

ALTO TREVIGIANO SERVIZI S.r.l.

MONTEBELLUNA



ALTO TREVIGIANO SERVIZI

**REALIZZAZIONE DI FOGNATURA NERA IN ATTRAVERSAMENTO
DEL FIUME SILE E DELLA LINEA FERROVIARIA
TREVISO-UDINE A RIDOSSO DI PONTE DELLA GOBBA
IN COMUNE DI TREVISO**

PROGETTO DEFINITIVO-ESECUTIVO

Tavola n.

R19.01

**RELAZIONE STRUTTURALE E FASCICOLO DEI CALCOLI
CARPENTERIA IMPALCATO**

ALTO TREVIGIANO SERVIZI S.R.L.



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RELAZIONE TECNICA GENERALE - RELAZIONE GEOTECNICA E SULLE FONDAZIONI - RELAZIONE DI CALCOLO E FASCICOLO DEI CALCOLI

Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”

1 INTRODUZIONE

1.1 PREMESSA

La presente relazione di calcolo strutturale, in conformità al punto §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica.

Seguono inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture di fondazione ed in elevazione.

1.2 DESCRIZIONE GENERALE DELL'OPERA

Il manufatto in oggetto è relativo alla realizzazione di un nuovo ponticello carrabile con giacitura limitrofa e parallelo a ponte metallico esistente.

Il nuovo manufatto, il cui uso è asservito unicamente al transito di mezzi per l'ingresso in area SIED, è caratterizzato da una carreggiata complessiva di 4 m per la sede di 1 corsia di marcia di 3.75 m.

La sezione è completata dalla presenza ai lati di un cordolo di 25 cm come sede per il parapetto di sicurezza.

Nel seguito, si riportano le principali caratteristiche geometriche, costruttive e statiche, di cui:

- **TRAVI PREFABBRICATE**

L'impalcato è costituito sostanzialmente da 5 travi in C.A.P. accostate di sezione costante 40x70 cm, poste ad interasse pari a 0.80/0.85 m.

Lo schema di calcolo è quello di trave isostatica su due appoggi, la luce di calcolo è pari a 12.00m pari alla distanza tra gli appoggi.

Sopra alle travi è previsto un getto integrativo collaborante di calcestruzzo per uno spessore pari a 20 cm.

- **SOLETTA D'IMPALCATO GETTA IN OPERA**

La soletta in c.a. ordinario, di spessore costante pari a 20 cm, ha pendenza trasversale nulla. Il getto della soletta d'impalcato avviene a completamento all'estradosso delle travi prefabbricate.

Lo spessore medio della soletta, incluso quello delle travi prefabbricate conduce quindi ad una altezza strutturale complessiva della sezione pari a $0.40 + 0.20 = 0.60$ m.

Complessivamente la larghezza dell'impalcato è pari a 4.00 m, corrispondenti a 3.75 m di carreggiata.

La piattaforma è completata dalla presenza ai lati di un cordolo di 25 cm come sede per il parapetto di sicurezza.

La soletta è resa collaborante alle sottostanti travi prefabbricate mediante staffe emergenti all'estradosso superiore delle travi.

La strada è resa percorribile da carichi di prima categoria Q1k in corrispondenza di corsia di 3.00 m, coerentemente con le prescrizioni di cui al NTC18.

La soletta in calcestruzzo armato collaborante con le travi garantisce la ripartizione dei carichi alle travi dell'impalcato in esame.

Per quanto riguarda il regime statico della soletta in c.a., si individuano due distinti schemi statici:

- Prima fase: sono attive soltanto le travi prefabbricate, di luce pari a 12.00 m. Il carico di progetto, in questa fase, è il peso proprio della trave prefabbricata ed il getto integrativo. Lo spessore complessivo della soletta è pari a 20 cm.
- Seconda fase: la soletta è interamente reagente come trave su due appoggi. I carichi agenti sono i permanenti portati e i carichi mobili.

– **SOTTOSTRUTTURE: SPALLE**

Le sottostrutture del ponticello sono costituite da spalle sismo-resistenti in c.a. ordinario su microplai, per la cui verifica geotecnica fondazionale si rimanda a specifico elaborato.

Le spalle presentano una sede di appoggio larga 160 cm in cui alloggiare le travi prefabbricate. A tergo è previsto un muro paraghiaia di spessore 45 cm che delimita la zona di appoggio. La spalla risulta rastremata nella sezione di base con larghezza 160 cm.

Nelle zone di estremità sono previsti dei muri di risvolto opportunamente sagomati.

– **APPOGGI**

Gli apparecchi d'appoggio sono ubicati sulle spalle e realizzati in neoprene armato.

Relativamente alla modellazione delle sovrastrutture per la quantificazione delle sollecitazioni trasmesse in fondazione, le stesse sono state compiutamente modellate ad elementi finiti, considerando un completo modello strutturale.

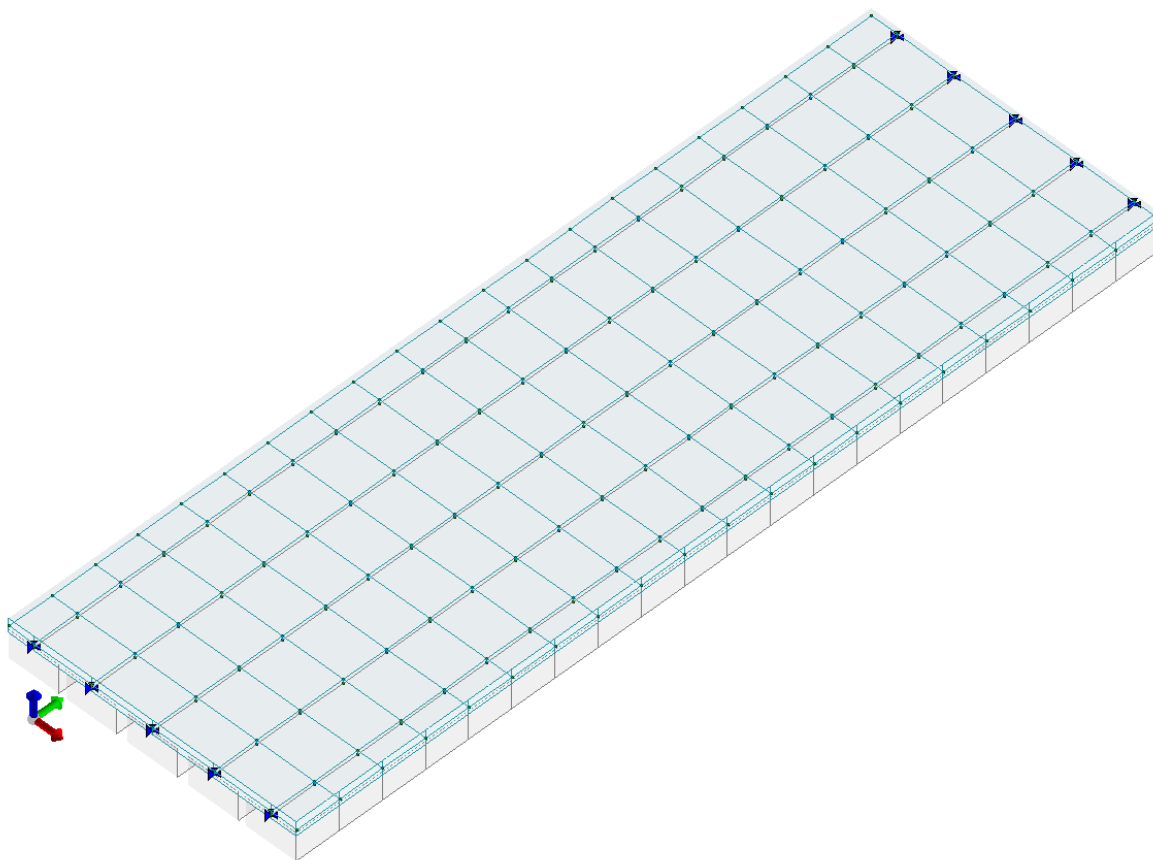


Figura 1-1: Modello strutturale 3D FEM

SEZIONE TRASVERSALE DI IMPALCATO (sez. B-B) - scala 1:50

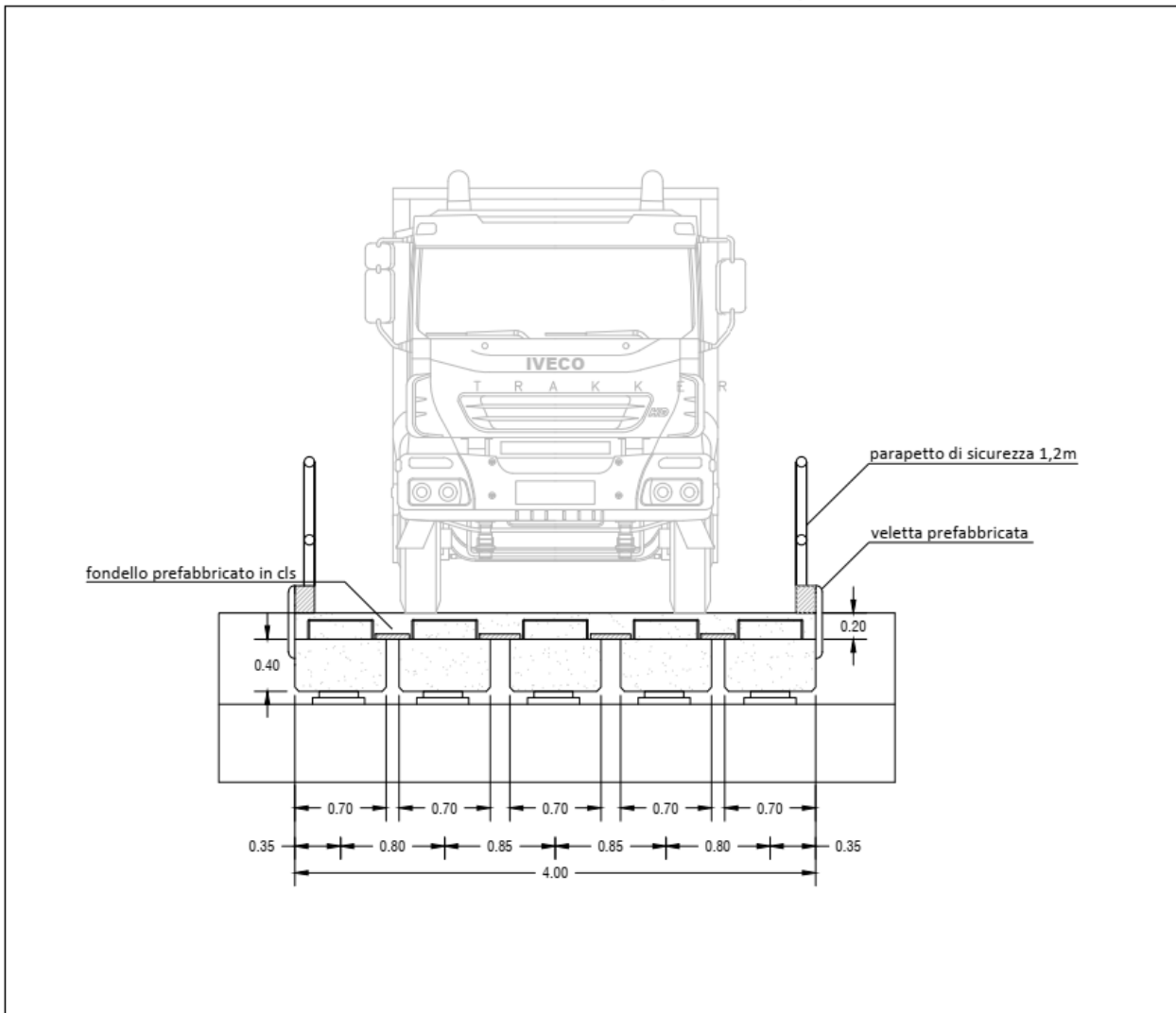


Figura 1-2: Dettaglio strutturale – sezione impalcato + soletta

1.3 QUADRO NORMATIVO DI RIFERIMENTO ADOTTATO

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono riportati in dettaglio al paragrafo dei riferimenti Bibliografici e Normativi, oltre a speditivo elenco:

1. Legge n. 1086 del 05.11.1971

Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica

2. Legge n. 64 del 02.02.1974

Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche

3. D.M. Infrastrutture 17 gennaio 2018

Norme tecniche per le costruzioni

4. Circolare 21 gennaio 2019 n. 7

Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al D.M. 17 gennaio 2018

5. UNI EN 1993-1-1 – Eurocodice 3

Progettazione delle strutture di acciaio - Parte 1-1: Regole generali, regole comuni e regole per gli edifici

6. UNI EN 1993-1-5 – Eurocodice 3

Progettazione delle strutture di acciaio - Parte 1-5: Elementi strutturali a lastra

7. UNI EN 1993-1-8 – Eurocodice 3

Progettazione delle strutture di acciaio - Parte 1-8: Progetto dei giunti

8. UNI EN 1995-1-1 – Eurocodice 5

Progettazione delle strutture di legno - Parte 1-1: Regole generali - Regole comuni e regole per gli edifici

9. UNI EN 1995-1-2 – Eurocodice 5

Progettazione delle strutture di legno - Parte 1-2: Regole generali – Progettazione strutturale contro l'incendio

10. UNI EN 338

Legno strutturale classi di resistenza

11. UNI EN 14080

Strutture di legno - Legno lamellare incollato e legno massiccio incollato - Requisiti

12. UNI EN 10025

Prodotti laminati a caldo per impieghi strutturale

Tabella 1-1: Normativa utilizzata per lo svolgimento della analisi

| Progetto-verifica degli elementi | |
|---|-----------------|
| Progetto C.A. | D.M. 17-01-2018 |
| Progetto ACCIAIO | D.M. 17-01-2018 |
| Azione sismica | |
| Norma applicata per l'azione sismica | D.M. 17-01-2018 |
| Vento - Neve | |
| Sollecitazione vento e neve | D.M. 17-01-2018 |

2 CARATTERISTICHE DELL'OPERA

2.1 VITA NOMINALE, CLASSE D'USO E PERIODO DI RIFERIMENTO DELL'AZIONE SISMICA (§ 2.4 NTC)

La vita nominale di un'opera strutturale (VN) è intesa come il numero di anni nel quale la struttura, purché soggetta alla manutenzione ordinaria, deve potere essere usata per lo scopo al quale è destinata.

La vita nominale dei diversi tipi di opere è quella riportata nella tabella sottostante:

Tabella 2-1: Vita nominale opera

| Tipi di costruzione | | Vita Nominale V_N (in anni) |
|---------------------|--|----------------------------------|
| 1 | Opere provvisorie – Opere provvisionali - Strutture in fase costruttiva | ≤ 10 |
| 2 | Opere ordinarie, ponti, opere infrastrutturali e dighe di dimensioni contenute o di importanza normale | 50 |
| 3 | Grandi opere, ponti, opere infrastrutturali e dighe di grandi dimensioni o di importanza strategica | 100 |

In presenza di azioni sismiche, con riferimento alle conseguenze di una interruzione di operatività o di un eventuale collasso, le costruzioni sono suddivise in classi d'uso così definite:

Tabella 2-2: Classificazione delle costruzioni

| Classi d'uso | Descrizione |
|-------------------|---|
| Classe I | Costruzioni con presenza solo occasionale di persone, edifici agricoli. |
| Classe II | Costruzioni il cui uso preveda normali affollamenti, senza contenuti pericolosi per l'ambiente e senza funzioni pubbliche e sociali essenziali. Industrie con attività non pericolose per l'ambiente. Ponti, opere infrastrutturali, reti viarie non ricadenti in Classe d'uso III o in Classe d'uso IV, reti ferroviarie la cui interruzione non provochi situazioni di emergenza. Dighe il cui collasso non provochi conseguenze rilevanti. |
| Classe III | Costruzioni il cui uso preveda affollamenti significativi. Industrie con attività pericolose per l'ambiente. Reti viarie extraurbane non ricadenti in Classe d'uso IV. Ponti e reti ferroviarie la cui interruzione provochi situazioni di emergenza. Dighe rilevanti per le conseguenze di un loro eventuale collasso. |
| Classe IV | Costruzioni con funzioni pubbliche o strategiche importanti, anche con riferimento alla gestione della protezione civile in caso di calamità. Industrie con attività particolarmente pericolose per l'ambiente. Reti viarie di tipo A o B, di cui al D.M. 5 novembre 2001, n. 6792, "Norme funzionali e geometriche per la costruzione delle strade", e di tipo C quando appartenenti ad itinerari di collegamento tra capoluoghi di provincia non altresì serviti da strade di tipo A o B. Ponti e reti ferroviarie di importanza critica per il mantenimento delle vie di comunicazione, particolarmente dopo un evento sismico. Dighe connesse al funzionamento di acquedotti e a impianti di produzione di energia elettrica. |

Le azioni sismiche su ciascuna costruzione vengono valutate in relazione ad un periodo di

riferimento VR che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale VN per il coefficiente d'uso CU (§2.4.3 NTC 2018):

$$VR = VN \times CU$$

Il valore del coefficiente d'uso CU è definito, al variare della classe d'uso, come mostrato nella tabella sottostante.

Tabella 2-3: Coefficiente Cu

| Classi d'uso | I | II | III | IV |
|--------------------|-----|-----|-----|-----|
| Coefficiente C_u | 0.7 | 1.0 | 1.5 | 2.0 |

Nel caso specifico la costruzione ha livelli di prestazione ordinari, mentre per la destinazione d'uso ricade in Classe d'uso III (affollamenti significativi), per cui si ha:

Tabella 2-4: Abaco parametri riferimento

| Parametro | Valore |
|---|---------|
| Classe d'uso | III |
| Vita nominale V_N | 50 anni |
| Coefficiente d'uso C_u | 1,00 |
| Periodo di riferimento per l'azione sismica, $V_R = V_N \times C_u$ | 50 anni |

2.2 VALUTAZIONE DELLA SICUREZZA

La valutazione della sicurezza e la progettazione di nuove costruzioni deve essere eseguita con riferimento agli stati limite ultimi SLU e agli stati limite di esercizio SLE.

In presenza di azioni sismiche, i requisiti di sicurezza relativi agli SLU possono essere ritenuti soddisfatti qualora siano eseguite le verifiche rispetto alla condizione di salvaguardia della vita umana (SLV); i requisiti di sicurezza relativi agli SLE possono essere ritenuti soddisfatti qualora siano eseguite le verifiche rispetto alla condizione di danno (SLD) e operatività (SLO).

In particolare, per le costruzioni di classe III e IV la deformabilità della struttura sotto le azioni sismiche dovrà essere contenuta secondo i limiti indicati dalla norma (7.3.6.1 NTC 2018) ridotti di 2/3, sotto le azioni sismiche di progetto relative allo SLO.

2.2.1 CRITERI DI VERIFICA

La valutazione della sicurezza viene eseguita mediante il metodo semiprobabilistico agli stati

limite basato sull'impiego dei coefficienti parziali di sicurezza.

Nel metodo semiprobabilistico agli stati limite, la sicurezza strutturale viene verificata tramite il confronto tra la resistenza e l'effetto delle azioni. Per la sicurezza strutturale, la resistenza dei materiali e le azioni sono rappresentate dai valori caratteristici, R_k e F_k definiti, rispettivamente, come il frattile inferiore delle resistenze e il frattile (superiore o inferiore) delle azioni che minimizzano la sicurezza.

In genere, i frattili sono assunti pari al 5%. Per le grandezze con piccoli coefficienti di variazione, ovvero per grandezze che non riguardino univocamente resistenze o azioni, si possono considerare frattili al 50% (valori mediani).

Per la sicurezza di opere e sistemi geotecnici, i valori caratteristici dei parametri fisico-meccanici dei terreni sono definiti al 6.2.2 NTC 2018.

La verifica della sicurezza nei riguardi degli stati limite ultimi di resistenza si effettua con il “metodo dei coefficienti parziali di sicurezza” espresso dalla equazione formale:

$$R_d \geq E_d$$

dove:

- R_d è la resistenza di progetto, valutata in base ai valori di progetto della resistenza dei materiali e ai valori nominali delle grandezze geometriche interessate;
- E_d è il valore di progetto dell'effetto delle azioni, valutato in base ai valori di progetto

I coefficienti parziali di sicurezza γ_{Mi} e γ_{Fj} , associati rispettivamente al materiale i-esimo e all'azione j-esima, tengono in conto la variabilità delle rispettive grandezze e le incertezze relative alle tolleranze geometriche e all'affidabilità del modello di calcolo.

La verifica della sicurezza nei riguardi degli stati limite di esercizio si esprime controllando aspetti di funzionalità e stato tensionale.

Le opere strutturali verranno verificate:

- per gli stati limite ultimi che possono presentarsi, in conseguenza alle diverse combinazioni delle azioni;
- per gli stati limite di esercizio definiti in relazione alle prestazioni attese;
- quando necessario, nei confronti degli effetti derivanti dalle azioni termiche connesse con lo sviluppo di un incendio.

2.2.2 GENERALITÀ

Si definisce stato limite (SL) uno stato superato il quale la struttura (o uno dei suoi elementi costitutivi) non è più in grado di soddisfare i requisiti richiesti dalla sua destinazione d'uso (secondo gli standard della nuova normativa sismica).

La valutazione del livello di sicurezza strutturale è svolta conducendo le verifiche nei riguardi degli stati limite ultimi (SLU) e degli stati limite di esercizio (SLE).

In presenza di sisma, inoltre, si considerano ulteriori Stati Limite, le cui definizioni sono date nel seguito.

Gli specifici stati limite da sottoporre a verifica sono indicati dalla vigente normativa in considerazione del tipo di struttura e di materiali in esame.

Le azioni sulla costruzione sono cumulate in modo da determinare condizioni di carico tali da risultare più sfavorevoli ai fini delle singole verifiche, tenendo conto della probabilità ridotta di intervento simultaneo di tutte le azioni con i rispettivi valori più sfavorevoli, come consentito dalle norme vigenti.

2.2.3 STATI LIMITE IN ASSENZA DI AZIONI SISMICHE

2.2.3.1 STATI LIMITE ULTIMI (§2.2.1 NTC)

Gli stati limite ultimi (SLU) sono associati al collasso della struttura o di sue parti, oppure ad altre forme simili di guasto strutturale. Generalmente, gli SLU riguardano la sicurezza delle persone e della struttura.

Nel caso in esame sono stati considerati i seguenti SLU:

- spostamenti o deformazioni eccessive;
- raggiungimento della massima capacità di resistenza di parti di strutture, collegamenti;
- raggiungimento della massima capacità di resistenza della struttura nel suo insieme;
- instabilità di parti della struttura o del suo insieme.

2.2.3.2 STATI LIMITE DI ESERCIZIO (§2.2.2 NTC)

Gli stati limite di esercizio (SLE) corrispondono a condizioni oltre le quali i requisiti funzionali specificati per una struttura o un elemento strutturale non sono più soddisfatti. Solitamente, gli SLE concernono il funzionamento della struttura o degli elementi strutturali in condizioni di esercizio normale, il comfort delle persone, l'aspetto delle costruzioni.

Nel caso in esame sono stati considerati i seguenti SLE:

- danneggiamenti locali che possano ridurre la durabilità della struttura, la sua efficienza o il suo aspetto;
- spostamenti e deformazioni che possano limitare l'uso, l'efficienza e l'aspetto della costruzione, di elementi non strutturali, impianti, macchinari;
- vibrazioni, al fine di assicurare che le sensazioni percepite dagli utenti garantiscano accettabili livelli di comfort.

La condizione di verifica si esplica nel controllo delle seguenti disuguaglianze:

$$Cd \geq Ed$$

dove:

- Ed è l'effetto di progetto delle azioni in termini di spostamento;
- Cd è un valore funzione di certi requisiti o proprietà assegnate alla struttura.

2.2.4 STATI LIMITE IN PRESENZA DI AZIONI SISMICHE

Poiché la costruzione in oggetto ricade in zona dichiarata sismica, agli stati limite sopra considerati se ne aggiungono altri prescritti dalle norme vigenti allo scopo di assicurare che in caso di evento sismico sia protetta la vita umana, siano limitati i danni e rimangano funzionanti le strutture essenziali agli interventi di protezione civile.

Per ciascuno degli stati limite considerati viene associata una probabilità di superamento nel periodo di riferimento *PVR* (Tab. 3.2.I. NTC 2018).

2.2.4.1 STATO LIMITE DI PREVENZIONE DEL COLLASSO (STATO LIMITE ULTIMO: SLC)

A seguito del terremoto la costruzione subisce gravi rotture e crolli dei componenti non strutturali ed impiantistici e danni molto gravi dei componenti strutturali; la costruzione conserva ancora un margine di sicurezza per azioni verticali ed un esiguo margine di sicurezza nei confronti del collasso per azioni orizzontali.

2.2.4.2 STATO LIMITE DI SALVAGUARDIA DELLA VITA (STATO LIMITE ULTIMO: SLV)

A seguito del terremoto la costruzione subisce rotture e crolli dei componenti non strutturali ed impiantistici e significativi danni dei componenti strutturali cui si associa una perdita significativa di rigidezza nei confronti delle azioni orizzontali; la costruzione conserva invece una parte della resistenza e rigidezza per azioni verticali e un margine di sicurezza nei confronti del collasso per azioni sismiche orizzontali.

2.2.4.3 STATO LIMITE DI DANNO (STATO LIMITE DI SERVIZIO: SLD)

A seguito del terremoto la costruzione nel suo complesso, includendo gli elementi strutturali, quelli non strutturali, le apparecchiature rilevanti alla sua funzione, subisce danni tali da non mettere a rischio gli utenti e da non compromettere significativamente la capacità di resistenza e di rigidezza nei confronti delle azioni verticali e orizzontali, mantenendosi immediatamente utilizzabile pur nell'interruzione d'uso di parte delle apparecchiature.

2.2.4.4 STATO LIMITE DI OPERATIVITÀ (STATO LIMITE DI SERVIZIO: SLO)

A seguito del terremoto la costruzione nel suo complesso, includendo gli elementi strutturali, quelli non strutturali, le apparecchiature rilevanti alla sua funzione, non deve subire danni ed interruzioni d'uso significativi;

Le verifiche di sicurezza effettuate in presenza di azione sismica per le strutture in di nuova realizzazione sono di seguito riassunte:

- Stato limite ultimo - SLV
 - Resistenza delle strutture
- Stato limite di servizio – SLE
 - Stati tensionali

2.2.5 OBIETTIVI E METODI

Per valutare il livello di sicurezza delle opere in oggetto, è stato eseguito il calcolo strutturale allo scopo di stabilire, attraverso un procedimento quantitativo, se la costruzione sia in grado o meno di resistere alle azioni cui è, o potrà essere, sottoposta durante la sua vita utile, compatibilmente con i requisiti di esercizio ed in modo che ne sia assicurata la durabilità.

Il calcolo è stato condotto attraverso le seguenti fasi:

A. schematizzazione del problema strutturale:

- definizione delle azioni agenti sulla costruzione, ivi compresa quella sismica, in considerazione di: destinazione d'uso, esigenze funzionali, ubicazione geografica, zonizzazione sismica, suolo di fondazione, esigenze del Committente etc.;
- definizione degli stati limite da sottoporre a verifica.

B. definizione dei modelli di calcolo:

- modellazione della struttura, dei vincoli e dei materiali;
- modellazione delle azioni.

C. analisi del modello col metodo degli elementi finiti;

- analisi elastica lineare per le azioni non sismiche;
- analisi dinamica lineare con spettro di risposta in presenza di azioni sismiche.

D. controllo dei risultati e verifiche di resistenza:

- controllo generale dei risultati del calcolo e confronto dei singoli risultati con calcoli eseguiti con metodi alternativi;
- verifiche di sicurezza degli elementi strutturali.

2.2.6 SVOLGIMENTO DELLE VERIFICHE DI PROGETTO

Le verifiche statiche saranno svolte con riferimento al metodo degli stati limite.

La tipologia strutturale dell'impalcato in oggetto, trave in semplice appoggio su sottostruttura scatolare

Trattandosi, nel funzionamento globale dell'impalcato, di un sistema misto calcestruzzo, per le azioni agenti vengono, normalmente, suddivise in tre fasi, corrispondenti al grado di maturazione del getto di calcestruzzo e quindi ai diversi livelli di rigidità e caratteristiche statiche delle sezioni.

- **Fase 0:** si considera il peso proprio delle strutture prefabbricate e la precompressione. La sezione resistente corrisponde alla sola parte prefabbricata.
- **Fase 1:** si considera il peso proprio delle strutture prefabbricate e del getto della soletta che, in questa fase, non è ancora reagente. La sezione resistente corrisponde alla sola parte prefabbricata.
- **Fase 2:** considera il peso dei successivi carichi permanenti applicati alla struttura (pavimentazione, cordoli, barriere di sicurezza, etc.) e corrisponde invece ad una sezione resistente in calcestruzzo. Per tenere in considerazione i fenomeni differiti che accompagnano questa fase, imputabili alla viscosità del calcestruzzo della soletta. Anche gli effetti del ritiro sono da considerarsi "lenti" in quanto concomitanti agli effetti viscosi, e vengono pertanto anch'essi valutati con le caratteristiche di resistenza della sezione della fase 2. In particolare, gli effetti del ritiro vengono considerati come un'azione di trazione sulla soletta ed una azione di presso - flessione applicata all'estremità della struttura per valutarne le successive ridistribuzioni. Oltre a tali effetti saranno valutati anche gli effetti dovuti ai cedimenti differenziali delle fondazioni.
- **Fase 3:** Corrisponde alla situazione di esercizio, relativa al transito dei carichi mobili desunti in accordo con NTC 18, per cui oltre a tali effetti "istantanei" vengono computati anche gli effetti dovuti all'azione del vento, alla temperatura.

In riferimento alla tipologia, caratteristiche e dimensioni dell'opera, si ritiene dominante la verifica rispetto alla Fase 3 per cui le analisi di seguito svolte sono alle condizioni di esercizio, con carichi di tipo istantaneo, statici e sismici.

3 ANALISI DEI CARICHI

La serie di carichi insistenti sulla fondazione, dovuti alle strutture in elevazione, ai carichi accidentali, e ad altri carichi specifici, sono automaticamente computati dal software, e trasmessi alle strutture di fondazione

3.1 CARICHI PERMANENTI

I carichi permanenti sono correlati con le strutture e sono automaticamente computati dal software per la platea.

3.2 CONDIZIONI DI CARICO ELEMENTARI

Con riferimento alle prescrizioni della vigente normativa NCT 2018 “Norme Tecniche per le Costruzioni DM 17/01/2018”, devono essere definite le condizioni di carico elementari, per poi procedere alla generazione delle combinazioni di carico.

3.2.1 CARICHI PERMANENTI

I carichi permanenti sono riferibili ai pesi propri strutturali e alle sovrastrutture di cui:

- peso di elementi strutturali modellati che sono automaticamente inseriti e gestiti dal software;
- peso di elementi inseriti dall'utente;

3.2.2 CARICHI VARIABILI

Relativamente ai carichi variabili gli stessi sono imputabili ai diversi carichi accidentali dei solai, al vento e neve e sono normalmente gestiti dal software.

3.2.3 G1 - PESO PROPRIO

Il software computa ed applica automaticamente i carichi dovuti al peso proprio delle travi di impalcato e della soletta collaborante

3.2.4 G2 – SOVRACCARICHI PERMANENTI

Si quantifica un sovraccarico permanente imputabile alla strato di finitura della pavimentazione ed altre opere accessorie pari a 100 daN/mq

3.2.5 VARIAZIONI TERMICHE

Per gli effetti termici, si è considerato una variazione termica pari a $\Delta T' = \pm 15 \text{ }^{\circ}\text{C}$ costante su tutta la sezione dell'impalcato.

3.2.6 CEDIMENTI VINCOLARI

Dato il modesto sviluppo longitudinale del ponte e la distanza tra i punti di appoggio dell'impalcato, si sono stimati i cedimenti differenziali tra le pile secondo la formula.

Spalla : $d_i = L / 2 \cdot 1/2000 = 12.00 \text{ m} / 2 \cdot 1/2000 = 0.300 \text{ cm}$

Dato il modesto valore del cedimento differenziale si ritiene che gli effetti indotti da tale cedimento per l'impalcato sia irrilevante in quanto la struttura presenta uno schema isostatico e per tanto gli effetti tensionali sono nulli. Per quanto riguarda le strutture di fondazione, i cedimenti differenziali valutati risultano di modesta entità e per tanto trascurabili ai fini delle analisi successive.

3.2.7 Q1k – CARICHI MOBILI

I sovraccarichi accidentali, ai sensi del vigente NTC 18, sono riferibili allo SCHEMA CARICO 1, per cui si prevede un carico tandem 2Q_{1k} di 600 kN totali dotato di 2 assi di 2 ruote ciascuno, interassati di 1.20 m in senso longitudinale e con interasse ruote in senso trasversale di 2.00 m agente su un'impronta di dimensione 40x40 cm, oltre carico di 9 kN/m² uniformemente distribuito per l'intero ingombro della corsia di larghezza 4.00 m e per tutto lo sviluppo del ponte.

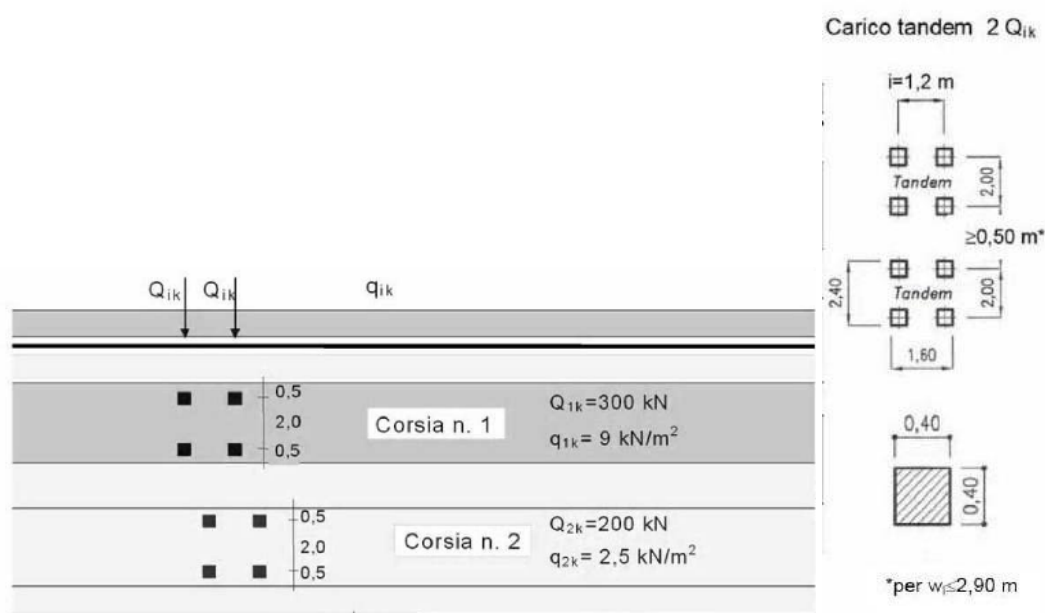


Figura 3-1: NTC2018 – SCHEMA CARICO 1 - PONTI

3.2.8 Q3 – AZIONE DI FRENAMENTO

La forza di frenatura, secondo il NTC 18, si assume agente in direzione dell'asse della strada al livello della superficie stradale. Come richiesto da normativa per i ponti di 1° cat., si valutano gli effetti dovuti alla frenatura determinando il valore come segue:

$$0.60 (2Q_{1k}) + 0.10 q_{1k} w L = 0.60 \times (2 \times 300 \text{ kN}) + 0.10 \times 9 \text{ kN/m}^2 \times 3.00 \text{ m} \times 12.00 \text{ m} = 392,40 \text{ kN.}$$

La valutazione degli effetti dovuti alla frenatura sarà utilizzata in fase di determinazione degli scarichi agli appoggi.

3.2.9 Q5 - AZIONE NEVE E VENTO

LOCALIZZAZIONE DELL'INTERVENTO

Località: TREVISO
Provincia: TREVISO

Regione: VENETO

Coordinate GPS:

Latitudine : 45,66900 N

Longitudine: 12,24400 E

Altitudine s.l.m.: 15,0 m

CALCOLO DELLE AZIONI DELLA NEVE E DEL VENTO

Normativa di riferimento:

D.M. 17 gennaio 2018 - NORME TECNICHE PER LE COSTRUZIONI

Cap. 3 - AZIONI SULLE COSTRUZIONI - Par. 3.3 e 3.4

NEVE:

Zona Neve = I Mediterranea

Periodo di ritorno, $T_r = 50$ anni

$C_{tr} = 1$ per $T_r = 50$ anni

C_e (coeff. di esposizione al vento) = 1,00

Valore caratteristico del carico al suolo = $q_{sk} C_e C_{tr} = 150$ daN/mq

Copertura ad una falda:

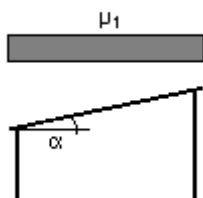
Angolo di inclinazione della falda $\alpha = 0,0^\circ$

- Falda con presenza di barriera o impedimento allo scivolamento della neve.

- Copertura piana $W = 7.0$ m, $L = 12.0$ m $\Rightarrow L_c = 9.9$, $C_{ef} = 1.000$

$\mu_1 = 0,80 \Rightarrow Q_1 = 120$ daN/mq

Schema di carico:



VENTO:

Zona vento = 1

Velocità base della zona, $V_{b.o} = 25$ m/s (Tab. 3.3.I)

Altitudine base della zona, $A_o = 1000$ m (Tab. 3.3.I)

Altitudine del sito, $A_s = 15$ m

Velocità di riferimento, $V_b = 25,00$ m/s ($V_b = V_{b.o}$ per $A_s \leq A_o$)

Periodo di ritorno, $T_r = 50$ anni

$C_r = 1$ per $T_r = 50$ anni

Velocità riferita al periodo di ritorno di progetto, $V_r = V_b C_r = 25,00$ m/s

Classe di rugosità del terreno: A

[Aree urbane con almeno il 15% della superficie coperta da edifici la cui altezza media superi 15 m]

Esposizione: Cat. V - Entroterra fino a 500 m di altitudine

($K_r = 0,23$; $Z_o = 0,70$ m; $Z_{min} = 12$ m)

Pressione cinetica di riferimento, $q_b = 39$ daN/mq

Coefficiente di forma, $C_p = 1,00$

Coefficiente dinamico, $C_d = 1,00$

Coefficiente di esposizione, $C_e = 1,48$

Coefficiente di esposizione topografica, $C_t = 1,00$

Altezza dell'edificio, $h = 2,00$ m

Pressione del vento, $p = q_b C_e C_p C_d = 58$ daN/mq

- **CARICO NEVE - VENTO,**

Il software modella in maniera automatica l'applicazione del carico VENTO e NEVE sugli elementi pannelli e 3D, come di seguito riportato.

3.2.10 Q6 - DEFINIZIONE INPUT SISMICO E DEI PARAMETRI SISMICI

Per la definizione dell'input sismico di calcolo della struttura, è necessario individuare e definire i seguenti parametri:

- I. Coordinate del sito;
- II. Vita di riferimento V_r , pari al prodotto delle Vita nominale V_n per il coefficiente d'uso C_u di indirizzo progettuale;
- III. Stati limite di progetto di riferimento, SLV ed SLD etc.. etc..

Si utilizzano le seguenti applicazioni:

- <http://www.geostru.com/geoapp/parametrisismici.aspx> per la determinazione delle coordinate ED50;
- Spettri-NTCver.1.0.3 per la determinazione dei valori di A_g , F_0 e T^*c in funzione dei diversi tempi di ritorno.

Trattandosi di un'opera di sostegno si ipotizzano le seguenti scelte progettuali:

- Vita nominale $V_n = 50$ anni;
- Coefficiente d'uso $C_u = 1.0$ pari a Classe d'uso II ai sensi §2.4.2 NTC;
- Vita riferimento $V_r = 50 * 1.0 = 50$ anni.

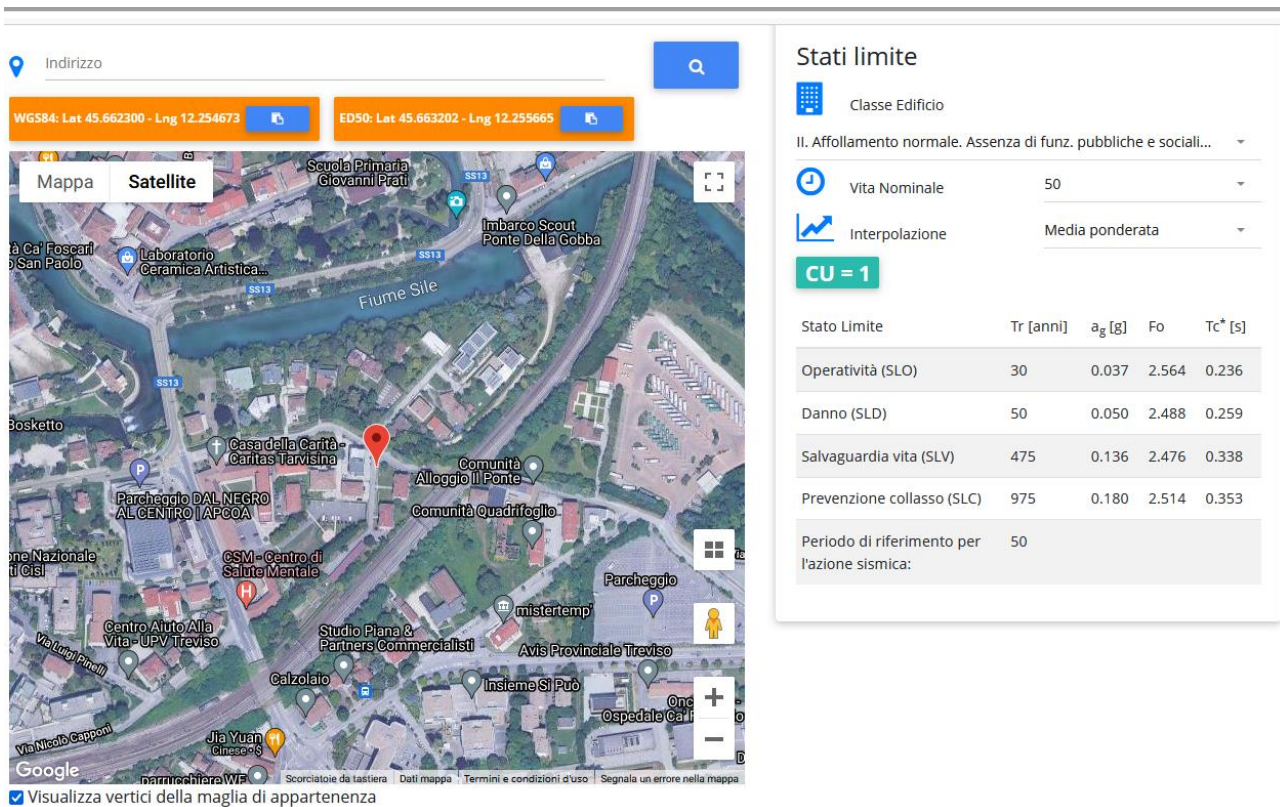


Fig. 1 : Individuazione coordinate ED50 sito di analisi

FASE 1. INDIVIDUAZIONE DELLA PERICOLOSITÀ DEL SITO

☒ Ricerca per coordinate

LONGITUDINE: 12.25567 LATITUDINE: 45.66320

☐ Ricerca per comune

REGIONE: Veneto PROVINCIA: Treviso COMUNE: Treviso

Elaborazioni grafiche

Grafici spettri di risposta

Variabilità dei parametri

Elaborazioni numeriche

Tabella parametri

Nodi del reticolo intorno al sito

km 7.5

11837 11838

11859 11880

-7.5 7.5 km

Reticolo di riferimento

Controllo sul reticolo

☒ Sito esterno al reticolo

☐ Interpolazione su 3 nodi

☐ Interpolazione corretta

Interpolazione

superficie rigata

La "Ricerca per comune" utilizza le coordinate ISTAT del comune per identificare il sito. Si sottolinea che all'interno del territorio comunale le azioni sismiche possono essere significativamente diverse da quelle così individuate e si consiglia, quindi, la "Ricerca per coordinate".

INTRO FASE 1 FASE 2 FASE 3

Fig. 2 : Spettri-NTC definizione parametri sismici

FASE 2. SCELTA DELLA STRATEGIA DI PROGETTAZIONE

Vita nominale della costruzione (in anni) - V_N info

Coefficiente d'uso della costruzione - c_U info

Valori di progetto

Periodo di riferimento per la costruzione (in anni) - V_R info

Periodi di ritorno per la definizione dell'azione sismica (in anni) - T_R info

| | | |
|---------------------------------|-----------------------|-----|
| Stati limite di esercizio - SLE | SLO - $P_{VR} = 81\%$ | 30 |
| | SLD - $P_{VR} = 63\%$ | 50 |
| Stati limite ultimi - SLU | SLV - $P_{VR} = 10\%$ | 475 |
| | SLC - $P_{VR} = 5\%$ | 975 |

Elaborazioni

Grafici parametri azione →

Grafici spettri di risposta →

Tabella parametri azione →

Strategia di progettazione

| Stato | T_R [anni] |
|-------|--------------|
| SLO | 30 |
| SLD | 50 |
| SLV | 475 |
| SLC | 975 |

LEGENDA GRAFICO

--□-- Strategia per costruzioni ordinarie

---■--- Strategia scelta

INTRO
FASE 1
FASE 2
FASE 3

Fig. 3 : Spettri-NTC definizione parametri sismici

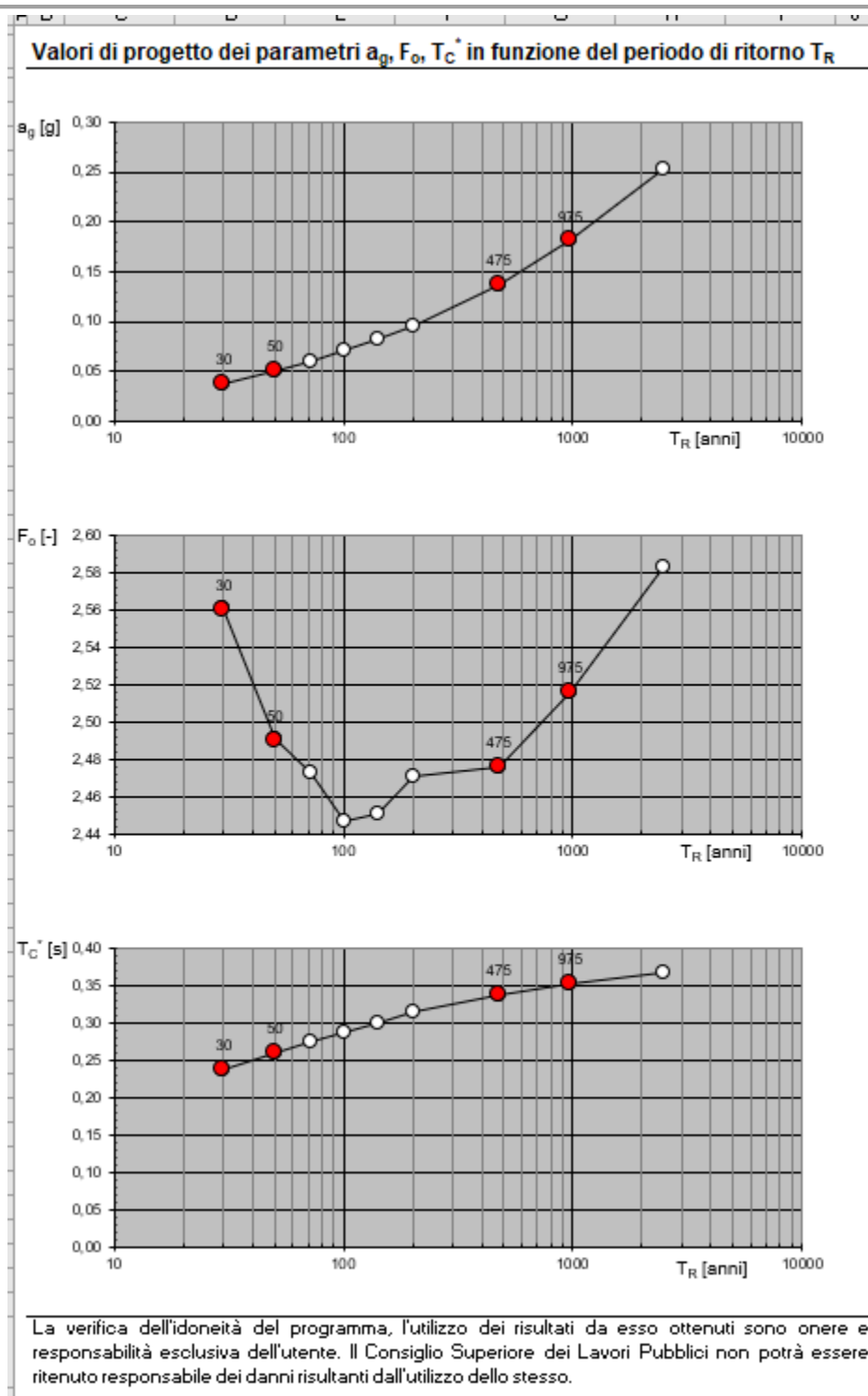


Fig. 4 : Spettri-NTC definizione parametri sismici

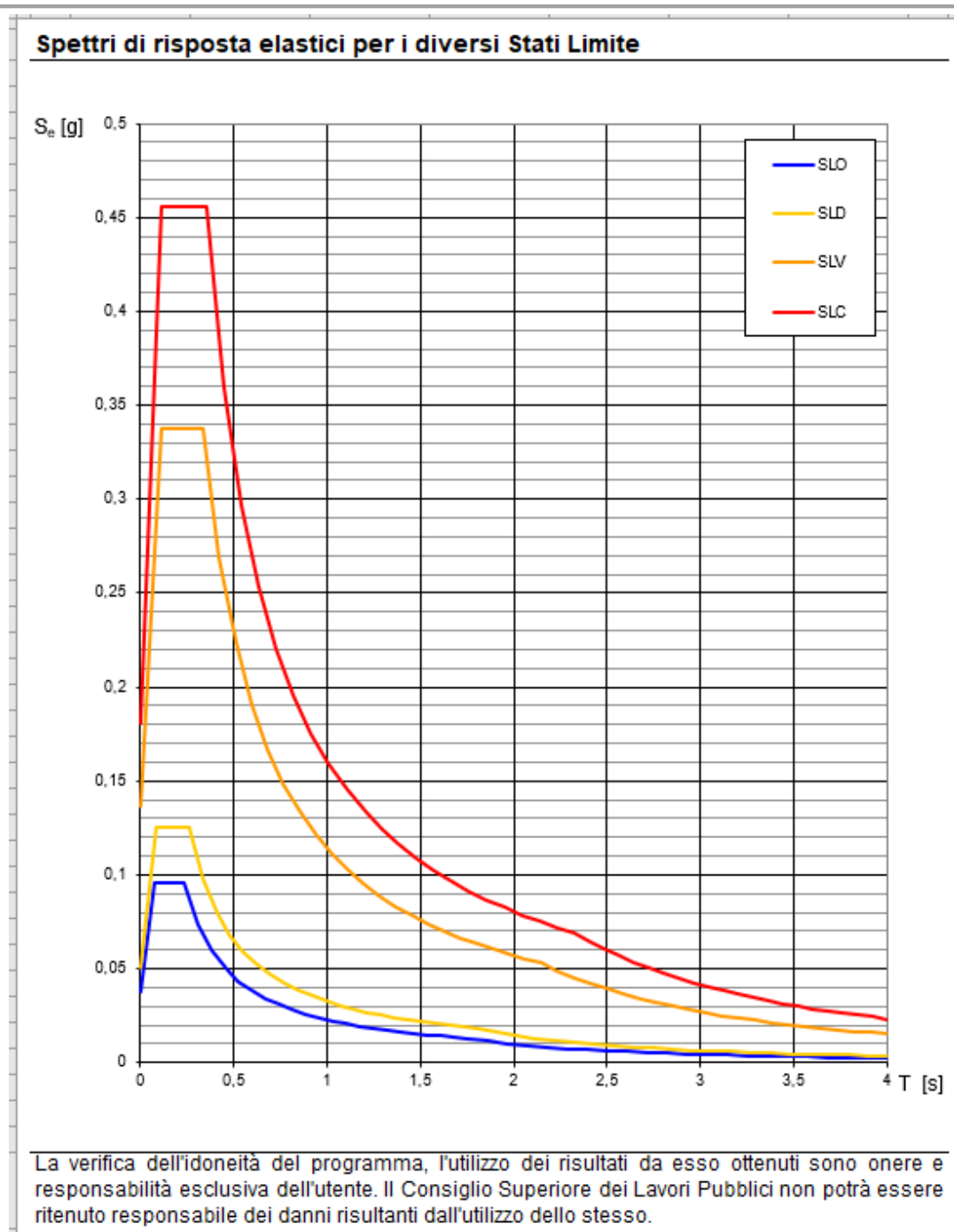


Fig. 5 : Spettri-NTC definizione parametri sismici

Valori dei parametri a_g , F_0 , T_C^* per i periodi di ritorno T_R associati a ciascuno SL

| SLATO LIMITE | T_R [anni] | a_g [g] | F_0 [-] | T_C^* [s] |
|-----------------|-----------------|--------------|--------------|----------------|
| SLO | 30 | 0,038 | 2,560 | 0,237 |
| SLD | 50 | 0,050 | 2,490 | 0,260 |
| SLV | 475 | 0,136 | 2,476 | 0,337 |
| SLC | 975 | 0,181 | 2,516 | 0,353 |

Fig. 6 : Spettri-NTC parametri sismici di input per analisi

3.3 CONDIZIONI DI CARICO

Le condizioni di carico oggetto di verifica sono opportunamente combinate e sviluppate sia in campo statico che sismico, di cui si riportano alcuni esempi sono quindi le seguenti:

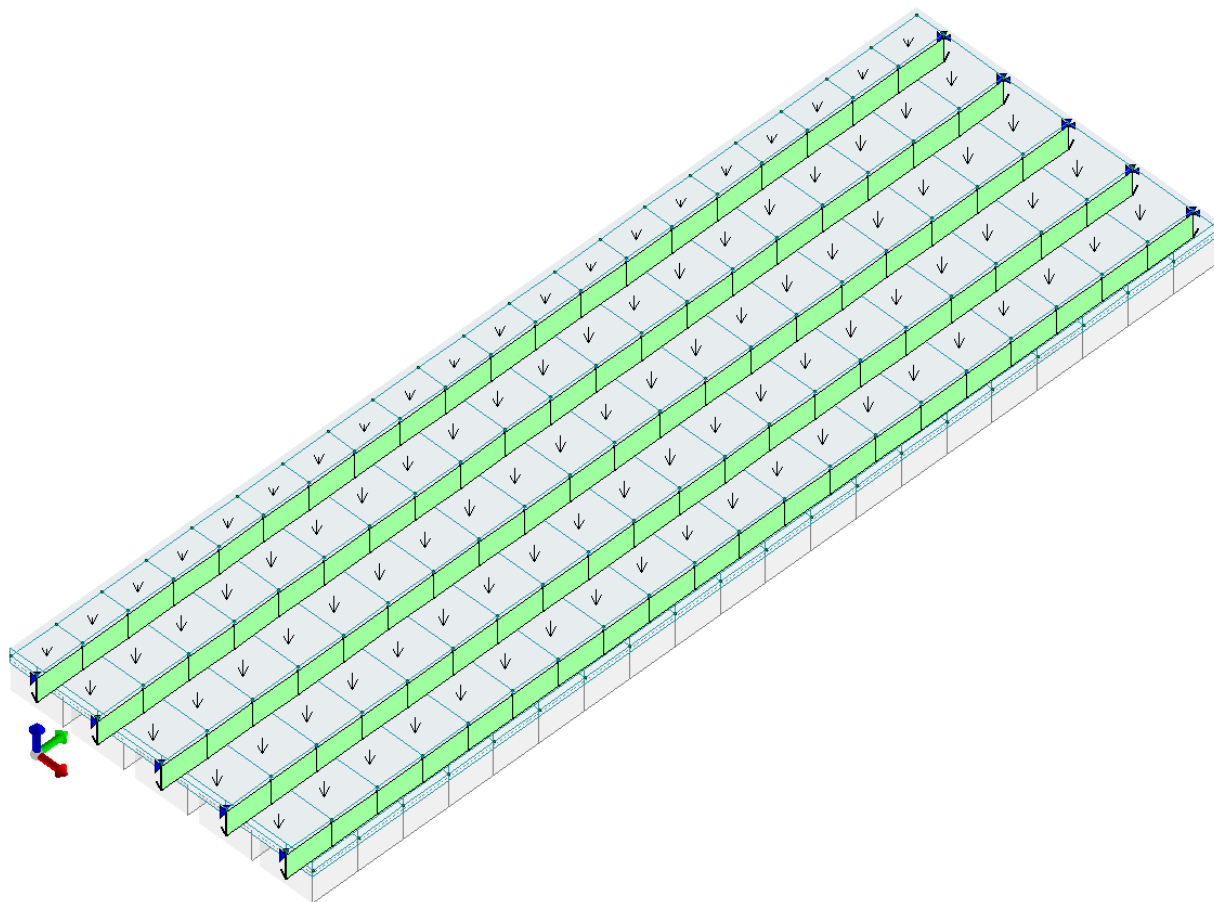


Figura 3-2: Schema carico permanente – peso proprio strutture

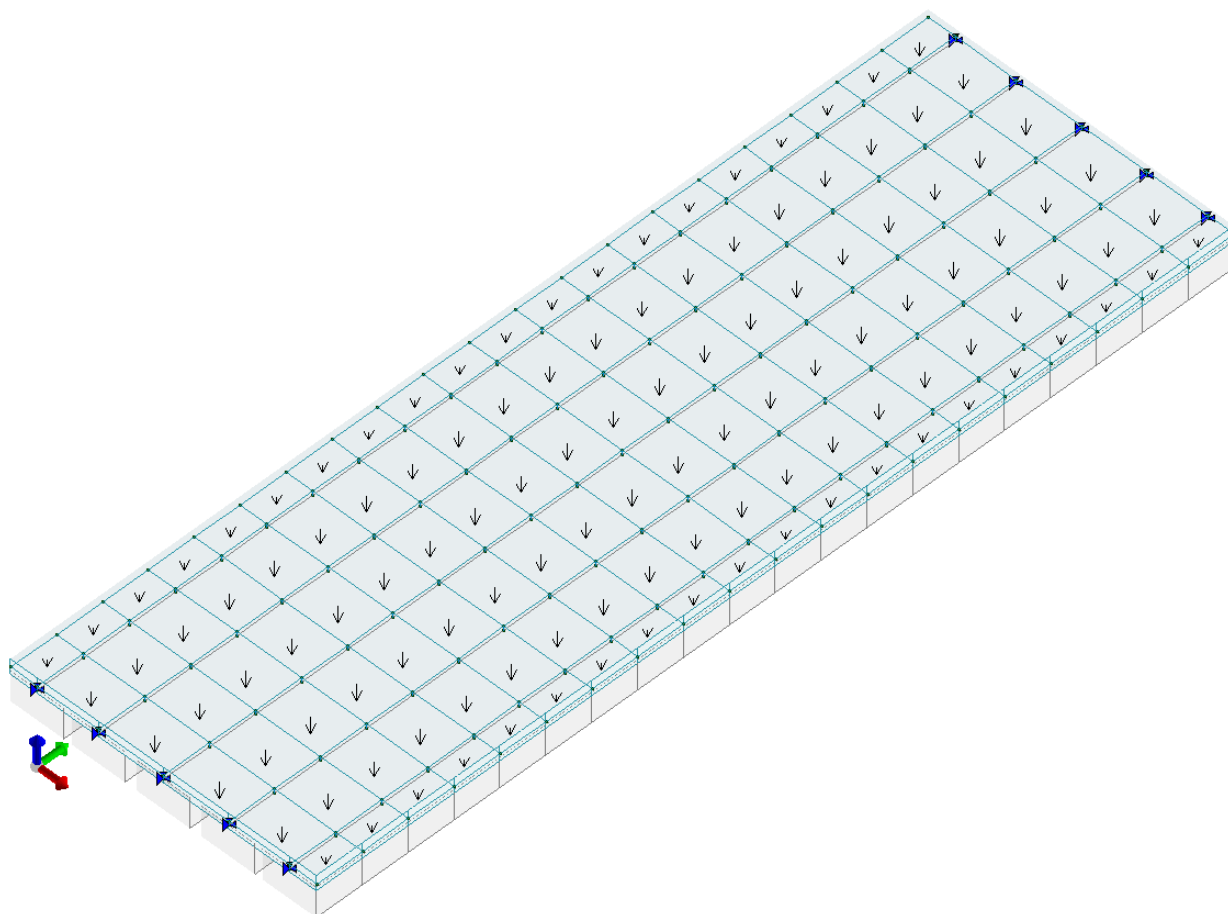


Figura 3-3: Schema carico permanente – G2

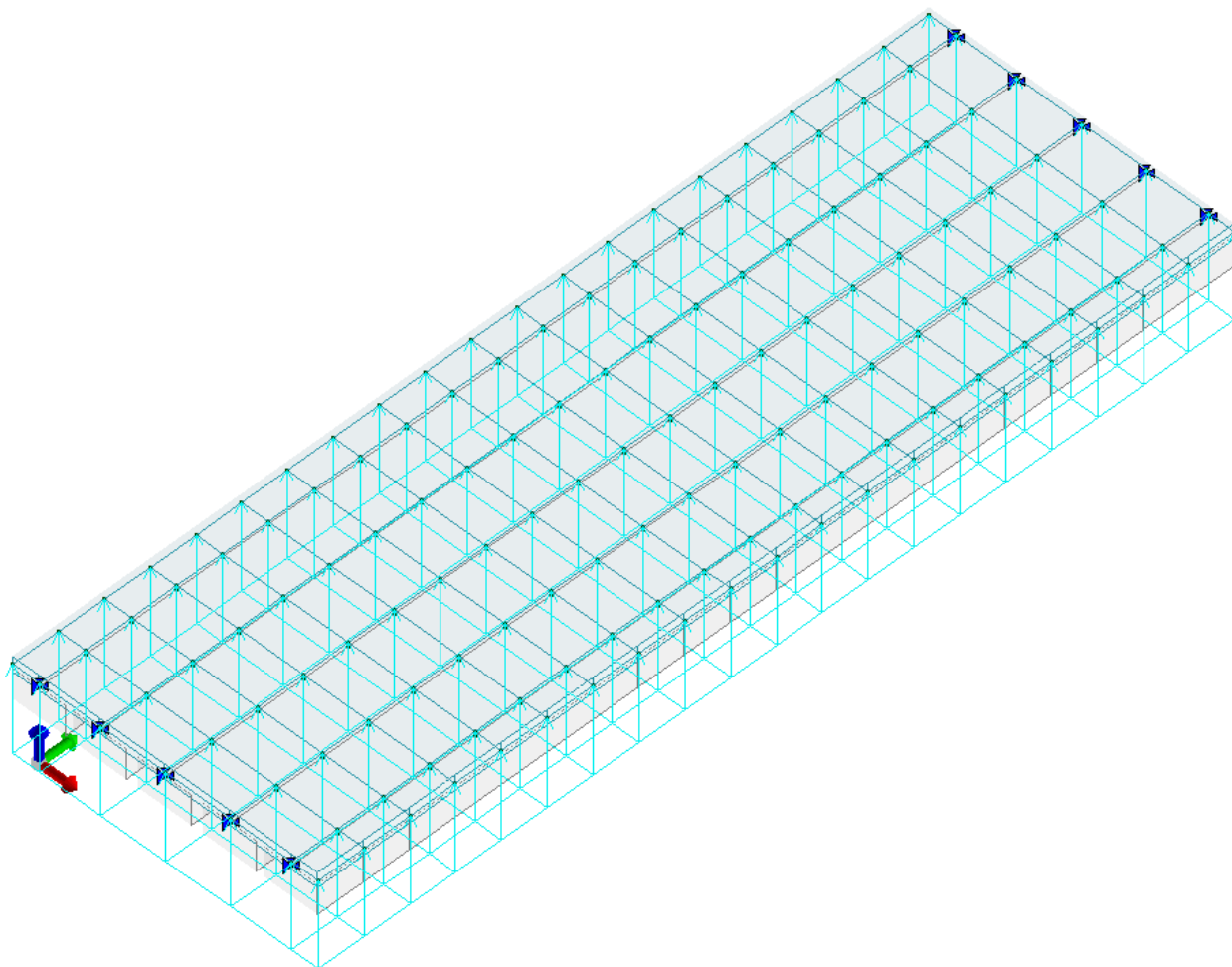


Figura 3-4: Schema carico Q5 – VENTO - NEVE

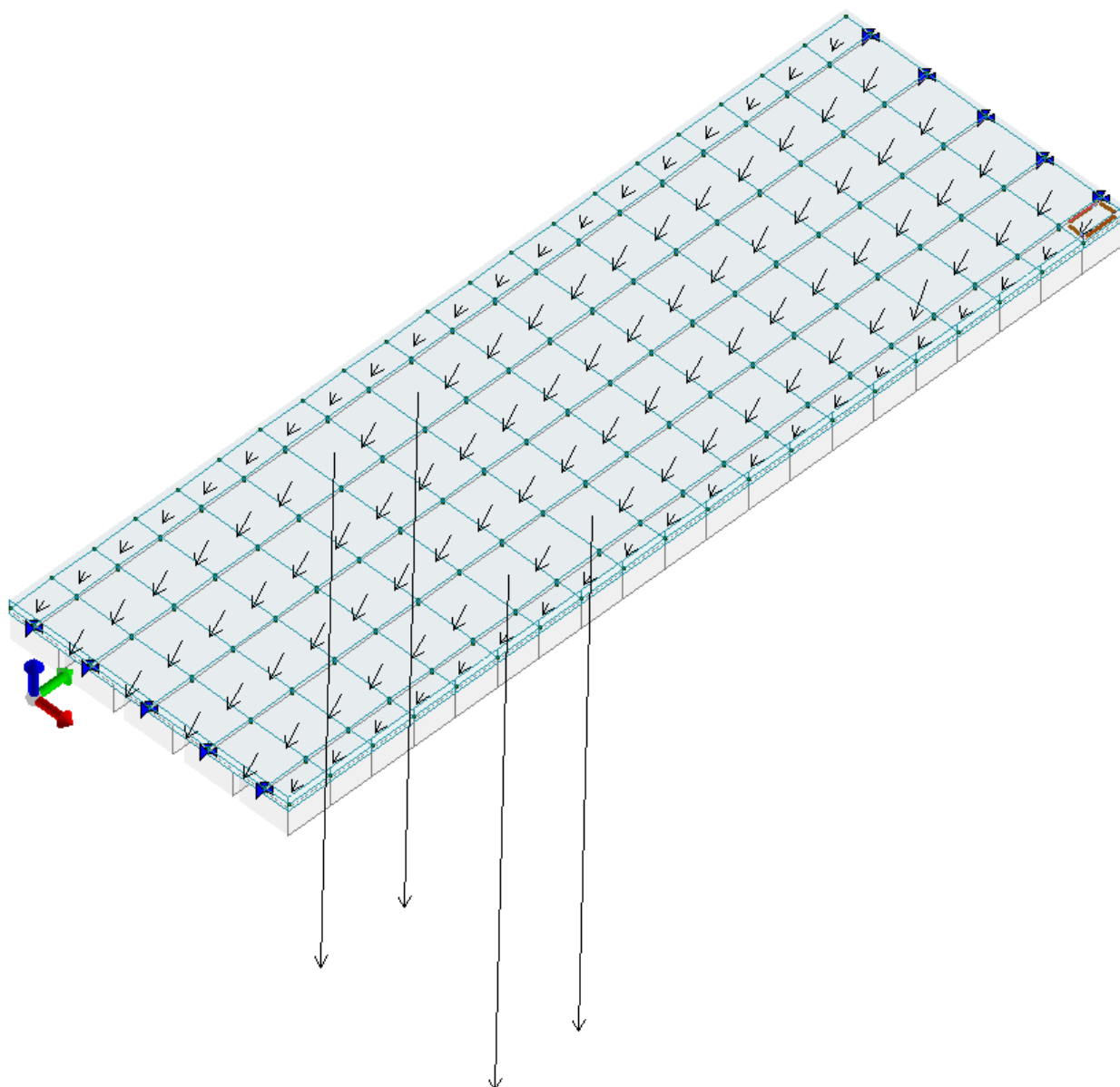


Figura 3-5: Schema carico variabile – TRAFFICO Q1K + Q3.

3.4 COMBINAZIONI DI CARICO E APPROCCI PROGETTUALI DI VERIFICA

La generazione delle combinazioni di carico da adottare per le verifiche agli Stati Limite Ultimi e di Esercizio delle strutture di fondazione prevede la scelta di un approccio progettuale.

In particolare, devono essere definiti i coefficienti di sicurezza parziali per le azioni (A1 e A2), per i parametri geotecnici (M1 e M2) e per le resistenze (R1, R2 e R3).

I valori dei coefficienti di sicurezza parziali per le azioni sono riportati nella seguente tabella:

Tabella 3-1: Coefficienti parziali per le azioni – Tabella 6.2.I NTC

| Carichi | Effetto | Coeff. parziale γ_F (o γ_E) | EQU | (A1) STR | (A2) GEO |
|----------------------------|-------------|---|-----|-------------|-------------|
| Permanenti | Favorevole | γ_{G1} | 0,9 | 1,0 | 1,0 |
| | Sfavorevole | | 1,1 | 1,3 | 1,0 |
| Permanenti non strutturali | Favorevole | γ_{G2} | 0,0 | 0,0 | 0,0 |
| | Sfavorevole | | 1,5 | 1,5 | 1,3 |
| Variabili | Favorevole | γ_{Qi} | 0,0 | 0,0 | 0,0 |
| | Sfavorevole | | 1,5 | 1,5 | 1,3 |

(1) Nel caso in cui i carichi permanenti non strutturali (per esempio i carichi permanenti portati) siano compiutamente definiti, si potranno adottare gli stessi coefficienti validi per le azioni permanenti.

Tabella 3-2: Coefficienti parziali per i parametri del terreno – Tabella 6.2.II NTC

I valori dei coefficienti di sicurezza parziali parametri del terreno sono riportati nella seguente tabella:

| Parametro | Grandezza alla quale applicare il coefficiente parziale | Coefficiente parziale γ_M | (M1) | (M2) |
|--|---|----------------------------------|------|------|
| Tangente dell'angolo di resistenza al taglio | $\tan \varphi'_k$ | $\gamma_{\varphi'}$ | 1,0 | 1,25 |
| Coesione efficace | c'_k | $\gamma_{c'}$ | 1,0 | 1,25 |
| Resistenza non drenata | c_{uk} | γ_{cu} | 1,0 | 1,4 |
| Peso dell'unità di volume | γ | γ_γ | 1,0 | 1,0 |

I coefficienti parziali per la resistenza R1, R2 e R3 dipendono dalla tipologia di opera e dal tipo di verifica, per la fondazione oggetto di analisi, trattandosi di FONDAZIONI SUPERFICIALI, sono riportati nelle seguenti schede sinottiche, e sono riferiti all'Approccio 01, che prevede due diverse combinazioni:

-
- DA1 – C1: (A1+M1+R1), definita STRU e generalmente più severa nei confronti del dimensionamento strutturale;
 - DA1 – C2: (A2+M2+R2), definita GEO e generalmente più severa nei confronti del dimensionamento geotecnico.

Le NTC2018 richiedono che per le strutture di fondazione vengano soddisfatte le verifiche di sicurezza nei confronti degli Stati Limite Ultimi indotti dallo sviluppo di meccanismi di collasso dovuti sia alla mobilitazione della resistenza del terreno (SLU GEO DA1-C2) e sia al raggiungimento della resistenza degli elementi strutturali che compongono la fondazione (SLU STR DA1 C1).

4 METODO DI CALCOLO E MODELLO NUMERICO

4.1 CARATTERISTICHE MATERIALI UTILIZZATI

4.1.1 LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

| | |
|---|-------------------------------|
| 1 | materiale tipo cemento armato |
| 2 | materiale tipo acciaio |
| 3 | materiale tipo muratura |
| 4 | materiale tipo legno |
| 5 | materiale tipo generico |

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

| | |
|----------------------------|--|
| Young | modulo di elasticità normale E |
| Poisson | coefficiente di contrazione trasversale ν |
| G | modulo di elasticità tangenziale |
| Gamma | peso specifico |
| Alfa | coefficiente di dilatazione termica |
| Fattore di confidenza FC m | Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura) |
| Fattore di confidenza FC a | Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura) |
| Elasto-plastico | Materiale elastico perfettamente plastico per aste non lineari |
| Massima compressione | Massima tensione di compressione per aste non lineari |
| Massima trazione | Massima tensione di trazione per aste non lineari |
| Fattore attrito | Coefficiente di attrito per aste non lineari |
| Rapporto HRDb | Rapporto di hardening a flessione |
| Rapporto HRDv | Rapporto di hardening a taglio |

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

| | | | |
|---|----------|---|---|
| 1 | c.a. | Resistenza Rc Resistenza fctm Coefficiente ksb | resistenza a compressione cubica resistenza media a trazione semplice Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |
| 2 | acciaio | Tensione ft Tensione fy Resistenza fd Resistenza fd (>40) Tensione ammissibile Tensione ammissibile(>40) | Valore della tensione di rottura Valore della tensione di snervamento Resistenza di calcolo per SL CNR-UNI 10011 Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm Tensione ammissibile CNR-UNI 10011 Tensione ammissibile CNR-UNI 10011 per spessori > 40mm |
| 3 | muratura | Muratura consolidata Incremento resistenza Incremento rigidezza Resistenza f Resistenza fv0 Resistenza fh Resistenza fb Resistenza fbh Resistenza fv0h Resistenza ft Resistenza fvlim Resistenza fbt Coefficiente mu Coefficiente fi Coefficiente ksb | Muratura per la quale si prevedono interventi di rinforzo" Incremento conseguito in termini di resistenza Incremento conseguito in termini di rigidezza Valore della resistenza a compressione Valore della resistenza a taglio in assenza di tensioni normali Valore della resistenza a compressione orizzontale Valore della resistenza a compressione dei blocchi Valore della resistenza a compressione dei blocchi in direzione orizzontale Valore della resistenza a taglio in assenza di tensioni normali per le travi Valore della resistenza a trazione per fessurazione diagonale Valore della massima resistenza a taglio Valore della resistenza a trazione dei blocchi Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4) Coefficiente d'ingranamento utilizzato per la resistenza a taglio Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |
| 4 | legno | E0,05 Resistenza fc0 Resistenza ft0 Resistenza fm Resistenza fv | Modulo di elasticità corrispondente ad un frattile del 5% Valore della resistenza a compressione parallela Valore della resistenza a trazione parallela Valore della resistenza a flessione Valore della resistenza a taglio |

| | |
|--------------|--|
| Resist. ft0k | Resistenza caratteristica (tensione amm. per REGLES) per trazione |
| Resist. fmk | Resistenza caratteristica (tensione amm. per REGLES) per flessione |
| Resist. fvk | Resistenza caratteristica (tensione amm. per REGLES) per taglio |
| Modulo E0,05 | Modulo elastico parallelo caratteristico |
| Lamellare | lamellare o massiccio |

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

| Id | Tipo / Note | V. caratt. | V. medio | Young | Poisson | G | Gamma | Alfa | Altri |
|-----|---|------------|----------|-----------|---------|-----------|----------|----------|----------|
| | | daN/cm2 | daN/cm2 | daN/cm2 | | daN/cm2 | daN/cm3 | | |
| 6 | Calcestruzzo Classe C35/45 | | | 3.463e+05 | 0.20 | 1.443e+05 | 2.50e-03 | 1.00e-05 | |
| | Resistenza Rc | 450.0 | | | | | | | |
| | Resistenza fctm | | 33.5 | | | | | | |
| | Rapporto Rfessurata | | | | | | | | 1.00 |
| | Coefficiente ksb | | | | | | | | 0.85 |
| | Rapporto HRDb | | | | | | | | 1.00e-05 |
| | Rapporto HRDv | | | | | | | | 1.00e-05 |
| 157 | Materiale inf. rigido no peso E = 1.000e+09 | | | 1.000e+09 | 0.0 | 5.000e+08 | 0.0 | 1.20e-05 | |
| | Rapporto HRDb | | | | | | | | 1.00e-05 |
| | Rapporto HRDv | | | | | | | | 1.00e-05 |

| Gusci c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|--------------------------------------|---------|--------|--------|---------|---------|---------|
| Armatura | | | | | | |
| Inclinazione Ax [gradi] | 0.0 | | | | | |
| Angolo Ax-Ay [gradi] | 90.00 | | | | | |
| Minima tesa | 0.31 | | | | | |
| Massima tesa | 0.78 | | | | | |
| Maglia unica centrale | NO | | | | | |
| Copriferro [cm] | 2.00 | | | | | |
| Maglia x | | | | | | |
| diametro | 16 | | | | | |
| passo | 10 | | | | | |
| diametro aggiuntivi | 16 | | | | | |
| Maglia y | | | | | | |
| diametro | 16 | | | | | |
| passo | 10 | | | | | |
| diametro aggiuntivi | 16 | | | | | |
| Stati limite ultimi | | | | | | |
| Tensione fy [daN/cm2] | 4500.00 | | | | | |
| Tipo acciaio | tipo C | | | | | |
| Coefficiente gamma s | 1.15 | | | | | |
| Coefficiente gamma c | 1.50 | | | | | |
| Verifiche con N costante | SI | | | | | |
| Applica SLU da DIN | NO | | | | | |
| Tensioni ammissibili | | | | | | |
| Tensione amm. cls [daN/cm2] | 97.50 | | | | | |
| Tensione amm. acciaio [daN/cm2] | 2600.00 | | | | | |
| Rapporto omogeneizzazione N | 15.00 | | | | | |
| Massimo rapporto area compressa/tesa | 1.00 | | | | | |
| Resistenza al fuoco | | | | | | |
| 3- intradosso | NO | | | | | |
| 3+ estradosso | NO | | | | | |
| Tempo di esposizione R | 15 | | | | | |

| Travi c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|--------------------|--------|--------|--------|---------|---------|---------|
| Generalità | | | | | | |
| Progetta a filo | NO | | | | | |
| Af inf: da q*L*L / | 0.0 | | | | | |
| Armatura | | | | | | |
| Minima tesa | 0.31 | | | | | |
| Minima compressa | 0.31 | | | | | |
| Massima tesa | 4.00 | | | | | |

| Travi c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|--------------------------------------|-----------|--------|--------|---------|---------|---------|
| Da sezione | SI | | | | | |
| Usa armatura teorica | NO | | | | | |
| Stati limite ultimi | | | | | | |
| Tensione fy [daN/cm2] | 4500.00 | | | | | |
| Tensione fy staffe [daN/cm2] | 4500.00 | | | | | |
| Tipo acciaio | tipo C | | | | | |
| Coefficiente gamma s | 1.15 | | | | | |
| Coefficiente gamma c | 1.50 | | | | | |
| Verifiche con N costante | SI | | | | | |
| Fattore di ridistribuzione | 0.0 | | | | | |
| Modello per il confinamento | | | | | | |
| Relazione tensio-deformativa | Mander | | | | | |
| Incrudimento acciaio | 5.000e-03 | | | | | |
| Fattore lambda | 1.00 | | | | | |
| epsilon max,s | 4.000e-02 | | | | | |
| epsilon cu2 | 4.500e-03 | | | | | |
| epsilon c2 | 0.0 | | | | | |
| epsilon cy | 0.0 | | | | | |
| Tensioni ammissibili | | | | | | |
| Tensione amm. cls [daN/cm2] | 97.50 | | | | | |
| Tensione amm. acciaio [daN/cm2] | 2600.00 | | | | | |
| Rapporto omogeneizzazione N | 15.00 | | | | | |
| Massimo rapporto area compressa/tesa | 1.00 | | | | | |
| Staffe | | | | | | |
| Diametro staffe | 0.0 | | | | | |
| Passo minimo [cm] | 4.00 | | | | | |
| Passo massimo [cm] | 30.00 | | | | | |
| Passo raffittito [cm] | 15.00 | | | | | |
| Lunghezza zona raffittita [cm] | 50.00 | | | | | |
| Ctg(Teta) Max | 2.50 | | | | | |
| Percentuale sagomati | 0.0 | | | | | |
| Luce di taglio per GR [cm] | 1.00 | | | | | |
| Adotta scorrimento medio | NO | | | | | |
| Torsione non essenziale inclusa | SI | | | | | |

4.2 MODELLAZIONE DELLE SEZIONI

4.2.1 LEGENDA TABELLA DATI SEZIONI

Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

| | |
|--------------|---|
| Area | area della sezione |
| A V2 | area della sezione/fattore di taglio (per il taglio in direzione 2) |
| A V3 | area della sezione/fattore di taglio (per il taglio in direzione 3) |
| Jt | fattore torsionale di rigidezza |
| J2-2 | momento d'inerzia della sezione riferito all'asse 2 |
| J3-3 | momento d'inerzia della sezione riferito all'asse 3 |
| W2-2 | modulo di resistenza della sezione riferito all'asse 2 |
| W3-3 | modulo di resistenza della sezione riferito all'asse 3 |
| Wp2-2 | modulo di resistenza plastico della sezione riferito all'asse 2 |
| Wp3-3 | modulo di resistenza plastico della sezione riferito all'asse 3 |

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

| | | | | | |
|-------------------------|--------------|--------------|--------------|----------------------|----------------|
| | | | | | |
| rettangolare | a T | a T rovescia | a T di colmo | a L | a L specchiata |
| | | | | | |
| a L specchiata rovescia | a L rovescia | a L di colmo | a doppio T | a quattro specchiata | a quattro |
| | | | | | |
| a U | a C | a croce | circolare | rettangolare cava | circolare cava |

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilati.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

| Id | Tipo | Area | A V2 | A V3 | Jt | J 2-2 | J 3-3 | W 2-2 | W 3-3 | Wp 2-2 | Wp 3-3 |
|----|-------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | cm2 | cm2 | cm2 | cm4 | cm4 | cm4 | cm3 | cm3 | cm3 | cm3 |
| 1 | Rettangolare: b=70 h=40 | 2800.00 | 2333.33 | 2333.33 | 9.557e+05 | 1.143e+06 | 3.733e+05 | 3.267e+04 | 1.867e+04 | 4.900e+04 | 2.800e+04 |
| 2 | Circolare: r=2 | 12.57 | 10.60 | 10.60 | 25.13 | 12.57 | 12.57 | 6.28 | 6.28 | 10.67 | 10.67 |

4.3 MODELLAZIONE STRUTTURA: NODI

4.3.1 LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.

Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).

Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

| | |
|-------------|---------------------------|
| Nodo | numero del nodo. |
| X | valore della coordinata X |
| Y | valore della coordinata Y |
| Z | valore della coordinata Z |

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

| | |
|----------------|---|
| Nodo | numero del nodo. |
| X | valore della coordinata X |
| Y | valore della coordinata Y |
| Z | valore della coordinata Z |
| Note | eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero). |
| Note | (FS = 1, 2,...) eventuale codice del tipo di fondazione speciale (1, 2,... fanno riferimento alle tipologie: plinto, palo, plinto su pali,...) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo |
| Rig. TX | valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ). |

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

4.3.2 TABELLA DATI NODI

| Nodo | X | Y | Z | Nodo | X | Y | Z | Nodo | X | Y | Z |
|------|-------|--------|-------|------|-------|--------|-------|------|-------|--------|-------|
| | cm | cm | cm | | cm | cm | cm | | cm | cm | cm |
| 3 | 0.0 | 60.0 | 100.0 | 4 | 0.0 | 120.0 | 100.0 | 5 | 0.0 | 180.0 | 100.0 |
| 6 | 0.0 | 240.0 | 100.0 | 7 | 0.0 | 300.0 | 100.0 | 8 | 0.0 | 360.0 | 100.0 |
| 9 | 0.0 | 420.0 | 100.0 | 10 | 0.0 | 480.0 | 100.0 | 11 | 0.0 | 540.0 | 100.0 |
| 12 | 0.0 | 600.0 | 100.0 | 13 | 0.0 | 660.0 | 100.0 | 14 | 0.0 | 720.0 | 100.0 |
| 15 | 0.0 | 780.0 | 100.0 | 16 | 0.0 | 840.0 | 100.0 | 17 | 0.0 | 900.0 | 100.0 |
| 18 | 0.0 | 960.0 | 100.0 | 19 | 0.0 | 1020.0 | 100.0 | 20 | 0.0 | 1080.0 | 100.0 |
| 21 | 0.0 | 1140.0 | 100.0 | 24 | 80.0 | 60.0 | 100.0 | 25 | 80.0 | 120.0 | 100.0 |
| 26 | 80.0 | 180.0 | 100.0 | 27 | 80.0 | 240.0 | 100.0 | 28 | 80.0 | 300.0 | 100.0 |
| 29 | 80.0 | 360.0 | 100.0 | 30 | 80.0 | 420.0 | 100.0 | 31 | 80.0 | 480.0 | 100.0 |
| 32 | 80.0 | 540.0 | 100.0 | 33 | 80.0 | 600.0 | 100.0 | 34 | 80.0 | 660.0 | 100.0 |
| 35 | 80.0 | 720.0 | 100.0 | 36 | 80.0 | 780.0 | 100.0 | 37 | 80.0 | 840.0 | 100.0 |
| 38 | 80.0 | 900.0 | 100.0 | 39 | 80.0 | 960.0 | 100.0 | 40 | 80.0 | 1020.0 | 100.0 |
| 41 | 80.0 | 1080.0 | 100.0 | 42 | 80.0 | 1140.0 | 100.0 | 43 | 0.0 | 1200.0 | 105.0 |
| 44 | 80.0 | 1200.0 | 105.0 | 45 | 0.0 | 1140.0 | 105.0 | 46 | 80.0 | 1140.0 | 105.0 |
| 47 | 0.0 | 1080.0 | 105.0 | 48 | 80.0 | 1080.0 | 105.0 | 49 | 0.0 | 120.0 | 105.0 |
| 50 | 80.0 | 120.0 | 105.0 | 51 | 0.0 | 780.0 | 105.0 | 52 | 80.0 | 780.0 | 105.0 |
| 53 | 0.0 | 420.0 | 105.0 | 54 | 80.0 | 420.0 | 105.0 | 55 | 0.0 | 1020.0 | 105.0 |
| 56 | 80.0 | 1020.0 | 105.0 | 57 | 0.0 | 300.0 | 105.0 | 58 | 80.0 | 300.0 | 105.0 |
| 59 | 0.0 | 540.0 | 105.0 | 60 | 80.0 | 540.0 | 105.0 | 61 | 0.0 | 720.0 | 105.0 |
| 62 | 80.0 | 720.0 | 105.0 | 63 | 0.0 | 960.0 | 105.0 | 64 | 80.0 | 960.0 | 105.0 |
| 65 | 80.0 | 0.0 | 105.0 | 66 | 0.0 | 0.0 | 105.0 | 67 | 0.0 | 60.0 | 105.0 |
| 68 | 80.0 | 60.0 | 105.0 | 69 | 0.0 | 360.0 | 105.0 | 70 | 80.0 | 360.0 | 105.0 |
| 71 | 0.0 | 900.0 | 105.0 | 72 | 80.0 | 900.0 | 105.0 | 73 | 0.0 | 660.0 | 105.0 |
| 74 | 80.0 | 660.0 | 105.0 | 75 | 0.0 | 480.0 | 105.0 | 76 | 80.0 | 480.0 | 105.0 |
| 77 | 0.0 | 180.0 | 105.0 | 78 | 80.0 | 180.0 | 105.0 | 79 | 0.0 | 840.0 | 105.0 |
| 80 | 80.0 | 840.0 | 105.0 | 81 | 0.0 | 240.0 | 105.0 | 82 | 80.0 | 240.0 | 105.0 |
| 83 | 0.0 | 600.0 | 105.0 | 84 | 80.0 | 600.0 | 105.0 | 87 | 165.0 | 60.0 | 100.0 |
| 88 | 165.0 | 120.0 | 100.0 | 89 | 165.0 | 180.0 | 100.0 | 90 | 165.0 | 240.0 | 100.0 |
| 91 | 165.0 | 300.0 | 100.0 | 92 | 165.0 | 360.0 | 100.0 | 93 | 165.0 | 420.0 | 100.0 |
| 94 | 165.0 | 480.0 | 100.0 | 95 | 165.0 | 540.0 | 100.0 | 96 | 165.0 | 600.0 | 100.0 |
| 97 | 165.0 | 660.0 | 100.0 | 98 | 165.0 | 720.0 | 100.0 | 99 | 165.0 | 780.0 | 100.0 |
| 100 | 165.0 | 840.0 | 100.0 | 101 | 165.0 | 900.0 | 100.0 | 102 | 165.0 | 960.0 | 100.0 |

| Nodo | X | Y | Z | Nodo | X | Y | Z | Nodo | X | Y | Z |
|------|-------|--------|-------|------|-------|--------|-------|------|-------|--------|-------|
| 103 | 165.0 | 1020.0 | 100.0 | 104 | 165.0 | 1080.0 | 100.0 | 105 | 165.0 | 1140.0 | 100.0 |
| 106 | 165.0 | 1200.0 | 105.0 | 107 | 165.0 | 1140.0 | 105.0 | 108 | 165.0 | 1080.0 | 105.0 |
| 109 | 165.0 | 120.0 | 105.0 | 110 | 165.0 | 780.0 | 105.0 | 111 | 165.0 | 420.0 | 105.0 |
| 112 | 165.0 | 1020.0 | 105.0 | 113 | 165.0 | 300.0 | 105.0 | 114 | 165.0 | 540.0 | 105.0 |
| 115 | 165.0 | 720.0 | 105.0 | 116 | 165.0 | 960.0 | 105.0 | 117 | 165.0 | 0.0 | 105.0 |
| 118 | 165.0 | 60.0 | 105.0 | 119 | 165.0 | 360.0 | 105.0 | 120 | 165.0 | 900.0 | 105.0 |
| 121 | 165.0 | 660.0 | 105.0 | 122 | 165.0 | 480.0 | 105.0 | 123 | 165.0 | 180.0 | 105.0 |
| 124 | 165.0 | 840.0 | 105.0 | 125 | 165.0 | 240.0 | 105.0 | 126 | 165.0 | 600.0 | 105.0 |
| 129 | 250.0 | 60.0 | 100.0 | 130 | 250.0 | 120.0 | 100.0 | 131 | 250.0 | 180.0 | 100.0 |
| 132 | 250.0 | 240.0 | 100.0 | 133 | 250.0 | 300.0 | 100.0 | 134 | 250.0 | 360.0 | 100.0 |
| 135 | 250.0 | 420.0 | 100.0 | 136 | 250.0 | 480.0 | 100.0 | 137 | 250.0 | 540.0 | 100.0 |
| 138 | 250.0 | 600.0 | 100.0 | 139 | 250.0 | 660.0 | 100.0 | 140 | 250.0 | 720.0 | 100.0 |
| 141 | 250.0 | 780.0 | 100.0 | 142 | 250.0 | 840.0 | 100.0 | 143 | 250.0 | 900.0 | 100.0 |
| 144 | 250.0 | 960.0 | 100.0 | 145 | 250.0 | 1020.0 | 100.0 | 146 | 250.0 | 1080.0 | 100.0 |
| 147 | 250.0 | 1140.0 | 100.0 | 148 | 250.0 | 1200.0 | 105.0 | 149 | 250.0 | 1140.0 | 105.0 |
| 150 | 250.0 | 1080.0 | 105.0 | 151 | 250.0 | 120.0 | 105.0 | 152 | 250.0 | 780.0 | 105.0 |
| 153 | 250.0 | 420.0 | 105.0 | 154 | 250.0 | 1020.0 | 105.0 | 155 | 250.0 | 300.0 | 105.0 |
| 156 | 250.0 | 540.0 | 105.0 | 157 | 250.0 | 720.0 | 105.0 | 158 | 250.0 | 960.0 | 105.0 |
| 159 | 250.0 | 0.0 | 105.0 | 160 | 250.0 | 60.0 | 105.0 | 161 | 250.0 | 360.0 | 105.0 |
| 162 | 250.0 | 900.0 | 105.0 | 163 | 250.0 | 660.0 | 105.0 | 164 | 250.0 | 480.0 | 105.0 |
| 165 | 250.0 | 180.0 | 105.0 | 166 | 250.0 | 840.0 | 105.0 | 167 | 250.0 | 240.0 | 105.0 |
| 168 | 250.0 | 600.0 | 105.0 | 171 | 330.0 | 60.0 | 100.0 | 172 | 330.0 | 120.0 | 100.0 |
| 173 | 330.0 | 180.0 | 100.0 | 174 | 330.0 | 240.0 | 100.0 | 175 | 330.0 | 300.0 | 100.0 |
| 176 | 330.0 | 360.0 | 100.0 | 177 | 330.0 | 420.0 | 100.0 | 178 | 330.0 | 480.0 | 100.0 |
| 179 | 330.0 | 540.0 | 100.0 | 180 | 330.0 | 600.0 | 100.0 | 181 | 330.0 | 660.0 | 100.0 |
| 182 | 330.0 | 720.0 | 100.0 | 183 | 330.0 | 780.0 | 100.0 | 184 | 330.0 | 840.0 | 100.0 |
| 185 | 330.0 | 900.0 | 100.0 | 186 | 330.0 | 960.0 | 100.0 | 187 | 330.0 | 1020.0 | 100.0 |
| 188 | 330.0 | 1080.0 | 100.0 | 189 | 330.0 | 1140.0 | 100.0 | 190 | 330.0 | 1200.0 | 105.0 |
| 191 | 330.0 | 1140.0 | 105.0 | 192 | 330.0 | 1080.0 | 105.0 | 193 | 330.0 | 120.0 | 105.0 |
| 194 | 330.0 | 780.0 | 105.0 | 195 | 330.0 | 420.0 | 105.0 | 196 | 330.0 | 1020.0 | 105.0 |
| 197 | 330.0 | 300.0 | 105.0 | 198 | 330.0 | 540.0 | 105.0 | 199 | 330.0 | 720.0 | 105.0 |
| 200 | 330.0 | 960.0 | 105.0 | 201 | 330.0 | 0.0 | 105.0 | 202 | 330.0 | 60.0 | 105.0 |
| 203 | 330.0 | 360.0 | 105.0 | 204 | 330.0 | 900.0 | 105.0 | 205 | 330.0 | 660.0 | 105.0 |
| 206 | 330.0 | 480.0 | 105.0 | 207 | 330.0 | 180.0 | 105.0 | 208 | 330.0 | 840.0 | 105.0 |
| 209 | 330.0 | 240.0 | 105.0 | 210 | 330.0 | 600.0 | 105.0 | 211 | -35.0 | 1200.0 | 105.0 |
| 212 | -35.0 | 1140.0 | 105.0 | 213 | -35.0 | 540.0 | 105.0 | 214 | -35.0 | 1080.0 | 105.0 |
| 215 | -35.0 | 120.0 | 105.0 | 216 | -35.0 | 1020.0 | 105.0 | 217 | -35.0 | 480.0 | 105.0 |
| 218 | -35.0 | 960.0 | 105.0 | 219 | -35.0 | 420.0 | 105.0 | 220 | -35.0 | 900.0 | 105.0 |
| 221 | -35.0 | 360.0 | 105.0 | 222 | -35.0 | 840.0 | 105.0 | 223 | -35.0 | 60.0 | 105.0 |
| 224 | -35.0 | 780.0 | 105.0 | 225 | -35.0 | 300.0 | 105.0 | 226 | -35.0 | 720.0 | 105.0 |
| 227 | -35.0 | 240.0 | 105.0 | 228 | -35.0 | 660.0 | 105.0 | 229 | -35.0 | 180.0 | 105.0 |
| 230 | -35.0 | 600.0 | 105.0 | 231 | -35.0 | 0.0 | 105.0 | 232 | 365.0 | 1140.0 | 105.0 |
| 233 | 365.0 | 1200.0 | 105.0 | 234 | 365.0 | 1080.0 | 105.0 | 235 | 365.0 | 1020.0 | 105.0 |
| 236 | 365.0 | 960.0 | 105.0 | 237 | 365.0 | 900.0 | 105.0 | 238 | 365.0 | 840.0 | 105.0 |
| 239 | 365.0 | 780.0 | 105.0 | 240 | 365.0 | 720.0 | 105.0 | 241 | 365.0 | 660.0 | 105.0 |
| 242 | 365.0 | 600.0 | 105.0 | 243 | 365.0 | 540.0 | 105.0 | 244 | 365.0 | 480.0 | 105.0 |
| 245 | 365.0 | 420.0 | 105.0 | 246 | 365.0 | 360.0 | 105.0 | 247 | 365.0 | 300.0 | 105.0 |
| 248 | 365.0 | 240.0 | 105.0 | 249 | 365.0 | 180.0 | 105.0 | 250 | 365.0 | 120.0 | 105.0 |
| 251 | 365.0 | 60.0 | 105.0 | 252 | 365.0 | 0.0 | 105.0 | | | | |

| Nodo | X | Y | Z | Note | Rig. TX | Rig. TY | Rig. TZ | Rig. RX | Rig. RY | Rig. RZ |
|------|-------|--------|-------|----------|---------|---------|---------|------------|------------|------------|
| | cm | cm | cm | | daN/cm | daN/cm | daN/cm | daN cm/rad | daN cm/rad | daN cm/rad |
| 1 | 0.0 | 0.0 | 100.0 | v=111000 | | | | | | |
| 2 | 0.0 | 1200.0 | 100.0 | v=111000 | | | | | | |
| 22 | 80.0 | 0.0 | 100.0 | v=111000 | | | | | | |
| 23 | 80.0 | 1200.0 | 100.0 | v=111000 | | | | | | |
| 85 | 165.0 | 0.0 | 100.0 | v=111000 | | | | | | |
| 86 | 165.0 | 1200.0 | 100.0 | v=111000 | | | | | | |
| 127 | 250.0 | 0.0 | 100.0 | v=111000 | | | | | | |
| 128 | 250.0 | 1200.0 | 100.0 | v=111000 | | | | | | |
| 169 | 330.0 | 0.0 | 100.0 | v=111000 | | | | | | |
| 170 | 330.0 | 1200.0 | 100.0 | v=111000 | | | | | | |

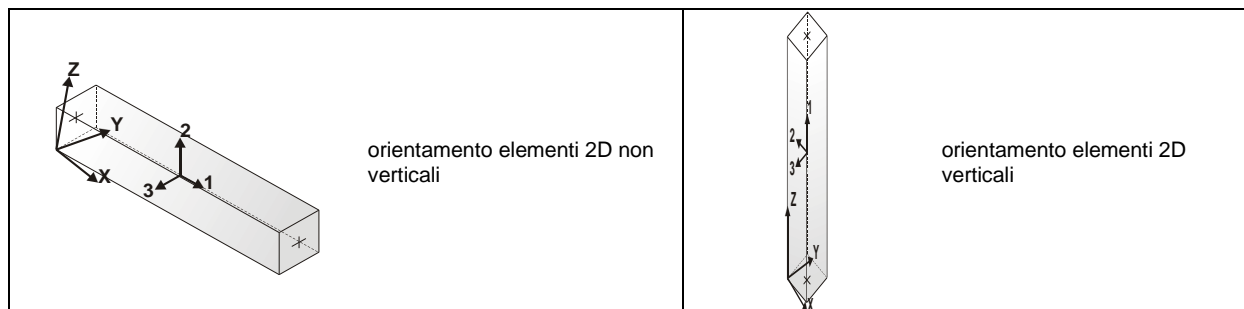
4.4 MODELLAZIONE STRUTTURALE: ELEMENTI TRAVE

4.4.1 TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.

Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

| | |
|-----------------------|---|
| Elem. | numero dell'elemento |
| Note | codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa, |
| Nodo I (J) | numero del nodo iniziale (finale) |
| Mat. | codice del materiale assegnato all'elemento |
| Sez. | codice della sezione assegnata all'elemento |
| Rotaz. | valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo |
| Svincolo I (J) | codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva) |
| Wink V | costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico |
| Wink O | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|-------|--------|--------|------|------|-------|--------|------------|------------|---------|---------|
| | | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 1 | Trave | 1 | 3 | 6 | 1 | 1 | | | | | |
| 2 | Trave | 3 | 4 | 6 | 1 | 1 | | | | | |
| 3 | Trave | 4 | 5 | 6 | 1 | 1 | | | | | |
| 4 | Trave | 5 | 6 | 6 | 1 | 1 | | | | | |
| 5 | Trave | 6 | 7 | 6 | 1 | 1 | | | | | |
| 6 | Trave | 7 | 8 | 6 | 1 | 1 | | | | | |
| 7 | Trave | 8 | 9 | 6 | 1 | 1 | | | | | |
| 8 | Trave | 9 | 10 | 6 | 1 | 1 | | | | | |
| 9 | Trave | 10 | 11 | 6 | 1 | 1 | | | | | |
| 10 | Trave | 11 | 12 | 6 | 1 | 1 | | | | | |
| 11 | Trave | 12 | 13 | 6 | 1 | 1 | | | | | |
| 12 | Trave | 13 | 14 | 6 | 1 | 1 | | | | | |
| 13 | Trave | 14 | 15 | 6 | 1 | 1 | | | | | |
| 14 | Trave | 15 | 16 | 6 | 1 | 1 | | | | | |
| 15 | Trave | 16 | 17 | 6 | 1 | 1 | | | | | |
| 16 | Trave | 17 | 18 | 6 | 1 | 1 | | | | | |
| 17 | Trave | 18 | 19 | 6 | 1 | 1 | | | | | |
| 18 | Trave | 19 | 20 | 6 | 1 | 1 | | | | | |
| 19 | Trave | 20 | 21 | 6 | 1 | 1 | | | | | |
| 20 | Trave | 21 | 2 | 6 | 1 | 1 | | | | | |
| 21 | Trave | 22 | 24 | 6 | 1 | 1 | | | | | |
| 22 | Trave | 24 | 25 | 6 | 1 | 1 | | | | | |
| 23 | Trave | 25 | 26 | 6 | 1 | 1 | | | | | |
| 24 | Trave | 26 | 27 | 6 | 1 | 1 | | | | | |
| 25 | Trave | 27 | 28 | 6 | 1 | 1 | | | | | |
| 26 | Trave | 28 | 29 | 6 | 1 | 1 | | | | | |
| 27 | Trave | 29 | 30 | 6 | 1 | 1 | | | | | |
| 28 | Trave | 30 | 31 | 6 | 1 | 1 | | | | | |
| 29 | Trave | 31 | 32 | 6 | 1 | 1 | | | | | |
| 30 | Trave | 32 | 33 | 6 | 1 | 1 | | | | | |
| 31 | Trave | 33 | 34 | 6 | 1 | 1 | | | | | |
| 32 | Trave | 34 | 35 | 6 | 1 | 1 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|--------|--------|--------|------|------|-------|--------|------------|------------|--------|--------|
| 33 | Trave | 35 | 36 | 6 | 1 | 1 | | | | | |
| 34 | Trave | 36 | 37 | 6 | 1 | 1 | | | | | |
| 35 | Trave | 37 | 38 | 6 | 1 | 1 | | | | | |
| 36 | Trave | 38 | 39 | 6 | 1 | 1 | | | | | |
| 37 | Trave | 39 | 40 | 6 | 1 | 1 | | | | | |
| 38 | Trave | 40 | 41 | 6 | 1 | 1 | | | | | |
| 39 | Trave | 41 | 42 | 6 | 1 | 1 | | | | | |
| 40 | Trave | 42 | 23 | 6 | 1 | 1 | | | | | |
| 41 | Pilas. | 2 | 43 | 157 | 2 | 1 | | | | | |
| 42 | Pilas. | 23 | 44 | 157 | 2 | 1 | | | | | |
| 43 | Pilas. | 21 | 45 | 157 | 2 | 1 | | | | | |
| 44 | Pilas. | 42 | 46 | 157 | 2 | 1 | | | | | |
| 45 | Pilas. | 20 | 47 | 157 | 2 | 1 | | | | | |
| 46 | Pilas. | 41 | 48 | 157 | 2 | 1 | | | | | |
| 47 | Pilas. | 6 | 81 | 157 | 2 | 1 | | | | | |
| 48 | Pilas. | 27 | 82 | 157 | 2 | 1 | | | | | |
| 49 | Pilas. | 19 | 55 | 157 | 2 | 1 | | | | | |
| 50 | Pilas. | 40 | 56 | 157 | 2 | 1 | | | | | |
| 51 | Pilas. | 10 | 75 | 157 | 2 | 1 | | | | | |
| 52 | Pilas. | 31 | 76 | 157 | 2 | 1 | | | | | |
| 53 | Pilas. | 18 | 63 | 157 | 2 | 1 | | | | | |
| 54 | Pilas. | 39 | 64 | 157 | 2 | 1 | | | | | |
| 55 | Pilas. | 1 | 66 | 157 | 2 | 1 | | | | | |
| 56 | Pilas. | 22 | 65 | 157 | 2 | 1 | | | | | |
| 57 | Pilas. | 17 | 71 | 157 | 2 | 1 | | | | | |
| 58 | Pilas. | 38 | 72 | 157 | 2 | 1 | | | | | |
| 59 | Pilas. | 9 | 53 | 157 | 2 | 1 | | | | | |
| 60 | Pilas. | 30 | 54 | 157 | 2 | 1 | | | | | |
| 61 | Pilas. | 16 | 79 | 157 | 2 | 1 | | | | | |
| 62 | Pilas. | 37 | 80 | 157 | 2 | 1 | | | | | |
| 63 | Pilas. | 5 | 77 | 157 | 2 | 1 | | | | | |
| 64 | Pilas. | 26 | 78 | 157 | 2 | 1 | | | | | |
| 65 | Pilas. | 15 | 51 | 157 | 2 | 1 | | | | | |
| 66 | Pilas. | 36 | 52 | 157 | 2 | 1 | | | | | |
| 67 | Pilas. | 8 | 69 | 157 | 2 | 1 | | | | | |
| 68 | Pilas. | 29 | 70 | 157 | 2 | 1 | | | | | |
| 69 | Pilas. | 14 | 61 | 157 | 2 | 1 | | | | | |
| 70 | Pilas. | 35 | 62 | 157 | 2 | 1 | | | | | |
| 71 | Pilas. | 3 | 67 | 157 | 2 | 1 | | | | | |
| 72 | Pilas. | 24 | 68 | 157 | 2 | 1 | | | | | |
| 73 | Pilas. | 13 | 73 | 157 | 2 | 1 | | | | | |
| 74 | Pilas. | 34 | 74 | 157 | 2 | 1 | | | | | |
| 75 | Pilas. | 7 | 57 | 157 | 2 | 1 | | | | | |
| 76 | Pilas. | 28 | 58 | 157 | 2 | 1 | | | | | |
| 77 | Pilas. | 12 | 83 | 157 | 2 | 1 | | | | | |
| 78 | Pilas. | 33 | 84 | 157 | 2 | 1 | | | | | |
| 79 | Pilas. | 4 | 49 | 157 | 2 | 1 | | | | | |
| 80 | Pilas. | 25 | 50 | 157 | 2 | 1 | | | | | |
| 81 | Pilas. | 11 | 59 | 157 | 2 | 1 | | | | | |
| 82 | Pilas. | 32 | 60 | 157 | 2 | 1 | | | | | |
| 83 | Trave | 85 | 87 | 6 | 1 | 1 | | | | | |
| 84 | Trave | 87 | 88 | 6 | 1 | 1 | | | | | |
| 85 | Trave | 88 | 89 | 6 | 1 | 1 | | | | | |
| 86 | Trave | 89 | 90 | 6 | 1 | 1 | | | | | |
| 87 | Trave | 90 | 91 | 6 | 1 | 1 | | | | | |
| 88 | Trave | 91 | 92 | 6 | 1 | 1 | | | | | |
| 89 | Trave | 92 | 93 | 6 | 1 | 1 | | | | | |
| 90 | Trave | 93 | 94 | 6 | 1 | 1 | | | | | |
| 91 | Trave | 94 | 95 | 6 | 1 | 1 | | | | | |
| 92 | Trave | 95 | 96 | 6 | 1 | 1 | | | | | |
| 93 | Trave | 96 | 97 | 6 | 1 | 1 | | | | | |
| 94 | Trave | 97 | 98 | 6 | 1 | 1 | | | | | |
| 95 | Trave | 98 | 99 | 6 | 1 | 1 | | | | | |
| 96 | Trave | 99 | 100 | 6 | 1 | 1 | | | | | |
| 97 | Trave | 100 | 101 | 6 | 1 | 1 | | | | | |
| 98 | Trave | 101 | 102 | 6 | 1 | 1 | | | | | |
| 99 | Trave | 102 | 103 | 6 | 1 | 1 | | | | | |
| 100 | Trave | 103 | 104 | 6 | 1 | 1 | | | | | |
| 101 | Trave | 104 | 105 | 6 | 1 | 1 | | | | | |
| 102 | Trave | 105 | 86 | 6 | 1 | 1 | | | | | |
| 103 | Pilas. | 86 | 106 | 157 | 2 | 1 | | | | | |
| 104 | Pilas. | 105 | 107 | 157 | 2 | 1 | | | | | |
| 105 | Pilas. | 104 | 108 | 157 | 2 | 1 | | | | | |
| 106 | Pilas. | 90 | 125 | 157 | 2 | 1 | | | | | |
| 107 | Pilas. | 103 | 112 | 157 | 2 | 1 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|--------|--------|--------|------|------|-------|--------|------------|------------|--------|--------|
| 108 | Pilas. | 94 | 122 | 157 | 2 | 1 | | | | | |
| 109 | Pilas. | 102 | 116 | 157 | 2 | 1 | | | | | |
| 110 | Pilas. | 85 | 117 | 157 | 2 | 1 | | | | | |
| 111 | Pilas. | 101 | 120 | 157 | 2 | 1 | | | | | |
| 112 | Pilas. | 93 | 111 | 157 | 2 | 1 | | | | | |
| 113 | Pilas. | 100 | 124 | 157 | 2 | 1 | | | | | |
| 114 | Pilas. | 89 | 123 | 157 | 2 | 1 | | | | | |
| 115 | Pilas. | 99 | 110 | 157 | 2 | 1 | | | | | |
| 116 | Pilas. | 92 | 119 | 157 | 2 | 1 | | | | | |
| 117 | Pilas. | 98 | 115 | 157 | 2 | 1 | | | | | |
| 118 | Pilas. | 87 | 118 | 157 | 2 | 1 | | | | | |
| 119 | Pilas. | 97 | 121 | 157 | 2 | 1 | | | | | |
| 120 | Pilas. | 91 | 113 | 157 | 2 | 1 | | | | | |
| 121 | Pilas. | 96 | 126 | 157 | 2 | 1 | | | | | |
| 122 | Pilas. | 88 | 109 | 157 | 2 | 1 | | | | | |
| 123 | Pilas. | 95 | 114 | 157 | 2 | 1 | | | | | |
| 124 | Trave | 127 | 129 | 6 | 1 | 1 | | | | | |
| 125 | Trave | 129 | 130 | 6 | 1 | 1 | | | | | |
| 126 | Trave | 130 | 131 | 6 | 1 | 1 | | | | | |
| 127 | Trave | 131 | 132 | 6 | 1 | 1 | | | | | |
| 128 | Trave | 132 | 133 | 6 | 1 | 1 | | | | | |
| 129 | Trave | 133 | 134 | 6 | 1 | 1 | | | | | |
| 130 | Trave | 134 | 135 | 6 | 1 | 1 | | | | | |
| 131 | Trave | 135 | 136 | 6 | 1 | 1 | | | | | |
| 132 | Trave | 136 | 137 | 6 | 1 | 1 | | | | | |
| 133 | Trave | 137 | 138 | 6 | 1 | 1 | | | | | |
| 134 | Trave | 138 | 139 | 6 | 1 | 1 | | | | | |
| 135 | Trave | 139 | 140 | 6 | 1 | 1 | | | | | |
| 136 | Trave | 140 | 141 | 6 | 1 | 1 | | | | | |
| 137 | Trave | 141 | 142 | 6 | 1 | 1 | | | | | |
| 138 | Trave | 142 | 143 | 6 | 1 | 1 | | | | | |
| 139 | Trave | 143 | 144 | 6 | 1 | 1 | | | | | |
| 140 | Trave | 144 | 145 | 6 | 1 | 1 | | | | | |
| 141 | Trave | 145 | 146 | 6 | 1 | 1 | | | | | |
| 142 | Trave | 146 | 147 | 6 | 1 | 1 | | | | | |
| 143 | Trave | 147 | 128 | 6 | 1 | 1 | | | | | |
| 144 | Pilas. | 128 | 148 | 157 | 2 | 1 | | | | | |
| 145 | Pilas. | 147 | 149 | 157 | 2 | 1 | | | | | |
| 146 | Pilas. | 146 | 150 | 157 | 2 | 1 | | | | | |
| 147 | Pilas. | 132 | 167 | 157 | 2 | 1 | | | | | |
| 148 | Pilas. | 145 | 154 | 157 | 2 | 1 | | | | | |
| 149 | Pilas. | 136 | 164 | 157 | 2 | 1 | | | | | |
| 150 | Pilas. | 144 | 158 | 157 | 2 | 1 | | | | | |
| 151 | Pilas. | 127 | 159 | 157 | 2 | 1 | | | | | |
| 152 | Pilas. | 143 | 162 | 157 | 2 | 1 | | | | | |
| 153 | Pilas. | 135 | 153 | 157 | 2 | 1 | | | | | |
| 154 | Pilas. | 142 | 166 | 157 | 2 | 1 | | | | | |
| 155 | Pilas. | 131 | 165 | 157 | 2 | 1 | | | | | |
| 156 | Pilas. | 141 | 152 | 157 | 2 | 1 | | | | | |
| 157 | Pilas. | 134 | 161 | 157 | 2 | 1 | | | | | |
| 158 | Pilas. | 140 | 157 | 157 | 2 | 1 | | | | | |
| 159 | Pilas. | 129 | 160 | 157 | 2 | 1 | | | | | |
| 160 | Pilas. | 139 | 163 | 157 | 2 | 1 | | | | | |
| 161 | Pilas. | 133 | 155 | 157 | 2 | 1 | | | | | |
| 162 | Pilas. | 138 | 168 | 157 | 2 | 1 | | | | | |
| 163 | Pilas. | 130 | 151 | 157 | 2 | 1 | | | | | |
| 164 | Pilas. | 137 | 156 | 157 | 2 | 1 | | | | | |
| 165 | Trave | 169 | 171 | 6 | 1 | 1 | | | | | |
| 166 | Trave | 171 | 172 | 6 | 1 | 1 | | | | | |
| 167 | Trave | 172 | 173 | 6 | 1 | 1 | | | | | |
| 168 | Trave | 173 | 174 | 6 | 1 | 1 | | | | | |
| 169 | Trave | 174 | 175 | 6 | 1 | 1 | | | | | |
| 170 | Trave | 175 | 176 | 6 | 1 | 1 | | | | | |
| 171 | Trave | 176 | 177 | 6 | 1 | 1 | | | | | |
| 172 | Trave | 177 | 178 | 6 | 1 | 1 | | | | | |
| 173 | Trave | 178 | 179 | 6 | 1 | 1 | | | | | |
| 174 | Trave | 179 | 180 | 6 | 1 | 1 | | | | | |
| 175 | Trave | 180 | 181 | 6 | 1 | 1 | | | | | |
| 176 | Trave | 181 | 182 | 6 | 1 | 1 | | | | | |
| 177 | Trave | 182 | 183 | 6 | 1 | 1 | | | | | |
| 178 | Trave | 183 | 184 | 6 | 1 | 1 | | | | | |
| 179 | Trave | 184 | 185 | 6 | 1 | 1 | | | | | |
| 180 | Trave | 185 | 186 | 6 | 1 | 1 | | | | | |
| 181 | Trave | 186 | 187 | 6 | 1 | 1 | | | | | |
| 182 | Trave | 187 | 188 | 6 | 1 | 1 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|--------|--------|--------|------|------|-------|--------|------------|------------|--------|--------|
| 183 | Trave | 188 | 189 | 6 | 1 | 1 | | | | | |
| 184 | Trave | 189 | 170 | 6 | 1 | 1 | | | | | |
| 185 | Pilas. | 170 | 190 | 157 | 2 | 1 | | | | | |
| 186 | Pilas. | 189 | 191 | 157 | 2 | 1 | | | | | |
| 187 | Pilas. | 188 | 192 | 157 | 2 | 1 | | | | | |
| 188 | Pilas. | 174 | 209 | 157 | 2 | 1 | | | | | |
| 189 | Pilas. | 187 | 196 | 157 | 2 | 1 | | | | | |
| 190 | Pilas. | 178 | 206 | 157 | 2 | 1 | | | | | |
| 191 | Pilas. | 186 | 200 | 157 | 2 | 1 | | | | | |
| 192 | Pilas. | 169 | 201 | 157 | 2 | 1 | | | | | |
| 193 | Pilas. | 185 | 204 | 157 | 2 | 1 | | | | | |
| 194 | Pilas. | 177 | 195 | 157 | 2 | 1 | | | | | |
| 195 | Pilas. | 184 | 208 | 157 | 2 | 1 | | | | | |
| 196 | Pilas. | 173 | 207 | 157 | 2 | 1 | | | | | |
| 197 | Pilas. | 183 | 194 | 157 | 2 | 1 | | | | | |
| 198 | Pilas. | 176 | 203 | 157 | 2 | 1 | | | | | |
| 199 | Pilas. | 182 | 199 | 157 | 2 | 1 | | | | | |
| 200 | Pilas. | 171 | 202 | 157 | 2 | 1 | | | | | |
| 201 | Pilas. | 181 | 205 | 157 | 2 | 1 | | | | | |
| 202 | Pilas. | 175 | 197 | 157 | 2 | 1 | | | | | |
| 203 | Pilas. | 180 | 210 | 157 | 2 | 1 | | | | | |
| 204 | Pilas. | 172 | 193 | 157 | 2 | 1 | | | | | |
| 205 | Pilas. | 179 | 198 | 157 | 2 | 1 | | | | | |

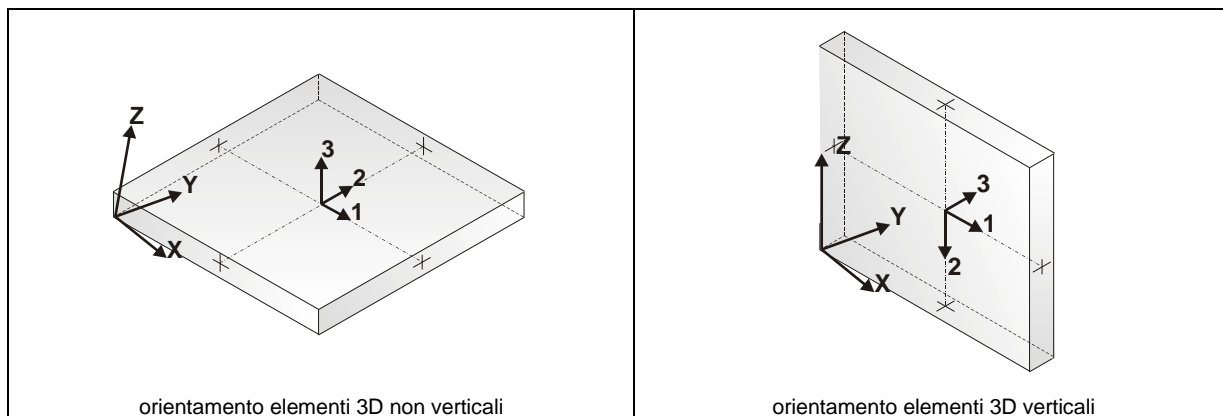
4.5 MODELLAZIONE STRUTTURALE: ELEMENTI SHELL

4.5.1 LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.

Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

| | |
|-------------------------|--|
| Elem. | numero dell'elemento |
| Note | codice di comportamento: <i>Guscio</i> (elemento guscio in elevazione non verticale) <i>Guscio fond.</i> (elemento guscio su suolo elastico) <i>Setto</i> (elemento guscio in elevazione verticale) <i>Membrana</i> (elemento guscio con comportamento membranale) |
| Nodo I (J, K, L) | numero del nodo I (J, K, L) |
| Mat. | codice del materiale assegnato all'elemento |
| Spessore | spessore dell'elemento (costante) |
| Wink V | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale |
| Wink O | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale |

| Elem. | Note | Nodo I | Nodo J | Nodo K | Nodo L | Mat. | Crit. | Spessore | Svincolo | Wink V | Wink O |
|-------|--------|--------|--------|--------|--------|------|-------|----------|----------|---------|---------|
| | | | | | | | | cm | | daN/cm3 | daN/cm3 |
| 1 | Guscio | 45 | 46 | 44 | 43 | 6 | 1 | 20.0 | | | |
| 2 | Guscio | 47 | 48 | 46 | 45 | 6 | 1 | 20.0 | | | |
| 3 | Guscio | 55 | 56 | 48 | 47 | 6 | 1 | 20.0 | | | |
| 4 | Guscio | 63 | 64 | 56 | 55 | 6 | 1 | 20.0 | | | |
| 5 | Guscio | 71 | 72 | 64 | 63 | 6 | 1 | 20.0 | | | |
| 6 | Guscio | 79 | 80 | 72 | 71 | 6 | 1 | 20.0 | | | |
| 7 | Guscio | 51 | 52 | 80 | 79 | 6 | 1 | 20.0 | | | |
| 8 | Guscio | 61 | 62 | 52 | 51 | 6 | 1 | 20.0 | | | |
| 9 | Guscio | 73 | 74 | 62 | 61 | 6 | 1 | 20.0 | | | |
| 10 | Guscio | 83 | 84 | 74 | 73 | 6 | 1 | 20.0 | | | |
| 11 | Guscio | 59 | 60 | 84 | 83 | 6 | 1 | 20.0 | | | |
| 12 | Guscio | 75 | 76 | 60 | 59 | 6 | 1 | 20.0 | | | |
| 13 | Guscio | 53 | 54 | 76 | 75 | 6 | 1 | 20.0 | | | |
| 14 | Guscio | 69 | 70 | 54 | 53 | 6 | 1 | 20.0 | | | |
| 15 | Guscio | 57 | 58 | 70 | 69 | 6 | 1 | 20.0 | | | |
| 16 | Guscio | 81 | 82 | 58 | 57 | 6 | 1 | 20.0 | | | |
| 17 | Guscio | 77 | 78 | 82 | 81 | 6 | 1 | 20.0 | | | |
| 18 | Guscio | 49 | 50 | 78 | 77 | 6 | 1 | 20.0 | | | |
| 19 | Guscio | 67 | 68 | 50 | 49 | 6 | 1 | 20.0 | | | |
| 20 | Guscio | 66 | 65 | 68 | 67 | 6 | 1 | 20.0 | | | |
| 21 | Guscio | 46 | 107 | 106 | 44 | 6 | 1 | 20.0 | | | |
| 22 | Guscio | 48 | 108 | 107 | 46 | 6 | 1 | 20.0 | | | |
| 23 | Guscio | 56 | 112 | 108 | 48 | 6 | 1 | 20.0 | | | |
| 24 | Guscio | 64 | 116 | 112 | 56 | 6 | 1 | 20.0 | | | |
| 25 | Guscio | 72 | 120 | 116 | 64 | 6 | 1 | 20.0 | | | |
| 26 | Guscio | 80 | 124 | 120 | 72 | 6 | 1 | 20.0 | | | |
| 27 | Guscio | 52 | 110 | 124 | 80 | 6 | 1 | 20.0 | | | |
| 28 | Guscio | 62 | 115 | 110 | 52 | 6 | 1 | 20.0 | | | |
| 29 | Guscio | 74 | 121 | 115 | 62 | 6 | 1 | 20.0 | | | |
| 30 | Guscio | 84 | 126 | 121 | 74 | 6 | 1 | 20.0 | | | |
| 31 | Guscio | 60 | 114 | 126 | 84 | 6 | 1 | 20.0 | | | |
| 32 | Guscio | 76 | 122 | 114 | 60 | 6 | 1 | 20.0 | | | |
| 33 | Guscio | 54 | 111 | 122 | 76 | 6 | 1 | 20.0 | | | |
| 34 | Guscio | 70 | 119 | 111 | 54 | 6 | 1 | 20.0 | | | |
| 35 | Guscio | 58 | 113 | 119 | 70 | 6 | 1 | 20.0 | | | |
| 36 | Guscio | 82 | 125 | 113 | 58 | 6 | 1 | 20.0 | | | |
| 37 | Guscio | 78 | 123 | 125 | 82 | 6 | 1 | 20.0 | | | |
| 38 | Guscio | 50 | 109 | 123 | 78 | 6 | 1 | 20.0 | | | |
| 39 | Guscio | 68 | 118 | 109 | 50 | 6 | 1 | 20.0 | | | |
| 40 | Guscio | 65 | 117 | 118 | 68 | 6 | 1 | 20.0 | | | |
| 41 | Guscio | 107 | 149 | 148 | 106 | 6 | 1 | 20.0 | | | |
| 42 | Guscio | 108 | 150 | 149 | 107 | 6 | 1 | 20.0 | | | |
| 43 | Guscio | 112 | 154 | 150 | 108 | 6 | 1 | 20.0 | | | |
| 44 | Guscio | 116 | 158 | 154 | 112 | 6 | 1 | 20.0 | | | |
| 45 | Guscio | 120 | 162 | 158 | 116 | 6 | 1 | 20.0 | | | |
| 46 | Guscio | 124 | 166 | 162 | 120 | 6 | 1 | 20.0 | | | |
| 47 | Guscio | 110 | 152 | 166 | 124 | 6 | 1 | 20.0 | | | |
| 48 | Guscio | 115 | 157 | 152 | 110 | 6 | 1 | 20.0 | | | |
| 49 | Guscio | 121 | 163 | 157 | 115 | 6 | 1 | 20.0 | | | |
| 50 | Guscio | 126 | 168 | 163 | 121 | 6 | 1 | 20.0 | | | |
| 51 | Guscio | 114 | 156 | 168 | 126 | 6 | 1 | 20.0 | | | |
| 52 | Guscio | 122 | 164 | 156 | 114 | 6 | 1 | 20.0 | | | |
| 53 | Guscio | 111 | 153 | 164 | 122 | 6 | 1 | 20.0 | | | |
| 54 | Guscio | 119 | 161 | 153 | 111 | 6 | 1 | 20.0 | | | |
| 55 | Guscio | 113 | 155 | 161 | 119 | 6 | 1 | 20.0 | | | |
| 56 | Guscio | 125 | 167 | 155 | 113 | 6 | 1 | 20.0 | | | |
| 57 | Guscio | 123 | 165 | 167 | 125 | 6 | 1 | 20.0 | | | |
| 58 | Guscio | 109 | 151 | 165 | 123 | 6 | 1 | 20.0 | | | |
| 59 | Guscio | 118 | 160 | 151 | 109 | 6 | 1 | 20.0 | | | |
| 60 | Guscio | 117 | 159 | 160 | 118 | 6 | 1 | 20.0 | | | |
| 61 | Guscio | 149 | 191 | 190 | 148 | 6 | 1 | 20.0 | | | |
| 62 | Guscio | 150 | 192 | 191 | 149 | 6 | 1 | 20.0 | | | |
| 63 | Guscio | 154 | 196 | 192 | 150 | 6 | 1 | 20.0 | | | |
| 64 | Guscio | 158 | 200 | 196 | 154 | 6 | 1 | 20.0 | | | |
| 65 | Guscio | 162 | 204 | 200 | 158 | 6 | 1 | 20.0 | | | |
| 66 | Guscio | 166 | 208 | 204 | 162 | 6 | 1 | 20.0 | | | |
| 67 | Guscio | 152 | 194 | 208 | 166 | 6 | 1 | 20.0 | | | |
| 68 | Guscio | 157 | 199 | 194 | 152 | 6 | 1 | 20.0 | | | |
| 69 | Guscio | 163 | 205 | 199 | 157 | 6 | 1 | 20.0 | | | |
| 70 | Guscio | 168 | 210 | 205 | 163 | 6 | 1 | 20.0 | | | |
| 71 | Guscio | 156 | 198 | 210 | 168 | 6 | 1 | 20.0 | | | |
| 72 | Guscio | 164 | 206 | 198 | 156 | 6 | 1 | 20.0 | | | |
| 73 | Guscio | 153 | 195 | 206 | 164 | 6 | 1 | 20.0 | | | |
| 74 | Guscio | 161 | 203 | 195 | 153 | 6 | 1 | 20.0 | | | |

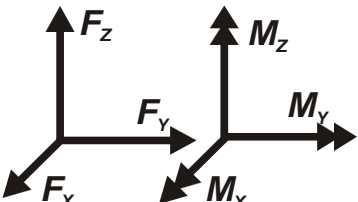
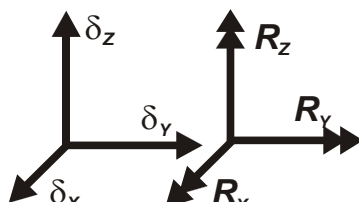
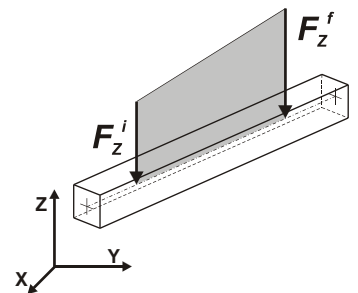
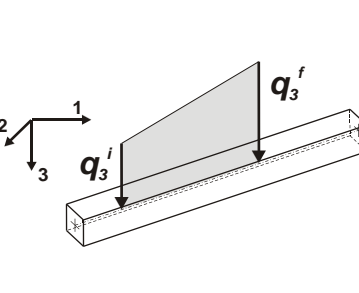
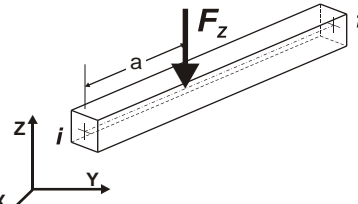
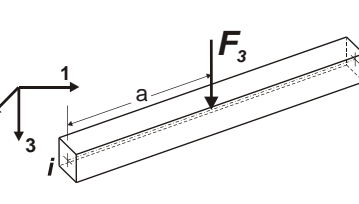
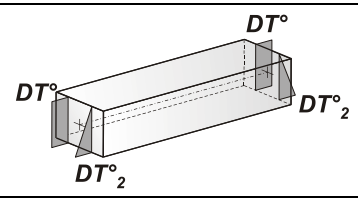
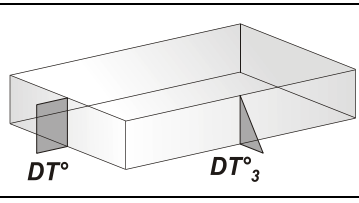
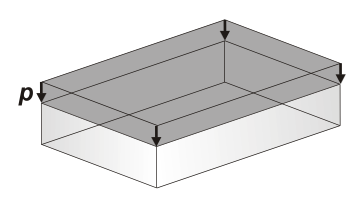
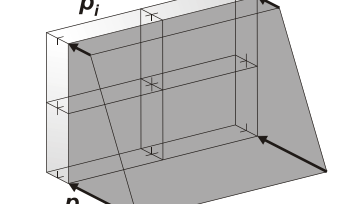
| Elem. | Note | Nodo I | Nodo J | Nodo K | Nodo L | Mat. | Crit. | Spessore | Svincolo | Wink V | Wink O |
|-------|--------|--------|--------|--------|--------|------|-------|----------|----------|--------|--------|
| 75 | Guscio | 155 | 197 | 203 | 161 | 6 | 1 | 20.0 | | | |
| 76 | Guscio | 167 | 209 | 197 | 155 | 6 | 1 | 20.0 | | | |
| 77 | Guscio | 165 | 207 | 209 | 167 | 6 | 1 | 20.0 | | | |
| 78 | Guscio | 151 | 193 | 207 | 165 | 6 | 1 | 20.0 | | | |
| 79 | Guscio | 160 | 202 | 193 | 151 | 6 | 1 | 20.0 | | | |
| 80 | Guscio | 159 | 201 | 202 | 160 | 6 | 1 | 20.0 | | | |
| 81 | Guscio | 212 | 45 | 43 | 211 | 6 | 1 | 20.0 | | | |
| 82 | Guscio | 214 | 47 | 45 | 212 | 6 | 1 | 20.0 | | | |
| 83 | Guscio | 216 | 55 | 47 | 214 | 6 | 1 | 20.0 | | | |
| 84 | Guscio | 218 | 63 | 55 | 216 | 6 | 1 | 20.0 | | | |
| 85 | Guscio | 220 | 71 | 63 | 218 | 6 | 1 | 20.0 | | | |
| 86 | Guscio | 222 | 79 | 71 | 220 | 6 | 1 | 20.0 | | | |
| 87 | Guscio | 224 | 51 | 79 | 222 | 6 | 1 | 20.0 | | | |
| 88 | Guscio | 226 | 61 | 51 | 224 | 6 | 1 | 20.0 | | | |
| 89 | Guscio | 228 | 73 | 61 | 226 | 6 | 1 | 20.0 | | | |
| 90 | Guscio | 230 | 83 | 73 | 228 | 6 | 1 | 20.0 | | | |
| 91 | Guscio | 213 | 59 | 83 | 230 | 6 | 1 | 20.0 | | | |
| 92 | Guscio | 217 | 75 | 59 | 213 | 6 | 1 | 20.0 | | | |
| 93 | Guscio | 219 | 53 | 75 | 217 | 6 | 1 | 20.0 | | | |
| 94 | Guscio | 221 | 69 | 53 | 219 | 6 | 1 | 20.0 | | | |
| 95 | Guscio | 225 | 57 | 69 | 221 | 6 | 1 | 20.0 | | | |
| 96 | Guscio | 227 | 81 | 57 | 225 | 6 | 1 | 20.0 | | | |
| 97 | Guscio | 229 | 77 | 81 | 227 | 6 | 1 | 20.0 | | | |
| 98 | Guscio | 215 | 49 | 77 | 229 | 6 | 1 | 20.0 | | | |
| 99 | Guscio | 223 | 67 | 49 | 215 | 6 | 1 | 20.0 | | | |
| 100 | Guscio | 231 | 66 | 67 | 223 | 6 | 1 | 20.0 | | | |
| 101 | Guscio | 191 | 232 | 233 | 190 | 6 | 1 | 20.0 | | | |
| 102 | Guscio | 192 | 234 | 232 | 191 | 6 | 1 | 20.0 | | | |
| 103 | Guscio | 196 | 235 | 234 | 192 | 6 | 1 | 20.0 | | | |
| 104 | Guscio | 200 | 236 | 235 | 196 | 6 | 1 | 20.0 | | | |
| 105 | Guscio | 204 | 237 | 236 | 200 | 6 | 1 | 20.0 | | | |
| 106 | Guscio | 208 | 238 | 237 | 204 | 6 | 1 | 20.0 | | | |
| 107 | Guscio | 194 | 239 | 238 | 208 | 6 | 1 | 20.0 | | | |
| 108 | Guscio | 199 | 240 | 239 | 194 | 6 | 1 | 20.0 | | | |
| 109 | Guscio | 205 | 241 | 240 | 199 | 6 | 1 | 20.0 | | | |
| 110 | Guscio | 210 | 242 | 241 | 205 | 6 | 1 | 20.0 | | | |
| 111 | Guscio | 198 | 243 | 242 | 210 | 6 | 1 | 20.0 | | | |
| 112 | Guscio | 206 | 244 | 243 | 198 | 6 | 1 | 20.0 | | | |
| 113 | Guscio | 195 | 245 | 244 | 206 | 6 | 1 | 20.0 | | | |
| 114 | Guscio | 203 | 246 | 245 | 195 | 6 | 1 | 20.0 | | | |
| 115 | Guscio | 197 | 247 | 246 | 203 | 6 | 1 | 20.0 | | | |
| 116 | Guscio | 209 | 248 | 247 | 197 | 6 | 1 | 20.0 | | | |
| 117 | Guscio | 207 | 249 | 248 | 209 | 6 | 1 | 20.0 | | | |
| 118 | Guscio | 193 | 250 | 249 | 207 | 6 | 1 | 20.0 | | | |
| 119 | Guscio | 202 | 251 | 250 | 193 | 6 | 1 | 20.0 | | | |
| 120 | Guscio | 201 | 252 | 251 | 202 | 6 | 1 | 20.0 | | | |

4.6 MODELLAZIONE DELLE AZIONI

4.6.1 LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

| | |
|-----------|---|
| 1 | carico concentrato nodale 6 dati (forza F_x , F_y , F_z , momento M_x , M_y , M_z) |
| 2 | spostamento nodale impresso 6 dati (spostamento T_x , T_y , T_z , rotazione R_x , R_y , R_z) |
| 3 | carico distribuito globale su elemento tipo trave 7 dati (f_x , f_y , f_z , m_x , m_y , m_z , ascissa di inizio carico) 7 dati (f_x , f_y , f_z , m_x , m_y , m_z , ascissa di fine carico) |
| 4 | carico distribuito locale su elemento tipo trave 7 dati (f_1 , f_2 , f_3 , m_1 , m_2 , m_3 , ascissa di inizio carico) 7 dati (f_1 , f_2 , f_3 , m_1 , m_2 , m_3 , ascissa di fine carico) |
| 5 | carico concentrato globale su elemento tipo trave 7 dati (F_x , F_y , F_z , M_x , M_y , M_z , ascissa di carico) |
| 6 | carico concentrato locale su elemento tipo trave 7 dati (F_1 , F_2 , F_3 , M_1 , M_2 , M_3 , ascissa di carico) |
| 7 | variazione termica applicata ad elemento tipo trave 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale) |
| 8 | carico di pressione uniforme su elemento tipo piastra 1 dato (pressione) |
| 9 | carico di pressione variabile su elemento tipo piastra 4 dati (pressione, quota, pressione, quota) |
| 10 | variazione termica applicata ad elemento tipo piastra 2 dati (variazioni termiche: media e differenza nello spessore) |
| 11 | carico variabile generale su elementi tipo trave e piastra 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave |
| 12 | gruppo di carichi con impronta su piastra 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell'impronta, interasse tra i carichi) |

| | |
|--|--|
|  <p>Carico concentrato nodale</p> |  <p>Spostamento impresso</p> |
|  <p>Carico distribuito globale</p> |  <p>Carico distribuito locale</p> |
|  <p>Carico concentrato globale</p> |  <p>Carico concentrato locale</p> |
|  <p>Carico termico 2D</p> |  <p>Carico termico 3D</p> |
|  <p>Carico pressione uniforme</p> |  <p>Carico pressione variabile</p> |

Tipo carico di pressione uniforme su piastra

| Id | Tipo | pressione |
|----|---|---------------------|
| | | daN/cm ² |
| 7 | QVK PAN ++ vento*0.4 (da personalizzare)-P3:p=3.200e-03 | 3.20e-03 |
| 8 | QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 | 3.20e-03 |

Tipo carico variabile generale

| Id | Tipo | ascissa | valore | ascissa | valore |
|----|--|------------|---------------------|-----------|---------------------|
| | | cm | daN/cm ² | cm | daN/cm ² |
| 1 | CARICO FRENATURA Q3k -QV:var x - Qy - Area | | | | |
| | X - X Qy Area L2=0.0 | -1.000e+05 | -0.08 | 1.000e+05 | -0.08 |

| Id | Tipo | ascissa | valore | ascissa | valore |
|----|--|------------|--------|-----------|--------|
| 2 | CARICO TRAFFICO Q1k 9 kN/MQ-QV:var x - Qz - Area | | | | |
| | X - X Qz Area L2=0.0 | -1.000e+05 | -0.09 | 1.000e+05 | -0.09 |
| 3 | CARICO TRAFFICO Q1k 150 kN-QV:var x - Qz - Area | | | | |
| | X - X Qz Area L2=0.0 | -1.000e+05 | -2.94 | 1.000e+05 | -2.94 |
| 4 | G2 PERMANENTE 1 kN/MQ-QV:var x - Qz - Area | | | | |
| | X - X Qz Area L2=0.0 | -1.000e+05 | -0.01 | 1.000e+05 | -0.09 |

4.7 SCHEMATIZZAZIONE DEI CASI DI CARICO

4.7.1 LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.

Sono previsti i seguenti 11 tipi di casi di carico:

| | Sigla | Tipo | Descrizione |
|----|--------------|-------------|---|
| 1 | Ggk | A | caso di carico comprensivo del peso proprio struttura |
| 2 | Gk | NA | caso di carico con azioni permanenti |
| 3 | Qk | NA | caso di carico con azioni variabili |
| 4 | Gsk | A | caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture |
| 5 | Qsk | A | caso di carico comprensivo dei carichi variabili sui solai |
| 6 | Qnk | A | caso di carico comprensivo dei carichi di neve sulle coperture |
| 7 | Qtk | SA | caso di carico comprensivo di una variazione termica agente sulla struttura |
| 8 | Qvk | NA | caso di carico comprensivo di azioni da vento sulla struttura |
| 9 | Esk | SA | caso di carico sismico con analisi statica equivalente |
| 10 | Edk | SA | caso di carico sismico con analisi dinamica |
| 11 | Et | NA | caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica |
| 12 | Pk | NA | caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni |

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:

7-Qtk, in quanto richiede solo il valore della variazione termica;

9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso: *Numero Tipo e Sigla identificativa, Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Skso1 nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

| CDC | Tipo | Sigla Id | Note |
|------------|-------------|---|--|
| 1 | Ggk | CDC=Ggk (peso proprio della struttura) | |
| 2 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +) | partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura) |
| 3 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -) | come precedente CDC sismico |
| 4 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +) | come precedente CDC sismico |
| 5 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -) | come precedente CDC sismico |
| 6 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +) | come precedente CDC sismico |
| 7 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -) | come precedente CDC sismico |
| 8 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +) | come precedente CDC sismico |
| 9 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -) | come precedente CDC sismico |
| 10 | Qk | CDC=Qk TRAFFICO | Azioni applicate: D3 :da 1 a 120 Azione : CARICO TRAFFICO Q1k 9 kN/MQ-QV:var x - Qz - Area |
| | | | D3 :da 1 a 120 Azione : CARICO FRENATURA Q3k -QV:var x - Qy - Area |
| 11 | Qvk | CDC=Qvk (carico da vento) dir X + | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN ++ vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 12 | Qvk | CDC=Qvk (carico da vento) dir X - | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 13 | Qvk | CDC=Qvk (carico da vento) dir Y + | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 14 | Qvk | CDC=Qvk (carico da vento) dir Y - | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 15 | Gk | CDC=G2k (permanente generico) | Azioni applicate: D3 :da 1 a 120 Azione : G2 PERMANENTE 1 kN/MQ-QV:var x - Qz - Area |

4.8 DEFINIZIONE DELLE COMBINAZIONI

4.8.1 LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.

Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

Combinazione fondamentale SLU

$$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \dots$$

Combinazione caratteristica (rara) SLE

$$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \dots$$

Combinazione frequente SLE

$$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione quasi permanente SLE

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

$$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

$$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Dove:

NTC 2018 Tabella 2.5.I

| Destinazione d'uso/azione | $\psi 0$ | $\psi 1$ | $\psi 2$ |
|--|----------|----------|----------|
| Categoria A residenziali | 0,70 | 0,50 | 0,30 |
| Categoria B uffici | 0,70 | 0,50 | 0,30 |
| Categoria C ambienti suscettibili di affollamento | 0,70 | 0,70 | 0,60 |
| Categoria D ambienti ad uso commerciale | 0,70 | 0,70 | 0,60 |
| Categoria E biblioteche, archivi, magazzini,... | 1,00 | 0,90 | 0,80 |
| Categoria F Rimesse e parcheggi (autoveicoli $\leq 30kN$) | 0,70 | 0,70 | 0,60 |
| Categoria G Rimesse e parcheggi (autoveicoli $> 30kN$) | 0,70 | 0,50 | 0,30 |
| Categoria H Coperture | 0,00 | 0,00 | 0,00 |
| Vento | 0,60 | 0,20 | 0,00 |
| Neve a quota ≤ 1000 m | 0,50 | 0,20 | 0,00 |
| Neve a quota > 1000 m | 0,70 | 0,50 | 0,20 |
| Variazioni Termiche | 0,60 | 0,50 | 0,00 |

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

| | | Coefficiente γf | EQU | A1 | A2 |
|--|-------------|----------------------------|------------|-----------|-----------|
| Carichi permanenti | Favorevoli | $\gamma G1$ | 0,9 | 1,0 | 1,0 |
| | Sfavorevoli | | 1,1 | 1,3 | 1,0 |
| Carichi permanenti non strutturali (Non compiutamente definiti) | Favorevoli | $\gamma G2$ | 0,8 | 0,8 | 0,8 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |
| Carichi variabili | Favorevoli | γQi | 0,0 | 0,0 | 0,0 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|------|----------------|-----------------|
| 1 | SLU | Comb. SLU A1 1 | |
| 2 | SLU | Comb. SLU A1 2 | |
| 3 | SLU | Comb. SLU A1 3 | |
| 4 | SLU | Comb. SLU A1 4 | |
| 5 | SLU | Comb. SLU A1 5 | |
| 6 | SLU | Comb. SLU A1 6 | |
| 7 | SLU | Comb. SLU A1 7 | |
| 8 | SLU | Comb. SLU A1 8 | |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|----------|--------------------------------|-----------------|
| 9 | SLU | Comb. SLU A1 9 | |
| 10 | SLU | Comb. SLU A1 10 | |
| 11 | SLU | Comb. SLU A1 11 | |
| 12 | SLU | Comb. SLU A1 12 | |
| 13 | SLU | Comb. SLU A1 13 | |
| 14 | SLU | Comb. SLU A1 14 | |
| 15 | SLU | Comb. SLU A1 15 | |
| 16 | SLU | Comb. SLU A1 16 | |
| 17 | SLU | Comb. SLU A1 17 | |
| 18 | SLU | Comb. SLU A1 18 | |
| 19 | SLU | Comb. SLU A1 19 | |
| 20 | SLU | Comb. SLU A1 20 | |
| 21 | SLU | Comb. SLU A1 (SLV sism.) 21 | |
| 22 | SLU | Comb. SLU A1 (SLV sism.) 22 | |
| 23 | SLU | Comb. SLU A1 (SLV sism.) 23 | |
| 24 | SLU | Comb. SLU A1 (SLV sism.) 24 | |
| 25 | SLU | Comb. SLU A1 (SLV sism.) 25 | |
| 26 | SLU | Comb. SLU A1 (SLV sism.) 26 | |
| 27 | SLU | Comb. SLU A1 (SLV sism.) 27 | |
| 28 | SLU | Comb. SLU A1 (SLV sism.) 28 | |
| 29 | SLU | Comb. SLU A1 (SLV sism.) 29 | |
| 30 | SLU | Comb. SLU A1 (SLV sism.) 30 | |
| 31 | SLU | Comb. SLU A1 (SLV sism.) 31 | |
| 32 | SLU | Comb. SLU A1 (SLV sism.) 32 | |
| 33 | SLU | Comb. SLU A1 (SLV sism.) 33 | |
| 34 | SLU | Comb. SLU A1 (SLV sism.) 34 | |
| 35 | SLU | Comb. SLU A1 (SLV sism.) 35 | |
| 36 | SLU | Comb. SLU A1 (SLV sism.) 36 | |
| 37 | SLU | Comb. SLU A1 (SLV sism.) 37 | |
| 38 | SLU | Comb. SLU A1 (SLV sism.) 38 | |
| 39 | SLU | Comb. SLU A1 (SLV sism.) 39 | |
| 40 | SLU | Comb. SLU A1 (SLV sism.) 40 | |
| 41 | SLU | Comb. SLU A1 (SLV sism.) 41 | |
| 42 | SLU | Comb. SLU A1 (SLV sism.) 42 | |
| 43 | SLU | Comb. SLU A1 (SLV sism.) 43 | |
| 44 | SLU | Comb. SLU A1 (SLV sism.) 44 | |
| 45 | SLU | Comb. SLU A1 (SLV sism.) 45 | |
| 46 | SLU | Comb. SLU A1 (SLV sism.) 46 | |
| 47 | SLU | Comb. SLU A1 (SLV sism.) 47 | |
| 48 | SLU | Comb. SLU A1 (SLV sism.) 48 | |
| 49 | SLU | Comb. SLU A1 (SLV sism.) 49 | |
| 50 | SLU | Comb. SLU A1 (SLV sism.) 50 | |
| 51 | SLU | Comb. SLU A1 (SLV sism.) 51 | |
| 52 | SLU | Comb. SLU A1 (SLV sism.) 52 | |
| 53 | SLD(sis) | Comb. SLE (SLD Danno sism.) 53 | |
| 54 | SLD(sis) | Comb. SLE (SLD Danno sism.) 54 | |
| 55 | SLD(sis) | Comb. SLE (SLD Danno sism.) 55 | |
| 56 | SLD(sis) | Comb. SLE (SLD Danno sism.) 56 | |
| 57 | SLD(sis) | Comb. SLE (SLD Danno sism.) 57 | |
| 58 | SLD(sis) | Comb. SLE (SLD Danno sism.) 58 | |
| 59 | SLD(sis) | Comb. SLE (SLD Danno sism.) 59 | |
| 60 | SLD(sis) | Comb. SLE (SLD Danno sism.) 60 | |
| 61 | SLD(sis) | Comb. SLE (SLD Danno sism.) 61 | |
| 62 | SLD(sis) | Comb. SLE (SLD Danno sism.) 62 | |
| 63 | SLD(sis) | Comb. SLE (SLD Danno sism.) 63 | |
| 64 | SLD(sis) | Comb. SLE (SLD Danno sism.) 64 | |
| 65 | SLD(sis) | Comb. SLE (SLD Danno sism.) 65 | |
| 66 | SLD(sis) | Comb. SLE (SLD Danno sism.) 66 | |
| 67 | SLD(sis) | Comb. SLE (SLD Danno sism.) 67 | |
| 68 | SLD(sis) | Comb. SLE (SLD Danno sism.) 68 | |
| 69 | SLD(sis) | Comb. SLE (SLD Danno sism.) 69 | |
| 70 | SLD(sis) | Comb. SLE (SLD Danno sism.) 70 | |
| 71 | SLD(sis) | Comb. SLE (SLD Danno sism.) 71 | |
| 72 | SLD(sis) | Comb. SLE (SLD Danno sism.) 72 | |
| 73 | SLD(sis) | Comb. SLE (SLD Danno sism.) 73 | |
| 74 | SLD(sis) | Comb. SLE (SLD Danno sism.) 74 | |
| 75 | SLD(sis) | Comb. SLE (SLD Danno sism.) 75 | |
| 76 | SLD(sis) | Comb. SLE (SLD Danno sism.) 76 | |
| 77 | SLD(sis) | Comb. SLE (SLD Danno sism.) 77 | |
| 78 | SLD(sis) | Comb. SLE (SLD Danno sism.) 78 | |
| 79 | SLD(sis) | Comb. SLE (SLD Danno sism.) 79 | |
| 80 | SLD(sis) | Comb. SLE (SLD Danno sism.) 80 | |
| 81 | SLD(sis) | Comb. SLE (SLD Danno sism.) 81 | |
| 82 | SLD(sis) | Comb. SLE (SLD Danno sism.) 82 | |
| 83 | SLD(sis) | Comb. SLE (SLD Danno sism.) 83 | |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|-----------|--------------------------------|-----------------|
| 84 | SLD(sis) | Comb. SLE (SLD Danno sism.) 84 | |
| 85 | SLU(acc.) | Comb. SLU (Accid.) 85 | |
| 86 | SLE(r) | Comb. SLE(rara) 86 | |
| 87 | SLE(r) | Comb. SLE(rara) 87 | |
| 88 | SLE(r) | Comb. SLE(rara) 88 | |
| 89 | SLE(r) | Comb. SLE(rara) 89 | |
| 90 | SLE(r) | Comb. SLE(rara) 90 | |
| 91 | SLE(r) | Comb. SLE(rara) 91 | |
| 92 | SLE(r) | Comb. SLE(rara) 92 | |
| 93 | SLE(r) | Comb. SLE(rara) 93 | |
| 94 | SLE(r) | Comb. SLE(rara) 94 | |
| 95 | SLE(r) | Comb. SLE(rara) 95 | |
| 96 | SLE(f) | Comb. SLE(freq.) 96 | |
| 97 | SLE(f) | Comb. SLE(freq.) 97 | |
| 98 | SLE(f) | Comb. SLE(freq.) 98 | |
| 99 | SLE(f) | Comb. SLE(freq.) 99 | |
| 100 | SLE(f) | Comb. SLE(freq.) 100 | |
| 101 | SLE(f) | Comb. SLE(freq.) 101 | |
| 102 | SLE(p) | Comb. SLE(perm.) 102 | |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 1 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 2 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 3 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 4 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 5 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 6 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 7 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 8 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 9 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 10 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 11 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 12 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 13 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 14 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 15 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 16 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 17 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.30 | | | | | | | | | | | | | |
| 18 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.30 | | | | | | | | | | | | | |
| 19 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.00 | | | | | | | | | | | | | |
| 20 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.00 | | | | | | | | | | | | | |
| 21 | 1.00 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 22 | 1.00 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 23 | 1.00 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 24 | 1.00 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 25 | 1.00 | -1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 26 | 1.00 | -1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 27 | 1.00 | 1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 28 | 1.00 | 1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 29 | 1.00 | 0.0 | -1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 30 | 1.00 | 0.0 | -1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 31 | 1.00 | 0.0 | 1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 32 | 1.00 | 0.0 | 1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 33 | 1.00 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 34 | 1.00 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 35 | 1.00 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 36 | 1.00 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 37 | 1.00 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 38 | 1.00 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 39 | 1.00 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 40 | 1.00 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 41 | 1.00 | 0.0 | -0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 42 | 1.00 | 0.0 | -0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 43 | 1.00 | 0.0 | 0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 44 | 1.00 | 0.0 | 0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 45 | 1.00 | -0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 46 | 1.00 | -0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 47 | 1.00 | 0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 48 | 1.00 | 0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 49 | 1.00 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 50 | 1.00 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 51 | 1.00 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 52 | 1.00 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 53 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 54 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 55 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 56 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 57 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 58 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 59 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 60 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 61 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 62 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 63 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 64 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 65 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 66 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 67 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 68 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 69 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 70 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 71 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 72 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 73 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 74 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 75 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 76 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 77 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 78 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 79 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 80 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 81 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 82 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 83 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 84 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 85 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 86 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 87 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 88 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 89 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 1.00 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 90 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 1.00 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 91 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 1.00 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 92 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 1.00 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 93 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 1.00 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 94 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 0.60 | 1.00 |
| | 1.00 | | | | | | | | | | | | | |
| 95 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 | 1.00 |
| | 1.00 | | | | | | | | | | | | | |
| 96 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 97 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 98 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 99 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 100 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 101 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 |
| | 1.00 | | | | | | | | | | | | | |
| 102 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |

5 ANALISI IN CAMPO SISMICO

Gli effetti sismici sono stati valutati convenzionalmente mediante un'analisi dinamica lineare della struttura considerata in campo elastico lineare.

Il manufatto è considerato come un sistema non dissipativo sia agli Stati Limite Ultimi che agli Stati Limite di Esercizio, per cui gli effetti delle azioni sismiche sono calcolati riferendosi allo spettro di progetto ottenuto assumendo un fattore di struttura q unitario.

Lo spettro di risposta fornisce la massima risposta, in termini di accelerazione, per l'oscillatore semplice caratterizzato dal valore del periodo naturale e dello smorzamento. In questo modo la risposta della struttura è fornita dalla risposta dell'oscillatore semplice corrispondente alla forma modale principale. In seguito viene esplicitata l'applicabilità del metodo statico.

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.

Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito <http://esse1.mi.ingv.it/>.

Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell'allegato alle NTC (rispettivamente media pesata e interpolazione).

L'azione sismica viene definita in relazione ad un periodo di riferimento V_r che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento V_r e la probabilità di superamento P_{ver} associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno T_r e i relativi parametri di pericolosità sismica (vedi tabella successiva):

ag: accelerazione orizzontale massima del terreno;

Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

| Parametri della struttura | | | | | |
|---------------------------|-------------------|------------|----------------------|---------------|-----------------------|
| Classe d'uso | Vita V_n [anni] | Coeff. Uso | Periodo V_r [anni] | Tipo di suolo | Categoria topografica |
| II | 50.0 | 1.0 | 50.0 | C | T1 |

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente $S = S_s \cdot S_t$ (3.2.3)

F_o è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale

F_v è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito di riferimento rigido orizzontale

T_b è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.

T_c è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.

T_d è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, S_e , è definito dalle seguenti espressioni:

$$\begin{aligned} 0 \leq T < T_B & S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o} \left(1 - \frac{T}{T_B} \right) \right] \\ T_B \leq T < T_C & S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \\ T_C \leq T < T_D & S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T} \right) \\ T_D \leq T & S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2} \right) \end{aligned}$$

Dove per sottosuolo di categoria **A** i coefficienti S_s e C_c valgono 1; mentre per le categorie di sottosuolo B, C, D, E i coefficienti S_s e C_c vengono calcolati mediante le espressioni riportate nella seguente Tabella

| Categoria sottosuolo | S_s | C_c |
|----------------------|---|------------------------------|
| A | 1,00 | 1,00 |
| B | $1,00 \leq 1,40 - 0,40 \cdot F_o \cdot \frac{a_g}{g} \leq 1,20$ | $1,10 \cdot (T_C^*)^{-0,20}$ |
| C | $1,00 \leq 1,70 - 0,60 \cdot F_o \cdot \frac{a_g}{g} \leq 1,50$ | $1,05 \cdot (T_C^*)^{-0,33}$ |
| D | $0,90 \leq 2,40 - 1,50 \cdot F_o \cdot \frac{a_g}{g} \leq 1,80$ | $1,25 \cdot (T_C^*)^{-0,50}$ |
| E | $1,00 \leq 2,00 - 1,10 \cdot F_o \cdot \frac{a_g}{g} \leq 1,60$ | $1,15 \cdot (T_C^*)^{-0,40}$ |

Per tenere conto delle condizioni topografiche e in assenza di specifiche analisi di risposta sismica locale, si utilizzano i valori del coefficiente topografico S_T riportati nella seguente Tabella

| Categoria topografica | Ubicazione dell'opera o dell'intervento | S_T |
|-----------------------|---|-------|
| T1 | - | 1,0 |
| T2 | In corrispondenza della sommità del pendio | 1,2 |
| T3 | In corrispondenza della cresta di un rilievo con pendenza media minore o uguale a 30° | 1,2 |
| T4 | In corrispondenza della cresta di un rilievo con pendenza media maggiore di 30° | 1,4 |

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, S_{ve} , è definito dalle espressioni:

$$\begin{aligned} 0 \leq T < T_B & S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o} \left(1 - \frac{T}{T_B} \right) \right] \\ T_B \leq T < T_C & S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \\ T_C \leq T < T_D & S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T} \right) \\ T_D \leq T & S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2} \right) \end{aligned}$$

I valori di S_s , T_B , T_C e T_D , sono riportati nella seguente Tabella

| Categoria di sottosuolo | S_s | T_B | T_C | T_D |
|-------------------------|-------|--------|--------|-------|
| A, B, C, D, E | 1,0 | 0,05 s | 0,15 s | 1,0 s |

| Id nodo | Longitudine | Latitudine | Distanza |
|---------|-------------|------------|----------|
| | | | Km |
| Loc. | 12.244 | 45.669 | |
| 11859 | 12.205 | 45.628 | 5.457 |
| 11860 | 12.276 | 45.629 | 5.079 |
| 11638 | 12.275 | 45.679 | 2.644 |
| 11637 | 12.204 | 45.678 | 3.254 |

| SL | Pver | Tr | ag | Fo | T*c |
|-----|------|-------|-------|-------|-------|
| | | Anni | g | | sec |
| SLO | 81.0 | 30.1 | 0.038 | 2.563 | 0.236 |
| SLD | 63.0 | 50.3 | 0.051 | 2.483 | 0.260 |
| SLV | 10.0 | 474.6 | 0.137 | 2.473 | 0.339 |
| SLC | 5.0 | 974.8 | 0.183 | 2.511 | 0.349 |

| SL | ag | S | Fo | Fv | Tb | Tc | Td |
|-----|-------|-------|-------|-------|-------|-------|-------|
| | g | | | | sec | sec | sec |
| SLO | 0.038 | 1.500 | 2.563 | 0.672 | 0.133 | 0.399 | 1.751 |
| SLD | 0.051 | 1.500 | 2.483 | 0.755 | 0.142 | 0.426 | 1.803 |
| SLV | 0.137 | 1.496 | 2.473 | 1.237 | 0.170 | 0.509 | 2.149 |
| SLC | 0.183 | 1.425 | 2.511 | 1.449 | 0.173 | 0.519 | 2.330 |

5.1 RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente

10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l'azione sismica: in particolare possono essere presenti i seguenti valori:

| | | |
|--------------------|----|---|
| Angolo ingresso | di | Angolo di ingresso dell'azione sismica orizzontale |
| Fattore importanza | di | Fattore di importanza dell'edificio, in base alla categoria di appartenenza |
| Zona sismica | | Zona sismica |
| Accelerazione ag | | Accelerazione orizzontale massima sul suolo |
| Categoria suolo | | Categoria di profilo stratigrafico del suolo di fondazione |

| | |
|----------------------------|---|
| Fattore q | Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale |
| Amplificazione ND | Coefficiente di amplificazione q/q_{ND} delle azioni sismiche (solo per elementi progettati in campo non dissipativo) |
| Fattore di sito S | Fattore dipendente dalla stratigrafia e dal profilo topografico |
| Classe di duttilità CD | Classe di duttilità della struttura – “A” duttilità alta, “B” duttilità bassa |
| Fattore riduz. SLD | Fattore di riduzione dello spettro elastico per lo stato limite di danno |
| Periodo proprio T1 | Periodo proprio di vibrazione della struttura |
| Coefficiente Lambda | Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura |
| Ordinata spettro Sd(T1) | Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd) |
| Ordinata spettro Se(T1) | Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve) |
| Ordinata spettro S (Tb-Tc) | Valore dell'ordinata dello spettro in uso nel tratto costante |
| numero di modi considerati | Numero di modi di vibrare della struttura considerati nell'analisi dinamica |

Nel caso di elementi progettati in campo non dissipativo vengono adottate le sollecitazioni calcolate con un fattore q_{ND} ricavato come da 7.3.2 in funzione del fattore di comportamento q utilizzato per la struttura:
 $1 < q_{ND} = 2/3 \cdot q < 1.5$

Il coefficiente di amplificazione delle azioni sismiche rispetto alle azioni calcolate con il fattore di comportamento globale viene indicato nelle relative tabelle.

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

- a) analisi sismica statica equivalente:
 - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/L_s (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
 - azione sismica complessiva
- b) analisi sismica dinamica con spettro di risposta:
 - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/L_s (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
 - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi
 - massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione ϵ_{dT} (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità $1000 \cdot \epsilon_{dT}/h$ da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") -

viene riportato il livello di deformazione ϵ_T , ϵ_P e ϵ_D degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità $1000 \cdot \epsilon_T/h$ da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento d_E , area ridotta e dimensione A_2 , azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.

Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.

In particolare la tabella, per ogni combinazione di calcolo, riporta:

| | |
|-----------------------|--|
| Nodo | Nodo di appoggio dell' isolatore |
| Cmb | Combinazione oggetto della verifica |
| Verif. | Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata |
| d_E | Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30% |
| Ang fi | Angolo utilizzato per il calcolo dell' area ridotta A_r (per dispositivi circolari) |
| V | Azione verticale agente |
| A_r | Area ridotta efficace |
| Dim A_2 | Dimensione utile per il calcolo della deformazione per rotazione |
| Sig s | Tensione nell' inserto in acciaio |
| $\Gamma_{m,c(a,s,t)}$ | Deformazioni di taglio dell' elastomero |
| V_{cr} | Carico critico per instabilità |

Affinché la verifica sia positiva deve essere:

- 1) $V > 0$
- 2) $\text{Sig s} < f_{yk}$
- 3) $\Gamma_{m,t} < 5$
- 4) $\Gamma_{m,s} < \Gamma_{m,s}^*$ (caratteristica dell' elastomero)
- 5) $\Gamma_{m,s} < 2$
- 6) $V < 0.5 V_{cr}$

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 2 | Edk | CDC=Ed (dinamico SLU) $\alpha=0.0$ (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito $S = 1.496$ |
| | | | ordinata spettro (tratto T_b-T_c) = 0.508 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T_1 : 0.013 sec. |
| | | | fattore q : 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. μ d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | $(r/L_s)^2$ | rapp. ex/rx | rapp. ey/ry |
|--------|---------------|---------|---------|------------|------------|---------|---------|-------------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | -60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.353 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.236 | 11.89 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.229 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 2.31e-05 | 0.0 | 7.25e-05 | 0.0 | 2213.27 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.223 | 3.01e-04 | 1.26e-06 | 0.17 | 7.22e-04 | 3.19e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.222 | 1089.52 | 4.5 | 5.12e-05 | 0.0 | 2.17e-05 | 0.0 | 0.0 | 0.0 |
| Risulta | | | | 1.889e+04 | | 156.29 | | 2.137e+04 | | | |
| In percentuale | | | | 78.69 | | 0.65 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 3 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.013 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. mu d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | 60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.353 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.236 | 11.88 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.53e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.229 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 0.0 | 0.0 | 6.04e-06 | 0.0 | 2213.44 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.223 | 1.48e-05 | 0.0 | 0.18 | 7.70e-04 | 2.23e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.222 | 1088.42 | 4.5 | 7.32e-04 | 3.05e-06 | 1.63e-04 | 0.0 | 0.0 | 0.0 |
| Risulta | | | | 1.888e+04 | | 156.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.68 | | 0.65 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--------------------|
| 4 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +) | |
| | | | categoria suolo: C |

| CDC | Tipo | Sigla Id | Note |
|-----|------|----------|--|
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.300 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. mu d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.353 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.236 | 0.0 | 0.0 | 0.84 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.229 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.70e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 0.95 | 3.94e-03 | 3.06e-05 | 0.0 | 2213.20 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.223 | 1.42e-04 | 0.0 | 0.17 | 6.95e-04 | 3.44e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.222 | 1096.38 | 4.6 | 2.83e-04 | 1.18e-06 | 0.08 | 3.27e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.29 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 5 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.300 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. mu d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | -20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|------|-----------|---------|----------------|------------------|---|------------------|---|------------------|---|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|------------------------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| 1 | 12.024 | 0.083 | 0.353 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.236 | 0.0 | 0.0 | 0.85 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.229 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.71e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 0.96 | 3.98e-03 | 2.03e-05 | 0.0 | 2213.23 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.223 | 9.23e-05 | 0.0 | 0.17 | 7.19e-04 | 3.88e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.222 | 1096.35 | 4.6 | 2.69e-04 | 1.12e-06 | 0.08 | 3.46e-04 | 0.0 | 0.0 |
| Risulta In percentuale | | | | 1.884e+04 78.51 | | 157.30 0.66 | | 2.137e+04 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 6 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.013 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | -60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|------------------------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.090 | 11.89 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.087 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 2.31e-05 | 0.0 | 7.25e-05 | 0.0 | 2213.27 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 3.01e-04 | 1.26e-06 | 0.17 | 7.22e-04 | 3.19e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.083 | 1089.52 | 4.5 | 5.12e-05 | 0.0 | 2.17e-05 | 0.0 | 0.0 | 0.0 |
| Risulta In percentuale | | | | 1.889e+04 78.69 | | 156.29 0.65 | | 2.137e+04 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 7 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.013 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | 60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.090 | 11.88 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.53e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.087 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.0 | 0.0 | 6.04e-06 | 0.0 | 2213.44 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 1.48e-05 | 0.0 | 0.18 | 7.70e-04 | 2.23e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.083 | 1088.42 | 4.5 | 7.32e-04 | 3.05e-06 | 1.63e-04 | 0.0 | 0.0 | 0.0 |
| Risulta | | | | 1.888e+04 | | 156.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.68 | | 0.65 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 8 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso: 90.00 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.300 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.090 | 0.0 | 0.0 | 0.84 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.087 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.70e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.95 | 3.94e-03 | 3.06e-05 | 0.0 | 2213.20 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 1.42e-04 | 0.0 | 0.17 | 6.95e-04 | 3.44e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.083 | 1096.38 | 4.6 | 2.83e-04 | 1.18e-06 | 0.08 | 3.27e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.29 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 9 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |

| CDC | Tipo | Sigla Id | Note |
|-----|------|----------|-----------------------------------|
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.300 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | -20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.090 | 0.0 | 0.0 | 0.85 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.087 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.71e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.96 | 3.98e-03 | 2.03e-05 | 0.0 | 2213.23 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 9.23e-05 | 0.0 | 0.17 | 7.19e-04 | 3.88e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.083 | 1096.35 | 4.6 | 2.69e-04 | 1.12e-06 | 0.08 | 3.46e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

6 MODELLAZIONE STRUTTURALE E RISULTATI ANALISI

La struttura e il suo comportamento sotto le azioni statiche e dinamiche è stato adeguatamente valutato, interpretato e trasferito in un modello tridimensionale; tale modello ha consentito di effettuare un'analisi particolarmente reale sia della distribuzione di massa che della effettiva rigidità.

Il modello rappresenta la struttura costituita da: travi e pilastri con i solai ai vari piani schematizzati come impalcati rigidi.

L'analisi strutturale, nella fase statica, è stata condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici.

L'analisi strutturale, nella fase sismica, è stata condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici.

In entrambi i casi l'analisi strutturale è stata condotta con il metodo degli elementi finiti.

I pilastri e le travi sono stati schematizzati considerando elementi finiti che modellino sforzo normale, flessione deviata, taglio deviato e momento torcente.

Gli elementi finiti utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

- Elemento tipo FRAME (pilastro e trave)
- Elemento tipo SHELL (elemento tipo lastra o piastra)

Le figure di seguito riportate illustrano il modello tridimensionale adottato ed i principali risultati delle analisi statiche e sismiche.

6.1 MODELLO STRUTTURALE

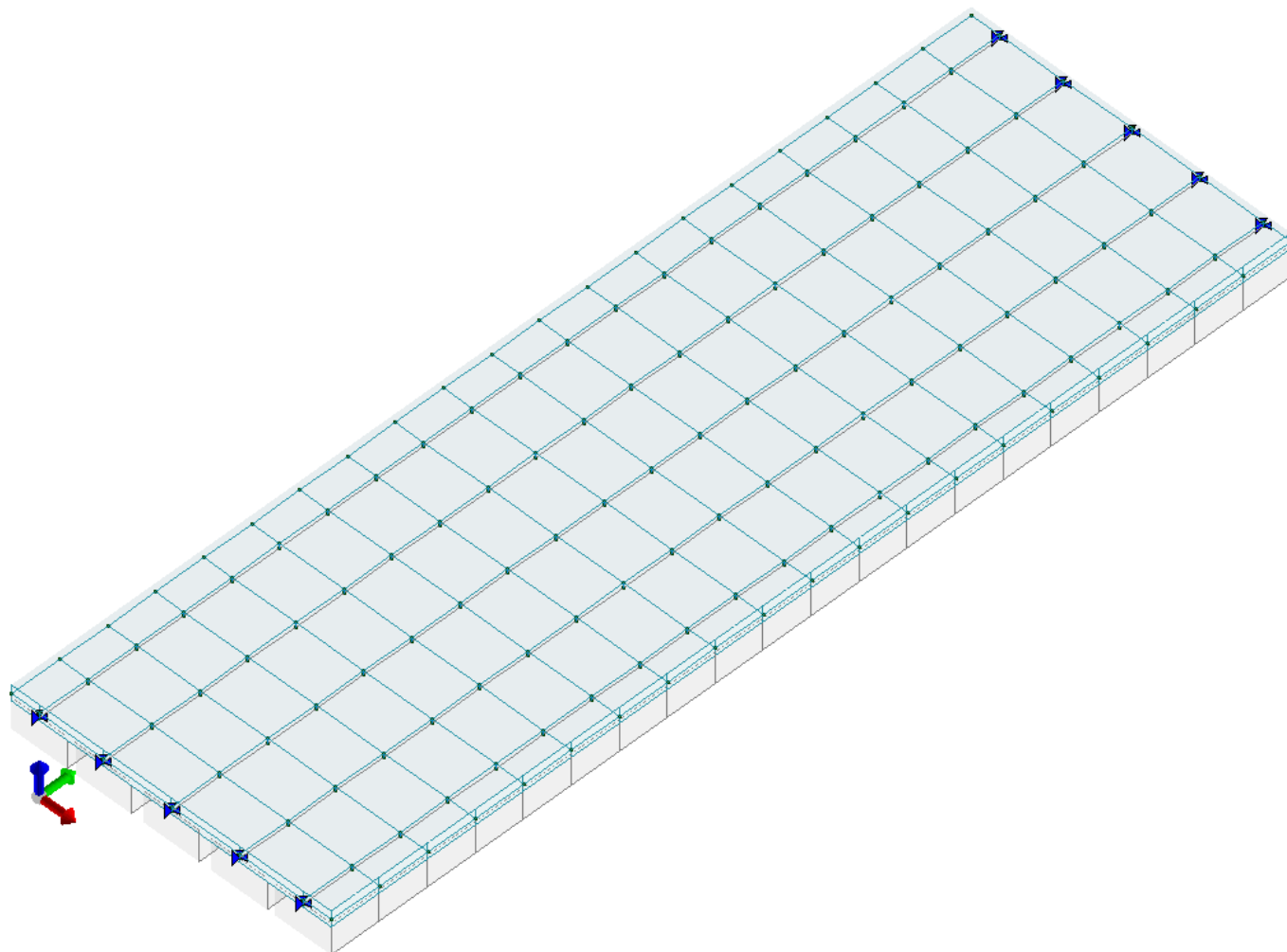


Figura 6-1: Modello strutturale 3D – elementi 2D e 3D

6.2 ANALISI DINAMICA

Si riportano di seguito i principali risultati dell'analisi dinamica modale.

In termini dinamici la struttura risulta correttamente modellata, verificando che i modi principali I° e II° modo sono traslazionali secondo direzione Y e X di cui di seguito figure:

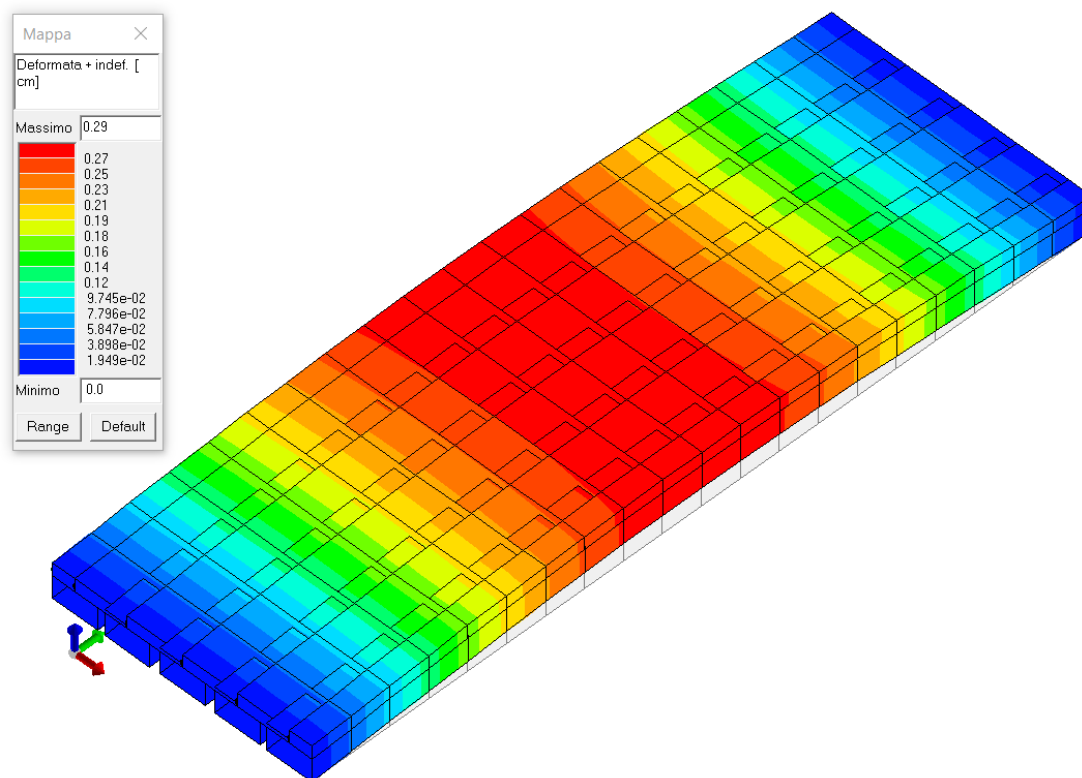


Figura 6-2: Analisi DINAMICA - MODO PRINCIPALE I°

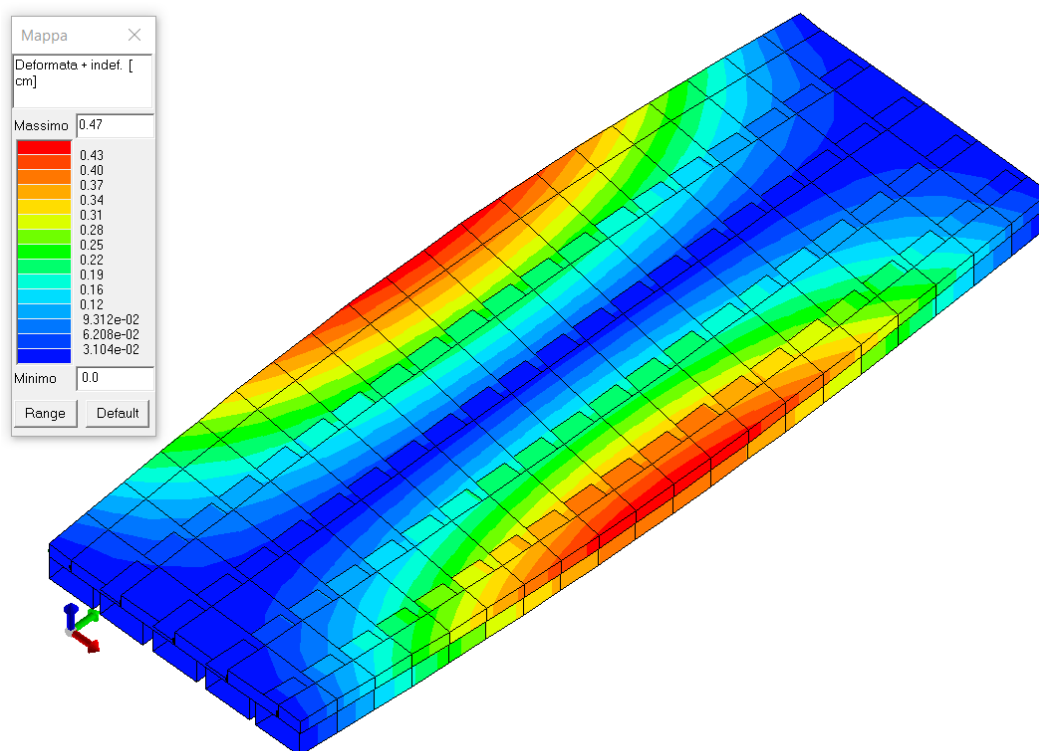


Figura 6-3: Analisi DINAMICA - MODO PRINCIPALE II°

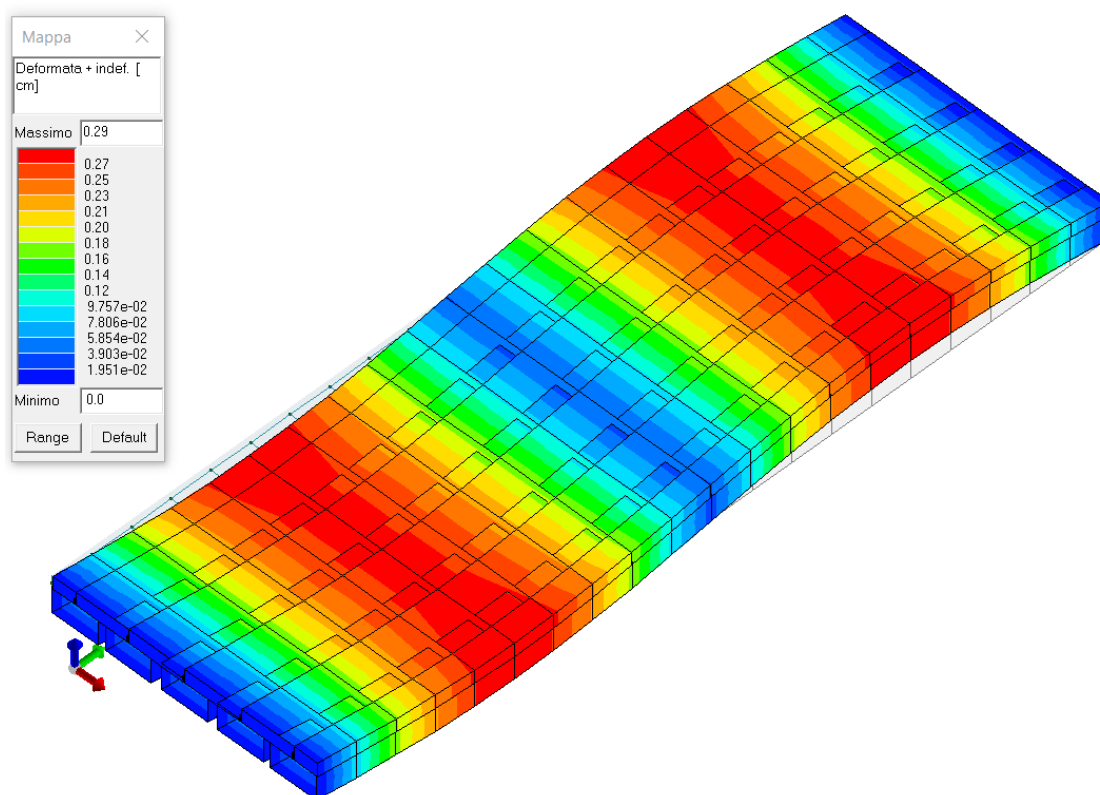


Figura 6-4: Analisi DINAMICA - MODO SUPERIORE III°

6.3 RISULTATI ANALISI IN CAMPO STATICO

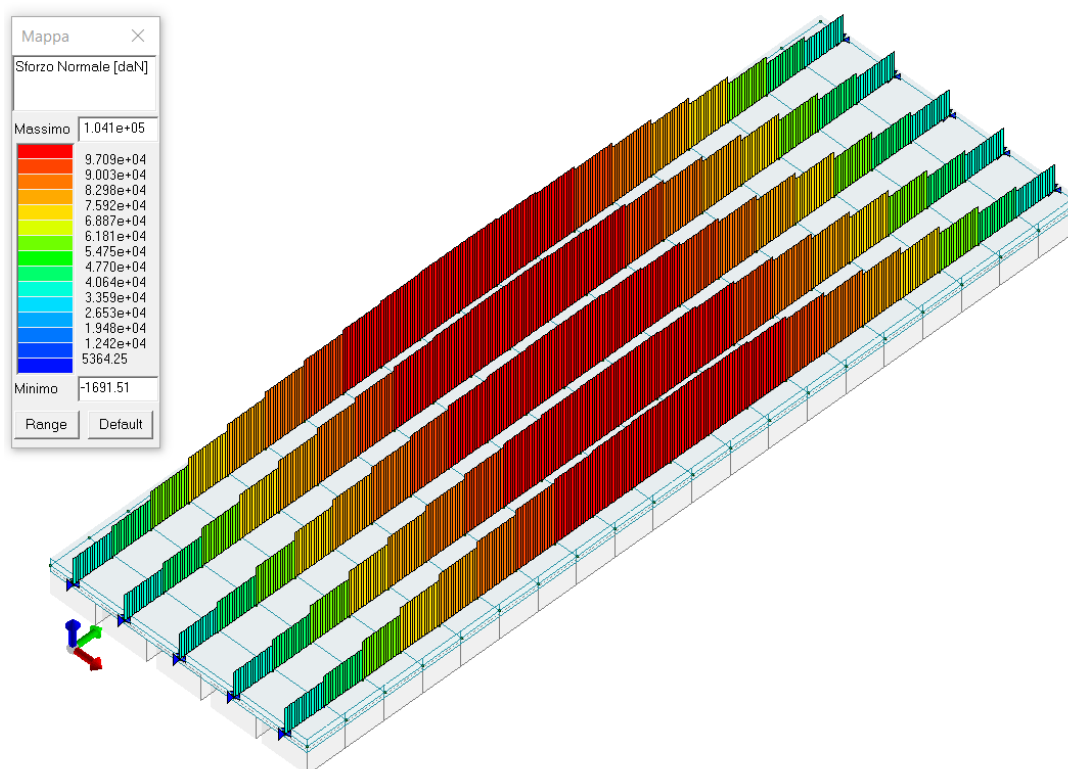


Figura 6-5: Combinazione STATICA SLU A1 1 – Sforzo normale

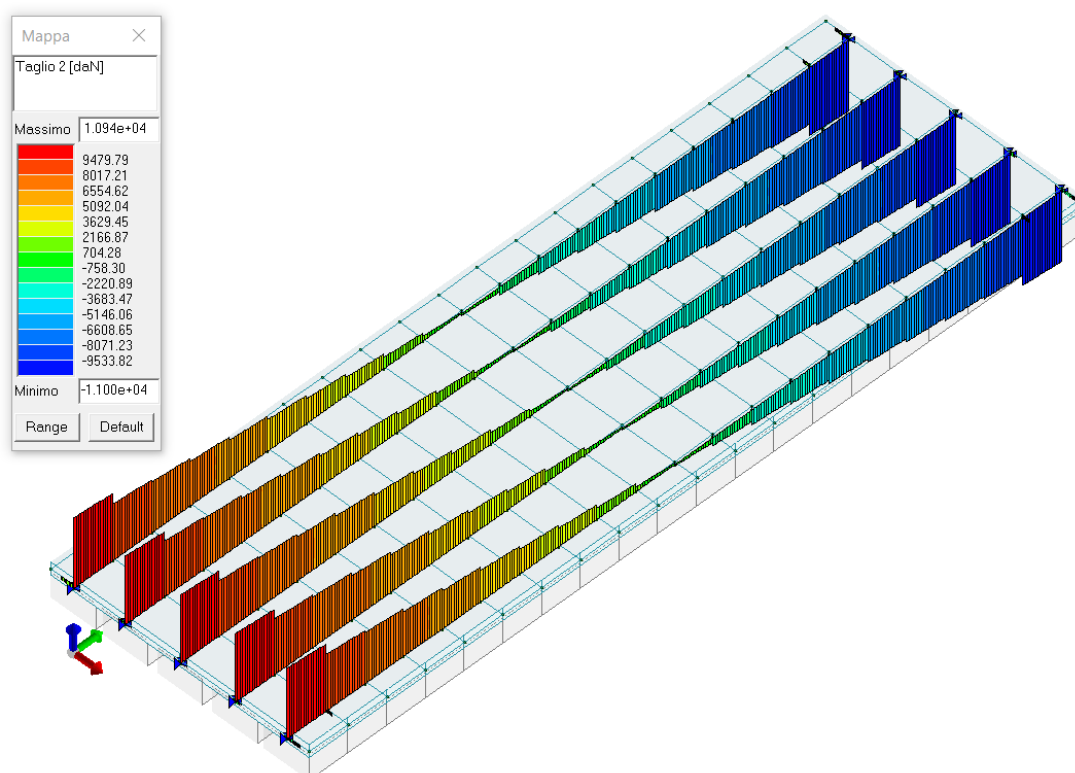


Figura 6-6: Combinazione STATICA SLU A1 1 – Taglio 2

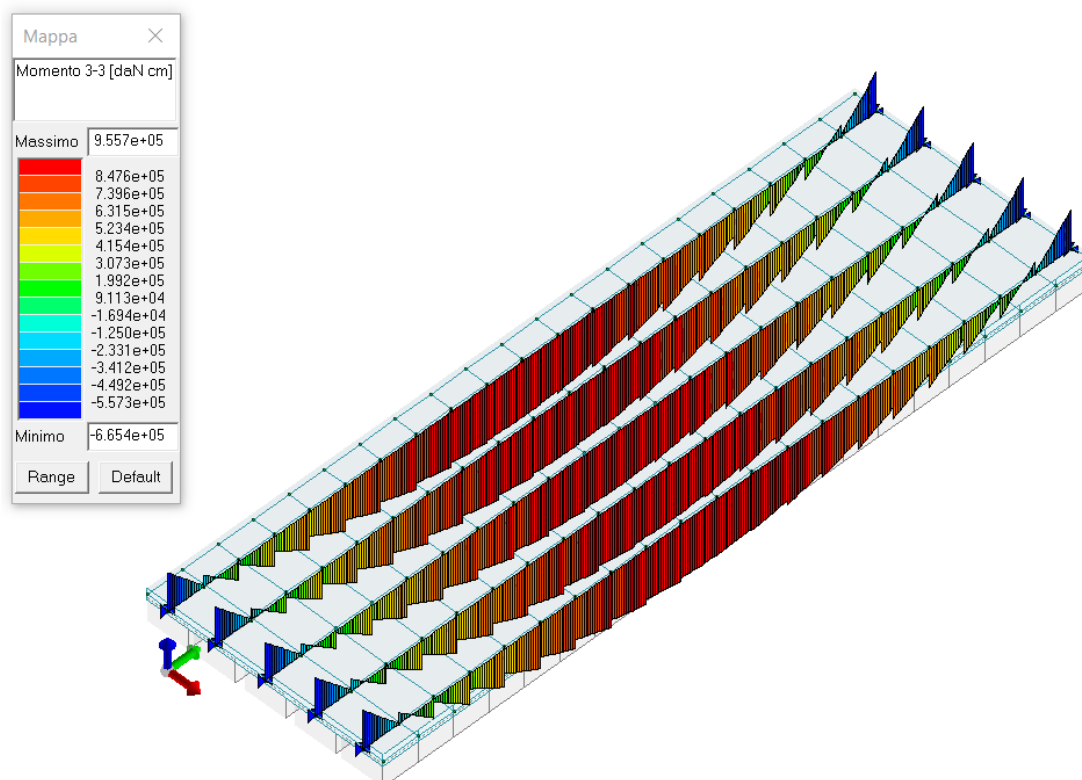


Figura 6-7: Combinazione STATICA SLU A1 1 – Momento flessione asse inerzia maggiore

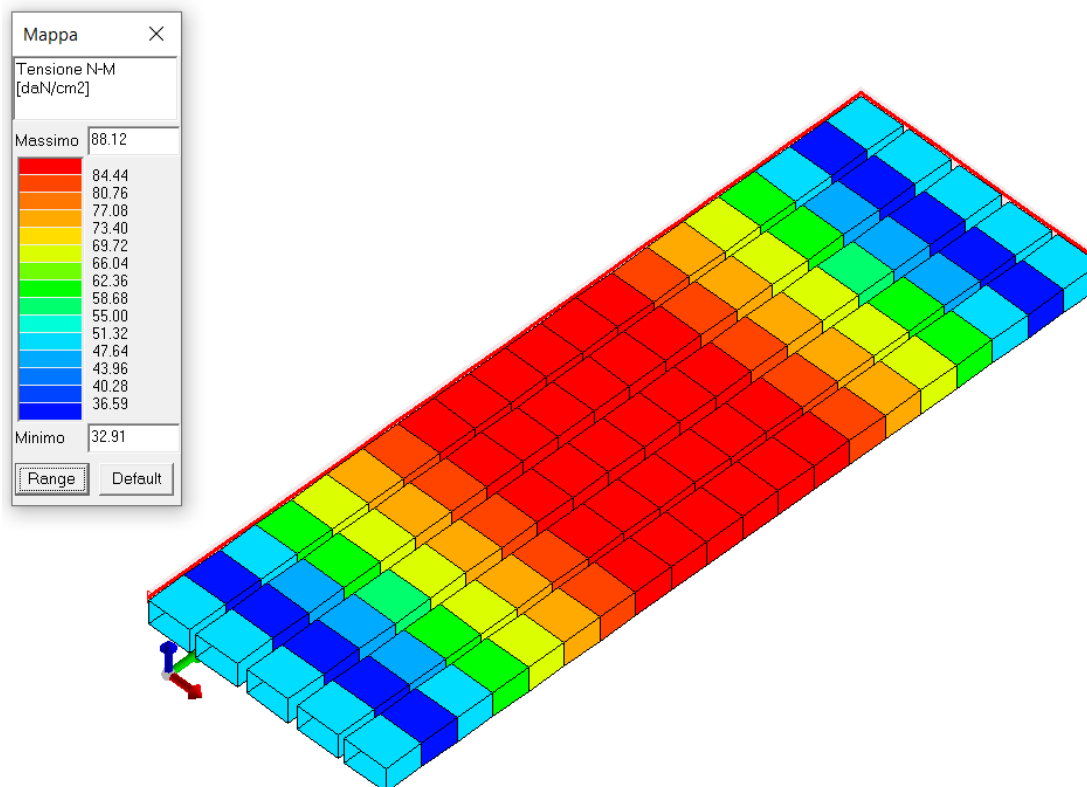


Figura 6-8: Combinazione STATICA SLU A1 1 – Tensione presso-flessione

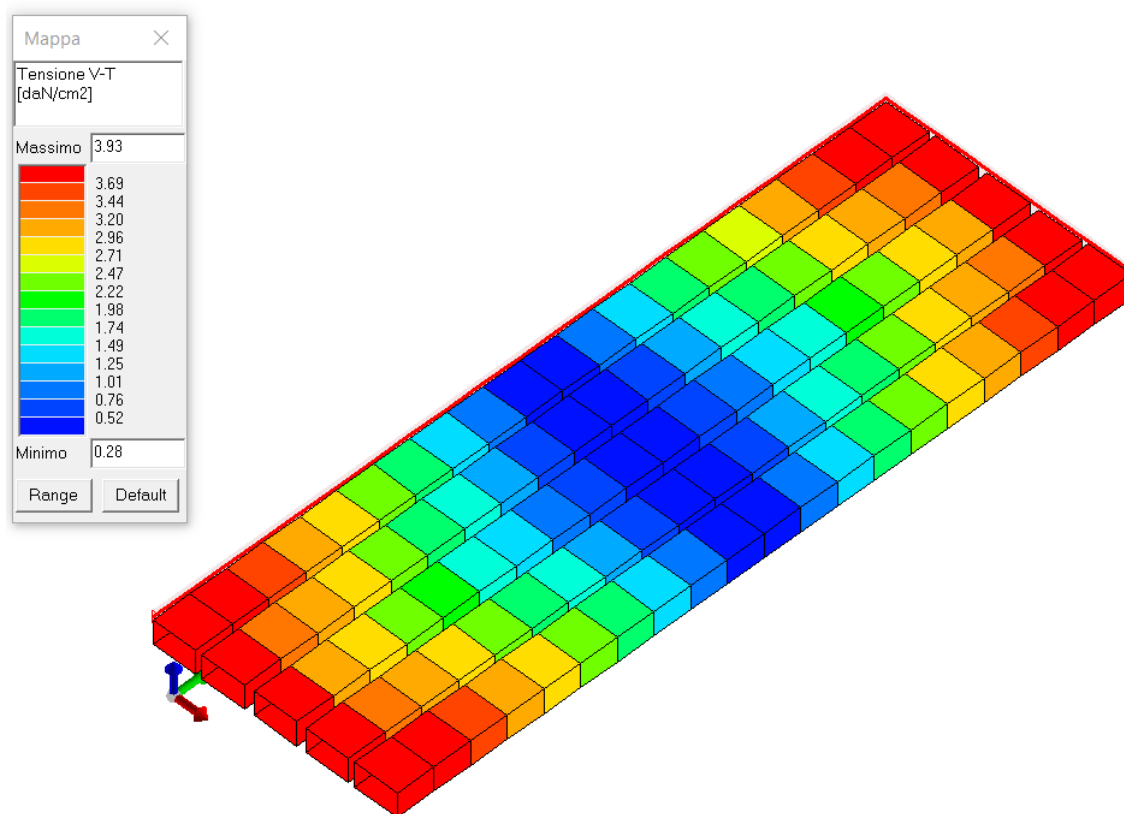


Figura 6-9: Combinazione STATICA SLU A1 1 – Tensione taglio-torsione

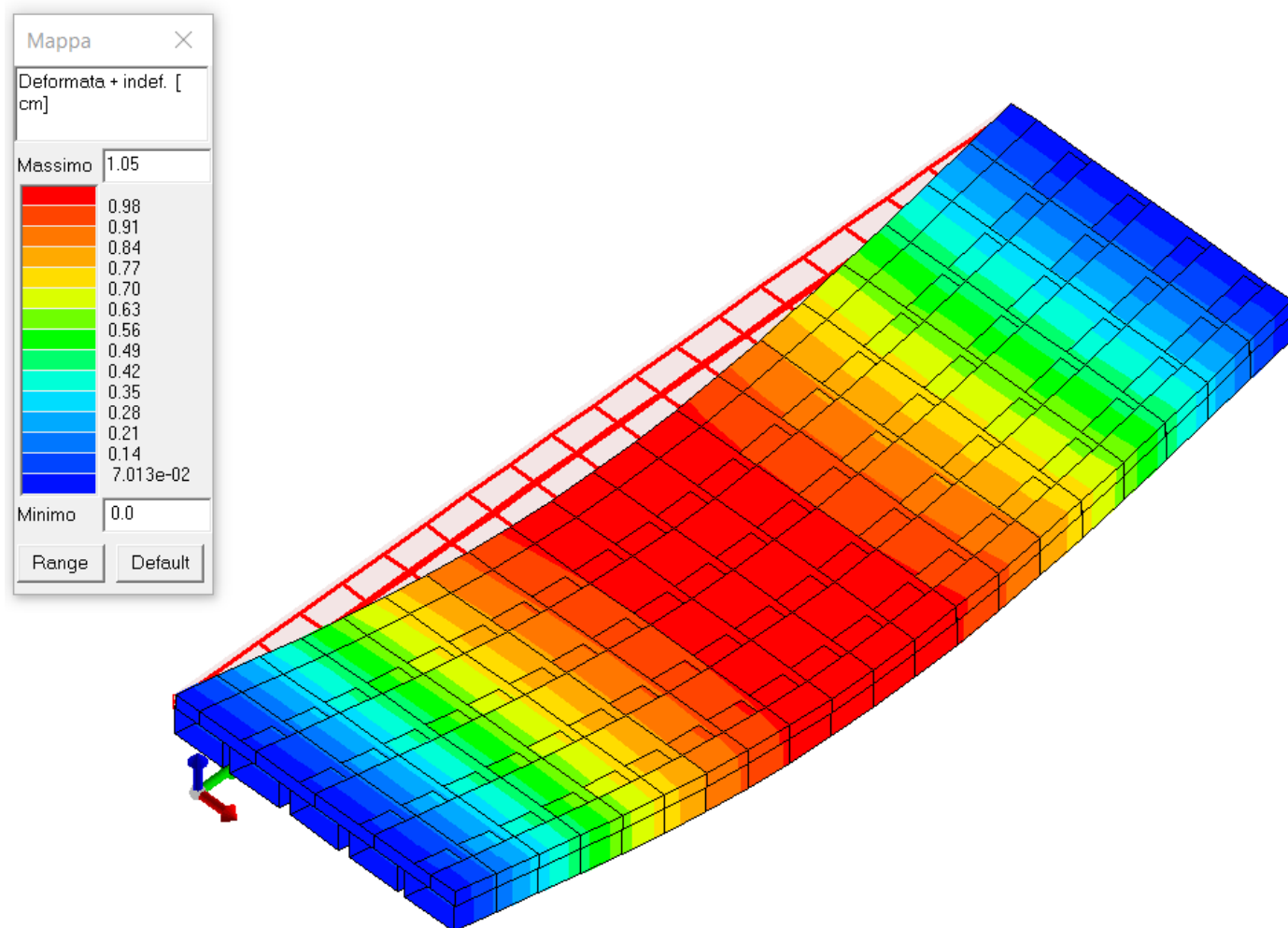


Figura 6-10: Combinazione STATICA SLU A1 1 – Max deformata

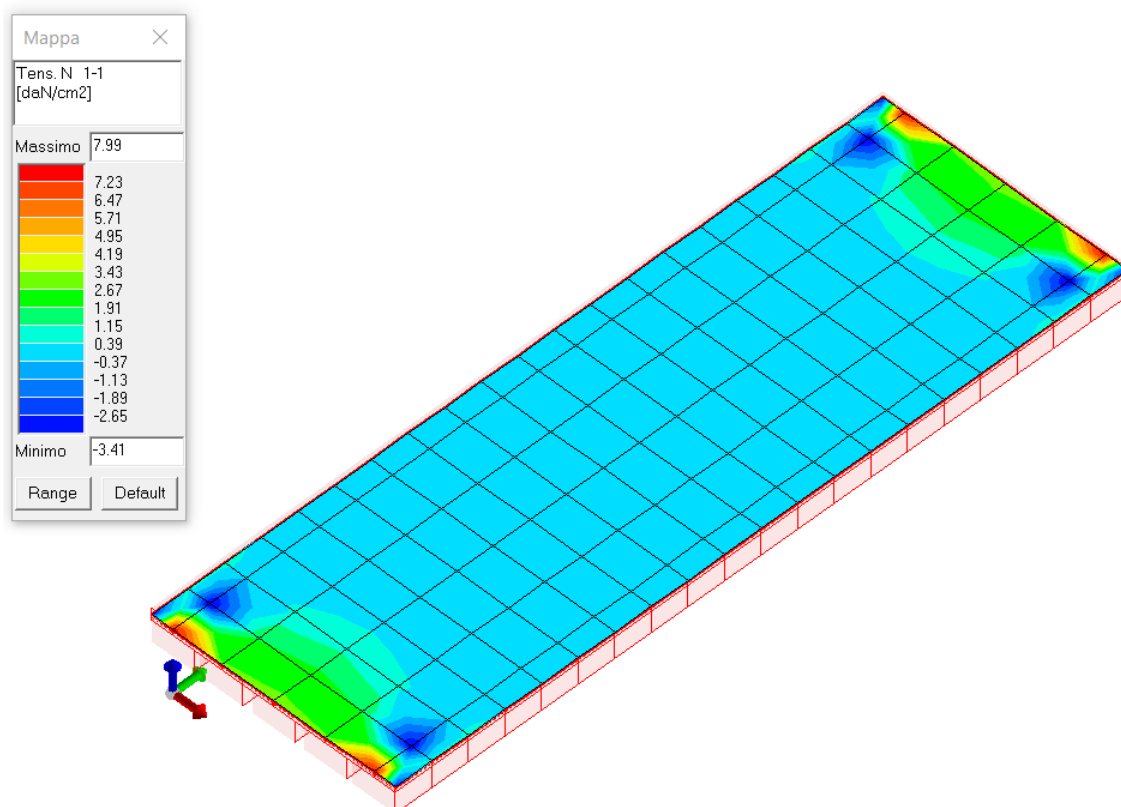


Figura 6-11: Combinazione STATICA SLU A1 1 – Max tensione sforzo N

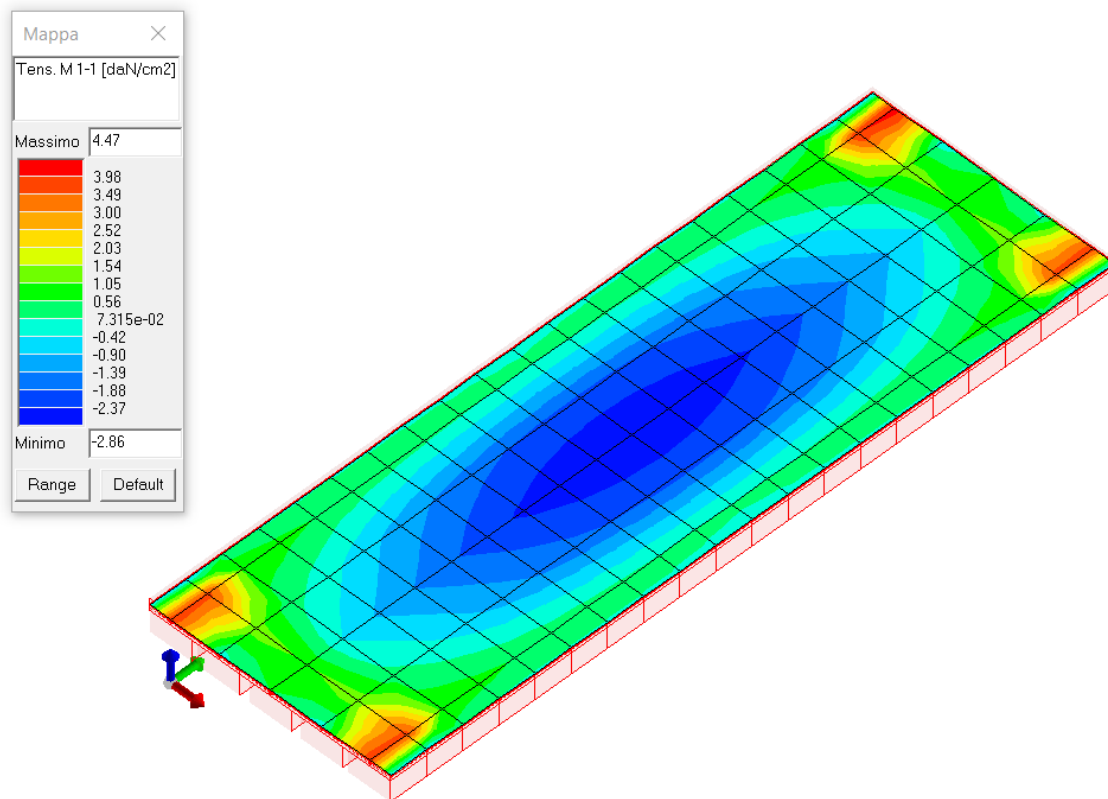


Figura 6-12: Combinazione STATICA SLU A1 1 – Max tensione sforzo M

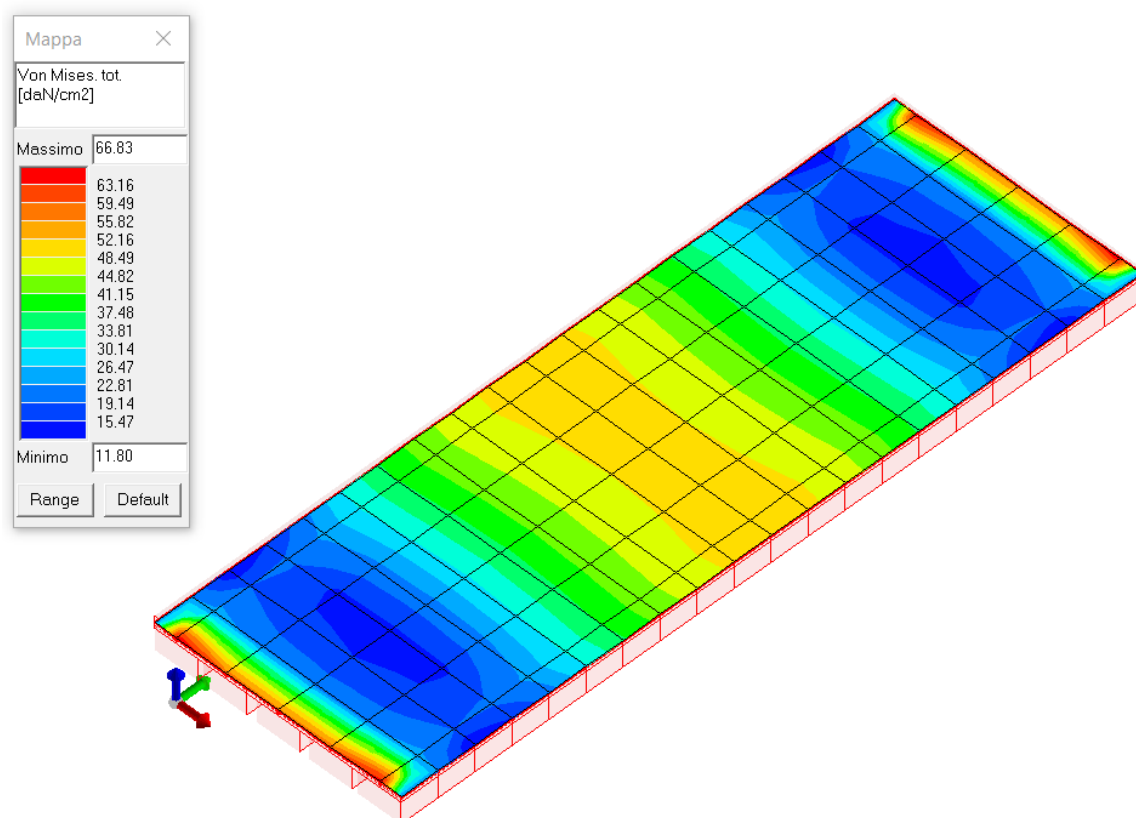


Figura 6-13: Combinazione STATICA SLU A1 1 – Max tensione

6.4 RISULTATI ANALISI IN CAMPO SISMICO

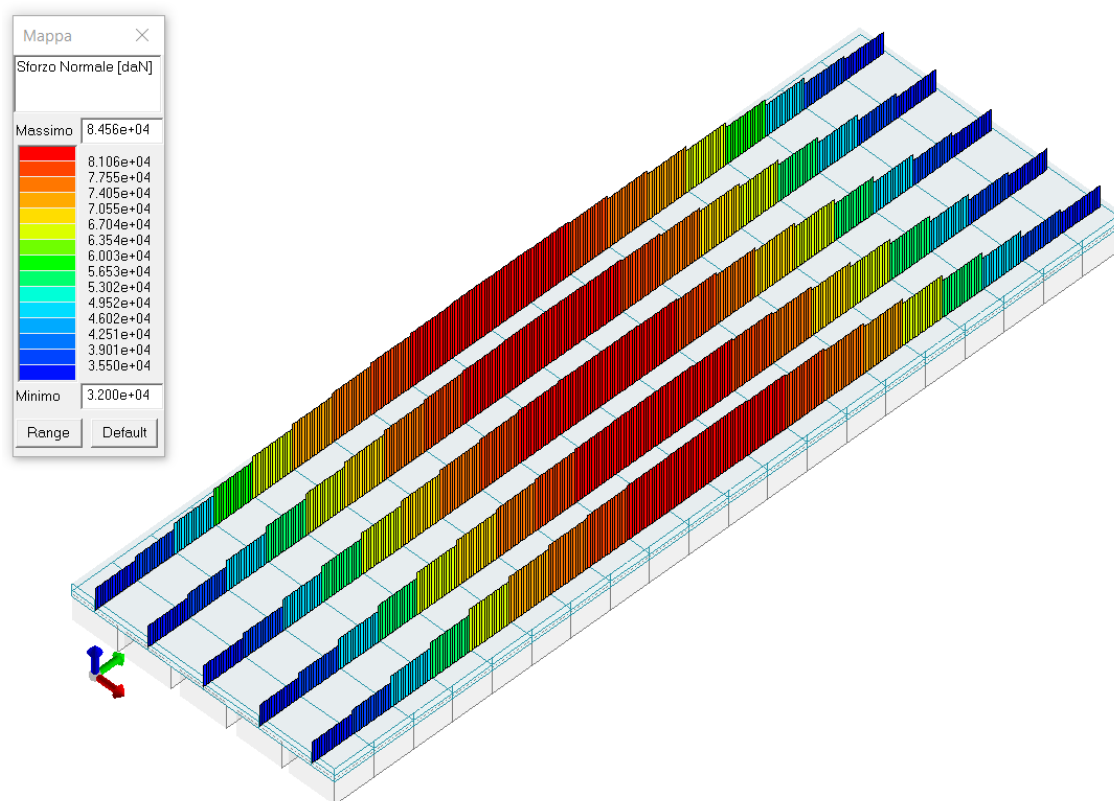


Figura 6-14: Combinazione SISMA SLV A1 – Sforzo normale

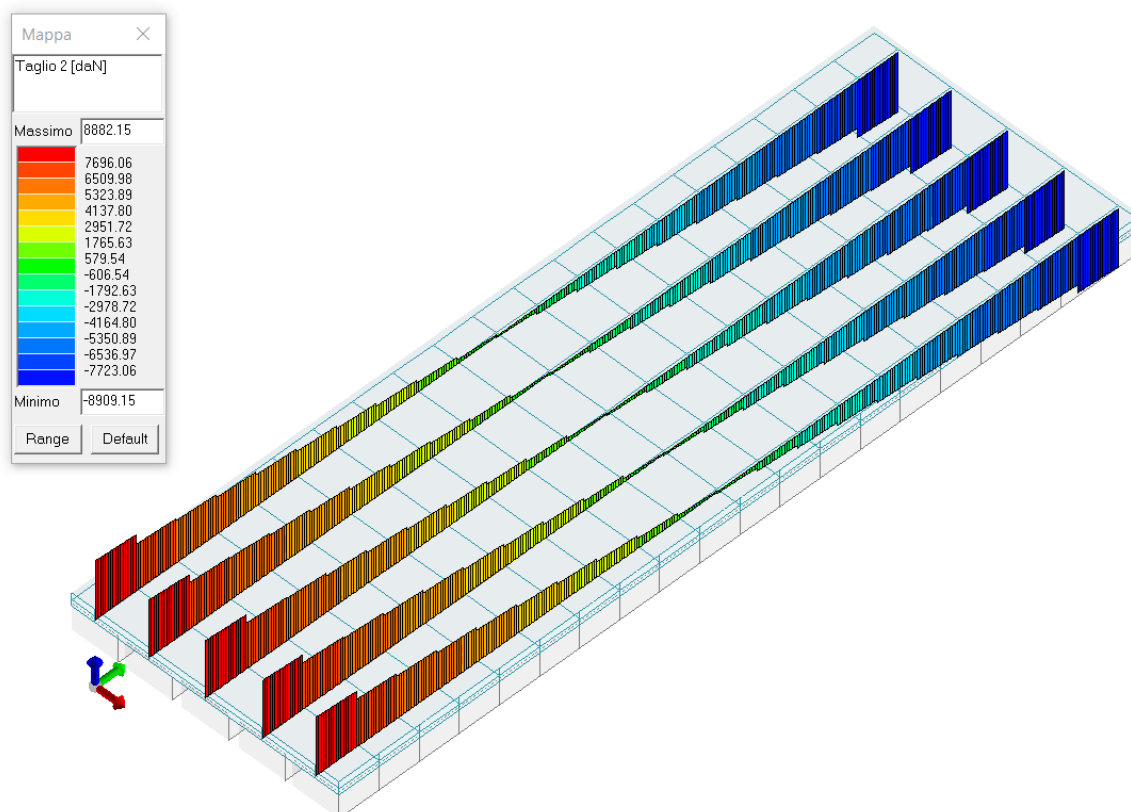


Figura 6-15: Combinazione SISMA SLV A1 – Taglio 2

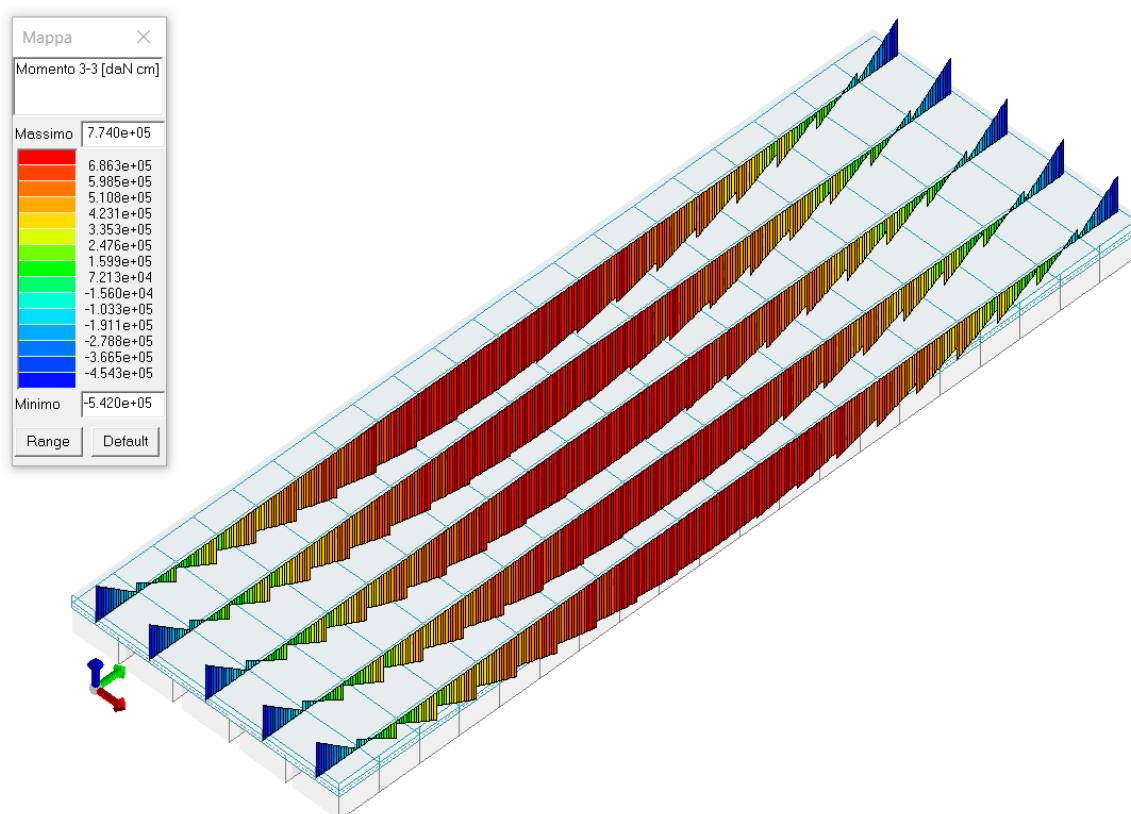


Figura 6-16: Combinazione SISMA SLV A1 – Momento flessione asse inerzia maggiore

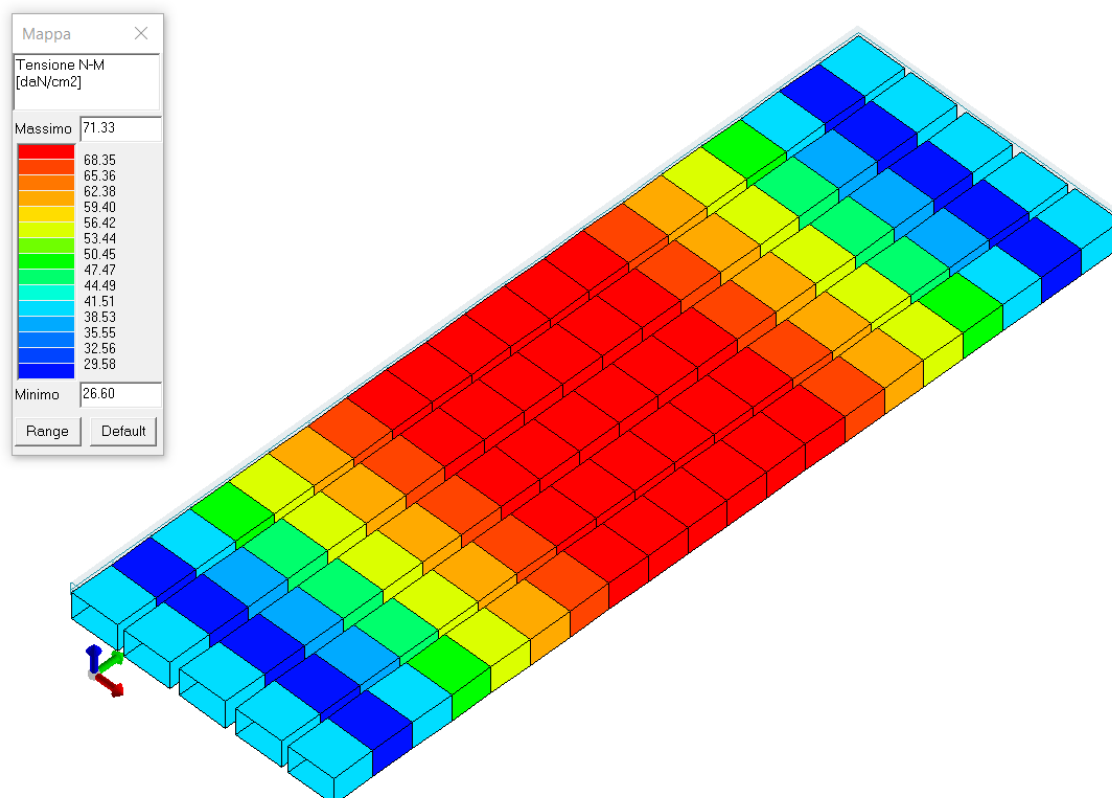


Figura 6-17: Combinazione SISMA SLV A1 – Tensione presso-flessione

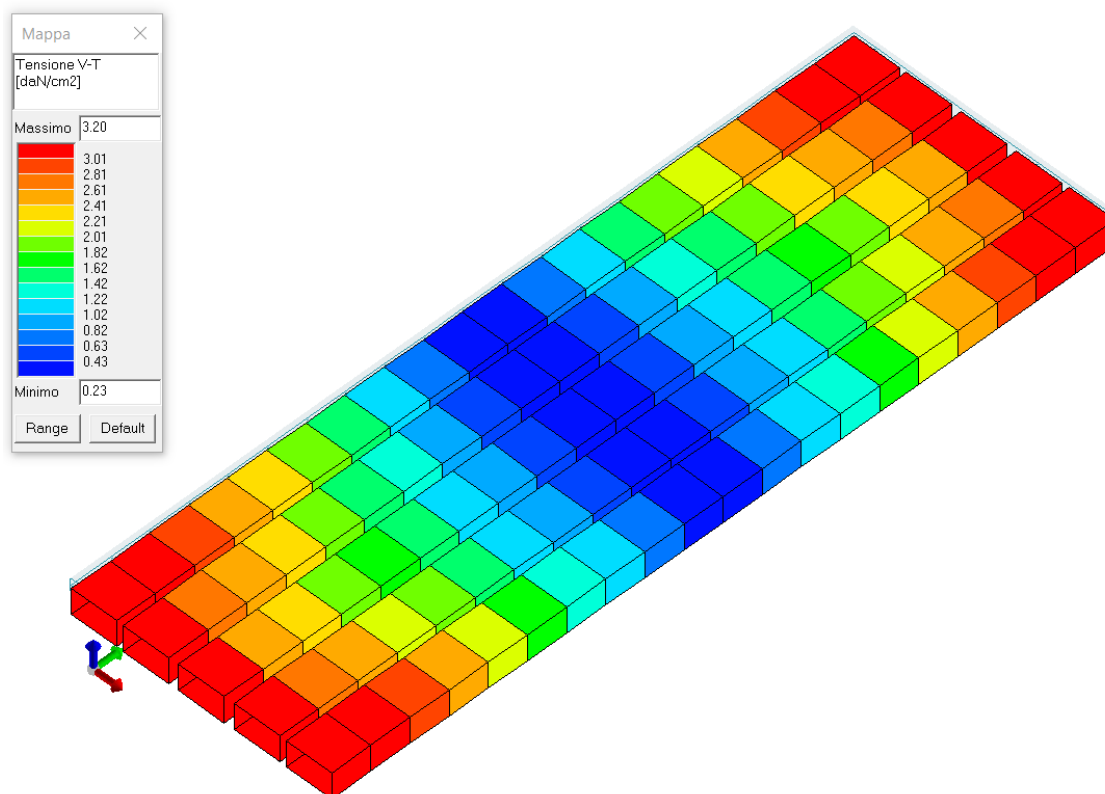


Figura 6-18: Combinazione SISMA SLV A1 – Tensione taglio-torsione

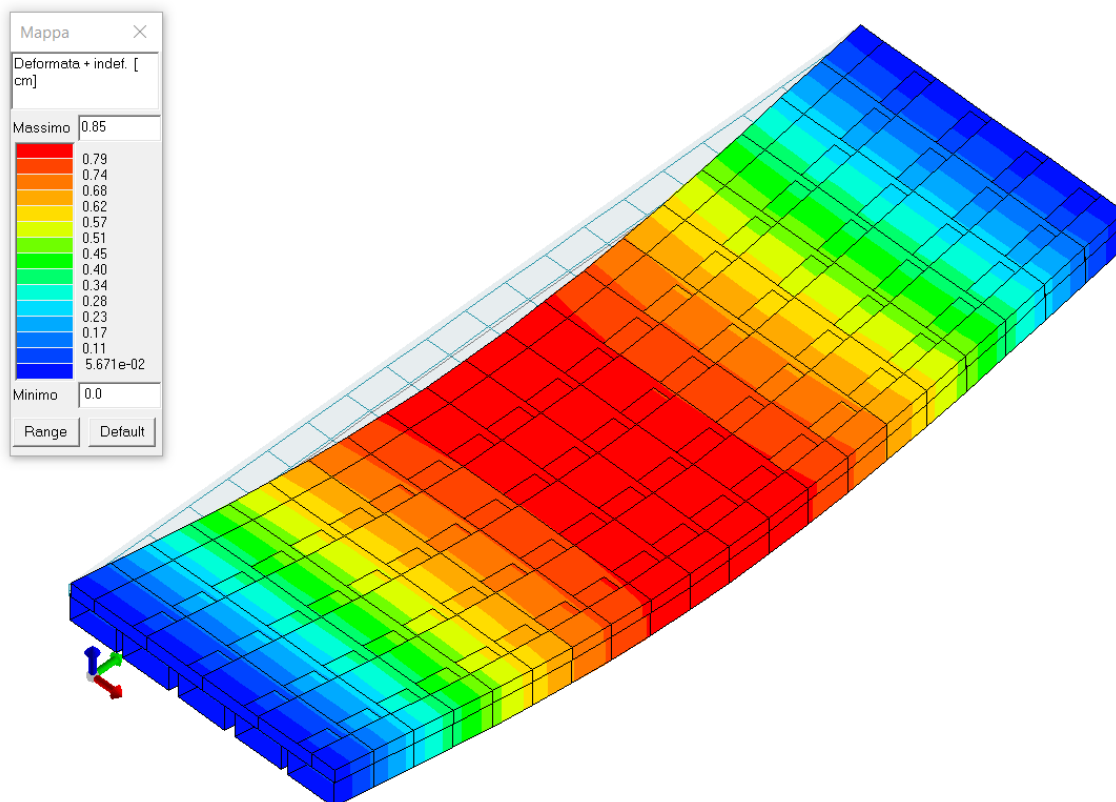


Figura 6-19: Combinazione SISMA SLV A1 – Max deformata

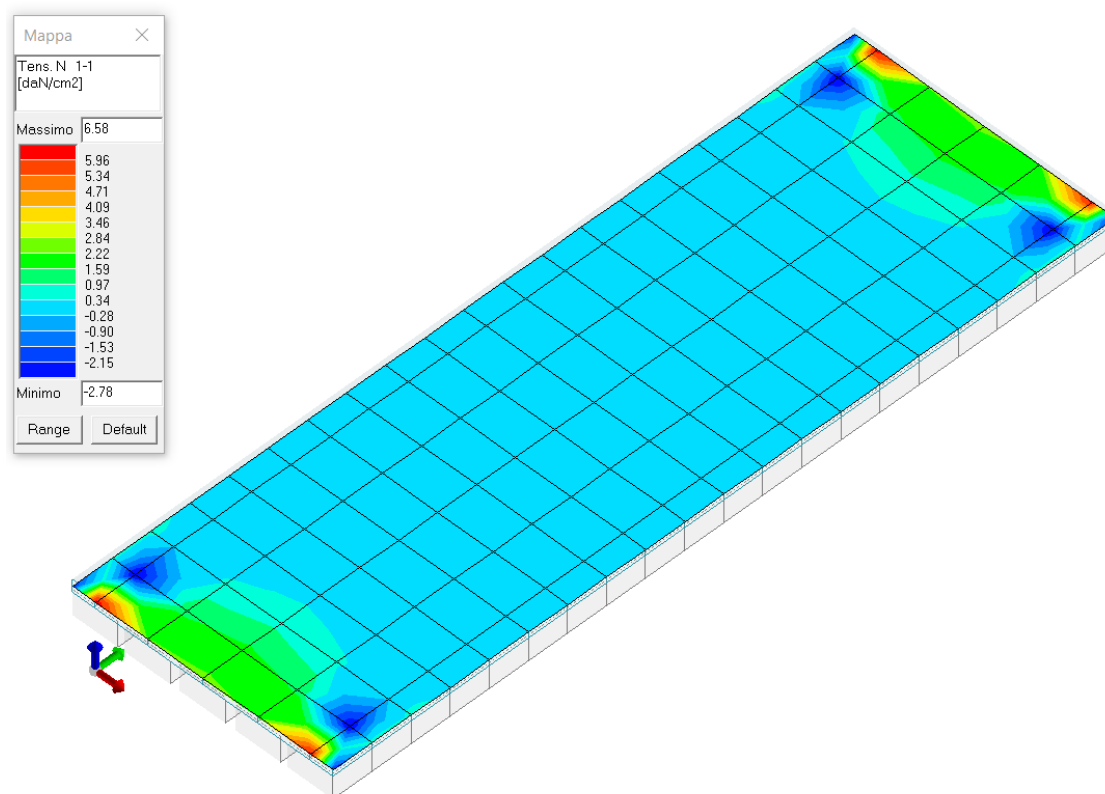


Figura 6-20: Combinazione SISMA SLV A1 – Max tensione sforzo N

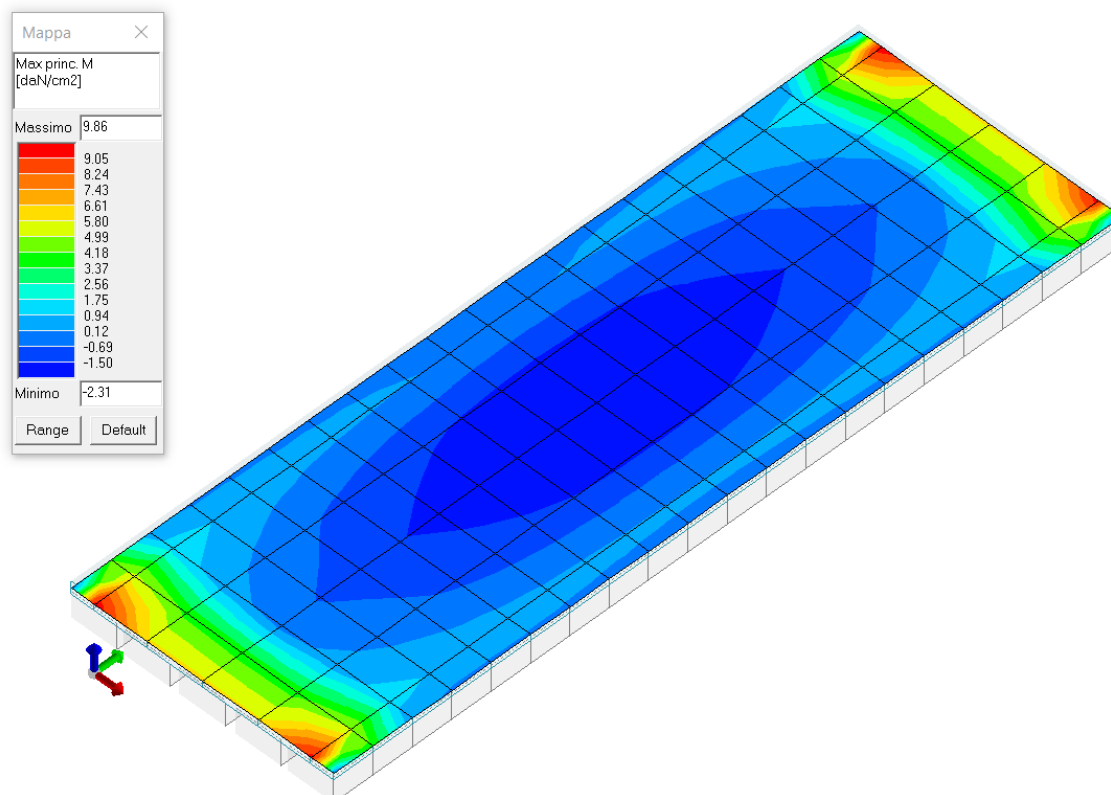


Figura 6-21: Combinazione SISMA SLV A1 – Max tensione sforzo M

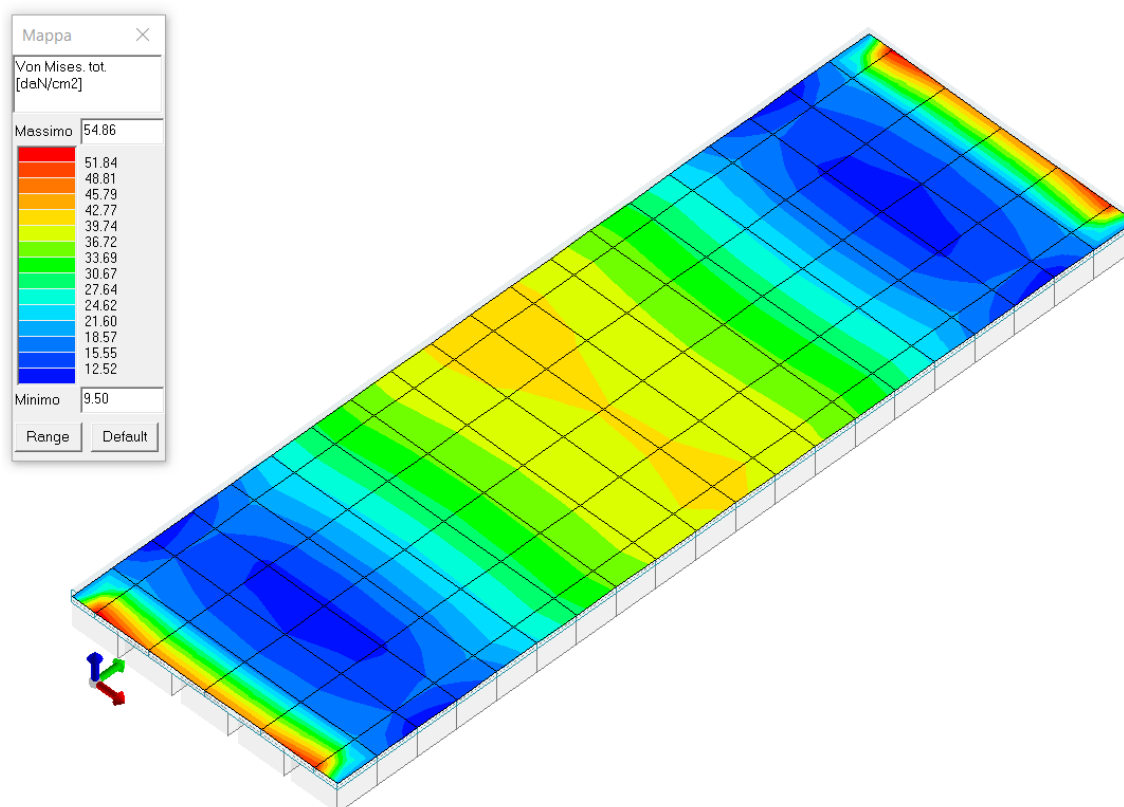


Figura 6-22: Combinazione SISMA SLV A1 – Max tensione

7 VERIFICHE DI SICUREZZA STRUTTURALI - NTC2018

Nei paragrafi seguenti sono riportati i risultati delle analisi e verifiche strutturali eseguite.

Si evidenzia che in ragione della complessità della struttura analizzata, i risultati sono presentati ricorrendo a diagrammi ed abachi riepilogativi e che tutti i risultati analitici e di dettaglio sono riportati nel fascicolo dei calcoli.

7.1 VERIFICHE TRAVI C.A. – NTC2018

Le verifiche strutturali sono eseguite in accordo con le seguenti norme:

- NTC 17 Gennaio 2018

Si riportano di seguito le principali verifiche sugli elementi travi con diagrammi grafici per cui affinché la verifica sia positiva il rapporto deve essere inferiore o uguale a 1.

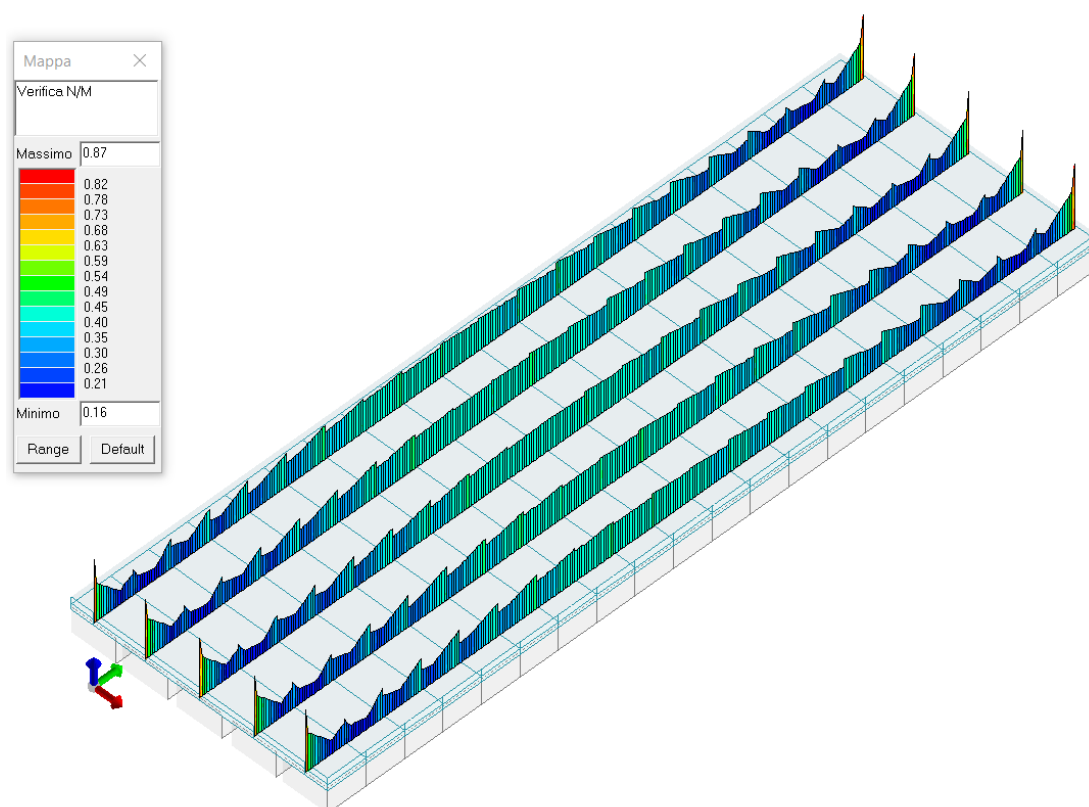


Figura 7-1: VERIFICHE TRAVI – PRESSOFLESSIONE N/M

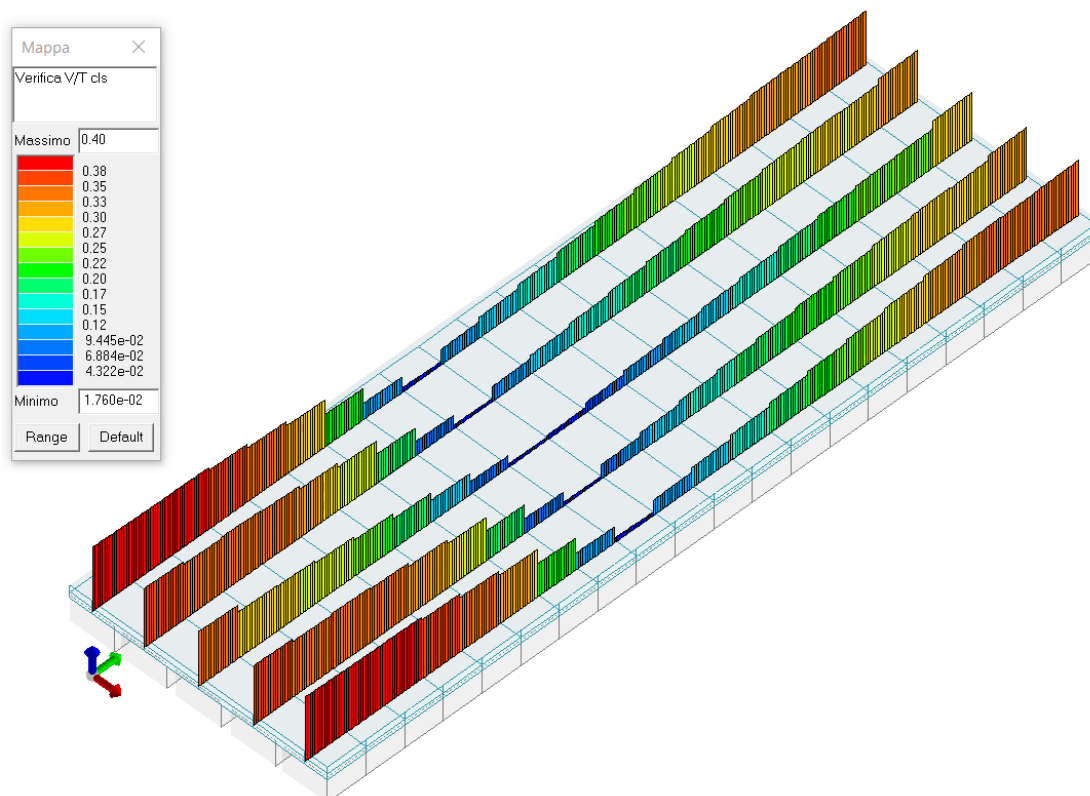


Figura 7-2: VERIFICHE TRAVI – TAGLIO CLS

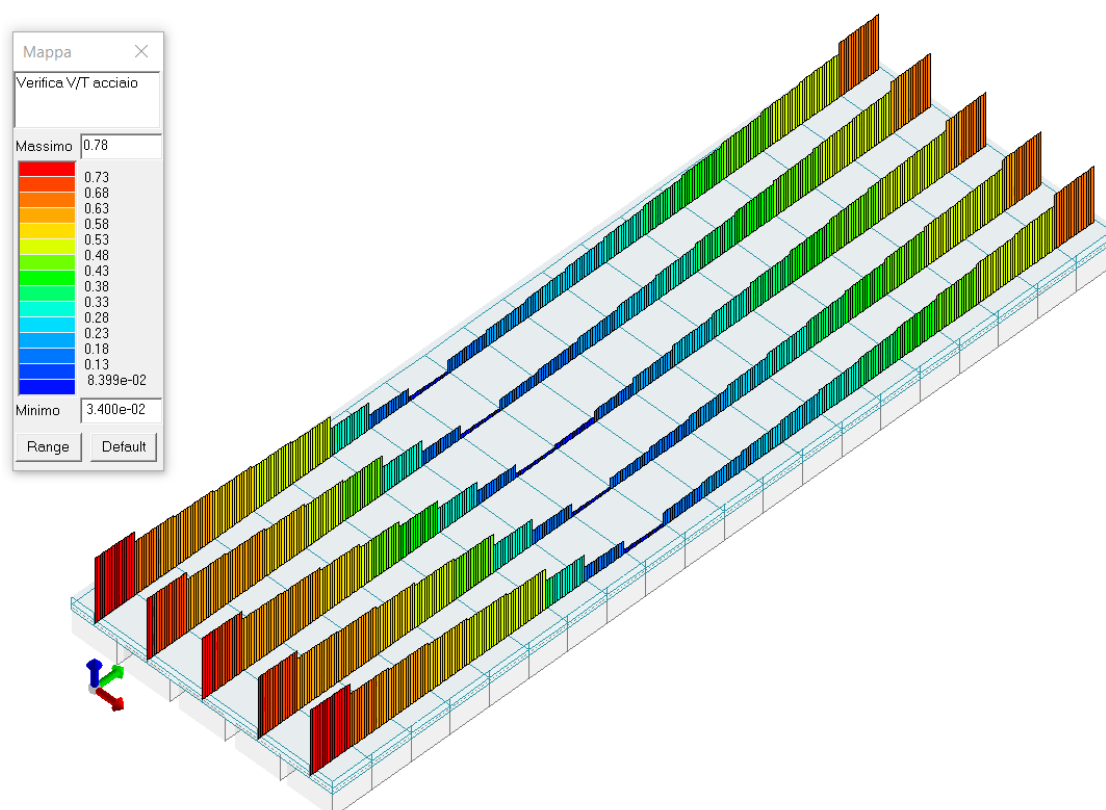


Figura 7-3: VERIFICHE TRAVI – TAGLIO ACCIAIO

Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:

| | | | | |
|-----------|--|---|---|--|
| M_T | Z | P | P | Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata) |
| Trave | numero identificativo dell'elemento D2 | | | |
| Note | Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte | | | |
| %Af | Percentuale di area di armatura rispetto a quella di calcestruzzo | | | |
| Af inf. | Area di armatura longitudinale posta all'intradosso | | | |
| Af sup | Area di armatura longitudinale posta all'estradosso | | | |
| Af long. | Area complessiva armatura longitudinale | | | |
| x/d | rapporto tra posizione dell'asse neutro e altezza utile | | | |
| V N/M | Verifica a pressoflessione rapporto Ed/Rd: valore minore o uguale a 1 per verifica positiva | | | |
| Staffe | Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto | | | |
| V V/T cls | Verifica a taglio/torsione con rapporto Ved/Vrd: valore minore o uguale a 1 per verifica positiva | | | |
| Rif. cmb. | Riferimento combinazioni da cui si generano le verifiche più gravose per la trave | | | |

| M T= 1 Z=100.0 P=1 P=101 | | | | | | | | | | | | |
|--------------------------|---------|------|------|---------|---------|----------|------|-------|-----------|-----------|-------------|----------|
| Trave | Note | Pos. | %Af | Af inf. | Af. sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | Staffe | Rif. cmb |
| | | cm | | | | | | | | | L=cm | |
| 1 | ok,ok | 0.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.85 | 0.40 | 0.78 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.30 | 0.39 | 0.77 | 3d8/12 L=60 | 28,2,2 |
| 2 | ok,ok | 0.0 | 0.98 | 25.5 | 27.5 | 0.0 | 0.20 | 0.35 | 0.39 | 0.64 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 17.4 | 0.0 | 0.24 | 0.40 | 0.39 | 0.63 | 3d8/12 L=60 | 2,2,2 |
| 3 | ok,ok | 0.0 | 1.41 | 39.5 | 19.4 | 0.0 | 0.26 | 0.30 | 0.39 | 0.61 | 3d8/12 L=60 | 33,2,2 |
| | s=1,m=6 | 60.0 | 1.70 | 47.6 | 15.4 | 0.0 | 0.33 | 0.43 | 0.38 | 0.59 | 3d8/12 L=60 | 2,2,2 |
| 4 | ok,ok | 0.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.28 | 0.37 | 0.57 | 3d8/12 L=60 | 45,2,2 |
| | s=1,m=6 | 60.0 | 2.13 | 59.7 | 15.4 | 0.0 | 0.42 | 0.45 | 0.36 | 0.56 | 3d8/12 L=60 | 2,2,2 |
| 5 | NV,ok | 0.0 | 2.35 | 65.7 | 19.4 | 0.0 | 0.44 | 0.27 | 0.34 | 0.53 | 3d8/12 L=60 | 27,2,2 |
| | s=1,m=6 | 60.0 | 2.56 | 71.7 | 15.4 | 0.0 | 0.54 | 0.45 | 0.33 | 0.52 | 3d8/12 L=60 | 2,2,2 |
| 6 | NV,ok | 0.0 | 2.70 | 75.7 | 19.4 | 0.0 | 0.54 | 0.31 | 0.30 | 0.50 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 15.4 | 0.0 | 0.63 | 0.46 | 0.30 | 0.48 | 3d8/12 L=60 | 2,2,2 |
| 7 | NV,ok | 0.0 | 3.06 | 85.8 | 17.4 | 0.0 | 0.64 | 0.36 | 0.20 | 0.34 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.45 | 0.20 | 0.32 | 3d8/12 L=60 | 2,2,2 |
| 8 | NV,ok | 0.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.41 | 0.10 | 0.17 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.10 | 0.16 | 3d8/12 L=60 | 2,2,2 |
| 9 | NV,ok | 0.0 | 3.42 | 95.8 | 15.4 | 0.0 | 0.67 | 0.41 | 0.03 | 0.05 | 3d8/12 L=60 | 2,1,1 |
| | s=1,m=6 | 60.0 | 3.42 | 95.8 | 15.4 | 0.0 | 0.67 | 0.41 | 0.02 | 0.04 | 3d8/12 L=60 | 2,1,1 |
| 10 | NV,ok | 0.0 | 3.28 | 91.8 | 15.4 | 0.0 | 0.66 | 0.45 | 0.10 | 0.16 | 3d8/12 L=60 | 2,20,16 |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.41 | 0.10 | 0.17 | 3d8/12 L=60 | 2,20,16 |
| 11 | NV,ok | 0.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.43 | 0.13 | 0.19 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 3.06 | 85.8 | 17.4 | 0.0 | 0.64 | 0.39 | 0.14 | 0.21 | 3d8/12 L=60 | 2,2,2 |
| 12 | NV,ok | 0.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.45 | 0.16 | 0.23 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 17.4 | 0.0 | 0.61 | 0.37 | 0.17 | 0.24 | 3d8/12 L=60 | 2,2,2 |
| 13 | NV,ok | 0.0 | 2.78 | 77.7 | 15.4 | 0.0 | 0.59 | 0.45 | 0.19 | 0.27 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 2.70 | 75.7 | 17.4 | 0.0 | 0.56 | 0.36 | 0.20 | 0.28 | 3d8/12 L=60 | 2,2,2 |
| 14 | NV,ok | 0.0 | 2.63 | 73.7 | 15.4 | 0.0 | 0.56 | 0.43 | 0.22 | 0.31 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 17.4 | 0.0 | 0.50 | 0.33 | 0.22 | 0.33 | 3d8/12 L=60 | 2,2,2 |
| 15 | NV,ok | 0.0 | 2.35 | 65.7 | 15.4 | 0.0 | 0.48 | 0.44 | 0.24 | 0.35 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 2.20 | 61.7 | 17.4 | 0.0 | 0.42 | 0.29 | 0.25 | 0.37 | 3d8/12 L=60 | 2,2,2 |
| 16 | ok,ok | 0.0 | 2.06 | 57.6 | 15.4 | 0.0 | 0.40 | 0.44 | 0.27 | 0.40 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.27 | 0.28 | 0.41 | 3d8/12 L=60 | 36,2,2 |
| 17 | ok,ok | 0.0 | 1.77 | 49.6 | 15.4 | 0.0 | 0.34 | 0.42 | 0.29 | 0.44 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.56 | 43.6 | 19.4 | 0.0 | 0.28 | 0.28 | 0.30 | 0.45 | 3d8/12 L=60 | 50,2,2 |
| 18 | ok,ok | 0.0 | 1.41 | 39.5 | 15.4 | 0.0 | 0.28 | 0.40 | 0.32 | 0.48 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 21.5 | 0.0 | 0.23 | 0.27 | 0.32 | 0.49 | 3d8/12 L=60 | 26,2,2 |
| 19 | ok,ok | 0.0 | 0.98 | 27.5 | 19.4 | 0.0 | 0.21 | 0.35 | 0.32 | 0.51 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 0.98 | 19.4 | 27.5 | 0.0 | 0.21 | 0.37 | 0.33 | 0.53 | 3d8/12 L=60 | 2,2,2 |
| 20 | ok,ok | 0.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.30 | 0.33 | 0.65 | 3d8/12 L=60 | 35,2,2 |
| | s=1,m=6 | 60.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.86 | 0.34 | 0.66 | 3d8/12 L=60 | 2,2,2 |
| M T= 2 Z=100.0 P=2 P=102 | | | | | | | | | | | | |
| Trave | Note | Pos. | %Af | Af inf. | Af. sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | Staffe | Rif. cmb |
| 21 | ok,ok | 0.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.81 | 0.37 | 0.74 | 3d8/12 L=60 | 2,2,2 |
| | s=1,m=6 | 60.0 | 1.20 | 13.4 | 33.5 | 0.0 | 0.25 | 0.29 | 0.36 | 0.72 | 3d8/12 L=60 | 28,2,2 |

| 22 | ok,ok | 0.0 | 0.98 | 23.5 | 27.5 | 0.0 | 0.20 | 0.35 | 0.35 | 0.63 | 3d8/12 L=60 | 2,2,2 | |
|---------------------------------|---------|------|------|---------|--------|----------|------|-------|-----------|-----------|-------------|----------|--|
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 17.4 | 0.0 | 0.24 | 0.37 | 0.34 | 0.61 | 3d8/12 L=60 | 2,2,2 | |
| 23 | ok,ok | 0.0 | 1.41 | 39.5 | 19.4 | 0.0 | 0.26 | 0.30 | 0.35 | 0.60 | 3d8/12 L=60 | 25,2,2 | |
| | s=1,m=6 | 60.0 | 1.70 | 47.6 | 15.4 | 0.0 | 0.33 | 0.41 | 0.34 | 0.59 | 3d8/12 L=60 | 2,2,2 | |
| 24 | ok,ok | 0.0 | 1.84 | 51.6 | 19.4 | 0.0 | 0.33 | 0.28 | 0.33 | 0.56 | 3d8/12 L=60 | 25,2,2 | |
| | s=1,m=6 | 60.0 | 2.13 | 59.7 | 15.4 | 0.0 | 0.42 | 0.43 | 0.32 | 0.54 | 3d8/12 L=60 | 2,2,2 | |
| 25 | NV,ok | 0.0 | 2.27 | 63.7 | 19.4 | 0.0 | 0.42 | 0.27 | 0.30 | 0.51 | 3d8/12 L=60 | 27,2,2 | |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 15.4 | 0.0 | 0.52 | 0.45 | 0.30 | 0.50 | 3d8/12 L=60 | 2,2,2 | |
| 26 | NV,ok | 0.0 | 2.63 | 73.7 | 17.4 | 0.0 | 0.54 | 0.32 | 0.27 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.85 | 79.8 | 15.4 | 0.0 | 0.61 | 0.46 | 0.27 | 0.46 | 3d8/12 L=60 | 2,2,2 | |
| 27 | NV,ok | 0.0 | 2.92 | 81.8 | 17.4 | 0.0 | 0.61 | 0.37 | 0.18 | 0.32 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.06 | 85.8 | 13.4 | 0.0 | 0.65 | 0.46 | 0.18 | 0.31 | 3d8/12 L=60 | 2,2,2 | |
| 28 | NV,ok | 0.0 | 3.14 | 87.8 | 15.4 | 0.0 | 0.65 | 0.40 | 0.09 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.08 | 0.16 | 3d8/12 L=60 | 2,2,2 | |
| 29 | NV,ok | 0.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.42 | 0.03 | 0.05 | 3d8/12 L=60 | 2,1,1 | |
| | s=1,m=6 | 60.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.42 | 0.02 | 0.03 | 3d8/12 L=60 | 2,1,1 | |
| 30 | NV,ok | 0.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.09 | 0.14 | 3d8/12 L=60 | 2,20,16 | |
| | s=1,m=6 | 60.0 | 3.14 | 87.8 | 15.4 | 0.0 | 0.65 | 0.41 | 0.10 | 0.15 | 3d8/12 L=60 | 2,20,16 | |
| 31 | NV,ok | 0.0 | 3.06 | 85.8 | 13.4 | 0.0 | 0.65 | 0.45 | 0.12 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.40 | 0.13 | 0.18 | 3d8/12 L=60 | 2,2,2 | |
| 32 | NV,ok | 0.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.44 | 0.15 | 0.21 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 15.4 | 0.0 | 0.63 | 0.37 | 0.15 | 0.22 | 3d8/12 L=60 | 2,2,2 | |
| 33 | NV,ok | 0.0 | 2.78 | 77.7 | 15.4 | 0.0 | 0.59 | 0.45 | 0.17 | 0.25 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.70 | 75.7 | 17.4 | 0.0 | 0.56 | 0.36 | 0.18 | 0.27 | 3d8/12 L=60 | 2,2,2 | |
| 34 | NV,ok | 0.0 | 2.56 | 71.7 | 15.4 | 0.0 | 0.54 | 0.45 | 0.19 | 0.30 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.42 | 67.7 | 17.4 | 0.0 | 0.48 | 0.34 | 0.20 | 0.32 | 3d8/12 L=60 | 2,2,2 | |
| 35 | NV,ok | 0.0 | 2.35 | 65.7 | 15.4 | 0.0 | 0.48 | 0.44 | 0.21 | 0.35 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.20 | 61.7 | 17.4 | 0.0 | 0.42 | 0.29 | 0.22 | 0.36 | 3d8/12 L=60 | 2,2,2 | |
| 36 | ok,ok | 0.0 | 2.06 | 57.6 | 15.4 | 0.0 | 0.40 | 0.43 | 0.24 | 0.39 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.27 | 0.24 | 0.41 | 3d8/12 L=60 | 36,2,2 | |
| 37 | ok,ok | 0.0 | 1.77 | 49.6 | 15.4 | 0.0 | 0.34 | 0.41 | 0.26 | 0.44 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.56 | 43.6 | 19.4 | 0.0 | 0.28 | 0.28 | 0.26 | 0.45 | 3d8/12 L=60 | 34,2,2 | |
| 38 | ok,ok | 0.0 | 1.41 | 39.5 | 17.4 | 0.0 | 0.27 | 0.39 | 0.27 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 21.5 | 0.0 | 0.23 | 0.27 | 0.28 | 0.50 | 3d8/12 L=60 | 34,2,2 | |
| 39 | ok,ok | 0.0 | 0.98 | 27.5 | 21.5 | 0.0 | 0.20 | 0.33 | 0.27 | 0.51 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 19.4 | 29.5 | 0.0 | 0.21 | 0.33 | 0.28 | 0.52 | 3d8/12 L=60 | 2,2,2 | |
| 40 | ok,ok | 0.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.29 | 0.31 | 0.63 | 3d8/12 L=60 | 35,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.84 | 0.32 | 0.64 | 3d8/12 L=60 | 2,2,2 | |
| M T= 3 Z=100.0 P=3 P=103 | | | | | | | | | | | | | |
| Trave | Note | Pos. | %Af | Af inf. | Af sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | Staffe | Rif. cmb | |
| 83 | ok,ok | 0.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.81 | 0.34 | 0.74 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 13.4 | 33.5 | 0.0 | 0.25 | 0.29 | 0.34 | 0.72 | 3d8/12 L=60 | 42,2,2 | |
| 84 | ok,ok | 0.0 | 0.98 | 23.5 | 27.5 | 0.0 | 0.20 | 0.35 | 0.29 | 0.63 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 17.4 | 0.0 | 0.24 | 0.37 | 0.28 | 0.61 | 3d8/12 L=60 | 2,2,2 | |
| 85 | ok,ok | 0.0 | 1.41 | 39.5 | 19.4 | 0.0 | 0.26 | 0.30 | 0.28 | 0.60 | 3d8/12 L=60 | 51,2,2 | |
| | s=1,m=6 | 60.0 | 1.70 | 47.6 | 15.4 | 0.0 | 0.33 | 0.41 | 0.27 | 0.58 | 3d8/12 L=60 | 2,2,2 | |
| 86 | ok,ok | 0.0 | 1.84 | 51.6 | 19.4 | 0.0 | 0.33 | 0.28 | 0.26 | 0.55 | 3d8/12 L=60 | 51,2,2 | |
| | s=1,m=6 | 60.0 | 2.13 | 59.7 | 15.4 | 0.0 | 0.42 | 0.43 | 0.25 | 0.54 | 3d8/12 L=60 | 2,2,2 | |
| 87 | NV,ok | 0.0 | 2.27 | 63.7 | 19.4 | 0.0 | 0.42 | 0.27 | 0.23 | 0.49 | 3d8/12 L=60 | 49,2,2 | |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 15.4 | 0.0 | 0.52 | 0.44 | 0.22 | 0.47 | 3d8/12 L=60 | 2,2,2 | |
| 88 | NV,ok | 0.0 | 2.63 | 73.7 | 17.4 | 0.0 | 0.54 | 0.32 | 0.19 | 0.41 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.78 | 77.7 | 15.4 | 0.0 | 0.59 | 0.45 | 0.18 | 0.39 | 3d8/12 L=60 | 2,2,2 | |
| 89 | NV,ok | 0.0 | 2.92 | 81.8 | 15.4 | 0.0 | 0.63 | 0.36 | 0.14 | 0.30 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.99 | 83.8 | 13.4 | 0.0 | 0.65 | 0.45 | 0.13 | 0.28 | 3d8/12 L=60 | 2,2,2 | |
| 90 | NV,ok | 0.0 | 3.06 | 85.8 | 15.4 | 0.0 | 0.65 | 0.40 | 0.08 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.14 | 87.8 | 13.4 | 0.0 | 0.66 | 0.44 | 0.07 | 0.16 | 3d8/12 L=60 | 2,2,2 | |
| 91 | NV,ok | 0.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.41 | 0.02 | 0.05 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.43 | 0.02 | 0.03 | 3d8/12 L=60 | 2,2,2 | |
| 92 | NV,ok | 0.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.43 | 0.03 | 0.06 | 3d8/12 L=60 | 2,20,16 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.40 | 0.04 | 0.07 | 3d8/12 L=60 | 2,20,16 | |
| 93 | NV,ok | 0.0 | 3.06 | 85.8 | 13.4 | 0.0 | 0.65 | 0.45 | 0.07 | 0.14 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.41 | 0.07 | 0.16 | 3d8/12 L=60 | 2,2,2 | |
| 94 | NV,ok | 0.0 | 2.99 | 83.8 | 13.4 | 0.0 | 0.65 | 0.44 | 0.09 | 0.20 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.85 | 79.8 | 15.4 | 0.0 | 0.61 | 0.39 | 0.10 | 0.22 | 3d8/12 L=60 | 2,2,2 | |
| 95 | NV,ok | 0.0 | 2.78 | 77.7 | 15.4 | 0.0 | 0.59 | 0.45 | 0.12 | 0.25 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.70 | 75.7 | 17.4 | 0.0 | 0.56 | 0.36 | 0.13 | 0.27 | 3d8/12 L=60 | 2,2,2 | |
| 96 | NV,ok | 0.0 | 2.56 | 71.7 | 15.4 | 0.0 | 0.54 | 0.45 | 0.14 | 0.30 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 17.4 | 0.0 | 0.50 | 0.33 | 0.15 | 0.32 | 3d8/12 L=60 | 2,2,2 | |
| 97 | NV,ok | 0.0 | 2.35 | 65.7 | 15.4 | 0.0 | 0.48 | 0.44 | 0.16 | 0.35 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.20 | 61.7 | 17.4 | 0.0 | 0.42 | 0.30 | 0.17 | 0.36 | 3d8/12 L=60 | 2,2,2 | |
| 98 | ok,ok | 0.0 | 2.06 | 57.6 | 15.4 | 0.0 | 0.40 | 0.43 | 0.18 | 0.39 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.27 | 0.19 | 0.41 | 3d8/12 L=60 | 50,2,2 | |
| 99 | ok,ok | 0.0 | 1.77 | 49.6 | 15.4 | 0.0 | 0.34 | 0.41 | 0.20 | 0.44 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.56 | 43.6 | 19.4 | 0.0 | 0.28 | 0.28 | 0.21 | 0.45 | 3d8/12 L=60 | 50,2,2 | |
| 100 | ok,ok | 0.0 | 1.41 | 39.5 | 17.4 | 0.0 | 0.27 | 0.39 | 0.22 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 21.5 | 0.0 | 0.23 | 0.27 | 0.23 | 0.50 | 3d8/12 L=60 | 52,2,2 | |

| | | | | | | | | | | | | | |
|---------------------------------|---------|------|------|---------|---------|----------|------|-------|-----------|-----------|-------------|----------|--|
| 101 | ok,ok | 0.0 | 0.98 | 27.5 | 21.5 | 0.0 | 0.20 | 0.33 | 0.24 | 0.51 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 0.98 | 19.4 | 27.5 | 0.0 | 0.21 | 0.37 | 0.24 | 0.52 | 3d8/12 L=60 | 2,2,2 | |
| 102 | ok,ok | 0.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.29 | 0.29 | 0.63 | 3d8/12 L=60 | 43,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.84 | 0.30 | 0.64 | 3d8/12 L=60 | 2,2,2 | |
| M T= 4 Z=100.0 P=4 P=104 | | | | | | | | | | | | | |
| Trave | Note | Pos. | %Af | Af inf. | Af. sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | Staffe | Rif. cmb | |
| 124 | ok,ok | 0.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.81 | 0.37 | 0.74 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 13.4 | 33.5 | 0.0 | 0.25 | 0.29 | 0.36 | 0.72 | 3d8/12 L=60 | 22,2,2 | |
| 125 | ok,ok | 0.0 | 0.98 | 23.5 | 27.5 | 0.0 | 0.20 | 0.35 | 0.35 | 0.63 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 17.4 | 0.0 | 0.24 | 0.37 | 0.34 | 0.61 | 3d8/12 L=60 | 2,2,2 | |
| 126 | ok,ok | 0.0 | 1.41 | 39.5 | 19.4 | 0.0 | 0.26 | 0.30 | 0.35 | 0.60 | 3d8/12 L=60 | 23,2,2 | |
| | s=1,m=6 | 60.0 | 1.70 | 47.6 | 15.4 | 0.0 | 0.33 | 0.41 | 0.34 | 0.59 | 3d8/12 L=60 | 2,2,2 | |
| 127 | ok,ok | 0.0 | 1.84 | 51.6 | 19.4 | 0.0 | 0.33 | 0.28 | 0.33 | 0.56 | 3d8/12 L=60 | 23,2,2 | |
| | s=1,m=6 | 60.0 | 2.13 | 59.7 | 15.4 | 0.0 | 0.42 | 0.43 | 0.33 | 0.54 | 3d8/12 L=60 | 2,2,2 | |
| 128 | NV,ok | 0.0 | 2.27 | 63.7 | 19.4 | 0.0 | 0.42 | 0.27 | 0.31 | 0.51 | 3d8/12 L=60 | 21,2,2 | |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 15.4 | 0.0 | 0.52 | 0.45 | 0.30 | 0.50 | 3d8/12 L=60 | 2,2,2 | |
| 129 | NV,ok | 0.0 | 2.63 | 73.7 | 17.4 | 0.0 | 0.54 | 0.32 | 0.28 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.85 | 79.8 | 15.4 | 0.0 | 0.61 | 0.46 | 0.27 | 0.46 | 3d8/12 L=60 | 2,2,2 | |
| 130 | NV,ok | 0.0 | 2.92 | 81.8 | 17.4 | 0.0 | 0.61 | 0.37 | 0.19 | 0.32 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.06 | 85.8 | 13.4 | 0.0 | 0.65 | 0.46 | 0.18 | 0.31 | 3d8/12 L=60 | 2,2,2 | |
| 131 | NV,ok | 0.0 | 3.14 | 87.8 | 15.4 | 0.0 | 0.65 | 0.40 | 0.09 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.09 | 0.16 | 3d8/12 L=60 | 2,2,2 | |
| 132 | NV,ok | 0.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.42 | 0.03 | 0.05 | 3d8/12 L=60 | 2,1,1 | |
| | s=1,m=6 | 60.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.42 | 0.02 | 0.03 | 3d8/12 L=60 | 2,1,1 | |
| 133 | NV,ok | 0.0 | 3.21 | 89.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.09 | 0.13 | 3d8/12 L=60 | 2,8,16 | |
| | s=1,m=6 | 60.0 | 3.14 | 87.8 | 15.4 | 0.0 | 0.65 | 0.41 | 0.10 | 0.15 | 3d8/12 L=60 | 2,8,16 | |
| 134 | NV,ok | 0.0 | 3.06 | 85.8 | 13.4 | 0.0 | 0.65 | 0.45 | 0.12 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.41 | 0.13 | 0.18 | 3d8/12 L=60 | 2,2,2 | |
| 135 | NV,ok | 0.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.44 | 0.14 | 0.21 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 15.4 | 0.0 | 0.63 | 0.37 | 0.15 | 0.22 | 3d8/12 L=60 | 2,2,2 | |
| 136 | NV,ok | 0.0 | 2.78 | 77.7 | 15.4 | 0.0 | 0.59 | 0.45 | 0.17 | 0.25 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.70 | 75.7 | 17.4 | 0.0 | 0.56 | 0.36 | 0.18 | 0.27 | 3d8/12 L=60 | 2,2,2 | |
| 137 | NV,ok | 0.0 | 2.56 | 71.7 | 15.4 | 0.0 | 0.54 | 0.45 | 0.19 | 0.30 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.42 | 67.7 | 17.4 | 0.0 | 0.48 | 0.34 | 0.20 | 0.31 | 3d8/12 L=60 | 2,2,2 | |
| 138 | NV,ok | 0.0 | 2.35 | 65.7 | 15.4 | 0.0 | 0.48 | 0.44 | 0.21 | 0.34 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.20 | 61.7 | 17.4 | 0.0 | 0.42 | 0.30 | 0.22 | 0.36 | 3d8/12 L=60 | 2,2,2 | |
| 139 | ok,ok | 0.0 | 2.06 | 57.6 | 15.4 | 0.0 | 0.40 | 0.43 | 0.24 | 0.39 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.27 | 0.24 | 0.40 | 3d8/12 L=60 | 30,2,2 | |
| 140 | ok,ok | 0.0 | 1.77 | 49.6 | 15.4 | 0.0 | 0.34 | 0.41 | 0.26 | 0.44 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.56 | 43.6 | 19.4 | 0.0 | 0.28 | 0.28 | 0.27 | 0.45 | 3d8/12 L=60 | 32,2,2 | |
| 141 | ok,ok | 0.0 | 1.41 | 39.5 | 17.4 | 0.0 | 0.27 | 0.39 | 0.28 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 21.5 | 0.0 | 0.23 | 0.27 | 0.28 | 0.50 | 3d8/12 L=60 | 32,2,2 | |
| 142 | ok,ok | 0.0 | 0.98 | 27.5 | 21.5 | 0.0 | 0.20 | 0.34 | 0.28 | 0.51 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 19.4 | 29.5 | 0.0 | 0.21 | 0.33 | 0.28 | 0.53 | 3d8/12 L=60 | 2,2,2 | |
| 143 | ok,ok | 0.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.29 | 0.31 | 0.63 | 3d8/12 L=60 | 29,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.84 | 0.32 | 0.64 | 3d8/12 L=60 | 2,2,2 | |
| M T= 5 Z=100.0 P=5 P=105 | | | | | | | | | | | | | |
| Trave | Note | Pos. | %Af | Af inf. | Af. sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | Staffe | Rif. cmb | |
| 165 | ok,ok | 0.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.85 | 0.40 | 0.78 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.27 | 13.4 | 35.5 | 0.0 | 0.26 | 0.30 | 0.39 | 0.77 | 3d8/12 L=60 | 22,2,2 | |
| 166 | ok,ok | 0.0 | 0.98 | 25.5 | 27.5 | 0.0 | 0.20 | 0.35 | 0.40 | 0.64 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 17.4 | 0.0 | 0.24 | 0.40 | 0.39 | 0.63 | 3d8/12 L=60 | 2,2,2 | |
| 167 | ok,ok | 0.0 | 1.41 | 39.5 | 19.4 | 0.0 | 0.26 | 0.30 | 0.39 | 0.61 | 3d8/12 L=60 | 31,2,2 | |
| | s=1,m=6 | 60.0 | 1.70 | 47.6 | 15.4 | 0.0 | 0.33 | 0.43 | 0.39 | 0.59 | 3d8/12 L=60 | 2,2,2 | |
| 168 | ok,ok | 0.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.28 | 0.37 | 0.57 | 3d8/12 L=60 | 39,2,2 | |
| | s=1,m=6 | 60.0 | 2.13 | 59.7 | 15.4 | 0.0 | 0.42 | 0.45 | 0.36 | 0.56 | 3d8/12 L=60 | 2,2,2 | |
| 169 | NV,ok | 0.0 | 2.35 | 65.7 | 19.4 | 0.0 | 0.44 | 0.27 | 0.34 | 0.53 | 3d8/12 L=60 | 21,2,2 | |
| | s=1,m=6 | 60.0 | 2.56 | 71.7 | 15.4 | 0.0 | 0.54 | 0.45 | 0.33 | 0.52 | 3d8/12 L=60 | 2,2,2 | |
| 170 | NV,ok | 0.0 | 2.70 | 75.7 | 19.4 | 0.0 | 0.54 | 0.31 | 0.31 | 0.50 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 15.4 | 0.0 | 0.63 | 0.46 | 0.30 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| 171 | NV,ok | 0.0 | 3.06 | 85.8 | 17.4 | 0.0 | 0.64 | 0.36 | 0.21 | 0.34 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.45 | 0.20 | 0.32 | 3d8/12 L=60 | 2,2,2 | |
| 172 | NV,ok | 0.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.41 | 0.11 | 0.17 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.28 | 91.8 | 13.4 | 0.0 | 0.66 | 0.45 | 0.10 | 0.16 | 3d8/12 L=60 | 2,2,2 | |
| 173 | NV,ok | 0.0 | 3.42 | 95.8 | 15.4 | 0.0 | 0.67 | 0.41 | 0.03 | 0.05 | 3d8/12 L=60 | 2,1,1 | |
| | s=1,m=6 | 60.0 | 3.42 | 95.8 | 15.4 | 0.0 | 0.67 | 0.41 | 0.02 | 0.03 | 3d8/12 L=60 | 2,1,1 | |
| 174 | NV,ok | 0.0 | 3.28 | 91.8 | 15.4 | 0.0 | 0.66 | 0.45 | 0.10 | 0.16 | 3d8/12 L=60 | 2,8,16 | |
| | s=1,m=6 | 60.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.41 | 0.10 | 0.17 | 3d8/12 L=60 | 2,8,16 | |
| 175 | NV,ok | 0.0 | 3.21 | 89.8 | 15.4 | 0.0 | 0.66 | 0.44 | 0.13 | 0.19 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 3.06 | 85.8 | 17.4 | 0.0 | 0.64 | 0.39 | 0.14 | 0.21 | 3d8/12 L=60 | 2,2,2 | |
| 176 | NV,ok | 0.0 | 2.99 | 83.8 | 15.4 | 0.0 | 0.64 | 0.45 | 0.16 | 0.23 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.92 | 81.8 | 17.4 | 0.0 | 0.61 | 0.37 | 0.17 | 0.24 | 3d8/12 L=60 | 2,2,2 | |
| 177 | NV,ok | 0.0 | 2.85 | 79.8 | 15.4 | 0.0 | 0.61 | 0.44 | 0.19 | 0.27 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.70 | 75.7 | 17.4 | 0.0 | 0.56 | 0.36 | 0.20 | 0.28 | 3d8/12 L=60 | 2,2,2 | |
| 178 | NV,ok | 0.0 | 2.63 | 73.7 | 15.4 | 0.0 | 0.56 | 0.43 | 0.22 | 0.31 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.49 | 69.7 | 17.4 | 0.0 | 0.50 | 0.33 | 0.22 | 0.32 | 3d8/12 L=60 | 2,2,2 | |

| | | | | | | | | | | | | | |
|--------------|---------|------|------------|----------------|----------------|-----------------|------------|--------------|------------------|------------------|-------------|--------|--|
| 179 | NV,ok | 0.0 | 2.35 | 65.7 | 15.4 | 0.0 | 0.48 | 0.44 | 0.24 | 0.35 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 2.20 | 61.7 | 17.4 | 0.0 | 0.42 | 0.30 | 0.25 | 0.37 | 3d8/12 L=60 | 2,2,2 | |
| 180 | ok,ok | 0.0 | 2.06 | 57.6 | 15.4 | 0.0 | 0.40 | 0.44 | 0.27 | 0.39 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.92 | 53.6 | 19.4 | 0.0 | 0.34 | 0.27 | 0.28 | 0.41 | 3d8/12 L=60 | 30,2,2 | |
| 181 | ok,ok | 0.0 | 1.77 | 49.6 | 15.4 | 0.0 | 0.34 | 0.42 | 0.30 | 0.44 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.56 | 43.6 | 19.4 | 0.0 | 0.28 | 0.28 | 0.31 | 0.45 | 3d8/12 L=60 | 44,2,2 | |
| 182 | ok,ok | 0.0 | 1.41 | 39.5 | 15.4 | 0.0 | 0.28 | 0.41 | 0.32 | 0.48 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 1.20 | 33.5 | 21.5 | 0.0 | 0.23 | 0.27 | 0.33 | 0.50 | 3d8/12 L=60 | 24,2,2 | |
| 183 | ok,ok | 0.0 | 0.98 | 27.5 | 19.4 | 0.0 | 0.21 | 0.36 | 0.33 | 0.52 | 3d8/12 L=60 | 2,2,2 | |
| | s=1,m=6 | 60.0 | 0.98 | 19.4 | 27.5 | 0.0 | 0.21 | 0.37 | 0.33 | 0.53 | 3d8/12 L=60 | 2,2,2 | |
| 184 | ok,ok | 0.0 | 1.34 | 13.4 | 37.5 | 0.0 | 0.27 | 0.30 | 0.34 | 0.65 | 3d8/12 L=60 | 29,2,2 | |
| | s=1,m=6 | 60.0 | 1.05 | 13.4 | 29.5 | 0.0 | 0.23 | 0.87 | 0.34 | 0.67 | 3d8/12 L=60 | 2,2,2 | |
| | | | | | | | | | | | | | |
| Trave | | | %Af | Af inf. | Af. sup | Af long. | x/d | V N/M | V V/T cls | V V/T acc | | | |
| | | | 3.42 | 95.84 | 37.54 | 0.0 | 0.67 | 0.87 | 0.40 | 0.78 | | | |

7.2 VERIFICHE SOLETTA C.A. – NTC2018

Per la progettazione come Singolo Elemento di ogni elemento vengono riportati il codice dello stato di verifica con le sigle Ok e NV, il rapporto x/d , la verifica per sollecitazioni ultime (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglienti), gli sforzi membranali e flessionali, il quantitativo di armatura nella direzione principale e secondaria sia inferiore che superiore e il quantitativo di armatura a taglio.

Inoltre, vengono riportate per ogni quota significativa l'armatura principale e secondaria, l'armatura in zona confinata (solo per parete sismica) e non confinata, l'armatura concentrata all'estremità (per pareti debolmente armate), lo sforzo assiale aggiuntivo per q superiore a 2 e i valori di involuppo di taglio e momento. Per le pareti debolmente armate viene riportato anche lo stato di verifica relativo alla snellezza.

Le azioni derivate dall'analisi, in ogni combinazione di calcolo, sono elaborate come previsto al punto 7.4.4.5.1: traslazione del momento, incremento e variazione diagramma taglio, incremento e decremento sforzo assiale

La progettazione nel caso dei gusci viene effettuata una progettazione come Singolo Elemento, riportando in tabella il rapporto x/d , la verifica per sollecitazioni ultime, (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglienti) di ogni elemento.

Per ogni elemento, viene riportata inoltre la maglia di armatura necessaria in relazione alle risultanze della progettazione dei nodi dell'elemento stesso. Le quantità di armature necessarie sono armature (disposte rispettivamente in direzione principale e secondaria, inferiore e superiore) distribuite nell'elemento ed espresse in centimetri quadri per sviluppo lineare pari ad un metro.

Nel caso dei gusci viene effettuata, inoltre, la verifica a punzonamento, riportando in tabella il codice dello stato di verifica, il coefficiente di verifica per piastre prive di armature a taglio lungo il perimetro resistente e lungo il perimetro del pilastro, coefficiente di incremento dovuto ai momenti flettenti, fattore di amplificazione per le fondazioni, il fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta, il quantitativo di armatura a punzonamento, il numero di serie di armature, il numero di braccia di armatura ed il riferimento alla combinazione più gravosa.

Si riportano di seguito le principali verifiche sugli elementi travi e colonne con diagrammi grafici per cui affinché la verifica sia positiva il rapporto deve essere inferiore o uguale a 1.

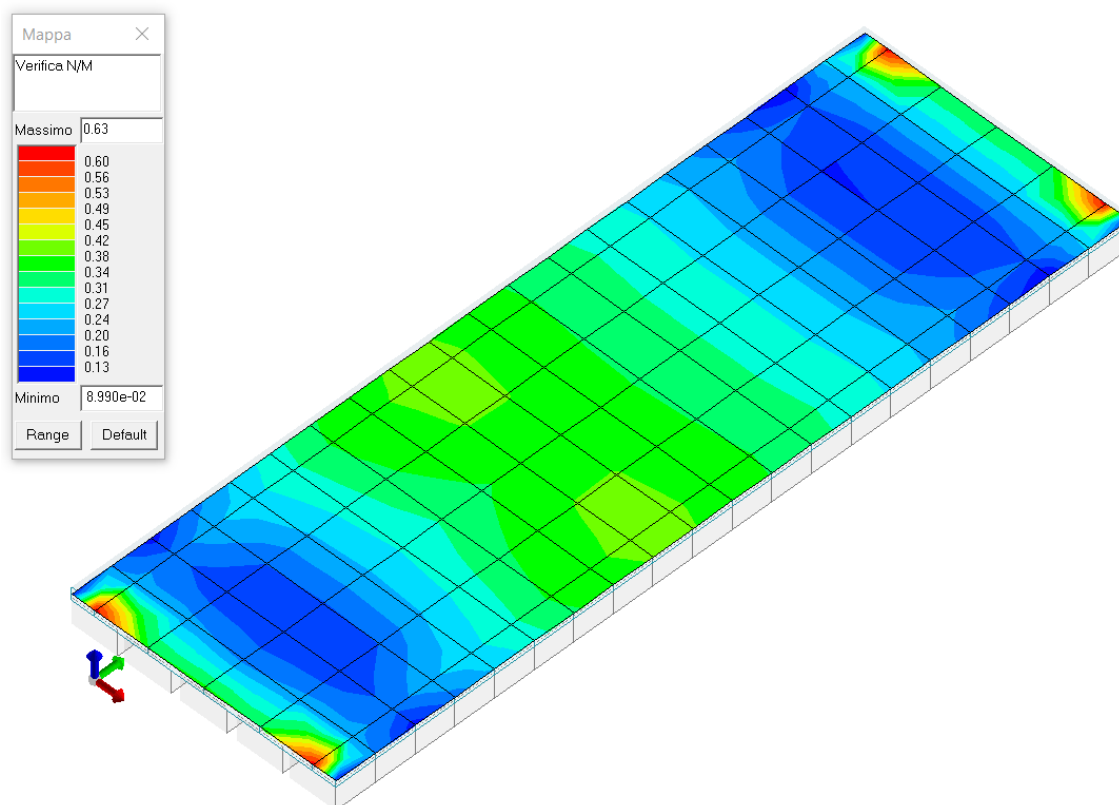


Figura 7-4: SOLETTA C.A. - Verifica N/M

Per gli elementi con progettazione “*Singolo Elemento ...*” è presente una tabella con i simboli di seguito descritti:

| | |
|---------------|---|
| Macro Guscio | Numero del macroelemento di tipo guscio (elementi non verticali contigui ed analoghi per proprietà) |
| Macro Setto | Numero del macroelemento di tipo setto (elementi verticali contigui ed analoghi per proprietà) |
| Spessore | Spessore della parete |
| Id Materiale | Codice del materiale assegnato all'elemento |
| Id Criterio | Codice del criterio di progetto assegnato all'elemento |
| Progettazione | Sigla tipo di Elemento: - Singolo Elemento; - Singolo Elemento FONDAZIONE; - Singolo Elemento NON DISSIPATIVO |

Per le verifiche degli elementi con progettazione “*Singolo Elemento ...*” e *Progettazione Composta* è presente una tabella con i simboli di seguito descritti:

| | |
|----------|--|
| Nodo | numero del nodo |
| Stato | codice di verifica dell'elemento ok o NV |
| x/d | rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione) |
| V N/M | Verifica delle sollecitazioni Normali (momento e sforzo normale) |
| Ver. rid | Rapporto Nd/Nu (Nu ottenuto con riduzione del 25% di fcd) |
| Af pr+ | quantità di armatura richiesta in direzione principale relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo) |
| Af pr- | quantità di armatura richiesta in direzione principale relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo) |
| Af sec+ | quantità di armatura richiesta in direzione secondaria relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo) |
| Af sec- | quantità di armatura richiesta in direzione secondaria relativa alla faccia negativa |

| (intradosso piastre) (valore derivante da calcolo o minimo normativo) | | | |
|---|----|-----|---|
| Nz | No | Nzo | Sforzi membranali per pareti e/o setti verticali |
| Mz | Mo | Mzo | Sforzi flessionali per pareti e/o setti verticali |
| Nx | Ny | Nxy | Sforzi membranali per gusci orizzontali |
| Mx | Mx | Mxy | Sforzi flessionali per gusci orizzontali |

| | |
|-----------|--|
| Nodo | numero del nodo |
| Stato | codice di verifica dell'elemento ok o NV |
| Max tau | Tensione tangenziale Massima |
| Ver V pr | Verifica a taglio nella direzione principale lato calcestruzzo |
| Ver V sec | Verifica a taglio nella direzione secondaria lato calcestruzzo |
| Af V pr | Armatura nella direzione principale |
| V pr- | Verifica dell'armatura nella direzione principale |
| Af V sec | Armatura nella direzione secondaria |
| V sec- | Verifica dell'armatura nella direzione secondaria |

| Macro Guscio | Spessore | Id Materiale | Id Criterio | Progettazione |
|--------------|----------|--------------|-------------|------------------|
| | cm | | | |
| 1 | 20.00 | 6 | 1 | Singolo elemento |

| Nodo | Stato | x/d | V N/M | ver. rid | Af pr- | Af pr+ | Af sec- | Af sec+ | N x | N y | N xy | M x | M y | M xy |
|------|-------|------|-------|----------|--------|--------|---------|---------|--------|---------|---------|--------|---------|--------|
| | | | | | | | | | daN/cm | daN/cm | daN/cm | daN | daN | daN |
| 43 | ok | 0.31 | 0.9 | 0.2 | 32.7 | 39.1 | 42.9 | 59.1 | 342.1 | 994.1 | -1635.3 | 1419.9 | 1046.3 | -706.8 |
| 44 | ok | 0.25 | 0.4 | 0.2 | 25.2 | 35.0 | 25.2 | 35.0 | 222.1 | 864.8 | -1576.1 | 396.0 | 828.7 | -867.8 |
| 45 | ok | 0.20 | 0.3 | 0.2 | 20.1 | 20.7 | 20.1 | 20.7 | -9.4 | 664.4 | -33.2 | 951.9 | 1252.6 | 226.4 |
| 46 | ok | 0.20 | 0.3 | 4.11e-02 | 20.1 | 21.1 | 20.1 | 21.1 | 108.0 | 841.7 | 552.1 | 323.4 | 964.3 | 588.0 |
| 47 | ok | 0.20 | 0.3 | 4.46e-02 | 21.8 | 20.1 | 21.8 | 20.1 | 22.5 | 1026.5 | -327.6 | -94.3 | -1361.6 | 714.2 |
| 48 | ok | 0.19 | 0.2 | 1.92e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 53.6 | 689.0 | -272.3 | 159.8 | -718.7 | 321.5 |
| 49 | ok | 0.21 | 0.4 | 0.1 | 23.3 | 20.1 | 23.7 | 20.1 | 57.2 | 945.5 | 358.8 | -11.0 | -1976.4 | -920.8 |
| 50 | ok | 0.19 | 0.2 | 4.80e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 55.4 | 473.2 | 294.0 | 229.0 | -1132.6 | -486.6 |
| 51 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 78.2 | -532.9 | -100.9 | 66.4 | -4136.8 | 201.1 |
| 52 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 8.2 | -859.4 | -97.0 | 23.9 | -3725.5 | 209.4 |
| 53 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 36.3 | -1213.6 | -94.7 | -597.4 | -5088.1 | -11.9 |
| 54 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 2.0 | -1254.7 | -98.3 | -778.8 | -4966.0 | 140.3 |
| 55 | ok | 0.19 | 0.3 | 9.75e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 97.1 | 720.4 | -193.3 | 44.2 | -2149.8 | 513.0 |
| 56 | ok | 0.19 | 0.2 | 5.52e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 27.4 | 318.6 | -185.9 | 141.9 | -1502.3 | 221.2 |
| 57 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 121.6 | -242.4 | 174.2 | 48.5 | -4405.0 | -232.6 |
| 58 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 20.8 | -626.6 | -254.4 | -303.8 | -3753.1 | -63.7 |
| 59 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 16.3 | -1417.6 | 18.5 | -555.1 | -5200.2 | -15.5 |
| 60 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -5.1 | -1431.6 | 12.6 | -679.0 | -5133.1 | 7.8 |
| 61 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 68.2 | -776.5 | -83.9 | 89.9 | -4467.5 | 130.4 |
| 62 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 6.4 | -1070.6 | -77.9 | 36.9 | -4098.1 | 215.3 |
| 63 | ok | 0.19 | 0.3 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 103.0 | 374.9 | -156.0 | 32.9 | -2766.2 | 399.4 |
| 64 | ok | 0.19 | 0.2 | 9.30e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 13.6 | -27.7 | -153.2 | 94.0 | -2168.9 | 200.7 |
| 65 | ok | 0.25 | 0.4 | 0.2 | 22.3 | 32.8 | 22.3 | 32.8 | 215.7 | 756.8 | 1402.2 | 663.2 | 899.5 | 939.8 |
| 66 | ok | 0.30 | 0.9 | 0.2 | 30.7 | 36.5 | 36.1 | 52.1 | 296.5 | 847.3 | 1463.2 | 2063.6 | 1190.6 | 603.2 |
| 67 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | -24.3 | 435.8 | -47.4 | 1291.0 | 1130.6 | -298.9 |
| 68 | ok | 0.19 | 0.3 | 4.99e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 84.5 | 506.9 | -15.0 | 738.3 | 1030.1 | -16.4 |
| 69 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 51.2 | -904.6 | -193.5 | -576.3 | -4695.4 | -39.2 |
| 70 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 13.7 | -968.2 | -187.7 | -648.7 | -4587.5 | 10.7 |
| 71 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 96.7 | 44.7 | -136.0 | 33.2 | -3290.7 | 323.7 |
| 72 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 9.1 | -338.9 | -133.4 | 52.4 | -2760.1 | 196.9 |
| 73 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 30.0 | -1113.9 | 117.7 | -329.0 | -4568.6 | 17.2 |
| 74 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 12.1 | -1182.5 | 109.7 | -177.1 | -4486.9 | 81.4 |
| 75 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 17.5 | -1423.1 | -2.8 | -537.9 | -5199.4 | 33.0 |
| 76 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -10.6 | -1439.7 | -11.0 | -737.4 | -5092.7 | 242.6 |
| 77 | ok | 0.19 | 0.4 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 124.7 | 571.2 | 233.5 | 99.8 | -2909.1 | -619.3 |
| 78 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 27.7 | 34.2 | 210.5 | 265.2 | -2047.8 | -371.2 |
| 79 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 87.7 | -259.0 | -118.3 | 46.0 | -3745.6 | 262.2 |
| 80 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 8.5 | -615.7 | -115.5 | 27.9 | -3279.3 | 201.3 |

| Nodo | Stato | x/d | V N/M | ver. rid | Af pr- | Af pr+ | Af sec- | Af sec+ | N x | N y | N xy | M x | M y | M xy |
|------|-------|------|-------|----------|--------|--------|---------|---------|--------|---------|---------|--------|---------|--------|
| 81 | ok | 0.19 | 0.4 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 129.2 | 160.6 | 199.3 | 68.5 | -3689.8 | -411.2 |
| 82 | ok | 0.19 | 0.2 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 11.3 | -380.2 | 179.8 | 237.6 | -2850.8 | -329.5 |
| 83 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 25.6 | -1275.0 | 87.6 | -448.5 | -4876.0 | -16.0 |
| 84 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 5.2 | -1318.8 | 76.5 | -378.3 | -4796.6 | 61.8 |
| 106 | ok | 0.25 | 0.3 | 0.2 | 24.7 | 33.5 | 24.7 | 33.5 | 165.6 | 836.2 | 1555.8 | 83.0 | 728.0 | 889.9 |
| 107 | ok | 0.19 | 0.3 | 3.42e-02 | 20.1 | 20.6 | 20.1 | 20.6 | 148.7 | 866.6 | -566.7 | 296.0 | 967.6 | -416.2 |
| 108 | ok | 0.19 | 0.2 | 1.25e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 90.4 | 694.5 | 295.5 | 88.1 | -715.2 | -96.0 |
| 109 | ok | 0.19 | 0.2 | 3.46e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 97.1 | 497.5 | -330.9 | 214.8 | -1136.5 | 70.1 |
| 110 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 14.1 | -828.5 | 127.5 | 84.6 | -3758.6 | -58.6 |
| 111 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -29.7 | -1273.7 | -71.2 | 1353.5 | -4356.6 | 223.7 |
| 112 | ok | 0.19 | 0.2 | 4.36e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 41.1 | 366.5 | 229.5 | 68.0 | -1509.9 | -67.4 |
| 113 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 1.6 | -718.4 | -187.5 | 806.2 | -3463.2 | 222.8 |
| 114 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -29.8 | -1485.2 | 15.8 | 1119.0 | -4521.2 | 187.9 |
| 115 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 12.6 | -1051.2 | -102.1 | 178.1 | -4124.4 | 80.6 |
| 116 | ok | 0.19 | 0.2 | 8.01e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 19.1 | 25.4 | 196.5 | 55.3 | -2183.0 | -64.0 |
| 117 | ok | 0.24 | 0.4 | 0.2 | 21.8 | 30.9 | 21.8 | 30.9 | 179.8 | 738.8 | 1386.4 | -61.9 | 728.6 | 1010.2 |
| 118 | ok | 0.19 | 0.2 | 4.21e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 158.9 | 754.5 | 585.3 | 323.5 | 622.5 | 446.8 |
| 119 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -17.6 | -1040.6 | -133.8 | 1176.6 | -3962.9 | 254.2 |
| 120 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 13.1 | -291.0 | 172.4 | 41.0 | -2783.1 | -58.8 |
| 121 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 6.5 | -1242.3 | -73.4 | 375.1 | -4389.0 | 112.3 |
| 122 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -31.8 | -1413.7 | -13.3 | 1312.6 | -4563.9 | 170.3 |
| 123 | ok | 0.19 | 0.2 | 8.91e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 47.4 | 91.2 | -265.1 | 325.0 | -2053.8 | 101.7 |
| 124 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 13.2 | -575.8 | 150.3 | 44.7 | -3308.9 | -56.0 |
| 125 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 20.7 | -328.9 | -226.0 | 515.6 | -2823.2 | 160.6 |
| 126 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -8.2 | -1396.7 | -37.5 | 697.6 | -4525.3 | 161.3 |
| 148 | ok | 0.25 | 0.4 | 0.2 | 25.2 | 35.2 | 25.2 | 35.2 | 224.6 | 868.1 | 1578.1 | 471.0 | 849.5 | 857.0 |
| 149 | ok | 0.20 | 0.3 | 4.13e-02 | 20.1 | 21.0 | 20.1 | 21.0 | 105.6 | 842.9 | -552.4 | 312.1 | 959.2 | -624.2 |
| 150 | ok | 0.19 | 0.2 | 1.97e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 53.3 | 687.3 | 274.2 | 160.5 | -725.4 | -351.1 |
| 151 | ok | 0.19 | 0.2 | 4.81e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 55.2 | 473.4 | -293.8 | 231.3 | -1132.9 | 503.2 |
| 152 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 8.3 | -860.0 | 96.9 | 18.7 | -3730.7 | -202.7 |
| 153 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 2.0 | -1254.2 | 98.9 | -787.0 | -4968.7 | -133.3 |
| 154 | ok | 0.19 | 0.2 | 5.58e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 27.1 | 314.9 | 186.6 | 140.5 | -1517.9 | -237.7 |
| 155 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 20.9 | -626.2 | 255.0 | -307.3 | -3754.9 | 72.4 |
| 156 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -5.2 | -1431.9 | -12.0 | -689.0 | -5135.7 | 0.5 |
| 157 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 6.5 | -1070.7 | 78.0 | 31.9 | -4102.1 | -207.6 |
| 158 | ok | 0.19 | 0.2 | 9.32e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 13.5 | -31.7 | 152.3 | 89.6 | -2185.0 | -205.6 |
| 159 | ok | 0.25 | 0.4 | 0.2 | 22.3 | 32.8 | 22.3 | 32.8 | 215.3 | 757.5 | -1402.3 | 697.6 | 907.4 | -938.7 |
| 160 | ok | 0.19 | 0.3 | 5.00e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 84.1 | 507.0 | 15.5 | 764.0 | 1036.1 | 23.5 |
| 161 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 13.7 | -967.8 | 188.3 | -654.5 | -4589.7 | -2.9 |
| 162 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 9.1 | -341.7 | 132.5 | 47.6 | -2769.2 | -195.3 |
| 163 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 11.8 | -1183.4 | -108.9 | -193.4 | -4491.1 | -74.2 |
| 164 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -10.5 | -1439.1 | 11.6 | -748.4 | -5096.1 | -236.5 |
| 165 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 27.6 | 34.4 | -210.2 | 269.2 | -2048.2 | 384.3 |
| 166 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 8.6 | -617.1 | 115.2 | 22.9 | -3286.1 | -196.5 |
| 167 | ok | 0.19 | 0.2 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 11.3 | -380.0 | -179.4 | 241.4 | -2851.4 | 340.3 |
| 168 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 5.0 | -1319.4 | -75.7 | -391.2 | -4799.9 | -53.9 |
| 190 | ok | 0.31 | 0.9 | 0.2 | 32.8 | 39.3 | 43.2 | 59.2 | 345.1 | 1000.0 | 1640.0 | 1498.1 | 1065.4 | 697.9 |
| 191 | ok | 0.20 | 0.3 | 0.2 | 20.1 | 20.8 | 20.1 | 20.8 | -10.7 | 662.4 | 31.9 | 1001.0 | 1264.7 | -244.2 |
| 192 | ok | 0.20 | 0.3 | 4.57e-02 | 21.9 | 20.1 | 21.9 | 20.1 | 22.3 | 1026.9 | 329.2 | -77.5 | -1379.1 | -753.0 |
| 193 | ok | 0.21 | 0.4 | 0.1 | 23.3 | 20.1 | 23.8 | 20.1 | 57.3 | 946.2 | -358.9 | -3.3 | -1978.4 | 942.6 |
| 194 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 77.7 | -537.2 | 100.3 | 64.2 | -4141.5 | -188.0 |
| 195 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 36.4 | -1212.8 | 95.0 | -605.3 | -5091.5 | 17.3 |
| 196 | ok | 0.19 | 0.4 | 9.92e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 97.6 | 717.4 | 193.6 | 53.3 | -2177.0 | -528.0 |
| 197 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 121.6 | -241.8 | -174.1 | 51.3 | -4406.6 | 241.0 |
| 198 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 16.1 | -1417.8 | -18.0 | -564.1 | -5203.8 | 21.4 |
| 199 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 67.8 | -779.3 | 83.5 | 87.1 | -4470.9 | -116.6 |
| 200 | ok | 0.19 | 0.3 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 103.3 | 367.8 | 154.5 | 37.0 | -2788.6 | -399.8 |
| 201 | ok | 0.30 | 0.9 | 0.2 | 30.8 | 36.6 | 36.2 | 52.1 | 296.8 | 847.9 | -1464.4 | 2122.7 | 1200.9 | -596.5 |
| 202 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.2 | 20.1 | 20.2 | -24.6 | 435.6 | 47.9 | 1327.2 | 1137.2 | 307.8 |
| 203 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 51.2 | -903.9 | 193.8 | -582.0 | -4698.2 | 45.4 |
| 204 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 96.4 | 36.8 | 134.3 | 36.4 | -3300.6 | -316.5 |
| 205 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 29.7 | -1115.3 | -117.0 | -343.3 | -4574.4 | -13.1 |
| 206 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 17.5 | -1422.2 | 3.2 | -548.2 | -5203.6 | -28.3 |
| 207 | ok | 0.19 | 0.4 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 124.7 | 571.7 | -233.4 | 105.7 | -2910.9 | 635.1 |
| 208 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 87.2 | -265.1 | 117.3 | 45.4 | -3752.3 | -251.2 |
| 209 | ok | 0.19 | 0.4 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 129.2 | 161.1 | -199.2 | 72.5 | -3691.5 | 422.7 |
| 210 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 25.4 | -1275.7 | -87.1 | -460.0 | -4880.4 | 21.1 |
| 211 | ok | 0.19 | 0.1 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -151.7 | -1011.7 | -461.4 | -10.1 | -259.2 | -144.6 |
| 212 | ok | 0.20 | 0.3 | 3.29e-02 | 20.1 | 20.8 | 20.1 | 20.8 | 212.3 | 835.3 | 530.0 | -35.6 | 1575.6 | 192.1 |
| 213 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -8.0 | -1448.2 | 42.5 | 29.8 | -5049.7 | -148.4 |
| 214 | ok | 0.19 | 0.1 | 4.37e-03 | 20.1 | 20.1 | 20.1 | 20.1 | -9.3 | 691.5 | -15.3 | -26.4 | -843.3 | 132.0 |
| 215 | ok | 0.19 | 0.2 | 2.43e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 9.9 | 550.3 | 17.7 | -9.9 | -1335.2 | -170.4 |
| 216 | ok | 0.19 | 0.2 | 2.78e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 33.7 | 399.7 | 10.2 | -33.7 | -1658.1 | 82.1 |

| Nodo | Stato | x/d | V N/M | ver. rid | Af pr- | Af pr+ | Af sec- | Af sec+ | N x | N y | N xy | M x | M y | M xy |
|------|-------|------|-------|----------|--------|--------|---------|---------|---------|----------|----------|---------|----------|---------|
| 217 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 6.0 | -1425.7 | -39.9 | 1.9 | -5086.0 | 173.5 |
| 218 | ok | 0.19 | 0.2 | 8.08e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 41.4 | 88.5 | 13.8 | -39.2 | -2305.8 | 52.1 |
| 219 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 18.9 | -1225.7 | -41.9 | -6.3 | -4971.1 | 146.2 |
| 220 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 39.4 | -207.7 | 14.1 | -37.2 | -2871.9 | 31.7 |
| 221 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 31.1 | -921.5 | -38.2 | -13.7 | -4596.0 | 100.7 |
| 222 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 35.2 | -479.8 | 14.0 | -30.6 | -3372.5 | 14.5 |
| 223 | ok | 0.19 | 0.2 | 2.97e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 180.6 | 590.0 | -485.0 | -15.8 | 1401.1 | -161.4 |
| 224 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 30.4 | -724.6 | 13.8 | -21.5 | -3811.1 | -4.1 |
| 225 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 42.8 | -558.4 | -24.5 | -48.3 | -3862.7 | 48.0 |
| 226 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 24.7 | -940.7 | 13.9 | -11.2 | -4189.9 | -27.5 |
| 227 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 52.2 | -184.0 | -11.6 | -30.2 | -3108.8 | -20.1 |
| 228 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 16.3 | -1129.6 | 16.3 | -1.3 | -4512.5 | -59.0 |
| 229 | ok | 0.19 | 0.2 | 9.72e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 48.8 | 192.9 | -5.9 | -21.3 | -2298.8 | -86.8 |
| 230 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 4.2 | -1299.1 | 28.8 | -9.4 | -4792.1 | -107.1 |
| 231 | ok | 0.19 | 0.1 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | -124.8 | -845.1 | 430.5 | -63.1 | -324.8 | 116.6 |
| 232 | ok | 0.20 | 0.3 | 3.30e-02 | 20.1 | 20.8 | 20.1 | 20.8 | 213.1 | 837.4 | -533.3 | -40.4 | 1582.1 | -186.2 |
| 233 | ok | 0.19 | 0.1 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -152.0 | -1022.5 | 461.4 | -9.2 | -265.8 | 123.3 |
| 234 | ok | 0.19 | 0.1 | 4.31e-03 | 20.1 | 20.1 | 20.1 | 20.1 | -9.4 | 689.2 | 14.9 | -21.6 | -859.3 | -142.2 |
| 235 | ok | 0.19 | 0.2 | 2.77e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 33.6 | 393.9 | -10.9 | -30.0 | -1682.5 | -86.6 |
| 236 | ok | 0.19 | 0.2 | 8.23e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 41.4 | 80.6 | -14.3 | -36.4 | -2328.7 | -53.0 |
| 237 | ok | 0.19 | 0.2 | 0.1 | 20.1 | 20.1 | 20.1 | 20.1 | 39.4 | -214.9 | -14.2 | -36.2 | -2886.6 | -30.2 |
| 238 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 35.1 | -485.2 | -13.9 | -30.3 | -3383.1 | -11.5 |
| 239 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 30.2 | -728.1 | -13.7 | -21.6 | -3818.8 | 8.0 |
| 240 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 24.6 | -942.9 | -13.8 | -11.6 | -4195.6 | 31.8 |
| 241 | ok | 0.19 | 0.3 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 16.2 | -1130.7 | -16.2 | -1.8 | -4516.7 | 63.5 |
| 242 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 4.1 | -1299.5 | -28.8 | -9.9 | -4795.3 | 111.8 |
| 243 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | -8.1 | -1448.1 | -42.5 | 29.3 | -5052.2 | 153.0 |
| 244 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 6.1 | -1424.8 | 39.8 | 2.4 | -5088.6 | -172.6 |
| 245 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 18.9 | -1224.9 | 41.8 | -5.7 | -4973.2 | -144.4 |
| 246 | ok | 0.19 | 0.4 | 0.3 | 20.1 | 20.1 | 20.1 | 20.1 | 31.2 | -920.8 | 38.2 | -13.1 | -4598.0 | -98.2 |
| 247 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 42.8 | -557.8 | 24.5 | -47.5 | -3864.6 | -44.7 |
| 248 | ok | 0.19 | 0.3 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | 52.2 | -183.5 | 11.6 | -29.2 | -3110.8 | 24.4 |
| 249 | ok | 0.19 | 0.2 | 9.72e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 48.9 | 193.2 | 5.9 | -19.9 | -2300.9 | 92.3 |
| 250 | ok | 0.19 | 0.2 | 2.44e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 9.9 | 550.6 | -17.6 | -7.9 | -1337.0 | 177.6 |
| 251 | ok | 0.19 | 0.2 | 2.98e-02 | 20.1 | 20.1 | 20.1 | 20.1 | 180.7 | 589.9 | 485.3 | -16.8 | 1402.0 | 159.8 |
| 252 | ok | 0.19 | 0.1 | 0.2 | 20.1 | 20.1 | 20.1 | 20.1 | -124.8 | -845.6 | -430.9 | -63.6 | -322.8 | -113.3 |
| Nodo | | x/d | V N/M | ver. rid | Af pr- | Af pr+ | Af sec- | Af sec+ | N x | N y | N xy | M x | M y | M xy |
| | | | | | | | | | -152.03 | -1485.20 | -1635.28 | -786.99 | -5203.76 | -938.69 |
| | | 0.31 | 0.91 | 0.35 | 20.01 | 20.01 | 20.01 | 20.01 | 345.14 | 1026.93 | 1639.96 | 2122.74 | 1582.09 | 1010.15 |

| Nodo | Stato | Max tau | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr | V sec |
|------|-------|---------|----------|-----------|---------|----------|--------|--------|
| | | daN/cm2 | | | | | daN/cm | daN/cm |
| 43 | ok | 2.28 | | | | | | |
| 44 | ok | 1.39 | | | | | | |
| 45 | ok | 2.28 | | | | | | |
| 46 | ok | 1.39 | | | | | | |
| 47 | ok | 1.53 | | | | | | |
| 48 | ok | 0.86 | | | | | | |
| 49 | ok | 1.69 | | | | | | |
| 50 | ok | 0.87 | | | | | | |
| 51 | ok | 0.50 | | | | | | |
| 52 | ok | 0.13 | | | | | | |
| 53 | ok | 0.63 | | | | | | |
| 54 | ok | 1.15 | | | | | | |
| 55 | ok | 0.91 | | | | | | |
| 56 | ok | 0.32 | | | | | | |
| 57 | ok | 0.91 | | | | | | |
| 58 | ok | 0.76 | | | | | | |
| 59 | ok | 0.52 | | | | | | |
| 60 | ok | 1.04 | | | | | | |
| 61 | ok | 0.44 | | | | | | |
| 62 | ok | 0.18 | | | | | | |
| 63 | ok | 0.75 | | | | | | |
| 64 | ok | 0.21 | | | | | | |
| 65 | ok | 1.29 | | | | | | |
| 66 | ok | 2.48 | | | | | | |
| 67 | ok | 2.48 | | | | | | |
| 68 | ok | 1.29 | | | | | | |

| Nodo | Stato | Max tau | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr | V sec |
|------|-------|---------|----------|-----------|---------|----------|------|-------|
| 69 | ok | 0.91 | | | | | | |
| 70 | ok | 1.06 | | | | | | |
| 71 | ok | 0.66 | | | | | | |
| 72 | ok | 0.17 | | | | | | |
| 73 | ok | 0.42 | | | | | | |
| 74 | ok | 0.37 | | | | | | |
| 75 | ok | 0.49 | | | | | | |
| 76 | ok | 1.15 | | | | | | |
| 77 | ok | 1.03 | | | | | | |
| 78 | ok | 0.38 | | | | | | |
| 79 | ok | 0.57 | | | | | | |
| 80 | ok | 0.15 | | | | | | |
| 81 | ok | 0.86 | | | | | | |
| 82 | ok | 0.41 | | | | | | |
| 83 | ok | 0.52 | | | | | | |
| 84 | ok | 0.72 | | | | | | |
| 106 | ok | 1.37 | | | | | | |
| 107 | ok | 1.37 | | | | | | |
| 108 | ok | 0.85 | | | | | | |
| 109 | ok | 0.81 | | | | | | |
| 110 | ok | 0.09 | | | | | | |
| 111 | ok | 1.15 | | | | | | |
| 112 | ok | 0.28 | | | | | | |
| 113 | ok | 0.76 | | | | | | |
| 114 | ok | 1.04 | | | | | | |
| 115 | ok | 0.18 | | | | | | |
| 116 | ok | 0.17 | | | | | | |
| 117 | ok | 1.26 | | | | | | |
| 118 | ok | 1.26 | | | | | | |
| 119 | ok | 1.06 | | | | | | |
| 120 | ok | 0.14 | | | | | | |
| 121 | ok | 0.38 | | | | | | |
| 122 | ok | 1.15 | | | | | | |
| 123 | ok | 0.28 | | | | | | |
| 124 | ok | 0.11 | | | | | | |
| 125 | ok | 0.41 | | | | | | |
| 126 | ok | 0.73 | | | | | | |
| 148 | ok | 1.40 | | | | | | |
| 149 | ok | 1.40 | | | | | | |
| 150 | ok | 0.87 | | | | | | |
| 151 | ok | 0.87 | | | | | | |
| 152 | ok | 0.13 | | | | | | |
| 153 | ok | 1.15 | | | | | | |
| 154 | ok | 0.32 | | | | | | |
| 155 | ok | 0.76 | | | | | | |
| 156 | ok | 1.04 | | | | | | |
| 157 | ok | 0.18 | | | | | | |
| 158 | ok | 0.20 | | | | | | |
| 159 | ok | 1.30 | | | | | | |
| 160 | ok | 1.30 | | | | | | |
| 161 | ok | 1.06 | | | | | | |
| 162 | ok | 0.16 | | | | | | |
| 163 | ok | 0.38 | | | | | | |
| 164 | ok | 1.15 | | | | | | |
| 165 | ok | 0.38 | | | | | | |
| 166 | ok | 0.15 | | | | | | |
| 167 | ok | 0.41 | | | | | | |
| 168 | ok | 0.73 | | | | | | |
| 190 | ok | 2.35 | | | | | | |
| 191 | ok | 2.35 | | | | | | |
| 192 | ok | 1.54 | | | | | | |
| 193 | ok | 1.70 | | | | | | |
| 194 | ok | 0.50 | | | | | | |
| 195 | ok | 0.63 | | | | | | |
| 196 | ok | 0.92 | | | | | | |
| 197 | ok | 0.91 | | | | | | |
| 198 | ok | 0.53 | | | | | | |
| 199 | ok | 0.44 | | | | | | |
| 200 | ok | 0.75 | | | | | | |
| 201 | ok | 2.52 | | | | | | |
| 202 | ok | 2.52 | | | | | | |
| 203 | ok | 0.91 | | | | | | |
| 204 | ok | 0.64 | | | | | | |

| Nodo | Stato | Max tau | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr | V sec |
|------|-------|---------|----------|-----------|---------|----------|------|-------|
| 205 | ok | 0.44 | | | | | | |
| 206 | ok | 0.50 | | | | | | |
| 207 | ok | 1.03 | | | | | | |
| 208 | ok | 0.57 | | | | | | |
| 209 | ok | 0.86 | | | | | | |
| 210 | ok | 0.53 | | | | | | |
| 211 | ok | 2.28 | | | | | | |
| 212 | ok | 2.28 | | | | | | |
| 213 | ok | 0.52 | | | | | | |
| 214 | ok | 1.53 | | | | | | |
| 215 | ok | 1.69 | | | | | | |
| 216 | ok | 0.91 | | | | | | |
| 217 | ok | 0.49 | | | | | | |
| 218 | ok | 0.75 | | | | | | |
| 219 | ok | 0.63 | | | | | | |
| 220 | ok | 0.66 | | | | | | |
| 221 | ok | 0.91 | | | | | | |
| 222 | ok | 0.57 | | | | | | |
| 223 | ok | 2.48 | | | | | | |
| 224 | ok | 0.50 | | | | | | |
| 225 | ok | 0.91 | | | | | | |
| 226 | ok | 0.44 | | | | | | |
| 227 | ok | 0.86 | | | | | | |
| 228 | ok | 0.42 | | | | | | |
| 229 | ok | 1.03 | | | | | | |
| 230 | ok | 0.52 | | | | | | |
| 231 | ok | 2.48 | | | | | | |
| 232 | ok | 2.35 | | | | | | |
| 233 | ok | 2.35 | | | | | | |
| 234 | ok | 1.54 | | | | | | |
| 235 | ok | 0.92 | | | | | | |
| 236 | ok | 0.75 | | | | | | |
| 237 | ok | 0.64 | | | | | | |
| 238 | ok | 0.57 | | | | | | |
| 239 | ok | 0.50 | | | | | | |
| 240 | ok | 0.44 | | | | | | |
| 241 | ok | 0.44 | | | | | | |
| 242 | ok | 0.53 | | | | | | |
| 243 | ok | 0.53 | | | | | | |
| 244 | ok | 0.50 | | | | | | |
| 245 | ok | 0.63 | | | | | | |
| 246 | ok | 0.91 | | | | | | |
| 247 | ok | 0.91 | | | | | | |
| 248 | ok | 0.86 | | | | | | |
| 249 | ok | 1.03 | | | | | | |
| 250 | ok | 1.70 | | | | | | |
| 251 | ok | 2.52 | | | | | | |
| 252 | ok | 2.52 | | | | | | |
| | | | | | | | | |
| Nodo | | Max tau | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr | V sec |
| | | 2.52 | | | | | | |

8 VERIFICHE STATI LIMITE ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare, vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

| | |
|--------------|--|
| rRfck | rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1] |
| rRfyk | rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1] |
| rPfck | rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1] |
| wR | apertura caratteristica delle fessure in combinazioni rare [mm] |
| wF | apertura caratteristica delle fessure in combinazioni frequenti [mm] |
| wP | apertura caratteristica delle fessure in combinazioni quasi permanenti [mm] |
| dR | massima deformazione in combinazioni rare |
| dF | massima deformazione in combinazioni frequenti |
| dP | massima deformazione in combinazioni quasi permanenti |

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

| | | | | |
|---------------|--------------|--------------|--------------|--------------------------------|
| pilastrati | rRfck | rRfyk | rPfck | per sezioni significative |
| travi | rRfck | rRfyk | rPfck | per sezioni significative |
| | wR | wF | wP | per sezioni significative |
| | dR | dF | dP | massimi in campata |
| setti e gusci | rRfck | rRfyk | rPfck | massimi nei nodi dell'elemento |
| | wR | wF | wP | massimi nei nodi dell'elemento |

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

| Trave | Pos. | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb | dR | dF | dP | Rif. cmb |
|-------|------|-------|-------|-------|-----------|------|------|------|-----------|-----------|-------|-------|-----------|
| | cm | | | | | mm | mm | mm | | cm | cm | cm | |
| 1 | 0.0 | 0.14 | 0.74 | 0.08 | 87,87,102 | 0.26 | 0.27 | 0.10 | 87,97,102 | -0.86 | -1.00 | -0.22 | 87,97,102 |
| | 60.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.36 | 0.37 | 0.0 | 87,97,0 | | | | |
| 2 | 0.0 | 0.0 | 0.58 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.09 | 87,97,102 | -1.39 | -1.56 | -0.24 | 87,97,102 |
| | 60.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.23 | 0.08 | 87,97,102 | | | | |
| 3 | 0.0 | 0.0 | 0.76 | 0.0 | 0,87,0 | 0.34 | 0.38 | 0.0 | 87,97,0 | -1.14 | -1.35 | -0.24 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.07 | 87,97,102 | | | | |
| 4 | 0.0 | 0.0 | 0.73 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | -0.69 | -0.80 | -0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.19 | 0.07 | 87,97,102 | | | | |
| 5 | 0.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.12 | 87,97,102 | -0.46 | -0.53 | -0.10 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.06 | 87,97,102 | | | | |
| 6 | 0.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.31 | 0.35 | 0.12 | 87,97,102 | -0.29 | -0.33 | -0.09 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 7 | 0.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | -0.17 | -0.23 | -0.07 | 87,97,102 |
| | 60.0 | 0.0 | 0.51 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 8 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.15 | 87,97,102 | -0.12 | -0.16 | -0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.15 | 87,97,102 | | | | |
| 9 | 0.0 | 0.0 | 0.64 | 0.0 | 0,87,0 | 0.33 | 0.34 | 0.15 | 87,97,102 | -0.06 | -0.08 | -0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.33 | 0.33 | 0.13 | 87,97,102 | | | | |
| 10 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.32 | 0.31 | 0.15 | 87,97,102 | -0.01 | -0.01 | -0.01 | 86,96,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.14 | 87,97,102 | | | | |
| 11 | 0.0 | 0.0 | 0.56 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.05 | 0.06 | 0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.66 | 0.0 | 0,87,0 | 0.32 | 0.35 | 0.13 | 87,97,102 | | | | |
| 12 | 0.0 | 0.0 | 0.55 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.11 | 0.14 | 0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | | | | |
| 13 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.17 | 0.21 | 0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | | | | |
| 14 | 0.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.19 | 0.19 | 0.08 | 87,97,102 | 0.27 | 0.33 | 0.08 | 87,97,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.33 | 0.38 | 0.14 | 87,97,102 | | | | |
| 15 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.20 | 0.08 | 87,97,102 | 0.37 | 0.47 | 0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.15 | 87,97,102 | | | | |
| 16 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.57 | 0.66 | 0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | | | | |
| 17 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.78 | 0.92 | 0.27 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.31 | 0.36 | 0.14 | 87,97,102 | | | | |
| 18 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.23 | 0.09 | 87,97,102 | 1.53 | 1.74 | 0.36 | 87,97,102 |
| | 60.0 | 0.0 | 0.67 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.0 | 87,97,0 | | | | |
| 19 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.23 | 0.26 | 0.10 | 87,97,102 | 2.68 | 3.58 | 0.39 | 87,97,102 |
| | 60.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.23 | 0.26 | 0.0 | 87,97,0 | | | | |
| 20 | 0.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.33 | 0.32 | 0.0 | 87,97,0 | 0.73 | 0.84 | 0.23 | 87,97,102 |
| | 60.0 | 0.13 | 0.75 | 0.08 | 87,87,102 | 0.27 | 0.28 | 0.10 | 87,97,102 | | | | |
| 21 | 0.0 | 0.13 | 0.72 | 0.08 | 87,87,102 | 0.25 | 0.26 | 0.10 | 87,97,102 | -0.85 | -1.00 | -0.23 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.35 | 0.35 | 0.0 | 87,97,0 | | | | |
| 22 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.0 | 87,97,0 | -1.69 | -1.95 | -0.25 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.20 | 0.22 | 0.08 | 87,97,102 | | | | |
| 23 | 0.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.0 | 87,97,0 | -1.16 | -1.38 | -0.21 | 87,97,102 |
| | 60.0 | 0.0 | 0.51 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.07 | 87,97,102 | | | | |
| 24 | 0.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | -0.68 | -0.79 | -0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.51 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 25 | 0.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | -0.42 | -0.48 | -0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 26 | 0.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.14 | 87,97,102 | -0.29 | -0.36 | -0.09 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 27 | 0.0 | 0.0 | 0.67 | 0.0 | 0,87,0 | 0.32 | 0.35 | 0.13 | 87,97,102 | -0.16 | -0.20 | -0.07 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.34 | 0.32 | 0.15 | 87,97,102 | | | | |
| 28 | 0.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.35 | 0.37 | 0.15 | 87,97,102 | -0.12 | -0.15 | -0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.60 | 0.0 | 0,87,0 | 0.36 | 0.35 | 0.15 | 87,97,102 | | | | |
| 29 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.39 | 0.40 | 0.18 | 87,97,102 | -0.07 | -0.09 | -0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.39 | 0.38 | 0.16 | 87,97,102 | | | | |
| 30 | 0.0 | 0.0 | 0.64 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.17 | 87,97,102 | -7.60e-03 | -0.01 | -0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.35 | 0.37 | 0.14 | 87,97,102 | | | | |
| 31 | 0.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.17 | 87,97,102 | 0.05 | 0.06 | 0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.15 | 87,97,102 | | | | |
| 32 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.11 | 0.14 | 0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.37 | 0.40 | 0.15 | 87,97,102 | | | | |
| 33 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.14 | 87,97,102 | 0.17 | 0.21 | 0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 34 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.08 | 87,97,102 | 0.27 | 0.32 | 0.08 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | | | | |
| 35 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.08 | 87,97,102 | 0.36 | 0.46 | 0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.73 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.15 | 87,97,102 | | | | |

| Trave | Pos. | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb | dR | dF | dP | Rif. cmb |
|-------|------|-------|-------|-------|-----------|------|------|------|-----------|-----------|-------|-------|-----------|
| 36 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.52 | 0.66 | 0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | | | | |
| 37 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.84 | 0.94 | 0.27 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 38 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.22 | 0.08 | 87,97,102 | 1.55 | 1.68 | 0.37 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.0 | 87,97,0 | | | | |
| 39 | 0.0 | 0.0 | 0.56 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.10 | 87,97,102 | 2.44 | 3.05 | 0.40 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.21 | 0.23 | 0.0 | 87,97,0 | | | | |
| 40 | 0.0 | 0.0 | 0.62 | 0.0 | 0,87,0 | 0.33 | 0.32 | 0.0 | 87,97,0 | 0.71 | 0.82 | 0.22 | 87,97,102 |
| | 60.0 | 0.12 | 0.73 | 0.08 | 87,87,102 | 0.26 | 0.27 | 0.10 | 87,97,102 | | | | |
| 83 | 0.0 | 0.13 | 0.72 | 0.07 | 87,87,102 | 0.25 | 0.26 | 0.10 | 87,97,102 | -0.85 | -1.00 | -0.23 | 87,97,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.35 | 0.36 | 0.0 | 87,97,0 | | | | |
| 84 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.0 | 87,97,0 | -1.63 | -1.88 | -0.24 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.22 | 0.08 | 87,97,102 | | | | |
| 85 | 0.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.0 | 87,97,0 | -1.14 | -1.36 | -0.21 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.07 | 87,97,102 | | | | |
| 86 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.31 | 0.36 | 0.13 | 87,97,102 | -0.67 | -0.78 | -0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.51 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 87 | 0.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.13 | 87,97,102 | -0.40 | -0.46 | -0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 88 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | -0.28 | -0.33 | -0.09 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 89 | 0.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.36 | 0.40 | 0.16 | 87,97,102 | -0.18 | -0.23 | -0.07 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.34 | 0.32 | 0.15 | 87,97,102 | | | | |
| 90 | 0.0 | 0.0 | 0.67 | 0.0 | 0,87,0 | 0.35 | 0.36 | 0.15 | 87,97,102 | -0.12 | -0.15 | -0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.59 | 0.0 | 0,87,0 | 0.36 | 0.34 | 0.15 | 87,97,102 | | | | |
| 91 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.39 | 0.40 | 0.18 | 87,97,102 | -0.07 | -0.09 | -0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.66 | 0.0 | 0,87,0 | 0.38 | 0.36 | 0.16 | 87,97,102 | | | | |
| 92 | 0.0 | 0.0 | 0.66 | 0.0 | 0,87,0 | 0.38 | 0.37 | 0.17 | 87,97,102 | -9.99e-03 | -0.01 | -0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.33 | 0.34 | 0.14 | 87,97,102 | | | | |
| 93 | 0.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.17 | 87,97,102 | 0.05 | 0.06 | 0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.35 | 0.37 | 0.15 | 87,97,102 | | | | |
| 94 | 0.0 | 0.0 | 0.61 | 0.0 | 0,87,0 | 0.36 | 0.35 | 0.17 | 87,97,102 | 0.11 | 0.14 | 0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.73 | 0.0 | 0,87,0 | 0.37 | 0.40 | 0.15 | 87,97,102 | | | | |
| 95 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.14 | 87,97,102 | 0.17 | 0.21 | 0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 96 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.08 | 87,97,102 | 0.27 | 0.32 | 0.08 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | | | | |
| 97 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.20 | 0.08 | 87,97,102 | 0.37 | 0.46 | 0.11 | 87,97,102 |
| | 60.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.15 | 87,97,102 | | | | |
| 98 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.47 | 0.66 | 0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | | | | |
| 99 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.84 | 0.94 | 0.23 | 87,97,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 100 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.22 | 0.08 | 87,97,102 | 1.55 | 1.68 | 0.37 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.0 | 87,97,0 | | | | |
| 101 | 0.0 | 0.0 | 0.56 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.10 | 87,97,102 | 2.90 | 3.01 | 0.39 | 87,97,102 |
| | 60.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.23 | 0.26 | 0.0 | 87,97,0 | | | | |
| 102 | 0.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.33 | 0.32 | 0.0 | 87,97,0 | 0.71 | 0.82 | 0.22 | 87,97,102 |
| | 60.0 | 0.12 | 0.73 | 0.07 | 87,87,102 | 0.26 | 0.27 | 0.10 | 87,97,102 | | | | |
| 124 | 0.0 | 0.13 | 0.72 | 0.08 | 87,87,102 | 0.25 | 0.26 | 0.10 | 87,97,102 | -0.85 | -1.00 | -0.23 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.35 | 0.35 | 0.0 | 87,97,0 | | | | |
| 125 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.0 | 87,97,0 | -1.70 | -1.95 | -0.25 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.20 | 0.22 | 0.08 | 87,97,102 | | | | |
| 126 | 0.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.0 | 87,97,0 | -1.16 | -1.38 | -0.21 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.07 | 87,97,102 | | | | |
| 127 | 0.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | -0.68 | -0.79 | -0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 128 | 0.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | -0.42 | -0.48 | -0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.07 | 87,97,102 | | | | |
| 129 | 0.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.14 | 87,97,102 | -0.31 | -0.36 | -0.09 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 130 | 0.0 | 0.0 | 0.67 | 0.0 | 0,87,0 | 0.32 | 0.35 | 0.13 | 87,97,102 | -0.16 | -0.20 | -0.07 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.34 | 0.32 | 0.15 | 87,97,102 | | | | |
| 131 | 0.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.35 | 0.37 | 0.15 | 87,97,102 | -0.12 | -0.15 | -0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.60 | 0.0 | 0,87,0 | 0.36 | 0.35 | 0.15 | 87,97,102 | | | | |
| 132 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.39 | 0.40 | 0.18 | 87,97,102 | -0.07 | -0.09 | -0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.69 | 0.0 | 0,87,0 | 0.39 | 0.38 | 0.16 | 87,97,102 | | | | |
| 133 | 0.0 | 0.0 | 0.64 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.17 | 87,97,102 | -7.74e-03 | -0.01 | -0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.35 | 0.37 | 0.14 | 87,97,102 | | | | |
| 134 | 0.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.17 | 87,97,102 | 0.05 | 0.06 | 0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.15 | 87,97,102 | | | | |
| 135 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.11 | 0.14 | 0.03 | 87,97,102 |

| Trave | Pos. | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb | dR | dF | dP | Rif. cmb |
|-------|------|-------|-------|-------|-----------|------|------|------|-----------|-------|-------|-------|-----------|
| | 60.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.37 | 0.40 | 0.15 | 87,97,102 | | | | |
| 136 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.14 | 87,97,102 | 0.17 | 0.21 | 0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 137 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.08 | 87,97,102 | 0.27 | 0.32 | 0.08 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | | | | |
| 138 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.20 | 0.08 | 87,97,102 | 0.36 | 0.46 | 0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.73 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.15 | 87,97,102 | | | | |
| 139 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.52 | 0.66 | 0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | | | | |
| 140 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.84 | 0.94 | 0.27 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 141 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.22 | 0.08 | 87,97,102 | 1.46 | 1.67 | 0.37 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.0 | 87,97,0 | | | | |
| 142 | 0.0 | 0.0 | 0.56 | 0.0 | 0,87,0 | 0.22 | 0.25 | 0.10 | 87,97,102 | 2.47 | 3.10 | 0.40 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.21 | 0.24 | 0.0 | 87,97,0 | | | | |
| 143 | 0.0 | 0.0 | 0.62 | 0.0 | 0,87,0 | 0.33 | 0.32 | 0.0 | 87,97,0 | 0.72 | 0.82 | 0.22 | 87,97,102 |
| | 60.0 | 0.12 | 0.73 | 0.08 | 87,87,102 | 0.26 | 0.27 | 0.10 | 87,97,102 | | | | |
| 165 | 0.0 | 0.14 | 0.74 | 0.08 | 87,87,102 | 0.26 | 0.27 | 0.10 | 87,97,102 | -0.86 | -1.01 | -0.22 | 87,97,102 |
| | 60.0 | 0.0 | 0.75 | 0.0 | 0,87,0 | 0.36 | 0.37 | 0.0 | 87,97,0 | | | | |
| 166 | 0.0 | 0.0 | 0.58 | 0.0 | 0,87,0 | 0.23 | 0.25 | 0.09 | 87,97,102 | -1.39 | -1.56 | -0.30 | 87,97,102 |
| | 60.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.23 | 0.08 | 87,97,102 | | | | |
| 167 | 0.0 | 0.0 | 0.76 | 0.0 | 0,87,0 | 0.34 | 0.38 | 0.0 | 87,97,0 | -1.15 | -1.36 | -0.24 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.07 | 87,97,102 | | | | |
| 168 | 0.0 | 0.0 | 0.73 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | -0.69 | -0.80 | -0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.19 | 0.19 | 0.07 | 87,97,102 | | | | |
| 169 | 0.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.12 | 87,97,102 | -0.46 | -0.53 | -0.10 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.19 | 0.06 | 87,97,102 | | | | |
| 170 | 0.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.31 | 0.35 | 0.12 | 87,97,102 | -0.29 | -0.33 | -0.09 | 87,97,102 |
| | 60.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 171 | 0.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.33 | 0.36 | 0.13 | 87,97,102 | -0.18 | -0.23 | -0.07 | 87,97,102 |
| | 60.0 | 0.0 | 0.51 | 0.0 | 0,87,0 | 0.18 | 0.18 | 0.12 | 87,97,102 | | | | |
| 172 | 0.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.15 | 87,97,102 | -0.13 | -0.16 | -0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.37 | 0.36 | 0.15 | 87,97,102 | | | | |
| 173 | 0.0 | 0.0 | 0.64 | 0.0 | 0,87,0 | 0.33 | 0.34 | 0.15 | 87,97,102 | -0.06 | -0.08 | -0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.63 | 0.0 | 0,87,0 | 0.33 | 0.33 | 0.13 | 87,97,102 | | | | |
| 174 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.32 | 0.31 | 0.15 | 87,97,102 | -0.01 | -0.01 | -0.01 | 86,96,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.36 | 0.39 | 0.14 | 87,97,102 | | | | |
| 175 | 0.0 | 0.0 | 0.56 | 0.0 | 0,87,0 | 0.32 | 0.30 | 0.14 | 87,97,102 | 0.05 | 0.06 | 0.01 | 87,97,102 |
| | 60.0 | 0.0 | 0.66 | 0.0 | 0,87,0 | 0.32 | 0.35 | 0.13 | 87,97,102 | | | | |
| 176 | 0.0 | 0.0 | 0.55 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.11 | 0.14 | 0.03 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.13 | 87,97,102 | | | | |
| 177 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.31 | 0.30 | 0.14 | 87,97,102 | 0.18 | 0.22 | 0.05 | 87,97,102 |
| | 60.0 | 0.0 | 0.70 | 0.0 | 0,87,0 | 0.33 | 0.37 | 0.14 | 87,97,102 | | | | |
| 178 | 0.0 | 0.0 | 0.52 | 0.0 | 0,87,0 | 0.19 | 0.20 | 0.08 | 87,97,102 | 0.27 | 0.33 | 0.08 | 87,97,102 |
| | 60.0 | 0.0 | 0.72 | 0.0 | 0,87,0 | 0.33 | 0.38 | 0.14 | 87,97,102 | | | | |
| 179 | 0.0 | 0.0 | 0.53 | 0.0 | 0,87,0 | 0.20 | 0.20 | 0.08 | 87,97,102 | 0.38 | 0.49 | 0.12 | 87,97,102 |
| | 60.0 | 0.0 | 0.74 | 0.0 | 0,87,0 | 0.34 | 0.39 | 0.15 | 87,97,102 | | | | |
| 180 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.57 | 0.66 | 0.18 | 87,97,102 |
| | 60.0 | 0.0 | 0.68 | 0.0 | 0,87,0 | 0.30 | 0.35 | 0.13 | 87,97,102 | | | | |
| 181 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.20 | 0.21 | 0.08 | 87,97,102 | 0.73 | 0.91 | 0.27 | 87,97,102 |
| | 60.0 | 0.0 | 0.71 | 0.0 | 0,87,0 | 0.32 | 0.36 | 0.14 | 87,97,102 | | | | |
| 182 | 0.0 | 0.0 | 0.54 | 0.0 | 0,87,0 | 0.21 | 0.23 | 0.09 | 87,97,102 | 1.52 | 1.73 | 0.36 | 87,97,102 |
| | 60.0 | 0.0 | 0.67 | 0.0 | 0,87,0 | 0.30 | 0.34 | 0.0 | 87,97,0 | | | | |
| 183 | 0.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.23 | 0.26 | 0.10 | 87,97,102 | 2.69 | 3.50 | 0.39 | 87,97,102 |
| | 60.0 | 0.0 | 0.57 | 0.0 | 0,87,0 | 0.23 | 0.26 | 0.0 | 87,97,0 | | | | |
| 184 | 0.0 | 0.0 | 0.64 | 0.0 | 0,87,0 | 0.33 | 0.32 | 0.0 | 87,97,0 | 0.74 | 0.84 | 0.22 | 87,97,102 |
| | 60.0 | 0.13 | 0.75 | 0.08 | 87,87,102 | 0.27 | 0.28 | 0.10 | 87,97,102 | | | | |
| Trave | | rRfck | rRfyk | rPfck | | wR | wF | wP | | dR | dF | dP | |
| | | | | | | | | | | -1.70 | -1.95 | -0.30 | |
| | | 0.14 | 0.76 | 0.08 | | 0.39 | 0.40 | 0.18 | | 2.90 | 3.58 | 0.40 | |

| Guscio | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb |
|--------|-------|-------|-------|-----------|------|------|------|-----------|
| | | | | | mm | mm | mm | |
| 1 | 0.15 | 0.75 | 0.08 | 87,87,102 | 0.23 | 0.24 | 0.08 | 87,97,102 |
| 2 | 0.04 | 0.44 | 0.02 | 87,87,102 | 0.11 | 0.13 | 0.0 | 87,97,0 |
| 3 | 0.04 | 0.35 | 0.04 | 87,87,102 | 0.08 | 0.07 | 0.0 | 87,97,0 |
| 4 | 0.10 | 0.25 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 5 | 0.14 | 0.15 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |

| Guscio | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb |
|--------|-------|-------|-------|-----------|------|------|------|-----------|
| 6 | 0.19 | 0.14 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 7 | 0.23 | 0.18 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 8 | 0.26 | 0.21 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 9 | 0.29 | 0.24 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 10 | 0.32 | 0.26 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 11 | 0.34 | 0.27 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 12 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 13 | 0.34 | 0.27 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 14 | 0.31 | 0.25 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 15 | 0.27 | 0.22 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 16 | 0.21 | 0.16 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 17 | 0.15 | 0.22 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 18 | 0.09 | 0.33 | 0.04 | 87,87,102 | 0.07 | 0.06 | 0.0 | 87,97,0 |
| 19 | 0.06 | 0.43 | 0.02 | 87,87,102 | 0.11 | 0.12 | 0.0 | 87,97,0 |
| 20 | 0.15 | 0.76 | 0.08 | 87,87,102 | 0.24 | 0.25 | 0.09 | 87,97,102 |
| 21 | 0.12 | 0.75 | 0.06 | 87,87,102 | 0.22 | 0.23 | 0.07 | 87,97,102 |
| 22 | 0.01 | 0.45 | 0.02 | 86,87,102 | 0.11 | 0.13 | 0.0 | 87,97,0 |
| 23 | 0.04 | 0.33 | 0.05 | 87,87,102 | 0.07 | 0.07 | 0.0 | 87,97,0 |
| 24 | 0.10 | 0.22 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 25 | 0.14 | 0.13 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 26 | 0.18 | 0.14 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 27 | 0.22 | 0.18 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 28 | 0.26 | 0.21 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 29 | 0.29 | 0.24 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 30 | 0.31 | 0.26 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 31 | 0.34 | 0.27 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 32 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 33 | 0.34 | 0.27 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 34 | 0.31 | 0.25 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 35 | 0.26 | 0.21 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 36 | 0.20 | 0.16 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 37 | 0.15 | 0.18 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 38 | 0.09 | 0.29 | 0.05 | 87,87,102 | 0.06 | 0.06 | 0.0 | 87,97,0 |
| 39 | 0.04 | 0.40 | 0.02 | 87,87,102 | 0.10 | 0.11 | 0.0 | 87,97,0 |
| 40 | 0.12 | 0.76 | 0.07 | 87,87,102 | 0.24 | 0.25 | 0.09 | 87,97,102 |
| 41 | 0.13 | 0.75 | 0.06 | 87,87,102 | 0.22 | 0.23 | 0.07 | 87,97,102 |
| 42 | 0.01 | 0.45 | 0.02 | 87,87,102 | 0.11 | 0.13 | 0.0 | 87,97,0 |
| 43 | 0.05 | 0.33 | 0.05 | 87,87,102 | 0.07 | 0.07 | 0.0 | 87,97,0 |
| 44 | 0.10 | 0.22 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 45 | 0.14 | 0.13 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 46 | 0.18 | 0.14 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 47 | 0.22 | 0.18 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 48 | 0.26 | 0.21 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 49 | 0.29 | 0.24 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 50 | 0.31 | 0.26 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 51 | 0.34 | 0.27 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 52 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 53 | 0.34 | 0.27 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 54 | 0.31 | 0.25 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 55 | 0.26 | 0.21 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 56 | 0.20 | 0.16 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 57 | 0.15 | 0.18 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 58 | 0.09 | 0.29 | 0.05 | 87,87,102 | 0.06 | 0.06 | 0.0 | 87,97,0 |
| 59 | 0.04 | 0.40 | 0.02 | 87,87,102 | 0.10 | 0.11 | 0.0 | 87,97,0 |
| 60 | 0.12 | 0.76 | 0.07 | 87,87,102 | 0.24 | 0.25 | 0.09 | 87,97,102 |
| 61 | 0.15 | 0.75 | 0.08 | 87,87,102 | 0.23 | 0.24 | 0.08 | 87,97,102 |
| 62 | 0.05 | 0.45 | 0.02 | 87,87,102 | 0.11 | 0.13 | 0.0 | 87,97,0 |
| 63 | 0.05 | 0.35 | 0.04 | 87,87,102 | 0.08 | 0.07 | 0.0 | 87,97,0 |
| 64 | 0.10 | 0.24 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 65 | 0.14 | 0.15 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 66 | 0.19 | 0.14 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 67 | 0.23 | 0.18 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 68 | 0.26 | 0.21 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 69 | 0.29 | 0.24 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 70 | 0.32 | 0.26 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 71 | 0.34 | 0.27 | 0.18 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 72 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 73 | 0.34 | 0.27 | 0.16 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 74 | 0.31 | 0.25 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 75 | 0.27 | 0.22 | 0.13 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 76 | 0.21 | 0.16 | 0.10 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 77 | 0.15 | 0.22 | 0.08 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 78 | 0.09 | 0.33 | 0.04 | 87,87,102 | 0.07 | 0.06 | 0.0 | 87,97,0 |

| Guscio | rRfck | rRfyk | rPfck | Rif. cmb | wR | wF | wP | Rif. cmb |
|--------|-------|-------|-------|-----------|------|------|------|-----------|
| 79 | 0.06 | 0.43 | 0.02 | 87,87,102 | 0.11 | 0.12 | 0.0 | 87,97,0 |
| 80 | 0.15 | 0.76 | 0.08 | 87,87,102 | 0.24 | 0.25 | 0.09 | 87,97,102 |
| 81 | 0.16 | 0.75 | 0.09 | 87,87,102 | 0.18 | 0.19 | 0.06 | 87,97,102 |
| 82 | 0.04 | 0.61 | 0.03 | 87,87,102 | 0.17 | 0.18 | 0.06 | 87,97,102 |
| 83 | 0.05 | 0.53 | 0.05 | 87,87,102 | 0.12 | 0.13 | 0.0 | 87,97,0 |
| 84 | 0.10 | 0.40 | 0.08 | 87,87,102 | 0.06 | 0.07 | 0.0 | 87,97,0 |
| 85 | 0.15 | 0.26 | 0.11 | 87,87,102 | 0.04 | 0.04 | 0.0 | 87,97,0 |
| 86 | 0.20 | 0.16 | 0.14 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 87 | 0.24 | 0.19 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 88 | 0.27 | 0.22 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 89 | 0.30 | 0.25 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 90 | 0.32 | 0.26 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 91 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 92 | 0.35 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 93 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 94 | 0.33 | 0.27 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 95 | 0.29 | 0.24 | 0.14 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 96 | 0.23 | 0.23 | 0.11 | 87,87,102 | 0.03 | 0.03 | 0.0 | 87,97,0 |
| 97 | 0.17 | 0.36 | 0.08 | 87,87,102 | 0.06 | 0.06 | 0.0 | 87,97,0 |
| 98 | 0.10 | 0.52 | 0.05 | 87,87,102 | 0.10 | 0.12 | 0.0 | 87,97,0 |
| 99 | 0.05 | 0.58 | 0.03 | 87,87,102 | 0.15 | 0.16 | 0.06 | 87,97,102 |
| 100 | 0.15 | 0.76 | 0.09 | 87,87,102 | 0.19 | 0.20 | 0.08 | 87,97,102 |
| 101 | 0.16 | 0.75 | 0.09 | 87,87,102 | 0.18 | 0.19 | 0.06 | 87,97,102 |
| 102 | 0.04 | 0.61 | 0.03 | 87,87,102 | 0.17 | 0.18 | 0.06 | 87,97,102 |
| 103 | 0.05 | 0.53 | 0.05 | 87,87,102 | 0.12 | 0.13 | 0.0 | 87,97,0 |
| 104 | 0.10 | 0.39 | 0.08 | 87,87,102 | 0.06 | 0.07 | 0.0 | 87,97,0 |
| 105 | 0.15 | 0.26 | 0.11 | 87,87,102 | 0.04 | 0.04 | 0.0 | 87,97,0 |
| 106 | 0.20 | 0.16 | 0.14 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 107 | 0.24 | 0.19 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 108 | 0.27 | 0.22 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 109 | 0.30 | 0.25 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 110 | 0.32 | 0.26 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 111 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 112 | 0.35 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 113 | 0.34 | 0.28 | 0.17 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 114 | 0.33 | 0.27 | 0.15 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 115 | 0.29 | 0.24 | 0.14 | 87,87,102 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 116 | 0.23 | 0.23 | 0.11 | 87,87,102 | 0.03 | 0.03 | 0.0 | 87,97,0 |
| 117 | 0.17 | 0.36 | 0.08 | 87,87,102 | 0.06 | 0.06 | 0.0 | 87,97,0 |
| 118 | 0.10 | 0.53 | 0.05 | 87,87,102 | 0.10 | 0.12 | 0.0 | 87,97,0 |
| 119 | 0.05 | 0.58 | 0.03 | 87,87,102 | 0.15 | 0.16 | 0.06 | 87,97,102 |
| 120 | 0.15 | 0.76 | 0.09 | 87,87,102 | 0.19 | 0.20 | 0.08 | 87,97,102 |
| | | | | | | | | |
| Guscio | rRfck | rRfyk | rPfck | | wR | wF | wP | |
| | 0.35 | 0.76 | 0.18 | | 0.24 | 0.25 | 0.09 | |

9 RIFERIMENTI NORMATIVI E BIBLIOGRAFICI

9.1 RIFERIMENTI NORMATIVI E SPECIFICHE TECNICHE

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- [2] CIRCOLARE 21 gennaio 2019 , n. 7 C.S.LL.PP. - Istruzioni per l'applicazione dell'«Aggiornamento delle “Norme tecniche per le costruzioni”» di cui al decreto ministeriale 17 gennaio 2018.
- [3] Decreto Ministeriale Infrastrutture 14 gennaio 2008 “*Nuove Norme Tecniche per le Costruzioni*”, e indicato anche con N.T.C. nel presente documento.
- [4] Indirizzi e Criteri di microzonazione Sismica del Dipartimento della Protezione Civile Nazionale (ICMS) approvati il 13 novembre 2008 dalla conferenza delle Regioni e delle Province autonome;
 - [5] D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
 - [6] D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
 - [7] D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
 - [8] D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
 - [9] Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
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 - [13] D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
 - [14] D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
 - [15] UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
 - [16] Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
 - [17] UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
 - [18] UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesì per unità di volume, pesì propri e sovraccarichi per gli edifici.
 - [19] UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
 - [20] UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
 - [21] UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
 - [22] UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
 - [23] UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
 - [24] UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
 - [25] UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
 - [26] UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
 - [27] UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
 - [28] UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
 - [29] UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
 - [30] UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
 - [31] UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
 - [32] UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.
 - [33] UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
 - [34] UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
 - [35] UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.

[36] UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

9.2 RIFERIMENTI BIBLIOGRAFICI

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10 ACCETTAZIONE DEI RISULTATI

I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità.

Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni.

In base a quanto detto, si può asserire che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

Si riporta un TEST DI VERIFICA PLATEA NERVATA per verifica controllo accettazione.

Test 38 PLATEA NERVATA

Revisione: 01
Data: 29/03/2010
Programma: PRO_SAP
Versione: 2007-03-143; 2010-05-151
File: Mod00_T039_plateaNervata_ALGOR.PSP

- **Scopo:**

Validazione del comportamento delle platee su suolo alla winkler con nervature costituite da elementi D2 e da elementi D3 (A).

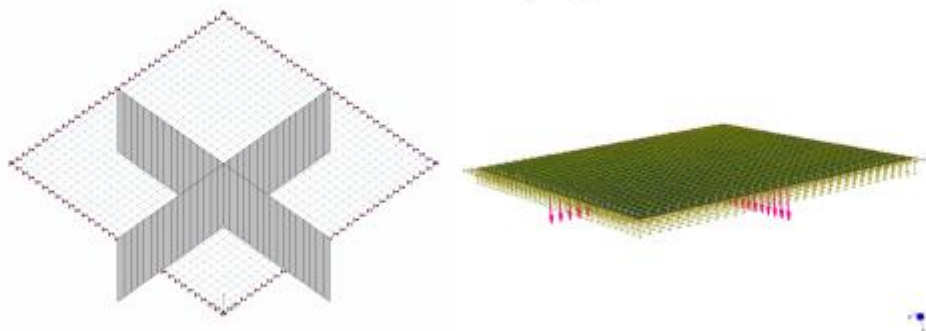
- **Descrizione test:**

Si considera una platea di fondazione costituita da elementi D3 su suolo alla Winkler con nervature costituite da elementi D2 e da elementi D3.

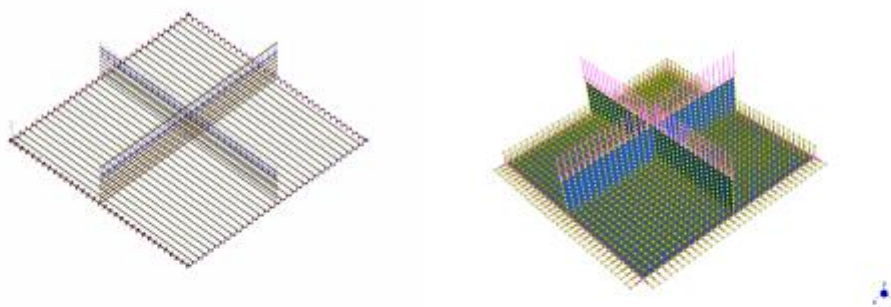
DATI GEOMETRICI:

Lastra di 500 cm X 500 cm su suolo alla Winkler di calcestruzzo spessa 30 cm con nervature rettangolari incrociate caricate con carico distribuito lineare $q=20$ daN/cm alte 100 cm e spesse 30 cm. Ai bordi sono state bloccate le traslazioni in direzione ortogonale al piano medio della soletta, quelle ortogonali al lato soletta e la rotazione di asse ortogonale al piano della soletta. Si e' assunta una costante di Winkler $k=1$ daN/cm³.

Lastra nervata e carichi con nervature modellate con elementi D2 (beam).



Lastra nervata e carichi con nervature modellate con elementi D3 (plate and shell).



- **Tipo di confronto:**

E' stato effettuato un confronto tra i risultati ottenuti con ALGOR e quelli ottenuti con altro software.

| Rev: | Data: | File: | Programma: | Tecnico: |
|-------------|----------|------------------------------------|---------------------------|----------------|
| 00 | 16/07/08 | Mod00_T039_plateaNervata_ALGOR.PSP | PRO_SAP vers. 2007-03-141 | Ing. G. Milani |
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Parte 2: CASI PROVA – MODULO 00

• **Tabella risultati:**

I momenti sono riportati in valore assoluto e valutati al centro della piastra. La massima deflessione si verifica al centro della lastra. I risultati si riferiscono al caso di carico "Variabile generico".

Caso nervature D2

| Parametro | Soluzione ALGOR | Soluzione altro software | Differenza |
|----------------------|--------------------|-----------------------------|------------|
| M11 [daN cm/cm] | 488.52 | 494.91 | 1.29% |
| M22 [daN cm/cm] | 488.52 | 494.91 | 1.29% |
| M12 [daN cm/cm] | 3.99 | 3.7 | 7.84% |
| Max deflessione [cm] | 0.01347 | 0.0142 | 5.14% |

Caso nervature D3

| Parametro | Soluzione ALGOR | Soluzione altro software | Differenza |
|----------------------|--------------------|-----------------------------|------------|
| M11 [daN cm/cm] | 206.79 | 214.67 | 3.67% |
| M22 [daN cm/cm] | 203.58 | 214.67 | 5.17% |
| M12 [daN cm/cm] | 1.30 | 1.25 | 4.00% |
| Max deflessione [cm] | 0.00706 | 0.00698 | 1.15% |

• **Commenti:**

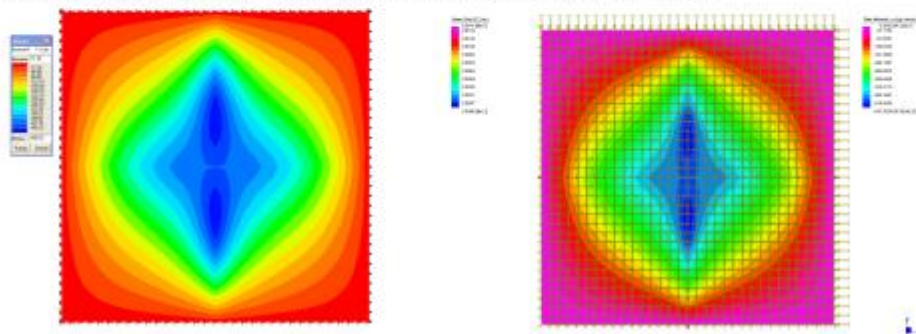
I risultati numerici sono in ottimo accordo con quelli di riferimento.

• **Allegati:**

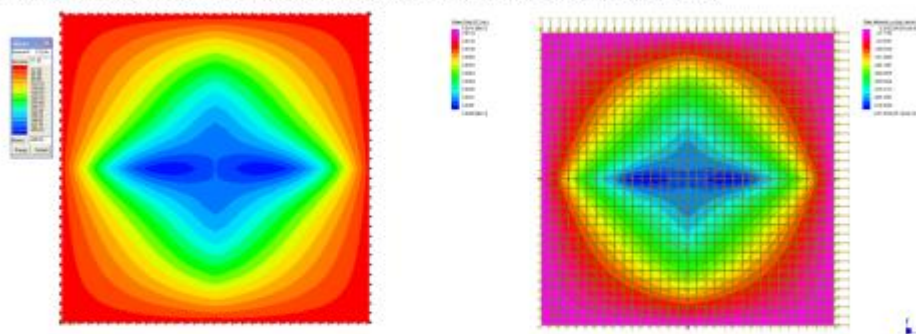
| | | | | |
|-------------|----------|------------------------------------|---------------------------|----------------|
| Rev: | Data: | File: | Programma: | Tecnico: |
| 00 | 16/07/08 | Mod00_T039_plateaNervata_ALGOR.PSP | PRO_SAP vers. 2007-03-141 | Ing. G. Milani |
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Caso di nervature realizzate mediante elementi D2 (beam)

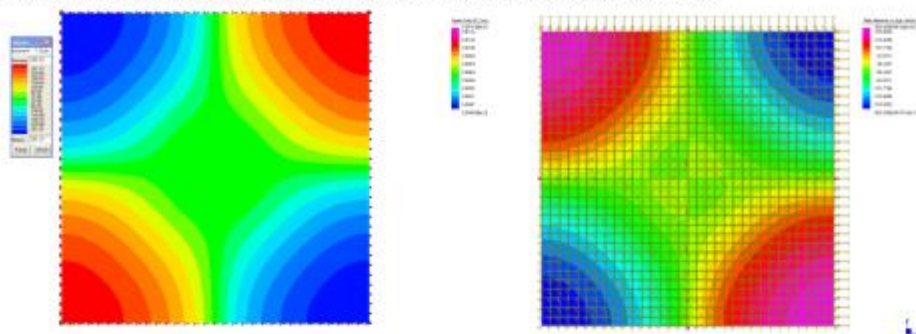
Confronto tra le mappe di M11 ottenuti con ALGOR (a sinistra) e altro software (a destra).



Confronto tra le mappe di M22 ottenuti con ALGOR (a sinistra) e altro software (a destra).



Confronto tra le mappe di M12 ottenuti con ALGOR (a sinistra) e altro software (a destra).



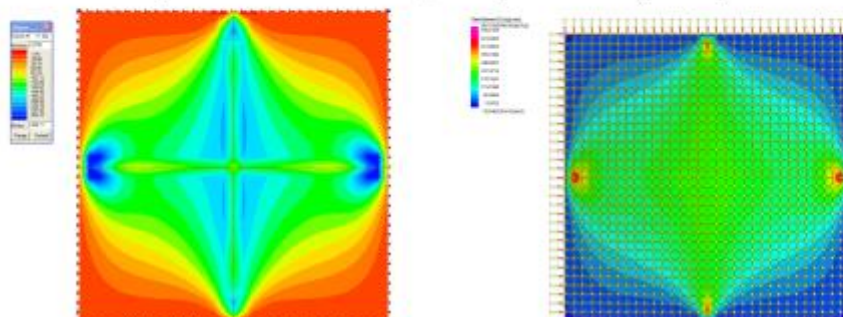
| Rev: | Data: | File: | Programma: | Tecnico: |
|------|----------|------------------------------------|---------------------------|----------------|
| 00 | 16/07/08 | Mod00_T039_plateaNervata_ALGOR.PSP | PRO_SAP vers. 2007-03-141 | Ing. G. Milani |

Modulo base

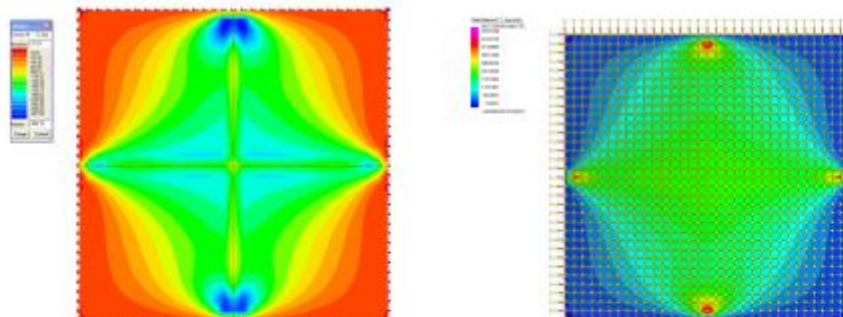
Pagina 207

Caso di nervature realizzate mediante elementi D3 (plate and shell)

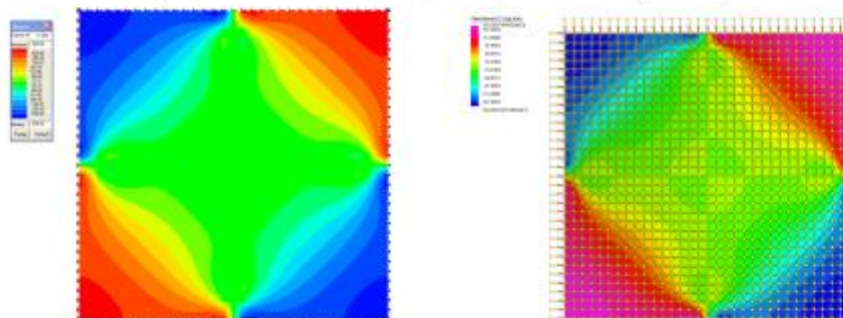
Confronto tra le mappe di M11 ottenuti con ALGOR (a sinistra) e altro software (a destra).



Confronto tra le mappe di M22 ottenuti con ALGOR (a sinistra) e altro software (a destra).



Confronto tra le mappe di M12 ottenuti con ALGOR (a sinistra) e altro software (a destra).



| Rev: | Data: | File: | Programma: | Tecnico: |
|-------------|----------|------------------------------------|---------------------------|----------------|
| 00 | 16/07/08 | Mod00_T039_plateaNervata_ALGOR.PSP | PRO_SAP vers. 2007-03-141 | Ing. G. Milani |
| Modulo base | | | Pagina 208 | |

ALLEGATO 1 TECNICO - SPECIFICHE TECNICHE SOFTWARE CALCOLO STRUTTURALE

Allegato 1. 1: PROSAP 2S.I. Software strutturale



Dichiarazione affidabilità

Dichiarazione del produttore-distributore di PRO_SAP PROfessional SAP riguardante l'affidabilità del codice
(D.M. 14/01/2008 - Paragrafo 10.2)

Origine e caratteristiche dei codici di calcolo

Titolo: PRO_SAP PROfessional Structural Analysis Program

Autore-Produttore: 2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara

Affidabilità dei codici

- Inquadramento teorico della metodologia

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo si basa sulla schematizzazione della struttura in elementi connessi in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensiodeformativo indotto da carichi statici.

L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensiodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo TRUSS (asta)*

Elemento tipo BEAM (trave)*

Elemento tipo MEMBRANE (membrana)*

Elemento tipo PLATE (piastra-guscio)*

Elemento tipo BRICK (solido)

Elemento tipo BOUNDARY (molla)*

Elemento tipo STIFFNESS

(matrice di rigidità)

*** anche non lineare**

- Casi prova che consentano un riscontro dell'affidabilità

2S.I. ha verificato, in collaborazione con il DISTART dell'Università di Bologna e con il Dipartimento di Ingegneria dell'Università di Ferrara, l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link:

<http://www.2si.it/affidabilita.php>

- Filtri di autodiagnostica

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione.

Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi.

Garanzia di qualità

Dal 1 dicembre 1999 2S.I. ha prodotto un manuale di qualità in funzione dei requisiti della norma di riferimento UNI EN ISO 9001.

Tutte le attività dell'azienda sono regolate dalla documentazione e dalle procedure in esso contenute.

In relazione alla attività di validazione dei prodotti software si dichiara inoltre quanto segue:

- la fase di progetto degli algoritmi è preceduta dalla ricerca di risultati di confronto reperibili in bibliografia o riproducibili con calcoli manuali;
- la fase di implementazione degli algoritmi è continuamente validata con strumenti automatici (tools di sviluppo) e attraverso confronti;
- il software che implementa gli algoritmi è testato, confrontato e controllato anche da tecnici qualificati che non sono intervenuti nelle precedenti fasi.

Nella produzione del solutore fem 2S.I. implementa componenti sviluppati da CM2 - Computing Objects SARL spin-off dell'École Centrale Paris, France. E' disponibile la documentazione di affidabilità di tali componenti all'indirizzo web:

http://www.2si.it/software/download/manuali/pro_sap_quaderni/Affidabilita/benchmarks_e_sap.zip

PRO_SAP
PROfessional Structural Analysis Program

Rev. del 05/06/2013

Allegato 1. 2: API ++ FULL Software Geotecnico

API ++ Full Platee, Plinti e Graticci

Il programma **API++ Full** è dedicato all'analisi delle fondazioni. Esso consente di analizzare platee, platee nervate, platee su pali, piastre in elevazione, graticci di travi, plinti superficiali e su pali.

E' disponibile in tre versioni indipendenti fra di loro:

- API++ Platee e Graticci;
- API++ Plinti e Graticci;
- API++ Full (che comprende sia il modulo Platee che il modulo Plinti).

API ++ Plinti e Graticci



API ++ FULL

Dichiarazioni di Affidabilità secondo N.T.C. 2018 (punto 10.2)

Analisi e verifiche svolte con l'ausilio di codici di calcolo e tipo di analisi svolta

L'analisi strutturale e le verifiche sono condotte con l'ausilio di un codice di calcolo automatico. La verifica della sicurezza degli elementi strutturali è stata valutata con i metodi della scienza delle costruzioni. Per il calcolo di piastre, plinti e graticci si utilizza il metodo degli elementi finiti. Il generatore di mesh permette di utilizzare elementi triangolari o quadrangolari, anche a deformabilità tagliante. Per le strutture di fondazione il terreno viene modellato con una serie di molle alla Winkler non reagenti a trazione. Il calcolo delle tensioni indotte nel terreno può essere condotto con i metodi di Boussinesq, Westergaard o Frohlich. Il calcolo dei cedimenti può essere eseguito con il metodo edometrico (con il modulo edometrico o con la curva edometrica) o elastico. Il calcolo della portanza può essere fatto con i metodi di Terzaghi, Meyerhof, Hansen o Vesic. In presenza di pali viene eseguito il calcolo di portanza verticale (di punta e laterale) e trasversale (portanza per carichi orizzontali). L'analisi strutturale sotto le azioni sismiche è condotta con il metodo dell'analisi statica equivalente secondo le disposizioni del capitolo 7 del DM 14/01/2018. La verifica delle sezioni degli elementi strutturali è eseguita con il metodo degli Stati Limite. Le combinazioni di carico adottate sono esaustive relativamente agli scenari di carico più gravosi cui l'opera sarà soggetta.

Origine e caratteristiche dei codici di calcolo

| | | | |
|----------|---|------------|---|
| Titolo | API++ Full (Platee, Plinti e Graticci) - Analisi Fondazioni | | |
| Versione | 11.07d - | Produttore | Aztec Informatica srl, Casole Bruzio (CS) |
| Utente | - Licenza AIU2877PC | | |

Affidabilità dei codici di calcolo

Un attento esame preliminare della documentazione a corredo del software ha consentito di valutarne l'affidabilità. La documentazione fornita dal produttore del software contiene un'esauriente descrizione delle basi teoriche, degli algoritmi impiegati e l'individuazione dei campi d'impiego. La società produttrice Aztec Informatica srl ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

Modalità di presentazione dei risultati

La relazione di calcolo strutturale presenta i dati di calcolo tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità. La relazione di calcolo illustra in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare.

Informazioni generali sull'elaborazione

Il software prevede una serie di controlli automatici che consentono l'individuazione di errori di modellazione, di non rispetto di limitazioni geometriche e di armatura e di presenza di elementi non verificati. Il codice di calcolo consente di visualizzare e controllare, sia in forma grafica che tabellare, i dati del modello strutturale, in modo da avere una visione consapevole del comportamento corretto del modello strutturale.

Giudizio motivato di accettabilità dei risultati

I risultati delle elaborazioni sono stati sottoposti a controlli dal sottoscritto utente del software. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali. Inoltre sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. In base a quanto sopra, è asseribile che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

Allegato 1. 3: CARL 12.00 Software Geotecnico

CARL

Carico Limite e Cedimenti

Il programma **CARL** è dedicato al calcolo del carico limite, dei cedimenti e delle tensioni di fondazioni superficiali e profonde.

Fondazioni superficiali

Le fondazioni superficiali per le quali è possibile eseguire l'analisi sono:

- fondazione nastriforme;
- fondazione circolare;
- fondazione rettangolare.

E' inoltre possibile analizzare il rilevato stradale.

Sulla fondazione possono agire carichi verticali, momenti flettenti e carichi orizzontali. I carichi agenti sono definiti per condizioni, in modo da permettere successivamente di definire le combinazioni di carico.



CARL 12.00

Dichiarazioni di Affidabilità secondo N.T.C. 2018 (punto 10.2)

Analisi e verifiche svolte con l'ausilio di codici di calcolo e tipo di analisi svolta

L'analisi e le verifiche sono condotte con l'ausilio di un codice di calcolo automatico.

La verifica a carico limite viene eseguita secondo le seguenti fasi:

- Calcolo delle caratteristiche del terreno equivalente di progetto;
- Calcolo della fondazione di progetto;
- Calcolo del carico limite.

Il calcolo dei cedimenti viene eseguita secondo le seguenti fasi:

- Calcolo della distribuzione dei carichi al piano di posa;
- Calcolo delle pressioni indotte nel terreno dal carico applicato;
- Calcolo dei cedimenti.

Le combinazioni di carico adottate sono esaustive relativamente agli scenari di carico più gravosi cui l'opera sarà soggetta.

Origine e caratteristiche dei codici di calcolo

| | |
|----------|---|
| Titolo | CARL - Carico Limite e Cedimenti |
| Versione | 12.0 - Produttore Aztec Informatica srl, Casole Bruzio (CS) |
| Utente | - Licenza AIU2877PC |

Affidabilità dei codici di calcolo

Un attento esame preliminare della documentazione a corredo del software ha consentito di valutarne l'affidabilità. La documentazione fornita dal produttore del software contiene un'esauriente descrizione delle basi teoriche, degli algoritmi impiegati e l'individuazione dei campi d'impiego. La società produttrice Aztec Informatica srl ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

Modalità di presentazione dei risultati

La relazione di calcolo strutturale presenta i dati di calcolo tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità. La relazione di calcolo illustra in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare.

Informazioni generali sull'elaborazione

Il software prevede una serie di controlli automatici che consentono l'individuazione di errori di modellazione, di non rispetto di limitazioni geometriche e di armatura e di presenza di elementi non verificati. Il codice di calcolo consente di visualizzare e controllare, sia in forma grafica che tabellare, i dati del modello strutturale, in modo da avere una visione consapevole del comportamento corretto del modello strutturale.

Giudizio motivato di accettabilità dei risultati

I risultati delle elaborazioni sono stati sottoposti a controlli dal sottoscritto utente del software. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali. Inoltre sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni.

In base a quanto sopra, io sottoscritto asserisco che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

ALLEGATO 2 - FASCICOLO DEI CALCOLI



Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.

| Origine e Caratteristiche dei Codici di Calcolo | |
|---|--|
| Codice di calcolo: | PRO_SAP PROfessional Structural Analysis Program |
| Versione: | PROFESSIONAL (build 2021-05-192) |
| Produttore-Distributore: | 2S.I. Software e Servizi per l'Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE (Italy) Tel. +39 0532 200091 www.2si.it |
| Codice Licenza: | Licenza dsi3728 |

| Descrizione | |
|-------------|---|
| Progetto | |
| Ubicazione | Comune di TREVISO (TV) (Regione VENETO) Località TREVISO (TV) Longitudine 12.244, Latitudine 45.669 |
| Progettista | |

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST” disponibile per il download sul sito: <https://www.2si.it/it/prodotti/affidabilita/>

11 INTESTAZIONE E CONTENUTI DELLA RELAZIONE

11.1.1 Progetto

Contenuti della relazione:

RELAZIONE DI CALCOLO STRUTTURALE

- Origine e Caratteristiche dei Codici di Calcolo
- Affidabilità dei codici utilizzati
- Validazione dei codici
- Tipo di analisi svolta
- Modalità di presentazione dei risultati
- Informazioni generali sull'elaborazione
- Giudizio motivato di accettabilità dei risultati

STAMPA DEI DATI DI INGRESSO

- Normative prese a riferimento
- Criteri adottati per le misure di sicurezza
- Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconnessioni
- Interazione tra terreno e struttura
- Legami costitutivi adottati per la modellazione dei materiali e dei terreni
- Schematizzazione delle azioni, condizioni e combinazioni di carico
- Metodologie numeriche utilizzate per l'analisi strutturale
- Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali

STAMPA DEI RISULTATI

Il Progettista:

29 novembre 2021

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12 RELAZIONE DI CALCOLO STRUTTURALE

12.1 Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Completare

12.2 Descrizione generale dell'opera

Completare

| Descrizione generale dell'opera | |
|---------------------------------|---|
| Fabbricato ad uso | |
| Ubicazione | Comune di TREVISO (TV) (Regione VENETO) |
| | Località TREVISO (TV) |
| | Longitudine 12.244, Latitudine 45.669 |
| Numero di piani | Fuori terra |
| | Interrati |
| | le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di |
| Numero vani scale | |
| Numero vani ascensore | |
| Tipo di fondazione | |

| Principali caratteristiche della struttura | |
|---|--|
| Struttura regolare in pianta | |
| Struttura regolare in altezza | |
| Classe di duttilità | |
| Travi: ricalate o in spessore | |
| Pilastrì | |
| Pilastrì in falso | |
| Tipo di fondazione | |
| Condizioni per cui è necessario considerare la componente verticale del sisma | |

| Parametri della struttura | | | |
|---------------------------|----------------|------------|-------------------|
| Classe d'uso | Vita Vn [anni] | Coeff. Uso | Periodo Vr [anni] |
| | | | |

| | | | |
|----|------|-----|------|
| II | 50.0 | 1.0 | 50.0 |
|----|------|-----|------|

Fattore di struttura/comportamento

Completare

12.3 Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo “normativa di riferimento” è comunque presente l’elenco completo delle normative disponibili.

| Progetto-verifica degli elementi | |
|---------------------------------------|-----------------|
| Progetto cemento armato | D.M. 17-01-2018 |
| Progetto acciaio | D.M. 17-01-2018 |
| Progetto legno | D.M. 17-01-2018 |
| Progetto muratura | D.M. 17-01-2018 |
| Azione sismica | |
| Norma applicata per l’ azione sismica | D.M. 17-01-2018 |

12.4 Azioni di progetto sulla costruzione

Nei capitoli “modellazione delle azioni” e “schematizzazione dei casi di carico” sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica*.

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L’analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L’analisi strutturale è condotta con il metodo dell’analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L’analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell’ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

$K * u = F$ dove K = matrice di rigidezza
 u = vettore spostamenti nodali
 F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all'elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l'asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

| | |
|--------------------------------|---|
| Elemento tipo TRUSS | (biella-D2) |
| Elemento tipo BEAM | (trave-D2) |
| Elemento tipo MEMBRANE | (membrana-D3) |
| Elemento tipo PLATE | (piastra-guscio-D3) |
| Elemento tipo BOUNDARY | (molla) |
| Elemento tipo STIFFNESS | (matrice di rigidezza) |
| Elemento tipo BRICK | (elemento solido) |
| Elemento tipo SOLAIO | (macro elemento composto da più membrane) |

12.5 Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Completare

| Tipo di analisi strutturale | |
|---|----|
| Sismica statica lineare | NO |
| Sismica dinamica lineare | SI |
| Sismica statica non lineare (prop. masse) | NO |
| Sismica statica non lineare (prop. modo) | NO |
| Sismica statica non lineare (triangolare) | NO |
| Non linearità geometriche (fattore P delta) | NO |
| Analisi lineare | SI |

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

| 12.5.1 Informazioni sul codice di calcolo | |
|---|---|
| Titolo: | PRO SAP PROfessional Structural Analysis Program |
| Versione: | PROFESSIONAL (build 2021-05-192) |
| Produttore-Distributore: | 2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara |

| | |
|---------------------|------------------------|
| Dati utente finale: | ***** COMPLETARE ***** |
| Codice Utente: | ***** COMPLETARE ***** |
| Codice Licenza: | Licenza dsi3728 |

Un attento esame preliminare della documentazione a corredo del software **ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico**. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

| Affidabilità dei codici utilizzati |
|--|
| 2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. |
| E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: https://www.2si.it/it/prodotti/affidabilita/ |

| Modellazione della geometria e proprietà meccaniche: | |
|--|---------|
| nodi | 252 |
| elementi D2 (per aste, travi, pilastri...) | 205 |
| elementi D3 (per pareti, platee, gusci...) | 120 |
| elementi solaio | 0 |
| elementi solidi | 0 |
| Dimensione del modello strutturale [cm]: | |
| X min = | -35.00 |
| Xmax = | 365.00 |
| Ymin = | 0.00 |
| Ymax = | 1200.00 |
| Zmin = | 100.00 |
| Zmax = | 105.00 |
| Strutture verticali: | |
| Elementi di tipo asta | NO |
| Pilastri | SI |
| Pareti | NO |
| Setti (a comportamento membranale) | NO |
| Strutture non verticali: | |
| Elementi di tipo asta | NO |
| Travi | SI |
| Gusci | SI |
| Membrane | NO |

| Orizzontamenti: | |
|---|----|
| Solai con la proprietà piano rigido | NO |
| Solai senza la proprietà piano rigido | NO |
| Tipo di vincoli: | |
| Nodi vincolati rigidamente | SI |
| Nodi vincolati elasticamente | NO |
| Nodi con isolatori sismici | NO |
| Fondazioni puntuali (plinti/plinti su palo) | NO |
| Fondazioni di tipo trave | NO |
| Fondazioni di tipo platea | NO |
| Fondazioni con elementi solidi | NO |

12.6 Modellazione delle azioni

Si veda il capitolo **“Schematizzazione dei casi di carico”** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte *“2.6. Azioni di progetto sulla costruzione”*.

12.7 Combinazioni e/o percorsi di carico

Si veda il capitolo **“Definizione delle combinazioni”** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

| Combinazioni dei casi di carico | |
|-------------------------------------|-------------|
| APPROCCIO PROGETTUALE | Approccio 2 |
| Tensioni ammissibili | NO |
| SLU | SI |
| SLV (SLU con sisma) | SI |
| SLC | NO |
| SLD | SI |
| SLO | NO |
| SLU GEO A2 (per approccio 1) | NO |
| SLU EQU | NO |
| Combinazione caratteristica (rara) | SI |
| Combinazione frequente | SI |
| Combinazione quasi permanente (SLE) | SI |
| SLA (accidentale quale incendio) | SI |

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la comprensione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

- *Completare*

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e involuipi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento

- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l'elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Completare

12.8 Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

12.9 Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

12.10 RELAZIONE SUI MATERIALI

Il capitolo Materiali riporta informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.

13 NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP. "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.
31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l'elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edificio esistente.

14 CARATTERISTICHE MATERIALI UTILIZZATI

14.1 LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

| | |
|---|-------------------------------|
| 1 | materiale tipo cemento armato |
| 2 | materiale tipo acciaio |
| 3 | materiale tipo muratura |
| 4 | materiale tipo legno |
| 5 | materiale tipo generico |

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

| | |
|----------------------------|--|
| Young | modulo di elasticità normale E |
| Poisson | coefficiente di contrazione trasversale ν |
| G | modulo di elasticità tangenziale |
| Gamma | peso specifico |
| Alfa | coefficiente di dilatazione termica |
| Fattore di confidenza FC m | Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura) |
| Fattore di confidenza FC a | Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura) |
| Elasto-plastico | Materiale elastico perfettamente plastico per aste non lineari |
| Massima compressione | Massima tensione di compressione per aste non lineari |
| Massima trazione | Massima tensione di trazione per aste non lineari |
| Fattore attrito | Coefficiente di attrito per aste non lineari |
| Rapporto HRDb | Rapporto di hardening a flessione |
| Rapporto HRDv | Rapporto di hardening a taglio |

I dati sopraportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

| | | | |
|---|----------|--|---|
| 1 | c.a. | Resistenza Rc Resistenza fctm Coefficiente ksb | resistenza a compressione cubica resistenza media a trazione semplice Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |
| 2 | acciaio | Tensione ft Tensione fy Resistenza fd Resistenza fd (>40) Tensione ammissibile Tensione ammissibile(>40) | Valore della tensione di rottura Valore della tensione di snervamento Resistenza di calcolo per SL CNR-UNI 10011 Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm Tensione ammissibile CNR-UNI 10011 Tensione ammissibile CNR-UNI 10011 per spessori > 40mm |
| 3 | muratura | Muratura consolidata Incremento resistenza Incremento rigidezza Resistenza f Resistenza fv0 Resistenza fh Resistenza fb Resistenza fbh Resistenza fv0h Resistenza ft Resistenza fvlm Resistenza fbt Coefficiente mu Coefficiente fi Coefficiente ksb | Muratura per la quale si prevedono interventi di rinforzo" Incremento conseguito in termini di resistenza Incremento conseguito in termini di rigidezza Valore della resistenza a compressione Valore della resistenza a taglio in assenza di tensioni normali Valore della resistenza a compressione orizzontale Valore della resistenza a compressione dei blocchi Valore della resistenza a compressione dei blocchi in direzione orizzontale Valore della resistenza a taglio in assenza di tensioni normali per le travi Valore della resistenza a trazione per fessurazione diagonale Valore della massima resistenza a taglio Valore della resistenza a trazione dei blocchi Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4) Coefficiente d'ingranamento utilizzato per la resistenza a taglio Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |
| 4 | legno | E0,05 Resistenza fc0 Resistenza ft0 Resistenza fm Resistenza fv Resist. ft0k Resist. frm Resist. fvk Modulo E0,05 | Modulo di elasticità corrispondente ad un frattile del 5% Valore della resistenza a compressione parallela Valore della resistenza a trazione parallela Valore della resistenza a flessione Valore della resistenza a taglio Resistenza caratteristica (tensione amm. per REGLES) per trazione Resistenza caratteristica (tensione amm. per REGLES) per flessione Resistenza caratteristica (tensione amm. per REGLES) per taglio Modulo elastico parallelo caratteristico |

Lamellare lamellare o massiccio

Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

| Id | Tipo / Note | V. caratt. | V. medio | Young | Poisson | G | Gamma | Alfa | Altri |
|-----|---|------------|----------|-----------|---------|-----------|----------|----------|----------|
| | | daN/cm2 | daN/cm2 | daN/cm2 | | daN/cm2 | daN/cm3 | | |
| 6 | Calcestruzzo Classe C35/45 | | | 3.463e+05 | 0.20 | 1.443e+05 | 2.50e-03 | 1.00e-05 | |
| | Resistenza Rc | 450.0 | | | | | | | |
| | Resistenza fctm | | 33.5 | | | | | | |
| | Rapporto Rfessurata | | | | | | | | 1.00 |
| | Coefficiente ksb | | | | | | | | 0.85 |
| | Rapporto HRDb | | | | | | | | 1.00e-05 |
| | Rapporto HRDv | | | | | | | | 1.00e-05 |
| 157 | Materiale inf. rigido no peso E = 1.000e+09 | | | 1.000e+09 | 0.0 | 5.000e+08 | 0.0 | 1.20e-05 | |
| | Rapporto HRDb | | | | | | | | 1.00e-05 |
| | Rapporto HRDv | | | | | | | | 1.00e-05 |

| Gusci c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|--------------------------------------|---------|--------|--------|---------|---------|---------|
| Armatura | | | | | | |
| Inclinazione Ax [gradi] | 0.0 | | | | | |
| Angolo Ax-Ay [gradi] | 90.00 | | | | | |
| Minima tesa | 0.31 | | | | | |
| Massima tesa | 0.78 | | | | | |
| Maglia unica centrale | NO | | | | | |
| Copriferro [cm] | 2.00 | | | | | |
| Maglia x | | | | | | |
| diametro | 16 | | | | | |
| passo | 10 | | | | | |
| diametro aggiuntivi | 16 | | | | | |
| Maglia y | | | | | | |
| diametro | 16 | | | | | |
| passo | 10 | | | | | |
| diametro aggiuntivi | 16 | | | | | |
| Stati limite ultimi | | | | | | |
| Tensione fy [daN/cm2] | 4500.00 | | | | | |
| Tipo acciaio | tipo C | | | | | |
| Coefficiente gamma s | 1.15 | | | | | |
| Coefficiente gamma c | 1.50 | | | | | |
| Verifiche con N costante | SI | | | | | |
| Applica SLU da DIN | NO | | | | | |
| Tensioni ammissibili | | | | | | |
| Tensione amm. cls [daN/cm2] | 97.50 | | | | | |
| Tensione amm. acciaio [daN/cm2] | 2600.00 | | | | | |
| Rapporto omogeneizzazione N | 15.00 | | | | | |
| Massimo rapporto area compressa/tesa | 1.00 | | | | | |
| Resistenza al fuoco | | | | | | |
| 3- intradosso | NO | | | | | |
| 3+ estradosso | NO | | | | | |
| Tempo di esposizione R | 15 | | | | | |

| Travi c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|-------------------------------|---------|--------|--------|---------|---------|---------|
| Generalità | | | | | | |
| Progetta a filo | NO | | | | | |
| Af inf: da q*L*L / | 0.0 | | | | | |
| Armatura | | | | | | |
| Minima tesa | 0.31 | | | | | |
| Minima compressa | 0.31 | | | | | |
| Massima tesa | 4.00 | | | | | |
| Da sezione | SI | | | | | |
| Usa armatura teorica | NO | | | | | |
| Stati limite ultimi | | | | | | |
| Tensione fy [daN/cm2] | 4500.00 | | | | | |
| Tensione fy staffe [daN/cm2] | 4500.00 | | | | | |
| Tipo acciaio | tipo C | | | | | |

| Travi c.a. | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|--------------------------------------|-----------|--------|--------|---------|---------|---------|
| Coefficiente gamma s | 1.15 | | | | | |
| Coefficiente gamma c | 1.50 | | | | | |
| Verifiche con N costante | SI | | | | | |
| Fattore di ridistribuzione | 0.0 | | | | | |
| Modello per il confinamento | | | | | | |
| Relazione tensio-deformativa | Mander | | | | | |
| Incrudimento acciaio | 5.000e-03 | | | | | |
| Fattore lambda | 1.00 | | | | | |
| epsilon max,s | 4.000e-02 | | | | | |
| epsilon cu2 | 4.500e-03 | | | | | |
| epsilon c2 | 0.0 | | | | | |
| epsilon cy | 0.0 | | | | | |
| Tensioni ammissibili | | | | | | |
| Tensione amm. cls [daN/cm2] | 97.50 | | | | | |
| Tensione amm. acciaio [daN/cm2] | 2600.00 | | | | | |
| Rapporto omogeneizzazione N | 15.00 | | | | | |
| Massimo rapporto area compressa/tesa | 1.00 | | | | | |
| Staffe | | | | | | |
| Diametro staffe | 0.0 | | | | | |
| Passo minimo [cm] | 4.00 | | | | | |
| Passo massimo [cm] | 30.00 | | | | | |
| Passo raffittito [cm] | 15.00 | | | | | |
| Lunghezza zona raffittita [cm] | 50.00 | | | | | |
| Ctg(Teta) Max | 2.50 | | | | | |
| Percentuale sagomati | 0.0 | | | | | |
| Luce di taglio per GR [cm] | 1.00 | | | | | |
| Adotta scorrimento medio | NO | | | | | |
| Torsione non essenziale inclusa | SI | | | | | |

15 MODELLAZIONE DELLE SEZIONI

15.1 LEGENDA TABELLA DATI SEZIONI

Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

4. sezione di tipo generico
5. profilati semplici
6. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

| | |
|--------------|---|
| Area | area della sezione |
| A V2 | area della sezione/fattore di taglio (per il taglio in direzione 2) |
| A V3 | area della sezione/fattore di taglio (per il taglio in direzione 3) |
| Jt | fattore torsionale di rigidezza |
| J2-2 | momento d'inerzia della sezione riferito all'asse 2 |
| J3-3 | momento d'inerzia della sezione riferito all'asse 3 |
| W2-2 | modulo di resistenza della sezione riferito all'asse 2 |
| W3-3 | modulo di resistenza della sezione riferito all'asse 3 |
| Wp2-2 | modulo di resistenza plastico della sezione riferito all'asse 2 |
| Wp3-3 | modulo di resistenza plastico della sezione riferito all'asse 3 |

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

| | | | | | |
|-------------------------|--------------|--------------|--------------|----------------------|----------------|
| | | | | | |
| rettangolare | a T | a T rovescia | a T di colmo | a L | a L specchiata |
| | | | | | |
| a L specchiata rovescia | a L rovescia | a L di colmo | a doppio T | a quattro specchiata | a quattro |
| | | | | | |
| a U | a C | a croce | circolare | rettangolare cava | circolare cava |

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilati.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

| Id | Tipo | Area | A V2 | A V3 | Jt | J 2-2 | J 3-3 | W 2-2 | W 3-3 | Wp 2-2 | Wp 3-3 |
|----|-------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | cm2 | cm2 | cm2 | cm4 | cm4 | cm4 | cm3 | cm3 | cm3 | cm3 |
| 1 | Rettangolare: b=70 h=40 | 2800.00 | 2333.33 | 2333.33 | 9.557e+05 | 1.143e+06 | 3.733e+05 | 3.267e+04 | 1.867e+04 | 4.900e+04 | 2.800e+04 |
| 2 | Circolare: r=2 | 12.57 | 10.60 | 10.60 | 25.13 | 12.57 | 12.57 | 6.28 | 6.28 | 10.67 | 10.67 |

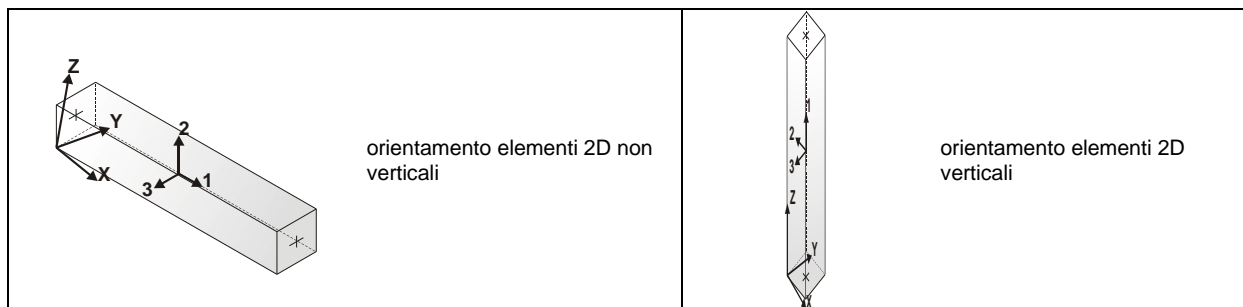
16 MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

16.1 TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.

Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

| | |
|-----------------------|---|
| Elem. | numero dell'elemento |
| Note | codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa, |
| Nodo I (J) | numero del nodo iniziale (finale) |
| Mat. | codice del materiale assegnato all'elemento |
| Sez. | codice della sezione assegnata all'elemento |
| Rotaz. | valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo |
| Svincolo I (J) | codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva) |
| Wink V | costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico |
| Wink O | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|-------|--------|--------|------|------|-------|--------|------------|------------|---------|---------|
| | | | | | | | gradi | | | daN/cm3 | daN/cm3 |
| 1 | Trave | 1 | 3 | 6 | 1 | 1 | | | | | |
| 2 | Trave | 3 | 4 | 6 | 1 | 1 | | | | | |
| 3 | Trave | 4 | 5 | 6 | 1 | 1 | | | | | |
| 4 | Trave | 5 | 6 | 6 | 1 | 1 | | | | | |
| 5 | Trave | 6 | 7 | 6 | 1 | 1 | | | | | |
| 6 | Trave | 7 | 8 | 6 | 1 | 1 | | | | | |
| 7 | Trave | 8 | 9 | 6 | 1 | 1 | | | | | |
| 8 | Trave | 9 | 10 | 6 | 1 | 1 | | | | | |
| 9 | Trave | 10 | 11 | 6 | 1 | 1 | | | | | |
| 10 | Trave | 11 | 12 | 6 | 1 | 1 | | | | | |
| 11 | Trave | 12 | 13 | 6 | 1 | 1 | | | | | |
| 12 | Trave | 13 | 14 | 6 | 1 | 1 | | | | | |
| 13 | Trave | 14 | 15 | 6 | 1 | 1 | | | | | |
| 14 | Trave | 15 | 16 | 6 | 1 | 1 | | | | | |
| 15 | Trave | 16 | 17 | 6 | 1 | 1 | | | | | |
| 16 | Trave | 17 | 18 | 6 | 1 | 1 | | | | | |
| 17 | Trave | 18 | 19 | 6 | 1 | 1 | | | | | |
| 18 | Trave | 19 | 20 | 6 | 1 | 1 | | | | | |
| 19 | Trave | 20 | 21 | 6 | 1 | 1 | | | | | |
| 20 | Trave | 21 | 2 | 6 | 1 | 1 | | | | | |
| 21 | Trave | 22 | 24 | 6 | 1 | 1 | | | | | |
| 22 | Trave | 24 | 25 | 6 | 1 | 1 | | | | | |
| 23 | Trave | 25 | 26 | 6 | 1 | 1 | | | | | |
| 24 | Trave | 26 | 27 | 6 | 1 | 1 | | | | | |
| 25 | Trave | 27 | 28 | 6 | 1 | 1 | | | | | |
| 26 | Trave | 28 | 29 | 6 | 1 | 1 | | | | | |
| 27 | Trave | 29 | 30 | 6 | 1 | 1 | | | | | |
| 28 | Trave | 30 | 31 | 6 | 1 | 1 | | | | | |
| 29 | Trave | 31 | 32 | 6 | 1 | 1 | | | | | |
| 30 | Trave | 32 | 33 | 6 | 1 | 1 | | | | | |
| 31 | Trave | 33 | 34 | 6 | 1 | 1 | | | | | |
| 32 | Trave | 34 | 35 | 6 | 1 | 1 | | | | | |
| 33 | Trave | 35 | 36 | 6 | 1 | 1 | | | | | |
| 34 | Trave | 36 | 37 | 6 | 1 | 1 | | | | | |
| 35 | Trave | 37 | 38 | 6 | 1 | 1 | | | | | |
| 36 | Trave | 38 | 39 | 6 | 1 | 1 | | | | | |
| 37 | Trave | 39 | 40 | 6 | 1 | 1 | | | | | |
| 38 | Trave | 40 | 41 | 6 | 1 | 1 | | | | | |
| 39 | Trave | 41 | 42 | 6 | 1 | 1 | | | | | |
| 40 | Trave | 42 | 23 | 6 | 1 | 1 | | | | | |
| 83 | Trave | 85 | 87 | 6 | 1 | 1 | | | | | |
| 84 | Trave | 87 | 88 | 6 | 1 | 1 | | | | | |
| 85 | Trave | 88 | 89 | 6 | 1 | 1 | | | | | |
| 86 | Trave | 89 | 90 | 6 | 1 | 1 | | | | | |
| 87 | Trave | 90 | 91 | 6 | 1 | 1 | | | | | |
| 88 | Trave | 91 | 92 | 6 | 1 | 1 | | | | | |
| 89 | Trave | 92 | 93 | 6 | 1 | 1 | | | | | |
| 90 | Trave | 93 | 94 | 6 | 1 | 1 | | | | | |
| 91 | Trave | 94 | 95 | 6 | 1 | 1 | | | | | |
| 92 | Trave | 95 | 96 | 6 | 1 | 1 | | | | | |
| 93 | Trave | 96 | 97 | 6 | 1 | 1 | | | | | |
| 94 | Trave | 97 | 98 | 6 | 1 | 1 | | | | | |
| 95 | Trave | 98 | 99 | 6 | 1 | 1 | | | | | |
| 96 | Trave | 99 | 100 | 6 | 1 | 1 | | | | | |
| 97 | Trave | 100 | 101 | 6 | 1 | 1 | | | | | |
| 98 | Trave | 101 | 102 | 6 | 1 | 1 | | | | | |
| 99 | Trave | 102 | 103 | 6 | 1 | 1 | | | | | |
| 100 | Trave | 103 | 104 | 6 | 1 | 1 | | | | | |
| 101 | Trave | 104 | 105 | 6 | 1 | 1 | | | | | |
| 102 | Trave | 105 | 86 | 6 | 1 | 1 | | | | | |
| 124 | Trave | 127 | 129 | 6 | 1 | 1 | | | | | |
| 125 | Trave | 129 | 130 | 6 | 1 | 1 | | | | | |
| 126 | Trave | 130 | 131 | 6 | 1 | 1 | | | | | |
| 127 | Trave | 131 | 132 | 6 | 1 | 1 | | | | | |
| 128 | Trave | 132 | 133 | 6 | 1 | 1 | | | | | |
| 129 | Trave | 133 | 134 | 6 | 1 | 1 | | | | | |
| 130 | Trave | 134 | 135 | 6 | 1 | 1 | | | | | |
| 131 | Trave | 135 | 136 | 6 | 1 | 1 | | | | | |
| 132 | Trave | 136 | 137 | 6 | 1 | 1 | | | | | |
| 133 | Trave | 137 | 138 | 6 | 1 | 1 | | | | | |
| 134 | Trave | 138 | 139 | 6 | 1 | 1 | | | | | |
| 135 | Trave | 139 | 140 | 6 | 1 | 1 | | | | | |

| Elem. | Note | Nodo I | Nodo J | Mat. | Sez. | Crit. | Rotaz. | Svincolo I | Svincolo J | Wink V | Wink O |
|-------|-------|--------|--------|------|------|-------|--------|------------|------------|--------|--------|
| 136 | Trave | 140 | 141 | 6 | 1 | 1 | | | | | |
| 137 | Trave | 141 | 142 | 6 | 1 | 1 | | | | | |
| 138 | Trave | 142 | 143 | 6 | 1 | 1 | | | | | |
| 139 | Trave | 143 | 144 | 6 | 1 | 1 | | | | | |
| 140 | Trave | 144 | 145 | 6 | 1 | 1 | | | | | |
| 141 | Trave | 145 | 146 | 6 | 1 | 1 | | | | | |
| 142 | Trave | 146 | 147 | 6 | 1 | 1 | | | | | |
| 143 | Trave | 147 | 128 | 6 | 1 | 1 | | | | | |
| 165 | Trave | 169 | 171 | 6 | 1 | 1 | | | | | |
| 166 | Trave | 171 | 172 | 6 | 1 | 1 | | | | | |
| 167 | Trave | 172 | 173 | 6 | 1 | 1 | | | | | |
| 168 | Trave | 173 | 174 | 6 | 1 | 1 | | | | | |
| 169 | Trave | 174 | 175 | 6 | 1 | 1 | | | | | |
| 170 | Trave | 175 | 176 | 6 | 1 | 1 | | | | | |
| 171 | Trave | 176 | 177 | 6 | 1 | 1 | | | | | |
| 172 | Trave | 177 | 178 | 6 | 1 | 1 | | | | | |
| 173 | Trave | 178 | 179 | 6 | 1 | 1 | | | | | |
| 174 | Trave | 179 | 180 | 6 | 1 | 1 | | | | | |
| 175 | Trave | 180 | 181 | 6 | 1 | 1 | | | | | |
| 176 | Trave | 181 | 182 | 6 | 1 | 1 | | | | | |
| 177 | Trave | 182 | 183 | 6 | 1 | 1 | | | | | |
| 178 | Trave | 183 | 184 | 6 | 1 | 1 | | | | | |
| 179 | Trave | 184 | 185 | 6 | 1 | 1 | | | | | |
| 180 | Trave | 185 | 186 | 6 | 1 | 1 | | | | | |
| 181 | Trave | 186 | 187 | 6 | 1 | 1 | | | | | |
| 182 | Trave | 187 | 188 | 6 | 1 | 1 | | | | | |
| 183 | Trave | 188 | 189 | 6 | 1 | 1 | | | | | |
| 184 | Trave | 189 | 170 | 6 | 1 | 1 | | | | | |

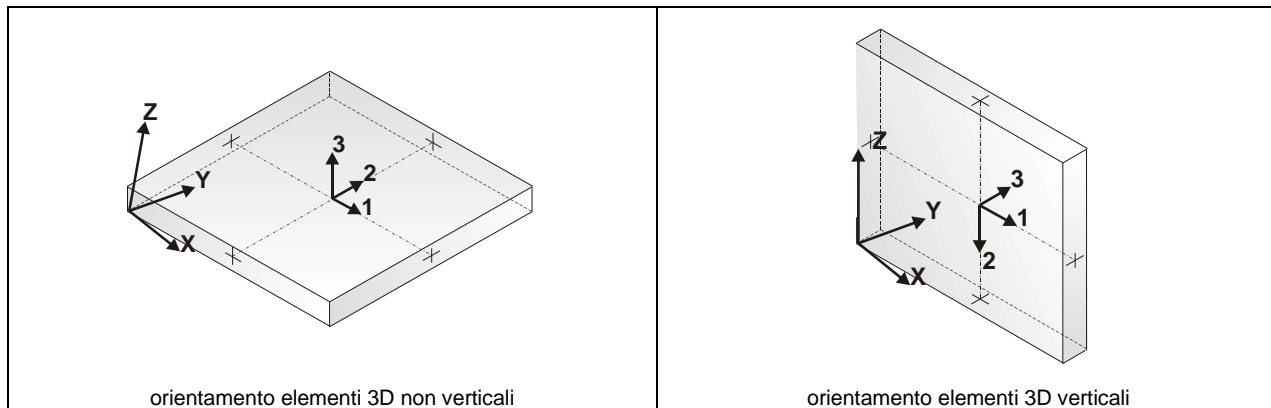
17 MODELLAZIONE STRUTTURA: ELEMENTI SHELL

17.1 LEGENDA TABELLA DATI SHELL

Il programma utilizza per la modellazione elementi a tre o quattro nodi denominati in generale shell.

Ogni elemento shell è individuato dai nodi I, J, K, L (L=I per gli elementi a tre nodi).

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

| | |
|-------------------------|--|
| Elem. | numero dell'elemento |
| Note | codice di comportamento: <i>Guscio</i> (elemento guscio in elevazione non verticale) <i>Guscio fond.</i> (elemento guscio su suolo elastico) <i>Setto</i> (elemento guscio in elevazione verticale) <i>Membrana</i> (elemento guscio con comportamento membranale) |
| Nodo I (J, K, L) | numero del nodo I (J, K, L) |
| Mat. | codice del materiale assegnato all'elemento |
| Spessore | spessore dell'elemento (costante) |
| Wink V | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale |
| Wink O | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale |

| Elem. | Note | Nodo I | Nodo J | Nodo K | Nodo L | Mat. | Crit. | Spessore | Svincolo | Wink V | Wink O |
|-------|--------|--------|--------|--------|--------|------|-------|----------|----------|---------|---------|
| | | | | | | | | cm | | daN/cm3 | daN/cm3 |
| 1 | Guscio | 45 | 46 | 44 | 43 | 6 | 1 | 20.0 | | | |
| 2 | Guscio | 47 | 48 | 46 | 45 | 6 | 1 | 20.0 | | | |
| 3 | Guscio | 55 | 56 | 48 | 47 | 6 | 1 | 20.0 | | | |
| 4 | Guscio | 63 | 64 | 56 | 55 | 6 | 1 | 20.0 | | | |
| 5 | Guscio | 71 | 72 | 64 | 63 | 6 | 1 | 20.0 | | | |
| 6 | Guscio | 79 | 80 | 72 | 71 | 6 | 1 | 20.0 | | | |
| 7 | Guscio | 51 | 52 | 80 | 79 | 6 | 1 | 20.0 | | | |
| 8 | Guscio | 61 | 62 | 52 | 51 | 6 | 1 | 20.0 | | | |
| 9 | Guscio | 73 | 74 | 62 | 61 | 6 | 1 | 20.0 | | | |
| 10 | Guscio | 83 | 84 | 74 | 73 | 6 | 1 | 20.0 | | | |
| 11 | Guscio | 59 | 60 | 84 | 83 | 6 | 1 | 20.0 | | | |
| 12 | Guscio | 75 | 76 | 60 | 59 | 6 | 1 | 20.0 | | | |
| 13 | Guscio | 53 | 54 | 76 | 75 | 6 | 1 | 20.0 | | | |
| 14 | Guscio | 69 | 70 | 54 | 53 | 6 | 1 | 20.0 | | | |
| 15 | Guscio | 57 | 58 | 70 | 69 | 6 | 1 | 20.0 | | | |
| 16 | Guscio | 81 | 82 | 58 | 57 | 6 | 1 | 20.0 | | | |
| 17 | Guscio | 77 | 78 | 82 | 81 | 6 | 1 | 20.0 | | | |
| 18 | Guscio | 49 | 50 | 78 | 77 | 6 | 1 | 20.0 | | | |
| 19 | Guscio | 67 | 68 | 50 | 49 | 6 | 1 | 20.0 | | | |
| 20 | Guscio | 66 | 65 | 68 | 67 | 6 | 1 | 20.0 | | | |
| 21 | Guscio | 46 | 107 | 106 | 44 | 6 | 1 | 20.0 | | | |
| 22 | Guscio | 48 | 108 | 107 | 46 | 6 | 1 | 20.0 | | | |
| 23 | Guscio | 56 | 112 | 108 | 48 | 6 | 1 | 20.0 | | | |
| 24 | Guscio | 64 | 116 | 112 | 56 | 6 | 1 | 20.0 | | | |
| 25 | Guscio | 72 | 120 | 116 | 64 | 6 | 1 | 20.0 | | | |
| 26 | Guscio | 80 | 124 | 120 | 72 | 6 | 1 | 20.0 | | | |
| 27 | Guscio | 52 | 110 | 124 | 80 | 6 | 1 | 20.0 | | | |
| 28 | Guscio | 62 | 115 | 110 | 52 | 6 | 1 | 20.0 | | | |
| 29 | Guscio | 74 | 121 | 115 | 62 | 6 | 1 | 20.0 | | | |
| 30 | Guscio | 84 | 126 | 121 | 74 | 6 | 1 | 20.0 | | | |
| 31 | Guscio | 60 | 114 | 126 | 84 | 6 | 1 | 20.0 | | | |
| 32 | Guscio | 76 | 122 | 114 | 60 | 6 | 1 | 20.0 | | | |
| 33 | Guscio | 54 | 111 | 122 | 76 | 6 | 1 | 20.0 | | | |
| 34 | Guscio | 70 | 119 | 111 | 54 | 6 | 1 | 20.0 | | | |
| 35 | Guscio | 58 | 113 | 119 | 70 | 6 | 1 | 20.0 | | | |
| 36 | Guscio | 82 | 125 | 113 | 58 | 6 | 1 | 20.0 | | | |
| 37 | Guscio | 78 | 123 | 125 | 82 | 6 | 1 | 20.0 | | | |
| 38 | Guscio | 50 | 109 | 123 | 78 | 6 | 1 | 20.0 | | | |
| 39 | Guscio | 68 | 118 | 109 | 50 | 6 | 1 | 20.0 | | | |
| 40 | Guscio | 65 | 117 | 118 | 68 | 6 | 1 | 20.0 | | | |
| 41 | Guscio | 107 | 149 | 148 | 106 | 6 | 1 | 20.0 | | | |
| 42 | Guscio | 108 | 150 | 149 | 107 | 6 | 1 | 20.0 | | | |
| 43 | Guscio | 112 | 154 | 150 | 108 | 6 | 1 | 20.0 | | | |
| 44 | Guscio | 116 | 158 | 154 | 112 | 6 | 1 | 20.0 | | | |
| 45 | Guscio | 120 | 162 | 158 | 116 | 6 | 1 | 20.0 | | | |
| 46 | Guscio | 124 | 166 | 162 | 120 | 6 | 1 | 20.0 | | | |
| 47 | Guscio | 110 | 152 | 166 | 124 | 6 | 1 | 20.0 | | | |
| 48 | Guscio | 115 | 157 | 152 | 110 | 6 | 1 | 20.0 | | | |
| 49 | Guscio | 121 | 163 | 157 | 115 | 6 | 1 | 20.0 | | | |
| 50 | Guscio | 126 | 168 | 163 | 121 | 6 | 1 | 20.0 | | | |
| 51 | Guscio | 114 | 156 | 168 | 126 | 6 | 1 | 20.0 | | | |
| 52 | Guscio | 122 | 164 | 156 | 114 | 6 | 1 | 20.0 | | | |
| 53 | Guscio | 111 | 153 | 164 | 122 | 6 | 1 | 20.0 | | | |
| 54 | Guscio | 119 | 161 | 153 | 111 | 6 | 1 | 20.0 | | | |
| 55 | Guscio | 113 | 155 | 161 | 119 | 6 | 1 | 20.0 | | | |
| 56 | Guscio | 125 | 167 | 155 | 113 | 6 | 1 | 20.0 | | | |
| 57 | Guscio | 123 | 165 | 167 | 125 | 6 | 1 | 20.0 | | | |
| 58 | Guscio | 109 | 151 | 165 | 123 | 6 | 1 | 20.0 | | | |
| 59 | Guscio | 118 | 160 | 151 | 109 | 6 | 1 | 20.0 | | | |
| 60 | Guscio | 117 | 159 | 160 | 118 | 6 | 1 | 20.0 | | | |
| 61 | Guscio | 149 | 191 | 190 | 148 | 6 | 1 | 20.0 | | | |
| 62 | Guscio | 150 | 192 | 191 | 149 | 6 | 1 | 20.0 | | | |
| 63 | Guscio | 154 | 196 | 192 | 150 | 6 | 1 | 20.0 | | | |
| 64 | Guscio | 158 | 200 | 196 | 154 | 6 | 1 | 20.0 | | | |
| 65 | Guscio | 162 | 204 | 200 | 158 | 6 | 1 | 20.0 | | | |
| 66 | Guscio | 166 | 208 | 204 | 162 | 6 | 1 | 20.0 | | | |
| 67 | Guscio | 152 | 194 | 208 | 166 | 6 | 1 | 20.0 | | | |
| 68 | Guscio | 157 | 199 | 194 | 152 | 6 | 1 | 20.0 | | | |
| 69 | Guscio | 163 | 205 | 199 | 157 | 6 | 1 | 20.0 | | | |
| 70 | Guscio | 168 | 210 | 205 | 163 | 6 | 1 | 20.0 | | | |
| 71 | Guscio | 156 | 198 | 210 | 168 | 6 | 1 | 20.0 | | | |
| 72 | Guscio | 164 | 206 | 198 | 156 | 6 | 1 | 20.0 | | | |

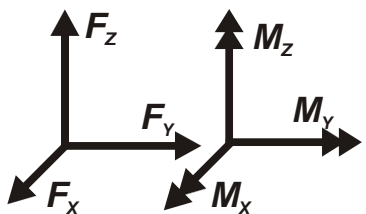
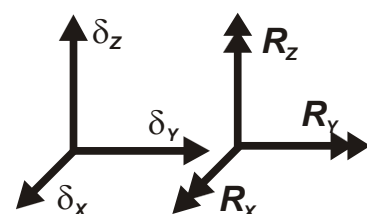
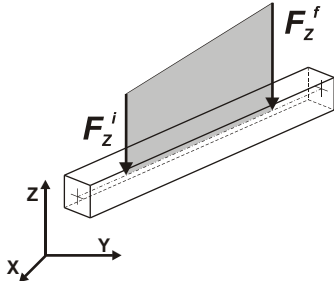
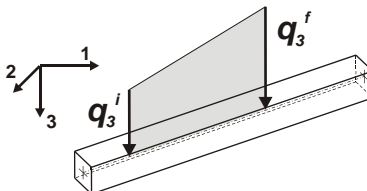
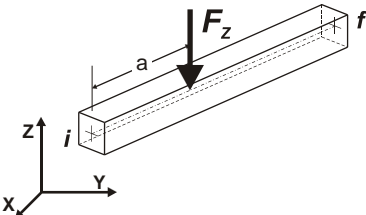
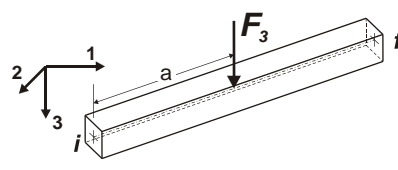
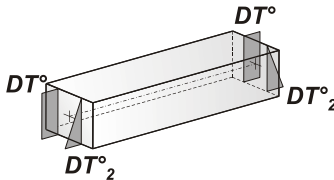
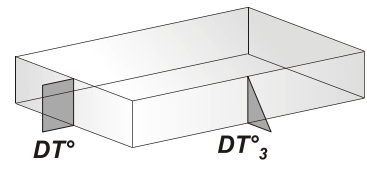
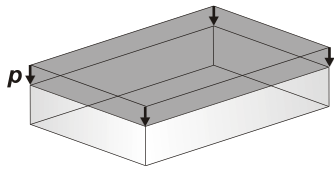
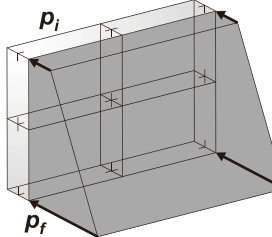
| Elem. | Note | Nodo I | Nodo J | Nodo K | Nodo L | Mat. | Crit. | Spessore | Svincolo | Wink V | Wink O |
|-------|--------|--------|--------|--------|--------|------|-------|----------|----------|--------|--------|
| 73 | Guscio | 153 | 195 | 206 | 164 | 6 | 1 | 20.0 | | | |
| 74 | Guscio | 161 | 203 | 195 | 153 | 6 | 1 | 20.0 | | | |
| 75 | Guscio | 155 | 197 | 203 | 161 | 6 | 1 | 20.0 | | | |
| 76 | Guscio | 167 | 209 | 197 | 155 | 6 | 1 | 20.0 | | | |
| 77 | Guscio | 165 | 207 | 209 | 167 | 6 | 1 | 20.0 | | | |
| 78 | Guscio | 151 | 193 | 207 | 165 | 6 | 1 | 20.0 | | | |
| 79 | Guscio | 160 | 202 | 193 | 151 | 6 | 1 | 20.0 | | | |
| 80 | Guscio | 159 | 201 | 202 | 160 | 6 | 1 | 20.0 | | | |
| 81 | Guscio | 212 | 45 | 43 | 211 | 6 | 1 | 20.0 | | | |
| 82 | Guscio | 214 | 47 | 45 | 212 | 6 | 1 | 20.0 | | | |
| 83 | Guscio | 216 | 55 | 47 | 214 | 6 | 1 | 20.0 | | | |
| 84 | Guscio | 218 | 63 | 55 | 216 | 6 | 1 | 20.0 | | | |
| 85 | Guscio | 220 | 71 | 63 | 218 | 6 | 1 | 20.0 | | | |
| 86 | Guscio | 222 | 79 | 71 | 220 | 6 | 1 | 20.0 | | | |
| 87 | Guscio | 224 | 51 | 79 | 222 | 6 | 1 | 20.0 | | | |
| 88 | Guscio | 226 | 61 | 51 | 224 | 6 | 1 | 20.0 | | | |
| 89 | Guscio | 228 | 73 | 61 | 226 | 6 | 1 | 20.0 | | | |
| 90 | Guscio | 230 | 83 | 73 | 228 | 6 | 1 | 20.0 | | | |
| 91 | Guscio | 213 | 59 | 83 | 230 | 6 | 1 | 20.0 | | | |
| 92 | Guscio | 217 | 75 | 59 | 213 | 6 | 1 | 20.0 | | | |
| 93 | Guscio | 219 | 53 | 75 | 217 | 6 | 1 | 20.0 | | | |
| 94 | Guscio | 221 | 69 | 53 | 219 | 6 | 1 | 20.0 | | | |
| 95 | Guscio | 225 | 57 | 69 | 221 | 6 | 1 | 20.0 | | | |
| 96 | Guscio | 227 | 81 | 57 | 225 | 6 | 1 | 20.0 | | | |
| 97 | Guscio | 229 | 77 | 81 | 227 | 6 | 1 | 20.0 | | | |
| 98 | Guscio | 215 | 49 | 77 | 229 | 6 | 1 | 20.0 | | | |
| 99 | Guscio | 223 | 67 | 49 | 215 | 6 | 1 | 20.0 | | | |
| 100 | Guscio | 231 | 66 | 67 | 223 | 6 | 1 | 20.0 | | | |
| 101 | Guscio | 191 | 232 | 233 | 190 | 6 | 1 | 20.0 | | | |
| 102 | Guscio | 192 | 234 | 232 | 191 | 6 | 1 | 20.0 | | | |
| 103 | Guscio | 196 | 235 | 234 | 192 | 6 | 1 | 20.0 | | | |
| 104 | Guscio | 200 | 236 | 235 | 196 | 6 | 1 | 20.0 | | | |
| 105 | Guscio | 204 | 237 | 236 | 200 | 6 | 1 | 20.0 | | | |
| 106 | Guscio | 208 | 238 | 237 | 204 | 6 | 1 | 20.0 | | | |
| 107 | Guscio | 194 | 239 | 238 | 208 | 6 | 1 | 20.0 | | | |
| 108 | Guscio | 199 | 240 | 239 | 194 | 6 | 1 | 20.0 | | | |
| 109 | Guscio | 205 | 241 | 240 | 199 | 6 | 1 | 20.0 | | | |
| 110 | Guscio | 210 | 242 | 241 | 205 | 6 | 1 | 20.0 | | | |
| 111 | Guscio | 198 | 243 | 242 | 210 | 6 | 1 | 20.0 | | | |
| 112 | Guscio | 206 | 244 | 243 | 198 | 6 | 1 | 20.0 | | | |
| 113 | Guscio | 195 | 245 | 244 | 206 | 6 | 1 | 20.0 | | | |
| 114 | Guscio | 203 | 246 | 245 | 195 | 6 | 1 | 20.0 | | | |
| 115 | Guscio | 197 | 247 | 246 | 203 | 6 | 1 | 20.0 | | | |
| 116 | Guscio | 209 | 248 | 247 | 197 | 6 | 1 | 20.0 | | | |
| 117 | Guscio | 207 | 249 | 248 | 209 | 6 | 1 | 20.0 | | | |
| 118 | Guscio | 193 | 250 | 249 | 207 | 6 | 1 | 20.0 | | | |
| 119 | Guscio | 202 | 251 | 250 | 193 | 6 | 1 | 20.0 | | | |
| 120 | Guscio | 201 | 252 | 251 | 202 | 6 | 1 | 20.0 | | | |

18 MODELLAZIONE DELLE AZIONI

18.1 LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

| | |
|-----------|---|
| 1 | carico concentrato nodale 6 dati (forza F_x , F_y , F_z , momento M_x , M_y , M_z) |
| 2 | spostamento nodale impresso 6 dati (spostamento T_x , T_y , T_z , rotazione R_x , R_y , R_z) |
| 3 | carico distribuito globale su elemento tipo trave 7 dati (f_x , f_y , f_z , m_x , m_y , m_z , ascissa di inizio carico) 7 dati (f_x , f_y , f_z , m_x , m_y , m_z , ascissa di fine carico) |
| 4 | carico distribuito locale su elemento tipo trave 7 dati (f_1 , f_2 , f_3 , m_1 , m_2 , m_3 , ascissa di inizio carico) 7 dati (f_1 , f_2 , f_3 , m_1 , m_2 , m_3 , ascissa di fine carico) |
| 5 | carico concentrato globale su elemento tipo trave 7 dati (F_x , F_y , F_z , M_x , M_y , M_z , ascissa di carico) |
| 6 | carico concentrato locale su elemento tipo trave 7 dati (F_1 , F_2 , F_3 , M_1 , M_2 , M_3 , ascissa di carico) |
| 7 | variazione termica applicata ad elemento tipo trave 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale) |
| 8 | carico di pressione uniforme su elemento tipo piastra 1 dato (pressione) |
| 9 | carico di pressione variabile su elemento tipo piastra 4 dati (pressione, quota, pressione, quota) |
| 10 | variazione termica applicata ad elemento tipo piastra 2 dati (variazioni termiche: media e differenza nello spessore) |
| 11 | carico variabile generale su elementi tipo trave e piastra 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave |
| 12 | gruppo di carichi con impronta su piastra 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell'impronta, interasse tra i carichi) |

| | |
|--|--|
|  <p>Carico concentrato nodale</p> |  <p>Spostamento impresso</p> |
|  <p>Carico distribuito globale</p> |  <p>Carico distribuito locale</p> |
|  <p>Carico concentrato globale</p> |  <p>Carico concentrato locale</p> |
|  <p>Carico termico 2D</p> |  <p>Carico termico 3D</p> |
|  <p>Carico pressione uniforme</p> |  <p>Carico pressione variabile</p> |

Tipo carico di pressione uniforme su piastra

| Id | Tipo | pressione |
|----|---|-----------|
| | | daN/cm2 |
| 7 | QVK PAN ++ vento*0.4 (da personalizzare)-P3:p=3.200e-03 | 3.20e-03 |
| 8 | QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 | 3.20e-03 |

Tipo carico variabile generale

| Id | Tipo | ascissa | valore | ascissa | valore |
|----|--|------------|---------|-----------|---------|
| | | cm | daN/cm2 | cm | daN/cm2 |
| 1 | CARICO FRENATURA Q3k -QV:var x - Qy - Area | | | | |
| | X - X Qy Area L2=0.0 | -1.000e+05 | -0.08 | 1.000e+05 | -0.08 |
| 2 | CARICO TRAFFICO Q1k 9 kN/MQ-QV:var x - Qz - Area | | | | |
| | X - X Qz Area L2=0.0 | -1.000e+05 | -0.09 | 1.000e+05 | -0.09 |
| 3 | CARICO TRAFFICO Q1k 150 kN-QV:var x - Qz - Area | | | | |

| Id | Tipo | ascissa | valore | ascissa | valore |
|----|--|------------|--------|-----------|--------|
| | X - X Qz Area L2=0.0 | -1.000e+05 | -2.94 | 1.000e+05 | -2.94 |
| 4 | G2 PERMANTE 1 kN/MQ-QV:var x - Qz - Area | | | | |
| | X - X Qz Area L2=0.0 | -1.000e+05 | -0.01 | 1.000e+05 | -0.09 |

19 SCHEMATIZZAZIONE DEI CASI DI CARICO

19.1 LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.

Sono previsti i seguenti 11 tipi di casi di carico:

| | Sigla | Tipo | Descrizione |
|-----------|--------------|-------------|---|
| 1 | Ggk | A | caso di carico comprensivo del peso proprio struttura |
| 2 | Gk | NA | caso di carico con azioni permanenti |
| 3 | Qk | NA | caso di carico con azioni variabili |
| 4 | Gsk | A | caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture |
| 5 | Qsk | A | caso di carico comprensivo dei carichi variabili sui solai |
| 6 | Qnk | A | caso di carico comprensivo dei carichi di neve sulle coperture |
| 7 | Qtk | SA | caso di carico comprensivo di una variazione termica agente sulla struttura |
| 8 | Qvk | NA | caso di carico comprensivo di azioni da vento sulla struttura |
| 9 | Esk | SA | caso di carico sismico con analisi statica equivalente |
| 10 | Edk | SA | caso di carico sismico con analisi dinamica |
| 11 | Etk | NA | caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica |
| 12 | Pk | NA | caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni |

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:

7-Qtk, in quanto richiede solo il valore della variazione termica;

9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e Sigla identificativa, Valore di riferimento del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

| CDC | Tipo | Sigla Id | Note |
|------------|-------------|---|--|
| 1 | Ggk | CDC=Ggk (peso proprio della struttura) | |
| 2 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +) | partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura) |
| 3 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -) | come precedente CDC sismico |
| 4 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +) | come precedente CDC sismico |
| 5 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -) | come precedente CDC sismico |
| 6 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +) | come precedente CDC sismico |
| 7 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -) | come precedente CDC sismico |
| 8 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +) | come precedente CDC sismico |
| 9 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -) | come precedente CDC sismico |
| 10 | Qk | CDC=Qk TRAFFICO | Azioni applicate: D3 :da 1 a 120 Azione : CARICO TRAFFICO Q1k 9 kN/MQ-QV:var x - Qz - Area |
| | | | D3 :da 1 a 120 Azione : CARICO FRENATURA Q3k -QV:var x - Qy - Area |
| 11 | Qvk | CDC=Qvk (carico da vento) dir X + | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN ++ vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 12 | Qvk | CDC=Qvk (carico da vento) dir X - | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 13 | Qvk | CDC=Qvk (carico da vento) dir Y + | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 14 | Qvk | CDC=Qvk (carico da vento) dir Y - | Azioni applicate: D3 :da 1 a 120 Azione : QVK PAN -- vento*0.4 (da personalizzare)-P3:p=3.200e-03 |
| 15 | Gk | CDC=G2k (permanente generico) | Azioni applicate: D3 :da 1 a 120 Azione : G2 PERMANENTE 1 kN/MQ-QV:var x - Qz - Area |

20 DEFINIZIONE DELLE COMBINAZIONI

20.1 LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.

Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

Combinazione fondamentale SLU

$$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \dots$$

Combinazione caratteristica (rara) SLE

$$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \dots$$

Combinazione frequente SLE

$$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione quasi permanente SLE

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

$$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

$$G1 + G2 + Ad + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Dove:

NTC 2018 Tabella 2.5.I

| Destinazione d'uso/azione | $\psi 0$ | $\psi 1$ | $\psi 2$ |
|--|----------|----------|----------|
| Categoria A residenziali | 0,70 | 0,50 | 0,30 |
| Categoria B uffici | 0,70 | 0,50 | 0,30 |
| Categoria C ambienti suscettibili di affollamento | 0,70 | 0,70 | 0,60 |
| Categoria D ambienti ad uso commerciale | 0,70 | 0,70 | 0,60 |
| Categoria E biblioteche, archivi, magazzini,... | 1,00 | 0,90 | 0,80 |
| Categoria F Rimesse e parcheggi (autoveicoli $\leq 30kN$) | 0,70 | 0,70 | 0,60 |
| Categoria G Rimesse e parcheggi (autoveicoli $> 30kN$) | 0,70 | 0,50 | 0,30 |
| Categoria H Coperture | 0,00 | 0,00 | 0,00 |
| Vento | 0,60 | 0,20 | 0,00 |
| Neve a quota ≤ 1000 m | 0,50 | 0,20 | 0,00 |
| Neve a quota > 1000 m | 0,70 | 0,50 | 0,20 |
| Variazioni Termiche | 0,60 | 0,50 | 0,00 |

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),

- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

| | | Coefficiente γf | EQU | A1 | A2 |
|--|-------------|----------------------------|------------|-----------|-----------|
| Carichi permanenti | Favorevoli | $\gamma G1$ | 0,9 | 1,0 | 1,0 |
| | Sfavorevoli | | 1,1 | 1,3 | 1,0 |
| Carichi permanenti non strutturali (Non compiutamente definiti) | Favorevoli | $\gamma G2$ | 0,8 | 0,8 | 0,8 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |
| Carichi variabili | Favorevoli | γQi | 0,0 | 0,0 | 0,0 |
| | Sfavorevoli | | 1,5 | 1,5 | 1,3 |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|------|----------------|-----------------|
| 1 | SLU | Comb. SLU A1 1 | |
| 2 | SLU | Comb. SLU A1 2 | |
| 3 | SLU | Comb. SLU A1 3 | |
| 4 | SLU | Comb. SLU A1 4 | |
| 5 | SLU | Comb. SLU A1 5 | |
| 6 | SLU | Comb. SLU A1 6 | |
| 7 | SLU | Comb. SLU A1 7 | |
| 8 | SLU | Comb. SLU A1 8 | |
| 9 | SLU | Comb. SLU A1 9 | |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|----------|--------------------------------|-----------------|
| 10 | SLU | Comb. SLU A1 10 | |
| 11 | SLU | Comb. SLU A1 11 | |
| 12 | SLU | Comb. SLU A1 12 | |
| 13 | SLU | Comb. SLU A1 13 | |
| 14 | SLU | Comb. SLU A1 14 | |
| 15 | SLU | Comb. SLU A1 15 | |
| 16 | SLU | Comb. SLU A1 16 | |
| 17 | SLU | Comb. SLU A1 17 | |
| 18 | SLU | Comb. SLU A1 18 | |
| 19 | SLU | Comb. SLU A1 19 | |
| 20 | SLU | Comb. SLU A1 20 | |
| 21 | SLU | Comb. SLU A1 (SLV sism.) 21 | |
| 22 | SLU | Comb. SLU A1 (SLV sism.) 22 | |
| 23 | SLU | Comb. SLU A1 (SLV sism.) 23 | |
| 24 | SLU | Comb. SLU A1 (SLV sism.) 24 | |
| 25 | SLU | Comb. SLU A1 (SLV sism.) 25 | |
| 26 | SLU | Comb. SLU A1 (SLV sism.) 26 | |
| 27 | SLU | Comb. SLU A1 (SLV sism.) 27 | |
| 28 | SLU | Comb. SLU A1 (SLV sism.) 28 | |
| 29 | SLU | Comb. SLU A1 (SLV sism.) 29 | |
| 30 | SLU | Comb. SLU A1 (SLV sism.) 30 | |
| 31 | SLU | Comb. SLU A1 (SLV sism.) 31 | |
| 32 | SLU | Comb. SLU A1 (SLV sism.) 32 | |
| 33 | SLU | Comb. SLU A1 (SLV sism.) 33 | |
| 34 | SLU | Comb. SLU A1 (SLV sism.) 34 | |
| 35 | SLU | Comb. SLU A1 (SLV sism.) 35 | |
| 36 | SLU | Comb. SLU A1 (SLV sism.) 36 | |
| 37 | SLU | Comb. SLU A1 (SLV sism.) 37 | |
| 38 | SLU | Comb. SLU A1 (SLV sism.) 38 | |
| 39 | SLU | Comb. SLU A1 (SLV sism.) 39 | |
| 40 | SLU | Comb. SLU A1 (SLV sism.) 40 | |
| 41 | SLU | Comb. SLU A1 (SLV sism.) 41 | |
| 42 | SLU | Comb. SLU A1 (SLV sism.) 42 | |
| 43 | SLU | Comb. SLU A1 (SLV sism.) 43 | |
| 44 | SLU | Comb. SLU A1 (SLV sism.) 44 | |
| 45 | SLU | Comb. SLU A1 (SLV sism.) 45 | |
| 46 | SLU | Comb. SLU A1 (SLV sism.) 46 | |
| 47 | SLU | Comb. SLU A1 (SLV sism.) 47 | |
| 48 | SLU | Comb. SLU A1 (SLV sism.) 48 | |
| 49 | SLU | Comb. SLU A1 (SLV sism.) 49 | |
| 50 | SLU | Comb. SLU A1 (SLV sism.) 50 | |
| 51 | SLU | Comb. SLU A1 (SLV sism.) 51 | |
| 52 | SLU | Comb. SLU A1 (SLV sism.) 52 | |
| 53 | SLD(sis) | Comb. SLE (SLD Danno sism.) 53 | |
| 54 | SLD(sis) | Comb. SLE (SLD Danno sism.) 54 | |
| 55 | SLD(sis) | Comb. SLE (SLD Danno sism.) 55 | |
| 56 | SLD(sis) | Comb. SLE (SLD Danno sism.) 56 | |
| 57 | SLD(sis) | Comb. SLE (SLD Danno sism.) 57 | |
| 58 | SLD(sis) | Comb. SLE (SLD Danno sism.) 58 | |
| 59 | SLD(sis) | Comb. SLE (SLD Danno sism.) 59 | |
| 60 | SLD(sis) | Comb. SLE (SLD Danno sism.) 60 | |
| 61 | SLD(sis) | Comb. SLE (SLD Danno sism.) 61 | |
| 62 | SLD(sis) | Comb. SLE (SLD Danno sism.) 62 | |
| 63 | SLD(sis) | Comb. SLE (SLD Danno sism.) 63 | |
| 64 | SLD(sis) | Comb. SLE (SLD Danno sism.) 64 | |
| 65 | SLD(sis) | Comb. SLE (SLD Danno sism.) 65 | |
| 66 | SLD(sis) | Comb. SLE (SLD Danno sism.) 66 | |
| 67 | SLD(sis) | Comb. SLE (SLD Danno sism.) 67 | |
| 68 | SLD(sis) | Comb. SLE (SLD Danno sism.) 68 | |
| 69 | SLD(sis) | Comb. SLE (SLD Danno sism.) 69 | |
| 70 | SLD(sis) | Comb. SLE (SLD Danno sism.) 70 | |
| 71 | SLD(sis) | Comb. SLE (SLD Danno sism.) 71 | |
| 72 | SLD(sis) | Comb. SLE (SLD Danno sism.) 72 | |
| 73 | SLD(sis) | Comb. SLE (SLD Danno sism.) 73 | |
| 74 | SLD(sis) | Comb. SLE (SLD Danno sism.) 74 | |
| 75 | SLD(sis) | Comb. SLE (SLD Danno sism.) 75 | |
| 76 | SLD(sis) | Comb. SLE (SLD Danno sism.) 76 | |
| 77 | SLD(sis) | Comb. SLE (SLD Danno sism.) 77 | |
| 78 | SLD(sis) | Comb. SLE (SLD Danno sism.) 78 | |
| 79 | SLD(sis) | Comb. SLE (SLD Danno sism.) 79 | |
| 80 | SLD(sis) | Comb. SLE (SLD Danno sism.) 80 | |
| 81 | SLD(sis) | Comb. SLE (SLD Danno sism.) 81 | |
| 82 | SLD(sis) | Comb. SLE (SLD Danno sism.) 82 | |
| 83 | SLD(sis) | Comb. SLE (SLD Danno sism.) 83 | |
| 84 | SLD(sis) | Comb. SLE (SLD Danno sism.) 84 | |

| Cmb | Tipo | Sigla Id | effetto P-delta |
|-----|-----------|-----------------------|-----------------|
| 85 | SLU(acc.) | Comb. SLU (Accid.) 85 | |
| 86 | SLE(r) | Comb. SLE(rara) 86 | |
| 87 | SLE(r) | Comb. SLE(rara) 87 | |
| 88 | SLE(r) | Comb. SLE(rara) 88 | |
| 89 | SLE(r) | Comb. SLE(rara) 89 | |
| 90 | SLE(r) | Comb. SLE(rara) 90 | |
| 91 | SLE(r) | Comb. SLE(rara) 91 | |
| 92 | SLE(r) | Comb. SLE(rara) 92 | |
| 93 | SLE(r) | Comb. SLE(rara) 93 | |
| 94 | SLE(r) | Comb. SLE(rara) 94 | |
| 95 | SLE(r) | Comb. SLE(rara) 95 | |
| 96 | SLE(f) | Comb. SLE(freq.) 96 | |
| 97 | SLE(f) | Comb. SLE(freq.) 97 | |
| 98 | SLE(f) | Comb. SLE(freq.) 98 | |
| 99 | SLE(f) | Comb. SLE(freq.) 99 | |
| 100 | SLE(f) | Comb. SLE(freq.) 100 | |
| 101 | SLE(f) | Comb. SLE(freq.) 101 | |
| 102 | SLE(p) | Comb. SLE(perm.) 102 | |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 1 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 2 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 3 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 4 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 5 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 6 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 7 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 8 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 1.50 | 0.90 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 9 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 10 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 11 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 12 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 1.50 | 0.90 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 13 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 14 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.30 | | | | | | | | | | | | | |
| 15 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 16 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 1.50 | 0.90 |
| | 1.00 | | | | | | | | | | | | | |
| 17 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.30 | | | | | | | | | | | | | |
| 18 | 1.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.30 | | | | | | | | | | | | | |
| 19 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.00 | | | | | | | | | | | | | |
| 20 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.50 | 0.90 | 0.90 | 0.90 | 1.50 |
| | 1.00 | | | | | | | | | | | | | |
| 21 | 1.00 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 22 | 1.00 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 23 | 1.00 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 24 | 1.00 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 25 | 1.00 | -1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 26 | 1.00 | -1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 27 | 1.00 | 1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 28 | 1.00 | 1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 29 | 1.00 | 0.0 | -1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 30 | 1.00 | 0.0 | -1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 31 | 1.00 | 0.0 | 1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 32 | 1.00 | 0.0 | 1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 33 | 1.00 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 34 | 1.00 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 35 | 1.00 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 36 | 1.00 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 37 | 1.00 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 38 | 1.00 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 39 | 1.00 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 40 | 1.00 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 41 | 1.00 | 0.0 | -0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 42 | 1.00 | 0.0 | -0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 43 | 1.00 | 0.0 | 0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 44 | 1.00 | 0.0 | 0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 45 | 1.00 | -0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 46 | 1.00 | -0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 47 | 1.00 | 0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 48 | 1.00 | 0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 49 | 1.00 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 50 | 1.00 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 51 | 1.00 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 52 | 1.00 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 53 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 54 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 55 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 56 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 57 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 58 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 59 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 60 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 61 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 62 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 63 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 64 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 65 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 66 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 67 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | -0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 68 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.0 | 0.30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 69 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 70 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 71 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 72 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 73 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 74 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 75 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 76 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 77 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 78 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 79 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 80 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 81 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 82 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 83 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | -1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 84 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 | 0.0 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 85 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 86 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 87 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 88 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 89 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 1.00 | 0.60 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 90 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 1.00 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 91 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 1.00 | 0.60 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 92 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 1.00 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 93 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 1.00 | 0.60 |
| | 1.00 | | | | | | | | | | | | | |
| 94 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.60 | 0.60 | 0.60 | 1.00 |
| | 1.00 | | | | | | | | | | | | | |
| 95 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.00 | 0.60 | 0.60 | 0.60 | 1.00 |
| | 1.00 | | | | | | | | | | | | | |
| 96 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 97 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.90 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 98 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 99 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |
| 100 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 | 0.0 |

| Cmb | CDC 1/15... | CDC 2/16... | CDC 3/17... | CDC 4/18... | CDC 5/19... | CDC 6/20... | CDC 7/21... | CDC 8/22... | CDC 9/23... | CDC 10/24... | CDC 11/25... | CDC 12/26... | CDC 13/27... | CDC 14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1.00 | | | | | | | | | | | | | |
| 101 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.20 |
| | 1.00 | | | | | | | | | | | | | |
| 102 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.00 | | | | | | | | | | | | | |

21 AZIONE SISMICA

21.1 VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.

Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito <http://esse1.mi.ingv.it/>. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento V_r che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento V_r e la probabilità di superamento P_{ver} associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno T_r e i relativi parametri di pericolosità sismica (vedi tabella successiva):

a_g : accelerazione orizzontale massima del terreno;

F_o : valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

T^*c : periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

| 21.1.1 Parametri della struttura | | | | | |
|----------------------------------|-------------------|------------|----------------------|---------------|-----------------------|
| Classe d'uso | Vita V_n [anni] | Coeff. Uso | Periodo V_r [anni] | Tipo di suolo | Categoria topografica |
| II | 50.0 | 1.0 | 50.0 | C | T1 |

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente $S = S_s \cdot S_t$ (3.2.3)

F_o è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale

F_v è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno a_g su sito di riferimento rigido orizzontale

T_b è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.

T_c è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.

T_d è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, S_e , è definito dalle seguenti espressioni:

$$\begin{aligned}
 0 \leq T < T_b & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_b} + \frac{1}{\eta \cdot F_o} \left(1 - \frac{T}{T_b} \right) \right] \\
 T_b \leq T < T_c & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \\
 T_c \leq T < T_d & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_c}{T} \right) \\
 T_d \leq T & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_c \cdot T_d}{T^2} \right)
 \end{aligned}$$

Dove per sottosuolo di categoria **A** i coefficienti S_s e C_c valgono 1; mentre per le categorie di sottosuolo B, C, D, E i coefficienti S_s e C_c vengono calcolati mediante le espressioni riportate nella seguente Tabella

| Categoria sottosuolo | S_s | C_c |
|----------------------|---|------------------------------|
| A | 1,00 | 1,00 |
| B | $1,00 \leq 1,40 - 0,40 \cdot F_o \cdot \frac{a_g}{g} \leq 1,20$ | $1,10 \cdot (T_c^*)^{-0,20}$ |
| C | $1,00 \leq 1,70 - 0,60 \cdot F_o \cdot \frac{a_g}{g} \leq 1,50$ | $1,05 \cdot (T_c^*)^{-0,33}$ |
| D | $0,90 \leq 2,40 - 1,50 \cdot F_o \cdot \frac{a_g}{g} \leq 1,80$ | $1,25 \cdot (T_c^*)^{-0,50}$ |
| E | $1,00 \leq 2,00 - 1,10 \cdot F_o \cdot \frac{a_g}{g} \leq 1,60$ | $1,15 \cdot (T_c^*)^{-0,40}$ |

Per tenere conto delle condizioni topografiche e in assenza di specifiche analisi di risposta sismica locale, si utilizzano i valori del coefficiente topografico S_T riportati nella seguente Tabella

| Categoria topografica | Ubicazione dell'opera o dell'intervento | S _T |
|-----------------------|---|----------------|
| T1 | - | 1,0 |
| T2 | In corrispondenza della sommità del pendio | 1,2 |
| T3 | In corrispondenza della cresta di un rilievo con pendenza media minore o uguale a 30° | 1,2 |
| T4 | In corrispondenza della cresta di un rilievo con pendenza media maggiore di 30° | 1,4 |

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, S_{ve}, è definito dalle espressioni:

$$0 \leq T < T_B \quad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o} \left(1 - \frac{T}{T_B} \right) \right]$$

$$T_B \leq T < T_C \quad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \leq T < T_D \quad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T} \right)$$

$$T_D \leq T \quad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2} \right)$$

I valori di S_s, T_B, T_C e T_D, sono riportati nella seguente Tabella

| Categoria di sottosuolo | S _s | T _B | T _C | T _D |
|-------------------------|----------------|----------------|----------------|----------------|
| A, B, C, D, E | 1,0 | 0,05 s | 0,15 s | 1,0 s |

| Id nodo | Longitudine | Latitudine | Distanza |
|---------|-------------|------------|----------|
| | | | Km |
| Loc. | 12.244 | 45.669 | |
| 11859 | 12.205 | 45.628 | 5.457 |
| 11860 | 12.276 | 45.629 | 5.079 |
| 11638 | 12.275 | 45.679 | 2.644 |
| 11637 | 12.204 | 45.678 | 3.254 |

| SL | P _{ver} | Tr | ag | Fo | T*c |
|-----|------------------|-------|-------|-------|-------|
| | | Anni | g | | sec |
| SLO | 81.0 | 30.1 | 0.038 | 2.563 | 0.236 |
| SLD | 63.0 | 50.3 | 0.051 | 2.483 | 0.260 |
| SLV | 10.0 | 474.6 | 0.137 | 2.473 | 0.339 |
| SLC | 5.0 | 974.8 | 0.183 | 2.511 | 0.349 |

| SL | ag | S | Fo | Fv | Tb | Tc | Td |
|-----|-------|-------|-------|-------|-------|-------|-------|
| | g | | | | sec | sec | sec |
| SLO | 0.038 | 1.500 | 2.563 | 0.672 | 0.133 | 0.399 | 1.751 |
| SLD | 0.051 | 1.500 | 2.483 | 0.755 | 0.142 | 0.426 | 1.803 |
| SLV | 0.137 | 1.496 | 2.473 | 1.237 | 0.170 | 0.509 | 2.149 |
| SLC | 0.183 | 1.425 | 2.511 | 1.449 | 0.173 | 0.519 | 2.330 |

22 RISULTATI ANALISI SISMICHE

22.1 LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente

10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l'azione sismica: in particolare possono essere presenti i seguenti valori:

| | |
|----------------------------|---|
| Angolo di ingresso | Angolo di ingresso dell'azione sismica orizzontale |
| Fattore di importanza | Fattore di importanza dell'edificio, in base alla categoria di appartenenza |
| Zona sismica | Zona sismica |
| Accelerazione ag | Accelerazione orizzontale massima sul suolo |
| Categoria suolo | Categoria di profilo stratigrafico del suolo di fondazione |
| Fattore q | Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale |
| Amplificazione ND | Coefficiente di amplificazione q/qND delle azioni sismiche (solo per elementi progettati in campo non dissipativo) |
| Fattore di sito S | Fattore dipendente dalla stratigrafia e dal profilo topografico |
| Classe di duttilità CD | Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa |
| Fattore riduz. SLD | Fattore di riduzione dello spettro elastico per lo stato limite di danno |
| Periodo proprio T1 | Periodo proprio di vibrazione della struttura |
| Coefficiente Lambda | Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura |
| Ordinata spettro Sd(T1) | Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd) |
| Ordinata spettro Se(T1) | Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve) |
| Ordinata spettro S (Tb-Tc) | Valore dell'ordinata dello spettro in uso nel tratto costante |
| numero di modi considerati | Numero di modi di vibrare della struttura considerati nell'analisi dinamica |

Nel caso di elementi progettati in campo non dissipativo vengono adottate le sollecitazioni calcolate con un fattore qND ricavato come da 7.3.2 in funzione del fattore di comportamento q utilizzato per la struttura: $1 < qND = 2/3 \cdot q < 1.5$

Il coefficiente di amplificazione delle azioni sismiche rispetto alle azioni calcolate con il fattore di comportamento globale viene indicato nelle relative tabelle.

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

- c) analisi sismica statica equivalente:
 - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidità, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
 - azione sismica complessiva
- d) analisi sismica dinamica con spettro di risposta:
 - quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidità, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
 - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi
 - massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione η_T (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità $1000 \cdot \eta_T/h$ da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione η_T , η_P e η_D degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità $1000 \cdot \eta_T/h$ da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.

Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.

In particolare la tabella, per ogni combinazione di calcolo, riporta:

| | |
|------|---------------------------------|
| Nodo | Nodo di appoggio dell'isolatore |
|------|---------------------------------|

| | |
|--------------|--|
| Cmb | Combinazione oggetto della verifica |
| Verif. | Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata |
| dE | Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30% |
| Ang fi | Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari) |
| V | Azione verticale agente |
| Ar | Area ridotta efficace |
| Dim A2 | Dimensione utile per il calcolo della deformazione per rotazione |
| Sig s | Tensione nell' inserto in acciaio |
| Gam c(a,s,t) | Deformazioni di taglio dell' elastomero |
| Vcr | Carico critico per instabilità |

Affinché la verifica sia positiva deve essere:

- 7) $V > 0$
- 8) $Sig s < f_{yk}$
- 9) $Gam t < 5$
- 10) $Gam s < Gam * (caratteristica\ dell'\ elastomero)$
- 11) $Gam s < 2$
- 12) $V < 0.5 V_{cr}$

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 2 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.013 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. mu d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | -60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X % | M efficace Y % | M efficace Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|----------------|----------------|----------------|-----------|-------------|
| | Hz | sec | g | x g | x g | x g | | |
| | | | | daN | daN | daN | | |
| 1 | 12.024 | 0.083 | 0.353 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 |
| 4 | 58.352 | 0.017 | 0.236 | 11.89 | 4.95e-02 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 |
| 6 | 75.848 | 0.013 | 0.229 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 2.31e-05 | 0.0 | 7.25e-05 | 2213.27 | 9.2 |
| 8 | 102.167 | 0.010 | 0.223 | 3.01e-04 | 1.26e-06 | 0.17 | 3.19e-05 | 0.0 |
| 9 | 108.998 | 0.009 | 0.222 | 1089.52 | 4.5 | 5.12e-05 | 2.17e-05 | 0.0 |
| Risulta | | | | 1.889e+04 | | 156.29 | 2.137e+04 | |
| In percentuale | | | | 78.69 | | 0.65 | 89.06 | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 3 | Edk | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.013 sec. |
| | | | fattore q: 1.000 |

| CDC | Tipo | Sigla Id | Note |
|-----|------|----------|--|
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. μ d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | 60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X % | M efficace Y % | M efficace Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|----------------|----------------|----------------|----------|-------------|
| | Hz | sec | g | daN | daN | daN | | |
| 1 | 12.024 | 0.083 | 0.353 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 |
| 4 | 58.352 | 0.017 | 0.236 | 11.88 | 4.95e-02 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 0.0 | 0.0 | 0.0 | 0.02 | 9.53e-05 |
| 6 | 75.848 | 0.013 | 0.229 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 0.0 | 0.0 | 6.04e-06 | 0.0 | 2213.44 |
| 8 | 102.167 | 0.010 | 0.223 | 1.48e-05 | 0.0 | 0.18 | 7.70e-04 | 2.23e-05 |
| 9 | 108.998 | 0.009 | 0.222 | 1088.42 | 4.5 | 7.32e-04 | 3.05e-06 | 1.63e-04 |
| Risulta | | | | 1.888e+04 | | 156.30 | | 2.137e+04 |
| In percentuale | | | | 78.68 | | 0.65 | | 89.06 |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 4 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso: 90.00 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.300 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. μ d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X % | M efficace Y % | M efficace Z % | Energia | Energia x v |
|---------|-----------|---------|----------------|----------------|----------------|----------------|-----------|-------------|
| | Hz | sec | g | daN | daN | daN | | |
| 1 | 12.024 | 0.083 | 0.353 | 1.63e-06 | 0.0 | 0.0 | 1.916e+04 | 79.8 |
| 2 | 23.454 | 0.043 | 0.281 | 55.00 | 0.2 | 0.0 | 1.77e-04 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 |
| 4 | 58.356 | 0.017 | 0.236 | 0.0 | 0.0 | 0.84 | 3.52e-03 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 2.71e-04 | 1.13e-06 | 0.0 | 0.02 | 9.54e-05 |
| 6 | 75.938 | 0.013 | 0.229 | 1.769e+04 | 73.7 | 0.0 | 0.06 | 2.70e-04 |
| 7 | 90.871 | 0.011 | 0.225 | 0.95 | 3.94e-03 | 3.06e-05 | 0.0 | 2213.20 |
| 8 | 102.167 | 0.010 | 0.223 | 1.42e-04 | 0.0 | 0.17 | 6.95e-04 | 3.44e-05 |
| 9 | 109.037 | 0.009 | 0.222 | 1096.38 | 4.6 | 2.83e-04 | 1.18e-06 | 0.08 |
| Risulta | | | | 1.884e+04 | | 157.29 | | 2.137e+04 |
| In | | | | 78.51 | | 0.66 | | 89.06 |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|-------------|-----------|---------|----------------|---------------------|---|---------------------|---|---------------------|---|---------|-------------|
| percentuale | | | | | | | | | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|--|
| 5 | Edk | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.496 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.508 g |
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.300 sec. |
| | | | fattore q: 1.000 |
| | | | amplificazione ND (non dissipativi): 1.000 |
| | | | fattore per spost. mu d: 1.000 |
| | | | classe di duttilità CD: ND |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | -20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.353 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.281 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.249 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.236 | 0.0 | 0.0 | 0.85 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.234 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.229 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.71e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.225 | 0.96 | 3.98e-03 | 2.03e-05 | 0.0 | 2213.23 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.223 | 9.23e-05 | 0.0 | 0.17 | 7.19e-04 | 3.88e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.222 | 1096.35 | 4.6 | 2.69e-04 | 1.12e-06 | 0.08 | 3.46e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 6 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.013 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | -60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | % | M efficace Y x g | % | M efficace Z x g | % | Energia | Energia x v |
|------|-----------|---------|----------------|---------------------|---|---------------------|---|---------------------|---|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | X % | M efficace Y x g | Y % | M efficace Z x g | Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| 1 | 12.024 | 0.083 | 0.142 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.090 | 11.89 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.087 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 2.31e-05 | 0.0 | 7.25e-05 | 0.0 | 2213.27 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 3.01e-04 | 1.26e-06 | 0.17 | 7.22e-04 | 3.19e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.083 | 1089.52 | 4.5 | 5.12e-05 | 0.0 | 2.17e-05 | 0.0 | 0.0 | 0.0 |
| Risulta | | | | 1.889e+04 | | 156.29 | | 2.137e+04 | | | |
| In percentuale | | | | 78.69 | | 0.65 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 7 | Edk | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:0.0 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.013 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 0.0 | 60.00 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | X % | M efficace Y x g | Y % | M efficace Z x g | Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 0.0 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.04 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.12 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.352 | 0.017 | 0.090 | 11.88 | 4.95e-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 0.0 | 0.0 | 0.0 | 0.0 | 0.02 | 9.53e-05 | 0.0 | 0.0 |
| 6 | 75.848 | 0.013 | 0.087 | 1.773e+04 | 73.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.0 | 0.0 | 6.04e-06 | 0.0 | 2213.44 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 1.48e-05 | 0.0 | 0.18 | 7.70e-04 | 2.23e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 108.998 | 0.009 | 0.083 | 1088.42 | 4.5 | 7.32e-04 | 3.05e-06 | 1.63e-04 | 0.0 | 0.0 | 0.0 |
| Risulta | | | | 1.888e+04 | | 156.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.68 | | 0.65 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 8 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: positiva |
| | | | periodo proprio T1: 0.300 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | 20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | X % | M efficace Y x g | Y % | M efficace Z x g | Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.090 | 0.0 | 0.0 | 0.84 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.087 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.70e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.95 | 3.94e-03 | 3.06e-05 | 0.0 | 2213.20 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 1.42e-04 | 0.0 | 0.17 | 6.95e-04 | 3.44e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.083 | 1096.38 | 4.6 | 2.83e-04 | 1.18e-06 | 0.08 | 3.27e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.29 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

| CDC | Tipo | Sigla Id | Note |
|-----|------|---|---|
| 9 | Edk | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -) | |
| | | | categoria suolo: C |
| | | | fattore di sito S = 1.500 |
| | | | ordinata spettro (tratto Tb-Tc) = 0.189 g |
| | | | angolo di ingresso:90.00 |
| | | | eccentricità aggiuntiva: negativa |
| | | | periodo proprio T1: 0.300 sec. |
| | | | numero di modi considerati: 9 |
| | | | combinaz. modale: CQC |

| Quota | M Sismica x g | Pos. GX | Pos. GY | E agg. X-X | E agg. Y-Y | Pos. KX | Pos. KY | (r/Ls)^2 | rapp. ex/rx | rapp. ey/ry |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| cm | daN | cm | cm | cm | cm | cm | cm | | | |
| 105.00 | 2.400e+04 | 165.00 | 600.00 | -20.00 | 0.0 | 165.00 | 600.00 | 1.093 | 0.0 | 0.0 |
| Risulta | 2.400e+04 | | | | | | | | | |

| Modo | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | X % | M efficace Y x g | Y % | M efficace Z x g | Z % | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| | Hz | sec | g | daN | | daN | | daN | | | |
| 1 | 12.024 | 0.083 | 0.142 | 1.63e-06 | 0.0 | 0.0 | 0.0 | 1.916e+04 | 79.8 | 0.0 | 0.0 |
| 2 | 23.454 | 0.043 | 0.110 | 55.00 | 0.2 | 0.0 | 0.0 | 1.77e-04 | 0.0 | 0.0 | 0.0 |
| 3 | 40.518 | 0.025 | 0.096 | 0.0 | 0.0 | 156.28 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 58.356 | 0.017 | 0.090 | 0.0 | 0.0 | 0.85 | 3.52e-03 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 62.164 | 0.016 | 0.089 | 2.71e-04 | 1.13e-06 | 0.0 | 0.0 | 0.02 | 9.54e-05 | 0.0 | 0.0 |
| 6 | 75.938 | 0.013 | 0.087 | 1.769e+04 | 73.7 | 0.0 | 0.0 | 0.06 | 2.71e-04 | 0.0 | 0.0 |
| 7 | 90.871 | 0.011 | 0.085 | 0.96 | 3.98e-03 | 2.03e-05 | 0.0 | 2213.23 | 9.2 | 0.0 | 0.0 |
| 8 | 102.167 | 0.010 | 0.084 | 9.23e-05 | 0.0 | 0.17 | 7.19e-04 | 3.88e-05 | 0.0 | 0.0 | 0.0 |
| 9 | 109.037 | 0.009 | 0.083 | 1096.35 | 4.6 | 2.69e-04 | 1.12e-06 | 0.08 | 3.46e-04 | 0.0 | 0.0 |
| Risulta | | | | 1.884e+04 | | 157.30 | | 2.137e+04 | | | |
| In percentuale | | | | 78.51 | | 0.66 | | 89.06 | | | |

23 RISULTATI ELEMENTI TIPO TRAVE

23.1 LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

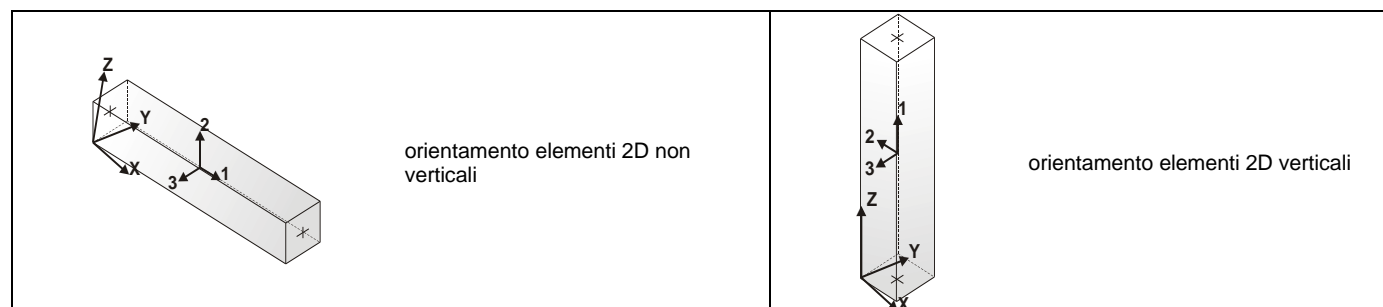
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

| | |
|---------------------|--|
| Pilas. | numero dell'elemento pilastro |
| Cmb | combinazione in cui si verificano i valori riportati |
| M3 mx/mn | momento flettente in campata M3 max (prima riga) / min (seconda riga) |
| M2 mx/mn | momento flettente in campata M2 max (prima riga) / min (seconda riga) |
| D2/D3 | freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga) |
| Q2/Q3 | carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga) |
| Pos. | ascissa del punto iniziale e finale dell'elemento |
| N, V2, ecc.. | sei componenti di sollecitazione al piede ed in sommità dell'elemento |

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.



| Trave | Cmb | M3 mx/mn daN cm | M2 mx/mn daN cm | D 2 / D 3 cm | Q 2 / Q 3 daN | Pos. | N cm | V 2 daN | V 3 daN | T daN cm | M 2 daN cm | M 3 daN cm |
|-------|-----|--------------------|--------------------|-----------------|------------------|------|-----------|------------|------------|-------------|---------------|---------------|
| 1 | 2 | -2.347e+04 | 0.06 | -0.43 | -546.00 | 0.0 | 1.035e+05 | 2.842e+04 | -2032.76 | -2.136e+04 | 0.06 | -1.712e+06 |
| | | -1.712e+06 | -1.220e+05 | 2.34e-03 | 0.0 | 60.0 | 1.035e+05 | 2.787e+04 | -2032.76 | -2.136e+04 | -1.220e+05 | -2.347e+04 |
| 1 | 7 | -1.820e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.012e+04 | 8204.77 | -575.75 | -215.81 | 0.01 | -4.979e+05 |
| | | -4.979e+05 | -3.455e+04 | 5.71e-04 | 0.0 | 60.0 | 3.012e+04 | 7784.77 | -575.75 | -215.81 | -3.455e+04 | -1.820e+04 |
| 1 | 8 | -1.747e+04 | 0.05 | -0.39 | -420.00 | 0.0 | 9.340e+04 | 2.568e+04 | -1839.69 | -2.127e+04 | 0.05 | -1.546e+06 |
| | | -1.546e+06 | -1.104e+05 | 2.15e-03 | 0.0 | 60.0 | 9.340e+04 | 2.526e+04 | -1839.69 | -2.127e+04 | -1.104e+05 | -1.747e+04 |
| 1 | 21 | -2.681e+04 | 0.02 | -0.12 | -420.00 | 0.0 | 3.286e+04 | 8882.15 | -627.23 | -1395.07 | 0.02 | -5.413e+05 |
| | | -5.413e+05 | -3.763e+04 | 7.87e-04 | 0.0 | 60.0 | 3.286e+04 | 8462.15 | -627.23 | -1395.07 | -3.763e+04 | -2.681e+04 |
| 1 | 25 | -2.681e+04 | 0.02 | -0.12 | -420.00 | 0.0 | 3.286e+04 | 8882.20 | -627.22 | -1393.76 | 0.02 | -5.413e+05 |
| | | -5.413e+05 | -3.763e+04 | 7.87e-04 | 0.0 | 60.0 | 3.286e+04 | 8462.20 | -627.22 | -1393.76 | -3.763e+04 | -2.681e+04 |
| 1 | 28 | -1.204e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.203e+04 | 8765.09 | -616.17 | 886.24 | 0.01 | -5.312e+05 |
| | | -5.312e+05 | -3.697e+04 | 4.49e-04 | 0.0 | 60.0 | 3.203e+04 | 8345.09 | -616.17 | 886.24 | -3.697e+04 | -1.204e+04 |
| 1 | 33 | -2.626e+04 | 0.02 | -0.12 | -420.00 | 0.0 | 3.286e+04 | 8876.29 | -625.90 | -1369.16 | 0.02 | -5.413e+05 |
| | | -5.413e+05 | -3.755e+04 | 7.70e-04 | 0.0 | 60.0 | 3.286e+04 | 8456.29 | -625.90 | -1369.16 | -3.755e+04 | -2.626e+04 |
| 1 | 53 | -2.222e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.261e+04 | 8845.88 | -623.79 | -697.10 | 0.01 | -5.381e+05 |
| | | -5.381e+05 | -3.743e+04 | 6.82e-04 | 0.0 | 60.0 | 3.261e+04 | 8425.88 | -623.79 | -697.10 | -3.743e+04 | -2.222e+04 |
| 1 | 57 | -2.222e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.261e+04 | 8845.91 | -623.79 | -696.60 | 0.01 | -5.381e+05 |
| | | -5.381e+05 | -3.743e+04 | 6.82e-04 | 0.0 | 60.0 | 3.261e+04 | 8425.91 | -623.79 | -696.60 | -3.743e+04 | -2.222e+04 |
| 1 | 60 | -1.663e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.229e+04 | 8801.39 | -619.60 | 189.07 | 0.01 | -5.343e+05 |
| | | -5.343e+05 | -3.718e+04 | 5.54e-04 | 0.0 | 60.0 | 3.229e+04 | 8381.39 | -619.60 | 189.07 | -3.718e+04 | -1.663e+04 |
| 1 | 65 | -2.201e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.260e+04 | 8843.68 | -623.29 | -687.53 | 0.01 | -5.382e+05 |
| | | -5.382e+05 | -3.740e+04 | 6.75e-04 | 0.0 | 60.0 | 3.260e+04 | 8423.68 | -623.29 | -687.53 | -3.740e+04 | -2.201e+04 |
| 1 | 85 | -1.942e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.245e+04 | 8823.65 | -621.69 | -253.76 | 0.01 | -5.362e+05 |
| | | -5.362e+05 | -3.730e+04 | 6.18e-04 | 0.0 | 60.0 | 3.245e+04 | 8403.65 | -621.69 | -253.76 | -3.730e+04 | -1.942e+04 |
| 1 | 87 | -1.824e+04 | 0.04 | -0.30 | -420.00 | 0.0 | 7.331e+04 | 2.012e+04 | -1438.07 | -1.427e+04 | 0.04 | -1.213e+06 |
| | | -1.213e+06 | -8.628e+04 | 1.64e-03 | 0.0 | 60.0 | 7.331e+04 | 1.970e+04 | -1438.07 | -1.427e+04 | -8.628e+04 | -1.824e+04 |
| 1 | 88 | -1.861e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.090e+04 | 8411.06 | -591.07 | -228.46 | 0.01 | -5.107e+05 |
| | | -5.107e+05 | -3.546e+04 | 5.87e-04 | 0.0 | 60.0 | 3.090e+04 | 7991.06 | -591.07 | -228.46 | -3.546e+04 | -1.861e+04 |
| 1 | 89 | -1.812e+04 | 0.04 | -0.30 | -420.00 | 0.0 | 7.309e+04 | 2.006e+04 | -1433.69 | -1.427e+04 | 0.04 | -1.209e+06 |
| | | -1.209e+06 | -8.602e+04 | 1.64e-03 | 0.0 | 60.0 | 7.309e+04 | 1.964e+04 | -1433.69 | -1.427e+04 | -8.602e+04 | -1.812e+04 |
| 1 | 97 | -1.898e+04 | 0.04 | -0.29 | -420.00 | 0.0 | 7.042e+04 | 1.931e+04 | -1380.05 | -1.289e+04 | 0.04 | -1.165e+06 |
| | | -1.165e+06 | -8.280e+04 | 1.57e-03 | 0.0 | 60.0 | 7.042e+04 | 1.889e+04 | -1380.05 | -1.289e+04 | -8.280e+04 | -1.898e+04 |
| 1 | 98 | -1.937e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.234e+04 | 8794.18 | -619.50 | -252.02 | 0.01 | -5.344e+05 |
| | | -5.344e+05 | -3.717e+04 | 6.16e-04 | 0.0 | 60.0 | 3.234e+04 | 8374.18 | -619.50 | -252.02 | -3.717e+04 | -1.937e+04 |
| 1 | 102 | -1.942e+04 | 0.01 | -0.12 | -420.00 | 0.0 | 3.245e+04 | 8823.65 | -621.69 | -253.76 | 0.01 | -5.362e+05 |
| | | -5.362e+05 | -3.730e+04 | 6.18e-04 | 0.0 | 60.0 | 3.245e+04 | 8403.65 | -621.69 | -253.76 | -3.730e+04 | -1.942e+04 |
| 2 | 2 | 8.626e+05 | -8.546e+04 | -0.44 | -546.00 | 0.0 | 1.242e+05 | 2.339e+04 | 608.35 | -1.283e+05 | -1.220e+05 | -5.242e+05 |
| | | -5.242e+05 | -1.220e+05 | 1.56e-04 | 0.0 | 60.0 | 1.242e+05 | 2.284e+04 | 608.35 | -1.283e+05 | -8.546e+04 | 8.626e+05 |
| 2 | 7 | 2.322e+05 | -2.303e+04 | -0.12 | -420.00 | 0.0 | 3.559e+04 | 6578.06 | 191.84 | -2.487e+04 | -3.455e+04 | -1.499e+05 |
| | | -1.499e+05 | -3.455e+04 | -2.46e-05 | 0.0 | 60.0 | 3.559e+04 | 6158.06 | 191.84 | -2.487e+04 | -2.303e+04 | 2.322e+05 |
| 2 | 21 | 2.446e+05 | -2.551e+04 | -0.13 | -420.00 | 0.0 | 3.856e+04 | 7014.43 | 217.92 | -2.861e+04 | -3.763e+04 | -1.637e+05 |
| | | -1.637e+05 | -3.763e+04 | 1.40e-04 | 0.0 | 60.0 | 3.856e+04 | 6594.43 | 217.92 | -2.861e+04 | -2.551e+04 | 2.446e+05 |
| 2 | 28 | 2.560e+05 | -2.426e+04 | -0.13 | -420.00 | 0.0 | 3.812e+04 | 7125.10 | 196.04 | -2.516e+04 | -3.697e+04 | -1.588e+05 |
| | | -1.588e+05 | -3.697e+04 | 1.90e-04 | 0.0 | 60.0 | 3.812e+04 | 6705.10 | 196.04 | -2.516e+04 | -2.426e+04 | 2.560e+05 |
| 2 | 32 | 2.556e+05 | -2.403e+04 | -0.13 | -420.00 | 0.0 | 3.810e+04 | 7117.81 | 194.13 | -2.518e+04 | -3.705e+04 | -1.588e+05 |
| | | -1.588e+05 | -3.705e+04 | 1.74e-04 | 0.0 | 60.0 | 3.810e+04 | 6697.81 | 194.13 | -2.518e+04 | -2.403e+04 | 2.556e+05 |
| 2 | 33 | 2.451e+05 | -2.574e+04 | -0.13 | -420.00 | 0.0 | 3.858e+04 | 7021.66 | 219.81 | -2.859e+04 | -3.755e+04 | -1.637e+05 |
| | | -1.637e+05 | -3.755e+04 | 1.24e-04 | 0.0 | 60.0 | 3.858e+04 | 6601.66 | 219.81 | -2.859e+04 | -2.574e+04 | 2.451e+05 |
| 2 | 36 | 2.556e+05 | -2.403e+04 | -0.13 | -420.00 | 0.0 | 3.810e+04 | 7117.83 | 194.14 | -2.518e+04 | -3.705e+04 | -1.588e+05 |
| | | -1.588e+05 | -3.705e+04 | 1.74e-04 | 0.0 | 60.0 | 3.810e+04 | 6697.83 | 194.14 | -2.518e+04 | -2.403e+04 | 2.556e+05 |
| 2 | 53 | 2.482e+05 | -2.512e+04 | -0.13 | -420.00 | 0.0 | 3.842e+04 | 7048.81 | 211.12 | -2.755e+04 | -3.743e+04 | -1.622e+05 |
| | | -1.622e+05 | -3.743e+04 | 5.59e-05 | 0.0 | 60.0 | 3.842e+04 | 6628.81 | 211.12 | -2.755e+04 | -2.512e+04 | 2.482e+05 |
| 2 | 60 | 2.525e+05 | -2.465e+04 | -0.13 | -420.00 | 0.0 | 3.826e+04 | 7090.69 | 202.84 | -2.621e+04 | -3.718e+04 | -1.603e+05 |
| | | -1.603e+05 | -3.718e+04 | 8.76e-05 | 0.0 | 60.0 | 3.826e+04 | 6670.69 | 202.84 | -2.621e+04 | -2.465e+04 | 2.525e+05 |
| 2 | 64 | 2.523e+05 | -2.456e+04 | -0.13 | -420.00 | 0.0 | 3.825e+04 | 7087.94 | 202.12 | -2.622e+04 | -3.721e+04 | -1.603e+05 |
| | | -1.603e+05 | -3.721e+04 | 8.16e-05 | 0.0 | 60.0 | 3.825e+04 | 6667.94 | 202.12 | -2.622e+04 | -2.456e+04 | 2.523e+05 |
| 2 | 65 | 2.483e+05 | -2.521e+04 | -0.13 | -420.00 | 0.0 | 3.843e+04 | 7051.55 | 211.83 | -2.755e+04 | -3.740e+04 | -1.622e+05 |
| | | -1.622e+05 | -3.740e+04 | 5.21e-05 | 0.0 | 60.0 | 3.843e+04 | 6631.55 | 211.83 | -2.755e+04 | -2.521e+04 | 2.483e+05 |
| 2 | 68 | 2.523e+05 | -2.456e+04 | -0.13 | -420.00 | 0.0 | 3.825e+04 | 7087.95 | 202.12 | -2.622e+04 | -3.721e+04 | -1.603e+05 |
| | | -1.603e+05 | -3.721e+04 | 8.16e-05 | 0.0 | 60.0 | 3.825e+04 | 6667.95 | 202.12 | -2.622e+04 | -2.456e+04 | 2.523e+05 |
| 2 | 85 | 2.503e+05 | -2.488e+04 | -0.13 | -420.00 | 0.0 | 3.834e+04 | 7069.75 | 206.98 | -2.688e+04 | -3.730e+04 | -1.613e+05 |
| | | -1.613e+05 | -3.730e+04 | 2.53e-05 | 0.0 | 60.0 | 3.834e+04 | 6649.75 | 206.98 | -2.688e+04 | -2.488e+04 | 2.503e+05 |
| 2 | 87 | 6.085e+05 | -6.029e+04 | -0.31 | -420.00 | 0.0 | 8.790e+04 | 1.653e+04 | 433.16 | -8.914e+04 | -8.628e+04 | -3.710e+05 |
| | | -3.710e+05 | -8.628e+04 | 1.06e-04 | 0.0 | 60.0 | 8.790e+04 | 1.611e+04 | 433.16 | -8.914e+04 | -6.029e+04 | 6.085e+05 |
| 2 | 88 | 2.383e+05 | -2.365e+04 | -0.12 | -420.00 | 0.0 | 3.651e+04 | 6741.95 | 196.89 | -2.554e+04 | -3.546e+04 | -1.537e+05 |
| | | -1.537e+05 | -3.546e+04 | -2.49e-05 | 0.0 | 60.0 | 3.651e+04 | 6321.95 | 196.89 | -2.554e+04 | -2.365e+04 | 2.383e+05 |
| 2 | 97 | 5.820e+05 | -5.770e+04 | -0.30 | -420.00 | 0.0 | 8.435e+04 | 1.584e+04 | 418.33 | -8.395e+04 | -8.280e+04 | -3.559e+05 |
| | | -3.559e+05 | -8.280e+04 | 9.89e-05 | 0.0 | 60.0 | 8.435e+04 | 1.542e+04 | 418.33 | -8.395e+04 | -5.770e+04 | 5.820e+05 |
| 2 | 98 | 2.495e+05 | -2.479e+04 | -0.13 | -420.00 | 0.0 | 3.821e+04 | 7046.33 | 206.26 | -2.679e+04 | -3.717e+04 | -1.607e+05 |
| | | -1.607e+05 | -3.717e+04 | 2.53e-05 | 0.0 | 60.0 | 3.821e+04 | 6626.33 | 206.26 | -2.679e+04 | -2.479e+04 | 2.495e+05 |
| 2 | 102 | 2.503e+05 | -2.488e+04 | -0.13 | -420.00 | 0.0 | 3.834e+04 | 7069.75 | 206.98 | -2.688e+04 | -3.730e+04 | -1.613e+05 |
| | | -1.613e+05 | -3.730e+04 | 2.53e-05 | 0.0 | 60.0 | 3.834e+04 | 6649.75 | 206.98 | -2.688e+04 | -2.488e+04 | 2.503e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|-----------|--------|------------|------------|-----------|
| 3 | 2 | 1.413e+06 | -4.684e+04 | -0.42 | -546.00 | 0.0 | 1.567e+05 | 2.213e+04 | 643.75 | -1.468e+05 | -8.546e+04 | 1.013e+05 |
| | | 1.013e+05 | -8.546e+04 | -8.70e-04 | 0.0 | 60.0 | 1.567e+05 | 2.159e+04 | 643.75 | -1.468e+05 | -4.684e+04 | 1.413e+06 |
| 3 | 7 | 3.752e+05 | -1.113e+04 | -0.11 | -420.00 | 0.0 | 4.417e+04 | 5930.40 | 198.46 | -2.705e+04 | -2.303e+04 | 3.200e+04 |
| | | 3.200e+04 | -2.303e+04 | -2.54e-04 | 0.0 | 60.0 | 4.417e+04 | 5510.40 | 198.46 | -2.705e+04 | -1.113e+04 | 3.752e+05 |
| 3 | 19 | 3.752e+05 | -1.113e+04 | -0.11 | -420.00 | 0.0 | 4.417e+04 | 5930.40 | 198.46 | -2.705e+04 | -2.304e+04 | 3.200e+04 |
| | | 3.200e+04 | -2.304e+04 | -2.54e-04 | 0.0 | 60.0 | 4.417e+04 | 5510.40 | 198.46 | -2.705e+04 | -1.113e+04 | 3.752e+05 |
| 3 | 28 | 4.091e+05 | -1.141e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6415.82 | 220.98 | -2.746e+04 | -2.426e+04 | 3.683e+04 |
| | | 3.683e+04 | -2.426e+04 | -4.41e-04 | 0.0 | 60.0 | 4.742e+04 | 5995.82 | 220.98 | -2.746e+04 | -1.141e+04 | 4.091e+05 |
| 3 | 29 | 3.999e+05 | -1.279e+04 | -0.12 | -420.00 | 0.0 | 4.776e+04 | 6333.68 | 209.27 | -3.100e+04 | -2.574e+04 | 3.246e+04 |
| | | 3.246e+04 | -2.574e+04 | -1.18e-04 | 0.0 | 60.0 | 4.776e+04 | 5913.68 | 209.27 | -3.100e+04 | -1.279e+04 | 3.999e+05 |
| 3 | 32 | 4.088e+05 | -1.127e+04 | -0.12 | -420.00 | 0.0 | 4.741e+04 | 6409.67 | 219.10 | -2.747e+04 | -2.403e+04 | 3.683e+04 |
| | | 3.683e+04 | -2.403e+04 | -4.28e-04 | 0.0 | 60.0 | 4.741e+04 | 5989.67 | 219.10 | -2.747e+04 | -1.127e+04 | 4.088e+05 |
| 3 | 33 | 3.999e+05 | -1.279e+04 | -0.12 | -420.00 | 0.0 | 4.776e+04 | 6333.66 | 209.27 | -3.100e+04 | -2.574e+04 | 3.246e+04 |
| | | 3.246e+04 | -2.574e+04 | -1.18e-04 | 0.0 | 60.0 | 4.776e+04 | 5913.66 | 209.27 | -3.100e+04 | -1.279e+04 | 3.999e+05 |
| 3 | 36 | 4.088e+05 | -1.127e+04 | -0.12 | -420.00 | 0.0 | 4.741e+04 | 6409.69 | 219.10 | -2.747e+04 | -2.403e+04 | 3.683e+04 |
| | | 3.683e+04 | -2.403e+04 | -4.28e-04 | 0.0 | 60.0 | 4.741e+04 | 5989.69 | 219.10 | -2.747e+04 | -1.127e+04 | 4.088e+05 |
| 3 | 60 | 4.061e+05 | -1.180e+04 | -0.12 | -420.00 | 0.0 | 4.752e+04 | 6388.39 | 216.76 | -2.854e+04 | -2.465e+04 | 3.547e+04 |
| | | 3.547e+04 | -2.465e+04 | -3.36e-04 | 0.0 | 60.0 | 4.752e+04 | 5968.39 | 216.76 | -2.854e+04 | -1.180e+04 | 4.061e+05 |
| 3 | 61 | 4.027e+05 | -1.232e+04 | -0.12 | -420.00 | 0.0 | 4.765e+04 | 6357.29 | 212.32 | -2.992e+04 | -2.521e+04 | 3.382e+04 |
| | | 3.382e+04 | -2.521e+04 | -2.14e-04 | 0.0 | 60.0 | 4.765e+04 | 5937.29 | 212.32 | -2.992e+04 | -1.232e+04 | 4.027e+05 |
| 3 | 64 | 4.060e+05 | -1.174e+04 | -0.12 | -420.00 | 0.0 | 4.752e+04 | 6386.06 | 216.05 | -2.854e+04 | -2.456e+04 | 3.547e+04 |
| | | 3.547e+04 | -2.456e+04 | -3.31e-04 | 0.0 | 60.0 | 4.752e+04 | 5966.06 | 216.05 | -2.854e+04 | -1.174e+04 | 4.060e+05 |
| 3 | 65 | 4.027e+05 | -1.232e+04 | -0.12 | -420.00 | 0.0 | 4.765e+04 | 6357.28 | 212.32 | -2.992e+04 | -2.521e+04 | 3.382e+04 |
| | | 3.382e+04 | -2.521e+04 | -2.14e-04 | 0.0 | 60.0 | 4.765e+04 | 5937.28 | 212.32 | -2.992e+04 | -1.232e+04 | 4.027e+05 |
| 3 | 68 | 4.060e+05 | -1.175e+04 | -0.12 | -420.00 | 0.0 | 4.752e+04 | 6386.07 | 216.05 | -2.854e+04 | -2.456e+04 | 3.547e+04 |
| | | 3.547e+04 | -2.456e+04 | -3.31e-04 | 0.0 | 60.0 | 4.752e+04 | 5966.07 | 216.05 | -2.854e+04 | -1.175e+04 | 4.060e+05 |
| 3 | 85 | 4.043e+05 | -1.203e+04 | -0.12 | -420.00 | 0.0 | 4.758e+04 | 6371.68 | 214.19 | -2.923e+04 | -2.488e+04 | 3.465e+04 |
| | | 3.465e+04 | -2.488e+04 | -2.73e-04 | 0.0 | 60.0 | 4.758e+04 | 5951.68 | 214.19 | -2.923e+04 | -1.203e+04 | 4.043e+05 |
| 3 | 87 | 9.959e+05 | -3.283e+04 | -0.30 | -420.00 | 0.0 | 1.108e+05 | 1.561e+04 | 457.73 | -1.018e+05 | -6.029e+04 | 7.214e+04 |
| | | 7.214e+04 | -6.029e+04 | -6.16e-04 | 0.0 | 60.0 | 1.108e+05 | 1.519e+04 | 457.73 | -1.018e+05 | -3.283e+04 | 9.959e+05 |
| 3 | 88 | 3.849e+05 | -1.143e+04 | -0.12 | -420.00 | 0.0 | 4.531e+04 | 6077.49 | 203.70 | -2.778e+04 | -2.365e+04 | 3.288e+04 |
| | | 3.288e+04 | -2.365e+04 | -2.60e-04 | 0.0 | 60.0 | 4.531e+04 | 5657.49 | 203.70 | -2.778e+04 | -1.143e+04 | 3.849e+05 |
| 3 | 94 | 3.849e+05 | -1.143e+04 | -0.12 | -420.00 | 0.0 | 4.531e+04 | 6077.50 | 203.70 | -2.778e+04 | -2.365e+04 | 3.288e+04 |
| | | 3.288e+04 | -2.365e+04 | -2.60e-04 | 0.0 | 60.0 | 4.531e+04 | 5657.50 | 203.70 | -2.778e+04 | -1.143e+04 | 3.849e+05 |
| 3 | 97 | 9.517e+05 | -3.122e+04 | -0.29 | -420.00 | 0.0 | 1.063e+05 | 1.491e+04 | 441.46 | -9.566e+04 | -5.770e+04 | 6.975e+04 |
| | | 6.975e+04 | -5.770e+04 | -5.92e-04 | 0.0 | 60.0 | 1.063e+05 | 1.449e+04 | 441.46 | -9.566e+04 | -3.122e+04 | 9.517e+05 |
| 3 | 98 | 4.030e+05 | -1.199e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6350.66 | 213.44 | -2.913e+04 | -2.479e+04 | 3.452e+04 |
| | | 3.452e+04 | -2.479e+04 | -2.72e-04 | 0.0 | 60.0 | 4.742e+04 | 5930.66 | 213.44 | -2.913e+04 | -1.199e+04 | 4.030e+05 |
| 3 | 101 | 4.030e+05 | -1.199e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6350.66 | 213.44 | -2.913e+04 | -2.480e+04 | 3.452e+04 |
| | | 3.452e+04 | -2.480e+04 | -2.72e-04 | 0.0 | 60.0 | 4.742e+04 | 5930.66 | 213.44 | -2.913e+04 | -1.199e+04 | 4.030e+05 |
| 3 | 102 | 4.043e+05 | -1.203e+04 | -0.12 | -420.00 | 0.0 | 4.758e+04 | 6371.68 | 214.19 | -2.923e+04 | -2.488e+04 | 3.465e+04 |
| | | 3.465e+04 | -2.488e+04 | -2.73e-04 | 0.0 | 60.0 | 4.758e+04 | 5951.68 | 214.19 | -2.923e+04 | -1.203e+04 | 4.043e+05 |
| 4 | 2 | 1.863e+06 | -2.184e+04 | -0.40 | -546.00 | 0.0 | 1.899e+05 | 2.074e+04 | 416.69 | -1.426e+05 | -4.684e+04 | 6.352e+05 |
| | | 6.352e+05 | -4.684e+04 | -1.24e-03 | 0.0 | 60.0 | 1.899e+05 | 2.019e+04 | 416.69 | -1.426e+05 | -2.184e+04 | 1.863e+06 |
| 4 | 7 | 4.798e+05 | -3348.75 | -0.11 | -420.00 | 0.0 | 5.246e+04 | 5185.47 | 129.64 | -2.534e+04 | -1.113e+04 | 1.813e+05 |
| | | 1.813e+05 | -1.113e+04 | -3.34e-04 | 0.0 | 60.0 | 5.246e+04 | 4765.47 | 129.64 | -2.534e+04 | -3348.75 | 4.798e+05 |
| 4 | 19 | 4.798e+05 | -3349.01 | -0.11 | -420.00 | 0.0 | 5.246e+04 | 5185.48 | 129.64 | -2.534e+04 | -1.113e+04 | 1.813e+05 |
| | | 1.813e+05 | -1.113e+04 | -3.34e-04 | 0.0 | 60.0 | 5.246e+04 | 4765.48 | 129.64 | -2.534e+04 | -3349.01 | 4.798e+05 |
| 4 | 24 | 5.208e+05 | -2592.54 | -0.11 | -420.00 | 0.0 | 5.627e+04 | 5603.23 | 154.30 | -2.565e+04 | -1.141e+04 | 1.938e+05 |
| | | 1.938e+05 | -1.141e+04 | -5.25e-04 | 0.0 | 60.0 | 5.627e+04 | 5183.23 | 154.30 | -2.565e+04 | -2592.54 | 5.208e+05 |
| 4 | 25 | 5.131e+05 | -4659.41 | -0.11 | -420.00 | 0.0 | 5.674e+04 | 5535.06 | 125.47 | -2.909e+04 | -1.265e+04 | 1.971e+05 |
| | | 1.971e+05 | -1.265e+04 | -1.94e-04 | 0.0 | 60.0 | 5.674e+04 | 5115.06 | 125.47 | -2.909e+04 | -4659.41 | 5.131e+05 |
| 4 | 27 | 5.199e+05 | -2594.18 | -0.11 | -420.00 | 0.0 | 5.633e+04 | 5598.53 | 154.38 | -2.567e+04 | -1.143e+04 | 1.931e+05 |
| | | 1.931e+05 | -1.143e+04 | -5.25e-04 | 0.0 | 60.0 | 5.633e+04 | 5178.53 | 154.38 | -2.567e+04 | -2594.18 | 5.199e+05 |
| 4 | 28 | 5.208e+05 | -2617.73 | -0.11 | -420.00 | 0.0 | 5.627e+04 | 5603.24 | 154.30 | -2.565e+04 | -1.141e+04 | 1.938e+05 |
| | | 1.938e+05 | -1.141e+04 | -5.25e-04 | 0.0 | 60.0 | 5.627e+04 | 5183.24 | 154.30 | -2.565e+04 | -2617.73 | 5.208e+05 |
| 4 | 29 | 5.134e+05 | -4302.13 | -0.11 | -420.00 | 0.0 | 5.670e+04 | 5539.16 | 126.96 | -2.910e+04 | -1.279e+04 | 1.971e+05 |
| | | 1.971e+05 | -1.279e+04 | -2.02e-04 | 0.0 | 60.0 | 5.670e+04 | 5119.16 | 126.96 | -2.910e+04 | -4302.13 | 5.134e+05 |
| 4 | 56 | 5.185e+05 | -3243.42 | -0.11 | -420.00 | 0.0 | 5.642e+04 | 5582.05 | 145.34 | -2.670e+04 | -1.180e+04 | 1.948e+05 |
| | | 1.948e+05 | -1.180e+04 | -4.22e-04 | 0.0 | 60.0 | 5.642e+04 | 5162.05 | 145.34 | -2.670e+04 | -3243.42 | 5.185e+05 |
| 4 | 57 | 5.155e+05 | -4024.11 | -0.11 | -420.00 | 0.0 | 5.659e+04 | 5556.25 | 134.43 | -2.804e+04 | -1.226e+04 | 1.961e+05 |
| | | 1.961e+05 | -1.226e+04 | -2.97e-04 | 0.0 | 60.0 | 5.659e+04 | 5136.25 | 134.43 | -2.804e+04 | -4024.11 | 5.155e+05 |
| 4 | 59 | 5.181e+05 | -3244.05 | -0.11 | -420.00 | 0.0 | 5.644e+04 | 5580.25 | 145.37 | -2.671e+04 | -1.181e+04 | 1.946e+05 |
| | | 1.946e+05 | -1.181e+04 | -4.22e-04 | 0.0 | 60.0 | 5.644e+04 | 5160.25 | 145.37 | -2.671e+04 | -3244.05 | 5.181e+05 |
| 4 | 60 | 5.185e+05 | -3253.02 | -0.11 | -420.00 | 0.0 | 5.642e+04 | 5582.05 | 145.34 | -2.670e+04 | -1.180e+04 | 1.948e+05 |
| | | 1.948e+05 | -1.180e+04 | -4.22e-04 | 0.0 | 60.0 | 5.642e+04 | 5162.05 | 145.34 | -2.670e+04 | -3253.02 | 5.185e+05 |
| 4 | 61 | 5.156e+05 | -3889.26 | -0.11 | -420.00 | 0.0 | 5.658e+04 | 5557.80 | 135.00 | -2.804e+04 | -1.232e+04 | 1.960e+05 |
| | | 1.960e+05 | -1.232e+04 | -3.00e-04 | 0.0 | 60.0 | 5.658e+04 | 5137.80 | 135.00 | -2.804e+04 | -3889.26 | 5.156e+05 |
| 4 | 85 | 5.170e+05 | -3638.57 | -0.11 | -420.00 | 0.0 | 5.650e+04 | 5569.15 | 139.89 | -2.737e+04 | -1.203e+04 | 1.954e+05 |
| | | 1.954e+05 | -1.203e+04 | -3.59e-04 | 0.0 | 60.0 | 5.650e+04 | 5149.15 | 139.89 | -2.737e+04 | -3638.57 | 5.170e+05 |
| 4 | 87 | 1.311e+06 | -1.504e+04 | -0.28 | -420.00 | 0.0 | 1.341e+05 | 1.457e+04 | 296.44 | -9.869e+04 | -3.283e+04 | 4.496e+05 |
| | | 4.496e+05 | -3.283e+04 | -8.74e-04 | 0.0 | 60.0 | 1.341e+05 | 1.415e+04 | 296.44 | -9.869e+04 | -1.504e+04 | 1.311e+06 |
| 4 | 88 | 4.922e+05 | -3445.35 | -0.11 | -420.00 | 0.0 | 5.381e+04 | 5313.36 | 133.05 | -2.602e+04 | -1.143e+04 | 1.860e+05 |
| | | 1.860e+05 | -1.143e+04 | -3.42e-04 | 0.0 | 60.0 | 5.381e+04 | 4893.36 | 133.05 | -2.602e+04 | -3445.35 | 4.922e+05 |
| 4 | 94 | 4.922e+05 | -3445.53 | -0.11 | -420.00 | 0.0 | 5.381e+04 | 5313.37 | 133.06 | -2.601e+04 | -1.143e+04 | 1.860e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|-----------|--------|------------|------------|-----------|
| | | 1.860e+05 | -1.143e+04 | -3.42e-04 | 0.0 | 60.0 | 5.381e+04 | 4893.37 | 133.06 | -2.601e+04 | -3445.53 | 4.922e+05 |
| 4 | 97 | 1.251e+06 | -1.405e+04 | -0.27 | -420.00 | 0.0 | 1.284e+05 | 1.386e+04 | 286.06 | -9.260e+04 | -3.122e+04 | 4.314e+05 |
| | | 4.314e+05 | -3.122e+04 | -8.35e-04 | 0.0 | 60.0 | 1.284e+05 | 1.344e+04 | 286.06 | -9.260e+04 | -1.405e+04 | 1.251e+06 |
| 4 | 98 | 5.152e+05 | -3624.75 | -0.11 | -420.00 | 0.0 | 5.631e+04 | 5550.88 | 139.40 | -2.727e+04 | -1.199e+04 | 1.948e+05 |
| | | 1.948e+05 | -1.199e+04 | -3.58e-04 | 0.0 | 60.0 | 5.631e+04 | 5130.88 | 139.40 | -2.727e+04 | -3624.75 | 5.152e+05 |
| 4 | 101 | 5.152e+05 | -3624.84 | -0.11 | -420.00 | 0.0 | 5.631e+04 | 5550.88 | 139.40 | -2.727e+04 | -1.199e+04 | 1.948e+05 |
| | | 1.948e+05 | -1.199e+04 | -3.58e-04 | 0.0 | 60.0 | 5.631e+04 | 5130.88 | 139.40 | -2.727e+04 | -3624.84 | 5.152e+05 |
| 4 | 102 | 5.170e+05 | -3638.57 | -0.11 | -420.00 | 0.0 | 5.650e+04 | 5569.15 | 139.89 | -2.737e+04 | -1.203e+04 | 1.954e+05 |
| | | 1.954e+05 | -1.203e+04 | -3.59e-04 | 0.0 | 60.0 | 5.650e+04 | 5149.15 | 139.89 | -2.737e+04 | -3638.57 | 5.170e+05 |
| 5 | 1 | 7.508e+05 | 1083.09 | -0.13 | -546.00 | 0.0 | 7.968e+04 | 5903.73 | 92.75 | -2.975e+04 | -4481.78 | 4.129e+05 |
| | | 4.129e+05 | -4481.78 | -4.44e-04 | 0.0 | 60.0 | 7.968e+04 | 5357.73 | 92.75 | -2.975e+04 | 1083.09 | 7.508e+05 |
| 5 | 2 | 2.274e+06 | -7683.52 | -0.35 | -546.00 | 0.0 | 2.214e+05 | 1.943e+04 | 235.91 | -1.264e+05 | -2.184e+04 | 1.124e+06 |
| | | 1.124e+06 | -2.184e+04 | -1.28e-03 | 0.0 | 60.0 | 2.214e+05 | 1.888e+04 | 235.91 | -1.264e+05 | -7683.52 | 2.274e+06 |
| 5 | 7 | 5.627e+05 | 819.72 | -0.10 | -420.00 | 0.0 | 5.973e+04 | 4430.47 | 69.47 | -2.228e+04 | -3348.75 | 3.095e+05 |
| | | 3.095e+05 | -3348.75 | -3.33e-04 | 0.0 | 60.0 | 5.973e+04 | 4010.47 | 69.47 | -2.228e+04 | 819.72 | 5.627e+05 |
| 5 | 19 | 5.627e+05 | 819.63 | -0.10 | -420.00 | 0.0 | 5.973e+04 | 4430.48 | 69.48 | -2.227e+04 | -3349.02 | 3.095e+05 |
| | | 3.095e+05 | -3349.02 | -3.33e-04 | 0.0 | 60.0 | 5.973e+04 | 4010.48 | 69.48 | -2.227e+04 | 819.63 | 5.627e+05 |
| 5 | 21 | 6.035e+05 | -1010.59 | -0.10 | -420.00 | 0.0 | 6.408e+04 | 4729.04 | 58.72 | -2.579e+04 | -4684.60 | 3.350e+05 |
| | | 3.350e+05 | -4684.60 | -2.03e-04 | 0.0 | 60.0 | 6.408e+04 | 4309.04 | 58.72 | -2.579e+04 | -1010.59 | 6.035e+05 |
| 5 | 24 | 6.090e+05 | 2728.94 | -0.10 | -420.00 | 0.0 | 6.459e+04 | 4782.77 | 91.20 | -2.232e+04 | -2592.55 | 3.320e+05 |
| | | 3.320e+05 | -2592.55 | -5.13e-04 | 0.0 | 60.0 | 6.459e+04 | 4362.77 | 91.20 | -2.232e+04 | 2728.94 | 6.090e+05 |
| 5 | 26 | 6.044e+05 | -1008.88 | -0.10 | -420.00 | 0.0 | 6.402e+04 | 4730.66 | 58.69 | -2.579e+04 | -4682.96 | 3.358e+05 |
| | | 3.358e+05 | -4682.96 | -2.03e-04 | 0.0 | 60.0 | 6.402e+04 | 4310.66 | 58.69 | -2.579e+04 | -1008.88 | 6.044e+05 |
| 5 | 27 | 6.081e+05 | 2727.23 | -0.10 | -420.00 | 0.0 | 6.465e+04 | 4781.16 | 91.24 | -2.233e+04 | -2594.19 | 3.312e+05 |
| | | 3.312e+05 | -2594.19 | -5.13e-04 | 0.0 | 60.0 | 6.465e+04 | 4361.16 | 91.24 | -2.233e+04 | 2727.23 | 6.081e+05 |
| 5 | 28 | 6.090e+05 | 2701.90 | -0.10 | -420.00 | 0.0 | 6.459e+04 | 4782.77 | 91.20 | -2.232e+04 | -2617.74 | 3.320e+05 |
| | | 3.320e+05 | -2617.74 | -5.13e-04 | 0.0 | 60.0 | 6.459e+04 | 4362.77 | 91.20 | -2.232e+04 | 2701.90 | 6.090e+05 |
| 5 | 53 | 6.052e+05 | 152.02 | -0.10 | -420.00 | 0.0 | 6.424e+04 | 4745.76 | 68.82 | -2.473e+04 | -4033.73 | 3.341e+05 |
| | | 3.341e+05 | -4033.73 | -2.99e-04 | 0.0 | 60.0 | 6.424e+04 | 4325.76 | 68.82 | -2.473e+04 | 152.02 | 6.052e+05 |
| 5 | 56 | 6.073e+05 | 1566.33 | -0.10 | -420.00 | 0.0 | 6.443e+04 | 4766.05 | 81.10 | -2.338e+04 | -3243.42 | 3.330e+05 |
| | | 3.330e+05 | -3243.42 | -4.17e-04 | 0.0 | 60.0 | 6.443e+04 | 4346.05 | 81.10 | -2.338e+04 | 1566.33 | 6.073e+05 |
| 5 | 58 | 6.056e+05 | 152.67 | -0.10 | -420.00 | 0.0 | 6.421e+04 | 4746.38 | 68.81 | -2.473e+04 | -4033.09 | 3.344e+05 |
| | | 3.344e+05 | -4033.09 | -2.99e-04 | 0.0 | 60.0 | 6.421e+04 | 4326.38 | 68.81 | -2.473e+04 | 152.67 | 6.056e+05 |
| 5 | 59 | 6.070e+05 | 1565.68 | -0.10 | -420.00 | 0.0 | 6.445e+04 | 4765.43 | 81.12 | -2.338e+04 | -3244.05 | 3.326e+05 |
| | | 3.326e+05 | -3244.05 | -4.17e-04 | 0.0 | 60.0 | 6.445e+04 | 4345.43 | 81.12 | -2.338e+04 | 1565.68 | 6.070e+05 |
| 5 | 60 | 6.073e+05 | 1556.02 | -0.10 | -420.00 | 0.0 | 6.443e+04 | 4766.05 | 81.10 | -2.338e+04 | -3253.03 | 3.330e+05 |
| | | 3.330e+05 | -3253.03 | -4.17e-04 | 0.0 | 60.0 | 6.443e+04 | 4346.05 | 81.10 | -2.338e+04 | 1556.02 | 6.073e+05 |
| 5 | 85 | 6.063e+05 | 859.17 | -0.10 | -420.00 | 0.0 | 6.433e+04 | 4755.91 | 74.96 | -2.406e+04 | -3638.57 | 3.335e+05 |
| | | 3.335e+05 | -3638.57 | -3.58e-04 | 0.0 | 60.0 | 6.433e+04 | 4335.91 | 74.96 | -2.406e+04 | 859.17 | 6.063e+05 |
| 5 | 86 | 5.814e+05 | 836.61 | -0.10 | -420.00 | 0.0 | 6.170e+04 | 4569.94 | 71.83 | -2.304e+04 | -3473.00 | 3.198e+05 |
| | | 3.198e+05 | -3473.00 | -3.43e-04 | 0.0 | 60.0 | 6.170e+04 | 4149.94 | 71.83 | -2.304e+04 | 836.61 | 5.814e+05 |
| 5 | 87 | 1.597e+06 | -5007.79 | -0.25 | -420.00 | 0.0 | 1.562e+05 | 1.359e+04 | 167.27 | -8.746e+04 | -1.504e+04 | 7.940e+05 |
| | | 7.940e+05 | -1.504e+04 | -9.02e-04 | 0.0 | 60.0 | 1.562e+05 | 1.317e+04 | 167.27 | -8.746e+04 | -5007.79 | 1.597e+06 |
| 5 | 88 | 5.772e+05 | 832.87 | -0.10 | -420.00 | 0.0 | 6.126e+04 | 4538.95 | 71.30 | -2.287e+04 | -3445.36 | 3.175e+05 |
| | | 3.175e+05 | -3445.36 | -3.41e-04 | 0.0 | 60.0 | 6.126e+04 | 4118.95 | 71.30 | -2.287e+04 | 832.87 | 5.772e+05 |
| 5 | 94 | 5.772e+05 | 832.81 | -0.10 | -420.00 | 0.0 | 6.126e+04 | 4538.95 | 71.31 | -2.287e+04 | -3445.54 | 3.175e+05 |
| | | 3.175e+05 | -3445.54 | -3.41e-04 | 0.0 | 60.0 | 6.126e+04 | 4118.95 | 71.31 | -2.287e+04 | 832.81 | 5.772e+05 |
| 5 | 96 | 6.063e+05 | 859.17 | -0.10 | -420.00 | 0.0 | 6.433e+04 | 4755.91 | 74.96 | -2.406e+04 | -3638.57 | 3.335e+05 |
| | | 3.335e+05 | -3638.57 | -3.58e-04 | 0.0 | 60.0 | 6.433e+04 | 4335.91 | 74.96 | -2.406e+04 | 859.17 | 6.063e+05 |
| 5 | 97 | 1.520e+06 | -4400.79 | -0.24 | -420.00 | 0.0 | 1.494e+05 | 1.287e+04 | 160.86 | -8.204e+04 | -1.405e+04 | 7.603e+05 |
| | | 7.603e+05 | -1.405e+04 | -8.60e-04 | 0.0 | 60.0 | 1.494e+05 | 1.245e+04 | 160.86 | -8.204e+04 | -4400.79 | 1.520e+06 |
| 5 | 98 | 6.042e+05 | 857.30 | -0.10 | -420.00 | 0.0 | 6.411e+04 | 4740.41 | 74.70 | -2.397e+04 | -3624.84 | 3.324e+05 |
| | | 3.324e+05 | -3624.84 | -3.57e-04 | 0.0 | 60.0 | 6.411e+04 | 4320.41 | 74.70 | -2.397e+04 | 857.30 | 6.042e+05 |
| 5 | 101 | 6.042e+05 | 857.27 | -0.10 | -420.00 | 0.0 | 6.411e+04 | 4740.41 | 74.70 | -2.397e+04 | -3624.84 | 3.324e+05 |
| | | 3.324e+05 | -3624.84 | -3.57e-04 | 0.0 | 60.0 | 6.411e+04 | 4320.41 | 74.70 | -2.397e+04 | 857.27 | 6.042e+05 |
| 5 | 102 | 6.063e+05 | 859.17 | -0.10 | -420.00 | 0.0 | 6.433e+04 | 4755.91 | 74.96 | -2.406e+04 | -3638.57 | 3.335e+05 |
| | | 3.335e+05 | -3638.57 | -3.58e-04 | 0.0 | 60.0 | 6.433e+04 | 4335.91 | 74.96 | -2.406e+04 | 859.17 | 6.063e+05 |
| 6 | 1 | 8.371e+05 | 3550.50 | -0.11 | -546.00 | 0.0 | 8.782e+04 | 4889.33 | 41.12 | -2.499e+04 | 1083.08 | 5.601e+05 |
| | | 5.601e+05 | 1083.08 | -3.88e-04 | 0.0 | 60.0 | 8.782e+04 | 4343.33 | 41.12 | -2.499e+04 | 3550.50 | 8.371e+05 |
| 6 | 2 | 2.665e+06 | -266.55 | -0.30 | -546.00 | 0.0 | 2.504e+05 | 1.813e+04 | 123.62 | -1.020e+05 | -7683.53 | 1.594e+06 |
| | | 1.594e+06 | -7683.53 | -1.13e-03 | 0.0 | 60.0 | 2.504e+05 | 1.758e+04 | 123.62 | -1.020e+05 | -266.55 | 2.665e+06 |
| 6 | 7 | 6.274e+05 | 2667.80 | -0.08 | -420.00 | 0.0 | 6.582e+04 | 3670.13 | 30.80 | -1.871e+04 | 819.71 | 4.197e+05 |
| | | 4.197e+05 | 819.71 | -2.91e-04 | 0.0 | 60.0 | 6.582e+04 | 3250.13 | 30.80 | -1.871e+04 | 2667.80 | 6.274e+05 |
| 6 | 19 | 6.274e+05 | 2667.84 | -0.08 | -420.00 | 0.0 | 6.582e+04 | 3670.14 | 30.80 | -1.871e+04 | 819.62 | 4.197e+05 |
| | | 4.197e+05 | 819.62 | -2.91e-04 | 0.0 | 60.0 | 6.582e+04 | 3250.14 | 30.80 | -1.871e+04 | 2667.84 | 6.274e+05 |
| 6 | 20 | 2.456e+06 | -1149.21 | -0.27 | -420.00 | 0.0 | 2.284e+05 | 1.691e+04 | 113.30 | -9.573e+04 | -1149.21 | 2.456e+06 |
| | | 1.454e+06 | -7946.98 | -1.03e-03 | 0.0 | 60.0 | 2.284e+05 | 1.649e+04 | 113.30 | -9.573e+04 | -1149.21 | 2.456e+06 |
| 6 | 21 | 6.768e+05 | 122.94 | -0.09 | -420.00 | 0.0 | 7.057e+04 | 3910.66 | 17.43 | -2.195e+04 | -1010.59 | 4.534e+05 |
| | | 4.534e+05 | -1010.59 | -1.76e-04 | 0.0 | 60.0 | 7.057e+04 | 3490.66 | 17.43 | -2.195e+04 | 122.94 | 6.768e+05 |
| 6 | 24 | 6.750e+05 | 5584.55 | -0.09 | -420.00 | 0.0 | 7.123e+04 | 3963.23 | 49.06 | -1.846e+04 | -2728.93 | 4.512e+05 |
| | | 4.512e+05 | -2728.93 | -4.50e-04 | 0.0 | 60.0 | 7.123e+04 | 3543.23 | 49.06 | -1.846e+04 | 5584.55 | 6.750e+05 |
| 6 | 26 | 6.776e+05 | 124.54 | -0.09 | -420.00 | 0.0 | 7.051e+04 | 3912.28 | 17.41 | -2.195e+04 | -1008.89 | 4.544e+05 |
| | | 4.544e+05 | -1008.89 | -1.76e-04 | 0.0 | 60.0 | 7.051e+04 | 3492.28 | 17.41 | -2.195e+04 | 124.54 | 6.776e+05 |
| 6 | 27 | 6.742e+05 | 5582.94 | -0.09 | -420.00 | 0.0 | 7.129e+04 | 3961.60 | 49.08 | -1.846e+04 | -2727.22 | 4.502e+05 |
| | | 4.502e+05 | -2727.22 | -4.50e-04 | 0.0 | 60.0 | 7.129e+04 | 3541.60 | 49.08 | -1.846e+04 | 5582.94 | 6.742e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|-----------|-------|------------|----------|-----------|
| 6 | 46 | 6.777e+05 | 1997.99 | -0.09 | -420.00 | 0.0 | 7.070e+04 | 3932.03 | 28.46 | -2.069e+04 | 260.33 | 4.543e+05 |
| | | 4.543e+05 | 260.33 | -2.72e-04 | 0.0 | 60.0 | 7.070e+04 | 3512.03 | 28.46 | -2.069e+04 | 1997.99 | 6.777e+05 |
| 6 | 53 | 6.763e+05 | 1820.80 | -0.09 | -420.00 | 0.0 | 7.078e+04 | 3927.04 | 27.27 | -2.087e+04 | 152.01 | 4.527e+05 |
| | | 4.527e+05 | 152.01 | -2.61e-04 | 0.0 | 60.0 | 7.078e+04 | 3507.04 | 27.27 | -2.087e+04 | 1820.80 | 6.763e+05 |
| 6 | 56 | 6.756e+05 | 3886.69 | -0.09 | -420.00 | 0.0 | 7.103e+04 | 3946.85 | 39.22 | -1.953e+04 | 1566.33 | 4.519e+05 |
| | | 4.519e+05 | 1566.33 | -3.65e-04 | 0.0 | 60.0 | 7.103e+04 | 3526.85 | 39.22 | -1.953e+04 | 3886.69 | 6.756e+05 |
| 6 | 58 | 6.766e+05 | 1821.42 | -0.09 | -420.00 | 0.0 | 7.076e+04 | 3927.67 | 27.26 | -2.087e+04 | 152.66 | 4.531e+05 |
| | | 4.531e+05 | 152.66 | -2.61e-04 | 0.0 | 60.0 | 7.076e+04 | 3507.67 | 27.26 | -2.087e+04 | 1821.42 | 6.766e+05 |
| 6 | 59 | 6.753e+05 | 3886.07 | -0.09 | -420.00 | 0.0 | 7.105e+04 | 3946.22 | 39.23 | -1.953e+04 | 1565.67 | 4.515e+05 |
| | | 4.515e+05 | 1565.67 | -3.65e-04 | 0.0 | 60.0 | 7.105e+04 | 3526.22 | 39.23 | -1.953e+04 | 3886.07 | 6.753e+05 |
| 6 | 78 | 6.766e+05 | 2529.95 | -0.09 | -420.00 | 0.0 | 7.082e+04 | 3935.11 | 31.44 | -2.039e+04 | 632.57 | 4.531e+05 |
| | | 4.531e+05 | 632.57 | -2.97e-04 | 0.0 | 60.0 | 7.082e+04 | 3515.11 | 31.44 | -2.039e+04 | 2529.95 | 6.766e+05 |
| 6 | 85 | 6.759e+05 | 2853.74 | -0.09 | -420.00 | 0.0 | 7.090e+04 | 3936.94 | 33.24 | -2.020e+04 | 859.17 | 4.523e+05 |
| | | 4.523e+05 | 859.17 | -3.13e-04 | 0.0 | 60.0 | 7.090e+04 | 3516.94 | 33.24 | -2.020e+04 | 2853.74 | 6.759e+05 |
| 6 | 86 | 6.482e+05 | 2747.50 | -0.08 | -420.00 | 0.0 | 6.800e+04 | 3784.48 | 31.85 | -1.935e+04 | 836.61 | 4.337e+05 |
| | | 4.337e+05 | 836.61 | -3.00e-04 | 0.0 | 60.0 | 6.800e+04 | 3364.48 | 31.85 | -1.935e+04 | 2747.50 | 6.482e+05 |
| 6 | 87 | 1.867e+06 | 202.80 | -0.21 | -420.00 | 0.0 | 1.764e+05 | 1.261e+04 | 86.84 | -7.070e+04 | -5007.80 | 1.123e+06 |
| | | 1.123e+06 | -5007.80 | -7.94e-04 | 0.0 | 60.0 | 1.764e+05 | 1.219e+04 | 86.84 | -7.070e+04 | 202.80 | 1.867e+06 |
| 6 | 88 | 6.435e+05 | 2729.78 | -0.08 | -420.00 | 0.0 | 6.752e+04 | 3759.07 | 31.62 | -1.921e+04 | 832.86 | 4.306e+05 |
| | | 4.306e+05 | 832.86 | -2.98e-04 | 0.0 | 60.0 | 6.752e+04 | 3339.07 | 31.62 | -1.921e+04 | 2729.78 | 6.435e+05 |
| 6 | 94 | 6.435e+05 | 2729.81 | -0.08 | -420.00 | 0.0 | 6.752e+04 | 3759.07 | 31.62 | -1.921e+04 | 832.80 | 4.306e+05 |
| | | 4.306e+05 | 832.80 | -2.98e-04 | 0.0 | 60.0 | 6.752e+04 | 3339.07 | 31.62 | -1.921e+04 | 2729.81 | 6.435e+05 |
| 6 | 95 | 1.862e+06 | 185.11 | -0.21 | -420.00 | 0.0 | 1.759e+05 | 1.259e+04 | 86.61 | -7.055e+04 | -5011.60 | 1.120e+06 |
| | | 1.120e+06 | -5011.60 | -7.92e-04 | 0.0 | 60.0 | 1.759e+05 | 1.217e+04 | 86.61 | -7.055e+04 | 185.11 | 1.862e+06 |
| 6 | 96 | 6.759e+05 | 2853.74 | -0.09 | -420.00 | 0.0 | 7.090e+04 | 3936.94 | 33.24 | -2.020e+04 | 859.17 | 4.523e+05 |
| | | 4.523e+05 | 859.17 | -3.13e-04 | 0.0 | 60.0 | 7.090e+04 | 3516.94 | 33.24 | -2.020e+04 | 2853.74 | 6.759e+05 |
| 6 | 97 | 1.773e+06 | 563.51 | -0.20 | -420.00 | 0.0 | 1.685e+05 | 1.188e+04 | 82.74 | -6.641e+04 | -4400.80 | 1.073e+06 |
| | | 1.073e+06 | -4400.80 | -7.58e-04 | 0.0 | 60.0 | 1.685e+05 | 1.146e+04 | 82.74 | -6.641e+04 | 563.51 | 1.773e+06 |
| 6 | 98 | 6.736e+05 | 2844.89 | -0.09 | -420.00 | 0.0 | 7.066e+04 | 3924.24 | 33.13 | -2.013e+04 | 857.30 | 4.508e+05 |
| | | 4.508e+05 | 857.30 | -3.12e-04 | 0.0 | 60.0 | 7.066e+04 | 3504.24 | 33.13 | -2.013e+04 | 2844.89 | 6.736e+05 |
| 6 | 101 | 6.736e+05 | 2844.90 | -0.09 | -420.00 | 0.0 | 7.066e+04 | 3924.24 | 33.13 | -2.013e+04 | 857.27 | 4.508e+05 |
| | | 4.508e+05 | 857.27 | -3.12e-04 | 0.0 | 60.0 | 7.066e+04 | 3504.24 | 33.13 | -2.013e+04 | 2844.90 | 6.736e+05 |
| 6 | 102 | 6.759e+05 | 2853.74 | -0.09 | -420.00 | 0.0 | 7.090e+04 | 3936.94 | 33.24 | -2.020e+04 | 859.17 | 4.523e+05 |
| | | 4.523e+05 | 859.17 | -3.13e-04 | 0.0 | 60.0 | 7.090e+04 | 3516.94 | 33.24 | -2.020e+04 | 2853.74 | 6.759e+05 |
| 7 | 1 | 8.999e+05 | 4345.01 | -0.09 | -546.00 | 0.0 | 9.435e+04 | 3869.12 | 13.24 | -1.987e+04 | 3550.49 | 6.842e+05 |
| | | 6.842e+05 | 3550.49 | -3.09e-04 | 0.0 | 60.0 | 9.435e+04 | 3323.12 | 13.24 | -1.987e+04 | 4345.01 | 8.999e+05 |
| 7 | 2 | 2.838e+06 | 2804.53 | -0.24 | -546.00 | 0.0 | 2.737e+05 | 1.223e+04 | 51.18 | -7.033e+04 | -266.56 | 2.121e+06 |
| | | 2.121e+06 | -266.56 | -8.49e-04 | 0.0 | 60.0 | 2.737e+05 | 1.168e+04 | 51.18 | -7.033e+04 | 2804.53 | 2.838e+06 |
| 7 | 7 | 6.745e+05 | 3262.61 | -0.07 | -420.00 | 0.0 | 7.071e+04 | 2905.44 | 9.91 | -1.488e+04 | 2667.80 | 5.128e+05 |
| | | 5.128e+05 | 2667.80 | -2.31e-04 | 0.0 | 60.0 | 7.071e+04 | 2485.44 | 9.91 | -1.488e+04 | 3262.61 | 6.745e+05 |
| 7 | 8 | 2.613e+06 | 1722.13 | -0.21 | -420.00 | 0.0 | 2.500e+05 | 1.127e+04 | 47.86 | -6.535e+04 | -1149.25 | 1.949e+06 |
| | | 1.949e+06 | -1149.25 | -7.72e-04 | 0.0 | 60.0 | 2.500e+05 | 1.085e+04 | 47.86 | -6.535e+04 | 1722.13 | 2.613e+06 |
| 7 | 21 | 7.275e+05 | 122.94 | -0.07 | -420.00 | 0.0 | 7.578e+04 | 3084.97 | -3.14 | -1.771e+04 | 122.94 | 5.533e+05 |
| | | 5.533e+05 | 1.64 | -1.38e-04 | 0.0 | 60.0 | 7.578e+04 | 2664.97 | -3.14 | -1.771e+04 | 1.64 | 7.275e+05 |
| 7 | 24 | 7.258e+05 | 6991.41 | -0.07 | -420.00 | 0.0 | 7.656e+04 | 3141.61 | 24.56 | -1.441e+04 | 5584.54 | 5.516e+05 |
| | | 5.516e+05 | 5584.54 | -3.61e-04 | 0.0 | 60.0 | 7.656e+04 | 2721.61 | 24.56 | -1.441e+04 | 6991.41 | 7.258e+05 |
| 7 | 26 | 7.282e+05 | 124.54 | -0.07 | -420.00 | 0.0 | 7.573e+04 | 3089.68 | -3.14 | -1.771e+04 | 124.54 | 5.542e+05 |
| | | 5.542e+05 | 2.99 | -1.37e-04 | 0.0 | 60.0 | 7.573e+04 | 2669.68 | -3.14 | -1.771e+04 | 2.99 | 7.282e+05 |
| 7 | 27 | 7.252e+05 | 6990.06 | -0.07 | -420.00 | 0.0 | 7.661e+04 | 3136.89 | 24.57 | -1.441e+04 | 5582.94 | 5.507e+05 |
| | | 5.507e+05 | 5582.94 | -3.61e-04 | 0.0 | 60.0 | 7.661e+04 | 2716.89 | 24.57 | -1.441e+04 | 6990.06 | 7.252e+05 |
| 7 | 34 | 7.282e+05 | 668.50 | -0.07 | -420.00 | 0.0 | 7.579e+04 | 3088.45 | -4.33 | -1.764e+04 | 668.50 | 5.543e+05 |
| | | 5.543e+05 | 465.63 | -1.29e-04 | 0.0 | 60.0 | 7.579e+04 | 2668.45 | -4.33 | -1.764e+04 | 465.63 | 7.282e+05 |
| 7 | 51 | 7.253e+05 | 4437.46 | -0.07 | -420.00 | 0.0 | 7.637e+04 | 3113.57 | 15.14 | -1.565e+04 | 3546.30 | 5.505e+05 |
| | | 5.505e+05 | 3546.30 | -2.86e-04 | 0.0 | 60.0 | 7.637e+04 | 2693.57 | 15.14 | -1.565e+04 | 4437.46 | 7.253e+05 |
| 7 | 53 | 7.270e+05 | 2174.65 | -0.07 | -420.00 | 0.0 | 7.602e+04 | 3102.62 | 5.48 | -1.669e+04 | 1820.80 | 5.528e+05 |
| | | 5.528e+05 | 1820.80 | -2.07e-04 | 0.0 | 60.0 | 7.602e+04 | 2682.62 | 5.48 | -1.669e+04 | 2174.65 | 7.270e+05 |
| 7 | 56 | 7.264e+05 | 4818.40 | -0.07 | -420.00 | 0.0 | 7.632e+04 | 3123.95 | 15.95 | -1.543e+04 | 3886.68 | 5.522e+05 |
| | | 5.522e+05 | 3886.68 | -2.91e-04 | 0.0 | 60.0 | 7.632e+04 | 2703.95 | 15.95 | -1.543e+04 | 4818.40 | 7.264e+05 |
| 7 | 58 | 7.272e+05 | 2175.16 | -0.07 | -420.00 | 0.0 | 7.600e+04 | 3104.43 | 5.48 | -1.669e+04 | 1821.41 | 5.532e+05 |
| | | 5.532e+05 | 1821.41 | -2.07e-04 | 0.0 | 60.0 | 7.600e+04 | 2684.43 | 5.48 | -1.669e+04 | 2175.16 | 7.272e+05 |
| 7 | 59 | 7.261e+05 | 4817.89 | -0.07 | -420.00 | 0.0 | 7.634e+04 | 3122.15 | 15.95 | -1.543e+04 | 3886.07 | 5.518e+05 |
| | | 5.518e+05 | 3886.07 | -2.91e-04 | 0.0 | 60.0 | 7.634e+04 | 2702.15 | 15.95 | -1.543e+04 | 4817.89 | 7.261e+05 |
| 7 | 66 | 7.273e+05 | 2349.97 | -0.07 | -420.00 | 0.0 | 7.603e+04 | 3103.96 | 5.03 | -1.667e+04 | 2026.88 | 5.532e+05 |
| | | 5.532e+05 | 2026.88 | -2.04e-04 | 0.0 | 60.0 | 7.603e+04 | 2683.96 | 5.03 | -1.667e+04 | 2349.97 | 7.273e+05 |
| 7 | 83 | 7.261e+05 | 3852.56 | -0.07 | -420.00 | 0.0 | 7.624e+04 | 3113.33 | 12.38 | -1.590e+04 | 3115.89 | 5.517e+05 |
| | | 5.517e+05 | 3115.89 | -2.63e-04 | 0.0 | 60.0 | 7.624e+04 | 2693.33 | 12.38 | -1.590e+04 | 3852.56 | 7.261e+05 |
| 7 | 85 | 7.267e+05 | 3496.52 | -0.07 | -420.00 | 0.0 | 7.617e+04 | 3113.29 | 10.71 | -1.606e+04 | 2853.74 | 5.525e+05 |
| | | 5.525e+05 | 2853.74 | -2.49e-04 | 0.0 | 60.0 | 7.617e+04 | 2693.29 | 10.71 | -1.606e+04 | 3496.52 | 7.267e+05 |
| 7 | 86 | 6.969e+05 | 3362.88 | -0.07 | -420.00 | 0.0 | 7.305e+04 | 2994.52 | 10.26 | -1.539e+04 | 2747.49 | 5.298e+05 |
| | | 5.298e+05 | 2747.49 | -2.39e-04 | 0.0 | 60.0 | 7.305e+04 | 2574.52 | 10.26 | -1.539e+04 | 3362.88 | 6.969e+05 |
| 7 | 87 | 1.989e+06 | 2335.89 | -0.17 | -420.00 | 0.0 | 1.926e+05 | 8567.91 | 35.55 | -4.903e+04 | 202.79 | 1.488e+06 |
| | | 1.488e+06 | 202.79 | -5.99e-04 | 0.0 | 60.0 | 1.926e+05 | 8147.91 | 35.55 | -4.903e+04 | 2335.89 | 1.989e+06 |
| 7 | 88 | 6.919e+05 | 3340.58 | -0.07 | -420.00 | 0.0 | 7.253e+04 | 2974.72 | 10.18 | -1.528e+04 | 2729.78 | 5.260e+05 |
| | | 5.260e+05 | 2729.78 | -2.37e-04 | 0.0 | 60.0 | 7.253e+04 | 2554.72 | 10.18 | -1.528e+04 | 3340.58 | 6.919e+05 |
| 7 | 89 | 1.984e+06 | 2313.59 | -0.17 | -420.00 | 0.0 | 1.921e+05 | 8548.12 | 35.48 | -4.892e+04 | 185.08 | 1.484e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|---------|--------|------------|---------|-----------|
| | | 1.484e+06 | 185.08 | -5.98e-04 | 0.0 | 60.0 | 1.921e+05 | 8128.12 | 35.48 | -4.892e+04 | 2313.59 | 1.984e+06 |
| 7 | 96 | 7.267e+05 | 3496.52 | -0.07 | -420.00 | 0.0 | 7.617e+04 | 3113.29 | 10.71 | -1.606e+04 | 2853.74 | 5.525e+05 |
| | | 5.525e+05 | 2853.74 | -2.49e-04 | 0.0 | 60.0 | 7.617e+04 | 2693.29 | 10.71 | -1.606e+04 | 3496.52 | 7.267e+05 |
| 7 | 97 | 1.890e+06 | 2572.24 | -0.16 | -420.00 | 0.0 | 1.838e+05 | 8129.34 | 33.48 | -4.634e+04 | 563.51 | 1.414e+06 |
| | | 1.414e+06 | 563.51 | -5.74e-04 | 0.0 | 60.0 | 1.838e+05 | 7709.34 | 33.48 | -4.634e+04 | 2572.24 | 1.890e+06 |
| 7 | 98 | 7.242e+05 | 3485.38 | -0.07 | -420.00 | 0.0 | 7.591e+04 | 3103.39 | 10.67 | -1.600e+04 | 2844.88 | 5.506e+05 |
| | | 5.506e+05 | 2844.88 | -2.48e-04 | 0.0 | 60.0 | 7.591e+04 | 2683.39 | 10.67 | -1.600e+04 | 3485.38 | 7.242e+05 |
| 7 | 102 | 7.267e+05 | 3496.52 | -0.07 | -420.00 | 0.0 | 7.617e+04 | 3113.29 | 10.71 | -1.606e+04 | 2853.74 | 5.525e+05 |
| | | 5.525e+05 | 2853.74 | -2.49e-04 | 0.0 | 60.0 | 7.617e+04 | 2693.29 | 10.71 | -1.606e+04 | 3496.52 | 7.267e+05 |
| 8 | 1 | 9.395e+05 | 4401.44 | -0.06 | -546.00 | 0.0 | 9.924e+04 | 2844.66 | 0.94 | -1.449e+04 | 4345.00 | 7.852e+05 |
| | | 7.852e+05 | 4345.00 | -2.21e-04 | 0.0 | 60.0 | 9.924e+04 | 2298.66 | 0.94 | -1.449e+04 | 4401.44 | 9.395e+05 |
| 8 | 2 | 2.864e+06 | 3184.47 | -0.16 | -546.00 | 0.0 | 2.879e+05 | 6277.37 | 6.33 | -3.513e+04 | 2804.52 | 2.503e+06 |
| | | 2.503e+06 | 2804.52 | -5.13e-04 | 0.0 | 60.0 | 2.879e+05 | 5731.37 | 6.33 | -3.513e+04 | 3184.47 | 2.864e+06 |
| 8 | 7 | 7.041e+05 | 3304.47 | -0.05 | -420.00 | 0.0 | 7.439e+04 | 2137.57 | 0.70 | -1.085e+04 | 3262.60 | 5.885e+05 |
| | | 5.885e+05 | 3262.60 | -1.66e-04 | 0.0 | 60.0 | 7.439e+04 | 1717.57 | 0.70 | -1.085e+04 | 3304.47 | 7.041e+05 |
| 8 | 8 | 2.628e+06 | 2087.51 | -0.15 | -420.00 | 0.0 | 2.631e+05 | 5570.28 | 6.09 | -3.150e+04 | 1722.12 | 2.307e+06 |
| | | 2.307e+06 | 1722.12 | -4.58e-04 | 0.0 | 60.0 | 2.631e+05 | 5150.28 | 6.09 | -3.150e+04 | 2087.51 | 2.628e+06 |
| 8 | 21 | 7.603e+05 | 1.64 | -0.05 | -420.00 | 0.0 | 7.969e+04 | 2259.12 | -9.84 | -1.308e+04 | 1.64 | 6.350e+05 |
| | | 6.350e+05 | -535.18 | -9.79e-05 | 0.0 | 60.0 | 7.969e+04 | 1839.12 | -9.84 | -1.308e+04 | -535.18 | 7.603e+05 |
| 8 | 24 | 7.570e+05 | 7620.93 | -0.05 | -420.00 | 0.0 | 8.055e+04 | 2313.27 | 11.39 | -1.033e+04 | 6991.40 | 6.331e+05 |
| | | 6.331e+05 | 6991.40 | -2.59e-04 | 0.0 | 60.0 | 8.055e+04 | 1893.27 | 11.39 | -1.033e+04 | 7620.93 | 7.570e+05 |
| 8 | 26 | 7.607e+05 | 2.99 | -0.05 | -420.00 | 0.0 | 7.965e+04 | 2266.45 | -9.85 | -1.308e+04 | 2.99 | 6.358e+05 |
| | | 6.358e+05 | -534.21 | -9.72e-05 | 0.0 | 60.0 | 7.965e+04 | 1846.45 | -9.85 | -1.308e+04 | -534.21 | 7.607e+05 |
| 8 | 27 | 7.566e+05 | 7619.96 | -0.05 | -420.00 | 0.0 | 8.060e+04 | 2305.93 | 11.39 | -1.033e+04 | 6990.05 | 6.323e+05 |
| | | 6.323e+05 | 6990.05 | -2.60e-04 | 0.0 | 60.0 | 8.060e+04 | 1885.93 | 11.39 | -1.033e+04 | 7619.96 | 7.566e+05 |
| 8 | 35 | 7.566e+05 | 7285.78 | -0.05 | -420.00 | 0.0 | 8.055e+04 | 2307.03 | 13.24 | -1.042e+04 | 6527.41 | 6.321e+05 |
| | | 6.321e+05 | 6527.41 | -2.73e-04 | 0.0 | 60.0 | 8.055e+04 | 1887.03 | 13.24 | -1.042e+04 | 7285.78 | 7.566e+05 |
| 8 | 53 | 7.592e+05 | 2174.64 | -0.05 | -420.00 | 0.0 | 7.996e+04 | 2275.99 | -3.24 | -1.223e+04 | 2174.64 | 6.344e+05 |
| | | 6.344e+05 | 2000.56 | -1.48e-04 | 0.0 | 60.0 | 7.996e+04 | 1855.99 | -3.24 | -1.223e+04 | 2000.56 | 7.592e+05 |
| 8 | 56 | 7.580e+05 | 5085.18 | -0.05 | -420.00 | 0.0 | 8.029e+04 | 2296.40 | 4.78 | -1.118e+04 | 4818.40 | 6.337e+05 |
| | | 6.337e+05 | 4818.40 | -2.09e-04 | 0.0 | 60.0 | 8.029e+04 | 1876.40 | 4.78 | -1.118e+04 | 5085.18 | 7.580e+05 |
| 8 | 58 | 7.594e+05 | 2175.16 | -0.05 | -420.00 | 0.0 | 7.994e+04 | 2278.80 | -3.24 | -1.223e+04 | 2175.16 | 6.347e+05 |
| | | 6.347e+05 | 2000.93 | -1.48e-04 | 0.0 | 60.0 | 7.994e+04 | 1858.80 | -3.24 | -1.223e+04 | 2000.93 | 7.594e+05 |
| 8 | 59 | 7.578e+05 | 5084.81 | -0.05 | -420.00 | 0.0 | 8.030e+04 | 2293.58 | 4.78 | -1.118e+04 | 4817.88 | 6.334e+05 |
| | | 6.334e+05 | 4817.88 | -2.09e-04 | 0.0 | 60.0 | 8.030e+04 | 1873.58 | 4.78 | -1.118e+04 | 5084.81 | 7.578e+05 |
| 8 | 67 | 7.578e+05 | 4958.51 | -0.05 | -420.00 | 0.0 | 8.028e+04 | 2294.00 | 5.48 | -1.121e+04 | 4643.08 | 6.333e+05 |
| | | 6.333e+05 | 4643.08 | -2.14e-04 | 0.0 | 60.0 | 8.028e+04 | 1874.00 | 5.48 | -1.121e+04 | 4958.51 | 7.578e+05 |
| 8 | 85 | 7.586e+05 | 3542.87 | -0.05 | -420.00 | 0.0 | 8.012e+04 | 2286.19 | 0.77 | -1.170e+04 | 3496.52 | 6.340e+05 |
| | | 6.340e+05 | 3496.52 | -1.79e-04 | 0.0 | 60.0 | 8.012e+04 | 1866.19 | 0.77 | -1.170e+04 | 3542.87 | 7.586e+05 |
| 8 | 86 | 7.275e+05 | 3406.67 | -0.05 | -420.00 | 0.0 | 7.684e+04 | 2201.27 | 0.73 | -1.122e+04 | 3362.87 | 6.080e+05 |
| | | 6.080e+05 | 3362.87 | -1.71e-04 | 0.0 | 60.0 | 7.684e+04 | 1781.27 | 0.73 | -1.122e+04 | 3406.67 | 7.275e+05 |
| 8 | 87 | 2.010e+06 | 2595.37 | -0.11 | -420.00 | 0.0 | 2.026e+05 | 4489.74 | 4.32 | -2.498e+04 | 2335.88 | 1.753e+06 |
| | | 1.753e+06 | 2335.88 | -3.66e-04 | 0.0 | 60.0 | 2.026e+05 | 4069.74 | 4.32 | -2.498e+04 | 2595.37 | 2.010e+06 |
| 8 | 88 | 7.223e+05 | 3383.94 | -0.05 | -420.00 | 0.0 | 7.630e+04 | 2187.11 | 0.72 | -1.114e+04 | 3340.58 | 6.037e+05 |
| | | 6.037e+05 | 3340.58 | -1.70e-04 | 0.0 | 60.0 | 7.630e+04 | 1767.11 | 0.72 | -1.114e+04 | 3383.94 | 7.223e+05 |
| 8 | 89 | 2.005e+06 | 2572.63 | -0.11 | -420.00 | 0.0 | 2.021e+05 | 4475.58 | 4.32 | -2.490e+04 | 2313.59 | 1.749e+06 |
| | | 1.749e+06 | 2313.59 | -3.65e-04 | 0.0 | 60.0 | 2.021e+05 | 4055.58 | 4.32 | -2.490e+04 | 2572.63 | 2.005e+06 |
| 8 | 96 | 7.586e+05 | 3542.87 | -0.05 | -420.00 | 0.0 | 8.012e+04 | 2286.19 | 0.77 | -1.170e+04 | 3496.52 | 6.340e+05 |
| | | 6.340e+05 | 3496.52 | -1.79e-04 | 0.0 | 60.0 | 8.012e+04 | 1866.19 | 0.77 | -1.170e+04 | 3542.87 | 7.586e+05 |
| 8 | 97 | 1.913e+06 | 2812.69 | -0.11 | -420.00 | 0.0 | 1.933e+05 | 4345.82 | 4.01 | -2.409e+04 | 2572.23 | 1.665e+06 |
| | | 1.665e+06 | 2572.23 | -3.54e-04 | 0.0 | 60.0 | 1.933e+05 | 3925.82 | 4.01 | -2.409e+04 | 2812.69 | 1.913e+06 |
| 8 | 98 | 7.560e+05 | 3531.51 | -0.05 | -420.00 | 0.0 | 7.985e+04 | 2279.12 | 0.77 | -1.166e+04 | 3485.37 | 6.319e+05 |
| | | 6.319e+05 | 3485.37 | -1.78e-04 | 0.0 | 60.0 | 7.985e+04 | 1859.12 | 0.77 | -1.166e+04 | 3531.51 | 7.560e+05 |
| 8 | 102 | 7.586e+05 | 3542.87 | -0.05 | -420.00 | 0.0 | 8.012e+04 | 2286.19 | 0.77 | -1.170e+04 | 3496.52 | 6.340e+05 |
| | | 6.340e+05 | 3496.52 | -1.79e-04 | 0.0 | 60.0 | 8.012e+04 | 1866.19 | 0.77 | -1.170e+04 | 3542.87 | 7.586e+05 |
| 9 | 1 | 9.556e+05 | 4401.43 | -0.04 | -546.00 | 0.0 | 1.025e+05 | 1817.54 | -2.37 | -8885.00 | 4401.43 | 8.630e+05 |
| | | 8.630e+05 | 4259.10 | -1.32e-04 | 0.0 | 60.0 | 1.025e+05 | 1271.54 | -2.37 | -8885.00 | 4259.10 | 9.556e+05 |
| 9 | 2 | 2.752e+06 | 3184.46 | -0.08 | -546.00 | 0.0 | 2.929e+05 | 312.37 | -15.14 | 316.88 | 3184.46 | 2.747e+06 |
| | | 2.747e+06 | 2275.79 | -1.74e-04 | 0.0 | 60.0 | 2.929e+05 | -233.63 | -15.14 | 316.88 | 2275.79 | 2.749e+06 |
| 9 | 7 | 7.162e+05 | 3304.47 | -0.03 | -420.00 | 0.0 | 7.683e+04 | 1367.71 | -1.78 | -6659.47 | 3304.47 | 6.468e+05 |
| | | 6.468e+05 | 3197.48 | -9.89e-05 | 0.0 | 60.0 | 7.683e+04 | 947.71 | -1.78 | -6659.47 | 3197.48 | 7.162e+05 |
| 9 | 8 | 2.531e+06 | 2087.50 | -0.07 | -420.00 | 0.0 | 2.672e+05 | -137.46 | -14.56 | 2542.41 | 2087.50 | 2.531e+06 |
| | | 2.510e+06 | 1214.17 | -1.41e-04 | 0.0 | 60.0 | 2.672e+05 | -557.46 | -14.56 | 2542.41 | 1214.17 | 2.510e+06 |
| 9 | 21 | 7.740e+05 | -535.19 | -0.03 | -420.00 | 0.0 | 8.230e+04 | 1435.61 | -8.23 | -8115.33 | -535.19 | 6.983e+05 |
| | | 6.983e+05 | -988.12 | -6.08e-05 | 0.0 | 60.0 | 8.230e+04 | 1015.61 | -8.23 | -8115.33 | -988.12 | 7.740e+05 |
| 9 | 24 | 7.693e+05 | 7845.15 | -0.03 | -420.00 | 0.0 | 8.322e+04 | 1478.27 | 4.42 | -6232.95 | 7620.92 | 6.954e+05 |
| | | 6.954e+05 | 7620.92 | -1.52e-04 | 0.0 | 60.0 | 8.322e+04 | 1058.27 | 4.42 | -6232.95 | 7845.15 | 7.693e+05 |
| 9 | 26 | 7.741e+05 | -534.21 | -0.03 | -420.00 | 0.0 | 8.227e+04 | 1444.86 | -8.24 | -8112.64 | -534.21 | 6.990e+05 |
| | | 6.990e+05 | -987.61 | -5.99e-05 | 0.0 | 60.0 | 8.227e+04 | 1024.86 | -8.24 | -8112.64 | -987.61 | 7.741e+05 |
| 9 | 27 | 7.692e+05 | 7844.64 | -0.03 | -420.00 | 0.0 | 8.325e+04 | 1469.02 | 4.43 | -6235.64 | 7619.95 | 6.947e+05 |
| | | 6.947e+05 | 7619.95 | -1.53e-04 | 0.0 | 60.0 | 8.325e+04 | 1049.02 | 4.43 | -6235.64 | 7844.64 | 7.692e+05 |
| 9 | 35 | 7.693e+05 | 7669.83 | -0.03 | -420.00 | 0.0 | 8.321e+04 | 1469.89 | 6.73 | -6349.67 | 7285.77 | 6.945e+05 |
| | | 6.945e+05 | 7285.77 | -1.70e-04 | 0.0 | 60.0 | 8.321e+04 | 1049.89 | 6.73 | -6349.67 | 7669.83 | 7.693e+05 |
| 9 | 53 | 7.725e+05 | 2000.56 | -0.03 | -420.00 | 0.0 | 8.259e+04 | 1448.88 | -4.29 | -7532.34 | 2000.56 | 6.974e+05 |
| | | 6.974e+05 | 1758.27 | -8.93e-05 | 0.0 | 60.0 | 8.259e+04 | 1028.88 | -4.29 | -7532.34 | 1758.27 | 7.725e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|--------|-----------|----------|-----------|
| 9 | 56 | 7.708e+05 | 5098.75 | -0.03 | -420.00 | 0.0 | 8.293e+04 | 1464.99 | 0.48 | -6815.94 | 5085.18 | 6.963e+05 |
| | | 6.963e+05 | 5085.18 | -1.24e-04 | 0.0 | 60.0 | 8.293e+04 | 1044.99 | 0.48 | -6815.94 | 5098.75 | 7.708e+05 |
| 9 | 58 | 7.726e+05 | 2000.93 | -0.03 | -420.00 | 0.0 | 8.258e+04 | 1452.43 | -4.30 | -7531.31 | 2000.93 | 6.976e+05 |
| | | 6.976e+05 | 1758.47 | -8.90e-05 | 0.0 | 60.0 | 8.258e+04 | 1032.43 | -4.30 | -7531.31 | 1758.47 | 7.726e+05 |
| 9 | 59 | 7.707e+05 | 5098.56 | -0.03 | -420.00 | 0.0 | 8.294e+04 | 1461.45 | 0.49 | -6816.97 | 5084.81 | 6.960e+05 |
| | | 6.960e+05 | 5084.81 | -1.24e-04 | 0.0 | 60.0 | 8.294e+04 | 1041.45 | 0.49 | -6816.97 | 5098.56 | 7.707e+05 |
| 9 | 67 | 7.707e+05 | 5032.48 | -0.03 | -420.00 | 0.0 | 8.293e+04 | 1461.78 | 1.36 | -6859.66 | 4958.51 | 6.959e+05 |
| | | 6.959e+05 | 4958.51 | -1.30e-04 | 0.0 | 60.0 | 8.293e+04 | 1041.78 | 1.36 | -6859.66 | 5032.48 | 7.707e+05 |
| 9 | 85 | 7.716e+05 | 3542.87 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.94 | -1.91 | -7174.14 | 3542.87 | 6.968e+05 |
| | | 6.968e+05 | 3428.51 | -1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.94 | -1.91 | -7174.14 | 3428.51 | 7.716e+05 |
| 9 | 86 | 7.400e+05 | 3406.67 | -0.03 | -420.00 | 0.0 | 7.937e+04 | 1405.95 | -1.84 | -6879.89 | 3406.67 | 6.682e+05 |
| | | 6.682e+05 | 3296.53 | -1.02e-04 | 0.0 | 60.0 | 7.937e+04 | 985.95 | -1.84 | -6879.89 | 3296.53 | 7.400e+05 |
| 9 | 87 | 1.936e+06 | 2595.36 | -0.06 | -420.00 | 0.0 | 2.063e+05 | 402.51 | -10.35 | -745.30 | 2595.36 | 1.924e+06 |
| | | 1.924e+06 | 1974.33 | -1.30e-04 | 0.0 | 60.0 | 2.063e+05 | 17.49 | -10.35 | -745.30 | 1974.33 | 1.936e+06 |
| 9 | 88 | 7.347e+05 | 3383.94 | -0.03 | -420.00 | 0.0 | 7.881e+04 | 1397.45 | -1.82 | -6831.03 | 3383.94 | 6.635e+05 |
| | | 6.635e+05 | 3274.49 | -1.02e-04 | 0.0 | 60.0 | 7.881e+04 | 977.45 | -1.82 | -6831.03 | 3274.49 | 7.347e+05 |
| 9 | 89 | 1.930e+06 | 2572.63 | -0.06 | -420.00 | 0.0 | 2.057e+05 | 394.01 | -10.34 | -696.44 | 2572.63 | 1.919e+06 |
| | | 1.919e+06 | 1952.28 | -1.30e-04 | 0.0 | 60.0 | 2.057e+05 | -25.99 | -10.34 | -696.44 | 1952.28 | 1.930e+06 |
| 9 | 96 | 7.716e+05 | 3542.87 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.94 | -1.91 | -7174.14 | 3542.87 | 6.968e+05 |
| | | 6.968e+05 | 3428.51 | -1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.94 | -1.91 | -7174.14 | 3428.51 | 7.716e+05 |
| 9 | 97 | 1.848e+06 | 2812.69 | -0.06 | -420.00 | 0.0 | 1.970e+05 | 553.84 | -9.57 | -1653.01 | 2812.69 | 1.827e+06 |
| | | 1.827e+06 | 2238.53 | -1.32e-04 | 0.0 | 60.0 | 1.970e+05 | 133.84 | -9.57 | -1653.01 | 2238.53 | 1.848e+06 |
| 9 | 98 | 7.690e+05 | 3531.50 | -0.03 | -420.00 | 0.0 | 8.248e+04 | 1452.69 | -1.90 | -7149.71 | 3531.50 | 6.944e+05 |
| | | 6.944e+05 | 3417.49 | -1.06e-04 | 0.0 | 60.0 | 8.248e+04 | 1032.69 | -1.90 | -7149.71 | 3417.49 | 7.690e+05 |
| 9 | 102 | 7.716e+05 | 3542.87 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.94 | -1.91 | -7174.14 | 3542.87 | 6.968e+05 |
| | | 6.968e+05 | 3428.51 | -1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.94 | -1.91 | -7174.14 | 3428.51 | 7.716e+05 |
| 10 | 1 | 9.483e+05 | 4259.09 | -0.01 | -546.00 | 0.0 | 1.041e+05 | 789.05 | -1.24 | -3140.95 | 4259.09 | 9.173e+05 |
| | | 9.173e+05 | 4184.99 | -4.34e-05 | 0.0 | 60.0 | 1.041e+05 | 243.05 | -1.24 | -3140.95 | 4184.99 | 9.483e+05 |
| 10 | 2 | 2.843e+06 | 2275.78 | -0.01 | -546.00 | 0.0 | 2.889e+05 | -5626.54 | -12.34 | 3.282e+04 | 2275.78 | 2.843e+06 |
| | | 2.489e+06 | 1535.27 | 1.29e-04 | 0.0 | 60.0 | 2.889e+05 | -6172.54 | -12.34 | 3.282e+04 | 1535.27 | 2.489e+06 |
| 10 | 7 | 7.107e+05 | 3197.47 | -9.90e-03 | -420.00 | 0.0 | 7.806e+04 | 596.83 | -0.93 | -2357.95 | 3197.47 | 6.875e+05 |
| | | 6.875e+05 | 3141.66 | -3.25e-05 | 0.0 | 60.0 | 7.806e+04 | 176.83 | -0.93 | -2357.95 | 3141.66 | 7.107e+05 |
| 10 | 8 | 2.613e+06 | 1214.16 | -9.95e-03 | -420.00 | 0.0 | 2.628e+05 | -5818.77 | -12.04 | 3.360e+04 | 1214.16 | 2.613e+06 |
| | | 2.251e+06 | 491.94 | 1.40e-04 | 0.0 | 60.0 | 2.628e+05 | -6238.77 | -12.04 | 3.360e+04 | 491.94 | 2.251e+06 |
| 10 | 24 | 7.632e+05 | 7845.14 | -0.01 | -420.00 | 0.0 | 8.455e+04 | 639.32 | -2.74 | -2120.35 | 7845.14 | 7.387e+05 |
| | | 7.387e+05 | 7840.10 | -4.40e-05 | 0.0 | 60.0 | 8.455e+04 | 219.32 | -2.74 | -2120.35 | 7840.10 | 7.632e+05 |
| 10 | 26 | 7.684e+05 | -987.62 | -0.01 | -420.00 | 0.0 | 8.360e+04 | 624.09 | 0.75 | -2934.66 | -987.62 | 7.428e+05 |
| | | 7.428e+05 | -1101.81 | -2.52e-05 | 0.0 | 60.0 | 8.360e+04 | 204.09 | 0.75 | -2934.66 | -1101.81 | 7.684e+05 |
| 10 | 27 | 7.630e+05 | 7844.63 | -0.01 | -420.00 | 0.0 | 8.456e+04 | 629.07 | -2.73 | -2123.31 | 7844.63 | 7.387e+05 |
| | | 7.387e+05 | 7840.10 | -4.50e-05 | 0.0 | 60.0 | 8.456e+04 | 209.07 | -2.73 | -2123.31 | 7840.10 | 7.630e+05 |
| 10 | 30 | 7.683e+05 | -804.30 | -0.01 | -420.00 | 0.0 | 8.361e+04 | 623.46 | -5.07 | -2909.31 | -804.30 | 7.434e+05 |
| | | 7.434e+05 | -1102.04 | -7.05e-06 | 0.0 | 60.0 | 8.361e+04 | 203.46 | -5.07 | -2909.31 | -1102.04 | 7.683e+05 |
| 10 | 36 | 7.633e+05 | 7840.33 | -0.01 | -420.00 | 0.0 | 8.454e+04 | 639.95 | 3.08 | -2145.71 | 7661.82 | 7.380e+05 |
| | | 7.380e+05 | 7661.82 | -6.21e-05 | 0.0 | 60.0 | 8.454e+04 | 219.95 | 3.08 | -2145.71 | 7840.33 | 7.633e+05 |
| 10 | 56 | 7.648e+05 | 5098.75 | -0.01 | -420.00 | 0.0 | 8.426e+04 | 631.42 | -1.65 | -2373.89 | 5098.75 | 7.400e+05 |
| | | 7.400e+05 | 5059.88 | -3.85e-05 | 0.0 | 60.0 | 8.426e+04 | 211.42 | -1.65 | -2373.89 | 5059.88 | 7.648e+05 |
| 10 | 58 | 7.668e+05 | 1758.46 | -0.01 | -420.00 | 0.0 | 8.390e+04 | 625.67 | -0.33 | -2682.95 | 1758.46 | 7.415e+05 |
| | | 7.415e+05 | 1678.41 | -3.13e-05 | 0.0 | 60.0 | 8.390e+04 | 205.67 | -0.33 | -2682.95 | 1678.41 | 7.668e+05 |
| 10 | 59 | 7.647e+05 | 5098.55 | -0.01 | -420.00 | 0.0 | 8.426e+04 | 627.48 | -1.65 | -2375.02 | 5098.55 | 7.400e+05 |
| | | 7.400e+05 | 5059.88 | -3.88e-05 | 0.0 | 60.0 | 8.426e+04 | 207.48 | -1.65 | -2375.02 | 5059.88 | 7.647e+05 |
| 10 | 62 | 7.667e+05 | 1827.78 | -0.01 | -420.00 | 0.0 | 8.390e+04 | 625.44 | -2.53 | -2674.02 | 1827.78 | 7.417e+05 |
| | | 7.417e+05 | 1678.32 | -2.45e-05 | 0.0 | 60.0 | 8.390e+04 | 205.44 | -2.53 | -2674.02 | 1678.32 | 7.667e+05 |
| 10 | 68 | 7.648e+05 | 5059.97 | -0.01 | -420.00 | 0.0 | 8.425e+04 | 631.65 | 0.55 | -2382.83 | 5029.43 | 7.397e+05 |
| | | 7.397e+05 | 5029.43 | -4.53e-05 | 0.0 | 60.0 | 8.425e+04 | 211.65 | 0.55 | -2382.83 | 5059.97 | 7.648e+05 |
| 10 | 85 | 7.657e+05 | 3428.51 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 626.58 | -0.99 | -2528.99 | 3428.51 | 7.407e+05 |
| | | 7.407e+05 | 3369.15 | -3.51e-05 | 0.0 | 60.0 | 8.408e+04 | 206.58 | -0.99 | -2528.99 | 3369.15 | 7.657e+05 |
| 10 | 86 | 7.343e+05 | 3296.53 | -0.01 | -420.00 | 0.0 | 8.064e+04 | 609.58 | -0.96 | -2431.16 | 3296.53 | 7.103e+05 |
| | | 7.103e+05 | 3239.21 | -3.36e-05 | 0.0 | 60.0 | 8.064e+04 | 189.58 | -0.96 | -2431.16 | 3239.21 | 7.343e+05 |
| 10 | 87 | 1.994e+06 | 1974.32 | -9.58e-03 | -420.00 | 0.0 | 2.038e+05 | -3667.48 | -8.36 | 2.154e+04 | 1974.32 | 1.994e+06 |
| | | 1.761e+06 | 1472.73 | 8.15e-05 | 0.0 | 60.0 | 2.038e+05 | -4087.48 | -8.36 | 2.154e+04 | 1472.73 | 1.761e+06 |
| 10 | 88 | 7.291e+05 | 3274.49 | -0.01 | -420.00 | 0.0 | 8.006e+04 | 606.74 | -0.95 | -2414.96 | 3274.49 | 7.053e+05 |
| | | 7.053e+05 | 3217.49 | -3.34e-05 | 0.0 | 60.0 | 8.006e+04 | 186.74 | -0.95 | -2414.96 | 3217.49 | 7.291e+05 |
| 10 | 89 | 1.989e+06 | 1952.28 | -9.52e-03 | -420.00 | 0.0 | 2.032e+05 | -3670.32 | -8.35 | 2.156e+04 | 1952.28 | 1.989e+06 |
| | | 1.756e+06 | 1451.01 | 8.17e-05 | 0.0 | 60.0 | 2.032e+05 | -4090.32 | -8.35 | 2.156e+04 | 1451.01 | 1.756e+06 |
| 10 | 96 | 7.657e+05 | 3428.51 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 626.58 | -0.99 | -2528.99 | 3428.51 | 7.407e+05 |
| | | 7.407e+05 | 3369.15 | -3.51e-05 | 0.0 | 60.0 | 8.408e+04 | 206.58 | -0.99 | -2528.99 | 3369.15 | 7.657e+05 |
| 10 | 97 | 1.896e+06 | 2238.52 | -9.87e-03 | -420.00 | 0.0 | 1.949e+05 | -3222.78 | -7.65 | 1.905e+04 | 2238.52 | 1.896e+06 |
| | | 1.690e+06 | 1779.32 | 6.85e-05 | 0.0 | 60.0 | 1.949e+05 | -3642.78 | -7.65 | 1.905e+04 | 1779.32 | 1.690e+06 |
| 10 | 98 | 7.631e+05 | 3417.49 | -0.01 | -420.00 | 0.0 | 8.379e+04 | 625.16 | -0.99 | -2520.89 | 3417.49 | 7.382e+05 |
| | | 7.382e+05 | 3358.29 | -3.50e-05 | 0.0 | 60.0 | 8.379e+04 | 205.16 | -0.99 | -2520.89 | 3358.29 | 7.631e+05 |
| 10 | 102 | 7.657e+05 | 3428.51 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 626.58 | -0.99 | -2528.99 | 3428.51 | 7.407e+05 |
| | | 7.407e+05 | 3369.15 | -3.51e-05 | 0.0 | 60.0 | 8.408e+04 | 206.58 | -0.99 | -2528.99 | 3369.15 | 7.657e+05 |
| 11 | 1 | 9.482e+05 | 4258.35 | 0.01 | -546.00 | 0.0 | 1.041e+05 | -239.79 | 1.22 | 2653.54 | 4184.99 | 9.482e+05 |
| | | 9.175e+05 | 4184.99 | 4.49e-05 | 0.0 | 60.0 | 1.041e+05 | -785.79 | 1.22 | 2653.54 | 4258.35 | 9.175e+05 |
| 11 | 2 | 2.718e+06 | 2409.85 | 0.07 | -546.00 | 0.0 | 2.791e+05 | -6983.76 | 14.58 | 5.905e+04 | 1535.26 | 2.718e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|-------|-----------|----------|-----------|
| | | 2.283e+06 | 1535.26 | 3.69e-04 | 0.0 | 60.0 | 2.791e+05 | -7529.76 | 14.58 | 5.905e+04 | 2409.85 | 2.283e+06 |
| 11 | 7 | 7.107e+05 | 3196.39 | 9.87e-03 | -420.00 | 0.0 | 7.806e+04 | -174.32 | 0.91 | 1981.52 | 3141.66 | 7.107e+05 |
| | | 6.876e+05 | 3141.66 | 3.37e-05 | 0.0 | 60.0 | 7.806e+04 | -594.32 | 0.91 | 1981.52 | 3196.39 | 6.876e+05 |
| 11 | 8 | 2.481e+06 | 1347.89 | 0.06 | -420.00 | 0.0 | 2.530e+05 | -6918.29 | 14.27 | 5.838e+04 | 491.93 | 2.481e+06 |
| | | 2.053e+06 | 491.93 | 3.58e-04 | 0.0 | 60.0 | 2.530e+05 | -7338.29 | 14.27 | 5.838e+04 | 1347.89 | 2.053e+06 |
| 11 | 27 | 7.633e+05 | 7840.27 | 0.01 | -420.00 | 0.0 | 8.454e+04 | -217.38 | -3.08 | 1773.56 | 7840.27 | 7.633e+05 |
| | | 7.381e+05 | 7661.95 | 6.32e-05 | 0.0 | 60.0 | 8.454e+04 | -637.38 | -3.08 | 1773.56 | 7661.95 | 7.381e+05 |
| 11 | 29 | 7.684e+05 | -978.73 | 0.01 | -420.00 | 0.0 | 8.360e+04 | -201.60 | -0.61 | 2637.77 | -1102.04 | 7.684e+05 |
| | | 7.433e+05 | -1102.04 | 2.62e-05 | 0.0 | 60.0 | 8.360e+04 | -621.60 | -0.61 | 2637.77 | -978.73 | 7.433e+05 |
| 11 | 31 | 7.631e+05 | 7845.42 | 0.01 | -420.00 | 0.0 | 8.456e+04 | -216.76 | 2.75 | 1748.26 | 7840.16 | 7.631e+05 |
| | | 7.388e+05 | 7840.16 | 4.51e-05 | 0.0 | 60.0 | 8.456e+04 | -636.76 | 2.75 | 1748.26 | 7845.42 | 7.388e+05 |
| 11 | 33 | 7.684e+05 | -987.29 | 0.01 | -420.00 | 0.0 | 8.360e+04 | -201.64 | -0.75 | 2562.00 | -1101.87 | 7.684e+05 |
| | | 7.429e+05 | -1101.87 | 2.62e-05 | 0.0 | 60.0 | 8.360e+04 | -621.64 | -0.75 | 2562.00 | -987.29 | 7.429e+05 |
| 11 | 36 | 7.630e+05 | 7844.91 | 0.01 | -420.00 | 0.0 | 8.457e+04 | -206.51 | 2.74 | 1751.22 | 7840.16 | 7.630e+05 |
| | | 7.388e+05 | 7840.16 | 4.61e-05 | 0.0 | 60.0 | 8.457e+04 | -626.51 | 2.74 | 1751.22 | 7844.91 | 7.388e+05 |
| 11 | 59 | 7.648e+05 | 5059.95 | 0.01 | -420.00 | 0.0 | 8.426e+04 | -209.12 | -0.55 | 2010.53 | 5059.95 | 7.648e+05 |
| | | 7.398e+05 | 5029.67 | 4.64e-05 | 0.0 | 60.0 | 8.426e+04 | -629.12 | -0.55 | 2010.53 | 5029.67 | 7.398e+05 |
| 11 | 61 | 7.667e+05 | 1762.04 | 0.01 | -420.00 | 0.0 | 8.390e+04 | -203.17 | 0.39 | 2339.45 | 1678.32 | 7.667e+05 |
| | | 7.418e+05 | 1678.32 | 3.24e-05 | 0.0 | 60.0 | 8.390e+04 | -623.17 | 0.39 | 2339.45 | 1762.04 | 7.418e+05 |
| 11 | 63 | 7.647e+05 | 5099.04 | 0.01 | -420.00 | 0.0 | 8.426e+04 | -208.89 | 1.66 | 2001.62 | 5059.91 | 7.647e+05 |
| | | 7.400e+05 | 5059.91 | 3.95e-05 | 0.0 | 60.0 | 8.426e+04 | -628.89 | 1.66 | 2001.62 | 5099.04 | 7.400e+05 |
| 11 | 65 | 7.667e+05 | 1758.78 | 0.01 | -420.00 | 0.0 | 8.390e+04 | -203.19 | 0.34 | 2310.47 | 1678.39 | 7.667e+05 |
| | | 7.416e+05 | 1678.39 | 3.24e-05 | 0.0 | 60.0 | 8.390e+04 | -623.19 | 0.34 | 2310.47 | 1758.78 | 7.416e+05 |
| 11 | 68 | 7.646e+05 | 5098.85 | 0.01 | -420.00 | 0.0 | 8.426e+04 | -204.96 | 1.65 | 2002.75 | 5059.91 | 7.646e+05 |
| | | 7.400e+05 | 5059.91 | 3.99e-05 | 0.0 | 60.0 | 8.426e+04 | -624.96 | 1.65 | 2002.75 | 5098.85 | 7.400e+05 |
| 11 | 85 | 7.657e+05 | 3428.81 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -204.07 | 0.99 | 2156.61 | 3369.15 | 7.657e+05 |
| | | 7.408e+05 | 3369.15 | 3.62e-05 | 0.0 | 60.0 | 8.408e+04 | -624.07 | 0.99 | 2156.61 | 3428.81 | 7.408e+05 |
| 11 | 86 | 7.342e+05 | 3296.08 | 0.01 | -420.00 | 0.0 | 8.064e+04 | -187.07 | 0.95 | 2056.57 | 3239.21 | 7.342e+05 |
| | | 7.104e+05 | 3239.21 | 3.47e-05 | 0.0 | 60.0 | 8.064e+04 | -607.07 | 0.95 | 2056.57 | 3296.08 | 7.104e+05 |
| 11 | 87 | 1.914e+06 | 2063.74 | 0.05 | -420.00 | 0.0 | 1.973e+05 | -4683.05 | 9.85 | 3.966e+04 | 1472.73 | 1.914e+06 |
| | | 1.621e+06 | 1472.73 | 2.51e-04 | 0.0 | 60.0 | 1.973e+05 | -5103.05 | 9.85 | 3.966e+04 | 2063.74 | 1.621e+06 |
| 11 | 88 | 7.290e+05 | 3273.86 | 0.01 | -420.00 | 0.0 | 8.007e+04 | -184.23 | 0.94 | 2039.88 | 3217.49 | 7.290e+05 |
| | | 7.053e+05 | 3217.49 | 3.45e-05 | 0.0 | 60.0 | 8.007e+04 | -604.23 | 0.94 | 2039.88 | 3273.86 | 7.053e+05 |
| 11 | 89 | 1.909e+06 | 2041.53 | 0.05 | -420.00 | 0.0 | 1.967e+05 | -4680.22 | 9.84 | 3.964e+04 | 1451.00 | 1.909e+06 |
| | | 1.616e+06 | 1451.00 | 2.51e-04 | 0.0 | 60.0 | 1.967e+05 | -5100.22 | 9.84 | 3.964e+04 | 2041.53 | 1.616e+06 |
| 11 | 96 | 7.657e+05 | 3428.81 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -204.07 | 0.99 | 2156.61 | 3369.15 | 7.657e+05 |
| | | 7.408e+05 | 3369.15 | 3.62e-05 | 0.0 | 60.0 | 8.408e+04 | -624.07 | 0.99 | 2156.61 | 3428.81 | 7.408e+05 |
| 11 | 97 | 1.828e+06 | 2319.71 | 0.04 | -420.00 | 0.0 | 1.890e+05 | -4250.46 | 9.01 | 3.600e+04 | 1779.31 | 1.828e+06 |
| | | 1.560e+06 | 1779.31 | 2.31e-04 | 0.0 | 60.0 | 1.890e+05 | -4670.46 | 9.01 | 3.600e+04 | 2319.71 | 1.560e+06 |
| 11 | 98 | 7.630e+05 | 3417.71 | 0.01 | -420.00 | 0.0 | 8.379e+04 | -202.66 | 0.99 | 2148.26 | 3358.29 | 7.630e+05 |
| | | 7.383e+05 | 3358.29 | 3.60e-05 | 0.0 | 60.0 | 8.379e+04 | -622.66 | 0.99 | 2148.26 | 3417.71 | 7.383e+05 |
| 11 | 102 | 7.657e+05 | 3428.81 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -204.07 | 0.99 | 2156.61 | 3369.15 | 7.657e+05 |
| | | 7.408e+05 | 3369.15 | 3.62e-05 | 0.0 | 60.0 | 8.408e+04 | -624.07 | 0.99 | 2156.61 | 3428.81 | 7.408e+05 |
| 12 | 2 | 2.576e+06 | 4841.44 | 0.13 | -546.00 | 0.0 | 2.666e+05 | -8350.75 | 40.53 | 7.963e+04 | 2409.85 | 2.576e+06 |
| | | 2.058e+06 | 2409.85 | 5.68e-04 | 0.0 | 60.0 | 2.666e+05 | -8896.75 | 40.53 | 7.963e+04 | 4841.44 | 2.058e+06 |
| 12 | 7 | 7.162e+05 | 3302.22 | 0.03 | -420.00 | 0.0 | 7.684e+04 | -945.04 | 1.76 | 6282.31 | 3196.39 | 7.162e+05 |
| | | 6.469e+05 | 3196.39 | 1.00e-04 | 0.0 | 60.0 | 7.684e+04 | -1365.04 | 1.76 | 6282.31 | 3302.22 | 6.469e+05 |
| 12 | 8 | 2.336e+06 | 3743.82 | 0.12 | -420.00 | 0.0 | 2.409e+05 | -8027.72 | 39.93 | 7.752e+04 | 1347.88 | 2.336e+06 |
| | | 1.842e+06 | 1347.88 | 5.35e-04 | 0.0 | 60.0 | 2.409e+05 | -8447.72 | 39.93 | 7.752e+04 | 3743.82 | 1.842e+06 |
| 12 | 28 | 7.692e+05 | 7670.00 | 0.03 | -420.00 | 0.0 | 8.322e+04 | -1047.21 | -6.73 | 5976.04 | 7670.00 | 7.692e+05 |
| | | 6.946e+05 | 7286.19 | 1.71e-04 | 0.0 | 60.0 | 8.322e+04 | -1467.21 | -6.73 | 5976.04 | 7286.19 | 6.946e+05 |
| 12 | 30 | 7.740e+05 | -534.63 | 0.03 | -420.00 | 0.0 | 8.231e+04 | -1013.01 | 8.24 | 7741.14 | -987.80 | 7.740e+05 |
| | | 6.984e+05 | -987.80 | 6.19e-05 | 0.0 | 60.0 | 8.231e+04 | -1433.01 | 8.24 | 7741.14 | -534.63 | 6.984e+05 |
| 12 | 31 | 7.693e+05 | 7845.42 | 0.03 | -420.00 | 0.0 | 8.323e+04 | -1055.56 | -4.42 | 5860.05 | 7845.42 | 7.693e+05 |
| | | 6.955e+05 | 7621.41 | 1.53e-04 | 0.0 | 60.0 | 8.323e+04 | -1475.56 | -4.42 | 5860.05 | 7621.41 | 6.955e+05 |
| 12 | 33 | 7.741e+05 | -533.66 | 0.03 | -420.00 | 0.0 | 8.228e+04 | -1022.26 | 8.24 | 7738.45 | -987.29 | 7.741e+05 |
| | | 6.991e+05 | -987.29 | 6.10e-05 | 0.0 | 60.0 | 8.228e+04 | -1442.26 | 8.24 | 7738.45 | -533.66 | 6.991e+05 |
| 12 | 36 | 7.691e+05 | 7844.91 | 0.03 | -420.00 | 0.0 | 8.325e+04 | -1046.32 | -4.42 | 5862.75 | 7844.91 | 7.691e+05 |
| | | 6.948e+05 | 7620.44 | 1.54e-04 | 0.0 | 60.0 | 8.325e+04 | -1466.32 | -4.42 | 5862.75 | 7620.44 | 6.948e+05 |
| 12 | 60 | 7.707e+05 | 5032.73 | 0.03 | -420.00 | 0.0 | 8.294e+04 | -1039.11 | -1.35 | 6486.09 | 5032.73 | 7.707e+05 |
| | | 6.961e+05 | 4958.99 | 1.32e-04 | 0.0 | 60.0 | 8.294e+04 | -1459.11 | -1.35 | 6486.09 | 4958.99 | 6.961e+05 |
| 12 | 62 | 7.725e+05 | 2001.09 | 0.03 | -420.00 | 0.0 | 8.259e+04 | -1026.25 | 4.30 | 7158.55 | 1758.58 | 7.725e+05 |
| | | 6.975e+05 | 1758.58 | 9.04e-05 | 0.0 | 60.0 | 8.259e+04 | -1446.25 | 4.30 | 7158.55 | 2001.09 | 6.975e+05 |
| 12 | 63 | 7.707e+05 | 5099.04 | 0.03 | -420.00 | 0.0 | 8.294e+04 | -1042.32 | -0.48 | 6442.64 | 5099.04 | 7.707e+05 |
| | | 6.964e+05 | 5085.69 | 1.25e-04 | 0.0 | 60.0 | 8.294e+04 | -1462.32 | -0.48 | 6442.64 | 5085.69 | 6.964e+05 |
| 12 | 65 | 7.726e+05 | 2001.46 | 0.03 | -420.00 | 0.0 | 8.258e+04 | -1029.80 | 4.30 | 7157.52 | 1758.78 | 7.726e+05 |
| | | 6.978e+05 | 1758.78 | 9.00e-05 | 0.0 | 60.0 | 8.258e+04 | -1449.80 | 4.30 | 7157.52 | 2001.46 | 6.978e+05 |
| 12 | 68 | 7.707e+05 | 5098.85 | 0.03 | -420.00 | 0.0 | 8.295e+04 | -1038.78 | -0.48 | 6443.67 | 5098.85 | 7.707e+05 |
| | | 6.962e+05 | 5085.32 | 1.25e-04 | 0.0 | 60.0 | 8.295e+04 | -1458.78 | -0.48 | 6443.67 | 5085.32 | 6.962e+05 |
| 12 | 85 | 7.716e+05 | 3543.39 | 0.03 | -420.00 | 0.0 | 8.277e+04 | -1034.29 | 1.91 | 6800.60 | 3428.81 | 7.716e+05 |
| | | 6.970e+05 | 3428.81 | 1.08e-04 | 0.0 | 60.0 | 8.277e+04 | -1454.29 | 1.91 | 6800.60 | 3543.39 | 6.970e+05 |
| 12 | 87 | 1.820e+06 | 3700.08 | 0.09 | -420.00 | 0.0 | 1.888e+05 | -5705.07 | 27.27 | 5.400e+04 | 2063.74 | 1.820e+06 |
| | | 1.465e+06 | 2063.74 | 3.93e-04 | 0.0 | 60.0 | 1.888e+05 | -6125.07 | 27.27 | 5.400e+04 | 3700.08 | 1.465e+06 |
| 12 | 88 | 7.347e+05 | 3382.61 | 0.03 | -420.00 | 0.0 | 7.882e+04 | -974.79 | 1.81 | 6455.07 | 3273.87 | 7.347e+05 |
| | | 6.636e+05 | 3273.87 | 1.03e-04 | 0.0 | 60.0 | 7.882e+04 | -1394.79 | 1.81 | 6455.07 | 3382.61 | 6.636e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|-----------|---------|-----------|
| 12 | 89 | 1.815e+06 | 3677.01 | 0.09 | -420.00 | 0.0 | 1.882e+05 | -5696.57 | 27.26 | 5.395e+04 | 2041.53 | 1.815e+06 |
| | | 1.460e+06 | 2041.53 | 3.92e-04 | 0.0 | 60.0 | 1.882e+05 | -6116.57 | 27.26 | 5.395e+04 | 3677.01 | 1.460e+06 |
| 12 | 97 | 1.744e+06 | 3808.35 | 0.09 | -420.00 | 0.0 | 1.812e+05 | -5283.89 | 24.81 | 4.954e+04 | 2319.71 | 1.744e+06 |
| | | 1.414e+06 | 2319.71 | 3.68e-04 | 0.0 | 60.0 | 1.812e+05 | -5703.89 | 24.81 | 4.954e+04 | 3808.35 | 1.414e+06 |
| 12 | 98 | 7.690e+05 | 3531.86 | 0.03 | -420.00 | 0.0 | 8.249e+04 | -1030.04 | 1.90 | 6775.95 | 3417.71 | 7.690e+05 |
| | | 6.946e+05 | 3417.71 | 1.07e-04 | 0.0 | 60.0 | 8.249e+04 | -1450.04 | 1.90 | 6775.95 | 3531.86 | 6.946e+05 |
| 12 | 102 | 7.716e+05 | 3543.39 | 0.03 | -420.00 | 0.0 | 8.277e+04 | -1034.29 | 1.91 | 6800.60 | 3428.81 | 7.716e+05 |
| | | 6.970e+05 | 3428.81 | 1.08e-04 | 0.0 | 60.0 | 8.277e+04 | -1454.29 | 1.91 | 6800.60 | 3543.39 | 6.970e+05 |
| 13 | 2 | 2.406e+06 | 6672.47 | 0.20 | -546.00 | 0.0 | 2.518e+05 | -9788.60 | 30.52 | 9.540e+04 | 4841.43 | 2.406e+06 |
| | | 1.802e+06 | 4841.43 | 7.50e-04 | 0.0 | 60.0 | 2.518e+05 | -1.033e+04 | 30.52 | 9.540e+04 | 6672.47 | 1.802e+06 |
| 13 | 7 | 7.041e+05 | 3302.22 | 0.05 | -420.00 | 0.0 | 7.440e+04 | -1714.59 | -0.73 | 1.047e+04 | 3302.22 | 7.041e+05 |
| | | 5.887e+05 | 3258.65 | 1.67e-04 | 0.0 | 60.0 | 7.440e+04 | -2134.59 | -0.73 | 1.047e+04 | 3258.65 | 5.887e+05 |
| 13 | 28 | 7.566e+05 | 7286.19 | 0.05 | -420.00 | 0.0 | 8.056e+04 | -1884.09 | -13.25 | 1.005e+04 | 7286.19 | 7.566e+05 |
| | | 6.323e+05 | 6527.72 | 2.74e-04 | 0.0 | 60.0 | 8.056e+04 | -2304.09 | -13.25 | 1.005e+04 | 6527.72 | 6.323e+05 |
| 13 | 30 | 7.603e+05 | 1.69 | 0.05 | -420.00 | 0.0 | 7.971e+04 | -1836.15 | 9.83 | 1.271e+04 | -534.63 | 7.603e+05 |
| | | 6.352e+05 | -534.63 | 9.89e-05 | 0.0 | 60.0 | 7.971e+04 | -2256.15 | 9.83 | 1.271e+04 | 1.69 | 6.352e+05 |
| 13 | 31 | 7.570e+05 | 7621.42 | 0.05 | -420.00 | 0.0 | 8.057e+04 | -1890.30 | -11.39 | 9950.20 | 7621.42 | 7.570e+05 |
| | | 6.333e+05 | 6991.66 | 2.60e-04 | 0.0 | 60.0 | 8.057e+04 | -2310.30 | -11.39 | 9950.20 | 6991.66 | 6.333e+05 |
| 13 | 33 | 7.607e+05 | 3.04 | 0.05 | -420.00 | 0.0 | 7.966e+04 | -1843.49 | 9.84 | 1.270e+04 | -533.66 | 7.607e+05 |
| | | 6.360e+05 | -533.66 | 9.82e-05 | 0.0 | 60.0 | 7.966e+04 | -2263.49 | 9.84 | 1.270e+04 | 3.04 | 6.360e+05 |
| 13 | 36 | 7.566e+05 | 7620.45 | 0.05 | -420.00 | 0.0 | 8.061e+04 | -1882.96 | -11.39 | 9952.39 | 7620.45 | 7.566e+05 |
| | | 6.325e+05 | 6990.31 | 2.61e-04 | 0.0 | 60.0 | 8.061e+04 | -2302.96 | -11.39 | 9952.39 | 6990.31 | 6.325e+05 |
| 13 | 60 | 7.579e+05 | 4959.00 | 0.05 | -420.00 | 0.0 | 8.030e+04 | -1871.04 | -5.49 | 1.084e+04 | 4959.00 | 7.579e+05 |
| | | 6.335e+05 | 4643.29 | 2.15e-04 | 0.0 | 60.0 | 8.030e+04 | -2291.04 | -5.49 | 1.084e+04 | 4643.29 | 6.335e+05 |
| 13 | 62 | 7.592e+05 | 2174.76 | 0.05 | -420.00 | 0.0 | 7.997e+04 | -1853.02 | 3.23 | 1.185e+04 | 2001.09 | 7.592e+05 |
| | | 6.346e+05 | 2001.09 | 1.49e-04 | 0.0 | 60.0 | 7.997e+04 | -2273.02 | 3.23 | 1.185e+04 | 2174.76 | 6.346e+05 |
| 13 | 63 | 7.580e+05 | 5085.69 | 0.05 | -420.00 | 0.0 | 8.030e+04 | -1873.43 | -4.79 | 1.080e+04 | 5085.69 | 7.580e+05 |
| | | 6.339e+05 | 4818.59 | 2.10e-04 | 0.0 | 60.0 | 8.030e+04 | -2293.43 | -4.79 | 1.080e+04 | 4818.59 | 6.339e+05 |
| 13 | 65 | 7.594e+05 | 2175.28 | 0.05 | -420.00 | 0.0 | 7.996e+04 | -1855.83 | 3.23 | 1.185e+04 | 2001.47 | 7.594e+05 |
| | | 6.349e+05 | 2001.47 | 1.49e-04 | 0.0 | 60.0 | 7.996e+04 | -2275.83 | 3.23 | 1.185e+04 | 2175.28 | 6.349e+05 |
| 13 | 68 | 7.578e+05 | 5085.32 | 0.05 | -420.00 | 0.0 | 8.032e+04 | -1870.62 | -4.79 | 1.080e+04 | 5085.32 | 7.578e+05 |
| | | 6.336e+05 | 4818.08 | 2.10e-04 | 0.0 | 60.0 | 8.032e+04 | -2290.62 | -4.79 | 1.080e+04 | 4818.08 | 6.336e+05 |
| 13 | 85 | 7.586e+05 | 3543.39 | 0.05 | -420.00 | 0.0 | 8.014e+04 | -1863.22 | -0.78 | 1.133e+04 | 3543.39 | 7.586e+05 |
| | | 6.342e+05 | 3496.68 | 1.80e-04 | 0.0 | 60.0 | 8.014e+04 | -2283.22 | -0.78 | 1.133e+04 | 3496.68 | 6.342e+05 |
| 13 | 87 | 1.705e+06 | 4914.53 | 0.14 | -420.00 | 0.0 | 1.785e+05 | -6774.16 | 20.24 | 6.511e+04 | 3700.08 | 1.705e+06 |
| | | 1.286e+06 | 3700.08 | 5.24e-04 | 0.0 | 60.0 | 1.785e+05 | -7194.16 | 20.24 | 6.511e+04 | 4914.53 | 1.286e+06 |
| 13 | 88 | 7.223e+05 | 3382.61 | 0.05 | -420.00 | 0.0 | 7.631e+04 | -1764.13 | -0.74 | 1.076e+04 | 3382.61 | 7.223e+05 |
| | | 6.038e+05 | 3337.99 | 1.71e-04 | 0.0 | 60.0 | 7.631e+04 | -2184.13 | -0.74 | 1.076e+04 | 3337.99 | 6.038e+05 |
| 13 | 97 | 1.638e+06 | 4895.05 | 0.13 | -420.00 | 0.0 | 1.717e+05 | -6359.51 | 18.11 | 6.017e+04 | 3808.35 | 1.638e+06 |
| | | 1.244e+06 | 3808.35 | 4.96e-04 | 0.0 | 60.0 | 1.717e+05 | -6779.51 | 18.11 | 6.017e+04 | 4895.05 | 1.244e+06 |
| 13 | 98 | 7.560e+05 | 3531.86 | 0.05 | -420.00 | 0.0 | 7.986e+04 | -1856.15 | -0.78 | 1.129e+04 | 3531.86 | 7.560e+05 |
| | | 6.321e+05 | 3485.28 | 1.79e-04 | 0.0 | 60.0 | 7.986e+04 | -2276.15 | -0.78 | 1.129e+04 | 3485.28 | 6.321e+05 |
| 13 | 102 | 7.586e+05 | 3543.39 | 0.05 | -420.00 | 0.0 | 8.014e+04 | -1863.22 | -0.78 | 1.133e+04 | 3543.39 | 7.586e+05 |
| | | 6.342e+05 | 3496.68 | 1.80e-04 | 0.0 | 60.0 | 8.014e+04 | -2283.22 | -0.78 | 1.133e+04 | 3496.68 | 6.342e+05 |
| 14 | 2 | 2.204e+06 | 6672.46 | 0.25 | -546.00 | 0.0 | 2.347e+05 | -1.128e+04 | -13.75 | 1.071e+05 | 6672.46 | 2.204e+06 |
| | | 1.510e+06 | 5847.67 | 9.16e-04 | 0.0 | 60.0 | 2.347e+05 | -1.183e+04 | -13.75 | 1.071e+05 | 5847.67 | 1.510e+06 |
| 14 | 7 | 6.745e+05 | 3258.65 | 0.07 | -420.00 | 0.0 | 7.073e+04 | -2481.92 | -9.98 | 1.451e+04 | 3258.65 | 6.745e+05 |
| | | 5.130e+05 | 2660.05 | 2.32e-04 | 0.0 | 60.0 | 7.073e+04 | -2901.92 | -9.98 | 1.451e+04 | 2660.05 | 5.130e+05 |
| 14 | 25 | 7.282e+05 | 665.38 | 0.07 | -420.00 | 0.0 | 7.581e+04 | -2664.90 | 4.29 | 1.726e+04 | 465.63 | 7.282e+05 |
| | | 5.546e+05 | 465.63 | 1.30e-04 | 0.0 | 60.0 | 7.581e+04 | -3084.90 | 4.29 | 1.726e+04 | 665.38 | 5.546e+05 |
| 14 | 30 | 7.276e+05 | 120.20 | 0.07 | -420.00 | 0.0 | 7.580e+04 | -2661.42 | 3.09 | 1.733e+04 | 1.69 | 7.276e+05 |
| | | 5.536e+05 | 1.69 | 1.39e-04 | 0.0 | 60.0 | 7.580e+04 | -3081.42 | 3.09 | 1.733e+04 | 120.20 | 5.536e+05 |
| 14 | 31 | 7.259e+05 | 6991.67 | 0.07 | -420.00 | 0.0 | 7.658e+04 | -2718.16 | -24.60 | 1.403e+04 | 6991.67 | 7.259e+05 |
| | | 5.519e+05 | 5582.21 | 3.62e-04 | 0.0 | 60.0 | 7.658e+04 | -3138.16 | -24.60 | 1.403e+04 | 5582.21 | 5.519e+05 |
| 14 | 33 | 7.282e+05 | 121.80 | 0.07 | -420.00 | 0.0 | 7.575e+04 | -2666.13 | 3.09 | 1.733e+04 | 3.04 | 7.282e+05 |
| | | 5.545e+05 | 3.04 | 1.38e-04 | 0.0 | 60.0 | 7.575e+04 | -3086.13 | 3.09 | 1.733e+04 | 121.80 | 5.545e+05 |
| 14 | 36 | 7.253e+05 | 6990.32 | 0.07 | -420.00 | 0.0 | 7.663e+04 | -2713.44 | -24.61 | 1.404e+04 | 6990.32 | 7.253e+05 |
| | | 5.510e+05 | 5580.61 | 3.62e-04 | 0.0 | 60.0 | 7.663e+04 | -3133.44 | -24.61 | 1.404e+04 | 5580.61 | 5.510e+05 |
| 14 | 48 | 7.253e+05 | 4437.67 | 0.07 | -420.00 | 0.0 | 7.638e+04 | -2690.08 | -15.18 | 1.527e+04 | 4437.67 | 7.253e+05 |
| | | 5.508e+05 | 3543.91 | 2.87e-04 | 0.0 | 60.0 | 7.638e+04 | -3110.08 | -15.18 | 1.527e+04 | 3543.91 | 5.508e+05 |
| 14 | 57 | 7.273e+05 | 2350.07 | 0.07 | -420.00 | 0.0 | 7.605e+04 | -2680.45 | -5.07 | 1.629e+04 | 2350.07 | 7.273e+05 |
| | | 5.534e+05 | 2024.12 | 2.05e-04 | 0.0 | 60.0 | 7.605e+04 | -3100.45 | -5.07 | 1.629e+04 | 2024.12 | 5.534e+05 |
| 14 | 62 | 7.270e+05 | 2174.76 | 0.07 | -420.00 | 0.0 | 7.604e+04 | -2679.11 | -5.53 | 1.631e+04 | 2174.76 | 7.270e+05 |
| | | 5.531e+05 | 1818.18 | 2.08e-04 | 0.0 | 60.0 | 7.604e+04 | -3099.11 | -5.53 | 1.631e+04 | 1818.18 | 5.531e+05 |
| 14 | 63 | 7.264e+05 | 4818.60 | 0.07 | -420.00 | 0.0 | 7.634e+04 | -2700.47 | -15.99 | 1.505e+04 | 4818.60 | 7.264e+05 |
| | | 5.524e+05 | 3884.22 | 2.92e-04 | 0.0 | 60.0 | 7.634e+04 | -3120.47 | -15.99 | 1.505e+04 | 3884.22 | 5.524e+05 |
| 14 | 65 | 7.273e+05 | 2175.28 | 0.07 | -420.00 | 0.0 | 7.602e+04 | -2680.91 | -5.53 | 1.631e+04 | 2175.28 | 7.273e+05 |
| | | 5.534e+05 | 1818.80 | 2.08e-04 | 0.0 | 60.0 | 7.602e+04 | -3100.91 | -5.53 | 1.631e+04 | 1818.80 | 5.534e+05 |
| 14 | 68 | 7.262e+05 | 4818.08 | 0.07 | -420.00 | 0.0 | 7.636e+04 | -2698.66 | -15.99 | 1.505e+04 | 4818.08 | 7.262e+05 |
| | | 5.521e+05 | 3883.61 | 2.92e-04 | 0.0 | 60.0 | 7.636e+04 | -3118.66 | -15.99 | 1.505e+04 | 3883.61 | 5.521e+05 |
| 14 | 80 | 7.262e+05 | 3852.73 | 0.07 | -420.00 | 0.0 | 7.626e+04 | -2689.84 | -12.43 | 1.552e+04 | 3852.73 | 7.262e+05 |
| | | 5.520e+05 | 3113.41 | 2.64e-04 | 0.0 | 60.0 | 7.626e+04 | -3109.84 | -12.43 | 1.552e+04 | 3113.41 | 5.520e+05 |
| 14 | 85 | 7.267e+05 | 3496.68 | 0.07 | -420.00 | 0.0 | 7.619e+04 | -2689.79 | -10.76 | 1.568e+04 | 3496.68 | 7.267e+05 |
| | | 5.527e+05 | 2851.20 | 2.50e-04 | 0.0 | 60.0 | 7.619e+04 | -3109.79 | -10.76 | 1.568e+04 | 2851.20 | 5.527e+05 |
| 14 | 87 | 1.566e+06 | 4914.53 | 0.18 | -420.00 | 0.0 | 1.666e+05 | -7881.72 | -10.60 | 7.350e+04 | 4914.53 | 1.566e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|-----------|
| | | 1.080e+06 | 4278.61 | 6.44e-04 | 0.0 | 60.0 | 1.666e+05 | -8301.72 | -10.60 | 7.350e+04 | 4278.61 | 1.080e+06 |
| 14 | 88 | 6.919e+05 | 3338.00 | 0.07 | -420.00 | 0.0 | 7.255e+04 | -2551.21 | -10.24 | 1.490e+04 | 3338.00 | 6.919e+05 |
| | | 5.263e+05 | 2723.77 | 2.38e-04 | 0.0 | 60.0 | 7.255e+04 | -2971.21 | -10.24 | 1.490e+04 | 2723.77 | 5.263e+05 |
| 14 | 97 | 1.509e+06 | 4895.05 | 0.17 | -420.00 | 0.0 | 1.604e+05 | -7469.43 | -11.02 | 6.832e+04 | 4895.05 | 1.509e+06 |
| | | 1.048e+06 | 4234.05 | 6.14e-04 | 0.0 | 60.0 | 1.604e+05 | -7889.43 | -11.02 | 6.832e+04 | 4234.05 | 1.048e+06 |
| 14 | 98 | 7.242e+05 | 3485.28 | 0.07 | -420.00 | 0.0 | 7.593e+04 | -2679.89 | -10.72 | 1.563e+04 | 3485.28 | 7.242e+05 |
| | | 5.508e+05 | 2842.03 | 2.49e-04 | 0.0 | 60.0 | 7.593e+04 | -3099.89 | -10.72 | 1.563e+04 | 2842.03 | 5.508e+05 |
| 14 | 102 | 7.267e+05 | 3496.68 | 0.07 | -420.00 | 0.0 | 7.619e+04 | -2689.79 | -10.76 | 1.568e+04 | 3496.68 | 7.267e+05 |
| | | 5.527e+05 | 2851.20 | 2.50e-04 | 0.0 | 60.0 | 7.619e+04 | -3109.79 | -10.76 | 1.568e+04 | 2851.20 | 5.527e+05 |
| 15 | 2 | 1.967e+06 | 5847.67 | 0.30 | -546.00 | 0.0 | 2.152e+05 | -1.281e+04 | -102.16 | 1.158e+05 | 5847.67 | 1.967e+06 |
| | | 1.182e+06 | -282.04 | 1.05e-03 | 0.0 | 60.0 | 2.152e+05 | -1.336e+04 | -102.16 | 1.158e+05 | -282.04 | 1.182e+06 |
| 15 | 7 | 6.274e+05 | 2660.05 | 0.08 | -420.00 | 0.0 | 6.585e+04 | -3245.78 | -30.97 | 1.833e+04 | 2660.05 | 6.274e+05 |
| | | 4.201e+05 | 801.62 | 2.92e-04 | 0.0 | 60.0 | 6.585e+04 | -3665.78 | -30.97 | 1.833e+04 | 801.62 | 4.201e+05 |
| 15 | 8 | 1.758e+06 | 4964.79 | 0.27 | -420.00 | 0.0 | 1.932e+05 | -1.172e+04 | -91.79 | 1.096e+05 | 4964.79 | 1.758e+06 |
| | | 1.042e+06 | -542.79 | 9.55e-04 | 0.0 | 60.0 | 1.932e+05 | -1.214e+04 | -91.79 | 1.096e+05 | -542.79 | 1.042e+06 |
| 15 | 19 | 6.274e+05 | 2661.03 | 0.08 | -420.00 | 0.0 | 6.585e+04 | -3245.80 | -30.97 | 1.833e+04 | 2661.03 | 6.274e+05 |
| | | 4.201e+05 | 802.59 | 2.92e-04 | 0.0 | 60.0 | 6.585e+04 | -3665.80 | -30.97 | 1.833e+04 | 802.59 | 4.201e+05 |
| 15 | 30 | 6.769e+05 | 120.20 | 0.09 | -420.00 | 0.0 | 7.060e+04 | -3486.27 | -17.60 | 2.157e+04 | 120.20 | 6.769e+05 |
| | | 4.538e+05 | -1022.72 | 1.77e-04 | 0.0 | 60.0 | 7.060e+04 | -3906.27 | -17.60 | 2.157e+04 | -1022.72 | 4.538e+05 |
| 15 | 31 | 6.751e+05 | 5582.22 | 0.09 | -420.00 | 0.0 | 7.126e+04 | -3538.97 | -49.21 | 1.808e+04 | 5582.22 | 6.751e+05 |
| | | 4.515e+05 | 2716.52 | 4.51e-04 | 0.0 | 60.0 | 7.126e+04 | -3958.97 | -49.21 | 1.808e+04 | 2716.52 | 4.515e+05 |
| 15 | 33 | 6.777e+05 | 121.80 | 0.09 | -420.00 | 0.0 | 7.054e+04 | -3487.90 | -17.58 | 2.157e+04 | 121.80 | 6.777e+05 |
| | | 4.547e+05 | -1021.01 | 1.77e-04 | 0.0 | 60.0 | 7.054e+04 | -3907.90 | -17.58 | 2.157e+04 | -1021.01 | 4.547e+05 |
| 15 | 36 | 6.743e+05 | 5580.62 | 0.09 | -420.00 | 0.0 | 7.132e+04 | -3537.34 | -49.23 | 1.808e+04 | 5580.62 | 6.743e+05 |
| | | 4.506e+05 | 2714.81 | 4.51e-04 | 0.0 | 60.0 | 7.132e+04 | -3957.34 | -49.23 | 1.808e+04 | 2714.81 | 4.506e+05 |
| 15 | 49 | 6.778e+05 | 1995.43 | 0.09 | -420.00 | 0.0 | 7.072e+04 | -3507.69 | -28.63 | 2.032e+04 | 1995.43 | 6.778e+05 |
| | | 4.547e+05 | 248.17 | 2.73e-04 | 0.0 | 60.0 | 7.072e+04 | -3927.69 | -28.63 | 2.032e+04 | 248.17 | 4.547e+05 |
| 15 | 62 | 6.763e+05 | 1818.19 | 0.09 | -420.00 | 0.0 | 7.080e+04 | -3502.70 | -27.43 | 2.049e+04 | 1818.19 | 6.763e+05 |
| | | 4.531e+05 | 139.80 | 2.62e-04 | 0.0 | 60.0 | 7.080e+04 | -3922.70 | -27.43 | 2.049e+04 | 139.80 | 4.531e+05 |
| 15 | 63 | 6.757e+05 | 3884.23 | 0.09 | -420.00 | 0.0 | 7.105e+04 | -3522.54 | -39.38 | 1.915e+04 | 3884.23 | 6.757e+05 |
| | | 4.522e+05 | 1554.00 | 3.66e-04 | 0.0 | 60.0 | 7.105e+04 | -3942.54 | -39.38 | 1.915e+04 | 1554.00 | 4.522e+05 |
| 15 | 65 | 6.766e+05 | 1818.80 | 0.09 | -420.00 | 0.0 | 7.078e+04 | -3503.32 | -27.42 | 2.049e+04 | 1818.80 | 6.766e+05 |
| | | 4.534e+05 | 140.45 | 2.62e-04 | 0.0 | 60.0 | 7.078e+04 | -3923.32 | -27.42 | 2.049e+04 | 140.45 | 4.534e+05 |
| 15 | 68 | 6.754e+05 | 3883.62 | 0.09 | -420.00 | 0.0 | 7.108e+04 | -3521.92 | -39.39 | 1.915e+04 | 3883.62 | 6.754e+05 |
| | | 4.519e+05 | 1553.35 | 3.66e-04 | 0.0 | 60.0 | 7.108e+04 | -3941.92 | -39.39 | 1.915e+04 | 1553.35 | 4.519e+05 |
| 15 | 81 | 6.767e+05 | 2527.40 | 0.09 | -420.00 | 0.0 | 7.085e+04 | -3510.78 | -31.60 | 2.001e+04 | 2527.40 | 6.767e+05 |
| | | 4.534e+05 | 620.34 | 2.98e-04 | 0.0 | 60.0 | 7.085e+04 | -3930.78 | -31.60 | 2.001e+04 | 620.34 | 4.534e+05 |
| 15 | 85 | 6.760e+05 | 2851.21 | 0.09 | -420.00 | 0.0 | 7.093e+04 | -3512.62 | -33.41 | 1.982e+04 | 2851.21 | 6.760e+05 |
| | | 4.526e+05 | 846.90 | 3.14e-04 | 0.0 | 60.0 | 7.093e+04 | -3932.62 | -33.41 | 1.982e+04 | 846.90 | 4.526e+05 |
| 15 | 87 | 1.402e+06 | 4278.61 | 0.21 | -420.00 | 0.0 | 1.529e+05 | -9011.48 | -72.56 | 7.981e+04 | 4278.61 | 1.402e+06 |
| | | 8.485e+05 | -75.11 | 7.44e-04 | 0.0 | 60.0 | 1.529e+05 | -9431.48 | -72.56 | 7.981e+04 | -75.11 | 8.485e+05 |
| 15 | 88 | 6.436e+05 | 2723.77 | 0.08 | -420.00 | 0.0 | 6.754e+04 | -3334.73 | -31.78 | 1.883e+04 | 2723.77 | 6.436e+05 |
| | | 4.309e+05 | 816.71 | 2.99e-04 | 0.0 | 60.0 | 6.754e+04 | -3754.73 | -31.78 | 1.883e+04 | 816.71 | 4.309e+05 |
| 15 | 89 | 1.397e+06 | 4260.26 | 0.21 | -420.00 | 0.0 | 1.524e+05 | -8986.06 | -72.33 | 7.967e+04 | 4260.26 | 1.397e+06 |
| | | 8.454e+05 | -79.56 | 7.41e-04 | 0.0 | 60.0 | 1.524e+05 | -9406.06 | -72.33 | 7.967e+04 | -79.56 | 8.454e+05 |
| 15 | 94 | 6.436e+05 | 2724.43 | 0.08 | -420.00 | 0.0 | 6.754e+04 | -3334.74 | -31.78 | 1.883e+04 | 2724.43 | 6.436e+05 |
| | | 4.309e+05 | 817.36 | 2.99e-04 | 0.0 | 60.0 | 6.754e+04 | -3754.74 | -31.78 | 1.883e+04 | 817.36 | 4.309e+05 |
| 15 | 97 | 1.354e+06 | 4234.05 | 0.20 | -420.00 | 0.0 | 1.473e+05 | -8598.82 | -69.90 | 7.458e+04 | 4234.05 | 1.354e+06 |
| | | 8.257e+05 | 40.26 | 7.12e-04 | 0.0 | 60.0 | 1.473e+05 | -9018.82 | -69.90 | 7.458e+04 | 40.26 | 8.257e+05 |
| 15 | 98 | 6.737e+05 | 2842.04 | 0.09 | -420.00 | 0.0 | 7.069e+04 | -3499.91 | -33.29 | 1.975e+04 | 2842.04 | 6.737e+05 |
| | | 4.511e+05 | 844.67 | 3.13e-04 | 0.0 | 60.0 | 7.069e+04 | -3919.91 | -33.29 | 1.975e+04 | 844.67 | 4.511e+05 |
| 15 | 101 | 6.737e+05 | 2842.36 | 0.09 | -420.00 | 0.0 | 7.069e+04 | -3499.92 | -33.29 | 1.975e+04 | 2842.36 | 6.737e+05 |
| | | 4.511e+05 | 845.00 | 3.13e-04 | 0.0 | 60.0 | 7.069e+04 | -3919.92 | -33.29 | 1.975e+04 | 845.00 | 4.511e+05 |
| 15 | 102 | 6.760e+05 | 2851.21 | 0.09 | -420.00 | 0.0 | 7.093e+04 | -3512.62 | -33.41 | 1.982e+04 | 2851.21 | 6.760e+05 |
| | | 4.526e+05 | 846.90 | 3.14e-04 | 0.0 | 60.0 | 7.093e+04 | -3932.62 | -33.41 | 1.982e+04 | 846.90 | 4.526e+05 |
| 16 | 1 | 7.510e+05 | 1062.37 | 0.13 | -546.00 | 0.0 | 7.973e+04 | -5350.50 | -93.34 | 2.926e+04 | 1062.37 | 7.510e+05 |
| | | 4.135e+05 | -4537.76 | 4.45e-04 | 0.0 | 60.0 | 7.973e+04 | -5896.50 | -93.34 | 2.926e+04 | -4537.76 | 4.135e+05 |
| 16 | 2 | 1.696e+06 | -282.04 | 0.34 | -546.00 | 0.0 | 1.932e+05 | -1.436e+04 | -254.34 | 1.221e+05 | -282.04 | 1.696e+06 |
| | | 8.181e+05 | -1.554e+04 | 1.12e-03 | 0.0 | 60.0 | 1.932e+05 | -1.490e+04 | -254.34 | 1.221e+05 | -1.554e+04 | 8.181e+05 |
| 16 | 19 | 5.628e+05 | 802.59 | 0.10 | -420.00 | 0.0 | 5.976e+04 | -4004.91 | -69.93 | 2.190e+04 | 802.59 | 5.628e+05 |
| | | 3.099e+05 | -3393.14 | 3.33e-04 | 0.0 | 60.0 | 5.976e+04 | -4424.91 | -69.93 | 2.190e+04 | -3393.14 | 3.099e+05 |
| 16 | 30 | 6.036e+05 | -1022.71 | 0.10 | -420.00 | 0.0 | 6.411e+04 | -4303.48 | -59.17 | 2.541e+04 | -1022.71 | 6.036e+05 |
| | | 3.354e+05 | -4722.82 | 2.04e-04 | 0.0 | 60.0 | 6.411e+04 | -4723.48 | -59.17 | 2.541e+04 | -4722.82 | 3.354e+05 |
| 16 | 31 | 6.091e+05 | 2716.53 | 0.10 | -420.00 | 0.0 | 6.463e+04 | -4357.24 | -91.66 | 2.195e+04 | 2716.53 | 6.091e+05 |
| | | 3.325e+05 | -2633.34 | 5.14e-04 | 0.0 | 60.0 | 6.463e+04 | -4777.24 | -91.66 | 2.195e+04 | -2633.34 | 3.325e+05 |
| 16 | 33 | 6.046e+05 | -1021.01 | 0.10 | -420.00 | 0.0 | 6.405e+04 | -4305.10 | -59.14 | 2.541e+04 | -1021.01 | 6.046e+05 |
| | | 3.363e+05 | -4721.18 | 2.04e-04 | 0.0 | 60.0 | 6.405e+04 | -4725.10 | -59.14 | 2.541e+04 | -4721.18 | 3.363e+05 |
| 16 | 35 | 6.091e+05 | 2689.53 | 0.10 | -420.00 | 0.0 | 6.463e+04 | -4357.24 | -91.66 | 2.195e+04 | 2689.53 | 6.091e+05 |
| | | 3.325e+05 | -2658.47 | 5.14e-04 | 0.0 | 60.0 | 6.463e+04 | -4777.24 | -91.66 | 2.195e+04 | -2658.47 | 3.325e+05 |
| 16 | 36 | 6.082e+05 | 2714.82 | 0.10 | -420.00 | 0.0 | 6.469e+04 | -4355.62 | -91.70 | 2.195e+04 | 2714.82 | 6.082e+05 |
| | | 3.317e+05 | -2634.98 | 5.14e-04 | 0.0 | 60.0 | 6.469e+04 | -4775.62 | -91.70 | 2.195e+04 | -2634.98 | 3.317e+05 |
| 16 | 62 | 6.053e+05 | 139.80 | 0.10 | -420.00 | 0.0 | 6.427e+04 | -4320.21 | -69.27 | 2.435e+04 | 139.80 | 6.053e+05 |
| | | 3.345e+05 | -4072.75 | 3.00e-04 | 0.0 | 60.0 | 6.427e+04 | -4740.21 | -69.27 | 2.435e+04 | -4072.75 | 3.345e+05 |
| 16 | 63 | 6.074e+05 | 1554.01 | 0.10 | -420.00 | 0.0 | 6.447e+04 | -4340.51 | -81.56 | 2.301e+04 | 1554.01 | 6.074e+05 |
| | | 3.334e+05 | -3283.41 | 4.18e-04 | 0.0 | 60.0 | 6.447e+04 | -4760.51 | -81.56 | 2.301e+04 | -3283.41 | 3.334e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|------------|
| 16 | 65 | 6.057e+05 | 140.45 | 0.10 | -420.00 | 0.0 | 6.425e+04 | -4320.83 | -69.26 | 2.435e+04 | 140.45 | 6.057e+05 |
| | | 3.348e+05 | -4072.12 | 3.00e-04 | 0.0 | 60.0 | 6.425e+04 | -4740.83 | -69.26 | 2.435e+04 | -4072.12 | 3.348e+05 |
| 16 | 67 | 6.074e+05 | 1543.72 | 0.10 | -420.00 | 0.0 | 6.447e+04 | -4340.51 | -81.56 | 2.301e+04 | 1543.72 | 6.074e+05 |
| | | 3.334e+05 | -3292.99 | 4.18e-04 | 0.0 | 60.0 | 6.447e+04 | -4760.51 | -81.56 | 2.301e+04 | -3292.99 | 3.334e+05 |
| 16 | 68 | 6.071e+05 | 1553.36 | 0.10 | -420.00 | 0.0 | 6.449e+04 | -4339.89 | -81.57 | 2.301e+04 | 1553.36 | 6.071e+05 |
| | | 3.331e+05 | -3284.04 | 4.18e-04 | 0.0 | 60.0 | 6.449e+04 | -4759.89 | -81.57 | 2.301e+04 | -3284.04 | 3.331e+05 |
| 16 | 85 | 6.064e+05 | 846.91 | 0.10 | -420.00 | 0.0 | 6.437e+04 | -4330.36 | -75.42 | 2.368e+04 | 846.91 | 6.064e+05 |
| | | 3.340e+05 | -3678.08 | 3.59e-04 | 0.0 | 60.0 | 6.437e+04 | -4750.36 | -75.42 | 2.368e+04 | -3678.08 | 3.340e+05 |
| 16 | 86 | 5.815e+05 | 821.17 | 0.10 | -420.00 | 0.0 | 6.174e+04 | -4144.38 | -72.28 | 2.266e+04 | 821.17 | 5.815e+05 |
| | | 3.202e+05 | -3515.58 | 3.44e-04 | 0.0 | 60.0 | 6.174e+04 | -4564.38 | -72.28 | 2.266e+04 | -3515.58 | 3.202e+05 |
| 16 | 87 | 1.211e+06 | -75.11 | 0.24 | -420.00 | 0.0 | 1.374e+05 | -1.015e+04 | -179.61 | 8.459e+04 | -75.11 | 1.211e+06 |
| | | 5.899e+05 | -1.085e+04 | 7.94e-04 | 0.0 | 60.0 | 1.374e+05 | -1.057e+04 | -179.61 | 8.459e+04 | -1.085e+04 | 5.899e+05 |
| 16 | 94 | 5.773e+05 | 817.36 | 0.10 | -420.00 | 0.0 | 6.130e+04 | -4113.39 | -71.76 | 2.249e+04 | 817.36 | 5.773e+05 |
| | | 3.179e+05 | -3488.12 | 3.42e-04 | 0.0 | 60.0 | 6.130e+04 | -4533.39 | -71.76 | 2.249e+04 | -3488.12 | 3.179e+05 |
| 16 | 96 | 6.064e+05 | 846.91 | 0.10 | -420.00 | 0.0 | 6.437e+04 | -4330.36 | -75.42 | 2.368e+04 | 846.91 | 6.064e+05 |
| | | 3.340e+05 | -3678.08 | 3.59e-04 | 0.0 | 60.0 | 6.437e+04 | -4750.36 | -75.42 | 2.368e+04 | -3678.08 | 3.340e+05 |
| 16 | 97 | 1.173e+06 | 40.26 | 0.23 | -420.00 | 0.0 | 1.325e+05 | -9734.94 | -172.02 | 7.941e+04 | 40.26 | 1.173e+06 |
| | | 5.767e+05 | -1.028e+04 | 7.64e-04 | 0.0 | 60.0 | 1.325e+05 | -1.015e+04 | -172.02 | 7.941e+04 | -1.028e+04 | 5.767e+05 |
| 16 | 101 | 6.043e+05 | 845.00 | 0.10 | -420.00 | 0.0 | 6.415e+04 | -4314.87 | -75.16 | 2.359e+04 | 845.00 | 6.043e+05 |
| | | 3.328e+05 | -3664.35 | 3.58e-04 | 0.0 | 60.0 | 6.415e+04 | -4734.87 | -75.16 | 2.359e+04 | -3664.35 | 3.328e+05 |
| 16 | 102 | 6.064e+05 | 846.91 | 0.10 | -420.00 | 0.0 | 6.437e+04 | -4330.36 | -75.42 | 2.368e+04 | 846.91 | 6.064e+05 |
| | | 3.340e+05 | -3678.08 | 3.59e-04 | 0.0 | 60.0 | 6.437e+04 | -4750.36 | -75.42 | 2.368e+04 | -3678.08 | 3.340e+05 |
| 17 | 2 | 1.386e+06 | -1.554e+04 | 0.37 | -546.00 | 0.0 | 1.690e+05 | -1.590e+04 | -481.86 | 1.261e+05 | -1.554e+04 | 1.386e+06 |
| | | 4.155e+05 | -4.445e+04 | 1.03e-03 | 0.0 | 60.0 | 1.690e+05 | -1.645e+04 | -481.86 | 1.261e+05 | -4.445e+04 | 4.155e+05 |
| 17 | 19 | 4.800e+05 | -3393.14 | 0.11 | -420.00 | 0.0 | 5.250e+04 | -4758.16 | -130.66 | 2.496e+04 | -3393.14 | 4.800e+05 |
| | | 1.819e+05 | -1.123e+04 | 3.35e-04 | 0.0 | 60.0 | 5.250e+04 | -5178.16 | -130.66 | 2.496e+04 | -1.123e+04 | 1.819e+05 |
| 17 | 22 | 5.136e+05 | -4342.20 | 0.11 | -420.00 | 0.0 | 5.675e+04 | -5111.88 | -127.99 | 2.873e+04 | -4342.20 | 5.136e+05 |
| | | 1.977e+05 | -1.289e+04 | 2.03e-04 | 0.0 | 60.0 | 5.675e+04 | -5531.88 | -127.99 | 2.873e+04 | -1.289e+04 | 1.977e+05 |
| 17 | 31 | 5.210e+05 | -2633.33 | 0.11 | -420.00 | 0.0 | 5.632e+04 | -5175.93 | -155.34 | 2.528e+04 | -2633.33 | 5.210e+05 |
| | | 1.944e+05 | -1.152e+04 | 5.26e-04 | 0.0 | 60.0 | 5.632e+04 | -5595.93 | -155.34 | 2.528e+04 | -1.152e+04 | 1.944e+05 |
| 17 | 34 | 5.133e+05 | -4697.68 | 0.11 | -420.00 | 0.0 | 5.678e+04 | -5107.79 | -126.50 | 2.872e+04 | -4697.68 | 5.133e+05 |
| | | 1.977e+05 | -1.275e+04 | 1.94e-04 | 0.0 | 60.0 | 5.678e+04 | -5527.79 | -126.50 | 2.872e+04 | -1.275e+04 | 1.977e+05 |
| 17 | 35 | 5.210e+05 | -2658.46 | 0.11 | -420.00 | 0.0 | 5.632e+04 | -5175.93 | -155.35 | 2.528e+04 | -2658.46 | 5.210e+05 |
| | | 1.944e+05 | -1.152e+04 | 5.26e-04 | 0.0 | 60.0 | 5.632e+04 | -5595.93 | -155.35 | 2.528e+04 | -1.152e+04 | 1.944e+05 |
| 17 | 36 | 5.201e+05 | -2634.97 | 0.11 | -420.00 | 0.0 | 5.637e+04 | -5171.23 | -155.42 | 2.530e+04 | -2634.97 | 5.201e+05 |
| | | 1.938e+05 | -1.154e+04 | 5.25e-04 | 0.0 | 60.0 | 5.637e+04 | -5591.23 | -155.42 | 2.530e+04 | -1.154e+04 | 1.938e+05 |
| 17 | 54 | 5.158e+05 | -3928.98 | 0.11 | -420.00 | 0.0 | 5.663e+04 | -5130.51 | -136.03 | 2.767e+04 | -3928.98 | 5.158e+05 |
| | | 1.967e+05 | -1.242e+04 | 3.01e-04 | 0.0 | 60.0 | 5.663e+04 | -5550.51 | -136.03 | 2.767e+04 | -1.242e+04 | 1.967e+05 |
| 17 | 63 | 5.186e+05 | -3283.40 | 0.11 | -420.00 | 0.0 | 5.646e+04 | -5154.75 | -146.38 | 2.633e+04 | -3283.40 | 5.186e+05 |
| | | 1.955e+05 | -1.190e+04 | 4.23e-04 | 0.0 | 60.0 | 5.646e+04 | -5574.75 | -146.38 | 2.633e+04 | -1.190e+04 | 1.955e+05 |
| 17 | 66 | 5.157e+05 | -4063.16 | 0.11 | -420.00 | 0.0 | 5.664e+04 | -5128.96 | -135.47 | 2.767e+04 | -4063.16 | 5.157e+05 |
| | | 1.967e+05 | -1.237e+04 | 2.97e-04 | 0.0 | 60.0 | 5.664e+04 | -5548.96 | -135.47 | 2.767e+04 | -1.237e+04 | 1.967e+05 |
| 17 | 67 | 5.186e+05 | -3292.99 | 0.11 | -420.00 | 0.0 | 5.646e+04 | -5154.75 | -146.38 | 2.633e+04 | -3292.99 | 5.186e+05 |
| | | 1.955e+05 | -1.190e+04 | 4.23e-04 | 0.0 | 60.0 | 5.646e+04 | -5574.75 | -146.38 | 2.633e+04 | -1.190e+04 | 1.955e+05 |
| 17 | 68 | 5.183e+05 | -3284.03 | 0.11 | -420.00 | 0.0 | 5.648e+04 | -5152.95 | -146.41 | 2.634e+04 | -3284.03 | 5.183e+05 |
| | | 1.952e+05 | -1.191e+04 | 4.23e-04 | 0.0 | 60.0 | 5.648e+04 | -5572.95 | -146.41 | 2.634e+04 | -1.191e+04 | 1.952e+05 |
| 17 | 85 | 5.172e+05 | -3678.07 | 0.11 | -420.00 | 0.0 | 5.655e+04 | -5141.86 | -140.92 | 2.700e+04 | -3678.07 | 5.172e+05 |
| | | 1.961e+05 | -1.213e+04 | 3.60e-04 | 0.0 | 60.0 | 5.655e+04 | -5561.86 | -140.92 | 2.700e+04 | -1.213e+04 | 1.961e+05 |
| 17 | 87 | 9.930e+05 | -1.085e+04 | 0.26 | -420.00 | 0.0 | 1.202e+05 | -1.129e+04 | -340.03 | 8.769e+04 | -1.085e+04 | 9.930e+05 |
| | | 3.032e+05 | -3.125e+04 | 7.36e-04 | 0.0 | 60.0 | 1.202e+05 | -1.171e+04 | -340.03 | 8.769e+04 | -3.125e+04 | 3.032e+05 |
| 17 | 94 | 4.924e+05 | -3488.12 | 0.11 | -420.00 | 0.0 | 5.385e+04 | -4886.06 | -134.08 | 2.564e+04 | -3488.12 | 4.924e+05 |
| | | 1.866e+05 | -1.153e+04 | 3.43e-04 | 0.0 | 60.0 | 5.385e+04 | -5306.06 | -134.08 | 2.564e+04 | -1.153e+04 | 1.866e+05 |
| 17 | 97 | 9.645e+05 | -1.028e+04 | 0.25 | -420.00 | 0.0 | 1.159e+05 | -1.087e+04 | -325.40 | 8.266e+04 | -1.028e+04 | 9.645e+05 |
| | | 2.997e+05 | -2.980e+04 | 7.12e-04 | 0.0 | 60.0 | 1.159e+05 | -1.129e+04 | -325.40 | 8.266e+04 | -2.980e+04 | 2.997e+05 |
| 17 | 101 | 5.154e+05 | -3664.34 | 0.11 | -420.00 | 0.0 | 5.636e+04 | -5123.59 | -140.44 | 2.690e+04 | -3664.34 | 5.154e+05 |
| | | 1.954e+05 | -1.209e+04 | 3.59e-04 | 0.0 | 60.0 | 5.636e+04 | -5543.59 | -140.44 | 2.690e+04 | -1.209e+04 | 1.954e+05 |
| 17 | 102 | 5.172e+05 | -3678.07 | 0.11 | -420.00 | 0.0 | 5.655e+04 | -5141.86 | -140.92 | 2.700e+04 | -3678.07 | 5.172e+05 |
| | | 1.961e+05 | -1.213e+04 | 3.60e-04 | 0.0 | 60.0 | 5.655e+04 | -5561.86 | -140.92 | 2.700e+04 | -1.213e+04 | 1.961e+05 |
| 18 | 2 | 1.025e+06 | -4.445e+04 | 0.39 | -546.00 | 0.0 | 1.430e+05 | -1.743e+04 | -733.81 | 1.248e+05 | -4.445e+04 | 1.025e+06 |
| | | -3.724e+04 | -8.848e+04 | 6.38e-04 | 0.0 | 60.0 | 1.430e+05 | -1.798e+04 | -733.81 | 1.248e+05 | -8.848e+04 | -3.724e+04 |
| 18 | 19 | 3.755e+05 | -1.123e+04 | 0.11 | -420.00 | 0.0 | 4.423e+04 | -5500.68 | -200.28 | 2.668e+04 | -1.123e+04 | 3.755e+05 |
| | | 3.289e+04 | -2.325e+04 | 2.53e-04 | 0.0 | 60.0 | 4.423e+04 | -5920.68 | -200.28 | 2.668e+04 | -2.325e+04 | 3.289e+04 |
| 18 | 20 | 8.995e+05 | -4.069e+04 | 0.35 | -420.00 | 0.0 | 1.282e+05 | -1.559e+04 | -666.76 | 1.158e+05 | -4.069e+04 | 8.995e+05 |
| | | -4.828e+04 | -8.069e+04 | 5.54e-04 | 0.0 | 60.0 | 1.282e+05 | -1.601e+04 | -666.76 | 1.158e+05 | -8.069e+04 | -4.828e+04 |
| 18 | 22 | 4.002e+05 | -1.289e+04 | 0.12 | -420.00 | 0.0 | 4.782e+04 | -5903.98 | -211.11 | 3.063e+04 | -1.289e+04 | 4.002e+05 |
| | | 3.336e+04 | -2.595e+04 | 1.18e-04 | 0.0 | 60.0 | 4.782e+04 | -6323.98 | -211.11 | 3.063e+04 | -2.595e+04 | 3.336e+04 |
| 18 | 23 | 4.091e+05 | -1.137e+04 | 0.12 | -420.00 | 0.0 | 4.747e+04 | -5979.97 | -220.94 | 2.710e+04 | -1.137e+04 | 4.091e+05 |
| | | 3.772e+04 | -2.424e+04 | 4.28e-04 | 0.0 | 60.0 | 4.747e+04 | -6399.97 | -220.94 | 2.710e+04 | -2.424e+04 | 3.772e+04 |
| 18 | 26 | 4.002e+05 | -1.289e+04 | 0.12 | -420.00 | 0.0 | 4.782e+04 | -5903.96 | -211.10 | 3.063e+04 | -1.289e+04 | 4.002e+05 |
| | | 3.335e+04 | -2.595e+04 | 1.18e-04 | 0.0 | 60.0 | 4.782e+04 | -6323.96 | -211.10 | 3.063e+04 | -2.595e+04 | 3.335e+04 |
| 18 | 27 | 4.091e+05 | -1.137e+04 | 0.12 | -420.00 | 0.0 | 4.747e+04 | -5979.99 | -220.95 | 2.710e+04 | -1.137e+04 | 4.091e+05 |
| | | 3.773e+04 | -2.424e+04 | 4.28e-04 | 0.0 | 60.0 | 4.747e+04 | -6399.99 | -220.95 | 2.710e+04 | -2.424e+04 | 3.773e+04 |
| 18 | 35 | 4.094e+05 | -1.152e+04 | 0.12 | -420.00 | 0.0 | 4.748e+04 | -5986.12 | -222.82 | 2.710e+04 | -1.152e+04 | 4.094e+05 |
| | | 3.772e+04 | -2.447e+04 | 4.41e-04 | 0.0 | 60.0 | 4.748e+04 | -6406.12 | -222.82 | 2.710e+04 | -2.447e+04 | 3.772e+04 |
| 18 | 54 | 4.030e+05 | -1.242e+04 | 0.12 | -420.00 | 0.0 | 4.771e+04 | -5927.59 | -214.16 | 2.955e+04 | -1.242e+04 | 4.030e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|------------|
| 18 | 55 | 3.471e+04 | -2.542e+04 | 2.14e-04 | 0.0 | 60.0 | 4.771e+04 | -6347.59 | -214.16 | 2.955e+04 | -2.542e+04 | 3.471e+04 |
| | | 4.063e+05 | -1.185e+04 | 0.12 | -420.00 | 0.0 | 4.758e+04 | -5956.36 | -217.89 | 2.818e+04 | -1.185e+04 | 4.063e+05 |
| | | 3.637e+04 | -2.477e+04 | 3.31e-04 | 0.0 | 60.0 | 4.758e+04 | -6376.36 | -217.89 | 2.818e+04 | -2.477e+04 | 3.637e+04 |
| 18 | 58 | 4.030e+05 | -1.242e+04 | 0.12 | -420.00 | 0.0 | 4.771e+04 | -5927.58 | -214.16 | 2.956e+04 | -1.242e+04 | 4.030e+05 |
| | | 3.471e+04 | -2.542e+04 | 2.14e-04 | 0.0 | 60.0 | 4.771e+04 | -6347.58 | -214.16 | 2.956e+04 | -2.542e+04 | 3.471e+04 |
| 18 | 59 | 4.063e+05 | -1.185e+04 | 0.12 | -420.00 | 0.0 | 4.758e+04 | -5956.37 | -217.89 | 2.818e+04 | -1.185e+04 | 4.063e+05 |
| | | 3.637e+04 | -2.477e+04 | 3.31e-04 | 0.0 | 60.0 | 4.758e+04 | -6376.37 | -217.89 | 2.818e+04 | -2.477e+04 | 3.637e+04 |
| 18 | 67 | 4.065e+05 | -1.190e+04 | 0.12 | -420.00 | 0.0 | 4.758e+04 | -5958.68 | -218.60 | 2.817e+04 | -1.190e+04 | 4.065e+05 |
| | | 3.637e+04 | -2.486e+04 | 3.36e-04 | 0.0 | 60.0 | 4.758e+04 | -6378.68 | -218.60 | 2.817e+04 | -2.486e+04 | 3.637e+04 |
| 18 | 85 | 4.047e+05 | -1.213e+04 | 0.12 | -420.00 | 0.0 | 4.764e+04 | -5941.97 | -216.02 | 2.887e+04 | -1.213e+04 | 4.047e+05 |
| | | 3.554e+04 | -2.509e+04 | 2.73e-04 | 0.0 | 60.0 | 4.764e+04 | -6361.97 | -216.02 | 2.887e+04 | -2.509e+04 | 3.554e+04 |
| 18 | 87 | 7.373e+05 | -3.125e+04 | 0.28 | -420.00 | 0.0 | 1.017e+05 | -1.241e+04 | -518.01 | 8.705e+04 | -3.125e+04 | 7.373e+05 |
| | | -2.009e+04 | -6.233e+04 | 4.62e-04 | 0.0 | 60.0 | 1.017e+05 | -1.283e+04 | -518.01 | 8.705e+04 | -6.233e+04 | -2.009e+04 |
| 18 | 94 | 3.852e+05 | -1.153e+04 | 0.12 | -420.00 | 0.0 | 4.537e+04 | -5647.78 | -205.53 | 2.741e+04 | -1.153e+04 | 3.852e+05 |
| | | 3.377e+04 | -2.386e+04 | 2.60e-04 | 0.0 | 60.0 | 4.537e+04 | -6067.78 | -205.53 | 2.741e+04 | -2.386e+04 | 3.377e+04 |
| 18 | 95 | 7.346e+05 | -3.117e+04 | 0.28 | -420.00 | 0.0 | 1.013e+05 | -1.237e+04 | -516.52 | 8.684e+04 | -3.117e+04 | 7.346e+05 |
| | | -2.034e+04 | -6.216e+04 | 4.60e-04 | 0.0 | 60.0 | 1.013e+05 | -1.279e+04 | -516.52 | 8.684e+04 | -6.216e+04 | -2.034e+04 |
| 18 | 97 | 7.190e+05 | -2.980e+04 | 0.27 | -420.00 | 0.0 | 9.802e+04 | -1.199e+04 | -495.91 | 8.235e+04 | -2.980e+04 | 7.190e+05 |
| | | -1.316e+04 | -5.956e+04 | 4.53e-04 | 0.0 | 60.0 | 9.802e+04 | -1.241e+04 | -495.91 | 8.235e+04 | -5.956e+04 | -1.316e+04 |
| 18 | 101 | 4.033e+05 | -1.209e+04 | 0.12 | -420.00 | 0.0 | 4.748e+04 | -5920.96 | -215.28 | 2.876e+04 | -1.209e+04 | 4.033e+05 |
| | | 3.541e+04 | -2.501e+04 | 2.72e-04 | 0.0 | 60.0 | 4.748e+04 | -6340.96 | -215.28 | 2.876e+04 | -2.501e+04 | 3.541e+04 |
| 18 | 102 | 4.047e+05 | -1.213e+04 | 0.12 | -420.00 | 0.0 | 4.764e+04 | -5941.97 | -216.02 | 2.887e+04 | -1.213e+04 | 4.047e+05 |
| | | 3.554e+04 | -2.509e+04 | 2.73e-04 | 0.0 | 60.0 | 4.764e+04 | -6361.97 | -216.02 | 2.887e+04 | -2.509e+04 | 3.554e+04 |
| 19 | 2 | 5.531e+05 | -8.848e+04 | 0.40 | -546.00 | 0.0 | 1.177e+05 | -1.866e+04 | -695.13 | 1.085e+05 | -8.848e+04 | 5.531e+05 |
| | | -5.826e+05 | -1.302e+05 | -3.12e-04 | 0.0 | 60.0 | 1.177e+05 | -1.920e+04 | -695.13 | 1.085e+05 | -1.302e+05 | -5.826e+05 |
| 19 | 7 | 2.329e+05 | -2.325e+04 | 0.12 | -420.00 | 0.0 | 3.567e+04 | -6150.10 | -193.46 | 2.453e+04 | -2.325e+04 | 2.329e+05 |
| | | -1.487e+05 | -3.486e+04 | 4.56e-05 | 0.0 | 60.0 | 3.567e+04 | -6570.10 | -193.46 | 2.453e+04 | -3.486e+04 | -1.487e+05 |
| 19 | 19 | 2.329e+05 | -2.325e+04 | 0.12 | -420.00 | 0.0 | 3.567e+04 | -6150.10 | -193.47 | 2.453e+04 | -2.325e+04 | 2.329e+05 |
| | | -1.487e+05 | -3.486e+04 | 4.56e-05 | 0.0 | 60.0 | 3.567e+04 | -6570.10 | -193.47 | 2.453e+04 | -3.486e+04 | -1.487e+05 |
| 19 | 23 | 2.563e+05 | -2.424e+04 | 0.13 | -420.00 | 0.0 | 3.817e+04 | -6689.87 | -195.77 | 2.483e+04 | -2.424e+04 | 2.563e+05 |
| | | -1.576e+05 | -3.736e+04 | 1.72e-04 | 0.0 | 60.0 | 3.817e+04 | -7109.87 | -195.77 | 2.483e+04 | -3.736e+04 | -1.576e+05 |
| 19 | 26 | 2.457e+05 | -2.595e+04 | 0.13 | -420.00 | 0.0 | 3.865e+04 | -6593.73 | -221.45 | 2.824e+04 | -2.595e+04 | 2.457e+05 |
| | | -1.625e+05 | -3.786e+04 | 1.25e-04 | 0.0 | 60.0 | 3.865e+04 | -7013.73 | -221.45 | 2.824e+04 | -3.786e+04 | -1.625e+05 |
| 19 | 27 | 2.563e+05 | -2.424e+04 | 0.13 | -420.00 | 0.0 | 3.817e+04 | -6689.90 | -195.78 | 2.483e+04 | -2.424e+04 | 2.563e+05 |
| | | -1.576e+05 | -3.736e+04 | 1.72e-04 | 0.0 | 60.0 | 3.817e+04 | -7109.90 | -195.78 | 2.483e+04 | -3.736e+04 | -1.576e+05 |
| 19 | 30 | 2.453e+05 | -2.572e+04 | 0.13 | -420.00 | 0.0 | 3.863e+04 | -6586.49 | -219.56 | 2.826e+04 | -2.572e+04 | 2.453e+05 |
| | | -1.625e+05 | -3.794e+04 | 1.41e-04 | 0.0 | 60.0 | 3.863e+04 | -7006.49 | -219.56 | 2.826e+04 | -3.794e+04 | -1.625e+05 |
| 19 | 35 | 2.567e+05 | -2.447e+04 | 0.13 | -420.00 | 0.0 | 3.819e+04 | -6697.16 | -197.68 | 2.481e+04 | -2.447e+04 | 2.567e+05 |
| | | -1.577e+05 | -3.728e+04 | 1.88e-04 | 0.0 | 60.0 | 3.819e+04 | -7117.16 | -197.68 | 2.481e+04 | -3.728e+04 | -1.577e+05 |
| 19 | 55 | 2.530e+05 | -2.477e+04 | 0.13 | -420.00 | 0.0 | 3.832e+04 | -6660.00 | -203.76 | 2.587e+04 | -2.477e+04 | 2.530e+05 |
| | | -1.592e+05 | -3.752e+04 | 8.72e-05 | 0.0 | 60.0 | 3.832e+04 | -7080.00 | -203.76 | 2.587e+04 | -3.752e+04 | -1.592e+05 |
| 19 | 58 | 2.490e+05 | -2.542e+04 | 0.13 | -420.00 | 0.0 | 3.850e+04 | -6623.62 | -213.47 | 2.720e+04 | -2.542e+04 | 2.490e+05 |
| | | -1.610e+05 | -3.771e+04 | 3.28e-05 | 0.0 | 60.0 | 3.850e+04 | -7043.62 | -213.47 | 2.720e+04 | -3.771e+04 | -1.610e+05 |
| 19 | 59 | 2.530e+05 | -2.477e+04 | 0.13 | -420.00 | 0.0 | 3.832e+04 | -6660.01 | -203.76 | 2.587e+04 | -2.477e+04 | 2.530e+05 |
| | | -1.592e+05 | -3.752e+04 | 8.72e-05 | 0.0 | 60.0 | 3.832e+04 | -7080.01 | -203.76 | 2.587e+04 | -3.752e+04 | -1.592e+05 |
| 19 | 62 | 2.489e+05 | -2.533e+04 | 0.13 | -420.00 | 0.0 | 3.849e+04 | -6620.88 | -212.75 | 2.721e+04 | -2.533e+04 | 2.489e+05 |
| | | -1.610e+05 | -3.774e+04 | 3.89e-05 | 0.0 | 60.0 | 3.849e+04 | -7040.88 | -212.75 | 2.721e+04 | -3.774e+04 | -1.610e+05 |
| 19 | 67 | 2.532e+05 | -2.486e+04 | 0.13 | -420.00 | 0.0 | 3.833e+04 | -6662.76 | -204.48 | 2.587e+04 | -2.486e+04 | 2.532e+05 |
| | | -1.592e+05 | -3.749e+04 | 9.22e-05 | 0.0 | 60.0 | 3.833e+04 | -7082.76 | -204.48 | 2.587e+04 | -3.749e+04 | -1.592e+05 |
| 19 | 85 | 2.510e+05 | -2.509e+04 | 0.13 | -420.00 | 0.0 | 3.841e+04 | -6641.82 | -208.61 | 2.654e+04 | -2.509e+04 | 2.510e+05 |
| | | -1.601e+05 | -3.761e+04 | 4.86e-05 | 0.0 | 60.0 | 3.841e+04 | -7061.82 | -208.61 | 2.654e+04 | -3.761e+04 | -1.601e+05 |
| 19 | 87 | 4.022e+05 | -6.233e+04 | 0.28 | -420.00 | 0.0 | 8.357e+04 | -1.332e+04 | -491.24 | 7.587e+04 | -6.233e+04 | 4.022e+05 |
| | | -4.098e+05 | -9.181e+04 | -2.05e-04 | 0.0 | 60.0 | 8.357e+04 | -1.374e+04 | -491.24 | 7.587e+04 | -9.181e+04 | -4.098e+05 |
| 19 | 88 | 2.389e+05 | -2.386e+04 | 0.12 | -420.00 | 0.0 | 3.658e+04 | -6314.01 | -198.51 | 2.520e+04 | -2.386e+04 | 2.389e+05 |
| | | -1.525e+05 | -3.578e+04 | 4.66e-05 | 0.0 | 60.0 | 3.658e+04 | -6734.01 | -198.51 | 2.520e+04 | -3.578e+04 | -1.525e+05 |
| 19 | 94 | 2.389e+05 | -2.386e+04 | 0.12 | -420.00 | 0.0 | 3.658e+04 | -6314.01 | -198.52 | 2.520e+04 | -2.386e+04 | 2.389e+05 |
| | | -1.525e+05 | -3.578e+04 | 4.66e-05 | 0.0 | 60.0 | 3.658e+04 | -6734.01 | -198.52 | 2.520e+04 | -3.578e+04 | -1.525e+05 |
| 19 | 97 | 3.964e+05 | -5.956e+04 | 0.27 | -420.00 | 0.0 | 8.047e+04 | -1.291e+04 | -470.76 | 7.197e+04 | -5.956e+04 | 3.964e+05 |
| | | -3.907e+05 | -8.781e+04 | -1.82e-04 | 0.0 | 60.0 | 8.047e+04 | -1.333e+04 | -470.76 | 7.197e+04 | -8.781e+04 | -3.907e+05 |
| 19 | 98 | 2.501e+05 | -2.501e+04 | 0.13 | -420.00 | 0.0 | 3.828e+04 | -6618.40 | -207.89 | 2.644e+04 | -2.501e+04 | 2.501e+05 |
| | | -1.596e+05 | -3.748e+04 | 4.85e-05 | 0.0 | 60.0 | 3.828e+04 | -7038.40 | -207.89 | 2.644e+04 | -3.748e+04 | -1.596e+05 |
| 19 | 101 | 2.501e+05 | -2.501e+04 | 0.13 | -420.00 | 0.0 | 3.828e+04 | -6618.40 | -207.89 | 2.644e+04 | -2.501e+04 | 2.501e+05 |
| | | -1.596e+05 | -3.748e+04 | 4.85e-05 | 0.0 | 60.0 | 3.828e+04 | -7038.40 | -207.89 | 2.644e+04 | -3.748e+04 | -1.596e+05 |
| 19 | 102 | 2.510e+05 | -2.509e+04 | 0.13 | -420.00 | 0.0 | 3.841e+04 | -6641.82 | -208.61 | 2.654e+04 | -2.509e+04 | 2.510e+05 |
| | | -1.601e+05 | -3.761e+04 | 4.86e-05 | 0.0 | 60.0 | 3.841e+04 | -7061.82 | -208.61 | 2.654e+04 | -3.761e+04 | -1.601e+05 |
| 20 | 2 | -2.778e+05 | 0.06 | 0.39 | -546.00 | 0.0 | 1.052e+05 | -2.360e+04 | 2169.85 | 7851.89 | -1.302e+05 | -2.778e+05 |
| | | -1.710e+06 | -1.302e+05 | -2.62e-03 | 0.0 | 60.0 | 1.052e+05 | -2.414e+04 | 2169.85 | 7851.89 | 0.06 | -1.710e+06 |
| 20 | 7 | -1.649e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.018e+04 | -7827.96 | 580.96 | -68.46 | -3.486e+04 | -1.649e+04 |
| | | -4.988e+05 | -3.486e+04 | -5.76e-04 | 0.0 | 60.0 | 3.018e+04 | -8247.96 | 580.96 | -68.46 | 0.01 | -4.988e+05 |
| 20 | 19 | -1.649e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.018e+04 | -7827.93 | 580.97 | -69.45 | -3.486e+04 | -1.649e+04 |
| | | -4.988e+05 | -3.486e+04 | -5.76e-04 | 0.0 | 60.0 | 3.018e+04 | -8247.93 | 580.97 | -69.45 | 0.01 | -4.988e+05 |
| 20 | 26 | -2.453e+04 | 0.02 | 0.12 | -420.00 | 0.0 | 3.291e+04 | -8499.43 | 631.07 | 1084.23 | -3.786e+04 | -2.453e+04 |
| | | -5.422e+05 | -3.786e+04 | -7.74e-04 | 0.0 | 60.0 | 3.291e+04 | -8919.43 | 631.07 | 1084.23 | 0.02 | -5.422e+05 |
| 20 | 30 | -2.508e+04 | 0.02 | 0.12 | -420.00 | 0.0 | 3.292e+04 | -8505.28 | 632.38 | 1110.04 | -3.794e+04 | -2.508e+04 |
| | | -5.421e+05 | -3.794e+04 | -7.92e-04 | 0.0 | 60.0 | 3.292e+04 | -8925.28 | 632.38 | 1110.04 | 0.02 | -5.421e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|---------|------------|------------|------------|
| 20 | 34 | -2.508e+04 | 0.02 | 0.12 | -420.00 | 0.0 | 3.292e+04 | -8505.34 | 632.37 | 1108.73 | -3.794e+04 | -2.508e+04 |
| | | -5.421e+05 | -3.794e+04 | -7.92e-04 | 0.0 | 60.0 | 3.292e+04 | -8925.34 | 632.37 | 1108.73 | 0.02 | -5.421e+05 |
| 20 | 35 | -1.032e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.209e+04 | -8388.27 | 621.35 | -1170.98 | -3.728e+04 | -1.032e+04 |
| | | -5.321e+05 | -3.728e+04 | -4.54e-04 | 0.0 | 60.0 | 3.209e+04 | -8808.27 | 621.35 | -1170.98 | 0.01 | -5.321e+05 |
| 20 | 58 | -2.028e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.266e+04 | -8466.83 | 628.46 | 402.63 | -3.771e+04 | -2.028e+04 |
| | | -5.390e+05 | -3.771e+04 | -6.80e-04 | 0.0 | 60.0 | 3.266e+04 | -8886.83 | 628.46 | 402.63 | 0.01 | -5.390e+05 |
| 20 | 62 | -2.049e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.266e+04 | -8469.03 | 628.95 | 412.16 | -3.774e+04 | -2.049e+04 |
| | | -5.390e+05 | -3.774e+04 | -6.87e-04 | 0.0 | 60.0 | 3.266e+04 | -8889.03 | 628.95 | 412.16 | 0.01 | -5.390e+05 |
| 20 | 66 | -2.049e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.266e+04 | -8469.05 | 628.95 | 411.66 | -3.774e+04 | -2.049e+04 |
| | | -5.390e+05 | -3.774e+04 | -6.87e-04 | 0.0 | 60.0 | 3.266e+04 | -8889.05 | 628.95 | 411.66 | 0.01 | -5.390e+05 |
| 20 | 67 | -1.491e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.235e+04 | -8424.55 | 624.78 | -473.91 | -3.749e+04 | -1.491e+04 |
| | | -5.352e+05 | -3.749e+04 | -5.59e-04 | 0.0 | 60.0 | 3.235e+04 | -8844.55 | 624.78 | -473.91 | 0.01 | -5.352e+05 |
| 20 | 85 | -1.770e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.250e+04 | -8446.80 | 626.86 | -31.13 | -3.761e+04 | -1.770e+04 |
| | | -5.371e+05 | -3.761e+04 | -6.23e-04 | 0.0 | 60.0 | 3.250e+04 | -8866.80 | 626.86 | -31.13 | 0.01 | -5.371e+05 |
| 20 | 87 | -1.875e+05 | 0.04 | 0.27 | -420.00 | 0.0 | 7.449e+04 | -1.686e+04 | 1530.15 | 5230.44 | -9.181e+04 | -1.875e+05 |
| | | -1.212e+06 | -9.181e+04 | -1.83e-03 | 0.0 | 60.0 | 7.449e+04 | -1.728e+04 | 1530.15 | 5230.44 | 0.04 | -1.212e+06 |
| 20 | 88 | -1.689e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.095e+04 | -8034.24 | 596.26 | -56.01 | -3.578e+04 | -1.689e+04 |
| | | -5.115e+05 | -3.578e+04 | -5.92e-04 | 0.0 | 60.0 | 3.095e+04 | -8454.24 | 596.26 | -56.01 | 0.01 | -5.115e+05 |
| 20 | 94 | -1.689e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.095e+04 | -8034.22 | 596.27 | -56.68 | -3.578e+04 | -1.689e+04 |
| | | -5.115e+05 | -3.578e+04 | -5.92e-04 | 0.0 | 60.0 | 3.095e+04 | -8454.22 | 596.27 | -56.68 | 0.01 | -5.115e+05 |
| 20 | 97 | -1.712e+05 | 0.04 | 0.26 | -420.00 | 0.0 | 7.148e+04 | -1.634e+04 | 1463.42 | 4723.61 | -8.781e+04 | -1.712e+05 |
| | | -1.164e+06 | -8.781e+04 | -1.73e-03 | 0.0 | 60.0 | 7.148e+04 | -1.676e+04 | 1463.42 | 4723.61 | 0.04 | -1.164e+06 |
| 20 | 98 | -1.764e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.239e+04 | -8417.34 | 624.68 | -32.83 | -3.748e+04 | -1.764e+04 |
| | | -5.353e+05 | -3.748e+04 | -6.21e-04 | 0.0 | 60.0 | 3.239e+04 | -8837.34 | 624.68 | -32.83 | 0.01 | -5.353e+05 |
| 20 | 101 | -1.764e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.239e+04 | -8417.33 | 624.68 | -33.16 | -3.748e+04 | -1.764e+04 |
| | | -5.353e+05 | -3.748e+04 | -6.21e-04 | 0.0 | 60.0 | 3.239e+04 | -8837.33 | 624.68 | -33.16 | 0.01 | -5.353e+05 |
| 20 | 102 | -1.770e+04 | 0.01 | 0.12 | -420.00 | 0.0 | 3.250e+04 | -8446.80 | 626.86 | -31.13 | -3.761e+04 | -1.770e+04 |
| | | -5.371e+05 | -3.761e+04 | -6.23e-04 | 0.0 | 60.0 | 3.250e+04 | -8866.80 | 626.86 | -31.13 | 0.01 | -5.371e+05 |
| 21 | 2 | -6.212e+04 | 0.02 | -0.42 | -546.00 | 0.0 | 1.010e+05 | 2.674e+04 | -291.28 | -3.792e+04 | 0.02 | -6.212e+04 |
| | | -1.650e+06 | -1.748e+04 | 7.93e-04 | 0.0 | 60.0 | 1.010e+05 | 2.620e+04 | -291.28 | -3.792e+04 | -1.748e+04 | -1.650e+06 |
| 21 | 7 | -1.933e+04 | 2.28e-03 | -0.11 | -420.00 | 0.0 | 2.981e+04 | 7986.55 | -104.26 | -3705.32 | 2.28e-03 | -4.859e+05 |
| | | -4.859e+05 | -6255.45 | 1.42e-04 | 0.0 | 60.0 | 2.981e+04 | 7566.55 | -104.26 | -3705.32 | -6255.45 | -1.933e+04 |
| 21 | 21 | -2.288e+04 | 3.67e-03 | -0.12 | -420.00 | 0.0 | 3.219e+04 | 8567.00 | -127.46 | -5660.66 | 3.67e-03 | -2.288e+04 |
| | | -5.242e+05 | -7647.33 | 3.05e-04 | 0.0 | 60.0 | 3.219e+04 | 8147.00 | -127.46 | -5660.66 | -7647.33 | -5.242e+05 |
| 21 | 28 | -1.868e+04 | 1.25e-03 | -0.12 | -420.00 | 0.0 | 3.201e+04 | 8603.01 | -95.94 | -2391.23 | 1.25e-03 | -5.224e+05 |
| | | -5.224e+05 | -5756.67 | 3.35e-06 | 0.0 | 60.0 | 3.201e+04 | 8183.01 | -95.94 | -2391.23 | -5756.67 | -1.868e+04 |
| 21 | 33 | -2.279e+04 | 3.54e-03 | -0.12 | -420.00 | 0.0 | 3.220e+04 | 8569.53 | -93.22 | -5624.69 | 3.54e-03 | -5.243e+05 |
| | | -5.243e+05 | -5592.94 | 2.88e-04 | 0.0 | 60.0 | 3.220e+04 | 8149.53 | -93.22 | -5624.69 | -5592.94 | -2.279e+04 |
| 21 | 35 | -1.918e+04 | 1.38e-03 | -0.12 | -420.00 | 0.0 | 3.201e+04 | 8609.39 | -130.37 | -2370.28 | 1.38e-03 | -5.224e+05 |
| | | -5.224e+05 | -7822.15 | 1.81e-05 | 0.0 | 60.0 | 3.201e+04 | 8189.39 | -130.37 | -2370.28 | -7822.15 | -1.918e+04 |
| 21 | 36 | -1.877e+04 | 1.38e-03 | -0.12 | -420.00 | 0.0 | 3.200e+04 | 8600.50 | -130.19 | -2398.90 | 1.38e-03 | -5.223e+05 |
| | | -5.223e+05 | -7811.10 | 1.75e-05 | 0.0 | 60.0 | 3.200e+04 | 8180.50 | -130.19 | -2398.90 | -7811.10 | -1.877e+04 |
| 21 | 53 | -2.157e+04 | 2.92e-03 | -0.12 | -420.00 | 0.0 | 3.213e+04 | 8578.24 | -117.71 | -4653.08 | 2.92e-03 | -5.236e+05 |
| | | -5.236e+05 | -7062.75 | 2.10e-04 | 0.0 | 60.0 | 3.213e+04 | 8158.24 | -117.71 | -4653.08 | -7062.75 | -2.157e+04 |
| 21 | 60 | -1.999e+04 | 2.00e-03 | -0.12 | -420.00 | 0.0 | 3.206e+04 | 8591.78 | -105.69 | -3381.26 | 2.00e-03 | -5.229e+05 |
| | | -5.229e+05 | -6341.28 | 9.49e-05 | 0.0 | 60.0 | 3.206e+04 | 8171.78 | -105.69 | -3381.26 | -6341.28 | -1.999e+04 |
| 21 | 65 | -2.154e+04 | 2.87e-03 | -0.12 | -420.00 | 0.0 | 3.214e+04 | 8579.20 | -104.67 | -4639.46 | 2.87e-03 | -5.237e+05 |
| | | -5.237e+05 | -6279.97 | 2.04e-04 | 0.0 | 60.0 | 3.214e+04 | 8159.20 | -104.67 | -4639.46 | -6279.97 | -2.154e+04 |
| 21 | 67 | -2.018e+04 | 2.05e-03 | -0.12 | -420.00 | 0.0 | 3.206e+04 | 8594.24 | -118.81 | -3373.25 | 2.05e-03 | -5.230e+05 |
| | | -5.230e+05 | -7128.31 | 1.02e-04 | 0.0 | 60.0 | 3.206e+04 | 8174.24 | -118.81 | -3373.25 | -7128.31 | -2.018e+04 |
| 21 | 68 | -2.002e+04 | 2.05e-03 | -0.12 | -420.00 | 0.0 | 3.206e+04 | 8590.83 | -118.73 | -3384.13 | 2.05e-03 | -5.229e+05 |
| | | -5.229e+05 | -7124.07 | 1.01e-04 | 0.0 | 60.0 | 3.206e+04 | 8170.83 | -118.73 | -3384.13 | -7124.07 | -2.002e+04 |
| 21 | 85 | -2.078e+04 | 2.46e-03 | -0.12 | -420.00 | 0.0 | 3.210e+04 | 8585.01 | -111.70 | -4011.80 | 2.46e-03 | -5.233e+05 |
| | | -5.233e+05 | -6702.02 | 1.53e-04 | 0.0 | 60.0 | 3.210e+04 | 8165.01 | -111.70 | -4011.80 | -6702.02 | -2.078e+04 |
| 21 | 87 | -4.419e+04 | 0.01 | -0.30 | -420.00 | 0.0 | 7.162e+04 | 1.897e+04 | -209.08 | -2.581e+04 | 0.01 | -1.170e+06 |
| | | -1.170e+06 | -1.254e+04 | 5.49e-04 | 0.0 | 60.0 | 7.162e+04 | 1.855e+04 | -209.08 | -2.581e+04 | -1.254e+04 | -4.419e+04 |
| 21 | 88 | -1.982e+04 | 2.34e-03 | -0.12 | -420.00 | 0.0 | 3.057e+04 | 8186.04 | -106.74 | -3807.48 | 2.34e-03 | -4.984e+05 |
| | | -4.984e+05 | -6404.30 | 1.45e-04 | 0.0 | 60.0 | 3.057e+04 | 7766.04 | -106.74 | -3807.48 | -6404.30 | -1.982e+04 |
| 21 | 97 | -4.259e+04 | 9.74e-03 | -0.28 | -420.00 | 0.0 | 6.885e+04 | 1.824e+04 | -203.17 | -2.379e+04 | 9.74e-03 | -1.124e+06 |
| | | -1.124e+06 | -1.219e+04 | 5.15e-04 | 0.0 | 60.0 | 6.885e+04 | 1.782e+04 | -203.17 | -2.379e+04 | -1.219e+04 | -4.259e+04 |
| 21 | 98 | -2.071e+04 | 2.45e-03 | -0.12 | -420.00 | 0.0 | 3.199e+04 | 8556.52 | -111.34 | -3997.29 | 2.45e-03 | -5.215e+05 |
| | | -5.215e+05 | -6680.68 | 1.52e-04 | 0.0 | 60.0 | 3.199e+04 | 8136.52 | -111.34 | -3997.29 | -6680.68 | -2.071e+04 |
| 21 | 102 | -2.078e+04 | 2.46e-03 | -0.12 | -420.00 | 0.0 | 3.210e+04 | 8585.01 | -111.70 | -4011.80 | 2.46e-03 | -5.233e+05 |
| | | -5.233e+05 | -6702.02 | 1.53e-04 | 0.0 | 60.0 | 3.210e+04 | 8165.01 | -111.70 | -4011.80 | -6702.02 | -2.078e+04 |
| 22 | 2 | 8.139e+05 | -1.748e+04 | -0.43 | -546.00 | 0.0 | 1.214e+05 | 2.286e+04 | -199.87 | -7.740e+04 | -1.748e+04 | -5.417e+05 |
| | | -5.417e+05 | -2.947e+04 | 2.83e-04 | 0.0 | 60.0 | 1.214e+05 | 2.232e+04 | -199.87 | -7.740e+04 | -2.947e+04 | 8.139e+05 |
| 22 | 7 | 2.251e+05 | -6255.44 | -0.12 | -420.00 | 0.0 | 3.540e+04 | 6482.94 | -55.01 | -8519.48 | -6255.44 | -1.513e+05 |
| | | -1.513e+05 | -9556.30 | 3.87e-05 | 0.0 | 60.0 | 3.540e+04 | 6062.94 | -55.01 | -8519.48 | -9556.30 | 2.251e+05 |
| 22 | 28 | 2.455e+05 | -5756.67 | -0.13 | -420.00 | 0.0 | 3.804e+04 | 6998.43 | -50.22 | -6854.51 | -5756.67 | -1.616e+05 |
| | | -1.616e+05 | -9254.28 | -1.26e-04 | 0.0 | 60.0 | 3.804e+04 | 6578.43 | -50.22 | -6854.51 | -9254.28 | 2.455e+05 |
| 22 | 31 | 2.447e+05 | -7822.10 | -0.13 | -420.00 | 0.0 | 3.806e+04 | 6986.99 | -50.19 | -6913.74 | -7822.10 | -1.618e+05 |
| | | -1.618e+05 | -1.159e+04 | -1.10e-04 | 0.0 | 60.0 | 3.806e+04 | 6566.99 | -50.19 | -6913.74 | -1.159e+04 | 2.447e+05 |
| 22 | 33 | 2.396e+05 | -5592.94 | -0.13 | -420.00 | 0.0 | 3.820e+04 | 6938.32 | -69.48 | -1.146e+04 | -5592.94 | -1.642e+05 |
| | | -1.642e+05 | -8994.48 | 1.94e-04 | 0.0 | 60.0 | 3.820e+04 | 6518.32 | -69.48 | -1.146e+04 | -8994.48 | 2.396e+05 |
| 22 | 34 | 2.403e+05 | -5581.89 | -0.13 | -420.00 | 0.0 | 3.818e+04 | 6947.29 | -69.28 | -1.150e+04 | -5581.89 | -1.641e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|-----------|---------|------------|------------|------------|
| | | -1.641e+05 | -8982.05 | 1.94e-04 | 0.0 | 60.0 | 3.818e+04 | 6527.29 | -69.28 | -1.150e+04 | -8982.05 | 2.403e+05 |
| 22 | 36 | 2.454e+05 | -7811.10 | -0.13 | -420.00 | 0.0 | 3.803e+04 | 6995.94 | -49.98 | -6914.11 | -7811.10 | -1.616e+05 |
| | | -1.616e+05 | -1.158e+04 | -1.10e-04 | 0.0 | 60.0 | 3.803e+04 | 6575.94 | -49.98 | -6914.11 | -1.158e+04 | 2.454e+05 |
| 22 | 60 | 2.436e+05 | -6341.27 | -0.13 | -420.00 | 0.0 | 3.809e+04 | 6979.00 | -56.10 | -8283.54 | -6341.27 | -1.624e+05 |
| | | -1.624e+05 | -9896.23 | -2.15e-05 | 0.0 | 60.0 | 3.809e+04 | 6559.00 | -56.10 | -8283.54 | -9896.23 | 2.436e+05 |
| 22 | 63 | 2.433e+05 | -7128.29 | -0.13 | -420.00 | 0.0 | 3.810e+04 | 6974.63 | -56.09 | -8305.37 | -7128.29 | -1.625e+05 |
| | | -1.625e+05 | -1.078e+04 | -1.52e-05 | 0.0 | 60.0 | 3.810e+04 | 6554.63 | -56.09 | -8305.37 | -1.078e+04 | 2.433e+05 |
| 22 | 65 | 2.414e+05 | -6279.96 | -0.13 | -420.00 | 0.0 | 3.815e+04 | 6956.20 | -63.46 | -1.007e+04 | -6279.96 | -1.634e+05 |
| | | -1.634e+05 | -9797.91 | 9.96e-05 | 0.0 | 60.0 | 3.815e+04 | 6536.20 | -63.46 | -1.007e+04 | -9797.91 | 2.414e+05 |
| 22 | 66 | 2.417e+05 | -6275.73 | -0.13 | -420.00 | 0.0 | 3.814e+04 | 6959.64 | -63.38 | -1.009e+04 | -6275.73 | -1.634e+05 |
| | | -1.634e+05 | -9793.17 | 9.94e-05 | 0.0 | 60.0 | 3.814e+04 | 6539.64 | -63.38 | -1.009e+04 | -9793.17 | 2.417e+05 |
| 22 | 68 | 2.436e+05 | -7124.07 | -0.13 | -420.00 | 0.0 | 3.809e+04 | 6978.06 | -56.01 | -8305.51 | -7124.07 | -1.624e+05 |
| | | -1.624e+05 | -1.077e+04 | -1.55e-05 | 0.0 | 60.0 | 3.809e+04 | 6558.06 | -56.01 | -8305.51 | -1.077e+04 | 2.436e+05 |
| 22 | 85 | 2.425e+05 | -6702.02 | -0.13 | -420.00 | 0.0 | 3.812e+04 | 6967.13 | -59.73 | -9189.06 | -6702.02 | -1.629e+05 |
| | | -1.629e+05 | -1.029e+04 | 4.21e-05 | 0.0 | 60.0 | 3.812e+04 | 6547.13 | -59.73 | -9189.06 | -1.029e+04 | 2.425e+05 |
| 22 | 87 | 5.749e+05 | -1.254e+04 | -0.30 | -420.00 | 0.0 | 8.603e+04 | 1.617e+04 | -141.21 | -5.283e+04 | -1.254e+04 | -3.828e+05 |
| | | -3.828e+05 | -2.102e+04 | 1.94e-04 | 0.0 | 60.0 | 8.603e+04 | 1.575e+04 | -141.21 | -5.283e+04 | -2.102e+04 | 5.749e+05 |
| 22 | 88 | 2.309e+05 | -6404.30 | -0.12 | -420.00 | 0.0 | 3.630e+04 | 6644.34 | -56.59 | -8742.67 | -6404.30 | -1.552e+05 |
| | | -1.552e+05 | -9799.52 | 3.98e-05 | 0.0 | 60.0 | 3.630e+04 | 6224.34 | -56.59 | -8742.67 | -9799.52 | 2.309e+05 |
| 22 | 97 | 5.506e+05 | -1.219e+04 | -0.29 | -420.00 | 0.0 | 8.264e+04 | 1.550e+04 | -135.49 | -4.881e+04 | -1.219e+04 | -3.668e+05 |
| | | -3.668e+05 | -2.032e+04 | 1.81e-04 | 0.0 | 60.0 | 8.264e+04 | 1.508e+04 | -135.49 | -4.881e+04 | -2.032e+04 | 5.506e+05 |
| 22 | 98 | 2.417e+05 | -6680.67 | -0.13 | -420.00 | 0.0 | 3.799e+04 | 6944.07 | -59.51 | -9157.31 | -6680.67 | -1.624e+05 |
| | | -1.624e+05 | -1.025e+04 | 4.19e-05 | 0.0 | 60.0 | 3.799e+04 | 6524.07 | -59.51 | -9157.31 | -1.025e+04 | 2.417e+05 |
| 22 | 102 | 2.425e+05 | -6702.02 | -0.13 | -420.00 | 0.0 | 3.812e+04 | 6967.13 | -59.73 | -9189.06 | -6702.02 | -1.629e+05 |
| | | -1.629e+05 | -1.029e+04 | 4.21e-05 | 0.0 | 60.0 | 3.812e+04 | 6547.13 | -59.73 | -9189.06 | -1.029e+04 | 2.425e+05 |
| 23 | 2 | 1.364e+06 | -2.393e+04 | -0.42 | -546.00 | 0.0 | 1.535e+05 | 2.182e+04 | 92.35 | -1.008e+05 | -2.947e+04 | 7.138e+04 |
| | | 7.138e+04 | -2.947e+04 | -2.15e-04 | 0.0 | 60.0 | 1.535e+05 | 2.127e+04 | 92.35 | -1.008e+05 | -2.393e+04 | 1.364e+06 |
| 23 | 7 | 3.665e+05 | -7123.00 | -0.11 | -420.00 | 0.0 | 4.398e+04 | 5877.63 | 40.55 | -1.167e+04 | -9556.30 | 2.647e+04 |
| | | 2.647e+04 | -9556.30 | -8.40e-05 | 0.0 | 60.0 | 4.398e+04 | 5457.63 | 40.55 | -1.167e+04 | -7123.00 | 3.665e+05 |
| 23 | 19 | 3.665e+05 | -7123.59 | -0.11 | -420.00 | 0.0 | 4.398e+04 | 5877.64 | 40.56 | -1.167e+04 | -9557.25 | 2.647e+04 |
| | | 2.647e+04 | -9557.25 | -8.40e-05 | 0.0 | 60.0 | 4.398e+04 | 5457.64 | 40.56 | -1.167e+04 | -7123.59 | 3.665e+05 |
| 23 | 25 | 3.922e+05 | -8548.66 | -0.12 | -420.00 | 0.0 | 4.746e+04 | 6298.48 | 32.70 | -1.486e+04 | -1.132e+04 | 2.687e+04 |
| | | 2.687e+04 | -1.132e+04 | 8.15e-05 | 0.0 | 60.0 | 4.746e+04 | 5878.48 | 32.70 | -1.486e+04 | -8548.66 | 3.922e+05 |
| 23 | 28 | 3.976e+05 | -6814.13 | -0.12 | -420.00 | 0.0 | 4.727e+04 | 6332.80 | 54.12 | -1.033e+04 | -9254.28 | 3.031e+04 |
| | | 3.031e+04 | -9254.28 | -2.62e-04 | 0.0 | 60.0 | 4.727e+04 | 5912.80 | 54.12 | -1.033e+04 | -6814.13 | 3.976e+05 |
| 23 | 31 | 3.966e+05 | -6626.21 | -0.12 | -420.00 | 0.0 | 4.731e+04 | 6324.50 | 52.66 | -1.035e+04 | -1.159e+04 | 2.985e+04 |
| | | 2.985e+04 | -1.159e+04 | -2.49e-04 | 0.0 | 60.0 | 4.731e+04 | 5904.50 | 52.66 | -1.035e+04 | -6626.21 | 3.966e+05 |
| 23 | 32 | 3.975e+05 | -6602.63 | -0.12 | -420.00 | 0.0 | 4.727e+04 | 6331.47 | 52.50 | -1.032e+04 | -1.158e+04 | 3.026e+04 |
| | | 3.026e+04 | -1.158e+04 | -2.49e-04 | 0.0 | 60.0 | 4.727e+04 | 5911.47 | 52.50 | -1.032e+04 | -6602.63 | 3.975e+05 |
| 23 | 57 | 3.939e+05 | -8008.06 | -0.12 | -420.00 | 0.0 | 4.740e+04 | 6309.11 | 39.34 | -1.348e+04 | -1.068e+04 | 2.794e+04 |
| | | 2.794e+04 | -1.068e+04 | -2.53e-05 | 0.0 | 60.0 | 4.740e+04 | 5889.11 | 39.34 | -1.348e+04 | -8008.06 | 3.939e+05 |
| 23 | 60 | 3.959e+05 | -7354.73 | -0.12 | -420.00 | 0.0 | 4.733e+04 | 6322.18 | 47.48 | -1.171e+04 | -9896.23 | 2.924e+04 |
| | | 2.924e+04 | -9896.23 | -1.55e-04 | 0.0 | 60.0 | 4.733e+04 | 5902.18 | 47.48 | -1.171e+04 | -7354.73 | 3.959e+05 |
| 23 | 63 | 3.956e+05 | -7283.30 | -0.12 | -420.00 | 0.0 | 4.734e+04 | 6319.00 | 46.93 | -1.172e+04 | -1.078e+04 | 2.906e+04 |
| | | 2.906e+04 | -1.078e+04 | -1.50e-04 | 0.0 | 60.0 | 4.734e+04 | 5899.00 | 46.93 | -1.172e+04 | -7283.30 | 3.956e+05 |
| 23 | 64 | 3.959e+05 | -7274.31 | -0.12 | -420.00 | 0.0 | 4.733e+04 | 6321.67 | 46.87 | -1.171e+04 | -1.077e+04 | 2.922e+04 |
| | | 2.922e+04 | -1.077e+04 | -1.50e-04 | 0.0 | 60.0 | 4.733e+04 | 5901.67 | 46.87 | -1.171e+04 | -7274.31 | 3.959e+05 |
| 23 | 85 | 3.949e+05 | -7681.40 | -0.12 | -420.00 | 0.0 | 4.737e+04 | 6315.64 | 43.41 | -1.260e+04 | -1.029e+04 | 2.859e+04 |
| | | 2.859e+04 | -1.029e+04 | -9.02e-05 | 0.0 | 60.0 | 4.737e+04 | 5895.64 | 43.41 | -1.260e+04 | -7681.40 | 3.949e+05 |
| 23 | 87 | 9.621e+05 | -1.698e+04 | -0.29 | -420.00 | 0.0 | 1.087e+05 | 1.539e+04 | 67.36 | -6.889e+04 | -2.102e+04 | 5.140e+04 |
| | | 5.140e+04 | -2.102e+04 | -1.55e-04 | 0.0 | 60.0 | 1.087e+05 | 1.497e+04 | 67.36 | -6.889e+04 | -1.698e+04 | 9.621e+05 |
| 23 | 88 | 3.760e+05 | -7309.13 | -0.12 | -420.00 | 0.0 | 4.511e+04 | 6023.63 | 41.51 | -1.198e+04 | -9799.52 | 2.718e+04 |
| | | 2.718e+04 | -9799.52 | -8.61e-05 | 0.0 | 60.0 | 4.511e+04 | 5603.63 | 41.51 | -1.198e+04 | -7309.13 | 3.760e+05 |
| 23 | 94 | 3.760e+05 | -7309.53 | -0.12 | -420.00 | 0.0 | 4.511e+04 | 6023.64 | 41.51 | -1.198e+04 | -9800.15 | 2.718e+04 |
| | | 2.718e+04 | -9800.15 | -8.61e-05 | 0.0 | 60.0 | 4.511e+04 | 5603.64 | 41.51 | -1.198e+04 | -7309.53 | 3.760e+05 |
| 23 | 97 | 9.200e+05 | -1.633e+04 | -0.28 | -420.00 | 0.0 | 1.043e+05 | 1.471e+04 | 66.43 | -6.373e+04 | -2.032e+04 | 5.021e+04 |
| | | 5.021e+04 | -2.032e+04 | -1.52e-04 | 0.0 | 60.0 | 1.043e+05 | 1.429e+04 | 66.43 | -6.373e+04 | -1.633e+04 | 9.200e+05 |
| 23 | 98 | 3.936e+05 | -7654.76 | -0.12 | -420.00 | 0.0 | 4.720e+04 | 6294.78 | 43.27 | -1.255e+04 | -1.025e+04 | 2.849e+04 |
| | | 2.849e+04 | -1.025e+04 | -8.99e-05 | 0.0 | 60.0 | 4.720e+04 | 5874.78 | 43.27 | -1.255e+04 | -7654.76 | 3.936e+05 |
| 23 | 101 | 3.936e+05 | -7654.96 | -0.12 | -420.00 | 0.0 | 4.720e+04 | 6294.79 | 43.28 | -1.255e+04 | -1.025e+04 | 2.849e+04 |
| | | 2.849e+04 | -1.025e+04 | -8.99e-05 | 0.0 | 60.0 | 4.720e+04 | 5874.79 | 43.28 | -1.255e+04 | -7654.96 | 3.936e+05 |
| 23 | 102 | 3.949e+05 | -7681.40 | -0.12 | -420.00 | 0.0 | 4.737e+04 | 6315.64 | 43.41 | -1.260e+04 | -1.029e+04 | 2.859e+04 |
| | | 2.859e+04 | -1.029e+04 | -9.02e-05 | 0.0 | 60.0 | 4.737e+04 | 5895.64 | 43.41 | -1.260e+04 | -7681.40 | 3.949e+05 |
| 24 | 2 | 1.811e+06 | -1.569e+04 | -0.39 | -546.00 | 0.0 | 1.858e+05 | 2.022e+04 | 137.26 | -1.054e+05 | -2.393e+04 | 6.149e+05 |
| | | 6.149e+05 | -2.393e+04 | -4.76e-04 | 0.0 | 60.0 | 1.858e+05 | 1.967e+04 | 137.26 | -1.054e+05 | -1.569e+04 | 1.811e+06 |
| 24 | 7 | 4.715e+05 | -3341.71 | -0.11 | -420.00 | 0.0 | 5.215e+04 | 5125.77 | 63.02 | -1.178e+04 | -7123.00 | 1.765e+05 |
| | | 1.765e+05 | -7123.00 | -1.52e-04 | 0.0 | 60.0 | 5.215e+04 | 4705.77 | 63.02 | -1.178e+04 | -3341.71 | 4.715e+05 |
| 24 | 19 | 4.715e+05 | -3341.98 | -0.11 | -420.00 | 0.0 | 5.215e+04 | 5125.78 | 63.03 | -1.177e+04 | -7123.59 | 1.765e+05 |
| | | 1.765e+05 | -7123.59 | -1.52e-04 | 0.0 | 60.0 | 5.215e+04 | 4705.78 | 63.03 | -1.177e+04 | -3341.98 | 4.715e+05 |
| 24 | 24 | 5.102e+05 | -2560.62 | -0.11 | -420.00 | 0.0 | 5.604e+04 | 5514.86 | 83.07 | -1.053e+04 | -6812.70 | 1.920e+05 |
| | | 1.920e+05 | -6812.70 | -3.32e-04 | 0.0 | 60.0 | 5.604e+04 | 5094.86 | 83.07 | -1.053e+04 | -2560.62 | 5.102e+05 |
| 24 | 25 | 5.058e+05 | -4635.98 | -0.11 | -420.00 | 0.0 | 5.630e+04 | 5496.66 | 52.56 | -1.489e+04 | -8548.66 | 1.885e+05 |
| | | 1.885e+05 | -8548.66 | 1.05e-05 | 0.0 | 60.0 | 5.630e+04 | 5076.66 | 52.56 | -1.489e+04 | -4635.98 | 5.058e+05 |
| 24 | 28 | 5.102e+05 | -2589.18 | -0.11 | -420.00 | 0.0 | 5.604e+04 | 5514.87 | 83.07 | -1.053e+04 | -6814.13 | 1.920e+05 |
| | | 1.920e+05 | -6814.13 | -3.32e-04 | 0.0 | 60.0 | 5.604e+04 | 5094.87 | 83.07 | -1.053e+04 | -2589.18 | 5.102e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|-----------|--------|------------|------------|-----------|
| 24 | 29 | 5.059e+05 | -4438.70 | -0.11 | -420.00 | 0.0 | 5.629e+04 | 5497.37 | 53.91 | -1.490e+04 | -8760.16 | 1.885e+05 |
| | | 1.885e+05 | -8760.16 | 6.32e-06 | 0.0 | 60.0 | 5.629e+04 | 5077.37 | 53.91 | -1.490e+04 | -4438.70 | 5.059e+05 |
| 24 | 56 | 5.088e+05 | -3215.15 | -0.11 | -420.00 | 0.0 | 5.612e+04 | 5509.24 | 73.59 | -1.186e+04 | -7354.19 | 1.909e+05 |
| | | 1.909e+05 | -7354.19 | -2.27e-04 | 0.0 | 60.0 | 5.612e+04 | 5089.24 | 73.59 | -1.186e+04 | -3215.15 | 5.088e+05 |
| 24 | 57 | 5.071e+05 | -3999.13 | -0.11 | -420.00 | 0.0 | 5.622e+04 | 5502.28 | 62.04 | -1.356e+04 | -8008.06 | 1.896e+05 |
| | | 1.896e+05 | -8008.06 | -9.93e-05 | 0.0 | 60.0 | 5.622e+04 | 5082.28 | 62.04 | -1.356e+04 | -3999.13 | 5.071e+05 |
| 24 | 60 | 5.088e+05 | -3226.03 | -0.11 | -420.00 | 0.0 | 5.612e+04 | 5509.24 | 73.59 | -1.186e+04 | -7354.73 | 1.909e+05 |
| | | 1.909e+05 | -7354.73 | -2.27e-04 | 0.0 | 60.0 | 5.612e+04 | 5089.24 | 73.59 | -1.186e+04 | -3226.03 | 5.088e+05 |
| 24 | 61 | 5.072e+05 | -3924.87 | -0.11 | -420.00 | 0.0 | 5.622e+04 | 5502.54 | 62.55 | -1.357e+04 | -8088.48 | 1.896e+05 |
| | | 1.896e+05 | -8088.48 | -1.02e-04 | 0.0 | 60.0 | 5.622e+04 | 5082.54 | 62.55 | -1.357e+04 | -3924.87 | 5.072e+05 |
| 24 | 85 | 5.080e+05 | -3612.58 | -0.11 | -420.00 | 0.0 | 5.617e+04 | 5505.76 | 67.81 | -1.271e+04 | -7681.40 | 1.902e+05 |
| | | 1.902e+05 | -7681.40 | -1.63e-04 | 0.0 | 60.0 | 5.617e+04 | 5085.76 | 67.81 | -1.271e+04 | -3612.58 | 5.080e+05 |
| 24 | 87 | 1.275e+06 | -1.094e+04 | -0.28 | -420.00 | 0.0 | 1.313e+05 | 1.421e+04 | 100.55 | -7.197e+04 | -1.698e+04 | 4.353e+05 |
| | | 4.353e+05 | -1.698e+04 | -3.39e-04 | 0.0 | 60.0 | 1.313e+05 | 1.379e+04 | 100.55 | -7.197e+04 | -1.094e+04 | 1.275e+06 |
| 24 | 88 | 4.836e+05 | -3432.00 | -0.11 | -420.00 | 0.0 | 5.349e+04 | 5252.43 | 64.62 | -1.209e+04 | -7309.13 | 1.811e+05 |
| | | 1.811e+05 | -7309.13 | -1.55e-04 | 0.0 | 60.0 | 5.349e+04 | 4832.43 | 64.62 | -1.209e+04 | -3432.00 | 4.836e+05 |
| 24 | 94 | 4.836e+05 | -3432.18 | -0.11 | -420.00 | 0.0 | 5.349e+04 | 5252.44 | 64.62 | -1.209e+04 | -7309.53 | 1.811e+05 |
| | | 1.811e+05 | -7309.53 | -1.55e-04 | 0.0 | 60.0 | 5.349e+04 | 4832.44 | 64.62 | -1.209e+04 | -3432.18 | 4.836e+05 |
| 24 | 97 | 1.217e+06 | -1.035e+04 | -0.26 | -420.00 | 0.0 | 1.259e+05 | 1.354e+04 | 99.74 | -6.653e+04 | -1.633e+04 | 4.178e+05 |
| | | 4.178e+05 | -1.633e+04 | -3.28e-04 | 0.0 | 60.0 | 1.259e+05 | 1.312e+04 | 99.74 | -6.653e+04 | -1.035e+04 | 1.217e+06 |
| 24 | 98 | 5.062e+05 | -3599.66 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5487.67 | 67.59 | -1.267e+04 | -7654.76 | 1.896e+05 |
| | | 1.896e+05 | -7654.76 | -1.63e-04 | 0.0 | 60.0 | 5.598e+04 | 5067.67 | 67.59 | -1.267e+04 | -3599.66 | 5.062e+05 |
| 24 | 101 | 5.062e+05 | -3599.76 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5487.67 | 67.59 | -1.267e+04 | -7654.96 | 1.896e+05 |
| | | 1.896e+05 | -7654.96 | -1.63e-04 | 0.0 | 60.0 | 5.598e+04 | 5067.67 | 67.59 | -1.267e+04 | -3599.76 | 5.062e+05 |
| 24 | 102 | 5.080e+05 | -3612.58 | -0.11 | -420.00 | 0.0 | 5.617e+04 | 5505.76 | 67.81 | -1.271e+04 | -7681.40 | 1.902e+05 |
| | | 1.902e+05 | -7681.40 | -1.63e-04 | 0.0 | 60.0 | 5.617e+04 | 5085.76 | 67.81 | -1.271e+04 | -3612.58 | 5.080e+05 |
| 25 | 2 | 2.212e+06 | -1.349e+04 | -0.35 | -546.00 | 0.0 | 2.159e+05 | 1.864e+04 | 36.75 | -9.635e+04 | -1.569e+04 | 1.110e+06 |
| | | 1.110e+06 | -1.569e+04 | -5.31e-04 | 0.0 | 60.0 | 2.159e+05 | 1.809e+04 | 36.75 | -9.635e+04 | -1.349e+04 | 2.212e+06 |
| 25 | 7 | 5.553e+05 | -448.36 | -0.09 | -420.00 | 0.0 | 5.926e+04 | 4364.06 | 48.22 | -1.033e+04 | -3341.71 | 3.061e+05 |
| | | 3.061e+05 | -3341.71 | -1.68e-04 | 0.0 | 60.0 | 5.926e+04 | 3944.06 | 48.22 | -1.033e+04 | -448.36 | 5.553e+05 |
| 25 | 19 | 5.553e+05 | -448.41 | -0.09 | -420.00 | 0.0 | 5.926e+04 | 4364.07 | 48.23 | -1.033e+04 | -3341.98 | 3.061e+05 |
| | | 3.061e+05 | -3341.98 | -1.68e-04 | 0.0 | 60.0 | 5.926e+04 | 3944.07 | 48.23 | -1.033e+04 | -448.41 | 5.553e+05 |
| 25 | 21 | 5.967e+05 | -2313.60 | -0.10 | -420.00 | 0.0 | 6.373e+04 | 4676.35 | 33.95 | -1.335e+04 | -4664.55 | 3.306e+05 |
| | | 3.306e+05 | -4664.55 | -2.26e-05 | 0.0 | 60.0 | 6.373e+04 | 4256.35 | 33.95 | -1.335e+04 | -2313.60 | 5.967e+05 |
| 25 | 24 | 5.999e+05 | 1322.36 | -0.10 | -420.00 | 0.0 | 6.393e+04 | 4693.92 | 69.95 | -8953.99 | -2560.62 | 3.289e+05 |
| | | 3.289e+05 | -2560.62 | -3.40e-04 | 0.0 | 60.0 | 6.393e+04 | 4273.92 | 69.95 | -8953.99 | 1322.36 | 5.999e+05 |
| 25 | 26 | 5.976e+05 | -2311.78 | -0.10 | -420.00 | 0.0 | 6.367e+04 | 4677.90 | 33.90 | -1.335e+04 | -4662.85 | 3.315e+05 |
| | | 3.315e+05 | -4662.85 | -2.27e-05 | 0.0 | 60.0 | 6.367e+04 | 4257.90 | 33.90 | -1.335e+04 | -2311.78 | 5.976e+05 |
| 25 | 27 | 5.990e+05 | 1320.53 | -0.10 | -420.00 | 0.0 | 6.398e+04 | 4692.37 | 70.00 | -8954.07 | -2562.32 | 3.281e+05 |
| | | 3.281e+05 | -2562.32 | -3.39e-04 | 0.0 | 60.0 | 6.398e+04 | 4272.37 | 70.00 | -8954.07 | 1320.53 | 5.990e+05 |
| 25 | 47 | 5.971e+05 | 94.14 | -0.10 | -420.00 | 0.0 | 6.396e+04 | 4684.96 | 57.43 | -1.050e+04 | -3256.76 | 3.281e+05 |
| | | 3.281e+05 | -3256.76 | -2.28e-04 | 0.0 | 60.0 | 6.396e+04 | 4264.96 | 57.43 | -1.050e+04 | 94.14 | 5.971e+05 |
| 25 | 48 | 6.001e+05 | -4.57 | -0.10 | -420.00 | 0.0 | 6.377e+04 | 4690.12 | 57.28 | -1.048e+04 | -3346.31 | 3.308e+05 |
| | | 3.308e+05 | -3346.31 | -2.29e-04 | 0.0 | 60.0 | 6.377e+04 | 4270.12 | 57.28 | -1.048e+04 | -4.57 | 6.001e+05 |
| 25 | 53 | 5.977e+05 | -1183.54 | -0.10 | -420.00 | 0.0 | 6.379e+04 | 4681.81 | 45.14 | -1.200e+04 | -4010.01 | 3.301e+05 |
| | | 3.301e+05 | -4010.01 | -1.21e-04 | 0.0 | 60.0 | 6.379e+04 | 4261.81 | 45.14 | -1.200e+04 | -1183.54 | 5.977e+05 |
| 25 | 56 | 5.989e+05 | 192.30 | -0.10 | -420.00 | 0.0 | 6.386e+04 | 4688.46 | 58.76 | -1.030e+04 | -3215.15 | 3.295e+05 |
| | | 3.295e+05 | -3215.15 | -2.41e-04 | 0.0 | 60.0 | 6.386e+04 | 4268.46 | 58.76 | -1.030e+04 | 192.30 | 5.989e+05 |
| 25 | 58 | 5.981e+05 | -1182.84 | -0.10 | -420.00 | 0.0 | 6.377e+04 | 4682.41 | 45.12 | -1.200e+04 | -4009.36 | 3.304e+05 |
| | | 3.304e+05 | -4009.36 | -1.21e-04 | 0.0 | 60.0 | 6.377e+04 | 4262.41 | 45.12 | -1.200e+04 | -1182.84 | 5.981e+05 |
| 25 | 59 | 5.985e+05 | 191.60 | -0.10 | -420.00 | 0.0 | 6.389e+04 | 4687.86 | 58.77 | -1.030e+04 | -3215.81 | 3.292e+05 |
| | | 3.292e+05 | -3215.81 | -2.41e-04 | 0.0 | 60.0 | 6.389e+04 | 4267.86 | 58.77 | -1.030e+04 | 191.60 | 5.985e+05 |
| 25 | 79 | 5.978e+05 | -272.35 | -0.10 | -420.00 | 0.0 | 6.388e+04 | 4685.05 | 54.02 | -1.090e+04 | -3478.03 | 3.291e+05 |
| | | 3.291e+05 | -3478.03 | -1.99e-04 | 0.0 | 60.0 | 6.388e+04 | 4265.05 | 54.02 | -1.090e+04 | -272.35 | 5.978e+05 |
| 25 | 80 | 5.990e+05 | -309.94 | -0.10 | -420.00 | 0.0 | 6.381e+04 | 4687.03 | 53.96 | -1.089e+04 | -3512.13 | 3.302e+05 |
| | | 3.302e+05 | -3512.13 | -1.99e-04 | 0.0 | 60.0 | 6.381e+04 | 4267.03 | 53.96 | -1.089e+04 | -309.94 | 5.990e+05 |
| 25 | 85 | 5.983e+05 | -495.62 | -0.10 | -420.00 | 0.0 | 6.383e+04 | 4685.13 | 51.95 | -1.115e+04 | -3612.58 | 3.298e+05 |
| | | 3.298e+05 | -3612.58 | -1.81e-04 | 0.0 | 60.0 | 6.383e+04 | 4265.13 | 51.95 | -1.115e+04 | -495.62 | 5.983e+05 |
| 25 | 87 | 1.554e+06 | -9057.21 | -0.25 | -420.00 | 0.0 | 1.524e+05 | 1.305e+04 | 31.43 | -6.572e+04 | -1.094e+04 | 7.839e+05 |
| | | 7.839e+05 | -1.094e+04 | -3.78e-04 | 0.0 | 60.0 | 1.524e+05 | 1.263e+04 | 31.43 | -6.572e+04 | -9057.21 | 1.554e+06 |
| 25 | 88 | 5.696e+05 | -464.11 | -0.10 | -420.00 | 0.0 | 6.078e+04 | 4471.08 | 49.46 | -1.061e+04 | -3432.00 | 3.140e+05 |
| | | 3.140e+05 | -3432.00 | -1.72e-04 | 0.0 | 60.0 | 6.078e+04 | 4051.08 | 49.46 | -1.061e+04 | -464.11 | 5.696e+05 |
| 25 | 94 | 5.696e+05 | -464.15 | -0.10 | -420.00 | 0.0 | 6.078e+04 | 4471.09 | 49.47 | -1.060e+04 | -3432.18 | 3.140e+05 |
| | | 3.140e+05 | -3432.18 | -1.72e-04 | 0.0 | 60.0 | 6.078e+04 | 4051.09 | 49.47 | -1.060e+04 | -464.15 | 5.696e+05 |
| 25 | 97 | 1.481e+06 | -8225.35 | -0.24 | -420.00 | 0.0 | 1.459e+05 | 1.238e+04 | 35.40 | -6.069e+04 | -1.035e+04 | 7.507e+05 |
| | | 7.507e+05 | -1.035e+04 | -3.65e-04 | 0.0 | 60.0 | 1.459e+05 | 1.196e+04 | 35.40 | -6.069e+04 | -8225.35 | 1.481e+06 |
| 25 | 98 | 5.963e+05 | -493.37 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4669.84 | 51.77 | -1.111e+04 | -3599.66 | 3.287e+05 |
| | | 3.287e+05 | -3599.66 | -1.80e-04 | 0.0 | 60.0 | 6.361e+04 | 4249.84 | 51.77 | -1.111e+04 | -493.37 | 5.963e+05 |
| 25 | 101 | 5.963e+05 | -493.38 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4669.85 | 51.77 | -1.111e+04 | -3599.76 | 3.287e+05 |
| | | 3.287e+05 | -3599.76 | -1.80e-04 | 0.0 | 60.0 | 6.361e+04 | 4249.85 | 51.77 | -1.111e+04 | -493.38 | 5.963e+05 |
| 25 | 102 | 5.983e+05 | -495.62 | -0.10 | -420.00 | 0.0 | 6.383e+04 | 4685.13 | 51.95 | -1.115e+04 | -3612.58 | 3.298e+05 |
| | | 3.298e+05 | -3612.58 | -1.81e-04 | 0.0 | 60.0 | 6.383e+04 | 4265.13 | 51.95 | -1.115e+04 | -495.62 | 5.983e+05 |
| 26 | 1 | 8.285e+05 | 1601.47 | -0.11 | -546.00 | 0.0 | 8.697e+04 | 4802.54 | 36.75 | -1.125e+04 | -603.81 | 5.567e+05 |
| | | 5.567e+05 | -603.81 | -2.05e-04 | 0.0 | 60.0 | 8.697e+04 | 4256.54 | 36.75 | -1.125e+04 | 1601.47 | 8.285e+05 |
| 26 | 2 | 2.590e+06 | -1.349e+04 | -0.30 | -546.00 | 0.0 | 2.434e+05 | 1.726e+04 | -53.35 | -7.661e+04 | -1.349e+04 | 1.571e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|-----------|--------|------------|------------|-----------|
| | | 1.571e+06 | -1.669e+04 | -4.74e-04 | 0.0 | 60.0 | 2.434e+05 | 1.671e+04 | -53.35 | -7.661e+04 | -1.669e+04 | 2.590e+06 |
| 26 | 7 | 6.209e+05 | 1204.14 | -0.08 | -420.00 | 0.0 | 6.519e+04 | 3604.89 | 27.54 | -8426.12 | -448.36 | 4.172e+05 |
| | | 4.172e+05 | -448.36 | -1.54e-04 | 0.0 | 60.0 | 6.519e+04 | 3184.89 | 27.54 | -8426.12 | 1204.14 | 6.209e+05 |
| 26 | 8 | 2.382e+06 | -1.333e+04 | -0.27 | -420.00 | 0.0 | 2.216e+05 | 1.606e+04 | -62.56 | -7.379e+04 | -1.333e+04 | 1.431e+06 |
| | | 1.431e+06 | -1.708e+04 | -4.23e-04 | 0.0 | 60.0 | 2.216e+05 | 1.564e+04 | -62.56 | -7.379e+04 | -1.708e+04 | 2.382e+06 |
| 26 | 21 | 6.691e+05 | -1464.16 | -0.09 | -420.00 | 0.0 | 7.010e+04 | 3854.02 | 11.54 | -1.136e+04 | -2313.60 | 4.500e+05 |
| | | 4.500e+05 | -2313.60 | -2.55e-05 | 0.0 | 60.0 | 7.010e+04 | 3434.02 | 11.54 | -1.136e+04 | -1464.16 | 6.691e+05 |
| 26 | 24 | 6.688e+05 | 4035.34 | -0.09 | -420.00 | 0.0 | 7.033e+04 | 3880.45 | 47.83 | -6828.09 | 1322.36 | 4.490e+05 |
| | | 4.490e+05 | 1322.36 | -3.06e-04 | 0.0 | 60.0 | 7.033e+04 | 3460.45 | 47.83 | -6828.09 | 4035.34 | 6.688e+05 |
| 26 | 26 | 6.700e+05 | -1462.39 | -0.09 | -420.00 | 0.0 | 7.005e+04 | 3855.53 | 11.53 | -1.136e+04 | -2311.78 | 4.509e+05 |
| | | 4.509e+05 | -2311.78 | -2.35e-05 | 0.0 | 60.0 | 7.005e+04 | 3435.53 | 11.53 | -1.136e+04 | -1462.39 | 6.700e+05 |
| 26 | 27 | 6.680e+05 | 4033.58 | -0.09 | -420.00 | 0.0 | 7.039e+04 | 3878.93 | 47.85 | -6828.08 | 1320.53 | 4.481e+05 |
| | | 4.481e+05 | 1320.53 | -3.08e-04 | 0.0 | 60.0 | 7.039e+04 | 3458.93 | 47.85 | -6828.08 | 4033.58 | 6.680e+05 |
| 26 | 46 | 6.705e+05 | 417.44 | -0.09 | -420.00 | 0.0 | 7.008e+04 | 3866.02 | 24.22 | -9759.42 | -1085.38 | 4.513e+05 |
| | | 4.513e+05 | -1085.38 | -1.17e-04 | 0.0 | 60.0 | 7.008e+04 | 3446.02 | 24.22 | -9759.42 | 417.44 | 6.705e+05 |
| 26 | 47 | 6.674e+05 | 2153.74 | -0.09 | -420.00 | 0.0 | 7.035e+04 | 3868.44 | 35.16 | -8423.89 | 94.14 | 4.477e+05 |
| | | 4.477e+05 | 94.14 | -2.14e-04 | 0.0 | 60.0 | 7.035e+04 | 3448.44 | 35.16 | -8423.89 | 2153.74 | 6.674e+05 |
| 26 | 53 | 6.690e+05 | 245.11 | -0.09 | -420.00 | 0.0 | 7.017e+04 | 3862.25 | 22.83 | -9961.64 | -1183.54 | 4.497e+05 |
| | | 4.497e+05 | -1183.54 | -1.13e-04 | 0.0 | 60.0 | 7.017e+04 | 3442.25 | 22.83 | -9961.64 | 245.11 | 6.690e+05 |
| 26 | 56 | 6.689e+05 | 2326.07 | -0.09 | -420.00 | 0.0 | 7.026e+04 | 3872.21 | 36.54 | -8221.68 | 192.30 | 4.493e+05 |
| | | 4.493e+05 | 192.30 | -2.19e-04 | 0.0 | 60.0 | 7.026e+04 | 3452.21 | 36.54 | -8221.68 | 2326.07 | 6.689e+05 |
| 26 | 58 | 6.693e+05 | 245.78 | -0.09 | -420.00 | 0.0 | 7.015e+04 | 3862.83 | 22.82 | -9961.65 | -1182.84 | 4.501e+05 |
| | | 4.501e+05 | -1182.84 | -1.12e-04 | 0.0 | 60.0 | 7.015e+04 | 3442.83 | 22.82 | -9961.65 | 245.78 | 6.693e+05 |
| 26 | 59 | 6.686e+05 | 2325.40 | -0.09 | -420.00 | 0.0 | 7.028e+04 | 3871.63 | 36.55 | -8221.67 | 191.60 | 4.490e+05 |
| | | 4.490e+05 | 191.60 | -2.19e-04 | 0.0 | 60.0 | 7.028e+04 | 3451.63 | 36.55 | -8221.67 | 2325.40 | 6.686e+05 |
| 26 | 78 | 6.695e+05 | 956.98 | -0.09 | -420.00 | 0.0 | 7.017e+04 | 3866.80 | 27.62 | -9348.36 | -718.89 | 4.502e+05 |
| | | 4.502e+05 | -718.89 | -1.47e-04 | 0.0 | 60.0 | 7.017e+04 | 3446.80 | 27.62 | -9348.36 | 956.98 | 6.695e+05 |
| 26 | 79 | 6.684e+05 | 1614.20 | -0.09 | -420.00 | 0.0 | 7.027e+04 | 3867.67 | 31.75 | -8834.96 | -272.35 | 4.488e+05 |
| | | 4.488e+05 | -272.35 | -1.84e-04 | 0.0 | 60.0 | 7.027e+04 | 3447.67 | 31.75 | -8834.96 | 1614.20 | 6.684e+05 |
| 26 | 85 | 6.690e+05 | 1285.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.23 | 29.69 | -9091.66 | -495.62 | 4.495e+05 |
| | | 4.495e+05 | -495.62 | -1.66e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.23 | 29.69 | -9091.66 | 1285.59 | 6.690e+05 |
| 26 | 86 | 6.415e+05 | 1239.06 | -0.08 | -420.00 | 0.0 | 6.735e+04 | 3717.32 | 28.46 | -8710.93 | -468.62 | 4.311e+05 |
| | | 4.311e+05 | -468.62 | -1.59e-04 | 0.0 | 60.0 | 6.735e+04 | 3297.32 | 28.46 | -8710.93 | 1239.06 | 6.415e+05 |
| 26 | 87 | 1.816e+06 | -9057.20 | -0.21 | -420.00 | 0.0 | 1.716e+05 | 1.202e+04 | -31.61 | -5.229e+04 | -9057.20 | 1.107e+06 |
| | | 1.107e+06 | -1.095e+04 | -3.38e-04 | 0.0 | 60.0 | 1.716e+05 | 1.160e+04 | -31.61 | -5.229e+04 | -1.095e+04 | 1.816e+06 |
| 26 | 88 | 6.369e+05 | 1231.29 | -0.08 | -420.00 | 0.0 | 6.687e+04 | 3692.34 | 28.26 | -8647.97 | -464.12 | 4.280e+05 |
| | | 4.280e+05 | -464.12 | -1.58e-04 | 0.0 | 60.0 | 6.687e+04 | 3272.34 | 28.26 | -8647.97 | 1231.29 | 6.369e+05 |
| 26 | 89 | 1.811e+06 | -9052.69 | -0.21 | -420.00 | 0.0 | 1.711e+05 | 1.200e+04 | -31.81 | -5.222e+04 | -9052.69 | 1.104e+06 |
| | | 1.104e+06 | -1.096e+04 | -3.37e-04 | 0.0 | 60.0 | 1.711e+05 | 1.158e+04 | -31.81 | -5.222e+04 | -1.096e+04 | 1.811e+06 |
| 26 | 96 | 6.690e+05 | 1285.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.23 | 29.69 | -9091.66 | -495.62 | 4.495e+05 |
| | | 4.495e+05 | -495.62 | -1.66e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.23 | 29.69 | -9091.66 | 1285.59 | 6.690e+05 |
| 26 | 97 | 1.726e+06 | -8225.34 | -0.20 | -420.00 | 0.0 | 1.640e+05 | 1.134e+04 | -24.38 | -4.831e+04 | -8225.34 | 1.058e+06 |
| | | 1.058e+06 | -9687.87 | -3.27e-04 | 0.0 | 60.0 | 1.640e+05 | 1.092e+04 | -24.38 | -4.831e+04 | -9687.87 | 1.726e+06 |
| 26 | 98 | 6.667e+05 | 1281.70 | -0.09 | -420.00 | 0.0 | 6.998e+04 | 3854.74 | 29.58 | -9060.18 | -493.37 | 4.480e+05 |
| | | 4.480e+05 | -493.37 | -1.65e-04 | 0.0 | 60.0 | 6.998e+04 | 3434.74 | 29.58 | -9060.18 | 1281.70 | 6.667e+05 |
| 26 | 102 | 6.690e+05 | 1285.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.23 | 29.69 | -9091.66 | -495.62 | 4.495e+05 |
| | | 4.495e+05 | -495.62 | -1.66e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.23 | 29.69 | -9091.66 | 1285.59 | 6.690e+05 |
| 27 | 1 | 8.923e+05 | 2603.27 | -0.09 | -546.00 | 0.0 | 9.331e+04 | 3793.69 | 16.70 | -8663.41 | 1601.47 | 6.810e+05 |
| | | 6.810e+05 | 1601.47 | -1.66e-04 | 0.0 | 60.0 | 9.331e+04 | 3247.69 | 16.70 | -8663.41 | 2603.27 | 8.923e+05 |
| 27 | 2 | 2.760e+06 | -1.669e+04 | -0.23 | -546.00 | 0.0 | 2.654e+05 | 1.167e+04 | -51.15 | -4.871e+04 | -1.669e+04 | 2.076e+06 |
| | | 2.076e+06 | -1.976e+04 | -3.83e-04 | 0.0 | 60.0 | 2.654e+05 | 1.112e+04 | -51.15 | -4.871e+04 | -1.976e+04 | 2.760e+06 |
| 27 | 7 | 6.687e+05 | 1954.64 | -0.07 | -420.00 | 0.0 | 6.994e+04 | 2848.77 | 12.51 | -6491.38 | 1204.14 | 5.104e+05 |
| | | 5.104e+05 | 1204.14 | -1.25e-04 | 0.0 | 60.0 | 6.994e+04 | 2428.77 | 12.51 | -6491.38 | 1954.64 | 6.687e+05 |
| 27 | 8 | 2.536e+06 | -1.708e+04 | -0.21 | -420.00 | 0.0 | 2.420e+05 | 1.073e+04 | -55.34 | -4.654e+04 | -1.708e+04 | 1.905e+06 |
| | | 1.905e+06 | -2.041e+04 | -3.42e-04 | 0.0 | 60.0 | 2.420e+05 | 1.031e+04 | -55.34 | -4.654e+04 | -2.041e+04 | 2.536e+06 |
| 27 | 21 | 7.209e+05 | -1464.16 | -0.07 | -420.00 | 0.0 | 7.520e+04 | 3035.64 | -2.76 | -9169.10 | -1464.16 | 5.502e+05 |
| | | 5.502e+05 | -1525.54 | -1.96e-05 | 0.0 | 60.0 | 7.520e+04 | 2615.64 | -2.76 | -9169.10 | -1525.54 | 7.209e+05 |
| 27 | 24 | 7.201e+05 | 5715.69 | -0.07 | -420.00 | 0.0 | 7.546e+04 | 3069.65 | 29.74 | -4830.65 | 4035.33 | 5.497e+05 |
| | | 5.497e+05 | 4035.33 | -2.49e-04 | 0.0 | 60.0 | 7.546e+04 | 2649.65 | 29.74 | -4830.65 | 5715.69 | 7.201e+05 |
| 27 | 26 | 7.215e+05 | -1462.39 | -0.07 | -420.00 | 0.0 | 7.515e+04 | 3040.05 | -2.77 | -9169.10 | -1462.39 | 5.511e+05 |
| | | 5.511e+05 | -1524.03 | -1.96e-05 | 0.0 | 60.0 | 7.515e+04 | 2620.05 | -2.77 | -9169.10 | -1524.03 | 7.215e+05 |
| 27 | 27 | 7.195e+05 | 5714.18 | -0.07 | -420.00 | 0.0 | 7.551e+04 | 3065.23 | 29.75 | -4830.64 | 4033.57 | 5.488e+05 |
| | | 5.488e+05 | 4033.57 | -2.49e-04 | 0.0 | 60.0 | 7.551e+04 | 2645.23 | 29.75 | -4830.64 | 5714.18 | 7.195e+05 |
| 27 | 50 | 7.218e+05 | 1107.25 | -0.07 | -420.00 | 0.0 | 7.521e+04 | 3055.66 | 8.39 | -7595.45 | 575.61 | 5.517e+05 |
| | | 5.517e+05 | 575.61 | -9.79e-05 | 0.0 | 60.0 | 7.521e+04 | 2635.66 | 8.39 | -7595.45 | 1107.25 | 7.218e+05 |
| 27 | 51 | 7.192e+05 | 3082.89 | -0.07 | -420.00 | 0.0 | 7.545e+04 | 3049.63 | 18.60 | -6404.29 | 1995.57 | 5.482e+05 |
| | | 5.482e+05 | 1995.57 | -1.71e-04 | 0.0 | 60.0 | 7.545e+04 | 2629.63 | 18.60 | -6404.29 | 3082.89 | 7.192e+05 |
| 27 | 53 | 7.206e+05 | 725.35 | -0.07 | -420.00 | 0.0 | 7.528e+04 | 3046.23 | 7.35 | -7828.97 | 245.11 | 5.500e+05 |
| | | 5.500e+05 | 245.11 | -9.10e-05 | 0.0 | 60.0 | 7.528e+04 | 2626.23 | 7.35 | -7828.97 | 725.35 | 7.206e+05 |
| 27 | 56 | 7.204e+05 | 3464.80 | -0.07 | -420.00 | 0.0 | 7.538e+04 | 3059.06 | 19.63 | -6170.78 | 2326.07 | 5.499e+05 |
| | | 5.499e+05 | 2326.07 | -1.78e-04 | 0.0 | 60.0 | 7.538e+04 | 2639.06 | 19.63 | -6170.78 | 3464.80 | 7.204e+05 |
| 27 | 58 | 7.209e+05 | 725.93 | -0.07 | -420.00 | 0.0 | 7.526e+04 | 3047.92 | 7.35 | -7828.97 | 245.78 | 5.504e+05 |
| | | 5.504e+05 | 245.78 | -9.10e-05 | 0.0 | 60.0 | 7.526e+04 | 2627.92 | 7.35 | -7828.97 | 725.93 | 7.209e+05 |
| 27 | 59 | 7.201e+05 | 3464.22 | -0.07 | -420.00 | 0.0 | 7.540e+04 | 3057.36 | 19.63 | -6170.78 | 2325.39 | 5.495e+05 |
| | | 5.495e+05 | 2325.39 | -1.78e-04 | 0.0 | 60.0 | 7.540e+04 | 2637.36 | 19.63 | -6170.78 | 3464.22 | 7.201e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|---------|--------|------------|------------|-----------|
| 27 | 82 | 7.210e+05 | 1721.20 | -0.07 | -420.00 | 0.0 | 7.528e+04 | 3053.83 | 11.56 | -7227.79 | 1016.71 | 5.506e+05 |
| | | 5.506e+05 | 1016.71 | -1.21e-04 | 0.0 | 60.0 | 7.528e+04 | 2633.83 | 11.56 | -7227.79 | 1721.20 | 7.210e+05 |
| 27 | 83 | 7.200e+05 | 2468.94 | -0.07 | -420.00 | 0.0 | 7.538e+04 | 3051.45 | 15.42 | -6771.95 | 1554.47 | 5.493e+05 |
| | | 5.493e+05 | 1554.47 | -1.48e-04 | 0.0 | 60.0 | 7.538e+04 | 2631.45 | 15.42 | -6771.95 | 2468.94 | 7.200e+05 |
| 27 | 85 | 7.205e+05 | 2095.07 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.64 | 13.49 | -6999.87 | 1285.59 | 5.499e+05 |
| | | 5.499e+05 | 1285.59 | -1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.64 | 13.49 | -6999.87 | 2095.07 | 7.205e+05 |
| 27 | 86 | 6.909e+05 | 2014.86 | -0.07 | -420.00 | 0.0 | 7.225e+04 | 2936.15 | 12.93 | -6708.92 | 1239.06 | 5.274e+05 |
| | | 5.274e+05 | 1239.06 | -1.29e-04 | 0.0 | 60.0 | 7.225e+04 | 2516.15 | 12.93 | -6708.92 | 2014.86 | 6.909e+05 |
| 27 | 87 | 1.936e+06 | -1.095e+04 | -0.16 | -420.00 | 0.0 | 1.870e+05 | 8187.59 | -32.30 | -3.341e+04 | -1.095e+04 | 1.457e+06 |
| | | 1.457e+06 | -1.289e+04 | -2.74e-04 | 0.0 | 60.0 | 1.870e+05 | 7767.59 | -32.30 | -3.341e+04 | -1.289e+04 | 1.936e+06 |
| 27 | 88 | 6.860e+05 | 2001.45 | -0.07 | -420.00 | 0.0 | 7.173e+04 | 2916.73 | 12.84 | -6660.88 | 1231.29 | 5.236e+05 |
| | | 5.236e+05 | 1231.29 | -1.28e-04 | 0.0 | 60.0 | 7.173e+04 | 2496.73 | 12.84 | -6660.88 | 2001.45 | 6.860e+05 |
| 27 | 89 | 1.931e+06 | -1.096e+04 | -0.16 | -420.00 | 0.0 | 1.865e+05 | 8168.17 | -32.40 | -3.336e+04 | -1.096e+04 | 1.453e+06 |
| | | 1.453e+06 | -1.291e+04 | -2.73e-04 | 0.0 | 60.0 | 1.865e+05 | 7748.17 | -32.40 | -3.336e+04 | -1.291e+04 | 1.931e+06 |
| 27 | 96 | 7.205e+05 | 2095.07 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.64 | 13.49 | -6999.87 | 1285.59 | 5.499e+05 |
| | | 5.499e+05 | 1285.59 | -1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.64 | 13.49 | -6999.87 | 2095.07 | 7.205e+05 |
| 27 | 97 | 1.841e+06 | -9687.87 | -0.16 | -420.00 | 0.0 | 1.786e+05 | 7778.94 | -27.22 | -3.103e+04 | -9687.87 | 1.387e+06 |
| | | 1.387e+06 | -1.132e+04 | -2.65e-04 | 0.0 | 60.0 | 1.786e+05 | 7358.94 | -27.22 | -3.103e+04 | -1.132e+04 | 1.841e+06 |
| 27 | 98 | 7.180e+05 | 2088.37 | -0.07 | -420.00 | 0.0 | 7.507e+04 | 3042.93 | 13.44 | -6975.85 | 1281.70 | 5.481e+05 |
| | | 5.481e+05 | 1281.70 | -1.34e-04 | 0.0 | 60.0 | 7.507e+04 | 2622.93 | 13.44 | -6975.85 | 2088.37 | 7.180e+05 |
| 27 | 102 | 7.205e+05 | 2095.07 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.64 | 13.49 | -6999.87 | 1285.59 | 5.499e+05 |
| | | 5.499e+05 | 1285.59 | -1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.64 | 13.49 | -6999.87 | 2095.07 | 7.205e+05 |
| 28 | 1 | 9.326e+05 | 2944.56 | -0.06 | -546.00 | 0.0 | 9.806e+04 | 2787.23 | 5.69 | -6168.58 | 2603.27 | 7.817e+05 |
| | | 7.817e+05 | 2603.27 | -1.20e-04 | 0.0 | 60.0 | 9.806e+04 | 2241.23 | 5.69 | -6168.58 | 2944.56 | 9.326e+05 |
| 28 | 2 | 2.797e+06 | -1.849e+04 | -0.16 | -546.00 | 0.0 | 2.792e+05 | 6256.66 | 21.14 | -1.591e+04 | -1.976e+04 | 2.438e+06 |
| | | 2.438e+06 | -1.976e+04 | -2.84e-04 | 0.0 | 60.0 | 2.792e+05 | 5710.66 | 21.14 | -1.591e+04 | -1.849e+04 | 2.797e+06 |
| 28 | 7 | 6.989e+05 | 2210.12 | -0.05 | -420.00 | 0.0 | 7.350e+04 | 2094.44 | 4.26 | -4623.76 | 1954.64 | 5.859e+05 |
| | | 5.859e+05 | 1954.64 | -9.00e-05 | 0.0 | 60.0 | 7.350e+04 | 1674.44 | 4.26 | -4623.76 | 2210.12 | 6.989e+05 |
| 28 | 8 | 2.564e+06 | -1.922e+04 | -0.14 | -420.00 | 0.0 | 2.546e+05 | 5563.87 | 19.71 | -1.437e+04 | -2.041e+04 | 2.242e+06 |
| | | 2.242e+06 | -2.041e+04 | -2.54e-04 | 0.0 | 60.0 | 2.546e+05 | 5143.87 | 19.71 | -1.437e+04 | -1.922e+04 | 2.564e+06 |
| 28 | 21 | 7.539e+05 | -1525.54 | -0.05 | -420.00 | 0.0 | 7.902e+04 | 2222.58 | -8.07 | -6813.20 | -1525.54 | 6.315e+05 |
| | | 6.315e+05 | -1933.17 | -1.36e-05 | 0.0 | 60.0 | 7.902e+04 | 1802.58 | -8.07 | -6813.20 | -1933.17 | 7.539e+05 |
| 28 | 24 | 7.521e+05 | 6675.61 | -0.05 | -420.00 | 0.0 | 7.930e+04 | 2257.41 | 17.27 | -3148.67 | 5715.68 | 6.310e+05 |
| | | 6.310e+05 | 5715.68 | -1.80e-04 | 0.0 | 60.0 | 7.930e+04 | 1837.41 | 17.27 | -3148.67 | 6675.61 | 7.521e+05 |
| 28 | 26 | 7.543e+05 | -1524.03 | -0.05 | -420.00 | 0.0 | 7.898e+04 | 2229.47 | -8.07 | -6813.22 | -1524.03 | 6.323e+05 |
| | | 6.323e+05 | -1932.07 | -1.36e-05 | 0.0 | 60.0 | 7.898e+04 | 1809.47 | -8.07 | -6813.22 | -1932.07 | 7.543e+05 |
| 28 | 27 | 7.517e+05 | 6674.51 | -0.05 | -420.00 | 0.0 | 7.934e+04 | 2250.52 | 17.28 | -3148.65 | 5714.18 | 6.302e+05 |
| | | 6.302e+05 | 5714.18 | -1.80e-04 | 0.0 | 60.0 | 7.934e+04 | 1830.52 | 17.28 | -3148.65 | 6674.51 | 7.517e+05 |
| 28 | 51 | 7.520e+05 | 3591.68 | -0.05 | -420.00 | 0.0 | 7.927e+04 | 2232.56 | 8.76 | -4515.35 | 3082.89 | 6.296e+05 |
| | | 6.296e+05 | 3082.89 | -1.25e-04 | 0.0 | 60.0 | 7.927e+04 | 1812.56 | 8.76 | -4515.35 | 3591.68 | 7.520e+05 |
| 28 | 53 | 7.534e+05 | 743.12 | -0.05 | -420.00 | 0.0 | 7.911e+04 | 2233.42 | -0.18 | -5678.93 | 725.35 | 6.313e+05 |
| | | 6.313e+05 | 725.35 | -6.55e-05 | 0.0 | 60.0 | 7.911e+04 | 1813.42 | -0.18 | -5678.93 | 743.12 | 7.534e+05 |
| 28 | 56 | 7.527e+05 | 3999.32 | -0.05 | -420.00 | 0.0 | 7.922e+04 | 2246.57 | 9.39 | -4282.95 | 3464.80 | 6.311e+05 |
| | | 6.311e+05 | 3464.80 | -1.29e-04 | 0.0 | 60.0 | 7.922e+04 | 1826.57 | 9.39 | -4282.95 | 3999.32 | 7.527e+05 |
| 28 | 58 | 7.535e+05 | 743.54 | -0.05 | -420.00 | 0.0 | 7.910e+04 | 2236.06 | -0.18 | -5678.93 | 725.93 | 6.316e+05 |
| | | 6.316e+05 | 725.93 | -6.55e-05 | 0.0 | 60.0 | 7.910e+04 | 1816.06 | -0.18 | -5678.93 | 743.54 | 7.535e+05 |
| 28 | 59 | 7.525e+05 | 3998.90 | -0.05 | -420.00 | 0.0 | 7.923e+04 | 2243.93 | 9.39 | -4282.94 | 3464.22 | 6.308e+05 |
| | | 6.308e+05 | 3464.22 | -1.29e-04 | 0.0 | 60.0 | 7.923e+04 | 1823.93 | 9.39 | -4282.94 | 3998.90 | 7.525e+05 |
| 28 | 83 | 7.526e+05 | 2832.95 | -0.05 | -420.00 | 0.0 | 7.921e+04 | 2237.11 | 6.17 | -4803.29 | 2468.94 | 6.306e+05 |
| | | 6.306e+05 | 2468.94 | -1.08e-04 | 0.0 | 60.0 | 7.921e+04 | 1817.11 | 6.17 | -4803.29 | 2832.95 | 7.526e+05 |
| 28 | 85 | 7.530e+05 | 2371.22 | -0.05 | -420.00 | 0.0 | 7.916e+04 | 2240.00 | 4.60 | -4980.94 | 2095.07 | 6.312e+05 |
| | | 6.312e+05 | 2095.07 | -9.70e-05 | 0.0 | 60.0 | 7.916e+04 | 1820.00 | 4.60 | -4980.94 | 2371.22 | 7.530e+05 |
| 28 | 86 | 7.221e+05 | 2279.21 | -0.05 | -420.00 | 0.0 | 7.593e+04 | 2156.82 | 4.41 | -4776.51 | 2014.86 | 6.053e+05 |
| | | 6.053e+05 | 2014.86 | -9.30e-05 | 0.0 | 60.0 | 7.593e+04 | 1736.82 | 4.41 | -4776.51 | 2279.21 | 7.221e+05 |
| 28 | 87 | 1.965e+06 | -1.201e+04 | -0.11 | -420.00 | 0.0 | 1.967e+05 | 4469.78 | 14.70 | -1.127e+04 | -1.201e+04 | 1.710e+06 |
| | | 1.710e+06 | -1.289e+04 | -2.02e-04 | 0.0 | 60.0 | 1.967e+05 | 4049.78 | 14.70 | -1.127e+04 | -1.289e+04 | 1.965e+06 |
| 28 | 88 | 7.170e+05 | 2263.82 | -0.05 | -420.00 | 0.0 | 7.539e+04 | 2142.96 | 4.37 | -4742.82 | 2001.45 | 6.010e+05 |
| | | 6.010e+05 | 2001.45 | -9.23e-05 | 0.0 | 60.0 | 7.539e+04 | 1722.96 | 4.37 | -4742.82 | 2263.82 | 7.170e+05 |
| 28 | 89 | 1.960e+06 | -1.203e+04 | -0.11 | -420.00 | 0.0 | 1.961e+05 | 4455.91 | 14.67 | -1.124e+04 | -1.291e+04 | 1.705e+06 |
| | | 1.705e+06 | -1.291e+04 | -2.02e-04 | 0.0 | 60.0 | 1.961e+05 | 4035.91 | 14.67 | -1.124e+04 | -1.203e+04 | 1.960e+06 |
| 28 | 96 | 7.530e+05 | 2371.22 | -0.05 | -420.00 | 0.0 | 7.916e+04 | 2240.00 | 4.60 | -4980.94 | 2095.07 | 6.312e+05 |
| | | 6.312e+05 | 2095.07 | -9.70e-05 | 0.0 | 60.0 | 7.916e+04 | 1820.00 | 4.60 | -4980.94 | 2371.22 | 7.530e+05 |
| 28 | 97 | 1.872e+06 | -1.049e+04 | -0.11 | -420.00 | 0.0 | 1.878e+05 | 4321.65 | 13.87 | -1.083e+04 | -1.132e+04 | 1.625e+06 |
| | | 1.625e+06 | -1.132e+04 | -1.95e-04 | 0.0 | 60.0 | 1.878e+05 | 3901.65 | 13.87 | -1.083e+04 | -1.049e+04 | 1.872e+06 |
| 28 | 98 | 7.505e+05 | 2363.52 | -0.05 | -420.00 | 0.0 | 7.889e+04 | 2233.06 | 4.59 | -4964.09 | 2088.37 | 6.291e+05 |
| | | 6.291e+05 | 2088.37 | -9.67e-05 | 0.0 | 60.0 | 7.889e+04 | 1813.06 | 4.59 | -4964.09 | 2363.52 | 7.505e+05 |
| 28 | 102 | 7.530e+05 | 2371.22 | -0.05 | -420.00 | 0.0 | 7.916e+04 | 2240.00 | 4.60 | -4980.94 | 2095.07 | 6.312e+05 |
| | | 6.312e+05 | 2095.07 | -9.70e-05 | 0.0 | 60.0 | 7.916e+04 | 1820.00 | 4.60 | -4980.94 | 2371.22 | 7.530e+05 |
| 29 | 1 | 9.494e+05 | 3008.92 | -0.04 | -546.00 | 0.0 | 1.012e+05 | 1781.79 | 1.07 | -3743.10 | 2944.56 | 8.588e+05 |
| | | 8.588e+05 | 2944.56 | -7.18e-05 | 0.0 | 60.0 | 1.012e+05 | 1235.79 | 1.07 | -3743.10 | 3008.92 | 9.494e+05 |
| 29 | 2 | 2.707e+06 | -1.194e+04 | -0.08 | -546.00 | 0.0 | 2.845e+05 | 848.22 | 109.17 | 1.629e+04 | -1.849e+04 | 2.673e+06 |
| | | 2.673e+06 | -1.849e+04 | -1.80e-04 | 0.0 | 60.0 | 2.845e+05 | 302.22 | 109.17 | 1.629e+04 | -1.194e+04 | 2.707e+06 |
| 29 | 7 | 7.115e+05 | 2257.98 | -0.03 | -420.00 | 0.0 | 7.587e+04 | 1340.86 | 0.80 | -2807.79 | 2210.11 | 6.437e+05 |
| | | 6.437e+05 | 2210.11 | -5.38e-05 | 0.0 | 60.0 | 7.587e+04 | 920.86 | 0.80 | -2807.79 | 2257.98 | 7.115e+05 |
| 29 | 8 | 2.469e+06 | -1.269e+04 | -0.07 | -420.00 | 0.0 | 2.592e+05 | 407.29 | 108.89 | 1.722e+04 | -1.922e+04 | 2.458e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|----------|--------|-----------|------------|-----------|
| | | 2.458e+06 | -1.922e+04 | -1.62e-04 | 0.0 | 60.0 | 2.592e+05 | -12.71 | 108.89 | 1.722e+04 | -1.269e+04 | 2.469e+06 |
| 29 | 21 | 7.679e+05 | -1933.17 | -0.03 | -420.00 | 0.0 | 8.157e+04 | 1413.71 | -6.85 | -4277.02 | -1933.17 | 6.941e+05 |
| | | 6.941e+05 | -2289.41 | -1.03e-05 | 0.0 | 60.0 | 8.157e+04 | 993.71 | -6.85 | -4277.02 | -2289.41 | 7.679e+05 |
| 29 | 24 | 7.652e+05 | 7137.08 | -0.03 | -420.00 | 0.0 | 8.187e+04 | 1442.65 | 8.60 | -1760.14 | 6675.60 | 6.929e+05 |
| | | 6.929e+05 | 6675.60 | -1.06e-04 | 0.0 | 60.0 | 8.187e+04 | 1022.65 | 8.60 | -1760.14 | 7137.08 | 7.652e+05 |
| 29 | 26 | 7.681e+05 | -1932.07 | -0.03 | -420.00 | 0.0 | 8.154e+04 | 1422.40 | -6.86 | -4277.06 | -1932.07 | 6.948e+05 |
| | | 6.948e+05 | -2288.84 | -1.03e-05 | 0.0 | 60.0 | 8.154e+04 | 1002.40 | -6.86 | -4277.06 | -2288.84 | 7.681e+05 |
| 29 | 27 | 7.651e+05 | 7136.50 | -0.03 | -420.00 | 0.0 | 8.190e+04 | 1433.96 | 8.61 | -1760.11 | 6674.51 | 6.922e+05 |
| | | 6.922e+05 | 6674.51 | -1.06e-04 | 0.0 | 60.0 | 8.190e+04 | 1013.96 | 8.61 | -1760.11 | 7136.50 | 7.651e+05 |
| 29 | 51 | 7.659e+05 | 3800.85 | -0.03 | -420.00 | 0.0 | 8.181e+04 | 1416.56 | 3.63 | -2745.18 | 3591.68 | 6.921e+05 |
| | | 6.921e+05 | 3591.68 | -7.63e-05 | 0.0 | 60.0 | 8.181e+04 | 996.56 | 3.63 | -2745.18 | 3800.85 | 7.659e+05 |
| 29 | 53 | 7.671e+05 | 743.12 | -0.03 | -420.00 | 0.0 | 8.166e+04 | 1422.70 | -2.04 | -3497.03 | 743.12 | 6.937e+05 |
| | | 6.937e+05 | 641.31 | -4.00e-05 | 0.0 | 60.0 | 8.166e+04 | 1002.70 | -2.04 | -3497.03 | 641.31 | 7.671e+05 |
| 29 | 56 | 7.661e+05 | 4206.35 | -0.03 | -420.00 | 0.0 | 8.178e+04 | 1433.66 | 3.79 | -2540.14 | 3999.32 | 6.933e+05 |
| | | 6.933e+05 | 3999.32 | -7.60e-05 | 0.0 | 60.0 | 8.178e+04 | 1013.66 | 3.79 | -2540.14 | 4206.35 | 7.661e+05 |
| 29 | 58 | 7.671e+05 | 743.54 | -0.03 | -420.00 | 0.0 | 8.165e+04 | 1426.04 | -2.04 | -3497.04 | 743.54 | 6.940e+05 |
| | | 6.940e+05 | 641.53 | -4.00e-05 | 0.0 | 60.0 | 8.165e+04 | 1006.04 | -2.04 | -3497.04 | 641.53 | 7.671e+05 |
| 29 | 59 | 7.660e+05 | 4206.13 | -0.03 | -420.00 | 0.0 | 8.179e+04 | 1430.32 | 3.80 | -2540.13 | 3998.89 | 6.930e+05 |
| | | 6.930e+05 | 3998.89 | -7.61e-05 | 0.0 | 60.0 | 8.179e+04 | 1010.32 | 3.80 | -2540.13 | 4206.13 | 7.660e+05 |
| 29 | 83 | 7.663e+05 | 2944.66 | -0.03 | -420.00 | 0.0 | 8.176e+04 | 1423.70 | 1.92 | -2914.40 | 2832.95 | 6.930e+05 |
| | | 6.930e+05 | 2832.95 | -6.49e-05 | 0.0 | 60.0 | 8.176e+04 | 1003.70 | 1.92 | -2914.40 | 2944.66 | 7.663e+05 |
| 29 | 85 | 7.666e+05 | 2423.83 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1428.18 | 0.88 | -3018.58 | 2371.22 | 6.935e+05 |
| | | 6.935e+05 | 2371.22 | -5.80e-05 | 0.0 | 60.0 | 8.172e+04 | 1008.18 | 0.88 | -3018.58 | 2423.83 | 7.666e+05 |
| 29 | 86 | 7.351e+05 | 2329.12 | -0.03 | -420.00 | 0.0 | 7.838e+04 | 1378.28 | 0.83 | -2897.88 | 2279.20 | 6.650e+05 |
| | | 6.650e+05 | 2279.20 | -5.56e-05 | 0.0 | 60.0 | 7.838e+04 | 958.28 | 0.83 | -2897.88 | 2329.12 | 7.351e+05 |
| 29 | 87 | 1.907e+06 | -7635.94 | -0.06 | -420.00 | 0.0 | 2.006e+05 | 755.90 | 72.89 | 1.046e+04 | -1.201e+04 | 1.874e+06 |
| | | 1.874e+06 | -1.201e+04 | -1.27e-04 | 0.0 | 60.0 | 2.006e+05 | 335.90 | 72.89 | 1.046e+04 | -7635.94 | 1.907e+06 |
| 29 | 88 | 7.299e+05 | 2313.26 | -0.03 | -420.00 | 0.0 | 7.782e+04 | 1369.96 | 0.82 | -2878.05 | 2263.82 | 6.603e+05 |
| | | 6.603e+05 | 2263.82 | -5.52e-05 | 0.0 | 60.0 | 7.782e+04 | 949.96 | 0.82 | -2878.05 | 2313.26 | 7.299e+05 |
| 29 | 89 | 1.902e+06 | -7651.80 | -0.06 | -420.00 | 0.0 | 2.000e+05 | 747.59 | 72.89 | 1.048e+04 | -1.203e+04 | 1.870e+06 |
| | | 1.870e+06 | -1.203e+04 | -1.27e-04 | 0.0 | 60.0 | 2.000e+05 | 327.59 | 72.89 | 1.048e+04 | -7651.80 | 1.902e+06 |
| 29 | 96 | 7.666e+05 | 2423.83 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1428.18 | 0.88 | -3018.58 | 2371.22 | 6.935e+05 |
| | | 6.935e+05 | 2371.22 | -5.80e-05 | 0.0 | 60.0 | 8.172e+04 | 1008.18 | 0.88 | -3018.58 | 2423.83 | 7.666e+05 |
| 29 | 97 | 1.821e+06 | -6544.72 | -0.06 | -420.00 | 0.0 | 1.917e+05 | 868.04 | 65.73 | 9000.50 | -1.049e+04 | 1.782e+06 |
| | | 1.782e+06 | -1.049e+04 | -1.23e-04 | 0.0 | 60.0 | 1.917e+05 | 448.04 | 65.73 | 9000.50 | -6544.72 | 1.821e+06 |
| 29 | 98 | 7.640e+05 | 2415.90 | -0.03 | -420.00 | 0.0 | 8.144e+04 | 1424.02 | 0.87 | -3008.67 | 2363.52 | 6.911e+05 |
| | | 6.911e+05 | 2363.52 | -5.78e-05 | 0.0 | 60.0 | 8.144e+04 | 1004.02 | 0.87 | -3008.67 | 2415.90 | 7.640e+05 |
| 29 | 102 | 7.666e+05 | 2423.83 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1428.18 | 0.88 | -3018.58 | 2371.22 | 6.935e+05 |
| | | 6.935e+05 | 2371.22 | -5.80e-05 | 0.0 | 60.0 | 8.172e+04 | 1008.18 | 0.88 | -3018.58 | 2423.83 | 7.666e+05 |
| 30 | 1 | 9.427e+05 | 3008.92 | -0.01 | -546.00 | 0.0 | 1.028e+05 | 776.65 | -0.10 | -1346.80 | 3008.92 | 9.125e+05 |
| | | 9.125e+05 | 3003.01 | -2.35e-05 | 0.0 | 60.0 | 1.028e+05 | 230.65 | -0.10 | -1346.80 | 3003.01 | 9.427e+05 |
| 30 | 2 | 2.775e+06 | -2502.61 | -0.01 | -546.00 | 0.0 | 2.817e+05 | -4722.57 | 157.27 | 4.258e+04 | -1.194e+04 | 2.775e+06 |
| | | 2.476e+06 | -1.194e+04 | -6.36e-05 | 0.0 | 60.0 | 2.817e+05 | -5268.57 | 157.27 | 4.258e+04 | -2502.61 | 2.476e+06 |
| 30 | 7 | 7.065e+05 | 2257.98 | -9.84e-03 | -420.00 | 0.0 | 7.706e+04 | 587.51 | -0.08 | -1013.33 | 2257.98 | 6.839e+05 |
| | | 6.839e+05 | 2253.09 | -1.76e-05 | 0.0 | 60.0 | 7.706e+04 | 167.51 | -0.08 | -1013.33 | 2253.09 | 7.065e+05 |
| 30 | 8 | 2.547e+06 | -3252.53 | -0.01 | -420.00 | 0.0 | 2.559e+05 | -4911.72 | 157.28 | 4.291e+04 | -1.269e+04 | 2.547e+06 |
| | | 2.239e+06 | -1.269e+04 | -5.77e-05 | 0.0 | 60.0 | 2.559e+05 | -5331.72 | 157.28 | 4.291e+04 | -3252.53 | 2.239e+06 |
| 30 | 26 | 7.628e+05 | -2288.84 | -0.01 | -420.00 | 0.0 | 8.283e+04 | 617.03 | 2.22 | -1626.91 | -2288.84 | 7.379e+05 |
| | | 7.379e+05 | -2373.40 | -9.21e-06 | 0.0 | 60.0 | 8.283e+04 | 197.03 | 2.22 | -1626.91 | -2373.40 | 7.628e+05 |
| 30 | 27 | 7.596e+05 | 7213.16 | -0.01 | -420.00 | 0.0 | 8.317e+04 | 616.21 | -2.35 | -533.92 | 7136.50 | 7.357e+05 |
| | | 7.357e+05 | 7136.50 | -2.89e-05 | 0.0 | 60.0 | 8.317e+04 | 196.21 | -2.35 | -533.92 | 7213.16 | 7.596e+05 |
| 30 | 30 | 7.627e+05 | -2107.66 | -0.01 | -420.00 | 0.0 | 8.283e+04 | 617.48 | -4.60 | -1555.29 | -2107.66 | 7.384e+05 |
| | | 7.384e+05 | -2373.67 | 9.35e-06 | 0.0 | 60.0 | 8.283e+04 | 197.48 | -4.60 | -1555.29 | -2373.67 | 7.627e+05 |
| 30 | 31 | 7.597e+05 | 7213.43 | -0.01 | -420.00 | 0.0 | 8.317e+04 | 615.76 | 4.47 | -605.53 | 6955.33 | 7.352e+05 |
| | | 7.352e+05 | 6955.33 | -4.74e-05 | 0.0 | 60.0 | 8.317e+04 | 195.76 | 4.47 | -605.53 | 7213.43 | 7.597e+05 |
| 30 | 36 | 7.598e+05 | 7213.42 | -0.01 | -420.00 | 0.0 | 8.316e+04 | 625.39 | 4.46 | -605.58 | 6955.90 | 7.352e+05 |
| | | 7.352e+05 | 6955.90 | -4.73e-05 | 0.0 | 60.0 | 8.316e+04 | 205.39 | 4.46 | -605.58 | 7213.42 | 7.598e+05 |
| 30 | 58 | 7.618e+05 | 641.53 | -0.01 | -420.00 | 0.0 | 8.294e+04 | 616.81 | 0.80 | -1287.84 | 641.53 | 7.372e+05 |
| | | 7.372e+05 | 607.18 | -1.53e-05 | 0.0 | 60.0 | 8.294e+04 | 196.81 | 0.80 | -1287.84 | 607.18 | 7.618e+05 |
| 30 | 59 | 7.606e+05 | 4232.58 | -0.01 | -420.00 | 0.0 | 8.307e+04 | 616.43 | -0.93 | -872.99 | 4206.13 | 7.364e+05 |
| | | 7.364e+05 | 4206.13 | -2.27e-05 | 0.0 | 60.0 | 8.307e+04 | 196.43 | -0.93 | -872.99 | 4232.58 | 7.606e+05 |
| 30 | 62 | 7.618e+05 | 710.05 | -0.01 | -420.00 | 0.0 | 8.294e+04 | 616.98 | -1.78 | -1261.20 | 710.05 | 7.374e+05 |
| | | 7.374e+05 | 607.07 | -8.30e-06 | 0.0 | 60.0 | 8.294e+04 | 196.98 | -1.78 | -1261.20 | 607.07 | 7.618e+05 |
| 30 | 63 | 7.606e+05 | 4232.69 | -0.01 | -420.00 | 0.0 | 8.306e+04 | 616.26 | 1.65 | -899.63 | 4137.61 | 7.362e+05 |
| | | 7.362e+05 | 4137.61 | -2.97e-05 | 0.0 | 60.0 | 8.306e+04 | 196.26 | 1.65 | -899.63 | 4232.69 | 7.606e+05 |
| 30 | 68 | 7.607e+05 | 4232.68 | -0.01 | -420.00 | 0.0 | 8.306e+04 | 619.96 | 1.64 | -899.64 | 4137.84 | 7.362e+05 |
| | | 7.362e+05 | 4137.84 | -2.97e-05 | 0.0 | 60.0 | 8.306e+04 | 199.96 | 1.64 | -899.64 | 4232.68 | 7.607e+05 |
| 30 | 85 | 7.612e+05 | 2423.83 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 616.62 | -0.07 | -1080.41 | 2423.83 | 7.368e+05 |
| | | 7.368e+05 | 2419.88 | -1.90e-05 | 0.0 | 60.0 | 8.300e+04 | 196.62 | -0.07 | -1080.41 | 2419.88 | 7.612e+05 |
| 30 | 86 | 7.300e+05 | 2329.12 | -0.01 | -420.00 | 0.0 | 7.961e+04 | 599.99 | -0.07 | -1041.92 | 2329.12 | 7.066e+05 |
| | | 7.066e+05 | 2324.65 | -1.82e-05 | 0.0 | 60.0 | 7.961e+04 | 179.99 | -0.07 | -1041.92 | 2324.65 | 7.300e+05 |
| 30 | 87 | 1.948e+06 | -1345.75 | -0.01 | -420.00 | 0.0 | 1.988e+05 | -3066.17 | 104.84 | 2.824e+04 | -7635.94 | 1.948e+06 |
| | | 1.752e+06 | -7635.94 | -4.49e-05 | 0.0 | 60.0 | 1.988e+05 | -3486.17 | 104.84 | 2.824e+04 | -1345.75 | 1.752e+06 |
| 30 | 88 | 7.248e+05 | 2313.26 | -0.01 | -420.00 | 0.0 | 7.904e+04 | 597.21 | -0.08 | -1035.69 | 2313.26 | 7.015e+05 |
| | | 7.015e+05 | 2308.68 | -1.81e-05 | 0.0 | 60.0 | 7.904e+04 | 177.21 | -0.08 | -1035.69 | 2308.68 | 7.248e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|--------|-----------|----------|-----------|
| 30 | 89 | 1.943e+06 | -1361.72 | -0.01 | -420.00 | 0.0 | 1.983e+05 | -3068.94 | 104.83 | 2.825e+04 | -7651.80 | 1.943e+06 |
| | | 1.747e+06 | -7651.80 | -4.48e-05 | 0.0 | 60.0 | 1.983e+05 | -3488.94 | 104.83 | 2.825e+04 | -1361.72 | 1.747e+06 |
| 30 | 92 | 7.248e+05 | 2313.26 | -0.01 | -420.00 | 0.0 | 7.904e+04 | 597.21 | -0.08 | -1035.69 | 2313.26 | 7.015e+05 |
| | | 7.015e+05 | 2308.68 | -1.81e-05 | 0.0 | 60.0 | 7.904e+04 | 177.21 | -0.08 | -1035.69 | 2308.68 | 7.248e+05 |
| 30 | 96 | 7.612e+05 | 2423.83 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 616.62 | -0.07 | -1080.41 | 2423.83 | 7.368e+05 |
| | | 7.368e+05 | 2419.88 | -1.90e-05 | 0.0 | 60.0 | 8.300e+04 | 196.62 | -0.07 | -1080.41 | 2419.88 | 7.612e+05 |
| 30 | 97 | 1.854e+06 | -883.49 | -0.01 | -420.00 | 0.0 | 1.903e+05 | -2682.92 | 94.35 | 2.527e+04 | -6544.73 | 1.854e+06 |
| | | 1.681e+06 | -6544.73 | -4.31e-05 | 0.0 | 60.0 | 1.903e+05 | -3102.92 | 94.35 | 2.527e+04 | -883.49 | 1.681e+06 |
| 30 | 98 | 7.586e+05 | 2415.90 | -0.01 | -420.00 | 0.0 | 8.272e+04 | 615.23 | -0.07 | -1077.30 | 2415.90 | 7.343e+05 |
| | | 7.343e+05 | 2411.90 | -1.89e-05 | 0.0 | 60.0 | 8.272e+04 | 195.23 | -0.07 | -1077.30 | 2411.90 | 7.586e+05 |
| 30 | 102 | 7.612e+05 | 2423.83 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 616.62 | -0.07 | -1080.41 | 2423.83 | 7.368e+05 |
| | | 7.368e+05 | 2419.88 | -1.90e-05 | 0.0 | 60.0 | 8.300e+04 | 196.62 | -0.07 | -1080.41 | 2419.88 | 7.612e+05 |
| 31 | 2 | 2.670e+06 | 5393.92 | 0.06 | -546.00 | 0.0 | 2.733e+05 | -6069.94 | 131.61 | 6.057e+04 | -2502.62 | 2.670e+06 |
| | | 2.290e+06 | -2502.62 | 7.25e-05 | 0.0 | 60.0 | 2.733e+05 | -6615.94 | 131.61 | 6.057e+04 | 5393.92 | 2.290e+06 |
| 31 | 7 | 7.065e+05 | 2253.09 | 9.82e-03 | -420.00 | 0.0 | 7.706e+04 | -165.80 | -0.17 | 779.61 | 2253.09 | 7.065e+05 |
| | | 6.839e+05 | 2242.59 | 1.85e-05 | 0.0 | 60.0 | 7.706e+04 | -585.80 | -0.17 | 779.61 | 2242.59 | 6.839e+05 |
| 31 | 8 | 2.434e+06 | 4646.74 | 0.06 | -420.00 | 0.0 | 2.476e+05 | -6007.32 | 131.65 | 6.030e+04 | -3252.54 | 2.434e+06 |
| | | 2.061e+06 | -3252.54 | 6.63e-05 | 0.0 | 60.0 | 2.476e+05 | -6427.32 | 131.65 | 6.030e+04 | 4646.74 | 2.061e+06 |
| 31 | 27 | 7.598e+05 | 7213.38 | 0.01 | -420.00 | 0.0 | 8.316e+04 | -203.64 | -4.69 | 381.55 | 7213.38 | 7.598e+05 |
| | | 7.353e+05 | 6942.05 | 4.81e-05 | 0.0 | 60.0 | 8.316e+04 | -623.64 | -4.69 | 381.55 | 6942.05 | 7.353e+05 |
| 31 | 29 | 7.627e+05 | -2292.11 | 0.01 | -420.00 | 0.0 | 8.283e+04 | -195.31 | -2.27 | 1448.30 | -2373.67 | 7.627e+05 |
| | | 7.384e+05 | -2373.67 | 9.42e-06 | 0.0 | 60.0 | 8.283e+04 | -615.31 | -2.27 | 1448.30 | -2292.11 | 7.384e+05 |
| 31 | 32 | 7.596e+05 | 7213.43 | 0.01 | -420.00 | 0.0 | 8.317e+04 | -194.49 | 1.95 | 262.05 | 7213.43 | 7.596e+05 |
| | | 7.354e+05 | 7112.57 | 3.03e-05 | 0.0 | 60.0 | 8.317e+04 | -614.49 | 1.95 | 262.05 | 7112.57 | 7.354e+05 |
| 31 | 33 | 7.627e+05 | -2302.30 | 0.01 | -420.00 | 0.0 | 8.283e+04 | -195.33 | -2.44 | 1400.85 | -2373.44 | 7.627e+05 |
| | | 7.379e+05 | -2373.44 | 1.01e-05 | 0.0 | 60.0 | 8.283e+04 | -615.33 | -2.44 | 1400.85 | -2302.30 | 7.379e+05 |
| 31 | 36 | 7.596e+05 | 7213.20 | 0.01 | -420.00 | 0.0 | 8.317e+04 | -194.47 | 2.12 | 309.50 | 7213.20 | 7.596e+05 |
| | | 7.358e+05 | 7122.76 | 2.97e-05 | 0.0 | 60.0 | 8.317e+04 | -614.47 | 2.12 | 309.50 | 7122.76 | 7.358e+05 |
| 31 | 59 | 7.606e+05 | 4232.67 | 0.01 | -420.00 | 0.0 | 8.306e+04 | -198.22 | -1.87 | 674.85 | 4232.67 | 7.606e+05 |
| | | 7.363e+05 | 4124.14 | 3.05e-05 | 0.0 | 60.0 | 8.306e+04 | -618.22 | -1.87 | 674.85 | 4124.14 | 7.363e+05 |
| 31 | 61 | 7.618e+05 | 631.87 | 0.01 | -420.00 | 0.0 | 8.294e+04 | -195.08 | -0.96 | 1080.32 | 607.07 | 7.618e+05 |
| | | 7.374e+05 | 607.07 | 1.59e-05 | 0.0 | 60.0 | 8.294e+04 | -615.08 | -0.96 | 1080.32 | 631.87 | 7.374e+05 |
| 31 | 64 | 7.606e+05 | 4232.69 | 0.01 | -420.00 | 0.0 | 8.307e+04 | -194.71 | 0.63 | 630.03 | 4232.69 | 7.606e+05 |
| | | 7.363e+05 | 4188.59 | 2.38e-05 | 0.0 | 60.0 | 8.307e+04 | -614.71 | 0.63 | 630.03 | 4188.59 | 7.363e+05 |
| 31 | 65 | 7.618e+05 | 627.98 | 0.01 | -420.00 | 0.0 | 8.294e+04 | -195.09 | -1.02 | 1062.30 | 607.16 | 7.618e+05 |
| | | 7.373e+05 | 607.16 | 1.61e-05 | 0.0 | 60.0 | 8.294e+04 | -615.09 | -1.02 | 1062.30 | 627.98 | 7.373e+05 |
| 31 | 68 | 7.606e+05 | 4232.60 | 0.01 | -420.00 | 0.0 | 8.307e+04 | -194.71 | 0.70 | 648.05 | 4232.60 | 7.606e+05 |
| | | 7.365e+05 | 4192.48 | 2.36e-05 | 0.0 | 60.0 | 8.307e+04 | -614.71 | 0.70 | 648.05 | 4192.48 | 7.365e+05 |
| 31 | 85 | 7.612e+05 | 2419.88 | 0.01 | -420.00 | 0.0 | 8.300e+04 | -194.90 | -0.16 | 855.18 | 2419.88 | 7.612e+05 |
| | | 7.369e+05 | 2410.23 | 1.99e-05 | 0.0 | 60.0 | 8.300e+04 | -614.90 | -0.16 | 855.18 | 2410.23 | 7.369e+05 |
| 31 | 87 | 1.882e+06 | 3917.31 | 0.04 | -420.00 | 0.0 | 1.933e+05 | -4072.62 | 87.72 | 4.049e+04 | -1345.76 | 1.882e+06 |
| | | 1.625e+06 | -1345.76 | 5.10e-05 | 0.0 | 60.0 | 1.933e+05 | -4492.62 | 87.72 | 4.049e+04 | 3917.31 | 1.625e+06 |
| 31 | 88 | 7.247e+05 | 2308.68 | 0.01 | -420.00 | 0.0 | 7.904e+04 | -175.50 | -0.17 | 804.80 | 2308.68 | 7.247e+05 |
| | | 7.016e+05 | 2298.47 | 1.90e-05 | 0.0 | 60.0 | 7.904e+04 | -595.50 | -0.17 | 804.80 | 2298.47 | 7.016e+05 |
| 31 | 89 | 1.876e+06 | 3901.24 | 0.04 | -420.00 | 0.0 | 1.927e+05 | -4069.84 | 87.72 | 4.049e+04 | -1361.73 | 1.876e+06 |
| | | 1.620e+06 | -1361.73 | 5.08e-05 | 0.0 | 60.0 | 1.927e+05 | -4489.84 | 87.72 | 4.049e+04 | 3901.24 | 1.620e+06 |
| 31 | 97 | 1.798e+06 | 3852.72 | 0.04 | -420.00 | 0.0 | 1.853e+05 | -3699.81 | 78.94 | 3.657e+04 | -883.49 | 1.798e+06 |
| | | 1.563e+06 | -883.49 | 4.85e-05 | 0.0 | 60.0 | 1.853e+05 | -4119.81 | 78.94 | 3.657e+04 | 3852.72 | 1.563e+06 |
| 31 | 98 | 7.586e+05 | 2411.90 | 0.01 | -420.00 | 0.0 | 8.272e+04 | -193.51 | -0.16 | 851.55 | 2411.90 | 7.586e+05 |
| | | 7.343e+05 | 2402.19 | 1.98e-05 | 0.0 | 60.0 | 8.272e+04 | -613.51 | -0.16 | 851.55 | 2402.19 | 7.343e+05 |
| 31 | 102 | 7.612e+05 | 2419.88 | 0.01 | -420.00 | 0.0 | 8.300e+04 | -194.90 | -0.16 | 855.18 | 2419.88 | 7.612e+05 |
| | | 7.369e+05 | 2410.23 | 1.99e-05 | 0.0 | 60.0 | 8.300e+04 | -614.90 | -0.16 | 855.18 | 2410.23 | 7.369e+05 |
| 32 | 2 | 2.546e+06 | 9465.53 | 0.13 | -546.00 | 0.0 | 2.624e+05 | -7609.85 | 67.86 | 7.028e+04 | 5393.91 | 2.546e+06 |
| | | 2.073e+06 | 5393.91 | 2.12e-04 | 0.0 | 60.0 | 2.624e+05 | -8155.85 | 67.86 | 7.028e+04 | 9465.53 | 2.073e+06 |
| 32 | 7 | 7.115e+05 | 2242.59 | 0.03 | -420.00 | 0.0 | 7.587e+04 | -919.17 | -1.08 | 2585.44 | 2242.59 | 7.115e+05 |
| | | 6.438e+05 | 2178.08 | 5.47e-05 | 0.0 | 60.0 | 7.587e+04 | -1339.17 | -1.08 | 2585.44 | 2178.08 | 6.438e+05 |
| 32 | 30 | 7.679e+05 | -1961.41 | 0.03 | -420.00 | 0.0 | 8.157e+04 | -992.02 | 6.60 | 4061.34 | -2302.88 | 7.679e+05 |
| | | 6.942e+05 | -2302.88 | 1.11e-05 | 0.0 | 60.0 | 8.157e+04 | -1412.02 | 6.60 | 4061.34 | -1961.41 | 6.942e+05 |
| 32 | 31 | 7.652e+05 | 7123.35 | 0.03 | -420.00 | 0.0 | 8.188e+04 | -1020.94 | -8.85 | 1546.28 | 7123.35 | 7.652e+05 |
| | | 6.930e+05 | 6646.85 | 1.07e-04 | 0.0 | 60.0 | 8.188e+04 | -1440.94 | -8.85 | 1546.28 | 6646.85 | 6.930e+05 |
| 32 | 33 | 7.681e+05 | -1960.31 | 0.03 | -420.00 | 0.0 | 8.155e+04 | -1000.71 | 6.60 | 4061.37 | -2302.30 | 7.681e+05 |
| | | 6.949e+05 | -2302.30 | 1.11e-05 | 0.0 | 60.0 | 8.155e+04 | -1420.71 | 6.60 | 4061.37 | -1960.31 | 6.949e+05 |
| 32 | 36 | 7.651e+05 | 7122.76 | 0.03 | -420.00 | 0.0 | 8.190e+04 | -1012.26 | -8.85 | 1546.25 | 7122.76 | 7.651e+05 |
| | | 6.923e+05 | 6645.75 | 1.07e-04 | 0.0 | 60.0 | 8.190e+04 | -1432.26 | -8.85 | 1546.25 | 6645.75 | 6.923e+05 |
| 32 | 48 | 7.660e+05 | 3787.24 | 0.03 | -420.00 | 0.0 | 8.181e+04 | -994.86 | -3.88 | 2530.52 | 3787.24 | 7.660e+05 |
| | | 6.922e+05 | 3563.13 | 7.71e-05 | 0.0 | 60.0 | 8.181e+04 | -1414.86 | -3.88 | 2530.52 | 3563.13 | 6.922e+05 |
| 32 | 62 | 7.671e+05 | 714.72 | 0.03 | -420.00 | 0.0 | 8.167e+04 | -1001.01 | 1.79 | 3281.92 | 627.76 | 7.671e+05 |
| | | 6.938e+05 | 627.76 | 4.08e-05 | 0.0 | 60.0 | 8.167e+04 | -1421.01 | 1.79 | 3281.92 | 714.72 | 6.938e+05 |
| 32 | 63 | 7.661e+05 | 4192.70 | 0.03 | -420.00 | 0.0 | 8.178e+04 | -1011.95 | -4.04 | 2325.70 | 4192.70 | 7.661e+05 |
| | | 6.934e+05 | 3970.72 | 7.69e-05 | 0.0 | 60.0 | 8.178e+04 | -1431.95 | -4.04 | 2325.70 | 3970.72 | 6.934e+05 |
| 32 | 65 | 7.672e+05 | 715.14 | 0.03 | -420.00 | 0.0 | 8.166e+04 | -1004.34 | 1.79 | 3281.93 | 627.98 | 7.672e+05 |
| | | 6.941e+05 | 627.98 | 4.08e-05 | 0.0 | 60.0 | 8.166e+04 | -1424.34 | 1.79 | 3281.93 | 715.14 | 6.941e+05 |
| 32 | 68 | 7.660e+05 | 4192.48 | 0.03 | -420.00 | 0.0 | 8.179e+04 | -1008.62 | -4.04 | 2325.70 | 4192.48 | 7.660e+05 |
| | | 6.931e+05 | 3970.30 | 7.69e-05 | 0.0 | 60.0 | 8.179e+04 | -1428.62 | -4.04 | 2325.70 | 3970.30 | 6.931e+05 |
| 32 | 80 | 7.663e+05 | 2931.05 | 0.03 | -420.00 | 0.0 | 8.176e+04 | -1002.00 | -2.17 | 2699.67 | 2931.05 | 7.663e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|------------|--------|-----------|-----------|-----------|
| | | 6.931e+05 | 2804.43 | 6.57e-05 | 0.0 | 60.0 | 8.176e+04 | -1422.00 | -2.17 | 2699.67 | 2804.43 | 6.931e+05 |
| 32 | 85 | 7.666e+05 | 2410.23 | 0.03 | -420.00 | 0.0 | 8.173e+04 | -1006.48 | -1.13 | 2803.81 | 2410.23 | 7.666e+05 |
| | | 6.936e+05 | 2342.72 | 5.88e-05 | 0.0 | 60.0 | 8.173e+04 | -1426.48 | -1.13 | 2803.81 | 2342.72 | 6.936e+05 |
| 32 | 87 | 1.799e+06 | 6622.71 | 0.09 | -420.00 | 0.0 | 1.858e+05 | -5207.43 | 45.09 | 4.723e+04 | 3917.31 | 1.799e+06 |
| | | 1.474e+06 | 3917.31 | 1.49e-04 | 0.0 | 60.0 | 1.858e+05 | -5627.43 | 45.09 | 4.723e+04 | 6622.71 | 1.474e+06 |
| 32 | 88 | 7.299e+05 | 2298.47 | 0.03 | -420.00 | 0.0 | 7.783e+04 | -948.27 | -1.09 | 2658.23 | 2298.47 | 7.299e+05 |
| | | 6.604e+05 | 2232.96 | 5.61e-05 | 0.0 | 60.0 | 7.783e+04 | -1368.27 | -1.09 | 2658.23 | 2232.96 | 6.604e+05 |
| 32 | 97 | 1.724e+06 | 6279.26 | 0.09 | -420.00 | 0.0 | 1.784e+05 | -4832.24 | 40.44 | 4.290e+04 | 3852.71 | 1.724e+06 |
| | | 1.422e+06 | 3852.71 | 1.42e-04 | 0.0 | 60.0 | 1.784e+05 | -5252.24 | 40.44 | 4.290e+04 | 6279.26 | 1.422e+06 |
| 32 | 98 | 7.640e+05 | 2402.19 | 0.03 | -420.00 | 0.0 | 8.145e+04 | -1002.32 | -1.12 | 2793.44 | 2402.19 | 7.640e+05 |
| | | 6.912e+05 | 2334.81 | 5.86e-05 | 0.0 | 60.0 | 8.145e+04 | -1422.32 | -1.12 | 2793.44 | 2334.81 | 6.912e+05 |
| 32 | 102 | 7.666e+05 | 2410.23 | 0.03 | -420.00 | 0.0 | 8.173e+04 | -1006.48 | -1.13 | 2803.81 | 2410.23 | 7.666e+05 |
| | | 6.936e+05 | 2342.72 | 5.88e-05 | 0.0 | 60.0 | 8.173e+04 | -1426.48 | -1.13 | 2803.81 | 2342.72 | 6.936e+05 |
| 33 | 2 | 2.387e+06 | 1.021e+04 | 0.19 | -546.00 | 0.0 | 2.489e+05 | -9241.34 | 12.41 | 7.426e+04 | 9465.52 | 2.387e+06 |
| | | 1.817e+06 | 9465.52 | 3.37e-04 | 0.0 | 60.0 | 2.489e+05 | -9787.34 | 12.41 | 7.426e+04 | 1.021e+04 | 1.817e+06 |
| 33 | 7 | 6.990e+05 | 2178.08 | 0.05 | -420.00 | 0.0 | 7.350e+04 | -1672.80 | -4.58 | 4425.02 | 2178.08 | 6.990e+05 |
| | | 5.860e+05 | 1903.36 | 9.09e-05 | 0.0 | 60.0 | 7.350e+04 | -2092.80 | -4.58 | 4425.02 | 1903.36 | 5.860e+05 |
| 33 | 30 | 7.540e+05 | -1571.42 | 0.05 | -420.00 | 0.0 | 7.903e+04 | -1800.94 | 7.77 | 6619.90 | -1961.41 | 7.540e+05 |
| | | 6.316e+05 | -1961.41 | 1.44e-05 | 0.0 | 60.0 | 7.903e+04 | -2220.94 | 7.77 | 6619.90 | -1571.42 | 6.316e+05 |
| 33 | 31 | 7.522e+05 | 6646.85 | 0.05 | -420.00 | 0.0 | 7.931e+04 | -1835.79 | -17.56 | 2956.28 | 6646.85 | 7.522e+05 |
| | | 6.311e+05 | 5669.37 | 1.81e-04 | 0.0 | 60.0 | 7.931e+04 | -2255.79 | -17.56 | 2956.28 | 5669.37 | 6.311e+05 |
| 33 | 33 | 7.544e+05 | -1569.91 | 0.05 | -420.00 | 0.0 | 7.899e+04 | -1807.83 | 7.78 | 6619.91 | -1960.31 | 7.544e+05 |
| | | 6.324e+05 | -1960.31 | 1.43e-05 | 0.0 | 60.0 | 7.899e+04 | -2227.83 | 7.78 | 6619.91 | -1569.91 | 6.324e+05 |
| 33 | 36 | 7.518e+05 | 6645.75 | 0.05 | -420.00 | 0.0 | 7.935e+04 | -1828.90 | -17.57 | 2956.27 | 6645.75 | 7.518e+05 |
| | | 6.303e+05 | 5667.86 | 1.81e-04 | 0.0 | 60.0 | 7.935e+04 | -2248.90 | -17.57 | 2956.27 | 5667.86 | 6.303e+05 |
| 33 | 48 | 7.521e+05 | 3563.13 | 0.05 | -420.00 | 0.0 | 7.928e+04 | -1810.93 | -9.05 | 4322.42 | 3563.13 | 7.521e+05 |
| | | 6.298e+05 | 3036.77 | 1.26e-04 | 0.0 | 60.0 | 7.928e+04 | -2230.93 | -9.05 | 4322.42 | 3036.77 | 6.298e+05 |
| 33 | 62 | 7.534e+05 | 714.72 | 0.05 | -420.00 | 0.0 | 7.912e+04 | -1811.79 | -0.11 | 5485.92 | 714.72 | 7.534e+05 |
| | | 6.315e+05 | 679.33 | 6.62e-05 | 0.0 | 60.0 | 7.912e+04 | -2231.79 | -0.11 | 5485.92 | 679.33 | 6.315e+05 |
| 33 | 63 | 7.527e+05 | 3970.72 | 0.05 | -420.00 | 0.0 | 7.922e+04 | -1824.95 | -9.68 | 4090.27 | 3970.72 | 7.527e+05 |
| | | 6.313e+05 | 3418.62 | 1.29e-04 | 0.0 | 60.0 | 7.922e+04 | -2244.95 | -9.68 | 4090.27 | 3418.62 | 6.313e+05 |
| 33 | 65 | 7.536e+05 | 715.14 | 0.05 | -420.00 | 0.0 | 7.910e+04 | -1814.43 | -0.11 | 5485.92 | 715.14 | 7.536e+05 |
| | | 6.318e+05 | 679.91 | 6.62e-05 | 0.0 | 60.0 | 7.910e+04 | -2234.43 | -0.11 | 5485.92 | 679.91 | 6.318e+05 |
| 33 | 68 | 7.526e+05 | 3970.30 | 0.05 | -420.00 | 0.0 | 7.924e+04 | -1822.30 | -9.68 | 4090.27 | 3970.30 | 7.526e+05 |
| | | 6.310e+05 | 3418.04 | 1.29e-04 | 0.0 | 60.0 | 7.924e+04 | -2242.30 | -9.68 | 4090.27 | 3418.04 | 6.310e+05 |
| 33 | 80 | 7.527e+05 | 2804.43 | 0.05 | -420.00 | 0.0 | 7.921e+04 | -1815.48 | -6.47 | 4610.42 | 2804.43 | 7.527e+05 |
| | | 6.308e+05 | 2422.84 | 1.08e-04 | 0.0 | 60.0 | 7.921e+04 | -2235.48 | -6.47 | 4610.42 | 2422.84 | 6.308e+05 |
| 33 | 85 | 7.531e+05 | 2342.72 | 0.05 | -420.00 | 0.0 | 7.917e+04 | -1818.37 | -4.90 | 4788.09 | 2342.72 | 7.531e+05 |
| | | 6.314e+05 | 2048.97 | 9.77e-05 | 0.0 | 60.0 | 7.917e+04 | -2238.37 | -4.90 | 4788.09 | 2048.97 | 6.314e+05 |
| 33 | 87 | 1.692e+06 | 7079.86 | 0.14 | -420.00 | 0.0 | 1.765e+05 | -6403.34 | 7.62 | 5.014e+04 | 6622.71 | 1.692e+06 |
| | | 1.295e+06 | 6622.71 | 2.38e-04 | 0.0 | 60.0 | 1.765e+05 | -6823.34 | 7.62 | 5.014e+04 | 7079.86 | 1.295e+06 |
| 33 | 88 | 7.170e+05 | 2232.96 | 0.05 | -420.00 | 0.0 | 7.539e+04 | -1721.32 | -4.68 | 4546.04 | 2232.96 | 7.170e+05 |
| | | 6.011e+05 | 1951.90 | 9.31e-05 | 0.0 | 60.0 | 7.539e+04 | -2141.32 | -4.68 | 4546.04 | 1951.90 | 6.011e+05 |
| 33 | 97 | 1.626e+06 | 6651.51 | 0.13 | -420.00 | 0.0 | 1.697e+05 | -6019.71 | 6.20 | 4.579e+04 | 6279.26 | 1.626e+06 |
| | | 1.252e+06 | 6279.26 | 2.27e-04 | 0.0 | 60.0 | 1.697e+05 | -6439.71 | 6.20 | 4.579e+04 | 6651.51 | 1.252e+06 |
| 33 | 98 | 7.505e+05 | 2334.81 | 0.05 | -420.00 | 0.0 | 7.890e+04 | -1811.43 | -4.88 | 4770.89 | 2334.81 | 7.505e+05 |
| | | 6.292e+05 | 2041.96 | 9.74e-05 | 0.0 | 60.0 | 7.890e+04 | -2231.43 | -4.88 | 4770.89 | 2041.96 | 6.292e+05 |
| 33 | 102 | 7.531e+05 | 2342.72 | 0.05 | -420.00 | 0.0 | 7.917e+04 | -1818.37 | -4.90 | 4788.09 | 2342.72 | 7.531e+05 |
| | | 6.314e+05 | 2048.97 | 9.77e-05 | 0.0 | 60.0 | 7.917e+04 | -2238.37 | -4.90 | 4788.09 | 2048.97 | 6.314e+05 |
| 34 | 2 | 2.191e+06 | 1.021e+04 | 0.25 | -546.00 | 0.0 | 2.328e+05 | -1.090e+04 | -41.98 | 7.535e+04 | 1.021e+04 | 2.191e+06 |
| | | 1.521e+06 | 7690.99 | 4.44e-04 | 0.0 | 60.0 | 2.328e+05 | -1.144e+04 | -41.98 | 7.535e+04 | 7690.99 | 1.521e+06 |
| 34 | 7 | 6.688e+05 | 1903.37 | 0.07 | -420.00 | 0.0 | 6.995e+04 | -2427.30 | -12.89 | 6330.01 | 1903.37 | 6.688e+05 |
| | | 5.106e+05 | 1129.84 | 1.25e-04 | 0.0 | 60.0 | 6.995e+04 | -2847.30 | -12.89 | 6330.01 | 1129.84 | 5.106e+05 |
| 34 | 30 | 7.209e+05 | -1531.93 | 0.07 | -420.00 | 0.0 | 7.521e+04 | -2614.15 | 2.40 | 9011.45 | -1571.42 | 7.209e+05 |
| | | 5.503e+05 | -1571.42 | 2.03e-05 | 0.0 | 60.0 | 7.521e+04 | -3034.15 | 2.40 | 9011.45 | -1531.93 | 5.503e+05 |
| 34 | 31 | 7.202e+05 | 5669.37 | 0.07 | -420.00 | 0.0 | 7.547e+04 | -2648.23 | -30.10 | 4672.95 | 5669.37 | 7.202e+05 |
| | | 5.499e+05 | 3967.58 | 2.50e-04 | 0.0 | 60.0 | 7.547e+04 | -3068.23 | -30.10 | 4672.95 | 3967.58 | 5.499e+05 |
| 34 | 33 | 7.216e+05 | -1530.17 | 0.07 | -420.00 | 0.0 | 7.516e+04 | -2618.57 | 2.40 | 9011.45 | -1569.91 | 7.216e+05 |
| | | 5.513e+05 | -1569.91 | 2.02e-05 | 0.0 | 60.0 | 7.516e+04 | -3038.57 | 2.40 | 9011.45 | -1530.17 | 5.513e+05 |
| 34 | 36 | 7.196e+05 | 5667.86 | 0.07 | -420.00 | 0.0 | 7.552e+04 | -2643.81 | -30.11 | 4672.96 | 5667.86 | 7.196e+05 |
| | | 5.490e+05 | 3965.83 | 2.50e-04 | 0.0 | 60.0 | 7.552e+04 | -3063.81 | -30.11 | 4672.96 | 3965.83 | 5.490e+05 |
| 34 | 45 | 7.219e+05 | 1061.18 | 0.07 | -420.00 | 0.0 | 7.521e+04 | -2634.20 | -8.75 | 7437.97 | 1061.18 | 7.219e+05 |
| | | 5.518e+05 | 507.73 | 9.86e-05 | 0.0 | 60.0 | 7.521e+04 | -3054.20 | -8.75 | 7437.97 | 507.73 | 5.518e+05 |
| 34 | 48 | 7.193e+05 | 3036.77 | 0.07 | -420.00 | 0.0 | 7.546e+04 | -2628.18 | -18.96 | 6246.43 | 3036.77 | 7.193e+05 |
| | | 5.484e+05 | 1927.93 | 1.71e-04 | 0.0 | 60.0 | 7.546e+04 | -3048.18 | -18.96 | 6246.43 | 1927.93 | 5.484e+05 |
| 34 | 62 | 7.207e+05 | 679.33 | 0.07 | -420.00 | 0.0 | 7.529e+04 | -2624.77 | -7.71 | 7671.31 | 679.33 | 7.207e+05 |
| | | 5.502e+05 | 177.34 | 9.16e-05 | 0.0 | 60.0 | 7.529e+04 | -3044.77 | -7.71 | 7671.31 | 177.34 | 5.502e+05 |
| 34 | 63 | 7.204e+05 | 3418.62 | 0.07 | -420.00 | 0.0 | 7.539e+04 | -2637.62 | -19.99 | 6013.10 | 3418.62 | 7.204e+05 |
| | | 5.500e+05 | 2258.31 | 1.78e-04 | 0.0 | 60.0 | 7.539e+04 | -3057.62 | -19.99 | 6013.10 | 2258.31 | 5.500e+05 |
| 34 | 65 | 7.210e+05 | 679.91 | 0.07 | -420.00 | 0.0 | 7.527e+04 | -2626.46 | -7.71 | 7671.30 | 679.91 | 7.210e+05 |
| | | 5.505e+05 | 178.02 | 9.16e-05 | 0.0 | 60.0 | 7.527e+04 | -3046.46 | -7.71 | 7671.30 | 178.02 | 5.505e+05 |
| 34 | 68 | 7.202e+05 | 3418.04 | 0.07 | -420.00 | 0.0 | 7.541e+04 | -2635.92 | -19.99 | 6013.10 | 3418.04 | 7.202e+05 |
| | | 5.497e+05 | 2257.64 | 1.78e-04 | 0.0 | 60.0 | 7.541e+04 | -3055.92 | -19.99 | 6013.10 | 2257.64 | 5.497e+05 |
| 34 | 77 | 7.211e+05 | 1675.12 | 0.07 | -420.00 | 0.0 | 7.529e+04 | -2632.38 | -11.92 | 7070.19 | 1675.12 | 7.211e+05 |
| | | 5.508e+05 | 948.90 | 1.21e-04 | 0.0 | 60.0 | 7.529e+04 | -3052.38 | -11.92 | 7070.19 | 948.90 | 5.508e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|-----------|
| 34 | 80 | 7.201e+05 | 2422.84 | 0.07 | -420.00 | 0.0 | 7.539e+04 | -2630.01 | -15.78 | 6614.21 | 2422.84 | 7.201e+05 |
| | | 5.495e+05 | 1486.76 | 1.49e-04 | 0.0 | 60.0 | 7.539e+04 | -3050.01 | -15.78 | 6614.21 | 1486.76 | 5.495e+05 |
| 34 | 85 | 7.206e+05 | 2048.98 | 0.07 | -420.00 | 0.0 | 7.534e+04 | -2631.19 | -13.85 | 6842.20 | 2048.98 | 7.206e+05 |
| | | 5.501e+05 | 1217.83 | 1.35e-04 | 0.0 | 60.0 | 7.534e+04 | -3051.19 | -13.85 | 6842.20 | 1217.83 | 5.501e+05 |
| 34 | 87 | 1.557e+06 | 7079.85 | 0.17 | -420.00 | 0.0 | 1.652e+05 | -7615.85 | -29.84 | 5.115e+04 | 7079.85 | 1.557e+06 |
| | | 1.087e+06 | 5289.70 | 3.14e-04 | 0.0 | 60.0 | 1.652e+05 | -8035.85 | -29.84 | 5.115e+04 | 5289.70 | 1.087e+06 |
| 34 | 88 | 6.861e+05 | 1951.90 | 0.07 | -420.00 | 0.0 | 7.174e+04 | -2495.27 | -13.21 | 6500.74 | 1951.90 | 6.861e+05 |
| | | 5.238e+05 | 1159.17 | 1.29e-04 | 0.0 | 60.0 | 7.174e+04 | -2915.27 | -13.21 | 6500.74 | 1159.17 | 5.238e+05 |
| 34 | 97 | 1.500e+06 | 6651.50 | 0.17 | -420.00 | 0.0 | 1.590e+05 | -7222.24 | -28.73 | 4.698e+04 | 6651.50 | 1.500e+06 |
| | | 1.054e+06 | 4927.60 | 3.01e-04 | 0.0 | 60.0 | 1.590e+05 | -7642.24 | -28.73 | 4.698e+04 | 4927.60 | 1.054e+06 |
| 34 | 98 | 7.181e+05 | 2041.96 | 0.07 | -420.00 | 0.0 | 7.508e+04 | -2621.48 | -13.81 | 6817.96 | 2041.96 | 7.181e+05 |
| | | 5.482e+05 | 1213.55 | 1.35e-04 | 0.0 | 60.0 | 7.508e+04 | -3041.48 | -13.81 | 6817.96 | 1213.55 | 5.482e+05 |
| 34 | 102 | 7.206e+05 | 2048.98 | 0.07 | -420.00 | 0.0 | 7.534e+04 | -2631.19 | -13.85 | 6842.20 | 2048.98 | 7.206e+05 |
| | | 5.501e+05 | 1217.83 | 1.35e-04 | 0.0 | 60.0 | 7.534e+04 | -3051.19 | -13.85 | 6842.20 | 1217.83 | 5.501e+05 |
| 35 | 1 | 8.286e+05 | 1508.04 | 0.11 | -546.00 | 0.0 | 8.699e+04 | -4255.15 | -37.32 | 1.111e+04 | 1508.04 | 8.286e+05 |
| | | 5.569e+05 | -731.38 | 2.06e-04 | 0.0 | 60.0 | 8.699e+04 | -4801.15 | -37.32 | 1.111e+04 | -731.38 | 5.569e+05 |
| 35 | 2 | 1.956e+06 | 7690.99 | 0.30 | -546.00 | 0.0 | 2.141e+05 | -1.256e+04 | -109.49 | 7.558e+04 | 7690.99 | 1.956e+06 |
| | | 1.186e+06 | 1121.48 | 5.22e-04 | 0.0 | 60.0 | 2.141e+05 | -1.310e+04 | -109.49 | 7.558e+04 | 1121.48 | 1.186e+06 |
| 35 | 7 | 6.210e+05 | 1129.85 | 0.08 | -420.00 | 0.0 | 6.520e+04 | -3183.81 | -27.98 | 8317.34 | 1129.85 | 6.210e+05 |
| | | 4.174e+05 | -549.19 | 1.54e-04 | 0.0 | 60.0 | 6.520e+04 | -3603.81 | -27.98 | 8317.34 | -549.19 | 4.174e+05 |
| 35 | 30 | 6.693e+05 | -1531.93 | 0.09 | -420.00 | 0.0 | 7.011e+04 | -3432.93 | -11.97 | 1.125e+04 | -1531.93 | 6.693e+05 |
| | | 4.502e+05 | -2407.30 | 2.59e-05 | 0.0 | 60.0 | 7.011e+04 | -3852.93 | -11.97 | 1.125e+04 | -2407.30 | 4.502e+05 |
| 35 | 31 | 6.689e+05 | 3967.59 | 0.09 | -420.00 | 0.0 | 7.034e+04 | -3459.44 | -48.26 | 6720.43 | 3967.59 | 6.689e+05 |
| | | 4.492e+05 | 1228.95 | 3.06e-04 | 0.0 | 60.0 | 7.034e+04 | -3879.44 | -48.26 | 6720.43 | 1228.95 | 4.492e+05 |
| 35 | 33 | 6.701e+05 | -1530.17 | 0.09 | -420.00 | 0.0 | 7.006e+04 | -3434.45 | -11.96 | 1.125e+04 | -1530.17 | 6.701e+05 |
| | | 4.512e+05 | -2405.48 | 2.40e-05 | 0.0 | 60.0 | 7.006e+04 | -3854.45 | -11.96 | 1.125e+04 | -2405.48 | 4.512e+05 |
| 35 | 36 | 6.681e+05 | 3965.83 | 0.09 | -420.00 | 0.0 | 7.040e+04 | -3457.92 | -48.27 | 6720.42 | 3965.83 | 6.681e+05 |
| | | 4.483e+05 | 1227.13 | 3.08e-04 | 0.0 | 60.0 | 7.040e+04 | -3877.92 | -48.27 | 6720.42 | 1227.13 | 4.483e+05 |
| 35 | 49 | 6.706e+05 | 349.71 | 0.09 | -420.00 | 0.0 | 7.009e+04 | -3444.97 | -24.65 | 9652.25 | 349.71 | 6.706e+05 |
| | | 4.515e+05 | -1178.92 | 1.18e-04 | 0.0 | 60.0 | 7.009e+04 | -3864.97 | -24.65 | 9652.25 | -1178.92 | 4.515e+05 |
| 35 | 52 | 6.676e+05 | 2085.95 | 0.09 | -420.00 | 0.0 | 7.037e+04 | -3447.40 | -35.58 | 8316.27 | 2085.95 | 6.676e+05 |
| | | 4.479e+05 | 0.57 | 2.15e-04 | 0.0 | 60.0 | 7.037e+04 | -3867.40 | -35.58 | 8316.27 | 0.57 | 4.479e+05 |
| 35 | 62 | 6.692e+05 | 177.34 | 0.09 | -420.00 | 0.0 | 7.019e+04 | -3441.19 | -23.26 | 9854.34 | 177.34 | 6.692e+05 |
| | | 4.499e+05 | -1277.15 | 1.13e-04 | 0.0 | 60.0 | 7.019e+04 | -3861.19 | -23.26 | 9854.34 | -1277.15 | 4.499e+05 |
| 35 | 63 | 6.690e+05 | 2258.32 | 0.09 | -420.00 | 0.0 | 7.027e+04 | -3451.18 | -36.97 | 8114.18 | 2258.32 | 6.690e+05 |
| | | 4.495e+05 | 98.80 | 2.19e-04 | 0.0 | 60.0 | 7.027e+04 | -3871.18 | -36.97 | 8114.18 | 98.80 | 4.495e+05 |
| 35 | 65 | 6.695e+05 | 178.02 | 0.09 | -420.00 | 0.0 | 7.016e+04 | -3441.77 | -23.25 | 9854.34 | 178.02 | 6.695e+05 |
| | | 4.503e+05 | -1276.45 | 1.12e-04 | 0.0 | 60.0 | 7.016e+04 | -3861.77 | -23.25 | 9854.34 | -1276.45 | 4.503e+05 |
| 35 | 68 | 6.687e+05 | 2257.64 | 0.09 | -420.00 | 0.0 | 7.029e+04 | -3450.60 | -36.98 | 8114.18 | 2257.64 | 6.687e+05 |
| | | 4.492e+05 | 98.10 | 2.20e-04 | 0.0 | 60.0 | 7.029e+04 | -3870.60 | -36.98 | 8114.18 | 98.10 | 4.492e+05 |
| 35 | 81 | 6.697e+05 | 889.23 | 0.09 | -420.00 | 0.0 | 7.018e+04 | -3445.74 | -28.05 | 9241.05 | 889.23 | 6.697e+05 |
| | | 4.504e+05 | -812.44 | 1.48e-04 | 0.0 | 60.0 | 7.018e+04 | -3865.74 | -28.05 | 9241.05 | -812.44 | 4.504e+05 |
| 35 | 84 | 6.685e+05 | 1546.43 | 0.09 | -420.00 | 0.0 | 7.028e+04 | -3446.63 | -32.18 | 8727.48 | 1546.43 | 6.685e+05 |
| | | 4.490e+05 | -365.91 | 1.85e-04 | 0.0 | 60.0 | 7.028e+04 | -3866.63 | -32.18 | 8727.48 | -365.91 | 4.490e+05 |
| 35 | 85 | 6.691e+05 | 1217.83 | 0.09 | -420.00 | 0.0 | 7.023e+04 | -3446.19 | -30.12 | 8984.26 | 1217.83 | 6.691e+05 |
| | | 4.497e+05 | -589.18 | 1.66e-04 | 0.0 | 60.0 | 7.023e+04 | -3866.19 | -30.12 | 8984.26 | -589.18 | 4.497e+05 |
| 35 | 86 | 6.416e+05 | 1167.74 | 0.08 | -420.00 | 0.0 | 6.736e+04 | -3296.26 | -28.90 | 8602.78 | 1167.74 | 6.416e+05 |
| | | 4.313e+05 | -566.15 | 1.59e-04 | 0.0 | 60.0 | 6.736e+04 | -3716.26 | -28.90 | 8602.78 | -566.15 | 4.313e+05 |
| 35 | 87 | 1.393e+06 | 5289.70 | 0.21 | -420.00 | 0.0 | 1.521e+05 | -8830.07 | -77.01 | 5.158e+04 | 5289.70 | 1.393e+06 |
| | | 8.507e+05 | 669.10 | 3.70e-04 | 0.0 | 60.0 | 1.521e+05 | -9250.07 | -77.01 | 5.158e+04 | 669.10 | 8.507e+05 |
| 35 | 88 | 6.371e+05 | 1159.17 | 0.08 | -420.00 | 0.0 | 6.688e+04 | -3271.27 | -28.69 | 8539.65 | 1159.17 | 6.371e+05 |
| | | 4.282e+05 | -562.52 | 1.58e-04 | 0.0 | 60.0 | 6.688e+04 | -3691.27 | -28.69 | 8539.65 | -562.52 | 4.282e+05 |
| 35 | 96 | 6.691e+05 | 1217.83 | 0.09 | -420.00 | 0.0 | 7.023e+04 | -3446.19 | -30.12 | 8984.26 | 1217.83 | 6.691e+05 |
| | | 4.497e+05 | -589.18 | 1.66e-04 | 0.0 | 60.0 | 7.023e+04 | -3866.19 | -30.12 | 8984.26 | -589.18 | 4.497e+05 |
| 35 | 97 | 1.345e+06 | 4927.60 | 0.20 | -420.00 | 0.0 | 1.465e+05 | -8426.62 | -73.42 | 4.767e+04 | 4927.60 | 1.345e+06 |
| | | 8.272e+05 | 522.54 | 3.56e-04 | 0.0 | 60.0 | 1.465e+05 | -8846.62 | -73.42 | 4.767e+04 | 522.54 | 8.272e+05 |
| 35 | 98 | 6.668e+05 | 1213.55 | 0.09 | -420.00 | 0.0 | 6.999e+04 | -3433.69 | -30.02 | 8952.70 | 1213.55 | 6.668e+05 |
| | | 4.482e+05 | -587.36 | 1.66e-04 | 0.0 | 60.0 | 6.999e+04 | -3853.69 | -30.02 | 8952.70 | -587.36 | 4.482e+05 |
| 35 | 102 | 6.691e+05 | 1217.83 | 0.09 | -420.00 | 0.0 | 7.023e+04 | -3446.19 | -30.12 | 8984.26 | 1217.83 | 6.691e+05 |
| | | 4.497e+05 | -589.18 | 1.66e-04 | 0.0 | 60.0 | 7.023e+04 | -3866.19 | -30.12 | 8984.26 | -589.18 | 4.497e+05 |
| 36 | 2 | 1.682e+06 | 1121.48 | 0.34 | -546.00 | 0.0 | 1.928e+05 | -1.421e+04 | -191.13 | 7.568e+04 | 1121.48 | 1.682e+06 |
| | | 8.124e+05 | -1.035e+04 | 5.40e-04 | 0.0 | 60.0 | 1.928e+05 | -1.476e+04 | -191.13 | 7.568e+04 | -1.035e+04 | 8.124e+05 |
| 36 | 7 | 5.555e+05 | -549.19 | 0.09 | -420.00 | 0.0 | 5.927e+04 | -3943.78 | -48.63 | 1.029e+04 | -549.19 | 5.555e+05 |
| | | 3.063e+05 | -3467.07 | 1.68e-04 | 0.0 | 60.0 | 5.927e+04 | -4363.78 | -48.63 | 1.029e+04 | -3467.07 | 3.063e+05 |
| 36 | 20 | 1.496e+06 | 1304.94 | 0.30 | -420.00 | 0.0 | 1.730e+05 | -1.289e+04 | -174.89 | 7.223e+04 | 1304.94 | 1.496e+06 |
| | | 7.100e+05 | -9188.33 | 4.84e-04 | 0.0 | 60.0 | 1.730e+05 | -1.331e+04 | -174.89 | 7.223e+04 | -9188.33 | 7.100e+05 |
| 36 | 30 | 5.969e+05 | -2407.30 | 0.10 | -420.00 | 0.0 | 6.374e+04 | -4256.11 | -34.36 | 1.331e+04 | -2407.30 | 5.969e+05 |
| | | 3.308e+05 | -4782.54 | 2.28e-05 | 0.0 | 60.0 | 6.374e+04 | -4676.11 | -34.36 | 1.331e+04 | -4782.54 | 3.308e+05 |
| 36 | 31 | 6.001e+05 | 1228.95 | 0.10 | -420.00 | 0.0 | 6.394e+04 | -4273.68 | -70.36 | 8911.81 | 1228.95 | 6.001e+05 |
| | | 3.292e+05 | -2679.40 | 3.40e-04 | 0.0 | 60.0 | 6.394e+04 | -4693.68 | -70.36 | 8911.81 | -2679.40 | 3.292e+05 |
| 36 | 33 | 5.978e+05 | -2405.48 | 0.10 | -420.00 | 0.0 | 6.368e+04 | -4257.66 | -34.31 | 1.331e+04 | -2405.48 | 5.978e+05 |
| | | 3.317e+05 | -4780.84 | 2.29e-05 | 0.0 | 60.0 | 6.368e+04 | -4677.66 | -34.31 | 1.331e+04 | -4780.84 | 3.317e+05 |
| 36 | 36 | 5.991e+05 | 1227.13 | 0.10 | -420.00 | 0.0 | 6.399e+04 | -4272.14 | -70.41 | 8911.88 | 1227.13 | 5.991e+05 |
| | | 3.283e+05 | -2681.09 | 3.40e-04 | 0.0 | 60.0 | 6.399e+04 | -4692.14 | -70.41 | 8911.88 | -2681.09 | 3.283e+05 |
| 36 | 51 | 6.003e+05 | -98.01 | 0.10 | -420.00 | 0.0 | 6.378e+04 | -4269.89 | -57.69 | 1.044e+04 | -98.01 | 6.003e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|------------|
| | | 3.310e+05 | -3464.72 | 2.29e-04 | 0.0 | 60.0 | 6.378e+04 | -4689.89 | -57.69 | 1.044e+04 | -3464.72 | 3.310e+05 |
| 36 | 52 | 5.973e+05 | 0.57 | 0.10 | -420.00 | 0.0 | 6.397e+04 | -4264.72 | -57.85 | 1.046e+04 | 0.57 | 5.973e+05 |
| | | 3.283e+05 | -3375.34 | 2.29e-04 | 0.0 | 60.0 | 6.397e+04 | -4684.72 | -57.85 | 1.046e+04 | -3375.34 | 3.283e+05 |
| 36 | 62 | 5.979e+05 | -1277.15 | 0.10 | -420.00 | 0.0 | 6.380e+04 | -4261.58 | -45.56 | 1.196e+04 | -1277.15 | 5.979e+05 |
| | | 3.303e+05 | -4128.25 | 1.21e-04 | 0.0 | 60.0 | 6.380e+04 | -4681.58 | -45.56 | 1.196e+04 | -4128.25 | 3.303e+05 |
| 36 | 63 | 5.991e+05 | 98.80 | 0.10 | -420.00 | 0.0 | 6.388e+04 | -4268.22 | -59.17 | 1.026e+04 | 98.80 | 5.991e+05 |
| | | 3.297e+05 | -3333.69 | 2.41e-04 | 0.0 | 60.0 | 6.388e+04 | -4688.22 | -59.17 | 1.026e+04 | -3333.69 | 3.297e+05 |
| 36 | 65 | 5.982e+05 | -1276.45 | 0.10 | -420.00 | 0.0 | 6.378e+04 | -4262.17 | -45.54 | 1.196e+04 | -1276.45 | 5.982e+05 |
| | | 3.306e+05 | -4127.60 | 1.21e-04 | 0.0 | 60.0 | 6.378e+04 | -4682.17 | -45.54 | 1.196e+04 | -4127.60 | 3.306e+05 |
| 36 | 68 | 5.987e+05 | 98.10 | 0.10 | -420.00 | 0.0 | 6.390e+04 | -4267.63 | -59.19 | 1.026e+04 | 98.10 | 5.987e+05 |
| | | 3.294e+05 | -3334.34 | 2.41e-04 | 0.0 | 60.0 | 6.390e+04 | -4687.63 | -59.19 | 1.026e+04 | -3334.34 | 3.294e+05 |
| 36 | 83 | 5.992e+05 | -403.45 | 0.10 | -420.00 | 0.0 | 6.382e+04 | -4266.80 | -54.38 | 1.085e+04 | -403.45 | 5.992e+05 |
| | | 3.304e+05 | -3630.53 | 1.99e-04 | 0.0 | 60.0 | 6.382e+04 | -4686.80 | -54.38 | 1.085e+04 | -3630.53 | 3.304e+05 |
| 36 | 84 | 5.980e+05 | -365.91 | 0.10 | -420.00 | 0.0 | 6.389e+04 | -4264.82 | -54.44 | 1.086e+04 | -365.91 | 5.980e+05 |
| | | 3.293e+05 | -3596.49 | 1.99e-04 | 0.0 | 60.0 | 6.389e+04 | -4684.82 | -54.44 | 1.086e+04 | -3596.49 | 3.293e+05 |
| 36 | 85 | 5.985e+05 | -589.18 | 0.10 | -420.00 | 0.0 | 6.384e+04 | -4264.90 | -52.36 | 1.111e+04 | -589.18 | 5.985e+05 |
| | | 3.300e+05 | -3730.97 | 1.81e-04 | 0.0 | 60.0 | 6.384e+04 | -4684.90 | -52.36 | 1.111e+04 | -3730.97 | 3.300e+05 |
| 36 | 87 | 1.201e+06 | 669.10 | 0.24 | -420.00 | 0.0 | 1.370e+05 | -1.004e+04 | -134.40 | 5.194e+04 | 669.10 | 1.201e+06 |
| | | 5.856e+05 | -7394.86 | 3.84e-04 | 0.0 | 60.0 | 1.370e+05 | -1.046e+04 | -134.40 | 5.194e+04 | -7394.86 | 5.856e+05 |
| 36 | 88 | 5.698e+05 | -562.52 | 0.10 | -420.00 | 0.0 | 6.079e+04 | -4050.82 | -49.88 | 1.056e+04 | -562.52 | 5.698e+05 |
| | | 3.142e+05 | -3555.04 | 1.73e-04 | 0.0 | 60.0 | 6.079e+04 | -4470.82 | -49.88 | 1.056e+04 | -3555.04 | 3.142e+05 |
| 36 | 95 | 1.197e+06 | 673.57 | 0.24 | -420.00 | 0.0 | 1.366e+05 | -1.001e+04 | -134.05 | 5.186e+04 | 673.57 | 1.197e+06 |
| | | 5.833e+05 | -7369.21 | 3.83e-04 | 0.0 | 60.0 | 1.366e+05 | -1.043e+04 | -134.05 | 5.186e+04 | -7369.21 | 5.833e+05 |
| 36 | 97 | 1.163e+06 | 522.54 | 0.23 | -420.00 | 0.0 | 1.321e+05 | -9632.08 | -128.11 | 4.827e+04 | 522.54 | 1.163e+06 |
| | | 5.722e+05 | -7164.32 | 3.71e-04 | 0.0 | 60.0 | 1.321e+05 | -1.005e+04 | -128.11 | 4.827e+04 | -7164.32 | 5.722e+05 |
| 36 | 98 | 5.964e+05 | -587.36 | 0.10 | -420.00 | 0.0 | 6.362e+04 | -4249.61 | -52.19 | 1.107e+04 | -587.36 | 5.964e+05 |
| | | 3.289e+05 | -3718.47 | 1.81e-04 | 0.0 | 60.0 | 6.362e+04 | -4669.61 | -52.19 | 1.107e+04 | -3718.47 | 3.289e+05 |
| 36 | 102 | 5.985e+05 | -589.18 | 0.10 | -420.00 | 0.0 | 6.384e+04 | -4264.90 | -52.36 | 1.111e+04 | -589.18 | 5.985e+05 |
| | | 3.300e+05 | -3730.97 | 1.81e-04 | 0.0 | 60.0 | 6.384e+04 | -4684.90 | -52.36 | 1.111e+04 | -3730.97 | 3.300e+05 |
| 37 | 2 | 1.367e+06 | -1.035e+04 | 0.37 | -546.00 | 0.0 | 1.690e+05 | -1.587e+04 | -247.34 | 7.453e+04 | -1.035e+04 | 1.367e+06 |
| | | 3.982e+05 | -2.519e+04 | 4.41e-04 | 0.0 | 60.0 | 1.690e+05 | -1.642e+04 | -247.34 | 7.453e+04 | -2.519e+04 | 3.982e+05 |
| 37 | 7 | 4.717e+05 | -3467.07 | 0.11 | -420.00 | 0.0 | 5.216e+04 | -4706.94 | -63.09 | 1.181e+04 | -3467.07 | 4.717e+05 |
| | | 1.767e+05 | -7252.69 | 1.51e-04 | 0.0 | 60.0 | 5.216e+04 | -5126.94 | -63.09 | 1.181e+04 | -7252.69 | 1.767e+05 |
| 37 | 19 | 4.717e+05 | -3466.08 | 0.11 | -420.00 | 0.0 | 5.216e+04 | -4706.96 | -63.10 | 1.181e+04 | -3466.08 | 4.717e+05 |
| | | 1.767e+05 | -7252.31 | 1.51e-04 | 0.0 | 60.0 | 5.216e+04 | -5126.96 | -63.10 | 1.181e+04 | -7252.31 | 1.767e+05 |
| 37 | 22 | 5.061e+05 | -4558.34 | 0.11 | -420.00 | 0.0 | 5.630e+04 | -5078.59 | -54.00 | 1.493e+04 | -4558.34 | 5.061e+05 |
| | | 1.887e+05 | -8884.57 | 8.96e-06 | 0.0 | 60.0 | 5.630e+04 | -5498.59 | -54.00 | 1.493e+04 | -8884.57 | 1.887e+05 |
| 37 | 31 | 5.104e+05 | -2679.40 | 0.11 | -420.00 | 0.0 | 5.605e+04 | -5096.07 | -83.17 | 1.057e+04 | -2679.40 | 5.104e+05 |
| | | 1.921e+05 | -6938.07 | 3.32e-04 | 0.0 | 60.0 | 5.605e+04 | -5516.07 | -83.17 | 1.057e+04 | -6938.07 | 1.921e+05 |
| 37 | 34 | 5.060e+05 | -4754.03 | 0.11 | -420.00 | 0.0 | 5.631e+04 | -5077.88 | -52.65 | 1.492e+04 | -4754.03 | 5.060e+05 |
| | | 1.886e+05 | -8671.95 | -5.97e-06 | 0.0 | 60.0 | 5.631e+04 | -5497.88 | -52.65 | 1.492e+04 | -8671.95 | 1.886e+05 |
| 37 | 35 | 5.104e+05 | -2707.90 | 0.11 | -420.00 | 0.0 | 5.605e+04 | -5096.08 | -83.17 | 1.057e+04 | -2707.90 | 5.104e+05 |
| | | 1.921e+05 | -6939.49 | 3.32e-04 | 0.0 | 60.0 | 5.605e+04 | -5516.08 | -83.17 | 1.057e+04 | -6939.49 | 1.921e+05 |
| 37 | 54 | 5.074e+05 | -4043.72 | 0.11 | -420.00 | 0.0 | 5.623e+04 | -5083.77 | -62.65 | 1.360e+04 | -4043.72 | 5.074e+05 |
| | | 1.898e+05 | -8212.83 | 1.02e-04 | 0.0 | 60.0 | 5.623e+04 | -5503.77 | -62.65 | 1.360e+04 | -8212.83 | 1.898e+05 |
| 37 | 63 | 5.090e+05 | -3333.68 | 0.11 | -420.00 | 0.0 | 5.613e+04 | -5090.46 | -73.69 | 1.190e+04 | -3333.68 | 5.090e+05 |
| | | 1.911e+05 | -7478.90 | 2.27e-04 | 0.0 | 60.0 | 5.613e+04 | -5510.46 | -73.69 | 1.190e+04 | -7478.90 | 1.911e+05 |
| 37 | 66 | 5.074e+05 | -4117.39 | 0.11 | -420.00 | 0.0 | 5.623e+04 | -5083.50 | -62.14 | 1.359e+04 | -4117.39 | 5.074e+05 |
| | | 1.897e+05 | -8131.99 | 9.91e-05 | 0.0 | 60.0 | 5.623e+04 | -5503.50 | -62.14 | 1.359e+04 | -8131.99 | 1.897e+05 |
| 37 | 67 | 5.090e+05 | -3344.54 | 0.11 | -420.00 | 0.0 | 5.613e+04 | -5090.46 | -73.69 | 1.190e+04 | -3344.54 | 5.090e+05 |
| | | 1.911e+05 | -7479.45 | 2.27e-04 | 0.0 | 60.0 | 5.613e+04 | -5510.46 | -73.69 | 1.190e+04 | -7479.45 | 1.911e+05 |
| 37 | 85 | 5.082e+05 | -3730.97 | 0.11 | -420.00 | 0.0 | 5.618e+04 | -5086.98 | -67.91 | 1.275e+04 | -3730.97 | 5.082e+05 |
| | | 1.904e+05 | -7805.72 | 1.63e-04 | 0.0 | 60.0 | 5.618e+04 | -5506.98 | -67.91 | 1.275e+04 | -7805.72 | 1.904e+05 |
| 37 | 87 | 9.789e+05 | -7394.86 | 0.26 | -420.00 | 0.0 | 1.201e+05 | -1.126e+04 | -173.95 | 5.139e+04 | -7394.86 | 9.789e+05 |
| | | 2.908e+05 | -1.783e+04 | 3.16e-04 | 0.0 | 60.0 | 1.201e+05 | -1.168e+04 | -173.95 | 5.139e+04 | -1.783e+04 | 2.908e+05 |
| 37 | 88 | 4.839e+05 | -3555.04 | 0.11 | -420.00 | 0.0 | 5.350e+04 | -4833.62 | -64.70 | 1.212e+04 | -3555.04 | 4.839e+05 |
| | | 1.813e+05 | -7437.03 | 1.55e-04 | 0.0 | 60.0 | 5.350e+04 | -5253.62 | -64.70 | 1.212e+04 | -7437.03 | 1.813e+05 |
| 37 | 94 | 4.839e+05 | -3554.38 | 0.11 | -420.00 | 0.0 | 5.350e+04 | -4833.64 | -64.71 | 1.212e+04 | -3554.38 | 4.839e+05 |
| | | 1.813e+05 | -7436.78 | 1.55e-04 | 0.0 | 60.0 | 5.350e+04 | -5253.64 | -64.71 | 1.212e+04 | -7436.78 | 1.813e+05 |
| 37 | 97 | 9.506e+05 | -7164.32 | 0.25 | -420.00 | 0.0 | 1.158e+05 | -1.084e+04 | -165.82 | 4.800e+04 | -7164.32 | 9.506e+05 |
| | | 2.878e+05 | -1.711e+04 | 3.06e-04 | 0.0 | 60.0 | 1.158e+05 | -1.126e+04 | -165.82 | 4.800e+04 | -1.711e+04 | 2.878e+05 |
| 37 | 98 | 5.065e+05 | -3718.47 | 0.11 | -420.00 | 0.0 | 5.599e+04 | -5068.88 | -67.68 | 1.270e+04 | -3718.47 | 5.065e+05 |
| | | 1.897e+05 | -7779.41 | 1.62e-04 | 0.0 | 60.0 | 5.599e+04 | -5488.88 | -67.68 | 1.270e+04 | -7779.41 | 1.897e+05 |
| 37 | 101 | 5.065e+05 | -3718.14 | 0.11 | -420.00 | 0.0 | 5.599e+04 | -5068.89 | -67.69 | 1.270e+04 | -3718.14 | 5.065e+05 |
| | | 1.897e+05 | -7779.28 | 1.62e-04 | 0.0 | 60.0 | 5.599e+04 | -5488.89 | -67.69 | 1.270e+04 | -7779.28 | 1.897e+05 |
| 37 | 102 | 5.082e+05 | -3730.97 | 0.11 | -420.00 | 0.0 | 5.618e+04 | -5086.98 | -67.91 | 1.275e+04 | -3730.97 | 5.082e+05 |
| | | 1.904e+05 | -7805.72 | 1.63e-04 | 0.0 | 60.0 | 5.618e+04 | -5506.98 | -67.91 | 1.275e+04 | -7805.72 | 1.904e+05 |
| 38 | 2 | 1.001e+06 | -2.519e+04 | 0.39 | -546.00 | 0.0 | 1.430e+05 | -1.747e+04 | -165.21 | 6.805e+04 | -2.519e+04 | 1.001e+06 |
| | | -6.359e+04 | -3.510e+04 | 1.48e-04 | 0.0 | 60.0 | 1.430e+05 | -1.802e+04 | -165.21 | 6.805e+04 | -3.510e+04 | -6.359e+04 |
| 38 | 8 | 8.786e+05 | -2.277e+04 | 0.35 | -420.00 | 0.0 | 1.283e+05 | -1.564e+04 | -152.00 | 6.411e+04 | -2.277e+04 | 8.786e+05 |
| | | -7.250e+04 | -3.189e+04 | 1.21e-04 | 0.0 | 60.0 | 1.283e+05 | -1.606e+04 | -152.00 | 6.411e+04 | -3.189e+04 | -7.250e+04 |
| 38 | 15 | 3.668e+05 | -7252.69 | 0.11 | -420.00 | 0.0 | 4.399e+04 | -5460.88 | -39.72 | 1.178e+04 | -7252.69 | 3.668e+05 |
| | | 2.654e+04 | -9636.18 | 8.30e-05 | 0.0 | 60.0 | 4.399e+04 | -5880.88 | -39.72 | 1.178e+04 | -9636.18 | 2.654e+04 |
| 38 | 19 | 3.668e+05 | -7252.31 | 0.11 | -420.00 | 0.0 | 4.399e+04 | -5460.90 | -39.74 | 1.177e+04 | -7252.31 | 3.668e+05 |
| | | 2.654e+04 | -9636.65 | 8.30e-05 | 0.0 | 60.0 | 4.399e+04 | -5880.90 | -39.74 | 1.177e+04 | -9636.65 | 2.654e+04 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|---------|-----------|------------|------------|
| 38 | 23 | 3.977e+05 | -6726.87 | 0.12 | -420.00 | 0.0 | 4.728e+04 | -5914.77 | -51.72 | 1.042e+04 | -6726.87 | 3.977e+05 |
| | | 3.033e+04 | -1.165e+04 | 2.48e-04 | 0.0 | 60.0 | 4.728e+04 | -6334.77 | -51.72 | 1.042e+04 | -1.165e+04 | 3.033e+04 |
| 38 | 24 | 3.969e+05 | -6750.38 | 0.12 | -420.00 | 0.0 | 4.732e+04 | -5907.80 | -51.89 | 1.045e+04 | -6750.38 | 3.969e+05 |
| | | 2.992e+04 | -1.167e+04 | 2.48e-04 | 0.0 | 60.0 | 4.732e+04 | -6327.80 | -51.89 | 1.045e+04 | -1.167e+04 | 2.992e+04 |
| 38 | 34 | 3.925e+05 | -8671.95 | 0.12 | -420.00 | 0.0 | 4.747e+04 | -5881.75 | -31.91 | 1.496e+04 | -8671.95 | 3.925e+05 |
| | | 2.694e+04 | -1.139e+04 | 8.24e-05 | 0.0 | 60.0 | 4.747e+04 | -6301.75 | -31.91 | 1.496e+04 | -1.139e+04 | 2.694e+04 |
| 38 | 35 | 3.979e+05 | -6939.49 | 0.12 | -420.00 | 0.0 | 4.727e+04 | -5916.11 | -53.34 | 1.043e+04 | -6939.49 | 3.979e+05 |
| | | 3.038e+04 | -9331.94 | 2.61e-04 | 0.0 | 60.0 | 4.727e+04 | -6336.11 | -53.34 | 1.043e+04 | -9331.94 | 3.038e+04 |
| 38 | 55 | 3.962e+05 | -7398.60 | 0.12 | -420.00 | 0.0 | 4.733e+04 | -5904.97 | -46.08 | 1.181e+04 | -7398.60 | 3.962e+05 |
| | | 2.929e+04 | -1.085e+04 | 1.49e-04 | 0.0 | 60.0 | 4.733e+04 | -6324.97 | -46.08 | 1.181e+04 | -1.085e+04 | 2.929e+04 |
| 38 | 56 | 3.958e+05 | -7407.57 | 0.12 | -420.00 | 0.0 | 4.735e+04 | -5902.29 | -46.15 | 1.182e+04 | -7407.57 | 3.958e+05 |
| | | 2.914e+04 | -1.086e+04 | 1.49e-04 | 0.0 | 60.0 | 4.735e+04 | -6322.29 | -46.15 | 1.182e+04 | -1.086e+04 | 2.914e+04 |
| 38 | 66 | 3.942e+05 | -8131.99 | 0.12 | -420.00 | 0.0 | 4.741e+04 | -5892.39 | -38.55 | 1.358e+04 | -8131.99 | 3.942e+05 |
| | | 2.801e+04 | -1.075e+04 | 2.65e-05 | 0.0 | 60.0 | 4.741e+04 | -6312.39 | -38.55 | 1.358e+04 | -1.075e+04 | 2.801e+04 |
| 38 | 67 | 3.962e+05 | -7479.45 | 0.12 | -420.00 | 0.0 | 4.733e+04 | -5905.47 | -46.69 | 1.181e+04 | -7479.45 | 3.962e+05 |
| | | 2.931e+04 | -9973.58 | 1.54e-04 | 0.0 | 60.0 | 4.733e+04 | -6325.47 | -46.69 | 1.181e+04 | -9973.58 | 2.931e+04 |
| 38 | 85 | 3.952e+05 | -7805.72 | 0.12 | -420.00 | 0.0 | 4.737e+04 | -5898.93 | -42.62 | 1.270e+04 | -7805.72 | 3.952e+05 |
| | | 2.866e+04 | -1.036e+04 | 8.93e-05 | 0.0 | 60.0 | 4.737e+04 | -6318.93 | -42.62 | 1.270e+04 | -1.036e+04 | 2.866e+04 |
| 38 | 87 | 7.202e+05 | -1.783e+04 | 0.27 | -420.00 | 0.0 | 1.016e+05 | -1.244e+04 | -115.82 | 4.706e+04 | -1.783e+04 | 7.202e+05 |
| | | -3.857e+04 | -2.478e+04 | 1.11e-04 | 0.0 | 60.0 | 1.016e+05 | -1.286e+04 | -115.82 | 4.706e+04 | -2.478e+04 | -3.857e+04 |
| 38 | 88 | 3.763e+05 | -7437.03 | 0.12 | -420.00 | 0.0 | 4.511e+04 | -5606.90 | -40.69 | 1.208e+04 | -7437.03 | 3.763e+05 |
| | | 2.725e+04 | -9878.50 | 8.51e-05 | 0.0 | 60.0 | 4.511e+04 | -6026.90 | -40.69 | 1.208e+04 | -9878.50 | 2.725e+04 |
| 38 | 89 | 7.175e+05 | -1.778e+04 | 0.27 | -420.00 | 0.0 | 1.013e+05 | -1.239e+04 | -115.54 | 4.697e+04 | -1.778e+04 | 7.175e+05 |
| | | -3.878e+04 | -2.471e+04 | 1.10e-04 | 0.0 | 60.0 | 1.013e+05 | -1.281e+04 | -115.54 | 4.697e+04 | -2.471e+04 | -3.878e+04 |
| 38 | 94 | 3.763e+05 | -7436.78 | 0.12 | -420.00 | 0.0 | 4.511e+04 | -5606.91 | -40.70 | 1.208e+04 | -7436.78 | 3.763e+05 |
| | | 2.725e+04 | -9878.81 | 8.51e-05 | 0.0 | 60.0 | 4.511e+04 | -6026.91 | -40.70 | 1.208e+04 | -9878.81 | 2.725e+04 |
| 38 | 97 | 7.023e+05 | -1.711e+04 | 0.26 | -420.00 | 0.0 | 9.796e+04 | -1.201e+04 | -109.99 | 4.410e+04 | -1.711e+04 | 7.023e+05 |
| | | -3.076e+04 | -2.371e+04 | 1.12e-04 | 0.0 | 60.0 | 9.796e+04 | -1.243e+04 | -109.99 | 4.410e+04 | -2.371e+04 | -3.076e+04 |
| 38 | 98 | 3.938e+05 | -7779.41 | 0.12 | -420.00 | 0.0 | 4.721e+04 | -5878.07 | -42.48 | 1.265e+04 | -7779.41 | 3.938e+05 |
| | | 2.856e+04 | -1.033e+04 | 8.90e-05 | 0.0 | 60.0 | 4.721e+04 | -6298.07 | -42.48 | 1.265e+04 | -1.033e+04 | 2.856e+04 |
| 38 | 101 | 3.938e+05 | -7779.28 | 0.12 | -420.00 | 0.0 | 4.721e+04 | -5878.07 | -42.49 | 1.265e+04 | -7779.28 | 3.938e+05 |
| | | 2.856e+04 | -1.033e+04 | 8.90e-05 | 0.0 | 60.0 | 4.721e+04 | -6298.07 | -42.49 | 1.265e+04 | -1.033e+04 | 2.856e+04 |
| 38 | 102 | 3.952e+05 | -7805.72 | 0.12 | -420.00 | 0.0 | 4.737e+04 | -5898.93 | -42.62 | 1.270e+04 | -7805.72 | 3.952e+05 |
| | | 2.866e+04 | -1.036e+04 | 8.93e-05 | 0.0 | 60.0 | 4.737e+04 | -6318.93 | -42.62 | 1.270e+04 | -1.036e+04 | 2.866e+04 |
| 39 | 2 | 5.294e+05 | -2.405e+04 | 0.39 | -546.00 | 0.0 | 1.173e+05 | -1.852e+04 | 184.17 | 5.004e+04 | -3.510e+04 | 5.294e+05 |
| | | -5.982e+05 | -3.510e+04 | -3.58e-04 | 0.0 | 60.0 | 1.173e+05 | -1.907e+04 | 184.17 | 5.004e+04 | -2.405e+04 | -5.982e+05 |
| 39 | 7 | 2.253e+05 | -6218.57 | 0.12 | -420.00 | 0.0 | 3.540e+04 | -6067.35 | 56.96 | 8645.90 | -9636.19 | 2.253e+05 |
| | | -1.514e+05 | -9636.19 | -4.03e-05 | 0.0 | 60.0 | 3.540e+04 | -6487.35 | 56.96 | 8645.90 | -6218.57 | -1.514e+05 |
| 39 | 19 | 2.253e+05 | -6219.62 | 0.12 | -420.00 | 0.0 | 3.540e+04 | -6067.36 | 56.95 | 8643.44 | -9636.65 | 2.253e+05 |
| | | -1.514e+05 | -9636.65 | -4.03e-05 | 0.0 | 60.0 | 3.540e+04 | -6487.36 | 56.95 | 8643.44 | -6219.62 | -1.514e+05 |
| 39 | 24 | 2.449e+05 | -7785.05 | 0.13 | -420.00 | 0.0 | 3.806e+04 | -6571.43 | 52.10 | 7037.59 | -1.167e+04 | 2.449e+05 |
| | | -1.618e+05 | -1.167e+04 | 1.08e-04 | 0.0 | 60.0 | 3.806e+04 | -6991.43 | 52.10 | 7037.59 | -7785.05 | -1.618e+05 |
| 39 | 25 | 2.405e+05 | -5544.62 | 0.13 | -420.00 | 0.0 | 3.818e+04 | -6531.72 | 71.18 | 1.162e+04 | -9059.31 | 2.405e+05 |
| | | -1.641e+05 | -9059.31 | -1.95e-04 | 0.0 | 60.0 | 3.818e+04 | -6951.72 | 71.18 | 1.162e+04 | -5544.62 | -1.641e+05 |
| 39 | 26 | 2.399e+05 | -5555.67 | 0.13 | -420.00 | 0.0 | 3.820e+04 | -6522.75 | 71.39 | 1.159e+04 | -9071.71 | 2.399e+05 |
| | | -1.643e+05 | -9071.71 | -1.96e-04 | 0.0 | 60.0 | 3.820e+04 | -6942.75 | 71.39 | 1.159e+04 | -5555.67 | -1.643e+05 |
| 39 | 27 | 2.456e+05 | -7774.05 | 0.13 | -420.00 | 0.0 | 3.803e+04 | -6580.38 | 51.89 | 7037.96 | -1.165e+04 | 2.456e+05 |
| | | -1.617e+05 | -1.165e+04 | 1.09e-04 | 0.0 | 60.0 | 3.803e+04 | -7000.38 | 51.89 | 7037.96 | -7774.05 | -1.617e+05 |
| 39 | 35 | 2.457e+05 | -5719.37 | 0.13 | -420.00 | 0.0 | 3.804e+04 | -6582.87 | 52.13 | 6978.36 | -9331.94 | 2.457e+05 |
| | | -1.617e+05 | -9331.94 | 1.24e-04 | 0.0 | 60.0 | 3.804e+04 | -7002.87 | 52.13 | 6978.36 | -5719.37 | -1.617e+05 |
| 39 | 56 | 2.436e+05 | -7091.17 | 0.13 | -420.00 | 0.0 | 3.809e+04 | -6559.07 | 57.99 | 8429.15 | -1.086e+04 | 2.436e+05 |
| | | -1.625e+05 | -1.086e+04 | 1.80e-05 | 0.0 | 60.0 | 3.809e+04 | -6979.07 | 57.99 | 8429.15 | -7091.17 | -1.625e+05 |
| 39 | 57 | 2.419e+05 | -6238.54 | 0.13 | -420.00 | 0.0 | 3.814e+04 | -6544.08 | 65.28 | 1.021e+04 | -9870.37 | 2.419e+05 |
| | | -1.634e+05 | -9870.37 | -1.01e-04 | 0.0 | 60.0 | 3.814e+04 | -6964.08 | 65.28 | 1.021e+04 | -6238.54 | -1.634e+05 |
| 39 | 58 | 2.416e+05 | -6242.77 | 0.13 | -420.00 | 0.0 | 3.815e+04 | -6540.63 | 65.36 | 1.020e+04 | -9875.11 | 2.416e+05 |
| | | -1.635e+05 | -9875.11 | -1.01e-04 | 0.0 | 60.0 | 3.815e+04 | -6960.63 | 65.36 | 1.020e+04 | -6242.77 | -1.635e+05 |
| 39 | 59 | 2.438e+05 | -7086.95 | 0.13 | -420.00 | 0.0 | 3.808e+04 | -6562.50 | 57.91 | 8429.30 | -1.085e+04 | 2.438e+05 |
| | | -1.625e+05 | -1.085e+04 | 1.81e-05 | 0.0 | 60.0 | 3.808e+04 | -6982.50 | 57.91 | 8429.30 | -7086.95 | -1.625e+05 |
| 39 | 67 | 2.439e+05 | -6304.06 | 0.13 | -420.00 | 0.0 | 3.809e+04 | -6563.44 | 58.01 | 8407.33 | -9973.58 | 2.439e+05 |
| | | -1.625e+05 | -9973.58 | 2.17e-05 | 0.0 | 60.0 | 3.809e+04 | -6983.44 | 58.01 | 8407.33 | -6304.06 | -1.625e+05 |
| 39 | 85 | 2.427e+05 | -6664.86 | 0.13 | -420.00 | 0.0 | 3.812e+04 | -6551.57 | 61.64 | 9312.80 | -1.036e+04 | 2.427e+05 |
| | | -1.630e+05 | -1.036e+04 | -4.36e-05 | 0.0 | 60.0 | 3.812e+04 | -6971.57 | 61.64 | 9312.80 | -6664.86 | -1.630e+05 |
| 39 | 87 | 3.853e+05 | -1.692e+04 | 0.28 | -420.00 | 0.0 | 8.329e+04 | -1.322e+04 | 131.00 | 3.460e+04 | -2.478e+04 | 3.853e+05 |
| | | -4.205e+05 | -2.478e+04 | -2.44e-04 | 0.0 | 60.0 | 8.329e+04 | -1.364e+04 | 131.00 | 3.460e+04 | -1.692e+04 | -4.205e+05 |
| 39 | 88 | 2.311e+05 | -6367.33 | 0.12 | -420.00 | 0.0 | 3.630e+04 | -6228.76 | 58.52 | 8868.20 | -9878.50 | 2.311e+05 |
| | | -1.552e+05 | -9878.50 | -4.14e-05 | 0.0 | 60.0 | 3.630e+04 | -6648.76 | 58.52 | 8868.20 | -6367.33 | -1.552e+05 |
| 39 | 94 | 2.311e+05 | -6368.03 | 0.12 | -420.00 | 0.0 | 3.630e+04 | -6228.76 | 58.51 | 8866.56 | -9878.81 | 2.311e+05 |
| | | -1.552e+05 | -9878.81 | -4.14e-05 | 0.0 | 60.0 | 3.630e+04 | -6648.76 | 58.51 | 8866.56 | -6368.03 | -1.552e+05 |
| 39 | 97 | 3.800e+05 | -1.612e+04 | 0.27 | -420.00 | 0.0 | 8.017e+04 | -1.280e+04 | 126.47 | 3.242e+04 | -2.371e+04 | 3.800e+05 |
| | | -4.007e+05 | -2.371e+04 | -2.26e-04 | 0.0 | 60.0 | 8.017e+04 | -1.322e+04 | 126.47 | 3.242e+04 | -1.612e+04 | -4.007e+05 |
| 39 | 98 | 2.419e+05 | -6643.53 | 0.13 | -420.00 | 0.0 | 3.799e+04 | -6528.51 | 61.42 | 9281.22 | -1.033e+04 | 2.419e+05 |
| | | -1.624e+05 | -1.033e+04 | -4.34e-05 | 0.0 | 60.0 | 3.799e+04 | -6948.51 | 61.42 | 9281.22 | -6643.53 | -1.624e+05 |
| 39 | 101 | 2.419e+05 | -6643.88 | 0.13 | -420.00 | 0.0 | 3.799e+04 | -6528.51 | 61.41 | 9280.40 | -1.033e+04 | 2.419e+05 |
| | | -1.624e+05 | -1.033e+04 | -4.34e-05 | 0.0 | 60.0 | 3.799e+04 | -6948.51 | 61.41 | 9280.40 | -6643.88 | -1.624e+05 |
| 39 | 102 | 2.427e+05 | -6664.86 | 0.13 | -420.00 | 0.0 | 3.812e+04 | -6551.57 | 61.64 | 9312.80 | -1.036e+04 | 2.427e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|--------|-----------|------------|------------|
| | | -1.630e+05 | -1.036e+04 | -4.36e-05 | 0.0 | 60.0 | 3.812e+04 | -6971.57 | 61.64 | 9312.80 | -6664.86 | -1.630e+05 |
| 40 | 2 | -2.879e+05 | 0.01 | 0.38 | -546.00 | 0.0 | 1.042e+05 | -2.277e+04 | 400.81 | 2.322e+04 | -2.405e+04 | -2.879e+05 |
| | | -1.670e+06 | -2.405e+04 | -8.29e-04 | 0.0 | 60.0 | 1.042e+05 | -2.331e+04 | 400.81 | 2.322e+04 | 0.01 | -1.670e+06 |
| 40 | 19 | -1.929e+04 | 2.31e-03 | 0.11 | -420.00 | 0.0 | 2.980e+04 | -7566.39 | 103.66 | 3824.47 | -6219.62 | -1.929e+04 |
| | | -4.859e+05 | -6219.62 | -1.43e-04 | 0.0 | 60.0 | 2.980e+04 | -7986.39 | 103.66 | 3824.47 | 2.31e-03 | -4.859e+05 |
| 40 | 26 | -2.273e+04 | 3.57e-03 | 0.12 | -420.00 | 0.0 | 3.219e+04 | -8149.35 | 92.59 | 5742.87 | -5555.68 | -2.273e+04 |
| | | -5.242e+05 | -5555.68 | -2.89e-04 | 0.0 | 60.0 | 3.219e+04 | -8569.35 | 92.59 | 5742.87 | 3.57e-03 | -5.242e+05 |
| 40 | 27 | -1.871e+04 | 1.41e-03 | 0.12 | -420.00 | 0.0 | 3.199e+04 | -8180.27 | 129.57 | 2517.38 | -7774.05 | -1.871e+04 |
| | | -5.222e+05 | -7774.05 | -1.82e-05 | 0.0 | 60.0 | 3.199e+04 | -8600.27 | 129.57 | 2517.38 | 1.41e-03 | -5.222e+05 |
| 40 | 28 | -1.912e+04 | 1.41e-03 | 0.12 | -420.00 | 0.0 | 3.200e+04 | -8189.17 | 129.75 | 2488.80 | -7785.10 | -1.912e+04 |
| | | -5.223e+05 | -7785.10 | -1.89e-05 | 0.0 | 60.0 | 3.200e+04 | -8609.17 | 129.75 | 2488.80 | 1.41e-03 | -5.223e+05 |
| 40 | 30 | -2.282e+04 | 3.70e-03 | 0.12 | -420.00 | 0.0 | 3.218e+04 | -8146.82 | 126.84 | 5778.84 | -7610.31 | -2.282e+04 |
| | | -5.241e+05 | -7610.31 | -3.06e-04 | 0.0 | 60.0 | 3.218e+04 | -8566.82 | 126.84 | 5778.84 | 3.70e-03 | -5.241e+05 |
| 40 | 35 | -1.862e+04 | 1.28e-03 | 0.12 | -420.00 | 0.0 | 3.200e+04 | -8182.78 | 95.32 | 2509.65 | -5719.38 | -1.862e+04 |
| | | -5.223e+05 | -5719.38 | 3.33e-06 | 0.0 | 60.0 | 3.200e+04 | -8602.78 | 95.32 | 2509.65 | 1.28e-03 | -5.223e+05 |
| 40 | 58 | -2.148e+04 | 2.90e-03 | 0.12 | -420.00 | 0.0 | 3.213e+04 | -8159.00 | 104.05 | 4757.73 | -6242.77 | -2.148e+04 |
| | | -5.236e+05 | -6242.77 | -2.05e-04 | 0.0 | 60.0 | 3.213e+04 | -8579.00 | 104.05 | 4757.73 | 2.90e-03 | -5.236e+05 |
| 40 | 59 | -1.996e+04 | 2.08e-03 | 0.12 | -420.00 | 0.0 | 3.205e+04 | -8170.62 | 118.12 | 3502.51 | -7086.96 | -1.996e+04 |
| | | -5.228e+05 | -7086.96 | -1.02e-04 | 0.0 | 60.0 | 3.205e+04 | -8590.62 | 118.12 | 3502.51 | 2.08e-03 | -5.228e+05 |
| 40 | 60 | -2.012e+04 | 2.08e-03 | 0.12 | -420.00 | 0.0 | 3.206e+04 | -8174.03 | 118.19 | 3491.65 | -7091.19 | -2.012e+04 |
| | | -5.229e+05 | -7091.19 | -1.03e-04 | 0.0 | 60.0 | 3.206e+04 | -8594.03 | 118.19 | 3491.65 | 2.08e-03 | -5.229e+05 |
| 40 | 62 | -2.151e+04 | 2.94e-03 | 0.12 | -420.00 | 0.0 | 3.213e+04 | -8158.05 | 117.09 | 4771.35 | -7025.65 | -2.151e+04 |
| | | -5.235e+05 | -7025.65 | -2.11e-04 | 0.0 | 60.0 | 3.213e+04 | -8578.05 | 117.09 | 4771.35 | 2.94e-03 | -5.235e+05 |
| 40 | 67 | -1.993e+04 | 2.03e-03 | 0.12 | -420.00 | 0.0 | 3.206e+04 | -8171.57 | 105.07 | 3499.62 | -6304.07 | -1.993e+04 |
| | | -5.229e+05 | -6304.07 | -9.59e-05 | 0.0 | 60.0 | 3.206e+04 | -8591.57 | 105.07 | 3499.62 | 2.03e-03 | -5.229e+05 |
| 40 | 85 | -2.072e+04 | 2.49e-03 | 0.12 | -420.00 | 0.0 | 3.209e+04 | -8164.81 | 111.08 | 4130.12 | -6664.86 | -2.072e+04 |
| | | -5.232e+05 | -6664.86 | -1.54e-04 | 0.0 | 60.0 | 3.209e+04 | -8584.81 | 111.08 | 4130.12 | 2.49e-03 | -5.232e+05 |
| 40 | 87 | -1.947e+05 | 9.52e-03 | 0.27 | -420.00 | 0.0 | 7.376e+04 | -1.627e+04 | 282.02 | 1.603e+04 | -1.692e+04 | -1.947e+05 |
| | | -1.183e+06 | -1.692e+04 | -5.73e-04 | 0.0 | 60.0 | 7.376e+04 | -1.669e+04 | 282.02 | 1.603e+04 | 9.52e-03 | -1.183e+06 |
| 40 | 94 | -1.976e+04 | 2.37e-03 | 0.12 | -420.00 | 0.0 | 3.056e+04 | -7765.86 | 106.13 | 3926.35 | -6368.04 | -1.976e+04 |
| | | -4.983e+05 | -6368.04 | -1.46e-04 | 0.0 | 60.0 | 3.056e+04 | -8185.86 | 106.13 | 3926.35 | 2.37e-03 | -4.983e+05 |
| 40 | 97 | -1.780e+05 | 8.90e-03 | 0.26 | -420.00 | 0.0 | 7.077e+04 | -1.576e+04 | 268.75 | 1.499e+04 | -1.612e+04 | -1.780e+05 |
| | | -1.136e+06 | -1.612e+04 | -5.37e-04 | 0.0 | 60.0 | 7.077e+04 | -1.618e+04 | 268.75 | 1.499e+04 | 8.90e-03 | -1.136e+06 |
| 40 | 101 | -2.065e+04 | 2.48e-03 | 0.12 | -420.00 | 0.0 | 3.198e+04 | -8136.32 | 110.73 | 4115.22 | -6643.89 | -2.065e+04 |
| | | -5.214e+05 | -6643.89 | -1.53e-04 | 0.0 | 60.0 | 3.198e+04 | -8556.32 | 110.73 | 4115.22 | 2.48e-03 | -5.214e+05 |
| 40 | 102 | -2.072e+04 | 2.49e-03 | 0.12 | -420.00 | 0.0 | 3.209e+04 | -8164.81 | 111.08 | 4130.12 | -6664.86 | -2.072e+04 |
| | | -5.232e+05 | -6664.86 | -1.54e-04 | 0.0 | 60.0 | 3.209e+04 | -8584.81 | 111.08 | 4130.12 | 2.49e-03 | -5.232e+05 |
| 83 | 2 | -5.460e+04 | -2.37e-04 | -0.42 | -546.00 | 0.0 | 1.014e+05 | 2.686e+04 | -10.55 | 936.04 | -2.37e-04 | -1.650e+06 |
| | | -1.650e+06 | -633.15 | -8.64e-06 | 0.0 | 60.0 | 1.014e+05 | 2.631e+04 | -10.55 | 936.04 | -633.15 | -5.460e+04 |
| 83 | 4 | -4.889e+04 | -2.33e-04 | -0.38 | -420.00 | 0.0 | 9.179e+04 | 2.428e+04 | -10.57 | 931.55 | -2.33e-04 | -1.493e+06 |
| | | -1.493e+06 | -634.49 | -8.37e-06 | 0.0 | 60.0 | 9.179e+04 | 2.386e+04 | -10.57 | 931.55 | -634.49 | -4.889e+04 |
| 83 | 5 | -2.353e+04 | 12.10 | -0.15 | -546.00 | 0.0 | 3.946e+04 | 1.056e+04 | 0.20 | 11.68 | -1.70e-05 | -6.406e+05 |
| | | -6.406e+05 | -1.70e-05 | -1.18e-06 | 0.0 | 60.0 | 3.946e+04 | 1.001e+04 | 0.20 | 11.68 | 12.10 | -2.353e+04 |
| 83 | 7 | -1.782e+04 | 10.76 | -0.11 | -420.00 | 0.0 | 2.982e+04 | 7982.86 | 0.18 | 7.20 | -1.29e-05 | -4.842e+05 |
| | | -4.842e+05 | -1.29e-05 | 0.0 | 0.0 | 60.0 | 2.982e+04 | 7562.86 | 0.18 | 7.20 | 10.76 | -1.782e+04 |
| 83 | 33 | -1.926e+04 | 950.07 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8588.39 | 15.83 | -1410.20 | 1.03e-03 | -5.215e+05 |
| | | -5.215e+05 | 1.03e-03 | 1.33e-04 | 0.0 | 60.0 | 3.212e+04 | 8168.39 | 15.83 | -1410.20 | 950.07 | -1.926e+04 |
| 83 | 36 | -1.883e+04 | -1.05e-03 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8578.99 | -15.69 | 1440.11 | -1.05e-03 | -5.214e+05 |
| | | -5.214e+05 | -941.13 | -1.35e-04 | 0.0 | 60.0 | 3.212e+04 | 8158.99 | -15.69 | 1440.11 | -941.13 | -1.883e+04 |
| 83 | 46 | -1.833e+04 | 3.43e-04 | -0.12 | -420.00 | 0.0 | 3.211e+04 | 8568.19 | -3.74 | -461.03 | 3.43e-04 | -5.212e+05 |
| | | -5.212e+05 | -224.30 | 4.51e-05 | 0.0 | 60.0 | 3.211e+04 | 8148.19 | -3.74 | -461.03 | -224.30 | -1.833e+04 |
| 83 | 47 | -1.975e+04 | 233.25 | -0.12 | -420.00 | 0.0 | 3.213e+04 | 8599.19 | 3.89 | 490.94 | -3.71e-04 | -5.217e+05 |
| | | -5.217e+05 | -3.71e-04 | -4.69e-05 | 0.0 | 60.0 | 3.213e+04 | 8179.19 | 3.89 | 490.94 | 233.25 | -1.975e+04 |
| 83 | 50 | -1.833e+04 | 284.00 | -0.12 | -420.00 | 0.0 | 3.211e+04 | 8568.19 | 4.73 | -459.77 | 3.06e-04 | -5.212e+05 |
| | | -5.212e+05 | 3.06e-04 | 3.99e-05 | 0.0 | 60.0 | 3.211e+04 | 8148.19 | 4.73 | -459.77 | 284.00 | -1.833e+04 |
| 83 | 65 | -1.913e+04 | 364.32 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8585.49 | 6.07 | -539.34 | 3.80e-04 | -5.215e+05 |
| | | -5.215e+05 | 3.80e-04 | 4.97e-05 | 0.0 | 60.0 | 3.212e+04 | 8165.49 | 6.07 | -539.34 | 364.32 | -1.913e+04 |
| 83 | 68 | -1.896e+04 | -4.07e-04 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8581.89 | -5.92 | 569.25 | -4.07e-04 | -5.214e+05 |
| | | -5.214e+05 | -355.37 | -5.15e-05 | 0.0 | 60.0 | 3.212e+04 | 8161.89 | -5.92 | 569.25 | -355.37 | -1.896e+04 |
| 83 | 78 | -1.877e+04 | 1.21e-04 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8577.74 | -1.38 | -169.74 | 1.21e-04 | -5.214e+05 |
| | | -5.214e+05 | -82.91 | 1.65e-05 | 0.0 | 60.0 | 3.212e+04 | 8157.74 | -1.38 | -169.74 | -82.91 | -1.877e+04 |
| 83 | 79 | -1.932e+04 | 91.86 | -0.12 | -420.00 | 0.0 | 3.213e+04 | 8589.64 | 1.53 | 199.65 | -1.49e-04 | -5.216e+05 |
| | | -5.216e+05 | -1.49e-04 | -1.83e-05 | 0.0 | 60.0 | 3.213e+04 | 8169.64 | 1.53 | 199.65 | 91.86 | -1.932e+04 |
| 83 | 82 | -1.877e+04 | 110.85 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8577.74 | 1.85 | -169.26 | 1.07e-04 | -5.214e+05 |
| | | -5.214e+05 | 1.07e-04 | 1.45e-05 | 0.0 | 60.0 | 3.212e+04 | 8157.74 | 1.85 | -169.26 | 110.85 | -1.877e+04 |
| 83 | 85 | -1.904e+04 | 4.47 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8583.69 | 0.07 | 14.96 | -1.37e-05 | -5.215e+05 |
| | | -5.215e+05 | -1.37e-05 | 0.0 | 0.0 | 60.0 | 3.212e+04 | 8163.69 | 0.07 | 14.96 | 4.47 | -1.904e+04 |
| 83 | 87 | -3.894e+04 | -1.60e-04 | -0.29 | -420.00 | 0.0 | 7.190e+04 | 1.905e+04 | -7.03 | 626.02 | -1.60e-04 | -1.169e+06 |
| | | -1.169e+06 | -421.50 | -5.88e-06 | 0.0 | 60.0 | 7.190e+04 | 1.863e+04 | -7.03 | 626.02 | -421.50 | -3.894e+04 |
| 83 | 88 | -1.823e+04 | 8.66 | -0.12 | -420.00 | 0.0 | 3.059e+04 | 8183.14 | 0.14 | 9.78 | -1.31e-05 | -4.966e+05 |
| | | -4.966e+05 | -1.31e-05 | 0.0 | 0.0 | 60.0 | 3.059e+04 | 7763.14 | 0.14 | 9.78 | 8.66 | -1.823e+04 |
| 83 | 97 | -3.758e+04 | -1.46e-04 | -0.28 | -420.00 | 0.0 | 6.910e+04 | 1.831e+04 | -6.37 | 568.72 | -1.46e-04 | -1.124e+06 |
| | | -1.124e+06 | -381.99 | -5.38e-06 | 0.0 | 60.0 | 6.910e+04 | 1.789e+04 | -6.37 | 568.72 | -381.99 | -3.758e+04 |
| 83 | 98 | -1.899e+04 | 4.85 | -0.12 | -420.00 | 0.0 | 3.201e+04 | 8555.08 | 0.08 | 14.48 | -1.37e-05 | -5.197e+05 |
| | | -5.197e+05 | -1.37e-05 | 0.0 | 0.0 | 60.0 | 3.201e+04 | 8135.08 | 0.08 | 14.48 | 4.85 | -1.899e+04 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|-----------|--------|----------|-----------|------------|
| 83 | 102 | -1.904e+04 | 4.47 | -0.12 | -420.00 | 0.0 | 3.212e+04 | 8583.69 | 0.07 | 14.96 | -1.37e-05 | -5.215e+05 |
| | | -5.215e+05 | -1.37e-05 | 0.0 | 0.0 | 60.0 | 3.212e+04 | 8163.69 | 0.07 | 14.96 | 4.47 | -1.904e+04 |
| 84 | 2 | 8.203e+05 | -633.15 | -0.43 | -546.00 | 0.0 | 1.216e+05 | 2.276e+04 | -0.07 | 1630.16 | -633.15 | -5.287e+05 |
| | | -5.287e+05 | -637.38 | -9.27e-06 | 0.0 | 60.0 | 1.216e+05 | 2.221e+04 | -0.07 | 1630.16 | -637.38 | 8.203e+05 |
| 84 | 5 | 2.979e+05 | 15.75 | -0.15 | -546.00 | 0.0 | 4.670e+04 | 8491.45 | 0.06 | 14.93 | 12.10 | -1.952e+05 |
| | | -1.952e+05 | 12.10 | -1.03e-06 | 0.0 | 60.0 | 4.670e+04 | 7945.45 | 0.06 | 14.93 | 15.75 | 2.979e+05 |
| 84 | 7 | 2.251e+05 | 13.44 | -0.12 | -420.00 | 0.0 | 3.530e+04 | 6421.32 | 0.04 | 8.33 | 10.76 | -1.475e+05 |
| | | -1.475e+05 | 10.76 | -1.70e-06 | 0.0 | 60.0 | 3.530e+04 | 6001.32 | 0.04 | 8.33 | 13.44 | 2.251e+05 |
| 84 | 20 | 7.450e+05 | -634.49 | -0.39 | -420.00 | 0.0 | 1.098e+05 | 2.062e+04 | -0.09 | 1623.56 | -634.49 | -4.795e+05 |
| | | -4.795e+05 | -639.69 | -9.03e-06 | 0.0 | 60.0 | 1.098e+05 | 2.020e+04 | -0.09 | 1623.56 | -639.69 | 7.450e+05 |
| 84 | 30 | 2.430e+05 | 1489.03 | -0.13 | -420.00 | 0.0 | 3.801e+04 | 6904.84 | -11.00 | -2101.75 | 950.07 | -1.587e+05 |
| | | -1.587e+05 | 950.07 | 1.47e-04 | 0.0 | 60.0 | 3.801e+04 | 6484.84 | -11.00 | -2101.75 | 1489.03 | 2.430e+05 |
| 84 | 31 | 2.423e+05 | -941.13 | -0.13 | -420.00 | 0.0 | 3.803e+04 | 6896.07 | 11.10 | 2145.77 | -941.13 | -1.588e+05 |
| | | -1.588e+05 | -1473.68 | -1.49e-04 | 0.0 | 60.0 | 3.803e+04 | 6476.07 | 11.10 | 2145.77 | -1473.68 | 2.423e+05 |
| 84 | 45 | 2.415e+05 | -216.67 | -0.13 | -420.00 | 0.0 | 3.806e+04 | 6885.87 | -2.70 | -578.82 | -216.67 | -1.590e+05 |
| | | -1.590e+05 | -338.52 | 4.79e-05 | 0.0 | 60.0 | 3.806e+04 | 6465.87 | -2.70 | -578.82 | -338.52 | 2.415e+05 |
| 84 | 48 | 2.438e+05 | 353.87 | -0.13 | -420.00 | 0.0 | 3.798e+04 | 6915.04 | 2.81 | 622.84 | 225.62 | -1.586e+05 |
| | | -1.586e+05 | 225.62 | -4.95e-05 | 0.0 | 60.0 | 3.798e+04 | 6495.04 | 2.81 | 622.84 | 353.87 | 2.438e+05 |
| 84 | 50 | 2.438e+05 | 438.67 | -0.13 | -420.00 | 0.0 | 3.798e+04 | 6915.05 | -3.55 | -677.64 | 284.00 | -1.586e+05 |
| | | -1.586e+05 | 284.00 | 4.43e-05 | 0.0 | 60.0 | 3.798e+04 | 6495.05 | -3.55 | -677.64 | 438.67 | 2.438e+05 |
| 84 | 51 | 2.415e+05 | -275.05 | -0.13 | -420.00 | 0.0 | 3.806e+04 | 6885.87 | 3.66 | 721.66 | -275.05 | -1.590e+05 |
| | | -1.590e+05 | -423.32 | -4.58e-05 | 0.0 | 60.0 | 3.806e+04 | 6465.87 | 3.66 | 721.66 | -423.32 | 2.415e+05 |
| 84 | 62 | 2.428e+05 | 567.90 | -0.13 | -420.00 | 0.0 | 3.801e+04 | 6902.14 | -4.13 | -803.18 | 364.32 | -1.588e+05 |
| | | -1.588e+05 | 364.32 | 5.53e-05 | 0.0 | 60.0 | 3.801e+04 | 6482.14 | -4.13 | -803.18 | 567.90 | 2.428e+05 |
| 84 | 63 | 2.425e+05 | -355.37 | -0.13 | -420.00 | 0.0 | 3.802e+04 | 6898.78 | 4.23 | 847.20 | -355.37 | -1.588e+05 |
| | | -1.588e+05 | -552.55 | -5.69e-05 | 0.0 | 60.0 | 3.802e+04 | 6478.78 | 4.23 | 847.20 | -552.55 | 2.425e+05 |
| 84 | 77 | 2.422e+05 | -80.01 | -0.13 | -420.00 | 0.0 | 3.803e+04 | 6894.86 | -0.99 | -211.57 | -80.01 | -1.589e+05 |
| | | -1.589e+05 | -123.22 | 1.76e-05 | 0.0 | 60.0 | 3.803e+04 | 6474.86 | -0.99 | -211.57 | -123.22 | 2.422e+05 |
| 84 | 80 | 2.431e+05 | 138.57 | -0.13 | -420.00 | 0.0 | 3.800e+04 | 6906.05 | 1.09 | 255.59 | 88.96 | -1.587e+05 |
| | | -1.587e+05 | 88.96 | -1.92e-05 | 0.0 | 60.0 | 3.800e+04 | 6486.05 | 1.09 | 255.59 | 138.57 | 2.431e+05 |
| 84 | 82 | 2.431e+05 | 170.64 | -0.13 | -420.00 | 0.0 | 3.800e+04 | 6906.05 | -1.31 | -249.31 | 110.85 | -1.587e+05 |
| | | -1.587e+05 | 110.85 | 1.62e-05 | 0.0 | 60.0 | 3.800e+04 | 6486.05 | -1.31 | -249.31 | 170.64 | 2.431e+05 |
| 84 | 83 | 2.422e+05 | -101.90 | -0.13 | -420.00 | 0.0 | 3.803e+04 | 6894.86 | 1.42 | 293.32 | -101.90 | -1.589e+05 |
| | | -1.589e+05 | -155.29 | -1.78e-05 | 0.0 | 60.0 | 3.803e+04 | 6474.86 | 1.42 | 293.32 | -155.29 | 2.422e+05 |
| 84 | 85 | 2.426e+05 | 7.68 | -0.13 | -420.00 | 0.0 | 3.802e+04 | 6900.46 | 0.05 | 22.01 | 4.47 | -1.588e+05 |
| | | -1.588e+05 | 4.47 | -1.70e-06 | 0.0 | 60.0 | 3.802e+04 | 6480.46 | 0.05 | 22.01 | 7.68 | 2.426e+05 |
| 84 | 87 | 5.792e+05 | -421.50 | -0.30 | -420.00 | 0.0 | 8.612e+04 | 1.609e+04 | -0.04 | 1089.71 | -421.50 | -3.736e+05 |
| | | -3.736e+05 | -423.90 | -6.29e-06 | 0.0 | 60.0 | 8.612e+04 | 1.567e+04 | -0.04 | 1089.71 | -423.90 | 5.792e+05 |
| 84 | 88 | 2.310e+05 | 11.52 | -0.12 | -420.00 | 0.0 | 3.620e+04 | 6581.03 | 0.05 | 12.89 | 8.66 | -1.513e+05 |
| | | -1.513e+05 | 8.66 | -1.70e-06 | 0.0 | 60.0 | 3.620e+04 | 6161.03 | 0.05 | 12.89 | 11.52 | 2.310e+05 |
| 84 | 95 | 5.775e+05 | -421.50 | -0.30 | -420.00 | 0.0 | 8.586e+04 | 1.605e+04 | -0.04 | 1089.71 | -421.50 | -3.726e+05 |
| | | -3.726e+05 | -423.90 | -6.29e-06 | 0.0 | 60.0 | 8.586e+04 | 1.563e+04 | -0.04 | 1089.71 | -423.90 | 5.775e+05 |
| 84 | 97 | 5.545e+05 | -381.99 | -0.29 | -420.00 | 0.0 | 8.271e+04 | 1.542e+04 | -0.03 | 989.65 | -381.99 | -3.579e+05 |
| | | -3.579e+05 | -383.57 | -5.74e-06 | 0.0 | 60.0 | 8.271e+04 | 1.500e+04 | -0.03 | 989.65 | -383.57 | 5.545e+05 |
| 84 | 98 | 2.418e+05 | 8.02 | -0.12 | -420.00 | 0.0 | 3.789e+04 | 6877.64 | 0.05 | 21.18 | 4.85 | -1.582e+05 |
| | | -1.582e+05 | 4.85 | -1.70e-06 | 0.0 | 60.0 | 3.789e+04 | 6457.64 | 0.05 | 21.18 | 8.02 | 2.418e+05 |
| 84 | 102 | 2.426e+05 | 7.68 | -0.13 | -420.00 | 0.0 | 3.802e+04 | 6900.46 | 0.05 | 22.01 | 4.47 | -1.588e+05 |
| | | -1.588e+05 | 4.47 | -1.70e-06 | 0.0 | 60.0 | 3.802e+04 | 6480.46 | 0.05 | 22.01 | 7.68 | 2.426e+05 |
| 85 | 2 | 1.368e+06 | -459.41 | -0.41 | -546.00 | 0.0 | 1.537e+05 | 2.176e+04 | 2.97 | 2180.55 | -637.38 | 7.867e+04 |
| | | 7.867e+04 | -637.38 | -1.05e-05 | 0.0 | 60.0 | 1.537e+05 | 2.121e+04 | 2.97 | 2180.55 | -459.41 | 1.368e+06 |
| 85 | 5 | 4.825e+05 | 21.92 | -0.15 | -546.00 | 0.0 | 5.805e+04 | 7722.23 | 0.10 | 8.31 | 15.75 | 3.556e+04 |
| | | 3.556e+04 | 15.75 | 0.0 | 0.0 | 60.0 | 5.805e+04 | 7176.23 | 0.10 | 8.31 | 21.92 | 4.825e+05 |
| 85 | 7 | 3.646e+05 | 17.75 | -0.11 | -420.00 | 0.0 | 4.387e+04 | 5839.98 | 0.07 | 2.09 | 13.44 | 2.684e+04 |
| | | 2.684e+04 | 13.44 | 0.0 | 0.0 | 60.0 | 4.387e+04 | 5419.98 | 0.07 | 2.09 | 17.75 | 3.646e+05 |
| 85 | 19 | 3.646e+05 | 17.05 | -0.11 | -420.00 | 0.0 | 4.387e+04 | 5840.00 | 0.08 | 5.48 | 12.40 | 2.684e+04 |
| | | 2.684e+04 | 12.40 | 0.0 | 0.0 | 60.0 | 4.387e+04 | 5420.00 | 0.08 | 5.48 | 17.05 | 3.646e+05 |
| 85 | 20 | 1.246e+06 | -463.58 | -0.38 | -420.00 | 0.0 | 1.390e+05 | 1.982e+04 | 2.94 | 2174.33 | -639.69 | 6.964e+04 |
| | | 6.964e+04 | -639.69 | -1.03e-05 | 0.0 | 60.0 | 1.390e+05 | 1.940e+04 | 2.94 | 2174.33 | -463.58 | 1.246e+06 |
| 85 | 30 | 3.933e+05 | 1489.03 | -0.12 | -420.00 | 0.0 | 4.723e+04 | 6277.65 | -9.37 | -2188.89 | 1489.03 | 2.925e+04 |
| | | 2.925e+04 | 1208.91 | 1.58e-04 | 0.0 | 60.0 | 4.723e+04 | 5857.65 | -9.37 | -2188.89 | 1208.91 | 3.933e+05 |
| 85 | 31 | 3.925e+05 | 1236.72 | -0.12 | -420.00 | 0.0 | 4.727e+04 | 6270.67 | 9.58 | 2230.37 | -1473.68 | 2.884e+04 |
| | | 2.884e+04 | -1473.68 | -1.59e-04 | 0.0 | 60.0 | 4.727e+04 | 5850.67 | 9.58 | 2230.37 | 1236.72 | 3.925e+05 |
| 85 | 45 | 3.915e+05 | -252.64 | -0.12 | -420.00 | 0.0 | 4.732e+04 | 6262.64 | -3.40 | -602.20 | -338.52 | 2.836e+04 |
| | | 2.836e+04 | -338.52 | 5.03e-05 | 0.0 | 60.0 | 4.732e+04 | 5842.64 | -3.40 | -602.20 | -252.64 | 3.915e+05 |
| 85 | 48 | 3.943e+05 | 353.87 | -0.12 | -420.00 | 0.0 | 4.719e+04 | 6285.68 | 3.61 | 643.69 | 353.87 | 2.973e+04 |
| | | 2.973e+04 | 280.46 | -5.18e-05 | 0.0 | 60.0 | 4.719e+04 | 5865.68 | 3.61 | 643.69 | 280.46 | 3.943e+05 |
| 85 | 50 | 3.943e+05 | 438.67 | -0.12 | -420.00 | 0.0 | 4.719e+04 | 6285.70 | -2.43 | -699.98 | 438.67 | 2.973e+04 |
| | | 2.973e+04 | -384.95 | 4.74e-05 | 0.0 | 60.0 | 4.719e+04 | 5865.70 | -2.43 | -699.98 | -384.95 | 3.943e+05 |
| 85 | 51 | 3.915e+05 | 412.77 | -0.12 | -420.00 | 0.0 | 4.732e+04 | 6262.62 | 2.64 | 741.46 | -423.32 | 2.836e+04 |
| | | 2.836e+04 | -423.32 | -4.89e-05 | 0.0 | 60.0 | 4.732e+04 | 5842.62 | 2.64 | 741.46 | 412.77 | 3.915e+05 |
| 85 | 62 | 3.931e+05 | 567.90 | -0.12 | -420.00 | 0.0 | 4.725e+04 | 6275.50 | -3.50 | -841.55 | 567.90 | 2.912e+04 |
| | | 2.912e+04 | -447.38 | 5.93e-05 | 0.0 | 60.0 | 4.725e+04 | 5855.50 | -3.50 | -841.55 | -447.38 | 3.931e+05 |
| 85 | 63 | 3.927e+05 | 475.19 | -0.12 | -420.00 | 0.0 | 4.726e+04 | 6272.82 | 3.71 | 883.03 | -552.55 | 2.897e+04 |
| | | 2.897e+04 | -552.55 | -6.08e-05 | 0.0 | 60.0 | 4.726e+04 | 5852.82 | 3.71 | 883.03 | 475.19 | 3.927e+05 |
| 85 | 77 | 3.924e+05 | -86.36 | -0.12 | -420.00 | 0.0 | 4.728e+04 | 6269.74 | -1.23 | -222.66 | -123.22 | 2.878e+04 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|-----------|--------|----------|----------|-----------|
| | | 2.878e+04 | -123.22 | 1.85e-05 | 0.0 | 60.0 | 4.728e+04 | 5849.74 | -1.23 | -222.66 | -86.36 | 3.924e+05 |
| 85 | 80 | 3.934e+05 | 138.57 | -0.12 | -420.00 | 0.0 | 4.723e+04 | 6278.58 | 1.44 | 264.15 | 138.57 | 2.931e+04 |
| | | 2.931e+04 | 114.17 | -2.00e-05 | 0.0 | 60.0 | 4.723e+04 | 5858.58 | 1.44 | 264.15 | 114.17 | 3.934e+05 |
| 85 | 82 | 3.934e+05 | 170.65 | -0.12 | -420.00 | 0.0 | 4.723e+04 | 6278.59 | -0.86 | -259.92 | 170.65 | 2.931e+04 |
| | | 2.931e+05 | -136.65 | 1.74e-05 | 0.0 | 60.0 | 4.723e+04 | 5858.59 | -0.86 | -259.92 | -136.65 | 3.934e+05 |
| 85 | 83 | 3.924e+05 | 164.46 | -0.12 | -420.00 | 0.0 | 4.728e+04 | 6269.73 | 1.07 | 301.41 | -155.29 | 2.878e+04 |
| | | 2.878e+04 | -155.29 | -1.89e-05 | 0.0 | 60.0 | 4.728e+04 | 5849.73 | 1.07 | 301.41 | 164.46 | 3.924e+05 |
| 85 | 85 | 3.929e+05 | 13.91 | -0.12 | -420.00 | 0.0 | 4.725e+04 | 6274.16 | 0.10 | 20.74 | 7.68 | 2.904e+04 |
| | | 2.904e+04 | 7.68 | 0.0 | 0.0 | 60.0 | 4.725e+04 | 5854.16 | 0.10 | 20.74 | 13.91 | 3.929e+05 |
| 85 | 87 | 9.643e+05 | -304.42 | -0.29 | -420.00 | 0.0 | 1.088e+05 | 1.534e+04 | 1.99 | 1456.47 | -423.90 | 5.632e+04 |
| | | 5.632e+04 | -423.90 | -7.13e-06 | 0.0 | 60.0 | 1.088e+05 | 1.492e+04 | 1.99 | 1456.47 | -304.42 | 9.643e+05 |
| 85 | 88 | 3.741e+05 | 16.47 | -0.12 | -420.00 | 0.0 | 4.500e+04 | 5984.71 | 0.08 | 8.31 | 11.52 | 2.758e+04 |
| | | 2.758e+04 | 11.52 | 0.0 | 0.0 | 60.0 | 4.500e+04 | 5564.71 | 0.08 | 8.31 | 16.47 | 3.741e+05 |
| 85 | 94 | 3.741e+05 | 16.00 | -0.12 | -420.00 | 0.0 | 4.500e+04 | 5984.72 | 0.09 | 10.57 | 10.82 | 2.758e+04 |
| | | 2.758e+04 | 10.82 | 0.0 | 0.0 | 60.0 | 4.500e+04 | 5564.72 | 0.09 | 10.57 | 16.00 | 3.741e+05 |
| 85 | 95 | 9.617e+05 | -304.42 | -0.29 | -420.00 | 0.0 | 1.084e+05 | 1.530e+04 | 1.99 | 1456.47 | -423.90 | 5.611e+04 |
| | | 5.611e+04 | -423.90 | -7.13e-06 | 0.0 | 60.0 | 1.084e+05 | 1.488e+04 | 1.99 | 1456.47 | -304.42 | 9.617e+05 |
| 85 | 97 | 9.217e+05 | -274.47 | -0.28 | -420.00 | 0.0 | 1.043e+05 | 1.466e+04 | 1.82 | 1322.05 | -383.57 | 5.473e+04 |
| | | 5.473e+04 | -383.57 | -6.50e-06 | 0.0 | 60.0 | 1.043e+05 | 1.424e+04 | 1.82 | 1322.05 | -274.47 | 9.217e+05 |
| 85 | 98 | 3.915e+05 | 14.14 | -0.12 | -420.00 | 0.0 | 4.709e+04 | 6253.48 | 0.10 | 19.61 | 8.02 | 2.894e+04 |
| | | 2.894e+04 | 8.02 | 0.0 | 0.0 | 60.0 | 4.709e+04 | 5833.48 | 0.10 | 19.61 | 14.14 | 3.915e+05 |
| 85 | 101 | 3.915e+05 | 13.91 | -0.12 | -420.00 | 0.0 | 4.709e+04 | 6253.49 | 0.10 | 20.74 | 7.68 | 2.894e+04 |
| | | 2.894e+04 | 7.68 | 0.0 | 0.0 | 60.0 | 4.709e+04 | 5833.49 | 0.10 | 20.74 | 13.91 | 3.915e+05 |
| 85 | 102 | 3.929e+05 | 13.91 | -0.12 | -420.00 | 0.0 | 4.725e+04 | 6274.16 | 0.10 | 20.74 | 7.68 | 2.904e+04 |
| | | 2.904e+04 | 7.68 | 0.0 | 0.0 | 60.0 | 4.725e+04 | 5854.16 | 0.10 | 20.74 | 13.91 | 3.929e+05 |
| 86 | 2 | 1.811e+06 | -273.04 | -0.39 | -546.00 | 0.0 | 1.857e+05 | 2.001e+04 | 3.11 | 2538.82 | -459.41 | 6.273e+05 |
| | | 6.273e+05 | -459.41 | -1.16e-05 | 0.0 | 60.0 | 1.857e+05 | 1.946e+04 | 3.11 | 2538.82 | -273.04 | 1.811e+06 |
| 86 | 5 | 6.204e+05 | 28.75 | -0.14 | -546.00 | 0.0 | 6.887e+04 | 6756.38 | 0.11 | -2.22 | 21.92 | 2.314e+05 |
| | | 2.314e+05 | 21.92 | 0.0 | 0.0 | 60.0 | 6.887e+04 | 6210.38 | 0.11 | -2.22 | 28.75 | 6.204e+05 |
| 86 | 7 | 4.688e+05 | 22.60 | -0.11 | -420.00 | 0.0 | 5.205e+04 | 5109.98 | 0.08 | -6.72 | 17.75 | 1.748e+05 |
| | | 1.748e+05 | 17.75 | 0.0 | 0.0 | 60.0 | 5.205e+04 | 4689.98 | 0.08 | -6.72 | 22.60 | 4.688e+05 |
| 86 | 19 | 4.688e+05 | 22.22 | -0.11 | -420.00 | 0.0 | 5.205e+04 | 5110.00 | 0.09 | -2.77 | 17.05 | 1.748e+05 |
| | | 1.748e+05 | 17.05 | 0.0 | 0.0 | 60.0 | 5.205e+04 | 4690.00 | 0.09 | -2.77 | 22.22 | 4.688e+05 |
| 86 | 20 | 1.655e+06 | -279.19 | -0.35 | -420.00 | 0.0 | 1.683e+05 | 1.831e+04 | 3.07 | 2534.32 | -463.58 | 5.688e+05 |
| | | 5.688e+05 | -463.58 | -1.14e-05 | 0.0 | 60.0 | 1.683e+05 | 1.789e+04 | 3.07 | 2534.32 | -279.19 | 1.655e+06 |
| 86 | 29 | 5.047e+05 | -868.68 | -0.11 | -420.00 | 0.0 | 5.609e+04 | 5485.78 | -14.61 | -2234.90 | -1226.53 | 1.881e+05 |
| | | 1.881e+05 | -1226.53 | 1.61e-04 | 0.0 | 60.0 | 5.609e+04 | 5065.78 | -14.61 | -2234.90 | -868.68 | 5.047e+05 |
| 86 | 32 | 5.056e+05 | 1254.35 | -0.11 | -420.00 | 0.0 | 5.604e+04 | 5490.19 | 14.83 | 2264.92 | 1254.35 | 1.888e+05 |
| | | 1.888e+05 | 909.71 | -1.62e-04 | 0.0 | 60.0 | 5.604e+04 | 5070.19 | 14.83 | 2264.92 | 909.71 | 5.056e+05 |
| 86 | 45 | 5.036e+05 | -243.36 | -0.11 | -420.00 | 0.0 | 5.615e+04 | 5480.49 | -4.88 | -614.93 | -252.64 | 1.874e+05 |
| | | 1.874e+05 | -252.64 | 4.99e-05 | 0.0 | 60.0 | 5.615e+04 | 5060.49 | -4.88 | -614.93 | -243.36 | 5.036e+05 |
| 86 | 46 | 5.066e+05 | -311.39 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5495.50 | -4.48 | -689.37 | -311.39 | 1.895e+05 |
| | | 1.895e+05 | -326.17 | 5.06e-05 | 0.0 | 60.0 | 5.598e+04 | 5075.50 | -4.48 | -689.37 | -326.17 | 5.066e+05 |
| 86 | 48 | 5.066e+05 | 284.40 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5495.48 | 5.10 | 644.95 | 284.40 | 1.895e+05 |
| | | 1.895e+05 | 280.46 | -5.13e-05 | 0.0 | 60.0 | 5.598e+04 | 5075.48 | 5.10 | 644.95 | 284.40 | 5.066e+05 |
| 86 | 51 | 5.036e+05 | 412.77 | -0.11 | -420.00 | 0.0 | 5.615e+04 | 5480.47 | 4.34 | 723.86 | 412.77 | 1.874e+05 |
| | | 1.874e+05 | 324.95 | -4.94e-05 | 0.0 | 60.0 | 5.615e+04 | 5060.47 | 4.34 | 723.86 | 324.95 | 5.036e+05 |
| 86 | 61 | 5.050e+05 | -314.90 | -0.11 | -420.00 | 0.0 | 5.607e+04 | 5487.14 | -5.47 | -862.45 | -454.08 | 1.883e+05 |
| | | 1.883e+05 | -454.08 | 6.04e-05 | 0.0 | 60.0 | 5.607e+04 | 5067.14 | -5.47 | -862.45 | -314.90 | 5.050e+05 |
| 86 | 64 | 5.053e+05 | 481.89 | -0.11 | -420.00 | 0.0 | 5.605e+04 | 5488.83 | 5.69 | 892.47 | 481.89 | 1.886e+05 |
| | | 1.886e+05 | 355.93 | -6.17e-05 | 0.0 | 60.0 | 5.605e+04 | 5068.83 | 5.69 | 892.47 | 355.93 | 5.053e+05 |
| 86 | 77 | 5.045e+05 | -78.87 | -0.11 | -420.00 | 0.0 | 5.609e+04 | 5485.11 | -1.78 | -231.19 | -86.36 | 1.880e+05 |
| | | 1.880e+05 | -86.36 | 1.85e-05 | 0.0 | 60.0 | 5.609e+04 | 5065.11 | -1.78 | -231.19 | -78.87 | 5.045e+05 |
| 86 | 78 | 5.057e+05 | -108.69 | -0.11 | -420.00 | 0.0 | 5.603e+04 | 5490.87 | -1.63 | -259.48 | -108.69 | 1.889e+05 |
| | | 1.889e+05 | -110.34 | 1.87e-05 | 0.0 | 60.0 | 5.603e+04 | 5070.87 | -1.63 | -259.48 | -110.34 | 5.057e+05 |
| 86 | 80 | 5.057e+05 | 119.91 | -0.11 | -420.00 | 0.0 | 5.603e+04 | 5490.86 | 2.00 | 261.21 | 114.17 | 1.889e+05 |
| | | 1.889e+05 | 114.17 | -1.98e-05 | 0.0 | 60.0 | 5.603e+04 | 5070.86 | 2.00 | 261.21 | 119.91 | 5.057e+05 |
| 86 | 83 | 5.045e+05 | 164.46 | -0.11 | -420.00 | 0.0 | 5.609e+04 | 5485.10 | 1.71 | 291.12 | 164.46 | 1.880e+05 |
| | | 1.880e+05 | 135.46 | -1.91e-05 | 0.0 | 60.0 | 5.609e+04 | 5065.10 | 1.71 | 291.12 | 135.46 | 5.045e+05 |
| 86 | 85 | 5.051e+05 | 20.52 | -0.11 | -420.00 | 0.0 | 5.606e+04 | 5487.99 | 0.11 | 15.01 | 13.91 | 1.884e+05 |
| | | 1.884e+05 | 13.91 | 0.0 | 0.0 | 60.0 | 5.606e+04 | 5067.99 | 0.11 | 15.01 | 20.52 | 5.051e+05 |
| 86 | 87 | 1.275e+06 | -179.29 | -0.27 | -420.00 | 0.0 | 1.313e+05 | 1.407e+04 | 2.09 | 1694.55 | -304.42 | 4.433e+05 |
| | | 4.433e+05 | -304.42 | -7.83e-06 | 0.0 | 60.0 | 1.313e+05 | 1.365e+04 | 2.09 | 1694.55 | -179.29 | 1.275e+06 |
| 86 | 88 | 4.809e+05 | 21.90 | -0.11 | -420.00 | 0.0 | 5.339e+04 | 5235.98 | 0.09 | 0.52 | 16.47 | 1.794e+05 |
| | | 1.794e+05 | 16.47 | 0.0 | 0.0 | 60.0 | 5.339e+04 | 4815.98 | 0.09 | 0.52 | 21.90 | 4.809e+05 |
| 86 | 94 | 4.809e+05 | 21.65 | -0.11 | -420.00 | 0.0 | 5.339e+04 | 5236.00 | 0.09 | 3.16 | 16.00 | 1.794e+05 |
| | | 1.794e+05 | 16.00 | 0.0 | 0.0 | 60.0 | 5.339e+04 | 4816.00 | 0.09 | 3.16 | 21.65 | 4.809e+05 |
| 86 | 95 | 1.271e+06 | -179.29 | -0.27 | -420.00 | 0.0 | 1.309e+05 | 1.403e+04 | 2.09 | 1694.55 | -304.42 | 4.420e+05 |
| | | 4.420e+05 | -304.42 | -7.83e-06 | 0.0 | 60.0 | 1.309e+05 | 1.361e+04 | 2.09 | 1694.55 | -179.29 | 1.271e+06 |
| 86 | 97 | 1.217e+06 | -160.33 | -0.26 | -420.00 | 0.0 | 1.258e+05 | 1.341e+04 | 1.90 | 1537.26 | -274.47 | 4.248e+05 |
| | | 4.248e+05 | -274.47 | -7.13e-06 | 0.0 | 60.0 | 1.258e+05 | 1.299e+04 | 1.90 | 1537.26 | -160.33 | 1.217e+06 |
| 86 | 98 | 5.034e+05 | 20.64 | -0.11 | -420.00 | 0.0 | 5.587e+04 | 5469.98 | 0.11 | 13.69 | 14.14 | 1.878e+05 |
| | | 1.878e+05 | 14.14 | 0.0 | 0.0 | 60.0 | 5.587e+04 | 5049.98 | 0.11 | 13.69 | 20.64 | 5.034e+05 |
| 86 | 101 | 5.034e+05 | 20.52 | -0.11 | -420.00 | 0.0 | 5.587e+04 | 5469.99 | 0.11 | 15.01 | 13.91 | 1.878e+05 |
| | | 1.878e+05 | 13.91 | 0.0 | 0.0 | 60.0 | 5.587e+04 | 5049.99 | 0.11 | 15.01 | 20.52 | 5.034e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|-----------|--------|----------|----------|-----------|
| 86 | 102 | 5.051e+05 | 20.52 | -0.11 | -420.00 | 0.0 | 5.606e+04 | 5487.99 | 0.11 | 15.01 | 13.91 | 1.884e+05 |
| | | 1.884e+05 | 13.91 | 0.0 | 0.0 | 60.0 | 5.606e+04 | 5067.99 | 0.11 | 15.01 | 20.52 | 5.051e+05 |
| 87 | 2 | 2.189e+06 | -123.19 | -0.35 | -546.00 | 0.0 | 2.147e+05 | 1.776e+04 | 2.50 | 2722.18 | -273.04 | 1.140e+06 |
| | | 1.140e+06 | -273.04 | -1.25e-05 | 0.0 | 60.0 | 2.147e+05 | 1.721e+04 | 2.50 | 2722.18 | -123.19 | 2.189e+06 |
| 87 | 5 | 7.316e+05 | 34.27 | -0.12 | -546.00 | 0.0 | 7.825e+04 | 5760.49 | 0.09 | -15.34 | 28.75 | 4.023e+05 |
| | | 4.023e+05 | 28.75 | 0.0 | 0.0 | 60.0 | 7.825e+04 | 5214.49 | 0.09 | -15.34 | 34.27 | 7.316e+05 |
| 87 | 7 | 5.529e+05 | 26.54 | -0.09 | -420.00 | 0.0 | 5.914e+04 | 4357.28 | 0.07 | -17.12 | 22.60 | 3.040e+05 |
| | | 3.040e+05 | 22.60 | 0.0 | 0.0 | 60.0 | 5.914e+04 | 3937.28 | 0.07 | -17.12 | 26.54 | 5.529e+05 |
| 87 | 19 | 5.529e+05 | 26.40 | -0.09 | -420.00 | 0.0 | 5.914e+04 | 4357.30 | 0.07 | -12.93 | 22.22 | 3.040e+05 |
| | | 3.040e+05 | 22.22 | 0.0 | 0.0 | 60.0 | 5.914e+04 | 3937.30 | 0.07 | -12.93 | 26.40 | 5.529e+05 |
| 87 | 20 | 2.004e+06 | -130.92 | -0.31 | -420.00 | 0.0 | 1.949e+05 | 1.631e+04 | 2.47 | 2720.40 | -279.19 | 1.038e+06 |
| | | 1.038e+06 | -279.19 | -1.23e-05 | 0.0 | 60.0 | 1.949e+05 | 1.589e+04 | 2.47 | 2720.40 | -130.92 | 2.004e+06 |
| 87 | 26 | 5.961e+05 | -1009.51 | -0.10 | -420.00 | 0.0 | 6.367e+04 | 4678.13 | -18.89 | -2374.08 | -1009.51 | 3.280e+05 |
| | | 3.280e+05 | -1723.15 | 1.59e-04 | 0.0 | 60.0 | 6.367e+04 | 4258.13 | -18.89 | -2374.08 | -1723.15 | 5.961e+05 |
| 87 | 27 | 5.952e+05 | 1774.69 | -0.10 | -420.00 | 0.0 | 6.373e+04 | 4676.60 | 19.06 | 2385.96 | 1050.55 | 3.272e+05 |
| | | 3.272e+05 | 1050.55 | -1.60e-04 | 0.0 | 60.0 | 6.373e+04 | 4256.60 | 19.06 | 2385.96 | 1774.69 | 5.952e+05 |
| 87 | 47 | 5.941e+05 | 593.04 | -0.10 | -420.00 | 0.0 | 6.380e+04 | 4674.75 | 5.70 | 707.47 | 367.20 | 3.263e+05 |
| | | 3.263e+05 | 367.20 | -4.86e-05 | 0.0 | 60.0 | 6.380e+04 | 4254.75 | 5.70 | 707.47 | 593.04 | 5.941e+05 |
| 87 | 49 | 5.941e+05 | -201.11 | -0.10 | -420.00 | 0.0 | 6.380e+04 | 4674.73 | -5.54 | -725.38 | -201.11 | 3.263e+05 |
| | | 3.263e+05 | -304.01 | 4.63e-05 | 0.0 | 60.0 | 6.380e+04 | 4254.73 | -5.54 | -725.38 | -304.01 | 5.941e+05 |
| 87 | 50 | 5.972e+05 | -283.92 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4679.97 | -5.36 | -697.96 | -283.92 | 3.290e+05 |
| | | 3.290e+05 | -397.63 | 4.66e-05 | 0.0 | 60.0 | 6.361e+04 | 4259.97 | -5.36 | -697.96 | -397.63 | 5.972e+05 |
| 87 | 52 | 5.972e+05 | 355.55 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4680.00 | 5.72 | 737.26 | 242.15 | 3.290e+05 |
| | | 3.290e+05 | 242.15 | -4.74e-05 | 0.0 | 60.0 | 6.361e+04 | 4260.00 | 5.72 | 737.26 | 355.55 | 5.972e+05 |
| 87 | 58 | 5.958e+05 | -367.96 | -0.10 | -420.00 | 0.0 | 6.369e+04 | 4677.66 | -7.09 | -915.09 | -367.96 | 3.278e+05 |
| | | 3.278e+05 | -635.88 | 5.98e-05 | 0.0 | 60.0 | 6.369e+04 | 4257.66 | -7.09 | -915.09 | -635.88 | 5.958e+05 |
| 87 | 59 | 5.955e+05 | 687.42 | -0.10 | -420.00 | 0.0 | 6.371e+04 | 4677.07 | 7.26 | 926.97 | 408.99 | 3.275e+05 |
| | | 3.275e+05 | 408.99 | -6.09e-05 | 0.0 | 60.0 | 6.371e+04 | 4257.07 | 7.26 | 926.97 | 687.42 | 5.955e+05 |
| 87 | 79 | 5.951e+05 | 240.45 | -0.10 | -420.00 | 0.0 | 6.374e+04 | 4676.36 | 2.21 | 277.51 | 151.38 | 3.271e+05 |
| | | 3.271e+05 | 151.38 | -1.87e-05 | 0.0 | 60.0 | 6.374e+04 | 4256.36 | 2.21 | 277.51 | 240.45 | 5.951e+05 |
| 87 | 81 | 5.951e+05 | -62.96 | -0.10 | -420.00 | 0.0 | 6.374e+04 | 4676.35 | -2.04 | -276.92 | -62.96 | 3.271e+05 |
| | | 3.271e+05 | -99.04 | 1.72e-05 | 0.0 | 60.0 | 6.374e+04 | 4256.35 | -2.04 | -276.92 | -99.04 | 5.951e+05 |
| 87 | 82 | 5.962e+05 | -94.43 | -0.10 | -420.00 | 0.0 | 6.367e+04 | 4678.36 | -1.97 | -266.50 | -94.43 | 3.281e+05 |
| | | 3.281e+05 | -134.62 | 1.73e-05 | 0.0 | 60.0 | 6.367e+04 | 4258.36 | -1.97 | -266.50 | -134.62 | 5.962e+05 |
| 87 | 84 | 5.962e+05 | 150.58 | -0.10 | -420.00 | 0.0 | 6.367e+04 | 4678.37 | 2.22 | 288.79 | 103.99 | 3.281e+05 |
| | | 3.281e+05 | 103.99 | -1.83e-05 | 0.0 | 60.0 | 6.367e+04 | 4258.37 | 2.22 | 288.79 | 150.58 | 5.962e+05 |
| 87 | 85 | 5.957e+05 | 25.77 | -0.10 | -420.00 | 0.0 | 6.370e+04 | 4677.36 | 0.09 | 5.94 | 20.52 | 3.276e+05 |
| | | 3.276e+05 | 20.52 | 0.0 | 0.0 | 60.0 | 6.370e+04 | 4257.36 | 0.09 | 5.94 | 25.77 | 5.957e+05 |
| 87 | 87 | 1.539e+06 | -78.69 | -0.24 | -420.00 | 0.0 | 1.516e+05 | 1.246e+04 | 1.68 | 1815.58 | -179.29 | 8.036e+05 |
| | | 8.036e+05 | -179.29 | -8.38e-06 | 0.0 | 60.0 | 1.516e+05 | 1.204e+04 | 1.68 | 1815.58 | -78.69 | 1.539e+06 |
| 87 | 88 | 5.671e+05 | 26.28 | -0.10 | -420.00 | 0.0 | 6.066e+04 | 4463.98 | 0.07 | -9.43 | 21.90 | 3.119e+05 |
| | | 3.119e+05 | 21.90 | 0.0 | 0.0 | 60.0 | 6.066e+04 | 4043.98 | 0.07 | -9.43 | 26.28 | 5.671e+05 |
| 87 | 94 | 5.671e+05 | 26.19 | -0.10 | -420.00 | 0.0 | 6.066e+04 | 4463.99 | 0.08 | -6.64 | 21.65 | 3.119e+05 |
| | | 3.119e+05 | 21.65 | 0.0 | 0.0 | 60.0 | 6.066e+04 | 4043.99 | 0.08 | -6.64 | 26.19 | 5.671e+05 |
| 87 | 95 | 1.535e+06 | -78.69 | -0.24 | -420.00 | 0.0 | 1.512e+05 | 1.243e+04 | 1.68 | 1815.58 | -179.29 | 8.014e+05 |
| | | 8.014e+05 | -179.29 | -8.38e-06 | 0.0 | 60.0 | 1.512e+05 | 1.201e+04 | 1.68 | 1815.58 | -78.69 | 1.535e+06 |
| 87 | 97 | 1.466e+06 | -68.62 | -0.23 | -420.00 | 0.0 | 1.452e+05 | 1.185e+04 | 1.53 | 1645.94 | -160.33 | 7.682e+05 |
| | | 7.682e+05 | -160.33 | -7.61e-06 | 0.0 | 60.0 | 1.452e+05 | 1.143e+04 | 1.53 | 1645.94 | -68.62 | 1.466e+06 |
| 87 | 98 | 5.936e+05 | 25.82 | -0.10 | -420.00 | 0.0 | 6.348e+04 | 4662.12 | 0.09 | 4.54 | 20.64 | 3.265e+05 |
| | | 3.265e+05 | 20.64 | 0.0 | 0.0 | 60.0 | 6.348e+04 | 4242.12 | 0.09 | 4.54 | 25.82 | 5.936e+05 |
| 87 | 101 | 5.936e+05 | 25.77 | -0.10 | -420.00 | 0.0 | 6.348e+04 | 4662.13 | 0.09 | 5.94 | 20.52 | 3.265e+05 |
| | | 3.265e+05 | 20.52 | 0.0 | 0.0 | 60.0 | 6.348e+04 | 4242.13 | 0.09 | 5.94 | 25.77 | 5.936e+05 |
| 87 | 102 | 5.957e+05 | 25.77 | -0.10 | -420.00 | 0.0 | 6.370e+04 | 4677.36 | 0.09 | 5.94 | 20.52 | 3.276e+05 |
| | | 3.276e+05 | 20.52 | 0.0 | 0.0 | 60.0 | 6.370e+04 | 4257.36 | 0.09 | 5.94 | 25.77 | 5.957e+05 |
| 88 | 1 | 8.257e+05 | 37.60 | -0.11 | -546.00 | 0.0 | 8.679e+04 | 4795.17 | 0.06 | -25.88 | 34.13 | 5.544e+05 |
| | | 5.544e+05 | 34.13 | 0.0 | 0.0 | 60.0 | 8.679e+04 | 4249.17 | 0.06 | -25.88 | 37.60 | 8.257e+05 |
| 88 | 2 | 2.484e+06 | -5.26 | -0.29 | -546.00 | 0.0 | 2.395e+05 | 1.474e+04 | 1.97 | 2765.35 | -123.19 | 1.616e+06 |
| | | 1.616e+06 | -123.19 | -1.32e-05 | 0.0 | 60.0 | 2.395e+05 | 1.420e+04 | 1.97 | 2765.35 | -5.26 | 2.484e+06 |
| 88 | 7 | 6.189e+05 | 28.85 | -0.08 | -420.00 | 0.0 | 6.505e+04 | 3599.44 | 0.04 | -28.42 | 26.54 | 4.155e+05 |
| | | 4.155e+05 | 26.54 | 0.0 | 0.0 | 60.0 | 6.505e+04 | 3179.44 | 0.04 | -28.42 | 28.85 | 6.189e+05 |
| 88 | 20 | 2.278e+06 | -13.97 | -0.27 | -420.00 | 0.0 | 2.178e+05 | 1.355e+04 | 1.95 | 2766.99 | -130.92 | 1.477e+06 |
| | | 1.477e+06 | -130.92 | -1.30e-05 | 0.0 | 60.0 | 2.178e+05 | 1.313e+04 | 1.95 | 2766.99 | -13.97 | 2.278e+06 |
| 88 | 26 | 6.672e+05 | -1723.14 | -0.09 | -420.00 | 0.0 | 7.004e+04 | 3861.87 | -19.47 | -2554.41 | -1723.14 | 4.481e+05 |
| | | 4.481e+05 | -2695.65 | 1.41e-04 | 0.0 | 60.0 | 7.004e+04 | 3441.87 | -19.47 | -2554.41 | -2695.65 | 6.672e+05 |
| 88 | 27 | 6.663e+05 | 2753.75 | -0.09 | -420.00 | 0.0 | 7.010e+04 | 3860.40 | 19.58 | 2543.52 | 1774.68 | 4.472e+05 |
| | | 4.472e+05 | 1774.68 | -1.42e-04 | 0.0 | 60.0 | 7.010e+04 | 3440.40 | 19.58 | 2543.52 | 2753.75 | 6.663e+05 |
| 88 | 50 | 6.681e+05 | -397.63 | -0.09 | -420.00 | 0.0 | 6.997e+04 | 3863.65 | -5.87 | -747.44 | -397.63 | 4.492e+05 |
| | | 4.492e+05 | -677.62 | 4.28e-05 | 0.0 | 60.0 | 6.997e+04 | 3443.65 | -5.87 | -747.44 | -677.62 | 6.681e+05 |
| 88 | 51 | 6.654e+05 | 735.73 | -0.09 | -420.00 | 0.0 | 7.016e+04 | 3858.62 | 5.98 | 736.55 | 449.17 | 4.462e+05 |
| | | 4.462e+05 | 449.17 | -4.36e-05 | 0.0 | 60.0 | 7.016e+04 | 3438.62 | 5.98 | 736.55 | 735.73 | 6.654e+05 |
| 88 | 58 | 6.669e+05 | -635.88 | -0.09 | -420.00 | 0.0 | 7.006e+04 | 3861.42 | -7.32 | -983.41 | -635.88 | 4.479e+05 |
| | | 4.479e+05 | -1002.01 | 5.31e-05 | 0.0 | 60.0 | 7.006e+04 | 3441.42 | -7.32 | -983.41 | -1002.01 | 6.669e+05 |
| 88 | 59 | 6.666e+05 | 1060.11 | -0.09 | -420.00 | 0.0 | 7.008e+04 | 3860.85 | 7.43 | 972.52 | 687.42 | 4.475e+05 |
| | | 4.475e+05 | 687.42 | -5.39e-05 | 0.0 | 60.0 | 7.008e+04 | 3440.85 | 7.43 | 972.52 | 1060.11 | 6.666e+05 |
| 88 | 82 | 6.673e+05 | -134.62 | -0.09 | -420.00 | 0.0 | 7.003e+04 | 3862.10 | -2.18 | -290.30 | -134.62 | 4.483e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|-----------|----------|----------|----------|-----------|
| | | 4.483e+05 | -238.56 | 1.59e-05 | 0.0 | 60.0 | 7.003e+04 | 3442.10 | -2.18 | -290.30 | -238.56 | 6.673e+05 |
| 88 | 83 | 6.662e+05 | 296.66 | -0.09 | -420.00 | 0.0 | 7.010e+04 | 3860.17 | 2.29 | 279.41 | 186.16 | 4.471e+05 |
| | | 4.471e+05 | 186.16 | -1.68e-05 | 0.0 | 60.0 | 7.010e+04 | 3440.17 | 2.29 | 279.41 | 296.66 | 6.662e+05 |
| 88 | 85 | 6.668e+05 | 29.05 | -0.09 | -420.00 | 0.0 | 7.007e+04 | 3861.13 | 0.05 | -5.44 | 25.77 | 4.477e+05 |
| | | 4.477e+05 | 25.77 | 0.0 | 0.0 | 60.0 | 7.007e+04 | 3441.13 | 0.05 | -5.44 | 29.05 | 6.668e+05 |
| 88 | 86 | 6.394e+05 | 28.94 | -0.08 | -420.00 | 0.0 | 6.720e+04 | 3711.60 | 0.05 | -17.98 | 26.19 | 4.293e+05 |
| | | 4.293e+05 | 26.19 | 0.0 | 0.0 | 60.0 | 6.720e+04 | 3291.60 | 0.05 | -17.98 | 28.94 | 6.394e+05 |
| 88 | 87 | 1.745e+06 | 0.37 | -0.21 | -420.00 | 0.0 | 1.690e+05 | 1.034e+04 | 1.32 | 1842.84 | -78.69 | 1.137e+06 |
| | | 1.137e+06 | -78.69 | -8.82e-06 | 0.0 | 60.0 | 1.690e+05 | 9922.57 | 1.32 | 1842.84 | 0.37 | 1.745e+06 |
| 88 | 88 | 6.348e+05 | 28.92 | -0.08 | -420.00 | 0.0 | 6.672e+04 | 3686.67 | 0.04 | -20.76 | 26.28 | 4.262e+05 |
| | | 4.262e+05 | 26.28 | 0.0 | 0.0 | 60.0 | 6.672e+04 | 3266.67 | 0.04 | -20.76 | 28.92 | 6.348e+05 |
| 88 | 95 | 1.741e+06 | 0.37 | -0.21 | -420.00 | 0.0 | 1.685e+05 | 1.032e+04 | 1.32 | 1842.84 | -78.69 | 1.134e+06 |
| | | 1.134e+06 | -78.69 | -8.82e-06 | 0.0 | 60.0 | 1.685e+05 | 9897.66 | 1.32 | 1842.84 | 0.37 | 1.741e+06 |
| 88 | 96 | 6.668e+05 | 29.05 | -0.09 | -420.00 | 0.0 | 7.007e+04 | 3861.13 | 0.05 | -5.44 | 25.77 | 4.477e+05 |
| | | 4.477e+05 | 25.77 | 0.0 | 0.0 | 60.0 | 7.007e+04 | 3441.13 | 0.05 | -5.44 | 29.05 | 6.668e+05 |
| 88 | 97 | 1.662e+06 | 3.33 | -0.20 | -420.00 | 0.0 | 1.617e+05 | 9829.01 | 1.20 | 1669.30 | -68.62 | 1.085e+06 |
| | | 1.085e+06 | -68.62 | -8.00e-06 | 0.0 | 60.0 | 1.617e+05 | 9409.01 | 1.20 | 1669.30 | 3.33 | 1.662e+06 |
| 88 | 98 | 6.645e+05 | 29.04 | -0.09 | -420.00 | 0.0 | 6.983e+04 | 3848.67 | 0.05 | -6.84 | 25.82 | 4.462e+05 |
| | | 4.462e+05 | 25.82 | 0.0 | 0.0 | 60.0 | 6.983e+04 | 3428.67 | 0.05 | -6.84 | 29.04 | 6.645e+05 |
| 88 | 102 | 6.668e+05 | 29.05 | -0.09 | -420.00 | 0.0 | 7.007e+04 | 3861.13 | 0.05 | -5.44 | 25.77 | 4.477e+05 |
| | | 4.477e+05 | 25.77 | 0.0 | 0.0 | 60.0 | 7.007e+04 | 3441.13 | 0.05 | -5.44 | 29.05 | 6.668e+05 |
| 89 | 2 | 2.668e+06 | 98.98 | -0.23 | -546.00 | 0.0 | 2.590e+05 | 1.080e+04 | 1.74 | 2699.98 | -5.26 | 2.036e+06 |
| | | 2.036e+06 | -5.26 | -1.37e-05 | 0.0 | 60.0 | 2.590e+05 | 1.026e+04 | 1.74 | 2699.98 | 98.98 | 2.668e+06 |
| 89 | 7 | 6.670e+05 | 29.22 | -0.07 | -420.00 | 0.0 | 6.977e+04 | 2842.40 | 6.24e-03 | -39.73 | 28.85 | 5.091e+05 |
| | | 5.091e+05 | 28.85 | 0.0 | 0.0 | 60.0 | 6.977e+04 | 2422.40 | 6.24e-03 | -39.73 | 29.22 | 6.670e+05 |
| 89 | 8 | 2.445e+06 | 89.73 | -0.21 | -420.00 | 0.0 | 2.356e+05 | 9860.14 | 1.73 | 2701.38 | -14.01 | 1.866e+06 |
| | | 1.866e+06 | -14.01 | -1.37e-05 | 0.0 | 60.0 | 2.356e+05 | 9440.14 | 1.73 | 2701.38 | 89.73 | 2.445e+06 |
| 89 | 26 | 7.190e+05 | -2695.65 | -0.07 | -420.00 | 0.0 | 7.513e+04 | 3047.87 | -17.73 | -2512.98 | -2695.65 | 5.490e+05 |
| | | 5.490e+05 | -3635.63 | 1.16e-04 | 0.0 | 60.0 | 7.513e+04 | 2627.87 | -17.73 | -2512.98 | -3635.63 | 7.190e+05 |
| 89 | 27 | 7.183e+05 | 3696.11 | -0.07 | -420.00 | 0.0 | 7.518e+04 | 3043.52 | 17.77 | 2477.15 | 2753.75 | 5.481e+05 |
| | | 5.481e+05 | 2753.75 | -1.16e-04 | 0.0 | 60.0 | 7.518e+04 | 2623.52 | 17.77 | 2477.15 | 3696.11 | 7.183e+05 |
| 89 | 46 | 7.197e+05 | -830.20 | -0.07 | -420.00 | 0.0 | 7.507e+04 | 3053.09 | -5.21 | -730.67 | -830.20 | 5.500e+05 |
| | | 5.500e+05 | -1105.67 | 3.43e-05 | 0.0 | 60.0 | 7.507e+04 | 2633.09 | -5.21 | -730.67 | -1105.67 | 7.197e+05 |
| 89 | 50 | 7.197e+05 | -677.62 | -0.07 | -420.00 | 0.0 | 7.507e+04 | 3053.09 | -5.52 | -704.84 | -677.62 | 5.500e+05 |
| | | 5.500e+05 | -974.48 | 3.68e-05 | 0.0 | 60.0 | 7.507e+04 | 2633.09 | -5.52 | -704.84 | -974.48 | 7.197e+05 |
| 89 | 51 | 7.176e+05 | 1034.96 | -0.07 | -420.00 | 0.0 | 7.524e+04 | 3038.31 | 5.56 | 669.02 | 735.72 | 5.470e+05 |
| | | 5.470e+05 | 735.72 | -3.73e-05 | 0.0 | 60.0 | 7.524e+04 | 2618.31 | 5.56 | 669.02 | 1034.96 | 7.176e+05 |
| 89 | 58 | 7.188e+05 | -1002.01 | -0.07 | -420.00 | 0.0 | 7.514e+04 | 3046.53 | -6.69 | -970.09 | -1002.01 | 5.487e+05 |
| | | 5.487e+05 | -1356.68 | 4.37e-05 | 0.0 | 60.0 | 7.514e+04 | 2626.53 | -6.69 | -970.09 | -1356.68 | 7.188e+05 |
| 89 | 59 | 7.185e+05 | 1417.16 | -0.07 | -420.00 | 0.0 | 7.516e+04 | 3044.86 | 6.72 | 934.27 | 1060.11 | 5.483e+05 |
| | | 5.483e+05 | 1060.11 | -4.42e-05 | 0.0 | 60.0 | 7.516e+04 | 2624.86 | 6.72 | 934.27 | 1417.16 | 7.185e+05 |
| 89 | 78 | 7.191e+05 | -296.17 | -0.07 | -420.00 | 0.0 | 7.512e+04 | 3048.53 | -1.96 | -289.98 | -296.17 | 5.491e+05 |
| | | 5.491e+05 | -399.58 | 1.28e-05 | 0.0 | 60.0 | 7.512e+04 | 2628.53 | -1.96 | -289.98 | -399.58 | 7.191e+05 |
| 89 | 82 | 7.191e+05 | -238.56 | -0.07 | -420.00 | 0.0 | 7.512e+04 | 3048.53 | -2.07 | -280.33 | -238.56 | 5.491e+05 |
| | | 5.491e+05 | -350.01 | 1.37e-05 | 0.0 | 60.0 | 7.512e+04 | 2628.53 | -2.07 | -280.33 | -350.01 | 7.191e+05 |
| 89 | 83 | 7.182e+05 | 410.49 | -0.07 | -420.00 | 0.0 | 7.519e+04 | 3042.86 | 2.11 | 244.50 | 296.66 | 5.479e+05 |
| | | 5.479e+05 | 296.66 | -1.43e-05 | 0.0 | 60.0 | 7.519e+04 | 2622.86 | 2.11 | 244.50 | 410.49 | 7.182e+05 |
| 89 | 85 | 7.187e+05 | 30.24 | -0.07 | -420.00 | 0.0 | 7.515e+04 | 3045.70 | 0.02 | -17.91 | 29.05 | 5.485e+05 |
| | | 5.485e+05 | 29.05 | 0.0 | 0.0 | 60.0 | 7.515e+04 | 2625.70 | 0.02 | -17.91 | 30.24 | 7.187e+05 |
| 89 | 87 | 1.875e+06 | 70.02 | -0.16 | -420.00 | 0.0 | 1.827e+05 | 7608.02 | 1.16 | 1797.60 | 0.37 | 1.431e+06 |
| | | 1.431e+06 | 0.37 | -9.20e-06 | 0.0 | 60.0 | 1.827e+05 | 7188.02 | 1.16 | 1797.60 | 70.02 | 1.875e+06 |
| 89 | 88 | 6.842e+05 | 29.56 | -0.07 | -420.00 | 0.0 | 7.157e+04 | 2910.16 | 0.01 | -32.46 | 28.92 | 5.222e+05 |
| | | 5.222e+05 | 28.92 | 0.0 | 0.0 | 60.0 | 7.157e+04 | 2490.16 | 0.01 | -32.46 | 29.56 | 6.842e+05 |
| 89 | 89 | 1.870e+06 | 69.90 | -0.16 | -420.00 | 0.0 | 1.821e+05 | 7588.66 | 1.16 | 1794.95 | 0.34 | 1.427e+06 |
| | | 1.427e+06 | 0.34 | -9.19e-06 | 0.0 | 60.0 | 1.821e+05 | 7168.66 | 1.16 | 1794.95 | 69.90 | 1.870e+06 |
| 89 | 97 | 1.785e+06 | 66.54 | -0.16 | -420.00 | 0.0 | 1.747e+05 | 7256.34 | 1.05 | 1626.75 | 3.33 | 1.363e+06 |
| | | 1.363e+06 | 3.33 | -8.33e-06 | 0.0 | 60.0 | 1.747e+05 | 6836.34 | 1.05 | 1626.75 | 66.54 | 1.785e+06 |
| 89 | 98 | 7.162e+05 | 30.18 | -0.07 | -420.00 | 0.0 | 7.490e+04 | 3036.02 | 0.02 | -19.24 | 29.04 | 5.466e+05 |
| | | 5.466e+05 | 29.04 | 0.0 | 0.0 | 60.0 | 7.490e+04 | 2616.02 | 0.02 | -19.24 | 30.18 | 7.162e+05 |
| 89 | 102 | 7.187e+05 | 30.24 | -0.07 | -420.00 | 0.0 | 7.515e+04 | 3045.70 | 0.02 | -17.91 | 29.05 | 5.485e+05 |
| | | 5.485e+05 | 29.05 | 0.0 | 0.0 | 60.0 | 7.515e+04 | 2625.70 | 0.02 | -17.91 | 30.24 | 7.187e+05 |
| 90 | 2 | 2.728e+06 | 208.94 | -0.16 | -546.00 | 0.0 | 2.720e+05 | 6296.68 | 1.83 | 2545.87 | 98.98 | 2.366e+06 |
| | | 2.366e+06 | 98.98 | -1.42e-05 | 0.0 | 60.0 | 2.720e+05 | 5750.68 | 1.83 | 2545.87 | 208.94 | 2.728e+06 |
| 90 | 7 | 6.975e+05 | 29.22 | -0.05 | -420.00 | 0.0 | 7.331e+04 | 2087.88 | -0.03 | -49.95 | 29.22 | 5.848e+05 |
| | | 5.848e+05 | 27.50 | 0.0 | 0.0 | 60.0 | 7.331e+04 | 1667.88 | -0.03 | -49.95 | 27.50 | 6.975e+05 |
| 90 | 26 | 7.516e+05 | -3635.63 | -0.05 | -420.00 | 0.0 | 7.895e+04 | 2236.37 | -14.01 | -2160.15 | -3635.63 | 6.305e+05 |
| | | 6.305e+05 | -4388.25 | 8.46e-05 | 0.0 | 60.0 | 7.895e+04 | 1816.37 | -14.01 | -2160.15 | -4388.25 | 7.516e+05 |
| 90 | 27 | 7.512e+05 | 4446.93 | -0.05 | -420.00 | 0.0 | 7.899e+04 | 2229.51 | 13.98 | 2099.76 | 3696.10 | 6.296e+05 |
| | | 6.296e+05 | 3696.10 | -8.47e-05 | 0.0 | 60.0 | 7.899e+04 | 1809.51 | 13.98 | 2099.76 | 4446.93 | 7.512e+05 |
| 90 | 45 | 7.507e+05 | -1026.23 | -0.05 | -420.00 | 0.0 | 7.903e+04 | 2221.37 | -4.41 | -736.61 | -1026.23 | 6.507e+05 |
| | | 6.507e+05 | -1264.24 | 2.58e-05 | 0.0 | 60.0 | 7.903e+04 | 1801.37 | -4.41 | -736.61 | -1264.24 | 7.507e+05 |
| 90 | 48 | 7.521e+05 | 1322.92 | -0.05 | -420.00 | 0.0 | 7.890e+04 | 2244.51 | 4.38 | 676.22 | 1086.70 | 6.314e+05 |
| | | 6.314e+05 | 1086.70 | -2.60e-05 | 0.0 | 60.0 | 7.890e+04 | 1824.51 | 4.38 | 676.22 | 1322.92 | 7.521e+05 |
| 90 | 51 | 7.507e+05 | 1286.15 | -0.05 | -420.00 | 0.0 | 7.903e+04 | 2221.40 | 4.52 | 514.21 | 1034.95 | 6.287e+05 |
| | | 6.287e+05 | 1034.95 | -2.89e-05 | 0.0 | 60.0 | 7.903e+04 | 1801.40 | 4.52 | 514.21 | 1286.15 | 7.507e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|-------|----------|----------|-----------|
| 90 | 58 | 7.515e+05 | -1356.68 | -0.05 | -420.00 | 0.0 | 7.896e+04 | 2234.26 | -5.30 | -840.58 | -1356.68 | 6.302e+05 |
| | | 6.302e+05 | -1641.62 | 3.19e-05 | 0.0 | 60.0 | 7.896e+04 | 1814.26 | -5.30 | -840.58 | -1641.62 | 7.515e+05 |
| 90 | 59 | 7.513e+05 | 1700.30 | -0.05 | -420.00 | 0.0 | 7.897e+04 | 2231.63 | 5.27 | 780.19 | 1417.16 | 6.299e+05 |
| | | 6.299e+05 | 1417.16 | -3.21e-05 | 0.0 | 60.0 | 7.897e+04 | 1811.63 | 5.27 | 780.19 | 1700.30 | 7.513e+05 |
| 90 | 77 | 7.512e+05 | -369.39 | -0.05 | -420.00 | 0.0 | 7.899e+04 | 2228.50 | -1.67 | -298.93 | -369.39 | 6.295e+05 |
| | | 6.295e+05 | -459.90 | 9.70e-06 | 0.0 | 60.0 | 7.899e+04 | 1808.50 | -1.67 | -298.93 | -459.90 | 7.512e+05 |
| 90 | 80 | 7.517e+05 | 518.58 | -0.05 | -420.00 | 0.0 | 7.894e+04 | 2237.38 | 1.64 | 238.54 | 429.86 | 6.306e+05 |
| | | 6.306e+05 | 429.86 | -9.87e-06 | 0.0 | 60.0 | 7.894e+04 | 1817.38 | 1.64 | 238.54 | 518.58 | 7.517e+05 |
| 90 | 83 | 7.512e+05 | 504.81 | -0.05 | -420.00 | 0.0 | 7.899e+04 | 2228.52 | 1.70 | 177.18 | 410.49 | 6.295e+05 |
| | | 6.295e+05 | 410.49 | -1.10e-05 | 0.0 | 60.0 | 7.899e+04 | 1808.52 | 1.70 | 177.18 | 504.81 | 7.512e+05 |
| 90 | 85 | 7.514e+05 | 30.24 | -0.05 | -420.00 | 0.0 | 7.897e+04 | 2232.94 | -0.01 | -30.20 | 30.24 | 6.300e+05 |
| | | 6.300e+05 | 29.34 | 0.0 | 0.0 | 60.0 | 7.897e+04 | 1812.94 | -0.01 | -30.20 | 29.34 | 7.514e+05 |
| 90 | 87 | 1.919e+06 | 143.21 | -0.11 | -420.00 | 0.0 | 1.919e+05 | 4495.51 | 1.22 | 1693.22 | 70.02 | 1.661e+06 |
| | | 1.661e+06 | 70.02 | -9.48e-06 | 0.0 | 60.0 | 1.919e+05 | 4075.51 | 1.22 | 1693.22 | 143.21 | 1.919e+06 |
| 90 | 88 | 7.154e+05 | 29.56 | -0.05 | -420.00 | 0.0 | 7.520e+04 | 2136.23 | -0.02 | -43.37 | 29.56 | 5.999e+05 |
| | | 5.999e+05 | 28.12 | 0.0 | 0.0 | 60.0 | 7.520e+04 | 1716.23 | -0.02 | -43.37 | 28.12 | 7.154e+05 |
| 90 | 97 | 1.830e+06 | 132.72 | -0.11 | -420.00 | 0.0 | 1.835e+05 | 4343.86 | 1.10 | 1530.58 | 66.54 | 1.582e+06 |
| | | 1.582e+06 | 66.54 | -8.56e-06 | 0.0 | 60.0 | 1.835e+05 | 3923.86 | 1.10 | 1530.58 | 132.72 | 1.830e+06 |
| 90 | 98 | 7.489e+05 | 30.18 | -0.05 | -420.00 | 0.0 | 7.870e+04 | 2226.03 | -0.02 | -31.39 | 30.18 | 6.279e+05 |
| | | 6.279e+05 | 29.23 | 0.0 | 0.0 | 60.0 | 7.870e+04 | 1806.03 | -0.02 | -31.39 | 29.23 | 7.489e+05 |
| 90 | 102 | 7.514e+05 | 30.24 | -0.05 | -420.00 | 0.0 | 7.897e+04 | 2232.94 | -0.01 | -30.20 | 30.24 | 6.300e+05 |
| | | 6.300e+05 | 29.34 | 0.0 | 0.0 | 60.0 | 7.897e+04 | 1812.94 | -0.01 | -30.20 | 29.34 | 7.514e+05 |
| 91 | 2 | 2.673e+06 | 341.77 | -0.09 | -546.00 | 0.0 | 2.782e+05 | 1802.60 | 2.21 | 2309.83 | 208.94 | 2.582e+06 |
| | | 2.582e+06 | 208.94 | -1.44e-05 | 0.0 | 60.0 | 2.782e+05 | 1256.60 | 2.21 | 2309.83 | 341.77 | 2.673e+06 |
| 91 | 7 | 7.102e+05 | 27.50 | -0.03 | -420.00 | 0.0 | 7.567e+04 | 1335.77 | -0.07 | -57.90 | 27.50 | 6.427e+05 |
| | | 6.427e+05 | 23.57 | 0.0 | 0.0 | 60.0 | 7.567e+04 | 915.77 | -0.07 | -57.90 | 23.57 | 7.102e+05 |
| 91 | 26 | 7.652e+05 | -4388.25 | -0.03 | -420.00 | 0.0 | 8.149e+04 | 1427.13 | -8.70 | -1511.05 | -4388.25 | 6.927e+05 |
| | | 6.927e+05 | -4848.96 | 4.88e-05 | 0.0 | 60.0 | 8.149e+04 | 1007.13 | -8.70 | -1511.05 | -4848.96 | 7.652e+05 |
| 91 | 27 | 7.651e+05 | 4901.68 | -0.03 | -420.00 | 0.0 | 8.152e+04 | 1418.40 | 8.60 | 1428.99 | 4446.92 | 6.921e+05 |
| | | 6.921e+05 | 4446.92 | -4.86e-05 | 0.0 | 60.0 | 8.152e+04 | 998.40 | 8.60 | 1428.99 | 4901.68 | 7.651e+05 |
| 91 | 46 | 7.654e+05 | -1322.40 | -0.03 | -420.00 | 0.0 | 8.146e+04 | 1437.34 | -2.44 | -410.77 | -1322.40 | 6.935e+05 |
| | | 6.935e+05 | -1450.20 | 1.42e-05 | 0.0 | 60.0 | 8.146e+04 | 1017.34 | -2.44 | -410.77 | -1450.20 | 7.654e+05 |
| 91 | 47 | 7.649e+05 | 1502.93 | -0.03 | -420.00 | 0.0 | 8.155e+04 | 1408.19 | 2.34 | 328.71 | 1381.08 | 6.913e+05 |
| | | 6.913e+05 | 1381.08 | -1.40e-05 | 0.0 | 60.0 | 8.155e+04 | 988.19 | 2.34 | 328.71 | 1502.93 | 7.649e+05 |
| 91 | 52 | 7.654e+05 | 1422.54 | -0.03 | -420.00 | 0.0 | 8.146e+04 | 1437.35 | 3.42 | 439.09 | 1227.99 | 6.935e+05 |
| | | 6.935e+05 | 1227.99 | -1.99e-05 | 0.0 | 60.0 | 8.146e+04 | 1017.35 | 3.42 | 439.09 | 1422.54 | 7.654e+05 |
| 91 | 58 | 7.652e+05 | -1641.62 | -0.03 | -420.00 | 0.0 | 8.150e+04 | 1424.44 | -3.31 | -599.35 | -1641.62 | 6.925e+05 |
| | | 6.925e+05 | -1817.47 | 1.85e-05 | 0.0 | 60.0 | 8.150e+04 | 1004.44 | -3.31 | -599.35 | -1817.47 | 7.652e+05 |
| 91 | 59 | 7.651e+05 | 1870.19 | -0.03 | -420.00 | 0.0 | 8.151e+04 | 1421.09 | 3.21 | 517.29 | 1700.30 | 6.923e+05 |
| | | 6.923e+05 | 1700.30 | -1.83e-05 | 0.0 | 60.0 | 8.151e+04 | 1001.09 | 3.21 | 517.29 | 1870.19 | 7.651e+05 |
| 91 | 78 | 7.652e+05 | -482.01 | -0.03 | -420.00 | 0.0 | 8.149e+04 | 1428.35 | -0.95 | -181.44 | -482.01 | 6.928e+05 |
| | | 6.928e+05 | -532.10 | 5.41e-06 | 0.0 | 60.0 | 8.149e+04 | 1008.35 | -0.95 | -181.44 | -532.10 | 7.652e+05 |
| 91 | 79 | 7.651e+05 | 584.82 | -0.03 | -420.00 | 0.0 | 8.152e+04 | 1417.18 | 0.85 | 99.38 | 540.68 | 6.920e+05 |
| | | 6.920e+05 | 540.68 | -5.24e-06 | 0.0 | 60.0 | 8.152e+04 | 997.18 | 0.85 | 99.38 | 584.82 | 7.651e+05 |
| 91 | 84 | 7.652e+05 | 554.37 | -0.03 | -420.00 | 0.0 | 8.149e+04 | 1428.36 | 1.26 | 141.55 | 482.70 | 6.928e+05 |
| | | 6.928e+05 | 482.70 | -7.47e-06 | 0.0 | 60.0 | 8.149e+04 | 1008.36 | 1.26 | 141.55 | 554.37 | 7.652e+05 |
| 91 | 85 | 7.651e+05 | 29.34 | -0.03 | -420.00 | 0.0 | 8.150e+04 | 1422.76 | -0.05 | -41.03 | 29.34 | 6.924e+05 |
| | | 6.924e+05 | 26.36 | 0.0 | 0.0 | 60.0 | 8.150e+04 | 1002.76 | -0.05 | -41.03 | 26.36 | 7.651e+05 |
| 91 | 87 | 1.884e+06 | 231.36 | -0.06 | -420.00 | 0.0 | 1.963e+05 | 1391.44 | 1.47 | 1534.42 | 143.21 | 1.813e+06 |
| | | 1.813e+06 | 143.21 | -9.58e-06 | 0.0 | 60.0 | 1.963e+05 | 971.44 | 1.47 | 1534.42 | 231.36 | 1.884e+06 |
| 91 | 88 | 7.285e+05 | 28.12 | -0.03 | -420.00 | 0.0 | 7.761e+04 | 1364.77 | -0.06 | -52.28 | 28.12 | 6.592e+05 |
| | | 6.592e+05 | 24.50 | 0.0 | 0.0 | 60.0 | 7.761e+04 | 944.77 | -0.06 | -52.28 | 24.50 | 7.285e+05 |
| 91 | 97 | 1.801e+06 | 212.23 | -0.06 | -420.00 | 0.0 | 1.879e+05 | 1439.31 | 1.33 | 1385.15 | 132.72 | 1.727e+06 |
| | | 1.727e+06 | 132.72 | -8.64e-06 | 0.0 | 60.0 | 1.879e+05 | 1019.31 | 1.33 | 1385.15 | 212.23 | 1.801e+06 |
| 91 | 98 | 7.625e+05 | 29.23 | -0.03 | -420.00 | 0.0 | 8.123e+04 | 1418.62 | -0.05 | -42.05 | 29.23 | 6.900e+05 |
| | | 6.900e+05 | 26.19 | 0.0 | 0.0 | 60.0 | 8.123e+04 | 998.62 | -0.05 | -42.05 | 26.19 | 7.625e+05 |
| 91 | 102 | 7.651e+05 | 29.34 | -0.03 | -420.00 | 0.0 | 8.150e+04 | 1422.76 | -0.05 | -41.03 | 29.34 | 6.924e+05 |
| | | 6.924e+05 | 26.36 | 0.0 | 0.0 | 60.0 | 8.150e+04 | 1002.76 | -0.05 | -41.03 | 26.36 | 7.651e+05 |
| 92 | 2 | 2.530e+06 | 511.32 | -0.02 | -546.00 | 0.0 | 2.781e+05 | -2105.33 | 2.83 | 1987.50 | 341.76 | 2.530e+06 |
| | | 2.530e+06 | 341.76 | -1.41e-05 | 0.0 | 60.0 | 2.781e+05 | -2651.33 | 2.83 | 1987.50 | 511.32 | 2.530e+06 |
| 92 | 7 | 7.053e+05 | 23.57 | -9.82e-03 | -420.00 | 0.0 | 7.685e+04 | 585.24 | -0.10 | -62.34 | 23.57 | 6.828e+05 |
| | | 6.828e+05 | 17.32 | 0.0 | 0.0 | 60.0 | 7.685e+04 | 165.24 | -0.10 | -62.34 | 17.32 | 7.053e+05 |
| 92 | 22 | 7.600e+05 | -4839.75 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 619.08 | 2.39 | -738.20 | -4839.75 | 7.354e+05 |
| | | 7.354e+05 | -4954.20 | 1.24e-05 | 0.0 | 60.0 | 8.277e+04 | 199.08 | 2.39 | -738.20 | -4954.20 | 7.600e+05 |
| 92 | 23 | 7.598e+05 | 4996.77 | -0.01 | -420.00 | 0.0 | 8.278e+04 | 609.47 | -2.56 | 639.82 | 4892.47 | 7.358e+05 |
| | | 7.358e+05 | 4892.47 | -1.20e-05 | 0.0 | 60.0 | 8.278e+04 | 189.47 | -2.56 | 639.82 | 4996.77 | 7.598e+05 |
| 92 | 46 | 7.601e+05 | -1450.20 | -0.01 | -420.00 | 0.0 | 8.276e+04 | 630.42 | 0.94 | -161.09 | -1450.20 | 7.349e+05 |
| | | 7.349e+05 | -1470.91 | 3.34e-06 | 0.0 | 60.0 | 8.276e+04 | 210.42 | 0.94 | -161.09 | -1470.91 | 7.601e+05 |
| 92 | 50 | 7.601e+05 | -1400.53 | -0.01 | -420.00 | 0.0 | 8.276e+04 | 630.43 | -1.24 | -118.56 | -1400.53 | 7.349e+05 |
| | | 7.349e+05 | -1470.87 | 8.07e-06 | 0.0 | 60.0 | 8.276e+04 | 210.43 | -1.24 | -118.56 | -1470.87 | 7.601e+05 |
| 92 | 51 | 7.596e+05 | 1513.44 | -0.01 | -420.00 | 0.0 | 8.279e+04 | 598.12 | 1.07 | 20.18 | 1453.25 | 7.363e+05 |
| | | 7.363e+05 | 1453.25 | -7.56e-06 | 0.0 | 60.0 | 8.279e+04 | 178.12 | 1.07 | 20.18 | 1513.44 | 7.596e+05 |
| 92 | 52 | 7.601e+05 | 1514.27 | -0.01 | -420.00 | 0.0 | 8.276e+04 | 630.43 | 1.58 | 194.14 | 1422.54 | 7.349e+05 |
| | | 7.349e+05 | 1422.54 | -8.81e-06 | 0.0 | 60.0 | 8.276e+04 | 210.43 | 1.58 | 194.14 | 1514.27 | 7.601e+05 |
| 92 | 54 | 7.599e+05 | -1813.97 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 616.12 | 0.85 | -310.58 | -1813.97 | 7.355e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|-------|---------|----------|-----------|
| | | 7.355e+05 | -1860.33 | 4.79e-06 | 0.0 | 60.0 | 8.277e+04 | 196.12 | 0.85 | -310.58 | -1860.33 | 7.599e+05 |
| 92 | 55 | 7.599e+05 | 1902.90 | -0.01 | -420.00 | 0.0 | 8.278e+04 | 612.43 | -1.02 | 212.20 | 1866.69 | 7.357e+05 |
| | | 7.357e+05 | 1866.69 | -4.44e-06 | 0.0 | 60.0 | 8.278e+04 | 192.43 | -1.02 | 212.20 | 1902.90 | 7.599e+05 |
| 92 | 78 | 7.600e+05 | -532.10 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 620.47 | 0.30 | -91.58 | -532.10 | 7.354e+05 |
| | | 7.354e+05 | -543.03 | 1.37e-06 | 0.0 | 60.0 | 8.277e+04 | 200.47 | 0.30 | -91.58 | -543.03 | 7.600e+05 |
| 92 | 82 | 7.600e+05 | -513.32 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 620.47 | -0.52 | -75.61 | -513.32 | 7.354e+05 |
| | | 7.354e+05 | -543.02 | 3.21e-06 | 0.0 | 60.0 | 8.277e+04 | 200.47 | -0.52 | -75.61 | -543.02 | 7.600e+05 |
| 92 | 83 | 7.598e+05 | 585.59 | -0.01 | -420.00 | 0.0 | 8.278e+04 | 608.08 | 0.35 | -22.77 | 566.04 | 7.359e+05 |
| | | 7.359e+05 | 566.04 | -2.69e-06 | 0.0 | 60.0 | 8.278e+04 | 188.08 | 0.35 | -22.77 | 585.59 | 7.598e+05 |
| 92 | 84 | 7.600e+05 | 585.90 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 620.47 | 0.55 | 43.34 | 554.37 | 7.354e+05 |
| | | 7.354e+05 | 554.37 | -3.17e-06 | 0.0 | 60.0 | 8.277e+04 | 200.47 | 0.55 | 43.34 | 585.90 | 7.600e+05 |
| 92 | 85 | 7.599e+05 | 26.36 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 614.27 | -0.08 | -49.19 | 26.36 | 7.356e+05 |
| | | 7.356e+05 | 21.28 | 0.0 | 0.0 | 60.0 | 8.277e+04 | 194.27 | -0.08 | -49.19 | 21.28 | 7.599e+05 |
| 92 | 87 | 1.880e+06 | 343.72 | -0.01 | -420.00 | 0.0 | 1.964e+05 | -1321.65 | 1.87 | 1318.44 | 231.36 | 1.880e+06 |
| | | 1.788e+06 | 231.36 | -9.39e-06 | 0.0 | 60.0 | 1.964e+05 | -1741.65 | 1.87 | 1318.44 | 343.72 | 1.788e+06 |
| 92 | 88 | 7.235e+05 | 24.50 | -0.01 | -420.00 | 0.0 | 7.882e+04 | 594.92 | -0.10 | -57.96 | 24.50 | 7.004e+05 |
| | | 7.004e+05 | 18.64 | 0.0 | 0.0 | 60.0 | 7.882e+04 | 174.92 | -0.10 | -57.96 | 18.64 | 7.235e+05 |
| 92 | 97 | 1.793e+06 | 313.43 | -0.01 | -420.00 | 0.0 | 1.881e+05 | -1113.13 | 1.69 | 1188.13 | 212.23 | 1.793e+06 |
| | | 1.714e+06 | 212.23 | -8.46e-06 | 0.0 | 60.0 | 1.881e+05 | -1533.13 | 1.69 | 1188.13 | 313.43 | 1.714e+06 |
| 92 | 98 | 7.573e+05 | 26.19 | -0.01 | -420.00 | 0.0 | 8.249e+04 | 612.89 | -0.09 | -49.99 | 26.19 | 7.331e+05 |
| | | 7.331e+05 | 21.04 | 0.0 | 0.0 | 60.0 | 8.249e+04 | 192.89 | -0.09 | -49.99 | 21.04 | 7.573e+05 |
| 92 | 102 | 7.599e+05 | 26.36 | -0.01 | -420.00 | 0.0 | 8.277e+04 | 614.27 | -0.08 | -49.19 | 26.36 | 7.356e+05 |
| | | 7.356e+05 | 21.28 | 0.0 | 0.0 | 60.0 | 8.277e+04 | 194.27 | -0.08 | -49.19 | 21.28 | 7.599e+05 |
| 93 | 2 | 2.655e+06 | 727.18 | 0.06 | -546.00 | 0.0 | 2.725e+05 | -5091.47 | 3.60 | 1566.37 | 511.32 | 2.655e+06 |
| | | 2.333e+06 | 511.32 | -1.32e-05 | 0.0 | 60.0 | 2.725e+05 | -5637.47 | 3.60 | 1566.37 | 727.18 | 2.333e+06 |
| 93 | 7 | 7.053e+05 | 17.32 | 9.81e-03 | -420.00 | 0.0 | 7.685e+04 | -164.77 | -0.14 | -62.05 | 17.32 | 7.053e+05 |
| | | 6.828e+05 | 8.71 | 0.0 | 0.0 | 60.0 | 7.685e+04 | -584.77 | -0.14 | -62.05 | 8.71 | 6.828e+05 |
| 93 | 18 | 2.647e+06 | 727.18 | 0.06 | -546.00 | 0.0 | 2.717e+05 | -5087.33 | 3.60 | 1566.37 | 511.32 | 2.647e+06 |
| | | 2.325e+06 | 511.32 | -1.32e-05 | 0.0 | 60.0 | 2.717e+05 | -5633.33 | 3.60 | 1566.37 | 727.18 | 2.325e+06 |
| 93 | 21 | 7.600e+05 | -4686.41 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -198.57 | 4.66 | 493.05 | -4954.20 | 7.600e+05 |
| | | 7.354e+05 | -4954.20 | -2.79e-05 | 0.0 | 60.0 | 8.277e+04 | -618.57 | 4.66 | 493.05 | -4686.41 | 7.354e+05 |
| 93 | 24 | 7.598e+05 | 4996.77 | 0.01 | -420.00 | 0.0 | 8.278e+04 | -188.77 | -4.90 | -600.06 | 4996.77 | 7.598e+05 |
| | | 7.359e+05 | 4714.60 | 2.87e-05 | 0.0 | 60.0 | 8.278e+04 | -608.77 | -4.90 | -600.06 | 4714.60 | 7.359e+05 |
| 93 | 45 | 7.601e+05 | -1412.78 | 0.01 | -420.00 | 0.0 | 8.276e+04 | -209.84 | 1.03 | 15.65 | -1470.91 | 7.601e+05 |
| | | 7.349e+05 | -1470.91 | -7.38e-06 | 0.0 | 60.0 | 8.276e+04 | -629.84 | 1.03 | 15.65 | -1412.78 | 7.349e+05 |
| 93 | 49 | 7.601e+05 | -1462.41 | 0.01 | -420.00 | 0.0 | 8.276e+04 | -209.84 | -1.14 | 58.24 | -1470.87 | 7.601e+05 |
| | | 7.349e+05 | -1470.87 | -2.08e-06 | 0.0 | 60.0 | 8.276e+04 | -629.84 | -1.14 | 58.24 | -1462.41 | 7.349e+05 |
| 93 | 51 | 7.601e+05 | 1514.27 | 0.01 | -420.00 | 0.0 | 8.276e+04 | -209.81 | 0.39 | -339.23 | 1514.27 | 7.601e+05 |
| | | 7.349e+05 | 1459.92 | 4.20e-06 | 0.0 | 60.0 | 8.276e+04 | -629.81 | 0.39 | -339.23 | 1459.92 | 7.349e+05 |
| 93 | 52 | 7.596e+05 | 1513.44 | 0.01 | -420.00 | 0.0 | 8.279e+04 | -177.50 | 0.90 | -165.26 | 1513.44 | 7.596e+05 |
| | | 7.364e+05 | 1490.60 | 2.92e-06 | 0.0 | 60.0 | 8.279e+04 | -597.50 | 0.90 | -165.26 | 1490.60 | 7.364e+05 |
| 93 | 53 | 7.599e+05 | -1763.63 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -195.55 | 1.69 | 154.41 | -1860.33 | 7.599e+05 |
| | | 7.356e+05 | -1860.33 | -1.03e-05 | 0.0 | 60.0 | 8.277e+04 | -615.55 | 1.69 | 154.41 | -1763.63 | 7.356e+05 |
| 93 | 56 | 7.598e+05 | 1902.90 | 0.01 | -420.00 | 0.0 | 8.278e+04 | -191.79 | -1.93 | -261.42 | 1902.90 | 7.598e+05 |
| | | 7.357e+05 | 1791.81 | 1.11e-05 | 0.0 | 60.0 | 8.278e+04 | -611.79 | -1.93 | -261.42 | 1791.81 | 7.357e+05 |
| 93 | 77 | 7.600e+05 | -525.58 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -199.87 | 0.32 | -27.16 | -543.03 | 7.600e+05 |
| | | 7.354e+05 | -543.03 | -2.53e-06 | 0.0 | 60.0 | 8.277e+04 | -619.87 | 0.32 | -27.16 | -525.58 | 7.354e+05 |
| 93 | 81 | 7.600e+05 | -543.02 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -199.87 | -0.50 | -11.17 | -543.02 | 7.600e+05 |
| | | 7.354e+05 | -544.34 | 0.0 | 0.0 | 60.0 | 8.277e+04 | -619.87 | -0.50 | -11.17 | -544.34 | 7.354e+05 |
| 93 | 83 | 7.600e+05 | 585.90 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -199.86 | 0.07 | -161.96 | 585.90 | 7.600e+05 |
| | | 7.354e+05 | 560.87 | 1.85e-06 | 0.0 | 60.0 | 8.277e+04 | -619.86 | 0.07 | -161.96 | 560.87 | 7.354e+05 |
| 93 | 84 | 7.598e+05 | 585.59 | 0.01 | -420.00 | 0.0 | 8.278e+04 | -187.47 | 0.27 | -95.84 | 585.59 | 7.598e+05 |
| | | 7.359e+05 | 572.53 | 1.36e-06 | 0.0 | 60.0 | 8.278e+04 | -607.47 | 0.27 | -95.84 | 572.53 | 7.359e+05 |
| 93 | 85 | 7.599e+05 | 21.28 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -193.67 | -0.12 | -53.51 | 21.28 | 7.599e+05 |
| | | 7.357e+05 | 14.09 | 0.0 | 0.0 | 60.0 | 8.277e+04 | -613.67 | -0.12 | -53.51 | 14.09 | 7.357e+05 |
| 93 | 87 | 1.871e+06 | 486.67 | 0.04 | -420.00 | 0.0 | 1.927e+05 | -3420.14 | 2.38 | 1037.11 | 343.72 | 1.871e+06 |
| | | 1.653e+06 | 343.72 | -8.75e-06 | 0.0 | 60.0 | 1.927e+05 | -3840.14 | 2.38 | 1037.11 | 486.67 | 1.653e+06 |
| 93 | 88 | 7.235e+05 | 18.64 | 0.01 | -420.00 | 0.0 | 7.882e+04 | -174.40 | -0.14 | -59.20 | 18.64 | 7.235e+05 |
| | | 7.004e+05 | 10.50 | 0.0 | 0.0 | 60.0 | 7.882e+04 | -594.40 | -0.14 | -59.20 | 10.50 | 7.004e+05 |
| 93 | 95 | 1.866e+06 | 486.67 | 0.04 | -420.00 | 0.0 | 1.922e+05 | -3417.38 | 2.38 | 1037.11 | 343.72 | 1.866e+06 |
| | | 1.648e+06 | 343.72 | -8.75e-06 | 0.0 | 60.0 | 1.922e+05 | -3837.38 | 2.38 | 1037.11 | 486.67 | 1.648e+06 |
| 93 | 97 | 1.788e+06 | 442.05 | 0.04 | -420.00 | 0.0 | 1.848e+05 | -3112.35 | 2.14 | 932.24 | 313.42 | 1.788e+06 |
| | | 1.589e+06 | 313.42 | -7.87e-06 | 0.0 | 60.0 | 1.848e+05 | -3532.35 | 2.14 | 932.24 | 442.05 | 1.589e+06 |
| 93 | 98 | 7.573e+05 | 21.04 | 0.01 | -420.00 | 0.0 | 8.249e+04 | -192.29 | -0.12 | -54.03 | 21.04 | 7.573e+05 |
| | | 7.331e+05 | 13.77 | 0.0 | 0.0 | 60.0 | 8.249e+04 | -612.29 | -0.12 | -54.03 | 13.77 | 7.331e+05 |
| 93 | 102 | 7.599e+05 | 21.28 | 0.01 | -420.00 | 0.0 | 8.277e+04 | -193.67 | -0.12 | -53.51 | 21.28 | 7.599e+05 |
| | | 7.357e+05 | 14.09 | 0.0 | 0.0 | 60.0 | 8.277e+04 | -613.67 | -0.12 | -53.51 | 14.09 | 7.357e+05 |
| 94 | 2 | 2.556e+06 | 992.57 | 0.13 | -546.00 | 0.0 | 2.628e+05 | -7354.58 | 4.42 | 1029.41 | 727.18 | 2.556e+06 |
| | | 2.099e+06 | 727.18 | -1.13e-05 | 0.0 | 60.0 | 2.628e+05 | -7900.58 | 4.42 | 1029.41 | 992.57 | 2.099e+06 |
| 94 | 7 | 7.102e+05 | 8.71 | 0.03 | -420.00 | 0.0 | 7.567e+04 | -915.35 | -0.18 | -55.94 | 8.71 | 7.102e+05 |
| | | 6.427e+05 | -2.16 | 0.0 | 0.0 | 60.0 | 7.567e+04 | -1335.35 | -0.18 | -55.94 | -2.16 | 6.427e+05 |
| 94 | 18 | 2.548e+06 | 992.57 | 0.13 | -546.00 | 0.0 | 2.620e+05 | -7342.17 | 4.42 | 1029.41 | 727.18 | 2.548e+06 |
| | | 2.091e+06 | 727.18 | -1.13e-05 | 0.0 | 60.0 | 2.620e+05 | -7888.17 | 4.42 | 1029.41 | 992.57 | 2.091e+06 |
| 94 | 30 | 7.651e+05 | -4412.60 | 0.03 | -420.00 | 0.0 | 8.152e+04 | -997.92 | 8.49 | 1416.84 | -4861.07 | 7.651e+05 |
| | | 6.921e+05 | -4861.07 | -4.81e-05 | 0.0 | 60.0 | 8.152e+04 | -1417.92 | 8.49 | 1416.84 | -4412.60 | 6.921e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|--------|----------|----------|-----------|
| 94 | 31 | 7.652e+05 | 4889.26 | 0.03 | -420.00 | 0.0 | 8.149e+04 | -1006.55 | -8.80 | -1522.76 | 4889.26 | 7.652e+05 |
| | | 6.928e+05 | 4422.30 | 4.92e-05 | 0.0 | 60.0 | 8.149e+04 | -1426.55 | -8.80 | -1522.76 | 4422.30 | 6.928e+05 |
| 94 | 43 | 7.654e+05 | 1490.61 | 0.03 | -420.00 | 0.0 | 8.146e+04 | -1016.79 | -2.54 | -422.67 | 1490.61 | 7.654e+05 |
| | | 6.935e+05 | 1356.54 | 1.46e-05 | 0.0 | 60.0 | 8.146e+04 | -1436.79 | -2.54 | -422.67 | 1356.54 | 6.935e+05 |
| 94 | 45 | 7.654e+05 | -1251.91 | 0.03 | -420.00 | 0.0 | 8.146e+04 | -1016.82 | 2.86 | 270.47 | -1412.78 | 7.654e+05 |
| | | 6.935e+05 | -1412.78 | -1.83e-05 | 0.0 | 60.0 | 8.146e+04 | -1436.82 | 2.86 | 270.47 | -1251.91 | 6.935e+05 |
| 94 | 48 | 7.649e+05 | 1440.97 | 0.03 | -420.00 | 0.0 | 8.155e+04 | -987.65 | -3.16 | -376.38 | 1440.97 | 7.649e+05 |
| | | 6.913e+05 | 1261.62 | 1.94e-05 | 0.0 | 60.0 | 8.155e+04 | -1407.65 | -3.16 | -376.38 | 1261.62 | 6.913e+05 |
| 94 | 50 | 7.649e+05 | -1288.69 | 0.03 | -420.00 | 0.0 | 8.155e+04 | -987.68 | 2.69 | 473.36 | -1431.73 | 7.649e+05 |
| | | 6.913e+05 | -1431.73 | -1.47e-05 | 0.0 | 60.0 | 8.155e+04 | -1407.68 | 2.69 | 473.36 | -1288.69 | 6.913e+05 |
| 94 | 62 | 7.651e+05 | -1666.05 | 0.03 | -420.00 | 0.0 | 8.151e+04 | -1000.58 | 3.11 | 505.28 | -1829.67 | 7.651e+05 |
| | | 6.923e+05 | -1829.67 | -1.78e-05 | 0.0 | 60.0 | 8.151e+04 | -1420.58 | 3.11 | 505.28 | -1666.05 | 6.923e+05 |
| 94 | 63 | 7.652e+05 | 1857.86 | 0.03 | -420.00 | 0.0 | 8.150e+04 | -1003.89 | -3.42 | -611.19 | 1857.86 | 7.652e+05 |
| | | 6.926e+05 | 1675.76 | 1.90e-05 | 0.0 | 60.0 | 8.150e+04 | -1423.89 | -3.42 | -611.19 | 1675.76 | 6.926e+05 |
| 94 | 75 | 7.653e+05 | 572.53 | 0.03 | -420.00 | 0.0 | 8.149e+04 | -1007.82 | -1.05 | -193.36 | 572.53 | 7.653e+05 |
| | | 6.929e+05 | 516.18 | 5.88e-06 | 0.0 | 60.0 | 8.149e+04 | -1427.82 | -1.05 | -193.36 | 516.18 | 6.929e+05 |
| 94 | 77 | 7.653e+05 | -470.60 | 0.03 | -420.00 | 0.0 | 8.149e+04 | -1007.83 | 0.98 | 70.08 | -525.58 | 7.653e+05 |
| | | 6.929e+05 | -525.58 | -6.57e-06 | 0.0 | 60.0 | 8.149e+04 | -1427.83 | 0.98 | 70.08 | -470.60 | 6.929e+05 |
| 94 | 80 | 7.651e+05 | 553.77 | 0.03 | -420.00 | 0.0 | 8.152e+04 | -996.64 | -1.29 | -175.99 | 553.77 | 7.651e+05 |
| | | 6.920e+05 | 480.30 | 7.68e-06 | 0.0 | 60.0 | 8.152e+04 | -1416.64 | -1.29 | -175.99 | 480.30 | 6.920e+05 |
| 94 | 82 | 7.651e+05 | -484.37 | 0.03 | -420.00 | 0.0 | 8.152e+04 | -996.65 | 0.92 | 146.96 | -532.68 | 7.651e+05 |
| | | 6.920e+05 | -532.68 | -5.20e-06 | 0.0 | 60.0 | 8.152e+04 | -1416.65 | 0.92 | 146.96 | -484.37 | 6.920e+05 |
| 94 | 85 | 7.652e+05 | 14.09 | 0.03 | -420.00 | 0.0 | 8.151e+04 | -1002.24 | -0.15 | -52.96 | 14.09 | 7.652e+05 |
| | | 6.924e+05 | 4.85 | 0.0 | 0.0 | 60.0 | 8.151e+04 | -1422.24 | -0.15 | -52.96 | 4.85 | 6.924e+05 |
| 94 | 87 | 1.806e+06 | 662.36 | 0.09 | -420.00 | 0.0 | 1.861e+05 | -5036.69 | 2.93 | 679.21 | 486.67 | 1.806e+06 |
| | | 1.491e+06 | 486.67 | -7.49e-06 | 0.0 | 60.0 | 1.861e+05 | -5456.69 | 2.93 | 679.21 | 662.36 | 1.491e+06 |
| 94 | 88 | 7.285e+05 | 10.50 | 0.03 | -420.00 | 0.0 | 7.762e+04 | -944.31 | -0.17 | -54.95 | 10.50 | 7.285e+05 |
| | | 6.593e+05 | 0.18 | 0.0 | 0.0 | 60.0 | 7.762e+04 | -1364.31 | -0.17 | -54.95 | 0.18 | 6.593e+05 |
| 94 | 95 | 1.801e+06 | 662.36 | 0.09 | -420.00 | 0.0 | 1.855e+05 | -5028.41 | 2.93 | 679.21 | 486.67 | 1.801e+06 |
| | | 1.487e+06 | 486.67 | -7.49e-06 | 0.0 | 60.0 | 1.855e+05 | -5448.41 | 2.93 | 679.21 | 662.36 | 1.487e+06 |
| 94 | 97 | 1.730e+06 | 600.05 | 0.08 | -420.00 | 0.0 | 1.786e+05 | -4677.92 | 2.63 | 607.46 | 442.05 | 1.730e+06 |
| | | 1.437e+06 | 442.05 | -6.72e-06 | 0.0 | 60.0 | 1.786e+05 | -5097.92 | 2.63 | 607.46 | 600.05 | 1.437e+06 |
| 94 | 98 | 7.625e+05 | 13.77 | 0.03 | -420.00 | 0.0 | 8.123e+04 | -998.10 | -0.16 | -53.14 | 13.77 | 7.625e+05 |
| | | 6.901e+05 | 4.43 | 0.0 | 0.0 | 60.0 | 8.123e+04 | -1418.10 | -0.16 | -53.14 | 4.43 | 6.901e+05 |
| 94 | 102 | 7.652e+05 | 14.09 | 0.03 | -420.00 | 0.0 | 8.151e+04 | -1002.24 | -0.15 | -52.96 | 14.09 | 7.652e+05 |
| | | 6.924e+05 | 4.85 | 0.0 | 0.0 | 60.0 | 8.151e+04 | -1422.24 | -0.15 | -52.96 | 4.85 | 6.924e+05 |
| 95 | 2 | 2.402e+06 | 1300.22 | 0.19 | -546.00 | 0.0 | 2.497e+05 | -9259.80 | 5.13 | 360.08 | 992.57 | 2.402e+06 |
| | | 1.830e+06 | 992.57 | -8.20e-06 | 0.0 | 60.0 | 2.497e+05 | -9805.80 | 5.13 | 360.08 | 1300.22 | 1.830e+06 |
| 95 | 5 | 9.229e+05 | -0.70 | 0.06 | -546.00 | 0.0 | 9.700e+04 | -2211.35 | -0.27 | -57.43 | -0.70 | 9.229e+05 |
| | | 7.739e+05 | -16.67 | 0.0 | 0.0 | 60.0 | 9.700e+04 | -2757.35 | -0.27 | -57.43 | -16.67 | 7.739e+05 |
| 95 | 7 | 6.975e+05 | -2.16 | 0.05 | -420.00 | 0.0 | 7.331e+04 | -1667.58 | -0.21 | -43.37 | -2.16 | 6.975e+05 |
| | | 5.848e+05 | -14.83 | 0.0 | 0.0 | 60.0 | 7.331e+04 | -2087.58 | -0.21 | -43.37 | -14.83 | 5.848e+05 |
| 95 | 20 | 2.169e+06 | 1302.06 | 0.17 | -420.00 | 0.0 | 2.252e+05 | -8695.33 | 5.18 | 374.14 | 991.12 | 2.169e+06 |
| | | 1.635e+06 | 991.12 | -8.40e-06 | 0.0 | 60.0 | 2.252e+05 | -9115.33 | 5.18 | 374.14 | 1302.06 | 1.635e+06 |
| 95 | 33 | 7.517e+05 | -3672.04 | 0.05 | -420.00 | 0.0 | 7.895e+04 | -1816.06 | 13.81 | 2083.45 | -4412.60 | 7.517e+05 |
| | | 6.305e+05 | -4412.60 | -8.40e-05 | 0.0 | 60.0 | 7.895e+04 | -2236.06 | 13.81 | 2083.45 | -3672.04 | 6.305e+05 |
| 95 | 36 | 7.513e+05 | 4422.31 | 0.05 | -420.00 | 0.0 | 7.899e+04 | -1809.07 | -14.18 | -2177.15 | 4422.31 | 7.513e+05 |
| | | 6.297e+05 | 3659.77 | 8.53e-05 | 0.0 | 60.0 | 7.899e+04 | -2229.07 | -14.18 | -2177.15 | 3659.77 | 6.297e+05 |
| 95 | 45 | 7.521e+05 | -1010.82 | 0.05 | -420.00 | 0.0 | 7.890e+04 | -1824.13 | 4.35 | 497.67 | -1251.91 | 7.521e+05 |
| | | 6.315e+05 | -1251.91 | -2.81e-05 | 0.0 | 60.0 | 7.890e+04 | -2244.13 | 4.35 | 497.67 | -1010.82 | 6.315e+05 |
| 95 | 47 | 7.521e+05 | 1203.46 | 0.05 | -420.00 | 0.0 | 7.890e+04 | -1824.12 | -5.07 | -715.13 | 1203.46 | 7.521e+05 |
| | | 6.315e+05 | 919.11 | 3.03e-05 | 0.0 | 60.0 | 7.890e+04 | -2244.12 | -5.07 | -715.13 | 919.11 | 6.315e+05 |
| 95 | 48 | 7.508e+05 | 1261.62 | 0.05 | -420.00 | 0.0 | 7.903e+04 | -1801.01 | -4.72 | -591.37 | 1261.62 | 7.508e+05 |
| | | 6.287e+05 | 998.56 | 2.94e-05 | 0.0 | 60.0 | 7.903e+04 | -2221.01 | -4.72 | -591.37 | 998.56 | 6.287e+05 |
| 95 | 50 | 7.508e+05 | -1062.61 | 0.05 | -420.00 | 0.0 | 7.903e+04 | -1801.02 | 4.21 | 659.69 | -1288.69 | 7.508e+05 |
| | | 6.287e+05 | -1288.69 | -2.52e-05 | 0.0 | 60.0 | 7.903e+04 | -2221.02 | 4.21 | 659.69 | -1062.61 | 6.287e+05 |
| 95 | 65 | 7.515e+05 | -1393.07 | 0.05 | -420.00 | 0.0 | 7.896e+04 | -1813.91 | 5.10 | 763.66 | -1666.06 | 7.515e+05 |
| | | 6.303e+05 | -1666.06 | -3.13e-05 | 0.0 | 60.0 | 7.896e+04 | -2233.91 | 5.10 | 763.66 | -1393.07 | 6.303e+05 |
| 95 | 68 | 7.514e+05 | 1675.76 | 0.05 | -420.00 | 0.0 | 7.897e+04 | -1811.23 | -5.47 | -857.36 | 1675.76 | 7.514e+05 |
| | | 6.300e+05 | 1380.80 | 3.27e-05 | 0.0 | 60.0 | 7.897e+04 | -2231.23 | -5.47 | -857.36 | 1380.80 | 6.300e+05 |
| 95 | 77 | 7.517e+05 | -386.37 | 0.05 | -420.00 | 0.0 | 7.894e+04 | -1817.00 | 1.53 | 160.57 | -470.60 | 7.517e+05 |
| | | 6.306e+05 | -470.60 | -1.02e-05 | 0.0 | 60.0 | 7.894e+04 | -2237.00 | 1.53 | 160.57 | -386.37 | 6.306e+05 |
| 95 | 79 | 7.517e+05 | 458.20 | 0.05 | -420.00 | 0.0 | 7.894e+04 | -1817.00 | -2.03 | -301.30 | 458.20 | 7.517e+05 |
| | | 6.306e+05 | 343.91 | 1.19e-05 | 0.0 | 60.0 | 7.894e+04 | -2237.00 | -2.03 | -301.30 | 343.91 | 6.306e+05 |
| 95 | 80 | 7.512e+05 | 480.30 | 0.05 | -420.00 | 0.0 | 7.899e+04 | -1808.13 | -1.90 | -254.27 | 480.30 | 7.512e+05 |
| | | 6.296e+05 | 374.11 | 1.15e-05 | 0.0 | 60.0 | 7.899e+04 | -2228.13 | -1.90 | -254.27 | 374.11 | 6.296e+05 |
| 95 | 82 | 7.512e+05 | -405.76 | 0.05 | -420.00 | 0.0 | 7.899e+04 | -1808.14 | 1.48 | 221.93 | -484.38 | 7.512e+05 |
| | | 6.296e+05 | -484.38 | -9.13e-06 | 0.0 | 60.0 | 7.899e+04 | -2228.14 | 1.48 | 221.93 | -405.76 | 6.296e+05 |
| 95 | 85 | 7.515e+05 | 4.85 | 0.05 | -420.00 | 0.0 | 7.897e+04 | -1812.57 | -0.18 | -46.85 | 4.85 | 7.515e+05 |
| | | 6.301e+05 | -6.13 | 0.0 | 0.0 | 60.0 | 7.897e+04 | -2232.57 | -0.18 | -46.85 | -6.13 | 6.301e+05 |
| 95 | 87 | 1.702e+06 | 865.99 | 0.13 | -420.00 | 0.0 | 1.770e+05 | -6414.88 | 3.39 | 233.81 | 662.36 | 1.702e+06 |
| | | 1.304e+06 | 662.36 | -5.38e-06 | 0.0 | 60.0 | 1.770e+05 | -6834.88 | 3.39 | 233.81 | 865.99 | 1.304e+06 |
| 95 | 88 | 7.155e+05 | 0.18 | 0.05 | -420.00 | 0.0 | 7.520e+04 | -1715.91 | -0.20 | -44.53 | 0.18 | 7.155e+05 |
| | | 5.999e+05 | -11.93 | 0.0 | 0.0 | 60.0 | 7.520e+04 | -2135.91 | -0.20 | -44.53 | -11.93 | 5.999e+05 |
| 95 | 95 | 1.696e+06 | 865.99 | 0.13 | -420.00 | 0.0 | 1.764e+05 | -6401.07 | 3.39 | 233.81 | 662.36 | 1.696e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|----------|----------|-----------|
| | | 1.300e+06 | 662.36 | -5.38e-06 | 0.0 | 60.0 | 1.764e+05 | -6821.07 | 3.39 | 233.81 | 865.99 | 1.300e+06 |
| 95 | 97 | 1.634e+06 | 783.05 | 0.13 | -420.00 | 0.0 | 1.701e+05 | -6029.21 | 3.05 | 204.03 | 600.05 | 1.634e+06 |
| | | 1.260e+06 | 600.05 | -4.81e-06 | 0.0 | 60.0 | 1.701e+05 | -6449.21 | 3.05 | 204.03 | 783.05 | 1.260e+06 |
| 95 | 98 | 7.489e+05 | 4.43 | 0.05 | -420.00 | 0.0 | 7.870e+04 | -1805.66 | -0.18 | -46.64 | 4.43 | 7.489e+05 |
| | | 6.280e+05 | -6.66 | 0.0 | 0.0 | 60.0 | 7.870e+04 | -2225.66 | -0.18 | -46.64 | -6.66 | 6.280e+05 |
| 95 | 102 | 7.515e+05 | 4.85 | 0.05 | -420.00 | 0.0 | 7.897e+04 | -1812.57 | -0.18 | -46.85 | 4.85 | 7.515e+05 |
| | | 6.301e+05 | -6.13 | 0.0 | 0.0 | 60.0 | 7.897e+04 | -2232.57 | -0.18 | -46.85 | -6.13 | 6.301e+05 |
| 96 | 2 | 2.203e+06 | 1621.79 | 0.25 | -546.00 | 0.0 | 2.336e+05 | -1.100e+04 | 5.36 | -448.53 | 1300.22 | 2.203e+06 |
| | | 1.526e+06 | 1300.22 | -3.84e-06 | 0.0 | 60.0 | 2.336e+05 | -1.155e+04 | 5.36 | -448.53 | 1621.79 | 1.526e+06 |
| 96 | 5 | 8.827e+05 | -16.67 | 0.09 | -546.00 | 0.0 | 9.232e+04 | -3209.96 | -0.28 | -35.24 | -16.67 | 8.827e+05 |
| | | 6.737e+05 | -33.48 | 0.0 | 0.0 | 60.0 | 9.232e+04 | -3755.96 | -0.28 | -35.24 | -33.48 | 6.737e+05 |
| 96 | 7 | 6.671e+05 | -14.83 | 0.07 | -420.00 | 0.0 | 6.978e+04 | -2422.29 | -0.22 | -24.66 | -14.83 | 6.671e+05 |
| | | 5.092e+05 | -28.09 | 0.0 | 0.0 | 60.0 | 6.978e+04 | -2842.29 | -0.22 | -24.66 | -28.09 | 5.092e+05 |
| 96 | 20 | 1.980e+06 | 1627.18 | 0.22 | -420.00 | 0.0 | 2.103e+05 | -1.018e+04 | 5.42 | -437.95 | 1302.06 | 1.980e+06 |
| | | 1.356e+06 | 1302.06 | -4.00e-06 | 0.0 | 60.0 | 2.103e+05 | -1.060e+04 | 5.42 | -437.95 | 1627.18 | 1.356e+06 |
| 96 | 33 | 7.190e+05 | -2743.11 | 0.07 | -420.00 | 0.0 | 7.513e+04 | -2627.80 | 17.56 | 2460.53 | -3672.04 | 7.190e+05 |
| | | 5.490e+05 | -3672.04 | -1.15e-04 | 0.0 | 60.0 | 7.513e+04 | -3047.80 | 17.56 | 2460.53 | -2743.11 | 5.490e+05 |
| 96 | 36 | 7.184e+05 | 3659.78 | 0.07 | -420.00 | 0.0 | 7.518e+04 | -2623.32 | -17.95 | -2531.03 | 3659.78 | 7.184e+05 |
| | | 5.481e+05 | 2707.19 | 1.17e-04 | 0.0 | 60.0 | 7.518e+04 | -3043.32 | -17.95 | -2531.03 | 2707.19 | 5.481e+05 |
| 96 | 45 | 7.198e+05 | -724.79 | 0.07 | -420.00 | 0.0 | 7.507e+04 | -2632.97 | 5.34 | 651.89 | -1010.82 | 7.198e+05 |
| | | 5.501e+05 | -1010.82 | -3.63e-05 | 0.0 | 60.0 | 7.507e+04 | -3052.97 | 5.34 | 651.89 | -724.79 | 5.501e+05 |
| 96 | 48 | 7.177e+05 | 998.56 | 0.07 | -420.00 | 0.0 | 7.524e+04 | -2618.15 | -5.74 | -722.39 | 998.56 | 7.177e+05 |
| | | 5.471e+05 | 688.87 | 3.77e-05 | 0.0 | 60.0 | 7.524e+04 | -3038.15 | -5.74 | -722.39 | 688.87 | 5.471e+05 |
| 96 | 50 | 7.177e+05 | -785.38 | 0.07 | -420.00 | 0.0 | 7.524e+04 | -2618.16 | 5.24 | 756.35 | -1062.61 | 7.177e+05 |
| | | 5.471e+05 | -1062.61 | -3.44e-05 | 0.0 | 60.0 | 7.524e+04 | -3038.16 | 5.24 | 756.35 | -785.38 | 5.471e+05 |
| 96 | 51 | 7.198e+05 | 1050.34 | 0.07 | -420.00 | 0.0 | 7.507e+04 | -2632.96 | -5.64 | -826.85 | 1050.34 | 7.198e+05 |
| | | 5.501e+05 | 749.46 | 3.59e-05 | 0.0 | 60.0 | 7.507e+04 | -3052.96 | -5.64 | -826.85 | 749.46 | 5.501e+05 |
| 96 | 65 | 7.188e+05 | -1049.19 | 0.07 | -420.00 | 0.0 | 7.515e+04 | -2626.42 | 6.51 | 917.19 | -1393.07 | 7.188e+05 |
| | | 5.488e+05 | -1393.07 | -4.32e-05 | 0.0 | 60.0 | 7.515e+04 | -3046.42 | 6.51 | 917.19 | -1049.19 | 5.488e+05 |
| 96 | 68 | 7.186e+05 | 1380.80 | 0.07 | -420.00 | 0.0 | 7.517e+04 | -2624.70 | -6.90 | -987.69 | 1380.80 | 7.186e+05 |
| | | 5.484e+05 | 1013.27 | 4.46e-05 | 0.0 | 60.0 | 7.517e+04 | -3044.70 | -6.90 | -987.69 | 1013.27 | 5.484e+05 |
| 96 | 77 | 7.191e+05 | -285.63 | 0.07 | -420.00 | 0.0 | 7.512e+04 | -2628.40 | 1.90 | 227.24 | -386.37 | 7.191e+05 |
| | | 5.492e+05 | -386.37 | -1.33e-05 | 0.0 | 60.0 | 7.512e+04 | -3048.40 | 1.90 | 227.24 | -285.63 | 5.492e+05 |
| 96 | 80 | 7.183e+05 | 374.11 | 0.07 | -420.00 | 0.0 | 7.519e+04 | -2622.72 | -2.29 | -297.74 | 374.11 | 7.183e+05 |
| | | 5.480e+05 | 249.71 | 1.47e-05 | 0.0 | 60.0 | 7.519e+04 | -3042.72 | -2.29 | -297.74 | 249.71 | 5.480e+05 |
| 96 | 82 | 7.183e+05 | -308.28 | 0.07 | -420.00 | 0.0 | 7.519e+04 | -2622.72 | 1.86 | 266.77 | -405.76 | 7.183e+05 |
| | | 5.480e+05 | -405.76 | -1.26e-05 | 0.0 | 60.0 | 7.519e+04 | -3042.72 | 1.86 | 266.77 | -308.28 | 5.480e+05 |
| 96 | 83 | 7.191e+05 | 393.49 | 0.07 | -420.00 | 0.0 | 7.512e+04 | -2628.40 | -2.25 | -337.27 | 393.49 | 7.191e+05 |
| | | 5.492e+05 | 272.36 | 1.40e-05 | 0.0 | 60.0 | 7.512e+04 | -3048.40 | -2.25 | -337.27 | 272.36 | 5.492e+05 |
| 96 | 85 | 7.187e+05 | -6.13 | 0.07 | -420.00 | 0.0 | 7.516e+04 | -2625.56 | -0.20 | -35.25 | -6.13 | 7.187e+05 |
| | | 5.486e+05 | -17.96 | 0.0 | 0.0 | 60.0 | 7.516e+04 | -3045.56 | -0.20 | -35.25 | -17.96 | 5.486e+05 |
| 96 | 87 | 1.564e+06 | 1078.80 | 0.17 | -420.00 | 0.0 | 1.658e+05 | -7682.75 | 3.55 | -303.72 | 865.99 | 1.564e+06 |
| | | 1.091e+06 | 865.99 | -2.49e-06 | 0.0 | 60.0 | 1.658e+05 | -8102.75 | 3.55 | -303.72 | 1078.80 | 1.091e+06 |
| 96 | 88 | 6.843e+05 | -11.93 | 0.07 | -420.00 | 0.0 | 7.157e+04 | -2490.05 | -0.21 | -28.19 | -11.93 | 6.843e+05 |
| | | 5.223e+05 | -24.71 | 0.0 | 0.0 | 60.0 | 7.157e+04 | -2910.05 | -0.21 | -28.19 | -24.71 | 5.223e+05 |
| 96 | 95 | 1.559e+06 | 1078.80 | 0.17 | -420.00 | 0.0 | 1.652e+05 | -7663.40 | 3.55 | -303.72 | 865.99 | 1.559e+06 |
| | | 1.087e+06 | 865.99 | -2.49e-06 | 0.0 | 60.0 | 1.652e+05 | -8083.40 | 3.55 | -303.72 | 1078.80 | 1.087e+06 |
| 96 | 97 | 1.506e+06 | 974.10 | 0.17 | -420.00 | 0.0 | 1.595e+05 | -7281.57 | 3.18 | -282.07 | 783.05 | 1.506e+06 |
| | | 1.057e+06 | 783.05 | -2.21e-06 | 0.0 | 60.0 | 1.595e+05 | -7701.57 | 3.18 | -282.07 | 974.10 | 1.057e+06 |
| 96 | 98 | 7.163e+05 | -6.66 | 0.07 | -420.00 | 0.0 | 7.490e+04 | -2615.88 | -0.20 | -34.61 | -6.66 | 7.163e+05 |
| | | 5.467e+05 | -18.57 | 0.0 | 0.0 | 60.0 | 7.490e+04 | -3035.88 | -0.20 | -34.61 | -18.57 | 5.467e+05 |
| 96 | 102 | 7.187e+05 | -6.13 | 0.07 | -420.00 | 0.0 | 7.516e+04 | -2625.56 | -0.20 | -35.25 | -6.13 | 7.187e+05 |
| | | 5.486e+05 | -17.96 | 0.0 | 0.0 | 60.0 | 7.516e+04 | -3045.56 | -0.20 | -35.25 | -17.96 | 5.486e+05 |
| 97 | 2 | 1.963e+06 | 1877.90 | 0.29 | -546.00 | 0.0 | 2.148e+05 | -1.267e+04 | 4.27 | -1374.20 | 1621.79 | 1.963e+06 |
| | | 1.186e+06 | 1621.79 | 3.36e-06 | 0.0 | 60.0 | 2.148e+05 | -1.322e+04 | 4.27 | -1374.20 | 1877.90 | 1.186e+06 |
| 97 | 5 | 8.190e+05 | -33.48 | 0.11 | -546.00 | 0.0 | 8.607e+04 | -4211.98 | -0.24 | -7.76 | -33.48 | 8.190e+05 |
| | | 5.499e+05 | -47.64 | 1.69e-06 | 0.0 | 60.0 | 8.607e+04 | -4757.98 | -0.24 | -7.76 | -47.64 | 5.499e+05 |
| 97 | 7 | 6.189e+05 | -28.09 | 0.08 | -420.00 | 0.0 | 6.505e+04 | -3179.58 | -0.18 | -1.89 | -28.09 | 6.189e+05 |
| | | 4.156e+05 | -39.11 | 1.16e-06 | 0.0 | 60.0 | 6.505e+04 | -3599.58 | -0.18 | -1.89 | -39.11 | 4.156e+05 |
| 97 | 20 | 1.756e+06 | 1886.43 | 0.27 | -420.00 | 0.0 | 1.931e+05 | -1.160e+04 | 4.32 | -1368.33 | 1627.18 | 1.756e+06 |
| | | 1.047e+06 | 1627.18 | 3.16e-06 | 0.0 | 60.0 | 1.931e+05 | -1.202e+04 | 4.32 | -1368.33 | 1886.43 | 1.047e+06 |
| 97 | 33 | 6.672e+05 | -1778.41 | 0.09 | -420.00 | 0.0 | 7.004e+04 | -3442.02 | 19.35 | 2530.00 | -2743.11 | 6.672e+05 |
| | | 4.482e+05 | -2743.11 | -1.41e-04 | 0.0 | 60.0 | 7.004e+04 | -3862.02 | 19.35 | 2530.00 | -1778.41 | 4.482e+05 |
| 97 | 36 | 6.664e+05 | 2707.20 | 0.09 | -420.00 | 0.0 | 7.010e+04 | -3440.60 | -19.70 | -2569.17 | 2707.20 | 6.664e+05 |
| | | 4.473e+05 | 1721.55 | 1.42e-04 | 0.0 | 60.0 | 7.010e+04 | -3860.60 | -19.70 | -2569.17 | 1721.55 | 4.473e+05 |
| 97 | 45 | 6.682e+05 | -452.43 | 0.09 | -420.00 | 0.0 | 6.997e+04 | -3443.84 | 5.75 | 722.58 | -724.79 | 6.682e+05 |
| | | 4.493e+05 | -724.79 | -4.25e-05 | 0.0 | 60.0 | 6.997e+04 | -3863.84 | 5.75 | 722.58 | -452.43 | 4.493e+05 |
| 97 | 46 | 6.655e+05 | -358.78 | 0.09 | -420.00 | 0.0 | 7.016e+04 | -3438.80 | 5.78 | 748.77 | -632.81 | 6.655e+05 |
| | | 4.462e+05 | -632.81 | -4.27e-05 | 0.0 | 60.0 | 7.016e+04 | -3858.80 | 5.78 | 748.77 | -358.78 | 4.462e+05 |
| 97 | 48 | 6.655e+05 | 688.87 | 0.09 | -420.00 | 0.0 | 7.016e+04 | -3438.79 | -6.10 | -761.74 | 688.87 | 6.655e+05 |
| | | 4.462e+05 | 395.57 | 4.39e-05 | 0.0 | 60.0 | 7.016e+04 | -3858.79 | -6.10 | -761.74 | 395.57 | 4.462e+05 |
| 97 | 51 | 6.682e+05 | 749.46 | 0.09 | -420.00 | 0.0 | 6.997e+04 | -3443.84 | -6.05 | -798.73 | 749.46 | 6.682e+05 |
| | | 4.493e+05 | 445.53 | 4.32e-05 | 0.0 | 60.0 | 6.997e+04 | -3863.84 | -6.05 | -798.73 | 445.53 | 4.493e+05 |
| 97 | 65 | 6.670e+05 | -690.48 | 0.09 | -420.00 | 0.0 | 7.006e+04 | -3441.58 | 7.21 | 958.61 | -1049.19 | 6.670e+05 |
| | | 4.479e+05 | -1049.19 | -5.29e-05 | 0.0 | 60.0 | 7.006e+04 | -3861.58 | 7.21 | 958.61 | -690.48 | 4.479e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|----------|----------|-----------|
| 97 | 68 | 6.667e+05 | 1013.27 | 0.09 | -420.00 | 0.0 | 7.008e+04 | -3441.04 | -7.55 | -997.78 | 1013.27 | 6.667e+05 |
| | | 4.476e+05 | 633.62 | 5.42e-05 | 0.0 | 60.0 | 7.008e+04 | -3861.04 | -7.55 | -997.78 | 633.62 | 4.476e+05 |
| 97 | 77 | 6.674e+05 | -189.04 | 0.09 | -420.00 | 0.0 | 7.003e+04 | -3442.28 | 2.06 | 265.33 | -285.63 | 6.674e+05 |
| | | 4.483e+05 | -285.63 | -1.57e-05 | 0.0 | 60.0 | 7.003e+04 | -3862.28 | 2.06 | 265.33 | -189.04 | 4.483e+05 |
| 97 | 78 | 6.663e+05 | -153.45 | 0.09 | -420.00 | 0.0 | 7.010e+04 | -3440.35 | 2.08 | 275.29 | -250.67 | 6.663e+05 |
| | | 4.472e+05 | -250.67 | -1.57e-05 | 0.0 | 60.0 | 7.010e+04 | -3860.35 | 2.08 | 275.29 | -153.45 | 4.472e+05 |
| 97 | 80 | 6.663e+05 | 249.71 | 0.09 | -420.00 | 0.0 | 7.010e+04 | -3440.34 | -2.41 | -304.50 | 249.71 | 6.663e+05 |
| | | 4.472e+05 | 132.18 | 1.70e-05 | 0.0 | 60.0 | 7.010e+04 | -3860.34 | -2.41 | -304.50 | 132.18 | 4.472e+05 |
| 97 | 83 | 6.674e+05 | 272.36 | 0.09 | -420.00 | 0.0 | 7.003e+04 | -3442.28 | -2.39 | -318.46 | 272.36 | 6.674e+05 |
| | | 4.483e+05 | 150.79 | 1.68e-05 | 0.0 | 60.0 | 7.003e+04 | -3862.28 | -2.39 | -318.46 | 150.79 | 4.483e+05 |
| 97 | 85 | 6.668e+05 | -17.96 | 0.09 | -420.00 | 0.0 | 7.007e+04 | -3441.31 | -0.17 | -19.58 | -17.96 | 6.668e+05 |
| | | 4.478e+05 | -28.43 | 0.0 | 0.0 | 60.0 | 7.007e+04 | -3861.31 | -0.17 | -19.58 | -28.43 | 4.478e+05 |
| 97 | 87 | 1.397e+06 | 1248.14 | 0.21 | -420.00 | 0.0 | 1.525e+05 | -8906.00 | 2.82 | -918.75 | 1078.80 | 1.397e+06 |
| | | 8.505e+05 | 1078.80 | 2.33e-06 | 0.0 | 60.0 | 1.525e+05 | -9326.00 | 2.82 | -918.75 | 1248.14 | 8.505e+05 |
| 97 | 88 | 6.349e+05 | -24.71 | 0.08 | -420.00 | 0.0 | 6.672e+04 | -3266.83 | -0.18 | -7.78 | -24.71 | 6.349e+05 |
| | | 4.263e+05 | -35.55 | 1.36e-06 | 0.0 | 60.0 | 6.672e+04 | -3686.83 | -0.18 | -7.78 | -35.55 | 4.263e+05 |
| 97 | 95 | 1.393e+06 | 1248.14 | 0.21 | -420.00 | 0.0 | 1.521e+05 | -8881.09 | 2.82 | -918.75 | 1078.80 | 1.393e+06 |
| | | 8.474e+05 | 1078.80 | 2.33e-06 | 0.0 | 60.0 | 1.521e+05 | -9301.09 | 2.82 | -918.75 | 1248.14 | 8.474e+05 |
| 97 | 97 | 1.349e+06 | 1125.73 | 0.20 | -420.00 | 0.0 | 1.469e+05 | -8494.13 | 2.53 | -837.52 | 974.10 | 1.349e+06 |
| | | 8.268e+05 | 974.10 | 2.15e-06 | 0.0 | 60.0 | 1.469e+05 | -8914.13 | 2.53 | -837.52 | 1125.73 | 8.268e+05 |
| 97 | 98 | 6.646e+05 | -18.57 | 0.09 | -420.00 | 0.0 | 6.983e+04 | -3428.85 | -0.18 | -18.51 | -18.57 | 6.646e+05 |
| | | 4.462e+05 | -29.08 | 0.0 | 0.0 | 60.0 | 6.983e+04 | -3848.85 | -0.18 | -18.51 | -29.08 | 4.462e+05 |
| 97 | 102 | 6.668e+05 | -17.96 | 0.09 | -420.00 | 0.0 | 7.007e+04 | -3441.31 | -0.17 | -19.58 | -17.96 | 6.668e+05 |
| | | 4.478e+05 | -28.43 | 0.0 | 0.0 | 60.0 | 7.007e+04 | -3861.31 | -0.17 | -19.58 | -28.43 | 4.478e+05 |
| 98 | 2 | 1.684e+06 | 1877.90 | 0.33 | -546.00 | 0.0 | 1.934e+05 | -1.432e+04 | -0.39 | -2323.91 | 1877.90 | 1.684e+06 |
| | | 8.086e+05 | 1854.57 | 1.26e-05 | 0.0 | 60.0 | 1.934e+05 | -1.486e+04 | -0.39 | -2323.91 | 1854.57 | 8.086e+05 |
| 98 | 5 | 7.317e+05 | -47.64 | 0.12 | -546.00 | 0.0 | 7.825e+04 | -5215.05 | -0.08 | 19.22 | -47.64 | 7.317e+05 |
| | | 4.024e+05 | -52.53 | 0.0 | 0.0 | 60.0 | 7.825e+04 | -5761.05 | -0.08 | 19.22 | -52.53 | 4.024e+05 |
| 98 | 7 | 5.529e+05 | -39.11 | 0.09 | -420.00 | 0.0 | 5.914e+04 | -3937.69 | -0.06 | 20.23 | -39.11 | 5.529e+05 |
| | | 3.041e+05 | -42.55 | 0.0 | 0.0 | 60.0 | 5.914e+04 | -4357.69 | -0.06 | 20.23 | -42.55 | 3.041e+05 |
| 98 | 20 | 1.499e+06 | 1886.43 | 0.30 | -420.00 | 0.0 | 1.736e+05 | -1.299e+04 | -0.36 | -2322.89 | 1886.43 | 1.499e+06 |
| | | 7.069e+05 | 1864.55 | 1.24e-05 | 0.0 | 60.0 | 1.736e+05 | -1.341e+04 | -0.36 | -2322.89 | 1864.55 | 7.069e+05 |
| 98 | 33 | 5.962e+05 | -1064.26 | 0.10 | -420.00 | 0.0 | 6.367e+04 | -4258.60 | 18.90 | 2376.89 | -1778.41 | 5.962e+05 |
| | | 3.281e+05 | -1778.41 | -1.59e-04 | 0.0 | 60.0 | 6.367e+04 | -4678.60 | 18.90 | 2376.89 | -1064.26 | 3.281e+05 |
| 98 | 36 | 5.953e+05 | 1721.55 | 0.10 | -420.00 | 0.0 | 6.373e+04 | -4257.15 | -19.06 | -2383.63 | 1721.55 | 5.953e+05 |
| | | 3.273e+05 | 997.73 | 1.60e-04 | 0.0 | 60.0 | 6.373e+04 | -4677.15 | -19.06 | -2383.63 | 997.73 | 3.273e+05 |
| 98 | 49 | 5.973e+05 | -380.26 | 0.10 | -420.00 | 0.0 | 6.361e+04 | -4260.48 | 5.53 | 698.25 | -596.04 | 5.973e+05 |
| | | 3.290e+05 | -596.04 | -4.75e-05 | 0.0 | 60.0 | 6.361e+04 | -4680.48 | 5.53 | 698.25 | -380.26 | 3.290e+05 |
| 98 | 50 | 5.942e+05 | -297.41 | 0.10 | -420.00 | 0.0 | 6.380e+04 | -4255.23 | 5.71 | 725.64 | -502.38 | 5.942e+05 |
| | | 3.263e+05 | -502.38 | -4.72e-05 | 0.0 | 60.0 | 6.380e+04 | -4675.23 | 5.71 | 725.64 | -297.41 | 3.263e+05 |
| 98 | 51 | 5.973e+05 | 445.53 | 0.10 | -420.00 | 0.0 | 6.361e+04 | -4260.51 | -5.87 | -732.37 | 445.53 | 5.973e+05 |
| | | 3.290e+05 | 230.88 | 4.83e-05 | 0.0 | 60.0 | 6.361e+04 | -4680.51 | -5.87 | -732.37 | 230.88 | 3.290e+05 |
| 98 | 52 | 5.942e+05 | 539.18 | 0.10 | -420.00 | 0.0 | 6.380e+04 | -4255.27 | -5.69 | -704.98 | 539.18 | 5.942e+05 |
| | | 3.263e+05 | 313.73 | 4.86e-05 | 0.0 | 60.0 | 6.380e+04 | -4675.27 | -5.69 | -704.98 | 313.73 | 3.263e+05 |
| 98 | 65 | 5.959e+05 | -422.10 | 0.10 | -420.00 | 0.0 | 6.369e+04 | -4258.15 | 7.10 | 917.75 | -690.48 | 5.959e+05 |
| | | 3.278e+05 | -690.48 | -5.98e-05 | 0.0 | 60.0 | 6.369e+04 | -4678.15 | 7.10 | 917.75 | -422.10 | 3.278e+05 |
| 98 | 68 | 5.956e+05 | 633.62 | 0.10 | -420.00 | 0.0 | 6.371e+04 | -4257.59 | -7.26 | -924.49 | 633.62 | 5.956e+05 |
| | | 3.275e+05 | 355.57 | 6.09e-05 | 0.0 | 60.0 | 6.371e+04 | -4677.59 | -7.26 | -924.49 | 355.57 | 3.275e+05 |
| 98 | 81 | 5.963e+05 | -164.24 | 0.10 | -420.00 | 0.0 | 6.367e+04 | -4258.87 | 2.04 | 268.23 | -243.24 | 5.963e+05 |
| | | 3.282e+05 | -243.24 | -1.76e-05 | 0.0 | 60.0 | 6.367e+04 | -4678.87 | 2.04 | 268.23 | -164.24 | 3.282e+05 |
| 98 | 82 | 5.952e+05 | -132.76 | 0.10 | -420.00 | 0.0 | 6.374e+04 | -4256.86 | 2.11 | 278.64 | -207.65 | 5.952e+05 |
| | | 3.272e+05 | -207.65 | -1.75e-05 | 0.0 | 60.0 | 6.374e+04 | -4676.86 | 2.11 | 278.64 | -132.76 | 3.272e+05 |
| 98 | 83 | 5.963e+05 | 150.79 | 0.10 | -420.00 | 0.0 | 6.367e+04 | -4258.89 | -2.27 | -285.38 | 150.79 | 5.963e+05 |
| | | 3.282e+05 | 66.23 | 1.86e-05 | 0.0 | 60.0 | 6.367e+04 | -4678.89 | -2.27 | -285.38 | 66.23 | 3.282e+05 |
| 98 | 84 | 5.952e+05 | 186.38 | 0.10 | -420.00 | 0.0 | 6.374e+04 | -4256.87 | -2.20 | -274.97 | 186.38 | 5.952e+05 |
| | | 3.272e+05 | 97.71 | 1.87e-05 | 0.0 | 60.0 | 6.374e+04 | -4676.87 | -2.20 | -274.97 | 97.71 | 3.272e+05 |
| 98 | 85 | 5.957e+05 | -28.43 | 0.10 | -420.00 | 0.0 | 6.370e+04 | -4257.87 | -0.08 | -3.37 | -28.43 | 5.957e+05 |
| | | 3.277e+05 | -33.27 | 1.08e-06 | 0.0 | 60.0 | 6.370e+04 | -4677.87 | -0.08 | -3.37 | -33.27 | 3.277e+05 |
| 98 | 87 | 1.202e+06 | 1248.14 | 0.24 | -420.00 | 0.0 | 1.374e+05 | -1.011e+04 | -0.27 | -1549.72 | 1248.14 | 1.202e+06 |
| | | 5.827e+05 | 1231.94 | 8.46e-06 | 0.0 | 60.0 | 1.374e+05 | -1.053e+04 | -0.27 | -1549.72 | 1231.94 | 5.827e+05 |
| 98 | 88 | 5.672e+05 | -35.55 | 0.10 | -420.00 | 0.0 | 6.066e+04 | -4044.42 | -0.07 | 12.37 | -35.55 | 5.672e+05 |
| | | 3.119e+05 | -39.45 | 0.0 | 0.0 | 60.0 | 6.066e+04 | -4464.42 | -0.07 | 12.37 | -39.45 | 3.119e+05 |
| 98 | 95 | 1.198e+06 | 1248.14 | 0.24 | -420.00 | 0.0 | 1.370e+05 | -1.008e+04 | -0.27 | -1549.72 | 1248.14 | 1.198e+06 |
| | | 5.805e+05 | 1231.94 | 8.46e-06 | 0.0 | 60.0 | 1.370e+05 | -1.050e+04 | -0.27 | -1549.72 | 1231.94 | 5.805e+05 |
| 98 | 97 | 1.163e+06 | 1125.73 | 0.23 | -420.00 | 0.0 | 1.324e+05 | -9691.61 | -0.26 | -1406.67 | 1125.73 | 1.163e+06 |
| | | 5.694e+05 | 1109.98 | 7.68e-06 | 0.0 | 60.0 | 1.324e+05 | -1.011e+04 | -0.26 | -1406.67 | 1109.98 | 5.694e+05 |
| 98 | 98 | 5.937e+05 | -29.08 | 0.10 | -420.00 | 0.0 | 6.348e+04 | -4242.62 | -0.08 | -1.94 | -29.08 | 5.937e+05 |
| | | 3.265e+05 | -33.83 | 1.04e-06 | 0.0 | 60.0 | 6.348e+04 | -4662.62 | -0.08 | -1.94 | -33.83 | 3.265e+05 |
| 98 | 102 | 5.957e+05 | -28.43 | 0.10 | -420.00 | 0.0 | 6.370e+04 | -4257.87 | -0.08 | -3.37 | -28.43 | 5.957e+05 |
| | | 3.277e+05 | -33.27 | 1.08e-06 | 0.0 | 60.0 | 6.370e+04 | -4677.87 | -0.08 | -3.37 | -33.27 | 3.277e+05 |
| 99 | 2 | 1.366e+06 | 1854.57 | 0.36 | -546.00 | 0.0 | 1.694e+05 | -1.593e+04 | -8.73 | -3088.34 | 1854.57 | 1.366e+06 |
| | | 3.934e+05 | 1330.72 | 2.35e-05 | 0.0 | 60.0 | 1.694e+05 | -1.648e+04 | -8.73 | -3088.34 | 1330.72 | 3.934e+05 |
| 99 | 5 | 6.205e+05 | -39.44 | 0.14 | -546.00 | 0.0 | 6.887e+04 | -6211.19 | 0.22 | 36.80 | -52.53 | 6.205e+05 |
| | | 2.314e+05 | -52.53 | 0.0 | 0.0 | 60.0 | 6.887e+04 | -6757.19 | 0.22 | 36.80 | -39.44 | 2.314e+05 |
| 99 | 7 | 4.689e+05 | -31.43 | 0.11 | -420.00 | 0.0 | 5.205e+04 | -4690.57 | 0.19 | 34.43 | -42.55 | 4.689e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|----------|-----------|-----------|------|-----------|------------|--------|----------|----------|------------|
| | | 1.749e+05 | -42.55 | 0.0 | 0.0 | 60.0 | 5.205e+04 | -5110.57 | 0.19 | 34.43 | -31.43 | 1.749e+05 |
| 99 | 20 | 1.209e+06 | 1864.55 | 0.33 | -420.00 | 0.0 | 1.520e+05 | -1.436e+04 | -8.76 | -3090.71 | 1864.55 | 1.209e+06 |
| | | 3.349e+05 | 1338.73 | 2.34e-05 | 0.0 | 60.0 | 1.520e+05 | -1.478e+04 | -8.76 | -3090.71 | 1338.73 | 3.349e+05 |
| 99 | 25 | 5.057e+05 | -925.04 | 0.11 | -420.00 | 0.0 | 5.604e+04 | -5070.98 | 14.84 | 2257.79 | -925.04 | 5.057e+05 |
| | | 1.888e+05 | -1267.86 | -1.61e-04 | 0.0 | 60.0 | 5.604e+04 | -5490.98 | 14.84 | 2257.79 | -1267.86 | 1.888e+05 |
| 99 | 28 | 5.048e+05 | 1214.47 | 0.11 | -420.00 | 0.0 | 5.609e+04 | -5066.49 | -14.62 | -2242.05 | 858.51 | 5.048e+05 |
| | | 1.882e+05 | 858.51 | 1.62e-04 | 0.0 | 60.0 | 5.609e+04 | -5486.49 | -14.62 | -2242.05 | 1214.47 | 1.882e+05 |
| 99 | 47 | 5.067e+05 | 313.62 | 0.11 | -420.00 | 0.0 | 5.598e+04 | -5076.24 | -4.53 | -626.54 | 189.12 | 5.067e+05 |
| | | 1.896e+05 | 189.12 | 4.84e-05 | 0.0 | 60.0 | 5.598e+04 | -5496.24 | -4.53 | -626.54 | 313.62 | 1.896e+05 |
| 99 | 49 | 5.067e+05 | -351.90 | 0.11 | -420.00 | 0.0 | 5.598e+04 | -5076.22 | 4.70 | 712.25 | -380.26 | 5.067e+05 |
| | | 1.896e+05 | -380.26 | -5.09e-05 | 0.0 | 60.0 | 5.598e+04 | -5496.22 | 4.70 | 712.25 | -351.90 | 1.896e+05 |
| 99 | 50 | 5.037e+05 | -293.12 | 0.11 | -420.00 | 0.0 | 5.614e+04 | -5061.22 | 5.10 | 637.81 | -297.41 | 5.037e+05 |
| | | 1.874e+05 | -297.41 | -5.03e-05 | 0.0 | 60.0 | 5.614e+04 | -5481.22 | 5.10 | 637.81 | -293.12 | 1.874e+05 |
| 99 | 52 | 5.037e+05 | 313.73 | 0.11 | -420.00 | 0.0 | 5.614e+04 | -5061.25 | -4.48 | -696.51 | 313.73 | 5.037e+05 |
| | | 1.874e+05 | 298.51 | 5.15e-05 | 0.0 | 60.0 | 5.614e+04 | -5481.25 | -4.48 | -696.51 | 298.51 | 1.874e+05 |
| 99 | 57 | 5.054e+05 | -369.64 | 0.11 | -420.00 | 0.0 | 5.605e+04 | -5069.60 | 5.69 | 885.33 | -369.64 | 5.054e+05 |
| | | 1.886e+05 | -494.95 | -6.07e-05 | 0.0 | 60.0 | 5.605e+04 | -5489.60 | 5.69 | 885.33 | -494.95 | 1.886e+05 |
| 99 | 60 | 5.050e+05 | 441.56 | 0.11 | -420.00 | 0.0 | 5.607e+04 | -5067.87 | -5.47 | -869.59 | 303.11 | 5.050e+05 |
| | | 1.884e+05 | 303.11 | 6.14e-05 | 0.0 | 60.0 | 5.607e+04 | -5487.87 | -5.47 | -869.59 | 441.56 | 1.884e+05 |
| 99 | 79 | 5.058e+05 | 101.61 | 0.11 | -420.00 | 0.0 | 5.603e+04 | -5071.61 | -1.65 | -239.95 | 50.49 | 5.058e+05 |
| | | 1.889e+05 | 50.49 | 1.85e-05 | 0.0 | 60.0 | 5.603e+04 | -5491.61 | -1.65 | -239.95 | 101.61 | 1.889e+05 |
| 99 | 81 | 5.058e+05 | -149.26 | 0.11 | -420.00 | 0.0 | 5.603e+04 | -5071.61 | 1.85 | 282.36 | -164.24 | 5.058e+05 |
| | | 1.889e+05 | -164.24 | -1.90e-05 | 0.0 | 60.0 | 5.603e+04 | -5491.61 | 1.85 | 282.36 | -149.26 | 1.889e+05 |
| 99 | 82 | 5.046e+05 | -126.92 | 0.11 | -420.00 | 0.0 | 5.609e+04 | -5065.85 | 2.00 | 254.07 | -132.76 | 5.046e+05 |
| | | 1.881e+05 | -132.76 | -1.88e-05 | 0.0 | 60.0 | 5.609e+04 | -5485.85 | 2.00 | 254.07 | -126.92 | 1.881e+05 |
| 99 | 84 | 5.046e+05 | 97.71 | 0.11 | -420.00 | 0.0 | 5.609e+04 | -5065.86 | -1.63 | -266.62 | 97.71 | 5.046e+05 |
| | | 1.881e+05 | 95.86 | 1.97e-05 | 0.0 | 60.0 | 5.609e+04 | -5485.86 | -1.63 | -266.62 | 95.86 | 1.881e+05 |
| 99 | 85 | 5.052e+05 | -26.70 | 0.11 | -420.00 | 0.0 | 5.606e+04 | -5068.74 | 0.11 | 7.87 | -33.27 | 5.052e+05 |
| | | 1.885e+05 | -33.27 | 0.0 | 0.0 | 60.0 | 5.606e+04 | -5488.74 | 0.11 | 7.87 | -26.70 | 1.885e+05 |
| 99 | 87 | 9.778e+05 | 1231.94 | 0.26 | -420.00 | 0.0 | 1.204e+05 | -1.130e+04 | -5.81 | -2057.85 | 1231.94 | 9.778e+05 |
| | | 2.874e+05 | 883.59 | 1.57e-05 | 0.0 | 60.0 | 1.204e+05 | -1.172e+04 | -5.81 | -2057.85 | 883.59 | 2.874e+05 |
| 99 | 88 | 4.810e+05 | -29.85 | 0.11 | -420.00 | 0.0 | 5.339e+04 | -4816.63 | 0.16 | 25.58 | -39.45 | 4.810e+05 |
| | | 1.794e+05 | -39.45 | 0.0 | 0.0 | 60.0 | 5.339e+04 | -5236.63 | 0.16 | 25.58 | -29.85 | 1.794e+05 |
| 99 | 92 | 4.810e+05 | -29.85 | 0.11 | -420.00 | 0.0 | 5.339e+04 | -4816.63 | 0.16 | 25.58 | -39.45 | 4.810e+05 |
| | | 1.794e+05 | -39.45 | 0.0 | 0.0 | 60.0 | 5.339e+04 | -5236.63 | 0.16 | 25.58 | -29.85 | 1.794e+05 |
| 99 | 95 | 9.744e+05 | 1231.94 | 0.26 | -420.00 | 0.0 | 1.200e+05 | -1.126e+04 | -5.81 | -2057.85 | 1231.94 | 9.744e+05 |
| | | 2.861e+05 | 883.59 | 1.57e-05 | 0.0 | 60.0 | 1.200e+05 | -1.168e+04 | -5.81 | -2057.85 | 883.59 | 2.861e+05 |
| 99 | 97 | 9.492e+05 | 1109.98 | 0.25 | -420.00 | 0.0 | 1.160e+05 | -1.087e+04 | -5.25 | -1864.32 | 1109.98 | 9.492e+05 |
| | | 2.845e+05 | 794.88 | 1.42e-05 | 0.0 | 60.0 | 1.160e+05 | -1.129e+04 | -5.25 | -1864.32 | 794.88 | 2.845e+05 |
| 99 | 98 | 5.035e+05 | -26.98 | 0.11 | -420.00 | 0.0 | 5.587e+04 | -5050.72 | 0.11 | 9.48 | -33.83 | 5.035e+05 |
| | | 1.878e+05 | -33.83 | 0.0 | 0.0 | 60.0 | 5.587e+04 | -5470.72 | 0.11 | 9.48 | -26.98 | 1.878e+05 |
| 99 | 102 | 5.052e+05 | -26.70 | 0.11 | -420.00 | 0.0 | 5.606e+04 | -5068.74 | 0.11 | 7.87 | -33.27 | 5.052e+05 |
| | | 1.885e+05 | -33.27 | 0.0 | 0.0 | 60.0 | 5.606e+04 | -5488.74 | 0.11 | 7.87 | -26.70 | 1.885e+05 |
| 100 | 2 | 1.000e+06 | 1330.72 | 0.38 | -546.00 | 0.0 | 1.432e+05 | -1.744e+04 | -15.02 | -3429.25 | 1330.72 | 1.000e+06 |
| | | -6.296e+04 | 429.27 | 3.32e-05 | 0.0 | 60.0 | 1.432e+05 | -1.799e+04 | -15.02 | -3429.25 | 429.27 | -6.296e+04 |
| 100 | 5 | 4.826e+05 | -6.57 | 0.15 | -546.00 | 0.0 | 5.805e+04 | -7177.01 | 0.55 | 37.35 | -39.44 | 4.826e+05 |
| | | 3.559e+04 | -39.44 | 0.0 | 0.0 | 60.0 | 5.805e+04 | -7723.01 | 0.55 | 37.35 | -6.57 | 3.559e+04 |
| 100 | 7 | 3.647e+05 | -4.44 | 0.11 | -420.00 | 0.0 | 4.387e+04 | -5420.55 | 0.45 | 34.51 | -31.43 | 3.647e+05 |
| | | 2.687e+04 | -31.43 | 0.0 | 0.0 | 60.0 | 4.387e+04 | -5840.55 | 0.45 | 34.51 | -4.44 | 2.687e+04 |
| 100 | 8 | 8.781e+05 | 1337.87 | 0.35 | -420.00 | 0.0 | 1.285e+05 | -1.562e+04 | -15.10 | -3427.54 | 1337.87 | 8.781e+05 |
| | | -7.200e+04 | 431.88 | 3.32e-05 | 0.0 | 60.0 | 1.285e+05 | -1.604e+04 | -15.10 | -3427.54 | 431.88 | -7.200e+04 |
| 100 | 20 | 8.781e+05 | 1338.73 | 0.35 | -420.00 | 0.0 | 1.285e+05 | -1.562e+04 | -15.12 | -3432.10 | 1338.73 | 8.781e+05 |
| | | -7.200e+04 | 431.40 | 3.32e-05 | 0.0 | 60.0 | 1.285e+05 | -1.604e+04 | -15.12 | -3432.10 | 431.40 | -7.200e+04 |
| 100 | 26 | 3.926e+05 | 1474.30 | 0.12 | -420.00 | 0.0 | 4.727e+04 | -5851.41 | 9.82 | 2219.19 | -1250.23 | 3.926e+05 |
| | | 2.887e+04 | -1250.23 | -1.59e-04 | 0.0 | 60.0 | 4.727e+04 | -6271.41 | 9.82 | 2219.19 | 1474.30 | 2.887e+04 |
| 100 | 27 | 3.934e+05 | 1196.83 | 0.12 | -420.00 | 0.0 | 4.723e+04 | -5858.34 | -9.16 | -2200.25 | 1196.83 | 3.934e+05 |
| | | 2.928e+04 | -1488.48 | 1.59e-04 | 0.0 | 60.0 | 4.723e+04 | -6278.34 | -9.16 | -2200.25 | -1488.48 | 2.928e+04 |
| 100 | 49 | 3.943e+05 | -351.90 | 0.12 | -420.00 | 0.0 | 4.718e+04 | -5866.40 | 3.27 | 738.57 | -351.90 | 3.943e+05 |
| | | 2.976e+04 | -377.78 | -5.18e-05 | 0.0 | 60.0 | 4.718e+04 | -6286.40 | 3.27 | 738.57 | -377.78 | 2.976e+04 |
| 100 | 50 | 3.916e+05 | -293.12 | 0.12 | -420.00 | 0.0 | 4.732e+04 | -5843.34 | 3.84 | 632.44 | -293.12 | 3.916e+05 |
| | | 2.839e+04 | -353.15 | -5.09e-05 | 0.0 | 60.0 | 4.732e+04 | -6263.34 | 3.84 | 632.44 | -353.15 | 2.839e+04 |
| 100 | 51 | 3.943e+05 | 338.96 | 0.12 | -420.00 | 0.0 | 4.718e+04 | -5866.41 | -3.18 | -613.50 | 239.73 | 3.943e+05 |
| | | 2.976e+04 | 239.73 | 5.11e-05 | 0.0 | 60.0 | 4.718e+04 | -6286.41 | -3.18 | -613.50 | 338.96 | 2.976e+04 |
| 100 | 52 | 3.916e+05 | 363.60 | 0.12 | -420.00 | 0.0 | 4.732e+04 | -5843.34 | -2.61 | -719.62 | 298.51 | 3.916e+05 |
| | | 2.840e+04 | 298.51 | 5.20e-05 | 0.0 | 60.0 | 4.732e+04 | -6263.34 | -2.61 | -719.62 | 363.60 | 2.840e+04 |
| 100 | 58 | 3.928e+05 | 553.15 | 0.12 | -420.00 | 0.0 | 4.726e+04 | -5853.54 | 3.94 | 871.80 | -488.25 | 3.928e+05 |
| | | 2.900e+04 | -488.25 | -5.99e-05 | 0.0 | 60.0 | 4.726e+04 | -6273.54 | 3.94 | 871.80 | 553.15 | 2.900e+04 |
| 100 | 59 | 3.931e+05 | 434.86 | 0.12 | -420.00 | 0.0 | 4.724e+04 | -5856.20 | -3.28 | -852.85 | 434.86 | 3.931e+05 |
| | | 2.916e+04 | -567.33 | 6.01e-05 | 0.0 | 60.0 | 4.724e+04 | -6276.20 | -3.28 | -852.85 | -567.33 | 2.916e+04 |
| 100 | 81 | 3.935e+05 | -147.30 | 0.12 | -420.00 | 0.0 | 4.723e+04 | -5859.29 | 1.44 | 293.22 | -149.26 | 3.935e+05 |
| | | 2.934e+04 | -149.26 | -1.96e-05 | 0.0 | 60.0 | 4.723e+04 | -6279.29 | 1.44 | 293.22 | -147.30 | 2.934e+04 |
| 100 | 82 | 3.924e+05 | -126.92 | 0.12 | -420.00 | 0.0 | 4.728e+04 | -5850.45 | 1.66 | 252.89 | -126.92 | 3.924e+05 |
| | | 2.882e+04 | -137.94 | -1.92e-05 | 0.0 | 60.0 | 4.728e+04 | -6270.45 | 1.66 | 252.89 | -137.94 | 2.882e+04 |
| 100 | 83 | 3.935e+05 | 123.75 | 0.12 | -420.00 | 0.0 | 4.723e+04 | -5859.30 | -1.01 | -233.94 | 73.52 | 3.935e+05 |
| | | 2.934e+04 | 73.52 | 1.94e-05 | 0.0 | 60.0 | 4.723e+04 | -6279.30 | -1.01 | -233.94 | 123.75 | 2.934e+04 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|--------|----------|-----------|------------|
| 100 | 84 | 3.924e+05 | 133.12 | 0.12 | -420.00 | 0.0 | 4.728e+04 | -5850.45 | -0.79 | -274.27 | 95.86 | 3.924e+05 |
| | | 2.882e+04 | 95.86 | 1.97e-05 | 0.0 | 60.0 | 4.728e+04 | -6270.45 | -0.79 | -274.27 | 133.12 | 2.882e+04 |
| 100 | 85 | 3.930e+05 | -7.09 | 0.12 | -420.00 | 0.0 | 4.725e+04 | -5854.87 | 0.33 | 9.47 | -26.70 | 3.930e+05 |
| | | 2.908e+04 | -26.70 | 0.0 | 0.0 | 60.0 | 4.725e+04 | -6274.87 | 0.33 | 9.47 | -7.09 | 2.908e+04 |
| 100 | 87 | 7.191e+05 | 883.59 | 0.27 | -420.00 | 0.0 | 1.018e+05 | -1.241e+04 | -9.97 | -2284.91 | 883.59 | 7.191e+05 |
| | | -3.810e+04 | 285.24 | 2.22e-05 | 0.0 | 60.0 | 1.018e+05 | -1.283e+04 | -9.97 | -2284.91 | 285.24 | -3.810e+04 |
| 100 | 88 | 3.741e+05 | -5.32 | 0.12 | -420.00 | 0.0 | 4.500e+04 | -5565.32 | 0.41 | 26.16 | -29.85 | 3.741e+05 |
| | | 2.760e+04 | -29.85 | 0.0 | 0.0 | 60.0 | 4.500e+04 | -5985.32 | 0.41 | 26.16 | -5.32 | 2.760e+04 |
| 100 | 89 | 7.164e+05 | 883.01 | 0.27 | -420.00 | 0.0 | 1.014e+05 | -1.237e+04 | -9.96 | -2281.87 | 883.01 | 7.164e+05 |
| | | -3.831e+04 | 285.56 | 2.21e-05 | 0.0 | 60.0 | 1.014e+05 | -1.279e+04 | -9.96 | -2281.87 | 285.56 | -3.831e+04 |
| 100 | 95 | 7.164e+05 | 883.59 | 0.27 | -420.00 | 0.0 | 1.014e+05 | -1.237e+04 | -9.97 | -2284.91 | 883.59 | 7.164e+05 |
| | | -3.831e+04 | 285.24 | 2.22e-05 | 0.0 | 60.0 | 1.014e+05 | -1.279e+04 | -9.97 | -2284.91 | 285.24 | -3.831e+04 |
| 100 | 97 | 7.010e+05 | 794.88 | 0.26 | -420.00 | 0.0 | 9.805e+04 | -1.198e+04 | -9.00 | -2067.76 | 794.88 | 7.010e+05 |
| | | -3.024e+04 | 254.70 | 2.00e-05 | 0.0 | 60.0 | 9.805e+04 | -1.240e+04 | -9.00 | -2067.76 | 254.70 | -3.024e+04 |
| 100 | 98 | 3.916e+05 | -6.93 | 0.12 | -420.00 | 0.0 | 4.709e+04 | -5834.19 | 0.33 | 10.99 | -26.98 | 3.916e+05 |
| | | 2.897e+04 | -26.98 | 0.0 | 0.0 | 60.0 | 4.709e+04 | -6254.19 | 0.33 | 10.99 | -6.93 | 2.897e+04 |
| 100 | 102 | 3.930e+05 | -7.09 | 0.12 | -420.00 | 0.0 | 4.725e+04 | -5854.87 | 0.33 | 9.47 | -26.70 | 3.930e+05 |
| | | 2.908e+04 | -26.70 | 0.0 | 0.0 | 60.0 | 4.725e+04 | -6274.87 | 0.33 | 9.47 | -7.09 | 2.908e+04 |
| 101 | 2 | 5.322e+05 | 429.27 | 0.39 | -546.00 | 0.0 | 1.174e+05 | -1.838e+04 | -11.56 | -3113.24 | 429.27 | 5.322e+05 |
| | | -5.870e+05 | -264.21 | 3.96e-05 | 0.0 | 60.0 | 1.174e+05 | -1.893e+04 | -11.56 | -3113.24 | -264.21 | -5.870e+05 |
| 101 | 4 | 4.594e+05 | 431.40 | 0.35 | -420.00 | 0.0 | 1.060e+05 | -1.644e+04 | -11.65 | -3114.67 | 431.40 | 4.594e+05 |
| | | -5.394e+05 | -267.83 | 3.96e-05 | 0.0 | 60.0 | 1.060e+05 | -1.686e+04 | -11.65 | -3114.67 | -267.83 | -5.394e+05 |
| 101 | 7 | 2.252e+05 | 19.98 | 0.12 | -420.00 | 0.0 | 3.529e+04 | -6001.62 | 0.41 | 24.11 | -4.44 | 2.252e+05 |
| | | -1.475e+05 | -4.44 | 0.0 | 0.0 | 60.0 | 3.529e+04 | -6421.62 | 0.41 | 24.11 | 19.98 | -1.475e+05 |
| 101 | 8 | 4.569e+05 | 431.88 | 0.35 | -420.00 | 0.0 | 1.056e+05 | -1.637e+04 | -11.64 | -3111.16 | 431.88 | 4.569e+05 |
| | | -5.378e+05 | -266.40 | 3.95e-05 | 0.0 | 60.0 | 1.056e+05 | -1.679e+04 | -11.64 | -3111.16 | -266.40 | -5.378e+05 |
| 101 | 26 | 2.424e+05 | 1474.30 | 0.13 | -420.00 | 0.0 | 3.803e+04 | -6476.45 | 11.37 | 2128.76 | 1474.30 | 2.424e+05 |
| | | -1.588e+05 | 957.72 | -1.48e-04 | 0.0 | 60.0 | 3.803e+04 | -6896.45 | 11.37 | 2128.76 | 957.72 | -1.588e+05 |
| 101 | 27 | 2.430e+05 | -933.55 | 0.13 | -420.00 | 0.0 | 3.800e+04 | -6485.23 | -10.73 | -2119.21 | -1488.48 | 2.430e+05 |
| | | -1.587e+05 | -1488.48 | 1.48e-04 | 0.0 | 60.0 | 3.800e+04 | -6905.23 | -10.73 | -2119.21 | -933.55 | -1.587e+05 |
| 101 | 49 | 2.438e+05 | -216.67 | 0.13 | -420.00 | 0.0 | 3.797e+04 | -6495.42 | 3.61 | 720.42 | -377.78 | 2.438e+05 |
| | | -1.585e+05 | -377.78 | -4.98e-05 | 0.0 | 60.0 | 3.797e+04 | -6915.42 | 3.61 | 720.42 | -216.67 | -1.585e+05 |
| 101 | 51 | 2.438e+05 | 338.96 | 0.13 | -420.00 | 0.0 | 3.797e+04 | -6495.44 | -2.43 | -596.14 | 338.96 | 2.438e+05 |
| | | -1.585e+05 | 233.22 | 4.87e-05 | 0.0 | 60.0 | 3.797e+04 | -6915.44 | -2.43 | -596.14 | 233.22 | -1.585e+05 |
| 101 | 52 | 2.416e+05 | 363.59 | 0.13 | -420.00 | 0.0 | 3.806e+04 | -6466.26 | -2.97 | -710.88 | 363.59 | 2.416e+05 |
| | | -1.590e+05 | 240.84 | 4.97e-05 | 0.0 | 60.0 | 3.806e+04 | -6886.26 | -2.97 | -710.88 | 240.84 | -1.590e+05 |
| 101 | 58 | 2.426e+05 | 553.15 | 0.13 | -420.00 | 0.0 | 3.802e+04 | -6479.16 | 4.50 | 830.04 | 553.15 | 2.426e+05 |
| | | -1.588e+05 | 371.94 | -5.61e-05 | 0.0 | 60.0 | 3.802e+04 | -6899.16 | 4.50 | 830.04 | 371.94 | -1.588e+05 |
| 101 | 59 | 2.428e+05 | -347.77 | 0.13 | -420.00 | 0.0 | 3.801e+04 | -6482.52 | -3.86 | -820.50 | -567.33 | 2.428e+05 |
| | | -1.587e+05 | -567.33 | 5.60e-05 | 0.0 | 60.0 | 3.801e+04 | -6902.52 | -3.86 | -820.50 | -347.77 | -1.587e+05 |
| 101 | 81 | 2.431e+05 | -75.29 | 0.13 | -420.00 | 0.0 | 3.800e+04 | -6486.43 | 1.56 | 281.98 | -147.30 | 2.431e+05 |
| | | -1.587e+05 | -147.30 | -1.88e-05 | 0.0 | 60.0 | 3.800e+04 | -6906.43 | 1.56 | 281.98 | -75.29 | -1.587e+05 |
| 101 | 83 | 2.431e+05 | 123.75 | 0.13 | -420.00 | 0.0 | 3.800e+04 | -6486.44 | -0.72 | -228.84 | 123.75 | 2.431e+05 |
| | | -1.587e+05 | 96.57 | 1.84e-05 | 0.0 | 60.0 | 3.800e+04 | -6906.44 | -0.72 | -228.84 | 96.57 | -1.587e+05 |
| 101 | 84 | 2.423e+05 | 133.12 | 0.13 | -420.00 | 0.0 | 3.803e+04 | -6475.25 | -0.92 | -272.44 | 133.12 | 2.423e+05 |
| | | -1.588e+05 | 99.46 | 1.88e-05 | 0.0 | 60.0 | 3.803e+04 | -6895.25 | -0.92 | -272.44 | 99.46 | -1.588e+05 |
| 101 | 85 | 2.427e+05 | 12.09 | 0.13 | -420.00 | 0.0 | 3.801e+04 | -6480.84 | 0.32 | 4.77 | -7.09 | 2.427e+05 |
| | | -1.587e+05 | -7.09 | 0.0 | 0.0 | 60.0 | 3.801e+04 | -6900.84 | 0.32 | 4.77 | 12.09 | -1.587e+05 |
| 101 | 87 | 3.872e+05 | 285.24 | 0.28 | -420.00 | 0.0 | 8.334e+04 | -1.312e+04 | -7.66 | -2074.86 | 285.24 | 3.872e+05 |
| | | -4.125e+05 | -174.53 | 2.64e-05 | 0.0 | 60.0 | 8.334e+04 | -1.354e+04 | -7.66 | -2074.86 | -174.53 | -4.125e+05 |
| 101 | 88 | 2.310e+05 | 17.35 | 0.12 | -420.00 | 0.0 | 3.620e+04 | -6161.36 | 0.38 | 17.66 | -5.32 | 2.310e+05 |
| | | -1.512e+05 | -5.32 | 0.0 | 0.0 | 60.0 | 3.620e+04 | -6581.36 | 0.38 | 17.66 | 17.35 | -1.512e+05 |
| 101 | 89 | 3.855e+05 | 285.56 | 0.28 | -420.00 | 0.0 | 8.309e+04 | -1.307e+04 | -7.65 | -2072.51 | 285.56 | 3.855e+05 |
| | | -4.114e+05 | -173.57 | 2.64e-05 | 0.0 | 60.0 | 8.309e+04 | -1.349e+04 | -7.65 | -2072.51 | -173.57 | -4.114e+05 |
| 101 | 97 | 3.817e+05 | 254.70 | 0.27 | -420.00 | 0.0 | 8.021e+04 | -1.270e+04 | -6.91 | -1876.39 | 254.70 | 3.817e+05 |
| | | -3.929e+05 | -159.74 | 2.38e-05 | 0.0 | 60.0 | 8.021e+04 | -1.312e+04 | -6.91 | -1876.39 | -159.74 | -3.929e+05 |
| 101 | 98 | 2.419e+05 | 12.57 | 0.12 | -420.00 | 0.0 | 3.788e+04 | -6458.02 | 0.32 | 5.94 | -6.93 | 2.419e+05 |
| | | -1.582e+05 | -6.93 | 0.0 | 0.0 | 60.0 | 3.788e+04 | -6878.02 | 0.32 | 5.94 | 12.57 | -1.582e+05 |
| 101 | 102 | 2.427e+05 | 12.09 | 0.13 | -420.00 | 0.0 | 3.801e+04 | -6480.84 | 0.32 | 4.77 | -7.09 | 2.427e+05 |
| | | -1.587e+05 | -7.09 | 0.0 | 0.0 | 60.0 | 3.801e+04 | -6900.84 | 0.32 | 4.77 | 12.09 | -1.587e+05 |
| 102 | 2 | -2.840e+05 | -8.48e-04 | 0.38 | -546.00 | 0.0 | 1.047e+05 | -2.283e+04 | 4.40 | -1926.84 | -264.21 | -2.840e+05 |
| | | -1.670e+06 | -264.21 | 4.61e-05 | 0.0 | 60.0 | 1.047e+05 | -2.338e+04 | 4.40 | -1926.84 | -8.48e-04 | -1.670e+06 |
| 102 | 4 | -2.783e+05 | -8.48e-04 | 0.34 | -420.00 | 0.0 | 9.506e+04 | -2.038e+04 | 4.46 | -1929.29 | -267.83 | -2.783e+05 |
| | | -1.514e+06 | -267.83 | 4.60e-05 | 0.0 | 60.0 | 9.506e+04 | -2.080e+04 | 4.46 | -1929.29 | -8.48e-04 | -1.514e+06 |
| 102 | 5 | -2.345e+04 | 23.61 | 0.15 | -546.00 | 0.0 | 3.945e+04 | -1.001e+04 | -0.39 | 23.26 | 23.61 | -2.345e+04 |
| | | -6.405e+05 | 2.38e-06 | 0.0 | 0.0 | 60.0 | 3.945e+04 | -1.056e+04 | -0.39 | 23.26 | 2.38e-06 | -6.405e+05 |
| 102 | 19 | -1.776e+04 | 18.55 | 0.11 | -420.00 | 0.0 | 2.982e+04 | -7562.81 | -0.31 | 18.52 | 18.55 | -1.776e+04 |
| | | -4.841e+05 | 2.01e-06 | 0.0 | 0.0 | 60.0 | 2.982e+04 | -7982.81 | -0.31 | 18.52 | 2.01e-06 | -4.841e+05 |
| 102 | 21 | -1.876e+04 | 957.72 | 0.12 | -420.00 | 0.0 | 3.211e+04 | -8158.93 | -15.96 | 1433.65 | 957.72 | -1.876e+04 |
| | | -5.213e+05 | 1.04e-03 | -1.34e-04 | 0.0 | 60.0 | 3.211e+04 | -8578.93 | -15.96 | 1433.65 | 1.04e-03 | -5.213e+05 |
| 102 | 24 | -1.919e+04 | -1.04e-03 | 0.12 | -420.00 | 0.0 | 3.212e+04 | -8168.26 | 15.56 | -1417.31 | -933.55 | -1.919e+04 |
| | | -5.215e+05 | -933.55 | 1.34e-04 | 0.0 | 60.0 | 3.212e+04 | -8588.26 | 15.56 | -1417.31 | -1.04e-03 | -5.215e+05 |
| 102 | 49 | -1.826e+04 | 3.56e-04 | 0.12 | -420.00 | 0.0 | 3.210e+04 | -8148.06 | 3.61 | 484.32 | -216.67 | -1.826e+04 |
| | | -5.212e+05 | -216.67 | -4.58e-05 | 0.0 | 60.0 | 3.210e+04 | -8568.06 | 3.61 | 484.32 | 3.56e-04 | -5.212e+05 |
| 102 | 51 | -1.826e+04 | 233.22 | 0.12 | -420.00 | 0.0 | 3.210e+04 | -8148.10 | -3.89 | -381.39 | 233.22 | -1.826e+04 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|--------|-----------|-----------|------------|
| | | -5.212e+05 | -3.43e-04 | 4.50e-05 | 0.0 | 60.0 | 3.210e+04 | -8568.10 | -3.89 | -381.39 | -3.43e-04 | -5.212e+05 |
| 102 | 52 | -1.968e+04 | 240.84 | 0.12 | -420.00 | 0.0 | 3.213e+04 | -8179.13 | -4.01 | -467.98 | 240.84 | -1.968e+04 |
| | | -5.216e+05 | -3.58e-04 | 4.62e-05 | 0.0 | 60.0 | 3.213e+04 | -8599.13 | -4.01 | -467.98 | -3.58e-04 | -5.216e+05 |
| 102 | 53 | -1.889e+04 | 371.94 | 0.12 | -420.00 | 0.0 | 3.211e+04 | -8161.80 | -6.20 | 562.58 | 371.94 | -1.889e+04 |
| | | -5.214e+05 | -3.92e-04 | -5.05e-05 | 0.0 | 60.0 | 3.211e+04 | -8581.80 | -6.20 | 562.58 | -3.92e-04 | -5.214e+05 |
| 102 | 56 | -1.906e+04 | -3.94e-04 | 0.12 | -420.00 | 0.0 | 3.212e+04 | -8165.38 | 5.80 | -546.25 | -347.77 | -1.906e+04 |
| | | -5.214e+05 | -347.77 | 5.08e-05 | 0.0 | 60.0 | 3.212e+04 | -8585.38 | 5.80 | -546.25 | -3.94e-04 | -5.214e+05 |
| 102 | 81 | -1.870e+04 | 1.34e-04 | 0.12 | -420.00 | 0.0 | 3.211e+04 | -8157.63 | 1.25 | 192.93 | -75.29 | -1.870e+04 |
| | | -5.213e+05 | -75.29 | -1.72e-05 | 0.0 | 60.0 | 3.211e+04 | -8577.63 | 1.25 | 192.93 | 1.34e-04 | -5.213e+05 |
| 102 | 83 | -1.870e+04 | 96.57 | 0.12 | -420.00 | 0.0 | 3.211e+04 | -8157.65 | -1.61 | -143.68 | 96.57 | -1.870e+04 |
| | | -5.213e+05 | -1.30e-04 | 1.71e-05 | 0.0 | 60.0 | 3.211e+04 | -8577.65 | -1.61 | -143.68 | -1.30e-04 | -5.213e+05 |
| 102 | 84 | -1.925e+04 | 99.46 | 0.12 | -420.00 | 0.0 | 3.212e+04 | -8169.55 | -1.66 | -176.59 | 99.46 | -1.925e+04 |
| | | -5.215e+05 | -1.36e-04 | 1.75e-05 | 0.0 | 60.0 | 3.212e+04 | -8589.55 | -1.66 | -176.59 | -1.36e-04 | -5.215e+05 |
| 102 | 85 | -1.897e+04 | 12.09 | 0.12 | -420.00 | 0.0 | 3.212e+04 | -8163.59 | -0.20 | 8.17 | 12.09 | -1.897e+04 |
| | | -5.214e+05 | 0.0 | 0.0 | 0.0 | 60.0 | 3.212e+04 | -8583.59 | -0.20 | 8.17 | 0.0 | -5.214e+05 |
| 102 | 87 | -1.919e+05 | -5.66e-04 | 0.27 | -420.00 | 0.0 | 7.408e+04 | -1.631e+04 | 2.91 | -1283.47 | -174.53 | -1.919e+05 |
| | | -1.183e+06 | -174.53 | 3.07e-05 | 0.0 | 60.0 | 7.408e+04 | -1.673e+04 | 2.91 | -1283.47 | -5.66e-04 | -1.183e+06 |
| 102 | 88 | -1.816e+04 | 17.35 | 0.12 | -420.00 | 0.0 | 3.058e+04 | -7763.06 | -0.29 | 16.60 | 17.35 | -1.816e+04 |
| | | -4.965e+05 | 1.47e-06 | 0.0 | 0.0 | 60.0 | 3.058e+04 | -8183.06 | -0.29 | 16.60 | 1.47e-06 | -4.965e+05 |
| 102 | 94 | -1.816e+04 | 16.39 | 0.12 | -420.00 | 0.0 | 3.058e+04 | -7763.07 | -0.27 | 15.07 | 16.39 | -1.816e+04 |
| | | -4.965e+05 | 1.03e-06 | 0.0 | 0.0 | 60.0 | 3.058e+04 | -8183.07 | -0.27 | 15.07 | 1.03e-06 | -4.965e+05 |
| 102 | 97 | -1.752e+05 | -5.11e-04 | 0.26 | -420.00 | 0.0 | 7.106e+04 | -1.580e+04 | 2.66 | -1160.51 | -159.74 | -1.752e+05 |
| | | -1.136e+06 | -159.74 | 2.78e-05 | 0.0 | 60.0 | 7.106e+04 | -1.622e+04 | 2.66 | -1160.51 | -5.11e-04 | -1.136e+06 |
| 102 | 98 | -1.892e+04 | 12.57 | 0.12 | -420.00 | 0.0 | 3.201e+04 | -8134.98 | -0.21 | 8.94 | 12.57 | -1.892e+04 |
| | | -5.196e+05 | 0.0 | 0.0 | 0.0 | 60.0 | 3.201e+04 | -8554.98 | -0.21 | 8.94 | 0.0 | -5.196e+05 |
| 102 | 101 | -1.892e+04 | 12.09 | 0.12 | -420.00 | 0.0 | 3.201e+04 | -8134.99 | -0.20 | 8.17 | 12.09 | -1.892e+04 |
| | | -5.196e+05 | 0.0 | 0.0 | 0.0 | 60.0 | 3.201e+04 | -8554.99 | -0.20 | 8.17 | 0.0 | -5.196e+05 |
| 102 | 102 | -1.897e+04 | 12.09 | 0.12 | -420.00 | 0.0 | 3.212e+04 | -8163.59 | -0.20 | 8.17 | 12.09 | -1.897e+04 |
| | | -5.214e+05 | 0.0 | 0.0 | 0.0 | 60.0 | 3.212e+04 | -8583.59 | -0.20 | 8.17 | 0.0 | -5.214e+05 |
| 124 | 2 | -6.238e+04 | 1.624e+04 | -0.42 | -546.00 | 0.0 | 1.011e+05 | 2.675e+04 | 270.59 | 3.987e+04 | -0.02 | -1.651e+06 |
| | | -1.651e+06 | -0.02 | -8.11e-04 | 0.0 | 60.0 | 1.011e+05 | 2.620e+04 | 270.59 | 3.987e+04 | 1.624e+04 | -6.238e+04 |
| 124 | 7 | -1.933e+04 | 6274.62 | -0.11 | -420.00 | 0.0 | 2.981e+04 | 7987.31 | 104.58 | 3714.16 | -2.31e-03 | -4.860e+05 |
| | | -4.860e+05 | -2.31e-03 | -1.44e-04 | 0.0 | 60.0 | 2.981e+04 | 7567.31 | 104.58 | 3714.16 | 6274.62 | -1.933e+04 |
| 124 | 22 | -1.868e+04 | 5763.43 | -0.12 | -420.00 | 0.0 | 3.201e+04 | 8603.85 | 96.06 | 2417.22 | -1.28e-03 | -5.224e+05 |
| | | -5.224e+05 | -1.28e-03 | -4.37e-06 | 0.0 | 60.0 | 3.201e+04 | 8183.85 | 96.06 | 2417.22 | 5763.43 | -1.868e+04 |
| 124 | 27 | -2.287e+04 | 7654.29 | -0.12 | -420.00 | 0.0 | 3.219e+04 | 8567.83 | 127.57 | 5686.44 | -3.69e-03 | -5.242e+05 |
| | | -5.242e+05 | -3.69e-03 | -3.07e-04 | 0.0 | 60.0 | 3.219e+04 | 8147.83 | 127.57 | 5686.44 | 7654.29 | -2.287e+04 |
| 124 | 29 | -1.917e+04 | 7829.18 | -0.12 | -420.00 | 0.0 | 3.201e+04 | 8610.23 | 130.49 | 2396.52 | -1.41e-03 | -5.225e+05 |
| | | -5.225e+05 | -1.41e-03 | -1.97e-05 | 0.0 | 60.0 | 3.201e+04 | 8190.23 | 130.49 | 2396.52 | 7829.18 | -1.917e+04 |
| 124 | 30 | -1.876e+04 | 7818.13 | -0.12 | -420.00 | 0.0 | 3.200e+04 | 8601.34 | 130.30 | 2425.06 | -1.40e-03 | -5.223e+05 |
| | | -5.223e+05 | -1.40e-03 | -1.91e-05 | 0.0 | 60.0 | 3.200e+04 | 8181.34 | 130.30 | 2425.06 | 7818.13 | -1.876e+04 |
| 124 | 31 | -2.278e+04 | 5599.63 | -0.12 | -420.00 | 0.0 | 3.220e+04 | 8570.36 | 93.33 | 5650.36 | -3.57e-03 | -5.243e+05 |
| | | -5.243e+05 | -3.57e-03 | -2.90e-04 | 0.0 | 60.0 | 3.220e+04 | 8150.36 | 93.33 | 5650.36 | 5599.63 | -2.278e+04 |
| 124 | 54 | -1.998e+04 | 6348.10 | -0.12 | -420.00 | 0.0 | 3.207e+04 | 8592.62 | 105.80 | 3407.20 | -2.03e-03 | -5.230e+05 |
| | | -5.230e+05 | -2.03e-03 | -9.66e-05 | 0.0 | 60.0 | 3.207e+04 | 8172.62 | 105.80 | 3407.20 | 6348.10 | -1.998e+04 |
| 124 | 59 | -2.157e+04 | 7069.65 | -0.12 | -420.00 | 0.0 | 3.214e+04 | 8579.08 | 117.83 | 4678.95 | -2.94e-03 | -5.237e+05 |
| | | -5.237e+05 | -2.94e-03 | -2.12e-04 | 0.0 | 60.0 | 3.214e+04 | 8159.08 | 117.83 | 4678.95 | 7069.65 | -2.157e+04 |
| 124 | 61 | -2.017e+04 | 7135.23 | -0.12 | -420.00 | 0.0 | 3.207e+04 | 8595.08 | 118.92 | 3399.29 | -2.08e-03 | -5.230e+05 |
| | | -5.230e+05 | -2.08e-03 | -1.03e-04 | 0.0 | 60.0 | 3.207e+04 | 8175.08 | 118.92 | 3399.29 | 7135.23 | -2.017e+04 |
| 124 | 62 | -2.001e+04 | 7131.00 | -0.12 | -420.00 | 0.0 | 3.206e+04 | 8591.67 | 118.85 | 3410.13 | -2.08e-03 | -5.229e+05 |
| | | -5.229e+05 | -2.08e-03 | -1.03e-04 | 0.0 | 60.0 | 3.206e+04 | 8171.67 | 118.85 | 3410.13 | 7131.00 | -2.001e+04 |
| 124 | 63 | -2.153e+04 | 6286.76 | -0.12 | -420.00 | 0.0 | 3.214e+04 | 8580.03 | 104.78 | 4665.29 | -2.89e-03 | -5.237e+05 |
| | | -5.237e+05 | -2.89e-03 | -2.05e-04 | 0.0 | 60.0 | 3.214e+04 | 8160.03 | 104.78 | 4665.29 | 6286.76 | -2.153e+04 |
| 124 | 85 | -2.077e+04 | 6708.88 | -0.12 | -420.00 | 0.0 | 3.210e+04 | 8585.85 | 111.81 | 4037.71 | -2.49e-03 | -5.233e+05 |
| | | -5.233e+05 | -2.49e-03 | -1.54e-04 | 0.0 | 60.0 | 3.210e+04 | 8165.85 | 111.81 | 4037.71 | 6708.88 | -2.077e+04 |
| 124 | 87 | -4.436e+04 | 1.172e+04 | -0.30 | -420.00 | 0.0 | 7.165e+04 | 1.898e+04 | 195.30 | 2.712e+04 | -0.01 | -1.170e+06 |
| | | -1.170e+06 | -0.01 | -5.61e-04 | 0.0 | 60.0 | 7.165e+04 | 1.856e+04 | 195.30 | 2.712e+04 | 1.172e+04 | -4.436e+04 |
| 124 | 88 | -1.981e+04 | 6419.37 | -0.12 | -420.00 | 0.0 | 3.057e+04 | 8186.82 | 106.99 | 3822.01 | -2.37e-03 | -4.984e+05 |
| | | -4.984e+05 | -2.37e-03 | -1.47e-04 | 0.0 | 60.0 | 3.057e+04 | 7766.82 | 106.99 | 3822.01 | 6419.37 | -1.981e+04 |
| 124 | 97 | -4.274e+04 | 1.144e+04 | -0.28 | -420.00 | 0.0 | 6.887e+04 | 1.825e+04 | 190.68 | 2.498e+04 | -0.01 | -1.125e+06 |
| | | -1.125e+06 | -0.01 | -5.26e-04 | 0.0 | 60.0 | 6.887e+04 | 1.783e+04 | 190.68 | 2.498e+04 | 1.144e+04 | -4.274e+04 |
| 124 | 98 | -2.070e+04 | 6688.28 | -0.12 | -420.00 | 0.0 | 3.199e+04 | 8557.34 | 111.47 | 4022.16 | -2.48e-03 | -5.215e+05 |
| | | -5.215e+05 | -2.48e-03 | -1.54e-04 | 0.0 | 60.0 | 3.199e+04 | 8137.34 | 111.47 | 4022.16 | 6688.28 | -2.070e+04 |
| 124 | 102 | -2.077e+04 | 6708.88 | -0.12 | -420.00 | 0.0 | 3.210e+04 | 8585.85 | 111.81 | 4037.71 | -2.49e-03 | -5.233e+05 |
| | | -5.233e+05 | -2.49e-03 | -1.54e-04 | 0.0 | 60.0 | 3.210e+04 | 8165.85 | 111.81 | 4037.71 | 6708.88 | -2.077e+04 |
| 125 | 2 | 8.142e+05 | 2.835e+04 | -0.43 | -546.00 | 0.0 | 1.215e+05 | 2.288e+04 | 201.94 | 8.070e+04 | 1.624e+04 | -5.421e+05 |
| | | -5.421e+05 | 1.624e+04 | -3.02e-04 | 0.0 | 60.0 | 1.215e+05 | 2.233e+04 | 201.94 | 8.070e+04 | 2.835e+04 | 8.142e+05 |
| 125 | 7 | 2.251e+05 | 9583.48 | -0.12 | -420.00 | 0.0 | 3.540e+04 | 6483.36 | 55.15 | 8525.21 | 6274.62 | -1.513e+05 |
| | | -1.513e+05 | 6274.62 | -4.03e-05 | 0.0 | 60.0 | 3.540e+04 | 6063.36 | 55.15 | 8525.21 | 9583.48 | 2.251e+05 |
| 125 | 19 | 2.251e+05 | 9582.52 | -0.12 | -420.00 | 0.0 | 3.540e+04 | 6483.39 | 55.15 | 8528.57 | 6273.48 | -1.513e+05 |
| | | -1.513e+05 | 6273.48 | -4.03e-05 | 0.0 | 60.0 | 3.540e+04 | 6063.39 | 55.15 | 8528.57 | 9582.52 | 2.251e+05 |
| 125 | 22 | 2.456e+05 | 9270.81 | -0.13 | -420.00 | 0.0 | 3.804e+04 | 6999.01 | 50.38 | 6889.63 | 5763.43 | -1.617e+05 |
| | | -1.617e+05 | 5763.43 | 1.25e-04 | 0.0 | 60.0 | 3.804e+04 | 6579.01 | 50.38 | 6889.63 | 9270.81 | 2.456e+05 |
| 125 | 30 | 2.454e+05 | 1.159e+04 | -0.13 | -420.00 | 0.0 | 3.804e+04 | 6996.51 | 50.16 | 6949.25 | 7818.13 | -1.616e+05 |
| | | -1.616e+05 | 7818.13 | 1.09e-04 | 0.0 | 60.0 | 3.804e+04 | 6576.51 | 50.16 | 6949.25 | 1.159e+04 | 2.454e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|-----------|---------|-----------|-----------|------------|
| 125 | 31 | 2.397e+05 | 9011.31 | -0.13 | -420.00 | 0.0 | 3.821e+04 | 6938.89 | 69.64 | 1.150e+04 | 5599.62 | -1.642e+05 |
| | | -1.642e+05 | 5599.62 | -1.96e-04 | 0.0 | 60.0 | 3.821e+04 | 6518.89 | 69.64 | 1.150e+04 | 9011.31 | 2.397e+05 |
| 125 | 32 | 2.403e+05 | 8998.93 | -0.13 | -420.00 | 0.0 | 3.818e+04 | 6947.86 | 69.43 | 1.153e+04 | 5588.57 | -1.641e+05 |
| | | -1.641e+05 | 5588.57 | -1.95e-04 | 0.0 | 60.0 | 3.818e+04 | 6527.86 | 69.43 | 1.153e+04 | 8998.93 | 2.403e+05 |
| 125 | 33 | 2.447e+05 | 1.161e+04 | -0.13 | -420.00 | 0.0 | 3.806e+04 | 6987.56 | 50.36 | 6948.93 | 7829.14 | -1.618e+05 |
| | | -1.618e+05 | 7829.14 | 1.08e-04 | 0.0 | 60.0 | 3.806e+04 | 6567.56 | 50.36 | 6948.93 | 1.161e+04 | 2.447e+05 |
| 125 | 54 | 2.437e+05 | 9912.85 | -0.13 | -420.00 | 0.0 | 3.809e+04 | 6979.57 | 56.26 | 8318.64 | 6348.09 | -1.624e+05 |
| | | -1.624e+05 | 6348.09 | 2.00e-05 | 0.0 | 60.0 | 3.809e+04 | 6559.57 | 56.26 | 8318.64 | 9912.85 | 2.437e+05 |
| 125 | 62 | 2.436e+05 | 1.079e+04 | -0.13 | -420.00 | 0.0 | 3.809e+04 | 6978.63 | 56.18 | 8340.62 | 7130.99 | -1.624e+05 |
| | | -1.624e+05 | 7130.99 | 1.39e-05 | 0.0 | 60.0 | 3.809e+04 | 6558.63 | 56.18 | 8340.62 | 1.079e+04 | 2.436e+05 |
| 125 | 63 | 2.414e+05 | 9814.64 | -0.13 | -420.00 | 0.0 | 3.815e+04 | 6956.77 | 63.62 | 1.011e+04 | 6286.76 | -1.634e+05 |
| | | -1.634e+05 | 6286.76 | -1.01e-04 | 0.0 | 60.0 | 3.815e+04 | 6536.77 | 63.62 | 1.011e+04 | 9814.64 | 2.414e+05 |
| 125 | 64 | 2.417e+05 | 9809.91 | -0.13 | -420.00 | 0.0 | 3.814e+04 | 6960.21 | 63.54 | 1.012e+04 | 6282.53 | -1.634e+05 |
| | | -1.634e+05 | 6282.53 | -1.01e-04 | 0.0 | 60.0 | 3.814e+04 | 6540.21 | 63.54 | 1.012e+04 | 9809.91 | 2.417e+05 |
| 125 | 65 | 2.434e+05 | 1.080e+04 | -0.13 | -420.00 | 0.0 | 3.810e+04 | 6975.20 | 56.25 | 8340.49 | 7135.21 | -1.625e+05 |
| | | -1.625e+05 | 7135.21 | 1.37e-05 | 0.0 | 60.0 | 3.810e+04 | 6555.20 | 56.25 | 8340.49 | 1.080e+04 | 2.434e+05 |
| 125 | 85 | 2.425e+05 | 1.030e+04 | -0.13 | -420.00 | 0.0 | 3.812e+04 | 6967.70 | 59.90 | 9224.14 | 6708.88 | -1.629e+05 |
| | | -1.629e+05 | 6708.88 | -4.36e-05 | 0.0 | 60.0 | 3.812e+04 | 6547.70 | 59.90 | 9224.14 | 1.030e+04 | 2.425e+05 |
| 125 | 87 | 5.751e+05 | 2.027e+04 | -0.30 | -420.00 | 0.0 | 8.607e+04 | 1.618e+04 | 142.61 | 5.503e+04 | 1.172e+04 | -3.831e+05 |
| | | -3.831e+05 | 1.172e+04 | -2.07e-04 | 0.0 | 60.0 | 8.607e+04 | 1.576e+04 | 142.61 | 5.503e+04 | 2.027e+04 | 5.751e+05 |
| 125 | 88 | 2.309e+05 | 9823.20 | -0.12 | -420.00 | 0.0 | 3.631e+04 | 6644.81 | 56.73 | 8758.19 | 6419.37 | -1.552e+05 |
| | | -1.552e+05 | 6419.37 | -4.14e-05 | 0.0 | 60.0 | 3.631e+04 | 6224.81 | 56.73 | 8758.19 | 9823.20 | 2.309e+05 |
| 125 | 94 | 2.309e+05 | 9822.56 | -0.12 | -420.00 | 0.0 | 3.631e+04 | 6644.83 | 56.73 | 8760.43 | 6418.61 | -1.552e+05 |
| | | -1.552e+05 | 6418.61 | -4.14e-05 | 0.0 | 60.0 | 3.631e+04 | 6224.83 | 56.73 | 8760.43 | 9822.56 | 2.309e+05 |
| 125 | 97 | 5.508e+05 | 1.965e+04 | -0.29 | -420.00 | 0.0 | 8.267e+04 | 1.551e+04 | 136.78 | 5.081e+04 | 1.144e+04 | -3.671e+05 |
| | | -3.671e+05 | 1.144e+04 | -1.92e-04 | 0.0 | 60.0 | 8.267e+04 | 1.509e+04 | 136.78 | 5.081e+04 | 1.965e+04 | 5.508e+05 |
| 125 | 98 | 2.417e+05 | 1.027e+04 | -0.13 | -420.00 | 0.0 | 3.799e+04 | 6944.63 | 59.67 | 9190.62 | 6688.28 | -1.624e+05 |
| | | -1.624e+05 | 6688.28 | -4.35e-05 | 0.0 | 60.0 | 3.799e+04 | 6524.63 | 59.67 | 9190.62 | 1.027e+04 | 2.417e+05 |
| 125 | 101 | 2.417e+05 | 1.027e+04 | -0.13 | -420.00 | 0.0 | 3.799e+04 | 6944.64 | 59.67 | 9191.74 | 6687.90 | -1.624e+05 |
| | | -1.624e+05 | 6687.90 | -4.35e-05 | 0.0 | 60.0 | 3.799e+04 | 6524.64 | 59.67 | 9191.74 | 1.027e+04 | 2.417e+05 |
| 125 | 102 | 2.425e+05 | 1.030e+04 | -0.13 | -420.00 | 0.0 | 3.812e+04 | 6967.70 | 59.90 | 9224.14 | 6708.88 | -1.629e+05 |
| | | -1.629e+05 | 6708.88 | -4.36e-05 | 0.0 | 60.0 | 3.812e+04 | 6547.70 | 59.90 | 9224.14 | 1.030e+04 | 2.425e+05 |
| 126 | 2 | 1.365e+06 | 2.835e+04 | -0.42 | -546.00 | 0.0 | 1.536e+05 | 2.183e+04 | -86.02 | 1.051e+05 | 2.835e+04 | -7.124e+04 |
| | | 7.124e+04 | 2.319e+04 | 1.94e-04 | 0.0 | 60.0 | 1.536e+05 | 2.129e+04 | -86.02 | 1.051e+05 | 2.319e+04 | 1.365e+06 |
| 126 | 7 | 3.666e+05 | 9583.48 | -0.11 | -420.00 | 0.0 | 4.398e+04 | 5877.85 | -40.40 | 1.167e+04 | 9583.48 | -2.649e+04 |
| | | 2.649e+04 | 7159.71 | 8.26e-05 | 0.0 | 60.0 | 4.398e+04 | 5457.85 | -40.40 | 1.167e+04 | 7159.71 | 3.666e+05 |
| 126 | 19 | 3.666e+05 | 9582.52 | -0.11 | -420.00 | 0.0 | 4.398e+04 | 5877.89 | -40.39 | 1.167e+04 | 9582.52 | -2.649e+04 |
| | | 2.649e+04 | 7159.08 | 8.26e-05 | 0.0 | 60.0 | 4.398e+04 | 5457.89 | -40.39 | 1.167e+04 | 7159.08 | 3.666e+05 |
| 126 | 22 | 3.977e+05 | 9270.80 | -0.12 | -420.00 | 0.0 | 4.727e+04 | 6333.17 | -53.90 | 1.036e+04 | 9270.80 | -3.033e+04 |
| | | 3.033e+04 | 6843.82 | 2.60e-04 | 0.0 | 60.0 | 4.727e+04 | 5913.17 | -53.90 | 1.036e+04 | 6843.82 | 3.977e+05 |
| 126 | 23 | 3.923e+05 | 1.133e+04 | -0.12 | -420.00 | 0.0 | 4.746e+04 | 6298.84 | -32.47 | 1.489e+04 | 1.133e+04 | -2.689e+04 |
| | | 2.689e+04 | 8578.92 | -8.30e-05 | 0.0 | 60.0 | 4.746e+04 | 5878.84 | -32.47 | 1.489e+04 | 8578.92 | 3.923e+05 |
| 126 | 33 | 3.967e+05 | 1.161e+04 | -0.12 | -420.00 | 0.0 | 4.731e+04 | 6324.86 | -52.45 | 1.038e+04 | 1.161e+04 | -2.987e+04 |
| | | 2.987e+04 | 6656.72 | 2.47e-04 | 0.0 | 60.0 | 4.731e+04 | 5904.86 | -52.45 | 1.038e+04 | 6656.72 | 3.967e+05 |
| 126 | 34 | 3.975e+05 | 1.159e+04 | -0.12 | -420.00 | 0.0 | 4.727e+04 | 6331.83 | -52.28 | 1.035e+04 | 1.159e+04 | -3.028e+04 |
| | | 3.028e+04 | 6633.18 | 2.48e-04 | 0.0 | 60.0 | 4.727e+04 | 5911.83 | -52.28 | 1.035e+04 | 6633.18 | 3.975e+05 |
| 126 | 54 | 3.960e+05 | 9912.84 | -0.12 | -420.00 | 0.0 | 4.733e+04 | 6322.54 | -47.26 | 1.175e+04 | 9912.84 | -2.926e+04 |
| | | 2.926e+04 | 7384.60 | 1.54e-04 | 0.0 | 60.0 | 4.733e+04 | 5902.54 | -47.26 | 1.175e+04 | 7384.60 | 3.960e+05 |
| 126 | 55 | 3.939e+05 | 1.069e+04 | -0.12 | -420.00 | 0.0 | 4.741e+04 | 6309.47 | -39.12 | 1.351e+04 | 1.069e+04 | -2.796e+04 |
| | | 2.796e+04 | 8038.14 | 2.38e-05 | 0.0 | 60.0 | 4.741e+04 | 5889.47 | -39.12 | 1.351e+04 | 8038.14 | 3.939e+05 |
| 126 | 65 | 3.956e+05 | 1.080e+04 | -0.12 | -420.00 | 0.0 | 4.735e+04 | 6319.37 | -46.71 | 1.175e+04 | 1.080e+04 | -2.908e+04 |
| | | 2.908e+04 | 7313.48 | 1.49e-04 | 0.0 | 60.0 | 4.735e+04 | 5899.37 | -46.71 | 1.175e+04 | 7313.48 | 3.956e+05 |
| 126 | 66 | 3.959e+05 | 1.079e+04 | -0.12 | -420.00 | 0.0 | 4.733e+04 | 6322.04 | -46.65 | 1.174e+04 | 1.079e+04 | -2.924e+04 |
| | | 2.924e+04 | 7304.50 | 1.49e-04 | 0.0 | 60.0 | 4.733e+04 | 5902.04 | -46.65 | 1.174e+04 | 7304.50 | 3.959e+05 |
| 126 | 85 | 3.950e+05 | 1.030e+04 | -0.12 | -420.00 | 0.0 | 4.737e+04 | 6316.01 | -43.19 | 1.263e+04 | 1.030e+04 | -2.861e+04 |
| | | 2.861e+04 | 7711.37 | 8.87e-05 | 0.0 | 60.0 | 4.737e+04 | 5896.01 | -43.19 | 1.263e+04 | 7711.37 | 3.950e+05 |
| 126 | 87 | 9.625e+05 | 2.027e+04 | -0.29 | -420.00 | 0.0 | 1.087e+05 | 1.540e+04 | -63.10 | 7.176e+04 | 2.027e+04 | -5.131e+04 |
| | | 5.131e+04 | 1.649e+04 | 1.41e-04 | 0.0 | 60.0 | 1.087e+05 | 1.498e+04 | -63.10 | 7.176e+04 | 1.649e+04 | 9.625e+05 |
| 126 | 88 | 3.760e+05 | 9823.19 | -0.12 | -420.00 | 0.0 | 4.511e+04 | 6023.90 | -41.33 | 1.199e+04 | 9823.19 | -2.720e+04 |
| | | 2.720e+04 | 7343.60 | 8.46e-05 | 0.0 | 60.0 | 4.511e+04 | 5603.90 | -41.33 | 1.199e+04 | 7343.60 | 3.760e+05 |
| 126 | 94 | 3.760e+05 | 9822.56 | -0.12 | -420.00 | 0.0 | 4.511e+04 | 6023.93 | -41.32 | 1.199e+04 | 9822.56 | -2.720e+04 |
| | | 2.720e+04 | 7343.18 | 8.46e-05 | 0.0 | 60.0 | 4.511e+04 | 5603.93 | -41.32 | 1.199e+04 | 7343.18 | 3.760e+05 |
| 126 | 97 | 9.204e+05 | 1.965e+04 | -0.28 | -420.00 | 0.0 | 1.043e+05 | 1.471e+04 | -62.55 | 6.634e+04 | 1.965e+04 | -5.012e+04 |
| | | 5.012e+04 | 1.589e+04 | 1.39e-04 | 0.0 | 60.0 | 1.043e+05 | 1.429e+04 | -62.55 | 6.634e+04 | 1.589e+04 | 9.204e+05 |
| 126 | 98 | 3.936e+05 | 1.027e+04 | -0.12 | -420.00 | 0.0 | 4.721e+04 | 6295.14 | -43.06 | 1.258e+04 | 1.027e+04 | -2.851e+04 |
| | | 2.851e+04 | 7685.15 | 8.84e-05 | 0.0 | 60.0 | 4.721e+04 | 5875.14 | -43.06 | 1.258e+04 | 7685.15 | 3.936e+05 |
| 126 | 101 | 3.936e+05 | 1.027e+04 | -0.12 | -420.00 | 0.0 | 4.721e+04 | 6295.15 | -43.05 | 1.258e+04 | 1.027e+04 | -2.851e+04 |
| | | 2.851e+04 | 7684.94 | 8.84e-05 | 0.0 | 60.0 | 4.721e+04 | 5875.15 | -43.05 | 1.258e+04 | 7684.94 | 3.936e+05 |
| 126 | 102 | 3.950e+05 | 1.030e+04 | -0.12 | -420.00 | 0.0 | 4.737e+04 | 6316.01 | -43.19 | 1.263e+04 | 1.030e+04 | -2.861e+04 |
| | | 2.861e+04 | 7711.37 | 8.87e-05 | 0.0 | 60.0 | 4.737e+04 | 5896.01 | -43.19 | 1.263e+04 | 7711.37 | 3.950e+05 |
| 127 | 2 | 1.812e+06 | 2.319e+04 | -0.39 | -546.00 | 0.0 | 1.858e+05 | 2.022e+04 | -131.57 | 1.103e+05 | 2.319e+04 | -6.150e+05 |
| | | 6.150e+05 | 1.530e+04 | 4.54e-04 | 0.0 | 60.0 | 1.858e+05 | 1.968e+04 | -131.57 | 1.103e+05 | 1.530e+04 | 1.812e+06 |
| 127 | 7 | 4.715e+05 | 7159.71 | -0.11 | -420.00 | 0.0 | 5.216e+04 | 5125.81 | -62.86 | 1.175e+04 | 7159.71 | -1.766e+05 |
| | | 1.766e+05 | 3388.22 | 1.50e-04 | 0.0 | 60.0 | 5.216e+04 | 4705.81 | -62.86 | 1.175e+04 | 3388.22 | 4.715e+05 |
| 127 | 19 | 4.715e+05 | 7159.08 | -0.11 | -420.00 | 0.0 | 5.216e+04 | 5125.84 | -62.85 | 1.176e+04 | 7159.08 | -1.766e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|-----------|--------|-----------|-----------|-----------|
| | | 1.766e+05 | 3387.82 | 1.50e-04 | 0.0 | 60.0 | 5.216e+04 | 4705.84 | -62.85 | 1.176e+04 | 3387.82 | 4.715e+05 |
| 127 | 22 | 5.102e+05 | 6843.82 | -0.11 | -420.00 | 0.0 | 5.604e+04 | 5515.05 | -82.86 | 1.055e+04 | 6843.82 | 1.920e+05 |
| | | 1.920e+05 | 2631.55 | 3.31e-04 | 0.0 | 60.0 | 5.604e+04 | 5095.05 | -82.86 | 1.055e+04 | 2631.55 | 5.102e+05 |
| 127 | 23 | 5.058e+05 | 8578.92 | -0.11 | -420.00 | 0.0 | 5.631e+04 | 5496.79 | -52.34 | 1.491e+04 | 8578.92 | 1.885e+05 |
| | | 1.885e+05 | 4679.21 | -1.13e-05 | 0.0 | 60.0 | 5.631e+04 | 5076.79 | -52.34 | 1.491e+04 | 4679.21 | 5.058e+05 |
| 127 | 26 | 5.102e+05 | 6842.38 | -0.11 | -420.00 | 0.0 | 5.604e+04 | 5515.04 | -82.86 | 1.055e+04 | 6842.38 | 1.920e+05 |
| | | 1.920e+05 | 2603.05 | 3.31e-04 | 0.0 | 60.0 | 5.604e+04 | 5095.04 | -82.86 | 1.055e+04 | 2603.05 | 5.102e+05 |
| 127 | 35 | 5.060e+05 | 8789.56 | -0.11 | -420.00 | 0.0 | 5.629e+04 | 5497.50 | -53.69 | 1.492e+04 | 8789.56 | 1.886e+05 |
| | | 1.886e+05 | 4481.35 | -6.93e-06 | 0.0 | 60.0 | 5.629e+04 | 5077.50 | -53.69 | 1.492e+04 | 4481.35 | 5.060e+05 |
| 127 | 54 | 5.088e+05 | 7384.60 | -0.11 | -420.00 | 0.0 | 5.613e+04 | 5509.41 | -73.37 | 1.188e+04 | 7384.60 | 1.909e+05 |
| | | 1.909e+05 | 3268.67 | 2.26e-04 | 0.0 | 60.0 | 5.613e+04 | 5089.41 | -73.37 | 1.188e+04 | 3268.67 | 5.088e+05 |
| 127 | 55 | 5.072e+05 | 8038.14 | -0.11 | -420.00 | 0.0 | 5.622e+04 | 5502.43 | -61.82 | 1.358e+04 | 8038.14 | 1.896e+05 |
| | | 1.896e+05 | 4042.09 | 9.80e-05 | 0.0 | 60.0 | 5.622e+04 | 5082.43 | -61.82 | 1.358e+04 | 4042.09 | 5.072e+05 |
| 127 | 58 | 5.088e+05 | 7384.05 | -0.11 | -420.00 | 0.0 | 5.613e+04 | 5509.41 | -73.37 | 1.188e+04 | 7384.05 | 1.909e+05 |
| | | 1.909e+05 | 3257.81 | 2.26e-04 | 0.0 | 60.0 | 5.613e+04 | 5089.41 | -73.37 | 1.188e+04 | 3257.81 | 5.088e+05 |
| 127 | 67 | 5.072e+05 | 8118.24 | -0.11 | -420.00 | 0.0 | 5.622e+04 | 5502.69 | -62.33 | 1.358e+04 | 8118.24 | 1.896e+05 |
| | | 1.896e+05 | 3967.61 | 1.01e-04 | 0.0 | 60.0 | 5.622e+04 | 5082.69 | -62.33 | 1.358e+04 | 3967.61 | 5.072e+05 |
| 127 | 85 | 5.080e+05 | 7711.37 | -0.11 | -420.00 | 0.0 | 5.618e+04 | 5505.92 | -67.60 | 1.273e+04 | 7711.37 | 1.903e+05 |
| | | 1.903e+05 | 3655.38 | 1.62e-04 | 0.0 | 60.0 | 5.618e+04 | 5085.92 | -67.60 | 1.273e+04 | 3655.38 | 5.080e+05 |
| 127 | 87 | 1.276e+06 | 1.649e+04 | -0.28 | -420.00 | 0.0 | 1.314e+05 | 1.422e+04 | -96.72 | 7.522e+04 | 1.649e+04 | 4.354e+05 |
| | | 4.354e+05 | 1.069e+04 | 3.24e-04 | 0.0 | 60.0 | 1.314e+05 | 1.380e+04 | -96.72 | 7.522e+04 | 1.069e+04 | 1.276e+06 |
| 127 | 88 | 4.837e+05 | 7343.60 | -0.11 | -420.00 | 0.0 | 5.350e+04 | 5252.51 | -64.44 | 1.208e+04 | 7343.60 | 1.811e+05 |
| | | 1.811e+05 | 3477.28 | 1.54e-04 | 0.0 | 60.0 | 5.350e+04 | 4832.51 | -64.44 | 1.208e+04 | 3477.28 | 4.837e+05 |
| 127 | 94 | 4.837e+05 | 7343.18 | -0.11 | -420.00 | 0.0 | 5.350e+04 | 5252.53 | -64.44 | 1.208e+04 | 7343.18 | 1.811e+05 |
| | | 1.811e+05 | 3477.01 | 1.54e-04 | 0.0 | 60.0 | 5.350e+04 | 4832.53 | -64.44 | 1.208e+04 | 3477.01 | 4.837e+05 |
| 127 | 97 | 1.218e+06 | 1.589e+04 | -0.26 | -420.00 | 0.0 | 1.259e+05 | 1.354e+04 | -96.25 | 6.947e+04 | 1.589e+04 | 4.179e+05 |
| | | 4.179e+05 | 1.012e+04 | 3.14e-04 | 0.0 | 60.0 | 1.259e+05 | 1.312e+04 | -96.25 | 6.947e+04 | 1.012e+04 | 1.218e+06 |
| 127 | 98 | 5.063e+05 | 7685.15 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5487.82 | -67.37 | 1.268e+04 | 7685.15 | 1.896e+05 |
| | | 1.896e+05 | 3642.69 | 1.61e-04 | 0.0 | 60.0 | 5.598e+04 | 5067.82 | -67.37 | 1.268e+04 | 3642.69 | 5.063e+05 |
| 127 | 101 | 5.063e+05 | 7684.94 | -0.11 | -420.00 | 0.0 | 5.598e+04 | 5487.83 | -67.37 | 1.268e+04 | 7684.94 | 1.896e+05 |
| | | 1.896e+05 | 3642.55 | 1.61e-04 | 0.0 | 60.0 | 5.598e+04 | 5067.83 | -67.37 | 1.268e+04 | 3642.55 | 5.063e+05 |
| 127 | 102 | 5.080e+05 | 7711.37 | -0.11 | -420.00 | 0.0 | 5.618e+04 | 5505.92 | -67.60 | 1.273e+04 | 7711.37 | 1.903e+05 |
| | | 1.903e+05 | 3655.38 | 1.62e-04 | 0.0 | 60.0 | 5.618e+04 | 5085.92 | -67.60 | 1.273e+04 | 3655.38 | 5.080e+05 |
| 128 | 2 | 2.213e+06 | 1.530e+04 | -0.35 | -546.00 | 0.0 | 2.160e+05 | 1.865e+04 | -32.39 | 1.014e+05 | 1.530e+04 | 1.110e+06 |
| | | 1.110e+06 | 1.335e+04 | 5.07e-04 | 0.0 | 60.0 | 2.160e+05 | 1.810e+04 | -32.39 | 1.014e+05 | 1.335e+04 | 2.213e+06 |
| 128 | 7 | 5.553e+05 | 3388.23 | -0.09 | -420.00 | 0.0 | 5.926e+04 | 4363.93 | -48.09 | 1.028e+04 | 3388.23 | 3.061e+05 |
| | | 3.061e+05 | 503.01 | 1.67e-04 | 0.0 | 60.0 | 5.926e+04 | 3943.93 | -48.09 | 1.028e+04 | 503.01 | 5.553e+05 |
| 128 | 19 | 5.554e+05 | 3387.83 | -0.09 | -420.00 | 0.0 | 5.926e+04 | 4363.96 | -48.08 | 1.029e+04 | 3387.83 | 3.061e+05 |
| | | 3.061e+05 | 502.76 | 1.67e-04 | 0.0 | 60.0 | 5.926e+04 | 3943.96 | -48.08 | 1.029e+04 | 502.76 | 5.554e+05 |
| 128 | 21 | 5.990e+05 | 2604.77 | -0.10 | -420.00 | 0.0 | 6.399e+04 | 4692.38 | -69.83 | 8952.11 | 2604.77 | 3.282e+05 |
| | | 3.282e+05 | -1267.67 | 3.38e-04 | 0.0 | 60.0 | 6.399e+04 | 4272.38 | -69.83 | 8952.11 | -1267.67 | 5.990e+05 |
| 128 | 24 | 5.977e+05 | 4706.00 | -0.10 | -420.00 | 0.0 | 6.367e+04 | 4677.83 | -33.73 | 1.335e+04 | 4706.00 | 3.315e+05 |
| | | 3.315e+05 | 2364.85 | 2.16e-05 | 0.0 | 60.0 | 6.367e+04 | 4257.83 | -33.73 | 1.335e+04 | 2364.85 | 5.977e+05 |
| 128 | 26 | 5.999e+05 | 2603.05 | -0.10 | -420.00 | 0.0 | 6.393e+04 | 4693.93 | -69.78 | 8952.04 | 2603.05 | 3.290e+05 |
| | | 3.290e+05 | -1269.52 | 3.38e-04 | 0.0 | 60.0 | 6.393e+04 | 4273.93 | -69.78 | 8952.04 | -1269.52 | 5.999e+05 |
| 128 | 27 | 5.968e+05 | 4707.71 | -0.10 | -420.00 | 0.0 | 6.373e+04 | 4676.28 | -33.78 | 1.335e+04 | 4707.71 | 3.307e+05 |
| | | 3.307e+05 | 2366.69 | 2.15e-05 | 0.0 | 60.0 | 6.373e+04 | 4256.28 | -33.78 | 1.335e+04 | 2366.69 | 5.968e+05 |
| 128 | 37 | 5.972e+05 | 3299.57 | -0.10 | -420.00 | 0.0 | 6.396e+04 | 4684.94 | -57.26 | 1.050e+04 | 3299.57 | 3.281e+05 |
| | | 3.281e+05 | -41.11 | 2.27e-04 | 0.0 | 60.0 | 6.396e+04 | 4264.94 | -57.26 | 1.050e+04 | -41.11 | 5.972e+05 |
| 128 | 38 | 6.002e+05 | 3388.86 | -0.10 | -420.00 | 0.0 | 6.377e+04 | 4690.10 | -57.11 | 1.048e+04 | 3388.86 | 3.308e+05 |
| | | 3.308e+05 | 57.39 | 2.28e-04 | 0.0 | 60.0 | 6.377e+04 | 4270.10 | -57.11 | 1.048e+04 | 57.39 | 6.002e+05 |
| 128 | 53 | 5.986e+05 | 3258.47 | -0.10 | -420.00 | 0.0 | 6.389e+04 | 4687.85 | -58.60 | 1.030e+04 | 3258.47 | 3.292e+05 |
| | | 3.292e+05 | -138.67 | 2.40e-04 | 0.0 | 60.0 | 6.389e+04 | 4267.85 | -58.60 | 1.030e+04 | -138.67 | 5.986e+05 |
| 128 | 56 | 5.981e+05 | 4052.29 | -0.10 | -420.00 | 0.0 | 6.377e+04 | 4682.36 | -44.96 | 1.200e+04 | 4052.29 | 3.305e+05 |
| | | 3.305e+05 | 1235.85 | 1.20e-04 | 0.0 | 60.0 | 6.377e+04 | 4262.36 | -44.96 | 1.200e+04 | 1235.85 | 5.981e+05 |
| 128 | 58 | 5.989e+05 | 3257.81 | -0.10 | -420.00 | 0.0 | 6.387e+04 | 4688.44 | -58.59 | 1.030e+04 | 3257.81 | 3.295e+05 |
| | | 3.295e+05 | -139.38 | 2.40e-04 | 0.0 | 60.0 | 6.387e+04 | 4268.44 | -58.59 | 1.030e+04 | -139.38 | 5.989e+05 |
| 128 | 59 | 5.978e+05 | 4052.95 | -0.10 | -420.00 | 0.0 | 6.379e+04 | 4681.77 | -44.97 | 1.200e+04 | 4052.95 | 3.302e+05 |
| | | 3.302e+05 | 1236.56 | 1.20e-04 | 0.0 | 60.0 | 6.379e+04 | 4261.77 | -44.97 | 1.200e+04 | 1236.56 | 5.978e+05 |
| 128 | 69 | 5.979e+05 | 3520.84 | -0.10 | -420.00 | 0.0 | 6.388e+04 | 4685.03 | -53.85 | 1.090e+04 | 3520.84 | 3.292e+05 |
| | | 3.292e+05 | 325.34 | 1.98e-04 | 0.0 | 60.0 | 6.388e+04 | 4265.03 | -53.85 | 1.090e+04 | 325.34 | 5.979e+05 |
| 128 | 70 | 5.991e+05 | 3554.84 | -0.10 | -420.00 | 0.0 | 6.381e+04 | 4687.01 | -53.80 | 1.089e+04 | 3554.84 | 3.302e+05 |
| | | 3.302e+05 | 362.85 | 1.98e-04 | 0.0 | 60.0 | 6.381e+04 | 4267.01 | -53.80 | 1.089e+04 | 362.85 | 5.991e+05 |
| 128 | 85 | 5.983e+05 | 3655.38 | -0.10 | -420.00 | 0.0 | 6.383e+04 | 4685.11 | -51.78 | 1.115e+04 | 3655.38 | 3.298e+05 |
| | | 3.298e+05 | 548.59 | 1.80e-04 | 0.0 | 60.0 | 6.383e+04 | 4265.11 | -51.78 | 1.115e+04 | 548.59 | 5.983e+05 |
| 128 | 87 | 1.555e+06 | 1.069e+04 | -0.25 | -420.00 | 0.0 | 1.525e+05 | 1.306e+04 | -28.50 | 6.912e+04 | 1.069e+04 | 7.841e+05 |
| | | 7.841e+05 | 8975.46 | 3.62e-04 | 0.0 | 60.0 | 1.525e+05 | 1.264e+04 | -28.50 | 6.912e+04 | 8975.46 | 1.555e+06 |
| 128 | 88 | 5.697e+05 | 3477.28 | -0.10 | -420.00 | 0.0 | 6.078e+04 | 4470.99 | -49.32 | 1.057e+04 | 3477.28 | 3.140e+05 |
| | | 3.140e+05 | 518.21 | 1.71e-04 | 0.0 | 60.0 | 6.078e+04 | 4050.99 | -49.32 | 1.057e+04 | 518.21 | 5.697e+05 |
| 128 | 94 | 5.697e+05 | 3477.01 | -0.10 | -420.00 | 0.0 | 6.079e+04 | 4471.01 | -49.32 | 1.058e+04 | 3477.01 | 3.140e+05 |
| | | 3.140e+05 | 518.04 | 1.71e-04 | 0.0 | 60.0 | 6.079e+04 | 4051.01 | -49.32 | 1.058e+04 | 518.04 | 5.697e+05 |
| 128 | 97 | 1.481e+06 | 1.012e+04 | -0.24 | -420.00 | 0.0 | 1.460e+05 | 1.238e+04 | -32.72 | 6.377e+04 | 1.012e+04 | 7.509e+05 |
| | | 7.509e+05 | 8156.24 | 3.51e-04 | 0.0 | 60.0 | 1.460e+05 | 1.196e+04 | -32.72 | 6.377e+04 | 8156.24 | 1.481e+06 |
| 128 | 98 | 5.963e+05 | 3642.69 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4669.81 | -51.60 | 1.111e+04 | 3642.69 | 3.287e+05 |
| | | 3.287e+05 | 546.44 | 1.79e-04 | 0.0 | 60.0 | 6.361e+04 | 4249.81 | -51.60 | 1.111e+04 | 546.44 | 5.963e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|-----------|--------|-----------|-----------|-----------|
| 128 | 101 | 5.963e+05 | 3642.55 | -0.10 | -420.00 | 0.0 | 6.361e+04 | 4669.82 | -51.60 | 1.111e+04 | 3642.55 | 3.287e+05 |
| | | 3.287e+05 | 546.35 | 1.79e-04 | 0.0 | 60.0 | 6.361e+04 | 4249.82 | -51.60 | 1.111e+04 | 546.35 | 5.963e+05 |
| 128 | 102 | 5.983e+05 | 3655.38 | -0.10 | -420.00 | 0.0 | 6.383e+04 | 4685.11 | -51.78 | 1.115e+04 | 3655.38 | 3.298e+05 |
| | | 3.298e+05 | 548.59 | 1.80e-04 | 0.0 | 60.0 | 6.383e+04 | 4265.11 | -51.78 | 1.115e+04 | 548.59 | 5.983e+05 |
| 129 | 1 | 8.285e+05 | 674.05 | -0.11 | -546.00 | 0.0 | 8.698e+04 | 4802.22 | -36.63 | 1.118e+04 | 674.05 | 5.568e+05 |
| | | 5.568e+05 | -1523.65 | 2.04e-04 | 0.0 | 60.0 | 8.698e+04 | 4256.22 | -36.63 | 1.118e+04 | -1523.65 | 8.285e+05 |
| 129 | 2 | 2.591e+06 | 1.676e+04 | -0.30 | -546.00 | 0.0 | 2.435e+05 | 1.727e+04 | 56.80 | 8.169e+04 | 1.335e+04 | 1.571e+06 |
| | | 1.571e+06 | 1.335e+04 | 4.49e-04 | 0.0 | 60.0 | 2.435e+05 | 1.672e+04 | 56.80 | 8.169e+04 | 1.676e+04 | 2.591e+06 |
| 129 | 7 | 6.209e+05 | 503.02 | -0.08 | -420.00 | 0.0 | 6.519e+04 | 3604.61 | -27.45 | 8353.81 | 503.02 | 4.173e+05 |
| | | 4.173e+05 | -1144.16 | 1.53e-04 | 0.0 | 60.0 | 6.519e+04 | 3184.61 | -27.45 | 8353.81 | -1144.16 | 6.209e+05 |
| 129 | 8 | 2.383e+06 | 1.714e+04 | -0.27 | -420.00 | 0.0 | 2.217e+05 | 1.607e+04 | 65.98 | 7.887e+04 | 1.318e+04 | 1.432e+06 |
| | | 1.432e+06 | 1.318e+04 | 3.98e-04 | 0.0 | 60.0 | 2.217e+05 | 1.565e+04 | 65.98 | 7.887e+04 | 1.714e+04 | 2.383e+06 |
| 129 | 21 | 6.680e+05 | -1267.67 | -0.09 | -420.00 | 0.0 | 7.039e+04 | 3878.74 | -47.73 | 6801.78 | -1267.67 | 4.482e+05 |
| | | 4.482e+05 | -3973.69 | 3.07e-04 | 0.0 | 60.0 | 7.039e+04 | 3458.74 | -47.73 | 6801.78 | -3973.69 | 6.680e+05 |
| 129 | 24 | 6.700e+05 | 2364.85 | -0.09 | -420.00 | 0.0 | 7.005e+04 | 3855.35 | -11.42 | 1.133e+04 | 2364.85 | 4.510e+05 |
| | | 4.510e+05 | 1521.87 | 2.27e-05 | 0.0 | 60.0 | 7.005e+04 | 3435.35 | -11.42 | 1.133e+04 | 1521.87 | 6.700e+05 |
| 129 | 26 | 6.688e+05 | -1269.51 | -0.09 | -420.00 | 0.0 | 7.033e+04 | 3880.26 | -47.72 | 6801.80 | -1269.51 | 4.491e+05 |
| | | 4.491e+05 | -3975.47 | 3.05e-04 | 0.0 | 60.0 | 7.033e+04 | 3460.26 | -47.72 | 6801.80 | -3975.47 | 6.688e+05 |
| 129 | 27 | 6.692e+05 | 2366.69 | -0.09 | -420.00 | 0.0 | 7.011e+04 | 3853.83 | -11.43 | 1.133e+04 | 2366.69 | 4.501e+05 |
| | | 4.501e+05 | 1523.65 | 2.47e-05 | 0.0 | 60.0 | 7.011e+04 | 3433.83 | -11.43 | 1.133e+04 | 1523.65 | 6.692e+05 |
| 129 | 37 | 6.675e+05 | -41.10 | -0.09 | -420.00 | 0.0 | 7.036e+04 | 3868.25 | -35.04 | 8397.59 | -41.10 | 4.478e+05 |
| | | 4.478e+05 | -2093.93 | 2.13e-04 | 0.0 | 60.0 | 7.036e+04 | 3448.25 | -35.04 | 8397.59 | -2093.93 | 6.675e+05 |
| 129 | 40 | 6.705e+05 | 1138.28 | -0.09 | -420.00 | 0.0 | 7.008e+04 | 3865.84 | -24.11 | 9733.63 | 1138.28 | 4.514e+05 |
| | | 4.514e+05 | -357.88 | 1.16e-04 | 0.0 | 60.0 | 7.008e+04 | 3445.84 | -24.11 | 9733.63 | -357.88 | 6.705e+05 |
| 129 | 53 | 6.686e+05 | -138.67 | -0.09 | -420.00 | 0.0 | 7.029e+04 | 3871.44 | -36.44 | 8195.53 | -138.67 | 4.490e+05 |
| | | 4.490e+05 | -2265.64 | 2.19e-04 | 0.0 | 60.0 | 7.029e+04 | 3451.44 | -36.44 | 8195.53 | -2265.64 | 6.686e+05 |
| 129 | 56 | 6.694e+05 | 1235.85 | -0.09 | -420.00 | 0.0 | 7.016e+04 | 3862.65 | -22.71 | 9935.69 | 1235.85 | 4.501e+05 |
| | | 4.501e+05 | -186.18 | 1.11e-04 | 0.0 | 60.0 | 7.016e+04 | 3442.65 | -22.71 | 9935.69 | -186.18 | 6.694e+05 |
| 129 | 58 | 6.689e+05 | -139.38 | -0.09 | -420.00 | 0.0 | 7.026e+04 | 3872.02 | -36.43 | 8195.54 | -139.38 | 4.494e+05 |
| | | 4.494e+05 | -2266.32 | 2.18e-04 | 0.0 | 60.0 | 7.026e+04 | 3452.02 | -36.43 | 8195.54 | -2266.32 | 6.689e+05 |
| 129 | 59 | 6.691e+05 | 1236.56 | -0.09 | -420.00 | 0.0 | 7.018e+04 | 3862.07 | -22.72 | 9935.68 | 1236.56 | 4.498e+05 |
| | | 4.498e+05 | -185.50 | 1.12e-04 | 0.0 | 60.0 | 7.018e+04 | 3442.07 | -22.72 | 9935.68 | -185.50 | 6.691e+05 |
| 129 | 69 | 6.684e+05 | 325.34 | -0.09 | -420.00 | 0.0 | 7.027e+04 | 3867.48 | -31.64 | 8808.82 | 325.34 | 4.489e+05 |
| | | 4.489e+05 | -1554.47 | 1.83e-04 | 0.0 | 60.0 | 7.027e+04 | 3447.48 | -31.64 | 8808.82 | -1554.47 | 6.684e+05 |
| 129 | 72 | 6.696e+05 | 771.84 | -0.09 | -420.00 | 0.0 | 7.017e+04 | 3866.61 | -27.51 | 9322.41 | 771.84 | 4.503e+05 |
| | | 4.503e+05 | -897.35 | 1.47e-04 | 0.0 | 60.0 | 7.017e+04 | 3446.61 | -27.51 | 9322.41 | -897.35 | 6.696e+05 |
| 129 | 85 | 6.690e+05 | 548.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.04 | -29.57 | 9065.61 | 548.59 | 4.496e+05 |
| | | 4.496e+05 | -1225.91 | 1.65e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.04 | -29.57 | 9065.61 | -1225.91 | 6.690e+05 |
| 129 | 86 | 6.415e+05 | 522.51 | -0.08 | -420.00 | 0.0 | 6.735e+04 | 3717.09 | -28.36 | 8659.65 | 522.51 | 4.311e+05 |
| | | 4.311e+05 | -1179.22 | 1.58e-04 | 0.0 | 60.0 | 6.735e+04 | 3297.09 | -28.36 | 8659.65 | -1179.22 | 6.415e+05 |
| 129 | 87 | 1.816e+06 | 1.101e+04 | -0.21 | -420.00 | 0.0 | 1.717e+05 | 1.203e+04 | 33.92 | 5.567e+04 | 8975.45 | 1.107e+06 |
| | | 1.107e+06 | 8975.45 | 3.21e-04 | 0.0 | 60.0 | 1.717e+05 | 1.161e+04 | 33.92 | 5.567e+04 | 1.101e+04 | 1.816e+06 |
| 129 | 88 | 6.370e+05 | 518.21 | -0.08 | -420.00 | 0.0 | 6.687e+04 | 3692.09 | -28.16 | 8591.08 | 518.21 | 4.280e+05 |
| | | 4.280e+05 | -1171.41 | 1.57e-04 | 0.0 | 60.0 | 6.687e+04 | 3272.09 | -28.16 | 8591.08 | -1171.41 | 6.370e+05 |
| 129 | 89 | 1.812e+06 | 1.102e+04 | -0.21 | -420.00 | 0.0 | 1.712e+05 | 1.200e+04 | 34.13 | 5.560e+04 | 8971.15 | 1.104e+06 |
| | | 1.104e+06 | 8971.15 | 3.20e-04 | 0.0 | 60.0 | 1.712e+05 | 1.158e+04 | 34.13 | 5.560e+04 | 1.102e+04 | 1.812e+06 |
| 129 | 96 | 6.690e+05 | 548.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.04 | -29.57 | 9065.61 | 548.59 | 4.496e+05 |
| | | 4.496e+05 | -1225.91 | 1.65e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.04 | -29.57 | 9065.61 | -1225.91 | 6.690e+05 |
| 129 | 97 | 1.726e+06 | 9745.22 | -0.20 | -420.00 | 0.0 | 1.641e+05 | 1.134e+04 | 26.48 | 5.137e+04 | 8156.23 | 1.058e+06 |
| | | 1.058e+06 | 8156.23 | 3.12e-04 | 0.0 | 60.0 | 1.641e+05 | 1.092e+04 | 26.48 | 5.137e+04 | 9745.22 | 1.726e+06 |
| 129 | 98 | 6.667e+05 | 546.44 | -0.09 | -420.00 | 0.0 | 6.998e+04 | 3854.55 | -29.47 | 9031.33 | 546.44 | 4.480e+05 |
| | | 4.480e+05 | -1222.01 | 1.64e-04 | 0.0 | 60.0 | 6.998e+04 | 3434.55 | -29.47 | 9031.33 | -1222.01 | 6.667e+05 |
| 129 | 102 | 6.690e+05 | 548.59 | -0.09 | -420.00 | 0.0 | 7.022e+04 | 3867.04 | -29.57 | 9065.61 | 548.59 | 4.496e+05 |
| | | 4.496e+05 | -1225.91 | 1.65e-04 | 0.0 | 60.0 | 7.022e+04 | 3447.04 | -29.57 | 9065.61 | -1225.91 | 6.690e+05 |
| 130 | 1 | 8.923e+05 | -1523.64 | -0.09 | -546.00 | 0.0 | 9.331e+04 | 3793.19 | -16.65 | 8558.64 | -1523.64 | 6.811e+05 |
| | | 6.811e+05 | -2522.40 | 1.66e-04 | 0.0 | 60.0 | 9.331e+04 | 3247.19 | -16.65 | 8558.64 | -2522.40 | 8.923e+05 |
| 130 | 2 | 2.760e+06 | 2.002e+04 | -0.23 | -546.00 | 0.0 | 2.655e+05 | 1.168e+04 | 54.32 | 5.358e+04 | 1.676e+04 | 2.076e+06 |
| | | 2.076e+06 | 1.676e+04 | 3.57e-04 | 0.0 | 60.0 | 2.655e+05 | 1.113e+04 | 54.32 | 5.358e+04 | 2.002e+04 | 2.760e+06 |
| 130 | 7 | 6.688e+05 | -1144.16 | -0.07 | -420.00 | 0.0 | 6.994e+04 | 2848.35 | -12.48 | 6394.30 | -1144.16 | 5.105e+05 |
| | | 5.105e+05 | -1892.74 | 1.24e-04 | 0.0 | 60.0 | 6.994e+04 | 2428.35 | -12.48 | 6394.30 | -1892.74 | 6.688e+05 |
| 130 | 8 | 2.537e+06 | 2.065e+04 | -0.21 | -420.00 | 0.0 | 2.422e+05 | 1.073e+04 | 58.49 | 5.142e+04 | 1.714e+04 | 1.905e+06 |
| | | 1.905e+06 | 1.714e+04 | 3.15e-04 | 0.0 | 60.0 | 2.422e+05 | 1.031e+04 | 58.49 | 5.142e+04 | 2.065e+04 | 2.537e+06 |
| 130 | 21 | 7.195e+05 | -3973.68 | -0.07 | -420.00 | 0.0 | 7.551e+04 | 3064.85 | -29.70 | 4777.96 | -3973.68 | 5.489e+05 |
| | | 5.489e+05 | -5651.08 | 2.49e-04 | 0.0 | 60.0 | 7.551e+04 | 2644.85 | -29.70 | 4777.96 | -5651.08 | 7.195e+05 |
| 130 | 24 | 7.215e+05 | 1586.41 | -0.07 | -420.00 | 0.0 | 7.515e+04 | 3039.78 | 2.82 | 9116.57 | 1521.87 | 5.511e+05 |
| | | 5.511e+05 | 1521.87 | 1.91e-05 | 0.0 | 60.0 | 7.515e+04 | 2619.78 | 2.82 | 9116.57 | 1586.41 | 7.215e+05 |
| 130 | 26 | 7.202e+05 | -3975.46 | -0.07 | -420.00 | 0.0 | 7.546e+04 | 3069.27 | -29.70 | 4778.00 | -3975.46 | 5.498e+05 |
| | | 5.498e+05 | -5652.60 | 2.49e-04 | 0.0 | 60.0 | 7.546e+04 | 2649.27 | -29.70 | 4778.00 | -5652.60 | 7.202e+05 |
| 130 | 27 | 7.209e+05 | 1587.94 | -0.07 | -420.00 | 0.0 | 7.521e+04 | 3035.36 | 2.82 | 9116.54 | 1523.65 | 5.502e+05 |
| | | 5.502e+05 | 1523.65 | 1.91e-05 | 0.0 | 60.0 | 7.521e+04 | 2615.36 | 2.82 | 9116.54 | 1587.94 | 7.209e+05 |
| 130 | 41 | 7.193e+05 | -1935.91 | -0.07 | -420.00 | 0.0 | 7.546e+04 | 3049.28 | -18.55 | 6351.50 | -1935.91 | 5.483e+05 |
| | | 5.483e+05 | -3020.13 | 1.70e-04 | 0.0 | 60.0 | 7.546e+04 | 2629.28 | -18.55 | 6351.50 | -3020.13 | 7.193e+05 |
| 130 | 44 | 7.218e+05 | -515.90 | -0.07 | -420.00 | 0.0 | 7.521e+04 | 3055.34 | -8.33 | 7543.03 | -515.90 | 5.517e+05 |
| | | 5.517e+05 | -1044.54 | 9.74e-05 | 0.0 | 60.0 | 7.521e+04 | 2635.34 | -8.33 | 7543.03 | -1044.54 | 7.218e+05 |
| 130 | 53 | 7.202e+05 | -2265.63 | -0.07 | -420.00 | 0.0 | 7.540e+04 | 3057.01 | -19.58 | 6118.14 | -2265.63 | 5.496e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|---------|--------|-----------|-----------|-----------|
| | | 5.496e+05 | -3401.34 | 1.77e-04 | 0.0 | 60.0 | 7.540e+04 | 2637.01 | -19.58 | 6118.14 | -3401.34 | 7.202e+05 |
| 130 | 56 | 7.209e+05 | -186.18 | -0.07 | -420.00 | 0.0 | 7.526e+04 | 3047.61 | -7.30 | 7776.39 | -186.18 | 5.504e+05 |
| | | 5.504e+05 | -663.32 | 9.05e-05 | 0.0 | 60.0 | 7.526e+04 | 2627.61 | -7.30 | 7776.39 | -663.32 | 7.209e+05 |
| 130 | 58 | 7.204e+05 | -2266.32 | -0.07 | -420.00 | 0.0 | 7.538e+04 | 3058.71 | -19.58 | 6118.15 | -2266.32 | 5.499e+05 |
| | | 5.499e+05 | -3401.93 | 1.77e-04 | 0.0 | 60.0 | 7.538e+04 | 2638.71 | -19.58 | 6118.15 | -3401.93 | 7.204e+05 |
| 130 | 59 | 7.207e+05 | -185.50 | -0.07 | -420.00 | 0.0 | 7.528e+04 | 3045.92 | -7.30 | 7776.38 | -185.50 | 5.501e+05 |
| | | 5.501e+05 | -662.74 | 9.05e-05 | 0.0 | 60.0 | 7.528e+04 | 2625.92 | -7.30 | 7776.38 | -662.74 | 7.207e+05 |
| 130 | 73 | 7.200e+05 | -1494.80 | -0.07 | -420.00 | 0.0 | 7.538e+04 | 3051.12 | -15.37 | 6719.28 | -1494.80 | 5.493e+05 |
| | | 5.493e+05 | -2406.19 | 1.48e-04 | 0.0 | 60.0 | 7.538e+04 | 2631.12 | -15.37 | 6719.28 | -2406.19 | 7.200e+05 |
| 130 | 76 | 7.210e+05 | -957.01 | -0.07 | -420.00 | 0.0 | 7.528e+04 | 3053.51 | -11.51 | 7175.25 | -957.01 | 5.507e+05 |
| | | 5.507e+05 | -1658.47 | 1.20e-04 | 0.0 | 60.0 | 7.528e+04 | 2633.51 | -11.51 | 7175.25 | -1658.47 | 7.210e+05 |
| 130 | 85 | 7.205e+05 | -1225.91 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.31 | -13.44 | 6947.27 | -1225.91 | 5.500e+05 |
| | | 5.500e+05 | -2032.33 | 1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.31 | -13.44 | 6947.27 | -2032.33 | 7.205e+05 |
| 130 | 86 | 6.910e+05 | -1179.22 | -0.07 | -420.00 | 0.0 | 7.225e+04 | 2935.77 | -12.89 | 6632.06 | -1179.22 | 5.274e+05 |
| | | 5.274e+05 | -1952.58 | 1.28e-04 | 0.0 | 60.0 | 7.225e+04 | 2515.77 | -12.89 | 6632.06 | -1952.58 | 6.910e+05 |
| 130 | 87 | 1.936e+06 | 1.308e+04 | -0.16 | -420.00 | 0.0 | 1.871e+05 | 8190.89 | 34.42 | 3.665e+04 | 1.101e+04 | 1.457e+06 |
| | | 1.457e+06 | 1.101e+04 | 2.56e-04 | 0.0 | 60.0 | 1.871e+05 | 7770.89 | 34.42 | 3.665e+04 | 1.308e+04 | 1.936e+06 |
| 130 | 88 | 6.860e+05 | -1171.41 | -0.07 | -420.00 | 0.0 | 7.174e+04 | 2916.34 | -12.80 | 6578.62 | -1171.41 | 5.237e+05 |
| | | 5.237e+05 | -1939.27 | 1.28e-04 | 0.0 | 60.0 | 7.174e+04 | 2496.34 | -12.80 | 6578.62 | -1939.27 | 6.860e+05 |
| 130 | 89 | 1.931e+06 | 1.309e+04 | -0.16 | -420.00 | 0.0 | 1.865e+05 | 8171.46 | 34.51 | 3.660e+04 | 1.102e+04 | 1.454e+06 |
| | | 1.454e+06 | 1.102e+04 | 2.55e-04 | 0.0 | 60.0 | 1.865e+05 | 7751.46 | 34.51 | 3.660e+04 | 1.309e+04 | 1.931e+06 |
| 130 | 96 | 7.205e+05 | -1225.91 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.31 | -13.44 | 6947.27 | -1225.91 | 5.500e+05 |
| | | 5.500e+05 | -2032.33 | 1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.31 | -13.44 | 6947.27 | -2032.33 | 7.205e+05 |
| 130 | 97 | 1.841e+06 | 1.149e+04 | -0.16 | -420.00 | 0.0 | 1.787e+05 | 7781.92 | 29.14 | 3.396e+04 | 9745.22 | 1.387e+06 |
| | | 1.387e+06 | 9745.22 | 2.49e-04 | 0.0 | 60.0 | 1.787e+05 | 7361.92 | 29.14 | 3.396e+04 | 1.149e+04 | 1.841e+06 |
| 130 | 98 | 7.181e+05 | -1222.00 | -0.07 | -420.00 | 0.0 | 7.507e+04 | 3042.60 | -13.39 | 6920.55 | -1222.00 | 5.481e+05 |
| | | 5.481e+05 | -2025.68 | 1.33e-04 | 0.0 | 60.0 | 7.507e+04 | 2622.60 | -13.39 | 6920.55 | -2025.68 | 7.181e+05 |
| 130 | 102 | 7.205e+05 | -1225.91 | -0.07 | -420.00 | 0.0 | 7.533e+04 | 3052.31 | -13.44 | 6947.27 | -1225.91 | 5.500e+05 |
| | | 5.500e+05 | -2032.33 | 1.34e-04 | 0.0 | 60.0 | 7.533e+04 | 2632.31 | -13.44 | 6947.27 | -2032.33 | 7.205e+05 |
| 131 | 1 | 9.326e+05 | -2522.40 | -0.06 | -546.00 | 0.0 | 9.806e+04 | 2786.54 | -5.72 | 6031.53 | -2522.40 | 7.818e+05 |
| | | 7.818e+05 | -2865.52 | 1.20e-04 | 0.0 | 60.0 | 9.806e+04 | 2240.54 | -5.72 | 6031.53 | -2865.52 | 9.326e+05 |
| 131 | 2 | 2.798e+06 | 2.002e+04 | -0.16 | -546.00 | 0.0 | 2.793e+05 | 6263.10 | -17.66 | 2.042e+04 | 2.002e+04 | 2.439e+06 |
| | | 2.439e+06 | 1.896e+04 | 2.57e-04 | 0.0 | 60.0 | 2.793e+05 | 5717.10 | -17.66 | 2.042e+04 | 1.896e+04 | 2.798e+06 |
| 131 | 7 | 6.990e+05 | -1892.74 | -0.05 | -420.00 | 0.0 | 7.350e+04 | 2093.87 | -4.29 | 4503.00 | -1892.74 | 5.859e+05 |
| | | 5.859e+05 | -2150.07 | 9.00e-05 | 0.0 | 60.0 | 7.350e+04 | 1673.87 | -4.29 | 4503.00 | -2150.07 | 6.990e+05 |
| 131 | 8 | 2.564e+06 | 2.065e+04 | -0.14 | -420.00 | 0.0 | 2.548e+05 | 5570.43 | -16.23 | 1.889e+04 | 2.065e+04 | 2.243e+06 |
| | | 2.243e+06 | 1.968e+04 | 2.27e-04 | 0.0 | 60.0 | 2.548e+05 | 5150.43 | -16.23 | 1.889e+04 | 1.968e+04 | 2.564e+06 |
| 131 | 21 | 7.518e+05 | -5651.07 | -0.05 | -420.00 | 0.0 | 7.935e+04 | 2250.00 | -17.29 | 3069.62 | -5651.07 | 6.302e+05 |
| | | 6.302e+05 | -6612.15 | 1.80e-04 | 0.0 | 60.0 | 7.935e+04 | 1830.00 | -17.29 | 3069.62 | -6612.15 | 7.518e+05 |
| 131 | 24 | 7.544e+05 | 1993.88 | -0.05 | -420.00 | 0.0 | 7.899e+04 | 2229.06 | 8.06 | 6733.48 | 1586.41 | 6.324e+05 |
| | | 6.324e+05 | 1586.41 | 1.34e-05 | 0.0 | 60.0 | 7.899e+04 | 1809.06 | 8.06 | 6733.48 | 1993.88 | 7.544e+05 |
| 131 | 26 | 7.522e+05 | -5652.60 | -0.05 | -420.00 | 0.0 | 7.930e+04 | 2256.89 | -17.28 | 3069.69 | -5652.60 | 6.310e+05 |
| | | 6.310e+05 | -6613.27 | 1.80e-04 | 0.0 | 60.0 | 7.930e+04 | 1836.89 | -17.28 | 3069.69 | -6613.27 | 7.522e+05 |
| 131 | 27 | 7.540e+05 | 1994.99 | -0.05 | -420.00 | 0.0 | 7.903e+04 | 2222.17 | 8.06 | 6733.41 | 1587.94 | 6.315e+05 |
| | | 6.315e+05 | 1587.94 | 1.35e-05 | 0.0 | 60.0 | 7.903e+04 | 1802.17 | 8.06 | 6733.41 | 1994.99 | 7.540e+05 |
| 131 | 41 | 7.521e+05 | -3020.12 | -0.05 | -420.00 | 0.0 | 7.928e+04 | 2232.07 | -8.77 | 4435.80 | -3020.12 | 6.297e+05 |
| | | 6.297e+05 | -3529.57 | 1.25e-04 | 0.0 | 60.0 | 7.928e+04 | 1812.07 | -8.77 | 4435.80 | -3529.57 | 7.521e+05 |
| 131 | 53 | 7.526e+05 | -3401.34 | -0.05 | -420.00 | 0.0 | 7.923e+04 | 2243.44 | -9.40 | 4203.68 | -3401.34 | 6.309e+05 |
| | | 6.309e+05 | -3936.71 | 1.28e-04 | 0.0 | 60.0 | 7.923e+04 | 1823.44 | -9.40 | 4203.68 | -3936.71 | 7.526e+05 |
| 131 | 56 | 7.536e+05 | -663.32 | -0.05 | -420.00 | 0.0 | 7.910e+04 | 2235.62 | 0.17 | 5599.42 | -663.32 | 6.317e+05 |
| | | 6.317e+05 | -681.56 | 6.53e-05 | 0.0 | 60.0 | 7.910e+04 | 1815.62 | 0.17 | 5599.42 | -681.56 | 7.536e+05 |
| 131 | 58 | 7.527e+05 | -3401.93 | -0.05 | -420.00 | 0.0 | 7.922e+04 | 2246.09 | -9.40 | 4203.71 | -3401.93 | 6.312e+05 |
| | | 6.312e+05 | -3937.14 | 1.28e-04 | 0.0 | 60.0 | 7.922e+04 | 1826.09 | -9.40 | 4203.71 | -3937.14 | 7.527e+05 |
| 131 | 59 | 7.534e+05 | -662.74 | -0.05 | -420.00 | 0.0 | 7.911e+04 | 2232.98 | 0.17 | 5599.39 | -662.74 | 6.314e+05 |
| | | 6.314e+05 | -681.14 | 6.53e-05 | 0.0 | 60.0 | 7.911e+04 | 1812.98 | 0.17 | 5599.39 | -681.14 | 7.534e+05 |
| 131 | 73 | 7.527e+05 | -2406.19 | -0.05 | -420.00 | 0.0 | 7.921e+04 | 2236.64 | -6.18 | 4723.85 | -2406.19 | 6.307e+05 |
| | | 6.307e+05 | -2770.86 | 1.08e-04 | 0.0 | 60.0 | 7.921e+04 | 1816.64 | -6.18 | 4723.85 | -2770.86 | 7.527e+05 |
| 131 | 85 | 7.531e+05 | -2032.33 | -0.05 | -420.00 | 0.0 | 7.917e+04 | 2239.53 | -4.61 | 4901.55 | -2032.33 | 6.313e+05 |
| | | 6.313e+05 | -2309.14 | 9.69e-05 | 0.0 | 60.0 | 7.917e+04 | 1819.53 | -4.61 | 4901.55 | -2309.14 | 7.531e+05 |
| 131 | 86 | 7.222e+05 | -1952.57 | -0.05 | -420.00 | 0.0 | 7.593e+04 | 2156.30 | -4.43 | 4674.56 | -1952.57 | 6.054e+05 |
| | | 6.054e+05 | -2218.23 | 9.29e-05 | 0.0 | 60.0 | 7.593e+04 | 1736.30 | -4.43 | 4674.56 | -2218.23 | 7.222e+05 |
| 131 | 87 | 1.966e+06 | 1.308e+04 | -0.11 | -420.00 | 0.0 | 1.968e+05 | 4474.00 | -12.39 | 1.427e+04 | 1.308e+04 | 1.710e+06 |
| | | 1.710e+06 | 1.233e+04 | 1.84e-04 | 0.0 | 60.0 | 1.968e+05 | 4054.00 | -12.39 | 1.427e+04 | 1.233e+04 | 1.966e+06 |
| 131 | 88 | 7.170e+05 | -1939.27 | -0.05 | -420.00 | 0.0 | 7.539e+04 | 2142.42 | -4.40 | 4635.85 | -1939.27 | 6.011e+05 |
| | | 6.011e+05 | -2203.09 | 9.23e-05 | 0.0 | 60.0 | 7.539e+04 | 1722.42 | -4.40 | 4635.85 | -2203.09 | 7.170e+05 |
| 131 | 89 | 1.961e+06 | 1.309e+04 | -0.11 | -420.00 | 0.0 | 1.962e+05 | 4460.13 | -12.36 | 1.423e+04 | 1.309e+04 | 1.706e+06 |
| | | 1.706e+06 | 1.235e+04 | 1.83e-04 | 0.0 | 60.0 | 1.962e+05 | 4040.13 | -12.36 | 1.423e+04 | 1.235e+04 | 1.961e+06 |
| 131 | 96 | 7.531e+05 | -2032.33 | -0.05 | -420.00 | 0.0 | 7.917e+04 | 2239.53 | -4.61 | 4901.55 | -2032.33 | 6.313e+05 |
| | | 6.313e+05 | -2309.14 | 9.69e-05 | 0.0 | 60.0 | 7.917e+04 | 1819.53 | -4.61 | 4901.55 | -2309.14 | 7.531e+05 |
| 131 | 97 | 1.872e+06 | 1.149e+04 | -0.11 | -420.00 | 0.0 | 1.879e+05 | 4325.47 | -11.78 | 1.354e+04 | 1.149e+04 | 1.625e+06 |
| | | 1.625e+06 | 1.079e+04 | 1.79e-04 | 0.0 | 60.0 | 1.879e+05 | 3905.47 | -11.78 | 1.354e+04 | 1.079e+04 | 1.872e+06 |
| 131 | 98 | 7.505e+05 | -2025.68 | -0.05 | -420.00 | 0.0 | 7.890e+04 | 2232.59 | -4.60 | 4882.20 | -2025.68 | 6.291e+05 |
| | | 6.291e+05 | -2301.56 | 9.65e-05 | 0.0 | 60.0 | 7.890e+04 | 1812.59 | -4.60 | 4882.20 | -2301.56 | 7.505e+05 |
| 131 | 102 | 7.531e+05 | -2032.33 | -0.05 | -420.00 | 0.0 | 7.917e+04 | 2239.53 | -4.61 | 4901.55 | -2032.33 | 6.313e+05 |
| | | 6.313e+05 | -2309.14 | 9.69e-05 | 0.0 | 60.0 | 7.917e+04 | 1819.53 | -4.61 | 4901.55 | -2309.14 | 7.531e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|----------|---------|------------|-----------|-----------|
| 132 | 1 | 9.494e+05 | -2865.52 | -0.04 | -546.00 | 0.0 | 1.012e+05 | 1780.90 | -1.19 | 3577.15 | -2865.52 | 8.589e+05 |
| | | 8.589e+05 | -2936.98 | 7.22e-05 | 0.0 | 60.0 | 1.012e+05 | 1234.90 | -1.19 | 3577.15 | -2936.98 | 9.494e+05 |
| 132 | 2 | 2.708e+06 | 1.896e+04 | -0.08 | -546.00 | 0.0 | 2.847e+05 | 857.35 | -104.88 | -1.229e+04 | 1.896e+04 | 2.673e+06 |
| | | 2.673e+06 | 1.267e+04 | 1.52e-04 | 0.0 | 60.0 | 2.847e+05 | 311.35 | -104.88 | -1.229e+04 | 1.267e+04 | 2.708e+06 |
| 132 | 7 | 7.115e+05 | -2150.07 | -0.03 | -420.00 | 0.0 | 7.587e+04 | 1340.13 | -0.90 | 2666.39 | -2150.07 | 6.437e+05 |
| | | 6.437e+05 | -2203.95 | 5.42e-05 | 0.0 | 60.0 | 7.587e+04 | 920.13 | -0.90 | 2666.39 | -2203.95 | 7.115e+05 |
| 132 | 20 | 2.470e+06 | 1.968e+04 | -0.07 | -420.00 | 0.0 | 2.594e+05 | 416.60 | -104.58 | -1.320e+04 | 1.968e+04 | 2.458e+06 |
| | | 2.458e+06 | 1.340e+04 | 1.34e-04 | 0.0 | 60.0 | 2.594e+05 | -3.40 | -104.58 | -1.320e+04 | 1.340e+04 | 2.470e+06 |
| 132 | 21 | 7.651e+05 | -6612.15 | -0.03 | -420.00 | 0.0 | 8.190e+04 | 1433.35 | -8.68 | 1656.65 | -6612.15 | 6.923e+05 |
| | | 6.923e+05 | -7078.87 | 1.06e-04 | 0.0 | 60.0 | 8.190e+04 | 1013.35 | -8.68 | 1656.65 | -7078.87 | 7.651e+05 |
| 132 | 24 | 7.681e+05 | 2346.33 | -0.03 | -420.00 | 0.0 | 8.154e+04 | 1421.81 | 6.78 | 4171.89 | 1993.88 | 6.948e+05 |
| | | 6.948e+05 | 1993.88 | 1.05e-05 | 0.0 | 60.0 | 8.154e+04 | 1001.81 | 6.78 | 4171.89 | 2346.33 | 7.681e+05 |
| 132 | 26 | 7.653e+05 | -6613.26 | -0.03 | -420.00 | 0.0 | 8.187e+04 | 1442.03 | -8.67 | 1656.75 | -6613.26 | 6.929e+05 |
| | | 6.929e+05 | -7079.46 | 1.06e-04 | 0.0 | 60.0 | 8.187e+04 | 1022.03 | -8.67 | 1656.75 | -7079.46 | 7.653e+05 |
| 132 | 27 | 7.680e+05 | 2346.92 | -0.03 | -420.00 | 0.0 | 8.157e+04 | 1413.13 | 6.77 | 4171.78 | 1994.99 | 6.942e+05 |
| | | 6.942e+05 | 1994.99 | 1.05e-05 | 0.0 | 60.0 | 8.157e+04 | 993.13 | 6.77 | 4171.78 | 2346.92 | 7.680e+05 |
| 132 | 41 | 7.660e+05 | -3529.57 | -0.03 | -420.00 | 0.0 | 8.181e+04 | 1415.95 | -3.71 | 2640.81 | -3529.57 | 6.922e+05 |
| | | 6.922e+05 | -3743.29 | 7.66e-05 | 0.0 | 60.0 | 8.181e+04 | 995.95 | -3.71 | 2640.81 | -3743.29 | 7.660e+05 |
| 132 | 53 | 7.661e+05 | -3936.71 | -0.03 | -420.00 | 0.0 | 8.179e+04 | 1429.72 | -3.87 | 2436.13 | -3936.71 | 6.931e+05 |
| | | 6.931e+05 | -4148.54 | 7.63e-05 | 0.0 | 60.0 | 8.179e+04 | 1009.72 | -3.87 | 2436.13 | -4148.54 | 7.661e+05 |
| 132 | 56 | 7.672e+05 | -584.00 | -0.03 | -420.00 | 0.0 | 8.165e+04 | 1425.44 | 1.97 | 3392.41 | -681.56 | 6.940e+05 |
| | | 6.940e+05 | -681.56 | 4.02e-05 | 0.0 | 60.0 | 8.165e+04 | 1005.44 | 1.97 | 3392.41 | -584.00 | 7.672e+05 |
| 132 | 58 | 7.661e+05 | -3937.14 | -0.03 | -420.00 | 0.0 | 8.178e+04 | 1433.05 | -3.87 | 2436.16 | -3937.14 | 6.933e+05 |
| | | 6.933e+05 | -4148.77 | 7.63e-05 | 0.0 | 60.0 | 8.178e+04 | 1013.05 | -3.87 | 2436.16 | -4148.77 | 7.661e+05 |
| 132 | 59 | 7.671e+05 | -583.77 | -0.03 | -420.00 | 0.0 | 8.166e+04 | 1422.11 | 1.96 | 3392.37 | -681.13 | 6.938e+05 |
| | | 6.938e+05 | -681.13 | 4.02e-05 | 0.0 | 60.0 | 8.166e+04 | 1002.11 | 1.96 | 3392.37 | -583.77 | 7.671e+05 |
| 132 | 73 | 7.664e+05 | -2770.85 | -0.03 | -420.00 | 0.0 | 8.176e+04 | 1423.10 | -1.99 | 2810.06 | -2770.85 | 6.930e+05 |
| | | 6.930e+05 | -2887.10 | 6.52e-05 | 0.0 | 60.0 | 8.176e+04 | 1003.10 | -1.99 | 2810.06 | -2887.10 | 7.664e+05 |
| 132 | 85 | 7.666e+05 | -2309.13 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1427.58 | -0.95 | 2914.27 | -2309.13 | 6.936e+05 |
| | | 6.936e+05 | -2366.27 | 5.82e-05 | 0.0 | 60.0 | 8.172e+04 | 1007.58 | -0.95 | 2914.27 | -2366.27 | 7.666e+05 |
| 132 | 86 | 7.351e+05 | -2218.23 | -0.03 | -420.00 | 0.0 | 7.838e+04 | 1377.61 | -0.92 | 2773.34 | -2218.23 | 6.651e+05 |
| | | 6.651e+05 | -2273.49 | 5.59e-05 | 0.0 | 60.0 | 7.838e+04 | 957.61 | -0.92 | 2773.34 | -2273.49 | 7.351e+05 |
| 132 | 87 | 1.908e+06 | 1.233e+04 | -0.06 | -420.00 | 0.0 | 2.007e+05 | 761.91 | -70.04 | -7804.69 | 1.233e+04 | 1.874e+06 |
| | | 1.874e+06 | 8130.51 | 1.09e-04 | 0.0 | 60.0 | 2.007e+05 | 341.91 | -70.04 | -7804.69 | 8130.51 | 1.908e+06 |
| 132 | 88 | 7.299e+05 | -2203.09 | -0.03 | -420.00 | 0.0 | 7.782e+04 | 1369.28 | -0.92 | 2749.02 | -2203.09 | 6.603e+05 |
| | | 6.603e+05 | -2258.06 | 5.55e-05 | 0.0 | 60.0 | 7.782e+04 | 949.28 | -0.92 | 2749.02 | -2258.06 | 7.299e+05 |
| 132 | 95 | 1.902e+06 | 1.235e+04 | -0.06 | -420.00 | 0.0 | 2.001e+05 | 753.59 | -70.04 | -7825.68 | 1.235e+04 | 1.870e+06 |
| | | 1.870e+06 | 8146.07 | 1.09e-04 | 0.0 | 60.0 | 2.001e+05 | 333.59 | -70.04 | -7825.68 | 8146.07 | 1.902e+06 |
| 132 | 96 | 7.666e+05 | -2309.13 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1427.58 | -0.95 | 2914.27 | -2309.13 | 6.936e+05 |
| | | 6.936e+05 | -2366.27 | 5.82e-05 | 0.0 | 60.0 | 8.172e+04 | 1007.58 | -0.95 | 2914.27 | -2366.27 | 7.666e+05 |
| 132 | 97 | 1.822e+06 | 1.079e+04 | -0.06 | -420.00 | 0.0 | 1.918e+05 | 873.45 | -63.16 | -6605.95 | 1.079e+04 | 1.782e+06 |
| | | 1.782e+06 | 6997.33 | 1.06e-04 | 0.0 | 60.0 | 1.918e+05 | 453.45 | -63.16 | -6605.95 | 6997.33 | 1.822e+06 |
| 132 | 98 | 7.640e+05 | -2301.56 | -0.03 | -420.00 | 0.0 | 8.144e+04 | 1423.41 | -0.95 | 2902.11 | -2301.56 | 6.912e+05 |
| | | 6.912e+05 | -2358.56 | 5.80e-05 | 0.0 | 60.0 | 8.144e+04 | 1003.41 | -0.95 | 2902.11 | -2358.56 | 7.640e+05 |
| 132 | 102 | 7.666e+05 | -2309.13 | -0.03 | -420.00 | 0.0 | 8.172e+04 | 1427.58 | -0.95 | 2914.27 | -2309.13 | 6.936e+05 |
| | | 6.936e+05 | -2366.27 | 5.82e-05 | 0.0 | 60.0 | 8.172e+04 | 1007.58 | -0.95 | 2914.27 | -2366.27 | 7.666e+05 |
| 133 | 1 | 9.427e+05 | -2936.98 | -0.01 | -546.00 | 0.0 | 1.028e+05 | 775.55 | -0.12 | 1158.12 | -2936.98 | 9.126e+05 |
| | | 9.126e+05 | -2944.00 | 2.43e-05 | 0.0 | 60.0 | 1.028e+05 | 229.55 | -0.12 | 1158.12 | -2944.00 | 9.427e+05 |
| 133 | 2 | 2.776e+06 | 1.267e+04 | -0.01 | -546.00 | 0.0 | 2.818e+05 | -4709.45 | -151.78 | -3.925e+04 | 1.267e+04 | 2.776e+06 |
| | | 2.477e+06 | 3562.32 | 3.69e-05 | 0.0 | 60.0 | 2.818e+05 | -5255.45 | -151.78 | -3.925e+04 | 3562.32 | 2.477e+06 |
| 133 | 7 | 7.065e+05 | -2203.95 | -9.83e-03 | -420.00 | 0.0 | 7.705e+04 | 586.60 | -0.10 | 856.51 | -2203.95 | 6.839e+05 |
| | | 6.839e+05 | -2209.75 | 1.83e-05 | 0.0 | 60.0 | 7.705e+04 | 166.60 | -0.10 | 856.51 | -2209.75 | 7.065e+05 |
| 133 | 20 | 2.547e+06 | 1.340e+04 | -0.01 | -420.00 | 0.0 | 2.561e+05 | -4898.37 | -151.75 | -3.955e+04 | 1.340e+04 | 2.547e+06 |
| | | 2.241e+06 | 4296.98 | 3.08e-05 | 0.0 | 60.0 | 2.561e+05 | -5318.37 | -151.75 | -3.955e+04 | 4296.98 | 2.241e+06 |
| 133 | 21 | 7.596e+05 | -7078.87 | -0.01 | -420.00 | 0.0 | 8.317e+04 | 615.48 | 2.19 | 409.52 | -7078.87 | 7.358e+05 |
| | | 7.358e+05 | -7164.39 | 2.95e-05 | 0.0 | 60.0 | 8.317e+04 | 195.48 | 2.19 | 409.52 | -7164.39 | 7.596e+05 |
| 133 | 22 | 7.598e+05 | -7069.27 | -0.01 | -420.00 | 0.0 | 8.316e+04 | 625.13 | 2.03 | 362.19 | -7069.27 | 7.354e+05 |
| | | 7.354e+05 | -7164.61 | 3.00e-05 | 0.0 | 60.0 | 8.316e+04 | 205.13 | 2.03 | 362.19 | -7164.61 | 7.598e+05 |
| 133 | 23 | 7.626e+05 | 2422.59 | -0.01 | -420.00 | 0.0 | 8.284e+04 | 606.61 | -2.19 | 1548.05 | 2336.72 | 7.383e+05 |
| | | 7.383e+05 | 2336.72 | 9.16e-06 | 0.0 | 60.0 | 8.284e+04 | 186.61 | -2.19 | 1548.05 | 2422.59 | 7.626e+05 |
| 133 | 24 | 7.628e+05 | 2422.37 | -0.01 | -420.00 | 0.0 | 8.283e+04 | 616.26 | -2.35 | 1500.72 | 2346.33 | 7.379e+05 |
| | | 7.379e+05 | 2346.33 | 9.77e-06 | 0.0 | 60.0 | 8.283e+04 | 196.26 | -2.35 | 1500.72 | 2422.37 | 7.628e+05 |
| 133 | 30 | 7.598e+05 | -6898.18 | -0.01 | -420.00 | 0.0 | 8.316e+04 | 624.64 | -4.60 | 481.17 | -6898.18 | 7.353e+05 |
| | | 7.353e+05 | -7164.56 | 4.79e-05 | 0.0 | 60.0 | 8.316e+04 | 204.64 | -4.60 | 481.17 | -7164.56 | 7.598e+05 |
| 133 | 53 | 7.606e+05 | -4148.54 | -0.01 | -420.00 | 0.0 | 8.306e+04 | 615.70 | 0.78 | 748.03 | -4148.54 | 7.365e+05 |
| | | 7.365e+05 | -4183.75 | 2.33e-05 | 0.0 | 60.0 | 8.306e+04 | 195.70 | 0.78 | 748.03 | -4183.75 | 7.606e+05 |
| 133 | 54 | 7.607e+05 | -4144.89 | -0.01 | -420.00 | 0.0 | 8.306e+04 | 619.40 | 0.72 | 730.05 | -4144.89 | 7.363e+05 |
| | | 7.363e+05 | -4183.83 | 2.35e-05 | 0.0 | 60.0 | 8.306e+04 | 199.40 | 0.72 | 730.05 | -4183.83 | 7.607e+05 |
| 133 | 55 | 7.617e+05 | -558.18 | -0.01 | -420.00 | 0.0 | 8.294e+04 | 612.35 | -0.88 | 1180.19 | -587.66 | 7.374e+05 |
| | | 7.374e+05 | -558.66 | 1.56e-05 | 0.0 | 60.0 | 8.294e+04 | 192.35 | -0.88 | 1180.19 | -558.18 | 7.617e+05 |
| 133 | 56 | 7.618e+05 | -558.27 | -0.01 | -420.00 | 0.0 | 8.293e+04 | 616.05 | -0.94 | 1162.21 | -584.00 | 7.373e+05 |
| | | 7.373e+05 | -584.00 | 1.59e-05 | 0.0 | 60.0 | 8.293e+04 | 196.05 | -0.94 | 1162.21 | -558.27 | 7.618e+05 |
| 133 | 62 | 7.607e+05 | -4080.21 | -0.01 | -420.00 | 0.0 | 8.306e+04 | 619.21 | -1.79 | 774.68 | -4080.21 | 7.363e+05 |
| | | 7.363e+05 | -4183.81 | 3.03e-05 | 0.0 | 60.0 | 8.306e+04 | 199.21 | -1.79 | 774.68 | -4183.81 | 7.607e+05 |
| 133 | 85 | 7.612e+05 | -2366.27 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 615.87 | -0.08 | 955.12 | -2366.27 | 7.369e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|---------|------------|----------|-----------|
| | | 7.369e+05 | -2371.01 | 1.96e-05 | 0.0 | 60.0 | 8.300e+04 | 195.87 | -0.08 | 955.12 | -2371.01 | 7.612e+05 |
| 133 | 86 | 7.300e+05 | -2273.49 | -0.01 | -420.00 | 0.0 | 7.960e+04 | 599.15 | -0.09 | 899.43 | -2273.49 | 7.066e+05 |
| | | 7.066e+05 | -2278.80 | 1.88e-05 | 0.0 | 60.0 | 7.960e+04 | 179.15 | -0.09 | 899.43 | -2278.80 | 7.300e+05 |
| 133 | 87 | 1.949e+06 | 8130.51 | -0.01 | -420.00 | 0.0 | 1.990e+05 | -3057.52 | -101.20 | -2.604e+04 | 8130.51 | 1.949e+06 |
| | | 1.753e+06 | 2058.74 | 2.72e-05 | 0.0 | 60.0 | 1.990e+05 | -3477.52 | -101.20 | -2.604e+04 | 2058.74 | 1.753e+06 |
| 133 | 88 | 7.248e+05 | -2258.06 | -0.01 | -420.00 | 0.0 | 7.904e+04 | 596.36 | -0.09 | 889.38 | -2258.06 | 7.016e+05 |
| | | 7.016e+05 | -2263.50 | 1.87e-05 | 0.0 | 60.0 | 7.904e+04 | 176.36 | -0.09 | 889.38 | -2263.50 | 7.248e+05 |
| 133 | 95 | 1.944e+06 | 8146.08 | -0.01 | -420.00 | 0.0 | 1.984e+05 | -3060.29 | -101.20 | -2.605e+04 | 8146.08 | 1.944e+06 |
| | | 1.747e+06 | 2074.32 | 2.71e-05 | 0.0 | 60.0 | 1.984e+05 | -3480.29 | -101.20 | -2.605e+04 | 2074.32 | 1.747e+06 |
| 133 | 96 | 7.612e+05 | -2366.27 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 615.87 | -0.08 | 955.12 | -2366.27 | 7.369e+05 |
| | | 7.369e+05 | -2371.01 | 1.96e-05 | 0.0 | 60.0 | 8.300e+04 | 195.87 | -0.08 | 955.12 | -2371.01 | 7.612e+05 |
| 133 | 97 | 1.855e+06 | 6997.33 | -0.01 | -420.00 | 0.0 | 1.904e+05 | -2675.13 | -91.08 | -2.329e+04 | 6997.33 | 1.855e+06 |
| | | 1.682e+06 | 1532.78 | 2.71e-05 | 0.0 | 60.0 | 1.904e+05 | -3095.13 | -91.08 | -2.329e+04 | 1532.78 | 1.682e+06 |
| 133 | 98 | 7.586e+05 | -2358.56 | -0.01 | -420.00 | 0.0 | 8.272e+04 | 614.48 | -0.08 | 950.09 | -2358.56 | 7.343e+05 |
| | | 7.343e+05 | -2363.36 | 1.95e-05 | 0.0 | 60.0 | 8.272e+04 | 194.48 | -0.08 | 950.09 | -2363.36 | 7.586e+05 |
| 133 | 102 | 7.612e+05 | -2366.27 | -0.01 | -420.00 | 0.0 | 8.300e+04 | 615.87 | -0.08 | 955.12 | -2366.27 | 7.369e+05 |
| | | 7.369e+05 | -2371.01 | 1.96e-05 | 0.0 | 60.0 | 8.300e+04 | 195.87 | -0.08 | 955.12 | -2371.01 | 7.612e+05 |
| 134 | 2 | 2.671e+06 | 3562.33 | 0.06 | -546.00 | 0.0 | 2.736e+05 | -6051.34 | -124.71 | -5.811e+04 | 3562.33 | 2.671e+06 |
| | | 2.291e+06 | -3920.01 | -9.72e-05 | 0.0 | 60.0 | 2.736e+05 | -6597.34 | -124.71 | -5.811e+04 | -3920.01 | 2.291e+06 |
| 134 | 7 | 7.065e+05 | -2209.75 | 9.83e-03 | -420.00 | 0.0 | 7.705e+04 | -166.90 | -0.09 | -944.24 | -2209.75 | 7.065e+05 |
| | | 6.839e+05 | -2215.26 | -1.75e-05 | 0.0 | 60.0 | 7.705e+04 | -586.90 | -0.09 | -944.24 | -2215.26 | 6.839e+05 |
| 134 | 20 | 2.435e+06 | 4296.99 | 0.06 | -420.00 | 0.0 | 2.478e+05 | -5988.45 | -124.69 | -5.780e+04 | 4296.99 | 2.435e+06 |
| | | 2.063e+06 | -3184.26 | -9.13e-05 | 0.0 | 60.0 | 2.478e+05 | -6408.45 | -124.69 | -5.780e+04 | -3184.26 | 2.063e+06 |
| 134 | 21 | 7.598e+05 | -6906.80 | 0.01 | -420.00 | 0.0 | 8.316e+04 | -204.49 | 4.47 | -520.12 | -7164.61 | 7.598e+05 |
| | | 7.353e+05 | -7164.61 | -4.72e-05 | 0.0 | 60.0 | 8.316e+04 | -624.49 | 4.47 | -520.12 | -6906.80 | 7.353e+05 |
| 134 | 24 | 7.626e+05 | 2422.59 | 0.01 | -420.00 | 0.0 | 8.284e+04 | -187.12 | -4.59 | -1470.43 | 2422.59 | 7.626e+05 |
| | | 7.384e+05 | 2157.38 | 9.32e-06 | 0.0 | 60.0 | 8.284e+04 | -607.12 | -4.59 | -1470.43 | 2157.38 | 7.384e+05 |
| 134 | 30 | 7.596e+05 | -7087.43 | 0.01 | -420.00 | 0.0 | 8.317e+04 | -195.35 | -2.35 | -449.06 | -7164.34 | 7.596e+05 |
| | | 7.358e+05 | -7164.34 | -2.88e-05 | 0.0 | 60.0 | 8.317e+04 | -615.35 | -2.35 | -449.06 | -7087.43 | 7.358e+05 |
| 134 | 31 | 7.628e+05 | 2422.32 | 0.01 | -420.00 | 0.0 | 8.283e+04 | -196.26 | 2.23 | -1541.49 | 2422.32 | 7.628e+05 |
| | | 7.379e+05 | 2338.01 | -9.22e-06 | 0.0 | 60.0 | 8.283e+04 | -616.26 | 2.23 | -1541.49 | 2338.01 | 7.379e+05 |
| 134 | 53 | 7.607e+05 | -4088.72 | 0.01 | -420.00 | 0.0 | 8.306e+04 | -199.11 | 1.65 | -814.38 | -4183.83 | 7.607e+05 |
| | | 7.363e+05 | -4183.83 | -2.97e-05 | 0.0 | 60.0 | 8.306e+04 | -619.11 | 1.65 | -814.38 | -4088.72 | 7.363e+05 |
| 134 | 56 | 7.617e+05 | -558.18 | 0.01 | -420.00 | 0.0 | 8.294e+04 | -192.50 | -1.77 | -1176.16 | -558.18 | 7.617e+05 |
| | | 7.375e+05 | -660.70 | -8.27e-06 | 0.0 | 60.0 | 8.294e+04 | -612.50 | -1.77 | -1176.16 | -660.70 | 7.375e+05 |
| 134 | 62 | 7.606e+05 | -4157.03 | 0.01 | -420.00 | 0.0 | 8.306e+04 | -195.60 | -0.93 | -787.95 | -4183.73 | 7.606e+05 |
| | | 7.365e+05 | -4183.73 | -2.27e-05 | 0.0 | 60.0 | 8.306e+04 | -615.60 | -0.93 | -787.95 | -4157.03 | 7.365e+05 |
| 134 | 63 | 7.618e+05 | -558.29 | 0.01 | -420.00 | 0.0 | 8.293e+04 | -196.01 | 0.80 | -1202.60 | -558.29 | 7.618e+05 |
| | | 7.373e+05 | -592.39 | -1.53e-05 | 0.0 | 60.0 | 8.293e+04 | -616.01 | 0.80 | -1202.60 | -592.39 | 7.373e+05 |
| 134 | 85 | 7.612e+05 | -2371.01 | 0.01 | -420.00 | 0.0 | 8.300e+04 | -195.81 | -0.06 | -995.27 | -2371.01 | 7.612e+05 |
| | | 7.369e+05 | -2374.71 | -1.90e-05 | 0.0 | 60.0 | 8.300e+04 | -615.81 | -0.06 | -995.27 | -2374.71 | 7.369e+05 |
| 134 | 87 | 1.882e+06 | 2058.75 | 0.04 | -420.00 | 0.0 | 1.934e+05 | -4060.34 | -83.15 | -3.887e+04 | 2058.75 | 1.882e+06 |
| | | 1.626e+06 | -2929.97 | -6.73e-05 | 0.0 | 60.0 | 1.934e+05 | -4480.34 | -83.15 | -3.887e+04 | -2929.97 | 1.626e+06 |
| 134 | 88 | 7.248e+05 | -2263.50 | 0.01 | -420.00 | 0.0 | 7.904e+04 | -176.53 | -0.08 | -961.25 | -2263.50 | 7.248e+05 |
| | | 7.016e+05 | -2268.41 | -1.80e-05 | 0.0 | 60.0 | 7.904e+04 | -596.53 | -0.08 | -961.25 | -2268.41 | 7.016e+05 |
| 134 | 95 | 1.877e+06 | 2074.33 | 0.04 | -420.00 | 0.0 | 1.929e+05 | -4057.57 | -83.15 | -3.886e+04 | 2074.33 | 1.877e+06 |
| | | 1.621e+06 | -2914.41 | -6.72e-05 | 0.0 | 60.0 | 1.929e+05 | -4477.57 | -83.15 | -3.886e+04 | -2914.41 | 1.621e+06 |
| 134 | 97 | 1.798e+06 | 1532.79 | 0.04 | -420.00 | 0.0 | 1.855e+05 | -3688.75 | -74.82 | -3.511e+04 | 1532.79 | 1.798e+06 |
| | | 1.564e+06 | -2956.54 | -6.32e-05 | 0.0 | 60.0 | 1.855e+05 | -4108.75 | -74.82 | -3.511e+04 | -2956.54 | 1.564e+06 |
| 134 | 98 | 7.586e+05 | -2363.36 | 0.01 | -420.00 | 0.0 | 8.272e+04 | -194.43 | -0.06 | -993.13 | -2363.36 | 7.586e+05 |
| | | 7.343e+05 | -2367.17 | -1.89e-05 | 0.0 | 60.0 | 8.272e+04 | -614.43 | -0.06 | -993.13 | -2367.17 | 7.343e+05 |
| 134 | 102 | 7.612e+05 | -2371.01 | 0.01 | -420.00 | 0.0 | 8.300e+04 | -195.81 | -0.06 | -995.27 | -2371.01 | 7.612e+05 |
| | | 7.369e+05 | -2374.71 | -1.90e-05 | 0.0 | 60.0 | 8.300e+04 | -615.81 | -0.06 | -995.27 | -2374.71 | 7.369e+05 |
| 135 | 2 | 2.546e+06 | -3920.00 | 0.13 | -546.00 | 0.0 | 2.626e+05 | -7583.94 | -59.61 | -6.889e+04 | -3920.00 | 2.546e+06 |
| | | 2.075e+06 | -7496.77 | -2.32e-04 | 0.0 | 60.0 | 2.626e+05 | -8129.94 | -59.61 | -6.889e+04 | -7496.77 | 2.075e+06 |
| 135 | 7 | 7.116e+05 | -2172.82 | 0.03 | -420.00 | 0.0 | 7.587e+04 | -920.46 | 0.71 | -2747.63 | -2215.26 | 7.116e+05 |
| | | 6.437e+05 | -2215.26 | -5.34e-05 | 0.0 | 60.0 | 7.587e+04 | -1340.46 | 0.71 | -2747.63 | -2172.82 | 6.437e+05 |
| 135 | 19 | 7.116e+05 | -2171.68 | 0.03 | -420.00 | 0.0 | 7.587e+04 | -920.42 | 0.71 | -2744.38 | -2214.54 | 7.116e+05 |
| | | 6.437e+05 | -2214.54 | -5.34e-05 | 0.0 | 60.0 | 7.587e+04 | -1340.42 | 0.71 | -2744.38 | -2171.68 | 6.437e+05 |
| 135 | 30 | 7.652e+05 | -6629.31 | 0.03 | -420.00 | 0.0 | 8.190e+04 | -1013.27 | 8.55 | -1692.08 | -7087.43 | 7.652e+05 |
| | | 6.923e+05 | -7087.43 | -1.05e-04 | 0.0 | 60.0 | 8.190e+04 | -1433.27 | 8.55 | -1692.08 | -6629.31 | 6.923e+05 |
| 135 | 31 | 7.681e+05 | 2338.01 | 0.03 | -420.00 | 0.0 | 8.154e+04 | -1001.82 | -6.92 | -4208.21 | 2338.01 | 7.681e+05 |
| | | 6.949e+05 | 1977.57 | -9.91e-06 | 0.0 | 60.0 | 8.154e+04 | -1421.82 | -6.92 | -4208.21 | 1977.57 | 6.949e+05 |
| 135 | 33 | 7.653e+05 | -6630.43 | 0.03 | -420.00 | 0.0 | 8.187e+04 | -1021.96 | 8.54 | -1692.19 | -7088.02 | 7.653e+05 |
| | | 6.929e+05 | -7088.02 | -1.05e-04 | 0.0 | 60.0 | 8.187e+04 | -1441.96 | 8.54 | -1692.19 | -6630.43 | 6.929e+05 |
| 135 | 36 | 7.680e+05 | 2338.60 | 0.03 | -420.00 | 0.0 | 8.157e+04 | -993.14 | -6.91 | -4208.09 | 2338.60 | 7.680e+05 |
| | | 6.942e+05 | 1978.68 | -9.95e-06 | 0.0 | 60.0 | 8.157e+04 | -1413.14 | -6.91 | -4208.09 | 1978.68 | 6.942e+05 |
| 135 | 38 | 7.660e+05 | -3546.34 | 0.03 | -420.00 | 0.0 | 8.181e+04 | -995.91 | 3.57 | -2676.47 | -3751.72 | 7.660e+05 |
| | | 6.922e+05 | -3751.72 | -7.60e-05 | 0.0 | 60.0 | 8.181e+04 | -1415.91 | 3.57 | -2676.47 | -3546.34 | 6.922e+05 |
| 135 | 62 | 7.661e+05 | -3953.61 | 0.03 | -420.00 | 0.0 | 8.179e+04 | -1009.67 | 3.73 | -2471.84 | -4157.03 | 7.661e+05 |
| | | 6.931e+05 | -4157.03 | -7.57e-05 | 0.0 | 60.0 | 8.179e+04 | -1429.67 | 3.73 | -2471.84 | -3953.61 | 6.931e+05 |
| 135 | 63 | 7.672e+05 | -592.39 | 0.03 | -420.00 | 0.0 | 8.165e+04 | -1005.42 | -2.11 | -3428.45 | -592.39 | 7.672e+05 |
| | | 6.941e+05 | -698.14 | -3.96e-05 | 0.0 | 60.0 | 8.165e+04 | -1425.42 | -2.11 | -3428.45 | -698.14 | 6.941e+05 |
| 135 | 65 | 7.661e+05 | -3954.03 | 0.03 | -420.00 | 0.0 | 8.178e+04 | -1013.00 | 3.73 | -2471.88 | -4157.25 | 7.661e+05 |
| | | 6.933e+05 | -4157.25 | -7.57e-05 | 0.0 | 60.0 | 8.178e+04 | -1433.00 | 3.73 | -2471.88 | -3954.03 | 6.933e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|------------|----------|-----------|
| 135 | 68 | 7.671e+05 | -592.16 | 0.03 | -420.00 | 0.0 | 8.166e+04 | -1002.09 | -2.10 | -3428.41 | -592.16 | 7.671e+05 |
| | | 6.938e+05 | -697.71 | -3.96e-05 | 0.0 | 60.0 | 8.166e+04 | -1422.09 | -2.10 | -3428.41 | -697.71 | 6.938e+05 |
| 135 | 70 | 7.664e+05 | -2787.61 | 0.03 | -420.00 | 0.0 | 8.176e+04 | -1003.06 | 1.86 | -2845.86 | -2895.54 | 7.664e+05 |
| | | 6.930e+05 | -2895.54 | -6.46e-05 | 0.0 | 60.0 | 8.176e+04 | -1423.06 | 1.86 | -2845.86 | -2787.61 | 6.930e+05 |
| 135 | 85 | 7.666e+05 | -2325.87 | 0.03 | -420.00 | 0.0 | 8.172e+04 | -1007.55 | 0.81 | -2950.14 | -2374.71 | 7.666e+05 |
| | | 6.936e+05 | -2374.71 | -5.77e-05 | 0.0 | 60.0 | 8.172e+04 | -1427.55 | 0.81 | -2950.14 | -2325.87 | 6.936e+05 |
| 135 | 87 | 1.800e+06 | -2929.96 | 0.09 | -420.00 | 0.0 | 1.860e+05 | -5190.30 | -39.63 | -4.632e+04 | -2929.96 | 1.800e+06 |
| | | 1.476e+06 | -5307.96 | -1.63e-04 | 0.0 | 60.0 | 1.860e+05 | -5610.30 | -39.63 | -4.632e+04 | -5307.96 | 1.476e+06 |
| 135 | 88 | 7.299e+05 | -2223.84 | 0.03 | -420.00 | 0.0 | 7.782e+04 | -949.49 | 0.74 | -2815.14 | -2268.41 | 7.299e+05 |
| | | 6.603e+05 | -2268.41 | -5.48e-05 | 0.0 | 60.0 | 7.782e+04 | -1369.49 | 0.74 | -2815.14 | -2223.84 | 6.603e+05 |
| 135 | 94 | 7.299e+05 | -2223.08 | 0.03 | -420.00 | 0.0 | 7.782e+04 | -949.46 | 0.75 | -2812.97 | -2267.93 | 7.299e+05 |
| | | 6.604e+05 | -2267.93 | -5.48e-05 | 0.0 | 60.0 | 7.782e+04 | -1369.46 | 0.75 | -2812.97 | -2223.08 | 6.604e+05 |
| 135 | 97 | 1.725e+06 | -2956.53 | 0.09 | -420.00 | 0.0 | 1.786e+05 | -4816.82 | -35.53 | -4.209e+04 | -2956.53 | 1.725e+06 |
| | | 1.423e+06 | -5088.61 | -1.54e-04 | 0.0 | 60.0 | 1.786e+05 | -5236.82 | -35.53 | -4.209e+04 | -5088.61 | 1.423e+06 |
| 135 | 98 | 7.640e+05 | -2318.67 | 0.03 | -420.00 | 0.0 | 8.144e+04 | -1003.40 | 0.81 | -2940.73 | -2367.17 | 7.640e+05 |
| | | 6.912e+05 | -2367.17 | -5.74e-05 | 0.0 | 60.0 | 8.144e+04 | -1423.40 | 0.81 | -2940.73 | -2318.67 | 6.912e+05 |
| 135 | 101 | 7.640e+05 | -2318.29 | 0.03 | -420.00 | 0.0 | 8.144e+04 | -1003.39 | 0.81 | -2939.65 | -2366.93 | 7.640e+05 |
| | | 6.912e+05 | -2366.93 | -5.75e-05 | 0.0 | 60.0 | 8.144e+04 | -1423.39 | 0.81 | -2939.65 | -2318.29 | 6.912e+05 |
| 135 | 102 | 7.666e+05 | -2325.87 | 0.03 | -420.00 | 0.0 | 8.172e+04 | -1007.55 | 0.81 | -2950.14 | -2374.71 | 7.666e+05 |
| | | 6.936e+05 | -2374.71 | -5.77e-05 | 0.0 | 60.0 | 8.172e+04 | -1427.55 | 0.81 | -2950.14 | -2325.87 | 6.936e+05 |
| 136 | 2 | 2.388e+06 | -7496.76 | 0.19 | -546.00 | 0.0 | 2.492e+05 | -9205.69 | -3.38 | -7.416e+04 | -7496.76 | 2.388e+06 |
| | | 1.820e+06 | -7699.41 | -3.51e-04 | 0.0 | 60.0 | 2.492e+05 | -9751.69 | -3.38 | -7.416e+04 | -7699.41 | 1.820e+06 |
| 136 | 7 | 6.990e+05 | -1927.00 | 0.05 | -420.00 | 0.0 | 7.349e+04 | -1674.24 | 4.10 | -4571.66 | -2172.82 | 6.990e+05 |
| | | 5.859e+05 | -2172.82 | -8.93e-05 | 0.0 | 60.0 | 7.349e+04 | -2094.24 | 4.10 | -4571.66 | -1927.00 | 5.859e+05 |
| 136 | 19 | 6.990e+05 | -1925.29 | 0.05 | -420.00 | 0.0 | 7.349e+04 | -1674.21 | 4.11 | -4569.51 | -2171.68 | 6.990e+05 |
| | | 5.859e+05 | -2171.68 | -8.94e-05 | 0.0 | 60.0 | 7.349e+04 | -2094.21 | 4.11 | -4569.51 | -1925.29 | 5.859e+05 |
| 136 | 30 | 7.518e+05 | -5676.31 | 0.05 | -420.00 | 0.0 | 7.934e+04 | -1830.06 | 17.16 | -3097.60 | -6629.31 | 7.518e+05 |
| | | 6.302e+05 | -6629.31 | -1.80e-04 | 0.0 | 60.0 | 7.934e+04 | -2250.06 | 17.16 | -3097.60 | -5676.31 | 6.302e+05 |
| 136 | 31 | 7.544e+05 | 1977.57 | 0.05 | -420.00 | 0.0 | 7.898e+04 | -1809.07 | -8.19 | -6761.34 | 1977.57 | 7.544e+05 |
| | | 6.324e+05 | 1562.60 | -1.30e-05 | 0.0 | 60.0 | 7.898e+04 | -2229.07 | -8.19 | -6761.34 | 1562.60 | 6.324e+05 |
| 136 | 33 | 7.522e+05 | -5677.84 | 0.05 | -420.00 | 0.0 | 7.930e+04 | -1836.95 | 17.15 | -3097.68 | -6630.43 | 7.522e+05 |
| | | 6.311e+05 | -6630.43 | -1.80e-04 | 0.0 | 60.0 | 7.930e+04 | -2256.95 | 17.15 | -3097.68 | -5677.84 | 6.311e+05 |
| 136 | 36 | 7.540e+05 | -1978.68 | 0.05 | -420.00 | 0.0 | 7.903e+04 | -1802.18 | -8.19 | -6761.27 | -1978.68 | 7.540e+05 |
| | | 6.316e+05 | 1564.13 | -1.30e-05 | 0.0 | 60.0 | 7.903e+04 | -2222.18 | -8.19 | -6761.27 | 1564.13 | 6.316e+05 |
| 136 | 38 | 7.521e+05 | -3044.75 | 0.05 | -420.00 | 0.0 | 7.927e+04 | -1812.12 | 8.64 | -4463.66 | -3546.34 | 7.521e+05 |
| | | 6.297e+05 | -3546.34 | -1.25e-04 | 0.0 | 60.0 | 7.927e+04 | -2232.12 | 8.64 | -4463.66 | -3044.75 | 6.297e+05 |
| 136 | 62 | 7.526e+05 | -3426.13 | 0.05 | -420.00 | 0.0 | 7.923e+04 | -1823.48 | 9.27 | -4231.63 | -3953.61 | 7.526e+05 |
| | | 6.309e+05 | -3953.61 | -1.28e-04 | 0.0 | 60.0 | 7.923e+04 | -2243.48 | 9.27 | -4231.63 | -3426.13 | 6.309e+05 |
| 136 | 63 | 7.536e+05 | -687.58 | 0.05 | -420.00 | 0.0 | 7.910e+04 | -1815.64 | -0.30 | -5627.32 | -698.14 | 7.536e+05 |
| | | 6.317e+05 | -698.14 | -6.48e-05 | 0.0 | 60.0 | 7.910e+04 | -2235.64 | -0.30 | -5627.32 | -687.58 | 6.317e+05 |
| 136 | 65 | 7.527e+05 | -3426.72 | 0.05 | -420.00 | 0.0 | 7.922e+04 | -1826.13 | 9.27 | -4231.66 | -3954.04 | 7.527e+05 |
| | | 6.312e+05 | -3954.04 | -1.28e-04 | 0.0 | 60.0 | 7.922e+04 | -2246.13 | 9.27 | -4231.66 | -3426.72 | 6.312e+05 |
| 136 | 68 | 7.534e+05 | -686.99 | 0.05 | -420.00 | 0.0 | 7.911e+04 | -1813.00 | -0.30 | -5627.29 | -697.71 | 7.534e+05 |
| | | 6.314e+05 | -697.71 | -6.48e-05 | 0.0 | 60.0 | 7.911e+04 | -2233.00 | -0.30 | -5627.29 | -686.99 | 6.314e+05 |
| 136 | 70 | 7.527e+05 | -2430.75 | 0.05 | -420.00 | 0.0 | 7.921e+04 | -1816.68 | 6.05 | -4751.74 | -2787.61 | 7.527e+05 |
| | | 6.307e+05 | -2787.61 | -1.07e-04 | 0.0 | 60.0 | 7.921e+04 | -2236.68 | 6.05 | -4751.74 | -2430.75 | 6.307e+05 |
| 136 | 85 | 7.531e+05 | -2056.85 | 0.05 | -420.00 | 0.0 | 7.916e+04 | -1819.56 | 4.48 | -4929.47 | -2325.87 | 7.531e+05 |
| | | 6.313e+05 | -2325.87 | -9.64e-05 | 0.0 | 60.0 | 7.916e+04 | -2239.56 | 4.48 | -4929.47 | -2056.85 | 6.313e+05 |
| 136 | 87 | 1.693e+06 | -5307.96 | 0.13 | -420.00 | 0.0 | 1.767e+05 | -6379.73 | -1.65 | -5.010e+04 | -5307.96 | 1.693e+06 |
| | | 1.297e+06 | -5407.19 | -2.47e-04 | 0.0 | 60.0 | 1.767e+05 | -6799.73 | -1.65 | -5.010e+04 | -5407.19 | 1.297e+06 |
| 136 | 88 | 7.170e+05 | -1970.29 | 0.05 | -420.00 | 0.0 | 7.538e+04 | -1722.68 | 4.23 | -4690.93 | -2223.84 | 7.170e+05 |
| | | 6.011e+05 | -2223.84 | -9.17e-05 | 0.0 | 60.0 | 7.538e+04 | -2142.68 | 4.23 | -4690.93 | -1970.29 | 6.011e+05 |
| 136 | 94 | 7.170e+05 | -1969.15 | 0.05 | -420.00 | 0.0 | 7.538e+04 | -1722.66 | 4.23 | -4689.50 | -2223.08 | 7.170e+05 |
| | | 6.011e+05 | -2223.08 | -9.17e-05 | 0.0 | 60.0 | 7.538e+04 | -2142.66 | 4.23 | -4689.50 | -1969.15 | 6.011e+05 |
| 136 | 97 | 1.627e+06 | -5088.61 | 0.13 | -420.00 | 0.0 | 1.698e+05 | -5998.46 | -0.84 | -4.577e+04 | -5088.61 | 1.627e+06 |
| | | 1.254e+06 | -5139.16 | -2.36e-04 | 0.0 | 60.0 | 1.698e+05 | -6418.46 | -0.84 | -4.577e+04 | -5139.16 | 1.254e+06 |
| 136 | 98 | 7.505e+05 | -2050.79 | 0.05 | -420.00 | 0.0 | 7.889e+04 | -1812.64 | 4.46 | -4912.59 | -2318.67 | 7.505e+05 |
| | | 6.292e+05 | -2318.67 | -9.60e-05 | 0.0 | 60.0 | 7.889e+04 | -2232.64 | 4.46 | -4912.59 | -2050.79 | 6.292e+05 |
| 136 | 101 | 7.505e+05 | -2050.22 | 0.05 | -420.00 | 0.0 | 7.889e+04 | -1812.63 | 4.47 | -4911.87 | -2318.29 | 7.505e+05 |
| | | 6.292e+05 | -2318.29 | -9.60e-05 | 0.0 | 60.0 | 7.889e+04 | -2232.63 | 4.47 | -4911.87 | -2050.22 | 6.292e+05 |
| 136 | 102 | 7.531e+05 | -2056.85 | 0.05 | -420.00 | 0.0 | 7.916e+04 | -1819.56 | 4.48 | -4929.47 | -2325.87 | 7.531e+05 |
| | | 6.313e+05 | -2325.87 | -9.64e-05 | 0.0 | 60.0 | 7.916e+04 | -2239.56 | 4.48 | -4929.47 | -2056.85 | 6.313e+05 |
| 137 | 2 | 2.192e+06 | -4673.65 | 0.25 | -546.00 | 0.0 | 2.332e+05 | -1.085e+04 | 50.43 | -7.677e+04 | -4673.65 | 2.192e+06 |
| | | 1.525e+06 | -7699.41 | -4.49e-04 | 0.0 | 60.0 | 2.332e+05 | -1.139e+04 | 50.43 | -7.677e+04 | -7699.41 | 1.525e+06 |
| 137 | 7 | 6.688e+05 | -1189.40 | 0.07 | -420.00 | 0.0 | 6.993e+04 | -2428.77 | 12.29 | -6445.14 | -1927.00 | 6.688e+05 |
| | | 5.105e+05 | -1927.00 | -1.24e-04 | 0.0 | 60.0 | 6.993e+04 | -2848.77 | 12.29 | -6445.14 | -1189.40 | 5.105e+05 |
| 137 | 19 | 6.688e+05 | -1186.95 | 0.07 | -420.00 | 0.0 | 6.994e+04 | -2428.74 | 12.31 | -6444.51 | -1925.30 | 6.688e+05 |
| | | 5.105e+05 | -1925.30 | -1.24e-04 | 0.0 | 60.0 | 6.994e+04 | -2848.74 | 12.31 | -6444.51 | -1186.95 | 5.105e+05 |
| 137 | 30 | 7.196e+05 | -4005.33 | 0.07 | -420.00 | 0.0 | 7.551e+04 | -2645.03 | 29.59 | -4795.90 | -5676.32 | 7.196e+05 |
| | | 5.489e+05 | -5676.32 | -2.48e-04 | 0.0 | 60.0 | 7.551e+04 | -3065.03 | 29.59 | -4795.90 | -4005.33 | 5.489e+05 |
| 137 | 31 | 7.216e+05 | 1562.60 | 0.07 | -420.00 | 0.0 | 7.515e+04 | -2619.80 | -2.92 | -9133.70 | 1562.60 | 7.216e+05 |
| | | 5.512e+05 | 1491.66 | -1.88e-05 | 0.0 | 60.0 | 7.515e+04 | -3039.80 | -2.92 | -9133.70 | 1491.66 | 5.512e+05 |
| 137 | 33 | 7.202e+05 | -4007.12 | 0.07 | -420.00 | 0.0 | 7.546e+04 | -2649.45 | 29.58 | -4795.95 | -5677.84 | 7.202e+05 |
| | | 5.498e+05 | -5677.84 | -2.48e-04 | 0.0 | 60.0 | 7.546e+04 | -3069.45 | 29.58 | -4795.95 | -4007.12 | 5.498e+05 |
| 137 | 36 | 7.209e+05 | 1564.13 | 0.07 | -420.00 | 0.0 | 7.520e+04 | -2615.38 | -2.92 | -9133.65 | 1564.13 | 7.209e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|------------|--------|------------|-----------|-----------|
| | | 5.503e+05 | 1493.44 | -1.88e-05 | 0.0 | 60.0 | 7.520e+04 | -3035.38 | -2.92 | -9133.65 | 1493.44 | 5.503e+05 |
| 137 | 38 | 7.193e+05 | -1967.04 | 0.07 | -420.00 | 0.0 | 7.546e+04 | -2629.42 | 18.44 | -6369.09 | -3044.75 | 7.193e+05 |
| | | 5.483e+05 | -3044.75 | -1.70e-04 | 0.0 | 60.0 | 7.546e+04 | -3049.42 | 18.44 | -6369.09 | -1967.04 | 5.483e+05 |
| 137 | 39 | 7.219e+05 | -546.63 | 0.07 | -420.00 | 0.0 | 7.521e+04 | -2635.42 | 8.23 | -7560.52 | -1068.96 | 7.219e+05 |
| | | 5.518e+05 | -1068.96 | -9.71e-05 | 0.0 | 60.0 | 7.521e+04 | -3055.42 | 8.23 | -7560.52 | -546.63 | 5.518e+05 |
| 137 | 62 | 7.202e+05 | -2296.83 | 0.07 | -420.00 | 0.0 | 7.540e+04 | -2637.15 | 19.47 | -6135.83 | -3426.14 | 7.202e+05 |
| | | 5.496e+05 | -3426.14 | -1.77e-04 | 0.0 | 60.0 | 7.540e+04 | -3057.15 | 19.47 | -6135.83 | -2296.83 | 5.496e+05 |
| 137 | 63 | 7.210e+05 | -216.84 | 0.07 | -420.00 | 0.0 | 7.526e+04 | -2627.69 | 7.19 | -7793.77 | -687.58 | 7.210e+05 |
| | | 5.505e+05 | -687.58 | -9.02e-05 | 0.0 | 60.0 | 7.526e+04 | -3047.69 | 7.19 | -7793.77 | -216.84 | 5.505e+05 |
| 137 | 65 | 7.204e+05 | -2297.52 | 0.07 | -420.00 | 0.0 | 7.538e+04 | -2638.84 | 19.47 | -6135.84 | -3426.72 | 7.204e+05 |
| | | 5.499e+05 | -3426.72 | -1.77e-04 | 0.0 | 60.0 | 7.538e+04 | -3058.84 | 19.47 | -6135.84 | -2297.52 | 5.499e+05 |
| 137 | 68 | 7.207e+05 | -216.15 | 0.07 | -420.00 | 0.0 | 7.528e+04 | -2625.99 | 7.20 | -7793.76 | -686.99 | 7.207e+05 |
| | | 5.501e+05 | -686.99 | -9.02e-05 | 0.0 | 60.0 | 7.528e+04 | -3045.99 | 7.20 | -7793.76 | -216.15 | 5.501e+05 |
| 137 | 70 | 7.201e+05 | -1525.80 | 0.07 | -420.00 | 0.0 | 7.538e+04 | -2631.24 | 15.26 | -6736.83 | -2430.75 | 7.201e+05 |
| | | 5.494e+05 | -2430.75 | -1.47e-04 | 0.0 | 60.0 | 7.538e+04 | -3051.24 | 15.26 | -6736.83 | -1525.80 | 5.494e+05 |
| 137 | 71 | 7.211e+05 | -987.87 | 0.07 | -420.00 | 0.0 | 7.528e+04 | -2633.60 | 11.40 | -7192.77 | -1682.96 | 7.211e+05 |
| | | 5.507e+05 | -1682.96 | -1.20e-04 | 0.0 | 60.0 | 7.528e+04 | -3053.60 | 11.40 | -7192.77 | -987.87 | 5.507e+05 |
| 137 | 85 | 7.206e+05 | -1256.84 | 0.07 | -420.00 | 0.0 | 7.533e+04 | -2632.42 | 13.33 | -6964.80 | -2056.86 | 7.206e+05 |
| | | 5.500e+05 | -2056.86 | -1.34e-04 | 0.0 | 60.0 | 7.533e+04 | -3052.42 | 13.33 | -6964.80 | -1256.84 | 5.500e+05 |
| 137 | 87 | 1.558e+06 | -3283.34 | 0.17 | -420.00 | 0.0 | 1.655e+05 | -7583.43 | 35.40 | -5.211e+04 | -5407.18 | 1.558e+06 |
| | | 1.090e+06 | -5407.18 | -3.17e-04 | 0.0 | 60.0 | 1.655e+05 | -8003.43 | 35.40 | -5.211e+04 | -3283.34 | 1.090e+06 |
| 137 | 88 | 6.861e+05 | -1211.88 | 0.07 | -420.00 | 0.0 | 7.173e+04 | -2496.65 | 12.64 | -6618.36 | -1970.29 | 6.861e+05 |
| | | 5.237e+05 | -1970.29 | -1.27e-04 | 0.0 | 60.0 | 7.173e+04 | -2916.65 | 12.64 | -6618.36 | -1211.88 | 5.237e+05 |
| 137 | 94 | 6.861e+05 | -1210.25 | 0.07 | -420.00 | 0.0 | 7.173e+04 | -2496.63 | 12.65 | -6617.94 | -1969.15 | 6.861e+05 |
| | | 5.237e+05 | -1969.15 | -1.27e-04 | 0.0 | 60.0 | 7.173e+04 | -2916.63 | 12.65 | -6617.94 | -1210.25 | 5.237e+05 |
| 137 | 97 | 1.501e+06 | -3115.69 | 0.17 | -420.00 | 0.0 | 1.592e+05 | -7193.07 | 33.72 | -4.786e+04 | -5139.15 | 1.501e+06 |
| | | 1.056e+06 | -5139.15 | -3.04e-04 | 0.0 | 60.0 | 1.592e+05 | -7613.07 | 33.72 | -4.786e+04 | -3115.69 | 1.056e+06 |
| 137 | 98 | 7.181e+05 | -1253.80 | 0.07 | -420.00 | 0.0 | 7.507e+04 | -2622.72 | 13.28 | -6940.10 | -2050.80 | 7.181e+05 |
| | | 5.481e+05 | -2050.80 | -1.33e-04 | 0.0 | 60.0 | 7.507e+04 | -3042.72 | 13.28 | -6940.10 | -1253.80 | 5.481e+05 |
| 137 | 101 | 7.181e+05 | -1252.98 | 0.07 | -420.00 | 0.0 | 7.507e+04 | -2622.71 | 13.29 | -6939.89 | -2050.23 | 7.181e+05 |
| | | 5.481e+05 | -2050.23 | -1.33e-04 | 0.0 | 60.0 | 7.507e+04 | -3042.71 | 13.29 | -6939.89 | -1252.98 | 5.481e+05 |
| 137 | 102 | 7.206e+05 | -1256.84 | 0.07 | -420.00 | 0.0 | 7.533e+04 | -2632.42 | 13.33 | -6964.80 | -2056.86 | 7.206e+05 |
| | | 5.500e+05 | -2056.86 | -1.34e-04 | 0.0 | 60.0 | 7.533e+04 | -3052.42 | 13.33 | -6964.80 | -1256.84 | 5.500e+05 |
| 138 | 2 | 1.958e+06 | 2210.01 | 0.30 | -546.00 | 0.0 | 2.146e+05 | -1.249e+04 | 114.73 | -7.863e+04 | -4673.64 | 1.958e+06 |
| | | 1.192e+06 | -4673.64 | -5.13e-04 | 0.0 | 60.0 | 2.146e+05 | -1.303e+04 | 114.73 | -7.863e+04 | 2210.01 | 1.192e+06 |
| 138 | 7 | 6.209e+05 | 448.82 | 0.08 | -420.00 | 0.0 | 6.519e+04 | -3185.01 | 27.30 | -8383.01 | -1189.41 | 6.209e+05 |
| | | 4.172e+05 | -1189.41 | -1.53e-04 | 0.0 | 60.0 | 6.519e+04 | -3605.01 | 27.30 | -8383.01 | 448.82 | 4.172e+05 |
| 138 | 30 | 6.680e+05 | -1302.07 | 0.09 | -420.00 | 0.0 | 7.039e+04 | -3459.00 | 47.67 | -6808.72 | -4005.34 | 6.680e+05 |
| | | 4.482e+05 | -4005.34 | -3.07e-04 | 0.0 | 60.0 | 7.039e+04 | -3879.00 | 47.67 | -6808.72 | -1302.07 | 4.482e+05 |
| 138 | 31 | 6.700e+05 | 2330.39 | 0.09 | -420.00 | 0.0 | 7.005e+04 | -3435.44 | 11.36 | -1.134e+04 | 1491.66 | 6.700e+05 |
| | | 4.510e+05 | 1491.66 | -2.25e-05 | 0.0 | 60.0 | 7.005e+04 | -3855.44 | 11.36 | -1.134e+04 | 2330.39 | 4.510e+05 |
| 138 | 33 | 6.689e+05 | -1303.92 | 0.09 | -420.00 | 0.0 | 7.033e+04 | -3460.51 | 47.66 | -6808.76 | -4007.12 | 6.689e+05 |
| | | 4.491e+05 | -4007.12 | -3.05e-04 | 0.0 | 60.0 | 7.033e+04 | -3880.51 | 47.66 | -6808.76 | -1303.92 | 4.491e+05 |
| 138 | 36 | 6.692e+05 | 2332.24 | 0.09 | -420.00 | 0.0 | 7.010e+04 | -3433.93 | 11.38 | -1.134e+04 | 1493.44 | 6.692e+05 |
| | | 4.501e+05 | 1493.44 | -2.45e-05 | 0.0 | 60.0 | 7.010e+04 | -3853.93 | 11.38 | -1.134e+04 | 2332.24 | 4.501e+05 |
| 138 | 42 | 6.675e+05 | -75.58 | 0.09 | -420.00 | 0.0 | 7.036e+04 | -3448.45 | 34.99 | -8404.39 | -2125.11 | 6.675e+05 |
| | | 4.478e+05 | -2125.11 | -2.13e-04 | 0.0 | 60.0 | 7.036e+04 | -3868.45 | 34.99 | -8404.39 | -75.58 | 4.478e+05 |
| 138 | 43 | 6.706e+05 | 1103.90 | 0.09 | -420.00 | 0.0 | 7.008e+04 | -3445.99 | 24.05 | -9739.86 | -388.57 | 6.706e+05 |
| | | 4.514e+05 | -388.57 | -1.16e-04 | 0.0 | 60.0 | 7.008e+04 | -3865.99 | 24.05 | -9739.86 | 1103.90 | 4.514e+05 |
| 138 | 62 | 6.687e+05 | -173.09 | 0.09 | -420.00 | 0.0 | 7.028e+04 | -3451.65 | 36.38 | -8202.21 | -2296.84 | 6.687e+05 |
| | | 4.491e+05 | -2296.84 | -2.19e-04 | 0.0 | 60.0 | 7.028e+04 | -3871.65 | 36.38 | -8202.21 | -173.09 | 4.491e+05 |
| 138 | 63 | 6.694e+05 | 1201.41 | 0.09 | -420.00 | 0.0 | 7.015e+04 | -3442.79 | 22.65 | -9942.05 | -216.84 | 6.694e+05 |
| | | 4.502e+05 | -216.84 | -1.11e-04 | 0.0 | 60.0 | 7.015e+04 | -3862.79 | 22.65 | -9942.05 | 1201.41 | 4.502e+05 |
| 138 | 65 | 6.690e+05 | -173.80 | 0.09 | -420.00 | 0.0 | 7.026e+04 | -3452.23 | 36.37 | -8202.22 | -2297.52 | 6.690e+05 |
| | | 4.494e+05 | -2297.52 | -2.18e-04 | 0.0 | 60.0 | 7.026e+04 | -3872.23 | 36.37 | -8202.22 | -173.80 | 4.494e+05 |
| 138 | 68 | 6.691e+05 | 1202.12 | 0.09 | -420.00 | 0.0 | 7.018e+04 | -3442.21 | 22.66 | -9942.04 | -216.15 | 6.691e+05 |
| | | 4.498e+05 | -216.15 | -1.12e-04 | 0.0 | 60.0 | 7.018e+04 | -3862.21 | 22.66 | -9942.04 | 1202.12 | 4.498e+05 |
| 138 | 74 | 6.685e+05 | 290.89 | 0.09 | -420.00 | 0.0 | 7.027e+04 | -3447.67 | 31.58 | -8815.44 | -1585.49 | 6.685e+05 |
| | | 4.489e+05 | -1585.49 | -1.83e-04 | 0.0 | 60.0 | 7.027e+04 | -3867.67 | 31.58 | -8815.44 | 290.89 | 4.489e+05 |
| 138 | 75 | 6.696e+05 | 737.42 | 0.09 | -420.00 | 0.0 | 7.017e+04 | -3446.78 | 27.45 | -9328.82 | -928.19 | 6.696e+05 |
| | | 4.503e+05 | -928.19 | -1.46e-04 | 0.0 | 60.0 | 7.017e+04 | -3866.78 | 27.45 | -9328.82 | 737.42 | 4.503e+05 |
| 138 | 85 | 6.690e+05 | 514.16 | 0.09 | -420.00 | 0.0 | 7.022e+04 | -3447.22 | 29.52 | -9072.13 | -1256.84 | 6.690e+05 |
| | | 4.496e+05 | -1256.84 | -1.65e-04 | 0.0 | 60.0 | 7.022e+04 | -3867.22 | 29.52 | -9072.13 | 514.16 | 4.496e+05 |
| 138 | 87 | 1.394e+06 | 1541.89 | 0.21 | -420.00 | 0.0 | 1.524e+05 | -8785.44 | 80.42 | -5.363e+04 | -3283.34 | 1.394e+06 |
| | | 8.547e+05 | -3283.34 | -3.64e-04 | 0.0 | 60.0 | 1.524e+05 | -9205.44 | 80.42 | -5.363e+04 | 1541.89 | 8.547e+05 |
| 138 | 88 | 6.370e+05 | 470.60 | 0.08 | -420.00 | 0.0 | 6.687e+04 | -3272.42 | 28.04 | -8612.72 | -1211.88 | 6.370e+05 |
| | | 4.280e+05 | -1211.88 | -1.57e-04 | 0.0 | 60.0 | 6.687e+04 | -3692.42 | 28.04 | -8612.72 | 470.60 | 4.280e+05 |
| 138 | 97 | 1.347e+06 | 1472.29 | 0.20 | -420.00 | 0.0 | 1.468e+05 | -8386.47 | 76.47 | -4.953e+04 | -3115.68 | 1.347e+06 |
| | | 8.309e+05 | -3115.68 | -3.50e-04 | 0.0 | 60.0 | 1.468e+05 | -8806.47 | 76.47 | -4.953e+04 | 1472.29 | 8.309e+05 |
| 138 | 98 | 6.668e+05 | 510.81 | 0.09 | -420.00 | 0.0 | 6.998e+04 | -3434.74 | 29.41 | -9039.22 | -1253.80 | 6.668e+05 |
| | | 4.481e+05 | -1253.80 | -1.64e-04 | 0.0 | 60.0 | 6.998e+04 | -3854.74 | 29.41 | -9039.22 | 510.81 | 4.481e+05 |
| 138 | 102 | 6.690e+05 | 514.16 | 0.09 | -420.00 | 0.0 | 7.022e+04 | -3447.22 | 29.52 | -9072.13 | -1256.84 | 6.690e+05 |
| | | 4.496e+05 | -1256.84 | -1.65e-04 | 0.0 | 60.0 | 7.022e+04 | -3867.22 | 29.52 | -9072.13 | 514.16 | 4.496e+05 |
| 139 | 2 | 1.685e+06 | 1.350e+04 | 0.34 | -546.00 | 0.0 | 1.934e+05 | -1.412e+04 | 188.18 | -8.034e+04 | 2210.01 | 1.685e+06 |
| | | 8.212e+05 | 2210.01 | -5.14e-04 | 0.0 | 60.0 | 1.934e+05 | -1.467e+04 | 188.18 | -8.034e+04 | 1.350e+04 | 8.212e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|--------|------------|-----------|------------|
| 139 | 7 | 5.553e+05 | 3330.17 | 0.09 | -420.00 | 0.0 | 5.926e+04 | -3944.20 | 48.02 | -1.029e+04 | 448.82 | 5.553e+05 |
| | | 3.061e+05 | 448.82 | -1.67e-04 | 0.0 | 60.0 | 5.926e+04 | -4364.20 | 48.02 | -1.029e+04 | 3330.17 | 3.061e+05 |
| 139 | 30 | 5.990e+05 | 2573.62 | 0.10 | -420.00 | 0.0 | 6.398e+04 | -4272.64 | 69.85 | -8949.21 | -1302.08 | 5.990e+05 |
| | | 3.282e+05 | -1302.08 | -3.38e-04 | 0.0 | 60.0 | 6.398e+04 | -4692.64 | 69.85 | -8949.21 | 2573.62 | 3.282e+05 |
| 139 | 31 | 5.977e+05 | 4671.04 | 0.10 | -420.00 | 0.0 | 6.367e+04 | -4258.00 | 33.75 | -1.335e+04 | 2330.39 | 5.977e+05 |
| | | 3.315e+05 | 2330.39 | -2.17e-05 | 0.0 | 60.0 | 6.367e+04 | -4678.00 | 33.75 | -1.335e+04 | 4671.04 | 3.315e+05 |
| 139 | 33 | 5.999e+05 | 2571.90 | 0.10 | -420.00 | 0.0 | 6.393e+04 | -4274.19 | 69.81 | -8949.14 | -1303.93 | 5.999e+05 |
| | | 3.290e+05 | -1303.93 | -3.39e-04 | 0.0 | 60.0 | 6.393e+04 | -4694.19 | 69.81 | -8949.14 | 2571.90 | 3.290e+05 |
| 139 | 36 | 5.968e+05 | 4672.76 | 0.10 | -420.00 | 0.0 | 6.373e+04 | -4256.46 | 33.80 | -1.335e+04 | 2332.24 | 5.968e+05 |
| | | 3.307e+05 | 2332.24 | -2.16e-05 | 0.0 | 60.0 | 6.373e+04 | -4676.46 | 33.80 | -1.335e+04 | 4672.76 | 3.307e+05 |
| 139 | 41 | 6.002e+05 | 3356.47 | 0.10 | -420.00 | 0.0 | 6.377e+04 | -4270.33 | 57.13 | -1.047e+04 | 23.03 | 6.002e+05 |
| | | 3.309e+05 | 23.03 | -2.28e-04 | 0.0 | 60.0 | 6.377e+04 | -4690.33 | 57.13 | -1.047e+04 | 3356.47 | 3.309e+05 |
| 139 | 42 | 5.972e+05 | 3267.01 | 0.10 | -420.00 | 0.0 | 6.396e+04 | -4265.17 | 57.29 | -1.050e+04 | -75.59 | 5.972e+05 |
| | | 3.281e+05 | -75.59 | -2.27e-04 | 0.0 | 60.0 | 6.396e+04 | -4685.17 | 57.29 | -1.050e+04 | 3267.01 | 3.281e+05 |
| 139 | 62 | 5.986e+05 | 3226.13 | 0.10 | -420.00 | 0.0 | 6.389e+04 | -4268.08 | 58.63 | -1.030e+04 | -173.09 | 5.986e+05 |
| | | 3.292e+05 | -173.09 | -2.40e-04 | 0.0 | 60.0 | 6.389e+04 | -4688.08 | 58.63 | -1.030e+04 | 3226.13 | 3.292e+05 |
| 139 | 63 | 5.981e+05 | 4018.52 | 0.10 | -420.00 | 0.0 | 6.377e+04 | -4262.56 | 44.98 | -1.200e+04 | 1201.41 | 5.981e+05 |
| | | 3.305e+05 | 1201.41 | -1.20e-04 | 0.0 | 60.0 | 6.377e+04 | -4682.56 | 44.98 | -1.200e+04 | 4018.52 | 3.305e+05 |
| 139 | 65 | 5.990e+05 | 3225.47 | 0.10 | -420.00 | 0.0 | 6.387e+04 | -4268.68 | 58.61 | -1.030e+04 | -173.80 | 5.990e+05 |
| | | 3.296e+05 | -173.80 | -2.40e-04 | 0.0 | 60.0 | 6.387e+04 | -4688.68 | 58.61 | -1.030e+04 | 3225.47 | 3.296e+05 |
| 139 | 68 | 5.978e+05 | 4019.19 | 0.10 | -420.00 | 0.0 | 6.379e+04 | -4261.97 | 45.00 | -1.200e+04 | 1202.12 | 5.978e+05 |
| | | 3.302e+05 | 1202.12 | -1.20e-04 | 0.0 | 60.0 | 6.379e+04 | -4681.97 | 45.00 | -1.200e+04 | 4019.19 | 3.302e+05 |
| 139 | 73 | 5.991e+05 | 3222.40 | 0.10 | -420.00 | 0.0 | 6.381e+04 | -4267.23 | 53.82 | -1.089e+04 | 328.45 | 5.991e+05 |
| | | 3.302e+05 | 328.45 | -1.98e-04 | 0.0 | 60.0 | 6.381e+04 | -4687.23 | 53.82 | -1.089e+04 | 3522.04 | 3.302e+05 |
| 139 | 74 | 5.979e+05 | 3487.97 | 0.10 | -420.00 | 0.0 | 6.388e+04 | -4265.25 | 53.88 | -1.090e+04 | 290.89 | 5.979e+05 |
| | | 3.292e+05 | 290.89 | -1.98e-04 | 0.0 | 60.0 | 6.388e+04 | -4685.25 | 53.88 | -1.090e+04 | 3487.97 | 3.292e+05 |
| 139 | 85 | 5.984e+05 | 3622.33 | 0.10 | -420.00 | 0.0 | 6.383e+04 | -4265.32 | 51.80 | -1.115e+04 | 514.16 | 5.984e+05 |
| | | 3.299e+05 | 514.16 | -1.80e-04 | 0.0 | 60.0 | 6.383e+04 | -4685.32 | 51.80 | -1.115e+04 | 3622.33 | 3.299e+05 |
| 139 | 87 | 1.203e+06 | 9483.65 | 0.24 | -420.00 | 0.0 | 1.374e+05 | -9983.93 | 132.36 | -5.504e+04 | 1541.90 | 1.203e+06 |
| | | 5.915e+05 | 1541.90 | -3.67e-04 | 0.0 | 60.0 | 1.374e+05 | -1.040e+04 | 132.36 | -5.504e+04 | 9483.65 | 5.915e+05 |
| 139 | 88 | 5.697e+05 | 3427.55 | 0.10 | -420.00 | 0.0 | 6.078e+04 | -4051.24 | 49.28 | -1.058e+04 | 470.60 | 5.697e+05 |
| | | 3.140e+05 | 470.60 | -1.71e-04 | 0.0 | 60.0 | 6.078e+04 | -4471.24 | 49.28 | -1.058e+04 | 3427.55 | 3.140e+05 |
| 139 | 97 | 1.165e+06 | 9047.24 | 0.23 | -420.00 | 0.0 | 1.324e+05 | -9577.21 | 126.25 | -5.109e+04 | 1472.29 | 1.165e+06 |
| | | 5.775e+05 | 1472.29 | -3.55e-04 | 0.0 | 60.0 | 1.324e+05 | -9997.21 | 126.25 | -5.109e+04 | 9047.24 | 5.775e+05 |
| 139 | 98 | 5.963e+05 | 3608.12 | 0.10 | -420.00 | 0.0 | 6.361e+04 | -4250.03 | 51.62 | -1.111e+04 | 510.81 | 5.963e+05 |
| | | 3.287e+05 | 510.81 | -1.79e-04 | 0.0 | 60.0 | 6.361e+04 | -4670.03 | 51.62 | -1.111e+04 | 3608.12 | 3.287e+05 |
| 139 | 102 | 5.984e+05 | 3622.33 | 0.10 | -420.00 | 0.0 | 6.383e+04 | -4265.32 | 51.80 | -1.115e+04 | 514.16 | 5.984e+05 |
| | | 3.299e+05 | 514.16 | -1.80e-04 | 0.0 | 60.0 | 6.383e+04 | -4685.32 | 51.80 | -1.115e+04 | 3622.33 | 3.299e+05 |
| 140 | 2 | 1.374e+06 | 2.740e+04 | 0.37 | -546.00 | 0.0 | 1.696e+05 | -1.589e+04 | 231.58 | -8.040e+04 | 1.350e+04 | 1.374e+06 |
| | | 4.049e+05 | 1.350e+04 | -3.96e-04 | 0.0 | 60.0 | 1.696e+05 | -1.643e+04 | 231.58 | -8.040e+04 | 2.740e+04 | 4.049e+05 |
| 140 | 7 | 4.715e+05 | 7108.04 | 0.11 | -420.00 | 0.0 | 5.215e+04 | -4705.76 | 62.96 | -1.173e+04 | 3330.17 | 4.715e+05 |
| | | 1.765e+05 | 3330.17 | -1.51e-04 | 0.0 | 60.0 | 5.215e+04 | -5125.76 | 62.96 | -1.173e+04 | 7108.04 | 1.765e+05 |
| 140 | 28 | 5.060e+05 | 8764.79 | 0.11 | -420.00 | 0.0 | 5.629e+04 | -5077.74 | 53.81 | -1.491e+04 | 4449.61 | 5.060e+05 |
| | | 1.886e+05 | 4449.61 | -8.44e-06 | 0.0 | 60.0 | 5.629e+04 | -5497.74 | 53.81 | -1.491e+04 | 8764.79 | 1.886e+05 |
| 140 | 29 | 5.102e+05 | 6821.09 | 0.11 | -420.00 | 0.0 | 5.604e+04 | -5095.25 | 82.99 | -1.054e+04 | 2600.46 | 5.102e+05 |
| | | 1.920e+05 | 2600.46 | -3.31e-04 | 0.0 | 60.0 | 5.604e+04 | -5515.25 | 82.99 | -1.054e+04 | 6821.09 | 1.920e+05 |
| 140 | 32 | 5.059e+05 | 8550.83 | 0.11 | -420.00 | 0.0 | 5.630e+04 | -5077.01 | 52.46 | -1.490e+04 | 4644.20 | 5.059e+05 |
| | | 1.885e+05 | 4644.20 | 6.67e-06 | 0.0 | 60.0 | 5.630e+04 | -5497.01 | 52.46 | -1.490e+04 | 8550.83 | 1.885e+05 |
| 140 | 33 | 5.102e+05 | 6819.65 | 0.11 | -420.00 | 0.0 | 5.604e+04 | -5095.24 | 82.99 | -1.054e+04 | 2571.90 | 5.102e+05 |
| | | 1.920e+05 | 2571.90 | -3.31e-04 | 0.0 | 60.0 | 5.604e+04 | -5515.24 | 82.99 | -1.054e+04 | 6819.65 | 1.920e+05 |
| 140 | 60 | 5.073e+05 | 8093.07 | 0.11 | -420.00 | 0.0 | 5.622e+04 | -5082.91 | 62.46 | -1.357e+04 | 3935.05 | 5.073e+05 |
| | | 1.897e+05 | 3935.05 | -1.02e-04 | 0.0 | 60.0 | 5.622e+04 | -5502.91 | 62.46 | -1.357e+04 | 8093.07 | 1.897e+05 |
| 140 | 61 | 5.089e+05 | 7360.20 | 0.11 | -420.00 | 0.0 | 5.612e+04 | -5089.62 | 73.50 | -1.187e+04 | 3236.35 | 5.089e+05 |
| | | 1.910e+05 | 3236.35 | -2.26e-04 | 0.0 | 60.0 | 5.612e+04 | -5509.62 | 73.50 | -1.187e+04 | 7360.20 | 1.910e+05 |
| 140 | 64 | 5.072e+05 | 8011.73 | 0.11 | -420.00 | 0.0 | 5.622e+04 | -5082.64 | 61.95 | -1.357e+04 | 4008.30 | 5.072e+05 |
| | | 1.896e+05 | 4008.30 | -9.84e-05 | 0.0 | 60.0 | 5.622e+04 | -5502.64 | 61.95 | -1.357e+04 | 8011.73 | 1.896e+05 |
| 140 | 65 | 5.089e+05 | 7359.64 | 0.11 | -420.00 | 0.0 | 5.612e+04 | -5089.62 | 73.50 | -1.187e+04 | 3225.47 | 5.089e+05 |
| | | 1.910e+05 | 3225.47 | -2.26e-04 | 0.0 | 60.0 | 5.612e+04 | -5509.62 | 73.50 | -1.187e+04 | 7359.64 | 1.910e+05 |
| 140 | 85 | 5.081e+05 | 7685.96 | 0.11 | -420.00 | 0.0 | 5.617e+04 | -5086.13 | 67.73 | -1.272e+04 | 3622.33 | 5.081e+05 |
| | | 1.903e+05 | 3622.33 | -1.62e-04 | 0.0 | 60.0 | 5.617e+04 | -5506.13 | 67.73 | -1.272e+04 | 7685.96 | 1.903e+05 |
| 140 | 87 | 9.840e+05 | 1.929e+04 | 0.26 | -420.00 | 0.0 | 1.206e+05 | -1.127e+04 | 163.41 | -5.530e+04 | 9483.66 | 9.840e+05 |
| | | 2.953e+05 | 9483.66 | -2.86e-04 | 0.0 | 60.0 | 1.206e+05 | -1.169e+04 | 163.41 | -5.530e+04 | 1.929e+04 | 2.953e+05 |
| 140 | 88 | 4.837e+05 | 7300.68 | 0.11 | -420.00 | 0.0 | 5.349e+04 | -4832.55 | 64.55 | -1.206e+04 | 3427.55 | 4.837e+05 |
| | | 1.811e+05 | 3427.55 | -1.55e-04 | 0.0 | 60.0 | 5.349e+04 | -5252.55 | 64.55 | -1.206e+04 | 7300.68 | 1.811e+05 |
| 140 | 97 | 9.553e+05 | 1.842e+04 | 0.25 | -420.00 | 0.0 | 1.162e+05 | -1.085e+04 | 156.30 | -5.155e+04 | 9047.25 | 9.553e+05 |
| | | 2.919e+05 | 9047.25 | -2.79e-04 | 0.0 | 60.0 | 1.162e+05 | -1.127e+04 | 156.30 | -5.155e+04 | 1.842e+04 | 2.919e+05 |
| 140 | 98 | 5.063e+05 | 7658.15 | 0.11 | -420.00 | 0.0 | 5.598e+04 | -5068.01 | 67.50 | -1.267e+04 | 3608.12 | 5.063e+05 |
| | | 1.896e+05 | 3608.12 | -1.62e-04 | 0.0 | 60.0 | 5.598e+04 | -5488.01 | 67.50 | -1.267e+04 | 7658.15 | 1.896e+05 |
| 140 | 102 | 5.081e+05 | 7685.96 | 0.11 | -420.00 | 0.0 | 5.617e+04 | -5086.13 | 67.73 | -1.272e+04 | 3622.33 | 5.081e+05 |
| | | 1.903e+05 | 3622.33 | -1.62e-04 | 0.0 | 60.0 | 5.617e+04 | -5506.13 | 67.73 | -1.272e+04 | 7685.96 | 1.903e+05 |
| 141 | 2 | 1.010e+06 | 3.575e+04 | 0.39 | -546.00 | 0.0 | 1.435e+05 | -1.760e+04 | 139.21 | -7.436e+04 | 2.740e+04 | 1.010e+06 |
| | | -6.222e+04 | 2.740e+04 | -9.23e-05 | 0.0 | 60.0 | 1.435e+05 | -1.815e+04 | 139.21 | -7.436e+04 | 3.575e+04 | -6.222e+04 |
| 141 | 7 | 3.665e+05 | 9554.33 | 0.11 | -420.00 | 0.0 | 4.398e+04 | -5457.31 | 40.77 | -1.163e+04 | 7108.04 | 3.665e+05 |
| | | 2.651e+04 | 7108.04 | -8.33e-05 | 0.0 | 60.0 | 4.398e+04 | -5877.31 | 40.77 | -1.163e+04 | 9554.33 | 2.651e+04 |
| 141 | 8 | 8.877e+05 | 3.256e+04 | 0.35 | -420.00 | 0.0 | 1.288e+05 | -1.577e+04 | 125.83 | -7.043e+04 | 2.501e+04 | 8.877e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|---------|------------|-----------|------------|
| | | -7.112e+04 | 2.501e+04 | -6.88e-05 | 0.0 | 60.0 | 1.288e+05 | -1.619e+04 | 125.83 | -7.043e+04 | 3.256e+04 | -7.112e+04 |
| 141 | 25 | 3.975e+05 | 1.158e+04 | 0.12 | -420.00 | 0.0 | 4.727e+04 | -5912.00 | 52.49 | -1.034e+04 | 6607.13 | 3.975e+05 |
| | | 3.030e+04 | 6607.13 | -2.48e-04 | 0.0 | 60.0 | 4.727e+04 | -6332.00 | 52.49 | -1.034e+04 | 1.158e+04 | 3.030e+04 |
| 141 | 26 | 3.967e+05 | 1.159e+04 | 0.12 | -420.00 | 0.0 | 4.731e+04 | -5905.03 | 52.66 | -1.037e+04 | 6630.72 | 3.967e+05 |
| | | 2.990e+04 | 6630.72 | -2.48e-04 | 0.0 | 60.0 | 4.731e+04 | -6325.03 | 52.66 | -1.037e+04 | 1.159e+04 | 2.990e+04 |
| 141 | 29 | 3.977e+05 | 9258.91 | 0.12 | -420.00 | 0.0 | 4.727e+04 | -5913.33 | 54.11 | -1.035e+04 | 6821.10 | 3.977e+05 |
| | | 3.036e+04 | 6821.10 | -2.61e-04 | 0.0 | 60.0 | 4.727e+04 | -6333.33 | 54.11 | -1.035e+04 | 9258.91 | 3.036e+04 |
| 141 | 32 | 3.923e+05 | 1.132e+04 | 0.12 | -420.00 | 0.0 | 4.746e+04 | -5879.00 | 32.69 | -1.488e+04 | 8550.83 | 3.923e+05 |
| | | 2.691e+04 | 8550.83 | 8.24e-05 | 0.0 | 60.0 | 4.746e+04 | -6299.00 | 32.69 | -1.488e+04 | 1.132e+04 | 2.691e+04 |
| 141 | 57 | 3.960e+05 | 1.078e+04 | 0.12 | -420.00 | 0.0 | 4.733e+04 | -5902.20 | 46.86 | -1.173e+04 | 7278.86 | 3.960e+05 |
| | | 2.927e+04 | 7278.86 | -1.49e-04 | 0.0 | 60.0 | 4.733e+04 | -6322.20 | 46.86 | -1.173e+04 | 1.078e+04 | 2.927e+04 |
| 141 | 58 | 3.957e+05 | 1.078e+04 | 0.12 | -420.00 | 0.0 | 4.734e+04 | -5899.53 | 46.92 | -1.174e+04 | 7287.85 | 3.957e+05 |
| | | 2.911e+04 | 7287.85 | -1.49e-04 | 0.0 | 60.0 | 4.734e+04 | -6319.53 | 46.92 | -1.174e+04 | 1.078e+04 | 2.911e+04 |
| 141 | 61 | 3.960e+05 | 9900.35 | 0.12 | -420.00 | 0.0 | 4.733e+04 | -5902.70 | 47.46 | -1.173e+04 | 7360.20 | 3.960e+05 |
| | | 2.929e+04 | 7360.20 | -1.54e-04 | 0.0 | 60.0 | 4.733e+04 | -6322.70 | 47.46 | -1.173e+04 | 9900.35 | 2.929e+04 |
| 141 | 64 | 3.940e+05 | 1.068e+04 | 0.12 | -420.00 | 0.0 | 4.740e+04 | -5889.63 | 39.33 | -1.350e+04 | 8011.73 | 3.940e+05 |
| | | 2.798e+04 | 8011.73 | -2.64e-05 | 0.0 | 60.0 | 4.740e+04 | -6309.63 | 39.33 | -1.350e+04 | 1.068e+04 | 2.798e+04 |
| 141 | 85 | 3.950e+05 | 1.029e+04 | 0.12 | -420.00 | 0.0 | 4.737e+04 | -5896.16 | 43.40 | -1.262e+04 | 7685.96 | 3.950e+05 |
| | | 2.864e+04 | 7685.96 | -8.93e-05 | 0.0 | 60.0 | 4.737e+04 | -6316.16 | 43.40 | -1.262e+04 | 1.029e+04 | 2.864e+04 |
| 141 | 87 | 7.262e+05 | 2.520e+04 | 0.27 | -420.00 | 0.0 | 1.020e+05 | -1.252e+04 | 98.59 | -5.125e+04 | 1.929e+04 | 7.262e+05 |
| | | -3.766e+04 | 1.929e+04 | -7.21e-05 | 0.0 | 60.0 | 1.020e+05 | -1.294e+04 | 98.59 | -5.125e+04 | 2.520e+04 | -3.766e+04 |
| 141 | 88 | 3.760e+05 | 9799.48 | 0.12 | -420.00 | 0.0 | 4.511e+04 | -5603.60 | 41.65 | -1.196e+04 | 7300.68 | 3.760e+05 |
| | | 2.722e+04 | 7300.68 | -8.53e-05 | 0.0 | 60.0 | 4.511e+04 | -6023.60 | 41.65 | -1.196e+04 | 9799.48 | 2.722e+04 |
| 141 | 89 | 7.234e+05 | 2.513e+04 | 0.27 | -420.00 | 0.0 | 1.017e+05 | -1.248e+04 | 98.35 | -5.116e+04 | 1.923e+04 | 7.234e+05 |
| | | -3.787e+04 | 1.923e+04 | -7.16e-05 | 0.0 | 60.0 | 1.017e+05 | -1.290e+04 | 98.35 | -5.116e+04 | 2.513e+04 | -3.787e+04 |
| 141 | 97 | 7.077e+05 | 2.409e+04 | 0.26 | -420.00 | 0.0 | 9.829e+04 | -1.208e+04 | 94.43 | -4.789e+04 | 1.842e+04 | 7.077e+05 |
| | | -2.994e+04 | 1.842e+04 | -7.59e-05 | 0.0 | 60.0 | 9.829e+04 | -1.250e+04 | 94.43 | -4.789e+04 | 2.409e+04 | -2.994e+04 |
| 141 | 98 | 3.936e+05 | 1.025e+04 | 0.12 | -420.00 | 0.0 | 4.720e+04 | -5875.26 | 43.27 | -1.257e+04 | 7658.15 | 3.936e+05 |
| | | 2.853e+04 | 7658.15 | -8.90e-05 | 0.0 | 60.0 | 4.720e+04 | -6295.26 | 43.27 | -1.257e+04 | 1.025e+04 | 2.853e+04 |
| 141 | 102 | 3.950e+05 | 1.029e+04 | 0.12 | -420.00 | 0.0 | 4.737e+04 | -5896.16 | 43.40 | -1.262e+04 | 7685.96 | 3.950e+05 |
| | | 2.864e+04 | 7685.96 | -8.93e-05 | 0.0 | 60.0 | 4.737e+04 | -6316.16 | 43.40 | -1.262e+04 | 1.029e+04 | 2.864e+04 |
| 142 | 2 | 5.346e+05 | 3.575e+04 | 0.39 | -546.00 | 0.0 | 1.177e+05 | -1.863e+04 | -206.55 | -5.559e+04 | 3.575e+04 | 5.346e+05 |
| | | -5.994e+05 | 2.336e+04 | 4.33e-04 | 0.0 | 60.0 | 1.177e+05 | -1.917e+04 | -206.55 | -5.559e+04 | 2.336e+04 | -5.994e+05 |
| 142 | 7 | 2.251e+05 | 9554.33 | 0.12 | -420.00 | 0.0 | 3.540e+04 | -6062.52 | -54.55 | -8486.40 | 9554.33 | 2.251e+05 |
| | | -1.513e+05 | 6281.12 | 3.93e-05 | 0.0 | 60.0 | 3.540e+04 | -6482.52 | -54.55 | -8486.40 | 6281.12 | -1.513e+05 |
| 142 | 19 | 2.251e+05 | 9556.34 | 0.12 | -420.00 | 0.0 | 3.540e+04 | -6062.72 | -54.63 | -8494.51 | 9556.34 | 2.251e+05 |
| | | -1.513e+05 | 6278.55 | 3.94e-05 | 0.0 | 60.0 | 3.540e+04 | -6482.72 | -54.63 | -8494.51 | 6278.55 | -1.513e+05 |
| 142 | 21 | 2.454e+05 | 1.158e+04 | 0.13 | -420.00 | 0.0 | 3.803e+04 | -6576.61 | -49.96 | -6936.34 | 1.158e+04 | 2.454e+05 |
| | | -1.616e+05 | 7816.77 | -1.09e-04 | 0.0 | 60.0 | 3.803e+04 | -6996.61 | -49.96 | -6936.34 | 7816.77 | -1.616e+05 |
| 142 | 23 | 2.404e+05 | 8985.87 | 0.13 | -420.00 | 0.0 | 3.818e+04 | -6527.95 | -69.25 | -1.152e+04 | 8985.87 | 2.404e+05 |
| | | -1.641e+05 | 5587.24 | 1.95e-04 | 0.0 | 60.0 | 3.818e+04 | -6947.95 | -69.25 | -1.152e+04 | 5587.24 | -1.641e+05 |
| 142 | 24 | 2.397e+05 | 8998.29 | 0.13 | -420.00 | 0.0 | 3.820e+04 | -6518.98 | -69.45 | -1.149e+04 | 8998.29 | 2.397e+05 |
| | | -1.642e+05 | 5598.29 | 1.95e-04 | 0.0 | 60.0 | 3.820e+04 | -6938.98 | -69.45 | -1.149e+04 | 5598.29 | -1.642e+05 |
| 142 | 26 | 2.448e+05 | 1.159e+04 | 0.13 | -420.00 | 0.0 | 3.806e+04 | -6567.66 | -50.16 | -6936.03 | 1.159e+04 | 2.448e+05 |
| | | -1.617e+05 | 7827.77 | -1.09e-04 | 0.0 | 60.0 | 3.806e+04 | -6987.66 | -50.16 | -6936.03 | 7827.77 | -1.617e+05 |
| 142 | 29 | 2.456e+05 | 9258.92 | 0.13 | -420.00 | 0.0 | 3.804e+04 | -6579.11 | -50.21 | -6877.00 | 9258.92 | 2.456e+05 |
| | | -1.616e+05 | 5761.92 | -1.25e-04 | 0.0 | 60.0 | 3.804e+04 | -6999.11 | -50.21 | -6877.00 | 5761.92 | -1.616e+05 |
| 142 | 53 | 2.437e+05 | 1.078e+04 | 0.13 | -420.00 | 0.0 | 3.809e+04 | -6558.73 | -55.98 | -8327.86 | 1.078e+04 | 2.437e+05 |
| | | -1.624e+05 | 7129.64 | -1.85e-05 | 0.0 | 60.0 | 3.809e+04 | -6978.73 | -55.98 | -8327.86 | 7129.64 | -1.624e+05 |
| 142 | 55 | 2.417e+05 | 9796.99 | 0.13 | -420.00 | 0.0 | 3.814e+04 | -6540.30 | -63.35 | -1.011e+04 | 9796.99 | 2.417e+05 |
| | | -1.633e+05 | 6281.18 | 1.00e-04 | 0.0 | 60.0 | 3.814e+04 | -6960.30 | -63.35 | -1.011e+04 | 6281.18 | -1.633e+05 |
| 142 | 56 | 2.415e+05 | 9801.73 | 0.13 | -420.00 | 0.0 | 3.815e+04 | -6536.86 | -63.43 | -1.010e+04 | 9801.73 | 2.415e+05 |
| | | -1.634e+05 | 6285.41 | 1.00e-04 | 0.0 | 60.0 | 3.815e+04 | -6956.86 | -63.43 | -1.010e+04 | 6285.41 | -1.634e+05 |
| 142 | 58 | 2.434e+05 | 1.078e+04 | 0.13 | -420.00 | 0.0 | 3.810e+04 | -6555.29 | -56.06 | -8327.74 | 1.078e+04 | 2.434e+05 |
| | | -1.625e+05 | 7133.85 | -1.84e-05 | 0.0 | 60.0 | 3.810e+04 | -6975.29 | -56.06 | -8327.74 | 7133.85 | -1.625e+05 |
| 142 | 61 | 2.437e+05 | 9900.35 | 0.13 | -420.00 | 0.0 | 3.809e+04 | -6559.67 | -56.08 | -8305.99 | 9900.35 | 2.437e+05 |
| | | -1.624e+05 | 6346.68 | -2.21e-05 | 0.0 | 60.0 | 3.809e+04 | -6979.67 | -56.08 | -8305.99 | 6346.68 | -1.624e+05 |
| 142 | 85 | 2.426e+05 | 1.029e+04 | 0.13 | -420.00 | 0.0 | 3.812e+04 | -6547.79 | -59.70 | -9211.47 | 1.029e+04 | 2.426e+05 |
| | | -1.629e+05 | 6707.53 | 4.30e-05 | 0.0 | 60.0 | 3.812e+04 | -6967.79 | -59.70 | -9211.47 | 6707.53 | -1.629e+05 |
| 142 | 87 | 3.888e+05 | 2.520e+04 | 0.28 | -420.00 | 0.0 | 8.354e+04 | -1.329e+04 | -145.66 | -3.829e+04 | 2.520e+04 | 3.888e+05 |
| | | -4.213e+05 | 1.646e+04 | 2.94e-04 | 0.0 | 60.0 | 8.354e+04 | -1.371e+04 | -145.66 | -3.829e+04 | 1.646e+04 | -4.213e+05 |
| 142 | 88 | 2.309e+05 | 9799.48 | 0.12 | -420.00 | 0.0 | 3.630e+04 | -6224.28 | -56.27 | -8728.09 | 9799.48 | 2.309e+05 |
| | | -1.551e+05 | 6423.25 | 4.05e-05 | 0.0 | 60.0 | 3.630e+04 | -6644.28 | -56.27 | -8728.09 | 6423.25 | -1.551e+05 |
| 142 | 94 | 2.309e+05 | 9800.82 | 0.12 | -420.00 | 0.0 | 3.630e+04 | -6224.41 | -56.32 | -8733.50 | 9800.82 | 2.309e+05 |
| | | -1.552e+05 | 6421.54 | 4.06e-05 | 0.0 | 60.0 | 3.630e+04 | -6644.41 | -56.32 | -8733.50 | 6421.54 | -1.552e+05 |
| 142 | 97 | 3.831e+05 | 2.409e+04 | 0.27 | -420.00 | 0.0 | 8.040e+04 | -1.287e+04 | -139.70 | -3.575e+04 | 2.409e+04 | 3.831e+05 |
| | | -4.014e+05 | 1.571e+04 | 2.71e-04 | 0.0 | 60.0 | 8.040e+04 | -1.329e+04 | -139.70 | -3.575e+04 | 1.571e+04 | -4.014e+05 |
| 142 | 98 | 2.417e+05 | 1.025e+04 | 0.13 | -420.00 | 0.0 | 3.799e+04 | -6524.67 | -59.45 | -9176.37 | 1.025e+04 | 2.417e+05 |
| | | -1.623e+05 | 6687.40 | 4.28e-05 | 0.0 | 60.0 | 3.799e+04 | -6944.67 | -59.45 | -9176.37 | 6687.40 | -1.623e+05 |
| 142 | 101 | 2.417e+05 | 1.026e+04 | 0.13 | -420.00 | 0.0 | 3.799e+04 | -6524.74 | -59.48 | -9179.07 | 1.026e+04 | 2.417e+05 |
| | | -1.623e+05 | 6686.55 | 4.28e-05 | 0.0 | 60.0 | 3.799e+04 | -6944.74 | -59.48 | -9179.07 | 6686.55 | -1.623e+05 |
| 142 | 102 | 2.426e+05 | 1.029e+04 | 0.13 | -420.00 | 0.0 | 3.812e+04 | -6547.79 | -59.70 | -9211.47 | 1.029e+04 | 2.426e+05 |
| | | -1.629e+05 | 6707.53 | 4.30e-05 | 0.0 | 60.0 | 3.812e+04 | -6967.79 | -59.70 | -9211.47 | 6707.53 | -1.629e+05 |
| 143 | 2 | -2.862e+05 | 2.336e+04 | 0.38 | -546.00 | 0.0 | 1.045e+05 | -2.287e+04 | -389.26 | -2.670e+04 | 2.336e+04 | -2.862e+05 |
| | | -1.675e+06 | -0.02 | 9.13e-04 | 0.0 | 60.0 | 1.045e+05 | -2.342e+04 | -389.26 | -2.670e+04 | -0.02 | -1.675e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|---------|------------|-----------|------------|
| 143 | 19 | -1.928e+04 | 6278.56 | 0.11 | -420.00 | 0.0 | 2.981e+04 | -7567.19 | -104.64 | -3684.00 | 6278.56 | -1.928e+04 |
| | | -4.859e+05 | -2.29e-03 | 1.43e-04 | 0.0 | 60.0 | 2.981e+04 | -7987.19 | -104.64 | -3684.00 | -2.29e-03 | -4.859e+05 |
| 143 | 21 | -1.870e+04 | 7816.77 | 0.12 | -420.00 | 0.0 | 3.200e+04 | -8181.16 | -130.28 | -2413.07 | 7816.77 | -1.870e+04 |
| | | -5.223e+05 | -1.39e-03 | 1.83e-05 | 0.0 | 60.0 | 3.200e+04 | -8601.16 | -130.28 | -2413.07 | -1.39e-03 | -5.223e+05 |
| 143 | 22 | -1.911e+04 | 7827.81 | 0.12 | -420.00 | 0.0 | 3.201e+04 | -8190.06 | -130.46 | -2384.48 | 7827.81 | -1.911e+04 |
| | | -5.224e+05 | -1.40e-03 | 1.89e-05 | 0.0 | 60.0 | 3.201e+04 | -8610.06 | -130.46 | -2384.48 | -1.40e-03 | -5.224e+05 |
| 143 | 24 | -2.272e+04 | 5598.29 | 0.12 | -420.00 | 0.0 | 3.219e+04 | -8150.18 | -93.30 | -5639.10 | 5598.29 | -2.272e+04 |
| | | -5.242e+05 | -3.56e-03 | 2.89e-04 | 0.0 | 60.0 | 3.219e+04 | -8570.18 | -93.30 | -5639.10 | -3.56e-03 | -5.242e+05 |
| 143 | 29 | -1.862e+04 | 5761.92 | 0.12 | -420.00 | 0.0 | 3.201e+04 | -8183.70 | -96.03 | -2405.69 | 5761.92 | -1.862e+04 |
| | | -5.224e+05 | -1.27e-03 | -2.94e-06 | 0.0 | 60.0 | 3.201e+04 | -8603.70 | -96.03 | -2405.69 | -1.27e-03 | -5.224e+05 |
| 143 | 36 | -2.281e+04 | 7653.09 | 0.12 | -420.00 | 0.0 | 3.219e+04 | -8147.62 | -127.55 | -5674.78 | 7653.09 | -2.281e+04 |
| | | -5.241e+05 | -3.68e-03 | 3.06e-04 | 0.0 | 60.0 | 3.219e+04 | -8567.62 | -127.55 | -5674.78 | -3.68e-03 | -5.241e+05 |
| 143 | 53 | -1.995e+04 | 7129.64 | 0.12 | -420.00 | 0.0 | 3.206e+04 | -8171.49 | -118.83 | -3398.37 | 7129.64 | -1.995e+04 |
| | | -5.229e+05 | -2.07e-03 | 1.02e-04 | 0.0 | 60.0 | 3.206e+04 | -8591.49 | -118.83 | -3398.37 | -2.07e-03 | -5.229e+05 |
| 143 | 54 | -2.011e+04 | 7133.87 | 0.12 | -420.00 | 0.0 | 3.206e+04 | -8174.90 | -118.90 | -3387.51 | 7133.87 | -2.011e+04 |
| | | -5.229e+05 | -2.07e-03 | 1.03e-04 | 0.0 | 60.0 | 3.206e+04 | -8594.90 | -118.90 | -3387.51 | -2.07e-03 | -5.229e+05 |
| 143 | 56 | -2.147e+04 | 6285.42 | 0.12 | -420.00 | 0.0 | 3.213e+04 | -8159.85 | -104.76 | -4653.79 | 6285.42 | -2.147e+04 |
| | | -5.236e+05 | -2.88e-03 | 2.05e-04 | 0.0 | 60.0 | 3.213e+04 | -8579.85 | -104.76 | -4653.79 | -2.88e-03 | -5.236e+05 |
| 143 | 61 | -1.992e+04 | 6346.69 | 0.12 | -420.00 | 0.0 | 3.206e+04 | -8172.45 | -105.78 | -3395.61 | 6346.69 | -1.992e+04 |
| | | -5.229e+05 | -2.02e-03 | 9.60e-05 | 0.0 | 60.0 | 3.206e+04 | -8592.45 | -105.78 | -3395.61 | -2.02e-03 | -5.229e+05 |
| 143 | 68 | -2.151e+04 | 7068.36 | 0.12 | -420.00 | 0.0 | 3.213e+04 | -8158.88 | -117.81 | -4667.31 | 7068.36 | -2.151e+04 |
| | | -5.236e+05 | -2.93e-03 | 2.11e-04 | 0.0 | 60.0 | 3.213e+04 | -8578.88 | -117.81 | -4667.31 | -2.93e-03 | -5.236e+05 |
| 143 | 85 | -2.071e+04 | 6707.53 | 0.12 | -420.00 | 0.0 | 3.210e+04 | -8165.67 | -111.79 | -4026.08 | 6707.53 | -2.071e+04 |
| | | -5.233e+05 | -2.47e-03 | 1.54e-04 | 0.0 | 60.0 | 3.210e+04 | -8585.67 | -111.79 | -4026.08 | -2.47e-03 | -5.233e+05 |
| 143 | 87 | -1.936e+05 | 1.646e+04 | 0.27 | -420.00 | 0.0 | 7.393e+04 | -1.634e+04 | -274.41 | -1.834e+04 | 1.646e+04 | -1.936e+05 |
| | | -1.186e+06 | -0.01 | 6.29e-04 | 0.0 | 60.0 | 7.393e+04 | -1.676e+04 | -274.41 | -1.834e+04 | -0.01 | -1.186e+06 |
| 143 | 94 | -1.976e+04 | 6421.55 | 0.12 | -420.00 | 0.0 | 3.057e+04 | -7766.68 | -107.03 | -3798.03 | 6421.55 | -1.976e+04 |
| | | -4.984e+05 | -2.35e-03 | 1.46e-04 | 0.0 | 60.0 | 3.057e+04 | -8186.68 | -107.03 | -3798.03 | -2.35e-03 | -4.984e+05 |
| 143 | 97 | -1.770e+05 | 1.571e+04 | 0.26 | -420.00 | 0.0 | 7.092e+04 | -1.583e+04 | -261.81 | -1.709e+04 | 1.571e+04 | -1.770e+05 |
| | | -1.139e+06 | -9.86e-03 | 5.87e-04 | 0.0 | 60.0 | 7.092e+04 | -1.625e+04 | -261.81 | -1.709e+04 | -9.86e-03 | -1.139e+06 |
| 143 | 101 | -2.064e+04 | 6686.55 | 0.12 | -420.00 | 0.0 | 3.199e+04 | -8137.17 | -111.44 | -4011.18 | 6686.55 | -2.064e+04 |
| | | -5.215e+05 | -2.47e-03 | 1.53e-04 | 0.0 | 60.0 | 3.199e+04 | -8557.17 | -111.44 | -4011.18 | -2.47e-03 | -5.215e+05 |
| 143 | 102 | -2.071e+04 | 6707.53 | 0.12 | -420.00 | 0.0 | 3.210e+04 | -8165.67 | -111.79 | -4026.08 | 6707.53 | -2.071e+04 |
| | | -5.233e+05 | -2.47e-03 | 1.54e-04 | 0.0 | 60.0 | 3.210e+04 | -8585.67 | -111.79 | -4026.08 | -2.47e-03 | -5.233e+05 |
| 165 | 2 | -2.206e+04 | 1.214e+05 | -0.43 | -546.00 | 0.0 | 1.036e+05 | 2.848e+04 | 2022.69 | 2.279e+04 | -0.06 | -1.714e+06 |
| | | -1.714e+06 | -0.06 | -2.37e-03 | 0.0 | 60.0 | 1.036e+05 | 2.793e+04 | 2022.69 | 2.279e+04 | 1.214e+05 | -2.206e+04 |
| 165 | 7 | -1.822e+04 | 3.457e+04 | -0.12 | -420.00 | 0.0 | 3.013e+04 | 8206.17 | 576.15 | 210.93 | -0.01 | -4.980e+05 |
| | | -4.980e+05 | -0.01 | -5.73e-04 | 0.0 | 60.0 | 3.013e+04 | 7786.17 | 576.15 | 210.93 | 3.457e+04 | -1.822e+04 |
| 165 | 20 | -1.606e+04 | 1.098e+05 | -0.39 | -420.00 | 0.0 | 9.354e+04 | 2.574e+04 | 1829.54 | 2.271e+04 | -0.05 | -1.548e+06 |
| | | -1.548e+06 | -0.05 | -2.17e-03 | 0.0 | 60.0 | 9.354e+04 | 2.532e+04 | 1829.54 | 2.271e+04 | 1.098e+05 | -1.606e+04 |
| 165 | 22 | -1.203e+04 | 3.699e+04 | -0.12 | -420.00 | 0.0 | 3.204e+04 | 8767.07 | 616.45 | -877.34 | -0.01 | -5.313e+05 |
| | | -5.313e+05 | -0.01 | -4.51e-04 | 0.0 | 60.0 | 3.204e+04 | 8347.07 | 616.45 | -877.34 | 3.699e+04 | -1.203e+04 |
| 165 | 23 | -2.680e+04 | 3.765e+04 | -0.12 | -420.00 | 0.0 | 3.287e+04 | 8884.21 | 627.51 | 1402.60 | -0.02 | -5.414e+05 |
| | | -5.414e+05 | -0.02 | -7.89e-04 | 0.0 | 60.0 | 3.287e+04 | 8464.21 | 627.51 | 1402.60 | 3.765e+04 | -2.680e+04 |
| 165 | 27 | -2.680e+04 | 3.765e+04 | -0.12 | -420.00 | 0.0 | 3.287e+04 | 8884.15 | 627.51 | 1403.88 | -0.02 | -5.414e+05 |
| | | -5.414e+05 | -0.02 | -7.89e-04 | 0.0 | 60.0 | 3.287e+04 | 8464.15 | 627.51 | 1403.88 | 3.765e+04 | -2.680e+04 |
| 165 | 31 | -2.625e+04 | 3.757e+04 | -0.12 | -420.00 | 0.0 | 3.286e+04 | 8878.25 | 626.17 | 1378.00 | -0.02 | -5.414e+05 |
| | | -5.414e+05 | -0.02 | -7.71e-04 | 0.0 | 60.0 | 3.286e+04 | 8458.25 | 626.17 | 1378.00 | 3.757e+04 | -2.625e+04 |
| 165 | 54 | -1.662e+04 | 3.719e+04 | -0.12 | -420.00 | 0.0 | 3.230e+04 | 8803.37 | 619.88 | -180.19 | -0.01 | -5.344e+05 |
| | | -5.344e+05 | -0.01 | -5.56e-04 | 0.0 | 60.0 | 3.230e+04 | 8383.37 | 619.88 | -180.19 | 3.719e+04 | -1.662e+04 |
| 165 | 55 | -2.221e+04 | 3.744e+04 | -0.12 | -420.00 | 0.0 | 3.261e+04 | 8847.90 | 624.07 | 705.45 | -0.01 | -5.383e+05 |
| | | -5.383e+05 | -0.01 | -6.84e-04 | 0.0 | 60.0 | 3.261e+04 | 8427.90 | 624.07 | 705.45 | 3.744e+04 | -2.221e+04 |
| 165 | 59 | -2.221e+04 | 3.744e+04 | -0.12 | -420.00 | 0.0 | 3.261e+04 | 8847.88 | 624.07 | 705.94 | -0.01 | -5.383e+05 |
| | | -5.383e+05 | -0.01 | -6.84e-04 | 0.0 | 60.0 | 3.261e+04 | 8427.88 | 624.07 | 705.94 | 3.744e+04 | -2.221e+04 |
| 165 | 63 | -2.200e+04 | 3.741e+04 | -0.12 | -420.00 | 0.0 | 3.261e+04 | 8845.66 | 623.57 | 696.39 | -0.01 | -5.383e+05 |
| | | -5.383e+05 | -0.01 | -6.77e-04 | 0.0 | 60.0 | 3.261e+04 | 8425.66 | 623.57 | 696.39 | 3.741e+04 | -2.200e+04 |
| 165 | 85 | -1.942e+04 | 3.732e+04 | -0.12 | -420.00 | 0.0 | 3.246e+04 | 8825.64 | 621.98 | 262.63 | -0.01 | -5.364e+05 |
| | | -5.364e+05 | -0.01 | -6.20e-04 | 0.0 | 60.0 | 3.246e+04 | 8405.64 | 621.98 | 262.63 | 3.732e+04 | -1.942e+04 |
| 165 | 87 | -1.730e+04 | 8.588e+04 | -0.30 | -420.00 | 0.0 | 7.340e+04 | 2.016e+04 | 1431.39 | 1.523e+04 | -0.04 | -1.214e+06 |
| | | -1.214e+06 | -0.04 | -1.66e-03 | 0.0 | 60.0 | 7.340e+04 | 1.974e+04 | 1431.39 | 1.523e+04 | 8.588e+04 | -1.730e+04 |
| 165 | 88 | -1.862e+04 | 3.549e+04 | -0.12 | -420.00 | 0.0 | 3.091e+04 | 8412.66 | 591.43 | 228.16 | -0.01 | -5.108e+05 |
| | | -5.108e+05 | -0.01 | -5.88e-04 | 0.0 | 60.0 | 3.091e+04 | 7992.66 | 591.43 | 228.16 | 3.549e+04 | -1.862e+04 |
| 165 | 95 | -1.718e+04 | 8.562e+04 | -0.30 | -420.00 | 0.0 | 7.318e+04 | 2.010e+04 | 1427.02 | 1.523e+04 | -0.04 | -1.211e+06 |
| | | -1.211e+06 | -0.04 | -1.66e-03 | 0.0 | 60.0 | 7.318e+04 | 1.968e+04 | 1427.02 | 1.523e+04 | 8.562e+04 | -1.718e+04 |
| 165 | 97 | -1.813e+04 | 8.244e+04 | -0.29 | -420.00 | 0.0 | 7.050e+04 | 1.935e+04 | 1374.01 | 1.376e+04 | -0.04 | -1.166e+06 |
| | | -1.166e+06 | -0.04 | -1.58e-03 | 0.0 | 60.0 | 7.050e+04 | 1.893e+04 | 1374.01 | 1.376e+04 | 8.244e+04 | -1.813e+04 |
| 165 | 98 | -1.936e+04 | 3.719e+04 | -0.12 | -420.00 | 0.0 | 3.234e+04 | 8796.13 | 619.79 | 260.05 | -0.01 | -5.345e+05 |
| | | -5.345e+05 | -0.01 | -6.18e-04 | 0.0 | 60.0 | 3.234e+04 | 8376.13 | 619.79 | 260.05 | 3.719e+04 | -1.936e+04 |
| 165 | 102 | -1.942e+04 | 3.732e+04 | -0.12 | -420.00 | 0.0 | 3.246e+04 | 8825.64 | 621.98 | 262.63 | -0.01 | -5.364e+05 |
| | | -5.364e+05 | -0.01 | -6.20e-04 | 0.0 | 60.0 | 3.246e+04 | 8405.64 | 621.98 | 262.63 | 3.732e+04 | -1.942e+04 |
| 166 | 2 | 8.642e+05 | 1.214e+05 | -0.44 | -546.00 | 0.0 | 1.244e+05 | 2.341e+04 | -609.96 | 1.311e+05 | 1.214e+05 | 8.642e+05 |
| | | -5.240e+05 | 8.476e+04 | -1.66e-04 | 0.0 | 60.0 | 1.244e+05 | 2.286e+04 | -609.96 | 1.311e+05 | 8.476e+04 | 8.642e+05 |
| 166 | 7 | 2.323e+05 | 3.457e+04 | -0.12 | -420.00 | 0.0 | 3.560e+04 | 6578.82 | -191.74 | 2.486e+04 | 3.457e+04 | -1.499e+05 |
| | | -1.499e+05 | 2.306e+04 | 2.32e-05 | 0.0 | 60.0 | 3.560e+04 | 6158.82 | -191.74 | 2.486e+04 | 2.306e+04 | 2.323e+05 |
| 166 | 19 | 2.323e+05 | 3.457e+04 | -0.12 | -420.00 | 0.0 | 3.560e+04 | 6578.86 | -191.75 | 2.487e+04 | 3.457e+04 | -1.499e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|-----------|---------|-----------|-----------|------------|
| | | -1.499e+05 | 2.306e+04 | 2.32e-05 | 0.0 | 60.0 | 3.560e+04 | 6158.86 | -191.75 | 2.487e+04 | 2.306e+04 | 2.323e+05 |
| 166 | 22 | 2.561e+05 | 3.699e+04 | -0.13 | -420.00 | 0.0 | 3.813e+04 | 7126.10 | -195.95 | 2.518e+04 | 3.699e+04 | -1.588e+05 |
| | | -1.588e+05 | 2.428e+04 | 1.89e-04 | 0.0 | 60.0 | 3.813e+04 | 6706.10 | -195.95 | 2.518e+04 | 2.428e+04 | 2.561e+05 |
| 166 | 27 | 2.447e+05 | 3.765e+04 | -0.13 | -420.00 | 0.0 | 3.857e+04 | 7015.43 | -217.84 | 2.862e+04 | 3.765e+04 | -1.637e+05 |
| | | -1.637e+05 | 2.553e+04 | -1.41e-04 | 0.0 | 60.0 | 3.857e+04 | 6595.43 | -217.84 | 2.862e+04 | 2.553e+04 | 2.447e+05 |
| 166 | 30 | 2.557e+05 | 3.707e+04 | -0.13 | -420.00 | 0.0 | 3.811e+04 | 7118.83 | -194.05 | 2.519e+04 | 3.707e+04 | -1.588e+05 |
| | | -1.588e+05 | 2.405e+04 | 1.73e-04 | 0.0 | 60.0 | 3.811e+04 | 6698.83 | -194.05 | 2.519e+04 | 2.405e+04 | 2.557e+05 |
| 166 | 31 | 2.451e+05 | 3.757e+04 | -0.13 | -420.00 | 0.0 | 3.859e+04 | 7022.67 | -219.72 | 2.861e+04 | 3.757e+04 | -1.637e+05 |
| | | -1.637e+05 | 2.576e+04 | -1.25e-04 | 0.0 | 60.0 | 3.859e+04 | 6602.67 | -219.72 | 2.861e+04 | 2.576e+04 | 2.451e+05 |
| 166 | 34 | 2.557e+05 | 3.707e+04 | -0.13 | -420.00 | 0.0 | 3.811e+04 | 7118.81 | -194.04 | 2.519e+04 | 3.707e+04 | -1.588e+05 |
| | | -1.588e+05 | 2.405e+04 | 1.73e-04 | 0.0 | 60.0 | 3.811e+04 | 6698.81 | -194.04 | 2.519e+04 | 2.405e+04 | 2.557e+05 |
| 166 | 54 | 2.525e+05 | 3.719e+04 | -0.13 | -420.00 | 0.0 | 3.826e+04 | 7091.70 | -202.75 | 2.623e+04 | 3.719e+04 | -1.603e+05 |
| | | -1.603e+05 | 2.467e+04 | 8.62e-05 | 0.0 | 60.0 | 3.826e+04 | 6671.70 | -202.75 | 2.623e+04 | 2.467e+04 | 2.525e+05 |
| 166 | 59 | 2.482e+05 | 3.744e+04 | -0.13 | -420.00 | 0.0 | 3.843e+04 | 7049.82 | -211.03 | 2.757e+04 | 3.744e+04 | -1.622e+05 |
| | | -1.622e+05 | 2.514e+04 | -5.68e-05 | 0.0 | 60.0 | 3.843e+04 | 6629.82 | -211.03 | 2.757e+04 | 2.514e+04 | 2.482e+05 |
| 166 | 62 | 2.524e+05 | 3.722e+04 | -0.13 | -420.00 | 0.0 | 3.826e+04 | 7088.95 | -202.04 | 2.623e+04 | 3.722e+04 | -1.603e+05 |
| | | -1.603e+05 | 2.458e+04 | 8.01e-05 | 0.0 | 60.0 | 3.826e+04 | 6668.95 | -202.04 | 2.623e+04 | 2.458e+04 | 2.524e+05 |
| 166 | 63 | 2.484e+05 | 3.741e+04 | -0.13 | -420.00 | 0.0 | 3.844e+04 | 7052.56 | -211.74 | 2.757e+04 | 3.741e+04 | -1.622e+05 |
| | | -1.622e+05 | 2.523e+04 | -5.31e-05 | 0.0 | 60.0 | 3.844e+04 | 6632.56 | -211.74 | 2.757e+04 | 2.523e+04 | 2.484e+05 |
| 166 | 66 | 2.524e+05 | 3.722e+04 | -0.13 | -420.00 | 0.0 | 3.826e+04 | 7088.94 | -202.03 | 2.624e+04 | 3.722e+04 | -1.603e+05 |
| | | -1.603e+05 | 2.458e+04 | 8.01e-05 | 0.0 | 60.0 | 3.826e+04 | 6668.94 | -202.03 | 2.624e+04 | 2.458e+04 | 2.524e+05 |
| 166 | 85 | 2.504e+05 | 3.732e+04 | -0.13 | -420.00 | 0.0 | 3.835e+04 | 7070.75 | -206.89 | 2.690e+04 | 3.732e+04 | -1.613e+05 |
| | | -1.613e+05 | 2.491e+04 | -2.48e-05 | 0.0 | 60.0 | 3.835e+04 | 6650.75 | -206.89 | 2.690e+04 | 2.491e+04 | 2.504e+05 |
| 166 | 87 | 6.095e+05 | 8.588e+04 | -0.31 | -420.00 | 0.0 | 8.802e+04 | 1.655e+04 | -434.22 | 9.096e+04 | 8.588e+04 | -3.709e+05 |
| | | -3.709e+05 | 5.983e+04 | -1.13e-04 | 0.0 | 60.0 | 8.802e+04 | 1.613e+04 | -434.22 | 9.096e+04 | 5.983e+04 | 6.095e+05 |
| 166 | 88 | 2.383e+05 | 3.549e+04 | -0.12 | -420.00 | 0.0 | 3.651e+04 | 6742.80 | -196.79 | 2.554e+04 | 3.549e+04 | -1.537e+05 |
| | | -1.537e+05 | 2.368e+04 | 2.34e-05 | 0.0 | 60.0 | 3.651e+04 | 6322.80 | -196.79 | 2.554e+04 | 2.368e+04 | 2.383e+05 |
| 166 | 94 | 2.383e+05 | 3.549e+04 | -0.12 | -420.00 | 0.0 | 3.651e+04 | 6742.82 | -196.79 | 2.554e+04 | 3.549e+04 | -1.537e+05 |
| | | -1.537e+05 | 2.368e+04 | 2.34e-05 | 0.0 | 60.0 | 3.651e+04 | 6322.82 | -196.79 | 2.554e+04 | 2.368e+04 | 2.383e+05 |
| 166 | 97 | 5.829e+05 | 8.244e+04 | -0.30 | -420.00 | 0.0 | 8.447e+04 | 1.585e+04 | -419.28 | 8.560e+04 | 8.244e+04 | -3.558e+05 |
| | | -3.558e+05 | 5.728e+04 | -1.05e-04 | 0.0 | 60.0 | 8.447e+04 | 1.543e+04 | -419.28 | 8.560e+04 | 5.728e+04 | 5.829e+05 |
| 166 | 98 | 2.495e+05 | 3.719e+04 | -0.13 | -420.00 | 0.0 | 3.822e+04 | 7047.33 | -206.17 | 2.680e+04 | 3.719e+04 | -1.607e+05 |
| | | -1.607e+05 | 2.482e+04 | -2.47e-05 | 0.0 | 60.0 | 3.822e+04 | 6627.33 | -206.17 | 2.680e+04 | 2.482e+04 | 2.495e+05 |
| 166 | 101 | 2.495e+05 | 3.719e+04 | -0.13 | -420.00 | 0.0 | 3.822e+04 | 7047.34 | -206.17 | 2.680e+04 | 3.719e+04 | -1.607e+05 |
| | | -1.607e+05 | 2.482e+04 | -2.47e-05 | 0.0 | 60.0 | 3.822e+04 | 6627.34 | -206.17 | 2.680e+04 | 2.482e+04 | 2.495e+05 |
| 166 | 102 | 2.504e+05 | 3.732e+04 | -0.13 | -420.00 | 0.0 | 3.835e+04 | 7070.75 | -206.89 | 2.690e+04 | 3.732e+04 | -1.613e+05 |
| | | -1.613e+05 | 2.491e+04 | -2.48e-05 | 0.0 | 60.0 | 3.835e+04 | 6650.75 | -206.89 | 2.690e+04 | 2.491e+04 | 2.504e+05 |
| 167 | 2 | 1.414e+06 | 8.476e+04 | -0.43 | -546.00 | 0.0 | 1.569e+05 | 2.214e+04 | -641.17 | 1.504e+05 | 8.476e+04 | 1.021e+05 |
| | | 1.021e+05 | 4.629e+04 | 8.51e-04 | 0.0 | 60.0 | 1.569e+05 | 2.160e+04 | -641.17 | 1.504e+05 | 4.629e+04 | 1.414e+06 |
| 167 | 7 | 3.753e+05 | 2.306e+04 | -0.11 | -420.00 | 0.0 | 4.418e+04 | 5930.78 | -198.32 | 2.702e+04 | 2.306e+04 | 3.204e+04 |
| | | 3.204e+04 | 1.117e+04 | 2.52e-04 | 0.0 | 60.0 | 4.418e+04 | 5510.78 | -198.32 | 2.702e+04 | 1.117e+04 | 3.753e+05 |
| 167 | 19 | 3.753e+05 | 2.306e+04 | -0.11 | -420.00 | 0.0 | 4.418e+04 | 5930.81 | -198.32 | 2.703e+04 | 2.306e+04 | 3.204e+04 |
| | | 3.204e+04 | 1.116e+04 | 2.52e-04 | 0.0 | 60.0 | 4.418e+04 | 5510.81 | -198.32 | 2.703e+04 | 1.116e+04 | 3.753e+05 |
| 167 | 22 | 4.092e+05 | 2.428e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6416.33 | -220.82 | 2.747e+04 | 2.428e+04 | 3.688e+04 |
| | | 3.688e+04 | 1.144e+04 | 4.39e-04 | 0.0 | 60.0 | 4.742e+04 | 5996.33 | -220.82 | 2.747e+04 | 1.144e+04 | 4.092e+05 |
| 167 | 30 | 4.088e+05 | 2.405e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6410.19 | -218.95 | 2.747e+04 | 2.405e+04 | 3.688e+04 |
| | | 3.688e+04 | 1.130e+04 | 4.26e-04 | 0.0 | 60.0 | 4.742e+04 | 5990.19 | -218.95 | 2.747e+04 | 1.130e+04 | 4.088e+05 |
| 167 | 31 | 4.000e+05 | 2.576e+04 | -0.12 | -420.00 | 0.0 | 4.776e+04 | 6334.17 | -209.09 | 3.101e+04 | 2.576e+04 | 3.251e+04 |
| | | 3.251e+04 | 1.282e+04 | 1.16e-04 | 0.0 | 60.0 | 4.776e+04 | 5914.17 | -209.09 | 3.101e+04 | 1.282e+04 | 4.000e+05 |
| 167 | 34 | 4.088e+05 | 2.405e+04 | -0.12 | -420.00 | 0.0 | 4.742e+04 | 6410.18 | -218.94 | 2.747e+04 | 2.405e+04 | 3.688e+04 |
| | | 3.688e+04 | 1.130e+04 | 4.26e-04 | 0.0 | 60.0 | 4.742e+04 | 5990.18 | -218.94 | 2.747e+04 | 1.130e+04 | 4.088e+05 |
| 167 | 35 | 4.000e+05 | 2.576e+04 | -0.12 | -420.00 | 0.0 | 4.776e+04 | 6334.18 | -209.10 | 3.101e+04 | 2.576e+04 | 3.251e+04 |
| | | 3.251e+04 | 1.283e+04 | 1.16e-04 | 0.0 | 60.0 | 4.776e+04 | 5914.18 | -209.10 | 3.101e+04 | 1.283e+04 | 4.000e+05 |
| 167 | 54 | 4.062e+05 | 2.467e+04 | -0.12 | -420.00 | 0.0 | 4.753e+04 | 6388.89 | -216.60 | 2.855e+04 | 2.467e+04 | 3.552e+04 |
| | | 3.552e+04 | 1.183e+04 | 3.35e-04 | 0.0 | 60.0 | 4.753e+04 | 5968.89 | -216.60 | 2.855e+04 | 1.183e+04 | 4.062e+05 |
| 167 | 62 | 4.061e+05 | 2.458e+04 | -0.12 | -420.00 | 0.0 | 4.752e+04 | 6386.57 | -215.89 | 2.855e+04 | 2.458e+04 | 3.552e+04 |
| | | 3.552e+04 | 1.178e+04 | 3.30e-04 | 0.0 | 60.0 | 4.752e+04 | 5966.57 | -215.89 | 2.855e+04 | 1.178e+04 | 4.061e+05 |
| 167 | 63 | 4.028e+05 | 2.523e+04 | -0.12 | -420.00 | 0.0 | 4.766e+04 | 6357.79 | -212.15 | 2.993e+04 | 2.523e+04 | 3.387e+04 |
| | | 3.387e+04 | 1.235e+04 | 2.13e-04 | 0.0 | 60.0 | 4.766e+04 | 5937.79 | -212.15 | 2.993e+04 | 1.235e+04 | 4.028e+05 |
| 167 | 66 | 4.061e+05 | 2.458e+04 | -0.12 | -420.00 | 0.0 | 4.752e+04 | 6386.57 | -215.89 | 2.855e+04 | 2.458e+04 | 3.552e+04 |
| | | 3.552e+04 | 1.178e+04 | 3.30e-04 | 0.0 | 60.0 | 4.752e+04 | 5966.57 | -215.89 | 2.855e+04 | 1.178e+04 | 4.061e+05 |
| 167 | 67 | 4.028e+05 | 2.523e+04 | -0.12 | -420.00 | 0.0 | 4.766e+04 | 6357.79 | -212.15 | 2.993e+04 | 2.523e+04 | 3.387e+04 |
| | | 3.387e+04 | 1.235e+04 | 2.13e-04 | 0.0 | 60.0 | 4.766e+04 | 5937.79 | -212.15 | 2.993e+04 | 1.235e+04 | 4.028e+05 |
| 167 | 85 | 4.044e+05 | 2.491e+04 | -0.12 | -420.00 | 0.0 | 4.759e+04 | 6372.18 | -214.02 | 2.924e+04 | 2.491e+04 | 3.469e+04 |
| | | 3.469e+04 | 1.206e+04 | 2.71e-04 | 0.0 | 60.0 | 4.759e+04 | 5952.18 | -214.02 | 2.924e+04 | 1.206e+04 | 4.044e+05 |
| 167 | 87 | 9.969e+05 | 5.983e+04 | -0.30 | -420.00 | 0.0 | 1.110e+05 | 1.561e+04 | -455.98 | 1.041e+05 | 5.983e+04 | 7.271e+04 |
| | | 7.271e+04 | 3.247e+04 | 6.03e-04 | 0.0 | 60.0 | 1.110e+05 | 1.519e+04 | -455.98 | 1.041e+05 | 3.247e+04 | 9.969e+05 |
| 167 | 88 | 3.850e+05 | 2.368e+04 | -0.12 | -420.00 | 0.0 | 4.532e+04 | 6077.91 | -203.55 | 2.776e+04 | 2.368e+04 | 3.292e+04 |
| | | 3.292e+04 | 1.146e+04 | 2.59e-04 | 0.0 | 60.0 | 4.532e+04 | 5657.91 | -203.55 | 2.776e+04 | 1.146e+04 | 3.850e+05 |
| 167 | 94 | 3.850e+05 | 2.368e+04 | -0.12 | -420.00 | 0.0 | 4.532e+04 | 6077.93 | -203.55 | 2.777e+04 | 2.368e+04 | 3.292e+04 |
| | | 3.292e+04 | 1.146e+04 | 2.59e-04 | 0.0 | 60.0 | 4.532e+04 | 5657.93 | -203.55 | 2.777e+04 | 1.146e+04 | 3.850e+05 |
| 167 | 97 | 9.526e+05 | 5.728e+04 | -0.29 | -420.00 | 0.0 | 1.064e+05 | 1.492e+04 | -439.86 | 9.779e+04 | 5.728e+04 | 7.027e+04 |
| | | 7.027e+04 | 3.089e+04 | 5.80e-04 | 0.0 | 60.0 | 1.064e+05 | 1.450e+04 | -439.86 | 9.779e+04 | 3.089e+04 | 9.526e+05 |
| 167 | 98 | 4.030e+05 | 2.482e+04 | -0.12 | -420.00 | 0.0 | 4.743e+04 | 6351.16 | -213.27 | 2.913e+04 | 2.482e+04 | 3.457e+04 |
| | | 3.457e+04 | 1.202e+04 | 2.70e-04 | 0.0 | 60.0 | 4.743e+04 | 5931.16 | -213.27 | 2.913e+04 | 1.202e+04 | 4.030e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|-----------|---------|-----------|-----------|-----------|
| 167 | 101 | 4.030e+05 | 2.482e+04 | -0.12 | -420.00 | 0.0 | 4.743e+04 | 6351.17 | -213.27 | 2.914e+04 | 2.482e+04 | 3.457e+04 |
| | | 3.457e+04 | 1.202e+04 | 2.70e-04 | 0.0 | 60.0 | 4.743e+04 | 5931.17 | -213.27 | 2.914e+04 | 1.202e+04 | 4.030e+05 |
| 167 | 102 | 4.044e+05 | 2.491e+04 | -0.12 | -420.00 | 0.0 | 4.759e+04 | 6372.18 | -214.02 | 2.924e+04 | 2.491e+04 | 3.469e+04 |
| | | 3.469e+04 | 1.206e+04 | 2.71e-04 | 0.0 | 60.0 | 4.759e+04 | 5952.18 | -214.02 | 2.924e+04 | 1.206e+04 | 4.044e+05 |
| 168 | 2 | 1.864e+06 | 4.629e+04 | -0.40 | -546.00 | 0.0 | 1.901e+05 | 2.074e+04 | -413.03 | 1.465e+05 | 4.629e+04 | 6.363e+05 |
| | | 6.363e+05 | 2.151e+04 | 1.22e-03 | 0.0 | 60.0 | 1.901e+05 | 2.019e+04 | -413.03 | 1.465e+05 | 2.151e+04 | 1.864e+06 |
| 168 | 7 | 4.799e+05 | 1.117e+04 | -0.11 | -420.00 | 0.0 | 5.246e+04 | 5185.52 | -129.47 | 2.529e+04 | 1.117e+04 | 1.813e+05 |
| | | 1.813e+05 | 3396.86 | 3.33e-04 | 0.0 | 60.0 | 5.246e+04 | 4765.52 | -129.47 | 2.529e+04 | 3396.86 | 4.799e+05 |
| 168 | 19 | 4.799e+05 | 1.116e+04 | -0.11 | -420.00 | 0.0 | 5.246e+04 | 5185.54 | -129.47 | 2.529e+04 | 1.116e+04 | 1.813e+05 |
| | | 1.813e+05 | 3396.27 | 3.33e-04 | 0.0 | 60.0 | 5.246e+04 | 4765.54 | -129.47 | 2.529e+04 | 3396.27 | 4.799e+05 |
| 168 | 21 | 5.200e+05 | 1.146e+04 | -0.11 | -420.00 | 0.0 | 5.633e+04 | 5598.68 | -154.20 | 2.566e+04 | 1.146e+04 | 1.932e+05 |
| | | 1.932e+05 | 2636.64 | 5.24e-04 | 0.0 | 60.0 | 5.633e+04 | 5178.68 | -154.20 | 2.566e+04 | 2636.64 | 5.200e+05 |
| 168 | 22 | 5.209e+05 | 1.144e+04 | -0.11 | -420.00 | 0.0 | 5.628e+04 | 5603.38 | -154.12 | 2.564e+04 | 1.144e+04 | 1.939e+05 |
| | | 1.939e+05 | 2660.10 | 5.24e-04 | 0.0 | 60.0 | 5.628e+04 | 5183.38 | -154.12 | 2.564e+04 | 2660.10 | 5.209e+05 |
| 168 | 23 | 5.132e+05 | 1.268e+04 | -0.11 | -420.00 | 0.0 | 5.674e+04 | 5535.18 | -125.28 | 2.908e+04 | 1.268e+04 | 1.972e+05 |
| | | 1.972e+05 | 4703.86 | 1.93e-04 | 0.0 | 60.0 | 5.674e+04 | 5115.18 | -125.28 | 2.908e+04 | 4703.86 | 5.132e+05 |
| 168 | 26 | 5.209e+05 | 1.144e+04 | -0.11 | -420.00 | 0.0 | 5.628e+04 | 5603.37 | -154.12 | 2.564e+04 | 1.144e+04 | 1.939e+05 |
| | | 1.939e+05 | 2634.97 | 5.24e-04 | 0.0 | 60.0 | 5.628e+04 | 5183.37 | -154.12 | 2.564e+04 | 2634.97 | 5.209e+05 |
| 168 | 35 | 5.135e+05 | 1.283e+04 | -0.11 | -420.00 | 0.0 | 5.671e+04 | 5539.30 | -126.77 | 2.909e+04 | 1.283e+04 | 1.971e+05 |
| | | 1.971e+05 | 4346.09 | 2.01e-04 | 0.0 | 60.0 | 5.671e+04 | 5119.30 | -126.77 | 2.909e+04 | 4346.09 | 5.135e+05 |
| 168 | 53 | 5.182e+05 | 1.184e+04 | -0.11 | -420.00 | 0.0 | 5.644e+04 | 5580.38 | -145.18 | 2.670e+04 | 1.184e+04 | 1.947e+05 |
| | | 1.947e+05 | 3287.10 | 4.21e-04 | 0.0 | 60.0 | 5.644e+04 | 5160.38 | -145.18 | 2.670e+04 | 3287.10 | 5.182e+05 |
| 168 | 54 | 5.185e+05 | 1.183e+04 | -0.11 | -420.00 | 0.0 | 5.642e+04 | 5582.19 | -145.15 | 2.669e+04 | 1.183e+04 | 1.949e+05 |
| | | 1.949e+05 | 3296.05 | 4.21e-04 | 0.0 | 60.0 | 5.642e+04 | 5162.19 | -145.15 | 2.669e+04 | 3296.05 | 5.185e+05 |
| 168 | 55 | 5.156e+05 | 1.230e+04 | -0.11 | -420.00 | 0.0 | 5.660e+04 | 5556.38 | -134.24 | 2.803e+04 | 1.230e+04 | 1.961e+05 |
| | | 1.961e+05 | 4067.92 | 2.96e-04 | 0.0 | 60.0 | 5.660e+04 | 5136.38 | -134.24 | 2.803e+04 | 4067.92 | 5.156e+05 |
| 168 | 58 | 5.185e+05 | 1.183e+04 | -0.11 | -420.00 | 0.0 | 5.642e+04 | 5582.18 | -145.15 | 2.669e+04 | 1.183e+04 | 1.949e+05 |
| | | 1.949e+05 | 3286.46 | 4.21e-04 | 0.0 | 60.0 | 5.642e+04 | 5162.18 | -145.15 | 2.669e+04 | 3286.46 | 5.185e+05 |
| 168 | 67 | 5.157e+05 | 1.235e+04 | -0.11 | -420.00 | 0.0 | 5.659e+04 | 5557.93 | -134.81 | 2.804e+04 | 1.235e+04 | 1.961e+05 |
| | | 1.961e+05 | 3932.88 | 2.99e-04 | 0.0 | 60.0 | 5.659e+04 | 5137.93 | -134.81 | 2.804e+04 | 3932.88 | 5.157e+05 |
| 168 | 85 | 5.171e+05 | 1.206e+04 | -0.11 | -420.00 | 0.0 | 5.651e+04 | 5569.28 | -139.70 | 2.736e+04 | 1.206e+04 | 1.955e+05 |
| | | 1.955e+05 | 3681.98 | 3.58e-04 | 0.0 | 60.0 | 5.651e+04 | 5149.28 | -139.70 | 2.736e+04 | 3681.98 | 5.171e+05 |
| 168 | 87 | 1.312e+06 | 3.247e+04 | -0.28 | -420.00 | 0.0 | 1.343e+05 | 1.457e+04 | -293.98 | 1.013e+05 | 3.247e+04 | 4.502e+05 |
| | | 4.502e+05 | 1.483e+04 | 8.60e-04 | 0.0 | 60.0 | 1.343e+05 | 1.415e+04 | -293.98 | 1.013e+05 | 1.483e+04 | 1.312e+06 |
| 168 | 88 | 4.923e+05 | 1.146e+04 | -0.11 | -420.00 | 0.0 | 5.381e+04 | 5313.44 | -132.88 | 2.598e+04 | 1.146e+04 | 1.861e+05 |
| | | 1.861e+05 | 3491.90 | 3.41e-04 | 0.0 | 60.0 | 5.381e+04 | 4893.44 | -132.88 | 2.598e+04 | 3491.90 | 4.923e+05 |
| 168 | 94 | 4.923e+05 | 1.146e+04 | -0.11 | -420.00 | 0.0 | 5.381e+04 | 5313.46 | -132.88 | 2.598e+04 | 1.146e+04 | 1.861e+05 |
| | | 1.861e+05 | 3491.51 | 3.41e-04 | 0.0 | 60.0 | 5.381e+04 | 4893.46 | -132.88 | 2.598e+04 | 3491.51 | 4.923e+05 |
| 168 | 97 | 1.251e+06 | 3.089e+04 | -0.27 | -420.00 | 0.0 | 1.286e+05 | 1.387e+04 | -283.81 | 9.499e+04 | 3.089e+04 | 4.321e+05 |
| | | 4.321e+05 | 1.386e+04 | 8.23e-04 | 0.0 | 60.0 | 1.286e+05 | 1.345e+04 | -283.81 | 9.499e+04 | 1.386e+04 | 1.251e+06 |
| 168 | 98 | 5.153e+05 | 1.202e+04 | -0.11 | -420.00 | 0.0 | 5.632e+04 | 5551.01 | -139.21 | 2.726e+04 | 1.202e+04 | 1.948e+05 |
| | | 1.948e+05 | 3668.45 | 3.57e-04 | 0.0 | 60.0 | 5.632e+04 | 5131.01 | -139.21 | 2.726e+04 | 3668.45 | 5.153e+05 |
| 168 | 101 | 5.153e+05 | 1.202e+04 | -0.11 | -420.00 | 0.0 | 5.632e+04 | 5551.01 | -139.21 | 2.726e+04 | 1.202e+04 | 1.948e+05 |
| | | 1.948e+05 | 3668.25 | 3.57e-04 | 0.0 | 60.0 | 5.632e+04 | 5131.01 | -139.21 | 2.726e+04 | 3668.25 | 5.153e+05 |
| 168 | 102 | 5.171e+05 | 1.206e+04 | -0.11 | -420.00 | 0.0 | 5.651e+04 | 5569.28 | -139.70 | 2.736e+04 | 1.206e+04 | 1.955e+05 |
| | | 1.955e+05 | 3681.98 | 3.58e-04 | 0.0 | 60.0 | 5.651e+04 | 5149.28 | -139.70 | 2.736e+04 | 3681.98 | 5.171e+05 |
| 169 | 1 | 7.509e+05 | 4542.07 | -0.13 | -546.00 | 0.0 | 7.969e+04 | 5903.49 | -92.54 | 2.967e+04 | 4542.07 | 4.131e+05 |
| | | 4.131e+05 | -1010.63 | 4.42e-04 | 0.0 | 60.0 | 7.969e+04 | 5357.49 | -92.54 | 2.967e+04 | -1010.63 | 7.509e+05 |
| 169 | 2 | 2.275e+06 | 2.151e+04 | -0.36 | -546.00 | 0.0 | 2.216e+05 | 1.943e+04 | -232.38 | 1.305e+05 | 2.151e+04 | 1.125e+06 |
| | | 1.125e+06 | 7569.21 | 1.26e-03 | 0.0 | 60.0 | 2.216e+05 | 1.889e+04 | -232.38 | 1.305e+05 | 7569.21 | 2.275e+06 |
| 169 | 7 | 5.628e+05 | 3396.86 | -0.10 | -420.00 | 0.0 | 5.973e+04 | 4430.26 | -69.33 | 2.220e+04 | 3396.86 | 3.095e+05 |
| | | 3.095e+05 | -762.66 | 3.32e-04 | 0.0 | 60.0 | 5.973e+04 | 4010.26 | -69.33 | 2.220e+04 | -762.66 | 5.628e+05 |
| 169 | 21 | 6.082e+05 | 2636.65 | -0.10 | -420.00 | 0.0 | 6.466e+04 | 4781.05 | -91.07 | 2.229e+04 | 2636.65 | 3.313e+05 |
| | | 3.313e+05 | -2674.22 | 5.12e-04 | 0.0 | 60.0 | 6.466e+04 | 4361.05 | -91.07 | 2.229e+04 | -2674.22 | 6.082e+05 |
| 169 | 22 | 6.091e+05 | 2660.11 | -0.10 | -420.00 | 0.0 | 6.460e+04 | 4782.66 | -91.04 | 2.229e+04 | 2660.11 | 3.321e+05 |
| | | 3.321e+05 | -2648.95 | 5.12e-04 | 0.0 | 60.0 | 6.460e+04 | 4362.66 | -91.04 | 2.229e+04 | -2648.95 | 6.091e+05 |
| 169 | 24 | 6.045e+05 | 4727.33 | -0.10 | -420.00 | 0.0 | 6.402e+04 | 4730.48 | -58.52 | 2.576e+04 | 4727.33 | 3.359e+05 |
| | | 3.359e+05 | 1062.87 | 2.02e-04 | 0.0 | 60.0 | 6.402e+04 | 4310.48 | -58.52 | 2.576e+04 | 1062.87 | 6.045e+05 |
| 169 | 26 | 6.091e+05 | 2634.98 | -0.10 | -420.00 | 0.0 | 6.460e+04 | 4782.66 | -91.04 | 2.229e+04 | 2634.98 | 3.321e+05 |
| | | 3.321e+05 | -2675.95 | 5.12e-04 | 0.0 | 60.0 | 6.460e+04 | 4362.66 | -91.04 | 2.229e+04 | -2675.95 | 6.091e+05 |
| 169 | 27 | 6.036e+05 | 4729.00 | -0.10 | -420.00 | 0.0 | 6.408e+04 | 4728.86 | -58.55 | 2.576e+04 | 4729.00 | 3.351e+05 |
| | | 3.351e+05 | 1064.60 | 2.02e-04 | 0.0 | 60.0 | 6.408e+04 | 4308.86 | -58.55 | 2.576e+04 | 1064.60 | 6.036e+05 |
| 169 | 53 | 6.070e+05 | 3287.11 | -0.10 | -420.00 | 0.0 | 6.446e+04 | 4765.30 | -80.95 | 2.335e+04 | 3287.11 | 3.327e+05 |
| | | 3.327e+05 | -1512.36 | 4.16e-04 | 0.0 | 60.0 | 6.446e+04 | 4345.30 | -80.95 | 2.335e+04 | -1512.36 | 6.070e+05 |
| 169 | 54 | 6.074e+05 | 3296.06 | -0.10 | -420.00 | 0.0 | 6.444e+04 | 4765.92 | -80.94 | 2.335e+04 | 3296.06 | 3.331e+05 |
| | | 3.331e+05 | -1502.73 | 4.16e-04 | 0.0 | 60.0 | 6.444e+04 | 4345.92 | -80.94 | 2.335e+04 | -1502.73 | 6.074e+05 |
| 169 | 56 | 6.057e+05 | 4076.87 | -0.10 | -420.00 | 0.0 | 6.422e+04 | 4746.23 | -68.64 | 2.470e+04 | 4076.87 | 3.345e+05 |
| | | 3.345e+05 | -98.98 | 2.99e-04 | 0.0 | 60.0 | 6.422e+04 | 4326.23 | -68.64 | 2.470e+04 | -98.98 | 6.057e+05 |
| 169 | 58 | 6.074e+05 | 3286.47 | -0.10 | -420.00 | 0.0 | 6.444e+04 | 4765.92 | -80.94 | 2.335e+04 | 3286.47 | 3.331e+05 |
| | | 3.331e+05 | -1513.02 | 4.16e-04 | 0.0 | 60.0 | 6.444e+04 | 4345.92 | -80.94 | 2.335e+04 | -1513.02 | 6.074e+05 |
| 169 | 59 | 6.053e+05 | 4077.51 | -0.10 | -420.00 | 0.0 | 6.424e+04 | 4745.61 | -68.65 | 2.470e+04 | 4077.51 | 3.342e+05 |
| | | 3.342e+05 | -98.32 | 2.98e-04 | 0.0 | 60.0 | 6.424e+04 | 4325.61 | -68.65 | 2.470e+04 | -98.32 | 6.053e+05 |
| 169 | 85 | 6.063e+05 | 3681.99 | -0.10 | -420.00 | 0.0 | 6.434e+04 | 4755.76 | -74.79 | 2.403e+04 | 3681.99 | 3.336e+05 |
| | | 3.336e+05 | -805.67 | 3.57e-04 | 0.0 | 60.0 | 6.434e+04 | 4335.76 | -74.79 | 2.403e+04 | -805.67 | 6.063e+05 |
| 169 | 86 | 5.814e+05 | 3518.98 | -0.10 | -420.00 | 0.0 | 6.171e+04 | 4569.76 | -71.67 | 2.299e+04 | 3518.98 | 3.199e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|-----------|---------|-----------|-----------|-----------|
| | | 3.199e+05 | -781.17 | 3.43e-04 | 0.0 | 60.0 | 6.171e+04 | 4149.76 | -71.67 | 2.299e+04 | -781.17 | 5.814e+05 |
| 169 | 87 | 1.597e+06 | 1.483e+04 | -0.25 | -420.00 | 0.0 | 1.563e+05 | 1.359e+04 | -164.89 | 9.020e+04 | 1.483e+04 | 7.946e+05 |
| | | 7.946e+05 | 4938.72 | 8.87e-04 | 0.0 | 60.0 | 1.563e+05 | 1.317e+04 | -164.89 | 9.020e+04 | 4938.72 | 1.597e+06 |
| 169 | 88 | 5.773e+05 | 3491.91 | -0.10 | -420.00 | 0.0 | 6.127e+04 | 4538.76 | -71.15 | 2.281e+04 | 3491.91 | 3.176e+05 |
| | | 3.176e+05 | -777.00 | 3.40e-04 | 0.0 | 60.0 | 6.127e+04 | 4118.76 | -71.15 | 2.281e+04 | -777.00 | 5.773e+05 |
| 169 | 96 | 6.063e+05 | 3681.99 | -0.10 | -420.00 | 0.0 | 6.434e+04 | 4755.76 | -74.79 | 2.403e+04 | 3681.99 | 3.336e+05 |
| | | 3.336e+05 | -805.67 | 3.57e-04 | 0.0 | 60.0 | 6.434e+04 | 4335.76 | -74.79 | 2.403e+04 | -805.67 | 6.063e+05 |
| 169 | 97 | 1.521e+06 | 1.386e+04 | -0.24 | -420.00 | 0.0 | 1.495e+05 | 1.287e+04 | -158.69 | 8.452e+04 | 1.386e+04 | 7.609e+05 |
| | | 7.609e+05 | 4342.23 | 8.47e-04 | 0.0 | 60.0 | 1.495e+05 | 1.245e+04 | -158.69 | 8.452e+04 | 4342.23 | 1.521e+06 |
| 169 | 98 | 6.043e+05 | 3668.45 | -0.10 | -420.00 | 0.0 | 6.412e+04 | 4740.26 | -74.53 | 2.394e+04 | 3668.45 | 3.325e+05 |
| | | 3.325e+05 | -803.58 | 3.56e-04 | 0.0 | 60.0 | 6.412e+04 | 4320.26 | -74.53 | 2.394e+04 | -803.58 | 6.043e+05 |
| 169 | 102 | 6.063e+05 | 3681.99 | -0.10 | -420.00 | 0.0 | 6.434e+04 | 4755.76 | -74.79 | 2.403e+04 | 3681.99 | 3.336e+05 |
| | | 3.336e+05 | -805.67 | 3.57e-04 | 0.0 | 60.0 | 6.434e+04 | 4335.76 | -74.79 | 2.403e+04 | -805.67 | 6.063e+05 |
| 170 | 1 | 8.372e+05 | -1010.62 | -0.11 | -546.00 | 0.0 | 8.783e+04 | 4888.80 | -40.96 | 2.488e+04 | -1010.62 | 5.602e+05 |
| | | 5.602e+05 | -3468.40 | 3.87e-04 | 0.0 | 60.0 | 8.783e+04 | 4342.80 | -40.96 | 2.488e+04 | -3468.40 | 8.372e+05 |
| 170 | 2 | 2.667e+06 | 7569.21 | -0.30 | -546.00 | 0.0 | 2.507e+05 | 1.813e+04 | -120.40 | 1.061e+05 | 7569.21 | 1.595e+06 |
| | | 1.595e+06 | 345.40 | 1.11e-03 | 0.0 | 60.0 | 2.507e+05 | 1.759e+04 | -120.40 | 1.061e+05 | 345.40 | 2.667e+06 |
| 170 | 7 | 6.274e+05 | -762.66 | -0.08 | -420.00 | 0.0 | 6.583e+04 | 3669.69 | -30.68 | 1.861e+04 | -762.66 | 4.198e+05 |
| | | 4.198e+05 | -2603.62 | 2.90e-04 | 0.0 | 60.0 | 6.583e+04 | 3249.69 | -30.68 | 1.861e+04 | -2603.62 | 6.274e+05 |
| 170 | 8 | 2.457e+06 | 7817.18 | -0.27 | -420.00 | 0.0 | 2.287e+05 | 1.691e+04 | -110.12 | 9.981e+04 | 7817.18 | 1.454e+06 |
| | | 1.454e+06 | 1210.19 | 1.01e-03 | 0.0 | 60.0 | 2.287e+05 | 1.649e+04 | -110.12 | 9.981e+04 | 1210.19 | 2.457e+06 |
| 170 | 21 | 6.743e+05 | -2674.20 | -0.09 | -420.00 | 0.0 | 7.130e+04 | 3961.29 | -48.94 | 1.840e+04 | -2674.20 | 4.503e+05 |
| | | 4.503e+05 | -5521.55 | 4.49e-04 | 0.0 | 60.0 | 7.130e+04 | 3541.29 | -48.94 | 1.840e+04 | -5521.55 | 6.743e+05 |
| 170 | 24 | 6.777e+05 | 1062.87 | -0.09 | -420.00 | 0.0 | 7.052e+04 | 3911.88 | -17.28 | 2.189e+04 | 1062.87 | 4.545e+05 |
| | | 4.545e+05 | -63.15 | 1.75e-04 | 0.0 | 60.0 | 7.052e+04 | 3491.88 | -17.28 | 2.189e+04 | -63.15 | 6.777e+05 |
| 170 | 26 | 6.751e+05 | -2675.93 | -0.09 | -420.00 | 0.0 | 7.124e+04 | 3962.92 | -48.92 | 1.840e+04 | -2675.93 | 4.513e+05 |
| | | 4.513e+05 | -5523.18 | 4.49e-04 | 0.0 | 60.0 | 7.124e+04 | 3542.92 | -48.92 | 1.840e+04 | -5523.18 | 6.751e+05 |
| 170 | 27 | 6.769e+05 | 1064.60 | -0.09 | -420.00 | 0.0 | 7.058e+04 | 3910.26 | -17.30 | 2.189e+04 | 1064.60 | 4.536e+05 |
| | | 4.536e+05 | -61.52 | 1.76e-04 | 0.0 | 60.0 | 7.058e+04 | 3490.26 | -17.30 | 2.189e+04 | -61.52 | 6.769e+05 |
| 170 | 40 | 6.778e+05 | -206.79 | -0.09 | -420.00 | 0.0 | 7.070e+04 | 3931.66 | -28.33 | 2.064e+04 | -206.79 | 4.544e+05 |
| | | 4.544e+05 | -1936.67 | 2.71e-04 | 0.0 | 60.0 | 7.070e+04 | 3511.66 | -28.33 | 2.064e+04 | -1936.67 | 6.778e+05 |
| 170 | 53 | 6.754e+05 | -1512.35 | -0.09 | -420.00 | 0.0 | 7.106e+04 | 3945.88 | -39.10 | 1.947e+04 | -1512.35 | 4.516e+05 |
| | | 4.516e+05 | -3824.68 | 3.64e-04 | 0.0 | 60.0 | 7.106e+04 | 3525.88 | -39.10 | 1.947e+04 | -3824.68 | 6.754e+05 |
| 170 | 56 | 6.767e+05 | -98.98 | -0.09 | -420.00 | 0.0 | 7.076e+04 | 3927.29 | -27.13 | 2.082e+04 | -98.98 | 4.532e+05 |
| | | 4.532e+05 | -1760.02 | 2.61e-04 | 0.0 | 60.0 | 7.076e+04 | 3507.29 | -27.13 | 2.082e+04 | -1760.02 | 6.767e+05 |
| 170 | 58 | 6.757e+05 | -1513.01 | -0.09 | -420.00 | 0.0 | 7.104e+04 | 3946.51 | -39.09 | 1.947e+04 | -1513.01 | 4.520e+05 |
| | | 4.520e+05 | -3825.31 | 3.64e-04 | 0.0 | 60.0 | 7.104e+04 | 3526.51 | -39.09 | 1.947e+04 | -3825.31 | 6.757e+05 |
| 170 | 59 | 6.763e+05 | -98.32 | -0.09 | -420.00 | 0.0 | 7.079e+04 | 3926.67 | -27.13 | 2.082e+04 | -98.32 | 4.528e+05 |
| | | 4.528e+05 | -1759.40 | 2.61e-04 | 0.0 | 60.0 | 7.079e+04 | 3506.67 | -27.13 | 2.082e+04 | -1759.40 | 6.763e+05 |
| 170 | 72 | 6.767e+05 | -579.05 | -0.09 | -420.00 | 0.0 | 7.083e+04 | 3934.75 | -31.31 | 2.034e+04 | -579.05 | 4.532e+05 |
| | | 4.532e+05 | -2468.58 | 2.97e-04 | 0.0 | 60.0 | 7.083e+04 | 3514.75 | -31.31 | 2.034e+04 | -2468.58 | 6.767e+05 |
| 170 | 85 | 6.760e+05 | -805.67 | -0.09 | -420.00 | 0.0 | 7.091e+04 | 3936.59 | -33.11 | 2.015e+04 | -805.67 | 4.524e+05 |
| | | 4.524e+05 | -2792.35 | 3.12e-04 | 0.0 | 60.0 | 7.091e+04 | 3516.59 | -33.11 | 2.015e+04 | -2792.35 | 6.760e+05 |
| 170 | 86 | 6.482e+05 | -781.17 | -0.08 | -420.00 | 0.0 | 6.801e+04 | 3784.08 | -31.72 | 1.927e+04 | -781.17 | 4.338e+05 |
| | | 4.338e+05 | -2684.58 | 3.00e-04 | 0.0 | 60.0 | 6.801e+04 | 3364.08 | -31.72 | 1.927e+04 | -2684.58 | 6.482e+05 |
| 170 | 87 | 1.868e+06 | 4938.72 | -0.21 | -420.00 | 0.0 | 1.766e+05 | 1.261e+04 | -84.68 | 7.340e+04 | 4938.72 | 1.124e+06 |
| | | 1.124e+06 | -142.05 | 7.79e-04 | 0.0 | 60.0 | 1.766e+05 | 1.219e+04 | -84.68 | 7.340e+04 | -142.05 | 1.868e+06 |
| 170 | 88 | 6.436e+05 | -776.99 | -0.08 | -420.00 | 0.0 | 6.752e+04 | 3758.66 | -31.49 | 1.912e+04 | -776.99 | 4.307e+05 |
| | | 4.307e+05 | -2666.53 | 2.97e-04 | 0.0 | 60.0 | 6.752e+04 | 3338.66 | -31.49 | 1.912e+04 | -2666.53 | 6.436e+05 |
| 170 | 89 | 1.863e+06 | 4942.90 | -0.21 | -420.00 | 0.0 | 1.761e+05 | 1.259e+04 | -84.45 | 7.325e+04 | 4942.90 | 1.120e+06 |
| | | 1.120e+06 | -123.99 | 7.77e-04 | 0.0 | 60.0 | 1.761e+05 | 1.217e+04 | -84.45 | 7.325e+04 | -123.99 | 1.863e+06 |
| 170 | 96 | 6.760e+05 | -805.67 | -0.09 | -420.00 | 0.0 | 7.091e+04 | 3936.59 | -33.11 | 2.015e+04 | -805.67 | 4.524e+05 |
| | | 4.524e+05 | -2792.35 | 3.12e-04 | 0.0 | 60.0 | 7.091e+04 | 3516.59 | -33.11 | 2.015e+04 | -2792.35 | 6.760e+05 |
| 170 | 97 | 1.774e+06 | 4342.24 | -0.20 | -420.00 | 0.0 | 1.686e+05 | 1.188e+04 | -80.77 | 6.886e+04 | 4342.24 | 1.073e+06 |
| | | 1.073e+06 | -504.07 | 7.44e-04 | 0.0 | 60.0 | 1.686e+05 | 1.146e+04 | -80.77 | 6.886e+04 | -504.07 | 1.774e+06 |
| 170 | 98 | 6.737e+05 | -803.58 | -0.09 | -420.00 | 0.0 | 7.067e+04 | 3923.88 | -33.00 | 2.007e+04 | -803.58 | 4.509e+05 |
| | | 4.509e+05 | -2783.33 | 3.11e-04 | 0.0 | 60.0 | 7.067e+04 | 3503.88 | -33.00 | 2.007e+04 | -2783.33 | 6.737e+05 |
| 170 | 102 | 6.760e+05 | -805.67 | -0.09 | -420.00 | 0.0 | 7.091e+04 | 3936.59 | -33.11 | 2.015e+04 | -805.67 | 4.524e+05 |
| | | 4.524e+05 | -2792.35 | 3.12e-04 | 0.0 | 60.0 | 7.091e+04 | 3516.59 | -33.11 | 2.015e+04 | -2792.35 | 6.760e+05 |
| 171 | 1 | 9.000e+05 | -3468.39 | -0.09 | -546.00 | 0.0 | 9.435e+04 | 3868.34 | -13.13 | 1.972e+04 | -3468.39 | 6.843e+05 |
| | | 6.843e+05 | -4256.28 | 3.08e-04 | 0.0 | 60.0 | 9.435e+04 | 3322.34 | -13.13 | 1.972e+04 | -4256.28 | 9.000e+05 |
| 171 | 2 | 2.839e+06 | 345.41 | -0.24 | -546.00 | 0.0 | 2.739e+05 | 1.224e+04 | -48.02 | 7.419e+04 | 345.41 | 2.122e+06 |
| | | 2.122e+06 | -2536.09 | 8.25e-04 | 0.0 | 60.0 | 2.739e+05 | 1.169e+04 | -48.02 | 7.419e+04 | -2536.09 | 2.839e+06 |
| 171 | 7 | 6.746e+05 | -2603.61 | -0.07 | -420.00 | 0.0 | 7.072e+04 | 2904.80 | -9.83 | 1.476e+04 | -2603.61 | 5.129e+05 |
| | | 5.129e+05 | -3193.50 | 2.31e-04 | 0.0 | 60.0 | 7.072e+04 | 2484.80 | -9.83 | 1.476e+04 | -3193.50 | 6.746e+05 |
| 171 | 8 | 2.614e+06 | 1210.19 | -0.21 | -420.00 | 0.0 | 2.503e+05 | 1.127e+04 | -44.73 | 6.922e+04 | 1210.19 | 1.950e+06 |
| | | 1.950e+06 | -1473.31 | 7.48e-04 | 0.0 | 60.0 | 2.503e+05 | 1.085e+04 | -44.73 | 6.922e+04 | -1473.31 | 2.614e+06 |
| 171 | 21 | 7.253e+05 | -5521.55 | -0.07 | -420.00 | 0.0 | 7.662e+04 | 3136.36 | -24.48 | 1.433e+04 | -5521.55 | 5.508e+05 |
| | | 5.508e+05 | -6922.91 | 3.61e-04 | 0.0 | 60.0 | 7.662e+04 | 2716.36 | -24.48 | 1.433e+04 | -6922.91 | 7.253e+05 |
| 171 | 24 | 7.282e+05 | 63.47 | -0.07 | -420.00 | 0.0 | 7.574e+04 | 3089.14 | 3.23 | 1.762e+04 | 63.47 | 5.544e+05 |
| | | 5.544e+05 | -63.15 | 1.37e-04 | 0.0 | 60.0 | 7.574e+04 | 2669.14 | 3.23 | 1.762e+04 | -63.15 | 7.282e+05 |
| 171 | 26 | 7.259e+05 | -5523.17 | -0.07 | -420.00 | 0.0 | 7.656e+04 | 3141.08 | -24.47 | 1.433e+04 | -5523.17 | 5.518e+05 |
| | | 5.518e+05 | -6924.28 | 3.60e-04 | 0.0 | 60.0 | 7.656e+04 | 2721.08 | -24.47 | 1.433e+04 | -6924.28 | 7.259e+05 |
| 171 | 27 | 7.276e+05 | 64.84 | -0.07 | -420.00 | 0.0 | 7.579e+04 | 3084.43 | 3.23 | 1.762e+04 | 64.84 | 5.534e+05 |
| | | 5.534e+05 | -61.52 | 1.37e-04 | 0.0 | 60.0 | 7.579e+04 | 2664.43 | 3.23 | 1.762e+04 | -61.52 | 7.276e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|---------|--------|-----------|----------|-----------|
| 171 | 32 | 7.282e+05 | -398.79 | -0.07 | -420.00 | 0.0 | 7.580e+04 | 3087.89 | 4.42 | 1.756e+04 | -606.65 | 5.545e+05 |
| | | 5.545e+05 | -606.65 | 1.29e-04 | 0.0 | 60.0 | 7.580e+04 | 2667.89 | 4.42 | 1.756e+04 | -398.79 | 7.282e+05 |
| 171 | 41 | 7.253e+05 | -3484.97 | -0.07 | -420.00 | 0.0 | 7.637e+04 | 3113.04 | -15.05 | 1.556e+04 | -3484.97 | 5.506e+05 |
| | | 5.506e+05 | -4370.64 | 2.85e-04 | 0.0 | 60.0 | 7.637e+04 | 2693.04 | -15.05 | 1.556e+04 | -4370.64 | 7.253e+05 |
| 171 | 53 | 7.262e+05 | -3824.68 | -0.07 | -420.00 | 0.0 | 7.634e+04 | 3121.61 | -15.86 | 1.535e+04 | -3824.68 | 5.519e+05 |
| | | 5.519e+05 | -4750.95 | 2.91e-04 | 0.0 | 60.0 | 7.634e+04 | 2701.61 | -15.86 | 1.535e+04 | -4750.95 | 7.262e+05 |
| 171 | 56 | 7.273e+05 | -1760.02 | -0.07 | -420.00 | 0.0 | 7.601e+04 | 3103.89 | -5.39 | 1.661e+04 | -1760.02 | 5.533e+05 |
| | | 5.533e+05 | -2108.49 | 2.06e-04 | 0.0 | 60.0 | 7.601e+04 | 2683.89 | -5.39 | 1.661e+04 | -2108.49 | 7.273e+05 |
| 171 | 58 | 7.264e+05 | -3825.30 | -0.07 | -420.00 | 0.0 | 7.632e+04 | 3123.42 | -15.86 | 1.535e+04 | -3825.30 | 5.523e+05 |
| | | 5.523e+05 | -4751.48 | 2.91e-04 | 0.0 | 60.0 | 7.632e+04 | 2703.42 | -15.86 | 1.535e+04 | -4751.48 | 7.264e+05 |
| 171 | 59 | 7.271e+05 | -1759.39 | -0.07 | -420.00 | 0.0 | 7.603e+04 | 3102.08 | -5.39 | 1.661e+04 | -1759.39 | 5.529e+05 |
| | | 5.529e+05 | -2107.96 | 2.07e-04 | 0.0 | 60.0 | 7.603e+04 | 2682.08 | -5.39 | 1.661e+04 | -2107.96 | 7.271e+05 |
| 171 | 64 | 7.273e+05 | -1965.31 | -0.07 | -420.00 | 0.0 | 7.603e+04 | 3103.42 | -4.94 | 1.658e+04 | -1965.31 | 5.533e+05 |
| | | 5.533e+05 | -2283.15 | 2.03e-04 | 0.0 | 60.0 | 7.603e+04 | 2683.42 | -4.94 | 1.658e+04 | -2283.15 | 7.273e+05 |
| 171 | 73 | 7.262e+05 | -3054.53 | -0.07 | -420.00 | 0.0 | 7.625e+04 | 3112.80 | -12.30 | 1.582e+04 | -3054.53 | 5.518e+05 |
| | | 5.518e+05 | -3785.75 | 2.63e-04 | 0.0 | 60.0 | 7.625e+04 | 2692.80 | -12.30 | 1.582e+04 | -3785.75 | 7.262e+05 |
| 171 | 85 | 7.268e+05 | -2792.35 | -0.07 | -420.00 | 0.0 | 7.618e+04 | 3112.75 | -10.62 | 1.598e+04 | -2792.35 | 5.526e+05 |
| | | 5.526e+05 | -3429.72 | 2.49e-04 | 0.0 | 60.0 | 7.618e+04 | 2692.75 | -10.62 | 1.598e+04 | -3429.72 | 7.268e+05 |
| 171 | 86 | 6.969e+05 | -2684.57 | -0.07 | -420.00 | 0.0 | 7.306e+04 | 2993.92 | -10.17 | 1.528e+04 | -2684.57 | 5.299e+05 |
| | | 5.299e+05 | -3294.81 | 2.39e-04 | 0.0 | 60.0 | 7.306e+04 | 2573.92 | -10.17 | 1.528e+04 | -3294.81 | 6.969e+05 |
| 171 | 87 | 1.990e+06 | -142.04 | -0.17 | -420.00 | 0.0 | 1.928e+05 | 8572.55 | -33.43 | 5.159e+04 | -142.04 | 1.488e+06 |
| | | 1.488e+06 | -2148.02 | 5.83e-04 | 0.0 | 60.0 | 1.928e+05 | 8152.55 | -33.43 | 5.159e+04 | -2148.02 | 1.990e+06 |
| 171 | 88 | 6.920e+05 | -2666.52 | -0.07 | -420.00 | 0.0 | 7.254e+04 | 2974.12 | -10.10 | 1.516e+04 | -2666.52 | 5.261e+05 |
| | | 5.261e+05 | -3272.24 | 2.37e-04 | 0.0 | 60.0 | 7.254e+04 | 2554.12 | -10.10 | 1.516e+04 | -3272.24 | 6.920e+05 |
| 171 | 89 | 1.985e+06 | -123.99 | -0.17 | -420.00 | 0.0 | 1.923e+05 | 8552.74 | -33.36 | 5.147e+04 | -123.99 | 1.484e+06 |
| | | 1.484e+06 | -2125.45 | 5.81e-04 | 0.0 | 60.0 | 1.923e+05 | 8132.74 | -33.36 | 5.147e+04 | -2125.45 | 1.985e+06 |
| 171 | 96 | 7.268e+05 | -2792.35 | -0.07 | -420.00 | 0.0 | 7.618e+04 | 3112.75 | -10.62 | 1.598e+04 | -2792.35 | 5.526e+05 |
| | | 5.526e+05 | -3429.72 | 2.49e-04 | 0.0 | 60.0 | 7.618e+04 | 2692.75 | -10.62 | 1.598e+04 | -3429.72 | 7.268e+05 |
| 171 | 97 | 1.890e+06 | -504.06 | -0.16 | -420.00 | 0.0 | 1.839e+05 | 8133.51 | -31.56 | 4.866e+04 | -504.06 | 1.415e+06 |
| | | 1.415e+06 | -2397.61 | 5.59e-04 | 0.0 | 60.0 | 1.839e+05 | 7713.51 | -31.56 | 4.866e+04 | -2397.61 | 1.890e+06 |
| 171 | 98 | 7.243e+05 | -2783.32 | -0.07 | -420.00 | 0.0 | 7.592e+04 | 3102.85 | -10.59 | 1.592e+04 | -2783.32 | 5.507e+05 |
| | | 5.507e+05 | -3418.43 | 2.48e-04 | 0.0 | 60.0 | 7.592e+04 | 2682.85 | -10.59 | 1.592e+04 | -3418.43 | 7.243e+05 |
| 171 | 102 | 7.268e+05 | -2792.35 | -0.07 | -420.00 | 0.0 | 7.618e+04 | 3112.75 | -10.62 | 1.598e+04 | -2792.35 | 5.526e+05 |
| | | 5.526e+05 | -3429.72 | 2.49e-04 | 0.0 | 60.0 | 7.618e+04 | 2692.75 | -10.62 | 1.598e+04 | -3429.72 | 7.268e+05 |
| 172 | 1 | 9.396e+05 | -4256.27 | -0.06 | -546.00 | 0.0 | 9.924e+04 | 2843.62 | -0.88 | 1.430e+04 | -4256.27 | 7.853e+05 |
| | | 7.853e+05 | -4309.21 | 2.21e-04 | 0.0 | 60.0 | 9.924e+04 | 2297.62 | -0.88 | 1.430e+04 | -4309.21 | 9.396e+05 |
| 172 | 2 | 2.865e+06 | -2536.08 | -0.16 | -546.00 | 0.0 | 2.882e+05 | 6288.58 | -2.86 | 3.863e+04 | -2536.08 | 2.504e+06 |
| | | 2.504e+06 | -2707.65 | 4.88e-04 | 0.0 | 60.0 | 2.882e+05 | 5742.58 | -2.86 | 3.863e+04 | -2707.65 | 2.865e+06 |
| 172 | 7 | 7.042e+05 | -3193.49 | -0.05 | -420.00 | 0.0 | 7.439e+04 | 2136.72 | -0.66 | 1.069e+04 | -3193.49 | 5.886e+05 |
| | | 5.886e+05 | -3232.82 | 1.66e-04 | 0.0 | 60.0 | 7.439e+04 | 1716.72 | -0.66 | 1.069e+04 | -3232.82 | 7.042e+05 |
| 172 | 8 | 2.630e+06 | -1473.30 | -0.15 | -420.00 | 0.0 | 2.634e+05 | 5581.68 | -2.63 | 3.503e+04 | -1473.30 | 2.307e+06 |
| | | 2.307e+06 | -1631.27 | 4.33e-04 | 0.0 | 60.0 | 2.634e+05 | 5161.68 | -2.63 | 3.503e+04 | -1631.27 | 2.630e+06 |
| 172 | 21 | 7.566e+05 | -6922.91 | -0.05 | -420.00 | 0.0 | 8.060e+04 | 2305.18 | -11.34 | 1.021e+04 | -6922.91 | 6.324e+05 |
| | | 6.324e+05 | -7549.74 | 2.60e-04 | 0.0 | 60.0 | 8.060e+04 | 1885.18 | -11.34 | 1.021e+04 | -7549.74 | 7.566e+05 |
| 172 | 24 | 7.607e+05 | 603.49 | -0.05 | -420.00 | 0.0 | 7.965e+04 | 2265.79 | 9.89 | 1.297e+04 | 63.47 | 6.359e+05 |
| | | 6.359e+05 | 63.47 | 9.71e-05 | 0.0 | 60.0 | 7.965e+04 | 1845.79 | 9.89 | 1.297e+04 | 603.49 | 7.607e+05 |
| 172 | 26 | 7.570e+05 | -6924.28 | -0.05 | -420.00 | 0.0 | 8.056e+04 | 2312.52 | -11.34 | 1.021e+04 | -6924.28 | 6.332e+05 |
| | | 6.332e+05 | -7550.73 | 2.59e-04 | 0.0 | 60.0 | 8.056e+04 | 1892.52 | -11.34 | 1.021e+04 | -7550.73 | 7.570e+05 |
| 172 | 27 | 7.603e+05 | 604.47 | -0.05 | -420.00 | 0.0 | 7.970e+04 | 2258.45 | 9.89 | 1.297e+04 | 64.84 | 6.351e+05 |
| | | 6.351e+05 | 64.84 | 9.78e-05 | 0.0 | 60.0 | 7.970e+04 | 1838.45 | 9.89 | 1.297e+04 | 604.47 | 7.603e+05 |
| 172 | 29 | 7.567e+05 | -6460.64 | -0.05 | -420.00 | 0.0 | 8.055e+04 | 2306.31 | -13.20 | 1.031e+04 | -6460.64 | 6.322e+05 |
| | | 6.322e+05 | -7215.80 | 2.73e-04 | 0.0 | 60.0 | 8.055e+04 | 1886.31 | -13.20 | 1.031e+04 | -7215.80 | 7.567e+05 |
| 172 | 53 | 7.579e+05 | -4750.95 | -0.05 | -420.00 | 0.0 | 8.031e+04 | 2292.86 | -4.73 | 1.106e+04 | -4750.95 | 6.335e+05 |
| | | 6.335e+05 | -5014.89 | 2.09e-04 | 0.0 | 60.0 | 8.031e+04 | 1872.86 | -4.73 | 1.106e+04 | -5014.89 | 7.579e+05 |
| 172 | 56 | 7.595e+05 | -1931.37 | -0.05 | -420.00 | 0.0 | 7.995e+04 | 2278.11 | 3.29 | 1.211e+04 | -2108.48 | 6.348e+05 |
| | | 6.348e+05 | -2108.48 | 1.48e-04 | 0.0 | 60.0 | 7.995e+04 | 1858.11 | 3.29 | 1.211e+04 | -1931.37 | 7.595e+05 |
| 172 | 58 | 7.581e+05 | -4751.47 | -0.05 | -420.00 | 0.0 | 8.029e+04 | 2295.67 | -4.73 | 1.106e+04 | -4751.47 | 6.338e+05 |
| | | 6.338e+05 | -5015.27 | 2.09e-04 | 0.0 | 60.0 | 8.029e+04 | 1875.67 | -4.73 | 1.106e+04 | -5015.27 | 7.581e+05 |
| 172 | 59 | 7.593e+05 | -1930.99 | -0.05 | -420.00 | 0.0 | 7.996e+04 | 2275.29 | 3.28 | 1.211e+04 | -2107.96 | 6.345e+05 |
| | | 6.345e+05 | -2107.96 | 1.48e-04 | 0.0 | 60.0 | 7.996e+04 | 1855.29 | 3.28 | 1.211e+04 | -1930.99 | 7.593e+05 |
| 172 | 61 | 7.579e+05 | -4576.28 | -0.05 | -420.00 | 0.0 | 8.029e+04 | 2293.29 | -5.44 | 1.110e+04 | -4576.28 | 6.334e+05 |
| | | 6.334e+05 | -4888.68 | 2.14e-04 | 0.0 | 60.0 | 8.029e+04 | 1873.29 | -5.44 | 1.110e+04 | -4888.68 | 7.579e+05 |
| 172 | 85 | 7.587e+05 | -3429.72 | -0.05 | -420.00 | 0.0 | 8.013e+04 | 2285.48 | -0.72 | 1.159e+04 | -3429.72 | 6.342e+05 |
| | | 6.342e+05 | -3473.13 | 1.78e-04 | 0.0 | 60.0 | 8.013e+04 | 1865.48 | -0.72 | 1.159e+04 | -3473.13 | 7.587e+05 |
| 172 | 86 | 7.275e+05 | -3294.81 | -0.05 | -420.00 | 0.0 | 7.685e+04 | 2200.48 | -0.68 | 1.108e+04 | -3294.81 | 6.081e+05 |
| | | 6.081e+05 | -3335.89 | 1.71e-04 | 0.0 | 60.0 | 7.685e+04 | 1780.48 | -0.68 | 1.108e+04 | -3335.89 | 7.275e+05 |
| 172 | 87 | 2.011e+06 | -2148.02 | -0.11 | -420.00 | 0.0 | 2.028e+05 | 4497.12 | -2.00 | 2.730e+04 | -2148.02 | 1.754e+06 |
| | | 1.754e+06 | -2268.19 | 3.49e-04 | 0.0 | 60.0 | 2.028e+05 | 4077.12 | -2.00 | 2.730e+04 | -2268.19 | 2.011e+06 |
| 172 | 88 | 7.224e+05 | -3272.23 | -0.05 | -420.00 | 0.0 | 7.630e+04 | 2186.31 | -0.68 | 1.099e+04 | -3272.23 | 6.038e+05 |
| | | 6.038e+05 | -3312.92 | 1.70e-04 | 0.0 | 60.0 | 7.630e+04 | 1766.31 | -0.68 | 1.099e+04 | -3312.92 | 7.224e+05 |
| 172 | 89 | 2.006e+06 | -2125.44 | -0.11 | -420.00 | 0.0 | 2.023e+05 | 4482.95 | -2.00 | 2.721e+04 | -2125.44 | 1.750e+06 |
| | | 1.750e+06 | -2245.22 | 3.48e-04 | 0.0 | 60.0 | 2.023e+05 | 4062.95 | -2.00 | 2.721e+04 | -2245.22 | 2.006e+06 |
| 172 | 96 | 7.587e+05 | -3429.72 | -0.05 | -420.00 | 0.0 | 8.013e+04 | 2285.48 | -0.72 | 1.159e+04 | -3429.72 | 6.342e+05 |
| | | 6.342e+05 | -3473.13 | 1.78e-04 | 0.0 | 60.0 | 8.013e+04 | 1865.48 | -0.72 | 1.159e+04 | -3473.13 | 7.587e+05 |
| 172 | 97 | 1.914e+06 | -2397.60 | -0.11 | -420.00 | 0.0 | 1.935e+05 | 4352.46 | -1.91 | 2.619e+04 | -2397.60 | 1.665e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|-------|------------|----------|-----------|
| | | 1.665e+06 | -2512.20 | 3.39e-04 | 0.0 | 60.0 | 1.935e+05 | 3932.46 | -1.91 | 2.619e+04 | -2512.20 | 1.914e+06 |
| 172 | 98 | 7.561e+05 | -3418.43 | -0.05 | -420.00 | 0.0 | 7.985e+04 | 2278.40 | -0.72 | 1.155e+04 | -3418.43 | 6.320e+05 |
| | | 6.320e+05 | -3461.65 | 1.78e-04 | 0.0 | 60.0 | 7.985e+04 | 1858.40 | -0.72 | 1.155e+04 | -3461.65 | 7.561e+05 |
| 172 | 102 | 7.587e+05 | -3429.72 | -0.05 | -420.00 | 0.0 | 8.013e+04 | 2285.48 | -0.72 | 1.159e+04 | -3429.72 | 6.342e+05 |
| | | 6.342e+05 | -3473.13 | 1.78e-04 | 0.0 | 60.0 | 8.013e+04 | 1865.48 | -0.72 | 1.159e+04 | -3473.13 | 7.587e+05 |
| 173 | 1 | 9.557e+05 | -4166.56 | -0.04 | -546.00 | 0.0 | 1.025e+05 | 1816.22 | 2.38 | 8658.45 | -4309.20 | 8.631e+05 |
| | | 8.631e+05 | -4309.20 | 1.33e-04 | 0.0 | 60.0 | 1.025e+05 | 1270.22 | 2.38 | 8658.45 | -4166.56 | 9.557e+05 |
| 173 | 2 | 2.754e+06 | -1550.21 | -0.08 | -546.00 | 0.0 | 2.932e+05 | 329.15 | 19.29 | 2681.52 | -2707.65 | 2.748e+06 |
| | | 2.748e+06 | -2707.65 | 1.49e-04 | 0.0 | 60.0 | 2.932e+05 | -216.85 | 19.29 | 2681.52 | -1550.21 | 2.751e+06 |
| 173 | 7 | 7.163e+05 | -3125.75 | -0.03 | -420.00 | 0.0 | 7.683e+04 | 1366.63 | 1.78 | 6469.21 | -3232.82 | 6.469e+05 |
| | | 6.469e+05 | -3232.82 | 9.94e-05 | 0.0 | 60.0 | 7.683e+04 | 946.63 | 1.78 | 6469.21 | -3125.75 | 7.163e+05 |
| 173 | 8 | 2.531e+06 | -509.40 | -0.07 | -420.00 | 0.0 | 2.676e+05 | -120.44 | 18.70 | 492.28 | -1631.26 | 2.531e+06 |
| | | 2.512e+06 | -1631.26 | 1.16e-04 | 0.0 | 60.0 | 2.676e+05 | -540.44 | 18.70 | 492.28 | -509.40 | 2.512e+06 |
| 173 | 21 | 7.692e+05 | -7549.74 | -0.03 | -420.00 | 0.0 | 8.325e+04 | 1468.07 | -4.42 | 6089.11 | -7549.74 | 6.948e+05 |
| | | 6.948e+05 | -7773.95 | 1.54e-04 | 0.0 | 60.0 | 8.325e+04 | 1048.07 | -4.42 | 6089.11 | -7773.95 | 7.692e+05 |
| 173 | 24 | 7.742e+05 | 1057.44 | -0.03 | -420.00 | 0.0 | 8.228e+04 | 1444.01 | 8.24 | 7964.94 | 603.49 | 6.991e+05 |
| | | 6.991e+05 | 603.49 | 6.02e-05 | 0.0 | 60.0 | 8.228e+04 | 1024.01 | 8.24 | 7964.94 | 1057.44 | 7.742e+05 |
| 173 | 26 | 7.694e+05 | -7550.72 | -0.03 | -420.00 | 0.0 | 8.322e+04 | 1477.31 | -4.41 | 6086.47 | -7550.72 | 6.955e+05 |
| | | 6.955e+05 | -7774.47 | 1.53e-04 | 0.0 | 60.0 | 8.322e+04 | 1057.31 | -4.41 | 6086.47 | -7774.47 | 7.694e+05 |
| 173 | 27 | 7.741e+05 | 1057.96 | -0.03 | -420.00 | 0.0 | 8.230e+04 | 1434.77 | 8.24 | 7967.58 | 604.47 | 6.984e+05 |
| | | 6.984e+05 | 604.47 | 6.11e-05 | 0.0 | 60.0 | 8.230e+04 | 1014.77 | 8.24 | 7967.58 | 1057.96 | 7.741e+05 |
| 173 | 29 | 7.693e+05 | -7215.80 | -0.03 | -420.00 | 0.0 | 8.322e+04 | 1468.94 | -6.72 | 6202.54 | -7215.80 | 6.946e+05 |
| | | 6.946e+05 | -7599.29 | 1.70e-04 | 0.0 | 60.0 | 8.322e+04 | 1048.94 | -6.72 | 6202.54 | -7599.29 | 7.693e+05 |
| 173 | 53 | 7.708e+05 | -5014.88 | -0.03 | -420.00 | 0.0 | 8.295e+04 | 1460.53 | -0.48 | 6670.08 | -5014.88 | 6.961e+05 |
| | | 6.961e+05 | -5028.14 | 1.25e-04 | 0.0 | 60.0 | 8.295e+04 | 1040.53 | -0.48 | 6670.08 | -5028.14 | 7.708e+05 |
| 173 | 56 | 7.727e+05 | -1688.37 | -0.03 | -420.00 | 0.0 | 8.258e+04 | 1451.55 | 4.30 | 7383.97 | -1931.37 | 6.978e+05 |
| | | 6.978e+05 | -1931.37 | 8.93e-05 | 0.0 | 60.0 | 8.258e+04 | 1031.55 | 4.30 | 7383.97 | -1688.37 | 7.727e+05 |
| 173 | 58 | 7.708e+05 | -5015.26 | -0.03 | -420.00 | 0.0 | 8.294e+04 | 1464.08 | -0.47 | 6669.07 | -5015.26 | 6.964e+05 |
| | | 6.964e+05 | -5028.33 | 1.24e-04 | 0.0 | 60.0 | 8.294e+04 | 1044.08 | -0.47 | 6669.07 | -5028.33 | 7.708e+05 |
| 173 | 59 | 7.726e+05 | -1688.17 | -0.03 | -420.00 | 0.0 | 8.259e+04 | 1448.01 | 4.30 | 7384.98 | -1930.99 | 6.975e+05 |
| | | 6.975e+05 | -1930.99 | 8.96e-05 | 0.0 | 60.0 | 8.259e+04 | 1028.01 | 4.30 | 7384.98 | -1688.17 | 7.726e+05 |
| 173 | 61 | 7.708e+05 | -4888.68 | -0.03 | -420.00 | 0.0 | 8.293e+04 | 1460.86 | -1.35 | 6712.54 | -4888.68 | 6.960e+05 |
| | | 6.960e+05 | -4962.12 | 1.31e-04 | 0.0 | 60.0 | 8.293e+04 | 1040.86 | -1.35 | 6712.54 | -4962.12 | 7.708e+05 |
| 173 | 85 | 7.717e+05 | -3358.25 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.04 | 1.91 | 7027.03 | -3473.12 | 6.969e+05 |
| | | 6.969e+05 | -3473.12 | 1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.04 | 1.91 | 7027.03 | -3358.25 | 7.717e+05 |
| 173 | 86 | 7.400e+05 | -3225.47 | -0.03 | -420.00 | 0.0 | 7.937e+04 | 1404.95 | 1.84 | 6709.24 | -3335.88 | 6.683e+05 |
| | | 6.683e+05 | -3335.88 | 1.03e-04 | 0.0 | 60.0 | 7.937e+04 | 984.95 | 1.84 | 6709.24 | -3225.47 | 7.400e+05 |
| 173 | 87 | 1.937e+06 | -1481.24 | -0.06 | -420.00 | 0.0 | 2.065e+05 | 413.57 | 13.12 | 2724.62 | -2268.18 | 1.925e+06 |
| | | 1.925e+06 | -2268.18 | 1.14e-04 | 0.0 | 60.0 | 2.065e+05 | -6.43 | 13.12 | 2724.62 | -1481.24 | 1.937e+06 |
| 173 | 88 | 7.347e+05 | -3203.25 | -0.03 | -420.00 | 0.0 | 7.881e+04 | 1396.43 | 1.83 | 6655.15 | -3312.92 | 6.636e+05 |
| | | 6.636e+05 | -3312.92 | 1.02e-04 | 0.0 | 60.0 | 7.881e+04 | 976.43 | 1.83 | 6655.15 | -3203.25 | 7.347e+05 |
| 173 | 89 | 1.932e+06 | -1459.02 | -0.06 | -420.00 | 0.0 | 2.060e+05 | 405.05 | 13.10 | 2670.53 | -2245.22 | 1.920e+06 |
| | | 1.920e+06 | -2245.22 | 1.13e-04 | 0.0 | 60.0 | 2.060e+05 | -14.95 | 13.10 | 2670.53 | -1459.02 | 1.932e+06 |
| 173 | 96 | 7.717e+05 | -3358.25 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.04 | 1.91 | 7027.03 | -3473.12 | 6.969e+05 |
| | | 6.969e+05 | -3473.12 | 1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.04 | 1.91 | 7027.03 | -3358.25 | 7.717e+05 |
| 173 | 97 | 1.849e+06 | -1788.44 | -0.06 | -420.00 | 0.0 | 1.972e+05 | 563.80 | 12.06 | 3440.87 | -2512.19 | 1.828e+06 |
| | | 1.828e+06 | -2512.19 | 1.17e-04 | 0.0 | 60.0 | 1.972e+05 | 143.80 | 12.06 | 3440.87 | -1788.44 | 1.849e+06 |
| 173 | 98 | 7.691e+05 | -3347.14 | -0.03 | -420.00 | 0.0 | 8.248e+04 | 1451.78 | 1.91 | 6999.98 | -3461.64 | 6.946e+05 |
| | | 6.946e+05 | -3461.64 | 1.07e-04 | 0.0 | 60.0 | 8.248e+04 | 1031.78 | 1.91 | 6999.98 | -3347.14 | 7.691e+05 |
| 173 | 102 | 7.717e+05 | -3358.25 | -0.03 | -420.00 | 0.0 | 8.276e+04 | 1456.04 | 1.91 | 7027.03 | -3473.12 | 6.969e+05 |
| | | 6.969e+05 | -3473.12 | 1.07e-04 | 0.0 | 60.0 | 8.276e+04 | 1036.04 | 1.91 | 7027.03 | -3358.25 | 7.717e+05 |
| 174 | 1 | 9.483e+05 | -4095.40 | -0.01 | -546.00 | 0.0 | 1.041e+05 | 787.40 | 1.19 | 2873.06 | -4166.56 | 9.717e+05 |
| | | 9.175e+05 | -4166.56 | 4.44e-05 | 0.0 | 60.0 | 1.041e+05 | 241.40 | 1.19 | 2873.06 | -4095.40 | 9.483e+05 |
| 174 | 2 | 2.843e+06 | -503.89 | -0.01 | -546.00 | 0.0 | 2.893e+05 | -5602.51 | 17.44 | -3.047e+04 | -1550.20 | 2.843e+06 |
| | | 2.491e+06 | -1550.20 | -1.53e-04 | 0.0 | 60.0 | 2.893e+05 | -6148.51 | 17.44 | -3.047e+04 | -503.89 | 2.491e+06 |
| 174 | 7 | 7.108e+05 | -3072.41 | -9.89e-03 | -420.00 | 0.0 | 7.805e+04 | 595.47 | 0.89 | 2136.31 | -3125.75 | 6.876e+05 |
| | | 6.876e+05 | -3125.75 | 3.33e-05 | 0.0 | 60.0 | 7.805e+04 | 175.47 | 0.89 | 2136.31 | -3072.41 | 7.108e+05 |
| 174 | 8 | 2.614e+06 | 519.10 | -0.01 | -420.00 | 0.0 | 2.632e+05 | -5794.43 | 17.14 | -3.121e+04 | 509.39 | 2.614e+06 |
| | | 2.253e+06 | 509.39 | -1.64e-04 | 0.0 | 60.0 | 2.632e+05 | -6214.43 | 17.14 | -3.121e+04 | 519.10 | 2.253e+06 |
| 174 | 21 | 7.631e+05 | -7771.47 | -0.01 | -420.00 | 0.0 | 8.456e+04 | 627.92 | 2.69 | 1944.26 | -7773.95 | 7.388e+05 |
| | | 7.388e+05 | -7773.95 | 4.57e-05 | 0.0 | 60.0 | 8.456e+04 | 207.92 | 2.69 | 1944.26 | -7771.47 | 7.631e+05 |
| 174 | 24 | 7.685e+05 | 1169.87 | -0.01 | -420.00 | 0.0 | 8.360e+04 | 622.99 | -0.77 | 2754.46 | 1057.44 | 7.429e+05 |
| | | 7.429e+05 | 1057.44 | 2.58e-05 | 0.0 | 60.0 | 8.360e+04 | 202.99 | -0.77 | 2754.46 | 1169.87 | 7.685e+05 |
| 174 | 26 | 7.632e+05 | -7771.47 | -0.01 | -420.00 | 0.0 | 8.455e+04 | 638.17 | 2.70 | 1941.36 | -7774.47 | 7.388e+05 |
| | | 7.388e+05 | -7774.47 | 4.47e-05 | 0.0 | 60.0 | 8.455e+04 | 218.17 | 2.70 | 1941.36 | -7771.47 | 7.632e+05 |
| 174 | 30 | 7.634e+05 | -7591.26 | -0.01 | -420.00 | 0.0 | 8.454e+04 | 638.77 | -3.12 | 1966.44 | -7591.26 | 7.382e+05 |
| | | 7.382e+05 | -7771.81 | 6.28e-05 | 0.0 | 60.0 | 8.454e+04 | 218.77 | -3.12 | 1966.44 | -7771.81 | 7.634e+05 |
| 174 | 31 | 7.682e+05 | 1170.21 | -0.01 | -420.00 | 0.0 | 8.362e+04 | 612.14 | 5.03 | 2732.27 | 874.75 | 7.435e+05 |
| | | 7.435e+05 | 874.75 | 8.73e-06 | 0.0 | 60.0 | 8.362e+04 | 192.14 | 5.03 | 2732.27 | 1170.21 | 7.682e+05 |
| 174 | 53 | 7.647e+05 | -4991.43 | -0.01 | -420.00 | 0.0 | 8.426e+04 | 626.35 | 1.61 | 2195.61 | -5028.13 | 7.401e+05 |
| | | 7.401e+05 | -5028.13 | 3.95e-05 | 0.0 | 60.0 | 8.426e+04 | 206.35 | 1.61 | 2195.61 | -4991.43 | 7.647e+05 |
| 174 | 56 | 7.668e+05 | -1610.17 | -0.01 | -420.00 | 0.0 | 8.390e+04 | 624.56 | 0.31 | 2503.11 | -1688.37 | 7.416e+05 |
| | | 7.416e+05 | -1688.37 | 3.20e-05 | 0.0 | 60.0 | 8.390e+04 | 204.56 | 0.31 | 2503.11 | -1610.17 | 7.668e+05 |
| 174 | 58 | 7.648e+05 | -4991.43 | -0.01 | -420.00 | 0.0 | 8.426e+04 | 630.28 | 1.61 | 2194.50 | -5028.33 | 7.401e+05 |
| | | 7.401e+05 | -5028.33 | 3.91e-05 | 0.0 | 60.0 | 8.426e+04 | 210.28 | 1.61 | 2194.50 | -4991.43 | 7.648e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|----------|--------|------------|----------|-----------|
| 174 | 62 | 7.649e+05 | -4959.06 | -0.01 | -420.00 | 0.0 | 8.425e+04 | 630.51 | -0.58 | 2203.33 | -4959.06 | 7.398e+05 |
| | | 7.398e+05 | -4991.56 | 4.60e-05 | 0.0 | 60.0 | 8.425e+04 | 210.51 | -0.58 | 2203.33 | -4991.56 | 7.649e+05 |
| 174 | 63 | 7.667e+05 | -1610.04 | -0.01 | -420.00 | 0.0 | 8.390e+04 | 620.40 | 2.50 | 2495.38 | -1757.45 | 7.419e+05 |
| | | 7.419e+05 | -1757.45 | 2.55e-05 | 0.0 | 60.0 | 8.390e+04 | 200.40 | 2.50 | 2495.38 | -1610.04 | 7.667e+05 |
| 174 | 85 | 7.658e+05 | -3300.80 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 625.46 | 0.96 | 2349.36 | -3358.25 | 7.408e+05 |
| | | 7.408e+05 | -3358.25 | 3.58e-05 | 0.0 | 60.0 | 8.408e+04 | 205.46 | 0.96 | 2349.36 | -3300.80 | 7.658e+05 |
| 174 | 86 | 7.343e+05 | -3170.37 | -0.01 | -420.00 | 0.0 | 8.064e+04 | 608.33 | 0.92 | 2228.62 | -3225.47 | 7.104e+05 |
| | | 7.104e+05 | -3225.47 | 3.44e-05 | 0.0 | 60.0 | 8.064e+04 | 188.33 | 0.92 | 2228.62 | -3170.37 | 7.343e+05 |
| 174 | 87 | 1.994e+06 | -776.03 | -9.72e-03 | -420.00 | 0.0 | 2.041e+05 | -3651.61 | 11.75 | -2.000e+04 | -1481.23 | 1.994e+06 |
| | | 1.763e+06 | -1481.23 | -9.75e-05 | 0.0 | 60.0 | 2.041e+05 | -4071.61 | 11.75 | -2.000e+04 | -776.03 | 1.763e+06 |
| 174 | 88 | 7.291e+05 | -3148.54 | -0.01 | -420.00 | 0.0 | 8.006e+04 | 605.46 | 0.91 | 2207.33 | -3203.25 | 7.054e+05 |
| | | 7.054e+05 | -3203.25 | 3.41e-05 | 0.0 | 60.0 | 8.006e+04 | 185.46 | 0.91 | 2207.33 | -3148.54 | 7.291e+05 |
| 174 | 89 | 1.989e+06 | -754.20 | -9.65e-03 | -420.00 | 0.0 | 2.035e+05 | -3654.47 | 11.75 | -2.002e+04 | -1459.01 | 1.989e+06 |
| | | 1.757e+06 | -1459.01 | -9.77e-05 | 0.0 | 60.0 | 2.035e+05 | -4074.47 | 11.75 | -2.002e+04 | -754.20 | 1.757e+06 |
| 174 | 96 | 7.658e+05 | -3300.80 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 625.46 | 0.96 | 2349.36 | -3358.25 | 7.408e+05 |
| | | 7.408e+05 | -3358.25 | 3.58e-05 | 0.0 | 60.0 | 8.408e+04 | 205.46 | 0.96 | 2349.36 | -3300.80 | 7.658e+05 |
| 174 | 97 | 1.896e+06 | -1145.89 | -9.99e-03 | -420.00 | 0.0 | 1.952e+05 | -3208.49 | 10.71 | -1.766e+04 | -1788.44 | 1.896e+06 |
| | | 1.691e+06 | -1788.44 | -8.29e-05 | 0.0 | 60.0 | 1.952e+05 | -3628.49 | 10.71 | -1.766e+04 | -1145.89 | 1.691e+06 |
| 174 | 98 | 7.631e+05 | -3289.88 | -0.01 | -420.00 | 0.0 | 8.379e+04 | 624.02 | 0.95 | 2338.71 | -3347.14 | 7.383e+05 |
| | | 7.383e+05 | -3347.14 | 3.56e-05 | 0.0 | 60.0 | 8.379e+04 | 204.02 | 0.95 | 2338.71 | -3289.88 | 7.631e+05 |
| 174 | 102 | 7.658e+05 | -3300.80 | -0.01 | -420.00 | 0.0 | 8.408e+04 | 625.46 | 0.96 | 2349.36 | -3358.25 | 7.408e+05 |
| | | 7.408e+05 | -3358.25 | 3.58e-05 | 0.0 | 60.0 | 8.408e+04 | 205.46 | 0.96 | 2349.36 | -3300.80 | 7.658e+05 |
| 175 | 1 | 9.484e+05 | -4095.40 | 0.01 | -546.00 | 0.0 | 1.041e+05 | -241.87 | -1.33 | -2962.39 | -4095.40 | 9.484e+05 |
| | | 9.175e+05 | -4175.04 | -4.34e-05 | 0.0 | 60.0 | 1.041e+05 | -787.87 | -1.33 | -2962.39 | -4175.04 | 9.175e+05 |
| 175 | 2 | 2.719e+06 | -503.88 | 0.07 | -546.00 | 0.0 | 2.795e+05 | -6950.41 | -8.41 | -5.751e+04 | -503.88 | 2.719e+06 |
| | | 2.286e+06 | -1008.77 | -3.91e-04 | 0.0 | 60.0 | 2.795e+05 | -7496.41 | -8.41 | -5.751e+04 | -1008.77 | 2.286e+06 |
| 175 | 7 | 7.108e+05 | -3072.41 | 9.89e-03 | -420.00 | 0.0 | 7.805e+04 | -176.03 | -1.00 | -2234.19 | -3072.41 | 7.108e+05 |
| | | 6.876e+05 | -3132.25 | -3.25e-05 | 0.0 | 60.0 | 7.805e+04 | -596.03 | -1.00 | -2234.19 | -3132.25 | 6.876e+05 |
| 175 | 8 | 2.482e+06 | 519.11 | 0.06 | -420.00 | 0.0 | 2.534e+05 | -6884.57 | -8.08 | -5.678e+04 | 519.11 | 2.482e+06 |
| | | 2.056e+06 | 34.02 | -3.80e-04 | 0.0 | 60.0 | 2.534e+05 | -7304.57 | -8.08 | -5.678e+04 | 34.02 | 2.056e+06 |
| 175 | 21 | 7.634e+05 | -7597.94 | 0.01 | -420.00 | 0.0 | 8.454e+04 | -218.80 | 3.01 | -1984.61 | -7771.64 | 7.634e+05 |
| | | 7.382e+05 | -7771.64 | -6.22e-05 | 0.0 | 60.0 | 8.454e+04 | -638.80 | 3.01 | -1984.61 | -7597.94 | 7.382e+05 |
| 175 | 30 | 7.631e+05 | -7771.64 | 0.01 | -420.00 | 0.0 | 8.456e+04 | -207.95 | -2.83 | -1963.03 | -7771.64 | 7.631e+05 |
| | | 7.388e+05 | -7780.96 | -4.51e-05 | 0.0 | 60.0 | 8.456e+04 | -627.95 | -2.83 | -1963.03 | -7780.96 | 7.388e+05 |
| 175 | 31 | 7.685e+05 | 1170.04 | 0.01 | -420.00 | 0.0 | 8.360e+04 | -203.02 | 0.69 | -2774.11 | 1170.04 | 7.685e+05 |
| | | 7.429e+05 | 1051.32 | -2.52e-05 | 0.0 | 60.0 | 8.360e+04 | -623.02 | 0.69 | -2774.11 | 1051.32 | 7.429e+05 |
| 175 | 32 | 7.683e+05 | 1170.21 | 0.01 | -420.00 | 0.0 | 8.361e+04 | -192.74 | 0.56 | -2852.79 | 1170.21 | 7.683e+05 |
| | | 7.433e+05 | 1043.33 | -2.62e-05 | 0.0 | 60.0 | 8.361e+04 | -612.74 | 0.56 | -2852.79 | 1043.33 | 7.433e+05 |
| 175 | 33 | 7.632e+05 | -7771.64 | 0.01 | -420.00 | 0.0 | 8.455e+04 | -218.19 | -2.83 | -1960.13 | -7771.64 | 7.632e+05 |
| | | 7.388e+05 | -7781.48 | -4.41e-05 | 0.0 | 60.0 | 8.455e+04 | -638.19 | -2.83 | -1960.13 | -7781.48 | 7.388e+05 |
| 175 | 53 | 7.649e+05 | -4965.67 | 0.01 | -420.00 | 0.0 | 8.425e+04 | -210.54 | 0.47 | -2222.16 | -4991.49 | 7.649e+05 |
| | | 7.398e+05 | -4991.49 | -4.54e-05 | 0.0 | 60.0 | 8.425e+04 | -630.54 | 0.47 | -2222.16 | -4965.67 | 7.398e+05 |
| 175 | 62 | 7.647e+05 | -4991.49 | 0.01 | -420.00 | 0.0 | 8.426e+04 | -206.38 | -1.73 | -2214.65 | -4991.49 | 7.647e+05 |
| | | 7.401e+05 | -5034.87 | -3.89e-05 | 0.0 | 60.0 | 8.426e+04 | -626.38 | -1.73 | -2214.65 | -5034.87 | 7.401e+05 |
| 175 | 63 | 7.668e+05 | -1610.10 | 0.01 | -420.00 | 0.0 | 8.390e+04 | -204.59 | -0.40 | -2522.48 | -1610.10 | 7.668e+05 |
| | | 7.416e+05 | -1694.77 | -3.14e-05 | 0.0 | 60.0 | 8.390e+04 | -624.59 | -0.40 | -2522.48 | -1694.77 | 7.416e+05 |
| 175 | 64 | 7.667e+05 | -1610.04 | 0.01 | -420.00 | 0.0 | 8.390e+04 | -200.65 | -0.45 | -2552.58 | -1610.04 | 7.667e+05 |
| | | 7.418e+05 | -1697.81 | -3.18e-05 | 0.0 | 60.0 | 8.390e+04 | -620.65 | -0.45 | -2552.58 | -1697.81 | 7.418e+05 |
| 175 | 65 | 7.648e+05 | -4991.49 | 0.01 | -420.00 | 0.0 | 8.426e+04 | -210.31 | -1.73 | -2213.54 | -4991.49 | 7.648e+05 |
| | | 7.401e+05 | -5035.07 | -3.85e-05 | 0.0 | 60.0 | 8.426e+04 | -630.31 | -1.73 | -2213.54 | -5035.07 | 7.401e+05 |
| 175 | 85 | 7.658e+05 | -3300.80 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -205.49 | -1.07 | -2368.57 | -3300.80 | 7.658e+05 |
| | | 7.408e+05 | -3364.82 | -3.52e-05 | 0.0 | 60.0 | 8.408e+04 | -625.49 | -1.07 | -2368.57 | -3364.82 | 7.408e+05 |
| 175 | 86 | 7.343e+05 | -3170.37 | 0.01 | -420.00 | 0.0 | 8.064e+04 | -188.64 | -1.03 | -2290.74 | -3170.37 | 7.343e+05 |
| | | 7.104e+05 | -3232.00 | -3.36e-05 | 0.0 | 60.0 | 8.064e+04 | -608.64 | -1.03 | -2290.74 | -3232.00 | 7.104e+05 |
| 175 | 87 | 1.915e+06 | -776.03 | 0.05 | -420.00 | 0.0 | 1.975e+05 | -4661.01 | -5.75 | -3.865e+04 | -776.03 | 1.915e+06 |
| | | 1.623e+06 | -1121.16 | -2.65e-04 | 0.0 | 60.0 | 1.975e+05 | -5081.01 | -5.75 | -3.865e+04 | -1121.16 | 1.623e+06 |
| 175 | 88 | 7.291e+05 | -3148.54 | 0.01 | -420.00 | 0.0 | 8.006e+04 | -185.85 | -1.02 | -2278.98 | -3148.54 | 7.291e+05 |
| | | 7.054e+05 | -3209.77 | -3.34e-05 | 0.0 | 60.0 | 8.006e+04 | -605.85 | -1.02 | -2278.98 | -3209.77 | 7.054e+05 |
| 175 | 89 | 1.910e+06 | -754.20 | 0.05 | -420.00 | 0.0 | 1.970e+05 | -4658.21 | -5.75 | -3.864e+04 | -754.20 | 1.910e+06 |
| | | 1.618e+06 | -1098.92 | -2.65e-04 | 0.0 | 60.0 | 1.970e+05 | -5078.21 | -5.75 | -3.864e+04 | -1098.92 | 1.618e+06 |
| 175 | 96 | 7.658e+05 | -3300.80 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -205.49 | -1.07 | -2368.57 | -3300.80 | 7.658e+05 |
| | | 7.408e+05 | -3364.82 | -3.52e-05 | 0.0 | 60.0 | 8.408e+04 | -625.49 | -1.07 | -2368.57 | -3364.82 | 7.408e+05 |
| 175 | 97 | 1.828e+06 | -1145.89 | 0.04 | -420.00 | 0.0 | 1.893e+05 | -4230.61 | -5.32 | -3.509e+04 | -1145.89 | 1.828e+06 |
| | | 1.562e+06 | -1465.06 | -2.44e-04 | 0.0 | 60.0 | 1.893e+05 | -4650.61 | -5.32 | -3.509e+04 | -1465.06 | 1.562e+06 |
| 175 | 98 | 7.632e+05 | -3289.88 | 0.01 | -420.00 | 0.0 | 8.379e+04 | -204.09 | -1.06 | -2362.69 | -3289.88 | 7.632e+05 |
| | | 7.383e+05 | -3353.70 | -3.50e-05 | 0.0 | 60.0 | 8.379e+04 | -624.09 | -1.06 | -2362.69 | -3353.70 | 7.383e+05 |
| 175 | 102 | 7.658e+05 | -3300.80 | 0.01 | -420.00 | 0.0 | 8.408e+04 | -205.49 | -1.07 | -2368.57 | -3300.80 | 7.658e+05 |
| | | 7.408e+05 | -3364.82 | -3.52e-05 | 0.0 | 60.0 | 8.408e+04 | -625.49 | -1.07 | -2368.57 | -3364.82 | 7.408e+05 |
| 176 | 1 | 9.557e+05 | -4175.04 | 0.04 | -546.00 | 0.0 | 1.025e+05 | -1270.73 | -2.52 | -8745.26 | -4175.04 | 9.557e+05 |
| | | 8.631e+05 | -4326.20 | -1.32e-04 | 0.0 | 60.0 | 1.025e+05 | -1816.73 | -2.52 | -8745.26 | -4326.20 | 8.631e+05 |
| 176 | 2 | 2.577e+06 | -1008.76 | 0.13 | -546.00 | 0.0 | 2.671e+05 | -8305.63 | -33.51 | -7.905e+04 | -1008.76 | 2.577e+06 |
| | | 2.063e+06 | -3019.27 | -5.86e-04 | 0.0 | 60.0 | 2.671e+05 | -8851.63 | -33.51 | -7.905e+04 | -3019.27 | 2.063e+06 |
| 176 | 7 | 7.163e+05 | -3132.25 | 0.03 | -420.00 | 0.0 | 7.683e+04 | -947.23 | -1.89 | -6565.23 | -3132.25 | 7.163e+05 |
| | | 6.468e+05 | -3245.85 | -9.86e-05 | 0.0 | 60.0 | 7.683e+04 | -1367.23 | -1.89 | -6565.23 | -3245.85 | 6.468e+05 |
| 176 | 8 | 2.338e+06 | 34.03 | 0.12 | -420.00 | 0.0 | 2.414e+05 | -7982.13 | -32.88 | -7.687e+04 | 34.03 | 2.338e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|------------|----------|-----------|
| | | 1.846e+06 | -1938.92 | -5.53e-04 | 0.0 | 60.0 | 2.414e+05 | -8402.13 | -32.88 | -7.687e+04 | -1938.92 | 1.846e+06 |
| 176 | 22 | 7.693e+05 | -7229.27 | 0.03 | -420.00 | 0.0 | 8.322e+04 | -1049.01 | 6.61 | -6219.00 | -7605.94 | 7.693e+05 |
| | | 6.946e+05 | -7605.94 | -1.69e-04 | 0.0 | 60.0 | 8.322e+04 | -1469.01 | 6.61 | -6219.00 | -7229.27 | 6.946e+05 |
| 176 | 30 | 7.692e+05 | -7563.57 | 0.03 | -420.00 | 0.0 | 8.325e+04 | -1048.10 | 4.31 | -6106.39 | -7780.96 | 7.692e+05 |
| | | 6.948e+05 | -7780.96 | -1.53e-04 | 0.0 | 60.0 | 8.325e+04 | -1468.10 | 4.31 | -6106.39 | -7563.57 | 6.948e+05 |
| 176 | 31 | 7.742e+05 | 1051.32 | 0.03 | -420.00 | 0.0 | 8.227e+04 | -1024.07 | -8.36 | -7981.89 | 1051.32 | 7.742e+05 |
| | | 6.991e+05 | 591.03 | -5.97e-05 | 0.0 | 60.0 | 8.227e+04 | -1444.07 | -8.36 | -7981.89 | 591.03 | 6.991e+05 |
| 176 | 33 | 7.694e+05 | -7564.56 | 0.03 | -420.00 | 0.0 | 8.322e+04 | -1057.35 | 4.31 | -6103.75 | -7781.48 | 7.694e+05 |
| | | 6.955e+05 | -7781.48 | -1.52e-04 | 0.0 | 60.0 | 8.322e+04 | -1477.35 | 4.31 | -6103.75 | -7564.56 | 6.955e+05 |
| 176 | 36 | 7.741e+05 | 1051.84 | 0.03 | -420.00 | 0.0 | 8.230e+04 | -1014.82 | -8.35 | -7984.53 | 1051.84 | 7.741e+05 |
| | | 6.984e+05 | 592.02 | -6.06e-05 | 0.0 | 60.0 | 8.230e+04 | -1434.82 | -8.35 | -7984.53 | 592.02 | 6.984e+05 |
| 176 | 54 | 7.708e+05 | -4901.95 | 0.03 | -420.00 | 0.0 | 8.293e+04 | -1040.91 | 1.24 | -6729.41 | -4968.72 | 7.708e+05 |
| | | 6.961e+05 | -4968.72 | -1.30e-04 | 0.0 | 60.0 | 8.293e+04 | -1460.91 | 1.24 | -6729.41 | -4901.95 | 6.961e+05 |
| 176 | 62 | 7.708e+05 | -5028.29 | 0.03 | -420.00 | 0.0 | 8.295e+04 | -1040.57 | 0.37 | -6687.25 | -5034.87 | 7.708e+05 |
| | | 6.961e+05 | -5034.87 | -1.24e-04 | 0.0 | 60.0 | 8.295e+04 | -1460.57 | 0.37 | -6687.25 | -5028.29 | 6.961e+05 |
| 176 | 63 | 7.727e+05 | -1694.77 | 0.03 | -420.00 | 0.0 | 8.258e+04 | -1031.60 | -4.42 | -7401.03 | -1694.77 | 7.727e+05 |
| | | 6.978e+05 | -1944.25 | -8.87e-05 | 0.0 | 60.0 | 8.258e+04 | -1451.60 | -4.42 | -7401.03 | -1944.25 | 6.978e+05 |
| 176 | 65 | 7.708e+05 | -5028.67 | 0.03 | -420.00 | 0.0 | 8.294e+04 | -1044.12 | 0.37 | -6686.24 | -5035.07 | 7.708e+05 |
| | | 6.964e+05 | -5035.07 | -1.24e-04 | 0.0 | 60.0 | 8.294e+04 | -1464.12 | 0.37 | -6686.24 | -5028.67 | 6.964e+05 |
| 176 | 68 | 7.726e+05 | -1694.57 | 0.03 | -420.00 | 0.0 | 8.259e+04 | -1028.05 | -4.41 | -7402.04 | -1694.57 | 7.726e+05 |
| | | 6.975e+05 | -1943.87 | -8.91e-05 | 0.0 | 60.0 | 8.259e+04 | -1448.05 | -4.41 | -7402.04 | -1943.87 | 6.975e+05 |
| 176 | 85 | 7.717e+05 | -3364.82 | 0.03 | -420.00 | 0.0 | 8.276e+04 | -1036.08 | -2.02 | -7044.14 | -3364.82 | 7.717e+05 |
| | | 6.970e+05 | -3486.27 | -1.06e-04 | 0.0 | 60.0 | 8.276e+04 | -1456.08 | -2.02 | -7044.14 | -3486.27 | 6.970e+05 |
| 176 | 86 | 7.740e+05 | -3232.00 | 0.03 | -420.00 | 0.0 | 7.937e+04 | -985.30 | -1.95 | -6769.39 | -3232.00 | 7.740e+05 |
| | | 6.683e+05 | -3348.97 | -1.02e-04 | 0.0 | 60.0 | 7.937e+04 | -1405.30 | -1.95 | -6769.39 | -3348.97 | 6.683e+05 |
| 176 | 87 | 1.821e+06 | -1121.15 | 0.09 | -420.00 | 0.0 | 1.891e+05 | -5675.23 | -22.61 | -5.364e+04 | -1121.15 | 1.821e+06 |
| | | 1.468e+06 | -2477.68 | -4.05e-04 | 0.0 | 60.0 | 1.891e+05 | -6095.23 | -22.61 | -5.364e+04 | -2477.68 | 1.468e+06 |
| 176 | 88 | 7.348e+05 | -3209.77 | 0.03 | -420.00 | 0.0 | 7.881e+04 | -976.85 | -1.94 | -6724.87 | -3209.77 | 7.348e+05 |
| | | 6.635e+05 | -3325.99 | -1.01e-04 | 0.0 | 60.0 | 7.881e+04 | -1396.85 | -1.94 | -6724.87 | -3325.99 | 6.635e+05 |
| 176 | 89 | 1.816e+06 | -1098.92 | 0.09 | -420.00 | 0.0 | 1.885e+05 | -5666.78 | -22.60 | -5.359e+04 | -1098.92 | 1.816e+06 |
| | | 1.463e+06 | -2454.70 | -4.04e-04 | 0.0 | 60.0 | 1.885e+05 | -6086.78 | -22.60 | -5.359e+04 | -2454.70 | 1.463e+06 |
| 176 | 96 | 7.717e+05 | -3364.82 | 0.03 | -420.00 | 0.0 | 8.276e+04 | -1036.08 | -2.02 | -7044.14 | -3364.82 | 7.717e+05 |
| | | 6.970e+05 | -3486.27 | -1.06e-04 | 0.0 | 60.0 | 8.276e+04 | -1456.08 | -2.02 | -7044.14 | -3486.27 | 6.970e+05 |
| 176 | 97 | 1.745e+06 | -1465.05 | 0.09 | -420.00 | 0.0 | 1.815e+05 | -5257.02 | -20.62 | -4.923e+04 | -1465.05 | 1.745e+06 |
| | | 1.417e+06 | -2702.11 | -3.79e-04 | 0.0 | 60.0 | 1.815e+05 | -5677.02 | -20.62 | -4.923e+04 | -2702.11 | 1.417e+06 |
| 176 | 98 | 7.691e+05 | -3353.71 | 0.03 | -420.00 | 0.0 | 8.248e+04 | -1031.86 | -2.02 | -7021.88 | -3353.71 | 7.691e+05 |
| | | 6.946e+05 | -3474.78 | -1.06e-04 | 0.0 | 60.0 | 8.248e+04 | -1451.86 | -2.02 | -7021.88 | -3474.78 | 6.946e+05 |
| 176 | 102 | 7.717e+05 | -3364.82 | 0.03 | -420.00 | 0.0 | 8.276e+04 | -1036.08 | -2.02 | -7044.14 | -3364.82 | 7.717e+05 |
| | | 6.970e+05 | -3486.27 | -1.06e-04 | 0.0 | 60.0 | 8.276e+04 | -1456.08 | -2.02 | -7044.14 | -3486.27 | 6.970e+05 |
| 177 | 2 | 2.408e+06 | -3019.26 | 0.20 | -546.00 | 0.0 | 2.524e+05 | -9729.01 | -23.47 | -9.593e+04 | -3019.26 | 2.408e+06 |
| | | 1.808e+06 | -4427.45 | -7.61e-04 | 0.0 | 60.0 | 2.524e+05 | -1.028e+04 | -23.47 | -9.593e+04 | -4427.45 | 1.808e+06 |
| 177 | 7 | 7.042e+05 | -3212.91 | 0.05 | -420.00 | 0.0 | 7.438e+04 | -1717.41 | 0.55 | -1.079e+04 | -3245.85 | 7.042e+05 |
| | | 5.885e+05 | -3245.85 | -1.65e-04 | 0.0 | 60.0 | 7.438e+04 | -2137.41 | 0.55 | -1.079e+04 | -3212.91 | 5.885e+05 |
| 177 | 8 | 2.172e+06 | -1938.91 | 0.18 | -420.00 | 0.0 | 2.275e+05 | -9148.20 | -23.67 | -9.233e+04 | -1938.91 | 2.172e+06 |
| | | 1.611e+06 | -3358.84 | -7.06e-04 | 0.0 | 60.0 | 2.275e+05 | -9568.20 | -23.67 | -9.233e+04 | -3358.84 | 1.611e+06 |
| 177 | 22 | 7.567e+05 | -6480.60 | 0.05 | -420.00 | 0.0 | 8.055e+04 | -1886.41 | 13.09 | -1.032e+04 | -7229.27 | 7.567e+05 |
| | | 6.322e+05 | -7229.27 | -2.72e-04 | 0.0 | 60.0 | 8.055e+04 | -2306.41 | 13.09 | -1.032e+04 | -6480.60 | 6.322e+05 |
| 177 | 30 | 7.567e+05 | -6943.11 | 0.05 | -420.00 | 0.0 | 8.060e+04 | -1885.23 | 11.23 | -1.023e+04 | -7563.57 | 7.567e+05 |
| | | 6.324e+05 | -7563.57 | -2.59e-04 | 0.0 | 60.0 | 8.060e+04 | -2305.23 | 11.23 | -1.023e+04 | -6943.11 | 6.324e+05 |
| 177 | 31 | 7.607e+05 | 591.03 | 0.05 | -420.00 | 0.0 | 7.965e+04 | -1845.87 | -10.00 | -1.298e+04 | 591.03 | 7.607e+05 |
| | | 6.359e+05 | 44.77 | -9.66e-05 | 0.0 | 60.0 | 7.965e+04 | -2265.87 | -10.00 | -1.298e+04 | 44.77 | 6.359e+05 |
| 177 | 33 | 7.571e+05 | -6944.48 | 0.05 | -420.00 | 0.0 | 8.056e+04 | -1892.56 | 11.23 | -1.022e+04 | -7564.56 | 7.571e+05 |
| | | 6.332e+05 | -7564.56 | -2.59e-04 | 0.0 | 60.0 | 8.056e+04 | -2312.56 | 11.23 | -1.022e+04 | -6944.48 | 6.332e+05 |
| 177 | 36 | 7.603e+05 | 592.02 | 0.05 | -420.00 | 0.0 | 7.970e+04 | -1838.54 | -9.99 | -1.298e+04 | 592.02 | 7.603e+05 |
| | | 6.351e+05 | 46.14 | -9.74e-05 | 0.0 | 60.0 | 7.970e+04 | -2258.54 | -9.99 | -1.298e+04 | 46.14 | 6.351e+05 |
| 177 | 54 | 7.579e+05 | -4595.93 | 0.05 | -420.00 | 0.0 | 8.029e+04 | -1873.36 | 5.33 | -1.111e+04 | -4901.95 | 7.579e+05 |
| | | 6.334e+05 | -4901.95 | -2.14e-04 | 0.0 | 60.0 | 8.029e+04 | -2293.36 | 5.33 | -1.111e+04 | -4595.93 | 6.334e+05 |
| 177 | 62 | 7.579e+05 | -4770.68 | 0.05 | -420.00 | 0.0 | 8.031e+04 | -1872.92 | 4.63 | -1.108e+04 | -5028.29 | 7.579e+05 |
| | | 6.335e+05 | -5028.29 | -2.09e-04 | 0.0 | 60.0 | 8.031e+04 | -2292.92 | 4.63 | -1.108e+04 | -4770.68 | 6.335e+05 |
| 177 | 63 | 7.595e+05 | -1944.25 | 0.05 | -420.00 | 0.0 | 7.995e+04 | -1858.18 | -3.39 | -1.213e+04 | -1944.25 | 7.595e+05 |
| | | 6.348e+05 | -2127.66 | -1.47e-04 | 0.0 | 60.0 | 7.995e+04 | -2278.18 | -3.39 | -1.213e+04 | -2127.66 | 6.348e+05 |
| 177 | 65 | 7.581e+05 | -4771.21 | 0.05 | -420.00 | 0.0 | 8.029e+04 | -1875.73 | 4.63 | -1.108e+04 | -5028.67 | 7.581e+05 |
| | | 6.338e+05 | -5028.67 | -2.08e-04 | 0.0 | 60.0 | 8.029e+04 | -2295.73 | 4.63 | -1.108e+04 | -4771.21 | 6.338e+05 |
| 177 | 68 | 7.593e+05 | -1943.87 | 0.05 | -420.00 | 0.0 | 7.996e+04 | -1855.37 | -3.39 | -1.213e+04 | -1943.87 | 7.593e+05 |
| | | 6.345e+05 | -2127.13 | -1.48e-04 | 0.0 | 60.0 | 7.996e+04 | -2275.37 | -3.39 | -1.213e+04 | -2127.13 | 6.345e+05 |
| 177 | 85 | 7.587e+05 | -3449.17 | 0.05 | -420.00 | 0.0 | 8.013e+04 | -1865.55 | 0.62 | -1.160e+04 | -3486.27 | 7.587e+05 |
| | | 6.342e+05 | -3486.27 | -1.78e-04 | 0.0 | 60.0 | 8.013e+04 | -2285.55 | 0.62 | -1.160e+04 | -3449.17 | 6.342e+05 |
| 177 | 87 | 1.706e+06 | -2477.68 | 0.14 | -420.00 | 0.0 | 1.789e+05 | -6734.75 | -15.56 | -6.550e+04 | -2477.68 | 1.706e+06 |
| | | 1.290e+06 | -3411.53 | -5.31e-04 | 0.0 | 60.0 | 1.789e+05 | -7154.75 | -15.56 | -6.550e+04 | -3411.53 | 1.290e+06 |
| 177 | 88 | 7.224e+05 | -3291.67 | 0.05 | -420.00 | 0.0 | 7.630e+04 | -1766.79 | 0.57 | -1.106e+04 | -3325.99 | 7.224e+05 |
| | | 6.038e+05 | -3325.99 | -1.69e-04 | 0.0 | 60.0 | 7.630e+04 | -2186.79 | 0.57 | -1.106e+04 | -3291.67 | 6.038e+05 |
| 177 | 89 | 1.701e+06 | -2454.70 | 0.14 | -420.00 | 0.0 | 1.784e+05 | -6720.65 | -15.57 | -6.542e+04 | -2454.70 | 1.701e+06 |
| | | 1.285e+06 | -3388.95 | -5.30e-04 | 0.0 | 60.0 | 1.784e+05 | -7140.65 | -15.57 | -6.542e+04 | -3388.95 | 1.285e+06 |
| 177 | 97 | 1.640e+06 | -2702.11 | 0.13 | -420.00 | 0.0 | 1.720e+05 | -6324.02 | -13.91 | -6.053e+04 | -2702.11 | 1.640e+06 |
| | | 1.248e+06 | -3536.72 | -5.02e-04 | 0.0 | 60.0 | 1.720e+05 | -6744.02 | -13.91 | -6.053e+04 | -3536.72 | 1.248e+06 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|----------|-----------|-----------|------|-----------|------------|--------|------------|----------|-----------|
| 177 | 98 | 7.561e+05 | -3437.88 | 0.05 | -420.00 | 0.0 | 7.985e+04 | -1858.50 | 0.62 | -1.156e+04 | -3474.78 | 7.561e+05 |
| | | 6.320e+05 | -3474.78 | -1.77e-04 | 0.0 | 60.0 | 7.985e+04 | -2278.50 | 0.62 | -1.156e+04 | -3437.88 | 6.320e+05 |
| 177 | 102 | 7.587e+05 | -3449.17 | 0.05 | -420.00 | 0.0 | 8.013e+04 | -1865.55 | 0.62 | -1.160e+04 | -3486.27 | 7.587e+05 |
| | | 6.342e+05 | -3486.27 | -1.78e-04 | 0.0 | 60.0 | 8.013e+04 | -2285.55 | 0.62 | -1.160e+04 | -3449.17 | 6.342e+05 |
| 178 | 2 | 2.207e+06 | -3288.39 | 0.25 | -546.00 | 0.0 | 2.353e+05 | -1.121e+04 | 18.98 | -1.088e+05 | -4427.45 | 2.207e+06 |
| | | 1.518e+06 | -4427.45 | -9.17e-04 | 0.0 | 60.0 | 2.353e+05 | -1.175e+04 | 18.98 | -1.088e+05 | -3288.39 | 1.518e+06 |
| 178 | 7 | 6.746e+05 | -2628.85 | 0.07 | -420.00 | 0.0 | 7.071e+04 | -2485.63 | 9.73 | -1.484e+04 | -3212.92 | 6.746e+05 |
| | | 5.128e+05 | -3212.92 | -2.30e-04 | 0.0 | 60.0 | 7.071e+04 | -2905.63 | 9.73 | -1.484e+04 | -2628.85 | 5.128e+05 |
| 178 | 8 | 1.981e+06 | -2416.29 | 0.23 | -420.00 | 0.0 | 2.117e+05 | -1.037e+04 | 15.71 | -1.039e+05 | -3358.83 | 1.981e+06 |
| | | 1.346e+06 | -3358.83 | -8.40e-04 | 0.0 | 60.0 | 2.117e+05 | -1.079e+04 | 15.71 | -1.039e+05 | -2416.29 | 1.346e+06 |
| 178 | 23 | 7.283e+05 | -417.74 | 0.07 | -420.00 | 0.0 | 7.580e+04 | -2667.96 | -4.51 | -1.756e+04 | -417.74 | 7.283e+05 |
| | | 5.545e+05 | -630.84 | -1.28e-04 | 0.0 | 60.0 | 7.580e+04 | -3087.96 | -4.51 | -1.756e+04 | -630.84 | 5.545e+05 |
| 178 | 30 | 7.253e+05 | -5546.59 | 0.07 | -420.00 | 0.0 | 7.662e+04 | -2716.43 | 24.38 | -1.434e+04 | -6943.11 | 7.253e+05 |
| | | 5.508e+05 | -6943.11 | -3.60e-04 | 0.0 | 60.0 | 7.662e+04 | -3136.43 | 24.38 | -1.434e+04 | -5546.59 | 5.508e+05 |
| 178 | 31 | 7.283e+05 | 44.77 | 0.07 | -420.00 | 0.0 | 7.573e+04 | -2669.26 | -3.31 | -1.763e+04 | 44.77 | 7.283e+05 |
| | | 5.544e+05 | -87.51 | -1.36e-04 | 0.0 | 60.0 | 7.573e+04 | -3089.26 | -3.31 | -1.763e+04 | -87.51 | 5.544e+05 |
| 178 | 33 | 7.259e+05 | -5548.22 | 0.07 | -420.00 | 0.0 | 7.656e+04 | -2721.15 | 24.38 | -1.434e+04 | -6944.48 | 7.259e+05 |
| | | 5.518e+05 | -6944.48 | -3.60e-04 | 0.0 | 60.0 | 7.656e+04 | -3141.15 | 24.38 | -1.434e+04 | -5548.22 | 5.518e+05 |
| 178 | 36 | 7.276e+05 | 46.14 | 0.07 | -420.00 | 0.0 | 7.579e+04 | -2664.55 | -3.31 | -1.763e+04 | 46.14 | 7.276e+05 |
| | | 5.534e+05 | -85.88 | -1.37e-04 | 0.0 | 60.0 | 7.579e+04 | -3084.55 | -3.31 | -1.763e+04 | -85.88 | 5.534e+05 |
| 178 | 38 | 7.254e+05 | -3509.86 | 0.07 | -420.00 | 0.0 | 7.637e+04 | -2693.14 | 14.96 | -1.557e+04 | -4390.24 | 7.254e+05 |
| | | 5.506e+05 | -4390.24 | -2.85e-04 | 0.0 | 60.0 | 7.637e+04 | -3113.14 | 14.96 | -1.557e+04 | -3509.86 | 5.506e+05 |
| 178 | 55 | 7.274e+05 | -1989.82 | 0.07 | -420.00 | 0.0 | 7.603e+04 | -2683.51 | 4.85 | -1.659e+04 | -2302.41 | 7.274e+05 |
| | | 5.533e+05 | -2302.41 | -2.03e-04 | 0.0 | 60.0 | 7.603e+04 | -3103.51 | 4.85 | -1.659e+04 | -1989.82 | 5.533e+05 |
| 178 | 62 | 7.262e+05 | -3849.51 | 0.07 | -420.00 | 0.0 | 7.634e+04 | -2701.70 | 15.77 | -1.535e+04 | -4770.69 | 7.262e+05 |
| | | 5.519e+05 | -4770.69 | -2.91e-04 | 0.0 | 60.0 | 7.634e+04 | -3121.70 | 15.77 | -1.535e+04 | -3849.51 | 5.519e+05 |
| 178 | 63 | 7.273e+05 | -1784.59 | 0.07 | -420.00 | 0.0 | 7.601e+04 | -2684.00 | 5.30 | -1.661e+04 | -2127.66 | 7.273e+05 |
| | | 5.533e+05 | -2127.66 | -2.06e-04 | 0.0 | 60.0 | 7.601e+04 | -3104.00 | 5.30 | -1.661e+04 | -1784.59 | 5.533e+05 |
| 178 | 65 | 7.265e+05 | -3850.13 | 0.07 | -420.00 | 0.0 | 7.632e+04 | -2703.51 | 15.77 | -1.535e+04 | -4771.21 | 7.265e+05 |
| | | 5.523e+05 | -4771.21 | -2.91e-04 | 0.0 | 60.0 | 7.632e+04 | -3123.51 | 15.77 | -1.535e+04 | -3850.13 | 5.523e+05 |
| 178 | 68 | 7.271e+05 | -1783.97 | 0.07 | -420.00 | 0.0 | 7.603e+04 | -2682.19 | 5.31 | -1.662e+04 | -2127.13 | 7.271e+05 |
| | | 5.529e+05 | -2127.13 | -2.06e-04 | 0.0 | 60.0 | 7.603e+04 | -3102.19 | 5.31 | -1.662e+04 | -1783.97 | 5.529e+05 |
| 178 | 70 | 7.262e+05 | -3079.30 | 0.07 | -420.00 | 0.0 | 7.625e+04 | -2692.90 | 12.21 | -1.583e+04 | -3805.26 | 7.262e+05 |
| | | 5.519e+05 | -3805.26 | -2.62e-04 | 0.0 | 60.0 | 7.625e+04 | -3112.90 | 12.21 | -1.583e+04 | -3079.30 | 5.519e+05 |
| 178 | 85 | 7.268e+05 | -2817.05 | 0.07 | -420.00 | 0.0 | 7.617e+04 | -2692.85 | 10.54 | -1.598e+04 | -3449.17 | 7.268e+05 |
| | | 5.526e+05 | -3449.17 | -2.48e-04 | 0.0 | 60.0 | 7.617e+04 | -3112.85 | 10.54 | -1.598e+04 | -2817.05 | 5.526e+05 |
| 178 | 87 | 1.568e+06 | -2567.86 | 0.18 | -420.00 | 0.0 | 1.670e+05 | -7831.13 | 14.06 | -7.469e+04 | -3411.52 | 1.568e+06 |
| | | 1.086e+06 | -3411.52 | -6.45e-04 | 0.0 | 60.0 | 1.670e+05 | -8251.13 | 14.06 | -7.469e+04 | -2567.86 | 1.086e+06 |
| 178 | 88 | 6.920e+05 | -2691.58 | 0.07 | -420.00 | 0.0 | 7.253e+04 | -2554.70 | 10.00 | -1.522e+04 | -3291.67 | 6.920e+05 |
| | | 5.261e+05 | -3291.67 | -2.36e-04 | 0.0 | 60.0 | 7.253e+04 | -2974.70 | 10.00 | -1.522e+04 | -2691.58 | 5.261e+05 |
| 178 | 89 | 1.563e+06 | -2549.88 | 0.18 | -420.00 | 0.0 | 1.665e+05 | -7811.41 | 13.98 | -7.458e+04 | -3388.95 | 1.563e+06 |
| | | 1.082e+06 | -3388.95 | -6.43e-04 | 0.0 | 60.0 | 1.665e+05 | -8231.41 | 13.98 | -7.458e+04 | -2549.88 | 1.082e+06 |
| 178 | 97 | 1.511e+06 | -2689.51 | 0.17 | -420.00 | 0.0 | 1.608e+05 | -7423.88 | 14.12 | -6.941e+04 | -3536.72 | 1.511e+06 |
| | | 1.053e+06 | -3536.72 | -6.14e-04 | 0.0 | 60.0 | 1.608e+05 | -7843.88 | 14.12 | -6.941e+04 | -2689.51 | 1.053e+06 |
| 178 | 98 | 7.243e+05 | -2808.06 | 0.07 | -420.00 | 0.0 | 7.591e+04 | -2682.99 | 10.50 | -1.593e+04 | -3437.88 | 7.243e+05 |
| | | 5.507e+05 | -3437.88 | -2.48e-04 | 0.0 | 60.0 | 7.591e+04 | -3102.99 | 10.50 | -1.593e+04 | -2808.06 | 5.507e+05 |
| 178 | 102 | 7.268e+05 | -2817.05 | 0.07 | -420.00 | 0.0 | 7.617e+04 | -2692.85 | 10.54 | -1.598e+04 | -3449.17 | 7.268e+05 |
| | | 5.526e+05 | -3449.17 | -2.48e-04 | 0.0 | 60.0 | 7.617e+04 | -3112.85 | 10.54 | -1.598e+04 | -2817.05 | 5.526e+05 |
| 179 | 1 | 8.372e+05 | -1048.60 | 0.11 | -546.00 | 0.0 | 8.782e+04 | -4343.71 | 40.87 | -2.495e+04 | -3500.95 | 8.372e+05 |
| | | 5.602e+05 | -3500.95 | -3.87e-04 | 0.0 | 60.0 | 8.782e+04 | -4889.71 | 40.87 | -2.495e+04 | -1048.60 | 5.602e+05 |
| 179 | 2 | 1.972e+06 | 2871.52 | 0.30 | -546.00 | 0.0 | 2.160e+05 | -1.272e+04 | 102.67 | -1.187e+05 | 3288.38 | 1.972e+06 |
| | | 1.192e+06 | 3288.38 | -1.04e-03 | 0.0 | 60.0 | 2.160e+05 | -1.327e+04 | 102.67 | -1.187e+05 | 2871.52 | 1.192e+06 |
| 179 | 7 | 6.274e+05 | -792.83 | 0.08 | -420.00 | 0.0 | 6.582e+04 | -3250.73 | 30.60 | -1.870e+04 | -2628.85 | 6.274e+05 |
| | | 4.198e+05 | -2628.85 | -2.90e-04 | 0.0 | 60.0 | 6.582e+04 | -3670.73 | 30.60 | -1.870e+04 | -792.83 | 4.198e+05 |
| 179 | 8 | 1.762e+06 | 3127.29 | 0.27 | -420.00 | 0.0 | 1.940e+05 | -1.163e+04 | 92.39 | -1.124e+05 | 2416.29 | 1.762e+06 |
| | | 1.052e+06 | -2416.29 | -9.43e-04 | 0.0 | 60.0 | 1.940e+05 | -1.205e+04 | 92.39 | -1.124e+05 | 3127.29 | 1.052e+06 |
| 179 | 30 | 6.743e+05 | -2700.86 | 0.09 | -420.00 | 0.0 | 7.130e+04 | -3541.40 | 48.89 | -1.840e+04 | -5546.60 | 6.743e+05 |
| | | 4.504e+05 | -5546.60 | -4.49e-04 | 0.0 | 60.0 | 7.130e+04 | -3961.40 | 48.89 | -1.840e+04 | -2700.86 | 4.504e+05 |
| 179 | 31 | 6.777e+05 | 1034.36 | 0.09 | -420.00 | 0.0 | 7.052e+04 | -3492.02 | 17.24 | -2.189e+04 | 87.51 | 6.777e+05 |
| | | 4.545e+05 | -87.51 | -1.75e-04 | 0.0 | 60.0 | 7.052e+04 | -3912.02 | 17.24 | -2.189e+04 | 1034.36 | 4.545e+05 |
| 179 | 33 | 6.752e+05 | -2702.59 | 0.09 | -420.00 | 0.0 | 7.124e+04 | -3543.03 | 48.87 | -1.840e+04 | -5548.23 | 6.752e+05 |
| | | 4.513e+05 | -5548.23 | -4.49e-04 | 0.0 | 60.0 | 7.124e+04 | -3963.03 | 48.87 | -1.840e+04 | -2702.59 | 4.513e+05 |
| 179 | 36 | 6.769e+05 | 1036.10 | 0.09 | -420.00 | 0.0 | 7.058e+04 | -3490.40 | 17.26 | -2.189e+04 | 85.88 | 6.769e+05 |
| | | 4.536e+05 | -85.88 | -1.75e-04 | 0.0 | 60.0 | 7.058e+04 | -3910.40 | 17.26 | -2.189e+04 | 1036.10 | 4.536e+05 |
| 179 | 43 | 6.778e+05 | -234.59 | 0.09 | -420.00 | 0.0 | 7.070e+04 | -3511.79 | 28.29 | -2.064e+04 | -1961.24 | 6.778e+05 |
| | | 4.544e+05 | -1961.24 | -2.71e-04 | 0.0 | 60.0 | 7.070e+04 | -3931.79 | 28.29 | -2.064e+04 | -234.59 | 4.544e+05 |
| 179 | 62 | 6.754e+05 | -1539.59 | 0.09 | -420.00 | 0.0 | 7.106e+04 | -3526.00 | 39.05 | -1.948e+04 | -3849.51 | 6.754e+05 |
| | | 4.516e+05 | -3849.51 | -3.64e-04 | 0.0 | 60.0 | 7.106e+04 | -3946.00 | 39.05 | -1.948e+04 | -1539.59 | 4.516e+05 |
| 179 | 63 | 6.767e+05 | -126.91 | 0.09 | -420.00 | 0.0 | 7.076e+04 | -3507.42 | 27.08 | -2.082e+04 | -1784.60 | 6.767e+05 |
| | | 4.532e+05 | -1784.60 | -2.60e-04 | 0.0 | 60.0 | 7.076e+04 | -3927.42 | 27.08 | -2.082e+04 | -126.91 | 4.532e+05 |
| 179 | 65 | 6.757e+05 | -1540.25 | 0.09 | -420.00 | 0.0 | 7.103e+04 | -3526.63 | 39.04 | -1.948e+04 | -3850.14 | 6.757e+05 |
| | | 4.520e+05 | -3850.14 | -3.64e-04 | 0.0 | 60.0 | 7.103e+04 | -3946.63 | 39.04 | -1.948e+04 | -1540.25 | 4.520e+05 |
| 179 | 68 | 6.764e+05 | -126.25 | 0.09 | -420.00 | 0.0 | 7.078e+04 | -3506.80 | 27.09 | -2.082e+04 | -1783.97 | 6.764e+05 |
| | | 4.529e+05 | -1783.97 | -2.60e-04 | 0.0 | 60.0 | 7.078e+04 | -3926.80 | 27.09 | -2.082e+04 | -126.25 | 4.529e+05 |
| 179 | 75 | 6.767e+05 | -606.72 | 0.09 | -420.00 | 0.0 | 7.083e+04 | -3514.88 | 31.26 | -2.034e+04 | -2493.24 | 6.767e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|-----------|-----------|-----------|-----------|------|-----------|------------|--------|------------|-----------|-----------|
| | | 4.532e+05 | -2493.24 | -2.97e-04 | 0.0 | 60.0 | 7.083e+04 | -3934.88 | 31.26 | -2.034e+04 | -606.72 | 4.532e+05 |
| 179 | 85 | 6.760e+05 | -833.25 | 0.09 | -420.00 | 0.0 | 7.091e+04 | -3516.71 | 33.06 | -2.015e+04 | -2817.05 | 6.760e+05 |
| | | 4.524e+05 | -2817.05 | -3.12e-04 | 0.0 | 60.0 | 7.091e+04 | -3936.71 | 33.06 | -2.015e+04 | -833.25 | 4.524e+05 |
| 179 | 86 | 6.483e+05 | -810.16 | 0.08 | -420.00 | 0.0 | 6.800e+04 | -3364.70 | 31.66 | -1.932e+04 | -2709.57 | 6.483e+05 |
| | | 4.338e+05 | -2709.57 | -2.99e-04 | 0.0 | 60.0 | 6.800e+04 | -3784.70 | 31.66 | -1.932e+04 | -810.16 | 4.338e+05 |
| 179 | 87 | 1.405e+06 | 1803.25 | 0.21 | -420.00 | 0.0 | 1.534e+05 | -8949.00 | 72.85 | -8.181e+04 | -2567.86 | 1.405e+06 |
| | | 8.553e+05 | -2567.86 | -7.35e-04 | 0.0 | 60.0 | 1.534e+05 | -9369.00 | 72.85 | -8.181e+04 | 1803.25 | 8.553e+05 |
| 179 | 88 | 6.436e+05 | -806.30 | 0.08 | -420.00 | 0.0 | 6.752e+04 | -3339.39 | 31.42 | -1.918e+04 | -2691.59 | 6.436e+05 |
| | | 4.307e+05 | -2691.59 | -2.97e-04 | 0.0 | 60.0 | 6.752e+04 | -3759.39 | 31.42 | -1.918e+04 | -806.30 | 4.307e+05 |
| 179 | 89 | 1.400e+06 | 1807.11 | 0.21 | -420.00 | 0.0 | 1.529e+05 | -8923.69 | 72.62 | -8.168e+04 | -2549.88 | 1.400e+06 |
| | | 8.522e+05 | -2549.88 | -7.33e-04 | 0.0 | 60.0 | 1.529e+05 | -9343.69 | 72.62 | -8.168e+04 | 1807.11 | 8.522e+05 |
| 179 | 96 | 6.760e+05 | -833.25 | 0.09 | -420.00 | 0.0 | 7.091e+04 | -3516.71 | 33.06 | -2.015e+04 | -2817.05 | 6.760e+05 |
| | | 4.524e+05 | -2817.05 | -3.12e-04 | 0.0 | 60.0 | 7.091e+04 | -3936.71 | 33.06 | -2.015e+04 | -833.25 | 4.524e+05 |
| 179 | 97 | 1.357e+06 | 1518.82 | 0.20 | -420.00 | 0.0 | 1.478e+05 | -8542.58 | 70.14 | -7.639e+04 | -2689.52 | 1.357e+06 |
| | | 8.318e+05 | -2689.52 | -7.04e-04 | 0.0 | 60.0 | 1.478e+05 | -8962.58 | 70.14 | -7.639e+04 | 1518.82 | 8.318e+05 |
| 179 | 98 | 6.737e+05 | -831.32 | 0.09 | -420.00 | 0.0 | 7.067e+04 | -3504.06 | 32.95 | -2.008e+04 | -2808.06 | 6.737e+05 |
| | | 4.509e+05 | -2808.06 | -3.11e-04 | 0.0 | 60.0 | 7.067e+04 | -3924.06 | 32.95 | -2.008e+04 | -831.32 | 4.509e+05 |
| 179 | 102 | 6.760e+05 | -833.25 | 0.09 | -420.00 | 0.0 | 7.091e+04 | -3516.71 | 33.06 | -2.015e+04 | -2817.05 | 6.760e+05 |
| | | 4.524e+05 | -2817.05 | -3.12e-04 | 0.0 | 60.0 | 7.091e+04 | -3936.71 | 33.06 | -2.015e+04 | -833.25 | 4.524e+05 |
| 180 | 1 | 7.509e+05 | 4500.47 | 0.13 | -546.00 | 0.0 | 7.968e+04 | -5358.64 | 92.48 | -2.974e+04 | -1048.60 | 7.509e+05 |
| | | 4.130e+05 | -1048.60 | -4.42e-04 | 0.0 | 60.0 | 7.968e+04 | -5904.64 | 92.48 | -2.974e+04 | 4500.47 | 4.130e+05 |
| 180 | 2 | 1.703e+06 | 1.777e+04 | 0.34 | -546.00 | 0.0 | 1.942e+05 | -1.425e+04 | 248.23 | -1.262e+05 | 2871.52 | 1.703e+06 |
| | | 8.315e+05 | 2871.52 | -1.09e-03 | 0.0 | 60.0 | 1.942e+05 | -1.479e+04 | 248.23 | -1.262e+05 | 1.777e+04 | 8.315e+05 |
| 180 | 7 | 5.628e+05 | 3361.78 | 0.10 | -420.00 | 0.0 | 5.972e+04 | -4011.57 | 69.24 | -2.228e+04 | -792.84 | 5.628e+05 |
| | | 3.095e+05 | -792.84 | -3.31e-04 | 0.0 | 60.0 | 5.972e+04 | -4431.57 | 69.24 | -2.228e+04 | 3361.78 | 3.095e+05 |
| 180 | 29 | 6.091e+05 | 2636.79 | 0.10 | -420.00 | 0.0 | 6.460e+04 | -4362.82 | 91.05 | -2.229e+04 | -2675.57 | 6.091e+05 |
| | | 3.322e+05 | -2675.57 | -5.12e-04 | 0.0 | 60.0 | 6.460e+04 | -4782.82 | 91.05 | -2.229e+04 | 2636.79 | 3.322e+05 |
| 180 | 30 | 6.082e+05 | 2613.28 | 0.10 | -420.00 | 0.0 | 6.466e+04 | -4361.20 | 91.09 | -2.229e+04 | -2700.87 | 6.082e+05 |
| | | 3.313e+05 | -2700.87 | -5.12e-04 | 0.0 | 60.0 | 6.466e+04 | -4781.20 | 91.09 | -2.229e+04 | 2613.28 | 3.313e+05 |
| 180 | 31 | 6.045e+05 | 4697.21 | 0.10 | -420.00 | 0.0 | 6.402e+04 | -4310.61 | 58.53 | -2.576e+04 | 1034.36 | 6.045e+05 |
| | | 3.359e+05 | 1034.36 | -2.02e-04 | 0.0 | 60.0 | 6.402e+04 | -4730.61 | 58.53 | -2.576e+04 | 4697.21 | 3.359e+05 |
| 180 | 33 | 6.091e+05 | 2611.61 | 0.10 | -420.00 | 0.0 | 6.460e+04 | -4362.82 | 91.05 | -2.229e+04 | -2702.60 | 6.091e+05 |
| | | 3.321e+05 | -2702.60 | -5.12e-04 | 0.0 | 60.0 | 6.460e+04 | -4782.82 | 91.05 | -2.229e+04 | 2611.61 | 3.321e+05 |
| 180 | 36 | 6.036e+05 | 4698.88 | 0.10 | -420.00 | 0.0 | 6.408e+04 | -4309.00 | 58.56 | -2.576e+04 | 1036.09 | 6.036e+05 |
| | | 3.351e+05 | 1036.09 | -2.02e-04 | 0.0 | 60.0 | 6.408e+04 | -4729.00 | 58.56 | -2.576e+04 | 4698.88 | 3.351e+05 |
| 180 | 61 | 6.074e+05 | 3270.59 | 0.10 | -420.00 | 0.0 | 6.444e+04 | -4346.07 | 80.95 | -2.335e+04 | -1529.95 | 6.074e+05 |
| | | 3.331e+05 | -1529.95 | -4.16e-04 | 0.0 | 60.0 | 6.444e+04 | -4766.07 | 80.95 | -2.335e+04 | 3270.59 | 3.331e+05 |
| 180 | 62 | 6.071e+05 | 3261.63 | 0.10 | -420.00 | 0.0 | 6.446e+04 | -4345.45 | 80.96 | -2.335e+04 | -1539.59 | 6.071e+05 |
| | | 3.327e+05 | -1539.59 | -4.16e-04 | 0.0 | 60.0 | 6.446e+04 | -4765.45 | 80.96 | -2.335e+04 | 3261.63 | 3.327e+05 |
| 180 | 63 | 6.057e+05 | 4048.86 | 0.10 | -420.00 | 0.0 | 6.422e+04 | -4326.37 | 68.65 | -2.470e+04 | -126.91 | 6.057e+05 |
| | | 3.345e+05 | -126.91 | -2.99e-04 | 0.0 | 60.0 | 6.422e+04 | -4746.37 | 68.65 | -2.470e+04 | 4048.86 | 3.345e+05 |
| 180 | 65 | 6.074e+05 | 3260.99 | 0.10 | -420.00 | 0.0 | 6.444e+04 | -4346.07 | 80.95 | -2.335e+04 | -1540.26 | 6.074e+05 |
| | | 3.331e+05 | -1540.26 | -4.16e-04 | 0.0 | 60.0 | 6.444e+04 | -4766.07 | 80.95 | -2.335e+04 | 3260.99 | 3.331e+05 |
| 180 | 68 | 6.053e+05 | 4049.50 | 0.10 | -420.00 | 0.0 | 6.424e+04 | -4325.75 | 68.67 | -2.470e+04 | -126.25 | 6.053e+05 |
| | | 3.342e+05 | -126.25 | -2.98e-04 | 0.0 | 60.0 | 6.424e+04 | -4745.75 | 68.67 | -2.470e+04 | 4049.50 | 3.342e+05 |
| 180 | 85 | 6.064e+05 | 3655.25 | 0.10 | -420.00 | 0.0 | 6.434e+04 | -4335.91 | 74.81 | -2.402e+04 | -833.25 | 6.064e+05 |
| | | 3.336e+05 | -833.25 | -3.57e-04 | 0.0 | 60.0 | 6.434e+04 | -4755.91 | 74.81 | -2.402e+04 | 3655.25 | 3.336e+05 |
| 180 | 86 | 5.814e+05 | 3487.68 | 0.10 | -420.00 | 0.0 | 6.170e+04 | -4150.55 | 71.63 | -2.303e+04 | -810.17 | 5.814e+05 |
| | | 3.198e+05 | -810.17 | -3.42e-04 | 0.0 | 60.0 | 6.170e+04 | -4570.55 | 71.63 | -2.303e+04 | 3487.68 | 3.198e+05 |
| 180 | 87 | 1.216e+06 | 1.233e+04 | 0.24 | -420.00 | 0.0 | 1.380e+05 | -1.008e+04 | 175.46 | -8.732e+04 | 1803.25 | 1.216e+06 |
| | | 5.988e+05 | 1803.25 | -7.75e-04 | 0.0 | 60.0 | 1.380e+05 | -1.050e+04 | 175.46 | -8.732e+04 | 1.233e+04 | 5.988e+05 |
| 180 | 88 | 5.773e+05 | 3459.60 | 0.10 | -420.00 | 0.0 | 6.126e+04 | -4119.68 | 71.10 | -2.286e+04 | -806.31 | 5.773e+05 |
| | | 3.175e+05 | -806.31 | -3.40e-04 | 0.0 | 60.0 | 6.126e+04 | -4539.68 | 71.10 | -2.286e+04 | 3459.60 | 3.175e+05 |
| 180 | 96 | 6.064e+05 | 3655.25 | 0.10 | -420.00 | 0.0 | 6.434e+04 | -4335.91 | 74.81 | -2.402e+04 | -833.25 | 6.064e+05 |
| | | 3.336e+05 | -833.25 | -3.57e-04 | 0.0 | 60.0 | 6.434e+04 | -4755.91 | 74.81 | -2.402e+04 | 3655.25 | 3.336e+05 |
| 180 | 97 | 1.178e+06 | 1.161e+04 | 0.23 | -420.00 | 0.0 | 1.330e+05 | -9670.03 | 168.26 | -8.189e+04 | 1518.82 | 1.178e+06 |
| | | 5.847e+05 | 1518.82 | -7.47e-04 | 0.0 | 60.0 | 1.330e+05 | -1.009e+04 | 168.26 | -8.189e+04 | 1.161e+04 | 5.847e+05 |
| 180 | 98 | 6.043e+05 | 3641.20 | 0.10 | -420.00 | 0.0 | 6.412e+04 | -4320.48 | 74.54 | -2.394e+04 | -831.32 | 6.043e+05 |
| | | 3.325e+05 | -831.32 | -3.56e-04 | 0.0 | 60.0 | 6.412e+04 | -4740.48 | 74.54 | -2.394e+04 | 3641.20 | 3.325e+05 |
| 180 | 102 | 6.064e+05 | 3655.25 | 0.10 | -420.00 | 0.0 | 6.434e+04 | -4335.91 | 74.81 | -2.402e+04 | -833.25 | 6.064e+05 |
| | | 3.336e+05 | -833.25 | -3.57e-04 | 0.0 | 60.0 | 6.434e+04 | -4755.91 | 74.81 | -2.402e+04 | 3655.25 | 3.336e+05 |
| 181 | 2 | 1.398e+06 | 4.596e+04 | 0.37 | -546.00 | 0.0 | 1.700e+05 | -1.593e+04 | 469.90 | -1.310e+05 | 1.777e+04 | 1.398e+06 |
| | | 4.263e+05 | 1.777e+04 | -9.92e-04 | 0.0 | 60.0 | 1.700e+05 | -1.647e+04 | 469.90 | -1.310e+05 | 4.596e+04 | 4.263e+05 |
| 181 | 7 | 4.799e+05 | 1.112e+04 | 0.11 | -420.00 | 0.0 | 5.245e+04 | -4767.21 | 129.34 | -2.536e+04 | 3361.77 | 4.799e+05 |
| | | 1.812e+05 | 3361.77 | -3.33e-04 | 0.0 | 60.0 | 5.245e+04 | -5187.21 | 129.34 | -2.536e+04 | 1.112e+04 | 1.812e+05 |
| 181 | 28 | 5.135e+05 | 1.280e+04 | 0.11 | -420.00 | 0.0 | 5.671e+04 | -5119.45 | 126.85 | -2.909e+04 | 4319.01 | 5.135e+05 |
| | | 1.971e+05 | 4319.01 | -2.01e-04 | 0.0 | 60.0 | 5.671e+04 | -5539.45 | 126.85 | -2.909e+04 | 1.280e+04 | 1.971e+05 |
| 181 | 29 | 5.210e+05 | 1.143e+04 | 0.11 | -420.00 | 0.0 | 5.628e+04 | -5183.53 | 154.20 | -2.564e+04 | 2636.78 | 5.210e+05 |
| | | 1.939e+05 | 2636.78 | -5.24e-04 | 0.0 | 60.0 | 5.628e+04 | -5603.53 | 154.20 | -2.564e+04 | 1.143e+04 | 1.939e+05 |
| 181 | 30 | 5.200e+05 | 1.145e+04 | 0.11 | -420.00 | 0.0 | 5.633e+04 | -5178.83 | 154.28 | -2.566e+04 | 2613.27 | 5.200e+05 |
| | | 1.932e+05 | 2613.27 | -5.24e-04 | 0.0 | 60.0 | 5.633e+04 | -5598.83 | 154.28 | -2.566e+04 | 1.145e+04 | 1.932e+05 |
| 181 | 32 | 5.132e+05 | 1.266e+04 | 0.11 | -420.00 | 0.0 | 5.674e+04 | -5115.32 | 125.36 | -2.908e+04 | 4673.70 | 5.132e+05 |
| | | 1.972e+05 | 4673.70 | -1.93e-04 | 0.0 | 60.0 | 5.674e+04 | -5535.32 | 125.36 | -2.908e+04 | 1.266e+04 | 1.972e+05 |
| 181 | 33 | 5.210e+05 | 1.143e+04 | 0.11 | -420.00 | 0.0 | 5.628e+04 | -5183.52 | 154.20 | -2.564e+04 | 2611.60 | 5.210e+05 |
| | | 1.939e+05 | 2611.60 | -5.24e-04 | 0.0 | 60.0 | 5.628e+04 | -5603.52 | 154.20 | -2.564e+04 | 1.143e+04 | 1.939e+05 |

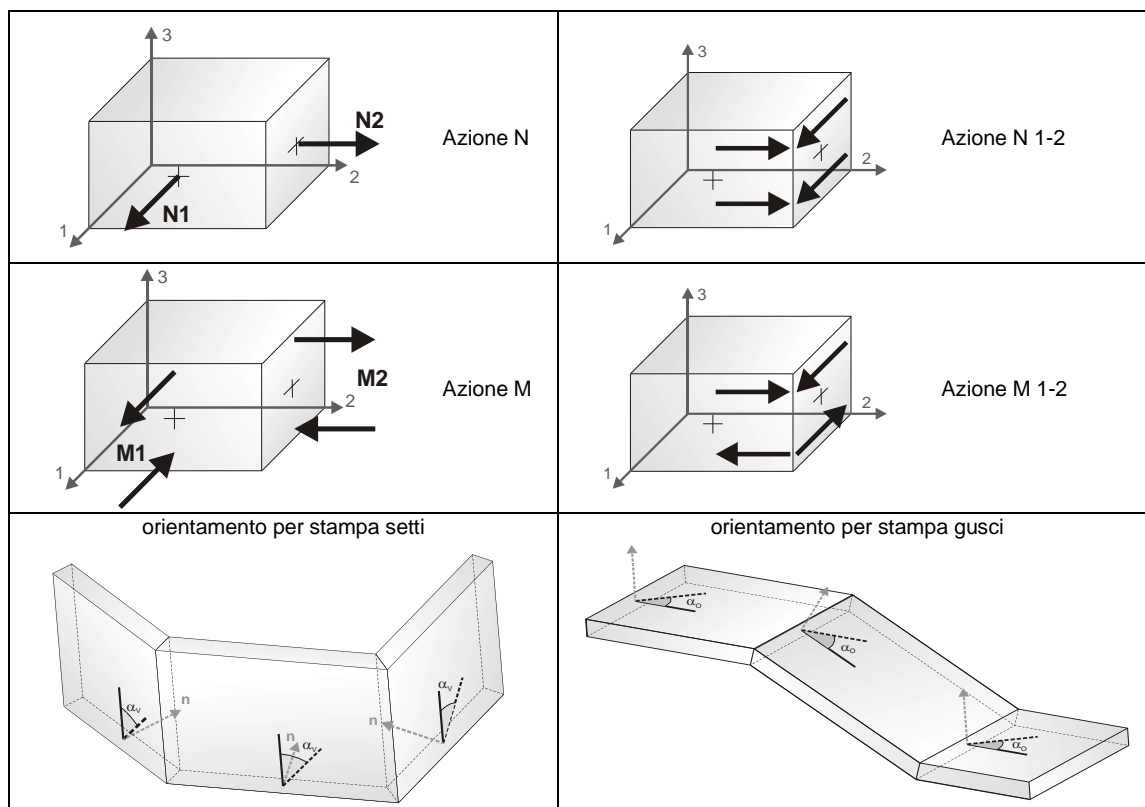
| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|-----------|-----------|-----------|------|-----------|------------|--------|------------|-----------|------------|
| 181 | 60 | 5.157e+05 | 1.233e+04 | 0.11 | -420.00 | 0.0 | 5.658e+04 | -5138.08 | 134.89 | -2.803e+04 | 3906.01 | 5.157e+05 |
| | | 1.961e+05 | 3906.01 | -2.99e-04 | 0.0 | 60.0 | 5.658e+04 | -5558.08 | 134.89 | -2.803e+04 | 1.233e+04 | 1.961e+05 |
| 181 | 61 | 5.186e+05 | 1.181e+04 | 0.11 | -420.00 | 0.0 | 5.642e+04 | -5162.33 | 145.24 | -2.669e+04 | 3270.59 | 5.186e+05 |
| | | 1.949e+05 | 3270.59 | -4.21e-04 | 0.0 | 60.0 | 5.642e+04 | -5582.33 | 145.24 | -2.669e+04 | 1.181e+04 | 1.949e+05 |
| 181 | 62 | 5.182e+05 | 1.182e+04 | 0.11 | -420.00 | 0.0 | 5.644e+04 | -5160.53 | 145.27 | -2.670e+04 | 3261.62 | 5.182e+05 |
| | | 1.947e+05 | 3261.62 | -4.21e-04 | 0.0 | 60.0 | 5.644e+04 | -5580.53 | 145.27 | -2.670e+04 | 1.182e+04 | 1.947e+05 |
| 181 | 64 | 5.156e+05 | 1.227e+04 | 0.11 | -420.00 | 0.0 | 5.660e+04 | -5136.52 | 134.32 | -2.803e+04 | 4039.89 | 5.156e+05 |
| | | 1.962e+05 | 4039.89 | -2.96e-04 | 0.0 | 60.0 | 5.660e+04 | -5556.52 | 134.32 | -2.803e+04 | 1.227e+04 | 1.962e+05 |
| 181 | 65 | 5.186e+05 | 1.181e+04 | 0.11 | -420.00 | 0.0 | 5.642e+04 | -5162.33 | 145.23 | -2.669e+04 | 3260.98 | 5.186e+05 |
| | | 1.949e+05 | 3260.98 | -4.21e-04 | 0.0 | 60.0 | 5.642e+04 | -5582.33 | 145.23 | -2.669e+04 | 1.181e+04 | 1.949e+05 |
| 181 | 85 | 5.171e+05 | 1.204e+04 | 0.11 | -420.00 | 0.0 | 5.651e+04 | -5149.43 | 139.78 | -2.736e+04 | 3655.24 | 5.171e+05 |
| | | 1.955e+05 | 3655.24 | -3.59e-04 | 0.0 | 60.0 | 5.651e+04 | -5569.43 | 139.78 | -2.736e+04 | 1.204e+04 | 1.955e+05 |
| 181 | 87 | 1.001e+06 | 3.225e+04 | 0.26 | -420.00 | 0.0 | 1.209e+05 | -1.130e+04 | 331.91 | -9.098e+04 | 1.233e+04 | 1.001e+06 |
| | | 3.103e+05 | 1.233e+04 | -7.09e-04 | 0.0 | 60.0 | 1.209e+05 | -1.172e+04 | 331.91 | -9.098e+04 | 3.225e+04 | 3.103e+05 |
| 181 | 88 | 4.923e+05 | 1.143e+04 | 0.11 | -420.00 | 0.0 | 5.380e+04 | -4894.61 | 132.82 | -2.603e+04 | 3459.59 | 4.923e+05 |
| | | 1.860e+05 | 3459.59 | -3.42e-04 | 0.0 | 60.0 | 5.380e+04 | -5314.61 | 132.82 | -2.603e+04 | 1.143e+04 | 1.860e+05 |
| 181 | 97 | 9.719e+05 | 3.070e+04 | 0.25 | -420.00 | 0.0 | 1.165e+05 | -1.088e+04 | 318.06 | -8.564e+04 | 1.161e+04 | 9.719e+05 |
| | | 3.062e+05 | 1.161e+04 | -6.87e-04 | 0.0 | 60.0 | 1.165e+05 | -1.130e+04 | 318.06 | -8.564e+04 | 3.070e+04 | 3.062e+05 |
| 181 | 98 | 5.153e+05 | 1.200e+04 | 0.11 | -420.00 | 0.0 | 5.632e+04 | -5131.24 | 139.28 | -2.726e+04 | 3641.20 | 5.153e+05 |
| | | 1.949e+05 | 3641.20 | -3.57e-04 | 0.0 | 60.0 | 5.632e+04 | -5551.24 | 139.28 | -2.726e+04 | 1.200e+04 | 1.949e+05 |
| 181 | 102 | 5.171e+05 | 1.204e+04 | 0.11 | -420.00 | 0.0 | 5.651e+04 | -5149.43 | 139.78 | -2.736e+04 | 3655.24 | 5.171e+05 |
| | | 1.955e+05 | 3655.24 | -3.59e-04 | 0.0 | 60.0 | 5.651e+04 | -5569.43 | 139.78 | -2.736e+04 | 1.204e+04 | 1.955e+05 |
| 182 | 2 | 1.039e+06 | 8.914e+04 | 0.39 | -546.00 | 0.0 | 1.439e+05 | -1.760e+04 | 719.68 | -1.300e+05 | 4.596e+04 | 1.039e+06 |
| | | -3.329e+04 | 4.596e+04 | -5.86e-04 | 0.0 | 60.0 | 1.439e+05 | -1.814e+04 | 719.68 | -1.300e+05 | 8.914e+04 | -3.329e+04 |
| 182 | 7 | 3.752e+05 | 2.300e+04 | 0.11 | -420.00 | 0.0 | 4.416e+04 | -5512.96 | 198.04 | -2.710e+04 | 1.112e+04 | 3.752e+05 |
| | | 3.187e+04 | 1.112e+04 | -2.53e-04 | 0.0 | 60.0 | 4.416e+04 | -5932.96 | 198.04 | -2.710e+04 | 2.300e+04 | 3.187e+04 |
| 182 | 8 | 9.134e+05 | 8.140e+04 | 0.35 | -420.00 | 0.0 | 1.291e+05 | -1.575e+04 | 653.12 | -1.209e+05 | 4.221e+04 | 9.134e+05 |
| | | -4.412e+04 | 4.221e+04 | -5.02e-04 | 0.0 | 60.0 | 1.291e+05 | -1.617e+04 | 653.12 | -1.209e+05 | 8.140e+04 | -4.412e+04 |
| 182 | 21 | 4.089e+05 | 2.403e+04 | 0.12 | -420.00 | 0.0 | 4.741e+04 | -5990.32 | 219.06 | -2.747e+04 | 1.128e+04 | 4.089e+05 |
| | | 3.690e+04 | 1.128e+04 | -4.27e-04 | 0.0 | 60.0 | 4.741e+04 | -6410.32 | 219.06 | -2.747e+04 | 2.403e+04 | 3.690e+04 |
| 182 | 24 | 4.000e+05 | 2.575e+04 | 0.12 | -420.00 | 0.0 | 4.776e+04 | -5914.30 | 209.21 | -3.100e+04 | 1.280e+04 | 4.000e+05 |
| | | 3.253e+04 | 1.280e+04 | -1.17e-04 | 0.0 | 60.0 | 4.776e+04 | -6334.30 | 209.21 | -3.100e+04 | 2.575e+04 | 3.253e+04 |
| 182 | 25 | 4.089e+05 | 2.403e+04 | 0.12 | -420.00 | 0.0 | 4.741e+04 | -5990.30 | 219.05 | -2.747e+04 | 1.128e+04 | 4.089e+05 |
| | | 3.690e+04 | 1.128e+04 | -4.27e-04 | 0.0 | 60.0 | 4.741e+04 | -6410.30 | 219.05 | -2.747e+04 | 2.403e+04 | 3.690e+04 |
| 182 | 28 | 4.000e+05 | 2.575e+04 | 0.12 | -420.00 | 0.0 | 4.776e+04 | -5914.31 | 209.22 | -3.100e+04 | 1.280e+04 | 4.000e+05 |
| | | 3.253e+04 | 1.280e+04 | -1.17e-04 | 0.0 | 60.0 | 4.776e+04 | -6334.31 | 209.22 | -3.100e+04 | 2.575e+04 | 3.253e+04 |
| 182 | 29 | 4.092e+05 | 2.427e+04 | 0.12 | -420.00 | 0.0 | 4.742e+04 | -5996.46 | 220.93 | -2.746e+04 | 1.143e+04 | 4.092e+05 |
| | | 3.690e+04 | 1.143e+04 | -4.40e-04 | 0.0 | 60.0 | 4.742e+04 | -6416.46 | 220.93 | -2.746e+04 | 2.427e+04 | 3.690e+04 |
| 182 | 53 | 4.061e+05 | 2.457e+04 | 0.12 | -420.00 | 0.0 | 4.752e+04 | -5966.70 | 216.00 | -2.854e+04 | 1.176e+04 | 4.061e+05 |
| | | 3.554e+04 | 1.176e+04 | -3.30e-04 | 0.0 | 60.0 | 4.752e+04 | -6386.70 | 216.00 | -2.854e+04 | 2.457e+04 | 3.554e+04 |
| 182 | 56 | 4.028e+05 | 2.521e+04 | 0.12 | -420.00 | 0.0 | 4.765e+04 | -5937.92 | 212.27 | -2.992e+04 | 1.233e+04 | 4.028e+05 |
| | | 3.389e+04 | 1.233e+04 | -2.13e-04 | 0.0 | 60.0 | 4.765e+04 | -6357.92 | 212.27 | -2.992e+04 | 2.521e+04 | 3.389e+04 |
| 182 | 57 | 4.061e+05 | 2.457e+04 | 0.12 | -420.00 | 0.0 | 4.752e+04 | -5966.69 | 216.00 | -2.854e+04 | 1.176e+04 | 4.061e+05 |
| | | 3.554e+04 | 1.176e+04 | -3.30e-04 | 0.0 | 60.0 | 4.752e+04 | -6386.69 | 216.00 | -2.854e+04 | 2.457e+04 | 3.554e+04 |
| 182 | 60 | 4.028e+05 | 2.521e+04 | 0.12 | -420.00 | 0.0 | 4.765e+04 | -5937.92 | 212.27 | -2.992e+04 | 1.233e+04 | 4.028e+05 |
| | | 3.389e+04 | 1.233e+04 | -2.13e-04 | 0.0 | 60.0 | 4.765e+04 | -6357.92 | 212.27 | -2.992e+04 | 2.521e+04 | 3.389e+04 |
| 182 | 61 | 4.063e+05 | 2.466e+04 | 0.12 | -420.00 | 0.0 | 4.752e+04 | -5969.02 | 216.71 | -2.854e+04 | 1.181e+04 | 4.063e+05 |
| | | 3.554e+04 | 1.181e+04 | -3.35e-04 | 0.0 | 60.0 | 4.752e+04 | -6389.02 | 216.71 | -2.854e+04 | 2.466e+04 | 3.554e+04 |
| 182 | 85 | 4.045e+05 | 2.489e+04 | 0.12 | -420.00 | 0.0 | 4.759e+04 | -5952.31 | 214.14 | -2.923e+04 | 1.204e+04 | 4.045e+05 |
| | | 3.471e+04 | 1.204e+04 | -2.72e-04 | 0.0 | 60.0 | 4.759e+04 | -6372.31 | 214.14 | -2.923e+04 | 2.489e+04 | 3.471e+04 |
| 182 | 87 | 7.466e+05 | 6.275e+04 | 0.28 | -420.00 | 0.0 | 1.022e+05 | -1.253e+04 | 508.34 | -9.055e+04 | 3.225e+04 | 7.466e+05 |
| | | -1.757e+04 | 3.225e+04 | -4.27e-04 | 0.0 | 60.0 | 1.022e+05 | -1.295e+04 | 508.34 | -9.055e+04 | 6.275e+04 | -1.757e+04 |
| 182 | 88 | 3.850e+05 | 2.363e+04 | 0.12 | -420.00 | 0.0 | 4.530e+04 | -5659.41 | 203.41 | -2.781e+04 | 1.143e+04 | 3.850e+05 |
| | | 3.282e+04 | 1.143e+04 | -2.59e-04 | 0.0 | 60.0 | 4.530e+04 | -6079.41 | 203.41 | -2.781e+04 | 2.363e+04 | 3.282e+04 |
| 182 | 89 | 7.438e+05 | 6.256e+04 | 0.28 | -420.00 | 0.0 | 1.019e+05 | -1.248e+04 | 506.79 | -9.035e+04 | 3.216e+04 | 7.438e+05 |
| | | -1.784e+04 | 3.216e+04 | -4.25e-04 | 0.0 | 60.0 | 1.019e+05 | -1.290e+04 | 506.79 | -9.035e+04 | 6.256e+04 | -1.784e+04 |
| 182 | 97 | 7.274e+05 | 5.993e+04 | 0.27 | -420.00 | 0.0 | 9.854e+04 | -1.209e+04 | 487.18 | -8.552e+04 | 3.070e+04 | 7.274e+05 |
| | | -1.088e+04 | 3.070e+04 | -4.21e-04 | 0.0 | 60.0 | 9.854e+04 | -1.251e+04 | 487.18 | -8.552e+04 | 5.993e+04 | -1.088e+04 |
| 182 | 98 | 4.031e+05 | 2.480e+04 | 0.12 | -420.00 | 0.0 | 4.742e+04 | -5931.41 | 213.36 | -2.913e+04 | 1.200e+04 | 4.031e+05 |
| | | 3.458e+04 | 1.200e+04 | -2.71e-04 | 0.0 | 60.0 | 4.742e+04 | -6351.41 | 213.36 | -2.913e+04 | 2.480e+04 | 3.458e+04 |
| 182 | 102 | 4.045e+05 | 2.489e+04 | 0.12 | -420.00 | 0.0 | 4.759e+04 | -5952.31 | 214.14 | -2.923e+04 | 1.204e+04 | 4.045e+05 |
| | | 3.471e+04 | 1.204e+04 | -2.72e-04 | 0.0 | 60.0 | 4.759e+04 | -6372.31 | 214.14 | -2.923e+04 | 2.489e+04 | 3.471e+04 |
| 183 | 2 | 5.624e+05 | 1.302e+05 | 0.40 | -546.00 | 0.0 | 1.183e+05 | -1.883e+04 | 684.37 | -1.130e+05 | 8.914e+04 | 5.624e+05 |
| | | -5.839e+05 | 8.914e+04 | 3.75e-04 | 0.0 | 60.0 | 1.183e+05 | -1.938e+04 | 684.37 | -1.130e+05 | 1.302e+05 | -5.839e+05 |
| 183 | 7 | 2.322e+05 | 3.449e+04 | 0.12 | -420.00 | 0.0 | 3.558e+04 | -6160.60 | 191.48 | -2.493e+04 | 2.300e+04 | 2.322e+05 |
| | | -1.501e+05 | 2.300e+04 | -4.63e-05 | 0.0 | 60.0 | 3.558e+04 | -6580.60 | 191.48 | -2.493e+04 | 3.449e+04 | -1.501e+05 |
| 183 | 21 | 2.557e+05 | 3.706e+04 | 0.13 | -420.00 | 0.0 | 3.810e+04 | -6698.95 | 194.13 | -2.519e+04 | 2.403e+04 | 2.557e+05 |
| | | -1.588e+05 | 2.403e+04 | -1.73e-04 | 0.0 | 60.0 | 3.810e+04 | -7118.95 | 194.13 | -2.519e+04 | 3.706e+04 | -1.588e+05 |
| 183 | 24 | 2.452e+05 | 3.756e+04 | 0.13 | -420.00 | 0.0 | 3.858e+04 | -6602.78 | 219.80 | -2.860e+04 | 2.575e+04 | 2.452e+05 |
| | | -1.637e+05 | 2.575e+04 | 1.24e-04 | 0.0 | 60.0 | 3.858e+04 | -7022.78 | 219.80 | -2.860e+04 | 3.756e+04 | -1.637e+05 |
| 183 | 25 | 2.557e+05 | 3.706e+04 | 0.13 | -420.00 | 0.0 | 3.810e+04 | -6698.93 | 194.13 | -2.519e+04 | 2.403e+04 | 2.557e+05 |
| | | -1.588e+05 | 2.403e+04 | -1.73e-04 | 0.0 | 60.0 | 3.810e+04 | -7118.93 | 194.13 | -2.519e+04 | 3.706e+04 | -1.588e+05 |
| 183 | 29 | 2.561e+05 | 3.698e+04 | 0.13 | -420.00 | 0.0 | 3.812e+04 | -6706.22 | 196.04 | -2.517e+04 | 2.427e+04 | 2.561e+05 |
| | | -1.588e+05 | 2.427e+04 | -1.89e-04 | 0.0 | 60.0 | 3.812e+04 | -7126.22 | 196.04 | -2.517e+04 | 3.698e+04 | -1.588e+05 |
| 183 | 36 | 2.447e+05 | 3.764e+04 | 0.13 | -420.00 | 0.0 | 3.856e+04 | -6595.54 | 217.91 | -2.861e+04 | 2.551e+04 | 2.447e+05 |

| Trave | Cmb | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | Pos. | N | V 2 | V 3 | T | M 2 | M 3 |
|-------|-----|------------|------------|-----------|-----------|------|-----------|------------|----------|------------|-----------|------------|
| | | -1.636e+05 | 2.551e+04 | 1.40e-04 | 0.0 | 60.0 | 3.856e+04 | -7015.54 | 217.91 | -2.861e+04 | 3.764e+04 | -1.636e+05 |
| 183 | 53 | 2.524e+05 | 3.721e+04 | 0.13 | -420.00 | 0.0 | 3.825e+04 | -6669.06 | 202.12 | -2.623e+04 | 2.457e+04 | 2.524e+05 |
| | | -1.603e+05 | 2.457e+04 | -8.79e-05 | 0.0 | 60.0 | 3.825e+04 | -7089.06 | 202.12 | -2.623e+04 | 3.721e+04 | -1.603e+05 |
| 183 | 56 | 2.484e+05 | 3.740e+04 | 0.13 | -420.00 | 0.0 | 3.843e+04 | -6632.66 | 211.82 | -2.756e+04 | 2.521e+04 | 2.484e+05 |
| | | -1.622e+05 | 2.521e+04 | 3.18e-05 | 0.0 | 60.0 | 3.843e+04 | -7052.66 | 211.82 | -2.756e+04 | 3.740e+04 | -1.622e+05 |
| 183 | 57 | 2.524e+05 | 3.721e+04 | 0.13 | -420.00 | 0.0 | 3.825e+04 | -6669.05 | 202.11 | -2.623e+04 | 2.457e+04 | 2.524e+05 |
| | | -1.603e+05 | 2.457e+04 | -8.79e-05 | 0.0 | 60.0 | 3.825e+04 | -7089.05 | 202.11 | -2.623e+04 | 3.721e+04 | -1.603e+05 |
| 183 | 61 | 2.526e+05 | 3.718e+04 | 0.13 | -420.00 | 0.0 | 3.826e+04 | -6671.81 | 202.84 | -2.622e+04 | 2.466e+04 | 2.526e+05 |
| | | -1.603e+05 | 2.466e+04 | -9.28e-05 | 0.0 | 60.0 | 3.826e+04 | -7091.81 | 202.84 | -2.622e+04 | 3.718e+04 | -1.603e+05 |
| 183 | 68 | 2.483e+05 | 3.743e+04 | 0.13 | -420.00 | 0.0 | 3.843e+04 | -6629.93 | 211.11 | -2.756e+04 | 2.513e+04 | 2.483e+05 |
| | | -1.621e+05 | 2.513e+04 | 3.79e-05 | 0.0 | 60.0 | 3.843e+04 | -7049.93 | 211.11 | -2.756e+04 | 3.743e+04 | -1.621e+05 |
| 183 | 85 | 2.504e+05 | 3.731e+04 | 0.13 | -420.00 | 0.0 | 3.834e+04 | -6650.86 | 206.97 | -2.689e+04 | 2.489e+04 | 2.504e+05 |
| | | -1.612e+05 | 2.489e+04 | -4.90e-05 | 0.0 | 60.0 | 3.834e+04 | -7070.86 | 206.97 | -2.689e+04 | 3.731e+04 | -1.612e+05 |
| 183 | 87 | 4.083e+05 | 9.178e+04 | 0.28 | -420.00 | 0.0 | 8.399e+04 | -1.344e+04 | 483.84 | -7.892e+04 | 6.275e+04 | 4.083e+05 |
| | | -4.107e+05 | 6.275e+04 | 2.47e-04 | 0.0 | 60.0 | 8.399e+04 | -1.386e+04 | 483.84 | -7.892e+04 | 9.178e+04 | -4.107e+05 |
| 183 | 88 | 2.383e+05 | 3.543e+04 | 0.12 | -420.00 | 0.0 | 3.650e+04 | -6324.02 | 196.64 | -2.558e+04 | 2.363e+04 | 2.383e+05 |
| | | -1.538e+05 | 2.363e+04 | -4.72e-05 | 0.0 | 60.0 | 3.650e+04 | -6744.02 | 196.64 | -2.558e+04 | 3.543e+04 | -1.538e+05 |
| 183 | 97 | 4.019e+05 | 8.778e+04 | 0.27 | -420.00 | 0.0 | 8.085e+04 | -1.301e+04 | 464.11 | -7.473e+04 | 5.993e+04 | 4.019e+05 |
| | | -3.915e+05 | 5.993e+04 | 2.20e-04 | 0.0 | 60.0 | 8.085e+04 | -1.343e+04 | 464.11 | -7.473e+04 | 8.778e+04 | -3.915e+05 |
| 183 | 98 | 2.496e+05 | 3.717e+04 | 0.13 | -420.00 | 0.0 | 3.821e+04 | -6627.54 | 206.23 | -2.680e+04 | 2.480e+04 | 2.496e+05 |
| | | -1.607e+05 | 2.480e+04 | -4.89e-05 | 0.0 | 60.0 | 3.821e+04 | -7047.54 | 206.23 | -2.680e+04 | 3.717e+04 | -1.607e+05 |
| 183 | 102 | 2.504e+05 | 3.731e+04 | 0.13 | -420.00 | 0.0 | 3.834e+04 | -6650.86 | 206.97 | -2.689e+04 | 2.489e+04 | 2.504e+05 |
| | | -1.612e+05 | 2.489e+04 | -4.90e-05 | 0.0 | 60.0 | 3.834e+04 | -7070.86 | 206.97 | -2.689e+04 | 3.731e+04 | -1.612e+05 |
| 184 | 2 | -2.760e+05 | 1.302e+05 | 0.39 | -546.00 | 0.0 | 1.058e+05 | -2.377e+04 | -2170.04 | -1.019e+04 | 1.302e+05 | -2.760e+05 |
| | | -1.719e+06 | -0.06 | 2.70e-03 | 0.0 | 60.0 | 1.058e+05 | -2.432e+04 | -2170.04 | -1.019e+04 | -0.06 | -1.719e+06 |
| 184 | 7 | -1.851e+04 | 3.449e+04 | 0.12 | -420.00 | 0.0 | 3.011e+04 | -7776.91 | -574.89 | -268.18 | 3.449e+04 | -1.851e+04 |
| | | -4.977e+05 | -0.01 | 5.71e-04 | 0.0 | 60.0 | 3.011e+04 | -8196.91 | -574.89 | -268.18 | -0.01 | -4.977e+05 |
| 184 | 19 | -1.845e+04 | 3.450e+04 | 0.12 | -420.00 | 0.0 | 3.012e+04 | -7778.65 | -575.08 | -258.85 | 3.450e+04 | -1.845e+04 |
| | | -4.978e+05 | -0.01 | 5.71e-04 | 0.0 | 60.0 | 3.012e+04 | -8198.65 | -575.08 | -258.85 | -0.01 | -4.978e+05 |
| 184 | 24 | -2.619e+04 | 3.756e+04 | 0.12 | -420.00 | 0.0 | 3.286e+04 | -8458.12 | -626.00 | -1375.01 | 3.756e+04 | -2.619e+04 |
| | | -5.413e+05 | -0.02 | 7.71e-04 | 0.0 | 60.0 | 3.286e+04 | -8878.12 | -626.00 | -1375.01 | -0.02 | -5.413e+05 |
| 184 | 29 | -1.197e+04 | 3.698e+04 | 0.12 | -420.00 | 0.0 | 3.204e+04 | -8346.91 | -616.30 | 880.04 | 3.698e+04 | -1.197e+04 |
| | | -5.312e+05 | -0.01 | 4.50e-04 | 0.0 | 60.0 | 3.204e+04 | -8766.91 | -616.30 | 880.04 | -0.01 | -5.312e+05 |
| 184 | 32 | -2.673e+04 | 3.764e+04 | 0.12 | -420.00 | 0.0 | 3.286e+04 | -8464.08 | -627.31 | -1399.41 | 3.764e+04 | -2.673e+04 |
| | | -5.413e+05 | -0.02 | 7.88e-04 | 0.0 | 60.0 | 3.286e+04 | -8884.08 | -627.31 | -1399.41 | -0.02 | -5.413e+05 |
| 184 | 36 | -2.673e+04 | 3.764e+04 | 0.12 | -420.00 | 0.0 | 3.286e+04 | -8464.02 | -627.32 | -1400.69 | 3.764e+04 | -2.673e+04 |
| | | -5.413e+05 | -0.02 | 7.88e-04 | 0.0 | 60.0 | 3.286e+04 | -8884.02 | -627.32 | -1400.69 | -0.02 | -5.413e+05 |
| 184 | 56 | -2.194e+04 | 3.740e+04 | 0.12 | -420.00 | 0.0 | 3.261e+04 | -8425.52 | -623.40 | -693.43 | 3.740e+04 | -2.194e+04 |
| | | -5.382e+05 | -0.01 | 6.76e-04 | 0.0 | 60.0 | 3.261e+04 | -8845.52 | -623.40 | -693.43 | -0.01 | -5.382e+05 |
| 184 | 61 | -1.656e+04 | 3.718e+04 | 0.12 | -420.00 | 0.0 | 3.229e+04 | -8383.22 | -619.72 | 183.05 | 3.718e+04 | -1.656e+04 |
| | | -5.344e+05 | -0.01 | 5.55e-04 | 0.0 | 60.0 | 3.229e+04 | -8803.22 | -619.72 | 183.05 | -0.01 | -5.344e+05 |
| 184 | 64 | -2.214e+04 | 3.743e+04 | 0.12 | -420.00 | 0.0 | 3.261e+04 | -8427.76 | -623.89 | -702.42 | 3.743e+04 | -2.214e+04 |
| | | -5.382e+05 | -0.01 | 6.83e-04 | 0.0 | 60.0 | 3.261e+04 | -8847.76 | -623.89 | -702.42 | -0.01 | -5.382e+05 |
| 184 | 68 | -2.214e+04 | 3.743e+04 | 0.12 | -420.00 | 0.0 | 3.261e+04 | -8427.74 | -623.89 | -702.91 | 3.743e+04 | -2.214e+04 |
| | | -5.382e+05 | -0.01 | 6.83e-04 | 0.0 | 60.0 | 3.261e+04 | -8847.74 | -623.89 | -702.91 | -0.01 | -5.382e+05 |
| 184 | 85 | -1.935e+04 | 3.731e+04 | 0.12 | -420.00 | 0.0 | 3.245e+04 | -8405.49 | -621.81 | -259.69 | 3.731e+04 | -1.935e+04 |
| | | -5.363e+05 | -0.01 | 6.19e-04 | 0.0 | 60.0 | 3.245e+04 | -8825.49 | -621.81 | -259.69 | -0.01 | -5.363e+05 |
| 184 | 87 | -1.866e+05 | 9.178e+04 | 0.27 | -420.00 | 0.0 | 7.483e+04 | -1.697e+04 | -1529.60 | -6828.14 | 9.178e+04 | -1.866e+05 |
| | | -1.217e+06 | -0.04 | 1.88e-03 | 0.0 | 60.0 | 7.483e+04 | -1.739e+04 | -1529.60 | -6828.14 | -0.04 | -1.217e+06 |
| 184 | 88 | -1.879e+04 | 3.543e+04 | 0.12 | -420.00 | 0.0 | 3.089e+04 | -7986.44 | -590.53 | -265.35 | 3.543e+04 | -1.879e+04 |
| | | -5.106e+05 | -0.01 | 5.87e-04 | 0.0 | 60.0 | 3.089e+04 | -8406.44 | -590.53 | -265.35 | -0.01 | -5.106e+05 |
| 184 | 94 | -1.875e+04 | 3.544e+04 | 0.12 | -420.00 | 0.0 | 3.089e+04 | -7987.60 | -590.66 | -259.13 | 3.544e+04 | -1.875e+04 |
| | | -5.106e+05 | -0.01 | 5.87e-04 | 0.0 | 60.0 | 3.089e+04 | -8407.60 | -590.66 | -259.13 | -0.01 | -5.106e+05 |
| 184 | 97 | -1.703e+05 | 8.778e+04 | 0.26 | -420.00 | 0.0 | 7.179e+04 | -1.643e+04 | -1462.92 | -6168.12 | 8.778e+04 | -1.703e+05 |
| | | -1.169e+06 | -0.04 | 1.78e-03 | 0.0 | 60.0 | 7.179e+04 | -1.685e+04 | -1462.92 | -6168.12 | -0.04 | -1.169e+06 |
| 184 | 98 | -1.932e+04 | 3.717e+04 | 0.12 | -420.00 | 0.0 | 3.234e+04 | -8375.43 | -619.56 | -260.76 | 3.717e+04 | -1.932e+04 |
| | | -5.344e+05 | -0.01 | 6.17e-04 | 0.0 | 60.0 | 3.234e+04 | -8795.43 | -619.56 | -260.76 | -0.01 | -5.344e+05 |
| 184 | 101 | -1.929e+04 | 3.718e+04 | 0.12 | -420.00 | 0.0 | 3.234e+04 | -8376.01 | -619.62 | -257.65 | 3.718e+04 | -1.929e+04 |
| | | -5.345e+05 | -0.01 | 6.17e-04 | 0.0 | 60.0 | 3.234e+04 | -8796.01 | -619.62 | -257.65 | -0.01 | -5.345e+05 |
| 184 | 102 | -1.935e+04 | 3.731e+04 | 0.12 | -420.00 | 0.0 | 3.245e+04 | -8405.49 | -621.81 | -259.69 | 3.731e+04 | -1.935e+04 |
| | | -5.363e+05 | -0.01 | 6.19e-04 | 0.0 | 60.0 | 3.245e+04 | -8825.49 | -621.81 | -259.69 | -0.01 | -5.363e+05 |
| Trave | | M3 mx/mn | M2 mx/mn | D 2 / D 3 | Q 2 / Q 3 | | N | V 2 | V 3 | T | | |
| | | -1.719e+06 | -1.302e+05 | -0.44 | -546.00 | | 2.980e+04 | -2.432e+04 | -2170.04 | -1.468e+05 | | |
| | | 2.865e+06 | 1.302e+05 | 0.40 | 0.0 | | 2.932e+05 | 2.848e+04 | 2169.85 | 1.504e+05 | | |

24 RISULTATI ELEMENTI TIPO SHELL

24.1 LEGENDA RISULTATI ELEMENTI TIPO SHELL

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo shell, è possibile in relazione alle tabelle sottoriportate. Per ogni elemento, e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.



In particolare vengono riportati in ogni nodo di un elemento per ogni combinazione:

| | | |
|------------------------------|--|--|
| tensione di Von Mises | (valore riassuntivo del complessivo stato di sollecitazione) | |
| N max | sforzo membranale principale massimo | |
| N min | sforzo membranale principale minimo | |
| M max | sforzo flessionale principale massimo | |
| M min | sforzo flessionale principale minimo | |
| N1 | N2 | sforzi membranali e flessionali in direzione locale 1 e 2 dell'elemento (lo sforzo 2-1 è uguale allo sforzo 1-2 per la reciprocità delle tensioni tangenziali) |
| N1-2 | M1 | |
| M2 | M1-2 | |

I suddetti risultati possono a scelta del progettista essere preceduti o sostituiti da valori di sollecitazione non più riferiti al sistema locale dell'elemento ma al sistema globale.

In questo caso gli elementi vengono raggruppati in gruppi (M, S: macro gusci o macro setti, raggruppati per materiale, spessore, e posizione fisica) per la valutazione dei valori mediati ai nodi appartenenti agli elementi dei gruppi stessi.

I valori di sollecitazione sono, in questo caso, riferiti ad una terna specifica del gruppo ruotata di α_0 attorno all'asse Z per i gusci e ruotata di α_v attorno alla normale (che per definizione è orizzontale) al piano del setto.

Per i setti, in particolare, se α_v è zero, l'asse '1-1 rappresenta la verticale e l'asse '2-2 l'orizzontale contenuta nel setto.

Le azioni sui setti possono essere espresse anche con formato macro, cioè riferite all'intero macroelemento.

In particolare vengono riportati per ogni quota Z dei nodi e per ogni combinazione i seguenti valori:

| | |
|----------------|--|
| N memb. | Azione membranale complessiva agente sulla parete in direzione Z |
| V memb. | Azione complessiva di taglio agente nel piano del macroelemento |
| V orto | Azione complessiva di taglio agente in direzione perpendicolare al macroelemento |
| M memb. | Azione flessionale complessiva agente nel piano del macroelemento |
| M orto | Azione flessionale complessiva agente in direzione perpendicolare al macroelemento |
| T | Azione torsionale complessiva agente nel piano orizzontale |

| Macro | Tipo | Angolo 1-X (gradi) |
|-------|--------|--------------------|
| 1 | Guscio | 0.0 |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|---|-----|------|---------|----------|---------|----------|--------|---------|----------|---------|----------|----------|
| | | | | daN/cm | daN/cm | daN/cm | daN/cm | daN/cm | daN | daN | daN | daN | daN |
| 1 | 2 | 43 | | 1801.85 | 483.23 | 488.18 | 1796.90 | -80.62 | 1478.80 | 760.69 | 763.15 | 1476.35 | -41.90 |
| 1 | 2 | 44 | | 826.02 | 157.28 | 157.58 | 825.72 | -14.20 | 710.81 | -76.84 | -76.00 | 709.97 | 25.75 |
| 1 | 2 | 45 | | 681.09 | -192.83 | -192.58 | 680.84 | -14.54 | 1247.16 | 638.82 | 759.35 | 1126.63 | 242.48 |
| 1 | 2 | 46 | | 811.22 | 106.57 | 108.39 | 809.40 | -35.81 | 1099.98 | 271.86 | 311.01 | 1060.83 | 175.74 |
| 1 | 2 | 47 | | 491.15 | -22.15 | -20.97 | 489.97 | 24.58 | 343.06 | -572.81 | 217.67 | -447.42 | 314.83 |
| 1 | 2 | 48 | | 556.48 | 31.29 | 31.91 | 555.86 | 18.05 | 237.42 | -461.52 | 197.92 | -422.01 | 161.41 |
| 1 | 2 | 49 | | 276.24 | -23.38 | -18.90 | 271.76 | -36.38 | 391.34 | -1007.83 | 227.26 | -843.75 | -450.18 |
| 1 | 2 | 50 | | 338.29 | 28.71 | 32.70 | 334.29 | -34.93 | 308.72 | -862.25 | 234.17 | -787.69 | -285.91 |
| 1 | 2 | 51 | | 4.99 | -892.16 | 4.15 | -891.33 | 27.42 | 55.00 | -3597.89 | 42.58 | -3585.47 | 212.68 |
| 1 | 2 | 52 | | -1.80 | -913.07 | -2.85 | -912.02 | 30.99 | 37.28 | -3587.69 | 32.63 | -3583.04 | 129.69 |
| 1 | 2 | 53 | | 17.74 | -1351.61 | 17.55 | -1351.42 | -16.40 | -249.43 | -4885.22 | -252.47 | -4882.18 | -118.55 |
| 1 | 2 | 54 | | -19.22 | -1361.47 | -19.53 | -1361.17 | -20.28 | -401.59 | -4743.55 | -403.00 | -4742.14 | -78.23 |
| 1 | 2 | 55 | | 183.52 | -12.52 | -3.95 | 174.96 | 40.08 | 233.55 | -1326.37 | 178.68 | -1271.49 | 287.38 |
| 1 | 2 | 56 | | 217.98 | -3.20 | 3.38 | 211.39 | 37.58 | 182.55 | -1247.37 | 169.42 | -1234.24 | 136.39 |
| 1 | 2 | 57 | | 8.12 | -835.47 | 6.28 | -833.63 | -39.36 | -50.03 | -3507.38 | -74.18 | -3483.23 | -287.95 |
| 1 | 2 | 58 | | -13.99 | -837.57 | -16.67 | -834.89 | -46.87 | -8.31 | -3401.85 | -25.75 | -3384.41 | -242.65 |
| 1 | 2 | 59 | | 14.66 | -1466.65 | 14.63 | -1466.62 | 6.86 | -234.09 | -5102.14 | -235.11 | -5101.12 | 70.51 |
| 1 | 2 | 60 | | -13.64 | -1483.66 | -13.69 | -1483.62 | 7.96 | -347.90 | -4996.77 | -352.09 | -4992.59 | 139.49 |
| 1 | 2 | 61 | | 4.98 | -1086.11 | 4.42 | -1085.56 | 24.54 | 7.09 | -4012.90 | -2.76 | -4003.04 | 198.79 |
| 1 | 2 | 62 | | -1.70 | -1110.95 | -2.46 | -1110.20 | 28.92 | 9.34 | -3998.00 | 3.89 | -3992.55 | 147.67 |
| 1 | 2 | 63 | | 11.14 | -143.07 | 0.65 | -132.58 | 38.82 | 170.64 | -1989.76 | 139.64 | -1958.76 | 256.95 |
| 1 | 2 | 64 | | 6.43 | -130.97 | -6.68 | -117.87 | 40.36 | 135.67 | -1939.28 | 128.53 | -1932.14 | 121.49 |
| 1 | 2 | 65 | | 735.34 | 164.56 | 164.62 | 735.27 | 6.18 | 713.23 | -173.54 | -173.51 | 713.20 | -5.31 |
| 1 | 2 | 66 | | 1551.50 | 400.15 | 404.86 | 1546.79 | 73.50 | 1620.81 | 1141.07 | 1154.86 | 1607.02 | 80.17 |
| 1 | 2 | 67 | | 539.19 | -172.68 | -172.66 | 539.18 | 3.49 | 1245.90 | 476.54 | 849.97 | 872.47 | -384.52 |
| 1 | 2 | 68 | | 665.22 | 108.67 | 109.41 | 664.47 | 20.37 | 940.55 | 138.31 | 287.47 | 791.38 | -312.12 |
| 1 | 2 | 69 | | 14.03 | -1135.30 | 13.32 | -1134.59 | -28.58 | -203.84 | -4388.07 | -214.65 | -4377.25 | -212.45 |
| 1 | 2 | 70 | | -17.82 | -1143.29 | -18.85 | -1142.25 | -34.17 | -264.21 | -4256.47 | -272.99 | -4247.69 | -187.03 |
| 1 | 2 | 71 | | 5.47 | -417.29 | 2.63 | -414.45 | 34.58 | 129.70 | -2587.25 | 108.88 | -2566.43 | 236.95 |
| 1 | 2 | 72 | | -4.12 | -419.30 | -7.52 | -415.91 | 37.41 | 94.58 | -2558.76 | 89.54 | -2553.73 | 115.47 |
| 1 | 2 | 73 | | 5.53 | -1251.17 | 5.18 | -1250.83 | 20.90 | -50.47 | -4372.28 | -57.65 | -4365.10 | 175.96 |
| 1 | 2 | 74 | | -4.43 | -1275.32 | -4.95 | -1274.80 | 25.76 | -41.84 | -4342.25 | -48.49 | -4335.60 | 169.07 |
| 1 | 2 | 75 | | 17.97 | -1462.36 | 17.96 | -1462.35 | -4.00 | -258.83 | -5123.81 | -258.91 | -5123.73 | -19.76 |
| 1 | 2 | 76 | | -17.73 | -1474.82 | -17.74 | -1474.81 | -4.27 | -429.08 | -4990.58 | -429.36 | -4990.30 | 35.74 |
| 1 | 2 | 77 | | 16.62 | -130.41 | -3.81 | -109.98 | -50.86 | 193.83 | -1904.27 | 113.75 | -1824.19 | -402.00 |
| 1 | 2 | 78 | | 30.29 | -106.30 | 2.62 | -78.62 | -54.90 | 246.82 | -1777.00 | 213.09 | -1743.28 | -259.07 |
| 1 | 2 | 79 | | 5.04 | -669.00 | 3.65 | -667.61 | 30.61 | 94.15 | -3123.09 | 78.52 | -3107.46 | 223.70 |
| 1 | 2 | 80 | | -3.46 | -682.28 | -5.15 | -680.60 | 33.75 | 62.49 | -3108.18 | 58.06 | -3103.74 | 118.51 |
| 1 | 2 | 81 | | 5.53 | -489.20 | 0.88 | -484.56 | -47.71 | 53.48 | -2723.70 | 9.61 | -2679.83 | -346.29 |
| 1 | 2 | 82 | | -4.18 | -480.49 | -10.93 | -473.74 | -56.30 | 152.10 | -2615.27 | 129.50 | -2592.67 | -249.08 |
| 1 | 2 | 83 | | 8.92 | -1384.70 | 8.76 | -1384.54 | 15.21 | -108.84 | -4691.78 | -112.92 | -4687.70 | 136.64 |
| 1 | 2 | 84 | | -9.00 | -1405.47 | -9.23 | -1405.23 | 18.00 | -149.24 | -4634.73 | -156.75 | -4627.22 | 183.40 |
| 1 | 2 | 106 | | 835.12 | 163.94 | 163.94 | 835.12 | 0.16 | 718.67 | 42.26 | 42.29 | 718.64 | -3.87 |
| 1 | 2 | 107 | | 786.86 | 127.76 | 127.76 | 786.86 | 0.45 | 1039.72 | 271.17 | 271.51 | 1039.38 | -16.17 |
| 1 | 2 | 108 | | 548.75 | 59.08 | 59.08 | 548.75 | 0.39 | 111.79 | -437.44 | 111.39 | -437.04 | -14.83 |
| 1 | 2 | 109 | | 325.23 | 61.36 | 61.36 | 325.23 | 0.24 | 237.05 | -792.68 | 237.02 | -792.65 | 5.47 |
| 1 | 2 | 110 | | -3.67 | -918.81 | -3.67 | -918.81 | 0.30 | 104.66 | -3590.82 | 104.66 | -3590.82 | 1.47 |
| 1 | 2 | 111 | | -41.74 | -1334.97 | -41.74 | -1334.97 | 0.31 | 1365.92 | -4236.22 | 1365.92 | -4236.21 | 4.44 |
| 1 | 2 | 112 | | 219.16 | 11.45 | 11.45 | 219.16 | 0.29 | 95.45 | -1240.73 | 95.36 | -1240.63 | -11.28 |
| 1 | 2 | 113 | | -21.61 | -830.23 | -21.61 | -830.23 | 0.32 | 816.40 | -3254.41 | 816.40 | -3254.40 | 4.98 |
| 1 | 2 | 114 | | -28.00 | -1470.36 | -28.00 | -1470.36 | 0.30 | 1090.84 | -4564.98 | 1090.84 | -4564.98 | 3.89 |
| 1 | 2 | 115 | | -0.98 | -1121.48 | -0.98 | -1121.48 | 0.31 | 193.55 | -3991.66 | 193.55 | -3991.66 | 2.42 |
| 1 | 2 | 116 | | -7.62 | -110.18 | -7.62 | -110.18 | 0.13 | 84.98 | -1935.14 | 84.96 | -1935.13 | -6.02 |
| 1 | 2 | 117 | | 739.02 | 179.56 | 179.56 | 739.02 | 0.24 | 732.46 | -44.31 | -44.31 | 732.46 | 0.79 |
| 1 | 2 | 118 | | 642.21 | 131.98 | 131.98 | 642.20 | 0.17 | 770.36 | 283.53 | 283.59 | 770.30 | 5.47 |
| 1 | 2 | 119 | | -35.25 | -1123.93 | -35.25 | -1123.93 | 0.31 | 1182.88 | -3809.29 | 1182.87 | -3809.28 | 4.71 |
| 1 | 2 | 120 | | -10.88 | -412.66 | -10.88 | -412.66 | 0.13 | 72.03 | -2558.95 | 72.02 | -2558.95 | -2.04 |
| 1 | 2 | 121 | | -2.13 | -1288.08 | -2.13 | -1288.08 | 0.31 | 372.04 | -4305.20 | 372.04 | -4305.19 | 3.07 |
| 1 | 2 | 122 | | -39.18 | -1450.18 | -39.18 | -1450.18 | 0.30 | 1333.97 | -4488.00 | 1333.97 | -4487.99 | 4.18 |
| 1 | 2 | 123 | | 14.06 | -76.84 | 14.06 | -76.84 | 0.29 | 353.35 | -1726.76 | 353.34 | -1726.75 | 5.42 |
| 1 | 2 | 124 | | -7.86 | -682.45 | -7.86 | -682.45 | 0.25 | 72.30 | -3111.70 | 72.30 | -3111.70 | 7.52e-02 |
| 1 | 2 | 125 | | -7.57 | -473.65 | -7.57 | -473.65 | 0.32 | 537.19 | -2541.96 | 537.18 | -2541.95 | 5.23 |
| 1 | 2 | 126 | | -11.87 | -1409.89 | -11.87 | -1409.89 | 0.31 | 676.59 | -4514.42 | 676.59 | -4514.41 | 3.54 |
| 1 | 2 | 148 | | 826.70 | 157.18 | 157.47 | 826.41 | 13.93 | 714.79 | -77.02 | -75.63 | 713.41 | -33.10 |
| 1 | 2 | 149 | | 811.74 | 106.35 | 108.29 | 809.80 | 37.00 | 1111.51 | 252.33 | 304.14 | 1059.70 | -204.53 |
| 1 | 2 | 150 | | 555.04 | 31.12 | 31.70 | 554.46 | -17.45 | 235.51 | -483.42 | 182.86 | -430.76 | -187.30 |
| 1 | 2 | 151 | | 338.67 | 28.51 | 32.60 | 334.59 | 35.36 | 317.05 | -867.56 | 236.82 | -787.33 | 297.66 |
| 1 | 2 | 152 | | -1.85 | -914.03 | -2.88 | -913.00 | -30.55 | 21.39 | -3594.69 | 16.83 | -3590.12 | -128.38 |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|---|-----|---------|----------|---------|----------|---------|---------|----------|---------|----------|---------|-------|
| 1 | 2 | 153 | -19.20 | -1361.23 | -19.52 | -1360.91 | 20.77 | -404.75 | -4745.43 | -406.46 | -4743.72 | 86.15 | |
| 1 | 2 | 154 | 214.72 | -3.11 | 3.45 | 208.16 | -37.22 | 162.39 | -1271.20 | 145.12 | -1253.94 | -156.39 | |
| 1 | 2 | 155 | -13.93 | -837.46 | -16.66 | -834.72 | 47.37 | -7.20 | -3404.13 | -25.96 | -3385.38 | 251.71 | |
| 1 | 2 | 156 | -13.66 | -1483.43 | -13.70 | -1483.40 | -7.48 | -355.10 | -4998.87 | -358.89 | -4995.07 | -132.75 | |
| 1 | 2 | 157 | -1.77 | -1111.39 | -2.50 | -1110.66 | -28.44 | -3.94 | -4003.14 | -9.16 | -3997.93 | -144.26 | |
| 1 | 2 | 158 | 6.14 | -134.17 | -6.50 | -121.53 | -40.17 | 110.15 | -1961.83 | 101.49 | -1953.17 | -133.68 | |
| 1 | 2 | 159 | 735.84 | 164.77 | 164.83 | 735.78 | -5.60 | 712.53 | -178.26 | -178.22 | 712.48 | 6.64 | |
| 1 | 2 | 160 | 665.63 | 108.69 | 109.42 | 664.90 | -20.22 | 951.63 | 128.63 | 288.03 | 792.23 | 325.24 | |
| 1 | 2 | 161 | -17.77 | -1143.10 | -18.84 | -1142.03 | 34.66 | -265.24 | -4258.55 | -274.83 | -4248.96 | 195.49 | |
| 1 | 2 | 162 | -4.07 | -422.05 | -7.41 | -418.72 | -37.19 | 72.24 | -2572.15 | 66.67 | -2566.57 | -121.29 | |
| 1 | 2 | 163 | -4.49 | -1275.43 | -4.99 | -1274.92 | -25.27 | -52.90 | -4346.00 | -59.19 | -4339.72 | -164.17 | |
| 1 | 2 | 164 | -17.73 | -1474.56 | -17.74 | -1474.54 | 4.76 | -434.28 | -4992.45 | -434.45 | -4992.27 | -28.38 | |
| 1 | 2 | 165 | 30.68 | -106.58 | 2.56 | -78.46 | 55.40 | 252.06 | -1779.89 | 215.61 | -1743.44 | 269.71 | |
| 1 | 2 | 166 | -3.49 | -683.99 | -5.13 | -682.35 | -33.38 | 43.57 | -3117.72 | 38.99 | -3113.14 | -120.18 | |
| 1 | 2 | 167 | -4.07 | -480.48 | -10.94 | -473.61 | 56.81 | 155.21 | -2617.66 | 130.83 | -2593.28 | 258.86 | |
| 1 | 2 | 168 | -9.04 | -1405.36 | -9.26 | -1405.14 | -17.51 | -158.35 | -4637.44 | -165.39 | -4630.40 | -177.45 | |
| 1 | 2 | 190 | 1811.48 | 487.18 | 492.05 | 1806.61 | 80.16 | 1488.41 | 778.83 | 782.14 | 1485.10 | 48.32 | |
| 1 | 2 | 191 | 680.90 | -195.07 | -194.82 | 680.66 | 14.64 | 1270.36 | 625.87 | 766.14 | 1130.10 | -265.94 | |
| 1 | 2 | 192 | 487.85 | -22.43 | -21.23 | 486.65 | -24.75 | 357.92 | -598.99 | 218.44 | -459.51 | -337.66 | |
| 1 | 2 | 193 | 276.47 | -23.44 | -18.90 | 271.93 | 36.63 | 404.34 | -1014.42 | 234.44 | -844.52 | 460.63 | |
| 1 | 2 | 194 | 4.94 | -894.28 | 4.11 | -893.45 | -27.29 | 42.96 | -3608.15 | 30.48 | -3595.67 | -213.12 | |
| 1 | 2 | 195 | 17.73 | -1351.10 | 17.53 | -1350.89 | 16.58 | -252.31 | -4887.93 | -255.71 | -4884.54 | 125.40 | |
| 1 | 2 | 196 | 178.32 | -12.45 | -3.65 | 169.51 | -40.03 | 231.23 | -1356.98 | 170.84 | -1296.59 | -303.76 | |
| 1 | 2 | 197 | 8.13 | -835.12 | 6.27 | -833.26 | 39.53 | -49.38 | -3510.65 | -74.87 | -3485.17 | 295.90 | |
| 1 | 2 | 198 | 14.62 | -1466.30 | 14.59 | -1466.27 | -6.69 | -240.02 | -5105.43 | -240.89 | -5104.57 | -65.00 | |
| 1 | 2 | 199 | 4.91 | -1087.22 | 4.37 | -1086.67 | -24.38 | -3.62 | -4020.43 | -13.31 | -4010.74 | -197.07 | |
| 1 | 2 | 200 | 11.04 | -148.65 | 1.01 | -138.61 | -38.75 | 160.33 | -2019.15 | 126.81 | -1985.63 | -268.21 | |
| 1 | 2 | 201 | 1552.55 | 400.38 | 405.11 | 1547.82 | -73.62 | 1627.63 | 1169.75 | 1186.14 | 1611.24 | -85.05 | |
| 1 | 2 | 202 | 539.55 | -172.84 | -172.82 | 539.53 | -3.34 | 1265.11 | 475.13 | 865.00 | 875.23 | 394.96 | |
| 1 | 2 | 203 | 14.03 | -1134.84 | 13.31 | -1134.12 | 28.75 | -205.11 | -4390.93 | -216.69 | -4379.35 | 219.85 | |
| 1 | 2 | 204 | 5.59 | -422.25 | 2.79 | -419.46 | -34.49 | 118.04 | -2606.21 | 96.05 | -2584.22 | -243.77 | |
| 1 | 2 | 205 | 5.47 | -1251.57 | 5.13 | -1251.23 | -20.73 | -59.60 | -4377.82 | -66.51 | -4370.91 | -172.62 | |
| 1 | 2 | 206 | 17.94 | -1461.87 | 17.93 | -1461.86 | 4.17 | -263.23 | -5126.65 | -263.37 | -5126.51 | 26.00 | |
| 1 | 2 | 207 | 16.80 | -130.43 | -3.81 | -109.82 | 51.08 | 200.73 | -1909.24 | 117.19 | -1825.70 | 411.46 | |
| 1 | 2 | 208 | 5.04 | -672.45 | 3.66 | -671.08 | -30.50 | 81.50 | -3136.99 | 65.41 | -3120.91 | -226.96 | |
| 1 | 2 | 209 | 5.57 | -488.99 | 0.88 | -484.30 | 47.91 | 56.61 | -2727.62 | 10.62 | -2681.62 | 354.89 | |
| 1 | 2 | 210 | 8.87 | -1384.63 | 8.71 | -1384.47 | -15.03 | -116.35 | -4695.93 | -120.16 | -4692.12 | -132.06 | |
| 1 | 2 | 211 | 49.04 | -1212.39 | -151.67 | -1011.68 | -461.41 | 56.22 | -325.56 | -10.10 | -259.24 | -144.64 | |
| 1 | 2 | 212 | 852.17 | -0.20 | 41.80 | 810.17 | 184.49 | 1128.46 | -137.16 | -117.80 | 1109.10 | 155.34 | |
| 1 | 2 | 213 | -6.13 | -1478.09 | -6.17 | -1478.05 | 7.59 | 29.10 | -4997.19 | 29.06 | -4997.15 | 13.50 | |
| 1 | 2 | 214 | 466.30 | 37.04 | 42.00 | 461.33 | 45.90 | 70.29 | -515.46 | 58.22 | -503.38 | 83.24 | |
| 1 | 2 | 215 | 248.89 | 31.96 | 39.04 | 241.81 | -38.54 | 69.70 | -918.50 | 57.32 | -906.12 | -109.92 | |
| 1 | 2 | 216 | 149.30 | 11.72 | 12.51 | 148.51 | 10.37 | 8.70 | -1313.58 | 3.24 | -1308.13 | 84.77 | |
| 1 | 2 | 217 | -7.15 | -1479.52 | -7.16 | -1479.52 | 3.10 | 20.32 | -5016.17 | 20.31 | -5016.16 | -6.52 | |
| 1 | 2 | 218 | 1.46 | -147.62 | 1.36 | -147.52 | 3.90 | 6.48 | -1978.22 | 3.20 | -1974.93 | 80.66 | |
| 1 | 2 | 219 | -7.09 | -1369.13 | -7.09 | -1369.13 | 1.04 | 20.12 | -4776.80 | 19.92 | -4776.60 | -30.89 | |
| 1 | 2 | 220 | -1.54 | -420.98 | -1.56 | -420.96 | 2.63 | 7.42 | -2573.99 | 5.13 | -2571.70 | 76.82 | |
| 1 | 2 | 221 | -5.88 | -1148.45 | -5.89 | -1148.44 | -3.55 | 28.34 | -4280.50 | 27.73 | -4279.89 | -51.30 | |
| 1 | 2 | 222 | -2.22 | -669.13 | -2.23 | -669.12 | 2.28 | 8.09 | -3107.25 | 6.36 | -3105.52 | 73.37 | |
| 1 | 2 | 223 | 700.44 | -2.41 | 39.40 | 658.63 | -166.25 | 880.46 | -129.50 | -98.33 | 849.29 | -174.67 | |
| 1 | 2 | 224 | -2.44 | -889.94 | -2.45 | -889.93 | 2.16 | 8.45 | -3579.03 | 7.12 | -3577.70 | 69.09 | |
| 1 | 2 | 225 | -4.29 | -841.97 | -4.31 | -841.95 | -3.87 | -2.22 | -3471.11 | -3.72 | -3469.60 | -72.30 | |
| 1 | 2 | 226 | -2.80 | -1082.48 | -2.81 | -1082.47 | 2.26 | 8.55 | -3990.68 | 7.57 | -3989.70 | 62.59 | |
| 1 | 2 | 227 | -0.27 | -496.12 | -0.27 | -496.12 | -0.69 | 5.76 | -2688.31 | 2.53 | -2685.08 | -93.27 | |
| 1 | 2 | 228 | -3.89 | -1247.26 | -3.90 | -1247.25 | 3.26 | 8.13 | -4346.05 | 7.51 | -4345.43 | 51.98 | |
| 1 | 2 | 229 | 11.40 | -134.57 | 11.18 | -134.34 | -5.69 | 8.35 | -1864.17 | 2.24 | -1858.06 | -106.79 | |
| 1 | 2 | 230 | -5.19 | -1386.17 | -5.23 | -1386.13 | 7.60 | -0.74 | -4660.94 | -0.98 | -4660.70 | 33.37 | |
| 1 | 2 | 231 | 76.33 | -1046.25 | -124.79 | -845.13 | 430.49 | -18.73 | -369.22 | -63.14 | -324.81 | 116.58 | |
| 1 | 2 | 232 | 852.96 | -1.11 | 41.85 | 809.99 | -186.68 | 1137.81 | -139.34 | -118.24 | 1116.71 | -162.78 | |
| 1 | 2 | 233 | 47.05 | -1221.56 | -152.03 | -1022.48 | 461.43 | 40.44 | -315.50 | -9.22 | -265.83 | 123.33 | |
| 1 | 2 | 234 | 462.43 | 37.15 | 42.18 | 457.40 | -45.99 | 72.20 | -534.49 | 58.44 | -520.73 | -90.34 | |
| 1 | 2 | 235 | 142.58 | 11.64 | 12.49 | 141.73 | -10.49 | 9.41 | -1337.86 | 3.33 | -1331.79 | -90.26 | |
| 1 | 2 | 236 | 1.40 | -155.03 | 1.31 | -154.94 | -3.75 | 7.16 | -2002.73 | 3.55 | -1999.12 | -85.11 | |
| 1 | 2 | 237 | -1.60 | -426.99 | -1.61 | -426.98 | -2.47 | 7.14 | -2591.01 | 4.67 | -2588.55 | -80.02 | |
| 1 | 2 | 238 | -2.25 | -673.24 | -2.25 | -673.23 | -2.26 | 8.06 | -3119.72 | 6.25 | -3117.91 | -75.23 | |
| 1 | 2 | 239 | -2.43 | -892.47 | -2.44 | -892.47 | -2.17 | 8.43 | -3588.19 | 7.08 | -3586.83 | -69.82 | |
| 1 | 2 | 240 | -2.79 | -1083.81 | -2.79 | -1083.81 | -2.27 | 8.54 | -3997.37 | 7.57 | -3996.40 | -62.33 | |
| 1 | 2 | 241 | -3.88 | -1247.73 | -3.89 | -1247.73 | -3.27 | 8.14 | -4350.94 | 7.54 | -4350.35 | -50.91 | |
| 1 | 2 | 242 | -5.18 | -1386.07 | -5.22 | -1386.03 | -7.61 | -0.73 | -4664.58 | -0.94 | -4664.37 | -31.64 | |
| 1 | 2 | 243 | -6.11 | -1477.65 | -6.15 | -1477.61 | -7.60 | 29.12 | -5000.02 | 29.10 | -4999.99 | -11.23 | |
| 1 | 2 | 244 | -7.14 | -1478.91 | -7.15 | -1478.90 | -3.11 | 20.35 | -5018.50 | 20.33 | -5018.49 | 9.21 | |
| 1 | 2 | 245 | -7.08 | -1368.48 | -7.08 | -1368.48 | -1.04 | 20.16 | -4778.90 | 19.92 | -4778.66 | 33.90 | |
| 1 | 2 | 246 | -5.88 | -1147.85 | -5.89 | -1147.84 | 3.55 | 28.40 | -4282.56 | 27.71 | -4281.87 | 54.56 | |
| 1 | 2 | 247 | -4.29 | -841.50 | -4.31 | -841.48 | 3.87 | -2.14 | -3473.30 | -3.79 | -3471.65 | 75.73 | |
| 1 | 2 | 248 | -0.27 | -495.80 | -0.27 | -495.80 | 0.68 | 5.89 | -2690.76 | 2.41 | -2687.29 | 96.79 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|--------|----------|-----------|----------|---------|---------|----------|---------|----------|---------|-------|
| 1 | 2 | 249 | 11.40 | -134.43 | 11.18 | -134.20 | 5.69 | 8.61 | -1866.92 | 2.10 | -1860.40 | 110.34 | |
| 1 | 2 | 250 | 248.91 | 31.97 | 39.06 | 241.82 | 38.56 | 70.55 | -921.34 | 57.42 | -908.20 | 113.37 | |
| 1 | 2 | 251 | 700.60 | -2.48 | 39.41 | 658.70 | 166.43 | 882.65 | -130.33 | -98.02 | 850.34 | 178.01 | |
| 1 | 2 | 252 | 76.48 | -1046.93 | -124.85 | -845.61 | -430.86 | -21.08 | -365.36 | -63.63 | -322.81 | -113.30 | |
| 1 | 30 | 43 | 509.35 | 130.52 | 131.79 | 508.09 | -21.83 | 500.49 | 241.20 | 241.22 | 500.48 | 2.08 | |
| 1 | 30 | 44 | 235.12 | 44.61 | 44.91 | 234.82 | -7.50 | 240.09 | -8.70 | -7.40 | 238.79 | 17.93 | |
| 1 | 30 | 45 | 184.18 | -55.56 | -55.44 | 184.05 | -5.46 | 310.53 | 177.06 | 219.69 | 267.89 | 62.23 | |
| 1 | 30 | 46 | 215.81 | 28.88 | 30.08 | 214.61 | -14.89 | 252.19 | 60.99 | 71.72 | 241.46 | 44.01 | |
| 1 | 30 | 47 | 103.63 | -5.65 | -5.33 | 103.31 | 5.94 | 77.65 | -273.36 | 56.23 | -251.95 | 84.01 | |
| 1 | 30 | 48 | 117.37 | 8.27 | 8.28 | 117.36 | 1.16 | 22.71 | -257.68 | 16.82 | -251.79 | 40.21 | |
| 1 | 30 | 49 | 103.59 | -5.63 | -5.27 | 103.23 | -6.25 | 76.67 | -274.74 | 54.36 | -252.44 | -85.68 | |
| 1 | 30 | 50 | 117.09 | 8.35 | 8.39 | 117.05 | -1.91 | 20.22 | -258.60 | 14.62 | -253.00 | -39.13 | |
| 1 | 30 | 51 | 2.21 | -327.76 | 2.16 | -327.71 | 4.05 | 12.15 | -1226.33 | 11.40 | -1225.58 | 30.51 | |
| 1 | 30 | 52 | -2.95 | -330.49 | -2.99 | -330.46 | 3.37 | -92.39 | -1232.65 | -92.52 | -1232.52 | 12.20 | |
| 1 | 30 | 53 | 2.27 | -327.98 | 2.22 | -327.93 | -3.92 | 12.14 | -1227.51 | 11.36 | -1226.73 | -31.05 | |
| 1 | 30 | 54 | -2.92 | -330.93 | -2.95 | -330.91 | -3.10 | -93.10 | -1233.92 | -93.24 | -1233.78 | -12.47 | |
| 1 | 30 | 55 | 6.82 | -14.89 | -0.25 | -7.82 | 10.17 | 53.96 | -542.77 | 44.69 | -533.50 | 73.78 | |
| 1 | 30 | 56 | 6.54 | -7.20 | -9.33e-02 | -0.56 | 6.87 | -6.60 | -531.39 | -8.50 | -529.49 | 31.57 | |
| 1 | 30 | 57 | 2.07 | -199.40 | 1.78 | -199.12 | -7.57 | 24.75 | -957.81 | 22.14 | -955.20 | -50.60 | |
| 1 | 30 | 58 | -3.67 | -199.85 | -3.88 | -199.64 | -6.48 | -59.79 | -956.94 | -60.25 | -956.48 | -20.35 | |
| 1 | 30 | 59 | 2.34 | -393.49 | 2.33 | -393.49 | -1.07 | 5.38 | -1364.85 | 5.29 | -1364.77 | -10.86 | |
| 1 | 30 | 60 | -2.25 | -396.57 | -2.25 | -396.57 | -0.65 | -109.54 | -1373.20 | -109.56 | -1373.18 | -4.52 | |
| 1 | 30 | 61 | 2.28 | -368.69 | 2.26 | -368.67 | 2.63 | 8.01 | -1312.30 | 7.69 | -1311.98 | 20.59 | |
| 1 | 30 | 62 | -2.52 | -371.66 | -2.53 | -371.65 | 2.19 | -102.96 | -1320.02 | -103.02 | -1319.97 | 8.33 | |
| 1 | 30 | 63 | 1.91 | -111.33 | 1.14 | -110.55 | 9.32 | 35.77 | -767.99 | 31.13 | -763.35 | 60.90 | |
| 1 | 30 | 64 | -2.80 | -108.52 | -3.34 | -107.99 | 7.51 | -35.37 | -762.01 | -36.24 | -761.14 | 25.16 | |
| 1 | 30 | 65 | 235.01 | 44.42 | 44.66 | 234.78 | 6.69 | 240.15 | -4.61 | -3.99 | 239.53 | -12.32 | |
| 1 | 30 | 66 | 509.08 | 130.38 | 131.58 | 507.89 | 21.22 | 496.58 | 215.86 | 215.86 | 496.58 | -0.39 | |
| 1 | 30 | 67 | 183.94 | -55.60 | -55.50 | 183.83 | 5.06 | 308.35 | 167.50 | 208.66 | 267.19 | -64.06 | |
| 1 | 30 | 68 | 215.53 | 29.00 | 30.05 | 214.48 | 13.94 | 250.57 | 61.31 | 71.10 | 240.79 | -41.91 | |
| 1 | 30 | 69 | 2.18 | -271.21 | 2.07 | -271.09 | -5.68 | 17.57 | -1108.84 | 16.10 | -1107.37 | -40.73 | |
| 1 | 30 | 70 | -3.43 | -273.44 | -3.51 | -273.35 | -4.71 | -78.53 | -1112.51 | -78.78 | -1112.26 | -16.25 | |
| 1 | 30 | 71 | 1.99 | -198.98 | 1.70 | -198.70 | 7.56 | 24.69 | -956.74 | 22.13 | -954.19 | 50.03 | |
| 1 | 30 | 72 | -3.73 | -199.26 | -3.93 | -199.06 | 6.34 | -58.53 | -955.57 | -58.98 | -955.12 | 20.13 | |
| 1 | 30 | 73 | 2.32 | -393.41 | 2.32 | -393.40 | 1.36 | 5.38 | -1364.37 | 5.31 | -1364.29 | 10.34 | |
| 1 | 30 | 74 | -2.26 | -396.40 | -2.26 | -396.40 | 1.22 | -109.32 | -1372.70 | -109.33 | -1372.68 | 4.24 | |
| 1 | 30 | 75 | 2.32 | -368.86 | 2.30 | -368.84 | -2.41 | 7.97 | -1313.20 | 7.63 | -1312.87 | -21.12 | |
| 1 | 30 | 76 | -2.50 | -371.99 | -2.51 | -371.98 | -1.76 | -103.43 | -1320.97 | -103.50 | -1320.91 | -8.60 | |
| 1 | 30 | 77 | 7.03 | -15.23 | -0.22 | -7.99 | -10.43 | 53.94 | -543.66 | 44.55 | -534.27 | -74.32 | |
| 1 | 30 | 78 | 6.95 | -7.96 | -2.87e-02 | -0.98 | -7.44 | -8.21 | -532.83 | -10.09 | -530.95 | -31.31 | |
| 1 | 30 | 79 | 2.11 | -270.95 | 1.99 | -270.83 | 5.69 | 17.54 | -1107.62 | 16.11 | -1106.18 | 40.17 | |
| 1 | 30 | 80 | -3.47 | -272.92 | -3.56 | -272.83 | 4.79 | -77.56 | -1111.12 | -77.81 | -1110.87 | 15.99 | |
| 1 | 30 | 81 | 2.02 | -111.75 | 1.22 | -110.95 | -9.50 | 36.60 | -769.04 | 31.87 | -764.32 | -61.50 | |
| 1 | 30 | 82 | -2.71 | -109.11 | -3.30 | -108.53 | -7.88 | -35.21 | -763.46 | -36.09 | -762.58 | -25.30 | |
| 1 | 30 | 83 | 2.34 | -401.70 | 2.34 | -401.70 | 0.14 | 4.50 | -1381.95 | 4.50 | -1381.95 | -0.55 | |
| 1 | 30 | 84 | -2.17 | -404.71 | -2.17 | -404.71 | 0.28 | -111.50 | -1390.44 | -111.50 | -1390.44 | -0.81 | |
| 1 | 30 | 106 | 232.84 | 45.95 | 46.26 | 232.55 | -7.58 | 240.60 | 32.39 | 32.49 | 240.50 | 4.54 | |
| 1 | 30 | 107 | 204.71 | 35.52 | 35.84 | 204.39 | -7.34 | 230.44 | 53.65 | 53.77 | 230.31 | 4.70 | |
| 1 | 30 | 108 | 113.00 | 15.63 | 16.14 | 112.49 | -7.05 | -22.75 | -262.38 | -22.83 | -262.30 | 4.30 | |
| 1 | 30 | 109 | 112.53 | 15.74 | 16.14 | 112.12 | 6.26 | -23.27 | -263.35 | -23.34 | -263.29 | -3.90 | |
| 1 | 30 | 110 | -4.53 | -328.48 | -4.56 | -328.45 | -2.88 | -131.80 | -1236.54 | -131.81 | -1236.52 | 3.58 | |
| 1 | 30 | 111 | -4.54 | -329.02 | -4.57 | -328.99 | 3.23 | -132.49 | -1237.83 | -132.50 | -1237.82 | -3.61 | |
| 1 | 30 | 112 | 7.57 | -5.46 | 2.01 | 9.39e-02 | -6.44 | -51.53 | -536.96 | -51.55 | -536.94 | 3.56 | |
| 1 | 30 | 113 | -5.46 | -197.13 | -5.58 | -197.01 | 4.71 | -96.88 | -958.21 | -96.90 | -958.20 | -3.80 | |
| 1 | 30 | 114 | -3.51 | -394.32 | -3.51 | -394.31 | 1.38 | -151.61 | -1376.99 | -151.61 | -1376.99 | -1.60 | |
| 1 | 30 | 115 | -3.90 | -369.51 | -3.91 | -369.50 | 1.82 | -143.92 | -1323.99 | -143.93 | -1323.98 | 2.75 | |
| 1 | 30 | 116 | -3.71 | -105.79 | -4.03 | -105.47 | -5.69 | -74.42 | -764.41 | -74.43 | -764.39 | 3.52 | |
| 1 | 30 | 117 | 232.68 | 45.92 | 46.16 | 232.44 | 6.70 | 240.50 | 32.38 | 32.47 | 240.41 | -4.13 | |
| 1 | 30 | 118 | 204.47 | 35.54 | 35.79 | 204.23 | 6.45 | 230.00 | 53.44 | 53.54 | 229.89 | -4.32 | |
| 1 | 30 | 119 | -5.25 | -271.46 | -5.31 | -271.40 | 4.02 | -116.34 | -1115.58 | -116.36 | -1115.57 | -3.93 | |
| 1 | 30 | 120 | -5.46 | -196.48 | -5.58 | -196.36 | -4.83 | -95.91 | -956.59 | -95.93 | -956.57 | 3.82 | |
| 1 | 30 | 121 | -3.51 | -394.10 | -3.51 | -394.10 | -0.71 | -151.37 | -1376.49 | -151.37 | -1376.49 | 1.54 | |
| 1 | 30 | 122 | -3.90 | -369.91 | -3.92 | -369.89 | 2.34 | -144.40 | -1324.93 | -144.41 | -1324.92 | -2.80 | |
| 1 | 30 | 123 | 6.78 | -5.16 | 2.04 | -0.42 | 5.84 | -52.33 | -538.31 | -52.35 | -538.28 | -3.32 | |
| 1 | 30 | 124 | -5.25 | -270.83 | -5.30 | -270.78 | -3.89 | -115.48 | -1114.05 | -115.49 | -1114.04 | 3.92 | |
| 1 | 30 | 125 | -3.73 | -106.36 | -4.01 | -106.08 | 5.32 | -75.38 | -765.97 | -75.40 | -765.96 | -3.46 | |
| 1 | 30 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | 0.33 | -153.94 | -1394.16 | -153.95 | -1394.15 | -0.79 | |
| 1 | 30 | 148 | 230.53 | 43.23 | 43.57 | 230.19 | -7.88 | 237.17 | -5.70 | -5.47 | 236.94 | -7.51 | |
| 1 | 30 | 149 | 209.74 | 30.66 | 30.68 | 209.72 | 1.62 | 242.22 | 64.13 | 70.35 | 236.00 | -32.71 | |
| 1 | 30 | 150 | 114.17 | 7.17 | 8.88 | 112.46 | -13.43 | 16.99 | -263.22 | 13.46 | -259.69 | -31.25 | |
| 1 | 30 | 151 | 113.61 | 7.26 | 8.80 | 112.07 | 12.71 | 16.78 | -264.01 | 13.20 | -260.43 | 31.48 | |
| 1 | 30 | 152 | -2.27 | -327.58 | -2.48 | -327.37 | -8.24 | -89.35 | -1229.52 | -89.38 | -1229.48 | -6.01 | |
| 1 | 30 | 153 | -2.29 | -328.23 | -2.52 | -328.01 | 8.56 | -89.67 | -1230.75 | -89.70 | -1230.72 | 6.06 | |
| 1 | 30 | 154 | 16.10 | -19.86 | 0.31 | -4.06 | -17.84 | -10.71 | -537.63 | -11.88 | -536.46 | -24.82 | |
| 1 | 30 | 155 | -2.48 | -199.52 | -3.54 | -198.45 | 14.45 | -58.01 | -953.18 | -58.21 | -952.97 | 13.44 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|-----------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 30 | 156 | -1.67 | -391.83 | -1.69 | -391.81 | 3.01 | -104.04 | -1367.47 | -104.05 | -1367.47 | 1.66 | |
| 1 | 30 | 157 | -1.90 | -367.58 | -1.98 | -367.50 | -5.27 | -98.56 | -1315.52 | -98.57 | -1315.51 | -3.59 | |
| 1 | 30 | 158 | -0.18 | -111.39 | -2.90 | -108.67 | -17.17 | -34.70 | -762.44 | -35.19 | -761.95 | -18.80 | |
| 1 | 30 | 159 | 230.30 | 43.26 | 43.53 | 230.04 | 7.03 | 237.46 | -6.19 | -5.49 | 236.75 | 13.12 | |
| 1 | 30 | 160 | 209.54 | 30.60 | 30.63 | 209.51 | -2.44 | 242.03 | 63.89 | 70.25 | 235.67 | 33.05 | |
| 1 | 30 | 161 | -2.64 | -272.20 | -3.13 | -271.71 | 11.51 | -76.23 | -1109.83 | -76.31 | -1109.75 | 9.22 | |
| 1 | 30 | 162 | -2.41 | -198.82 | -3.49 | -197.74 | -14.54 | -57.53 | -951.44 | -57.73 | -951.24 | -13.40 | |
| 1 | 30 | 163 | -1.66 | -391.58 | -1.68 | -391.56 | -2.42 | -103.92 | -1367.01 | -103.92 | -1367.01 | -1.62 | |
| 1 | 30 | 164 | -1.92 | -368.05 | -2.01 | -367.96 | 5.73 | -98.79 | -1316.40 | -98.80 | -1316.39 | 3.64 | |
| 1 | 30 | 165 | 15.29 | -19.66 | 0.27 | -4.63 | 17.30 | -11.66 | -538.74 | -12.84 | -537.56 | 24.91 | |
| 1 | 30 | 166 | -2.60 | -271.45 | -3.08 | -270.97 | -11.38 | -75.82 | -1108.28 | -75.90 | -1108.20 | -9.18 | |
| 1 | 30 | 167 | -0.32 | -111.94 | -2.93 | -109.33 | 16.85 | -37.02 | -763.95 | -37.51 | -763.46 | 18.80 | |
| 1 | 30 | 168 | -1.58 | -399.66 | -1.58 | -399.66 | 0.29 | -105.72 | -1384.31 | -105.72 | -1384.31 | -0.65 | |
| 1 | 30 | 190 | 487.28 | 125.46 | 126.39 | 486.36 | 18.27 | 482.64 | 218.29 | 218.33 | 482.60 | -3.27 | |
| 1 | 30 | 191 | 167.78 | -54.48 | -54.47 | 167.77 | -1.09 | 293.81 | 164.73 | 205.79 | 252.75 | -60.12 | |
| 1 | 30 | 192 | 94.88 | -6.52 | -5.19 | 93.55 | -11.54 | 72.97 | -283.16 | 54.16 | -264.35 | -79.66 | |
| 1 | 30 | 193 | 94.39 | -6.54 | -5.30 | 93.14 | 11.15 | 72.90 | -283.69 | 54.13 | -264.92 | 79.64 | |
| 1 | 30 | 194 | 2.92 | -320.05 | 2.80 | -319.92 | -6.35 | 14.75 | -1221.39 | 14.21 | -1220.84 | -25.95 | |
| 1 | 30 | 195 | 2.87 | -320.94 | 2.74 | -320.81 | 6.47 | 14.66 | -1222.57 | 14.11 | -1222.02 | 25.96 | |
| 1 | 30 | 196 | 9.90 | -23.36 | 8.29e-02 | -13.54 | -15.17 | 50.95 | -551.43 | 42.88 | -543.36 | -69.25 | |
| 1 | 30 | 197 | 2.77 | -197.30 | 2.13 | -196.66 | 11.29 | 26.66 | -951.92 | 24.57 | -949.83 | 45.21 | |
| 1 | 30 | 198 | 2.98 | -382.56 | 2.97 | -382.55 | 2.19 | 10.28 | -1356.12 | 10.23 | -1356.07 | 8.46 | |
| 1 | 30 | 199 | 2.97 | -358.84 | 2.92 | -358.79 | -4.10 | 11.85 | -1305.37 | 11.63 | -1305.15 | -17.12 | |
| 1 | 30 | 200 | 3.19 | -113.25 | 1.54 | -111.60 | -13.79 | 36.65 | -768.24 | 32.68 | -764.27 | -56.40 | |
| 1 | 30 | 201 | 487.71 | 125.51 | 126.47 | 486.75 | -18.67 | 482.77 | 218.24 | 218.28 | 482.74 | 3.15 | |
| 1 | 30 | 202 | 167.81 | -54.52 | -54.52 | 167.80 | 0.68 | 293.91 | 164.52 | 205.72 | 252.71 | 60.28 | |
| 1 | 30 | 203 | 2.80 | -266.96 | 2.51 | -266.68 | 8.78 | 19.45 | -1104.54 | 18.34 | -1103.44 | 35.22 | |
| 1 | 30 | 204 | 2.84 | -196.41 | 2.20 | -195.77 | -11.26 | 26.84 | -950.20 | 24.75 | -948.10 | -45.19 | |
| 1 | 30 | 205 | 2.99 | -382.22 | 2.98 | -382.21 | -1.95 | 10.28 | -1355.69 | 10.23 | -1355.64 | -8.47 | |
| 1 | 30 | 206 | 2.94 | -359.49 | 2.89 | -359.44 | 4.28 | 11.82 | -1306.20 | 11.60 | -1305.98 | 17.12 | |
| 1 | 30 | 207 | 9.43 | -23.61 | 7.46e-02 | -14.26 | 14.88 | 50.86 | -552.39 | 42.82 | -544.34 | 69.20 | |
| 1 | 30 | 208 | 2.85 | -265.94 | 2.57 | -265.65 | -8.75 | 19.60 | -1103.03 | 18.49 | -1101.93 | -35.20 | |
| 1 | 30 | 209 | 3.08 | -113.99 | 1.47 | -112.38 | 13.62 | 35.72 | -769.70 | 31.74 | -765.73 | 56.42 | |
| 1 | 30 | 210 | 3.00 | -390.13 | 3.00 | -390.13 | 0.12 | 9.78 | -1372.59 | 9.78 | -1372.59 | -0.30 | |
| 1 | 30 | 211 | 19.27 | -329.78 | -39.58 | -270.93 | -130.69 | 15.96 | -139.05 | -25.78 | -97.31 | -68.76 | |
| 1 | 30 | 212 | 232.99 | -2.56 | 10.14 | 220.29 | 53.21 | 271.00 | -35.33 | -29.57 | 265.24 | 41.61 | |
| 1 | 30 | 213 | -1.71 | -396.53 | -1.71 | -396.53 | 0.16 | 2.26 | -1357.43 | 2.25 | -1357.42 | -3.84 | |
| 1 | 30 | 214 | 96.61 | 10.25 | 12.14 | 94.72 | 12.60 | 20.08 | -261.30 | 18.70 | -259.92 | 19.67 | |
| 1 | 30 | 215 | 96.94 | 10.32 | 12.21 | 95.05 | -12.64 | 20.37 | -264.44 | 18.87 | -262.95 | -20.57 | |
| 1 | 30 | 216 | 3.12 | -18.09 | 2.93 | -17.91 | 1.96 | 3.04 | -543.56 | 2.37 | -542.89 | 19.12 | |
| 1 | 30 | 217 | -1.67 | -371.72 | -1.67 | -371.72 | 0.25 | 2.61 | -1305.81 | 2.57 | -1305.77 | -7.17 | |
| 1 | 30 | 218 | -0.39 | -117.91 | -0.39 | -117.91 | 0.29 | 2.60 | -762.76 | 2.23 | -762.40 | 16.72 | |
| 1 | 30 | 219 | -1.61 | -330.71 | -1.61 | -330.71 | 0.31 | 2.92 | -1220.28 | 2.84 | -1220.20 | -10.12 | |
| 1 | 30 | 220 | -1.32 | -202.53 | -1.32 | -202.53 | -0.21 | 1.77 | -950.83 | 1.54 | -950.60 | 14.53 | |
| 1 | 30 | 221 | -1.50 | -274.00 | -1.50 | -274.00 | 0.30 | 2.59 | -1102.08 | 2.45 | -1101.93 | -12.62 | |
| 1 | 30 | 222 | -1.59 | -274.14 | -1.59 | -274.14 | -0.29 | 2.43 | -1100.90 | 2.29 | -1100.76 | 12.35 | |
| 1 | 30 | 223 | 233.29 | -2.37 | 10.29 | 220.63 | -53.13 | 273.64 | -35.18 | -30.25 | 268.70 | -38.71 | |
| 1 | 30 | 224 | -1.69 | -330.82 | -1.69 | -330.82 | -0.26 | 2.79 | -1219.11 | 2.71 | -1219.03 | 9.85 | |
| 1 | 30 | 225 | -1.25 | -202.51 | -1.25 | -202.51 | 0.13 | 1.92 | -951.80 | 1.69 | -951.57 | -14.80 | |
| 1 | 30 | 226 | -1.73 | -371.80 | -1.73 | -371.80 | -0.18 | 2.55 | -1304.90 | 2.52 | -1304.86 | 6.89 | |
| 1 | 30 | 227 | -0.27 | -116.12 | -0.27 | -116.12 | -7.40e-02 | 2.58 | -763.73 | 2.21 | -763.35 | -17.00 | |
| 1 | 30 | 228 | -1.74 | -396.57 | -1.74 | -396.57 | -6.91e-02 | 2.21 | -1356.95 | 2.20 | -1356.94 | 3.54 | |
| 1 | 30 | 229 | 3.34 | -16.23 | 3.14 | -16.03 | -1.98 | 3.08 | -539.50 | 2.38 | -538.81 | -19.39 | |
| 1 | 30 | 230 | -1.73 | -404.84 | -1.73 | -404.84 | 4.91e-02 | 2.10 | -1374.52 | 2.10 | -1374.52 | -0.18 | |
| 1 | 30 | 231 | 19.30 | -330.21 | -39.71 | -271.20 | 130.93 | 5.84 | -133.02 | -23.67 | -103.51 | 56.81 | |
| 1 | 30 | 232 | 227.55 | 0.27 | 14.28 | 213.54 | -54.67 | 259.70 | -37.43 | -32.87 | 255.14 | -36.53 | |
| 1 | 30 | 233 | 22.73 | -341.16 | -42.53 | -275.89 | 139.61 | 15.57 | -140.44 | -12.95 | -111.91 | 60.30 | |
| 1 | 30 | 234 | 87.73 | 9.59 | 12.04 | 85.27 | -13.63 | 19.79 | -277.40 | 19.08 | -276.69 | -14.51 | |
| 1 | 30 | 235 | 3.87 | -20.33 | 3.48 | -19.95 | -3.02 | 2.89 | -544.10 | 2.50 | -543.70 | -14.67 | |
| 1 | 30 | 236 | 0.11 | -114.56 | 0.11 | -114.55 | -0.81 | 2.67 | -763.48 | 2.47 | -763.28 | -12.31 | |
| 1 | 30 | 237 | -0.73 | -197.81 | -0.73 | -197.81 | -0.55 | 4.13 | -943.95 | 4.03 | -943.85 | -9.62 | |
| 1 | 30 | 238 | -0.88 | -265.86 | -0.89 | -265.86 | -0.43 | 3.82 | -1096.21 | 3.77 | -1096.17 | -7.16 | |
| 1 | 30 | 239 | -0.90 | -319.28 | -0.90 | -319.28 | -0.34 | 3.62 | -1214.20 | 3.60 | -1214.18 | -5.00 | |
| 1 | 30 | 240 | -0.90 | -357.76 | -0.90 | -357.76 | -0.24 | 3.93 | -1297.86 | 3.93 | -1297.85 | -3.13 | |
| 1 | 30 | 241 | -0.90 | -381.03 | -0.90 | -381.03 | -0.13 | 4.30 | -1347.94 | 4.30 | -1347.94 | -1.46 | |
| 1 | 30 | 242 | -0.90 | -388.96 | -0.90 | -388.96 | -1.05e-02 | 4.48 | -1364.76 | 4.48 | -1364.76 | -5.57e-02 | |
| 1 | 30 | 243 | -0.92 | -381.47 | -0.92 | -381.47 | 0.11 | 4.37 | -1348.37 | 4.37 | -1348.37 | 1.41 | |
| 1 | 30 | 244 | -0.94 | -358.59 | -0.94 | -358.59 | 0.22 | 3.98 | -1298.69 | 3.97 | -1298.68 | 3.10 | |
| 1 | 30 | 245 | -0.96 | -320.43 | -0.96 | -320.43 | 0.32 | 3.56 | -1215.39 | 3.54 | -1215.37 | 4.98 | |
| 1 | 30 | 246 | -0.96 | -267.20 | -0.96 | -267.19 | 0.40 | 3.70 | -1097.76 | 3.65 | -1097.71 | 7.16 | |
| 1 | 30 | 247 | -0.80 | -199.06 | -0.80 | -199.06 | 0.44 | 4.00 | -945.73 | 3.90 | -945.63 | 9.63 | |
| 1 | 30 | 248 | -1.13e-02 | -117.43 | -1.96e-02 | -117.42 | 0.99 | 2.64 | -764.97 | 2.44 | -764.77 | 12.29 | |
| 1 | 30 | 249 | 3.62 | -22.91 | 3.29 | -22.58 | 2.95 | 2.84 | -550.19 | 2.46 | -549.81 | 14.55 | |
| 1 | 30 | 250 | 87.14 | 9.54 | 11.98 | 84.70 | 13.54 | 19.74 | -277.94 | 19.02 | -277.22 | 14.63 | |
| 1 | 30 | 251 | 227.36 | 0.15 | 14.19 | 213.32 | 54.70 | 260.59 | -38.50 | -33.00 | 255.08 | 40.21 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|--------|---------|-----------|---------|---------|---------|----------|---------|----------|--------|-------|
| 1 | 30 | 252 | 22.59 | -341.31 | -42.61 | -276.11 | -139.55 | 15.58 | -140.61 | -13.08 | -111.95 | -60.45 | |
| 1 | 33 | 43 | 509.19 | 130.47 | 131.74 | 507.93 | -21.86 | 500.29 | 241.27 | 241.29 | 500.28 | 2.05 | |
| 1 | 33 | 44 | 234.98 | 44.59 | 44.89 | 234.69 | -7.47 | 239.90 | -8.80 | -7.49 | 238.60 | 17.96 | |
| 1 | 33 | 45 | 183.92 | -55.55 | -55.43 | 183.80 | -5.45 | 310.22 | 176.80 | 219.61 | 267.41 | 62.28 | |
| 1 | 33 | 46 | 215.57 | -28.88 | 30.07 | 214.37 | -14.88 | 251.74 | 60.87 | 71.62 | 240.99 | 44.01 | |
| 1 | 33 | 47 | 103.18 | -5.65 | -5.33 | 102.86 | 5.92 | 77.57 | -274.20 | 56.27 | -252.89 | 83.91 | |
| 1 | 33 | 48 | 116.92 | 8.26 | 8.27 | 116.91 | 1.16 | 22.56 | -258.62 | 16.69 | -252.75 | 40.21 | |
| 1 | 33 | 49 | 104.04 | -5.63 | -5.27 | 103.69 | -6.27 | 76.75 | -273.91 | 54.33 | -251.49 | -85.79 | |
| 1 | 33 | 50 | 117.53 | 8.36 | 8.39 | 117.50 | -1.91 | 20.36 | -257.66 | 14.74 | -252.04 | -39.13 | |
| 1 | 33 | 51 | 2.21 | -328.36 | 2.17 | -328.31 | 4.03 | 12.13 | -1227.60 | 11.38 | -1226.85 | 30.50 | |
| 1 | 33 | 52 | -2.95 | -331.10 | -2.99 | -331.06 | 3.37 | -92.55 | -1233.96 | -92.68 | -1233.83 | 12.20 | |
| 1 | 33 | 53 | 2.27 | -327.38 | 2.22 | -327.33 | -3.94 | 12.16 | -1226.24 | 11.38 | -1225.46 | -31.05 | |
| 1 | 33 | 54 | -2.93 | -330.33 | -2.95 | -330.30 | -3.10 | -92.94 | -1232.61 | -93.08 | -1232.48 | -12.47 | |
| 1 | 33 | 55 | 6.61 | -15.28 | -0.25 | -8.42 | 10.15 | 53.94 | -544.01 | 44.71 | -534.78 | 73.72 | |
| 1 | 33 | 56 | 6.26 | -7.52 | -9.08e-02 | -1.18 | 6.87 | -6.76 | -532.70 | -8.66 | -530.79 | 31.57 | |
| 1 | 33 | 57 | 2.07 | -198.66 | 1.78 | -198.37 | -7.57 | 24.79 | -956.24 | 22.17 | -953.62 | -50.60 | |
| 1 | 33 | 58 | -3.67 | -199.10 | -3.88 | -198.88 | -6.48 | -59.59 | -955.32 | -60.06 | -954.86 | -20.35 | |
| 1 | 33 | 59 | 2.33 | -393.27 | 2.33 | -393.26 | -1.11 | 5.37 | -1364.37 | 5.29 | -1364.28 | -10.86 | |
| 1 | 33 | 60 | -2.25 | -396.34 | -2.25 | -396.34 | -0.66 | -109.48 | -1372.70 | -109.49 | -1372.68 | -4.52 | |
| 1 | 33 | 61 | 2.28 | -369.13 | 2.26 | -369.11 | 2.60 | 8.00 | -1313.23 | 7.68 | -1312.91 | 20.59 | |
| 1 | 33 | 62 | -2.52 | -372.10 | -2.53 | -372.09 | 2.19 | -103.09 | -1320.97 | -103.14 | -1320.92 | 8.33 | |
| 1 | 33 | 63 | 1.91 | -112.03 | 1.14 | -111.27 | 9.31 | 35.73 | -769.49 | 31.10 | -764.85 | 60.92 | |
| 1 | 33 | 64 | -2.80 | -109.24 | -3.34 | -108.70 | 7.52 | -35.55 | -763.55 | -36.42 | -762.68 | 25.16 | |
| 1 | 33 | 65 | 235.15 | 44.44 | 44.68 | 234.91 | 6.72 | 240.34 | -4.52 | -3.90 | 239.72 | -12.28 | |
| 1 | 33 | 66 | 509.24 | 130.43 | 131.62 | 508.05 | 21.20 | 496.78 | 215.79 | 215.79 | 496.78 | -0.43 | |
| 1 | 33 | 67 | 184.19 | -55.61 | -55.51 | 184.08 | 5.07 | 308.68 | 167.74 | 208.75 | 267.67 | -64.01 | |
| 1 | 33 | 68 | 215.77 | 29.00 | 30.05 | 214.72 | 13.96 | 251.02 | 61.44 | 71.20 | 241.26 | -41.91 | |
| 1 | 33 | 69 | 2.18 | -270.50 | 2.06 | -270.39 | -5.69 | 17.60 | -1107.35 | 16.12 | -1105.87 | -40.73 | |
| 1 | 33 | 70 | -3.43 | -272.72 | -3.51 | -272.64 | -4.71 | -78.34 | -1110.98 | -78.60 | -1110.72 | -16.25 | |
| 1 | 33 | 71 | 1.99 | -199.73 | 1.70 | -199.44 | 7.56 | 24.65 | -958.31 | 22.10 | -955.76 | 50.03 | |
| 1 | 33 | 72 | -3.72 | -200.01 | -3.93 | -199.81 | 6.34 | -58.72 | -957.19 | -59.17 | -956.74 | 20.13 | |
| 1 | 33 | 73 | 2.32 | -393.64 | 2.32 | -393.63 | 1.33 | 5.39 | -1364.86 | 5.31 | -1364.78 | 10.33 | |
| 1 | 33 | 74 | -2.26 | -396.63 | -2.26 | -396.63 | 1.21 | -109.38 | -1373.20 | -109.40 | -1373.18 | 4.24 | |
| 1 | 33 | 75 | 2.32 | -368.42 | 2.30 | -368.40 | -2.44 | 7.98 | -1312.28 | 7.64 | -1311.94 | -21.12 | |
| 1 | 33 | 76 | -2.50 | -371.55 | -2.51 | -371.54 | -1.76 | -103.31 | -1320.02 | -103.37 | -1319.96 | -8.60 | |
| 1 | 33 | 77 | 7.24 | -14.84 | -0.22 | -7.38 | -10.45 | 53.96 | -542.42 | 44.53 | -532.99 | -74.39 | |
| 1 | 33 | 78 | 7.24 | -7.64 | -3.12e-02 | -0.37 | -7.44 | -8.05 | -531.52 | -9.93 | -529.64 | -31.31 | |
| 1 | 33 | 79 | 2.11 | -271.66 | 2.00 | -271.54 | 5.68 | 17.52 | -1109.12 | 16.08 | -1107.68 | 40.17 | |
| 1 | 33 | 80 | -3.47 | -273.63 | -3.55 | -273.55 | 4.79 | -77.75 | -1112.66 | -77.99 | -1112.41 | 15.99 | |
| 1 | 33 | 81 | 2.03 | -111.04 | 1.22 | -110.24 | -9.51 | 36.64 | -767.55 | 31.91 | -762.82 | -61.49 | |
| 1 | 33 | 82 | -2.71 | -108.40 | -3.30 | -107.81 | -7.87 | -35.03 | -761.92 | -35.91 | -761.04 | -25.30 | |
| 1 | 33 | 83 | 2.34 | -401.70 | 2.34 | -401.70 | 0.10 | 4.50 | -1381.95 | 4.50 | -1381.95 | -0.56 | |
| 1 | 33 | 84 | -2.17 | -404.71 | -2.17 | -404.71 | 0.27 | -111.50 | -1390.44 | -111.50 | -1390.44 | -0.81 | |
| 1 | 33 | 106 | 232.70 | 45.92 | 46.23 | 232.39 | -7.58 | 240.37 | 32.32 | 32.42 | 240.27 | 4.54 | |
| 1 | 33 | 107 | 204.47 | 35.50 | 35.82 | 204.15 | -7.34 | 229.93 | 53.53 | 53.66 | 229.81 | 4.70 | |
| 1 | 33 | 108 | 112.55 | 15.62 | 16.14 | 112.04 | -7.05 | -22.95 | -263.35 | -23.03 | -263.28 | 4.30 | |
| 1 | 33 | 109 | 112.98 | 15.75 | 16.15 | 112.57 | 6.26 | -23.07 | -262.37 | -23.14 | -262.31 | -3.90 | |
| 1 | 33 | 110 | -4.54 | -329.08 | -4.56 | -329.06 | -2.88 | -132.06 | -1237.86 | -132.07 | -1237.85 | 3.58 | |
| 1 | 33 | 111 | -4.54 | -328.41 | -4.57 | -328.38 | 3.23 | -132.23 | -1236.50 | -132.24 | -1236.49 | -3.61 | |
| 1 | 33 | 112 | 7.32 | -5.82 | 2.02 | -0.52 | -6.44 | -51.79 | -538.29 | -51.82 | -538.27 | 3.56 | |
| 1 | 33 | 113 | -5.46 | -196.38 | -5.58 | -196.26 | 4.71 | -96.56 | -956.57 | -96.58 | -956.56 | -3.80 | |
| 1 | 33 | 114 | -3.51 | -394.08 | -3.51 | -394.08 | 1.38 | -151.51 | -1376.48 | -151.51 | -1376.48 | -1.60 | |
| 1 | 33 | 115 | -3.90 | -369.95 | -3.91 | -369.94 | -1.82 | -144.11 | -1324.95 | -144.12 | -1324.94 | 2.75 | |
| 1 | 33 | 116 | -3.71 | -106.50 | -4.02 | -106.19 | -5.69 | -74.72 | -765.97 | -74.74 | -765.96 | 3.52 | |
| 1 | 33 | 117 | 232.82 | 45.95 | 46.20 | 232.58 | 6.70 | 240.72 | 32.46 | 32.54 | 240.64 | -4.13 | |
| 1 | 33 | 118 | 204.72 | 35.57 | 35.81 | 204.47 | 6.45 | 230.50 | 53.56 | 53.66 | 230.39 | -4.32 | |
| 1 | 33 | 119 | -5.25 | -270.75 | -5.31 | -270.69 | 4.02 | -116.03 | -1114.02 | -116.05 | -1114.01 | -3.93 | |
| 1 | 33 | 120 | -5.46 | -197.24 | -5.58 | -197.11 | -4.83 | -96.24 | -958.23 | -96.25 | -958.22 | 3.82 | |
| 1 | 33 | 121 | -3.51 | -394.34 | -3.51 | -394.33 | -0.71 | -151.47 | -1377.00 | -151.47 | -1377.00 | 1.54 | |
| 1 | 33 | 122 | -3.90 | -369.47 | -3.91 | -369.45 | 2.34 | -144.21 | -1323.96 | -144.22 | -1323.96 | -2.80 | |
| 1 | 33 | 123 | 7.02 | -4.80 | 2.03 | 0.19 | 5.84 | -52.07 | -536.98 | -52.09 | -536.96 | -3.32 | |
| 1 | 33 | 124 | -5.25 | -271.55 | -5.31 | -271.49 | -3.89 | -115.78 | -1115.61 | -115.80 | -1115.60 | 3.92 | |
| 1 | 33 | 125 | -3.74 | -105.65 | -4.01 | -105.37 | 5.32 | -75.07 | -764.41 | -75.09 | -764.39 | -3.46 | |
| 1 | 33 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | 0.33 | -153.94 | -1394.16 | -153.95 | -1394.15 | -0.79 | |
| 1 | 33 | 148 | 230.40 | 43.21 | 43.55 | 230.06 | -7.91 | 236.97 | -5.79 | -5.56 | 236.74 | -7.54 | |
| 1 | 33 | 149 | 209.50 | 30.65 | 30.67 | 209.48 | 1.61 | 241.77 | 64.01 | 70.25 | 235.53 | -32.71 | |
| 1 | 33 | 150 | 113.73 | 7.16 | 8.88 | 112.01 | -13.43 | 16.85 | -264.16 | 13.33 | -260.64 | -31.25 | |
| 1 | 33 | 151 | 114.05 | 7.27 | 8.80 | 112.52 | 12.70 | 16.92 | -263.07 | 13.33 | -259.48 | 31.48 | |
| 1 | 33 | 152 | -2.27 | -328.18 | -2.47 | -327.98 | -8.24 | -89.51 | -1230.82 | -89.54 | -1230.79 | -6.01 | |
| 1 | 33 | 153 | -2.30 | -327.63 | -2.52 | -327.40 | 8.56 | -89.50 | -1229.45 | -89.54 | -1229.41 | 6.06 | |
| 1 | 33 | 154 | 15.83 | -20.20 | 0.31 | -4.68 | -17.85 | -10.86 | -538.94 | -12.03 | -537.77 | -24.82 | |
| 1 | 33 | 155 | -2.47 | -198.77 | -3.54 | -197.70 | 14.45 | -57.82 | -951.56 | -58.02 | -951.36 | 13.44 | |
| 1 | 33 | 156 | -1.67 | -391.60 | -1.69 | -391.58 | 3.01 | -103.98 | -1366.97 | -103.98 | -1366.97 | 1.66 | |
| 1 | 33 | 157 | -1.90 | -368.02 | -1.98 | -367.94 | -5.26 | -98.69 | -1316.47 | -98.70 | -1316.46 | -3.59 | |
| 1 | 33 | 158 | -0.20 | -112.09 | -2.90 | -109.39 | -17.18 | -34.88 | -763.97 | -35.37 | -763.49 | -18.80 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|-----------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 33 | 159 | 230.43 | 43.28 | 43.54 | 230.17 | 6.99 | 237.65 | -6.10 | -5.40 | 236.95 | 13.08 | |
| 1 | 33 | 160 | 209.79 | 30.61 | 30.64 | 209.75 | -2.46 | 242.49 | 64.01 | 70.35 | 236.14 | 33.04 | |
| 1 | 33 | 161 | -2.64 | -271.49 | -3.14 | -270.99 | 11.51 | -76.04 | -1108.29 | -76.12 | -1108.21 | 9.22 | |
| 1 | 33 | 162 | -2.41 | -199.57 | -3.49 | -198.49 | -14.54 | -57.72 | -953.06 | -57.92 | -952.86 | -13.40 | |
| 1 | 33 | 163 | -1.66 | -391.81 | -1.68 | -391.79 | -2.41 | -103.98 | -1367.51 | -103.98 | -1367.51 | -1.62 | |
| 1 | 33 | 164 | -1.92 | -367.61 | -2.01 | -367.52 | 5.73 | -98.66 | -1315.45 | -98.67 | -1315.44 | 3.64 | |
| 1 | 33 | 165 | 15.56 | -19.31 | 0.27 | -4.02 | 17.30 | -11.50 | -537.43 | -12.68 | -536.25 | 24.91 | |
| 1 | 33 | 166 | -2.60 | -272.17 | -3.08 | -271.68 | -11.38 | -76.00 | -1109.82 | -76.09 | -1109.74 | -9.17 | |
| 1 | 33 | 167 | -0.31 | -111.23 | -2.93 | -108.61 | 16.85 | -36.84 | -762.41 | -37.33 | -761.93 | 18.80 | |
| 1 | 33 | 168 | -1.58 | -399.66 | -1.58 | -399.66 | 0.29 | -105.72 | -1384.31 | -105.72 | -1384.31 | -0.65 | |
| 1 | 33 | 190 | 487.13 | 125.42 | 126.34 | 486.20 | 18.30 | 482.44 | 218.36 | 218.40 | 482.40 | -3.23 | |
| 1 | 33 | 191 | 167.52 | -54.47 | -54.46 | 167.52 | -1.10 | 293.50 | 164.48 | 205.71 | 252.27 | -60.16 | |
| 1 | 33 | 192 | 94.43 | -6.52 | -5.19 | 93.10 | -11.52 | 72.91 | -284.00 | 54.20 | -265.29 | -79.55 | |
| 1 | 33 | 193 | 94.84 | -6.54 | -5.30 | 93.59 | 11.18 | 72.97 | -282.85 | 54.09 | -263.98 | 79.75 | |
| 1 | 33 | 194 | 2.92 | -320.65 | 2.80 | -320.52 | -6.33 | 14.74 | -1222.66 | 14.19 | -1222.11 | -25.95 | |
| 1 | 33 | 195 | 2.87 | -320.34 | 2.74 | -320.21 | 6.49 | 14.68 | -1221.29 | 14.13 | -1220.75 | 25.97 | |
| 1 | 33 | 196 | 9.71 | -23.77 | 8.87e-02 | -14.15 | -15.15 | 50.93 | -552.67 | 42.89 | -544.64 | -69.18 | |
| 1 | 33 | 197 | 2.77 | -196.56 | 2.13 | -195.92 | 11.29 | 26.69 | -950.35 | 24.60 | -948.25 | 45.21 | |
| 1 | 33 | 198 | 2.98 | -382.33 | 2.97 | -382.32 | 2.23 | 10.27 | -1355.64 | 10.22 | -1355.58 | 8.46 | |
| 1 | 33 | 199 | 2.97 | -359.27 | 2.93 | -359.23 | -4.07 | 11.84 | -1306.30 | 11.62 | -1306.08 | -17.11 | |
| 1 | 33 | 200 | 3.18 | -113.95 | 1.54 | -112.31 | -13.77 | 36.61 | -769.73 | 32.65 | -765.77 | -56.41 | |
| 1 | 33 | 201 | 487.87 | 125.56 | 126.52 | 486.90 | -18.65 | 482.97 | 218.17 | 218.20 | 482.94 | 3.18 | |
| 1 | 33 | 202 | 168.06 | -54.53 | -54.53 | 168.06 | 0.67 | 294.23 | 164.77 | 205.80 | 253.20 | 60.23 | |
| 1 | 33 | 203 | 2.79 | -266.26 | 2.50 | -265.97 | 8.79 | 19.47 | -1103.05 | 18.37 | -1101.94 | 35.22 | |
| 1 | 33 | 204 | 2.84 | -197.15 | 2.20 | -196.52 | -11.25 | 26.81 | -951.77 | 24.72 | -949.68 | -45.19 | |
| 1 | 33 | 205 | 2.99 | -382.45 | 2.98 | -382.44 | -1.92 | 10.29 | -1356.17 | 10.24 | -1356.12 | -8.46 | |
| 1 | 33 | 206 | 2.94 | -359.05 | 2.88 | -359.00 | 4.31 | 11.83 | -1305.28 | 11.61 | -1305.06 | 17.13 | |
| 1 | 33 | 207 | 9.62 | -23.20 | 6.88e-02 | -13.65 | 14.90 | 50.88 | -551.14 | 42.80 | -543.06 | 69.27 | |
| 1 | 33 | 208 | 2.86 | -266.64 | 2.57 | -266.36 | -8.74 | 19.57 | -1104.53 | 18.47 | -1103.42 | -35.20 | |
| 1 | 33 | 209 | 3.09 | -113.29 | 1.47 | -111.67 | 13.63 | 35.76 | -768.20 | 31.78 | -764.23 | 56.40 | |
| 1 | 33 | 210 | 3.00 | -390.13 | 3.00 | -390.13 | 0.15 | 9.78 | -1372.59 | 9.78 | -1372.59 | -0.29 | |
| 1 | 33 | 211 | 19.24 | -329.95 | -39.66 | -271.06 | -130.76 | 16.18 | -139.24 | -25.54 | -97.52 | -68.87 | |
| 1 | 33 | 212 | 232.78 | -2.55 | 10.17 | 220.07 | 53.20 | 270.53 | -35.44 | -29.66 | 264.75 | 41.64 | |
| 1 | 33 | 213 | -1.71 | -396.32 | -1.71 | -396.32 | 0.11 | 2.21 | -1356.94 | 2.20 | -1356.93 | -3.84 | |
| 1 | 33 | 214 | 96.18 | 10.26 | 12.14 | 94.30 | 12.56 | 20.11 | -262.25 | 18.73 | -260.87 | 19.67 | |
| 1 | 33 | 215 | 97.36 | 10.32 | 12.21 | 95.47 | -12.69 | 20.34 | -263.49 | 18.84 | -262.00 | -20.57 | |
| 1 | 33 | 216 | 3.11 | -18.65 | 2.94 | -18.47 | 1.93 | 3.10 | -544.86 | 2.44 | -544.20 | 19.00 | |
| 1 | 33 | 217 | -1.68 | -371.32 | -1.68 | -371.31 | 0.21 | 2.56 | -1304.87 | 2.52 | -1304.83 | -7.17 | |
| 1 | 33 | 218 | -0.39 | -118.57 | -0.39 | -118.57 | 0.27 | 2.58 | -764.29 | 2.21 | -763.93 | 16.70 | |
| 1 | 33 | 219 | -1.62 | -330.15 | -1.62 | -330.15 | 0.27 | 2.89 | -1218.99 | 2.80 | -1218.90 | -10.13 | |
| 1 | 33 | 220 | -1.32 | -203.22 | -1.32 | -203.22 | -0.22 | 1.77 | -952.43 | 1.55 | -952.21 | 14.53 | |
| 1 | 33 | 221 | -1.51 | -273.35 | -1.51 | -273.35 | 0.28 | 2.58 | -1100.55 | 2.43 | -1100.41 | -12.63 | |
| 1 | 33 | 222 | -1.58 | -274.79 | -1.58 | -274.79 | -0.31 | 2.44 | -1102.42 | 2.30 | -1102.28 | 12.35 | |
| 1 | 33 | 223 | 233.51 | -2.38 | 10.27 | 220.85 | -53.14 | 274.10 | -35.08 | -30.17 | 269.19 | -38.68 | |
| 1 | 33 | 224 | -1.68 | -331.37 | -1.68 | -331.37 | -0.29 | 2.82 | -1220.40 | 2.74 | -1220.32 | 9.84 | |
| 1 | 33 | 225 | -1.25 | -201.82 | -1.25 | -201.82 | 0.12 | 1.92 | -950.20 | 1.69 | -949.97 | -14.80 | |
| 1 | 33 | 226 | -1.72 | -372.20 | -1.72 | -372.20 | -0.22 | 2.60 | -1305.84 | 2.56 | -1305.81 | 6.88 | |
| 1 | 33 | 227 | -0.27 | -115.46 | -0.27 | -115.46 | -9.28e-02 | 2.60 | -762.20 | 2.22 | -761.82 | -17.01 | |
| 1 | 33 | 228 | -1.73 | -396.78 | -1.73 | -396.78 | -0.13 | 2.26 | -1357.44 | 2.25 | -1357.43 | 3.53 | |
| 1 | 33 | 229 | 3.36 | -15.68 | 3.14 | -15.46 | -2.01 | 3.01 | -538.20 | 2.31 | -537.50 | -19.51 | |
| 1 | 33 | 230 | -1.73 | -404.84 | -1.73 | -404.84 | -1.04e-02 | 2.10 | -1374.52 | 2.10 | -1374.52 | -0.19 | |
| 1 | 33 | 231 | 19.33 | -330.04 | -39.64 | -271.07 | 130.86 | 5.60 | -132.82 | -23.92 | -103.30 | 56.69 | |
| 1 | 33 | 232 | 227.34 | 0.28 | 14.30 | 213.32 | -54.66 | 259.23 | -37.53 | -32.95 | 254.66 | -36.56 | |
| 1 | 33 | 233 | 22.70 | -341.33 | -42.61 | -276.02 | 139.68 | 15.82 | -140.65 | -12.71 | -112.12 | 60.42 | |
| 1 | 33 | 234 | 87.30 | 9.59 | 12.04 | 84.85 | -13.58 | 19.83 | -278.35 | 19.12 | -277.64 | -14.51 | |
| 1 | 33 | 235 | 3.85 | -20.88 | 3.48 | -20.52 | -2.99 | 2.96 | -545.40 | 2.58 | -545.02 | -14.55 | |
| 1 | 33 | 236 | 0.10 | -115.22 | 9.91e-02 | -115.21 | -0.79 | 2.65 | -765.01 | 2.45 | -764.81 | -12.30 | |
| 1 | 33 | 237 | -0.73 | -198.50 | -0.73 | -198.50 | -0.54 | 4.13 | -945.56 | 4.03 | -945.46 | -9.62 | |
| 1 | 33 | 238 | -0.88 | -266.51 | -0.88 | -266.51 | -0.41 | 3.84 | -1097.74 | 3.79 | -1097.69 | -7.16 | |
| 1 | 33 | 239 | -0.89 | -319.83 | -0.89 | -319.83 | -0.30 | 3.66 | -1215.50 | 3.64 | -1215.48 | -5.00 | |
| 1 | 33 | 240 | -0.89 | -358.16 | -0.89 | -358.16 | -0.19 | 3.98 | -1298.80 | 3.97 | -1298.80 | -3.12 | |
| 1 | 33 | 241 | -0.89 | -381.25 | -0.89 | -381.24 | -7.32e-02 | 4.36 | -1348.43 | 4.35 | -1348.43 | -1.46 | |
| 1 | 33 | 242 | -0.90 | -388.96 | -0.90 | -388.96 | 4.90e-02 | 4.48 | -1364.76 | 4.48 | -1364.76 | -5.05e-02 | |
| 1 | 33 | 243 | -0.92 | -381.26 | -0.92 | -381.26 | 0.17 | 4.32 | -1347.87 | 4.31 | -1347.87 | 1.42 | |
| 1 | 33 | 244 | -0.95 | -358.19 | -0.95 | -358.19 | 0.27 | 3.93 | -1297.74 | 3.93 | -1297.74 | 3.10 | |
| 1 | 33 | 245 | -0.97 | -319.87 | -0.97 | -319.87 | 0.36 | 3.53 | -1214.10 | 3.51 | -1214.07 | 4.98 | |
| 1 | 33 | 246 | -0.97 | -266.54 | -0.97 | -266.54 | 0.42 | 3.68 | -1096.24 | 3.64 | -1096.19 | 7.16 | |
| 1 | 33 | 247 | -0.80 | -198.37 | -0.80 | -198.37 | 0.45 | 4.00 | -944.12 | 3.90 | -944.03 | 9.63 | |
| 1 | 33 | 248 | -4.29e-03 | -116.77 | -1.29e-02 | -116.76 | 1.00 | 2.66 | -763.44 | 2.46 | -763.24 | 12.30 | |
| 1 | 33 | 249 | 3.63 | -22.36 | 3.29 | -22.01 | 2.98 | 2.77 | -548.88 | 2.38 | -548.49 | 14.67 | |
| 1 | 33 | 250 | 87.56 | 9.54 | 11.98 | 85.12 | 13.59 | 19.71 | -276.99 | 18.98 | -276.27 | 14.62 | |
| 1 | 33 | 251 | 227.57 | 0.14 | 14.16 | 213.54 | 54.71 | 261.06 | -38.40 | -32.91 | 255.57 | 40.17 | |
| 1 | 33 | 252 | 22.62 | -341.14 | -42.54 | -275.98 | -139.49 | 15.33 | -140.39 | -13.32 | -111.74 | -60.34 | |
| 1 | 62 | 43 | 502.33 | 128.95 | 130.11 | 501.17 | -20.82 | 495.92 | 241.98 | 242.01 | 495.89 | 2.98 | |
| 1 | 62 | 44 | 233.39 | 44.51 | 44.55 | 233.35 | -2.68 | 238.77 | -8.78 | -7.89 | 237.89 | 14.77 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|--------|---------|----------|-----------|----------|---------|----------|---------|----------|--------|-------|
| 1 | 62 | 45 | 178.89 | -55.15 | -55.10 | 178.84 | -3.41 | 305.77 | 175.99 | 218.74 | 263.02 | 61.00 | |
| 1 | 62 | 46 | 213.65 | 29.64 | 30.27 | 213.01 | -10.80 | 249.18 | 61.95 | 71.44 | 239.69 | 41.06 | |
| 1 | 62 | 47 | 100.60 | -5.83 | -5.27 | 100.04 | 7.69 | 76.45 | -276.53 | 56.21 | -256.29 | 82.07 | |
| 1 | 62 | 48 | 115.90 | 8.23 | 8.46 | 115.67 | 4.96 | 21.54 | -259.64 | 16.39 | -254.49 | 37.72 | |
| 1 | 62 | 49 | 100.81 | -5.85 | -5.28 | 100.24 | -7.79 | 75.48 | -277.20 | 54.28 | -256.00 | -83.83 | |
| 1 | 62 | 50 | 115.90 | 8.26 | 8.52 | 115.64 | -5.28 | 19.17 | -259.92 | 14.25 | -255.00 | -36.74 | |
| 1 | 62 | 51 | 2.43 | -325.53 | 2.36 | -325.46 | 4.75 | 13.00 | -1225.18 | 12.32 | -1224.50 | 28.95 | |
| 1 | 62 | 52 | -2.75 | -329.75 | -2.83 | -329.68 | 4.87 | -91.33 | -1232.06 | -91.42 | -1231.97 | 10.18 | |
| 1 | 62 | 53 | 2.45 | -325.57 | 2.38 | -325.50 | -4.73 | 12.99 | -1225.53 | 12.28 | -1224.82 | -29.52 | |
| 1 | 62 | 54 | -2.75 | -329.87 | -2.82 | -329.80 | -4.81 | -91.92 | -1232.49 | -92.02 | -1232.39 | -10.51 | |
| 1 | 62 | 55 | 7.68 | -17.68 | -0.15 | -9.85 | 11.72 | 53.04 | -545.98 | 44.21 | -537.15 | 72.18 | |
| 1 | 62 | 56 | 9.39 | -11.23 | 2.94e-02 | -1.87 | 10.27 | -7.30 | -533.70 | -8.96 | -532.03 | 29.56 | |
| 1 | 62 | 57 | 2.27 | -198.48 | 1.89 | -198.10 | -8.73 | 25.40 | -955.43 | 22.95 | -952.98 | -48.95 | |
| 1 | 62 | 58 | -3.37 | -199.43 | -3.78 | -199.02 | -8.97 | -59.13 | -955.22 | -59.50 | -954.85 | -18.22 | |
| 1 | 62 | 59 | 2.54 | -389.99 | 2.53 | -389.99 | -1.44 | 6.97 | -1361.93 | 6.89 | -1361.86 | -10.20 | |
| 1 | 62 | 60 | -2.07 | -395.01 | -2.08 | -395.00 | -1.40 | -107.72 | -1371.22 | -107.74 | -1371.21 | -3.70 | |
| 1 | 62 | 61 | 2.49 | -365.74 | 2.47 | -365.71 | 3.07 | 9.25 | -1310.41 | 8.97 | -1310.12 | 19.38 | |
| 1 | 62 | 62 | -2.33 | -370.51 | -2.36 | -370.48 | 3.13 | -101.50 | -1318.89 | -101.54 | -1318.86 | 6.76 | |
| 1 | 62 | 63 | 2.27 | -112.14 | 1.26 | -111.13 | 10.69 | 36.05 | -768.60 | 31.65 | -764.20 | 59.35 | |
| 1 | 62 | 64 | -2.16 | -109.48 | -3.20 | -108.44 | 10.51 | -34.75 | -762.59 | -35.49 | -761.86 | 23.18 | |
| 1 | 62 | 65 | 233.37 | 44.28 | 44.31 | 233.34 | 2.43 | 239.37 | -5.06 | -4.41 | 238.72 | -12.53 | |
| 1 | 62 | 66 | 502.44 | 128.86 | 129.98 | 501.32 | 20.42 | 492.30 | 216.49 | 216.50 | 492.29 | -1.24 | |
| 1 | 62 | 67 | 178.96 | -55.23 | -55.19 | 178.92 | 3.27 | 303.90 | 166.66 | 207.74 | 262.82 | -62.85 | |
| 1 | 62 | 68 | 213.59 | 29.64 | 30.23 | 213.01 | 10.36 | 247.99 | 62.24 | 70.89 | 239.34 | -39.13 | |
| 1 | 62 | 69 | 2.37 | -269.64 | 2.20 | -269.48 | -6.65 | 18.21 | -1106.99 | 16.86 | -1105.63 | -39.06 | |
| 1 | 62 | 70 | -3.22 | -272.78 | -3.39 | -272.61 | -6.84 | -77.70 | -1111.16 | -77.89 | -1110.97 | -14.09 | |
| 1 | 62 | 71 | 2.23 | -198.41 | 1.85 | -198.03 | 8.70 | 25.37 | -955.23 | 22.98 | -952.84 | 48.37 | |
| 1 | 62 | 72 | -3.39 | -199.29 | -3.79 | -198.89 | 8.88 | -57.95 | -954.77 | -58.31 | -954.41 | 17.98 | |
| 1 | 62 | 73 | 2.53 | -389.97 | 2.52 | -389.96 | 1.53 | 6.97 | -1361.78 | 6.90 | -1361.71 | 9.64 | |
| 1 | 62 | 74 | -2.07 | -394.96 | -2.08 | -394.95 | 1.57 | -107.55 | -1371.05 | -107.56 | -1371.05 | 3.34 | |
| 1 | 62 | 75 | 2.51 | -365.78 | 2.48 | -365.75 | -3.01 | 9.23 | -1310.69 | 8.93 | -1310.38 | -19.94 | |
| 1 | 62 | 76 | -2.33 | -370.60 | -2.36 | -370.58 | -3.01 | -101.87 | -1319.21 | -101.92 | -1319.17 | -7.11 | |
| 1 | 62 | 77 | 7.83 | -17.70 | -0.13 | -9.74 | -11.83 | 53.00 | -545.93 | 44.03 | -536.96 | -72.76 | |
| 1 | 62 | 78 | 9.64 | -11.49 | 6.30e-02 | -1.92 | -10.52 | -9.21 | -534.22 | -10.85 | -532.57 | -29.32 | |
| 1 | 62 | 79 | 2.33 | -269.60 | 2.17 | -269.44 | 6.63 | 18.21 | -1106.67 | 16.89 | -1105.35 | 38.47 | |
| 1 | 62 | 80 | -3.23 | -272.65 | -3.40 | -272.48 | 6.82 | -76.85 | -1110.70 | -77.04 | -1110.52 | 13.79 | |
| 1 | 62 | 81 | 2.33 | -112.18 | 1.30 | -111.16 | -10.79 | 36.37 | -768.73 | 31.88 | -764.24 | -59.93 | |
| 1 | 62 | 82 | -2.11 | -109.62 | -3.18 | -108.54 | -10.68 | -35.67 | -763.09 | -36.42 | -762.35 | -23.28 | |
| 1 | 62 | 83 | 2.54 | -398.07 | 2.54 | -398.07 | 4.40e-02 | 6.21 | -1378.99 | 6.21 | -1378.99 | -0.39 | |
| 1 | 62 | 84 | -1.99 | -403.12 | -1.99 | -403.12 | 8.51e-02 | -109.60 | -1388.50 | -109.60 | -1388.50 | -0.43 | |
| 1 | 62 | 106 | 232.53 | 46.20 | 46.25 | 232.49 | -2.86 | 240.45 | 32.45 | 32.47 | 240.43 | 1.84 | |
| 1 | 62 | 107 | 204.36 | 35.79 | 35.83 | 204.32 | -2.78 | 230.17 | 53.72 | 53.74 | 230.16 | 1.81 | |
| 1 | 62 | 108 | 112.42 | 16.07 | 16.14 | 112.35 | -2.68 | -22.88 | -262.62 | -22.89 | -262.60 | 1.72 | |
| 1 | 62 | 109 | 112.32 | 16.09 | 16.14 | 112.26 | 2.35 | -23.27 | -263.00 | -23.28 | -262.99 | -1.46 | |
| 1 | 62 | 110 | -4.56 | -328.64 | -4.56 | -328.64 | -1.10 | -131.89 | -1236.94 | -131.89 | -1236.93 | 1.30 | |
| 1 | 62 | 111 | -4.56 | -328.80 | -4.57 | -328.80 | 1.20 | -132.42 | -1237.41 | -132.42 | -1237.41 | -1.40 | |
| 1 | 62 | 112 | 3.62 | -1.70 | 2.01 | -9.46e-02 | -2.44 | -51.63 | -537.35 | -51.63 | -537.35 | 1.46 | |
| 1 | 62 | 113 | -5.56 | -196.80 | -5.58 | -196.78 | 1.77 | -96.80 | -957.69 | -96.80 | -957.69 | -1.45 | |
| 1 | 62 | 114 | -3.51 | -394.24 | -3.51 | -394.24 | 0.51 | -151.58 | -1376.83 | -151.58 | -1376.83 | -0.66 | |
| 1 | 62 | 115 | -3.91 | -369.64 | -3.91 | -369.64 | -0.70 | -143.99 | -1324.28 | -143.99 | -1324.28 | 0.97 | |
| 1 | 62 | 116 | -3.98 | -105.74 | -4.03 | -105.69 | -2.15 | -74.53 | -764.88 | -74.53 | -764.87 | 1.40 | |
| 1 | 62 | 117 | 232.52 | 46.14 | 46.17 | 232.48 | 2.52 | 240.49 | 32.48 | 32.49 | 240.48 | -1.57 | |
| 1 | 62 | 118 | 204.34 | 35.76 | 35.80 | 204.30 | 2.42 | 230.06 | 53.56 | 53.58 | 230.04 | -1.60 | |
| 1 | 62 | 119 | -5.30 | -271.19 | -5.31 | -271.18 | 1.50 | -116.26 | -1115.09 | -116.26 | -1115.09 | -1.51 | |
| 1 | 62 | 120 | -5.56 | -196.61 | -5.58 | -196.59 | -1.83 | -96.03 | -957.08 | -96.03 | -957.08 | 1.46 | |
| 1 | 62 | 121 | -3.51 | -394.17 | -3.51 | -394.17 | -0.28 | -151.40 | -1376.65 | -151.40 | -1376.65 | 0.51 | |
| 1 | 62 | 122 | -3.91 | -369.76 | -3.92 | -369.76 | 0.87 | -144.35 | -1324.62 | -144.35 | -1324.62 | -1.10 | |
| 1 | 62 | 123 | 3.37 | -1.57 | 2.04 | -0.24 | 2.19 | -52.27 | -537.88 | -52.27 | -537.88 | -1.25 | |
| 1 | 62 | 124 | -5.29 | -271.01 | -5.30 | -271.00 | -1.48 | -115.58 | -1114.52 | -115.59 | -1114.52 | 1.45 | |
| 1 | 62 | 125 | -3.97 | -105.90 | -4.01 | -105.86 | 1.99 | -75.30 | -765.48 | -75.30 | -765.47 | -1.31 | |
| 1 | 62 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | 0.11 | -153.95 | -1394.15 | -153.95 | -1394.15 | -0.37 | |
| 1 | 62 | 148 | 231.64 | 43.86 | 43.91 | 231.59 | -3.08 | 238.19 | -5.51 | -5.04 | 237.72 | -10.68 | |
| 1 | 62 | 149 | 211.36 | 30.29 | 30.47 | 211.18 | 5.71 | 244.77 | 63.28 | 70.58 | 237.47 | -35.66 | |
| 1 | 62 | 150 | 114.74 | 7.83 | 8.70 | 113.86 | -9.63 | 17.94 | -261.72 | 13.81 | -257.58 | -33.74 | |
| 1 | 62 | 151 | 114.58 | 7.85 | 8.67 | 113.76 | 9.33 | 17.81 | -262.01 | 13.65 | -257.85 | 33.87 | |
| 1 | 62 | 152 | -2.50 | -328.66 | -2.64 | -328.52 | -6.74 | -90.52 | -1230.89 | -90.58 | -1230.84 | -8.02 | |
| 1 | 62 | 153 | -2.51 | -328.88 | -2.65 | -328.74 | 6.85 | -90.76 | -1231.36 | -90.82 | -1231.31 | 8.01 | |
| 1 | 62 | 154 | 13.06 | -16.01 | 0.19 | -3.13 | -14.44 | -10.14 | -536.09 | -11.51 | -534.72 | -26.83 | |
| 1 | 62 | 155 | -2.92 | -199.33 | -3.65 | -198.60 | 11.96 | -58.57 | -953.87 | -58.84 | -953.60 | 15.57 | |
| 1 | 62 | 156 | -1.85 | -393.25 | -1.87 | -393.23 | 2.26 | -105.82 | -1369.13 | -105.83 | -1369.13 | 2.48 | |
| 1 | 62 | 157 | -2.10 | -368.98 | -2.15 | -368.93 | -4.32 | -100.11 | -1317.23 | -100.13 | -1317.21 | -5.16 | |
| 1 | 62 | 158 | -1.17 | -110.53 | -3.04 | -108.65 | -14.18 | -35.46 | -762.77 | -36.05 | -762.18 | -20.78 | |
| 1 | 62 | 159 | 231.59 | 43.84 | 43.88 | 231.55 | 2.74 | 238.36 | -5.69 | -5.01 | 237.68 | 12.88 | |
| 1 | 62 | 160 | 211.33 | 30.25 | 30.45 | 211.13 | -6.04 | 244.77 | 63.15 | 70.52 | 237.40 | 35.83 | |
| 1 | 62 | 161 | -2.92 | -272.34 | -3.25 | -272.01 | 9.38 | -76.96 | -1110.22 | -77.08 | -1110.09 | 11.38 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|-----------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 62 | 162 | -2.90 | -199.10 | -3.63 | -198.36 | -12.00 | -58.24 | -953.21 | -58.51 | -952.94 | -15.55 | |
| 1 | 62 | 163 | -1.85 | -393.16 | -1.86 | -393.15 | -2.06 | -105.73 | -1368.96 | -105.73 | -1368.96 | -2.52 | |
| 1 | 62 | 164 | -2.11 | -369.15 | -2.16 | -369.09 | 4.48 | -100.28 | -1317.56 | -100.30 | -1317.54 | 5.13 | |
| 1 | 62 | 165 | 12.76 | -15.90 | 0.18 | -3.31 | 14.22 | -10.59 | -536.51 | -11.97 | -535.13 | 26.90 | |
| 1 | 62 | 166 | -2.91 | -272.09 | -3.23 | -271.76 | -9.35 | -76.66 | -1109.63 | -76.79 | -1109.50 | -11.37 | |
| 1 | 62 | 167 | -1.21 | -110.70 | -3.05 | -108.87 | 14.05 | -36.47 | -763.35 | -37.07 | -762.75 | 20.81 | |
| 1 | 62 | 168 | -1.77 | -401.24 | -1.77 | -401.24 | 0.10 | -107.61 | -1386.25 | -107.61 | -1386.25 | -0.28 | |
| 1 | 62 | 190 | 494.20 | 127.02 | 128.03 | 493.18 | 19.30 | 487.09 | 217.56 | 217.58 | 487.07 | -2.35 | |
| 1 | 62 | 191 | 172.83 | -54.81 | -54.81 | 172.83 | 0.95 | 298.41 | 165.62 | 206.70 | 257.33 | -61.38 | |
| 1 | 62 | 192 | 97.47 | -6.18 | -5.25 | 96.54 | -9.78 | 74.08 | -280.45 | 54.21 | -260.58 | -81.54 | |
| 1 | 62 | 193 | 97.32 | -6.19 | -5.29 | 96.42 | 9.63 | 74.05 | -280.64 | 54.19 | -260.78 | 81.56 | |
| 1 | 62 | 194 | 2.70 | -322.64 | 2.60 | -322.54 | -5.64 | 13.89 | -1223.31 | 13.28 | -1222.70 | -27.51 | |
| 1 | 62 | 195 | 2.68 | -322.97 | 2.58 | -322.87 | 5.68 | 13.82 | -1223.76 | 13.21 | -1223.15 | 27.50 | |
| 1 | 62 | 196 | 8.90 | -20.80 | -1.53e-02 | -11.88 | -13.61 | 51.84 | -548.97 | 43.37 | -540.51 | -70.81 | |
| 1 | 62 | 197 | 2.54 | -197.73 | 2.02 | -197.22 | 10.13 | 26.02 | -953.32 | 23.77 | -951.07 | 46.86 | |
| 1 | 62 | 198 | 2.78 | -385.92 | 2.77 | -385.91 | 1.85 | 8.68 | -1358.74 | 8.62 | -1358.68 | 9.13 | |
| 1 | 62 | 199 | 2.76 | -362.06 | 2.72 | -362.02 | -3.64 | 10.59 | -1307.83 | 10.34 | -1307.58 | -18.32 | |
| 1 | 62 | 200 | 2.77 | -112.80 | 1.42 | -111.46 | -12.40 | 36.34 | -768.53 | 32.14 | -764.34 | -57.96 | |
| 1 | 62 | 201 | 494.45 | 127.06 | 128.10 | 493.41 | -19.46 | 487.16 | 217.57 | 217.59 | 487.14 | 2.32 | |
| 1 | 62 | 202 | 172.88 | -54.84 | -54.83 | 172.87 | -1.11 | 298.51 | 165.56 | 206.69 | 257.38 | 61.46 | |
| 1 | 62 | 203 | 2.60 | -268.09 | 2.37 | -267.86 | 7.81 | 18.81 | -1105.46 | 17.60 | -1104.25 | 36.90 | |
| 1 | 62 | 204 | 2.56 | -197.41 | 2.05 | -196.90 | -10.12 | 26.13 | -952.67 | 23.88 | -950.42 | -46.85 | |
| 1 | 62 | 205 | 2.78 | -385.79 | 2.78 | -385.79 | -1.76 | 8.70 | -1358.58 | 8.64 | -1358.51 | -9.16 | |
| 1 | 62 | 206 | 2.74 | -362.29 | 2.71 | -362.26 | 3.70 | 10.56 | -1308.15 | 10.31 | -1307.89 | 18.30 | |
| 1 | 62 | 207 | 8.72 | -20.87 | -1.81e-02 | -12.13 | 13.50 | 51.79 | -549.32 | 43.33 | -540.86 | 70.81 | |
| 1 | 62 | 208 | 2.62 | -267.71 | 2.39 | -267.49 | -7.80 | 18.91 | -1104.89 | 17.70 | -1103.68 | -36.90 | |
| 1 | 62 | 209 | 2.72 | -113.06 | 1.39 | -111.73 | 12.33 | 35.95 | -769.08 | 31.76 | -764.89 | 57.98 | |
| 1 | 62 | 210 | 2.79 | -393.76 | 2.79 | -393.76 | 4.15e-02 | 8.07 | -1375.55 | 8.07 | -1375.55 | -0.13 | |
| 1 | 62 | 211 | 20.34 | -333.32 | -40.51 | -272.47 | -133.48 | 18.86 | -141.15 | -22.18 | -100.11 | -69.88 | |
| 1 | 62 | 212 | 231.09 | -1.68 | 11.43 | 217.98 | 53.67 | 265.99 | -35.78 | -30.42 | 260.64 | 39.83 | |
| 1 | 62 | 213 | -1.46 | -391.74 | -1.46 | -391.74 | 6.04e-02 | 2.90 | -1354.41 | 2.89 | -1354.40 | -3.13 | |
| 1 | 62 | 214 | 93.55 | 10.06 | 12.10 | 91.50 | 12.89 | 19.93 | -265.96 | 18.82 | -264.85 | 17.77 | |
| 1 | 62 | 215 | 94.01 | 10.09 | 12.14 | 91.97 | -12.93 | 20.13 | -268.28 | 18.91 | -267.06 | -18.74 | |
| 1 | 62 | 216 | 3.34 | -19.03 | 3.10 | -18.80 | 2.28 | 3.05 | -544.23 | 2.48 | -543.66 | 17.61 | |
| 1 | 62 | 217 | -1.44 | -367.47 | -1.44 | -367.47 | 9.13e-02 | 3.02 | -1303.26 | 2.99 | -1303.23 | -5.94 | |
| 1 | 62 | 218 | -0.23 | -117.11 | -0.24 | -117.10 | 0.45 | 2.61 | -763.57 | 2.31 | -763.26 | 15.28 | |
| 1 | 62 | 219 | -1.41 | -327.30 | -1.41 | -327.30 | 0.10 | 3.10 | -1218.31 | 3.04 | -1218.25 | -8.55 | |
| 1 | 62 | 220 | -1.14 | -201.29 | -1.14 | -201.29 | 2.40e-02 | 2.49 | -949.25 | 2.32 | -949.07 | 12.94 | |
| 1 | 62 | 221 | -1.34 | -271.65 | -1.34 | -271.65 | 7.35e-02 | 2.93 | -1100.21 | 2.82 | -1100.10 | -10.95 | |
| 1 | 62 | 222 | -1.37 | -271.76 | -1.37 | -271.76 | -6.94e-02 | 2.86 | -1099.95 | 2.75 | -1099.84 | 10.67 | |
| 1 | 62 | 223 | 231.49 | -1.57 | 11.50 | 218.42 | -53.62 | 269.70 | -36.17 | -31.08 | 264.61 | -39.15 | |
| 1 | 62 | 224 | -1.44 | -327.38 | -1.44 | -327.38 | -8.10e-02 | 3.05 | -1217.99 | 3.00 | -1217.94 | 8.27 | |
| 1 | 62 | 225 | -1.11 | -201.19 | -1.11 | -201.19 | -5.44e-02 | 2.56 | -949.36 | 2.38 | -949.18 | -13.22 | |
| 1 | 62 | 226 | -1.47 | -367.53 | -1.47 | -367.53 | -6.11e-02 | 2.99 | -1302.99 | 2.97 | -1302.96 | 5.66 | |
| 1 | 62 | 227 | -0.19 | -116.30 | -0.19 | -116.30 | -0.36 | 2.60 | -763.58 | 2.28 | -763.27 | -15.56 | |
| 1 | 62 | 228 | -1.48 | -391.77 | -1.48 | -391.77 | -2.45e-02 | 2.88 | -1354.27 | 2.87 | -1354.26 | 2.84 | |
| 1 | 62 | 229 | 3.43 | -18.12 | 3.19 | -17.88 | -2.29 | 2.97 | -542.37 | 2.38 | -541.78 | -17.95 | |
| 1 | 62 | 230 | -1.47 | -399.87 | -1.47 | -399.87 | 1.88e-02 | 2.84 | -1371.44 | 2.84 | -1371.44 | -0.16 | |
| 1 | 62 | 231 | 20.32 | -333.57 | -40.59 | -272.67 | 133.58 | 8.72 | -135.26 | -20.46 | -106.08 | 57.88 | |
| 1 | 62 | 232 | 229.30 | -0.58 | 13.00 | 215.72 | -54.20 | 264.39 | -37.02 | -32.07 | 259.43 | -38.33 | |
| 1 | 62 | 233 | 21.62 | -337.70 | -41.65 | -274.43 | 136.86 | 12.45 | -138.09 | -16.40 | -109.24 | 59.25 | |
| 1 | 62 | 234 | 90.49 | 9.82 | 12.07 | 88.23 | -13.31 | 19.91 | -273.27 | 18.99 | -272.35 | -16.40 | |
| 1 | 62 | 235 | 3.63 | -19.72 | 3.32 | -19.41 | -2.69 | 2.90 | -544.21 | 2.43 | -543.74 | -16.11 | |
| 1 | 62 | 236 | -4.58e-02 | -115.77 | -4.93e-02 | -115.76 | -0.64 | 2.63 | -763.60 | 2.39 | -763.36 | -13.74 | |
| 1 | 62 | 237 | -0.91 | -199.49 | -0.91 | -199.48 | -0.31 | 3.39 | -946.50 | 3.26 | -946.37 | -11.21 | |
| 1 | 62 | 238 | -1.10 | -268.64 | -1.10 | -268.64 | -0.20 | 3.39 | -1098.09 | 3.32 | -1098.02 | -8.84 | |
| 1 | 62 | 239 | -1.14 | -323.06 | -1.14 | -323.06 | -0.14 | 3.37 | -1216.11 | 3.34 | -1216.07 | -6.57 | |
| 1 | 62 | 240 | -1.15 | -362.28 | -1.15 | -362.28 | -9.58e-02 | 3.52 | -1300.35 | 3.50 | -1300.33 | -4.35 | |
| 1 | 62 | 241 | -1.16 | -385.96 | -1.16 | -385.96 | -5.04e-02 | 3.67 | -1350.92 | 3.66 | -1350.92 | -2.16 | |
| 1 | 62 | 242 | -1.16 | -393.93 | -1.16 | -393.93 | -4.09e-03 | 3.74 | -1367.84 | 3.74 | -1367.84 | -2.75e-02 | |
| 1 | 62 | 243 | -1.17 | -386.13 | -1.17 | -386.13 | 4.26e-02 | 3.69 | -1351.08 | 3.69 | -1351.08 | 2.13 | |
| 1 | 62 | 244 | -1.17 | -362.59 | -1.17 | -362.59 | 8.89e-02 | 3.53 | -1300.66 | 3.52 | -1300.64 | 4.33 | |
| 1 | 62 | 245 | -1.16 | -323.49 | -1.16 | -323.49 | 0.14 | 3.35 | -1216.56 | 3.32 | -1216.52 | 6.55 | |
| 1 | 62 | 246 | -1.13 | -269.14 | -1.13 | -269.14 | 0.19 | 3.34 | -1098.68 | 3.27 | -1098.60 | 8.83 | |
| 1 | 62 | 247 | -0.94 | -199.95 | -0.94 | -199.95 | 0.27 | 3.34 | -947.17 | 3.21 | -947.04 | 11.22 | |
| 1 | 62 | 248 | -9.23e-02 | -116.84 | -9.66e-02 | -116.84 | 0.71 | 2.62 | -764.16 | 2.37 | -763.91 | 13.73 | |
| 1 | 62 | 249 | 3.54 | -20.67 | 3.24 | -20.38 | 2.66 | 2.88 | -546.50 | 2.41 | -546.03 | 16.07 | |
| 1 | 62 | 250 | 90.30 | 9.80 | 12.05 | 88.05 | 13.27 | 19.89 | -273.45 | 18.97 | -272.52 | 16.45 | |
| 1 | 62 | 251 | 229.26 | -0.62 | 12.97 | 215.67 | 54.22 | 264.80 | -37.44 | -32.12 | 259.48 | 39.75 | |
| 1 | 62 | 252 | 21.56 | -337.81 | -41.69 | -274.56 | -136.86 | 12.46 | -138.16 | -16.44 | -109.25 | -59.31 | |
| 1 | 65 | 43 | 502.27 | 128.93 | 130.10 | 501.10 | -20.83 | 495.85 | 242.01 | 242.04 | 495.81 | 2.96 | |
| 1 | 65 | 44 | 233.33 | 44.51 | 44.55 | 233.30 | -2.67 | 238.70 | -8.81 | -7.93 | 237.81 | 14.79 | |
| 1 | 65 | 45 | 178.79 | -55.14 | -55.09 | 178.74 | -3.41 | 305.65 | 175.89 | 218.71 | 262.83 | 61.02 | |
| 1 | 65 | 46 | 213.56 | 29.64 | 30.27 | 212.92 | -10.79 | 249.01 | 61.90 | 71.40 | 239.51 | 41.06 | |
| 1 | 65 | 47 | 100.42 | -5.83 | -5.27 | 99.87 | 7.68 | 76.42 | -276.85 | 56.22 | -256.65 | 82.03 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|--------|---------|----------|-----------|----------|---------|----------|---------|----------|--------|-------|
| 1 | 65 | 48 | 115.73 | 8.23 | 8.45 | 115.50 | 4.96 | 21.49 | -260.00 | 16.34 | -254.85 | 37.72 | |
| 1 | 65 | 49 | 100.98 | -5.85 | -5.28 | 100.41 | -7.80 | 75.51 | -276.88 | 54.26 | -255.63 | -83.87 | |
| 1 | 65 | 50 | 116.07 | 8.26 | 8.52 | 115.82 | -5.28 | 19.22 | -259.56 | 14.30 | -254.63 | -36.74 | |
| 1 | 65 | 51 | 2.43 | -325.76 | 2.36 | -325.69 | 4.74 | 12.99 | -1225.67 | 12.31 | -1224.99 | 28.95 | |
| 1 | 65 | 52 | -2.75 | -329.99 | -2.82 | -329.91 | 4.87 | -91.39 | -1232.56 | -91.49 | -1232.47 | 10.18 | |
| 1 | 65 | 53 | 2.45 | -325.34 | 2.38 | -325.27 | -4.73 | 12.99 | -1225.04 | 12.29 | -1224.34 | -29.52 | |
| 1 | 65 | 54 | -2.75 | -329.64 | -2.82 | -329.57 | -4.81 | -91.86 | -1231.99 | -91.95 | -1231.89 | -10.51 | |
| 1 | 65 | 55 | 7.60 | -17.83 | -0.15 | -10.08 | 11.71 | 53.03 | -546.45 | 44.22 | -537.64 | 72.16 | |
| 1 | 65 | 56 | 9.29 | -11.36 | 3.04e-02 | -2.10 | 10.27 | -7.36 | -534.20 | -9.02 | -532.53 | 29.56 | |
| 1 | 65 | 57 | 2.27 | -198.20 | 1.89 | -197.82 | -8.73 | 25.41 | -954.83 | 22.96 | -952.38 | -48.95 | |
| 1 | 65 | 58 | -3.37 | -199.15 | -3.78 | -198.73 | -8.97 | -59.06 | -954.60 | -59.43 | -954.23 | -18.22 | |
| 1 | 65 | 59 | 2.53 | -389.90 | 2.53 | -389.90 | -1.45 | 6.96 | -1361.75 | 6.89 | -1361.67 | -10.20 | |
| 1 | 65 | 60 | -2.07 | -394.92 | -2.08 | -394.91 | -1.40 | -107.70 | -1371.03 | -107.71 | -1371.02 | -3.70 | |
| 1 | 65 | 61 | 2.49 | -365.90 | 2.47 | -365.88 | 3.06 | 9.25 | -1310.76 | 8.97 | -1310.48 | 19.38 | |
| 1 | 65 | 62 | -2.33 | -370.68 | -2.36 | -370.65 | 3.13 | -101.55 | -1319.26 | -101.59 | -1319.22 | 6.76 | |
| 1 | 65 | 63 | 2.27 | -112.41 | 1.26 | -111.40 | 10.69 | 36.03 | -769.18 | 31.63 | -764.78 | 59.36 | |
| 1 | 65 | 64 | -2.16 | -109.76 | -3.20 | -108.72 | 10.51 | -34.82 | -763.18 | -35.56 | -762.45 | 23.18 | |
| 1 | 65 | 65 | 233.43 | 44.29 | 44.32 | 233.39 | 2.44 | 239.44 | -5.02 | -4.38 | 238.80 | -12.52 | |
| 1 | 65 | 66 | 502.50 | 128.88 | 130.00 | 501.38 | 20.41 | 492.38 | 216.47 | 216.47 | 492.37 | -1.26 | |
| 1 | 65 | 67 | 179.06 | -55.24 | -55.19 | 179.01 | 3.27 | 304.02 | 166.75 | 207.77 | 263.01 | -62.83 | |
| 1 | 65 | 68 | 213.68 | 29.65 | 30.23 | 213.10 | 10.36 | 248.16 | 62.29 | 70.93 | 239.52 | -39.13 | |
| 1 | 65 | 69 | 2.36 | -269.37 | 2.20 | -269.20 | -6.65 | 18.22 | -1106.42 | 16.86 | -1105.06 | -39.06 | |
| 1 | 65 | 70 | -3.22 | -272.51 | -3.39 | -272.33 | -6.84 | -77.63 | -1110.57 | -77.82 | -1110.38 | -14.09 | |
| 1 | 65 | 71 | 2.23 | -198.69 | 1.85 | -198.31 | 8.70 | 25.36 | -955.83 | 22.97 | -953.44 | 48.37 | |
| 1 | 65 | 72 | -3.39 | -199.58 | -3.79 | -199.18 | 8.88 | -58.02 | -955.39 | -58.38 | -955.03 | 17.98 | |
| 1 | 65 | 73 | 2.53 | -390.06 | 2.52 | -390.05 | 1.51 | 6.97 | -1361.97 | 6.91 | -1361.90 | 9.64 | |
| 1 | 65 | 74 | -2.07 | -395.05 | -2.08 | -395.04 | 1.57 | -107.57 | -1371.25 | -107.58 | -1371.24 | 3.34 | |
| 1 | 65 | 75 | 2.51 | -365.61 | 2.48 | -365.58 | -3.02 | 9.23 | -1310.33 | 8.93 | -1310.03 | -19.94 | |
| 1 | 65 | 76 | -2.33 | -370.43 | -2.36 | -370.41 | -3.01 | -101.83 | -1318.85 | -101.87 | -1318.81 | -7.11 | |
| 1 | 65 | 77 | 7.91 | -17.55 | -0.13 | -9.50 | -11.83 | 53.01 | -545.45 | 44.02 | -536.47 | -72.79 | |
| 1 | 65 | 78 | 9.74 | -11.37 | 6.20e-02 | -1.69 | -10.52 | -9.15 | -533.71 | -10.79 | -532.07 | -29.32 | |
| 1 | 65 | 79 | 2.33 | -269.87 | 2.17 | -269.71 | 6.63 | 18.20 | -1107.24 | 16.88 | -1105.93 | 38.47 | |
| 1 | 65 | 80 | -3.23 | -272.92 | -3.40 | -272.75 | 6.82 | -76.92 | -1111.29 | -77.11 | -1111.11 | 13.79 | |
| 1 | 65 | 81 | 2.33 | -111.91 | 1.30 | -110.88 | -10.79 | 36.39 | -768.15 | 31.90 | -763.66 | -59.93 | |
| 1 | 65 | 82 | -2.11 | -109.34 | -3.19 | -108.27 | -10.68 | -35.60 | -762.50 | -36.35 | -761.75 | -23.28 | |
| 1 | 65 | 83 | 2.54 | -398.07 | 2.54 | -398.07 | 3.02e-02 | 6.21 | -1378.99 | 6.21 | -1378.99 | -0.39 | |
| 1 | 65 | 84 | -1.99 | -403.12 | -1.99 | -403.12 | 8.45e-02 | -109.60 | -1388.50 | -109.60 | -1388.50 | -0.43 | |
| 1 | 65 | 106 | 232.48 | 46.19 | 46.23 | 232.44 | -2.86 | 240.36 | 32.43 | 32.44 | 240.34 | 1.84 | |
| 1 | 65 | 107 | 204.27 | 35.78 | 35.82 | 204.22 | -2.78 | 229.98 | 53.67 | 53.69 | 229.96 | 1.81 | |
| 1 | 65 | 108 | 112.25 | 16.06 | 16.14 | 112.17 | -2.68 | -22.96 | -262.99 | -22.97 | -262.98 | 1.72 | |
| 1 | 65 | 109 | 112.49 | 16.09 | 16.15 | 112.43 | 2.35 | -23.19 | -262.62 | -23.20 | -262.61 | -1.46 | |
| 1 | 65 | 110 | -4.56 | -328.87 | -4.56 | -328.87 | -1.10 | -131.99 | -1237.44 | -131.99 | -1237.44 | 1.30 | |
| 1 | 65 | 111 | -4.56 | -328.57 | -4.57 | -328.57 | 1.20 | -132.32 | -1236.90 | -132.32 | -1236.90 | -1.40 | |
| 1 | 65 | 112 | 3.55 | -1.87 | 2.02 | -0.33 | -2.44 | -51.73 | -537.86 | -51.73 | -537.86 | 1.46 | |
| 1 | 65 | 113 | -5.56 | -196.51 | -5.58 | -196.49 | 1.77 | -96.67 | -957.06 | -96.68 | -957.06 | -1.45 | |
| 1 | 65 | 114 | -3.51 | -394.15 | -3.51 | -394.15 | 0.51 | -151.54 | -1376.64 | -151.54 | -1376.64 | -0.66 | |
| 1 | 65 | 115 | -3.91 | -369.81 | -3.91 | -369.81 | -0.70 | -144.06 | -1324.65 | -144.06 | -1324.65 | 0.97 | |
| 1 | 65 | 116 | -3.98 | -106.01 | -4.02 | -105.97 | -2.15 | -74.64 | -765.48 | -74.65 | -765.47 | 1.40 | |
| 1 | 65 | 117 | 232.57 | 46.15 | 46.19 | 232.54 | 2.52 | 240.58 | 32.50 | 32.52 | 240.57 | -1.57 | |
| 1 | 65 | 118 | 204.43 | 35.77 | 35.80 | 204.40 | 2.42 | 230.25 | 53.61 | 53.62 | 230.24 | -1.60 | |
| 1 | 65 | 119 | -5.30 | -270.92 | -5.31 | -270.91 | 1.50 | -116.14 | -1114.49 | -116.14 | -1114.49 | -1.51 | |
| 1 | 65 | 120 | -5.56 | -196.90 | -5.58 | -196.88 | -1.83 | -96.15 | -957.71 | -96.15 | -957.71 | 1.46 | |
| 1 | 65 | 121 | -3.51 | -394.26 | -3.51 | -394.26 | -0.28 | -151.44 | -1376.84 | -151.44 | -1376.84 | 0.51 | |
| 1 | 65 | 122 | -3.91 | -369.59 | -3.92 | -369.59 | 0.87 | -144.28 | -1324.25 | -144.28 | -1324.25 | -1.10 | |
| 1 | 65 | 123 | 3.43 | -1.40 | 2.03 | -5.08e-04 | 2.19 | -52.17 | -537.37 | -52.17 | -537.37 | -1.25 | |
| 1 | 65 | 124 | -5.30 | -271.28 | -5.30 | -271.27 | -1.48 | -115.70 | -1115.12 | -115.71 | -1115.12 | 1.45 | |
| 1 | 65 | 125 | -3.97 | -105.63 | -4.01 | -105.59 | 1.99 | -75.18 | -764.88 | -75.18 | -764.87 | -1.31 | |
| 1 | 65 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | 0.11 | -153.95 | -1394.15 | -153.95 | -1394.15 | -0.37 | |
| 1 | 65 | 148 | 231.59 | 43.85 | 43.90 | 231.54 | -3.09 | 238.12 | -5.54 | -5.07 | 237.64 | -10.69 | |
| 1 | 65 | 149 | 211.26 | 30.29 | 30.47 | 211.08 | 5.71 | 244.60 | 63.23 | 70.54 | 237.29 | -35.66 | |
| 1 | 65 | 150 | 114.57 | 7.83 | 8.70 | 113.69 | -9.63 | 17.89 | -262.08 | 13.76 | -257.95 | -33.74 | |
| 1 | 65 | 151 | 114.75 | 7.85 | 8.67 | 113.93 | 9.33 | 17.87 | -261.65 | 13.70 | -257.48 | 33.87 | |
| 1 | 65 | 152 | -2.50 | -328.89 | -2.64 | -328.75 | -6.74 | -90.58 | -1231.40 | -90.64 | -1231.34 | -8.02 | |
| 1 | 65 | 153 | -2.51 | -328.65 | -2.65 | -328.50 | 6.85 | -90.70 | -1230.86 | -90.76 | -1230.80 | 8.01 | |
| 1 | 65 | 154 | 12.96 | -16.14 | 0.19 | -3.37 | -14.44 | -10.20 | -536.59 | -11.57 | -535.22 | -26.83 | |
| 1 | 65 | 155 | -2.92 | -199.04 | -3.65 | -198.31 | 11.96 | -58.50 | -953.25 | -58.77 | -952.98 | 15.57 | |
| 1 | 65 | 156 | -1.85 | -393.16 | -1.87 | -393.15 | 2.27 | -105.80 | -1368.94 | -105.80 | -1368.94 | 2.48 | |
| 1 | 65 | 157 | -2.10 | -369.15 | -2.15 | -369.10 | -4.32 | -100.15 | -1317.59 | -100.17 | -1317.57 | -5.16 | |
| 1 | 65 | 158 | -1.17 | -110.80 | -3.04 | -108.93 | -14.18 | -35.53 | -763.36 | -36.12 | -762.77 | -20.78 | |
| 1 | 65 | 159 | 231.64 | 43.85 | 43.89 | 231.61 | 2.73 | 238.43 | -5.65 | -4.97 | 237.75 | 12.86 | |
| 1 | 65 | 160 | 211.43 | 30.25 | 30.46 | 211.22 | -6.04 | 244.94 | 63.20 | 70.56 | 237.58 | 35.82 | |
| 1 | 65 | 161 | -2.93 | -272.07 | -3.25 | -271.74 | 9.38 | -76.89 | -1109.63 | -77.01 | -1109.50 | 11.38 | |
| 1 | 65 | 162 | -2.90 | -199.39 | -3.63 | -198.65 | -12.00 | -58.32 | -953.83 | -58.59 | -953.56 | -15.55 | |
| 1 | 65 | 163 | -1.85 | -393.25 | -1.86 | -393.24 | -2.06 | -105.75 | -1369.15 | -105.76 | -1369.15 | -2.52 | |
| 1 | 65 | 164 | -2.11 | -368.98 | -2.16 | -368.92 | 4.48 | -100.23 | -1317.20 | -100.25 | -1317.18 | 5.13 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|-----------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 65 | 165 | 12.86 | -15.76 | 0.17 | -3.08 | 14.22 | -10.53 | -536.01 | -11.91 | -534.63 | 26.90 | |
| 1 | 65 | 166 | -2.91 | -272.36 | -3.23 | -272.04 | -9.35 | -76.73 | -1110.22 | -76.86 | -1110.09 | -11.37 | |
| 1 | 65 | 167 | -1.21 | -110.43 | -3.05 | -108.59 | 14.05 | -36.40 | -762.76 | -37.00 | -762.16 | 20.81 | |
| 1 | 65 | 168 | -1.77 | -401.24 | -1.77 | -401.24 | 0.10 | -107.61 | -1386.25 | -107.61 | -1386.25 | -0.28 | |
| 1 | 65 | 190 | 494.14 | 127.00 | 128.02 | 493.12 | 19.31 | 487.01 | 217.59 | 217.61 | 486.99 | -2.34 | |
| 1 | 65 | 191 | 172.73 | -54.81 | -54.80 | 172.73 | 0.94 | 298.28 | 165.52 | 206.67 | 257.14 | -61.40 | |
| 1 | 65 | 192 | 97.30 | -6.18 | -5.25 | 96.37 | -9.78 | 74.05 | -280.77 | 54.22 | -260.95 | -81.50 | |
| 1 | 65 | 193 | 97.49 | -6.19 | -5.29 | 96.59 | 9.64 | 74.08 | -280.32 | 54.17 | -260.42 | 81.60 | |
| 1 | 65 | 194 | 2.70 | -322.87 | 2.60 | -322.77 | -5.63 | 13.88 | -1223.80 | 13.27 | -1223.19 | -27.51 | |
| 1 | 65 | 195 | 2.68 | -322.74 | 2.58 | -322.64 | 5.69 | 13.82 | -1223.27 | 13.21 | -1222.66 | 27.50 | |
| 1 | 65 | 196 | 8.83 | -20.96 | -1.31e-02 | -12.12 | -13.61 | 51.83 | -549.45 | 43.38 | -541.00 | -70.78 | |
| 1 | 65 | 197 | 2.54 | -197.45 | 2.02 | -196.93 | 10.13 | 26.04 | -952.72 | 23.79 | -950.47 | 46.86 | |
| 1 | 65 | 198 | 2.78 | -385.83 | 2.77 | -385.82 | 1.86 | 8.68 | -1358.55 | 8.62 | -1358.49 | 9.13 | |
| 1 | 65 | 199 | 2.76 | -362.22 | 2.72 | -362.19 | -3.63 | 10.59 | -1308.19 | 10.34 | -1307.93 | -18.32 | |
| 1 | 65 | 200 | 2.76 | -113.07 | 1.42 | -111.73 | -12.40 | 36.32 | -769.11 | 32.13 | -764.92 | -57.96 | |
| 1 | 65 | 201 | 494.51 | 127.08 | 128.11 | 493.47 | -19.45 | 487.24 | 217.55 | 217.57 | 487.22 | 2.33 | |
| 1 | 65 | 202 | 172.98 | -54.84 | -54.84 | 172.97 | -1.12 | 298.63 | 165.65 | 206.73 | 257.56 | 61.44 | |
| 1 | 65 | 203 | 2.59 | -267.82 | 2.37 | -267.59 | 7.82 | 18.82 | -1104.89 | 17.61 | -1103.68 | 36.90 | |
| 1 | 65 | 204 | 2.56 | -197.70 | 2.05 | -197.18 | -10.12 | 26.11 | -953.27 | 23.87 | -951.02 | -46.85 | |
| 1 | 65 | 205 | 2.78 | -385.88 | 2.78 | -385.87 | -1.75 | 8.70 | -1358.76 | 8.64 | -1358.70 | -9.16 | |
| 1 | 65 | 206 | 2.74 | -362.13 | 2.70 | -362.09 | 3.72 | 10.56 | -1307.79 | 10.31 | -1307.54 | 18.30 | |
| 1 | 65 | 207 | 8.80 | -20.71 | -2.03e-02 | -11.90 | 13.51 | 51.80 | -548.85 | 43.32 | -540.37 | 70.83 | |
| 1 | 65 | 208 | 2.62 | -267.98 | 2.39 | -267.76 | -7.80 | 18.90 | -1105.47 | 17.69 | -1104.26 | -36.90 | |
| 1 | 65 | 209 | 2.73 | -112.80 | 1.40 | -111.46 | 12.34 | 35.97 | -768.51 | 31.77 | -764.31 | 57.97 | |
| 1 | 65 | 210 | 2.79 | -393.76 | 2.79 | -393.76 | 5.53e-02 | 8.07 | -1375.55 | 8.07 | -1375.55 | -0.13 | |
| 1 | 65 | 211 | 20.33 | -333.38 | -40.54 | -272.52 | -133.50 | 18.95 | -141.22 | -22.09 | -100.19 | -69.92 | |
| 1 | 65 | 212 | 231.01 | -1.67 | 11.44 | 217.89 | 53.67 | 265.82 | -35.82 | -30.46 | 260.46 | 39.85 | |
| 1 | 65 | 213 | -1.46 | -391.66 | -1.46 | -391.66 | 3.87e-02 | 2.88 | -1354.22 | 2.87 | -1354.21 | -3.13 | |
| 1 | 65 | 214 | 93.38 | 10.06 | 12.10 | 91.34 | 12.88 | 19.94 | -266.33 | 18.83 | -265.22 | 17.78 | |
| 1 | 65 | 215 | 94.17 | 10.09 | 12.14 | 92.13 | -12.95 | 20.12 | -267.92 | 18.89 | -266.69 | -18.74 | |
| 1 | 65 | 216 | 3.33 | -19.25 | 3.10 | -19.02 | 2.27 | 3.08 | -544.73 | 2.51 | -544.17 | 17.56 | |
| 1 | 65 | 217 | -1.45 | -367.32 | -1.45 | -367.32 | 7.29e-02 | 3.00 | -1302.89 | 2.97 | -1302.87 | -5.94 | |
| 1 | 65 | 218 | -0.24 | -117.36 | -0.24 | -117.36 | 0.44 | 2.60 | -764.15 | 2.30 | -763.85 | 15.28 | |
| 1 | 65 | 219 | -1.41 | -327.09 | -1.41 | -327.09 | 8.83e-02 | 3.09 | -1217.82 | 3.03 | -1217.76 | -8.55 | |
| 1 | 65 | 220 | -1.14 | -201.55 | -1.14 | -201.55 | 2.00e-02 | 2.49 | -949.86 | 2.32 | -949.69 | 12.94 | |
| 1 | 65 | 221 | -1.34 | -271.40 | -1.34 | -271.40 | 6.64e-02 | 2.92 | -1099.63 | 2.81 | -1099.52 | -10.95 | |
| 1 | 65 | 222 | -1.37 | -272.01 | -1.37 | -272.01 | -7.64e-02 | 2.86 | -1100.53 | 2.76 | -1100.43 | 10.67 | |
| 1 | 65 | 223 | 231.57 | -1.58 | 11.49 | 218.50 | -53.63 | 269.88 | -36.13 | -31.04 | 264.79 | -39.14 | |
| 1 | 65 | 224 | -1.43 | -327.59 | -1.43 | -327.59 | -9.44e-02 | 3.06 | -1218.49 | 3.01 | -1218.43 | 8.27 | |
| 1 | 65 | 225 | -1.11 | -200.93 | -1.11 | -200.93 | -5.84e-02 | 2.56 | -948.74 | 2.37 | -948.56 | -13.22 | |
| 1 | 65 | 226 | -1.46 | -367.68 | -1.46 | -367.68 | -7.95e-02 | 3.01 | -1303.35 | 2.98 | -1303.32 | 5.65 | |
| 1 | 65 | 227 | -0.19 | -116.05 | -0.19 | -116.05 | 0.37 | 2.61 | -763.00 | 2.29 | -762.68 | -15.57 | |
| 1 | 65 | 228 | -1.47 | -391.85 | -1.47 | -391.85 | -4.62e-02 | 2.90 | -1354.46 | 2.89 | -1354.45 | 2.84 | |
| 1 | 65 | 229 | 3.44 | -17.91 | 3.19 | -17.66 | -2.30 | 2.95 | -541.87 | 2.35 | -541.27 | -17.99 | |
| 1 | 65 | 230 | -1.47 | -399.87 | -1.47 | -399.87 | -3.98e-03 | 2.84 | -1371.44 | 2.84 | -1371.44 | -0.16 | |
| 1 | 65 | 231 | 20.33 | -333.51 | -40.56 | -272.62 | 133.56 | 8.62 | -135.18 | -20.56 | -106.00 | 57.83 | |
| 1 | 65 | 232 | 229.22 | -0.57 | 13.01 | 215.63 | -54.20 | 264.21 | -37.06 | -32.10 | 259.25 | -38.34 | |
| 1 | 65 | 233 | 21.61 | -337.77 | -41.68 | -274.48 | 136.89 | 12.54 | -138.18 | -16.31 | -109.32 | 59.30 | |
| 1 | 65 | 234 | 90.33 | 9.82 | 12.07 | 88.07 | -13.29 | 19.92 | -273.63 | 19.00 | -272.71 | -16.40 | |
| 1 | 65 | 235 | 3.62 | -19.93 | 3.32 | -19.62 | -2.67 | 2.93 | -544.71 | 2.46 | -544.24 | -16.06 | |
| 1 | 65 | 236 | -4.84e-02 | -116.02 | -5.19e-02 | -116.02 | -0.63 | 2.63 | -764.19 | 2.38 | -763.95 | -13.73 | |
| 1 | 65 | 237 | -0.91 | -199.75 | -0.91 | -199.75 | -0.30 | 3.39 | -947.12 | 3.26 | -946.99 | -11.21 | |
| 1 | 65 | 238 | -1.10 | -268.89 | -1.10 | -268.89 | -0.20 | 3.40 | -1098.68 | 3.33 | -1098.61 | -8.84 | |
| 1 | 65 | 239 | -1.14 | -323.27 | -1.14 | -323.27 | -0.13 | 3.39 | -1216.61 | 3.35 | -1216.57 | -6.57 | |
| 1 | 65 | 240 | -1.15 | -362.43 | -1.15 | -362.43 | -7.74e-02 | 3.53 | -1300.71 | 3.52 | -1300.70 | -4.35 | |
| 1 | 65 | 241 | -1.16 | -386.04 | -1.16 | -386.04 | -2.87e-02 | 3.69 | -1351.11 | 3.68 | -1351.11 | -2.16 | |
| 1 | 65 | 242 | -1.16 | -393.93 | -1.16 | -393.93 | 1.87e-02 | 3.74 | -1367.84 | 3.74 | -1367.84 | -2.55e-02 | |
| 1 | 65 | 243 | -1.17 | -386.05 | -1.17 | -386.05 | 6.43e-02 | 3.67 | -1350.89 | 3.67 | -1350.89 | 2.13 | |
| 1 | 65 | 244 | -1.17 | -362.43 | -1.17 | -362.43 | 0.11 | 3.52 | -1300.30 | 3.50 | -1300.28 | 4.33 | |
| 1 | 65 | 245 | -1.17 | -323.27 | -1.17 | -323.27 | 0.15 | 3.34 | -1216.06 | 3.30 | -1216.02 | 6.56 | |
| 1 | 65 | 246 | -1.13 | -268.89 | -1.13 | -268.89 | 0.20 | 3.34 | -1098.09 | 3.27 | -1098.02 | 8.84 | |
| 1 | 65 | 247 | -0.94 | -199.68 | -0.94 | -199.68 | 0.27 | 3.34 | -946.56 | 3.21 | -946.42 | 11.22 | |
| 1 | 65 | 248 | -8.97e-02 | -116.59 | -9.41e-02 | -116.58 | 0.72 | 2.63 | -763.57 | 2.38 | -763.33 | 13.74 | |
| 1 | 65 | 249 | 3.54 | -20.46 | 3.24 | -20.16 | 2.67 | 2.86 | -546.00 | 2.38 | -545.53 | 16.11 | |
| 1 | 65 | 250 | 90.46 | 9.80 | 12.05 | 88.21 | 13.29 | 19.88 | -273.08 | 18.95 | -272.16 | 16.45 | |
| 1 | 65 | 251 | 229.34 | -0.63 | 12.96 | 215.75 | 54.23 | 264.98 | -37.40 | -32.09 | 259.66 | 39.73 | |
| 1 | 65 | 252 | 21.58 | -337.75 | -41.66 | -274.51 | -136.83 | 12.37 | -138.07 | -16.53 | -109.17 | -59.27 | |
| 1 | 85 | 43 | 498.06 | 127.99 | 129.10 | 496.96 | -20.20 | 493.15 | 242.43 | 242.48 | 493.10 | 3.53 | |
| 1 | 85 | 44 | 232.45 | 44.33 | 44.33 | 232.45 | 0.25 | 238.00 | -8.87 | -8.20 | 237.33 | 12.82 | |
| 1 | 85 | 45 | 175.69 | -54.91 | -54.89 | 175.67 | -2.17 | 302.86 | 175.33 | 218.14 | 260.06 | 60.22 | |
| 1 | 85 | 46 | 212.42 | 30.01 | 30.39 | 212.04 | -8.31 | 247.35 | 62.51 | 71.25 | 238.62 | 39.22 | |
| 1 | 85 | 47 | 98.79 | -5.97 | -5.24 | 98.05 | 8.74 | 75.71 | -278.45 | 56.19 | -258.93 | 80.83 | |
| 1 | 85 | 48 | 115.15 | 8.07 | 8.56 | 114.65 | 7.27 | 20.84 | -260.84 | 16.12 | -256.13 | 36.14 | |
| 1 | 85 | 49 | 99.15 | -6.01 | -5.29 | 98.42 | -8.72 | 74.75 | -278.68 | 54.22 | -258.16 | -82.66 | |
| 1 | 85 | 50 | 115.29 | 8.09 | 8.59 | 114.79 | -7.33 | 18.53 | -260.72 | 14.02 | -256.21 | -35.22 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|--------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 85 | 51 | 2.56 | -324.17 | 2.48 | -324.09 | 5.18 | 13.53 | -1224.46 | 12.90 | -1223.83 | 27.99 | |
| 1 | 85 | 52 | -2.62 | -329.31 | -2.73 | -329.21 | 5.78 | -90.66 | -1231.70 | -90.73 | -1231.63 | 8.94 | |
| 1 | 85 | 53 | 2.56 | -324.11 | 2.48 | -324.02 | -5.21 | 13.52 | -1224.29 | 12.86 | -1223.63 | -28.58 | |
| 1 | 85 | 54 | -2.63 | -329.23 | -2.74 | -329.13 | -5.85 | -91.17 | -1231.60 | -91.25 | -1231.52 | -9.31 | |
| 1 | 85 | 55 | 8.21 | -19.38 | -8.89e-02 | -11.09 | 12.65 | 52.47 | -547.92 | 43.92 | -539.37 | 71.16 | |
| 1 | 85 | 56 | 11.13 | -13.70 | 0.10 | -2.67 | 12.34 | -7.73 | -535.10 | -9.25 | -533.58 | 28.27 | |
| 1 | 85 | 57 | 2.40 | -197.93 | 1.96 | -197.48 | -9.44 | 25.80 | -953.97 | 23.45 | -951.62 | -47.92 | |
| 1 | 85 | 58 | -3.15 | -199.21 | -3.71 | -198.65 | -10.48 | -58.71 | -954.17 | -59.03 | -953.85 | -16.88 | |
| 1 | 85 | 59 | 2.66 | -387.86 | 2.65 | -387.85 | -1.66 | 7.94 | -1360.14 | 7.87 | -1360.07 | -9.79 | |
| 1 | 85 | 60 | -1.96 | -394.06 | -1.97 | -394.05 | -1.86 | -106.60 | -1370.01 | -106.61 | -1370.00 | -3.19 | |
| 1 | 85 | 61 | 2.62 | -363.94 | 2.59 | -363.91 | 3.34 | 10.03 | -1309.24 | 9.76 | -1308.98 | 18.64 | |
| 1 | 85 | 62 | -2.22 | -369.81 | -2.25 | -369.78 | 3.70 | -100.59 | -1318.20 | -100.62 | -1318.17 | 5.81 | |
| 1 | 85 | 63 | 2.50 | -112.65 | 1.33 | -111.48 | 11.53 | 36.22 | -768.98 | 31.96 | -764.72 | 58.37 | |
| 1 | 85 | 64 | -1.70 | -110.15 | -3.11 | -108.73 | 12.32 | -34.36 | -762.96 | -35.02 | -762.30 | 21.92 | |
| 1 | 85 | 65 | 232.47 | 44.10 | 44.10 | 232.47 | -0.16 | 238.89 | -5.34 | -4.68 | 238.23 | -12.67 | |
| 1 | 85 | 66 | 498.40 | 127.93 | 129.01 | 497.33 | 19.93 | 489.70 | 216.86 | 216.87 | 489.69 | -1.76 | |
| 1 | 85 | 67 | 175.95 | -55.02 | -55.00 | 175.93 | 2.18 | 301.17 | 166.16 | 207.16 | 260.17 | -62.09 | |
| 1 | 85 | 68 | 212.48 | 29.97 | 30.34 | 212.11 | 8.18 | 246.42 | 62.80 | 70.75 | 238.47 | -37.38 | |
| 1 | 85 | 69 | 2.48 | -268.68 | 2.29 | -268.49 | -7.24 | 18.62 | -1105.83 | 17.33 | -1104.54 | -38.02 | |
| 1 | 85 | 70 | -3.08 | -272.40 | -3.32 | -272.15 | -8.13 | -77.17 | -1110.32 | -77.33 | -1110.16 | -12.76 | |
| 1 | 85 | 71 | 2.39 | -198.06 | 1.95 | -197.62 | 9.39 | 25.80 | -954.30 | 23.51 | -952.01 | 47.33 | |
| 1 | 85 | 72 | -3.15 | -199.35 | -3.70 | -198.80 | 10.42 | -57.58 | -954.29 | -57.89 | -953.98 | 16.64 | |
| 1 | 85 | 73 | 2.66 | -387.88 | 2.65 | -387.88 | 1.63 | 7.95 | -1360.19 | 7.89 | -1360.13 | 9.22 | |
| 1 | 85 | 74 | -1.96 | -394.08 | -1.97 | -394.07 | 1.79 | -106.45 | -1370.05 | -106.46 | -1370.04 | 2.79 | |
| 1 | 85 | 75 | 2.62 | -363.90 | 2.59 | -363.87 | -3.37 | 10.01 | -1309.13 | 9.73 | -1308.85 | -19.22 | |
| 1 | 85 | 76 | -2.22 | -369.76 | -2.26 | -369.72 | -3.77 | -100.90 | -1318.13 | -100.93 | -1318.10 | -6.20 | |
| 1 | 85 | 77 | 8.33 | -19.20 | -7.55e-02 | -10.80 | -12.68 | 52.42 | -547.30 | 43.71 | -538.59 | -71.76 | |
| 1 | 85 | 78 | 11.27 | -13.64 | 0.12 | -2.49 | -12.39 | -9.82 | -535.05 | -11.32 | -533.55 | -28.05 | |
| 1 | 85 | 79 | 2.47 | -268.78 | 2.28 | -268.59 | 7.20 | 18.63 | -1106.07 | 17.38 | -1104.83 | 37.42 | |
| 1 | 85 | 80 | -3.07 | -272.51 | -3.31 | -272.26 | 8.06 | -76.40 | -1110.44 | -76.55 | -1110.29 | 12.43 | |
| 1 | 85 | 81 | 2.52 | -112.46 | 1.35 | -111.28 | -11.57 | 36.23 | -768.52 | 31.89 | -764.18 | -58.94 | |
| 1 | 85 | 82 | -1.68 | -109.99 | -3.12 | -108.55 | -12.38 | -35.96 | -762.86 | -36.62 | -762.19 | -22.01 | |
| 1 | 85 | 83 | 2.67 | -395.87 | 2.67 | -395.87 | -1.43e-02 | 7.26 | -1377.18 | 7.26 | -1377.18 | -0.28 | |
| 1 | 85 | 84 | -1.88 | -402.16 | -1.88 | -402.16 | -3.09e-02 | -108.43 | -1387.31 | -108.43 | -1387.31 | -0.20 | |
| 1 | 85 | 106 | 232.46 | 46.24 | 46.24 | 232.46 | 3.04e-03 | 240.39 | 32.46 | 32.46 | 240.39 | 0.15 | |
| 1 | 85 | 107 | 204.27 | 35.83 | 35.83 | 204.27 | -8.97e-03 | 230.06 | 53.72 | 53.72 | 230.06 | 4.85e-03 | |
| 1 | 85 | 108 | 112.26 | 16.14 | 16.14 | 112.26 | -1.88e-02 | -22.93 | -262.79 | -22.93 | -262.79 | 0.10 | |
| 1 | 85 | 109 | 112.35 | 16.15 | 16.15 | 112.35 | -2.51e-02 | -23.24 | -262.80 | -23.24 | -262.80 | 8.90e-02 | |
| 1 | 85 | 110 | -4.56 | -328.75 | -4.56 | -328.75 | -2.13e-02 | -131.94 | -1237.19 | -131.94 | -1237.19 | -0.10 | |
| 1 | 85 | 111 | -4.57 | -328.68 | -4.57 | -328.68 | -2.61e-02 | -132.37 | -1237.16 | -132.37 | -1237.16 | -3.96e-02 | |
| 1 | 85 | 112 | 2.02 | -0.21 | 2.02 | -0.21 | -1.21e-02 | -51.68 | -537.60 | -51.68 | -537.60 | 0.12 | |
| 1 | 85 | 113 | -5.58 | -196.64 | -5.58 | -196.64 | -2.52e-02 | -96.74 | -957.38 | -96.74 | -957.38 | 1.89e-02 | |
| 1 | 85 | 114 | -3.51 | -394.19 | -3.51 | -394.19 | -2.68e-02 | -151.56 | -1376.73 | -151.56 | -1376.73 | -9.11e-02 | |
| 1 | 85 | 115 | -3.91 | -369.72 | -3.91 | -369.72 | -2.43e-02 | -144.03 | -1324.46 | -144.03 | -1324.46 | -0.12 | |
| 1 | 85 | 116 | -4.02 | -105.83 | -4.02 | -105.83 | -9.09e-03 | -74.59 | -765.17 | -74.59 | -765.17 | 5.98e-02 | |
| 1 | 85 | 117 | 232.51 | 46.18 | 46.18 | 232.51 | -1.76e-02 | 240.53 | 32.50 | 32.50 | 240.53 | 3.29e-02 | |
| 1 | 85 | 118 | 204.35 | 35.80 | 35.80 | 204.35 | -2.36e-02 | 230.14 | 53.60 | 53.60 | 230.14 | 9.85e-02 | |
| 1 | 85 | 119 | -5.31 | -271.04 | -5.31 | -271.04 | -2.56e-02 | -116.20 | -1114.79 | -116.20 | -1114.79 | -1.05e-02 | |
| 1 | 85 | 120 | -5.58 | -196.74 | -5.58 | -196.74 | -1.19e-02 | -96.09 | -957.40 | -96.09 | -957.40 | -1.22e-02 | |
| 1 | 85 | 121 | -3.51 | -394.22 | -3.51 | -394.22 | -2.60e-02 | -151.42 | -1376.75 | -151.42 | -1376.75 | -0.12 | |
| 1 | 85 | 122 | -3.92 | -369.67 | -3.92 | -369.67 | -2.65e-02 | -144.31 | -1324.44 | -144.31 | -1324.44 | -6.71e-02 | |
| 1 | 85 | 123 | 2.04 | -0.12 | 2.04 | -0.12 | -2.50e-02 | -52.22 | -537.62 | -52.22 | -537.62 | 7.07e-02 | |
| 1 | 85 | 124 | -5.30 | -271.13 | -5.30 | -271.13 | -1.68e-02 | -115.65 | -1114.82 | -115.65 | -1114.82 | -6.91e-02 | |
| 1 | 85 | 125 | -4.01 | -105.73 | -4.01 | -105.73 | -2.49e-02 | -75.24 | -765.17 | -75.24 | -765.17 | 4.67e-02 | |
| 1 | 85 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | -2.67e-02 | -153.95 | -1394.15 | -153.95 | -1394.15 | -0.11 | |
| 1 | 85 | 148 | 232.43 | 44.12 | 44.12 | 232.43 | -0.16 | 238.86 | -5.42 | -4.76 | 238.20 | -12.65 | |
| 1 | 85 | 149 | 212.43 | 29.98 | 30.35 | 212.06 | 8.19 | 246.37 | 62.72 | 70.72 | 238.37 | -37.50 | |
| 1 | 85 | 150 | 115.22 | 8.09 | 8.59 | 114.72 | -7.31 | 18.57 | -260.85 | 14.03 | -256.31 | -35.32 | |
| 1 | 85 | 151 | 115.28 | 8.10 | 8.59 | 114.78 | 7.28 | 18.49 | -260.83 | 13.93 | -256.27 | 35.39 | |
| 1 | 85 | 152 | -2.63 | -329.33 | -2.74 | -329.22 | -5.83 | -91.26 | -1231.76 | -91.33 | -1231.68 | -9.26 | |
| 1 | 85 | 153 | -2.63 | -329.28 | -2.74 | -329.18 | 5.81 | -91.45 | -1231.75 | -91.53 | -1231.67 | 9.21 | |
| 1 | 85 | 154 | 11.22 | -13.68 | 0.11 | -2.57 | -12.38 | -9.78 | -535.18 | -11.29 | -533.67 | -28.11 | |
| 1 | 85 | 155 | -3.15 | -199.25 | -3.71 | -198.69 | 10.44 | -58.92 | -954.30 | -59.24 | -953.98 | 16.90 | |
| 1 | 85 | 156 | -1.96 | -394.11 | -1.97 | -394.10 | 1.81 | -106.93 | -1370.15 | -106.93 | -1370.15 | 2.99 | |
| 1 | 85 | 157 | -2.22 | -369.85 | -2.26 | -369.81 | -3.75 | -101.06 | -1318.29 | -101.10 | -1318.26 | -6.12 | |
| 1 | 85 | 158 | -1.69 | -110.08 | -3.12 | -108.65 | -12.37 | -35.92 | -763.00 | -36.59 | -762.33 | -22.04 | |
| 1 | 85 | 159 | 232.48 | 44.11 | 44.11 | 232.48 | 0.14 | 238.91 | -5.37 | -4.70 | 238.25 | 12.73 | |
| 1 | 85 | 160 | 212.49 | 29.97 | 30.35 | 212.12 | -8.22 | 246.49 | 62.67 | 70.70 | 238.46 | 37.57 | |
| 1 | 85 | 161 | -3.08 | -272.44 | -3.32 | -272.20 | 8.09 | -77.42 | -1110.46 | -77.58 | -1110.31 | 12.72 | |
| 1 | 85 | 162 | -3.16 | -199.31 | -3.72 | -198.75 | -10.46 | -58.69 | -954.31 | -59.01 | -954.00 | -16.89 | |
| 1 | 85 | 163 | -1.96 | -394.13 | -1.97 | -394.12 | -1.84 | -106.85 | -1370.16 | -106.86 | -1370.15 | -3.08 | |
| 1 | 85 | 164 | -2.22 | -369.81 | -2.26 | -369.78 | 3.73 | -101.21 | -1318.28 | -101.24 | -1318.25 | 6.04 | |
| 1 | 85 | 165 | 11.22 | -13.61 | 0.12 | -2.51 | 12.35 | -9.93 | -535.16 | -11.45 | -533.65 | 28.17 | |
| 1 | 85 | 166 | -3.08 | -272.49 | -3.32 | -272.25 | -8.11 | -77.19 | -1110.48 | -77.35 | -1110.32 | -12.73 | |
| 1 | 85 | 167 | -1.69 | -110.01 | -3.11 | -108.59 | 12.34 | -36.12 | -762.99 | -36.80 | -762.31 | 22.08 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|---------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|-------|
| 1 | 85 | 168 | -1.88 | -402.21 | -1.88 | -402.21 | -1.32e-02 | -108.79 | -1387.44 | -108.79 | -1387.44 | -4.68e-02 | |
| 1 | 85 | 190 | 498.40 | 127.96 | 129.03 | 497.33 | 19.93 | 489.80 | 217.13 | 217.14 | 489.78 | -1.79 | |
| 1 | 85 | 191 | 175.92 | -55.03 | -55.01 | 175.90 | 2.19 | 301.24 | 166.13 | 207.27 | 260.10 | -62.17 | |
| 1 | 85 | 192 | 99.08 | -6.01 | -5.28 | 98.35 | -8.72 | 74.79 | -278.85 | 54.24 | -258.30 | -82.74 | |
| 1 | 85 | 193 | 99.13 | -6.01 | -5.29 | 98.41 | 8.70 | 74.80 | -278.83 | 54.23 | -258.26 | 82.77 | |
| 1 | 85 | 194 | 2.56 | -324.22 | 2.48 | -324.14 | -5.20 | 13.35 | -1224.52 | 12.69 | -1223.86 | -28.47 | |
| 1 | 85 | 195 | 2.56 | -324.20 | 2.48 | -324.12 | 5.20 | 13.29 | -1224.51 | 12.64 | -1223.85 | 28.44 | |
| 1 | 85 | 196 | 8.30 | -19.25 | -7.50e-02 | -10.88 | -12.67 | 52.39 | -547.50 | 43.67 | -538.78 | -71.80 | |
| 1 | 85 | 197 | 2.40 | -198.00 | 1.96 | -197.56 | 9.42 | 25.63 | -954.18 | 23.28 | -951.83 | 47.90 | |
| 1 | 85 | 198 | 2.66 | -387.96 | 2.65 | -387.95 | 1.64 | 7.70 | -1360.34 | 7.64 | -1360.28 | 9.54 | |
| 1 | 85 | 199 | 2.63 | -364.02 | 2.59 | -363.99 | -3.36 | 9.82 | -1309.35 | 9.54 | -1309.08 | -19.06 | |
| 1 | 85 | 200 | 2.52 | -112.55 | 1.35 | -111.38 | -11.56 | 36.15 | -768.73 | 31.81 | -764.39 | -58.95 | |
| 1 | 85 | 201 | 498.54 | 128.01 | 129.08 | 497.47 | -19.94 | 489.84 | 217.18 | 217.19 | 489.82 | 1.81 | |
| 1 | 85 | 202 | 175.98 | -55.05 | -55.03 | 175.96 | -2.20 | 301.35 | 166.16 | 207.31 | 260.21 | 62.20 | |
| 1 | 85 | 203 | 2.48 | -268.77 | 2.29 | -268.58 | 7.22 | 18.41 | -1106.05 | 17.13 | -1104.77 | 37.94 | |
| 1 | 85 | 204 | 2.40 | -198.03 | 1.96 | -197.59 | -9.43 | 25.69 | -954.19 | 23.34 | -951.85 | -47.89 | |
| 1 | 85 | 205 | 2.66 | -387.97 | 2.65 | -387.96 | -1.65 | 7.73 | -1360.35 | 7.66 | -1360.28 | -9.58 | |
| 1 | 85 | 206 | 2.63 | -364.00 | 2.59 | -363.97 | 3.35 | 9.78 | -1309.35 | 9.50 | -1309.07 | 19.02 | |
| 1 | 85 | 207 | 8.30 | -19.21 | -7.45e-02 | -10.84 | 12.66 | 52.37 | -547.47 | 43.64 | -538.74 | 71.83 | |
| 1 | 85 | 208 | 2.48 | -268.80 | 2.29 | -268.60 | -7.23 | 18.48 | -1106.06 | 17.19 | -1104.78 | -37.95 | |
| 1 | 85 | 209 | 2.52 | -112.51 | 1.35 | -111.34 | 11.55 | 36.11 | -768.71 | 31.76 | -764.37 | 58.96 | |
| 1 | 85 | 210 | 2.67 | -395.96 | 2.67 | -395.96 | -2.97e-03 | 7.02 | -1377.36 | 7.02 | -1377.36 | -2.50e-02 | |
| 1 | 85 | 211 | 20.99 | -335.47 | -41.07 | -273.41 | -135.17 | 20.69 | -142.47 | -19.98 | -101.81 | -70.58 | |
| 1 | 85 | 212 | 229.94 | -1.15 | 12.22 | 216.57 | 53.95 | 262.95 | -36.05 | -30.95 | 257.85 | 38.73 | |
| 1 | 85 | 213 | -1.32 | -388.83 | -1.32 | -388.83 | -1.85e-03 | 3.28 | -1352.56 | 3.28 | -1352.56 | -2.69 | |
| 1 | 85 | 214 | 91.69 | 9.94 | 12.08 | 89.55 | 13.07 | 19.85 | -268.81 | 18.89 | -267.86 | 16.58 | |
| 1 | 85 | 215 | 92.24 | 9.95 | 12.09 | 90.09 | -13.11 | 19.99 | -270.62 | 18.92 | -269.55 | -17.58 | |
| 1 | 85 | 216 | 3.47 | -19.61 | 3.21 | -19.35 | 2.47 | 3.06 | -544.65 | 2.56 | -544.14 | 16.64 | |
| 1 | 85 | 217 | -1.31 | -364.89 | -1.31 | -364.89 | -7.97e-03 | 3.26 | -1301.68 | 3.24 | -1301.66 | -5.18 | |
| 1 | 85 | 218 | -0.14 | -116.62 | -0.14 | -116.62 | 0.54 | 2.62 | -764.06 | 2.35 | -763.79 | 14.37 | |
| 1 | 85 | 219 | -1.29 | -325.23 | -1.29 | -325.23 | -2.41e-02 | 3.22 | -1217.08 | 3.17 | -1217.04 | -7.59 | |
| 1 | 85 | 220 | -1.02 | -200.53 | -1.02 | -200.53 | 0.17 | 2.94 | -948.29 | 2.79 | -948.14 | 11.95 | |
| 1 | 85 | 221 | -1.23 | -270.22 | -1.23 | -270.22 | -6.27e-02 | 3.13 | -1099.05 | 3.04 | -1098.96 | -9.92 | |
| 1 | 85 | 222 | -1.23 | -270.31 | -1.23 | -270.31 | 6.35e-02 | 3.12 | -1099.35 | 3.04 | -1099.27 | 9.63 | |
| 1 | 85 | 223 | 230.40 | -1.10 | 12.23 | 217.08 | -53.92 | 267.32 | -36.78 | -31.58 | 262.12 | -39.42 | |
| 1 | 85 | 224 | -1.29 | -325.29 | -1.29 | -325.29 | 2.48e-02 | 3.21 | -1217.29 | 3.17 | -1217.25 | 7.31 | |
| 1 | 85 | 225 | -1.03 | -200.39 | -1.03 | -200.39 | -0.16 | 2.95 | -947.86 | 2.79 | -947.70 | -12.23 | |
| 1 | 85 | 226 | -1.31 | -364.93 | -1.31 | -364.93 | 8.47e-03 | 3.26 | -1301.81 | 3.24 | -1301.79 | 4.90 | |
| 1 | 85 | 227 | -0.14 | -116.41 | -0.14 | -116.41 | -0.54 | 2.61 | -763.48 | 2.33 | -763.20 | -14.65 | |
| 1 | 85 | 228 | -1.32 | -388.85 | -1.32 | -388.85 | 2.30e-03 | 3.28 | -1352.63 | 3.28 | -1352.62 | 2.41 | |
| 1 | 85 | 229 | 3.49 | -19.27 | 3.21 | -19.00 | -2.48 | 2.91 | -544.10 | 2.38 | -543.57 | -17.02 | |
| 1 | 85 | 230 | -1.32 | -396.84 | -1.32 | -396.84 | 2.12e-04 | 3.29 | -1369.56 | 3.29 | -1369.56 | -0.14 | |
| 1 | 85 | 231 | 20.94 | -335.62 | -41.12 | -273.56 | 135.19 | 10.52 | -136.65 | -18.49 | -107.64 | 58.55 | |
| 1 | 85 | 232 | 230.37 | -1.10 | 12.23 | 217.04 | -53.92 | 267.25 | -36.78 | -31.57 | 262.04 | -39.44 | |
| 1 | 85 | 233 | 20.95 | -335.61 | -41.12 | -273.54 | 135.20 | 10.54 | -136.68 | -18.51 | -107.62 | 58.59 | |
| 1 | 85 | 234 | 92.18 | 9.95 | 12.09 | 90.03 | -13.11 | 20.00 | -270.78 | 18.93 | -269.71 | -17.60 | |
| 1 | 85 | 235 | 3.49 | -19.35 | 3.21 | -19.08 | -2.48 | 2.91 | -544.29 | 2.38 | -543.76 | -17.03 | |
| 1 | 85 | 236 | -0.14 | -116.50 | -0.14 | -116.50 | -0.54 | 2.61 | -763.69 | 2.33 | -763.41 | -14.64 | |
| 1 | 85 | 237 | -1.03 | -200.50 | -1.03 | -200.50 | -0.16 | 2.95 | -948.08 | 2.79 | -947.92 | -12.21 | |
| 1 | 85 | 238 | -1.23 | -270.34 | -1.23 | -270.34 | -6.24e-02 | 3.13 | -1099.27 | 3.04 | -1099.18 | -9.87 | |
| 1 | 85 | 239 | -1.29 | -325.36 | -1.29 | -325.36 | -2.39e-02 | 3.22 | -1217.30 | 3.18 | -1217.26 | -7.53 | |
| 1 | 85 | 240 | -1.31 | -365.02 | -1.31 | -365.02 | -7.85e-03 | 3.27 | -1301.89 | 3.25 | -1301.87 | -5.10 | |
| 1 | 85 | 241 | -1.32 | -388.96 | -1.32 | -388.96 | -1.86e-03 | 3.29 | -1352.75 | 3.28 | -1352.74 | -2.58 | |
| 1 | 85 | 242 | -1.32 | -396.96 | -1.32 | -396.96 | 7.41e-05 | 3.29 | -1369.72 | 3.29 | -1369.72 | -9.15e-03 | |
| 1 | 85 | 243 | -1.32 | -388.96 | -1.32 | -388.96 | 2.01e-03 | 3.28 | -1352.74 | 3.28 | -1352.74 | 2.57 | |
| 1 | 85 | 244 | -1.31 | -365.01 | -1.31 | -365.01 | 8.01e-03 | 3.26 | -1301.87 | 3.25 | -1301.85 | 5.09 | |
| 1 | 85 | 245 | -1.29 | -325.35 | -1.29 | -325.35 | 2.41e-02 | 3.22 | -1217.29 | 3.17 | -1217.24 | 7.52 | |
| 1 | 85 | 246 | -1.23 | -270.32 | -1.23 | -270.32 | 6.25e-02 | 3.13 | -1099.25 | 3.04 | -1099.16 | 9.87 | |
| 1 | 85 | 247 | -1.03 | -200.48 | -1.03 | -200.48 | 0.16 | 2.95 | -948.06 | 2.79 | -947.90 | 12.21 | |
| 1 | 85 | 248 | -0.14 | -116.48 | -0.14 | -116.48 | 0.54 | 2.61 | -763.67 | 2.33 | -763.39 | 14.65 | |
| 1 | 85 | 249 | 3.49 | -19.32 | 3.21 | -19.04 | 2.48 | 2.91 | -544.26 | 2.38 | -543.73 | 17.04 | |
| 1 | 85 | 250 | 92.23 | 9.95 | 12.10 | 90.08 | 13.11 | 20.00 | -270.73 | 18.93 | -269.66 | 17.61 | |
| 1 | 85 | 251 | 230.43 | -1.10 | 12.23 | 217.10 | 53.93 | 267.36 | -36.79 | -31.58 | 262.15 | 39.46 | |
| 1 | 85 | 252 | 20.95 | -335.70 | -41.13 | -273.62 | -135.22 | 10.55 | -136.67 | -18.50 | -107.61 | -58.60 | |
| 1 | 87 | 43 | 1267.64 | 339.22 | 342.67 | 1264.20 | -56.44 | 1051.45 | 539.62 | 541.10 | 1049.98 | -27.46 | |
| 1 | 87 | 44 | 581.66 | 110.78 | 110.97 | 581.47 | -9.43 | 505.60 | -52.40 | -51.76 | 504.96 | 18.87 | |
| 1 | 87 | 45 | 477.48 | -135.87 | -135.71 | 477.32 | -9.98 | 871.43 | 449.65 | 535.32 | 785.76 | 169.68 | |
| 1 | 87 | 46 | 569.14 | 75.05 | 76.32 | 567.87 | -24.98 | 766.30 | 189.57 | 216.84 | 739.04 | 122.39 | |
| 1 | 87 | 47 | 340.59 | -15.55 | -14.68 | 339.72 | 17.55 | 237.92 | -418.12 | 152.60 | -332.81 | 220.67 | |
| 1 | 87 | 48 | 386.33 | 21.95 | 22.42 | 385.86 | 13.00 | 160.64 | -342.04 | 134.09 | -315.49 | 112.43 | |
| 1 | 87 | 49 | 197.36 | -16.37 | -13.30 | 194.30 | -25.42 | 270.36 | -708.54 | 158.73 | -596.92 | -311.14 | |
| 1 | 87 | 50 | 240.87 | 20.24 | 22.95 | 238.17 | -24.27 | 207.71 | -609.02 | 157.98 | -559.29 | -195.30 | |
| 1 | 87 | 51 | 3.66 | -637.99 | 3.10 | -637.43 | 18.97 | 38.28 | -2561.66 | 30.11 | -2553.49 | 145.52 | |
| 1 | 87 | 52 | -1.56 | -652.61 | -2.26 | -651.90 | 21.43 | 12.65 | -2555.91 | 9.66 | -2552.91 | 87.65 | |
| 1 | 87 | 53 | 12.17 | -944.29 | 12.03 | -944.15 | -11.63 | -164.49 | -3420.05 | -166.60 | -3417.94 | -82.84 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|---------|----------|---------|----------|----------|---------|----------|---------|----------|----------|-------|
| 1 | 87 | 54 | -13.16 | -951.55 | -13.38 | -951.33 | -14.30 | -279.90 | -3326.56 | -280.83 | -3325.63 | -53.40 | |
| 1 | 87 | 55 | 121.65 | -9.14 | -2.65 | 115.16 | 28.41 | 162.34 | -956.95 | 124.98 | -919.58 | 201.07 | |
| 1 | 87 | 56 | 145.55 | -2.71 | 2.27 | 140.57 | 26.70 | 120.56 | -902.81 | 111.72 | -893.97 | 94.69 | |
| 1 | 87 | 57 | 5.73 | -583.37 | 4.44 | -582.09 | -27.50 | -30.06 | -2465.30 | -46.32 | -2449.03 | -198.36 | |
| 1 | 87 | 58 | -9.75 | -584.94 | -11.61 | -583.08 | -32.64 | -13.68 | -2394.80 | -25.03 | -2383.45 | -164.02 | |
| 1 | 87 | 59 | 10.12 | -1029.48 | 10.11 | -1029.46 | 4.35 | -155.08 | -3582.70 | -155.69 | -3582.09 | 45.70 | |
| 1 | 87 | 60 | -9.36 | -1041.64 | -9.39 | -1041.62 | 5.06 | -246.32 | -3513.68 | -248.94 | -3511.06 | 92.57 | |
| 1 | 87 | 61 | 3.66 | -772.59 | 3.29 | -772.23 | 16.80 | 5.86 | -2849.62 | -0.54 | -2843.23 | 135.01 | |
| 1 | 87 | 62 | -1.44 | -789.93 | -1.94 | -789.43 | 19.77 | -7.34 | -2840.93 | -10.82 | -2837.45 | 99.22 | |
| 1 | 87 | 63 | 7.41 | -110.05 | 0.61 | -103.25 | 27.42 | 118.37 | -1428.82 | 97.35 | -1407.80 | 179.08 | |
| 1 | 87 | 64 | 3.57 | -101.51 | -4.87 | -93.08 | 28.55 | 85.79 | -1394.50 | 81.02 | -1389.73 | 83.92 | |
| 1 | 87 | 65 | 521.22 | 115.59 | 115.63 | 521.18 | 4.10 | 507.27 | -116.34 | -116.30 | 507.23 | -5.23 | |
| 1 | 87 | 66 | 1100.79 | 283.83 | 287.11 | 1097.51 | 51.66 | 1144.82 | 790.64 | 798.82 | 1136.64 | 53.21 | |
| 1 | 87 | 67 | 382.92 | -122.45 | -122.44 | 382.91 | 2.62 | 870.15 | 340.45 | 594.27 | 616.34 | -264.62 | |
| 1 | 87 | 68 | 471.81 | 76.44 | 76.99 | 471.26 | 14.67 | 658.61 | 101.86 | 201.08 | 559.39 | -213.06 | |
| 1 | 87 | 69 | 9.68 | -792.69 | 9.18 | -792.19 | -20.02 | -133.45 | -3072.78 | -140.79 | -3065.44 | -146.70 | |
| 1 | 87 | 70 | -12.29 | -798.51 | -13.01 | -797.79 | -23.86 | -186.59 | -2985.53 | -192.31 | -2979.81 | -126.39 | |
| 1 | 87 | 71 | 3.94 | -304.57 | 2.01 | -302.65 | 24.31 | 89.72 | -1851.89 | 75.72 | -1837.89 | 164.28 | |
| 1 | 87 | 72 | -3.20 | -306.08 | -5.50 | -303.78 | 26.33 | 55.30 | -1833.01 | 51.98 | -1829.68 | 79.20 | |
| 1 | 87 | 73 | 4.03 | -885.83 | 3.81 | -885.60 | 14.15 | -32.79 | -3096.01 | -37.38 | -3091.42 | 118.54 | |
| 1 | 87 | 74 | -3.23 | -902.75 | -3.56 | -902.41 | 17.41 | -42.30 | -3077.29 | -46.52 | -3073.07 | 113.08 | |
| 1 | 87 | 75 | 12.33 | -1023.43 | 12.32 | -1023.42 | -3.11 | -171.24 | -3590.40 | -171.31 | -3590.33 | -15.74 | |
| 1 | 87 | 76 | -12.12 | -1032.52 | -12.13 | -1032.50 | -3.35 | -299.53 | -3502.78 | -299.70 | -3502.61 | 23.00 | |
| 1 | 87 | 77 | 12.04 | -89.36 | -2.55 | -74.76 | -35.59 | 135.78 | -1342.05 | 81.66 | -1287.94 | -277.57 | |
| 1 | 87 | 78 | 21.47 | -72.46 | 1.76 | -52.75 | -38.25 | 162.85 | -1255.63 | 140.55 | -1233.33 | -176.45 | |
| 1 | 87 | 79 | 3.68 | -481.83 | 2.73 | -480.89 | 21.37 | 65.07 | -2229.35 | 54.67 | -2218.95 | 154.12 | |
| 1 | 87 | 80 | -2.73 | -491.18 | -3.87 | -490.04 | 23.57 | 31.39 | -2220.09 | 28.50 | -2217.20 | 80.67 | |
| 1 | 87 | 81 | 4.02 | -341.13 | 0.77 | -337.87 | -33.35 | 40.20 | -1917.99 | 10.66 | -1888.44 | -238.72 | |
| 1 | 87 | 82 | -3.01 | -334.99 | -7.70 | -330.30 | -39.18 | 96.27 | -1844.90 | 81.45 | -1830.07 | -168.99 | |
| 1 | 87 | 83 | 6.30 | -975.91 | 6.19 | -975.81 | 10.14 | -71.75 | -3311.32 | -74.31 | -3308.76 | 91.05 | |
| 1 | 87 | 84 | -6.26 | -990.59 | -6.40 | -990.44 | 12.00 | -114.22 | -3274.52 | -118.96 | -3269.79 | 122.24 | |
| 1 | 87 | 106 | 587.74 | 115.46 | 115.46 | 587.74 | 0.11 | 511.16 | 32.51 | 32.52 | 511.15 | -2.56 | |
| 1 | 87 | 107 | 551.81 | 89.95 | 89.95 | 551.81 | 0.30 | 723.81 | 187.95 | 188.17 | 723.60 | -10.78 | |
| 1 | 87 | 108 | 380.80 | 41.54 | 41.54 | 380.80 | 0.26 | 71.45 | -326.64 | 71.20 | -326.40 | -9.88 | |
| 1 | 87 | 109 | 231.80 | 43.06 | 43.06 | 231.80 | 0.16 | 154.93 | -563.49 | 154.92 | -563.48 | 3.66 | |
| 1 | 87 | 110 | -3.06 | -656.37 | -3.06 | -656.37 | 0.20 | 52.18 | -2558.84 | 52.18 | -2558.84 | 0.96 | |
| 1 | 87 | 111 | -28.43 | -933.80 | -28.43 | -933.80 | 0.20 | 892.96 | -2989.10 | 892.96 | -2989.10 | 2.96 | |
| 1 | 87 | 112 | 146.08 | 7.90 | 7.90 | 146.08 | 0.19 | 56.74 | -898.83 | 56.68 | -898.77 | -7.51 | |
| 1 | 87 | 113 | -15.15 | -579.71 | -15.15 | -579.71 | 0.21 | 531.37 | -2297.25 | 531.37 | -2297.25 | 3.32 | |
| 1 | 87 | 114 | -19.14 | -1032.80 | -19.14 | -1032.80 | 0.20 | 707.02 | -3226.88 | 707.02 | -3226.88 | 2.58 | |
| 1 | 87 | 115 | -1.18 | -796.95 | -1.18 | -796.95 | 0.21 | 109.83 | -2837.70 | 109.83 | -2837.70 | 1.59 | |
| 1 | 87 | 116 | -5.62 | -87.56 | -5.62 | -87.56 | 8.26e-02 | 46.71 | -1392.12 | 46.70 | -1392.11 | -4.00 | |
| 1 | 87 | 117 | 523.68 | 125.87 | 125.87 | 523.68 | 0.16 | 520.38 | -25.21 | -25.21 | 520.38 | 0.53 | |
| 1 | 87 | 118 | 455.38 | 92.76 | 92.76 | 455.38 | 0.11 | 544.26 | 196.17 | 196.21 | 544.22 | 3.66 | |
| 1 | 87 | 119 | -24.21 | -785.43 | -24.21 | -785.43 | 0.21 | 773.09 | -2688.16 | 773.09 | -2688.16 | 3.14 | |
| 1 | 87 | 120 | -8.00 | -301.34 | -8.00 | -301.34 | 8.73e-02 | 35.21 | -1833.62 | 35.20 | -1833.62 | -1.36 | |
| 1 | 87 | 121 | -1.89 | -911.28 | -1.89 | -911.28 | 0.21 | 227.84 | -3053.70 | 227.84 | -3053.70 | 2.03 | |
| 1 | 87 | 122 | -26.64 | -1016.08 | -26.64 | -1016.08 | 0.20 | 870.07 | -3168.59 | 870.07 | -3168.59 | 2.78 | |
| 1 | 87 | 123 | 9.65 | -51.24 | 9.64 | -51.24 | 0.19 | 228.60 | -1222.86 | 228.59 | -1222.85 | 3.62 | |
| 1 | 87 | 124 | -5.95 | -491.12 | -5.95 | -491.12 | 0.16 | 32.78 | -2223.11 | 32.78 | -2223.11 | 4.09e-02 | |
| 1 | 87 | 125 | -5.58 | -329.86 | -5.58 | -329.86 | 0.21 | 348.09 | -1796.66 | 348.09 | -1796.66 | 3.49 | |
| 1 | 87 | 126 | -8.36 | -993.58 | -8.36 | -993.58 | 0.20 | 430.53 | -3195.50 | 430.53 | -3195.50 | 2.35 | |
| 1 | 87 | 148 | 582.11 | 110.68 | 110.86 | 581.93 | 9.27 | 508.37 | -52.06 | -51.05 | 507.37 | -23.75 | |
| 1 | 87 | 149 | 569.49 | 74.90 | 76.24 | 568.14 | 25.76 | 773.82 | 176.61 | 212.19 | 738.25 | -141.36 | |
| 1 | 87 | 150 | 385.37 | 21.84 | 22.28 | 384.93 | -12.61 | 158.75 | -356.32 | 123.77 | -321.35 | -129.58 | |
| 1 | 87 | 151 | 241.12 | 20.12 | 22.88 | 238.36 | 24.54 | 213.18 | -612.50 | 159.74 | -559.06 | 203.16 | |
| 1 | 87 | 152 | -1.60 | -653.25 | -2.28 | -652.56 | -21.14 | 1.99 | -2560.59 | -0.96 | -2557.64 | -86.82 | |
| 1 | 87 | 153 | -13.15 | -951.39 | -13.38 | -951.16 | 14.62 | -282.05 | -3327.84 | -283.18 | -3326.71 | 58.66 | |
| 1 | 87 | 154 | 143.40 | -2.65 | 2.32 | 138.43 | -26.47 | 106.75 | -918.62 | 95.24 | -907.11 | -108.01 | |
| 1 | 87 | 155 | -9.70 | -584.87 | -11.60 | -582.97 | 32.97 | -13.01 | -2396.31 | -25.20 | -2384.12 | 170.06 | |
| 1 | 87 | 156 | -9.38 | -1041.50 | -9.40 | -1041.48 | -4.75 | -251.14 | -3515.11 | -253.52 | -3512.73 | -88.10 | |
| 1 | 87 | 157 | -1.48 | -790.23 | -1.96 | -789.75 | -19.46 | -16.25 | -2844.38 | -19.58 | -2841.05 | -96.99 | |
| 1 | 87 | 158 | 3.42 | -103.68 | -4.75 | -95.51 | -28.43 | 68.54 | -1409.51 | 62.78 | -1403.75 | -92.06 | |
| 1 | 87 | 159 | 521.55 | 115.73 | 115.76 | 521.52 | -3.72 | 506.81 | -119.50 | -119.44 | 506.75 | 6.12 | |
| 1 | 87 | 160 | 472.09 | 76.46 | 76.99 | 471.55 | -14.57 | 665.90 | 95.49 | 201.45 | 559.95 | 221.83 | |
| 1 | 87 | 161 | -12.26 | -798.39 | -13.00 | -797.65 | 24.18 | -187.32 | -2986.92 | -193.56 | -2980.68 | 132.03 | |
| 1 | 87 | 162 | -3.17 | -307.91 | -5.43 | -305.64 | -26.19 | 40.26 | -1841.92 | 36.58 | -1838.25 | -83.11 | |
| 1 | 87 | 163 | -3.26 | -902.82 | -3.59 | -902.50 | -17.09 | -49.72 | -3079.82 | -53.71 | -3075.83 | -109.86 | |
| 1 | 87 | 164 | -12.12 | -1032.35 | -12.13 | -1032.33 | 3.67 | -303.03 | -3504.05 | -303.13 | -3503.95 | -18.11 | |
| 1 | 87 | 165 | 21.73 | -72.65 | 1.72 | -52.64 | 38.58 | 166.28 | -1257.52 | 142.21 | -1233.45 | 183.56 | |
| 1 | 87 | 166 | -2.75 | -492.32 | -3.86 | -491.20 | -23.34 | 18.67 | -2226.46 | 15.68 | -2223.47 | -81.82 | |
| 1 | 87 | 167 | -2.94 | -334.99 | -7.71 | -330.22 | 39.52 | 98.29 | -1846.47 | 82.32 | -1830.50 | 175.52 | |
| 1 | 87 | 168 | -6.28 | -990.52 | -6.42 | -990.39 | -11.68 | -120.33 | -3276.37 | -124.77 | -3271.93 | -118.31 | |
| 1 | 87 | 190 | 1274.10 | 341.85 | 345.24 | 1270.71 | 56.10 | 1057.39 | 548.36 | 550.38 | 1055.37 | 31.97 | |
| 1 | 87 | 191 | 477.39 | -137.38 | -137.22 | 477.22 | 10.05 | 886.90 | 439.57 | 538.39 | 788.08 | -185.58 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|---------|----------|---------|----------|---------|-----------|----------|---------|----------|---------|-------|
| 1 | 87 | 192 | 338.43 | -15.74 | -14.86 | 337.54 | -17.66 | 247.62 | -435.55 | 152.86 | -340.78 | -236.14 | |
| 1 | 87 | 193 | 197.51 | -16.41 | -13.31 | 194.41 | 25.58 | 278.99 | -712.92 | 163.52 | -597.45 | 318.12 | |
| 1 | 87 | 194 | 3.62 | -639.41 | 3.07 | -638.85 | -18.89 | 30.23 | -2568.51 | 22.01 | -2560.29 | -145.88 | |
| 1 | 87 | 195 | 12.16 | -943.96 | 12.02 | -943.81 | 11.75 | -166.44 | -3421.89 | -168.79 | -3419.54 | 87.39 | |
| 1 | 87 | 196 | 118.23 | -9.11 | -2.44 | 111.56 | -28.37 | 160.72 | -977.23 | 119.72 | -936.23 | -212.08 | |
| 1 | 87 | 197 | 5.74 | -583.14 | 4.44 | -581.85 | 27.61 | -29.67 | -2467.49 | -46.81 | -2450.36 | 203.65 | |
| 1 | 87 | 198 | 10.10 | -1029.26 | 10.08 | -1029.24 | -4.24 | -159.06 | -3584.93 | -159.57 | -3584.41 | -42.06 | |
| 1 | 87 | 199 | 3.62 | -773.34 | 3.26 | -772.98 | -16.70 | -1.30 | -2854.67 | -7.60 | -2848.37 | -133.92 | |
| 1 | 87 | 200 | 7.39 | -113.80 | 0.85 | -107.26 | -27.37 | 111.45 | -1448.34 | 88.78 | -1425.67 | -186.67 | |
| 1 | 87 | 201 | 1101.50 | 283.99 | 287.28 | 1098.21 | -51.74 | 1149.15 | 810.04 | 819.72 | 1139.47 | -56.46 | |
| 1 | 87 | 202 | 383.16 | -122.57 | -122.55 | 383.15 | -2.52 | 882.94 | 339.56 | 604.31 | 618.18 | 271.60 | |
| 1 | 87 | 203 | 9.68 | -792.39 | 9.18 | -791.89 | 20.13 | -134.33 | -3074.71 | -142.17 | -3066.87 | 151.62 | |
| 1 | 87 | 204 | 4.02 | -307.88 | 2.12 | -305.98 | -24.25 | 81.91 | -1864.49 | 67.15 | -1849.72 | -168.90 | |
| 1 | 87 | 205 | 3.99 | -886.10 | 3.77 | -885.88 | -14.04 | -38.89 | -3099.74 | -43.32 | -3095.31 | -116.36 | |
| 1 | 87 | 206 | 12.31 | -1023.11 | 12.30 | -1023.10 | 3.23 | -174.20 | -3592.33 | -174.31 | -3592.22 | 19.87 | |
| 1 | 87 | 207 | 12.16 | -89.37 | -2.55 | -74.66 | 35.74 | 140.33 | -1345.35 | 83.94 | -1288.97 | 283.88 | |
| 1 | 87 | 208 | 3.68 | -484.13 | 2.74 | -483.20 | -21.30 | 56.60 | -2238.61 | 45.90 | -2227.91 | -156.36 | |
| 1 | 87 | 209 | 4.05 | -340.99 | 0.77 | -337.71 | 33.48 | 42.25 | -1920.60 | 11.31 | -1889.66 | 244.46 | |
| 1 | 87 | 210 | 6.26 | -975.88 | 6.16 | -975.77 | -10.02 | -76.77 | -3314.12 | -79.17 | -3311.73 | -88.05 | |
| 1 | 87 | 211 | 35.48 | -852.97 | -106.59 | -710.91 | -325.63 | 40.07 | -235.86 | -9.39 | -186.40 | -105.84 | |
| 1 | 87 | 212 | 598.76 | -0.28 | 29.50 | 568.99 | 130.19 | 787.36 | -96.25 | -82.66 | 773.78 | 108.72 | |
| 1 | 87 | 213 | -4.26 | -1037.24 | -4.29 | -1037.21 | 5.06 | 19.83 | -3511.80 | 19.81 | -3511.78 | 8.64 | |
| 1 | 87 | 214 | 323.06 | 26.05 | 29.61 | 319.49 | 32.34 | 49.25 | -379.22 | 41.33 | -371.30 | 57.71 | |
| 1 | 87 | 215 | 178.22 | 22.64 | 27.64 | 173.22 | -27.44 | 49.03 | -648.32 | 40.73 | -640.02 | -75.63 | |
| 1 | 87 | 216 | 97.02 | 8.17 | 8.76 | 96.43 | 7.24 | 6.13 | -948.26 | 2.50 | -944.64 | 58.73 | |
| 1 | 87 | 217 | -4.94 | -1035.00 | -4.95 | -1035.00 | 2.07 | 13.98 | -3517.67 | 13.97 | -3517.66 | -5.04 | |
| 1 | 87 | 218 | 0.95 | -113.96 | 0.89 | -113.89 | 2.67 | 4.63 | -1420.64 | 2.45 | -1418.46 | 55.69 | |
| 1 | 87 | 219 | -4.90 | -956.12 | -4.90 | -956.12 | 0.69 | 13.84 | -3346.81 | 13.70 | -3346.67 | -21.60 | |
| 1 | 87 | 220 | -1.16 | -307.39 | -1.17 | -307.38 | 1.78 | 5.30 | -1842.40 | 3.79 | -1840.89 | 52.80 | |
| 1 | 87 | 221 | -4.09 | -801.66 | -4.09 | -801.66 | -2.38 | 19.31 | -3000.20 | 18.89 | -2999.79 | -35.52 | |
| 1 | 87 | 222 | -1.65 | -482.13 | -1.65 | -482.12 | 1.53 | 5.78 | -2218.05 | 4.65 | -2216.92 | 50.20 | |
| 1 | 87 | 223 | 497.68 | -1.75 | 27.90 | 468.03 | -118.02 | 622.54 | -91.16 | -69.77 | 601.14 | -121.71 | |
| 1 | 87 | 224 | -1.80 | -636.66 | -1.80 | -636.66 | 1.45 | 6.03 | -2548.30 | 5.17 | -2547.43 | 47.04 | |
| 1 | 87 | 225 | -3.00 | -588.03 | -3.01 | -588.02 | -2.60 | -1.09 | -2440.45 | -2.11 | -2439.43 | -49.83 | |
| 1 | 87 | 226 | -2.04 | -770.31 | -2.05 | -770.31 | 1.51 | 6.11 | -2834.00 | 5.48 | -2833.37 | 42.38 | |
| 1 | 87 | 227 | -0.20 | -346.27 | -0.20 | -346.27 | -0.53 | 4.16 | -1893.98 | 2.00 | -1891.81 | -64.13 | |
| 1 | 87 | 228 | -2.77 | -883.35 | -2.78 | -883.35 | 2.17 | 5.84 | -3077.70 | 5.44 | -3077.30 | 34.98 | |
| 1 | 87 | 229 | 8.05 | -92.27 | 7.88 | -92.10 | -4.12 | 5.91 | -1315.28 | 1.81 | -1311.18 | -73.46 | |
| 1 | 87 | 230 | -3.64 | -977.02 | -3.66 | -977.00 | 5.07 | -6.54e-02 | -3289.89 | -0.22 | -3289.74 | 22.23 | |
| 1 | 87 | 231 | 53.68 | -742.24 | -88.67 | -599.89 | 305.02 | -11.25 | -264.20 | -44.56 | -230.89 | 85.53 | |
| 1 | 87 | 232 | 599.35 | -0.88 | 29.53 | 568.93 | -131.64 | 794.17 | -97.80 | -83.04 | 779.41 | -113.78 | |
| 1 | 87 | 233 | 34.14 | -859.09 | -106.83 | -718.12 | 325.65 | 28.26 | -228.45 | -8.62 | -191.57 | 90.04 | |
| 1 | 87 | 234 | 320.55 | 26.12 | 29.73 | 316.94 | -32.41 | 50.51 | -392.14 | 41.48 | -383.11 | -62.57 | |
| 1 | 87 | 235 | 92.58 | 8.11 | 8.75 | 91.94 | -7.32 | 6.57 | -964.39 | 2.54 | -960.36 | -62.44 | |
| 1 | 87 | 236 | 0.91 | -118.88 | 0.85 | -118.83 | -2.57 | 5.07 | -1436.93 | 2.68 | -1434.54 | -58.69 | |
| 1 | 87 | 237 | -1.20 | -311.39 | -1.21 | -311.39 | -1.67 | 5.11 | -1853.71 | 3.49 | -1852.09 | -54.98 | |
| 1 | 87 | 238 | -1.66 | -484.87 | -1.67 | -484.87 | -1.51 | 5.76 | -2226.35 | 4.57 | -2225.17 | -51.47 | |
| 1 | 87 | 239 | -1.80 | -638.36 | -1.80 | -638.36 | -1.45 | 6.02 | -2554.41 | 5.14 | -2553.52 | -47.55 | |
| 1 | 87 | 240 | -2.03 | -771.21 | -2.03 | -771.21 | -1.52 | 6.11 | -2838.47 | 5.48 | -2837.85 | -42.24 | |
| 1 | 87 | 241 | -2.76 | -883.68 | -2.77 | -883.68 | -2.18 | 5.85 | -3080.98 | 5.46 | -3080.60 | -34.29 | |
| 1 | 87 | 242 | -3.63 | -976.97 | -3.66 | -976.95 | -5.07 | -5.43e-02 | -3292.34 | -0.19 | -3292.21 | -21.10 | |
| 1 | 87 | 243 | -4.25 | -1036.96 | -4.28 | -1036.93 | -5.07 | 19.85 | -3513.71 | 19.83 | -3513.69 | -7.15 | |
| 1 | 87 | 244 | -4.94 | -1034.61 | -4.94 | -1034.60 | -2.07 | 14.00 | -3519.25 | 13.99 | -3519.24 | 6.82 | |
| 1 | 87 | 245 | -4.89 | -955.70 | -4.89 | -955.70 | -0.69 | 13.87 | -3348.24 | 13.70 | -3348.07 | 23.60 | |
| 1 | 87 | 246 | -4.08 | -801.78 | -4.09 | -801.27 | 2.37 | 19.35 | -3001.61 | 18.88 | -3001.14 | 37.69 | |
| 1 | 87 | 247 | -3.00 | -587.73 | -3.01 | -587.72 | 2.60 | -1.04 | -2441.93 | -2.15 | -2440.82 | 52.11 | |
| 1 | 87 | 248 | -0.20 | -346.07 | -0.20 | -346.06 | 0.53 | 4.25 | -1895.64 | 1.92 | -1893.31 | 66.48 | |
| 1 | 87 | 249 | 8.05 | -92.18 | 7.88 | -92.01 | 4.12 | 6.08 | -1317.13 | 1.72 | -1312.77 | 75.83 | |
| 1 | 87 | 250 | 178.23 | 22.65 | 27.65 | 173.22 | 27.46 | 49.59 | -650.21 | 40.81 | -641.42 | 77.93 | |
| 1 | 87 | 251 | 497.79 | -1.80 | 27.91 | 468.08 | 118.14 | 623.99 | -91.70 | -69.56 | 601.85 | 123.94 | |
| 1 | 87 | 252 | 53.78 | -742.71 | -88.72 | -600.22 | -305.27 | -12.83 | -261.61 | -44.89 | -229.56 | -83.35 | |
| 1 | 97 | 43 | 1209.06 | 322.86 | 326.12 | 1205.80 | -53.61 | 1013.70 | 520.41 | 521.62 | 1012.50 | -24.37 | |
| 1 | 97 | 44 | 555.30 | 105.83 | 105.98 | 555.14 | -8.43 | 487.51 | -48.78 | -48.12 | 486.85 | 18.76 | |
| 1 | 97 | 45 | 453.79 | -129.79 | -129.65 | 453.64 | -9.27 | 826.28 | 430.25 | 513.29 | 743.24 | 161.22 | |
| 1 | 97 | 46 | 541.31 | 71.67 | 72.86 | 540.12 | -23.63 | 723.57 | 179.15 | 204.87 | 697.85 | 115.51 | |
| 1 | 97 | 47 | 320.04 | -14.79 | -13.93 | 319.17 | 17.00 | 225.54 | -413.20 | 146.90 | -334.56 | 209.88 | |
| 1 | 97 | 48 | 363.45 | 20.88 | 21.35 | 362.98 | 12.70 | 147.28 | -343.04 | 123.11 | -318.87 | 106.15 | |
| 1 | 97 | 49 | 191.18 | -15.54 | -12.70 | 188.33 | -24.08 | 254.95 | -674.90 | 152.22 | -572.17 | -291.49 | |
| 1 | 97 | 50 | 232.55 | 19.35 | 21.83 | 230.08 | -22.83 | 189.25 | -583.15 | 144.39 | -538.29 | -180.65 | |
| 1 | 97 | 51 | 3.63 | -618.55 | 3.13 | -618.04 | 17.78 | 38.04 | -2472.48 | 30.78 | -2465.22 | 134.83 | |
| 1 | 97 | 52 | -1.77 | -632.41 | -2.41 | -631.77 | 20.08 | -0.55 | -2468.63 | -3.16 | -2466.03 | 80.13 | |
| 1 | 97 | 53 | 11.30 | -894.21 | 11.17 | -894.07 | -11.18 | -144.28 | -3245.19 | -146.26 | -3243.20 | -78.48 | |
| 1 | 97 | 54 | -12.21 | -901.45 | -12.42 | -901.24 | -13.67 | -263.83 | -3162.30 | -264.67 | -3161.46 | -49.33 | |
| 1 | 97 | 55 | 108.83 | -9.10 | -2.39 | 102.13 | 27.30 | 154.87 | -935.51 | 120.39 | -901.03 | 190.82 | |
| 1 | 97 | 56 | 131.28 | -3.07 | 2.05 | 126.16 | 25.72 | 107.72 | -885.52 | 99.66 | -877.46 | 89.12 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|----|-----|---------|---------|---------|---------|----------|---------|----------|---------|----------|----------|-------|
| 1 | 97 | 57 | 5.49 | -552.12 | 4.27 | -550.90 | -26.04 | -21.76 | -2348.79 | -36.58 | -2333.97 | -185.12 | |
| 1 | 97 | 58 | -9.21 | -553.70 | -10.96 | -551.95 | -30.81 | -20.10 | -2285.47 | -30.07 | -2275.50 | -149.94 | |
| 1 | 97 | 59 | 9.47 | -979.61 | 9.46 | -979.59 | 3.69 | -136.64 | -3410.09 | -137.12 | -3409.61 | 39.80 | |
| 1 | 97 | 60 | -8.70 | -991.40 | -8.72 | -991.38 | 4.31 | -235.85 | -3349.51 | -238.06 | -3347.30 | 82.88 | |
| 1 | 97 | 61 | 3.64 | -745.13 | 3.32 | -744.81 | 15.58 | 8.38 | -2743.24 | 2.77 | -2737.64 | 124.09 | |
| 1 | 97 | 62 | -1.61 | -761.54 | -2.05 | -761.10 | 18.30 | -19.94 | -2736.95 | -22.93 | -2733.96 | 90.11 | |
| 1 | 97 | 63 | 6.73 | -114.18 | 0.73 | -108.18 | 26.26 | 113.18 | -1390.57 | 93.89 | -1371.27 | 169.24 | |
| 1 | 97 | 64 | 2.60 | -106.05 | -4.81 | -98.64 | 27.39 | 72.91 | -1359.26 | 68.59 | -1354.94 | 78.55 | |
| 1 | 97 | 65 | 500.92 | 110.12 | 110.15 | 500.88 | 3.64 | 489.06 | -105.92 | -105.85 | 488.99 | -6.47 | |
| 1 | 97 | 66 | 1058.94 | 273.01 | 276.11 | 1055.83 | 49.28 | 1096.74 | 744.43 | 751.02 | 1090.15 | 47.72 | |
| 1 | 97 | 67 | 368.72 | -117.73 | -117.72 | 368.70 | 2.64 | 825.20 | 330.83 | 565.26 | 590.78 | -246.85 | |
| 1 | 97 | 68 | 453.73 | 72.92 | 73.46 | 453.19 | 14.34 | 625.37 | 101.43 | 190.64 | 536.16 | -196.93 | |
| 1 | 97 | 69 | 9.05 | -750.19 | 8.58 | -749.71 | -19.01 | -115.69 | -2916.40 | -122.43 | -2909.66 | -137.26 | |
| 1 | 97 | 70 | -11.48 | -755.94 | -12.17 | -755.25 | -22.59 | -178.08 | -2838.64 | -183.10 | -2833.62 | -115.50 | |
| 1 | 97 | 71 | 3.84 | -301.19 | 2.08 | -299.42 | 23.16 | 86.01 | -1796.72 | 73.27 | -1783.98 | 154.38 | |
| 1 | 97 | 72 | -3.34 | -302.72 | -5.46 | -300.60 | 25.13 | 42.35 | -1780.10 | 39.38 | -1777.12 | 73.58 | |
| 1 | 97 | 73 | 3.99 | -850.32 | 3.79 | -850.12 | 12.96 | -26.68 | -2971.97 | -30.64 | -2968.01 | 107.97 | |
| 1 | 97 | 74 | -3.18 | -866.39 | -3.48 | -866.10 | 15.92 | -52.26 | -2956.71 | -55.86 | -2953.11 | 102.17 | |
| 1 | 97 | 75 | 11.45 | -970.88 | 11.44 | -970.87 | -3.26 | -150.84 | -3410.10 | -150.93 | -3410.02 | -16.79 | |
| 1 | 97 | 76 | -11.21 | -979.86 | -11.22 | -979.85 | -3.53 | -282.84 | -3332.73 | -282.96 | -3332.60 | 19.86 | |
| 1 | 97 | 77 | 11.84 | -82.91 | -2.31 | -68.76 | -33.77 | 130.86 | -1281.95 | 81.38 | -1232.47 | -259.73 | |
| 1 | 97 | 78 | 20.66 | -66.86 | 1.60 | -47.80 | -36.12 | 145.31 | -1202.80 | 125.38 | -1182.87 | -162.69 | |
| 1 | 97 | 79 | 3.64 | -470.41 | 2.77 | -469.55 | 20.21 | 62.85 | -2157.21 | 53.49 | -2147.85 | 143.87 | |
| 1 | 97 | 80 | -2.89 | -479.34 | -3.94 | -478.29 | 22.32 | 18.28 | -2149.83 | 15.73 | -2147.28 | 74.32 | |
| 1 | 97 | 81 | 3.96 | -322.41 | 0.87 | -319.32 | -31.60 | 42.77 | -1830.72 | 15.85 | -1803.79 | -222.97 | |
| 1 | 97 | 82 | -2.94 | -316.54 | -7.36 | -312.12 | -36.96 | 81.93 | -1764.36 | 68.80 | -1751.23 | -155.13 | |
| 1 | 97 | 83 | 6.03 | -932.49 | 5.94 | -932.40 | 9.12 | -61.80 | -3168.11 | -63.96 | -3165.95 | 81.92 | |
| 1 | 97 | 84 | -5.89 | -946.56 | -6.02 | -946.44 | 10.79 | -117.31 | -3136.54 | -121.32 | -3132.53 | 110.00 | |
| 1 | 97 | 106 | 560.78 | 110.26 | 110.26 | 560.78 | 9.56e-02 | 492.96 | 33.77 | 33.79 | 492.95 | -2.31 | |
| 1 | 97 | 107 | 524.58 | 85.88 | 85.88 | 524.58 | 0.27 | 682.89 | 176.37 | 176.55 | 682.70 | -9.74 | |
| 1 | 97 | 108 | 358.09 | 39.60 | 39.60 | 358.09 | 0.23 | 60.89 | -329.95 | 60.68 | -329.75 | -8.92 | |
| 1 | 97 | 109 | 224.00 | 40.97 | 40.97 | 224.00 | 0.14 | 135.98 | -543.13 | 135.96 | -543.12 | 3.32 | |
| 1 | 97 | 110 | -3.38 | -635.73 | -3.38 | -635.73 | 0.18 | 28.78 | -2472.27 | 28.78 | -2472.27 | 0.85 | |
| 1 | 97 | 111 | -26.22 | -885.40 | -26.22 | -885.40 | 0.18 | 785.40 | -2859.49 | 785.40 | -2859.49 | 2.67 | |
| 1 | 97 | 112 | 131.45 | 7.39 | 7.39 | 131.45 | 0.17 | 43.73 | -882.53 | 43.68 | -882.48 | -6.79 | |
| 1 | 97 | 113 | -14.40 | -548.64 | -14.40 | -548.64 | 0.19 | 464.78 | -2198.55 | 464.77 | -2198.54 | 3.01 | |
| 1 | 97 | 114 | -17.70 | -983.46 | -17.70 | -983.46 | 0.18 | 615.45 | -3092.60 | 615.45 | -3092.60 | 2.33 | |
| 1 | 97 | 115 | -1.59 | -767.85 | -1.59 | -767.85 | 0.19 | 79.02 | -2735.19 | 79.02 | -2735.19 | 1.43 | |
| 1 | 97 | 116 | -5.61 | -93.28 | -5.61 | -93.28 | 7.40e-02 | 31.62 | -1357.63 | 31.61 | -1357.62 | -3.63 | |
| 1 | 97 | 117 | 503.13 | 119.62 | 119.62 | 503.13 | 0.14 | 501.28 | -18.16 | -18.16 | 501.28 | 0.49 | |
| 1 | 97 | 118 | 437.81 | 88.40 | 88.40 | 437.81 | 9.68e-02 | 521.31 | 183.73 | 183.77 | 521.28 | 3.33 | |
| 1 | 97 | 119 | -22.51 | -743.97 | -22.51 | -743.97 | 0.18 | 679.70 | -2571.90 | 679.70 | -2571.90 | 2.84 | |
| 1 | 97 | 120 | -7.97 | -298.12 | -7.97 | -298.12 | 7.83e-02 | 18.36 | -1781.28 | 18.36 | -1781.28 | -1.25 | |
| 1 | 97 | 121 | -2.18 | -874.10 | -2.18 | -874.10 | 0.19 | 184.22 | -2936.74 | 184.22 | -2936.73 | 1.83 | |
| 1 | 97 | 122 | -24.51 | -965.06 | -24.51 | -965.06 | 0.18 | 763.18 | -3032.98 | 763.18 | -3032.98 | 2.51 | |
| 1 | 97 | 123 | 8.96 | -46.12 | 8.96 | -46.12 | 0.17 | 198.30 | -1174.16 | 198.29 | -1174.15 | 3.29 | |
| 1 | 97 | 124 | -6.08 | -479.11 | -6.08 | -479.11 | 0.15 | 13.54 | -2153.36 | 13.54 | -2153.36 | 1.87e-02 | |
| 1 | 97 | 125 | -5.57 | -311.33 | -5.57 | -311.33 | 0.19 | 302.73 | -1721.71 | 302.72 | -1721.71 | 3.17 | |
| 1 | 97 | 126 | -7.99 | -949.28 | -7.99 | -949.28 | 0.18 | 366.30 | -3066.74 | 366.29 | -3066.74 | 2.11 | |
| 1 | 97 | 148 | 555.71 | 105.74 | 105.89 | 555.56 | 8.28 | 490.01 | -48.52 | -47.53 | 489.01 | -23.16 | |
| 1 | 97 | 149 | 541.63 | 71.54 | 72.80 | 540.36 | 24.33 | 730.37 | 167.46 | 200.69 | 697.14 | -132.66 | |
| 1 | 97 | 150 | 362.59 | 20.78 | 21.22 | 362.15 | -12.34 | 145.36 | -355.67 | 113.84 | -324.14 | -121.66 | |
| 1 | 97 | 151 | 232.78 | 19.24 | 21.77 | 230.26 | 23.09 | 194.14 | -586.25 | 145.98 | -538.08 | 187.79 | |
| 1 | 97 | 152 | -1.80 | -632.99 | -2.43 | -632.36 | -19.82 | -10.17 | -2472.87 | -12.73 | -2470.30 | -79.41 | |
| 1 | 97 | 153 | -12.20 | -901.31 | -12.41 | -901.09 | 13.95 | -265.80 | -3163.46 | -266.81 | -3162.45 | 54.09 | |
| 1 | 97 | 154 | 129.35 | -3.02 | 2.10 | 124.23 | -25.51 | 95.24 | -899.69 | 84.84 | -889.29 | -101.17 | |
| 1 | 97 | 155 | -9.17 | -553.64 | -10.95 | -551.86 | 31.11 | -19.53 | -2286.82 | -30.23 | -2276.11 | 155.43 | |
| 1 | 97 | 156 | -8.71 | -991.27 | -8.73 | -991.26 | -4.02 | -240.21 | -3350.83 | -242.21 | -3348.83 | -78.86 | |
| 1 | 97 | 157 | -1.65 | -761.81 | -2.08 | -761.38 | -18.02 | -27.98 | -2740.09 | -30.85 | -2737.22 | -88.11 | |
| 1 | 97 | 158 | 2.50 | -108.03 | -4.71 | -100.83 | -27.28 | 57.36 | -1372.75 | 52.18 | -1367.57 | -85.93 | |
| 1 | 97 | 159 | 501.22 | 110.25 | 110.28 | 501.19 | -3.29 | 488.65 | -108.79 | -108.70 | 488.56 | 7.28 | |
| 1 | 97 | 160 | 453.98 | 72.94 | 73.47 | 453.45 | -14.26 | 631.89 | 95.74 | 190.97 | 536.66 | 204.91 | |
| 1 | 97 | 161 | -11.45 | -755.83 | -12.16 | -755.13 | 22.87 | -178.78 | -2839.89 | -184.25 | -2834.42 | 120.61 | |
| 1 | 97 | 162 | -3.31 | -304.37 | -5.40 | -302.28 | -25.00 | 28.79 | -1788.13 | 25.51 | -1784.85 | -77.14 | |
| 1 | 97 | 163 | -3.22 | -866.46 | -3.50 | -866.18 | -15.63 | -58.95 | -2959.02 | -62.36 | -2955.62 | -99.28 | |
| 1 | 97 | 164 | -11.21 | -979.71 | -11.23 | -979.70 | 3.81 | -286.01 | -3333.90 | -286.09 | -3333.82 | -15.44 | |
| 1 | 97 | 165 | 20.89 | -67.04 | 1.56 | -47.70 | 36.42 | 148.38 | -1204.48 | 126.88 | -1182.99 | 169.15 | |
| 1 | 97 | 166 | -2.90 | -480.37 | -3.93 | -479.34 | -22.11 | 6.80 | -2155.57 | 4.17 | -2152.94 | -75.39 | |
| 1 | 97 | 167 | -2.88 | -316.54 | -7.37 | -312.05 | 37.26 | 83.71 | -1765.76 | 69.58 | -1751.62 | 161.06 | |
| 1 | 97 | 168 | -5.92 | -946.50 | -6.03 | -946.39 | -10.51 | -122.82 | -3138.23 | -126.58 | -3134.47 | -106.46 | |
| 1 | 97 | 190 | 1214.88 | 325.23 | 328.43 | 1211.68 | 53.30 | 1019.05 | 528.60 | 530.25 | 1017.40 | 28.45 | |
| 1 | 97 | 191 | 453.71 | -131.15 | -131.01 | 453.56 | 9.33 | 840.42 | 421.11 | 516.19 | 745.34 | -175.58 | |
| 1 | 97 | 192 | 318.09 | -14.97 | -14.09 | 317.21 | -17.10 | 234.18 | -428.76 | 147.18 | -341.75 | -223.85 | |
| 1 | 97 | 193 | 191.31 | -15.57 | -12.70 | 188.43 | 24.22 | 262.75 | -678.85 | 156.57 | -572.67 | 297.84 | |
| 1 | 97 | 194 | 3.60 | -619.83 | 3.10 | -619.33 | -17.71 | 30.77 | -2478.68 | 23.47 | -2471.37 | -135.17 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|-----|-----|---------|---------|-----------|---------|---------|---------|----------|---------|----------|---------|-------|
| 1 | 97 | 195 | 11.29 | -893.92 | 11.15 | -893.78 | 11.28 | -146.06 | -3246.88 | -148.26 | -3244.67 | 82.59 | |
| 1 | 97 | 196 | 105.77 | -9.10 | -2.21 | 98.88 | -27.27 | 153.36 | -953.73 | 115.67 | -916.04 | -200.78 | |
| 1 | 97 | 197 | 5.49 | -551.92 | 4.26 | -550.69 | 26.14 | -21.44 | -2350.78 | -37.03 | -2335.19 | 189.92 | |
| 1 | 97 | 198 | 9.45 | -979.41 | 9.44 | -979.40 | -3.59 | -140.24 | -3412.14 | -140.64 | -3411.73 | -36.51 | |
| 1 | 97 | 199 | 3.61 | -745.81 | 3.29 | -745.49 | -15.49 | 1.91 | -2747.82 | -3.61 | -2742.30 | -123.12 | |
| 1 | 97 | 200 | 6.75 | -117.59 | 0.95 | -111.79 | -26.22 | 106.93 | -1408.14 | 86.17 | -1387.38 | -176.11 | |
| 1 | 97 | 201 | 1059.59 | 273.16 | 276.27 | 1056.48 | -49.36 | 1100.50 | 762.24 | 770.01 | 1092.74 | -50.66 | |
| 1 | 97 | 202 | 368.94 | -117.83 | -117.82 | 368.92 | -2.55 | 836.77 | 330.06 | 574.38 | 592.45 | 253.19 | |
| 1 | 97 | 203 | 9.05 | -749.93 | 8.57 | -749.45 | 19.11 | -116.51 | -2918.16 | -123.70 | -2910.98 | 141.71 | |
| 1 | 97 | 204 | 3.92 | -304.18 | 2.18 | -302.43 | -23.11 | 78.96 | -1808.08 | 65.54 | -1794.66 | -158.58 | |
| 1 | 97 | 205 | 3.95 | -850.57 | 3.76 | -850.38 | -12.86 | -32.19 | -2975.36 | -36.01 | -2971.54 | -106.01 | |
| 1 | 97 | 206 | 11.43 | -970.60 | 11.42 | -970.59 | 3.37 | -153.53 | -3411.87 | -153.66 | -3411.74 | 20.53 | |
| 1 | 97 | 207 | 11.95 | -82.93 | -2.30 | -68.68 | 33.90 | 134.95 | -1284.92 | 83.45 | -1233.42 | 265.47 | |
| 1 | 97 | 208 | 3.64 | -472.49 | 2.78 | -471.64 | -20.15 | 55.21 | -2165.57 | 45.58 | -2155.94 | -145.92 | |
| 1 | 97 | 209 | 3.99 | -322.29 | 0.87 | -319.18 | 31.71 | 44.59 | -1833.07 | 16.44 | -1804.92 | 228.18 | |
| 1 | 97 | 210 | 6.00 | -932.46 | 5.91 | -932.38 | -9.02 | -66.34 | -3170.68 | -68.36 | -3168.65 | -79.21 | |
| 1 | 97 | 211 | 34.79 | -813.59 | -101.55 | -677.26 | -311.57 | 39.04 | -231.37 | -11.17 | -181.16 | -105.15 | |
| 1 | 97 | 212 | 570.31 | -0.40 | 28.22 | 541.70 | 124.56 | 744.72 | -91.59 | -78.64 | 731.77 | 103.29 | |
| 1 | 97 | 213 | -4.02 | -986.72 | -4.04 | -986.70 | 4.55 | 18.29 | -3345.70 | 18.28 | -3345.69 | 7.41 | |
| 1 | 97 | 214 | 303.26 | 24.83 | 28.31 | 299.79 | 30.90 | 46.84 | -377.98 | 39.78 | -370.92 | 54.30 | |
| 1 | 97 | 215 | 173.00 | 21.74 | 26.53 | 168.20 | -26.49 | 46.79 | -620.47 | 39.25 | -612.94 | -70.52 | |
| 1 | 97 | 216 | 84.75 | 7.71 | 8.33 | 84.14 | 6.86 | 5.87 | -927.91 | 2.59 | -924.64 | 55.19 | |
| 1 | 97 | 217 | -4.63 | -981.44 | -4.63 | -981.43 | 1.86 | 13.03 | -3344.03 | 13.02 | -3344.02 | -5.25 | |
| 1 | 97 | 218 | 0.83 | -118.51 | 0.78 | -118.46 | 2.48 | 4.48 | -1383.09 | 2.52 | -1381.13 | 52.12 | |
| 1 | 97 | 219 | -4.58 | -905.01 | -4.58 | -905.01 | 0.62 | 12.90 | -3178.68 | 12.77 | -3178.55 | -20.49 | |
| 1 | 97 | 220 | -1.19 | -304.09 | -1.20 | -304.08 | 1.62 | 5.15 | -1787.89 | 3.80 | -1786.54 | 49.19 | |
| 1 | 97 | 221 | -3.85 | -758.48 | -3.85 | -758.47 | -2.15 | 17.81 | -2850.58 | 17.42 | -2850.20 | -33.34 | |
| 1 | 97 | 222 | -1.65 | -470.90 | -1.66 | -470.90 | 1.39 | 5.61 | -2146.65 | 4.60 | -2145.65 | 46.52 | |
| 1 | 97 | 223 | 479.40 | -1.73 | 26.78 | 450.89 | -113.60 | 596.77 | -87.03 | -67.09 | 576.83 | -115.04 | |
| 1 | 97 | 224 | -1.80 | -617.51 | -1.80 | -617.51 | 1.30 | 5.85 | -2460.02 | 5.09 | -2459.25 | 43.35 | |
| 1 | 97 | 225 | -2.84 | -556.65 | -2.85 | -556.64 | -2.36 | -0.59 | -2326.11 | -1.52 | -2325.18 | -46.54 | |
| 1 | 97 | 226 | -2.02 | -743.22 | -2.02 | -743.22 | 1.36 | 5.93 | -2728.72 | 5.38 | -2728.17 | 38.83 | |
| 1 | 97 | 227 | -0.20 | -327.57 | -0.20 | -327.57 | -0.55 | 4.09 | -1809.06 | 2.11 | -1807.09 | -59.75 | |
| 1 | 97 | 228 | -2.67 | -848.23 | -2.68 | -848.23 | 1.96 | 5.69 | -2955.01 | 5.35 | -2954.67 | 31.82 | |
| 1 | 97 | 229 | 7.71 | -85.67 | 7.53 | -85.50 | -4.05 | 5.68 | -1258.19 | 1.96 | -1254.47 | -68.48 | |
| 1 | 97 | 230 | -3.46 | -933.63 | -3.48 | -933.60 | 4.56 | 0.38 | -3148.31 | 0.26 | -3148.18 | 20.00 | |
| 1 | 97 | 231 | 51.18 | -713.97 | -85.43 | -577.36 | 293.03 | -8.29 | -256.16 | -42.67 | -221.79 | 85.67 | |
| 1 | 97 | 232 | 570.84 | -0.95 | 28.25 | 541.64 | -125.87 | 750.85 | -92.99 | -78.97 | 736.83 | -107.86 | |
| 1 | 97 | 233 | 33.58 | -819.10 | -101.77 | -683.75 | 311.59 | 28.19 | -224.45 | -10.48 | -185.78 | 90.96 | |
| 1 | 97 | 234 | 301.00 | 24.90 | 28.41 | 297.48 | -30.96 | 47.94 | -389.59 | 39.92 | -381.57 | -58.69 | |
| 1 | 97 | 235 | 80.76 | 7.65 | 8.32 | 80.10 | -6.93 | 6.25 | -942.45 | 2.63 | -938.82 | -58.55 | |
| 1 | 97 | 236 | 0.79 | -122.95 | 0.75 | -122.91 | -2.39 | 4.87 | -1397.77 | 2.73 | -1395.63 | -54.84 | |
| 1 | 97 | 237 | -1.22 | -307.70 | -1.23 | -307.69 | -1.52 | 4.97 | -1798.10 | 3.52 | -1796.65 | -51.16 | |
| 1 | 97 | 238 | -1.67 | -473.38 | -1.67 | -473.38 | -1.37 | 5.58 | -2154.15 | 4.53 | -2153.10 | -47.68 | |
| 1 | 97 | 239 | -1.79 | -619.05 | -1.79 | -619.04 | -1.31 | 5.84 | -2465.54 | 5.06 | -2464.77 | -43.82 | |
| 1 | 97 | 240 | -2.01 | -744.04 | -2.01 | -744.03 | -1.37 | 5.93 | -2732.77 | 5.38 | -2732.23 | -38.70 | |
| 1 | 97 | 241 | -2.66 | -848.54 | -2.67 | -848.53 | -1.96 | 5.70 | -2957.99 | 5.37 | -2957.66 | -31.20 | |
| 1 | 97 | 242 | -3.45 | -933.59 | -3.47 | -933.57 | -4.57 | 0.39 | -3150.54 | 0.28 | -3150.43 | -18.97 | |
| 1 | 97 | 243 | -4.01 | -986.48 | -4.03 | -986.46 | -4.56 | 18.31 | -3347.45 | 18.30 | -3347.44 | -6.06 | |
| 1 | 97 | 244 | -4.62 | -981.09 | -4.62 | -981.09 | -1.86 | 13.05 | -3345.48 | 13.03 | -3345.47 | 6.85 | |
| 1 | 97 | 245 | -4.58 | -904.64 | -4.58 | -904.64 | -0.62 | 12.92 | -3180.00 | 12.77 | -3179.84 | 22.30 | |
| 1 | 97 | 246 | -3.85 | -758.14 | -3.85 | -758.13 | 2.15 | 17.84 | -2851.87 | 17.41 | -2851.44 | 35.30 | |
| 1 | 97 | 247 | -2.84 | -556.39 | -2.85 | -556.38 | 2.36 | -0.54 | -2327.47 | -1.56 | -2326.46 | 48.61 | |
| 1 | 97 | 248 | -0.20 | -327.40 | -0.20 | -327.40 | 0.55 | 4.16 | -1810.57 | 2.04 | -1808.46 | 61.88 | |
| 1 | 97 | 249 | 7.71 | -85.60 | 7.53 | -85.42 | 4.05 | 5.82 | -1259.88 | 1.87 | -1255.92 | 70.63 | |
| 1 | 97 | 250 | 173.00 | 21.75 | 26.54 | 168.20 | 26.51 | 47.29 | -622.19 | 39.32 | -614.22 | 72.61 | |
| 1 | 97 | 251 | 479.50 | -1.77 | 26.79 | 450.94 | 113.71 | 598.08 | -87.51 | -66.90 | 577.47 | 117.07 | |
| 1 | 97 | 252 | 51.27 | -714.40 | -85.47 | -577.66 | -293.26 | -9.74 | -253.79 | -42.97 | -220.57 | -83.69 | |
| 1 | 102 | 43 | 498.06 | 127.99 | 129.10 | 496.96 | -20.20 | 493.15 | 242.43 | 242.48 | 493.10 | 3.53 | |
| 1 | 102 | 44 | 232.45 | 44.33 | 44.33 | 232.45 | 0.25 | 238.00 | -8.87 | -8.20 | 237.33 | 12.82 | |
| 1 | 102 | 45 | 175.69 | -54.91 | -54.89 | 175.67 | -2.17 | 302.86 | 175.33 | 218.14 | 260.06 | 60.22 | |
| 1 | 102 | 46 | 212.42 | 30.01 | 30.39 | 212.04 | -8.31 | 247.35 | 62.51 | 71.25 | 238.62 | 39.22 | |
| 1 | 102 | 47 | 98.79 | -5.97 | -5.24 | 98.05 | 8.74 | 75.71 | -278.45 | 56.19 | -258.93 | 80.83 | |
| 1 | 102 | 48 | 115.15 | 8.07 | 8.56 | 114.65 | 7.27 | 20.84 | -260.84 | 16.12 | -256.13 | 36.14 | |
| 1 | 102 | 49 | 99.15 | -6.01 | -5.29 | 98.42 | -8.72 | 74.75 | -278.68 | 54.22 | -258.16 | -82.66 | |
| 1 | 102 | 50 | 115.29 | 8.09 | 8.59 | 114.79 | -7.33 | 18.53 | -260.72 | 14.02 | -256.21 | -35.22 | |
| 1 | 102 | 51 | 2.56 | -324.17 | 2.48 | -324.09 | 5.18 | 13.53 | -1224.46 | 12.90 | -1223.83 | 27.99 | |
| 1 | 102 | 52 | -2.62 | -329.31 | -2.73 | -329.21 | 5.78 | -90.66 | -1231.70 | -90.73 | -1231.63 | 8.94 | |
| 1 | 102 | 53 | 2.56 | -324.11 | 2.48 | -324.02 | -5.21 | 13.52 | -1224.29 | 12.86 | -1223.63 | -28.58 | |
| 1 | 102 | 54 | -2.63 | -329.23 | -2.74 | -329.13 | -5.85 | -91.17 | -1231.60 | -91.25 | -1231.52 | -9.31 | |
| 1 | 102 | 55 | 8.21 | -19.38 | -8.89e-02 | -11.09 | 12.65 | 52.47 | -547.92 | 43.92 | -539.37 | 71.16 | |
| 1 | 102 | 56 | 11.13 | -13.70 | 0.10 | -2.67 | 12.34 | -7.73 | -535.10 | -9.25 | -533.58 | 28.27 | |
| 1 | 102 | 57 | 2.40 | -197.93 | 1.96 | -197.48 | -9.44 | 25.80 | -953.97 | 23.45 | -951.62 | -47.92 | |
| 1 | 102 | 58 | -3.15 | -199.21 | -3.71 | -198.65 | -10.48 | -58.71 | -954.17 | -59.03 | -953.85 | -16.88 | |
| 1 | 102 | 59 | 2.66 | -387.86 | 2.65 | -387.85 | -1.66 | 7.94 | -1360.14 | 7.87 | -1360.07 | -9.79 | |

| M | G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|---|---|-----|------|--------|---------|-----------|---------|-----------|---------|----------|---------|----------|-----------|
| 1 | | 102 | 60 | -1.96 | -394.06 | -1.97 | -394.05 | -1.86 | -106.60 | -1370.01 | -106.61 | -1370.00 | -3.19 |
| 1 | | 102 | 61 | 2.62 | -363.94 | 2.59 | -363.91 | 3.34 | 10.03 | -1309.24 | 9.76 | -1308.98 | 18.64 |
| 1 | | 102 | 62 | -2.22 | -369.81 | -2.25 | -369.78 | 3.70 | -100.59 | -1318.20 | -100.62 | -1318.17 | 5.81 |
| 1 | | 102 | 63 | 2.50 | -112.65 | 1.33 | -111.48 | 11.53 | 36.22 | -768.98 | 31.96 | -764.72 | 58.37 |
| 1 | | 102 | 64 | -1.70 | -110.15 | -3.11 | -108.73 | 12.32 | -34.36 | -762.96 | -35.02 | -762.30 | 21.92 |
| 1 | | 102 | 65 | 232.47 | 44.10 | 44.10 | 232.47 | -0.16 | 238.89 | -5.34 | -4.68 | 238.23 | -12.67 |
| 1 | | 102 | 66 | 498.40 | 127.93 | 129.01 | 497.33 | 19.93 | 489.70 | 216.86 | 216.87 | 489.69 | -1.76 |
| 1 | | 102 | 67 | 175.95 | -55.02 | -55.00 | 175.93 | 2.18 | 301.17 | 166.16 | 207.16 | 260.17 | -62.09 |
| 1 | | 102 | 68 | 212.48 | 29.97 | 30.34 | 212.11 | 8.18 | 246.42 | 62.80 | 70.75 | 238.47 | -37.38 |
| 1 | | 102 | 69 | 2.48 | -268.68 | 2.29 | -268.49 | -7.24 | 18.62 | -1105.83 | 17.33 | -1104.54 | -38.02 |
| 1 | | 102 | 70 | -3.08 | -272.40 | -3.32 | -272.15 | -8.13 | -77.17 | -1110.32 | -77.33 | -1110.16 | -12.76 |
| 1 | | 102 | 71 | 2.39 | -198.06 | 1.95 | -197.62 | 9.39 | 25.80 | -954.30 | 23.51 | -952.01 | 47.33 |
| 1 | | 102 | 72 | -3.15 | -199.35 | -3.70 | -198.80 | 10.42 | -57.58 | -954.29 | -57.89 | -953.98 | 16.64 |
| 1 | | 102 | 73 | 2.66 | -387.88 | 2.65 | -387.88 | 1.63 | 7.95 | -1360.19 | 7.89 | -1360.13 | 9.22 |
| 1 | | 102 | 74 | -1.96 | -394.08 | -1.97 | -394.07 | 1.79 | -106.45 | -1370.05 | -106.46 | -1370.04 | 2.79 |
| 1 | | 102 | 75 | 2.62 | -363.90 | 2.59 | -363.87 | -3.37 | 10.01 | -1309.13 | 9.73 | -1308.85 | -19.22 |
| 1 | | 102 | 76 | -2.22 | -369.76 | -2.26 | -369.72 | -3.77 | -100.90 | -1318.13 | -100.93 | -1318.10 | -6.20 |
| 1 | | 102 | 77 | 8.33 | -19.20 | -7.55e-02 | -10.80 | -12.68 | 52.42 | -547.30 | 43.71 | -538.59 | -71.76 |
| 1 | | 102 | 78 | 11.27 | -13.64 | 0.12 | -2.49 | -12.39 | -9.82 | -535.05 | -11.32 | -533.55 | -28.05 |
| 1 | | 102 | 79 | 2.47 | -268.78 | 2.28 | -268.59 | 7.20 | 18.63 | -1106.07 | 17.38 | -1104.83 | 37.42 |
| 1 | | 102 | 80 | -3.07 | -272.51 | -3.31 | -272.26 | 8.06 | -76.40 | -1110.44 | -76.55 | -1110.29 | 12.43 |
| 1 | | 102 | 81 | 2.52 | -112.46 | 1.35 | -111.28 | -11.57 | 36.23 | -768.52 | 31.89 | -764.18 | -58.94 |
| 1 | | 102 | 82 | -1.68 | -109.99 | -3.12 | -108.55 | -12.38 | -35.96 | -762.86 | -36.62 | -762.19 | -22.01 |
| 1 | | 102 | 83 | 2.67 | -395.87 | 2.67 | -395.87 | -1.43e-02 | 7.26 | -1377.18 | 7.26 | -1377.18 | -0.28 |
| 1 | | 102 | 84 | -1.88 | -402.16 | -1.88 | -402.16 | -3.09e-02 | -108.43 | -1387.31 | -108.43 | -1387.31 | -0.20 |
| 1 | | 102 | 106 | 232.46 | 46.24 | 46.24 | 232.46 | 3.04e-03 | 240.39 | 32.46 | 32.46 | 240.39 | 0.15 |
| 1 | | 102 | 107 | 204.27 | 35.83 | 35.83 | 204.27 | -8.97e-03 | 230.06 | 53.72 | 53.72 | 230.06 | 4.85e-03 |
| 1 | | 102 | 108 | 112.26 | 16.14 | 16.14 | 112.26 | -1.88e-02 | -22.93 | -262.79 | -22.93 | -262.79 | 0.10 |
| 1 | | 102 | 109 | 112.35 | 16.15 | 16.15 | 112.35 | -2.51e-02 | -23.24 | -262.80 | -23.24 | -262.80 | 8.90e-02 |
| 1 | | 102 | 110 | -4.56 | -328.75 | -4.56 | -328.75 | -2.13e-02 | -131.94 | -1237.19 | -131.94 | -1237.19 | -0.10 |
| 1 | | 102 | 111 | -4.57 | -328.68 | -4.57 | -328.68 | -2.61e-02 | -132.37 | -1237.16 | -132.37 | -1237.16 | -3.96e-02 |
| 1 | | 102 | 112 | 2.02 | -0.21 | 2.02 | -0.21 | -1.21e-02 | -51.68 | -537.60 | -51.68 | -537.60 | 0.12 |
| 1 | | 102 | 113 | -5.58 | -196.64 | -5.58 | -196.64 | -2.52e-02 | -96.74 | -957.38 | -96.74 | -957.38 | 1.89e-02 |
| 1 | | 102 | 114 | -3.51 | -394.19 | -3.51 | -394.19 | -2.68e-02 | -151.56 | -1376.73 | -151.56 | -1376.73 | -9.11e-02 |
| 1 | | 102 | 115 | -3.91 | -369.72 | -3.91 | -369.72 | -2.43e-02 | -144.03 | -1324.46 | -144.03 | -1324.46 | -0.12 |
| 1 | | 102 | 116 | -4.02 | -105.83 | -4.02 | -105.83 | -9.09e-03 | -74.59 | -765.17 | -74.59 | -765.17 | 5.98e-02 |
| 1 | | 102 | 117 | 232.51 | 46.18 | 46.18 | 232.51 | -1.76e-02 | 240.53 | 32.50 | 32.50 | 240.53 | 3.29e-02 |
| 1 | | 102 | 118 | 204.35 | 35.80 | 35.80 | 204.35 | -2.36e-02 | 230.14 | 53.60 | 53.60 | 230.14 | 9.85e-02 |
| 1 | | 102 | 119 | -5.31 | -271.04 | -5.31 | -271.04 | -2.56e-02 | -116.20 | -1114.79 | -116.20 | -1114.79 | -1.05e-02 |
| 1 | | 102 | 120 | -5.58 | -196.74 | -5.58 | -196.74 | -1.19e-02 | -96.09 | -957.40 | -96.09 | -957.40 | -1.22e-02 |
| 1 | | 102 | 121 | -3.51 | -394.22 | -3.51 | -394.22 | -2.60e-02 | -151.42 | -1376.75 | -151.42 | -1376.75 | -0.12 |
| 1 | | 102 | 122 | -3.92 | -369.67 | -3.92 | -369.67 | -2.65e-02 | -144.31 | -1324.44 | -144.31 | -1324.44 | -6.71e-02 |
| 1 | | 102 | 123 | 2.04 | -0.12 | 2.04 | -0.12 | -2.50e-02 | -52.22 | -537.62 | -52.22 | -537.62 | 7.07e-02 |
| 1 | | 102 | 124 | -5.30 | -271.13 | -5.30 | -271.13 | -1.68e-02 | -115.65 | -1114.82 | -115.65 | -1114.82 | -6.91e-02 |
| 1 | | 102 | 125 | -4.01 | -105.73 | -4.01 | -105.73 | -2.49e-02 | -75.24 | -765.17 | -75.24 | -765.17 | 4.67e-02 |
| 1 | | 102 | 126 | -3.38 | -402.36 | -3.38 | -402.36 | -2.67e-02 | -153.95 | -1394.15 | -153.95 | -1394.15 | -0.11 |
| 1 | | 102 | 148 | 232.43 | 44.12 | 44.12 | 232.43 | -0.16 | 238.86 | -5.42 | -4.76 | 238.20 | -12.65 |
| 1 | | 102 | 149 | 212.43 | 29.98 | 30.35 | 212.06 | 8.19 | 246.37 | 62.72 | 70.72 | 238.37 | -37.50 |
| 1 | | 102 | 150 | 115.22 | 8.09 | 8.59 | 114.72 | -7.31 | 18.57 | -260.85 | 14.03 | -256.31 | -35.32 |
| 1 | | 102 | 151 | 115.28 | 8.10 | 8.59 | 114.78 | 7.28 | 18.49 | -260.83 | 13.93 | -256.27 | 35.39 |
| 1 | | 102 | 152 | -2.63 | -329.33 | -2.74 | -329.22 | -5.83 | -91.26 | -1231.76 | -91.33 | -1231.68 | -9.26 |
| 1 | | 102 | 153 | -2.63 | -329.28 | -2.74 | -329.18 | 5.81 | -91.45 | -1231.75 | -91.53 | -1231.67 | 9.21 |
| 1 | | 102 | 154 | 11.22 | -13.68 | 0.11 | -2.57 | -12.38 | -9.78 | -535.18 | -11.29 | -533.67 | -28.11 |
| 1 | | 102 | 155 | -3.15 | -199.25 | -3.71 | -198.69 | 10.44 | -58.92 | -954.30 | -59.24 | -953.98 | 16.90 |
| 1 | | 102 | 156 | -1.96 | -394.11 | -1.97 | -394.10 | 1.81 | -106.93 | -1370.15 | -106.93 | -1370.15 | 2.99 |
| 1 | | 102 | 157 | -2.22 | -369.85 | -2.26 | -369.81 | -3.75 | -101.06 | -1318.29 | -101.10 | -1318.26 | 6.12 |
| 1 | | 102 | 158 | -1.69 | -110.08 | -3.12 | -108.65 | -12.37 | -35.92 | -763.00 | -36.59 | -762.33 | -22.04 |
| 1 | | 102 | 159 | 232.48 | 44.11 | 44.11 | 232.48 | 0.14 | 238.91 | -5.37 | -4.70 | 238.25 | 12.73 |
| 1 | | 102 | 160 | 212.49 | 29.97 | 30.35 | 212.12 | -8.22 | 246.49 | 62.67 | 70.70 | 238.46 | 37.57 |
| 1 | | 102 | 161 | -3.08 | -272.44 | -3.32 | -272.20 | 8.09 | -77.42 | -1110.46 | -77.58 | -1110.31 | 12.72 |
| 1 | | 102 | 162 | -3.16 | -199.31 | -3.72 | -198.75 | -10.46 | -58.69 | -954.31 | -59.01 | -954.00 | -16.89 |
| 1 | | 102 | 163 | -1.96 | -394.13 | -1.97 | -394.12 | -1.84 | -106.85 | -1370.16 | -106.86 | -1370.15 | -3.08 |
| 1 | | 102 | 164 | -2.22 | -369.81 | -2.26 | -369.78 | 3.73 | -101.21 | -1318.28 | -101.24 | -1318.25 | 6.04 |
| 1 | | 102 | 165 | 11.22 | -13.61 | 0.12 | -2.51 | 12.35 | -9.93 | -535.16 | -11.45 | -533.65 | 28.17 |
| 1 | | 102 | 166 | -3.08 | -272.49 | -3.32 | -272.25 | -8.11 | -77.19 | -1110.48 | -77.35 | -1110.32 | -12.73 |
| 1 | | 102 | 167 | -1.69 | -110.01 | -3.11 | -108.59 | 12.34 | -36.12 | -762.99 | -36.80 | -762.31 | 22.08 |
| 1 | | 102 | 168 | -1.88 | -402.21 | -1.88 | -402.21 | -1.32e-02 | -108.79 | -1387.44 | -108.79 | -1387.44 | -4.68e-02 |
| 1 | | 102 | 190 | 498.40 | 127.96 | 129.03 | 497.33 | 19.93 | 489.80 | 217.13 | 217.14 | 489.78 | -1.79 |
| 1 | | 102 | 191 | 175.92 | -55.03 | -55.01 | 175.90 | 2.19 | 301.24 | 166.13 | 207.27 | 260.10 | -62.17 |
| 1 | | 102 | 192 | 99.08 | -6.01 | -5.28 | 98.35 | -8.72 | 74.79 | -278.85 | 54.24 | -258.30 | -82.74 |
| 1 | | 102 | 193 | 99.13 | -6.01 | -5.29 | 98.41 | 8.70 | 74.80 | -278.83 | 54.23 | -258.26 | 82.77 |
| 1 | | 102 | 194 | 2.56 | -324.22 | 2.48 | -324.14 | -5.20 | 13.35 | -1224.52 | 12.69 | -1223.86 | -28.47 |
| 1 | | 102 | 195 | 2.56 | -324.20 | 2.48 | -324.12 | 5.20 | 13.29 | -1224.51 | 12.64 | -1223.85 | 28.44 |
| 1 | | 102 | 196 | 8.30 | -19.25 | -7.50e-02 | -10.88 | -12.67 | 52.39 | -547.50 | 43.67 | -538.78 | -71.80 |
| 1 | | 102 | 197 | 2.40 | -198.00 | 1.96 | -197.56 | 9.42 | 25.63 | -954.18 | 23.28 | -951.83 | 47.90 |

| M_G | Cmb | Nodo | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-----|-----|------|---------|----------|-----------|----------|-----------|---------|----------|---------|----------|-----------|
| 1 | 102 | 198 | 2.66 | -387.96 | 2.65 | -387.95 | 1.64 | 7.70 | -1360.34 | 7.64 | -1360.28 | 9.54 |
| 1 | 102 | 199 | 2.63 | -364.02 | 2.59 | -363.99 | -3.36 | 9.82 | -1309.35 | 9.54 | -1309.08 | -19.06 |
| 1 | 102 | 200 | 2.52 | -112.55 | 1.35 | -111.38 | -11.56 | 36.15 | -768.73 | 31.81 | -764.39 | -58.95 |
| 1 | 102 | 201 | 498.54 | 128.01 | 129.08 | 497.47 | -19.94 | 489.84 | 217.18 | 217.19 | 489.82 | 1.81 |
| 1 | 102 | 202 | 175.98 | -55.05 | -55.03 | 175.96 | -2.20 | 301.35 | 166.16 | 207.31 | 260.21 | 62.20 |
| 1 | 102 | 203 | 2.48 | -268.77 | 2.29 | -268.58 | 7.22 | 18.41 | -1106.05 | 17.13 | -1104.77 | 37.94 |
| 1 | 102 | 204 | 2.40 | -198.03 | 1.96 | -197.59 | -9.43 | 25.69 | -954.19 | 23.34 | -951.85 | -47.89 |
| 1 | 102 | 205 | 2.66 | -387.97 | 2.65 | -387.96 | -1.65 | 7.73 | -1360.35 | 7.66 | -1360.28 | -9.58 |
| 1 | 102 | 206 | 2.63 | -364.00 | 2.59 | -363.97 | 3.35 | 9.78 | -1309.35 | 9.50 | -1309.07 | 19.02 |
| 1 | 102 | 207 | 8.30 | -19.21 | -7.45e-02 | -10.84 | 12.66 | 52.37 | -547.47 | 43.64 | -538.74 | 71.83 |
| 1 | 102 | 208 | 2.48 | -268.80 | 2.29 | -268.60 | -7.23 | 18.48 | -1106.06 | 17.19 | -1104.78 | -37.95 |
| 1 | 102 | 209 | 2.52 | -112.51 | 1.35 | -111.34 | 11.55 | 36.11 | -768.71 | 31.76 | -764.37 | 58.96 |
| 1 | 102 | 210 | 2.67 | -395.96 | 2.67 | -395.96 | -2.97e-03 | 7.02 | -1377.36 | 7.02 | -1377.36 | -2.50e-02 |
| 1 | 102 | 211 | 20.99 | -335.47 | -41.07 | -273.41 | -135.17 | 20.69 | -142.47 | -19.98 | -101.81 | -70.58 |
| 1 | 102 | 212 | 229.94 | -1.15 | 12.22 | 216.57 | 53.95 | 262.95 | -36.05 | -30.95 | 257.85 | 38.73 |
| 1 | 102 | 213 | -1.32 | -388.83 | -1.32 | -388.83 | -1.85e-03 | 3.28 | -1352.56 | 3.28 | -1352.56 | -2.69 |
| 1 | 102 | 214 | 91.69 | 9.94 | 12.08 | 89.55 | 13.07 | 19.85 | -268.81 | 18.89 | -267.86 | 16.58 |
| 1 | 102 | 215 | 92.24 | 9.95 | 12.09 | 90.09 | -13.11 | 19.99 | -270.62 | 18.92 | -269.55 | -17.58 |
| 1 | 102 | 216 | 3.47 | -19.61 | 3.21 | -19.35 | 2.47 | 3.06 | -544.65 | 2.56 | -544.14 | 16.64 |
| 1 | 102 | 217 | -1.31 | -364.89 | -1.31 | -364.89 | -7.97e-03 | 3.26 | -1301.68 | 3.24 | -1301.66 | -5.18 |
| 1 | 102 | 218 | -0.14 | -116.62 | -0.14 | -116.62 | 0.54 | 2.62 | -764.06 | 2.35 | -763.79 | 14.37 |
| 1 | 102 | 219 | -1.29 | -325.23 | -1.29 | -325.23 | -2.41e-02 | 3.22 | -1217.08 | 3.17 | -1217.04 | -7.59 |
| 1 | 102 | 220 | -1.02 | -200.53 | -1.02 | -200.53 | 0.17 | 2.94 | -948.29 | 2.79 | -948.14 | 11.95 |
| 1 | 102 | 221 | -1.23 | -270.22 | -1.23 | -270.22 | -6.27e-02 | 3.13 | -1099.05 | 3.04 | -1098.96 | -9.92 |
| 1 | 102 | 222 | -1.23 | -270.31 | -1.23 | -270.31 | 6.35e-02 | 3.12 | -1099.35 | 3.04 | -1099.27 | 9.63 |
| 1 | 102 | 223 | 230.40 | -1.10 | 12.23 | 217.08 | -53.92 | 267.32 | -36.78 | -31.58 | 262.12 | -39.42 |
| 1 | 102 | 224 | -1.29 | -325.29 | -1.29 | -325.29 | 2.48e-02 | 3.21 | -1217.29 | 3.17 | -1217.25 | 7.31 |
| 1 | 102 | 225 | -1.03 | -200.39 | -1.03 | -200.39 | -0.16 | 2.95 | -947.86 | 2.79 | -947.70 | -12.23 |
| 1 | 102 | 226 | -1.31 | -364.93 | -1.31 | -364.93 | 8.47e-03 | 3.26 | -1301.81 | 3.24 | -1301.79 | 4.90 |
| 1 | 102 | 227 | -0.14 | -116.41 | -0.14 | -116.41 | -0.54 | 2.61 | -763.48 | 2.33 | -763.20 | -14.65 |
| 1 | 102 | 228 | -1.32 | -388.85 | -1.32 | -388.85 | 2.30e-03 | 3.28 | -1352.63 | 3.28 | -1352.62 | 2.41 |
| 1 | 102 | 229 | 3.49 | -19.27 | 3.21 | -19.00 | -2.48 | 2.91 | -544.10 | 2.38 | -543.57 | -17.02 |
| 1 | 102 | 230 | -1.32 | -396.84 | -1.32 | -396.84 | 2.12e-04 | 3.29 | -1369.56 | 3.29 | -1369.56 | -0.14 |
| 1 | 102 | 231 | 20.94 | -335.62 | -41.12 | -273.56 | 135.19 | 10.52 | -136.65 | -18.49 | -107.64 | 58.55 |
| 1 | 102 | 232 | 230.37 | -1.10 | 12.23 | 217.04 | -53.92 | 267.25 | -36.78 | -31.57 | 262.04 | -39.44 |
| 1 | 102 | 233 | 20.95 | -335.61 | -41.12 | -273.54 | 135.20 | 10.54 | -136.68 | -18.51 | -107.62 | 58.59 |
| 1 | 102 | 234 | 92.18 | 9.95 | 12.09 | 90.03 | -13.11 | 20.00 | -270.78 | 18.93 | -269.71 | -17.60 |
| 1 | 102 | 235 | 3.49 | -19.35 | 3.21 | -19.08 | -2.48 | 2.91 | -544.29 | 2.38 | -543.76 | -17.03 |
| 1 | 102 | 236 | -0.14 | -116.50 | -0.14 | -116.50 | -0.54 | 2.61 | -763.69 | 2.33 | -763.41 | -14.64 |
| 1 | 102 | 237 | -1.03 | -200.50 | -1.03 | -200.50 | -0.16 | 2.95 | -948.08 | 2.79 | -947.92 | -12.21 |
| 1 | 102 | 238 | -1.23 | -270.34 | -1.23 | -270.34 | -6.24e-02 | 3.13 | -1099.27 | 3.04 | -1099.18 | -9.87 |
| 1 | 102 | 239 | -1.29 | -325.36 | -1.29 | -325.36 | -2.39e-02 | 3.22 | -1217.30 | 3.18 | -1217.26 | -7.53 |
| 1 | 102 | 240 | -1.31 | -365.02 | -1.31 | -365.02 | -7.85e-03 | 3.27 | -1301.89 | 3.25 | -1301.87 | -5.10 |
| 1 | 102 | 241 | -1.32 | -388.96 | -1.32 | -388.96 | -1.86e-03 | 3.29 | -1352.75 | 3.28 | -1352.74 | -2.58 |
| 1 | 102 | 242 | -1.32 | -396.96 | -1.32 | -396.96 | 7.41e-05 | 3.29 | -1369.72 | 3.29 | -1369.72 | -9.15e-03 |
| 1 | 102 | 243 | -1.32 | -388.96 | -1.32 | -388.96 | 2.01e-03 | 3.28 | -1352.74 | 3.28 | -1352.74 | 2.57 |
| 1 | 102 | 244 | -1.31 | -365.01 | -1.31 | -365.01 | 8.01e-03 | 3.26 | -1301.87 | 3.25 | -1301.85 | 5.09 |
| 1 | 102 | 245 | -1.29 | -325.35 | -1.29 | -325.35 | 2.41e-02 | 3.22 | -1217.29 | 3.17 | -1217.24 | 7.52 |
| 1 | 102 | 246 | -1.23 | -270.32 | -1.23 | -270.32 | 6.25e-02 | 3.13 | -1099.25 | 3.04 | -1099.16 | 9.87 |
| 1 | 102 | 247 | -1.03 | -200.48 | -1.03 | -200.48 | 0.16 | 2.95 | -948.06 | 2.79 | -947.90 | 12.21 |
| 1 | 102 | 248 | -0.14 | -116.48 | -0.14 | -116.48 | 0.54 | 2.61 | -763.67 | 2.33 | -763.39 | 14.65 |
| 1 | 102 | 249 | 3.49 | -19.32 | 3.21 | -19.04 | 2.48 | 2.91 | -544.26 | 2.38 | -543.73 | 17.04 |
| 1 | 102 | 250 | 92.23 | 9.95 | 12.10 | 90.08 | 13.11 | 20.00 | -270.73 | 18.93 | -269.66 | 17.61 |
| 1 | 102 | 251 | 230.43 | -1.10 | 12.23 | 217.10 | 53.93 | 267.36 | -36.79 | -31.58 | 262.15 | 39.46 |
| 1 | 102 | 252 | 20.95 | -335.70 | -41.13 | -273.62 | -135.22 | 10.55 | -136.67 | -18.50 | -107.61 | -58.60 |
| | | | | | | | | | | | | |
| M_G | | | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
| | | | | -1483.66 | -194.82 | -1483.62 | -461.41 | | -5126.65 | -434.45 | -5126.51 | -450.18 |
| | | | 1811.48 | | 492.05 | 1806.61 | 461.43 | 1627.63 | | 1365.92 | 1611.24 | 460.63 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|--------|--------|----------|---------|----------|---------|---------|---------|
| | | | daN/cm2 | daN/cm | daN/cm | daN/cm | daN/cm | daN/cm | daN | daN | daN | daN | daN |
| 1 | 2 | 45 | 85.46 | 1104.04 | -349.99 | -51.37 | 805.41 | 587.39 | 1466.60 | 134.71 | 579.29 | 1022.03 | 628.08 |
| | | 46 | 80.71 | 1312.28 | -196.72 | 165.13 | 950.43 | -644.28 | 995.04 | 318.61 | 322.77 | 990.88 | -52.87 |
| | | 44 | 165.67 | 2025.90 | -1146.21 | 93.06 | 786.63 | 1547.68 | 1103.11 | -1059.83 | -547.98 | 591.26 | 919.30 |
| | | 43 | 169.81 | 2335.54 | -999.35 | 342.13 | 994.06 | -1635.28 | 1964.23 | 502.03 | 1419.92 | 1046.33 | -706.84 |
| 1 | 30 | 45 | 24.98 | 344.10 | -107.88 | -7.39 | 243.61 | 187.94 | 339.46 | 19.53 | 149.68 | 209.31 | 157.16 |
| | | 46 | 23.72 | 389.03 | -82.37 | 43.89 | 262.77 | -208.75 | 206.31 | 81.65 | 84.47 | 203.49 | -18.53 |
| | | 44 | 46.89 | 574.33 | -315.07 | 33.00 | 226.25 | 434.08 | 362.52 | -263.21 | -107.22 | 206.53 | 270.69 |
| | | 43 | 49.36 | 668.22 | -293.78 | 90.27 | 284.17 | -471.13 | 578.80 | 143.40 | 381.35 | 340.85 | -216.75 |
| 1 | 62 | 45 | 24.98 | 342.04 | -112.82 | -7.74 | 236.96 | 191.72 | 333.86 | 19.09 | 148.53 | 204.43 | 154.89 |
| | | 46 | 23.50 | 385.42 | -79.28 | 44.63 | 261.51 | -205.49 | 206.34 | 79.45 | 83.07 | 202.73 | -21.10 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|---------|--------|--------|----------|---------|----------|---------|----------|---------|
| | | 44 | 47.19 | 578.07 | -320.61 | 32.66 | 224.79 | 438.95 | 358.52 | -261.97 | -109.18 | 205.73 | 267.32 |
| | | 43 | 48.72 | 658.29 | -292.03 | 88.94 | 277.32 | -465.73 | 572.48 | 143.10 | 379.60 | 335.97 | -213.58 |
| 1 | 85 | 45 | 24.98 | 340.84 | -115.87 | -7.95 | 232.91 | 194.02 | 330.41 | 18.83 | 147.79 | 201.46 | 153.46 |
| | | 46 | 23.37 | 383.22 | -77.41 | 45.08 | 260.74 | -203.51 | 206.41 | 78.03 | 82.19 | 202.26 | -22.71 |
| | | 44 | 47.37 | 580.34 | -323.99 | 32.45 | 223.90 | 441.92 | 356.05 | -261.23 | -110.42 | 205.23 | 265.23 |
| | | 43 | 48.33 | 652.26 | -290.97 | 88.13 | 273.16 | -462.45 | 568.58 | 142.92 | 378.49 | 333.01 | -211.62 |
| 1 | 87 | 45 | 60.29 | 781.39 | -248.70 | -35.30 | 568.00 | 417.46 | 1021.52 | 92.59 | 405.90 | 708.21 | 439.18 |
| | | 46 | 56.91 | 925.90 | -141.42 | 116.10 | 668.39 | -456.66 | 690.71 | 222.98 | 226.14 | 687.56 | -38.28 |
| | | 44 | 116.76 | 1427.98 | -807.34 | 66.36 | 554.27 | 1090.71 | 782.87 | -741.38 | -380.04 | 421.54 | 648.23 |
| | | 43 | 119.65 | 1644.00 | -705.03 | 239.84 | 699.13 | -1151.84 | 1384.99 | 354.05 | 997.08 | 741.96 | -499.44 |
| 1 | 97 | 45 | 57.68 | 749.85 | -239.65 | -32.88 | 543.09 | 402.30 | 965.50 | 87.15 | 387.22 | 665.44 | 416.56 |
| | | 46 | 54.41 | 885.76 | -137.83 | 110.68 | 637.26 | -438.87 | 649.78 | 211.48 | 214.74 | 646.53 | -37.62 |
| | | 44 | 111.58 | 1364.68 | -770.93 | 64.25 | 529.50 | 1042.16 | 753.30 | -703.61 | -357.63 | 407.33 | 619.96 |
| | | 43 | 114.31 | 1568.98 | -674.33 | 228.04 | 666.62 | -1100.01 | 1325.39 | 339.25 | 951.14 | 713.50 | -478.54 |
| 1 | 102 | 45 | 24.98 | 340.84 | -115.87 | -7.95 | 232.91 | 194.02 | 330.41 | 18.83 | 147.79 | 201.46 | 153.46 |
| | | 46 | 23.37 | 383.22 | -77.41 | 45.08 | 260.74 | -203.51 | 206.41 | 78.03 | 82.19 | 202.26 | -22.71 |
| | | 44 | 47.37 | 580.34 | -323.99 | 32.45 | 223.90 | 441.92 | 356.05 | -261.23 | -110.42 | 205.23 | 265.23 |
| | | 43 | 48.33 | 652.26 | -290.97 | 88.13 | 273.16 | -462.45 | 568.58 | 142.92 | 378.49 | 333.01 | -211.62 |
| 2 | 2 | 47 | 53.59 | 844.37 | -102.31 | 33.54 | 708.52 | 331.89 | 273.91 | -756.99 | 250.90 | -733.98 | 152.29 |
| | | 48 | 55.25 | 789.76 | -47.13 | 53.57 | 689.05 | -272.29 | 264.83 | -823.73 | 159.76 | -718.65 | 321.47 |
| | | 46 | 52.22 | 750.23 | 67.26 | 67.47 | 750.02 | 11.99 | 1115.33 | 35.77 | 52.30 | 1098.80 | 132.55 |
| | | 45 | 46.76 | 666.08 | -11.06 | -9.43 | 664.44 | -33.21 | 1374.06 | 830.43 | 951.86 | 1252.64 | 226.42 |
| 2 | 30 | 47 | 17.04 | 236.31 | -36.96 | 13.71 | 185.64 | 106.21 | 51.01 | -360.79 | 49.76 | -359.53 | 22.70 |
| | | 48 | 16.71 | 206.59 | -30.85 | 15.04 | 160.71 | -93.75 | 36.91 | -371.13 | 16.13 | -350.35 | 89.72 |
| | | 46 | 13.11 | 192.27 | 15.10 | 16.98 | 190.39 | -18.16 | 283.54 | 16.61 | 23.95 | 276.20 | 43.64 |
| | | 45 | 11.60 | 156.74 | -7.86 | -7.64 | 156.52 | 6.08 | 359.62 | 224.96 | 256.13 | 328.45 | 56.80 |
| 2 | 62 | 47 | 17.09 | 235.46 | -40.01 | 13.80 | 181.66 | 109.21 | 49.61 | -365.57 | 48.59 | -364.54 | 20.59 |
| | | 48 | 16.45 | 202.72 | -28.42 | 15.39 | 158.91 | -90.59 | 34.85 | -372.67 | 15.28 | -353.10 | 87.12 |
| | | 46 | 12.97 | 189.85 | 16.46 | 17.66 | 188.66 | -14.34 | 280.03 | 16.37 | 22.76 | 273.65 | 40.54 |
| | | 45 | 11.39 | 153.18 | -7.99 | -7.40 | 152.59 | 9.74 | 353.56 | 225.22 | 255.14 | 323.65 | 54.26 |
| 2 | 85 | 47 | 17.12 | 234.99 | -41.90 | 13.86 | 179.23 | 111.04 | 48.76 | -368.48 | 47.87 | -367.59 | 19.24 |
| | | 48 | 16.29 | 200.37 | -26.95 | 15.60 | 157.82 | -88.67 | 33.57 | -373.60 | 14.76 | -354.78 | 85.48 |
| | | 46 | 12.89 | 188.45 | 17.22 | 18.06 | 187.60 | -12.02 | 277.91 | 16.18 | 22.00 | 272.09 | 38.60 |
| | | 45 | 11.27 | 151.11 | -8.15 | -7.25 | 150.20 | 11.96 | 349.82 | 225.41 | 254.50 | 320.73 | 52.66 |
| 2 | 87 | 47 | 38.00 | 594.04 | -73.59 | 24.20 | 496.24 | 236.06 | 188.55 | -553.24 | 173.65 | -538.34 | 104.09 |
| | | 48 | 39.01 | 552.97 | -34.77 | 37.80 | 480.41 | -193.35 | 180.54 | -598.47 | 108.47 | -526.41 | 225.71 |
| | | 46 | 36.53 | 525.11 | 47.30 | 47.39 | 525.03 | 6.39 | 780.58 | 26.03 | 37.80 | 768.81 | 93.52 |
| | | 45 | 32.66 | 463.89 | -8.15 | -7.25 | 462.99 | -20.55 | 962.68 | 583.68 | 668.51 | 877.86 | 157.97 |
| 2 | 97 | 47 | 36.54 | 566.63 | -71.79 | 23.67 | 471.16 | 227.67 | 177.63 | -547.49 | 164.56 | -534.42 | 96.47 |
| | | 48 | 37.33 | 524.88 | -34.75 | 36.15 | 453.98 | -186.15 | 166.87 | -589.18 | 99.87 | -522.19 | 214.86 |
| | | 46 | 34.63 | 498.26 | 45.11 | 45.14 | 498.22 | 4.11 | 740.59 | 25.49 | 36.88 | 729.20 | 89.51 |
| | | 45 | 30.92 | 437.90 | -8.14 | -7.50 | 437.26 | -16.86 | 915.23 | 557.61 | 638.41 | 834.42 | 149.56 |
| 2 | 102 | 47 | 17.12 | 234.99 | -41.90 | 13.86 | 179.23 | 111.04 | 48.76 | -368.48 | 47.87 | -367.59 | 19.24 |
| | | 48 | 16.29 | 200.37 | -26.95 | 15.60 | 157.82 | -88.67 | 33.57 | -373.60 | 14.76 | -354.78 | 85.48 |
| | | 46 | 12.89 | 188.45 | 17.22 | 18.06 | 187.60 | -12.02 | 277.91 | 16.18 | 22.00 | 272.09 | 38.60 |
| | | 45 | 11.27 | 151.11 | -8.15 | -7.25 | 150.20 | 11.96 | 349.82 | 225.41 | 254.50 | 320.73 | 52.66 |
| 3 | 2 | 55 | 48.32 | 561.86 | -96.58 | 40.24 | 425.05 | 267.14 | 125.07 | -1581.71 | 108.30 | -1564.94 | 168.35 |
| | | 56 | 44.57 | 409.13 | -63.19 | 27.35 | 318.60 | -185.92 | 171.19 | -1531.57 | 141.94 | -1502.33 | 221.25 |
| | | 48 | 34.33 | 509.54 | -65.50 | -0.41 | 444.46 | -182.18 | 283.04 | -334.90 | 107.47 | -159.34 | 278.69 |
| | | 47 | 28.60 | 391.74 | -173.44 | -45.72 | 264.02 | 236.37 | 565.93 | -111.99 | 554.89 | -100.96 | 85.78 |
| 3 | 30 | 55 | 14.61 | 134.50 | -41.46 | 14.68 | 78.35 | 82.02 | 7.08 | -638.67 | 5.73 | -637.33 | 29.42 |
| | | 56 | 12.76 | 85.52 | -44.95 | 7.33 | 33.23 | -63.94 | 2.24 | -619.08 | -2.80 | -614.04 | 55.73 |
| | | 48 | 10.62 | 121.22 | -44.10 | -2.47 | 79.59 | -71.76 | 46.15 | -192.47 | 10.87 | -157.19 | 84.70 |
| | | 47 | 8.47 | 84.98 | -83.57 | -16.94 | 18.34 | 82.41 | 142.77 | -130.29 | 142.11 | -129.63 | 13.37 |
| 3 | 62 | 55 | 14.67 | 135.36 | -44.88 | 14.70 | 75.78 | 84.79 | 5.78 | -642.60 | 4.60 | -641.42 | 27.66 |
| | | 56 | 12.55 | 81.85 | -42.61 | 7.53 | 31.71 | -61.05 | 1.02 | -621.36 | -3.66 | -616.69 | 53.74 |
| | | 48 | 10.33 | 117.46 | -41.37 | -2.03 | 78.12 | -68.56 | 43.62 | -193.26 | 10.13 | -159.77 | 82.54 |
| | | 47 | 8.67 | 86.55 | -87.43 | -16.69 | 15.81 | 85.46 | 141.67 | -134.13 | 141.19 | -133.65 | 11.47 |
| 3 | 85 | 55 | 14.71 | 135.91 | -46.98 | 14.72 | 74.22 | 86.47 | 5.00 | -645.00 | 3.91 | -643.91 | 26.54 |
| | | 56 | 12.43 | 79.62 | -41.19 | 7.65 | 30.79 | -59.29 | 0.27 | -622.75 | -4.18 | -618.30 | 52.47 |
| | | 48 | 10.15 | 115.18 | -39.72 | -1.76 | 77.22 | -66.63 | 42.05 | -193.73 | 9.67 | -161.35 | 81.16 |
| | | 47 | 8.80 | 87.52 | -89.79 | -16.54 | 14.27 | 87.31 | 141.00 | -136.48 | 140.62 | -136.10 | 10.25 |
| 3 | 87 | 55 | 34.17 | 392.20 | -70.16 | 28.79 | 293.26 | 189.62 | 83.77 | -1140.20 | 72.72 | -1129.15 | 115.77 |
| | | 56 | 31.37 | 282.53 | -46.78 | 19.25 | 216.50 | -131.85 | 113.99 | -1103.91 | 94.07 | -1083.99 | 154.49 |
| | | 48 | 24.22 | 354.46 | -48.37 | -0.51 | 306.60 | -130.34 | 193.33 | -248.13 | 72.94 | -127.74 | 196.61 |
| | | 47 | 20.19 | 271.92 | -126.69 | -32.69 | 177.92 | 169.22 | 395.80 | -92.58 | 388.68 | -85.45 | 58.55 |
| 3 | 97 | 55 | 32.77 | 371.14 | -69.12 | 27.92 | 274.10 | 182.50 | 77.62 | -1113.81 | 67.77 | -1103.96 | 107.86 |
| | | 56 | 29.93 | 264.41 | -46.96 | 18.37 | 199.08 | -126.78 | 102.87 | -1078.47 | 84.47 | -1060.07 | 146.29 |
| | | 48 | 23.18 | 334.25 | -48.42 | -0.70 | 286.53 | -126.42 | 179.04 | -248.88 | 67.09 | -136.93 | 188.08 |
| | | 47 | 19.35 | 255.90 | -125.50 | -31.68 | 162.08 | 164.25 | 377.21 | -101.36 | 370.97 | -95.11 | 54.32 |
| 3 | 102 | 55 | 14.71 | 135.91 | -46.98 | 14.72 | 74.22 | 86.47 | 5.00 | -645.00 | 3.91 | -643.91 | 26.54 |
| | | 56 | 12.43 | 79.62 | -41.19 | 7.65 | 30.79 | -59.29 | 0.27 | -622.75 | -4.18 | -618.30 | 52.47 |
| | | 48 | 10.15 | 115.18 | -39.72 | -1.76 | 77.22 | -66.63 | 42.05 | -193.73 | 9.67 | -161.35 | 81.16 |
| | | 47 | 8.80 | 87.52 | -89.79 | -16.54 | 14.27 | 87.31 | 141.00 | -136.48 | 140.62 | -136.10 | 10.25 |
| 4 | 2 | 63 | 41.79 | 312.53 | -161.80 | 43.78 | 106.96 | 235.05 | 60.90 | -2243.81 | 53.27 | -2236.18 | 132.41 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|--------|----------|--------|----------|--------|
| | | 64 | 36.54 | 147.51 | -161.58 | 13.62 | -27.69 | -153.16 | 111.67 | -2186.52 | 94.00 | -2168.85 | 200.75 |
| | | 56 | 31.71 | 244.04 | -158.43 | -20.89 | 106.49 | -190.89 | 197.03 | -1033.15 | 144.08 | -980.20 | 249.69 |
| | | 55 | 32.42 | 206.84 | -338.12 | -54.04 | -77.24 | 272.24 | 368.12 | -947.56 | 361.96 | -941.39 | 89.87 |
| 4 | 51 | 63 | 16.47 | 66.12 | -88.17 | 14.68 | -36.74 | 72.73 | -11.39 | -861.76 | -11.66 | -861.48 | 15.26 |
| | | 64 | 16.82 | 22.07 | -102.54 | 3.07 | -83.54 | -44.79 | -26.69 | -838.22 | -28.71 | -836.20 | 40.47 |
| | | 56 | 9.26 | 43.50 | -88.73 | -7.36 | -37.86 | -64.33 | 10.69 | -460.53 | 0.13 | -449.97 | 69.74 |
| | | 55 | 14.34 | 44.08 | -160.86 | -17.66 | -99.12 | 94.02 | 83.36 | -431.57 | 83.16 | -431.36 | 10.38 |
| 4 | 83 | 63 | 16.36 | 65.77 | -86.74 | 14.68 | -35.65 | 71.99 | -11.63 | -859.32 | -11.92 | -859.03 | 15.80 |
| | | 64 | 16.75 | 22.76 | -102.30 | 3.04 | -82.58 | -45.58 | -26.82 | -836.22 | -28.91 | -834.13 | 41.07 |
| | | 56 | 9.21 | 44.60 | -88.98 | -7.47 | -36.91 | -65.15 | 11.16 | -458.67 | 0.40 | -447.91 | 70.28 |
| | | 55 | 14.24 | 43.63 | -159.41 | -17.74 | -98.04 | 93.24 | 83.73 | -429.14 | 83.50 | -428.91 | 10.93 |
| 4 | 85 | 63 | 16.30 | 65.56 | -85.87 | 14.67 | -34.98 | 71.53 | -11.78 | -857.82 | -12.09 | -857.51 | 16.14 |
| | | 64 | 16.71 | 23.18 | -102.16 | 3.02 | -81.99 | -46.06 | -26.90 | -834.99 | -29.03 | -832.85 | 41.45 |
| | | 56 | 9.18 | 45.28 | -89.13 | -7.53 | -36.32 | -65.64 | 11.45 | -457.52 | 0.56 | -446.63 | 70.62 |
| | | 55 | 14.17 | 43.37 | -158.52 | -17.79 | -97.37 | 92.77 | 83.96 | -427.64 | 83.71 | -427.39 | 11.27 |
| 4 | 87 | 63 | 29.47 | 216.08 | -118.29 | 31.14 | 66.64 | 166.24 | 38.87 | -1610.09 | 33.90 | -1605.12 | 90.43 |
| | | 64 | 26.17 | 100.02 | -119.93 | 9.49 | -29.39 | -108.25 | 70.73 | -1568.88 | 58.79 | -1556.95 | 139.36 |
| | | 56 | 22.33 | 167.54 | -116.31 | -14.93 | 66.15 | -136.01 | 132.70 | -749.59 | 96.13 | -713.01 | 175.87 |
| | | 55 | 23.42 | 142.86 | -245.73 | -38.40 | -64.47 | 193.86 | 256.47 | -688.59 | 252.46 | -684.58 | 61.41 |
| 4 | 97 | 63 | 28.19 | 202.52 | -117.29 | 30.04 | 55.19 | 159.41 | 35.05 | -1565.94 | 30.67 | -1561.56 | 83.58 |
| | | 64 | 25.83 | 91.95 | -120.67 | 8.95 | -37.66 | -103.72 | 60.33 | -1526.02 | 49.41 | -1515.10 | 131.16 |
| | | 56 | 21.33 | 155.91 | -115.80 | -14.47 | 54.58 | -131.39 | 121.16 | -736.93 | 86.92 | -702.69 | 167.96 |
| | | 55 | 22.96 | 133.79 | -242.14 | -36.99 | -71.35 | 187.18 | 244.08 | -677.76 | 240.54 | -674.22 | 57.01 |
| 4 | 102 | 63 | 16.30 | 65.56 | -85.87 | 14.67 | -34.98 | 71.53 | -11.78 | -857.82 | -12.09 | -857.51 | 16.14 |
| | | 64 | 16.71 | 23.18 | -102.16 | 3.02 | -81.99 | -46.06 | -26.90 | -834.99 | -29.03 | -832.85 | 41.45 |
| | | 56 | 9.18 | 45.28 | -89.13 | -7.53 | -36.32 | -65.64 | 11.45 | -457.52 | 0.56 | -446.63 | 70.62 |
| | | 55 | 14.17 | 43.37 | -158.52 | -17.79 | -97.37 | 92.77 | 83.96 | -427.64 | 83.71 | -427.39 | 11.27 |
| 5 | 2 | 71 | 57.22 | 165.06 | -316.60 | 43.23 | -194.77 | 209.38 | 10.84 | -2829.08 | 7.01 | -2825.25 | 104.15 |
| | | 72 | 59.33 | 54.40 | -384.13 | 9.13 | -338.86 | -133.43 | 66.14 | -2773.83 | 52.43 | -2760.12 | 196.89 |
| | | 64 | 37.66 | 79.83 | -315.05 | -24.50 | -210.72 | -174.11 | 154.03 | -1729.40 | 128.81 | -1704.18 | 216.51 |
| | | 63 | 50.75 | 91.32 | -516.89 | -51.60 | -373.98 | 257.87 | 255.96 | -1664.05 | 250.59 | -1658.68 | 101.40 |
| 5 | 49 | 71 | 23.01 | 32.75 | -154.08 | 13.24 | -134.57 | 57.14 | -22.24 | -1035.32 | -22.31 | -1035.25 | 8.09 |
| | | 72 | 23.93 | 8.74 | -186.52 | 1.00 | -178.78 | -38.09 | -50.19 | -1015.92 | -51.44 | -1014.67 | 34.67 |
| | | 64 | 17.32 | 13.65 | -161.01 | -8.65 | -138.71 | -58.30 | -12.78 | -695.85 | -17.88 | -690.76 | 58.75 |
| | | 63 | 20.95 | 16.52 | -222.90 | -15.99 | -190.38 | 82.02 | 48.55 | -672.85 | 48.28 | -672.58 | 13.86 |
| 5 | 81 | 71 | 22.94 | 33.33 | -153.65 | 13.30 | -133.62 | 57.84 | -21.91 | -1032.94 | -21.96 | -1032.88 | 7.56 |
| | | 72 | 23.85 | 8.53 | -185.38 | 1.04 | -177.89 | -37.37 | -49.94 | -1013.80 | -51.15 | -1012.60 | 34.07 |
| | | 64 | 17.24 | 13.37 | -159.76 | -8.58 | -137.81 | -57.60 | -12.60 | -693.69 | -17.60 | -688.68 | 58.18 |
| | | 63 | 20.89 | 17.20 | -222.53 | -15.90 | -189.43 | 82.70 | 48.86 | -670.45 | 48.62 | -670.20 | 13.35 |
| 5 | 85 | 71 | 22.90 | 33.69 | -153.39 | 13.33 | -133.03 | 58.26 | -21.70 | -1031.46 | -21.75 | -1031.41 | 7.22 |
| | | 72 | 23.80 | 8.41 | -184.67 | 1.06 | -177.33 | -36.93 | -49.78 | -1012.49 | -50.96 | -1011.31 | 33.69 |
| | | 64 | 17.19 | 13.20 | -158.99 | -8.53 | -137.26 | -57.18 | -12.48 | -692.34 | -17.44 | -687.39 | 57.82 |
| | | 63 | 20.85 | 17.61 | -222.29 | -15.84 | -188.84 | 83.10 | 49.06 | -668.96 | 48.82 | -668.72 | 13.02 |
| 5 | 87 | 71 | 41.17 | 113.70 | -230.69 | 30.60 | -147.58 | 147.35 | 4.22 | -2023.47 | 1.78 | -2021.02 | 70.39 |
| | | 72 | 42.72 | 36.99 | -280.31 | 6.23 | -249.55 | -93.88 | 37.31 | -1984.08 | 28.16 | -1974.92 | 135.75 |
| | | 64 | 27.40 | 54.33 | -230.58 | -17.47 | -158.78 | -123.70 | 100.94 | -1245.17 | 83.55 | -1227.77 | 152.05 |
| | | 63 | 36.58 | 62.78 | -373.78 | -36.51 | -274.50 | 182.99 | 177.07 | -1198.45 | 173.57 | -1194.95 | 69.34 |
| 5 | 97 | 71 | 40.17 | 106.20 | -227.87 | 29.36 | -151.03 | 140.59 | 2.57 | -1961.78 | 0.46 | -1959.67 | 64.31 |
| | | 72 | 41.71 | 34.09 | -277.19 | 5.75 | -248.85 | -89.55 | 27.17 | -1923.97 | 18.89 | -1915.69 | 126.85 |
| | | 64 | 27.00 | 50.13 | -228.71 | -16.90 | -161.68 | -119.15 | 89.52 | -1215.17 | 73.26 | -1198.91 | 144.75 |
| | | 63 | 35.76 | 58.52 | -366.43 | -35.03 | -272.89 | 176.07 | 167.84 | -1169.69 | 164.74 | -1166.58 | 64.36 |
| 5 | 102 | 71 | 22.90 | 33.69 | -153.39 | 13.33 | -133.03 | 58.26 | -21.70 | -1031.46 | -21.75 | -1031.41 | 7.22 |
| | | 72 | 23.80 | 8.41 | -184.67 | 1.06 | -177.33 | -36.93 | -49.78 | -1012.49 | -50.96 | -1011.31 | 33.69 |
| | | 64 | 17.19 | 13.20 | -158.99 | -8.53 | -137.26 | -57.18 | -12.48 | -692.34 | -17.44 | -687.39 | 57.82 |
| | | 63 | 20.85 | 17.61 | -222.29 | -15.84 | -188.84 | 83.10 | 49.06 | -668.96 | 48.82 | -668.72 | 13.02 |
| 6 | 2 | 79 | 76.56 | 100.88 | -529.64 | 40.63 | -469.40 | 185.36 | -45.21 | -3350.05 | -47.31 | -3347.95 | 83.33 |
| | | 80 | 80.54 | 29.21 | -636.37 | 8.51 | -615.66 | -115.54 | 40.16 | -3291.54 | 27.95 | -3279.33 | 201.33 |
| | | 72 | 60.89 | 24.98 | -543.20 | -21.79 | -496.43 | -156.16 | 107.12 | -2368.77 | 92.52 | -2354.17 | 189.56 |
| | | 71 | 70.41 | 35.25 | -717.67 | -46.13 | -636.30 | 233.76 | 180.68 | -2302.94 | 174.94 | -2297.20 | 119.25 |
| 6 | 49 | 79 | 28.85 | 19.41 | -226.77 | 11.19 | -218.55 | 44.23 | -28.73 | -1173.29 | -28.73 | -1173.29 | 1.43 |
| | | 80 | 29.78 | 3.66 | -260.31 | 0.30 | -256.95 | -29.62 | -68.09 | -1158.85 | -68.81 | -1158.14 | 27.95 |
| | | 72 | 24.33 | 2.89 | -234.67 | -7.92 | -223.86 | -49.51 | -35.36 | -896.85 | -37.90 | -894.30 | 46.77 |
| | | 71 | 27.02 | 4.75 | -282.84 | -13.14 | -264.95 | 69.47 | 24.59 | -876.46 | 24.31 | -876.19 | 15.80 |
| 6 | 81 | 79 | 28.77 | 19.75 | -225.90 | 11.27 | -217.42 | 44.84 | -28.33 | -1171.17 | -28.33 | -1171.17 | 0.90 |
| | | 80 | 29.71 | 3.56 | -259.30 | 0.32 | -256.06 | -28.99 | -67.75 | -1156.90 | -68.44 | -1156.22 | 27.33 |
| | | 72 | 24.26 | 2.76 | -233.59 | -7.86 | -222.97 | -48.96 | -35.14 | -894.86 | -37.62 | -892.38 | 46.15 |
| | | 71 | 26.95 | 5.18 | -282.03 | -13.03 | -263.82 | 70.00 | 24.89 | -874.32 | 24.63 | -874.06 | 15.26 |
| 6 | 85 | 79 | 28.73 | 19.95 | -225.36 | 11.31 | -216.73 | 45.21 | -28.08 | -1169.85 | -28.08 | -1169.85 | 0.57 |
| | | 80 | 29.66 | 3.50 | -258.67 | 0.34 | -255.51 | -28.61 | -67.54 | -1155.69 | -68.20 | -1155.02 | 26.95 |
| | | 72 | 24.22 | 2.68 | -232.92 | -7.82 | -222.42 | -48.63 | -35.00 | -893.63 | -37.45 | -891.18 | 45.77 |
| | | 71 | 26.90 | 5.45 | -281.53 | -12.97 | -263.12 | 70.32 | 25.08 | -872.99 | 24.83 | -872.75 | 14.93 |
| 6 | 87 | 79 | 54.85 | 69.44 | -382.67 | 28.60 | -341.83 | 129.60 | -33.97 | -2389.26 | -35.29 | -2387.95 | 55.63 |
| | | 80 | 57.65 | 19.79 | -458.59 | 5.72 | -444.51 | -80.84 | 17.59 | -2348.27 | 9.54 | -2340.22 | 137.81 |
| | | 72 | 43.82 | 16.83 | -393.01 | -15.57 | -360.61 | -110.59 | 66.69 | -1698.27 | 56.69 | -1688.27 | 132.48 |
| | | 71 | 50.51 | 24.00 | -515.77 | -32.48 | -459.28 | 165.22 | 123.69 | -1651.58 | 119.94 | -1647.83 | 81.49 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|-------|----------|--------|----------|---------|---------|----------|---------|----------|--------|
| 6 | 97 | 79 | 53.29 | 64.80 | -374.82 | 27.29 | -337.30 | 122.83 | -32.64 | -2309.95 | -33.75 | -2308.85 | 50.10 |
| | | 80 | 55.94 | 18.16 | -448.00 | 5.19 | -435.02 | -76.67 | 7.00 | -2271.32 | -0.19 | -2264.13 | 127.77 |
| | | 72 | 42.75 | 15.36 | -385.43 | -15.08 | -354.99 | -106.19 | 55.69 | -1650.53 | 46.41 | -1641.25 | 125.49 |
| | | 71 | 49.14 | 22.15 | -502.52 | -31.01 | -449.36 | 158.32 | 116.50 | -1605.42 | 113.19 | -1602.10 | 75.53 |
| 6 | 102 | 79 | 28.73 | 19.95 | -225.36 | 11.31 | -216.73 | 45.21 | -28.08 | -1169.85 | -28.08 | -1169.85 | 0.57 |
| | | 80 | 29.66 | 3.50 | -258.67 | 0.34 | -255.51 | -28.61 | -67.54 | -1155.69 | -68.20 | -1155.02 | 26.95 |
| | | 72 | 24.22 | 2.68 | -232.92 | -7.82 | -222.42 | -48.63 | -35.00 | -893.63 | -37.45 | -891.18 | 45.77 |
| | | 71 | 26.90 | 5.45 | -281.53 | -12.97 | -263.12 | 70.32 | 25.08 | -872.99 | 24.83 | -872.75 | 14.93 |
| 7 | 2 | 51 | 94.22 | 70.84 | -747.80 | 37.17 | -714.14 | 162.56 | -118.13 | -3811.24 | -119.27 | -3810.10 | 64.85 |
| | | 52 | 99.28 | 18.95 | -870.12 | 8.24 | -859.42 | -96.96 | 35.54 | -3737.14 | 23.88 | -3725.48 | 209.42 |
| | | 80 | 81.75 | 8.21 | -773.81 | -17.00 | -748.60 | -138.13 | 62.88 | -2943.40 | 53.07 | -2933.60 | 171.41 |
| | | 79 | 88.96 | 9.34 | -917.91 | -40.41 | -868.16 | 208.94 | 118.61 | -2874.75 | 111.96 | -2868.09 | 140.97 |
| 7 | 49 | 51 | 33.60 | 12.11 | -290.67 | 8.80 | -287.36 | 31.46 | -32.80 | -1276.93 | -32.81 | -1276.92 | -3.74 |
| | | 52 | 34.35 | 1.29 | -319.85 | -0.10 | -318.46 | -21.09 | -81.02 | -1267.31 | -81.40 | -1266.92 | 21.32 |
| | | 80 | 30.11 | -0.85 | -298.47 | -6.60 | -292.72 | -40.98 | -55.00 | -1063.50 | -56.29 | -1062.21 | 36.04 |
| | | 79 | 32.10 | -0.27 | -333.35 | -10.13 | -323.49 | 56.45 | 6.88 | -1045.66 | 6.60 | -1045.38 | 17.24 |
| 7 | 81 | 51 | 33.51 | 12.33 | -289.47 | 8.91 | -286.04 | 31.97 | -32.26 | -1275.05 | -32.28 | -1275.03 | -4.21 |
| | | 52 | 34.28 | 1.26 | -318.86 | -0.07 | -317.53 | -20.57 | -80.53 | -1265.56 | -80.89 | -1265.19 | 20.76 |
| | | 80 | 30.04 | -0.90 | -297.45 | -6.57 | -291.79 | -40.58 | -54.68 | -1061.75 | -55.93 | -1060.50 | 35.45 |
| | | 79 | 32.02 | 0.02 | -332.20 | -10.01 | -322.17 | 56.85 | 7.26 | -1043.78 | 7.00 | -1043.52 | 16.73 |
| 7 | 85 | 51 | 33.46 | 12.47 | -288.73 | 8.97 | -285.23 | 32.29 | -31.92 | -1273.87 | -31.94 | -1273.85 | -4.50 |
| | | 52 | 34.24 | 1.24 | -318.25 | -0.05 | -316.96 | -20.25 | -80.22 | -1264.47 | -80.58 | -1264.11 | 20.42 |
| | | 80 | 30.00 | -0.94 | -296.82 | -6.54 | -291.22 | -40.33 | -54.48 | -1060.66 | -55.70 | -1059.44 | 35.08 |
| | | 79 | 31.96 | 0.19 | -331.49 | -9.94 | -321.35 | 57.09 | 7.50 | -1042.61 | 7.25 | -1042.35 | 16.42 |
| 7 | 87 | 51 | 67.26 | 48.54 | -536.69 | 25.98 | -514.12 | 112.68 | -83.08 | -2710.61 | -83.77 | -2709.92 | 42.63 |
| | | 52 | 70.75 | 12.71 | -622.43 | 5.49 | -615.20 | -67.34 | 12.78 | -2659.80 | 5.18 | -2652.20 | 142.34 |
| | | 80 | 58.50 | 5.28 | -555.39 | -12.20 | -537.90 | -97.46 | 34.59 | -2103.63 | 27.95 | -2096.99 | 118.95 |
| | | 79 | 63.56 | 6.11 | -656.00 | -28.27 | -621.62 | 146.90 | 79.95 | -2055.38 | 75.61 | -2051.04 | 96.17 |
| 7 | 97 | 51 | 65.11 | 45.09 | -522.22 | 24.61 | -501.74 | 105.83 | -77.34 | -2613.42 | -77.90 | -2612.86 | 37.70 |
| | | 52 | 68.36 | 11.53 | -603.66 | 4.93 | -597.06 | -63.38 | 0.91 | -2566.53 | -5.79 | -2559.84 | 130.94 |
| | | 80 | 56.76 | 4.57 | -540.41 | -11.88 | -523.96 | -93.24 | 24.18 | -2038.21 | 18.09 | -2032.12 | 111.85 |
| | | 79 | 61.57 | 5.40 | -635.64 | -26.80 | -603.43 | 140.03 | 74.72 | -1992.03 | 70.89 | -1988.20 | 88.93 |
| 7 | 102 | 51 | 33.46 | 12.47 | -288.73 | 8.97 | -285.23 | 32.29 | -31.92 | -1273.87 | -31.94 | -1273.85 | -4.50 |
| | | 52 | 34.24 | 1.24 | -318.25 | -0.05 | -316.96 | -20.25 | -80.22 | -1264.47 | -80.58 | -1264.11 | 20.42 |
| | | 80 | 30.00 | -0.94 | -296.82 | -6.54 | -291.22 | -40.33 | -54.48 | -1060.66 | -55.70 | -1059.44 | 35.08 |
| | | 79 | 31.96 | 0.19 | -331.49 | -9.94 | -321.35 | 57.09 | 7.50 | -1042.61 | 7.25 | -1042.35 | 16.42 |
| 8 | 2 | 61 | 109.71 | 53.63 | -948.55 | 33.52 | -928.43 | 140.55 | -213.54 | -4216.15 | -214.03 | -4215.66 | 43.95 |
| | | 62 | 115.45 | 12.02 | -1076.24 | 6.41 | -1070.62 | -77.94 | 48.11 | -4109.28 | 36.93 | -4098.09 | 215.33 |
| | | 52 | 100.00 | 2.35 | -981.51 | -12.31 | -966.85 | -119.21 | 25.39 | -3450.57 | 17.78 | -3442.96 | 162.49 |
| | | 51 | 105.60 | -3.15 | -1103.05 | -35.29 | -1070.92 | 185.24 | 54.46 | -3382.38 | 46.70 | -3374.62 | 163.14 |
| 8 | 33 | 61 | 37.26 | 6.73 | -343.87 | 5.85 | -343.00 | 17.50 | -36.81 | -1347.48 | -36.84 | -1347.45 | -6.32 |
| | | 62 | 37.65 | -0.10 | -364.56 | -0.62 | -364.04 | -13.77 | -91.34 | -1341.43 | -91.55 | -1341.22 | 16.32 |
| | | 52 | 34.62 | -2.16 | -348.97 | -5.38 | -345.75 | -33.24 | -72.31 | -1195.83 | -73.03 | -1195.11 | 28.45 |
| | | 51 | 36.15 | -2.74 | -373.73 | -7.75 | -368.72 | 42.79 | -8.56 | -1182.07 | -8.90 | -1181.74 | 19.74 |
| 8 | 65 | 61 | 37.10 | 7.25 | -340.99 | 6.24 | -339.98 | 18.74 | -34.75 | -1345.13 | -34.79 | -1345.09 | -7.71 |
| | | 62 | 37.57 | -0.11 | -363.18 | -0.54 | -362.75 | -12.48 | -89.48 | -1339.77 | -89.66 | -1339.59 | 14.70 |
| | | 52 | 34.54 | -2.17 | -347.52 | -5.25 | -344.44 | -32.46 | -70.89 | -1194.20 | -71.52 | -1193.57 | 26.62 |
| | | 51 | 35.99 | -2.07 | -370.90 | -7.28 | -365.69 | 43.53 | -6.96 | -1179.74 | -7.24 | -1179.46 | 18.14 |
| 8 | 85 | 61 | 37.00 | 7.57 | -339.24 | 6.47 | -338.14 | 19.50 | -33.46 | -1343.67 | -33.52 | -1343.62 | -8.57 |
| | | 62 | 37.52 | -0.11 | -362.34 | -0.49 | -361.96 | -11.69 | -88.33 | -1338.74 | -88.48 | -1338.59 | 13.70 |
| | | 52 | 34.50 | -2.18 | -346.63 | -5.18 | -343.64 | -31.98 | -70.00 | -1193.19 | -70.58 | -1192.61 | 25.49 |
| | | 51 | 35.90 | -1.65 | -369.18 | -7.00 | -363.84 | 43.98 | -5.95 | -1178.29 | -6.20 | -1178.04 | 17.16 |
| 8 | 87 | 61 | 78.06 | 36.44 | -677.28 | 23.21 | -664.04 | 96.30 | -146.87 | -2989.87 | -147.15 | -2989.59 | 28.16 |
| | | 62 | 81.97 | 7.93 | -765.73 | 4.21 | -762.01 | -53.52 | 20.03 | -2917.75 | 12.82 | -2910.54 | 145.38 |
| | | 52 | 71.26 | 1.24 | -700.52 | -8.90 | -690.39 | -83.74 | 7.51 | -2459.39 | 2.44 | -2454.32 | 111.73 |
| | | 51 | 75.18 | -2.44 | -784.47 | -24.46 | -762.46 | 129.36 | 35.35 | -2411.87 | 30.31 | -2406.82 | 111.04 |
| 8 | 97 | 61 | 75.31 | 33.55 | -655.69 | 21.77 | -643.91 | 89.34 | -134.94 | -2874.32 | -135.15 | -2874.11 | 24.11 |
| | | 62 | 78.90 | 7.06 | -738.68 | 3.72 | -735.34 | -49.77 | 6.30 | -2808.81 | 0.02 | -2802.53 | 132.75 |
| | | 52 | 68.86 | 0.79 | -677.88 | -8.72 | -668.38 | -79.74 | -2.31 | -2376.52 | -6.88 | -2371.95 | 104.04 |
| | | 51 | 72.57 | -2.53 | -756.44 | -22.97 | -736.00 | 122.44 | 32.73 | -2331.40 | 28.29 | -2326.96 | 102.40 |
| 8 | 102 | 61 | 37.00 | 7.57 | -339.24 | 6.47 | -338.14 | 19.50 | -33.46 | -1343.67 | -33.52 | -1343.62 | -8.57 |
| | | 62 | 37.52 | -0.11 | -362.34 | -0.49 | -361.96 | -11.69 | -88.33 | -1338.74 | -88.48 | -1338.59 | 13.70 |
| | | 52 | 34.50 | -2.18 | -346.63 | -5.18 | -343.64 | -31.98 | -70.00 | -1193.19 | -70.58 | -1192.61 | 25.49 |
| | | 51 | 35.90 | -1.65 | -369.18 | -7.00 | -363.84 | 43.98 | -5.95 | -1178.29 | -6.20 | -1178.04 | 17.16 |
| 9 | 2 | 73 | 123.00 | 41.98 | -1125.89 | 30.00 | -1113.91 | 117.68 | -328.90 | -4568.67 | -328.97 | -4568.60 | 17.15 |
| | | 74 | 128.91 | 4.97 | -1251.60 | 2.13 | -1248.76 | -59.67 | 63.68 | -4410.55 | 53.89 | -4400.76 | 209.02 |
| | | 62 | 115.54 | -0.44 | -1159.91 | -9.14 | -1151.21 | -100.04 | -7.11 | -3889.04 | -14.02 | -3882.12 | 163.68 |
| | | 61 | 120.03 | -9.24 | -1266.47 | -30.65 | -1245.07 | 162.64 | -22.67 | -3828.13 | -31.16 | -3819.64 | 179.61 |
| 9 | 33 | 73 | 39.61 | 3.28 | -380.95 | 3.20 | -380.87 | 5.50 | -36.70 | -1384.09 | -36.78 | -1384.00 | -10.49 |
| | | 74 | 39.65 | -1.19 | -393.18 | -1.23 | -393.13 | -4.32 | -95.93 | -1381.72 | -95.98 | -1381.67 | 8.29 |
| | | 62 | 37.84 | -2.56 | -383.70 | -4.06 | -382.20 | -23.87 | -84.51 | -1294.35 | -84.80 | -1294.06 | 18.82 |
| | | 61 | 38.94 | -2.54 | -398.62 | -4.93 | -396.23 | 30.69 | -19.83 | -1284.79 | -20.12 | -1284.51 | 18.90 |
| 9 | 65 | 73 | 39.42 | 3.73 | -377.46 | 3.63 | -377.36 | 6.33 | -34.24 | -1381.07 | -34.34 | -1380.97 | -11.36 |
| | | 74 | 39.56 | -1.11 | -391.64 | -1.14 | -391.61 | -3.47 | -93.71 | -1379.73 | -93.75 | -1379.69 | 7.26 |
| | | 62 | 37.75 | -2.49 | -382.14 | -3.97 | -380.67 | -23.60 | -82.59 | -1292.40 | -82.84 | -1292.14 | 17.48 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|--------|---------|----------|---------|----------|---------|
| | | 61 | 38.74 | -2.00 | -395.15 | -4.45 | -392.70 | 30.94 | -17.71 | -1281.78 | -17.95 | -1281.54 | 17.72 |
| 9 | 85 | 73 | 39.30 | 4.01 | -375.34 | 3.89 | -375.22 | 6.83 | -32.72 | -1379.21 | -32.83 | -1379.11 | -11.90 |
| | | 74 | 39.51 | -1.06 | -390.70 | -1.09 | -390.68 | -2.96 | -92.33 | -1378.51 | -92.36 | -1378.47 | 6.63 |
| | | 62 | 37.70 | -2.46 | -381.19 | -3.91 | -379.74 | -23.44 | -81.40 | -1291.19 | -81.62 | -1290.96 | 16.66 |
| | | 61 | 38.62 | -1.67 | -393.04 | -4.16 | -390.55 | 31.09 | -16.38 | -1279.94 | -16.61 | -1279.71 | 17.00 |
| 9 | 87 | 73 | 87.23 | 28.19 | -800.31 | 20.52 | -792.63 | 79.36 | -223.66 | -3229.65 | -223.69 | -3229.62 | 9.85 |
| | | 74 | 91.20 | 3.09 | -886.42 | 1.27 | -884.60 | -40.17 | 29.86 | -3123.88 | 23.61 | -3117.64 | 140.23 |
| | | 62 | 82.05 | -0.65 | -824.07 | -6.62 | -818.10 | -69.82 | -15.71 | -2764.73 | -20.23 | -2760.21 | 111.34 |
| | | 61 | 85.16 | -6.51 | -896.59 | -20.99 | -882.12 | 112.57 | -17.48 | -2722.57 | -22.99 | -2717.05 | 122.01 |
| 9 | 97 | 73 | 83.87 | 25.63 | -771.34 | 19.00 | -764.72 | 72.36 | -203.91 | -3095.01 | -203.93 | -3094.99 | 7.18 |
| | | 74 | 87.49 | 2.57 | -851.17 | 1.00 | -849.61 | -36.56 | 14.59 | -2999.75 | 9.21 | -2994.38 | 127.15 |
| | | 62 | 79.01 | -0.95 | -793.80 | -6.49 | -788.26 | -66.05 | -24.80 | -2664.70 | -28.79 | -2660.71 | 102.49 |
| | | 61 | 81.92 | -6.21 | -860.60 | -19.46 | -847.35 | 105.57 | -16.25 | -2624.92 | -21.09 | -2620.08 | 112.24 |
| 9 | 102 | 73 | 39.30 | 4.01 | -375.34 | 3.89 | -375.22 | 6.83 | -32.72 | -1379.21 | -32.83 | -1379.11 | -11.90 |
| | | 74 | 39.51 | -1.06 | -390.70 | -1.09 | -390.68 | -2.96 | -92.33 | -1378.51 | -92.36 | -1378.47 | 6.63 |
| | | 62 | 37.70 | -2.46 | -381.19 | -3.91 | -379.74 | -23.44 | -81.40 | -1291.19 | -81.62 | -1290.96 | 16.66 |
| | | 61 | 38.62 | -1.67 | -393.04 | -4.16 | -390.55 | 31.09 | -16.38 | -1279.94 | -16.61 | -1279.71 | 17.00 |
| 10 | 2 | 83 | 134.44 | 31.43 | -1280.88 | 25.56 | -1275.00 | 87.60 | -448.42 | -4876.04 | -448.48 | -4875.98 | -15.97 |
| | | 84 | 139.61 | -3.15 | -1393.17 | -4.30 | -1392.02 | -39.95 | 52.77 | -4657.19 | 46.38 | -4650.80 | 173.41 |
| | | 74 | 128.34 | -3.33 | -1307.98 | -8.74 | -1302.57 | -83.86 | -42.31 | -4258.60 | -49.67 | -4251.25 | 175.95 |
| | | 73 | 132.17 | -10.80 | -1404.34 | -25.28 | -1389.86 | 141.31 | -119.70 | -4218.05 | -127.59 | -4210.16 | 179.62 |
| 10 | 29 | 83 | 40.67 | 0.62 | -402.42 | 0.52 | -402.32 | -6.37 | -33.86 | -1385.82 | -34.03 | -1385.66 | -15.03 |
| | | 84 | 40.35 | -1.94 | -405.85 | -2.01 | -405.78 | 5.26 | -96.39 | -1387.22 | -96.39 | -1387.22 | -1.42 |
| | | 74 | 39.75 | -2.42 | -402.67 | -2.93 | -402.16 | -14.30 | -92.44 | -1358.09 | -92.51 | -1358.02 | 9.49 |
| | | 73 | 40.45 | -1.29 | -408.26 | -2.16 | -407.39 | 18.83 | -28.24 | -1352.76 | -28.46 | -1352.54 | 17.00 |
| 10 | 61 | 83 | 40.46 | 1.07 | -398.68 | 0.98 | -398.59 | -6.01 | -31.26 | -1382.47 | -31.42 | -1382.31 | -14.74 |
| | | 84 | 40.26 | -1.84 | -404.26 | -1.92 | -404.18 | 5.64 | -94.02 | -1385.11 | -94.02 | -1385.11 | -1.06 |
| | | 74 | 39.65 | -2.32 | -401.09 | -2.85 | -400.55 | -14.56 | -90.21 | -1356.00 | -90.27 | -1355.94 | 8.78 |
| | | 73 | 40.24 | -0.84 | -404.51 | -1.70 | -403.66 | 18.54 | -25.78 | -1349.42 | -25.98 | -1349.22 | 16.34 |
| 10 | 85 | 83 | 40.34 | 1.34 | -396.41 | 1.26 | -396.33 | -5.80 | -29.65 | -1380.42 | -29.81 | -1380.26 | -14.56 |
| | | 84 | 40.20 | -1.78 | -403.29 | -1.86 | -403.20 | 5.87 | -92.56 | -1383.82 | -92.56 | -1383.82 | -0.85 |
| | | 74 | 39.60 | -2.26 | -400.13 | -2.81 | -399.58 | -14.72 | -88.82 | -1354.72 | -88.88 | -1354.67 | 8.34 |
| | | 73 | 40.11 | -0.57 | -402.23 | -1.41 | -401.39 | 18.37 | -24.25 | -1347.37 | -24.44 | -1347.18 | 15.94 |
| 10 | 87 | 83 | 94.99 | 20.80 | -906.44 | 17.21 | -902.85 | 57.63 | -302.91 | -3434.74 | -302.96 | -3434.69 | -12.59 |
| | | 84 | 98.43 | -2.43 | -982.46 | -3.11 | -981.78 | -25.85 | 22.61 | -3289.08 | 18.58 | -3285.04 | 115.49 |
| | | 74 | 90.84 | -2.56 | -925.30 | -6.20 | -921.66 | -57.87 | -40.25 | -3019.50 | -44.96 | -3014.79 | 118.41 |
| | | 73 | 93.45 | -7.44 | -989.70 | -17.04 | -980.09 | 96.66 | -83.20 | -2991.52 | -88.32 | -2986.40 | 121.87 |
| 10 | 97 | 83 | 91.00 | 18.60 | -869.74 | 15.66 | -866.80 | 51.08 | -274.81 | -3279.78 | -274.87 | -3279.72 | -13.38 |
| | | 84 | 94.09 | -2.52 | -939.32 | -3.06 | -938.78 | -22.46 | 8.08 | -3149.19 | 4.66 | -3145.77 | 103.85 |
| | | 74 | 87.17 | -2.65 | -887.49 | -5.97 | -884.18 | -54.10 | -47.96 | -2902.62 | -52.03 | -2898.55 | 107.71 |
| | | 73 | 89.58 | -6.92 | -945.63 | -15.53 | -937.02 | 89.51 | -76.46 | -2876.21 | -80.95 | -2871.73 | 111.96 |
| 10 | 102 | 83 | 40.34 | 1.34 | -396.41 | 1.26 | -396.33 | -5.80 | -29.65 | -1380.42 | -29.81 | -1380.26 | -14.56 |
| | | 84 | 40.20 | -1.78 | -403.29 | -1.86 | -403.20 | 5.87 | -92.56 | -1383.82 | -92.56 | -1383.82 | -0.85 |
| | | 74 | 39.60 | -2.26 | -400.13 | -2.81 | -399.58 | -14.72 | -88.82 | -1354.72 | -88.88 | -1354.67 | 8.34 |
| | | 73 | 40.11 | -0.57 | -402.23 | -1.41 | -401.39 | 18.37 | -24.25 | -1347.37 | -24.44 | -1347.18 | 15.94 |
| 11 | 2 | 59 | 145.28 | 16.53 | -1417.81 | 16.29 | -1417.57 | 18.48 | -555.05 | -5200.27 | -555.10 | -5200.22 | -15.46 |
| | | 60 | 148.10 | -13.90 | -1490.95 | -13.94 | -1490.91 | 7.84 | -26.65 | -4940.14 | -27.18 | -4939.61 | 51.02 |
| | | 84 | 138.58 | -7.98 | -1429.17 | -12.36 | -1424.80 | -78.69 | -88.60 | -4567.14 | -97.90 | -4557.84 | 203.77 |
| | | 83 | 141.94 | -6.37 | -1507.20 | -16.90 | -1496.66 | 125.32 | -243.82 | -4577.24 | -248.34 | -4572.72 | 139.80 |
| 11 | 26 | 59 | 40.45 | -1.30 | -408.31 | -2.18 | -407.44 | -18.85 | -28.24 | -1352.63 | -28.47 | -1352.40 | -17.46 |
| | | 60 | 39.74 | -2.42 | -402.62 | -2.93 | -402.11 | 14.28 | -92.78 | -1358.08 | -92.85 | -1358.01 | -9.78 |
| | | 84 | 40.35 | -1.95 | -405.86 | -2.01 | -405.79 | -5.28 | -96.32 | -1387.21 | -96.32 | -1387.21 | 1.06 |
| | | 83 | 40.67 | 0.63 | -402.36 | 0.53 | -402.26 | 6.35 | -33.92 | -1385.90 | -34.08 | -1385.74 | 14.61 |
| 11 | 58 | 59 | 40.24 | -0.85 | -404.56 | -1.71 | -403.71 | -18.59 | -25.75 | -1349.29 | -25.97 | -1349.07 | -16.86 |
| | | 60 | 39.65 | -2.32 | -401.04 | -2.85 | -400.51 | 14.53 | -90.52 | -1355.99 | -90.59 | -1355.93 | -9.11 |
| | | 84 | 40.26 | -1.84 | -404.27 | -1.92 | -404.19 | 5.67 | -93.95 | -1385.10 | -93.95 | -1385.10 | 0.66 |
| | | 83 | 40.46 | 1.08 | -398.62 | 0.99 | -398.53 | 5.96 | -31.32 | -1382.54 | -31.47 | -1382.39 | 14.27 |
| 11 | 85 | 59 | 40.11 | -0.58 | -402.29 | -1.43 | -401.44 | -18.44 | -24.21 | -1347.24 | -24.42 | -1347.04 | -16.49 |
| | | 60 | 39.59 | -2.27 | -400.08 | -2.81 | -399.54 | 14.68 | -89.12 | -1354.71 | -89.18 | -1354.65 | -8.70 |
| | | 84 | 40.20 | -1.78 | -403.31 | -1.87 | -403.22 | -5.90 | -92.48 | -1383.81 | -92.48 | -1383.81 | 0.42 |
| | | 83 | 40.34 | 1.35 | -396.34 | 1.27 | -396.26 | 5.73 | -29.71 | -1380.48 | -29.86 | -1380.34 | 14.05 |
| 11 | 87 | 59 | 102.19 | 10.77 | -998.67 | 10.67 | -998.57 | 9.86 | -373.27 | -3646.47 | -373.32 | -3646.42 | -12.51 |
| | | 60 | 104.01 | -9.62 | -1047.26 | -9.67 | -1047.21 | 7.19 | -29.70 | -3474.00 | -30.01 | -3473.69 | 32.85 |
| | | 84 | 97.75 | -5.64 | -1006.47 | -8.49 | -1003.63 | -53.25 | -71.73 | -3228.93 | -77.59 | -3223.07 | 135.90 |
| | | 83 | 99.98 | -4.31 | -1057.40 | -11.10 | -1050.61 | 84.31 | -166.59 | -3235.47 | -169.54 | -3232.53 | 95.07 |
| 11 | 97 | 59 | 97.45 | 9.45 | -953.69 | 9.41 | -953.65 | 6.35 | -337.40 | -3465.79 | -337.46 | -3465.73 | -13.58 |
| | | 60 | 99.03 | -9.01 | -997.24 | -9.09 | -997.17 | 8.48 | -38.36 | -3311.81 | -38.61 | -3311.56 | 28.40 |
| | | 84 | 93.48 | -5.40 | -960.94 | -7.89 | -958.44 | -48.73 | -76.92 | -3094.97 | -81.89 | -3090.00 | 122.37 |
| | | 83 | 95.50 | -3.92 | -1005.68 | -9.82 | -999.78 | 76.67 | -152.19 | -3100.38 | -154.79 | -3097.78 | 87.57 |
| 11 | 102 | 59 | 40.11 | -0.58 | -402.29 | -1.43 | -401.44 | -18.44 | -24.21 | -1347.24 | -24.42 | -1347.04 | -16.49 |
| | | 60 | 39.59 | -2.27 | -400.08 | -2.81 | -399.54 | 14.68 | -89.12 | -1354.71 | -89.18 | -1354.65 | -8.70 |
| | | 84 | 40.20 | -1.78 | -403.31 | -1.87 | -403.22 | -5.90 | -92.48 | -1383.81 | -92.48 | -1383.81 | 0.42 |
| | | 83 | 40.34 | 1.35 | -396.34 | 1.27 | -396.26 | 5.73 | -29.71 | -1380.48 | -29.86 | -1380.34 | 14.05 |
| 12 | 2 | 75 | 148.13 | 4.19 | -1510.29 | 0.01 | -1506.11 | -79.48 | -553.82 | -5107.22 | -553.98 | -5107.06 | -26.87 |
| | | 76 | 147.21 | -20.25 | -1510.51 | -23.91 | -1506.86 | 73.74 | -69.71 | -4865.10 | -71.80 | -4863.01 | -100.08 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 60 | 147.05 | -13.57 | -1493.00 | -15.68 | -1490.90 | -55.73 | -153.77 | -4947.60 | -162.35 | -4939.02 | 202.67 |
| | | 59 | 148.88 | 2.36 | -1523.93 | -1.93 | -1519.64 | 80.75 | -415.20 | -5048.08 | -416.37 | -5046.91 | 73.59 |
| 12 | 26 | 75 | 38.94 | -2.54 | -398.67 | -4.94 | -396.26 | -30.77 | -19.81 | -1284.58 | -20.11 | -1284.28 | -19.50 |
| | | 76 | 37.83 | -2.56 | -383.62 | -4.06 | -382.12 | 23.83 | -85.07 | -1294.34 | -85.37 | -1294.04 | -19.10 |
| | | 60 | 39.65 | -1.20 | -393.17 | -1.24 | -393.12 | 4.28 | -96.07 | -1381.69 | -96.13 | -1381.63 | -8.78 |
| | | 59 | 39.61 | 3.29 | -380.87 | 3.21 | -380.78 | -5.57 | -36.79 | -1384.10 | -36.86 | -1384.03 | 10.03 |
| 12 | 58 | 75 | 38.74 | -2.00 | -395.20 | -4.46 | -392.73 | -31.02 | -17.68 | -1281.58 | -17.94 | -1281.31 | -18.33 |
| | | 76 | 37.74 | -2.50 | -382.06 | -3.97 | -380.59 | 23.56 | -83.15 | -1292.39 | -83.41 | -1292.13 | -17.76 |
| | | 60 | 39.56 | -1.12 | -391.63 | -1.15 | -391.60 | 3.43 | -93.85 | -1379.70 | -93.90 | -1379.66 | -7.75 |
| | | 59 | 39.41 | 3.75 | -377.37 | 3.64 | -377.27 | -6.40 | -34.33 | -1381.09 | -34.42 | -1381.00 | 10.90 |
| 12 | 85 | 75 | 38.62 | -1.67 | -393.08 | -4.17 | -390.59 | -31.17 | -16.36 | -1279.73 | -16.60 | -1279.49 | -17.60 |
| | | 76 | 37.69 | -2.46 | -381.11 | -3.92 | -379.66 | 23.40 | -81.96 | -1291.18 | -82.19 | -1290.95 | -16.94 |
| | | 60 | 39.51 | -1.07 | -390.70 | -1.09 | -390.68 | 2.92 | -92.48 | -1378.48 | -92.52 | -1378.44 | -7.12 |
| | | 59 | 39.30 | 4.03 | -375.25 | 3.90 | -375.13 | -6.90 | -32.81 | -1379.23 | -32.91 | -1379.13 | 11.44 |
| 12 | 87 | 75 | 103.89 | 2.53 | -1059.23 | -0.55 | -1056.15 | -57.14 | -371.41 | -3575.43 | -371.53 | -3575.30 | -20.26 |
| | | 76 | 103.17 | -13.84 | -1057.82 | -16.46 | -1055.19 | 52.28 | -57.41 | -3415.55 | -58.82 | -3414.13 | -68.98 |
| | | 60 | 103.30 | -9.29 | -1047.33 | -10.60 | -1046.02 | -36.77 | -115.22 | -3481.83 | -120.57 | -3476.47 | 134.16 |
| | | 59 | 104.48 | 1.86 | -1065.74 | -0.76 | -1063.11 | 52.91 | -281.18 | -3549.28 | -281.97 | -3548.49 | 50.58 |
| 12 | 97 | 75 | 98.79 | 2.02 | -1007.07 | -1.07 | -1003.98 | -55.69 | -334.65 | -3392.63 | -334.79 | -3392.49 | -20.72 |
| | | 76 | 98.01 | -12.80 | -1004.19 | -15.35 | -1001.63 | 50.26 | -62.28 | -3250.54 | -63.58 | -3249.24 | -64.39 |
| | | 60 | 98.38 | -8.60 | -995.97 | -9.69 | -994.88 | -32.69 | -116.10 | -3321.81 | -120.58 | -3317.33 | 119.77 |
| | | 59 | 99.41 | 2.00 | -1010.30 | -0.15 | -1008.14 | 46.68 | -255.68 | -3382.70 | -256.39 | -3381.98 | 47.17 |
| 12 | 102 | 75 | 38.62 | -1.67 | -393.08 | -4.17 | -390.59 | -31.17 | -16.36 | -1279.73 | -16.60 | -1279.49 | -17.60 |
| | | 76 | 37.69 | -2.46 | -381.11 | -3.92 | -379.66 | 23.40 | -81.96 | -1291.18 | -82.19 | -1290.95 | -16.94 |
| | | 60 | 39.51 | -1.07 | -390.70 | -1.09 | -390.68 | 2.92 | -92.48 | -1378.48 | -92.52 | -1378.44 | -7.12 |
| | | 59 | 39.30 | 4.03 | -375.25 | 3.90 | -375.13 | -6.90 | -32.81 | -1379.23 | -32.91 | -1379.13 | 11.44 |
| 13 | 2 | 53 | 142.78 | -0.29 | -1513.53 | -20.02 | -1493.80 | -171.65 | -468.96 | -4733.52 | -469.80 | -4732.68 | -59.94 |
| | | 54 | 137.73 | -17.74 | -1425.02 | -29.70 | -1413.06 | 129.17 | -71.32 | -4566.60 | -83.17 | -4554.75 | -230.51 |
| | | 76 | 146.54 | -15.77 | -1462.39 | -15.78 | -1462.38 | -4.35 | -142.21 | -4993.10 | -144.89 | -4990.42 | 114.08 |
| | | 75 | 145.68 | 17.49 | -1423.14 | 17.48 | -1423.13 | -2.82 | -537.71 | -5199.60 | -537.94 | -5199.36 | 32.96 |
| 13 | 26 | 53 | 36.15 | -2.74 | -373.77 | -7.76 | -368.75 | -42.88 | -8.54 | -1181.77 | -8.89 | -1181.42 | -20.41 |
| | | 54 | 34.61 | -2.17 | -348.84 | -5.38 | -345.63 | 33.19 | -73.20 | -1195.83 | -73.93 | -1195.10 | -28.64 |
| | | 76 | 37.64 | -0.12 | -364.54 | -0.63 | -364.02 | 13.72 | -91.72 | -1341.38 | -91.95 | -1341.15 | -16.87 |
| | | 75 | 37.25 | 6.75 | -343.76 | 5.87 | -342.87 | -17.57 | -36.93 | -1347.45 | -36.96 | -1347.43 | 5.90 |
| 13 | 58 | 53 | 35.99 | -2.06 | -370.94 | -7.30 | -365.71 | -43.62 | -6.93 | -1179.44 | -7.24 | -1179.14 | -18.81 |
| | | 54 | 34.53 | -2.19 | -347.39 | -5.26 | -344.32 | 32.41 | -71.78 | -1194.20 | -72.42 | -1193.56 | -26.80 |
| | | 76 | 37.57 | -0.12 | -363.15 | -0.55 | -362.72 | 12.43 | -89.87 | -1339.71 | -90.05 | -1339.53 | -15.25 |
| | | 75 | 37.09 | 7.27 | -340.88 | 6.25 | -339.86 | -18.82 | -34.87 | -1345.10 | -34.91 | -1345.06 | 7.30 |
| 13 | 85 | 53 | 35.90 | -1.65 | -369.23 | -7.01 | -363.86 | -44.07 | -5.93 | -1177.99 | -6.20 | -1177.72 | -17.82 |
| | | 54 | 34.48 | -2.19 | -346.51 | -5.18 | -343.52 | 31.94 | -70.89 | -1193.19 | -71.47 | -1192.61 | -25.68 |
| | | 76 | 37.52 | -0.13 | -362.31 | -0.50 | -361.93 | 11.65 | -88.71 | -1338.68 | -88.87 | -1338.52 | -14.26 |
| | | 75 | 36.99 | 7.60 | -339.13 | 6.49 | -338.02 | -19.58 | -33.59 | -1343.64 | -33.64 | -1343.59 | 8.15 |
| 13 | 87 | 53 | 99.97 | -0.42 | -1058.25 | -14.28 | -1044.38 | -120.31 | -313.43 | -3312.74 | -314.03 | -3312.15 | -42.34 |
| | | 54 | 96.41 | -12.12 | -996.21 | -20.49 | -987.84 | 90.37 | -57.12 | -3203.38 | -64.98 | -3195.51 | -157.09 |
| | | 76 | 102.70 | -10.59 | -1023.18 | -10.59 | -1023.18 | -1.35 | -106.83 | -3507.03 | -108.44 | -3505.41 | 74.15 |
| | | 75 | 102.05 | 12.54 | -993.84 | 12.52 | -993.82 | -4.49 | -362.95 | -3645.55 | -363.11 | -3645.39 | 23.06 |
| 13 | 97 | 53 | 94.89 | -0.60 | -1002.95 | -13.81 | -989.74 | -114.31 | -281.05 | -3142.30 | -281.62 | -3141.72 | -40.63 |
| | | 54 | 91.49 | -11.21 | -944.01 | -19.15 | -936.07 | 85.71 | -60.61 | -3046.07 | -67.66 | -3039.02 | -144.89 |
| | | 76 | 97.56 | -9.60 | -970.39 | -9.60 | -970.39 | 0.38 | -107.87 | -3339.21 | -109.17 | -3337.91 | 64.78 |
| | | 75 | 96.91 | 12.20 | -940.75 | 12.15 | -940.70 | -6.72 | -329.37 | -3464.48 | -329.53 | -3464.32 | 21.94 |
| 13 | 102 | 53 | 35.90 | -1.65 | -369.23 | -7.01 | -363.86 | -44.07 | -5.93 | -1177.99 | -6.20 | -1177.72 | -17.82 |
| | | 54 | 34.48 | -2.19 | -346.51 | -5.18 | -343.52 | 31.94 | -70.89 | -1193.19 | -71.47 | -1192.61 | -25.68 |
| | | 76 | 37.52 | -0.13 | -362.31 | -0.50 | -361.93 | 11.65 | -88.71 | -1338.68 | -88.87 | -1338.52 | -14.26 |
| | | 75 | 36.99 | 7.60 | -339.13 | 6.49 | -338.02 | -19.58 | -33.59 | -1343.64 | -33.64 | -1343.59 | 8.15 |
| 14 | 2 | 69 | 128.99 | 7.29 | -1416.70 | -40.66 | -1368.75 | -256.86 | -314.20 | -4097.98 | -316.41 | -4095.77 | -91.35 |
| | | 70 | 119.85 | -6.16 | -1240.89 | -32.65 | -1214.40 | 178.91 | -20.19 | -4033.49 | -47.85 | -4005.82 | -332.07 |
| | | 54 | 137.66 | -11.17 | -1331.04 | -13.15 | -1329.06 | 51.13 | -75.61 | -4801.97 | -75.62 | -4801.96 | -7.82 |
| | | 53 | 133.85 | 43.47 | -1220.77 | 36.34 | -1213.64 | -94.66 | -597.34 | -5088.14 | -597.37 | -5088.11 | -11.86 |
| 14 | 46 | 69 | 32.10 | -0.26 | -333.40 | -10.15 | -323.51 | -56.55 | 6.91 | -1045.23 | 6.60 | -1044.93 | -17.97 |
| | | 70 | 30.09 | -0.86 | -298.29 | -6.61 | -292.55 | 40.93 | -56.31 | -1063.53 | -57.60 | -1062.24 | -36.10 |
| | | 54 | 34.34 | 1.26 | -319.80 | -0.12 | -318.41 | 21.04 | -81.68 | -1267.23 | -82.09 | -1266.82 | -21.94 |
| | | 53 | 33.59 | 12.15 | -290.52 | 8.82 | -287.19 | -31.55 | -32.96 | -1276.87 | -32.97 | -1276.86 | 3.37 |
| 14 | 78 | 69 | 32.01 | 0.03 | -332.25 | -10.03 | -322.19 | -56.95 | 7.29 | -1043.35 | 7.00 | -1043.06 | -17.46 |
| | | 70 | 30.02 | -0.92 | -297.27 | -6.57 | -291.62 | 40.52 | -55.98 | -1061.79 | -57.24 | -1060.54 | -35.51 |
| | | 54 | 34.27 | 1.23 | -318.81 | -0.09 | -317.49 | 20.52 | -81.20 | -1265.48 | -81.58 | -1265.09 | -21.37 |
| | | 53 | 33.51 | 12.38 | -289.32 | 8.93 | -285.88 | -32.06 | -32.42 | -1274.98 | -32.43 | -1274.97 | 3.84 |
| 14 | 85 | 69 | 31.96 | 0.21 | -331.54 | -9.96 | -321.37 | -57.19 | 7.53 | -1042.18 | 7.25 | -1041.90 | -17.15 |
| | | 70 | 29.98 | -0.95 | -296.64 | -6.54 | -291.04 | 40.28 | -55.78 | -1060.70 | -57.01 | -1059.47 | -35.14 |
| | | 54 | 34.23 | 1.21 | -318.20 | -0.07 | -316.92 | 20.20 | -80.89 | -1264.39 | -81.26 | -1264.01 | -21.03 |
| | | 53 | 33.45 | 12.51 | -288.59 | 8.99 | -285.07 | -32.37 | -32.08 | -1273.80 | -32.09 | -1273.79 | 4.13 |
| 14 | 87 | 69 | 90.25 | 4.88 | -988.67 | -28.44 | -955.35 | -178.87 | -208.47 | -2870.94 | -209.97 | -2869.44 | -63.19 |
| | | 70 | 83.89 | -4.24 | -866.81 | -22.64 | -848.40 | 124.64 | -21.19 | -2830.12 | -39.50 | -2811.81 | -226.07 |
| | | 54 | 96.34 | -7.31 | -929.76 | -8.78 | -928.29 | 36.78 | -61.23 | -3369.86 | -61.25 | -3369.84 | -8.02 |
| | | 53 | 93.69 | 30.60 | -852.28 | 25.42 | -847.10 | -67.42 | -402.51 | -3561.93 | -402.53 | -3561.91 | -7.36 |
| 14 | 97 | 69 | 85.61 | 4.42 | -935.16 | -26.96 | -903.79 | -168.80 | -184.76 | -2726.09 | -186.14 | -2724.70 | -59.31 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 70 | 79.61 | -3.95 | -820.72 | -21.27 | -803.40 | 117.69 | -26.39 | -2691.83 | -42.76 | -2675.46 | -208.27 |
| | | 54 | 91.39 | -6.43 | -880.30 | -7.91 | -878.83 | 35.87 | -65.62 | -3205.74 | -65.65 | -3205.70 | -10.10 |
| | | 53 | 88.90 | 29.21 | -806.51 | 24.11 | -801.41 | -65.11 | -364.79 | -3379.65 | -364.80 | -3379.64 | -5.99 |
| 14 | 102 | 69 | 31.96 | 0.21 | -331.54 | -9.96 | -321.37 | -57.19 | 7.53 | -1042.18 | 7.25 | -1041.90 | -17.15 |
| | | 70 | 29.98 | -0.95 | -296.64 | -6.54 | -291.04 | 40.28 | -55.78 | -1060.70 | -57.01 | -1059.47 | -35.14 |
| | | 54 | 34.23 | 1.21 | -318.20 | -0.07 | -316.92 | 20.20 | -80.89 | -1264.39 | -81.26 | -1264.01 | -21.03 |
| | | 53 | 33.45 | 12.51 | -288.59 | 8.99 | -285.07 | -32.37 | -32.08 | -1273.80 | -32.09 | -1273.79 | 4.13 |
| 15 | 2 | 57 | 105.67 | 23.54 | -1205.94 | -56.92 | -1125.49 | -304.05 | -93.17 | -3145.92 | -100.65 | -3138.43 | -151.00 |
| | | 58 | 92.91 | 10.96 | -962.93 | -31.68 | -920.29 | 199.27 | 96.83 | -3164.60 | 58.39 | -3126.16 | -351.98 |
| | | 70 | 120.22 | 6.16 | -1097.36 | -6.05 | -1085.16 | 115.41 | 35.89 | -4387.70 | 30.46 | -4382.27 | -154.94 |
| | | 69 | 114.13 | 88.90 | -942.27 | 51.21 | -904.58 | -193.51 | -575.88 | -4695.73 | -576.26 | -4695.36 | -39.17 |
| 15 | 46 | 57 | 27.02 | 4.79 | -282.92 | -13.16 | -264.97 | -69.59 | 24.61 | -875.86 | 24.30 | -875.55 | -16.59 |
| | | 58 | 24.31 | 2.88 | -234.41 | -7.91 | -223.61 | 49.45 | -37.19 | -896.96 | -39.73 | -894.42 | -46.68 |
| | | 70 | 29.77 | 3.62 | -260.25 | 0.27 | -256.90 | 29.56 | -69.12 | -1158.74 | -69.88 | -1157.99 | -28.60 |
| | | 69 | 28.84 | 19.49 | -226.59 | 11.22 | -218.32 | -44.34 | -28.91 | -1173.19 | -28.91 | -1173.19 | -1.76 |
| 15 | 78 | 57 | 26.95 | 5.22 | -282.11 | -13.05 | -263.84 | -70.12 | 24.91 | -873.72 | 24.62 | -873.43 | -16.06 |
| | | 58 | 24.24 | 2.75 | -233.33 | -7.85 | -222.72 | 48.90 | -36.97 | -894.98 | -39.45 | -892.50 | -46.05 |
| | | 70 | 29.69 | 3.52 | -259.24 | 0.29 | -256.01 | 28.93 | -68.78 | -1156.79 | -69.51 | -1156.07 | -27.99 |
| | | 69 | 28.76 | 19.82 | -225.72 | 11.30 | -217.20 | -44.94 | -28.51 | -1171.07 | -28.52 | -1171.06 | -1.23 |
| 15 | 85 | 57 | 26.90 | 5.48 | -281.61 | -12.99 | -263.14 | -70.44 | 25.10 | -872.39 | 24.82 | -872.11 | -15.72 |
| | | 58 | 24.19 | 2.67 | -232.66 | -7.81 | -222.17 | 48.56 | -36.84 | -893.74 | -39.28 | -891.30 | -45.67 |
| | | 70 | 29.65 | 3.46 | -258.61 | 0.31 | -255.46 | 28.55 | -68.57 | -1155.58 | -69.27 | -1154.88 | -27.61 |
| | | 69 | 28.72 | 20.02 | -225.18 | 11.34 | -216.50 | -45.31 | -28.26 | -1169.75 | -28.26 | -1169.74 | -0.90 |
| 15 | 87 | 57 | 74.03 | 16.42 | -841.51 | -39.68 | -785.41 | -212.10 | -58.88 | -2213.48 | -63.79 | -2208.57 | -102.76 |
| | | 58 | 65.16 | 7.66 | -672.98 | -22.16 | -643.15 | 139.32 | 59.31 | -2228.57 | 33.69 | -2202.95 | -240.74 |
| | | 70 | 84.10 | 4.57 | -766.06 | -3.99 | -757.50 | 80.75 | 14.77 | -3079.20 | 11.07 | -3075.50 | -106.97 |
| | | 69 | 79.91 | 61.93 | -658.20 | 35.65 | -631.92 | -135.05 | -387.70 | -3286.44 | -387.94 | -3286.21 | -26.24 |
| 15 | 97 | 57 | 70.31 | 15.53 | -795.89 | -37.49 | -742.87 | -200.52 | -47.82 | -2111.06 | -52.18 | -2106.70 | -94.75 |
| | | 58 | 61.96 | 7.26 | -637.52 | -21.02 | -609.24 | 132.04 | 48.60 | -2127.55 | 25.52 | -2104.47 | -222.93 |
| | | 70 | 79.74 | 4.58 | -724.84 | -3.55 | -716.70 | 76.59 | 4.49 | -2929.27 | 1.07 | -2925.86 | -100.07 |
| | | 69 | 75.85 | 58.48 | -623.20 | 33.64 | -598.36 | -127.74 | -350.96 | -3117.47 | -351.16 | -3117.27 | -23.68 |
| 15 | 102 | 57 | 26.90 | 5.48 | -281.61 | -12.99 | -263.14 | -70.44 | 25.10 | -872.39 | 24.82 | -872.11 | -15.72 |
| | | 58 | 24.19 | 2.67 | -232.66 | -7.81 | -222.17 | 48.56 | -36.84 | -893.74 | -39.28 | -891.30 | -45.67 |
| | | 70 | 29.65 | 3.46 | -258.61 | 0.31 | -255.46 | 28.55 | -68.57 | -1155.58 | -69.27 | -1154.88 | -27.61 |
| | | 69 | 28.72 | 20.02 | -225.18 | 11.34 | -216.50 | -45.31 | -28.26 | -1169.75 | -28.26 | -1169.74 | -0.90 |
| 16 | 2 | 81 | 80.44 | 55.18 | -920.66 | -65.94 | -799.54 | -321.74 | 115.65 | -2305.54 | 100.92 | -2290.81 | -188.30 |
| | | 82 | 64.02 | 39.30 | -636.00 | -27.97 | -568.74 | 202.23 | 171.85 | -2369.89 | 122.59 | -2320.63 | -350.40 |
| | | 58 | 93.36 | 34.76 | -789.03 | 2.14 | -756.41 | 160.66 | 188.82 | -3618.03 | 168.11 | -3597.32 | -279.97 |
| | | 57 | 87.20 | 157.96 | -644.16 | 58.30 | -544.50 | -264.58 | -444.96 | -3886.36 | -446.10 | -3885.22 | -62.49 |
| 16 | 46 | 81 | 20.94 | 16.59 | -223.00 | -16.01 | -190.40 | -82.15 | 48.49 | -672.00 | 48.20 | -671.70 | -14.68 |
| | | 82 | 17.29 | 13.67 | -160.67 | -8.62 | -138.38 | 58.22 | -15.25 | -696.09 | -20.31 | -691.03 | -58.44 |
| | | 58 | 23.91 | 8.68 | -186.45 | 0.97 | -178.74 | 38.03 | -51.72 | -1015.78 | -53.01 | -1014.48 | -35.34 |
| | | 57 | 22.99 | 32.90 | -153.87 | 13.28 | -134.26 | -57.26 | -22.44 | -1035.19 | -22.51 | -1035.12 | -8.36 |
| 16 | 78 | 81 | 20.89 | 17.26 | -222.63 | -15.92 | -189.44 | -82.83 | 48.81 | -669.60 | 48.53 | -669.32 | -14.17 |
| | | 82 | 17.21 | 13.38 | -159.42 | -8.55 | -137.49 | 57.52 | -15.07 | -693.92 | -20.04 | -688.95 | -57.86 |
| | | 58 | 23.83 | 8.48 | -185.31 | 1.01 | -177.84 | 37.31 | -51.47 | -1013.66 | -52.72 | -1012.41 | -34.74 |
| | | 57 | 22.93 | 33.48 | -153.45 | 13.34 | -133.30 | -57.96 | -22.10 | -1032.80 | -22.16 | -1032.74 | -7.82 |
| 16 | 85 | 81 | 20.85 | 17.68 | -222.40 | -15.87 | -188.85 | -83.23 | 49.00 | -668.11 | 48.73 | -667.84 | -13.85 |
| | | 82 | 17.16 | 13.21 | -158.66 | -8.50 | -136.94 | 57.10 | -14.95 | -692.58 | -19.87 | -687.66 | -57.50 |
| | | 58 | 23.78 | 8.35 | -184.61 | 1.03 | -177.29 | 36.87 | -51.31 | -1012.35 | -52.54 | -1011.12 | -34.37 |
| | | 57 | 22.89 | 33.84 | -153.18 | 13.38 | -132.71 | -58.39 | -21.90 | -1031.33 | -21.95 | -1031.27 | -7.48 |
| 16 | 87 | 81 | 56.40 | 39.12 | -643.41 | -46.08 | -558.21 | -225.59 | 83.32 | -1625.80 | 73.78 | -1616.25 | -127.38 |
| | | 82 | 44.96 | 27.92 | -445.12 | -19.78 | -397.42 | 142.44 | 112.32 | -1672.02 | 79.08 | -1638.77 | -241.27 |
| | | 58 | 65.41 | 24.29 | -550.63 | 1.56 | -527.91 | 112.02 | 118.86 | -2546.82 | 105.07 | -2533.03 | -191.23 |
| | | 57 | 61.18 | 109.81 | -449.85 | 40.65 | -380.70 | -184.17 | -299.58 | -2728.40 | -300.32 | -2727.65 | -42.66 |
| 16 | 97 | 81 | 53.62 | 37.62 | -609.48 | -43.64 | -528.22 | -214.42 | 83.26 | -1554.02 | 74.91 | -1545.67 | -116.67 |
| | | 82 | 42.81 | 26.90 | -422.28 | -18.97 | -376.42 | 136.01 | 99.33 | -1599.19 | 68.97 | -1568.84 | -225.03 |
| | | 58 | 62.12 | 23.00 | -520.82 | 1.55 | -499.37 | 105.87 | 100.36 | -2430.39 | 87.94 | -2417.97 | -176.84 |
| | | 57 | 58.19 | 103.44 | -425.82 | 38.42 | -360.79 | -173.74 | -270.80 | -2596.29 | -271.46 | -2595.62 | -39.37 |
| 16 | 102 | 81 | 20.85 | 17.68 | -222.40 | -15.87 | -188.85 | -83.23 | 49.00 | -668.11 | 48.73 | -667.84 | -13.85 |
| | | 82 | 17.16 | 13.21 | -158.66 | -8.50 | -136.94 | 57.10 | -14.95 | -692.58 | -19.87 | -687.66 | -57.50 |
| | | 58 | 23.78 | 8.35 | -184.61 | 1.03 | -177.29 | 36.87 | -51.31 | -1012.35 | -52.54 | -1011.12 | -34.37 |
| | | 57 | 22.89 | 33.84 | -153.18 | 13.38 | -132.71 | -58.39 | -21.90 | -1031.33 | -21.95 | -1031.27 | -7.48 |
| 17 | 2 | 77 | 55.26 | 130.50 | -632.89 | -68.75 | -433.64 | -335.27 | 363.41 | -1420.56 | 342.55 | -1399.71 | -191.74 |
| | | 78 | 32.81 | 126.81 | -336.06 | -21.44 | -187.81 | 215.97 | 202.03 | -1534.97 | 119.01 | -1451.95 | -370.55 |
| | | 82 | 64.32 | 81.39 | -450.23 | 11.33 | -380.18 | 179.82 | 272.36 | -2885.60 | 237.59 | -2850.84 | -329.51 |
| | | 81 | 61.58 | 263.09 | -375.68 | 58.85 | -171.44 | -297.91 | -288.32 | -3095.60 | -294.61 | -3089.31 | -132.80 |
| 17 | 48 | 77 | 14.34 | 44.17 | -160.97 | -17.68 | -99.11 | -94.15 | 82.93 | -430.40 | 82.69 | -430.16 | -11.17 |
| | | 78 | 9.24 | 43.59 | -88.37 | -7.30 | -37.48 | 64.23 | 7.60 | -460.89 | -2.83 | -450.46 | -69.11 |
| | | 82 | 16.80 | 21.99 | -102.48 | 3.03 | -83.51 | 44.73 | -28.87 | -838.04 | -30.96 | -835.95 | -41.07 |
| | | 81 | 16.45 | 66.44 | -88.00 | 14.75 | -36.31 | -72.88 | -11.62 | -861.59 | -11.90 | -861.31 | -15.44 |
| 17 | 80 | 77 | 14.24 | 43.73 | -159.52 | -17.76 | -98.03 | -93.37 | 83.30 | -427.97 | 83.03 | -427.70 | -11.72 |
| | | 78 | 9.19 | 44.69 | -88.62 | -7.41 | -36.53 | 65.05 | 8.07 | -459.02 | -2.56 | -448.39 | -69.64 |
| | | 82 | 16.73 | 22.68 | -102.24 | 3.00 | -82.56 | 45.51 | -29.00 | -836.04 | -31.16 | -833.89 | -41.67 |
| | | 81 | 16.35 | 66.09 | -86.57 | 14.74 | -35.22 | -72.13 | -11.87 | -859.16 | -12.17 | -858.86 | -15.98 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|--------|---------|----------|---------|----------|----------|----------|---------|
| 17 | 85 | 77 | 14.17 | 43.46 | -158.64 | -17.81 | -97.36 | -92.89 | 83.53 | -426.47 | 83.24 | -426.19 | -12.07 |
| | | 78 | 9.16 | 45.37 | -88.77 | -7.47 | -35.94 | 65.54 | 8.36 | -457.87 | -2.40 | -447.11 | -69.98 |
| | | 82 | 16.68 | 23.11 | -102.09 | 2.98 | -81.96 | 45.99 | -29.08 | -834.81 | -31.28 | -832.61 | -42.05 |
| | | 81 | 16.28 | 65.89 | -85.70 | 14.74 | -34.55 | -71.68 | -12.02 | -857.66 | -12.33 | -857.34 | -16.32 |
| 17 | 87 | 77 | 38.73 | 92.74 | -443.02 | -48.21 | -302.07 | -235.90 | 252.95 | -1003.44 | 239.47 | -989.97 | -129.43 |
| | | 78 | 23.08 | 90.49 | -235.78 | -15.29 | -130.00 | 152.72 | 135.53 | -1084.09 | 79.02 | -1027.58 | -256.36 |
| | | 82 | 45.09 | 57.31 | -313.74 | 7.95 | -264.38 | 126.01 | 177.41 | -2034.76 | 154.23 | -2011.57 | -225.28 |
| | | 81 | 43.22 | 184.17 | -261.88 | 41.20 | -118.90 | -208.16 | -193.90 | -2178.00 | -198.05 | -2173.85 | -90.71 |
| 17 | 97 | 77 | 36.81 | 89.36 | -420.37 | -45.83 | -285.18 | -225.02 | 240.56 | -960.71 | 228.79 | -948.94 | -118.31 |
| | | 78 | 22.01 | 87.56 | -224.26 | -14.79 | -121.91 | 146.42 | 123.30 | -1037.93 | 71.21 | -985.85 | -240.34 |
| | | 82 | 42.86 | 54.72 | -296.30 | 7.57 | -249.14 | 119.71 | 155.98 | -1945.14 | 135.07 | -1924.23 | -208.55 |
| | | 81 | 41.12 | 174.76 | -247.41 | 39.09 | -111.75 | -197.15 | -174.42 | -2077.10 | -178.12 | -2073.40 | -83.85 |
| 17 | 102 | 77 | 14.17 | 43.46 | -158.64 | -17.81 | -97.36 | -92.89 | 83.53 | -426.47 | 83.24 | -426.19 | -12.07 |
| | | 78 | 9.16 | 45.37 | -88.77 | -7.47 | -35.94 | 65.54 | 8.36 | -457.87 | -2.40 | -447.11 | -69.98 |
| | | 82 | 16.68 | 23.11 | -102.09 | 2.98 | -81.96 | 45.99 | -29.08 | -834.81 | -31.28 | -832.61 | -42.05 |
| | | 81 | 16.28 | 65.89 | -85.70 | 14.74 | -34.55 | -71.68 | -12.02 | -857.66 | -12.33 | -857.34 | -16.32 |
| 18 | 2 | 49 | 33.40 | 258.93 | -345.92 | -60.18 | -26.81 | -301.97 | 720.80 | -420.58 | 690.25 | -390.03 | -184.21 |
| | | 50 | 33.93 | 345.01 | -127.85 | 0.42 | 216.73 | 210.24 | 226.93 | -715.91 | 8.58 | -497.55 | -397.74 |
| | | 78 | 43.81 | 241.51 | -179.63 | 27.71 | 34.18 | 210.55 | 323.29 | -2105.88 | 265.18 | -2047.77 | -371.19 |
| | | 77 | 47.87 | 472.30 | -205.55 | 55.12 | 211.62 | -329.77 | -99.64 | -2252.72 | -120.77 | -2231.60 | -212.22 |
| 18 | 27 | 49 | 9.14 | 90.62 | -95.99 | -16.23 | 10.87 | -92.31 | 137.25 | -140.26 | 137.03 | -140.04 | -7.76 |
| | | 50 | 9.67 | 109.75 | -35.01 | -1.00 | 75.74 | 61.37 | 34.99 | -194.28 | 5.70 | -164.99 | -76.53 |
| | | 78 | 12.10 | 73.98 | -37.16 | 7.96 | 28.86 | 54.58 | -4.52 | -625.08 | -8.47 | -621.13 | -49.39 |
| | | 77 | 14.85 | 138.32 | -52.33 | 14.81 | 71.18 | -91.07 | 2.37 | -650.02 | 1.49 | -649.14 | -23.93 |
| 18 | 59 | 49 | 8.91 | 88.76 | -92.17 | -16.47 | 13.06 | -89.25 | 138.28 | -137.07 | 137.94 | -136.74 | -9.62 |
| | | 50 | 9.95 | 113.23 | -37.79 | -1.43 | 76.88 | 64.56 | 37.33 | -194.00 | 6.43 | -163.10 | -78.70 |
| | | 78 | 12.29 | 77.44 | -39.64 | 7.76 | 30.04 | 57.47 | -3.36 | -623.46 | -7.64 | -619.17 | -51.38 |
| | | 77 | 14.77 | 137.15 | -48.93 | 14.81 | 73.42 | -88.30 | 3.61 | -646.77 | 2.59 | -645.76 | -25.66 |
| 18 | 85 | 49 | 8.78 | 87.64 | -89.86 | -16.61 | 14.39 | -87.38 | 138.93 | -135.16 | 138.50 | -134.73 | -10.81 |
| | | 50 | 10.12 | 115.35 | -39.48 | -1.69 | 77.57 | 66.50 | 38.82 | -193.90 | 6.89 | -161.96 | -80.07 |
| | | 78 | 12.41 | 79.54 | -41.14 | 7.63 | 30.76 | 59.22 | -2.64 | -622.49 | -7.14 | -617.99 | -52.65 |
| | | 77 | 14.73 | 136.45 | -46.88 | 14.80 | 74.77 | -86.62 | 4.37 | -644.81 | 3.26 | -643.70 | -26.76 |
| 18 | 87 | 49 | 23.35 | 184.23 | -242.52 | -42.34 | -15.95 | -212.96 | 498.52 | -297.86 | 478.64 | -277.98 | -124.25 |
| | | 50 | 23.96 | 245.36 | -90.48 | 0.06 | 154.83 | 149.03 | 156.02 | -502.68 | 6.64 | -353.30 | -275.83 |
| | | 78 | 30.84 | 171.49 | -125.12 | 19.49 | 26.89 | 148.26 | 214.79 | -1486.54 | 175.84 | -1447.58 | -254.48 |
| | | 77 | 33.88 | 333.00 | -143.23 | 38.72 | 151.05 | -231.40 | -66.12 | -1587.52 | -80.08 | -1573.56 | -145.05 |
| 18 | 97 | 49 | 22.14 | 177.73 | -230.49 | -40.37 | -12.39 | -203.63 | 469.19 | -285.72 | 451.72 | -268.25 | -113.50 |
| | | 50 | 22.95 | 236.62 | -86.82 | -0.18 | 149.98 | 143.23 | 145.57 | -478.44 | 7.13 | -340.00 | -259.28 |
| | | 78 | 29.44 | 165.13 | -118.12 | 18.58 | 28.43 | 141.54 | 193.09 | -1422.60 | 157.76 | -1387.26 | -236.30 |
| | | 77 | 32.51 | 318.31 | -135.27 | 36.87 | 146.17 | -220.11 | -57.36 | -1516.37 | -69.82 | -1503.91 | -134.24 |
| 18 | 102 | 49 | 8.78 | 87.64 | -89.86 | -16.61 | 14.39 | -87.38 | 138.93 | -135.16 | 138.50 | -134.73 | -10.81 |
| | | 50 | 10.12 | 115.35 | -39.48 | -1.69 | 77.57 | 66.50 | 38.82 | -193.90 | 6.89 | -161.96 | -80.07 |
| | | 78 | 12.41 | 79.54 | -41.14 | 7.63 | 30.76 | 59.22 | -2.64 | -622.49 | -7.14 | -617.99 | -52.65 |
| | | 77 | 14.73 | 136.45 | -46.88 | 14.80 | 74.77 | -86.62 | 4.37 | -644.81 | 3.26 | -643.70 | -26.76 |
| 19 | 2 | 67 | 35.62 | 440.65 | -29.18 | -24.33 | 435.81 | -47.44 | 1520.28 | 901.32 | 1291.02 | 1130.57 | -298.90 |
| | | 68 | 42.41 | 596.55 | 67.40 | 69.46 | 594.50 | 32.92 | 914.57 | -254.54 | -192.63 | 852.66 | -261.82 |
| | | 50 | 55.96 | 625.00 | -96.34 | 55.43 | 473.23 | 294.02 | 385.00 | -1288.63 | 228.99 | -1132.62 | -486.59 |
| | | 49 | 54.02 | 774.38 | -161.33 | 49.21 | 563.84 | -390.74 | 191.94 | -1273.07 | 149.27 | -1230.40 | -246.37 |
| 19 | 27 | 67 | 11.04 | 146.78 | -9.11 | -7.07 | 144.74 | -17.74 | 338.52 | 220.56 | 244.59 | 314.49 | -47.50 |
| | | 68 | 12.71 | 185.37 | 18.89 | 19.08 | 185.18 | 5.71 | 272.63 | 16.13 | 20.26 | 268.50 | -32.29 |
| | | 50 | 15.84 | 194.40 | -22.93 | 16.22 | 155.25 | 83.52 | 27.03 | -374.71 | 10.48 | -358.16 | -79.85 |
| | | 49 | 17.21 | 234.72 | -46.94 | 14.02 | 173.76 | -115.99 | 43.51 | -375.37 | 42.81 | -374.67 | -17.19 |
| 19 | 59 | 67 | 11.22 | 149.70 | -8.56 | -7.30 | 148.44 | -14.08 | 344.17 | 220.22 | 245.57 | 318.82 | -50.00 |
| | | 68 | 12.82 | 187.23 | 17.89 | 18.42 | 186.69 | 9.53 | 275.54 | 16.50 | 21.43 | 270.61 | -35.38 |
| | | 50 | 16.09 | 198.07 | -25.38 | 15.87 | 156.83 | 86.68 | 28.94 | -373.51 | 11.27 | -355.85 | -82.45 |
| | | 49 | 17.14 | 235.22 | -43.76 | 13.94 | 177.52 | -112.99 | 44.82 | -371.01 | 43.93 | -370.11 | -19.26 |
| 19 | 85 | 67 | 11.33 | 151.57 | -8.32 | -7.44 | 150.68 | -11.85 | 347.66 | 219.99 | 246.20 | 321.45 | -51.57 |
| | | 68 | 12.89 | 188.43 | 17.20 | 18.02 | 187.61 | 11.85 | 277.35 | 16.71 | 22.17 | 271.89 | -37.33 |
| | | 50 | 16.25 | 200.30 | -26.87 | 15.65 | 157.78 | 88.61 | 30.16 | -372.83 | 11.77 | -354.44 | -84.09 |
| | | 49 | 17.11 | 235.56 | -41.86 | 13.89 | 179.81 | -111.17 | 45.64 | -368.38 | 44.61 | -367.35 | -20.58 |
| 19 | 87 | 67 | 25.21 | 313.96 | -20.54 | -17.21 | 310.63 | -33.21 | 1056.81 | 633.28 | 893.51 | 796.58 | -206.14 |
| | | 68 | 29.98 | 422.82 | 47.23 | 48.71 | 421.35 | 23.52 | 646.44 | -167.22 | -125.46 | 604.69 | -179.53 |
| | | 50 | 39.46 | 443.35 | -67.79 | 39.04 | 336.52 | 207.83 | 260.23 | -908.33 | 154.23 | -802.34 | -335.60 |
| | | 49 | 38.30 | 547.63 | -113.10 | 34.66 | 399.87 | -275.32 | 133.28 | -897.06 | 105.46 | -869.24 | -166.99 |
| 19 | 97 | 67 | 24.20 | 303.30 | -19.59 | -16.49 | 300.19 | -31.50 | 997.52 | 603.93 | 840.10 | 761.35 | -192.81 |
| | | 68 | 28.74 | 406.36 | 44.88 | 46.33 | 404.92 | 22.80 | 619.60 | -148.19 | -110.06 | 581.48 | -166.79 |
| | | 50 | 37.73 | 426.43 | -64.67 | 37.28 | 324.49 | 199.18 | 238.27 | -868.00 | 140.75 | -770.48 | -313.64 |
| | | 49 | 36.81 | 525.08 | -107.51 | 33.09 | 384.49 | -263.01 | 127.33 | -856.68 | 102.87 | -832.21 | -153.21 |
| 19 | 102 | 67 | 11.33 | 151.57 | -8.32 | -7.44 | 150.68 | -11.85 | 347.66 | 219.99 | 246.20 | 321.45 | -51.57 |
| | | 68 | 12.89 | 188.43 | 17.20 | 18.02 | 187.61 | 11.85 | 277.35 | 16.71 | 22.17 | 271.89 | -37.33 |
| | | 50 | 16.25 | 200.30 | -26.87 | 15.65 | 157.78 | 88.61 | 30.16 | -372.83 | 11.77 | -354.44 | -84.09 |
| | | 49 | 17.11 | 235.56 | -41.86 | 13.89 | 179.81 | -111.17 | 45.64 | -368.38 | 44.61 | -367.35 | -20.58 |
| 20 | 2 | 66 | 152.45 | 2060.75 | -917.04 | 296.47 | 847.25 | 1463.21 | 2371.66 | 882.59 | 2063.62 | 1190.62 | 603.16 |
| | | 65 | 153.11 | 1835.50 | -1008.20 | 113.57 | 713.73 | -1389.82 | 980.67 | -1463.96 | -1010.21 | 526.92 | -950.45 |
| | | 68 | 68.76 | 1213.74 | -236.97 | 163.47 | 813.31 | 648.51 | 720.34 | 202.40 | 273.57 | 649.17 | -178.32 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|--------|--------|----------|---------|----------|---------|---------|---------|
| | | 67 | 85.79 | 1097.30 | -383.48 | -28.76 | 742.58 | -632.01 | 1401.25 | -73.06 | 656.86 | 671.34 | -737.12 |
| 20 | 32 | 66 | 47.47 | 637.31 | -288.99 | 85.55 | 262.77 | 454.60 | 550.76 | 128.06 | 356.37 | 322.45 | 210.67 |
| | | 65 | 48.02 | 585.21 | -332.38 | 31.47 | 221.37 | -448.86 | 361.77 | -261.72 | -105.99 | 206.04 | -269.90 |
| | | 68 | 23.13 | 377.81 | -72.95 | 46.12 | 258.75 | 198.73 | 207.94 | 71.90 | 79.25 | 200.59 | 30.76 |
| | | 67 | 25.02 | 337.21 | -123.14 | -8.52 | 222.59 | -199.07 | 320.09 | 10.77 | 136.28 | 194.58 | -151.89 |
| 20 | 64 | 66 | 48.05 | 646.52 | -290.30 | 86.84 | 269.37 | 459.43 | 556.85 | 128.39 | 358.12 | 327.13 | 213.67 |
| | | 65 | 47.60 | 582.03 | -327.33 | 31.82 | 222.88 | -444.53 | 360.07 | -257.28 | -104.10 | 206.88 | -266.65 |
| | | 68 | 23.32 | 381.07 | -75.58 | 45.43 | 260.06 | 201.53 | 207.68 | 74.29 | 80.57 | 201.40 | 28.26 |
| | | 67 | 25.03 | 339.29 | -118.47 | -8.18 | 229.00 | -195.76 | 325.51 | 11.21 | 137.45 | 199.27 | -154.08 |
| 20 | 85 | 66 | 48.41 | 652.11 | -291.10 | 87.63 | 273.39 | 462.37 | 560.62 | 128.58 | 359.23 | 329.97 | 215.52 |
| | | 65 | 47.35 | 580.10 | -324.26 | 32.04 | 223.79 | -441.90 | 359.01 | -254.51 | -102.90 | 207.40 | -264.63 |
| | | 68 | 23.44 | 383.05 | -77.17 | 45.02 | 260.86 | 203.24 | 207.54 | 75.75 | 81.40 | 201.89 | 26.70 |
| | | 67 | 25.04 | 340.60 | -115.67 | -7.98 | 232.90 | -193.75 | 328.86 | 11.45 | 138.19 | 202.12 | -155.45 |
| 20 | 87 | 66 | 108.06 | 1460.78 | -650.17 | 209.33 | 601.29 | 1037.12 | 1651.70 | 609.69 | 1423.64 | 837.75 | 430.84 |
| | | 65 | 108.38 | 1301.01 | -715.37 | 79.98 | 505.66 | -985.47 | 701.21 | -1009.47 | -687.19 | 378.93 | -668.92 |
| | | 68 | 48.96 | 860.23 | -168.26 | 114.98 | 576.99 | 459.44 | 502.67 | 150.26 | 193.24 | 459.70 | -115.32 |
| | | 67 | 60.53 | 776.95 | -271.08 | -20.24 | 526.11 | -447.18 | 977.64 | -46.80 | 456.33 | 474.51 | -512.14 |
| 20 | 97 | 66 | 103.86 | 1404.09 | -624.96 | 200.54 | 578.60 | 996.76 | 1561.52 | 571.03 | 1333.14 | 799.41 | 417.19 |
| | | 65 | 104.02 | 1250.39 | -688.20 | 76.46 | 485.73 | -947.45 | 679.30 | -943.84 | -633.33 | 369.19 | -638.52 |
| | | 68 | 47.27 | 826.69 | -162.01 | 109.67 | 555.02 | 441.36 | 475.96 | 150.52 | 185.05 | 441.43 | -100.23 |
| | | 67 | 57.90 | 745.91 | -259.84 | -19.33 | 505.39 | -429.01 | 925.99 | -39.16 | 431.64 | 455.18 | -482.43 |
| 20 | 102 | 66 | 48.41 | 652.11 | -291.10 | 87.63 | 273.39 | 462.37 | 560.62 | 128.58 | 359.23 | 329.97 | 215.52 |
| | | 65 | 47.35 | 580.10 | -324.26 | 32.04 | 223.79 | -441.90 | 359.01 | -254.51 | -102.90 | 207.40 | -264.63 |
| | | 68 | 23.44 | 383.05 | -77.17 | 45.02 | 260.86 | 203.24 | 207.54 | 75.75 | 81.40 | 201.89 | 26.70 |
| | | 67 | 25.04 | 340.60 | -115.67 | -7.98 | 232.90 | -193.75 | 328.86 | 11.45 | 138.19 | 202.12 | -155.45 |
| 21 | 2 | 46 | 81.88 | 1137.69 | -188.08 | 107.95 | 841.65 | 552.12 | 1313.52 | -25.77 | 323.42 | 964.33 | 588.00 |
| | | 107 | 79.92 | 1178.44 | -163.13 | 148.70 | 866.61 | -566.67 | 1166.63 | 97.05 | 296.04 | 967.64 | -416.22 |
| | | 106 | 165.19 | 2092.44 | -1090.57 | 165.63 | 836.24 | 1555.78 | 1352.11 | -541.06 | 83.02 | 728.03 | 889.95 |
| | | 44 | 166.54 | 2151.96 | -1065.04 | 222.11 | 864.80 | -1576.07 | 1506.70 | -282.03 | 395.99 | 828.68 | -867.80 |
| 21 | 34 | 46 | 22.96 | 336.70 | -63.28 | 35.91 | 237.51 | 172.73 | 273.11 | -31.84 | 54.84 | 186.43 | 137.55 |
| | | 107 | 23.03 | 353.08 | -70.97 | 43.70 | 238.41 | -188.35 | 234.19 | 9.03 | 54.16 | 189.06 | -90.14 |
| | | 106 | 45.82 | 579.21 | -300.55 | 46.11 | 232.55 | 429.89 | 402.57 | -131.81 | 30.74 | 240.02 | 245.85 |
| | | 44 | 47.30 | 608.77 | -308.57 | 56.81 | 243.39 | -449.08 | 433.05 | -69.58 | 92.42 | 271.05 | -234.91 |
| 21 | 66 | 46 | 23.16 | 339.32 | -67.64 | 35.64 | 236.04 | 177.10 | 270.14 | -29.20 | 55.45 | 185.48 | 134.81 |
| | | 107 | 22.78 | 349.24 | -67.14 | 43.73 | 238.38 | -184.04 | 236.37 | 7.44 | 54.71 | 189.11 | -92.66 |
| | | 106 | 46.14 | 583.85 | -305.09 | 46.23 | 232.53 | 434.60 | 400.46 | -128.70 | 31.64 | 240.13 | 243.18 |
| | | 44 | 46.95 | 603.05 | -304.71 | 56.44 | 241.91 | -444.31 | 435.39 | -71.95 | 93.40 | 270.05 | -237.80 |
| 21 | 85 | 46 | 23.28 | 340.93 | -70.31 | 35.48 | 235.15 | 179.76 | 268.29 | -27.55 | 55.83 | 184.91 | 133.10 |
| | | 107 | 22.63 | 346.91 | -64.82 | 43.74 | 238.36 | -181.42 | 237.74 | 6.44 | 55.05 | 189.13 | -94.24 |
| | | 106 | 46.34 | 586.67 | -307.85 | 46.30 | 232.52 | 437.46 | 399.16 | -126.76 | 32.20 | 240.20 | 241.52 |
| | | 44 | 46.74 | 599.58 | -302.36 | 56.22 | 241.00 | -441.41 | 436.87 | -73.42 | 94.01 | 269.43 | -239.59 |
| 21 | 87 | 46 | 57.68 | 803.84 | -134.68 | 76.70 | 592.46 | 392.05 | 911.43 | -20.84 | 223.06 | 667.54 | 409.74 |
| | | 107 | 56.29 | 831.82 | -117.33 | 104.97 | 609.52 | -401.97 | 809.42 | 65.59 | 204.70 | 670.31 | -290.04 |
| | | 106 | 116.30 | 1473.18 | -768.10 | 116.59 | 588.50 | 1095.52 | 954.57 | -377.55 | 59.64 | 517.38 | 625.50 |
| | | 44 | 117.25 | 1514.58 | -750.34 | 155.57 | 608.67 | -1109.57 | 1062.53 | -197.63 | 276.53 | 588.38 | -610.48 |
| 21 | 97 | 46 | 55.09 | 770.02 | -130.72 | 73.91 | 565.39 | 377.42 | 857.14 | -22.55 | 208.42 | 626.17 | 387.08 |
| | | 107 | 53.75 | 796.05 | -114.38 | 100.47 | 581.19 | -386.59 | 761.14 | 59.63 | 191.63 | 629.14 | -274.19 |
| | | 106 | 111.02 | 1406.15 | -733.40 | 111.28 | 561.46 | 1045.83 | 913.86 | -356.99 | 58.29 | 498.58 | 596.07 |
| | | 44 | 111.93 | 1445.18 | -716.67 | 147.72 | 580.79 | -1059.01 | 1015.96 | -188.19 | 261.40 | 566.37 | -582.45 |
| 21 | 102 | 46 | 23.28 | 340.93 | -70.31 | 35.48 | 235.15 | 179.76 | 268.29 | -27.55 | 55.83 | 184.91 | 133.10 |
| | | 107 | 22.63 | 346.91 | -64.82 | 43.74 | 238.36 | -181.42 | 237.74 | 6.44 | 55.05 | 189.13 | -94.24 |
| | | 106 | 46.34 | 586.67 | -307.85 | 46.30 | 232.52 | 437.46 | 399.16 | -126.76 | 32.20 | 240.20 | 241.52 |
| | | 44 | 46.74 | 599.58 | -302.36 | 56.22 | 241.00 | -441.41 | 436.87 | -73.42 | 94.01 | 269.43 | -239.59 |
| 22 | 2 | 48 | 52.16 | 842.60 | -58.93 | 66.33 | 717.35 | 311.82 | 164.78 | -710.69 | 156.01 | -701.92 | 87.18 |
| | | 108 | 51.73 | 816.17 | -29.18 | 90.52 | 696.46 | -294.73 | 74.60 | -726.73 | 69.45 | -721.58 | 64.05 |
| | | 107 | 48.37 | 710.15 | 101.78 | 105.36 | 706.57 | 46.57 | 1118.77 | 269.35 | 272.08 | 1116.05 | 48.03 |
| | | 46 | 47.73 | 702.01 | 86.50 | 93.03 | 695.48 | -63.06 | 1191.24 | 543.60 | 545.53 | 1189.31 | 35.30 |
| 22 | 30 | 48 | 15.98 | 223.36 | -25.52 | 21.29 | 176.55 | 97.26 | -13.58 | -356.11 | -13.59 | -356.11 | 0.29 |
| | | 108 | 16.26 | 219.23 | -29.57 | 26.46 | 163.20 | -103.93 | -32.14 | -366.73 | -37.61 | -361.26 | 42.41 |
| | | 107 | 11.67 | 171.44 | 26.77 | 27.87 | 170.33 | -12.60 | 272.57 | 49.97 | 51.35 | 271.19 | 17.49 |
| | | 46 | 11.67 | 167.98 | 23.32 | 23.52 | 167.78 | -5.39 | 300.71 | 122.64 | 123.64 | 299.71 | 13.30 |
| 22 | 62 | 48 | 16.18 | 225.30 | -29.48 | 21.16 | 174.66 | 101.68 | -14.37 | -358.92 | -14.39 | -358.90 | -2.57 |
| | | 108 | 15.99 | 215.67 | -25.84 | 26.69 | 163.14 | -99.64 | -32.49 | -366.21 | -37.27 | -361.43 | 39.66 |
| | | 107 | 11.65 | 170.66 | 27.47 | 27.90 | 170.23 | -7.80 | 271.98 | 50.94 | 51.87 | 271.06 | 14.27 |
| | | 46 | 11.54 | 165.85 | 23.17 | 23.17 | 165.85 | -0.46 | 297.49 | 123.90 | 124.47 | 296.91 | 9.98 |
| 22 | 85 | 48 | 16.30 | 226.52 | -31.94 | 21.07 | 173.51 | 104.36 | -14.82 | -360.65 | -14.88 | -360.59 | -4.38 |
| | | 108 | 15.82 | 213.52 | -23.59 | 26.83 | 163.10 | -97.03 | -32.69 | -365.90 | -37.07 | -361.53 | 37.93 |
| | | 107 | 11.64 | 170.33 | 27.74 | 27.91 | 170.16 | -4.88 | 271.67 | 51.51 | 52.19 | 270.98 | 12.26 |
| | | 46 | 11.46 | 164.72 | 22.92 | 22.96 | 164.67 | 2.53 | 295.58 | 124.62 | 124.98 | 295.21 | 7.90 |
| 22 | 87 | 48 | 36.93 | 591.69 | -43.29 | 47.03 | 501.36 | 221.80 | 107.33 | -521.33 | 102.02 | -516.02 | 57.53 |
| | | 108 | 36.59 | 572.32 | -22.34 | 63.93 | 486.05 | -209.42 | 45.32 | -533.22 | 41.35 | -529.26 | 47.75 |
| | | 107 | 33.79 | 495.92 | 71.77 | 73.96 | 493.73 | 30.39 | 782.07 | 186.44 | 188.34 | 780.16 | 33.65 |
| | | 46 | 33.34 | 489.70 | 60.98 | 65.08 | 485.61 | -41.70 | 833.57 | 379.02 | 380.35 | 832.24 | 24.59 |
| 22 | 97 | 48 | 35.46 | 563.30 | -43.09 | 45.22 | 474.99 | 213.90 | 94.37 | -517.97 | 90.05 | -513.64 | 51.26 |
| | | 108 | 35.08 | 544.07 | -23.08 | 61.22 | 459.77 | -201.76 | 35.99 | -529.93 | 31.88 | -525.83 | 48.02 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|---------|----------|---------|----------|--------|
| | | 107 | 31.99 | 469.42 | 68.62 | 70.40 | 467.64 | 26.69 | 741.04 | 174.78 | 176.59 | 739.23 | 31.98 |
| | | 46 | 31.56 | 463.05 | 58.28 | 61.73 | 459.60 | -37.19 | 790.72 | 358.21 | 359.45 | 789.48 | 23.07 |
| 22 | 102 | 48 | 16.30 | 226.52 | -31.94 | 21.07 | 173.51 | 104.36 | -14.82 | -360.65 | -14.88 | -360.59 | -4.38 |
| | | 108 | 15.82 | 213.52 | -23.59 | 26.83 | 163.10 | -97.03 | -32.69 | -365.90 | -37.07 | -361.53 | 37.93 |
| | | 107 | 11.64 | 170.33 | 27.74 | 27.91 | 170.16 | -4.88 | 271.67 | 51.51 | 52.19 | 270.98 | 12.26 |
| | | 46 | 11.46 | 164.72 | 22.92 | 22.96 | 164.67 | 2.53 | 295.58 | 124.62 | 124.98 | 295.21 | 7.90 |
| 23 | 2 | 56 | 46.76 | 529.34 | -106.29 | 35.54 | 387.51 | 264.64 | 121.23 | -1511.93 | 116.46 | -1507.15 | 88.21 |
| | | 112 | 45.60 | 486.08 | -76.49 | 41.67 | 367.92 | -229.15 | 40.81 | -1519.27 | 39.36 | -1517.81 | 47.63 |
| | | 108 | 31.20 | 487.85 | -59.33 | 27.46 | 401.06 | -199.89 | 219.81 | -213.57 | 157.70 | -151.47 | 151.85 |
| | | 48 | 30.46 | 472.10 | -91.34 | 8.16 | 372.60 | 214.85 | 372.04 | -111.77 | 368.42 | -108.15 | -41.69 |
| 23 | 30 | 56 | 13.61 | 117.82 | -46.93 | 11.20 | 59.70 | 78.73 | -42.00 | -626.48 | -42.03 | -626.46 | 3.44 |
| | | 112 | 13.51 | 111.45 | -51.95 | 11.40 | 48.11 | -79.61 | -65.41 | -629.13 | -67.06 | -627.48 | 30.49 |
| | | 108 | 9.85 | 118.67 | -51.98 | 5.07 | 61.61 | -80.50 | 5.38 | -178.32 | -9.39 | -163.55 | 49.95 |
| | | 48 | 8.49 | 103.52 | -51.68 | -0.74 | 52.58 | 72.88 | 54.83 | -144.50 | 53.86 | -143.53 | -13.87 |
| 23 | 62 | 56 | 13.78 | 120.67 | -51.43 | 11.12 | 58.12 | 82.78 | -43.02 | -629.15 | -43.02 | -629.15 | 1.32 |
| | | 112 | 13.28 | 107.51 | -47.92 | 11.61 | 47.98 | -75.55 | -65.20 | -629.17 | -66.63 | -627.74 | 28.35 |
| | | 108 | 9.47 | 114.47 | -47.68 | 5.30 | 61.49 | -76.05 | 4.37 | -177.28 | -9.08 | -163.84 | 47.56 |
| | | 48 | 8.83 | 106.69 | -56.37 | -0.69 | 51.00 | 77.32 | 55.83 | -147.48 | 54.53 | -146.18 | -16.21 |
| 23 | 85 | 56 | 13.89 | 122.41 | -54.18 | 11.07 | 57.16 | 85.24 | -43.63 | -630.78 | -43.63 | -630.78 | -0.04 |
| | | 112 | 13.15 | 105.11 | -45.47 | 11.73 | 47.90 | -73.09 | -65.07 | -629.20 | -66.37 | -627.91 | 26.99 |
| | | 108 | 9.25 | 111.93 | -45.07 | 5.44 | 61.42 | -73.34 | 3.75 | -176.65 | -8.89 | -164.01 | 46.04 |
| | | 48 | 9.04 | 108.64 | -59.25 | -0.66 | 50.05 | 80.03 | 56.48 | -149.32 | 54.94 | -147.79 | -17.70 |
| 23 | 87 | 56 | 33.01 | 368.64 | -77.50 | 25.17 | 265.96 | 187.79 | 74.79 | -1091.84 | 71.82 | -1088.87 | 58.80 |
| | | 112 | 32.14 | 337.40 | -56.39 | 29.34 | 251.67 | -162.51 | 18.51 | -1096.72 | 17.39 | -1095.59 | 35.35 |
| | | 108 | 22.01 | 339.43 | -44.83 | 19.03 | 275.56 | -143.04 | 146.72 | -165.62 | 103.95 | -122.85 | 107.37 |
| | | 48 | 21.47 | 328.39 | -67.97 | 5.35 | 255.07 | 153.90 | 255.56 | -94.42 | 252.94 | -91.80 | -30.15 |
| 23 | 97 | 56 | 31.60 | 348.01 | -76.64 | 24.17 | 247.20 | 180.68 | 61.56 | -1068.67 | 59.07 | -1066.18 | 52.97 |
| | | 112 | 30.72 | 317.43 | -56.36 | 28.01 | 233.06 | -156.26 | 7.45 | -1073.14 | 6.29 | -1071.97 | 35.43 |
| | | 108 | 21.04 | 320.13 | -45.83 | 17.88 | 256.42 | -138.77 | 132.09 | -172.99 | 92.13 | -133.03 | 102.92 |
| | | 48 | 20.53 | 309.68 | -68.52 | 4.73 | 236.43 | 149.46 | 238.01 | -105.29 | 235.43 | -102.71 | -29.62 |
| 23 | 102 | 56 | 13.89 | 122.41 | -54.18 | 11.07 | 57.16 | 85.24 | -43.63 | -630.78 | -43.63 | -630.78 | -0.04 |
| | | 112 | 13.15 | 105.11 | -45.47 | 11.73 | 47.90 | -73.09 | -65.07 | -629.20 | -66.37 | -627.91 | 26.99 |
| | | 108 | 9.25 | 111.93 | -45.07 | 5.44 | 61.42 | -73.34 | 3.75 | -176.65 | -8.89 | -164.01 | 46.04 |
| | | 48 | 9.04 | 108.64 | -59.25 | -0.66 | 50.05 | 80.03 | 56.48 | -149.32 | 54.94 | -147.79 | -17.70 |
| 24 | 2 | 64 | 39.77 | 271.11 | -199.38 | 23.59 | 48.14 | 234.93 | 85.60 | -2181.37 | 83.66 | -2179.43 | 66.33 |
| | | 116 | 38.54 | 218.83 | -174.19 | 19.47 | 25.17 | -196.49 | 29.61 | -2189.30 | 28.13 | -2187.81 | 57.41 |
| | | 112 | 30.33 | 258.57 | -206.35 | -18.44 | 70.66 | -228.15 | 152.36 | -981.11 | 137.94 | -966.69 | 127.01 |
| | | 56 | 30.06 | 266.53 | -262.03 | -28.48 | 32.98 | 262.49 | 275.38 | -947.45 | 275.23 | -947.30 | -13.60 |
| 24 | 33 | 64 | 16.04 | 48.16 | -96.02 | 6.52 | -54.38 | 65.34 | -69.07 | -844.19 | -69.08 | -844.19 | -2.67 |
| | | 116 | 16.12 | 43.08 | -103.97 | 3.96 | -64.85 | -64.98 | -88.01 | -844.77 | -89.11 | -843.67 | 28.83 |
| | | 112 | 10.67 | 57.59 | -114.37 | -8.04 | -48.74 | -83.53 | -33.65 | -452.29 | -37.80 | -448.14 | 41.48 |
| | | 56 | 11.72 | 50.47 | -122.54 | -10.85 | -61.22 | 82.75 | 8.81 | -436.27 | 8.71 | -436.17 | -6.67 |
| 24 | 65 | 64 | 16.20 | 51.33 | -99.83 | 6.56 | -55.06 | 69.02 | -68.06 | -845.74 | -68.09 | -845.71 | -4.69 |
| | | 116 | 16.02 | 40.00 | -100.49 | 4.12 | -64.61 | -61.27 | -87.52 | -844.05 | -88.47 | -843.10 | 26.77 |
| | | 112 | 10.50 | 53.99 | -110.31 | -7.84 | -48.49 | -79.59 | -33.45 | -451.33 | -37.20 | -447.58 | 39.42 |
| | | 56 | 11.94 | 54.01 | -126.70 | -10.80 | -61.89 | 86.67 | 9.84 | -437.87 | 9.67 | -437.70 | -8.69 |
| 24 | 85 | 64 | 16.29 | 53.27 | -102.16 | 6.58 | -55.47 | 71.25 | -67.43 | -846.68 | -67.48 | -846.64 | -5.97 |
| | | 116 | 15.97 | 38.15 | -98.40 | 4.21 | -64.46 | -59.01 | -87.21 | -843.61 | -88.07 | -842.75 | 25.46 |
| | | 112 | 10.39 | 51.80 | -107.85 | -7.71 | -48.33 | -77.20 | -33.33 | -450.74 | -36.84 | -447.24 | 38.10 |
| | | 56 | 12.08 | 56.16 | -129.23 | -10.77 | -62.29 | 89.04 | 10.48 | -438.84 | 10.26 | -438.62 | -9.98 |
| 24 | 87 | 64 | 28.00 | 186.82 | -145.52 | 16.60 | 24.70 | 166.12 | 47.95 | -1567.01 | 46.78 | -1565.84 | 43.42 |
| | | 116 | 27.08 | 149.75 | -128.02 | 13.54 | 8.19 | -138.86 | 8.11 | -1572.01 | 7.01 | -1570.91 | 41.67 |
| | | 112 | 21.36 | 178.29 | -150.95 | -13.32 | 40.66 | -162.39 | 97.10 | -714.15 | 87.05 | -704.09 | 89.75 |
| | | 56 | 21.18 | 184.27 | -191.01 | -20.42 | 13.68 | 186.87 | 184.98 | -690.14 | 184.86 | -690.02 | -10.39 |
| 24 | 97 | 64 | 27.19 | 174.51 | -144.02 | 15.84 | 14.65 | 159.27 | 34.28 | -1525.93 | 33.34 | -1524.99 | 38.29 |
| | | 116 | 25.79 | 138.89 | -127.59 | 12.76 | -1.45 | -133.05 | -4.89 | -1530.25 | -5.99 | -1529.15 | 40.95 |
| | | 112 | 20.39 | 166.66 | -149.71 | -13.05 | 29.99 | -156.72 | 82.56 | -704.41 | 73.06 | -694.91 | 85.96 |
| | | 56 | 20.25 | 172.73 | -188.79 | -19.86 | 3.80 | 180.37 | 168.31 | -681.02 | 168.18 | -680.88 | -10.73 |
| 24 | 102 | 64 | 16.29 | 53.27 | -102.16 | 6.58 | -55.47 | 71.25 | -67.43 | -846.68 | -67.48 | -846.64 | -5.97 |
| | | 116 | 15.97 | 38.15 | -98.40 | 4.21 | -64.46 | -59.01 | -87.21 | -843.61 | -88.07 | -842.75 | 25.46 |
| | | 112 | 10.39 | 51.80 | -107.85 | -7.71 | -48.33 | -77.20 | -33.33 | -450.74 | -36.84 | -447.24 | 38.10 |
| | | 56 | 12.08 | 56.16 | -129.23 | -10.77 | -62.29 | 89.04 | 10.48 | -438.84 | 10.26 | -438.62 | -9.98 |
| 25 | 2 | 72 | 59.17 | 130.15 | -375.19 | 20.71 | -265.75 | 208.15 | 54.90 | -2775.46 | 53.69 | -2774.25 | 58.49 |
| | | 120 | 58.42 | 90.46 | -369.73 | 12.98 | -292.25 | -172.20 | 23.08 | -2785.77 | 21.77 | -2784.46 | 60.71 |
| | | 116 | 40.81 | 99.64 | -379.25 | -34.35 | -245.25 | -214.98 | 127.21 | -1693.51 | 120.84 | -1687.14 | 107.48 |
| | | 64 | 45.48 | 120.78 | -441.42 | -39.44 | -281.20 | 253.78 | 207.66 | -1676.10 | 207.66 | -1676.10 | 2.38 |
| 25 | 49 | 72 | 23.14 | 22.55 | -173.21 | 4.64 | -155.31 | 56.43 | -88.42 | -1028.62 | -88.51 | -1028.53 | -8.99 |
| | | 120 | 23.10 | 14.70 | -177.25 | 1.16 | -163.70 | -49.15 | -107.93 | -1025.35 | -108.57 | -1024.71 | 24.24 |
| | | 116 | 17.87 | 17.61 | -178.41 | -12.33 | -148.48 | -70.51 | -60.09 | -691.82 | -61.59 | -690.31 | 30.77 |
| | | 64 | 19.10 | 21.16 | -196.37 | -13.55 | -161.65 | 79.67 | -27.06 | -685.82 | -27.09 | -685.79 | -4.64 |
| 25 | 81 | 72 | 23.08 | 23.22 | -172.96 | 4.66 | -154.40 | 57.42 | -87.84 | -1026.49 | -87.94 | -1026.39 | -9.64 |
| | | 120 | 23.03 | 14.28 | -176.01 | 1.19 | -162.92 | -48.16 | -107.47 | -1023.60 | -108.08 | -1022.99 | 23.56 |
| | | 116 | 17.79 | 17.04 | -177.02 | -12.29 | -147.69 | -69.50 | -59.65 | -690.04 | -61.09 | -688.59 | 30.14 |
| | | 64 | 19.05 | 22.06 | -196.34 | -13.53 | -160.75 | 80.67 | -26.47 | -683.68 | -26.51 | -683.64 | -5.25 |
| 25 | 85 | 72 | 23.04 | 23.63 | -172.81 | 4.67 | -153.84 | 58.01 | -87.49 | -1025.18 | -87.59 | -1025.07 | -10.05 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|-------|----------|--------|----------|---------|---------|----------|---------|----------|----------|
| | | 120 | 22.98 | 14.02 | -175.25 | 1.21 | -162.44 | -47.55 | -107.19 | -1022.51 | -107.77 | -1021.93 | 23.13 |
| | | 116 | 17.74 | 16.69 | -176.16 | -12.27 | -147.21 | -68.89 | -59.37 | -688.93 | -60.78 | -687.52 | 29.74 |
| | | 64 | 19.03 | 22.62 | -196.32 | -13.52 | -160.19 | 81.28 | -26.10 | -682.36 | -26.15 | -682.31 | -5.63 |
| 25 | 87 | 72 | 42.49 | 89.23 | -272.49 | 14.43 | -197.68 | 146.50 | 24.82 | -1986.88 | 24.12 | -1986.18 | 37.65 |
| | | 120 | 41.99 | 61.59 | -269.26 | 8.82 | -216.49 | -121.14 | 1.10 | -1993.51 | 0.14 | -1992.56 | 43.56 |
| | | 116 | 29.55 | 68.05 | -275.72 | -24.54 | -183.13 | -152.50 | 76.88 | -1220.85 | 72.46 | -1216.43 | 75.62 |
| | | 64 | 32.83 | 82.97 | -319.89 | -28.09 | -208.83 | 180.03 | 134.95 | -1208.37 | 134.95 | -1208.37 | 0.84 |
| 25 | 97 | 72 | 41.37 | 82.95 | -268.28 | 13.62 | -198.96 | 139.80 | 10.78 | -1928.25 | 10.23 | -1927.71 | 32.53 |
| | | 120 | 40.92 | 56.83 | -265.81 | 8.10 | -217.07 | -115.53 | -13.89 | -1934.09 | -14.83 | -1933.16 | 42.36 |
| | | 116 | 29.01 | 63.00 | -271.72 | -23.77 | -184.95 | -146.68 | 60.82 | -1193.06 | 56.66 | -1188.90 | 72.09 |
| | | 64 | 32.13 | 77.28 | -314.28 | -27.14 | -209.86 | 173.15 | 118.36 | -1180.75 | 118.36 | -1180.75 | 7.77e-04 |
| 25 | 102 | 72 | 23.04 | 23.63 | -172.81 | 4.67 | -153.84 | 58.01 | -87.49 | -1025.18 | -87.59 | -1025.07 | -10.05 |
| | | 120 | 22.98 | 14.02 | -175.25 | 1.21 | -162.44 | -47.55 | -107.19 | -1022.51 | -107.77 | -1021.93 | 23.13 |
| | | 116 | 17.74 | 16.69 | -176.16 | -12.27 | -147.21 | -68.89 | -59.37 | -688.93 | -60.78 | -687.52 | 29.74 |
| | | 64 | 19.03 | 22.62 | -196.32 | -13.52 | -160.19 | 81.28 | -26.10 | -682.36 | -26.15 | -682.31 | -5.63 |
| 26 | 2 | 80 | 79.49 | 74.12 | -601.12 | 20.43 | -547.43 | 182.67 | 26.84 | -3299.19 | 25.67 | -3298.03 | 62.33 |
| | | 124 | 79.87 | 48.76 | -612.91 | 12.92 | -577.07 | -149.77 | 31.87 | -3310.87 | 30.74 | -3309.74 | 61.26 |
| | | 120 | 63.27 | 32.23 | -599.81 | -34.61 | -532.97 | -194.36 | 106.74 | -2340.65 | 103.16 | -2337.07 | 93.56 |
| | | 72 | 66.49 | 49.18 | -649.88 | -38.11 | -562.58 | 231.09 | 159.65 | -2326.48 | 159.54 | -2326.37 | 16.93 |
| 26 | 45 | 80 | 28.98 | 11.13 | -245.08 | 3.48 | -237.42 | 43.61 | -104.20 | -1171.31 | -104.31 | -1171.20 | -10.80 |
| | | 124 | 29.02 | 5.88 | -250.88 | 0.06 | -245.07 | -38.20 | -125.58 | -1169.52 | -126.01 | -1169.09 | 21.11 |
| | | 120 | 24.59 | 2.81 | -247.52 | -12.41 | -232.30 | -59.82 | -84.16 | -896.26 | -84.84 | -895.58 | 23.59 |
| | | 72 | 25.49 | 5.75 | -261.54 | -12.78 | -243.01 | 67.89 | -56.40 | -891.54 | -56.41 | -891.54 | -1.76 |
| 26 | 77 | 80 | 28.92 | 11.49 | -244.52 | 3.52 | -236.55 | 44.46 | -103.66 | -1169.37 | -103.78 | -1169.25 | -11.46 |
| | | 124 | 28.96 | 5.67 | -249.87 | 0.09 | -244.29 | -37.34 | -125.11 | -1167.77 | -125.51 | -1167.37 | 20.40 |
| | | 120 | 24.52 | 2.49 | -246.40 | -12.39 | -231.52 | -58.99 | -83.72 | -894.51 | -84.37 | -893.86 | 22.87 |
| | | 72 | 25.44 | 6.27 | -261.14 | -12.74 | -242.13 | 68.71 | -55.87 | -889.58 | -55.88 | -889.58 | -2.42 |
| 26 | 85 | 80 | 28.88 | 11.72 | -244.17 | 3.55 | -236.00 | 44.98 | -103.32 | -1168.16 | -103.45 | -1168.03 | -11.87 |
| | | 124 | 28.92 | 5.54 | -249.25 | 0.10 | -243.81 | -36.82 | -124.81 | -1166.68 | -125.20 | -1166.30 | 19.96 |
| | | 120 | 24.47 | 2.29 | -245.70 | -12.37 | -231.04 | -58.49 | -83.44 | -893.42 | -84.07 | -892.79 | 22.43 |
| | | 72 | 25.40 | 6.58 | -260.89 | -12.72 | -241.59 | 69.21 | -55.54 | -888.36 | -55.55 | -888.35 | -2.84 |
| 26 | 87 | 80 | 56.82 | 50.62 | -432.95 | 14.09 | -396.42 | 127.78 | 4.00 | -2355.10 | 3.32 | -2354.42 | 39.97 |
| | | 124 | 57.09 | 33.00 | -441.60 | 8.63 | -417.22 | -104.76 | 4.60 | -2362.80 | 3.80 | -2362.00 | 43.50 |
| | | 120 | 45.44 | 21.57 | -432.41 | -24.72 | -386.12 | -137.38 | 60.02 | -1679.54 | 57.56 | -1677.08 | 65.36 |
| | | 72 | 47.70 | 33.40 | -467.77 | -27.10 | -407.27 | 163.29 | 99.02 | -1669.43 | 98.95 | -1669.36 | 10.91 |
| 26 | 97 | 80 | 55.07 | 46.85 | -422.75 | 13.17 | -389.07 | 121.16 | -10.11 | -2279.21 | -10.63 | -2278.69 | 34.36 |
| | | 124 | 55.33 | 30.24 | -431.33 | 7.78 | -408.87 | -99.32 | -13.12 | -2286.19 | -13.89 | -2285.41 | 41.89 |
| | | 120 | 44.23 | 19.52 | -422.59 | -23.95 | -379.12 | -131.64 | 42.38 | -1633.86 | 40.09 | -1631.57 | 61.87 |
| | | 72 | 46.40 | 30.73 | -456.47 | -26.13 | -399.60 | 156.44 | 82.03 | -1623.89 | 81.98 | -1623.84 | 9.46 |
| 26 | 102 | 80 | 28.88 | 11.72 | -244.17 | 3.55 | -236.00 | 44.98 | -103.32 | -1168.16 | -103.45 | -1168.03 | -11.87 |
| | | 124 | 28.92 | 5.54 | -249.25 | 0.10 | -243.81 | -36.82 | -124.81 | -1166.68 | -125.20 | -1166.30 | 19.96 |
| | | 120 | 24.47 | 2.29 | -245.70 | -12.37 | -231.04 | -58.49 | -83.44 | -893.42 | -84.07 | -892.79 | 22.43 |
| | | 72 | 25.40 | 6.58 | -260.89 | -12.72 | -241.59 | 69.21 | -55.54 | -888.36 | -55.55 | -888.35 | -2.84 |
| 27 | 2 | 52 | 97.75 | 49.42 | -824.97 | 19.72 | -795.27 | 158.39 | -7.05 | -3755.20 | -8.42 | -3753.83 | 71.71 |
| | | 110 | 99.22 | 32.54 | -848.20 | 13.85 | -829.52 | -126.90 | 75.53 | -3760.34 | 74.40 | -3759.22 | 65.68 |
| | | 124 | 84.14 | 8.67 | -825.17 | -28.65 | -787.85 | -172.41 | 99.70 | -2918.94 | 97.52 | -2916.76 | 81.05 |
| | | 80 | 86.31 | 18.64 | -861.87 | -32.52 | -810.71 | 205.99 | 126.04 | -2904.51 | 125.54 | -2904.01 | 38.99 |
| 27 | 45 | 52 | 33.65 | 5.49 | -306.32 | 2.39 | -303.22 | 30.96 | -115.74 | -1278.89 | -115.85 | -1278.79 | -11.16 |
| | | 110 | 33.69 | 1.87 | -311.87 | -0.55 | -309.45 | -27.45 | -139.78 | -1278.50 | -140.04 | -1278.24 | 17.36 |
| | | 124 | 30.19 | -2.67 | -307.64 | -10.73 | -299.59 | -48.90 | -106.25 | -1066.11 | -106.56 | -1065.80 | 17.24 |
| | | 80 | 30.86 | -0.77 | -317.70 | -10.67 | -307.81 | 55.13 | -79.65 | -1061.50 | -79.65 | -1061.50 | 0.62 |
| 27 | 77 | 52 | 33.58 | 5.72 | -305.56 | 2.45 | -302.30 | 31.70 | -115.17 | -1277.15 | -115.29 | -1277.03 | -11.76 |
| | | 110 | 33.63 | 1.78 | -311.05 | -0.52 | -308.75 | -26.72 | -139.28 | -1276.92 | -139.52 | -1276.67 | 16.72 |
| | | 124 | 30.14 | -2.86 | -306.75 | -10.72 | -298.89 | -48.23 | -105.81 | -1064.54 | -106.10 | -1064.25 | 16.55 |
| | | 80 | 30.80 | -0.46 | -317.05 | -10.62 | -306.89 | 55.80 | -79.15 | -1059.75 | -79.15 | -1059.75 | -0.02 |
| 27 | 85 | 52 | 33.55 | 5.85 | -305.09 | 2.49 | -301.73 | 32.15 | -114.82 | -1276.07 | -114.95 | -1275.94 | -12.13 |
| | | 110 | 33.60 | 1.72 | -310.54 | -0.51 | -308.31 | -26.27 | -138.96 | -1275.93 | -139.20 | -1275.70 | 16.32 |
| | | 124 | 30.10 | -2.97 | -306.20 | -10.71 | -298.46 | -47.82 | -105.53 | -1063.55 | -105.81 | -1063.28 | 16.12 |
| | | 80 | 30.76 | -0.26 | -316.65 | -10.59 | -306.32 | 56.21 | -78.83 | -1058.66 | -78.83 | -1058.66 | -0.42 |
| 27 | 87 | 52 | 69.62 | 33.47 | -590.40 | 13.48 | -570.41 | 109.88 | -20.13 | -2673.48 | -20.94 | -2672.68 | 46.19 |
| | | 110 | 70.61 | 21.77 | -606.73 | 9.17 | -594.12 | -88.10 | 31.82 | -2677.02 | 31.04 | -2676.24 | 45.96 |
| | | 124 | 60.10 | 5.28 | -590.83 | -20.53 | -565.03 | -121.32 | 52.38 | -2087.76 | 50.91 | -2086.28 | 56.19 |
| | | 80 | 61.63 | 12.24 | -616.65 | -23.09 | -581.31 | 144.82 | 73.50 | -2077.47 | 73.18 | -2077.16 | 25.94 |
| 27 | 97 | 52 | 67.23 | 30.70 | -572.89 | 12.47 | -554.66 | 103.30 | -33.40 | -2580.52 | -34.02 | -2579.89 | 39.92 |
| | | 110 | 68.13 | 19.70 | -588.42 | 8.18 | -576.91 | -82.89 | 9.47 | -2583.93 | 8.74 | -2583.20 | 43.61 |
| | | 124 | 58.20 | 4.25 | -573.56 | -19.95 | -549.37 | -115.73 | 32.51 | -2024.53 | 31.15 | -2023.17 | 52.75 |
| | | 80 | 59.67 | 10.85 | -598.19 | -22.23 | -565.11 | 138.04 | 55.89 | -2014.43 | 55.63 | -2014.17 | 23.32 |
| 27 | 102 | 52 | 33.55 | 5.85 | -305.09 | 2.49 | -301.73 | 32.15 | -114.82 | -1276.07 | -114.95 | -1275.94 | -12.13 |
| | | 110 | 33.60 | 1.72 | -310.54 | -0.51 | -308.31 | -26.27 | -138.96 | -1275.93 | -139.20 | -1275.70 | 16.32 |
| | | 124 | 30.10 | -2.97 | -306.20 | -10.71 | -298.46 | -47.82 | -105.53 | -1063.55 | -105.81 | -1063.28 | 16.12 |
| | | 80 | 30.76 | -0.26 | -316.65 | -10.59 | -306.32 | 56.21 | -78.83 | -1058.66 | -78.83 | -1058.66 | -0.42 |
| 28 | 2 | 62 | 113.36 | 34.55 | -1025.14 | 17.12 | -1007.72 | 134.76 | -64.43 | -4148.27 | -66.01 | -4146.68 | 80.49 |
| | | 115 | 116.31 | 22.34 | -1060.90 | 12.64 | -1051.20 | -102.08 | 179.58 | -4125.88 | 178.07 | -4124.37 | 80.62 |
| | | 110 | 102.78 | 0.96 | -1030.35 | -21.25 | -1008.14 | -149.71 | 122.75 | -3426.24 | 121.52 | -3425.00 | 66.21 |
| | | 52 | 104.04 | 4.97 | -1058.55 | -27.05 | -1026.53 | 181.74 | 98.89 | -3411.51 | 97.28 | -3409.90 | 75.15 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|--------|
| 28 | 51 | 62 | 37.01 | 2.49 | -352.60 | 1.33 | -351.45 | 20.25 | -121.92 | -1350.51 | -122.04 | -1350.39 | -12.45 |
| | | 115 | 37.05 | -0.59 | -357.64 | -1.22 | -357.01 | -14.98 | -148.76 | -1352.07 | -148.87 | -1351.96 | 11.36 |
| | | 110 | 34.54 | -4.71 | -353.95 | -8.57 | -350.08 | -36.54 | -124.46 | -1200.62 | -124.54 | -1200.54 | 9.33 |
| | | 52 | 34.99 | -2.58 | -360.29 | -8.02 | -354.84 | 43.81 | -96.80 | -1195.29 | -96.80 | -1195.29 | 0.92 |
| 28 | 83 | 62 | 36.98 | 2.39 | -352.35 | 1.28 | -351.24 | 19.79 | -122.01 | -1349.62 | -122.12 | -1349.51 | -11.85 |
| | | 115 | 37.01 | -0.54 | -357.13 | -1.21 | -356.46 | -15.46 | -148.78 | -1350.93 | -148.90 | -1350.81 | 12.01 |
| | | 110 | 34.50 | -4.65 | -353.49 | -8.60 | -349.53 | -36.93 | -124.41 | -1199.46 | -124.51 | -1199.37 | 10.05 |
| | | 52 | 34.96 | -2.75 | -360.01 | -8.12 | -354.64 | 43.44 | -96.82 | -1194.40 | -96.82 | -1194.40 | 1.58 |
| 28 | 85 | 62 | 36.96 | 2.33 | -352.18 | 1.25 | -351.10 | 19.51 | -122.07 | -1349.07 | -122.18 | -1348.96 | -11.48 |
| | | 115 | 36.98 | -0.51 | -356.81 | -1.20 | -356.11 | -15.75 | -148.79 | -1350.22 | -148.92 | -1350.09 | 12.41 |
| | | 110 | 34.47 | -4.61 | -353.20 | -8.61 | -349.19 | -37.16 | -124.39 | -1198.75 | -124.49 | -1198.65 | 10.49 |
| | | 52 | 34.95 | -2.86 | -359.83 | -8.17 | -354.52 | 43.22 | -96.83 | -1193.84 | -96.83 | -1193.84 | 1.99 |
| 28 | 87 | 62 | 80.48 | 23.10 | -730.15 | 11.58 | -718.63 | 92.44 | -59.36 | -2945.26 | -60.30 | -2944.32 | 52.13 |
| | | 115 | 82.45 | 14.72 | -754.73 | 8.27 | -748.28 | -70.15 | 99.87 | -2930.61 | 98.86 | -2929.59 | 55.40 |
| | | 110 | 73.11 | -0.04 | -733.93 | -15.31 | -718.66 | -104.76 | 65.24 | -2443.98 | 64.41 | -2443.15 | 45.54 |
| | | 52 | 74.01 | 2.81 | -753.55 | -19.12 | -731.62 | 126.92 | 52.96 | -2433.47 | 51.94 | -2432.45 | 50.36 |
| 28 | 97 | 62 | 77.47 | 20.90 | -705.11 | 10.60 | -694.81 | 85.87 | -69.68 | -2835.10 | -70.43 | -2834.36 | 45.35 |
| | | 115 | 79.25 | 13.07 | -727.99 | 7.27 | -722.19 | -65.29 | 69.38 | -2822.32 | 68.46 | -2821.40 | 51.58 |
| | | 110 | 70.50 | -0.73 | -708.81 | -14.96 | -694.58 | -99.37 | 41.52 | -2363.63 | 40.77 | -2362.88 | 42.41 |
| | | 52 | 71.38 | 2.03 | -727.34 | -18.33 | -706.98 | 120.15 | 34.93 | -2353.30 | 34.06 | -2352.43 | 45.63 |
| 28 | 102 | 62 | 36.96 | 2.33 | -352.18 | 1.25 | -351.10 | 19.51 | -122.07 | -1349.07 | -122.18 | -1348.96 | -11.48 |
| | | 115 | 36.98 | -0.51 | -356.81 | -1.20 | -356.11 | -15.75 | -148.79 | -1350.22 | -148.92 | -1350.09 | 12.41 |
| | | 110 | 34.47 | -4.61 | -353.20 | -8.61 | -349.19 | -37.16 | -124.39 | -1198.75 | -124.49 | -1198.65 | 10.49 |
| | | 52 | 34.95 | -2.86 | -359.83 | -8.17 | -354.52 | 43.22 | -96.83 | -1193.84 | -96.83 | -1193.84 | 1.99 |
| 29 | 2 | 74 | 125.95 | 22.06 | -1192.45 | 12.06 | -1182.45 | 109.74 | -175.52 | -4488.48 | -177.05 | -4486.95 | 81.36 |
| | | 121 | 131.07 | 10.79 | -1246.64 | 6.49 | -1242.34 | -73.40 | 377.76 | -4391.67 | 375.12 | -4389.03 | 112.31 |
| | | 115 | 119.04 | -1.40 | -1205.06 | -14.65 | -1191.81 | -125.60 | 198.84 | -3861.54 | 198.32 | -3861.02 | 45.93 |
| | | 62 | 119.29 | -3.32 | -1232.13 | -24.21 | -1211.23 | 158.88 | 63.09 | -3847.69 | 58.69 | -3843.29 | 131.18 |
| 29 | 51 | 74 | 39.12 | 0.02 | -384.24 | -0.13 | -384.10 | 7.42 | -124.77 | -1387.80 | -124.87 | -1387.70 | -10.98 |
| | | 121 | 39.11 | -2.10 | -388.05 | -2.16 | -387.99 | -4.75 | -153.61 | -1390.76 | -153.65 | -1390.71 | 7.55 |
| | | 115 | 37.61 | -4.74 | -385.71 | -6.56 | -383.89 | -26.27 | -138.85 | -1300.01 | -138.86 | -1299.99 | 4.39 |
| | | 62 | 37.90 | -3.24 | -388.63 | -5.70 | -386.17 | 30.68 | -109.88 | -1294.70 | -109.89 | -1294.69 | 3.50 |
| 29 | 83 | 74 | 39.11 | -0.05 | -384.31 | -0.18 | -384.18 | 7.16 | -125.02 | -1387.49 | -125.11 | -1387.40 | -10.56 |
| | | 121 | 39.08 | -2.09 | -387.70 | -2.16 | -387.64 | -5.04 | -153.77 | -1390.05 | -153.82 | -1390.00 | 8.01 |
| | | 115 | 37.58 | -4.75 | -385.39 | -6.59 | -383.55 | -26.44 | -138.95 | -1299.29 | -138.98 | -1299.27 | 4.95 |
| | | 62 | 37.90 | -3.37 | -388.70 | -5.80 | -386.26 | 30.53 | -110.07 | -1294.39 | -110.09 | -1294.38 | 4.02 |
| 29 | 85 | 74 | 39.11 | -0.09 | -384.35 | -0.21 | -384.22 | 7.00 | -125.18 | -1387.29 | -125.26 | -1387.20 | -10.31 |
| | | 121 | 39.06 | -2.08 | -387.48 | -2.15 | -387.41 | -5.21 | -153.86 | -1389.61 | -153.92 | -1389.56 | 8.29 |
| | | 115 | 37.56 | -4.75 | -385.19 | -6.61 | -383.33 | -26.55 | -139.02 | -1298.85 | -139.05 | -1298.83 | 5.29 |
| | | 62 | 37.89 | -3.44 | -388.73 | -5.86 | -386.31 | 30.44 | -110.19 | -1294.19 | -110.20 | -1294.18 | 4.34 |
| 29 | 87 | 74 | 89.16 | 14.44 | -845.96 | 8.01 | -839.53 | 74.09 | -133.82 | -3177.18 | -134.74 | -3176.26 | 52.86 |
| | | 121 | 92.57 | 6.82 | -882.66 | 4.04 | -879.88 | -49.63 | 231.28 | -3113.02 | 229.56 | -3111.29 | 75.98 |
| | | 115 | 84.35 | -1.62 | -854.67 | -10.65 | -845.65 | -87.27 | 114.02 | -2747.53 | 113.67 | -2747.19 | 31.33 |
| | | 62 | 84.56 | -2.80 | -873.12 | -16.92 | -859.00 | 109.98 | 27.24 | -2737.56 | 24.43 | -2734.75 | 88.03 |
| 29 | 97 | 74 | 85.58 | 12.76 | -813.73 | 7.18 | -808.16 | 67.65 | -137.11 | -3049.07 | -137.84 | -3048.34 | 46.17 |
| | | 121 | 88.64 | 5.76 | -847.34 | 3.34 | -844.92 | -45.37 | 186.93 | -2991.85 | 185.41 | -2990.32 | 69.54 |
| | | 115 | 81.04 | -2.16 | -821.86 | -10.49 | -813.54 | -82.18 | 83.43 | -2650.53 | 83.13 | -2650.22 | 88.92 |
| | | 62 | 81.28 | -3.10 | -838.90 | -16.03 | -825.97 | 103.15 | 9.89 | -2640.65 | 7.48 | -2638.24 | 79.85 |
| 29 | 102 | 74 | 39.11 | -0.09 | -384.35 | -0.21 | -384.22 | 7.00 | -125.18 | -1387.29 | -125.26 | -1387.20 | -10.31 |
| | | 121 | 39.06 | -2.08 | -387.48 | -2.15 | -387.41 | -5.21 | -153.86 | -1389.61 | -153.92 | -1389.56 | 8.29 |
| | | 115 | 37.56 | -4.75 | -385.19 | -6.61 | -383.33 | -26.55 | -139.02 | -1298.85 | -139.05 | -1298.83 | 5.29 |
| | | 62 | 37.89 | -3.44 | -388.73 | -5.86 | -386.31 | 30.44 | -110.19 | -1294.19 | -110.20 | -1294.18 | 4.34 |
| 30 | 2 | 84 | 135.51 | 9.57 | -1323.24 | 5.17 | -1318.84 | 76.46 | -377.40 | -4797.45 | -378.26 | -4796.59 | 61.78 |
| | | 126 | 143.01 | -7.14 | -1397.73 | -8.15 | -1396.72 | -37.49 | 702.53 | -4530.29 | 697.56 | -4525.31 | 161.32 |
| | | 121 | 132.79 | -3.36 | -1341.29 | -10.80 | -1333.85 | -99.49 | 360.65 | -4223.06 | 360.58 | -4222.98 | 18.45 |
| | | 74 | 131.68 | -11.43 | -1379.25 | -25.26 | -1365.42 | 136.81 | -10.63 | -4213.94 | -21.14 | -4203.43 | 209.95 |
| 30 | 39 | 84 | 39.95 | -1.74 | -400.62 | -1.80 | -400.56 | -5.04 | -123.61 | -1390.35 | -123.67 | -1390.29 | -8.78 |
| | | 126 | 39.87 | -3.37 | -402.64 | -3.45 | -402.56 | 5.73 | -153.57 | -1394.53 | -153.58 | -1394.51 | 3.91 |
| | | 121 | 39.37 | -4.23 | -401.85 | -4.86 | -401.22 | -15.77 | -148.50 | -1364.27 | -148.50 | -1364.27 | 0.21 |
| | | 74 | 39.55 | -2.77 | -402.04 | -3.59 | -401.22 | 18.07 | -118.71 | -1359.39 | -118.74 | -1359.36 | 6.30 |
| 30 | 71 | 84 | 39.97 | -1.79 | -400.98 | -1.86 | -400.91 | -5.30 | -123.99 | -1390.65 | -124.05 | -1390.58 | -8.76 |
| | | 126 | 39.86 | -3.33 | -402.51 | -3.40 | -402.43 | 5.49 | -153.85 | -1394.33 | -153.87 | -1394.31 | 3.93 |
| | | 121 | 39.36 | -4.22 | -401.73 | -4.86 | -401.10 | -15.89 | -148.77 | -1364.07 | -148.77 | -1364.07 | 0.34 |
| | | 74 | 39.56 | -2.89 | -402.40 | -3.70 | -401.59 | 17.93 | -119.07 | -1359.68 | -119.10 | -1359.65 | 6.42 |
| 30 | 85 | 84 | 39.98 | -1.82 | -401.20 | -1.89 | -401.13 | -5.46 | -124.22 | -1390.82 | -124.28 | -1390.76 | -8.75 |
| | | 126 | 39.85 | -3.30 | -402.42 | -3.37 | -402.35 | 5.34 | -154.03 | -1394.20 | -154.04 | -1394.19 | 3.95 |
| | | 121 | 39.35 | -4.22 | -401.66 | -4.86 | -401.02 | -15.96 | -148.93 | -1363.94 | -148.93 | -1363.94 | 0.42 |
| | | 74 | 39.57 | -2.97 | -402.61 | -3.77 | -401.81 | 17.85 | -119.30 | -1359.86 | -119.33 | -1359.83 | 6.50 |
| 30 | 87 | 84 | 95.66 | 5.89 | -935.40 | 3.20 | -932.71 | 50.25 | -268.23 | -3383.68 | -268.75 | -3383.16 | 40.02 |
| | | 126 | 100.62 | -5.28 | -985.39 | -5.88 | -984.79 | -24.28 | 447.70 | -3205.96 | 444.50 | -3202.76 | 108.07 |
| | | 121 | 93.75 | -2.86 | -947.69 | -7.85 | -942.70 | -68.46 | 220.58 | -2997.23 | 220.53 | -2997.18 | 12.35 |
| | | 74 | 93.04 | -8.17 | -973.02 | -17.34 | -963.86 | 93.59 | -23.31 | -2990.30 | -30.01 | -2983.60 | 140.83 |
| 30 | 97 | 84 | 91.55 | 4.82 | -896.53 | 2.62 | -894.33 | 44.48 | -257.91 | -3235.45 | -258.32 | -3235.04 | 34.83 |
| | | 126 | 95.98 | -5.28 | -941.85 | -5.76 | -941.37 | -21.12 | 381.61 | -3076.05 | 378.84 | -3073.28 | 97.83 |
| | | 121 | 89.74 | -3.21 | -907.83 | -7.73 | -903.31 | -63.79 | 177.99 | -2884.17 | 177.95 | -2884.13 | 11.18 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| 30 | 102 | 74 | 89.14 | -7.91 | -930.68 | -16.12 | -922.46 | 86.67 | -37.01 | -2876.94 | -42.76 | -2871.19 | 127.66 |
| | | 84 | 39.98 | -1.82 | -401.20 | -1.89 | -401.13 | -5.46 | -124.22 | -1390.82 | -124.28 | -1390.76 | -8.75 |
| | | 126 | 39.85 | -3.30 | -402.42 | -3.37 | -402.35 | 5.34 | -154.03 | -1394.20 | -154.04 | -1394.19 | 3.95 |
| | | 121 | 39.35 | -4.22 | -401.66 | -4.86 | -401.02 | -15.96 | -148.93 | -1363.94 | -148.93 | -1363.94 | 0.42 |
| | | 74 | 39.57 | -2.97 | -402.61 | -3.77 | -401.81 | 17.85 | -119.30 | -1359.86 | -119.33 | -1359.83 | 6.50 |
| 31 | 2 | 60 | 143.65 | -4.97 | -1431.75 | -5.08 | -1431.64 | 12.65 | -679.02 | -5133.12 | -679.04 | -5133.11 | 7.79 |
| | | 114 | 150.44 | -29.59 | -1485.37 | -29.76 | -1485.20 | 15.78 | 1125.24 | -4527.48 | 1118.99 | -4521.22 | 187.94 |
| | | 126 | 143.57 | -11.70 | -1427.02 | -15.62 | -1423.10 | -74.38 | 649.16 | -4504.80 | 649.14 | -4504.78 | -10.24 |
| | | 84 | 140.85 | -16.55 | -1494.16 | -25.43 | -1485.28 | 114.17 | -177.16 | -4523.72 | -197.23 | -4503.65 | 294.65 |
| 31 | 34 | 60 | 39.72 | -3.48 | -405.23 | -4.23 | -404.48 | -17.34 | -121.52 | -1362.85 | -121.57 | -1362.80 | -7.89 |
| | | 114 | 39.35 | -4.06 | -401.70 | -4.75 | -401.01 | 16.50 | -151.02 | -1364.47 | -151.02 | -1364.47 | -1.72 |
| | | 126 | 39.85 | -3.23 | -402.46 | -3.28 | -402.41 | -4.13 | -155.78 | -1394.65 | -155.79 | -1394.64 | -4.71 |
| | | 84 | 40.13 | -2.24 | -403.84 | -2.35 | -403.73 | 6.64 | -126.70 | -1394.03 | -126.75 | -1393.98 | 7.88 |
| 31 | 66 | 60 | 39.63 | -3.17 | -403.62 | -3.95 | -402.83 | -17.71 | -120.12 | -1360.91 | -120.16 | -1360.87 | -7.25 |
| | | 114 | 39.35 | -4.16 | -401.64 | -4.82 | -400.99 | 16.13 | -149.93 | -1364.18 | -149.93 | -1364.18 | -1.04 |
| | | 126 | 39.85 | -3.28 | -402.45 | -3.34 | -402.39 | -4.91 | -154.64 | -1394.35 | -154.65 | -1394.33 | -4.38 |
| | | 84 | 40.04 | -1.98 | -402.17 | -2.06 | -402.08 | 5.85 | -125.24 | -1392.09 | -125.29 | -1392.04 | 8.18 |
| 31 | 85 | 60 | 39.57 | -2.97 | -402.64 | -3.78 | -401.83 | -17.94 | -119.25 | -1359.72 | -119.29 | -1359.68 | -6.86 |
| | | 114 | 39.35 | -4.22 | -401.61 | -4.86 | -400.97 | 15.91 | -149.25 | -1363.99 | -149.25 | -1363.99 | -0.62 |
| | | 126 | 39.85 | -3.31 | -402.45 | -3.38 | -402.37 | -5.39 | -153.93 | -1394.15 | -153.94 | -1394.14 | -4.18 |
| | | 84 | 39.98 | -1.81 | -401.15 | -1.88 | -401.08 | 5.37 | -124.34 | -1390.90 | -124.39 | -1390.85 | 8.37 |
| 31 | 87 | 60 | 101.03 | -3.85 | -1008.04 | -3.89 | -1008.00 | 6.04 | -468.59 | -3603.37 | -468.60 | -3603.37 | 4.28 |
| | | 114 | 105.49 | -20.33 | -1043.75 | -20.49 | -1043.60 | 12.64 | 730.09 | -3200.01 | 726.09 | -3196.01 | 125.21 |
| | | 126 | 101.00 | -8.32 | -1004.93 | -10.86 | -1002.38 | -50.31 | 412.25 | -3189.08 | 412.23 | -3189.07 | -7.39 |
| | | 84 | 99.20 | -11.49 | -1049.38 | -17.20 | -1043.67 | 76.83 | -135.29 | -3200.67 | -148.07 | -3187.88 | 197.55 |
| 31 | 97 | 60 | 96.34 | -4.01 | -962.20 | -4.02 | -962.19 | 2.98 | -437.50 | -3428.97 | -437.51 | -3428.97 | 2.91 |
| | | 114 | 100.28 | -18.92 | -994.30 | -19.10 | -994.11 | 13.56 | 636.36 | -3066.50 | 632.93 | -3063.07 | 112.63 |
| | | 126 | 96.32 | -8.01 | -959.44 | -10.24 | -957.21 | -46.01 | 349.82 | -3060.97 | 349.80 | -3060.96 | -7.21 |
| | | 84 | 94.73 | -10.77 | -999.16 | -15.74 | -994.19 | 69.89 | -138.75 | -3070.26 | -149.72 | -3059.29 | 178.96 |
| 31 | 102 | 60 | 39.57 | -2.97 | -402.64 | -3.78 | -401.83 | -17.94 | -119.25 | -1359.72 | -119.29 | -1359.68 | -6.86 |
| | | 114 | 39.35 | -4.22 | -401.61 | -4.86 | -400.97 | 15.91 | -149.25 | -1363.99 | -149.25 | -1363.99 | -0.62 |
| | | 126 | 39.85 | -3.31 | -402.45 | -3.38 | -402.37 | -5.39 | -153.93 | -1394.15 | -153.94 | -1394.14 | -4.18 |
| | | 84 | 39.98 | -1.81 | -401.15 | -1.88 | -401.08 | 5.37 | -124.34 | -1390.90 | -124.39 | -1390.85 | 8.37 |
| 32 | 2 | 76 | 144.22 | -16.83 | -1494.17 | -20.70 | -1490.31 | -75.46 | -760.29 | -5018.12 | -763.33 | -5015.08 | -113.63 |
| | | 122 | 150.73 | -42.36 | -1491.13 | -46.62 | -1486.86 | 78.49 | 1361.42 | -4415.74 | 1357.19 | -4411.51 | 156.24 |
| | | 114 | 149.83 | -25.22 | -1456.59 | -26.27 | -1455.54 | -38.62 | 1058.92 | -4610.87 | 1057.74 | -4609.69 | -81.68 |
| | | 60 | 146.72 | -17.05 | -1524.01 | -20.05 | -1521.02 | 67.10 | -520.00 | -4978.41 | -539.80 | -4958.60 | 296.47 |
| 32 | 26 | 76 | 38.03 | -4.06 | -391.11 | -6.34 | -388.84 | -29.57 | -112.15 | -1296.89 | -112.19 | -1296.85 | -7.09 |
| | | 122 | 37.56 | -4.69 | -385.43 | -6.68 | -383.44 | 27.46 | -141.06 | -1299.61 | -141.12 | -1299.55 | -8.06 |
| | | 114 | 39.07 | -2.16 | -387.73 | -2.27 | -387.61 | 6.76 | -155.74 | -1390.32 | -155.83 | -1390.23 | -10.52 |
| | | 60 | 39.25 | -0.57 | -386.75 | -0.65 | -386.68 | -5.50 | -127.61 | -1390.22 | -127.66 | -1390.17 | 8.08 |
| 32 | 58 | 76 | 37.94 | -3.68 | -389.64 | -6.05 | -387.26 | -30.16 | -110.96 | -1295.10 | -110.98 | -1295.07 | -5.58 |
| | | 122 | 37.56 | -4.73 | -385.23 | -6.64 | -383.32 | 26.86 | -140.14 | -1299.18 | -140.17 | -1299.14 | -6.45 |
| | | 114 | 39.06 | -2.12 | -387.58 | -2.20 | -387.49 | 5.77 | -154.66 | -1389.85 | -154.73 | -1389.78 | -9.28 |
| | | 60 | 39.16 | -0.26 | -385.21 | -0.37 | -385.10 | -6.49 | -126.22 | -1388.42 | -126.29 | -1388.36 | 9.22 |
| 32 | 85 | 76 | 37.89 | -3.45 | -388.74 | -5.88 | -386.30 | -30.53 | -110.21 | -1294.00 | -110.23 | -1293.98 | -4.66 |
| | | 122 | 37.55 | -4.76 | -385.11 | -6.61 | -383.25 | 26.50 | -139.56 | -1298.91 | -139.58 | -1298.88 | -5.46 |
| | | 114 | 39.06 | -2.09 | -387.48 | -2.16 | -387.42 | 5.16 | -153.98 | -1389.57 | -154.04 | -1389.51 | -8.52 |
| | | 60 | 39.11 | -0.08 | -384.28 | -0.21 | -384.15 | -7.09 | -125.36 | -1387.32 | -125.44 | -1387.24 | 9.91 |
| 32 | 87 | 76 | 101.20 | -11.72 | -1047.91 | -14.58 | -1045.05 | -54.37 | -521.64 | -3517.87 | -523.58 | -3515.92 | -76.37 |
| | | 122 | 105.43 | -28.89 | -1045.42 | -31.96 | -1042.34 | 55.86 | 888.85 | -3116.86 | 886.18 | -3114.19 | 103.43 |
| | | 114 | 105.04 | -17.17 | -1022.64 | -17.80 | -1022.02 | -25.06 | 685.40 | -3259.18 | 684.62 | -3258.40 | -55.59 |
| | | 60 | 103.00 | -11.57 | -1067.05 | -13.39 | -1065.23 | 43.79 | -363.93 | -3503.36 | -376.59 | -3490.70 | 198.97 |
| 32 | 97 | 76 | 96.26 | -11.06 | -996.28 | -13.93 | -993.41 | -53.11 | -484.08 | -3342.96 | -485.77 | -3341.27 | -69.38 |
| | | 122 | 99.97 | -26.66 | -993.57 | -29.67 | -990.55 | 53.90 | 780.59 | -2982.79 | 778.32 | -2980.52 | 92.36 |
| | | 114 | 99.84 | -15.82 | -973.33 | -16.31 | -972.83 | -21.84 | 595.64 | -3123.42 | 594.94 | -3122.72 | -51.18 |
| | | 60 | 98.03 | -10.60 | -1012.76 | -12.08 | -1011.28 | 38.44 | -344.63 | -3342.24 | -355.54 | -3331.34 | 180.45 |
| 32 | 102 | 76 | 37.89 | -3.45 | -388.74 | -5.88 | -386.30 | -30.53 | -110.21 | -1294.00 | -110.23 | -1293.98 | -4.66 |
| | | 122 | 37.55 | -4.76 | -385.11 | -6.61 | -383.25 | 26.50 | -139.56 | -1298.91 | -139.58 | -1298.88 | -5.46 |
| | | 114 | 39.06 | -2.09 | -387.48 | -2.16 | -387.42 | 5.16 | -153.98 | -1389.57 | -154.04 | -1389.51 | -8.52 |
| | | 60 | 39.11 | -0.08 | -384.28 | -0.21 | -384.15 | -7.09 | -125.36 | -1387.32 | -125.44 | -1387.24 | 9.91 |
| 33 | 2 | 54 | 137.90 | -18.61 | -1466.50 | -37.23 | -1447.88 | -163.14 | -662.83 | -4657.44 | -674.42 | -4645.85 | -214.86 |
| | | 111 | 142.16 | -40.00 | -1410.17 | -53.77 | -1396.40 | 136.68 | 1382.08 | -4117.23 | 1380.16 | -4115.31 | 102.53 |
| | | 122 | 149.01 | -31.61 | -1413.65 | -31.75 | -1413.51 | 13.88 | 1311.58 | -4569.72 | 1307.07 | -4565.20 | -162.95 |
| | | 76 | 143.03 | -10.48 | -1439.79 | -10.57 | -1439.70 | -11.03 | -723.95 | -5106.17 | -737.42 | -5092.70 | 242.59 |
| 33 | 26 | 54 | 35.05 | -3.80 | -361.45 | -8.61 | -356.64 | -41.21 | -98.46 | -1195.93 | -98.49 | -1195.91 | -5.54 |
| | | 111 | 34.49 | -4.22 | -353.83 | -8.68 | -349.37 | 39.22 | -126.29 | -1199.72 | -126.48 | -1199.53 | -14.15 |
| | | 122 | 36.99 | -0.35 | -357.32 | -1.30 | -356.38 | 18.33 | -150.63 | -1351.12 | -150.83 | -1350.92 | -15.76 |
| | | 76 | 37.07 | 1.69 | -353.97 | 0.87 | -353.15 | -16.99 | -124.26 | -1351.39 | -124.31 | -1351.34 | 8.18 |
| 33 | 80 | 54 | 34.96 | -2.75 | -359.99 | -8.14 | -354.61 | -43.53 | -96.94 | -1194.15 | -96.94 | -1194.15 | -1.83 |
| | | 111 | 34.49 | -4.66 | -353.38 | -8.60 | -349.43 | 36.88 | -125.15 | -1199.53 | -125.25 | -1199.44 | -10.17 |
| | | 122 | 37.00 | -0.55 | -357.10 | -1.22 | -356.44 | 15.41 | -149.11 | -1350.88 | -149.23 | -1350.75 | -12.22 |
| | | 76 | 36.97 | 2.40 | -352.25 | 1.28 | -351.13 | -19.88 | -122.28 | -1349.60 | -122.38 | -1349.50 | 11.44 |
| 33 | 85 | 54 | 34.94 | -2.86 | -359.81 | -8.19 | -354.48 | -43.30 | -96.95 | -1193.60 | -96.95 | -1193.59 | -2.24 |
| | | 111 | 34.46 | -4.62 | -353.09 | -8.62 | -349.09 | 37.11 | -125.12 | -1198.82 | -125.23 | -1198.71 | -10.61 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 122 | 36.97 | -0.52 | -356.79 | -1.22 | -356.09 | 15.70 | -149.12 | -1350.17 | -149.25 | -1350.04 | -12.62 |
| | | 76 | 36.96 | 2.34 | -352.09 | 1.26 | -351.00 | -19.60 | -122.34 | -1349.05 | -122.44 | -1348.95 | 11.07 |
| 33 | 87 | 54 | 96.59 | -12.79 | -1025.64 | -25.91 | -1012.52 | -114.54 | -455.19 | -3263.74 | -462.54 | -3256.38 | -143.54 |
| | | 111 | 99.31 | -27.29 | -987.19 | -37.00 | -977.48 | 96.07 | 904.59 | -2904.55 | 903.41 | -2903.37 | 66.94 |
| | | 122 | 104.21 | -21.20 | -989.95 | -21.33 | -989.82 | 11.35 | 854.46 | -3226.46 | 851.48 | -3223.47 | -110.32 |
| | | 76 | 100.27 | -6.78 | -1006.70 | -6.88 | -1006.60 | -9.97 | -499.28 | -3583.65 | -507.94 | -3574.99 | 163.20 |
| 33 | 97 | 54 | 91.71 | -11.90 | -972.31 | -24.44 | -959.78 | -109.01 | -422.74 | -3100.23 | -429.02 | -3093.95 | -129.50 |
| | | 111 | 94.03 | -25.19 | -936.79 | -34.48 | -927.50 | 91.54 | 796.75 | -2778.04 | 795.78 | -2777.08 | 58.81 |
| | | 122 | 98.78 | -19.20 | -939.73 | -19.36 | -939.56 | 12.37 | 748.42 | -3088.54 | 745.76 | -3085.88 | -101.00 |
| | | 76 | 95.29 | -5.88 | -954.12 | -6.02 | -953.98 | -11.65 | -465.84 | -3409.46 | -473.35 | -3401.96 | 148.41 |
| 33 | 102 | 54 | 34.94 | -2.86 | -359.81 | -8.19 | -354.48 | -43.30 | -96.95 | -1193.60 | -96.95 | -1193.59 | -2.24 |
| | | 111 | 34.46 | -4.62 | -353.09 | -8.62 | -349.09 | 37.11 | -125.12 | -1198.82 | -125.23 | -1198.71 | -10.61 |
| | | 122 | 36.97 | -0.52 | -356.79 | -1.22 | -356.09 | 15.70 | -149.12 | -1350.17 | -149.25 | -1350.04 | -12.62 |
| | | 76 | 36.96 | 2.34 | -352.09 | 1.26 | -351.00 | -19.60 | -122.34 | -1349.05 | -122.44 | -1348.95 | 11.07 |
| 34 | 2 | 70 | 124.31 | -4.72 | -1346.90 | -50.37 | -1301.25 | -243.29 | -405.41 | -4035.60 | -425.87 | -4015.14 | -271.79 |
| | | 119 | 124.66 | -22.64 | -1237.76 | -52.96 | -1207.44 | 189.53 | 1191.27 | -3655.20 | 1191.20 | -3655.13 | 18.45 |
| | | 111 | 139.37 | -25.58 | -1277.67 | -29.71 | -1273.54 | 71.79 | 1357.23 | -4365.73 | 1349.12 | -4357.62 | -215.35 |
| | | 54 | 131.90 | 9.62 | -1262.31 | 1.97 | -1254.67 | -98.29 | -774.09 | -4970.67 | -778.78 | -4965.98 | 140.26 |
| 34 | 50 | 70 | 30.85 | -0.76 | -317.66 | -10.69 | -307.74 | -55.20 | -79.91 | -1061.21 | -79.91 | -1061.21 | -0.76 |
| | | 119 | 30.18 | -2.68 | -307.51 | -10.72 | -299.47 | 48.85 | -107.15 | -1066.20 | -107.46 | -1065.89 | -17.31 |
| | | 111 | 33.68 | 1.85 | -311.82 | -0.56 | -309.41 | 27.41 | -140.32 | -1278.46 | -140.59 | -1278.19 | -17.53 |
| | | 54 | 33.64 | 5.51 | -306.21 | 2.39 | -303.08 | -31.05 | -116.11 | -1278.83 | -116.21 | -1278.73 | 10.74 |
| 34 | 82 | 70 | 30.79 | -0.45 | -317.01 | -10.64 | -306.82 | -55.88 | -79.40 | -1059.46 | -79.40 | -1059.46 | -0.12 |
| | | 119 | 30.12 | -2.87 | -306.61 | -10.71 | -298.77 | 48.18 | -106.71 | -1064.62 | -107.00 | -1064.33 | -16.62 |
| | | 111 | 33.62 | 1.76 | -311.00 | -0.54 | -308.71 | 26.67 | -139.82 | -1276.87 | -140.07 | -1276.62 | -16.88 |
| | | 54 | 33.58 | 5.73 | -305.45 | 2.45 | -302.16 | -31.79 | -115.54 | -1277.08 | -115.65 | -1276.97 | 11.34 |
| 34 | 85 | 70 | 30.75 | -0.25 | -316.61 | -10.61 | -306.25 | -56.29 | -79.09 | -1058.38 | -79.09 | -1058.38 | 0.28 |
| | | 119 | 30.09 | -2.98 | -306.06 | -10.71 | -298.34 | 47.77 | -106.43 | -1063.64 | -106.71 | -1063.36 | -16.19 |
| | | 111 | 33.59 | 1.70 | -310.49 | -0.52 | -308.27 | 26.23 | -139.51 | -1275.89 | -139.75 | -1275.65 | -16.48 |
| | | 54 | 33.54 | 5.87 | -304.97 | 2.49 | -301.59 | -32.24 | -115.19 | -1276.00 | -115.30 | -1275.88 | 11.70 |
| 34 | 87 | 70 | 86.96 | -3.18 | -940.15 | -35.00 | -908.33 | -169.70 | -281.52 | -2830.81 | -294.46 | -2817.87 | -181.15 |
| | | 119 | 87.07 | -15.49 | -865.98 | -36.74 | -844.74 | 132.72 | 779.93 | -2578.57 | 779.90 | -2578.54 | 10.14 |
| | | 111 | 97.32 | -16.85 | -893.15 | -19.88 | -890.13 | 51.36 | 886.14 | -3080.53 | 880.78 | -3075.16 | -145.76 |
| | | 54 | 92.40 | 7.17 | -882.18 | 1.65 | -876.66 | -69.83 | -531.50 | -3483.84 | -534.56 | -3480.77 | 95.06 |
| 34 | 97 | 70 | 82.47 | -2.90 | -889.46 | -32.95 | -859.41 | -160.43 | -264.32 | -2691.79 | -275.32 | -2680.79 | -163.02 |
| | | 119 | 82.43 | -14.35 | -821.26 | -34.53 | -801.09 | 125.99 | 687.15 | -2466.22 | 687.13 | -2466.21 | 6.93 |
| | | 111 | 92.12 | -14.96 | -846.30 | -17.96 | -843.30 | 49.82 | 778.20 | -2947.01 | 773.42 | -2942.22 | -133.42 |
| | | 54 | 87.75 | 7.23 | -835.67 | 1.82 | -830.27 | -67.25 | -493.64 | -3309.87 | -496.34 | -3307.17 | 87.17 |
| 34 | 102 | 70 | 30.75 | -0.25 | -316.61 | -10.61 | -306.25 | -56.29 | -79.09 | -1058.38 | -79.09 | -1058.38 | 0.28 |
| | | 119 | 30.09 | -2.98 | -306.06 | -10.71 | -298.34 | 47.77 | -106.43 | -1063.64 | -106.71 | -1063.36 | -16.19 |
| | | 111 | 33.59 | 1.70 | -310.49 | -0.52 | -308.27 | 26.23 | -139.51 | -1275.89 | -139.75 | -1275.65 | -16.48 |
| | | 54 | 33.54 | 5.87 | -304.97 | 2.49 | -301.59 | -32.24 | -115.19 | -1276.00 | -115.30 | -1275.88 | 11.70 |
| 35 | 2 | 58 | 101.48 | 23.13 | -1117.37 | -57.93 | -1036.31 | -293.06 | -1.00 | -3085.77 | -25.70 | -3061.07 | -274.91 |
| | | 113 | 99.91 | 8.66 | -995.69 | -44.84 | -942.19 | 225.54 | 830.23 | -3045.91 | 829.30 | -3044.98 | -59.98 |
| | | 119 | 120.82 | -0.17 | -1057.78 | -17.53 | -1040.42 | 134.39 | 1184.86 | -3975.36 | 1173.20 | -3963.70 | -244.95 |
| | | 70 | 114.10 | 48.32 | -1002.87 | 13.66 | -968.21 | -187.70 | -648.67 | -4587.55 | -648.70 | -4587.52 | 10.67 |
| 35 | 50 | 58 | 25.48 | 5.78 | -261.47 | -12.79 | -242.90 | -67.95 | -56.88 | -891.24 | -56.88 | -891.24 | 1.79 |
| | | 113 | 24.57 | 2.81 | -247.37 | -12.40 | -232.16 | 59.78 | -85.13 | -896.36 | -85.82 | -895.67 | -23.61 |
| | | 119 | 29.01 | 5.85 | -250.81 | 0.05 | -245.01 | 38.15 | -126.32 | -1169.48 | -126.75 | -1169.05 | -21.18 |
| | | 70 | 28.97 | 11.17 | -244.94 | 3.48 | -237.26 | -43.69 | -104.71 | -1171.19 | -104.81 | -1171.09 | 10.36 |
| 35 | 82 | 58 | 25.42 | 6.29 | -261.07 | -12.76 | -242.02 | -68.78 | -56.35 | -889.29 | -56.36 | -889.28 | 2.46 |
| | | 113 | 24.50 | 2.48 | -246.25 | -12.37 | -231.39 | 58.95 | -84.69 | -894.60 | -85.34 | -893.95 | -22.90 |
| | | 119 | 28.95 | 5.64 | -249.80 | 0.08 | -244.23 | 37.30 | -125.85 | -1167.73 | -126.25 | -1167.33 | -20.47 |
| | | 70 | 28.91 | 11.53 | -244.39 | 3.52 | -236.38 | -44.55 | -104.16 | -1169.25 | -104.27 | -1169.14 | 11.02 |
| 35 | 85 | 58 | 25.39 | 6.61 | -260.83 | -12.74 | -241.48 | -69.28 | -56.02 | -888.07 | -56.03 | -888.06 | 2.87 |
| | | 113 | 24.46 | 2.29 | -245.55 | -12.36 | -230.90 | 58.44 | -84.42 | -893.51 | -85.04 | -892.88 | -22.45 |
| | | 119 | 28.91 | 5.52 | -249.18 | 0.09 | -243.75 | 36.78 | -125.55 | -1166.64 | -125.94 | -1166.26 | -20.03 |
| | | 70 | 28.87 | 11.75 | -244.04 | 3.55 | -235.84 | -45.06 | -103.82 | -1168.04 | -103.94 | -1167.92 | 11.43 |
| 35 | 87 | 58 | 71.03 | 16.30 | -779.69 | -40.32 | -723.07 | -204.61 | -9.05 | -2174.68 | -24.61 | -2159.12 | -182.89 |
| | | 113 | 69.83 | 6.07 | -696.53 | -31.54 | -658.92 | 158.15 | 542.22 | -2149.72 | 541.53 | -2149.04 | -42.98 |
| | | 119 | 84.34 | 0.61 | -738.40 | -11.68 | -726.11 | 94.50 | 773.06 | -2805.68 | 765.34 | -2797.97 | -165.97 |
| | | 70 | 79.91 | 33.78 | -701.12 | 9.58 | -676.92 | -131.14 | -446.30 | -3214.09 | -446.33 | -3214.07 | 8.64 |
| 35 | 97 | 58 | 67.39 | 15.58 | -737.42 | -38.03 | -683.81 | -193.63 | -16.14 | -2077.76 | -29.30 | -2064.60 | -164.23 |
| | | 113 | 66.16 | 5.77 | -660.47 | -30.08 | -624.61 | 150.34 | 476.22 | -2057.02 | 475.53 | -2056.33 | -41.74 |
| | | 119 | 79.81 | 1.30 | -698.65 | -10.50 | -686.85 | 90.08 | 678.28 | -2684.67 | 671.39 | -2677.77 | -152.09 |
| | | 70 | 75.87 | 32.01 | -664.40 | 9.10 | -641.50 | -124.20 | -415.36 | -3052.39 | -415.39 | -3052.36 | 9.34 |
| 35 | 102 | 58 | 25.39 | 6.61 | -260.83 | -12.74 | -241.48 | -69.28 | -56.02 | -888.07 | -56.03 | -888.06 | 2.87 |
| | | 113 | 24.46 | 2.29 | -245.55 | -12.36 | -230.90 | 58.44 | -84.42 | -893.51 | -85.04 | -892.88 | -22.45 |
| | | 119 | 28.91 | 5.52 | -249.18 | 0.09 | -243.75 | 36.78 | -125.55 | -1166.64 | -125.94 | -1166.26 | -20.03 |
| | | 70 | 28.87 | 11.75 | -244.04 | 3.55 | -235.84 | -45.06 | -103.82 | -1168.04 | -103.94 | -1167.92 | 11.43 |
| 36 | 2 | 82 | 75.66 | 75.88 | -816.35 | -55.01 | -685.47 | -315.68 | 234.43 | -2271.37 | 219.46 | -2256.41 | -193.06 |
| | | 125 | 70.96 | 56.51 | -710.97 | -35.86 | -618.60 | 249.72 | 566.32 | -2263.55 | 562.52 | -2259.75 | -103.60 |
| | | 113 | 95.14 | 47.82 | -764.46 | 1.63 | -718.26 | 188.12 | 814.20 | -3474.35 | 803.66 | -3463.81 | -212.36 |
| | | 58 | 89.12 | 108.78 | -714.54 | 20.80 | -626.56 | -254.35 | -302.61 | -3754.26 | -303.79 | -3753.08 | -63.72 |
| 36 | 40 | 82 | 19.13 | 23.76 | -198.31 | -13.46 | -161.09 | -82.94 | -27.05 | -684.16 | -27.12 | -684.08 | 6.89 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|---------|----------|---------|----------|---------|
| | | 125 | 17.79 | 15.44 | -175.91 | -12.15 | -148.32 | 67.22 | -60.62 | -691.59 | -61.93 | -690.28 | -28.69 |
| | | 113 | 23.06 | 13.18 | -175.54 | 1.25 | -163.61 | 45.92 | -108.41 | -1025.12 | -108.94 | -1024.60 | -21.94 |
| | | 58 | 23.14 | 24.57 | -174.57 | 4.71 | -154.71 | -59.67 | -88.32 | -1027.05 | -88.44 | -1026.93 | 10.68 |
| 36 | 72 | 82 | 19.05 | 23.08 | -197.02 | -13.50 | -160.44 | -81.94 | -26.97 | -682.91 | -27.03 | -682.85 | 6.29 |
| | | 125 | 17.75 | 16.22 | -175.98 | -12.21 | -147.55 | 68.23 | -60.40 | -690.00 | -61.76 | -688.63 | -29.32 |
| | | 113 | 23.01 | 13.69 | -175.31 | 1.22 | -162.84 | 46.91 | -108.20 | -1023.50 | -108.76 | -1022.94 | -22.62 |
| | | 58 | 23.07 | 24.02 | -173.40 | 4.68 | -154.06 | -58.69 | -88.22 | -1025.79 | -88.33 | -1025.69 | 10.03 |
| 36 | 85 | 82 | 19.01 | 22.67 | -196.23 | -13.53 | -160.03 | -81.33 | -26.92 | -682.12 | -26.98 | -682.07 | 5.91 |
| | | 125 | 17.73 | 16.69 | -176.02 | -12.25 | -147.08 | 68.85 | -60.25 | -689.01 | -61.66 | -687.60 | -29.72 |
| | | 113 | 22.97 | 14.01 | -175.17 | 1.20 | -162.37 | 47.51 | -108.07 | -1022.49 | -108.65 | -1021.91 | -23.05 |
| | | 58 | 23.03 | 23.69 | -172.68 | 4.67 | -153.65 | -58.09 | -88.16 | -1025.00 | -88.26 | -1024.91 | 9.62 |
| 36 | 87 | 82 | 52.96 | 53.59 | -570.38 | -38.47 | -478.32 | -221.29 | 152.08 | -1604.58 | 142.71 | -1595.21 | -127.92 |
| | | 125 | 49.64 | 39.85 | -497.40 | -25.54 | -432.01 | 175.66 | 369.50 | -1600.89 | 366.79 | -1598.18 | -73.03 |
| | | 113 | 66.44 | 33.74 | -532.98 | 1.24 | -500.49 | 131.75 | 528.32 | -2452.50 | 521.29 | -2445.46 | -144.65 |
| | | 58 | 62.48 | 75.67 | -499.38 | 14.49 | -438.19 | -177.31 | -213.59 | -2639.41 | -214.29 | -2638.71 | -41.20 |
| 36 | 97 | 82 | 50.26 | 51.32 | -540.18 | -36.48 | -452.38 | -210.30 | 133.10 | -1536.75 | 125.23 | -1528.88 | -114.34 |
| | | 125 | 47.08 | 38.11 | -471.70 | -24.67 | -408.92 | 167.52 | 324.05 | -1535.10 | 321.42 | -1532.47 | -69.78 |
| | | 113 | 62.90 | 32.27 | -503.64 | 1.28 | -472.65 | 125.08 | 460.42 | -2347.10 | 454.07 | -2340.76 | -133.31 |
| | | 58 | 59.38 | 71.34 | -473.06 | 13.68 | -415.39 | -167.53 | -203.88 | -2515.53 | -204.44 | -2514.97 | -35.77 |
| 36 | 102 | 82 | 19.01 | 22.67 | -196.23 | -13.53 | -160.03 | -81.33 | -26.92 | -682.12 | -26.98 | -682.07 | 5.91 |
| | | 125 | 17.73 | 16.69 | -176.02 | -12.25 | -147.08 | 68.85 | -60.25 | -689.01 | -61.66 | -687.60 | -29.72 |
| | | 113 | 22.97 | 14.01 | -175.17 | 1.20 | -162.37 | 47.51 | -108.07 | -1022.49 | -108.65 | -1021.91 | -23.05 |
| | | 58 | 23.03 | 23.69 | -172.68 | 4.67 | -153.65 | -58.09 | -88.16 | -1025.00 | -88.26 | -1024.91 | 9.62 |
| 37 | 2 | 78 | 48.70 | 179.97 | -517.85 | -38.67 | -299.21 | -323.68 | 391.42 | -1386.36 | 385.07 | -1380.01 | -106.09 |
| | | 123 | 40.65 | 158.37 | -422.87 | -19.38 | -245.12 | 267.81 | 400.91 | -1412.28 | 387.01 | -1398.38 | -158.15 |
| | | 125 | 65.54 | 132.19 | -440.11 | 20.76 | -328.68 | 226.62 | 520.74 | -2830.36 | 514.12 | -2823.74 | -148.85 |
| | | 82 | 64.07 | 208.97 | -441.64 | 27.92 | -260.59 | -291.57 | -56.39 | -2948.07 | -61.66 | -2942.80 | -123.36 |
| 37 | 24 | 78 | 12.47 | 61.74 | -136.27 | -10.67 | -63.86 | -95.36 | 10.62 | -442.89 | 10.19 | -442.47 | 13.86 |
| | | 123 | 10.17 | 45.82 | -101.67 | -7.34 | -48.50 | 70.81 | -33.81 | -450.74 | -36.71 | -447.84 | -34.68 |
| | | 125 | 15.88 | 33.20 | -93.38 | 4.48 | -64.66 | 53.01 | -87.63 | -843.98 | -88.26 | -843.35 | -21.84 |
| | | 82 | 16.59 | 58.33 | -108.73 | 6.64 | -57.05 | -77.22 | -66.96 | -850.47 | -67.06 | -850.37 | 8.89 |
| 37 | 56 | 78 | 12.21 | 58.33 | -131.83 | -10.73 | -62.77 | -91.45 | 9.73 | -440.34 | 9.42 | -440.03 | 11.84 |
| | | 123 | 10.30 | 49.54 | -105.43 | -7.56 | -48.33 | 74.76 | -33.86 | -450.75 | -37.12 | -447.48 | -36.74 |
| | | 125 | 15.93 | 36.26 | -96.42 | 4.32 | -64.48 | 56.72 | -87.96 | -843.76 | -88.72 | -843.00 | -23.89 |
| | | 82 | 16.40 | 55.25 | -104.58 | 6.61 | -55.95 | -73.54 | -67.80 | -847.98 | -67.87 | -847.92 | 6.88 |
| 37 | 85 | 78 | 12.06 | 56.26 | -129.13 | -10.77 | -62.11 | -89.07 | 9.19 | -438.78 | 8.95 | -438.54 | 10.55 |
| | | 123 | 10.39 | 51.81 | -107.73 | -7.69 | -48.23 | 77.15 | -33.87 | -450.76 | -37.37 | -447.26 | -38.07 |
| | | 125 | 15.96 | 38.15 | -98.30 | 4.23 | -64.37 | 58.97 | -88.16 | -843.63 | -89.00 | -842.78 | -25.20 |
| | | 82 | 16.28 | 53.38 | -102.07 | 6.58 | -55.28 | -71.30 | -68.32 | -846.47 | -68.36 | -846.43 | 5.60 |
| 37 | 87 | 78 | 34.06 | 127.42 | -362.39 | -27.21 | -207.76 | -227.66 | 261.78 | -982.35 | 257.90 | -978.48 | -69.32 |
| | | 123 | 28.46 | 112.39 | -296.18 | -13.95 | -169.84 | 188.83 | 262.75 | -1001.62 | 253.02 | -991.89 | -110.51 |
| | | 125 | 45.79 | 93.14 | -306.44 | 14.40 | -227.71 | 158.94 | 335.40 | -1999.38 | 330.88 | -1994.86 | -102.59 |
| | | 82 | 44.88 | 146.42 | -308.02 | 19.49 | -181.10 | -203.89 | -46.95 | -2078.00 | -50.22 | -2074.72 | -81.49 |
| 37 | 97 | 78 | 32.30 | 122.32 | -343.76 | -25.97 | -195.47 | -217.08 | 236.93 | -943.64 | 233.78 | -940.48 | -60.96 |
| | | 123 | 27.01 | 108.15 | -281.20 | -13.60 | -159.44 | 180.50 | 231.56 | -963.17 | 222.32 | -953.93 | -104.67 |
| | | 125 | 43.36 | 88.98 | -289.18 | 13.54 | -213.74 | 151.12 | 289.53 | -1914.87 | 285.36 | -1910.71 | -95.74 |
| | | 82 | 42.61 | 139.08 | -291.17 | 18.44 | -170.54 | -193.26 | -51.35 | -1985.69 | -54.08 | -1982.96 | -72.61 |
| 37 | 102 | 78 | 12.06 | 56.26 | -129.13 | -10.77 | -62.11 | -89.07 | 9.19 | -438.78 | 8.95 | -438.54 | 10.55 |
| | | 123 | 10.39 | 51.81 | -107.73 | -7.69 | -48.23 | 77.15 | -33.87 | -450.76 | -37.37 | -447.26 | -38.07 |
| | | 125 | 15.96 | 38.15 | -98.30 | 4.23 | -64.37 | 58.97 | -88.16 | -843.63 | -89.00 | -842.78 | -25.20 |
| | | 82 | 16.28 | 53.38 | -102.07 | 6.58 | -55.28 | -71.30 | -68.32 | -846.47 | -68.36 | -846.43 | 5.60 |
| 38 | 2 | 50 | 29.06 | 339.08 | -227.76 | -0.16 | 111.48 | -277.87 | 531.20 | -390.50 | 530.93 | -390.22 | -15.86 |
| | | 109 | 31.23 | 342.12 | -164.08 | 25.41 | 152.63 | 244.98 | 328.22 | -508.62 | 266.62 | -447.02 | -218.52 |
| | | 123 | 44.58 | 336.09 | -197.11 | 47.54 | 91.44 | 265.69 | 328.30 | -2057.42 | 325.00 | -2054.12 | -88.63 |
| | | 78 | 44.33 | 416.56 | -235.34 | 42.87 | 138.35 | -322.43 | 99.29 | -2109.58 | 83.09 | -2093.38 | -188.45 |
| 38 | 27 | 50 | 9.63 | 114.39 | -66.67 | -0.52 | 48.25 | -87.18 | 56.91 | -153.45 | 54.51 | -151.04 | 22.37 |
| | | 109 | 8.67 | 105.62 | -37.99 | 5.80 | 61.83 | 66.11 | 2.60 | -173.94 | -8.10 | -163.23 | -42.13 |
| | | 123 | 12.80 | 99.15 | -38.72 | 12.10 | 48.33 | 66.51 | -65.31 | -628.21 | -66.25 | -627.26 | -23.07 |
| | | 78 | 14.19 | 127.55 | -61.27 | 10.95 | 55.33 | -91.77 | -46.03 | -633.72 | -46.05 | -633.70 | 3.35 |
| 38 | 59 | 50 | 9.27 | 110.89 | -62.00 | -0.59 | 49.48 | -82.74 | 55.64 | -151.09 | 53.68 | -149.13 | 20.03 |
| | | 109 | 9.02 | 109.52 | -42.34 | 5.57 | 61.61 | 70.57 | 3.31 | -175.54 | -8.56 | -163.67 | -44.52 |
| | | 123 | 13.01 | 102.87 | -42.86 | 11.89 | 48.12 | 70.57 | -65.70 | -628.85 | -66.83 | -627.72 | -25.21 |
| | | 78 | 14.00 | 124.42 | -56.82 | 11.03 | 56.57 | -87.72 | -45.20 | -631.75 | -45.20 | -631.75 | 1.23 |
| 38 | 85 | 50 | 9.05 | 108.78 | -59.18 | -0.63 | 50.23 | -80.04 | 54.88 | -149.67 | 53.18 | -147.97 | 18.54 |
| | | 109 | 9.24 | 111.91 | -45.00 | 5.43 | 61.48 | 73.28 | 3.80 | -176.58 | -8.84 | -163.94 | -46.04 |
| | | 123 | 13.14 | 105.13 | -45.38 | 11.76 | 47.99 | 73.04 | -65.92 | -629.26 | -67.18 | -628.01 | -26.57 |
| | | 78 | 13.88 | 122.54 | -54.14 | 11.08 | 57.32 | -85.26 | -44.69 | -630.57 | -44.69 | -630.57 | -0.12 |
| 38 | 87 | 50 | 20.57 | 240.49 | -159.66 | -0.19 | 81.02 | -195.92 | 361.14 | -279.98 | 361.04 | -279.88 | -8.10 |
| | | 109 | 22.04 | 242.94 | -115.32 | 17.67 | 109.95 | 173.09 | 219.32 | -362.62 | 176.57 | -319.87 | -151.82 |
| | | 123 | 31.45 | 237.95 | -137.33 | 33.26 | 67.36 | 186.87 | 210.07 | -1455.51 | 207.71 | -1453.15 | -62.63 |
| | | 78 | 31.40 | 293.97 | -164.03 | 30.06 | 99.88 | -226.32 | 59.69 | -1489.92 | 49.44 | -1479.66 | -125.65 |
| 38 | 97 | 50 | 19.74 | 231.28 | -151.73 | -0.25 | 79.80 | -187.27 | 332.59 | -272.03 | 332.55 | -271.99 | -4.73 |
| | | 109 | 21.09 | 233.92 | -109.89 | 16.65 | 107.38 | 165.81 | 197.66 | -350.58 | 157.44 | -310.35 | -142.94 |
| | | 123 | 30.08 | 228.44 | -129.70 | 31.54 | 67.20 | 178.18 | 179.75 | -1396.06 | 177.47 | -1393.78 | -59.94 |
| | | 78 | 30.16 | 281.28 | -154.96 | 28.56 | 97.75 | -215.36 | 47.52 | -1426.61 | 38.79 | -1417.87 | -113.16 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|--------|--------|----------|---------|----------|--------|----------|----------|
| 38 | 102 | 50 | 9.05 | 108.78 | -59.18 | -0.63 | 50.23 | -80.04 | 54.88 | -149.67 | 53.18 | -147.97 | 18.54 |
| | | 109 | 9.24 | 111.91 | -45.00 | 5.43 | 61.48 | 73.28 | 3.80 | -176.58 | -8.84 | -163.94 | -46.04 |
| | | 123 | 13.14 | 105.13 | -45.38 | 11.76 | 47.99 | 73.04 | -65.92 | -629.26 | -67.18 | -628.01 | -26.57 |
| | | 78 | 13.88 | 122.54 | -54.14 | 11.08 | 57.32 | -85.26 | -44.69 | -630.57 | -44.69 | -630.57 | -0.12 |
| 39 | 2 | 68 | 35.74 | 507.46 | 83.96 | 84.50 | 506.92 | -15.05 | 1031.00 | 737.42 | 738.34 | 1030.08 | -16.44 |
| | | 118 | 36.72 | 530.51 | 104.09 | 104.77 | 529.83 | 17.11 | 959.98 | 219.56 | 258.54 | 921.00 | -165.35 |
| | | 109 | 51.01 | 684.67 | -89.57 | 97.30 | 497.81 | 331.30 | 219.36 | -1138.72 | 217.07 | -1136.43 | -55.68 |
| | | 50 | 50.05 | 737.97 | -127.13 | 75.10 | 535.75 | -366.13 | 212.32 | -1174.52 | 168.19 | -1130.38 | -243.44 |
| 39 | 27 | 68 | 11.32 | 162.86 | 21.65 | 22.43 | 162.08 | -10.43 | 291.17 | 124.84 | 124.85 | 291.15 | -1.74 |
| | | 118 | 11.66 | 170.45 | 27.85 | 27.91 | 170.39 | -2.92 | 272.00 | 53.56 | 53.79 | 271.78 | -6.98 |
| | | 109 | 15.41 | 208.28 | -17.58 | 27.24 | 163.46 | 90.08 | -33.61 | -364.50 | -36.96 | -361.15 | -33.12 |
| | | 50 | 16.66 | 230.24 | -38.51 | 20.85 | 170.88 | -111.49 | -16.64 | -364.41 | -16.90 | -364.16 | 9.40 |
| 39 | 59 | 68 | 11.41 | 164.01 | 22.54 | 22.76 | 163.80 | -5.52 | 293.62 | 123.77 | 123.92 | 293.47 | -5.07 |
| | | 118 | 11.65 | 170.30 | 27.85 | 27.88 | 170.27 | 1.89 | 271.90 | 52.69 | 53.17 | 271.42 | -10.20 |
| | | 109 | 15.66 | 211.56 | -21.25 | 27.00 | 163.31 | 94.37 | -33.47 | -365.39 | -37.39 | -361.47 | -35.87 |
| | | 50 | 16.44 | 227.95 | -34.42 | 20.97 | 172.56 | -107.07 | -16.07 | -361.97 | -16.19 | -361.85 | 6.53 |
| 39 | 85 | 68 | 11.47 | 164.88 | 22.91 | 22.96 | 164.84 | -2.53 | 295.17 | 123.05 | 123.34 | 294.88 | -7.14 |
| | | 118 | 11.64 | 170.36 | 27.69 | 27.85 | 170.20 | 4.81 | 271.88 | 52.10 | 52.78 | 271.20 | -12.21 |
| | | 109 | 15.82 | 213.58 | -23.51 | 26.86 | 163.21 | 96.98 | -33.35 | -365.97 | -37.65 | -361.66 | -37.60 |
| | | 50 | 16.31 | 226.59 | -31.96 | 21.05 | 173.57 | -104.38 | -15.70 | -360.51 | -15.76 | -360.44 | 4.73 |
| 39 | 87 | 68 | 25.34 | 360.28 | 59.04 | 59.39 | 359.93 | -10.37 | 726.69 | 508.02 | 508.68 | 726.04 | -11.91 |
| | | 118 | 26.02 | 376.39 | 73.08 | 73.56 | 375.91 | 12.05 | 675.39 | 154.17 | 179.40 | 650.16 | -111.86 |
| | | 109 | 36.11 | 484.89 | -62.81 | 68.45 | 353.64 | 233.80 | 141.57 | -807.72 | 139.69 | -805.84 | -42.13 |
| | | 50 | 35.54 | 522.15 | -88.97 | 52.87 | 380.31 | -258.00 | 137.84 | -829.47 | 110.02 | -801.65 | -161.66 |
| 39 | 97 | 68 | 24.36 | 346.84 | 56.29 | 56.61 | 346.51 | -9.67 | 694.50 | 474.18 | 474.79 | 693.88 | -11.60 |
| | | 118 | 25.01 | 362.07 | 69.58 | 70.04 | 361.61 | 11.51 | 644.28 | 146.52 | 168.55 | 622.25 | -102.37 |
| | | 109 | 34.66 | 465.61 | -59.71 | 65.29 | 340.62 | 223.69 | 122.37 | -776.82 | 120.31 | -774.76 | -42.95 |
| | | 50 | 34.21 | 500.92 | -84.40 | 50.47 | 366.05 | -246.48 | 120.70 | -794.26 | 97.14 | -770.69 | -144.94 |
| 39 | 102 | 68 | 11.47 | 164.88 | 22.91 | 22.96 | 164.84 | -2.53 | 295.17 | 123.05 | 123.34 | 294.88 | -7.14 |
| | | 118 | 11.64 | 170.36 | 27.69 | 27.85 | 170.20 | 4.81 | 271.88 | 52.10 | 52.78 | 271.20 | -12.21 |
| | | 109 | 15.82 | 213.58 | -23.51 | 26.86 | 163.21 | 96.98 | -33.35 | -365.97 | -37.65 | -361.66 | -37.60 |
| | | 50 | 16.31 | 226.59 | -31.96 | 21.05 | 173.57 | -104.38 | -15.70 | -360.51 | -15.76 | -360.44 | 4.73 |
| 40 | 2 | 65 | 152.55 | 1914.30 | -941.81 | 215.68 | 756.81 | 1402.19 | 1728.55 | -165.89 | 663.19 | 899.48 | 939.82 |
| | | 117 | 152.80 | 1873.18 | -954.60 | 179.35 | 739.23 | -1385.90 | 1433.10 | -723.53 | -26.73 | 736.31 | -1008.57 |
| | | 118 | 75.21 | 1113.38 | -199.96 | 158.94 | 754.48 | 585.27 | 944.17 | 1.86 | 323.50 | 622.53 | 446.80 |
| | | 68 | 82.82 | 1094.36 | -230.98 | 120.22 | 743.17 | -584.91 | 1288.37 | -324.12 | 330.61 | 633.64 | -791.88 |
| 40 | 23 | 65 | 46.20 | 590.75 | -296.26 | 55.59 | 238.90 | 433.93 | 440.20 | -77.36 | 95.20 | 267.65 | 243.99 |
| | | 117 | 46.86 | 594.36 | -315.25 | 46.46 | 232.65 | -445.18 | 395.92 | -120.71 | 34.22 | 240.99 | -236.72 |
| | | 118 | 22.24 | 341.00 | -58.65 | 43.78 | 238.56 | 174.48 | 241.28 | 3.59 | 55.48 | 189.39 | 98.19 |
| | | 68 | 23.59 | 345.37 | -77.52 | 34.95 | 232.90 | -186.85 | 262.75 | -21.70 | 57.14 | 183.91 | -127.32 |
| 40 | 55 | 65 | 46.54 | 596.38 | -300.15 | 55.93 | 240.30 | 438.68 | 437.72 | -75.03 | 94.17 | 268.52 | 241.10 |
| | | 117 | 46.53 | 589.65 | -310.74 | 46.33 | 232.58 | -440.46 | 397.91 | -123.89 | 33.29 | 240.73 | -239.39 |
| | | 118 | 22.48 | 344.73 | -62.47 | 43.74 | 238.52 | 178.80 | 238.94 | 5.17 | 54.90 | 189.21 | 95.67 |
| | | 68 | 23.39 | 342.62 | -73.13 | 35.20 | 234.29 | -182.50 | 265.61 | -24.40 | 56.49 | 184.72 | -130.06 |
| 40 | 85 | 65 | 46.75 | 599.81 | -302.51 | 56.15 | 241.15 | 441.57 | 436.18 | -73.59 | 93.53 | 269.06 | 239.30 |
| | | 117 | 46.34 | 586.79 | -308.01 | 46.24 | 232.54 | -437.60 | 399.14 | -125.87 | 32.70 | 240.58 | -241.05 |
| | | 118 | 22.63 | 347.01 | -64.80 | 43.72 | 238.49 | 181.41 | 237.49 | 6.14 | 54.53 | 189.09 | 94.10 |
| | | 68 | 23.26 | 340.97 | -70.48 | 35.36 | 235.13 | -179.85 | 267.39 | -26.09 | 56.09 | 185.22 | -131.77 |
| 40 | 87 | 65 | 107.93 | 1356.17 | -668.20 | 151.27 | 536.69 | 993.67 | 1209.70 | -119.58 | 454.60 | 635.53 | 658.45 |
| | | 117 | 108.05 | 1327.02 | -677.47 | 125.73 | 523.83 | -982.28 | 1008.59 | -499.10 | -13.46 | 522.95 | -704.52 |
| | | 118 | 53.15 | 788.51 | -141.94 | 111.79 | 534.78 | 414.37 | 660.47 | 2.71 | 222.94 | 440.23 | 310.42 |
| | | 68 | 58.30 | 775.03 | -163.38 | 84.86 | 526.79 | -413.92 | 893.90 | -218.89 | 227.88 | 447.12 | -545.49 |
| 40 | 97 | 65 | 103.53 | 1302.63 | -642.75 | 143.85 | 516.03 | 954.73 | 1147.75 | -117.33 | 421.64 | 608.78 | 625.58 |
| | | 117 | 103.58 | 1274.62 | -651.86 | 119.50 | 503.27 | -943.94 | 962.47 | -466.34 | -7.49 | 503.62 | -667.13 |
| | | 118 | 50.94 | 757.15 | -136.59 | 106.61 | 513.95 | 397.76 | 626.48 | 3.60 | 207.99 | 422.08 | 292.47 |
| | | 68 | 55.65 | 744.18 | -156.64 | 81.25 | 506.30 | -397.12 | 840.66 | -200.05 | 212.78 | 427.83 | -509.12 |
| 40 | 102 | 65 | 46.75 | 599.81 | -302.51 | 56.15 | 241.15 | 441.57 | 436.18 | -73.59 | 93.53 | 269.06 | 239.30 |
| | | 117 | 46.34 | 586.79 | -308.01 | 46.24 | 232.54 | -437.60 | 399.14 | -125.87 | 32.70 | 240.58 | -241.05 |
| | | 118 | 22.63 | 347.01 | -64.80 | 43.72 | 238.49 | 181.41 | 237.49 | 6.14 | 54.53 | 189.09 | 94.10 |
| | | 68 | 23.26 | 340.97 | -70.48 | 35.36 | 235.13 | -179.85 | 267.39 | -26.09 | 56.09 | 185.22 | -131.77 |
| 41 | 2 | 107 | 79.14 | 1179.77 | -162.21 | 151.38 | 866.19 | 567.88 | 1137.05 | 132.59 | 299.07 | 970.57 | 373.50 |
| | | 149 | 82.68 | 1138.41 | -189.87 | 105.60 | 842.94 | -552.42 | 1338.65 | -67.41 | 312.06 | 959.18 | -624.15 |
| | | 148 | 166.49 | 2156.84 | -1064.21 | 224.56 | 868.07 | 1578.06 | 1537.92 | -217.41 | 471.02 | 849.49 | 857.02 |
| | | 106 | 165.39 | 2089.44 | -1093.19 | 162.25 | 834.00 | -1555.46 | 1320.32 | -609.51 | 1.56 | 709.26 | -897.69 |
| 41 | 32 | 107 | 23.03 | 353.16 | -70.87 | 43.77 | 238.51 | 188.34 | 233.96 | 8.62 | 53.70 | 188.87 | 90.15 |
| | | 149 | 22.94 | 336.65 | -63.49 | 35.74 | 237.42 | -172.80 | 272.32 | -30.56 | 55.12 | 186.64 | -136.42 |
| | | 148 | 47.30 | 608.98 | -308.58 | 56.84 | 243.56 | 449.18 | 432.47 | -69.76 | 92.03 | 270.69 | 234.69 |
| | | 106 | 45.82 | 579.09 | -300.66 | 45.99 | 232.44 | -429.88 | 402.70 | -131.05 | 31.26 | 240.38 | -245.54 |
| 41 | 64 | 107 | 22.78 | 349.32 | -67.04 | 43.80 | 238.48 | 184.02 | 236.13 | 7.03 | 54.25 | 188.92 | 92.67 |
| | | 149 | 23.14 | 339.27 | -67.85 | 35.47 | 235.95 | -177.17 | 269.35 | -27.93 | 55.73 | 185.69 | -133.68 |
| | | 148 | 46.96 | 603.27 | -304.72 | 56.47 | 242.07 | 444.41 | 434.82 | -72.12 | 93.01 | 269.68 | 237.58 |
| | | 106 | 46.14 | 583.73 | -305.20 | 46.11 | 232.42 | -434.59 | 400.60 | -127.94 | 32.16 | 240.50 | -242.87 |
| 41 | 85 | 107 | 22.63 | 347.00 | -64.73 | 43.81 | 238.46 | 181.41 | 237.50 | 6.03 | 54.59 | 188.94 | 94.25 |
| | | 149 | 23.26 | 340.88 | -70.51 | 35.31 | 235.06 | -179.82 | 267.50 | -26.28 | 56.11 | 185.12 | -131.97 |
| | | 148 | 46.75 | 599.80 | -302.38 | 56.25 | 241.17 | 441.51 | 436.29 | -73.60 | 93.62 | 269.07 | 239.38 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|---------|--------|--------|----------|---------|----------|--------|----------|---------|
| 41 | 87 | 106 | 46.33 | 586.55 | -307.96 | 46.18 | 232.41 | -437.46 | 399.29 | -126.00 | 32.72 | 240.57 | -241.21 |
| | | 107 | 55.77 | 832.72 | -116.71 | 106.76 | 609.25 | 402.77 | 789.61 | 89.29 | 206.66 | 672.24 | 261.57 |
| | | 149 | 58.21 | 804.31 | -135.90 | 75.11 | 593.30 | -392.25 | 928.10 | -48.44 | 215.52 | 664.14 | -433.70 |
| | | 148 | 117.22 | 1517.87 | -749.79 | 157.21 | 610.87 | 1110.91 | 1083.16 | -154.46 | 326.50 | 602.20 | 603.26 |
| 41 | 97 | 106 | 116.44 | 1471.17 | -769.85 | 114.32 | 586.99 | -1095.30 | 933.44 | -423.12 | 5.40 | 504.91 | -630.62 |
| | | 107 | 53.28 | 796.87 | -113.83 | 102.09 | 580.95 | 387.32 | 743.16 | 81.10 | 193.38 | 630.87 | 248.46 |
| | | 149 | 55.57 | 770.45 | -131.81 | 72.48 | 566.16 | -377.61 | 872.25 | -47.49 | 201.65 | 623.11 | -408.75 |
| | | 148 | 111.90 | 1448.14 | -716.16 | 149.20 | 582.78 | 1060.21 | 1034.53 | -149.09 | 306.57 | 578.87 | 575.94 |
| 41 | 102 | 106 | 111.13 | 1404.33 | -734.99 | 109.24 | 560.10 | -1045.64 | 894.80 | -398.21 | 9.28 | 487.31 | -600.70 |
| | | 107 | 22.63 | 347.00 | -64.73 | 43.81 | 238.46 | 181.41 | 237.50 | 6.03 | 54.59 | 188.94 | 94.25 |
| | | 149 | 23.26 | 340.88 | -70.51 | 35.31 | 235.06 | -179.82 | 267.50 | -26.28 | 56.11 | 185.12 | -131.97 |
| | | 148 | 46.75 | 599.80 | -302.38 | 56.25 | 241.17 | 441.51 | 436.29 | -73.60 | 93.62 | 269.07 | 239.38 |
| 42 | 2 | 106 | 46.33 | 586.55 | -307.96 | 46.18 | 232.41 | -437.46 | 399.29 | -126.00 | 32.72 | 240.57 | -241.21 |
| | | 108 | 52.15 | 815.03 | -30.10 | 90.44 | 694.48 | 295.54 | 99.38 | -726.54 | 88.07 | -715.22 | -96.01 |
| | | 150 | 51.92 | 844.38 | -59.08 | 66.52 | 718.78 | -312.57 | 138.49 | -734.04 | 123.06 | -718.61 | -115.01 |
| | | 149 | 47.59 | 700.04 | 85.98 | 92.50 | 693.51 | 62.94 | 1206.62 | 583.49 | 588.66 | 1201.46 | -56.50 |
| 42 | 30 | 107 | 48.59 | 711.57 | 102.10 | 105.59 | 708.09 | -45.97 | 1108.79 | 213.34 | 218.84 | 1103.28 | -70.00 |
| | | 108 | 15.41 | 208.24 | -17.58 | 27.26 | 163.40 | 90.09 | -33.31 | -364.54 | -36.65 | -361.20 | -33.11 |
| | | 150 | 16.66 | 230.17 | -38.53 | 20.83 | 170.81 | -111.48 | -16.67 | -364.51 | -16.92 | -364.26 | 9.31 |
| | | 149 | 11.31 | 162.81 | 21.68 | 22.46 | 162.03 | -10.44 | 291.08 | 124.85 | 124.87 | 291.06 | -1.79 |
| 42 | 62 | 107 | 11.65 | 170.35 | 27.85 | 27.91 | 170.29 | -2.87 | 271.98 | 53.81 | 54.04 | 271.75 | -7.02 |
| | | 108 | 15.66 | 211.53 | -21.26 | 27.02 | 163.25 | 94.38 | -33.17 | -365.43 | -37.08 | -361.51 | -35.87 |
| | | 150 | 16.44 | 227.87 | -34.43 | 20.96 | 172.48 | -107.06 | -16.10 | -362.07 | -16.22 | -361.95 | 6.45 |
| | | 149 | 11.41 | 163.96 | 22.57 | 22.79 | 163.75 | -5.52 | 293.53 | 123.78 | 123.93 | 293.38 | -5.11 |
| 42 | 85 | 107 | 11.64 | 170.20 | 27.84 | 27.87 | 170.17 | 1.93 | 271.88 | 52.94 | 53.42 | 271.40 | -10.25 |
| | | 108 | 15.82 | 213.54 | -23.52 | 26.87 | 163.15 | 96.99 | -33.05 | -366.01 | -37.35 | -361.71 | -37.60 |
| | | 150 | 16.30 | 226.52 | -31.98 | 21.03 | 173.50 | -104.37 | -15.72 | -360.61 | -15.79 | -360.55 | 4.65 |
| | | 149 | 11.47 | 164.83 | 22.95 | 22.99 | 164.79 | -2.54 | 295.08 | 123.06 | 123.36 | 294.78 | -7.18 |
| 42 | 87 | 107 | 11.63 | 170.26 | 27.68 | 27.84 | 170.10 | 4.85 | 271.86 | 52.35 | 53.03 | 271.18 | -12.25 |
| | | 108 | 36.87 | 571.57 | -22.95 | 63.88 | 484.74 | 209.96 | 61.85 | -533.16 | 53.73 | -525.04 | -69.02 |
| | | 150 | 36.77 | 592.87 | -43.40 | 47.15 | 502.32 | -222.29 | 89.32 | -536.53 | 79.93 | -527.15 | -76.05 |
| | | 149 | 33.25 | 488.40 | 60.64 | 64.73 | 484.32 | 41.62 | 843.71 | 405.45 | 408.88 | 840.28 | -38.62 |
| 42 | 97 | 107 | 33.93 | 496.87 | 71.98 | 74.11 | 494.74 | -30.00 | 775.43 | 149.22 | 152.97 | 771.68 | -48.30 |
| | | 108 | 35.34 | 543.41 | -23.64 | 61.17 | 458.59 | 202.24 | 50.92 | -529.92 | 43.03 | -522.03 | -67.24 |
| | | 150 | 35.31 | 564.37 | -43.19 | 45.33 | 475.85 | -214.35 | 77.85 | -531.36 | 70.16 | -523.67 | -68.00 |
| | | 149 | 31.48 | 461.88 | 57.97 | 61.41 | 458.44 | 37.12 | 799.84 | 382.19 | 385.28 | 796.75 | -35.75 |
| 42 | 102 | 107 | 32.12 | 470.28 | 68.80 | 70.54 | 468.54 | -26.33 | 735.03 | 141.15 | 144.61 | 731.57 | -45.20 |
| | | 108 | 15.82 | 213.54 | -23.52 | 26.87 | 163.15 | 96.99 | -33.05 | -366.01 | -37.35 | -361.71 | -37.60 |
| | | 150 | 16.30 | 226.52 | -31.98 | 21.03 | 173.50 | -104.37 | -15.72 | -360.61 | -15.79 | -360.55 | 4.65 |
| | | 149 | 11.47 | 164.83 | 22.95 | 22.99 | 164.79 | -2.54 | 295.08 | 123.06 | 123.36 | 294.78 | -7.18 |
| 43 | 2 | 107 | 11.63 | 170.26 | 27.68 | 27.84 | 170.10 | 4.85 | 271.86 | 52.35 | 53.03 | 271.18 | -12.25 |
| | | 112 | 45.88 | 485.16 | -77.54 | 41.10 | 366.51 | 229.53 | 70.87 | -1512.79 | 68.00 | -1509.92 | -67.39 |
| | | 154 | 46.52 | 528.75 | -106.33 | 36.18 | 386.24 | -264.95 | 75.21 | -1542.05 | 67.84 | -1534.68 | -108.88 |
| | | 150 | 30.06 | 469.09 | -93.34 | 7.47 | 368.28 | -215.72 | 380.86 | -107.88 | 380.11 | -107.13 | 19.17 |
| 43 | 30 | 108 | 31.73 | 490.09 | -59.22 | 27.89 | 402.98 | 200.66 | 215.84 | -245.39 | 130.35 | -159.89 | -179.23 |
| | | 112 | 12.81 | 99.12 | -38.78 | 12.09 | 48.25 | 66.54 | -64.81 | -628.25 | -65.76 | -627.29 | -23.17 |
| | | 154 | 14.19 | 127.48 | -61.30 | 10.94 | 55.24 | -91.75 | -46.09 | -633.85 | -46.11 | -633.83 | 3.38 |
| | | 150 | 9.62 | 114.35 | -66.69 | -0.52 | 48.18 | -87.18 | 56.87 | -153.53 | 54.50 | -151.15 | 22.24 |
| 43 | 62 | 108 | 8.66 | 105.57 | -38.05 | 5.79 | 61.73 | 66.14 | 2.97 | -173.84 | -7.68 | -163.20 | -42.06 |
| | | 112 | 13.01 | 102.84 | -42.91 | 11.88 | 48.04 | 70.60 | -65.20 | -628.89 | -66.34 | -627.76 | -25.30 |
| | | 154 | 14.00 | 124.36 | -56.85 | 11.02 | 56.49 | -87.71 | -45.26 | -631.88 | -45.26 | -631.87 | 1.26 |
| | | 150 | 9.26 | 110.84 | -62.02 | -0.58 | 49.41 | -82.74 | 55.60 | -151.17 | 53.67 | -149.24 | 19.90 |
| 43 | 85 | 108 | 9.02 | 109.47 | -42.40 | 5.56 | 61.51 | 70.59 | 3.67 | -175.45 | -8.14 | -163.64 | -44.45 |
| | | 112 | 13.14 | 105.10 | -45.43 | 11.75 | 47.91 | 73.06 | -65.43 | -629.31 | -66.69 | -628.04 | -26.66 |
| | | 154 | 13.88 | 122.47 | -54.17 | 11.06 | 57.24 | -85.25 | -44.74 | -630.69 | -44.74 | -630.69 | -0.10 |
| | | 150 | 9.05 | 108.73 | -59.20 | -0.63 | 50.16 | -80.04 | 54.84 | -149.75 | 53.17 | -148.08 | 18.40 |
| 43 | 87 | 108 | 9.24 | 111.86 | -45.06 | 5.42 | 61.38 | 73.30 | 4.15 | -176.48 | -8.42 | -163.91 | -45.97 |
| | | 112 | 32.33 | 336.79 | -57.09 | 28.97 | 250.73 | 162.76 | 38.52 | -1092.43 | 36.44 | -1090.35 | -48.48 |
| | | 154 | 32.85 | 368.27 | -77.55 | 25.60 | 265.12 | -188.00 | 43.84 | -1111.79 | 39.26 | -1107.21 | -72.60 |
| | | 150 | 21.21 | 326.43 | -69.33 | 4.90 | 252.21 | -154.49 | 261.15 | -91.82 | 260.49 | -91.16 | 15.23 |
| 43 | 97 | 108 | 22.36 | 340.91 | -44.76 | 19.31 | 276.84 | 143.54 | 143.74 | -186.42 | 85.78 | -128.45 | -125.61 |
| | | 112 | 30.89 | 316.89 | -57.00 | 27.68 | 232.22 | 156.49 | 25.51 | -1069.29 | 23.46 | -1067.25 | -47.31 |
| | | 154 | 31.45 | 347.69 | -76.69 | 24.55 | 246.45 | -180.87 | 33.58 | -1086.54 | 29.74 | -1082.71 | -65.45 |
| | | 150 | 20.29 | 307.94 | -69.77 | 4.32 | 233.85 | -149.99 | 243.08 | -102.87 | 242.33 | -102.12 | 16.13 |
| 43 | 102 | 108 | 21.37 | 321.47 | -45.76 | 18.14 | 257.57 | 139.22 | 129.04 | -191.45 | 75.68 | -138.09 | -119.39 |
| | | 112 | 13.14 | 105.10 | -45.43 | 11.75 | 47.91 | 73.06 | -65.43 | -629.31 | -66.69 | -628.04 | -26.66 |
| | | 154 | 13.88 | 122.47 | -54.17 | 11.06 | 57.24 | -85.25 | -44.74 | -630.69 | -44.74 | -630.69 | -0.10 |
| | | 150 | 9.05 | 108.73 | -59.20 | -0.63 | 50.16 | -80.04 | 54.84 | -149.75 | 53.17 | -148.08 | 18.40 |
| 44 | 2 | 108 | 9.24 | 111.86 | -45.06 | 5.42 | 61.38 | 73.30 | 4.15 | -176.48 | -8.42 | -163.91 | -45.97 |
| | | 116 | 38.75 | 218.77 | -174.29 | 19.10 | 25.38 | 196.51 | 57.14 | -2184.85 | 55.31 | -2183.02 | -63.97 |
| | | 158 | 39.40 | 268.31 | -200.35 | 23.97 | 43.99 | -234.12 | 36.99 | -2206.32 | 34.27 | -2203.59 | -78.13 |
| | | 154 | 29.61 | 264.56 | -264.74 | -28.50 | 28.32 | -263.12 | 256.06 | -963.85 | 256.05 | -963.83 | -4.79 |
| 44 | 33 | 112 | 30.92 | 259.83 | -206.80 | -18.52 | 71.54 | 228.93 | 156.78 | -988.76 | 136.13 | -968.12 | -152.39 |
| | | 116 | 15.89 | 33.19 | -93.47 | 4.47 | -64.75 | 53.04 | -87.02 | -844.03 | -87.66 | -843.39 | -21.99 |
| | | 158 | 16.59 | 58.28 | -108.79 | 6.64 | -57.14 | -77.21 | -67.04 | -850.62 | -67.14 | -850.52 | 8.99 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|---------|----------|---------|----------|---------|
| | | 154 | 12.47 | 61.70 | -136.32 | -10.68 | -63.95 | -95.36 | 10.58 | -443.02 | 10.17 | -442.61 | 13.70 |
| | | 112 | 10.18 | 45.80 | -101.76 | -7.36 | -48.61 | 70.84 | -33.30 | -450.69 | -36.18 | -447.81 | -34.56 |
| 44 | 65 | 116 | 15.94 | 36.25 | -96.51 | 4.31 | -64.58 | 56.75 | -87.35 | -843.80 | -88.12 | -843.04 | -24.04 |
| | | 158 | 16.40 | 55.19 | -104.64 | 6.60 | -56.04 | -73.52 | -67.89 | -848.13 | -67.96 | -848.07 | 6.98 |
| | | 112 | 12.22 | 58.29 | -131.88 | -10.74 | -62.85 | -91.44 | 9.69 | -440.47 | 9.39 | -440.16 | 11.68 |
| | | 112 | 10.31 | 49.51 | -105.53 | -7.57 | -48.44 | 74.78 | -33.35 | -450.69 | -36.59 | -447.46 | -36.63 |
| 44 | 85 | 116 | 15.97 | 38.14 | -98.39 | 4.22 | -64.47 | 59.00 | -87.55 | -843.67 | -88.40 | -842.82 | -25.35 |
| | | 158 | 16.29 | 53.33 | -102.12 | 6.58 | -55.37 | -71.29 | -68.41 | -846.62 | -68.45 | -846.58 | 5.69 |
| | | 154 | 12.06 | 56.22 | -129.18 | -10.77 | -62.19 | -89.06 | 9.16 | -438.91 | 8.91 | -438.67 | 10.39 |
| | | 112 | 10.39 | 51.78 | -107.82 | -7.71 | -48.34 | 77.17 | -33.36 | -450.71 | -36.84 | -447.23 | -37.95 |
| 44 | 87 | 116 | 27.22 | 149.70 | -128.08 | 13.30 | 8.32 | 138.87 | 26.42 | -1569.05 | 25.09 | -1567.73 | -46.03 |
| | | 158 | 27.98 | 185.00 | -146.20 | 16.86 | 21.94 | -165.58 | 15.37 | -1583.59 | 13.72 | -1581.94 | -51.33 |
| | | 154 | 20.89 | 183.00 | -192.86 | -20.44 | 10.59 | -187.29 | 171.89 | -701.05 | 171.89 | -701.04 | -1.81 |
| | | 112 | 21.75 | 179.12 | -151.24 | -13.38 | 41.25 | 162.91 | 99.97 | -719.17 | 85.84 | -705.04 | -106.65 |
| 44 | 97 | 116 | 25.92 | 138.84 | -127.63 | 12.54 | -1.33 | 133.06 | 11.63 | -1527.59 | 10.32 | -1526.28 | -44.93 |
| | | 158 | 27.36 | 172.92 | -144.68 | 16.07 | 12.17 | -158.79 | 4.88 | -1540.84 | 3.55 | -1539.50 | -45.45 |
| | | 154 | 19.98 | 171.62 | -190.49 | -19.87 | 1.00 | -180.75 | 156.55 | -690.80 | 156.55 | -690.80 | -0.31 |
| | | 112 | 20.75 | 167.40 | -149.97 | -13.09 | 30.52 | 157.18 | 85.05 | -708.90 | 71.92 | -695.78 | -101.22 |
| 44 | 102 | 116 | 15.97 | 38.14 | -98.39 | 4.22 | -64.47 | 59.00 | -87.55 | -843.67 | -88.40 | -842.82 | -25.35 |
| | | 158 | 16.29 | 53.33 | -102.12 | 6.58 | -55.37 | -71.29 | -68.41 | -846.62 | -68.45 | -846.58 | 5.69 |
| | | 154 | 12.06 | 56.22 | -129.18 | -10.77 | -62.19 | -89.06 | 9.16 | -438.91 | 8.91 | -438.67 | 10.39 |
| | | 112 | 10.39 | 51.78 | -107.82 | -7.71 | -48.34 | 77.17 | -33.36 | -450.71 | -36.84 | -447.23 | -37.95 |
| 45 | 2 | 120 | 58.50 | 90.86 | -368.82 | 13.05 | -291.01 | 172.37 | 42.22 | -2784.32 | 41.00 | -2783.10 | -58.80 |
| | | 162 | 59.27 | 128.04 | -377.87 | 20.61 | -270.44 | -206.90 | 15.45 | -2788.29 | 14.07 | -2786.91 | -62.18 |
| | | 158 | 45.82 | 119.92 | -442.72 | -38.96 | -283.84 | -253.27 | 170.63 | -1701.36 | 170.51 | -1701.24 | -14.95 |
| | | 116 | 40.72 | 99.61 | -380.32 | -34.70 | -246.01 | 215.46 | 144.13 | -1691.08 | 135.57 | -1682.52 | -124.99 |
| 45 | 49 | 120 | 23.07 | 13.18 | -175.63 | 1.25 | -163.70 | 45.94 | -107.78 | -1025.17 | -108.32 | -1024.63 | -22.11 |
| | | 162 | 23.14 | 24.54 | -174.65 | 4.70 | -154.81 | -59.65 | -88.45 | -1027.22 | -88.57 | -1027.10 | 10.81 |
| | | 158 | 19.14 | 23.73 | -198.37 | -13.47 | -161.18 | -82.93 | -27.09 | -684.31 | -27.16 | -684.24 | 6.74 |
| | | 116 | 17.80 | 15.44 | -176.03 | -12.16 | -148.43 | 67.25 | -60.07 | -691.58 | -61.36 | -690.29 | -28.58 |
| 45 | 81 | 120 | 23.01 | 13.69 | -175.41 | 1.22 | -162.94 | 46.93 | -107.57 | -1023.55 | -108.14 | -1022.98 | -22.80 |
| | | 162 | 23.08 | 23.99 | -173.48 | 4.68 | -154.16 | -58.66 | -88.35 | -1025.96 | -88.46 | -1025.85 | 10.16 |
| | | 158 | 19.06 | 23.05 | -197.09 | -13.51 | -160.53 | -81.92 | -27.02 | -683.06 | -27.08 | -683.00 | 6.13 |
| | | 116 | 17.76 | 16.21 | -176.10 | -12.22 | -147.67 | 68.26 | -59.84 | -689.99 | -61.20 | -688.63 | -29.21 |
| 45 | 85 | 120 | 22.98 | 14.01 | -175.26 | 1.20 | -162.46 | 47.53 | -107.44 | -1022.54 | -108.03 | -1021.95 | -23.22 |
| | | 162 | 23.04 | 23.66 | -172.76 | 4.66 | -153.76 | -58.06 | -88.30 | -1025.18 | -88.40 | -1025.07 | 9.75 |
| | | 158 | 19.02 | 22.64 | -196.30 | -13.54 | -160.12 | -81.31 | -26.97 | -682.27 | -27.02 | -682.22 | 5.75 |
| | | 116 | 17.74 | 16.69 | -176.13 | -12.26 | -147.19 | 68.87 | -59.70 | -689.00 | -61.09 | -687.60 | -29.61 |
| 45 | 87 | 120 | 42.05 | 61.84 | -268.65 | 8.86 | -215.67 | 121.25 | 13.82 | -1992.55 | 12.93 | -1991.66 | -42.29 |
| | | 162 | 42.56 | 87.88 | -274.31 | 14.36 | -200.80 | -145.68 | -1.60 | -1995.43 | -2.41 | -1994.62 | -40.15 |
| | | 158 | 33.06 | 82.42 | -320.78 | -27.78 | -210.58 | -179.69 | 110.13 | -1225.18 | 110.07 | -1225.12 | -9.20 |
| | | 116 | 29.49 | 68.03 | -276.43 | -24.77 | -183.63 | 152.82 | 88.09 | -1219.22 | 82.24 | -1213.36 | -87.27 |
| 45 | 97 | 120 | 40.97 | 57.05 | -265.24 | 8.14 | -216.33 | 115.63 | -2.40 | -1933.22 | -3.28 | -1932.34 | -41.26 |
| | | 162 | 41.43 | 81.76 | -269.96 | 13.57 | -201.76 | -139.05 | -13.06 | -1935.96 | -13.69 | -1935.33 | -34.82 |
| | | 158 | 32.34 | 76.80 | -315.10 | -26.86 | -211.44 | -172.85 | 96.02 | -1195.88 | 95.98 | -1195.83 | -7.58 |
| | | 116 | 28.96 | 62.98 | -272.36 | -23.97 | -185.40 | 146.97 | 70.88 | -1191.57 | 65.45 | -1186.14 | -82.64 |
| 45 | 102 | 120 | 22.98 | 14.01 | -175.26 | 1.20 | -162.46 | 47.53 | -107.44 | -1022.54 | -108.03 | -1021.95 | -23.22 |
| | | 162 | 23.04 | 23.66 | -172.76 | 4.66 | -153.76 | -58.06 | -88.30 | -1025.18 | -88.40 | -1025.07 | 9.75 |
| | | 158 | 19.02 | 22.64 | -196.30 | -13.54 | -160.12 | -81.31 | -26.97 | -682.27 | -27.02 | -682.22 | 5.75 |
| | | 116 | 17.74 | 16.69 | -176.13 | -12.26 | -147.19 | 68.87 | -59.70 | -689.00 | -61.09 | -687.60 | -29.61 |
| 46 | 2 | 124 | 79.94 | 49.34 | -611.92 | 13.22 | -575.79 | 150.27 | 45.61 | -3309.82 | 44.67 | -3308.89 | -55.96 |
| | | 166 | 79.52 | 72.92 | -603.82 | 20.08 | -550.99 | -181.56 | -5.08 | -3308.29 | 6.22 | -3307.15 | -61.24 |
| | | 162 | 66.57 | 48.77 | -649.66 | -37.56 | -563.33 | -229.88 | 120.72 | -2346.13 | 120.46 | -2345.87 | -25.21 |
| | | 120 | 63.34 | 32.00 | -601.35 | -34.95 | -534.40 | 194.73 | 126.54 | -2335.55 | 122.17 | -2331.18 | -103.64 |
| 46 | 51 | 124 | 29.02 | 5.83 | -250.89 | 0.04 | -245.10 | 38.12 | -125.72 | -1169.52 | -126.16 | -1169.08 | -21.43 |
| | | 166 | 28.98 | 11.19 | -245.06 | 3.50 | -237.38 | -43.72 | -104.89 | -1171.39 | -104.99 | -1171.28 | 10.43 |
| | | 162 | 25.49 | 5.76 | -261.58 | -12.81 | -243.01 | -67.97 | -56.96 | -891.43 | -56.96 | -891.42 | 1.63 |
| | | 120 | 24.58 | 2.78 | -247.47 | -12.41 | -232.27 | 59.77 | -84.60 | -896.38 | -85.28 | -895.70 | -23.57 |
| 46 | 83 | 124 | 28.96 | 5.64 | -249.88 | 0.08 | -244.32 | 37.29 | -125.25 | -1167.77 | -125.66 | -1167.36 | -20.67 |
| | | 166 | 28.92 | 11.53 | -244.49 | 3.53 | -236.49 | -44.54 | -104.35 | -1169.44 | -104.46 | -1169.32 | 11.14 |
| | | 162 | 25.43 | 6.27 | -261.16 | -12.77 | -242.12 | -68.77 | -56.42 | -889.46 | -56.43 | -889.45 | 2.32 |
| | | 120 | 24.51 | 2.47 | -246.35 | -12.38 | -231.50 | 58.96 | -84.16 | -894.63 | -84.80 | -893.98 | -22.84 |
| 46 | 85 | 124 | 28.92 | 5.52 | -249.26 | 0.10 | -243.84 | 36.79 | -124.96 | -1166.68 | -125.36 | -1166.29 | -20.20 |
| | | 166 | 28.88 | 11.74 | -244.13 | 3.55 | -235.94 | -45.04 | -104.01 | -1168.23 | -104.13 | -1168.10 | 11.59 |
| | | 162 | 25.40 | 6.59 | -260.90 | -12.74 | -241.57 | -69.26 | -56.09 | -888.24 | -56.10 | -888.23 | 2.74 |
| | | 120 | 24.47 | 2.29 | -245.66 | -12.36 | -231.01 | 58.47 | -83.88 | -893.53 | -84.50 | -892.91 | -22.38 |
| 46 | 87 | 124 | 57.13 | 33.38 | -440.93 | 8.83 | -416.37 | 105.09 | 13.74 | -2362.10 | 13.07 | -2361.43 | -40.00 |
| | | 166 | 56.85 | 49.84 | -434.76 | 13.86 | -398.78 | -127.04 | -17.37 | -2361.17 | -18.03 | -2360.51 | -39.28 |
| | | 162 | 47.76 | 33.14 | -467.64 | -26.74 | -407.76 | -162.49 | 72.98 | -1682.50 | 72.83 | -1682.34 | -16.44 |
| | | 120 | 45.48 | 21.41 | -433.43 | -24.95 | -387.07 | 137.61 | 73.15 | -1676.15 | 70.18 | -1673.17 | -72.08 |
| 46 | 97 | 124 | 55.36 | 30.57 | -430.72 | 7.95 | -408.10 | 99.61 | -4.84 | -2285.55 | -5.50 | -2284.89 | -38.77 |
| | | 166 | 55.10 | 46.16 | -424.40 | 12.96 | -391.20 | -120.50 | -29.40 | -2284.71 | -29.90 | -2284.20 | -33.77 |
| | | 162 | 46.45 | 30.51 | -456.37 | -25.81 | -400.05 | -155.72 | 58.57 | -1635.67 | 58.45 | -1635.54 | -14.48 |
| | | 120 | 44.27 | 19.38 | -423.51 | -24.15 | -379.97 | 131.85 | 54.20 | -1630.80 | 51.46 | -1628.05 | -67.96 |
| 46 | 102 | 124 | 28.92 | 5.52 | -249.26 | 0.10 | -243.84 | 36.79 | -124.96 | -1166.68 | -125.36 | -1166.29 | -20.20 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|-------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 166 | 28.88 | 11.74 | -244.13 | 3.55 | -235.94 | -45.04 | -104.01 | -1168.23 | -104.13 | -1168.10 | 11.59 |
| | | 162 | 25.40 | 6.59 | -260.90 | -12.74 | -241.57 | -69.26 | -56.09 | -888.24 | -56.10 | -888.23 | 2.74 |
| | | 120 | 24.47 | 2.29 | -245.66 | -12.36 | -231.01 | 58.47 | -83.88 | -893.53 | -84.50 | -892.91 | -22.38 |
| 47 | 2 | 110 | 99.26 | 33.01 | -847.36 | 14.13 | -828.48 | 127.53 | 85.51 | -3759.47 | 84.61 | -3758.57 | -58.58 |
| | | 152 | 97.74 | 48.63 | -826.97 | 19.36 | -797.70 | -157.40 | -32.81 | -3762.01 | -34.03 | -3760.79 | -67.60 |
| | | 166 | 86.28 | 18.46 | -861.27 | -32.11 | -810.69 | -204.78 | 89.83 | -2920.07 | 89.20 | -2919.44 | -43.62 |
| | | 124 | 84.24 | 8.56 | -826.55 | -28.91 | -789.07 | 172.90 | 118.72 | -2913.86 | 116.27 | -2911.41 | -86.05 |
| 47 | 51 | 110 | 33.69 | 1.83 | -311.87 | -0.56 | -309.48 | 27.29 | -139.79 | -1278.48 | -140.07 | -1278.20 | -17.84 |
| | | 152 | 33.65 | 5.52 | -306.35 | 2.38 | -303.20 | -31.17 | -116.35 | -1278.98 | -116.45 | -1278.88 | 10.73 |
| | | 166 | 30.86 | -0.74 | -317.81 | -10.71 | -307.85 | -55.32 | -80.01 | -1061.37 | -80.01 | -1061.37 | -0.98 |
| | | 124 | 30.19 | -2.73 | -307.57 | -10.73 | -299.56 | 48.75 | -106.66 | -1066.24 | -106.97 | -1065.92 | -17.41 |
| 47 | 83 | 110 | 33.63 | 1.75 | -311.06 | -0.53 | -308.78 | 26.63 | -139.31 | -1276.89 | -139.57 | -1276.63 | -17.08 |
| | | 152 | 33.58 | 5.74 | -305.56 | 2.45 | -302.27 | -31.82 | -115.79 | -1277.26 | -115.91 | -1277.15 | 11.43 |
| | | 166 | 30.80 | -0.44 | -317.12 | -10.64 | -306.92 | -55.91 | -79.52 | -1059.64 | -79.52 | -1059.64 | -0.26 |
| | | 124 | 30.13 | -2.88 | -306.70 | -10.72 | -298.86 | 48.15 | -106.23 | -1064.66 | -106.52 | -1064.37 | -16.64 |
| 47 | 85 | 110 | 33.60 | 1.70 | -310.56 | -0.51 | -308.34 | 26.23 | -139.01 | -1275.90 | -139.25 | -1275.66 | -16.62 |
| | | 152 | 33.54 | 5.87 | -305.07 | 2.49 | -301.70 | -32.21 | -115.45 | -1276.19 | -115.57 | -1276.07 | 11.86 |
| | | 166 | 30.76 | -0.26 | -316.69 | -10.61 | -306.35 | -56.27 | -79.21 | -1058.56 | -79.21 | -1058.56 | 0.18 |
| | | 124 | 30.10 | -2.98 | -306.16 | -10.70 | -298.43 | 47.78 | -105.95 | -1063.68 | -106.23 | -1063.40 | -16.16 |
| 47 | 87 | 110 | 70.64 | 22.08 | -606.16 | 9.35 | -593.43 | 88.52 | 38.47 | -2676.43 | 37.84 | -2675.80 | -41.27 |
| | | 152 | 69.62 | 32.96 | -591.75 | 13.24 | -572.03 | -109.23 | -37.38 | -2678.05 | -38.10 | -2677.33 | -43.48 |
| | | 166 | 61.61 | 12.13 | -616.26 | -22.82 | -581.31 | -144.02 | 49.30 | -2087.83 | 48.91 | -2087.43 | -29.06 |
| | | 124 | 60.17 | 5.21 | -591.75 | -20.70 | -565.84 | 121.64 | 65.00 | -2084.38 | 63.35 | -2082.73 | -59.52 |
| 47 | 97 | 110 | 68.16 | 19.97 | -587.91 | 8.35 | -576.28 | 83.26 | 15.50 | -2583.40 | 14.90 | -2582.80 | -39.41 |
| | | 152 | 67.23 | 30.25 | -574.10 | 12.26 | -556.11 | -102.71 | -48.98 | -2584.66 | -49.53 | -2584.11 | -37.50 |
| | | 166 | 59.65 | 10.75 | -597.85 | -21.99 | -565.10 | -137.32 | 34.07 | -2023.77 | 33.73 | -2023.44 | -26.16 |
| | | 124 | 58.26 | 4.18 | -574.38 | -20.10 | -550.10 | 116.01 | 43.89 | -2021.48 | 42.38 | -2019.97 | -55.80 |
| 47 | 102 | 110 | 33.60 | 1.70 | -310.56 | -0.51 | -308.34 | 26.23 | -139.01 | -1275.90 | -139.25 | -1275.66 | -16.62 |
| | | 152 | 33.54 | 5.87 | -305.07 | 2.49 | -301.70 | -32.21 | -115.45 | -1276.19 | -115.57 | -1276.07 | 11.86 |
| | | 166 | 30.76 | -0.26 | -316.69 | -10.61 | -306.35 | -56.27 | -79.21 | -1058.56 | -79.21 | -1058.56 | 0.18 |
| | | 124 | 30.10 | -2.98 | -306.16 | -10.70 | -298.43 | 47.78 | -105.95 | -1063.68 | -106.23 | -1063.40 | -16.16 |
| 48 | 2 | 115 | 116.34 | 22.69 | -1060.23 | 12.86 | -1050.40 | 102.74 | 186.79 | -4125.10 | 185.57 | -4123.88 | -72.53 |
| | | 157 | 113.33 | 34.00 | -1026.47 | 16.82 | -1009.29 | -133.88 | -85.16 | -4153.41 | -86.53 | -4152.05 | -74.48 |
| | | 152 | 103.97 | 4.86 | -1057.81 | -26.79 | -1026.15 | -180.65 | 67.20 | -3423.73 | 65.51 | -3422.04 | -76.84 |
| | | 110 | 102.88 | 0.93 | -1031.45 | -21.43 | -1009.09 | 150.28 | 139.40 | -3421.78 | 138.12 | -3420.51 | -67.44 |
| 48 | 31 | 115 | 37.00 | -0.35 | -357.37 | -1.29 | -356.42 | 18.32 | -150.24 | -1351.13 | -150.45 | -1350.92 | -15.85 |
| | | 157 | 37.08 | 1.68 | -354.06 | 0.87 | -353.25 | -16.96 | -124.60 | -1351.58 | -124.66 | -1351.52 | 8.36 |
| | | 152 | 35.06 | -3.80 | -361.53 | -8.60 | -356.73 | -41.19 | -98.66 | -1196.13 | -98.69 | -1196.10 | -5.60 |
| | | 110 | 34.50 | -4.21 | -353.90 | -8.67 | -349.44 | 39.23 | -125.89 | -1199.75 | -126.08 | -1199.57 | -14.15 |
| 48 | 67 | 115 | 36.99 | -0.46 | -357.03 | -1.24 | -356.25 | 16.69 | -149.32 | -1350.54 | -149.48 | -1350.37 | -13.92 |
| | | 157 | 37.00 | 2.09 | -352.89 | 1.11 | -351.91 | -18.59 | -123.42 | -1350.13 | -123.50 | -1350.04 | 10.13 |
| | | 152 | 34.99 | -3.22 | -360.51 | -8.34 | -355.39 | -42.50 | -97.73 | -1194.68 | -97.75 | -1194.67 | -3.57 |
| | | 110 | 34.48 | -4.46 | -353.44 | -8.63 | -349.27 | 37.92 | -125.18 | -1199.20 | -125.31 | -1199.06 | -11.97 |
| 48 | 85 | 115 | 36.98 | -0.52 | -356.84 | -1.21 | -356.14 | 15.70 | -148.74 | -1350.17 | -148.87 | -1350.04 | -12.71 |
| | | 157 | 36.96 | 2.34 | -352.18 | 1.26 | -351.09 | -19.57 | -122.67 | -1349.23 | -122.78 | -1349.13 | 11.25 |
| | | 152 | 34.95 | -2.86 | -359.89 | -8.19 | -354.57 | -43.28 | -97.15 | -1193.79 | -97.15 | -1193.79 | -2.30 |
| | | 110 | 34.47 | -4.61 | -353.16 | -8.61 | -349.16 | 37.12 | -124.72 | -1198.86 | -124.83 | -1198.75 | -10.61 |
| 48 | 87 | 115 | 82.47 | 14.94 | -754.28 | 8.41 | -747.75 | 70.58 | 104.69 | -2930.08 | 103.86 | -2929.26 | -50.05 |
| | | 157 | 80.46 | 22.74 | -731.04 | 11.38 | -719.67 | -91.86 | -73.25 | -2948.72 | -74.06 | -2947.92 | -48.16 |
| | | 152 | 73.96 | 2.74 | -753.07 | -18.95 | -731.38 | -126.20 | 31.79 | -2441.61 | 30.72 | -2440.53 | -51.53 |
| | | 110 | 73.17 | -0.07 | -734.65 | -15.43 | -719.28 | 105.13 | 76.29 | -2441.02 | 75.44 | -2440.17 | -46.38 |
| 48 | 97 | 115 | 79.27 | 13.27 | -727.58 | 7.40 | -721.71 | 65.68 | 73.76 | -2821.84 | 73.01 | -2821.08 | -46.76 |
| | | 157 | 77.46 | 20.58 | -705.93 | 10.41 | -695.76 | -85.35 | -82.25 | -2838.26 | -82.88 | -2837.63 | -41.78 |
| | | 152 | 71.34 | 1.97 | -726.91 | -18.18 | -706.76 | -119.50 | 15.82 | -2360.65 | 14.90 | -2359.74 | -46.71 |
| | | 110 | 70.56 | -0.75 | -709.45 | -15.07 | -695.14 | 99.70 | 51.50 | -2360.97 | 50.73 | -2360.19 | -43.20 |
| 48 | 102 | 115 | 36.98 | -0.52 | -356.84 | -1.21 | -356.14 | 15.70 | -148.74 | -1350.17 | -148.87 | -1350.04 | -12.71 |
| | | 157 | 36.96 | 2.34 | -352.18 | 1.26 | -351.09 | -19.57 | -122.67 | -1349.23 | -122.78 | -1349.13 | 11.25 |
| | | 152 | 34.95 | -2.86 | -359.89 | -8.19 | -354.57 | -43.28 | -97.15 | -1193.79 | -97.15 | -1193.79 | -2.30 |
| | | 110 | 34.47 | -4.61 | -353.16 | -8.61 | -349.16 | 37.12 | -124.72 | -1198.86 | -124.83 | -1198.75 | -10.61 |
| 49 | 2 | 121 | 131.10 | 11.03 | -1246.12 | 6.65 | -1241.74 | 74.05 | 382.87 | -4390.89 | 380.62 | -4388.64 | -103.66 |
| | | 163 | 125.91 | 21.67 | -1193.25 | 11.82 | -1183.40 | -108.95 | -192.12 | -4492.39 | -193.40 | -4491.11 | -74.19 |
| | | 157 | 119.19 | -3.39 | -1231.33 | -24.05 | -1210.68 | -157.93 | 36.26 | -3857.14 | 31.88 | -3852.76 | -130.52 |
| | | 115 | 119.13 | -1.40 | -1205.88 | -14.78 | -1192.51 | 126.20 | 212.71 | -3857.87 | 212.22 | -3857.38 | -44.36 |
| 49 | 31 | 121 | 39.07 | -2.15 | -387.75 | -2.27 | -387.63 | 6.75 | -155.50 | -1390.31 | -155.59 | -1390.22 | -10.56 |
| | | 163 | 39.25 | -0.57 | -386.83 | -0.65 | -386.76 | -5.48 | -128.03 | -1390.38 | -128.08 | -1390.33 | 8.28 |
| | | 157 | 38.04 | -4.06 | -391.18 | -6.33 | -388.91 | -29.54 | -112.45 | -1297.09 | -112.49 | -1297.04 | -7.11 |
| | | 115 | 37.57 | -4.68 | -385.48 | -6.67 | -383.49 | 27.46 | -140.75 | -1299.63 | -140.81 | -1299.57 | -8.08 |
| 49 | 63 | 121 | 39.07 | -2.12 | -387.60 | -2.20 | -387.51 | 5.76 | -154.41 | -1389.84 | -154.48 | -1389.77 | -9.32 |
| | | 163 | 39.16 | -0.26 | -385.29 | -0.37 | -385.18 | -6.46 | -126.64 | -1388.59 | -126.71 | -1388.52 | 9.41 |
| | | 157 | 37.95 | -3.68 | -389.71 | -6.05 | -387.34 | -30.14 | -111.26 | -1295.30 | -111.28 | -1295.27 | -5.60 |
| | | 115 | 37.56 | -4.73 | -385.28 | -6.63 | -383.37 | 26.86 | -139.83 | -1299.20 | -139.86 | -1299.16 | -6.46 |
| 49 | 85 | 121 | 39.06 | -2.09 | -387.51 | -2.16 | -387.44 | 5.16 | -153.73 | -1389.55 | -153.79 | -1389.49 | -8.56 |
| | | 163 | 39.11 | -0.08 | -384.36 | -0.21 | -384.23 | -7.06 | -125.77 | -1387.48 | -125.86 | -1387.40 | 10.10 |
| | | 157 | 37.89 | -3.45 | -388.81 | -5.88 | -386.38 | -30.50 | -110.51 | -1294.20 | -110.53 | -1294.18 | -4.68 |
| | | 115 | 37.56 | -4.75 | -385.16 | -6.61 | -383.30 | 26.50 | -139.24 | -1298.93 | -139.27 | -1298.90 | -5.47 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| 49 | 87 | 121 | 92.58 | 6.98 | -882.31 | 4.15 | -879.49 | 50.06 | 234.71 | -3112.50 | 233.24 | -3111.03 | -70.25 |
| | | 163 | 89.14 | 14.19 | -846.50 | 7.85 | -840.17 | -73.57 | -144.95 | -3179.83 | -145.71 | -3179.06 | -48.11 |
| | | 157 | 84.50 | -2.84 | -872.61 | -16.82 | -858.63 | -109.35 | 9.31 | -2743.86 | 6.52 | -2741.07 | -87.64 |
| | | 115 | 84.41 | -1.63 | -855.22 | -10.73 | -846.12 | 87.67 | 123.23 | -2745.10 | 122.91 | -2744.77 | -30.30 |
| 49 | 97 | 121 | 88.65 | 5.90 | -847.02 | 3.44 | -844.56 | 45.76 | 190.07 | -2991.38 | 188.77 | -2990.08 | -64.37 |
| | | 163 | 85.56 | 12.53 | -814.23 | 7.04 | -808.73 | -67.18 | -147.19 | -3051.50 | -147.80 | -3050.89 | -41.90 |
| | | 157 | 81.22 | -3.14 | -838.44 | -15.94 | -825.64 | -102.59 | -6.31 | -2646.35 | -8.71 | -2643.95 | -79.52 |
| | | 115 | 81.10 | -2.17 | -822.35 | -10.56 | -813.96 | 82.53 | 91.77 | -2648.33 | 91.48 | -2648.04 | -28.03 |
| 49 | 102 | 121 | 39.06 | -2.09 | -387.51 | -2.16 | -387.44 | 5.16 | -153.73 | -1389.55 | -153.79 | -1389.49 | -8.56 |
| | | 163 | 39.11 | -0.08 | -384.36 | -0.21 | -384.23 | -7.06 | -125.77 | -1387.48 | -125.86 | -1387.40 | 10.10 |
| | | 157 | 37.89 | -3.45 | -388.81 | -5.88 | -386.38 | -30.50 | -110.51 | -1294.20 | -110.53 | -1294.18 | -4.68 |
| | | 115 | 37.56 | -4.75 | -385.16 | -6.61 | -383.30 | 26.50 | -139.24 | -1298.93 | -139.27 | -1298.90 | -5.47 |
| 50 | 2 | 126 | 143.02 | -6.99 | -1397.32 | -8.03 | -1396.27 | 38.13 | 706.01 | -4529.44 | 701.58 | -4525.01 | -152.34 |
| | | 168 | 135.48 | 9.31 | -1323.68 | 4.99 | -1319.36 | -75.75 | -390.50 | -4800.52 | -391.16 | -4799.86 | -53.91 |
| | | 163 | 131.58 | -11.49 | -1378.44 | -25.15 | -1364.78 | -135.97 | -32.90 | -4221.07 | -43.20 | -4210.78 | -207.42 |
| | | 121 | 132.87 | -3.36 | -1341.90 | -10.88 | -1334.37 | 100.10 | 371.88 | -4220.17 | 371.84 | -4220.12 | -14.80 |
| 50 | 23 | 126 | 39.85 | -3.24 | -402.45 | -3.28 | -402.41 | -4.13 | -155.69 | -1394.63 | -155.70 | -1394.62 | -4.70 |
| | | 168 | 40.13 | -2.25 | -403.91 | -2.36 | -403.80 | 6.67 | -127.19 | -1394.16 | -127.24 | -1394.11 | 8.10 |
| | | 163 | 39.73 | -3.48 | -405.28 | -4.23 | -404.54 | -17.31 | -121.93 | -1363.04 | -121.98 | -1362.99 | -7.87 |
| | | 121 | 39.35 | -4.06 | -401.72 | -4.74 | -401.03 | 16.50 | -150.81 | -1364.47 | -150.81 | -1364.47 | -1.72 |
| 50 | 55 | 126 | 39.85 | -3.28 | -402.45 | -3.34 | -402.39 | -4.92 | -154.55 | -1394.33 | -154.56 | -1394.31 | -4.37 |
| | | 168 | 40.04 | -1.98 | -402.23 | -2.06 | -402.15 | 5.88 | -125.72 | -1392.22 | -125.78 | -1392.17 | 8.40 |
| | | 163 | 39.63 | -3.16 | -403.67 | -3.95 | -402.89 | -17.68 | -120.53 | -1361.10 | -120.57 | -1361.06 | -7.23 |
| | | 121 | 39.35 | -4.16 | -401.67 | -4.81 | -401.01 | 16.13 | -149.72 | -1364.18 | -149.72 | -1364.18 | -1.05 |
| 50 | 85 | 126 | 39.85 | -3.31 | -402.44 | -3.38 | -402.37 | -5.39 | -153.84 | -1394.13 | -153.85 | -1394.12 | -4.17 |
| | | 168 | 39.98 | -1.81 | -401.22 | -1.89 | -401.15 | 5.40 | -124.82 | -1391.04 | -124.88 | -1390.98 | 8.59 |
| | | 163 | 39.58 | -2.97 | -402.69 | -3.78 | -401.89 | -17.91 | -119.66 | -1359.92 | -119.70 | -1359.88 | -6.83 |
| | | 121 | 39.35 | -4.22 | -401.64 | -4.86 | -401.00 | 15.91 | -149.04 | -1363.99 | -149.04 | -1363.99 | -0.63 |
| 50 | 87 | 126 | 100.63 | -5.18 | -985.12 | -5.81 | -984.50 | 24.70 | 450.06 | -3205.41 | 447.20 | -3202.55 | -102.12 |
| | | 168 | 95.64 | 5.72 | -935.70 | 3.08 | -933.06 | -49.78 | -277.04 | -3385.76 | -277.43 | -3385.37 | -34.79 |
| | | 163 | 92.98 | -8.21 | -972.50 | -17.27 | -963.44 | -93.04 | -38.19 | -2995.07 | -44.76 | -2988.50 | -139.19 |
| | | 121 | 93.80 | -2.86 | -948.09 | -7.90 | -943.05 | 68.85 | 228.05 | -2995.31 | 228.02 | -2995.28 | -9.95 |
| 50 | 97 | 126 | 95.99 | -5.19 | -941.60 | -5.69 | -941.11 | 21.50 | 383.80 | -3075.56 | 381.32 | -3073.08 | -92.45 |
| | | 168 | 91.53 | 4.67 | -896.81 | 2.51 | -894.65 | -44.06 | -265.90 | -3237.36 | -266.21 | -3237.06 | -30.11 |
| | | 163 | 89.08 | -7.94 | -930.21 | -16.06 | -922.09 | -86.18 | -50.48 | -2881.27 | -56.11 | -2875.63 | -126.20 |
| | | 121 | 89.79 | -3.21 | -908.19 | -7.78 | -903.62 | 64.15 | 184.77 | -2882.43 | 184.74 | -2882.41 | -9.04 |
| 50 | 102 | 126 | 39.85 | -3.31 | -402.44 | -3.38 | -402.37 | -5.39 | -153.84 | -1394.13 | -153.85 | -1394.12 | -4.17 |
| | | 168 | 39.98 | -1.81 | -401.22 | -1.89 | -401.15 | 5.40 | -124.82 | -1391.04 | -124.88 | -1390.98 | 8.59 |
| | | 163 | 39.58 | -2.97 | -402.69 | -3.78 | -401.89 | -17.91 | -119.66 | -1359.92 | -119.70 | -1359.88 | -6.83 |
| | | 121 | 39.35 | -4.22 | -401.64 | -4.86 | -401.00 | 15.91 | -149.04 | -1363.99 | -149.04 | -1363.99 | -0.63 |
| 51 | 2 | 114 | 150.44 | -29.52 | -1485.03 | -29.68 | -1484.87 | -15.15 | 1127.52 | -4526.65 | 1121.86 | -4520.99 | -178.76 |
| | | 156 | 143.63 | -5.10 | -1431.98 | -5.20 | -1431.87 | -12.00 | -689.00 | -5135.70 | -689.00 | -5135.70 | 0.54 |
| | | 168 | 140.76 | -16.60 | -1493.39 | -25.36 | -1484.63 | -113.43 | -195.45 | -4528.92 | -215.03 | -4509.33 | -290.66 |
| | | 126 | 143.64 | -11.70 | -1427.47 | -15.68 | -1423.49 | 74.98 | 658.12 | -4502.61 | 658.07 | -4502.56 | 15.44 |
| 51 | 32 | 114 | 39.35 | -4.06 | -401.72 | -4.75 | -401.03 | -16.55 | -150.79 | -1364.40 | -150.79 | -1364.40 | 1.56 |
| | | 156 | 39.72 | -3.48 | -405.25 | -4.22 | -404.50 | 17.28 | -122.11 | -1363.07 | -122.16 | -1363.03 | 7.77 |
| | | 168 | 40.14 | -2.25 | -403.92 | -2.36 | -403.81 | -6.70 | -127.12 | -1394.13 | -127.17 | -1394.08 | -8.20 |
| | | 126 | 39.85 | -3.23 | -402.43 | -3.27 | -402.39 | 4.07 | -155.77 | -1394.68 | -155.79 | -1394.66 | 4.49 |
| 51 | 64 | 114 | 39.35 | -4.16 | -401.67 | -4.82 | -401.01 | -16.19 | -149.70 | -1364.10 | -149.70 | -1364.10 | 0.88 |
| | | 156 | 39.63 | -3.16 | -403.64 | -3.94 | -402.86 | 17.66 | -120.71 | -1361.14 | -120.75 | -1361.10 | 7.13 |
| | | 168 | 40.04 | -1.98 | -402.25 | -2.07 | -402.16 | -5.91 | -125.65 | -1392.19 | -125.71 | -1392.13 | -8.49 |
| | | 126 | 39.85 | -3.28 | -402.43 | -3.34 | -402.37 | 4.86 | -154.64 | -1394.37 | -154.65 | -1394.36 | 4.16 |
| 51 | 85 | 114 | 39.35 | -4.22 | -401.63 | -4.87 | -400.99 | -15.96 | -149.02 | -1363.92 | -149.02 | -1363.92 | 0.46 |
| | | 156 | 39.57 | -2.97 | -402.66 | -3.77 | -401.86 | 17.88 | -119.84 | -1359.95 | -119.88 | -1359.91 | 6.74 |
| | | 168 | 39.98 | -1.82 | -401.23 | -1.89 | -401.16 | -5.43 | -124.75 | -1391.01 | -124.81 | -1390.95 | -8.68 |
| | | 126 | 39.85 | -3.30 | -402.42 | -3.38 | -402.35 | 5.34 | -153.93 | -1394.18 | -153.94 | -1394.17 | 3.96 |
| 51 | 87 | 114 | 105.49 | -20.29 | -1043.53 | -20.43 | -1043.38 | -12.23 | 731.65 | -3199.46 | 728.04 | -3195.85 | -119.11 |
| | | 156 | 101.02 | -3.94 | -1008.20 | -3.97 | -1008.16 | -5.61 | -475.31 | -3605.12 | -475.31 | -3605.12 | 1.26 |
| | | 168 | 99.14 | -11.51 | -1048.89 | -17.16 | -1043.24 | -76.35 | -147.51 | -3204.16 | -160.00 | -3191.68 | -194.93 |
| | | 126 | 101.04 | -8.32 | -1005.23 | -10.90 | -1002.64 | 50.70 | 418.22 | -3187.63 | 418.19 | -3187.60 | 10.82 |
| 51 | 97 | 114 | 100.28 | -18.88 | -994.09 | -19.05 | -993.92 | -13.19 | 637.82 | -3066.02 | 634.72 | -3062.92 | -107.11 |
| | | 156 | 96.33 | -4.08 | -962.35 | -4.09 | -962.34 | -2.60 | -443.62 | -3430.58 | -443.63 | -3430.58 | 2.09 |
| | | 168 | 94.67 | -10.80 | -998.71 | -15.70 | -993.81 | -69.45 | -149.82 | -3073.45 | -160.52 | -3062.74 | -176.61 |
| | | 126 | 96.36 | -8.01 | -959.70 | -10.27 | -957.44 | 46.36 | 355.24 | -3059.65 | 355.21 | -3059.62 | 10.28 |
| 51 | 102 | 114 | 39.35 | -4.22 | -401.63 | -4.87 | -400.99 | -15.96 | -149.02 | -1363.92 | -149.02 | -1363.92 | 0.46 |
| | | 156 | 39.57 | -2.97 | -402.66 | -3.77 | -401.86 | 17.88 | -119.84 | -1359.95 | -119.88 | -1359.91 | 6.74 |
| | | 168 | 39.98 | -1.82 | -401.23 | -1.89 | -401.16 | -5.43 | -124.75 | -1391.01 | -124.81 | -1390.95 | -8.68 |
| | | 126 | 39.85 | -3.30 | -402.42 | -3.38 | -402.35 | 5.34 | -153.93 | -1394.18 | -153.94 | -1394.17 | 3.96 |
| 52 | 2 | 122 | 150.72 | -42.37 | -1490.82 | -46.56 | -1486.62 | -77.87 | 1362.78 | -4415.11 | 1359.05 | -4411.37 | -146.91 |
| | | 164 | 144.22 | -16.85 | -1494.31 | -20.78 | -1490.38 | 76.06 | -767.11 | -5020.65 | -770.63 | -5017.13 | 122.29 |
| | | 156 | 146.64 | -17.06 | -1523.33 | -20.00 | -1520.39 | -66.43 | -534.75 | -4982.17 | -553.91 | -4963.01 | -291.32 |
| | | 114 | 149.89 | -25.23 | -1456.90 | -26.30 | -1455.83 | 39.22 | 1066.13 | -4609.37 | 1064.76 | -4608.00 | 88.07 |
| 52 | 24 | 122 | 37.56 | -4.68 | -385.46 | -6.68 | -383.46 | -27.52 | -140.82 | -1299.53 | -140.87 | -1299.48 | 7.97 |
| | | 164 | 38.03 | -4.07 | -391.13 | -6.33 | -388.87 | 29.52 | -112.72 | -1297.12 | -112.76 | -1297.08 | 7.02 |
| | | 156 | 39.25 | -0.57 | -386.83 | -0.65 | -386.75 | 5.45 | -128.07 | -1390.35 | -128.12 | -1390.30 | -8.35 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| 52 | 56 | 114 | 39.07 | -2.15 | -387.71 | -2.27 | -387.59 | -6.81 | -155.65 | -1390.32 | -155.74 | -1390.23 | 10.31 |
| | | 122 | 37.56 | -4.73 | -385.26 | -6.64 | -383.34 | -26.92 | -139.89 | -1299.10 | -139.93 | -1299.07 | 6.35 |
| | | 164 | 37.94 | -3.68 | -389.66 | -6.05 | -387.29 | 30.11 | -111.53 | -1295.33 | -111.55 | -1295.30 | 5.51 |
| | | 156 | 39.16 | -0.27 | -385.29 | -0.38 | -385.18 | 6.43 | -126.68 | -1388.56 | -126.75 | -1388.49 | -9.49 |
| 52 | 85 | 114 | 39.06 | -2.11 | -387.56 | -2.20 | -387.47 | -5.82 | -154.57 | -1389.85 | -154.63 | -1389.79 | 9.07 |
| | | 122 | 37.56 | -4.76 | -385.13 | -6.62 | -383.27 | -26.55 | -139.31 | -1298.84 | -139.33 | -1298.81 | 5.37 |
| | | 164 | 37.89 | -3.45 | -388.76 | -5.88 | -386.34 | 30.47 | -110.79 | -1294.23 | -110.80 | -1294.21 | 4.59 |
| | | 156 | 39.11 | -0.08 | -384.35 | -0.21 | -384.23 | 7.03 | -125.82 | -1387.46 | -125.90 | -1387.37 | -10.18 |
| 52 | 87 | 114 | 39.06 | -2.09 | -387.47 | -2.16 | -387.40 | -5.22 | -153.89 | -1389.57 | -153.94 | -1389.51 | 8.31 |
| | | 122 | 105.42 | -28.89 | -1045.22 | -31.93 | -1042.18 | -55.45 | 889.81 | -3116.45 | 887.45 | -3114.09 | -97.22 |
| | | 164 | 101.20 | -11.73 | -1048.00 | -14.64 | -1045.10 | 54.77 | -526.27 | -3519.57 | -528.53 | -3517.32 | 82.14 |
| | | 156 | 102.95 | -11.58 | -1066.61 | -13.36 | -1064.82 | -43.35 | -373.80 | -3505.91 | -386.06 | -3493.65 | -195.57 |
| 52 | 97 | 114 | 105.08 | -17.18 | -1022.85 | -17.82 | -1022.21 | 25.45 | 690.22 | -3258.17 | 689.32 | -3257.27 | 59.82 |
| | | 122 | 99.96 | -26.66 | -993.39 | -29.64 | -990.41 | -53.54 | 781.51 | -2982.42 | 779.51 | -2980.42 | -86.74 |
| | | 164 | 96.26 | -11.07 | -996.37 | -13.98 | -993.46 | 53.47 | -488.33 | -3344.51 | -490.28 | -3342.56 | 74.59 |
| | | 156 | 97.98 | -10.60 | -1012.36 | -12.05 | -1010.92 | -38.05 | -353.58 | -3344.58 | -364.13 | -3334.03 | -177.38 |
| 52 | 102 | 114 | 99.87 | -15.82 | -973.52 | -16.34 | -973.00 | 22.19 | 600.02 | -3122.50 | 599.21 | -3121.69 | 54.99 |
| | | 122 | 37.56 | -4.76 | -385.13 | -6.62 | -383.27 | -26.55 | -139.31 | -1298.84 | -139.33 | -1298.81 | 5.37 |
| | | 164 | 37.89 | -3.45 | -388.76 | -5.88 | -386.34 | 30.47 | -110.79 | -1294.23 | -110.80 | -1294.21 | 4.59 |
| | | 156 | 39.11 | -0.08 | -384.35 | -0.21 | -384.23 | 7.03 | -125.82 | -1387.46 | -125.90 | -1387.37 | -10.18 |
| 53 | 2 | 114 | 39.06 | -2.09 | -387.47 | -2.16 | -387.40 | -5.22 | -153.89 | -1389.57 | -153.94 | -1389.51 | 8.31 |
| | | 111 | 142.13 | -40.08 | -1409.87 | -53.74 | -1396.21 | -136.06 | 1382.49 | -4116.89 | 1380.92 | -4115.32 | -93.08 |
| | | 153 | 137.94 | -18.52 | -1466.64 | -37.28 | -1447.88 | 163.73 | -666.51 | -4660.00 | -679.09 | -4647.42 | 223.80 |
| | | 164 | 142.98 | -10.43 | -1439.22 | -10.53 | -1439.13 | 11.65 | -735.54 | -5108.97 | -748.37 | -5096.14 | -236.47 |
| 53 | 24 | 122 | 149.06 | -31.65 | -1413.85 | -31.78 | -1413.72 | -13.28 | 1317.52 | -4568.84 | 1312.58 | -4563.90 | 170.34 |
| | | 111 | 34.49 | -4.21 | -353.85 | -8.68 | -349.39 | -39.28 | -126.05 | -1199.65 | -126.23 | -1199.46 | 14.12 |
| | | 153 | 35.05 | -3.80 | -361.47 | -8.60 | -356.67 | 41.16 | -99.00 | -1196.16 | -99.03 | -1196.13 | 5.52 |
| | | 164 | 37.07 | 1.68 | -354.04 | 0.87 | -353.23 | 16.94 | -124.75 | -1351.55 | -124.81 | -1351.49 | -8.40 |
| 53 | 60 | 122 | 36.99 | -0.35 | -357.31 | -1.29 | -356.36 | -18.38 | -150.46 | -1351.10 | -150.67 | -1350.90 | 15.58 |
| | | 111 | 34.48 | -4.46 | -353.39 | -8.64 | -349.21 | -37.96 | -125.33 | -1199.09 | -125.47 | -1198.96 | 11.95 |
| | | 153 | 34.98 | -3.22 | -360.45 | -8.34 | -355.33 | 42.47 | -98.07 | -1194.72 | -98.08 | -1194.71 | 3.49 |
| | | 164 | 37.00 | 2.08 | -352.86 | 1.11 | -351.89 | 18.57 | -123.57 | -1350.10 | -123.65 | -1350.02 | -10.17 |
| 53 | 85 | 122 | 36.98 | -0.46 | -356.98 | -1.24 | -356.19 | -16.74 | -149.54 | -1350.51 | -149.70 | -1350.36 | 13.66 |
| | | 111 | 34.47 | -4.61 | -353.11 | -8.62 | -349.10 | -37.17 | -124.88 | -1198.75 | -124.98 | -1198.65 | 10.58 |
| | | 153 | 34.94 | -2.86 | -359.83 | -8.19 | -354.51 | 43.25 | -97.49 | -1193.82 | -97.49 | -1193.82 | 2.22 |
| | | 164 | 36.96 | 2.33 | -352.16 | 1.25 | -351.08 | 19.54 | -122.83 | -1349.21 | -122.93 | -1349.11 | -11.29 |
| 53 | 87 | 122 | 36.97 | -0.52 | -356.78 | -1.21 | -356.08 | -15.75 | -148.96 | -1350.15 | -149.09 | -1350.02 | 12.45 |
| | | 111 | 99.29 | -27.34 | -986.99 | -36.97 | -977.36 | -95.66 | 904.91 | -2904.33 | 903.95 | -2903.36 | -60.64 |
| | | 153 | 96.61 | -12.73 | -1025.73 | -25.94 | -1012.52 | 114.92 | -457.74 | -3265.44 | -465.73 | -3257.46 | 149.50 |
| | | 164 | 100.23 | -6.74 | -1006.34 | -6.85 | -1006.23 | 10.37 | -507.05 | -3585.56 | -515.30 | -3577.31 | -159.15 |
| 53 | 97 | 122 | 104.24 | -21.22 | -990.08 | -21.35 | -989.96 | -10.96 | 858.43 | -3225.86 | 855.18 | -3222.60 | 115.22 |
| | | 111 | 94.01 | -25.24 | -936.61 | -34.46 | -927.39 | -91.18 | 797.09 | -2777.85 | 796.30 | -2777.06 | -53.11 |
| | | 153 | 91.73 | -11.85 | -972.40 | -24.47 | -959.78 | 109.35 | -425.13 | -3101.76 | -431.94 | -3094.95 | 134.90 |
| | | 164 | 95.25 | -5.84 | -953.80 | -5.99 | -953.64 | 12.01 | -472.90 | -3411.23 | -480.05 | -3404.08 | -144.76 |
| 53 | 102 | 122 | 98.81 | -19.22 | -939.85 | -19.38 | -939.69 | -12.01 | 752.03 | -3087.99 | 749.14 | -3085.09 | 105.41 |
| | | 111 | 34.47 | -4.61 | -353.11 | -8.62 | -349.10 | -37.17 | -124.88 | -1198.75 | -124.98 | -1198.65 | 10.58 |
| | | 153 | 34.94 | -2.86 | -359.83 | -8.19 | -354.51 | 43.25 | -97.49 | -1193.82 | -97.49 | -1193.82 | 2.22 |
| | | 164 | 36.96 | 2.33 | -352.16 | 1.25 | -351.08 | 19.54 | -122.83 | -1349.21 | -122.93 | -1349.11 | -11.29 |
| 54 | 2 | 122 | 36.97 | -0.52 | -356.78 | -1.21 | -356.08 | -15.75 | -148.96 | -1350.15 | -149.09 | -1350.02 | 12.45 |
| | | 119 | 124.61 | -22.81 | -1237.41 | -52.94 | -1207.29 | -188.91 | 1190.51 | -3655.40 | 1190.50 | -3655.39 | -8.93 |
| | | 161 | 124.38 | -4.54 | -1347.12 | -50.40 | -1301.26 | 243.87 | -405.79 | -4038.05 | -427.66 | -4016.18 | 281.00 |
| | | 153 | 131.88 | 9.75 | -1261.91 | 2.02 | -1254.17 | 98.89 | -782.74 | -4972.97 | -786.99 | -4968.73 | -133.29 |
| 54 | 44 | 111 | 139.40 | -25.67 | -1277.77 | -29.73 | -1273.71 | -71.18 | 1362.21 | -4365.36 | 1353.47 | -4356.61 | 223.66 |
| | | 119 | 30.18 | -2.67 | -307.53 | -10.73 | -299.48 | -48.90 | -106.93 | -1066.14 | -107.24 | -1065.83 | 17.34 |
| | | 161 | 30.85 | -0.78 | -317.68 | -10.69 | -307.77 | 55.16 | -80.39 | -1061.42 | -80.39 | -1061.42 | 0.79 |
| | | 153 | 33.64 | 5.50 | -306.26 | 2.39 | -303.15 | 31.00 | -116.62 | -1279.00 | -116.72 | -1278.90 | -10.90 |
| 54 | 76 | 111 | 33.68 | 1.86 | -311.82 | -0.56 | -309.39 | -27.46 | -140.11 | -1278.42 | -140.38 | -1278.16 | 17.39 |
| | | 119 | 30.13 | -2.86 | -306.64 | -10.72 | -298.78 | -48.23 | -106.49 | -1064.56 | -106.78 | -1064.27 | 16.65 |
| | | 161 | 30.79 | -0.46 | -317.03 | -10.63 | -306.85 | 55.83 | -79.89 | -1059.68 | -79.89 | -1059.68 | 0.15 |
| | | 153 | 33.58 | 5.72 | -305.50 | 2.45 | -302.23 | 31.74 | -116.05 | -1277.26 | -116.16 | -1277.15 | -11.50 |
| 54 | 85 | 111 | 33.62 | 1.77 | -311.00 | -0.53 | -308.69 | -26.72 | -139.61 | -1276.84 | -139.86 | -1276.59 | 16.75 |
| | | 119 | 30.09 | -2.97 | -306.09 | -10.71 | -298.35 | -47.82 | -106.21 | -1063.58 | -106.48 | -1063.31 | 16.23 |
| | | 161 | 30.76 | -0.27 | -316.62 | -10.60 | -306.28 | 56.24 | -79.57 | -1058.59 | -79.57 | -1058.59 | -0.25 |
| | | 153 | 33.54 | 5.86 | -305.03 | 2.49 | -301.66 | 32.19 | -115.69 | -1276.17 | -115.82 | -1276.05 | -11.87 |
| 54 | 87 | 111 | 33.59 | 1.71 | -310.49 | -0.52 | -308.26 | -26.28 | -139.29 | -1275.85 | -139.53 | -1275.62 | 16.35 |
| | | 119 | 87.03 | -15.60 | -865.75 | -36.72 | -844.64 | -132.32 | 779.47 | -2578.70 | 779.47 | -2578.70 | -3.79 |
| | | 161 | 87.01 | -3.06 | -940.30 | -35.01 | -908.34 | 170.08 | -281.88 | -2832.43 | -295.71 | -2818.60 | 187.30 |
| | | 153 | 92.38 | 7.26 | -881.91 | 1.68 | -876.33 | 70.22 | -537.32 | -3485.40 | -540.10 | -3482.62 | -90.44 |
| 54 | 97 | 111 | 97.34 | -16.92 | -893.22 | -19.89 | -890.24 | -50.96 | 889.48 | -3080.26 | 883.71 | -3074.49 | 151.29 |
| | | 119 | 82.40 | -14.45 | -821.06 | -34.52 | -800.99 | -125.63 | 686.76 | -2466.35 | 686.76 | -2466.34 | -1.16 |
| | | 161 | 82.51 | -2.79 | -889.60 | -32.96 | -859.42 | 160.77 | -264.73 | -2693.22 | -276.49 | -2681.46 | 168.59 |
| | | 153 | 87.73 | 7.31 | -835.43 | 1.85 | -829.98 | 67.60 | -498.95 | -3311.31 | -501.40 | -3308.86 | -82.99 |
| 54 | 102 | 111 | 92.14 | -15.02 | -846.35 | -17.97 | -843.40 | -49.46 | 781.24 | -2946.75 | 776.10 | -2941.61 | 138.41 |
| | | 119 | 30.09 | -2.97 | -306.09 | -10.71 | -298.35 | -47.82 | -106.21 | -1063.58 | -106.48 | -1063.31 | 16.23 |
| | | 161 | 30.76 | -0.27 | -316.62 | -10.60 | -306.28 | 56.24 | -79.57 | -1058.59 | -79.57 | -1058.59 | -0.25 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|--------|
| | | 153 | 33.54 | 5.86 | -305.03 | 2.49 | -301.66 | 32.19 | -115.69 | -1276.17 | -115.82 | -1276.05 | -11.87 |
| | | 111 | 33.59 | 1.71 | -310.49 | -0.52 | -308.26 | -26.28 | -139.29 | -1275.85 | -139.53 | -1275.62 | 16.35 |
| 55 | 2 | 113 | 99.84 | 8.40 | -995.26 | -44.82 | -942.04 | -224.91 | 827.71 | -3046.89 | 826.47 | -3045.65 | 69.46 |
| | | 155 | 101.60 | 23.41 | -1117.74 | -57.96 | -1036.37 | 293.66 | 2.37 | -3087.82 | -24.02 | -3061.42 | 284.39 |
| | | 161 | 114.11 | 48.59 | -1002.66 | 13.71 | -967.78 | 188.29 | -654.46 | -4589.74 | -654.47 | -4589.74 | -2.89 |
| | | 119 | 120.84 | -0.36 | -1057.78 | -17.56 | -1040.58 | -133.76 | 1189.14 | -3975.45 | 1176.60 | -3962.90 | 254.25 |
| 55 | 44 | 113 | 24.57 | 2.83 | -247.40 | -12.40 | -232.17 | -59.83 | -84.95 | -896.32 | -85.64 | -895.62 | 23.70 |
| | | 155 | 25.48 | 5.76 | -261.47 | -12.79 | -242.93 | 67.91 | -57.28 | -891.43 | -57.28 | -891.43 | -1.71 |
| | | 161 | 28.97 | 11.15 | -244.99 | 3.48 | -237.32 | 43.65 | -105.21 | -1171.37 | -105.31 | -1171.27 | -10.46 |
| | | 119 | 29.02 | 5.87 | -250.82 | 0.05 | -245.00 | -38.20 | -126.07 | -1169.44 | -126.50 | -1169.01 | 21.10 |
| 55 | 76 | 113 | 24.51 | 2.51 | -246.28 | -12.38 | -231.39 | -59.00 | -84.51 | -894.56 | -85.16 | -893.91 | 22.99 |
| | | 155 | 25.43 | 6.27 | -261.08 | -12.75 | -242.05 | 68.73 | -56.75 | -889.47 | -56.76 | -889.47 | -2.38 |
| | | 161 | 28.91 | 11.51 | -244.43 | 3.52 | -236.44 | 44.50 | -104.67 | -1169.43 | -104.78 | -1169.32 | -11.13 |
| | | 119 | 28.95 | 5.66 | -249.81 | 0.08 | -244.23 | -37.35 | -125.60 | -1167.69 | -126.00 | -1167.29 | 20.39 |
| 55 | 85 | 113 | 24.46 | 2.31 | -245.58 | -12.36 | -230.91 | -58.50 | -84.24 | -893.47 | -84.87 | -892.84 | 22.54 |
| | | 155 | 25.39 | 6.59 | -260.83 | -12.73 | -241.51 | 69.24 | -56.42 | -888.25 | -56.43 | -888.24 | -2.79 |
| | | 161 | 28.87 | 11.73 | -244.08 | 3.55 | -235.90 | 45.01 | -104.32 | -1168.22 | -104.45 | -1168.10 | -11.54 |
| | | 119 | 28.91 | 5.54 | -249.18 | 0.09 | -243.74 | -36.83 | -125.31 | -1166.60 | -125.69 | -1166.22 | 19.95 |
| 55 | 87 | 113 | 69.78 | 5.90 | -696.25 | -31.53 | -658.81 | -157.74 | 540.57 | -2150.38 | 539.66 | -2149.48 | 49.32 |
| | | 155 | 71.10 | 16.49 | -779.94 | -40.34 | -723.11 | 205.00 | -6.91 | -2176.02 | -23.54 | -2159.38 | 189.22 |
| | | 161 | 79.92 | 33.96 | -700.99 | 9.61 | -676.64 | 131.53 | -450.23 | -3215.58 | -450.24 | -3215.57 | -3.47 |
| | | 119 | 84.35 | 0.49 | -738.40 | -11.69 | -726.22 | -94.08 | 775.93 | -2805.73 | 767.64 | -2797.43 | 172.16 |
| 55 | 97 | 113 | 66.11 | 5.62 | -660.21 | -30.07 | -624.52 | -149.96 | 474.75 | -2057.62 | 473.86 | -2056.72 | 47.50 |
| | | 155 | 67.46 | 15.74 | -737.64 | -38.05 | -683.85 | 193.99 | -14.28 | -2078.94 | -28.37 | -2064.85 | 169.98 |
| | | 161 | 75.88 | 32.17 | -664.28 | 9.14 | -641.25 | 124.54 | -418.97 | -3053.75 | -418.97 | -3053.74 | -4.66 |
| | | 119 | 79.81 | 1.18 | -698.64 | -10.51 | -686.95 | -89.71 | 680.91 | -2684.69 | 673.50 | -2677.28 | 157.69 |
| 55 | 102 | 113 | 24.46 | 2.31 | -245.58 | -12.36 | -230.91 | -58.50 | -84.24 | -893.47 | -84.87 | -892.84 | 22.54 |
| | | 155 | 25.39 | 6.59 | -260.83 | -12.73 | -241.51 | 69.24 | -56.42 | -888.25 | -56.43 | -888.24 | -2.79 |
| | | 161 | 28.87 | 11.73 | -244.08 | 3.55 | -235.90 | 45.01 | -104.32 | -1168.22 | -104.45 | -1168.10 | -11.54 |
| | | 119 | 28.91 | 5.54 | -249.18 | 0.09 | -243.74 | -36.83 | -125.31 | -1166.60 | -125.69 | -1166.22 | 19.95 |
| 56 | 2 | 125 | 70.85 | 56.15 | -710.40 | -35.84 | -618.41 | -249.10 | 561.00 | -2265.59 | 556.49 | -2261.08 | 112.81 |
| | | 167 | 75.83 | 76.26 | -816.92 | -55.07 | -685.59 | 316.31 | 241.95 | -2272.23 | 225.49 | -2255.77 | 202.73 |
| | | 155 | 89.18 | 109.25 | -714.55 | 20.86 | -626.16 | 254.96 | -305.75 | -3756.40 | -307.27 | -3754.88 | 72.39 |
| | | 113 | 95.12 | 47.47 | -764.32 | 1.58 | -718.43 | -187.48 | 817.75 | -3474.76 | 806.16 | -3463.17 | 222.79 |
| 56 | 46 | 125 | 17.79 | 15.48 | -175.95 | -12.15 | -148.32 | -67.27 | -60.51 | -691.58 | -61.83 | -690.26 | 28.82 |
| | | 167 | 19.13 | 23.72 | -198.30 | -13.46 | -161.12 | 82.90 | -27.34 | -684.30 | -27.41 | -684.23 | -6.77 |
| | | 155 | 23.14 | 24.54 | -174.58 | 4.71 | -154.75 | 59.63 | -88.80 | -1027.23 | -88.92 | -1027.11 | -10.72 |
| | | 113 | 23.06 | 13.20 | -175.56 | 1.25 | -163.61 | -45.97 | -108.16 | -1025.08 | -108.68 | -1024.55 | 21.92 |
| 56 | 78 | 125 | 17.75 | 16.25 | -176.02 | -12.21 | -147.56 | -68.28 | -60.28 | -689.99 | -61.66 | -688.61 | 29.46 |
| | | 167 | 19.06 | 23.05 | -197.02 | -13.50 | -160.47 | 81.90 | -27.26 | -683.05 | -27.32 | -683.00 | -6.17 |
| | | 155 | 23.07 | 23.99 | -173.41 | 4.68 | -154.11 | 58.64 | -88.70 | -1025.97 | -88.81 | -1025.87 | -10.07 |
| | | 113 | 23.01 | 13.71 | -175.33 | 1.22 | -162.84 | -46.96 | -107.95 | -1023.46 | -108.50 | -1022.90 | 22.61 |
| 56 | 85 | 125 | 17.73 | 16.73 | -176.06 | -12.25 | -147.08 | -68.90 | -60.14 | -689.00 | -61.56 | -687.58 | 29.86 |
| | | 167 | 19.01 | 22.64 | -196.23 | -13.53 | -160.06 | 81.28 | -27.21 | -682.27 | -27.27 | -682.22 | -5.78 |
| | | 155 | 23.03 | 23.66 | -172.69 | 4.67 | -153.70 | 58.04 | -88.65 | -1025.19 | -88.75 | -1025.09 | -9.66 |
| | | 113 | 22.98 | 14.03 | -175.19 | 1.20 | -162.36 | -47.56 | -107.81 | -1022.45 | -108.40 | -1021.87 | 23.03 |
| 56 | 87 | 125 | 49.57 | 39.61 | -497.03 | -25.52 | -431.89 | -175.25 | 365.98 | -1602.25 | 362.79 | -1599.06 | 79.19 |
| | | 167 | 53.08 | 53.84 | -570.76 | -38.52 | -478.40 | 221.71 | 157.00 | -1605.12 | 146.69 | -1594.81 | 134.39 |
| | | 155 | 62.52 | 75.98 | -499.39 | 14.53 | -437.93 | 177.71 | -215.77 | -2640.84 | -216.68 | -2639.93 | 46.97 |
| | | 113 | 66.43 | 33.50 | -532.89 | 1.21 | -500.60 | -131.33 | 530.71 | -2452.75 | 522.99 | -2445.03 | 151.59 |
| 56 | 97 | 125 | 47.01 | 37.89 | -471.35 | -24.65 | -408.81 | -167.15 | 320.87 | -1536.34 | 317.80 | -1533.27 | 75.38 |
| | | 167 | 50.36 | 51.54 | -540.52 | -36.52 | -452.46 | 210.67 | 137.50 | -1537.21 | 128.82 | -1528.53 | 120.22 |
| | | 155 | 59.42 | 71.62 | -473.07 | 13.72 | -415.16 | 167.89 | -205.91 | -2516.83 | -206.64 | -2516.10 | 41.01 |
| | | 113 | 62.89 | 32.06 | -503.56 | 1.25 | -472.75 | -124.70 | 462.60 | -2347.31 | 455.64 | -2340.36 | 139.61 |
| 56 | 102 | 125 | 17.73 | 16.73 | -176.06 | -12.25 | -147.08 | -68.90 | -60.14 | -689.00 | -61.56 | -687.58 | 29.86 |
| | | 167 | 19.01 | 22.64 | -196.23 | -13.53 | -160.06 | 81.28 | -27.21 | -682.27 | -27.27 | -682.22 | -5.78 |
| | | 155 | 23.03 | 23.66 | -172.69 | 4.67 | -153.70 | 58.04 | -88.65 | -1025.19 | -88.75 | -1025.09 | -9.66 |
| | | 113 | 22.98 | 14.03 | -175.19 | 1.20 | -162.36 | -47.56 | -107.81 | -1022.45 | -108.40 | -1021.87 | 23.03 |
| 57 | 2 | 123 | 40.46 | 157.95 | -422.14 | -19.31 | -244.88 | -267.22 | 391.83 | -1416.20 | 376.33 | -1400.69 | 166.72 |
| | | 165 | 48.95 | 180.43 | -518.61 | -38.81 | -299.37 | 324.33 | 404.12 | -1385.47 | 396.60 | -1377.96 | 115.73 |
| | | 167 | 64.20 | 209.72 | -441.89 | 28.00 | -260.17 | 292.21 | -56.80 | -2950.32 | -62.94 | -2944.18 | 133.12 |
| | | 125 | 65.47 | 131.57 | -439.78 | 20.67 | -328.88 | -225.97 | 523.28 | -2830.93 | 515.58 | -2823.23 | 160.56 |
| 57 | 26 | 123 | 10.17 | 45.87 | -101.71 | -7.34 | -48.50 | -70.86 | -33.78 | -450.77 | -36.71 | -447.84 | 34.84 |
| | | 165 | 12.47 | 61.69 | -136.25 | -10.67 | -63.89 | 95.32 | 10.46 | -442.98 | 10.05 | -442.57 | -13.71 |
| | | 167 | 16.59 | 58.28 | -108.72 | 6.65 | -57.08 | 77.18 | -67.39 | -850.64 | -67.49 | -850.54 | -8.87 |
| | | 125 | 15.88 | 33.24 | -93.42 | 4.48 | -64.66 | -53.06 | -87.38 | -843.93 | -88.01 | -843.30 | 21.89 |
| 57 | 58 | 123 | 10.30 | 49.59 | -105.48 | -7.56 | -48.33 | -74.81 | -33.83 | -450.77 | -37.12 | -447.48 | 36.90 |
| | | 165 | 12.21 | 58.28 | -131.81 | -10.73 | -62.79 | 91.41 | 9.57 | -440.43 | 9.27 | -440.13 | -11.69 |
| | | 167 | 16.40 | 55.20 | -104.57 | 6.61 | -55.98 | 73.50 | -68.24 | -848.15 | -68.30 | -848.09 | -6.86 |
| | | 125 | 15.93 | 36.30 | -96.46 | 4.32 | -64.48 | -56.77 | -87.71 | -843.71 | -88.47 | -842.95 | 23.94 |
| 57 | 85 | 123 | 10.39 | 51.86 | -107.77 | -7.69 | -48.23 | -77.20 | -33.84 | -450.79 | -37.37 | -447.26 | 38.23 |
| | | 165 | 12.06 | 56.22 | -129.11 | -10.76 | -62.13 | 89.03 | 9.04 | -438.87 | 8.80 | -438.63 | -10.40 |
| | | 167 | 16.28 | 53.33 | -102.05 | 6.59 | -55.31 | 71.26 | -68.75 | -846.64 | -68.79 | -846.60 | -5.58 |
| | | 125 | 15.96 | 38.19 | -98.34 | 4.23 | -64.37 | -59.02 | -87.90 | -843.58 | -88.75 | -842.74 | 25.25 |
| 57 | 87 | 123 | 28.33 | 112.11 | -295.69 | -13.90 | -169.68 | -188.44 | 256.71 | -1004.24 | 245.90 | -993.43 | 116.25 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|---------|--------|---------|----------|---------|----------|--------|----------|---------|
| | | 165 | 34.23 | 127.72 | -362.89 | -27.31 | -207.87 | 228.09 | 270.18 | -981.73 | 265.57 | -977.12 | 75.77 |
| | | 167 | 44.96 | 146.91 | -308.19 | 19.55 | -180.82 | 204.31 | -47.31 | -2079.48 | -51.13 | -2075.67 | 88.00 |
| | | 125 | 45.74 | 92.73 | -306.22 | 14.35 | -227.84 | -158.52 | 337.11 | -1999.74 | 331.88 | -1994.52 | 110.41 |
| 57 | 97 | 123 | 26.89 | 107.91 | -280.76 | -13.56 | -159.29 | -180.15 | 226.09 | -965.55 | 215.87 | -955.33 | 109.88 |
| | | 165 | 32.45 | 122.59 | -344.22 | -26.05 | -195.58 | 217.47 | 244.50 | -943.04 | 240.72 | -939.27 | 66.82 |
| | | 167 | 42.69 | 139.52 | -291.32 | 18.49 | -170.29 | 193.64 | -51.75 | -1987.03 | -54.95 | -1983.84 | 78.51 |
| | | 125 | 43.32 | 88.61 | -288.98 | 13.49 | -213.86 | -150.74 | 291.10 | -1915.19 | 286.30 | -1910.39 | 102.83 |
| 57 | 102 | 123 | 10.39 | 51.86 | -107.77 | -7.69 | -48.23 | -77.20 | -33.84 | -450.79 | -37.37 | -447.26 | 38.23 |
| | | 165 | 12.06 | 56.22 | -129.11 | -10.76 | -62.13 | 89.03 | 9.04 | -438.87 | 8.80 | -438.63 | -10.40 |
| | | 167 | 16.28 | 53.33 | -102.05 | 6.59 | -55.31 | 71.26 | -68.75 | -846.64 | -68.79 | -846.60 | -5.58 |
| | | 125 | 15.96 | 38.19 | -98.34 | 4.23 | -64.37 | -59.02 | -87.90 | -843.58 | -88.75 | -842.74 | 25.25 |
| 58 | 2 | 109 | 31.31 | 341.86 | -163.33 | 25.61 | 152.92 | -244.44 | 316.12 | -517.21 | 249.56 | -450.64 | 225.93 |
| | | 151 | 29.02 | 339.51 | -228.57 | -0.44 | 111.37 | 278.48 | 549.79 | -386.96 | 549.13 | -386.30 | 24.88 |
| | | 165 | 44.24 | 417.55 | -235.71 | 42.96 | 138.88 | 323.09 | 102.14 | -2112.36 | 83.98 | -2094.21 | 199.70 |
| | | 123 | 44.73 | 335.31 | -196.72 | 47.40 | 91.19 | -265.11 | 329.35 | -2058.14 | 325.01 | -2053.79 | 101.74 |
| 58 | 21 | 109 | 8.67 | 105.67 | -38.04 | 5.80 | 61.83 | -66.16 | 2.56 | -174.05 | -8.23 | -163.26 | 42.30 |
| | | 151 | 9.62 | 114.35 | -66.63 | -0.52 | 48.23 | 87.14 | 56.89 | -153.45 | 54.52 | -151.07 | -22.20 |
| | | 165 | 14.19 | 127.50 | -61.24 | 10.95 | 55.31 | 91.72 | -46.39 | -633.87 | -46.41 | -633.85 | -3.27 |
| | | 123 | 12.81 | 99.20 | -38.77 | 12.10 | 48.33 | -66.56 | -65.08 | -628.17 | -66.04 | -627.21 | 23.20 |
| 58 | 53 | 109 | 9.03 | 109.57 | -42.38 | 5.57 | 61.62 | -70.62 | 3.28 | -175.66 | -8.68 | -163.70 | 44.69 |
| | | 151 | 9.26 | 110.84 | -61.96 | -0.59 | 49.47 | 82.70 | 55.62 | -151.09 | 53.70 | -149.16 | -19.86 |
| | | 165 | 14.00 | 124.37 | -56.79 | 11.03 | 56.55 | 87.68 | -45.56 | -631.90 | -45.56 | -631.90 | -1.15 |
| | | 123 | 13.01 | 102.91 | -42.91 | 11.89 | 48.12 | -70.62 | -65.47 | -628.81 | -66.61 | -627.67 | 25.33 |
| 58 | 85 | 109 | 9.25 | 111.96 | -45.05 | 5.43 | 61.48 | -73.33 | 3.76 | -176.70 | -8.96 | -163.97 | 46.20 |
| | | 151 | 9.05 | 108.73 | -59.14 | -0.63 | 50.22 | 80.00 | 54.86 | -149.67 | 53.20 | -148.01 | -18.37 |
| | | 165 | 13.88 | 122.49 | -54.10 | 11.08 | 57.31 | 85.22 | -45.05 | -630.72 | -45.05 | -630.72 | 0.21 |
| | | 123 | 13.14 | 105.18 | -45.43 | 11.76 | 47.99 | -73.09 | -65.70 | -629.23 | -66.96 | -627.96 | 26.70 |
| 58 | 87 | 109 | 22.09 | 242.78 | -114.83 | 17.80 | 110.15 | -172.74 | 211.24 | -368.36 | 165.18 | -322.29 | 156.78 |
| | | 151 | 20.54 | 240.77 | -160.20 | -0.38 | 80.94 | 196.32 | 373.49 | -277.57 | 373.18 | -277.27 | 14.14 |
| | | 165 | 31.34 | 294.62 | -164.27 | 30.12 | 100.23 | 226.76 | 61.48 | -1491.74 | 49.98 | -1480.23 | 133.16 |
| | | 123 | 31.55 | 237.44 | -137.08 | 33.17 | 67.19 | -186.48 | 210.81 | -1455.99 | 207.74 | -1452.92 | 71.38 |
| 58 | 97 | 109 | 21.14 | 233.78 | -109.44 | 16.77 | 107.56 | -165.50 | 190.33 | -355.79 | 147.09 | -312.55 | 147.46 |
| | | 151 | 19.71 | 231.53 | -152.22 | -0.43 | 79.74 | 187.64 | 343.74 | -269.79 | 343.57 | -269.62 | 10.22 |
| | | 165 | 30.11 | 281.88 | -155.18 | 28.62 | 98.07 | 215.75 | 49.06 | -1428.21 | 39.25 | -1418.40 | 119.98 |
| | | 123 | 30.18 | 227.98 | -129.47 | 31.46 | 67.05 | -177.83 | 180.45 | -1396.49 | 177.52 | -1393.56 | 67.89 |
| 58 | 102 | 109 | 9.25 | 111.96 | -45.05 | 5.43 | 61.48 | -73.33 | 3.76 | -176.70 | -8.96 | -163.97 | 46.20 |
| | | 151 | 9.05 | 108.73 | -59.14 | -0.63 | 50.22 | 80.00 | 54.86 | -149.67 | 53.20 | -148.01 | -18.37 |
| | | 165 | 13.88 | 122.49 | -54.10 | 11.08 | 57.31 | 85.22 | -45.05 | -630.72 | -45.05 | -630.72 | 0.21 |
| | | 123 | 13.14 | 105.18 | -45.43 | 11.76 | 47.99 | -73.09 | -65.70 | -629.23 | -66.96 | -627.96 | 26.70 |
| 59 | 2 | 118 | 36.78 | 530.70 | 104.54 | 105.19 | 530.05 | -16.63 | 956.24 | 193.12 | 233.51 | 915.86 | 170.85 |
| | | 160 | 35.79 | 507.57 | 83.51 | 84.07 | 507.01 | 15.47 | 1038.13 | 761.93 | 763.96 | 1036.11 | 23.55 |
| | | 151 | 49.95 | 739.02 | -127.36 | 75.22 | 536.43 | 366.71 | 220.08 | -1179.17 | 171.21 | -1130.30 | 256.90 |
| | | 109 | 51.19 | 684.06 | -89.38 | 97.13 | 497.55 | -330.86 | 218.47 | -1140.15 | 214.84 | -1136.52 | 70.14 |
| 59 | 21 | 118 | 11.66 | 170.45 | 27.84 | 27.89 | 170.39 | 2.87 | 271.95 | 53.29 | 53.52 | 271.72 | 7.12 |
| | | 160 | 11.32 | 162.86 | 21.68 | 22.45 | 162.09 | 10.39 | 291.22 | 125.02 | 125.04 | 291.20 | 1.90 |
| | | 151 | 16.66 | 230.21 | -38.49 | 20.84 | 170.88 | 111.45 | -16.92 | -364.52 | -17.16 | -364.27 | -9.26 |
| | | 109 | 15.41 | 208.32 | -17.61 | 27.26 | 163.46 | -90.13 | -33.42 | -364.50 | -36.81 | -361.11 | 33.30 |
| 59 | 53 | 118 | 11.65 | 170.30 | 27.83 | 27.86 | 170.27 | -1.94 | 271.85 | 52.42 | 52.90 | 271.36 | 10.34 |
| | | 160 | 11.41 | 164.02 | 22.57 | 22.78 | 163.80 | 5.48 | 293.68 | 123.95 | 124.11 | 293.52 | 5.23 |
| | | 151 | 16.43 | 227.91 | -34.39 | 20.96 | 172.56 | 107.03 | -16.34 | -362.08 | -16.46 | -361.96 | -6.39 |
| | | 109 | 15.66 | 211.60 | -21.28 | 27.02 | 163.31 | -94.42 | -33.27 | -365.39 | -37.24 | -361.43 | 36.06 |
| 59 | 85 | 118 | 11.64 | 170.37 | 27.67 | 27.83 | 170.20 | -4.86 | 271.84 | 51.82 | 52.52 | 271.14 | 12.35 |
| | | 160 | 11.47 | 164.89 | 22.94 | 22.98 | 164.84 | 2.49 | 295.24 | 123.22 | 123.53 | 294.93 | 7.30 |
| | | 151 | 16.30 | 226.55 | -31.94 | 21.04 | 173.57 | 104.34 | -15.97 | -360.62 | -16.03 | -360.56 | -4.59 |
| | | 109 | 15.82 | 213.62 | -23.54 | 26.87 | 163.21 | -97.03 | -33.16 | -365.97 | -37.50 | -361.62 | 37.79 |
| 59 | 87 | 118 | 26.06 | 376.52 | 73.38 | 73.83 | 376.06 | -11.73 | 672.89 | 136.51 | 162.68 | 646.72 | 115.55 |
| | | 160 | 25.37 | 360.36 | 58.74 | 59.11 | 359.99 | 10.65 | 731.42 | 524.42 | 525.77 | 730.06 | 16.67 |
| | | 151 | 35.46 | 522.85 | -89.13 | 52.95 | 380.76 | 258.38 | 142.84 | -832.44 | 112.00 | -801.61 | 170.66 |
| | | 109 | 36.23 | 484.49 | -62.69 | 68.33 | 353.46 | -233.51 | 141.06 | -808.73 | 138.22 | -805.90 | 51.80 |
| 59 | 97 | 118 | 25.04 | 362.18 | 69.85 | 70.28 | 361.75 | -11.22 | 642.00 | 130.48 | 153.36 | 619.13 | 105.73 |
| | | 160 | 24.39 | 346.90 | 56.02 | 56.35 | 346.57 | 9.91 | 698.76 | 489.11 | 490.32 | 697.54 | 15.93 |
| | | 151 | 34.14 | 501.55 | -84.54 | 50.55 | 366.47 | 246.83 | 125.08 | -796.84 | 98.91 | -770.67 | 153.11 |
| | | 109 | 34.77 | 465.24 | -59.60 | 65.19 | 340.45 | -223.43 | 121.98 | -777.79 | 119.00 | -774.81 | 51.73 |
| 59 | 102 | 118 | 11.64 | 170.37 | 27.67 | 27.83 | 170.20 | -4.86 | 271.84 | 51.82 | 52.52 | 271.14 | 12.35 |
| | | 160 | 11.47 | 164.89 | 22.94 | 22.98 | 164.84 | 2.49 | 295.24 | 123.22 | 123.53 | 294.93 | 7.30 |
| | | 151 | 16.30 | 226.55 | -31.94 | 21.04 | 173.57 | 104.34 | -15.97 | -360.62 | -16.03 | -360.56 | -4.59 |
| | | 109 | 15.82 | 213.62 | -23.54 | 26.87 | 163.21 | -97.03 | -33.16 | -365.97 | -37.50 | -361.62 | 37.79 |
| 60 | 2 | 117 | 152.89 | 1873.57 | -954.98 | 179.78 | 738.81 | 1386.38 | 1418.09 | -751.36 | -61.89 | 728.62 | 1010.15 |
| | | 159 | 152.56 | 1914.71 | -941.89 | 215.29 | 757.54 | -1402.33 | 1747.01 | -142.04 | 697.59 | 907.38 | -938.69 |
| | | 160 | 83.24 | 1094.97 | -231.12 | 120.22 | 743.63 | 585.21 | 1307.92 | -338.02 | 335.02 | 634.89 | 809.20 |
| | | 118 | 74.85 | 1113.23 | -199.74 | 159.02 | 754.46 | -585.09 | 926.62 | 14.01 | 318.80 | 621.82 | -430.42 |
| 60 | 23 | 117 | 45.82 | 579.21 | -300.77 | 45.93 | 232.51 | 429.98 | 402.42 | -131.28 | 30.85 | 240.29 | 245.45 |
| | | 159 | 47.31 | 609.13 | -308.67 | 56.86 | 243.61 | -449.30 | 432.48 | -69.40 | 92.28 | 270.80 | -234.53 |
| | | 160 | 22.94 | 336.68 | -63.48 | 35.72 | 237.48 | 172.79 | 272.33 | -30.65 | 54.98 | 186.70 | 136.42 |
| | | 118 | 23.03 | 353.24 | -70.92 | 43.76 | 238.56 | -188.39 | 233.77 | 8.96 | 53.69 | 189.04 | -89.75 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|--------|---------|----------|---------|----------|---------|---------|---------|
| 60 | 55 | 117 | 46.14 | 583.85 | -305.31 | 46.04 | 232.50 | 434.70 | 400.32 | -128.17 | 31.75 | 240.40 | 242.78 |
| | | 159 | 46.96 | 603.42 | -304.80 | 56.50 | 242.12 | -444.53 | 434.82 | -71.77 | 93.26 | 269.79 | -237.42 |
| | | 160 | 23.14 | 339.30 | -67.84 | 35.45 | 236.01 | 177.16 | 269.35 | -28.01 | 55.59 | 185.75 | 133.68 |
| | | 118 | 22.78 | 349.40 | -67.09 | 43.78 | 238.53 | -184.08 | 235.94 | 7.38 | 54.23 | 189.09 | -92.27 |
| 60 | 85 | 117 | 46.34 | 586.67 | -308.07 | 46.12 | 232.48 | 437.56 | 399.02 | -126.23 | 32.31 | 240.48 | 241.12 |
| | | 159 | 46.75 | 599.95 | -302.46 | 56.27 | 241.22 | -441.63 | 436.29 | -73.24 | 93.87 | 269.18 | -239.21 |
| | | 160 | 23.26 | 340.91 | -70.50 | 35.29 | 235.12 | 179.81 | 267.51 | -26.36 | 55.97 | 185.18 | 131.97 |
| | | 118 | 22.63 | 347.08 | -64.78 | 43.80 | 238.51 | -181.46 | 237.31 | 6.38 | 54.58 | 189.12 | -93.85 |
| 60 | 87 | 117 | 108.11 | 1327.26 | -677.73 | 126.00 | 523.54 | 982.59 | 998.58 | -517.72 | -36.95 | 517.81 | 705.58 |
| | | 159 | 107.94 | 1356.46 | -668.24 | 151.03 | 537.19 | -993.77 | 1221.92 | -103.54 | 477.58 | 640.81 | -657.69 |
| | | 160 | 58.58 | 775.43 | -163.48 | 84.85 | 527.10 | 414.12 | 906.92 | -228.16 | 230.81 | 447.95 | 557.06 |
| | | 118 | 52.91 | 788.42 | -141.79 | 111.85 | 534.78 | -414.26 | 648.80 | 10.78 | 219.81 | 439.76 | -299.46 |
| 60 | 97 | 117 | 103.64 | 1274.84 | -652.10 | 119.74 | 503.00 | 944.22 | 953.39 | -483.28 | -28.83 | 498.94 | 668.11 |
| | | 159 | 103.54 | 1302.91 | -642.79 | 143.63 | 516.49 | -954.82 | 1158.75 | -102.65 | 442.52 | 613.59 | -624.87 |
| | | 160 | 55.90 | 744.54 | -156.73 | 81.24 | 506.58 | 397.29 | 852.45 | -208.46 | 215.42 | 428.58 | 519.64 |
| | | 118 | 50.72 | 757.07 | -136.46 | 106.67 | 513.94 | -397.66 | 615.95 | 10.88 | 205.17 | 421.66 | -282.51 |
| 60 | 102 | 117 | 46.34 | 586.67 | -308.07 | 46.12 | 232.48 | 437.56 | 399.02 | -126.23 | 32.31 | 240.48 | 241.12 |
| | | 159 | 46.75 | 599.95 | -302.46 | 56.27 | 241.22 | -441.63 | 436.29 | -73.24 | 93.87 | 269.18 | -239.21 |
| | | 160 | 23.26 | 340.91 | -70.50 | 35.29 | 235.12 | 179.81 | 267.51 | -26.36 | 55.97 | 185.18 | 131.97 |
| | | 118 | 22.63 | 347.08 | -64.78 | 43.80 | 238.51 | -181.46 | 237.31 | 6.38 | 54.58 | 189.12 | -93.85 |
| 61 | 2 | 149 | 80.19 | 1316.76 | -197.59 | 167.62 | 951.55 | 647.82 | 989.49 | 318.39 | 318.60 | 989.28 | 11.89 |
| | | 191 | 86.22 | 1107.29 | -353.40 | -53.82 | 807.71 | -589.78 | 1491.45 | 114.51 | 582.56 | 1023.40 | -652.23 |
| | | 190 | 170.18 | 2344.90 | -999.75 | 345.14 | 1000.01 | 1639.96 | 2012.35 | 551.11 | 1498.06 | 1065.40 | 697.86 |
| | | 148 | 166.09 | 2026.15 | -1151.04 | 90.37 | 784.74 | -1550.19 | 1078.47 | -1123.42 | -622.28 | 577.32 | -923.22 |
| 61 | 36 | 149 | 23.78 | 388.87 | -82.10 | 43.90 | 262.87 | 208.49 | 207.08 | 79.60 | 83.66 | 203.01 | 22.39 |
| | | 191 | 25.04 | 343.83 | -107.72 | -7.46 | 243.57 | -187.67 | 338.01 | 12.01 | 140.13 | 209.88 | -159.22 |
| | | 190 | 49.43 | 668.11 | -293.82 | 89.84 | 284.44 | 471.02 | 571.12 | 129.23 | 362.43 | 337.93 | 220.61 |
| | | 148 | 46.86 | 573.93 | -315.34 | 32.54 | 226.05 | -433.98 | 365.44 | -256.76 | -99.96 | 208.63 | -270.14 |
| 61 | 68 | 149 | 23.56 | 385.26 | -79.02 | 44.64 | 261.60 | 205.23 | 207.23 | 77.28 | 82.26 | 202.25 | 24.96 |
| | | 191 | 25.04 | 341.77 | -112.66 | -7.81 | 236.92 | -191.45 | 332.37 | 11.60 | 138.98 | 205.00 | -156.95 |
| | | 190 | 48.79 | 658.18 | -292.07 | 88.51 | 277.59 | 465.63 | 564.74 | 129.00 | 360.69 | 333.05 | 217.43 |
| | | 148 | 47.16 | 577.67 | -320.88 | 32.20 | 224.58 | -438.86 | 361.42 | -255.51 | -101.91 | 207.83 | -266.77 |
| 61 | 85 | 149 | 23.43 | 383.06 | -77.14 | 45.08 | 260.83 | 203.25 | 207.38 | 75.78 | 81.38 | 201.78 | 26.58 |
| | | 191 | 25.04 | 340.56 | -115.71 | -8.02 | 232.87 | -193.75 | 328.90 | 11.37 | 138.24 | 202.02 | -155.53 |
| | | 190 | 48.41 | 652.15 | -291.01 | 87.70 | 273.43 | 462.35 | 560.80 | 128.86 | 359.58 | 330.08 | 215.47 |
| | | 148 | 47.34 | 579.94 | -324.26 | 31.99 | 223.69 | -441.82 | 358.94 | -254.75 | -103.15 | 207.33 | -264.68 |
| 61 | 87 | 149 | 56.56 | 928.87 | -141.96 | 117.76 | 669.15 | 458.98 | 686.71 | 222.97 | 223.25 | 686.42 | 11.47 |
| | | 191 | 60.81 | 783.52 | -250.95 | -36.95 | 569.52 | -419.02 | 1038.00 | 78.01 | 406.80 | 709.20 | -455.55 |
| | | 190 | 119.90 | 1650.22 | -705.30 | 241.79 | 703.13 | 1154.95 | 1415.61 | 385.32 | 1046.65 | 754.28 | 493.97 |
| | | 148 | 117.04 | 1428.09 | -810.59 | 64.51 | 552.99 | -1092.37 | 766.80 | -782.88 | -428.60 | 412.53 | -650.77 |
| 61 | 97 | 149 | 54.09 | 888.44 | -138.33 | 112.17 | 637.94 | 440.97 | 645.92 | 211.72 | 212.13 | 645.51 | 13.35 |
| | | 191 | 58.15 | 751.78 | -241.68 | -34.37 | 544.47 | -403.71 | 980.48 | 74.02 | 388.16 | 666.34 | -431.36 |
| | | 190 | 114.54 | 1574.61 | -674.57 | 229.80 | 670.23 | 1102.82 | 1353.05 | 367.78 | 996.17 | 724.66 | 473.56 |
| | | 148 | 111.83 | 1364.78 | -773.87 | 62.58 | 528.33 | -1043.66 | 738.71 | -741.18 | -401.62 | 399.15 | -622.26 |
| 61 | 102 | 149 | 23.43 | 383.06 | -77.14 | 45.08 | 260.83 | 203.25 | 207.38 | 75.78 | 81.38 | 201.78 | 26.58 |
| | | 191 | 25.04 | 340.56 | -115.71 | -8.02 | 232.87 | -193.75 | 328.90 | 11.37 | 138.24 | 202.02 | -155.53 |
| | | 190 | 48.41 | 652.15 | -291.01 | 87.70 | 273.43 | 462.35 | 560.80 | 128.86 | 359.58 | 330.08 | 215.47 |
| | | 148 | 47.34 | 579.94 | -324.26 | 31.99 | 223.69 | -441.82 | 358.94 | -254.75 | -103.15 | 207.33 | -264.68 |
| 62 | 2 | 150 | 55.82 | 789.47 | -48.85 | 53.32 | 687.30 | 274.24 | 282.81 | -847.66 | 160.50 | -725.35 | -351.14 |
| | | 192 | 53.56 | 845.71 | -103.68 | 33.78 | 708.26 | -334.07 | 264.38 | -780.96 | 235.44 | -752.02 | -171.50 |
| | | 191 | 46.71 | 663.90 | -12.24 | -10.73 | 662.39 | 31.89 | 1410.39 | 855.25 | 1000.95 | 1264.69 | -244.25 |
| | | 149 | 52.52 | 751.34 | 67.30 | 67.46 | 751.18 | -10.36 | 1108.94 | -22.82 | -2.75 | 1088.87 | -149.37 |
| 62 | 30 | 150 | 15.84 | 194.36 | -22.95 | 16.23 | 155.18 | 83.54 | 27.16 | -374.85 | 10.57 | -358.26 | -79.95 |
| | | 192 | 17.20 | 234.68 | -46.96 | 14.01 | 173.71 | -115.99 | 43.41 | -375.55 | 42.70 | -374.84 | -17.24 |
| | | 191 | 11.04 | 146.74 | -9.11 | -7.06 | 144.69 | -17.75 | 338.60 | 220.64 | 244.78 | 314.45 | -47.59 |
| | | 149 | 12.70 | 185.31 | 18.88 | 19.08 | 185.11 | 5.75 | 272.56 | 15.98 | 20.14 | 268.40 | 32.38 |
| 62 | 62 | 150 | 16.09 | 198.03 | -25.39 | 15.88 | 156.76 | 86.70 | 29.07 | -373.65 | 11.37 | -355.95 | -82.55 |
| | | 192 | 17.14 | 235.18 | -43.77 | 13.93 | 177.47 | -112.99 | 44.72 | -371.19 | 43.82 | -370.29 | -19.31 |
| | | 191 | 11.21 | 149.66 | -8.55 | -7.29 | 148.39 | -14.09 | 344.25 | 220.29 | 245.76 | 318.78 | -50.08 |
| | | 149 | 12.81 | 187.17 | 17.87 | 18.42 | 186.63 | 9.57 | 275.46 | 16.35 | 21.30 | 270.51 | -35.48 |
| 62 | 85 | 150 | 16.25 | 200.26 | -26.88 | 15.66 | 157.72 | 88.62 | 30.28 | -372.96 | 11.86 | -354.54 | -84.19 |
| | | 192 | 17.10 | 235.52 | -41.87 | 13.88 | 179.76 | -111.17 | 45.54 | -368.56 | 44.51 | -367.53 | -20.62 |
| | | 191 | 11.32 | 151.53 | -8.31 | -7.43 | 150.64 | -11.87 | 347.73 | 220.06 | 246.38 | 321.41 | -51.65 |
| | | 149 | 12.88 | 188.37 | 17.19 | 18.02 | 187.54 | 11.89 | 277.27 | 16.55 | 22.04 | 271.79 | -37.42 |
| 62 | 87 | 150 | 39.38 | 552.78 | -35.91 | 37.63 | 479.23 | 194.65 | 191.86 | -614.11 | 108.58 | -530.84 | -245.32 |
| | | 192 | 37.98 | 595.01 | -74.51 | 24.37 | 496.14 | -237.54 | 181.62 | -569.08 | 162.90 | -550.35 | -117.08 |
| | | 191 | 32.64 | 462.50 | -8.97 | -8.15 | 461.68 | 19.68 | 986.55 | 599.58 | 700.15 | 885.98 | -169.72 |
| | | 149 | 36.73 | 525.85 | 47.31 | 47.37 | 525.80 | -5.32 | 776.26 | -13.00 | 1.10 | 762.15 | -104.57 |
| 62 | 97 | 150 | 37.67 | 524.72 | -35.80 | 36.00 | 452.92 | 187.32 | 176.96 | -603.13 | 100.01 | -526.18 | -232.61 |
| | | 192 | 36.52 | 567.52 | -72.63 | 23.82 | 471.07 | -228.99 | 171.26 | -561.60 | 154.92 | -545.26 | -108.21 |
| | | 191 | 30.90 | 436.66 | -8.89 | -8.31 | 436.08 | 16.08 | 936.89 | 572.01 | 667.13 | 841.77 | -160.19 |
| | | 149 | 34.81 | 498.94 | 45.11 | 45.13 | 498.92 | -3.15 | 736.69 | -9.80 | 3.70 | 723.19 | -99.50 |
| 62 | 102 | 150 | 16.25 | 200.26 | -26.88 | 15.66 | 157.72 | 88.62 | 30.28 | -372.96 | 11.86 | -354.54 | -84.19 |
| | | 192 | 17.10 | 235.52 | -41.87 | 13.88 | 179.76 | -111.17 | 45.54 | -368.56 | 44.51 | -367.53 | -20.62 |
| | | 191 | 11.32 | 151.53 | -8.31 | -7.43 | 150.64 | -11.87 | 347.73 | 220.06 | 246.38 | 321.41 | -51.65 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|--------|----------|--------|----------|---------|
| 63 | 2 | 149 | 12.88 | 188.37 | 17.19 | 18.02 | 187.54 | 11.89 | 277.27 | 16.55 | 22.04 | 271.79 | -37.42 |
| | | 154 | 44.85 | 406.63 | -64.63 | 27.09 | 314.92 | 186.57 | 173.89 | -1551.33 | 140.49 | -1517.92 | -237.74 |
| | | 196 | 48.24 | 559.51 | -97.43 | 40.86 | 421.22 | -267.82 | 103.38 | -1614.17 | 83.47 | -1594.25 | -183.88 |
| | | 192 | 28.55 | 388.92 | -177.39 | -46.51 | 258.04 | -238.72 | 592.40 | -120.29 | 577.62 | -105.51 | -101.57 |
| 63 | 30 | 150 | 34.73 | 509.98 | -67.02 | -0.52 | 443.48 | 184.25 | 273.03 | -377.24 | 67.75 | -171.96 | -302.24 |
| | | 154 | 12.10 | 73.95 | -37.21 | 7.96 | 28.78 | 54.60 | -4.36 | -625.21 | -8.32 | -621.24 | -49.46 |
| | | 196 | 14.85 | 138.27 | -52.36 | 14.81 | 71.10 | -91.06 | 2.17 | -650.24 | 1.29 | -649.36 | -23.92 |
| | | 192 | 9.14 | 90.59 | -96.03 | -16.23 | 10.79 | -92.32 | 137.28 | -140.40 | 137.06 | -140.18 | -7.85 |
| 63 | 62 | 150 | 9.67 | 109.71 | -35.05 | -1.01 | 75.66 | 61.40 | 35.02 | -194.41 | 5.69 | -165.08 | -76.61 |
| | | 154 | 12.29 | 77.41 | -39.69 | 7.75 | 29.96 | 57.48 | -3.20 | -623.58 | -7.49 | -619.28 | -51.45 |
| | | 196 | 14.77 | 137.09 | -48.95 | 14.81 | 73.34 | -88.30 | 3.41 | -646.99 | 2.40 | -645.97 | -25.65 |
| | | 192 | 8.91 | 88.72 | -92.20 | -16.47 | 12.98 | -89.26 | 138.31 | -137.21 | 137.97 | -136.87 | -9.72 |
| 63 | 85 | 150 | 9.95 | 113.19 | -37.83 | -1.44 | 76.80 | 64.59 | 37.36 | -194.13 | 6.42 | -163.20 | -78.77 |
| | | 154 | 12.41 | 79.51 | -41.20 | 7.63 | 30.68 | 59.24 | -2.47 | -622.61 | -6.99 | -618.10 | -52.72 |
| | | 196 | 14.73 | 136.40 | -46.90 | 14.80 | 74.70 | -86.62 | 4.17 | -645.02 | 3.07 | -643.92 | -26.76 |
| | | 192 | 8.77 | 87.60 | -89.90 | -16.61 | 14.31 | -87.39 | 138.96 | -135.30 | 138.53 | -134.86 | -10.91 |
| 63 | 87 | 150 | 10.12 | 115.31 | -39.52 | -1.70 | 77.49 | 66.53 | 38.85 | -194.03 | 6.88 | -162.06 | -80.15 |
| | | 154 | 31.55 | 280.87 | -47.76 | 19.08 | 214.04 | 132.28 | 115.37 | -1117.01 | 92.73 | -1094.36 | -165.52 |
| | | 196 | 34.11 | 390.73 | -70.74 | 29.21 | 290.77 | -190.09 | 69.12 | -1161.76 | 56.05 | -1148.69 | -126.16 |
| | | 192 | 20.15 | 270.11 | -129.40 | -33.22 | 173.93 | -170.80 | 413.09 | -97.86 | 403.55 | -88.32 | -69.17 |
| 63 | 97 | 150 | 24.50 | 354.80 | -49.38 | -0.57 | 305.98 | 131.71 | 185.85 | -276.02 | 46.08 | -136.25 | -212.18 |
| | | 154 | 30.10 | 262.94 | -47.87 | 18.21 | 196.86 | 127.17 | 104.12 | -1090.22 | 83.31 | -1069.41 | -156.28 |
| | | 196 | 32.72 | 369.83 | -69.67 | 28.31 | 271.86 | -182.92 | 64.36 | -1133.17 | 52.76 | -1121.58 | -117.25 |
| | | 192 | 19.31 | 254.31 | -127.99 | -32.17 | 158.49 | -165.68 | 392.80 | -106.03 | 384.47 | -97.70 | -63.92 |
| 63 | 102 | 150 | 23.43 | 334.57 | -49.35 | -0.75 | 285.97 | 127.66 | 171.95 | -273.70 | 42.86 | -144.61 | -202.15 |
| | | 154 | 12.41 | 79.51 | -41.20 | 7.63 | 30.68 | 59.24 | -2.47 | -622.61 | -6.99 | -618.10 | -52.72 |
| | | 196 | 14.73 | 136.40 | -46.90 | 14.80 | 74.70 | -86.62 | 4.17 | -645.02 | 3.07 | -643.92 | -26.76 |
| | | 192 | 8.77 | 87.60 | -89.90 | -16.61 | 14.31 | -87.39 | 138.96 | -135.30 | 138.53 | -134.86 | -10.91 |
| 64 | 2 | 150 | 10.12 | 115.31 | -39.52 | -1.70 | 77.49 | 66.53 | 38.85 | -194.03 | 6.88 | -162.06 | -80.15 |
| | | 158 | 36.57 | 144.88 | -163.15 | 13.47 | -31.74 | 152.35 | 108.07 | -2203.39 | 89.64 | -2184.95 | -205.60 |
| | | 200 | 41.52 | 307.82 | -163.36 | 44.06 | 100.40 | -233.90 | 34.44 | -2273.41 | 25.31 | -2264.28 | -144.91 |
| | | 196 | 33.18 | 205.11 | -343.53 | -54.18 | -84.25 | -273.90 | 369.04 | -970.82 | 361.33 | -963.12 | -101.33 |
| 64 | 33 | 154 | 32.20 | 243.47 | -161.25 | -20.96 | 103.18 | 192.61 | 179.86 | -1063.05 | 116.12 | -999.31 | -274.16 |
| | | 158 | 16.80 | 20.00 | -100.56 | 3.21 | -83.77 | 41.74 | -27.94 | -838.50 | -29.82 | -836.62 | -39.00 |
| | | 200 | 16.61 | 69.01 | -91.24 | 14.86 | -37.09 | -75.80 | -10.71 | -863.67 | -10.92 | -863.46 | -13.47 |
| | | 196 | 14.52 | 46.93 | -164.19 | -17.43 | -99.84 | -97.19 | 81.70 | -432.41 | 81.53 | -432.24 | -9.35 |
| 64 | 65 | 154 | 9.17 | 40.70 | -85.37 | -6.97 | -37.70 | 61.14 | 6.21 | -460.86 | -3.58 | -451.08 | -66.88 |
| | | 158 | 16.73 | 21.91 | -101.55 | 3.07 | -82.70 | 44.40 | -28.54 | -836.28 | -30.62 | -834.21 | -40.89 |
| | | 200 | 16.41 | 67.04 | -87.83 | 14.78 | -35.57 | -73.23 | -11.69 | -860.08 | -11.96 | -859.81 | -15.18 |
| | | 196 | 14.31 | 44.76 | -160.77 | -17.67 | -98.35 | -94.52 | 82.78 | -428.84 | 82.54 | -428.60 | -11.06 |
| 64 | 85 | 154 | 9.17 | 43.59 | -87.53 | -7.29 | -36.66 | 63.89 | 7.58 | -459.05 | -2.80 | -448.68 | -68.80 |
| | | 158 | 16.69 | 23.11 | -102.18 | 2.98 | -82.05 | 46.01 | -28.90 | -834.94 | -31.11 | -832.73 | -42.09 |
| | | 200 | 16.29 | 65.84 | -85.76 | 14.74 | -34.65 | -71.67 | -12.28 | -857.89 | -12.59 | -857.58 | -16.26 |
| | | 196 | 14.18 | 43.44 | -158.70 | -17.82 | -97.44 | -92.90 | 83.44 | -426.68 | 83.15 | -426.39 | -12.16 |
| 64 | 87 | 154 | 9.16 | 45.35 | -88.85 | -7.48 | -36.03 | 65.57 | 8.43 | -457.97 | -2.33 | -447.21 | -70.03 |
| | | 158 | 26.40 | 98.32 | -121.04 | 9.38 | -32.10 | 107.70 | 68.06 | -1580.11 | 55.61 | -1567.67 | -142.68 |
| | | 200 | 29.30 | 213.04 | -119.39 | 31.34 | 62.31 | -165.49 | 21.13 | -1629.79 | 15.19 | -1623.86 | -98.77 |
| | | 196 | 23.93 | 141.77 | -249.41 | -38.49 | -69.16 | -194.99 | 256.98 | -703.93 | 251.97 | -698.93 | -69.18 |
| 64 | 97 | 154 | 22.66 | 167.22 | -118.21 | -14.97 | 63.98 | 137.15 | 120.70 | -769.43 | 77.10 | -725.84 | -192.11 |
| | | 158 | 26.04 | 90.47 | -121.72 | 8.85 | -40.10 | 103.23 | 57.97 | -1536.13 | 46.59 | -1524.75 | -134.19 |
| | | 200 | 28.03 | 199.83 | -118.33 | 30.21 | 51.29 | -158.73 | 19.00 | -1583.66 | 13.81 | -1578.46 | -91.13 |
| | | 196 | 23.42 | 132.85 | -245.50 | -37.08 | -75.57 | -188.19 | 244.54 | -691.55 | 240.14 | -687.15 | -64.04 |
| 64 | 102 | 154 | 21.63 | 155.66 | -117.55 | -14.51 | 52.62 | 132.42 | 110.23 | -754.70 | 69.78 | -714.24 | -182.63 |
| | | 158 | 16.69 | 23.11 | -102.18 | 2.98 | -82.05 | 46.01 | -28.90 | -834.94 | -31.11 | -832.73 | -42.09 |
| | | 200 | 16.29 | 65.84 | -85.76 | 14.74 | -34.65 | -71.67 | -12.28 | -857.89 | -12.59 | -857.58 | -16.26 |
| | | 196 | 14.18 | 43.44 | -158.70 | -17.82 | -97.44 | -92.90 | 83.44 | -426.68 | 83.15 | -426.39 | -12.16 |
| 65 | 2 | 154 | 9.16 | 45.35 | -88.85 | -7.48 | -36.03 | 65.57 | 8.43 | -457.97 | -2.33 | -447.21 | -70.03 |
| | | 162 | 59.56 | 53.51 | -386.07 | 9.11 | -341.67 | 132.46 | 61.07 | -2782.63 | 47.60 | -2769.16 | -195.28 |
| | | 204 | 57.60 | 161.94 | -320.29 | 43.13 | -201.48 | -207.79 | -14.94 | -2847.57 | -19.36 | -2843.15 | -111.80 |
| | | 200 | 51.36 | 90.12 | -520.81 | -51.24 | -379.45 | -257.64 | 240.56 | -1693.33 | 234.23 | -1687.01 | -110.44 |
| 65 | 47 | 158 | 37.87 | 79.06 | -318.08 | -24.50 | -214.53 | 174.36 | 141.42 | -1752.77 | 111.54 | -1722.89 | -236.03 |
| | | 162 | 23.91 | 8.67 | -186.52 | 0.98 | -178.83 | 37.97 | -51.53 | -1015.85 | -52.83 | -1014.55 | -35.38 |
| | | 204 | 23.00 | 32.99 | -154.00 | 13.34 | -134.36 | -57.34 | -22.73 | -1035.34 | -22.80 | -1035.27 | -8.25 |
| | | 200 | 20.95 | 16.65 | -223.09 | -15.98 | -190.47 | -82.20 | 48.34 | -672.15 | 48.04 | -671.84 | -14.79 |
| 65 | 79 | 158 | 17.30 | 13.65 | -160.75 | -8.61 | -138.49 | 58.19 | -14.45 | -696.14 | -19.51 | -691.08 | -58.50 |
| | | 162 | 23.84 | 8.47 | -185.40 | 1.01 | -177.94 | 37.30 | -51.29 | -1013.77 | -52.55 | -1012.51 | -34.77 |
| | | 204 | 22.93 | 33.50 | -153.55 | 13.36 | -133.41 | -57.98 | -22.41 | -1033.02 | -22.47 | -1032.96 | -7.71 |
| | | 200 | 20.89 | 17.27 | -222.71 | -15.91 | -189.53 | -82.84 | 48.64 | -669.80 | 48.36 | -669.52 | -14.26 |
| 65 | 85 | 158 | 17.22 | 13.38 | -159.52 | -8.55 | -137.60 | 57.53 | -14.70 | -694.01 | -19.67 | -689.04 | -57.90 |
| | | 162 | 23.79 | 8.35 | -184.71 | 1.03 | -177.38 | 36.89 | -51.14 | -1012.48 | -52.37 | -1011.25 | -34.38 |
| | | 204 | 22.89 | 33.82 | -153.27 | 13.37 | -132.83 | -58.37 | -22.21 | -1031.58 | -22.27 | -1031.53 | -7.38 |
| | | 200 | 20.86 | 17.66 | -222.47 | -15.87 | -188.94 | -83.23 | 48.82 | -668.35 | 48.55 | -668.08 | -13.92 |
| 65 | 87 | 158 | 17.17 | 13.21 | -158.76 | -8.51 | -137.04 | 57.13 | -14.85 | -692.69 | -19.76 | -687.77 | -57.51 |
| | | 162 | 42.88 | 36.41 | -281.62 | 6.21 | -251.43 | 93.23 | 33.77 | -1989.95 | 24.75 | -1980.94 | -134.77 |
| | | 204 | 41.43 | 111.70 | -233.20 | 30.54 | -152.03 | -146.31 | -13.05 | -2035.79 | -15.88 | -2032.97 | -75.52 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 200 | 36.99 | 62.01 | -376.45 | -36.27 | -278.16 | -182.85 | 166.76 | -1217.88 | 162.63 | -1213.75 | -75.48 |
| | | 158 | 27.53 | 53.84 | -232.60 | -17.46 | -161.29 | 123.86 | 92.16 | -1260.73 | 71.72 | -1240.29 | -165.02 |
| 65 | 97 | 162 | 41.84 | 33.59 | -278.40 | 5.73 | -250.55 | 88.96 | 24.02 | -1929.28 | 15.86 | -1921.12 | -126.00 |
| | | 204 | 40.40 | 104.46 | -230.19 | 29.31 | -155.04 | -139.66 | -13.04 | -1972.89 | -15.47 | -1970.46 | -68.95 |
| | | 200 | 36.14 | 57.86 | -368.86 | -34.82 | -276.19 | -175.95 | 158.54 | -1187.17 | 154.90 | -1183.53 | -69.92 |
| | | 158 | 27.13 | 49.72 | -230.56 | -16.89 | -163.95 | 119.30 | 81.57 | -1229.15 | 62.61 | -1210.19 | -156.49 |
| 65 | 102 | 162 | 23.79 | 8.35 | -184.71 | 1.03 | -177.38 | 36.89 | -51.14 | -1012.48 | -52.37 | -1011.25 | -34.38 |
| | | 204 | 22.89 | 33.82 | -153.27 | 13.37 | -132.83 | -58.37 | -22.21 | -1031.58 | -22.27 | -1031.53 | -7.38 |
| | | 200 | 20.86 | 17.66 | -222.47 | -15.87 | -188.94 | -83.23 | 48.82 | -668.35 | 48.55 | -668.08 | -13.92 |
| | | 158 | 17.17 | 13.21 | -158.76 | -8.51 | -137.04 | 57.13 | -14.85 | -692.69 | -19.76 | -687.77 | -57.51 |
| 66 | 2 | 166 | 80.68 | 29.12 | -637.58 | 8.60 | -617.06 | 115.15 | 34.49 | -3297.77 | 22.86 | -3286.14 | -196.50 |
| | | 208 | 76.81 | 99.44 | -533.73 | 40.34 | -474.63 | -184.20 | -68.99 | -3363.36 | -71.27 | -3361.09 | -86.50 |
| | | 204 | 70.76 | 34.52 | -719.69 | -45.61 | -639.57 | -232.40 | 157.76 | -2326.21 | 151.30 | -2319.75 | -126.48 |
| | | 162 | 61.08 | 24.39 | -545.63 | -21.80 | -499.43 | 155.56 | 101.18 | -2380.97 | 84.55 | -2364.34 | -202.48 |
| 66 | 43 | 166 | 29.77 | 3.62 | -260.35 | 0.27 | -256.99 | 29.58 | -68.98 | -1158.88 | -69.73 | -1158.13 | -28.59 |
| | | 208 | 28.85 | 19.47 | -226.70 | 11.22 | -218.45 | -44.31 | -29.28 | -1173.45 | -29.28 | -1173.45 | -1.60 |
| | | 204 | 27.03 | 4.78 | -283.00 | -13.16 | -265.07 | -69.57 | 24.36 | -876.13 | 24.05 | -875.82 | -16.64 |
| | | 162 | 24.32 | 2.89 | -234.52 | -7.91 | -223.72 | 49.47 | -37.09 | -897.08 | -39.63 | -894.54 | -46.67 |
| 66 | 75 | 166 | 29.70 | 3.52 | -259.34 | 0.29 | -256.11 | 28.95 | -68.64 | -1156.93 | -69.36 | -1156.21 | -27.98 |
| | | 208 | 28.77 | 19.81 | -225.83 | 11.30 | -217.32 | -44.92 | -28.88 | -1171.33 | -28.88 | -1171.33 | -1.08 |
| | | 204 | 26.95 | 5.21 | -282.19 | -13.05 | -263.93 | -70.11 | 24.66 | -873.99 | 24.37 | -873.70 | -16.11 |
| | | 162 | 24.25 | 2.75 | -233.44 | -7.85 | -222.83 | 48.92 | -36.87 | -895.10 | -39.35 | -892.62 | -46.05 |
| 66 | 85 | 166 | 29.66 | 3.46 | -258.71 | 0.31 | -255.56 | 28.57 | -68.43 | -1155.71 | -69.13 | -1155.01 | -27.60 |
| | | 208 | 28.72 | 20.01 | -225.30 | 11.34 | -216.63 | -45.29 | -28.63 | -1170.01 | -28.63 | -1170.01 | -0.75 |
| | | 204 | 26.91 | 5.47 | -281.69 | -12.99 | -263.23 | -70.43 | 24.85 | -872.66 | 24.57 | -872.38 | -15.77 |
| | | 162 | 24.20 | 2.67 | -232.78 | -7.82 | -222.28 | 48.59 | -36.73 | -893.87 | -39.17 | -891.43 | -45.66 |
| 66 | 87 | 166 | 57.74 | 19.73 | -459.40 | 5.77 | -445.45 | 80.58 | 13.72 | -2352.45 | 6.03 | -2344.76 | -134.68 |
| | | 208 | 55.02 | 68.52 | -385.42 | 28.41 | -345.30 | -128.84 | -49.91 | -2398.15 | -51.33 | -2396.73 | -57.76 |
| | | 204 | 50.74 | 23.54 | -517.15 | -32.14 | -461.48 | -164.33 | 108.36 | -1667.03 | 104.14 | -1662.82 | -86.43 |
| | | 162 | 43.94 | 16.45 | -394.62 | -15.58 | -362.59 | 110.19 | 62.47 | -1706.41 | 51.14 | -1695.08 | -141.08 |
| 66 | 97 | 166 | 56.02 | 18.11 | -448.74 | 5.24 | -435.87 | 76.43 | 3.55 | -2275.10 | -3.33 | -2268.23 | -124.96 |
| | | 208 | 53.44 | 64.00 | -377.33 | 27.11 | -340.44 | -122.14 | -47.04 | -2317.98 | -48.24 | -2316.79 | -52.04 |
| | | 204 | 49.35 | 21.75 | -503.79 | -30.70 | -451.34 | -157.52 | 102.67 | -1619.34 | 98.95 | -1615.62 | -80.00 |
| | | 162 | 42.86 | 15.03 | -386.89 | -15.09 | -356.77 | 105.82 | 51.88 | -1657.85 | 41.43 | -1647.39 | -133.28 |
| 66 | 102 | 166 | 29.66 | 3.46 | -258.71 | 0.31 | -255.56 | 28.57 | -68.43 | -1155.71 | -69.13 | -1155.01 | -27.60 |
| | | 208 | 28.72 | 20.01 | -225.30 | 11.34 | -216.63 | -45.29 | -28.63 | -1170.01 | -28.63 | -1170.01 | -0.75 |
| | | 204 | 26.91 | 5.47 | -281.69 | -12.99 | -263.23 | -70.43 | 24.85 | -872.66 | 24.57 | -872.38 | -15.77 |
| | | 162 | 24.20 | 2.67 | -232.78 | -7.82 | -222.28 | 48.59 | -36.73 | -893.87 | -39.17 | -891.43 | -45.66 |
| 67 | 2 | 152 | 99.36 | 19.02 | -870.66 | 8.34 | -859.99 | 96.88 | 29.65 | -3741.65 | 18.73 | -3730.72 | -202.69 |
| | | 194 | 94.37 | 69.99 | -750.95 | 36.83 | -717.80 | -161.62 | -138.94 | -3821.16 | -140.08 | -3820.02 | -64.79 |
| | | 208 | 89.13 | 9.07 | -918.87 | -39.96 | -869.83 | -207.60 | 93.05 | -2893.69 | 85.94 | -2886.58 | -145.55 |
| | | 166 | 81.90 | 7.90 | -775.65 | -17.09 | -750.67 | 137.66 | 60.85 | -2950.55 | 50.12 | -2939.83 | -179.37 |
| 67 | 31 | 152 | 34.33 | 1.46 | -320.20 | -0.19 | -318.55 | 22.95 | -83.02 | -1266.71 | -83.52 | -1266.21 | -24.20 |
| | | 194 | 33.64 | 11.41 | -291.82 | 8.47 | -288.88 | -29.71 | -34.99 | -1276.92 | -34.99 | -1276.92 | 1.54 |
| | | 208 | 32.15 | -1.26 | -334.58 | -10.66 | -325.19 | -55.17 | 5.46 | -1045.34 | 5.08 | -1044.95 | -20.11 |
| | | 166 | 30.09 | -0.67 | -298.89 | -6.82 | -292.73 | 42.40 | -57.16 | -1063.05 | -58.63 | -1061.58 | -38.48 |
| 67 | 63 | 152 | 34.28 | 1.30 | -319.01 | -0.11 | -317.59 | 21.25 | -81.66 | -1265.36 | -82.08 | -1264.94 | -22.21 |
| | | 194 | 33.53 | 12.08 | -289.88 | 8.79 | -286.59 | -31.35 | -33.46 | -1275.17 | -33.47 | -1275.16 | 3.26 |
| | | 208 | 32.04 | -0.36 | -332.75 | -10.23 | -322.88 | -56.42 | 6.54 | -1043.58 | 6.22 | -1043.26 | -18.29 |
| | | 166 | 30.03 | -0.84 | -297.56 | -6.65 | -291.75 | 41.09 | -56.27 | -1061.69 | -57.59 | -1060.37 | -36.39 |
| 67 | 85 | 152 | 34.24 | 1.21 | -318.29 | -0.07 | -317.01 | 20.22 | -80.80 | -1264.51 | -81.17 | -1264.14 | -20.98 |
| | | 194 | 33.46 | 12.51 | -288.71 | 8.99 | -285.20 | -32.35 | -32.49 | -1274.06 | -32.50 | -1274.05 | 4.32 |
| | | 208 | 31.97 | 0.20 | -331.64 | -9.96 | -321.47 | -57.17 | 7.22 | -1042.46 | 6.94 | -1042.18 | -17.17 |
| | | 166 | 29.99 | -0.95 | -296.75 | -6.54 | -291.15 | 40.30 | -55.70 | -1060.83 | -56.93 | -1059.61 | -35.11 |
| 67 | 87 | 152 | 70.80 | 12.76 | -622.80 | 5.55 | -615.59 | 67.28 | 8.80 | -2662.84 | 1.66 | -2655.70 | -137.93 |
| | | 194 | 67.36 | 47.99 | -538.80 | 25.75 | -516.56 | -112.06 | -97.03 | -2717.24 | -97.72 | -2716.55 | -42.62 |
| | | 208 | 63.67 | 5.95 | -656.67 | -27.97 | -622.75 | -146.02 | 62.86 | -2067.99 | 58.22 | -2063.35 | -99.32 |
| | | 166 | 58.60 | 5.08 | -556.61 | -12.26 | -539.27 | 97.15 | 33.06 | -2108.40 | 25.83 | -2101.17 | -124.26 |
| 67 | 97 | 152 | 68.41 | 11.57 | -603.99 | 4.99 | -597.41 | 63.32 | -2.64 | -2569.30 | -8.93 | -2563.00 | -126.98 |
| | | 194 | 65.20 | 44.61 | -524.14 | 24.40 | -503.94 | -105.27 | -89.95 | -2619.43 | -90.51 | -2618.86 | -37.71 |
| | | 208 | 61.68 | 5.26 | -636.25 | -26.53 | -604.45 | -139.24 | 59.30 | -2003.40 | 55.20 | -1999.31 | -91.79 |
| | | 166 | 56.84 | 4.38 | -541.52 | -11.93 | -525.20 | 92.95 | 22.80 | -2042.51 | 16.19 | -2035.89 | -116.68 |
| 67 | 102 | 152 | 34.24 | 1.21 | -318.29 | -0.07 | -317.01 | 20.22 | -80.80 | -1264.51 | -81.17 | -1264.14 | -20.98 |
| | | 194 | 33.46 | 12.51 | -288.71 | 8.99 | -285.20 | -32.35 | -32.49 | -1274.06 | -32.50 | -1274.05 | 4.32 |
| | | 208 | 31.97 | 0.20 | -331.64 | -9.96 | -321.47 | -57.17 | 7.22 | -1042.46 | 6.94 | -1042.18 | -17.17 |
| | | 166 | 29.99 | -0.95 | -296.75 | -6.54 | -291.15 | 40.30 | -55.70 | -1060.83 | -56.93 | -1059.61 | -35.11 |
| 68 | 2 | 157 | 115.48 | 12.11 | -1076.34 | 6.49 | -1070.71 | 78.05 | 42.29 | -4112.53 | 31.89 | -4102.13 | -207.61 |
| | | 199 | 109.79 | 53.06 | -950.64 | 33.20 | -930.79 | -139.76 | -231.06 | -4223.62 | -231.49 | -4223.18 | -41.56 |
| | | 194 | 105.67 | -3.24 | -1103.23 | -34.96 | -1071.51 | -184.10 | 29.60 | -3397.41 | 21.60 | -3389.41 | -165.41 |
| | | 152 | 100.11 | 2.17 | -982.76 | -12.42 | -968.17 | 118.98 | 25.09 | -3454.92 | 17.12 | -3446.95 | -166.39 |
| 68 | 31 | 157 | 37.65 | -0.11 | -364.62 | -0.63 | -364.10 | 13.73 | -91.71 | -1341.50 | -91.93 | -1341.27 | -16.79 |
| | | 199 | 37.26 | 6.75 | -343.89 | 5.87 | -343.01 | -17.55 | -37.38 | -1347.71 | -37.41 | -1347.68 | 6.15 |
| | | 194 | 36.16 | -2.74 | -373.87 | -7.76 | -368.85 | -42.86 | -8.90 | -1182.06 | -9.26 | -1181.71 | -20.40 |
| | | 152 | 34.61 | -2.17 | -348.94 | -5.38 | -345.73 | 33.21 | -73.16 | -1195.97 | -73.89 | -1195.24 | -28.58 |
| 68 | 63 | 157 | 37.57 | -0.12 | -363.23 | -0.55 | -362.80 | 12.44 | -89.85 | -1339.83 | -90.04 | -1339.65 | -15.17 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| | | 199 | 37.10 | 7.27 | -341.01 | 6.25 | -339.99 | -18.79 | -35.32 | -1345.36 | -35.37 | -1345.32 | 7.54 |
| | | 194 | 36.00 | -2.07 | -371.04 | -7.29 | -365.81 | -43.60 | -7.30 | -1179.73 | -7.60 | -1179.43 | -18.80 |
| | | 152 | 34.54 | -2.18 | -347.49 | -5.25 | -344.42 | 32.43 | -71.74 | -1194.34 | -72.38 | -1193.70 | -26.75 |
| 68 | 85 | 157 | 37.53 | -0.12 | -362.39 | -0.50 | -362.01 | 11.66 | -88.70 | -1338.80 | -88.86 | -1338.64 | -14.17 |
| | | 199 | 37.00 | 7.59 | -339.26 | 6.49 | -338.15 | -19.55 | -34.04 | -1343.90 | -34.09 | -1343.85 | 8.39 |
| | | 194 | 35.90 | -1.65 | -369.32 | -7.01 | -363.96 | -44.05 | -6.29 | -1178.28 | -6.56 | -1178.01 | -17.81 |
| | | 152 | 34.49 | -2.19 | -346.61 | -5.18 | -343.62 | 31.96 | -70.85 | -1193.33 | -71.43 | -1192.74 | -25.62 |
| 68 | 87 | 157 | 81.99 | 7.99 | -765.81 | 4.26 | -762.08 | 53.59 | 16.13 | -2919.96 | 9.41 | -2913.24 | -140.30 |
| | | 199 | 78.11 | 36.07 | -678.69 | 23.00 | -665.61 | -95.78 | -158.63 | -2994.88 | -158.88 | -2994.63 | -26.59 |
| | | 194 | 75.22 | -2.49 | -784.62 | -24.24 | -762.87 | -128.61 | 18.74 | -2421.89 | 13.53 | -2416.68 | -112.65 |
| | | 152 | 71.34 | 1.12 | -701.35 | -8.97 | -691.26 | 83.58 | 7.19 | -2462.30 | 1.89 | -2457.00 | -114.34 |
| 68 | 97 | 157 | 78.92 | 7.11 | -738.75 | 3.77 | -735.40 | 49.83 | 2.82 | -2810.83 | -3.03 | -2804.97 | -128.18 |
| | | 199 | 75.36 | 33.22 | -656.97 | 21.58 | -645.33 | -88.87 | -145.57 | -2878.88 | -145.76 | -2878.69 | -22.71 |
| | | 194 | 72.61 | -2.57 | -756.58 | -22.78 | -736.38 | -121.77 | 17.73 | -2340.45 | 13.14 | -2335.87 | -103.86 |
| | | 152 | 68.92 | 0.68 | -678.63 | -8.78 | -669.17 | 79.60 | -2.60 | -2379.15 | -7.37 | -2374.37 | -106.44 |
| 68 | 102 | 157 | 37.53 | -0.12 | -362.39 | -0.50 | -362.01 | 11.66 | -88.70 | -1338.80 | -88.86 | -1338.64 | -14.17 |
| | | 199 | 37.00 | 7.59 | -339.26 | 6.49 | -338.15 | -19.55 | -34.04 | -1343.90 | -34.09 | -1343.85 | 8.39 |
| | | 194 | 35.90 | -1.65 | -369.32 | -7.01 | -363.96 | -44.05 | -6.29 | -1178.28 | -6.56 | -1178.01 | -17.81 |
| | | 152 | 34.49 | -2.19 | -346.61 | -5.18 | -343.62 | 31.96 | -70.85 | -1193.33 | -71.43 | -1192.74 | -25.62 |
| 69 | 2 | 163 | 128.91 | 5.05 | -1251.43 | 2.19 | -1248.57 | 59.89 | 58.22 | -4412.92 | 49.19 | -4403.88 | -200.81 |
| | | 205 | 123.04 | 41.58 | -1127.12 | 29.75 | -1115.28 | -117.03 | -343.24 | -4574.39 | -343.28 | -4574.35 | -13.12 |
| | | 199 | 120.03 | -9.27 | -1266.11 | -30.43 | -1244.95 | -161.70 | -45.08 | -3839.79 | -53.63 | -3831.24 | -179.94 |
| | | 157 | 115.62 | -0.55 | -1160.66 | -9.23 | -1151.97 | 100.00 | -6.89 | -3891.75 | -13.86 | -3884.78 | -164.41 |
| 69 | 31 | 163 | 39.65 | -1.19 | -393.23 | -1.24 | -393.19 | 4.29 | -96.16 | -1381.80 | -96.22 | -1381.74 | -8.67 |
| | | 205 | 39.61 | 3.29 | -381.00 | 3.21 | -380.92 | -5.54 | -37.27 | -1384.34 | -37.35 | -1384.26 | 10.33 |
| | | 199 | 38.94 | -2.54 | -398.76 | -4.94 | -396.36 | -30.74 | -20.22 | -1284.87 | -20.52 | -1284.57 | -19.47 |
| | | 157 | 37.84 | -2.56 | -383.71 | -4.06 | -382.21 | 23.84 | -85.09 | -1294.47 | -85.39 | -1294.17 | -19.01 |
| 69 | 63 | 163 | 39.57 | -1.12 | -391.70 | -1.15 | -391.67 | 3.44 | -93.94 | -1379.81 | -93.99 | -1379.76 | -7.64 |
| | | 205 | 39.42 | 3.74 | -377.51 | 3.64 | -377.40 | -6.37 | -34.82 | -1381.33 | -34.91 | -1381.23 | 11.20 |
| | | 199 | 38.75 | -2.00 | -395.29 | -4.46 | -392.83 | -31.00 | -18.10 | -1281.87 | -18.36 | -1281.60 | -18.29 |
| | | 157 | 37.75 | -2.50 | -382.15 | -3.97 | -380.68 | 23.58 | -83.18 | -1292.52 | -83.43 | -1292.26 | -17.68 |
| 69 | 85 | 163 | 39.51 | -1.07 | -390.76 | -1.09 | -390.74 | 2.93 | -92.56 | -1378.58 | -92.60 | -1378.55 | -7.00 |
| | | 205 | 39.30 | 4.02 | -375.38 | 3.90 | -375.26 | -6.87 | -33.30 | -1379.47 | -33.40 | -1379.37 | 11.74 |
| | | 199 | 38.63 | -1.67 | -393.18 | -4.17 | -390.68 | -31.15 | -16.78 | -1280.02 | -17.02 | -1279.78 | -17.57 |
| | | 157 | 37.69 | -2.46 | -381.20 | -3.91 | -379.75 | 23.41 | -81.98 | -1291.31 | -82.22 | -1291.08 | -16.86 |
| 69 | 87 | 163 | 91.21 | 3.14 | -886.31 | 1.31 | -884.48 | 40.32 | 26.22 | -3125.50 | 20.44 | -3119.72 | -134.81 |
| | | 205 | 87.25 | 27.93 | -801.14 | 20.35 | -793.55 | -78.93 | -233.29 | -3233.50 | -233.31 | -3233.48 | -7.18 |
| | | 199 | 85.16 | -6.53 | -896.37 | -20.84 | -882.06 | -111.95 | -32.47 | -2730.35 | -38.02 | -2724.80 | -122.30 |
| | | 157 | 82.10 | -0.72 | -824.57 | -6.68 | -818.62 | 69.79 | -15.65 | -2766.55 | -20.20 | -2762.00 | -111.85 |
| 69 | 97 | 163 | 87.49 | 2.61 | -851.08 | 1.03 | -849.50 | 36.69 | 11.34 | -3001.24 | 6.37 | -2996.27 | -122.25 |
| | | 205 | 83.90 | 25.40 | -772.10 | 18.85 | -765.55 | -71.97 | -212.65 | -3098.52 | -212.65 | -3098.51 | -4.78 |
| | | 199 | 81.92 | -6.21 | -860.41 | -19.33 | -847.30 | -105.01 | -29.80 | -2631.96 | -34.67 | -2627.09 | -112.51 |
| | | 157 | 79.05 | -1.01 | -794.26 | -6.54 | -788.73 | 66.02 | -24.74 | -2666.35 | -28.76 | -2662.33 | -102.98 |
| 69 | 102 | 163 | 39.51 | -1.07 | -390.76 | -1.09 | -390.74 | 2.93 | -92.56 | -1378.58 | -92.60 | -1378.55 | -7.00 |
| | | 205 | 39.30 | 4.02 | -375.38 | 3.90 | -375.26 | -6.87 | -33.30 | -1379.47 | -33.40 | -1379.37 | 11.74 |
| | | 199 | 38.63 | -1.67 | -393.18 | -4.17 | -390.68 | -31.15 | -16.78 | -1280.02 | -17.02 | -1279.78 | -17.57 |
| | | 157 | 37.69 | -2.46 | -381.20 | -3.91 | -379.75 | 23.41 | -81.98 | -1291.31 | -82.22 | -1291.08 | -16.86 |
| 70 | 2 | 168 | 139.60 | -3.08 | -1392.84 | -4.25 | -1391.67 | 40.25 | 47.98 | -4659.01 | 42.20 | -4653.22 | -164.96 |
| | | 210 | 134.44 | 31.16 | -1281.47 | 25.36 | -1275.67 | -87.06 | -459.88 | -4880.54 | -459.98 | -4880.44 | 21.12 |
| | | 205 | 132.13 | -10.80 | -1403.63 | -25.13 | -1389.30 | -140.55 | -139.00 | -4226.95 | -146.79 | -4219.16 | -178.34 |
| | | 163 | 128.39 | -3.39 | -1308.36 | -8.81 | -1302.94 | 83.95 | -42.14 | -4260.30 | -49.35 | -4253.09 | -174.27 |
| 70 | 31 | 168 | 40.35 | -1.95 | -405.91 | -2.01 | -405.84 | -5.27 | -96.54 | -1387.30 | -96.54 | -1387.30 | 1.21 |
| | | 210 | 40.68 | 0.63 | -402.49 | 0.53 | -402.38 | 6.38 | -34.43 | -1386.10 | -34.59 | -1385.94 | 14.98 |
| | | 205 | 40.45 | -1.30 | -408.40 | -2.17 | -407.52 | -18.83 | -28.72 | -1352.91 | -28.95 | -1352.68 | -17.39 |
| | | 163 | 39.75 | -2.42 | -402.70 | -2.93 | -402.19 | 14.29 | -92.88 | -1358.20 | -92.95 | -1358.13 | -9.65 |
| 70 | 63 | 168 | 40.26 | -1.84 | -404.32 | -1.92 | -404.24 | 5.66 | -94.17 | -1385.20 | -94.17 | -1385.20 | 0.81 |
| | | 210 | 40.47 | 1.08 | -398.74 | 0.99 | -398.65 | 5.99 | -31.82 | -1382.75 | -31.98 | -1382.59 | 14.63 |
| | | 205 | 40.24 | -0.85 | -404.65 | -1.70 | -403.79 | -18.57 | -26.23 | -1349.57 | -26.44 | -1349.36 | -16.79 |
| | | 163 | 39.65 | -2.32 | -401.12 | -2.85 | -400.59 | 14.54 | -90.62 | -1356.11 | -90.69 | -1356.05 | -8.98 |
| 70 | 85 | 168 | 40.20 | -1.78 | -403.35 | -1.87 | -403.26 | -5.90 | -92.70 | -1383.91 | -92.70 | -1383.91 | 0.56 |
| | | 210 | 40.34 | 1.35 | -396.47 | 1.26 | -396.39 | 5.76 | -30.22 | -1380.69 | -30.37 | -1380.54 | 14.42 |
| | | 205 | 40.12 | -0.57 | -402.37 | -1.42 | -401.52 | -18.41 | -24.68 | -1347.53 | -24.89 | -1347.32 | -16.42 |
| | | 163 | 39.60 | -2.27 | -400.15 | -2.81 | -399.61 | 14.69 | -89.22 | -1354.83 | -89.28 | -1354.77 | -8.57 |
| 70 | 87 | 168 | 98.42 | -2.39 | -982.24 | -3.08 | -981.55 | 26.05 | 19.42 | -3290.32 | 15.77 | -3286.67 | -109.90 |
| | | 210 | 94.99 | 20.62 | -906.85 | 17.07 | -903.30 | -57.27 | -310.62 | -3437.78 | -310.70 | -3437.70 | 16.01 |
| | | 205 | 93.42 | -7.43 | -989.25 | -16.94 | -979.74 | -96.15 | -96.12 | -2997.48 | -101.18 | -2992.41 | -121.08 |
| | | 163 | 90.87 | -2.60 | -925.56 | -6.25 | -921.91 | 57.93 | -40.18 | -3020.66 | -44.80 | -3016.03 | -117.32 |
| 70 | 97 | 168 | 94.08 | -2.48 | -939.13 | -3.03 | -938.58 | 22.64 | 5.24 | -3150.34 | 2.14 | -3147.25 | -98.80 |
| | | 210 | 91.01 | 18.45 | -870.12 | 15.54 | -867.21 | -50.76 | -281.80 | -3282.55 | -281.89 | -3282.46 | 16.46 |
| | | 205 | 89.56 | -6.91 | -945.23 | -15.44 | -936.70 | -89.05 | -88.15 | -2881.62 | -92.59 | -2877.18 | -111.26 |
| | | 163 | 87.20 | -2.68 | -887.73 | -6.01 | -884.40 | 54.15 | -47.88 | -2903.68 | -51.88 | -2899.68 | -106.76 |
| 70 | 102 | 168 | 40.20 | -1.78 | -403.35 | -1.87 | -403.26 | -5.90 | -92.70 | -1383.91 | -92.70 | -1383.91 | 0.56 |
| | | 210 | 40.34 | 1.35 | -396.47 | 1.26 | -396.39 | 5.76 | -30.22 | -1380.69 | -30.37 | -1380.54 | 14.42 |
| | | 205 | 40.12 | -0.57 | -402.37 | -1.42 | -401.52 | -18.41 | -24.68 | -1347.53 | -24.89 | -1347.32 | -16.42 |
| | | 163 | 39.60 | -2.27 | -400.15 | -2.81 | -399.61 | 14.69 | -89.22 | -1354.83 | -89.28 | -1354.77 | -8.57 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|---------|
| 71 | 2 | 156 | 148.08 | -13.87 | -1490.53 | -13.91 | -1490.50 | -7.49 | -30.34 | -4941.88 | -30.71 | -4941.51 | -42.43 |
| | | 198 | 145.27 | 16.37 | -1418.00 | 16.14 | -1417.77 | -18.03 | -564.00 | -5203.86 | -564.10 | -5203.76 | 21.39 |
| | | 210 | 141.88 | -6.37 | -1506.30 | -16.80 | -1495.86 | -124.69 | -259.90 | -4584.03 | -264.26 | -4579.67 | -137.19 |
| | | 168 | 138.61 | -8.01 | -1429.28 | -12.40 | -1424.89 | 78.88 | -88.60 | -4568.16 | -97.58 | -4559.19 | -200.28 |
| 71 | 24 | 156 | 39.74 | -2.42 | -402.69 | -2.93 | -402.18 | -14.31 | -92.87 | -1358.17 | -92.94 | -1358.10 | 9.58 |
| | | 198 | 40.45 | -1.30 | -408.38 | -2.17 | -407.51 | 18.82 | -28.80 | -1352.92 | -29.02 | -1352.69 | 17.35 |
| | | 210 | 40.68 | 0.63 | -402.49 | 0.53 | -402.39 | -6.39 | -34.39 | -1386.09 | -34.55 | -1385.93 | -15.01 |
| | | 168 | 40.35 | -1.95 | -405.90 | -2.01 | -405.84 | 5.25 | -96.59 | -1387.31 | -96.59 | -1387.31 | -1.30 |
| 71 | 56 | 156 | 39.65 | -2.32 | -401.10 | -2.86 | -400.57 | -14.56 | -90.61 | -1356.08 | -90.68 | -1356.02 | 8.91 |
| | | 198 | 40.24 | -0.85 | -404.63 | -1.70 | -403.78 | 18.56 | -26.30 | -1349.58 | -26.52 | -1349.37 | 16.74 |
| | | 210 | 40.47 | 1.07 | -398.75 | 0.98 | -398.66 | -6.00 | -31.78 | -1382.74 | -31.94 | -1382.58 | -14.67 |
| | | 168 | 40.26 | -1.84 | -404.31 | -1.92 | -404.23 | 5.64 | -94.22 | -1385.21 | -94.22 | -1385.21 | -0.90 |
| 71 | 85 | 156 | 39.60 | -2.26 | -400.14 | -2.81 | -399.60 | -14.72 | -89.21 | -1354.80 | -89.27 | -1354.75 | 8.50 |
| | | 198 | 40.12 | -0.57 | -402.35 | -1.42 | -401.51 | 18.40 | -24.76 | -1347.54 | -24.96 | -1347.33 | 16.38 |
| | | 210 | 40.34 | 1.35 | -396.48 | 1.26 | -396.39 | -5.77 | -30.18 | -1380.68 | -30.33 | -1380.53 | -14.46 |
| | | 168 | 40.20 | -1.78 | -403.35 | -1.87 | -403.26 | 5.87 | -92.75 | -1383.92 | -92.75 | -1383.92 | -0.66 |
| 71 | 87 | 156 | 104.00 | -9.60 | -1046.99 | -9.65 | -1046.94 | -6.96 | -32.16 | -3475.19 | -32.37 | -3474.98 | -27.15 |
| | | 198 | 102.19 | 10.66 | -998.80 | 10.57 | -998.71 | -9.56 | -379.31 | -3648.90 | -379.40 | -3648.82 | 16.44 |
| | | 210 | 99.95 | -4.30 | -1056.82 | -11.03 | -1050.09 | -83.90 | -177.37 | -3240.03 | -180.22 | -3237.18 | -93.39 |
| | | 168 | 97.77 | -5.66 | -1006.55 | -8.52 | -1003.70 | 53.37 | -71.76 | -3229.65 | -77.42 | -3223.98 | -133.61 |
| 71 | 97 | 156 | 99.02 | -8.99 | -997.00 | -9.06 | -996.93 | -8.27 | -40.56 | -3312.89 | -40.73 | -3312.73 | -23.24 |
| | | 198 | 97.45 | 9.36 | -953.82 | 9.32 | -953.78 | -6.09 | -342.89 | -3468.03 | -342.99 | -3467.93 | 17.13 |
| | | 210 | 95.46 | -3.91 | -1005.17 | -9.76 | -999.32 | -76.29 | -161.94 | -3104.53 | -164.46 | -3102.01 | -86.06 |
| | | 168 | 93.49 | -5.42 | -961.01 | -7.92 | -958.51 | 48.84 | -76.92 | -3095.63 | -81.73 | -3090.83 | -120.32 |
| 71 | 102 | 156 | 39.60 | -2.26 | -400.14 | -2.81 | -399.60 | -14.72 | -89.21 | -1354.80 | -89.27 | -1354.75 | 8.50 |
| | | 198 | 40.12 | -0.57 | -402.35 | -1.42 | -401.51 | 18.40 | -24.76 | -1347.54 | -24.96 | -1347.33 | 16.38 |
| | | 210 | 40.34 | 1.35 | -396.48 | 1.26 | -396.39 | -5.77 | -30.18 | -1380.68 | -30.33 | -1380.53 | -14.46 |
| | | 168 | 40.20 | -1.78 | -403.35 | -1.87 | -403.26 | 5.87 | -92.75 | -1383.92 | -92.75 | -1383.92 | -0.66 |
| 72 | 2 | 164 | 147.19 | -20.26 | -1510.07 | -23.88 | -1506.45 | -73.36 | -72.15 | -4867.01 | -74.62 | -4864.55 | 108.79 |
| | | 206 | 148.13 | 4.13 | -1510.24 | -0.09 | -1506.02 | 79.85 | -560.48 | -5110.21 | -560.72 | -5109.97 | 33.32 |
| | | 198 | 148.82 | 2.37 | -1522.98 | -1.86 | -1518.75 | -80.23 | -428.20 | -5053.36 | -429.26 | -5052.31 | -69.87 |
| | | 156 | 147.06 | -13.58 | -1492.95 | -15.70 | -1490.82 | 56.00 | -153.78 | -4948.23 | -161.96 | -4940.06 | -197.80 |
| 72 | 24 | 164 | 37.83 | -2.56 | -383.68 | -4.06 | -382.18 | -23.86 | -85.12 | -1294.44 | -85.42 | -1294.14 | 18.99 |
| | | 206 | 38.94 | -2.54 | -398.74 | -4.94 | -396.34 | 30.74 | -20.33 | -1284.88 | -20.63 | -1284.58 | 19.42 |
| | | 198 | 39.61 | 3.29 | -380.99 | 3.21 | -380.91 | 5.54 | -37.27 | -1384.33 | -37.35 | -1384.25 | -10.36 |
| | | 156 | 39.65 | -1.19 | -393.22 | -1.24 | -393.17 | -4.31 | -96.24 | -1381.79 | -96.30 | -1381.74 | 8.55 |
| 72 | 56 | 164 | 37.74 | -2.50 | -382.12 | -3.97 | -380.65 | -23.60 | -83.21 | -1292.48 | -83.46 | -1292.22 | 17.65 |
| | | 206 | 38.75 | -2.00 | -395.27 | -4.46 | -392.81 | 30.99 | -18.20 | -1281.88 | -18.47 | -1281.61 | 18.24 |
| | | 198 | 39.42 | 3.74 | -377.50 | 3.64 | -377.39 | 6.36 | -34.82 | -1381.31 | -34.91 | -1381.22 | -11.23 |
| | | 156 | 39.57 | -1.12 | -391.68 | -1.15 | -391.65 | -3.46 | -94.02 | -1379.80 | -94.07 | -1379.76 | 7.52 |
| 72 | 85 | 164 | 37.69 | -2.46 | -381.17 | -3.92 | -379.72 | -23.44 | -82.01 | -1291.28 | -82.25 | -1291.04 | 16.83 |
| | | 206 | 38.63 | -1.67 | -393.15 | -4.17 | -390.66 | 31.14 | -16.88 | -1280.03 | -17.13 | -1279.79 | 17.52 |
| | | 198 | 39.30 | 4.02 | -375.38 | 3.90 | -375.25 | 6.86 | -33.30 | -1379.46 | -33.40 | -1379.36 | -11.77 |
| | | 156 | 39.51 | -1.07 | -390.74 | -1.09 | -390.72 | -2.95 | -92.65 | -1378.58 | -92.68 | -1378.54 | 6.89 |
| 72 | 87 | 164 | 103.15 | -13.84 | -1057.53 | -16.44 | -1054.93 | -52.03 | -59.04 | -3416.84 | -60.71 | -3415.17 | 74.77 |
| | | 206 | 103.90 | 2.49 | -1059.21 | -0.62 | -1056.10 | 57.39 | -375.91 | -3577.47 | -376.10 | -3577.28 | 24.55 |
| | | 198 | 104.44 | 1.88 | -1065.13 | -0.72 | -1062.53 | -52.57 | -289.91 | -3552.83 | -290.63 | -3552.12 | -48.15 |
| | | 156 | 103.31 | -9.30 | -1047.29 | -10.61 | -1045.98 | 36.94 | -115.23 | -3482.28 | -120.33 | -3477.18 | -130.95 |
| 72 | 97 | 164 | 97.99 | -12.80 | -1003.93 | -15.33 | -1001.40 | -50.03 | -63.75 | -3251.70 | -65.27 | -3250.18 | 69.63 |
| | | 206 | 98.79 | 1.98 | -1007.05 | -1.13 | -1003.94 | 55.91 | -338.75 | -3394.51 | -338.95 | -3394.31 | 24.59 |
| | | 198 | 99.37 | 2.02 | -1009.75 | -0.11 | -1007.62 | -46.37 | -263.60 | -3385.93 | -264.25 | -3385.28 | -44.97 |
| | | 156 | 98.39 | -8.61 | -995.94 | -9.70 | -994.85 | 32.84 | -116.08 | -3322.24 | -120.35 | -3317.97 | -116.89 |
| 72 | 102 | 164 | 37.69 | -2.46 | -381.17 | -3.92 | -379.72 | -23.44 | -82.01 | -1291.28 | -82.25 | -1291.04 | 16.83 |
| | | 206 | 38.63 | -1.67 | -393.15 | -4.17 | -390.66 | 31.14 | -16.88 | -1280.03 | -17.13 | -1279.79 | 17.52 |
| | | 198 | 39.30 | 4.02 | -375.38 | 3.90 | -375.25 | 6.86 | -33.30 | -1379.46 | -33.40 | -1379.36 | -11.77 |
| | | 156 | 39.51 | -1.07 | -390.74 | -1.09 | -390.72 | -2.95 | -92.65 | -1378.58 | -92.68 | -1378.54 | 6.89 |
| 73 | 2 | 153 | 137.70 | -17.79 | -1424.61 | -29.68 | -1412.72 | -128.78 | -72.58 | -4568.80 | -85.36 | -4556.03 | 239.32 |
| | | 195 | 142.79 | -0.29 | -1513.37 | -20.09 | -1493.56 | 171.97 | -473.29 | -4736.19 | -474.33 | -4735.15 | 66.76 |
| | | 206 | 145.63 | 17.53 | -1422.26 | 17.53 | -1422.25 | 3.24 | -547.99 | -5203.78 | -548.16 | -5203.60 | -28.30 |
| | | 164 | 146.55 | -15.77 | -1462.23 | -15.79 | -1462.21 | 4.67 | -141.80 | -4993.68 | -144.21 | -4991.27 | -108.11 |
| 73 | 24 | 153 | 34.61 | -2.17 | -348.90 | -5.38 | -345.69 | -33.23 | -73.23 | -1195.93 | -73.96 | -1195.20 | 28.60 |
| | | 195 | 36.15 | -2.74 | -373.84 | -7.76 | -368.82 | 42.85 | -9.03 | -1182.07 | -9.38 | -1181.72 | 20.36 |
| | | 206 | 37.26 | 6.75 | -343.88 | 5.87 | -343.00 | 17.54 | -37.43 | -1347.70 | -37.46 | -1347.67 | -6.16 |
| | | 164 | 37.64 | -0.11 | -364.59 | -0.63 | -364.07 | -13.76 | -91.82 | -1341.48 | -92.04 | -1341.25 | 16.66 |
| 73 | 56 | 153 | 34.53 | -2.18 | -347.45 | -5.26 | -344.38 | -32.45 | -71.81 | -1194.30 | -72.45 | -1193.66 | 26.76 |
| | | 195 | 36.00 | -2.07 | -371.01 | -7.29 | -365.79 | 43.59 | -7.42 | -1179.73 | -7.72 | -1179.43 | 18.76 |
| | | 206 | 37.10 | 7.27 | -341.00 | 6.25 | -339.98 | 18.79 | -35.37 | -1345.35 | -35.41 | -1345.31 | -7.55 |
| | | 164 | 37.57 | -0.12 | -363.20 | -0.55 | -362.77 | -12.46 | -89.96 | -1339.81 | -90.15 | -1339.63 | 15.04 |
| 73 | 85 | 153 | 34.49 | -2.19 | -346.57 | -5.18 | -343.57 | -31.97 | -70.92 | -1193.29 | -71.51 | -1192.71 | 25.64 |
| | | 195 | 35.90 | -1.65 | -369.29 | -7.01 | -363.94 | 44.04 | -6.42 | -1178.28 | -6.69 | -1178.02 | 17.77 |
| | | 206 | 37.00 | 7.59 | -339.25 | 6.48 | -338.14 | 19.54 | -34.09 | -1343.89 | -34.14 | -1343.84 | -8.41 |
| | | 164 | 37.52 | -0.12 | -362.36 | -0.50 | -361.98 | -11.68 | -88.81 | -1338.78 | -88.96 | -1338.63 | 14.05 |
| 73 | 87 | 153 | 96.40 | -12.15 | -995.95 | -20.48 | -987.62 | -90.12 | -57.98 | -3204.84 | -66.44 | -3196.38 | 162.96 |
| | | 195 | 99.98 | -0.41 | -1058.15 | -14.33 | -1044.23 | 120.52 | -316.38 | -3314.57 | -317.11 | -3313.83 | 46.88 |
| | | 206 | 102.01 | 12.57 | -993.27 | 12.55 | -993.25 | 4.77 | -369.87 | -3648.37 | -369.99 | -3648.25 | -19.99 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|---------|----------|---------|----------|--------|
| | | 164 | 102.70 | -10.59 | -1023.07 | -10.59 | -1023.07 | 1.56 | -106.55 | -3507.45 | -108.00 | -3506.00 | -70.20 |
| 73 | 97 | 153 | 91.48 | -11.23 | -943.78 | -19.14 | -935.88 | -85.48 | -61.39 | -3047.39 | -68.97 | -3039.81 | 150.22 |
| | | 195 | 94.90 | -0.60 | -1002.86 | -13.85 | -989.60 | 114.50 | -283.75 | -3143.98 | -284.45 | -3143.28 | 44.73 |
| | | 206 | 96.88 | 12.23 | -940.24 | 12.18 | -940.19 | 6.97 | -335.66 | -3467.05 | -335.78 | -3466.94 | -19.17 |
| | | 164 | 97.57 | -9.60 | -970.29 | -9.60 | -970.29 | -0.20 | -107.59 | -3339.61 | -108.75 | -3338.45 | -61.23 |
| 73 | 102 | 153 | 34.49 | -2.19 | -346.57 | -5.18 | -343.57 | -31.97 | -70.92 | -1193.29 | -71.51 | -1192.71 | 25.64 |
| | | 195 | 35.90 | -1.65 | -369.29 | -7.01 | -363.94 | 44.04 | -6.42 | -1178.28 | -6.69 | -1178.02 | 17.77 |
| | | 206 | 37.00 | 7.59 | -339.25 | 6.48 | -338.14 | 19.54 | -34.09 | -1343.89 | -34.14 | -1343.84 | -8.41 |
| | | 164 | 37.52 | -0.12 | -362.36 | -0.50 | -361.98 | -11.68 | -88.81 | -1338.78 | -88.96 | -1338.63 | 14.05 |
| 74 | 2 | 161 | 119.82 | -6.26 | -1240.53 | -32.64 | -1214.15 | -178.51 | -20.49 | -4036.10 | -49.65 | -4006.94 | 340.98 |
| | | 203 | 129.03 | 7.36 | -1416.52 | -40.70 | -1368.46 | 257.14 | -315.97 | -4100.47 | -318.53 | -4097.91 | 98.45 |
| | | 195 | 133.81 | 43.55 | -1220.03 | 36.37 | -1212.85 | 95.01 | -605.19 | -5091.58 | -605.26 | -5091.51 | 17.34 |
| | | 153 | 137.66 | -11.19 | -1330.81 | -13.14 | -1328.85 | -50.77 | -74.36 | -4802.76 | -74.41 | -4802.72 | 14.77 |
| 74 | 40 | 161 | 30.10 | -0.85 | -298.35 | -6.61 | -292.60 | -40.96 | -56.33 | -1063.64 | -57.63 | -1062.34 | 36.13 |
| | | 203 | 32.10 | -0.26 | -333.46 | -10.15 | -323.58 | 56.53 | 6.48 | -1045.52 | 6.17 | -1045.21 | 17.96 |
| | | 195 | 33.60 | 12.14 | -290.63 | 8.82 | -287.31 | 31.52 | -33.45 | -1277.12 | -33.46 | -1277.11 | -3.56 |
| | | 153 | 34.35 | 1.27 | -319.85 | -0.12 | -318.46 | -21.07 | -81.72 | -1267.32 | -82.12 | -1266.92 | 21.77 |
| 74 | 72 | 161 | 30.03 | -0.91 | -297.33 | -6.57 | -291.67 | -40.56 | -56.01 | -1061.89 | -57.26 | -1060.63 | 35.53 |
| | | 203 | 32.02 | 0.02 | -332.31 | -10.03 | -322.26 | 56.92 | 6.86 | -1043.64 | 6.57 | -1043.35 | 17.45 |
| | | 195 | 33.51 | 12.36 | -289.43 | 8.93 | -285.99 | 32.03 | -32.91 | -1275.24 | -32.92 | -1275.22 | -4.03 |
| | | 153 | 34.28 | 1.24 | -318.86 | -0.09 | -317.54 | -20.55 | -81.24 | -1265.57 | -81.62 | -1265.19 | 21.21 |
| 74 | 85 | 161 | 29.99 | -0.94 | -296.70 | -6.54 | -291.10 | -40.32 | -55.80 | -1060.80 | -57.03 | -1059.57 | 35.16 |
| | | 203 | 31.97 | 0.20 | -331.60 | -9.96 | -321.44 | 57.17 | 7.10 | -1042.47 | 6.82 | -1042.19 | 17.14 |
| | | 195 | 33.46 | 12.50 | -288.69 | 8.99 | -285.18 | 32.34 | -32.57 | -1274.06 | -32.59 | -1274.04 | -4.32 |
| | | 153 | 34.24 | 1.22 | -318.25 | -0.07 | -316.96 | -20.24 | -80.93 | -1264.48 | -81.30 | -1264.11 | 20.86 |
| 74 | 87 | 161 | 83.88 | -4.30 | -866.58 | -22.63 | -848.25 | -124.38 | -21.42 | -2831.85 | -40.71 | -2812.57 | 232.01 |
| | | 203 | 90.28 | 4.93 | -988.56 | -28.46 | -955.17 | 179.05 | -209.71 | -2872.63 | -211.44 | -2870.90 | 67.92 |
| | | 195 | 93.67 | 30.66 | -851.81 | 25.44 | -846.59 | 67.65 | -407.81 | -3564.25 | -407.85 | -3564.21 | 10.99 |
| | | 153 | 96.34 | -7.32 | -929.61 | -8.77 | -928.16 | -36.55 | -60.40 | -3370.41 | -60.44 | -3370.36 | 12.63 |
| 74 | 97 | 161 | 79.59 | -4.00 | -820.52 | -21.27 | -803.26 | -117.46 | -26.61 | -2693.39 | -43.84 | -2676.16 | 213.66 |
| | | 203 | 85.63 | 4.46 | -935.07 | -26.98 | -903.63 | 168.97 | -185.91 | -2727.65 | -187.50 | -2726.05 | 63.60 |
| | | 195 | 88.88 | 29.27 | -806.09 | 24.13 | -800.95 | 65.31 | -369.62 | -3381.78 | -369.65 | -3381.75 | 9.27 |
| | | 153 | 91.39 | -6.44 | -880.17 | -7.90 | -878.71 | -35.66 | -64.85 | -3206.25 | -64.91 | -3206.18 | 14.26 |
| 74 | 102 | 161 | 29.99 | -0.94 | -296.70 | -6.54 | -291.10 | -40.32 | -55.80 | -1060.80 | -57.03 | -1059.57 | 35.16 |
| | | 203 | 31.97 | 0.20 | -331.60 | -9.96 | -321.44 | 57.17 | 7.10 | -1042.47 | 6.82 | -1042.19 | 17.14 |
| | | 195 | 33.46 | 12.50 | -288.69 | 8.99 | -285.18 | 32.34 | -32.57 | -1274.06 | -32.59 | -1274.04 | -4.32 |
| | | 153 | 34.24 | 1.22 | -318.25 | -0.07 | -316.96 | -20.24 | -80.93 | -1264.48 | -81.30 | -1264.11 | 20.86 |
| 75 | 2 | 155 | 92.88 | 10.81 | -962.64 | -31.69 | -920.15 | -198.89 | 96.84 | -3167.62 | 56.44 | -3127.21 | 360.92 |
| | | 197 | 105.75 | 23.66 | -1205.84 | -56.95 | -1125.23 | 304.32 | -91.56 | -3148.44 | -99.79 | -3140.21 | 158.36 |
| | | 203 | 114.13 | 89.05 | -941.75 | 51.23 | -903.93 | 193.80 | -581.54 | -4698.65 | -582.04 | -4698.15 | 45.39 |
| | | 161 | 120.22 | 6.10 | -1097.08 | -6.03 | -1084.95 | -115.03 | 38.45 | -4388.97 | 32.45 | -4382.97 | 162.89 |
| 75 | 40 | 155 | 24.31 | 2.90 | -234.47 | -7.91 | -223.66 | -49.49 | -37.21 | -897.06 | -39.76 | -894.51 | 46.76 |
| | | 197 | 27.02 | 4.78 | -282.97 | -13.16 | -265.03 | 69.56 | 24.25 | -876.12 | 23.95 | -875.82 | 16.62 |
| | | 203 | 28.85 | 19.47 | -226.68 | 11.22 | -218.43 | 44.31 | -29.39 | -1173.44 | -29.39 | -1173.44 | 1.62 |
| | | 161 | 29.77 | 3.63 | -260.30 | 0.27 | -256.94 | -29.60 | -69.11 | -1158.83 | -69.86 | -1158.09 | 28.49 |
| 75 | 72 | 155 | 24.24 | 2.77 | -233.39 | -7.85 | -222.77 | -48.94 | -37.00 | -895.08 | -39.49 | -892.59 | 46.13 |
| | | 197 | 26.95 | 5.21 | -282.16 | -13.05 | -263.90 | 70.10 | 24.55 | -873.98 | 24.27 | -873.69 | 16.08 |
| | | 203 | 28.77 | 19.80 | -225.81 | 11.30 | -217.30 | 44.92 | -28.99 | -1171.32 | -28.99 | -1171.32 | 1.10 |
| | | 161 | 29.70 | 3.53 | -259.29 | 0.29 | -256.06 | -28.97 | -68.77 | -1156.88 | -69.49 | -1156.17 | 27.87 |
| 75 | 85 | 155 | 24.20 | 2.69 | -232.72 | -7.81 | -222.22 | -48.60 | -36.86 | -893.85 | -39.31 | -891.40 | 45.75 |
| | | 197 | 26.90 | 5.47 | -281.66 | -12.99 | -263.20 | 70.42 | 24.74 | -872.65 | 24.47 | -872.38 | 15.75 |
| | | 203 | 28.72 | 20.01 | -225.27 | 11.34 | -216.60 | 45.29 | -28.74 | -1170.00 | -28.74 | -1170.00 | 0.77 |
| | | 161 | 29.65 | 3.47 | -258.66 | 0.31 | -255.51 | -28.59 | -68.56 | -1155.67 | -69.25 | -1154.97 | 27.49 |
| 75 | 87 | 155 | 65.14 | 7.56 | -672.79 | -22.17 | -643.06 | -139.07 | 59.28 | -2230.56 | 32.38 | -2203.66 | 246.71 |
| | | 197 | 74.08 | 16.50 | -841.45 | -39.70 | -785.25 | 212.27 | -57.87 | -2215.18 | -63.26 | -2209.10 | 107.68 |
| | | 203 | 79.91 | 62.04 | -657.87 | 35.67 | -631.50 | 135.24 | -391.54 | -3288.42 | -391.86 | -3288.79 | 30.37 |
| | | 161 | 84.10 | 4.53 | -765.87 | -3.98 | -757.37 | -80.50 | 16.47 | -3080.05 | 12.40 | -3075.98 | 112.26 |
| 75 | 97 | 155 | 61.94 | 7.17 | -637.36 | -21.02 | -609.17 | -131.82 | 48.55 | -2129.33 | 24.34 | -2105.12 | 228.35 |
| | | 197 | 70.36 | 15.60 | -795.84 | -37.50 | -742.73 | 200.68 | -46.95 | -2112.60 | -51.73 | -2107.83 | 99.21 |
| | | 203 | 75.85 | 58.57 | -622.91 | 33.65 | -597.99 | 127.91 | -354.47 | -3119.29 | -354.74 | -3119.01 | 27.42 |
| | | 161 | 79.75 | 4.55 | -724.67 | -3.54 | -716.59 | -76.36 | 6.03 | -2930.05 | 2.28 | -2926.30 | 104.85 |
| 75 | 102 | 155 | 24.20 | 2.69 | -232.72 | -7.81 | -222.22 | -48.60 | -36.86 | -893.85 | -39.31 | -891.40 | 45.75 |
| | | 197 | 26.90 | 5.47 | -281.66 | -12.99 | -263.20 | 70.42 | 24.74 | -872.65 | 24.47 | -872.38 | 15.75 |
| | | 203 | 28.72 | 20.01 | -225.27 | 11.34 | -216.60 | 45.29 | -28.74 | -1170.00 | -28.74 | -1170.00 | 0.77 |
| | | 161 | 29.65 | 3.47 | -258.66 | 0.31 | -255.51 | -28.59 | -68.56 | -1155.67 | -69.25 | -1154.97 | 27.49 |
| 76 | 2 | 167 | 63.98 | 39.06 | -635.72 | -28.00 | -568.67 | -201.87 | 171.18 | -2373.52 | 119.41 | -2321.74 | 359.25 |
| | | 209 | 80.57 | 55.37 | -920.73 | -65.97 | -799.39 | 322.05 | 121.86 | -2307.95 | 105.95 | -2292.04 | 195.97 |
| | | 197 | 87.25 | 158.22 | -643.90 | 58.33 | -544.01 | 264.85 | -448.44 | -3888.96 | -449.84 | -3887.56 | 69.44 |
| | | 155 | 93.36 | 34.62 | -788.69 | 2.14 | -756.21 | -160.25 | 193.08 | -3620.04 | 171.03 | -3597.98 | 289.15 |
| 76 | 40 | 167 | 17.29 | 13.69 | -160.73 | -8.62 | -138.42 | -58.26 | -15.29 | -696.20 | -20.37 | -691.12 | 58.56 |
| | | 209 | 20.95 | 16.57 | -223.03 | -16.01 | -190.45 | 82.13 | 48.25 | -672.23 | 47.95 | -671.93 | 14.75 |
| | | 197 | 23.00 | 32.87 | -153.93 | 13.28 | -134.34 | 57.23 | -22.88 | -1035.43 | -22.95 | -1035.36 | 8.28 |
| | | 155 | 23.91 | 8.70 | -186.50 | 0.97 | -178.77 | -38.07 | -51.66 | -1015.86 | -52.96 | -1014.57 | 35.29 |
| 76 | 72 | 167 | 17.21 | 13.41 | -159.48 | -8.55 | -137.53 | -57.57 | -15.10 | -694.03 | -20.09 | -689.04 | 57.98 |
| | | 209 | 20.89 | 17.25 | -222.66 | -15.92 | -189.49 | 82.81 | 48.56 | -669.83 | 48.28 | -669.54 | 14.24 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|---------|--------|---------|---------|---------|----------|---------|----------|--------|
| | | 197 | 22.93 | 33.46 | -153.51 | 13.34 | -133.39 | 57.94 | -22.54 | -1033.05 | -22.60 | -1032.99 | 7.75 |
| | | 155 | 23.83 | 8.49 | -185.36 | 1.01 | -177.88 | -37.35 | -51.42 | -1013.75 | -52.67 | -1012.49 | 34.69 |
| 76 | 85 | 167 | 17.17 | 13.24 | -158.72 | -8.50 | -136.98 | -57.14 | -14.99 | -692.69 | -19.93 | -687.75 | 57.62 |
| | | 209 | 20.85 | 17.66 | -222.43 | -15.86 | -188.90 | 83.21 | 48.75 | -668.34 | 48.48 | -668.07 | 13.92 |
| | | 197 | 22.89 | 33.82 | -153.24 | 13.37 | -132.80 | 58.36 | -22.34 | -1031.57 | -22.39 | -1031.52 | 7.41 |
| | | 155 | 23.79 | 8.37 | -184.66 | 1.03 | -177.32 | -36.91 | -51.26 | -1012.44 | -52.48 | -1011.21 | 34.31 |
| 76 | 87 | 167 | 44.93 | 27.76 | -444.94 | -19.80 | -397.37 | -142.20 | 111.84 | -1674.42 | 76.95 | -1639.53 | 247.19 |
| | | 209 | 56.49 | 39.25 | -643.46 | -46.10 | -558.12 | 225.80 | 87.40 | -1627.40 | 77.10 | -1617.10 | 132.51 |
| | | 197 | 61.21 | 109.97 | -449.68 | 40.67 | -380.38 | 184.35 | -301.96 | -2730.17 | -302.88 | -2729.24 | 47.28 |
| | | 155 | 65.41 | 24.19 | -550.41 | 1.57 | -527.79 | -111.76 | 121.69 | -2548.15 | 107.02 | -2533.48 | 197.34 |
| 76 | 97 | 167 | 42.78 | 26.76 | -422.13 | -18.99 | -376.38 | -135.80 | 98.87 | -1601.35 | 67.05 | -1569.53 | 230.41 |
| | | 209 | 53.70 | 37.73 | -609.54 | -43.66 | -528.15 | 214.61 | 86.91 | -1555.47 | 77.90 | -1546.46 | 121.33 |
| | | 197 | 58.22 | 103.59 | -425.68 | 38.43 | -360.52 | 173.90 | -272.99 | -2597.91 | -273.81 | -2597.09 | 43.57 |
| | | 155 | 62.12 | 22.92 | -520.63 | 1.55 | -499.26 | -105.63 | 102.92 | -2431.58 | 89.73 | -2418.39 | 182.37 |
| 76 | 102 | 167 | 17.17 | 13.24 | -158.72 | -8.50 | -136.98 | -57.14 | -14.99 | -692.69 | -19.93 | -687.75 | 57.62 |
| | | 209 | 20.85 | 17.66 | -222.43 | -15.86 | -188.90 | 83.21 | 48.75 | -668.34 | 48.48 | -668.07 | 13.92 |
| | | 197 | 22.89 | 33.82 | -153.24 | 13.37 | -132.80 | 58.36 | -22.34 | -1031.57 | -22.39 | -1031.52 | 7.41 |
| | | 155 | 23.79 | 8.37 | -184.66 | 1.03 | -177.32 | -36.91 | -51.26 | -1012.44 | -52.48 | -1011.21 | 34.31 |
| 77 | 2 | 165 | 32.71 | 126.51 | -335.69 | -21.49 | -187.69 | -215.64 | 199.59 | -1540.33 | 112.64 | -1453.39 | 379.10 |
| | | 207 | 55.49 | 130.79 | -633.28 | -68.84 | -433.66 | 335.67 | 376.31 | -1422.37 | 353.82 | -1399.89 | 199.83 |
| | | 209 | 61.69 | 263.50 | -375.67 | 58.90 | -171.07 | 298.18 | -289.06 | -3098.31 | -296.11 | -3091.25 | 140.59 |
| | | 167 | 64.32 | 81.09 | -449.81 | 11.29 | -380.00 | -179.41 | 278.38 | -2888.43 | 241.38 | -2851.42 | 340.32 |
| 77 | 38 | 165 | 9.24 | 43.62 | -88.43 | -7.30 | -37.50 | -64.28 | 7.54 | -461.01 | -2.93 | -450.54 | 69.26 |
| | | 207 | 14.34 | 44.15 | -160.98 | -17.68 | -99.15 | 94.13 | 82.83 | -430.57 | 82.58 | -430.33 | 11.27 |
| | | 209 | 16.46 | 66.40 | -88.02 | 14.75 | -36.38 | 72.85 | -12.01 | -861.82 | -12.29 | -861.54 | 15.42 |
| | | 167 | 16.80 | 22.02 | -102.53 | 3.03 | -83.54 | -44.77 | -28.79 | -838.12 | -30.88 | -836.03 | 41.09 |
| 77 | 70 | 165 | 9.19 | 44.73 | -88.68 | -7.41 | -36.55 | -65.09 | 8.01 | -459.15 | -2.66 | -448.48 | 69.79 |
| | | 207 | 14.24 | 43.71 | -159.53 | -17.76 | -98.06 | 93.35 | 83.20 | -428.14 | 82.92 | -427.87 | 11.82 |
| | | 209 | 16.35 | 66.05 | -86.60 | 14.74 | -35.29 | 72.11 | -12.25 | -859.39 | -12.55 | -859.09 | 15.96 |
| | | 167 | 16.73 | 22.71 | -102.29 | 3.00 | -82.59 | -45.55 | -28.92 | -836.12 | -31.07 | -833.96 | 41.69 |
| 77 | 85 | 165 | 9.16 | 45.41 | -88.83 | -7.47 | -35.96 | -65.59 | 8.30 | -458.00 | -2.50 | -447.20 | 70.13 |
| | | 207 | 14.17 | 43.44 | -158.65 | -17.81 | -97.39 | 92.88 | 83.42 | -426.65 | 83.13 | -426.36 | 12.17 |
| | | 209 | 16.29 | 65.85 | -85.72 | 14.74 | -34.62 | 71.65 | -12.40 | -857.89 | -12.71 | -857.57 | 16.30 |
| | | 167 | 16.69 | 23.14 | -102.15 | 2.98 | -81.99 | -46.03 | -28.99 | -834.89 | -31.19 | -832.69 | 42.06 |
| 77 | 87 | 165 | 23.01 | 90.30 | -235.54 | -15.32 | -129.92 | -152.51 | 133.85 | -1087.64 | 74.76 | -1028.55 | 262.08 |
| | | 207 | 38.88 | 92.93 | -443.29 | -48.27 | -302.09 | 236.17 | 261.49 | -1004.63 | 246.97 | -990.11 | 134.84 |
| | | 209 | 43.29 | 184.44 | -261.87 | 41.23 | -118.66 | 208.34 | -194.46 | -2179.82 | -199.10 | -2175.18 | 95.90 |
| | | 167 | 45.09 | 57.12 | -313.46 | 7.92 | -264.27 | -125.74 | 181.40 | -2036.61 | 156.76 | -2011.97 | 232.49 |
| 77 | 97 | 165 | 21.95 | 87.39 | -224.05 | -14.82 | -121.84 | -146.23 | 121.74 | -1041.13 | 67.35 | -986.74 | 245.55 |
| | | 207 | 36.94 | 89.54 | -420.62 | -45.88 | -285.20 | 225.27 | 248.27 | -961.76 | 235.59 | -949.08 | 123.22 |
| | | 209 | 41.19 | 175.00 | -247.41 | 39.12 | -111.54 | 197.31 | -174.97 | -2078.76 | -179.10 | -2074.63 | 88.56 |
| | | 167 | 42.86 | 54.55 | -296.05 | 7.54 | -249.04 | -119.46 | 159.58 | -1946.79 | 137.38 | -1924.60 | 215.08 |
| 77 | 102 | 165 | 9.16 | 45.41 | -88.83 | -7.47 | -35.96 | -65.59 | 8.30 | -458.00 | -2.50 | -447.20 | 70.13 |
| | | 207 | 14.17 | 43.44 | -158.65 | -17.81 | -97.39 | 92.88 | 83.42 | -426.65 | 83.13 | -426.36 | 12.17 |
| | | 209 | 16.29 | 65.85 | -85.72 | 14.74 | -34.62 | 71.65 | -12.40 | -857.89 | -12.71 | -857.57 | 16.30 |
| | | 167 | 16.69 | 23.14 | -102.15 | 2.98 | -81.99 | -46.03 | -28.99 | -834.89 | -31.19 | -832.69 | 42.06 |
| 78 | 2 | 151 | 34.06 | 345.03 | -127.47 | 0.45 | 217.11 | -209.95 | 223.22 | -727.40 | -4.33 | -499.85 | 405.63 |
| | | 193 | 33.74 | 259.26 | -346.66 | -60.38 | -27.02 | 302.50 | 744.04 | -420.94 | 711.22 | -388.11 | 192.78 |
| | | 207 | 47.82 | 472.90 | -205.69 | 55.21 | 211.99 | 330.12 | -96.34 | -2255.98 | -119.22 | -2233.11 | 221.09 |
| | | 165 | 44.05 | 241.15 | -179.24 | 27.56 | 34.35 | -210.17 | 331.28 | -2110.28 | 269.21 | -2048.21 | 384.31 |
| 78 | 21 | 151 | 9.67 | 109.78 | -35.06 | -1.00 | 75.73 | -61.42 | 34.93 | -194.47 | 5.52 | -165.06 | 76.69 |
| | | 193 | 9.14 | 90.60 | -95.98 | -16.23 | 10.85 | 92.30 | 137.32 | -140.35 | 137.10 | -140.13 | 7.88 |
| | | 207 | 14.85 | 138.28 | -52.33 | 14.81 | 71.14 | 91.05 | 2.07 | -650.22 | 1.19 | -649.34 | 23.96 |
| | | 165 | 12.11 | 74.01 | -37.21 | 7.96 | 28.84 | -54.62 | -4.40 | -625.16 | -8.37 | -621.19 | 49.49 |
| 78 | 53 | 151 | 9.95 | 113.27 | -37.83 | -1.43 | 76.87 | -64.61 | 37.27 | -194.20 | 6.25 | -163.18 | 78.85 |
| | | 193 | 8.91 | 88.74 | -92.16 | -16.47 | 13.05 | 89.24 | 138.35 | -137.16 | 138.01 | -136.82 | 9.75 |
| | | 207 | 14.77 | 137.11 | -48.92 | 14.81 | 73.38 | 88.28 | 3.31 | -646.97 | 2.30 | -645.95 | 25.69 |
| | | 165 | 12.30 | 77.47 | -39.68 | 7.76 | 30.03 | -57.51 | -3.24 | -623.53 | -7.55 | -619.23 | 51.47 |
| 78 | 85 | 151 | 10.13 | 115.39 | -39.52 | -1.70 | 77.56 | -66.55 | 38.76 | -194.09 | 6.70 | -162.04 | 80.23 |
| | | 193 | 8.77 | 87.62 | -89.85 | -16.61 | 14.37 | 87.37 | 139.00 | -135.25 | 138.57 | -134.81 | 10.94 |
| | | 207 | 14.73 | 136.41 | -46.87 | 14.80 | 74.74 | 86.60 | 4.07 | -645.01 | 2.96 | -643.90 | 26.79 |
| | | 165 | 12.41 | 79.57 | -41.19 | 7.63 | 30.74 | -59.26 | -2.52 | -622.57 | -7.04 | -618.05 | 52.75 |
| 78 | 87 | 151 | 24.05 | 245.39 | -90.23 | 0.08 | 155.08 | -148.84 | 153.47 | -510.31 | -1.99 | -354.84 | 281.11 |
| | | 193 | 23.58 | 184.44 | -243.01 | -42.47 | -16.09 | 213.32 | 513.99 | -298.08 | 492.62 | -276.72 | 129.98 |
| | | 207 | 33.84 | 333.39 | -143.32 | 38.78 | 151.29 | 231.62 | -63.99 | -1589.68 | -79.08 | -1574.59 | 150.97 |
| | | 165 | 31.00 | 171.25 | -124.87 | 19.39 | 27.00 | -148.01 | 220.08 | -1489.42 | 178.53 | -1447.88 | 263.24 |
| 78 | 97 | 151 | 23.02 | 236.64 | -86.60 | -0.17 | 150.21 | -143.06 | 143.20 | -485.32 | -0.71 | -341.40 | 264.09 |
| | | 193 | 22.34 | 177.93 | -230.94 | -40.50 | -12.52 | 203.95 | 483.20 | -285.89 | 464.41 | -267.11 | 118.71 |
| | | 207 | 32.47 | 318.67 | -135.36 | 36.93 | 146.38 | 220.32 | -55.49 | -1518.31 | -68.94 | -1504.87 | 139.61 |
| | | 165 | 29.58 | 164.92 | -117.90 | 18.49 | 28.53 | -141.32 | 197.85 | -1425.17 | 160.22 | -1387.54 | 244.25 |
| 78 | 102 | 151 | 10.13 | 115.39 | -39.52 | -1.70 | 77.56 | -66.55 | 38.76 | -194.09 | 6.70 | -162.04 | 80.23 |
| | | 193 | 8.77 | 87.62 | -89.85 | -16.61 | 14.37 | 87.37 | 139.00 | -135.25 | 138.57 | -134.81 | 10.94 |
| | | 207 | 14.73 | 136.41 | -46.87 | 14.80 | 74.74 | 86.60 | 4.07 | -645.01 | 2.96 | -643.90 | 26.79 |
| | | 165 | 12.41 | 79.57 | -41.19 | 7.63 | 30.74 | -59.26 | -2.52 | -622.57 | -7.04 | -618.05 | 52.75 |
| 79 | 2 | 160 | 42.58 | 597.29 | 67.81 | 69.82 | 595.28 | -32.56 | 912.22 | -280.64 | -217.07 | 848.65 | 267.93 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| | | 202 | 35.77 | 440.49 | -29.58 | -24.65 | 435.56 | 47.90 | 1554.33 | 909.99 | 1327.15 | 1137.17 | 307.85 |
| | | 193 | 53.99 | 775.30 | -161.53 | 49.35 | 564.42 | 391.26 | 202.08 | -1277.06 | 156.14 | -1231.13 | 256.58 |
| | | 151 | 56.27 | 624.94 | -96.35 | 55.15 | 473.44 | -293.81 | 396.83 | -1298.42 | 231.28 | -1132.87 | 503.23 |
| 79 | 21 | 160 | 12.71 | 185.38 | 18.87 | 19.07 | 185.18 | -5.76 | 272.61 | 15.82 | 19.98 | 268.46 | 32.40 |
| | | 202 | 11.04 | 146.81 | -9.10 | -7.06 | 144.77 | 17.72 | 338.74 | 220.69 | 244.88 | 314.56 | 47.65 |
| | | 193 | 17.20 | 234.70 | -46.94 | 14.01 | 173.75 | 115.98 | 43.35 | -375.52 | 42.64 | -374.80 | 17.26 |
| | | 151 | 15.85 | 194.44 | -22.96 | 16.23 | 155.25 | -83.57 | 27.18 | -374.82 | 10.55 | -358.20 | 80.04 |
| 79 | 53 | 160 | 12.82 | 187.24 | 17.87 | 18.41 | 186.69 | -9.58 | 275.52 | 16.19 | 21.14 | 270.56 | 35.50 |
| | | 202 | 11.22 | 149.73 | -8.54 | -7.28 | 148.47 | 14.06 | 344.40 | 220.34 | 245.85 | 318.89 | 50.14 |
| | | 193 | 17.14 | 235.20 | -43.75 | 13.93 | 177.52 | 112.98 | 44.66 | -371.15 | 43.76 | -370.25 | 19.33 |
| | | 151 | 16.10 | 198.11 | -25.40 | 15.88 | 156.83 | -86.73 | 29.09 | -373.62 | 11.35 | -355.89 | 82.64 |
| 79 | 85 | 160 | 12.89 | 188.44 | 17.18 | 18.01 | 187.61 | -11.90 | 277.33 | 16.40 | 21.88 | 271.84 | 37.44 |
| | | 202 | 11.33 | 151.60 | -8.30 | -7.42 | 150.71 | 11.83 | 347.88 | 220.11 | 246.48 | 321.51 | 51.71 |
| | | 193 | 17.10 | 235.54 | -41.86 | 13.88 | 179.80 | 111.15 | 45.48 | -368.52 | 44.45 | -367.49 | 20.64 |
| | | 151 | 16.25 | 200.34 | -26.89 | 15.67 | 157.78 | -88.65 | 30.30 | -372.94 | 11.84 | -354.48 | 84.28 |
| 79 | 87 | 160 | 30.09 | 423.32 | 47.50 | 48.95 | 421.87 | -23.30 | 644.87 | -184.65 | -141.80 | 602.01 | 183.61 |
| | | 202 | 25.30 | 313.86 | -20.81 | -17.42 | 310.47 | 33.51 | 1079.31 | 639.31 | 917.63 | 800.98 | 212.13 |
| | | 193 | 38.27 | 548.24 | -113.23 | 34.75 | 400.26 | 275.66 | 139.94 | -899.67 | 110.02 | -869.75 | 173.81 |
| | | 151 | 39.67 | 443.32 | -67.79 | 38.86 | 336.67 | -207.69 | 268.06 | -914.80 | 155.77 | -802.51 | 346.72 |
| 79 | 97 | 160 | 28.84 | 406.81 | 45.13 | 46.54 | 405.39 | -22.59 | 618.17 | -164.03 | -124.90 | 579.04 | 170.51 |
| | | 202 | 24.28 | 303.20 | -19.83 | -16.67 | 300.04 | 31.78 | 1017.74 | 609.63 | 862.01 | 765.36 | 198.25 |
| | | 193 | 36.79 | 525.63 | -107.63 | 33.17 | 384.84 | 263.32 | 133.29 | -858.99 | 106.99 | -832.69 | 159.41 |
| | | 151 | 37.92 | 426.40 | -64.68 | 37.11 | 324.62 | -199.06 | 245.32 | -873.81 | 142.16 | -770.65 | 323.74 |
| 79 | 102 | 160 | 12.89 | 188.44 | 17.18 | 18.01 | 187.61 | -11.90 | 277.33 | 16.40 | 21.88 | 271.84 | 37.44 |
| | | 202 | 11.33 | 151.60 | -8.30 | -7.42 | 150.71 | 11.83 | 347.88 | 220.11 | 246.48 | 321.51 | 51.71 |
| | | 193 | 17.10 | 235.54 | -41.86 | 13.88 | 179.80 | 111.15 | 45.48 | -368.52 | 44.45 | -367.49 | 20.64 |
| | | 151 | 16.25 | 200.34 | -26.89 | 15.67 | 157.78 | -88.65 | 30.30 | -372.94 | 11.84 | -354.48 | 84.28 |
| 80 | 2 | 159 | 153.35 | 1837.26 | -1008.87 | 114.36 | 714.02 | 1391.12 | 966.17 | -1502.61 | -1054.02 | 517.58 | 951.96 |
| | | 201 | 152.52 | 2062.44 | -917.66 | 296.85 | 847.93 | -1464.35 | 2415.69 | 907.98 | 2122.74 | 1200.94 | -596.54 |
| | | 202 | 86.13 | 1098.75 | -384.16 | -28.95 | 743.55 | 632.90 | 1423.55 | -74.85 | 674.58 | 674.12 | 749.20 |
| | | 160 | 68.38 | 1214.46 | -237.21 | 163.58 | 813.68 | -648.98 | 735.48 | 184.01 | 270.23 | 649.26 | 200.28 |
| 80 | 27 | 159 | 46.87 | 574.02 | -315.44 | 32.49 | 226.08 | 434.07 | 365.39 | -256.86 | -100.08 | 208.61 | 270.14 |
| | | 201 | 49.44 | 668.30 | -293.87 | 89.90 | 284.53 | -471.14 | 571.20 | 129.35 | 362.57 | 337.98 | -220.58 |
| | | 202 | 25.05 | 343.85 | -107.74 | -7.49 | 243.61 | 187.67 | 338.10 | 12.03 | 140.13 | 210.00 | 159.25 |
| | | 160 | 23.78 | 388.97 | -82.12 | 43.92 | 262.93 | -208.54 | 207.15 | 79.67 | 83.68 | 203.14 | -22.26 |
| 80 | 59 | 159 | 47.17 | 577.76 | -320.98 | 32.15 | 224.62 | 438.94 | 361.37 | -255.60 | -102.04 | 207.81 | 266.77 |
| | | 201 | 48.80 | 658.37 | -292.12 | 88.57 | 277.68 | -465.74 | 564.81 | 129.12 | 360.82 | 333.10 | -217.40 |
| | | 202 | 25.04 | 341.79 | -112.67 | -7.84 | 236.95 | 191.45 | 332.46 | 11.62 | 138.98 | 205.11 | 156.97 |
| | | 160 | 23.57 | 385.35 | -79.03 | 44.65 | 261.67 | -205.28 | 207.30 | 77.35 | 82.28 | 202.37 | -24.83 |
| 80 | 85 | 159 | 47.35 | 580.03 | -324.35 | 31.94 | 223.73 | 441.91 | 358.89 | -254.85 | -103.28 | 207.31 | 264.68 |
| | | 201 | 48.42 | 652.33 | -291.06 | 87.76 | 273.52 | -462.46 | 560.87 | 128.97 | 359.71 | 330.13 | -215.44 |
| | | 202 | 25.04 | 340.58 | -115.72 | -8.05 | 232.91 | 193.74 | 328.98 | 11.39 | 138.24 | 202.14 | 155.55 |
| | | 160 | 23.44 | 383.16 | -77.16 | 45.10 | 260.90 | -203.30 | 207.45 | 75.85 | 81.40 | 201.90 | -26.44 |
| 80 | 87 | 159 | 108.53 | 1302.18 | -715.83 | 80.50 | 505.85 | 986.34 | 691.47 | -1035.22 | -716.45 | 372.70 | 669.93 |
| | | 201 | 108.11 | 1461.94 | -650.58 | 209.60 | 601.76 | -1037.90 | 1680.63 | 627.13 | 1463.12 | 844.64 | -426.42 |
| | | 202 | 60.75 | 777.91 | -271.53 | -20.38 | 526.76 | 447.77 | 992.48 | -47.97 | 468.15 | 476.36 | 520.21 |
| | | 160 | 48.71 | 860.72 | -168.42 | 115.06 | 577.24 | -459.76 | 512.35 | 138.42 | 191.00 | 459.76 | 130.00 |
| 80 | 97 | 159 | 104.16 | 1251.45 | -688.62 | 76.93 | 485.90 | 948.24 | 670.80 | -967.18 | -659.91 | 363.53 | 639.44 |
| | | 201 | 103.90 | 1405.15 | -625.33 | 200.79 | 579.03 | -997.47 | 1587.39 | 587.30 | 1369.01 | 805.68 | -413.17 |
| | | 202 | 58.10 | 746.78 | -260.26 | -19.46 | 505.98 | 429.55 | 939.43 | -40.19 | 442.37 | 456.86 | 489.76 |
| | | 160 | 47.04 | 827.14 | -162.15 | 109.75 | 555.24 | -441.65 | 484.30 | 140.22 | 183.03 | 441.49 | 113.57 |
| 80 | 102 | 159 | 47.35 | 580.03 | -324.35 | 31.94 | 223.73 | 441.91 | 358.89 | -254.85 | -103.28 | 207.31 | 264.68 |
| | | 201 | 48.42 | 652.33 | -291.06 | 87.76 | 273.52 | -462.46 | 560.87 | 128.97 | 359.71 | 330.13 | -215.44 |
| | | 202 | 25.04 | 340.58 | -115.72 | -8.05 | 232.91 | 193.74 | 328.98 | 11.39 | 138.24 | 202.14 | 155.55 |
| | | 160 | 23.44 | 383.16 | -77.16 | 45.10 | 260.90 | -203.30 | 207.45 | 75.85 | 81.40 | 201.90 | -26.44 |
| 81 | 2 | 212 | 79.43 | 1138.55 | -90.97 | 212.25 | 835.32 | 529.98 | 1598.23 | -58.23 | -35.63 | 1575.63 | 192.15 |
| | | 45 | 98.58 | 1120.30 | -1013.86 | -686.29 | 792.73 | -769.28 | 971.34 | 521.33 | 880.72 | 611.95 | 180.47 |
| | | 43 | 204.12 | 3388.60 | -154.61 | 634.24 | 2599.74 | 1474.04 | 2100.97 | -88.24 | 106.38 | 1906.36 | 623.03 |
| | | 211 | 67.21 | 49.04 | -1212.39 | -151.67 | -1011.68 | -461.41 | 56.22 | -325.56 | -10.10 | -259.24 | -144.64 |
| 81 | 34 | 212 | 21.54 | 299.96 | -38.80 | 56.73 | 204.42 | 152.44 | 444.98 | -5.00 | 5.48 | 434.51 | 67.85 |
| | | 45 | 31.05 | 368.62 | -297.01 | -191.23 | 262.84 | -243.36 | 249.34 | 41.04 | 247.50 | 42.88 | 19.49 |
| | | 43 | 60.17 | 963.29 | -57.99 | 173.30 | 732.00 | 427.46 | 736.86 | 24.32 | 101.09 | 660.10 | 220.92 |
| | | 211 | 19.16 | 19.27 | -329.78 | -39.58 | -270.93 | -130.69 | 15.95 | -139.05 | -25.79 | -97.31 | -68.76 |
| 81 | 66 | 212 | 21.48 | 300.54 | -38.90 | 58.27 | 203.37 | 153.44 | 441.20 | -5.51 | 4.63 | 431.06 | 66.53 |
| | | 45 | 30.88 | 362.89 | -297.32 | -190.77 | 256.34 | -242.88 | 248.73 | 35.74 | 246.54 | 37.93 | 21.51 |
| | | 43 | 59.67 | 954.61 | -58.32 | 171.29 | 725.01 | 424.10 | 732.53 | 27.69 | 104.42 | 655.80 | 219.53 |
| | | 211 | 19.43 | 20.34 | -333.32 | -40.51 | -272.47 | -133.48 | 18.86 | -141.15 | -22.18 | -100.11 | -69.88 |
| 81 | 85 | 212 | 21.45 | 300.91 | -38.97 | 59.21 | 202.73 | 154.05 | 438.90 | -5.82 | 4.11 | 428.97 | 65.70 |
| | | 45 | 30.78 | 359.41 | -297.51 | -190.49 | 252.39 | -242.59 | 248.38 | 32.49 | 245.95 | 34.92 | 22.75 |
| | | 43 | 59.36 | 949.34 | -58.52 | 170.06 | 720.76 | 422.05 | 729.88 | 29.77 | 106.47 | 653.18 | 218.67 |
| | | 211 | 19.60 | 20.99 | -335.47 | -41.07 | -273.41 | -135.17 | 20.69 | -142.47 | -19.98 | -101.81 | -70.58 |
| 81 | 87 | 212 | 55.80 | 799.06 | -65.75 | 149.40 | 583.91 | 373.86 | 1123.94 | -39.53 | -23.20 | 1107.62 | 136.86 |
| | | 45 | 69.82 | 794.78 | -715.56 | -482.92 | 562.14 | -545.20 | 677.40 | 355.17 | 619.94 | 412.63 | 123.34 |
| | | 43 | 144.00 | 2385.64 | -110.88 | 445.50 | 1829.26 | 1038.96 | 1497.86 | -54.75 | 85.11 | 1358.00 | 444.51 |
| | | 211 | 47.41 | 35.48 | -852.97 | -106.59 | -710.91 | -325.63 | 40.07 | -235.86 | -9.39 | -186.40 | -105.84 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|-----------|-----------|---------|---------|---------|----------|---------|----------|---------|
| 81 | 97 | 212 | 53.16 | 760.21 | -64.43 | 142.56 | 553.23 | 357.56 | 1071.52 | -36.48 | -20.38 | 1055.43 | 132.57 |
| | | 45 | 67.05 | 764.46 | -684.66 | -460.67 | 540.47 | -523.85 | 642.73 | 327.36 | 593.36 | 376.74 | 114.60 |
| | | 43 | 137.71 | 2276.96 | -107.78 | 424.20 | 1744.98 | 992.79 | 1447.75 | -44.16 | 92.10 | 1311.49 | 429.79 |
| | | 211 | 45.35 | 34.79 | -813.59 | -101.55 | -677.26 | -311.57 | 39.04 | -231.37 | -11.17 | -181.16 | -105.15 |
| 81 | 102 | 212 | 21.45 | 300.91 | -38.97 | 59.21 | 202.73 | 154.05 | 438.90 | -5.82 | 4.11 | 428.97 | 65.70 |
| | | 45 | 30.78 | 359.41 | -297.51 | -190.49 | 252.39 | -242.59 | 248.38 | 32.49 | 245.95 | 34.92 | 22.75 |
| | | 43 | 59.36 | 949.34 | -58.52 | 170.06 | 720.76 | 422.05 | 729.88 | 29.77 | 106.47 | 653.18 | 218.67 |
| | | 211 | 19.60 | 20.99 | -335.47 | -41.07 | -273.41 | -135.17 | 20.69 | -142.47 | -19.98 | -101.81 | -70.58 |
| 82 | 2 | 214 | 15.41 | 289.55 | 34.85 | 93.28 | 231.12 | 107.09 | 146.71 | -167.29 | 142.86 | -163.45 | 34.54 |
| | | 47 | 84.70 | 1123.90 | -74.96 | 22.48 | 1026.46 | -327.61 | 226.84 | -1682.76 | -94.28 | -1361.64 | 714.20 |
| | | 45 | 45.40 | 507.22 | -69.69 | -23.26 | 460.79 | 156.93 | 1624.15 | 621.29 | 625.52 | 1619.91 | -65.04 |
| | | 212 | 55.30 | 812.55 | -156.18 | -128.64 | 785.02 | -160.99 | 658.92 | -216.33 | -199.97 | 642.56 | 118.53 |
| 82 | 30 | 214 | 4.24 | 46.44 | -12.49 | 24.36 | 9.60 | 28.53 | 52.87 | -134.64 | 50.98 | -132.76 | 18.69 |
| | | 47 | 26.83 | 333.23 | -20.29 | 15.04 | 297.90 | -106.02 | 18.78 | -633.80 | -36.63 | -578.39 | 181.91 |
| | | 45 | 10.36 | 81.08 | -23.33 | -15.50 | 73.25 | 27.51 | 491.83 | 224.57 | 225.47 | 490.93 | 15.48 |
| | | 212 | 15.27 | 243.71 | -44.00 | -36.45 | 236.16 | -46.01 | 97.42 | -66.08 | -64.62 | 95.97 | 15.37 |
| 82 | 62 | 214 | 4.37 | 45.10 | -15.12 | 24.19 | 5.79 | 28.67 | 51.75 | -139.77 | 50.27 | -138.30 | 16.73 |
| | | 47 | 26.68 | 329.33 | -20.62 | 14.82 | 293.89 | -105.57 | 18.12 | -636.87 | -35.70 | -583.05 | 179.88 |
| | | 45 | 10.10 | 77.83 | -22.85 | -14.50 | 69.48 | 27.78 | 486.75 | 224.08 | 224.76 | 486.07 | 13.34 |
| | | 212 | 15.01 | 240.29 | -43.11 | -35.40 | 232.58 | -46.09 | 91.32 | -66.58 | -65.48 | 90.22 | 13.14 |
| 82 | 85 | 214 | 4.45 | 44.34 | -16.77 | 24.10 | 3.47 | 28.76 | 51.09 | -142.92 | 49.85 | -141.67 | 15.50 |
| | | 47 | 26.59 | 326.96 | -20.82 | 14.69 | 291.45 | -105.30 | 17.71 | -638.73 | -35.13 | -585.89 | 178.60 |
| | | 45 | 9.94 | 75.88 | -22.59 | -13.89 | 67.18 | 27.95 | 483.67 | 223.76 | 224.32 | 483.11 | 12.02 |
| | | 212 | 14.85 | 238.21 | -42.57 | -34.77 | 230.41 | -46.14 | 87.62 | -66.90 | -66.00 | 86.72 | 11.76 |
| 82 | 87 | 214 | 10.66 | 197.41 | 22.53 | 65.40 | 154.54 | 75.23 | 104.60 | -130.56 | 101.89 | -127.85 | 25.09 |
| | | 47 | 60.01 | 792.80 | -52.69 | 16.95 | 723.16 | -232.44 | 152.11 | -1205.52 | -67.54 | -985.88 | 499.95 |
| | | 45 | 31.59 | 348.26 | -49.47 | -17.36 | 316.15 | 108.35 | 1146.85 | 444.43 | 446.93 | 1144.35 | -41.76 |
| | | 212 | 38.84 | 573.46 | -109.80 | -90.40 | 554.06 | -113.48 | 450.89 | -153.07 | -142.12 | 439.94 | 80.59 |
| 82 | 97 | 214 | 9.99 | 182.28 | 19.43 | 62.15 | 139.55 | 71.64 | 101.17 | -137.32 | 98.48 | -134.63 | 25.18 |
| | | 47 | 57.66 | 758.22 | -50.21 | 17.27 | 690.74 | -223.61 | 140.06 | -1170.61 | -63.51 | -967.04 | 474.74 |
| | | 45 | 29.78 | 323.83 | -47.62 | -17.54 | 293.74 | 101.34 | 1098.29 | 432.26 | 434.19 | 1096.35 | -35.85 |
| | | 212 | 36.99 | 548.69 | -104.64 | -86.11 | 530.17 | -108.44 | 417.98 | -146.76 | -136.89 | 408.11 | 74.00 |
| 82 | 102 | 214 | 4.45 | 44.34 | -16.77 | 24.10 | 3.47 | 28.76 | 51.09 | -142.92 | 49.85 | -141.67 | 15.50 |
| | | 47 | 26.59 | 326.96 | -20.82 | 14.69 | 291.45 | -105.30 | 17.71 | -638.73 | -35.13 | -585.89 | 178.60 |
| | | 45 | 9.94 | 75.88 | -22.59 | -13.89 | 67.18 | 27.95 | 483.67 | 223.76 | 224.32 | 483.11 | 12.02 |
| | | 212 | 14.85 | 238.21 | -42.57 | -34.77 | 230.41 | -46.14 | 87.62 | -66.90 | -66.00 | 86.72 | 11.76 |
| 83 | 2 | 216 | 19.85 | -7.48 | -103.82 | -8.65 | -102.65 | 10.54 | 47.73 | -965.70 | 40.14 | -958.11 | 87.40 |
| | | 55 | 72.78 | 775.50 | 41.98 | 97.05 | 720.43 | -193.29 | 158.21 | -2263.88 | 44.17 | -2149.85 | 513.03 |
| | | 47 | 21.69 | 78.31 | -211.61 | -94.18 | -39.12 | -142.32 | 614.12 | -48.08 | 159.15 | 406.90 | 307.06 |
| | | 214 | 47.50 | 691.87 | -9.60 | -9.27 | 691.54 | -15.29 | -5.65 | -864.10 | -26.43 | -843.32 | 131.95 |
| 83 | 26 | 216 | 11.39 | -5.27 | -101.81 | -5.28 | -101.80 | -0.57 | 21.31 | -419.74 | 18.81 | -417.24 | 33.10 |
| | | 55 | 22.31 | 201.07 | 12.08 | 35.03 | 178.12 | -61.74 | 29.99 | -848.21 | 13.47 | -831.69 | 119.31 |
| | | 47 | 9.37 | 4.22 | -125.85 | -33.09 | -88.54 | -58.83 | 182.79 | -53.50 | 69.80 | 59.49 | 118.03 |
| | | 214 | 14.74 | 180.25 | -0.06 | -2.14e-03 | 180.19 | -3.33 | -12.36 | -388.56 | -13.49 | -387.43 | 20.59 |
| 83 | 58 | 216 | 11.58 | -5.39 | -104.67 | -5.39 | -104.67 | -0.28 | 20.05 | -423.58 | 17.80 | -421.33 | 31.53 |
| | | 55 | 22.21 | 198.54 | 11.91 | 34.97 | 175.48 | -61.42 | 28.40 | -851.25 | 12.33 | -835.18 | 117.81 |
| | | 47 | 9.33 | 3.12 | -127.28 | -33.00 | -91.16 | -58.36 | 179.94 | -53.16 | 70.79 | 55.99 | 116.31 |
| | | 214 | 14.66 | 177.40 | -5.27e-03 | 0.04 | 177.35 | -2.89 | -11.68 | -392.47 | -12.61 | -391.54 | 18.80 |
| 83 | 85 | 216 | 11.70 | -5.45 | -106.41 | -5.45 | -106.41 | -0.11 | 19.28 | -425.92 | 17.18 | -423.82 | 30.52 |
| | | 55 | 22.14 | 197.00 | 11.80 | 34.93 | 173.87 | -61.23 | 27.44 | -853.09 | 11.65 | -837.30 | 116.85 |
| | | 47 | 9.31 | 2.47 | -128.16 | -32.95 | -92.75 | -58.07 | 178.18 | -52.92 | 71.40 | 53.85 | 115.22 |
| | | 214 | 14.62 | 175.66 | 0.03 | 0.07 | 175.62 | -2.62 | -11.25 | -394.85 | -12.07 | -394.04 | 17.66 |
| 83 | 87 | 216 | 14.78 | -5.85 | -83.26 | -6.49 | -82.62 | 7.01 | 34.37 | -700.57 | 29.05 | -695.25 | 62.33 |
| | | 55 | 51.47 | 543.10 | 29.73 | 69.36 | 503.47 | -137.02 | 108.35 | -1622.22 | 31.00 | -1544.87 | 357.60 |
| | | 47 | 15.66 | 50.81 | -156.44 | -67.18 | -38.44 | -102.63 | 431.67 | -37.61 | 115.62 | 278.44 | 220.07 |
| | | 214 | 33.61 | 484.67 | -6.40 | -6.17 | 484.44 | -10.54 | -5.83 | -628.15 | -19.23 | -614.75 | 90.32 |
| 83 | 97 | 216 | 14.90 | -6.11 | -89.40 | -6.59 | -88.93 | 6.29 | 33.61 | -688.87 | 28.47 | -683.73 | 60.73 |
| | | 55 | 49.36 | 515.61 | 28.53 | 67.21 | 476.93 | -131.70 | 102.59 | -1575.62 | 31.53 | -1504.56 | 337.96 |
| | | 47 | 15.35 | 44.56 | -156.83 | -64.98 | -47.29 | -100.31 | 412.53 | -38.60 | 115.58 | 258.35 | 213.97 |
| | | 214 | 32.25 | 460.24 | -5.75 | -5.54 | 460.03 | -9.85 | -7.32 | -618.81 | -18.91 | -607.21 | 83.41 |
| 83 | 102 | 216 | 11.70 | -5.45 | -106.41 | -5.45 | -106.41 | -0.11 | 19.28 | -425.92 | 17.18 | -423.82 | 30.52 |
| | | 55 | 22.14 | 197.00 | 11.80 | 34.93 | 173.87 | -61.23 | 27.44 | -853.09 | 11.65 | -837.30 | 116.85 |
| | | 47 | 9.31 | 2.47 | -128.16 | -32.95 | -92.75 | -58.07 | 178.18 | -52.92 | 71.40 | 53.85 | 115.22 |
| | | 214 | 14.62 | 175.66 | 0.03 | 0.07 | 175.62 | -2.62 | -11.25 | -394.85 | -12.07 | -394.04 | 17.66 |
| 84 | 2 | 218 | 43.29 | -38.60 | -383.62 | -38.71 | -383.51 | -6.01 | 52.68 | -1651.10 | 45.64 | -1644.07 | 109.24 |
| | | 63 | 62.77 | 445.88 | 31.98 | 102.97 | 374.89 | -156.02 | 88.73 | -2822.06 | 32.86 | -2766.19 | 399.40 |
| | | 55 | 27.98 | -4.28 | -463.19 | -99.06 | -368.41 | -185.77 | 377.52 | -607.02 | 200.30 | -429.79 | 378.26 |
| | | 216 | 43.82 | 399.96 | 33.37 | 33.66 | 399.68 | 10.20 | -29.51 | -1662.28 | -33.66 | -1658.14 | 82.14 |
| 84 | 26 | 218 | 19.15 | -13.09 | -191.38 | -13.27 | -191.19 | -5.69 | 20.64 | -653.44 | 18.48 | -651.28 | 38.03 |
| | | 63 | 18.28 | 91.75 | -3.71 | 34.64 | 53.40 | -46.80 | 19.87 | -1024.24 | 13.81 | -1018.18 | 79.33 |
| | | 55 | 13.26 | -7.53 | -217.46 | -32.52 | -192.47 | -67.97 | 122.30 | -291.75 | 74.49 | -243.94 | 132.32 |
| | | 216 | 13.02 | 70.53 | 11.19 | 11.54 | 70.18 | 4.58 | -13.80 | -658.92 | -13.84 | -658.88 | 5.14 |
| 84 | 58 | 218 | 19.27 | -13.19 | -192.93 | -13.34 | -192.77 | -5.33 | 19.57 | -656.78 | 17.59 | -654.80 | 36.58 |
| | | 63 | 18.22 | 90.32 | -4.02 | 34.56 | 51.74 | -46.38 | 18.66 | -1027.12 | 12.82 | -1021.28 | 77.95 |
| | | 55 | 13.40 | -7.79 | -218.63 | -32.33 | -194.09 | -67.62 | 122.10 | -293.41 | 75.68 | -246.99 | 130.89 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|--------|----------|--------|----------|--------|
| | | 216 | 13.00 | 69.06 | 11.33 | 11.74 | 68.65 | 4.88 | -12.72 | -662.37 | -12.74 | -662.35 | 3.69 |
| 84 | 85 | 218 | 19.34 | -13.24 | -193.87 | -13.39 | -193.73 | -5.11 | 18.93 | -658.82 | 17.04 | -656.94 | 35.66 |
| | | 63 | 18.18 | 89.45 | -4.21 | 34.51 | 50.73 | -46.12 | 17.93 | -1028.87 | 12.23 | -1023.17 | 77.07 |
| | | 55 | 13.49 | -7.94 | -219.34 | -32.22 | -195.07 | -67.40 | 121.96 | -294.41 | 76.40 | -248.86 | 129.98 |
| | | 216 | 12.99 | 68.17 | 11.41 | 11.86 | 67.72 | 5.06 | -12.06 | -664.47 | -12.07 | -664.46 | 2.76 |
| 84 | 87 | 218 | 31.44 | -27.50 | -281.59 | -27.59 | -281.51 | -4.69 | 37.63 | -1188.57 | 32.70 | -1183.64 | 77.58 |
| | | 63 | 44.27 | 308.32 | 21.62 | 73.25 | 256.69 | -110.16 | 60.99 | -2018.01 | 23.53 | -1980.55 | 276.54 |
| | | 55 | 20.05 | -4.32 | -337.63 | -70.33 | -271.62 | -132.84 | 267.42 | -443.42 | 143.72 | -319.71 | 269.50 |
| | | 216 | 30.94 | 275.70 | 23.80 | 24.02 | 275.48 | 7.47 | -21.46 | -1196.61 | -24.05 | -1194.02 | 55.13 |
| 84 | 97 | 218 | 30.94 | -26.57 | -279.96 | -26.66 | -279.87 | -4.92 | 36.50 | -1159.90 | 31.76 | -1155.17 | 75.15 |
| | | 63 | 42.34 | 288.92 | 19.70 | 70.65 | 237.97 | -105.46 | 58.83 | -1956.10 | 24.84 | -1922.11 | 259.51 |
| | | 55 | 19.48 | -5.33 | -333.54 | -67.71 | -271.15 | -128.77 | 258.66 | -438.33 | 141.71 | -321.38 | 260.45 |
| | | 216 | 29.62 | 257.44 | 23.01 | 23.24 | 257.20 | 7.42 | -21.13 | -1167.70 | -23.28 | -1165.55 | 49.64 |
| 84 | 102 | 218 | 19.34 | -13.24 | -193.87 | -13.39 | -193.73 | -5.11 | 18.93 | -658.82 | 17.04 | -656.94 | 35.66 |
| | | 63 | 18.18 | 89.45 | -4.21 | 34.51 | 50.73 | -46.12 | 17.93 | -1028.87 | 12.23 | -1023.17 | 77.07 |
| | | 55 | 13.49 | -7.94 | -219.34 | -32.22 | -195.07 | -67.40 | 121.96 | -294.41 | 76.40 | -248.86 | 129.98 |
| | | 216 | 12.99 | 68.17 | 11.41 | 11.86 | 67.72 | 5.06 | -12.06 | -664.47 | -12.07 | -664.46 | 2.76 |
| 85 | 2 | 220 | 65.13 | -42.41 | -634.39 | -42.55 | -634.26 | -8.87 | 53.82 | -2277.86 | 47.42 | -2271.46 | 121.94 |
| | | 71 | 53.52 | 209.11 | -67.79 | 96.66 | 44.66 | -135.98 | 64.41 | -3321.98 | 33.18 | -3290.75 | 323.71 |
| | | 63 | 49.19 | -37.63 | -693.12 | -92.54 | -638.20 | -181.61 | 325.66 | -1277.81 | 221.83 | -1173.99 | 394.59 |
| | | 218 | 37.75 | 92.23 | 37.67 | 41.42 | 88.48 | 13.81 | -38.05 | -2306.99 | -39.25 | -2305.79 | 52.08 |
| 85 | 49 | 220 | 26.06 | -13.33 | -267.06 | -13.48 | -266.90 | -6.30 | 17.44 | -863.71 | 15.77 | -862.04 | 38.32 |
| | | 71 | 21.71 | 42.95 | -75.58 | 30.37 | -63.00 | -36.51 | 15.52 | -1173.03 | 13.53 | -1171.05 | 48.50 |
| | | 63 | 21.41 | -13.10 | -289.36 | -28.08 | -274.39 | -62.54 | 105.18 | -539.57 | 78.68 | -513.08 | 127.99 |
| | | 218 | 15.41 | 13.68 | -41.81 | 12.97 | -41.11 | 6.21 | -12.48 | -874.58 | -12.52 | -874.53 | -6.14 |
| 85 | 81 | 220 | 25.98 | -13.31 | -266.08 | -13.46 | -265.93 | -6.13 | 17.83 | -861.26 | 16.20 | -859.62 | 37.86 |
| | | 71 | 21.63 | 42.91 | -74.61 | 30.35 | -62.05 | -36.31 | 15.95 | -1170.77 | 14.00 | -1168.82 | 48.05 |
| | | 63 | 21.33 | -13.05 | -288.42 | -28.03 | -273.44 | -62.45 | 105.21 | -537.26 | 78.81 | -510.86 | 127.54 |
| | | 218 | 15.33 | 13.76 | -40.84 | 13.05 | -40.12 | 6.20 | -12.36 | -872.18 | -12.41 | -872.13 | -6.62 |
| 85 | 85 | 220 | 25.93 | -13.30 | -265.47 | -13.44 | -265.32 | -6.02 | 18.07 | -859.74 | 16.46 | -858.13 | 37.57 |
| | | 71 | 21.59 | 42.89 | -74.02 | 30.34 | -61.46 | -36.20 | 16.21 | -1169.37 | 14.28 | -1167.44 | 47.76 |
| | | 63 | 21.28 | -13.02 | -287.83 | -28.01 | -272.85 | -62.40 | 105.23 | -535.83 | 78.89 | -509.49 | 127.24 |
| | | 218 | 15.28 | 13.82 | -40.23 | 13.10 | -39.51 | 6.19 | -12.29 | -870.70 | -12.34 | -870.65 | -6.92 |
| 85 | 87 | 220 | 46.88 | -30.05 | -458.32 | -30.16 | -458.22 | -6.72 | 38.28 | -1633.19 | 33.81 | -1628.73 | 86.30 |
| | | 71 | 37.61 | 143.35 | -53.29 | 68.48 | 21.58 | -95.48 | 44.64 | -2370.11 | 24.02 | -2349.49 | 222.18 |
| | | 63 | 35.63 | -26.93 | -500.34 | -65.43 | -461.85 | -129.39 | 230.91 | -923.10 | 158.40 | -850.59 | 280.03 |
| | | 218 | 26.59 | 57.32 | 25.76 | 29.36 | 53.72 | 10.03 | -27.11 | -1653.98 | -27.81 | -1653.28 | 33.80 |
| 85 | 97 | 220 | 45.74 | -28.87 | -448.82 | -28.98 | -448.70 | -6.87 | 36.96 | -1587.55 | 32.68 | -1583.27 | 83.25 |
| | | 71 | 35.84 | 133.33 | -56.52 | 65.79 | 11.02 | -90.89 | 43.95 | -2292.30 | 25.54 | -2273.90 | 206.54 |
| | | 63 | 34.99 | -26.12 | -489.60 | -62.72 | -453.00 | -124.99 | 223.93 | -903.45 | 155.31 | -834.84 | 269.53 |
| | | 218 | 25.40 | 47.90 | 23.26 | 28.22 | 42.94 | 9.87 | -26.18 | -1607.63 | -26.71 | -1607.09 | 29.10 |
| 85 | 102 | 220 | 25.93 | -13.30 | -265.47 | -13.44 | -265.32 | -6.02 | 18.07 | -859.74 | 16.46 | -858.13 | 37.57 |
| | | 71 | 21.59 | 42.89 | -74.02 | 30.34 | -61.46 | -36.20 | 16.21 | -1169.37 | 14.28 | -1167.44 | 47.76 |
| | | 63 | 21.28 | -13.02 | -287.83 | -28.01 | -272.85 | -62.40 | 105.23 | -535.83 | 78.89 | -509.49 | 127.24 |
| | | 218 | 15.28 | 13.82 | -40.23 | 13.10 | -39.51 | 6.19 | -12.29 | -870.70 | -12.34 | -870.65 | -6.92 |
| 86 | 2 | 222 | 84.88 | -39.57 | -858.51 | -39.68 | -858.40 | -9.42 | 49.35 | -2844.58 | 43.30 | -2838.52 | 132.25 |
| | | 79 | 71.89 | 124.26 | -295.51 | 87.74 | -258.98 | -118.31 | 64.01 | -3763.70 | 45.96 | -3745.64 | 262.24 |
| | | 71 | 71.06 | -48.62 | -906.02 | -83.26 | -871.37 | -168.83 | 295.13 | -1927.26 | 220.37 | -1852.50 | 400.70 |
| | | 220 | 54.22 | 40.24 | -208.47 | 39.43 | -207.66 | 14.13 | -36.80 | -2872.29 | -37.16 | -2871.94 | 31.69 |
| 86 | 33 | 222 | 31.57 | -11.46 | -325.99 | -11.63 | -325.83 | -7.25 | 15.56 | -1031.98 | 13.97 | -1030.39 | 40.77 |
| | | 79 | 28.13 | 29.60 | -165.67 | 25.48 | -161.54 | -28.07 | 18.45 | -1279.94 | 17.92 | -1279.41 | 26.20 |
| | | 71 | 27.88 | -13.85 | -344.44 | -23.15 | -335.14 | -54.66 | 93.11 | -757.12 | 75.27 | -739.28 | 121.87 |
| | | 220 | 22.77 | 11.16 | -139.65 | 10.88 | -139.37 | 6.48 | -12.09 | -1041.54 | -12.21 | -1041.42 | -11.03 |
| 86 | 65 | 222 | 31.43 | -11.38 | -323.75 | -11.52 | -323.61 | -6.63 | 15.83 | -1029.75 | 14.36 | -1028.28 | 39.08 |
| | | 79 | 28.03 | 29.35 | -164.14 | 25.39 | -160.18 | -27.39 | 18.83 | -1278.05 | 18.36 | -1277.58 | 24.63 |
| | | 71 | 27.79 | -13.63 | -343.11 | -23.00 | -333.74 | -54.76 | 93.57 | -754.96 | 76.14 | -737.54 | 120.35 |
| | | 220 | 22.64 | 11.47 | -137.39 | 11.20 | -137.12 | 6.40 | -11.23 | -1039.56 | -11.38 | -1039.40 | -12.66 |
| 86 | 85 | 222 | 31.35 | -11.34 | -322.39 | -11.46 | -322.26 | -6.25 | 15.99 | -1028.36 | 14.60 | -1026.98 | 38.04 |
| | | 79 | 27.97 | 29.20 | -163.22 | 25.34 | -159.35 | -26.98 | 19.07 | -1276.89 | 18.64 | -1276.45 | 23.65 |
| | | 71 | 27.74 | -13.50 | -342.30 | -22.91 | -332.89 | -54.83 | 93.84 | -753.63 | 76.67 | -736.46 | 119.40 |
| | | 220 | 22.57 | 11.66 | -136.01 | 11.39 | -135.74 | 6.35 | -10.70 | -1038.33 | -10.88 | -1038.15 | -13.67 |
| 86 | 87 | 222 | 60.76 | -27.90 | -615.32 | -27.98 | -615.24 | -7.11 | 35.02 | -2033.49 | 30.81 | -2029.28 | 93.24 |
| | | 79 | 51.65 | 86.16 | -218.19 | 61.87 | -193.90 | -82.47 | 44.80 | -2678.97 | 33.12 | -2667.29 | 177.98 |
| | | 71 | 51.07 | -34.25 | -649.61 | -58.56 | -625.30 | -119.86 | 209.08 | -1385.14 | 157.13 | -1333.20 | 283.05 |
| | | 220 | 39.16 | 28.38 | -157.11 | 27.81 | -156.54 | 10.27 | -26.04 | -2053.23 | -26.22 | -2053.05 | 19.30 |
| 86 | 97 | 222 | 58.98 | -26.66 | -597.90 | -26.75 | -597.81 | -7.25 | 33.74 | -1970.89 | 29.73 | -1966.88 | 89.55 |
| | | 79 | 50.33 | 81.04 | -218.21 | 59.15 | -196.32 | -77.92 | 44.53 | -2585.03 | 34.33 | -2574.83 | 163.45 |
| | | 71 | 49.77 | -32.71 | -631.45 | -55.84 | -608.33 | -115.38 | 202.80 | -1349.16 | 153.88 | -1300.24 | 271.16 |
| | | 220 | 38.33 | 27.13 | -160.01 | 26.59 | -159.46 | 10.11 | -24.97 | -1989.92 | -25.09 | -1989.80 | 15.12 |
| 86 | 102 | 222 | 31.35 | -11.34 | -322.39 | -11.46 | -322.26 | -6.25 | 15.99 | -1028.36 | 14.60 | -1026.98 | 38.04 |
| | | 79 | 27.97 | 29.20 | -163.22 | 25.34 | -159.35 | -26.98 | 19.07 | -1276.89 | 18.64 | -1276.45 | 23.65 |
| | | 71 | 27.74 | -13.50 | -342.30 | -22.91 | -332.89 | -54.83 | 93.84 | -753.63 | 76.67 | -736.46 | 119.40 |
| | | 220 | 22.57 | 11.66 | -136.01 | 11.39 | -135.74 | 6.35 | -10.70 | -1038.33 | -10.88 | -1038.15 | -13.67 |
| 87 | 2 | 224 | 102.36 | -35.21 | -1055.37 | -35.30 | -1055.28 | -9.44 | 41.69 | -3350.27 | 35.71 | -3344.29 | 142.30 |
| | | 51 | 91.32 | 94.40 | -549.18 | 78.16 | -532.93 | -100.94 | 75.96 | -4146.38 | 66.35 | -4136.78 | 201.13 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|--------|----------|--------|----------|--------|
| | | 79 | 90.45 | -50.34 | -1096.94 | -73.37 | -1073.90 | -153.55 | 264.47 | -2529.14 | 203.48 | -2468.14 | 408.26 |
| | | 222 | 75.26 | 35.60 | -480.22 | 35.22 | -479.84 | 13.98 | -30.50 | -3372.59 | -30.57 | -3372.52 | 14.49 |
| 87 | 33 | 224 | 35.82 | -9.12 | -369.78 | -9.27 | -369.62 | -7.39 | 12.99 | -1166.93 | 11.62 | -1165.56 | 40.20 |
| | | 51 | 33.33 | 21.60 | -246.91 | 20.26 | -245.57 | -18.90 | 23.83 | -1353.93 | 23.81 | -1353.92 | 4.81 |
| | | 79 | 33.13 | -11.95 | -386.35 | -17.76 | -380.53 | -46.29 | 83.12 | -945.28 | 70.87 | -933.03 | 111.54 |
| | | 222 | 28.94 | 8.65 | -223.95 | 8.46 | -223.76 | 6.64 | -9.14 | -1174.40 | -9.36 | -1174.17 | -16.07 |
| 87 | 65 | 224 | 35.64 | -8.99 | -366.43 | -9.12 | -366.30 | -6.73 | 13.18 | -1165.22 | 11.92 | -1163.96 | 38.57 |
| | | 51 | 33.20 | 21.42 | -244.62 | 20.17 | -243.37 | -18.20 | 24.13 | -1352.48 | 24.12 | -1352.47 | 3.30 |
| | | 79 | 33.00 | -11.77 | -384.17 | -17.65 | -378.29 | -46.43 | 83.33 | -943.50 | 71.40 | -931.58 | 109.99 |
| | | 222 | 28.76 | 8.98 | -220.59 | 8.79 | -220.40 | 6.47 | -8.57 | -1172.84 | -8.84 | -1172.57 | -17.74 |
| 87 | 85 | 224 | 35.53 | -8.91 | -364.40 | -9.02 | -364.28 | -6.33 | 13.30 | -1164.14 | 12.10 | -1162.95 | 37.56 |
| | | 51 | 33.11 | 21.32 | -243.22 | 20.12 | -242.02 | -17.77 | 24.32 | -1351.56 | 24.32 | -1351.55 | 2.37 |
| | | 79 | 32.93 | -11.66 | -382.85 | -17.58 | -376.92 | -46.52 | 83.45 | -942.38 | 71.73 | -930.66 | 109.04 |
| | | 222 | 28.65 | 9.17 | -218.54 | 8.99 | -218.36 | 6.37 | -8.23 | -1171.86 | -8.53 | -1171.56 | -18.77 |
| 87 | 87 | 224 | 72.98 | -24.66 | -752.16 | -24.73 | -752.09 | -7.14 | 29.55 | -2388.72 | 25.42 | -2384.58 | 99.87 |
| | | 51 | 65.29 | 65.50 | -398.27 | 54.79 | -387.56 | -69.66 | 53.52 | -2944.10 | 47.48 | -2938.06 | 134.40 |
| | | 79 | 64.69 | -35.14 | -782.32 | -51.26 | -766.19 | -108.57 | 187.23 | -1811.53 | 145.22 | -1769.52 | 286.71 |
| | | 222 | 53.99 | 24.95 | -349.28 | 24.68 | -349.01 | 10.17 | -21.49 | -2404.58 | -21.52 | -2404.56 | 7.15 |
| 87 | 97 | 224 | 70.54 | -23.42 | -726.81 | -23.49 | -726.74 | -7.29 | 28.44 | -2309.16 | 24.54 | -2305.26 | 95.45 |
| | | 51 | 63.30 | 61.62 | -391.48 | 52.06 | -381.92 | -65.13 | 53.13 | -2833.91 | 48.02 | -2828.80 | 121.31 |
| | | 79 | 62.74 | -33.24 | -756.46 | -48.54 | -741.16 | -104.08 | 181.69 | -1758.71 | 142.48 | -1719.51 | 273.02 |
| | | 222 | 52.51 | 23.71 | -344.26 | 23.44 | -343.99 | 10.03 | -20.53 | -2324.42 | -20.53 | -2324.41 | 3.49 |
| 87 | 102 | 224 | 35.53 | -8.91 | -364.40 | -9.02 | -364.28 | -6.33 | 13.30 | -1164.14 | 12.10 | -1162.95 | 37.56 |
| | | 51 | 33.11 | 21.32 | -243.22 | 20.12 | -242.02 | -17.77 | 24.32 | -1351.56 | 24.32 | -1351.55 | 2.37 |
| | | 79 | 32.93 | -11.66 | -382.85 | -17.58 | -376.92 | -46.52 | 83.45 | -942.38 | 71.73 | -930.66 | 109.04 |
| | | 222 | 28.65 | 9.17 | -218.54 | 8.99 | -218.36 | 6.37 | -8.23 | -1171.86 | -8.53 | -1171.56 | -18.77 |
| 88 | 2 | 226 | 117.54 | -30.24 | -1224.29 | -30.32 | -1224.22 | -9.35 | 32.43 | -3795.58 | 26.34 | -3789.49 | 152.65 |
| | | 61 | 108.37 | 76.47 | -784.77 | 68.23 | -776.52 | -83.87 | 93.63 | -4471.20 | 89.91 | -4467.48 | 130.35 |
| | | 51 | 107.41 | -47.76 | -1263.00 | -63.45 | -1247.32 | -137.17 | 231.20 | -3075.03 | 176.54 | -3020.36 | 421.60 |
| | | 224 | 94.01 | 30.65 | -724.83 | 30.40 | -724.58 | 13.77 | -21.47 | -3811.11 | -21.48 | -3811.10 | -4.11 |
| 88 | 33 | 226 | 38.82 | -6.66 | -397.84 | -6.80 | -397.70 | -7.42 | 9.58 | -1270.15 | 8.42 | -1268.99 | 38.54 |
| | | 61 | 37.26 | 15.22 | -314.06 | 14.94 | -313.78 | -9.59 | 29.92 | -1396.11 | 29.76 | -1395.95 | -15.22 |
| | | 51 | 37.11 | -8.82 | -413.53 | -12.30 | -410.04 | -37.41 | 73.46 | -1103.45 | 65.04 | -1095.03 | 99.18 |
| | | 224 | 33.89 | 6.07 | -293.28 | 5.92 | -293.12 | 6.81 | -5.80 | -1275.43 | -6.13 | -1275.09 | -20.52 |
| 88 | 65 | 226 | 38.58 | -6.48 | -393.61 | -6.60 | -393.49 | -6.76 | 10.04 | -1267.97 | 8.95 | -1266.88 | 37.18 |
| | | 61 | 37.09 | 15.10 | -311.09 | 14.86 | -310.85 | -8.89 | 30.52 | -1394.26 | 30.33 | -1394.07 | -16.46 |
| | | 51 | 36.94 | -8.67 | -410.64 | -12.23 | -407.08 | -37.65 | 73.47 | -1101.27 | 65.27 | -1093.08 | 97.79 |
| | | 224 | 33.65 | 6.39 | -289.03 | 6.25 | -288.88 | 6.54 | -5.52 | -1273.29 | -5.90 | -1272.91 | -22.02 |
| 88 | 85 | 226 | 38.44 | -6.37 | -391.03 | -6.48 | -390.93 | -6.37 | 10.31 | -1266.61 | 9.28 | -1265.57 | 36.36 |
| | | 61 | 36.98 | 15.04 | -309.29 | 14.82 | -309.07 | -8.47 | 30.89 | -1393.11 | 30.68 | -1392.90 | -17.21 |
| | | 51 | 36.84 | -8.58 | -408.88 | -12.18 | -405.28 | -37.79 | 73.48 | -1099.92 | 65.41 | -1091.86 | 96.93 |
| | | 224 | 33.51 | 6.59 | -286.44 | 6.45 | -286.30 | 6.38 | -5.34 | -1271.97 | -5.76 | -1271.55 | -22.94 |
| 88 | 87 | 226 | 83.48 | -21.01 | -868.33 | -21.07 | -868.27 | -7.09 | 22.98 | -2699.25 | 18.80 | -2695.07 | 106.61 |
| | | 61 | 77.17 | 52.78 | -564.21 | 47.46 | -558.89 | -57.04 | 66.25 | -3166.25 | 64.03 | -3164.04 | 84.61 |
| | | 51 | 76.52 | -33.00 | -896.50 | -43.92 | -885.58 | -96.48 | 163.62 | -2196.37 | 126.41 | -2159.16 | 293.99 |
| | | 224 | 67.14 | 21.31 | -521.41 | 21.12 | -521.22 | 10.03 | -15.07 | -2710.29 | -15.09 | -2710.28 | -5.80 |
| 88 | 97 | 226 | 80.40 | -19.79 | -835.01 | -19.85 | -834.94 | -7.25 | 22.11 | -2602.66 | 18.19 | -2598.74 | 101.35 |
| | | 61 | 74.53 | 49.38 | -549.93 | 44.74 | -545.30 | -52.50 | 65.55 | -3039.60 | 63.79 | -3037.84 | 73.81 |
| | | 51 | 73.92 | -30.89 | -862.79 | -41.20 | -852.49 | -92.01 | 159.00 | -2126.55 | 124.70 | -2092.25 | 277.91 |
| | | 224 | 65.01 | 20.08 | -508.47 | 19.89 | -508.28 | 9.90 | -14.34 | -2613.28 | -14.37 | -2613.25 | -8.75 |
| 88 | 102 | 226 | 38.44 | -6.37 | -391.03 | -6.48 | -390.93 | -6.37 | 10.31 | -1266.61 | 9.28 | -1265.57 | 36.36 |
| | | 61 | 36.98 | 15.04 | -309.29 | 14.82 | -309.07 | -8.47 | 30.89 | -1393.11 | 30.68 | -1392.90 | -17.21 |
| | | 51 | 36.84 | -8.58 | -408.88 | -12.18 | -405.28 | -37.79 | 73.48 | -1099.92 | 65.41 | -1091.86 | 96.93 |
| | | 224 | 33.51 | 6.59 | -286.44 | 6.45 | -286.30 | 6.38 | -5.34 | -1271.97 | -5.76 | -1271.55 | -22.94 |
| 89 | 2 | 228 | 130.49 | -24.02 | -1365.00 | -24.09 | -1364.93 | -9.76 | 22.63 | -4184.67 | 16.31 | -4178.35 | 162.93 |
| | | 73 | 123.14 | 62.10 | -995.32 | 57.92 | -991.14 | -66.35 | 112.60 | -4743.12 | 112.24 | -4742.75 | 42.21 |
| | | 61 | 122.00 | -42.52 | -1403.08 | -53.40 | -1392.20 | -121.17 | 196.76 | -3561.93 | 144.23 | -3509.40 | 441.23 |
| | | 226 | 110.42 | 24.90 | -940.93 | 24.70 | -940.73 | 13.87 | -11.02 | -4190.09 | -11.20 | -4189.91 | -27.47 |
| 89 | 33 | 228 | 40.50 | -4.15 | -409.71 | -4.29 | -409.57 | -7.37 | 6.14 | -1339.99 | 5.18 | -1339.03 | 35.93 |
| | | 73 | 39.88 | 9.55 | -365.77 | 9.55 | -365.77 | -0.15 | 36.98 | -1405.15 | 36.17 | -1404.34 | -34.33 |
| | | 61 | 39.79 | -4.91 | -425.33 | -6.81 | -423.43 | -28.21 | 63.53 | -1229.33 | 57.92 | -1223.72 | 85.01 |
| | | 226 | 37.53 | 3.50 | -346.83 | 3.36 | -346.70 | 6.97 | -2.84 | -1343.08 | -3.29 | -1342.62 | -24.77 |
| 89 | 65 | 228 | 40.23 | -3.93 | -404.88 | -4.05 | -404.76 | -6.75 | 6.80 | -1337.15 | 5.88 | -1336.24 | 35.07 |
| | | 73 | 39.68 | 9.49 | -362.35 | 9.49 | -362.35 | 0.49 | 37.80 | -1402.76 | 36.94 | -1401.90 | -35.11 |
| | | 61 | 39.59 | -4.82 | -421.95 | -6.78 | -419.99 | -28.56 | 63.77 | -1226.71 | 58.28 | -1221.22 | 83.98 |
| | | 226 | 37.26 | 3.80 | -342.00 | 3.67 | -341.87 | 6.60 | -2.48 | -1340.27 | -2.98 | -1339.77 | -25.87 |
| 89 | 85 | 228 | 40.06 | -3.80 | -401.94 | -3.90 | -401.84 | -6.38 | 7.20 | -1335.41 | 6.31 | -1334.52 | 34.55 |
| | | 73 | 39.56 | 9.46 | -360.26 | 9.46 | -360.26 | 0.88 | 38.29 | -1401.28 | 37.41 | -1400.40 | -35.59 |
| | | 61 | 39.46 | -4.76 | -419.90 | -6.76 | -417.90 | -28.77 | 63.92 | -1225.10 | 58.50 | -1219.69 | 83.35 |
| | | 226 | 37.09 | 3.98 | -339.06 | 3.86 | -338.94 | 6.38 | -2.27 | -1338.54 | -2.80 | -1338.01 | -26.55 |
| 89 | 87 | 228 | 92.33 | -16.52 | -963.59 | -16.58 | -963.53 | -7.36 | 16.02 | -2967.81 | 11.72 | -2963.51 | 113.22 |
| | | 73 | 87.37 | 42.46 | -711.39 | 39.87 | -708.80 | -44.12 | 79.97 | -3348.71 | 79.81 | -3348.55 | 23.40 |
| | | 61 | 86.60 | -29.00 | -991.35 | -36.50 | -983.86 | -84.61 | 139.23 | -2537.50 | 103.95 | -2502.23 | 305.27 |
| | | 226 | 78.56 | 17.13 | -672.49 | 16.98 | -672.35 | 10.10 | -7.68 | -2971.84 | -7.84 | -2971.68 | -21.85 |
| 89 | 97 | 228 | 88.58 | -15.39 | -922.23 | -15.46 | -922.17 | -7.49 | 15.41 | -2853.77 | 11.41 | -2849.77 | 107.04 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|--------|----------|--------|----------|---------|
| | | 73 | 84.05 | 39.34 | -689.37 | 37.18 | -687.22 | -39.59 | 79.00 | -3205.02 | 78.92 | -3204.94 | 16.20 |
| | | 61 | 83.34 | -26.77 | -949.66 | -33.78 | -942.66 | -80.09 | 135.60 | -2450.57 | 103.54 | -2418.50 | 286.19 |
| | | 226 | 75.78 | 15.96 | -651.64 | 15.81 | -651.49 | 9.96 | -7.24 | -2857.80 | -7.44 | -2857.60 | -23.69 |
| 89 | 102 | 228 | 40.06 | -3.80 | -401.94 | -3.90 | -401.84 | -6.38 | 7.20 | -1335.41 | 6.31 | -1334.52 | 34.55 |
| | | 73 | 39.56 | 9.46 | -360.26 | 9.46 | -360.26 | 0.88 | 38.29 | -1400.28 | 37.41 | -1400.40 | -35.59 |
| | | 61 | 39.46 | -4.76 | -419.90 | -6.76 | -417.90 | -28.77 | 63.92 | -1225.10 | 58.50 | -1219.69 | 83.35 |
| | | 226 | 37.09 | 3.98 | -339.06 | 3.86 | -338.94 | 6.38 | -2.27 | -1338.54 | -2.80 | -1338.01 | -26.55 |
| 90 | 2 | 230 | 141.33 | -14.51 | -1473.26 | -14.63 | -1473.14 | -13.61 | 14.09 | -4535.92 | 7.44 | -4529.26 | 173.87 |
| | | 83 | 136.03 | 48.06 | -1183.90 | 46.64 | -1182.48 | -41.77 | 128.13 | -4975.76 | 127.09 | -4974.73 | -72.72 |
| | | 73 | 134.33 | -33.84 | -1516.46 | -41.91 | -1508.39 | -109.05 | 166.36 | -3991.53 | 113.72 | -3938.89 | 464.87 |
| | | 228 | 124.57 | 16.52 | -1129.81 | 16.28 | -1129.58 | 16.28 | -0.52 | -4513.27 | -1.29 | -4512.50 | -58.96 |
| 90 | 33 | 230 | 40.84 | -1.62 | -405.07 | -1.75 | -404.94 | -7.25 | 2.84 | -1375.44 | 2.07 | -1374.67 | 32.67 |
| | | 83 | 41.18 | 4.32 | -401.55 | 4.11 | -401.34 | 9.36 | 44.94 | -1380.30 | 43.01 | -1378.36 | -52.46 |
| | | 73 | 41.15 | -0.46 | -421.33 | -1.31 | -420.49 | -18.84 | 53.86 | -1321.73 | 50.37 | -1318.24 | 69.25 |
| | | 228 | 39.85 | 0.95 | -384.12 | 0.82 | -383.99 | 7.11 | -0.06 | -1376.44 | -0.67 | -1375.83 | -28.86 |
| 90 | 65 | 230 | 40.55 | -1.37 | -400.00 | -1.48 | -399.89 | -6.71 | 3.59 | -1372.28 | 2.82 | -1371.52 | 32.39 |
| | | 83 | 40.96 | 4.32 | -397.94 | 4.08 | -397.70 | 9.91 | 45.80 | -1377.61 | 43.85 | -1375.65 | -52.72 |
| | | 73 | 40.93 | -0.43 | -417.74 | -1.33 | -416.85 | -19.28 | 54.46 | -1318.96 | 51.02 | -1315.51 | 68.73 |
| | | 228 | 39.56 | 1.22 | -379.05 | 1.10 | -378.94 | 6.66 | 0.53 | -1373.29 | -0.10 | -1372.66 | -29.40 |
| 90 | 85 | 230 | 40.38 | -1.21 | -396.92 | -1.31 | -396.82 | -6.39 | 4.04 | -1370.35 | 3.28 | -1369.59 | 32.22 |
| | | 83 | 40.83 | 4.32 | -395.75 | 4.06 | -395.49 | 10.24 | 46.32 | -1375.96 | 44.35 | -1373.99 | -52.88 |
| | | 73 | 40.80 | -0.41 | -415.56 | -1.33 | -414.63 | -19.55 | 54.83 | -1317.26 | 51.41 | -1313.84 | 68.42 |
| | | 228 | 39.39 | 1.38 | -375.97 | 1.27 | -375.86 | 6.39 | 0.89 | -1371.37 | 0.24 | -1370.72 | -29.73 |
| 90 | 87 | 230 | 99.60 | -9.83 | -1035.10 | -9.93 | -1035.00 | -9.93 | 9.90 | -3206.62 | 5.40 | -3202.12 | 120.21 |
| | | 83 | 96.12 | 32.44 | -841.85 | 31.64 | -841.05 | -26.48 | 91.50 | -3500.54 | 90.64 | -3499.68 | -55.53 |
| | | 73 | 94.99 | -22.65 | -1066.34 | -28.12 | -1060.88 | -75.30 | 117.54 | -2835.98 | 82.67 | -2801.11 | 319.03 |
| | | 228 | 88.30 | 11.19 | -803.34 | 11.03 | -803.17 | 11.70 | -0.24 | -3191.69 | -0.83 | -3191.10 | -43.27 |
| 90 | 97 | 230 | 95.17 | -9.02 | -985.91 | -9.12 | -985.81 | -9.81 | 9.45 | -3073.47 | 5.31 | -3069.32 | 113.01 |
| | | 83 | 92.11 | 29.63 | -811.67 | 29.03 | -811.07 | -22.43 | 90.57 | -3338.29 | 89.62 | -3337.34 | -57.21 |
| | | 73 | 91.09 | -20.48 | -1016.54 | -25.49 | -1011.54 | -70.45 | 114.64 | -2731.62 | 83.41 | -2700.38 | 296.52 |
| | | 228 | 84.86 | 10.26 | -774.45 | 10.10 | -774.29 | 11.41 | -0.10 | -3060.18 | -0.71 | -3059.56 | -43.41 |
| 90 | 102 | 230 | 40.38 | -1.21 | -396.92 | -1.31 | -396.82 | -6.39 | 4.04 | -1370.35 | 3.28 | -1369.59 | 32.22 |
| | | 83 | 40.83 | 4.32 | -395.75 | 4.06 | -395.49 | 10.24 | 46.32 | -1375.96 | 44.35 | -1373.99 | -52.88 |
| | | 73 | 40.80 | -0.41 | -415.56 | -1.33 | -414.63 | -19.55 | 54.83 | -1317.26 | 51.41 | -1313.84 | 68.42 |
| | | 228 | 39.39 | 1.38 | -375.97 | 1.27 | -375.86 | 6.39 | 0.89 | -1371.37 | 0.24 | -1370.72 | -29.73 |
| 91 | 2 | 213 | 149.69 | -3.79 | -1508.39 | -4.29 | -1507.89 | -27.32 | 34.53 | -4950.84 | 28.34 | -4944.66 | 175.44 |
| | | 59 | 148.55 | 32.12 | -1383.73 | 31.84 | -1383.46 | 19.70 | 49.91 | -5227.00 | 36.49 | -5213.58 | -265.79 |
| | | 83 | 144.53 | -12.52 | -1591.74 | -20.26 | -1584.00 | -110.31 | 172.61 | -4381.91 | 118.07 | -4327.37 | 495.44 |
| | | 230 | 136.87 | 4.80 | -1299.75 | 4.17 | -1299.11 | 28.81 | -7.00 | -4794.53 | -9.40 | -4792.14 | -107.12 |
| 91 | 26 | 213 | 39.85 | 0.96 | -384.06 | 0.83 | -383.93 | -7.12 | -0.09 | -1376.42 | -0.68 | -1375.82 | 28.58 |
| | | 59 | 41.15 | -0.48 | -421.40 | -1.33 | -420.56 | 18.85 | 53.94 | -1321.59 | 50.39 | -1318.04 | -69.87 |
| | | 83 | 41.18 | 4.34 | -401.46 | 4.12 | -401.24 | -9.35 | 44.87 | -1380.39 | 42.99 | -1378.50 | 51.83 |
| | | 230 | 40.84 | -1.63 | -405.11 | -1.76 | -404.98 | 7.25 | 2.87 | -1375.40 | 2.08 | -1374.62 | -32.95 |
| 91 | 58 | 213 | 39.56 | 1.23 | -378.99 | 1.11 | -378.87 | -6.66 | 0.50 | -1373.27 | -0.11 | -1372.65 | 29.12 |
| | | 59 | 40.93 | -0.45 | -417.81 | -1.34 | -416.92 | 19.29 | 54.54 | -1318.82 | 51.03 | -1315.31 | -69.36 |
| | | 83 | 40.96 | 4.34 | -397.85 | 4.10 | -397.61 | -9.90 | 45.73 | -1377.70 | 43.83 | -1375.79 | 52.09 |
| | | 230 | 40.55 | -1.37 | -400.05 | -1.49 | -399.93 | 6.71 | 3.61 | -1372.24 | 2.84 | -1371.46 | -32.67 |
| 91 | 85 | 213 | 39.39 | 1.39 | -375.91 | 1.28 | -375.80 | -6.39 | 0.86 | -1371.35 | 0.23 | -1370.71 | 29.45 |
| | | 59 | 40.80 | -0.43 | -415.63 | -1.35 | -414.71 | 19.56 | 54.91 | -1317.12 | 51.42 | -1313.63 | -69.05 |
| | | 83 | 40.83 | 4.34 | -395.66 | 4.08 | -395.40 | -10.23 | 46.25 | -1376.05 | 44.33 | -1374.13 | 52.25 |
| | | 230 | 40.38 | -1.22 | -396.97 | -1.32 | -396.86 | 6.39 | 4.06 | -1370.30 | 3.29 | -1369.54 | -32.50 |
| 91 | 87 | 213 | 105.04 | -2.34 | -1055.71 | -2.69 | -1055.37 | -19.07 | 23.10 | -3483.37 | 18.93 | -3479.20 | 120.88 |
| | | 59 | 104.47 | 21.30 | -977.85 | 21.05 | -977.60 | 15.74 | 40.60 | -3660.29 | 31.18 | -3650.87 | -186.40 |
| | | 83 | 101.80 | -7.87 | -1113.82 | -12.96 | -1108.72 | -74.90 | 120.30 | -3103.80 | 84.62 | -3068.13 | 337.26 |
| | | 230 | 96.63 | 3.04 | -919.43 | 2.60 | -918.99 | 20.06 | -4.13 | -3379.06 | -5.83 | -3377.36 | -75.75 |
| 91 | 97 | 213 | 99.93 | -1.92 | -1001.59 | -2.24 | -1001.26 | -18.03 | 20.90 | -3322.69 | 17.06 | -3318.85 | 113.23 |
| | | 59 | 99.61 | 19.05 | -936.89 | 18.76 | -936.59 | 16.84 | 46.02 | -3474.09 | 37.08 | -3465.15 | -177.21 |
| | | 83 | 97.21 | -6.58 | -1056.49 | -11.11 | -1051.96 | -68.81 | 115.70 | -2980.45 | 84.20 | -2948.95 | 310.71 |
| | | 230 | 92.49 | 2.57 | -881.81 | 2.16 | -881.40 | 18.93 | -3.14 | -3228.69 | -4.79 | -3227.04 | -73.02 |
| 91 | 102 | 213 | 39.39 | 1.39 | -375.91 | 1.28 | -375.80 | -6.39 | 0.86 | -1371.35 | 0.23 | -1370.71 | 29.45 |
| | | 59 | 40.80 | -0.43 | -415.63 | -1.35 | -414.71 | 19.56 | 54.91 | -1317.12 | 51.42 | -1313.63 | -69.05 |
| | | 83 | 40.83 | 4.34 | -395.66 | 4.08 | -395.40 | -10.23 | 46.25 | -1376.05 | 44.33 | -1374.13 | 52.25 |
| | | 230 | 40.38 | -1.22 | -396.97 | -1.32 | -396.86 | 6.39 | 4.06 | -1370.30 | 3.29 | -1369.54 | -32.50 |
| 92 | 2 | 217 | 147.74 | 7.14 | -1426.80 | 6.03 | -1425.69 | -39.88 | 7.76 | -5091.95 | 1.85 | -5086.04 | 173.51 |
| | | 75 | 152.73 | 12.69 | -1566.90 | 6.20 | -1560.41 | 101.08 | 119.24 | -4971.58 | 76.93 | -4929.26 | -462.19 |
| | | 59 | 151.79 | 17.67 | -1551.17 | 12.32 | -1545.82 | -91.46 | 42.62 | -4991.87 | -5.48 | -4943.77 | 489.70 |
| | | 213 | 148.18 | -6.79 | -1449.46 | -8.04 | -1448.21 | 42.50 | 34.11 | -5053.98 | 29.78 | -5049.65 | -148.44 |
| 92 | 26 | 217 | 37.53 | 3.51 | -346.75 | 3.37 | -346.61 | -6.97 | -2.86 | -1342.99 | -3.31 | -1342.55 | 24.49 |
| | | 75 | 39.79 | -4.93 | -425.39 | -6.83 | -423.49 | 28.23 | 63.63 | -1229.13 | 57.93 | -1223.43 | -85.63 |
| | | 59 | 39.88 | 9.57 | -365.66 | 9.57 | -365.66 | 0.16 | 36.93 | -1405.20 | 36.14 | -1404.41 | 33.69 |
| | | 213 | 40.50 | -4.16 | -409.73 | -4.30 | -409.60 | 7.37 | 6.16 | -1339.88 | 5.19 | -1338.91 | -36.21 |
| 92 | 58 | 217 | 37.25 | 3.81 | -341.91 | 3.68 | -341.78 | -6.61 | -2.51 | -1340.18 | -3.00 | -1339.69 | 25.59 |
| | | 75 | 39.59 | -4.83 | -422.01 | -6.80 | -420.05 | 28.57 | 63.87 | -1226.51 | 58.30 | -1220.94 | -84.60 |
| | | 59 | 39.68 | 9.51 | -362.23 | 9.51 | -362.23 | -0.48 | 37.74 | -1402.80 | 36.92 | -1401.98 | 34.47 |
| | | 213 | 40.23 | -3.94 | -404.90 | -4.06 | -404.79 | 6.75 | 6.83 | -1337.05 | 5.90 | -1336.12 | -35.35 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|--------|--------|----------|--------|----------|---------|
| 92 | 85 | 217 | 37.09 | 3.99 | -338.97 | 3.87 | -338.85 | -6.38 | -2.29 | -1338.46 | -2.81 | -1337.94 | 26.26 |
| | | 75 | 39.46 | -4.77 | -419.96 | -6.78 | -417.95 | 28.78 | 64.01 | -1224.90 | 58.52 | -1219.41 | -83.97 |
| | | 59 | 39.55 | 9.48 | -360.15 | 9.48 | -360.15 | -0.87 | 38.24 | -1401.33 | 37.39 | -1400.48 | 34.95 |
| | | 213 | 40.06 | -3.81 | -401.97 | -3.91 | -401.87 | 6.38 | 7.23 | -1335.30 | 6.33 | -1334.40 | -34.82 |
| 92 | 87 | 217 | 103.44 | 5.29 | -996.39 | 4.54 | -995.64 | -27.44 | 4.83 | -3573.06 | 0.86 | -3569.09 | 119.17 |
| | | 75 | 107.08 | 7.82 | -1100.59 | 3.23 | -1096.00 | 71.22 | 87.92 | -3477.59 | 59.09 | -3448.76 | -319.32 |
| | | 59 | 106.47 | 12.89 | -1081.99 | 9.47 | -1078.57 | -61.09 | 32.53 | -3513.77 | 1.33 | -3482.58 | 331.13 |
| | | 213 | 104.13 | -5.04 | -1019.89 | -5.88 | -1019.05 | 29.19 | 23.70 | -3547.36 | 20.69 | -3544.35 | -103.60 |
| 92 | 97 | 217 | 98.17 | 5.30 | -943.14 | 4.61 | -942.45 | -25.57 | 4.03 | -3398.91 | 0.39 | -3395.26 | 111.26 |
| | | 75 | 101.78 | 6.39 | -1048.00 | 1.98 | -1043.59 | 68.04 | 89.75 | -3296.95 | 63.16 | -3270.36 | -298.89 |
| | | 59 | 101.24 | 12.76 | -1022.94 | 9.82 | -1020.00 | -55.10 | 35.57 | -3352.85 | 8.28 | -3325.57 | 302.82 |
| | | 213 | 99.20 | -5.07 | -972.90 | -5.83 | -972.14 | 27.14 | 22.35 | -3375.37 | 19.49 | -3372.52 | -98.41 |
| 92 | 102 | 217 | 37.09 | 3.99 | -338.97 | 3.87 | -338.85 | -6.38 | -2.29 | -1338.46 | -2.81 | -1337.94 | 26.26 |
| | | 75 | 39.46 | -4.77 | -419.96 | -6.78 | -417.95 | 28.78 | 64.01 | -1224.90 | 58.52 | -1219.41 | -83.97 |
| | | 59 | 39.55 | 9.48 | -360.15 | 9.48 | -360.15 | -0.87 | 38.24 | -1401.33 | 37.39 | -1400.48 | 34.95 |
| | | 213 | 40.06 | -3.81 | -401.97 | -3.91 | -401.87 | 6.38 | 7.23 | -1335.30 | 6.33 | -1334.40 | -34.82 |
| 93 | 2 | 219 | 136.28 | 20.28 | -1227.09 | 18.87 | -1225.69 | -41.87 | -2.00 | -4975.40 | -6.30 | -4971.10 | 146.17 |
| | | 53 | 147.68 | -12.02 | -1656.66 | -29.33 | -1639.33 | 167.83 | 167.89 | -4469.45 | 85.14 | -4386.70 | -613.93 |
| | | 75 | 148.09 | 49.00 | -1360.62 | 48.14 | -1359.76 | -34.77 | 6.35 | -5286.23 | -20.65 | -5259.23 | 377.05 |
| | | 217 | 150.65 | -18.94 | -1534.74 | -20.34 | -1533.34 | 46.08 | 45.74 | -4953.25 | 38.77 | -4946.28 | -186.55 |
| 93 | 26 | 219 | 33.88 | 6.08 | -293.16 | 5.93 | -293.01 | -6.81 | -5.83 | -1275.27 | -6.15 | -1274.95 | 20.23 |
| | | 53 | 37.11 | -8.83 | -413.58 | -12.32 | -410.08 | 37.43 | 73.58 | -1103.18 | 65.05 | -1094.65 | -99.79 |
| | | 75 | 37.25 | 15.24 | -313.92 | 14.96 | -313.64 | 9.60 | 29.88 | -1396.13 | 29.73 | -1395.98 | 14.55 |
| | | 217 | 38.81 | -6.67 | -397.85 | -6.81 | -397.71 | 7.42 | 9.61 | -1269.98 | 8.43 | -1268.80 | -38.81 |
| 93 | 58 | 219 | 33.64 | 6.40 | -288.91 | 6.26 | -288.77 | -6.54 | -5.54 | -1273.14 | -5.91 | -1272.77 | 21.73 |
| | | 53 | 36.94 | -8.69 | -410.69 | -12.25 | -407.13 | 37.67 | 73.59 | -1101.00 | 65.28 | -1092.70 | -98.40 |
| | | 75 | 37.08 | 15.13 | -310.95 | 14.88 | -310.71 | 8.90 | 30.48 | -1394.27 | 30.31 | -1394.09 | 15.79 |
| | | 217 | 38.58 | -6.49 | -393.62 | -6.61 | -393.50 | 6.77 | 10.07 | -1267.79 | 8.97 | -1266.69 | -37.46 |
| 93 | 85 | 219 | 33.50 | 6.60 | -286.33 | 6.46 | -286.19 | -6.38 | -5.37 | -1271.81 | -5.77 | -1271.41 | 22.65 |
| | | 53 | 36.83 | -8.60 | -408.93 | -12.20 | -405.33 | 37.81 | 73.59 | -1099.65 | 65.42 | -1091.48 | -97.55 |
| | | 75 | 36.97 | 15.06 | -309.14 | 14.84 | -308.92 | 8.48 | 30.85 | -1393.12 | 30.66 | -1392.92 | 16.55 |
| | | 217 | 38.44 | -6.38 | -391.04 | -6.49 | -390.94 | 6.37 | 10.35 | -1266.43 | 9.29 | -1265.38 | -36.63 |
| 93 | 87 | 219 | 95.32 | 14.40 | -856.23 | 13.44 | -855.28 | -28.76 | -2.07 | -3486.49 | -4.97 | -3483.59 | 100.47 |
| | | 53 | 103.36 | -9.17 | -1158.96 | -21.18 | -1146.94 | 116.93 | 121.36 | -3125.87 | 65.48 | -3070.00 | -422.29 |
| | | 75 | 103.66 | 34.57 | -948.19 | 34.07 | -947.70 | -22.05 | 7.70 | -3709.25 | -9.68 | -3691.87 | 253.57 |
| | | 217 | 105.56 | -13.49 | -1075.29 | -14.43 | -1074.35 | 31.57 | 31.86 | -3471.01 | 27.09 | -3466.24 | -129.25 |
| 93 | 97 | 219 | 90.37 | 13.85 | -809.79 | 12.98 | -808.92 | -26.76 | -2.60 | -3311.88 | -5.26 | -3309.21 | 93.92 |
| | | 53 | 98.07 | -9.43 | -1099.02 | -20.73 | -1087.71 | 110.41 | 120.90 | -2963.00 | 69.86 | -2911.96 | -393.44 |
| | | 75 | 98.36 | 33.07 | -895.58 | 32.69 | -895.21 | -18.68 | 12.52 | -3527.97 | -2.55 | -3512.90 | 230.50 |
| | | 217 | 100.26 | -13.02 | -1021.27 | -13.87 | -1020.41 | 29.29 | 30.11 | -3297.23 | 25.65 | -3292.77 | -121.75 |
| 93 | 102 | 219 | 33.50 | 6.60 | -286.33 | 6.46 | -286.19 | -6.38 | -5.37 | -1271.81 | -5.77 | -1271.41 | 22.65 |
| | | 53 | 36.83 | -8.60 | -408.93 | -12.20 | -405.33 | 37.81 | 73.59 | -1099.65 | 65.42 | -1091.48 | -97.55 |
| | | 75 | 36.97 | 15.06 | -309.14 | 14.84 | -308.92 | 8.48 | 30.85 | -1393.12 | 30.66 | -1392.92 | 16.55 |
| | | 217 | 38.44 | -6.38 | -391.04 | -6.49 | -390.94 | 6.37 | 10.35 | -1266.43 | 9.29 | -1265.38 | -36.63 |
| 94 | 2 | 221 | 115.70 | 32.64 | -923.05 | 31.11 | -921.52 | -38.21 | -11.54 | -4598.21 | -13.75 | -4595.99 | 100.74 |
| | | 69 | 133.18 | -33.93 | -1635.33 | -65.37 | -1603.90 | 222.16 | 227.86 | -3726.99 | 94.30 | -3593.43 | -714.39 |
| | | 53 | 134.93 | 84.15 | -1059.81 | 83.21 | -1058.87 | 32.87 | -19.38 | -5329.69 | -27.82 | -5321.25 | 211.55 |
| | | 219 | 143.89 | -31.75 | -1513.87 | -33.05 | -1512.57 | 43.94 | 55.46 | -4591.44 | 46.13 | -4582.11 | -207.95 |
| 94 | 26 | 221 | 28.93 | 8.66 | -223.79 | 8.48 | -223.60 | -6.64 | -9.17 | -1174.16 | -9.38 | -1173.95 | 15.77 |
| | | 69 | 33.12 | -11.97 | -386.39 | -17.79 | -380.57 | 46.32 | 83.27 | -944.91 | 70.89 | -932.53 | -112.15 |
| | | 53 | 33.32 | 21.63 | -246.73 | 20.29 | -245.39 | 18.91 | 23.81 | -1353.91 | 23.78 | -1353.89 | -5.51 |
| | | 219 | 35.82 | -9.13 | -369.77 | -9.28 | -369.62 | 7.39 | 13.03 | -1166.66 | 11.64 | -1165.27 | -40.48 |
| 94 | 58 | 221 | 28.75 | 8.99 | -220.43 | 8.81 | -220.25 | -6.48 | -8.60 | -1172.61 | -8.86 | -1172.35 | 17.45 |
| | | 69 | 33.00 | -11.79 | -384.21 | -17.68 | -378.32 | 46.46 | 83.48 | -943.13 | 71.42 | -931.07 | -110.60 |
| | | 53 | 33.19 | 21.45 | -244.44 | 20.20 | -243.19 | 18.21 | 24.11 | -1352.46 | 24.10 | -1352.45 | -4.00 |
| | | 219 | 35.63 | -9.00 | -366.42 | -9.13 | -366.30 | 6.73 | 13.22 | -1164.96 | 11.94 | -1163.67 | -38.84 |
| 94 | 85 | 221 | 28.64 | 9.19 | -218.38 | 9.01 | -218.20 | -6.38 | -8.25 | -1171.63 | -8.55 | -1171.33 | 18.48 |
| | | 69 | 32.92 | -11.68 | -382.89 | -17.61 | -376.96 | 46.55 | 83.60 | -942.01 | 71.74 | -930.15 | -109.64 |
| | | 53 | 33.10 | 21.35 | -243.04 | 20.15 | -241.84 | 17.78 | 24.29 | -1351.54 | 24.29 | -1351.53 | -3.07 |
| | | 219 | 35.52 | -8.92 | -364.39 | -9.03 | -364.27 | 6.33 | 13.33 | -1163.88 | 12.12 | -1162.66 | -37.84 |
| 94 | 87 | 221 | 80.95 | 22.98 | -644.48 | 21.94 | -643.44 | -26.32 | -8.80 | -3221.68 | -10.31 | -3220.17 | 69.63 |
| | | 69 | 93.17 | -24.19 | -1141.27 | -45.93 | -1119.53 | 154.32 | 162.28 | -2609.49 | 72.43 | -2519.64 | -490.88 |
| | | 53 | 94.37 | 58.90 | -738.90 | 58.16 | -738.16 | 24.28 | -9.99 | -3733.02 | -15.31 | -3727.70 | 140.63 |
| | | 219 | 100.66 | -22.36 | -1057.83 | -23.24 | -1056.95 | 30.14 | 38.73 | -3216.12 | 32.37 | -3209.76 | -143.68 |
| 94 | 97 | 221 | 76.78 | 21.94 | -609.92 | 20.98 | -608.96 | -24.56 | -9.04 | -3059.86 | -10.45 | -3058.44 | 65.59 |
| | | 69 | 88.37 | -23.37 | -1079.52 | -43.74 | -1059.15 | 145.25 | 158.72 | -2476.31 | 76.98 | -2394.57 | -456.84 |
| | | 53 | 89.47 | 55.88 | -698.22 | 55.10 | -697.44 | 24.29 | -3.99 | -3543.98 | -8.49 | -3539.48 | 126.15 |
| | | 219 | 95.46 | -21.35 | -1001.90 | -22.15 | -1001.10 | 27.99 | 36.69 | -3053.79 | 30.79 | -3047.89 | -134.90 |
| 94 | 102 | 221 | 28.64 | 9.19 | -218.38 | 9.01 | -218.20 | -6.38 | -8.25 | -1171.63 | -8.55 | -1171.33 | 18.48 |
| | | 69 | 32.92 | -11.68 | -382.89 | -17.61 | -376.96 | 46.55 | 83.60 | -942.01 | 71.74 | -930.15 | -109.64 |
| | | 53 | 33.10 | 21.35 | -243.04 | 20.15 | -241.84 | 17.78 | 24.29 | -1351.54 | 24.29 | -1351.53 | -3.07 |
| | | 219 | 35.52 | -8.92 | -364.39 | -9.03 | -364.27 | 6.33 | 13.33 | -1163.88 | 12.12 | -1162.66 | -37.84 |
| 95 | 2 | 225 | 86.58 | 43.76 | -559.43 | 42.77 | -558.44 | -24.47 | -47.66 | -3863.27 | -48.26 | -3862.66 | 48.00 |
| | | 57 | 107.77 | -56.70 | -1463.29 | -97.83 | -1422.15 | 237.01 | 374.51 | -2677.28 | 201.49 | -2504.26 | -705.75 |
| | | 69 | 112.66 | 124.61 | -677.64 | 108.10 | -661.14 | 113.88 | -60.25 | -5124.45 | -60.25 | -5124.45 | -4.91 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|---------|----------|--------|--------|----------|--------|----------|---------|
| 95 | 26 | 221 | 127.70 | -42.17 | -1376.08 | -42.90 | -1375.36 | 31.10 | 79.44 | -3974.01 | 69.22 | -3963.78 | -203.35 |
| | | 225 | 22.76 | 11.17 | -139.43 | 10.89 | -139.16 | -6.48 | -12.12 | -1041.21 | -12.24 | -1041.09 | 10.74 |
| | | 57 | 27.87 | -13.86 | -344.47 | -23.17 | -335.16 | 54.70 | 93.34 | -756.63 | 75.31 | -738.60 | -122.46 |
| | | 69 | 28.11 | 29.64 | -165.44 | 25.51 | -161.31 | 28.08 | 18.43 | -1279.90 | 17.88 | -1279.34 | -26.92 |
| 95 | 58 | 221 | 31.56 | -11.48 | -325.96 | -11.64 | -325.80 | 7.26 | 15.61 | -1031.61 | 14.00 | -1030.00 | -41.04 |
| | | 225 | 22.63 | 11.49 | -137.18 | 11.21 | -136.90 | -6.40 | -11.26 | -1039.22 | -11.41 | -1039.07 | 12.37 |
| | | 57 | 27.78 | -13.65 | -343.14 | -23.03 | -333.76 | 54.80 | 93.79 | -754.47 | 76.18 | -736.86 | -120.94 |
| | | 69 | 28.02 | 29.39 | -163.92 | 25.42 | -159.95 | 27.40 | 18.82 | -1278.01 | 18.32 | -1277.51 | -25.35 |
| 95 | 85 | 221 | 31.42 | -11.40 | -323.72 | -11.54 | -323.58 | 6.63 | 15.88 | -1029.37 | 14.39 | -1027.89 | -39.35 |
| | | 225 | 22.55 | 11.68 | -135.80 | 11.41 | -135.53 | -6.36 | -10.74 | -1037.99 | -10.91 | -1037.82 | 13.38 |
| | | 57 | 27.73 | -13.52 | -342.33 | -22.94 | -332.91 | 54.87 | 94.06 | -753.13 | 76.71 | -735.78 | -119.99 |
| | | 69 | 27.96 | 29.24 | -162.99 | 25.37 | -159.12 | 26.99 | 19.05 | -1276.84 | 18.60 | -1276.38 | -24.38 |
| 95 | 87 | 221 | 31.34 | -11.35 | -322.36 | -11.48 | -322.23 | 6.25 | 16.04 | -1027.99 | 14.63 | -1026.58 | -38.31 |
| | | 225 | 60.73 | 30.73 | -391.06 | 30.03 | -390.36 | -17.16 | -33.20 | -2713.91 | -33.63 | -2713.48 | 33.79 |
| | | 57 | 75.54 | -39.60 | -1021.17 | -68.28 | -992.49 | 165.32 | 261.22 | -1884.27 | 144.56 | -1767.61 | -486.50 |
| | | 69 | 78.84 | 86.97 | -473.49 | 75.45 | -461.97 | 79.52 | -37.68 | -3586.50 | -37.69 | -3586.48 | -6.52 |
| 95 | 97 | 221 | 89.31 | -29.63 | -960.37 | -30.13 | -959.87 | 21.57 | 55.08 | -2786.38 | 48.10 | -2779.40 | -140.67 |
| | | 225 | 57.74 | 29.26 | -370.54 | 28.59 | -369.87 | -16.31 | -31.34 | -2584.57 | -31.76 | -2584.16 | 32.63 |
| | | 57 | 71.79 | -37.49 | -965.89 | -64.59 | -938.79 | 156.30 | 248.96 | -1797.54 | 142.56 | -1691.15 | -454.33 |
| | | 69 | 74.79 | 82.27 | -448.45 | 71.38 | -437.55 | 75.26 | -29.39 | -3402.12 | -29.41 | -3402.10 | -9.20 |
| 95 | 102 | 221 | 84.67 | -28.22 | -908.44 | -28.69 | -907.98 | 20.27 | 51.78 | -2648.44 | 45.29 | -2641.95 | -132.27 |
| | | 225 | 22.55 | 11.68 | -135.80 | 11.41 | -135.53 | -6.36 | -10.74 | -1037.99 | -10.91 | -1037.82 | 13.38 |
| | | 57 | 27.73 | -13.52 | -342.33 | -22.94 | -332.91 | 54.87 | 94.06 | -753.13 | 76.71 | -735.78 | -119.99 |
| | | 69 | 27.96 | 29.24 | -162.99 | 25.37 | -159.12 | 26.99 | 19.05 | -1276.84 | 18.60 | -1276.38 | -24.38 |
| 96 | 2 | 221 | 31.34 | -11.35 | -322.36 | -11.48 | -322.23 | 6.25 | 16.04 | -1027.99 | 14.63 | -1026.58 | -38.31 |
| | | 227 | 56.96 | 52.78 | -184.53 | 52.22 | -183.96 | -11.57 | -30.10 | -3108.89 | -30.23 | -3108.76 | -20.07 |
| | | 81 | 79.51 | -68.82 | -1177.62 | -118.55 | -1127.89 | 229.50 | 374.22 | -1859.96 | 163.62 | -1649.37 | -652.80 |
| | | 57 | 82.31 | 191.50 | -312.34 | 121.56 | -242.40 | 174.21 | 60.66 | -4417.10 | 48.55 | -4404.99 | -232.56 |
| 96 | 26 | 225 | 101.52 | -51.12 | -1125.73 | -51.38 | -1125.47 | 16.73 | 52.66 | -3088.39 | 40.81 | -3076.54 | -192.60 |
| | | 227 | 15.40 | 13.41 | -41.76 | 12.66 | -41.01 | -6.41 | -13.96 | -874.97 | -13.98 | -874.95 | 4.25 |
| | | 81 | 21.37 | -13.19 | -289.29 | -28.30 | -274.18 | 62.80 | 104.65 | -540.06 | 77.22 | -512.63 | -130.13 |
| | | 57 | 21.69 | 43.55 | -75.55 | 30.51 | -62.51 | 37.20 | 15.11 | -1173.66 | 12.92 | -1171.47 | -50.92 |
| 96 | 58 | 225 | 26.07 | -13.35 | -267.20 | -13.54 | -267.02 | 6.92 | 17.19 | -864.31 | 15.33 | -862.46 | -40.37 |
| | | 227 | 15.31 | 13.68 | -40.62 | 12.94 | -39.89 | -6.28 | -12.94 | -872.03 | -12.98 | -872.00 | 5.72 |
| | | 81 | 21.31 | -13.08 | -288.40 | -28.14 | -273.35 | 62.59 | 105.23 | -537.05 | 78.30 | -510.12 | -128.72 |
| | | 57 | 21.61 | 43.19 | -74.44 | 30.43 | -61.67 | 36.59 | 15.79 | -1170.96 | 13.73 | -1168.89 | -49.43 |
| 96 | 85 | 225 | 25.98 | -13.33 | -266.09 | -13.49 | -265.93 | 6.37 | 17.77 | -861.15 | 16.06 | -859.43 | -38.81 |
| | | 227 | 15.26 | 13.84 | -39.93 | 13.11 | -39.20 | -6.20 | -12.33 | -870.24 | -12.38 | -870.19 | 6.65 |
| | | 81 | 21.27 | -13.02 | -287.86 | -28.04 | -272.84 | 62.47 | 105.56 | -535.19 | 78.95 | -508.59 | -127.83 |
| | | 57 | 21.57 | 42.97 | -73.76 | 30.38 | -61.16 | 36.21 | 16.21 | -1169.30 | 14.22 | -1167.31 | -48.50 |
| 96 | 87 | 225 | 25.92 | -13.31 | -265.41 | -13.46 | -265.26 | 6.03 | 18.13 | -859.22 | 16.49 | -857.58 | -37.84 |
| | | 227 | 40.01 | 37.00 | -128.31 | 36.56 | -127.87 | -8.54 | -21.73 | -2188.61 | -21.81 | -2188.53 | -12.49 |
| | | 81 | 55.83 | -47.63 | -823.44 | -82.77 | -788.30 | 161.33 | 262.63 | -1310.41 | 119.61 | -1167.39 | -452.25 |
| | | 57 | 57.75 | 133.36 | -218.03 | 85.09 | -169.75 | 120.97 | 42.58 | -3100.62 | 34.26 | -3092.30 | -161.51 |
| 96 | 97 | 225 | 71.14 | -35.86 | -785.87 | -36.05 | -785.68 | 11.96 | 37.49 | -2173.45 | 29.41 | -2165.37 | -133.45 |
| | | 227 | 38.09 | 35.17 | -120.92 | 34.70 | -120.45 | -8.54 | -21.27 | -2088.82 | -21.31 | -2088.77 | -9.96 |
| | | 81 | 53.16 | -44.67 | -780.47 | -78.33 | -746.81 | 153.74 | 251.83 | -1251.30 | 120.40 | -1119.86 | -424.60 |
| | | 57 | 54.93 | 125.88 | -206.29 | 80.74 | -161.15 | 113.83 | 42.49 | -2950.15 | 34.75 | -2942.41 | -152.01 |
| 96 | 102 | 225 | 67.57 | -34.10 | -743.60 | -34.29 | -743.41 | 11.58 | 36.24 | -2073.71 | 28.72 | -2066.20 | -125.71 |
| | | 227 | 15.26 | 13.84 | -39.93 | 13.11 | -39.20 | -6.20 | -12.33 | -870.24 | -12.38 | -870.19 | 6.65 |
| | | 81 | 21.27 | -13.02 | -287.86 | -28.04 | -272.84 | 62.47 | 105.56 | -535.19 | 78.95 | -508.59 | -127.83 |
| | | 57 | 21.57 | 42.97 | -73.76 | 30.38 | -61.16 | 36.21 | 16.21 | -1169.30 | 14.22 | -1167.31 | -48.50 |
| 97 | 2 | 225 | 25.92 | -13.31 | -265.41 | -13.46 | -265.26 | 6.03 | 18.13 | -859.22 | 16.49 | -857.58 | -37.84 |
| | | 229 | 42.85 | 193.18 | 48.60 | 48.84 | 192.94 | -5.91 | -18.04 | -2302.06 | -21.34 | -2298.76 | -86.76 |
| | | 77 | 49.00 | -55.38 | -860.07 | -126.33 | -789.13 | 228.16 | 423.27 | -1046.23 | 133.41 | -756.37 | -584.75 |
| | | 81 | 66.96 | 344.82 | -55.02 | 129.16 | 160.64 | 199.30 | 112.97 | -3734.32 | 68.50 | -3689.84 | -411.25 |
| 97 | 36 | 227 | 73.38 | -52.61 | -808.41 | -52.75 | -808.27 | 10.19 | 47.29 | -2273.40 | 35.29 | -2261.40 | -166.46 |
| | | 229 | 12.97 | 66.28 | 11.62 | 12.19 | 65.71 | -5.54 | -10.26 | -669.49 | -10.26 | -669.49 | -0.68 |
| | | 77 | 13.68 | -8.29 | -221.25 | -31.95 | -197.60 | 66.92 | 122.04 | -296.60 | 78.09 | -252.65 | -128.33 |
| | | 81 | 18.10 | 87.46 | -4.58 | 34.42 | 48.46 | 45.48 | 16.09 | -1033.39 | 10.63 | -1027.93 | -75.50 |
| 97 | 68 | 227 | 19.52 | -13.40 | -196.25 | -13.52 | -196.14 | 4.54 | 17.27 | -663.53 | 15.61 | -661.87 | -33.58 |
| | | 229 | 12.99 | 67.73 | 11.50 | 11.99 | 67.24 | -5.24 | -11.36 | -666.03 | -11.37 | -666.02 | -2.13 |
| | | 77 | 13.55 | -8.05 | -220.07 | -32.13 | -195.99 | 67.27 | 122.18 | -294.88 | 76.90 | -249.60 | -129.76 |
| | | 81 | 18.17 | 88.87 | -4.25 | 34.50 | 50.11 | 45.90 | 17.28 | -1030.50 | 11.61 | -1024.83 | -76.88 |
| 97 | 85 | 227 | 19.40 | -13.31 | -194.70 | -13.44 | -194.56 | 4.90 | 18.31 | -660.17 | 16.50 | -658.36 | -35.03 |
| | | 229 | 13.00 | 68.62 | 11.42 | 11.87 | 68.17 | -5.06 | -12.02 | -663.93 | -12.03 | -663.91 | -3.07 |
| | | 77 | 13.46 | -7.90 | -219.35 | -32.25 | -195.01 | 67.49 | 122.32 | -293.88 | 76.18 | -247.74 | -130.67 |
| | | 81 | 18.20 | 89.73 | -4.06 | 34.55 | 51.12 | 46.16 | 18.01 | -1028.75 | 12.21 | -1022.94 | -77.76 |
| 97 | 87 | 227 | 19.33 | -13.25 | -193.75 | -13.40 | -193.61 | 5.12 | 18.96 | -658.13 | 17.04 | -656.22 | -35.95 |
| | | 229 | 30.30 | 137.92 | 33.94 | 34.14 | 137.71 | -4.61 | -13.72 | -1623.14 | -15.83 | -1621.03 | -58.25 |
| | | 77 | 34.45 | -38.03 | -602.57 | -88.52 | -552.08 | 161.10 | 297.73 | -735.91 | 99.10 | -537.28 | -407.26 |
| | | 81 | 47.05 | 241.82 | -37.19 | 90.72 | 113.91 | 139.02 | 77.57 | -2626.57 | 47.29 | -2596.29 | -284.53 |
| 97 | 97 | 227 | 51.50 | -36.85 | -564.77 | -36.95 | -564.66 | 7.48 | 34.02 | -1603.32 | 25.80 | -1595.09 | -115.77 |
| | | 229 | 29.04 | 133.49 | 32.12 | 32.35 | 133.26 | -4.85 | -14.09 | -1551.59 | -15.88 | -1549.79 | -52.48 |
| | | 77 | 32.85 | -35.36 | -572.28 | -84.08 | -523.56 | 154.22 | 285.70 | -701.25 | 101.53 | -517.08 | -384.51 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|---------|---------|----------|---------|----------|---------|----------|---------|
| | | 81 | 44.84 | 229.88 | -34.00 | 86.37 | 109.51 | 131.43 | 74.12 | -2504.15 | 46.22 | -2476.24 | -266.77 |
| | | 227 | 48.99 | -34.98 | -534.80 | -35.09 | -534.69 | 7.43 | 33.24 | -1533.10 | 25.54 | -1525.40 | -109.54 |
| 97 | 102 | 229 | 13.00 | 68.62 | 11.42 | 11.87 | 68.17 | -5.06 | -12.02 | -663.93 | -12.03 | -663.91 | -3.07 |
| | | 77 | 13.46 | -7.90 | -219.35 | -32.25 | -195.01 | 67.49 | 122.32 | -293.88 | 76.18 | -247.74 | -130.67 |
| | | 81 | 18.20 | 89.73 | -4.06 | 34.55 | 51.12 | 46.16 | 18.01 | -1028.75 | 12.21 | -1022.94 | -77.76 |
| | | 227 | 19.33 | -13.25 | -193.75 | -13.40 | -193.61 | 5.12 | 18.96 | -658.13 | 17.04 | -656.22 | -35.95 |
| 98 | 2 | 215 | 47.60 | 550.89 | 9.30 | 9.88 | 550.31 | 17.67 | 11.71 | -1356.72 | -9.86 | -1335.16 | -170.44 |
| | | 49 | 34.66 | -25.88 | -491.47 | -121.84 | -395.51 | 188.33 | 606.10 | -303.71 | 80.54 | 221.86 | -449.38 |
| | | 77 | 78.81 | 670.99 | 24.94 | 124.72 | 571.21 | 233.46 | 222.28 | -3031.56 | 99.80 | -2909.08 | -619.30 |
| | | 229 | 44.04 | -26.42 | -461.70 | -26.49 | -461.63 | -5.47 | 36.89 | -1428.41 | 25.83 | -1417.35 | -126.82 |
| 98 | 33 | 215 | 14.78 | 180.85 | -0.09 | -0.03 | 180.79 | 3.37 | -11.64 | -388.46 | -12.88 | -387.23 | -21.51 |
| | | 49 | 9.41 | 4.30 | -125.76 | -33.11 | -88.35 | 58.87 | 183.01 | -56.35 | 66.65 | 60.01 | -119.63 |
| | | 77 | 22.34 | 201.60 | 12.10 | 35.06 | 178.64 | 61.83 | 30.67 | -847.82 | 13.96 | -831.11 | -120.00 |
| | | 229 | 11.36 | -5.26 | -101.56 | -5.27 | -101.56 | 0.55 | 21.00 | -419.23 | 18.42 | -416.66 | -33.56 |
| 98 | 65 | 215 | 14.70 | 178.00 | -0.03 | 0.02 | 177.95 | 2.92 | -10.97 | -392.36 | -11.99 | -391.34 | -19.71 |
| | | 49 | 9.37 | 3.19 | -127.18 | -33.02 | -90.97 | 58.39 | 180.12 | -55.97 | 67.65 | 56.51 | -117.91 |
| | | 77 | 22.23 | 199.06 | 11.93 | 34.99 | 176.00 | 61.52 | 29.09 | -850.86 | 12.83 | -834.60 | -118.49 |
| | | 229 | 11.56 | -5.37 | -104.42 | -5.37 | -104.42 | 0.27 | 19.74 | -423.07 | 17.41 | -420.75 | -31.99 |
| 98 | 85 | 215 | 14.65 | 176.26 | 4.78e-03 | 0.04 | 176.22 | 2.66 | -10.55 | -394.74 | -11.45 | -393.84 | -18.57 |
| | | 49 | 9.34 | 2.54 | -128.06 | -32.97 | -92.56 | 58.11 | 178.34 | -55.71 | 68.25 | 54.37 | -116.82 |
| | | 77 | 22.17 | 197.53 | 11.83 | 34.96 | 174.39 | 61.32 | 28.12 | -852.70 | 12.15 | -836.72 | -117.53 |
| | | 229 | 11.67 | -5.44 | -106.16 | -5.44 | -106.16 | 0.10 | 18.97 | -425.41 | 16.80 | -423.24 | -30.98 |
| 98 | 87 | 215 | 33.68 | 390.76 | 6.21 | 6.59 | 390.37 | 12.13 | 6.11 | -956.82 | -8.10 | -942.62 | -116.10 |
| | | 49 | 24.34 | -17.01 | -344.62 | -85.62 | -276.01 | 133.30 | 427.50 | -209.56 | 62.79 | 155.16 | -315.16 |
| | | 77 | 55.48 | 473.62 | 18.25 | 87.80 | 404.06 | 163.82 | 151.53 | -2134.33 | 68.15 | -2050.95 | -428.54 |
| | | 229 | 30.92 | -18.34 | -321.95 | -18.38 | -321.91 | -3.63 | 27.10 | -1008.98 | 19.46 | -1001.33 | -88.67 |
| 98 | 97 | 215 | 32.31 | 375.77 | 5.60 | 5.94 | 375.43 | 11.28 | 3.74 | -914.84 | -8.83 | -902.27 | -106.70 |
| | | 49 | 23.18 | -15.06 | -327.60 | -81.57 | -261.08 | 127.92 | 409.95 | -194.79 | 67.72 | 147.45 | -299.73 |
| | | 77 | 52.97 | 453.24 | 18.08 | 83.81 | 387.52 | 155.82 | 141.86 | -2036.80 | 65.01 | -1959.96 | -401.88 |
| | | 229 | 29.42 | -17.25 | -304.29 | -17.29 | -304.25 | -3.25 | 27.03 | -966.38 | 19.79 | -959.14 | -84.48 |
| 98 | 102 | 215 | 14.65 | 176.26 | 4.78e-03 | 0.04 | 176.22 | 2.66 | -10.55 | -394.74 | -11.45 | -393.84 | -18.57 |
| | | 49 | 9.34 | 2.54 | -128.06 | -32.97 | -92.56 | 58.11 | 178.34 | -55.71 | 68.25 | 54.37 | -116.82 |
| | | 77 | 22.17 | 197.53 | 11.83 | 34.96 | 174.39 | 61.32 | 28.12 | -852.70 | 12.15 | -836.72 | -117.53 |
| | | 229 | 11.67 | -5.44 | -106.16 | -5.44 | -106.16 | 0.10 | 18.97 | -425.41 | 16.80 | -423.24 | -30.98 |
| 99 | 2 | 223 | 45.99 | 754.35 | -128.98 | -101.83 | 727.21 | 152.45 | 362.50 | -245.87 | -180.89 | 297.51 | -187.91 |
| | | 67 | 30.28 | 189.71 | -86.61 | -56.89 | 159.99 | -85.60 | 1576.64 | 530.00 | 530.12 | 1576.52 | 11.40 |
| | | 49 | 93.37 | 1072.37 | -69.63 | 57.21 | 945.52 | 358.84 | 352.93 | -2340.37 | -11.03 | -1976.42 | -920.75 |
| | | 215 | 16.83 | 117.06 | -115.56 | 68.20 | -66.70 | -94.76 | 128.52 | -481.11 | 124.49 | -477.08 | -49.41 |
| 99 | 21 | 223 | 15.34 | 244.08 | -44.06 | -36.47 | 236.49 | 46.14 | 105.02 | -66.67 | -64.12 | 102.48 | -20.74 |
| | | 67 | 10.47 | 81.87 | -23.39 | -15.40 | 73.88 | -27.88 | 491.02 | 208.06 | 209.07 | 490.01 | -16.89 |
| | | 49 | 26.92 | 333.88 | -20.51 | 14.89 | 298.48 | 106.27 | 21.61 | -635.00 | -35.98 | -577.42 | -185.73 |
| | | 215 | 4.28 | 46.77 | -12.27 | 24.40 | 10.09 | -28.64 | 52.51 | -138.42 | 50.44 | -136.35 | -19.78 |
| 99 | 53 | 223 | 15.08 | 240.65 | -43.17 | -35.43 | 232.92 | 46.22 | 98.82 | -67.07 | -64.98 | 96.73 | -18.51 |
| | | 67 | 10.20 | 78.62 | -22.92 | -14.40 | 70.11 | -28.15 | 485.94 | 207.58 | 208.36 | 485.15 | -14.75 |
| | | 49 | 26.77 | 329.99 | -20.84 | 14.68 | 294.47 | 105.83 | 20.92 | -638.04 | -35.04 | -582.08 | -183.70 |
| | | 215 | 4.41 | 45.42 | -14.90 | 24.24 | 6.28 | -28.79 | 51.37 | -143.54 | 49.73 | -141.90 | -17.82 |
| 99 | 85 | 223 | 14.92 | 238.57 | -42.63 | -34.80 | 230.74 | 46.27 | 95.06 | -67.33 | -65.51 | 93.23 | -17.13 |
| | | 67 | 10.04 | 76.67 | -22.65 | -13.79 | 67.81 | -28.31 | 482.85 | 207.27 | 207.92 | 482.20 | -13.42 |
| | | 49 | 26.67 | 327.62 | -21.04 | 14.55 | 292.03 | 105.56 | 20.49 | -639.88 | -34.48 | -584.91 | -182.42 |
| | | 215 | 4.49 | 44.64 | -16.54 | 24.14 | 3.96 | -28.88 | 50.71 | -146.67 | 49.30 | -145.27 | -16.59 |
| 99 | 87 | 223 | 32.65 | 534.71 | -91.67 | -72.53 | 515.57 | 107.80 | 253.30 | -171.85 | -129.33 | 210.77 | -127.56 |
| | | 67 | 21.52 | 136.68 | -60.75 | -39.77 | 115.70 | -60.85 | 1115.35 | 381.09 | 381.14 | 1115.30 | 5.81 |
| | | 49 | 65.79 | 758.58 | -49.22 | 40.08 | 669.28 | 253.30 | 237.43 | -1644.98 | -11.95 | -1395.60 | -638.16 |
| | | 215 | 11.81 | 83.84 | -79.09 | 48.68 | -43.94 | -67.02 | 92.44 | -340.30 | 89.57 | -337.42 | -35.15 |
| 99 | 97 | 223 | 31.42 | 513.85 | -88.33 | -70.03 | 495.56 | 103.35 | 239.89 | -162.70 | -125.33 | 202.52 | -116.82 |
| | | 67 | 20.73 | 133.49 | -57.77 | -37.69 | 113.41 | -58.63 | 1070.14 | 373.32 | 373.34 | 1070.12 | 3.35 |
| | | 49 | 62.86 | 727.54 | -47.15 | 38.08 | 642.31 | 242.41 | 217.93 | -1567.02 | -13.41 | -1335.68 | -599.51 |
| | | 215 | 11.24 | 81.41 | -73.32 | 47.12 | -39.02 | -64.27 | 90.18 | -326.45 | 87.33 | -323.60 | -34.35 |
| 99 | 102 | 223 | 14.92 | 238.57 | -42.63 | -34.80 | 230.74 | 46.27 | 95.06 | -67.33 | -65.51 | 93.23 | -17.13 |
| | | 67 | 10.04 | 76.67 | -22.65 | -13.79 | 67.81 | -28.31 | 482.85 | 207.27 | 207.92 | 482.20 | -13.42 |
| | | 49 | 26.67 | 327.62 | -21.04 | 14.55 | 292.03 | 105.56 | 20.49 | -639.88 | -34.48 | -584.91 | -182.42 |
| | | 215 | 4.49 | 44.64 | -16.54 | 24.14 | 3.96 | -28.88 | 50.71 | -146.67 | 49.30 | -145.27 | -16.59 |
| 100 | 2 | 231 | 59.66 | 76.33 | -1046.25 | -124.79 | -845.13 | 430.49 | -18.73 | -369.22 | -63.14 | -324.81 | 116.58 |
| | | 66 | 181.04 | 2955.64 | -196.05 | 513.25 | 2246.34 | -1316.20 | 2127.63 | 141.89 | 246.10 | 2023.41 | -442.82 |
| | | 67 | 107.65 | 1165.80 | -928.13 | -580.66 | 818.32 | 779.00 | 1170.75 | -137.42 | 921.88 | 111.45 | -513.45 |
| | | 223 | 65.72 | 911.73 | -141.05 | 180.64 | 590.05 | -484.96 | 1419.23 | -33.94 | -15.78 | 1401.06 | -161.44 |
| 100 | 25 | 231 | 19.02 | 19.22 | -329.93 | -39.63 | -271.08 | 130.71 | 5.35 | -132.80 | -24.30 | -103.14 | 56.73 |
| | | 66 | 60.29 | 964.15 | -58.02 | 173.62 | 732.51 | -427.92 | 730.39 | -4.93 | 69.14 | 656.32 | -221.30 |
| | | 67 | 31.07 | 368.57 | -297.33 | -191.54 | 262.78 | 243.43 | 240.95 | 39.81 | 237.88 | 42.88 | -24.65 |
| | | 223 | 21.52 | 300.51 | -38.63 | 56.78 | 205.10 | -152.49 | 445.77 | -5.52 | 3.71 | 436.54 | -63.87 |
| 100 | 57 | 231 | 19.29 | 20.29 | -333.46 | -40.56 | -272.62 | 133.50 | 8.53 | -135.17 | -20.70 | -105.94 | 57.85 |
| | | 66 | 59.78 | 955.47 | -58.34 | 171.61 | 725.52 | -424.56 | 726.03 | -1.53 | 72.47 | 652.02 | -219.92 |
| | | 67 | 30.90 | 362.84 | -297.64 | -191.08 | 256.28 | 242.95 | 240.43 | 34.42 | 236.92 | 37.93 | -26.67 |
| | | 223 | 21.46 | 301.09 | -38.73 | 58.32 | 204.05 | -153.49 | 442.00 | -6.04 | 2.86 | 433.10 | -62.54 |
| 100 | 85 | 231 | 19.46 | 20.94 | -335.62 | -41.12 | -273.56 | 135.19 | 10.52 | -136.65 | -18.49 | -107.64 | 58.55 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|---------|----------|----------|---------|----------|---------|----------|---------|
| | | 66 | 59.48 | 950.20 | -58.54 | 170.39 | 721.27 | -422.52 | 723.36 | 0.57 | 74.52 | 649.41 | -219.05 |
| | | 67 | 30.79 | 359.36 | -297.83 | -190.81 | 252.33 | 242.65 | 240.13 | 31.12 | 236.33 | 34.92 | -27.91 |
| | | 223 | 21.43 | 301.46 | -38.79 | 59.25 | 203.41 | -154.10 | 439.71 | -6.37 | 2.34 | 431.00 | -61.71 |
| 100 | 87 | 231 | 42.37 | 53.68 | -742.24 | -88.67 | -599.89 | 305.02 | -11.25 | -264.20 | -44.56 | -230.89 | 85.53 |
| | | 66 | 128.62 | 2097.12 | -138.51 | 364.88 | 1593.73 | -933.80 | 1514.07 | 95.47 | 174.00 | 1435.53 | -324.42 |
| | | 67 | 75.86 | 825.11 | -658.46 | -412.55 | 579.19 | 551.69 | 809.90 | -84.84 | 646.09 | 78.96 | -346.02 |
| | | 223 | 46.67 | 648.00 | -99.19 | 128.33 | 420.49 | -343.85 | 1004.73 | -23.43 | -10.21 | 991.51 | -115.85 |
| 100 | 97 | 231 | 40.80 | 51.18 | -713.97 | -85.43 | -577.36 | 293.03 | -8.29 | -256.16 | -42.67 | -221.79 | 85.67 |
| | | 66 | 123.88 | 2017.40 | -132.65 | 351.68 | 1533.07 | -898.20 | 1461.02 | 88.78 | 168.90 | 1380.90 | -321.75 |
| | | 67 | 72.50 | 791.77 | -633.32 | -397.36 | 555.82 | 529.70 | 761.31 | -68.91 | 615.94 | 76.45 | -315.52 |
| | | 223 | 44.94 | 624.41 | -94.59 | 123.60 | 406.22 | -330.56 | 964.33 | -22.04 | -8.86 | 951.14 | -113.27 |
| 100 | 102 | 231 | 19.46 | 20.94 | -335.62 | -41.12 | -273.56 | 135.19 | 10.52 | -136.65 | -18.49 | -107.64 | 58.55 |
| | | 66 | 59.48 | 950.20 | -58.54 | 170.39 | 721.27 | -422.52 | 723.36 | 0.57 | 74.52 | 649.41 | -219.05 |
| | | 67 | 30.79 | 359.36 | -297.83 | -190.81 | 252.33 | 242.65 | 240.13 | 31.12 | 236.33 | 34.92 | -27.91 |
| | | 223 | 21.43 | 301.46 | -38.79 | 59.25 | 203.41 | -154.10 | 439.71 | -6.37 | 2.34 | 431.00 | -61.71 |
| 101 | 2 | 191 | 100.07 | 1122.93 | -1019.99 | -690.77 | 793.71 | 772.73 | 1024.53 | 481.08 | 893.33 | 612.29 | -232.57 |
| | | 232 | 79.68 | 1143.24 | -92.65 | 213.14 | 837.44 | -533.31 | 1603.19 | -61.53 | -40.44 | 1582.09 | -186.20 |
| | | 233 | 67.33 | 47.05 | -1221.56 | -152.03 | -1022.48 | 461.43 | 40.44 | -315.50 | -9.22 | -265.83 | 123.33 |
| | | 190 | 204.60 | 3404.77 | -152.62 | 638.95 | 2613.20 | -1479.64 | 2083.94 | -112.93 | 66.22 | 1904.80 | -601.22 |
| 101 | 32 | 191 | 31.07 | 368.60 | -297.31 | -191.52 | 262.80 | 243.43 | 241.13 | 39.69 | 238.04 | 42.77 | -24.74 |
| | | 232 | 21.52 | 300.46 | -38.65 | 56.77 | 205.04 | -152.49 | 445.73 | -5.52 | 3.72 | 436.49 | -63.92 |
| | | 233 | 19.02 | 19.23 | -329.92 | -39.62 | -271.06 | 130.71 | 5.38 | -132.83 | -24.32 | -103.12 | 56.77 |
| | | 190 | 60.29 | 964.08 | -58.02 | 173.60 | 732.46 | -427.89 | 730.47 | -4.75 | 69.32 | 656.40 | -221.29 |
| 101 | 64 | 191 | 30.90 | 362.86 | -297.62 | -191.06 | 256.30 | 242.95 | 240.61 | 34.29 | 237.08 | 37.82 | -26.76 |
| | | 232 | 21.46 | 301.05 | -38.75 | 58.31 | 203.99 | -153.49 | 441.97 | -6.05 | 2.87 | 433.04 | -62.59 |
| | | 233 | 19.29 | 20.30 | -333.45 | -40.55 | -272.60 | 133.50 | 8.55 | -135.20 | -20.72 | -105.92 | 57.89 |
| | | 190 | 59.78 | 955.40 | -58.35 | 171.58 | 725.47 | -424.53 | 726.11 | -1.35 | 72.65 | 652.10 | -219.91 |
| 101 | 85 | 191 | 30.80 | 359.38 | -297.81 | -190.78 | 252.35 | 242.66 | 240.30 | 30.99 | 236.48 | 34.81 | -28.00 |
| | | 232 | 21.43 | 301.41 | -38.81 | 59.25 | 203.35 | -154.10 | 439.67 | -6.38 | 2.34 | 430.95 | -61.76 |
| | | 233 | 19.46 | 20.95 | -335.61 | -41.12 | -273.54 | 135.20 | 10.54 | -136.68 | -18.51 | -107.62 | 58.59 |
| | | 190 | 59.47 | 950.13 | -58.54 | 170.36 | 721.22 | -422.48 | 723.44 | 0.74 | 74.70 | 649.49 | -219.04 |
| 101 | 87 | 191 | 70.81 | 796.53 | -719.69 | -485.95 | 562.79 | 547.50 | 711.50 | 328.42 | 627.08 | 412.83 | -158.78 |
| | | 232 | 55.97 | 802.26 | -66.85 | 150.00 | 585.41 | -376.09 | 1127.37 | -41.83 | -26.65 | 1112.19 | -132.37 |
| | | 233 | 47.48 | 34.14 | -859.09 | -106.83 | -718.12 | 325.65 | 28.26 | -228.45 | -8.62 | -191.57 | 90.04 |
| | | 190 | 144.33 | 2396.53 | -109.55 | 448.68 | 1838.30 | -1042.76 | 1485.64 | -75.07 | 54.11 | 1356.46 | -430.02 |
| 101 | 97 | 191 | 67.95 | 766.05 | -688.38 | -463.39 | 541.06 | 525.93 | 672.60 | 304.23 | 599.90 | 376.93 | -146.61 |
| | | 232 | 53.30 | 763.09 | -65.43 | 143.09 | 554.57 | -359.56 | 1074.59 | -38.53 | -23.48 | 1059.54 | -128.54 |
| | | 233 | 45.41 | 33.58 | -819.10 | -101.77 | -683.75 | 311.59 | 28.19 | -224.45 | -10.48 | -185.78 | 90.96 |
| | | 190 | 138.01 | 2286.77 | -106.58 | 427.07 | 1753.12 | -996.21 | 1436.64 | -62.17 | 64.34 | 1310.13 | -416.67 |
| 101 | 102 | 191 | 30.80 | 359.38 | -297.81 | -190.78 | 252.35 | 242.66 | 240.30 | 30.99 | 236.48 | 34.81 | -28.00 |
| | | 232 | 21.43 | 301.41 | -38.81 | 59.25 | 203.35 | -154.10 | 439.67 | -6.38 | 2.34 | 430.95 | -61.76 |
| | | 233 | 19.46 | 20.95 | -335.61 | -41.12 | -273.54 | 135.20 | 10.54 | -136.68 | -18.51 | -107.62 | 58.59 |
| | | 190 | 59.47 | 950.13 | -58.54 | 170.36 | 721.22 | -422.48 | 723.44 | 0.74 | 74.70 | 649.49 | -219.04 |
| 102 | 2 | 192 | 85.68 | 1125.20 | -75.93 | 22.35 | 1026.93 | 329.22 | 266.95 | -1723.56 | -77.53 | -1379.08 | -753.01 |
| | | 234 | 15.32 | 285.22 | 34.10 | 93.72 | 225.60 | -106.85 | 143.01 | -186.67 | 138.46 | -182.11 | -38.47 |
| | | 232 | 55.18 | 809.78 | -156.68 | -129.44 | 782.54 | 159.95 | 673.66 | -218.37 | -196.04 | 651.32 | -139.37 |
| | | 191 | 45.50 | 504.98 | -70.13 | -23.97 | 458.82 | -156.26 | 1624.14 | 583.60 | 587.71 | 1620.03 | 65.28 |
| 102 | 24 | 192 | 26.91 | 333.66 | -20.41 | 14.89 | 298.35 | 106.08 | 21.72 | -635.41 | -35.75 | -577.94 | -185.65 |
| | | 234 | 4.29 | 46.88 | -12.35 | 24.44 | 10.08 | -28.73 | 52.58 | -138.94 | 50.54 | -136.90 | -19.68 |
| | | 232 | 15.38 | 244.22 | -43.99 | -36.34 | 236.56 | 46.33 | 103.07 | -65.16 | -64.06 | 101.96 | -13.59 |
| | | 191 | 10.45 | 81.74 | -23.33 | -15.33 | 73.74 | -27.88 | 490.62 | 208.16 | 209.15 | 489.62 | -16.76 |
| 102 | 56 | 192 | 26.76 | 329.88 | -20.80 | 14.69 | 294.40 | 105.76 | 21.05 | -638.30 | -34.86 | -582.38 | -183.69 |
| | | 234 | 4.41 | 45.44 | -14.95 | 24.25 | 6.23 | -28.82 | 51.40 | -143.83 | 49.76 | -142.19 | -17.82 |
| | | 232 | 15.09 | 240.70 | -43.14 | -35.38 | 232.94 | 46.29 | 98.00 | -66.47 | -64.95 | 96.47 | -15.77 |
| | | 191 | 10.19 | 78.52 | -22.90 | -14.38 | 70.01 | -28.13 | 485.78 | 207.63 | 208.41 | 484.99 | -14.76 |
| 102 | 85 | 192 | 26.68 | 327.59 | -21.04 | 14.56 | 291.99 | 105.56 | 20.63 | -640.04 | -34.33 | -585.09 | -182.45 |
| | | 234 | 4.49 | 44.61 | -16.58 | 24.14 | 3.89 | -28.87 | 50.70 | -146.82 | 49.29 | -145.41 | -16.65 |
| | | 232 | 14.92 | 238.56 | -42.62 | -34.79 | 230.73 | 46.26 | 94.96 | -67.32 | -65.49 | 93.13 | -17.13 |
| | | 191 | 10.04 | 76.59 | -22.66 | -13.81 | 67.74 | -28.29 | 482.84 | 207.29 | 207.95 | 482.18 | -13.51 |
| 102 | 87 | 192 | 60.67 | 793.76 | -53.37 | 16.84 | 723.55 | 233.55 | 179.18 | -1232.85 | -56.27 | -997.40 | -526.33 |
| | | 234 | 10.61 | 194.64 | 21.98 | 65.70 | 150.92 | -75.08 | 102.07 | -143.99 | 98.88 | -140.80 | -27.87 |
| | | 232 | 38.77 | 571.66 | -110.13 | -90.93 | 552.46 | 112.80 | 461.71 | -154.50 | -139.43 | 446.63 | -95.20 |
| | | 191 | 31.67 | 346.86 | -49.77 | -17.82 | 314.91 | -107.94 | 1146.70 | 417.14 | 419.53 | 1144.31 | 41.72 |
| 102 | 97 | 192 | 58.25 | 759.09 | -50.82 | 17.18 | 691.09 | 224.61 | 164.39 | -1195.14 | -53.31 | -977.43 | -498.58 |
| | | 234 | 9.94 | 179.84 | 18.87 | 62.42 | 136.28 | -71.51 | 98.89 | -149.42 | 95.76 | -146.29 | -27.68 |
| | | 232 | 36.92 | 547.07 | -104.94 | -86.59 | 528.72 | 107.83 | 427.63 | -147.98 | -134.46 | 414.11 | -87.18 |
| | | 191 | 29.85 | 322.57 | -47.90 | -17.95 | 292.62 | -100.98 | 1098.18 | 407.71 | 409.57 | 1096.31 | 35.84 |
| 102 | 102 | 192 | 26.68 | 327.59 | -21.04 | 14.56 | 291.99 | 105.56 | 20.63 | -640.04 | -34.33 | -585.09 | -182.45 |
| | | 234 | 4.49 | 44.61 | -16.58 | 24.14 | 3.89 | -28.87 | 50.70 | -146.82 | 49.29 | -145.41 | -16.65 |
| | | 232 | 14.92 | 238.56 | -42.62 | -34.79 | 230.73 | 46.26 | 94.96 | -67.32 | -65.49 | 93.13 | -17.13 |
| | | 191 | 10.04 | 76.59 | -22.66 | -13.81 | 67.74 | -28.29 | 482.84 | 207.29 | 207.95 | 482.18 | -13.51 |
| 103 | 2 | 196 | 73.23 | 772.90 | 42.11 | 97.61 | 717.40 | 193.60 | 172.02 | -2295.69 | 53.33 | -2177.00 | -528.01 |
| | | 235 | 20.57 | -7.67 | -111.46 | -8.66 | -110.47 | -10.05 | 45.31 | -989.67 | 36.71 | -981.08 | -93.92 |
| | | 234 | 47.68 | 689.51 | -9.67 | -9.35 | 689.19 | 14.87 | 1.90 | -882.82 | -21.59 | -859.34 | -142.21 |
| | | 192 | 22.31 | 75.97 | -217.13 | -94.52 | -46.64 | 144.58 | 618.07 | -81.28 | 138.24 | 398.56 | -324.55 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|---------|--------|--------|----------|--------|----------|---------|
| 103 | 28 | 196 | 22.34 | 201.54 | 12.09 | 35.06 | 178.57 | 61.84 | 30.56 | -847.99 | 13.87 | -831.30 | -119.93 |
| | | 235 | 11.37 | -5.29 | -101.65 | -5.29 | -101.65 | 0.56 | 20.77 | -419.43 | 18.19 | -416.85 | -33.62 |
| | | 234 | 14.78 | 180.80 | -0.10 | -0.04 | 180.74 | 3.36 | -11.62 | -388.63 | -12.85 | -387.40 | -21.48 |
| | | 192 | 9.42 | 4.28 | -125.84 | -33.11 | -88.44 | 58.89 | 183.10 | -56.54 | 66.66 | 59.90 | -119.77 |
| 103 | 60 | 196 | 22.23 | 199.01 | 11.92 | 35.00 | 175.93 | 61.52 | 29.12 | -851.02 | 12.88 | -834.78 | -118.43 |
| | | 235 | 11.56 | -5.38 | -104.51 | -5.39 | -104.51 | 0.27 | 19.64 | -423.26 | 17.31 | -420.93 | -32.05 |
| | | 234 | 14.70 | 177.95 | -0.03 | 0.02 | 177.90 | 2.92 | -10.95 | -392.53 | -11.97 | -391.51 | -19.69 |
| | | 192 | 9.38 | 3.18 | -127.26 | -33.03 | -91.06 | 58.41 | 180.22 | -56.16 | 67.65 | 56.40 | -118.05 |
| 103 | 85 | 196 | 22.17 | 197.47 | 11.82 | 34.96 | 174.32 | 61.33 | 28.23 | -852.85 | 12.28 | -836.91 | -117.47 |
| | | 235 | 11.68 | -5.44 | -106.25 | -5.44 | -106.25 | 0.10 | 18.96 | -425.60 | 16.78 | -423.42 | -31.04 |
| | | 234 | 14.65 | 176.21 | 7.77e-03 | 0.05 | 176.17 | 2.65 | -10.53 | -394.91 | -11.43 | -394.01 | -18.55 |
| | | 192 | 9.35 | 2.53 | -128.15 | -32.97 | -92.65 | 58.13 | 178.43 | -55.91 | 68.26 | 54.27 | -116.96 |
| 103 | 87 | 196 | 51.77 | 541.44 | 29.80 | 69.74 | 501.51 | 137.24 | 117.63 | -1643.36 | 37.19 | -1562.92 | -367.75 |
| | | 235 | 15.26 | -5.95 | -88.36 | -6.50 | -87.82 | -6.69 | 32.71 | -716.50 | 26.71 | -710.51 | -66.75 |
| | | 234 | 33.74 | 483.17 | -6.44 | -6.23 | 482.95 | 10.27 | -0.76 | -640.58 | -15.91 | -625.43 | -97.28 |
| | | 192 | 16.09 | 49.40 | -160.25 | -67.41 | -43.44 | 104.14 | 434.43 | -60.23 | 101.26 | 272.94 | -231.96 |
| 103 | 97 | 196 | 49.63 | 514.12 | 28.59 | 67.54 | 475.16 | 131.90 | 110.97 | -1594.65 | 37.14 | -1520.83 | -347.09 |
| | | 235 | 15.33 | -6.18 | -94.02 | -6.59 | -93.61 | -6.00 | 32.10 | -703.23 | 26.35 | -697.49 | -64.72 |
| | | 234 | 32.36 | 458.88 | -5.79 | -5.60 | 458.68 | 9.60 | -2.81 | -629.95 | -15.92 | -616.85 | -89.70 |
| | | 192 | 15.74 | 43.40 | -160.38 | -65.18 | -51.80 | 101.67 | 415.01 | -58.99 | 102.63 | 253.38 | -224.69 |
| 103 | 102 | 196 | 22.17 | 197.47 | 11.82 | 34.96 | 174.32 | 61.33 | 28.23 | -852.85 | 12.28 | -836.91 | -117.47 |
| | | 235 | 11.68 | -5.44 | -106.25 | -5.44 | -106.25 | 0.10 | 18.96 | -425.60 | 16.78 | -423.42 | -31.04 |
| | | 234 | 14.65 | 176.21 | 7.77e-03 | 0.05 | 176.17 | 2.65 | -10.53 | -394.91 | -11.43 | -394.01 | -18.55 |
| | | 192 | 9.35 | 2.53 | -128.15 | -32.97 | -92.65 | 58.13 | 178.43 | -55.91 | 68.26 | 54.27 | -116.96 |
| 104 | 2 | 200 | 62.73 | 438.89 | 32.18 | 103.28 | 367.79 | 154.47 | 92.52 | -2844.05 | 37.04 | -2788.56 | -399.81 |
| | | 236 | 44.01 | -38.69 | -390.66 | -38.82 | -390.53 | 6.75 | 51.49 | -1677.51 | 43.51 | -1669.52 | -117.22 |
| | | 235 | 43.93 | 394.27 | 33.30 | 33.63 | 393.94 | -10.93 | -25.52 | -1687.03 | -30.05 | -1682.50 | -86.60 |
| | | 196 | 28.73 | -3.96 | -471.26 | -98.88 | -376.33 | 188.01 | 379.42 | -646.17 | 185.23 | -451.98 | -401.80 |
| 104 | 21 | 200 | 18.10 | 87.41 | -4.63 | 34.42 | 48.36 | 45.49 | 16.19 | -1033.55 | 10.76 | -1028.12 | -75.35 |
| | | 236 | 19.53 | -13.40 | -196.35 | -13.52 | -196.24 | 4.54 | 17.26 | -663.75 | 15.59 | -662.08 | -33.65 |
| | | 235 | 12.97 | 66.20 | 11.62 | 12.19 | 65.63 | -5.54 | -10.24 | -669.69 | -10.25 | -669.69 | -0.62 |
| | | 196 | 13.69 | -8.30 | -221.35 | -31.95 | -197.70 | 66.93 | 122.13 | -296.84 | 78.09 | -252.80 | -128.49 |
| 104 | 53 | 200 | 18.16 | 88.82 | -4.30 | 34.50 | 50.02 | 45.91 | 17.38 | -1030.67 | 11.74 | -1025.02 | -76.73 |
| | | 236 | 19.41 | -13.31 | -194.79 | -13.44 | -194.66 | 4.90 | 18.31 | -660.39 | 16.49 | -658.57 | -35.10 |
| | | 235 | 12.99 | 67.66 | 11.50 | 11.99 | 67.16 | -5.24 | -11.34 | -666.23 | -11.35 | -666.22 | -2.08 |
| | | 196 | 13.55 | -8.06 | -220.16 | -32.13 | -196.08 | 67.29 | 122.28 | -295.12 | 76.91 | -249.75 | -129.92 |
| 104 | 85 | 200 | 18.20 | 89.68 | -4.10 | 34.56 | 51.03 | 46.16 | 18.11 | -1028.91 | 12.33 | -1023.13 | -77.61 |
| | | 236 | 19.33 | -13.26 | -193.85 | -13.40 | -193.70 | 5.12 | 18.95 | -658.35 | 17.03 | -656.43 | -36.02 |
| | | 235 | 13.00 | 68.55 | 11.42 | 11.87 | 68.09 | -5.06 | -12.00 | -664.12 | -12.01 | -664.11 | -3.01 |
| | | 196 | 13.47 | -7.91 | -219.44 | -32.25 | -195.10 | 67.50 | 122.41 | -294.12 | 76.19 | -247.89 | -130.84 |
| 104 | 87 | 200 | 44.24 | 303.73 | 21.73 | 73.46 | 252.00 | 109.14 | 63.57 | -2032.69 | 26.33 | -1995.46 | -276.89 |
| | | 236 | 31.92 | -27.56 | -286.28 | -27.66 | -286.18 | 5.18 | 36.84 | -1206.10 | 31.28 | -1200.54 | -82.95 |
| | | 235 | 31.02 | 271.96 | 23.75 | 24.00 | 271.71 | -7.96 | -18.80 | -1213.05 | -21.63 | -1210.22 | -58.14 |
| | | 196 | 20.55 | -4.07 | -343.05 | -70.22 | -276.90 | 134.34 | 268.64 | -469.37 | 133.65 | -334.37 | -285.31 |
| 104 | 97 | 200 | 42.31 | 284.81 | 19.77 | 70.84 | 233.74 | 104.53 | 61.21 | -1969.37 | 27.39 | -1935.55 | -259.86 |
| | | 236 | 31.37 | -26.62 | -284.19 | -26.73 | -284.08 | 5.36 | 35.77 | -1175.71 | 30.47 | -1170.41 | -80.00 |
| | | 235 | 29.69 | 254.07 | 22.96 | 23.23 | 253.80 | -7.86 | -18.74 | -1182.51 | -21.10 | -1180.15 | -52.37 |
| | | 196 | 19.94 | -5.08 | -338.44 | -67.61 | -275.91 | 130.13 | 259.63 | -461.62 | 132.62 | -334.60 | -274.73 |
| 104 | 102 | 200 | 18.20 | 89.68 | -4.10 | 34.56 | 51.03 | 46.16 | 18.11 | -1028.91 | 12.33 | -1023.13 | -77.61 |
| | | 236 | 19.33 | -13.26 | -193.85 | -13.40 | -193.70 | 5.12 | 18.95 | -658.35 | 17.03 | -656.43 | -36.02 |
| | | 235 | 13.00 | 68.55 | 11.42 | 11.87 | 68.09 | -5.06 | -12.00 | -664.12 | -12.01 | -664.11 | -3.01 |
| | | 196 | 13.47 | -7.91 | -219.44 | -32.25 | -195.10 | 67.50 | 122.41 | -294.12 | 76.19 | -247.89 | -130.84 |
| 105 | 2 | 204 | 53.20 | 204.19 | -70.93 | 96.43 | 36.83 | 134.29 | 66.14 | -3330.38 | 36.38 | -3300.62 | -316.54 |
| | | 237 | 65.65 | -42.45 | -639.20 | -42.59 | -639.06 | 9.23 | 52.75 | -2297.69 | 45.55 | -2290.49 | -129.88 |
| | | 236 | 37.72 | 85.28 | 36.80 | 41.43 | 80.65 | -14.25 | -35.19 | -2329.94 | -36.42 | -2328.72 | -52.99 |
| | | 200 | 49.74 | -37.36 | -697.91 | -92.07 | -643.19 | 182.07 | 324.87 | -1316.87 | 210.67 | -1202.66 | -417.68 |
| 105 | 31 | 204 | 21.70 | 43.54 | -75.66 | 30.51 | -62.62 | 37.20 | 15.21 | -1173.82 | 13.04 | -1171.65 | -50.70 |
| | | 237 | 26.08 | -13.35 | -267.31 | -13.54 | -267.12 | 6.92 | 17.19 | -864.54 | 15.33 | -862.68 | -40.43 |
| | | 236 | 15.40 | 13.41 | -41.86 | 12.66 | -41.10 | -6.41 | -13.93 | -875.17 | -13.95 | -875.15 | 4.34 |
| | | 200 | 21.38 | -13.19 | -289.38 | -28.30 | -274.27 | 62.81 | 104.74 | -540.31 | 77.24 | -512.82 | -130.30 |
| 105 | 63 | 204 | 21.62 | 43.18 | -74.54 | 30.43 | -61.79 | 36.59 | 15.89 | -1171.12 | 13.85 | -1169.07 | -49.21 |
| | | 237 | 25.99 | -13.33 | -266.19 | -13.49 | -266.03 | 6.37 | 17.77 | -861.38 | 16.05 | -859.66 | -38.88 |
| | | 236 | 15.32 | 13.68 | -40.72 | 12.94 | -39.98 | -6.28 | -12.92 | -872.24 | -12.96 | -872.20 | 5.80 |
| | | 200 | 21.31 | -13.08 | -288.50 | -28.14 | -273.45 | 62.60 | 105.30 | -537.30 | 78.32 | -510.31 | -128.89 |
| 105 | 85 | 204 | 21.58 | 42.96 | -73.86 | 30.38 | -61.28 | 36.22 | 16.31 | -1169.46 | 14.34 | -1167.49 | -48.27 |
| | | 237 | 25.93 | -13.31 | -265.51 | -13.46 | -265.37 | 6.03 | 18.12 | -859.45 | 16.48 | -857.81 | -37.90 |
| | | 236 | 15.27 | 13.84 | -40.02 | 13.11 | -39.30 | -6.20 | -12.31 | -870.45 | -12.36 | -870.40 | 6.73 |
| | | 200 | 21.27 | -13.02 | -287.96 | -28.04 | -272.94 | 62.48 | 105.63 | -535.44 | 78.97 | -508.78 | -127.99 |
| 105 | 87 | 204 | 37.39 | 140.23 | -55.51 | 68.34 | 16.38 | 94.36 | 45.85 | -2375.76 | 26.16 | -2356.08 | -217.46 |
| | | 237 | 47.22 | -30.07 | -461.54 | -30.19 | -461.42 | 6.96 | 37.57 | -1646.37 | 32.57 | -1641.37 | -91.64 |
| | | 236 | 26.57 | 53.03 | 24.86 | 29.37 | 48.53 | -10.33 | -25.20 | -1669.25 | -25.93 | -1668.53 | -34.43 |
| | | 200 | 35.99 | -26.75 | -503.56 | -65.12 | -465.19 | 129.71 | 230.37 | -949.00 | 150.97 | -869.61 | -295.52 |
| 105 | 97 | 204 | 35.96 | 130.64 | -58.65 | 65.66 | 6.33 | 89.88 | 45.10 | -2297.45 | 27.49 | -2279.85 | -202.32 |
| | | 237 | 46.05 | -28.89 | -451.71 | -29.01 | -451.60 | 7.08 | 36.31 | -1599.44 | 31.56 | -1594.68 | -88.08 |
| | | 236 | 25.38 | 44.56 | 21.93 | 28.23 | 38.26 | -10.14 | -24.46 | -1621.40 | -25.01 | -1620.85 | -29.68 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|--------|--------|----------|--------|----------|---------|
| 105 | 102 | 200 | 35.31 | -25.95 | -492.51 | -62.44 | -456.01 | 125.28 | 223.36 | -926.74 | 148.61 | -851.99 | -283.53 |
| | | 204 | 21.58 | 42.96 | -73.86 | 30.38 | -61.28 | 36.22 | 16.31 | -1169.46 | 14.34 | -1167.49 | -48.27 |
| | | 237 | 25.93 | -13.31 | -265.51 | -13.46 | -265.37 | 6.03 | 18.12 | -859.45 | 16.48 | -857.81 | -37.90 |
| | | 236 | 15.27 | 13.84 | -40.02 | 13.11 | -39.30 | -6.20 | -12.31 | -870.45 | -12.36 | -870.40 | 6.73 |
| | | 200 | 21.27 | -13.02 | -287.96 | -28.04 | -272.94 | 62.48 | 105.63 | -535.44 | 78.97 | -508.78 | -127.99 |
| | | 208 | 72.28 | 122.73 | -300.56 | 87.24 | -265.07 | 117.31 | 61.94 | -3768.87 | 45.40 | -3752.32 | -251.20 |
| | | 238 | 85.24 | -39.46 | -861.41 | -39.57 | -861.30 | 9.38 | 49.46 | -2859.38 | 42.81 | -2852.73 | -138.94 |
| | | 237 | 54.81 | 40.15 | -215.68 | 39.37 | -214.89 | -14.17 | -35.89 | -2886.92 | -36.21 | -2886.60 | -30.16 |
| | | 204 | 71.43 | -48.60 | -907.79 | -82.79 | -873.60 | 167.93 | 297.26 | -1954.73 | 215.89 | -1873.35 | -420.27 |
| 106 | 31 | 208 | 28.12 | 29.64 | -165.57 | 25.51 | -161.44 | 28.08 | 18.53 | -1280.05 | 17.99 | -1279.51 | -26.62 |
| | | 238 | 31.57 | -11.47 | -326.08 | -11.64 | -325.91 | 7.26 | 15.61 | -1031.84 | 13.99 | -1030.23 | -41.09 |
| | | 237 | 22.77 | 11.17 | -139.55 | 10.89 | -139.27 | -6.48 | -12.10 | -1041.42 | -12.21 | -1041.31 | 10.86 |
| | | 204 | 27.87 | -13.86 | -344.57 | -23.17 | -335.26 | 54.71 | 93.40 | -756.88 | 75.34 | -738.81 | -122.62 |
| | | 208 | 28.03 | 29.38 | -164.05 | 25.42 | -160.08 | 27.41 | 18.92 | -1278.17 | 18.43 | -1277.68 | -25.05 |
| | | 238 | 31.43 | -11.40 | -323.84 | -11.54 | -323.70 | 6.63 | 15.87 | -1029.61 | 14.38 | -1028.12 | -39.41 |
| | | 237 | 22.64 | 11.49 | -137.29 | 11.21 | -137.01 | -6.41 | -11.24 | -1039.44 | -11.39 | -1039.29 | 12.48 |
| | | 204 | 27.79 | -13.64 | -343.24 | -23.03 | -333.86 | 54.81 | 93.85 | -754.72 | 76.20 | -737.07 | -121.10 |
| 106 | 85 | 208 | 27.97 | 29.23 | -163.12 | 25.37 | -159.25 | 26.99 | 19.15 | -1277.00 | 18.71 | -1276.55 | -24.08 |
| | | 238 | 31.35 | -11.35 | -322.47 | -11.48 | -322.35 | 6.25 | 16.03 | -1028.23 | 14.62 | -1026.82 | -38.37 |
| | | 237 | 22.56 | 11.68 | -135.91 | 11.40 | -135.64 | -6.36 | -10.72 | -1038.21 | -10.89 | -1038.03 | 13.49 |
| | | 204 | 27.74 | -13.51 | -342.43 | -22.94 | -333.01 | 54.88 | 94.12 | -753.38 | 76.73 | -735.99 | -120.15 |
| 106 | 87 | 208 | 51.92 | 85.18 | -221.59 | 61.54 | -197.95 | 81.81 | 43.49 | -2682.49 | 32.76 | -2671.76 | -170.68 |
| | | 238 | 61.01 | -27.82 | -617.26 | -27.91 | -617.18 | 7.09 | 35.10 | -2043.33 | 30.49 | -2038.73 | -97.74 |
| | | 237 | 39.54 | 28.32 | -161.91 | 27.76 | -161.35 | -10.29 | -25.43 | -2062.97 | -25.59 | -2062.80 | -18.31 |
| | | 204 | 51.32 | -34.24 | -650.81 | -58.25 | -626.80 | 119.27 | 210.48 | -1403.36 | 154.15 | -1347.03 | -296.20 |
| 106 | 97 | 208 | 50.56 | 80.20 | -221.30 | 58.86 | -199.96 | 77.32 | 43.40 | -2588.26 | 34.01 | -2578.88 | -156.88 |
| | | 238 | 59.20 | -26.59 | -599.66 | -26.69 | -599.57 | 7.23 | 33.80 | -1979.77 | 29.44 | -1975.41 | -93.63 |
| | | 237 | 38.68 | 27.08 | -164.33 | 26.55 | -163.79 | -10.13 | -24.42 | -1998.71 | -24.52 | -1998.61 | -14.23 |
| | | 204 | 49.99 | -32.70 | -632.54 | -55.56 | -609.68 | 114.85 | 204.01 | -1365.55 | 151.19 | -1312.73 | -283.06 |
| 106 | 102 | 208 | 27.97 | 29.23 | -163.12 | 25.37 | -159.25 | 26.99 | 19.15 | -1277.00 | 18.71 | -1276.55 | -24.08 |
| | | 238 | 31.35 | -11.35 | -322.47 | -11.48 | -322.35 | 6.25 | 16.03 | -1028.23 | 14.62 | -1026.82 | -38.37 |
| | | 237 | 22.56 | 11.68 | -135.91 | 11.40 | -135.64 | -6.36 | -10.72 | -1038.21 | -10.89 | -1038.03 | 13.49 |
| | | 204 | 27.74 | -13.51 | -342.43 | -22.94 | -333.01 | 54.88 | 94.12 | -753.38 | 76.73 | -735.99 | -120.15 |
| 107 | 2 | 194 | 91.58 | 93.64 | -553.14 | 77.70 | -537.19 | 100.30 | 72.55 | -4149.88 | 64.16 | -4141.49 | -188.04 |
| | | 239 | 102.60 | -35.03 | -1056.90 | -35.11 | -1056.81 | 9.33 | 42.21 | -3361.24 | 35.80 | -3354.82 | -147.61 |
| | | 238 | 75.68 | 35.43 | -485.53 | 35.06 | -485.16 | -13.90 | -30.28 | -3383.14 | -30.32 | -3383.10 | -11.53 |
| | | 208 | 90.71 | -50.28 | -1097.48 | -72.98 | -1074.78 | 152.50 | 267.12 | -2549.17 | 201.59 | -2483.64 | -424.58 |
| 107 | 31 | 194 | 33.33 | 21.62 | -246.87 | 20.28 | -245.53 | 18.91 | 23.90 | -1354.07 | 23.88 | -1354.05 | -5.13 |
| | | 239 | 35.83 | -9.13 | -369.88 | -9.28 | -369.73 | 7.39 | 13.02 | -1166.90 | 11.63 | -1165.51 | -40.52 |
| | | 238 | 28.94 | 8.66 | -223.92 | 8.47 | -223.73 | -6.64 | -9.15 | -1174.38 | -9.36 | -1174.16 | 15.92 |
| | | 208 | 33.13 | -11.96 | -386.49 | -17.78 | -380.67 | 46.33 | 83.32 | -945.16 | 70.91 | -932.75 | -112.29 |
| 107 | 63 | 194 | 33.20 | 21.45 | -244.58 | 20.20 | -243.32 | 18.20 | 24.21 | -1352.61 | 24.20 | -1352.60 | -3.63 |
| | | 239 | 35.64 | -9.00 | -366.54 | -9.13 | -366.41 | 6.74 | 13.21 | -1165.19 | 11.92 | -1163.91 | -38.89 |
| | | 238 | 28.76 | 8.99 | -220.56 | 8.80 | -220.37 | -6.48 | -8.58 | -1172.83 | -8.84 | -1172.56 | 17.59 |
| | | 208 | 33.01 | -11.78 | -384.31 | -17.67 | -378.42 | 46.47 | 83.53 | -943.38 | 71.44 | -931.30 | -110.74 |
| 107 | 85 | 194 | 33.11 | 21.34 | -243.18 | 20.14 | -241.98 | 17.77 | 24.40 | -1351.69 | 24.39 | -1351.69 | -2.70 |
| | | 239 | 35.53 | -8.92 | -364.50 | -9.03 | -364.39 | 6.34 | 13.33 | -1164.12 | 12.11 | -1162.90 | -37.88 |
| | | 238 | 28.65 | 9.18 | -218.51 | 9.01 | -218.33 | -6.38 | -8.23 | -1171.84 | -8.53 | -1171.55 | 18.62 |
| | | 208 | 32.93 | -11.67 | -382.99 | -17.60 | -377.06 | 46.56 | 83.65 | -942.26 | 71.76 | -930.38 | -109.79 |
| 107 | 87 | 194 | 65.47 | 65.01 | -400.92 | 54.48 | -390.39 | 69.24 | 51.31 | -2946.50 | 46.03 | -2941.22 | -125.72 |
| | | 239 | 73.14 | -24.54 | -753.20 | -24.61 | -753.13 | 7.07 | 29.90 | -2396.02 | 25.48 | -2391.60 | -103.45 |
| | | 238 | 54.27 | 24.84 | -352.82 | 24.57 | -352.55 | -10.12 | -21.34 | -2411.61 | -21.35 | -2411.60 | -5.20 |
| | | 208 | 64.86 | -35.10 | -782.70 | -51.00 | -766.79 | 107.87 | 188.97 | -1824.82 | 143.96 | -1779.81 | -297.69 |
| 107 | 97 | 194 | 63.46 | 61.19 | -393.88 | 51.79 | -384.48 | 64.74 | 51.20 | -2836.14 | 46.73 | -2831.67 | -113.49 |
| | | 239 | 70.69 | -23.31 | -727.75 | -23.39 | -727.67 | 7.23 | 28.75 | -2315.77 | 24.59 | -2311.61 | -98.70 |
| | | 238 | 52.76 | 23.61 | -347.45 | 23.35 | -347.18 | -9.98 | -20.38 | -2330.79 | -20.38 | -2330.79 | -1.73 |
| | | 208 | 62.89 | -33.20 | -756.81 | -48.31 | -741.70 | 103.45 | 183.22 | -1770.68 | 141.35 | -1728.80 | -282.96 |
| 107 | 102 | 194 | 33.11 | 21.34 | -243.18 | 20.14 | -241.98 | 17.77 | 24.40 | -1351.69 | 24.39 | -1351.69 | -2.70 |
| | | 239 | 35.53 | -8.92 | -364.50 | -9.03 | -364.39 | 6.34 | 13.33 | -1164.12 | 12.11 | -1162.90 | -37.88 |
| | | 238 | 28.65 | 9.18 | -218.51 | 9.01 | -218.33 | -6.38 | -8.23 | -1171.84 | -8.53 | -1171.55 | 18.62 |
| | | 208 | 32.93 | -11.67 | -382.99 | -17.60 | -377.06 | 46.56 | 83.65 | -942.26 | 71.76 | -930.38 | -109.79 |
| 108 | 2 | 199 | 108.53 | 75.98 | -787.46 | 67.84 | -779.31 | 83.46 | 90.03 | -4473.84 | 87.05 | -4470.86 | -116.57 |
| | | 240 | 117.69 | -30.07 | -1224.82 | -30.14 | -1224.75 | 9.24 | 33.13 | -3803.60 | 26.73 | -3797.21 | -156.49 |
| | | 239 | 94.29 | 30.48 | -728.37 | 30.23 | -728.12 | -13.68 | -21.63 | -3818.86 | -21.64 | -3818.85 | -7.97 |
| | | 194 | 107.59 | -47.66 | -1262.79 | -63.13 | -1247.32 | 136.26 | 233.98 | -3089.50 | 176.24 | -3031.75 | -434.25 |
| 108 | 31 | 199 | 37.26 | 15.24 | -314.06 | 14.96 | -313.78 | 9.59 | 29.99 | -1396.27 | 29.83 | -1396.11 | 15.00 |
| | | 240 | 38.82 | -6.67 | -397.97 | -6.81 | -397.83 | 7.42 | 9.60 | -1270.20 | 8.42 | -1269.02 | -38.85 |
| | | 239 | 33.89 | 6.08 | -293.30 | 5.93 | -293.15 | -6.81 | -5.81 | -1275.48 | -6.13 | -1275.15 | 20.40 |
| | | 194 | 37.12 | -8.83 | -413.67 | -12.32 | -410.18 | 37.43 | 73.61 | -1103.43 | 65.07 | -1094.88 | -99.92 |
| 108 | 63 | 199 | 37.09 | 15.12 | -311.09 | 14.88 | -310.85 | 8.90 | 30.59 | -1394.41 | 30.41 | -1394.23 | 16.23 |
| | | 240 | 38.59 | -6.49 | -393.73 | -6.61 | -393.62 | 6.77 | 10.06 | -1268.02 | 8.96 | -1266.91 | -37.50 |
| | | 239 | 33.65 | 6.40 | -289.05 | 6.26 | -288.91 | -6.55 | -5.52 | -1273.35 | -5.90 | -1272.97 | 21.91 |
| | | 194 | 36.95 | -8.68 | -410.78 | -12.24 | -407.22 | 37.67 | 73.62 | -1101.25 | 65.30 | -1092.93 | -98.53 |
| 108 | 85 | 199 | 36.98 | 15.05 | -309.29 | 14.83 | -309.07 | 8.48 | 30.96 | -1393.26 | 30.76 | -1393.06 | 16.99 |
| | | 240 | 38.45 | -6.38 | -391.16 | -6.49 | -391.05 | 6.37 | 10.34 | -1266.66 | 9.28 | -1265.60 | -36.67 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|--------|--------|----------|--------|----------|---------|
| | | 239 | 33.51 | 6.59 | -286.46 | 6.46 | -286.33 | -6.38 | -5.34 | -1272.03 | -5.75 | -1271.61 | 22.83 |
| | | 194 | 36.84 | -8.59 | -409.03 | -12.20 | -405.42 | 37.82 | 73.63 | -1099.90 | 65.44 | -1091.71 | -97.68 |
| 108 | 87 | 199 | 77.29 | 52.46 | -566.01 | 47.20 | -560.75 | 56.77 | 63.90 | -3168.08 | 62.14 | -3166.31 | -75.45 |
| | | 240 | 83.59 | -20.90 | -868.70 | -20.96 | -868.64 | 7.01 | 23.44 | -2704.60 | 19.06 | -2700.22 | -109.22 |
| | | 239 | 67.33 | 21.20 | -523.77 | 21.01 | -523.59 | -9.97 | -15.17 | -2715.47 | 15.20 | -2715.45 | 8.36 |
| | | 194 | 76.64 | -32.93 | -896.38 | -43.72 | -885.60 | 95.88 | 165.46 | -2205.97 | 126.22 | -2166.73 | -302.52 |
| 108 | 97 | 199 | 74.63 | 49.09 | -551.55 | 44.51 | -546.97 | 52.26 | 63.48 | -3041.30 | 62.10 | -3039.92 | -65.54 |
| | | 240 | 80.49 | -19.68 | -835.35 | -19.75 | -835.28 | 7.18 | 22.52 | -2607.50 | 18.42 | -2603.41 | -103.71 |
| | | 239 | 65.18 | 19.98 | -510.60 | 19.80 | -510.42 | -9.85 | -14.42 | -2617.98 | -14.46 | -2617.93 | 11.06 |
| | | 194 | 74.02 | -30.83 | -862.69 | -41.01 | -852.51 | 91.47 | 160.63 | -2135.20 | 124.52 | -2099.09 | -285.64 |
| 108 | 102 | 199 | 36.98 | 15.05 | -309.29 | 14.83 | -309.07 | 8.48 | 30.96 | -1393.26 | 30.76 | -1393.06 | 16.99 |
| | | 240 | 38.45 | -6.38 | -391.16 | -6.49 | -391.05 | 6.37 | 10.34 | -1266.66 | 9.28 | -1265.60 | -36.67 |
| | | 239 | 33.51 | 6.59 | -286.46 | 6.46 | -286.33 | -6.38 | -5.34 | -1272.03 | -5.75 | -1271.61 | 22.83 |
| | | 194 | 36.84 | -8.59 | -409.03 | -12.20 | -405.42 | 37.82 | 73.63 | -1099.90 | 65.44 | -1091.71 | -97.68 |
| 109 | 2 | 205 | 123.24 | 61.75 | -996.97 | 57.60 | -992.83 | 66.12 | 109.44 | -4745.42 | 109.28 | -4745.25 | -28.52 |
| | | 241 | 130.58 | -23.87 | -1364.85 | -23.94 | -1364.78 | 9.67 | 23.35 | -4190.51 | 16.86 | -4184.01 | -165.36 |
| | | 240 | 110.61 | 24.75 | -943.06 | 24.56 | -942.86 | -13.79 | -11.34 | -4195.82 | -11.59 | -4195.58 | 31.82 |
| | | 199 | 122.11 | -42.39 | -1402.40 | -53.15 | -1391.65 | 120.46 | 199.36 | -3572.20 | 144.83 | -3517.67 | -450.21 |
| 109 | 31 | 205 | 39.89 | 9.56 | -365.80 | 9.56 | -365.80 | 0.15 | 37.05 | -1405.33 | 36.23 | -1404.52 | 34.20 |
| | | 241 | 40.50 | -4.16 | -409.84 | -4.29 | -409.71 | 7.37 | 6.16 | -1340.09 | 5.18 | -1339.12 | -36.23 |
| | | 240 | 37.54 | 3.51 | -346.89 | 3.37 | -346.75 | -6.97 | -2.84 | -1343.19 | -3.29 | -1342.73 | 24.69 |
| | | 199 | 39.80 | -4.92 | -425.48 | -6.83 | -423.58 | 28.23 | 63.66 | -1229.37 | 57.95 | -1223.66 | -85.73 |
| 109 | 63 | 205 | 39.68 | 9.50 | -362.38 | 9.50 | -362.38 | -0.49 | 37.86 | -1402.93 | 37.01 | -1402.08 | 34.99 |
| | | 241 | 40.23 | -3.94 | -405.01 | -4.05 | -404.90 | 6.76 | 6.82 | -1337.26 | 5.89 | -1336.32 | -35.37 |
| | | 240 | 37.26 | 3.81 | -342.05 | 3.68 | -341.93 | -6.61 | -2.48 | -1340.38 | -2.98 | -1339.88 | 25.79 |
| | | 199 | 39.60 | -4.83 | -422.10 | -6.79 | -420.13 | 28.57 | 63.90 | -1226.75 | 58.31 | -1221.17 | -84.70 |
| 109 | 85 | 205 | 39.56 | 9.47 | -360.29 | 9.47 | -360.29 | -0.87 | 38.35 | -1401.46 | 37.48 | -1400.58 | 35.46 |
| | | 241 | 40.07 | -3.81 | -402.08 | -3.91 | -401.98 | 6.38 | 7.22 | -1335.51 | 6.32 | -1334.61 | -34.84 |
| | | 240 | 37.10 | 3.99 | -339.11 | 3.87 | -339.00 | -6.39 | -2.27 | -1338.65 | -2.79 | -1338.13 | 26.46 |
| | | 199 | 39.47 | -4.77 | -420.05 | -6.77 | -418.04 | 28.78 | 64.04 | -1225.14 | 58.53 | -1219.63 | -84.07 |
| 109 | 87 | 205 | 87.44 | 42.24 | -712.49 | 39.67 | -709.92 | 43.96 | 77.91 | -3350.30 | 77.85 | -3350.24 | -14.29 |
| | | 241 | 92.39 | -16.43 | -963.51 | -16.48 | -963.45 | 7.29 | 16.50 | -2971.71 | 12.08 | -2967.29 | -114.89 |
| | | 240 | 78.69 | 17.03 | -673.92 | 16.89 | -673.77 | -10.05 | -7.89 | -2975.68 | -8.10 | -2975.47 | 24.74 |
| | | 199 | 86.67 | -28.92 | -990.92 | -36.34 | -983.50 | 84.15 | 140.95 | -2544.33 | 104.36 | -2507.73 | -311.35 |
| 109 | 97 | 205 | 84.11 | 39.13 | -690.37 | 36.99 | -688.24 | 39.45 | 77.18 | -3206.50 | 77.16 | -3206.48 | -7.97 |
| | | 241 | 88.64 | -15.31 | -922.17 | -15.37 | -922.11 | 7.44 | 15.84 | -2857.31 | 11.74 | -2853.20 | -108.56 |
| | | 240 | 75.89 | 15.87 | -652.93 | 15.73 | -652.79 | -9.91 | -7.43 | -2861.29 | -7.67 | -2861.05 | 26.31 |
| | | 199 | 83.41 | -26.70 | -949.28 | -33.63 | -942.35 | 79.67 | 137.13 | -2456.72 | 103.90 | -2423.49 | -291.71 |
| 109 | 102 | 205 | 39.56 | 9.47 | -360.29 | 9.47 | -360.29 | -0.87 | 38.35 | -1401.46 | 37.48 | -1400.58 | 35.46 |
| | | 241 | 40.07 | -3.81 | -402.08 | -3.91 | -401.98 | 6.38 | 7.22 | -1335.51 | 6.32 | -1334.61 | -34.84 |
| | | 240 | 37.10 | 3.99 | -339.11 | 3.87 | -339.00 | -6.39 | -2.27 | -1338.65 | -2.79 | -1338.13 | 26.46 |
| | | 199 | 39.47 | -4.77 | -420.05 | -6.77 | -418.04 | 28.78 | 64.04 | -1225.14 | 58.53 | -1219.63 | -84.07 |
| 110 | 2 | 210 | 136.08 | 47.80 | -1184.78 | 46.39 | -1183.37 | 41.66 | 125.75 | -4978.12 | 124.31 | -4976.68 | 85.92 |
| | | 242 | 141.37 | -14.39 | -1472.70 | -14.52 | -1472.57 | 13.54 | 14.76 | -4540.17 | 8.02 | -4533.44 | -175.04 |
| | | 241 | 124.68 | 16.40 | -1130.90 | 16.17 | -1130.67 | -16.21 | -0.88 | -4517.58 | -1.77 | -4516.69 | 63.54 |
| | | 205 | 134.40 | -33.72 | -1515.50 | -41.71 | -1507.51 | 108.54 | 168.57 | -3998.68 | 114.76 | -3944.87 | -470.48 |
| 110 | 31 | 210 | 41.18 | 4.33 | -401.60 | 4.12 | -401.38 | -9.36 | 45.00 | -1380.49 | 43.07 | -1378.56 | 52.42 |
| | | 242 | 40.85 | -1.63 | -405.21 | -1.76 | -405.08 | 7.25 | 2.86 | -1375.58 | 2.07 | -1374.80 | -32.95 |
| | | 241 | 39.86 | 0.96 | -384.20 | 0.82 | -384.07 | -7.12 | -0.06 | -1376.59 | -0.67 | -1375.98 | 28.81 |
| | | 205 | 41.16 | -0.47 | -421.48 | -1.32 | -420.63 | 18.85 | 53.97 | -1321.81 | 50.41 | -1318.25 | -69.94 |
| 110 | 63 | 210 | 40.97 | 4.33 | -397.99 | 4.09 | -397.75 | -9.91 | 45.86 | -1377.80 | 43.91 | -1375.84 | 52.68 |
| | | 242 | 40.56 | -1.37 | -400.14 | -1.48 | -400.03 | 6.71 | 3.60 | -1372.42 | 2.83 | -1371.65 | -32.67 |
| | | 241 | 39.57 | 1.22 | -379.13 | 1.11 | -379.02 | -6.66 | 0.53 | -1373.44 | -0.10 | -1372.82 | 29.35 |
| | | 205 | 40.94 | -0.44 | -417.89 | -1.34 | -416.99 | 19.29 | 54.57 | -1319.04 | 51.05 | -1315.52 | -69.43 |
| 110 | 85 | 210 | 40.83 | 4.34 | -395.80 | 4.07 | -395.54 | -10.24 | 46.38 | -1376.15 | 44.41 | -1374.18 | 52.84 |
| | | 242 | 40.39 | -1.22 | -397.06 | -1.32 | -396.96 | 6.39 | 4.05 | -1370.49 | 3.29 | -1369.72 | -32.50 |
| | | 241 | 39.39 | 1.38 | -376.05 | 1.28 | -375.94 | -6.39 | 0.89 | -1371.52 | 0.24 | -1370.88 | 29.68 |
| | | 205 | 40.80 | -0.42 | -415.70 | -1.35 | -414.78 | 19.56 | 54.93 | -1317.34 | 51.44 | -1313.85 | -69.11 |
| 110 | 87 | 210 | 96.17 | 32.27 | -842.45 | 31.47 | -841.65 | 26.41 | 89.95 | -3502.16 | 88.79 | -3501.01 | 64.32 |
| | | 242 | 99.63 | -9.76 | -1034.74 | -9.85 | -1034.64 | 9.88 | 10.34 | -3209.48 | 5.79 | -3204.92 | -121.03 |
| | | 241 | 88.37 | 11.12 | -804.07 | 10.95 | -803.90 | -11.66 | -0.48 | -3194.58 | -1.15 | -3193.91 | 46.32 |
| | | 205 | 95.04 | -22.57 | -1065.73 | -27.99 | -1060.31 | 74.97 | 119.01 | -2840.74 | 83.36 | -2805.09 | -322.87 |
| 110 | 97 | 210 | 92.14 | 29.48 | -812.21 | 28.88 | -811.61 | 22.37 | 89.20 | -3339.80 | 87.96 | -3338.56 | 65.17 |
| | | 242 | 95.19 | -8.95 | -985.59 | -9.05 | -985.49 | 9.76 | 9.86 | -3076.07 | 5.66 | -3071.87 | -113.76 |
| | | 241 | 84.92 | 10.19 | -775.12 | 10.03 | -774.96 | -11.37 | -0.30 | -3062.82 | -1.00 | -3062.12 | 46.16 |
| | | 205 | 91.12 | -20.40 | -1016.00 | -25.37 | -1011.03 | 70.14 | 115.96 | -2735.91 | 84.04 | -2703.99 | -300.02 |
| 110 | 102 | 210 | 40.83 | 4.34 | -395.80 | 4.07 | -395.54 | -10.24 | 46.38 | -1376.15 | 44.41 | -1374.18 | 52.84 |
| | | 242 | 40.39 | -1.22 | -397.06 | -1.32 | -396.96 | 6.39 | 4.05 | -1370.49 | 3.29 | -1369.72 | -32.50 |
| | | 241 | 39.39 | 1.38 | -376.05 | 1.28 | -375.94 | -6.39 | 0.89 | -1371.52 | 0.24 | -1370.88 | 29.68 |
| | | 205 | 40.80 | -0.42 | -415.70 | -1.35 | -414.78 | 19.56 | 54.93 | -1317.34 | 51.44 | -1313.85 | -69.11 |
| 111 | 2 | 198 | 148.58 | 31.93 | -1384.09 | 31.65 | -1383.82 | -19.73 | 48.70 | -5229.95 | 33.98 | -5215.23 | 278.33 |
| | | 243 | 149.70 | -3.70 | -1507.60 | -4.20 | -1507.10 | 27.26 | 35.10 | -4954.01 | 28.92 | -4947.82 | -175.50 |
| | | 242 | 136.93 | 4.71 | -1300.12 | 4.08 | -1299.48 | -28.76 | -7.30 | -4797.91 | -9.91 | -4795.30 | 111.76 |
| | | 210 | 144.56 | -12.41 | -1590.66 | -20.11 | -1582.96 | 109.96 | 174.35 | -4386.75 | 119.29 | -4331.69 | -498.11 |
| 111 | 24 | 198 | 41.15 | -0.47 | -421.46 | -1.32 | -420.62 | -18.85 | 53.99 | -1321.80 | 50.43 | -1318.24 | 69.91 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|--------|----------|---------|--------|----------|--------|----------|---------|
| | | 243 | 39.86 | 0.96 | -384.20 | 0.82 | -384.07 | 7.12 | -0.08 | -1376.58 | -0.68 | -1375.98 | -28.84 |
| | | 242 | 40.85 | -1.62 | -405.21 | -1.76 | -405.08 | -7.25 | 2.87 | -1375.58 | 2.08 | -1374.80 | 32.93 |
| | | 210 | 41.18 | 4.33 | -401.60 | 4.12 | -401.39 | 9.36 | 44.96 | -1380.49 | 43.03 | -1378.56 | -52.48 |
| 111 | 56 | 198 | 40.94 | -0.44 | -417.87 | -1.33 | -416.98 | -19.30 | 54.60 | -1319.03 | 51.08 | -1315.51 | 69.39 |
| | | 243 | 39.57 | 1.22 | -379.13 | 1.10 | -379.01 | 6.66 | 0.52 | -1373.44 | -0.11 | -1372.81 | -29.38 |
| | | 242 | 40.56 | -1.37 | -400.14 | -1.48 | -400.03 | -6.71 | 3.61 | -1372.42 | 2.84 | -1371.65 | 32.65 |
| | | 210 | 40.97 | 4.33 | -398.00 | 4.09 | -397.75 | 9.90 | 45.83 | -1377.80 | 43.87 | -1375.85 | -52.74 |
| 111 | 85 | 198 | 40.80 | -0.42 | -415.69 | -1.34 | -414.77 | -19.57 | 54.96 | -1317.33 | 51.47 | -1313.84 | 69.08 |
| | | 243 | 39.39 | 1.38 | -376.05 | 1.28 | -375.94 | 6.39 | 0.88 | -1371.52 | 0.23 | -1370.87 | -29.70 |
| | | 242 | 40.39 | -1.21 | -397.06 | -1.32 | -396.96 | -6.39 | 4.06 | -1370.49 | 3.30 | -1369.72 | 32.48 |
| | | 210 | 40.83 | 4.33 | -395.80 | 4.07 | -395.54 | 10.24 | 46.35 | -1376.16 | 44.38 | -1374.19 | -52.90 |
| 111 | 87 | 198 | 104.49 | 21.17 | -978.10 | 20.92 | -977.85 | -15.76 | 39.79 | -3662.28 | 29.52 | -3652.00 | 194.76 |
| | | 243 | 105.05 | -2.28 | -1055.21 | -2.63 | -1054.86 | 19.03 | 23.49 | -3485.51 | 19.31 | -3481.33 | -120.96 |
| | | 242 | 96.67 | 2.98 | -919.68 | 2.54 | -919.25 | -20.02 | -4.32 | -3381.34 | -6.17 | -3379.50 | 78.84 |
| | | 210 | 101.82 | -7.80 | -1113.11 | -12.86 | -1108.05 | 74.67 | 121.47 | -3107.04 | 85.44 | -3071.02 | -339.13 |
| 111 | 97 | 198 | 99.63 | 18.94 | -937.12 | 18.64 | -936.82 | -16.86 | 45.31 | -3475.92 | 35.58 | -3466.19 | 184.79 |
| | | 243 | 99.94 | -1.87 | -1001.14 | -2.19 | -1000.81 | 18.00 | 21.26 | -3324.64 | 17.41 | -3320.80 | -113.32 |
| | | 242 | 92.53 | 2.51 | -882.04 | 2.11 | -881.64 | -18.89 | -3.32 | -3230.77 | -5.10 | -3228.99 | 75.82 |
| | | 210 | 97.23 | -6.52 | -1055.86 | -11.02 | -1051.36 | 68.60 | 116.75 | -2983.39 | 84.94 | -2951.58 | -312.43 |
| 111 | 102 | 198 | 40.80 | -0.42 | -415.69 | -1.34 | -414.77 | -19.57 | 54.96 | -1317.33 | 51.47 | -1313.84 | 69.08 |
| | | 243 | 39.39 | 1.38 | -376.05 | 1.28 | -375.94 | 6.39 | 0.88 | -1371.52 | 0.23 | -1370.87 | -29.70 |
| | | 242 | 40.39 | -1.21 | -397.06 | -1.32 | -396.96 | -6.39 | 4.06 | -1370.49 | 3.30 | -1369.72 | 32.48 |
| | | 210 | 40.83 | 4.33 | -395.80 | 4.07 | -395.54 | 10.24 | 46.35 | -1376.16 | 44.38 | -1374.19 | -52.90 |
| 112 | 2 | 206 | 152.74 | 12.54 | -1566.92 | 6.05 | -1560.43 | -101.05 | 119.16 | -4975.30 | 74.67 | -4930.81 | 474.00 |
| | | 244 | 147.74 | 7.21 | -1425.93 | 6.10 | -1424.82 | 39.84 | 8.26 | -5094.41 | 2.41 | -5088.56 | -172.62 |
| | | 243 | 148.21 | -6.86 | -1449.36 | -8.11 | -1448.11 | -42.46 | 33.87 | -5056.76 | 29.27 | -5052.16 | 153.03 |
| | | 198 | 151.80 | 17.76 | -1550.08 | 12.43 | -1544.75 | 91.25 | 43.90 | -4995.04 | -4.18 | -4946.96 | -489.85 |
| 112 | 24 | 206 | 39.80 | -4.92 | -425.46 | -6.83 | -423.56 | -28.23 | 63.67 | -1229.36 | 57.96 | -1223.65 | 85.73 |
| | | 244 | 37.54 | 3.51 | -346.88 | 3.37 | -346.74 | 6.97 | -2.85 | -1343.18 | -3.31 | -1342.72 | -24.72 |
| | | 243 | 40.50 | -4.16 | -409.83 | -4.29 | -409.70 | -7.37 | 6.16 | -1340.09 | 5.18 | -1339.11 | 36.22 |
| | | 198 | 39.89 | 9.56 | -365.80 | 9.56 | -365.80 | -0.15 | 37.01 | -1405.32 | 36.19 | -1404.51 | -34.29 |
| 112 | 56 | 206 | 39.59 | -4.83 | -422.08 | -6.79 | -420.11 | -28.58 | 63.92 | -1226.74 | 58.33 | -1221.15 | 84.70 |
| | | 244 | 37.26 | 3.81 | -342.05 | 3.68 | -341.92 | 6.61 | -2.49 | -1340.37 | -2.99 | -1339.87 | -25.82 |
| | | 243 | 40.23 | -3.94 | -405.01 | -4.05 | -404.89 | -6.76 | 6.83 | -1337.25 | 5.90 | -1336.32 | 35.36 |
| | | 198 | 39.68 | 9.50 | -362.37 | 9.50 | -362.37 | 0.48 | 37.83 | -1402.93 | 36.97 | -1402.07 | -35.07 |
| 112 | 85 | 206 | 39.47 | -4.77 | -420.03 | -6.77 | -418.02 | -28.79 | 64.06 | -1225.13 | 58.56 | -1219.62 | 84.07 |
| | | 244 | 37.10 | 3.99 | -339.11 | 3.87 | -338.99 | 6.39 | -2.27 | -1338.64 | -2.80 | -1338.12 | -26.50 |
| | | 243 | 40.07 | -3.80 | -402.07 | -3.91 | -401.97 | -6.38 | 7.23 | -1335.51 | 6.33 | -1334.60 | 34.84 |
| | | 198 | 39.56 | 9.47 | -360.29 | 9.47 | -360.29 | 0.87 | 38.32 | -1401.45 | 37.44 | -1400.58 | -35.55 |
| 112 | 87 | 206 | 107.09 | 7.73 | -1100.62 | 3.13 | -1096.02 | -71.21 | 87.85 | -3480.09 | 57.59 | -3449.82 | 327.21 |
| | | 244 | 103.44 | 5.33 | -995.83 | 4.58 | -995.08 | 27.41 | 5.17 | -3574.73 | 1.24 | -3570.79 | -118.61 |
| | | 243 | 104.15 | -5.09 | -1019.84 | -5.93 | -1019.00 | -29.16 | 23.54 | -3549.24 | 20.36 | -3546.05 | 106.67 |
| | | 198 | 106.47 | 12.96 | -1081.27 | 9.55 | -1077.87 | 60.95 | 33.41 | -3515.91 | 2.21 | -3484.72 | -331.31 |
| 112 | 97 | 206 | 101.79 | 6.30 | -1048.03 | 1.89 | -1043.62 | -68.02 | 89.68 | -3299.21 | 61.81 | -3271.34 | 306.05 |
| | | 244 | 98.17 | 5.34 | -942.64 | 4.65 | -941.95 | 25.54 | 4.34 | -3400.43 | 0.73 | -3396.83 | -110.76 |
| | | 243 | 99.21 | -5.11 | -972.87 | -5.87 | -972.11 | -27.11 | 22.20 | -3377.09 | 19.19 | -3374.08 | 101.19 |
| | | 198 | 101.25 | 12.82 | -1022.30 | 9.89 | -1019.38 | 54.97 | 36.37 | -3354.81 | 9.08 | -3327.51 | -303.01 |
| 112 | 102 | 206 | 39.47 | -4.77 | -420.03 | -6.77 | -418.02 | -28.79 | 64.06 | -1225.13 | 58.56 | -1219.62 | 84.07 |
| | | 244 | 37.10 | 3.99 | -339.11 | 3.87 | -338.99 | 6.39 | -2.27 | -1338.64 | -2.80 | -1338.12 | -26.50 |
| | | 243 | 40.07 | -3.80 | -402.07 | -3.91 | -401.97 | -6.38 | 7.23 | -1335.51 | 6.33 | -1334.60 | 34.84 |
| | | 198 | 39.56 | 9.47 | -360.29 | 9.47 | -360.29 | 0.87 | 38.32 | -1401.45 | 37.44 | -1400.58 | -35.55 |
| 113 | 2 | 195 | 147.68 | -12.14 | -1656.50 | -29.44 | -1639.20 | -167.76 | 168.71 | -4474.01 | 83.00 | -4388.30 | 624.97 |
| | | 245 | 136.27 | 20.33 | -1226.26 | 18.93 | -1224.85 | 41.84 | -1.54 | -4977.44 | -5.73 | -4973.24 | -144.44 |
| | | 244 | 150.66 | -18.99 | -1534.38 | -20.39 | -1532.98 | -46.05 | 45.56 | -4955.72 | 38.25 | -4948.41 | 191.04 |
| | | 206 | 148.09 | 49.08 | -1359.59 | 48.23 | -1358.74 | 34.66 | 7.42 | -5288.34 | -19.27 | -5261.65 | -375.00 |
| 113 | 24 | 195 | 37.12 | -8.83 | -413.64 | -12.32 | -410.15 | -37.43 | 73.63 | -1103.42 | 65.08 | -1094.87 | 99.95 |
| | | 245 | 33.89 | 6.08 | -293.29 | 5.93 | -293.13 | 6.81 | -5.81 | -1275.47 | -6.14 | -1275.14 | -20.43 |
| | | 244 | 38.82 | -6.67 | -397.96 | -6.81 | -397.82 | -7.42 | 9.60 | -1270.20 | 8.42 | -1269.01 | 38.85 |
| | | 206 | 37.26 | 15.24 | -314.05 | 14.96 | -313.77 | -9.60 | 29.95 | -1396.25 | 29.79 | -1396.10 | -15.09 |
| 113 | 56 | 195 | 36.95 | -8.68 | -410.76 | -12.24 | -407.19 | -37.67 | 73.64 | -1101.24 | 65.31 | -1092.91 | 98.56 |
| | | 245 | 33.65 | 6.40 | -289.04 | 6.26 | -288.89 | 6.55 | -5.52 | -1273.33 | -5.90 | -1272.95 | -21.94 |
| | | 244 | 38.59 | -6.49 | -393.72 | -6.61 | -393.60 | -6.77 | 10.06 | -1268.01 | 8.96 | -1266.90 | 37.50 |
| | | 206 | 37.09 | 15.12 | -311.08 | 14.88 | -310.84 | -8.90 | 30.56 | -1394.40 | 30.37 | -1394.21 | -16.33 |
| 113 | 85 | 195 | 36.84 | -8.59 | -409.00 | -12.20 | -405.39 | -37.82 | 73.65 | -1099.89 | 65.45 | -1091.70 | 97.71 |
| | | 245 | 33.51 | 6.59 | -286.45 | 6.45 | -286.32 | 6.38 | -5.35 | -1272.01 | -5.76 | -1271.60 | -22.86 |
| | | 244 | 38.45 | -6.38 | -391.15 | -6.48 | -391.04 | -6.37 | 10.34 | -1266.65 | 9.29 | -1265.59 | 36.67 |
| | | 206 | 36.98 | 15.05 | -309.28 | 14.83 | -309.06 | -8.48 | 30.93 | -1393.25 | 30.72 | -1393.04 | -17.09 |
| 113 | 87 | 195 | 103.36 | -9.24 | -1158.86 | -21.25 | -1146.86 | -116.88 | 121.88 | -3128.91 | 64.06 | -3071.09 | 429.68 |
| | | 245 | 95.32 | 14.43 | -855.69 | 13.48 | -854.74 | 28.74 | -1.76 | -3487.87 | -4.59 | -3485.04 | -99.34 |
| | | 244 | 105.56 | -13.52 | -1075.07 | -14.46 | -1074.13 | -31.55 | 31.74 | -3472.68 | 26.74 | -3467.69 | 132.25 |
| | | 206 | 103.66 | 34.62 | -947.53 | 34.13 | -947.03 | 21.97 | 8.44 | -3710.70 | -8.75 | -3693.51 | -252.28 |
| 113 | 97 | 195 | 98.07 | -9.50 | -1098.94 | -20.80 | -1087.64 | -110.37 | 121.35 | -2965.74 | 68.58 | -2912.97 | 400.14 |
| | | 245 | 90.37 | 13.88 | -809.31 | 13.01 | -808.44 | 26.74 | -2.31 | -3313.16 | -4.92 | -3310.55 | -92.91 |
| | | 244 | 100.27 | -13.05 | -1021.07 | -13.90 | -1020.22 | -29.27 | 30.00 | -3298.77 | 25.34 | -3294.10 | 124.47 |
| | | 206 | 98.36 | 33.12 | -894.99 | 32.75 | -894.61 | 18.62 | 13.21 | -3529.30 | -1.71 | -3514.39 | -229.35 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|--------|----------|---------|----------|---------|--------|----------|--------|----------|---------|
| 113 | 102 | 195 | 36.84 | -8.59 | -409.00 | -12.20 | -405.39 | -37.82 | 73.65 | -1099.89 | 65.45 | -1091.70 | 97.71 |
| | | 245 | 33.51 | 6.59 | -286.45 | 6.45 | -286.32 | 6.38 | -5.35 | -1272.01 | -5.76 | -1271.60 | -22.86 |
| | | 244 | 38.45 | -6.38 | -391.15 | -6.48 | -391.04 | -6.37 | 10.34 | -1266.65 | 9.29 | -1265.59 | 36.67 |
| | | 206 | 36.98 | 15.05 | -309.28 | 14.83 | -309.06 | -8.48 | 30.93 | -1393.25 | 30.72 | -1393.04 | -17.09 |
| 114 | 2 | 203 | 133.18 | -34.03 | -1635.12 | -65.45 | -1603.70 | -222.08 | 229.35 | -3732.47 | 92.08 | -3595.20 | 724.55 |
| | | 246 | 115.70 | 32.68 | -922.32 | 31.15 | -920.79 | 38.19 | -11.02 | -4600.07 | -13.12 | -4597.97 | -98.22 |
| | | 245 | 143.89 | -31.79 | -1513.41 | -33.10 | -1512.10 | -43.92 | 55.28 | -4593.80 | 45.57 | -4584.09 | 212.24 |
| | | 195 | 134.92 | 84.22 | -1058.91 | 83.27 | -1057.96 | -32.90 | -18.13 | -5331.32 | -26.24 | -5323.21 | -207.49 |
| 114 | 24 | 203 | 33.13 | -11.96 | -386.45 | -17.78 | -380.63 | -46.33 | 83.33 | -945.16 | 70.91 | -932.74 | 112.36 |
| | | 246 | 28.94 | 8.66 | -223.91 | 8.47 | -223.72 | 6.64 | -9.15 | -1174.36 | -9.37 | -1174.14 | -15.94 |
| | | 245 | 35.83 | -9.13 | -369.87 | -9.28 | -369.72 | -7.39 | 13.02 | -1166.89 | 11.63 | -1165.49 | 40.54 |
| | | 195 | 33.33 | 21.62 | -246.85 | 20.28 | -245.51 | -18.91 | 23.88 | -1354.04 | 23.86 | -1354.02 | 5.04 |
| 114 | 56 | 203 | 33.00 | -11.78 | -384.28 | -17.67 | -378.39 | -46.47 | 83.54 | -943.38 | 71.44 | -931.28 | 110.81 |
| | | 246 | 28.76 | 8.99 | -220.54 | 8.80 | -220.36 | 6.48 | -8.58 | -1172.81 | -8.85 | -1172.54 | -17.62 |
| | | 245 | 35.64 | -9.00 | -366.52 | -9.13 | -366.40 | -6.74 | 13.21 | -1165.18 | 11.93 | -1163.90 | 38.90 |
| | | 195 | 33.19 | 21.45 | -244.56 | 20.19 | -243.31 | -18.21 | 24.18 | -1352.59 | 24.17 | -1352.58 | 3.53 |
| 114 | 85 | 203 | 32.93 | -11.67 | -382.96 | -17.60 | -377.02 | -46.56 | 83.66 | -942.26 | 71.76 | -930.36 | 109.85 |
| | | 246 | 28.65 | 9.18 | -218.50 | 9.01 | -218.32 | 6.38 | -8.23 | -1171.82 | -8.53 | -1171.52 | -18.65 |
| | | 245 | 35.53 | -8.92 | -364.49 | -9.03 | -364.38 | -6.34 | 13.33 | -1164.10 | 12.11 | -1162.88 | 37.90 |
| | | 195 | 33.11 | 21.34 | -243.16 | 20.14 | -241.96 | -17.78 | 24.37 | -1351.67 | 24.37 | -1351.66 | 2.60 |
| 114 | 87 | 203 | 93.17 | -24.25 | -1141.13 | -45.98 | -1119.40 | -154.26 | 163.23 | -2613.13 | 70.95 | -2520.85 | 497.68 |
| | | 246 | 80.95 | 23.01 | -644.01 | 21.97 | -642.97 | 26.31 | -8.45 | -3222.95 | -9.89 | -3221.52 | -67.97 |
| | | 245 | 100.67 | -22.39 | -1057.53 | -23.27 | -1056.65 | -30.12 | 38.61 | -3217.72 | 32.00 | -3211.11 | 146.55 |
| | | 195 | 94.36 | 58.94 | -738.31 | 58.20 | -737.57 | -24.30 | -9.13 | -3734.14 | -14.25 | -3729.03 | -137.98 |
| 114 | 97 | 203 | 88.37 | -23.43 | -1079.41 | -43.79 | -1059.05 | -145.21 | 159.55 | -2479.59 | 75.64 | -2395.68 | 463.02 |
| | | 246 | 76.78 | 21.96 | -609.50 | 21.00 | -608.54 | 24.55 | -8.72 | -3061.03 | -10.07 | -3059.68 | -64.10 |
| | | 245 | 95.46 | -21.38 | -1001.64 | -22.18 | -1000.84 | -27.98 | 36.58 | -3055.26 | 30.46 | -3049.13 | 137.51 |
| | | 195 | 89.47 | 55.92 | -697.70 | 55.14 | -696.92 | -24.31 | -3.19 | -3545.02 | -7.52 | -3540.69 | -123.78 |
| 114 | 102 | 203 | 32.93 | -11.67 | -382.96 | -17.60 | -377.02 | -46.56 | 83.66 | -942.26 | 71.76 | -930.36 | 109.85 |
| | | 246 | 28.65 | 9.18 | -218.50 | 9.01 | -218.32 | 6.38 | -8.23 | -1171.82 | -8.53 | -1171.52 | -18.65 |
| | | 245 | 35.53 | -8.92 | -364.49 | -9.03 | -364.38 | -6.34 | 13.33 | -1164.10 | 12.11 | -1162.88 | 37.90 |
| | | 195 | 33.11 | 21.34 | -243.16 | 20.14 | -241.96 | -17.78 | 24.37 | -1351.67 | 24.37 | -1351.66 | 2.60 |
| 115 | 2 | 197 | 107.77 | -56.78 | -1463.12 | -97.89 | -1422.00 | -236.92 | 376.14 | -2506.29 | 198.87 | -2506.29 | 714.80 |
| | | 247 | 86.59 | 43.80 | -558.84 | 42.80 | -557.85 | 24.46 | -46.97 | -3865.15 | -47.50 | -3864.63 | -44.66 |
| | | 246 | 127.70 | -42.21 | -1375.62 | -42.93 | -1374.90 | -31.09 | 79.17 | -3976.40 | 68.54 | -3965.77 | 207.34 |
| | | 203 | 112.65 | 124.66 | -676.89 | 108.15 | -660.38 | -113.85 | -58.24 | -5126.18 | -58.27 | -5126.15 | 11.00 |
| 115 | 24 | 197 | 27.87 | -13.86 | -344.53 | -23.17 | -335.22 | -54.71 | 93.40 | -756.89 | 75.31 | -738.80 | 122.70 |
| | | 247 | 22.77 | 11.17 | -139.53 | 10.89 | -139.25 | 6.48 | -12.10 | -1041.40 | -12.22 | -1041.28 | -10.88 |
| | | 246 | 31.57 | -11.47 | -326.06 | -11.64 | -325.89 | -7.26 | 15.61 | -1031.83 | 13.99 | -1030.22 | 41.12 |
| | | 203 | 28.12 | 29.64 | -165.55 | 25.51 | -161.42 | -28.09 | 18.52 | -1280.02 | 17.98 | -1279.48 | 26.54 |
| 115 | 56 | 197 | 27.79 | -13.64 | -343.20 | -23.03 | -333.82 | -54.82 | 93.85 | -754.73 | 76.18 | -737.06 | 121.17 |
| | | 247 | 22.64 | 11.49 | -137.27 | 11.21 | -137.00 | 6.41 | -11.24 | -1039.41 | -11.39 | -1039.26 | -12.50 |
| | | 246 | 31.43 | -11.40 | -323.82 | -11.54 | -323.68 | -6.63 | 15.87 | -1029.60 | 14.38 | -1028.11 | 39.43 |
| | | 203 | 28.03 | 29.38 | -164.03 | 25.42 | -160.06 | -27.41 | 18.90 | -1278.13 | 18.42 | -1277.65 | 24.97 |
| 115 | 85 | 197 | 27.74 | -13.51 | -342.40 | -22.94 | -332.97 | -54.88 | 94.12 | -753.39 | 76.71 | -735.98 | 120.22 |
| | | 247 | 22.56 | 11.68 | -135.90 | 11.40 | -135.62 | 6.36 | -10.71 | -1038.18 | -10.89 | -1038.01 | -13.52 |
| | | 246 | 31.35 | -11.35 | -322.45 | -11.47 | -322.33 | -6.25 | 16.03 | -1028.22 | 14.62 | -1026.80 | 38.39 |
| | | 203 | 27.97 | 29.23 | -163.10 | 25.37 | -159.23 | -26.99 | 19.14 | -1276.96 | 18.70 | -1276.52 | 23.99 |
| 115 | 87 | 197 | 75.54 | -39.66 | -1021.06 | -68.32 | -992.40 | -165.26 | 262.25 | -1888.43 | 142.81 | -1768.99 | 492.56 |
| | | 247 | 60.73 | 30.75 | -390.68 | 30.05 | -389.98 | 17.15 | -32.74 | -2715.19 | -33.12 | -2714.82 | -31.58 |
| | | 246 | 89.32 | -29.65 | -960.08 | -30.15 | -959.58 | -21.56 | 54.89 | -2788.00 | 47.64 | -2780.76 | 143.35 |
| | | 203 | 78.83 | 87.01 | -473.01 | 75.48 | -461.48 | -79.50 | -36.32 | -3587.67 | -36.35 | -3587.64 | 10.53 |
| 115 | 97 | 197 | 71.79 | -37.54 | -965.81 | -64.63 | -938.72 | -156.24 | 249.86 | -1801.29 | 140.98 | -1692.41 | 459.85 |
| | | 247 | 57.75 | 29.28 | -370.21 | 28.61 | -369.54 | 16.31 | -30.92 | -2585.76 | -31.29 | -2585.39 | -30.63 |
| | | 246 | 84.67 | -28.24 | -908.19 | -28.71 | -907.72 | -20.26 | 51.61 | -2649.93 | 44.88 | -2643.20 | 134.70 |
| | | 203 | 74.78 | 82.31 | -448.02 | 71.41 | -437.12 | -75.24 | -28.14 | -3403.21 | -28.19 | -3403.16 | 12.81 |
| 115 | 102 | 197 | 27.74 | -13.51 | -342.40 | -22.94 | -332.97 | -54.88 | 94.12 | -753.39 | 76.71 | -735.98 | 120.22 |
| | | 247 | 22.56 | 11.68 | -135.90 | 11.40 | -135.62 | 6.36 | -10.71 | -1038.18 | -10.89 | -1038.01 | -13.52 |
| | | 246 | 31.35 | -11.35 | -322.45 | -11.47 | -322.33 | -6.25 | 16.03 | -1028.22 | 14.62 | -1026.80 | 38.39 |
| | | 203 | 27.97 | 29.23 | -163.10 | 25.37 | -159.23 | -26.99 | 19.14 | -1276.96 | 18.70 | -1276.52 | 23.99 |
| 116 | 2 | 209 | 79.51 | -68.89 | -1177.58 | -118.60 | -1127.88 | -229.42 | 375.24 | -1866.77 | 160.14 | -1651.68 | 660.29 |
| | | 248 | 56.98 | 52.82 | -184.10 | 52.25 | -183.53 | 11.58 | -29.01 | -3111.02 | -29.21 | -3110.83 | 24.39 |
| | | 247 | 101.53 | -51.15 | -1125.37 | -51.41 | -1125.11 | -16.73 | 52.20 | -3090.95 | 39.92 | -3078.67 | 196.11 |
| | | 197 | 82.30 | 191.56 | -311.75 | 121.60 | -241.79 | -174.12 | 64.27 | -4419.60 | 51.28 | -4406.61 | 240.98 |
| 116 | 24 | 209 | 21.38 | -13.18 | -289.34 | -28.29 | -274.23 | -62.81 | 104.73 | -540.33 | 77.20 | -512.81 | 130.38 |
| | | 248 | 15.40 | 13.41 | -41.84 | 12.66 | -41.08 | 6.41 | -13.93 | -875.15 | -13.96 | -875.12 | -4.35 |
| | | 247 | 26.08 | -13.35 | -267.29 | -13.54 | -267.10 | -6.92 | 17.18 | -864.53 | 15.31 | -862.67 | 40.46 |
| | | 197 | 21.70 | 43.55 | -75.64 | 30.51 | -62.60 | -37.20 | 15.20 | -1173.77 | 13.04 | -1171.61 | 50.63 |
| 116 | 56 | 209 | 21.31 | -13.08 | -288.46 | -28.13 | -273.40 | -62.61 | 105.30 | -537.32 | 78.28 | -510.30 | 128.97 |
| | | 248 | 15.32 | 13.68 | -40.70 | 12.94 | -39.96 | 6.28 | -12.92 | -872.21 | -12.96 | -872.17 | -5.82 |
| | | 247 | 25.99 | -13.33 | -266.17 | -13.49 | -266.01 | -6.37 | 17.76 | -861.37 | 16.04 | -859.64 | 38.90 |
| | | 197 | 21.62 | 43.18 | -74.52 | 30.42 | -61.76 | -36.59 | 15.89 | -1171.07 | 13.85 | -1169.03 | 49.14 |
| 116 | 85 | 209 | 21.27 | -13.01 | -287.91 | -28.03 | -272.89 | -62.48 | 105.63 | -535.46 | 78.93 | -508.76 | 128.07 |
| | | 248 | 15.26 | 13.84 | -40.00 | 13.11 | -39.28 | 6.20 | -12.30 | -870.42 | -12.35 | -870.37 | -6.74 |
| | | 247 | 25.93 | -13.31 | -265.49 | -13.46 | -265.35 | -6.03 | 18.12 | -859.44 | 16.48 | -857.79 | 37.93 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|---------|---------|---------|---------|----------|---------|----------|--------|
| | | 197 | 21.58 | 42.96 | -73.84 | 30.38 | -61.25 | -36.22 | 16.31 | -1169.42 | 14.35 | -1167.45 | 48.20 |
| 116 | 87 | 209 | 55.84 | -47.68 | -823.42 | -82.80 | -788.30 | -161.28 | 263.28 | -1314.95 | 117.29 | -1168.95 | 457.27 |
| | | 248 | 40.02 | 37.02 | -128.03 | 36.58 | -127.59 | 8.55 | -21.01 | -2190.04 | -21.12 | -2189.94 | 15.36 |
| | | 247 | 71.14 | -35.88 | -785.64 | -36.07 | -785.45 | -11.96 | 37.18 | -2175.19 | 28.81 | -2166.82 | 135.80 |
| | | 197 | 57.74 | 133.40 | -217.65 | 85.12 | -169.36 | -120.91 | 45.00 | -3102.30 | 36.10 | -3093.40 | 167.08 |
| 116 | 97 | 209 | 53.16 | -44.71 | -780.46 | -78.36 | -746.81 | -153.70 | 252.38 | -1255.38 | 118.29 | -1121.30 | 429.17 |
| | | 248 | 38.11 | 35.19 | -120.68 | 34.72 | -120.21 | 8.54 | -20.61 | -2090.13 | -20.69 | -2090.06 | 12.55 |
| | | 247 | 67.58 | -34.11 | -743.40 | -34.30 | -743.21 | -11.59 | 35.95 | -2075.30 | 28.18 | -2067.53 | 127.85 |
| | | 197 | 54.93 | 125.91 | -205.95 | 80.76 | -160.80 | -113.77 | 44.68 | -2951.68 | 36.43 | -2943.42 | 157.04 |
| 116 | 102 | 209 | 21.27 | -13.01 | -287.91 | -28.03 | -272.89 | -62.48 | 105.63 | -535.46 | 78.93 | -508.76 | 128.07 |
| | | 248 | 15.26 | 13.84 | -40.00 | 13.11 | -39.28 | 6.20 | -12.30 | -870.42 | -12.35 | -870.37 | -6.74 |
| | | 247 | 25.93 | -13.31 | -265.49 | -13.46 | -265.35 | -6.03 | 18.12 | -859.44 | 16.48 | -857.79 | 37.93 |
| | | 197 | 21.58 | 42.96 | -73.84 | 30.38 | -61.25 | -36.22 | 16.31 | -1169.42 | 14.35 | -1167.45 | 48.20 |
| 117 | 2 | 207 | 49.00 | -55.45 | -860.22 | -126.36 | -789.32 | -228.11 | 422.86 | -1053.29 | 128.45 | -758.89 | 589.84 |
| | | 249 | 42.91 | 193.48 | 48.63 | 48.87 | 193.24 | 5.93 | -16.15 | -2304.66 | -19.88 | -2300.93 | 92.34 |
| | | 248 | 73.40 | -52.64 | -808.21 | -52.78 | -808.08 | -10.21 | 46.42 | -2276.14 | 34.03 | -2263.74 | 169.20 |
| | | 209 | 67.15 | 344.99 | -54.65 | 129.20 | 161.14 | -199.18 | 119.38 | -3738.41 | 72.50 | -3691.52 | 422.71 |
| 117 | 30 | 207 | 13.69 | -8.28 | -221.30 | -11.94 | -197.64 | -66.94 | 122.13 | -296.87 | 78.05 | -252.79 | 128.56 |
| | | 249 | 12.97 | 66.23 | 11.62 | 32.19 | 65.66 | 5.54 | -10.23 | -669.64 | -10.23 | -669.64 | 0.62 |
| | | 248 | 19.53 | -13.40 | -196.32 | -13.52 | -196.21 | -4.54 | 17.25 | -663.73 | 15.58 | -662.06 | 33.68 |
| | | 209 | 18.10 | 87.43 | -4.62 | 34.42 | 48.39 | -45.49 | 16.20 | -1033.50 | 10.77 | -1028.07 | 75.31 |
| 117 | 62 | 207 | 13.55 | -8.04 | -220.12 | -32.13 | -196.03 | -67.29 | 122.28 | -295.16 | 76.86 | -249.74 | 129.99 |
| | | 249 | 12.99 | 67.68 | 11.50 | 11.99 | 67.19 | 5.24 | -11.33 | -666.18 | -11.33 | -666.18 | 2.08 |
| | | 248 | 19.41 | -13.31 | -194.76 | -13.44 | -194.63 | -4.90 | 18.30 | -660.37 | 16.48 | -658.55 | 35.12 |
| | | 209 | 18.16 | 88.84 | -4.29 | 34.50 | 50.05 | -45.91 | 17.40 | -1030.61 | 11.76 | -1024.97 | 76.69 |
| 117 | 85 | 207 | 13.47 | -7.89 | -219.40 | -32.25 | -195.04 | -67.51 | 122.42 | -294.15 | 76.14 | -247.88 | 130.91 |
| | | 249 | 13.00 | 68.57 | 11.42 | 11.87 | 68.12 | 5.06 | -11.99 | -664.08 | -12.00 | -664.06 | 3.01 |
| | | 248 | 19.33 | -13.25 | -193.82 | -13.40 | -193.67 | -5.12 | 18.94 | -658.33 | 17.02 | -656.41 | 36.04 |
| | | 209 | 18.20 | 89.70 | -4.09 | 34.55 | 51.06 | -46.17 | 18.13 | -1028.86 | 12.35 | -1023.08 | 77.57 |
| 117 | 87 | 207 | 34.45 | -38.07 | -602.68 | -88.54 | -552.22 | -161.07 | 297.43 | -740.62 | 95.79 | -538.98 | 410.68 |
| | | 249 | 30.34 | 138.12 | 33.96 | 34.16 | 137.91 | 4.63 | -12.47 | -1624.88 | -14.86 | -1622.50 | 61.96 |
| | | 248 | 51.51 | -36.87 | -564.65 | -36.97 | -564.54 | -7.49 | 33.44 | -1605.17 | 24.96 | -1596.68 | 117.61 |
| | | 209 | 47.18 | 241.92 | -36.95 | 90.74 | 114.23 | -138.94 | 81.83 | -2629.28 | 49.98 | -2597.43 | 292.15 |
| 117 | 97 | 207 | 32.85 | -35.40 | -572.39 | -84.10 | -523.69 | -154.20 | 285.40 | -705.51 | 98.52 | -518.63 | 387.63 |
| | | 249 | 29.08 | 133.67 | 32.14 | 32.37 | 133.43 | 4.86 | -12.97 | -1553.17 | -14.99 | -1551.14 | 55.84 |
| | | 248 | 49.01 | -35.00 | -534.70 | -35.11 | -534.59 | -7.44 | 32.71 | -1534.79 | 24.78 | -1526.86 | 111.22 |
| | | 209 | 44.95 | 229.98 | -33.79 | 86.39 | 109.80 | -131.36 | 77.98 | -2506.60 | 48.67 | -2477.29 | 273.66 |
| 117 | 102 | 207 | 13.47 | -7.89 | -219.40 | -32.25 | -195.04 | -67.51 | 122.42 | -294.15 | 76.14 | -247.88 | 130.91 |
| | | 249 | 13.00 | 68.57 | 11.42 | 11.87 | 68.12 | 5.06 | -11.99 | -664.08 | -12.00 | -664.06 | 3.01 |
| | | 248 | 19.33 | -13.25 | -193.82 | -13.40 | -193.67 | -5.12 | 18.94 | -658.33 | 17.02 | -656.41 | 36.04 |
| | | 209 | 18.20 | 89.70 | -4.09 | 34.55 | 51.06 | -46.17 | 18.13 | -1028.86 | 12.35 | -1023.08 | 77.57 |
| 118 | 2 | 193 | 34.69 | -25.96 | -491.78 | -121.84 | -395.90 | -188.33 | 603.05 | -309.87 | 73.66 | -219.53 | 450.60 |
| | | 250 | 47.68 | 551.14 | 9.31 | 9.88 | 550.57 | -17.63 | 15.46 | -1360.38 | -7.87 | -1337.05 | 177.64 |
| | | 249 | 44.07 | -26.44 | -461.72 | -26.51 | -461.65 | 5.44 | 35.39 | -1431.20 | 24.08 | -1419.88 | 128.34 |
| | | 207 | 79.08 | 671.34 | 25.11 | 124.75 | 571.71 | -233.36 | 233.94 | -3039.16 | 105.69 | -2910.91 | 635.07 |
| 118 | 31 | 193 | 9.42 | 4.31 | -125.79 | -33.11 | -88.37 | -58.89 | 183.14 | -56.60 | 66.60 | 59.93 | 119.82 |
| | | 250 | 14.78 | 180.84 | -0.09 | -0.03 | 180.78 | 3.36 | -11.61 | -388.57 | -12.84 | -387.34 | 21.50 |
| | | 249 | 11.37 | -5.26 | -101.61 | -5.26 | -101.60 | -0.56 | 20.98 | -419.41 | 18.40 | -416.82 | 33.65 |
| | | 207 | 22.34 | 201.57 | 12.09 | 35.06 | 178.60 | -61.85 | 30.83 | -847.92 | 14.14 | -831.24 | 119.94 |
| 118 | 63 | 193 | 9.38 | 3.21 | -127.22 | -33.02 | -90.99 | -58.42 | 180.25 | -56.22 | 67.60 | 56.43 | 118.10 |
| | | 250 | 14.70 | 177.99 | -0.03 | 0.02 | 177.94 | -2.92 | -10.93 | -392.47 | -11.95 | -391.45 | 19.70 |
| | | 249 | 11.56 | -5.37 | -104.47 | -5.37 | -104.47 | -0.27 | 19.72 | -423.24 | 17.38 | -420.91 | 32.07 |
| | | 207 | 22.24 | 199.04 | 11.92 | 35.00 | 175.96 | -61.53 | 29.24 | -850.96 | 13.01 | -834.72 | 118.43 |
| 118 | 85 | 193 | 9.35 | 2.55 | -128.10 | -32.97 | -92.58 | -58.13 | 178.46 | -55.96 | 68.21 | 54.29 | 117.01 |
| | | 250 | 14.65 | 176.25 | 3.25e-03 | 0.04 | 176.21 | -2.65 | -10.52 | -394.85 | -11.42 | -393.95 | 18.56 |
| | | 249 | 11.68 | -5.44 | -106.21 | -5.44 | -106.21 | -0.10 | 18.95 | -425.58 | 16.77 | -423.40 | 31.07 |
| | | 207 | 22.17 | 197.50 | 11.81 | 34.96 | 174.36 | -61.34 | 28.27 | -852.80 | 12.32 | -836.85 | 117.47 |
| 118 | 87 | 193 | 24.36 | -17.07 | -344.83 | -85.62 | -276.28 | -133.30 | 425.47 | -213.68 | 58.20 | 153.59 | 316.00 |
| | | 250 | 33.73 | 390.92 | 6.21 | 6.60 | 390.54 | -12.11 | 8.58 | -959.24 | -6.77 | -943.89 | 120.90 |
| | | 249 | 30.94 | -18.35 | -321.97 | -18.40 | -321.93 | 3.61 | 26.11 | -1010.86 | 18.29 | -1003.04 | 89.70 |
| | | 207 | 55.66 | 473.85 | 18.36 | 87.83 | 404.39 | -163.75 | 159.27 | -2139.35 | 72.11 | -2052.19 | 439.04 |
| 118 | 97 | 193 | 23.19 | -15.11 | -327.79 | -81.58 | -261.33 | -127.92 | 408.10 | -198.53 | 63.55 | 146.02 | 300.50 |
| | | 250 | 32.36 | 375.92 | 5.60 | 5.94 | 375.58 | -11.26 | 5.94 | -917.00 | -7.62 | -903.44 | 111.05 |
| | | 249 | 29.44 | -17.27 | -304.31 | -17.30 | -304.28 | 3.24 | 26.12 | -968.10 | 18.73 | -960.71 | 85.42 |
| | | 207 | 53.13 | 453.45 | 18.19 | 83.83 | 387.81 | -155.77 | 148.83 | -2041.31 | 68.62 | -1961.10 | 411.40 |
| 118 | 102 | 193 | 9.35 | 2.55 | -128.10 | -32.97 | -92.58 | -58.13 | 178.46 | -55.96 | 68.21 | 54.29 | 117.01 |
| | | 250 | 14.65 | 176.25 | 3.25e-03 | 0.04 | 176.21 | -2.65 | -10.52 | -394.85 | -11.42 | -393.95 | 18.56 |
| | | 249 | 11.68 | -5.44 | -106.21 | -5.44 | -106.21 | -0.10 | 18.95 | -425.58 | 16.77 | -423.40 | 31.07 |
| | | 207 | 22.17 | 197.50 | 11.81 | 34.96 | 174.36 | -61.34 | 28.27 | -852.80 | 12.32 | -836.85 | 117.47 |
| 119 | 2 | 202 | 30.25 | 189.40 | -86.68 | -56.89 | 159.62 | 85.65 | 1576.46 | 523.92 | 524.21 | 1576.18 | -17.38 |
| | | 251 | 45.97 | 754.69 | -129.06 | -101.92 | 727.55 | -152.47 | 368.87 | -249.45 | -179.22 | 298.65 | 196.19 |
| | | 250 | 16.85 | 117.04 | -115.74 | 68.24 | -66.93 | 94.76 | 126.69 | -483.34 | 122.71 | -479.36 | 49.10 |
| | | 193 | 93.81 | 1073.04 | -69.56 | 57.27 | 946.21 | -358.93 | 374.36 | -2355.99 | -3.26 | -1978.37 | 942.57 |
| 119 | 27 | 202 | 10.47 | 81.87 | -23.39 | -15.41 | 73.89 | 27.86 | 491.07 | 208.07 | 209.09 | 490.04 | 16.97 |
| | | 251 | 15.35 | 244.10 | -44.06 | -36.48 | 236.51 | -46.14 | 105.04 | -66.65 | -64.11 | 102.49 | 20.75 |

| Elem. | Cmb | Nodo | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
|-------|-----|------|-----------|---------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| | | 250 | 4.28 | 46.76 | -12.28 | 24.41 | 10.07 | 28.64 | 52.51 | -138.54 | 50.42 | -136.46 | 19.85 |
| | | 193 | 26.92 | 333.90 | -20.52 | 14.90 | 298.48 | -106.30 | 21.81 | -635.12 | -35.80 | -577.51 | 185.81 |
| 119 | 59 | 202 | 10.20 | 78.63 | -22.92 | -14.41 | 70.12 | 28.14 | 485.98 | 207.58 | 208.37 | 485.19 | 14.84 |
| | | 251 | 15.08 | 240.68 | -43.17 | -35.44 | 232.94 | -46.22 | 98.84 | -67.06 | -64.96 | 96.74 | 18.53 |
| | | 250 | 4.41 | 45.41 | -14.91 | 24.25 | 6.26 | 28.79 | 51.37 | -143.66 | 49.71 | -142.00 | 17.89 |
| | | 193 | 26.77 | 330.00 | -20.85 | 14.69 | 294.47 | -105.85 | 21.12 | -638.16 | -34.86 | -582.17 | 183.78 |
| 119 | 85 | 202 | 10.04 | 76.68 | -22.66 | -13.80 | 67.83 | 28.30 | 482.89 | 207.27 | 207.93 | 482.23 | 13.51 |
| | | 251 | 14.92 | 238.60 | -42.63 | -34.80 | 230.77 | -46.27 | 95.08 | -67.32 | -65.49 | 93.25 | 17.15 |
| | | 250 | 4.49 | 44.64 | -16.55 | 24.15 | 3.95 | 28.88 | 50.70 | -146.79 | 49.28 | -145.37 | 16.66 |
| | | 193 | 26.68 | 327.63 | -21.05 | 14.55 | 292.03 | -105.58 | 20.69 | -640.00 | -34.30 | -585.01 | 182.50 |
| 119 | 87 | 202 | 21.50 | 136.48 | -60.79 | -39.77 | 115.45 | 60.87 | 1115.21 | 377.07 | 377.20 | 1115.08 | -9.79 |
| | | 251 | 32.64 | 534.94 | -91.72 | -72.59 | 515.80 | -107.81 | 257.45 | -174.14 | -128.22 | 211.53 | 133.08 |
| | | 250 | 11.82 | 83.83 | -79.21 | 48.71 | -44.10 | 67.02 | 91.22 | -341.80 | 88.38 | -338.96 | 34.95 |
| | | 193 | 66.08 | 759.03 | -49.17 | 40.12 | 669.74 | -253.36 | 251.68 | -1655.34 | -6.75 | -1396.91 | 652.71 |
| 119 | 97 | 202 | 20.72 | 133.30 | -57.82 | -37.70 | 113.18 | 58.65 | 1069.99 | 369.70 | 369.77 | 1069.92 | -6.95 |
| | | 251 | 31.41 | 514.06 | -88.38 | -70.09 | 495.77 | -103.36 | 243.55 | -164.66 | -124.32 | 203.21 | 121.83 |
| | | 250 | 11.25 | 81.40 | -73.43 | 47.14 | -39.17 | 64.27 | 89.07 | -327.83 | 86.25 | -325.01 | 34.17 |
| | | 193 | 63.12 | 727.95 | -47.11 | 38.11 | 642.73 | -242.46 | 230.81 | -1576.36 | -8.67 | -1336.88 | 612.72 |
| 119 | 102 | 202 | 10.04 | 76.68 | -22.66 | -13.80 | 67.83 | 28.30 | 482.89 | 207.27 | 207.93 | 482.23 | 13.51 |
| | | 251 | 14.92 | 238.60 | -42.63 | -34.80 | 230.77 | -46.27 | 95.08 | -67.32 | -65.49 | 93.25 | 17.15 |
| | | 250 | 4.49 | 44.64 | -16.55 | 24.15 | 3.95 | 28.88 | 50.70 | -146.79 | 49.28 | -145.37 | 16.66 |
| | | 193 | 26.68 | 327.63 | -21.05 | 14.55 | 292.03 | -105.58 | 20.69 | -640.00 | -34.30 | -585.01 | 182.50 |
| 120 | 2 | 201 | 180.82 | 2957.48 | -196.41 | 513.36 | 2247.71 | 1317.10 | 2118.83 | 152.24 | 249.53 | 2021.55 | 426.44 |
| | | 252 | 59.61 | 76.48 | -1046.93 | -124.85 | -845.61 | -430.86 | -21.08 | -365.36 | -63.63 | -322.81 | -113.30 |
| | | 251 | 65.72 | 911.97 | -141.37 | 180.75 | 589.86 | 485.32 | 1419.81 | -34.60 | -16.81 | 1402.03 | 159.83 |
| | | 202 | 108.35 | 1167.26 | -928.66 | -580.81 | 819.40 | -779.79 | 1202.10 | -154.56 | 934.07 | 113.47 | 540.17 |
| 120 | 23 | 201 | 60.30 | 964.32 | -58.02 | 173.64 | 732.65 | 427.98 | 730.50 | -4.78 | 69.29 | 656.43 | 221.31 |
| | | 252 | 19.03 | 19.23 | -330.01 | -39.64 | -271.14 | -130.74 | 5.39 | -132.82 | -24.32 | -103.11 | -56.77 |
| | | 251 | 21.52 | 300.55 | -38.65 | 56.79 | 205.12 | 152.52 | 445.83 | -5.54 | 3.70 | 436.59 | 63.94 |
| | | 202 | 31.07 | 368.63 | -297.38 | -191.57 | 262.82 | -243.46 | 241.22 | 39.83 | 238.12 | 42.93 | 24.78 |
| 120 | 55 | 201 | 59.79 | 955.64 | -58.34 | 171.63 | 725.66 | 424.62 | 726.14 | -1.39 | 72.63 | 652.13 | 219.93 |
| | | 252 | 19.30 | 20.29 | -333.54 | -40.56 | -272.68 | -133.53 | 8.57 | -135.19 | -20.71 | -105.91 | -57.89 |
| | | 251 | 21.47 | 301.14 | -38.74 | 58.33 | 204.07 | 153.52 | 442.07 | -6.07 | 2.85 | 433.15 | 62.61 |
| | | 202 | 30.90 | 362.89 | -297.68 | -191.11 | 256.32 | -242.98 | 240.70 | 34.43 | 237.16 | 37.97 | 26.80 |
| 120 | 85 | 201 | 59.48 | 950.37 | -58.54 | 170.41 | 721.42 | 422.58 | 723.48 | 0.71 | 74.67 | 649.51 | 219.06 |
| | | 252 | 19.46 | 20.95 | -335.70 | -41.13 | -273.62 | -135.22 | 10.55 | -136.67 | -18.50 | -107.61 | -58.60 |
| | | 251 | 21.44 | 301.50 | -38.81 | 59.26 | 203.43 | 154.13 | 439.78 | -6.39 | 2.33 | 431.05 | 61.78 |
| | | 202 | 30.80 | 359.41 | -297.87 | -190.83 | 252.37 | -242.69 | 240.40 | 31.13 | 236.57 | 34.96 | 28.04 |
| 120 | 87 | 201 | 128.47 | 2098.37 | -138.74 | 364.96 | 1594.66 | 934.41 | 1508.10 | 102.51 | 176.31 | 1434.30 | 313.50 |
| | | 252 | 42.34 | 53.78 | -742.71 | -88.72 | -600.22 | -305.27 | -12.83 | -261.61 | -44.89 | -229.56 | -83.35 |
| | | 251 | 46.67 | 648.17 | -99.40 | 128.40 | 420.36 | 344.10 | 1005.13 | -23.87 | -10.90 | 992.16 | 114.79 |
| | | 202 | 76.33 | 826.09 | -658.82 | -412.65 | 579.92 | -552.22 | 830.69 | -96.12 | 654.26 | 80.31 | 363.85 |
| 120 | 97 | 201 | 123.75 | 2018.55 | -132.86 | 351.76 | 1533.93 | 898.76 | 1455.50 | 95.30 | 171.01 | 1379.79 | 311.85 |
| | | 252 | 40.77 | 51.27 | -714.40 | -85.47 | -577.66 | -293.26 | -9.74 | -253.79 | -42.97 | -220.57 | -83.69 |
| | | 251 | 44.94 | 624.55 | -94.78 | 123.67 | 406.10 | 330.79 | 964.68 | -22.44 | -9.49 | 951.73 | 112.31 |
| | | 202 | 72.92 | 792.67 | -633.65 | -397.46 | 556.48 | -530.19 | 780.04 | -78.99 | 623.37 | 77.67 | 331.72 |
| 120 | 102 | 201 | 59.48 | 950.37 | -58.54 | 170.41 | 721.42 | 422.58 | 723.48 | 0.71 | 74.67 | 649.51 | 219.06 |
| | | 252 | 19.46 | 20.95 | -335.70 | -41.13 | -273.62 | -135.22 | 10.55 | -136.67 | -18.50 | -107.61 | -58.60 |
| | | 251 | 21.44 | 301.50 | -38.81 | 59.26 | 203.43 | 154.13 | 439.78 | -6.39 | 2.33 | 431.05 | 61.78 |
| | | 202 | 30.80 | 359.41 | -297.87 | -190.83 | 252.37 | -242.69 | 240.40 | 31.13 | 236.57 | 34.96 | 28.04 |
| Elem. | | | Von Mises | N max | N min | N 1 | N 2 | N 1-2 | M max | M min | M 1 | M 2 | M 1-2 |
| | | | | | -1656.66 | -690.77 | -1639.35 | -1635.28 | | -5331.32 | -1054.02 | -5323.21 | -1008.57 |
| | | | 204.60 | 3404.77 | | 638.95 | 2613.20 | 1639.96 | 2415.69 | | 2122.74 | 2023.41 | 1010.15 |