

**AVVISO M2C.1.1 I 1.1 - Linea d'Intervento C**  
**"Ammodernamento (anche con ampliamento di impianti  
esistenti) e realizzazione di nuovi impianti innovativi di  
trattamento/riciclaggio per lo smaltimento di materiali  
assorbenti ad uso personale (PAD), i fanghi di acque reflue,  
i rifiuti di pelletteria e i rifiuti tessili"**  
**REALIZZAZIONE ESSICCATORE FANGHI DI DEPURAZIONE  
LOCALITÀ OMIGNANO SCALO**

**PFTE**

|                                               |                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>ELABORATO</div> <div>D-R-321-B55</div>   | <div>Tabulato di calcolo</div> <div>Platea cassoni</div>                                                                                                                                                                                                                                                                                       | <div>SCALA</div> <div>-</div>                                                                                                                                                                                                                                                                                                                                                                        |
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DATA  
18/10/2024  
Revisione 0 - Emissione



**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 2023-06-199)                                                                                                   |
| Produttore-Distributore:                        | 2S.I. Software e Servizi per l'Ingegneria s.r.l.<br>Via Garibaldi, 90 44121 Ferrara FE ( Italy)<br>Tel. +39 0532 200091 www.2si.it |
| Codice Licenza:                                 | Licenza dsi5862                                                                                                                    |

| Descrizione |                                                       |
|-------------|-------------------------------------------------------|
| Progetto    | -                                                     |
|             | -                                                     |
| Ubicazione  | Comune di VALLO DELLA LUCANIA (SA) (Regione CAMPANIA) |
|             | Località VALLO DELLA LUCANIA (SA)                     |
|             | Longitudine 15.267, Latitudine 40.229                 |
| 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/>

# INTESTAZIONE E CONTENUTI DELLA RELAZIONE

## 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:

|                                                |    |
|------------------------------------------------|----|
| INTESTAZIONE E CONTENUTI DELLA RELAZIONE ..... | 2  |
| PROGETTO.....                                  | 2  |
| RELAZIONE DI CALCOLO STRUTTURALE .....         | 5  |
| PREMESSA .....                                 | 5  |
| DESCRIZIONE GENERALE DELL'OPERA .....          | 5  |
| QUADRO NORMATIVO DI RIFERIMENTO ADOTTATO ..... | 6  |
| AZIONI DI PROGETTO SULLA COSTRUZIONE.....      | 6  |
| MODELLO NUMERICO.....                          | 7  |
| Tipo di analisi strutturale .....              | 7  |
| Informazioni sul codice di calcolo .....       | 7  |
| Affidabilità dei codici utilizzati .....       | 8  |
| MODELLAZIONE DELLE AZIONI .....                | 9  |
| COMBINAZIONI E/O PERCORSI DI CARICO.....       | 9  |
| VERIFICHE AGLI STATI LIMITE ULTIMI .....       | 11 |
| VERIFICHE AGLI STATI LIMITE DI ESERCIZIO.....  | 11 |
| NORMATIVA DI RIFERIMENTO .....                 | 12 |
| CARATTERISTICHE MATERIALI UTILIZZATI.....      | 14 |
| LEGENDA TABELLA DATI MATERIALI.....            | 14 |
| MODELLAZIONE DELLE SEZIONI .....               | 18 |
| LEGENDA TABELLA DATI SEZIONI.....              | 18 |
| MODELLAZIONE STRUTTURA: NODI .....             | 20 |
| LEGENDA TABELLA DATI NODI.....                 | 20 |
| TABELLA DATI NODI .....                        | 20 |
| MODELLAZIONE STRUTTURA: ELEMENTI SHELL .....   | 23 |
| LEGENDA TABELLA DATI SHELL .....               | 23 |
| MODELLAZIONE DELLE AZIONI .....                | 28 |
| LEGENDA TABELLA DATI AZIONI .....              | 28 |
| SCHEMATIZZAZIONE DEI CASI DI CARICO .....      | 30 |
| LEGENDA TABELLA CASI DI CARICO .....           | 30 |
| DEFINIZIONE DELLE COMBINAZIONI .....           | 32 |
| LEGENDA TABELLA COMBINAZIONI DI CARICO .....   | 32 |
| AZIONE SISMICA.....                            | 37 |
| VALUTAZIONE DELL' AZIONE SISMICA .....         | 37 |
| Parametri della struttura .....                | 37 |
| RISULTATI ANALISI SISMICHE .....               | 40 |
| LEGENDA TABELLA ANALISI SISMICHE .....         | 40 |
| RISULTATI NODALI .....                         | 56 |
| LEGENDA RISULTATI NODALI .....                 | 56 |
| RISULTATI ELEMENTI TIPO SHELL.....             | 92 |

|                                                                |     |
|----------------------------------------------------------------|-----|
| LEGENDA RISULTATI ELEMENTI TIPO SHELL .....                    | 92  |
| VERIFICHE ELEMENTI PARETE E/O GUSCIO IN C.A.....               | 148 |
| LEGENDA TABELLA VERIFICHE ELEMENTI PARETE E GUSCIO IN C.A..... | 148 |
| PROGETTAZIONE DELLE FONDAZIONI.....                            | 152 |
| STATI LIMITE D' ESERCIZIO .....                                | 158 |
| LEGENDA TABELLA STATI LIMITE D' ESERCIZIO.....                 | 158 |
| STATO LIMITE D' ESERCIZIO: SLD DANNO SISMICO .....             | 161 |
| LEGENDA TABELLA STATI LIMITE DI DANNO (VERIFICHE RES).....     | 161 |
| Simbologia adottata nelle tabelle di verifica .....            | 161 |

# RELAZIONE DI CALCOLO STRUTTURALE

## 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.

## DESCRIZIONE GENERALE DELL’OPERA

| Descrizione generale dell’opera |                                                                       |
|---------------------------------|-----------------------------------------------------------------------|
| Fabbricato ad uso               |                                                                       |
| Ubicazione                      | Comune di VALLO DELLA LUCANIA (SA) (Regione CAMPANIA)                 |
|                                 | Località VALLO DELLA LUCANIA (SA)                                     |
|                                 | Longitudine 15.267, Latitudine 40.229                                 |
| 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] |
|                           |                |            |                   |

|     |      |     |      |
|-----|------|-----|------|
|     |      |     |      |
| III | 50.0 | 1.5 | 75.0 |

| Fattore di struttura/comportamento |
|------------------------------------|
| 1                                  |

## 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 |

## 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:

$$\mathbf{K} \cdot \mathbf{u} = \mathbf{F} \quad \text{dove} \quad \mathbf{K} = \text{matrice di rigidità}$$

$\mathbf{u}$  = 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 <b>TRUSS</b>     | (biella-D2)                               |
| Elemento tipo <b>BEAM</b>      | (trave-D2)                                |
| Elemento tipo <b>MEMBRANE</b>  | (membrana-D3)                             |
| Elemento tipo <b>PLATE</b>     | (piastra-guscio-D3)                       |
| Elemento tipo <b>BOUNDARY</b>  | (molla)                                   |
| Elemento tipo <b>STIFFNESS</b> | (matrice di rigidezza)                    |
| Elemento tipo <b>BRICK</b>     | (elemento solido)                         |
| Elemento tipo <b>SOLAIO</b>    | (macro elemento composto da più membrane) |

## 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

| 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:

| Informazioni sul codice di calcolo |                                                  |
|------------------------------------|--------------------------------------------------|
| Titolo:                            | PRO_SAP Professional Structural Analysis Program |
| Versione:                          | PROFESSIONAL (build 2023-06-199)                 |

|                          |                                                              |
|--------------------------|--------------------------------------------------------------|
| Produttore-Distributore: | 2S.I. Software e Servizi per l'Ingegneria s.r.l.,<br>Ferrara |
| Dati utente finale:      |                                                              |
| Codice Utente:           |                                                              |
| Codice Licenza:          | Licenza dsi5862                                              |

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                                       | 241 |
| elementi D2 (per aste, travi, pilastri...) | 90  |
| elementi D3 (per pareti, platee, gusci...) | 188 |
| elementi solaio                            | 0   |
| elementi solidi                            | 0   |

#### Dimensione del modello strutturale [cm]:

|         |        |
|---------|--------|
| X min = | -50.00 |
| Xmax =  | 400.00 |
| Ymin =  | 0.00   |
| Ymax =  | 700.00 |
| Zmin =  | 0.00   |
| Zmax =  | 227.50 |

#### Strutture verticali:

|                       |    |
|-----------------------|----|
| Elementi di tipo asta | NO |
| Pilastri              | SI |

|                                             |    |
|---------------------------------------------|----|
| Pareti                                      | SI |
| Setti (a comportamento membranale)          | NO |
| <b>Strutture non verticali:</b>             |    |
| Elementi di tipo asta                       | NO |
| Travi                                       | SI |
| Gusci                                       | SI |
| Membrane                                    | NO |
| <b>Orizzontamenti:</b>                      |    |
| Solai con la proprietà piano rigido         | NO |
| Solai senza la proprietà piano rigido       | NO |
| <b>Tipo di vincoli:</b>                     |    |
| Nodi vincolati rigidamente                  | NO |
| 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                   | SI |
| Fondazioni con elementi solidi              | NO |

## 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”*.

## 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.

| <b>Combinazioni dei casi di carico</b> |             |
|----------------------------------------|-------------|
| APPROCCIO PROGETTUALE                  | Approccio 2 |
| 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              | NO |
| Combinazione quasi permanente (SLE) | NO |
| SLA (accidentale quale incendio)    | NO |

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 compresione 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

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 involucri 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.) .

## 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.

## 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.

# 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.
35. CNR DT-200/2013 - Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati
36. CNR DT-215/2018 - Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati a Matrice Inorganica

NOTA: il presente capitolo 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 normative antecedenti al DM 17.01.18 è dovuto alla progettazione simulata di edificio esistente.

# CARATTERISTICHE MATERIALI UTILIZZATI

## 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 $\nu$                                                                  |
| 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 a compressione cubica                                                           |
|   | Resistenza fctm  | resistenza media a trazione semplice                                                       |
|   | Coefficiente ksb | Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |

|   |          |                               |                                                                                            |
|---|----------|-------------------------------|--------------------------------------------------------------------------------------------|
| 2 | acciaio  | Tensione $f_t$                | Valore della tensione di rottura                                                           |
|   |          | Tensione $f_y$                | Valore della tensione di snervamento                                                       |
|   |          | Resistenza $f_d$              | Resistenza di calcolo per SL CNR-UNI 10011                                                 |
|   |          | Resistenza $f_d (>40)$        | Resistenza di calcolo per SL CNR-UNI 10011 per spessori $> 40\text{mm}$                    |
|   |          | Tensione ammissibile          | Tensione ammissibile CNR-UNI 10011                                                         |
|   |          | Tensione ammissibile( $>40$ ) | Tensione ammissibile CNR-UNI 10011 per spessori $> 40\text{mm}$                            |
| 3 | muratura | Muratura consolidata          | Muratura per la quale si prevedono interventi di rinforzo"                                 |
|   |          | Incremento resistenza         | Incremento conseguito in termini di resistenza                                             |
|   |          | Incremento rigidezza          | Incremento conseguito in termini di rigidezza                                              |
|   |          | Resistenza $f$                | Valore della resistenza a compressione                                                     |
|   |          | Resistenza $f_{v0}$           | Valore della resistenza a taglio in assenza di tensioni normali                            |
|   |          | Resistenza $f_h$              | Valore della resistenza a compressione orizzontale                                         |
|   |          | Resistenza $f_b$              | Valore della resistenza a compressione dei blocchi                                         |
|   |          | Resistenza $f_{bh}$           | Valore della resistenza a compressione dei blocchi in direzione orizzontale                |
|   |          | Resistenza $f_{v0h}$          | Valore della resistenza a taglio in assenza di tensioni normali per le travi               |
|   |          | Resistenza $f_t$              | Valore della resistenza a trazione per fessurazione diagonale                              |
|   |          | Resistenza $f_{vlim}$         | Valore della massima resistenza a taglio                                                   |
|   |          | Resistenza $f_{bt}$           | Valore della resistenza a trazione dei blocchi                                             |
|   |          | Coefficiente $\mu$            | Coefficiente d'attrito utilizzato per la resistenza a taglio                               |
|   |          | Coefficiente $f_i$            | Coefficiente d'ingranamento utilizzato per la resistenza a taglio                          |
|   |          | Coefficiente $k_{sb}$         | Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block |
| 4 | legno    | $E_{0,05}$                    | Modulo di elasticità corrispondente ad un frattile del 5%                                  |
|   |          | Resistenza $f_{c0}$           | Valore della resistenza a compressione parallela                                           |
|   |          | Resistenza $f_{t0}$           | Valore della resistenza a trazione parallela                                               |
|   |          | Resistenza $f_m$              | Valore della resistenza a flessione                                                        |
|   |          | Resistenza $f_v$              | Valore della resistenza a taglio                                                           |
|   |          | Resist. $f_{t0k}$             | Resistenza caratteristica (tensione amm. per REGLES) per trazione                          |
|   |          | Resist. $f_{mk}$              | Resistenza caratteristica (tensione amm. per REGLES) per flessione                         |
|   |          | Resist. $f_{vk}$              | Resistenza caratteristica (tensione amm. per REGLES) per taglio                            |
|   |          | Modulo $E_{0,05}$             | 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, CNR-DT 215 per interventi con FRCM)

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  |          |          |
| 1   | Calcestruzzo Classe C25/30                                              |            |          | 3.145e+05 | 0.20    | 1.310e+05 | 2.50e-03 | 1.00e-05 |          |
|     | Resistenza Rc                                                           | 300.0      |          |           |         |           |          |          |          |
|     | Resistenza fctm                                                         |            | 25.6     |           |         |           |          |          |          |
|     | Rapporto Rfessurata (assiale)                                           |            |          |           |         |           |          |          | 1.00     |
|     | Rapporto Rfessurata (flessione)                                         |            |          |           |         |           |          |          | 1.00     |
|     | Rapporto Rfessurata (taglio)                                            |            |          |           |         |           |          |          | 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+07-<br>materiale E = 1.000e+07 |            |          | 1.000e+07 | 0.0     | 5.000e+06 | 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/.. |
|--------------------------------------|---------|---------|--------|---------|---------|---------|
| <b>Armatura</b>                      |         |         |        |         |         |         |
| Inclinazione Ax [ gradi ]            | 0.0     | 0.0     |        |         |         |         |
| Angolo Ax-Ay [ gradi ]               | 90.00   | 90.00   |        |         |         |         |
| Minima tesa                          | 0.31    | 0.10    |        |         |         |         |
| Massima tesa                         | 0.78    | 4.00    |        |         |         |         |
| Maglia unica centrale                | NO      | NO      |        |         |         |         |
| Copriferro [ cm ]                    | 2.00    | 5.00    |        |         |         |         |
| <b>Maglia x</b>                      |         |         |        |         |         |         |
| diametro                             | 10      | 12      |        |         |         |         |
| passo                                | 20      | 20      |        |         |         |         |
| diametro aggiuntivi                  | 12      | 12      |        |         |         |         |
| <b>Maglia y</b>                      |         |         |        |         |         |         |
| diametro                             | 10      | 12      |        |         |         |         |
| passo                                | 20      | 20      |        |         |         |         |
| diametro aggiuntivi                  | 12      | 12      |        |         |         |         |
| <b>Stati limite ultimi</b>           |         |         |        |         |         |         |
| Tensione fy [daN/cm2 ]               | 4500.00 | 4500.00 |        |         |         |         |
| Tipo acciaio                         | tipo C  | tipo C  |        |         |         |         |
| Coefficiente gamma s                 | 1.15    | 1.15    |        |         |         |         |
| Coefficiente gamma c                 | 1.50    | 1.50    |        |         |         |         |
| Verifiche con N costante             | SI      | SI      |        |         |         |         |
| Applica SLU da DIN                   | NO      | NO      |        |         |         |         |
| <b>Tensioni ammissibili</b>          |         |         |        |         |         |         |
| Tensione amm. cls [daN/cm2 ]         | 97.50   | 97.50   |        |         |         |         |
| Tensione amm. acciaio [daN/cm2 ]     | 2600.00 | 2600.00 |        |         |         |         |
| Rapporto omogeneizzazione N          | 15.00   | 15.00   |        |         |         |         |
| Massimo rapporto area compressa/tesa | 1.00    | 1.00    |        |         |         |         |
| <b>Resistenza al fuoco</b>           |         |         |        |         |         |         |
| 3- intradosso                        | NO      | NO      |        |         |         |         |
| 3+ estradosso                        | NO      | NO      |        |         |         |         |

| Gusci c.a.             | 1/7/.. | 2/8/.. | 3/9/.. | 4/10/.. | 5/11/.. | 6/12/.. |
|------------------------|--------|--------|--------|---------|---------|---------|
| Tempo di esposizione R | 15     | 15     |        |         |         |         |

# MODELLAZIONE DELLE SEZIONI

## LEGENDA TABELLA DATI SEZIONI

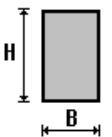
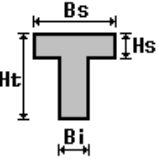
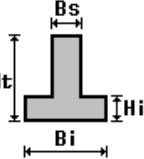
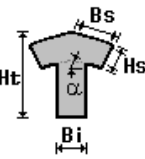
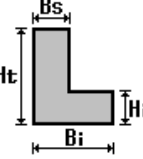
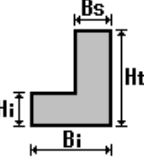
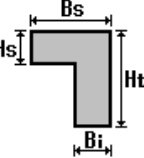
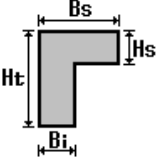
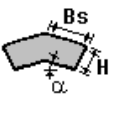
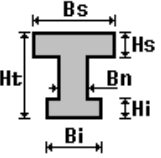
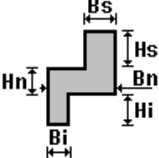
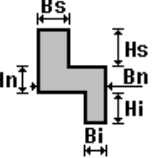
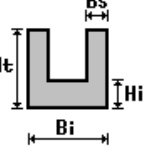
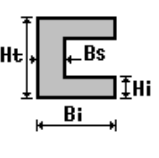
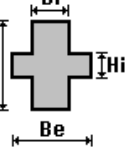
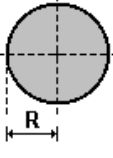
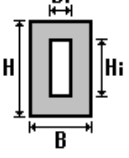
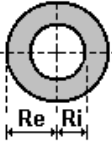
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

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:

|              |                                                                     |
|--------------|---------------------------------------------------------------------|
| <b>Area</b>  | area della sezione                                                  |
| <b>A V2</b>  | area della sezione/fattore di taglio (per il taglio in direzione 2) |
| <b>A V3</b>  | area della sezione/fattore di taglio (per il taglio in direzione 3) |
| <b>Jt</b>    | fattore torsionale di rigidezza                                     |
| <b>J2-2</b>  | momento d'inerzia della sezione riferito all'asse 2                 |
| <b>J3-3</b>  | momento d'inerzia della sezione riferito all'asse 3                 |
| <b>W2-2</b>  | modulo di resistenza della sezione riferito all'asse 2              |
| <b>W3-3</b>  | modulo di resistenza della sezione riferito all'asse 3              |
| <b>Wp2-2</b> | modulo di resistenza plastico della sezione riferito all'asse 2     |
| <b>Wp3-3</b> | 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  | Circolare: r=5 | 78.54 | 66.27 | 66.27 | 981.75 | 490.87 | 490.87 | 98.17 | 98.17 | 166.67 | 166.67 |

# MODELLAZIONE STRUTTURA: NODI

## 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:

|             |                           |
|-------------|---------------------------|
| <b>Nodo</b> | numero del nodo.          |
| <b>X</b>    | valore della coordinata X |
| <b>Y</b>    | valore della coordinata Y |
| <b>Z</b>    | 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:

|                |                                                                                                                                                                                                                                                                                 |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nodo</b>    | numero del nodo.                                                                                                                                                                                                                                                                |
| <b>X</b>       | valore della coordinata X                                                                                                                                                                                                                                                       |
| <b>Y</b>       | valore della coordinata Y                                                                                                                                                                                                                                                       |
| <b>Z</b>       | valore della coordinata Z                                                                                                                                                                                                                                                       |
| <b>Note</b>    | 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).           |
| <b>Note</b>    | (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.<br>(ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo |
| <b>Rig. TX</b> | 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

## TABELLA DATI NODI

| Nodo | X     | Y     | Z   | Nodo | X     | Y     | Z   | Nodo | X     | Y     | Z   |
|------|-------|-------|-----|------|-------|-------|-----|------|-------|-------|-----|
|      | cm    | cm    | cm  |      | cm    | cm    | cm  |      | cm    | cm    | cm  |
| 1    | -50.0 | 0.0   | 0.0 | 2    | 400.0 | 0.0   | 0.0 | 3    | 400.0 | 700.0 | 0.0 |
| 4    | -50.0 | 700.0 | 0.0 | 5    | 80.0  | 0.0   | 0.0 | 6    | 270.0 | 0.0   | 0.0 |
| 7    | 80.0  | 700.0 | 0.0 | 8    | 270.0 | 700.0 | 0.0 | 9    | -50.0 | 50.0  | 0.0 |
| 10   | 400.0 | 50.0  | 0.0 | 11   | 80.0  | 50.0  | 0.0 | 12   | 270.0 | 50.0  | 0.0 |
| 13   | -50.0 | 100.0 | 0.0 | 14   | 400.0 | 100.0 | 0.0 | 15   | 80.0  | 100.0 | 0.0 |

|     |       |       |       |     |       |       |       |     |       |       |       |
|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|
| 16  | 270.0 | 100.0 | 0.0   | 17  | -50.0 | 150.0 | 0.0   | 18  | 400.0 | 150.0 | 0.0   |
| 19  | 80.0  | 150.0 | 0.0   | 20  | 270.0 | 150.0 | 0.0   | 21  | -50.0 | 200.0 | 0.0   |
| 22  | 400.0 | 200.0 | 0.0   | 23  | 80.0  | 200.0 | 0.0   | 24  | 270.0 | 200.0 | 0.0   |
| 25  | -50.0 | 250.0 | 0.0   | 26  | 400.0 | 250.0 | 0.0   | 27  | 80.0  | 250.0 | 0.0   |
| 28  | 270.0 | 250.0 | 0.0   | 29  | -50.0 | 300.0 | 0.0   | 30  | 400.0 | 300.0 | 0.0   |
| 31  | 80.0  | 300.0 | 0.0   | 32  | 270.0 | 300.0 | 0.0   | 33  | -50.0 | 350.0 | 0.0   |
| 34  | 400.0 | 350.0 | 0.0   | 35  | 80.0  | 350.0 | 0.0   | 36  | 270.0 | 350.0 | 0.0   |
| 37  | -50.0 | 400.0 | 0.0   | 38  | 400.0 | 400.0 | 0.0   | 39  | 80.0  | 400.0 | 0.0   |
| 40  | 270.0 | 400.0 | 0.0   | 41  | -50.0 | 450.0 | 0.0   | 42  | 400.0 | 450.0 | 0.0   |
| 43  | 80.0  | 450.0 | 0.0   | 44  | 270.0 | 450.0 | 0.0   | 45  | -50.0 | 500.0 | 0.0   |
| 46  | 400.0 | 500.0 | 0.0   | 47  | 80.0  | 500.0 | 0.0   | 48  | 270.0 | 500.0 | 0.0   |
| 49  | -50.0 | 550.0 | 0.0   | 50  | 400.0 | 550.0 | 0.0   | 51  | 80.0  | 550.0 | 0.0   |
| 52  | 270.0 | 550.0 | 0.0   | 53  | -50.0 | 600.0 | 0.0   | 54  | 400.0 | 600.0 | 0.0   |
| 55  | 80.0  | 600.0 | 0.0   | 56  | 270.0 | 600.0 | 0.0   | 57  | -50.0 | 650.0 | 0.0   |
| 58  | 400.0 | 650.0 | 0.0   | 59  | 80.0  | 650.0 | 0.0   | 60  | 270.0 | 650.0 | 0.0   |
| 61  | 270.0 | 50.0  | 27.5  | 62  | 270.0 | 100.0 | 27.5  | 63  | 270.0 | 150.0 | 27.5  |
| 64  | 270.0 | 200.0 | 27.5  | 65  | 270.0 | 250.0 | 27.5  | 66  | 270.0 | 300.0 | 27.5  |
| 67  | 270.0 | 350.0 | 27.5  | 68  | 270.0 | 400.0 | 27.5  | 69  | 270.0 | 450.0 | 27.5  |
| 70  | 270.0 | 500.0 | 27.5  | 71  | 270.0 | 550.0 | 27.5  | 72  | 270.0 | 600.0 | 27.5  |
| 73  | 270.0 | 650.0 | 27.5  | 74  | 80.0  | 50.0  | 27.5  | 75  | 80.0  | 100.0 | 27.5  |
| 76  | 80.0  | 150.0 | 27.5  | 77  | 80.0  | 200.0 | 27.5  | 78  | 80.0  | 250.0 | 27.5  |
| 79  | 80.0  | 300.0 | 27.5  | 80  | 80.0  | 350.0 | 27.5  | 81  | 80.0  | 400.0 | 27.5  |
| 82  | 80.0  | 450.0 | 27.5  | 83  | 80.0  | 500.0 | 27.5  | 84  | 80.0  | 550.0 | 27.5  |
| 85  | 80.0  | 600.0 | 27.5  | 86  | 80.0  | 650.0 | 27.5  | 87  | 175.0 | 700.0 | 0.0   |
| 88  | 175.0 | 0.0   | 0.0   | 89  | 175.0 | 650.0 | 0.0   | 90  | 175.0 | 50.0  | 0.0   |
| 91  | 175.0 | 100.0 | 0.0   | 92  | 175.0 | 150.0 | 0.0   | 93  | 175.0 | 200.0 | 0.0   |
| 94  | 175.0 | 250.0 | 0.0   | 95  | 175.0 | 300.0 | 0.0   | 96  | 175.0 | 350.0 | 0.0   |
| 97  | 175.0 | 400.0 | 0.0   | 98  | 175.0 | 450.0 | 0.0   | 99  | 175.0 | 500.0 | 0.0   |
| 100 | 175.0 | 550.0 | 0.0   | 101 | 175.0 | 600.0 | 0.0   | 102 | 298.0 | 650.0 | 27.5  |
| 103 | 52.0  | 650.0 | 27.5  | 104 | 52.0  | 654.5 | 27.5  | 105 | 298.0 | 654.5 | 27.5  |
| 106 | 52.0  | 45.5  | 27.5  | 107 | 298.0 | 45.5  | 27.5  | 108 | 298.0 | 50.0  | 27.5  |
| 109 | 52.0  | 50.0  | 27.5  | 110 | 52.0  | 654.5 | 227.5 | 111 | 298.0 | 654.5 | 227.5 |
| 112 | 52.0  | 45.5  | 227.5 | 113 | 298.0 | 45.5  | 227.5 | 114 | 298.0 | 100.0 | 27.5  |
| 115 | 52.0  | 100.0 | 27.5  | 116 | 298.0 | 150.0 | 27.5  | 117 | 52.0  | 150.0 | 27.5  |
| 118 | 298.0 | 200.0 | 27.5  | 119 | 52.0  | 200.0 | 27.5  | 120 | 298.0 | 250.0 | 27.5  |
| 121 | 52.0  | 250.0 | 27.5  | 122 | 298.0 | 300.0 | 27.5  | 123 | 52.0  | 300.0 | 27.5  |
| 124 | 298.0 | 350.0 | 27.5  | 125 | 52.0  | 350.0 | 27.5  | 126 | 298.0 | 400.0 | 27.5  |
| 127 | 52.0  | 400.0 | 27.5  | 128 | 298.0 | 450.0 | 27.5  | 129 | 52.0  | 450.0 | 27.5  |
| 130 | 298.0 | 500.0 | 27.5  | 131 | 52.0  | 500.0 | 27.5  | 132 | 298.0 | 550.0 | 27.5  |
| 133 | 52.0  | 550.0 | 27.5  | 134 | 298.0 | 600.0 | 27.5  | 135 | 52.0  | 600.0 | 27.5  |
| 136 | 298.0 | 650.0 | 227.5 | 137 | 52.0  | 650.0 | 227.5 | 138 | 298.0 | 200.0 | 127.5 |
| 139 | 298.0 | 150.0 | 127.5 | 140 | 298.0 | 100.0 | 127.5 | 141 | 298.0 | 50.0  | 127.5 |
| 142 | 298.0 | 50.0  | 227.5 | 143 | 298.0 | 250.0 | 127.5 | 144 | 298.0 | 100.0 | 227.5 |
| 145 | 52.0  | 100.0 | 227.5 | 146 | 298.0 | 150.0 | 227.5 | 147 | 52.0  | 150.0 | 227.5 |
| 148 | 298.0 | 200.0 | 227.5 | 149 | 52.0  | 200.0 | 227.5 | 150 | 298.0 | 250.0 | 227.5 |
| 151 | 52.0  | 250.0 | 227.5 | 152 | 298.0 | 300.0 | 227.5 | 153 | 52.0  | 300.0 | 227.5 |
| 154 | 298.0 | 350.0 | 227.5 | 155 | 52.0  | 350.0 | 227.5 | 156 | 298.0 | 400.0 | 227.5 |
| 157 | 52.0  | 400.0 | 227.5 | 158 | 298.0 | 450.0 | 227.5 | 159 | 52.0  | 450.0 | 227.5 |
| 160 | 298.0 | 500.0 | 227.5 | 161 | 52.0  | 500.0 | 227.5 | 162 | 298.0 | 550.0 | 227.5 |
| 163 | 52.0  | 550.0 | 227.5 | 164 | 298.0 | 600.0 | 227.5 | 165 | 52.0  | 600.0 | 227.5 |
| 166 | 175.0 | 50.0  | 27.5  | 167 | 270.0 | 654.5 | 27.5  | 168 | 270.0 | 45.5  | 27.5  |
| 169 | 80.0  | 654.5 | 27.5  | 170 | 80.0  | 45.5  | 27.5  | 171 | 175.0 | 650.0 | 27.5  |
| 172 | 175.0 | 654.5 | 27.5  | 173 | 175.0 | 45.5  | 27.5  | 174 | 298.0 | 45.5  | 127.5 |
| 175 | 298.0 | 654.5 | 127.5 | 176 | 52.0  | 654.5 | 127.5 | 177 | 52.0  | 45.5  | 127.5 |
| 178 | 175.0 | 45.5  | 227.5 | 179 | 175.0 | 654.5 | 227.5 | 180 | 175.0 | 654.5 | 127.5 |
| 181 | 175.0 | 45.5  | 127.5 | 182 | 52.0  | 650.0 | 127.5 | 183 | 52.0  | 600.0 | 127.5 |

|     |       |       |       |     |       |       |       |     |       |       |       |
|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|
| 184 | 52.0  | 550.0 | 127.5 | 185 | 52.0  | 500.0 | 127.5 | 186 | 52.0  | 450.0 | 127.5 |
| 187 | 52.0  | 400.0 | 127.5 | 188 | 52.0  | 350.0 | 127.5 | 189 | 52.0  | 300.0 | 127.5 |
| 190 | 52.0  | 250.0 | 127.5 | 191 | 52.0  | 200.0 | 127.5 | 192 | 52.0  | 150.0 | 127.5 |
| 193 | 52.0  | 100.0 | 127.5 | 194 | 298.0 | 650.0 | 127.5 | 195 | 298.0 | 600.0 | 127.5 |
| 196 | 298.0 | 550.0 | 127.5 | 197 | 298.0 | 500.0 | 127.5 | 198 | 298.0 | 450.0 | 127.5 |
| 199 | 298.0 | 400.0 | 127.5 | 200 | 298.0 | 350.0 | 127.5 | 201 | 298.0 | 300.0 | 127.5 |
| 202 | 270.0 | 45.5  | 227.5 | 203 | 270.0 | 45.5  | 127.5 | 204 | 80.0  | 45.5  | 227.5 |
| 205 | 80.0  | 45.5  | 127.5 | 206 | 270.0 | 654.5 | 227.5 | 207 | 80.0  | 654.5 | 227.5 |
| 208 | 80.0  | 654.5 | 127.5 | 209 | 270.0 | 654.5 | 127.5 | 210 | 52.0  | 50.0  | 227.5 |
| 211 | 52.0  | 50.0  | 127.5 | 212 | 0.0   | 0.0   | 0.0   | 213 | 0.0   | 700.0 | 0.0   |
| 214 | 0.0   | 50.0  | 0.0   | 215 | 0.0   | 100.0 | 0.0   | 216 | 0.0   | 150.0 | 0.0   |
| 217 | 0.0   | 200.0 | 0.0   | 218 | 0.0   | 250.0 | 0.0   | 219 | 0.0   | 300.0 | 0.0   |
| 220 | 0.0   | 350.0 | 0.0   | 221 | 0.0   | 400.0 | 0.0   | 222 | 0.0   | 450.0 | 0.0   |
| 223 | 0.0   | 500.0 | 0.0   | 224 | 0.0   | 550.0 | 0.0   | 225 | 0.0   | 600.0 | 0.0   |
| 226 | 0.0   | 650.0 | 0.0   | 227 | 350.0 | 0.0   | 0.0   | 228 | 350.0 | 700.0 | 0.0   |
| 229 | 350.0 | 50.0  | 0.0   | 230 | 350.0 | 100.0 | 0.0   | 231 | 350.0 | 150.0 | 0.0   |
| 232 | 350.0 | 200.0 | 0.0   | 233 | 350.0 | 250.0 | 0.0   | 234 | 350.0 | 300.0 | 0.0   |
| 235 | 350.0 | 350.0 | 0.0   | 236 | 350.0 | 400.0 | 0.0   | 237 | 350.0 | 450.0 | 0.0   |
| 238 | 350.0 | 500.0 | 0.0   | 239 | 350.0 | 550.0 | 0.0   | 240 | 350.0 | 600.0 | 0.0   |
| 241 | 350.0 | 650.0 | 0.0   |     |       |       |       |     |       |       |       |

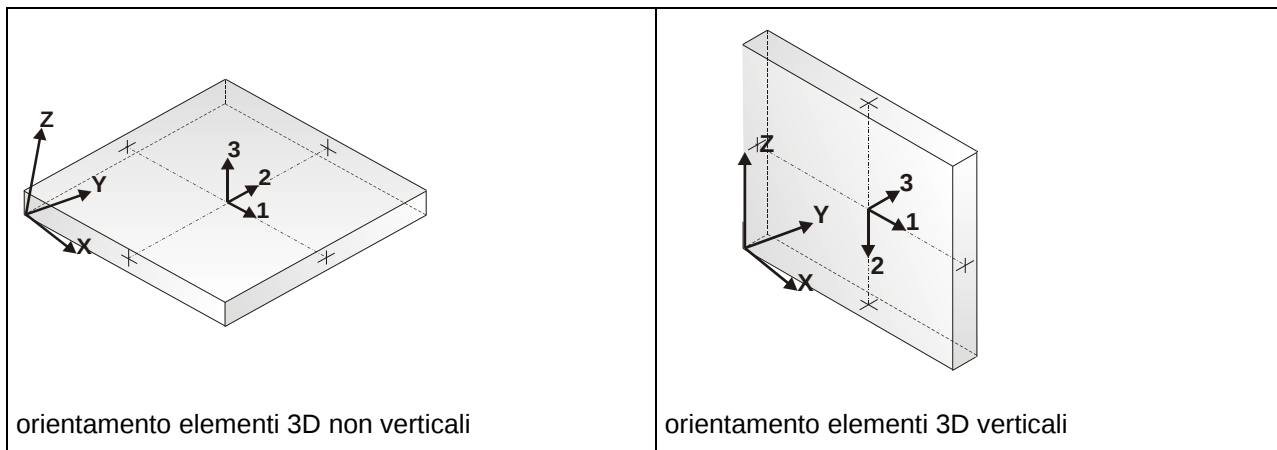
# MODELLAZIONE STRUTTURA: ELEMENTI SHELL

## 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:

|                         |                                                                                                                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Elem.</b>            | numero dell'elemento                                                                                                                                                                                                                                                           |
| <b>Note</b>             | codice di comportamento:<br><i>Guscio</i> (elemento guscio in elevazione non verticale)<br><i>Guscio fond.</i> (elemento guscio su suolo elastico)<br><i>Setto</i> (elemento guscio in elevazione verticale)<br><i>Membrana</i> (elemento guscio con comportamento membranale) |
| <b>Nodo I (J, K, L)</b> | numero del nodo I (J, K, L)                                                                                                                                                                                                                                                    |
| <b>Mat.</b>             | codice del materiale assegnato all'elemento                                                                                                                                                                                                                                    |
| <b>Spessore</b>         | spessore dell'elemento (costante)                                                                                                                                                                                                                                              |
| <b>Wink V</b>           | costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico verticale                                                                                                                                                                              |
| <b>Wink O</b>           | 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<br>cm | Svincolo | Wink V<br>daN/cm3 | Wink O<br>daN/cm3 |
|-------|--------------|--------|--------|--------|--------|------|-------|----------------|----------|-------------------|-------------------|
| 1     | Guscio fond. | 241    | 58     | 3      | 228    | 1    | 2     | 25.0           |          | 0.98              | 0.52              |
| 2     | Guscio fond. | 89     | 60     | 8      | 87     | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 3     | Guscio fond. | 226    | 59     | 7      | 213    | 1    | 2     | 25.0           |          | 0.64              | 0.34              |
| 4     | Guscio fond. | 227    | 2      | 10     | 229    | 1    | 2     | 25.0           |          | 0.98              | 0.52              |
| 5     | Guscio fond. | 88     | 6      | 12     | 90     | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 6     | Guscio fond. | 212    | 5      | 11     | 214    | 1    | 2     | 25.0           |          | 0.64              | 0.34              |
| 7     | Guscio fond. | 229    | 10     | 14     | 230    | 1    | 2     | 25.0           |          | 0.65              | 0.34              |
| 8     | Guscio fond. | 90     | 12     | 16     | 91     | 1    | 2     | 25.0           |          | 0.38              | 0.20              |
| 9     | Guscio fond. | 214    | 11     | 15     | 215    | 1    | 2     | 25.0           |          | 0.44              | 0.24              |
| 10    | Guscio fond. | 230    | 14     | 18     | 231    | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 11    | Guscio fond. | 91     | 16     | 20     | 92     | 1    | 2     | 25.0           |          | 0.33              | 0.18              |
| 12    | Guscio fond. | 215    | 15     | 19     | 216    | 1    | 2     | 25.0           |          | 0.38              | 0.20              |
| 13    | Guscio fond. | 231    | 18     | 22     | 232    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 14    | Guscio fond. | 92     | 20     | 24     | 93     | 1    | 2     | 25.0           |          | 0.31              | 0.16              |
| 15    | Guscio fond. | 216    | 19     | 23     | 217    | 1    | 2     | 25.0           |          | 0.35              | 0.19              |
| 16    | Guscio fond. | 232    | 22     | 26     | 233    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 17    | Guscio fond. | 93     | 24     | 28     | 94     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 18    | Guscio fond. | 217    | 23     | 27     | 218    | 1    | 2     | 25.0           |          | 0.35              | 0.19              |
| 19    | Guscio fond. | 233    | 26     | 30     | 234    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 20    | Guscio fond. | 94     | 28     | 32     | 95     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 21    | Guscio fond. | 218    | 27     | 31     | 219    | 1    | 2     | 25.0           |          | 0.35              | 0.18              |
| 22    | Guscio fond. | 234    | 30     | 34     | 235    | 1    | 2     | 25.0           |          | 0.52              | 0.28              |
| 23    | Guscio fond. | 95     | 32     | 36     | 96     | 1    | 2     | 25.0           |          | 0.29              | 0.16              |
| 24    | Guscio fond. | 219    | 31     | 35     | 220    | 1    | 2     | 25.0           |          | 0.35              | 0.18              |
| 25    | Guscio fond. | 235    | 34     | 38     | 236    | 1    | 2     | 25.0           |          | 0.52              | 0.28              |
| 26    | Guscio fond. | 96     | 36     | 40     | 97     | 1    | 2     | 25.0           |          | 0.29              | 0.16              |
| 27    | Guscio fond. | 220    | 35     | 39     | 221    | 1    | 2     | 25.0           |          | 0.35              | 0.18              |
| 28    | Guscio fond. | 236    | 38     | 42     | 237    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 29    | Guscio fond. | 97     | 40     | 44     | 98     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 30    | Guscio fond. | 221    | 39     | 43     | 222    | 1    | 2     | 25.0           |          | 0.35              | 0.18              |
| 31    | Guscio fond. | 237    | 42     | 46     | 238    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 32    | Guscio fond. | 98     | 44     | 48     | 99     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 33    | Guscio fond. | 222    | 43     | 47     | 223    | 1    | 2     | 25.0           |          | 0.35              | 0.19              |
| 34    | Guscio fond. | 238    | 46     | 50     | 239    | 1    | 2     | 25.0           |          | 0.53              | 0.28              |
| 35    | Guscio fond. | 99     | 48     | 52     | 100    | 1    | 2     | 25.0           |          | 0.31              | 0.16              |
| 36    | Guscio fond. | 223    | 47     | 51     | 224    | 1    | 2     | 25.0           |          | 0.35              | 0.19              |
| 37    | Guscio fond. | 239    | 50     | 54     | 240    | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 38    | Guscio fond. | 100    | 52     | 56     | 101    | 1    | 2     | 25.0           |          | 0.33              | 0.18              |
| 39    | Guscio fond. | 224    | 51     | 55     | 225    | 1    | 2     | 25.0           |          | 0.38              | 0.20              |
| 40    | Guscio fond. | 240    | 54     | 58     | 241    | 1    | 2     | 25.0           |          | 0.65              | 0.34              |
| 41    | Guscio fond. | 101    | 56     | 60     | 89     | 1    | 2     | 25.0           |          | 0.38              | 0.20              |
| 42    | Guscio fond. | 225    | 55     | 59     | 226    | 1    | 2     | 25.0           |          | 0.44              | 0.24              |
| 43    | Guscio fond. | 59     | 89     | 87     | 7      | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 44    | Guscio fond. | 5      | 88     | 90     | 11     | 1    | 2     | 25.0           |          | 0.56              | 0.30              |
| 45    | Guscio fond. | 11     | 90     | 91     | 15     | 1    | 2     | 25.0           |          | 0.38              | 0.20              |
| 46    | Guscio fond. | 15     | 91     | 92     | 19     | 1    | 2     | 25.0           |          | 0.33              | 0.18              |
| 47    | Guscio fond. | 19     | 92     | 93     | 23     | 1    | 2     | 25.0           |          | 0.31              | 0.16              |
| 48    | Guscio fond. | 23     | 93     | 94     | 27     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 49    | Guscio fond. | 27     | 94     | 95     | 31     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |
| 50    | Guscio fond. | 31     | 95     | 96     | 35     | 1    | 2     | 25.0           |          | 0.29              | 0.16              |
| 51    | Guscio fond. | 35     | 96     | 97     | 39     | 1    | 2     | 25.0           |          | 0.29              | 0.16              |
| 52    | Guscio fond. | 39     | 97     | 98     | 43     | 1    | 2     | 25.0           |          | 0.30              | 0.16              |

|     |              |     |     |     |     |     |   |      |      |      |
|-----|--------------|-----|-----|-----|-----|-----|---|------|------|------|
| 53  | Guscio fond. | 43  | 98  | 99  | 47  | 1   | 2 | 25.0 | 0.30 | 0.16 |
| 54  | Guscio fond. | 47  | 99  | 100 | 51  | 1   | 2 | 25.0 | 0.31 | 0.16 |
| 55  | Guscio fond. | 51  | 100 | 101 | 55  | 1   | 2 | 25.0 | 0.33 | 0.18 |
| 56  | Guscio fond. | 55  | 101 | 89  | 59  | 1   | 2 | 25.0 | 0.38 | 0.20 |
| 57  | Guscio       | 73  | 102 | 105 | 167 | 157 | 1 | 10.0 |      |      |
| 58  | Guscio       | 72  | 134 | 102 | 73  | 157 | 1 | 10.0 |      |      |
| 59  | Guscio       | 135 | 85  | 86  | 103 | 157 | 1 | 10.0 |      |      |
| 60  | Guscio       | 168 | 107 | 108 | 61  | 157 | 1 | 10.0 |      |      |
| 61  | Setto        | 209 | 175 | 105 | 167 | 157 | 1 | 10.0 |      |      |
| 62  | Setto        | 203 | 174 | 107 | 168 | 157 | 1 | 10.0 |      |      |
| 63  | Setto        | 194 | 175 | 111 | 136 | 157 | 1 | 10.0 |      |      |
| 64  | Setto        | 182 | 176 | 110 | 137 | 157 | 1 | 10.0 |      |      |
| 65  | Guscio       | 61  | 108 | 114 | 62  | 157 | 1 | 10.0 |      |      |
| 66  | Guscio       | 109 | 74  | 75  | 115 | 157 | 1 | 10.0 |      |      |
| 67  | Guscio       | 62  | 114 | 116 | 63  | 157 | 1 | 10.0 |      |      |
| 68  | Guscio       | 115 | 75  | 76  | 117 | 157 | 1 | 10.0 |      |      |
| 69  | Guscio       | 63  | 116 | 118 | 64  | 157 | 1 | 10.0 |      |      |
| 70  | Guscio       | 117 | 76  | 77  | 119 | 157 | 1 | 10.0 |      |      |
| 71  | Guscio       | 64  | 118 | 120 | 65  | 157 | 1 | 10.0 |      |      |
| 72  | Guscio       | 119 | 77  | 78  | 121 | 157 | 1 | 10.0 |      |      |
| 73  | Guscio       | 65  | 120 | 122 | 66  | 157 | 1 | 10.0 |      |      |
| 74  | Guscio       | 121 | 78  | 79  | 123 | 157 | 1 | 10.0 |      |      |
| 75  | Guscio       | 66  | 122 | 124 | 67  | 157 | 1 | 10.0 |      |      |
| 76  | Guscio       | 123 | 79  | 80  | 125 | 157 | 1 | 10.0 |      |      |
| 77  | Guscio       | 67  | 124 | 126 | 68  | 157 | 1 | 10.0 |      |      |
| 78  | Guscio       | 125 | 80  | 81  | 127 | 157 | 1 | 10.0 |      |      |
| 79  | Guscio       | 68  | 126 | 128 | 69  | 157 | 1 | 10.0 |      |      |
| 80  | Guscio       | 127 | 81  | 82  | 129 | 157 | 1 | 10.0 |      |      |
| 81  | Guscio       | 69  | 128 | 130 | 70  | 157 | 1 | 10.0 |      |      |
| 82  | Guscio       | 129 | 82  | 83  | 131 | 157 | 1 | 10.0 |      |      |
| 83  | Guscio       | 70  | 130 | 132 | 71  | 157 | 1 | 10.0 |      |      |
| 84  | Guscio       | 131 | 83  | 84  | 133 | 157 | 1 | 10.0 |      |      |
| 85  | Guscio       | 71  | 132 | 134 | 72  | 157 | 1 | 10.0 |      |      |
| 86  | Guscio       | 133 | 84  | 85  | 135 | 157 | 1 | 10.0 |      |      |
| 87  | Setto        | 195 | 194 | 136 | 164 | 157 | 1 | 10.0 |      |      |
| 88  | Setto        | 196 | 195 | 164 | 162 | 157 | 1 | 10.0 |      |      |
| 89  | Setto        | 197 | 196 | 162 | 160 | 157 | 1 | 10.0 |      |      |
| 90  | Setto        | 198 | 197 | 160 | 158 | 157 | 1 | 10.0 |      |      |
| 91  | Setto        | 199 | 198 | 158 | 156 | 157 | 1 | 10.0 |      |      |
| 92  | Setto        | 200 | 199 | 156 | 154 | 157 | 1 | 10.0 |      |      |
| 93  | Setto        | 201 | 200 | 154 | 152 | 157 | 1 | 10.0 |      |      |
| 94  | Setto        | 143 | 201 | 152 | 150 | 157 | 1 | 10.0 |      |      |
| 95  | Setto        | 138 | 143 | 150 | 148 | 157 | 1 | 10.0 |      |      |
| 96  | Setto        | 139 | 138 | 148 | 146 | 157 | 1 | 10.0 |      |      |
| 97  | Setto        | 140 | 139 | 146 | 144 | 157 | 1 | 10.0 |      |      |
| 98  | Setto        | 141 | 140 | 144 | 142 | 157 | 1 | 10.0 |      |      |
| 99  | Setto        | 174 | 141 | 142 | 113 | 157 | 1 | 10.0 |      |      |
| 100 | Setto        | 183 | 182 | 137 | 165 | 157 | 1 | 10.0 |      |      |
| 101 | Setto        | 184 | 183 | 165 | 163 | 157 | 1 | 10.0 |      |      |
| 102 | Setto        | 185 | 184 | 163 | 161 | 157 | 1 | 10.0 |      |      |
| 103 | Setto        | 186 | 185 | 161 | 159 | 157 | 1 | 10.0 |      |      |
| 104 | Setto        | 187 | 186 | 159 | 157 | 157 | 1 | 10.0 |      |      |
| 105 | Setto        | 188 | 187 | 157 | 155 | 157 | 1 | 10.0 |      |      |
| 106 | Setto        | 189 | 188 | 155 | 153 | 157 | 1 | 10.0 |      |      |
| 107 | Setto        | 190 | 189 | 153 | 151 | 157 | 1 | 10.0 |      |      |
| 108 | Setto        | 191 | 190 | 151 | 149 | 157 | 1 | 10.0 |      |      |

|     |              |     |     |     |     |     |   |      |      |      |
|-----|--------------|-----|-----|-----|-----|-----|---|------|------|------|
| 109 | Setto        | 192 | 191 | 149 | 147 | 157 | 1 | 10.0 |      |      |
| 110 | Setto        | 193 | 192 | 147 | 145 | 157 | 1 | 10.0 |      |      |
| 111 | Setto        | 211 | 193 | 145 | 210 | 157 | 1 | 10.0 |      |      |
| 112 | Guscio       | 171 | 73  | 167 | 172 | 157 | 1 | 10.0 |      |      |
| 113 | Guscio       | 173 | 168 | 61  | 166 | 157 | 1 | 10.0 |      |      |
| 114 | Guscio       | 103 | 86  | 169 | 104 | 157 | 1 | 10.0 |      |      |
| 115 | Guscio       | 106 | 170 | 74  | 109 | 157 | 1 | 10.0 |      |      |
| 116 | Guscio       | 86  | 171 | 172 | 169 | 157 | 1 | 10.0 |      |      |
| 117 | Guscio       | 170 | 173 | 166 | 74  | 157 | 1 | 10.0 |      |      |
| 118 | Setto        | 205 | 181 | 173 | 170 | 157 | 1 | 10.0 |      |      |
| 119 | Setto        | 208 | 180 | 172 | 169 | 157 | 1 | 10.0 |      |      |
| 120 | Setto        | 206 | 111 | 175 | 209 | 157 | 1 | 10.0 |      |      |
| 121 | Setto        | 207 | 179 | 180 | 208 | 157 | 1 | 10.0 |      |      |
| 122 | Setto        | 202 | 113 | 174 | 203 | 157 | 1 | 10.0 |      |      |
| 123 | Setto        | 204 | 178 | 181 | 205 | 157 | 1 | 10.0 |      |      |
| 124 | Setto        | 103 | 104 | 176 | 182 | 157 | 1 | 10.0 |      |      |
| 125 | Setto        | 135 | 103 | 182 | 183 | 157 | 1 | 10.0 |      |      |
| 126 | Setto        | 133 | 135 | 183 | 184 | 157 | 1 | 10.0 |      |      |
| 127 | Setto        | 131 | 133 | 184 | 185 | 157 | 1 | 10.0 |      |      |
| 128 | Setto        | 129 | 131 | 185 | 186 | 157 | 1 | 10.0 |      |      |
| 129 | Setto        | 127 | 129 | 186 | 187 | 157 | 1 | 10.0 |      |      |
| 130 | Setto        | 125 | 127 | 187 | 188 | 157 | 1 | 10.0 |      |      |
| 131 | Setto        | 123 | 125 | 188 | 189 | 157 | 1 | 10.0 |      |      |
| 132 | Setto        | 121 | 123 | 189 | 190 | 157 | 1 | 10.0 |      |      |
| 133 | Setto        | 119 | 121 | 190 | 191 | 157 | 1 | 10.0 |      |      |
| 134 | Setto        | 117 | 119 | 191 | 192 | 157 | 1 | 10.0 |      |      |
| 135 | Setto        | 115 | 117 | 192 | 193 | 157 | 1 | 10.0 |      |      |
| 136 | Setto        | 109 | 115 | 193 | 211 | 157 | 1 | 10.0 |      |      |
| 137 | Setto        | 102 | 105 | 175 | 194 | 157 | 1 | 10.0 |      |      |
| 138 | Setto        | 134 | 102 | 194 | 195 | 157 | 1 | 10.0 |      |      |
| 139 | Setto        | 132 | 134 | 195 | 196 | 157 | 1 | 10.0 |      |      |
| 140 | Setto        | 130 | 132 | 196 | 197 | 157 | 1 | 10.0 |      |      |
| 141 | Setto        | 128 | 130 | 197 | 198 | 157 | 1 | 10.0 |      |      |
| 142 | Setto        | 126 | 128 | 198 | 199 | 157 | 1 | 10.0 |      |      |
| 143 | Setto        | 124 | 126 | 199 | 200 | 157 | 1 | 10.0 |      |      |
| 144 | Setto        | 122 | 124 | 200 | 201 | 157 | 1 | 10.0 |      |      |
| 145 | Setto        | 120 | 122 | 201 | 143 | 157 | 1 | 10.0 |      |      |
| 146 | Setto        | 118 | 120 | 143 | 138 | 157 | 1 | 10.0 |      |      |
| 147 | Setto        | 116 | 118 | 138 | 139 | 157 | 1 | 10.0 |      |      |
| 148 | Setto        | 114 | 116 | 139 | 140 | 157 | 1 | 10.0 |      |      |
| 149 | Setto        | 108 | 114 | 140 | 141 | 157 | 1 | 10.0 |      |      |
| 150 | Setto        | 107 | 108 | 141 | 174 | 157 | 1 | 10.0 |      |      |
| 151 | Setto        | 181 | 203 | 168 | 173 | 157 | 1 | 10.0 |      |      |
| 152 | Setto        | 178 | 202 | 203 | 181 | 157 | 1 | 10.0 |      |      |
| 153 | Setto        | 177 | 205 | 170 | 106 | 157 | 1 | 10.0 |      |      |
| 154 | Setto        | 112 | 204 | 205 | 177 | 157 | 1 | 10.0 |      |      |
| 155 | Setto        | 176 | 208 | 169 | 104 | 157 | 1 | 10.0 |      |      |
| 156 | Setto        | 110 | 207 | 208 | 176 | 157 | 1 | 10.0 |      |      |
| 157 | Setto        | 180 | 209 | 167 | 172 | 157 | 1 | 10.0 |      |      |
| 158 | Setto        | 179 | 206 | 209 | 180 | 157 | 1 | 10.0 |      |      |
| 159 | Setto        | 177 | 211 | 210 | 112 | 157 | 1 | 10.0 |      |      |
| 160 | Setto        | 106 | 109 | 211 | 177 | 157 | 1 | 10.0 |      |      |
| 161 | Guscio fond. | 57  | 226 | 213 | 4   | 1   | 2 | 25.0 | 0.98 | 0.52 |
| 162 | Guscio fond. | 1   | 212 | 214 | 9   | 1   | 2 | 25.0 | 0.98 | 0.52 |
| 163 | Guscio fond. | 9   | 214 | 215 | 13  | 1   | 2 | 25.0 | 0.65 | 0.34 |
| 164 | Guscio fond. | 13  | 215 | 216 | 17  | 1   | 2 | 25.0 | 0.56 | 0.30 |

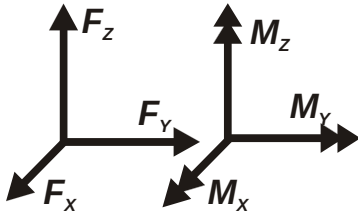
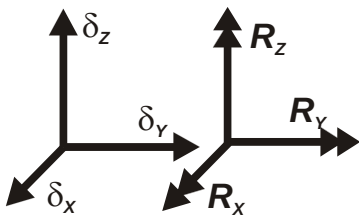
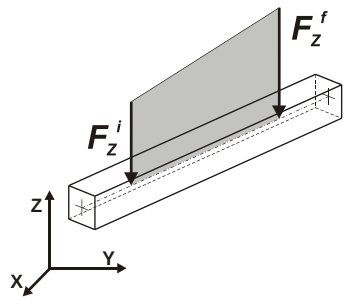
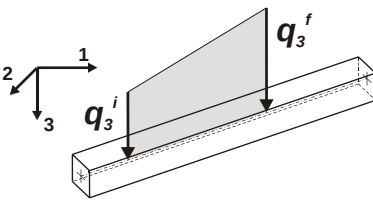
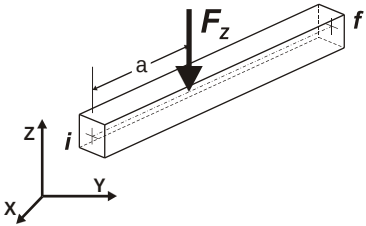
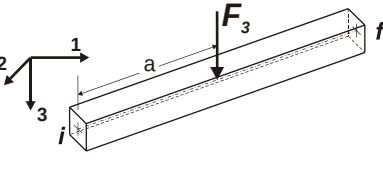
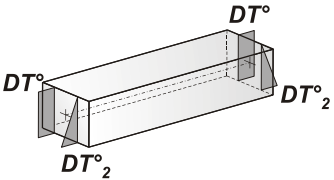
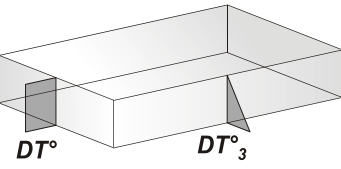
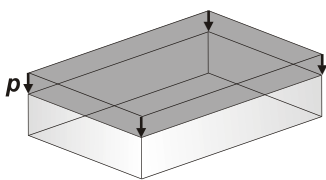
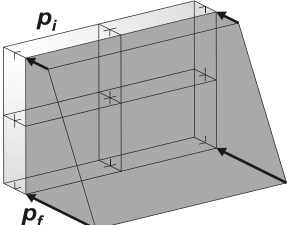
|                 |    |     |     |    |   |   |      |      |      |
|-----------------|----|-----|-----|----|---|---|------|------|------|
| 165Guscio fond. | 17 | 216 | 217 | 21 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 166Guscio fond. | 21 | 217 | 218 | 25 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 167Guscio fond. | 25 | 218 | 219 | 29 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 168Guscio fond. | 29 | 219 | 220 | 33 | 1 | 2 | 25.0 | 0.52 | 0.28 |
| 169Guscio fond. | 33 | 220 | 221 | 37 | 1 | 2 | 25.0 | 0.52 | 0.28 |
| 170Guscio fond. | 37 | 221 | 222 | 41 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 171Guscio fond. | 41 | 222 | 223 | 45 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 172Guscio fond. | 45 | 223 | 224 | 49 | 1 | 2 | 25.0 | 0.53 | 0.28 |
| 173Guscio fond. | 49 | 224 | 225 | 53 | 1 | 2 | 25.0 | 0.56 | 0.30 |
| 174Guscio fond. | 53 | 225 | 226 | 57 | 1 | 2 | 25.0 | 0.65 | 0.34 |
| 175Guscio fond. | 60 | 241 | 228 | 8  | 1 | 2 | 25.0 | 0.64 | 0.34 |
| 176Guscio fond. | 6  | 227 | 229 | 12 | 1 | 2 | 25.0 | 0.64 | 0.34 |
| 177Guscio fond. | 12 | 229 | 230 | 16 | 1 | 2 | 25.0 | 0.44 | 0.24 |
| 178Guscio fond. | 16 | 230 | 231 | 20 | 1 | 2 | 25.0 | 0.38 | 0.20 |
| 179Guscio fond. | 20 | 231 | 232 | 24 | 1 | 2 | 25.0 | 0.35 | 0.19 |
| 180Guscio fond. | 24 | 232 | 233 | 28 | 1 | 2 | 25.0 | 0.35 | 0.19 |
| 181Guscio fond. | 28 | 233 | 234 | 32 | 1 | 2 | 25.0 | 0.35 | 0.18 |
| 182Guscio fond. | 32 | 234 | 235 | 36 | 1 | 2 | 25.0 | 0.35 | 0.18 |
| 183Guscio fond. | 36 | 235 | 236 | 40 | 1 | 2 | 25.0 | 0.35 | 0.18 |
| 184Guscio fond. | 40 | 236 | 237 | 44 | 1 | 2 | 25.0 | 0.35 | 0.18 |
| 185Guscio fond. | 44 | 237 | 238 | 48 | 1 | 2 | 25.0 | 0.35 | 0.19 |
| 186Guscio fond. | 48 | 238 | 239 | 52 | 1 | 2 | 25.0 | 0.35 | 0.19 |
| 187Guscio fond. | 52 | 239 | 240 | 56 | 1 | 2 | 25.0 | 0.38 | 0.20 |
| 188Guscio fond. | 56 | 240 | 241 | 60 | 1 | 2 | 25.0 | 0.44 | 0.24 |

# MODELLAZIONE DELLE AZIONI

## 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:

|           |                                                                                                                                                                                                                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | <b>carico concentrato nodale</b><br>6 dati (forza $F_x$ , $F_y$ , $F_z$ , momento $M_x$ , $M_y$ , $M_z$ )                                                                                                                                                                                                                     |
| <b>2</b>  | <b>spostamento nodale impresso</b><br>6 dati (spostamento $T_x$ , $T_y$ , $T_z$ , rotazione $R_x$ , $R_y$ , $R_z$ )                                                                                                                                                                                                           |
| <b>3</b>  | <b>carico distribuito globale su elemento tipo trave</b><br>7 dati ( $f_x$ , $f_y$ , $f_z$ , $m_x$ , $m_y$ , $m_z$ , ascissa di inizio carico)<br>7 dati ( $f_x$ , $f_y$ , $f_z$ , $m_x$ , $m_y$ , $m_z$ , ascissa di fine carico)                                                                                            |
| <b>4</b>  | <b>carico distribuito locale su elemento tipo trave</b><br>7 dati ( $f_1$ , $f_2$ , $f_3$ , $m_1$ , $m_2$ , $m_3$ , ascissa di inizio carico)<br>7 dati ( $f_1$ , $f_2$ , $f_3$ , $m_1$ , $m_2$ , $m_3$ , ascissa di fine carico)                                                                                             |
| <b>5</b>  | <b>carico concentrato globale su elemento tipo trave</b><br>7 dati ( $F_x$ , $F_y$ , $F_z$ , $M_x$ , $M_y$ , $M_z$ , ascissa di carico)                                                                                                                                                                                       |
| <b>6</b>  | <b>carico concentrato locale su elemento tipo trave</b><br>7 dati ( $F_1$ , $F_2$ , $F_3$ , $M_1$ , $M_2$ , $M_3$ , ascissa di carico)                                                                                                                                                                                        |
| <b>7</b>  | <b>variazione termica applicata ad elemento tipo trave</b><br>7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)                                                                                                                                                     |
| <b>8</b>  | <b>carico di pressione uniforme su elemento tipo piastra</b><br>1 dato (pressione)                                                                                                                                                                                                                                            |
| <b>9</b>  | <b>carico di pressione variabile su elemento tipo piastra</b><br>4 dati (pressione, quota, pressione, quota)                                                                                                                                                                                                                  |
| <b>10</b> | <b>variazione termica applicata ad elemento tipo piastra</b><br>2 dati (variazioni termiche: media e differenza nello spessore)                                                                                                                                                                                               |
| <b>11</b> | <b>carico variabile generale su elementi tipo trave e piastra</b><br>1 dato descrizione della tipologia<br>4 dati per segmento (posizione, valore, posizione, valore)<br>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 |
| <b>12</b> | <b>gruppo di carichi con impronta su piastra</b><br>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)                                                                                                              |

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

Tipo carico distribuito globale su trave

| Id | Tipo                     | Pos. | fx     | fy     | fz       | mx  | my  | mz  |
|----|--------------------------|------|--------|--------|----------|-----|-----|-----|
|    |                          | m    | daN/ m | daN/ m | daN/ m   | daN | daN | daN |
| 1  | DG:Fzi=-12.50 Fzf=-12.50 | 0.0  | 0.0    | 0.0    | -1250.00 | 0.0 | 0.0 | 0.0 |
|    |                          | 0.0  | 0.0    | 0.0    | -1250.00 | 0.0 | 0.0 | 0.0 |

# SCHEMATIZZAZIONE DEI CASI DI CARICO

## 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:

|           | <b>Sigla</b> | <b>Tipo</b> | <b>Descrizione</b>                                                                                          |
|-----------|--------------|-------------|-------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | <b>Ggk</b>   | A           | caso di carico comprensivo del peso proprio struttura                                                       |
| <b>2</b>  | <b>Gk</b>    | NA          | caso di carico con azioni permanenti                                                                        |
| <b>3</b>  | <b>Qk</b>    | NA          | caso di carico con azioni variabili                                                                         |
| <b>4</b>  | <b>Gsk</b>   | A           | caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture                               |
| <b>5</b>  | <b>Qsk</b>   | A           | caso di carico comprensivo dei carichi variabili sui solai                                                  |
| <b>6</b>  | <b>Qnk</b>   | A           | caso di carico comprensivo dei carichi di neve sulle coperture                                              |
| <b>7</b>  | <b>Qtk</b>   | SA          | caso di carico comprensivo di una variazione termica agente sulla struttura                                 |
| <b>8</b>  | <b>Qvk</b>   | NA          | caso di carico comprensivo di azioni da vento sulla struttura                                               |
| <b>9</b>  | <b>Esk</b>   | SA          | caso di carico sismico con analisi statica equivalente                                                      |
| <b>10</b> | <b>Edk</b>   | SA          | caso di carico sismico con analisi dinamica                                                                 |
| <b>11</b> | <b>Etk</b>   | NA          | caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica |
| <b>12</b> | <b>Pk</b>    | 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  $S_{ksol}$  nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

| CDC | Tipo | Sigla Id                                      | Note                                                             | Per non automatici:      |
|-----|------|-----------------------------------------------|------------------------------------------------------------------|--------------------------|
| 1   | Ggk  | CDC=Ggk (peso proprio della struttura)        |                                                                  |                          |
| 2   | Edk  | CDC=Ed (dinamico SLU) $\alpha=0.0$ (ecc. +)   | partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura) |                          |
|     |      |                                               | partecipazione:1.00 per 10 CDC=G2k (PESO VASCA)                  |                          |
| 3   | Edk  | CDC=Ed (dinamico SLU) $\alpha=0.0$ (ecc. -)   | come precedente CDC sismico                                      |                          |
| 4   | Edk  | CDC=Ed (dinamico SLU) $\alpha=90.00$ (ecc. +) | come precedente CDC sismico                                      |                          |
| 5   | Edk  | CDC=Ed (dinamico SLU) $\alpha=90.00$ (ecc. -) | come precedente CDC sismico                                      |                          |
| 6   | Edk  | CDC=Ed (dinamico SLD) $\alpha=0.0$ (ecc. +)   | come precedente CDC sismico                                      |                          |
| 7   | Edk  | CDC=Ed (dinamico SLD) $\alpha=0.0$ (ecc. -)   | come precedente CDC sismico                                      |                          |
| 8   | Edk  | CDC=Ed (dinamico SLD) $\alpha=90.00$ (ecc. +) | come precedente CDC sismico                                      |                          |
| 9   | Edk  | CDC=Ed (dinamico SLD) $\alpha=90.00$ (ecc. -) | come precedente CDC sismico                                      |                          |
| 10  | Gk   | CDC=G2k (PESO VASCA)                          | Azioni applicate:                                                | Ad elementi:             |
|     |      |                                               | [1] DG:Fzi=-12.50 Fzf=-12.50                                     | D2: 60, 63 # 67, 69 # 85 |

# DEFINIZIONE DELLE COMBINAZIONI

## 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

$$\gamma G_1 \cdot G_1 + \gamma G_2 \cdot G_2 + \gamma P \cdot P + \gamma Q_1 \cdot Q_{k1} + \gamma Q_2 \cdot \psi_{02} \cdot Q_{k2} + \gamma Q_3 \cdot \psi_{03} \cdot Q_{k3} + \dots$$

### Combinazione caratteristica (rara) SLE

$$G_1 + G_2 + P + Q_{k1} + \psi_{02} \cdot Q_{k2} + \psi_{03} \cdot Q_{k3} + \dots$$

### Combinazione frequente SLE

$$G_1 + G_2 + P + \psi_{11} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

### Combinazione quasi permanente SLE

$$G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

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

$$E + G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

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

$$G_1 + G_2 + A_d + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

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 $\leq 1000$ 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<br>$\gamma_f$ | <b>EQU</b> | <b>A1</b> | <b>A2</b> |
|---------------------------------------------------------------------------|--------------------|----------------------------|------------|-----------|-----------|
| <i>Carichi permanenti</i>                                                 | <i>Favorevoli</i>  | $\gamma_{G1}$              | 0,9        | 1,0       | 1,0       |
|                                                                           | <i>Sfavorevoli</i> |                            | 1,1        | 1,3       | 1,0       |
| <i>Carichi permanenti non strutturali</i><br>(Non compiutamente definiti) | <i>Favorevoli</i>  | $\gamma_{G2}$              | 0,8        | 0,8       | 0,8       |
|                                                                           | <i>Sfavorevoli</i> |                            | 1,5        | 1,5       | 1,3       |
| <i>Carichi variabili</i>                                                  | <i>Favorevoli</i>  | $\gamma_{Qi}$              | 0,0        | 0,0       | 0,0       |
|                                                                           | <i>Sfavorevoli</i> |                            | 1,5        | 1,5       | 1,3       |

| Cmb | Tipo   | Sigla Id                  | effetto P-delta |
|-----|--------|---------------------------|-----------------|
| 1   | SLU    | SLU                       |                 |
| 2   | SLE(r) | SLE_R                     |                 |
| 3   | SLU    | SLV_1_100X_30Y_ex+_ey+    |                 |
| 4   | SLU    | SLV_2_100X_30Y_ex+_ey-    |                 |
| 5   | SLU    | SLV_3_100X_30Y_ex-_ey+    |                 |
| 6   | SLU    | SLV_4_100X_30Y_ex-_ey-    |                 |
| 7   | SLU    | SLV_5_100X_-30Y_ex+_ey+   |                 |
| 8   | SLU    | SLV_6_100X_-30Y_ex+_ey-   |                 |
| 9   | SLU    | SLV_7_100X_-30Y_ex-_ey+   |                 |
| 10  | SLU    | SLV_8_100X_-30Y_ex-_ey-   |                 |
| 11  | SLU    | SLV_9_-100X_30Y_ex+_ey+   |                 |
| 12  | SLU    | SLV_10_-100X_30Y_ex+_ey-  |                 |
| 13  | SLU    | SLV_11_-100X_30Y_ex-_ey+  |                 |
| 14  | SLU    | SLV_12_-100X_30Y_ex-_ey-  |                 |
| 15  | SLU    | SLV_13_-100X_-30Y_ex+_ey+ |                 |
| 16  | SLU    | SLV_14_-100X_-30Y_ex+_ey- |                 |
| 17  | SLU    | SLV_15_-100X_-30Y_ex-_ey+ |                 |
| 18  | SLU    | SLV_16_-100X_-30Y_ex-_ey- |                 |
| 19  | SLU    | SLV_17_30X_100Y_ex+_ey+   |                 |
| 20  | SLU    | SLV_18_30X_100Y_ex+_ey-   |                 |
| 21  | SLU    | SLV_19_30X_100Y_ex-_ey+   |                 |
| 22  | SLU    | SLV_20_30X_100Y_ex-_ey-   |                 |
| 23  | SLU    | SLV_21_30X_-100Y_ex+_ey+  |                 |
| 24  | SLU    | SLV_22_30X_-100Y_ex+_ey-  |                 |
| 25  | SLU    | SLV_23_30X_-100Y_ex-_ey+  |                 |
| 26  | SLU    | SLV_24_30X_-100Y_ex-_ey-  |                 |
| 27  | SLU    | SLV_25_-30X_100Y_ex+_ey+  |                 |
| 28  | SLU    | SLV_26_-30X_100Y_ex+_ey-  |                 |

| Cmb | Tipo     | Sigla Id                  | effetto P-delta |
|-----|----------|---------------------------|-----------------|
| 29  | SLU      | SLV_27_-30X_100Y_ex-_ey+  |                 |
| 30  | SLU      | SLV_28_-30X_100Y_ex-_ey-  |                 |
| 31  | SLU      | SLV_29_-30X_-100Y_ex+_ey+ |                 |
| 32  | SLU      | SLV_30_-30X_-100Y_ex+_ey- |                 |
| 33  | SLU      | SLV_31_-30X_-100Y_ex-_ey+ |                 |
| 34  | SLU      | SLV_32_-30X_-100Y_ex-_ey- |                 |
| 35  | SLE(sis) | SLD_1_100X_30Y_ex+_ey+    |                 |
| 36  | SLE(sis) | SLD_2_100X_30Y_ex+_ey-    |                 |
| 37  | SLE(sis) | SLD_3_100X_30Y_ex-_ey+    |                 |
| 38  | SLE(sis) | SLD_4_100X_30Y_ex-_ey-    |                 |
| 39  | SLE(sis) | SLD_5_100X_-30Y_ex+_ey+   |                 |
| 40  | SLE(sis) | SLD_6_100X_-30Y_ex+_ey-   |                 |
| 41  | SLE(sis) | SLD_7_100X_-30Y_ex-_ey+   |                 |
| 42  | SLE(sis) | SLD_8_100X_-30Y_ex-_ey-   |                 |
| 43  | SLE(sis) | SLD_9_-100X_30Y_ex+_ey+   |                 |
| 44  | SLE(sis) | SLD_10_-100X_30Y_ex+_ey-  |                 |
| 45  | SLE(sis) | SLD_11_-100X_30Y_ex-_ey+  |                 |
| 46  | SLE(sis) | SLD_12_-100X_30Y_ex-_ey-  |                 |
| 47  | SLE(sis) | SLD_13_-100X_-30Y_ex+_ey+ |                 |
| 48  | SLE(sis) | SLD_14_-100X_-30Y_ex+_ey- |                 |
| 49  | SLE(sis) | SLD_15_-100X_-30Y_ex-_ey+ |                 |
| 50  | SLE(sis) | SLD_16_-100X_-30Y_ex-_ey- |                 |
| 51  | SLE(sis) | SLD_17_30X_100Y_ex+_ey+   |                 |
| 52  | SLE(sis) | SLD_18_30X_100Y_ex+_ey-   |                 |
| 53  | SLE(sis) | SLD_19_30X_100Y_ex-_ey+   |                 |
| 54  | SLE(sis) | SLD_20_30X_100Y_ex-_ey-   |                 |
| 55  | SLE(sis) | SLD_21_30X_-100Y_ex+_ey+  |                 |
| 56  | SLE(sis) | SLD_22_30X_-100Y_ex+_ey-  |                 |
| 57  | SLE(sis) | SLD_23_30X_-100Y_ex-_ey+  |                 |
| 58  | SLE(sis) | SLD_24_30X_-100Y_ex-_ey-  |                 |
| 59  | SLE(sis) | SLD_25_-30X_100Y_ex+_ey+  |                 |
| 60  | SLE(sis) | SLD_26_-30X_100Y_ex+_ey-  |                 |
| 61  | SLE(sis) | SLD_27_-30X_100Y_ex-_ey+  |                 |
| 62  | SLE(sis) | SLD_28_-30X_100Y_ex-_ey-  |                 |
| 63  | SLE(sis) | SLD_29_-30X_-100Y_ex+_ey+ |                 |
| 64  | SLE(sis) | SLD_30_-30X_-100Y_ex+_ey- |                 |
| 65  | SLE(sis) | SLD_31_-30X_-100Y_ex-_ey+ |                 |
| 66  | SLE(sis) | SLD_32_-30X_-100Y_ex-_ey- |                 |

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

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

| Cmb | CDC<br>1/15... | CDC<br>2/16... | CDC<br>3/17... | CDC<br>4/18... | CDC<br>5/19... | CDC<br>6/20... | CDC<br>7/21... | CDC<br>8/22... | CDC<br>9/23... | CDC<br>10/24... | CDC<br>11/25... | CDC<br>12/26... | CDC<br>13/27... | CDC<br>14/28... |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 62  | 1.00           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | -0.30          | 0.0            | 1.00           | 1.00            |                 |                 |                 |                 |
| 63  | 1.00           | 0.0            | 0.0            | 0.0            | 0.0            | -0.30          | 0.0            | -1.00          | 0.0            | 1.00            |                 |                 |                 |                 |
| 64  | 1.00           | 0.0            | 0.0            | 0.0            | 0.0            | -0.30          | 0.0            | 0.0            | -1.00          | 1.00            |                 |                 |                 |                 |
| 65  | 1.00           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | -0.30          | -1.00          | 0.0            | 1.00            |                 |                 |                 |                 |
| 66  | 1.00           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | -0.30          | 0.0            | -1.00          | 1.00            |                 |                 |                 |                 |

# AZIONE SISMICA

## 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;

| Parametri della struttura |                   |            |                      |               |                       |
|---------------------------|-------------------|------------|----------------------|---------------|-----------------------|
| Classe d'uso              | Vita $V_n$ [anni] | Coeff. Uso | Periodo $V_r$ [anni] | Tipo di suolo | Categoria topografica |
| III                       | 50.0              | 1.5        | 75.0                 | B             | 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.    | 15.267      | 40.229     |          |
| 35880   | 15.257      | 40.221     | 1.362    |
| 35881   | 15.323      | 40.220     | 4.819    |
| 35659   | 15.324      | 40.270     | 6.526    |
| 35658   | 15.259      | 40.271     | 4.625    |

| SL  | Pver | Tr     | ag    | Fo    | T*c   |
|-----|------|--------|-------|-------|-------|
|     |      | Anni   | g     |       | sec   |
| SLO | 81.0 | 45.2   | 0.039 | 2.498 | 0.312 |
| SLD | 63.0 | 75.4   | 0.049 | 2.495 | 0.361 |
| SLV | 10.0 | 711.8  | 0.110 | 2.629 | 0.494 |
| SLC | 5.0  | 1462.2 | 0.135 | 2.714 | 0.525 |

| SL  | ag    | S     | Fo    | Fv    | Tb    | Tc    | Td    |
|-----|-------|-------|-------|-------|-------|-------|-------|
|     | g     |       |       |       | sec   | sec   | sec   |
| SLO | 0.039 | 1.200 | 2.498 | 0.666 | 0.144 | 0.433 | 1.756 |
| SLD | 0.049 | 1.200 | 2.495 | 0.744 | 0.162 | 0.487 | 1.795 |
| SLV | 0.110 | 1.200 | 2.629 | 1.178 | 0.209 | 0.626 | 2.041 |
| SLC | 0.135 | 1.200 | 2.714 | 1.348 | 0.219 | 0.657 | 2.141 |

| Modo | Frequenza | Periodo | X M efficace x g | %  | Y M efficace x g | %  | Z M efficace x g | %  | RZ M efficace x g | %  |
|------|-----------|---------|------------------|----|------------------|----|------------------|----|-------------------|----|
|      | 1/sec     | sec     | daN              |    | daN              |    | daN              |    | daN m2            |    |
| 1    | 8.62      | 0.12    | 1.341e+04        | 89 | 0.0              | 0  | 0.0              | 0  | 0.0               | 0  |
| 2    | 9.78      | 0.10    | 0.0              | 0  | 1.399e+04        | 93 | 0.0              | 0  | 0.0               | 0  |
| 3    | 13.44     | 0.07    | 0.0              | 0  | 0.0              | 0  | 0.0              | 0  | 6.8               | 99 |
| 4    | 14.77     | 0.07    | 0.0              | 0  | 0.0              | 0  | 1.500e+04        | 99 | 0.0               | 0  |
| 5    | 21.04     | 0.05    | 0.0              | 0  | 1012.5           | 6  | 0.0              | 0  | 0.0               | 0  |
| 6    | 21.60     | 0.05    | 1590.8           | 10 | 0.0              | 0  | 0.0              | 0  | 0.0               | 0  |

# 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 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 $q/q_{ND}$ 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 di riduzione 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                                                                             |
| N° 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  $\eta_T$  (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  $\eta_T$ ,  $\eta_P$  e  $\eta_D$  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  $d_E$ , area ridotta e dimensione  $A_2$ , azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.

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 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                                                                |

|              |                                         |
|--------------|-----------------------------------------|
| Gam c(a,s,t) | Deformazioni di taglio dell' elastomero |
| Vcr          | Carico critico per instabilità          |

Affinché la verifica sia positiva deve essere:

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

| CDC | Tipo | Sigla Id                                | Note                                       |
|-----|------|-----------------------------------------|--------------------------------------------|
| 2   | Edk  | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +) |                                            |
|     |      |                                         | categoria suolo: B                         |
|     |      |                                         | fattore di sito S = 1.200                  |
|     |      |                                         | ordinata spettro (tratto Tb-Tc) = 0.348 g  |
|     |      |                                         | angolo di ingresso:0.0                     |
|     |      |                                         | eccentricità aggiuntiva: positiva          |
|     |      |                                         | periodo proprio T1: 0.117 s                |
|     |      |                                         | 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: 20             |
|     |      |                                         | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | 0.0        | -0.30      | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+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    | 8.566     | 0.117   | 0.253          | 1.335e+04        | 89.0     | 0.0              | 0.0  | 0.0              | 0.0      | 0.0     | 0.0         |
| 2    | 9.780     | 0.102   | 0.238          | 0.0              | 0.0      | 1.399e+04        | 93.2 | 0.0              | 0.0      | 0.0     | 0.0         |
| 3    | 13.635    | 0.073   | 0.208          | 51.44            | 0.3      | 0.0              | 0.0  | 0.0              | 0.0      | 0.0     | 0.0         |
| 4    | 14.770    | 0.068   | 0.202          | 0.0              | 0.0      | 0.0              | 0.0  | 1.500e+04        | 100.0    | 0.0     | 0.0         |
| 5    | 21.037    | 0.048   | 0.181          | 0.0              | 0.0      | 1012.54          | 6.8  | 0.0              | 0.0      | 0.0     | 0.0         |
| 6    | 21.634    | 0.046   | 0.180          | 1597.42          | 10.6     | 0.0              | 0.0  | 0.0              | 0.0      | 0.0     | 0.0         |
| 7    | 45.708    | 0.022   | 0.155          | 0.22             | 1.45e-03 | 0.0              | 0.0  | 0.0              | 0.0      | 0.0     | 0.0         |
| 8    | 50.678    | 0.020   | 0.153          | 0.0              | 0.0      | 0.0              | 0.0  | 0.19             | 1.23e-03 | 0.0     | 0.0         |

| Modo           | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %   | M efficace Z<br>x g | %        | Energia | Energia x v |
|----------------|-----------|---------|-------------------|---------------------|----------|---------------------|-----|---------------------|----------|---------|-------------|
| 9              | 109.719   | 0.009   | 0.142             | 0.0                 | 0.0      | 2.60e-06            | 0.0 | 5.83e-05            | 0.0      | 0.0     | 0.0         |
| 10             | 109.756   | 0.009   | 0.142             | 2.31                | 1.54e-02 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11             | 158.305   | 0.006   | 0.139             | 1.88e-03            | 1.25e-05 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12             | 183.781   | 0.005   | 0.138             | 0.0                 | 0.0      | 0.0                 | 0.0 | 3.75e-04            | 2.50e-06 | 0.0     | 0.0         |
| 13             | 262.759   | 0.004   | 0.136             | 0.10                | 6.50e-04 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14             | 270.560   | 0.004   | 0.136             | 0.0                 | 0.0      | 1.86e-06            | 0.0 | 6.21e-06            | 0.0      | 0.0     | 0.0         |
| 15             | 293.694   | 0.003   | 0.136             | 8.34e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16             | 372.531   | 0.003   | 0.135             | 0.0                 | 0.0      | 0.0                 | 0.0 | 1.94e-06            | 0.0      | 0.0     | 0.0         |
| 17             | 420.726   | 0.002   | 0.135             | 4.60e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18             | 469.162   | 0.002   | 0.134             | 0.01                | 8.02e-05 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19             | 496.165   | 0.002   | 0.134             | 0.0                 | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20             | 626.927   | 0.002   | 0.134             | 5.76e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                   | 1.500e+04           |          | 1.500e+04           |     | 1.500e+04           |          |         |             |
| In percentuale |           |         |                   | 100.00              |          | 100.00              |     | 100.00              |          |         |             |

| CDC | Tipo | Sigla Id                                | Note                                       |
|-----|------|-----------------------------------------|--------------------------------------------|
| 3   | Edk  | CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -) |                                            |
|     |      |                                         | categoria suolo: B                         |
|     |      |                                         | fattore di sito S = 1.200                  |
|     |      |                                         | ordinata spettro (tratto Tb-Tc) = 0.348 g  |
|     |      |                                         | angolo di ingresso:0.0                     |
|     |      |                                         | eccentricità aggiuntiva: negativa          |
|     |      |                                         | periodo proprio T1: 0.117 s                |
|     |      |                                         | 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: 20             |
|     |      |                                         | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | 0.0        | 0.30       | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+04     |         |         |            |            |         |         |          |             |             |

| Modo | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %    | M efficace Y<br>x g | %    | M efficace Z<br>x g | %     | Energia | Energia x v |
|------|-----------|---------|-------------------|---------------------|------|---------------------|------|---------------------|-------|---------|-------------|
|      | Hz        | sec     | g                 | daN                 |      | daN                 |      | daN                 |       |         |             |
| 1    | 8.566     | 0.117   | 0.253             | 1.335e+04           | 89.0 | 0.0                 | 0.0  | 0.0                 | 0.0   | 0.0     | 0.0         |
| 2    | 9.780     | 0.102   | 0.238             | 0.0                 | 0.0  | 1.399e+04           | 93.2 | 0.0                 | 0.0   | 0.0     | 0.0         |
| 3    | 13.635    | 0.073   | 0.208             | 51.44               | 0.3  | 0.0                 | 0.0  | 0.0                 | 0.0   | 0.0     | 0.0         |
| 4    | 14.770    | 0.068   | 0.202             | 0.0                 | 0.0  | 0.0                 | 0.0  | 1.500e+04           | 100.0 | 0.0     | 0.0         |
| 5    | 21.037    | 0.048   | 0.181             | 0.0                 | 0.0  | 1012.54             | 6.8  | 0.0                 | 0.0   | 0.0     | 0.0         |

| Modo           | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %   | M efficace Z<br>x g | %        | Energia | Energia x v |
|----------------|-----------|---------|-------------------|---------------------|----------|---------------------|-----|---------------------|----------|---------|-------------|
| 6              | 21.634    | 0.046   | 0.180             | 1597.42             | 10.6     | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 7              | 45.708    | 0.022   | 0.155             | 0.22                | 1.45e-03 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 8              | 50.678    | 0.020   | 0.153             | 0.0                 | 0.0      | 0.0                 | 0.0 | 0.19                | 1.23e-03 | 0.0     | 0.0         |
| 9              | 109.719   | 0.009   | 0.142             | 0.0                 | 0.0      | 2.60e-06            | 0.0 | 5.83e-05            | 0.0      | 0.0     | 0.0         |
| 10             | 109.756   | 0.009   | 0.142             | 2.31                | 1.54e-02 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11             | 158.305   | 0.006   | 0.139             | 1.88e-03            | 1.25e-05 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12             | 183.781   | 0.005   | 0.138             | 0.0                 | 0.0      | 0.0                 | 0.0 | 3.75e-04            | 2.50e-06 | 0.0     | 0.0         |
| 13             | 262.759   | 0.004   | 0.136             | 0.10                | 6.50e-04 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14             | 270.560   | 0.004   | 0.136             | 0.0                 | 0.0      | 1.86e-06            | 0.0 | 6.21e-06            | 0.0      | 0.0     | 0.0         |
| 15             | 293.694   | 0.003   | 0.136             | 8.34e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16             | 372.531   | 0.003   | 0.135             | 0.0                 | 0.0      | 0.0                 | 0.0 | 1.94e-06            | 0.0      | 0.0     | 0.0         |
| 17             | 420.726   | 0.002   | 0.135             | 4.60e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18             | 469.162   | 0.002   | 0.134             | 0.01                | 8.02e-05 | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19             | 496.165   | 0.002   | 0.134             | 0.0                 | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20             | 626.927   | 0.002   | 0.134             | 5.76e-05            | 0.0      | 0.0                 | 0.0 | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                   | 1.500e+04           |          | 1.500e+04           |     | 1.500e+04           |          |         |             |
| In percentuale |           |         |                   | 100.00              |          | 100.00              |     | 100.00              |          |         |             |

| CDC | Tipo | Sigla Id                                  | Note                                       |
|-----|------|-------------------------------------------|--------------------------------------------|
| 4   | Edk  | CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +) |                                            |
|     |      |                                           | categoria suolo: B                         |
|     |      |                                           | fattore di sito S = 1.200                  |
|     |      |                                           | ordinata spettro (tratto Tb-Tc) = 0.348 g  |
|     |      |                                           | angolo di ingresso:90.00                   |
|     |      |                                           | eccentricità aggiuntiva: positiva          |
|     |      |                                           | periodo proprio T1: 0.102 s                |
|     |      |                                           | 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: 20             |
|     |      |                                           | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | 0.12       | 0.0        | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+04     |         |         |            |            |         |         |          |             |             |

| Modo | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %    | M efficace Y<br>x g | %    | M efficace Z<br>x g | %   | Energia | Energia x v |
|------|-----------|---------|-------------------|---------------------|------|---------------------|------|---------------------|-----|---------|-------------|
|      | Hz        | sec     | g                 | daN                 |      | daN                 |      | daN                 |     |         |             |
| 1    | 8.619     | 0.116   | 0.252             | 1.341e+04           | 89.4 | 0.0                 | 0.0  | 0.0                 | 0.0 | 0.0     | 0.0         |
| 2    | 9.764     | 0.102   | 0.238             | 0.0                 | 0.0  | 1.395e+04           | 93.0 | 0.0                 | 0.0 | 0.0     | 0.0         |



| Modo           | Frequenza | Periodo | Acc. Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %        | M efficace Z<br>x g | %        | Energia | Energia x v |
|----------------|-----------|---------|----------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
|                | Hz        | sec     | g              | daN                 |          | daN                 |          | daN                 |          |         |             |
| 1              | 8.619     | 0.116   | 0.252          | 1.341e+04           | 89.4     | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 2              | 9.764     | 0.102   | 0.238          | 0.0                 | 0.0      | 1.395e+04           | 93.0     | 0.0                 | 0.0      | 0.0     | 0.0         |
| 3              | 13.479    | 0.074   | 0.209          | 0.0                 | 0.0      | 38.71               | 0.3      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 4              | 14.770    | 0.068   | 0.202          | 0.0                 | 0.0      | 0.0                 | 0.0      | 1.500e+04           | 100.0    | 0.0     | 0.0         |
| 5              | 21.039    | 0.048   | 0.181          | 0.0                 | 0.0      | 1013.98             | 6.8      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 6              | 21.599    | 0.046   | 0.180          | 1590.80             | 10.6     | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 7              | 45.701    | 0.022   | 0.155          | 0.0                 | 0.0      | 0.26                | 1.75e-03 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 8              | 50.749    | 0.020   | 0.153          | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.19                | 1.23e-03 | 0.0     | 0.0         |
| 9              | 109.086   | 0.009   | 0.142          | 2.28                | 1.52e-02 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 10             | 109.397   | 0.009   | 0.142          | 0.0                 | 0.0      | 2.60e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11             | 157.887   | 0.006   | 0.139          | 0.0                 | 0.0      | 7.60e-05            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12             | 183.020   | 0.005   | 0.138          | 0.0                 | 0.0      | 0.0                 | 0.0      | 3.70e-04            | 2.47e-06 | 0.0     | 0.0         |
| 13             | 261.463   | 0.004   | 0.136          | 0.10                | 6.45e-04 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14             | 269.215   | 0.004   | 0.136          | 0.0                 | 0.0      | 1.93e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 15             | 293.041   | 0.003   | 0.136          | 0.0                 | 0.0      | 3.38e-05            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16             | 370.366   | 0.003   | 0.135          | 0.0                 | 0.0      | 0.0                 | 0.0      | 2.53e-06            | 0.0      | 0.0     | 0.0         |
| 17             | 419.236   | 0.002   | 0.135          | 0.0                 | 0.0      | 7.05e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18             | 465.532   | 0.002   | 0.134          | 0.01                | 8.13e-05 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19             | 492.865   | 0.002   | 0.134          | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20             | 621.760   | 0.002   | 0.134          | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                | 1.500e+04           |          | 1.500e+04           |          | 1.500e+04           |          |         |             |
| In percentuale |           |         |                | 100.00              |          | 100.00              |          | 100.00              |          |         |             |

| CDC | Tipo | Sigla Id                                | Note                                      |
|-----|------|-----------------------------------------|-------------------------------------------|
| 6   | Edk  | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +) |                                           |
|     |      |                                         | categoria suolo: B                        |
|     |      |                                         | fattore di sito S = 1.200                 |
|     |      |                                         | ordinata spettro (tratto Tb-Tc) = 0.146 g |
|     |      |                                         | angolo di ingresso:0.0                    |
|     |      |                                         | eccentricità aggiuntiva: positiva         |
|     |      |                                         | periodo proprio T1: 0.117 s               |
|     |      |                                         | numero di modi considerati: 20            |
|     |      |                                         | combinaz. modale: CQC                     |

[illegible]

| Modo           | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %    | M efficace Z<br>x g | %        | Energia | Energia x v |
|----------------|-----------|---------|-------------------|---------------------|----------|---------------------|------|---------------------|----------|---------|-------------|
|                | Hz        | sec     | g                 | daN                 |          | daN                 |      | daN                 |          |         |             |
| 1              | 8.566     | 0.117   | 0.122             | 1.335e+04           | 89.0     | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 2              | 9.780     | 0.102   | 0.114             | 0.0                 | 0.0      | 1.399e+04           | 93.2 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 3              | 13.635    | 0.073   | 0.098             | 51.44               | 0.3      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 4              | 14.770    | 0.068   | 0.095             | 0.0                 | 0.0      | 0.0                 | 0.0  | 1.500e+04           | 100.0    | 0.0     | 0.0         |
| 5              | 21.037    | 0.048   | 0.084             | 0.0                 | 0.0      | 1012.54             | 6.8  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 6              | 21.634    | 0.046   | 0.084             | 1597.42             | 10.6     | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 7              | 45.708    | 0.022   | 0.070             | 0.22                | 1.45e-03 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 8              | 50.678    | 0.020   | 0.069             | 0.0                 | 0.0      | 0.0                 | 0.0  | 0.19                | 1.23e-03 | 0.0     | 0.0         |
| 9              | 109.719   | 0.009   | 0.063             | 0.0                 | 0.0      | 2.60e-06            | 0.0  | 5.83e-05            | 0.0      | 0.0     | 0.0         |
| 10             | 109.756   | 0.009   | 0.063             | 2.31                | 1.54e-02 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11             | 158.305   | 0.006   | 0.062             | 1.88e-03            | 1.25e-05 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12             | 183.781   | 0.005   | 0.062             | 0.0                 | 0.0      | 0.0                 | 0.0  | 3.75e-04            | 2.50e-06 | 0.0     | 0.0         |
| 13             | 262.759   | 0.004   | 0.061             | 0.10                | 6.50e-04 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14             | 270.560   | 0.004   | 0.061             | 0.0                 | 0.0      | 1.86e-06            | 0.0  | 6.21e-06            | 0.0      | 0.0     | 0.0         |
| 15             | 293.694   | 0.003   | 0.060             | 8.34e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16             | 372.531   | 0.003   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0  | 1.94e-06            | 0.0      | 0.0     | 0.0         |
| 17             | 420.726   | 0.002   | 0.060             | 4.60e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18             | 469.162   | 0.002   | 0.060             | 0.01                | 8.02e-05 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19             | 496.165   | 0.002   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20             | 626.927   | 0.002   | 0.059             | 5.76e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                   | 1.500e+04           |          | 1.500e+04           |      | 1.500e+04           |          |         |             |
| In percentuale |           |         |                   | 100.00              |          | 100.00              |      | 100.00              |          |         |             |

| CDC | Tipo | Sigla Id                                | Note                                      |
|-----|------|-----------------------------------------|-------------------------------------------|
| 7   | Edk  | CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -) |                                           |
|     |      |                                         | categoria suolo: B                        |
|     |      |                                         | fattore di sito S = 1.200                 |
|     |      |                                         | ordinata spettro (tratto Tb-Tc) = 0.146 g |
|     |      |                                         | angolo di ingresso:0.0                    |
|     |      |                                         | eccentricità aggiuntiva: negativa         |
|     |      |                                         | periodo proprio T1: 0.117 s               |
|     |      |                                         | numero di modi considerati: 20            |
|     |      |                                         | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | 0.0        | 0.30       | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+04     |         |         |            |            |         |         |          |             |             |

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

| Modo           | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %    | M efficace Z<br>x g | %        | Energia | Energia x v |
|----------------|-----------|---------|-------------------|---------------------|----------|---------------------|------|---------------------|----------|---------|-------------|
| 1              | 8.566     | 0.117   | 0.122             | 1.335e+04           | 89.0     | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 2              | 9.780     | 0.102   | 0.114             | 0.0                 | 0.0      | 1.399e+04           | 93.2 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 3              | 13.635    | 0.073   | 0.098             | 51.44               | 0.3      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 4              | 14.770    | 0.068   | 0.095             | 0.0                 | 0.0      | 0.0                 | 0.0  | 1.500e+04           | 100.0    | 0.0     | 0.0         |
| 5              | 21.037    | 0.048   | 0.084             | 0.0                 | 0.0      | 1012.54             | 6.8  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 6              | 21.634    | 0.046   | 0.084             | 1597.42             | 10.6     | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 7              | 45.708    | 0.022   | 0.070             | 0.22                | 1.45e-03 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 8              | 50.678    | 0.020   | 0.069             | 0.0                 | 0.0      | 0.0                 | 0.0  | 0.19                | 1.23e-03 | 0.0     | 0.0         |
| 9              | 109.719   | 0.009   | 0.063             | 0.0                 | 0.0      | 2.60e-06            | 0.0  | 5.83e-05            | 0.0      | 0.0     | 0.0         |
| 10             | 109.756   | 0.009   | 0.063             | 2.31                | 1.54e-02 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11             | 158.305   | 0.006   | 0.062             | 1.88e-03            | 1.25e-05 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12             | 183.781   | 0.005   | 0.062             | 0.0                 | 0.0      | 0.0                 | 0.0  | 3.75e-04            | 2.50e-06 | 0.0     | 0.0         |
| 13             | 262.759   | 0.004   | 0.061             | 0.10                | 6.50e-04 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14             | 270.560   | 0.004   | 0.061             | 0.0                 | 0.0      | 1.86e-06            | 0.0  | 6.21e-06            | 0.0      | 0.0     | 0.0         |
| 15             | 293.694   | 0.003   | 0.060             | 8.34e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16             | 372.531   | 0.003   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0  | 1.94e-06            | 0.0      | 0.0     | 0.0         |
| 17             | 420.726   | 0.002   | 0.060             | 4.60e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18             | 469.162   | 0.002   | 0.060             | 0.01                | 8.02e-05 | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19             | 496.165   | 0.002   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20             | 626.927   | 0.002   | 0.059             | 5.76e-05            | 0.0      | 0.0                 | 0.0  | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                   | 1.500e+04           |          | 1.500e+04           |      | 1.500e+04           |          |         |             |
| In percentuale |           |         |                   | 100.00              |          | 100.00              |      | 100.00              |          |         |             |

| CDC | Tipo | Sigla Id                                  | Note                                      |
|-----|------|-------------------------------------------|-------------------------------------------|
| 8   | Edk  | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +) |                                           |
|     |      |                                           | categoria suolo: B                        |
|     |      |                                           | fattore di sito S = 1.200                 |
|     |      |                                           | ordinata spettro (tratto Tb-Tc) = 0.146 g |
|     |      |                                           | angolo di ingresso:90.00                  |
|     |      |                                           | eccentricità aggiuntiva: positiva         |
|     |      |                                           | periodo proprio T1: 0.102 s               |
|     |      |                                           | numero di modi considerati: 20            |
|     |      |                                           | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | 0.12       | 0.0        | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+04     |         |         |            |            |         |         |          |             |             |

| Modo | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %    | M efficace Y<br>x g | %   | M efficace Z<br>x g | %   | Energia | Energia x v |
|------|-----------|---------|-------------------|---------------------|------|---------------------|-----|---------------------|-----|---------|-------------|
|      | Hz        | sec     | g                 | daN                 |      | daN                 |     | daN                 |     |         |             |
| 1    | 8.619     | 0.116   | 0.121             | 1.341e+04           | 89.4 | 0.0                 | 0.0 | 0.0                 | 0.0 | 0.0     | 0.0         |

| Modo           | Frequenza | Periodo | Acc. Spettrale | M efficace X x g | %        | M efficace Y x g | %        | M efficace Z x g | %        | Energia | Energia x v |
|----------------|-----------|---------|----------------|------------------|----------|------------------|----------|------------------|----------|---------|-------------|
| 2              | 9.764     | 0.102   | 0.114          | 0.0              | 0.0      | 1.395e+04        | 93.0     | 0.0              | 0.0      | 0.0     | 0.0         |
| 3              | 13.479    | 0.074   | 0.099          | 0.0              | 0.0      | 38.71            | 0.3      | 0.0              | 0.0      | 0.0     | 0.0         |
| 4              | 14.770    | 0.068   | 0.095          | 0.0              | 0.0      | 0.0              | 0.0      | 1.500e+04        | 100.0    | 0.0     | 0.0         |
| 5              | 21.039    | 0.048   | 0.084          | 0.0              | 0.0      | 1013.98          | 6.8      | 0.0              | 0.0      | 0.0     | 0.0         |
| 6              | 21.599    | 0.046   | 0.084          | 1590.80          | 10.6     | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 7              | 45.701    | 0.022   | 0.070          | 0.0              | 0.0      | 0.26             | 1.75e-03 | 0.0              | 0.0      | 0.0     | 0.0         |
| 8              | 50.749    | 0.020   | 0.069          | 0.0              | 0.0      | 0.0              | 0.0      | 0.19             | 1.23e-03 | 0.0     | 0.0         |
| 9              | 109.086   | 0.009   | 0.064          | 2.28             | 1.52e-02 | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 10             | 109.397   | 0.009   | 0.063          | 0.0              | 0.0      | 2.60e-06         | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 11             | 157.887   | 0.006   | 0.062          | 0.0              | 0.0      | 7.60e-05         | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 12             | 183.020   | 0.005   | 0.062          | 0.0              | 0.0      | 0.0              | 0.0      | 3.70e-04         | 2.47e-06 | 0.0     | 0.0         |
| 13             | 261.463   | 0.004   | 0.061          | 0.10             | 6.45e-04 | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 14             | 269.215   | 0.004   | 0.061          | 0.0              | 0.0      | 1.93e-06         | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 15             | 293.041   | 0.003   | 0.060          | 0.0              | 0.0      | 3.38e-05         | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 16             | 370.366   | 0.003   | 0.060          | 0.0              | 0.0      | 0.0              | 0.0      | 2.53e-06         | 0.0      | 0.0     | 0.0         |
| 17             | 419.236   | 0.002   | 0.060          | 0.0              | 0.0      | 7.05e-06         | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 18             | 465.532   | 0.002   | 0.060          | 0.01             | 8.13e-05 | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 19             | 492.865   | 0.002   | 0.060          | 0.0              | 0.0      | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| 20             | 621.760   | 0.002   | 0.059          | 0.0              | 0.0      | 0.0              | 0.0      | 0.0              | 0.0      | 0.0     | 0.0         |
| Risulta        |           |         |                | 1.500e+04        |          | 1.500e+04        |          | 1.500e+04        |          |         |             |
| In percentuale |           |         |                | 100.00           |          | 100.00           |          | 100.00           |          |         |             |

| CDC | Tipo | Sigla Id                                  | Note                                      |
|-----|------|-------------------------------------------|-------------------------------------------|
| 9   | Edk  | CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -) |                                           |
|     |      |                                           | categoria suolo: B                        |
|     |      |                                           | fattore di sito S = 1.200                 |
|     |      |                                           | ordinata spettro (tratto Tb-Tc) = 0.146 g |
|     |      |                                           | angolo di ingresso:90.00                  |
|     |      |                                           | eccentricità aggiuntiva: negativa         |
|     |      |                                           | periodo proprio T1: 0.102 s               |
|     |      |                                           | numero di modi considerati: 20            |
|     |      |                                           | 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 |
|---------|---------------|---------|---------|------------|------------|---------|---------|----------|-------------|-------------|
| m       | daN           | m       | m       | m          | m          | m       | m       |          |             |             |
| 1.28    | 1.500e+04     | 1.75    | 3.50    | -0.12      | 0.0        | 1.75    | 3.50    | 0.606    | 0.0         | 0.0         |
| Risulta | 1.500e+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    | 8.619     | 0.116   | 0.121          | 1.341e+04        | 89.4 | 0.0              | 0.0 | 0.0              | 0.0 | 0.0     | 0.0         |

| Modo              | Frequenza | Periodo | Acc.<br>Spettrale | M efficace X<br>x g | %        | M efficace Y<br>x g | %        | M efficace Z<br>x g | %        | Energia | Energia x v |
|-------------------|-----------|---------|-------------------|---------------------|----------|---------------------|----------|---------------------|----------|---------|-------------|
| 2                 | 9.764     | 0.102   | 0.114             | 0.0                 | 0.0      | 1.395e+04           | 93.0     | 0.0                 | 0.0      | 0.0     | 0.0         |
| 3                 | 13.479    | 0.074   | 0.099             | 0.0                 | 0.0      | 38.71               | 0.3      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 4                 | 14.770    | 0.068   | 0.095             | 0.0                 | 0.0      | 0.0                 | 0.0      | 1.500e+04           | 100.0    | 0.0     | 0.0         |
| 5                 | 21.039    | 0.048   | 0.084             | 0.0                 | 0.0      | 1013.98             | 6.8      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 6                 | 21.599    | 0.046   | 0.084             | 1590.80             | 10.6     | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 7                 | 45.701    | 0.022   | 0.070             | 0.0                 | 0.0      | 0.26                | 1.75e-03 | 0.0                 | 0.0      | 0.0     | 0.0         |
| 8                 | 50.749    | 0.020   | 0.069             | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.19                | 1.23e-03 | 0.0     | 0.0         |
| 9                 | 109.086   | 0.009   | 0.064             | 2.28                | 1.52e-02 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 10                | 109.397   | 0.009   | 0.063             | 0.0                 | 0.0      | 2.60e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 11                | 157.887   | 0.006   | 0.062             | 0.0                 | 0.0      | 7.60e-05            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 12                | 183.020   | 0.005   | 0.062             | 0.0                 | 0.0      | 0.0                 | 0.0      | 3.70e-04            | 2.47e-06 | 0.0     | 0.0         |
| 13                | 261.463   | 0.004   | 0.061             | 0.10                | 6.45e-04 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 14                | 269.215   | 0.004   | 0.061             | 0.0                 | 0.0      | 1.93e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 15                | 293.041   | 0.003   | 0.060             | 0.0                 | 0.0      | 3.38e-05            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 16                | 370.366   | 0.003   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0      | 2.53e-06            | 0.0      | 0.0     | 0.0         |
| 17                | 419.236   | 0.002   | 0.060             | 0.0                 | 0.0      | 7.05e-06            | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 18                | 465.532   | 0.002   | 0.060             | 0.01                | 8.13e-05 | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 19                | 492.865   | 0.002   | 0.060             | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| 20                | 621.760   | 0.002   | 0.059             | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0                 | 0.0      | 0.0     | 0.0         |
| Risulta           |           |         |                   | 1.500e+04           |          | 1.500e+04           |          | 1.500e+04           |          |         |             |
| In<br>percentuale |           |         |                   | 100.00              |          | 100.00              |          | 100.00              |          |         |             |

| Cmb | Pilas. 1000 etaT/h | etaT         | inter. h | Pilas. 1000 etaT/h | etaT         | inter. h | Pilas. 1000 etaT/h | etaT         | inter. h |
|-----|--------------------|--------------|----------|--------------------|--------------|----------|--------------------|--------------|----------|
|     |                    | cm           | cm       |                    | cm           | cm       |                    | cm           | cm       |
| 35  | 1                  | 0.113.12e-03 | 27.5     | 2                  | 0.123.34e-03 | 27.5     | 3                  | 0.133.49e-03 | 27.5     |
|     | 4                  | 0.133.59e-03 | 27.5     | 5                  | 0.133.64e-03 | 27.5     | 6                  | 0.133.66e-03 | 27.5     |
|     | 7                  | 0.133.65e-03 | 27.5     | 8                  | 0.133.62e-03 | 27.5     | 9                  | 0.133.57e-03 | 27.5     |
|     | 10                 | 0.133.49e-03 | 27.5     | 11                 | 0.123.36e-03 | 27.5     | 12                 | 0.123.19e-03 | 27.5     |
|     | 13                 | 0.112.96e-03 | 27.5     | 14                 | 0.102.61e-03 | 27.5     | 15                 | 0.092.40e-03 | 27.5     |
|     | 16                 | 0.082.26e-03 | 27.5     | 17                 | 0.082.18e-03 | 27.5     | 18                 | 0.082.14e-03 | 27.5     |
|     | 19                 | 0.082.12e-03 | 27.5     | 20                 | 0.082.10e-03 | 27.5     | 21                 | 0.082.09e-03 | 27.5     |
|     | 22                 | 0.082.08e-03 | 27.5     | 23                 | 0.082.09e-03 | 27.5     | 24                 | 0.082.14e-03 | 27.5     |
|     | 25                 | 0.082.26e-03 | 27.5     | 26                 | 0.092.46e-03 | 27.5     |                    |              |          |
| 36  | 1                  | 0.113.12e-03 | 27.5     | 2                  | 0.123.34e-03 | 27.5     | 3                  | 0.133.49e-03 | 27.5     |
|     | 4                  | 0.133.59e-03 | 27.5     | 5                  | 0.133.64e-03 | 27.5     | 6                  | 0.133.66e-03 | 27.5     |
|     | 7                  | 0.133.65e-03 | 27.5     | 8                  | 0.133.62e-03 | 27.5     | 9                  | 0.133.57e-03 | 27.5     |
|     | 10                 | 0.133.49e-03 | 27.5     | 11                 | 0.123.36e-03 | 27.5     | 12                 | 0.123.19e-03 | 27.5     |
|     | 13                 | 0.112.96e-03 | 27.5     | 14                 | 0.092.61e-03 | 27.5     | 15                 | 0.092.40e-03 | 27.5     |
|     | 16                 | 0.082.26e-03 | 27.5     | 17                 | 0.082.18e-03 | 27.5     | 18                 | 0.082.14e-03 | 27.5     |
|     | 19                 | 0.082.12e-03 | 27.5     | 20                 | 0.082.10e-03 | 27.5     | 21                 | 0.082.09e-03 | 27.5     |
|     | 22                 | 0.082.08e-03 | 27.5     | 23                 | 0.082.09e-03 | 27.5     | 24                 | 0.082.15e-03 | 27.5     |
|     | 25                 | 0.082.26e-03 | 27.5     | 26                 | 0.092.46e-03 | 27.5     |                    |              |          |
| 37  | 1                  | 0.112.98e-03 | 27.5     | 2                  | 0.123.21e-03 | 27.5     | 3                  | 0.123.38e-03 | 27.5     |
|     | 4                  | 0.133.50e-03 | 27.5     | 5                  | 0.133.58e-03 | 27.5     | 6                  | 0.133.63e-03 | 27.5     |
|     | 7                  | 0.133.65e-03 | 27.5     | 8                  | 0.133.66e-03 | 27.5     | 9                  | 0.133.64e-03 | 27.5     |
|     | 10                 | 0.133.58e-03 | 27.5     | 11                 | 0.133.48e-03 | 27.5     | 12                 | 0.123.32e-03 | 27.5     |
|     | 13                 | 0.113.10e-03 | 27.5     | 14                 | 0.092.47e-03 | 27.5     | 15                 | 0.082.27e-03 | 27.5     |
|     | 16                 | 0.082.14e-03 | 27.5     | 17                 | 0.082.09e-03 | 27.5     | 18                 | 0.082.07e-03 | 27.5     |
|     | 19                 | 0.082.08e-03 | 27.5     | 20                 | 0.082.10e-03 | 27.5     | 21                 | 0.082.11e-03 | 27.5     |

|    |    |              |      |    |              |      |    |              |      |
|----|----|--------------|------|----|--------------|------|----|--------------|------|
| 38 | 22 | 0.082.14e-03 | 27.5 | 23 | 0.082.18e-03 | 27.5 | 24 | 0.082.25e-03 | 27.5 |
|    | 25 | 0.092.39e-03 | 27.5 | 26 | 0.092.60e-03 | 27.5 |    |              |      |
|    | 1  | 0.112.98e-03 | 27.5 | 2  | 0.123.21e-03 | 27.5 | 3  | 0.123.38e-03 | 27.5 |
|    | 4  | 0.133.50e-03 | 27.5 | 5  | 0.133.58e-03 | 27.5 | 6  | 0.133.63e-03 | 27.5 |
|    | 7  | 0.133.65e-03 | 27.5 | 8  | 0.133.66e-03 | 27.5 | 9  | 0.133.64e-03 | 27.5 |
|    | 10 | 0.133.58e-03 | 27.5 | 11 | 0.133.48e-03 | 27.5 | 12 | 0.123.32e-03 | 27.5 |
|    | 13 | 0.113.11e-03 | 27.5 | 14 | 0.092.47e-03 | 27.5 | 15 | 0.082.27e-03 | 27.5 |
|    | 16 | 0.082.14e-03 | 27.5 | 17 | 0.082.09e-03 | 27.5 | 18 | 0.082.07e-03 | 27.5 |
| 39 | 19 | 0.082.08e-03 | 27.5 | 20 | 0.082.10e-03 | 27.5 | 21 | 0.082.12e-03 | 27.5 |
|    | 22 | 0.082.14e-03 | 27.5 | 23 | 0.082.18e-03 | 27.5 | 24 | 0.082.26e-03 | 27.5 |
|    | 25 | 0.092.39e-03 | 27.5 | 26 | 0.092.60e-03 | 27.5 |    |              |      |
|    | 1  | 0.113.10e-03 | 27.5 | 2  | 0.123.32e-03 | 27.5 | 3  | 0.133.48e-03 | 27.5 |
|    | 4  | 0.133.58e-03 | 27.5 | 5  | 0.133.64e-03 | 27.5 | 6  | 0.133.66e-03 | 27.5 |
|    | 7  | 0.133.65e-03 | 27.5 | 8  | 0.133.63e-03 | 27.5 | 9  | 0.133.58e-03 | 27.5 |
|    | 10 | 0.133.50e-03 | 27.5 | 11 | 0.123.38e-03 | 27.5 | 12 | 0.123.21e-03 | 27.5 |
|    | 13 | 0.112.98e-03 | 27.5 | 14 | 0.092.60e-03 | 27.5 | 15 | 0.092.39e-03 | 27.5 |
| 40 | 16 | 0.082.25e-03 | 27.5 | 17 | 0.082.18e-03 | 27.5 | 18 | 0.082.14e-03 | 27.5 |
|    | 19 | 0.082.11e-03 | 27.5 | 20 | 0.082.10e-03 | 27.5 | 21 | 0.082.08e-03 | 27.5 |
|    | 22 | 0.082.07e-03 | 27.5 | 23 | 0.082.09e-03 | 27.5 | 24 | 0.082.14e-03 | 27.5 |
|    | 25 | 0.082.27e-03 | 27.5 | 26 | 0.092.47e-03 | 27.5 |    |              |      |
|    | 1  | 0.113.11e-03 | 27.5 | 2  | 0.123.32e-03 | 27.5 | 3  | 0.133.48e-03 | 27.5 |
|    | 4  | 0.133.58e-03 | 27.5 | 5  | 0.133.64e-03 | 27.5 | 6  | 0.133.66e-03 | 27.5 |
|    | 7  | 0.133.65e-03 | 27.5 | 8  | 0.133.63e-03 | 27.5 | 9  | 0.133.58e-03 | 27.5 |
|    | 10 | 0.133.50e-03 | 27.5 | 11 | 0.123.38e-03 | 27.5 | 12 | 0.123.21e-03 | 27.5 |
| 41 | 13 | 0.112.98e-03 | 27.5 | 14 | 0.092.60e-03 | 27.5 | 15 | 0.092.39e-03 | 27.5 |
|    | 16 | 0.082.26e-03 | 27.5 | 17 | 0.082.18e-03 | 27.5 | 18 | 0.082.14e-03 | 27.5 |
|    | 19 | 0.082.12e-03 | 27.5 | 20 | 0.082.10e-03 | 27.5 | 21 | 0.082.08e-03 | 27.5 |
|    | 22 | 0.082.07e-03 | 27.5 | 23 | 0.082.09e-03 | 27.5 | 24 | 0.082.14e-03 | 27.5 |
|    | 25 | 0.082.27e-03 | 27.5 | 26 | 0.092.47e-03 | 27.5 |    |              |      |
|    | 1  | 0.112.96e-03 | 27.5 | 2  | 0.123.19e-03 | 27.5 | 3  | 0.123.36e-03 | 27.5 |
|    | 4  | 0.133.49e-03 | 27.5 | 5  | 0.133.57e-03 | 27.5 | 6  | 0.133.62e-03 | 27.5 |
|    | 7  | 0.133.65e-03 | 27.5 | 8  | 0.133.66e-03 | 27.5 | 9  | 0.133.64e-03 | 27.5 |
| 42 | 10 | 0.133.59e-03 | 27.5 | 11 | 0.133.49e-03 | 27.5 | 12 | 0.123.34e-03 | 27.5 |
|    | 13 | 0.113.12e-03 | 27.5 | 14 | 0.092.46e-03 | 27.5 | 15 | 0.082.26e-03 | 27.5 |
|    | 16 | 0.082.14e-03 | 27.5 | 17 | 0.082.09e-03 | 27.5 | 18 | 0.082.08e-03 | 27.5 |
|    | 19 | 0.082.09e-03 | 27.5 | 20 | 0.082.10e-03 | 27.5 | 21 | 0.082.12e-03 | 27.5 |
|    | 22 | 0.082.14e-03 | 27.5 | 23 | 0.082.18e-03 | 27.5 | 24 | 0.082.26e-03 | 27.5 |
|    | 25 | 0.092.40e-03 | 27.5 | 26 | 0.102.61e-03 | 27.5 |    |              |      |
|    | 1  | 0.112.96e-03 | 27.5 | 2  | 0.123.19e-03 | 27.5 | 3  | 0.123.36e-03 | 27.5 |
|    | 4  | 0.133.49e-03 | 27.5 | 5  | 0.133.57e-03 | 27.5 | 6  | 0.133.62e-03 | 27.5 |
| 43 | 7  | 0.133.65e-03 | 27.5 | 8  | 0.133.66e-03 | 27.5 | 9  | 0.133.64e-03 | 27.5 |
|    | 10 | 0.133.59e-03 | 27.5 | 11 | 0.133.49e-03 | 27.5 | 12 | 0.123.34e-03 | 27.5 |
|    | 13 | 0.113.12e-03 | 27.5 | 14 | 0.092.46e-03 | 27.5 | 15 | 0.082.26e-03 | 27.5 |
|    | 16 | 0.082.15e-03 | 27.5 | 17 | 0.082.09e-03 | 27.5 | 18 | 0.082.08e-03 | 27.5 |
|    | 19 | 0.082.09e-03 | 27.5 | 20 | 0.082.10e-03 | 27.5 | 21 | 0.082.12e-03 | 27.5 |
|    | 22 | 0.082.14e-03 | 27.5 | 23 | 0.082.18e-03 | 27.5 | 24 | 0.082.26e-03 | 27.5 |
|    | 25 | 0.092.40e-03 | 27.5 | 26 | 0.092.61e-03 | 27.5 |    |              |      |
|    | 1  | 0.092.61e-03 | 27.5 | 2  | 0.092.40e-03 | 27.5 | 3  | 0.082.26e-03 | 27.5 |
|    | 4  | 0.082.18e-03 | 27.5 | 5  | 0.082.14e-03 | 27.5 | 6  | 0.082.12e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.09e-03 | 27.5 | 9  | 0.082.08e-03 | 27.5 |
|    | 10 | 0.082.09e-03 | 27.5 | 11 | 0.082.15e-03 | 27.5 | 12 | 0.082.26e-03 | 27.5 |
|    | 13 | 0.092.46e-03 | 27.5 | 14 | 0.113.12e-03 | 27.5 | 15 | 0.123.34e-03 | 27.5 |
|    | 16 | 0.133.49e-03 | 27.5 | 17 | 0.133.59e-03 | 27.5 | 18 | 0.133.64e-03 | 27.5 |
|    | 19 | 0.133.66e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.62e-03 | 27.5 |
|    | 22 | 0.133.57e-03 | 27.5 | 23 | 0.133.49e-03 | 27.5 | 24 | 0.123.36e-03 | 27.5 |
|    | 25 | 0.123.19e-03 | 27.5 | 26 | 0.112.96e-03 | 27.5 |    |              |      |

|    |    |              |      |    |              |      |    |              |      |
|----|----|--------------|------|----|--------------|------|----|--------------|------|
| 44 | 1  | 0.102.61e-03 | 27.5 | 2  | 0.092.40e-03 | 27.5 | 3  | 0.082.26e-03 | 27.5 |
|    | 4  | 0.082.18e-03 | 27.5 | 5  | 0.082.14e-03 | 27.5 | 6  | 0.082.12e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.09e-03 | 27.5 | 9  | 0.082.08e-03 | 27.5 |
|    | 10 | 0.082.09e-03 | 27.5 | 11 | 0.082.14e-03 | 27.5 | 12 | 0.082.26e-03 | 27.5 |
|    | 13 | 0.092.46e-03 | 27.5 | 14 | 0.113.12e-03 | 27.5 | 15 | 0.123.34e-03 | 27.5 |
|    | 16 | 0.133.49e-03 | 27.5 | 17 | 0.133.59e-03 | 27.5 | 18 | 0.133.64e-03 | 27.5 |
|    | 19 | 0.133.66e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.62e-03 | 27.5 |
|    | 22 | 0.133.57e-03 | 27.5 | 23 | 0.133.49e-03 | 27.5 | 24 | 0.123.36e-03 | 27.5 |
|    | 25 | 0.123.19e-03 | 27.5 | 26 | 0.112.96e-03 | 27.5 |    |              |      |
| 45 | 1  | 0.092.47e-03 | 27.5 | 2  | 0.082.27e-03 | 27.5 | 3  | 0.082.14e-03 | 27.5 |
|    | 4  | 0.082.09e-03 | 27.5 | 5  | 0.082.07e-03 | 27.5 | 6  | 0.082.08e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.12e-03 | 27.5 | 9  | 0.082.14e-03 | 27.5 |
|    | 10 | 0.082.18e-03 | 27.5 | 11 | 0.082.26e-03 | 27.5 | 12 | 0.092.39e-03 | 27.5 |
|    | 13 | 0.092.60e-03 | 27.5 | 14 | 0.112.98e-03 | 27.5 | 15 | 0.123.21e-03 | 27.5 |
|    | 16 | 0.123.38e-03 | 27.5 | 17 | 0.133.50e-03 | 27.5 | 18 | 0.133.58e-03 | 27.5 |
|    | 19 | 0.133.63e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.66e-03 | 27.5 |
|    | 22 | 0.133.64e-03 | 27.5 | 23 | 0.133.58e-03 | 27.5 | 24 | 0.133.48e-03 | 27.5 |
|    | 25 | 0.123.32e-03 | 27.5 | 26 | 0.113.11e-03 | 27.5 |    |              |      |
| 46 | 1  | 0.092.47e-03 | 27.5 | 2  | 0.082.27e-03 | 27.5 | 3  | 0.082.14e-03 | 27.5 |
|    | 4  | 0.082.09e-03 | 27.5 | 5  | 0.082.07e-03 | 27.5 | 6  | 0.082.08e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.11e-03 | 27.5 | 9  | 0.082.14e-03 | 27.5 |
|    | 10 | 0.082.18e-03 | 27.5 | 11 | 0.082.25e-03 | 27.5 | 12 | 0.092.39e-03 | 27.5 |
|    | 13 | 0.092.60e-03 | 27.5 | 14 | 0.112.98e-03 | 27.5 | 15 | 0.123.21e-03 | 27.5 |
|    | 16 | 0.123.38e-03 | 27.5 | 17 | 0.133.50e-03 | 27.5 | 18 | 0.133.58e-03 | 27.5 |
|    | 19 | 0.133.63e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.66e-03 | 27.5 |
|    | 22 | 0.133.64e-03 | 27.5 | 23 | 0.133.58e-03 | 27.5 | 24 | 0.133.48e-03 | 27.5 |
|    | 25 | 0.123.32e-03 | 27.5 | 26 | 0.113.10e-03 | 27.5 |    |              |      |
| 47 | 1  | 0.092.60e-03 | 27.5 | 2  | 0.092.39e-03 | 27.5 | 3  | 0.082.26e-03 | 27.5 |
|    | 4  | 0.082.18e-03 | 27.5 | 5  | 0.082.14e-03 | 27.5 | 6  | 0.082.12e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.08e-03 | 27.5 | 9  | 0.082.07e-03 | 27.5 |
|    | 10 | 0.082.09e-03 | 27.5 | 11 | 0.082.14e-03 | 27.5 | 12 | 0.082.27e-03 | 27.5 |
|    | 13 | 0.092.47e-03 | 27.5 | 14 | 0.113.11e-03 | 27.5 | 15 | 0.123.32e-03 | 27.5 |
|    | 16 | 0.133.48e-03 | 27.5 | 17 | 0.133.58e-03 | 27.5 | 18 | 0.133.64e-03 | 27.5 |
|    | 19 | 0.133.66e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.63e-03 | 27.5 |
|    | 22 | 0.133.58e-03 | 27.5 | 23 | 0.133.50e-03 | 27.5 | 24 | 0.123.38e-03 | 27.5 |
|    | 25 | 0.123.21e-03 | 27.5 | 26 | 0.112.98e-03 | 27.5 |    |              |      |
| 48 | 1  | 0.092.60e-03 | 27.5 | 2  | 0.092.39e-03 | 27.5 | 3  | 0.082.25e-03 | 27.5 |
|    | 4  | 0.082.18e-03 | 27.5 | 5  | 0.082.14e-03 | 27.5 | 6  | 0.082.11e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.08e-03 | 27.5 | 9  | 0.082.07e-03 | 27.5 |
|    | 10 | 0.082.09e-03 | 27.5 | 11 | 0.082.14e-03 | 27.5 | 12 | 0.082.27e-03 | 27.5 |
|    | 13 | 0.092.47e-03 | 27.5 | 14 | 0.113.10e-03 | 27.5 | 15 | 0.123.32e-03 | 27.5 |
|    | 16 | 0.133.48e-03 | 27.5 | 17 | 0.133.58e-03 | 27.5 | 18 | 0.133.64e-03 | 27.5 |
|    | 19 | 0.133.66e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.63e-03 | 27.5 |
|    | 22 | 0.133.58e-03 | 27.5 | 23 | 0.133.50e-03 | 27.5 | 24 | 0.123.38e-03 | 27.5 |
|    | 25 | 0.123.21e-03 | 27.5 | 26 | 0.112.98e-03 | 27.5 |    |              |      |
| 49 | 1  | 0.092.46e-03 | 27.5 | 2  | 0.082.26e-03 | 27.5 | 3  | 0.082.15e-03 | 27.5 |
|    | 4  | 0.082.09e-03 | 27.5 | 5  | 0.082.08e-03 | 27.5 | 6  | 0.082.09e-03 | 27.5 |
|    | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.12e-03 | 27.5 | 9  | 0.082.14e-03 | 27.5 |
|    | 10 | 0.082.18e-03 | 27.5 | 11 | 0.082.26e-03 | 27.5 | 12 | 0.092.40e-03 | 27.5 |
|    | 13 | 0.092.61e-03 | 27.5 | 14 | 0.112.96e-03 | 27.5 | 15 | 0.123.19e-03 | 27.5 |
|    | 16 | 0.123.36e-03 | 27.5 | 17 | 0.133.49e-03 | 27.5 | 18 | 0.133.57e-03 | 27.5 |
|    | 19 | 0.133.62e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.66e-03 | 27.5 |
|    | 22 | 0.133.64e-03 | 27.5 | 23 | 0.133.59e-03 | 27.5 | 24 | 0.133.49e-03 | 27.5 |
|    | 25 | 0.123.34e-03 | 27.5 | 26 | 0.113.12e-03 | 27.5 |    |              |      |
| 50 | 1  | 0.092.46e-03 | 27.5 | 2  | 0.082.26e-03 | 27.5 | 3  | 0.082.14e-03 | 27.5 |
|    | 4  | 0.082.09e-03 | 27.5 | 5  | 0.082.08e-03 | 27.5 | 6  | 0.082.09e-03 | 27.5 |

|    |    |              |      |    |              |      |    |              |      |
|----|----|--------------|------|----|--------------|------|----|--------------|------|
| 51 | 7  | 0.082.10e-03 | 27.5 | 8  | 0.082.12e-03 | 27.5 | 9  | 0.082.14e-03 | 27.5 |
|    | 10 | 0.082.18e-03 | 27.5 | 11 | 0.082.26e-03 | 27.5 | 12 | 0.092.40e-03 | 27.5 |
|    | 13 | 0.102.61e-03 | 27.5 | 14 | 0.112.96e-03 | 27.5 | 15 | 0.123.19e-03 | 27.5 |
|    | 16 | 0.123.36e-03 | 27.5 | 17 | 0.133.49e-03 | 27.5 | 18 | 0.133.57e-03 | 27.5 |
|    | 19 | 0.133.62e-03 | 27.5 | 20 | 0.133.65e-03 | 27.5 | 21 | 0.133.66e-03 | 27.5 |
|    | 22 | 0.133.64e-03 | 27.5 | 23 | 0.133.59e-03 | 27.5 | 24 | 0.133.49e-03 | 27.5 |
|    | 25 | 0.123.34e-03 | 27.5 | 26 | 0.113.12e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.68e-03 | 27.5 | 2  | 0.071.82e-03 | 27.5 | 3  | 0.071.92e-03 | 27.5 |
|    | 4  | 0.071.98e-03 | 27.5 | 5  | 0.072.01e-03 | 27.5 | 6  | 0.072.02e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.00e-03 | 27.5 | 9  | 0.071.97e-03 | 27.5 |
| 52 | 10 | 0.071.92e-03 | 27.5 | 11 | 0.071.83e-03 | 27.5 | 12 | 0.061.70e-03 | 27.5 |
|    | 13 | 0.061.55e-03 | 27.5 | 14 | 0.051.37e-03 | 27.5 | 15 | 0.051.29e-03 | 27.5 |
|    | 16 | 0.041.23e-03 | 27.5 | 17 | 0.041.20e-03 | 27.5 | 18 | 0.041.18e-03 | 27.5 |
|    | 19 | 0.041.18e-03 | 27.5 | 20 | 0.041.18e-03 | 27.5 | 21 | 0.041.18e-03 | 27.5 |
|    | 22 | 0.041.18e-03 | 27.5 | 23 | 0.041.17e-03 | 27.5 | 24 | 0.041.17e-03 | 27.5 |
|    | 25 | 0.041.18e-03 | 27.5 | 26 | 0.051.26e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.66e-03 | 27.5 | 2  | 0.071.81e-03 | 27.5 | 3  | 0.071.91e-03 | 27.5 |
|    | 4  | 0.071.97e-03 | 27.5 | 5  | 0.072.00e-03 | 27.5 | 6  | 0.072.01e-03 | 27.5 |
|    | 7  | 0.072.01e-03 | 27.5 | 8  | 0.072.00e-03 | 27.5 | 9  | 0.071.97e-03 | 27.5 |
|    | 10 | 0.071.91e-03 | 27.5 | 11 | 0.071.83e-03 | 27.5 | 12 | 0.061.70e-03 | 27.5 |
| 53 | 13 | 0.061.54e-03 | 27.5 | 14 | 0.051.38e-03 | 27.5 | 15 | 0.051.30e-03 | 27.5 |
|    | 16 | 0.051.24e-03 | 27.5 | 17 | 0.041.21e-03 | 27.5 | 18 | 0.041.20e-03 | 27.5 |
|    | 19 | 0.041.19e-03 | 27.5 | 20 | 0.041.19e-03 | 27.5 | 21 | 0.041.19e-03 | 27.5 |
|    | 22 | 0.041.19e-03 | 27.5 | 23 | 0.041.18e-03 | 27.5 | 24 | 0.041.18e-03 | 27.5 |
|    | 25 | 0.041.19e-03 | 27.5 | 26 | 0.051.27e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.65e-03 | 27.5 | 2  | 0.071.80e-03 | 27.5 | 3  | 0.071.90e-03 | 27.5 |
|    | 4  | 0.071.96e-03 | 27.5 | 5  | 0.072.00e-03 | 27.5 | 6  | 0.072.02e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.02e-03 | 27.5 | 9  | 0.071.99e-03 | 27.5 |
|    | 10 | 0.071.95e-03 | 27.5 | 11 | 0.071.86e-03 | 27.5 | 12 | 0.061.74e-03 | 27.5 |
|    | 13 | 0.061.58e-03 | 27.5 | 14 | 0.051.35e-03 | 27.5 | 15 | 0.051.27e-03 | 27.5 |
| 54 | 16 | 0.041.22e-03 | 27.5 | 17 | 0.041.19e-03 | 27.5 | 18 | 0.041.17e-03 | 27.5 |
|    | 19 | 0.041.17e-03 | 27.5 | 20 | 0.041.17e-03 | 27.5 | 21 | 0.041.17e-03 | 27.5 |
|    | 22 | 0.041.17e-03 | 27.5 | 23 | 0.041.17e-03 | 27.5 | 24 | 0.041.17e-03 | 27.5 |
|    | 25 | 0.041.19e-03 | 27.5 | 26 | 0.051.27e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.64e-03 | 27.5 | 2  | 0.071.79e-03 | 27.5 | 3  | 0.071.89e-03 | 27.5 |
|    | 4  | 0.071.95e-03 | 27.5 | 5  | 0.071.99e-03 | 27.5 | 6  | 0.072.01e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.01e-03 | 27.5 | 9  | 0.071.99e-03 | 27.5 |
|    | 10 | 0.071.94e-03 | 27.5 | 11 | 0.071.86e-03 | 27.5 | 12 | 0.061.73e-03 | 27.5 |
|    | 13 | 0.061.58e-03 | 27.5 | 14 | 0.051.36e-03 | 27.5 | 15 | 0.051.28e-03 | 27.5 |
|    | 16 | 0.041.23e-03 | 27.5 | 17 | 0.041.20e-03 | 27.5 | 18 | 0.041.19e-03 | 27.5 |
| 55 | 19 | 0.041.18e-03 | 27.5 | 20 | 0.041.18e-03 | 27.5 | 21 | 0.041.18e-03 | 27.5 |
|    | 22 | 0.041.18e-03 | 27.5 | 23 | 0.041.18e-03 | 27.5 | 24 | 0.041.18e-03 | 27.5 |
|    | 25 | 0.041.20e-03 | 27.5 | 26 | 0.051.29e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.58e-03 | 27.5 | 2  | 0.061.74e-03 | 27.5 | 3  | 0.071.86e-03 | 27.5 |
|    | 4  | 0.071.95e-03 | 27.5 | 5  | 0.071.99e-03 | 27.5 | 6  | 0.072.02e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.02e-03 | 27.5 | 9  | 0.072.00e-03 | 27.5 |
|    | 10 | 0.071.96e-03 | 27.5 | 11 | 0.071.90e-03 | 27.5 | 12 | 0.071.80e-03 | 27.5 |
|    | 13 | 0.061.65e-03 | 27.5 | 14 | 0.051.27e-03 | 27.5 | 15 | 0.041.19e-03 | 27.5 |
|    | 16 | 0.041.17e-03 | 27.5 | 17 | 0.041.17e-03 | 27.5 | 18 | 0.041.17e-03 | 27.5 |
|    | 19 | 0.041.17e-03 | 27.5 | 20 | 0.041.17e-03 | 27.5 | 21 | 0.041.17e-03 | 27.5 |
| 56 | 22 | 0.041.17e-03 | 27.5 | 23 | 0.041.19e-03 | 27.5 | 24 | 0.041.22e-03 | 27.5 |
|    | 25 | 0.051.27e-03 | 27.5 | 26 | 0.051.35e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.58e-03 | 27.5 | 2  | 0.061.73e-03 | 27.5 | 3  | 0.071.86e-03 | 27.5 |
|    | 4  | 0.071.94e-03 | 27.5 | 5  | 0.071.99e-03 | 27.5 | 6  | 0.072.01e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.01e-03 | 27.5 | 9  | 0.071.99e-03 | 27.5 |
|    | 10 | 0.071.95e-03 | 27.5 | 11 | 0.071.89e-03 | 27.5 | 12 | 0.071.79e-03 | 27.5 |

|    |    |              |      |    |              |      |    |              |      |
|----|----|--------------|------|----|--------------|------|----|--------------|------|
| 57 | 13 | 0.061.64e-03 | 27.5 | 14 | 0.051.29e-03 | 27.5 | 15 | 0.041.20e-03 | 27.5 |
|    | 16 | 0.041.18e-03 | 27.5 | 17 | 0.041.18e-03 | 27.5 | 18 | 0.041.18e-03 | 27.5 |
|    | 19 | 0.041.18e-03 | 27.5 | 20 | 0.041.18e-03 | 27.5 | 21 | 0.041.18e-03 | 27.5 |
|    | 22 | 0.041.19e-03 | 27.5 | 23 | 0.041.20e-03 | 27.5 | 24 | 0.041.23e-03 | 27.5 |
|    | 25 | 0.051.28e-03 | 27.5 | 26 | 0.051.36e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.55e-03 | 27.5 | 2  | 0.061.70e-03 | 27.5 | 3  | 0.071.83e-03 | 27.5 |
|    | 4  | 0.071.92e-03 | 27.5 | 5  | 0.071.97e-03 | 27.5 | 6  | 0.072.00e-03 | 27.5 |
|    | 7  | 0.072.02e-03 | 27.5 | 8  | 0.072.02e-03 | 27.5 | 9  | 0.072.01e-03 | 27.5 |
|    | 10 | 0.071.98e-03 | 27.5 | 11 | 0.071.92e-03 | 27.5 | 12 | 0.071.82e-03 | 27.5 |
|    | 13 | 0.061.68e-03 | 27.5 | 14 | 0.051.26e-03 | 27.5 | 15 | 0.041.18e-03 | 27.5 |
| 58 | 16 | 0.041.17e-03 | 27.5 | 17 | 0.041.17e-03 | 27.5 | 18 | 0.041.18e-03 | 27.5 |
|    | 19 | 0.041.18e-03 | 27.5 | 20 | 0.041.18e-03 | 27.5 | 21 | 0.041.18e-03 | 27.5 |
|    | 22 | 0.041.18e-03 | 27.5 | 23 | 0.041.20e-03 | 27.5 | 24 | 0.041.23e-03 | 27.5 |
|    | 25 | 0.051.29e-03 | 27.5 | 26 | 0.051.37e-03 | 27.5 |    |              |      |
|    | 1  | 0.061.54e-03 | 27.5 | 2  | 0.061.70e-03 | 27.5 | 3  | 0.071.83e-03 | 27.5 |
|    | 4  | 0.071.91e-03 | 27.5 | 5  | 0.071.97e-03 | 27.5 | 6  | 0.072.00e-03 | 27.5 |
|    | 7  | 0.072.01e-03 | 27.5 | 8  | 0.072.01e-03 | 27.5 | 9  | 0.072.00e-03 | 27.5 |
|    | 10 | 0.071.97e-03 | 27.5 | 11 | 0.071.91e-03 | 27.5 | 12 | 0.071.81e-03 | 27.5 |
|    | 13 | 0.061.66e-03 | 27.5 | 14 | 0.051.27e-03 | 27.5 | 15 | 0.041.19e-03 | 27.5 |
|    | 16 | 0.041.18e-03 | 27.5 | 17 | 0.041.18e-03 | 27.5 | 18 | 0.041.19e-03 | 27.5 |
| 59 | 19 | 0.041.19e-03 | 27.5 | 20 | 0.041.19e-03 | 27.5 | 21 | 0.041.19e-03 | 27.5 |
|    | 22 | 0.041.20e-03 | 27.5 | 23 | 0.041.21e-03 | 27.5 | 24 | 0.051.24e-03 | 27.5 |
|    | 25 | 0.051.30e-03 | 27.5 | 26 | 0.051.38e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.38e-03 | 27.5 | 2  | 0.051.30e-03 | 27.5 | 3  | 0.051.24e-03 | 27.5 |
|    | 4  | 0.041.21e-03 | 27.5 | 5  | 0.041.20e-03 | 27.5 | 6  | 0.041.19e-03 | 27.5 |
|    | 7  | 0.041.19e-03 | 27.5 | 8  | 0.041.19e-03 | 27.5 | 9  | 0.041.19e-03 | 27.5 |
|    | 10 | 0.041.18e-03 | 27.5 | 11 | 0.041.18e-03 | 27.5 | 12 | 0.041.19e-03 | 27.5 |
|    | 13 | 0.051.27e-03 | 27.5 | 14 | 0.061.66e-03 | 27.5 | 15 | 0.071.81e-03 | 27.5 |
|    | 16 | 0.071.91e-03 | 27.5 | 17 | 0.071.97e-03 | 27.5 | 18 | 0.072.00e-03 | 27.5 |
|    | 19 | 0.072.01e-03 | 27.5 | 20 | 0.072.01e-03 | 27.5 | 21 | 0.072.00e-03 | 27.5 |
| 60 | 22 | 0.071.97e-03 | 27.5 | 23 | 0.071.91e-03 | 27.5 | 24 | 0.071.83e-03 | 27.5 |
|    | 25 | 0.061.70e-03 | 27.5 | 26 | 0.061.54e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.37e-03 | 27.5 | 2  | 0.051.29e-03 | 27.5 | 3  | 0.041.23e-03 | 27.5 |
|    | 4  | 0.041.20e-03 | 27.5 | 5  | 0.041.18e-03 | 27.5 | 6  | 0.041.18e-03 | 27.5 |
|    | 7  | 0.041.18e-03 | 27.5 | 8  | 0.041.18e-03 | 27.5 | 9  | 0.041.18e-03 | 27.5 |
|    | 10 | 0.041.17e-03 | 27.5 | 11 | 0.041.17e-03 | 27.5 | 12 | 0.041.18e-03 | 27.5 |
|    | 13 | 0.051.26e-03 | 27.5 | 14 | 0.061.68e-03 | 27.5 | 15 | 0.071.82e-03 | 27.5 |
|    | 16 | 0.071.92e-03 | 27.5 | 17 | 0.071.98e-03 | 27.5 | 18 | 0.072.01e-03 | 27.5 |
|    | 19 | 0.072.02e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.00e-03 | 27.5 |
|    | 22 | 0.071.97e-03 | 27.5 | 23 | 0.071.92e-03 | 27.5 | 24 | 0.071.83e-03 | 27.5 |
| 61 | 25 | 0.061.70e-03 | 27.5 | 26 | 0.061.55e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.36e-03 | 27.5 | 2  | 0.051.28e-03 | 27.5 | 3  | 0.041.23e-03 | 27.5 |
|    | 4  | 0.041.20e-03 | 27.5 | 5  | 0.041.19e-03 | 27.5 | 6  | 0.041.18e-03 | 27.5 |
|    | 7  | 0.041.18e-03 | 27.5 | 8  | 0.041.18e-03 | 27.5 | 9  | 0.041.18e-03 | 27.5 |
|    | 10 | 0.041.18e-03 | 27.5 | 11 | 0.041.18e-03 | 27.5 | 12 | 0.041.20e-03 | 27.5 |
|    | 13 | 0.051.29e-03 | 27.5 | 14 | 0.061.64e-03 | 27.5 | 15 | 0.071.79e-03 | 27.5 |
|    | 16 | 0.071.89e-03 | 27.5 | 17 | 0.071.95e-03 | 27.5 | 18 | 0.071.99e-03 | 27.5 |
|    | 19 | 0.072.01e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.01e-03 | 27.5 |
|    | 22 | 0.071.99e-03 | 27.5 | 23 | 0.071.94e-03 | 27.5 | 24 | 0.071.86e-03 | 27.5 |
|    | 25 | 0.061.73e-03 | 27.5 | 26 | 0.061.58e-03 | 27.5 |    |              |      |
| 62 | 1  | 0.051.35e-03 | 27.5 | 2  | 0.051.27e-03 | 27.5 | 3  | 0.041.22e-03 | 27.5 |
|    | 4  | 0.041.19e-03 | 27.5 | 5  | 0.041.17e-03 | 27.5 | 6  | 0.041.17e-03 | 27.5 |
|    | 7  | 0.041.17e-03 | 27.5 | 8  | 0.041.17e-03 | 27.5 | 9  | 0.041.17e-03 | 27.5 |
|    | 10 | 0.041.17e-03 | 27.5 | 11 | 0.041.17e-03 | 27.5 | 12 | 0.041.19e-03 | 27.5 |
|    | 13 | 0.051.27e-03 | 27.5 | 14 | 0.061.65e-03 | 27.5 | 15 | 0.071.80e-03 | 27.5 |
|    | 16 | 0.071.90e-03 | 27.5 | 17 | 0.071.96e-03 | 27.5 | 18 | 0.072.00e-03 | 27.5 |

|    |    |              |      |    |              |      |    |              |      |
|----|----|--------------|------|----|--------------|------|----|--------------|------|
| 63 | 19 | 0.072.02e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.02e-03 | 27.5 |
|    | 22 | 0.071.99e-03 | 27.5 | 23 | 0.071.95e-03 | 27.5 | 24 | 0.071.86e-03 | 27.5 |
|    | 25 | 0.061.74e-03 | 27.5 | 26 | 0.061.58e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.29e-03 | 27.5 | 2  | 0.041.20e-03 | 27.5 | 3  | 0.041.18e-03 | 27.5 |
|    | 4  | 0.041.18e-03 | 27.5 | 5  | 0.041.18e-03 | 27.5 | 6  | 0.041.18e-03 | 27.5 |
|    | 7  | 0.041.18e-03 | 27.5 | 8  | 0.041.18e-03 | 27.5 | 9  | 0.041.19e-03 | 27.5 |
|    | 10 | 0.041.20e-03 | 27.5 | 11 | 0.041.23e-03 | 27.5 | 12 | 0.051.28e-03 | 27.5 |
|    | 13 | 0.051.36e-03 | 27.5 | 14 | 0.061.58e-03 | 27.5 | 15 | 0.061.73e-03 | 27.5 |
| 64 | 16 | 0.071.86e-03 | 27.5 | 17 | 0.071.94e-03 | 27.5 | 18 | 0.071.99e-03 | 27.5 |
|    | 19 | 0.072.01e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.01e-03 | 27.5 |
|    | 22 | 0.071.99e-03 | 27.5 | 23 | 0.071.95e-03 | 27.5 | 24 | 0.071.89e-03 | 27.5 |
|    | 25 | 0.071.79e-03 | 27.5 | 26 | 0.061.64e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.27e-03 | 27.5 | 2  | 0.041.19e-03 | 27.5 | 3  | 0.041.17e-03 | 27.5 |
|    | 4  | 0.041.17e-03 | 27.5 | 5  | 0.041.17e-03 | 27.5 | 6  | 0.041.17e-03 | 27.5 |
|    | 7  | 0.041.17e-03 | 27.5 | 8  | 0.041.17e-03 | 27.5 | 9  | 0.041.17e-03 | 27.5 |
|    | 10 | 0.041.19e-03 | 27.5 | 11 | 0.041.22e-03 | 27.5 | 12 | 0.051.27e-03 | 27.5 |
| 65 | 13 | 0.051.35e-03 | 27.5 | 14 | 0.061.58e-03 | 27.5 | 15 | 0.061.74e-03 | 27.5 |
|    | 16 | 0.071.86e-03 | 27.5 | 17 | 0.071.95e-03 | 27.5 | 18 | 0.071.99e-03 | 27.5 |
|    | 19 | 0.072.02e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.02e-03 | 27.5 |
|    | 22 | 0.072.00e-03 | 27.5 | 23 | 0.071.96e-03 | 27.5 | 24 | 0.071.90e-03 | 27.5 |
|    | 25 | 0.071.80e-03 | 27.5 | 26 | 0.061.65e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.27e-03 | 27.5 | 2  | 0.041.19e-03 | 27.5 | 3  | 0.041.18e-03 | 27.5 |
|    | 4  | 0.041.18e-03 | 27.5 | 5  | 0.041.19e-03 | 27.5 | 6  | 0.041.19e-03 | 27.5 |
|    | 7  | 0.041.19e-03 | 27.5 | 8  | 0.041.19e-03 | 27.5 | 9  | 0.041.20e-03 | 27.5 |
| 66 | 10 | 0.041.21e-03 | 27.5 | 11 | 0.051.24e-03 | 27.5 | 12 | 0.051.30e-03 | 27.5 |
|    | 13 | 0.051.38e-03 | 27.5 | 14 | 0.061.54e-03 | 27.5 | 15 | 0.061.70e-03 | 27.5 |
|    | 16 | 0.071.83e-03 | 27.5 | 17 | 0.071.91e-03 | 27.5 | 18 | 0.071.97e-03 | 27.5 |
|    | 19 | 0.072.00e-03 | 27.5 | 20 | 0.072.01e-03 | 27.5 | 21 | 0.072.01e-03 | 27.5 |
|    | 22 | 0.072.00e-03 | 27.5 | 23 | 0.071.97e-03 | 27.5 | 24 | 0.071.91e-03 | 27.5 |
|    | 25 | 0.071.81e-03 | 27.5 | 26 | 0.061.66e-03 | 27.5 |    |              |      |
|    | 1  | 0.051.26e-03 | 27.5 | 2  | 0.041.18e-03 | 27.5 | 3  | 0.041.17e-03 | 27.5 |
|    | 4  | 0.041.17e-03 | 27.5 | 5  | 0.041.18e-03 | 27.5 | 6  | 0.041.18e-03 | 27.5 |
|    | 7  | 0.041.18e-03 | 27.5 | 8  | 0.041.18e-03 | 27.5 | 9  | 0.041.18e-03 | 27.5 |
|    | 10 | 0.041.20e-03 | 27.5 | 11 | 0.041.23e-03 | 27.5 | 12 | 0.051.29e-03 | 27.5 |
|    | 13 | 0.051.37e-03 | 27.5 | 14 | 0.061.55e-03 | 27.5 | 15 | 0.061.70e-03 | 27.5 |
|    | 16 | 0.071.83e-03 | 27.5 | 17 | 0.071.92e-03 | 27.5 | 18 | 0.071.97e-03 | 27.5 |
|    | 19 | 0.072.00e-03 | 27.5 | 20 | 0.072.02e-03 | 27.5 | 21 | 0.072.02e-03 | 27.5 |
|    | 22 | 0.072.01e-03 | 27.5 | 23 | 0.071.98e-03 | 27.5 | 24 | 0.071.92e-03 | 27.5 |
|    | 25 | 0.071.82e-03 | 27.5 | 26 | 0.061.68e-03 | 27.5 |    |              |      |

**Cmb**            **1000 etaT/h**  
0.13

# RISULTATI NODALI

## LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

| Nodo | Cmb | Traslazione X | Traslazione Y | Traslazione Z | Rotazione X | Rotazione Y | Rotazione Z |
|------|-----|---------------|---------------|---------------|-------------|-------------|-------------|
|      |     | cm            | cm            | cm            |             |             |             |
| 1    | 1   | -2.20e-04     | -1.55e-06     | -0.33         | -4.11e-05   | 2.32e-04    | 0.0         |
| 1    | 2   | -1.54e-04     | -3.27e-06     | -0.24         | -2.96e-05   | 1.61e-04    | 0.0         |
| 1    | 3   | -0.06         | -5.17e-03     | -0.29         | -1.91e-06   | -1.12e-05   | 0.0         |
| 1    | 4   | -0.06         | -7.32e-03     | -0.29         | -1.83e-06   | -1.13e-05   | 0.0         |
| 1    | 28  | 0.02          | -0.05         | -0.26         | 5.44e-05    | 2.36e-04    | 0.0         |
| 1    | 35  | -0.03         | -2.46e-03     | -0.27         | -1.64e-05   | 7.83e-05    | 0.0         |
| 1    | 36  | -0.03         | -3.49e-03     | -0.27         | -1.63e-05   | 7.82e-05    | 0.0         |
| 1    | 60  | 0.01          | -0.02         | -0.25         | 1.06e-05    | 1.97e-04    | 0.0         |
| 2    | 1   | 2.20e-04      | -1.55e-06     | -0.33         | -4.11e-05   | -2.32e-04   | 0.0         |
| 2    | 2   | 1.54e-04      | -3.27e-06     | -0.24         | -2.96e-05   | -1.61e-04   | 0.0         |
| 2    | 11  | 0.06          | -7.32e-03     | -0.29         | -1.83e-06   | 1.13e-05    | 0.0         |
| 2    | 12  | 0.06          | -5.17e-03     | -0.29         | -1.91e-06   | 1.12e-05    | 0.0         |
| 2    | 19  | -0.02         | -0.05         | -0.26         | 5.44e-05    | -2.36e-04   | 0.0         |
| 2    | 43  | 0.03          | -3.49e-03     | -0.27         | -1.63e-05   | -7.82e-05   | 0.0         |
| 2    | 44  | 0.03          | -2.46e-03     | -0.27         | -1.64e-05   | -7.83e-05   | 0.0         |
| 2    | 51  | -0.01         | -0.02         | -0.25         | 1.06e-05    | -1.97e-04   | 0.0         |
| 3    | 1   | 2.20e-04      | 1.55e-06      | -0.33         | 4.11e-05    | -2.32e-04   | 0.0         |
| 3    | 2   | 1.54e-04      | 3.27e-06      | -0.24         | 2.96e-05    | -1.61e-04   | 0.0         |
| 3    | 17  | 0.06          | 7.32e-03      | -0.29         | 1.83e-06    | 1.13e-05    | 0.0         |
| 3    | 18  | 0.06          | 5.17e-03      | -0.29         | 1.91e-06    | 1.12e-05    | 0.0         |
| 3    | 25  | -0.02         | 0.05          | -0.26         | -5.44e-05   | -2.36e-04   | 0.0         |
| 3    | 49  | 0.03          | 3.49e-03      | -0.27         | 1.63e-05    | -7.82e-05   | 0.0         |
| 3    | 50  | 0.03          | 2.46e-03      | -0.27         | 1.64e-05    | -7.83e-05   | 0.0         |
| 3    | 57  | -0.01         | 0.02          | -0.25         | -1.06e-05   | -1.97e-04   | 0.0         |
| 4    | 1   | -2.20e-04     | 1.55e-06      | -0.33         | 4.11e-05    | 2.32e-04    | 0.0         |
| 4    | 2   | -1.54e-04     | 3.27e-06      | -0.24         | 2.96e-05    | 1.61e-04    | 0.0         |
| 4    | 9   | -0.06         | 5.17e-03      | -0.29         | 1.91e-06    | -1.12e-05   | 0.0         |
| 4    | 10  | -0.06         | 7.32e-03      | -0.29         | 1.83e-06    | -1.13e-05   | 0.0         |
| 4    | 34  | 0.02          | 0.05          | -0.26         | -5.44e-05   | 2.36e-04    | 0.0         |
| 4    | 41  | -0.03         | 2.46e-03      | -0.27         | 1.64e-05    | 7.83e-05    | 0.0         |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 4  | 42 | -0.03     | 3.49e-03  | -0.27 | 1.63e-05  | 7.82e-05  | 0.0       |
| 4  | 66 | 0.01      | 0.02      | -0.25 | -1.06e-05 | 1.97e-04  | 0.0       |
| 5  | 1  | -2.18e-04 | -7.35e-05 | -0.36 | -1.61e-05 | 1.11e-04  | 0.0       |
| 5  | 2  | -1.52e-04 | -5.41e-05 | -0.26 | -1.15e-05 | 7.75e-05  | 0.0       |
| 5  | 3  | -0.06     | -0.01     | -0.29 | 1.47e-05  | -1.23e-04 | 0.0       |
| 5  | 20 | -0.01     | -0.05     | -0.30 | 7.46e-05  | 2.59e-05  | 0.0       |
| 5  | 28 | 0.02      | -0.05     | -0.28 | 7.43e-05  | 1.48e-04  | 0.0       |
| 5  | 35 | -0.03     | -4.92e-03 | -0.27 | 1.03e-06  | -1.92e-05 | 0.0       |
| 5  | 52 | -5.72e-03 | -0.02     | -0.28 | 2.97e-05  | 5.27e-05  | 0.0       |
| 5  | 60 | 0.01      | -0.02     | -0.27 | 2.96e-05  | 1.12e-04  | 0.0       |
| 6  | 1  | 2.18e-04  | -7.35e-05 | -0.36 | -1.61e-05 | -1.11e-04 | 0.0       |
| 6  | 2  | 1.52e-04  | -5.41e-05 | -0.26 | -1.15e-05 | -7.75e-05 | 0.0       |
| 6  | 12 | 0.06      | -0.01     | -0.29 | 1.47e-05  | 1.23e-04  | 0.0       |
| 6  | 19 | -0.02     | -0.05     | -0.28 | 7.43e-05  | -1.48e-04 | 0.0       |
| 6  | 27 | 0.01      | -0.05     | -0.30 | 7.46e-05  | -2.59e-05 | 0.0       |
| 6  | 44 | 0.03      | -4.92e-03 | -0.27 | 1.03e-06  | 1.92e-05  | 0.0       |
| 6  | 51 | -0.01     | -0.02     | -0.27 | 2.96e-05  | -1.12e-04 | 0.0       |
| 6  | 59 | 5.72e-03  | -0.02     | -0.28 | 2.97e-05  | -5.27e-05 | 0.0       |
| 7  | 1  | -2.18e-04 | 7.35e-05  | -0.36 | 1.61e-05  | 1.11e-04  | 0.0       |
| 7  | 2  | -1.52e-04 | 5.41e-05  | -0.26 | 1.15e-05  | 7.75e-05  | 0.0       |
| 7  | 9  | -0.06     | 0.01      | -0.29 | -1.47e-05 | -1.23e-04 | 0.0       |
| 7  | 26 | -0.01     | 0.05      | -0.30 | -7.46e-05 | 2.59e-05  | 0.0       |
| 7  | 34 | 0.02      | 0.05      | -0.28 | -7.43e-05 | 1.48e-04  | 0.0       |
| 7  | 41 | -0.03     | 4.92e-03  | -0.27 | -1.03e-06 | -1.92e-05 | 0.0       |
| 7  | 58 | -5.72e-03 | 0.02      | -0.28 | -2.97e-05 | 5.27e-05  | 0.0       |
| 7  | 66 | 0.01      | 0.02      | -0.27 | -2.96e-05 | 1.12e-04  | 0.0       |
| 8  | 1  | 2.18e-04  | 7.35e-05  | -0.36 | 1.61e-05  | -1.11e-04 | 0.0       |
| 8  | 2  | 1.52e-04  | 5.41e-05  | -0.26 | 1.15e-05  | -7.75e-05 | 0.0       |
| 8  | 18 | 0.06      | 0.01      | -0.29 | -1.47e-05 | 1.23e-04  | 0.0       |
| 8  | 25 | -0.02     | 0.05      | -0.28 | -7.43e-05 | -1.48e-04 | 0.0       |
| 8  | 33 | 0.01      | 0.05      | -0.30 | -7.46e-05 | -2.59e-05 | 0.0       |
| 8  | 50 | 0.03      | 4.92e-03  | -0.27 | -1.03e-06 | 1.92e-05  | 0.0       |
| 8  | 57 | -0.01     | 0.02      | -0.27 | -2.96e-05 | -1.12e-04 | 0.0       |
| 8  | 65 | 5.72e-03  | 0.02      | -0.28 | -2.97e-05 | -5.27e-05 | 0.0       |
| 9  | 1  | -1.79e-04 | 3.37e-06  | -0.34 | -3.74e-05 | 2.25e-04  | 0.0       |
| 9  | 2  | -1.25e-04 | 0.0       | -0.24 | -2.70e-05 | 1.56e-04  | 0.0       |
| 9  | 3  | -0.06     | -5.17e-03 | -0.29 | 0.0       | -1.87e-05 | 0.0       |
| 9  | 4  | -0.06     | -7.32e-03 | -0.29 | 0.0       | -1.88e-05 | 0.0       |
| 9  | 24 | -0.02     | 0.05      | -0.23 | -1.11e-04 | 8.32e-05  | 0.0       |
| 9  | 35 | -0.03     | -2.46e-03 | -0.27 | -1.41e-05 | 7.19e-05  | 0.0       |
| 9  | 36 | -0.03     | -3.49e-03 | -0.27 | -1.41e-05 | 7.19e-05  | 0.0       |
| 9  | 56 | -0.01     | 0.02      | -0.24 | -6.71e-05 | 1.21e-04  | 0.0       |
| 10 | 1  | 1.79e-04  | 3.37e-06  | -0.34 | -3.74e-05 | -2.25e-04 | 0.0       |
| 10 | 2  | 1.25e-04  | 0.0       | -0.24 | -2.70e-05 | -1.56e-04 | 0.0       |
| 10 | 11 | 0.06      | -7.32e-03 | -0.29 | 0.0       | 1.88e-05  | 0.0       |
| 10 | 12 | 0.06      | -5.17e-03 | -0.29 | 0.0       | 1.87e-05  | 0.0       |
| 10 | 31 | 0.02      | 0.05      | -0.23 | -1.11e-04 | -8.32e-05 | 0.0       |
| 10 | 43 | 0.03      | -3.49e-03 | -0.27 | -1.41e-05 | -7.19e-05 | 0.0       |
| 10 | 44 | 0.03      | -2.46e-03 | -0.27 | -1.41e-05 | -7.19e-05 | 0.0       |
| 10 | 63 | 0.01      | 0.02      | -0.24 | -6.71e-05 | -1.21e-04 | 0.0       |
| 11 | 1  | -2.69e-04 | -8.96e-05 | -0.36 | -7.77e-06 | 7.56e-05  | 0.0       |
| 11 | 2  | -1.87e-04 | -6.56e-05 | -0.26 | -5.65e-06 | 5.26e-05  | 0.0       |
| 11 | 3  | -0.06     | -0.01     | -0.29 | 2.34e-05  | -1.52e-04 | -3.87e-05 |
| 11 | 20 | -0.01     | -0.05     | -0.29 | 8.42e-05  | -2.54e-06 | 7.40e-06  |
| 11 | 28 | 0.02      | -0.05     | -0.28 | 8.27e-05  | 1.22e-04  | 2.76e-05  |
| 11 | 35 | -0.03     | -4.93e-03 | -0.27 | 8.29e-06  | -4.60e-05 | -1.84e-05 |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 11 | 52 | -5.93e-03 | -0.02     | -0.28 | 3.74e-05  | 2.61e-05  | 3.66e-06  |
| 11 | 60 | 0.01      | -0.02     | -0.27 | 3.67e-05  | 8.59e-05  | 1.34e-05  |
| 12 | 1  | 2.69e-04  | -8.96e-05 | -0.36 | -7.77e-06 | -7.56e-05 | 0.0       |
| 12 | 2  | 1.87e-04  | -6.56e-05 | -0.26 | -5.65e-06 | -5.26e-05 | 0.0       |
| 12 | 12 | 0.06      | -0.01     | -0.29 | 2.34e-05  | 1.52e-04  | 3.87e-05  |
| 12 | 19 | -0.02     | -0.05     | -0.28 | 8.27e-05  | -1.22e-04 | -2.76e-05 |
| 12 | 27 | 0.01      | -0.05     | -0.29 | 8.42e-05  | 2.54e-06  | -7.40e-06 |
| 12 | 44 | 0.03      | -4.93e-03 | -0.27 | 8.29e-06  | 4.60e-05  | 1.84e-05  |
| 12 | 51 | -0.01     | -0.02     | -0.27 | 3.67e-05  | -8.59e-05 | -1.34e-05 |
| 12 | 59 | 5.93e-03  | -0.02     | -0.28 | 3.74e-05  | -2.61e-05 | -3.66e-06 |
| 13 | 1  | -1.35e-04 | 1.76e-05  | -0.34 | -3.31e-05 | 2.10e-04  | 0.0       |
| 13 | 2  | -9.45e-05 | 1.02e-05  | -0.24 | -2.40e-05 | 1.46e-04  | 0.0       |
| 13 | 3  | -0.06     | -5.16e-03 | -0.30 | 2.66e-06  | -3.03e-05 | 0.0       |
| 13 | 4  | -0.05     | -7.31e-03 | -0.30 | 2.74e-06  | -3.04e-05 | 0.0       |
| 13 | 24 | -0.02     | 0.05      | -0.24 | -1.07e-04 | 7.46e-05  | 0.0       |
| 13 | 35 | -0.03     | -2.45e-03 | -0.27 | -1.12e-05 | 6.09e-05  | 0.0       |
| 13 | 36 | -0.03     | -3.48e-03 | -0.27 | -1.12e-05 | 6.08e-05  | 0.0       |
| 13 | 56 | -0.01     | 0.02      | -0.24 | -6.36e-05 | 1.11e-04  | 0.0       |
| 14 | 1  | 1.35e-04  | 1.76e-05  | -0.34 | -3.31e-05 | -2.10e-04 | 0.0       |
| 14 | 2  | 9.45e-05  | 1.02e-05  | -0.24 | -2.40e-05 | -1.46e-04 | 0.0       |
| 14 | 11 | 0.05      | -7.31e-03 | -0.30 | 2.74e-06  | 3.04e-05  | 0.0       |
| 14 | 12 | 0.06      | -5.16e-03 | -0.30 | 2.66e-06  | 3.03e-05  | 0.0       |
| 14 | 31 | 0.02      | 0.05      | -0.24 | -1.07e-04 | -7.46e-05 | 0.0       |
| 14 | 43 | 0.03      | -3.48e-03 | -0.27 | -1.12e-05 | -6.08e-05 | 0.0       |
| 14 | 44 | 0.03      | -2.45e-03 | -0.27 | -1.12e-05 | -6.09e-05 | 0.0       |
| 14 | 63 | 0.01      | 0.02      | -0.24 | -6.36e-05 | -1.11e-04 | 0.0       |
| 15 | 1  | -1.85e-04 | -9.39e-05 | -0.36 | 0.0       | 7.63e-05  | -6.40e-06 |
| 15 | 2  | -1.29e-04 | -6.88e-05 | -0.26 | 0.0       | 5.31e-05  | -4.54e-06 |
| 15 | 3  | -0.06     | -0.01     | -0.29 | 3.20e-05  | -1.51e-04 | -4.36e-05 |
| 15 | 20 | -0.01     | -0.05     | -0.29 | 9.18e-05  | -2.68e-06 | 2.46e-06  |
| 15 | 28 | 0.02      | -0.05     | -0.28 | 8.88e-05  | 1.21e-04  | 2.27e-05  |
| 15 | 35 | -0.03     | -4.93e-03 | -0.27 | 1.53e-05  | -4.53e-05 | -2.33e-05 |
| 15 | 52 | -6.04e-03 | -0.02     | -0.27 | 4.40e-05  | 2.62e-05  | -1.22e-06 |
| 15 | 60 | 9.91e-03  | -0.02     | -0.27 | 4.25e-05  | 8.58e-05  | 8.53e-06  |
| 16 | 1  | 1.85e-04  | -9.39e-05 | -0.36 | 0.0       | -7.63e-05 | 6.40e-06  |
| 16 | 2  | 1.29e-04  | -6.88e-05 | -0.26 | 0.0       | -5.31e-05 | 4.54e-06  |
| 16 | 12 | 0.06      | -0.01     | -0.29 | 3.20e-05  | 1.51e-04  | 4.36e-05  |
| 16 | 19 | -0.02     | -0.05     | -0.28 | 8.88e-05  | -1.21e-04 | -2.27e-05 |
| 16 | 27 | 0.01      | -0.05     | -0.29 | 9.18e-05  | 2.68e-06  | -2.46e-06 |
| 16 | 44 | 0.03      | -4.93e-03 | -0.27 | 1.53e-05  | 4.53e-05  | 2.33e-05  |
| 16 | 51 | -9.91e-03 | -0.02     | -0.27 | 4.25e-05  | -8.58e-05 | -8.53e-06 |
| 16 | 59 | 6.04e-03  | -0.02     | -0.27 | 4.40e-05  | -2.62e-05 | 1.22e-06  |
| 17 | 1  | -8.48e-05 | 2.70e-05  | -0.34 | -2.48e-05 | 1.96e-04  | 0.0       |
| 17 | 2  | -5.92e-05 | 1.71e-05  | -0.25 | -1.81e-05 | 1.36e-04  | 0.0       |
| 17 | 3  | -0.05     | -5.15e-03 | -0.29 | 9.48e-06  | -4.31e-05 | 0.0       |
| 17 | 4  | -0.05     | -7.31e-03 | -0.29 | 9.59e-06  | -4.31e-05 | 0.0       |
| 17 | 24 | -0.02     | 0.05      | -0.24 | -1.01e-04 | 6.75e-05  | 0.0       |
| 17 | 35 | -0.03     | -2.44e-03 | -0.27 | -4.87e-06 | 4.95e-05  | 0.0       |
| 17 | 36 | -0.03     | -3.47e-03 | -0.27 | -4.82e-06 | 4.95e-05  | 0.0       |
| 17 | 56 | -9.45e-03 | 0.02      | -0.24 | -5.75e-05 | 1.03e-04  | 0.0       |
| 18 | 1  | 8.48e-05  | 2.70e-05  | -0.34 | -2.48e-05 | -1.96e-04 | 0.0       |
| 18 | 2  | 5.92e-05  | 1.71e-05  | -0.25 | -1.81e-05 | -1.36e-04 | 0.0       |
| 18 | 11 | 0.05      | -7.31e-03 | -0.29 | 9.59e-06  | 4.31e-05  | 0.0       |
| 18 | 12 | 0.05      | -5.15e-03 | -0.29 | 9.48e-06  | 4.31e-05  | 0.0       |
| 18 | 31 | 0.02      | 0.05      | -0.24 | -1.01e-04 | -6.75e-05 | 0.0       |
| 18 | 43 | 0.03      | -3.47e-03 | -0.27 | -4.82e-06 | -4.95e-05 | 0.0       |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 18 | 44 | 0.03      | -2.44e-03 | -0.27 | -4.87e-06 | -4.95e-05 | 0.0       |
| 18 | 63 | 9.45e-03  | 0.02      | -0.24 | -5.75e-05 | -1.03e-04 | 0.0       |
| 19 | 1  | -9.96e-05 | -8.77e-05 | -0.36 | 0.0       | 7.74e-05  | -4.78e-06 |
| 19 | 2  | -6.99e-05 | -6.41e-05 | -0.26 | 0.0       | 5.38e-05  | -3.41e-06 |
| 19 | 3  | -0.05     | -0.01     | -0.29 | 3.08e-05  | -1.50e-04 | -4.21e-05 |
| 19 | 4  | -0.05     | -0.01     | -0.29 | 3.09e-05  | -1.50e-04 | -3.17e-05 |
| 19 | 28 | 0.02      | -0.05     | -0.27 | 8.85e-05  | 1.20e-04  | 2.39e-05  |
| 19 | 35 | -0.03     | -4.93e-03 | -0.27 | 1.47e-05  | -4.44e-05 | -2.20e-05 |
| 19 | 36 | -0.03     | -5.36e-03 | -0.27 | 1.47e-05  | -4.45e-05 | -1.71e-05 |
| 19 | 60 | 9.32e-03  | -0.02     | -0.27 | 4.23e-05  | 8.59e-05  | 9.70e-06  |
| 20 | 1  | 9.96e-05  | -8.77e-05 | -0.36 | 0.0       | -7.74e-05 | 4.78e-06  |
| 20 | 2  | 6.99e-05  | -6.41e-05 | -0.26 | 0.0       | -5.38e-05 | 3.41e-06  |
| 20 | 11 | 0.05      | -0.01     | -0.29 | 3.09e-05  | 1.50e-04  | 3.17e-05  |
| 20 | 12 | 0.05      | -0.01     | -0.29 | 3.08e-05  | 1.50e-04  | 4.21e-05  |
| 20 | 19 | -0.02     | -0.05     | -0.27 | 8.85e-05  | -1.20e-04 | -2.39e-05 |
| 20 | 43 | 0.03      | -5.36e-03 | -0.27 | 1.47e-05  | 4.45e-05  | 1.71e-05  |
| 20 | 44 | 0.03      | -4.93e-03 | -0.27 | 1.47e-05  | 4.44e-05  | 2.20e-05  |
| 20 | 51 | -9.32e-03 | -0.02     | -0.27 | 4.23e-05  | -8.59e-05 | -9.70e-06 |
| 21 | 1  | -3.64e-05 | 2.65e-05  | -0.34 | -1.67e-05 | 1.86e-04  | 0.0       |
| 21 | 2  | -2.54e-05 | 1.71e-05  | -0.25 | -1.22e-05 | 1.28e-04  | 0.0       |
| 21 | 3  | -0.05     | -5.16e-03 | -0.29 | 1.59e-05  | -5.30e-05 | 0.0       |
| 21 | 4  | -0.05     | -7.31e-03 | -0.29 | 1.60e-05  | -5.31e-05 | 0.0       |
| 21 | 24 | -0.02     | 0.05      | -0.25 | -9.45e-05 | 6.28e-05  | 0.0       |
| 21 | 35 | -0.03     | -2.44e-03 | -0.27 | 1.24e-06  | 4.07e-05  | 0.0       |
| 21 | 36 | -0.02     | -3.48e-03 | -0.27 | 1.30e-06  | 4.07e-05  | 0.0       |
| 21 | 56 | -8.76e-03 | 0.02      | -0.25 | -5.16e-05 | 9.65e-05  | 0.0       |
| 22 | 1  | 3.64e-05  | 2.65e-05  | -0.34 | -1.67e-05 | -1.86e-04 | 0.0       |
| 22 | 2  | 2.54e-05  | 1.71e-05  | -0.25 | -1.22e-05 | -1.28e-04 | 0.0       |
| 22 | 11 | 0.05      | -7.31e-03 | -0.29 | 1.60e-05  | 5.31e-05  | 0.0       |
| 22 | 12 | 0.05      | -5.16e-03 | -0.29 | 1.59e-05  | 5.30e-05  | 0.0       |
| 22 | 31 | 0.02      | 0.05      | -0.25 | -9.45e-05 | -6.28e-05 | 0.0       |
| 22 | 43 | 0.02      | -3.48e-03 | -0.27 | 1.30e-06  | -4.07e-05 | 0.0       |
| 22 | 44 | 0.03      | -2.44e-03 | -0.27 | 1.24e-06  | -4.07e-05 | 0.0       |
| 22 | 63 | 8.76e-03  | 0.02      | -0.25 | -5.16e-05 | -9.65e-05 | 0.0       |
| 23 | 1  | -3.80e-05 | -7.24e-05 | -0.36 | 0.0       | 7.77e-05  | -2.94e-06 |
| 23 | 2  | -2.69e-05 | -5.27e-05 | -0.26 | 0.0       | 5.40e-05  | -2.11e-06 |
| 23 | 3  | -0.05     | -0.01     | -0.28 | 2.95e-05  | -1.49e-04 | -4.08e-05 |
| 23 | 4  | -0.05     | -0.01     | -0.28 | 2.96e-05  | -1.50e-04 | -3.04e-05 |
| 23 | 28 | 0.02      | -0.05     | -0.27 | 8.84e-05  | 1.19e-04  | 2.53e-05  |
| 23 | 35 | -0.03     | -4.92e-03 | -0.27 | 1.39e-05  | -4.40e-05 | -2.07e-05 |
| 23 | 36 | -0.02     | -5.36e-03 | -0.27 | 1.40e-05  | -4.40e-05 | -1.58e-05 |
| 23 | 60 | 8.71e-03  | -0.02     | -0.26 | 4.21e-05  | 8.54e-05  | 1.11e-05  |
| 24 | 1  | 3.80e-05  | -7.24e-05 | -0.36 | 0.0       | -7.77e-05 | 2.94e-06  |
| 24 | 2  | 2.69e-05  | -5.27e-05 | -0.26 | 0.0       | -5.40e-05 | 2.11e-06  |
| 24 | 11 | 0.05      | -0.01     | -0.28 | 2.96e-05  | 1.50e-04  | 3.04e-05  |
| 24 | 12 | 0.05      | -0.01     | -0.28 | 2.95e-05  | 1.49e-04  | 4.08e-05  |
| 24 | 19 | -0.02     | -0.05     | -0.27 | 8.84e-05  | -1.19e-04 | -2.53e-05 |
| 24 | 43 | 0.02      | -5.36e-03 | -0.27 | 1.40e-05  | 4.40e-05  | 1.58e-05  |
| 24 | 44 | 0.03      | -4.92e-03 | -0.27 | 1.39e-05  | 4.40e-05  | 2.07e-05  |
| 24 | 51 | -8.71e-03 | -0.02     | -0.26 | 4.21e-05  | -8.54e-05 | -1.11e-05 |
| 25 | 1  | 0.0       | 1.95e-05  | -0.34 | -1.01e-05 | 1.79e-04  | 0.0       |
| 25 | 2  | 0.0       | 1.26e-05  | -0.25 | -7.40e-06 | 1.23e-04  | 0.0       |
| 25 | 4  | -0.05     | -7.33e-03 | -0.29 | 2.07e-05  | -5.93e-05 | 0.0       |
| 25 | 15 | 0.05      | 5.20e-03  | -0.20 | -3.54e-05 | 3.05e-04  | 0.0       |
| 25 | 24 | -0.02     | 0.05      | -0.25 | -8.96e-05 | 6.10e-05  | 0.0       |
| 25 | 36 | -0.02     | -3.49e-03 | -0.27 | 6.07e-06  | 3.51e-05  | 0.0       |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 25 | 47 | 0.02      | 2.48e-03  | -0.22 | -2.08e-05 | 2.10e-04  | 0.0       |
| 25 | 56 | -8.09e-03 | 0.02      | -0.25 | -4.68e-05 | 9.30e-05  | 0.0       |
| 26 | 1  | 0.0       | 1.95e-05  | -0.34 | -1.01e-05 | -1.79e-04 | 0.0       |
| 26 | 2  | 0.0       | 1.26e-05  | -0.25 | -7.40e-06 | -1.23e-04 | 0.0       |
| 26 | 8  | -0.05     | 5.20e-03  | -0.20 | -3.54e-05 | -3.05e-04 | 0.0       |
| 26 | 11 | 0.05      | -7.33e-03 | -0.29 | 2.07e-05  | 5.93e-05  | 0.0       |
| 26 | 31 | 0.02      | 0.05      | -0.25 | -8.96e-05 | -6.10e-05 | 0.0       |
| 26 | 40 | -0.02     | 2.48e-03  | -0.22 | -2.08e-05 | -2.10e-04 | 0.0       |
| 26 | 43 | 0.02      | -3.49e-03 | -0.27 | 6.07e-06  | -3.51e-05 | 0.0       |
| 26 | 63 | 8.09e-03  | 0.02      | -0.25 | -4.68e-05 | -9.30e-05 | 0.0       |
| 27 | 1  | 0.0       | -5.08e-05 | -0.36 | 0.0       | 7.76e-05  | -1.56e-06 |
| 27 | 2  | 0.0       | -3.70e-05 | -0.26 | 0.0       | 5.39e-05  | -1.13e-06 |
| 27 | 4  | -0.05     | -0.01     | -0.28 | 2.88e-05  | -1.49e-04 | -2.96e-05 |
| 27 | 15 | 0.05      | 0.01      | -0.24 | -2.95e-05 | 2.57e-04  | 3.77e-05  |
| 27 | 28 | 0.02      | -0.05     | -0.26 | 8.86e-05  | 1.18e-04  | 2.65e-05  |
| 27 | 36 | -0.02     | -5.35e-03 | -0.27 | 1.36e-05  | -4.39e-05 | -1.48e-05 |
| 27 | 47 | 0.02      | 4.84e-03  | -0.25 | -1.44e-05 | 1.52e-04  | 1.75e-05  |
| 27 | 60 | 8.09e-03  | -0.02     | -0.26 | 4.22e-05  | 8.46e-05  | 1.21e-05  |
| 28 | 1  | 0.0       | -5.08e-05 | -0.36 | 0.0       | -7.76e-05 | 1.56e-06  |
| 28 | 2  | 0.0       | -3.70e-05 | -0.26 | 0.0       | -5.39e-05 | 1.13e-06  |
| 28 | 8  | -0.05     | 0.01      | -0.24 | -2.95e-05 | -2.57e-04 | -3.77e-05 |
| 28 | 11 | 0.05      | -0.01     | -0.28 | 2.88e-05  | 1.49e-04  | 2.96e-05  |
| 28 | 19 | -0.02     | -0.05     | -0.26 | 8.86e-05  | -1.18e-04 | -2.65e-05 |
| 28 | 40 | -0.02     | 4.84e-03  | -0.25 | -1.44e-05 | -1.52e-04 | -1.75e-05 |
| 28 | 43 | 0.02      | -5.35e-03 | -0.27 | 1.36e-05  | 4.39e-05  | 1.48e-05  |
| 28 | 51 | -8.09e-03 | -0.02     | -0.26 | 4.22e-05  | -8.46e-05 | -1.21e-05 |
| 29 | 1  | 2.19e-05  | 9.95e-06  | -0.34 | -4.73e-06 | 1.75e-04  | 0.0       |
| 29 | 2  | 1.55e-05  | 6.47e-06  | -0.25 | -3.46e-06 | 1.20e-04  | 0.0       |
| 29 | 4  | -0.05     | -7.35e-03 | -0.29 | 2.43e-05  | -6.29e-05 | 0.0       |
| 29 | 15 | 0.05      | 5.21e-03  | -0.20 | -3.10e-05 | 3.03e-04  | 0.0       |
| 29 | 24 | -0.02     | 0.05      | -0.26 | -8.58e-05 | 6.15e-05  | 0.0       |
| 29 | 36 | -0.02     | -3.50e-03 | -0.27 | 9.83e-06  | 3.19e-05  | 0.0       |
| 29 | 47 | 0.02      | 2.48e-03  | -0.23 | -1.67e-05 | 2.08e-04  | 0.0       |
| 29 | 56 | -7.42e-03 | 0.02      | -0.25 | -4.29e-05 | 9.19e-05  | 0.0       |
| 30 | 1  | -2.19e-05 | 9.95e-06  | -0.34 | -4.73e-06 | -1.75e-04 | 0.0       |
| 30 | 2  | -1.55e-05 | 6.47e-06  | -0.25 | -3.46e-06 | -1.20e-04 | 0.0       |
| 30 | 8  | -0.05     | 5.21e-03  | -0.20 | -3.10e-05 | -3.03e-04 | 0.0       |
| 30 | 11 | 0.05      | -7.35e-03 | -0.29 | 2.43e-05  | 6.29e-05  | 0.0       |
| 30 | 31 | 0.02      | 0.05      | -0.26 | -8.58e-05 | -6.15e-05 | 0.0       |
| 30 | 40 | -0.02     | 2.48e-03  | -0.23 | -1.67e-05 | -2.08e-04 | 0.0       |
| 30 | 43 | 0.02      | -3.50e-03 | -0.27 | 9.83e-06  | -3.19e-05 | 0.0       |
| 30 | 63 | 7.42e-03  | 0.02      | -0.25 | -4.29e-05 | -9.19e-05 | 0.0       |
| 31 | 1  | 2.14e-05  | -2.60e-05 | -0.36 | 0.0       | 7.74e-05  | 0.0       |
| 31 | 2  | 1.47e-05  | -1.89e-05 | -0.26 | 0.0       | 5.38e-05  | 0.0       |
| 31 | 4  | -0.05     | -0.01     | -0.28 | 2.82e-05  | -1.49e-04 | -2.92e-05 |
| 31 | 15 | 0.05      | 0.01      | -0.24 | -2.86e-05 | 2.57e-04  | 3.86e-05  |
| 31 | 28 | 0.02      | -0.05     | -0.26 | 8.90e-05  | 1.16e-04  | 2.73e-05  |
| 31 | 36 | -0.02     | -5.33e-03 | -0.27 | 1.34e-05  | -4.39e-05 | -1.43e-05 |
| 31 | 47 | 0.02      | 4.86e-03  | -0.25 | -1.38e-05 | 1.51e-04  | 1.83e-05  |
| 31 | 60 | 7.45e-03  | -0.02     | -0.26 | 4.25e-05  | 8.38e-05  | 1.28e-05  |
| 32 | 1  | -2.14e-05 | -2.60e-05 | -0.36 | 0.0       | -7.74e-05 | 0.0       |
| 32 | 2  | -1.47e-05 | -1.89e-05 | -0.26 | 0.0       | -5.38e-05 | 0.0       |
| 32 | 8  | -0.05     | 0.01      | -0.24 | -2.86e-05 | -2.57e-04 | -3.86e-05 |
| 32 | 11 | 0.05      | -0.01     | -0.28 | 2.82e-05  | 1.49e-04  | 2.92e-05  |
| 32 | 19 | -0.02     | -0.05     | -0.26 | 8.90e-05  | -1.16e-04 | -2.73e-05 |
| 32 | 40 | -0.02     | 4.86e-03  | -0.25 | -1.38e-05 | -1.51e-04 | -1.83e-05 |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 32 | 43 | 0.02      | -5.33e-03 | -0.27 | 1.34e-05  | 4.39e-05  | 1.43e-05  |
| 32 | 51 | -7.45e-03 | -0.02     | -0.26 | 4.25e-05  | -8.38e-05 | -1.28e-05 |
| 33 | 1  | 2.90e-05  | 0.0       | -0.34 | 0.0       | 1.74e-04  | 0.0       |
| 33 | 2  | 2.05e-05  | 0.0       | -0.25 | 0.0       | 1.19e-04  | 0.0       |
| 33 | 5  | -0.05     | -0.02     | -0.29 | 2.24e-05  | -6.43e-05 | 0.0       |
| 33 | 15 | 0.05      | 5.22e-03  | -0.20 | -2.71e-05 | 3.02e-04  | 0.0       |
| 33 | 28 | 0.01      | -0.05     | -0.23 | 8.24e-05  | 1.74e-04  | 0.0       |
| 33 | 37 | -0.02     | -9.76e-03 | -0.27 | 1.07e-05  | 3.08e-05  | 0.0       |
| 33 | 47 | 0.02      | 2.48e-03  | -0.23 | -1.30e-05 | 2.07e-04  | 0.0       |
| 33 | 60 | 6.81e-03  | -0.02     | -0.24 | 3.94e-05  | 1.46e-04  | 0.0       |
| 34 | 1  | -2.90e-05 | 0.0       | -0.34 | 0.0       | -1.74e-04 | 0.0       |
| 34 | 2  | -2.05e-05 | 0.0       | -0.25 | 0.0       | -1.19e-04 | 0.0       |
| 34 | 3  | -0.05     | -0.02     | -0.20 | 2.26e-05  | -3.02e-04 | 0.0       |
| 34 | 17 | 0.05      | 7.37e-03  | -0.29 | -2.73e-05 | 6.43e-05  | 0.0       |
| 34 | 19 | -0.01     | -0.05     | -0.23 | 8.24e-05  | -1.74e-04 | 0.0       |
| 34 | 35 | -0.02     | -0.01     | -0.23 | 1.08e-05  | -2.07e-04 | 0.0       |
| 34 | 49 | 0.02      | 3.51e-03  | -0.27 | -1.31e-05 | -3.08e-05 | 0.0       |
| 34 | 51 | -6.81e-03 | -0.02     | -0.24 | 3.94e-05  | -1.46e-04 | 0.0       |
| 35 | 1  | 2.78e-05  | 0.0       | -0.36 | 0.0       | 7.74e-05  | 0.0       |
| 35 | 2  | 1.92e-05  | 0.0       | -0.26 | 0.0       | 5.37e-05  | 0.0       |
| 35 | 9  | -0.05     | 0.01      | -0.28 | -2.76e-05 | -1.49e-04 | 3.94e-05  |
| 35 | 15 | 0.05      | 0.01      | -0.24 | -2.76e-05 | 2.56e-04  | 3.94e-05  |
| 35 | 28 | 0.01      | -0.05     | -0.25 | 8.94e-05  | 1.15e-04  | 2.79e-05  |
| 35 | 41 | -0.02     | 4.88e-03  | -0.27 | -1.32e-05 | -4.39e-05 | 1.89e-05  |
| 35 | 47 | 0.02      | 4.88e-03  | -0.25 | -1.32e-05 | 1.51e-04  | 1.89e-05  |
| 35 | 60 | 6.81e-03  | -0.02     | -0.26 | 4.28e-05  | 8.30e-05  | 1.34e-05  |
| 36 | 1  | -2.78e-05 | 0.0       | -0.36 | 0.0       | -7.74e-05 | 0.0       |
| 36 | 2  | -1.92e-05 | 0.0       | -0.26 | 0.0       | -5.37e-05 | 0.0       |
| 36 | 3  | -0.05     | -0.02     | -0.24 | 2.60e-05  | -2.56e-04 | -3.95e-05 |
| 36 | 13 | 0.05      | -0.02     | -0.28 | 2.60e-05  | 1.49e-04  | -3.95e-05 |
| 36 | 19 | -0.01     | -0.05     | -0.25 | 8.94e-05  | -1.15e-04 | -2.79e-05 |
| 36 | 35 | -0.02     | -8.39e-03 | -0.25 | 1.25e-05  | -1.51e-04 | -1.90e-05 |
| 36 | 45 | 0.02      | -8.39e-03 | -0.27 | 1.25e-05  | 4.39e-05  | -1.90e-05 |
| 36 | 51 | -6.81e-03 | -0.02     | -0.26 | 4.28e-05  | -8.30e-05 | -1.34e-05 |
| 37 | 1  | 2.19e-05  | -9.95e-06 | -0.34 | 4.73e-06  | 1.75e-04  | 0.0       |
| 37 | 2  | 1.55e-05  | -6.47e-06 | -0.25 | 3.46e-06  | 1.20e-04  | 0.0       |
| 37 | 10 | -0.05     | 7.35e-03  | -0.29 | -2.43e-05 | -6.29e-05 | 0.0       |
| 37 | 13 | 0.05      | -5.21e-03 | -0.20 | 3.10e-05  | 3.03e-04  | 0.0       |
| 37 | 22 | -0.02     | -0.05     | -0.26 | 8.58e-05  | 6.15e-05  | 0.0       |
| 37 | 42 | -0.02     | 3.50e-03  | -0.27 | -9.83e-06 | 3.19e-05  | 0.0       |
| 37 | 45 | 0.02      | -2.48e-03 | -0.23 | 1.67e-05  | 2.08e-04  | 0.0       |
| 37 | 54 | -7.42e-03 | -0.02     | -0.25 | 4.29e-05  | 9.19e-05  | 0.0       |
| 38 | 1  | -2.19e-05 | -9.95e-06 | -0.34 | 4.73e-06  | -1.75e-04 | 0.0       |
| 38 | 2  | -1.55e-05 | -6.47e-06 | -0.25 | 3.46e-06  | -1.20e-04 | 0.0       |
| 38 | 6  | -0.05     | -5.21e-03 | -0.20 | 3.10e-05  | -3.03e-04 | 0.0       |
| 38 | 17 | 0.05      | 7.35e-03  | -0.29 | -2.43e-05 | 6.29e-05  | 0.0       |
| 38 | 29 | 0.02      | -0.05     | -0.26 | 8.58e-05  | -6.15e-05 | 0.0       |
| 38 | 38 | -0.02     | -2.48e-03 | -0.23 | 1.67e-05  | -2.08e-04 | 0.0       |
| 38 | 49 | 0.02      | 3.50e-03  | -0.27 | -9.83e-06 | -3.19e-05 | 0.0       |
| 38 | 61 | 7.42e-03  | -0.02     | -0.25 | 4.29e-05  | -9.19e-05 | 0.0       |
| 39 | 1  | 2.14e-05  | 2.60e-05  | -0.36 | 0.0       | 7.74e-05  | 0.0       |
| 39 | 2  | 1.47e-05  | 1.89e-05  | -0.26 | 0.0       | 5.38e-05  | 0.0       |
| 39 | 10 | -0.05     | 0.01      | -0.28 | -2.82e-05 | -1.49e-04 | 2.92e-05  |
| 39 | 13 | 0.05      | -0.01     | -0.24 | 2.86e-05  | 2.57e-04  | -3.86e-05 |
| 39 | 34 | 0.02      | 0.05      | -0.26 | -8.90e-05 | 1.16e-04  | -2.73e-05 |
| 39 | 42 | -0.02     | 5.33e-03  | -0.27 | -1.34e-05 | -4.39e-05 | 1.43e-05  |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 39 | 45 | 0.02      | -4.86e-03 | -0.25 | 1.38e-05  | 1.51e-04  | -1.83e-05 |
| 39 | 66 | 7.45e-03  | 0.02      | -0.26 | -4.25e-05 | 8.38e-05  | -1.28e-05 |
| 40 | 1  | -2.14e-05 | 2.60e-05  | -0.36 | 0.0       | -7.74e-05 | 0.0       |
| 40 | 2  | -1.47e-05 | 1.89e-05  | -0.26 | 0.0       | -5.38e-05 | 0.0       |
| 40 | 6  | -0.05     | -0.01     | -0.24 | 2.86e-05  | -2.57e-04 | 3.86e-05  |
| 40 | 17 | 0.05      | 0.01      | -0.28 | -2.82e-05 | 1.49e-04  | -2.92e-05 |
| 40 | 25 | -0.02     | 0.05      | -0.26 | -8.90e-05 | -1.16e-04 | 2.73e-05  |
| 40 | 38 | -0.02     | -4.86e-03 | -0.25 | 1.38e-05  | -1.51e-04 | 1.83e-05  |
| 40 | 49 | 0.02      | 5.33e-03  | -0.27 | -1.34e-05 | 4.39e-05  | -1.43e-05 |
| 40 | 57 | -7.45e-03 | 0.02      | -0.26 | -4.25e-05 | -8.38e-05 | 1.28e-05  |
| 41 | 1  | 0.0       | -1.95e-05 | -0.34 | 1.01e-05  | 1.79e-04  | 0.0       |
| 41 | 2  | 0.0       | -1.26e-05 | -0.25 | 7.40e-06  | 1.23e-04  | 0.0       |
| 41 | 10 | -0.05     | 7.33e-03  | -0.29 | -2.07e-05 | -5.93e-05 | 0.0       |
| 41 | 13 | 0.05      | -5.20e-03 | -0.20 | 3.54e-05  | 3.05e-04  | 0.0       |
| 41 | 22 | -0.02     | -0.05     | -0.25 | 8.96e-05  | 6.10e-05  | 0.0       |
| 41 | 42 | -0.02     | 3.49e-03  | -0.27 | -6.07e-06 | 3.51e-05  | 0.0       |
| 41 | 45 | 0.02      | -2.48e-03 | -0.22 | 2.08e-05  | 2.10e-04  | 0.0       |
| 41 | 54 | -8.09e-03 | -0.02     | -0.25 | 4.68e-05  | 9.30e-05  | 0.0       |
| 42 | 1  | 0.0       | -1.95e-05 | -0.34 | 1.01e-05  | -1.79e-04 | 0.0       |
| 42 | 2  | 0.0       | -1.26e-05 | -0.25 | 7.40e-06  | -1.23e-04 | 0.0       |
| 42 | 6  | -0.05     | -5.20e-03 | -0.20 | 3.54e-05  | -3.05e-04 | 0.0       |
| 42 | 17 | 0.05      | 7.33e-03  | -0.29 | -2.07e-05 | 5.93e-05  | 0.0       |
| 42 | 29 | 0.02      | -0.05     | -0.25 | 8.96e-05  | -6.10e-05 | 0.0       |
| 42 | 38 | -0.02     | -2.48e-03 | -0.22 | 2.08e-05  | -2.10e-04 | 0.0       |
| 42 | 49 | 0.02      | 3.49e-03  | -0.27 | -6.07e-06 | -3.51e-05 | 0.0       |
| 42 | 61 | 8.09e-03  | -0.02     | -0.25 | 4.68e-05  | -9.30e-05 | 0.0       |
| 43 | 1  | 0.0       | 5.08e-05  | -0.36 | 0.0       | 7.76e-05  | 1.56e-06  |
| 43 | 2  | 0.0       | 3.70e-05  | -0.26 | 0.0       | 5.39e-05  | 1.13e-06  |
| 43 | 10 | -0.05     | 0.01      | -0.28 | -2.88e-05 | -1.49e-04 | 2.96e-05  |
| 43 | 13 | 0.05      | -0.01     | -0.24 | 2.95e-05  | 2.57e-04  | -3.77e-05 |
| 43 | 34 | 0.02      | 0.05      | -0.26 | -8.86e-05 | 1.18e-04  | -2.65e-05 |
| 43 | 42 | -0.02     | 5.35e-03  | -0.27 | -1.36e-05 | -4.39e-05 | 1.48e-05  |
| 43 | 45 | 0.02      | -4.84e-03 | -0.25 | 1.44e-05  | 1.52e-04  | -1.75e-05 |
| 43 | 66 | 8.09e-03  | 0.02      | -0.26 | -4.22e-05 | 8.46e-05  | -1.21e-05 |
| 44 | 1  | 0.0       | 5.08e-05  | -0.36 | 0.0       | -7.76e-05 | -1.56e-06 |
| 44 | 2  | 0.0       | 3.70e-05  | -0.26 | 0.0       | -5.39e-05 | -1.13e-06 |
| 44 | 6  | -0.05     | -0.01     | -0.24 | 2.95e-05  | -2.57e-04 | 3.77e-05  |
| 44 | 17 | 0.05      | 0.01      | -0.28 | -2.88e-05 | 1.49e-04  | -2.96e-05 |
| 44 | 25 | -0.02     | 0.05      | -0.26 | -8.86e-05 | -1.18e-04 | 2.65e-05  |
| 44 | 38 | -0.02     | -4.84e-03 | -0.25 | 1.44e-05  | -1.52e-04 | 1.75e-05  |
| 44 | 49 | 0.02      | 5.35e-03  | -0.27 | -1.36e-05 | 4.39e-05  | -1.48e-05 |
| 44 | 57 | -8.09e-03 | 0.02      | -0.26 | -4.22e-05 | -8.46e-05 | 1.21e-05  |
| 45 | 1  | -3.64e-05 | -2.65e-05 | -0.34 | 1.67e-05  | 1.86e-04  | 0.0       |
| 45 | 2  | -2.54e-05 | -1.71e-05 | -0.25 | 1.22e-05  | 1.28e-04  | 0.0       |
| 45 | 9  | -0.05     | 5.16e-03  | -0.29 | -1.59e-05 | -5.30e-05 | 0.0       |
| 45 | 10 | -0.05     | 7.31e-03  | -0.29 | -1.60e-05 | -5.31e-05 | 0.0       |
| 45 | 22 | -0.02     | -0.05     | -0.25 | 9.45e-05  | 6.28e-05  | 0.0       |
| 45 | 41 | -0.03     | 2.44e-03  | -0.27 | -1.24e-06 | 4.07e-05  | 0.0       |
| 45 | 42 | -0.02     | 3.48e-03  | -0.27 | -1.30e-06 | 4.07e-05  | 0.0       |
| 45 | 54 | -8.76e-03 | -0.02     | -0.25 | 5.16e-05  | 9.65e-05  | 0.0       |
| 46 | 1  | 3.64e-05  | -2.65e-05 | -0.34 | 1.67e-05  | -1.86e-04 | 0.0       |
| 46 | 2  | 2.54e-05  | -1.71e-05 | -0.25 | 1.22e-05  | -1.28e-04 | 0.0       |
| 46 | 17 | 0.05      | 7.31e-03  | -0.29 | -1.60e-05 | 5.31e-05  | 0.0       |
| 46 | 18 | 0.05      | 5.16e-03  | -0.29 | -1.59e-05 | 5.30e-05  | 0.0       |
| 46 | 29 | 0.02      | -0.05     | -0.25 | 9.45e-05  | -6.28e-05 | 0.0       |
| 46 | 49 | 0.02      | 3.48e-03  | -0.27 | -1.30e-06 | -4.07e-05 | 0.0       |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 46 | 50 | 0.03      | 2.44e-03  | -0.27 | -1.24e-06 | -4.07e-05 | 0.0       |
| 46 | 61 | 8.76e-03  | -0.02     | -0.25 | 5.16e-05  | -9.65e-05 | 0.0       |
| 47 | 1  | -3.80e-05 | 7.24e-05  | -0.36 | 0.0       | 7.77e-05  | 2.94e-06  |
| 47 | 2  | -2.69e-05 | 5.27e-05  | -0.26 | 0.0       | 5.40e-05  | 2.11e-06  |
| 47 | 9  | -0.05     | 0.01      | -0.28 | -2.95e-05 | -1.49e-04 | 4.08e-05  |
| 47 | 10 | -0.05     | 0.01      | -0.28 | -2.96e-05 | -1.50e-04 | 3.04e-05  |
| 47 | 34 | 0.02      | 0.05      | -0.27 | -8.84e-05 | 1.19e-04  | -2.53e-05 |
| 47 | 41 | -0.03     | 4.92e-03  | -0.27 | -1.39e-05 | -4.40e-05 | 2.07e-05  |
| 47 | 42 | -0.02     | 5.36e-03  | -0.27 | -1.40e-05 | -4.40e-05 | 1.58e-05  |
| 47 | 66 | 8.71e-03  | 0.02      | -0.26 | -4.21e-05 | 8.54e-05  | -1.11e-05 |
| 48 | 1  | 3.80e-05  | 7.24e-05  | -0.36 | 0.0       | -7.77e-05 | -2.94e-06 |
| 48 | 2  | 2.69e-05  | 5.27e-05  | -0.26 | 0.0       | -5.40e-05 | -2.11e-06 |
| 48 | 17 | 0.05      | 0.01      | -0.28 | -2.96e-05 | 1.50e-04  | -3.04e-05 |
| 48 | 18 | 0.05      | 0.01      | -0.28 | -2.95e-05 | 1.49e-04  | -4.08e-05 |
| 48 | 25 | -0.02     | 0.05      | -0.27 | -8.84e-05 | -1.19e-04 | 2.53e-05  |
| 48 | 49 | 0.02      | 5.36e-03  | -0.27 | -1.40e-05 | 4.40e-05  | -1.58e-05 |
| 48 | 50 | 0.03      | 4.92e-03  | -0.27 | -1.39e-05 | 4.40e-05  | -2.07e-05 |
| 48 | 57 | -8.71e-03 | 0.02      | -0.26 | -4.21e-05 | -8.54e-05 | 1.11e-05  |
| 49 | 1  | -8.48e-05 | -2.70e-05 | -0.34 | 2.48e-05  | 1.96e-04  | 0.0       |
| 49 | 2  | -5.92e-05 | -1.71e-05 | -0.25 | 1.81e-05  | 1.36e-04  | 0.0       |
| 49 | 9  | -0.05     | 5.15e-03  | -0.29 | -9.48e-06 | -4.31e-05 | 0.0       |
| 49 | 10 | -0.05     | 7.31e-03  | -0.29 | -9.59e-06 | -4.31e-05 | 0.0       |
| 49 | 22 | -0.02     | -0.05     | -0.24 | 1.01e-04  | 6.75e-05  | 0.0       |
| 49 | 41 | -0.03     | 2.44e-03  | -0.27 | 4.87e-06  | 4.95e-05  | 0.0       |
| 49 | 42 | -0.03     | 3.47e-03  | -0.27 | 4.82e-06  | 4.95e-05  | 0.0       |
| 49 | 54 | -9.45e-03 | -0.02     | -0.24 | 5.75e-05  | 1.03e-04  | 0.0       |
| 50 | 1  | 8.48e-05  | -2.70e-05 | -0.34 | 2.48e-05  | -1.96e-04 | 0.0       |
| 50 | 2  | 5.92e-05  | -1.71e-05 | -0.25 | 1.81e-05  | -1.36e-04 | 0.0       |
| 50 | 17 | 0.05      | 7.31e-03  | -0.29 | -9.59e-06 | 4.31e-05  | 0.0       |
| 50 | 18 | 0.05      | 5.15e-03  | -0.29 | -9.48e-06 | 4.31e-05  | 0.0       |
| 50 | 29 | 0.02      | -0.05     | -0.24 | 1.01e-04  | -6.75e-05 | 0.0       |
| 50 | 49 | 0.03      | 3.47e-03  | -0.27 | 4.82e-06  | -4.95e-05 | 0.0       |
| 50 | 50 | 0.03      | 2.44e-03  | -0.27 | 4.87e-06  | -4.95e-05 | 0.0       |
| 50 | 61 | 9.45e-03  | -0.02     | -0.24 | 5.75e-05  | -1.03e-04 | 0.0       |
| 51 | 1  | -9.96e-05 | 8.77e-05  | -0.36 | 0.0       | 7.74e-05  | 4.78e-06  |
| 51 | 2  | -6.99e-05 | 6.41e-05  | -0.26 | 0.0       | 5.38e-05  | 3.41e-06  |
| 51 | 9  | -0.05     | 0.01      | -0.29 | -3.08e-05 | -1.50e-04 | 4.21e-05  |
| 51 | 10 | -0.05     | 0.01      | -0.29 | -3.09e-05 | -1.50e-04 | 3.17e-05  |
| 51 | 34 | 0.02      | 0.05      | -0.27 | -8.85e-05 | 1.20e-04  | -2.39e-05 |
| 51 | 41 | -0.03     | 4.93e-03  | -0.27 | -1.47e-05 | -4.44e-05 | 2.20e-05  |
| 51 | 42 | -0.03     | 5.36e-03  | -0.27 | -1.47e-05 | -4.45e-05 | 1.71e-05  |
| 51 | 66 | 9.32e-03  | 0.02      | -0.27 | -4.23e-05 | 8.59e-05  | -9.70e-06 |
| 52 | 1  | 9.96e-05  | 8.77e-05  | -0.36 | 0.0       | -7.74e-05 | -4.78e-06 |
| 52 | 2  | 6.99e-05  | 6.41e-05  | -0.26 | 0.0       | -5.38e-05 | -3.41e-06 |
| 52 | 17 | 0.05      | 0.01      | -0.29 | -3.09e-05 | 1.50e-04  | -3.17e-05 |
| 52 | 18 | 0.05      | 0.01      | -0.29 | -3.08e-05 | 1.50e-04  | -4.21e-05 |
| 52 | 25 | -0.02     | 0.05      | -0.27 | -8.85e-05 | -1.20e-04 | 2.39e-05  |
| 52 | 49 | 0.03      | 5.36e-03  | -0.27 | -1.47e-05 | 4.45e-05  | -1.71e-05 |
| 52 | 50 | 0.03      | 4.93e-03  | -0.27 | -1.47e-05 | 4.44e-05  | -2.20e-05 |
| 52 | 57 | -9.32e-03 | 0.02      | -0.27 | -4.23e-05 | -8.59e-05 | 9.70e-06  |
| 53 | 1  | -1.35e-04 | -1.76e-05 | -0.34 | 3.31e-05  | 2.10e-04  | 0.0       |
| 53 | 2  | -9.45e-05 | -1.02e-05 | -0.24 | 2.40e-05  | 1.46e-04  | 0.0       |
| 53 | 9  | -0.06     | 5.16e-03  | -0.30 | -2.66e-06 | -3.03e-05 | 0.0       |
| 53 | 10 | -0.05     | 7.31e-03  | -0.30 | -2.74e-06 | -3.04e-05 | 0.0       |
| 53 | 22 | -0.02     | -0.05     | -0.24 | 1.07e-04  | 7.46e-05  | 0.0       |
| 53 | 41 | -0.03     | 2.45e-03  | -0.27 | 1.12e-05  | 6.09e-05  | 0.0       |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 53 | 42 | -0.03     | 3.48e-03  | -0.27 | 1.12e-05  | 6.08e-05  | 0.0       |
| 53 | 54 | -0.01     | -0.02     | -0.24 | 6.36e-05  | 1.11e-04  | 0.0       |
| 54 | 1  | 1.35e-04  | -1.76e-05 | -0.34 | 3.31e-05  | -2.10e-04 | 0.0       |
| 54 | 2  | 9.45e-05  | -1.02e-05 | -0.24 | 2.40e-05  | -1.46e-04 | 0.0       |
| 54 | 17 | 0.05      | 7.31e-03  | -0.30 | -2.74e-06 | 3.04e-05  | 0.0       |
| 54 | 18 | 0.06      | 5.16e-03  | -0.30 | -2.66e-06 | 3.03e-05  | 0.0       |
| 54 | 29 | 0.02      | -0.05     | -0.24 | 1.07e-04  | -7.46e-05 | 0.0       |
| 54 | 49 | 0.03      | 3.48e-03  | -0.27 | 1.12e-05  | -6.08e-05 | 0.0       |
| 54 | 50 | 0.03      | 2.45e-03  | -0.27 | 1.12e-05  | -6.09e-05 | 0.0       |
| 54 | 61 | 0.01      | -0.02     | -0.24 | 6.36e-05  | -1.11e-04 | 0.0       |
| 55 | 1  | -1.85e-04 | 9.39e-05  | -0.36 | 0.0       | 7.63e-05  | 6.40e-06  |
| 55 | 2  | -1.29e-04 | 6.88e-05  | -0.26 | 0.0       | 5.31e-05  | 4.54e-06  |
| 55 | 9  | -0.06     | 0.01      | -0.29 | -3.20e-05 | -1.51e-04 | 4.36e-05  |
| 55 | 26 | -0.01     | 0.05      | -0.29 | -9.18e-05 | -2.68e-06 | -2.46e-06 |
| 55 | 34 | 0.02      | 0.05      | -0.28 | -8.88e-05 | 1.21e-04  | -2.27e-05 |
| 55 | 41 | -0.03     | 4.93e-03  | -0.27 | -1.53e-05 | -4.53e-05 | 2.33e-05  |
| 55 | 58 | -6.04e-03 | 0.02      | -0.27 | -4.40e-05 | 2.62e-05  | 1.22e-06  |
| 55 | 66 | 9.91e-03  | 0.02      | -0.27 | -4.25e-05 | 8.58e-05  | -8.53e-06 |
| 56 | 1  | 1.85e-04  | 9.39e-05  | -0.36 | 0.0       | -7.63e-05 | -6.40e-06 |
| 56 | 2  | 1.29e-04  | 6.88e-05  | -0.26 | 0.0       | -5.31e-05 | -4.54e-06 |
| 56 | 18 | 0.06      | 0.01      | -0.29 | -3.20e-05 | 1.51e-04  | -4.36e-05 |
| 56 | 25 | -0.02     | 0.05      | -0.28 | -8.88e-05 | -1.21e-04 | 2.27e-05  |
| 56 | 33 | 0.01      | 0.05      | -0.29 | -9.18e-05 | 2.68e-06  | 2.46e-06  |
| 56 | 50 | 0.03      | 4.93e-03  | -0.27 | -1.53e-05 | 4.53e-05  | -2.33e-05 |
| 56 | 57 | -9.91e-03 | 0.02      | -0.27 | -4.25e-05 | -8.58e-05 | 8.53e-06  |
| 56 | 65 | 6.04e-03  | 0.02      | -0.27 | -4.40e-05 | -2.62e-05 | -1.22e-06 |
| 57 | 1  | -1.79e-04 | -3.37e-06 | -0.34 | 3.74e-05  | 2.25e-04  | 0.0       |
| 57 | 2  | -1.25e-04 | 0.0       | -0.24 | 2.70e-05  | 1.56e-04  | 0.0       |
| 57 | 9  | -0.06     | 5.17e-03  | -0.29 | 0.0       | -1.87e-05 | 0.0       |
| 57 | 10 | -0.06     | 7.32e-03  | -0.29 | 0.0       | -1.88e-05 | 0.0       |
| 57 | 22 | -0.02     | -0.05     | -0.23 | 1.11e-04  | 8.32e-05  | 0.0       |
| 57 | 41 | -0.03     | 2.46e-03  | -0.27 | 1.41e-05  | 7.19e-05  | 0.0       |
| 57 | 42 | -0.03     | 3.49e-03  | -0.27 | 1.41e-05  | 7.19e-05  | 0.0       |
| 57 | 54 | -0.01     | -0.02     | -0.24 | 6.71e-05  | 1.21e-04  | 0.0       |
| 58 | 1  | 1.79e-04  | -3.37e-06 | -0.34 | 3.74e-05  | -2.25e-04 | 0.0       |
| 58 | 2  | 1.25e-04  | 0.0       | -0.24 | 2.70e-05  | -1.56e-04 | 0.0       |
| 58 | 17 | 0.06      | 7.32e-03  | -0.29 | 0.0       | 1.88e-05  | 0.0       |
| 58 | 18 | 0.06      | 5.17e-03  | -0.29 | 0.0       | 1.87e-05  | 0.0       |
| 58 | 29 | 0.02      | -0.05     | -0.23 | 1.11e-04  | -8.32e-05 | 0.0       |
| 58 | 49 | 0.03      | 3.49e-03  | -0.27 | 1.41e-05  | -7.19e-05 | 0.0       |
| 58 | 50 | 0.03      | 2.46e-03  | -0.27 | 1.41e-05  | -7.19e-05 | 0.0       |
| 58 | 61 | 0.01      | -0.02     | -0.24 | 6.71e-05  | -1.21e-04 | 0.0       |
| 59 | 1  | -2.69e-04 | 8.96e-05  | -0.36 | 7.77e-06  | 7.56e-05  | 0.0       |
| 59 | 2  | -1.87e-04 | 6.56e-05  | -0.26 | 5.65e-06  | 5.26e-05  | 0.0       |
| 59 | 9  | -0.06     | 0.01      | -0.29 | -2.34e-05 | -1.52e-04 | 3.87e-05  |
| 59 | 26 | -0.01     | 0.05      | -0.29 | -8.42e-05 | -2.54e-06 | -7.40e-06 |
| 59 | 34 | 0.02      | 0.05      | -0.28 | -8.27e-05 | 1.22e-04  | -2.76e-05 |
| 59 | 41 | -0.03     | 4.93e-03  | -0.27 | -8.29e-06 | -4.60e-05 | 1.84e-05  |
| 59 | 58 | -5.93e-03 | 0.02      | -0.28 | -3.74e-05 | 2.61e-05  | -3.66e-06 |
| 59 | 66 | 0.01      | 0.02      | -0.27 | -3.67e-05 | 8.59e-05  | -1.34e-05 |
| 60 | 1  | 2.69e-04  | 8.96e-05  | -0.36 | 7.77e-06  | -7.56e-05 | 0.0       |
| 60 | 2  | 1.87e-04  | 6.56e-05  | -0.26 | 5.65e-06  | -5.26e-05 | 0.0       |
| 60 | 18 | 0.06      | 0.01      | -0.29 | -2.34e-05 | 1.52e-04  | -3.87e-05 |
| 60 | 25 | -0.02     | 0.05      | -0.28 | -8.27e-05 | -1.22e-04 | 2.76e-05  |
| 60 | 33 | 0.01      | 0.05      | -0.29 | -8.42e-05 | 2.54e-06  | 7.40e-06  |
| 60 | 50 | 0.03      | 4.93e-03  | -0.27 | -8.29e-06 | 4.60e-05  | -1.84e-05 |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 60 | 57 | -0.01     | 0.02      | -0.27 | -3.67e-05 | -8.59e-05 | 1.34e-05  |
| 60 | 65 | 5.93e-03  | 0.02      | -0.28 | -3.74e-05 | -2.61e-05 | 3.66e-06  |
| 61 | 1  | -9.73e-05 | -1.70e-04 | -0.36 | 4.35e-06  | 2.24e-06  | 6.52e-06  |
| 61 | 2  | -6.77e-05 | -1.20e-04 | -0.26 | 2.97e-06  | 1.55e-06  | 4.62e-06  |
| 61 | 3  | -0.06     | -0.02     | -0.25 | 2.71e-05  | -2.15e-04 | -3.41e-05 |
| 61 | 19 | -0.02     | -0.05     | -0.28 | 9.25e-05  | -6.26e-05 | -2.28e-05 |
| 61 | 27 | 0.01      | -0.05     | -0.29 | 9.43e-05  | 6.73e-05  | -2.64e-06 |
| 61 | 35 | -0.03     | -8.86e-03 | -0.25 | 1.45e-05  | -1.03e-04 | -1.40e-05 |
| 61 | 51 | -0.01     | -0.02     | -0.27 | 4.58e-05  | -2.93e-05 | -8.50e-06 |
| 61 | 59 | 6.51e-03  | -0.02     | -0.28 | 4.67e-05  | 3.32e-05  | 1.18e-06  |
| 62 | 1  | -4.88e-04 | -1.69e-04 | -0.36 | 2.00e-06  | 5.98e-06  | 6.40e-06  |
| 62 | 2  | -3.44e-04 | -1.19e-04 | -0.26 | 1.21e-06  | 3.71e-06  | 4.54e-06  |
| 62 | 3  | -0.06     | -0.02     | -0.25 | 2.28e-05  | -2.17e-04 | -3.44e-05 |
| 62 | 19 | -0.02     | -0.05     | -0.28 | 8.95e-05  | -6.13e-05 | -2.27e-05 |
| 62 | 27 | 0.01      | -0.05     | -0.29 | 9.27e-05  | 7.15e-05  | -2.46e-06 |
| 62 | 35 | -0.03     | -8.86e-03 | -0.25 | 1.15e-05  | -1.03e-04 | -1.42e-05 |
| 62 | 51 | -0.01     | -0.02     | -0.27 | 4.34e-05  | -2.76e-05 | -8.53e-06 |
| 62 | 59 | 6.40e-03  | -0.02     | -0.27 | 4.50e-05  | 3.64e-05  | 1.22e-06  |
| 63 | 1  | -7.78e-04 | -1.32e-04 | -0.36 | 0.0       | 4.11e-06  | 4.78e-06  |
| 63 | 2  | -5.49e-04 | -9.32e-05 | -0.26 | 0.0       | 2.04e-06  | 3.41e-06  |
| 63 | 3  | -0.06     | -0.02     | -0.25 | 2.33e-05  | -2.24e-04 | -3.53e-05 |
| 63 | 11 | 0.06      | -0.01     | -0.29 | 3.06e-05  | 2.29e-04  | 3.17e-05  |
| 63 | 19 | -0.02     | -0.05     | -0.27 | 8.88e-05  | -6.46e-05 | -2.39e-05 |
| 63 | 35 | -0.03     | -8.83e-03 | -0.25 | 1.12e-05  | -1.07e-04 | -1.52e-05 |
| 63 | 43 | 0.03      | -5.78e-03 | -0.27 | 1.47e-05  | 1.11e-04  | 1.71e-05  |
| 63 | 51 | -0.01     | -0.02     | -0.27 | 4.25e-05  | -3.00e-05 | -9.70e-06 |
| 64 | 1  | -9.62e-04 | -9.07e-05 | -0.36 | 0.0       | 1.93e-06  | 2.94e-06  |
| 64 | 2  | -6.81e-04 | -6.41e-05 | -0.26 | 0.0       | 0.0       | 2.11e-06  |
| 64 | 3  | -0.06     | -0.02     | -0.24 | 2.34e-05  | -2.29e-04 | -3.66e-05 |
| 64 | 11 | 0.06      | -0.01     | -0.28 | 2.97e-05  | 2.31e-04  | 3.04e-05  |
| 64 | 19 | -0.02     | -0.05     | -0.27 | 8.84e-05  | -6.76e-05 | -2.53e-05 |
| 64 | 35 | -0.03     | -8.81e-03 | -0.25 | 1.10e-05  | -1.10e-04 | -1.65e-05 |
| 64 | 43 | 0.03      | -5.75e-03 | -0.27 | 1.40e-05  | 1.11e-04  | 1.58e-05  |
| 64 | 51 | -0.01     | -0.02     | -0.26 | 4.21e-05  | -3.24e-05 | -1.11e-05 |
| 65 | 1  | -1.06e-03 | -5.48e-05 | -0.36 | 0.0       | 0.0       | 1.56e-06  |
| 65 | 2  | -7.56e-04 | -3.89e-05 | -0.26 | 0.0       | -1.04e-06 | 1.13e-06  |
| 65 | 3  | -0.06     | -0.02     | -0.24 | 2.42e-05  | -2.33e-04 | -3.78e-05 |
| 65 | 11 | 0.05      | -0.01     | -0.28 | 2.88e-05  | 2.31e-04  | 2.96e-05  |
| 65 | 19 | -0.02     | -0.05     | -0.26 | 8.86e-05  | -6.99e-05 | -2.65e-05 |
| 65 | 35 | -0.03     | -8.78e-03 | -0.25 | 1.14e-05  | -1.13e-04 | -1.76e-05 |
| 65 | 43 | 0.03      | -5.72e-03 | -0.27 | 1.36e-05  | 1.11e-04  | 1.48e-05  |
| 65 | 51 | -9.72e-03 | -0.02     | -0.26 | 4.22e-05  | -3.42e-05 | -1.21e-05 |
| 66 | 1  | -1.11e-03 | -2.55e-05 | -0.36 | 0.0       | 0.0       | 0.0       |
| 66 | 2  | -7.92e-04 | -1.81e-05 | -0.26 | 0.0       | -1.78e-06 | 0.0       |
| 66 | 3  | -0.06     | -0.02     | -0.24 | 2.50e-05  | -2.34e-04 | -3.87e-05 |
| 66 | 11 | 0.05      | -0.01     | -0.28 | 2.83e-05  | 2.31e-04  | 2.92e-05  |
| 66 | 19 | -0.02     | -0.05     | -0.26 | 8.89e-05  | -7.12e-05 | -2.73e-05 |
| 66 | 35 | -0.03     | -8.76e-03 | -0.25 | 1.19e-05  | -1.14e-04 | -1.84e-05 |
| 66 | 43 | 0.03      | -5.70e-03 | -0.27 | 1.34e-05  | 1.10e-04  | 1.43e-05  |
| 66 | 51 | -9.09e-03 | -0.02     | -0.26 | 4.24e-05  | -3.52e-05 | -1.28e-05 |
| 67 | 1  | -1.13e-03 | 0.0       | -0.36 | 0.0       | 0.0       | 0.0       |
| 67 | 2  | -8.02e-04 | 0.0       | -0.26 | 0.0       | -2.02e-06 | 0.0       |
| 67 | 3  | -0.05     | -0.02     | -0.24 | 2.59e-05  | -2.34e-04 | -3.95e-05 |
| 67 | 13 | 0.05      | -0.02     | -0.28 | 2.59e-05  | 2.30e-04  | -3.95e-05 |
| 67 | 19 | -0.02     | -0.05     | -0.25 | 8.93e-05  | -7.16e-05 | -2.79e-05 |
| 67 | 35 | -0.03     | -8.73e-03 | -0.25 | 1.24e-05  | -1.14e-04 | -1.90e-05 |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 67 | 45 | 0.02      | -8.73e-03 | -0.27 | 1.24e-05  | 1.10e-04  | -1.90e-05 |
| 67 | 51 | -8.45e-03 | -0.02     | -0.26 | 4.27e-05  | -3.55e-05 | -1.34e-05 |
| 68 | 1  | -1.11e-03 | 2.55e-05  | -0.36 | 0.0       | 0.0       | 0.0       |
| 68 | 2  | -7.92e-04 | 1.81e-05  | -0.26 | 0.0       | -1.78e-06 | 0.0       |
| 68 | 9  | -0.06     | 0.02      | -0.24 | -2.50e-05 | -2.34e-04 | 3.87e-05  |
| 68 | 17 | 0.05      | 0.01      | -0.28 | -2.83e-05 | 2.31e-04  | -2.92e-05 |
| 68 | 25 | -0.02     | 0.05      | -0.26 | -8.89e-05 | -7.12e-05 | 2.73e-05  |
| 68 | 41 | -0.03     | 8.76e-03  | -0.25 | -1.19e-05 | -1.14e-04 | 1.84e-05  |
| 68 | 49 | 0.03      | 5.70e-03  | -0.27 | -1.34e-05 | 1.10e-04  | -1.43e-05 |
| 68 | 57 | -9.09e-03 | 0.02      | -0.26 | -4.24e-05 | -3.52e-05 | 1.28e-05  |
| 69 | 1  | -1.06e-03 | 5.48e-05  | -0.36 | 0.0       | 0.0       | -1.56e-06 |
| 69 | 2  | -7.56e-04 | 3.89e-05  | -0.26 | 0.0       | -1.04e-06 | -1.13e-06 |
| 69 | 9  | -0.06     | 0.02      | -0.24 | -2.42e-05 | -2.33e-04 | 3.78e-05  |
| 69 | 17 | 0.05      | 0.01      | -0.28 | -2.88e-05 | 2.31e-04  | -2.96e-05 |
| 69 | 25 | -0.02     | 0.05      | -0.26 | -8.86e-05 | -6.99e-05 | 2.65e-05  |
| 69 | 41 | -0.03     | 8.78e-03  | -0.25 | -1.14e-05 | -1.13e-04 | 1.76e-05  |
| 69 | 49 | 0.03      | 5.72e-03  | -0.27 | -1.36e-05 | 1.11e-04  | -1.48e-05 |
| 69 | 57 | -9.72e-03 | 0.02      | -0.26 | -4.22e-05 | -3.42e-05 | 1.21e-05  |
| 70 | 1  | -9.62e-04 | 9.07e-05  | -0.36 | 0.0       | 1.93e-06  | -2.94e-06 |
| 70 | 2  | -6.81e-04 | 6.41e-05  | -0.26 | 0.0       | 0.0       | -2.11e-06 |
| 70 | 9  | -0.06     | 0.02      | -0.24 | -2.34e-05 | -2.29e-04 | 3.66e-05  |
| 70 | 17 | 0.06      | 0.01      | -0.28 | -2.97e-05 | 2.31e-04  | -3.04e-05 |
| 70 | 25 | -0.02     | 0.05      | -0.27 | -8.84e-05 | -6.76e-05 | 2.53e-05  |
| 70 | 41 | -0.03     | 8.81e-03  | -0.25 | -1.10e-05 | -1.10e-04 | 1.65e-05  |
| 70 | 49 | 0.03      | 5.75e-03  | -0.27 | -1.40e-05 | 1.11e-04  | -1.58e-05 |
| 70 | 57 | -0.01     | 0.02      | -0.26 | -4.21e-05 | -3.24e-05 | 1.11e-05  |
| 71 | 1  | -7.78e-04 | 1.32e-04  | -0.36 | 0.0       | 4.11e-06  | -4.78e-06 |
| 71 | 2  | -5.49e-04 | 9.32e-05  | -0.26 | 0.0       | 2.04e-06  | -3.41e-06 |
| 71 | 9  | -0.06     | 0.02      | -0.25 | -2.33e-05 | -2.24e-04 | 3.53e-05  |
| 71 | 17 | 0.06      | 0.01      | -0.29 | -3.06e-05 | 2.29e-04  | -3.17e-05 |
| 71 | 25 | -0.02     | 0.05      | -0.27 | -8.88e-05 | -6.46e-05 | 2.39e-05  |
| 71 | 41 | -0.03     | 8.83e-03  | -0.25 | -1.12e-05 | -1.07e-04 | 1.52e-05  |
| 71 | 49 | 0.03      | 5.78e-03  | -0.27 | -1.47e-05 | 1.11e-04  | -1.71e-05 |
| 71 | 57 | -0.01     | 0.02      | -0.27 | -4.25e-05 | -3.00e-05 | 9.70e-06  |
| 72 | 1  | -4.88e-04 | 1.69e-04  | -0.36 | -2.00e-06 | 5.98e-06  | -6.40e-06 |
| 72 | 2  | -3.44e-04 | 1.19e-04  | -0.26 | -1.21e-06 | 3.71e-06  | -4.54e-06 |
| 72 | 9  | -0.06     | 0.02      | -0.25 | -2.28e-05 | -2.17e-04 | 3.44e-05  |
| 72 | 25 | -0.02     | 0.05      | -0.28 | -8.95e-05 | -6.13e-05 | 2.27e-05  |
| 72 | 33 | 0.01      | 0.05      | -0.29 | -9.27e-05 | 7.15e-05  | 2.46e-06  |
| 72 | 41 | -0.03     | 8.86e-03  | -0.25 | -1.15e-05 | -1.03e-04 | 1.42e-05  |
| 72 | 57 | -0.01     | 0.02      | -0.27 | -4.34e-05 | -2.76e-05 | 8.53e-06  |
| 72 | 65 | 6.40e-03  | 0.02      | -0.27 | -4.50e-05 | 3.64e-05  | -1.22e-06 |
| 73 | 1  | -9.73e-05 | 1.70e-04  | -0.36 | -4.35e-06 | 2.24e-06  | -6.52e-06 |
| 73 | 2  | -6.77e-05 | 1.20e-04  | -0.26 | -2.97e-06 | 1.55e-06  | -4.62e-06 |
| 73 | 9  | -0.06     | 0.02      | -0.25 | -2.71e-05 | -2.15e-04 | 3.41e-05  |
| 73 | 25 | -0.02     | 0.05      | -0.28 | -9.25e-05 | -6.26e-05 | 2.28e-05  |
| 73 | 33 | 0.01      | 0.05      | -0.29 | -9.43e-05 | 6.73e-05  | 2.64e-06  |
| 73 | 41 | -0.03     | 8.86e-03  | -0.25 | -1.45e-05 | -1.03e-04 | 1.40e-05  |
| 73 | 57 | -0.01     | 0.02      | -0.27 | -4.58e-05 | -2.93e-05 | 8.50e-06  |
| 73 | 65 | 6.51e-03  | 0.02      | -0.28 | -4.67e-05 | 3.32e-05  | -1.18e-06 |
| 74 | 1  | 9.73e-05  | -1.70e-04 | -0.36 | 4.35e-06  | -2.24e-06 | -6.52e-06 |
| 74 | 2  | 6.77e-05  | -1.20e-04 | -0.26 | 2.97e-06  | -1.55e-06 | -4.62e-06 |
| 74 | 12 | 0.06      | -0.02     | -0.25 | 2.71e-05  | 2.15e-04  | 3.41e-05  |
| 74 | 20 | -0.01     | -0.05     | -0.29 | 9.43e-05  | -6.73e-05 | 2.64e-06  |
| 74 | 28 | 0.02      | -0.05     | -0.28 | 9.25e-05  | 6.26e-05  | 2.28e-05  |
| 74 | 44 | 0.03      | -8.86e-03 | -0.25 | 1.45e-05  | 1.03e-04  | 1.40e-05  |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 74 | 52 | -6.51e-03 | -0.02     | -0.28 | 4.67e-05  | -3.32e-05 | -1.18e-06 |
| 74 | 60 | 0.01      | -0.02     | -0.27 | 4.58e-05  | 2.93e-05  | 8.50e-06  |
| 75 | 1  | 4.88e-04  | -1.69e-04 | -0.36 | 2.00e-06  | -5.98e-06 | -6.40e-06 |
| 75 | 2  | 3.44e-04  | -1.19e-04 | -0.26 | 1.21e-06  | -3.71e-06 | -4.54e-06 |
| 75 | 12 | 0.06      | -0.02     | -0.25 | 2.28e-05  | 2.17e-04  | 3.44e-05  |
| 75 | 20 | -0.01     | -0.05     | -0.29 | 9.27e-05  | -7.15e-05 | 2.46e-06  |
| 75 | 28 | 0.02      | -0.05     | -0.28 | 8.95e-05  | 6.13e-05  | 2.27e-05  |
| 75 | 44 | 0.03      | -8.86e-03 | -0.25 | 1.15e-05  | 1.03e-04  | 1.42e-05  |
| 75 | 52 | -6.40e-03 | -0.02     | -0.27 | 4.50e-05  | -3.64e-05 | -1.22e-06 |
| 75 | 60 | 0.01      | -0.02     | -0.27 | 4.34e-05  | 2.76e-05  | 8.53e-06  |
| 76 | 1  | 7.78e-04  | -1.32e-04 | -0.36 | 0.0       | -4.11e-06 | -4.78e-06 |
| 76 | 2  | 5.49e-04  | -9.32e-05 | -0.26 | 0.0       | -2.04e-06 | -3.41e-06 |
| 76 | 4  | -0.06     | -0.01     | -0.29 | 3.06e-05  | -2.29e-04 | -3.17e-05 |
| 76 | 12 | 0.06      | -0.02     | -0.25 | 2.33e-05  | 2.24e-04  | 3.53e-05  |
| 76 | 28 | 0.02      | -0.05     | -0.27 | 8.88e-05  | 6.46e-05  | 2.39e-05  |
| 76 | 36 | -0.03     | -5.78e-03 | -0.27 | 1.47e-05  | -1.11e-04 | -1.71e-05 |
| 76 | 44 | 0.03      | -8.83e-03 | -0.25 | 1.12e-05  | 1.07e-04  | 1.52e-05  |
| 76 | 60 | 0.01      | -0.02     | -0.27 | 4.25e-05  | 3.00e-05  | 9.70e-06  |
| 77 | 1  | 9.62e-04  | -9.07e-05 | -0.36 | 0.0       | -1.93e-06 | -2.94e-06 |
| 77 | 2  | 6.81e-04  | -6.41e-05 | -0.26 | 0.0       | 0.0       | -2.11e-06 |
| 77 | 4  | -0.06     | -0.01     | -0.28 | 2.97e-05  | -2.31e-04 | -3.04e-05 |
| 77 | 12 | 0.06      | -0.02     | -0.24 | 2.34e-05  | 2.29e-04  | 3.66e-05  |
| 77 | 28 | 0.02      | -0.05     | -0.27 | 8.84e-05  | 6.76e-05  | 2.53e-05  |
| 77 | 36 | -0.03     | -5.75e-03 | -0.27 | 1.40e-05  | -1.11e-04 | -1.58e-05 |
| 77 | 44 | 0.03      | -8.81e-03 | -0.25 | 1.10e-05  | 1.10e-04  | 1.65e-05  |
| 77 | 60 | 0.01      | -0.02     | -0.26 | 4.21e-05  | 3.24e-05  | 1.11e-05  |
| 78 | 1  | 1.06e-03  | -5.48e-05 | -0.36 | 0.0       | 0.0       | -1.56e-06 |
| 78 | 2  | 7.56e-04  | -3.89e-05 | -0.26 | 0.0       | 1.04e-06  | -1.13e-06 |
| 78 | 4  | -0.05     | -0.01     | -0.28 | 2.88e-05  | -2.31e-04 | -2.96e-05 |
| 78 | 12 | 0.06      | -0.02     | -0.24 | 2.42e-05  | 2.33e-04  | 3.78e-05  |
| 78 | 28 | 0.02      | -0.05     | -0.26 | 8.86e-05  | 6.99e-05  | 2.65e-05  |
| 78 | 36 | -0.03     | -5.72e-03 | -0.27 | 1.36e-05  | -1.11e-04 | -1.48e-05 |
| 78 | 44 | 0.03      | -8.78e-03 | -0.25 | 1.14e-05  | 1.13e-04  | 1.76e-05  |
| 78 | 60 | 9.72e-03  | -0.02     | -0.26 | 4.22e-05  | 3.42e-05  | 1.21e-05  |
| 79 | 1  | 1.11e-03  | -2.55e-05 | -0.36 | 0.0       | 0.0       | 0.0       |
| 79 | 2  | 7.92e-04  | -1.81e-05 | -0.26 | 0.0       | 1.78e-06  | 0.0       |
| 79 | 4  | -0.05     | -0.01     | -0.28 | 2.83e-05  | -2.31e-04 | -2.92e-05 |
| 79 | 12 | 0.06      | -0.02     | -0.24 | 2.50e-05  | 2.34e-04  | 3.87e-05  |
| 79 | 28 | 0.02      | -0.05     | -0.26 | 8.89e-05  | 7.12e-05  | 2.73e-05  |
| 79 | 36 | -0.03     | -5.70e-03 | -0.27 | 1.34e-05  | -1.10e-04 | -1.43e-05 |
| 79 | 44 | 0.03      | -8.76e-03 | -0.25 | 1.19e-05  | 1.14e-04  | 1.84e-05  |
| 79 | 60 | 9.09e-03  | -0.02     | -0.26 | 4.24e-05  | 3.52e-05  | 1.28e-05  |
| 80 | 1  | 1.13e-03  | 0.0       | -0.36 | 0.0       | 0.0       | 0.0       |
| 80 | 2  | 8.02e-04  | 0.0       | -0.26 | 0.0       | 2.02e-06  | 0.0       |
| 80 | 9  | -0.05     | 0.01      | -0.28 | -2.77e-05 | -2.30e-04 | 3.94e-05  |
| 80 | 15 | 0.05      | 0.01      | -0.24 | -2.77e-05 | 2.34e-04  | 3.94e-05  |
| 80 | 28 | 0.02      | -0.05     | -0.25 | 8.93e-05  | 7.16e-05  | 2.79e-05  |
| 80 | 41 | -0.02     | 5.25e-03  | -0.27 | -1.33e-05 | -1.10e-04 | 1.89e-05  |
| 80 | 47 | 0.03      | 5.25e-03  | -0.25 | -1.33e-05 | 1.14e-04  | 1.89e-05  |
| 80 | 60 | 8.45e-03  | -0.02     | -0.26 | 4.27e-05  | 3.55e-05  | 1.34e-05  |
| 81 | 1  | 1.11e-03  | 2.55e-05  | -0.36 | 0.0       | 0.0       | 0.0       |
| 81 | 2  | 7.92e-04  | 1.81e-05  | -0.26 | 0.0       | 1.78e-06  | 0.0       |
| 81 | 10 | -0.05     | 0.01      | -0.28 | -2.83e-05 | -2.31e-04 | 2.92e-05  |
| 81 | 18 | 0.06      | 0.02      | -0.24 | -2.50e-05 | 2.34e-04  | -3.87e-05 |
| 81 | 34 | 0.02      | 0.05      | -0.26 | -8.89e-05 | 7.12e-05  | -2.73e-05 |
| 81 | 42 | -0.03     | 5.70e-03  | -0.27 | -1.34e-05 | -1.10e-04 | 1.43e-05  |

|    |    |           |           |       |           |           |           |
|----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 81 | 50 | 0.03      | 8.76e-03  | -0.25 | -1.19e-05 | 1.14e-04  | -1.84e-05 |
| 81 | 66 | 9.09e-03  | 0.02      | -0.26 | -4.24e-05 | 3.52e-05  | -1.28e-05 |
| 82 | 1  | 1.06e-03  | 5.48e-05  | -0.36 | 0.0       | 0.0       | 1.56e-06  |
| 82 | 2  | 7.56e-04  | 3.89e-05  | -0.26 | 0.0       | 1.04e-06  | 1.13e-06  |
| 82 | 10 | -0.05     | 0.01      | -0.28 | -2.88e-05 | -2.31e-04 | 2.96e-05  |
| 82 | 18 | 0.06      | 0.02      | -0.24 | -2.42e-05 | 2.33e-04  | -3.78e-05 |
| 82 | 34 | 0.02      | 0.05      | -0.26 | -8.86e-05 | 6.99e-05  | -2.65e-05 |
| 82 | 42 | -0.03     | 5.72e-03  | -0.27 | -1.36e-05 | -1.11e-04 | 1.48e-05  |
| 82 | 50 | 0.03      | 8.78e-03  | -0.25 | -1.14e-05 | 1.13e-04  | -1.76e-05 |
| 82 | 66 | 9.72e-03  | 0.02      | -0.26 | -4.22e-05 | 3.42e-05  | -1.21e-05 |
| 83 | 1  | 9.62e-04  | 9.07e-05  | -0.36 | 0.0       | -1.93e-06 | 2.94e-06  |
| 83 | 2  | 6.81e-04  | 6.41e-05  | -0.26 | 0.0       | 0.0       | 2.11e-06  |
| 83 | 10 | -0.06     | 0.01      | -0.28 | -2.97e-05 | -2.31e-04 | 3.04e-05  |
| 83 | 18 | 0.06      | 0.02      | -0.24 | -2.34e-05 | 2.29e-04  | -3.66e-05 |
| 83 | 34 | 0.02      | 0.05      | -0.27 | -8.84e-05 | 6.76e-05  | -2.53e-05 |
| 83 | 42 | -0.03     | 5.75e-03  | -0.27 | -1.40e-05 | -1.11e-04 | 1.58e-05  |
| 83 | 50 | 0.03      | 8.81e-03  | -0.25 | -1.10e-05 | 1.10e-04  | -1.65e-05 |
| 83 | 66 | 0.01      | 0.02      | -0.26 | -4.21e-05 | 3.24e-05  | -1.11e-05 |
| 84 | 1  | 7.78e-04  | 1.32e-04  | -0.36 | 0.0       | -4.11e-06 | 4.78e-06  |
| 84 | 2  | 5.49e-04  | 9.32e-05  | -0.26 | 0.0       | -2.04e-06 | 3.41e-06  |
| 84 | 10 | -0.06     | 0.01      | -0.29 | -3.06e-05 | -2.29e-04 | 3.17e-05  |
| 84 | 18 | 0.06      | 0.02      | -0.25 | -2.33e-05 | 2.24e-04  | -3.53e-05 |
| 84 | 34 | 0.02      | 0.05      | -0.27 | -8.88e-05 | 6.46e-05  | -2.39e-05 |
| 84 | 42 | -0.03     | 5.78e-03  | -0.27 | -1.47e-05 | -1.11e-04 | 1.71e-05  |
| 84 | 50 | 0.03      | 8.83e-03  | -0.25 | -1.12e-05 | 1.07e-04  | -1.52e-05 |
| 84 | 66 | 0.01      | 0.02      | -0.27 | -4.25e-05 | 3.00e-05  | -9.70e-06 |
| 85 | 1  | 4.88e-04  | 1.69e-04  | -0.36 | -2.00e-06 | -5.98e-06 | 6.40e-06  |
| 85 | 2  | 3.44e-04  | 1.19e-04  | -0.26 | -1.21e-06 | -3.71e-06 | 4.54e-06  |
| 85 | 18 | 0.06      | 0.02      | -0.25 | -2.28e-05 | 2.17e-04  | -3.44e-05 |
| 85 | 26 | -0.01     | 0.05      | -0.29 | -9.27e-05 | -7.15e-05 | -2.46e-06 |
| 85 | 34 | 0.02      | 0.05      | -0.28 | -8.95e-05 | 6.13e-05  | -2.27e-05 |
| 85 | 50 | 0.03      | 8.86e-03  | -0.25 | -1.15e-05 | 1.03e-04  | -1.42e-05 |
| 85 | 58 | -6.40e-03 | 0.02      | -0.27 | -4.50e-05 | -3.64e-05 | 1.22e-06  |
| 85 | 66 | 0.01      | 0.02      | -0.27 | -4.34e-05 | 2.76e-05  | -8.53e-06 |
| 86 | 1  | 9.73e-05  | 1.70e-04  | -0.36 | -4.35e-06 | -2.24e-06 | 6.52e-06  |
| 86 | 2  | 6.77e-05  | 1.20e-04  | -0.26 | -2.97e-06 | -1.55e-06 | 4.62e-06  |
| 86 | 18 | 0.06      | 0.02      | -0.25 | -2.71e-05 | 2.15e-04  | -3.41e-05 |
| 86 | 26 | -0.01     | 0.05      | -0.29 | -9.43e-05 | -6.73e-05 | -2.64e-06 |
| 86 | 34 | 0.02      | 0.05      | -0.28 | -9.25e-05 | 6.26e-05  | -2.28e-05 |
| 86 | 50 | 0.03      | 8.86e-03  | -0.25 | -1.45e-05 | 1.03e-04  | -1.40e-05 |
| 86 | 58 | -6.51e-03 | 0.02      | -0.28 | -4.67e-05 | -3.32e-05 | 1.18e-06  |
| 86 | 66 | 0.01      | 0.02      | -0.27 | -4.58e-05 | 2.93e-05  | -8.50e-06 |
| 87 | 1  | 0.0       | 8.46e-05  | -0.36 | 7.23e-06  | 0.0       | 0.0       |
| 87 | 2  | 0.0       | 6.18e-05  | -0.26 | 5.23e-06  | 0.0       | 0.0       |
| 87 | 6  | -0.06     | -0.01     | -0.25 | 3.24e-05  | -2.24e-04 | 0.0       |
| 87 | 25 | -0.02     | 0.05      | -0.29 | -8.55e-05 | -6.63e-05 | 0.0       |
| 87 | 34 | 0.02      | 0.05      | -0.29 | -8.55e-05 | 6.63e-05  | 0.0       |
| 87 | 38 | -0.03     | -6.57e-03 | -0.26 | 1.83e-05  | -1.08e-04 | 0.0       |
| 87 | 57 | -0.01     | 0.02      | -0.28 | -3.82e-05 | -3.19e-05 | 0.0       |
| 87 | 66 | 0.01      | 0.02      | -0.28 | -3.82e-05 | 3.19e-05  | 0.0       |
| 88 | 1  | 0.0       | -8.46e-05 | -0.36 | -7.23e-06 | 0.0       | 0.0       |
| 88 | 2  | 0.0       | -6.18e-05 | -0.26 | -5.23e-06 | 0.0       | 0.0       |
| 88 | 12 | 0.06      | -0.01     | -0.27 | 2.20e-05  | 2.24e-04  | 0.0       |
| 88 | 21 | -0.02     | -0.05     | -0.29 | 8.55e-05  | -6.35e-05 | 0.0       |
| 88 | 22 | -4.69e-03 | -0.05     | -0.29 | 8.55e-05  | -6.52e-05 | 0.0       |
| 88 | 44 | 0.03      | -6.70e-03 | -0.27 | 7.80e-06  | 1.08e-04  | 0.0       |

|    |    |           |           |       |           |           |     |
|----|----|-----------|-----------|-------|-----------|-----------|-----|
| 88 | 53 | -8.08e-03 | -0.02     | -0.28 | 3.82e-05  | -3.06e-05 | 0.0 |
| 88 | 54 | -2.27e-03 | -0.02     | -0.28 | 3.82e-05  | -3.14e-05 | 0.0 |
| 89 | 1  | 0.0       | 8.91e-05  | -0.37 | 4.44e-06  | 0.0       | 0.0 |
| 89 | 2  | 0.0       | 6.49e-05  | -0.26 | 3.35e-06  | 0.0       | 0.0 |
| 89 | 6  | -0.06     | -0.01     | -0.25 | 3.02e-05  | -2.20e-04 | 0.0 |
| 89 | 25 | -0.02     | 0.05      | -0.29 | -8.61e-05 | -6.53e-05 | 0.0 |
| 89 | 34 | 0.02      | 0.05      | -0.29 | -8.61e-05 | 6.53e-05  | 0.0 |
| 89 | 38 | -0.03     | -6.57e-03 | -0.26 | 1.62e-05  | -1.06e-04 | 0.0 |
| 89 | 57 | -0.01     | 0.02      | -0.28 | -3.95e-05 | -3.15e-05 | 0.0 |
| 89 | 66 | 0.01      | 0.02      | -0.28 | -3.95e-05 | 3.15e-05  | 0.0 |
| 90 | 1  | 0.0       | -8.91e-05 | -0.37 | -4.44e-06 | 0.0       | 0.0 |
| 90 | 2  | 0.0       | -6.49e-05 | -0.26 | -3.35e-06 | 0.0       | 0.0 |
| 90 | 12 | 0.06      | -0.01     | -0.27 | 2.35e-05  | 2.20e-04  | 0.0 |
| 90 | 21 | -0.02     | -0.05     | -0.29 | 8.61e-05  | -6.30e-05 | 0.0 |
| 90 | 22 | -6.03e-03 | -0.05     | -0.29 | 8.61e-05  | -6.47e-05 | 0.0 |
| 90 | 44 | 0.03      | -6.70e-03 | -0.27 | 9.49e-06  | 1.06e-04  | 0.0 |
| 90 | 53 | -7.89e-03 | -0.02     | -0.28 | 3.95e-05  | -3.03e-05 | 0.0 |
| 90 | 54 | -2.92e-03 | -0.02     | -0.28 | 3.95e-05  | -3.12e-05 | 0.0 |
| 91 | 1  | 0.0       | -1.08e-04 | -0.37 | -2.35e-06 | 0.0       | 0.0 |
| 91 | 2  | 0.0       | -7.80e-05 | -0.26 | -1.86e-06 | 0.0       | 0.0 |
| 91 | 12 | 0.06      | -0.01     | -0.27 | 2.52e-05  | 2.17e-04  | 0.0 |
| 91 | 21 | -0.02     | -0.05     | -0.29 | 8.83e-05  | -6.28e-05 | 0.0 |
| 91 | 22 | -7.37e-03 | -0.05     | -0.29 | 8.83e-05  | -6.41e-05 | 0.0 |
| 91 | 44 | 0.03      | -6.71e-03 | -0.27 | 1.11e-05  | 1.04e-04  | 0.0 |
| 91 | 53 | -7.70e-03 | -0.02     | -0.27 | 4.13e-05  | -3.02e-05 | 0.0 |
| 91 | 54 | -3.56e-03 | -0.02     | -0.27 | 4.13e-05  | -3.09e-05 | 0.0 |
| 92 | 1  | 0.0       | -1.08e-04 | -0.37 | 0.0       | 0.0       | 0.0 |
| 92 | 2  | 0.0       | -7.74e-05 | -0.26 | 0.0       | 0.0       | 0.0 |
| 92 | 12 | 0.05      | -0.01     | -0.27 | 2.70e-05  | 2.13e-04  | 0.0 |
| 92 | 22 | -8.71e-03 | -0.05     | -0.28 | 9.04e-05  | -6.34e-05 | 0.0 |
| 92 | 29 | 8.71e-03  | -0.05     | -0.28 | 9.04e-05  | 6.34e-05  | 0.0 |
| 92 | 44 | 0.03      | -6.71e-03 | -0.27 | 1.29e-05  | 1.02e-04  | 0.0 |
| 92 | 54 | -4.20e-03 | -0.02     | -0.27 | 4.32e-05  | -3.05e-05 | 0.0 |
| 92 | 61 | 4.20e-03  | -0.02     | -0.27 | 4.32e-05  | 3.05e-05  | 0.0 |
| 93 | 1  | 0.0       | -9.16e-05 | -0.37 | 0.0       | 0.0       | 0.0 |
| 93 | 2  | 0.0       | -6.57e-05 | -0.26 | 0.0       | 0.0       | 0.0 |
| 93 | 8  | -0.05     | 0.01      | -0.26 | -2.71e-05 | -2.10e-04 | 0.0 |
| 93 | 22 | -0.01     | -0.05     | -0.28 | 9.04e-05  | -6.27e-05 | 0.0 |
| 93 | 29 | 0.01      | -0.05     | -0.28 | 9.04e-05  | 6.27e-05  | 0.0 |
| 93 | 40 | -0.03     | 6.57e-03  | -0.26 | -1.30e-05 | -1.01e-04 | 0.0 |
| 93 | 54 | -4.85e-03 | -0.02     | -0.27 | 4.33e-05  | -3.02e-05 | 0.0 |
| 93 | 61 | 4.85e-03  | -0.02     | -0.27 | 4.33e-05  | 3.02e-05  | 0.0 |
| 94 | 1  | 0.0       | -6.54e-05 | -0.37 | 0.0       | 0.0       | 0.0 |
| 94 | 2  | 0.0       | -4.68e-05 | -0.26 | 0.0       | 0.0       | 0.0 |
| 94 | 8  | -0.05     | 0.01      | -0.26 | -2.72e-05 | -2.08e-04 | 0.0 |
| 94 | 22 | -0.01     | -0.05     | -0.27 | 9.03e-05  | -6.22e-05 | 0.0 |
| 94 | 29 | 0.01      | -0.05     | -0.27 | 9.03e-05  | 6.22e-05  | 0.0 |
| 94 | 40 | -0.02     | 6.59e-03  | -0.26 | -1.30e-05 | -1.00e-04 | 0.0 |
| 94 | 54 | -5.49e-03 | -0.02     | -0.27 | 4.32e-05  | -3.00e-05 | 0.0 |
| 94 | 61 | 5.49e-03  | -0.02     | -0.27 | 4.32e-05  | 3.00e-05  | 0.0 |
| 95 | 1  | 0.0       | -3.38e-05 | -0.37 | 0.0       | 0.0       | 0.0 |
| 95 | 2  | 0.0       | -2.42e-05 | -0.26 | 0.0       | 0.0       | 0.0 |
| 95 | 8  | -0.05     | 0.01      | -0.26 | -2.72e-05 | -2.06e-04 | 0.0 |
| 95 | 22 | -0.01     | -0.05     | -0.27 | 9.03e-05  | -6.19e-05 | 0.0 |
| 95 | 29 | 0.01      | -0.05     | -0.27 | 9.03e-05  | 6.19e-05  | 0.0 |
| 95 | 40 | -0.02     | 6.61e-03  | -0.26 | -1.30e-05 | -9.93e-05 | 0.0 |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 95  | 54 | -6.14e-03 | -0.02     | -0.27 | 4.32e-05  | -2.98e-05 | 0.0       |
| 95  | 61 | 6.14e-03  | -0.02     | -0.27 | 4.32e-05  | 2.98e-05  | 0.0       |
| 96  | 1  | 0.0       | 0.0       | -0.37 | 0.0       | 0.0       | 0.0       |
| 96  | 2  | 0.0       | 0.0       | -0.26 | 0.0       | 0.0       | 0.0       |
| 96  | 3  | -0.05     | -0.01     | -0.26 | 2.71e-05  | -2.06e-04 | 0.0       |
| 96  | 19 | -0.01     | -0.05     | -0.26 | 9.04e-05  | -6.17e-05 | 0.0       |
| 96  | 22 | -0.01     | -0.05     | -0.26 | 9.04e-05  | -6.17e-05 | 0.0       |
| 96  | 35 | -0.02     | -6.64e-03 | -0.26 | 1.30e-05  | -9.90e-05 | 0.0       |
| 96  | 51 | -6.79e-03 | -0.02     | -0.26 | 4.33e-05  | -2.97e-05 | 0.0       |
| 96  | 54 | -6.79e-03 | -0.02     | -0.26 | 4.33e-05  | -2.97e-05 | 0.0       |
| 97  | 1  | 0.0       | 3.38e-05  | -0.37 | 0.0       | 0.0       | 0.0       |
| 97  | 2  | 0.0       | 2.42e-05  | -0.26 | 0.0       | 0.0       | 0.0       |
| 97  | 6  | -0.05     | -0.01     | -0.26 | 2.72e-05  | -2.06e-04 | 0.0       |
| 97  | 23 | -0.01     | 0.05      | -0.27 | -9.03e-05 | -6.16e-05 | 0.0       |
| 97  | 34 | 0.02      | 0.05      | -0.27 | -9.03e-05 | 6.18e-05  | 0.0       |
| 97  | 38 | -0.02     | -6.61e-03 | -0.26 | 1.30e-05  | -9.93e-05 | 0.0       |
| 97  | 55 | -6.97e-03 | 0.02      | -0.27 | -4.32e-05 | -2.97e-05 | 0.0       |
| 97  | 66 | 7.44e-03  | 0.02      | -0.27 | -4.32e-05 | 2.97e-05  | 0.0       |
| 98  | 1  | 0.0       | 6.54e-05  | -0.37 | 0.0       | 0.0       | 0.0       |
| 98  | 2  | 0.0       | 4.68e-05  | -0.26 | 0.0       | 0.0       | 0.0       |
| 98  | 6  | -0.05     | -0.01     | -0.26 | 2.72e-05  | -2.08e-04 | 0.0       |
| 98  | 23 | -0.01     | 0.05      | -0.27 | -9.03e-05 | -6.17e-05 | 0.0       |
| 98  | 34 | 0.02      | 0.05      | -0.27 | -9.03e-05 | 6.21e-05  | 0.0       |
| 98  | 38 | -0.02     | -6.59e-03 | -0.26 | 1.30e-05  | -1.00e-04 | 0.0       |
| 98  | 55 | -7.15e-03 | 0.02      | -0.27 | -4.32e-05 | -2.97e-05 | 0.0       |
| 98  | 66 | 8.09e-03  | 0.02      | -0.27 | -4.32e-05 | 2.99e-05  | 0.0       |
| 99  | 1  | 0.0       | 9.16e-05  | -0.37 | 0.0       | 0.0       | 0.0       |
| 99  | 2  | 0.0       | 6.57e-05  | -0.26 | 0.0       | 0.0       | 0.0       |
| 99  | 6  | -0.05     | -0.01     | -0.26 | 2.71e-05  | -2.10e-04 | 0.0       |
| 99  | 25 | -0.02     | 0.05      | -0.28 | -9.04e-05 | -6.26e-05 | 0.0       |
| 99  | 34 | 0.02      | 0.05      | -0.28 | -9.04e-05 | 6.26e-05  | 0.0       |
| 99  | 38 | -0.03     | -6.57e-03 | -0.26 | 1.30e-05  | -1.01e-04 | 0.0       |
| 99  | 57 | -8.74e-03 | 0.02      | -0.27 | -4.33e-05 | -3.01e-05 | 0.0       |
| 99  | 66 | 8.74e-03  | 0.02      | -0.27 | -4.33e-05 | 3.01e-05  | 0.0       |
| 100 | 1  | 0.0       | 1.08e-04  | -0.37 | 0.0       | 0.0       | 0.0       |
| 100 | 2  | 0.0       | 7.74e-05  | -0.26 | 0.0       | 0.0       | 0.0       |
| 100 | 6  | -0.05     | -0.01     | -0.26 | 2.73e-05  | -2.13e-04 | 0.0       |
| 100 | 25 | -0.02     | 0.05      | -0.28 | -9.04e-05 | -6.34e-05 | 0.0       |
| 100 | 34 | 0.02      | 0.05      | -0.28 | -9.04e-05 | 6.34e-05  | 0.0       |
| 100 | 38 | -0.03     | -6.56e-03 | -0.26 | 1.31e-05  | -1.02e-04 | 0.0       |
| 100 | 57 | -9.39e-03 | 0.02      | -0.27 | -4.32e-05 | -3.05e-05 | 0.0       |
| 100 | 66 | 9.39e-03  | 0.02      | -0.27 | -4.32e-05 | 3.05e-05  | 0.0       |
| 101 | 1  | 0.0       | 1.08e-04  | -0.37 | 2.35e-06  | 0.0       | 0.0       |
| 101 | 2  | 0.0       | 7.80e-05  | -0.26 | 1.86e-06  | 0.0       | 0.0       |
| 101 | 6  | -0.06     | -0.01     | -0.26 | 2.89e-05  | -2.17e-04 | 0.0       |
| 101 | 25 | -0.02     | 0.05      | -0.29 | -8.83e-05 | -6.44e-05 | 0.0       |
| 101 | 34 | 0.02      | 0.05      | -0.29 | -8.83e-05 | 6.44e-05  | 0.0       |
| 101 | 38 | -0.03     | -6.56e-03 | -0.26 | 1.48e-05  | -1.04e-04 | 0.0       |
| 101 | 57 | -0.01     | 0.02      | -0.27 | -4.13e-05 | -3.10e-05 | 0.0       |
| 101 | 66 | 0.01      | 0.02      | -0.27 | -4.13e-05 | 3.10e-05  | 0.0       |
| 102 | 1  | -1.08e-04 | -1.59e-05 | -0.36 | 0.0       | 2.38e-06  | -7.10e-06 |
| 102 | 2  | -7.50e-05 | -1.21e-05 | -0.26 | 0.0       | 1.61e-06  | -5.03e-06 |
| 102 | 9  | -0.06     | 0.02      | -0.24 | -2.52e-05 | -2.13e-04 | 3.38e-05  |
| 102 | 29 | 0.02      | -0.05     | -0.24 | 8.88e-05  | 6.52e-05  | -3.24e-05 |
| 102 | 33 | 0.01      | 0.05      | -0.30 | -9.08e-05 | 6.71e-05  | 2.11e-06  |
| 102 | 41 | -0.03     | 9.25e-03  | -0.25 | -1.22e-05 | -1.02e-04 | 1.36e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 102 | 61 | 0.01      | -0.02     | -0.25 | 4.23e-05  | 3.22e-05  | -1.81e-05 |
| 102 | 65 | 6.50e-03  | 0.02      | -0.28 | -4.36e-05 | 3.31e-05  | -1.65e-06 |
| 103 | 1  | 1.08e-04  | -1.59e-05 | -0.36 | 0.0       | -2.38e-06 | 7.10e-06  |
| 103 | 2  | 7.50e-05  | -1.21e-05 | -0.26 | 0.0       | -1.61e-06 | 5.03e-06  |
| 103 | 18 | 0.06      | 0.02      | -0.24 | -2.52e-05 | 2.13e-04  | -3.38e-05 |
| 103 | 22 | -0.02     | -0.05     | -0.24 | 8.88e-05  | -6.52e-05 | 3.24e-05  |
| 103 | 26 | -0.01     | 0.05      | -0.30 | -9.08e-05 | -6.71e-05 | -2.11e-06 |
| 103 | 50 | 0.03      | 9.25e-03  | -0.25 | -1.22e-05 | 1.02e-04  | -1.36e-05 |
| 103 | 54 | -0.01     | -0.02     | -0.25 | 4.23e-05  | -3.22e-05 | 1.81e-05  |
| 103 | 58 | -6.50e-03 | 0.02      | -0.28 | -4.36e-05 | -3.31e-05 | 1.65e-06  |
| 104 | 1  | 7.62e-05  | -1.56e-05 | -0.36 | 0.0       | -2.29e-06 | 6.92e-06  |
| 104 | 2  | 5.25e-05  | -1.19e-05 | -0.26 | 0.0       | -1.55e-06 | 4.91e-06  |
| 104 | 18 | 0.06      | 0.02      | -0.24 | -2.51e-05 | 2.13e-04  | -3.39e-05 |
| 104 | 22 | -0.02     | -0.05     | -0.24 | 8.90e-05  | -6.52e-05 | 3.23e-05  |
| 104 | 26 | -0.01     | 0.05      | -0.30 | -9.09e-05 | -6.70e-05 | -2.31e-06 |
| 104 | 50 | 0.03      | 9.25e-03  | -0.25 | -1.21e-05 | 1.02e-04  | -1.38e-05 |
| 104 | 54 | -0.01     | -0.02     | -0.25 | 4.24e-05  | -3.22e-05 | 1.80e-05  |
| 104 | 58 | -6.50e-03 | 0.02      | -0.28 | -4.37e-05 | -3.31e-05 | 1.49e-06  |
| 105 | 1  | -7.62e-05 | -1.56e-05 | -0.36 | 0.0       | 2.29e-06  | -6.92e-06 |
| 105 | 2  | -5.25e-05 | -1.19e-05 | -0.26 | 0.0       | 1.55e-06  | -4.91e-06 |
| 105 | 9  | -0.06     | 0.02      | -0.24 | -2.51e-05 | -2.13e-04 | 3.39e-05  |
| 105 | 29 | 0.02      | -0.05     | -0.24 | 8.90e-05  | 6.52e-05  | -3.23e-05 |
| 105 | 33 | 0.01      | 0.05      | -0.30 | -9.09e-05 | 6.70e-05  | 2.31e-06  |
| 105 | 41 | -0.03     | 9.25e-03  | -0.25 | -1.21e-05 | -1.02e-04 | 1.38e-05  |
| 105 | 61 | 0.01      | -0.02     | -0.25 | 4.24e-05  | 3.22e-05  | -1.80e-05 |
| 105 | 65 | 6.50e-03  | 0.02      | -0.28 | -4.37e-05 | 3.31e-05  | -1.49e-06 |
| 106 | 1  | 7.62e-05  | 1.56e-05  | -0.36 | 0.0       | -2.29e-06 | -6.92e-06 |
| 106 | 2  | 5.25e-05  | 1.19e-05  | -0.26 | 0.0       | -1.55e-06 | -4.91e-06 |
| 106 | 12 | 0.06      | -0.02     | -0.24 | 2.51e-05  | 2.13e-04  | 3.39e-05  |
| 106 | 20 | -0.01     | -0.05     | -0.30 | 9.09e-05  | -6.70e-05 | 2.31e-06  |
| 106 | 24 | -0.02     | 0.05      | -0.24 | -8.90e-05 | -6.52e-05 | -3.23e-05 |
| 106 | 44 | 0.03      | -9.25e-03 | -0.25 | 1.21e-05  | 1.02e-04  | 1.38e-05  |
| 106 | 52 | -6.50e-03 | -0.02     | -0.28 | 4.37e-05  | -3.31e-05 | -1.49e-06 |
| 106 | 56 | -0.01     | 0.02      | -0.25 | -4.24e-05 | -3.22e-05 | -1.80e-05 |
| 107 | 1  | -7.62e-05 | 1.56e-05  | -0.36 | 0.0       | 2.29e-06  | 6.92e-06  |
| 107 | 2  | -5.25e-05 | 1.19e-05  | -0.26 | 0.0       | 1.55e-06  | 4.91e-06  |
| 107 | 3  | -0.06     | -0.02     | -0.24 | 2.51e-05  | -2.13e-04 | -3.39e-05 |
| 107 | 27 | 0.01      | -0.05     | -0.30 | 9.09e-05  | 6.70e-05  | -2.31e-06 |
| 107 | 31 | 0.02      | 0.05      | -0.24 | -8.90e-05 | 6.52e-05  | 3.23e-05  |
| 107 | 35 | -0.03     | -9.25e-03 | -0.25 | 1.21e-05  | -1.02e-04 | -1.38e-05 |
| 107 | 59 | 6.50e-03  | -0.02     | -0.28 | 4.37e-05  | 3.31e-05  | 1.49e-06  |
| 107 | 63 | 0.01      | 0.02      | -0.25 | -4.24e-05 | 3.22e-05  | 1.80e-05  |
| 108 | 1  | -1.08e-04 | 1.59e-05  | -0.36 | 0.0       | 2.38e-06  | 7.10e-06  |
| 108 | 2  | -7.50e-05 | 1.21e-05  | -0.26 | 0.0       | 1.61e-06  | 5.03e-06  |
| 108 | 3  | -0.06     | -0.02     | -0.24 | 2.52e-05  | -2.13e-04 | -3.38e-05 |
| 108 | 27 | 0.01      | -0.05     | -0.30 | 9.08e-05  | 6.71e-05  | -2.11e-06 |
| 108 | 31 | 0.02      | 0.05      | -0.24 | -8.88e-05 | 6.52e-05  | 3.24e-05  |
| 108 | 35 | -0.03     | -9.25e-03 | -0.25 | 1.22e-05  | -1.02e-04 | -1.36e-05 |
| 108 | 59 | 6.50e-03  | -0.02     | -0.28 | 4.36e-05  | 3.31e-05  | 1.65e-06  |
| 108 | 63 | 0.01      | 0.02      | -0.25 | -4.23e-05 | 3.22e-05  | 1.81e-05  |
| 109 | 1  | 1.08e-04  | 1.59e-05  | -0.36 | 0.0       | -2.38e-06 | -7.10e-06 |
| 109 | 2  | 7.50e-05  | 1.21e-05  | -0.26 | 0.0       | -1.61e-06 | -5.03e-06 |
| 109 | 12 | 0.06      | -0.02     | -0.24 | 2.52e-05  | 2.13e-04  | 3.38e-05  |
| 109 | 20 | -0.01     | -0.05     | -0.30 | 9.08e-05  | -6.71e-05 | 2.11e-06  |
| 109 | 24 | -0.02     | 0.05      | -0.24 | -8.88e-05 | -6.52e-05 | -3.24e-05 |
| 109 | 44 | 0.03      | -9.25e-03 | -0.25 | 1.22e-05  | 1.02e-04  | 1.36e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 109 | 52 | -6.50e-03 | -0.02     | -0.28 | 4.36e-05  | -3.31e-05 | -1.65e-06 |
| 109 | 56 | -0.01     | 0.02      | -0.25 | -4.23e-05 | -3.22e-05 | -1.81e-05 |
| 110 | 1  | -2.12e-05 | -6.19e-05 | -0.36 | 1.06e-06  | 0.0       | 0.0       |
| 110 | 2  | -1.43e-05 | -4.26e-05 | -0.26 | 0.0       | 0.0       | 1.06e-06  |
| 110 | 9  | -0.11     | 0.02      | -0.30 | -2.83e-05 | -2.15e-04 | 2.95e-05  |
| 110 | 26 | -0.03     | 0.07      | -0.30 | -8.97e-05 | -6.54e-05 | -9.40e-06 |
| 110 | 28 | 0.02      | -0.07     | -0.23 | 9.02e-05  | 6.26e-05  | 3.09e-05  |
| 110 | 41 | -0.05     | 7.37e-03  | -0.28 | -1.32e-05 | -1.03e-04 | 1.47e-05  |
| 110 | 58 | -0.01     | 0.03      | -0.28 | -4.26e-05 | -3.16e-05 | -3.92e-06 |
| 110 | 60 | 9.60e-03  | -0.03     | -0.24 | 4.35e-05  | 3.00e-05  | 1.54e-05  |
| 111 | 1  | 2.12e-05  | -6.19e-05 | -0.36 | 1.06e-06  | 0.0       | 0.0       |
| 111 | 2  | 1.43e-05  | -4.26e-05 | -0.26 | 0.0       | 0.0       | -1.06e-06 |
| 111 | 18 | 0.11      | 0.02      | -0.30 | -2.83e-05 | 2.15e-04  | -2.95e-05 |
| 111 | 19 | -0.02     | -0.07     | -0.23 | 9.02e-05  | -6.26e-05 | -3.09e-05 |
| 111 | 33 | 0.03      | 0.07      | -0.30 | -8.97e-05 | 6.54e-05  | 9.40e-06  |
| 111 | 50 | 0.05      | 7.37e-03  | -0.28 | -1.32e-05 | 1.03e-04  | -1.47e-05 |
| 111 | 51 | -9.60e-03 | -0.03     | -0.24 | 4.35e-05  | -3.00e-05 | -1.54e-05 |
| 111 | 65 | 0.01      | 0.03      | -0.28 | -4.26e-05 | 3.16e-05  | 3.92e-06  |
| 112 | 1  | -2.12e-05 | 6.19e-05  | -0.36 | -1.06e-06 | 0.0       | 0.0       |
| 112 | 2  | -1.43e-05 | 4.26e-05  | -0.26 | 0.0       | 0.0       | -1.06e-06 |
| 112 | 3  | -0.11     | -0.02     | -0.30 | 2.83e-05  | -2.15e-04 | -2.95e-05 |
| 112 | 20 | -0.03     | -0.07     | -0.30 | 8.97e-05  | -6.54e-05 | 9.40e-06  |
| 112 | 34 | 0.02      | 0.07      | -0.23 | -9.02e-05 | 6.26e-05  | -3.09e-05 |
| 112 | 35 | -0.05     | -7.37e-03 | -0.28 | 1.32e-05  | -1.03e-04 | -1.47e-05 |
| 112 | 52 | -0.01     | -0.03     | -0.28 | 4.26e-05  | -3.16e-05 | 3.92e-06  |
| 112 | 66 | 9.60e-03  | 0.03      | -0.24 | -4.35e-05 | 3.00e-05  | -1.54e-05 |
| 113 | 1  | 2.12e-05  | 6.19e-05  | -0.36 | -1.06e-06 | 0.0       | 0.0       |
| 113 | 2  | 1.43e-05  | 4.26e-05  | -0.26 | 0.0       | 0.0       | 1.06e-06  |
| 113 | 12 | 0.11      | -0.02     | -0.30 | 2.83e-05  | 2.15e-04  | 2.95e-05  |
| 113 | 25 | -0.02     | 0.07      | -0.23 | -9.02e-05 | -6.26e-05 | 3.09e-05  |
| 113 | 27 | 0.03      | -0.07     | -0.30 | 8.97e-05  | 6.54e-05  | -9.40e-06 |
| 113 | 44 | 0.05      | -7.37e-03 | -0.28 | 1.32e-05  | 1.03e-04  | 1.47e-05  |
| 113 | 57 | -9.60e-03 | 0.03      | -0.24 | -4.35e-05 | -3.00e-05 | 1.54e-05  |
| 113 | 59 | 0.01      | -0.03     | -0.28 | 4.26e-05  | 3.16e-05  | -3.92e-06 |
| 114 | 1  | -4.82e-04 | 1.27e-05  | -0.36 | 0.0       | 7.35e-06  | 6.87e-06  |
| 114 | 2  | -3.40e-04 | 9.81e-06  | -0.26 | 0.0       | 4.69e-06  | 4.88e-06  |
| 114 | 3  | -0.06     | -0.02     | -0.24 | 2.44e-05  | -2.16e-04 | -3.39e-05 |
| 114 | 11 | 0.06      | -0.01     | -0.29 | 2.92e-05  | 2.26e-04  | 3.34e-05  |
| 114 | 31 | 0.02      | 0.05      | -0.25 | -8.90e-05 | 6.99e-05  | 3.21e-05  |
| 114 | 35 | -0.03     | -9.25e-03 | -0.25 | 1.17e-05  | -1.02e-04 | -1.38e-05 |
| 114 | 43 | 0.03      | -5.28e-03 | -0.28 | 1.39e-05  | 1.11e-04  | 1.86e-05  |
| 114 | 63 | 0.01      | 0.02      | -0.25 | -4.27e-05 | 3.61e-05  | 1.79e-05  |
| 115 | 1  | 4.82e-04  | 1.27e-05  | -0.36 | 0.0       | -7.35e-06 | -6.87e-06 |
| 115 | 2  | 3.40e-04  | 9.81e-06  | -0.26 | 0.0       | -4.69e-06 | -4.88e-06 |
| 115 | 4  | -0.06     | -0.01     | -0.29 | 2.92e-05  | -2.26e-04 | -3.34e-05 |
| 115 | 12 | 0.06      | -0.02     | -0.24 | 2.44e-05  | 2.16e-04  | 3.39e-05  |
| 115 | 24 | -0.02     | 0.05      | -0.25 | -8.90e-05 | -6.99e-05 | -3.21e-05 |
| 115 | 36 | -0.03     | -5.28e-03 | -0.28 | 1.39e-05  | -1.11e-04 | -1.86e-05 |
| 115 | 44 | 0.03      | -9.25e-03 | -0.25 | 1.17e-05  | 1.02e-04  | 1.38e-05  |
| 115 | 56 | -0.01     | 0.02      | -0.25 | -4.27e-05 | -3.61e-05 | -1.79e-05 |
| 116 | 1  | -7.74e-04 | -2.75e-06 | -0.36 | 0.0       | 9.14e-06  | 4.72e-06  |
| 116 | 2  | -5.47e-04 | -1.01e-06 | -0.26 | 0.0       | 5.56e-06  | 3.37e-06  |
| 116 | 3  | -0.06     | -0.02     | -0.24 | 2.46e-05  | -2.22e-04 | -3.53e-05 |
| 116 | 11 | 0.06      | -0.01     | -0.29 | 2.85e-05  | 2.34e-04  | 3.16e-05  |
| 116 | 29 | 9.83e-03  | -0.05     | -0.29 | 8.90e-05  | 7.26e-05  | -2.43e-05 |
| 116 | 35 | -0.03     | -9.26e-03 | -0.25 | 1.16e-05  | -1.04e-04 | -1.52e-05 |

|     |    |           |           |       |          |           |           |
|-----|----|-----------|-----------|-------|----------|-----------|-----------|
| 116 | 43 | 0.03      | -5.30e-03 | -0.28 | 1.35e-05 | 1.15e-04  | 1.70e-05  |
| 116 | 61 | 4.46e-03  | -0.02     | -0.27 | 4.24e-05 | 3.79e-05  | -9.87e-06 |
| 117 | 1  | 7.74e-04  | -2.75e-06 | -0.36 | 0.0      | -9.14e-06 | -4.72e-06 |
| 117 | 2  | 5.47e-04  | -1.01e-06 | -0.26 | 0.0      | -5.56e-06 | -3.37e-06 |
| 117 | 4  | -0.06     | -0.01     | -0.29 | 2.85e-05 | -2.34e-04 | -3.16e-05 |
| 117 | 12 | 0.06      | -0.02     | -0.24 | 2.46e-05 | 2.22e-04  | 3.53e-05  |
| 117 | 22 | -9.83e-03 | -0.05     | -0.29 | 8.90e-05 | -7.26e-05 | 2.43e-05  |
| 117 | 36 | -0.03     | -5.30e-03 | -0.28 | 1.35e-05 | -1.15e-04 | -1.70e-05 |
| 117 | 44 | 0.03      | -9.26e-03 | -0.25 | 1.16e-05 | 1.04e-04  | 1.52e-05  |
| 117 | 54 | -4.46e-03 | -0.02     | -0.27 | 4.24e-05 | -3.79e-05 | 9.87e-06  |
| 118 | 1  | -9.61e-04 | -1.17e-05 | -0.36 | 0.0      | 9.18e-06  | 2.82e-06  |
| 118 | 2  | -6.80e-04 | -7.37e-06 | -0.26 | 0.0      | 5.30e-06  | 2.03e-06  |
| 118 | 3  | -0.06     | -0.02     | -0.24 | 2.46e-05 | -2.26e-04 | -3.66e-05 |
| 118 | 11 | 0.06      | -0.01     | -0.29 | 2.85e-05 | 2.37e-04  | 3.03e-05  |
| 118 | 29 | 0.01      | -0.05     | -0.28 | 8.89e-05 | 7.38e-05  | -2.58e-05 |
| 118 | 35 | -0.03     | -9.27e-03 | -0.25 | 1.16e-05 | -1.06e-04 | -1.66e-05 |
| 118 | 43 | 0.03      | -5.30e-03 | -0.28 | 1.35e-05 | 1.17e-04  | 1.56e-05  |
| 118 | 61 | 4.98e-03  | -0.02     | -0.27 | 4.24e-05 | 3.83e-05  | -1.13e-05 |
| 119 | 1  | 9.61e-04  | -1.17e-05 | -0.36 | 0.0      | -9.18e-06 | -2.82e-06 |
| 119 | 2  | 6.80e-04  | -7.37e-06 | -0.26 | 0.0      | -5.30e-06 | -2.03e-06 |
| 119 | 4  | -0.06     | -0.01     | -0.29 | 2.85e-05 | -2.37e-04 | -3.03e-05 |
| 119 | 12 | 0.06      | -0.02     | -0.24 | 2.46e-05 | 2.26e-04  | 3.66e-05  |
| 119 | 22 | -0.01     | -0.05     | -0.28 | 8.89e-05 | -7.38e-05 | 2.58e-05  |
| 119 | 36 | -0.03     | -5.30e-03 | -0.28 | 1.35e-05 | -1.17e-04 | -1.56e-05 |
| 119 | 44 | 0.03      | -9.27e-03 | -0.25 | 1.16e-05 | 1.06e-04  | 1.66e-05  |
| 119 | 54 | -4.98e-03 | -0.02     | -0.27 | 4.24e-05 | -3.83e-05 | 1.13e-05  |
| 120 | 1  | -1.06e-03 | -1.26e-05 | -0.36 | 0.0      | 8.71e-06  | 1.47e-06  |
| 120 | 2  | -7.56e-04 | -8.27e-06 | -0.26 | 0.0      | 4.78e-06  | 1.08e-06  |
| 120 | 3  | -0.06     | -0.02     | -0.24 | 2.49e-05 | -2.29e-04 | -3.78e-05 |
| 120 | 11 | 0.05      | -0.01     | -0.29 | 2.83e-05 | 2.39e-04  | 2.95e-05  |
| 120 | 29 | 0.01      | -0.05     | -0.28 | 8.90e-05 | 7.43e-05  | -2.69e-05 |
| 120 | 35 | -0.03     | -9.27e-03 | -0.25 | 1.18e-05 | -1.08e-04 | -1.76e-05 |
| 120 | 43 | 0.03      | -5.30e-03 | -0.27 | 1.34e-05 | 1.18e-04  | 1.48e-05  |
| 120 | 61 | 5.57e-03  | -0.02     | -0.27 | 4.24e-05 | 3.82e-05  | -1.23e-05 |
| 121 | 1  | 1.06e-03  | -1.26e-05 | -0.36 | 0.0      | -8.71e-06 | -1.47e-06 |
| 121 | 2  | 7.56e-04  | -8.27e-06 | -0.26 | 0.0      | -4.78e-06 | -1.08e-06 |
| 121 | 4  | -0.05     | -0.01     | -0.29 | 2.83e-05 | -2.39e-04 | -2.95e-05 |
| 121 | 12 | 0.06      | -0.02     | -0.24 | 2.49e-05 | 2.29e-04  | 3.78e-05  |
| 121 | 22 | -0.01     | -0.05     | -0.28 | 8.90e-05 | -7.43e-05 | 2.69e-05  |
| 121 | 36 | -0.03     | -5.30e-03 | -0.27 | 1.34e-05 | -1.18e-04 | -1.48e-05 |
| 121 | 44 | 0.03      | -9.27e-03 | -0.25 | 1.18e-05 | 1.08e-04  | 1.76e-05  |
| 121 | 54 | -5.57e-03 | -0.02     | -0.27 | 4.24e-05 | -3.82e-05 | 1.23e-05  |
| 122 | 1  | -1.11e-03 | -7.79e-06 | -0.36 | 0.0      | 8.29e-06  | 0.0       |
| 122 | 2  | -7.92e-04 | -5.15e-06 | -0.26 | 0.0      | 4.36e-06  | 0.0       |
| 122 | 3  | -0.06     | -0.02     | -0.24 | 2.51e-05 | -2.31e-04 | -3.88e-05 |
| 122 | 11 | 0.05      | -0.01     | -0.29 | 2.84e-05 | 2.40e-04  | 2.91e-05  |
| 122 | 29 | 0.01      | -0.05     | -0.27 | 8.90e-05 | 7.45e-05  | -2.75e-05 |
| 122 | 35 | -0.03     | -9.27e-03 | -0.25 | 1.19e-05 | -1.09e-04 | -1.84e-05 |
| 122 | 43 | 0.03      | -5.30e-03 | -0.27 | 1.35e-05 | 1.18e-04  | 1.43e-05  |
| 122 | 61 | 6.19e-03  | -0.02     | -0.27 | 4.25e-05 | 3.81e-05  | -1.29e-05 |
| 123 | 1  | 1.11e-03  | -7.79e-06 | -0.36 | 0.0      | -8.29e-06 | 0.0       |
| 123 | 2  | 7.92e-04  | -5.15e-06 | -0.26 | 0.0      | -4.36e-06 | 0.0       |
| 123 | 4  | -0.05     | -0.01     | -0.29 | 2.84e-05 | -2.40e-04 | -2.91e-05 |
| 123 | 12 | 0.06      | -0.02     | -0.24 | 2.51e-05 | 2.31e-04  | 3.88e-05  |
| 123 | 22 | -0.01     | -0.05     | -0.27 | 8.90e-05 | -7.45e-05 | 2.75e-05  |
| 123 | 36 | -0.03     | -5.30e-03 | -0.27 | 1.35e-05 | -1.18e-04 | -1.43e-05 |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 123 | 44 | 0.03      | -9.27e-03 | -0.25 | 1.19e-05  | 1.09e-04  | 1.84e-05  |
| 123 | 54 | -6.19e-03 | -0.02     | -0.27 | 4.25e-05  | -3.81e-05 | 1.29e-05  |
| 124 | 1  | -1.13e-03 | 0.0       | -0.36 | 0.0       | 8.13e-06  | 0.0       |
| 124 | 2  | -8.03e-04 | 0.0       | -0.26 | 0.0       | 4.21e-06  | 0.0       |
| 124 | 3  | -0.05     | -0.02     | -0.23 | 2.54e-05  | -2.30e-04 | -3.96e-05 |
| 124 | 13 | 0.05      | -0.02     | -0.29 | 2.54e-05  | 2.39e-04  | -3.96e-05 |
| 124 | 19 | -0.02     | -0.05     | -0.25 | 8.91e-05  | -6.61e-05 | -2.79e-05 |
| 124 | 35 | -0.03     | -9.26e-03 | -0.25 | 1.21e-05  | -1.09e-04 | -1.90e-05 |
| 124 | 45 | 0.02      | -9.26e-03 | -0.27 | 1.21e-05  | 1.17e-04  | -1.90e-05 |
| 124 | 51 | -8.45e-03 | -0.02     | -0.26 | 4.27e-05  | -2.96e-05 | -1.34e-05 |
| 125 | 1  | 1.13e-03  | 0.0       | -0.36 | 0.0       | -8.13e-06 | 0.0       |
| 125 | 2  | 8.03e-04  | 0.0       | -0.26 | 0.0       | -4.21e-06 | 0.0       |
| 125 | 5  | -0.05     | -0.02     | -0.29 | 2.53e-05  | -2.39e-04 | 2.92e-05  |
| 125 | 15 | 0.05      | 9.88e-03  | -0.23 | -2.83e-05 | 2.30e-04  | 3.94e-05  |
| 125 | 28 | 0.02      | -0.05     | -0.25 | 8.91e-05  | 6.61e-05  | 2.79e-05  |
| 125 | 37 | -0.02     | -8.69e-03 | -0.27 | 1.21e-05  | -1.17e-04 | 1.40e-05  |
| 125 | 47 | 0.03      | 4.72e-03  | -0.25 | -1.35e-05 | 1.09e-04  | 1.89e-05  |
| 125 | 60 | 8.45e-03  | -0.02     | -0.26 | 4.27e-05  | 2.96e-05  | 1.34e-05  |
| 126 | 1  | -1.11e-03 | 7.79e-06  | -0.36 | 0.0       | 8.29e-06  | 0.0       |
| 126 | 2  | -7.92e-04 | 5.15e-06  | -0.26 | 0.0       | 4.36e-06  | 0.0       |
| 126 | 9  | -0.06     | 0.02      | -0.24 | -2.51e-05 | -2.31e-04 | 3.88e-05  |
| 126 | 17 | 0.05      | 0.01      | -0.29 | -2.84e-05 | 2.40e-04  | -2.91e-05 |
| 126 | 31 | 0.01      | 0.05      | -0.27 | -8.90e-05 | 7.45e-05  | 2.75e-05  |
| 126 | 41 | -0.03     | 9.27e-03  | -0.25 | -1.19e-05 | -1.09e-04 | 1.84e-05  |
| 126 | 49 | 0.03      | 5.30e-03  | -0.27 | -1.35e-05 | 1.18e-04  | -1.43e-05 |
| 126 | 63 | 6.19e-03  | 0.02      | -0.27 | -4.25e-05 | 3.81e-05  | 1.29e-05  |
| 127 | 1  | 1.11e-03  | 7.79e-06  | -0.36 | 0.0       | -8.29e-06 | 0.0       |
| 127 | 2  | 7.92e-04  | 5.15e-06  | -0.26 | 0.0       | -4.36e-06 | 0.0       |
| 127 | 10 | -0.05     | 0.01      | -0.29 | -2.84e-05 | -2.40e-04 | 2.91e-05  |
| 127 | 18 | 0.06      | 0.02      | -0.24 | -2.51e-05 | 2.31e-04  | -3.88e-05 |
| 127 | 24 | -0.01     | 0.05      | -0.27 | -8.90e-05 | -7.45e-05 | -2.75e-05 |
| 127 | 42 | -0.03     | 5.30e-03  | -0.27 | -1.35e-05 | -1.18e-04 | 1.43e-05  |
| 127 | 50 | 0.03      | 9.27e-03  | -0.25 | -1.19e-05 | 1.09e-04  | -1.84e-05 |
| 127 | 56 | -6.19e-03 | 0.02      | -0.27 | -4.25e-05 | -3.81e-05 | -1.29e-05 |
| 128 | 1  | -1.06e-03 | 1.26e-05  | -0.36 | 0.0       | 8.71e-06  | -1.47e-06 |
| 128 | 2  | -7.56e-04 | 8.27e-06  | -0.26 | 0.0       | 4.78e-06  | -1.08e-06 |
| 128 | 9  | -0.06     | 0.02      | -0.24 | -2.49e-05 | -2.29e-04 | 3.78e-05  |
| 128 | 17 | 0.05      | 0.01      | -0.29 | -2.83e-05 | 2.39e-04  | -2.95e-05 |
| 128 | 31 | 0.01      | 0.05      | -0.28 | -8.90e-05 | 7.43e-05  | 2.69e-05  |
| 128 | 41 | -0.03     | 9.27e-03  | -0.25 | -1.18e-05 | -1.08e-04 | 1.76e-05  |
| 128 | 49 | 0.03      | 5.30e-03  | -0.27 | -1.34e-05 | 1.18e-04  | -1.48e-05 |
| 128 | 63 | 5.57e-03  | 0.02      | -0.27 | -4.24e-05 | 3.82e-05  | 1.23e-05  |
| 129 | 1  | 1.06e-03  | 1.26e-05  | -0.36 | 0.0       | -8.71e-06 | 1.47e-06  |
| 129 | 2  | 7.56e-04  | 8.27e-06  | -0.26 | 0.0       | -4.78e-06 | 1.08e-06  |
| 129 | 10 | -0.05     | 0.01      | -0.29 | -2.83e-05 | -2.39e-04 | 2.95e-05  |
| 129 | 18 | 0.06      | 0.02      | -0.24 | -2.49e-05 | 2.29e-04  | -3.78e-05 |
| 129 | 24 | -0.01     | 0.05      | -0.28 | -8.90e-05 | -7.43e-05 | -2.69e-05 |
| 129 | 42 | -0.03     | 5.30e-03  | -0.27 | -1.34e-05 | -1.18e-04 | 1.48e-05  |
| 129 | 50 | 0.03      | 9.27e-03  | -0.25 | -1.18e-05 | 1.08e-04  | -1.76e-05 |
| 129 | 56 | -5.57e-03 | 0.02      | -0.27 | -4.24e-05 | -3.82e-05 | -1.23e-05 |
| 130 | 1  | -9.61e-04 | 1.17e-05  | -0.36 | 0.0       | 9.18e-06  | -2.82e-06 |
| 130 | 2  | -6.80e-04 | 7.37e-06  | -0.26 | 0.0       | 5.30e-06  | -2.03e-06 |
| 130 | 9  | -0.06     | 0.02      | -0.24 | -2.46e-05 | -2.26e-04 | 3.66e-05  |
| 130 | 17 | 0.06      | 0.01      | -0.29 | -2.85e-05 | 2.37e-04  | -3.03e-05 |
| 130 | 31 | 0.01      | 0.05      | -0.28 | -8.89e-05 | 7.38e-05  | 2.58e-05  |
| 130 | 41 | -0.03     | 9.27e-03  | -0.25 | -1.16e-05 | -1.06e-04 | 1.66e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 130 | 49 | 0.03      | 5.30e-03  | -0.28 | -1.35e-05 | 1.17e-04  | -1.56e-05 |
| 130 | 63 | 4.98e-03  | 0.02      | -0.27 | -4.24e-05 | 3.83e-05  | 1.13e-05  |
| 131 | 1  | 9.61e-04  | 1.17e-05  | -0.36 | 0.0       | -9.18e-06 | 2.82e-06  |
| 131 | 2  | 6.80e-04  | 7.37e-06  | -0.26 | 0.0       | -5.30e-06 | 2.03e-06  |
| 131 | 10 | -0.06     | 0.01      | -0.29 | -2.85e-05 | -2.37e-04 | 3.03e-05  |
| 131 | 18 | 0.06      | 0.02      | -0.24 | -2.46e-05 | 2.26e-04  | -3.66e-05 |
| 131 | 24 | -0.01     | 0.05      | -0.28 | -8.89e-05 | -7.38e-05 | -2.58e-05 |
| 131 | 42 | -0.03     | 5.30e-03  | -0.28 | -1.35e-05 | -1.17e-04 | 1.56e-05  |
| 131 | 50 | 0.03      | 9.27e-03  | -0.25 | -1.16e-05 | 1.06e-04  | -1.66e-05 |
| 131 | 56 | -4.98e-03 | 0.02      | -0.27 | -4.24e-05 | -3.83e-05 | -1.13e-05 |
| 132 | 1  | -7.74e-04 | 2.75e-06  | -0.36 | 0.0       | 9.14e-06  | -4.72e-06 |
| 132 | 2  | -5.47e-04 | 1.01e-06  | -0.26 | 0.0       | 5.56e-06  | -3.37e-06 |
| 132 | 9  | -0.06     | 0.02      | -0.24 | -2.46e-05 | -2.22e-04 | 3.53e-05  |
| 132 | 17 | 0.06      | 0.01      | -0.29 | -2.85e-05 | 2.34e-04  | -3.16e-05 |
| 132 | 31 | 9.83e-03  | 0.05      | -0.29 | -8.90e-05 | 7.26e-05  | 2.43e-05  |
| 132 | 41 | -0.03     | 9.26e-03  | -0.25 | -1.16e-05 | -1.04e-04 | 1.52e-05  |
| 132 | 49 | 0.03      | 5.30e-03  | -0.28 | -1.35e-05 | 1.15e-04  | -1.70e-05 |
| 132 | 63 | 4.46e-03  | 0.02      | -0.27 | -4.24e-05 | 3.79e-05  | 9.87e-06  |
| 133 | 1  | 7.74e-04  | 2.75e-06  | -0.36 | 0.0       | -9.14e-06 | 4.72e-06  |
| 133 | 2  | 5.47e-04  | 1.01e-06  | -0.26 | 0.0       | -5.56e-06 | 3.37e-06  |
| 133 | 10 | -0.06     | 0.01      | -0.29 | -2.85e-05 | -2.34e-04 | 3.16e-05  |
| 133 | 18 | 0.06      | 0.02      | -0.24 | -2.46e-05 | 2.22e-04  | -3.53e-05 |
| 133 | 24 | -9.83e-03 | 0.05      | -0.29 | -8.90e-05 | -7.26e-05 | -2.43e-05 |
| 133 | 42 | -0.03     | 5.30e-03  | -0.28 | -1.35e-05 | -1.15e-04 | 1.70e-05  |
| 133 | 50 | 0.03      | 9.26e-03  | -0.25 | -1.16e-05 | 1.04e-04  | -1.52e-05 |
| 133 | 56 | -4.46e-03 | 0.02      | -0.27 | -4.24e-05 | -3.79e-05 | -9.87e-06 |
| 134 | 1  | -4.82e-04 | -1.27e-05 | -0.36 | 0.0       | 7.35e-06  | -6.87e-06 |
| 134 | 2  | -3.40e-04 | -9.81e-06 | -0.26 | 0.0       | 4.69e-06  | -4.88e-06 |
| 134 | 9  | -0.06     | 0.02      | -0.24 | -2.44e-05 | -2.16e-04 | 3.39e-05  |
| 134 | 17 | 0.06      | 0.01      | -0.29 | -2.92e-05 | 2.26e-04  | -3.34e-05 |
| 134 | 29 | 0.02      | -0.05     | -0.25 | 8.90e-05  | 6.99e-05  | -3.21e-05 |
| 134 | 41 | -0.03     | 9.25e-03  | -0.25 | -1.17e-05 | -1.02e-04 | 1.38e-05  |
| 134 | 49 | 0.03      | 5.28e-03  | -0.28 | -1.39e-05 | 1.11e-04  | -1.86e-05 |
| 134 | 61 | 0.01      | -0.02     | -0.25 | 4.27e-05  | 3.61e-05  | -1.79e-05 |
| 135 | 1  | 4.82e-04  | -1.27e-05 | -0.36 | 0.0       | -7.35e-06 | 6.87e-06  |
| 135 | 2  | 3.40e-04  | -9.81e-06 | -0.26 | 0.0       | -4.69e-06 | 4.88e-06  |
| 135 | 10 | -0.06     | 0.01      | -0.29 | -2.92e-05 | -2.26e-04 | 3.34e-05  |
| 135 | 18 | 0.06      | 0.02      | -0.24 | -2.44e-05 | 2.16e-04  | -3.39e-05 |
| 135 | 22 | -0.02     | -0.05     | -0.25 | 8.90e-05  | -6.99e-05 | 3.21e-05  |
| 135 | 42 | -0.03     | 5.28e-03  | -0.28 | -1.39e-05 | -1.11e-04 | 1.86e-05  |
| 135 | 50 | 0.03      | 9.25e-03  | -0.25 | -1.17e-05 | 1.02e-04  | -1.38e-05 |
| 135 | 54 | -0.01     | -0.02     | -0.25 | 4.27e-05  | -3.61e-05 | 1.79e-05  |
| 136 | 1  | 1.83e-05  | -6.18e-05 | -0.36 | 0.0       | 0.0       | 0.0       |
| 136 | 2  | 9.67e-06  | -4.25e-05 | -0.26 | 0.0       | 0.0       | -1.04e-06 |
| 136 | 18 | 0.11      | 0.02      | -0.30 | 0.0       | 2.15e-04  | -2.86e-05 |
| 136 | 19 | -0.02     | -0.07     | -0.23 | 0.0       | -6.26e-05 | -3.12e-05 |
| 136 | 33 | 0.03      | 0.07      | -0.30 | 0.0       | 6.54e-05  | 9.61e-06  |
| 136 | 50 | 0.05      | 7.37e-03  | -0.28 | 0.0       | 1.03e-04  | -1.43e-05 |
| 136 | 51 | -9.66e-03 | -0.03     | -0.24 | 0.0       | -3.00e-05 | -1.55e-05 |
| 136 | 65 | 0.01      | 0.03      | -0.28 | 0.0       | 3.16e-05  | 4.04e-06  |
| 137 | 1  | -1.83e-05 | -6.18e-05 | -0.36 | 0.0       | 0.0       | 0.0       |
| 137 | 2  | -9.67e-06 | -4.25e-05 | -0.26 | 0.0       | 0.0       | 1.04e-06  |
| 137 | 9  | -0.11     | 0.02      | -0.30 | 0.0       | -2.15e-04 | 2.86e-05  |
| 137 | 26 | -0.03     | 0.07      | -0.30 | 0.0       | -6.54e-05 | -9.61e-06 |
| 137 | 28 | 0.02      | -0.07     | -0.23 | 0.0       | 6.26e-05  | 3.12e-05  |
| 137 | 41 | -0.05     | 7.37e-03  | -0.28 | 0.0       | -1.03e-04 | 1.43e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 137 | 58 | -0.01     | 0.03      | -0.28 | 0.0       | -3.16e-05 | -4.04e-06 |
| 137 | 60 | 9.66e-03  | -0.03     | -0.24 | 0.0       | 3.00e-05  | 1.55e-05  |
| 138 | 1  | -3.18e-04 | 1.38e-05  | -0.36 | 0.0       | 4.23e-06  | 1.45e-06  |
| 138 | 2  | -3.03e-04 | 9.79e-06  | -0.26 | 0.0       | 2.51e-06  | 1.47e-06  |
| 138 | 8  | -0.08     | 0.01      | -0.23 | -2.87e-05 | -2.25e-04 | -3.06e-05 |
| 138 | 11 | 0.08      | -0.01     | -0.29 | 2.83e-05  | 2.30e-04  | 2.32e-05  |
| 138 | 25 | -0.02     | 0.06      | -0.24 | -8.95e-05 | -6.42e-05 | 3.21e-05  |
| 138 | 40 | -0.04     | 6.07e-03  | -0.25 | -1.39e-05 | -1.07e-04 | -1.39e-05 |
| 138 | 43 | 0.04      | -6.63e-03 | -0.28 | 1.34e-05  | 1.12e-04  | 1.19e-05  |
| 138 | 57 | -9.17e-03 | 0.03      | -0.25 | -4.30e-05 | -2.96e-05 | 1.62e-05  |
| 139 | 1  | -2.38e-04 | 1.67e-05  | -0.36 | 0.0       | 3.08e-06  | 1.75e-06  |
| 139 | 2  | -2.21e-04 | 1.19e-05  | -0.26 | 0.0       | 1.86e-06  | 1.77e-06  |
| 139 | 8  | -0.08     | 0.01      | -0.23 | -2.88e-05 | -2.21e-04 | -2.73e-05 |
| 139 | 11 | 0.08      | -0.01     | -0.29 | 2.82e-05  | 2.25e-04  | 2.06e-05  |
| 139 | 25 | -0.02     | 0.06      | -0.24 | -8.96e-05 | -6.33e-05 | 3.28e-05  |
| 139 | 40 | -0.04     | 6.08e-03  | -0.25 | -1.40e-05 | -1.06e-04 | -1.22e-05 |
| 139 | 43 | 0.04      | -6.63e-03 | -0.28 | 1.33e-05  | 1.09e-04  | 1.08e-05  |
| 139 | 57 | -8.35e-03 | 0.03      | -0.25 | -4.31e-05 | -2.95e-05 | 1.66e-05  |
| 140 | 1  | -1.45e-04 | 1.82e-05  | -0.36 | 0.0       | 1.86e-06  | 2.05e-06  |
| 140 | 2  | -1.28e-04 | 1.30e-05  | -0.26 | 0.0       | 1.16e-06  | 1.99e-06  |
| 140 | 8  | -0.08     | 0.01      | -0.23 | -2.91e-05 | -2.18e-04 | -2.57e-05 |
| 140 | 11 | 0.08      | -0.01     | -0.29 | 2.81e-05  | 2.20e-04  | 1.94e-05  |
| 140 | 25 | -0.02     | 0.06      | -0.23 | -8.99e-05 | -6.26e-05 | 3.27e-05  |
| 140 | 40 | -0.04     | 6.08e-03  | -0.24 | -1.43e-05 | -1.04e-04 | -1.13e-05 |
| 140 | 43 | 0.04      | -6.63e-03 | -0.28 | 1.31e-05  | 1.07e-04  | 1.04e-05  |
| 140 | 57 | -7.53e-03 | 0.03      | -0.25 | -4.33e-05 | -2.95e-05 | 1.67e-05  |
| 141 | 1  | -1.51e-05 | 1.92e-05  | -0.36 | -1.97e-06 | 0.0       | 3.10e-06  |
| 141 | 2  | -1.25e-05 | 1.36e-05  | -0.26 | -1.32e-06 | 0.0       | 2.59e-06  |
| 141 | 8  | -0.09     | 0.01      | -0.23 | -2.94e-05 | -2.15e-04 | -2.91e-05 |
| 141 | 25 | -0.01     | 0.06      | -0.23 | -9.05e-05 | -6.27e-05 | 3.16e-05  |
| 141 | 27 | 0.02      | -0.06     | -0.30 | 8.88e-05  | 6.55e-05  | -6.80e-06 |
| 141 | 40 | -0.04     | 6.08e-03  | -0.24 | -1.48e-05 | -1.04e-04 | -1.26e-05 |
| 141 | 57 | -6.70e-03 | 0.03      | -0.24 | -4.40e-05 | -3.01e-05 | 1.65e-05  |
| 141 | 59 | 9.66e-03  | -0.03     | -0.28 | 4.18e-05  | 3.17e-05  | -1.88e-06 |
| 142 | 1  | 1.83e-05  | 6.18e-05  | -0.36 | 0.0       | 0.0       | 0.0       |
| 142 | 2  | 9.67e-06  | 4.25e-05  | -0.26 | 0.0       | 0.0       | 1.04e-06  |
| 142 | 12 | 0.11      | -0.02     | -0.30 | 0.0       | 2.15e-04  | 2.86e-05  |
| 142 | 25 | -0.02     | 0.07      | -0.23 | 0.0       | -6.26e-05 | 3.12e-05  |
| 142 | 27 | 0.03      | -0.07     | -0.30 | 0.0       | 6.54e-05  | -9.61e-06 |
| 142 | 44 | 0.05      | -7.37e-03 | -0.28 | 0.0       | 1.03e-04  | 1.43e-05  |
| 142 | 57 | -9.66e-03 | 0.03      | -0.24 | 0.0       | -3.00e-05 | 1.55e-05  |
| 142 | 59 | 0.01      | -0.03     | -0.28 | 0.0       | 3.16e-05  | -4.04e-06 |
| 143 | 1  | -3.79e-04 | 9.63e-06  | -0.36 | 0.0       | 5.03e-06  | 1.01e-06  |
| 143 | 2  | -3.65e-04 | 6.85e-06  | -0.26 | 0.0       | 2.94e-06  | 1.03e-06  |
| 143 | 8  | -0.08     | 0.01      | -0.23 | -2.86e-05 | -2.27e-04 | -3.45e-05 |
| 143 | 11 | 0.08      | -0.01     | -0.29 | 2.83e-05  | 2.33e-04  | 2.61e-05  |
| 143 | 25 | -0.02     | 0.06      | -0.24 | -8.94e-05 | -6.51e-05 | 3.11e-05  |
| 143 | 40 | -0.04     | 6.07e-03  | -0.25 | -1.38e-05 | -1.08e-04 | -1.60e-05 |
| 143 | 43 | 0.04      | -6.63e-03 | -0.27 | 1.35e-05  | 1.14e-04  | 1.31e-05  |
| 143 | 57 | -9.95e-03 | 0.03      | -0.25 | -4.29e-05 | -2.98e-05 | 1.54e-05  |
| 144 | 1  | 8.52e-06  | 5.81e-05  | -0.36 | 0.0       | 1.36e-06  | 0.0       |
| 144 | 2  | -3.29e-05 | 3.99e-05  | -0.26 | 0.0       | 0.0       | 0.0       |
| 144 | 8  | -0.11     | 0.02      | -0.23 | 0.0       | -2.15e-04 | -2.15e-05 |
| 144 | 11 | 0.10      | -0.02     | -0.29 | 0.0       | 2.17e-04  | 1.27e-05  |
| 144 | 25 | -0.02     | 0.07      | -0.23 | 0.0       | -6.28e-05 | 3.34e-05  |
| 144 | 40 | -0.05     | 7.45e-03  | -0.24 | 0.0       | -1.03e-04 | -9.93e-06 |

|     |    |           |           |       |     |           |           |
|-----|----|-----------|-----------|-------|-----|-----------|-----------|
| 144 | 43 | 0.05      | -7.95e-03 | -0.28 | 0.0 | 1.05e-04  | 6.46e-06  |
| 144 | 57 | -0.01     | 0.03      | -0.25 | 0.0 | -2.98e-05 | 1.64e-05  |
| 145 | 1  | -8.52e-06 | 5.81e-05  | -0.36 | 0.0 | -1.36e-06 | 0.0       |
| 145 | 2  | 3.29e-05  | 3.99e-05  | -0.26 | 0.0 | 0.0       | 0.0       |
| 145 | 4  | -0.10     | -0.02     | -0.29 | 0.0 | -2.17e-04 | -1.27e-05 |
| 145 | 15 | 0.11      | 0.02      | -0.23 | 0.0 | 2.15e-04  | 2.15e-05  |
| 145 | 34 | 0.02      | 0.07      | -0.23 | 0.0 | 6.28e-05  | -3.34e-05 |
| 145 | 36 | -0.05     | -7.95e-03 | -0.28 | 0.0 | -1.05e-04 | -6.46e-06 |
| 145 | 47 | 0.05      | 7.45e-03  | -0.24 | 0.0 | 1.03e-04  | 9.93e-06  |
| 145 | 66 | 0.01      | 0.03      | -0.25 | 0.0 | 2.98e-05  | -1.64e-05 |
| 146 | 1  | 2.30e-05  | 5.10e-05  | -0.36 | 0.0 | 2.36e-06  | 0.0       |
| 146 | 2  | -6.31e-05 | 3.51e-05  | -0.26 | 0.0 | 1.42e-06  | 0.0       |
| 146 | 8  | -0.10     | 0.02      | -0.23 | 0.0 | -2.17e-04 | -2.18e-05 |
| 146 | 11 | 0.10      | -0.02     | -0.29 | 0.0 | 2.20e-04  | 1.27e-05  |
| 146 | 25 | -0.02     | 0.07      | -0.24 | 0.0 | -6.30e-05 | 3.42e-05  |
| 146 | 40 | -0.05     | 7.44e-03  | -0.25 | 0.0 | -1.04e-04 | -1.02e-05 |
| 146 | 43 | 0.05      | -7.96e-03 | -0.28 | 0.0 | 1.07e-04  | 6.41e-06  |
| 146 | 57 | -0.01     | 0.03      | -0.25 | 0.0 | -2.96e-05 | 1.67e-05  |
| 147 | 1  | -2.30e-05 | 5.10e-05  | -0.36 | 0.0 | -2.36e-06 | 0.0       |
| 147 | 2  | 6.31e-05  | 3.51e-05  | -0.26 | 0.0 | -1.42e-06 | 0.0       |
| 147 | 4  | -0.10     | -0.02     | -0.29 | 0.0 | -2.20e-04 | -1.27e-05 |
| 147 | 15 | 0.10      | 0.02      | -0.23 | 0.0 | 2.17e-04  | 2.18e-05  |
| 147 | 34 | 0.02      | 0.07      | -0.24 | 0.0 | 6.30e-05  | -3.42e-05 |
| 147 | 36 | -0.05     | -7.96e-03 | -0.28 | 0.0 | -1.07e-04 | -6.41e-06 |
| 147 | 47 | 0.05      | 7.44e-03  | -0.25 | 0.0 | 1.04e-04  | 1.02e-05  |
| 147 | 66 | 0.01      | 0.03      | -0.25 | 0.0 | 2.96e-05  | -1.67e-05 |
| 148 | 1  | 4.11e-05  | 4.17e-05  | -0.36 | 0.0 | 3.23e-06  | 0.0       |
| 148 | 2  | -8.81e-05 | 2.88e-05  | -0.26 | 0.0 | 1.93e-06  | 0.0       |
| 148 | 8  | -0.10     | 0.02      | -0.23 | 0.0 | -2.19e-04 | -2.57e-05 |
| 148 | 11 | 0.10      | -0.02     | -0.29 | 0.0 | 2.23e-04  | 1.64e-05  |
| 148 | 25 | -0.03     | 0.07      | -0.24 | 0.0 | -6.35e-05 | 3.38e-05  |
| 148 | 40 | -0.05     | 7.44e-03  | -0.25 | 0.0 | -1.05e-04 | -1.21e-05 |
| 148 | 43 | 0.05      | -7.96e-03 | -0.28 | 0.0 | 1.09e-04  | 8.14e-06  |
| 148 | 57 | -0.01     | 0.03      | -0.25 | 0.0 | -2.96e-05 | 1.64e-05  |
| 149 | 1  | -4.11e-05 | 4.17e-05  | -0.36 | 0.0 | -3.23e-06 | 0.0       |
| 149 | 2  | 8.81e-05  | 2.88e-05  | -0.26 | 0.0 | -1.93e-06 | 0.0       |
| 149 | 4  | -0.10     | -0.02     | -0.29 | 0.0 | -2.23e-04 | -1.64e-05 |
| 149 | 15 | 0.10      | 0.02      | -0.23 | 0.0 | 2.19e-04  | 2.57e-05  |
| 149 | 34 | 0.03      | 0.07      | -0.24 | 0.0 | 6.35e-05  | -3.38e-05 |
| 149 | 36 | -0.05     | -7.96e-03 | -0.28 | 0.0 | -1.09e-04 | -8.14e-06 |
| 149 | 47 | 0.05      | 7.44e-03  | -0.25 | 0.0 | 1.05e-04  | 1.21e-05  |
| 149 | 66 | 0.01      | 0.03      | -0.25 | 0.0 | 2.96e-05  | -1.64e-05 |
| 150 | 1  | 5.42e-05  | 3.00e-05  | -0.36 | 0.0 | 3.91e-06  | 0.0       |
| 150 | 2  | -1.09e-04 | 2.07e-05  | -0.26 | 0.0 | 2.32e-06  | 0.0       |
| 150 | 8  | -0.10     | 0.02      | -0.23 | 0.0 | -2.21e-04 | -3.15e-05 |
| 150 | 11 | 0.10      | -0.02     | -0.29 | 0.0 | 2.26e-04  | 2.19e-05  |
| 150 | 25 | -0.03     | 0.07      | -0.24 | 0.0 | -6.40e-05 | 3.26e-05  |
| 150 | 40 | -0.05     | 7.43e-03  | -0.25 | 0.0 | -1.05e-04 | -1.49e-05 |
| 150 | 43 | 0.05      | -7.97e-03 | -0.27 | 0.0 | 1.10e-04  | 1.07e-05  |
| 150 | 57 | -0.01     | 0.03      | -0.25 | 0.0 | -2.96e-05 | 1.58e-05  |
| 151 | 1  | -5.42e-05 | 3.00e-05  | -0.36 | 0.0 | -3.91e-06 | 0.0       |
| 151 | 2  | 1.09e-04  | 2.07e-05  | -0.26 | 0.0 | -2.32e-06 | 0.0       |
| 151 | 4  | -0.10     | -0.02     | -0.29 | 0.0 | -2.26e-04 | -2.19e-05 |
| 151 | 15 | 0.10      | 0.02      | -0.23 | 0.0 | 2.21e-04  | 3.15e-05  |
| 151 | 34 | 0.03      | 0.07      | -0.24 | 0.0 | 6.40e-05  | -3.26e-05 |
| 151 | 36 | -0.05     | -7.97e-03 | -0.27 | 0.0 | -1.10e-04 | -1.07e-05 |

|     |    |           |           |       |     |           |           |
|-----|----|-----------|-----------|-------|-----|-----------|-----------|
| 151 | 47 | 0.05      | 7.43e-03  | -0.25 | 0.0 | 1.05e-04  | 1.49e-05  |
| 151 | 66 | 0.01      | 0.03      | -0.25 | 0.0 | 2.96e-05  | -1.58e-05 |
| 152 | 1  | 6.11e-05  | 1.57e-05  | -0.36 | 0.0 | 4.35e-06  | 0.0       |
| 152 | 2  | -1.23e-04 | 1.09e-05  | -0.26 | 0.0 | 2.56e-06  | 0.0       |
| 152 | 8  | -0.10     | 0.02      | -0.23 | 0.0 | -2.22e-04 | -3.80e-05 |
| 152 | 11 | 0.10      | -0.02     | -0.29 | 0.0 | 2.27e-04  | 2.79e-05  |
| 152 | 25 | -0.03     | 0.07      | -0.25 | 0.0 | -6.45e-05 | 3.09e-05  |
| 152 | 40 | -0.05     | 7.42e-03  | -0.25 | 0.0 | -1.06e-04 | -1.82e-05 |
| 152 | 43 | 0.05      | -7.98e-03 | -0.27 | 0.0 | 1.11e-04  | 1.36e-05  |
| 152 | 57 | -0.01     | 0.03      | -0.25 | 0.0 | -2.97e-05 | 1.49e-05  |
| 153 | 1  | -6.11e-05 | 1.57e-05  | -0.36 | 0.0 | -4.35e-06 | 0.0       |
| 153 | 2  | 1.23e-04  | 1.09e-05  | -0.26 | 0.0 | -2.56e-06 | 0.0       |
| 153 | 4  | -0.10     | -0.02     | -0.29 | 0.0 | -2.27e-04 | -2.79e-05 |
| 153 | 15 | 0.10      | 0.02      | -0.23 | 0.0 | 2.22e-04  | 3.80e-05  |
| 153 | 34 | 0.03      | 0.07      | -0.25 | 0.0 | 6.45e-05  | -3.09e-05 |
| 153 | 36 | -0.05     | -7.98e-03 | -0.27 | 0.0 | -1.11e-04 | -1.36e-05 |
| 153 | 47 | 0.05      | 7.42e-03  | -0.25 | 0.0 | 1.06e-04  | 1.82e-05  |
| 153 | 66 | 0.01      | 0.03      | -0.25 | 0.0 | 2.97e-05  | -1.49e-05 |
| 154 | 1  | 6.32e-05  | 0.0       | -0.36 | 0.0 | 4.49e-06  | 0.0       |
| 154 | 2  | -1.28e-04 | 0.0       | -0.26 | 0.0 | 2.65e-06  | 0.0       |
| 154 | 3  | -0.10     | -0.02     | -0.23 | 0.0 | -2.22e-04 | -4.43e-05 |
| 154 | 13 | 0.10      | -0.02     | -0.29 | 0.0 | 2.27e-04  | -4.43e-05 |
| 154 | 19 | -0.03     | -0.07     | -0.25 | 0.0 | -6.47e-05 | -2.90e-05 |
| 154 | 35 | -0.05     | -0.01     | -0.25 | 0.0 | -1.06e-04 | -2.13e-05 |
| 154 | 45 | 0.05      | -0.01     | -0.27 | 0.0 | 1.11e-04  | -2.13e-05 |
| 154 | 51 | -0.01     | -0.03     | -0.26 | 0.0 | -2.98e-05 | -1.39e-05 |
| 155 | 1  | -6.32e-05 | 0.0       | -0.36 | 0.0 | -4.49e-06 | 0.0       |
| 155 | 2  | 1.28e-04  | 0.0       | -0.26 | 0.0 | -2.65e-06 | 0.0       |
| 155 | 5  | -0.10     | -0.02     | -0.29 | 0.0 | -2.27e-04 | 3.38e-05  |
| 155 | 15 | 0.10      | 0.02      | -0.23 | 0.0 | 2.22e-04  | 4.44e-05  |
| 155 | 28 | 0.03      | -0.07     | -0.25 | 0.0 | 6.47e-05  | 2.90e-05  |
| 155 | 37 | -0.05     | -0.01     | -0.27 | 0.0 | -1.11e-04 | 1.63e-05  |
| 155 | 47 | 0.05      | 7.40e-03  | -0.25 | 0.0 | 1.06e-04  | 2.14e-05  |
| 155 | 60 | 0.01      | -0.03     | -0.26 | 0.0 | 2.98e-05  | 1.39e-05  |
| 156 | 1  | 6.11e-05  | -1.57e-05 | -0.36 | 0.0 | 4.35e-06  | 0.0       |
| 156 | 2  | -1.23e-04 | -1.09e-05 | -0.26 | 0.0 | 2.56e-06  | 0.0       |
| 156 | 6  | -0.10     | -0.02     | -0.23 | 0.0 | -2.22e-04 | 3.80e-05  |
| 156 | 17 | 0.10      | 0.02      | -0.29 | 0.0 | 2.27e-04  | -2.79e-05 |
| 156 | 19 | -0.03     | -0.07     | -0.25 | 0.0 | -6.45e-05 | -3.09e-05 |
| 156 | 38 | -0.05     | -7.42e-03 | -0.25 | 0.0 | -1.06e-04 | 1.82e-05  |
| 156 | 49 | 0.05      | 7.98e-03  | -0.27 | 0.0 | 1.11e-04  | -1.36e-05 |
| 156 | 51 | -0.01     | -0.03     | -0.25 | 0.0 | -2.97e-05 | -1.49e-05 |
| 157 | 1  | -6.11e-05 | -1.57e-05 | -0.36 | 0.0 | -4.35e-06 | 0.0       |
| 157 | 2  | 1.23e-04  | -1.09e-05 | -0.26 | 0.0 | -2.56e-06 | 0.0       |
| 157 | 10 | -0.10     | 0.02      | -0.29 | 0.0 | -2.27e-04 | 2.79e-05  |
| 157 | 13 | 0.10      | -0.02     | -0.23 | 0.0 | 2.22e-04  | -3.80e-05 |
| 157 | 28 | 0.03      | -0.07     | -0.25 | 0.0 | 6.45e-05  | 3.09e-05  |
| 157 | 42 | -0.05     | 7.98e-03  | -0.27 | 0.0 | -1.11e-04 | 1.36e-05  |
| 157 | 45 | 0.05      | -7.42e-03 | -0.25 | 0.0 | 1.06e-04  | -1.82e-05 |
| 157 | 60 | 0.01      | -0.03     | -0.25 | 0.0 | 2.97e-05  | 1.49e-05  |
| 158 | 1  | 5.42e-05  | -3.00e-05 | -0.36 | 0.0 | 3.91e-06  | 0.0       |
| 158 | 2  | -1.09e-04 | -2.07e-05 | -0.26 | 0.0 | 2.32e-06  | 0.0       |
| 158 | 6  | -0.10     | -0.02     | -0.23 | 0.0 | -2.21e-04 | 3.15e-05  |
| 158 | 17 | 0.10      | 0.02      | -0.29 | 0.0 | 2.26e-04  | -2.19e-05 |
| 158 | 19 | -0.03     | -0.07     | -0.24 | 0.0 | -6.40e-05 | -3.26e-05 |
| 158 | 38 | -0.05     | -7.43e-03 | -0.25 | 0.0 | -1.05e-04 | 1.49e-05  |

|     |    |           |           |       |     |           |           |
|-----|----|-----------|-----------|-------|-----|-----------|-----------|
| 158 | 49 | 0.05      | 7.97e-03  | -0.27 | 0.0 | 1.10e-04  | -1.07e-05 |
| 158 | 51 | -0.01     | -0.03     | -0.25 | 0.0 | -2.96e-05 | -1.58e-05 |
| 159 | 1  | -5.42e-05 | -3.00e-05 | -0.36 | 0.0 | -3.91e-06 | 0.0       |
| 159 | 2  | 1.09e-04  | -2.07e-05 | -0.26 | 0.0 | -2.32e-06 | 0.0       |
| 159 | 10 | -0.10     | 0.02      | -0.29 | 0.0 | -2.26e-04 | 2.19e-05  |
| 159 | 13 | 0.10      | -0.02     | -0.23 | 0.0 | 2.21e-04  | -3.15e-05 |
| 159 | 28 | 0.03      | -0.07     | -0.24 | 0.0 | 6.40e-05  | 3.26e-05  |
| 159 | 42 | -0.05     | 7.97e-03  | -0.27 | 0.0 | -1.10e-04 | 1.07e-05  |
| 159 | 45 | 0.05      | -7.43e-03 | -0.25 | 0.0 | 1.05e-04  | -1.49e-05 |
| 159 | 60 | 0.01      | -0.03     | -0.25 | 0.0 | 2.96e-05  | 1.58e-05  |
| 160 | 1  | 4.11e-05  | -4.17e-05 | -0.36 | 0.0 | 3.23e-06  | 0.0       |
| 160 | 2  | -8.81e-05 | -2.88e-05 | -0.26 | 0.0 | 1.93e-06  | 0.0       |
| 160 | 6  | -0.10     | -0.02     | -0.23 | 0.0 | -2.19e-04 | 2.57e-05  |
| 160 | 17 | 0.10      | 0.02      | -0.29 | 0.0 | 2.23e-04  | -1.64e-05 |
| 160 | 19 | -0.03     | -0.07     | -0.24 | 0.0 | -6.35e-05 | -3.38e-05 |
| 160 | 38 | -0.05     | -7.44e-03 | -0.25 | 0.0 | -1.05e-04 | 1.21e-05  |
| 160 | 49 | 0.05      | 7.96e-03  | -0.28 | 0.0 | 1.09e-04  | -8.14e-06 |
| 160 | 51 | -0.01     | -0.03     | -0.25 | 0.0 | -2.96e-05 | -1.64e-05 |
| 161 | 1  | -4.11e-05 | -4.17e-05 | -0.36 | 0.0 | -3.23e-06 | 0.0       |
| 161 | 2  | 8.81e-05  | -2.88e-05 | -0.26 | 0.0 | -1.93e-06 | 0.0       |
| 161 | 10 | -0.10     | 0.02      | -0.29 | 0.0 | -2.23e-04 | 1.64e-05  |
| 161 | 13 | 0.10      | -0.02     | -0.23 | 0.0 | 2.19e-04  | -2.57e-05 |
| 161 | 28 | 0.03      | -0.07     | -0.24 | 0.0 | 6.35e-05  | 3.38e-05  |
| 161 | 42 | -0.05     | 7.96e-03  | -0.28 | 0.0 | -1.09e-04 | 8.14e-06  |
| 161 | 45 | 0.05      | -7.44e-03 | -0.25 | 0.0 | 1.05e-04  | -1.21e-05 |
| 161 | 60 | 0.01      | -0.03     | -0.25 | 0.0 | 2.96e-05  | 1.64e-05  |
| 162 | 1  | 2.30e-05  | -5.10e-05 | -0.36 | 0.0 | 2.36e-06  | 0.0       |
| 162 | 2  | -6.31e-05 | -3.51e-05 | -0.26 | 0.0 | 1.42e-06  | 0.0       |
| 162 | 6  | -0.10     | -0.02     | -0.23 | 0.0 | -2.17e-04 | 2.18e-05  |
| 162 | 17 | 0.10      | 0.02      | -0.29 | 0.0 | 2.20e-04  | -1.27e-05 |
| 162 | 19 | -0.02     | -0.07     | -0.24 | 0.0 | -6.30e-05 | -3.42e-05 |
| 162 | 38 | -0.05     | -7.44e-03 | -0.25 | 0.0 | -1.04e-04 | 1.02e-05  |
| 162 | 49 | 0.05      | 7.96e-03  | -0.28 | 0.0 | 1.07e-04  | -6.41e-06 |
| 162 | 51 | -0.01     | -0.03     | -0.25 | 0.0 | -2.96e-05 | -1.67e-05 |
| 163 | 1  | -2.30e-05 | -5.10e-05 | -0.36 | 0.0 | -2.36e-06 | 0.0       |
| 163 | 2  | 6.31e-05  | -3.51e-05 | -0.26 | 0.0 | -1.42e-06 | 0.0       |
| 163 | 10 | -0.10     | 0.02      | -0.29 | 0.0 | -2.20e-04 | 1.27e-05  |
| 163 | 13 | 0.10      | -0.02     | -0.23 | 0.0 | 2.17e-04  | -2.18e-05 |
| 163 | 28 | 0.02      | -0.07     | -0.24 | 0.0 | 6.30e-05  | 3.42e-05  |
| 163 | 42 | -0.05     | 7.96e-03  | -0.28 | 0.0 | -1.07e-04 | 6.41e-06  |
| 163 | 45 | 0.05      | -7.44e-03 | -0.25 | 0.0 | 1.04e-04  | -1.02e-05 |
| 163 | 60 | 0.01      | -0.03     | -0.25 | 0.0 | 2.96e-05  | 1.67e-05  |
| 164 | 1  | 8.52e-06  | -5.81e-05 | -0.36 | 0.0 | 1.36e-06  | 0.0       |
| 164 | 2  | -3.29e-05 | -3.99e-05 | -0.26 | 0.0 | 0.0       | 0.0       |
| 164 | 6  | -0.11     | -0.02     | -0.23 | 0.0 | -2.15e-04 | 2.15e-05  |
| 164 | 17 | 0.10      | 0.02      | -0.29 | 0.0 | 2.17e-04  | -1.27e-05 |
| 164 | 19 | -0.02     | -0.07     | -0.23 | 0.0 | -6.28e-05 | -3.34e-05 |
| 164 | 38 | -0.05     | -7.45e-03 | -0.24 | 0.0 | -1.03e-04 | 9.93e-06  |
| 164 | 49 | 0.05      | 7.95e-03  | -0.28 | 0.0 | 1.05e-04  | -6.46e-06 |
| 164 | 51 | -0.01     | -0.03     | -0.25 | 0.0 | -2.98e-05 | -1.64e-05 |
| 165 | 1  | -8.52e-06 | -5.81e-05 | -0.36 | 0.0 | -1.36e-06 | 0.0       |
| 165 | 2  | 3.29e-05  | -3.99e-05 | -0.26 | 0.0 | 0.0       | 0.0       |
| 165 | 10 | -0.10     | 0.02      | -0.29 | 0.0 | -2.17e-04 | 1.27e-05  |
| 165 | 13 | 0.11      | -0.02     | -0.23 | 0.0 | 2.15e-04  | -2.15e-05 |
| 165 | 28 | 0.02      | -0.07     | -0.23 | 0.0 | 6.28e-05  | 3.34e-05  |
| 165 | 42 | -0.05     | 7.95e-03  | -0.28 | 0.0 | -1.05e-04 | 6.46e-06  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 165 | 45 | 0.05      | -7.45e-03 | -0.24 | 0.0       | 1.03e-04  | -9.93e-06 |
| 165 | 60 | 0.01      | -0.03     | -0.25 | 0.0       | 2.98e-05  | 1.64e-05  |
| 166 | 1  | 0.0       | -7.70e-04 | -0.36 | -5.58e-06 | 0.0       | 0.0       |
| 166 | 2  | 0.0       | -5.45e-04 | -0.26 | -3.78e-06 | 0.0       | 0.0       |
| 166 | 12 | 0.06      | -0.02     | -0.27 | 2.30e-05  | 2.13e-04  | 3.87e-05  |
| 166 | 21 | -0.02     | -0.05     | -0.29 | 8.56e-05  | -6.10e-05 | -7.44e-06 |
| 166 | 44 | 0.03      | -7.54e-03 | -0.26 | 9.06e-06  | 1.03e-04  | 1.86e-05  |
| 166 | 53 | -8.70e-03 | -0.02     | -0.27 | 3.90e-05  | -2.94e-05 | -3.53e-06 |
| 166 | 54 | -3.72e-03 | -0.02     | -0.27 | 3.90e-05  | -3.01e-05 | 1.32e-05  |
| 167 | 1  | -6.76e-05 | 1.70e-04  | -0.36 | -3.44e-06 | 1.64e-06  | -6.83e-06 |
| 167 | 2  | -4.67e-05 | 1.20e-04  | -0.26 | -2.38e-06 | 1.15e-06  | -4.85e-06 |
| 167 | 9  | -0.06     | 0.02      | -0.25 | -2.71e-05 | -2.15e-04 | 3.37e-05  |
| 167 | 25 | -0.02     | 0.05      | -0.28 | -9.19e-05 | -6.30e-05 | 2.24e-05  |
| 167 | 33 | 0.01      | 0.05      | -0.29 | -9.33e-05 | 6.67e-05  | 2.37e-06  |
| 167 | 41 | -0.03     | 8.86e-03  | -0.25 | -1.42e-05 | -1.03e-04 | 1.37e-05  |
| 167 | 57 | -0.01     | 0.02      | -0.27 | -4.52e-05 | -2.97e-05 | 8.22e-06  |
| 167 | 65 | 6.51e-03  | 0.02      | -0.28 | -4.59e-05 | 3.27e-05  | -1.43e-06 |
| 168 | 1  | -6.76e-05 | -1.70e-04 | -0.36 | 3.44e-06  | 1.64e-06  | 6.83e-06  |
| 168 | 2  | -4.67e-05 | -1.20e-04 | -0.26 | 2.38e-06  | 1.15e-06  | 4.85e-06  |
| 168 | 3  | -0.06     | -0.02     | -0.25 | 2.71e-05  | -2.15e-04 | -3.37e-05 |
| 168 | 19 | -0.02     | -0.05     | -0.28 | 9.19e-05  | -6.30e-05 | -2.24e-05 |
| 168 | 27 | 0.01      | -0.05     | -0.29 | 9.33e-05  | 6.67e-05  | -2.37e-06 |
| 168 | 35 | -0.03     | -8.86e-03 | -0.25 | 1.42e-05  | -1.03e-04 | -1.37e-05 |
| 168 | 51 | -0.01     | -0.02     | -0.27 | 4.52e-05  | -2.97e-05 | -8.22e-06 |
| 168 | 59 | 6.51e-03  | -0.02     | -0.28 | 4.59e-05  | 3.27e-05  | 1.43e-06  |
| 169 | 1  | 6.76e-05  | 1.70e-04  | -0.36 | -3.44e-06 | -1.64e-06 | 6.83e-06  |
| 169 | 2  | 4.67e-05  | 1.20e-04  | -0.26 | -2.38e-06 | -1.15e-06 | 4.85e-06  |
| 169 | 18 | 0.06      | 0.02      | -0.25 | -2.71e-05 | 2.15e-04  | -3.37e-05 |
| 169 | 26 | -0.01     | 0.05      | -0.29 | -9.33e-05 | -6.67e-05 | -2.37e-06 |
| 169 | 34 | 0.02      | 0.05      | -0.28 | -9.19e-05 | 6.30e-05  | -2.24e-05 |
| 169 | 50 | 0.03      | 8.86e-03  | -0.25 | -1.42e-05 | 1.03e-04  | -1.37e-05 |
| 169 | 58 | -6.51e-03 | 0.02      | -0.28 | -4.59e-05 | -3.27e-05 | 1.43e-06  |
| 169 | 66 | 0.01      | 0.02      | -0.27 | -4.52e-05 | 2.97e-05  | -8.22e-06 |
| 170 | 1  | 6.76e-05  | -1.70e-04 | -0.36 | 3.44e-06  | -1.64e-06 | -6.83e-06 |
| 170 | 2  | 4.67e-05  | -1.20e-04 | -0.26 | 2.38e-06  | -1.15e-06 | -4.85e-06 |
| 170 | 12 | 0.06      | -0.02     | -0.25 | 2.71e-05  | 2.15e-04  | 3.37e-05  |
| 170 | 20 | -0.01     | -0.05     | -0.29 | 9.33e-05  | -6.67e-05 | 2.37e-06  |
| 170 | 28 | 0.02      | -0.05     | -0.28 | 9.19e-05  | 6.30e-05  | 2.24e-05  |
| 170 | 44 | 0.03      | -8.86e-03 | -0.25 | 1.42e-05  | 1.03e-04  | 1.37e-05  |
| 170 | 52 | -6.51e-03 | -0.02     | -0.28 | 4.59e-05  | -3.27e-05 | -1.43e-06 |
| 170 | 60 | 0.01      | -0.02     | -0.27 | 4.52e-05  | 2.97e-05  | 8.22e-06  |
| 171 | 1  | 0.0       | 7.70e-04  | -0.36 | 5.58e-06  | 0.0       | 0.0       |
| 171 | 2  | 0.0       | 5.45e-04  | -0.26 | 3.78e-06  | 0.0       | 0.0       |
| 171 | 6  | -0.06     | -0.01     | -0.25 | 3.06e-05  | -2.13e-04 | 3.87e-05  |
| 171 | 25 | -0.02     | 0.05      | -0.29 | -8.56e-05 | -6.32e-05 | 2.75e-05  |
| 171 | 33 | 0.01      | 0.05      | -0.29 | -8.56e-05 | 6.47e-05  | 7.43e-06  |
| 171 | 38 | -0.03     | -6.45e-03 | -0.26 | 1.66e-05  | -1.03e-04 | 1.86e-05  |
| 171 | 57 | -0.01     | 0.02      | -0.27 | -3.90e-05 | -3.04e-05 | 1.32e-05  |
| 171 | 66 | 0.01      | 0.02      | -0.27 | -3.90e-05 | 3.04e-05  | -1.32e-05 |
| 172 | 1  | 0.0       | 7.70e-04  | -0.36 | 5.73e-06  | 0.0       | 0.0       |
| 172 | 2  | 0.0       | 5.45e-04  | -0.26 | 3.87e-06  | 0.0       | 0.0       |
| 172 | 6  | -0.06     | -0.01     | -0.25 | 3.07e-05  | -2.13e-04 | 3.88e-05  |
| 172 | 25 | -0.02     | 0.05      | -0.29 | -8.56e-05 | -6.32e-05 | 2.75e-05  |
| 172 | 33 | 0.01      | 0.05      | -0.29 | -8.56e-05 | 6.47e-05  | 7.41e-06  |
| 172 | 38 | -0.03     | -6.45e-03 | -0.26 | 1.67e-05  | -1.03e-04 | 1.86e-05  |
| 172 | 57 | -0.01     | 0.02      | -0.27 | -3.90e-05 | -3.04e-05 | 1.32e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 172 | 66 | 0.01      | 0.02      | -0.27 | -3.90e-05 | 3.04e-05  | -1.32e-05 |
| 173 | 1  | 0.0       | -7.70e-04 | -0.36 | -5.73e-06 | 0.0       | 0.0       |
| 173 | 2  | 0.0       | -5.45e-04 | -0.26 | -3.87e-06 | 0.0       | 0.0       |
| 173 | 12 | 0.06      | -0.02     | -0.27 | 2.30e-05  | 2.13e-04  | 3.88e-05  |
| 173 | 21 | -0.02     | -0.05     | -0.29 | 8.56e-05  | -6.10e-05 | -7.50e-06 |
| 173 | 44 | 0.03      | -7.54e-03 | -0.26 | 8.98e-06  | 1.03e-04  | 1.86e-05  |
| 173 | 53 | -8.72e-03 | -0.02     | -0.27 | 3.90e-05  | -2.94e-05 | -3.56e-06 |
| 173 | 54 | -3.66e-03 | -0.02     | -0.27 | 3.90e-05  | -3.01e-05 | 1.32e-05  |
| 174 | 1  | -1.03e-06 | 1.93e-05  | -0.36 | 0.0       | 0.0       | 3.13e-06  |
| 174 | 2  | 0.0       | 1.37e-05  | -0.26 | 0.0       | 0.0       | 2.59e-06  |
| 174 | 8  | -0.09     | 0.01      | -0.23 | -2.83e-05 | -2.15e-04 | -2.99e-05 |
| 174 | 25 | -0.01     | 0.06      | -0.23 | -8.96e-05 | -6.27e-05 | 3.13e-05  |
| 174 | 27 | 0.02      | -0.06     | -0.30 | 8.93e-05  | 6.55e-05  | -6.53e-06 |
| 174 | 40 | -0.04     | 6.08e-03  | -0.24 | -1.39e-05 | -1.04e-04 | -1.30e-05 |
| 174 | 57 | -6.63e-03 | 0.03      | -0.24 | -4.32e-05 | -3.01e-05 | 1.64e-05  |
| 174 | 59 | 9.65e-03  | -0.03     | -0.28 | 4.24e-05  | 3.17e-05  | -1.75e-06 |
| 175 | 1  | -1.03e-06 | -1.93e-05 | -0.36 | 0.0       | 0.0       | -3.13e-06 |
| 175 | 2  | 0.0       | -1.37e-05 | -0.26 | 0.0       | 0.0       | -2.59e-06 |
| 175 | 6  | -0.09     | -0.01     | -0.23 | 2.83e-05  | -2.15e-04 | 2.99e-05  |
| 175 | 19 | -0.01     | -0.06     | -0.23 | 8.96e-05  | -6.27e-05 | -3.13e-05 |
| 175 | 33 | 0.02      | 0.06      | -0.30 | -8.93e-05 | 6.55e-05  | 6.53e-06  |
| 175 | 38 | -0.04     | -6.08e-03 | -0.24 | 1.39e-05  | -1.04e-04 | 1.30e-05  |
| 175 | 51 | -6.63e-03 | -0.03     | -0.24 | 4.32e-05  | -3.01e-05 | -1.64e-05 |
| 175 | 65 | 9.65e-03  | 0.03      | -0.28 | -4.24e-05 | 3.17e-05  | 1.75e-06  |
| 176 | 1  | 1.03e-06  | -1.93e-05 | -0.36 | 0.0       | 0.0       | 3.13e-06  |
| 176 | 2  | 0.0       | -1.37e-05 | -0.26 | 0.0       | 0.0       | 2.59e-06  |
| 176 | 13 | 0.09      | -0.01     | -0.23 | 2.83e-05  | 2.15e-04  | -2.99e-05 |
| 176 | 26 | -0.02     | 0.06      | -0.30 | -8.93e-05 | -6.55e-05 | -6.53e-06 |
| 176 | 28 | 0.01      | -0.06     | -0.23 | 8.96e-05  | 6.27e-05  | 3.13e-05  |
| 176 | 45 | 0.04      | -6.08e-03 | -0.24 | 1.39e-05  | 1.04e-04  | -1.30e-05 |
| 176 | 58 | -9.65e-03 | 0.03      | -0.28 | -4.24e-05 | -3.17e-05 | -1.75e-06 |
| 176 | 60 | 6.63e-03  | -0.03     | -0.24 | 4.32e-05  | 3.01e-05  | 1.64e-05  |
| 177 | 1  | 1.03e-06  | 1.93e-05  | -0.36 | 0.0       | 0.0       | -3.13e-06 |
| 177 | 2  | 0.0       | 1.37e-05  | -0.26 | 0.0       | 0.0       | -2.59e-06 |
| 177 | 15 | 0.09      | 0.01      | -0.23 | -2.83e-05 | 2.15e-04  | 2.99e-05  |
| 177 | 20 | -0.02     | -0.06     | -0.30 | 8.93e-05  | -6.55e-05 | 6.53e-06  |
| 177 | 34 | 0.01      | 0.06      | -0.23 | -8.96e-05 | 6.27e-05  | -3.13e-05 |
| 177 | 47 | 0.04      | 6.08e-03  | -0.24 | -1.39e-05 | 1.04e-04  | 1.30e-05  |
| 177 | 52 | -9.65e-03 | -0.03     | -0.28 | 4.24e-05  | -3.17e-05 | 1.75e-06  |
| 177 | 66 | 6.63e-03  | 0.03      | -0.24 | -4.32e-05 | 3.01e-05  | -1.64e-05 |
| 178 | 1  | 0.0       | -5.07e-05 | -0.36 | -1.81e-06 | 0.0       | 0.0       |
| 178 | 2  | 0.0       | -6.69e-05 | -0.26 | -1.19e-06 | 0.0       | 0.0       |
| 178 | 8  | -0.11     | 0.02      | -0.25 | -2.80e-05 | 0.0       | -4.17e-05 |
| 178 | 21 | -0.03     | -0.07     | -0.29 | 8.80e-05  | 0.0       | -1.06e-05 |
| 178 | 40 | -0.05     | 9.46e-03  | -0.26 | -1.40e-05 | 0.0       | -2.00e-05 |
| 178 | 53 | -0.01     | -0.03     | -0.27 | 4.15e-05  | 0.0       | -5.04e-06 |
| 179 | 1  | 0.0       | 5.07e-05  | -0.36 | 1.81e-06  | 0.0       | 0.0       |
| 179 | 2  | 0.0       | 6.69e-05  | -0.26 | 1.19e-06  | 0.0       | 0.0       |
| 179 | 6  | -0.11     | -0.02     | -0.25 | 2.80e-05  | 0.0       | 4.17e-05  |
| 179 | 25 | -0.04     | 0.07      | -0.29 | -8.80e-05 | 0.0       | 2.87e-05  |
| 179 | 33 | 0.03      | 0.07      | -0.29 | -8.80e-05 | 0.0       | 6.97e-06  |
| 179 | 38 | -0.05     | -9.46e-03 | -0.26 | 1.40e-05  | 0.0       | 2.00e-05  |
| 179 | 57 | -0.02     | 0.03      | -0.27 | -4.15e-05 | 0.0       | 1.38e-05  |
| 179 | 65 | 0.01      | 0.03      | -0.27 | -4.15e-05 | 0.0       | 3.30e-06  |
| 180 | 1  | 0.0       | 3.16e-04  | -0.36 | 3.49e-06  | 0.0       | 0.0       |
| 180 | 2  | 0.0       | 2.42e-04  | -0.26 | 2.30e-06  | 0.0       | 0.0       |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 180 | 6  | -0.09     | -0.02     | -0.25 | 2.92e-05  | -2.15e-04 | 4.03e-05  |
| 180 | 25 | -0.03     | 0.06      | -0.29 | -8.72e-05 | -6.38e-05 | 2.82e-05  |
| 180 | 33 | 0.02      | 0.06      | -0.29 | -8.72e-05 | 6.52e-05  | 7.20e-06  |
| 180 | 38 | -0.04     | -8.02e-03 | -0.26 | 1.52e-05  | -1.03e-04 | 1.94e-05  |
| 180 | 57 | -0.01     | 0.03      | -0.27 | -4.06e-05 | -3.07e-05 | 1.35e-05  |
| 180 | 65 | 9.65e-03  | 0.03      | -0.27 | -4.06e-05 | 3.14e-05  | 3.41e-06  |
| 181 | 1  | 0.0       | -3.16e-04 | -0.36 | -3.49e-06 | 0.0       | 0.0       |
| 181 | 2  | 0.0       | -2.42e-04 | -0.26 | -2.30e-06 | 0.0       | 0.0       |
| 181 | 8  | -0.09     | 0.02      | -0.25 | -2.92e-05 | -2.15e-04 | -4.03e-05 |
| 181 | 21 | -0.02     | -0.06     | -0.29 | 8.72e-05  | -6.15e-05 | -9.06e-06 |
| 181 | 40 | -0.04     | 8.02e-03  | -0.26 | -1.52e-05 | -1.03e-04 | -1.94e-05 |
| 181 | 53 | -0.01     | -0.03     | -0.27 | 4.06e-05  | -2.96e-05 | -4.31e-06 |
| 182 | 1  | 1.51e-05  | -1.92e-05 | -0.36 | 1.97e-06  | 0.0       | 3.10e-06  |
| 182 | 2  | 1.25e-05  | -1.36e-05 | -0.26 | 1.32e-06  | 0.0       | 2.59e-06  |
| 182 | 13 | 0.09      | -0.01     | -0.23 | 2.94e-05  | 2.15e-04  | -2.91e-05 |
| 182 | 26 | -0.02     | 0.06      | -0.30 | -8.88e-05 | -6.55e-05 | -6.80e-06 |
| 182 | 28 | 0.01      | -0.06     | -0.23 | 9.05e-05  | 6.27e-05  | 3.16e-05  |
| 182 | 45 | 0.04      | -6.08e-03 | -0.24 | 1.48e-05  | 1.04e-04  | -1.26e-05 |
| 182 | 58 | -9.66e-03 | 0.03      | -0.28 | -4.18e-05 | -3.17e-05 | -1.88e-06 |
| 182 | 60 | 6.70e-03  | -0.03     | -0.24 | 4.40e-05  | 3.01e-05  | 1.65e-05  |
| 183 | 1  | 1.45e-04  | -1.82e-05 | -0.36 | 0.0       | -1.86e-06 | 2.05e-06  |
| 183 | 2  | 1.28e-04  | -1.30e-05 | -0.26 | 0.0       | -1.16e-06 | 1.99e-06  |
| 183 | 10 | -0.08     | 0.01      | -0.29 | -2.81e-05 | -2.20e-04 | 1.94e-05  |
| 183 | 13 | 0.08      | -0.01     | -0.23 | 2.91e-05  | 2.18e-04  | -2.57e-05 |
| 183 | 28 | 0.02      | -0.06     | -0.23 | 8.99e-05  | 6.26e-05  | 3.27e-05  |
| 183 | 42 | -0.04     | 6.63e-03  | -0.28 | -1.31e-05 | -1.07e-04 | 1.04e-05  |
| 183 | 45 | 0.04      | -6.08e-03 | -0.24 | 1.43e-05  | 1.04e-04  | -1.13e-05 |
| 183 | 60 | 7.53e-03  | -0.03     | -0.25 | 4.33e-05  | 2.95e-05  | 1.67e-05  |
| 184 | 1  | 2.38e-04  | -1.67e-05 | -0.36 | 0.0       | -3.08e-06 | 1.75e-06  |
| 184 | 2  | 2.21e-04  | -1.19e-05 | -0.26 | 0.0       | -1.86e-06 | 1.77e-06  |
| 184 | 10 | -0.08     | 0.01      | -0.29 | -2.82e-05 | -2.25e-04 | 2.06e-05  |
| 184 | 13 | 0.08      | -0.01     | -0.23 | 2.88e-05  | 2.21e-04  | -2.73e-05 |
| 184 | 28 | 0.02      | -0.06     | -0.24 | 8.96e-05  | 6.33e-05  | 3.28e-05  |
| 184 | 42 | -0.04     | 6.63e-03  | -0.28 | -1.33e-05 | -1.09e-04 | 1.08e-05  |
| 184 | 45 | 0.04      | -6.08e-03 | -0.25 | 1.40e-05  | 1.06e-04  | -1.22e-05 |
| 184 | 60 | 8.35e-03  | -0.03     | -0.25 | 4.31e-05  | 2.95e-05  | 1.66e-05  |
| 185 | 1  | 3.18e-04  | -1.38e-05 | -0.36 | 0.0       | -4.23e-06 | 1.45e-06  |
| 185 | 2  | 3.03e-04  | -9.79e-06 | -0.26 | 0.0       | -2.51e-06 | 1.47e-06  |
| 185 | 10 | -0.08     | 0.01      | -0.29 | -2.83e-05 | -2.30e-04 | 2.32e-05  |
| 185 | 13 | 0.08      | -0.01     | -0.23 | 2.87e-05  | 2.25e-04  | -3.06e-05 |
| 185 | 28 | 0.02      | -0.06     | -0.24 | 8.95e-05  | 6.42e-05  | 3.21e-05  |
| 185 | 42 | -0.04     | 6.63e-03  | -0.28 | -1.34e-05 | -1.12e-04 | 1.19e-05  |
| 185 | 45 | 0.04      | -6.07e-03 | -0.25 | 1.39e-05  | 1.07e-04  | -1.39e-05 |
| 185 | 60 | 9.17e-03  | -0.03     | -0.25 | 4.30e-05  | 2.96e-05  | 1.62e-05  |
| 186 | 1  | 3.79e-04  | -9.63e-06 | -0.36 | 0.0       | -5.03e-06 | 1.01e-06  |
| 186 | 2  | 3.65e-04  | -6.85e-06 | -0.26 | 0.0       | -2.94e-06 | 1.03e-06  |
| 186 | 10 | -0.08     | 0.01      | -0.29 | -2.83e-05 | -2.33e-04 | 2.61e-05  |
| 186 | 13 | 0.08      | -0.01     | -0.23 | 2.86e-05  | 2.27e-04  | -3.45e-05 |
| 186 | 28 | 0.02      | -0.06     | -0.24 | 8.94e-05  | 6.51e-05  | 3.11e-05  |
| 186 | 42 | -0.04     | 6.63e-03  | -0.27 | -1.35e-05 | -1.14e-04 | 1.31e-05  |
| 186 | 45 | 0.04      | -6.07e-03 | -0.25 | 1.38e-05  | 1.08e-04  | -1.60e-05 |
| 186 | 60 | 9.95e-03  | -0.03     | -0.25 | 4.29e-05  | 2.98e-05  | 1.54e-05  |
| 187 | 1  | 4.17e-04  | -4.90e-06 | -0.36 | 0.0       | -5.46e-06 | 0.0       |
| 187 | 2  | 4.04e-04  | -3.49e-06 | -0.26 | 0.0       | -3.15e-06 | 0.0       |
| 187 | 10 | -0.08     | 0.01      | -0.29 | -2.84e-05 | -2.35e-04 | 2.90e-05  |
| 187 | 13 | 0.08      | -0.01     | -0.23 | 2.85e-05  | 2.28e-04  | -3.84e-05 |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 187 | 28 | 0.02      | -0.06     | -0.25 | 8.93e-05  | 6.57e-05  | 2.98e-05  |
| 187 | 42 | -0.04     | 6.63e-03  | -0.27 | -1.36e-05 | -1.15e-04 | 1.43e-05  |
| 187 | 45 | 0.04      | -6.07e-03 | -0.25 | 1.37e-05  | 1.08e-04  | -1.82e-05 |
| 187 | 60 | 0.01      | -0.03     | -0.25 | 4.28e-05  | 3.00e-05  | 1.46e-05  |
| 188 | 1  | 4.30e-04  | 0.0       | -0.36 | 0.0       | -5.59e-06 | 0.0       |
| 188 | 2  | 4.17e-04  | 0.0       | -0.26 | 0.0       | -3.21e-06 | 0.0       |
| 188 | 5  | -0.08     | -0.02     | -0.29 | 2.52e-05  | -2.34e-04 | 3.17e-05  |
| 188 | 15 | 0.08      | 0.01      | -0.23 | -2.84e-05 | 2.28e-04  | 4.23e-05  |
| 188 | 28 | 0.02      | -0.06     | -0.25 | 8.92e-05  | 6.61e-05  | 2.84e-05  |
| 188 | 37 | -0.04     | -9.88e-03 | -0.27 | 1.20e-05  | -1.14e-04 | 1.53e-05  |
| 188 | 47 | 0.04      | 6.06e-03  | -0.25 | -1.36e-05 | 1.08e-04  | 2.03e-05  |
| 188 | 60 | 0.01      | -0.03     | -0.26 | 4.27e-05  | 3.01e-05  | 1.36e-05  |
| 189 | 1  | 4.17e-04  | 4.90e-06  | -0.36 | 0.0       | -5.46e-06 | 0.0       |
| 189 | 2  | 4.04e-04  | 3.49e-06  | -0.26 | 0.0       | -3.15e-06 | 0.0       |
| 189 | 4  | -0.08     | -0.01     | -0.29 | 2.84e-05  | -2.35e-04 | -2.90e-05 |
| 189 | 15 | 0.08      | 0.01      | -0.23 | -2.85e-05 | 2.28e-04  | 3.84e-05  |
| 189 | 34 | 0.02      | 0.06      | -0.25 | -8.93e-05 | 6.57e-05  | -2.98e-05 |
| 189 | 36 | -0.04     | -6.63e-03 | -0.27 | 1.36e-05  | -1.15e-04 | -1.43e-05 |
| 189 | 47 | 0.04      | 6.07e-03  | -0.25 | -1.37e-05 | 1.08e-04  | 1.82e-05  |
| 189 | 66 | 0.01      | 0.03      | -0.25 | -4.28e-05 | 3.00e-05  | -1.46e-05 |
| 190 | 1  | 3.79e-04  | 9.63e-06  | -0.36 | 0.0       | -5.03e-06 | -1.01e-06 |
| 190 | 2  | 3.65e-04  | 6.85e-06  | -0.26 | 0.0       | -2.94e-06 | -1.03e-06 |
| 190 | 4  | -0.08     | -0.01     | -0.29 | 2.83e-05  | -2.33e-04 | -2.61e-05 |
| 190 | 15 | 0.08      | 0.01      | -0.23 | -2.86e-05 | 2.27e-04  | 3.45e-05  |
| 190 | 34 | 0.02      | 0.06      | -0.24 | -8.94e-05 | 6.51e-05  | -3.11e-05 |
| 190 | 36 | -0.04     | -6.63e-03 | -0.27 | 1.35e-05  | -1.14e-04 | -1.31e-05 |
| 190 | 47 | 0.04      | 6.07e-03  | -0.25 | -1.38e-05 | 1.08e-04  | 1.60e-05  |
| 190 | 66 | 9.95e-03  | 0.03      | -0.25 | -4.29e-05 | 2.98e-05  | -1.54e-05 |
| 191 | 1  | 3.18e-04  | 1.38e-05  | -0.36 | 0.0       | -4.23e-06 | -1.45e-06 |
| 191 | 2  | 3.03e-04  | 9.79e-06  | -0.26 | 0.0       | -2.51e-06 | -1.47e-06 |
| 191 | 4  | -0.08     | -0.01     | -0.29 | 2.83e-05  | -2.30e-04 | -2.32e-05 |
| 191 | 15 | 0.08      | 0.01      | -0.23 | -2.87e-05 | 2.25e-04  | 3.06e-05  |
| 191 | 34 | 0.02      | 0.06      | -0.24 | -8.95e-05 | 6.42e-05  | -3.21e-05 |
| 191 | 36 | -0.04     | -6.63e-03 | -0.28 | 1.34e-05  | -1.12e-04 | -1.19e-05 |
| 191 | 47 | 0.04      | 6.07e-03  | -0.25 | -1.39e-05 | 1.07e-04  | 1.39e-05  |
| 191 | 66 | 9.17e-03  | 0.03      | -0.25 | -4.30e-05 | 2.96e-05  | -1.62e-05 |
| 192 | 1  | 2.38e-04  | 1.67e-05  | -0.36 | 0.0       | -3.08e-06 | -1.75e-06 |
| 192 | 2  | 2.21e-04  | 1.19e-05  | -0.26 | 0.0       | -1.86e-06 | -1.77e-06 |
| 192 | 4  | -0.08     | -0.01     | -0.29 | 2.82e-05  | -2.25e-04 | -2.06e-05 |
| 192 | 15 | 0.08      | 0.01      | -0.23 | -2.88e-05 | 2.21e-04  | 2.73e-05  |
| 192 | 34 | 0.02      | 0.06      | -0.24 | -8.96e-05 | 6.33e-05  | -3.28e-05 |
| 192 | 36 | -0.04     | -6.63e-03 | -0.28 | 1.33e-05  | -1.09e-04 | -1.08e-05 |
| 192 | 47 | 0.04      | 6.08e-03  | -0.25 | -1.40e-05 | 1.06e-04  | 1.22e-05  |
| 192 | 66 | 8.35e-03  | 0.03      | -0.25 | -4.31e-05 | 2.95e-05  | -1.66e-05 |
| 193 | 1  | 1.45e-04  | 1.82e-05  | -0.36 | 0.0       | -1.86e-06 | -2.05e-06 |
| 193 | 2  | 1.28e-04  | 1.30e-05  | -0.26 | 0.0       | -1.16e-06 | -1.99e-06 |
| 193 | 4  | -0.08     | -0.01     | -0.29 | 2.81e-05  | -2.20e-04 | -1.94e-05 |
| 193 | 15 | 0.08      | 0.01      | -0.23 | -2.91e-05 | 2.18e-04  | 2.57e-05  |
| 193 | 34 | 0.02      | 0.06      | -0.23 | -8.99e-05 | 6.26e-05  | -3.27e-05 |
| 193 | 36 | -0.04     | -6.63e-03 | -0.28 | 1.31e-05  | -1.07e-04 | -1.04e-05 |
| 193 | 47 | 0.04      | 6.08e-03  | -0.24 | -1.43e-05 | 1.04e-04  | 1.13e-05  |
| 193 | 66 | 7.53e-03  | 0.03      | -0.25 | -4.33e-05 | 2.95e-05  | -1.67e-05 |
| 194 | 1  | -1.51e-05 | -1.92e-05 | -0.36 | 1.97e-06  | 0.0       | -3.10e-06 |
| 194 | 2  | -1.25e-05 | -1.36e-05 | -0.26 | 1.32e-06  | 0.0       | -2.59e-06 |
| 194 | 6  | -0.09     | -0.01     | -0.23 | 2.94e-05  | -2.15e-04 | 2.91e-05  |
| 194 | 19 | -0.01     | -0.06     | -0.23 | 9.05e-05  | -6.27e-05 | -3.16e-05 |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 194 | 33 | 0.02      | 0.06      | -0.30 | -8.88e-05 | 6.55e-05  | 6.80e-06  |
| 194 | 38 | -0.04     | -6.08e-03 | -0.24 | 1.48e-05  | -1.04e-04 | 1.26e-05  |
| 194 | 51 | -6.70e-03 | -0.03     | -0.24 | 4.40e-05  | -3.01e-05 | -1.65e-05 |
| 194 | 65 | 9.66e-03  | 0.03      | -0.28 | -4.18e-05 | 3.17e-05  | 1.88e-06  |
| 195 | 1  | -1.45e-04 | -1.82e-05 | -0.36 | 0.0       | 1.86e-06  | -2.05e-06 |
| 195 | 2  | -1.28e-04 | -1.30e-05 | -0.26 | 0.0       | 1.16e-06  | -1.99e-06 |
| 195 | 6  | -0.08     | -0.01     | -0.23 | 2.91e-05  | -2.18e-04 | 2.57e-05  |
| 195 | 17 | 0.08      | 0.01      | -0.29 | -2.81e-05 | 2.20e-04  | -1.94e-05 |
| 195 | 19 | -0.02     | -0.06     | -0.23 | 8.99e-05  | -6.26e-05 | -3.27e-05 |
| 195 | 38 | -0.04     | -6.08e-03 | -0.24 | 1.43e-05  | -1.04e-04 | 1.13e-05  |
| 195 | 49 | 0.04      | 6.63e-03  | -0.28 | -1.31e-05 | 1.07e-04  | -1.04e-05 |
| 195 | 51 | -7.53e-03 | -0.03     | -0.25 | 4.33e-05  | -2.95e-05 | -1.67e-05 |
| 196 | 1  | -2.38e-04 | -1.67e-05 | -0.36 | 0.0       | 3.08e-06  | -1.75e-06 |
| 196 | 2  | -2.21e-04 | -1.19e-05 | -0.26 | 0.0       | 1.86e-06  | -1.77e-06 |
| 196 | 6  | -0.08     | -0.01     | -0.23 | 2.88e-05  | -2.21e-04 | 2.73e-05  |
| 196 | 17 | 0.08      | 0.01      | -0.29 | -2.82e-05 | 2.25e-04  | -2.06e-05 |
| 196 | 19 | -0.02     | -0.06     | -0.24 | 8.96e-05  | -6.33e-05 | -3.28e-05 |
| 196 | 38 | -0.04     | -6.08e-03 | -0.25 | 1.40e-05  | -1.06e-04 | 1.22e-05  |
| 196 | 49 | 0.04      | 6.63e-03  | -0.28 | -1.33e-05 | 1.09e-04  | -1.08e-05 |
| 196 | 51 | -8.35e-03 | -0.03     | -0.25 | 4.31e-05  | -2.95e-05 | -1.66e-05 |
| 197 | 1  | -3.18e-04 | -1.38e-05 | -0.36 | 0.0       | 4.23e-06  | -1.45e-06 |
| 197 | 2  | -3.03e-04 | -9.79e-06 | -0.26 | 0.0       | 2.51e-06  | -1.47e-06 |
| 197 | 6  | -0.08     | -0.01     | -0.23 | 2.87e-05  | -2.25e-04 | 3.06e-05  |
| 197 | 17 | 0.08      | 0.01      | -0.29 | -2.83e-05 | 2.30e-04  | -2.32e-05 |
| 197 | 19 | -0.02     | -0.06     | -0.24 | 8.95e-05  | -6.42e-05 | -3.21e-05 |
| 197 | 38 | -0.04     | -6.07e-03 | -0.25 | 1.39e-05  | -1.07e-04 | 1.39e-05  |
| 197 | 49 | 0.04      | 6.63e-03  | -0.28 | -1.34e-05 | 1.12e-04  | -1.19e-05 |
| 197 | 51 | -9.17e-03 | -0.03     | -0.25 | 4.30e-05  | -2.96e-05 | -1.62e-05 |
| 198 | 1  | -3.79e-04 | -9.63e-06 | -0.36 | 0.0       | 5.03e-06  | -1.01e-06 |
| 198 | 2  | -3.65e-04 | -6.85e-06 | -0.26 | 0.0       | 2.94e-06  | -1.03e-06 |
| 198 | 6  | -0.08     | -0.01     | -0.23 | 2.86e-05  | -2.27e-04 | 3.45e-05  |
| 198 | 17 | 0.08      | 0.01      | -0.29 | -2.83e-05 | 2.33e-04  | -2.61e-05 |
| 198 | 19 | -0.02     | -0.06     | -0.24 | 8.94e-05  | -6.51e-05 | -3.11e-05 |
| 198 | 38 | -0.04     | -6.07e-03 | -0.25 | 1.38e-05  | -1.08e-04 | 1.60e-05  |
| 198 | 49 | 0.04      | 6.63e-03  | -0.27 | -1.35e-05 | 1.14e-04  | -1.31e-05 |
| 198 | 51 | -9.95e-03 | -0.03     | -0.25 | 4.29e-05  | -2.98e-05 | -1.54e-05 |
| 199 | 1  | -4.17e-04 | -4.90e-06 | -0.36 | 0.0       | 5.46e-06  | 0.0       |
| 199 | 2  | -4.04e-04 | -3.49e-06 | -0.26 | 0.0       | 3.15e-06  | 0.0       |
| 199 | 6  | -0.08     | -0.01     | -0.23 | 2.85e-05  | -2.28e-04 | 3.84e-05  |
| 199 | 17 | 0.08      | 0.01      | -0.29 | -2.84e-05 | 2.35e-04  | -2.90e-05 |
| 199 | 19 | -0.02     | -0.06     | -0.25 | 8.93e-05  | -6.57e-05 | -2.98e-05 |
| 199 | 38 | -0.04     | -6.07e-03 | -0.25 | 1.37e-05  | -1.08e-04 | 1.82e-05  |
| 199 | 49 | 0.04      | 6.63e-03  | -0.27 | -1.36e-05 | 1.15e-04  | -1.43e-05 |
| 199 | 51 | -0.01     | -0.03     | -0.25 | 4.28e-05  | -3.00e-05 | -1.46e-05 |
| 200 | 1  | -4.30e-04 | 0.0       | -0.36 | 0.0       | 5.59e-06  | 0.0       |
| 200 | 2  | -4.17e-04 | 0.0       | -0.26 | 0.0       | 3.21e-06  | 0.0       |
| 200 | 3  | -0.08     | -0.02     | -0.23 | 2.53e-05  | -2.28e-04 | -4.22e-05 |
| 200 | 13 | 0.08      | -0.02     | -0.29 | 2.53e-05  | 2.34e-04  | -4.22e-05 |
| 200 | 19 | -0.02     | -0.06     | -0.25 | 8.92e-05  | -6.61e-05 | -2.84e-05 |
| 200 | 35 | -0.04     | -0.01     | -0.25 | 1.21e-05  | -1.08e-04 | -2.03e-05 |
| 200 | 45 | 0.04      | -0.01     | -0.27 | 1.21e-05  | 1.14e-04  | -2.03e-05 |
| 200 | 51 | -0.01     | -0.03     | -0.26 | 4.27e-05  | -3.01e-05 | -1.36e-05 |
| 201 | 1  | -4.17e-04 | 4.90e-06  | -0.36 | 0.0       | 5.46e-06  | 0.0       |
| 201 | 2  | -4.04e-04 | 3.49e-06  | -0.26 | 0.0       | 3.15e-06  | 0.0       |
| 201 | 8  | -0.08     | 0.01      | -0.23 | -2.85e-05 | -2.28e-04 | -3.84e-05 |
| 201 | 11 | 0.08      | -0.01     | -0.29 | 2.84e-05  | 2.35e-04  | 2.90e-05  |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 201 | 25 | -0.02     | 0.06      | -0.25 | -8.93e-05 | -6.57e-05 | 2.98e-05  |
| 201 | 40 | -0.04     | 6.07e-03  | -0.25 | -1.37e-05 | -1.08e-04 | -1.82e-05 |
| 201 | 43 | 0.04      | -6.63e-03 | -0.27 | 1.36e-05  | 1.15e-04  | 1.43e-05  |
| 201 | 57 | -0.01     | 0.03      | -0.25 | -4.28e-05 | -3.00e-05 | 1.46e-05  |
| 202 | 1  | 1.95e-05  | 3.50e-05  | -0.36 | 0.0       | 0.0       | 1.29e-06  |
| 202 | 2  | 1.32e-05  | 1.03e-05  | -0.26 | 0.0       | 0.0       | 1.29e-06  |
| 202 | 12 | 0.11      | -0.02     | -0.29 | 2.89e-05  | 0.0       | 3.49e-05  |
| 202 | 27 | 0.03      | -0.07     | -0.29 | 9.02e-05  | 0.0       | -7.83e-06 |
| 202 | 31 | 0.04      | 0.07      | -0.24 | -8.97e-05 | 0.0       | 2.74e-05  |
| 202 | 44 | 0.05      | -7.81e-03 | -0.27 | 1.36e-05  | 0.0       | 1.74e-05  |
| 202 | 59 | 0.01      | -0.03     | -0.28 | 4.29e-05  | 0.0       | -3.05e-06 |
| 202 | 63 | 0.02      | 0.03      | -0.25 | -4.32e-05 | 0.0       | 1.38e-05  |
| 203 | 1  | 0.0       | -7.45e-05 | -0.36 | 0.0       | 0.0       | 3.76e-06  |
| 203 | 2  | 0.0       | -6.13e-05 | -0.26 | 0.0       | 0.0       | 2.90e-06  |
| 203 | 8  | -0.09     | 0.01      | -0.23 | -2.58e-05 | -2.14e-04 | -3.34e-05 |
| 203 | 19 | -0.03     | -0.06     | -0.28 | 8.93e-05  | -6.33e-05 | -2.38e-05 |
| 203 | 27 | 0.02      | -0.06     | -0.29 | 8.85e-05  | 6.54e-05  | -5.19e-06 |
| 203 | 40 | -0.04     | 6.46e-03  | -0.25 | -1.25e-05 | -1.03e-04 | -1.46e-05 |
| 203 | 51 | -0.01     | -0.03     | -0.27 | 4.25e-05  | -3.04e-05 | -9.90e-06 |
| 203 | 59 | 9.65e-03  | -0.03     | -0.28 | 4.22e-05  | 3.16e-05  | 0.0       |
| 204 | 1  | -1.95e-05 | 3.50e-05  | -0.36 | 0.0       | 0.0       | -1.29e-06 |
| 204 | 2  | -1.32e-05 | 1.03e-05  | -0.26 | 0.0       | 0.0       | -1.29e-06 |
| 204 | 3  | -0.11     | -0.02     | -0.29 | 2.89e-05  | 0.0       | -3.49e-05 |
| 204 | 20 | -0.03     | -0.07     | -0.29 | 9.02e-05  | 0.0       | 7.83e-06  |
| 204 | 24 | -0.04     | 0.07      | -0.24 | -8.97e-05 | 0.0       | -2.74e-05 |
| 204 | 35 | -0.05     | -7.81e-03 | -0.27 | 1.36e-05  | 0.0       | -1.74e-05 |
| 204 | 52 | -0.01     | -0.03     | -0.28 | 4.29e-05  | 0.0       | 3.05e-06  |
| 204 | 56 | -0.02     | 0.03      | -0.25 | -4.32e-05 | 0.0       | -1.38e-05 |
| 205 | 1  | 0.0       | -7.45e-05 | -0.36 | 0.0       | 0.0       | -3.76e-06 |
| 205 | 2  | 0.0       | -6.13e-05 | -0.26 | 0.0       | 0.0       | -2.90e-06 |
| 205 | 15 | 0.09      | 0.01      | -0.23 | -2.58e-05 | 2.14e-04  | 3.34e-05  |
| 205 | 20 | -0.02     | -0.06     | -0.29 | 8.85e-05  | -6.54e-05 | 5.19e-06  |
| 205 | 28 | 0.03      | -0.06     | -0.28 | 8.93e-05  | 6.33e-05  | 2.38e-05  |
| 205 | 47 | 0.04      | 6.46e-03  | -0.25 | -1.25e-05 | 1.03e-04  | 1.46e-05  |
| 205 | 52 | -9.65e-03 | -0.03     | -0.28 | 4.22e-05  | -3.16e-05 | 0.0       |
| 205 | 60 | 0.01      | -0.03     | -0.27 | 4.25e-05  | 3.04e-05  | 9.90e-06  |
| 206 | 1  | 1.95e-05  | -3.50e-05 | -0.36 | 0.0       | 0.0       | -1.29e-06 |
| 206 | 2  | 1.32e-05  | -1.03e-05 | -0.26 | 0.0       | 0.0       | -1.29e-06 |
| 206 | 18 | 0.11      | 0.02      | -0.29 | -2.89e-05 | 0.0       | -3.49e-05 |
| 206 | 29 | 0.04      | -0.07     | -0.24 | 8.97e-05  | 0.0       | -2.74e-05 |
| 206 | 33 | 0.03      | 0.07      | -0.29 | -9.02e-05 | 0.0       | 7.83e-06  |
| 206 | 50 | 0.05      | 7.81e-03  | -0.27 | -1.36e-05 | 0.0       | -1.74e-05 |
| 206 | 61 | 0.02      | -0.03     | -0.25 | 4.32e-05  | 0.0       | -1.38e-05 |
| 206 | 65 | 0.01      | 0.03      | -0.28 | -4.29e-05 | 0.0       | 3.05e-06  |
| 207 | 1  | -1.95e-05 | -3.50e-05 | -0.36 | 0.0       | 0.0       | 1.29e-06  |
| 207 | 2  | -1.32e-05 | -1.03e-05 | -0.26 | 0.0       | 0.0       | 1.29e-06  |
| 207 | 9  | -0.11     | 0.02      | -0.29 | -2.89e-05 | 0.0       | 3.49e-05  |
| 207 | 22 | -0.04     | -0.07     | -0.24 | 8.97e-05  | 0.0       | 2.74e-05  |
| 207 | 26 | -0.03     | 0.07      | -0.29 | -9.02e-05 | 0.0       | -7.83e-06 |
| 207 | 41 | -0.05     | 7.81e-03  | -0.27 | -1.36e-05 | 0.0       | 1.74e-05  |
| 207 | 54 | -0.02     | -0.03     | -0.25 | 4.32e-05  | 0.0       | 1.38e-05  |
| 207 | 58 | -0.01     | 0.03      | -0.28 | -4.29e-05 | 0.0       | -3.05e-06 |
| 208 | 1  | 0.0       | 7.45e-05  | -0.36 | 0.0       | 0.0       | 3.76e-06  |
| 208 | 2  | 0.0       | 6.13e-05  | -0.26 | 0.0       | 0.0       | 2.90e-06  |
| 208 | 13 | 0.09      | -0.01     | -0.23 | 2.58e-05  | 2.14e-04  | -3.34e-05 |
| 208 | 26 | -0.02     | 0.06      | -0.29 | -8.85e-05 | -6.54e-05 | -5.19e-06 |

|     |    |           |           |       |           |           |           |
|-----|----|-----------|-----------|-------|-----------|-----------|-----------|
| 208 | 34 | 0.03      | 0.06      | -0.28 | -8.93e-05 | 6.33e-05  | -2.38e-05 |
| 208 | 45 | 0.04      | -6.46e-03 | -0.25 | 1.25e-05  | 1.03e-04  | -1.46e-05 |
| 208 | 58 | -9.65e-03 | 0.03      | -0.28 | -4.22e-05 | -3.16e-05 | 0.0       |
| 208 | 66 | 0.01      | 0.03      | -0.27 | -4.25e-05 | 3.04e-05  | -9.90e-06 |
| 209 | 1  | 0.0       | 7.45e-05  | -0.36 | 0.0       | 0.0       | -3.76e-06 |
| 209 | 2  | 0.0       | 6.13e-05  | -0.26 | 0.0       | 0.0       | -2.90e-06 |
| 209 | 6  | -0.09     | -0.01     | -0.23 | 2.58e-05  | -2.14e-04 | 3.34e-05  |
| 209 | 25 | -0.03     | 0.06      | -0.28 | -8.93e-05 | -6.33e-05 | 2.38e-05  |
| 209 | 33 | 0.02      | 0.06      | -0.29 | -8.85e-05 | 6.54e-05  | 5.19e-06  |
| 209 | 38 | -0.04     | -6.46e-03 | -0.25 | 1.25e-05  | -1.03e-04 | 1.46e-05  |
| 209 | 57 | -0.01     | 0.03      | -0.27 | -4.25e-05 | -3.04e-05 | 9.90e-06  |
| 209 | 65 | 9.65e-03  | 0.03      | -0.28 | -4.22e-05 | 3.16e-05  | 0.0       |
| 210 | 1  | -1.83e-05 | 6.18e-05  | -0.36 | 0.0       | 0.0       | 0.0       |
| 210 | 2  | -9.67e-06 | 4.25e-05  | -0.26 | 0.0       | 0.0       | -1.04e-06 |
| 210 | 3  | -0.11     | -0.02     | -0.30 | 0.0       | -2.15e-04 | -2.86e-05 |
| 210 | 20 | -0.03     | -0.07     | -0.30 | 0.0       | -6.54e-05 | 9.61e-06  |
| 210 | 34 | 0.02      | 0.07      | -0.23 | 0.0       | 6.26e-05  | -3.12e-05 |
| 210 | 35 | -0.05     | -7.37e-03 | -0.28 | 0.0       | -1.03e-04 | -1.43e-05 |
| 210 | 52 | -0.01     | -0.03     | -0.28 | 0.0       | -3.16e-05 | 4.04e-06  |
| 210 | 66 | 9.66e-03  | 0.03      | -0.24 | 0.0       | 3.00e-05  | -1.55e-05 |
| 211 | 1  | 1.51e-05  | 1.92e-05  | -0.36 | -1.97e-06 | 0.0       | -3.10e-06 |
| 211 | 2  | 1.25e-05  | 1.36e-05  | -0.26 | -1.32e-06 | 0.0       | -2.59e-06 |
| 211 | 15 | 0.09      | 0.01      | -0.23 | -2.94e-05 | 2.15e-04  | 2.91e-05  |
| 211 | 20 | -0.02     | -0.06     | -0.30 | 8.88e-05  | -6.55e-05 | 6.80e-06  |
| 211 | 34 | 0.01      | 0.06      | -0.23 | -9.05e-05 | 6.27e-05  | -3.16e-05 |
| 211 | 47 | 0.04      | 6.08e-03  | -0.24 | -1.48e-05 | 1.04e-04  | 1.26e-05  |
| 211 | 52 | -9.66e-03 | -0.03     | -0.28 | 4.18e-05  | -3.17e-05 | 1.88e-06  |
| 211 | 66 | 6.70e-03  | 0.03      | -0.24 | -4.40e-05 | 3.01e-05  | -1.65e-05 |
| 212 | 1  | -2.19e-04 | -5.68e-05 | -0.35 | -3.25e-05 | 2.23e-04  | 0.0       |
| 212 | 2  | -1.53e-04 | -4.21e-05 | -0.25 | -2.35e-05 | 1.55e-04  | 0.0       |
| 212 | 3  | -0.06     | -7.13e-03 | -0.29 | 5.11e-06  | -2.22e-05 | 0.0       |
| 212 | 4  | -0.06     | -8.81e-03 | -0.29 | 5.20e-06  | -2.22e-05 | 0.0       |
| 212 | 28 | 0.02      | -0.05     | -0.27 | 6.17e-05  | 2.29e-04  | 0.0       |
| 212 | 35 | -0.03     | -3.42e-03 | -0.27 | -9.78e-06 | 6.99e-05  | 0.0       |
| 212 | 36 | -0.03     | -4.23e-03 | -0.27 | -9.74e-06 | 6.98e-05  | 0.0       |
| 212 | 60 | 0.01      | -0.02     | -0.26 | 1.73e-05  | 1.91e-04  | 0.0       |
| 213 | 1  | -2.19e-04 | 5.68e-05  | -0.35 | 3.25e-05  | 2.23e-04  | 0.0       |
| 213 | 2  | -1.53e-04 | 4.21e-05  | -0.25 | 2.35e-05  | 1.55e-04  | 0.0       |
| 213 | 9  | -0.06     | 7.13e-03  | -0.29 | -5.11e-06 | -2.22e-05 | 0.0       |
| 213 | 10 | -0.06     | 8.81e-03  | -0.29 | -5.20e-06 | -2.22e-05 | 0.0       |
| 213 | 34 | 0.02      | 0.05      | -0.27 | -6.17e-05 | 2.29e-04  | 0.0       |
| 213 | 41 | -0.03     | 3.42e-03  | -0.27 | 9.78e-06  | 6.99e-05  | 0.0       |
| 213 | 42 | -0.03     | 4.23e-03  | -0.27 | 9.74e-06  | 6.98e-05  | 0.0       |
| 213 | 66 | 0.01      | 0.02      | -0.26 | -1.73e-05 | 1.91e-04  | 0.0       |
| 214 | 1  | -1.92e-04 | -4.91e-05 | -0.35 | -2.83e-05 | 2.10e-04  | 0.0       |
| 214 | 2  | -1.34e-04 | -3.68e-05 | -0.25 | -2.05e-05 | 1.46e-04  | 0.0       |
| 214 | 3  | -0.06     | -7.13e-03 | -0.29 | 7.14e-06  | -2.96e-05 | 0.0       |
| 214 | 4  | -0.06     | -8.80e-03 | -0.29 | 7.21e-06  | -2.97e-05 | 0.0       |
| 214 | 28 | 0.02      | -0.05     | -0.27 | 6.42e-05  | 2.19e-04  | 0.0       |
| 214 | 35 | -0.03     | -3.42e-03 | -0.27 | -7.25e-06 | 6.12e-05  | 0.0       |
| 214 | 36 | -0.03     | -4.22e-03 | -0.27 | -7.22e-06 | 6.12e-05  | 0.0       |
| 214 | 60 | 0.01      | -0.02     | -0.26 | 2.00e-05  | 1.81e-04  | 0.0       |
| 215 | 1  | -1.46e-04 | -2.57e-05 | -0.35 | -2.19e-05 | 1.99e-04  | 0.0       |
| 215 | 2  | -1.02e-04 | -2.02e-05 | -0.25 | -1.59e-05 | 1.38e-04  | 0.0       |
| 215 | 3  | -0.06     | -7.11e-03 | -0.29 | 1.30e-05  | -4.08e-05 | 0.0       |
| 215 | 4  | -0.05     | -8.79e-03 | -0.29 | 1.30e-05  | -4.08e-05 | 0.0       |

|     |    |           |           |       |           |           |     |
|-----|----|-----------|-----------|-------|-----------|-----------|-----|
| 215 | 28 | 0.02      | -0.05     | -0.26 | 6.89e-05  | 2.08e-04  | 0.0 |
| 215 | 35 | -0.03     | -3.40e-03 | -0.27 | -2.10e-06 | 5.17e-05  | 0.0 |
| 215 | 36 | -0.03     | -4.21e-03 | -0.27 | -2.07e-06 | 5.17e-05  | 0.0 |
| 215 | 60 | 9.93e-03  | -0.02     | -0.26 | 2.47e-05  | 1.72e-04  | 0.0 |
| 216 | 1  | -8.84e-05 | -1.65e-05 | -0.35 | -1.51e-05 | 1.85e-04  | 0.0 |
| 216 | 2  | -6.18e-05 | -1.34e-05 | -0.25 | -1.11e-05 | 1.28e-04  | 0.0 |
| 216 | 3  | -0.05     | -7.11e-03 | -0.29 | 1.86e-05  | -5.38e-05 | 0.0 |
| 216 | 4  | -0.05     | -8.78e-03 | -0.29 | 1.87e-05  | -5.39e-05 | 0.0 |
| 216 | 28 | 0.02      | -0.05     | -0.26 | 7.37e-05  | 1.96e-04  | 0.0 |
| 216 | 35 | -0.03     | -3.40e-03 | -0.27 | 3.13e-06  | 4.02e-05  | 0.0 |
| 216 | 36 | -0.03     | -4.20e-03 | -0.27 | 3.18e-06  | 4.02e-05  | 0.0 |
| 216 | 60 | 9.32e-03  | -0.02     | -0.26 | 2.95e-05  | 1.60e-04  | 0.0 |
| 217 | 1  | -3.68e-05 | -1.15e-05 | -0.35 | -1.01e-05 | 1.75e-04  | 0.0 |
| 217 | 2  | -2.57e-05 | -9.55e-06 | -0.25 | -7.41e-06 | 1.20e-04  | 0.0 |
| 217 | 3  | -0.05     | -7.11e-03 | -0.29 | 2.18e-05  | -6.29e-05 | 0.0 |
| 217 | 4  | -0.05     | -8.79e-03 | -0.29 | 2.20e-05  | -6.30e-05 | 0.0 |
| 217 | 28 | 0.02      | -0.05     | -0.25 | 7.72e-05  | 1.85e-04  | 0.0 |
| 217 | 35 | -0.03     | -3.40e-03 | -0.27 | 6.60e-06  | 3.20e-05  | 0.0 |
| 217 | 36 | -0.02     | -4.20e-03 | -0.27 | 6.65e-06  | 3.20e-05  | 0.0 |
| 217 | 60 | 8.71e-03  | -0.02     | -0.25 | 3.31e-05  | 1.52e-04  | 0.0 |
| 218 | 1  | 0.0       | -7.65e-06 | -0.35 | -6.14e-06 | 1.68e-04  | 0.0 |
| 218 | 2  | 0.0       | -6.41e-06 | -0.25 | -4.52e-06 | 1.16e-04  | 0.0 |
| 218 | 4  | -0.05     | -8.80e-03 | -0.29 | 2.43e-05  | -6.86e-05 | 0.0 |
| 218 | 15 | 0.05      | 7.11e-03  | -0.22 | -3.32e-05 | 3.00e-04  | 0.0 |
| 218 | 28 | 0.02      | -0.05     | -0.25 | 8.02e-05  | 1.78e-04  | 0.0 |
| 218 | 36 | -0.02     | -4.20e-03 | -0.27 | 9.28e-06  | 2.69e-05  | 0.0 |
| 218 | 47 | 0.02      | 3.39e-03  | -0.23 | -1.83e-05 | 2.04e-04  | 0.0 |
| 218 | 60 | 8.09e-03  | -0.02     | -0.25 | 3.60e-05  | 1.45e-04  | 0.0 |
| 219 | 1  | 2.30e-05  | -3.91e-06 | -0.35 | -2.89e-06 | 1.65e-04  | 0.0 |
| 219 | 2  | 1.61e-05  | -3.27e-06 | -0.25 | -2.13e-06 | 1.13e-04  | 0.0 |
| 219 | 4  | -0.05     | -8.80e-03 | -0.29 | 2.61e-05  | -7.18e-05 | 0.0 |
| 219 | 15 | 0.05      | 7.12e-03  | -0.22 | -3.02e-05 | 2.98e-04  | 0.0 |
| 219 | 28 | 0.02      | -0.05     | -0.25 | 8.27e-05  | 1.72e-04  | 0.0 |
| 219 | 36 | -0.02     | -4.20e-03 | -0.27 | 1.14e-05  | 2.40e-05  | 0.0 |
| 219 | 47 | 0.02      | 3.40e-03  | -0.24 | -1.56e-05 | 2.02e-04  | 0.0 |
| 219 | 60 | 7.45e-03  | -0.02     | -0.25 | 3.85e-05  | 1.41e-04  | 0.0 |
| 220 | 1  | 3.01e-05  | 0.0       | -0.35 | 0.0       | 1.64e-04  | 0.0 |
| 220 | 2  | 2.11e-05  | 0.0       | -0.25 | 0.0       | 1.12e-04  | 0.0 |
| 220 | 5  | -0.05     | -0.02     | -0.29 | 2.36e-05  | -7.31e-05 | 0.0 |
| 220 | 15 | 0.05      | 7.14e-03  | -0.22 | -2.74e-05 | 2.98e-04  | 0.0 |
| 220 | 28 | 0.01      | -0.05     | -0.24 | 8.50e-05  | 1.68e-04  | 0.0 |
| 220 | 37 | -0.02     | -9.06e-03 | -0.27 | 1.13e-05  | 2.30e-05  | 0.0 |
| 220 | 47 | 0.02      | 3.40e-03  | -0.24 | -1.31e-05 | 2.01e-04  | 0.0 |
| 220 | 60 | 6.81e-03  | -0.02     | -0.25 | 4.07e-05  | 1.39e-04  | 0.0 |
| 221 | 1  | 2.30e-05  | 3.91e-06  | -0.35 | 2.89e-06  | 1.65e-04  | 0.0 |
| 221 | 2  | 1.61e-05  | 3.27e-06  | -0.25 | 2.13e-06  | 1.13e-04  | 0.0 |
| 221 | 10 | -0.05     | 8.80e-03  | -0.29 | -2.61e-05 | -7.18e-05 | 0.0 |
| 221 | 13 | 0.05      | -7.12e-03 | -0.22 | 3.02e-05  | 2.98e-04  | 0.0 |
| 221 | 34 | 0.02      | 0.05      | -0.25 | -8.27e-05 | 1.72e-04  | 0.0 |
| 221 | 42 | -0.02     | 4.20e-03  | -0.27 | -1.14e-05 | 2.40e-05  | 0.0 |
| 221 | 45 | 0.02      | -3.40e-03 | -0.24 | 1.56e-05  | 2.02e-04  | 0.0 |
| 221 | 66 | 7.45e-03  | 0.02      | -0.25 | -3.85e-05 | 1.41e-04  | 0.0 |
| 222 | 1  | 0.0       | 7.65e-06  | -0.35 | 6.14e-06  | 1.68e-04  | 0.0 |
| 222 | 2  | 0.0       | 6.41e-06  | -0.25 | 4.52e-06  | 1.16e-04  | 0.0 |
| 222 | 10 | -0.05     | 8.80e-03  | -0.29 | -2.43e-05 | -6.86e-05 | 0.0 |
| 222 | 13 | 0.05      | -7.11e-03 | -0.22 | 3.32e-05  | 3.00e-04  | 0.0 |

|     |    |           |           |       |           |           |     |
|-----|----|-----------|-----------|-------|-----------|-----------|-----|
| 222 | 34 | 0.02      | 0.05      | -0.25 | -8.02e-05 | 1.78e-04  | 0.0 |
| 222 | 42 | -0.02     | 4.20e-03  | -0.27 | -9.28e-06 | 2.69e-05  | 0.0 |
| 222 | 45 | 0.02      | -3.39e-03 | -0.23 | 1.83e-05  | 2.04e-04  | 0.0 |
| 222 | 66 | 8.09e-03  | 0.02      | -0.25 | -3.60e-05 | 1.45e-04  | 0.0 |
| 223 | 1  | -3.68e-05 | 1.15e-05  | -0.35 | 1.01e-05  | 1.75e-04  | 0.0 |
| 223 | 2  | -2.57e-05 | 9.55e-06  | -0.25 | 7.41e-06  | 1.20e-04  | 0.0 |
| 223 | 9  | -0.05     | 7.11e-03  | -0.29 | -2.18e-05 | -6.29e-05 | 0.0 |
| 223 | 10 | -0.05     | 8.79e-03  | -0.29 | -2.20e-05 | -6.30e-05 | 0.0 |
| 223 | 34 | 0.02      | 0.05      | -0.25 | -7.72e-05 | 1.85e-04  | 0.0 |
| 223 | 41 | -0.03     | 3.40e-03  | -0.27 | -6.60e-06 | 3.20e-05  | 0.0 |
| 223 | 42 | -0.02     | 4.20e-03  | -0.27 | -6.65e-06 | 3.20e-05  | 0.0 |
| 223 | 66 | 8.71e-03  | 0.02      | -0.25 | -3.31e-05 | 1.52e-04  | 0.0 |
| 224 | 1  | -8.84e-05 | 1.65e-05  | -0.35 | 1.51e-05  | 1.85e-04  | 0.0 |
| 224 | 2  | -6.18e-05 | 1.34e-05  | -0.25 | 1.11e-05  | 1.28e-04  | 0.0 |
| 224 | 9  | -0.05     | 7.11e-03  | -0.29 | -1.86e-05 | -5.38e-05 | 0.0 |
| 224 | 10 | -0.05     | 8.78e-03  | -0.29 | -1.87e-05 | -5.39e-05 | 0.0 |
| 224 | 34 | 0.02      | 0.05      | -0.26 | -7.37e-05 | 1.96e-04  | 0.0 |
| 224 | 41 | -0.03     | 3.40e-03  | -0.27 | -3.13e-06 | 4.02e-05  | 0.0 |
| 224 | 42 | -0.03     | 4.20e-03  | -0.27 | -3.18e-06 | 4.02e-05  | 0.0 |
| 224 | 66 | 9.32e-03  | 0.02      | -0.26 | -2.95e-05 | 1.60e-04  | 0.0 |
| 225 | 1  | -1.46e-04 | 2.57e-05  | -0.35 | 2.19e-05  | 1.99e-04  | 0.0 |
| 225 | 2  | -1.02e-04 | 2.02e-05  | -0.25 | 1.59e-05  | 1.38e-04  | 0.0 |
| 225 | 9  | -0.06     | 7.11e-03  | -0.29 | -1.30e-05 | -4.08e-05 | 0.0 |
| 225 | 10 | -0.05     | 8.79e-03  | -0.29 | -1.30e-05 | -4.08e-05 | 0.0 |
| 225 | 34 | 0.02      | 0.05      | -0.26 | -6.89e-05 | 2.08e-04  | 0.0 |
| 225 | 41 | -0.03     | 3.40e-03  | -0.27 | 2.10e-06  | 5.17e-05  | 0.0 |
| 225 | 42 | -0.03     | 4.21e-03  | -0.27 | 2.07e-06  | 5.17e-05  | 0.0 |
| 225 | 66 | 9.93e-03  | 0.02      | -0.26 | -2.47e-05 | 1.72e-04  | 0.0 |
| 226 | 1  | -1.92e-04 | 4.91e-05  | -0.35 | 2.83e-05  | 2.10e-04  | 0.0 |
| 226 | 2  | -1.34e-04 | 3.68e-05  | -0.25 | 2.05e-05  | 1.46e-04  | 0.0 |
| 226 | 9  | -0.06     | 7.13e-03  | -0.29 | -7.14e-06 | -2.96e-05 | 0.0 |
| 226 | 10 | -0.06     | 8.80e-03  | -0.29 | -7.21e-06 | -2.97e-05 | 0.0 |
| 226 | 34 | 0.02      | 0.05      | -0.27 | -6.42e-05 | 2.19e-04  | 0.0 |
| 226 | 41 | -0.03     | 3.42e-03  | -0.27 | 7.25e-06  | 6.12e-05  | 0.0 |
| 226 | 42 | -0.03     | 4.22e-03  | -0.27 | 7.22e-06  | 6.12e-05  | 0.0 |
| 226 | 66 | 0.01      | 0.02      | -0.26 | -2.00e-05 | 1.81e-04  | 0.0 |
| 227 | 1  | 2.19e-04  | -5.68e-05 | -0.35 | -3.25e-05 | -2.23e-04 | 0.0 |
| 227 | 2  | 1.53e-04  | -4.21e-05 | -0.25 | -2.35e-05 | -1.55e-04 | 0.0 |
| 227 | 11 | 0.06      | -8.81e-03 | -0.29 | 5.20e-06  | 2.22e-05  | 0.0 |
| 227 | 12 | 0.06      | -7.13e-03 | -0.29 | 5.11e-06  | 2.22e-05  | 0.0 |
| 227 | 19 | -0.02     | -0.05     | -0.27 | 6.17e-05  | -2.29e-04 | 0.0 |
| 227 | 43 | 0.03      | -4.23e-03 | -0.27 | -9.74e-06 | -6.98e-05 | 0.0 |
| 227 | 44 | 0.03      | -3.42e-03 | -0.27 | -9.78e-06 | -6.99e-05 | 0.0 |
| 227 | 51 | -0.01     | -0.02     | -0.26 | 1.73e-05  | -1.91e-04 | 0.0 |
| 228 | 1  | 2.19e-04  | 5.68e-05  | -0.35 | 3.25e-05  | -2.23e-04 | 0.0 |
| 228 | 2  | 1.53e-04  | 4.21e-05  | -0.25 | 2.35e-05  | -1.55e-04 | 0.0 |
| 228 | 17 | 0.06      | 8.81e-03  | -0.29 | -5.20e-06 | 2.22e-05  | 0.0 |
| 228 | 18 | 0.06      | 7.13e-03  | -0.29 | -5.11e-06 | 2.22e-05  | 0.0 |
| 228 | 25 | -0.02     | 0.05      | -0.27 | -6.17e-05 | -2.29e-04 | 0.0 |
| 228 | 49 | 0.03      | 4.23e-03  | -0.27 | 9.74e-06  | -6.98e-05 | 0.0 |
| 228 | 50 | 0.03      | 3.42e-03  | -0.27 | 9.78e-06  | -6.99e-05 | 0.0 |
| 228 | 57 | -0.01     | 0.02      | -0.26 | -1.73e-05 | -1.91e-04 | 0.0 |
| 229 | 1  | 1.92e-04  | -4.91e-05 | -0.35 | -2.83e-05 | -2.10e-04 | 0.0 |
| 229 | 2  | 1.34e-04  | -3.68e-05 | -0.25 | -2.05e-05 | -1.46e-04 | 0.0 |
| 229 | 11 | 0.06      | -8.80e-03 | -0.29 | 7.21e-06  | 2.97e-05  | 0.0 |
| 229 | 12 | 0.06      | -7.13e-03 | -0.29 | 7.14e-06  | 2.96e-05  | 0.0 |

|     |    |           |           |       |           |           |     |
|-----|----|-----------|-----------|-------|-----------|-----------|-----|
| 229 | 19 | -0.02     | -0.05     | -0.27 | 6.42e-05  | -2.19e-04 | 0.0 |
| 229 | 43 | 0.03      | -4.22e-03 | -0.27 | -7.22e-06 | -6.12e-05 | 0.0 |
| 229 | 44 | 0.03      | -3.42e-03 | -0.27 | -7.25e-06 | -6.12e-05 | 0.0 |
| 229 | 51 | -0.01     | -0.02     | -0.26 | 2.00e-05  | -1.81e-04 | 0.0 |
| 230 | 1  | 1.46e-04  | -2.57e-05 | -0.35 | -2.19e-05 | -1.99e-04 | 0.0 |
| 230 | 2  | 1.02e-04  | -2.02e-05 | -0.25 | -1.59e-05 | -1.38e-04 | 0.0 |
| 230 | 11 | 0.05      | -8.79e-03 | -0.29 | 1.30e-05  | 4.08e-05  | 0.0 |
| 230 | 12 | 0.06      | -7.11e-03 | -0.29 | 1.30e-05  | 4.08e-05  | 0.0 |
| 230 | 19 | -0.02     | -0.05     | -0.26 | 6.89e-05  | -2.08e-04 | 0.0 |
| 230 | 43 | 0.03      | -4.21e-03 | -0.27 | -2.07e-06 | -5.17e-05 | 0.0 |
| 230 | 44 | 0.03      | -3.40e-03 | -0.27 | -2.10e-06 | -5.17e-05 | 0.0 |
| 230 | 51 | -9.93e-03 | -0.02     | -0.26 | 2.47e-05  | -1.72e-04 | 0.0 |
| 231 | 1  | 8.84e-05  | -1.65e-05 | -0.35 | -1.51e-05 | -1.85e-04 | 0.0 |
| 231 | 2  | 6.18e-05  | -1.34e-05 | -0.25 | -1.11e-05 | -1.28e-04 | 0.0 |
| 231 | 11 | 0.05      | -8.78e-03 | -0.29 | 1.87e-05  | 5.39e-05  | 0.0 |
| 231 | 12 | 0.05      | -7.11e-03 | -0.29 | 1.86e-05  | 5.38e-05  | 0.0 |
| 231 | 19 | -0.02     | -0.05     | -0.26 | 7.37e-05  | -1.96e-04 | 0.0 |
| 231 | 43 | 0.03      | -4.20e-03 | -0.27 | 3.18e-06  | -4.02e-05 | 0.0 |
| 231 | 44 | 0.03      | -3.40e-03 | -0.27 | 3.13e-06  | -4.02e-05 | 0.0 |
| 231 | 51 | -9.32e-03 | -0.02     | -0.26 | 2.95e-05  | -1.60e-04 | 0.0 |
| 232 | 1  | 3.68e-05  | -1.15e-05 | -0.35 | -1.01e-05 | -1.75e-04 | 0.0 |
| 232 | 2  | 2.57e-05  | -9.55e-06 | -0.25 | -7.41e-06 | -1.20e-04 | 0.0 |
| 232 | 11 | 0.05      | -8.79e-03 | -0.29 | 2.20e-05  | 6.30e-05  | 0.0 |
| 232 | 12 | 0.05      | -7.11e-03 | -0.29 | 2.18e-05  | 6.29e-05  | 0.0 |
| 232 | 19 | -0.02     | -0.05     | -0.25 | 7.72e-05  | -1.85e-04 | 0.0 |
| 232 | 43 | 0.02      | -4.20e-03 | -0.27 | 6.65e-06  | -3.20e-05 | 0.0 |
| 232 | 44 | 0.03      | -3.40e-03 | -0.27 | 6.60e-06  | -3.20e-05 | 0.0 |
| 232 | 51 | -8.71e-03 | -0.02     | -0.25 | 3.31e-05  | -1.52e-04 | 0.0 |
| 233 | 1  | 0.0       | -7.65e-06 | -0.35 | -6.14e-06 | -1.68e-04 | 0.0 |
| 233 | 2  | 0.0       | -6.41e-06 | -0.25 | -4.52e-06 | -1.16e-04 | 0.0 |
| 233 | 8  | -0.05     | 7.11e-03  | -0.22 | -3.32e-05 | -3.00e-04 | 0.0 |
| 233 | 11 | 0.05      | -8.80e-03 | -0.29 | 2.43e-05  | 6.86e-05  | 0.0 |
| 233 | 19 | -0.02     | -0.05     | -0.25 | 8.02e-05  | -1.78e-04 | 0.0 |
| 233 | 40 | -0.02     | 3.39e-03  | -0.23 | -1.83e-05 | -2.04e-04 | 0.0 |
| 233 | 43 | 0.02      | -4.20e-03 | -0.27 | 9.28e-06  | -2.69e-05 | 0.0 |
| 233 | 51 | -8.09e-03 | -0.02     | -0.25 | 3.60e-05  | -1.45e-04 | 0.0 |
| 234 | 1  | -2.30e-05 | -3.91e-06 | -0.35 | -2.89e-06 | -1.65e-04 | 0.0 |
| 234 | 2  | -1.61e-05 | -3.27e-06 | -0.25 | -2.13e-06 | -1.13e-04 | 0.0 |
| 234 | 8  | -0.05     | 7.12e-03  | -0.22 | -3.02e-05 | -2.98e-04 | 0.0 |
| 234 | 11 | 0.05      | -8.80e-03 | -0.29 | 2.61e-05  | 7.18e-05  | 0.0 |
| 234 | 19 | -0.02     | -0.05     | -0.25 | 8.27e-05  | -1.72e-04 | 0.0 |
| 234 | 40 | -0.02     | 3.40e-03  | -0.24 | -1.56e-05 | -2.02e-04 | 0.0 |
| 234 | 43 | 0.02      | -4.20e-03 | -0.27 | 1.14e-05  | -2.40e-05 | 0.0 |
| 234 | 51 | -7.45e-03 | -0.02     | -0.25 | 3.85e-05  | -1.41e-04 | 0.0 |
| 235 | 1  | -3.01e-05 | 0.0       | -0.35 | 0.0       | -1.64e-04 | 0.0 |
| 235 | 2  | -2.11e-05 | 0.0       | -0.25 | 0.0       | -1.12e-04 | 0.0 |
| 235 | 3  | -0.05     | -0.02     | -0.22 | 2.38e-05  | -2.98e-04 | 0.0 |
| 235 | 13 | 0.05      | -0.02     | -0.29 | 2.38e-05  | 7.31e-05  | 0.0 |
| 235 | 19 | -0.01     | -0.05     | -0.24 | 8.50e-05  | -1.68e-04 | 0.0 |
| 235 | 35 | -0.02     | -9.87e-03 | -0.24 | 1.14e-05  | -2.01e-04 | 0.0 |
| 235 | 45 | 0.02      | -9.87e-03 | -0.27 | 1.14e-05  | -2.30e-05 | 0.0 |
| 235 | 51 | -6.81e-03 | -0.02     | -0.25 | 4.07e-05  | -1.39e-04 | 0.0 |
| 236 | 1  | -2.30e-05 | 3.91e-06  | -0.35 | 2.89e-06  | -1.65e-04 | 0.0 |
| 236 | 2  | -1.61e-05 | 3.27e-06  | -0.25 | 2.13e-06  | -1.13e-04 | 0.0 |
| 236 | 6  | -0.05     | -7.12e-03 | -0.22 | 3.02e-05  | -2.98e-04 | 0.0 |
| 236 | 17 | 0.05      | 8.80e-03  | -0.29 | -2.61e-05 | 7.18e-05  | 0.0 |

|     |    |           |           |       |           |           |     |
|-----|----|-----------|-----------|-------|-----------|-----------|-----|
| 236 | 25 | -0.02     | 0.05      | -0.25 | -8.27e-05 | -1.72e-04 | 0.0 |
| 236 | 38 | -0.02     | -3.40e-03 | -0.24 | 1.56e-05  | -2.02e-04 | 0.0 |
| 236 | 49 | 0.02      | 4.20e-03  | -0.27 | -1.14e-05 | -2.40e-05 | 0.0 |
| 236 | 57 | -7.45e-03 | 0.02      | -0.25 | -3.85e-05 | -1.41e-04 | 0.0 |
| 237 | 1  | 0.0       | 7.65e-06  | -0.35 | 6.14e-06  | -1.68e-04 | 0.0 |
| 237 | 2  | 0.0       | 6.41e-06  | -0.25 | 4.52e-06  | -1.16e-04 | 0.0 |
| 237 | 6  | -0.05     | -7.11e-03 | -0.22 | 3.32e-05  | -3.00e-04 | 0.0 |
| 237 | 17 | 0.05      | 8.80e-03  | -0.29 | -2.43e-05 | 6.86e-05  | 0.0 |
| 237 | 25 | -0.02     | 0.05      | -0.25 | -8.02e-05 | -1.78e-04 | 0.0 |
| 237 | 38 | -0.02     | -3.39e-03 | -0.23 | 1.83e-05  | -2.04e-04 | 0.0 |
| 237 | 49 | 0.02      | 4.20e-03  | -0.27 | -9.28e-06 | -2.69e-05 | 0.0 |
| 237 | 57 | -8.09e-03 | 0.02      | -0.25 | -3.60e-05 | -1.45e-04 | 0.0 |
| 238 | 1  | 3.68e-05  | 1.15e-05  | -0.35 | 1.01e-05  | -1.75e-04 | 0.0 |
| 238 | 2  | 2.57e-05  | 9.55e-06  | -0.25 | 7.41e-06  | -1.20e-04 | 0.0 |
| 238 | 17 | 0.05      | 8.79e-03  | -0.29 | -2.20e-05 | 6.30e-05  | 0.0 |
| 238 | 18 | 0.05      | 7.11e-03  | -0.29 | -2.18e-05 | 6.29e-05  | 0.0 |
| 238 | 25 | -0.02     | 0.05      | -0.25 | -7.72e-05 | -1.85e-04 | 0.0 |
| 238 | 49 | 0.02      | 4.20e-03  | -0.27 | -6.65e-06 | -3.20e-05 | 0.0 |
| 238 | 50 | 0.03      | 3.40e-03  | -0.27 | -6.60e-06 | -3.20e-05 | 0.0 |
| 238 | 57 | -8.71e-03 | 0.02      | -0.25 | -3.31e-05 | -1.52e-04 | 0.0 |
| 239 | 1  | 8.84e-05  | 1.65e-05  | -0.35 | 1.51e-05  | -1.85e-04 | 0.0 |
| 239 | 2  | 6.18e-05  | 1.34e-05  | -0.25 | 1.11e-05  | -1.28e-04 | 0.0 |
| 239 | 17 | 0.05      | 8.78e-03  | -0.29 | -1.87e-05 | 5.39e-05  | 0.0 |
| 239 | 18 | 0.05      | 7.11e-03  | -0.29 | -1.86e-05 | 5.38e-05  | 0.0 |
| 239 | 25 | -0.02     | 0.05      | -0.26 | -7.37e-05 | -1.96e-04 | 0.0 |
| 239 | 49 | 0.03      | 4.20e-03  | -0.27 | -3.18e-06 | -4.02e-05 | 0.0 |
| 239 | 50 | 0.03      | 3.40e-03  | -0.27 | -3.13e-06 | -4.02e-05 | 0.0 |
| 239 | 57 | -9.32e-03 | 0.02      | -0.26 | -2.95e-05 | -1.60e-04 | 0.0 |
| 240 | 1  | 1.46e-04  | 2.57e-05  | -0.35 | 2.19e-05  | -1.99e-04 | 0.0 |
| 240 | 2  | 1.02e-04  | 2.02e-05  | -0.25 | 1.59e-05  | -1.38e-04 | 0.0 |
| 240 | 17 | 0.05      | 8.79e-03  | -0.29 | -1.30e-05 | 4.08e-05  | 0.0 |
| 240 | 18 | 0.06      | 7.11e-03  | -0.29 | -1.30e-05 | 4.08e-05  | 0.0 |
| 240 | 25 | -0.02     | 0.05      | -0.26 | -6.89e-05 | -2.08e-04 | 0.0 |
| 240 | 49 | 0.03      | 4.21e-03  | -0.27 | 2.07e-06  | -5.17e-05 | 0.0 |
| 240 | 50 | 0.03      | 3.40e-03  | -0.27 | 2.10e-06  | -5.17e-05 | 0.0 |
| 240 | 57 | -9.93e-03 | 0.02      | -0.26 | -2.47e-05 | -1.72e-04 | 0.0 |
| 241 | 1  | 1.92e-04  | 4.91e-05  | -0.35 | 2.83e-05  | -2.10e-04 | 0.0 |
| 241 | 2  | 1.34e-04  | 3.68e-05  | -0.25 | 2.05e-05  | -1.46e-04 | 0.0 |
| 241 | 17 | 0.06      | 8.80e-03  | -0.29 | -7.21e-06 | 2.97e-05  | 0.0 |
| 241 | 18 | 0.06      | 7.13e-03  | -0.29 | -7.14e-06 | 2.96e-05  | 0.0 |
| 241 | 25 | -0.02     | 0.05      | -0.27 | -6.42e-05 | -2.19e-04 | 0.0 |
| 241 | 49 | 0.03      | 4.22e-03  | -0.27 | 7.22e-06  | -6.12e-05 | 0.0 |
| 241 | 50 | 0.03      | 3.42e-03  | -0.27 | 7.25e-06  | -6.12e-05 | 0.0 |
| 241 | 57 | -0.01     | 0.02      | -0.26 | -2.00e-05 | -1.81e-04 | 0.0 |

| Nodo |  | Traslazione X | Traslazione Y | Traslazione Z | Rotazione X | Rotazione Y | Rotazione Z |
|------|--|---------------|---------------|---------------|-------------|-------------|-------------|
|      |  | -0.11         | -0.07         | -0.37         | -1.11e-04   | -3.05e-04   | -4.43e-05   |
|      |  | 0.11          | 0.07          | -0.20         | 1.11e-04    | 3.05e-04    | 4.44e-05    |

| Nodo | Cmb | Azione X | Azione Y | Azione Z | Azione RX | Azione RY | Azione RZ |
|------|-----|----------|----------|----------|-----------|-----------|-----------|
|      |     | kN       | kN       | kN       | kN m      | kN m      | kN m      |

| Nodo |  | Azione X | Azione Y | Azione Z | Azione RX | Azione RY | Azione RZ |
|------|--|----------|----------|----------|-----------|-----------|-----------|
|------|--|----------|----------|----------|-----------|-----------|-----------|

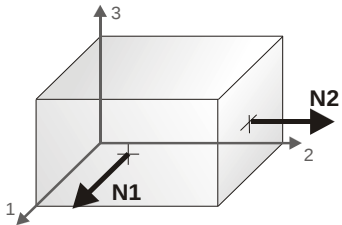
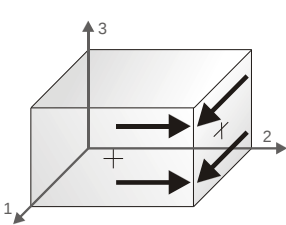
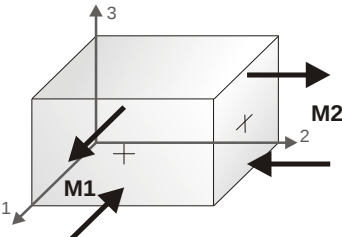
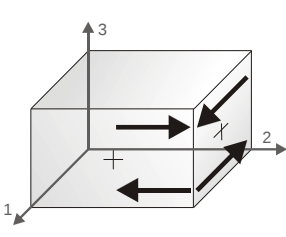
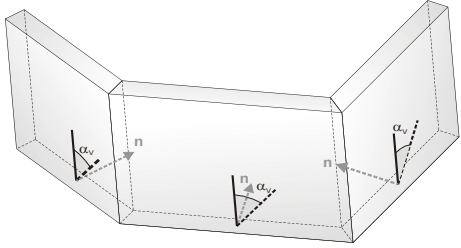
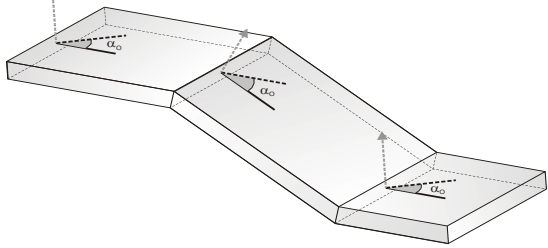
| Nodo | Cmb | Azione X | Azione Y | Azione Z | Azione RX | Azione RY | Azione RZ |
|------|-----|----------|----------|----------|-----------|-----------|-----------|
|      |     | kN       | kN       | kN       | kN m      | kN m      | kN m      |

# RISULTATI ELEMENTI TIPO SHELL

## 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.

|                                                                                                                          |                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  <p>Azione<br/>N</p>                    |  <p>Azione N 1-2</p>                    |
|  <p>Azione<br/>M</p>                    |  <p>Azione M 1-2</p>                    |
| <p>orientamento per stampa setti</p>  | <p>orientamento per stampa gusci</p>  |

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

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

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  $\alpha_o$  attorno all'asse Z per i gusci e ruotata di  $\alpha_v$  attorno alla normale (che per definizione è orizzontale) al piano del setto.

Per i setti, in particolare, se  $\alpha_v$  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:

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

| 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   | kN/ m | kN/ m | kN/ m | kN/ m | kN/ m  | kN        | kN    | kN    | kN        | kN        |
| 1     | 1   | 241  | 3.40      | 2.04  | -5.03 | -2.30 | -0.69 | -3.45  | 0.09      | -3.24 | -2.16 | -0.98     | -1.56     |
|       |     | 58   | 0.19      | 2.69  | 0.61  | 0.64  | 2.66  | 0.24   | 0.15      | 0.08  | 0.12  | 0.10      | -0.04     |
|       |     | 3    | 1.18      | -0.79 | -1.71 | -0.80 | -1.71 | -0.07  | 0.25      | -1.05 | -0.30 | -0.50     | -0.64     |
|       |     | 228  | 0.66      | 3.46  | 2.61  | 3.33  | 2.74  | -0.30  | -0.01     | -0.61 | -0.61 | -0.01     | -3.11e-03 |
| 1     | 2   | 241  | 2.40      | 1.45  | -3.53 | -1.61 | -0.48 | -2.42  | 0.09      | -2.28 | -1.50 | -0.69     | -1.11     |
|       |     | 58   | 0.14      | 1.89  | 0.43  | 0.45  | 1.87  | 0.17   | 0.12      | 0.05  | 0.09  | 0.08      | -0.04     |
|       |     | 3    | 0.83      | -0.56 | -1.20 | -0.56 | -1.20 | -0.05  | 0.18      | -0.74 | -0.21 | -0.35     | -0.45     |
|       |     | 228  | 0.45      | 2.44  | 1.83  | 2.34  | 1.93  | -0.22  | -8.96e-03 | -0.41 | -0.41 | -9.26e-03 | -0.01     |
| 1     | 18  | 241  | 2.34      | 1.17  | -3.73 | -2.16 | -0.41 | -2.29  | 0.09      | -2.21 | -1.51 | -0.60     | -1.06     |
|       |     | 58   | 0.29      | 1.74  | -0.17 | -0.15 | 1.73  | 0.17   | 0.25      | -0.04 | 0.07  | 0.15      | -0.14     |
|       |     | 3    | 1.11      | -1.31 | -1.56 | -1.48 | -1.38 | -0.11  | 0.08      | -1.07 | -0.63 | -0.37     | -0.56     |
|       |     | 228  | 0.81      | 1.98  | 1.41  | 1.46  | 1.93  | -0.16  | -9.75e-03 | -0.82 | -0.82 | -0.01     | 0.04      |
| 1     | 63  | 241  | 2.43      | 1.63  | -3.70 | -1.63 | -0.43 | -2.59  | 0.14      | -2.26 | -1.48 | -0.64     | -1.13     |
|       |     | 58   | 0.22      | 1.63  | 0.36  | 0.36  | 1.62  | 0.11   | 0.21      | 0.01  | 0.10  | 0.12      | -0.10     |
|       |     | 3    | 0.95      | -0.33 | -1.45 | -0.38 | -1.40 | -0.23  | 0.19      | -0.85 | -0.32 | -0.34     | -0.52     |
|       |     | 228  | 0.57      | 2.88  | 1.73  | 2.59  | 2.02  | -0.50  | 0.01      | -0.52 | -0.52 | 0.01      | -0.03     |
| 2     | 1   | 89   | 3.56      | 18.18 | -2.69 | 13.63 | 1.86  | 8.62   | 0.73      | -3.14 | -2.72 | 0.30      | 1.21      |
|       |     | 60   | 6.99      | 28.85 | -5.98 | 23.73 | -0.86 | -12.33 | -2.13     | -7.86 | -5.69 | -4.30     | -2.78     |
|       |     | 8    | 9.28      | 15.31 | -3.63 | 10.44 | 1.24  | 8.28   | 1.01      | -8.67 | -8.66 | 1.00      | -0.27     |
|       |     | 87   | 2.35      | 21.69 | -0.79 | 19.01 | 1.89  | -7.29  | -0.72     | -2.00 | -1.96 | -0.76     | -0.23     |
| 2     | 2   | 89   | 2.52      | 12.68 | -1.83 | 9.51  | 1.33  | 5.99   | 0.50      | -2.23 | -1.93 | 0.20      | 0.85      |
|       |     | 60   | 4.86      | 20.09 | -4.16 | 16.55 | -0.62 | -8.56  | -1.46     | -5.45 | -3.92 | -2.99     | -1.94     |
|       |     | 8    | 6.44      | 10.71 | -2.53 | 7.31  | 0.86  | 5.78   | 0.70      | -6.02 | -6.01 | 0.69      | -0.19     |
|       |     | 87   | 1.67      | 15.13 | -0.54 | 13.25 | 1.34  | -5.09  | -0.50     | -1.42 | -1.40 | -0.53     | -0.16     |
| 2     | 17  | 89   | 3.26      | 13.78 | -1.03 | 11.13 | 1.62  | 5.68   | 0.42      | -2.98 | -2.65 | 0.09      | 1.01      |
|       |     | 60   | 5.38      | 22.37 | -4.31 | 18.20 | -0.15 | -9.68  | -1.93     | -6.18 | -4.70 | -3.42     | -2.03     |
|       |     | 8    | 7.26      | 10.29 | -1.29 | 7.88  | 1.12  | 4.70   | 0.23      | -7.11 | -7.09 | 0.21      | -0.35     |
|       |     | 87   | 2.60      | 15.77 | -0.59 | 13.78 | 1.41  | -5.35  | -0.69     | -2.42 | -2.42 | -0.70     | -0.07     |
| 2     | 49  | 89   | 2.87      | 13.20 | -1.44 | 10.29 | 1.47  | 5.84   | 0.46      | -2.59 | -2.28 | 0.15      | 0.92      |
|       |     | 60   | 5.11      | 21.18 | -4.23 | 17.35 | -0.39 | -9.10  | -1.69     | -5.80 | -4.29 | -3.20     | -1.98     |
|       |     | 8    | 6.83      | 10.49 | -1.92 | 7.58  | 0.98  | 5.26   | 0.47      | -6.54 | -6.53 | 0.46      | -0.27     |
|       |     | 87   | 2.11      | 15.43 | -0.56 | 13.50 | 1.37  | -5.21  | -0.60     | -1.90 | -1.89 | -0.61     | -0.12     |

|   |    |     |       |       |        |          |       |        |           |        |        |           |           |
|---|----|-----|-------|-------|--------|----------|-------|--------|-----------|--------|--------|-----------|-----------|
| 3 | 1  | 226 | 1.36  | 8.15  | -5.57  | 0.96     | 1.62  | -6.85  | 1.05      | 0.12   | 0.76   | 0.41      | -0.43     |
|   |    | 59  | 13.50 | 8.48  | -18.38 | -8.70    | -1.20 | 12.89  | -5.68     | -15.36 | -14.74 | -6.30     | 2.36      |
|   |    | 7   | 7.76  | 11.11 | -6.05  | 8.19     | -3.13 | -6.44  | 1.23      | -7.06  | -6.97  | 1.15      | -0.83     |
|   |    | 213 | 3.66  | 4.80  | -4.31  | -1.12    | 1.60  | 4.35   | -0.77     | -3.93  | -3.59  | -1.11     | 0.97      |
| 3 | 2  | 226 | 0.91  | 5.69  | -3.86  | 0.67     | 1.16  | -4.77  | 0.71      | 0.11   | 0.54   | 0.28      | -0.27     |
|   |    | 59  | 9.38  | 5.92  | -12.83 | -6.04    | -0.87 | 9.02   | -3.94     | -10.67 | -10.23 | -4.39     | 1.67      |
|   |    | 7   | 5.39  | 7.77  | -4.21  | 5.75     | -2.18 | -4.49  | 0.85      | -4.89  | -4.84  | 0.80      | -0.57     |
|   |    | 213 | 2.54  | 3.35  | -3.00  | -0.78    | 1.12  | 3.03   | -0.53     | -2.72  | -2.48  | -0.77     | 0.69      |
| 3 | 9  | 226 | 1.41  | 4.48  | -5.69  | -2.00    | 0.79  | -4.89  | 0.14      | -1.11  | -1.03  | 0.05      | -0.32     |
|   |    | 59  | 10.87 | 5.32  | -15.17 | -8.62    | -1.23 | 9.55   | -4.52     | -12.32 | -11.87 | -4.98     | 1.83      |
|   |    | 7   | 6.27  | 5.97  | -4.20  | 4.09     | -2.32 | -3.95  | 0.31      | -6.18  | -6.14  | 0.27      | -0.49     |
|   |    | 213 | 3.50  | 2.64  | -4.11  | -2.44    | 0.97  | 2.92   | -0.83     | -3.82  | -3.71  | -0.93     | 0.56      |
| 3 | 41 | 226 | 0.91  | 5.08  | -4.71  | -0.61    | 0.98  | -4.83  | 0.33      | -0.37  | -0.21  | 0.17      | -0.30     |
|   |    | 59  | 10.10 | 5.62  | -13.95 | -7.28    | -1.04 | 9.27   | -4.22     | -11.46 | -11.02 | -4.67     | 1.75      |
|   |    | 7   | 5.81  | 6.90  | -4.20  | 4.95     | -2.25 | -4.23  | 0.59      | -5.51  | -5.46  | 0.55      | -0.53     |
|   |    | 213 | 2.98  | 2.99  | -3.52  | -1.58    | 1.05  | 2.98   | -0.68     | -3.24  | -3.07  | -0.85     | 0.63      |
| 4 | 1  | 227 | 0.66  | 3.46  | 2.61   | 3.33     | 2.74  | 0.30   | -0.01     | -0.61  | -0.61  | -0.01     | 3.11e-03  |
|   |    | 2   | 1.18  | -0.79 | -1.71  | -0.80    | -1.71 | 0.07   | 0.25      | -1.05  | -0.30  | -0.50     | 0.64      |
|   |    | 10  | 0.19  | 2.69  | 0.61   | 0.64     | 2.66  | -0.24  | 0.15      | 0.08   | 0.12   | 0.10      | 0.04      |
|   |    | 229 | 3.40  | 2.04  | -5.03  | -2.30    | -0.69 | 3.45   | 0.09      | -3.24  | -2.16  | -0.98     | 1.56      |
| 4 | 2  | 227 | 0.45  | 2.44  | 1.83   | 2.34     | 1.93  | 0.22   | -8.96e-03 | -0.41  | -0.41  | -9.26e-03 | 0.01      |
|   |    | 2   | 0.83  | -0.56 | -1.20  | -0.56    | -1.20 | 0.05   | 0.18      | -0.74  | -0.21  | -0.35     | 0.45      |
|   |    | 10  | 0.14  | 1.89  | 0.43   | 0.45     | 1.87  | -0.17  | 0.12      | 0.05   | 0.09   | 0.08      | 0.04      |
|   |    | 229 | 2.40  | 1.45  | -3.53  | -1.61    | -0.48 | 2.42   | 0.09      | -2.28  | -1.50  | -0.69     | 1.11      |
| 4 | 3  | 227 | 0.21  | 3.76  | 1.81   | 3.54     | 2.03  | 0.61   | 0.06      | -0.13  | -0.08  | 0.01      | 0.08      |
|   |    | 2   | 0.83  | 0.63  | -1.24  | 0.61     | -1.22 | 0.19   | 0.37      | -0.57  | 0.13   | -0.33     | 0.41      |
|   |    | 10  | 0.15  | 1.76  | 0.99   | 1.00     | 1.75  | -0.08  | 0.13      | 0.05   | 0.13   | 0.05      | -4.73e-03 |
|   |    | 229 | 2.50  | 2.01  | -3.54  | -1.04    | -0.50 | 2.76   | 0.16      | -2.33  | -1.45  | -0.73     | 1.19      |
| 4 | 35 | 227 | 0.33  | 3.07  | 1.82   | 2.92     | 1.98  | 0.41   | 9.81e-03  | -0.26  | -0.25  | 1.58e-03  | 0.05      |
|   |    | 2   | 0.81  | 0.01  | -1.22  | 2.34e-03 | -1.21 | 0.11   | 0.26      | -0.65  | -0.05  | -0.34     | 0.43      |
|   |    | 10  | 0.13  | 1.83  | 0.70   | 0.71     | 1.81  | -0.13  | 0.11      | 0.06   | 0.11   | 0.06      | 0.02      |
|   |    | 229 | 2.45  | 1.71  | -3.53  | -1.33    | -0.49 | 2.59   | 0.12      | -2.30  | -1.48  | -0.70     | 1.15      |
| 5 | 1  | 88  | 2.35  | 21.69 | -0.79  | 19.01    | 1.89  | 7.29   | -0.72     | -2.00  | -1.96  | -0.76     | 0.23      |
|   |    | 6   | 9.28  | 15.31 | -3.63  | 10.44    | 1.24  | -8.28  | 1.01      | -8.67  | -8.66  | 1.00      | 0.27      |
|   |    | 12  | 6.99  | 28.85 | -5.98  | 23.73    | -0.86 | 12.33  | -2.13     | -7.86  | -5.69  | -4.30     | 2.78      |
|   |    | 90  | 3.56  | 18.18 | -2.69  | 13.63    | 1.86  | -8.62  | 0.73      | -3.14  | -2.72  | 0.30      | -1.21     |
| 5 | 2  | 88  | 1.67  | 15.13 | -0.54  | 13.25    | 1.34  | 5.09   | -0.50     | -1.42  | -1.40  | -0.53     | 0.16      |
|   |    | 6   | 6.44  | 10.71 | -2.53  | 7.31     | 0.86  | -5.78  | 0.70      | -6.02  | -6.01  | 0.69      | 0.19      |
|   |    | 12  | 4.86  | 20.09 | -4.16  | 16.55    | -0.62 | 8.56   | -1.46     | -5.45  | -3.92  | -2.99     | 1.94      |
|   |    | 90  | 2.52  | 12.68 | -1.83  | 9.51     | 1.33  | -5.99  | 0.50      | -2.23  | -1.93  | 0.20      | -0.85     |
| 5 | 11 | 88  | 2.60  | 15.77 | -0.59  | 13.78    | 1.41  | 5.35   | -0.69     | -2.42  | -2.42  | -0.70     | 0.07      |
|   |    | 6   | 7.26  | 10.29 | -1.29  | 7.88     | 1.12  | -4.70  | 0.23      | -7.11  | -7.09  | 0.21      | 0.35      |
|   |    | 12  | 5.38  | 22.37 | -4.31  | 18.20    | -0.15 | 9.68   | -1.93     | -6.18  | -4.70  | -3.42     | 2.03      |
|   |    | 90  | 3.26  | 13.78 | -1.03  | 11.13    | 1.62  | -5.68  | 0.42      | -2.98  | -2.65  | 0.09      | -1.01     |
| 5 | 43 | 88  | 2.11  | 15.43 | -0.56  | 13.50    | 1.37  | 5.21   | -0.60     | -1.90  | -1.89  | -0.61     | 0.12      |
|   |    | 6   | 6.83  | 10.49 | -1.92  | 7.58     | 0.98  | -5.26  | 0.47      | -6.54  | -6.53  | 0.46      | 0.27      |
|   |    | 12  | 5.11  | 21.18 | -4.23  | 17.35    | -0.39 | 9.10   | -1.69     | -5.80  | -4.29  | -3.20     | 1.98      |
|   |    | 90  | 2.87  | 13.20 | -1.44  | 10.29    | 1.47  | -5.84  | 0.46      | -2.59  | -2.28  | 0.15      | -0.92     |
| 6 | 1  | 212 | 3.66  | 4.80  | -4.31  | -1.12    | 1.60  | -4.35  | -0.77     | -3.93  | -3.59  | -1.11     | -0.97     |
|   |    | 5   | 7.76  | 11.11 | -6.05  | 8.19     | -3.13 | 6.44   | 1.23      | -7.06  | -6.97  | 1.15      | 0.83      |
|   |    | 11  | 13.50 | 8.48  | -18.38 | -8.70    | -1.20 | -12.89 | -5.68     | -15.36 | -14.74 | -6.30     | -2.36     |
|   |    | 214 | 1.36  | 8.15  | -5.57  | 0.96     | 1.62  | 6.85   | 1.05      | 0.12   | 0.76   | 0.41      | 0.43      |
| 6 | 2  | 212 | 2.54  | 3.35  | -3.00  | -0.78    | 1.12  | -3.03  | -0.53     | -2.72  | -2.48  | -0.77     | -0.69     |
|   |    | 5   | 5.39  | 7.77  | -4.21  | 5.75     | -2.18 | 4.49   | 0.85      | -4.89  | -4.84  | 0.80      | 0.57      |
|   |    | 11  | 9.38  | 5.92  | -12.83 | -6.04    | -0.87 | -9.02  | -3.94     | -10.67 | -10.23 | -4.39     | -1.67     |
|   |    | 214 | 0.91  | 5.69  | -3.86  | 0.67     | 1.16  | 4.77   | 0.71      | 0.11   | 0.54   | 0.28      | 0.27      |

|   |    |     |       |       |        |       |       |        |       |        |        |       |       |
|---|----|-----|-------|-------|--------|-------|-------|--------|-------|--------|--------|-------|-------|
| 6 | 3  | 212 | 3.50  | 2.64  | -4.11  | -2.44 | 0.97  | -2.92  | -0.83 | -3.82  | -3.71  | -0.93 | -0.56 |
|   |    | 5   | 6.27  | 5.97  | -4.20  | 4.09  | -2.32 | 3.95   | 0.31  | -6.18  | -6.14  | 0.27  | 0.49  |
|   |    | 11  | 10.87 | 5.32  | -15.17 | -8.62 | -1.23 | -9.55  | -4.52 | -12.32 | -11.87 | -4.98 | -1.83 |
|   |    | 214 | 1.41  | 4.48  | -5.69  | -2.00 | 0.79  | 4.89   | 0.14  | -1.11  | -1.03  | 0.05  | 0.32  |
| 6 | 35 | 212 | 2.98  | 2.99  | -3.52  | -1.58 | 1.05  | -2.98  | -0.68 | -3.24  | -3.07  | -0.85 | -0.63 |
|   |    | 5   | 5.81  | 6.90  | -4.20  | 4.95  | -2.25 | 4.23   | 0.59  | -5.51  | -5.46  | 0.55  | 0.53  |
|   |    | 11  | 10.10 | 5.62  | -13.95 | -7.28 | -1.04 | -9.27  | -4.22 | -11.46 | -11.02 | -4.67 | -1.75 |
|   |    | 214 | 0.91  | 5.08  | -4.71  | -0.61 | 0.98  | 4.83   | 0.33  | -0.37  | -0.21  | 0.17  | 0.30  |
| 7 | 1  | 229 | 1.62  | 3.43  | -0.99  | -0.98 | 3.42  | -0.21  | -0.51 | -1.82  | -1.74  | -0.59 | 0.32  |
|   |    | 10  | 1.51  | 1.05  | -0.05  | 0.06  | 0.94  | 0.33   | 0.82  | -0.96  | -0.09  | -0.05 | 0.89  |
|   |    | 14  | 0.84  | 2.06  | 0.15   | 0.20  | 2.02  | -0.30  | 0.10  | -0.74  | 0.01   | -0.65 | 0.26  |
|   |    | 230 | 3.12  | 2.32  | -0.61  | -0.40 | 2.11  | 0.75   | 0.42  | -2.97  | -1.47  | -1.09 | 1.68  |
| 7 | 2  | 229 | 1.14  | 2.43  | -0.68  | -0.67 | 2.42  | -0.13  | -0.34 | -1.27  | -1.20  | -0.41 | 0.25  |
|   |    | 10  | 1.07  | 0.73  | -0.04  | 0.04  | 0.66  | 0.23   | 0.59  | -0.68  | -0.06  | -0.03 | 0.63  |
|   |    | 14  | 0.61  | 1.48  | 0.11   | 0.14  | 1.45  | -0.21  | 0.08  | -0.54  | 0.01   | -0.47 | 0.20  |
|   |    | 230 | 2.22  | 1.65  | -0.44  | -0.29 | 1.49  | 0.55   | 0.31  | -2.10  | -1.02  | -0.77 | 1.20  |
| 7 | 30 | 229 | 1.28  | 2.33  | -0.89  | -0.86 | 2.29  | 0.34   | -0.26 | -1.39  | -1.18  | -0.46 | 0.44  |
|   |    | 10  | 1.32  | 0.50  | -0.95  | -0.29 | -0.17 | 0.73   | 0.78  | -0.74  | -0.02  | 0.06  | 0.76  |
|   |    | 14  | 0.74  | 0.64  | -0.11  | -0.11 | 0.64  | -0.01  | 0.16  | -0.67  | -0.10  | -0.41 | 0.38  |
|   |    | 230 | 2.65  | 1.62  | -0.62  | -0.37 | 1.37  | 0.71   | 0.45  | -2.47  | -1.16  | -0.86 | 1.45  |
| 7 | 62 | 229 | 1.20  | 2.37  | -0.76  | -0.76 | 2.36  | 0.10   | -0.31 | -1.32  | -1.19  | -0.43 | 0.34  |
|   |    | 10  | 1.19  | 0.58  | -0.43  | -0.12 | 0.26  | 0.47   | 0.68  | -0.71  | -0.04  | 0.01  | 0.69  |
|   |    | 14  | 0.66  | 1.07  | 0.01   | 0.02  | 1.06  | -0.11  | 0.11  | -0.59  | -0.04  | -0.44 | 0.29  |
|   |    | 230 | 2.43  | 1.63  | -0.53  | -0.33 | 1.43  | 0.62   | 0.38  | -2.28  | -1.09  | -0.81 | 1.32  |
| 8 | 1  | 90  | 3.56  | 17.55 | -5.32  | 13.94 | -1.71 | 8.34   | 0.55  | -3.20  | -2.34  | -0.31 | 1.58  |
|   |    | 12  | 6.70  | 30.08 | -3.79  | 23.12 | 3.17  | -13.69 | -1.91 | -7.47  | -6.37  | -3.01 | -2.21 |
|   |    | 16  | 6.07  | 13.04 | -2.44  | 8.77  | 1.83  | 6.92   | -0.16 | -6.36  | -5.67  | -0.84 | 1.95  |
|   |    | 91  | 3.84  | 18.29 | -2.13  | 14.78 | 1.38  | -7.70  | -0.12 | -3.91  | -2.84  | -1.19 | -1.70 |
| 8 | 2  | 90  | 2.49  | 12.26 | -3.68  | 9.73  | -1.16 | 5.82   | 0.36  | -2.27  | -1.67  | -0.23 | 1.10  |
|   |    | 12  | 4.63  | 21.00 | -2.65  | 16.12 | 2.23  | -9.57  | -1.32 | -5.16  | -4.39  | -2.08 | -1.53 |
|   |    | 16  | 4.18  | 9.08  | -1.69  | 6.16  | 1.23  | 4.79   | -0.10 | -4.38  | -3.89  | -0.59 | 1.35  |
|   |    | 91  | 2.70  | 12.77 | -1.41  | 10.32 | 1.05  | -5.36  | -0.11 | -2.77  | -2.03  | -0.84 | -1.19 |
| 8 | 11 | 90  | 2.83  | 13.92 | -3.47  | 11.34 | -0.89 | 6.18   | -0.03 | -2.76  | -2.40  | -0.39 | 0.92  |
|   |    | 12  | 5.31  | 22.69 | -1.17  | 17.95 | 3.57  | -9.51  | -1.73 | -5.90  | -5.16  | -2.48 | -1.60 |
|   |    | 16  | 4.57  | 10.72 | -0.62  | 7.60  | 2.50  | 5.06   | -0.56 | -4.91  | -4.52  | -0.95 | 1.24  |
|   |    | 91  | 3.30  | 13.43 | -0.65  | 11.54 | 1.23  | -4.80  | -0.17 | -3.42  | -2.61  | -0.98 | -1.41 |
| 8 | 43 | 90  | 2.58  | 13.05 | -3.58  | 10.50 | -1.03 | 6.00   | 0.17  | -2.49  | -2.02  | -0.30 | 1.01  |
|   |    | 12  | 4.95  | 21.81 | -1.93  | 17.00 | 2.88  | -9.54  | -1.52 | -5.51  | -4.76  | -2.27 | -1.56 |
|   |    | 16  | 4.36  | 9.87  | -1.17  | 6.86  | 1.84  | 4.92   | -0.33 | -4.63  | -4.20  | -0.76 | 1.30  |
|   |    | 91  | 2.95  | 13.08 | -1.03  | 10.91 | 1.14  | -5.09  | -0.14 | -3.08  | -2.31  | -0.91 | -1.29 |
| 9 | 1  | 214 | 3.51  | 7.86  | -2.65  | 0.86  | 4.34  | -4.96  | 1.57  | -2.25  | -0.10  | -0.58 | -1.89 |
|   |    | 11  | 11.68 | 7.17  | -16.24 | -7.60 | -1.48 | 11.30  | -4.65 | -13.38 | -13.31 | -4.72 | 0.79  |
|   |    | 15  | 9.49  | 9.31  | -7.06  | 3.42  | -1.17 | -7.86  | -1.01 | -10.23 | -9.54  | -1.70 | -2.43 |
|   |    | 215 | 2.11  | 6.42  | -7.47  | -3.15 | 2.10  | 6.43   | -1.33 | -2.39  | -2.25  | -1.47 | -0.37 |
| 9 | 2  | 214 | 2.49  | 5.49  | -1.87  | 0.58  | 3.04  | -3.47  | 1.12  | -1.59  | -0.06  | -0.41 | -1.34 |
|   |    | 11  | 8.09  | 5.00  | -11.24 | -5.23 | -1.01 | 7.84   | -3.22 | -9.27  | -9.23  | -3.27 | 0.53  |
|   |    | 15  | 6.56  | 6.53  | -5.05  | 2.35  | -0.87 | -5.56  | -0.69 | -7.06  | -6.57  | -1.18 | -1.70 |
|   |    | 215 | 1.49  | 4.54  | -5.17  | -2.18 | 1.55  | 4.48   | -0.91 | -1.69  | -1.56  | -1.03 | -0.28 |
| 9 | 3  | 214 | 3.08  | 4.10  | -4.01  | -2.17 | 2.26  | -3.40  | 0.30  | -2.79  | -1.66  | -0.83 | -1.49 |
|   |    | 11  | 9.55  | 5.12  | -13.19 | -7.63 | -0.44 | 8.42   | -3.80 | -10.90 | -10.86 | -3.84 | 0.52  |
|   |    | 15  | 7.67  | 4.90  | -4.41  | 0.64  | -0.14 | -4.64  | -1.27 | -8.44  | -8.00  | -1.71 | -1.72 |
|   |    | 215 | 2.65  | 3.87  | -7.14  | -4.16 | 0.89  | 4.89   | -1.29 | -3.09  | -2.97  | -1.42 | -0.46 |
| 9 | 35 | 214 | 2.68  | 4.79  | -2.88  | -0.74 | 2.66  | -3.44  | 0.70  | -2.14  | -0.83  | -0.61 | -1.41 |
|   |    | 11  | 8.80  | 5.04  | -12.16 | -6.39 | -0.74 | 8.12   | -3.50 | -10.06 | -10.01 | -3.54 | 0.53  |
|   |    | 15  | 7.08  | 5.72  | -4.71  | 1.53  | -0.52 | -5.11  | -0.97 | -7.72  | -7.25  | -1.44 | -1.71 |
|   |    | 215 | 2.00  | 4.22  | -6.11  | -3.14 | 1.24  | 4.68   | -1.10 | -2.36  | -2.24  | -1.22 | -0.37 |

|    |    |     |      |       |       |       |       |       |       |        |          |       |       |
|----|----|-----|------|-------|-------|-------|-------|-------|-------|--------|----------|-------|-------|
| 10 | 1  | 230 | 2.12 | 2.76  | -2.56 | -1.36 | 1.57  | -2.22 | -0.45 | -2.31  | -1.77    | -0.99 | 0.85  |
|    |    | 14  | 1.54 | 2.32  | 0.12  | 0.24  | 2.19  | 0.51  | 0.64  | -1.18  | 0.06     | -0.61 | 0.84  |
|    |    | 18  | 0.94 | 0.91  | -0.51 | -0.27 | 0.67  | -0.54 | 0.11  | -0.87  | 0.03     | -0.79 | 0.27  |
|    |    | 231 | 2.78 | 1.16  | 0.84  | 0.86  | 1.15  | -0.07 | 0.15  | -2.79  | -1.76    | -0.88 | 1.41  |
| 10 | 2  | 230 | 1.52 | 1.96  | -1.76 | -0.95 | 1.15  | -1.53 | -0.29 | -1.64  | -1.23    | -0.70 | 0.62  |
|    |    | 14  | 1.09 | 1.64  | 0.08  | 0.17  | 1.56  | 0.36  | 0.45  | -0.84  | 0.04     | -0.43 | 0.60  |
|    |    | 18  | 0.69 | 0.69  | -0.34 | -0.18 | 0.53  | -0.37 | 0.09  | -0.63  | 0.02     | -0.57 | 0.20  |
|    |    | 231 | 1.96 | 0.84  | 0.59  | 0.59  | 0.84  | -0.03 | 0.12  | -1.97  | -1.22    | -0.63 | 1.00  |
| 10 | 30 | 230 | 1.89 | 1.23  | -1.89 | -1.16 | 0.50  | -1.32 | -0.13 | -1.97  | -1.36    | -0.74 | 0.87  |
|    |    | 14  | 1.50 | 1.03  | -0.46 | -0.10 | 0.67  | 0.64  | 0.59  | -1.14  | -0.08    | -0.47 | 0.85  |
|    |    | 18  | 0.93 | -0.11 | -0.49 | -0.27 | -0.33 | -0.19 | 0.17  | -0.86  | -0.11    | -0.59 | 0.46  |
|    |    | 231 | 2.37 | 0.58  | 0.21  | 0.56  | 0.23  | 0.08  | 0.28  | -2.31  | -1.35    | -0.68 | 1.25  |
| 10 | 62 | 230 | 1.69 | 1.61  | -1.82 | -1.05 | 0.84  | -1.43 | -0.21 | -1.80  | -1.29    | -0.72 | 0.74  |
|    |    | 14  | 1.29 | 1.32  | -0.15 | 0.04  | 1.13  | 0.49  | 0.52  | -0.98  | -0.02    | -0.45 | 0.72  |
|    |    | 18  | 0.78 | 0.28  | -0.39 | -0.23 | 0.12  | -0.29 | 0.11  | -0.73  | -0.04    | -0.58 | 0.32  |
|    |    | 231 | 2.16 | 0.59  | 0.53  | 0.58  | 0.55  | 0.02  | 0.20  | -2.13  | -1.28    | -0.65 | 1.12  |
| 11 | 1  | 91  | 3.40 | 13.01 | -1.16 | 11.32 | 0.54  | 4.60  | -0.56 | -3.55  | -3.15    | -0.97 | 1.02  |
|    |    | 16  | 5.44 | 21.00 | -1.85 | 15.74 | 3.41  | -9.62 | -0.30 | -5.61  | -4.99    | -0.92 | -1.71 |
|    |    | 20  | 5.21 | 5.98  | 0.34  | 3.99  | 2.33  | 2.70  | -0.39 | -5.60  | -4.99    | -1.00 | 1.68  |
|    |    | 92  | 3.54 | 11.34 | 1.53  | 9.31  | 3.56  | -3.97 | -0.19 | -3.65  | -3.19    | -0.65 | -1.17 |
| 11 | 2  | 91  | 2.41 | 9.11  | -0.81 | 7.91  | 0.39  | 3.24  | -0.42 | -2.52  | -2.25    | -0.69 | 0.71  |
|    |    | 16  | 3.73 | 14.76 | -1.26 | 11.02 | 2.48  | -6.78 | -0.19 | -3.84  | -3.41    | -0.62 | -1.18 |
|    |    | 20  | 3.57 | 4.19  | 0.27  | 2.82  | 1.64  | 1.87  | -0.26 | -3.83  | -3.40    | -0.69 | 1.16  |
|    |    | 92  | 2.51 | 7.98  | 1.13  | 6.54  | 2.57  | -2.79 | -0.16 | -2.59  | -2.28    | -0.46 | -0.81 |
| 11 | 11 | 91  | 2.82 | 10.33 | -0.66 | 9.13  | 0.54  | 3.43  | -0.71 | -2.94  | -2.83    | -0.82 | 0.47  |
|    |    | 16  | 4.34 | 15.54 | -1.55 | 12.09 | 1.90  | -6.86 | -0.17 | -4.40  | -3.97    | -0.61 | -1.28 |
|    |    | 20  | 3.88 | 4.24  | 0.26  | 3.51  | 0.99  | 1.54  | -0.33 | -4.14  | -3.80    | -0.67 | 1.08  |
|    |    | 92  | 3.03 | 8.64  | 1.39  | 7.37  | 2.65  | -2.75 | -0.15 | -3.11  | -2.70    | -0.56 | -1.03 |
| 11 | 43 | 91  | 2.59 | 9.70  | -0.74 | 8.50  | 0.46  | 3.33  | -0.57 | -2.71  | -2.53    | -0.75 | 0.59  |
|    |    | 16  | 4.02 | 15.13 | -1.39 | 11.53 | 2.20  | -6.82 | -0.18 | -4.11  | -3.68    | -0.62 | -1.23 |
|    |    | 20  | 3.72 | 4.18  | 0.30  | 3.15  | 1.33  | 1.71  | -0.30 | -3.98  | -3.59    | -0.68 | 1.12  |
|    |    | 92  | 2.76 | 8.29  | 1.25  | 6.94  | 2.61  | -2.77 | -0.15 | -2.84  | -2.48    | -0.51 | -0.91 |
| 12 | 1  | 215 | 4.05 | 3.29  | -0.71 | 1.23  | 1.35  | -2.00 | 0.85  | -3.61  | -1.68    | -1.08 | -2.21 |
|    |    | 15  | 9.52 | 6.20  | -8.91 | -4.16 | 1.45  | 7.02  | -1.82 | -10.41 | -10.29   | -1.93 | 0.97  |
|    |    | 19  | 7.74 | 6.51  | -2.10 | 4.05  | 0.36  | -3.89 | -1.32 | -8.58  | -8.19    | -1.71 | -1.64 |
|    |    | 216 | 1.87 | 4.04  | -4.33 | -1.64 | 1.35  | 3.91  | -0.76 | -2.15  | -2.14    | -0.77 | -0.12 |
| 12 | 2  | 215 | 2.86 | 2.30  | -0.53 | 0.84  | 0.94  | -1.42 | 0.61  | -2.54  | -1.17    | -0.77 | -1.56 |
|    |    | 15  | 6.56 | 4.37  | -6.13 | -2.87 | 1.11  | 4.85  | -1.25 | -7.17  | -7.10    | -1.32 | 0.66  |
|    |    | 19  | 5.30 | 4.58  | -1.54 | 2.78  | 0.26  | -2.79 | -0.90 | -5.88  | -5.60    | -1.18 | -1.15 |
|    |    | 216 | 1.30 | 2.88  | -2.98 | -1.13 | 1.03  | 2.73  | -0.53 | -1.50  | -1.49    | -0.54 | -0.11 |
| 12 | 3  | 215 | 3.65 | 0.33  | -1.59 | -1.20 | -0.06 | -0.78 | 0.04  | -3.71  | -2.56    | -1.11 | -1.73 |
|    |    | 15  | 7.83 | 4.11  | -9.10 | -4.93 | -0.06 | 6.14  | -1.45 | -8.51  | -8.46    | -1.50 | 0.60  |
|    |    | 19  | 6.32 | 2.46  | -1.46 | 1.71  | -0.71 | -1.54 | -1.09 | -7.02  | -6.78    | -1.32 | -1.16 |
|    |    | 216 | 2.39 | 2.57  | -4.50 | -2.17 | 0.24  | 3.32  | -0.82 | -2.73  | -2.70    | -0.85 | -0.24 |
| 12 | 35 | 215 | 3.20 | 1.30  | -0.99 | -0.14 | 0.46  | -1.11 | 0.32  | -3.09  | -1.84    | -0.93 | -1.64 |
|    |    | 15  | 7.17 | 4.24  | -7.56 | -3.87 | 0.55  | 5.47  | -1.35 | -7.81  | -7.75    | -1.41 | 0.63  |
|    |    | 19  | 5.79 | 3.54  | -1.48 | 2.27  | -0.20 | -2.19 | -0.99 | -6.43  | -6.17    | -1.25 | -1.15 |
|    |    | 216 | 1.82 | 2.73  | -3.71 | -1.63 | 0.65  | 3.01  | -0.67 | -2.09  | -2.07    | -0.69 | -0.17 |
| 13 | 1  | 231 | 1.97 | 2.15  | -1.60 | -0.45 | 1.00  | -1.73 | -0.49 | -2.19  | -1.84    | -0.84 | 0.69  |
|    |    | 18  | 1.46 | 0.77  | 0.20  | 0.23  | 0.74  | 0.12  | 0.51  | -1.19  | 0.06     | -0.74 | 0.76  |
|    |    | 22  | 0.67 | -0.16 | -0.84 | -0.27 | -0.73 | -0.25 | 0.04  | -0.67  | 9.70e-03 | -0.64 | 0.14  |
|    |    | 232 | 2.17 | 1.02  | 0.51  | 0.74  | 0.79  | -0.26 | -0.11 | -2.29  | -1.65    | -0.74 | 0.99  |
| 13 | 2  | 231 | 1.40 | 1.54  | -1.09 | -0.31 | 0.76  | -1.20 | -0.33 | -1.55  | -1.28    | -0.60 | 0.51  |
|    |    | 18  | 1.04 | 0.58  | 0.14  | 0.16  | 0.56  | 0.09  | 0.36  | -0.85  | 0.04     | -0.53 | 0.54  |
|    |    | 22  | 0.49 | -0.10 | -0.53 | -0.19 | -0.44 | -0.17 | 0.03  | -0.49  | 7.25e-03 | -0.46 | 0.11  |
|    |    | 232 | 1.53 | 0.73  | 0.39  | 0.51  | 0.61  | -0.16 | -0.07 | -1.61  | -1.15    | -0.53 | 0.70  |

|    |    |     |      |       |       |       |       |           |          |       |          |       |           |
|----|----|-----|------|-------|-------|-------|-------|-----------|----------|-------|----------|-------|-----------|
| 13 | 30 | 231 | 1.74 | 0.71  | -1.18 | -0.39 | -0.08 | -0.93     | -0.16    | -1.84 | -1.40    | -0.60 | 0.74      |
|    |    | 18  | 1.43 | 0.21  | -0.74 | 0.02  | -0.55 | 0.37      | 0.50     | -1.15 | -0.09    | -0.56 | 0.79      |
|    |    | 22  | 0.75 | -0.26 | -1.54 | -0.26 | -1.54 | 0.01      | 0.11     | -0.68 | -0.09    | -0.48 | 0.34      |
|    |    | 232 | 1.86 | 0.50  | -0.22 | 0.50  | -0.22 | -5.87e-03 | 0.11     | -1.87 | -1.24    | -0.52 | 0.93      |
| 13 | 62 | 231 | 1.56 | 1.13  | -1.12 | -0.35 | 0.36  | -1.07     | -0.25    | -1.69 | -1.34    | -0.60 | 0.62      |
|    |    | 18  | 1.22 | 0.29  | -0.17 | 0.09  | 0.03  | 0.22      | 0.42     | -0.99 | -0.02    | -0.55 | 0.66      |
|    |    | 22  | 0.59 | -0.21 | -0.98 | -0.22 | -0.97 | -0.09     | 0.05     | -0.57 | -0.04    | -0.47 | 0.22      |
|    |    | 232 | 1.69 | 0.53  | 0.19  | 0.51  | 0.21  | -0.09     | 0.01     | -1.73 | -1.19    | -0.53 | 0.81      |
| 14 | 1  | 92  | 3.47 | 7.86  | 1.92  | 7.10  | 2.68  | 1.99      | -0.46    | -3.65 | -3.36    | -0.75 | 0.92      |
|    |    | 20  | 4.73 | 11.96 | 0.66  | 8.73  | 3.89  | -5.11     | -0.35    | -4.98 | -4.57    | -0.76 | -1.32     |
|    |    | 24  | 4.76 | 3.17  | 1.08  | 1.32  | 2.93  | 0.66      | -0.55    | -5.20 | -4.74    | -1.02 | 1.39      |
|    |    | 93  | 3.31 | 6.26  | 3.04  | 4.54  | 4.76  | -1.61     | -0.30    | -3.53 | -3.24    | -0.59 | -0.92     |
| 14 | 2  | 92  | 2.46 | 5.53  | 1.35  | 4.99  | 1.90  | 1.41      | -0.35    | -2.60 | -2.40    | -0.55 | 0.64      |
|    |    | 20  | 3.22 | 8.49  | 0.49  | 6.14  | 2.84  | -3.64     | -0.23    | -3.39 | -3.10    | -0.52 | -0.90     |
|    |    | 24  | 3.24 | 2.27  | 0.79  | 0.95  | 2.11  | 0.46      | -0.38    | -3.54 | -3.22    | -0.70 | 0.96      |
|    |    | 93  | 2.35 | 4.47  | 2.16  | 3.22  | 3.42  | -1.15     | -0.23    | -2.51 | -2.32    | -0.43 | -0.64     |
| 14 | 13 | 92  | 2.84 | 5.95  | 1.43  | 5.46  | 1.92  | 1.40      | -0.51    | -3.02 | -2.90    | -0.64 | 0.55      |
|    |    | 20  | 3.67 | 8.67  | -0.05 | 6.48  | 2.15  | -3.78     | -0.24    | -3.83 | -3.59    | -0.48 | -0.90     |
|    |    | 24  | 3.58 | 1.41  | 1.18  | 1.19  | 1.39  | 0.05      | -0.39    | -3.88 | -3.59    | -0.68 | 0.97      |
|    |    | 93  | 2.71 | 5.02  | 2.03  | 3.61  | 3.44  | -1.49     | -0.29    | -2.91 | -2.70    | -0.50 | -0.71     |
| 14 | 45 | 92  | 2.64 | 5.73  | 1.39  | 5.21  | 1.91  | 1.41      | -0.43    | -2.80 | -2.64    | -0.59 | 0.59      |
|    |    | 20  | 3.44 | 8.57  | 0.24  | 6.30  | 2.51  | -3.71     | -0.24    | -3.60 | -3.34    | -0.50 | -0.90     |
|    |    | 24  | 3.40 | 1.85  | 0.98  | 1.07  | 1.76  | 0.26      | -0.38    | -3.71 | -3.40    | -0.69 | 0.96      |
|    |    | 93  | 2.52 | 4.73  | 2.10  | 3.41  | 3.43  | -1.31     | -0.26    | -2.71 | -2.50    | -0.46 | -0.67     |
| 15 | 1  | 216 | 3.15 | 1.23  | 0.32  | 1.21  | 0.34  | -0.14     | 0.36     | -3.07 | -1.83    | -0.88 | -1.65     |
|    |    | 19  | 7.99 | 4.48  | -2.59 | -1.00 | 2.89  | 2.96      | -1.38    | -8.79 | -8.69    | -1.48 | 0.89      |
|    |    | 23  | 6.98 | 4.00  | 0.65  | 2.70  | 1.94  | -1.63     | -1.36    | -7.81 | -7.55    | -1.62 | -1.27     |
|    |    | 217 | 1.63 | 2.14  | -1.74 | -0.60 | 1.01  | 1.77      | -0.62    | -1.87 | -1.87    | -0.63 | 0.08      |
| 15 | 2  | 216 | 2.21 | 0.86  | 0.23  | 0.84  | 0.26  | -0.13     | 0.26     | -2.16 | -1.27    | -0.63 | -1.16     |
|    |    | 19  | 5.47 | 3.21  | -1.77 | -0.70 | 2.14  | 2.04      | -0.94    | -6.02 | -5.95    | -1.01 | 0.60      |
|    |    | 23  | 4.75 | 2.85  | 0.41  | 1.86  | 1.40  | -1.20     | -0.93    | -5.32 | -5.14    | -1.12 | -0.88     |
|    |    | 217 | 1.13 | 1.57  | -1.19 | -0.42 | 0.80  | 1.24      | -0.45    | -1.30 | -1.30    | -0.45 | 0.04      |
| 15 | 3  | 216 | 2.97 | -0.06 | -1.47 | -0.33 | -1.20 | 0.55      | -0.16    | -3.15 | -2.47    | -0.84 | -1.25     |
|    |    | 19  | 6.56 | 2.55  | -3.91 | -1.90 | 0.54  | 2.99      | -1.11    | -7.19 | -7.14    | -1.17 | 0.59      |
|    |    | 23  | 5.69 | 1.15  | -0.18 | 1.08  | -0.11 | -0.28     | -1.10    | -6.36 | -6.20    | -1.25 | -0.88     |
|    |    | 217 | 2.09 | 1.03  | -2.77 | -1.16 | -0.57 | 1.88      | -0.63    | -2.38 | -2.38    | -0.63 | -0.04     |
| 15 | 35 | 216 | 2.55 | 0.33  | -0.49 | 0.27  | -0.44 | 0.20      | 0.04     | -2.62 | -1.85    | -0.73 | -1.21     |
|    |    | 19  | 5.99 | 2.88  | -2.78 | -1.28 | 1.37  | 2.50      | -1.02    | -6.59 | -6.52    | -1.09 | 0.59      |
|    |    | 23  | 5.20 | 1.94  | 0.22  | 1.49  | 0.67  | -0.76     | -1.01    | -5.82 | -5.65    | -1.18 | -0.88     |
|    |    | 217 | 1.59 | 1.29  | -1.93 | -0.78 | 0.14  | 1.55      | -0.54    | -1.82 | -1.82    | -0.54 | -1.08e-03 |
| 16 | 1  | 232 | 1.59 | 1.31  | -0.58 | -0.06 | 0.78  | -0.85     | -0.58    | -1.85 | -1.71    | -0.72 | 0.39      |
|    |    | 22  | 1.17 | 0.12  | -0.67 | 0.12  | -0.67 | 2.52e-03  | 0.38     | -0.97 | 0.04     | -0.63 | 0.58      |
|    |    | 26  | 0.54 | -0.15 | -1.40 | -0.15 | -1.40 | -0.06     | 4.89e-03 | -0.50 | 4.85e-03 | -0.50 | 4.12e-03  |
|    |    | 233 | 1.73 | 0.72  | 0.33  | 0.41  | 0.65  | -0.15     | -0.27    | -1.90 | -1.54    | -0.63 | 0.67      |
| 16 | 2  | 232 | 1.12 | 0.96  | -0.38 | -0.04 | 0.62  | -0.59     | -0.40    | -1.30 | -1.19    | -0.51 | 0.30      |
|    |    | 22  | 0.83 | 0.08  | -0.41 | 0.08  | -0.41 | 2.79e-03  | 0.26     | -0.69 | 0.03     | -0.46 | 0.41      |
|    |    | 26  | 0.39 | -0.10 | -0.90 | -0.11 | -0.90 | -0.04     | 4.02e-03 | -0.37 | 3.63e-03 | -0.37 | 0.01      |
|    |    | 233 | 1.20 | 0.56  | 0.25  | 0.28  | 0.52  | -0.10     | -0.19    | -1.33 | -1.07    | -0.45 | 0.48      |
| 16 | 30 | 232 | 1.38 | 0.07  | -0.37 | -0.06 | -0.24 | -0.20     | -0.25    | -1.54 | -1.28    | -0.50 | 0.51      |
|    |    | 22  | 1.19 | 0.08  | -1.72 | -0.01 | -1.64 | 0.39      | 0.40     | -0.93 | -0.07    | -0.46 | 0.64      |
|    |    | 26  | 0.57 | -0.19 | -2.15 | -0.21 | -2.13 | 0.19      | 0.06     | -0.50 | -0.07    | -0.37 | 0.23      |
|    |    | 233 | 1.50 | 0.29  | -0.37 | 0.25  | -0.34 | 0.14      | -0.02    | -1.57 | -1.14    | -0.44 | 0.69      |
| 16 | 62 | 232 | 1.24 | 0.50  | -0.34 | -0.05 | 0.21  | -0.40     | -0.33    | -1.41 | -1.23    | -0.51 | 0.40      |
|    |    | 22  | 1.00 | 0.07  | -1.03 | 0.04  | -1.00 | 0.19      | 0.33     | -0.80 | -0.02    | -0.46 | 0.52      |
|    |    | 26  | 0.44 | -0.15 | -1.50 | -0.16 | -1.49 | 0.07      | 5.26e-03 | -0.41 | -0.03    | -0.37 | 0.12      |
|    |    | 233 | 1.34 | 0.27  | 0.11  | 0.27  | 0.11  | 0.02      | -0.11    | -1.44 | -1.10    | -0.45 | 0.58      |

|    |    |     |      |       |          |           |       |       |       |       |          |       |       |
|----|----|-----|------|-------|----------|-----------|-------|-------|-------|-------|----------|-------|-------|
| 17 | 1  | 93  | 3.30 | 4.40  | 3.04     | 3.37      | 4.06  | 0.58  | -0.46 | -3.58 | -3.35    | -0.69 | 0.82  |
|    |    | 24  | 4.40 | 6.17  | 1.92     | 3.93      | 4.17  | -2.12 | -0.51 | -4.79 | -4.47    | -0.83 | -1.12 |
|    |    | 28  | 4.52 | 3.47  | -0.39    | -0.37     | 3.46  | -0.22 | -0.62 | -4.94 | -4.58    | -0.98 | 1.20  |
|    |    | 94  | 3.20 | 5.29  | 1.32     | 1.36      | 5.26  | -0.37 | -0.40 | -3.48 | -3.26    | -0.62 | -0.80 |
| 17 | 2  | 93  | 2.34 | 3.14  | 2.15     | 2.40      | 2.89  | 0.43  | -0.35 | -2.55 | -2.40    | -0.50 | 0.56  |
|    |    | 24  | 2.98 | 4.47  | 1.36     | 2.79      | 3.04  | -1.55 | -0.34 | -3.24 | -3.03    | -0.56 | -0.76 |
|    |    | 28  | 3.07 | 2.51  | -0.24    | -0.24     | 2.50  | -0.15 | -0.42 | -3.35 | -3.10    | -0.67 | 0.82  |
|    |    | 94  | 2.27 | 3.80  | 0.97     | 0.99      | 3.77  | -0.28 | -0.30 | -2.48 | -2.33    | -0.45 | -0.55 |
| 17 | 13 | 93  | 2.64 | 3.32  | 2.40     | 2.79      | 2.93  | 0.45  | -0.47 | -2.89 | -2.78    | -0.57 | 0.50  |
|    |    | 24  | 3.34 | 4.01  | 0.83     | 2.96      | 1.88  | -1.50 | -0.35 | -3.59 | -3.40    | -0.53 | -0.75 |
|    |    | 28  | 3.31 | 1.41  | -0.10    | -0.04     | 1.35  | -0.30 | -0.41 | -3.62 | -3.38    | -0.66 | 0.85  |
|    |    | 94  | 2.53 | 3.95  | 1.31     | 1.43      | 3.84  | -0.54 | -0.34 | -2.78 | -2.62    | -0.50 | -0.60 |
| 17 | 46 | 93  | 2.48 | 3.26  | 2.23     | 2.58      | 2.91  | 0.49  | -0.40 | -2.71 | -2.58    | -0.53 | 0.53  |
|    |    | 24  | 3.15 | 4.16  | 1.19     | 2.87      | 2.49  | -1.47 | -0.35 | -3.41 | -3.21    | -0.55 | -0.76 |
|    |    | 28  | 3.18 | 1.96  | -0.16    | -0.14     | 1.95  | -0.17 | -0.42 | -3.48 | -3.23    | -0.67 | 0.84  |
|    |    | 94  | 2.39 | 3.85  | 1.15     | 1.20      | 3.80  | -0.36 | -0.32 | -2.62 | -2.47    | -0.47 | -0.57 |
| 18 | 1  | 217 | 2.49 | 1.03  | 0.03     | 0.86      | 0.20  | 0.38  | 0.08  | -2.52 | -1.71    | -0.73 | -1.20 |
|    |    | 23  | 7.11 | 3.85  | -0.04    | 0.08      | 3.73  | 0.66  | -1.32 | -7.92 | -7.82    | -1.43 | 0.81  |
|    |    | 27  | 6.56 | 3.14  | 1.27     | 1.36      | 3.05  | -0.40 | -1.34 | -7.39 | -7.20    | -1.53 | -1.06 |
|    |    | 218 | 1.50 | 1.00  | -0.39    | -0.23     | 0.84  | 0.45  | -0.51 | -1.72 | -1.67    | -0.56 | 0.25  |
| 18 | 2  | 217 | 1.74 | 0.71  | 0.07     | 0.60      | 0.18  | 0.24  | 0.05  | -1.76 | -1.19    | -0.52 | -0.84 |
|    |    | 23  | 4.85 | 2.81  | -0.03    | 0.04      | 2.74  | 0.45  | -0.90 | -5.40 | -5.33    | -0.97 | 0.55  |
|    |    | 27  | 4.44 | 2.28  | 0.85     | 0.93      | 2.21  | -0.32 | -0.91 | -5.01 | -4.88    | -1.05 | -0.73 |
|    |    | 218 | 1.03 | 0.79  | -0.26    | -0.16     | 0.68  | 0.32  | -0.37 | -1.19 | -1.16    | -0.40 | 0.15  |
| 18 | 4  | 217 | 2.47 | 0.07  | -1.88    | -0.21     | -1.60 | 0.68  | -0.30 | -2.67 | -2.27    | -0.70 | -0.89 |
|    |    | 23  | 5.81 | 1.30  | -1.26    | -0.79     | 0.83  | 0.99  | -1.07 | -6.46 | -6.40    | -1.12 | 0.54  |
|    |    | 27  | 5.32 | 0.48  | 0.10     | 0.25      | 0.33  | 0.18  | -1.08 | -5.99 | -5.88    | -1.19 | -0.73 |
|    |    | 218 | 1.91 | -0.21 | -1.69    | -0.82     | -1.08 | 0.73  | -0.55 | -2.17 | -2.17    | -0.55 | 0.11  |
| 18 | 36 | 217 | 2.07 | 0.40  | -0.87    | 0.21      | -0.68 | 0.45  | -0.13 | -2.18 | -1.71    | -0.61 | -0.86 |
|    |    | 23  | 5.31 | 2.03  | -0.57    | -0.36     | 1.82  | 0.71  | -0.98 | -5.91 | -5.85    | -1.04 | 0.55  |
|    |    | 27  | 4.86 | 1.31  | 0.59     | 0.60      | 1.30  | -0.08 | -0.99 | -5.48 | -5.36    | -1.11 | -0.73 |
|    |    | 218 | 1.45 | 0.22  | -0.86    | -0.48     | -0.17 | 0.52  | -0.46 | -1.66 | -1.64    | -0.47 | 0.13  |
| 19 | 1  | 233 | 1.34 | 0.74  | -0.04    | 0.02      | 0.68  | -0.21 | -0.60 | -1.60 | -1.58    | -0.62 | 0.14  |
|    |    | 26  | 0.90 | 0.05  | -1.35    | 0.05      | -1.35 | -0.03 | 0.26  | -0.74 | 0.02     | -0.50 | 0.43  |
|    |    | 30  | 0.50 | -0.07 | -1.56    | -0.07     | -1.56 | 0.02  | 0.03  | -0.44 | 5.90e-03 | -0.42 | -0.11 |
|    |    | 234 | 1.45 | 0.64  | 0.13     | 0.15      | 0.61  | -0.10 | -0.39 | -1.66 | -1.48    | -0.57 | 0.44  |
| 19 | 2  | 233 | 0.93 | 0.59  | -0.03    | 9.93e-03  | 0.55  | -0.14 | -0.42 | -1.11 | -1.09    | -0.44 | 0.11  |
|    |    | 26  | 0.64 | 0.04  | -0.88    | 0.04      | -0.87 | -0.02 | 0.18  | -0.53 | 0.02     | -0.37 | 0.30  |
|    |    | 30  | 0.35 | -0.05 | -1.01    | -0.05     | -1.01 | 0.01  | 0.02  | -0.32 | 4.30e-03 | -0.31 | -0.07 |
|    |    | 234 | 1.00 | 0.52  | 0.10     | 0.11      | 0.51  | -0.07 | -0.28 | -1.15 | -1.02    | -0.40 | 0.31  |
| 19 | 30 | 233 | 1.13 | 0.22  | -0.47    | -8.09e-03 | -0.24 | 0.32  | -0.31 | -1.29 | -1.17    | -0.44 | 0.33  |
|    |    | 26  | 0.98 | 0.04  | -2.11    | -0.05     | -2.02 | 0.43  | 0.33  | -0.75 | -0.06    | -0.36 | 0.52  |
|    |    | 30  | 0.44 | -0.12 | -2.22    | -0.17     | -2.17 | 0.32  | 0.02  | -0.37 | -0.06    | -0.29 | 0.15  |
|    |    | 234 | 1.26 | 0.18  | -0.44    | 0.04      | -0.30 | 0.26  | -0.12 | -1.36 | -1.08    | -0.39 | 0.52  |
| 19 | 62 | 233 | 1.01 | 0.20  | -0.03    | 1.13e-03  | 0.17  | 0.08  | -0.38 | -1.19 | -1.13    | -0.44 | 0.21  |
|    |    | 26  | 0.79 | 0.02  | -1.45    | -6.79e-03 | -1.43 | 0.20  | 0.25  | -0.63 | -0.02    | -0.36 | 0.41  |
|    |    | 30  | 0.34 | -0.09 | -1.59    | -0.11     | -1.57 | 0.16  | -0.02 | -0.30 | -0.02    | -0.30 | 0.04  |
|    |    | 234 | 1.12 | 0.19  | 6.68e-03 | 0.08      | 0.12  | 0.09  | -0.20 | -1.25 | -1.05    | -0.40 | 0.41  |
| 20 | 1  | 94  | 3.20 | 4.84  | 0.79     | 0.80      | 4.84  | -0.12 | -0.48 | -3.52 | -3.32    | -0.68 | 0.74  |
|    |    | 28  | 4.30 | 4.26  | 0.86     | 0.92      | 4.20  | -0.43 | -0.60 | -4.71 | -4.44    | -0.87 | -1.03 |
|    |    | 32  | 4.39 | 3.84  | -1.30    | -1.23     | 3.78  | -0.57 | -0.64 | -4.79 | -4.48    | -0.95 | 1.09  |
|    |    | 95  | 3.21 | 5.42  | -0.44    | -0.44     | 5.41  | 0.22  | -0.45 | -3.46 | -3.27    | -0.64 | -0.74 |
| 20 | 2  | 94  | 2.27 | 3.46  | 0.59     | 0.60      | 3.46  | -0.07 | -0.36 | -2.50 | -2.38    | -0.49 | 0.51  |
|    |    | 28  | 2.91 | 3.12  | 0.63     | 0.68      | 3.06  | -0.35 | -0.40 | -3.19 | -3.00    | -0.59 | -0.70 |
|    |    | 32  | 2.98 | 2.78  | -0.88    | -0.84     | 2.74  | -0.38 | -0.44 | -3.24 | -3.03    | -0.65 | 0.74  |
|    |    | 95  | 2.28 | 3.89  | -0.27    | -0.26     | 3.88  | 0.13  | -0.34 | -2.47 | -2.34    | -0.46 | -0.50 |

|    |    |     |      |           |           |           |       |       |       |       |          |       |       |
|----|----|-----|------|-----------|-----------|-----------|-------|-------|-------|-------|----------|-------|-------|
| 20 | 4  | 94  | 2.23 | 3.34      | 2.81e-03  | 0.03      | 3.32  | -0.28 | -0.27 | -2.41 | -2.23    | -0.46 | 0.60  |
|    |    | 28  | 2.75 | 4.95      | 0.41      | 0.49      | 4.86  | -0.60 | -0.48 | -3.02 | -2.86    | -0.64 | -0.61 |
|    |    | 32  | 3.19 | 4.54      | -1.09     | -1.08     | 4.53  | -0.23 | -0.46 | -3.44 | -3.20    | -0.70 | 0.81  |
|    |    | 95  | 2.40 | 3.77      | -0.91     | -0.89     | 3.75  | 0.32  | -0.42 | -2.60 | -2.52    | -0.50 | -0.42 |
| 20 | 36 | 94  | 2.25 | 3.40      | 0.31      | 0.32      | 3.39  | -0.17 | -0.32 | -2.46 | -2.31    | -0.47 | 0.55  |
|    |    | 28  | 2.83 | 4.00      | 0.53      | 0.59      | 3.93  | -0.47 | -0.44 | -3.10 | -2.93    | -0.61 | -0.66 |
|    |    | 32  | 3.08 | 3.62      | -0.97     | -0.95     | 3.60  | -0.31 | -0.45 | -3.33 | -3.11    | -0.67 | 0.77  |
|    |    | 95  | 2.34 | 3.83      | -0.57     | -0.56     | 3.82  | 0.22  | -0.38 | -2.53 | -2.42    | -0.48 | -0.46 |
| 21 | 1  | 218 | 2.04 | 0.81      | -0.01     | 0.45      | 0.34  | 0.41  | -0.08 | -2.13 | -1.60    | -0.62 | -0.90 |
|    |    | 27  | 6.65 | 4.12      | 0.10      | 0.14      | 4.08  | -0.40 | -1.31 | -7.44 | -7.34    | -1.41 | 0.79  |
|    |    | 31  | 6.39 | 3.69      | 0.40      | 0.43      | 3.67  | 0.27  | -1.32 | -7.18 | -7.03    | -1.47 | -0.93 |
|    |    | 219 | 1.47 | 0.78      | -0.14     | -0.10     | 0.75  | -0.17 | -0.39 | -1.69 | -1.56    | -0.52 | 0.39  |
| 21 | 2  | 218 | 1.41 | 0.57      | 0.04      | 0.31      | 0.30  | 0.27  | -0.07 | -1.48 | -1.11    | -0.44 | -0.63 |
|    |    | 27  | 4.51 | 3.00      | 0.06      | 0.08      | 2.97  | -0.28 | -0.89 | -5.05 | -4.98    | -0.96 | 0.53  |
|    |    | 31  | 4.32 | 2.67      | 0.28      | 0.29      | 2.66  | 0.16  | -0.89 | -4.86 | -4.76    | -1.00 | -0.63 |
|    |    | 219 | 1.01 | 0.63      | -0.09     | -0.07     | 0.61  | -0.11 | -0.29 | -1.16 | -1.08    | -0.37 | 0.26  |
| 21 | 4  | 218 | 2.13 | -0.27     | -1.84     | -0.40     | -1.71 | 0.42  | -0.35 | -2.36 | -2.11    | -0.59 | -0.66 |
|    |    | 27  | 5.40 | 0.95      | -0.64     | -0.63     | 0.94  | -0.10 | -1.04 | -6.04 | -5.98    | -1.10 | 0.53  |
|    |    | 31  | 5.15 | 0.73      | -0.50     | -0.40     | 0.63  | 0.33  | -1.04 | -5.79 | -5.71    | -1.13 | -0.63 |
|    |    | 219 | 1.81 | -0.75     | -1.40     | -0.76     | -1.40 | 0.05  | -0.48 | -2.07 | -2.03    | -0.51 | 0.23  |
| 21 | 36 | 218 | 1.74 | 0.12      | -0.82     | -0.03     | -0.67 | 0.34  | -0.22 | -1.89 | -1.59    | -0.51 | -0.64 |
|    |    | 27  | 4.94 | 2.01      | -0.28     | -0.26     | 2.00  | -0.19 | -0.96 | -5.52 | -5.46    | -1.03 | 0.53  |
|    |    | 31  | 4.72 | 1.72      | -0.08     | -0.04     | 1.68  | 0.24  | -0.97 | -5.31 | -5.21    | -1.06 | -0.63 |
|    |    | 219 | 1.39 | -0.34     | -0.42     | -0.40     | -0.35 | -0.03 | -0.39 | -1.59 | -1.54    | -0.44 | 0.24  |
| 22 | 1  | 234 | 1.27 | 0.65      | -7.45e-03 | 1.26e-03  | 0.64  | 0.07  | -0.56 | -1.50 | -1.50    | -0.56 | -0.07 |
|    |    | 30  | 0.69 | 0.02      | -1.54     | 0.02      | -1.54 | -0.04 | 0.17  | -0.58 | 0.01     | -0.42 | 0.31  |
|    |    | 34  | 0.56 | -0.01     | -1.56     | -0.01     | -1.56 | 0.04  | 0.10  | -0.48 | 8.27e-03 | -0.39 | -0.21 |
|    |    | 235 | 1.30 | 0.65      | 1.97e-03  | 0.03      | 0.62  | -0.12 | -0.48 | -1.53 | -1.47    | -0.54 | 0.25  |
| 22 | 2  | 234 | 0.87 | 0.53      | -5.15e-03 | -2.26e-04 | 0.53  | 0.05  | -0.40 | -1.04 | -1.03    | -0.40 | -0.04 |
|    |    | 30  | 0.49 | 0.01      | -1.00     | 0.01      | -1.00 | -0.03 | 0.12  | -0.41 | 9.25e-03 | -0.31 | 0.21  |
|    |    | 34  | 0.39 | -8.93e-03 | -1.02     | -9.67e-03 | -1.02 | 0.03  | 0.06  | -0.34 | 6.00e-03 | -0.28 | -0.14 |
|    |    | 235 | 0.90 | 0.53      | 4.28e-03  | 0.02      | 0.52  | -0.08 | -0.34 | -1.06 | -1.01    | -0.39 | 0.17  |
| 22 | 30 | 234 | 0.98 | 0.46      | -0.64     | -0.03     | -0.15 | 0.55  | -0.35 | -1.13 | -1.09    | -0.39 | 0.17  |
|    |    | 30  | 0.82 | 0.04      | -2.02     | -0.07     | -1.91 | 0.45  | 0.27  | -0.62 | -0.05    | -0.30 | 0.43  |
|    |    | 34  | 0.36 | -0.06     | -2.03     | -0.14     | -1.94 | 0.41  | -0.02 | -0.30 | -0.04    | -0.28 | 0.07  |
|    |    | 235 | 1.10 | 0.20      | -0.44     | -0.07     | -0.17 | 0.32  | -0.21 | -1.23 | -1.06    | -0.38 | 0.38  |
| 22 | 46 | 234 | 0.94 | -0.02     | -0.52     | -0.10     | -0.44 | 0.19  | -0.39 | -1.11 | -1.11    | -0.39 | 0.01  |
|    |    | 30  | 0.57 | -0.14     | -2.26     | -0.15     | -2.26 | 0.11  | 0.11  | -0.47 | -0.07    | -0.30 | 0.26  |
|    |    | 34  | 0.36 | -0.18     | -2.28     | -0.18     | -2.28 | 0.04  | -0.04 | -0.31 | -0.07    | -0.28 | -0.09 |
|    |    | 235 | 0.99 | -0.08     | -0.46     | -0.09     | -0.45 | -0.06 | -0.31 | -1.15 | -1.09    | -0.38 | 0.22  |
| 23 | 1  | 95  | 3.21 | 5.25      | -0.68     | -0.65     | 5.22  | -0.41 | -0.49 | -3.48 | -3.30    | -0.67 | 0.71  |
|    |    | 32  | 4.29 | 4.14      | -0.75     | -0.72     | 4.11  | 0.37  | -0.63 | -4.68 | -4.42    | -0.90 | -1.00 |
|    |    | 36  | 4.32 | 4.04      | -1.44     | -1.36     | 3.97  | -0.63 | -0.64 | -4.71 | -4.43    | -0.92 | 1.03  |
|    |    | 96  | 3.22 | 5.41      | -1.09     | -1.06     | 5.38  | 0.44  | -0.48 | -3.46 | -3.28    | -0.66 | -0.71 |
| 23 | 2  | 95  | 2.28 | 3.76      | -0.44     | -0.42     | 3.74  | -0.27 | -0.36 | -2.48 | -2.36    | -0.48 | 0.48  |
|    |    | 32  | 2.90 | 3.01      | -0.49     | -0.47     | 2.99  | 0.22  | -0.43 | -3.17 | -2.99    | -0.61 | -0.68 |
|    |    | 36  | 2.93 | 2.93      | -0.97     | -0.93     | 2.89  | -0.42 | -0.44 | -3.18 | -2.99    | -0.63 | 0.69  |
|    |    | 96  | 2.29 | 3.88      | -0.72     | -0.70     | 3.86  | 0.29  | -0.35 | -2.46 | -2.35    | -0.47 | -0.48 |
| 23 | 4  | 95  | 2.48 | 3.66      | -1.08     | -1.04     | 3.62  | -0.42 | -0.38 | -2.67 | -2.54    | -0.52 | 0.54  |
|    |    | 32  | 3.03 | 4.83      | -0.70     | -0.70     | 4.83  | 0.09  | -0.52 | -3.29 | -3.15    | -0.66 | -0.61 |
|    |    | 36  | 3.12 | 4.73      | -1.14     | -1.14     | 4.72  | -0.14 | -0.46 | -3.36 | -3.15    | -0.67 | 0.75  |
|    |    | 96  | 2.41 | 3.80      | -1.37     | -1.31     | 3.74  | 0.55  | -0.41 | -2.60 | -2.51    | -0.50 | -0.44 |
| 23 | 36 | 95  | 2.38 | 3.71      | -0.74     | -0.72     | 3.68  | -0.34 | -0.37 | -2.57 | -2.44    | -0.50 | 0.51  |
|    |    | 32  | 2.96 | 3.88      | -0.59     | -0.58     | 3.88  | 0.16  | -0.47 | -3.23 | -3.07    | -0.63 | -0.64 |
|    |    | 36  | 3.02 | 3.79      | -1.04     | -1.03     | 3.77  | -0.28 | -0.45 | -3.27 | -3.07    | -0.65 | 0.72  |
|    |    | 96  | 2.34 | 3.84      | -1.03     | -0.99     | 3.80  | 0.42  | -0.38 | -2.53 | -2.42    | -0.49 | -0.46 |

|    |    |     |      |           |           |           |       |       |       |       |          |       |       |
|----|----|-----|------|-----------|-----------|-----------|-------|-------|-------|-------|----------|-------|-------|
| 24 | 1  | 219 | 1.74 | 0.76      | -0.09     | 0.15      | 0.53  | 0.38  | -0.19 | -1.88 | -1.53    | -0.55 | -0.69 |
|    |    | 31  | 6.43 | 4.24      | -0.15     | -0.03     | 4.11  | -0.72 | -1.30 | -7.20 | -7.09    | -1.41 | 0.80  |
|    |    | 35  | 6.35 | 4.08      | -0.10     | -6.37e-03 | 3.98  | 0.63  | -1.30 | -7.12 | -7.00    | -1.43 | -0.85 |
|    |    | 220 | 1.56 | 0.81      | -0.17     | -0.02     | 0.66  | -0.35 | -0.29 | -1.74 | -1.51    | -0.51 | 0.53  |
| 24 | 2  | 219 | 1.20 | 0.58      | -0.03     | 0.10      | 0.44  | 0.25  | -0.14 | -1.30 | -1.06    | -0.39 | -0.47 |
|    |    | 31  | 4.35 | 3.07      | -0.11     | -0.03     | 2.99  | -0.49 | -0.88 | -4.87 | -4.80    | -0.96 | 0.54  |
|    |    | 35  | 4.29 | 2.95      | -0.07     | -0.01     | 2.89  | 0.42  | -0.88 | -4.82 | -4.73    | -0.97 | -0.58 |
|    |    | 220 | 1.07 | 0.63      | -0.10     | -0.01     | 0.55  | -0.24 | -0.21 | -1.20 | -1.05    | -0.37 | 0.36  |
| 24 | 4  | 219 | 1.92 | -0.59     | -1.68     | -0.60     | -1.67 | 0.11  | -0.38 | -2.16 | -2.01    | -0.53 | -0.49 |
|    |    | 31  | 5.19 | 1.17      | -0.93     | -0.72     | 0.96  | -0.63 | -1.03 | -5.81 | -5.75    | -1.09 | 0.55  |
|    |    | 35  | 5.10 | 0.91      | -0.76     | -0.70     | 0.86  | 0.30  | -1.03 | -5.72 | -5.65    | -1.10 | -0.57 |
|    |    | 220 | 1.79 | -0.58     | -1.69     | -0.72     | -1.56 | -0.36 | -0.42 | -2.04 | -1.96    | -0.50 | 0.34  |
| 24 | 36 | 219 | 1.53 | -0.15     | -0.66     | -0.23     | -0.57 | 0.19  | -0.27 | -1.70 | -1.52    | -0.46 | -0.48 |
|    |    | 31  | 4.75 | 2.14      | -0.49     | -0.36     | 2.01  | -0.56 | -0.95 | -5.32 | -5.26    | -1.02 | 0.54  |
|    |    | 35  | 4.68 | 1.97      | -0.40     | -0.34     | 1.91  | 0.37  | -0.95 | -5.25 | -5.17    | -1.03 | -0.57 |
|    |    | 220 | 1.40 | -0.11     | -0.71     | -0.35     | -0.47 | -0.29 | -0.33 | -1.59 | -1.49    | -0.43 | 0.35  |
| 25 | 1  | 235 | 1.30 | 0.65      | 1.97e-03  | 0.03      | 0.62  | 0.12  | -0.48 | -1.53 | -1.47    | -0.54 | -0.25 |
|    |    | 34  | 0.56 | -0.01     | -1.56     | -0.01     | -1.56 | -0.04 | 0.10  | -0.48 | 8.27e-03 | -0.39 | 0.21  |
|    |    | 38  | 0.69 | 0.02      | -1.54     | 0.02      | -1.54 | 0.04  | 0.17  | -0.58 | 0.01     | -0.42 | -0.31 |
|    |    | 236 | 1.27 | 0.65      | -7.45e-03 | 1.26e-03  | 0.64  | -0.07 | -0.56 | -1.50 | -1.50    | -0.56 | 0.07  |
| 25 | 2  | 235 | 0.90 | 0.53      | 4.28e-03  | 0.02      | 0.52  | 0.08  | -0.34 | -1.06 | -1.01    | -0.39 | -0.17 |
|    |    | 34  | 0.39 | -8.93e-03 | -1.02     | -9.67e-03 | -1.02 | -0.03 | 0.06  | -0.34 | 6.00e-03 | -0.28 | 0.14  |
|    |    | 38  | 0.49 | 0.01      | -1.00     | 0.01      | -1.00 | 0.03  | 0.12  | -0.41 | 9.25e-03 | -0.31 | -0.21 |
|    |    | 236 | 0.87 | 0.53      | -5.15e-03 | -2.26e-04 | 0.53  | -0.05 | -0.40 | -1.04 | -1.03    | -0.40 | 0.04  |
| 25 | 14 | 235 | 1.01 | -0.06     | -1.58     | -0.20     | -1.44 | 0.44  | -0.36 | -1.17 | -1.17    | -0.36 | -0.08 |
|    |    | 34  | 0.54 | -0.30     | -3.49     | -0.33     | -3.46 | 0.31  | 0.03  | -0.45 | -0.15    | -0.27 | 0.23  |
|    |    | 38  | 0.42 | -0.35     | -3.46     | -0.35     | -3.46 | 0.13  | -0.07 | -0.36 | -0.15    | -0.29 | -0.13 |
|    |    | 236 | 1.03 | -0.26     | -1.45     | -0.27     | -1.44 | 0.11  | -0.36 | -1.20 | -1.19    | -0.38 | 0.12  |
| 25 | 46 | 235 | 0.94 | 0.05      | -0.56     | -0.09     | -0.43 | 0.25  | -0.35 | -1.11 | -1.09    | -0.37 | -0.13 |
|    |    | 34  | 0.45 | -0.15     | -2.20     | -0.16     | -2.20 | 0.13  | 0.04  | -0.39 | -0.07    | -0.28 | 0.18  |
|    |    | 38  | 0.44 | -0.16     | -2.19     | -0.16     | -2.18 | 0.08  | 0.03  | -0.39 | -0.07    | -0.30 | -0.17 |
|    |    | 236 | 0.95 | -0.13     | -0.42     | -0.13     | -0.42 | 0.03  | -0.38 | -1.12 | -1.11    | -0.39 | 0.08  |
| 26 | 1  | 96  | 3.22 | 5.41      | -1.09     | -1.06     | 5.38  | -0.44 | -0.48 | -3.46 | -3.28    | -0.66 | 0.71  |
|    |    | 36  | 4.32 | 4.04      | -1.44     | -1.36     | 3.97  | 0.63  | -0.64 | -4.71 | -4.43    | -0.92 | -1.03 |
|    |    | 40  | 4.29 | 4.14      | -0.75     | -0.72     | 4.11  | -0.37 | -0.63 | -4.68 | -4.42    | -0.90 | 1.00  |
|    |    | 97  | 3.21 | 5.25      | -0.68     | -0.65     | 5.22  | 0.41  | -0.49 | -3.48 | -3.30    | -0.67 | -0.71 |
| 26 | 2  | 96  | 2.29 | 3.88      | -0.72     | -0.70     | 3.86  | -0.29 | -0.35 | -2.46 | -2.35    | -0.47 | 0.48  |
|    |    | 36  | 2.93 | 2.93      | -0.97     | -0.93     | 2.89  | 0.42  | -0.44 | -3.18 | -2.99    | -0.63 | -0.69 |
|    |    | 40  | 2.90 | 3.01      | -0.49     | -0.47     | 2.99  | -0.22 | -0.43 | -3.17 | -2.99    | -0.61 | 0.68  |
|    |    | 97  | 2.28 | 3.76      | -0.44     | -0.42     | 3.74  | 0.27  | -0.36 | -2.48 | -2.36    | -0.48 | -0.48 |
| 26 | 10 | 96  | 2.41 | 3.80      | -1.37     | -1.31     | 3.74  | -0.55 | -0.41 | -2.60 | -2.51    | -0.50 | 0.44  |
|    |    | 36  | 3.12 | 4.73      | -1.14     | -1.14     | 4.72  | 0.14  | -0.46 | -3.36 | -3.15    | -0.67 | -0.75 |
|    |    | 40  | 3.03 | 4.83      | -0.70     | -0.70     | 4.83  | -0.09 | -0.52 | -3.29 | -3.15    | -0.66 | 0.61  |
|    |    | 97  | 2.48 | 3.66      | -1.08     | -1.04     | 3.62  | 0.42  | -0.38 | -2.67 | -2.54    | -0.52 | -0.54 |
| 26 | 42 | 96  | 2.34 | 3.84      | -1.03     | -0.99     | 3.80  | -0.42 | -0.38 | -2.53 | -2.42    | -0.49 | 0.46  |
|    |    | 36  | 3.02 | 3.79      | -1.04     | -1.03     | 3.77  | 0.28  | -0.45 | -3.27 | -3.07    | -0.65 | -0.72 |
|    |    | 40  | 2.96 | 3.88      | -0.59     | -0.58     | 3.88  | -0.16 | -0.47 | -3.23 | -3.07    | -0.63 | 0.64  |
|    |    | 97  | 2.38 | 3.71      | -0.74     | -0.72     | 3.68  | 0.34  | -0.37 | -2.57 | -2.44    | -0.50 | -0.51 |
| 27 | 1  | 220 | 1.56 | 0.81      | -0.17     | -0.02     | 0.66  | 0.35  | -0.29 | -1.74 | -1.51    | -0.51 | -0.53 |
|    |    | 35  | 6.35 | 4.08      | -0.10     | -6.37e-03 | 3.98  | -0.63 | -1.30 | -7.12 | -7.00    | -1.43 | 0.85  |
|    |    | 39  | 6.43 | 4.24      | -0.15     | -0.03     | 4.11  | 0.72  | -1.30 | -7.20 | -7.09    | -1.41 | -0.80 |
|    |    | 221 | 1.74 | 0.76      | -0.09     | 0.15      | 0.53  | -0.38 | -0.19 | -1.88 | -1.53    | -0.55 | 0.69  |
| 27 | 2  | 220 | 1.07 | 0.63      | -0.10     | -0.01     | 0.55  | 0.24  | -0.21 | -1.20 | -1.05    | -0.37 | -0.36 |
|    |    | 35  | 4.29 | 2.95      | -0.07     | -0.01     | 2.89  | -0.42 | -0.88 | -4.82 | -4.73    | -0.97 | 0.58  |
|    |    | 39  | 4.35 | 3.07      | -0.11     | -0.03     | 2.99  | 0.49  | -0.88 | -4.87 | -4.80    | -0.96 | -0.54 |
|    |    | 221 | 1.20 | 0.58      | -0.03     | 0.10      | 0.44  | -0.25 | -0.14 | -1.30 | -1.06    | -0.39 | 0.47  |

|    |    |     |      |       |          |          |       |       |       |       |          |       |       |
|----|----|-----|------|-------|----------|----------|-------|-------|-------|-------|----------|-------|-------|
| 27 | 10 | 220 | 1.79 | -0.58 | -1.69    | -0.72    | -1.56 | 0.36  | -0.42 | -2.04 | -1.96    | -0.50 | -0.34 |
|    |    | 35  | 5.10 | 0.91  | -0.76    | -0.70    | 0.86  | -0.30 | -1.03 | -5.72 | -5.65    | -1.10 | 0.57  |
|    |    | 39  | 5.19 | 1.17  | -0.93    | -0.72    | 0.96  | 0.63  | -1.03 | -5.81 | -5.75    | -1.09 | -0.55 |
|    |    | 221 | 1.92 | -0.59 | -1.68    | -0.60    | -1.67 | -0.11 | -0.38 | -2.16 | -2.01    | -0.53 | 0.49  |
| 27 | 42 | 220 | 1.40 | -0.11 | -0.71    | -0.35    | -0.47 | 0.29  | -0.33 | -1.59 | -1.49    | -0.43 | -0.35 |
|    |    | 35  | 4.68 | 1.97  | -0.40    | -0.34    | 1.91  | -0.37 | -0.95 | -5.25 | -5.17    | -1.03 | 0.57  |
|    |    | 39  | 4.75 | 2.14  | -0.49    | -0.36    | 2.01  | 0.56  | -0.95 | -5.32 | -5.26    | -1.02 | -0.54 |
|    |    | 221 | 1.53 | -0.15 | -0.66    | -0.23    | -0.57 | -0.19 | -0.27 | -1.70 | -1.52    | -0.46 | 0.48  |
| 28 | 1  | 236 | 1.45 | 0.64  | 0.13     | 0.15     | 0.61  | 0.10  | -0.39 | -1.66 | -1.48    | -0.57 | -0.44 |
|    |    | 38  | 0.50 | -0.07 | -1.56    | -0.07    | -1.56 | -0.02 | 0.03  | -0.44 | 5.90e-03 | -0.42 | 0.11  |
|    |    | 42  | 0.90 | 0.05  | -1.35    | 0.05     | -1.35 | 0.03  | 0.26  | -0.74 | 0.02     | -0.50 | -0.43 |
|    |    | 237 | 1.34 | 0.74  | -0.04    | 0.02     | 0.68  | 0.21  | -0.60 | -1.60 | -1.58    | -0.62 | -0.14 |
| 28 | 2  | 236 | 1.00 | 0.52  | 0.10     | 0.11     | 0.51  | 0.07  | -0.28 | -1.15 | -1.02    | -0.40 | -0.31 |
|    |    | 38  | 0.35 | -0.05 | -1.01    | -0.05    | -1.01 | -0.01 | 0.02  | -0.32 | 4.30e-03 | -0.31 | 0.07  |
|    |    | 42  | 0.64 | 0.04  | -0.88    | 0.04     | -0.87 | 0.02  | 0.18  | -0.53 | 0.02     | -0.37 | -0.30 |
|    |    | 237 | 0.93 | 0.59  | -0.03    | 9.93e-03 | 0.55  | 0.14  | -0.42 | -1.11 | -1.09    | -0.44 | -0.11 |
| 28 | 16 | 236 | 1.23 | -0.07 | -1.43    | -0.09    | -1.42 | 0.14  | -0.21 | -1.36 | -1.18    | -0.39 | -0.42 |
|    |    | 38  | 0.37 | -0.37 | -3.58    | -0.37    | -3.58 | 0.05  | -0.14 | -0.30 | -0.16    | -0.28 | -0.05 |
|    |    | 42  | 0.83 | -0.29 | -3.46    | -0.30    | -3.45 | -0.18 | 0.18  | -0.68 | -0.15    | -0.35 | -0.42 |
|    |    | 237 | 1.13 | -0.19 | -1.37    | -0.20    | -1.37 | -0.05 | -0.37 | -1.32 | -1.26    | -0.43 | -0.23 |
| 28 | 48 | 236 | 1.11 | 0.03  | -0.44    | 0.01     | -0.42 | 0.10  | -0.24 | -1.25 | -1.10    | -0.40 | -0.36 |
|    |    | 38  | 0.34 | -0.20 | -2.25    | -0.20    | -2.25 | 0.02  | -0.07 | -0.30 | -0.07    | -0.30 | 0.01  |
|    |    | 42  | 0.72 | -0.12 | -2.12    | -0.13    | -2.11 | -0.08 | 0.18  | -0.60 | -0.07    | -0.36 | -0.36 |
|    |    | 237 | 1.03 | -0.08 | -0.38    | -0.09    | -0.37 | 0.05  | -0.40 | -1.21 | -1.17    | -0.44 | -0.17 |
| 29 | 1  | 97  | 3.21 | 5.42  | -0.44    | -0.44    | 5.41  | -0.22 | -0.45 | -3.46 | -3.27    | -0.64 | 0.74  |
|    |    | 40  | 4.39 | 3.84  | -1.30    | -1.23    | 3.78  | 0.57  | -0.64 | -4.79 | -4.48    | -0.95 | -1.09 |
|    |    | 44  | 4.30 | 4.26  | 0.86     | 0.92     | 4.20  | 0.43  | -0.60 | -4.71 | -4.44    | -0.87 | 1.03  |
|    |    | 98  | 3.20 | 4.84  | 0.79     | 0.80     | 4.84  | 0.12  | -0.48 | -3.52 | -3.32    | -0.68 | -0.74 |
| 29 | 2  | 97  | 2.28 | 3.89  | -0.27    | -0.26    | 3.88  | -0.13 | -0.34 | -2.47 | -2.34    | -0.46 | 0.50  |
|    |    | 40  | 2.98 | 2.78  | -0.88    | -0.84    | 2.74  | 0.38  | -0.44 | -3.24 | -3.03    | -0.65 | -0.74 |
|    |    | 44  | 2.91 | 3.12  | 0.63     | 0.68     | 3.06  | 0.35  | -0.40 | -3.19 | -3.00    | -0.59 | 0.70  |
|    |    | 98  | 2.27 | 3.46  | 0.59     | 0.60     | 3.46  | 0.07  | -0.36 | -2.50 | -2.38    | -0.49 | -0.51 |
| 29 | 10 | 97  | 2.40 | 3.77  | -0.91    | -0.89    | 3.75  | -0.32 | -0.42 | -2.60 | -2.52    | -0.50 | 0.42  |
|    |    | 40  | 3.19 | 4.54  | -1.09    | -1.08    | 4.53  | 0.23  | -0.46 | -3.44 | -3.20    | -0.70 | -0.81 |
|    |    | 44  | 2.75 | 4.95  | 0.41     | 0.49     | 4.86  | 0.60  | -0.48 | -3.02 | -2.86    | -0.64 | 0.61  |
|    |    | 98  | 2.23 | 3.34  | 2.81e-03 | 0.03     | 3.32  | 0.28  | -0.27 | -2.41 | -2.23    | -0.46 | -0.60 |
| 29 | 42 | 97  | 2.34 | 3.83  | -0.57    | -0.56    | 3.82  | -0.22 | -0.38 | -2.53 | -2.42    | -0.48 | 0.46  |
|    |    | 40  | 3.08 | 3.62  | -0.97    | -0.95    | 3.60  | 0.31  | -0.45 | -3.33 | -3.11    | -0.67 | -0.77 |
|    |    | 44  | 2.83 | 4.00  | 0.53     | 0.59     | 3.93  | 0.47  | -0.44 | -3.10 | -2.93    | -0.61 | 0.66  |
|    |    | 98  | 2.25 | 3.40  | 0.31     | 0.32     | 3.39  | 0.17  | -0.32 | -2.46 | -2.31    | -0.47 | -0.55 |
| 30 | 1  | 221 | 1.47 | 0.78  | -0.14    | -0.10    | 0.75  | 0.17  | -0.39 | -1.69 | -1.56    | -0.52 | -0.39 |
|    |    | 39  | 6.39 | 3.69  | 0.40     | 0.43     | 3.67  | -0.27 | -1.32 | -7.18 | -7.03    | -1.47 | 0.93  |
|    |    | 43  | 6.65 | 4.12  | 0.10     | 0.14     | 4.08  | 0.40  | -1.31 | -7.44 | -7.34    | -1.41 | -0.79 |
|    |    | 222 | 2.04 | 0.81  | -0.01    | 0.45     | 0.34  | -0.41 | -0.08 | -2.13 | -1.60    | -0.62 | 0.90  |
| 30 | 2  | 221 | 1.01 | 0.63  | -0.09    | -0.07    | 0.61  | 0.11  | -0.29 | -1.16 | -1.08    | -0.37 | -0.26 |
|    |    | 39  | 4.32 | 2.67  | 0.28     | 0.29     | 2.66  | -0.16 | -0.89 | -4.86 | -4.76    | -1.00 | 0.63  |
|    |    | 43  | 4.51 | 3.00  | 0.06     | 0.08     | 2.97  | 0.28  | -0.89 | -5.05 | -4.98    | -0.96 | -0.53 |
|    |    | 222 | 1.41 | 0.57  | 0.04     | 0.31     | 0.30  | -0.27 | -0.07 | -1.48 | -1.11    | -0.44 | 0.63  |
| 30 | 10 | 221 | 1.81 | -0.75 | -1.40    | -0.76    | -1.40 | -0.05 | -0.48 | -2.07 | -2.03    | -0.51 | -0.23 |
|    |    | 39  | 5.15 | 0.73  | -0.50    | -0.40    | 0.63  | -0.33 | -1.04 | -5.79 | -5.71    | -1.13 | 0.63  |
|    |    | 43  | 5.40 | 0.95  | -0.64    | -0.63    | 0.94  | 0.10  | -1.04 | -6.04 | -5.98    | -1.10 | -0.53 |
|    |    | 222 | 2.13 | -0.27 | -1.84    | -0.40    | -1.71 | -0.42 | -0.35 | -2.36 | -2.11    | -0.59 | 0.66  |
| 30 | 42 | 221 | 1.39 | -0.34 | -0.42    | -0.40    | -0.35 | 0.03  | -0.39 | -1.59 | -1.54    | -0.44 | -0.24 |
|    |    | 39  | 4.72 | 1.72  | -0.08    | -0.04    | 1.68  | -0.24 | -0.97 | -5.31 | -5.21    | -1.06 | 0.63  |
|    |    | 43  | 4.94 | 2.01  | -0.28    | -0.26    | 2.00  | 0.19  | -0.96 | -5.52 | -5.46    | -1.03 | -0.53 |
|    |    | 222 | 1.74 | 0.12  | -0.82    | -0.03    | -0.67 | -0.34 | -0.22 | -1.89 | -1.59    | -0.51 | 0.64  |

|    |    |     |      |       |       |       |       |           |          |       |          |       |           |
|----|----|-----|------|-------|-------|-------|-------|-----------|----------|-------|----------|-------|-----------|
| 31 | 1  | 237 | 1.73 | 0.72  | 0.33  | 0.41  | 0.65  | 0.15      | -0.27    | -1.90 | -1.54    | -0.63 | -0.67     |
|    |    | 42  | 0.54 | -0.15 | -1.40 | -0.15 | -1.40 | 0.06      | 4.89e-03 | -0.50 | 4.85e-03 | -0.50 | -4.12e-03 |
|    |    | 46  | 1.17 | 0.12  | -0.67 | 0.12  | -0.67 | -2.52e-03 | 0.38     | -0.97 | 0.04     | -0.63 | -0.58     |
|    |    | 238 | 1.59 | 1.31  | -0.58 | -0.06 | 0.78  | 0.85      | -0.58    | -1.85 | -1.71    | -0.72 | -0.39     |
| 31 | 2  | 237 | 1.20 | 0.56  | 0.25  | 0.28  | 0.52  | 0.10      | -0.19    | -1.33 | -1.07    | -0.45 | -0.48     |
|    |    | 42  | 0.39 | -0.10 | -0.90 | -0.11 | -0.90 | 0.04      | 4.02e-03 | -0.37 | 3.63e-03 | -0.37 | -0.01     |
|    |    | 46  | 0.83 | 0.08  | -0.41 | 0.08  | -0.41 | -2.79e-03 | 0.26     | -0.69 | 0.03     | -0.46 | -0.41     |
|    |    | 238 | 1.12 | 0.96  | -0.38 | -0.04 | 0.62  | 0.59      | -0.40    | -1.30 | -1.19    | -0.51 | -0.30     |
| 31 | 32 | 237 | 1.50 | 0.29  | -0.37 | 0.25  | -0.34 | -0.14     | -0.02    | -1.57 | -1.14    | -0.44 | -0.69     |
|    |    | 42  | 0.57 | -0.19 | -2.15 | -0.21 | -2.13 | -0.19     | 0.06     | -0.50 | -0.07    | -0.37 | -0.23     |
|    |    | 46  | 1.19 | 0.08  | -1.72 | -0.01 | -1.64 | -0.39     | 0.40     | -0.93 | -0.07    | -0.46 | -0.64     |
|    |    | 238 | 1.38 | 0.07  | -0.37 | -0.06 | -0.24 | 0.20      | -0.25    | -1.54 | -1.28    | -0.50 | -0.51     |
| 31 | 48 | 237 | 1.33 | 0.27  | -0.35 | 0.21  | -0.29 | 0.19      | -0.15    | -1.44 | -1.15    | -0.44 | -0.54     |
|    |    | 42  | 0.43 | -0.23 | -2.00 | -0.24 | -2.00 | 0.12      | -0.06    | -0.40 | -0.08    | -0.38 | -0.08     |
|    |    | 46  | 0.94 | -0.08 | -1.51 | -0.08 | -1.51 | -0.04     | 0.25     | -0.79 | -0.06    | -0.47 | -0.48     |
|    |    | 238 | 1.24 | 0.39  | -0.74 | -0.15 | -0.20 | 0.56      | -0.36    | -1.42 | -1.27    | -0.51 | -0.36     |
| 32 | 1  | 98  | 3.20 | 5.29  | 1.32  | 1.36  | 5.26  | 0.37      | -0.40    | -3.48 | -3.26    | -0.62 | 0.80      |
|    |    | 44  | 4.52 | 3.47  | -0.39 | -0.37 | 3.46  | 0.22      | -0.62    | -4.94 | -4.58    | -0.98 | -1.20     |
|    |    | 48  | 4.40 | 6.17  | 1.92  | 3.93  | 4.17  | 2.12      | -0.51    | -4.79 | -4.47    | -0.83 | 1.12      |
|    |    | 99  | 3.30 | 4.40  | 3.04  | 3.37  | 4.06  | -0.58     | -0.46    | -3.58 | -3.35    | -0.69 | -0.82     |
| 32 | 2  | 98  | 2.27 | 3.80  | 0.97  | 0.99  | 3.77  | 0.28      | -0.30    | -2.48 | -2.33    | -0.45 | 0.55      |
|    |    | 44  | 3.07 | 2.51  | -0.24 | -0.24 | 2.50  | 0.15      | -0.42    | -3.35 | -3.10    | -0.67 | -0.82     |
|    |    | 48  | 2.98 | 4.47  | 1.36  | 2.79  | 3.04  | 1.55      | -0.34    | -3.24 | -3.03    | -0.56 | 0.76      |
|    |    | 99  | 2.34 | 3.14  | 2.15  | 2.40  | 2.89  | -0.43     | -0.35    | -2.55 | -2.40    | -0.50 | -0.56     |
| 32 | 15 | 98  | 2.53 | 3.95  | 1.31  | 1.43  | 3.84  | 0.54      | -0.34    | -2.78 | -2.62    | -0.50 | 0.60      |
|    |    | 44  | 3.31 | 1.41  | -0.10 | -0.04 | 1.35  | 0.30      | -0.41    | -3.62 | -3.38    | -0.66 | -0.85     |
|    |    | 48  | 3.34 | 4.01  | 0.83  | 2.96  | 1.88  | 1.50      | -0.35    | -3.59 | -3.40    | -0.53 | 0.75      |
|    |    | 99  | 2.64 | 3.32  | 2.40  | 2.79  | 2.93  | -0.45     | -0.47    | -2.89 | -2.78    | -0.57 | -0.50     |
| 32 | 48 | 98  | 2.39 | 3.85  | 1.15  | 1.20  | 3.80  | 0.36      | -0.32    | -2.62 | -2.47    | -0.47 | 0.57      |
|    |    | 44  | 3.18 | 1.96  | -0.16 | -0.14 | 1.95  | 0.17      | -0.42    | -3.48 | -3.23    | -0.67 | -0.84     |
|    |    | 48  | 3.15 | 4.16  | 1.19  | 2.87  | 2.49  | 1.47      | -0.35    | -3.41 | -3.21    | -0.55 | 0.76      |
|    |    | 99  | 2.48 | 3.26  | 2.23  | 2.58  | 2.91  | -0.49     | -0.40    | -2.71 | -2.58    | -0.53 | -0.53     |
| 33 | 1  | 222 | 1.50 | 1.00  | -0.39 | -0.23 | 0.84  | -0.45     | -0.51    | -1.72 | -1.67    | -0.56 | -0.25     |
|    |    | 43  | 6.56 | 3.14  | 1.27  | 1.36  | 3.05  | 0.40      | -1.34    | -7.39 | -7.20    | -1.53 | 1.06      |
|    |    | 47  | 7.11 | 3.85  | -0.04 | 0.08  | 3.73  | -0.66     | -1.32    | -7.92 | -7.82    | -1.43 | -0.81     |
|    |    | 223 | 2.49 | 1.03  | 0.03  | 0.86  | 0.20  | -0.38     | 0.08     | -2.52 | -1.71    | -0.73 | 1.20      |
| 33 | 2  | 222 | 1.03 | 0.79  | -0.26 | -0.16 | 0.68  | -0.32     | -0.37    | -1.19 | -1.16    | -0.40 | -0.15     |
|    |    | 43  | 4.44 | 2.28  | 0.85  | 0.93  | 2.21  | 0.32      | -0.91    | -5.01 | -4.88    | -1.05 | 0.73      |
|    |    | 47  | 4.85 | 2.81  | -0.03 | 0.04  | 2.74  | -0.45     | -0.90    | -5.40 | -5.33    | -0.97 | -0.55     |
|    |    | 223 | 1.74 | 0.71  | 0.07  | 0.60  | 0.18  | -0.24     | 0.05     | -1.76 | -1.19    | -0.52 | 0.84      |
| 33 | 10 | 222 | 1.91 | -0.21 | -1.69 | -0.82 | -1.08 | -0.73     | -0.55    | -2.17 | -2.17    | -0.55 | -0.11     |
|    |    | 43  | 5.32 | 0.48  | 0.10  | 0.25  | 0.33  | -0.18     | -1.08    | -5.99 | -5.88    | -1.19 | 0.73      |
|    |    | 47  | 5.81 | 1.30  | -1.26 | -0.79 | 0.83  | -0.99     | -1.07    | -6.46 | -6.40    | -1.12 | -0.54     |
|    |    | 223 | 2.47 | 0.07  | -1.88 | -0.21 | -1.60 | -0.68     | -0.30    | -2.67 | -2.27    | -0.70 | 0.89      |
| 33 | 42 | 222 | 1.45 | 0.22  | -0.86 | -0.48 | -0.17 | -0.52     | -0.46    | -1.66 | -1.64    | -0.47 | -0.13     |
|    |    | 43  | 4.86 | 1.31  | 0.59  | 0.60  | 1.30  | 0.08      | -0.99    | -5.48 | -5.36    | -1.11 | 0.73      |
|    |    | 47  | 5.31 | 2.03  | -0.57 | -0.36 | 1.82  | -0.71     | -0.98    | -5.91 | -5.85    | -1.04 | -0.55     |
|    |    | 223 | 2.07 | 0.40  | -0.87 | 0.21  | -0.68 | -0.45     | -0.13    | -2.18 | -1.71    | -0.61 | 0.86      |
| 34 | 1  | 238 | 2.17 | 1.02  | 0.51  | 0.74  | 0.79  | 0.26      | -0.11    | -2.29 | -1.65    | -0.74 | -0.99     |
|    |    | 46  | 0.67 | -0.16 | -0.84 | -0.27 | -0.73 | 0.25      | 0.04     | -0.67 | 9.70e-03 | -0.64 | -0.14     |
|    |    | 50  | 1.46 | 0.77  | 0.20  | 0.23  | 0.74  | -0.12     | 0.51     | -1.19 | 0.06     | -0.74 | -0.76     |
|    |    | 239 | 1.97 | 2.15  | -1.60 | -0.45 | 1.00  | 1.73      | -0.49    | -2.19 | -1.84    | -0.84 | -0.69     |
| 34 | 2  | 238 | 1.53 | 0.73  | 0.39  | 0.51  | 0.61  | 0.16      | -0.07    | -1.61 | -1.15    | -0.53 | -0.70     |
|    |    | 46  | 0.49 | -0.10 | -0.53 | -0.19 | -0.44 | 0.17      | 0.03     | -0.49 | 7.25e-03 | -0.46 | -0.11     |
|    |    | 50  | 1.04 | 0.58  | 0.14  | 0.16  | 0.56  | -0.09     | 0.36     | -0.85 | 0.04     | -0.53 | -0.54     |
|    |    | 239 | 1.40 | 1.54  | -1.09 | -0.31 | 0.76  | 1.20      | -0.33    | -1.55 | -1.28    | -0.60 | -0.51     |

|    |    |     |      |       |       |       |       |          |       |       |       |       |          |
|----|----|-----|------|-------|-------|-------|-------|----------|-------|-------|-------|-------|----------|
| 34 | 32 | 238 | 1.86 | 0.50  | -0.22 | 0.50  | -0.22 | 5.87e-03 | 0.11  | -1.87 | -1.24 | -0.52 | -0.93    |
|    |    | 46  | 0.75 | -0.26 | -1.54 | -0.26 | -1.54 | -0.01    | 0.11  | -0.68 | -0.09 | -0.48 | -0.34    |
|    |    | 50  | 1.43 | 0.21  | -0.74 | 0.02  | -0.55 | -0.37    | 0.50  | -1.15 | -0.09 | -0.56 | -0.79    |
|    |    | 239 | 1.74 | 0.71  | -1.18 | -0.39 | -0.08 | 0.93     | -0.16 | -1.84 | -1.40 | -0.60 | -0.74    |
| 34 | 64 | 238 | 1.69 | 0.53  | 0.19  | 0.51  | 0.21  | 0.09     | 0.01  | -1.73 | -1.19 | -0.53 | -0.81    |
|    |    | 46  | 0.59 | -0.21 | -0.98 | -0.22 | -0.97 | 0.09     | 0.05  | -0.57 | -0.04 | -0.47 | -0.22    |
|    |    | 50  | 1.22 | 0.29  | -0.17 | 0.09  | 0.03  | -0.22    | 0.42  | -0.99 | -0.02 | -0.55 | -0.66    |
|    |    | 239 | 1.56 | 1.13  | -1.12 | -0.35 | 0.36  | 1.07     | -0.25 | -1.69 | -1.34 | -0.60 | -0.62    |
| 35 | 1  | 99  | 3.31 | 6.26  | 3.04  | 4.54  | 4.76  | 1.61     | -0.30 | -3.53 | -3.24 | -0.59 | 0.92     |
|    |    | 48  | 4.76 | 3.17  | 1.08  | 1.32  | 2.93  | -0.66    | -0.55 | -5.20 | -4.74 | -1.02 | -1.39    |
|    |    | 52  | 4.73 | 11.96 | 0.66  | 8.73  | 3.89  | 5.11     | -0.35 | -4.98 | -4.57 | -0.76 | 1.32     |
|    |    | 100 | 3.47 | 7.86  | 1.92  | 7.10  | 2.68  | -1.99    | -0.46 | -3.65 | -3.36 | -0.75 | -0.92    |
| 35 | 2  | 99  | 2.35 | 4.47  | 2.16  | 3.22  | 3.42  | 1.15     | -0.23 | -2.51 | -2.32 | -0.43 | 0.64     |
|    |    | 48  | 3.24 | 2.27  | 0.79  | 0.95  | 2.11  | -0.46    | -0.38 | -3.54 | -3.22 | -0.70 | -0.96    |
|    |    | 52  | 3.22 | 8.49  | 0.49  | 6.14  | 2.84  | 3.64     | -0.23 | -3.39 | -3.10 | -0.52 | 0.90     |
|    |    | 100 | 2.46 | 5.53  | 1.35  | 4.99  | 1.90  | -1.41    | -0.35 | -2.60 | -2.40 | -0.55 | -0.64    |
| 35 | 15 | 99  | 2.71 | 5.02  | 2.03  | 3.61  | 3.44  | 1.49     | -0.29 | -2.91 | -2.70 | -0.50 | 0.71     |
|    |    | 48  | 3.58 | 1.41  | 1.18  | 1.19  | 1.39  | -0.05    | -0.39 | -3.88 | -3.59 | -0.68 | -0.97    |
|    |    | 52  | 3.67 | 8.67  | -0.05 | 6.48  | 2.15  | 3.78     | -0.24 | -3.83 | -3.59 | -0.48 | 0.90     |
|    |    | 100 | 2.84 | 5.95  | 1.43  | 5.46  | 1.92  | -1.40    | -0.51 | -3.02 | -2.90 | -0.64 | -0.55    |
| 35 | 47 | 99  | 2.52 | 4.73  | 2.10  | 3.41  | 3.43  | 1.31     | -0.26 | -2.71 | -2.50 | -0.46 | 0.67     |
|    |    | 48  | 3.40 | 1.85  | 0.98  | 1.07  | 1.76  | -0.26    | -0.38 | -3.71 | -3.40 | -0.69 | -0.96    |
|    |    | 52  | 3.44 | 8.57  | 0.24  | 6.30  | 2.51  | 3.71     | -0.24 | -3.60 | -3.34 | -0.50 | 0.90     |
|    |    | 100 | 2.64 | 5.73  | 1.39  | 5.21  | 1.91  | -1.41    | -0.43 | -2.80 | -2.64 | -0.59 | -0.59    |
| 36 | 1  | 223 | 1.63 | 2.14  | -1.74 | -0.60 | 1.01  | -1.77    | -0.62 | -1.87 | -1.87 | -0.63 | -0.08    |
|    |    | 47  | 6.98 | 4.00  | 0.65  | 2.70  | 1.94  | 1.63     | -1.36 | -7.81 | -7.55 | -1.62 | 1.27     |
|    |    | 51  | 7.99 | 4.48  | -2.59 | -1.00 | 2.89  | -2.96    | -1.38 | -8.79 | -8.69 | -1.48 | -0.89    |
|    |    | 224 | 3.15 | 1.23  | 0.32  | 1.21  | 0.34  | 0.14     | 0.36  | -3.07 | -1.83 | -0.88 | 1.65     |
| 36 | 2  | 223 | 1.13 | 1.57  | -1.19 | -0.42 | 0.80  | -1.24    | -0.45 | -1.30 | -1.30 | -0.45 | -0.04    |
|    |    | 47  | 4.75 | 2.85  | 0.41  | 1.86  | 1.40  | 1.20     | -0.93 | -5.32 | -5.14 | -1.12 | 0.88     |
|    |    | 51  | 5.47 | 3.21  | -1.77 | -0.70 | 2.14  | -2.04    | -0.94 | -6.02 | -5.95 | -1.01 | -0.60    |
|    |    | 224 | 2.21 | 0.86  | 0.23  | 0.84  | 0.26  | 0.13     | 0.26  | -2.16 | -1.27 | -0.63 | 1.16     |
| 36 | 9  | 223 | 2.09 | 1.03  | -2.77 | -1.16 | -0.57 | -1.88    | -0.63 | -2.38 | -2.38 | -0.63 | 0.04     |
|    |    | 47  | 5.69 | 1.15  | -0.18 | 1.08  | -0.11 | 0.28     | -1.10 | -6.36 | -6.20 | -1.25 | 0.88     |
|    |    | 51  | 6.56 | 2.55  | -3.91 | -1.90 | 0.54  | -2.99    | -1.11 | -7.19 | -7.14 | -1.17 | -0.59    |
|    |    | 224 | 2.97 | -0.06 | -1.47 | -0.33 | -1.20 | -0.55    | -0.16 | -3.15 | -2.47 | -0.84 | 1.25     |
| 36 | 41 | 223 | 1.59 | 1.29  | -1.93 | -0.78 | 0.14  | -1.55    | -0.54 | -1.82 | -1.82 | -0.54 | 1.08e-03 |
|    |    | 47  | 5.20 | 1.94  | 0.22  | 1.49  | 0.67  | 0.76     | -1.01 | -5.82 | -5.65 | -1.18 | 0.88     |
|    |    | 51  | 5.99 | 2.88  | -2.78 | -1.28 | 1.37  | -2.50    | -1.02 | -6.59 | -6.52 | -1.09 | -0.59    |
|    |    | 224 | 2.55 | 0.33  | -0.49 | 0.27  | -0.44 | -0.20    | 0.04  | -2.62 | -1.85 | -0.73 | 1.21     |
| 37 | 1  | 239 | 2.78 | 1.16  | 0.84  | 0.86  | 1.15  | 0.07     | 0.15  | -2.79 | -1.76 | -0.88 | -1.41    |
|    |    | 50  | 0.94 | 0.91  | -0.51 | -0.27 | 0.67  | 0.54     | 0.11  | -0.87 | 0.03  | -0.79 | -0.27    |
|    |    | 54  | 1.54 | 2.32  | 0.12  | 0.24  | 2.19  | -0.51    | 0.64  | -1.18 | 0.06  | -0.61 | -0.84    |
|    |    | 240 | 2.12 | 2.76  | -2.56 | -1.36 | 1.57  | 2.22     | -0.45 | -2.31 | -1.77 | -0.99 | -0.85    |
| 37 | 2  | 239 | 1.96 | 0.84  | 0.59  | 0.59  | 0.84  | 0.03     | 0.12  | -1.97 | -1.22 | -0.63 | -1.00    |
|    |    | 50  | 0.69 | 0.69  | -0.34 | -0.18 | 0.53  | 0.37     | 0.09  | -0.63 | 0.02  | -0.57 | -0.20    |
|    |    | 54  | 1.09 | 1.64  | 0.08  | 0.17  | 1.56  | -0.36    | 0.45  | -0.84 | 0.04  | -0.43 | -0.60    |
|    |    | 240 | 1.52 | 1.96  | -1.76 | -0.95 | 1.15  | 1.53     | -0.29 | -1.64 | -1.23 | -0.70 | -0.62    |
| 37 | 32 | 239 | 2.37 | 0.58  | 0.21  | 0.56  | 0.23  | -0.08    | 0.28  | -2.31 | -1.35 | -0.68 | -1.25    |
|    |    | 50  | 0.93 | -0.11 | -0.49 | -0.27 | -0.33 | 0.19     | 0.17  | -0.86 | -0.11 | -0.59 | -0.46    |
|    |    | 54  | 1.50 | 1.03  | -0.46 | -0.10 | 0.67  | -0.64    | 0.59  | -1.14 | -0.08 | -0.47 | -0.85    |
|    |    | 240 | 1.89 | 1.23  | -1.89 | -1.16 | 0.50  | 1.32     | -0.13 | -1.97 | -1.36 | -0.74 | -0.87    |
| 37 | 64 | 239 | 2.16 | 0.59  | 0.53  | 0.58  | 0.55  | -0.02    | 0.20  | -2.13 | -1.28 | -0.65 | -1.12    |
|    |    | 50  | 0.78 | 0.28  | -0.39 | -0.23 | 0.12  | 0.29     | 0.11  | -0.73 | -0.04 | -0.58 | -0.32    |
|    |    | 54  | 1.29 | 1.32  | -0.15 | 0.04  | 1.13  | -0.49    | 0.52  | -0.98 | -0.02 | -0.45 | -0.72    |
|    |    | 240 | 1.69 | 1.61  | -1.82 | -1.05 | 0.84  | 1.43     | -0.21 | -1.80 | -1.29 | -0.72 | -0.74    |

|    |    |     |      |       |       |       |       |       |       |        |        |           |       |
|----|----|-----|------|-------|-------|-------|-------|-------|-------|--------|--------|-----------|-------|
| 38 | 1  | 100 | 3.54 | 11.34 | 1.53  | 9.31  | 3.56  | 3.97  | -0.19 | -3.65  | -3.19  | -0.65     | 1.17  |
|    |    | 52  | 5.21 | 5.98  | 0.34  | 3.99  | 2.33  | -2.70 | -0.39 | -5.60  | -4.99  | -1.00     | -1.68 |
|    |    | 56  | 5.44 | 21.00 | -1.85 | 15.74 | 3.41  | 9.62  | -0.30 | -5.61  | -4.99  | -0.92     | 1.71  |
|    |    | 101 | 3.40 | 13.01 | -1.16 | 11.32 | 0.54  | -4.60 | -0.56 | -3.55  | -3.15  | -0.97     | -1.02 |
| 38 | 2  | 100 | 2.51 | 7.98  | 1.13  | 6.54  | 2.57  | 2.79  | -0.16 | -2.59  | -2.28  | -0.46     | 0.81  |
|    |    | 52  | 3.57 | 4.19  | 0.27  | 2.82  | 1.64  | -1.87 | -0.26 | -3.83  | -3.40  | -0.69     | -1.16 |
|    |    | 56  | 3.73 | 14.76 | -1.26 | 11.02 | 2.48  | 6.78  | -0.19 | -3.84  | -3.41  | -0.62     | 1.18  |
|    |    | 101 | 2.41 | 9.11  | -0.81 | 7.91  | 0.39  | -3.24 | -0.42 | -2.52  | -2.25  | -0.69     | -0.71 |
| 38 | 17 | 100 | 3.03 | 8.64  | 1.39  | 7.37  | 2.65  | 2.75  | -0.15 | -3.11  | -2.70  | -0.56     | 1.03  |
|    |    | 52  | 3.88 | 4.24  | 0.26  | 3.51  | 0.99  | -1.54 | -0.33 | -4.14  | -3.80  | -0.67     | -1.08 |
|    |    | 56  | 4.34 | 15.54 | -1.55 | 12.09 | 1.90  | 6.86  | -0.17 | -4.40  | -3.97  | -0.61     | 1.28  |
|    |    | 101 | 2.82 | 10.33 | -0.66 | 9.13  | 0.54  | -3.43 | -0.71 | -2.94  | -2.83  | -0.82     | -0.47 |
| 38 | 49 | 100 | 2.76 | 8.29  | 1.25  | 6.94  | 2.61  | 2.77  | -0.15 | -2.84  | -2.48  | -0.51     | 0.91  |
|    |    | 52  | 3.72 | 4.18  | 0.30  | 3.15  | 1.33  | -1.71 | -0.30 | -3.98  | -3.59  | -0.68     | -1.12 |
|    |    | 56  | 4.02 | 15.13 | -1.39 | 11.53 | 2.20  | 6.82  | -0.18 | -4.11  | -3.68  | -0.62     | 1.23  |
|    |    | 101 | 2.59 | 9.70  | -0.74 | 8.50  | 0.46  | -3.33 | -0.57 | -2.71  | -2.53  | -0.75     | -0.59 |
| 39 | 1  | 224 | 1.87 | 4.04  | -4.33 | -1.64 | 1.35  | -3.91 | -0.76 | -2.15  | -2.14  | -0.77     | 0.12  |
|    |    | 51  | 7.74 | 6.51  | -2.10 | 4.05  | 0.36  | 3.89  | -1.32 | -8.58  | -8.19  | -1.71     | 1.64  |
|    |    | 55  | 9.52 | 6.20  | -8.91 | -4.16 | 1.45  | -7.02 | -1.82 | -10.41 | -10.29 | -1.93     | -0.97 |
|    |    | 225 | 4.05 | 3.29  | -0.71 | 1.23  | 1.35  | 2.00  | 0.85  | -3.61  | -1.68  | -1.08     | 2.21  |
| 39 | 2  | 224 | 1.30 | 2.88  | -2.98 | -1.13 | 1.03  | -2.73 | -0.53 | -1.50  | -1.49  | -0.54     | 0.11  |
|    |    | 51  | 5.30 | 4.58  | -1.54 | 2.78  | 0.26  | 2.79  | -0.90 | -5.88  | -5.60  | -1.18     | 1.15  |
|    |    | 55  | 6.56 | 4.37  | -6.13 | -2.87 | 1.11  | -4.85 | -1.25 | -7.17  | -7.10  | -1.32     | -0.66 |
|    |    | 225 | 2.86 | 2.30  | -0.53 | 0.84  | 0.94  | 1.42  | 0.61  | -2.54  | -1.17  | -0.77     | 1.56  |
| 39 | 9  | 224 | 2.39 | 2.57  | -4.50 | -2.17 | 0.24  | -3.32 | -0.82 | -2.73  | -2.70  | -0.85     | 0.24  |
|    |    | 51  | 6.32 | 2.46  | -1.46 | 1.71  | -0.71 | 1.54  | -1.09 | -7.02  | -6.78  | -1.32     | 1.16  |
|    |    | 55  | 7.83 | 4.11  | -9.10 | -4.93 | -0.06 | -6.14 | -1.45 | -8.51  | -8.46  | -1.50     | -0.60 |
|    |    | 225 | 3.65 | 0.33  | -1.59 | -1.20 | -0.06 | 0.78  | 0.04  | -3.71  | -2.56  | -1.11     | 1.73  |
| 39 | 41 | 224 | 1.82 | 2.73  | -3.71 | -1.63 | 0.65  | -3.01 | -0.67 | -2.09  | -2.07  | -0.69     | 0.17  |
|    |    | 51  | 5.79 | 3.54  | -1.48 | 2.27  | -0.20 | 2.19  | -0.99 | -6.43  | -6.17  | -1.25     | 1.15  |
|    |    | 55  | 7.17 | 4.24  | -7.56 | -3.87 | 0.55  | -5.47 | -1.35 | -7.81  | -7.75  | -1.41     | -0.63 |
|    |    | 225 | 3.20 | 1.30  | -0.99 | -0.14 | 0.46  | 1.11  | 0.32  | -3.09  | -1.84  | -0.93     | 1.64  |
| 40 | 1  | 240 | 3.12 | 2.32  | -0.61 | -0.40 | 2.11  | -0.75 | 0.42  | -2.97  | -1.47  | -1.09     | -1.68 |
|    |    | 54  | 0.84 | 2.06  | 0.15  | 0.20  | 2.02  | 0.30  | 0.10  | -0.74  | 0.01   | -0.65     | -0.26 |
|    |    | 58  | 1.51 | 1.05  | -0.05 | 0.06  | 0.94  | -0.33 | 0.82  | -0.96  | -0.09  | -0.05     | -0.89 |
|    |    | 241 | 1.62 | 3.43  | -0.99 | -0.98 | 3.42  | 0.21  | -0.51 | -1.82  | -1.74  | -0.59     | -0.32 |
| 40 | 2  | 240 | 2.22 | 1.65  | -0.44 | -0.29 | 1.49  | -0.55 | 0.31  | -2.10  | -1.02  | -0.77     | -1.20 |
|    |    | 54  | 0.61 | 1.48  | 0.11  | 0.14  | 1.45  | 0.21  | 0.08  | -0.54  | 0.01   | -0.47     | -0.20 |
|    |    | 58  | 1.07 | 0.73  | -0.04 | 0.04  | 0.66  | -0.23 | 0.59  | -0.68  | -0.06  | -0.03     | -0.63 |
|    |    | 241 | 1.14 | 2.43  | -0.68 | -0.67 | 2.42  | 0.13  | -0.34 | -1.27  | -1.20  | -0.41     | -0.25 |
| 40 | 31 | 240 | 2.65 | 1.66  | -0.60 | -0.30 | 1.37  | -0.76 | 0.44  | -2.46  | -1.16  | -0.86     | -1.44 |
|    |    | 54  | 0.74 | 0.55  | -0.05 | -0.05 | 0.55  | -0.03 | 0.16  | -0.66  | -0.10  | -0.41     | -0.38 |
|    |    | 58  | 1.32 | 0.57  | -1.04 | -0.21 | -0.26 | -0.80 | 0.78  | -0.75  | -0.03  | 0.06      | -0.76 |
|    |    | 241 | 1.28 | 2.35  | -0.81 | -0.75 | 2.29  | -0.43 | -0.26 | -1.39  | -1.19  | -0.47     | -0.43 |
| 40 | 47 | 240 | 2.40 | 1.51  | -0.57 | -0.44 | 1.38  | -0.51 | 0.33  | -2.28  | -1.12  | -0.83     | -1.30 |
|    |    | 54  | 0.64 | 1.18  | -0.09 | -0.05 | 1.14  | 0.22  | 0.06  | -0.60  | -0.08  | -0.46     | -0.27 |
|    |    | 58  | 1.15 | 0.47  | -0.34 | -0.21 | 0.33  | -0.30 | 0.63  | -0.72  | -0.08  | -6.80e-03 | -0.68 |
|    |    | 241 | 1.21 | 2.30  | -0.89 | -0.88 | 2.29  | 0.08  | -0.33 | -1.34  | -1.23  | -0.45     | -0.32 |
| 41 | 1  | 101 | 3.84 | 18.29 | -2.13 | 14.78 | 1.38  | 7.70  | -0.12 | -3.91  | -2.84  | -1.19     | 1.70  |
|    |    | 56  | 6.07 | 13.04 | -2.44 | 8.77  | 1.83  | -6.92 | -0.16 | -6.36  | -5.67  | -0.84     | -1.95 |
|    |    | 60  | 6.70 | 30.08 | -3.79 | 23.12 | 3.17  | 13.69 | -1.91 | -7.47  | -6.37  | -3.01     | 2.21  |
|    |    | 89  | 3.56 | 17.55 | -5.32 | 13.94 | -1.71 | -8.34 | 0.55  | -3.20  | -2.34  | -0.31     | -1.58 |
| 41 | 2  | 101 | 2.70 | 12.77 | -1.41 | 10.32 | 1.05  | 5.36  | -0.11 | -2.77  | -2.03  | -0.84     | 1.19  |
|    |    | 56  | 4.18 | 9.08  | -1.69 | 6.16  | 1.23  | -4.79 | -0.10 | -4.38  | -3.89  | -0.59     | -1.35 |
|    |    | 60  | 4.63 | 21.00 | -2.65 | 16.12 | 2.23  | 9.57  | -1.32 | -5.16  | -4.39  | -2.08     | 1.53  |
|    |    | 89  | 2.49 | 12.26 | -3.68 | 9.73  | -1.16 | -5.82 | 0.36  | -2.27  | -1.67  | -0.23     | -1.10 |

|    |    |     |       |       |        |       |       |        |       |        |        |       |       |
|----|----|-----|-------|-------|--------|-------|-------|--------|-------|--------|--------|-------|-------|
| 41 | 17 | 101 | 3.30  | 13.43 | -0.65  | 11.54 | 1.23  | 4.80   | -0.17 | -3.42  | -2.61  | -0.98 | 1.41  |
|    |    | 56  | 4.57  | 10.72 | -0.62  | 7.60  | 2.50  | -5.06  | -0.56 | -4.91  | -4.52  | -0.95 | -1.24 |
|    |    | 60  | 5.31  | 22.69 | -1.17  | 17.95 | 3.57  | 9.51   | -1.73 | -5.90  | -5.16  | -2.48 | 1.60  |
|    |    | 89  | 2.83  | 13.92 | -3.47  | 11.34 | -0.89 | -6.18  | -0.03 | -2.76  | -2.40  | -0.39 | -0.92 |
| 41 | 49 | 101 | 2.95  | 13.08 | -1.03  | 10.91 | 1.14  | 5.09   | -0.14 | -3.08  | -2.31  | -0.91 | 1.29  |
|    |    | 56  | 4.36  | 9.87  | -1.17  | 6.86  | 1.84  | -4.92  | -0.33 | -4.63  | -4.20  | -0.76 | -1.30 |
|    |    | 60  | 4.95  | 21.81 | -1.93  | 17.00 | 2.88  | 9.54   | -1.52 | -5.51  | -4.76  | -2.27 | 1.56  |
|    |    | 89  | 2.58  | 13.05 | -3.58  | 10.50 | -1.03 | -6.00  | 0.17  | -2.49  | -2.02  | -0.30 | -1.01 |
| 42 | 1  | 225 | 2.11  | 6.42  | -7.47  | -3.15 | 2.10  | -6.43  | -1.33 | -2.39  | -2.25  | -1.47 | 0.37  |
|    |    | 55  | 9.49  | 9.31  | -7.06  | 3.42  | -1.17 | 7.86   | -1.01 | -10.23 | -9.54  | -1.70 | 2.43  |
|    |    | 59  | 11.68 | 7.17  | -16.24 | -7.60 | -1.48 | -11.30 | -4.65 | -13.38 | -13.31 | -4.72 | -0.79 |
|    |    | 226 | 3.51  | 7.86  | -2.65  | 0.86  | 4.34  | 4.96   | 1.57  | -2.25  | -0.10  | -0.58 | 1.89  |
| 42 | 2  | 225 | 1.49  | 4.54  | -5.17  | -2.18 | 1.55  | -4.48  | -0.91 | -1.69  | -1.56  | -1.03 | 0.28  |
|    |    | 55  | 6.56  | 6.53  | -5.05  | 2.35  | -0.87 | 5.56   | -0.69 | -7.06  | -6.57  | -1.18 | 1.70  |
|    |    | 59  | 8.09  | 5.00  | -11.24 | -5.23 | -1.01 | -7.84  | -3.22 | -9.27  | -9.23  | -3.27 | -0.53 |
|    |    | 226 | 2.49  | 5.49  | -1.87  | 0.58  | 3.04  | 3.47   | 1.12  | -1.59  | -0.06  | -0.41 | 1.34  |
| 42 | 9  | 225 | 2.65  | 3.87  | -7.14  | -4.16 | 0.89  | -4.89  | -1.29 | -3.09  | -2.97  | -1.42 | 0.46  |
|    |    | 55  | 7.67  | 4.90  | -4.41  | 0.64  | -0.14 | 4.64   | -1.27 | -8.44  | -8.00  | -1.71 | 1.72  |
|    |    | 59  | 9.55  | 5.12  | -13.19 | -7.63 | -0.44 | -8.42  | -3.80 | -10.90 | -10.86 | -3.84 | -0.52 |
|    |    | 226 | 3.08  | 4.10  | -4.01  | -2.17 | 2.26  | 3.40   | 0.30  | -2.79  | -1.66  | -0.83 | 1.49  |
| 42 | 41 | 225 | 2.00  | 4.22  | -6.11  | -3.14 | 1.24  | -4.68  | -1.10 | -2.36  | -2.24  | -1.22 | 0.37  |
|    |    | 55  | 7.08  | 5.72  | -4.71  | 1.53  | -0.52 | 5.11   | -0.97 | -7.72  | -7.25  | -1.44 | 1.71  |
|    |    | 59  | 8.80  | 5.04  | -12.16 | -6.39 | -0.74 | -8.12  | -3.50 | -10.06 | -10.01 | -3.54 | -0.53 |
|    |    | 226 | 2.68  | 4.79  | -2.88  | -0.74 | 2.66  | 3.44   | 0.70  | -2.14  | -0.83  | -0.61 | 1.41  |
| 43 | 1  | 59  | 6.99  | 28.85 | -5.98  | 23.73 | -0.86 | 12.33  | -2.13 | -7.86  | -5.69  | -4.30 | 2.78  |
|    |    | 89  | 3.56  | 18.18 | -2.69  | 13.63 | 1.86  | -8.62  | 0.73  | -3.14  | -2.72  | 0.30  | -1.21 |
|    |    | 87  | 2.35  | 21.69 | -0.79  | 19.01 | 1.89  | 7.29   | -0.72 | -2.00  | -1.96  | -0.76 | 0.23  |
|    |    | 7   | 9.28  | 15.31 | -3.63  | 10.44 | 1.24  | -8.28  | 1.01  | -8.67  | -8.66  | 1.00  | 0.27  |
| 43 | 2  | 59  | 4.86  | 20.09 | -4.16  | 16.55 | -0.62 | 8.56   | -1.46 | -5.45  | -3.92  | -2.99 | 1.94  |
|    |    | 89  | 2.52  | 12.68 | -1.83  | 9.51  | 1.33  | -5.99  | 0.50  | -2.23  | -1.93  | 0.20  | -0.85 |
|    |    | 87  | 1.67  | 15.13 | -0.54  | 13.25 | 1.34  | 5.09   | -0.50 | -1.42  | -1.40  | -0.53 | 0.16  |
|    |    | 7   | 6.44  | 10.71 | -2.53  | 7.31  | 0.86  | -5.78  | 0.70  | -6.02  | -6.01  | 0.69  | 0.19  |
| 43 | 10 | 59  | 5.38  | 22.37 | -4.31  | 18.20 | -0.15 | 9.68   | -1.93 | -6.18  | -4.70  | -3.42 | 2.03  |
|    |    | 89  | 3.26  | 13.78 | -1.03  | 11.13 | 1.62  | -5.68  | 0.42  | -2.98  | -2.65  | 0.09  | -1.01 |
|    |    | 87  | 2.60  | 15.77 | -0.59  | 13.78 | 1.41  | 5.35   | -0.69 | -2.42  | -2.42  | -0.70 | 0.07  |
|    |    | 7   | 7.26  | 10.29 | -1.29  | 7.88  | 1.12  | -4.70  | 0.23  | -7.11  | -7.09  | 0.21  | 0.35  |
| 43 | 42 | 59  | 5.11  | 21.18 | -4.23  | 17.35 | -0.39 | 9.10   | -1.69 | -5.80  | -4.29  | -3.20 | 1.98  |
|    |    | 89  | 2.87  | 13.20 | -1.44  | 10.29 | 1.47  | -5.84  | 0.46  | -2.59  | -2.28  | 0.15  | -0.92 |
|    |    | 87  | 2.11  | 15.43 | -0.56  | 13.50 | 1.37  | 5.21   | -0.60 | -1.90  | -1.89  | -0.61 | 0.12  |
|    |    | 7   | 6.83  | 10.49 | -1.92  | 7.58  | 0.98  | -5.26  | 0.47  | -6.54  | -6.53  | 0.46  | 0.27  |
| 44 | 1  | 5   | 9.28  | 15.31 | -3.63  | 10.44 | 1.24  | 8.28   | 1.01  | -8.67  | -8.66  | 1.00  | -0.27 |
|    |    | 88  | 2.35  | 21.69 | -0.79  | 19.01 | 1.89  | -7.29  | -0.72 | -2.00  | -1.96  | -0.76 | -0.23 |
|    |    | 90  | 3.56  | 18.18 | -2.69  | 13.63 | 1.86  | 8.62   | 0.73  | -3.14  | -2.72  | 0.30  | 1.21  |
|    |    | 11  | 6.99  | 28.85 | -5.98  | 23.73 | -0.86 | -12.33 | -2.13 | -7.86  | -5.69  | -4.30 | -2.78 |
| 44 | 2  | 5   | 6.44  | 10.71 | -2.53  | 7.31  | 0.86  | 5.78   | 0.70  | -6.02  | -6.01  | 0.69  | -0.19 |
|    |    | 88  | 1.67  | 15.13 | -0.54  | 13.25 | 1.34  | -5.09  | -0.50 | -1.42  | -1.40  | -0.53 | -0.16 |
|    |    | 90  | 2.52  | 12.68 | -1.83  | 9.51  | 1.33  | 5.99   | 0.50  | -2.23  | -1.93  | 0.20  | 0.85  |
|    |    | 11  | 4.86  | 20.09 | -4.16  | 16.55 | -0.62 | -8.56  | -1.46 | -5.45  | -3.92  | -2.99 | -1.94 |
| 44 | 5  | 5   | 7.22  | 10.68 | -1.82  | 8.03  | 0.83  | 5.11   | 0.28  | -7.02  | -7.00  | 0.26  | -0.40 |
|    |    | 88  | 2.52  | 15.93 | -0.46  | 14.01 | 1.45  | -5.27  | -0.66 | -2.34  | -2.33  | -0.68 | -0.16 |
|    |    | 90  | 3.16  | 13.93 | -1.19  | 11.12 | 1.62  | 5.89   | 0.37  | -2.88  | -2.61  | 0.10  | 0.90  |
|    |    | 11  | 5.41  | 21.88 | -4.25  | 18.13 | -0.49 | -9.17  | -1.84 | -6.20  | -4.66  | -3.38 | -2.09 |
| 44 | 37 | 5   | 6.81  | 10.68 | -2.18  | 7.66  | 0.85  | 5.46   | 0.50  | -6.50  | -6.49  | 0.48  | -0.29 |
|    |    | 88  | 2.07  | 15.51 | -0.50  | 13.62 | 1.39  | -5.17  | -0.58 | -1.86  | -1.84  | -0.60 | -0.16 |
|    |    | 90  | 2.83  | 13.28 | -1.52  | 10.28 | 1.47  | 5.94   | 0.44  | -2.54  | -2.26  | 0.15  | 0.87  |
|    |    | 11  | 5.12  | 20.95 | -4.20  | 17.31 | -0.56 | -8.85  | -1.64 | -5.81  | -4.27  | -3.18 | -2.01 |

|    |    |    |      |       |       |       |       |       |       |       |       |       |       |
|----|----|----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 45 | 1  | 11 | 6.70 | 30.08 | -3.79 | 23.12 | 3.17  | 13.69 | -1.91 | -7.47 | -6.37 | -3.01 | 2.21  |
|    |    | 90 | 3.56 | 17.55 | -5.32 | 13.94 | -1.71 | -8.34 | 0.55  | -3.20 | -2.34 | -0.31 | -1.58 |
|    |    | 91 | 3.84 | 18.29 | -2.13 | 14.78 | 1.38  | 7.70  | -0.12 | -3.91 | -2.84 | -1.19 | 1.70  |
|    |    | 15 | 6.07 | 13.04 | -2.44 | 8.77  | 1.83  | -6.92 | -0.16 | -6.36 | -5.67 | -0.84 | -1.95 |
| 45 | 2  | 11 | 4.63 | 21.00 | -2.65 | 16.12 | 2.23  | 9.57  | -1.32 | -5.16 | -4.39 | -2.08 | 1.53  |
|    |    | 90 | 2.49 | 12.26 | -3.68 | 9.73  | -1.16 | -5.82 | 0.36  | -2.27 | -1.67 | -0.23 | -1.10 |
|    |    | 91 | 2.70 | 12.77 | -1.41 | 10.32 | 1.05  | 5.36  | -0.11 | -2.77 | -2.03 | -0.84 | 1.19  |
|    |    | 15 | 4.18 | 9.08  | -1.69 | 6.16  | 1.23  | -4.79 | -0.10 | -4.38 | -3.89 | -0.59 | -1.35 |
| 45 | 6  | 11 | 5.23 | 23.04 | -2.11 | 17.83 | 3.10  | 10.19 | -1.73 | -5.82 | -5.13 | -2.42 | 1.54  |
|    |    | 90 | 2.91 | 13.74 | -3.33 | 11.31 | -0.90 | -5.96 | 0.07  | -2.83 | -2.38 | -0.39 | -1.05 |
|    |    | 91 | 3.17 | 13.51 | -1.10 | 11.24 | 1.17  | 5.30  | -0.30 | -3.34 | -2.66 | -0.98 | 1.27  |
|    |    | 15 | 4.68 | 9.60  | -0.43 | 7.20  | 1.97  | -4.28 | -0.48 | -4.99 | -4.56 | -0.91 | -1.33 |
| 45 | 38 | 11 | 4.92 | 21.98 | -2.39 | 16.94 | 2.65  | 9.87  | -1.51 | -5.48 | -4.75 | -2.24 | 1.53  |
|    |    | 90 | 2.63 | 12.97 | -3.51 | 10.49 | -1.03 | -5.89 | 0.22  | -2.53 | -2.01 | -0.30 | -1.07 |
|    |    | 91 | 2.88 | 13.12 | -1.26 | 10.76 | 1.11  | 5.33  | -0.20 | -3.04 | -2.33 | -0.91 | 1.23  |
|    |    | 15 | 4.42 | 9.33  | -1.08 | 6.66  | 1.59  | -4.54 | -0.28 | -4.67 | -4.21 | -0.74 | -1.34 |
| 46 | 1  | 15 | 5.44 | 21.00 | -1.85 | 15.74 | 3.41  | 9.62  | -0.30 | -5.61 | -4.99 | -0.92 | 1.71  |
|    |    | 91 | 3.40 | 13.01 | -1.16 | 11.32 | 0.54  | -4.60 | -0.56 | -3.55 | -3.15 | -0.97 | -1.02 |
|    |    | 92 | 3.54 | 11.34 | 1.53  | 9.31  | 3.56  | 3.97  | -0.19 | -3.65 | -3.19 | -0.65 | 1.17  |
|    |    | 19 | 5.21 | 5.98  | 0.34  | 3.99  | 2.33  | -2.70 | -0.39 | -5.60 | -4.99 | -1.00 | -1.68 |
| 46 | 2  | 15 | 3.73 | 14.76 | -1.26 | 11.02 | 2.48  | 6.78  | -0.19 | -3.84 | -3.41 | -0.62 | 1.18  |
|    |    | 91 | 2.41 | 9.11  | -0.81 | 7.91  | 0.39  | -3.24 | -0.42 | -2.52 | -2.25 | -0.69 | -0.71 |
|    |    | 92 | 2.51 | 7.98  | 1.13  | 6.54  | 2.57  | 2.79  | -0.16 | -2.59 | -2.28 | -0.46 | 0.81  |
|    |    | 19 | 3.57 | 4.19  | 0.27  | 2.82  | 1.64  | -1.87 | -0.26 | -3.83 | -3.40 | -0.69 | -1.16 |
| 46 | 6  | 15 | 4.27 | 15.88 | -1.73 | 11.87 | 2.29  | 7.39  | -0.31 | -4.40 | -4.02 | -0.69 | 1.19  |
|    |    | 91 | 2.91 | 9.76  | -0.46 | 8.82  | 0.48  | -2.95 | -0.67 | -3.04 | -2.88 | -0.83 | -0.60 |
|    |    | 92 | 2.98 | 8.63  | 0.95  | 7.01  | 2.57  | 3.14  | -0.25 | -3.11 | -2.78 | -0.57 | 0.91  |
|    |    | 19 | 4.00 | 3.82  | 0.78  | 3.23  | 1.36  | -1.20 | -0.35 | -4.27 | -3.89 | -0.73 | -1.17 |
| 46 | 38 | 15 | 3.99 | 15.30 | -1.49 | 11.42 | 2.39  | 7.07  | -0.25 | -4.11 | -3.70 | -0.66 | 1.19  |
|    |    | 91 | 2.64 | 9.42  | -0.64 | 8.35  | 0.43  | -3.10 | -0.55 | -2.76 | -2.55 | -0.76 | -0.65 |
|    |    | 92 | 2.73 | 8.29  | 1.04  | 6.76  | 2.57  | 2.96  | -0.20 | -2.84 | -2.52 | -0.52 | 0.86  |
|    |    | 19 | 3.78 | 3.98  | 0.54  | 3.02  | 1.51  | -1.55 | -0.31 | -4.04 | -3.64 | -0.71 | -1.16 |
| 47 | 1  | 19 | 4.73 | 11.96 | 0.66  | 8.73  | 3.89  | 5.11  | -0.35 | -4.98 | -4.57 | -0.76 | 1.32  |
|    |    | 92 | 3.47 | 7.86  | 1.92  | 7.10  | 2.68  | -1.99 | -0.46 | -3.65 | -3.36 | -0.75 | -0.92 |
|    |    | 93 | 3.31 | 6.26  | 3.04  | 4.54  | 4.76  | 1.61  | -0.30 | -3.53 | -3.24 | -0.59 | 0.92  |
|    |    | 23 | 4.76 | 3.17  | 1.08  | 1.32  | 2.93  | -0.66 | -0.55 | -5.20 | -4.74 | -1.02 | -1.39 |
| 47 | 2  | 19 | 3.22 | 8.49  | 0.49  | 6.14  | 2.84  | 3.64  | -0.23 | -3.39 | -3.10 | -0.52 | 0.90  |
|    |    | 92 | 2.46 | 5.53  | 1.35  | 4.99  | 1.90  | -1.41 | -0.35 | -2.60 | -2.40 | -0.55 | -0.64 |
|    |    | 93 | 2.35 | 4.47  | 2.16  | 3.22  | 3.42  | 1.15  | -0.23 | -2.51 | -2.32 | -0.43 | 0.64  |
|    |    | 23 | 3.24 | 2.27  | 0.79  | 0.95  | 2.11  | -0.46 | -0.38 | -3.54 | -3.22 | -0.70 | -0.96 |
| 47 | 6  | 19 | 3.67 | 8.67  | -0.05 | 6.48  | 2.15  | 3.78  | -0.24 | -3.83 | -3.59 | -0.48 | 0.90  |
|    |    | 92 | 2.84 | 5.95  | 1.43  | 5.46  | 1.92  | -1.40 | -0.51 | -3.02 | -2.90 | -0.64 | -0.55 |
|    |    | 93 | 2.71 | 5.02  | 2.03  | 3.61  | 3.44  | 1.49  | -0.29 | -2.91 | -2.70 | -0.50 | 0.71  |
|    |    | 23 | 3.58 | 1.41  | 1.18  | 1.19  | 1.39  | -0.05 | -0.39 | -3.88 | -3.59 | -0.68 | -0.97 |
| 47 | 38 | 19 | 3.44 | 8.57  | 0.24  | 6.30  | 2.51  | 3.71  | -0.24 | -3.60 | -3.34 | -0.50 | 0.90  |
|    |    | 92 | 2.64 | 5.73  | 1.39  | 5.21  | 1.91  | -1.41 | -0.43 | -2.80 | -2.64 | -0.59 | -0.59 |
|    |    | 93 | 2.52 | 4.73  | 2.10  | 3.41  | 3.43  | 1.31  | -0.26 | -2.71 | -2.50 | -0.46 | 0.67  |
|    |    | 23 | 3.40 | 1.85  | 0.98  | 1.07  | 1.76  | -0.26 | -0.38 | -3.71 | -3.40 | -0.69 | -0.96 |
| 48 | 1  | 23 | 4.40 | 6.17  | 1.92  | 3.93  | 4.17  | 2.12  | -0.51 | -4.79 | -4.47 | -0.83 | 1.12  |
|    |    | 93 | 3.30 | 4.40  | 3.04  | 3.37  | 4.06  | -0.58 | -0.46 | -3.58 | -3.35 | -0.69 | -0.82 |
|    |    | 94 | 3.20 | 5.29  | 1.32  | 1.36  | 5.26  | 0.37  | -0.40 | -3.48 | -3.26 | -0.62 | 0.80  |
|    |    | 27 | 4.52 | 3.47  | -0.39 | -0.37 | 3.46  | 0.22  | -0.62 | -4.94 | -4.58 | -0.98 | -1.20 |
| 48 | 2  | 23 | 2.98 | 4.47  | 1.36  | 2.79  | 3.04  | 1.55  | -0.34 | -3.24 | -3.03 | -0.56 | 0.76  |
|    |    | 93 | 2.34 | 3.14  | 2.15  | 2.40  | 2.89  | -0.43 | -0.35 | -2.55 | -2.40 | -0.50 | -0.56 |
|    |    | 94 | 2.27 | 3.80  | 0.97  | 0.99  | 3.77  | 0.28  | -0.30 | -2.48 | -2.33 | -0.45 | 0.55  |
|    |    | 27 | 3.07 | 2.51  | -0.24 | -0.24 | 2.50  | 0.15  | -0.42 | -3.35 | -3.10 | -0.67 | -0.82 |

|    |    |    |      |      |          |       |      |       |       |       |       |       |       |
|----|----|----|------|------|----------|-------|------|-------|-------|-------|-------|-------|-------|
| 48 | 5  | 23 | 3.33 | 3.91 | 0.93     | 2.96  | 1.89 | 1.39  | -0.35 | -3.58 | -3.40 | -0.53 | 0.75  |
|    |    | 93 | 2.64 | 3.42 | 2.30     | 2.79  | 2.93 | -0.56 | -0.46 | -2.89 | -2.78 | -0.57 | -0.51 |
|    |    | 94 | 2.52 | 3.91 | 1.35     | 1.43  | 3.84 | 0.44  | -0.35 | -2.77 | -2.61 | -0.50 | 0.59  |
|    |    | 27 | 3.31 | 1.38 | -0.07    | -0.05 | 1.36 | 0.19  | -0.41 | -3.62 | -3.38 | -0.66 | -0.85 |
| 48 | 37 | 23 | 3.15 | 4.16 | 1.19     | 2.87  | 2.49 | 1.47  | -0.35 | -3.41 | -3.21 | -0.55 | 0.76  |
|    |    | 93 | 2.48 | 3.26 | 2.23     | 2.58  | 2.91 | -0.49 | -0.40 | -2.71 | -2.58 | -0.53 | -0.53 |
|    |    | 94 | 2.39 | 3.85 | 1.15     | 1.20  | 3.80 | 0.36  | -0.32 | -2.62 | -2.47 | -0.47 | 0.57  |
|    |    | 27 | 3.18 | 1.96 | -0.16    | -0.14 | 1.95 | 0.17  | -0.42 | -3.48 | -3.23 | -0.67 | -0.84 |
| 49 | 1  | 27 | 4.30 | 4.26 | 0.86     | 0.92  | 4.20 | 0.43  | -0.60 | -4.71 | -4.44 | -0.87 | 1.03  |
|    |    | 94 | 3.20 | 4.84 | 0.79     | 0.80  | 4.84 | 0.12  | -0.48 | -3.52 | -3.32 | -0.68 | -0.74 |
|    |    | 95 | 3.21 | 5.42 | -0.44    | -0.44 | 5.41 | -0.22 | -0.45 | -3.46 | -3.27 | -0.64 | 0.74  |
|    |    | 31 | 4.39 | 3.84 | -1.30    | -1.23 | 3.78 | 0.57  | -0.64 | -4.79 | -4.48 | -0.95 | -1.09 |
| 49 | 2  | 27 | 2.91 | 3.12 | 0.63     | 0.68  | 3.06 | 0.35  | -0.40 | -3.19 | -3.00 | -0.59 | 0.70  |
|    |    | 94 | 2.27 | 3.46 | 0.59     | 0.60  | 3.46 | 0.07  | -0.36 | -2.50 | -2.38 | -0.49 | -0.51 |
|    |    | 95 | 2.28 | 3.89 | -0.27    | -0.26 | 3.88 | -0.13 | -0.34 | -2.47 | -2.34 | -0.46 | 0.50  |
|    |    | 31 | 2.98 | 2.78 | -0.88    | -0.84 | 2.74 | 0.38  | -0.44 | -3.24 | -3.03 | -0.65 | -0.74 |
| 49 | 11 | 27 | 2.75 | 4.95 | 0.41     | 0.49  | 4.86 | 0.60  | -0.48 | -3.02 | -2.86 | -0.64 | 0.61  |
|    |    | 94 | 2.23 | 3.34 | 2.81e-03 | 0.03  | 3.32 | 0.28  | -0.27 | -2.41 | -2.23 | -0.46 | -0.60 |
|    |    | 95 | 2.40 | 3.77 | -0.91    | -0.89 | 3.75 | -0.32 | -0.42 | -2.60 | -2.52 | -0.50 | 0.42  |
|    |    | 31 | 3.19 | 4.54 | -1.09    | -1.08 | 4.53 | 0.23  | -0.46 | -3.44 | -3.20 | -0.70 | -0.81 |
| 49 | 43 | 27 | 2.83 | 4.00 | 0.53     | 0.59  | 3.93 | 0.47  | -0.44 | -3.10 | -2.93 | -0.61 | 0.66  |
|    |    | 94 | 2.25 | 3.40 | 0.31     | 0.32  | 3.39 | 0.17  | -0.32 | -2.46 | -2.31 | -0.47 | -0.55 |
|    |    | 95 | 2.34 | 3.83 | -0.57    | -0.56 | 3.82 | -0.22 | -0.38 | -2.53 | -2.42 | -0.48 | 0.46  |
|    |    | 31 | 3.08 | 3.62 | -0.97    | -0.95 | 3.60 | 0.31  | -0.45 | -3.33 | -3.11 | -0.67 | -0.77 |
| 50 | 1  | 31 | 4.29 | 4.14 | -0.75    | -0.72 | 4.11 | -0.37 | -0.63 | -4.68 | -4.42 | -0.90 | 1.00  |
|    |    | 95 | 3.21 | 5.25 | -0.68    | -0.65 | 5.22 | 0.41  | -0.49 | -3.48 | -3.30 | -0.67 | -0.71 |
|    |    | 96 | 3.22 | 5.41 | -1.09    | -1.06 | 5.38 | -0.44 | -0.48 | -3.46 | -3.28 | -0.66 | 0.71  |
|    |    | 35 | 4.32 | 4.04 | -1.44    | -1.36 | 3.97 | 0.63  | -0.64 | -4.71 | -4.43 | -0.92 | -1.03 |
| 50 | 2  | 31 | 2.90 | 3.01 | -0.49    | -0.47 | 2.99 | -0.22 | -0.43 | -3.17 | -2.99 | -0.61 | 0.68  |
|    |    | 95 | 2.28 | 3.76 | -0.44    | -0.42 | 3.74 | 0.27  | -0.36 | -2.48 | -2.36 | -0.48 | -0.48 |
|    |    | 96 | 2.29 | 3.88 | -0.72    | -0.70 | 3.86 | -0.29 | -0.35 | -2.46 | -2.35 | -0.47 | 0.48  |
|    |    | 35 | 2.93 | 2.93 | -0.97    | -0.93 | 2.89 | 0.42  | -0.44 | -3.18 | -2.99 | -0.63 | -0.69 |
| 50 | 11 | 31 | 3.03 | 4.83 | -0.70    | -0.70 | 4.83 | -0.09 | -0.52 | -3.29 | -3.15 | -0.66 | 0.61  |
|    |    | 95 | 2.48 | 3.66 | -1.08    | -1.04 | 3.62 | 0.42  | -0.38 | -2.67 | -2.54 | -0.52 | -0.54 |
|    |    | 96 | 2.41 | 3.80 | -1.37    | -1.31 | 3.74 | -0.55 | -0.41 | -2.60 | -2.51 | -0.50 | 0.44  |
|    |    | 35 | 3.12 | 4.73 | -1.14    | -1.14 | 4.72 | 0.14  | -0.46 | -3.36 | -3.15 | -0.67 | -0.75 |
| 50 | 43 | 31 | 2.96 | 3.88 | -0.59    | -0.58 | 3.88 | -0.16 | -0.47 | -3.23 | -3.07 | -0.63 | 0.64  |
|    |    | 95 | 2.38 | 3.71 | -0.74    | -0.72 | 3.68 | 0.34  | -0.37 | -2.57 | -2.44 | -0.50 | -0.51 |
|    |    | 96 | 2.34 | 3.84 | -1.03    | -0.99 | 3.80 | -0.42 | -0.38 | -2.53 | -2.42 | -0.49 | 0.46  |
|    |    | 35 | 3.02 | 3.79 | -1.04    | -1.03 | 3.77 | 0.28  | -0.45 | -3.27 | -3.07 | -0.65 | -0.72 |
| 51 | 1  | 35 | 4.32 | 4.04 | -1.44    | -1.36 | 3.97 | -0.63 | -0.64 | -4.71 | -4.43 | -0.92 | 1.03  |
|    |    | 96 | 3.22 | 5.41 | -1.09    | -1.06 | 5.38 | 0.44  | -0.48 | -3.46 | -3.28 | -0.66 | -0.71 |
|    |    | 97 | 3.21 | 5.25 | -0.68    | -0.65 | 5.22 | -0.41 | -0.49 | -3.48 | -3.30 | -0.67 | 0.71  |
|    |    | 39 | 4.29 | 4.14 | -0.75    | -0.72 | 4.11 | 0.37  | -0.63 | -4.68 | -4.42 | -0.90 | -1.00 |
| 51 | 2  | 35 | 2.93 | 2.93 | -0.97    | -0.93 | 2.89 | -0.42 | -0.44 | -3.18 | -2.99 | -0.63 | 0.69  |
|    |    | 96 | 2.29 | 3.88 | -0.72    | -0.70 | 3.86 | 0.29  | -0.35 | -2.46 | -2.35 | -0.47 | -0.48 |
|    |    | 97 | 2.28 | 3.76 | -0.44    | -0.42 | 3.74 | -0.27 | -0.36 | -2.48 | -2.36 | -0.48 | 0.48  |
|    |    | 39 | 2.90 | 3.01 | -0.49    | -0.47 | 2.99 | 0.22  | -0.43 | -3.17 | -2.99 | -0.61 | -0.68 |
| 51 | 18 | 35 | 3.12 | 4.73 | -1.15    | -1.14 | 4.72 | -0.26 | -0.46 | -3.36 | -3.15 | -0.67 | 0.75  |
|    |    | 96 | 2.42 | 3.78 | -1.34    | -1.31 | 3.74 | 0.43  | -0.41 | -2.60 | -2.51 | -0.50 | -0.44 |
|    |    | 97 | 2.47 | 3.68 | -1.10    | -1.04 | 3.62 | -0.54 | -0.39 | -2.67 | -2.54 | -0.52 | 0.53  |
|    |    | 39 | 3.04 | 4.83 | -0.70    | -0.70 | 4.82 | -0.03 | -0.51 | -3.30 | -3.16 | -0.66 | -0.61 |
| 51 | 50 | 35 | 3.02 | 3.80 | -1.05    | -1.03 | 3.77 | -0.34 | -0.45 | -3.26 | -3.07 | -0.65 | 0.72  |
|    |    | 96 | 2.35 | 3.83 | -1.02    | -0.99 | 3.80 | 0.36  | -0.38 | -2.53 | -2.42 | -0.49 | -0.46 |
|    |    | 97 | 2.37 | 3.72 | -0.75    | -0.72 | 3.68 | -0.40 | -0.37 | -2.57 | -2.44 | -0.50 | 0.51  |
|    |    | 39 | 2.97 | 3.88 | -0.58    | -0.58 | 3.88 | 0.10  | -0.47 | -3.23 | -3.07 | -0.63 | -0.65 |

|    |    |     |      |       |           |           |      |           |       |       |       |       |       |
|----|----|-----|------|-------|-----------|-----------|------|-----------|-------|-------|-------|-------|-------|
| 52 | 1  | 39  | 4.39 | 3.84  | -1.30     | -1.23     | 3.78 | -0.57     | -0.64 | -4.79 | -4.48 | -0.95 | 1.09  |
|    |    | 97  | 3.21 | 5.42  | -0.44     | -0.44     | 5.41 | 0.22      | -0.45 | -3.46 | -3.27 | -0.64 | -0.74 |
|    |    | 98  | 3.20 | 4.84  | 0.79      | 0.80      | 4.84 | -0.12     | -0.48 | -3.52 | -3.32 | -0.68 | 0.74  |
|    |    | 43  | 4.30 | 4.26  | 0.86      | 0.92      | 4.20 | -0.43     | -0.60 | -4.71 | -4.44 | -0.87 | -1.03 |
| 52 | 2  | 39  | 2.98 | 2.78  | -0.88     | -0.84     | 2.74 | -0.38     | -0.44 | -3.24 | -3.03 | -0.65 | 0.74  |
|    |    | 97  | 2.28 | 3.89  | -0.27     | -0.26     | 3.88 | 0.13      | -0.34 | -2.47 | -2.34 | -0.46 | -0.50 |
|    |    | 98  | 2.27 | 3.46  | 0.59      | 0.60      | 3.46 | -0.07     | -0.36 | -2.50 | -2.38 | -0.49 | 0.51  |
|    |    | 43  | 2.91 | 3.12  | 0.63      | 0.68      | 3.06 | -0.35     | -0.40 | -3.19 | -3.00 | -0.59 | -0.70 |
| 52 | 10 | 39  | 2.81 | 1.25  | -0.90     | -0.56     | 0.91 | -0.79     | -0.41 | -3.10 | -2.90 | -0.60 | 0.70  |
|    |    | 97  | 2.21 | 4.02  | 0.39      | 0.40      | 4.00 | -0.25     | -0.26 | -2.37 | -2.20 | -0.43 | -0.58 |
|    |    | 98  | 2.40 | 3.60  | 1.29      | 1.29      | 3.60 | -0.03     | -0.45 | -2.68 | -2.60 | -0.53 | 0.41  |
|    |    | 43  | 3.12 | 1.47  | 0.75      | 0.99      | 1.24 | -0.34     | -0.36 | -3.41 | -3.21 | -0.56 | -0.74 |
| 52 | 40 | 39  | 3.06 | 2.09  | -0.80     | -0.74     | 2.02 | -0.44     | -0.42 | -3.34 | -3.13 | -0.64 | 0.76  |
|    |    | 97  | 2.36 | 3.93  | -9.70e-03 | -7.69e-03 | 3.93 | 0.09      | -0.36 | -2.57 | -2.44 | -0.48 | -0.51 |
|    |    | 98  | 2.37 | 3.50  | 0.81      | 0.81      | 3.50 | -1.29e-04 | -0.40 | -2.63 | -2.51 | -0.52 | 0.49  |
|    |    | 43  | 3.00 | 2.38  | 0.70      | 0.74      | 2.34 | -0.25     | -0.41 | -3.30 | -3.13 | -0.58 | -0.68 |
| 53 | 1  | 43  | 4.52 | 3.47  | -0.39     | -0.37     | 3.46 | -0.22     | -0.62 | -4.94 | -4.58 | -0.98 | 1.20  |
|    |    | 98  | 3.20 | 5.29  | 1.32      | 1.36      | 5.26 | -0.37     | -0.40 | -3.48 | -3.26 | -0.62 | -0.80 |
|    |    | 99  | 3.30 | 4.40  | 3.04      | 3.37      | 4.06 | 0.58      | -0.46 | -3.58 | -3.35 | -0.69 | 0.82  |
|    |    | 47  | 4.40 | 6.17  | 1.92      | 3.93      | 4.17 | -2.12     | -0.51 | -4.79 | -4.47 | -0.83 | -1.12 |
| 53 | 2  | 43  | 3.07 | 2.51  | -0.24     | -0.24     | 2.50 | -0.15     | -0.42 | -3.35 | -3.10 | -0.67 | 0.82  |
|    |    | 98  | 2.27 | 3.80  | 0.97      | 0.99      | 3.77 | -0.28     | -0.30 | -2.48 | -2.33 | -0.45 | -0.55 |
|    |    | 99  | 2.34 | 3.14  | 2.15      | 2.40      | 2.89 | 0.43      | -0.35 | -2.55 | -2.40 | -0.50 | 0.56  |
|    |    | 47  | 2.98 | 4.47  | 1.36      | 2.79      | 3.04 | -1.55     | -0.34 | -3.24 | -3.03 | -0.56 | -0.76 |
| 53 | 8  | 43  | 3.31 | 1.41  | -0.10     | -0.04     | 1.35 | -0.30     | -0.41 | -3.62 | -3.38 | -0.66 | 0.85  |
|    |    | 98  | 2.53 | 3.95  | 1.31      | 1.43      | 3.84 | -0.54     | -0.34 | -2.78 | -2.62 | -0.50 | -0.60 |
|    |    | 99  | 2.64 | 3.32  | 2.40      | 2.79      | 2.93 | 0.45      | -0.47 | -2.89 | -2.78 | -0.57 | 0.50  |
|    |    | 47  | 3.34 | 4.01  | 0.83      | 2.96      | 1.88 | -1.50     | -0.35 | -3.59 | -3.40 | -0.53 | -0.75 |
| 53 | 40 | 43  | 3.18 | 1.97  | -0.17     | -0.14     | 1.95 | -0.22     | -0.42 | -3.48 | -3.23 | -0.67 | 0.84  |
|    |    | 98  | 2.40 | 3.87  | 1.14      | 1.20      | 3.80 | -0.41     | -0.32 | -2.62 | -2.47 | -0.47 | -0.57 |
|    |    | 99  | 2.48 | 3.22  | 2.28      | 2.59      | 2.91 | 0.44      | -0.41 | -2.71 | -2.58 | -0.53 | 0.53  |
|    |    | 47  | 3.15 | 4.21  | 1.14      | 2.87      | 2.48 | -1.52     | -0.35 | -3.41 | -3.21 | -0.55 | -0.76 |
| 54 | 1  | 47  | 4.76 | 3.17  | 1.08      | 1.32      | 2.93 | 0.66      | -0.55 | -5.20 | -4.74 | -1.02 | 1.39  |
|    |    | 99  | 3.31 | 6.26  | 3.04      | 4.54      | 4.76 | -1.61     | -0.30 | -3.53 | -3.24 | -0.59 | -0.92 |
|    |    | 100 | 3.47 | 7.86  | 1.92      | 7.10      | 2.68 | 1.99      | -0.46 | -3.65 | -3.36 | -0.75 | 0.92  |
|    |    | 51  | 4.73 | 11.96 | 0.66      | 8.73      | 3.89 | -5.11     | -0.35 | -4.98 | -4.57 | -0.76 | -1.32 |
| 54 | 2  | 47  | 3.24 | 2.27  | 0.79      | 0.95      | 2.11 | 0.46      | -0.38 | -3.54 | -3.22 | -0.70 | 0.96  |
|    |    | 99  | 2.35 | 4.47  | 2.16      | 3.22      | 3.42 | -1.15     | -0.23 | -2.51 | -2.32 | -0.43 | -0.64 |
|    |    | 100 | 2.46 | 5.53  | 1.35      | 4.99      | 1.90 | 1.41      | -0.35 | -2.60 | -2.40 | -0.55 | 0.64  |
|    |    | 51  | 3.22 | 8.49  | 0.49      | 6.14      | 2.84 | -3.64     | -0.23 | -3.39 | -3.10 | -0.52 | -0.90 |
| 54 | 8  | 47  | 3.58 | 1.41  | 1.18      | 1.19      | 1.39 | 0.05      | -0.39 | -3.88 | -3.59 | -0.68 | 0.97  |
|    |    | 99  | 2.71 | 5.02  | 2.03      | 3.61      | 3.44 | -1.49     | -0.29 | -2.91 | -2.70 | -0.50 | -0.71 |
|    |    | 100 | 2.84 | 5.95  | 1.43      | 5.46      | 1.92 | 1.40      | -0.51 | -3.02 | -2.90 | -0.64 | 0.55  |
|    |    | 51  | 3.67 | 8.67  | -0.05     | 6.48      | 2.15 | -3.78     | -0.24 | -3.83 | -3.59 | -0.48 | -0.90 |
| 54 | 40 | 47  | 3.40 | 1.85  | 0.98      | 1.07      | 1.76 | 0.26      | -0.38 | -3.71 | -3.40 | -0.69 | 0.96  |
|    |    | 99  | 2.52 | 4.73  | 2.10      | 3.41      | 3.43 | -1.31     | -0.26 | -2.71 | -2.50 | -0.46 | -0.67 |
|    |    | 100 | 2.64 | 5.73  | 1.39      | 5.21      | 1.91 | 1.41      | -0.43 | -2.80 | -2.64 | -0.59 | 0.59  |
|    |    | 51  | 3.44 | 8.57  | 0.24      | 6.30      | 2.51 | -3.71     | -0.24 | -3.60 | -3.34 | -0.50 | -0.90 |
| 55 | 1  | 51  | 5.21 | 5.98  | 0.34      | 3.99      | 2.33 | 2.70      | -0.39 | -5.60 | -4.99 | -1.00 | 1.68  |
|    |    | 100 | 3.54 | 11.34 | 1.53      | 9.31      | 3.56 | -3.97     | -0.19 | -3.65 | -3.19 | -0.65 | -1.17 |
|    |    | 101 | 3.40 | 13.01 | -1.16     | 11.32     | 0.54 | 4.60      | -0.56 | -3.55 | -3.15 | -0.97 | 1.02  |
|    |    | 55  | 5.44 | 21.00 | -1.85     | 15.74     | 3.41 | -9.62     | -0.30 | -5.61 | -4.99 | -0.92 | -1.71 |
| 55 | 2  | 51  | 3.57 | 4.19  | 0.27      | 2.82      | 1.64 | 1.87      | -0.26 | -3.83 | -3.40 | -0.69 | 1.16  |
|    |    | 100 | 2.51 | 7.98  | 1.13      | 6.54      | 2.57 | -2.79     | -0.16 | -2.59 | -2.28 | -0.46 | -0.81 |
|    |    | 101 | 2.41 | 9.11  | -0.81     | 7.91      | 0.39 | 3.24      | -0.42 | -2.52 | -2.25 | -0.69 | 0.71  |
|    |    | 55  | 3.73 | 14.76 | -1.26     | 11.02     | 2.48 | -6.78     | -0.19 | -3.84 | -3.41 | -0.62 | -1.18 |

|    |    |     |       |        |         |        |        |        |       |       |          |       |       |
|----|----|-----|-------|--------|---------|--------|--------|--------|-------|-------|----------|-------|-------|
| 55 | 10 | 51  | 3.88  | 4.24   | 0.26    | 3.51   | 0.99   | 1.54   | -0.33 | -4.14 | -3.80    | -0.67 | 1.08  |
|    |    | 100 | 3.03  | 8.64   | 1.39    | 7.37   | 2.65   | -2.75  | -0.15 | -3.11 | -2.70    | -0.56 | -1.03 |
|    |    | 101 | 2.82  | 10.33  | -0.66   | 9.13   | 0.54   | 3.43   | -0.71 | -2.94 | -2.83    | -0.82 | 0.47  |
|    |    | 55  | 4.34  | 15.54  | -1.55   | 12.09  | 1.90   | -6.86  | -0.17 | -4.40 | -3.97    | -0.61 | -1.28 |
| 55 | 42 | 51  | 3.72  | 4.18   | 0.30    | 3.15   | 1.33   | 1.71   | -0.30 | -3.98 | -3.59    | -0.68 | 1.12  |
|    |    | 100 | 2.76  | 8.29   | 1.25    | 6.94   | 2.61   | -2.77  | -0.15 | -2.84 | -2.48    | -0.51 | -0.91 |
|    |    | 101 | 2.59  | 9.70   | -0.74   | 8.50   | 0.46   | 3.33   | -0.57 | -2.71 | -2.53    | -0.75 | 0.59  |
|    |    | 55  | 4.02  | 15.13  | -1.39   | 11.53  | 2.20   | -6.82  | -0.18 | -4.11 | -3.68    | -0.62 | -1.23 |
| 56 | 1  | 55  | 6.07  | 13.04  | -2.44   | 8.77   | 1.83   | 6.92   | -0.16 | -6.36 | -5.67    | -0.84 | 1.95  |
|    |    | 101 | 3.84  | 18.29  | -2.13   | 14.78  | 1.38   | -7.70  | -0.12 | -3.91 | -2.84    | -1.19 | -1.70 |
|    |    | 89  | 3.56  | 17.55  | -5.32   | 13.94  | -1.71  | 8.34   | 0.55  | -3.20 | -2.34    | -0.31 | 1.58  |
|    |    | 59  | 6.70  | 30.08  | -3.79   | 23.12  | 3.17   | -13.69 | -1.91 | -7.47 | -6.37    | -3.01 | -2.21 |
| 56 | 2  | 55  | 4.18  | 9.08   | -1.69   | 6.16   | 1.23   | 4.79   | -0.10 | -4.38 | -3.89    | -0.59 | 1.35  |
|    |    | 101 | 2.70  | 12.77  | -1.41   | 10.32  | 1.05   | -5.36  | -0.11 | -2.77 | -2.03    | -0.84 | -1.19 |
|    |    | 89  | 2.49  | 12.26  | -3.68   | 9.73   | -1.16  | 5.82   | 0.36  | -2.27 | -1.67    | -0.23 | 1.10  |
|    |    | 59  | 4.63  | 21.00  | -2.65   | 16.12  | 2.23   | -9.57  | -1.32 | -5.16 | -4.39    | -2.08 | -1.53 |
| 56 | 10 | 55  | 4.57  | 10.72  | -0.62   | 7.60   | 2.50   | 5.06   | -0.56 | -4.91 | -4.52    | -0.95 | 1.24  |
|    |    | 101 | 3.30  | 13.43  | -0.65   | 11.54  | 1.23   | -4.80  | -0.17 | -3.42 | -2.61    | -0.98 | -1.41 |
|    |    | 89  | 2.83  | 13.92  | -3.47   | 11.34  | -0.89  | 6.18   | -0.03 | -2.76 | -2.40    | -0.39 | 0.92  |
|    |    | 59  | 5.31  | 22.69  | -1.17   | 17.95  | 3.57   | -9.51  | -1.73 | -5.90 | -5.16    | -2.48 | -1.60 |
| 56 | 42 | 55  | 4.36  | 9.87   | -1.17   | 6.86   | 1.84   | 4.92   | -0.33 | -4.63 | -4.20    | -0.76 | 1.30  |
|    |    | 101 | 2.95  | 13.08  | -1.03   | 10.91  | 1.14   | -5.09  | -0.14 | -3.08 | -2.31    | -0.91 | -1.29 |
|    |    | 89  | 2.58  | 13.05  | -3.58   | 10.50  | -1.03  | 6.00   | 0.17  | -2.49 | -2.02    | -0.30 | 1.01  |
|    |    | 59  | 4.95  | 21.81  | -1.93   | 17.00  | 2.88   | -9.54  | -1.52 | -5.51 | -4.76    | -2.27 | -1.56 |
| 57 | 1  | 73  | 26.41 | -1.25  | -76.15  | -73.42 | -3.97  | 14.02  | 2.94  | -0.95 | 1.44     | 0.55  | -1.89 |
|    |    | 102 | 9.73  | 24.00  | -24.42  | -2.70  | 2.29   | 24.08  | -0.49 | -1.41 | -1.31    | -0.59 | -0.29 |
|    |    | 105 | 14.40 | 18.43  | -21.18  | -6.43  | 3.69   | 19.15  | 0.92  | -1.56 | -1.56    | 0.92  | 0.04  |
|    |    | 167 | 31.37 | -9.69  | -54.85  | -54.84 | -9.70  | -0.64  | 2.04  | -3.26 | 1.99     | -3.22 | -0.50 |
| 57 | 2  | 73  | 18.07 | -0.27  | -52.47  | -50.52 | -2.22  | 9.91   | 2.04  | -0.62 | 0.96     | 0.46  | -1.30 |
|    |    | 102 | 6.45  | 16.64  | -16.81  | -1.54  | 1.37   | 16.66  | -0.34 | -0.94 | -0.89    | -0.39 | -0.17 |
|    |    | 105 | 9.92  | 12.88  | -14.58  | -4.15  | 2.45   | 13.33  | 0.64  | -1.07 | -1.07    | 0.64  | 0.03  |
|    |    | 167 | 21.01 | -6.28  | -37.50  | -37.50 | -6.28  | -0.33  | 1.38  | -2.16 | 1.34     | -2.13 | -0.34 |
| 57 | 17 | 73  | 23.30 | -6.09  | -60.80  | -59.48 | -7.40  | 8.38   | 1.70  | -2.11 | 0.56     | -0.98 | -1.74 |
|    |    | 102 | 9.56  | 22.40  | -28.15  | -10.51 | 4.75   | 24.10  | -0.03 | -1.36 | -1.29    | -0.10 | -0.30 |
|    |    | 105 | 14.06 | 20.69  | -25.11  | -10.26 | 5.83   | 21.44  | 0.94  | -1.37 | -1.37    | 0.94  | 0.04  |
|    |    | 167 | 27.90 | -11.42 | -43.65  | -43.60 | -11.47 | -1.20  | 1.13  | -3.65 | 1.05     | -3.56 | -0.64 |
| 57 | 49 | 73  | 20.31 | -3.09  | -56.46  | -54.83 | -4.72  | 9.17   | 1.86  | -1.33 | 0.77     | -0.23 | -1.51 |
|    |    | 102 | 7.89  | 19.29  | -22.15  | -5.86  | 2.99   | 20.24  | -0.19 | -1.14 | -1.08    | -0.25 | -0.23 |
|    |    | 105 | 11.91 | 16.61  | -19.62  | -7.09  | 4.08   | 17.23  | 0.79  | -1.21 | -1.21    | 0.78  | 0.03  |
|    |    | 167 | 24.23 | -8.76  | -40.45  | -40.44 | -8.78  | -0.75  | 1.26  | -2.87 | 1.20     | -2.82 | -0.48 |
| 58 | 1  | 72  | 13.85 | 82.77  | 29.77   | 52.43  | 60.11  | 26.22  | 1.74  | 0.38  | 1.73     | 0.39  | -0.15 |
|    |    | 134 | 22.90 | 24.92  | -71.81  | -2.52  | -44.37 | 43.60  | 0.87  | -2.05 | -1.78    | 0.60  | -0.85 |
|    |    | 102 | 13.98 | 54.32  | -26.95  | -6.51  | 33.88  | 35.26  | 0.08  | -1.29 | -0.79    | -0.42 | -0.66 |
|    |    | 73  | 24.03 | -15.54 | -100.25 | -62.77 | -53.02 | 42.07  | 1.71  | -1.33 | 6.00e-03 | 0.37  | -1.51 |
| 58 | 2  | 72  | 9.72  | 58.00  | 20.55   | 36.40  | 42.16  | 18.50  | 1.17  | 0.19  | 1.17     | 0.19  | -0.02 |
|    |    | 134 | 15.14 | 17.36  | -50.11  | -1.72  | -31.03 | 30.39  | 0.57  | -1.32 | -1.17    | 0.42  | -0.51 |
|    |    | 102 | 9.40  | 37.92  | -18.52  | -4.23  | 23.63  | 24.54  | 0.03  | -0.86 | -0.55    | -0.29 | -0.43 |
|    |    | 73  | 16.14 | -10.66 | -69.38  | -43.37 | -36.68 | 29.17  | 1.19  | -0.81 | 2.98e-03 | 0.38  | -0.98 |
| 58 | 16 | 72  | 16.59 | 79.87  | 10.86   | 39.14  | 51.58  | 33.94  | 1.51  | -0.57 | 1.01     | -0.07 | -0.88 |
|    |    | 134 | 25.55 | 28.77  | -66.69  | 1.03   | -38.95 | 43.35  | 1.19  | -2.14 | -1.33    | 0.39  | -1.43 |
|    |    | 102 | 16.04 | 28.49  | -23.19  | -10.40 | 15.71  | 22.30  | 0.56  | -1.76 | -0.88    | -0.32 | -1.13 |
|    |    | 73  | 22.28 | -7.05  | -69.74  | -49.54 | -27.26 | 29.30  | 1.54  | -1.76 | -0.33    | 0.11  | -1.63 |
| 58 | 49 | 72  | 10.07 | 58.95  | 17.04   | 38.60  | 37.39  | 20.95  | 1.30  | -0.13 | 1.15     | 0.02  | -0.45 |
|    |    | 134 | 19.16 | 19.85  | -50.09  | 0.48   | -30.72 | 31.30  | 0.87  | -1.66 | -1.19    | 0.40  | -0.99 |
|    |    | 102 | 13.65 | 41.43  | -26.05  | -8.55  | 23.93  | 29.57  | 0.27  | -1.32 | -0.74    | -0.31 | -0.76 |
|    |    | 73  | 20.04 | -8.40  | -80.72  | -47.68 | -41.45 | 36.03  | 1.30  | -1.28 | -0.19    | 0.20  | -1.27 |

|    |    |     |       |        |         |        |        |        |          |           |          |           |           |
|----|----|-----|-------|--------|---------|--------|--------|--------|----------|-----------|----------|-----------|-----------|
| 59 | 1  | 135 | 22.90 | 24.92  | -71.81  | -2.52  | -44.37 | -43.60 | 0.87     | -2.05     | -1.78    | 0.60      | 0.85      |
|    |    | 85  | 13.85 | 82.77  | 29.77   | 52.43  | 60.11  | -26.22 | 1.74     | 0.38      | 1.73     | 0.39      | 0.15      |
|    |    | 86  | 24.03 | -15.54 | -100.25 | -62.77 | -53.02 | -42.07 | 1.71     | -1.33     | 6.00e-03 | 0.37      | 1.51      |
|    |    | 103 | 13.98 | 54.32  | -26.95  | -6.51  | 33.88  | -35.26 | 0.08     | -1.29     | -0.79    | -0.42     | 0.66      |
| 59 | 2  | 135 | 15.14 | 17.36  | -50.11  | -1.72  | -31.03 | -30.39 | 0.57     | -1.32     | -1.17    | 0.42      | 0.51      |
|    |    | 85  | 9.72  | 58.00  | 20.55   | 36.40  | 42.16  | -18.50 | 1.17     | 0.19      | 1.17     | 0.19      | 0.02      |
|    |    | 86  | 16.14 | -10.66 | -69.38  | -43.37 | -36.68 | -29.17 | 1.19     | -0.81     | 2.98e-03 | 0.38      | 0.98      |
|    |    | 103 | 9.40  | 37.92  | -18.52  | -4.23  | 23.63  | -24.54 | 0.03     | -0.86     | -0.55    | -0.29     | 0.43      |
| 59 | 10 | 135 | 23.96 | 22.56  | -50.09  | 2.86   | -30.39 | -32.30 | 1.28     | -2.12     | -1.22    | 0.38      | 1.50      |
|    |    | 85  | 14.78 | 60.60  | 12.62   | 40.97  | 32.25  | -23.59 | 1.59     | -0.63     | 1.13     | -0.16     | 0.91      |
|    |    | 86  | 24.38 | -5.95  | -92.97  | -52.33 | -46.59 | -43.42 | 1.42     | -1.79     | -0.39    | 0.02      | 1.59      |
|    |    | 103 | 18.33 | 45.23  | -34.17  | -13.20 | 24.26  | -35.00 | 0.54     | -1.81     | -0.94    | -0.33     | 1.13      |
| 59 | 42 | 135 | 19.16 | 19.85  | -50.09  | 0.48   | -30.72 | -31.30 | 0.87     | -1.66     | -1.19    | 0.40      | 0.99      |
|    |    | 85  | 10.07 | 58.95  | 17.04   | 38.60  | 37.39  | -20.95 | 1.30     | -0.13     | 1.15     | 0.02      | 0.45      |
|    |    | 86  | 20.04 | -8.40  | -80.72  | -47.68 | -41.45 | -36.03 | 1.30     | -1.28     | -0.19    | 0.20      | 1.27      |
|    |    | 103 | 13.65 | 41.43  | -26.05  | -8.55  | 23.93  | -29.57 | 0.27     | -1.32     | -0.74    | -0.31     | 0.76      |
| 60 | 1  | 168 | 31.37 | -9.69  | -54.85  | -54.84 | -9.70  | 0.64   | 2.04     | -3.26     | 1.99     | -3.22     | 0.50      |
|    |    | 107 | 14.40 | 18.43  | -21.18  | -6.43  | 3.69   | -19.15 | 0.92     | -1.56     | -1.56    | 0.92      | -0.04     |
|    |    | 108 | 9.73  | 24.00  | -24.42  | -2.70  | 2.29   | -24.08 | -0.49    | -1.41     | -1.31    | -0.59     | 0.29      |
|    |    | 61  | 26.41 | -1.25  | -76.15  | -73.42 | -3.97  | -14.02 | 2.94     | -0.95     | 1.44     | 0.55      | 1.89      |
| 60 | 2  | 168 | 21.01 | -6.28  | -37.50  | -37.50 | -6.28  | 0.33   | 1.38     | -2.16     | 1.34     | -2.13     | 0.34      |
|    |    | 107 | 9.92  | 12.88  | -14.58  | -4.15  | 2.45   | -13.33 | 0.64     | -1.07     | -1.07    | 0.64      | -0.03     |
|    |    | 108 | 6.45  | 16.64  | -16.81  | -1.54  | 1.37   | -16.66 | -0.34    | -0.94     | -0.89    | -0.39     | 0.17      |
|    |    | 61  | 18.07 | -0.27  | -52.47  | -50.52 | -2.22  | -9.91  | 2.04     | -0.62     | 0.96     | 0.46      | 1.30      |
| 60 | 12 | 168 | 27.88 | -11.51 | -43.68  | -43.66 | -11.53 | 0.90   | 1.11     | -3.66     | 1.02     | -3.57     | 0.64      |
|    |    | 107 | 14.14 | 20.47  | -25.26  | -10.31 | 5.52   | -21.45 | 0.93     | -1.39     | -1.39    | 0.93      | -0.04     |
|    |    | 108 | 9.67  | 22.22  | -28.27  | -10.49 | 4.43   | -24.12 | -0.03    | -1.38     | -1.31    | -0.10     | 0.30      |
|    |    | 61  | 23.36 | -6.06  | -60.88  | -59.47 | -7.47  | -8.68  | 1.68     | -2.13     | 0.54     | -0.99     | 1.75      |
| 60 | 46 | 168 | 23.96 | -8.18  | -40.10  | -40.03 | -8.24  | -1.40  | 1.27     | -2.80     | 1.21     | -2.74     | 0.46      |
|    |    | 107 | 11.50 | 14.28  | -19.46  | -6.69  | 1.50   | -16.36 | 0.79     | -1.20     | -1.20    | 0.79      | 6.19e-03  |
|    |    | 108 | 8.08  | 17.72  | -21.81  | -4.51  | 0.42   | -19.61 | -0.16    | -1.13     | -1.05    | -0.24     | 0.26      |
|    |    | 61  | 20.36 | -1.61  | -56.05  | -53.48 | -4.18  | -11.55 | 1.89     | -1.25     | 0.80     | -0.16     | 1.49      |
| 61 | 1  | 209 | 12.75 | 32.43  | -3.43   | 21.43  | 7.57   | 16.54  | 0.59     | -1.27     | 0.13     | -0.80     | 0.80      |
|    |    | 175 | 9.55  | 28.25  | -21.49  | 4.60   | 2.16   | 24.84  | 0.33     | -0.82     | -0.64    | 0.15      | 0.42      |
|    |    | 105 | 4.60  | 33.73  | -6.57   | -2.03  | 29.19  | 12.75  | 0.02     | -0.23     | -0.23    | 0.02      | -2.94e-03 |
|    |    | 167 | 14.90 | -30.40 | -75.13  | -31.77 | -73.75 | 7.72   | 1.48     | 0.09      | 0.14     | 1.43      | -0.26     |
| 61 | 2  | 209 | 8.62  | 22.12  | -2.50   | 14.51  | 5.11   | 11.38  | 0.42     | -0.83     | 0.12     | -0.52     | 0.54      |
|    |    | 175 | 6.32  | 19.47  | -14.77  | 2.94   | 1.76   | 17.11  | 0.23     | -0.51     | -0.39    | 0.11      | 0.27      |
|    |    | 105 | 2.93  | 22.90  | -4.38   | -1.35  | 19.87  | 8.58   | 7.08e-03 | -0.14     | -0.14    | 4.44e-03  | -0.02     |
|    |    | 167 | 10.12 | -20.96 | -51.29  | -21.87 | -50.37 | 5.18   | 0.99     | 0.04      | 0.08     | 0.95      | -0.19     |
| 61 | 18 | 209 | 13.09 | 28.14  | -5.58   | 21.07  | 1.49   | 13.73  | 0.44     | -1.69     | -1.06    | -0.20     | 0.97      |
|    |    | 175 | 15.52 | 24.09  | -16.46  | 9.49   | -1.86  | 19.46  | 0.59     | -1.93     | -1.57    | 0.23      | 0.88      |
|    |    | 105 | 5.27  | 20.52  | -11.77  | -7.51  | 16.26  | 10.93  | 0.27     | -0.22     | -0.08    | 0.12      | 0.22      |
|    |    | 167 | 11.98 | -26.00 | -56.02  | -28.02 | -53.99 | 7.53   | 1.29     | 0.12      | 0.14     | 1.28      | -0.12     |
| 61 | 47 | 209 | 9.14  | 24.13  | -3.71   | 16.71  | 3.71   | 12.31  | 0.22     | -1.10     | -0.50    | -0.39     | 0.66      |
|    |    | 175 | 10.16 | 20.94  | -15.45  | 5.14   | 0.36   | 18.04  | 0.33     | -1.18     | -1.01    | 0.16      | 0.48      |
|    |    | 105 | 3.52  | 21.97  | -7.36   | -3.86  | 18.47  | 9.51   | 0.06     | -0.13     | -0.12    | 0.05      | 0.03      |
|    |    | 167 | 11.08 | -23.08 | -53.08  | -24.38 | -51.78 | 6.11   | 1.14     | 0.05      | 0.10     | 1.09      | -0.23     |
| 62 | 1  | 203 | 12.75 | 32.43  | -3.43   | 21.43  | 7.57   | 16.54  | 1.27     | -0.59     | -0.13    | 0.80      | -0.80     |
|    |    | 174 | 9.55  | 28.25  | -21.49  | 4.60   | 2.16   | 24.84  | 0.82     | -0.33     | 0.64     | -0.15     | -0.42     |
|    |    | 107 | 4.60  | 33.73  | -6.57   | -2.03  | 29.19  | 12.75  | 0.23     | -0.02     | 0.23     | -0.02     | 2.94e-03  |
|    |    | 168 | 14.90 | -30.40 | -75.13  | -31.77 | -73.75 | 7.72   | -0.09    | -1.48     | -0.14    | -1.43     | 0.26      |
| 62 | 2  | 203 | 8.62  | 22.12  | -2.50   | 14.51  | 5.11   | 11.38  | 0.83     | -0.42     | -0.12    | 0.52      | -0.54     |
|    |    | 174 | 6.32  | 19.47  | -14.77  | 2.94   | 1.76   | 17.11  | 0.51     | -0.23     | 0.39     | -0.11     | -0.27     |
|    |    | 107 | 2.93  | 22.90  | -4.38   | -1.35  | 19.87  | 8.58   | 0.14     | -7.08e-03 | 0.14     | -4.44e-03 | 0.02      |
|    |    | 168 | 10.12 | -20.96 | -51.29  | -21.87 | -50.37 | 5.18   | -0.04    | -0.99     | -0.08    | -0.95     | 0.19      |

|    |    |     |       |        |         |        |        |        |           |           |          |           |       |
|----|----|-----|-------|--------|---------|--------|--------|--------|-----------|-----------|----------|-----------|-------|
| 62 | 12 | 203 | 13.09 | 28.14  | -5.58   | 21.07  | 1.49   | 13.73  | 1.69      | -0.44     | 1.06     | 0.20      | -0.97 |
|    |    | 174 | 15.52 | 24.09  | -16.46  | 9.49   | -1.86  | 19.46  | 1.93      | -0.59     | 1.57     | -0.23     | -0.88 |
|    |    | 107 | 5.27  | 20.52  | -11.77  | -7.51  | 16.26  | 10.93  | 0.22      | -0.27     | 0.08     | -0.12     | -0.22 |
|    |    | 168 | 11.98 | -26.00 | -56.02  | -28.02 | -53.99 | 7.53   | -0.12     | -1.29     | -0.14    | -1.28     | 0.12  |
| 62 | 45 | 203 | 9.14  | 24.13  | -3.71   | 16.71  | 3.71   | 12.31  | 1.10      | -0.22     | 0.50     | 0.39      | -0.66 |
|    |    | 174 | 10.16 | 20.94  | -15.45  | 5.14   | 0.36   | 18.04  | 1.18      | -0.33     | 1.01     | -0.16     | -0.48 |
|    |    | 107 | 3.52  | 21.97  | -7.36   | -3.86  | 18.47  | 9.51   | 0.13      | -0.06     | 0.12     | -0.05     | -0.03 |
|    |    | 168 | 11.08 | -23.08 | -53.08  | -24.38 | -51.78 | 6.11   | -0.05     | -1.14     | -0.10    | -1.09     | 0.23  |
| 63 | 1  | 194 | 6.10  | 27.40  | -17.07  | -0.73  | 11.06  | 21.44  | 0.14      | -0.30     | -0.15    | -0.01     | 0.21  |
|    |    | 175 | 3.50  | 18.75  | -18.06  | 0.20   | 0.49   | 18.40  | -0.01     | -0.13     | -0.13    | -0.01     | 0.02  |
|    |    | 111 | 1.80  | 4.35   | -0.46   | -0.42  | 4.32   | 0.41   | 3.08e-03  | -0.25     | -0.25    | 1.57e-03  | 0.02  |
|    |    | 136 | 1.94  | -0.76  | -5.53   | -1.27  | -5.02  | -1.47  | 0.05      | -0.24     | -0.19    | -2.81e-03 | 0.11  |
| 63 | 2  | 194 | 4.00  | 18.54  | -11.53  | -0.48  | 7.49   | 14.50  | 0.10      | -0.17     | -0.07    | -7.37e-03 | 0.13  |
|    |    | 175 | 2.32  | 12.79  | -12.17  | 0.16   | 0.46   | 12.48  | -6.02e-03 | -0.06     | -0.05    | -9.62e-03 | 0.01  |
|    |    | 111 | 0.91  | 2.95   | -0.34   | -0.30  | 2.91   | 0.35   | 2.43e-03  | -0.11     | -0.11    | 1.04e-03  | 0.01  |
|    |    | 136 | 1.06  | -0.57  | -3.62   | -0.87  | -3.32  | -0.91  | 0.04      | -0.12     | -0.08    | -1.47e-03 | 0.07  |
| 63 | 11 | 194 | 11.71 | 18.21  | -8.12   | 2.52   | 7.57   | 12.92  | 0.12      | -1.72     | -1.66    | 0.06      | 0.31  |
|    |    | 175 | 10.45 | 12.83  | -9.14   | 3.16   | 0.53   | 10.91  | 0.07      | -1.67     | -1.65    | 0.06      | 0.17  |
|    |    | 111 | 15.60 | 3.59   | 0.50    | 1.11   | 2.98   | -1.23  | 0.07      | -2.56     | -2.55    | 0.07      | 0.12  |
|    |    | 136 | 15.75 | 1.78   | -4.48   | 0.54   | -3.24  | -2.49  | 0.08      | -2.54     | -2.52    | 0.07      | 0.20  |
| 63 | 43 | 194 | 7.16  | 18.37  | -9.87   | 0.97   | 7.53   | 13.74  | 0.08      | -0.89     | -0.84    | 0.03      | 0.22  |
|    |    | 175 | 5.70  | 12.79  | -10.69  | 1.61   | 0.50   | 11.72  | 0.03      | -0.83     | -0.82    | 0.02      | 0.09  |
|    |    | 111 | 7.96  | 3.01   | 0.32    | 0.38   | 2.95   | -0.41  | 0.04      | -1.29     | -1.29    | 0.03      | 0.07  |
|    |    | 136 | 7.96  | 0.54   | -4.01   | -0.19  | -3.28  | -1.67  | 0.04      | -1.27     | -1.26    | 0.03      | 0.13  |
| 64 | 1  | 182 | 6.10  | 27.40  | -17.07  | -0.73  | 11.06  | 21.44  | 0.30      | -0.14     | 0.15     | 0.01      | -0.21 |
|    |    | 176 | 3.50  | 18.75  | -18.06  | 0.20   | 0.49   | 18.40  | 0.13      | 0.01      | 0.13     | 0.01      | -0.02 |
|    |    | 110 | 1.80  | 4.35   | -0.46   | -0.42  | 4.32   | 0.41   | 0.25      | -3.08e-03 | 0.25     | -1.57e-03 | -0.02 |
|    |    | 137 | 1.94  | -0.76  | -5.53   | -1.27  | -5.02  | -1.47  | 0.24      | -0.05     | 0.19     | 2.81e-03  | -0.11 |
| 64 | 2  | 182 | 4.00  | 18.54  | -11.53  | -0.48  | 7.49   | 14.50  | 0.17      | -0.10     | 0.07     | 7.37e-03  | -0.13 |
|    |    | 176 | 2.32  | 12.79  | -12.17  | 0.16   | 0.46   | 12.48  | 0.06      | 6.02e-03  | 0.05     | 9.62e-03  | -0.01 |
|    |    | 110 | 0.91  | 2.95   | -0.34   | -0.30  | 2.91   | 0.35   | 0.11      | -2.43e-03 | 0.11     | -1.04e-03 | -0.01 |
|    |    | 137 | 1.06  | -0.57  | -3.62   | -0.87  | -3.32  | -0.91  | 0.12      | -0.04     | 0.08     | 1.47e-03  | -0.07 |
| 64 | 4  | 182 | 11.71 | 18.21  | -8.12   | 2.52   | 7.57   | 12.92  | 1.72      | -0.12     | 1.66     | -0.06     | -0.31 |
|    |    | 176 | 10.45 | 12.83  | -9.14   | 3.16   | 0.53   | 10.91  | 1.67      | -0.07     | 1.65     | -0.06     | -0.17 |
|    |    | 110 | 15.60 | 3.59   | 0.50    | 1.11   | 2.98   | -1.23  | 2.56      | -0.07     | 2.55     | -0.07     | -0.12 |
|    |    | 137 | 15.75 | 1.78   | -4.48   | 0.54   | -3.24  | -2.49  | 2.54      | -0.08     | 2.52     | -0.07     | -0.20 |
| 64 | 36 | 182 | 7.16  | 18.37  | -9.87   | 0.97   | 7.53   | 13.74  | 0.89      | -0.08     | 0.84     | -0.03     | -0.22 |
|    |    | 176 | 5.70  | 12.79  | -10.69  | 1.61   | 0.50   | 11.72  | 0.83      | -0.03     | 0.82     | -0.02     | -0.09 |
|    |    | 110 | 7.96  | 3.01   | 0.32    | 0.38   | 2.95   | -0.41  | 1.29      | -0.04     | 1.29     | -0.03     | -0.07 |
|    |    | 137 | 7.96  | 0.54   | -4.01   | -0.19  | -3.28  | -1.67  | 1.27      | -0.04     | 1.26     | -0.03     | -0.13 |
| 65 | 1  | 61  | 24.03 | -15.54 | -100.25 | -62.77 | -53.02 | -42.07 | 1.71      | -1.33     | 6.00e-03 | 0.37      | 1.51  |
|    |    | 108 | 13.98 | 54.32  | -26.95  | -6.51  | 33.88  | -35.26 | 0.08      | -1.29     | -0.79    | -0.42     | 0.66  |
|    |    | 114 | 22.90 | 24.92  | -71.81  | -2.52  | -44.37 | -43.60 | 0.87      | -2.05     | -1.78    | 0.60      | 0.85  |
|    |    | 62  | 13.85 | 82.77  | 29.77   | 52.43  | 60.11  | -26.22 | 1.74      | 0.38      | 1.73     | 0.39      | 0.15  |
| 65 | 2  | 61  | 16.14 | -10.66 | -69.38  | -43.37 | -36.68 | -29.17 | 1.19      | -0.81     | 2.98e-03 | 0.38      | 0.98  |
|    |    | 108 | 9.40  | 37.92  | -18.52  | -4.23  | 23.63  | -24.54 | 0.03      | -0.86     | -0.55    | -0.29     | 0.43  |
|    |    | 114 | 15.14 | 17.36  | -50.11  | -1.72  | -31.03 | -30.39 | 0.57      | -1.32     | -1.17    | 0.42      | 0.51  |
|    |    | 62  | 9.72  | 58.00  | 20.55   | 36.40  | 42.16  | -18.50 | 1.17      | 0.19      | 1.17     | 0.19      | 0.02  |
| 65 | 14 | 61  | 22.28 | -7.05  | -69.74  | -49.54 | -27.26 | -29.30 | 1.54      | -1.76     | -0.33    | 0.11      | 1.63  |
|    |    | 108 | 16.04 | 28.49  | -23.19  | -10.40 | 15.71  | -22.30 | 0.56      | -1.76     | -0.88    | -0.32     | 1.13  |
|    |    | 114 | 25.55 | 28.77  | -66.69  | 1.03   | -38.95 | -43.35 | 1.19      | -2.14     | -1.33    | 0.39      | 1.43  |
|    |    | 62  | 16.59 | 79.87  | 10.86   | 39.14  | 51.58  | -33.94 | 1.51      | -0.57     | 1.01     | -0.07     | 0.88  |
| 65 | 46 | 61  | 19.01 | -9.16  | -69.32  | -46.33 | -32.14 | -29.23 | 1.36      | -1.26     | -0.16    | 0.25      | 1.29  |
|    |    | 108 | 12.53 | 33.38  | -20.76  | -7.20  | 19.82  | -23.46 | 0.28      | -1.29     | -0.71    | -0.30     | 0.76  |
|    |    | 114 | 19.95 | 22.85  | -58.09  | -0.40  | -34.84 | -36.62 | 0.84      | -1.68     | -1.25    | 0.40      | 0.95  |
|    |    | 62  | 10.93 | 68.53  | 15.89   | 37.72  | 46.70  | -25.93 | 1.25      | -0.09     | 1.09     | 0.07      | 0.44  |

|    |    |     |       |        |         |        |        |        |       |       |          |       |       |
|----|----|-----|-------|--------|---------|--------|--------|--------|-------|-------|----------|-------|-------|
| 66 | 1  | 109 | 13.98 | 54.32  | -26.95  | -6.51  | 33.88  | 35.26  | 0.08  | -1.29 | -0.79    | -0.42 | -0.66 |
|    |    | 74  | 24.03 | -15.54 | -100.25 | -62.77 | -53.02 | 42.07  | 1.71  | -1.33 | 6.00e-03 | 0.37  | -1.51 |
|    |    | 75  | 13.85 | 82.77  | 29.77   | 52.43  | 60.11  | 26.22  | 1.74  | 0.38  | 1.73     | 0.39  | -0.15 |
|    |    | 115 | 22.90 | 24.92  | -71.81  | -2.52  | -44.37 | 43.60  | 0.87  | -2.05 | -1.78    | 0.60  | -0.85 |
| 66 | 2  | 109 | 9.40  | 37.92  | -18.52  | -4.23  | 23.63  | 24.54  | 0.03  | -0.86 | -0.55    | -0.29 | -0.43 |
|    |    | 74  | 16.14 | -10.66 | -69.38  | -43.37 | -36.68 | 29.17  | 1.19  | -0.81 | 2.98e-03 | 0.38  | -0.98 |
|    |    | 75  | 9.72  | 58.00  | 20.55   | 36.40  | 42.16  | 18.50  | 1.17  | 0.19  | 1.17     | 0.19  | -0.02 |
|    |    | 115 | 15.14 | 17.36  | -50.11  | -1.72  | -31.03 | 30.39  | 0.57  | -1.32 | -1.17    | 0.42  | -0.51 |
| 66 | 5  | 109 | 16.04 | 28.49  | -23.19  | -10.40 | 15.71  | 22.30  | 0.56  | -1.76 | -0.88    | -0.32 | -1.13 |
|    |    | 74  | 22.28 | -7.05  | -69.74  | -49.54 | -27.26 | 29.30  | 1.54  | -1.76 | -0.33    | 0.11  | -1.63 |
|    |    | 75  | 16.59 | 79.87  | 10.86   | 39.14  | 51.58  | 33.94  | 1.51  | -0.57 | 1.01     | -0.07 | -0.88 |
|    |    | 115 | 25.55 | 28.77  | -66.69  | 1.03   | -38.95 | 43.35  | 1.19  | -2.14 | -1.33    | 0.39  | -1.43 |
| 66 | 36 | 109 | 13.65 | 41.43  | -26.05  | -8.55  | 23.93  | 29.57  | 0.27  | -1.32 | -0.74    | -0.31 | -0.76 |
|    |    | 74  | 20.04 | -8.40  | -80.72  | -47.68 | -41.45 | 36.03  | 1.30  | -1.28 | -0.19    | 0.20  | -1.27 |
|    |    | 75  | 10.07 | 58.95  | 17.04   | 38.60  | 37.39  | 20.95  | 1.30  | -0.13 | 1.15     | 0.02  | -0.45 |
|    |    | 115 | 19.16 | 19.85  | -50.09  | 0.48   | -30.72 | 31.30  | 0.87  | -1.66 | -1.19    | 0.40  | -0.99 |
| 67 | 1  | 62  | 14.01 | 59.22  | 17.82   | 17.84  | 59.20  | 0.71   | 1.66  | -0.27 | 0.48     | 0.91  | 0.94  |
|    |    | 114 | 8.81  | 16.82  | -48.56  | 1.78   | -33.52 | -27.52 | -0.31 | -1.10 | -1.10    | -0.31 | -0.03 |
|    |    | 116 | 13.15 | 0.16   | -28.56  | -0.69  | -27.70 | -4.88  | 0.58  | -1.47 | -1.29    | 0.40  | 0.58  |
|    |    | 63  | 26.07 | 91.33  | -3.56   | -1.53  | 89.29  | -13.76 | 3.15  | -0.66 | 2.85     | -0.36 | -1.02 |
| 67 | 2  | 62  | 9.25  | 41.19  | 12.47   | 12.47  | 41.19  | 0.42   | 1.08  | -0.11 | 0.32     | 0.66  | 0.57  |
|    |    | 114 | 5.67  | 11.88  | -33.83  | 1.33   | -23.29 | -19.26 | -0.22 | -0.72 | -0.71    | -0.23 | -0.07 |
|    |    | 116 | 8.50  | 0.22   | -20.23  | -0.42  | -19.59 | -3.56  | 0.39  | -0.91 | -0.81    | 0.29  | 0.35  |
|    |    | 63  | 18.18 | 64.02  | -2.47   | -0.99  | 62.54  | -9.80  | 2.16  | -0.52 | 1.93     | -0.28 | -0.76 |
| 67 | 9  | 62  | 7.32  | 33.36  | 2.17    | 9.82   | 25.71  | -13.42 | 0.78  | 0.17  | 0.47     | 0.48  | -0.31 |
|    |    | 114 | 16.63 | 25.84  | -40.08  | -1.31  | -12.93 | -32.44 | 0.62  | -1.46 | -0.55    | -0.28 | -1.03 |
|    |    | 116 | 9.53  | 3.59   | -13.53  | -0.70  | -9.24  | 7.42   | 0.42  | -1.12 | -0.93    | 0.23  | -0.50 |
|    |    | 63  | 22.65 | 47.07  | -1.29   | -1.28  | 47.06  | 0.51   | 2.58  | -1.23 | 1.80     | -0.46 | -1.53 |
| 67 | 41 | 62  | 5.90  | 35.34  | 9.58    | 11.20  | 33.73  | -6.25  | 0.66  | 0.31  | 0.39     | 0.57  | 0.15  |
|    |    | 114 | 10.61 | 18.09  | -36.33  | 0.06   | -18.30 | -25.61 | 0.12  | -1.01 | -0.63    | -0.25 | -0.53 |
|    |    | 116 | 7.22  | -0.35  | -14.82  | -0.55  | -14.61 | 1.72   | 0.26  | -0.87 | -0.87    | 0.26  | -0.06 |
|    |    | 63  | 19.85 | 55.49  | -1.54   | -1.13  | 55.08  | -4.84  | 2.34  | -0.84 | 1.87     | -0.37 | -1.13 |
| 68 | 1  | 115 | 8.81  | 16.82  | -48.56  | 1.78   | -33.52 | 27.52  | -0.31 | -1.10 | -1.10    | -0.31 | 0.03  |
|    |    | 75  | 14.01 | 59.22  | 17.82   | 17.84  | 59.20  | -0.71  | 1.66  | -0.27 | 0.48     | 0.91  | -0.94 |
|    |    | 76  | 26.07 | 91.33  | -3.56   | -1.53  | 89.29  | 13.76  | 3.15  | -0.66 | 2.85     | -0.36 | 1.02  |
|    |    | 117 | 13.15 | 0.16   | -28.56  | -0.69  | -27.70 | 4.88   | 0.58  | -1.47 | -1.29    | 0.40  | -0.58 |
| 68 | 2  | 115 | 5.67  | 11.88  | -33.83  | 1.33   | -23.29 | 19.26  | -0.22 | -0.72 | -0.71    | -0.23 | 0.07  |
|    |    | 75  | 9.25  | 41.19  | 12.47   | 12.47  | 41.19  | -0.42  | 1.08  | -0.11 | 0.32     | 0.66  | -0.57 |
|    |    | 76  | 18.18 | 64.02  | -2.47   | -0.99  | 62.54  | 9.80   | 2.16  | -0.52 | 1.93     | -0.28 | 0.76  |
|    |    | 117 | 8.50  | 0.22   | -20.23  | -0.42  | -19.59 | 3.56   | 0.39  | -0.91 | -0.81    | 0.29  | -0.35 |
| 68 | 18 | 115 | 16.63 | 25.84  | -40.08  | -1.31  | -12.93 | 32.44  | 0.62  | -1.46 | -0.55    | -0.28 | 1.03  |
|    |    | 75  | 7.32  | 33.36  | 2.17    | 9.82   | 25.71  | 13.42  | 0.78  | 0.17  | 0.47     | 0.48  | 0.31  |
|    |    | 76  | 22.65 | 47.07  | -1.29   | -1.28  | 47.06  | -0.51  | 2.58  | -1.23 | 1.80     | -0.46 | 1.53  |
|    |    | 117 | 9.53  | 3.59   | -13.53  | -0.70  | -9.24  | -7.42  | 0.42  | -1.12 | -0.93    | 0.23  | 0.50  |
| 68 | 50 | 115 | 10.61 | 18.09  | -36.33  | 0.06   | -18.30 | 25.61  | 0.12  | -1.01 | -0.63    | -0.25 | 0.53  |
|    |    | 75  | 5.90  | 35.34  | 9.58    | 11.20  | 33.73  | 6.25   | 0.66  | 0.31  | 0.39     | 0.57  | -0.15 |
|    |    | 76  | 19.85 | 55.49  | -1.54   | -1.13  | 55.08  | 4.84   | 2.34  | -0.84 | 1.87     | -0.37 | 1.13  |
|    |    | 117 | 7.22  | -0.35  | -14.82  | -0.55  | -14.61 | -1.72  | 0.26  | -0.87 | -0.87    | 0.26  | 0.06  |
| 69 | 1  | 63  | 15.97 | 83.89  | 12.20   | 12.57  | 83.52  | 5.16   | 2.24  | -0.06 | 1.67     | 0.51  | 0.99  |
|    |    | 116 | 9.45  | 2.79   | -30.10  | -0.34  | -26.97 | -9.65  | 0.17  | -1.21 | -0.79    | -0.26 | -0.64 |
|    |    | 118 | 8.87  | 2.11   | -10.62  | 1.06   | -9.57  | 3.50   | 0.57  | -1.10 | -0.77    | 0.24  | 0.66  |
|    |    | 64  | 28.76 | 81.85  | -3.73   | -3.67  | 81.79  | -2.20  | 3.49  | -0.86 | 2.98     | -0.35 | -1.41 |
| 69 | 2  | 63  | 10.57 | 58.54  | 8.57    | 8.82   | 58.29  | 3.50   | 1.48  | 0.02  | 1.13     | 0.37  | 0.62  |
|    |    | 116 | 6.80  | 2.05   | -21.19  | -0.19  | -18.95 | -6.86  | 0.17  | -0.82 | -0.47    | -0.19 | -0.48 |
|    |    | 118 | 5.51  | 1.39   | -7.73   | 0.77   | -7.12  | 2.30   | 0.38  | -0.65 | -0.44    | 0.17  | 0.41  |
|    |    | 64  | 19.97 | 57.54  | -2.55   | -2.51  | 57.49  | -1.70  | 2.39  | -0.64 | 2.01     | -0.27 | -1.00 |

|    |    |     |       |       |        |       |        |           |      |       |       |       |       |
|----|----|-----|-------|-------|--------|-------|--------|-----------|------|-------|-------|-------|-------|
| 69 | 10 | 63  | 7.16  | 48.74 | 6.25   | 8.51  | 46.48  | -9.53     | 1.01 | 0.32  | 1.01  | 0.32  | -0.07 |
|    |    | 116 | 16.78 | 15.01 | -26.84 | -0.49 | -11.33 | -20.21    | 0.88 | -1.65 | -0.59 | -0.19 | -1.25 |
|    |    | 118 | 7.12  | 6.26  | -6.42  | -0.66 | 0.50   | 6.31      | 0.26 | -0.94 | -0.85 | 0.17  | -0.32 |
|    |    | 64  | 22.81 | 45.82 | -4.08  | -3.94 | 45.68  | 2.63      | 2.56 | -1.27 | 1.60  | -0.31 | -1.66 |
| 69 | 42 | 63  | 8.40  | 52.78 | 8.50   | 8.67  | 52.61  | -2.77     | 1.17 | 0.25  | 1.07  | 0.35  | 0.29  |
|    |    | 116 | 11.50 | 7.44  | -23.06 | -0.33 | -15.29 | -13.29    | 0.51 | -1.22 | -0.53 | -0.19 | -0.85 |
|    |    | 118 | 4.66  | 2.89  | -6.26  | 0.08  | -3.45  | 4.22      | 0.17 | -0.64 | -0.64 | 0.17  | 0.06  |
|    |    | 64  | 20.99 | 51.81 | -3.20  | -3.20 | 51.81  | 0.38      | 2.45 | -0.92 | 1.81  | -0.29 | -1.32 |
| 70 | 1  | 117 | 9.45  | 2.79  | -30.10 | -0.34 | -26.97 | 9.65      | 0.17 | -1.21 | -0.79 | -0.26 | 0.64  |
|    |    | 76  | 15.97 | 83.89 | 12.20  | 12.57 | 83.52  | -5.16     | 2.24 | -0.06 | 1.67  | 0.51  | -0.99 |
|    |    | 77  | 28.76 | 81.85 | -3.73  | -3.67 | 81.79  | 2.20      | 3.49 | -0.86 | 2.98  | -0.35 | 1.41  |
|    |    | 119 | 8.87  | 2.11  | -10.62 | 1.06  | -9.57  | -3.50     | 0.57 | -1.10 | -0.77 | 0.24  | -0.66 |
| 70 | 2  | 117 | 6.80  | 2.05  | -21.19 | -0.19 | -18.95 | 6.86      | 0.17 | -0.82 | -0.47 | -0.19 | 0.48  |
|    |    | 76  | 10.57 | 58.54 | 8.57   | 8.82  | 58.29  | -3.50     | 1.48 | 0.02  | 1.13  | 0.37  | -0.62 |
|    |    | 77  | 19.97 | 57.54 | -2.55  | -2.51 | 57.49  | 1.70      | 2.39 | -0.64 | 2.01  | -0.27 | 1.00  |
|    |    | 119 | 5.51  | 1.39  | -7.73  | 0.77  | -7.12  | -2.30     | 0.38 | -0.65 | -0.44 | 0.17  | -0.41 |
| 70 | 17 | 117 | 16.78 | 15.01 | -26.84 | -0.49 | -11.33 | 20.21     | 0.88 | -1.65 | -0.59 | -0.19 | 1.25  |
|    |    | 76  | 7.16  | 48.74 | 6.25   | 8.51  | 46.48  | 9.53      | 1.01 | 0.32  | 1.01  | 0.32  | 0.07  |
|    |    | 77  | 22.81 | 45.82 | -4.08  | -3.94 | 45.68  | -2.63     | 2.56 | -1.27 | 1.60  | -0.31 | 1.66  |
|    |    | 119 | 7.12  | 6.26  | -6.42  | -0.66 | 0.50   | -6.31     | 0.26 | -0.94 | -0.85 | 0.17  | 0.32  |
| 70 | 49 | 117 | 11.50 | 7.44  | -23.06 | -0.33 | -15.29 | 13.29     | 0.51 | -1.22 | -0.53 | -0.19 | 0.85  |
|    |    | 76  | 8.40  | 52.78 | 8.50   | 8.67  | 52.61  | 2.77      | 1.17 | 0.25  | 1.07  | 0.35  | -0.29 |
|    |    | 77  | 20.99 | 51.81 | -3.20  | -3.20 | 51.81  | -0.38     | 2.45 | -0.92 | 1.81  | -0.29 | 1.32  |
|    |    | 119 | 4.66  | 2.89  | -6.26  | 0.08  | -3.45  | -4.22     | 0.17 | -0.64 | -0.64 | 0.17  | -0.06 |
| 71 | 1  | 64  | 20.80 | 77.29 | 4.83   | 5.02  | 77.10  | 3.66      | 2.86 | -0.22 | 2.37  | 0.27  | 1.13  |
|    |    | 118 | 9.54  | -0.51 | -9.12  | -0.51 | -9.12  | -5.91e-03 | 0.54 | -1.23 | -0.52 | -0.17 | -0.87 |
|    |    | 120 | 9.07  | 7.52  | -1.98  | 0.65  | 4.88   | 4.25      | 0.63 | -0.96 | -0.44 | 0.11  | 0.74  |
|    |    | 65  | 28.32 | 66.23 | -2.65  | -2.57 | 66.16  | 2.31      | 3.56 | -0.86 | 2.96  | -0.26 | -1.52 |
| 71 | 2  | 64  | 13.93 | 54.18 | 3.44   | 3.56  | 54.06  | 2.49      | 1.91 | -0.12 | 1.60  | 0.19  | 0.73  |
|    |    | 118 | 6.70  | -0.32 | -6.71  | -0.32 | -6.71  | -0.13     | 0.43 | -0.83 | -0.27 | -0.12 | -0.62 |
|    |    | 120 | 5.74  | 4.78  | -1.43  | 0.48  | 2.87   | 2.86      | 0.44 | -0.57 | -0.21 | 0.08  | 0.48  |
|    |    | 65  | 19.54 | 46.78 | -1.80  | -1.76 | 46.74  | 1.49      | 2.43 | -0.63 | 2.00  | -0.20 | -1.06 |
| 71 | 10 | 64  | 10.19 | 51.68 | 1.77   | 2.13  | 51.32  | -4.23     | 1.21 | 0.09  | 1.19  | 0.10  | 0.11  |
|    |    | 118 | 15.02 | 4.29  | -9.60  | -1.76 | -3.56  | -6.89     | 0.90 | -1.73 | -0.68 | -0.15 | -1.28 |
|    |    | 120 | 5.44  | 6.23  | -1.27  | -1.06 | 6.02   | 1.22      | 0.07 | -0.80 | -0.78 | 0.05  | -0.13 |
|    |    | 65  | 21.36 | 44.00 | -3.30  | -3.30 | 44.00  | -0.12     | 2.41 | -1.27 | 1.43  | -0.29 | -1.62 |
| 71 | 48 | 64  | 15.59 | 50.82 | 4.49   | 4.62  | 50.69  | 2.40      | 2.26 | -0.14 | 1.86  | 0.26  | 0.90  |
|    |    | 118 | 4.77  | 0.74  | -5.23  | 0.73  | -5.22  | -0.20     | 0.38 | -0.51 | -0.01 | -0.11 | -0.44 |
|    |    | 120 | 7.67  | 10.12 | -4.19  | 1.58  | 4.36   | 7.02      | 0.72 | -0.52 | 0.10  | 0.10  | 0.62  |
|    |    | 65  | 20.22 | 44.08 | -1.37  | -0.66 | 43.37  | 5.64      | 2.63 | -0.46 | 2.32  | -0.14 | -0.94 |
| 72 | 1  | 119 | 9.54  | -0.51 | -9.12  | -0.51 | -9.12  | 5.91e-03  | 0.54 | -1.23 | -0.52 | -0.17 | 0.87  |
|    |    | 77  | 20.80 | 77.29 | 4.83   | 5.02  | 77.10  | -3.66     | 2.86 | -0.22 | 2.37  | 0.27  | -1.13 |
|    |    | 78  | 28.32 | 66.23 | -2.65  | -2.57 | 66.16  | -2.31     | 3.56 | -0.86 | 2.96  | -0.26 | 1.52  |
|    |    | 121 | 9.07  | 7.52  | -1.98  | 0.65  | 4.88   | -4.25     | 0.63 | -0.96 | -0.44 | 0.11  | -0.74 |
| 72 | 2  | 119 | 6.70  | -0.32 | -6.71  | -0.32 | -6.71  | 0.13      | 0.43 | -0.83 | -0.27 | -0.12 | 0.62  |
|    |    | 77  | 13.93 | 54.18 | 3.44   | 3.56  | 54.06  | -2.49     | 1.91 | -0.12 | 1.60  | 0.19  | -0.73 |
|    |    | 78  | 19.54 | 46.78 | -1.80  | -1.76 | 46.74  | -1.49     | 2.43 | -0.63 | 2.00  | -0.20 | 1.06  |
|    |    | 121 | 5.74  | 4.78  | -1.43  | 0.48  | 2.87   | -2.86     | 0.44 | -0.57 | -0.21 | 0.08  | -0.48 |
| 72 | 17 | 119 | 15.02 | 4.29  | -9.60  | -1.76 | -3.56  | 6.89      | 0.90 | -1.73 | -0.68 | -0.15 | 1.28  |
|    |    | 77  | 10.19 | 51.68 | 1.77   | 2.13  | 51.32  | 4.23      | 1.21 | 0.09  | 1.19  | 0.10  | -0.11 |
|    |    | 78  | 21.36 | 44.00 | -3.30  | -3.30 | 44.00  | 0.12      | 2.41 | -1.27 | 1.43  | -0.29 | 1.62  |
|    |    | 121 | 5.44  | 6.23  | -1.27  | -1.06 | 6.02   | -1.22     | 0.07 | -0.80 | -0.78 | 0.05  | 0.13  |
| 72 | 39 | 119 | 4.77  | 0.74  | -5.23  | 0.73  | -5.22  | 0.20      | 0.38 | -0.51 | -0.01 | -0.11 | 0.44  |
|    |    | 77  | 15.59 | 50.82 | 4.49   | 4.62  | 50.69  | -2.40     | 2.26 | -0.14 | 1.86  | 0.26  | -0.90 |
|    |    | 78  | 20.22 | 44.08 | -1.37  | -0.66 | 43.37  | -5.64     | 2.63 | -0.46 | 2.32  | -0.14 | 0.94  |
|    |    | 121 | 7.67  | 10.12 | -4.19  | 1.58  | 4.36   | -7.02     | 0.72 | -0.52 | 0.10  | 0.10  | -0.62 |

|    |    |     |       |       |       |       |       |           |      |       |       |           |       |
|----|----|-----|-------|-------|-------|-------|-------|-----------|------|-------|-------|-----------|-------|
| 73 | 1  | 65  | 23.35 | 63.47 | 1.04  | 1.10  | 63.42 | 1.82      | 3.20 | -0.40 | 2.70  | 0.10      | 1.25  |
|    |    | 120 | 10.29 | 6.54  | -1.32 | -0.28 | 5.51  | 2.66      | 0.72 | -1.16 | -0.33 | -0.11     | -0.93 |
|    |    | 122 | 9.31  | 14.38 | -0.30 | 0.18  | 13.89 | 2.62      | 0.71 | -0.95 | -0.27 | 0.03      | 0.81  |
|    |    | 66  | 26.96 | 54.15 | -2.03 | -1.89 | 54.01 | 2.81      | 3.53 | -0.77 | 2.93  | -0.17     | -1.49 |
| 73 | 2  | 65  | 15.75 | 44.76 | 0.78  | 0.82  | 44.73 | 1.23      | 2.15 | -0.26 | 1.82  | 0.07      | 0.82  |
|    |    | 120 | 7.14  | 4.10  | -0.91 | -0.18 | 3.37  | 1.77      | 0.55 | -0.76 | -0.14 | -0.08     | -0.65 |
|    |    | 122 | 6.06  | 9.46  | -0.20 | 0.14  | 9.12  | 1.77      | 0.50 | -0.58 | -0.10 | 0.02      | 0.54  |
|    |    | 66  | 18.49 | 38.44 | -1.38 | -1.29 | 38.35 | 1.88      | 2.40 | -0.55 | 1.98  | -0.13     | -1.03 |
| 73 | 16 | 65  | 18.99 | 34.23 | 2.77  | 3.10  | 33.89 | -3.22     | 2.82 | -0.17 | 2.48  | 0.18      | 0.95  |
|    |    | 120 | 6.54  | 8.88  | 1.03  | 2.10  | 7.81  | -2.69     | 0.81 | -0.36 | 0.51  | -0.07     | -0.51 |
|    |    | 122 | 8.78  | 20.27 | -4.32 | 2.39  | 13.56 | 10.96     | 0.99 | -0.34 | 0.61  | 0.04      | 0.60  |
|    |    | 66  | 21.39 | 31.53 | -3.05 | 0.96  | 27.52 | 11.08     | 3.00 | -0.34 | 2.68  | -0.02     | -0.98 |
| 73 | 48 | 65  | 17.28 | 39.53 | 1.89  | 1.92  | 39.51 | -0.91     | 2.47 | -0.21 | 2.14  | 0.12      | 0.89  |
|    |    | 120 | 6.23  | 5.54  | 0.89  | 0.92  | 5.51  | -0.38     | 0.65 | -0.54 | 0.18  | -0.07     | -0.58 |
|    |    | 122 | 7.10  | 14.21 | -1.73 | 1.22  | 11.26 | 6.19      | 0.71 | -0.44 | 0.24  | 0.03      | 0.57  |
|    |    | 66  | 19.85 | 34.29 | -1.36 | -0.21 | 33.13 | 6.31      | 2.68 | -0.44 | 2.32  | -0.08     | -1.01 |
| 74 | 1  | 121 | 10.29 | 6.54  | -1.32 | -0.28 | 5.51  | -2.66     | 0.72 | -1.16 | -0.33 | -0.11     | 0.93  |
|    |    | 78  | 23.35 | 63.47 | 1.04  | 1.10  | 63.42 | -1.82     | 3.20 | -0.40 | 2.70  | 0.10      | -1.25 |
|    |    | 79  | 26.96 | 54.15 | -2.03 | -1.89 | 54.01 | -2.81     | 3.53 | -0.77 | 2.93  | -0.17     | 1.49  |
|    |    | 123 | 9.31  | 14.38 | -0.30 | 0.18  | 13.89 | -2.62     | 0.71 | -0.95 | -0.27 | 0.03      | -0.81 |
| 74 | 2  | 121 | 7.14  | 4.10  | -0.91 | -0.18 | 3.37  | -1.77     | 0.55 | -0.76 | -0.14 | -0.08     | 0.65  |
|    |    | 78  | 15.75 | 44.76 | 0.78  | 0.82  | 44.73 | -1.23     | 2.15 | -0.26 | 1.82  | 0.07      | -0.82 |
|    |    | 79  | 18.49 | 38.44 | -1.38 | -1.29 | 38.35 | -1.88     | 2.40 | -0.55 | 1.98  | -0.13     | 1.03  |
|    |    | 123 | 6.06  | 9.46  | -0.20 | 0.14  | 9.12  | -1.77     | 0.50 | -0.58 | -0.10 | 0.02      | -0.54 |
| 74 | 7  | 121 | 6.54  | 8.88  | 1.03  | 2.10  | 7.81  | 2.69      | 0.81 | -0.36 | 0.51  | -0.07     | 0.51  |
|    |    | 78  | 18.99 | 34.23 | 2.77  | 3.10  | 33.89 | 3.22      | 2.82 | -0.17 | 2.48  | 0.18      | -0.95 |
|    |    | 79  | 21.39 | 31.53 | -3.05 | 0.96  | 27.52 | -11.08    | 3.00 | -0.34 | 2.68  | -0.02     | 0.98  |
|    |    | 123 | 8.78  | 20.27 | -4.32 | 2.39  | 13.56 | -10.96    | 0.99 | -0.34 | 0.61  | 0.04      | -0.60 |
| 74 | 39 | 121 | 6.23  | 5.54  | 0.89  | 0.92  | 5.51  | 0.38      | 0.65 | -0.54 | 0.18  | -0.07     | 0.58  |
|    |    | 78  | 17.28 | 39.53 | 1.89  | 1.92  | 39.51 | 0.91      | 2.47 | -0.21 | 2.14  | 0.12      | -0.89 |
|    |    | 79  | 19.85 | 34.29 | -1.36 | -0.21 | 33.13 | -6.31     | 2.68 | -0.44 | 2.32  | -0.08     | 1.01  |
|    |    | 123 | 7.10  | 14.21 | -1.73 | 1.22  | 11.26 | -6.19     | 0.71 | -0.44 | 0.24  | 0.03      | -0.57 |
| 75 | 1  | 66  | 24.64 | 52.82 | -0.65 | -0.65 | 52.82 | -9.24e-03 | 3.37 | -0.54 | 2.84  | -0.01     | 1.34  |
|    |    | 122 | 9.97  | 14.51 | -0.40 | -0.16 | 14.27 | 1.87      | 0.77 | -1.07 | -0.24 | -0.06     | -0.91 |
|    |    | 124 | 9.42  | 17.03 | -0.06 | -0.05 | 17.03 | 0.27      | 0.76 | -0.99 | -0.21 | -0.02     | 0.87  |
|    |    | 67  | 25.69 | 49.36 | -1.46 | -1.41 | 49.31 | 1.69      | 3.47 | -0.66 | 2.90  | -0.09     | -1.42 |
| 75 | 2  | 66  | 16.71 | 37.47 | -0.41 | -0.41 | 37.47 | -0.01     | 2.27 | -0.37 | 1.92  | -0.01     | 0.90  |
|    |    | 122 | 6.85  | 9.58  | -0.26 | -0.10 | 9.41  | 1.27      | 0.57 | -0.69 | -0.07 | -0.04     | -0.63 |
|    |    | 124 | 6.27  | 11.31 | -0.03 | -0.02 | 11.30 | 0.18      | 0.55 | -0.62 | -0.06 | -0.01     | 0.59  |
|    |    | 67  | 17.51 | 35.12 | -0.99 | -0.95 | 35.08 | 1.15      | 2.34 | -0.46 | 1.95  | -0.07     | -0.97 |
| 75 | 16 | 66  | 19.23 | 27.35 | 0.15  | 1.84  | 25.66 | -6.56     | 2.87 | -0.14 | 2.62  | 0.10      | 0.82  |
|    |    | 122 | 9.07  | 15.90 | 0.10  | 2.15  | 13.84 | -5.31     | 1.09 | -0.48 | 0.64  | -0.02     | -0.71 |
|    |    | 124 | 6.86  | 19.45 | -1.60 | 2.12  | 15.73 | 8.03      | 0.87 | -0.21 | 0.65  | 8.94e-03  | 0.43  |
|    |    | 67  | 21.53 | 26.49 | -2.03 | 1.19  | 23.27 | 9.03      | 3.08 | -0.38 | 2.66  | 0.04      | -1.12 |
| 75 | 48 | 66  | 17.88 | 32.10 | 0.36  | 0.68  | 31.78 | -3.17     | 2.55 | -0.25 | 2.26  | 0.04      | 0.86  |
|    |    | 122 | 7.44  | 11.88 | 0.65  | 0.99  | 11.54 | -1.90     | 0.81 | -0.57 | 0.27  | -0.03     | -0.67 |
|    |    | 124 | 6.21  | 14.59 | -0.15 | 1.01  | 13.44 | 3.96      | 0.67 | -0.39 | 0.28  | -2.51e-03 | 0.51  |
|    |    | 67  | 19.42 | 30.21 | -0.73 | 0.08  | 29.40 | 4.94      | 2.69 | -0.42 | 2.29  | -0.02     | -1.04 |
| 76 | 1  | 123 | 9.97  | 14.51 | -0.40 | -0.16 | 14.27 | -1.87     | 0.77 | -1.07 | -0.24 | -0.06     | 0.91  |
|    |    | 79  | 24.64 | 52.82 | -0.65 | -0.65 | 52.82 | 9.24e-03  | 3.37 | -0.54 | 2.84  | -0.01     | -1.34 |
|    |    | 80  | 25.69 | 49.36 | -1.46 | -1.41 | 49.31 | -1.69     | 3.47 | -0.66 | 2.90  | -0.09     | 1.42  |
|    |    | 125 | 9.42  | 17.03 | -0.06 | -0.05 | 17.03 | -0.27     | 0.76 | -0.99 | -0.21 | -0.02     | -0.87 |
| 76 | 2  | 123 | 6.85  | 9.58  | -0.26 | -0.10 | 9.41  | -1.27     | 0.57 | -0.69 | -0.07 | -0.04     | 0.63  |
|    |    | 79  | 16.71 | 37.47 | -0.41 | -0.41 | 37.47 | 0.01      | 2.27 | -0.37 | 1.92  | -0.01     | -0.90 |
|    |    | 80  | 17.51 | 35.12 | -0.99 | -0.95 | 35.08 | -1.15     | 2.34 | -0.46 | 1.95  | -0.07     | 0.97  |
|    |    | 125 | 6.27  | 11.31 | -0.03 | -0.02 | 11.30 | -0.18     | 0.55 | -0.62 | -0.06 | -0.01     | -0.59 |

|    |    |     |       |       |          |       |       |           |      |       |       |           |       |
|----|----|-----|-------|-------|----------|-------|-------|-----------|------|-------|-------|-----------|-------|
| 76 | 7  | 123 | 9.07  | 15.90 | 0.10     | 2.15  | 13.84 | 5.31      | 1.09 | -0.48 | 0.64  | -0.02     | 0.71  |
|    |    | 79  | 19.23 | 27.35 | 0.15     | 1.84  | 25.66 | 6.56      | 2.87 | -0.14 | 2.62  | 0.10      | -0.82 |
|    |    | 80  | 21.53 | 26.49 | -2.03    | 1.19  | 23.27 | -9.03     | 3.08 | -0.38 | 2.66  | 0.04      | 1.12  |
|    |    | 125 | 6.86  | 19.45 | -1.60    | 2.12  | 15.73 | -8.03     | 0.87 | -0.21 | 0.65  | 8.94e-03  | -0.43 |
| 76 | 39 | 123 | 7.44  | 11.88 | 0.65     | 0.99  | 11.54 | 1.90      | 0.81 | -0.57 | 0.27  | -0.03     | 0.67  |
|    |    | 79  | 17.88 | 32.10 | 0.36     | 0.68  | 31.78 | 3.17      | 2.55 | -0.25 | 2.26  | 0.04      | -0.86 |
|    |    | 80  | 19.42 | 30.21 | -0.73    | 0.08  | 29.40 | -4.94     | 2.69 | -0.42 | 2.29  | -0.02     | 1.04  |
|    |    | 125 | 6.21  | 14.59 | -0.15    | 1.01  | 13.44 | -3.96     | 0.67 | -0.39 | 0.28  | -2.51e-03 | -0.51 |
| 77 | 1  | 67  | 25.69 | 49.36 | -1.46    | -1.41 | 49.31 | -1.69     | 3.47 | -0.66 | 2.90  | -0.09     | 1.42  |
|    |    | 124 | 9.42  | 17.03 | -0.06    | -0.05 | 17.03 | -0.27     | 0.76 | -0.99 | -0.21 | -0.02     | -0.87 |
|    |    | 126 | 9.97  | 14.51 | -0.40    | -0.16 | 14.27 | -1.87     | 0.77 | -1.07 | -0.24 | -0.06     | 0.91  |
|    |    | 68  | 24.64 | 52.82 | -0.65    | -0.65 | 52.82 | 9.24e-03  | 3.37 | -0.54 | 2.84  | -0.01     | -1.34 |
| 77 | 2  | 67  | 17.51 | 35.12 | -0.99    | -0.95 | 35.08 | -1.15     | 2.34 | -0.46 | 1.95  | -0.07     | 0.97  |
|    |    | 124 | 6.27  | 11.31 | -0.03    | -0.02 | 11.30 | -0.18     | 0.55 | -0.62 | -0.06 | -0.01     | -0.59 |
|    |    | 126 | 6.85  | 9.58  | -0.26    | -0.10 | 9.41  | -1.27     | 0.57 | -0.69 | -0.07 | -0.04     | 0.63  |
|    |    | 68  | 16.71 | 37.47 | -0.41    | -0.41 | 37.47 | 0.01      | 2.27 | -0.37 | 1.92  | -0.01     | -0.90 |
| 77 | 16 | 67  | 19.23 | 27.64 | -1.25    | 1.19  | 25.19 | -8.04     | 2.84 | -0.15 | 2.66  | 0.03      | 0.71  |
|    |    | 124 | 10.81 | 17.72 | -1.14    | 2.12  | 14.47 | -7.13     | 1.25 | -0.59 | 0.65  | 5.71e-03  | -0.86 |
|    |    | 126 | 4.87  | 13.56 | 0.82     | 1.81  | 12.57 | 3.41      | 0.70 | -0.13 | 0.59  | -0.02     | 0.28  |
|    |    | 68  | 21.44 | 28.42 | 0.66     | 1.50  | 27.58 | 4.75      | 3.09 | -0.42 | 2.58  | 0.09      | -1.23 |
| 77 | 48 | 67  | 18.26 | 30.97 | -0.57    | 0.08  | 30.32 | -4.47     | 2.57 | -0.30 | 2.29  | -0.02     | 0.84  |
|    |    | 124 | 8.25  | 13.80 | 0.03     | 1.01  | 12.83 | -3.53     | 0.87 | -0.59 | 0.28  | -4.07e-03 | -0.72 |
|    |    | 126 | 5.21  | 11.03 | 0.73     | 0.82  | 10.93 | 0.98      | 0.59 | -0.38 | 0.25  | -0.03     | 0.46  |
|    |    | 68  | 18.94 | 32.87 | 0.35     | 0.51  | 32.71 | 2.29      | 2.66 | -0.39 | 2.24  | 0.04      | -1.06 |
| 78 | 1  | 125 | 9.42  | 17.03 | -0.06    | -0.05 | 17.03 | 0.27      | 0.76 | -0.99 | -0.21 | -0.02     | 0.87  |
|    |    | 80  | 25.69 | 49.36 | -1.46    | -1.41 | 49.31 | 1.69      | 3.47 | -0.66 | 2.90  | -0.09     | -1.42 |
|    |    | 81  | 24.64 | 52.82 | -0.65    | -0.65 | 52.82 | -9.24e-03 | 3.37 | -0.54 | 2.84  | -0.01     | 1.34  |
|    |    | 127 | 9.97  | 14.51 | -0.40    | -0.16 | 14.27 | 1.87      | 0.77 | -1.07 | -0.24 | -0.06     | -0.91 |
| 78 | 2  | 125 | 6.27  | 11.31 | -0.03    | -0.02 | 11.30 | 0.18      | 0.55 | -0.62 | -0.06 | -0.01     | 0.59  |
|    |    | 80  | 17.51 | 35.12 | -0.99    | -0.95 | 35.08 | 1.15      | 2.34 | -0.46 | 1.95  | -0.07     | -0.97 |
|    |    | 81  | 16.71 | 37.47 | -0.41    | -0.41 | 37.47 | -0.01     | 2.27 | -0.37 | 1.92  | -0.01     | 0.90  |
|    |    | 127 | 6.85  | 9.58  | -0.26    | -0.10 | 9.41  | 1.27      | 0.57 | -0.69 | -0.07 | -0.04     | -0.63 |
| 78 | 5  | 125 | 6.86  | 19.45 | -1.60    | 2.12  | 15.73 | 8.03      | 0.87 | -0.21 | 0.65  | 8.94e-03  | 0.43  |
|    |    | 80  | 21.53 | 26.49 | -2.03    | 1.19  | 23.27 | 9.03      | 3.08 | -0.38 | 2.66  | 0.04      | -1.12 |
|    |    | 81  | 19.23 | 27.35 | 0.15     | 1.84  | 25.66 | -6.56     | 2.87 | -0.14 | 2.62  | 0.10      | 0.82  |
|    |    | 127 | 9.07  | 15.90 | 0.10     | 2.15  | 13.84 | -5.31     | 1.09 | -0.48 | 0.64  | -0.02     | -0.71 |
| 78 | 37 | 125 | 6.21  | 14.59 | -0.15    | 1.01  | 13.44 | 3.96      | 0.67 | -0.39 | 0.28  | -2.51e-03 | 0.51  |
|    |    | 80  | 19.42 | 30.21 | -0.73    | 0.08  | 29.40 | 4.94      | 2.69 | -0.42 | 2.29  | -0.02     | -1.04 |
|    |    | 81  | 17.88 | 32.10 | 0.36     | 0.68  | 31.78 | -3.17     | 2.55 | -0.25 | 2.26  | 0.04      | 0.86  |
|    |    | 127 | 7.44  | 11.88 | 0.65     | 0.99  | 11.54 | -1.90     | 0.81 | -0.57 | 0.27  | -0.03     | -0.67 |
| 79 | 1  | 68  | 26.96 | 54.15 | -2.03    | -1.89 | 54.01 | -2.81     | 3.53 | -0.77 | 2.93  | -0.17     | 1.49  |
|    |    | 126 | 9.31  | 14.38 | -0.30    | 0.18  | 13.89 | -2.62     | 0.71 | -0.95 | -0.27 | 0.03      | -0.81 |
|    |    | 128 | 10.29 | 6.54  | -1.32    | -0.28 | 5.51  | -2.66     | 0.72 | -1.16 | -0.33 | -0.11     | 0.93  |
|    |    | 69  | 23.35 | 63.47 | 1.04     | 1.10  | 63.42 | -1.82     | 3.20 | -0.40 | 2.70  | 0.10      | -1.25 |
| 79 | 2  | 68  | 18.49 | 38.44 | -1.38    | -1.29 | 38.35 | -1.88     | 2.40 | -0.55 | 1.98  | -0.13     | 1.03  |
|    |    | 126 | 6.06  | 9.46  | -0.20    | 0.14  | 9.12  | -1.77     | 0.50 | -0.58 | -0.10 | 0.02      | -0.54 |
|    |    | 128 | 7.14  | 4.10  | -0.91    | -0.18 | 3.37  | -1.77     | 0.55 | -0.76 | -0.14 | -0.08     | 0.65  |
|    |    | 69  | 15.75 | 44.76 | 0.78     | 0.82  | 44.73 | -1.23     | 2.15 | -0.26 | 1.82  | 0.07      | -0.82 |
| 79 | 16 | 68  | 19.38 | 34.84 | -0.87    | 0.62  | 33.35 | -7.14     | 2.77 | -0.17 | 2.64  | -0.04     | 0.61  |
|    |    | 126 | 11.93 | 14.09 | -2.17    | 2.05  | 9.87  | -7.13     | 1.33 | -0.72 | 0.57  | 0.04      | -0.99 |
|    |    | 128 | 3.47  | 5.48  | 3.61e-03 | 1.36  | 4.12  | -2.37     | 0.47 | -0.10 | 0.43  | -0.06     | 0.14  |
|    |    | 69  | 20.71 | 39.81 | 2.27     | 2.36  | 39.73 | -1.79     | 3.00 | -0.45 | 2.40  | 0.16      | -1.31 |
| 79 | 48 | 68  | 18.77 | 36.47 | -0.90    | -0.37 | 35.94 | -4.42     | 2.56 | -0.35 | 2.30  | -0.09     | 0.83  |
|    |    | 126 | 8.69  | 11.33 | -0.79    | 1.06  | 9.48  | -4.36     | 0.89 | -0.63 | 0.22  | 0.03      | -0.75 |
|    |    | 128 | 4.77  | 4.74  | -0.44    | 0.57  | 3.73  | -2.05     | 0.45 | -0.39 | 0.14  | -0.07     | 0.41  |
|    |    | 69  | 18.08 | 42.37 | 1.51     | 1.56  | 42.32 | -1.49     | 2.56 | -0.35 | 2.10  | 0.11      | -1.06 |

|    |    |     |       |       |        |       |        |           |      |       |       |       |       |
|----|----|-----|-------|-------|--------|-------|--------|-----------|------|-------|-------|-------|-------|
| 80 | 1  | 127 | 9.31  | 14.38 | -0.30  | 0.18  | 13.89  | 2.62      | 0.71 | -0.95 | -0.27 | 0.03  | 0.81  |
|    |    | 81  | 26.96 | 54.15 | -2.03  | -1.89 | 54.01  | 2.81      | 3.53 | -0.77 | 2.93  | -0.17 | -1.49 |
|    |    | 82  | 23.35 | 63.47 | 1.04   | 1.10  | 63.42  | 1.82      | 3.20 | -0.40 | 2.70  | 0.10  | 1.25  |
|    |    | 129 | 10.29 | 6.54  | -1.32  | -0.28 | 5.51   | 2.66      | 0.72 | -1.16 | -0.33 | -0.11 | -0.93 |
| 80 | 2  | 127 | 6.06  | 9.46  | -0.20  | 0.14  | 9.12   | 1.77      | 0.50 | -0.58 | -0.10 | 0.02  | 0.54  |
|    |    | 81  | 18.49 | 38.44 | -1.38  | -1.29 | 38.35  | 1.88      | 2.40 | -0.55 | 1.98  | -0.13 | -1.03 |
|    |    | 82  | 15.75 | 44.76 | 0.78   | 0.82  | 44.73  | 1.23      | 2.15 | -0.26 | 1.82  | 0.07  | 0.82  |
|    |    | 129 | 7.14  | 4.10  | -0.91  | -0.18 | 3.37   | 1.77      | 0.55 | -0.76 | -0.14 | -0.08 | -0.65 |
| 80 | 5  | 127 | 8.78  | 20.27 | -4.32  | 2.39  | 13.56  | 10.96     | 0.99 | -0.34 | 0.61  | 0.04  | 0.60  |
|    |    | 81  | 21.39 | 31.53 | -3.05  | 0.96  | 27.52  | 11.08     | 3.00 | -0.34 | 2.68  | -0.02 | -0.98 |
|    |    | 82  | 18.99 | 34.23 | 2.77   | 3.10  | 33.89  | -3.22     | 2.82 | -0.17 | 2.48  | 0.18  | 0.95  |
|    |    | 129 | 6.54  | 8.88  | 1.03   | 2.10  | 7.81   | -2.69     | 0.81 | -0.36 | 0.51  | -0.07 | -0.51 |
| 80 | 37 | 127 | 7.10  | 14.21 | -1.73  | 1.22  | 11.26  | 6.19      | 0.71 | -0.44 | 0.24  | 0.03  | 0.57  |
|    |    | 81  | 19.85 | 34.29 | -1.36  | -0.21 | 33.13  | 6.31      | 2.68 | -0.44 | 2.32  | -0.08 | -1.01 |
|    |    | 82  | 17.28 | 39.53 | 1.89   | 1.92  | 39.51  | -0.91     | 2.47 | -0.21 | 2.14  | 0.12  | 0.89  |
|    |    | 129 | 6.23  | 5.54  | 0.89   | 0.92  | 5.51   | -0.38     | 0.65 | -0.54 | 0.18  | -0.07 | -0.58 |
| 81 | 1  | 69  | 28.32 | 66.23 | -2.65  | -2.57 | 66.16  | -2.31     | 3.56 | -0.86 | 2.96  | -0.26 | 1.52  |
|    |    | 128 | 9.07  | 7.52  | -1.98  | 0.65  | 4.88   | -4.25     | 0.63 | -0.96 | -0.44 | 0.11  | -0.74 |
|    |    | 130 | 9.54  | -0.51 | -9.12  | -0.51 | -9.12  | 5.91e-03  | 0.54 | -1.23 | -0.52 | -0.17 | 0.87  |
|    |    | 70  | 20.80 | 77.29 | 4.83   | 5.02  | 77.10  | -3.66     | 2.86 | -0.22 | 2.37  | 0.27  | -1.13 |
| 81 | 2  | 69  | 19.54 | 46.78 | -1.80  | -1.76 | 46.74  | -1.49     | 2.43 | -0.63 | 2.00  | -0.20 | 1.06  |
|    |    | 128 | 5.74  | 4.78  | -1.43  | 0.48  | 2.87   | -2.86     | 0.44 | -0.57 | -0.21 | 0.08  | -0.48 |
|    |    | 130 | 6.70  | -0.32 | -6.71  | -0.32 | -6.71  | 0.13      | 0.43 | -0.83 | -0.27 | -0.12 | 0.62  |
|    |    | 70  | 13.93 | 54.18 | 3.44   | 3.56  | 54.06  | -2.49     | 1.91 | -0.12 | 1.60  | 0.19  | -0.73 |
| 81 | 16 | 69  | 19.73 | 49.67 | -0.41  | -0.22 | 49.48  | -3.10     | 2.66 | -0.20 | 2.57  | -0.11 | 0.50  |
|    |    | 128 | 12.25 | 5.52  | -3.78  | 2.02  | -0.28  | -4.51     | 1.33 | -0.86 | 0.36  | 0.11  | -1.09 |
|    |    | 130 | 2.66  | 4.23  | -12.97 | 1.11  | -9.86  | -6.63     | 0.14 | -0.10 | 0.14  | -0.10 | -0.03 |
|    |    | 70  | 19.02 | 58.39 | 3.41   | 5.00  | 56.80  | -9.21     | 2.75 | -0.45 | 2.01  | 0.29  | -1.34 |
| 81 | 48 | 69  | 19.38 | 48.16 | -1.12  | -1.01 | 48.05  | -2.27     | 2.51 | -0.39 | 2.28  | -0.16 | 0.79  |
|    |    | 128 | 8.67  | 4.95  | -2.37  | 1.22  | 1.36   | -3.66     | 0.85 | -0.69 | 0.06  | 0.10  | -0.77 |
|    |    | 130 | 3.78  | 1.38  | -9.23  | 0.37  | -8.22  | -3.12     | 0.22 | -0.40 | -0.07 | -0.11 | 0.31  |
|    |    | 70  | 16.14 | 56.01 | 3.62   | 4.25  | 55.38  | -5.72     | 2.31 | -0.27 | 1.80  | 0.24  | -1.03 |
| 82 | 1  | 129 | 9.07  | 7.52  | -1.98  | 0.65  | 4.88   | 4.25      | 0.63 | -0.96 | -0.44 | 0.11  | 0.74  |
|    |    | 82  | 28.32 | 66.23 | -2.65  | -2.57 | 66.16  | 2.31      | 3.56 | -0.86 | 2.96  | -0.26 | -1.52 |
|    |    | 83  | 20.80 | 77.29 | 4.83   | 5.02  | 77.10  | 3.66      | 2.86 | -0.22 | 2.37  | 0.27  | 1.13  |
|    |    | 131 | 9.54  | -0.51 | -9.12  | -0.51 | -9.12  | -5.91e-03 | 0.54 | -1.23 | -0.52 | -0.17 | -0.87 |
| 82 | 2  | 129 | 5.74  | 4.78  | -1.43  | 0.48  | 2.87   | 2.86      | 0.44 | -0.57 | -0.21 | 0.08  | 0.48  |
|    |    | 82  | 19.54 | 46.78 | -1.80  | -1.76 | 46.74  | 1.49      | 2.43 | -0.63 | 2.00  | -0.20 | -1.06 |
|    |    | 83  | 13.93 | 54.18 | 3.44   | 3.56  | 54.06  | 2.49      | 1.91 | -0.12 | 1.60  | 0.19  | 0.73  |
|    |    | 131 | 6.70  | -0.32 | -6.71  | -0.32 | -6.71  | -0.13     | 0.43 | -0.83 | -0.27 | -0.12 | -0.62 |
| 82 | 11 | 129 | 5.44  | 6.23  | -1.27  | -1.06 | 6.02   | 1.22      | 0.07 | -0.80 | -0.78 | 0.05  | -0.13 |
|    |    | 82  | 21.36 | 44.00 | -3.30  | -3.30 | 44.00  | -0.12     | 2.41 | -1.27 | 1.43  | -0.29 | -1.62 |
|    |    | 83  | 10.19 | 51.68 | 1.77   | 2.13  | 51.32  | -4.23     | 1.21 | 0.09  | 1.19  | 0.10  | 0.11  |
|    |    | 131 | 15.02 | 4.29  | -9.60  | -1.76 | -3.56  | -6.89     | 0.90 | -1.73 | -0.68 | -0.15 | -1.28 |
| 82 | 37 | 129 | 7.67  | 10.12 | -4.19  | 1.58  | 4.36   | 7.02      | 0.72 | -0.52 | 0.10  | 0.10  | 0.62  |
|    |    | 82  | 20.22 | 44.08 | -1.37  | -0.66 | 43.37  | 5.64      | 2.63 | -0.46 | 2.32  | -0.14 | -0.94 |
|    |    | 83  | 15.59 | 50.82 | 4.49   | 4.62  | 50.69  | 2.40      | 2.26 | -0.14 | 1.86  | 0.26  | 0.90  |
|    |    | 131 | 4.77  | 0.74  | -5.23  | 0.73  | -5.22  | -0.20     | 0.38 | -0.51 | -0.01 | -0.11 | -0.44 |
| 83 | 1  | 70  | 28.76 | 81.85 | -3.73  | -3.67 | 81.79  | 2.20      | 3.49 | -0.86 | 2.98  | -0.35 | 1.41  |
|    |    | 130 | 8.87  | 2.11  | -10.62 | 1.06  | -9.57  | -3.50     | 0.57 | -1.10 | -0.77 | 0.24  | -0.66 |
|    |    | 132 | 9.45  | 2.79  | -30.10 | -0.34 | -26.97 | 9.65      | 0.17 | -1.21 | -0.79 | -0.26 | 0.64  |
|    |    | 71  | 15.97 | 83.89 | 12.20  | 12.57 | 83.52  | -5.16     | 2.24 | -0.06 | 1.67  | 0.51  | -0.99 |
| 83 | 2  | 70  | 19.97 | 57.54 | -2.55  | -2.51 | 57.49  | 1.70      | 2.39 | -0.64 | 2.01  | -0.27 | 1.00  |
|    |    | 130 | 5.51  | 1.39  | -7.73  | 0.77  | -7.12  | -2.30     | 0.38 | -0.65 | -0.44 | 0.17  | -0.41 |
|    |    | 132 | 6.80  | 2.05  | -21.19 | -0.19 | -18.95 | 6.86      | 0.17 | -0.82 | -0.47 | -0.19 | 0.48  |
|    |    | 71  | 10.57 | 58.54 | 8.57   | 8.82  | 58.29  | -3.50     | 1.48 | 0.02  | 1.13  | 0.37  | -0.62 |

|    |    |     |       |       |        |       |        |        |           |       |       |       |       |
|----|----|-----|-------|-------|--------|-------|--------|--------|-----------|-------|-------|-------|-------|
| 83 | 16 | 70  | 20.23 | 69.81 | -1.59  | -1.07 | 69.30  | 6.03   | 2.46      | -0.27 | 2.42  | -0.22 | 0.34  |
|    |    | 130 | 12.55 | 2.38  | -14.90 | 2.21  | -14.73 | 1.72   | 1.22      | -1.09 | -0.03 | 0.17  | -1.15 |
|    |    | 132 | 5.33  | 1.62  | -28.06 | 0.12  | -26.57 | -6.50  | 0.04      | -0.57 | -0.34 | -0.19 | -0.30 |
|    |    | 71  | 18.82 | 74.29 | 4.93   | 9.12  | 70.10  | -16.53 | 2.21      | -0.55 | 1.25  | 0.41  | -1.32 |
| 83 | 48 | 70  | 19.68 | 63.39 | -2.04  | -1.82 | 63.17  | 3.78   | 2.39      | -0.42 | 2.21  | -0.24 | 0.69  |
|    |    | 130 | 8.56  | 1.47  | -10.79 | 1.46  | -10.78 | -0.37  | 0.76      | -0.83 | -0.24 | 0.17  | -0.77 |
|    |    | 132 | 3.33  | -0.03 | -22.62 | -0.04 | -22.61 | 0.43   | -0.14     | -0.45 | -0.41 | -0.19 | 0.10  |
|    |    | 71  | 14.34 | 65.66 | 7.28   | 8.96  | 63.97  | -9.77  | 1.83      | -0.25 | 1.19  | 0.39  | -0.96 |
| 84 | 1  | 131 | 8.87  | 2.11  | -10.62 | 1.06  | -9.57  | 3.50   | 0.57      | -1.10 | -0.77 | 0.24  | 0.66  |
|    |    | 83  | 28.76 | 81.85 | -3.73  | -3.67 | 81.79  | -2.20  | 3.49      | -0.86 | 2.98  | -0.35 | -1.41 |
|    |    | 84  | 15.97 | 83.89 | 12.20  | 12.57 | 83.52  | 5.16   | 2.24      | -0.06 | 1.67  | 0.51  | 0.99  |
|    |    | 133 | 9.45  | 2.79  | -30.10 | -0.34 | -26.97 | -9.65  | 0.17      | -1.21 | -0.79 | -0.26 | -0.64 |
| 84 | 2  | 131 | 5.51  | 1.39  | -7.73  | 0.77  | -7.12  | 2.30   | 0.38      | -0.65 | -0.44 | 0.17  | 0.41  |
|    |    | 83  | 19.97 | 57.54 | -2.55  | -2.51 | 57.49  | -1.70  | 2.39      | -0.64 | 2.01  | -0.27 | -1.00 |
|    |    | 84  | 10.57 | 58.54 | 8.57   | 8.82  | 58.29  | 3.50   | 1.48      | 0.02  | 1.13  | 0.37  | 0.62  |
|    |    | 133 | 6.80  | 2.05  | -21.19 | -0.19 | -18.95 | -6.86  | 0.17      | -0.82 | -0.47 | -0.19 | -0.48 |
| 84 | 11 | 131 | 7.12  | 6.26  | -6.42  | -0.66 | 0.50   | 6.31   | 0.26      | -0.94 | -0.85 | 0.17  | -0.32 |
|    |    | 83  | 22.81 | 45.82 | -4.08  | -3.94 | 45.68  | 2.63   | 2.56      | -1.27 | 1.60  | -0.31 | -1.66 |
|    |    | 84  | 7.16  | 48.74 | 6.25   | 8.51  | 46.48  | -9.53  | 1.01      | 0.32  | 1.01  | 0.32  | -0.07 |
|    |    | 133 | 16.78 | 15.01 | -26.84 | -0.49 | -11.33 | -20.21 | 0.88      | -1.65 | -0.59 | -0.19 | -1.25 |
| 84 | 43 | 131 | 4.66  | 2.89  | -6.26  | 0.08  | -3.45  | 4.22   | 0.17      | -0.64 | -0.64 | 0.17  | 0.06  |
|    |    | 83  | 20.99 | 51.81 | -3.20  | -3.20 | 51.81  | 0.38   | 2.45      | -0.92 | 1.81  | -0.29 | -1.32 |
|    |    | 84  | 8.40  | 52.78 | 8.50   | 8.67  | 52.61  | -2.77  | 1.17      | 0.25  | 1.07  | 0.35  | 0.29  |
|    |    | 133 | 11.50 | 7.44  | -23.06 | -0.33 | -15.29 | -13.29 | 0.51      | -1.22 | -0.53 | -0.19 | -0.85 |
| 85 | 1  | 71  | 26.07 | 91.33 | -3.56  | -1.53 | 89.29  | 13.76  | 3.15      | -0.66 | 2.85  | -0.36 | 1.02  |
|    |    | 132 | 13.15 | 0.16  | -28.56 | -0.69 | -27.70 | 4.88   | 0.58      | -1.47 | -1.29 | 0.40  | -0.58 |
|    |    | 134 | 8.81  | 16.82 | -48.56 | 1.78  | -33.52 | 27.52  | -0.31     | -1.10 | -1.10 | -0.31 | 0.03  |
|    |    | 72  | 14.01 | 59.22 | 17.82  | 17.84 | 59.20  | -0.71  | 1.66      | -0.27 | 0.48  | 0.91  | -0.94 |
| 85 | 2  | 71  | 18.18 | 64.02 | -2.47  | -0.99 | 62.54  | 9.80   | 2.16      | -0.52 | 1.93  | -0.28 | 0.76  |
|    |    | 132 | 8.50  | 0.22  | -20.23 | -0.42 | -19.59 | 3.56   | 0.39      | -0.91 | -0.81 | 0.29  | -0.35 |
|    |    | 134 | 5.67  | 11.88 | -33.83 | 1.33  | -23.29 | 19.26  | -0.22     | -0.72 | -0.71 | -0.23 | 0.07  |
|    |    | 72  | 9.25  | 41.19 | 12.47  | 12.47 | 41.19  | -0.42  | 1.08      | -0.11 | 0.32  | 0.66  | -0.57 |
| 85 | 16 | 71  | 18.71 | 85.41 | -5.58  | -0.69 | 80.53  | 20.51  | 2.05      | -0.10 | 2.05  | -0.10 | -0.02 |
|    |    | 132 | 17.09 | 6.04  | -36.48 | -0.11 | -30.33 | 14.96  | 1.14      | -1.48 | -0.68 | 0.35  | -1.21 |
|    |    | 134 | 12.40 | 4.73  | -34.67 | 4.08  | -34.02 | 5.00   | 0.44      | -1.48 | -0.87 | -0.17 | -0.89 |
|    |    | 72  | 20.43 | 64.01 | 10.39  | 15.22 | 59.17  | -15.36 | 2.00      | -1.00 | 0.16  | 0.84  | -1.46 |
| 85 | 48 | 71  | 17.74 | 74.18 | -3.83  | -0.85 | 71.20  | 14.95  | 2.05      | -0.26 | 1.99  | -0.20 | 0.38  |
|    |    | 132 | 12.17 | 2.70  | -27.74 | -0.27 | -24.76 | 9.04   | 0.71      | -1.14 | -0.75 | 0.32  | -0.76 |
|    |    | 134 | 8.62  | 6.99  | -32.79 | 2.65  | -28.46 | 12.39  | -2.51e-03 | -0.98 | -0.78 | -0.20 | -0.39 |
|    |    | 72  | 14.41 | 51.39 | 12.25  | 13.79 | 49.84  | -7.61  | 1.52      | -0.54 | 0.24  | 0.74  | -1.00 |
| 86 | 1  | 133 | 13.15 | 0.16  | -28.56 | -0.69 | -27.70 | -4.88  | 0.58      | -1.47 | -1.29 | 0.40  | 0.58  |
|    |    | 84  | 26.07 | 91.33 | -3.56  | -1.53 | 89.29  | -13.76 | 3.15      | -0.66 | 2.85  | -0.36 | -1.02 |
|    |    | 85  | 14.01 | 59.22 | 17.82  | 17.84 | 59.20  | 0.71   | 1.66      | -0.27 | 0.48  | 0.91  | 0.94  |
|    |    | 135 | 8.81  | 16.82 | -48.56 | 1.78  | -33.52 | -27.52 | -0.31     | -1.10 | -1.10 | -0.31 | -0.03 |
| 86 | 2  | 133 | 8.50  | 0.22  | -20.23 | -0.42 | -19.59 | -3.56  | 0.39      | -0.91 | -0.81 | 0.29  | 0.35  |
|    |    | 84  | 18.18 | 64.02 | -2.47  | -0.99 | 62.54  | -9.80  | 2.16      | -0.52 | 1.93  | -0.28 | -0.76 |
|    |    | 85  | 9.25  | 41.19 | 12.47  | 12.47 | 41.19  | 0.42   | 1.08      | -0.11 | 0.32  | 0.66  | 0.57  |
|    |    | 135 | 5.67  | 11.88 | -33.83 | 1.33  | -23.29 | -19.26 | -0.22     | -0.72 | -0.71 | -0.23 | -0.07 |
| 86 | 12 | 133 | 9.53  | 3.59  | -13.53 | -0.70 | -9.24  | 7.42   | 0.42      | -1.12 | -0.93 | 0.23  | -0.50 |
|    |    | 84  | 22.65 | 47.07 | -1.29  | -1.28 | 47.06  | 0.51   | 2.58      | -1.23 | 1.80  | -0.46 | -1.53 |
|    |    | 85  | 7.32  | 33.36 | 2.17   | 9.82  | 25.71  | -13.42 | 0.78      | 0.17  | 0.47  | 0.48  | -0.31 |
|    |    | 135 | 16.63 | 25.84 | -40.08 | -1.31 | -12.93 | -32.44 | 0.62      | -1.46 | -0.55 | -0.28 | -1.03 |
| 86 | 44 | 133 | 7.22  | -0.35 | -14.82 | -0.55 | -14.61 | 1.72   | 0.26      | -0.87 | -0.87 | 0.26  | -0.06 |
|    |    | 84  | 19.85 | 55.49 | -1.54  | -1.13 | 55.08  | -4.84  | 2.34      | -0.84 | 1.87  | -0.37 | -1.13 |
|    |    | 85  | 5.90  | 35.34 | 9.58   | 11.20 | 33.73  | -6.25  | 0.66      | 0.31  | 0.39  | 0.57  | 0.15  |
|    |    | 135 | 10.61 | 18.09 | -36.33 | 0.06  | -18.30 | -25.61 | 0.12      | -1.01 | -0.63 | -0.25 | -0.53 |

|    |    |     |       |          |        |        |       |       |      |       |           |           |      |
|----|----|-----|-------|----------|--------|--------|-------|-------|------|-------|-----------|-----------|------|
| 87 | 1  | 195 | 4.87  | 16.66    | -10.51 | -2.28  | 8.43  | 12.49 | 0.24 | -0.24 | -0.13     | 0.13      | 0.20 |
|    |    | 194 | 5.48  | 16.13    | -10.62 | 0.39   | 5.11  | 13.16 | 0.24 | -0.38 | -0.19     | 0.04      | 0.28 |
|    |    | 136 | 2.09  | 1.80     | -3.87  | -2.11  | 0.04  | 2.63  | 0.04 | -0.25 | -0.17     | -0.04     | 0.13 |
|    |    | 164 | 2.08  | -2.50    | -11.11 | -10.99 | -2.62 | -1.00 | 0.12 | -0.21 | -0.05     | -0.04     | 0.17 |
| 87 | 2  | 195 | 3.10  | 11.30    | -7.26  | -1.62  | 5.65  | 8.54  | 0.15 | -0.14 | -0.08     | 0.09      | 0.12 |
|    |    | 194 | 3.57  | 11.05    | -7.24  | 0.29   | 3.53  | 9.00  | 0.16 | -0.22 | -0.10     | 0.03      | 0.18 |
|    |    | 136 | 1.19  | 1.26     | -2.64  | -1.44  | 0.06  | 1.80  | 0.03 | -0.13 | -0.07     | -0.03     | 0.08 |
|    |    | 164 | 1.32  | -1.68    | -7.56  | -7.49  | -1.76 | -0.68 | 0.08 | -0.13 | -0.02     | -0.02     | 0.10 |
| 87 | 11 | 195 | 10.83 | 10.40    | -3.46  | 1.61   | 5.33  | 6.67  | 0.46 | -1.37 | -1.07     | 0.16      | 0.67 |
|    |    | 194 | 9.81  | 10.49    | -3.78  | 3.51   | 3.20  | 7.14  | 0.33 | -1.32 | -1.08     | 0.10      | 0.58 |
|    |    | 136 | 11.48 | 1.41     | -0.27  | 1.41   | -0.27 | -0.06 | 0.16 | -1.80 | -1.69     | 0.04      | 0.47 |
|    |    | 164 | 12.17 | -0.51    | -6.20  | -4.63  | -2.08 | -2.54 | 0.28 | -1.87 | -1.64     | 0.05      | 0.65 |
| 87 | 43 | 195 | 6.75  | 10.85    | -5.41  | -0.06  | 5.50  | 7.64  | 0.30 | -0.73 | -0.56     | 0.12      | 0.39 |
|    |    | 194 | 6.41  | 10.75    | -5.53  | 1.84   | 3.37  | 8.10  | 0.24 | -0.74 | -0.57     | 0.06      | 0.37 |
|    |    | 136 | 5.86  | 0.82     | -0.99  | -0.07  | -0.10 | 0.90  | 0.08 | -0.92 | -0.85     | 4.38e-03  | 0.26 |
|    |    | 164 | 6.44  | -1.39    | -6.64  | -6.11  | -1.91 | -1.58 | 0.15 | -0.94 | -0.80     | 0.01      | 0.37 |
| 88 | 1  | 196 | 4.55  | 11.85    | -15.21 | -3.33  | -0.03 | 13.43 | 0.27 | -0.16 | -0.02     | 0.13      | 0.20 |
|    |    | 195 | 2.78  | 3.77     | -2.37  | -1.52  | 2.92  | 2.12  | 0.22 | -0.22 | -0.09     | 0.10      | 0.20 |
|    |    | 164 | 2.79  | 1.62     | -11.83 | -10.80 | 0.59  | 3.57  | 0.12 | -0.21 | -0.07     | -0.01     | 0.17 |
|    |    | 162 | 2.51  | 0.02     | -16.50 | -16.03 | -0.44 | -2.73 | 0.13 | -0.16 | -0.01     | -0.01     | 0.15 |
| 88 | 2  | 196 | 2.89  | 8.02     | -10.53 | -2.44  | -0.08 | 9.20  | 0.15 | -0.10 | -0.03     | 0.08      | 0.12 |
|    |    | 195 | 1.72  | 2.65     | -1.81  | -1.11  | 1.95  | 1.62  | 0.13 | -0.13 | -0.05     | 0.06      | 0.12 |
|    |    | 164 | 1.74  | 1.07     | -8.02  | -7.35  | 0.40  | 2.38  | 0.08 | -0.12 | -0.04     | -7.22e-03 | 0.10 |
|    |    | 162 | 1.55  | 0.02     | -11.25 | -10.95 | -0.29 | -1.82 | 0.07 | -0.10 | -0.02     | -5.09e-03 | 0.09 |
| 88 | 11 | 196 | 11.30 | 7.86     | -8.33  | 0.35   | -0.82 | 8.08  | 0.98 | -0.93 | -0.22     | 0.27      | 0.93 |
|    |    | 195 | 9.17  | 1.99     | 0.89   | 1.68   | 1.20  | 0.49  | 0.82 | -0.93 | -0.25     | 0.14      | 0.85 |
|    |    | 164 | 8.38  | 0.29     | -2.83  | -2.19  | -0.35 | 1.26  | 0.54 | -1.00 | -0.53     | 0.07      | 0.71 |
|    |    | 162 | 9.08  | 0.37     | -7.20  | -5.79  | -1.04 | -2.95 | 0.68 | -1.00 | -0.51     | 0.19      | 0.77 |
| 88 | 43 | 196 | 6.94  | 7.90     | -9.43  | -1.09  | -0.44 | 8.66  | 0.55 | -0.50 | -0.12     | 0.17      | 0.51 |
|    |    | 195 | 5.27  | 2.18     | -0.36  | 0.23   | 1.59  | 1.07  | 0.46 | -0.51 | -0.15     | 0.10      | 0.47 |
|    |    | 164 | 4.93  | 0.65     | -5.48  | -4.87  | 0.04  | 1.84  | 0.30 | -0.54 | -0.27     | 0.03      | 0.39 |
|    |    | 162 | 4.83  | 0.01     | -9.12  | -8.46  | -0.65 | -2.37 | 0.36 | -0.53 | -0.25     | 0.09      | 0.41 |
| 89 | 1  | 197 | 4.62  | 11.71    | -18.42 | -6.77  | 0.06  | 14.67 | 0.27 | -0.14 | -0.05     | 0.19      | 0.16 |
|    |    | 196 | 2.74  | -0.66    | -4.24  | -3.70  | -1.21 | 1.28  | 0.29 | -0.18 | -0.04     | 0.15      | 0.22 |
|    |    | 162 | 2.54  | 1.11     | -16.27 | -15.69 | 0.53  | 3.10  | 0.13 | -0.15 | -6.27e-03 | -0.02     | 0.14 |
|    |    | 160 | 2.86  | -0.13    | -20.65 | -20.30 | -0.48 | -2.66 | 0.14 | -0.13 | 0.03      | -0.01     | 0.13 |
| 89 | 2  | 197 | 2.97  | 7.94     | -12.74 | -4.84  | 0.04  | 10.04 | 0.15 | -0.10 | -0.06     | 0.11      | 0.09 |
|    |    | 196 | 1.70  | -0.34    | -3.20  | -2.69  | -0.86 | 1.10  | 0.17 | -0.11 | -0.04     | 0.09      | 0.13 |
|    |    | 162 | 1.66  | 0.73     | -11.09 | -10.72 | 0.36  | 2.07  | 0.07 | -0.10 | -0.01     | -0.01     | 0.08 |
|    |    | 160 | 1.74  | -0.10    | -14.16 | -13.93 | -0.32 | -1.76 | 0.07 | -0.08 | -9.06e-03 | -7.40e-03 | 0.08 |
| 89 | 16 | 197 | 11.67 | 8.00     | -11.25 | -2.44  | -0.80 | 9.59  | 1.24 | -0.67 | 0.11      | 0.46      | 0.94 |
|    |    | 196 | 10.39 | -0.04    | -1.95  | -0.29  | -1.70 | 0.65  | 1.19 | -0.78 | 0.13      | 0.28      | 0.98 |
|    |    | 162 | 8.51  | 0.21     | -4.24  | -3.55  | -0.48 | 1.62  | 0.97 | -0.60 | 0.19      | 0.18      | 0.79 |
|    |    | 160 | 8.66  | -0.40    | -7.53  | -6.76  | -1.17 | -2.21 | 1.05 | -0.50 | 0.20      | 0.35      | 0.77 |
| 89 | 48 | 197 | 7.10  | 7.94     | -11.99 | -3.69  | -0.37 | 9.83  | 0.66 | -0.36 | 0.02      | 0.28      | 0.50 |
|    |    | 196 | 5.81  | -0.50    | -2.29  | -1.53  | -1.26 | 0.88  | 0.66 | -0.43 | 0.05      | 0.18      | 0.54 |
|    |    | 162 | 4.74  | 0.40     | -7.71  | -7.27  | -0.05 | 1.85  | 0.50 | -0.34 | 0.09      | 0.08      | 0.42 |
|    |    | 160 | 4.83  | -0.34    | -10.87 | -10.48 | -0.73 | -1.98 | 0.54 | -0.29 | 0.09      | 0.16      | 0.41 |
| 90 | 1  | 198 | 4.07  | 11.19    | -17.69 | -8.51  | 2.01  | 13.45 | 0.23 | -0.11 | -0.08     | 0.20      | 0.10 |
|    |    | 197 | 2.79  | 6.09e-03 | -7.07  | -6.82  | -0.25 | 1.32  | 0.28 | -0.15 | -0.06     | 0.19      | 0.18 |
|    |    | 160 | 2.63  | 0.60     | -21.00 | -20.38 | -0.02 | 3.60  | 0.13 | -0.12 | 0.03      | -0.02     | 0.12 |
|    |    | 158 | 3.06  | -0.28    | -25.74 | -25.50 | -0.51 | -2.43 | 0.11 | -0.09 | 0.03      | -5.25e-03 | 0.10 |
| 90 | 2  | 198 | 2.66  | 7.58     | -12.24 | -6.06  | 1.40  | 9.18  | 0.12 | -0.09 | -0.08     | 0.11      | 0.05 |
|    |    | 197 | 1.80  | 0.09     | -5.13  | -4.87  | -0.16 | 1.13  | 0.16 | -0.11 | -0.06     | 0.11      | 0.10 |
|    |    | 160 | 1.83  | 0.39     | -14.39 | -13.99 | -0.02 | 2.42  | 0.06 | -0.08 | -9.23e-03 | -9.83e-03 | 0.07 |
|    |    | 158 | 1.88  | -0.21    | -17.71 | -17.56 | -0.36 | -1.60 | 0.05 | -0.07 | -0.02     | -1.49e-03 | 0.06 |

|    |    |     |      |       |        |        |       |          |          |          |       |           |           |
|----|----|-----|------|-------|--------|--------|-------|----------|----------|----------|-------|-----------|-----------|
| 90 | 16 | 198 | 9.98 | 8.28  | -11.30 | -3.93  | 0.90  | 9.49     | 1.19     | -0.35    | 0.28  | 0.55      | 0.76      |
|    |    | 197 | 9.66 | 0.07  | -3.48  | -2.74  | -0.67 | 1.44     | 1.26     | -0.50    | 0.30  | 0.47      | 0.88      |
|    |    | 160 | 8.78 | 0.53  | -7.64  | -6.59  | -0.52 | 2.73     | 1.26     | -0.28    | 0.63  | 0.34      | 0.76      |
|    |    | 158 | 8.34 | -0.68 | -10.34 | -10.17 | -0.86 | -1.29    | 1.21     | -0.15    | 0.62  | 0.44      | 0.68      |
| 90 | 48 | 198 | 6.03 | 7.90  | -11.76 | -5.03  | 1.16  | 9.33     | 0.62     | -0.20    | 0.09  | 0.32      | 0.39      |
|    |    | 197 | 5.37 | 0.02  | -4.27  | -3.85  | -0.41 | 1.28     | 0.68     | -0.28    | 0.11  | 0.28      | 0.47      |
|    |    | 160 | 4.69 | 0.35  | -11.04 | -10.43 | -0.26 | 2.57     | 0.64     | -0.18    | 0.30  | 0.16      | 0.40      |
|    |    | 158 | 4.80 | -0.44 | -14.16 | -14.01 | -0.60 | -1.45    | 0.61     | -0.11    | 0.29  | 0.21      | 0.36      |
| 91 | 1  | 199 | 3.34 | 9.47  | -15.02 | -8.94  | 3.39  | 10.58    | 0.19     | -0.09    | -0.08 | 0.19      | 0.04      |
|    |    | 198 | 2.59 | 1.88  | -8.44  | -8.44  | 1.87  | -0.29    | 0.24     | -0.12    | -0.08 | 0.20      | 0.11      |
|    |    | 158 | 2.88 | 0.26  | -26.25 | -25.66 | -0.33 | 3.92     | 0.10     | -0.08    | 0.02  | -6.60e-03 | 0.09      |
|    |    | 156 | 3.21 | -0.30 | -29.97 | -29.73 | -0.54 | -2.67    | 0.06     | -0.05    | 0.02  | 1.42e-03  | 0.06      |
| 91 | 2  | 199 | 2.24 | 6.40  | -10.40 | -6.36  | 2.36  | 7.17     | 0.10     | -0.09    | -0.09 | 0.10      | 0.02      |
|    |    | 198 | 1.74 | 1.31  | -6.01  | -6.01  | 1.31  | 7.90e-03 | 0.13     | -0.10    | -0.08 | 0.11      | 0.06      |
|    |    | 158 | 2.12 | 0.16  | -18.06 | -17.67 | -0.23 | 2.64     | 0.04     | -0.06    | -0.02 | -2.39e-03 | 0.05      |
|    |    | 156 | 2.23 | -0.22 | -20.67 | -20.51 | -0.38 | -1.76    | 0.02     | -0.05    | -0.03 | 2.81e-03  | 0.03      |
| 91 | 4  | 199 | 6.71 | 5.55  | -11.81 | -8.77  | 2.51  | 6.60     | 0.03     | -0.96    | -0.53 | -0.40     | -0.49     |
|    |    | 198 | 6.73 | 1.49  | -8.45  | -8.41  | 1.46  | -0.56    | 0.12     | -0.99    | -0.53 | -0.34     | -0.55     |
|    |    | 158 | 8.36 | 0.09  | -24.51 | -24.33 | -0.08 | 2.07     | -0.12    | -1.21    | -0.89 | -0.45     | -0.50     |
|    |    | 156 | 8.53 | -0.03 | -27.37 | -27.17 | -0.23 | -2.34    | -0.24    | -1.16    | -0.90 | -0.50     | -0.42     |
| 91 | 38 | 199 | 2.77 | 6.19  | -11.47 | -7.68  | 2.40  | 7.25     | -0.16    | -0.38    | -0.37 | -0.17     | -0.05     |
|    |    | 198 | 2.68 | 1.35  | -7.32  | -7.32  | 1.35  | 0.08     | -0.15    | -0.38    | -0.36 | -0.17     | -0.07     |
|    |    | 158 | 4.70 | 0.17  | -20.38 | -20.02 | -0.20 | 2.71     | -0.26    | -0.57    | -0.55 | -0.28     | -0.08     |
|    |    | 156 | 5.08 | -0.21 | -22.98 | -22.86 | -0.34 | -1.69    | -0.26    | -0.57    | -0.56 | -0.27     | -0.04     |
| 92 | 1  | 200 | 2.73 | 6.86  | -11.99 | -8.95  | 3.82  | 6.94     | 0.18     | -0.09    | -0.09 | 0.18      | -0.01     |
|    |    | 199 | 2.48 | 4.14  | -9.71  | -8.88  | 3.32  | -3.28    | 0.20     | -0.10    | -0.08 | 0.19      | 0.06      |
|    |    | 156 | 3.08 | -0.02 | -30.29 | -29.82 | -0.48 | 3.71     | 0.05     | -0.04    | 0.01  | 8.45e-04  | 0.04      |
|    |    | 154 | 3.22 | -0.21 | -31.68 | -31.36 | -0.54 | -3.19    | 0.01     | 2.72e-04 | 0.01  | 3.39e-03  | 5.67e-03  |
| 92 | 2  | 200 | 1.88 | 4.61  | -8.32  | -6.37  | 2.66  | 4.63     | 0.09     | -0.09    | -0.09 | 0.09      | -7.05e-03 |
|    |    | 199 | 1.72 | 2.79  | -6.80  | -6.32  | 2.32  | -2.08    | 0.10     | -0.09    | -0.09 | 0.10      | 0.03      |
|    |    | 156 | 2.35 | -0.03 | -20.88 | -20.58 | -0.34 | 2.49     | 0.02     | -0.05    | -0.03 | 2.43e-03  | 0.02      |
|    |    | 154 | 2.40 | -0.16 | -21.86 | -21.65 | -0.38 | -2.13    | 4.40e-03 | -0.04    | -0.04 | 4.05e-03  | 3.77e-03  |
| 92 | 4  | 200 | 4.56 | 3.86  | -10.38 | -9.12  | 2.60  | 4.04     | -0.24    | -0.81    | -0.61 | -0.44     | -0.28     |
|    |    | 199 | 5.74 | 2.86  | -9.67  | -9.07  | 2.26  | -2.66    | -0.13    | -0.88    | -0.61 | -0.40     | -0.36     |
|    |    | 156 | 8.32 | -0.25 | -26.40 | -26.26 | -0.39 | 1.90     | -0.35    | -1.18    | -1.03 | -0.50     | -0.32     |
|    |    | 154 | 8.33 | -0.16 | -27.60 | -27.33 | -0.43 | -2.72    | -0.45    | -1.12    | -1.04 | -0.53     | -0.22     |
| 92 | 36 | 200 | 2.61 | 4.22  | -9.28  | -7.69  | 2.63  | 4.35     | -0.09    | -0.41    | -0.34 | -0.16     | -0.14     |
|    |    | 199 | 3.25 | 2.82  | -8.18  | -7.65  | 2.29  | -2.36    | -0.06    | -0.42    | -0.34 | -0.14     | -0.16     |
|    |    | 156 | 4.97 | -0.15 | -23.52 | -23.31 | -0.36 | 2.21     | -0.18    | -0.57    | -0.51 | -0.24     | -0.14     |
|    |    | 154 | 5.18 | -0.16 | -24.62 | -24.38 | -0.40 | -2.41    | -0.22    | -0.56    | -0.52 | -0.25     | -0.11     |
| 93 | 1  | 201 | 2.48 | 4.14  | -9.71  | -8.88  | 3.32  | 3.28     | 0.20     | -0.10    | -0.08 | 0.19      | -0.06     |
|    |    | 200 | 2.73 | 6.86  | -11.99 | -8.95  | 3.82  | -6.94    | 0.18     | -0.09    | -0.09 | 0.18      | 0.01      |
|    |    | 154 | 3.22 | -0.21 | -31.68 | -31.36 | -0.54 | 3.19     | 0.01     | 2.72e-04 | 0.01  | 3.39e-03  | -5.67e-03 |
|    |    | 152 | 3.08 | -0.02 | -30.29 | -29.82 | -0.48 | -3.71    | 0.05     | -0.04    | 0.01  | 8.45e-04  | -0.04     |
| 93 | 2  | 201 | 1.72 | 2.79  | -6.80  | -6.32  | 2.32  | 2.08     | 0.10     | -0.09    | -0.09 | 0.10      | -0.03     |
|    |    | 200 | 1.88 | 4.61  | -8.32  | -6.37  | 2.66  | -4.63    | 0.09     | -0.09    | -0.09 | 0.09      | 7.05e-03  |
|    |    | 154 | 2.40 | -0.16 | -21.86 | -21.65 | -0.38 | 2.13     | 4.40e-03 | -0.04    | -0.04 | 4.05e-03  | -3.77e-03 |
|    |    | 152 | 2.35 | -0.03 | -20.88 | -20.58 | -0.34 | -2.49    | 0.02     | -0.05    | -0.03 | 2.43e-03  | -0.02     |
| 93 | 10 | 201 | 5.74 | 2.86  | -9.67  | -9.07  | 2.26  | 2.66     | -0.13    | -0.88    | -0.61 | -0.40     | 0.36      |
|    |    | 200 | 4.56 | 3.86  | -10.38 | -9.12  | 2.60  | -4.04    | -0.24    | -0.81    | -0.61 | -0.44     | 0.28      |
|    |    | 154 | 8.33 | -0.16 | -27.60 | -27.33 | -0.43 | 2.72     | -0.45    | -1.12    | -1.04 | -0.53     | 0.22      |
|    |    | 152 | 8.32 | -0.25 | -26.40 | -26.26 | -0.39 | -1.90    | -0.35    | -1.18    | -1.03 | -0.50     | 0.32      |
| 93 | 42 | 201 | 3.25 | 2.82  | -8.18  | -7.65  | 2.29  | 2.36     | -0.06    | -0.42    | -0.34 | -0.14     | 0.16      |
|    |    | 200 | 2.61 | 4.22  | -9.28  | -7.69  | 2.63  | -4.35    | -0.09    | -0.41    | -0.34 | -0.16     | 0.14      |
|    |    | 154 | 5.18 | -0.16 | -24.62 | -24.38 | -0.40 | 2.41     | -0.22    | -0.56    | -0.52 | -0.25     | 0.11      |
|    |    | 152 | 4.97 | -0.15 | -23.52 | -23.31 | -0.36 | -2.21    | -0.18    | -0.57    | -0.51 | -0.24     | 0.14      |

|    |    |     |       |          |        |        |       |           |       |       |           |           |       |
|----|----|-----|-------|----------|--------|--------|-------|-----------|-------|-------|-----------|-----------|-------|
| 94 | 1  | 143 | 2.59  | 1.88     | -8.44  | -8.44  | 1.87  | 0.29      | 0.24  | -0.12 | -0.08     | 0.20      | -0.11 |
|    |    | 201 | 3.34  | 9.47     | -15.02 | -8.94  | 3.39  | -10.58    | 0.19  | -0.09 | -0.08     | 0.19      | -0.04 |
|    |    | 152 | 3.21  | -0.30    | -29.97 | -29.73 | -0.54 | 2.67      | 0.06  | -0.05 | 0.02      | 1.42e-03  | -0.06 |
|    |    | 150 | 2.88  | 0.26     | -26.25 | -25.66 | -0.33 | -3.92     | 0.10  | -0.08 | 0.02      | -6.60e-03 | -0.09 |
| 94 | 2  | 143 | 1.74  | 1.31     | -6.01  | -6.01  | 1.31  | -7.90e-03 | 0.13  | -0.10 | -0.08     | 0.11      | -0.06 |
|    |    | 201 | 2.24  | 6.40     | -10.40 | -6.36  | 2.36  | -7.17     | 0.10  | -0.09 | -0.09     | 0.10      | -0.02 |
|    |    | 152 | 2.23  | -0.22    | -20.67 | -20.51 | -0.38 | 1.76      | 0.02  | -0.05 | -0.03     | 2.81e-03  | -0.03 |
|    |    | 150 | 2.12  | 0.16     | -18.06 | -17.67 | -0.23 | -2.64     | 0.04  | -0.06 | -0.02     | -2.39e-03 | -0.05 |
| 94 | 10 | 143 | 6.73  | 1.49     | -8.45  | -8.41  | 1.46  | 0.56      | 0.12  | -0.99 | -0.53     | -0.34     | 0.55  |
|    |    | 201 | 6.71  | 5.55     | -11.81 | -8.77  | 2.51  | -6.60     | 0.03  | -0.96 | -0.53     | -0.40     | 0.49  |
|    |    | 152 | 8.53  | -0.03    | -27.37 | -27.17 | -0.23 | 2.34      | -0.24 | -1.16 | -0.90     | -0.50     | 0.42  |
|    |    | 150 | 8.36  | 0.09     | -24.51 | -24.33 | -0.08 | -2.07     | -0.12 | -1.21 | -0.89     | -0.45     | 0.50  |
| 94 | 40 | 143 | 2.68  | 1.35     | -7.32  | -7.32  | 1.35  | -0.08     | -0.15 | -0.38 | -0.36     | -0.17     | 0.07  |
|    |    | 201 | 2.77  | 6.19     | -11.47 | -7.68  | 2.40  | -7.25     | -0.16 | -0.38 | -0.37     | -0.17     | 0.05  |
|    |    | 152 | 5.08  | -0.21    | -22.98 | -22.86 | -0.34 | 1.69      | -0.26 | -0.57 | -0.56     | -0.27     | 0.04  |
|    |    | 150 | 4.70  | 0.17     | -20.38 | -20.02 | -0.20 | -2.71     | -0.26 | -0.57 | -0.55     | -0.28     | 0.08  |
| 95 | 1  | 138 | 2.79  | 6.09e-03 | -7.07  | -6.82  | -0.25 | -1.32     | 0.28  | -0.15 | -0.06     | 0.19      | -0.18 |
|    |    | 143 | 4.07  | 11.19    | -17.69 | -8.51  | 2.01  | -13.45    | 0.23  | -0.11 | -0.08     | 0.20      | -0.10 |
|    |    | 150 | 3.06  | -0.28    | -25.74 | -25.50 | -0.51 | 2.43      | 0.11  | -0.09 | 0.03      | -5.25e-03 | -0.10 |
|    |    | 148 | 2.63  | 0.60     | -21.00 | -20.38 | -0.02 | -3.60     | 0.13  | -0.12 | 0.03      | -0.02     | -0.12 |
| 95 | 2  | 138 | 1.80  | 0.09     | -5.13  | -4.87  | -0.16 | -1.13     | 0.16  | -0.11 | -0.06     | 0.11      | -0.10 |
|    |    | 143 | 2.66  | 7.58     | -12.24 | -6.06  | 1.40  | -9.18     | 0.12  | -0.09 | -0.08     | 0.11      | -0.05 |
|    |    | 150 | 1.88  | -0.21    | -17.71 | -17.56 | -0.36 | 1.60      | 0.05  | -0.07 | -0.02     | -1.49e-03 | -0.06 |
|    |    | 148 | 1.83  | 0.39     | -14.39 | -13.99 | -0.02 | -2.42     | 0.06  | -0.08 | -9.23e-03 | -9.83e-03 | -0.07 |
| 95 | 14 | 138 | 9.66  | 0.07     | -3.48  | -2.74  | -0.67 | -1.44     | 1.26  | -0.50 | 0.30      | 0.47      | -0.88 |
|    |    | 143 | 9.98  | 8.28     | -11.30 | -3.93  | 0.90  | -9.49     | 1.19  | -0.35 | 0.28      | 0.55      | -0.76 |
|    |    | 150 | 8.34  | -0.68    | -10.34 | -10.17 | -0.86 | 1.29      | 1.21  | -0.15 | 0.62      | 0.44      | -0.68 |
|    |    | 148 | 8.78  | 0.53     | -7.64  | -6.59  | -0.52 | -2.73     | 1.26  | -0.28 | 0.63      | 0.34      | -0.76 |
| 95 | 46 | 138 | 5.37  | 0.02     | -4.27  | -3.85  | -0.41 | -1.28     | 0.68  | -0.28 | 0.11      | 0.28      | -0.47 |
|    |    | 143 | 6.03  | 7.90     | -11.76 | -5.03  | 1.16  | -9.33     | 0.62  | -0.20 | 0.09      | 0.32      | -0.39 |
|    |    | 150 | 4.80  | -0.44    | -14.16 | -14.01 | -0.60 | 1.45      | 0.61  | -0.11 | 0.29      | 0.21      | -0.36 |
|    |    | 148 | 4.69  | 0.35     | -11.04 | -10.43 | -0.26 | -2.57     | 0.64  | -0.18 | 0.30      | 0.16      | -0.40 |
| 96 | 1  | 139 | 2.74  | -0.66    | -4.24  | -3.70  | -1.21 | -1.28     | 0.29  | -0.18 | -0.04     | 0.15      | -0.22 |
|    |    | 138 | 4.62  | 11.71    | -18.42 | -6.77  | 0.06  | -14.67    | 0.27  | -0.14 | -0.05     | 0.19      | -0.16 |
|    |    | 148 | 2.86  | -0.13    | -20.65 | -20.30 | -0.48 | 2.66      | 0.14  | -0.13 | 0.03      | -0.01     | -0.13 |
|    |    | 146 | 2.54  | 1.11     | -16.27 | -15.69 | 0.53  | -3.10     | 0.13  | -0.15 | -6.27e-03 | -0.02     | -0.14 |
| 96 | 2  | 139 | 1.70  | -0.34    | -3.20  | -2.69  | -0.86 | -1.10     | 0.17  | -0.11 | -0.04     | 0.09      | -0.13 |
|    |    | 138 | 2.97  | 7.94     | -12.74 | -4.84  | 0.04  | -10.04    | 0.15  | -0.10 | -0.06     | 0.11      | -0.09 |
|    |    | 148 | 1.74  | -0.10    | -14.16 | -13.93 | -0.32 | 1.76      | 0.07  | -0.08 | -9.06e-03 | -7.40e-03 | -0.08 |
|    |    | 146 | 1.66  | 0.73     | -11.09 | -10.72 | 0.36  | -2.07     | 0.07  | -0.10 | -0.01     | -0.01     | -0.08 |
| 96 | 14 | 139 | 10.39 | -0.04    | -1.95  | -0.29  | -1.70 | -0.65     | 1.19  | -0.78 | 0.13      | 0.28      | -0.98 |
|    |    | 138 | 11.67 | 8.00     | -11.25 | -2.44  | -0.80 | -9.59     | 1.24  | -0.67 | 0.11      | 0.46      | -0.94 |
|    |    | 148 | 8.66  | -0.40    | -7.53  | -6.76  | -1.17 | 2.21      | 1.05  | -0.50 | 0.20      | 0.35      | -0.77 |
|    |    | 146 | 8.51  | 0.21     | -4.24  | -3.55  | -0.48 | -1.62     | 0.97  | -0.60 | 0.19      | 0.18      | -0.79 |
| 96 | 46 | 139 | 5.81  | -0.50    | -2.29  | -1.53  | -1.26 | -0.88     | 0.66  | -0.43 | 0.05      | 0.18      | -0.54 |
|    |    | 138 | 7.10  | 7.94     | -11.99 | -3.69  | -0.37 | -9.83     | 0.66  | -0.36 | 0.02      | 0.28      | -0.50 |
|    |    | 148 | 4.83  | -0.34    | -10.87 | -10.48 | -0.73 | 1.98      | 0.54  | -0.29 | 0.09      | 0.16      | -0.41 |
|    |    | 146 | 4.74  | 0.40     | -7.71  | -7.27  | -0.05 | -1.85     | 0.50  | -0.34 | 0.09      | 0.08      | -0.42 |
| 97 | 1  | 140 | 2.78  | 3.77     | -2.37  | -1.52  | 2.92  | -2.12     | 0.22  | -0.22 | -0.09     | 0.10      | -0.20 |
|    |    | 139 | 4.55  | 11.85    | -15.21 | -3.33  | -0.03 | -13.43    | 0.27  | -0.16 | -0.02     | 0.13      | -0.20 |
|    |    | 146 | 2.51  | 0.02     | -16.50 | -16.03 | -0.44 | 2.73      | 0.13  | -0.16 | -0.01     | -0.01     | -0.15 |
|    |    | 144 | 2.79  | 1.62     | -11.83 | -10.80 | 0.59  | -3.57     | 0.12  | -0.21 | -0.07     | -0.01     | -0.17 |
| 97 | 2  | 140 | 1.72  | 2.65     | -1.81  | -1.11  | 1.95  | -1.62     | 0.13  | -0.13 | -0.05     | 0.06      | -0.12 |
|    |    | 139 | 2.89  | 8.02     | -10.53 | -2.44  | -0.08 | -9.20     | 0.15  | -0.10 | -0.03     | 0.08      | -0.12 |
|    |    | 146 | 1.55  | 0.02     | -11.25 | -10.95 | -0.29 | 1.82      | 0.07  | -0.10 | -0.02     | -5.09e-03 | -0.09 |
|    |    | 144 | 1.74  | 1.07     | -8.02  | -7.35  | 0.40  | -2.38     | 0.08  | -0.12 | -0.04     | -7.22e-03 | -0.10 |

|     |    |     |       |       |        |        |           |        |           |       |       |           |       |
|-----|----|-----|-------|-------|--------|--------|-----------|--------|-----------|-------|-------|-----------|-------|
| 97  | 14 | 140 | 9.11  | 2.02  | 1.06   | 1.97   | 1.11      | -0.22  | 0.81      | -0.94 | -0.25 | 0.12      | -0.85 |
|     |    | 139 | 11.30 | 7.70  | -7.98  | 0.64   | -0.92     | -7.80  | 0.99      | -0.94 | -0.22 | 0.27      | -0.93 |
|     |    | 146 | 9.11  | 0.60  | -7.14  | -5.41  | -1.13     | 3.22   | 0.68      | -1.00 | -0.51 | 0.19      | -0.76 |
|     |    | 144 | 8.25  | 0.07  | -2.32  | -1.81  | -0.44     | -0.98  | 0.52      | -1.00 | -0.53 | 0.06      | -0.70 |
| 97  | 46 | 140 | 5.24  | 2.07  | -0.15  | 0.37   | 1.55      | -0.94  | 0.46      | -0.52 | -0.15 | 0.09      | -0.47 |
|     |    | 139 | 6.94  | 7.81  | -9.25  | -0.95  | -0.48     | -8.53  | 0.55      | -0.50 | -0.12 | 0.17      | -0.51 |
|     |    | 146 | 4.84  | 0.06  | -9.03  | -8.28  | -0.69     | 2.50   | 0.36      | -0.53 | -0.25 | 0.09      | -0.41 |
|     |    | 144 | 4.86  | 0.55  | -5.24  | -4.68  | -4.50e-03 | -1.71  | 0.29      | -0.54 | -0.27 | 0.02      | -0.39 |
| 98  | 1  | 141 | 5.48  | 16.13 | -10.62 | 0.39   | 5.11      | -13.16 | 0.24      | -0.38 | -0.19 | 0.04      | -0.28 |
|     |    | 140 | 4.87  | 16.66 | -10.51 | -2.28  | 8.43      | -12.49 | 0.24      | -0.24 | -0.13 | 0.13      | -0.20 |
|     |    | 144 | 2.08  | -2.50 | -11.11 | -10.99 | -2.62     | 1.00   | 0.12      | -0.21 | -0.05 | -0.04     | -0.17 |
|     |    | 142 | 2.09  | 1.80  | -3.87  | -2.11  | 0.04      | -2.63  | 0.04      | -0.25 | -0.17 | -0.04     | -0.13 |
| 98  | 2  | 141 | 3.57  | 11.05 | -7.24  | 0.29   | 3.53      | -9.00  | 0.16      | -0.22 | -0.10 | 0.03      | -0.18 |
|     |    | 140 | 3.10  | 11.30 | -7.26  | -1.62  | 5.65      | -8.54  | 0.15      | -0.14 | -0.08 | 0.09      | -0.12 |
|     |    | 144 | 1.32  | -1.68 | -7.56  | -7.49  | -1.76     | 0.68   | 0.08      | -0.13 | -0.02 | -0.02     | -0.10 |
|     |    | 142 | 1.19  | 1.26  | -2.64  | -1.44  | 0.06      | -1.80  | 0.03      | -0.13 | -0.07 | -0.03     | -0.08 |
| 98  | 17 | 141 | 9.81  | 10.49 | -3.78  | 3.51   | 3.20      | -7.14  | 0.33      | -1.32 | -1.08 | 0.10      | -0.58 |
|     |    | 140 | 10.83 | 10.40 | -3.46  | 1.61   | 5.33      | -6.67  | 0.46      | -1.37 | -1.07 | 0.16      | -0.67 |
|     |    | 144 | 12.17 | -0.51 | -6.20  | -4.63  | -2.08     | 2.54   | 0.28      | -1.87 | -1.64 | 0.05      | -0.65 |
|     |    | 142 | 11.48 | 1.41  | -0.27  | 1.41   | -0.27     | 0.06   | 0.16      | -1.80 | -1.69 | 0.04      | -0.47 |
| 98  | 49 | 141 | 6.41  | 10.75 | -5.53  | 1.84   | 3.37      | -8.10  | 0.24      | -0.74 | -0.57 | 0.06      | -0.37 |
|     |    | 140 | 6.75  | 10.85 | -5.41  | -0.06  | 5.50      | -7.64  | 0.30      | -0.73 | -0.56 | 0.12      | -0.39 |
|     |    | 144 | 6.44  | -1.39 | -6.64  | -6.11  | -1.91     | 1.58   | 0.15      | -0.94 | -0.80 | 0.01      | -0.37 |
|     |    | 142 | 5.86  | 0.82  | -0.99  | -0.07  | -0.10     | -0.90  | 0.08      | -0.92 | -0.85 | 4.38e-03  | -0.26 |
| 99  | 1  | 174 | 3.50  | 18.75 | -18.06 | 0.20   | 0.49      | -18.40 | -0.01     | -0.13 | -0.13 | -0.01     | -0.02 |
|     |    | 141 | 6.10  | 27.40 | -17.07 | -0.73  | 11.06     | -21.44 | 0.14      | -0.30 | -0.15 | -0.01     | -0.21 |
|     |    | 142 | 1.94  | -0.76 | -5.53  | -1.27  | -5.02     | 1.47   | 0.05      | -0.24 | -0.19 | -2.81e-03 | -0.11 |
|     |    | 113 | 1.80  | 4.35  | -0.46  | -0.42  | 4.32      | -0.41  | 3.08e-03  | -0.25 | -0.25 | 1.57e-03  | -0.02 |
| 99  | 2  | 174 | 2.32  | 12.79 | -12.17 | 0.16   | 0.46      | -12.48 | -6.02e-03 | -0.06 | -0.05 | -9.62e-03 | -0.01 |
|     |    | 141 | 4.00  | 18.54 | -11.53 | -0.48  | 7.49      | -14.50 | 0.10      | -0.17 | -0.07 | -7.37e-03 | -0.13 |
|     |    | 142 | 1.06  | -0.57 | -3.62  | -0.87  | -3.32     | 0.91   | 0.04      | -0.12 | -0.08 | -1.47e-03 | -0.07 |
|     |    | 113 | 0.91  | 2.95  | -0.34  | -0.30  | 2.91      | -0.35  | 2.43e-03  | -0.11 | -0.11 | 1.04e-03  | -0.01 |
| 99  | 17 | 174 | 10.45 | 12.83 | -9.14  | 3.16   | 0.53      | -10.91 | 0.07      | -1.67 | -1.65 | 0.06      | -0.17 |
|     |    | 141 | 11.71 | 18.21 | -8.12  | 2.52   | 7.57      | -12.92 | 0.12      | -1.72 | -1.66 | 0.06      | -0.31 |
|     |    | 142 | 15.75 | 1.78  | -4.48  | 0.54   | -3.24     | 2.49   | 0.08      | -2.54 | -2.52 | 0.07      | -0.20 |
|     |    | 113 | 15.60 | 3.59  | 0.50   | 1.11   | 2.98      | 1.23   | 0.07      | -2.56 | -2.55 | 0.07      | -0.12 |
| 99  | 49 | 174 | 5.70  | 12.79 | -10.69 | 1.61   | 0.50      | -11.72 | 0.03      | -0.83 | -0.82 | 0.02      | -0.09 |
|     |    | 141 | 7.16  | 18.37 | -9.87  | 0.97   | 7.53      | -13.74 | 0.08      | -0.89 | -0.84 | 0.03      | -0.22 |
|     |    | 142 | 7.96  | 0.54  | -4.01  | -0.19  | -3.28     | 1.67   | 0.04      | -1.27 | -1.26 | 0.03      | -0.13 |
|     |    | 113 | 7.96  | 3.01  | 0.32   | 0.38   | 2.95      | 0.41   | 0.04      | -1.29 | -1.29 | 0.03      | -0.07 |
| 100 | 1  | 183 | 4.87  | 16.66 | -10.51 | -2.28  | 8.43      | 12.49  | 0.24      | -0.24 | 0.13  | -0.13     | -0.20 |
|     |    | 182 | 5.48  | 16.13 | -10.62 | 0.39   | 5.11      | 13.16  | 0.38      | -0.24 | 0.19  | -0.04     | -0.28 |
|     |    | 137 | 2.09  | 1.80  | -3.87  | -2.11  | 0.04      | 2.63   | 0.25      | -0.04 | 0.17  | 0.04      | -0.13 |
|     |    | 165 | 2.08  | -2.50 | -11.11 | -10.99 | -2.62     | -1.00  | 0.21      | -0.12 | 0.05  | 0.04      | -0.17 |
| 100 | 2  | 183 | 3.10  | 11.30 | -7.26  | -1.62  | 5.65      | 8.54   | 0.14      | -0.15 | 0.08  | -0.09     | -0.12 |
|     |    | 182 | 3.57  | 11.05 | -7.24  | 0.29   | 3.53      | 9.00   | 0.22      | -0.16 | 0.10  | -0.03     | -0.18 |
|     |    | 137 | 1.19  | 1.26  | -2.64  | -1.44  | 0.06      | 1.80   | 0.13      | -0.03 | 0.07  | 0.03      | -0.08 |
|     |    | 165 | 1.32  | -1.68 | -7.56  | -7.49  | -1.76     | -0.68  | 0.13      | -0.08 | 0.02  | 0.02      | -0.10 |
| 100 | 4  | 183 | 10.83 | 10.40 | -3.46  | 1.61   | 5.33      | 6.67   | 1.37      | -0.46 | 1.07  | -0.16     | -0.67 |
|     |    | 182 | 9.81  | 10.49 | -3.78  | 3.51   | 3.20      | 7.14   | 1.32      | -0.33 | 1.08  | -0.10     | -0.58 |
|     |    | 137 | 11.48 | 1.41  | -0.27  | 1.41   | -0.27     | -0.06  | 1.80      | -0.16 | 1.69  | -0.04     | -0.47 |
|     |    | 165 | 12.17 | -0.51 | -6.20  | -4.63  | -2.08     | -2.54  | 1.87      | -0.28 | 1.64  | -0.05     | -0.65 |
| 100 | 36 | 183 | 6.75  | 10.85 | -5.41  | -0.06  | 5.50      | 7.64   | 0.73      | -0.30 | 0.56  | -0.12     | -0.39 |
|     |    | 182 | 6.41  | 10.75 | -5.53  | 1.84   | 3.37      | 8.10   | 0.74      | -0.24 | 0.57  | -0.06     | -0.37 |
|     |    | 137 | 5.86  | 0.82  | -0.99  | -0.07  | -0.10     | 0.90   | 0.92      | -0.08 | 0.85  | -4.38e-03 | -0.26 |
|     |    | 165 | 6.44  | -1.39 | -6.64  | -6.11  | -1.91     | -1.58  | 0.94      | -0.15 | 0.80  | -0.01     | -0.37 |

|     |    |     |       |          |        |        |       |          |      |       |          |           |       |
|-----|----|-----|-------|----------|--------|--------|-------|----------|------|-------|----------|-----------|-------|
| 101 | 1  | 184 | 4.55  | 11.85    | -15.21 | -3.33  | -0.03 | 13.43    | 0.16 | -0.27 | 0.02     | -0.13     | -0.20 |
|     |    | 183 | 2.78  | 3.77     | -2.37  | -1.52  | 2.92  | 2.12     | 0.22 | -0.22 | 0.09     | -0.10     | -0.20 |
|     |    | 165 | 2.79  | 1.62     | -11.83 | -10.80 | 0.59  | 3.57     | 0.21 | -0.12 | 0.07     | 0.01      | -0.17 |
|     |    | 163 | 2.51  | 0.02     | -16.50 | -16.03 | -0.44 | -2.73    | 0.16 | -0.13 | 0.01     | 0.01      | -0.15 |
| 101 | 2  | 184 | 2.89  | 8.02     | -10.53 | -2.44  | -0.08 | 9.20     | 0.10 | -0.15 | 0.03     | -0.08     | -0.12 |
|     |    | 183 | 1.72  | 2.65     | -1.81  | -1.11  | 1.95  | 1.62     | 0.13 | -0.13 | 0.05     | -0.06     | -0.12 |
|     |    | 165 | 1.74  | 1.07     | -8.02  | -7.35  | 0.40  | 2.38     | 0.12 | -0.08 | 0.04     | 7.22e-03  | -0.10 |
|     |    | 163 | 1.55  | 0.02     | -11.25 | -10.95 | -0.29 | -1.82    | 0.10 | -0.07 | 0.02     | 5.09e-03  | -0.09 |
| 101 | 4  | 184 | 11.30 | 7.86     | -8.33  | 0.35   | -0.82 | 8.08     | 0.93 | -0.98 | 0.22     | -0.27     | -0.93 |
|     |    | 183 | 9.17  | 1.99     | 0.89   | 1.68   | 1.20  | 0.49     | 0.93 | -0.82 | 0.25     | -0.14     | -0.85 |
|     |    | 165 | 8.38  | 0.29     | -2.83  | -2.19  | -0.35 | 1.26     | 1.00 | -0.54 | 0.53     | -0.07     | -0.71 |
|     |    | 163 | 9.08  | 0.37     | -7.20  | -5.79  | -1.04 | -2.95    | 1.00 | -0.68 | 0.51     | -0.19     | -0.77 |
| 101 | 36 | 184 | 6.94  | 7.90     | -9.43  | -1.09  | -0.44 | 8.66     | 0.50 | -0.55 | 0.12     | -0.17     | -0.51 |
|     |    | 183 | 5.27  | 2.18     | -0.36  | 0.23   | 1.59  | 1.07     | 0.51 | -0.46 | 0.15     | -0.10     | -0.47 |
|     |    | 165 | 4.93  | 0.65     | -5.48  | -4.87  | 0.04  | 1.84     | 0.54 | -0.30 | 0.27     | -0.03     | -0.39 |
|     |    | 163 | 4.83  | 0.01     | -9.12  | -8.46  | -0.65 | -2.37    | 0.53 | -0.36 | 0.25     | -0.09     | -0.41 |
| 102 | 1  | 185 | 4.62  | 11.71    | -18.42 | -6.77  | 0.06  | 14.67    | 0.14 | -0.27 | 0.05     | -0.19     | -0.16 |
|     |    | 184 | 2.74  | -0.66    | -4.24  | -3.70  | -1.21 | 1.28     | 0.18 | -0.29 | 0.04     | -0.15     | -0.22 |
|     |    | 163 | 2.54  | 1.11     | -16.27 | -15.69 | 0.53  | 3.10     | 0.15 | -0.13 | 6.27e-03 | 0.02      | -0.14 |
|     |    | 161 | 2.86  | -0.13    | -20.65 | -20.30 | -0.48 | -2.66    | 0.13 | -0.14 | -0.03    | 0.01      | -0.13 |
| 102 | 2  | 185 | 2.97  | 7.94     | -12.74 | -4.84  | 0.04  | 10.04    | 0.10 | -0.15 | 0.06     | -0.11     | -0.09 |
|     |    | 184 | 1.70  | -0.34    | -3.20  | -2.69  | -0.86 | 1.10     | 0.11 | -0.17 | 0.04     | -0.09     | -0.13 |
|     |    | 163 | 1.66  | 0.73     | -11.09 | -10.72 | 0.36  | 2.07     | 0.10 | -0.07 | 0.01     | 0.01      | -0.08 |
|     |    | 161 | 1.74  | -0.10    | -14.16 | -13.93 | -0.32 | -1.76    | 0.08 | -0.07 | 9.06e-03 | 7.40e-03  | -0.08 |
| 102 | 7  | 185 | 11.67 | 8.00     | -11.25 | -2.44  | -0.80 | 9.59     | 0.67 | -1.24 | -0.11    | -0.46     | -0.94 |
|     |    | 184 | 10.39 | -0.04    | -1.95  | -0.29  | -1.70 | 0.65     | 0.78 | -1.19 | -0.13    | -0.28     | -0.98 |
|     |    | 163 | 8.51  | 0.21     | -4.24  | -3.55  | -0.48 | 1.62     | 0.60 | -0.97 | -0.19    | -0.18     | -0.79 |
|     |    | 161 | 8.66  | -0.40    | -7.53  | -6.76  | -1.17 | -2.21    | 0.50 | -1.05 | -0.20    | -0.35     | -0.77 |
| 102 | 39 | 185 | 7.10  | 7.94     | -11.99 | -3.69  | -0.37 | 9.83     | 0.36 | -0.66 | -0.02    | -0.28     | -0.50 |
|     |    | 184 | 5.81  | -0.50    | -2.29  | -1.53  | -1.26 | 0.88     | 0.43 | -0.66 | -0.05    | -0.18     | -0.54 |
|     |    | 163 | 4.74  | 0.40     | -7.71  | -7.27  | -0.05 | 1.85     | 0.34 | -0.50 | -0.09    | -0.08     | -0.42 |
|     |    | 161 | 4.83  | -0.34    | -10.87 | -10.48 | -0.73 | -1.98    | 0.29 | -0.54 | -0.09    | -0.16     | -0.41 |
| 103 | 1  | 186 | 4.07  | 11.19    | -17.69 | -8.51  | 2.01  | 13.45    | 0.11 | -0.23 | 0.08     | -0.20     | -0.10 |
|     |    | 185 | 2.79  | 6.09e-03 | -7.07  | -6.82  | -0.25 | 1.32     | 0.15 | -0.28 | 0.06     | -0.19     | -0.18 |
|     |    | 161 | 2.63  | 0.60     | -21.00 | -20.38 | -0.02 | 3.60     | 0.12 | -0.13 | -0.03    | 0.02      | -0.12 |
|     |    | 159 | 3.06  | -0.28    | -25.74 | -25.50 | -0.51 | -2.43    | 0.09 | -0.11 | -0.03    | 5.25e-03  | -0.10 |
| 103 | 2  | 186 | 2.66  | 7.58     | -12.24 | -6.06  | 1.40  | 9.18     | 0.09 | -0.12 | 0.08     | -0.11     | -0.05 |
|     |    | 185 | 1.80  | 0.09     | -5.13  | -4.87  | -0.16 | 1.13     | 0.11 | -0.16 | 0.06     | -0.11     | -0.10 |
|     |    | 161 | 1.83  | 0.39     | -14.39 | -13.99 | -0.02 | 2.42     | 0.08 | -0.06 | 9.23e-03 | 9.83e-03  | -0.07 |
|     |    | 159 | 1.88  | -0.21    | -17.71 | -17.56 | -0.36 | -1.60    | 0.07 | -0.05 | 0.02     | 1.49e-03  | -0.06 |
| 103 | 7  | 186 | 9.98  | 8.28     | -11.30 | -3.93  | 0.90  | 9.49     | 0.35 | -1.19 | -0.28    | -0.55     | -0.76 |
|     |    | 185 | 9.66  | 0.07     | -3.48  | -2.74  | -0.67 | 1.44     | 0.50 | -1.26 | -0.30    | -0.47     | -0.88 |
|     |    | 161 | 8.78  | 0.53     | -7.64  | -6.59  | -0.52 | 2.73     | 0.28 | -1.26 | -0.63    | -0.34     | -0.76 |
|     |    | 159 | 8.34  | -0.68    | -10.34 | -10.17 | -0.86 | -1.29    | 0.15 | -1.21 | -0.62    | -0.44     | -0.68 |
| 103 | 39 | 186 | 6.03  | 7.90     | -11.76 | -5.03  | 1.16  | 9.33     | 0.20 | -0.62 | -0.09    | -0.32     | -0.39 |
|     |    | 185 | 5.37  | 0.02     | -4.27  | -3.85  | -0.41 | 1.28     | 0.28 | -0.68 | -0.11    | -0.28     | -0.47 |
|     |    | 161 | 4.69  | 0.35     | -11.04 | -10.43 | -0.26 | 2.57     | 0.18 | -0.64 | -0.30    | -0.16     | -0.40 |
|     |    | 159 | 4.80  | -0.44    | -14.16 | -14.01 | -0.60 | -1.45    | 0.11 | -0.61 | -0.29    | -0.21     | -0.36 |
| 104 | 1  | 187 | 3.34  | 9.47     | -15.02 | -8.94  | 3.39  | 10.58    | 0.09 | -0.19 | 0.08     | -0.19     | -0.04 |
|     |    | 186 | 2.59  | 1.88     | -8.44  | -8.44  | 1.87  | -0.29    | 0.12 | -0.24 | 0.08     | -0.20     | -0.11 |
|     |    | 159 | 2.88  | 0.26     | -26.25 | -25.66 | -0.33 | 3.92     | 0.08 | -0.10 | -0.02    | 6.60e-03  | -0.09 |
|     |    | 157 | 3.21  | -0.30    | -29.97 | -29.73 | -0.54 | -2.67    | 0.05 | -0.06 | -0.02    | -1.42e-03 | -0.06 |
| 104 | 2  | 187 | 2.24  | 6.40     | -10.40 | -6.36  | 2.36  | 7.17     | 0.09 | -0.10 | 0.09     | -0.10     | -0.02 |
|     |    | 186 | 1.74  | 1.31     | -6.01  | -6.01  | 1.31  | 7.90e-03 | 0.10 | -0.13 | 0.08     | -0.11     | -0.06 |
|     |    | 159 | 2.12  | 0.16     | -18.06 | -17.67 | -0.23 | 2.64     | 0.06 | -0.04 | 0.02     | 2.39e-03  | -0.05 |
|     |    | 157 | 2.23  | -0.22    | -20.67 | -20.51 | -0.38 | -1.76    | 0.05 | -0.02 | 0.03     | -2.81e-03 | -0.03 |

|     |    |     |      |       |        |        |       |           |           |           |       |           |           |
|-----|----|-----|------|-------|--------|--------|-------|-----------|-----------|-----------|-------|-----------|-----------|
| 104 | 11 | 187 | 6.71 | 5.55  | -11.81 | -8.77  | 2.51  | 6.60      | 0.96      | -0.03     | 0.53  | 0.40      | 0.49      |
|     |    | 186 | 6.73 | 1.49  | -8.45  | -8.41  | 1.46  | -0.56     | 0.99      | -0.12     | 0.53  | 0.34      | 0.55      |
|     |    | 159 | 8.36 | 0.09  | -24.51 | -24.33 | -0.08 | 2.07      | 1.21      | 0.12      | 0.89  | 0.45      | 0.50      |
|     |    | 157 | 8.53 | -0.03 | -27.37 | -27.17 | -0.23 | -2.34     | 1.16      | 0.24      | 0.90  | 0.50      | 0.42      |
| 104 | 45 | 187 | 2.77 | 6.19  | -11.47 | -7.68  | 2.40  | 7.25      | 0.38      | 0.16      | 0.37  | 0.17      | 0.05      |
|     |    | 186 | 2.68 | 1.35  | -7.32  | -7.32  | 1.35  | 0.08      | 0.38      | 0.15      | 0.36  | 0.17      | 0.07      |
|     |    | 159 | 4.70 | 0.17  | -20.38 | -20.02 | -0.20 | 2.71      | 0.57      | 0.26      | 0.55  | 0.28      | 0.08      |
|     |    | 157 | 5.08 | -0.21 | -22.98 | -22.86 | -0.34 | -1.69     | 0.57      | 0.26      | 0.56  | 0.27      | 0.04      |
| 105 | 1  | 188 | 2.73 | 6.86  | -11.99 | -8.95  | 3.82  | 6.94      | 0.09      | -0.18     | 0.09  | -0.18     | 0.01      |
|     |    | 187 | 2.48 | 4.14  | -9.71  | -8.88  | 3.32  | -3.28     | 0.10      | -0.20     | 0.08  | -0.19     | -0.06     |
|     |    | 157 | 3.08 | -0.02 | -30.29 | -29.82 | -0.48 | 3.71      | 0.04      | -0.05     | -0.01 | -8.45e-04 | -0.04     |
|     |    | 155 | 3.22 | -0.21 | -31.68 | -31.36 | -0.54 | -3.19     | -2.72e-04 | -0.01     | -0.01 | -3.39e-03 | -5.67e-03 |
| 105 | 2  | 188 | 1.88 | 4.61  | -8.32  | -6.37  | 2.66  | 4.63      | 0.09      | -0.09     | 0.09  | -0.09     | 7.05e-03  |
|     |    | 187 | 1.72 | 2.79  | -6.80  | -6.32  | 2.32  | -2.08     | 0.09      | -0.10     | 0.09  | -0.10     | -0.03     |
|     |    | 157 | 2.35 | -0.03 | -20.88 | -20.58 | -0.34 | 2.49      | 0.05      | -0.02     | 0.03  | -2.43e-03 | -0.02     |
|     |    | 155 | 2.40 | -0.16 | -21.86 | -21.65 | -0.38 | -2.13     | 0.04      | -4.40e-03 | 0.04  | -4.05e-03 | -3.77e-03 |
| 105 | 11 | 188 | 4.56 | 3.86  | -10.38 | -9.12  | 2.60  | 4.04      | 0.81      | 0.24      | 0.61  | 0.44      | 0.28      |
|     |    | 187 | 5.74 | 2.86  | -9.67  | -9.07  | 2.26  | -2.66     | 0.88      | 0.13      | 0.61  | 0.40      | 0.36      |
|     |    | 157 | 8.32 | -0.25 | -26.40 | -26.26 | -0.39 | 1.90      | 1.18      | 0.35      | 1.03  | 0.50      | 0.32      |
|     |    | 155 | 8.33 | -0.16 | -27.60 | -27.33 | -0.43 | -2.72     | 1.12      | 0.45      | 1.04  | 0.53      | 0.22      |
| 105 | 43 | 188 | 2.61 | 4.22  | -9.28  | -7.69  | 2.63  | 4.35      | 0.41      | 0.09      | 0.34  | 0.16      | 0.14      |
|     |    | 187 | 3.25 | 2.82  | -8.18  | -7.65  | 2.29  | -2.36     | 0.42      | 0.06      | 0.34  | 0.14      | 0.16      |
|     |    | 157 | 4.97 | -0.15 | -23.52 | -23.31 | -0.36 | 2.21      | 0.57      | 0.18      | 0.51  | 0.24      | 0.14      |
|     |    | 155 | 5.18 | -0.16 | -24.62 | -24.38 | -0.40 | -2.41     | 0.56      | 0.22      | 0.52  | 0.25      | 0.11      |
| 106 | 1  | 189 | 2.48 | 4.14  | -9.71  | -8.88  | 3.32  | 3.28      | 0.10      | -0.20     | 0.08  | -0.19     | 0.06      |
|     |    | 188 | 2.73 | 6.86  | -11.99 | -8.95  | 3.82  | -6.94     | 0.09      | -0.18     | 0.09  | -0.18     | -0.01     |
|     |    | 155 | 3.22 | -0.21 | -31.68 | -31.36 | -0.54 | 3.19      | -2.72e-04 | -0.01     | -0.01 | -3.39e-03 | 5.67e-03  |
|     |    | 153 | 3.08 | -0.02 | -30.29 | -29.82 | -0.48 | -3.71     | 0.04      | -0.05     | -0.01 | -8.45e-04 | 0.04      |
| 106 | 2  | 189 | 1.72 | 2.79  | -6.80  | -6.32  | 2.32  | 2.08      | 0.09      | -0.10     | 0.09  | -0.10     | 0.03      |
|     |    | 188 | 1.88 | 4.61  | -8.32  | -6.37  | 2.66  | -4.63     | 0.09      | -0.09     | 0.09  | -0.09     | -7.05e-03 |
|     |    | 155 | 2.40 | -0.16 | -21.86 | -21.65 | -0.38 | 2.13      | 0.04      | -4.40e-03 | 0.04  | -4.05e-03 | 3.77e-03  |
|     |    | 153 | 2.35 | -0.03 | -20.88 | -20.58 | -0.34 | -2.49     | 0.05      | -0.02     | 0.03  | -2.43e-03 | 0.02      |
| 106 | 17 | 189 | 5.74 | 2.86  | -9.67  | -9.07  | 2.26  | 2.66      | 0.88      | 0.13      | 0.61  | 0.40      | -0.36     |
|     |    | 188 | 4.56 | 3.86  | -10.38 | -9.12  | 2.60  | -4.04     | 0.81      | 0.24      | 0.61  | 0.44      | -0.28     |
|     |    | 155 | 8.33 | -0.16 | -27.60 | -27.33 | -0.43 | 2.72      | 1.12      | 0.45      | 1.04  | 0.53      | -0.22     |
|     |    | 153 | 8.32 | -0.25 | -26.40 | -26.26 | -0.39 | -1.90     | 1.18      | 0.35      | 1.03  | 0.50      | -0.32     |
| 106 | 49 | 189 | 3.25 | 2.82  | -8.18  | -7.65  | 2.29  | 2.36      | 0.42      | 0.06      | 0.34  | 0.14      | -0.16     |
|     |    | 188 | 2.61 | 4.22  | -9.28  | -7.69  | 2.63  | -4.35     | 0.41      | 0.09      | 0.34  | 0.16      | -0.14     |
|     |    | 155 | 5.18 | -0.16 | -24.62 | -24.38 | -0.40 | 2.41      | 0.56      | 0.22      | 0.52  | 0.25      | -0.11     |
|     |    | 153 | 4.97 | -0.15 | -23.52 | -23.31 | -0.36 | -2.21     | 0.57      | 0.18      | 0.51  | 0.24      | -0.14     |
| 107 | 1  | 190 | 2.59 | 1.88  | -8.44  | -8.44  | 1.87  | 0.29      | 0.12      | -0.24     | 0.08  | -0.20     | 0.11      |
|     |    | 189 | 3.34 | 9.47  | -15.02 | -8.94  | 3.39  | -10.58    | 0.09      | -0.19     | 0.08  | -0.19     | 0.04      |
|     |    | 153 | 3.21 | -0.30 | -29.97 | -29.73 | -0.54 | 2.67      | 0.05      | -0.06     | -0.02 | -1.42e-03 | 0.06      |
|     |    | 151 | 2.88 | 0.26  | -26.25 | -25.66 | -0.33 | -3.92     | 0.08      | -0.10     | -0.02 | 6.60e-03  | 0.09      |
| 107 | 2  | 190 | 1.74 | 1.31  | -6.01  | -6.01  | 1.31  | -7.90e-03 | 0.10      | -0.13     | 0.08  | -0.11     | 0.06      |
|     |    | 189 | 2.24 | 6.40  | -10.40 | -6.36  | 2.36  | -7.17     | 0.09      | -0.10     | 0.09  | -0.10     | 0.02      |
|     |    | 153 | 2.23 | -0.22 | -20.67 | -20.51 | -0.38 | 1.76      | 0.05      | -0.02     | 0.03  | -2.81e-03 | 0.03      |
|     |    | 151 | 2.12 | 0.16  | -18.06 | -17.67 | -0.23 | -2.64     | 0.06      | -0.04     | 0.02  | 2.39e-03  | 0.05      |
| 107 | 17 | 190 | 6.73 | 1.49  | -8.45  | -8.41  | 1.46  | 0.56      | 0.99      | -0.12     | 0.53  | 0.34      | -0.55     |
|     |    | 189 | 6.71 | 5.55  | -11.81 | -8.77  | 2.51  | -6.60     | 0.96      | -0.03     | 0.53  | 0.40      | -0.49     |
|     |    | 153 | 8.53 | -0.03 | -27.37 | -27.17 | -0.23 | 2.34      | 1.16      | 0.24      | 0.90  | 0.50      | -0.42     |
|     |    | 151 | 8.36 | 0.09  | -24.51 | -24.33 | -0.08 | -2.07     | 1.21      | 0.12      | 0.89  | 0.45      | -0.50     |
| 107 | 47 | 190 | 2.68 | 1.35  | -7.32  | -7.32  | 1.35  | -0.08     | 0.38      | 0.15      | 0.36  | 0.17      | -0.07     |
|     |    | 189 | 2.77 | 6.19  | -11.47 | -7.68  | 2.40  | -7.25     | 0.38      | 0.16      | 0.37  | 0.17      | -0.05     |
|     |    | 153 | 5.08 | -0.21 | -22.98 | -22.86 | -0.34 | 1.69      | 0.57      | 0.26      | 0.56  | 0.27      | -0.04     |
|     |    | 151 | 4.70 | 0.17  | -20.38 | -20.02 | -0.20 | -2.71     | 0.57      | 0.26      | 0.55  | 0.28      | -0.08     |

|     |    |     |       |          |        |        |           |        |      |       |          |          |      |
|-----|----|-----|-------|----------|--------|--------|-----------|--------|------|-------|----------|----------|------|
| 108 | 1  | 191 | 2.79  | 6.09e-03 | -7.07  | -6.82  | -0.25     | -1.32  | 0.15 | -0.28 | 0.06     | -0.19    | 0.18 |
|     |    | 190 | 4.07  | 11.19    | -17.69 | -8.51  | 2.01      | -13.45 | 0.11 | -0.23 | 0.08     | -0.20    | 0.10 |
|     |    | 151 | 3.06  | -0.28    | -25.74 | -25.50 | -0.51     | 2.43   | 0.09 | -0.11 | -0.03    | 5.25e-03 | 0.10 |
|     |    | 149 | 2.63  | 0.60     | -21.00 | -20.38 | -0.02     | -3.60  | 0.12 | -0.13 | -0.03    | 0.02     | 0.12 |
| 108 | 2  | 191 | 1.80  | 0.09     | -5.13  | -4.87  | -0.16     | -1.13  | 0.11 | -0.16 | 0.06     | -0.11    | 0.10 |
|     |    | 190 | 2.66  | 7.58     | -12.24 | -6.06  | 1.40      | -9.18  | 0.09 | -0.12 | 0.08     | -0.11    | 0.05 |
|     |    | 151 | 1.88  | -0.21    | -17.71 | -17.56 | -0.36     | 1.60   | 0.07 | -0.05 | 0.02     | 1.49e-03 | 0.06 |
|     |    | 149 | 1.83  | 0.39     | -14.39 | -13.99 | -0.02     | -2.42  | 0.08 | -0.06 | 9.23e-03 | 9.83e-03 | 0.07 |
| 108 | 5  | 191 | 9.66  | 0.07     | -3.48  | -2.74  | -0.67     | -1.44  | 0.50 | -1.26 | -0.30    | -0.47    | 0.88 |
|     |    | 190 | 9.98  | 8.28     | -11.30 | -3.93  | 0.90      | -9.49  | 0.35 | -1.19 | -0.28    | -0.55    | 0.76 |
|     |    | 151 | 8.34  | -0.68    | -10.34 | -10.17 | -0.86     | 1.29   | 0.15 | -1.21 | -0.62    | -0.44    | 0.68 |
|     |    | 149 | 8.78  | 0.53     | -7.64  | -6.59  | -0.52     | -2.73  | 0.28 | -1.26 | -0.63    | -0.34    | 0.76 |
| 108 | 37 | 191 | 5.37  | 0.02     | -4.27  | -3.85  | -0.41     | -1.28  | 0.28 | -0.68 | -0.11    | -0.28    | 0.47 |
|     |    | 190 | 6.03  | 7.90     | -11.76 | -5.03  | 1.16      | -9.33  | 0.20 | -0.62 | -0.09    | -0.32    | 0.39 |
|     |    | 151 | 4.80  | -0.44    | -14.16 | -14.01 | -0.60     | 1.45   | 0.11 | -0.61 | -0.29    | -0.21    | 0.36 |
|     |    | 149 | 4.69  | 0.35     | -11.04 | -10.43 | -0.26     | -2.57  | 0.18 | -0.64 | -0.30    | -0.16    | 0.40 |
| 109 | 1  | 192 | 2.74  | -0.66    | -4.24  | -3.70  | -1.21     | -1.28  | 0.18 | -0.29 | 0.04     | -0.15    | 0.22 |
|     |    | 191 | 4.62  | 11.71    | -18.42 | -6.77  | 0.06      | -14.67 | 0.14 | -0.27 | 0.05     | -0.19    | 0.16 |
|     |    | 149 | 2.86  | -0.13    | -20.65 | -20.30 | -0.48     | 2.66   | 0.13 | -0.14 | -0.03    | 0.01     | 0.13 |
|     |    | 147 | 2.54  | 1.11     | -16.27 | -15.69 | 0.53      | -3.10  | 0.15 | -0.13 | 6.27e-03 | 0.02     | 0.14 |
| 109 | 2  | 192 | 1.70  | -0.34    | -3.20  | -2.69  | -0.86     | -1.10  | 0.11 | -0.17 | 0.04     | -0.09    | 0.13 |
|     |    | 191 | 2.97  | 7.94     | -12.74 | -4.84  | 0.04      | -10.04 | 0.10 | -0.15 | 0.06     | -0.11    | 0.09 |
|     |    | 149 | 1.74  | -0.10    | -14.16 | -13.93 | -0.32     | 1.76   | 0.08 | -0.07 | 9.06e-03 | 7.40e-03 | 0.08 |
|     |    | 147 | 1.66  | 0.73     | -11.09 | -10.72 | 0.36      | -2.07  | 0.10 | -0.07 | 0.01     | 0.01     | 0.08 |
| 109 | 5  | 192 | 10.39 | -0.04    | -1.95  | -0.29  | -1.70     | -0.65  | 0.78 | -1.19 | -0.13    | -0.28    | 0.98 |
|     |    | 191 | 11.67 | 8.00     | -11.25 | -2.44  | -0.80     | -9.59  | 0.67 | -1.24 | -0.11    | -0.46    | 0.94 |
|     |    | 149 | 8.66  | -0.40    | -7.53  | -6.76  | -1.17     | 2.21   | 0.50 | -1.05 | -0.20    | -0.35    | 0.77 |
|     |    | 147 | 8.51  | 0.21     | -4.24  | -3.55  | -0.48     | -1.62  | 0.60 | -0.97 | -0.19    | -0.18    | 0.79 |
| 109 | 37 | 192 | 5.81  | -0.50    | -2.29  | -1.53  | -1.26     | -0.88  | 0.43 | -0.66 | -0.05    | -0.18    | 0.54 |
|     |    | 191 | 7.10  | 7.94     | -11.99 | -3.69  | -0.37     | -9.83  | 0.36 | -0.66 | -0.02    | -0.28    | 0.50 |
|     |    | 149 | 4.83  | -0.34    | -10.87 | -10.48 | -0.73     | 1.98   | 0.29 | -0.54 | -0.09    | -0.16    | 0.41 |
|     |    | 147 | 4.74  | 0.40     | -7.71  | -7.27  | -0.05     | -1.85  | 0.34 | -0.50 | -0.09    | -0.08    | 0.42 |
| 110 | 1  | 193 | 2.78  | 3.77     | -2.37  | -1.52  | 2.92      | -2.12  | 0.22 | -0.22 | 0.09     | -0.10    | 0.20 |
|     |    | 192 | 4.55  | 11.85    | -15.21 | -3.33  | -0.03     | -13.43 | 0.16 | -0.27 | 0.02     | -0.13    | 0.20 |
|     |    | 147 | 2.51  | 0.02     | -16.50 | -16.03 | -0.44     | 2.73   | 0.16 | -0.13 | 0.01     | 0.01     | 0.15 |
|     |    | 145 | 2.79  | 1.62     | -11.83 | -10.80 | 0.59      | -3.57  | 0.21 | -0.12 | 0.07     | 0.01     | 0.17 |
| 110 | 2  | 193 | 1.72  | 2.65     | -1.81  | -1.11  | 1.95      | -1.62  | 0.13 | -0.13 | 0.05     | -0.06    | 0.12 |
|     |    | 192 | 2.89  | 8.02     | -10.53 | -2.44  | -0.08     | -9.20  | 0.10 | -0.15 | 0.03     | -0.08    | 0.12 |
|     |    | 147 | 1.55  | 0.02     | -11.25 | -10.95 | -0.29     | 1.82   | 0.10 | -0.07 | 0.02     | 5.09e-03 | 0.09 |
|     |    | 145 | 1.74  | 1.07     | -8.02  | -7.35  | 0.40      | -2.38  | 0.12 | -0.08 | 0.04     | 7.22e-03 | 0.10 |
| 110 | 5  | 193 | 9.11  | 2.02     | 1.06   | 1.97   | 1.11      | -0.22  | 0.94 | -0.81 | 0.25     | -0.12    | 0.85 |
|     |    | 192 | 11.30 | 7.70     | -7.98  | 0.64   | -0.92     | -7.80  | 0.94 | -0.99 | 0.22     | -0.27    | 0.93 |
|     |    | 147 | 9.11  | 0.60     | -7.14  | -5.41  | -1.13     | 3.22   | 1.00 | -0.68 | 0.51     | -0.19    | 0.76 |
|     |    | 145 | 8.25  | 0.07     | -2.32  | -1.81  | -0.44     | -0.98  | 1.00 | -0.52 | 0.53     | -0.06    | 0.70 |
| 110 | 37 | 193 | 5.24  | 2.07     | -0.15  | 0.37   | 1.55      | -0.94  | 0.52 | -0.46 | 0.15     | -0.09    | 0.47 |
|     |    | 192 | 6.94  | 7.81     | -9.25  | -0.95  | -0.48     | -8.53  | 0.50 | -0.55 | 0.12     | -0.17    | 0.51 |
|     |    | 147 | 4.84  | 0.06     | -9.03  | -8.28  | -0.69     | 2.50   | 0.53 | -0.36 | 0.25     | -0.09    | 0.41 |
|     |    | 145 | 4.86  | 0.55     | -5.24  | -4.68  | -4.50e-03 | -1.71  | 0.54 | -0.29 | 0.27     | -0.02    | 0.39 |
| 111 | 1  | 211 | 5.48  | 16.13    | -10.62 | 0.39   | 5.11      | -13.16 | 0.38 | -0.24 | 0.19     | -0.04    | 0.28 |
|     |    | 193 | 4.87  | 16.66    | -10.51 | -2.28  | 8.43      | -12.49 | 0.24 | -0.24 | 0.13     | -0.13    | 0.20 |
|     |    | 145 | 2.08  | -2.50    | -11.11 | -10.99 | -2.62     | 1.00   | 0.21 | -0.12 | 0.05     | 0.04     | 0.17 |
|     |    | 210 | 2.09  | 1.80     | -3.87  | -2.11  | 0.04      | -2.63  | 0.25 | -0.04 | 0.17     | 0.04     | 0.13 |
| 111 | 2  | 211 | 3.57  | 11.05    | -7.24  | 0.29   | 3.53      | -9.00  | 0.22 | -0.16 | 0.10     | -0.03    | 0.18 |
|     |    | 193 | 3.10  | 11.30    | -7.26  | -1.62  | 5.65      | -8.54  | 0.14 | -0.15 | 0.08     | -0.09    | 0.12 |
|     |    | 145 | 1.32  | -1.68    | -7.56  | -7.49  | -1.76     | 0.68   | 0.13 | -0.08 | 0.02     | 0.02     | 0.10 |
|     |    | 210 | 1.19  | 1.26     | -2.64  | -1.44  | 0.06      | -1.80  | 0.13 | -0.03 | 0.07     | 0.03     | 0.08 |

|     |    |     |       |        |         |         |        |        |       |       |       |           |           |
|-----|----|-----|-------|--------|---------|---------|--------|--------|-------|-------|-------|-----------|-----------|
| 111 | 10 | 211 | 9.81  | 10.49  | -3.78   | 3.51    | 3.20   | -7.14  | 1.32  | -0.33 | 1.08  | -0.10     | 0.58      |
|     |    | 193 | 10.83 | 10.40  | -3.46   | 1.61    | 5.33   | -6.67  | 1.37  | -0.46 | 1.07  | -0.16     | 0.67      |
|     |    | 145 | 12.17 | -0.51  | -6.20   | -4.63   | -2.08  | 2.54   | 1.87  | -0.28 | 1.64  | -0.05     | 0.65      |
|     |    | 210 | 11.48 | 1.41   | -0.27   | 1.41    | -0.27  | 0.06   | 1.80  | -0.16 | 1.69  | -0.04     | 0.47      |
| 111 | 42 | 211 | 6.41  | 10.75  | -5.53   | 1.84    | 3.37   | -8.10  | 0.74  | -0.24 | 0.57  | -0.06     | 0.37      |
|     |    | 193 | 6.75  | 10.85  | -5.41   | -0.06   | 5.50   | -7.64  | 0.73  | -0.30 | 0.56  | -0.12     | 0.39      |
|     |    | 145 | 6.44  | -1.39  | -6.64   | -6.11   | -1.91  | 1.58   | 0.94  | -0.15 | 0.80  | -0.01     | 0.37      |
|     |    | 210 | 5.86  | 0.82   | -0.99   | -0.07   | -0.10  | -0.90  | 0.92  | -0.08 | 0.85  | -4.38e-03 | 0.26      |
| 112 | 1  | 171 | 15.82 | -3.11  | -123.25 | -121.40 | -4.96  | -14.79 | 0.24  | -1.29 | -0.66 | -0.39     | 0.75      |
|     |    | 73  | 13.74 | 4.17   | -83.54  | -83.09  | 3.72   | -6.27  | 1.06  | 0.43  | 1.04  | 0.44      | 0.10      |
|     |    | 167 | 30.19 | 1.70   | -133.60 | -132.14 | 0.23   | -13.99 | 0.92  | -2.63 | 0.91  | -2.61     | 0.25      |
|     |    | 172 | 9.36  | -0.11  | -11.68  | -9.97   | -1.82  | -4.11  | 1.03  | -0.64 | -0.63 | 1.03      | 0.08      |
| 112 | 2  | 171 | 11.05 | -2.38  | -86.77  | -85.48  | -3.68  | -10.37 | 0.16  | -0.90 | -0.46 | -0.28     | 0.53      |
|     |    | 73  | 9.38  | 3.40   | -57.32  | -56.94  | 3.01   | -4.80  | 0.73  | 0.33  | 0.72  | 0.34      | 0.06      |
|     |    | 167 | 20.68 | 1.62   | -92.79  | -91.68  | 0.51   | -10.19 | 0.64  | -1.76 | 0.63  | -1.75     | 0.16      |
|     |    | 172 | 6.29  | -0.04  | -7.89   | -6.51   | -1.42  | -2.99  | 0.69  | -0.44 | -0.44 | 0.69      | 0.06      |
| 112 | 18 | 171 | 12.73 | -2.55  | -96.95  | -95.61  | -3.89  | -11.17 | 0.47  | -0.86 | -0.16 | -0.24     | 0.66      |
|     |    | 73  | 17.00 | -2.21  | -67.10  | -67.07  | -2.24  | -1.29  | 1.02  | -1.11 | 1.02  | -1.11     | -0.07     |
|     |    | 167 | 29.75 | -4.26  | -101.88 | -101.40 | -4.74  | -6.81  | 0.90  | -3.20 | 0.90  | -3.20     | 8.11e-04  |
|     |    | 172 | 6.05  | -0.65  | -17.22  | -16.24  | -1.63  | -3.91  | 0.76  | -0.19 | -0.16 | 0.73      | 0.16      |
| 112 | 50 | 171 | 11.20 | -2.46  | -91.66  | -90.35  | -3.78  | -10.75 | 0.31  | -0.88 | -0.31 | -0.26     | 0.59      |
|     |    | 73  | 12.63 | 0.64   | -61.97  | -61.81  | 0.49   | -3.11  | 0.87  | -0.36 | 0.87  | -0.36     | -4.85e-03 |
|     |    | 167 | 24.96 | -1.25  | -97.13  | -96.36  | -2.02  | -8.56  | 0.76  | -2.45 | 0.76  | -2.45     | 0.09      |
|     |    | 172 | 6.15  | -0.43  | -12.28  | -11.19  | -1.52  | -3.43  | 0.72  | -0.31 | -0.30 | 0.71      | 0.10      |
| 113 | 1  | 173 | 9.36  | -0.11  | -11.68  | -9.97   | -1.82  | 4.11   | 1.03  | -0.64 | -0.63 | 1.03      | -0.08     |
|     |    | 168 | 30.19 | 1.70   | -133.60 | -132.14 | 0.23   | 13.99  | 0.92  | -2.63 | 0.91  | -2.61     | -0.25     |
|     |    | 61  | 13.74 | 4.17   | -83.54  | -83.09  | 3.72   | 6.27   | 1.06  | 0.43  | 1.04  | 0.44      | -0.10     |
|     |    | 166 | 15.82 | -3.11  | -123.25 | -121.40 | -4.96  | 14.79  | 0.24  | -1.29 | -0.66 | -0.39     | -0.75     |
| 113 | 2  | 173 | 6.29  | -0.04  | -7.89   | -6.51   | -1.42  | 2.99   | 0.69  | -0.44 | -0.44 | 0.69      | -0.06     |
|     |    | 168 | 20.68 | 1.62   | -92.79  | -91.68  | 0.51   | 10.19  | 0.64  | -1.76 | 0.63  | -1.75     | -0.16     |
|     |    | 61  | 9.38  | 3.40   | -57.32  | -56.94  | 3.01   | 4.80   | 0.73  | 0.33  | 0.72  | 0.34      | -0.06     |
|     |    | 166 | 11.05 | -2.38  | -86.77  | -85.48  | -3.68  | 10.37  | 0.16  | -0.90 | -0.46 | -0.28     | -0.53     |
| 113 | 12 | 173 | 6.05  | -0.65  | -17.22  | -16.24  | -1.63  | 3.91   | 0.76  | -0.19 | -0.16 | 0.73      | -0.16     |
|     |    | 168 | 29.75 | -4.26  | -101.88 | -101.40 | -4.74  | 6.81   | 0.90  | -3.20 | 0.90  | -3.20     | -8.11e-04 |
|     |    | 61  | 17.00 | -2.21  | -67.10  | -67.07  | -2.24  | 1.29   | 1.02  | -1.11 | 1.02  | -1.11     | 0.07      |
|     |    | 166 | 12.73 | -2.55  | -96.95  | -95.61  | -3.89  | 11.17  | 0.47  | -0.86 | -0.16 | -0.24     | -0.66     |
| 113 | 44 | 173 | 6.15  | -0.43  | -12.28  | -11.19  | -1.52  | 3.43   | 0.72  | -0.31 | -0.30 | 0.71      | -0.10     |
|     |    | 168 | 24.96 | -1.25  | -97.13  | -96.36  | -2.02  | 8.56   | 0.76  | -2.45 | 0.76  | -2.45     | -0.09     |
|     |    | 61  | 12.63 | 0.64   | -61.97  | -61.81  | 0.49   | 3.11   | 0.87  | -0.36 | 0.87  | -0.36     | 4.85e-03  |
|     |    | 166 | 11.20 | -2.46  | -91.66  | -90.35  | -3.78  | 10.75  | 0.31  | -0.88 | -0.31 | -0.26     | -0.59     |
| 114 | 1  | 103 | 9.73  | 24.00  | -24.42  | -2.70   | 2.29   | -24.08 | -0.49 | -1.41 | -1.31 | -0.59     | 0.29      |
|     |    | 86  | 26.41 | -1.25  | -76.15  | -73.42  | -3.97  | -14.02 | 2.94  | -0.95 | 1.44  | 0.55      | 1.89      |
|     |    | 169 | 31.37 | -9.69  | -54.85  | -54.84  | -9.70  | 0.64   | 2.04  | -3.26 | 1.99  | -3.22     | 0.50      |
|     |    | 104 | 14.40 | 18.43  | -21.18  | -6.43   | 3.69   | -19.15 | 0.92  | -1.56 | -1.56 | 0.92      | -0.04     |
| 114 | 2  | 103 | 6.45  | 16.64  | -16.81  | -1.54   | 1.37   | -16.66 | -0.34 | -0.94 | -0.89 | -0.39     | 0.17      |
|     |    | 86  | 18.07 | -0.27  | -52.47  | -50.52  | -2.22  | -9.91  | 2.04  | -0.62 | 0.96  | 0.46      | 1.30      |
|     |    | 169 | 21.01 | -6.28  | -37.50  | -37.50  | -6.28  | 0.33   | 1.38  | -2.16 | 1.34  | -2.13     | 0.34      |
|     |    | 104 | 9.92  | 12.88  | -14.58  | -4.15   | 2.45   | -13.33 | 0.64  | -1.07 | -1.07 | 0.64      | -0.03     |
| 114 | 10 | 103 | 9.56  | 22.40  | -28.15  | -10.51  | 4.75   | -24.10 | -0.03 | -1.36 | -1.29 | -0.10     | 0.30      |
|     |    | 86  | 23.30 | -6.09  | -60.80  | -59.48  | -7.40  | -8.38  | 1.70  | -2.11 | 0.56  | -0.98     | 1.74      |
|     |    | 169 | 27.90 | -11.42 | -43.65  | -43.60  | -11.47 | 1.20   | 1.13  | -3.65 | 1.05  | -3.56     | 0.64      |
|     |    | 104 | 14.06 | 20.69  | -25.11  | -10.26  | 5.83   | -21.44 | 0.94  | -1.37 | -1.37 | 0.94      | -0.04     |
| 114 | 42 | 103 | 7.89  | 19.29  | -22.15  | -5.86   | 2.99   | -20.24 | -0.19 | -1.14 | -1.08 | -0.25     | 0.23      |
|     |    | 86  | 20.31 | -3.09  | -56.46  | -54.83  | -4.72  | -9.17  | 1.86  | -1.33 | 0.77  | -0.23     | 1.51      |
|     |    | 169 | 24.23 | -8.76  | -40.45  | -40.44  | -8.78  | 0.75   | 1.26  | -2.87 | 1.20  | -2.82     | 0.48      |
|     |    | 104 | 11.91 | 16.61  | -19.62  | -7.09   | 4.08   | -17.23 | 0.79  | -1.21 | -1.21 | 0.78      | -0.03     |

|     |    |     |       |        |         |         |        |        |       |       |       |           |           |
|-----|----|-----|-------|--------|---------|---------|--------|--------|-------|-------|-------|-----------|-----------|
| 115 | 1  | 106 | 14.40 | 18.43  | -21.18  | -6.43   | 3.69   | 19.15  | 0.92  | -1.56 | -1.56 | 0.92      | 0.04      |
|     |    | 170 | 31.37 | -9.69  | -54.85  | -54.84  | -9.70  | -0.64  | 2.04  | -3.26 | 1.99  | -3.22     | -0.50     |
|     |    | 74  | 26.41 | -1.25  | -76.15  | -73.42  | -3.97  | 14.02  | 2.94  | -0.95 | 1.44  | 0.55      | -1.89     |
|     |    | 109 | 9.73  | 24.00  | -24.42  | -2.70   | 2.29   | 24.08  | -0.49 | -1.41 | -1.31 | -0.59     | -0.29     |
| 115 | 2  | 106 | 9.92  | 12.88  | -14.58  | -4.15   | 2.45   | 13.33  | 0.64  | -1.07 | -1.07 | 0.64      | 0.03      |
|     |    | 170 | 21.01 | -6.28  | -37.50  | -37.50  | -6.28  | -0.33  | 1.38  | -2.16 | 1.34  | -2.13     | -0.34     |
|     |    | 74  | 18.07 | -0.27  | -52.47  | -50.52  | -2.22  | 9.91   | 2.04  | -0.62 | 0.96  | 0.46      | -1.30     |
|     |    | 109 | 6.45  | 16.64  | -16.81  | -1.54   | 1.37   | 16.66  | -0.34 | -0.94 | -0.89 | -0.39     | -0.17     |
| 115 | 4  | 106 | 14.06 | 20.69  | -25.11  | -10.26  | 5.83   | 21.44  | 0.94  | -1.37 | -1.37 | 0.94      | 0.04      |
|     |    | 170 | 27.90 | -11.42 | -43.65  | -43.60  | -11.47 | -1.20  | 1.13  | -3.65 | 1.05  | -3.56     | -0.64     |
|     |    | 74  | 23.30 | -6.09  | -60.80  | -59.48  | -7.40  | 8.38   | 1.70  | -2.11 | 0.56  | -0.98     | -1.74     |
|     |    | 109 | 9.56  | 22.40  | -28.15  | -10.51  | 4.75   | 24.10  | -0.03 | -1.36 | -1.29 | -0.10     | -0.30     |
| 115 | 36 | 106 | 11.91 | 16.61  | -19.62  | -7.09   | 4.08   | 17.23  | 0.79  | -1.21 | -1.21 | 0.78      | 0.03      |
|     |    | 170 | 24.23 | -8.76  | -40.45  | -40.44  | -8.78  | -0.75  | 1.26  | -2.87 | 1.20  | -2.82     | -0.48     |
|     |    | 74  | 20.31 | -3.09  | -56.46  | -54.83  | -4.72  | 9.17   | 1.86  | -1.33 | 0.77  | -0.23     | -1.51     |
|     |    | 109 | 7.89  | 19.29  | -22.15  | -5.86   | 2.99   | 20.24  | -0.19 | -1.14 | -1.08 | -0.25     | -0.23     |
| 116 | 1  | 86  | 13.74 | 4.17   | -83.54  | -83.09  | 3.72   | 6.27   | 1.06  | 0.43  | 1.04  | 0.44      | -0.10     |
|     |    | 171 | 15.82 | -3.11  | -123.25 | -121.40 | -4.96  | 14.79  | 0.24  | -1.29 | -0.66 | -0.39     | -0.75     |
|     |    | 172 | 9.36  | -0.11  | -11.68  | -9.97   | -1.82  | 4.11   | 1.03  | -0.64 | -0.63 | 1.03      | -0.08     |
|     |    | 169 | 30.19 | 1.70   | -133.60 | -132.14 | 0.23   | 13.99  | 0.92  | -2.63 | 0.91  | -2.61     | -0.25     |
| 116 | 2  | 86  | 9.38  | 3.40   | -57.32  | -56.94  | 3.01   | 4.80   | 0.73  | 0.33  | 0.72  | 0.34      | -0.06     |
|     |    | 171 | 11.05 | -2.38  | -86.77  | -85.48  | -3.68  | 10.37  | 0.16  | -0.90 | -0.46 | -0.28     | -0.53     |
|     |    | 172 | 6.29  | -0.04  | -7.89   | -6.51   | -1.42  | 2.99   | 0.69  | -0.44 | -0.44 | 0.69      | -0.06     |
|     |    | 169 | 20.68 | 1.62   | -92.79  | -91.68  | 0.51   | 10.19  | 0.64  | -1.76 | 0.63  | -1.75     | -0.16     |
| 116 | 9  | 86  | 17.00 | -2.21  | -67.10  | -67.07  | -2.24  | 1.29   | 1.02  | -1.11 | 1.02  | -1.11     | 0.07      |
|     |    | 171 | 12.73 | -2.55  | -96.95  | -95.61  | -3.89  | 11.17  | 0.47  | -0.86 | -0.16 | -0.24     | -0.66     |
|     |    | 172 | 6.05  | -0.65  | -17.22  | -16.24  | -1.63  | 3.91   | 0.76  | -0.19 | -0.16 | 0.73      | -0.16     |
|     |    | 169 | 29.75 | -4.26  | -101.88 | -101.40 | -4.74  | 6.81   | 0.90  | -3.20 | 0.90  | -3.20     | -8.11e-04 |
| 116 | 41 | 86  | 12.63 | 0.64   | -61.97  | -61.81  | 0.49   | 3.11   | 0.87  | -0.36 | 0.87  | -0.36     | 4.85e-03  |
|     |    | 171 | 11.20 | -2.46  | -91.66  | -90.35  | -3.78  | 10.75  | 0.31  | -0.88 | -0.31 | -0.26     | -0.59     |
|     |    | 172 | 6.15  | -0.43  | -12.28  | -11.19  | -1.52  | 3.43   | 0.72  | -0.31 | -0.30 | 0.71      | -0.10     |
|     |    | 169 | 24.96 | -1.25  | -97.13  | -96.36  | -2.02  | 8.56   | 0.76  | -2.45 | 0.76  | -2.45     | -0.09     |
| 117 | 1  | 170 | 30.19 | 1.70   | -133.60 | -132.14 | 0.23   | -13.99 | 0.92  | -2.63 | 0.91  | -2.61     | 0.25      |
|     |    | 173 | 9.36  | -0.11  | -11.68  | -9.97   | -1.82  | -4.11  | 1.03  | -0.64 | -0.63 | 1.03      | 0.08      |
|     |    | 166 | 15.82 | -3.11  | -123.25 | -121.40 | -4.96  | -14.79 | 0.24  | -1.29 | -0.66 | -0.39     | 0.75      |
|     |    | 74  | 13.74 | 4.17   | -83.54  | -83.09  | 3.72   | -6.27  | 1.06  | 0.43  | 1.04  | 0.44      | 0.10      |
| 117 | 2  | 170 | 20.68 | 1.62   | -92.79  | -91.68  | 0.51   | -10.19 | 0.64  | -1.76 | 0.63  | -1.75     | 0.16      |
|     |    | 173 | 6.29  | -0.04  | -7.89   | -6.51   | -1.42  | -2.99  | 0.69  | -0.44 | -0.44 | 0.69      | 0.06      |
|     |    | 166 | 11.05 | -2.38  | -86.77  | -85.48  | -3.68  | -10.37 | 0.16  | -0.90 | -0.46 | -0.28     | 0.53      |
|     |    | 74  | 9.38  | 3.40   | -57.32  | -56.94  | 3.01   | -4.80  | 0.73  | 0.33  | 0.72  | 0.34      | 0.06      |
| 117 | 3  | 170 | 29.75 | -4.26  | -101.88 | -101.40 | -4.74  | -6.81  | 0.90  | -3.20 | 0.90  | -3.20     | 8.11e-04  |
|     |    | 173 | 6.05  | -0.65  | -17.22  | -16.24  | -1.63  | -3.91  | 0.76  | -0.19 | -0.16 | 0.73      | 0.16      |
|     |    | 166 | 12.73 | -2.55  | -96.95  | -95.61  | -3.89  | -11.17 | 0.47  | -0.86 | -0.16 | -0.24     | 0.66      |
|     |    | 74  | 17.00 | -2.21  | -67.10  | -67.07  | -2.24  | -1.29  | 1.02  | -1.11 | 1.02  | -1.11     | -0.07     |
| 117 | 35 | 170 | 24.96 | -1.25  | -97.13  | -96.36  | -2.02  | -8.56  | 0.76  | -2.45 | 0.76  | -2.45     | 0.09      |
|     |    | 173 | 6.15  | -0.43  | -12.28  | -11.19  | -1.52  | -3.43  | 0.72  | -0.31 | -0.30 | 0.71      | 0.10      |
|     |    | 166 | 11.20 | -2.46  | -91.66  | -90.35  | -3.78  | -10.75 | 0.31  | -0.88 | -0.31 | -0.26     | 0.59      |
|     |    | 74  | 12.63 | 0.64   | -61.97  | -61.81  | 0.49   | -3.11  | 0.87  | -0.36 | 0.87  | -0.36     | -4.85e-03 |
| 118 | 1  | 205 | 12.57 | 58.56  | -14.16  | 46.21   | -1.82  | -27.30 | 0.74  | -0.49 | -0.42 | 0.67      | 0.29      |
|     |    | 181 | 4.31  | -8.56  | -31.80  | -18.67  | -21.69 | 11.52  | 0.05  | -0.41 | -0.33 | -0.02     | -0.17     |
|     |    | 173 | 17.24 | 25.61  | -32.03  | -31.98  | 25.55  | 1.73   | 0.48  | -1.83 | -1.70 | 0.35      | 0.53      |
|     |    | 170 | 17.71 | -39.20 | -108.42 | -81.03  | -66.58 | 33.85  | 0.58  | -1.56 | 0.41  | -1.39     | 0.58      |
| 118 | 2  | 205 | 8.68  | 40.32  | -9.68   | 31.91   | -1.28  | -18.70 | 0.49  | -0.37 | -0.32 | 0.44      | 0.19      |
|     |    | 181 | 2.99  | -5.96  | -21.98  | -13.07  | -14.87 | 7.96   | 0.04  | -0.30 | -0.25 | -8.66e-03 | -0.11     |
|     |    | 173 | 12.08 | 17.56  | -21.84  | -21.81  | 17.52  | 1.12   | 0.33  | -1.30 | -1.21 | 0.24      | 0.38      |
|     |    | 170 | 12.03 | -27.13 | -74.80  | -56.30  | -45.63 | 23.23  | 0.41  | -1.05 | 0.30  | -0.94     | 0.39      |

|     |    |     |       |        |         |        |        |        |       |           |          |           |           |
|-----|----|-----|-------|--------|---------|--------|--------|--------|-------|-----------|----------|-----------|-----------|
| 118 | 4  | 205 | 6.20  | 38.90  | -9.04   | 35.85  | -5.99  | -11.69 | 0.32  | -0.17     | 0.03     | 0.12      | 0.24      |
|     |    | 181 | 5.28  | 1.50   | -30.22  | -9.13  | -19.59 | 14.97  | 0.28  | -0.19     | 0.10     | -7.34e-03 | -0.23     |
|     |    | 173 | 13.34 | 14.25  | -32.82  | -31.37 | 12.80  | 8.13   | 0.36  | -1.33     | -1.21    | 0.24      | 0.43      |
|     |    | 170 | 15.96 | -26.89 | -89.32  | -65.86 | -50.35 | 30.24  | 0.51  | -1.47     | 0.30     | -1.26     | 0.61      |
| 118 | 36 | 205 | 7.45  | 39.29  | -9.03   | 33.81  | -3.55  | -15.32 | 0.37  | -0.24     | -0.15    | 0.28      | 0.21      |
|     |    | 181 | 4.00  | -2.43  | -25.88  | -11.17 | -17.14 | 11.34  | 0.13  | -0.22     | -0.08    | -8.03e-03 | -0.17     |
|     |    | 173 | 12.67 | 15.73  | -26.89  | -26.41 | 15.25  | 4.50   | 0.34  | -1.31     | -1.21    | 0.24      | 0.40      |
|     |    | 170 | 13.91 | -27.01 | -81.79  | -60.90 | -47.90 | 26.60  | 0.45  | -1.25     | 0.30     | -1.09     | 0.50      |
| 119 | 1  | 208 | 12.57 | 58.56  | -14.16  | 46.21  | -1.82  | -27.30 | 0.49  | -0.74     | 0.42     | -0.67     | -0.29     |
|     |    | 180 | 4.31  | -8.56  | -31.80  | -18.67 | -21.69 | 11.52  | 0.41  | -0.05     | 0.33     | 0.02      | 0.17      |
|     |    | 172 | 17.24 | 25.61  | -32.03  | -31.98 | 25.55  | 1.73   | 1.83  | -0.48     | 1.70     | -0.35     | -0.53     |
|     |    | 169 | 17.71 | -39.20 | -108.42 | -81.03 | -66.58 | 33.85  | 1.56  | -0.58     | -0.41    | 1.39      | -0.58     |
| 119 | 2  | 208 | 8.68  | 40.32  | -9.68   | 31.91  | -1.28  | -18.70 | 0.37  | -0.49     | 0.32     | -0.44     | -0.19     |
|     |    | 180 | 2.99  | -5.96  | -21.98  | -13.07 | -14.87 | 7.96   | 0.30  | -0.04     | 0.25     | 8.66e-03  | 0.11      |
|     |    | 172 | 12.08 | 17.56  | -21.84  | -21.81 | 17.52  | 1.12   | 1.30  | -0.33     | 1.21     | -0.24     | -0.38     |
|     |    | 169 | 12.03 | -27.13 | -74.80  | -56.30 | -45.63 | 23.23  | 1.05  | -0.41     | -0.30    | 0.94      | -0.39     |
| 119 | 10 | 208 | 6.20  | 38.90  | -9.04   | 35.85  | -5.99  | -11.69 | 0.17  | -0.32     | -0.03    | -0.12     | -0.24     |
|     |    | 180 | 5.28  | 1.50   | -30.22  | -9.13  | -19.59 | 14.97  | 0.19  | -0.28     | -0.10    | 7.34e-03  | 0.23      |
|     |    | 172 | 13.34 | 14.25  | -32.82  | -31.37 | 12.80  | 8.13   | 1.33  | -0.36     | 1.21     | -0.24     | -0.43     |
|     |    | 169 | 15.96 | -26.89 | -89.32  | -65.86 | -50.35 | 30.24  | 1.47  | -0.51     | -0.30    | 1.26      | -0.61     |
| 119 | 42 | 208 | 7.45  | 39.29  | -9.03   | 33.81  | -3.55  | -15.32 | 0.24  | -0.37     | 0.15     | -0.28     | -0.21     |
|     |    | 180 | 4.00  | -2.43  | -25.88  | -11.17 | -17.14 | 11.34  | 0.22  | -0.13     | 0.08     | 8.03e-03  | 0.17      |
|     |    | 172 | 12.67 | 15.73  | -26.89  | -26.41 | 15.25  | 4.50   | 1.31  | -0.34     | 1.21     | -0.24     | -0.40     |
|     |    | 169 | 13.91 | -27.01 | -81.79  | -60.90 | -47.90 | 26.60  | 1.25  | -0.45     | -0.30    | 1.09      | -0.50     |
| 120 | 1  | 206 | 2.61  | 9.99   | -0.51   | 9.58   | -0.10  | 2.02   | 0.08  | -0.27     | -0.01    | -0.18     | 0.16      |
|     |    | 111 | 3.21  | 4.05   | -0.96   | 1.88   | 1.21   | 2.48   | 0.28  | -0.30     | -0.25    | 0.22      | 0.16      |
|     |    | 175 | 3.79  | 16.56  | -13.39  | -0.79  | 3.96   | 14.78  | -0.06 | -0.28     | -0.16    | -0.19     | 0.11      |
|     |    | 209 | 6.11  | 14.94  | -18.65  | -1.06  | -2.64  | 16.78  | 0.38  | -0.29     | -0.13    | 0.22      | 0.29      |
| 120 | 2  | 206 | 1.87  | 6.66   | -0.38   | 6.37   | -0.09  | 1.41   | 0.09  | -0.17     | 0.03     | -0.12     | 0.10      |
|     |    | 111 | 1.95  | 2.69   | -0.82   | 1.08   | 0.79   | 1.75   | 0.19  | -0.15     | -0.11    | 0.15      | 0.10      |
|     |    | 175 | 2.49  | 11.34  | -9.02   | -0.51  | 2.84   | 10.04  | -0.03 | -0.18     | -0.07    | -0.13     | 0.07      |
|     |    | 209 | 4.02  | 10.28  | -12.75  | -0.71  | -1.76  | 11.50  | 0.26  | -0.16     | -0.05    | 0.15      | 0.18      |
| 120 | 11 | 206 | 13.19 | 10.50  | -0.26   | 10.50  | -0.26  | -0.30  | -0.35 | -2.18     | -2.18    | -0.36     | 0.04      |
|     |    | 111 | 14.75 | 5.21   | 0.62    | 5.21   | 0.62   | 0.04   | 0.08  | -2.33     | -2.32    | 0.07      | 0.17      |
|     |    | 175 | 9.40  | 11.46  | -5.24   | 3.55   | 2.67   | 8.34   | -0.08 | -1.50     | -1.37    | -0.21     | 0.42      |
|     |    | 209 | 9.49  | 10.86  | -9.44   | 3.36   | -1.93  | 9.80   | 0.03  | -1.47     | -1.35    | -0.09     | 0.41      |
| 120 | 43 | 206 | 6.48  | 8.40   | -0.21   | 8.36   | -0.17  | 0.59   | -0.22 | -1.04     | -1.03    | -0.23     | 0.07      |
|     |    | 111 | 7.79  | 3.39   | 0.38    | 3.07   | 0.71   | 0.93   | 0.13  | -1.19     | -1.18    | 0.11      | 0.14      |
|     |    | 175 | 5.50  | 11.35  | -7.15   | 1.45   | 2.75   | 9.22   | -0.08 | -0.79     | -0.70    | -0.17     | 0.24      |
|     |    | 209 | 6.27  | 10.50  | -11.09  | 1.25   | -1.84  | 10.69  | 0.13  | -0.78     | -0.68    | 0.03      | 0.29      |
| 121 | 1  | 207 | 2.07  | 13.95  | -0.27   | 13.06  | 0.62   | -3.45  | 0.07  | -0.13     | -0.02    | -0.05     | -0.10     |
|     |    | 179 | 3.76  | 25.76  | 1.60    | 25.75  | 1.61   | 0.59   | 0.21  | -0.01     | 0.21     | -0.01     | -0.01     |
|     |    | 180 | 5.95  | 0.42   | -12.57  | -0.10  | -12.04 | -2.56  | 0.62  | -0.32     | 0.62     | -0.31     | -0.05     |
|     |    | 208 | 6.62  | 10.99  | -19.27  | -3.90  | -4.39  | -15.13 | 0.40  | -0.37     | 4.02e-03 | 0.03      | -0.38     |
| 121 | 2  | 207 | 1.55  | 9.43   | -0.22   | 8.79   | 0.42   | -2.40  | 0.07  | -0.07     | 0.03     | -0.03     | -0.06     |
|     |    | 179 | 2.75  | 17.54  | 1.10    | 17.53  | 1.11   | 0.41   | 0.17  | -7.89e-03 | 0.17     | -7.41e-03 | -9.31e-03 |
|     |    | 180 | 4.18  | 0.22   | -8.67   | -0.15  | -8.31  | -1.77  | 0.45  | -0.21     | 0.45     | -0.21     | -0.03     |
|     |    | 208 | 4.43  | 7.51   | -13.23  | -2.73  | -2.98  | -10.37 | 0.28  | -0.22     | 0.03     | 0.02      | -0.25     |
| 121 | 16 | 207 | 5.98  | 10.02  | -1.76   | 7.76   | 0.50   | -4.64  | 0.93  | 0.21      | 0.93     | 0.21      | -0.06     |
|     |    | 179 | 8.50  | 16.72  | 0.98    | 16.50  | 1.19   | -1.83  | 1.12  | -0.05     | 1.07     | 2.09e-04  | -0.24     |
|     |    | 180 | 7.97  | -0.80  | -10.39  | -2.97  | -8.22  | -4.02  | 1.03  | -0.32     | 0.91     | -0.20     | -0.39     |
|     |    | 208 | 6.67  | 8.46   | -16.91  | -5.56  | -2.90  | -12.62 | 0.80  | -0.04     | 0.50     | 0.26      | -0.40     |
| 121 | 48 | 207 | 3.58  | 9.61   | -0.86   | 8.29   | 0.46   | -3.48  | 0.47  | 0.08      | 0.46     | 0.09      | -0.06     |
|     |    | 179 | 5.47  | 17.06  | 1.12    | 17.04  | 1.15   | -0.67  | 0.63  | -0.03     | 0.61     | -3.76e-03 | -0.12     |
|     |    | 180 | 5.83  | -0.47  | -9.31   | -1.51  | -8.26  | -2.85  | 0.72  | -0.25     | 0.67     | -0.20     | -0.20     |
|     |    | 208 | 5.43  | 7.95   | -14.98  | -4.09  | -2.94  | -11.45 | 0.53  | -0.13     | 0.26     | 0.14      | -0.32     |

|     |    |     |       |       |        |        |        |        |          |       |           |           |          |
|-----|----|-----|-------|-------|--------|--------|--------|--------|----------|-------|-----------|-----------|----------|
| 122 | 1  | 202 | 2.61  | 9.99  | -0.51  | 9.58   | -0.10  | 2.02   | 0.27     | -0.08 | 0.01      | 0.18      | -0.16    |
|     |    | 113 | 3.21  | 4.05  | -0.96  | 1.88   | 1.21   | 2.48   | 0.30     | -0.28 | 0.25      | -0.22     | -0.16    |
|     |    | 174 | 3.79  | 16.56 | -13.39 | -0.79  | 3.96   | 14.78  | 0.28     | 0.06  | 0.16      | 0.19      | -0.11    |
|     |    | 203 | 6.11  | 14.94 | -18.65 | -1.06  | -2.64  | 16.78  | 0.29     | -0.38 | 0.13      | -0.22     | -0.29    |
| 122 | 2  | 202 | 1.87  | 6.66  | -0.38  | 6.37   | -0.09  | 1.41   | 0.17     | -0.09 | -0.03     | 0.12      | -0.10    |
|     |    | 113 | 1.95  | 2.69  | -0.82  | 1.08   | 0.79   | 1.75   | 0.15     | -0.19 | 0.11      | -0.15     | -0.10    |
|     |    | 174 | 2.49  | 11.34 | -9.02  | -0.51  | 2.84   | 10.04  | 0.18     | 0.03  | 0.07      | 0.13      | -0.07    |
|     |    | 203 | 4.02  | 10.28 | -12.75 | -0.71  | -1.76  | 11.50  | 0.16     | -0.26 | 0.05      | -0.15     | -0.18    |
| 122 | 17 | 202 | 13.19 | 10.50 | -0.26  | 10.50  | -0.26  | -0.30  | 2.18     | 0.35  | 2.18      | 0.36      | -0.04    |
|     |    | 113 | 14.75 | 5.21  | 0.62   | 5.21   | 0.62   | 0.04   | 2.33     | -0.08 | 2.32      | -0.07     | -0.17    |
|     |    | 174 | 9.40  | 11.46 | -5.24  | 3.55   | 2.67   | 8.34   | 1.50     | 0.08  | 1.37      | 0.21      | -0.42    |
|     |    | 203 | 9.49  | 10.86 | -9.44  | 3.36   | -1.93  | 9.80   | 1.47     | -0.03 | 1.35      | 0.09      | -0.41    |
| 122 | 49 | 202 | 6.48  | 8.40  | -0.21  | 8.36   | -0.17  | 0.59   | 1.04     | 0.22  | 1.03      | 0.23      | -0.07    |
|     |    | 113 | 7.79  | 3.39  | 0.38   | 3.07   | 0.71   | 0.93   | 1.19     | -0.13 | 1.18      | -0.11     | -0.14    |
|     |    | 174 | 5.50  | 11.35 | -7.15  | 1.45   | 2.75   | 9.22   | 0.79     | 0.08  | 0.70      | 0.17      | -0.24    |
|     |    | 203 | 6.27  | 10.50 | -11.09 | 1.25   | -1.84  | 10.69  | 0.78     | -0.13 | 0.68      | -0.03     | -0.29    |
| 123 | 1  | 204 | 2.07  | 13.95 | -0.27  | 13.06  | 0.62   | -3.45  | 0.13     | -0.07 | 0.02      | 0.05      | 0.10     |
|     |    | 178 | 3.76  | 25.76 | 1.60   | 25.75  | 1.61   | 0.59   | 0.01     | -0.21 | -0.21     | 0.01      | 0.01     |
|     |    | 181 | 5.95  | 0.42  | -12.57 | -0.10  | -12.04 | -2.56  | 0.32     | -0.62 | -0.62     | 0.31      | 0.05     |
|     |    | 205 | 6.62  | 10.99 | -19.27 | -3.90  | -4.39  | -15.13 | 0.37     | -0.40 | -4.02e-03 | -0.03     | 0.38     |
| 123 | 2  | 204 | 1.55  | 9.43  | -0.22  | 8.79   | 0.42   | -2.40  | 0.07     | -0.07 | -0.03     | 0.03      | 0.06     |
|     |    | 178 | 2.75  | 17.54 | 1.10   | 17.53  | 1.11   | 0.41   | 7.89e-03 | -0.17 | -0.17     | 7.41e-03  | 9.31e-03 |
|     |    | 181 | 4.18  | 0.22  | -8.67  | -0.15  | -8.31  | -1.77  | 0.21     | -0.45 | -0.45     | 0.21      | 0.03     |
|     |    | 205 | 4.43  | 7.51  | -13.23 | -2.73  | -2.98  | -10.37 | 0.22     | -0.28 | -0.03     | -0.02     | 0.25     |
| 123 | 14 | 204 | 5.98  | 10.02 | -1.76  | 7.76   | 0.50   | -4.64  | -0.21    | -0.93 | -0.93     | -0.21     | 0.06     |
|     |    | 178 | 8.50  | 16.72 | 0.98   | 16.50  | 1.19   | -1.83  | 0.05     | -1.12 | -1.07     | -2.09e-04 | 0.24     |
|     |    | 181 | 7.97  | -0.80 | -10.39 | -2.97  | -8.22  | -4.02  | 0.32     | -1.03 | -0.91     | 0.20      | 0.39     |
|     |    | 205 | 6.67  | 8.46  | -16.91 | -5.56  | -2.90  | -12.62 | 0.04     | -0.80 | -0.50     | -0.26     | 0.40     |
| 123 | 46 | 204 | 3.58  | 9.61  | -0.86  | 8.29   | 0.46   | -3.48  | -0.08    | -0.47 | -0.46     | -0.09     | 0.06     |
|     |    | 178 | 5.47  | 17.06 | 1.12   | 17.04  | 1.15   | -0.67  | 0.03     | -0.63 | -0.61     | 3.76e-03  | 0.12     |
|     |    | 181 | 5.83  | -0.47 | -9.31  | -1.51  | -8.26  | -2.85  | 0.25     | -0.72 | -0.67     | 0.20      | 0.20     |
|     |    | 205 | 5.43  | 7.95  | -14.98 | -4.09  | -2.94  | -11.45 | 0.13     | -0.53 | -0.26     | -0.14     | 0.32     |
| 124 | 1  | 103 | 6.50  | 26.86 | 6.56   | 8.78   | 24.63  | 6.34   | 0.34     | -0.51 | 0.19      | -0.36     | -0.32    |
|     |    | 104 | 5.46  | 33.42 | 2.42   | 9.51   | 26.33  | 13.02  | 0.29     | -0.32 | 0.29      | -0.32     | 3.18e-03 |
|     |    | 176 | 6.12  | 22.33 | -16.06 | -0.75  | 7.03   | 18.80  | 0.68     | -0.02 | 0.67      | -7.05e-03 | -0.09    |
|     |    | 182 | 7.22  | 24.24 | -25.59 | 0.33   | -1.68  | 24.89  | 0.65     | -0.05 | 0.59      | 0.01      | -0.20    |
| 124 | 2  | 103 | 4.22  | 18.06 | 4.34   | 5.90   | 16.50  | 4.36   | 0.20     | -0.33 | 0.11      | -0.24     | -0.20    |
|     |    | 104 | 3.65  | 22.59 | 1.64   | 6.42   | 17.81  | 8.79   | 0.18     | -0.22 | 0.18      | -0.22     | 5.13e-03 |
|     |    | 176 | 4.00  | 15.59 | -11.03 | -0.59  | 5.15   | 13.00  | 0.42     | -0.01 | 0.41      | -3.02e-03 | -0.06    |
|     |    | 182 | 4.73  | 16.82 | -17.30 | 0.17   | -0.65  | 17.05  | 0.40     | -0.03 | 0.36      | 8.85e-03  | -0.12    |
| 124 | 7  | 103 | 6.31  | 20.87 | 1.05   | 3.93   | 17.99  | 6.99   | 0.34     | -0.53 | 0.02      | -0.22     | -0.42    |
|     |    | 104 | 4.95  | 25.50 | -1.74  | 4.45   | 19.30  | 11.42  | 0.17     | -0.28 | 0.09      | -0.20     | -0.18    |
|     |    | 176 | 13.68 | 20.42 | -11.08 | 2.70   | 6.64   | 15.63  | 2.12     | -0.02 | 2.08      | 0.02      | -0.27    |
|     |    | 182 | 13.92 | 21.87 | -17.58 | 3.45   | 0.84   | 19.68  | 2.10     | -0.04 | 2.03      | 0.03      | -0.38    |
| 124 | 41 | 103 | 5.23  | 19.74 | 4.76   | 7.38   | 17.13  | 5.69   | 0.27     | -0.44 | 0.06      | -0.22     | -0.33    |
|     |    | 104 | 4.15  | 24.58 | 1.76   | 7.90   | 18.44  | 10.12  | 0.15     | -0.23 | 0.12      | -0.20     | -0.11    |
|     |    | 176 | 8.51  | 17.80 | -11.30 | 0.72   | 5.78   | 14.33  | 1.20     | -0.02 | 1.17      | 0.02      | -0.20    |
|     |    | 182 | 8.95  | 19.12 | -17.67 | 1.47   | -0.02  | 18.38  | 1.19     | -0.04 | 1.12      | 0.03      | -0.29    |
| 125 | 1  | 135 | 13.60 | 5.36  | -42.27 | -18.35 | -18.56 | 23.82  | 0.47     | -1.49 | 0.13      | -1.16     | -0.74    |
|     |    | 103 | 9.80  | 31.98 | -3.60  | 15.80  | 12.58  | 17.72  | 0.44     | -0.84 | 0.05      | -0.45     | -0.58    |
|     |    | 182 | 4.54  | 10.83 | -8.35  | -3.65  | 6.13   | 8.25   | 0.57     | 0.07  | 0.53      | 0.11      | -0.14    |
|     |    | 183 | 4.82  | 11.35 | -18.96 | 10.27  | -17.89 | 5.61   | 0.29     | -0.13 | -0.07     | 0.24      | -0.14    |
| 125 | 2  | 135 | 8.81  | 4.06  | -29.53 | -12.96 | -12.51 | 16.80  | 0.29     | -0.95 | 0.10      | -0.76     | -0.45    |
|     |    | 103 | 6.36  | 21.80 | -2.69  | 10.79  | 8.32   | 12.18  | 0.26     | -0.55 | 0.02      | -0.31     | -0.36    |
|     |    | 182 | 2.87  | 7.78  | -5.80  | -2.58  | 4.56   | 5.78   | 0.35     | 0.05  | 0.32      | 0.07      | -0.08    |
|     |    | 183 | 3.24  | 7.73  | -12.74 | 6.99   | -12.00 | 3.80   | 0.19     | -0.09 | -0.06     | 0.17      | -0.08    |

|     |    |     |       |       |        |        |        |       |      |       |           |       |       |
|-----|----|-----|-------|-------|--------|--------|--------|-------|------|-------|-----------|-------|-------|
| 125 | 9  | 135 | 19.18 | 4.44  | -28.93 | -12.72 | -11.78 | 16.68 | 1.14 | -2.01 | 0.11      | -0.98 | -1.48 |
|     |    | 103 | 14.93 | 22.14 | -2.06  | 11.02  | 9.06   | 12.06 | 1.12 | -1.34 | 0.03      | -0.26 | -1.22 |
|     |    | 182 | 9.94  | 8.92  | -3.54  | 0.08   | 5.29   | 5.66  | 1.38 | -0.22 | 1.04      | 0.13  | -0.66 |
|     |    | 183 | 9.94  | 10.29 | -11.90 | 9.66   | -11.27 | 3.68  | 1.21 | -0.62 | 0.65      | -0.06 | -0.84 |
| 125 | 41 | 135 | 13.72 | 4.24  | -29.25 | -12.85 | -12.17 | 16.74 | 0.68 | -1.44 | 0.10      | -0.87 | -0.94 |
|     |    | 103 | 10.43 | 21.96 | -2.39  | 10.90  | 8.67   | 12.12 | 0.66 | -0.92 | 0.03      | -0.29 | -0.78 |
|     |    | 182 | 6.24  | 8.31  | -4.70  | -1.30  | 4.90   | 5.72  | 0.84 | -0.08 | 0.67      | 0.10  | -0.36 |
|     |    | 183 | 5.46  | 8.96  | -12.34 | 8.28   | -11.66 | 3.74  | 0.63 | -0.29 | 0.29      | 0.06  | -0.45 |
| 126 | 1  | 133 | 8.08  | -5.83 | -28.84 | -21.23 | -13.43 | 10.83 | 0.34 | -0.97 | 0.32      | -0.95 | -0.16 |
|     |    | 135 | 13.11 | 6.78  | -45.05 | -21.93 | -16.33 | 25.76 | 0.47 | -1.36 | 0.26      | -1.14 | -0.58 |
|     |    | 183 | 4.07  | 10.55 | -15.51 | 10.52  | -15.47 | -1.00 | 0.32 | -0.18 | -0.03     | 0.18  | -0.23 |
|     |    | 184 | 6.49  | 9.08  | -31.26 | 1.87   | -24.04 | 15.46 | 0.28 | -0.40 | -0.01     | -0.11 | -0.34 |
| 126 | 2  | 133 | 5.12  | -3.65 | -20.24 | -15.05 | -8.84  | 7.69  | 0.23 | -0.59 | 0.23      | -0.58 | -0.06 |
|     |    | 135 | 8.47  | 4.89  | -31.25 | -15.45 | -10.91 | 17.92 | 0.30 | -0.86 | 0.18      | -0.74 | -0.34 |
|     |    | 183 | 2.72  | 7.17  | -10.41 | 7.16   | -10.40 | -0.49 | 0.21 | -0.12 | -0.03     | 0.12  | -0.14 |
|     |    | 184 | 4.20  | 6.19  | -21.20 | 1.15   | -16.16 | 10.61 | 0.18 | -0.24 | 6.67e-03  | -0.07 | -0.21 |
| 126 | 7  | 133 | 14.68 | -8.68 | -28.63 | -25.78 | -11.53 | 6.98  | 0.96 | -1.55 | 0.33      | -0.93 | -1.08 |
|     |    | 135 | 18.68 | -1.57 | -38.21 | -26.18 | -13.60 | 17.21 | 1.15 | -1.83 | 0.29      | -0.97 | -1.35 |
|     |    | 183 | 11.52 | 10.30 | -13.15 | 10.24  | -13.09 | -1.20 | 1.08 | -1.02 | 0.17      | -0.11 | -1.04 |
|     |    | 184 | 13.41 | 7.89  | -22.51 | 4.23   | -18.85 | 9.90  | 1.06 | -1.26 | 0.20      | -0.41 | -1.12 |
| 126 | 39 | 133 | 9.34  | -6.26 | -24.08 | -20.21 | -10.13 | 7.35  | 0.52 | -0.99 | 0.28      | -0.75 | -0.55 |
|     |    | 135 | 13.30 | 1.67  | -34.48 | -20.61 | -12.21 | 17.58 | 0.68 | -1.30 | 0.23      | -0.85 | -0.83 |
|     |    | 183 | 6.44  | 8.68  | -11.72 | 8.64   | -11.69 | -0.83 | 0.61 | -0.54 | 0.06      | 0.01  | -0.57 |
|     |    | 184 | 8.52  | 6.95  | -21.77 | 2.63   | -17.45 | 10.27 | 0.60 | -0.73 | 0.10      | -0.23 | -0.65 |
| 127 | 1  | 131 | 5.38  | -6.77 | -13.23 | -8.47  | -11.53 | 2.85  | 0.27 | -0.62 | 0.27      | -0.62 | 0.04  |
|     |    | 133 | 8.34  | -3.92 | -31.29 | -20.19 | -15.03 | 13.44 | 0.36 | -0.97 | 0.33      | -0.94 | -0.21 |
|     |    | 184 | 4.11  | 2.49  | -22.24 | 1.45   | -21.20 | 4.96  | 0.23 | -0.34 | -4.90e-03 | -0.10 | -0.28 |
|     |    | 185 | 5.43  | 4.23  | -30.50 | -6.09  | -20.18 | 15.87 | 0.21 | -0.38 | 0.07      | -0.24 | -0.25 |
| 127 | 2  | 131 | 3.28  | -4.66 | -9.10  | -6.28  | -7.47  | 2.14  | 0.20 | -0.35 | 0.19      | -0.34 | 0.07  |
|     |    | 133 | 5.25  | -2.48 | -21.77 | -14.34 | -9.92  | 9.39  | 0.24 | -0.58 | 0.23      | -0.57 | -0.09 |
|     |    | 184 | 2.62  | 1.70  | -15.07 | 0.87   | -14.24 | 3.63  | 0.15 | -0.20 | 9.81e-03  | -0.06 | -0.17 |
|     |    | 185 | 3.50  | 2.88  | -20.72 | -4.36  | -13.48 | 10.89 | 0.14 | -0.22 | 0.07      | -0.14 | -0.15 |
| 127 | 7  | 131 | 10.12 | -9.77 | -14.69 | -13.90 | -10.56 | 1.80  | 0.72 | -1.15 | 0.25      | -0.67 | -0.81 |
|     |    | 133 | 14.16 | -7.38 | -27.58 | -21.96 | -13.01 | 9.05  | 0.88 | -1.51 | 0.28      | -0.91 | -1.03 |
|     |    | 184 | 12.27 | 3.79  | -17.84 | 3.27   | -17.33 | 3.30  | 0.85 | -1.41 | -0.16     | -0.40 | -1.12 |
|     |    | 185 | 12.67 | 3.56  | -22.10 | -1.97  | -16.57 | 10.55 | 0.77 | -1.34 | -0.10     | -0.47 | -1.04 |
| 127 | 39 | 131 | 5.57  | -7.41 | -11.49 | -9.95  | -8.95  | 1.98  | 0.37 | -0.65 | 0.22      | -0.50 | -0.36 |
|     |    | 133 | 9.26  | -4.90 | -24.50 | -18.01 | -11.40 | 9.23  | 0.50 | -0.98 | 0.26      | -0.74 | -0.55 |
|     |    | 184 | 7.17  | 2.68  | -16.38 | 2.03   | -15.72 | 3.47  | 0.48 | -0.78 | -0.07     | -0.23 | -0.63 |
|     |    | 185 | 7.87  | 3.14  | -21.31 | -3.21  | -14.96 | 10.72 | 0.44 | -0.75 | -0.01     | -0.30 | -0.58 |
| 128 | 1  | 129 | 4.48  | 4.16  | -10.54 | 4.16   | -10.53 | -0.29 | 0.20 | -0.41 | 0.19      | -0.39 | 0.10  |
|     |    | 131 | 5.50  | -4.84 | -15.45 | -7.69  | -12.60 | 4.70  | 0.27 | -0.62 | 0.27      | -0.62 | -0.03 |
|     |    | 185 | 3.27  | -4.01 | -21.15 | -6.16  | -19.00 | 5.68  | 0.16 | -0.32 | 0.06      | -0.22 | -0.19 |
|     |    | 186 | 4.12  | 0.05  | -26.55 | -10.04 | -16.46 | 12.91 | 0.16 | -0.30 | 0.10      | -0.24 | -0.15 |
| 128 | 2  | 129 | 2.63  | 2.42  | -6.75  | 2.42   | -6.75  | -0.08 | 0.16 | -0.20 | 0.14      | -0.18 | 0.09  |
|     |    | 131 | 3.32  | -3.44 | -10.50 | -5.75  | -8.19  | 3.31  | 0.19 | -0.35 | 0.19      | -0.35 | 0.02  |
|     |    | 185 | 2.08  | -2.71 | -14.39 | -4.41  | -12.68 | 4.13  | 0.11 | -0.18 | 0.07      | -0.13 | -0.11 |
|     |    | 186 | 2.70  | 0.02  | -18.03 | -7.12  | -10.89 | 8.83  | 0.12 | -0.17 | 0.09      | -0.14 | -0.09 |
| 128 | 7  | 129 | 7.87  | -0.72 | -9.18  | -0.73  | -9.17  | -0.38 | 0.54 | -0.87 | 0.15      | -0.48 | -0.63 |
|     |    | 131 | 9.78  | -6.63 | -12.89 | -8.90  | -10.61 | 3.01  | 0.67 | -1.14 | 0.21      | -0.68 | -0.79 |
|     |    | 185 | 10.45 | -1.22 | -16.15 | -2.28  | -15.10 | 3.82  | 0.56 | -1.32 | -0.30     | -0.46 | -0.93 |
|     |    | 186 | 10.09 | 0.34  | -18.63 | -4.98  | -13.31 | 8.53  | 0.47 | -1.18 | -0.27     | -0.44 | -0.82 |
| 128 | 39 | 129 | 4.27  | 0.91  | -7.92  | 0.91   | -7.91  | -0.22 | 0.25 | -0.44 | 0.14      | -0.33 | -0.25 |
|     |    | 131 | 5.60  | -4.97 | -11.64 | -7.27  | -9.35  | 3.17  | 0.36 | -0.66 | 0.20      | -0.50 | -0.37 |
|     |    | 185 | 5.95  | -2.04 | -15.18 | -3.38  | -13.84 | 3.98  | 0.31 | -0.71 | -0.11     | -0.29 | -0.51 |
|     |    | 186 | 6.11  | 0.11  | -18.25 | -6.09  | -12.05 | 8.68  | 0.27 | -0.63 | -0.08     | -0.28 | -0.44 |

|     |    |     |      |        |        |        |        |       |       |       |       |       |           |
|-----|----|-----|------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-----------|
| 129 | 1  | 127 | 4.06 | 12.37  | -10.08 | 12.34  | -10.05 | -0.84 | 0.14  | -0.28 | 0.13  | -0.27 | 0.08      |
|     |    | 129 | 4.50 | 4.54   | -11.07 | 4.49   | -11.02 | 0.85  | 0.19  | -0.40 | 0.19  | -0.40 | 0.02      |
|     |    | 186 | 2.84 | -8.62  | -17.43 | -10.00 | -16.04 | 3.21  | 0.12  | -0.26 | 0.09  | -0.23 | -0.10     |
|     |    | 187 | 2.94 | -3.84  | -21.92 | -11.45 | -14.31 | 8.93  | 0.12  | -0.24 | 0.10  | -0.22 | -0.08     |
| 129 | 2  | 127 | 2.31 | 8.09   | -6.42  | 8.07   | -6.40  | -0.50 | 0.12  | -0.12 | 0.09  | -0.09 | 0.07      |
|     |    | 129 | 2.58 | 2.69   | -7.12  | 2.65   | -7.08  | 0.61  | 0.14  | -0.19 | 0.14  | -0.18 | 0.04      |
|     |    | 186 | 1.78 | -5.87  | -11.83 | -7.09  | -10.62 | 2.40  | 0.10  | -0.14 | 0.09  | -0.13 | -0.05     |
|     |    | 187 | 2.01 | -2.66  | -14.85 | -8.10  | -9.40  | 6.06  | 0.11  | -0.13 | 0.10  | -0.12 | -0.05     |
| 129 | 7  | 127 | 5.93 | 8.83   | -8.30  | 8.82   | -8.29  | -0.33 | 0.32  | -0.63 | 0.07  | -0.38 | -0.42     |
|     |    | 129 | 7.44 | 3.45   | -9.02  | 3.40   | -8.97  | 0.78  | 0.47  | -0.85 | 0.11  | -0.49 | -0.59     |
|     |    | 186 | 7.69 | -3.91  | -13.28 | -4.68  | -12.51 | 2.57  | 0.29  | -1.08 | -0.36 | -0.44 | -0.68     |
|     |    | 187 | 7.21 | -1.67  | -15.32 | -5.70  | -11.29 | 6.23  | 0.20  | -0.95 | -0.35 | -0.40 | -0.58     |
| 129 | 36 | 127 | 3.65 | 8.98   | -7.24  | 8.89   | -7.14  | -1.23 | 0.17  | -0.31 | 0.08  | -0.22 | -0.18     |
|     |    | 129 | 4.34 | 3.46   | -7.82  | 3.46   | -7.82  | -0.11 | 0.25  | -0.44 | 0.12  | -0.31 | -0.26     |
|     |    | 186 | 4.13 | -5.40  | -11.83 | -5.87  | -11.36 | 1.68  | 0.17  | -0.56 | -0.13 | -0.26 | -0.35     |
|     |    | 187 | 4.09 | -2.94  | -14.09 | -6.89  | -10.14 | 5.33  | 0.13  | -0.49 | -0.12 | -0.25 | -0.30     |
| 130 | 1  | 125 | 3.94 | 15.15  | -9.95  | 15.14  | -9.95  | -0.34 | 0.11  | -0.24 | 0.11  | -0.23 | 0.04      |
|     |    | 127 | 4.05 | 12.46  | -10.23 | 12.46  | -10.23 | -0.06 | 0.13  | -0.27 | 0.13  | -0.27 | 7.06e-04  |
|     |    | 187 | 2.52 | -11.32 | -14.29 | -11.42 | -14.19 | -0.53 | 0.10  | -0.22 | 0.10  | -0.22 | -0.02     |
|     |    | 188 | 2.43 | -7.89  | -17.47 | -11.74 | -13.62 | 4.70  | 0.10  | -0.21 | 0.10  | -0.21 | -0.03     |
| 130 | 2  | 125 | 2.20 | 10.01  | -6.33  | 10.01  | -6.33  | -0.19 | 0.08  | -0.07 | 0.08  | -0.07 | 0.03      |
|     |    | 127 | 2.26 | 8.15   | -6.52  | 8.15   | -6.52  | -0.05 | 0.09  | -0.10 | 0.09  | -0.10 | 0.01      |
|     |    | 187 | 1.53 | -8.05  | -9.36  | -8.08  | -9.33  | -0.20 | 0.10  | -0.12 | 0.10  | -0.12 | -7.04e-03 |
|     |    | 188 | 1.51 | -5.50  | -11.74 | -8.31  | -8.93  | 3.11  | 0.10  | -0.11 | 0.10  | -0.11 | -0.02     |
| 130 | 11 | 125 | 3.65 | 6.90   | -4.85  | 6.85   | -4.79  | -0.79 | 0.47  | -0.13 | 0.12  | 0.21  | 0.30      |
|     |    | 127 | 4.54 | 5.03   | -5.03  | 4.99   | -4.99  | -0.65 | 0.57  | -0.24 | 0.14  | 0.19  | 0.40      |
|     |    | 187 | 6.04 | -7.59  | -11.03 | -10.83 | -7.79  | -0.80 | 0.86  | -0.07 | 0.62  | 0.17  | 0.40      |
|     |    | 188 | 4.87 | -6.12  | -12.33 | -11.05 | -7.39  | 2.51  | 0.75  | 0.04  | 0.62  | 0.17  | 0.27      |
| 130 | 36 | 125 | 3.26 | 11.70  | -7.04  | 11.68  | -7.01  | -0.71 | 0.10  | -0.25 | 0.05  | -0.20 | -0.12     |
|     |    | 127 | 3.66 | 9.84   | -7.22  | 9.82   | -7.20  | -0.57 | 0.16  | -0.32 | 0.07  | -0.22 | -0.19     |
|     |    | 187 | 3.14 | -6.58  | -10.16 | -6.73  | -10.01 | -0.72 | 0.01  | -0.41 | -0.15 | -0.25 | -0.21     |
|     |    | 188 | 2.46 | -5.38  | -11.19 | -6.96  | -9.61  | 2.58  | -0.03 | -0.37 | -0.15 | -0.24 | -0.16     |
| 131 | 1  | 123 | 4.05 | 12.46  | -10.23 | 12.46  | -10.23 | 0.06  | 0.13  | -0.27 | 0.13  | -0.27 | -7.06e-04 |
|     |    | 125 | 3.94 | 15.15  | -9.95  | 15.14  | -9.95  | 0.34  | 0.11  | -0.24 | 0.11  | -0.23 | -0.04     |
|     |    | 188 | 2.43 | -7.89  | -17.47 | -11.74 | -13.62 | -4.70 | 0.10  | -0.21 | 0.10  | -0.21 | 0.03      |
|     |    | 189 | 2.52 | -11.32 | -14.29 | -11.42 | -14.19 | 0.53  | 0.10  | -0.22 | 0.10  | -0.22 | 0.02      |
| 131 | 2  | 123 | 2.26 | 8.15   | -6.52  | 8.15   | -6.52  | 0.05  | 0.09  | -0.10 | 0.09  | -0.10 | -0.01     |
|     |    | 125 | 2.20 | 10.01  | -6.33  | 10.01  | -6.33  | 0.19  | 0.08  | -0.07 | 0.08  | -0.07 | -0.03     |
|     |    | 188 | 1.51 | -5.50  | -11.74 | -8.31  | -8.93  | -3.11 | 0.10  | -0.11 | 0.10  | -0.11 | 0.02      |
|     |    | 189 | 1.53 | -8.05  | -9.36  | -8.08  | -9.33  | 0.20  | 0.10  | -0.12 | 0.10  | -0.12 | 7.04e-03  |
| 131 | 17 | 123 | 4.54 | 5.03   | -5.03  | 4.99   | -4.99  | 0.65  | 0.57  | -0.24 | 0.14  | 0.19  | -0.40     |
|     |    | 125 | 3.65 | 6.90   | -4.85  | 6.85   | -4.79  | 0.79  | 0.47  | -0.13 | 0.12  | 0.21  | -0.30     |
|     |    | 188 | 4.87 | -6.12  | -12.33 | -11.05 | -7.39  | -2.51 | 0.75  | 0.04  | 0.62  | 0.17  | -0.27     |
|     |    | 189 | 6.04 | -7.59  | -11.03 | -10.83 | -7.79  | 0.80  | 0.86  | -0.07 | 0.62  | 0.17  | -0.40     |
| 131 | 49 | 123 | 2.55 | 6.64   | -5.80  | 6.63   | -5.79  | 0.34  | 0.28  | -0.13 | 0.12  | 0.04  | -0.20     |
|     |    | 125 | 2.18 | 8.50   | -5.61  | 8.48   | -5.59  | 0.48  | 0.24  | -0.07 | 0.10  | 0.07  | -0.16     |
|     |    | 188 | 2.82 | -6.00  | -11.82 | -9.63  | -8.19  | -2.82 | 0.39  | -0.01 | 0.35  | 0.03  | -0.12     |
|     |    | 189 | 3.38 | -8.36  | -9.63  | -9.40  | -8.59  | 0.49  | 0.44  | -0.07 | 0.35  | 0.02  | -0.19     |
| 132 | 1  | 121 | 4.50 | 4.54   | -11.07 | 4.49   | -11.02 | -0.85 | 0.19  | -0.40 | 0.19  | -0.40 | -0.02     |
|     |    | 123 | 4.06 | 12.37  | -10.08 | 12.34  | -10.05 | 0.84  | 0.14  | -0.28 | 0.13  | -0.27 | -0.08     |
|     |    | 189 | 2.94 | -3.84  | -21.92 | -11.45 | -14.31 | -8.93 | 0.12  | -0.24 | 0.10  | -0.22 | 0.08      |
|     |    | 190 | 2.84 | -8.62  | -17.43 | -10.00 | -16.04 | -3.21 | 0.12  | -0.26 | 0.09  | -0.23 | 0.10      |
| 132 | 2  | 121 | 2.58 | 2.69   | -7.12  | 2.65   | -7.08  | -0.61 | 0.14  | -0.19 | 0.14  | -0.18 | -0.04     |
|     |    | 123 | 2.31 | 8.09   | -6.42  | 8.07   | -6.40  | 0.50  | 0.12  | -0.12 | 0.09  | -0.09 | -0.07     |
|     |    | 189 | 2.01 | -2.66  | -14.85 | -8.10  | -9.40  | -6.06 | 0.11  | -0.13 | 0.10  | -0.12 | 0.05      |
|     |    | 190 | 1.78 | -5.87  | -11.83 | -7.09  | -10.62 | -2.40 | 0.10  | -0.14 | 0.09  | -0.13 | 0.05      |

|     |    |     |       |       |        |        |        |        |      |       |           |       |       |
|-----|----|-----|-------|-------|--------|--------|--------|--------|------|-------|-----------|-------|-------|
| 132 | 5  | 121 | 7.44  | 3.45  | -9.02  | 3.40   | -8.97  | -0.78  | 0.47 | -0.85 | 0.11      | -0.49 | 0.59  |
|     |    | 123 | 5.93  | 8.83  | -8.30  | 8.82   | -8.29  | 0.33   | 0.32 | -0.63 | 0.07      | -0.38 | 0.42  |
|     |    | 189 | 7.21  | -1.67 | -15.32 | -5.70  | -11.29 | -6.23  | 0.20 | -0.95 | -0.35     | -0.40 | 0.58  |
|     |    | 190 | 7.69  | -3.91 | -13.28 | -4.68  | -12.51 | -2.57  | 0.29 | -1.08 | -0.36     | -0.44 | 0.68  |
| 132 | 37 | 121 | 4.31  | 3.05  | -8.03  | 3.01   | -7.99  | -0.69  | 0.24 | -0.45 | 0.12      | -0.33 | 0.26  |
|     |    | 123 | 3.52  | 8.44  | -7.32  | 8.43   | -7.31  | 0.42   | 0.15 | -0.30 | 0.08      | -0.23 | 0.17  |
|     |    | 189 | 4.22  | -2.26 | -14.99 | -6.95  | -10.31 | -6.14  | 0.12 | -0.50 | -0.12     | -0.26 | 0.30  |
|     |    | 190 | 4.13  | -4.98 | -12.47 | -5.93  | -11.52 | -2.48  | 0.16 | -0.56 | -0.13     | -0.28 | 0.35  |
| 133 | 1  | 119 | 5.50  | -4.84 | -15.45 | -7.69  | -12.60 | -4.70  | 0.27 | -0.62 | 0.27      | -0.62 | 0.03  |
|     |    | 121 | 4.48  | 4.16  | -10.54 | 4.16   | -10.53 | 0.29   | 0.20 | -0.41 | 0.19      | -0.39 | -0.10 |
|     |    | 190 | 4.12  | 0.05  | -26.55 | -10.04 | -16.46 | -12.91 | 0.16 | -0.30 | 0.10      | -0.24 | 0.15  |
|     |    | 191 | 3.27  | -4.01 | -21.15 | -6.16  | -19.00 | -5.68  | 0.16 | -0.32 | 0.06      | -0.22 | 0.19  |
| 133 | 2  | 119 | 3.32  | -3.44 | -10.50 | -5.75  | -8.19  | -3.31  | 0.19 | -0.35 | 0.19      | -0.35 | -0.02 |
|     |    | 121 | 2.63  | 2.42  | -6.75  | 2.42   | -6.75  | 0.08   | 0.16 | -0.20 | 0.14      | -0.18 | -0.09 |
|     |    | 190 | 2.70  | 0.02  | -18.03 | -7.12  | -10.89 | -8.83  | 0.12 | -0.17 | 0.09      | -0.14 | 0.09  |
|     |    | 191 | 2.08  | -2.71 | -14.39 | -4.41  | -12.68 | -4.13  | 0.11 | -0.18 | 0.07      | -0.13 | 0.11  |
| 133 | 5  | 119 | 9.78  | -6.63 | -12.89 | -8.90  | -10.61 | -3.01  | 0.67 | -1.14 | 0.21      | -0.68 | 0.79  |
|     |    | 121 | 7.87  | -0.72 | -9.18  | -0.73  | -9.17  | 0.38   | 0.54 | -0.87 | 0.15      | -0.48 | 0.63  |
|     |    | 190 | 10.09 | 0.34  | -18.63 | -4.98  | -13.31 | -8.53  | 0.47 | -1.18 | -0.27     | -0.44 | 0.82  |
|     |    | 191 | 10.45 | -1.22 | -16.15 | -2.28  | -15.10 | -3.82  | 0.56 | -1.32 | -0.30     | -0.46 | 0.93  |
| 133 | 37 | 119 | 5.60  | -4.97 | -11.64 | -7.27  | -9.35  | -3.17  | 0.36 | -0.66 | 0.20      | -0.50 | 0.37  |
|     |    | 121 | 4.27  | 0.91  | -7.92  | 0.91   | -7.91  | 0.22   | 0.25 | -0.44 | 0.14      | -0.33 | 0.25  |
|     |    | 190 | 6.11  | 0.11  | -18.25 | -6.09  | -12.05 | -8.68  | 0.27 | -0.63 | -0.08     | -0.28 | 0.44  |
|     |    | 191 | 5.95  | -2.04 | -15.18 | -3.38  | -13.84 | -3.98  | 0.31 | -0.71 | -0.11     | -0.29 | 0.51  |
| 134 | 1  | 117 | 8.34  | -3.92 | -31.29 | -20.19 | -15.03 | -13.44 | 0.36 | -0.97 | 0.33      | -0.94 | 0.21  |
|     |    | 119 | 5.38  | -6.77 | -13.23 | -8.47  | -11.53 | -2.85  | 0.27 | -0.62 | 0.27      | -0.62 | -0.04 |
|     |    | 191 | 5.43  | 4.23  | -30.50 | -6.09  | -20.18 | -15.87 | 0.21 | -0.38 | 0.07      | -0.24 | 0.25  |
|     |    | 192 | 4.11  | 2.49  | -22.24 | 1.45   | -21.20 | -4.96  | 0.23 | -0.34 | -4.90e-03 | -0.10 | 0.28  |
| 134 | 2  | 117 | 5.25  | -2.48 | -21.77 | -14.34 | -9.92  | -9.39  | 0.24 | -0.58 | 0.23      | -0.57 | 0.09  |
|     |    | 119 | 3.28  | -4.66 | -9.10  | -6.28  | -7.47  | -2.14  | 0.20 | -0.35 | 0.19      | -0.34 | -0.07 |
|     |    | 191 | 3.50  | 2.88  | -20.72 | -4.36  | -13.48 | -10.89 | 0.14 | -0.22 | 0.07      | -0.14 | 0.15  |
|     |    | 192 | 2.62  | 1.70  | -15.07 | 0.87   | -14.24 | -3.63  | 0.15 | -0.20 | 9.81e-03  | -0.06 | 0.17  |
| 134 | 5  | 117 | 14.16 | -7.38 | -27.58 | -21.96 | -13.01 | -9.05  | 0.88 | -1.51 | 0.28      | -0.91 | 1.03  |
|     |    | 119 | 10.12 | -9.77 | -14.69 | -13.90 | -10.56 | -1.80  | 0.72 | -1.15 | 0.25      | -0.67 | 0.81  |
|     |    | 191 | 12.67 | 3.56  | -22.10 | -1.97  | -16.57 | -10.55 | 0.77 | -1.34 | -0.10     | -0.47 | 1.04  |
|     |    | 192 | 12.27 | 3.79  | -17.84 | 3.27   | -17.33 | -3.30  | 0.85 | -1.41 | -0.16     | -0.40 | 1.12  |
| 134 | 37 | 117 | 9.26  | -4.90 | -24.50 | -18.01 | -11.40 | -9.23  | 0.50 | -0.98 | 0.26      | -0.74 | 0.55  |
|     |    | 119 | 5.57  | -7.41 | -11.49 | -9.95  | -8.95  | -1.98  | 0.37 | -0.65 | 0.22      | -0.50 | 0.36  |
|     |    | 191 | 7.87  | 3.14  | -21.31 | -3.21  | -14.96 | -10.72 | 0.44 | -0.75 | -0.01     | -0.30 | 0.58  |
|     |    | 192 | 7.17  | 2.68  | -16.38 | 2.03   | -15.72 | -3.47  | 0.48 | -0.78 | -0.07     | -0.23 | 0.63  |
| 135 | 1  | 115 | 13.11 | 6.78  | -45.05 | -21.93 | -16.33 | -25.76 | 0.47 | -1.36 | 0.26      | -1.14 | 0.58  |
|     |    | 117 | 8.08  | -5.83 | -28.84 | -21.23 | -13.43 | -10.83 | 0.34 | -0.97 | 0.32      | -0.95 | 0.16  |
|     |    | 192 | 6.49  | 9.08  | -31.26 | 1.87   | -24.04 | -15.46 | 0.28 | -0.40 | -0.01     | -0.11 | 0.34  |
|     |    | 193 | 4.07  | 10.55 | -15.51 | 10.52  | -15.47 | 1.00   | 0.32 | -0.18 | -0.03     | 0.18  | 0.23  |
| 135 | 2  | 115 | 8.47  | 4.89  | -31.25 | -15.45 | -10.91 | -17.92 | 0.30 | -0.86 | 0.18      | -0.74 | 0.34  |
|     |    | 117 | 5.12  | -3.65 | -20.24 | -15.05 | -8.84  | -7.69  | 0.23 | -0.59 | 0.23      | -0.58 | 0.06  |
|     |    | 192 | 4.20  | 6.19  | -21.20 | 1.15   | -16.16 | -10.61 | 0.18 | -0.24 | 6.67e-03  | -0.07 | 0.21  |
|     |    | 193 | 2.72  | 7.17  | -10.41 | 7.16   | -10.40 | 0.49   | 0.21 | -0.12 | -0.03     | 0.12  | 0.14  |
| 135 | 5  | 115 | 18.68 | -1.57 | -38.21 | -26.18 | -13.60 | -17.21 | 1.15 | -1.83 | 0.29      | -0.97 | 1.35  |
|     |    | 117 | 14.68 | -8.68 | -28.63 | -25.78 | -11.53 | -6.98  | 0.96 | -1.55 | 0.33      | -0.93 | 1.08  |
|     |    | 192 | 13.41 | 7.89  | -22.51 | 4.23   | -18.85 | -9.90  | 1.06 | -1.26 | 0.20      | -0.41 | 1.12  |
|     |    | 193 | 11.52 | 10.30 | -13.15 | 10.24  | -13.09 | 1.20   | 1.08 | -1.02 | 0.17      | -0.11 | 1.04  |
| 135 | 37 | 115 | 13.30 | 1.67  | -34.48 | -20.61 | -12.21 | -17.58 | 0.68 | -1.30 | 0.23      | -0.85 | 0.83  |
|     |    | 117 | 9.34  | -6.26 | -24.08 | -20.21 | -10.13 | -7.35  | 0.52 | -0.99 | 0.28      | -0.75 | 0.55  |
|     |    | 192 | 8.52  | 6.95  | -21.77 | 2.63   | -17.45 | -10.27 | 0.60 | -0.73 | 0.10      | -0.23 | 0.65  |
|     |    | 193 | 6.44  | 8.68  | -11.72 | 8.64   | -11.69 | 0.83   | 0.61 | -0.54 | 0.06      | 0.01  | 0.57  |

|     |    |     |       |       |        |        |        |        |       |       |           |           |           |
|-----|----|-----|-------|-------|--------|--------|--------|--------|-------|-------|-----------|-----------|-----------|
| 136 | 1  | 109 | 9.80  | 31.98 | -3.60  | 15.80  | 12.58  | -17.72 | 0.44  | -0.84 | 0.05      | -0.45     | 0.58      |
|     |    | 115 | 13.60 | 5.36  | -42.27 | -18.35 | -18.56 | -23.82 | 0.47  | -1.49 | 0.13      | -1.16     | 0.74      |
|     |    | 193 | 4.82  | 11.35 | -18.96 | 10.27  | -17.89 | -5.61  | 0.29  | -0.13 | -0.07     | 0.24      | 0.14      |
|     |    | 211 | 4.54  | 10.83 | -8.35  | -3.65  | 6.13   | -8.25  | 0.57  | 0.07  | 0.53      | 0.11      | 0.14      |
| 136 | 2  | 109 | 6.36  | 21.80 | -2.69  | 10.79  | 8.32   | -12.18 | 0.26  | -0.55 | 0.02      | -0.31     | 0.36      |
|     |    | 115 | 8.81  | 4.06  | -29.53 | -12.96 | -12.51 | -16.80 | 0.29  | -0.95 | 0.10      | -0.76     | 0.45      |
|     |    | 193 | 3.24  | 7.73  | -12.74 | 6.99   | -12.00 | -3.80  | 0.19  | -0.09 | -0.06     | 0.17      | 0.08      |
|     |    | 211 | 2.87  | 7.78  | -5.80  | -2.58  | 4.56   | -5.78  | 0.35  | 0.05  | 0.32      | 0.07      | 0.08      |
| 136 | 3  | 109 | 14.93 | 22.14 | -2.06  | 11.02  | 9.06   | -12.06 | 1.12  | -1.34 | 0.03      | -0.26     | 1.22      |
|     |    | 115 | 19.18 | 4.44  | -28.93 | -12.72 | -11.78 | -16.68 | 1.14  | -2.01 | 0.11      | -0.98     | 1.48      |
|     |    | 193 | 9.94  | 10.29 | -11.90 | 9.66   | -11.27 | -3.68  | 1.21  | -0.62 | 0.65      | -0.06     | 0.84      |
|     |    | 211 | 9.94  | 8.92  | -3.54  | 0.08   | 5.29   | -5.66  | 1.38  | -0.22 | 1.04      | 0.13      | 0.66      |
| 136 | 35 | 109 | 10.43 | 21.96 | -2.39  | 10.90  | 8.67   | -12.12 | 0.66  | -0.92 | 0.03      | -0.29     | 0.78      |
|     |    | 115 | 13.72 | 4.24  | -29.25 | -12.85 | -12.17 | -16.74 | 0.68  | -1.44 | 0.10      | -0.87     | 0.94      |
|     |    | 193 | 5.46  | 8.96  | -12.34 | 8.28   | -11.66 | -3.74  | 0.63  | -0.29 | 0.29      | 0.06      | 0.45      |
|     |    | 211 | 6.24  | 8.31  | -4.70  | -1.30  | 4.90   | -5.72  | 0.84  | -0.08 | 0.67      | 0.10      | 0.36      |
| 137 | 1  | 102 | 6.50  | 26.86 | 6.56   | 8.78   | 24.63  | 6.34   | 0.51  | -0.34 | -0.19     | 0.36      | 0.32      |
|     |    | 105 | 5.46  | 33.42 | 2.42   | 9.51   | 26.33  | 13.02  | 0.32  | -0.29 | -0.29     | 0.32      | -3.18e-03 |
|     |    | 175 | 6.12  | 22.33 | -16.06 | -0.75  | 7.03   | 18.80  | 0.02  | -0.68 | -0.67     | 7.05e-03  | 0.09      |
|     |    | 194 | 7.22  | 24.24 | -25.59 | 0.33   | -1.68  | 24.89  | 0.05  | -0.65 | -0.59     | -0.01     | 0.20      |
| 137 | 2  | 102 | 4.22  | 18.06 | 4.34   | 5.90   | 16.50  | 4.36   | 0.33  | -0.20 | -0.11     | 0.24      | 0.20      |
|     |    | 105 | 3.65  | 22.59 | 1.64   | 6.42   | 17.81  | 8.79   | 0.22  | -0.18 | -0.18     | 0.22      | -5.13e-03 |
|     |    | 175 | 4.00  | 15.59 | -11.03 | -0.59  | 5.15   | 13.00  | 0.01  | -0.42 | -0.41     | 3.02e-03  | 0.06      |
|     |    | 194 | 4.73  | 16.82 | -17.30 | 0.17   | -0.65  | 17.05  | 0.03  | -0.40 | -0.36     | -8.85e-03 | 0.12      |
| 137 | 16 | 102 | 6.31  | 20.87 | 1.05   | 3.93   | 17.99  | 6.99   | 0.53  | -0.34 | -0.02     | 0.22      | 0.42      |
|     |    | 105 | 4.95  | 25.50 | -1.74  | 4.45   | 19.30  | 11.42  | 0.28  | -0.17 | -0.09     | 0.20      | 0.18      |
|     |    | 175 | 13.68 | 20.42 | -11.08 | 2.70   | 6.64   | 15.63  | 0.02  | -2.12 | -2.08     | -0.02     | 0.27      |
|     |    | 194 | 13.92 | 21.87 | -17.58 | 3.45   | 0.84   | 19.68  | 0.04  | -2.10 | -2.03     | -0.03     | 0.38      |
| 137 | 50 | 102 | 5.23  | 19.74 | 4.76   | 7.38   | 17.13  | 5.69   | 0.44  | -0.27 | -0.06     | 0.22      | 0.33      |
|     |    | 105 | 4.15  | 24.58 | 1.76   | 7.90   | 18.44  | 10.12  | 0.23  | -0.15 | -0.12     | 0.20      | 0.11      |
|     |    | 175 | 8.51  | 17.80 | -11.30 | 0.72   | 5.78   | 14.33  | 0.02  | -1.20 | -1.17     | -0.02     | 0.20      |
|     |    | 194 | 8.95  | 19.12 | -17.67 | 1.47   | -0.02  | 18.38  | 0.04  | -1.19 | -1.12     | -0.03     | 0.29      |
| 138 | 1  | 134 | 13.60 | 5.36  | -42.27 | -18.35 | -18.56 | 23.82  | 1.49  | -0.47 | -0.13     | 1.16      | 0.74      |
|     |    | 102 | 9.80  | 31.98 | -3.60  | 15.80  | 12.58  | 17.72  | 0.84  | -0.44 | -0.05     | 0.45      | 0.58      |
|     |    | 194 | 4.54  | 10.83 | -8.35  | -3.65  | 6.13   | 8.25   | -0.07 | -0.57 | -0.53     | -0.11     | 0.14      |
|     |    | 195 | 4.82  | 11.35 | -18.96 | 10.27  | -17.89 | 5.61   | 0.13  | -0.29 | 0.07      | -0.24     | 0.14      |
| 138 | 2  | 134 | 8.81  | 4.06  | -29.53 | -12.96 | -12.51 | 16.80  | 0.95  | -0.29 | -0.10     | 0.76      | 0.45      |
|     |    | 102 | 6.36  | 21.80 | -2.69  | 10.79  | 8.32   | 12.18  | 0.55  | -0.26 | -0.02     | 0.31      | 0.36      |
|     |    | 194 | 2.87  | 7.78  | -5.80  | -2.58  | 4.56   | 5.78   | -0.05 | -0.35 | -0.32     | -0.07     | 0.08      |
|     |    | 195 | 3.24  | 7.73  | -12.74 | 6.99   | -12.00 | 3.80   | 0.09  | -0.19 | 0.06      | -0.17     | 0.08      |
| 138 | 18 | 134 | 19.18 | 4.44  | -28.93 | -12.72 | -11.78 | 16.68  | 2.01  | -1.14 | -0.11     | 0.98      | 1.48      |
|     |    | 102 | 14.93 | 22.14 | -2.06  | 11.02  | 9.06   | 12.06  | 1.34  | -1.12 | -0.03     | 0.26      | 1.22      |
|     |    | 194 | 9.94  | 8.92  | -3.54  | 0.08   | 5.29   | 5.66   | 0.22  | -1.38 | -1.04     | -0.13     | 0.66      |
|     |    | 195 | 9.94  | 10.29 | -11.90 | 9.66   | -11.27 | 3.68   | 0.62  | -1.21 | -0.65     | 0.06      | 0.84      |
| 138 | 50 | 134 | 13.72 | 4.24  | -29.25 | -12.85 | -12.17 | 16.74  | 1.44  | -0.68 | -0.10     | 0.87      | 0.94      |
|     |    | 102 | 10.43 | 21.96 | -2.39  | 10.90  | 8.67   | 12.12  | 0.92  | -0.66 | -0.03     | 0.29      | 0.78      |
|     |    | 194 | 6.24  | 8.31  | -4.70  | -1.30  | 4.90   | 5.72   | 0.08  | -0.84 | -0.67     | -0.10     | 0.36      |
|     |    | 195 | 5.46  | 8.96  | -12.34 | 8.28   | -11.66 | 3.74   | 0.29  | -0.63 | -0.29     | -0.06     | 0.45      |
| 139 | 1  | 132 | 8.08  | -5.83 | -28.84 | -21.23 | -13.43 | 10.83  | 0.97  | -0.34 | -0.32     | 0.95      | 0.16      |
|     |    | 134 | 13.11 | 6.78  | -45.05 | -21.93 | -16.33 | 25.76  | 1.36  | -0.47 | -0.26     | 1.14      | 0.58      |
|     |    | 195 | 4.07  | 10.55 | -15.51 | 10.52  | -15.47 | -1.00  | 0.18  | -0.32 | 0.03      | -0.18     | 0.23      |
|     |    | 196 | 6.49  | 9.08  | -31.26 | 1.87   | -24.04 | 15.46  | 0.40  | -0.28 | 0.01      | 0.11      | 0.34      |
| 139 | 2  | 132 | 5.12  | -3.65 | -20.24 | -15.05 | -8.84  | 7.69   | 0.59  | -0.23 | -0.23     | 0.58      | 0.06      |
|     |    | 134 | 8.47  | 4.89  | -31.25 | -15.45 | -10.91 | 17.92  | 0.86  | -0.30 | -0.18     | 0.74      | 0.34      |
|     |    | 195 | 2.72  | 7.17  | -10.41 | 7.16   | -10.40 | -0.49  | 0.12  | -0.21 | 0.03      | -0.12     | 0.14      |
|     |    | 196 | 4.20  | 6.19  | -21.20 | 1.15   | -16.16 | 10.61  | 0.24  | -0.18 | -6.67e-03 | 0.07      | 0.21      |

|     |    |     |       |       |        |        |        |       |      |       |           |       |       |
|-----|----|-----|-------|-------|--------|--------|--------|-------|------|-------|-----------|-------|-------|
| 139 | 16 | 132 | 14.68 | -8.68 | -28.63 | -25.78 | -11.53 | 6.98  | 1.55 | -0.96 | -0.33     | 0.93  | 1.08  |
|     |    | 134 | 18.68 | -1.57 | -38.21 | -26.18 | -13.60 | 17.21 | 1.83 | -1.15 | -0.29     | 0.97  | 1.35  |
|     |    | 195 | 11.52 | 10.30 | -13.15 | 10.24  | -13.09 | -1.20 | 1.02 | -1.08 | -0.17     | 0.11  | 1.04  |
|     |    | 196 | 13.41 | 7.89  | -22.51 | 4.23   | -18.85 | 9.90  | 1.26 | -1.06 | -0.20     | 0.41  | 1.12  |
| 139 | 48 | 132 | 9.34  | -6.26 | -24.08 | -20.21 | -10.13 | 7.35  | 0.99 | -0.52 | -0.28     | 0.75  | 0.55  |
|     |    | 134 | 13.30 | 1.67  | -34.48 | -20.61 | -12.21 | 17.58 | 1.30 | -0.68 | -0.23     | 0.85  | 0.83  |
|     |    | 195 | 6.44  | 8.68  | -11.72 | 8.64   | -11.69 | -0.83 | 0.54 | -0.61 | -0.06     | -0.01 | 0.57  |
|     |    | 196 | 8.52  | 6.95  | -21.77 | 2.63   | -17.45 | 10.27 | 0.73 | -0.60 | -0.10     | 0.23  | 0.65  |
| 140 | 1  | 130 | 5.38  | -6.77 | -13.23 | -8.47  | -11.53 | 2.85  | 0.62 | -0.27 | -0.27     | 0.62  | -0.04 |
|     |    | 132 | 8.34  | -3.92 | -31.29 | -20.19 | -15.03 | 13.44 | 0.97 | -0.36 | -0.33     | 0.94  | 0.21  |
|     |    | 196 | 4.11  | 2.49  | -22.24 | 1.45   | -21.20 | 4.96  | 0.34 | -0.23 | 4.90e-03  | 0.10  | 0.28  |
|     |    | 197 | 5.43  | 4.23  | -30.50 | -6.09  | -20.18 | 15.87 | 0.38 | -0.21 | -0.07     | 0.24  | 0.25  |
| 140 | 2  | 130 | 3.28  | -4.66 | -9.10  | -6.28  | -7.47  | 2.14  | 0.35 | -0.20 | -0.19     | 0.34  | -0.07 |
|     |    | 132 | 5.25  | -2.48 | -21.77 | -14.34 | -9.92  | 9.39  | 0.58 | -0.24 | -0.23     | 0.57  | 0.09  |
|     |    | 196 | 2.62  | 1.70  | -15.07 | 0.87   | -14.24 | 3.63  | 0.20 | -0.15 | -9.81e-03 | 0.06  | 0.17  |
|     |    | 197 | 3.50  | 2.88  | -20.72 | -4.36  | -13.48 | 10.89 | 0.22 | -0.14 | -0.07     | 0.14  | 0.15  |
| 140 | 16 | 130 | 10.12 | -9.77 | -14.69 | -13.90 | -10.56 | 1.80  | 1.15 | -0.72 | -0.25     | 0.67  | 0.81  |
|     |    | 132 | 14.16 | -7.38 | -27.58 | -21.96 | -13.01 | 9.05  | 1.51 | -0.88 | -0.28     | 0.91  | 1.03  |
|     |    | 196 | 12.27 | 3.79  | -17.84 | 3.27   | -17.33 | 3.30  | 1.41 | -0.85 | 0.16      | 0.40  | 1.12  |
|     |    | 197 | 12.67 | 3.56  | -22.10 | -1.97  | -16.57 | 10.55 | 1.34 | -0.77 | 0.10      | 0.47  | 1.04  |
| 140 | 48 | 130 | 5.57  | -7.41 | -11.49 | -9.95  | -8.95  | 1.98  | 0.65 | -0.37 | -0.22     | 0.50  | 0.36  |
|     |    | 132 | 9.26  | -4.90 | -24.50 | -18.01 | -11.40 | 9.23  | 0.98 | -0.50 | -0.26     | 0.74  | 0.55  |
|     |    | 196 | 7.17  | 2.68  | -16.38 | 2.03   | -15.72 | 3.47  | 0.78 | -0.48 | 0.07      | 0.23  | 0.63  |
|     |    | 197 | 7.87  | 3.14  | -21.31 | -3.21  | -14.96 | 10.72 | 0.75 | -0.44 | 0.01      | 0.30  | 0.58  |
| 141 | 1  | 128 | 4.48  | 4.16  | -10.54 | 4.16   | -10.53 | -0.29 | 0.41 | -0.20 | -0.19     | 0.39  | -0.10 |
|     |    | 130 | 5.50  | -4.84 | -15.45 | -7.69  | -12.60 | 4.70  | 0.62 | -0.27 | -0.27     | 0.62  | 0.03  |
|     |    | 197 | 3.27  | -4.01 | -21.15 | -6.16  | -19.00 | 5.68  | 0.32 | -0.16 | -0.06     | 0.22  | 0.19  |
|     |    | 198 | 4.12  | 0.05  | -26.55 | -10.04 | -16.46 | 12.91 | 0.30 | -0.16 | -0.10     | 0.24  | 0.15  |
| 141 | 2  | 128 | 2.63  | 2.42  | -6.75  | 2.42   | -6.75  | -0.08 | 0.20 | -0.16 | -0.14     | 0.18  | -0.09 |
|     |    | 130 | 3.32  | -3.44 | -10.50 | -5.75  | -8.19  | 3.31  | 0.35 | -0.19 | -0.19     | 0.35  | -0.02 |
|     |    | 197 | 2.08  | -2.71 | -14.39 | -4.41  | -12.68 | 4.13  | 0.18 | -0.11 | -0.07     | 0.13  | 0.11  |
|     |    | 198 | 2.70  | 0.02  | -18.03 | -7.12  | -10.89 | 8.83  | 0.17 | -0.12 | -0.09     | 0.14  | 0.09  |
| 141 | 16 | 128 | 7.87  | -0.72 | -9.18  | -0.73  | -9.17  | -0.38 | 0.87 | -0.54 | -0.15     | 0.48  | 0.63  |
|     |    | 130 | 9.78  | -6.63 | -12.89 | -8.90  | -10.61 | 3.01  | 1.14 | -0.67 | -0.21     | 0.68  | 0.79  |
|     |    | 197 | 10.45 | -1.22 | -16.15 | -2.28  | -15.10 | 3.82  | 1.32 | -0.56 | 0.30      | 0.46  | 0.93  |
|     |    | 198 | 10.09 | 0.34  | -18.63 | -4.98  | -13.31 | 8.53  | 1.18 | -0.47 | 0.27      | 0.44  | 0.82  |
| 141 | 48 | 128 | 4.27  | 0.91  | -7.92  | 0.91   | -7.91  | -0.22 | 0.44 | -0.25 | -0.14     | 0.33  | 0.25  |
|     |    | 130 | 5.60  | -4.97 | -11.64 | -7.27  | -9.35  | 3.17  | 0.66 | -0.36 | -0.20     | 0.50  | 0.37  |
|     |    | 197 | 5.95  | -2.04 | -15.18 | -3.38  | -13.84 | 3.98  | 0.71 | -0.31 | 0.11      | 0.29  | 0.51  |
|     |    | 198 | 6.11  | 0.11  | -18.25 | -6.09  | -12.05 | 8.68  | 0.63 | -0.27 | 0.08      | 0.28  | 0.44  |
| 142 | 1  | 126 | 4.06  | 12.37 | -10.08 | 12.34  | -10.05 | -0.84 | 0.28 | -0.14 | -0.13     | 0.27  | -0.08 |
|     |    | 128 | 4.50  | 4.54  | -11.07 | 4.49   | -11.02 | 0.85  | 0.40 | -0.19 | -0.19     | 0.40  | -0.02 |
|     |    | 198 | 2.84  | -8.62 | -17.43 | -10.00 | -16.04 | 3.21  | 0.26 | -0.12 | -0.09     | 0.23  | 0.10  |
|     |    | 199 | 2.94  | -3.84 | -21.92 | -11.45 | -14.31 | 8.93  | 0.24 | -0.12 | -0.10     | 0.22  | 0.08  |
| 142 | 2  | 126 | 2.31  | 8.09  | -6.42  | 8.07   | -6.40  | -0.50 | 0.12 | -0.12 | -0.09     | 0.09  | -0.07 |
|     |    | 128 | 2.58  | 2.69  | -7.12  | 2.65   | -7.08  | 0.61  | 0.19 | -0.14 | -0.14     | 0.18  | -0.04 |
|     |    | 198 | 1.78  | -5.87 | -11.83 | -7.09  | -10.62 | 2.40  | 0.14 | -0.10 | -0.09     | 0.13  | 0.05  |
|     |    | 199 | 2.01  | -2.66 | -14.85 | -8.10  | -9.40  | 6.06  | 0.13 | -0.11 | -0.10     | 0.12  | 0.05  |
| 142 | 16 | 126 | 5.93  | 8.83  | -8.30  | 8.82   | -8.29  | -0.33 | 0.63 | -0.32 | -0.07     | 0.38  | 0.42  |
|     |    | 128 | 7.44  | 3.45  | -9.02  | 3.40   | -8.97  | 0.78  | 0.85 | -0.47 | -0.11     | 0.49  | 0.59  |
|     |    | 198 | 7.69  | -3.91 | -13.28 | -4.68  | -12.51 | 2.57  | 1.08 | -0.29 | 0.36      | 0.44  | 0.68  |
|     |    | 199 | 7.21  | -1.67 | -15.32 | -5.70  | -11.29 | 6.23  | 0.95 | -0.20 | 0.35      | 0.40  | 0.58  |
| 142 | 43 | 126 | 3.65  | 8.98  | -7.24  | 8.89   | -7.14  | -1.23 | 0.31 | -0.17 | -0.08     | 0.22  | 0.18  |
|     |    | 128 | 4.34  | 3.46  | -7.82  | 3.46   | -7.82  | -0.11 | 0.44 | -0.25 | -0.12     | 0.31  | 0.26  |
|     |    | 198 | 4.13  | -5.40 | -11.83 | -5.87  | -11.36 | 1.68  | 0.56 | -0.17 | 0.13      | 0.26  | 0.35  |
|     |    | 199 | 4.09  | -2.94 | -14.09 | -6.89  | -10.14 | 5.33  | 0.49 | -0.13 | 0.12      | 0.25  | 0.30  |

|     |    |     |      |        |        |        |        |        |       |       |       |       |           |
|-----|----|-----|------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-----------|
| 143 | 1  | 124 | 3.94 | 15.15  | -9.95  | 15.14  | -9.95  | -0.34  | 0.24  | -0.11 | -0.11 | 0.23  | -0.04     |
|     |    | 126 | 4.05 | 12.46  | -10.23 | 12.46  | -10.23 | -0.06  | 0.27  | -0.13 | -0.13 | 0.27  | -7.06e-04 |
|     |    | 199 | 2.52 | -11.32 | -14.29 | -11.42 | -14.19 | -0.53  | 0.22  | -0.10 | -0.10 | 0.22  | 0.02      |
|     |    | 200 | 2.43 | -7.89  | -17.47 | -11.74 | -13.62 | 4.70   | 0.21  | -0.10 | -0.10 | 0.21  | 0.03      |
| 143 | 2  | 124 | 2.20 | 10.01  | -6.33  | 10.01  | -6.33  | -0.19  | 0.07  | -0.08 | -0.08 | 0.07  | -0.03     |
|     |    | 126 | 2.26 | 8.15   | -6.52  | 8.15   | -6.52  | -0.05  | 0.10  | -0.09 | -0.09 | 0.10  | -0.01     |
|     |    | 199 | 1.53 | -8.05  | -9.36  | -8.08  | -9.33  | -0.20  | 0.12  | -0.10 | -0.10 | 0.12  | 7.04e-03  |
|     |    | 200 | 1.51 | -5.50  | -11.74 | -8.31  | -8.93  | 3.11   | 0.11  | -0.10 | -0.10 | 0.11  | 0.02      |
| 143 | 4  | 124 | 3.65 | 6.90   | -4.85  | 6.85   | -4.79  | -0.79  | 0.13  | -0.47 | -0.12 | -0.21 | -0.30     |
|     |    | 126 | 4.54 | 5.03   | -5.03  | 4.99   | -4.99  | -0.65  | 0.24  | -0.57 | -0.14 | -0.19 | -0.40     |
|     |    | 199 | 6.04 | -7.59  | -11.03 | -10.83 | -7.79  | -0.80  | 0.07  | -0.86 | -0.62 | -0.17 | -0.40     |
|     |    | 200 | 4.87 | -6.12  | -12.33 | -11.05 | -7.39  | 2.51   | -0.04 | -0.75 | -0.62 | -0.17 | -0.27     |
| 143 | 43 | 124 | 3.26 | 11.70  | -7.04  | 11.68  | -7.01  | -0.71  | 0.25  | -0.10 | -0.05 | 0.20  | 0.12      |
|     |    | 126 | 3.66 | 9.84   | -7.22  | 9.82   | -7.20  | -0.57  | 0.32  | -0.16 | -0.07 | 0.22  | 0.19      |
|     |    | 199 | 3.14 | -6.58  | -10.16 | -6.73  | -10.01 | -0.72  | 0.41  | -0.01 | 0.15  | 0.25  | 0.21      |
|     |    | 200 | 2.46 | -5.38  | -11.19 | -6.96  | -9.61  | 2.58   | 0.37  | 0.03  | 0.15  | 0.24  | 0.16      |
| 144 | 1  | 122 | 4.05 | 12.46  | -10.23 | 12.46  | -10.23 | 0.06   | 0.27  | -0.13 | -0.13 | 0.27  | 7.06e-04  |
|     |    | 124 | 3.94 | 15.15  | -9.95  | 15.14  | -9.95  | 0.34   | 0.24  | -0.11 | -0.11 | 0.23  | 0.04      |
|     |    | 200 | 2.43 | -7.89  | -17.47 | -11.74 | -13.62 | -4.70  | 0.21  | -0.10 | -0.10 | 0.21  | -0.03     |
|     |    | 201 | 2.52 | -11.32 | -14.29 | -11.42 | -14.19 | 0.53   | 0.22  | -0.10 | -0.10 | 0.22  | -0.02     |
| 144 | 2  | 122 | 2.26 | 8.15   | -6.52  | 8.15   | -6.52  | 0.05   | 0.10  | -0.09 | -0.09 | 0.10  | 0.01      |
|     |    | 124 | 2.20 | 10.01  | -6.33  | 10.01  | -6.33  | 0.19   | 0.07  | -0.08 | -0.08 | 0.07  | 0.03      |
|     |    | 200 | 1.51 | -5.50  | -11.74 | -8.31  | -8.93  | -3.11  | 0.11  | -0.10 | -0.10 | 0.11  | -0.02     |
|     |    | 201 | 1.53 | -8.05  | -9.36  | -8.08  | -9.33  | 0.20   | 0.12  | -0.10 | -0.10 | 0.12  | -7.04e-03 |
| 144 | 10 | 122 | 4.54 | 5.03   | -5.03  | 4.99   | -4.99  | 0.65   | 0.24  | -0.57 | -0.14 | -0.19 | 0.40      |
|     |    | 124 | 3.65 | 6.90   | -4.85  | 6.85   | -4.79  | 0.79   | 0.13  | -0.47 | -0.12 | -0.21 | 0.30      |
|     |    | 200 | 4.87 | -6.12  | -12.33 | -11.05 | -7.39  | -2.51  | -0.04 | -0.75 | -0.62 | -0.17 | 0.27      |
|     |    | 201 | 6.04 | -7.59  | -11.03 | -10.83 | -7.79  | 0.80   | 0.07  | -0.86 | -0.62 | -0.17 | 0.40      |
| 144 | 42 | 122 | 2.55 | 6.64   | -5.80  | 6.63   | -5.79  | 0.34   | 0.13  | -0.28 | -0.12 | -0.04 | 0.20      |
|     |    | 124 | 2.18 | 8.50   | -5.61  | 8.48   | -5.59  | 0.48   | 0.07  | -0.24 | -0.10 | -0.07 | 0.16      |
|     |    | 200 | 2.82 | -6.00  | -11.82 | -9.63  | -8.19  | -2.82  | 0.01  | -0.39 | -0.35 | -0.03 | 0.12      |
|     |    | 201 | 3.38 | -8.36  | -9.63  | -9.40  | -8.59  | 0.49   | 0.07  | -0.44 | -0.35 | -0.02 | 0.19      |
| 145 | 1  | 120 | 4.50 | 4.54   | -11.07 | 4.49   | -11.02 | -0.85  | 0.40  | -0.19 | -0.19 | 0.40  | 0.02      |
|     |    | 122 | 4.06 | 12.37  | -10.08 | 12.34  | -10.05 | 0.84   | 0.28  | -0.14 | -0.13 | 0.27  | 0.08      |
|     |    | 201 | 2.94 | -3.84  | -21.92 | -11.45 | -14.31 | -8.93  | 0.24  | -0.12 | -0.10 | 0.22  | -0.08     |
|     |    | 143 | 2.84 | -8.62  | -17.43 | -10.00 | -16.04 | -3.21  | 0.26  | -0.12 | -0.09 | 0.23  | -0.10     |
| 145 | 2  | 120 | 2.58 | 2.69   | -7.12  | 2.65   | -7.08  | -0.61  | 0.19  | -0.14 | -0.14 | 0.18  | 0.04      |
|     |    | 122 | 2.31 | 8.09   | -6.42  | 8.07   | -6.40  | 0.50   | 0.12  | -0.12 | -0.09 | 0.09  | 0.07      |
|     |    | 201 | 2.01 | -2.66  | -14.85 | -8.10  | -9.40  | -6.06  | 0.13  | -0.11 | -0.10 | 0.12  | -0.05     |
|     |    | 143 | 1.78 | -5.87  | -11.83 | -7.09  | -10.62 | -2.40  | 0.14  | -0.10 | -0.09 | 0.13  | -0.05     |
| 145 | 14 | 120 | 7.44 | 3.45   | -9.02  | 3.40   | -8.97  | -0.78  | 0.85  | -0.47 | -0.11 | 0.49  | -0.59     |
|     |    | 122 | 5.93 | 8.83   | -8.30  | 8.82   | -8.29  | 0.33   | 0.63  | -0.32 | -0.07 | 0.38  | -0.42     |
|     |    | 201 | 7.21 | -1.67  | -15.32 | -5.70  | -11.29 | -6.23  | 0.95  | -0.20 | 0.35  | 0.40  | -0.58     |
|     |    | 143 | 7.69 | -3.91  | -13.28 | -4.68  | -12.51 | -2.57  | 1.08  | -0.29 | 0.36  | 0.44  | -0.68     |
| 145 | 46 | 120 | 4.31 | 3.05   | -8.03  | 3.01   | -7.99  | -0.69  | 0.45  | -0.24 | -0.12 | 0.33  | -0.26     |
|     |    | 122 | 3.52 | 8.44   | -7.32  | 8.43   | -7.31  | 0.42   | 0.30  | -0.15 | -0.08 | 0.23  | -0.17     |
|     |    | 201 | 4.22 | -2.26  | -14.99 | -6.95  | -10.31 | -6.14  | 0.50  | -0.12 | 0.12  | 0.26  | -0.30     |
|     |    | 143 | 4.13 | -4.98  | -12.47 | -5.93  | -11.52 | -2.48  | 0.56  | -0.16 | 0.13  | 0.28  | -0.35     |
| 146 | 1  | 118 | 5.50 | -4.84  | -15.45 | -7.69  | -12.60 | -4.70  | 0.62  | -0.27 | -0.27 | 0.62  | -0.03     |
|     |    | 120 | 4.48 | 4.16   | -10.54 | 4.16   | -10.53 | 0.29   | 0.41  | -0.20 | -0.19 | 0.39  | 0.10      |
|     |    | 143 | 4.12 | 0.05   | -26.55 | -10.04 | -16.46 | -12.91 | 0.30  | -0.16 | -0.10 | 0.24  | -0.15     |
|     |    | 138 | 3.27 | -4.01  | -21.15 | -6.16  | -19.00 | -5.68  | 0.32  | -0.16 | -0.06 | 0.22  | -0.19     |
| 146 | 2  | 118 | 3.32 | -3.44  | -10.50 | -5.75  | -8.19  | -3.31  | 0.35  | -0.19 | -0.19 | 0.35  | 0.02      |
|     |    | 120 | 2.63 | 2.42   | -6.75  | 2.42   | -6.75  | 0.08   | 0.20  | -0.16 | -0.14 | 0.18  | 0.09      |
|     |    | 143 | 2.70 | 0.02   | -18.03 | -7.12  | -10.89 | -8.83  | 0.17  | -0.12 | -0.09 | 0.14  | -0.09     |
|     |    | 138 | 2.08 | -2.71  | -14.39 | -4.41  | -12.68 | -4.13  | 0.18  | -0.11 | -0.07 | 0.13  | -0.11     |

|     |    |     |       |       |        |        |        |        |       |       |           |       |       |
|-----|----|-----|-------|-------|--------|--------|--------|--------|-------|-------|-----------|-------|-------|
| 146 | 14 | 118 | 9.78  | -6.63 | -12.89 | -8.90  | -10.61 | -3.01  | 1.14  | -0.67 | -0.21     | 0.68  | -0.79 |
|     |    | 120 | 7.87  | -0.72 | -9.18  | -0.73  | -9.17  | 0.38   | 0.87  | -0.54 | -0.15     | 0.48  | -0.63 |
|     |    | 143 | 10.09 | 0.34  | -18.63 | -4.98  | -13.31 | -8.53  | 1.18  | -0.47 | 0.27      | 0.44  | -0.82 |
|     |    | 138 | 10.45 | -1.22 | -16.15 | -2.28  | -15.10 | -3.82  | 1.32  | -0.56 | 0.30      | 0.46  | -0.93 |
| 146 | 46 | 118 | 5.60  | -4.97 | -11.64 | -7.27  | -9.35  | -3.17  | 0.66  | -0.36 | -0.20     | 0.50  | -0.37 |
|     |    | 120 | 4.27  | 0.91  | -7.92  | 0.91   | -7.91  | 0.22   | 0.44  | -0.25 | -0.14     | 0.33  | -0.25 |
|     |    | 143 | 6.11  | 0.11  | -18.25 | -6.09  | -12.05 | -8.68  | 0.63  | -0.27 | 0.08      | 0.28  | -0.44 |
|     |    | 138 | 5.95  | -2.04 | -15.18 | -3.38  | -13.84 | -3.98  | 0.71  | -0.31 | 0.11      | 0.29  | -0.51 |
| 147 | 1  | 116 | 8.34  | -3.92 | -31.29 | -20.19 | -15.03 | -13.44 | 0.97  | -0.36 | -0.33     | 0.94  | -0.21 |
|     |    | 118 | 5.38  | -6.77 | -13.23 | -8.47  | -11.53 | -2.85  | 0.62  | -0.27 | -0.27     | 0.62  | 0.04  |
|     |    | 138 | 5.43  | 4.23  | -30.50 | -6.09  | -20.18 | -15.87 | 0.38  | -0.21 | -0.07     | 0.24  | -0.25 |
|     |    | 139 | 4.11  | 2.49  | -22.24 | 1.45   | -21.20 | -4.96  | 0.34  | -0.23 | 4.90e-03  | 0.10  | -0.28 |
| 147 | 2  | 116 | 5.25  | -2.48 | -21.77 | -14.34 | -9.92  | -9.39  | 0.58  | -0.24 | -0.23     | 0.57  | -0.09 |
|     |    | 118 | 3.28  | -4.66 | -9.10  | -6.28  | -7.47  | -2.14  | 0.35  | -0.20 | -0.19     | 0.34  | 0.07  |
|     |    | 138 | 3.50  | 2.88  | -20.72 | -4.36  | -13.48 | -10.89 | 0.22  | -0.14 | -0.07     | 0.14  | -0.15 |
|     |    | 139 | 2.62  | 1.70  | -15.07 | 0.87   | -14.24 | -3.63  | 0.20  | -0.15 | -9.81e-03 | 0.06  | -0.17 |
| 147 | 14 | 116 | 14.16 | -7.38 | -27.58 | -21.96 | -13.01 | -9.05  | 1.51  | -0.88 | -0.28     | 0.91  | -1.03 |
|     |    | 118 | 10.12 | -9.77 | -14.69 | -13.90 | -10.56 | -1.80  | 1.15  | -0.72 | -0.25     | 0.67  | -0.81 |
|     |    | 138 | 12.67 | 3.56  | -22.10 | -1.97  | -16.57 | -10.55 | 1.34  | -0.77 | 0.10      | 0.47  | -1.04 |
|     |    | 139 | 12.27 | 3.79  | -17.84 | 3.27   | -17.33 | -3.30  | 1.41  | -0.85 | 0.16      | 0.40  | -1.12 |
| 147 | 46 | 116 | 9.26  | -4.90 | -24.50 | -18.01 | -11.40 | -9.23  | 0.98  | -0.50 | -0.26     | 0.74  | -0.55 |
|     |    | 118 | 5.57  | -7.41 | -11.49 | -9.95  | -8.95  | -1.98  | 0.65  | -0.37 | -0.22     | 0.50  | -0.36 |
|     |    | 138 | 7.87  | 3.14  | -21.31 | -3.21  | -14.96 | -10.72 | 0.75  | -0.44 | 0.01      | 0.30  | -0.58 |
|     |    | 139 | 7.17  | 2.68  | -16.38 | 2.03   | -15.72 | -3.47  | 0.78  | -0.48 | 0.07      | 0.23  | -0.63 |
| 148 | 1  | 114 | 13.11 | 6.78  | -45.05 | -21.93 | -16.33 | -25.76 | 1.36  | -0.47 | -0.26     | 1.14  | -0.58 |
|     |    | 116 | 8.08  | -5.83 | -28.84 | -21.23 | -13.43 | -10.83 | 0.97  | -0.34 | -0.32     | 0.95  | -0.16 |
|     |    | 139 | 6.49  | 9.08  | -31.26 | 1.87   | -24.04 | -15.46 | 0.40  | -0.28 | 0.01      | 0.11  | -0.34 |
|     |    | 140 | 4.07  | 10.55 | -15.51 | 10.52  | -15.47 | 1.00   | 0.18  | -0.32 | 0.03      | -0.18 | -0.23 |
| 148 | 2  | 114 | 8.47  | 4.89  | -31.25 | -15.45 | -10.91 | -17.92 | 0.86  | -0.30 | -0.18     | 0.74  | -0.34 |
|     |    | 116 | 5.12  | -3.65 | -20.24 | -15.05 | -8.84  | -7.69  | 0.59  | -0.23 | -0.23     | 0.58  | -0.06 |
|     |    | 139 | 4.20  | 6.19  | -21.20 | 1.15   | -16.16 | -10.61 | 0.24  | -0.18 | -6.67e-03 | 0.07  | -0.21 |
|     |    | 140 | 2.72  | 7.17  | -10.41 | 7.16   | -10.40 | 0.49   | 0.12  | -0.21 | 0.03      | -0.12 | -0.14 |
| 148 | 14 | 114 | 18.68 | -1.57 | -38.21 | -26.18 | -13.60 | -17.21 | 1.83  | -1.15 | -0.29     | 0.97  | -1.35 |
|     |    | 116 | 14.68 | -8.68 | -28.63 | -25.78 | -11.53 | -6.98  | 1.55  | -0.96 | -0.33     | 0.93  | -1.08 |
|     |    | 139 | 13.41 | 7.89  | -22.51 | 4.23   | -18.85 | -9.90  | 1.26  | -1.06 | -0.20     | 0.41  | -1.12 |
|     |    | 140 | 11.52 | 10.30 | -13.15 | 10.24  | -13.09 | 1.20   | 1.02  | -1.08 | -0.17     | 0.11  | -1.04 |
| 148 | 46 | 114 | 13.30 | 1.67  | -34.48 | -20.61 | -12.21 | -17.58 | 1.30  | -0.68 | -0.23     | 0.85  | -0.83 |
|     |    | 116 | 9.34  | -6.26 | -24.08 | -20.21 | -10.13 | -7.35  | 0.99  | -0.52 | -0.28     | 0.75  | -0.55 |
|     |    | 139 | 8.52  | 6.95  | -21.77 | 2.63   | -17.45 | -10.27 | 0.73  | -0.60 | -0.10     | 0.23  | -0.65 |
|     |    | 140 | 6.44  | 8.68  | -11.72 | 8.64   | -11.69 | 0.83   | 0.54  | -0.61 | -0.06     | -0.01 | -0.57 |
| 149 | 1  | 108 | 9.80  | 31.98 | -3.60  | 15.80  | 12.58  | -17.72 | 0.84  | -0.44 | -0.05     | 0.45  | -0.58 |
|     |    | 114 | 13.60 | 5.36  | -42.27 | -18.35 | -18.56 | -23.82 | 1.49  | -0.47 | -0.13     | 1.16  | -0.74 |
|     |    | 140 | 4.82  | 11.35 | -18.96 | 10.27  | -17.89 | -5.61  | 0.13  | -0.29 | 0.07      | -0.24 | -0.14 |
|     |    | 141 | 4.54  | 10.83 | -8.35  | -3.65  | 6.13   | -8.25  | -0.07 | -0.57 | -0.53     | -0.11 | -0.14 |
| 149 | 2  | 108 | 6.36  | 21.80 | -2.69  | 10.79  | 8.32   | -12.18 | 0.55  | -0.26 | -0.02     | 0.31  | -0.36 |
|     |    | 114 | 8.81  | 4.06  | -29.53 | -12.96 | -12.51 | -16.80 | 0.95  | -0.29 | -0.10     | 0.76  | -0.45 |
|     |    | 140 | 3.24  | 7.73  | -12.74 | 6.99   | -12.00 | -3.80  | 0.09  | -0.19 | 0.06      | -0.17 | -0.08 |
|     |    | 141 | 2.87  | 7.78  | -5.80  | -2.58  | 4.56   | -5.78  | -0.05 | -0.35 | -0.32     | -0.07 | -0.08 |
| 149 | 12 | 108 | 14.93 | 22.14 | -2.06  | 11.02  | 9.06   | -12.06 | 1.34  | -1.12 | -0.03     | 0.26  | -1.22 |
|     |    | 114 | 19.18 | 4.44  | -28.93 | -12.72 | -11.78 | -16.68 | 2.01  | -1.14 | -0.11     | 0.98  | -1.48 |
|     |    | 140 | 9.94  | 10.29 | -11.90 | 9.66   | -11.27 | -3.68  | 0.62  | -1.21 | -0.65     | 0.06  | -0.84 |
|     |    | 141 | 9.94  | 8.92  | -3.54  | 0.08   | 5.29   | -5.66  | 0.22  | -1.38 | -1.04     | -0.13 | -0.66 |
| 149 | 44 | 108 | 10.43 | 21.96 | -2.39  | 10.90  | 8.67   | -12.12 | 0.92  | -0.66 | -0.03     | 0.29  | -0.78 |
|     |    | 114 | 13.72 | 4.24  | -29.25 | -12.85 | -12.17 | -16.74 | 1.44  | -0.68 | -0.10     | 0.87  | -0.94 |
|     |    | 140 | 5.46  | 8.96  | -12.34 | 8.28   | -11.66 | -3.74  | 0.29  | -0.63 | -0.29     | -0.06 | -0.45 |
|     |    | 141 | 6.24  | 8.31  | -4.70  | -1.30  | 4.90   | -5.72  | 0.08  | -0.84 | -0.67     | -0.10 | -0.36 |

|     |    |     |       |        |         |        |        |        |          |           |           |           |           |
|-----|----|-----|-------|--------|---------|--------|--------|--------|----------|-----------|-----------|-----------|-----------|
| 150 | 1  | 107 | 5.46  | 33.42  | 2.42    | 9.51   | 26.33  | -13.02 | 0.32     | -0.29     | -0.29     | 0.32      | 3.18e-03  |
|     |    | 108 | 6.50  | 26.86  | 6.56    | 8.78   | 24.63  | -6.34  | 0.51     | -0.34     | -0.19     | 0.36      | -0.32     |
|     |    | 141 | 7.22  | 24.24  | -25.59  | 0.33   | -1.68  | -24.89 | 0.05     | -0.65     | -0.59     | -0.01     | -0.20     |
|     |    | 174 | 6.12  | 22.33  | -16.06  | -0.75  | 7.03   | -18.80 | 0.02     | -0.68     | -0.67     | 7.05e-03  | -0.09     |
| 150 | 2  | 107 | 3.65  | 22.59  | 1.64    | 6.42   | 17.81  | -8.79  | 0.22     | -0.18     | -0.18     | 0.22      | 5.13e-03  |
|     |    | 108 | 4.22  | 18.06  | 4.34    | 5.90   | 16.50  | -4.36  | 0.33     | -0.20     | -0.11     | 0.24      | -0.20     |
|     |    | 141 | 4.73  | 16.82  | -17.30  | 0.17   | -0.65  | -17.05 | 0.03     | -0.40     | -0.36     | -8.85e-03 | -0.12     |
|     |    | 174 | 4.00  | 15.59  | -11.03  | -0.59  | 5.15   | -13.00 | 0.01     | -0.42     | -0.41     | 3.02e-03  | -0.06     |
| 150 | 14 | 107 | 4.95  | 25.50  | -1.74   | 4.45   | 19.30  | -11.42 | 0.28     | -0.17     | -0.09     | 0.20      | -0.18     |
|     |    | 108 | 6.31  | 20.87  | 1.05    | 3.93   | 17.99  | -6.99  | 0.53     | -0.34     | -0.02     | 0.22      | -0.42     |
|     |    | 141 | 13.92 | 21.87  | -17.58  | 3.45   | 0.84   | -19.68 | 0.04     | -2.10     | -2.03     | -0.03     | -0.38     |
|     |    | 174 | 13.68 | 20.42  | -11.08  | 2.70   | 6.64   | -15.63 | 0.02     | -2.12     | -2.08     | -0.02     | -0.27     |
| 150 | 44 | 107 | 4.15  | 24.58  | 1.76    | 7.90   | 18.44  | -10.12 | 0.23     | -0.15     | -0.12     | 0.20      | -0.11     |
|     |    | 108 | 5.23  | 19.74  | 4.76    | 7.38   | 17.13  | -5.69  | 0.44     | -0.27     | -0.06     | 0.22      | -0.33     |
|     |    | 141 | 8.95  | 19.12  | -17.67  | 1.47   | -0.02  | -18.38 | 0.04     | -1.19     | -1.12     | -0.03     | -0.29     |
|     |    | 174 | 8.51  | 17.80  | -11.30  | 0.72   | 5.78   | -14.33 | 0.02     | -1.20     | -1.17     | -0.02     | -0.20     |
| 151 | 1  | 181 | 4.31  | -8.56  | -31.80  | -18.67 | -21.69 | -11.52 | 0.05     | -0.41     | -0.33     | -0.02     | 0.17      |
|     |    | 203 | 12.57 | 58.56  | -14.16  | 46.21  | -1.82  | 27.30  | 0.74     | -0.49     | -0.42     | 0.67      | -0.29     |
|     |    | 168 | 17.71 | -39.20 | -108.42 | -81.03 | -66.58 | -33.85 | 0.58     | -1.56     | 0.41      | -1.39     | -0.58     |
|     |    | 173 | 17.24 | 25.61  | -32.03  | -31.98 | 25.55  | -1.73  | 0.48     | -1.83     | -1.70     | 0.35      | -0.53     |
| 151 | 2  | 181 | 2.99  | -5.96  | -21.98  | -13.07 | -14.87 | -7.96  | 0.04     | -0.30     | -0.25     | -8.66e-03 | 0.11      |
|     |    | 203 | 8.68  | 40.32  | -9.68   | 31.91  | -1.28  | 18.70  | 0.49     | -0.37     | -0.32     | 0.44      | -0.19     |
|     |    | 168 | 12.03 | -27.13 | -74.80  | -56.30 | -45.63 | -23.23 | 0.41     | -1.05     | 0.30      | -0.94     | -0.39     |
|     |    | 173 | 12.08 | 17.56  | -21.84  | -21.81 | 17.52  | -1.12  | 0.33     | -1.30     | -1.21     | 0.24      | -0.38     |
| 151 | 11 | 181 | 5.28  | 1.50   | -30.22  | -9.13  | -19.59 | -14.97 | 0.28     | -0.19     | 0.10      | -7.34e-03 | 0.23      |
|     |    | 203 | 6.20  | 38.90  | -9.04   | 35.85  | -5.99  | 11.69  | 0.32     | -0.17     | 0.03      | 0.12      | -0.24     |
|     |    | 168 | 15.96 | -26.89 | -89.32  | -65.86 | -50.35 | -30.24 | 0.51     | -1.47     | 0.30      | -1.26     | -0.61     |
|     |    | 173 | 13.34 | 14.25  | -32.82  | -31.37 | 12.80  | -8.13  | 0.36     | -1.33     | -1.21     | 0.24      | -0.43     |
| 151 | 43 | 181 | 4.00  | -2.43  | -25.88  | -11.17 | -17.14 | -11.34 | 0.13     | -0.22     | -0.08     | -8.03e-03 | 0.17      |
|     |    | 203 | 7.45  | 39.29  | -9.03   | 33.81  | -3.55  | 15.32  | 0.37     | -0.24     | -0.15     | 0.28      | -0.21     |
|     |    | 168 | 13.91 | -27.01 | -81.79  | -60.90 | -47.90 | -26.60 | 0.45     | -1.25     | 0.30      | -1.09     | -0.50     |
|     |    | 173 | 12.67 | 15.73  | -26.89  | -26.41 | 15.25  | -4.50  | 0.34     | -1.31     | -1.21     | 0.24      | -0.40     |
| 152 | 1  | 178 | 3.76  | 25.76  | 1.60    | 25.75  | 1.61   | -0.59  | 0.01     | -0.21     | -0.21     | 0.01      | -0.01     |
|     |    | 202 | 2.07  | 13.95  | -0.27   | 13.06  | 0.62   | 3.45   | 0.13     | -0.07     | 0.02      | 0.05      | -0.10     |
|     |    | 203 | 6.62  | 10.99  | -19.27  | -3.90  | -4.39  | 15.13  | 0.37     | -0.40     | -4.02e-03 | -0.03     | -0.38     |
|     |    | 181 | 5.95  | 0.42   | -12.57  | -0.10  | -12.04 | 2.56   | 0.32     | -0.62     | -0.62     | 0.31      | -0.05     |
| 152 | 2  | 178 | 2.75  | 17.54  | 1.10    | 17.53  | 1.11   | -0.41  | 7.89e-03 | -0.17     | -0.17     | 7.41e-03  | -9.31e-03 |
|     |    | 202 | 1.55  | 9.43   | -0.22   | 8.79   | 0.42   | 2.40   | 0.07     | -0.07     | -0.03     | 0.03      | -0.06     |
|     |    | 203 | 4.43  | 7.51   | -13.23  | -2.73  | -2.98  | 10.37  | 0.22     | -0.28     | -0.03     | -0.02     | -0.25     |
|     |    | 181 | 4.18  | 0.22   | -8.67   | -0.15  | -8.31  | 1.77   | 0.21     | -0.45     | -0.45     | 0.21      | -0.03     |
| 152 | 5  | 178 | 8.50  | 16.72  | 0.98    | 16.50  | 1.19   | 1.83   | 0.05     | -1.12     | -1.07     | -2.09e-04 | -0.24     |
|     |    | 202 | 5.98  | 10.02  | -1.76   | 7.76   | 0.50   | 4.64   | -0.21    | -0.93     | -0.93     | -0.21     | -0.06     |
|     |    | 203 | 6.67  | 8.46   | -16.91  | -5.56  | -2.90  | 12.62  | 0.04     | -0.80     | -0.50     | -0.26     | -0.40     |
|     |    | 181 | 7.97  | -0.80  | -10.39  | -2.97  | -8.22  | 4.02   | 0.32     | -1.03     | -0.91     | 0.20      | -0.39     |
| 152 | 37 | 178 | 5.47  | 17.06  | 1.12    | 17.04  | 1.15   | 0.67   | 0.03     | -0.63     | -0.61     | 3.76e-03  | -0.12     |
|     |    | 202 | 3.58  | 9.61   | -0.86   | 8.29   | 0.46   | 3.48   | -0.08    | -0.47     | -0.46     | -0.09     | -0.06     |
|     |    | 203 | 5.43  | 7.95   | -14.98  | -4.09  | -2.94  | 11.45  | 0.13     | -0.53     | -0.26     | -0.14     | -0.32     |
|     |    | 181 | 5.83  | -0.47  | -9.31   | -1.51  | -8.26  | 2.85   | 0.25     | -0.72     | -0.67     | 0.20      | -0.20     |
| 153 | 1  | 177 | 9.55  | 28.25  | -21.49  | 4.60   | 2.16   | -24.84 | 0.82     | -0.33     | 0.64      | -0.15     | 0.42      |
|     |    | 205 | 12.75 | 32.43  | -3.43   | 21.43  | 7.57   | -16.54 | 1.27     | -0.59     | -0.13     | 0.80      | 0.80      |
|     |    | 170 | 14.90 | -30.40 | -75.13  | -31.77 | -73.75 | -7.72  | -0.09    | -1.48     | -0.14     | -1.43     | -0.26     |
|     |    | 106 | 4.60  | 33.73  | -6.57   | -2.03  | 29.19  | -12.75 | 0.23     | -0.02     | 0.23      | -0.02     | -2.94e-03 |
| 153 | 2  | 177 | 6.32  | 19.47  | -14.77  | 2.94   | 1.76   | -17.11 | 0.51     | -0.23     | 0.39      | -0.11     | 0.27      |
|     |    | 205 | 8.62  | 22.12  | -2.50   | 14.51  | 5.11   | -11.38 | 0.83     | -0.42     | -0.12     | 0.52      | 0.54      |
|     |    | 170 | 10.12 | -20.96 | -51.29  | -21.87 | -50.37 | -5.18  | -0.04    | -0.99     | -0.08     | -0.95     | -0.19     |
|     |    | 106 | 2.93  | 22.90  | -4.38   | -1.35  | 19.87  | -8.58  | 0.14     | -7.08e-03 | 0.14      | -4.44e-03 | -0.02     |

|     |    |     |       |        |        |        |           |        |          |       |       |           |          |
|-----|----|-----|-------|--------|--------|--------|-----------|--------|----------|-------|-------|-----------|----------|
| 153 | 3  | 177 | 15.52 | 24.09  | -16.46 | 9.49   | -1.86     | -19.46 | 1.93     | -0.59 | 1.57  | -0.23     | 0.88     |
|     |    | 205 | 13.09 | 28.14  | -5.58  | 21.07  | 1.49      | -13.73 | 1.69     | -0.44 | 1.06  | 0.20      | 0.97     |
|     |    | 170 | 11.98 | -26.00 | -56.02 | -28.02 | -53.99    | -7.53  | -0.12    | -1.29 | -0.14 | -1.28     | -0.12    |
|     |    | 106 | 5.27  | 20.52  | -11.77 | -7.51  | 16.26     | -10.93 | 0.22     | -0.27 | 0.08  | -0.12     | 0.22     |
| 153 | 38 | 177 | 10.16 | 20.94  | -15.45 | 5.14   | 0.36      | -18.04 | 1.18     | -0.33 | 1.01  | -0.16     | 0.48     |
|     |    | 205 | 9.14  | 24.13  | -3.71  | 16.71  | 3.71      | -12.31 | 1.10     | -0.22 | 0.50  | 0.39      | 0.66     |
|     |    | 170 | 11.08 | -23.08 | -53.08 | -24.38 | -51.78    | -6.11  | -0.05    | -1.14 | -0.10 | -1.09     | -0.23    |
|     |    | 106 | 3.52  | 21.97  | -7.36  | -3.86  | 18.47     | -9.51  | 0.13     | -0.06 | 0.12  | -0.05     | 0.03     |
| 154 | 1  | 112 | 3.21  | 4.05   | -0.96  | 1.88   | 1.21      | -2.48  | 0.30     | -0.28 | 0.25  | -0.22     | 0.16     |
|     |    | 204 | 2.61  | 9.99   | -0.51  | 9.58   | -0.10     | -2.02  | 0.27     | -0.08 | 0.01  | 0.18      | 0.16     |
|     |    | 205 | 6.11  | 14.94  | -18.65 | -1.06  | -2.64     | -16.78 | 0.29     | -0.38 | 0.13  | -0.22     | 0.29     |
|     |    | 177 | 3.79  | 16.56  | -13.39 | -0.79  | 3.96      | -14.78 | 0.28     | 0.06  | 0.16  | 0.19      | 0.11     |
| 154 | 2  | 112 | 1.95  | 2.69   | -0.82  | 1.08   | 0.79      | -1.75  | 0.15     | -0.19 | 0.11  | -0.15     | 0.10     |
|     |    | 204 | 1.87  | 6.66   | -0.38  | 6.37   | -0.09     | -1.41  | 0.17     | -0.09 | -0.03 | 0.12      | 0.10     |
|     |    | 205 | 4.02  | 10.28  | -12.75 | -0.71  | -1.76     | -11.50 | 0.16     | -0.26 | 0.05  | -0.15     | 0.18     |
|     |    | 177 | 2.49  | 11.34  | -9.02  | -0.51  | 2.84      | -10.04 | 0.18     | 0.03  | 0.07  | 0.13      | 0.07     |
| 154 | 14 | 112 | 12.28 | 2.94   | -5.03  | -3.04  | 0.96      | -3.45  | -0.23    | -2.10 | -2.10 | -0.24     | 0.03     |
|     |    | 204 | 13.50 | 4.45   | -2.13  | 2.24   | 0.08      | -3.11  | -0.11    | -2.25 | -2.24 | -0.12     | 0.16     |
|     |    | 205 | 7.53  | 10.12  | -16.48 | -4.77  | -1.59     | -13.21 | -0.38    | -1.25 | -1.24 | -0.39     | -0.04    |
|     |    | 177 | 9.51  | 11.56  | -13.12 | -4.57  | 3.01      | -11.74 | 0.11     | -1.28 | -1.22 | 0.05      | -0.28    |
| 154 | 46 | 112 | 5.35  | 2.70   | -2.73  | -0.90  | 0.87      | -2.56  | -0.19    | -0.96 | -0.95 | -0.19     | 0.07     |
|     |    | 204 | 7.24  | 5.31   | -0.93  | 4.38   | -3.06e-03 | -2.22  | 0.02     | -1.11 | -1.10 | 5.09e-04  | 0.13     |
|     |    | 205 | 4.02  | 10.16  | -14.50 | -2.67  | -1.68     | -12.32 | -0.24    | -0.59 | -0.57 | -0.26     | 0.08     |
|     |    | 177 | 4.99  | 11.41  | -10.96 | -2.47  | 2.92      | -10.86 | 0.11     | -0.57 | -0.55 | 0.09      | -0.10    |
| 155 | 1  | 176 | 9.55  | 28.25  | -21.49 | 4.60   | 2.16      | -24.84 | 0.33     | -0.82 | -0.64 | 0.15      | -0.42    |
|     |    | 208 | 12.75 | 32.43  | -3.43  | 21.43  | 7.57      | -16.54 | 0.59     | -1.27 | 0.13  | -0.80     | -0.80    |
|     |    | 169 | 14.90 | -30.40 | -75.13 | -31.77 | -73.75    | -7.72  | 1.48     | 0.09  | 0.14  | 1.43      | 0.26     |
|     |    | 104 | 4.60  | 33.73  | -6.57  | -2.03  | 29.19     | -12.75 | 0.02     | -0.23 | -0.23 | 0.02      | 2.94e-03 |
| 155 | 2  | 176 | 6.32  | 19.47  | -14.77 | 2.94   | 1.76      | -17.11 | 0.23     | -0.51 | -0.39 | 0.11      | -0.27    |
|     |    | 208 | 8.62  | 22.12  | -2.50  | 14.51  | 5.11      | -11.38 | 0.42     | -0.83 | 0.12  | -0.52     | -0.54    |
|     |    | 169 | 10.12 | -20.96 | -51.29 | -21.87 | -50.37    | -5.18  | 0.99     | 0.04  | 0.08  | 0.95      | 0.19     |
|     |    | 104 | 2.93  | 22.90  | -4.38  | -1.35  | 19.87     | -8.58  | 7.08e-03 | -0.14 | -0.14 | 4.44e-03  | 0.02     |
| 155 | 9  | 176 | 15.52 | 24.09  | -16.46 | 9.49   | -1.86     | -19.46 | 0.59     | -1.93 | -1.57 | 0.23      | -0.88    |
|     |    | 208 | 13.09 | 28.14  | -5.58  | 21.07  | 1.49      | -13.73 | 0.44     | -1.69 | -1.06 | -0.20     | -0.97    |
|     |    | 169 | 11.98 | -26.00 | -56.02 | -28.02 | -53.99    | -7.53  | 1.29     | 0.12  | 0.14  | 1.28      | 0.12     |
|     |    | 104 | 5.27  | 20.52  | -11.77 | -7.51  | 16.26     | -10.93 | 0.27     | -0.22 | -0.08 | 0.12      | -0.22    |
| 155 | 40 | 176 | 10.16 | 20.94  | -15.45 | 5.14   | 0.36      | -18.04 | 0.33     | -1.18 | -1.01 | 0.16      | -0.48    |
|     |    | 208 | 9.14  | 24.13  | -3.71  | 16.71  | 3.71      | -12.31 | 0.22     | -1.10 | -0.50 | -0.39     | -0.66    |
|     |    | 169 | 11.08 | -23.08 | -53.08 | -24.38 | -51.78    | -6.11  | 1.14     | 0.05  | 0.10  | 1.09      | 0.23     |
|     |    | 104 | 3.52  | 21.97  | -7.36  | -3.86  | 18.47     | -9.51  | 0.06     | -0.13 | -0.12 | 0.05      | -0.03    |
| 156 | 1  | 110 | 3.21  | 4.05   | -0.96  | 1.88   | 1.21      | -2.48  | 0.28     | -0.30 | -0.25 | 0.22      | -0.16    |
|     |    | 207 | 2.61  | 9.99   | -0.51  | 9.58   | -0.10     | -2.02  | 0.08     | -0.27 | -0.01 | -0.18     | -0.16    |
|     |    | 208 | 6.11  | 14.94  | -18.65 | -1.06  | -2.64     | -16.78 | 0.38     | -0.29 | -0.13 | 0.22      | -0.29    |
|     |    | 176 | 3.79  | 16.56  | -13.39 | -0.79  | 3.96      | -14.78 | -0.06    | -0.28 | -0.16 | -0.19     | -0.11    |
| 156 | 2  | 110 | 1.95  | 2.69   | -0.82  | 1.08   | 0.79      | -1.75  | 0.19     | -0.15 | -0.11 | 0.15      | -0.10    |
|     |    | 207 | 1.87  | 6.66   | -0.38  | 6.37   | -0.09     | -1.41  | 0.09     | -0.17 | 0.03  | -0.12     | -0.10    |
|     |    | 208 | 4.02  | 10.28  | -12.75 | -0.71  | -1.76     | -11.50 | 0.26     | -0.16 | -0.05 | 0.15      | -0.18    |
|     |    | 176 | 2.49  | 11.34  | -9.02  | -0.51  | 2.84      | -10.04 | -0.03    | -0.18 | -0.07 | -0.13     | -0.07    |
| 156 | 16 | 110 | 12.28 | 2.94   | -5.03  | -3.04  | 0.96      | -3.45  | 2.10     | 0.23  | 2.10  | 0.24      | -0.03    |
|     |    | 207 | 13.50 | 4.45   | -2.13  | 2.24   | 0.08      | -3.11  | 2.25     | 0.11  | 2.24  | 0.12      | -0.16    |
|     |    | 208 | 7.53  | 10.12  | -16.48 | -4.77  | -1.59     | -13.21 | 1.25     | 0.38  | 1.24  | 0.39      | 0.04     |
|     |    | 176 | 9.51  | 11.56  | -13.12 | -4.57  | 3.01      | -11.74 | 1.28     | -0.11 | 1.22  | -0.05     | 0.28     |
| 156 | 48 | 110 | 5.35  | 2.70   | -2.73  | -0.90  | 0.87      | -2.56  | 0.96     | 0.19  | 0.95  | 0.19      | -0.07    |
|     |    | 207 | 7.24  | 5.31   | -0.93  | 4.38   | -3.06e-03 | -2.22  | 1.11     | -0.02 | 1.10  | -5.09e-04 | -0.13    |
|     |    | 208 | 4.02  | 10.16  | -14.50 | -2.67  | -1.68     | -12.32 | 0.59     | 0.24  | 0.57  | 0.26      | -0.08    |
|     |    | 176 | 4.99  | 11.41  | -10.96 | -2.47  | 2.92      | -10.86 | 0.57     | -0.11 | 0.55  | -0.09     | 0.10     |

|     |    |     |       |        |         |        |        |        |      |           |          |           |           |
|-----|----|-----|-------|--------|---------|--------|--------|--------|------|-----------|----------|-----------|-----------|
| 157 | 1  | 180 | 4.31  | -8.56  | -31.80  | -18.67 | -21.69 | -11.52 | 0.41 | -0.05     | 0.33     | 0.02      | -0.17     |
|     |    | 209 | 12.57 | 58.56  | -14.16  | 46.21  | -1.82  | 27.30  | 0.49 | -0.74     | 0.42     | -0.67     | 0.29      |
|     |    | 167 | 17.71 | -39.20 | -108.42 | -81.03 | -66.58 | -33.85 | 1.56 | -0.58     | -0.41    | 1.39      | 0.58      |
|     |    | 172 | 17.24 | 25.61  | -32.03  | -31.98 | 25.55  | -1.73  | 1.83 | -0.48     | 1.70     | -0.35     | 0.53      |
| 157 | 2  | 180 | 2.99  | -5.96  | -21.98  | -13.07 | -14.87 | -7.96  | 0.30 | -0.04     | 0.25     | 8.66e-03  | -0.11     |
|     |    | 209 | 8.68  | 40.32  | -9.68   | 31.91  | -1.28  | 18.70  | 0.37 | -0.49     | 0.32     | -0.44     | 0.19      |
|     |    | 167 | 12.03 | -27.13 | -74.80  | -56.30 | -45.63 | -23.23 | 1.05 | -0.41     | -0.30    | 0.94      | 0.39      |
|     |    | 172 | 12.08 | 17.56  | -21.84  | -21.81 | 17.52  | -1.12  | 1.30 | -0.33     | 1.21     | -0.24     | 0.38      |
| 157 | 17 | 180 | 5.28  | 1.50   | -30.22  | -9.13  | -19.59 | -14.97 | 0.19 | -0.28     | -0.10    | 7.34e-03  | -0.23     |
|     |    | 209 | 6.20  | 38.90  | -9.04   | 35.85  | -5.99  | 11.69  | 0.17 | -0.32     | -0.03    | -0.12     | 0.24      |
|     |    | 167 | 15.96 | -26.89 | -89.32  | -65.86 | -50.35 | -30.24 | 1.47 | -0.51     | -0.30    | 1.26      | 0.61      |
|     |    | 172 | 13.34 | 14.25  | -32.82  | -31.37 | 12.80  | -8.13  | 1.33 | -0.36     | 1.21     | -0.24     | 0.43      |
| 157 | 49 | 180 | 4.00  | -2.43  | -25.88  | -11.17 | -17.14 | -11.34 | 0.22 | -0.13     | 0.08     | 8.03e-03  | -0.17     |
|     |    | 209 | 7.45  | 39.29  | -9.03   | 33.81  | -3.55  | 15.32  | 0.24 | -0.37     | 0.15     | -0.28     | 0.21      |
|     |    | 167 | 13.91 | -27.01 | -81.79  | -60.90 | -47.90 | -26.60 | 1.25 | -0.45     | -0.30    | 1.09      | 0.50      |
|     |    | 172 | 12.67 | 15.73  | -26.89  | -26.41 | 15.25  | -4.50  | 1.31 | -0.34     | 1.21     | -0.24     | 0.40      |
| 158 | 1  | 179 | 3.76  | 25.76  | 1.60    | 25.75  | 1.61   | -0.59  | 0.21 | -0.01     | 0.21     | -0.01     | 0.01      |
|     |    | 206 | 2.07  | 13.95  | -0.27   | 13.06  | 0.62   | 3.45   | 0.07 | -0.13     | -0.02    | -0.05     | 0.10      |
|     |    | 209 | 6.62  | 10.99  | -19.27  | -3.90  | -4.39  | 15.13  | 0.40 | -0.37     | 4.02e-03 | 0.03      | 0.38      |
|     |    | 180 | 5.95  | 0.42   | -12.57  | -0.10  | -12.04 | 2.56   | 0.62 | -0.32     | 0.62     | -0.31     | 0.05      |
| 158 | 2  | 179 | 2.75  | 17.54  | 1.10    | 17.53  | 1.11   | -0.41  | 0.17 | -7.89e-03 | 0.17     | -7.41e-03 | 9.31e-03  |
|     |    | 206 | 1.55  | 9.43   | -0.22   | 8.79   | 0.42   | 2.40   | 0.07 | -0.07     | 0.03     | -0.03     | 0.06      |
|     |    | 209 | 4.43  | 7.51   | -13.23  | -2.73  | -2.98  | 10.37  | 0.28 | -0.22     | 0.03     | 0.02      | 0.25      |
|     |    | 180 | 4.18  | 0.22   | -8.67   | -0.15  | -8.31  | 1.77   | 0.45 | -0.21     | 0.45     | -0.21     | 0.03      |
| 158 | 7  | 179 | 8.50  | 16.72  | 0.98    | 16.50  | 1.19   | 1.83   | 1.12 | -0.05     | 1.07     | 2.09e-04  | 0.24      |
|     |    | 206 | 5.98  | 10.02  | -1.76   | 7.76   | 0.50   | 4.64   | 0.93 | 0.21      | 0.93     | 0.21      | 0.06      |
|     |    | 209 | 6.67  | 8.46   | -16.91  | -5.56  | -2.90  | 12.62  | 0.80 | -0.04     | 0.50     | 0.26      | 0.40      |
|     |    | 180 | 7.97  | -0.80  | -10.39  | -2.97  | -8.22  | 4.02   | 1.03 | -0.32     | 0.91     | -0.20     | 0.39      |
| 158 | 39 | 179 | 5.47  | 17.06  | 1.12    | 17.04  | 1.15   | 0.67   | 0.63 | -0.03     | 0.61     | -3.76e-03 | 0.12      |
|     |    | 206 | 3.58  | 9.61   | -0.86   | 8.29   | 0.46   | 3.48   | 0.47 | 0.08      | 0.46     | 0.09      | 0.06      |
|     |    | 209 | 5.43  | 7.95   | -14.98  | -4.09  | -2.94  | 11.45  | 0.53 | -0.13     | 0.26     | 0.14      | 0.32      |
|     |    | 180 | 5.83  | -0.47  | -9.31   | -1.51  | -8.26  | 2.85   | 0.72 | -0.25     | 0.67     | -0.20     | 0.20      |
| 159 | 1  | 177 | 3.50  | 18.75  | -18.06  | 0.20   | 0.49   | -18.40 | 0.13 | 0.01      | 0.13     | 0.01      | 0.02      |
|     |    | 211 | 6.10  | 27.40  | -17.07  | -0.73  | 11.06  | -21.44 | 0.30 | -0.14     | 0.15     | 0.01      | 0.21      |
|     |    | 210 | 1.94  | -0.76  | -5.53   | -1.27  | -5.02  | 1.47   | 0.24 | -0.05     | 0.19     | 2.81e-03  | 0.11      |
|     |    | 112 | 1.80  | 4.35   | -0.46   | -0.42  | 4.32   | -0.41  | 0.25 | -3.08e-03 | 0.25     | -1.57e-03 | 0.02      |
| 159 | 2  | 177 | 2.32  | 12.79  | -12.17  | 0.16   | 0.46   | -12.48 | 0.06 | 6.02e-03  | 0.05     | 9.62e-03  | 0.01      |
|     |    | 211 | 4.00  | 18.54  | -11.53  | -0.48  | 7.49   | -14.50 | 0.17 | -0.10     | 0.07     | 7.37e-03  | 0.13      |
|     |    | 210 | 1.06  | -0.57  | -3.62   | -0.87  | -3.32  | 0.91   | 0.12 | -0.04     | 0.08     | 1.47e-03  | 0.07      |
|     |    | 112 | 0.91  | 2.95   | -0.34   | -0.30  | 2.91   | -0.35  | 0.11 | -2.43e-03 | 0.11     | -1.04e-03 | 0.01      |
| 159 | 10 | 177 | 10.45 | 12.83  | -9.14   | 3.16   | 0.53   | -10.91 | 1.67 | -0.07     | 1.65     | -0.06     | 0.17      |
|     |    | 211 | 11.71 | 18.21  | -8.12   | 2.52   | 7.57   | -12.92 | 1.72 | -0.12     | 1.66     | -0.06     | 0.31      |
|     |    | 210 | 15.75 | 1.78   | -4.48   | 0.54   | -3.24  | 2.49   | 2.54 | -0.08     | 2.52     | -0.07     | 0.20      |
|     |    | 112 | 15.60 | 3.59   | 0.50    | 1.11   | 2.98   | 1.23   | 2.56 | -0.07     | 2.55     | -0.07     | 0.12      |
| 159 | 42 | 177 | 5.70  | 12.79  | -10.69  | 1.61   | 0.50   | -11.72 | 0.83 | -0.03     | 0.82     | -0.02     | 0.09      |
|     |    | 211 | 7.16  | 18.37  | -9.87   | 0.97   | 7.53   | -13.74 | 0.89 | -0.08     | 0.84     | -0.03     | 0.22      |
|     |    | 210 | 7.96  | 0.54   | -4.01   | -0.19  | -3.28  | 1.67   | 1.27 | -0.04     | 1.26     | -0.03     | 0.13      |
|     |    | 112 | 7.96  | 3.01   | 0.32    | 0.38   | 2.95   | 0.41   | 1.29 | -0.04     | 1.29     | -0.03     | 0.07      |
| 160 | 1  | 106 | 5.46  | 33.42  | 2.42    | 9.51   | 26.33  | -13.02 | 0.29 | -0.32     | 0.29     | -0.32     | -3.18e-03 |
|     |    | 109 | 6.50  | 26.86  | 6.56    | 8.78   | 24.63  | -6.34  | 0.34 | -0.51     | 0.19     | -0.36     | 0.32      |
|     |    | 211 | 7.22  | 24.24  | -25.59  | 0.33   | -1.68  | -24.89 | 0.65 | -0.05     | 0.59     | 0.01      | 0.20      |
|     |    | 177 | 6.12  | 22.33  | -16.06  | -0.75  | 7.03   | -18.80 | 0.68 | -0.02     | 0.67     | -7.05e-03 | 0.09      |
| 160 | 2  | 106 | 3.65  | 22.59  | 1.64    | 6.42   | 17.81  | -8.79  | 0.18 | -0.22     | 0.18     | -0.22     | -5.13e-03 |
|     |    | 109 | 4.22  | 18.06  | 4.34    | 5.90   | 16.50  | -4.36  | 0.20 | -0.33     | 0.11     | -0.24     | 0.20      |
|     |    | 211 | 4.73  | 16.82  | -17.30  | 0.17   | -0.65  | -17.05 | 0.40 | -0.03     | 0.36     | 8.85e-03  | 0.12      |
|     |    | 177 | 4.00  | 15.59  | -11.03  | -0.59  | 5.15   | -13.00 | 0.42 | -0.01     | 0.41     | -3.02e-03 | 0.06      |

|     |    |     |       |       |        |          |       |        |           |       |       |           |           |
|-----|----|-----|-------|-------|--------|----------|-------|--------|-----------|-------|-------|-----------|-----------|
| 160 | 5  | 106 | 4.95  | 25.50 | -1.74  | 4.45     | 19.30 | -11.42 | 0.17      | -0.28 | 0.09  | -0.20     | 0.18      |
|     |    | 109 | 6.31  | 20.87 | 1.05   | 3.93     | 17.99 | -6.99  | 0.34      | -0.53 | 0.02  | -0.22     | 0.42      |
|     |    | 211 | 13.92 | 21.87 | -17.58 | 3.45     | 0.84  | -19.68 | 2.10      | -0.04 | 2.03  | 0.03      | 0.38      |
|     |    | 177 | 13.68 | 20.42 | -11.08 | 2.70     | 6.64  | -15.63 | 2.12      | -0.02 | 2.08  | 0.02      | 0.27      |
| 160 | 35 | 106 | 4.15  | 24.58 | 1.76   | 7.90     | 18.44 | -10.12 | 0.15      | -0.23 | 0.12  | -0.20     | 0.11      |
|     |    | 109 | 5.23  | 19.74 | 4.76   | 7.38     | 17.13 | -5.69  | 0.27      | -0.44 | 0.06  | -0.22     | 0.33      |
|     |    | 211 | 8.95  | 19.12 | -17.67 | 1.47     | -0.02 | -18.38 | 1.19      | -0.04 | 1.12  | 0.03      | 0.29      |
|     |    | 177 | 8.51  | 17.80 | -11.30 | 0.72     | 5.78  | -14.33 | 1.20      | -0.02 | 1.17  | 0.02      | 0.20      |
| 161 | 1  | 57  | 0.19  | 2.69  | 0.61   | 0.64     | 2.66  | -0.24  | 0.15      | 0.08  | 0.12  | 0.10      | 0.04      |
|     |    | 226 | 3.40  | 2.04  | -5.03  | -2.30    | -0.69 | 3.45   | 0.09      | -3.24 | -2.16 | -0.98     | 1.56      |
|     |    | 213 | 0.66  | 3.46  | 2.61   | 3.33     | 2.74  | 0.30   | -0.01     | -0.61 | -0.61 | -0.01     | 3.11e-03  |
|     |    | 4   | 1.18  | -0.79 | -1.71  | -0.80    | -1.71 | 0.07   | 0.25      | -1.05 | -0.30 | -0.50     | 0.64      |
| 161 | 2  | 57  | 0.14  | 1.89  | 0.43   | 0.45     | 1.87  | -0.17  | 0.12      | 0.05  | 0.09  | 0.08      | 0.04      |
|     |    | 226 | 2.40  | 1.45  | -3.53  | -1.61    | -0.48 | 2.42   | 0.09      | -2.28 | -1.50 | -0.69     | 1.11      |
|     |    | 213 | 0.45  | 2.44  | 1.83   | 2.34     | 1.93  | 0.22   | -8.96e-03 | -0.41 | -0.41 | -9.26e-03 | 0.01      |
|     |    | 4   | 0.83  | -0.56 | -1.20  | -0.56    | -1.20 | 0.05   | 0.18      | -0.74 | -0.21 | -0.35     | 0.45      |
| 161 | 18 | 57  | 0.15  | 1.76  | 0.99   | 1.00     | 1.75  | -0.08  | 0.13      | 0.05  | 0.13  | 0.05      | -4.73e-03 |
|     |    | 226 | 2.50  | 2.01  | -3.54  | -1.04    | -0.50 | 2.76   | 0.16      | -2.33 | -1.45 | -0.73     | 1.19      |
|     |    | 213 | 0.21  | 3.76  | 1.81   | 3.54     | 2.03  | 0.61   | 0.06      | -0.13 | -0.08 | 0.01      | 0.08      |
|     |    | 4   | 0.83  | 0.63  | -1.24  | 0.61     | -1.22 | 0.19   | 0.37      | -0.57 | 0.13  | -0.33     | 0.41      |
| 161 | 50 | 57  | 0.13  | 1.83  | 0.70   | 0.71     | 1.81  | -0.13  | 0.11      | 0.06  | 0.11  | 0.06      | 0.02      |
|     |    | 226 | 2.45  | 1.71  | -3.53  | -1.33    | -0.49 | 2.59   | 0.12      | -2.30 | -1.48 | -0.70     | 1.15      |
|     |    | 213 | 0.33  | 3.07  | 1.82   | 2.92     | 1.98  | 0.41   | 9.81e-03  | -0.26 | -0.25 | 1.58e-03  | 0.05      |
|     |    | 4   | 0.81  | 0.01  | -1.22  | 2.34e-03 | -1.21 | 0.11   | 0.26      | -0.65 | -0.05 | -0.34     | 0.43      |
| 162 | 1  | 1   | 1.18  | -0.79 | -1.71  | -0.80    | -1.71 | -0.07  | 0.25      | -1.05 | -0.30 | -0.50     | -0.64     |
|     |    | 212 | 0.66  | 3.46  | 2.61   | 3.33     | 2.74  | -0.30  | -0.01     | -0.61 | -0.61 | -0.01     | -3.11e-03 |
|     |    | 214 | 3.40  | 2.04  | -5.03  | -2.30    | -0.69 | -3.45  | 0.09      | -3.24 | -2.16 | -0.98     | -1.56     |
|     |    | 9   | 0.19  | 2.69  | 0.61   | 0.64     | 2.66  | 0.24   | 0.15      | 0.08  | 0.12  | 0.10      | -0.04     |
| 162 | 2  | 1   | 0.83  | -0.56 | -1.20  | -0.56    | -1.20 | -0.05  | 0.18      | -0.74 | -0.21 | -0.35     | -0.45     |
|     |    | 212 | 0.45  | 2.44  | 1.83   | 2.34     | 1.93  | -0.22  | -8.96e-03 | -0.41 | -0.41 | -9.26e-03 | -0.01     |
|     |    | 214 | 2.40  | 1.45  | -3.53  | -1.61    | -0.48 | -2.42  | 0.09      | -2.28 | -1.50 | -0.69     | -1.11     |
|     |    | 9   | 0.14  | 1.89  | 0.43   | 0.45     | 1.87  | 0.17   | 0.12      | 0.05  | 0.09  | 0.08      | -0.04     |
| 162 | 12 | 1   | 0.83  | 0.63  | -1.24  | 0.61     | -1.22 | -0.19  | 0.37      | -0.57 | 0.13  | -0.33     | -0.41     |
|     |    | 212 | 0.21  | 3.76  | 1.81   | 3.54     | 2.03  | -0.61  | 0.06      | -0.13 | -0.08 | 0.01      | -0.08     |
|     |    | 214 | 2.50  | 2.01  | -3.54  | -1.04    | -0.50 | -2.76  | 0.16      | -2.33 | -1.45 | -0.73     | -1.19     |
|     |    | 9   | 0.15  | 1.76  | 0.99   | 1.00     | 1.75  | 0.08   | 0.13      | 0.05  | 0.13  | 0.05      | 4.73e-03  |
| 162 | 44 | 1   | 0.81  | 0.01  | -1.22  | 2.34e-03 | -1.21 | -0.11  | 0.26      | -0.65 | -0.05 | -0.34     | -0.43     |
|     |    | 212 | 0.33  | 3.07  | 1.82   | 2.92     | 1.98  | -0.41  | 9.81e-03  | -0.26 | -0.25 | 1.58e-03  | -0.05     |
|     |    | 214 | 2.45  | 1.71  | -3.53  | -1.33    | -0.49 | -2.59  | 0.12      | -2.30 | -1.48 | -0.70     | -1.15     |
|     |    | 9   | 0.13  | 1.83  | 0.70   | 0.71     | 1.81  | 0.13   | 0.11      | 0.06  | 0.11  | 0.06      | -0.02     |
| 163 | 1  | 9   | 1.51  | 1.05  | -0.05  | 0.06     | 0.94  | -0.33  | 0.82      | -0.96 | -0.09 | -0.05     | -0.89     |
|     |    | 214 | 1.62  | 3.43  | -0.99  | -0.98    | 3.42  | 0.21   | -0.51     | -1.82 | -1.74 | -0.59     | -0.32     |
|     |    | 215 | 3.12  | 2.32  | -0.61  | -0.40    | 2.11  | -0.75  | 0.42      | -2.97 | -1.47 | -1.09     | -1.68     |
|     |    | 13  | 0.84  | 2.06  | 0.15   | 0.20     | 2.02  | 0.30   | 0.10      | -0.74 | 0.01  | -0.65     | -0.26     |
| 163 | 2  | 9   | 1.07  | 0.73  | -0.04  | 0.04     | 0.66  | -0.23  | 0.59      | -0.68 | -0.06 | -0.03     | -0.63     |
|     |    | 214 | 1.14  | 2.43  | -0.68  | -0.67    | 2.42  | 0.13   | -0.34     | -1.27 | -1.20 | -0.41     | -0.25     |
|     |    | 215 | 2.22  | 1.65  | -0.44  | -0.29    | 1.49  | -0.55  | 0.31      | -2.10 | -1.02 | -0.77     | -1.20     |
|     |    | 13  | 0.61  | 1.48  | 0.11   | 0.14     | 1.45  | 0.21   | 0.08      | -0.54 | 0.01  | -0.47     | -0.20     |
| 163 | 21 | 9   | 1.32  | 0.50  | -0.95  | -0.29    | -0.17 | -0.73  | 0.78      | -0.74 | -0.02 | 0.06      | -0.76     |
|     |    | 214 | 1.28  | 2.33  | -0.89  | -0.86    | 2.29  | -0.34  | -0.26     | -1.39 | -1.18 | -0.46     | -0.44     |
|     |    | 215 | 2.65  | 1.62  | -0.62  | -0.37    | 1.37  | -0.71  | 0.45      | -2.47 | -1.16 | -0.86     | -1.45     |
|     |    | 13  | 0.74  | 0.64  | -0.11  | -0.11    | 0.64  | 0.01   | 0.16      | -0.67 | -0.10 | -0.41     | -0.38     |
| 163 | 53 | 9   | 1.19  | 0.58  | -0.43  | -0.12    | 0.26  | -0.47  | 0.68      | -0.71 | -0.04 | 0.01      | -0.69     |
|     |    | 214 | 1.20  | 2.37  | -0.76  | -0.76    | 2.36  | -0.10  | -0.31     | -1.32 | -1.19 | -0.43     | -0.34     |
|     |    | 215 | 2.43  | 1.63  | -0.53  | -0.33    | 1.43  | -0.62  | 0.38      | -2.28 | -1.09 | -0.81     | -1.32     |
|     |    | 13  | 0.66  | 1.07  | 0.01   | 0.02     | 1.06  | 0.11   | 0.11      | -0.59 | -0.04 | -0.44     | -0.29     |

|     |    |     |      |       |       |          |       |           |          |       |          |       |           |
|-----|----|-----|------|-------|-------|----------|-------|-----------|----------|-------|----------|-------|-----------|
| 164 | 1  | 13  | 1.54 | 2.32  | 0.12  | 0.24     | 2.19  | -0.51     | 0.64     | -1.18 | 0.06     | -0.61 | -0.84     |
|     |    | 215 | 2.12 | 2.76  | -2.56 | -1.36    | 1.57  | 2.22      | -0.45    | -2.31 | -1.77    | -0.99 | -0.85     |
|     |    | 216 | 2.78 | 1.16  | 0.84  | 0.86     | 1.15  | 0.07      | 0.15     | -2.79 | -1.76    | -0.88 | -1.41     |
|     |    | 17  | 0.94 | 0.91  | -0.51 | -0.27    | 0.67  | 0.54      | 0.11     | -0.87 | 0.03     | -0.79 | -0.27     |
| 164 | 2  | 13  | 1.09 | 1.64  | 0.08  | 0.17     | 1.56  | -0.36     | 0.45     | -0.84 | 0.04     | -0.43 | -0.60     |
|     |    | 215 | 1.52 | 1.96  | -1.76 | -0.95    | 1.15  | 1.53      | -0.29    | -1.64 | -1.23    | -0.70 | -0.62     |
|     |    | 216 | 1.96 | 0.84  | 0.59  | 0.59     | 0.84  | 0.03      | 0.12     | -1.97 | -1.22    | -0.63 | -1.00     |
|     |    | 17  | 0.69 | 0.69  | -0.34 | -0.18    | 0.53  | 0.37      | 0.09     | -0.63 | 0.02     | -0.57 | -0.20     |
| 164 | 21 | 13  | 1.50 | 1.03  | -0.46 | -0.10    | 0.67  | -0.64     | 0.59     | -1.14 | -0.08    | -0.47 | -0.85     |
|     |    | 215 | 1.89 | 1.23  | -1.89 | -1.16    | 0.50  | 1.32      | -0.13    | -1.97 | -1.36    | -0.74 | -0.87     |
|     |    | 216 | 2.37 | 0.58  | 0.21  | 0.56     | 0.23  | -0.08     | 0.28     | -2.31 | -1.35    | -0.68 | -1.25     |
|     |    | 17  | 0.93 | -0.11 | -0.49 | -0.27    | -0.33 | 0.19      | 0.17     | -0.86 | -0.11    | -0.59 | -0.46     |
| 164 | 53 | 13  | 1.29 | 1.32  | -0.15 | 0.04     | 1.13  | -0.49     | 0.52     | -0.98 | -0.02    | -0.45 | -0.72     |
|     |    | 215 | 1.69 | 1.61  | -1.82 | -1.05    | 0.84  | 1.43      | -0.21    | -1.80 | -1.29    | -0.72 | -0.74     |
|     |    | 216 | 2.16 | 0.59  | 0.53  | 0.58     | 0.55  | -0.02     | 0.20     | -2.13 | -1.28    | -0.65 | -1.12     |
|     |    | 17  | 0.78 | 0.28  | -0.39 | -0.23    | 0.12  | 0.29      | 0.11     | -0.73 | -0.04    | -0.58 | -0.32     |
| 165 | 1  | 17  | 1.46 | 0.77  | 0.20  | 0.23     | 0.74  | -0.12     | 0.51     | -1.19 | 0.06     | -0.74 | -0.76     |
|     |    | 216 | 1.97 | 2.15  | -1.60 | -0.45    | 1.00  | 1.73      | -0.49    | -2.19 | -1.84    | -0.84 | -0.69     |
|     |    | 217 | 2.17 | 1.02  | 0.51  | 0.74     | 0.79  | 0.26      | -0.11    | -2.29 | -1.65    | -0.74 | -0.99     |
|     |    | 21  | 0.67 | -0.16 | -0.84 | -0.27    | -0.73 | 0.25      | 0.04     | -0.67 | 9.70e-03 | -0.64 | -0.14     |
| 165 | 2  | 17  | 1.04 | 0.58  | 0.14  | 0.16     | 0.56  | -0.09     | 0.36     | -0.85 | 0.04     | -0.53 | -0.54     |
|     |    | 216 | 1.40 | 1.54  | -1.09 | -0.31    | 0.76  | 1.20      | -0.33    | -1.55 | -1.28    | -0.60 | -0.51     |
|     |    | 217 | 1.53 | 0.73  | 0.39  | 0.51     | 0.61  | 0.16      | -0.07    | -1.61 | -1.15    | -0.53 | -0.70     |
|     |    | 21  | 0.49 | -0.10 | -0.53 | -0.19    | -0.44 | 0.17      | 0.03     | -0.49 | 7.25e-03 | -0.46 | -0.11     |
| 165 | 21 | 17  | 1.43 | 0.21  | -0.74 | 0.02     | -0.55 | -0.37     | 0.50     | -1.15 | -0.09    | -0.56 | -0.79     |
|     |    | 216 | 1.74 | 0.71  | -1.18 | -0.39    | -0.08 | 0.93      | -0.16    | -1.84 | -1.40    | -0.60 | -0.74     |
|     |    | 217 | 1.86 | 0.50  | -0.22 | 0.50     | -0.22 | 5.87e-03  | 0.11     | -1.87 | -1.24    | -0.52 | -0.93     |
|     |    | 21  | 0.75 | -0.26 | -1.54 | -0.26    | -1.54 | -0.01     | 0.11     | -0.68 | -0.09    | -0.48 | -0.34     |
| 165 | 53 | 17  | 1.22 | 0.29  | -0.17 | 0.09     | 0.03  | -0.22     | 0.42     | -0.99 | -0.02    | -0.55 | -0.66     |
|     |    | 216 | 1.56 | 1.13  | -1.12 | -0.35    | 0.36  | 1.07      | -0.25    | -1.69 | -1.34    | -0.60 | -0.62     |
|     |    | 217 | 1.69 | 0.53  | 0.19  | 0.51     | 0.21  | 0.09      | 0.01     | -1.73 | -1.19    | -0.53 | -0.81     |
|     |    | 21  | 0.59 | -0.21 | -0.98 | -0.22    | -0.97 | 0.09      | 0.05     | -0.57 | -0.04    | -0.47 | -0.22     |
| 166 | 1  | 21  | 1.17 | 0.12  | -0.67 | 0.12     | -0.67 | -2.52e-03 | 0.38     | -0.97 | 0.04     | -0.63 | -0.58     |
|     |    | 217 | 1.59 | 1.31  | -0.58 | -0.06    | 0.78  | 0.85      | -0.58    | -1.85 | -1.71    | -0.72 | -0.39     |
|     |    | 218 | 1.73 | 0.72  | 0.33  | 0.41     | 0.65  | 0.15      | -0.27    | -1.90 | -1.54    | -0.63 | -0.67     |
|     |    | 25  | 0.54 | -0.15 | -1.40 | -0.15    | -1.40 | 0.06      | 4.89e-03 | -0.50 | 4.85e-03 | -0.50 | -4.12e-03 |
| 166 | 2  | 21  | 0.83 | 0.08  | -0.41 | 0.08     | -0.41 | -2.79e-03 | 0.26     | -0.69 | 0.03     | -0.46 | -0.41     |
|     |    | 217 | 1.12 | 0.96  | -0.38 | -0.04    | 0.62  | 0.59      | -0.40    | -1.30 | -1.19    | -0.51 | -0.30     |
|     |    | 218 | 1.20 | 0.56  | 0.25  | 0.28     | 0.52  | 0.10      | -0.19    | -1.33 | -1.07    | -0.45 | -0.48     |
|     |    | 25  | 0.39 | -0.10 | -0.90 | -0.11    | -0.90 | 0.04      | 4.02e-03 | -0.37 | 3.63e-03 | -0.37 | -0.01     |
| 166 | 21 | 21  | 1.19 | 0.08  | -1.72 | -0.01    | -1.64 | -0.39     | 0.40     | -0.93 | -0.07    | -0.46 | -0.64     |
|     |    | 217 | 1.38 | 0.07  | -0.37 | -0.06    | -0.24 | 0.20      | -0.25    | -1.54 | -1.28    | -0.50 | -0.51     |
|     |    | 218 | 1.50 | 0.29  | -0.37 | 0.25     | -0.34 | -0.14     | -0.02    | -1.57 | -1.14    | -0.44 | -0.69     |
|     |    | 25  | 0.57 | -0.19 | -2.15 | -0.21    | -2.13 | -0.19     | 0.06     | -0.50 | -0.07    | -0.37 | -0.23     |
| 166 | 53 | 21  | 1.00 | 0.07  | -1.03 | 0.04     | -1.00 | -0.19     | 0.33     | -0.80 | -0.02    | -0.46 | -0.52     |
|     |    | 217 | 1.24 | 0.50  | -0.34 | -0.05    | 0.21  | 0.40      | -0.33    | -1.41 | -1.23    | -0.51 | -0.40     |
|     |    | 218 | 1.34 | 0.27  | 0.11  | 0.27     | 0.11  | -0.02     | -0.11    | -1.44 | -1.10    | -0.45 | -0.58     |
|     |    | 25  | 0.44 | -0.15 | -1.50 | -0.16    | -1.49 | -0.07     | 5.26e-03 | -0.41 | -0.03    | -0.37 | -0.12     |
| 167 | 1  | 25  | 0.90 | 0.05  | -1.35 | 0.05     | -1.35 | 0.03      | 0.26     | -0.74 | 0.02     | -0.50 | -0.43     |
|     |    | 218 | 1.34 | 0.74  | -0.04 | 0.02     | 0.68  | 0.21      | -0.60    | -1.60 | -1.58    | -0.62 | -0.14     |
|     |    | 219 | 1.45 | 0.64  | 0.13  | 0.15     | 0.61  | 0.10      | -0.39    | -1.66 | -1.48    | -0.57 | -0.44     |
|     |    | 29  | 0.50 | -0.07 | -1.56 | -0.07    | -1.56 | -0.02     | 0.03     | -0.44 | 5.90e-03 | -0.42 | 0.11      |
| 167 | 2  | 25  | 0.64 | 0.04  | -0.88 | 0.04     | -0.87 | 0.02      | 0.18     | -0.53 | 0.02     | -0.37 | -0.30     |
|     |    | 218 | 0.93 | 0.59  | -0.03 | 9.93e-03 | 0.55  | 0.14      | -0.42    | -1.11 | -1.09    | -0.44 | -0.11     |
|     |    | 219 | 1.00 | 0.52  | 0.10  | 0.11     | 0.51  | 0.07      | -0.28    | -1.15 | -1.02    | -0.40 | -0.31     |
|     |    | 29  | 0.35 | -0.05 | -1.01 | -0.05    | -1.01 | -0.01     | 0.02     | -0.32 | 4.30e-03 | -0.31 | 0.07      |

|     |    |     |      |           |           |           |       |       |       |       |          |       |       |
|-----|----|-----|------|-----------|-----------|-----------|-------|-------|-------|-------|----------|-------|-------|
| 167 | 21 | 25  | 0.98 | 0.04      | -2.11     | -0.05     | -2.02 | -0.43 | 0.33  | -0.75 | -0.06    | -0.36 | -0.52 |
|     |    | 218 | 1.13 | 0.22      | -0.47     | -8.09e-03 | -0.24 | -0.32 | -0.31 | -1.29 | -1.17    | -0.44 | -0.33 |
|     |    | 219 | 1.26 | 0.18      | -0.44     | 0.04      | -0.30 | -0.26 | -0.12 | -1.36 | -1.08    | -0.39 | -0.52 |
|     |    | 29  | 0.44 | -0.12     | -2.22     | -0.17     | -2.17 | -0.32 | 0.02  | -0.37 | -0.06    | -0.29 | -0.15 |
| 167 | 53 | 25  | 0.79 | 0.02      | -1.45     | -6.79e-03 | -1.43 | -0.20 | 0.25  | -0.63 | -0.02    | -0.36 | -0.41 |
|     |    | 218 | 1.01 | 0.20      | -0.03     | 1.13e-03  | 0.17  | -0.08 | -0.38 | -1.19 | -1.13    | -0.44 | -0.21 |
|     |    | 219 | 1.12 | 0.19      | 6.68e-03  | 0.08      | 0.12  | -0.09 | -0.20 | -1.25 | -1.05    | -0.40 | -0.41 |
|     |    | 29  | 0.34 | -0.09     | -1.59     | -0.11     | -1.57 | -0.16 | -0.02 | -0.30 | -0.02    | -0.30 | -0.04 |
| 168 | 1  | 29  | 0.69 | 0.02      | -1.54     | 0.02      | -1.54 | 0.04  | 0.17  | -0.58 | 0.01     | -0.42 | -0.31 |
|     |    | 219 | 1.27 | 0.65      | -7.45e-03 | 1.26e-03  | 0.64  | -0.07 | -0.56 | -1.50 | -1.50    | -0.56 | 0.07  |
|     |    | 220 | 1.30 | 0.65      | 1.97e-03  | 0.03      | 0.62  | 0.12  | -0.48 | -1.53 | -1.47    | -0.54 | -0.25 |
|     |    | 33  | 0.56 | -0.01     | -1.56     | -0.01     | -1.56 | -0.04 | 0.10  | -0.48 | 8.27e-03 | -0.39 | 0.21  |
| 168 | 2  | 29  | 0.49 | 0.01      | -1.00     | 0.01      | -1.00 | 0.03  | 0.12  | -0.41 | 9.25e-03 | -0.31 | -0.21 |
|     |    | 219 | 0.87 | 0.53      | -5.15e-03 | -2.26e-04 | 0.53  | -0.05 | -0.40 | -1.04 | -1.03    | -0.40 | 0.04  |
|     |    | 220 | 0.90 | 0.53      | 4.28e-03  | 0.02      | 0.52  | 0.08  | -0.34 | -1.06 | -1.01    | -0.39 | -0.17 |
|     |    | 33  | 0.39 | -8.93e-03 | -1.02     | -9.67e-03 | -1.02 | -0.03 | 0.06  | -0.34 | 6.00e-03 | -0.28 | 0.14  |
| 168 | 21 | 29  | 0.82 | 0.04      | -2.02     | -0.07     | -1.91 | -0.45 | 0.27  | -0.62 | -0.05    | -0.30 | -0.43 |
|     |    | 219 | 0.98 | 0.46      | -0.64     | -0.03     | -0.15 | -0.55 | -0.35 | -1.13 | -1.09    | -0.39 | -0.17 |
|     |    | 220 | 1.10 | 0.20      | -0.44     | -0.07     | -0.17 | -0.32 | -0.21 | -1.23 | -1.06    | -0.38 | -0.38 |
|     |    | 33  | 0.36 | -0.06     | -2.03     | -0.14     | -1.94 | -0.41 | -0.02 | -0.30 | -0.04    | -0.28 | -0.07 |
| 168 | 37 | 29  | 0.57 | -0.14     | -2.26     | -0.15     | -2.26 | -0.11 | 0.11  | -0.47 | -0.07    | -0.30 | -0.26 |
|     |    | 219 | 0.94 | -0.02     | -0.52     | -0.10     | -0.44 | -0.19 | -0.39 | -1.11 | -1.11    | -0.39 | -0.01 |
|     |    | 220 | 0.99 | -0.08     | -0.46     | -0.09     | -0.45 | 0.06  | -0.31 | -1.15 | -1.09    | -0.38 | -0.22 |
|     |    | 33  | 0.36 | -0.18     | -2.28     | -0.18     | -2.28 | -0.04 | -0.04 | -0.31 | -0.07    | -0.28 | 0.09  |
| 169 | 1  | 33  | 0.56 | -0.01     | -1.56     | -0.01     | -1.56 | 0.04  | 0.10  | -0.48 | 8.27e-03 | -0.39 | -0.21 |
|     |    | 220 | 1.30 | 0.65      | 1.97e-03  | 0.03      | 0.62  | -0.12 | -0.48 | -1.53 | -1.47    | -0.54 | 0.25  |
|     |    | 221 | 1.27 | 0.65      | -7.45e-03 | 1.26e-03  | 0.64  | 0.07  | -0.56 | -1.50 | -1.50    | -0.56 | -0.07 |
|     |    | 37  | 0.69 | 0.02      | -1.54     | 0.02      | -1.54 | -0.04 | 0.17  | -0.58 | 0.01     | -0.42 | 0.31  |
| 169 | 2  | 33  | 0.39 | -8.93e-03 | -1.02     | -9.67e-03 | -1.02 | 0.03  | 0.06  | -0.34 | 6.00e-03 | -0.28 | -0.14 |
|     |    | 220 | 0.90 | 0.53      | 4.28e-03  | 0.02      | 0.52  | -0.08 | -0.34 | -1.06 | -1.01    | -0.39 | 0.17  |
|     |    | 221 | 0.87 | 0.53      | -5.15e-03 | -2.26e-04 | 0.53  | 0.05  | -0.40 | -1.04 | -1.03    | -0.40 | -0.04 |
|     |    | 37  | 0.49 | 0.01      | -1.00     | 0.01      | -1.00 | -0.03 | 0.12  | -0.41 | 9.25e-03 | -0.31 | 0.21  |
| 169 | 23 | 33  | 0.36 | -0.06     | -2.03     | -0.14     | -1.94 | 0.41  | -0.02 | -0.30 | -0.04    | -0.28 | 0.07  |
|     |    | 220 | 1.10 | 0.20      | -0.44     | -0.07     | -0.17 | 0.32  | -0.21 | -1.23 | -1.06    | -0.38 | 0.38  |
|     |    | 221 | 0.98 | 0.46      | -0.64     | -0.03     | -0.15 | 0.55  | -0.35 | -1.13 | -1.09    | -0.39 | 0.17  |
|     |    | 37  | 0.82 | 0.04      | -2.02     | -0.07     | -1.91 | 0.45  | 0.27  | -0.62 | -0.05    | -0.30 | 0.43  |
| 169 | 39 | 33  | 0.36 | -0.18     | -2.28     | -0.18     | -2.28 | 0.04  | -0.04 | -0.31 | -0.07    | -0.28 | -0.09 |
|     |    | 220 | 0.99 | -0.08     | -0.46     | -0.09     | -0.45 | -0.06 | -0.31 | -1.15 | -1.09    | -0.38 | 0.22  |
|     |    | 221 | 0.94 | -0.02     | -0.52     | -0.10     | -0.44 | 0.19  | -0.39 | -1.11 | -1.11    | -0.39 | 0.01  |
|     |    | 37  | 0.57 | -0.14     | -2.26     | -0.15     | -2.26 | 0.11  | 0.11  | -0.47 | -0.07    | -0.30 | 0.26  |
| 170 | 1  | 37  | 0.50 | -0.07     | -1.56     | -0.07     | -1.56 | 0.02  | 0.03  | -0.44 | 5.90e-03 | -0.42 | -0.11 |
|     |    | 221 | 1.45 | 0.64      | 0.13      | 0.15      | 0.61  | -0.10 | -0.39 | -1.66 | -1.48    | -0.57 | 0.44  |
|     |    | 222 | 1.34 | 0.74      | -0.04     | 0.02      | 0.68  | -0.21 | -0.60 | -1.60 | -1.58    | -0.62 | 0.14  |
|     |    | 41  | 0.90 | 0.05      | -1.35     | 0.05      | -1.35 | -0.03 | 0.26  | -0.74 | 0.02     | -0.50 | 0.43  |
| 170 | 2  | 37  | 0.35 | -0.05     | -1.01     | -0.05     | -1.01 | 0.01  | 0.02  | -0.32 | 4.30e-03 | -0.31 | -0.07 |
|     |    | 221 | 1.00 | 0.52      | 0.10      | 0.11      | 0.51  | -0.07 | -0.28 | -1.15 | -1.02    | -0.40 | 0.31  |
|     |    | 222 | 0.93 | 0.59      | -0.03     | 9.93e-03  | 0.55  | -0.14 | -0.42 | -1.11 | -1.09    | -0.44 | 0.11  |
|     |    | 41  | 0.64 | 0.04      | -0.88     | 0.04      | -0.87 | -0.02 | 0.18  | -0.53 | 0.02     | -0.37 | 0.30  |
| 170 | 23 | 37  | 0.44 | -0.12     | -2.22     | -0.17     | -2.17 | 0.32  | 0.02  | -0.37 | -0.06    | -0.29 | 0.15  |
|     |    | 221 | 1.26 | 0.18      | -0.44     | 0.04      | -0.30 | 0.26  | -0.12 | -1.36 | -1.08    | -0.39 | 0.52  |
|     |    | 222 | 1.13 | 0.22      | -0.47     | -8.09e-03 | -0.24 | 0.32  | -0.31 | -1.29 | -1.17    | -0.44 | 0.33  |
|     |    | 41  | 0.98 | 0.04      | -2.11     | -0.05     | -2.02 | 0.43  | 0.33  | -0.75 | -0.06    | -0.36 | 0.52  |
| 170 | 55 | 37  | 0.34 | -0.09     | -1.59     | -0.11     | -1.57 | 0.16  | -0.02 | -0.30 | -0.02    | -0.30 | 0.04  |
|     |    | 221 | 1.12 | 0.19      | 6.68e-03  | 0.08      | 0.12  | 0.09  | -0.20 | -1.25 | -1.05    | -0.40 | 0.41  |
|     |    | 222 | 1.01 | 0.20      | -0.03     | 1.13e-03  | 0.17  | 0.08  | -0.38 | -1.19 | -1.13    | -0.44 | 0.21  |
|     |    | 41  | 0.79 | 0.02      | -1.45     | -6.79e-03 | -1.43 | 0.20  | 0.25  | -0.63 | -0.02    | -0.36 | 0.41  |

|     |    |     |      |       |       |       |       |           |          |       |          |       |          |
|-----|----|-----|------|-------|-------|-------|-------|-----------|----------|-------|----------|-------|----------|
| 171 | 1  | 41  | 0.54 | -0.15 | -1.40 | -0.15 | -1.40 | -0.06     | 4.89e-03 | -0.50 | 4.85e-03 | -0.50 | 4.12e-03 |
|     |    | 222 | 1.73 | 0.72  | 0.33  | 0.41  | 0.65  | -0.15     | -0.27    | -1.90 | -1.54    | -0.63 | 0.67     |
|     |    | 223 | 1.59 | 1.31  | -0.58 | -0.06 | 0.78  | -0.85     | -0.58    | -1.85 | -1.71    | -0.72 | 0.39     |
|     |    | 45  | 1.17 | 0.12  | -0.67 | 0.12  | -0.67 | 2.52e-03  | 0.38     | -0.97 | 0.04     | -0.63 | 0.58     |
| 171 | 2  | 41  | 0.39 | -0.10 | -0.90 | -0.11 | -0.90 | -0.04     | 4.02e-03 | -0.37 | 3.63e-03 | -0.37 | 0.01     |
|     |    | 222 | 1.20 | 0.56  | 0.25  | 0.28  | 0.52  | -0.10     | -0.19    | -1.33 | -1.07    | -0.45 | 0.48     |
|     |    | 223 | 1.12 | 0.96  | -0.38 | -0.04 | 0.62  | -0.59     | -0.40    | -1.30 | -1.19    | -0.51 | 0.30     |
|     |    | 45  | 0.83 | 0.08  | -0.41 | 0.08  | -0.41 | 2.79e-03  | 0.26     | -0.69 | 0.03     | -0.46 | 0.41     |
| 171 | 23 | 41  | 0.57 | -0.19 | -2.15 | -0.21 | -2.13 | 0.19      | 0.06     | -0.50 | -0.07    | -0.37 | 0.23     |
|     |    | 222 | 1.50 | 0.29  | -0.37 | 0.25  | -0.34 | 0.14      | -0.02    | -1.57 | -1.14    | -0.44 | 0.69     |
|     |    | 223 | 1.38 | 0.07  | -0.37 | -0.06 | -0.24 | -0.20     | -0.25    | -1.54 | -1.28    | -0.50 | 0.51     |
|     |    | 45  | 1.19 | 0.08  | -1.72 | -0.01 | -1.64 | 0.39      | 0.40     | -0.93 | -0.07    | -0.46 | 0.64     |
| 171 | 55 | 41  | 0.44 | -0.15 | -1.50 | -0.16 | -1.49 | 0.07      | 5.26e-03 | -0.41 | -0.03    | -0.37 | 0.12     |
|     |    | 222 | 1.34 | 0.27  | 0.11  | 0.27  | 0.11  | 0.02      | -0.11    | -1.44 | -1.10    | -0.45 | 0.58     |
|     |    | 223 | 1.24 | 0.50  | -0.34 | -0.05 | 0.21  | -0.40     | -0.33    | -1.41 | -1.23    | -0.51 | 0.40     |
|     |    | 45  | 1.00 | 0.07  | -1.03 | 0.04  | -1.00 | 0.19      | 0.33     | -0.80 | -0.02    | -0.46 | 0.52     |
| 172 | 1  | 45  | 0.67 | -0.16 | -0.84 | -0.27 | -0.73 | -0.25     | 0.04     | -0.67 | 9.70e-03 | -0.64 | 0.14     |
|     |    | 223 | 2.17 | 1.02  | 0.51  | 0.74  | 0.79  | -0.26     | -0.11    | -2.29 | -1.65    | -0.74 | 0.99     |
|     |    | 224 | 1.97 | 2.15  | -1.60 | -0.45 | 1.00  | -1.73     | -0.49    | -2.19 | -1.84    | -0.84 | 0.69     |
|     |    | 49  | 1.46 | 0.77  | 0.20  | 0.23  | 0.74  | 0.12      | 0.51     | -1.19 | 0.06     | -0.74 | 0.76     |
| 172 | 2  | 45  | 0.49 | -0.10 | -0.53 | -0.19 | -0.44 | -0.17     | 0.03     | -0.49 | 7.25e-03 | -0.46 | 0.11     |
|     |    | 223 | 1.53 | 0.73  | 0.39  | 0.51  | 0.61  | -0.16     | -0.07    | -1.61 | -1.15    | -0.53 | 0.70     |
|     |    | 224 | 1.40 | 1.54  | -1.09 | -0.31 | 0.76  | -1.20     | -0.33    | -1.55 | -1.28    | -0.60 | 0.51     |
|     |    | 49  | 1.04 | 0.58  | 0.14  | 0.16  | 0.56  | 0.09      | 0.36     | -0.85 | 0.04     | -0.53 | 0.54     |
| 172 | 23 | 45  | 0.75 | -0.26 | -1.54 | -0.26 | -1.54 | 0.01      | 0.11     | -0.68 | -0.09    | -0.48 | 0.34     |
|     |    | 223 | 1.86 | 0.50  | -0.22 | 0.50  | -0.22 | -5.87e-03 | 0.11     | -1.87 | -1.24    | -0.52 | 0.93     |
|     |    | 224 | 1.74 | 0.71  | -1.18 | -0.39 | -0.08 | -0.93     | -0.16    | -1.84 | -1.40    | -0.60 | 0.74     |
|     |    | 49  | 1.43 | 0.21  | -0.74 | 0.02  | -0.55 | 0.37      | 0.50     | -1.15 | -0.09    | -0.56 | 0.79     |
| 172 | 55 | 45  | 0.59 | -0.21 | -0.98 | -0.22 | -0.97 | -0.09     | 0.05     | -0.57 | -0.04    | -0.47 | 0.22     |
|     |    | 223 | 1.69 | 0.53  | 0.19  | 0.51  | 0.21  | -0.09     | 0.01     | -1.73 | -1.19    | -0.53 | 0.81     |
|     |    | 224 | 1.56 | 1.13  | -1.12 | -0.35 | 0.36  | -1.07     | -0.25    | -1.69 | -1.34    | -0.60 | 0.62     |
|     |    | 49  | 1.22 | 0.29  | -0.17 | 0.09  | 0.03  | 0.22      | 0.42     | -0.99 | -0.02    | -0.55 | 0.66     |
| 173 | 1  | 49  | 0.94 | 0.91  | -0.51 | -0.27 | 0.67  | -0.54     | 0.11     | -0.87 | 0.03     | -0.79 | 0.27     |
|     |    | 224 | 2.78 | 1.16  | 0.84  | 0.86  | 1.15  | -0.07     | 0.15     | -2.79 | -1.76    | -0.88 | 1.41     |
|     |    | 225 | 2.12 | 2.76  | -2.56 | -1.36 | 1.57  | -2.22     | -0.45    | -2.31 | -1.77    | -0.99 | 0.85     |
|     |    | 53  | 1.54 | 2.32  | 0.12  | 0.24  | 2.19  | 0.51      | 0.64     | -1.18 | 0.06     | -0.61 | 0.84     |
| 173 | 2  | 49  | 0.69 | 0.69  | -0.34 | -0.18 | 0.53  | -0.37     | 0.09     | -0.63 | 0.02     | -0.57 | 0.20     |
|     |    | 224 | 1.96 | 0.84  | 0.59  | 0.59  | 0.84  | -0.03     | 0.12     | -1.97 | -1.22    | -0.63 | 1.00     |
|     |    | 225 | 1.52 | 1.96  | -1.76 | -0.95 | 1.15  | -1.53     | -0.29    | -1.64 | -1.23    | -0.70 | 0.62     |
|     |    | 53  | 1.09 | 1.64  | 0.08  | 0.17  | 1.56  | 0.36      | 0.45     | -0.84 | 0.04     | -0.43 | 0.60     |
| 173 | 23 | 49  | 0.93 | -0.11 | -0.49 | -0.27 | -0.33 | -0.19     | 0.17     | -0.86 | -0.11    | -0.59 | 0.46     |
|     |    | 224 | 2.37 | 0.58  | 0.21  | 0.56  | 0.23  | 0.08      | 0.28     | -2.31 | -1.35    | -0.68 | 1.25     |
|     |    | 225 | 1.89 | 1.23  | -1.89 | -1.16 | 0.50  | -1.32     | -0.13    | -1.97 | -1.36    | -0.74 | 0.87     |
|     |    | 53  | 1.50 | 1.03  | -0.46 | -0.10 | 0.67  | 0.64      | 0.59     | -1.14 | -0.08    | -0.47 | 0.85     |
| 173 | 55 | 49  | 0.78 | 0.28  | -0.39 | -0.23 | 0.12  | -0.29     | 0.11     | -0.73 | -0.04    | -0.58 | 0.32     |
|     |    | 224 | 2.16 | 0.59  | 0.53  | 0.58  | 0.55  | 0.02      | 0.20     | -2.13 | -1.28    | -0.65 | 1.12     |
|     |    | 225 | 1.69 | 1.61  | -1.82 | -1.05 | 0.84  | -1.43     | -0.21    | -1.80 | -1.29    | -0.72 | 0.74     |
|     |    | 53  | 1.29 | 1.32  | -0.15 | 0.04  | 1.13  | 0.49      | 0.52     | -0.98 | -0.02    | -0.45 | 0.72     |
| 174 | 1  | 53  | 0.84 | 2.06  | 0.15  | 0.20  | 2.02  | -0.30     | 0.10     | -0.74 | 0.01     | -0.65 | 0.26     |
|     |    | 225 | 3.12 | 2.32  | -0.61 | -0.40 | 2.11  | 0.75      | 0.42     | -2.97 | -1.47    | -1.09 | 1.68     |
|     |    | 226 | 1.62 | 3.43  | -0.99 | -0.98 | 3.42  | -0.21     | -0.51    | -1.82 | -1.74    | -0.59 | 0.32     |
|     |    | 57  | 1.51 | 1.05  | -0.05 | 0.06  | 0.94  | 0.33      | 0.82     | -0.96 | -0.09    | -0.05 | 0.89     |
| 174 | 2  | 53  | 0.61 | 1.48  | 0.11  | 0.14  | 1.45  | -0.21     | 0.08     | -0.54 | 0.01     | -0.47 | 0.20     |
|     |    | 225 | 2.22 | 1.65  | -0.44 | -0.29 | 1.49  | 0.55      | 0.31     | -2.10 | -1.02    | -0.77 | 1.20     |
|     |    | 226 | 1.14 | 2.43  | -0.68 | -0.67 | 2.42  | -0.13     | -0.34    | -1.27 | -1.20    | -0.41 | 0.25     |
|     |    | 57  | 1.07 | 0.73  | -0.04 | 0.04  | 0.66  | 0.23      | 0.59     | -0.68 | -0.06    | -0.03 | 0.63     |

|     |    |     |       |       |        |       |       |        |       |        |        |       |       |
|-----|----|-----|-------|-------|--------|-------|-------|--------|-------|--------|--------|-------|-------|
| 174 | 23 | 53  | 0.74  | 0.64  | -0.11  | -0.11 | 0.64  | -0.01  | 0.16  | -0.67  | -0.10  | -0.41 | 0.38  |
|     |    | 225 | 2.65  | 1.62  | -0.62  | -0.37 | 1.37  | 0.71   | 0.45  | -2.47  | -1.16  | -0.86 | 1.45  |
|     |    | 226 | 1.28  | 2.33  | -0.89  | -0.86 | 2.29  | 0.34   | -0.26 | -1.39  | -1.18  | -0.46 | 0.44  |
|     |    | 57  | 1.32  | 0.50  | -0.95  | -0.29 | -0.17 | 0.73   | 0.78  | -0.74  | -0.02  | 0.06  | 0.76  |
| 174 | 55 | 53  | 0.66  | 1.07  | 0.01   | 0.02  | 1.06  | -0.11  | 0.11  | -0.59  | -0.04  | -0.44 | 0.29  |
|     |    | 225 | 2.43  | 1.63  | -0.53  | -0.33 | 1.43  | 0.62   | 0.38  | -2.28  | -1.09  | -0.81 | 1.32  |
|     |    | 226 | 1.20  | 2.37  | -0.76  | -0.76 | 2.36  | 0.10   | -0.31 | -1.32  | -1.19  | -0.43 | 0.34  |
|     |    | 57  | 1.19  | 0.58  | -0.43  | -0.12 | 0.26  | 0.47   | 0.68  | -0.71  | -0.04  | 0.01  | 0.69  |
| 175 | 1  | 60  | 13.50 | 8.48  | -18.38 | -8.70 | -1.20 | -12.89 | -5.68 | -15.36 | -14.74 | -6.30 | -2.36 |
|     |    | 241 | 1.36  | 8.15  | -5.57  | 0.96  | 1.62  | 6.85   | 1.05  | 0.12   | 0.76   | 0.41  | 0.43  |
|     |    | 228 | 3.66  | 4.80  | -4.31  | -1.12 | 1.60  | -4.35  | -0.77 | -3.93  | -3.59  | -1.11 | -0.97 |
|     |    | 8   | 7.76  | 11.11 | -6.05  | 8.19  | -3.13 | 6.44   | 1.23  | -7.06  | -6.97  | 1.15  | 0.83  |
| 175 | 2  | 60  | 9.38  | 5.92  | -12.83 | -6.04 | -0.87 | -9.02  | -3.94 | -10.67 | -10.23 | -4.39 | -1.67 |
|     |    | 241 | 0.91  | 5.69  | -3.86  | 0.67  | 1.16  | 4.77   | 0.71  | 0.11   | 0.54   | 0.28  | 0.27  |
|     |    | 228 | 2.54  | 3.35  | -3.00  | -0.78 | 1.12  | -3.03  | -0.53 | -2.72  | -2.48  | -0.77 | -0.69 |
|     |    | 8   | 5.39  | 7.77  | -4.21  | 5.75  | -2.18 | 4.49   | 0.85  | -4.89  | -4.84  | 0.80  | 0.57  |
| 175 | 17 | 60  | 10.86 | 5.32  | -15.16 | -8.59 | -1.25 | -9.56  | -4.53 | -12.32 | -11.86 | -4.98 | -1.83 |
|     |    | 241 | 1.41  | 4.53  | -5.60  | -1.88 | 0.81  | 4.88   | 0.14  | -1.11  | -1.02  | 0.06  | 0.32  |
|     |    | 228 | 3.50  | 2.69  | -4.01  | -2.30 | 0.98  | -2.92  | -0.83 | -3.82  | -3.72  | -0.93 | -0.55 |
|     |    | 8   | 6.28  | 6.07  | -4.19  | 4.22  | -2.34 | 3.95   | 0.31  | -6.19  | -6.15  | 0.27  | 0.50  |
| 175 | 49 | 60  | 10.09 | 5.62  | -13.94 | -7.27 | -1.05 | -9.28  | -4.22 | -11.46 | -11.01 | -4.67 | -1.74 |
|     |    | 241 | 0.91  | 5.10  | -4.67  | -0.56 | 0.99  | 4.82   | 0.33  | -0.37  | -0.21  | 0.17  | 0.29  |
|     |    | 228 | 2.98  | 3.01  | -3.47  | -1.51 | 1.06  | -2.98  | -0.69 | -3.24  | -3.07  | -0.85 | -0.63 |
|     |    | 8   | 5.81  | 6.95  | -4.20  | 5.01  | -2.26 | 4.23   | 0.59  | -5.52  | -5.47  | 0.54  | 0.53  |
| 176 | 1  | 6   | 7.76  | 11.11 | -6.05  | 8.19  | -3.13 | -6.44  | 1.23  | -7.06  | -6.97  | 1.15  | -0.83 |
|     |    | 227 | 3.66  | 4.80  | -4.31  | -1.12 | 1.60  | 4.35   | -0.77 | -3.93  | -3.59  | -1.11 | 0.97  |
|     |    | 229 | 1.36  | 8.15  | -5.57  | 0.96  | 1.62  | -6.85  | 1.05  | 0.12   | 0.76   | 0.41  | -0.43 |
|     |    | 12  | 13.50 | 8.48  | -18.38 | -8.70 | -1.20 | 12.89  | -5.68 | -15.36 | -14.74 | -6.30 | 2.36  |
| 176 | 2  | 6   | 5.39  | 7.77  | -4.21  | 5.75  | -2.18 | -4.49  | 0.85  | -4.89  | -4.84  | 0.80  | -0.57 |
|     |    | 227 | 2.54  | 3.35  | -3.00  | -0.78 | 1.12  | 3.03   | -0.53 | -2.72  | -2.48  | -0.77 | 0.69  |
|     |    | 229 | 0.91  | 5.69  | -3.86  | 0.67  | 1.16  | -4.77  | 0.71  | 0.11   | 0.54   | 0.28  | -0.27 |
|     |    | 12  | 9.38  | 5.92  | -12.83 | -6.04 | -0.87 | 9.02   | -3.94 | -10.67 | -10.23 | -4.39 | 1.67  |
| 176 | 12 | 6   | 6.27  | 5.97  | -4.20  | 4.09  | -2.32 | -3.95  | 0.31  | -6.18  | -6.14  | 0.27  | -0.49 |
|     |    | 227 | 3.50  | 2.64  | -4.11  | -2.44 | 0.97  | 2.92   | -0.83 | -3.82  | -3.71  | -0.93 | 0.56  |
|     |    | 229 | 1.41  | 4.48  | -5.69  | -2.00 | 0.79  | -4.89  | 0.14  | -1.11  | -1.03  | 0.05  | -0.32 |
|     |    | 12  | 10.87 | 5.32  | -15.17 | -8.62 | -1.23 | 9.55   | -4.52 | -12.32 | -11.87 | -4.98 | 1.83  |
| 176 | 44 | 6   | 5.81  | 6.90  | -4.20  | 4.95  | -2.25 | -4.23  | 0.59  | -5.51  | -5.46  | 0.55  | -0.53 |
|     |    | 227 | 2.98  | 2.99  | -3.52  | -1.58 | 1.05  | 2.98   | -0.68 | -3.24  | -3.07  | -0.85 | 0.63  |
|     |    | 229 | 0.91  | 5.08  | -4.71  | -0.61 | 0.98  | -4.83  | 0.33  | -0.37  | -0.21  | 0.17  | -0.30 |
|     |    | 12  | 10.10 | 5.62  | -13.95 | -7.28 | -1.04 | 9.27   | -4.22 | -11.46 | -11.02 | -4.67 | 1.75  |
| 177 | 1  | 12  | 11.68 | 7.17  | -16.24 | -7.60 | -1.48 | -11.30 | -4.65 | -13.38 | -13.31 | -4.72 | -0.79 |
|     |    | 229 | 3.51  | 7.86  | -2.65  | 0.86  | 4.34  | 4.96   | 1.57  | -2.25  | -0.10  | -0.58 | 1.89  |
|     |    | 230 | 2.11  | 6.42  | -7.47  | -3.15 | 2.10  | -6.43  | -1.33 | -2.39  | -2.25  | -1.47 | 0.37  |
|     |    | 16  | 9.49  | 9.31  | -7.06  | 3.42  | -1.17 | 7.86   | -1.01 | -10.23 | -9.54  | -1.70 | 2.43  |
| 177 | 2  | 12  | 8.09  | 5.00  | -11.24 | -5.23 | -1.01 | -7.84  | -3.22 | -9.27  | -9.23  | -3.27 | -0.53 |
|     |    | 229 | 2.49  | 5.49  | -1.87  | 0.58  | 3.04  | 3.47   | 1.12  | -1.59  | -0.06  | -0.41 | 1.34  |
|     |    | 230 | 1.49  | 4.54  | -5.17  | -2.18 | 1.55  | -4.48  | -0.91 | -1.69  | -1.56  | -1.03 | 0.28  |
|     |    | 16  | 6.56  | 6.53  | -5.05  | 2.35  | -0.87 | 5.56   | -0.69 | -7.06  | -6.57  | -1.18 | 1.70  |
| 177 | 11 | 12  | 9.55  | 5.04  | -13.16 | -7.61 | -0.51 | -8.38  | -3.80 | -10.90 | -10.86 | -3.84 | -0.52 |
|     |    | 229 | 3.07  | 4.15  | -3.93  | -2.05 | 2.28  | 3.41   | 0.30  | -2.79  | -1.66  | -0.83 | 1.49  |
|     |    | 230 | 2.65  | 3.91  | -7.04  | -4.08 | 0.94  | -4.86  | -1.29 | -3.09  | -2.97  | -1.42 | 0.46  |
|     |    | 16  | 7.67  | 4.97  | -4.48  | 0.71  | -0.22 | 4.70   | -1.27 | -8.44  | -8.00  | -1.71 | 1.72  |
| 177 | 43 | 12  | 8.79  | 5.00  | -12.15 | -6.38 | -0.77 | -8.10  | -3.50 | -10.06 | -10.01 | -3.54 | -0.53 |
|     |    | 229 | 2.68  | 4.82  | -2.84  | -0.69 | 2.67  | 3.44   | 0.70  | -2.13  | -0.83  | -0.61 | 1.41  |
|     |    | 230 | 2.00  | 4.23  | -6.07  | -3.10 | 1.26  | -4.66  | -1.10 | -2.36  | -2.24  | -1.22 | 0.37  |
|     |    | 16  | 7.08  | 5.75  | -4.75  | 1.56  | -0.56 | 5.14   | -0.97 | -7.72  | -7.25  | -1.44 | 1.71  |

|     |    |     |      |           |       |       |       |          |       |        |        |       |       |
|-----|----|-----|------|-----------|-------|-------|-------|----------|-------|--------|--------|-------|-------|
| 178 | 1  | 16  | 9.52 | 6.20      | -8.91 | -4.16 | 1.45  | -7.02    | -1.82 | -10.41 | -10.29 | -1.93 | -0.97 |
|     |    | 230 | 4.05 | 3.29      | -0.71 | 1.23  | 1.35  | 2.00     | 0.85  | -3.61  | -1.68  | -1.08 | 2.21  |
|     |    | 231 | 1.87 | 4.04      | -4.33 | -1.64 | 1.35  | -3.91    | -0.76 | -2.15  | -2.14  | -0.77 | 0.12  |
|     |    | 20  | 7.74 | 6.51      | -2.10 | 4.05  | 0.36  | 3.89     | -1.32 | -8.58  | -8.19  | -1.71 | 1.64  |
| 178 | 2  | 16  | 6.56 | 4.37      | -6.13 | -2.87 | 1.11  | -4.85    | -1.25 | -7.17  | -7.10  | -1.32 | -0.66 |
|     |    | 230 | 2.86 | 2.30      | -0.53 | 0.84  | 0.94  | 1.42     | 0.61  | -2.54  | -1.17  | -0.77 | 1.56  |
|     |    | 231 | 1.30 | 2.88      | -2.98 | -1.13 | 1.03  | -2.73    | -0.53 | -1.50  | -1.49  | -0.54 | 0.11  |
|     |    | 20  | 5.30 | 4.58      | -1.54 | 2.78  | 0.26  | 2.79     | -0.90 | -5.88  | -5.60  | -1.18 | 1.15  |
| 178 | 11 | 16  | 7.83 | 4.05      | -9.01 | -4.88 | -0.08 | -6.07    | -1.45 | -8.51  | -8.46  | -1.50 | -0.60 |
|     |    | 230 | 3.65 | 0.38      | -1.57 | -1.13 | -0.06 | 0.82     | 0.04  | -3.71  | -2.56  | -1.11 | 1.73  |
|     |    | 231 | 2.39 | 2.53      | -4.43 | -2.13 | 0.23  | -3.28    | -0.82 | -2.74  | -2.71  | -0.85 | 0.24  |
|     |    | 20  | 6.32 | 2.54      | -1.53 | 1.74  | -0.74 | 1.62     | -1.09 | -7.02  | -6.79  | -1.33 | 1.16  |
| 178 | 43 | 16  | 7.17 | 4.21      | -7.52 | -3.84 | 0.54  | -5.44    | -1.35 | -7.82  | -7.75  | -1.41 | -0.63 |
|     |    | 230 | 3.20 | 1.33      | -0.99 | -0.11 | 0.46  | 1.13     | 0.32  | -3.09  | -1.84  | -0.93 | 1.64  |
|     |    | 231 | 1.82 | 2.71      | -3.68 | -1.61 | 0.65  | -2.99    | -0.67 | -2.10  | -2.07  | -0.69 | 0.17  |
|     |    | 20  | 5.79 | 3.58      | -1.52 | 2.28  | -0.22 | 2.22     | -0.99 | -6.43  | -6.17  | -1.25 | 1.15  |
| 179 | 1  | 20  | 7.99 | 4.48      | -2.59 | -1.00 | 2.89  | -2.96    | -1.38 | -8.79  | -8.69  | -1.48 | -0.89 |
|     |    | 231 | 3.15 | 1.23      | 0.32  | 1.21  | 0.34  | 0.14     | 0.36  | -3.07  | -1.83  | -0.88 | 1.65  |
|     |    | 232 | 1.63 | 2.14      | -1.74 | -0.60 | 1.01  | -1.77    | -0.62 | -1.87  | -1.87  | -0.63 | -0.08 |
|     |    | 24  | 6.98 | 4.00      | 0.65  | 2.70  | 1.94  | 1.63     | -1.36 | -7.81  | -7.55  | -1.62 | 1.27  |
| 179 | 2  | 20  | 5.47 | 3.21      | -1.77 | -0.70 | 2.14  | -2.04    | -0.94 | -6.02  | -5.95  | -1.01 | -0.60 |
|     |    | 231 | 2.21 | 0.86      | 0.23  | 0.84  | 0.26  | 0.13     | 0.26  | -2.16  | -1.27  | -0.63 | 1.16  |
|     |    | 232 | 1.13 | 1.57      | -1.19 | -0.42 | 0.80  | -1.24    | -0.45 | -1.30  | -1.30  | -0.45 | -0.04 |
|     |    | 24  | 4.75 | 2.85      | 0.41  | 1.86  | 1.40  | 1.20     | -0.93 | -5.32  | -5.14  | -1.12 | 0.88  |
| 179 | 11 | 20  | 6.56 | 2.50      | -3.83 | -1.86 | 0.53  | -2.93    | -1.11 | -7.20  | -7.14  | -1.17 | -0.59 |
|     |    | 231 | 2.97 | -0.06     | -1.42 | -0.29 | -1.20 | -0.51    | -0.16 | -3.15  | -2.47  | -0.84 | 1.25  |
|     |    | 232 | 2.09 | 0.99      | -2.71 | -1.14 | -0.58 | -1.83    | -0.64 | -2.38  | -2.38  | -0.64 | 0.04  |
|     |    | 24  | 5.69 | 1.19      | -0.22 | 1.10  | -0.13 | 0.35     | -1.10 | -6.36  | -6.21  | -1.25 | 0.88  |
| 179 | 45 | 20  | 5.95 | 2.96      | -2.30 | -1.05 | 1.71  | -2.24    | -1.04 | -6.55  | -6.50  | -1.10 | -0.55 |
|     |    | 231 | 2.57 | 0.43      | -0.45 | 0.43  | -0.45 | 3.75e-03 | 0.07  | -2.62  | -1.82  | -0.73 | 1.23  |
|     |    | 232 | 1.57 | 1.19      | -1.78 | -0.70 | 0.11  | -1.43    | -0.54 | -1.80  | -1.80  | -0.54 | 0.03  |
|     |    | 24  | 5.20 | 2.29      | 0.33  | 1.63  | 0.99  | 0.93     | -1.01 | -5.82  | -5.64  | -1.20 | 0.92  |
| 180 | 1  | 24  | 7.11 | 3.85      | -0.04 | 0.08  | 3.73  | -0.66    | -1.32 | -7.92  | -7.82  | -1.43 | -0.81 |
|     |    | 232 | 2.49 | 1.03      | 0.03  | 0.86  | 0.20  | -0.38    | 0.08  | -2.52  | -1.71  | -0.73 | 1.20  |
|     |    | 233 | 1.50 | 1.00      | -0.39 | -0.23 | 0.84  | -0.45    | -0.51 | -1.72  | -1.67  | -0.56 | -0.25 |
|     |    | 28  | 6.56 | 3.14      | 1.27  | 1.36  | 3.05  | 0.40     | -1.34 | -7.39  | -7.20  | -1.53 | 1.06  |
| 180 | 2  | 24  | 4.85 | 2.81      | -0.03 | 0.04  | 2.74  | -0.45    | -0.90 | -5.40  | -5.33  | -0.97 | -0.55 |
|     |    | 232 | 1.74 | 0.71      | 0.07  | 0.60  | 0.18  | -0.24    | 0.05  | -1.76  | -1.19  | -0.52 | 0.84  |
|     |    | 233 | 1.03 | 0.79      | -0.26 | -0.16 | 0.68  | -0.32    | -0.37 | -1.19  | -1.16  | -0.40 | -0.15 |
|     |    | 28  | 4.44 | 2.28      | 0.85  | 0.93  | 2.21  | 0.32     | -0.91 | -5.01  | -4.88  | -1.05 | 0.73  |
| 180 | 13 | 24  | 5.75 | 1.59      | -0.68 | -0.53 | 1.43  | -0.57    | -1.10 | -6.41  | -6.37  | -1.14 | -0.46 |
|     |    | 232 | 2.51 | -4.44e-03 | -1.68 | -0.07 | -1.61 | -0.32    | -0.24 | -2.71  | -2.24  | -0.71 | 0.97  |
|     |    | 233 | 1.87 | -0.38     | -1.48 | -0.75 | -1.11 | -0.52    | -0.57 | -2.15  | -2.15  | -0.57 | -0.03 |
|     |    | 28  | 5.33 | 0.93      | 0.42  | 0.43  | 0.92  | 0.08     | -1.07 | -6.00  | -5.87  | -1.21 | 0.81  |
| 180 | 45 | 24  | 5.28 | 2.21      | -0.34 | -0.23 | 2.11  | -0.51    | -1.00 | -5.88  | -5.83  | -1.05 | -0.50 |
|     |    | 232 | 2.10 | 0.35      | -0.76 | 0.28  | -0.68 | -0.28    | -0.10 | -2.20  | -1.69  | -0.61 | 0.90  |
|     |    | 233 | 1.43 | 0.12      | -0.75 | -0.44 | -0.18 | -0.42    | -0.47 | -1.64  | -1.64  | -0.48 | -0.09 |
|     |    | 28  | 4.87 | 1.63      | 0.65  | 0.69  | 1.59  | 0.20     | -0.99 | -5.49  | -5.36  | -1.12 | 0.77  |
| 181 | 1  | 28  | 6.65 | 4.12      | 0.10  | 0.14  | 4.08  | 0.40     | -1.31 | -7.44  | -7.34  | -1.41 | -0.79 |
|     |    | 233 | 2.04 | 0.81      | -0.01 | 0.45  | 0.34  | -0.41    | -0.08 | -2.13  | -1.60  | -0.62 | 0.90  |
|     |    | 234 | 1.47 | 0.78      | -0.14 | -0.10 | 0.75  | 0.17     | -0.39 | -1.69  | -1.56  | -0.52 | -0.39 |
|     |    | 32  | 6.39 | 3.69      | 0.40  | 0.43  | 3.67  | -0.27    | -1.32 | -7.18  | -7.03  | -1.47 | 0.93  |
| 181 | 2  | 28  | 4.51 | 3.00      | 0.06  | 0.08  | 2.97  | 0.28     | -0.89 | -5.05  | -4.98  | -0.96 | -0.53 |
|     |    | 233 | 1.41 | 0.57      | 0.04  | 0.31  | 0.30  | -0.27    | -0.07 | -1.48  | -1.11  | -0.44 | 0.63  |
|     |    | 234 | 1.01 | 0.63      | -0.09 | -0.07 | 0.61  | 0.11     | -0.29 | -1.16  | -1.08  | -0.37 | -0.26 |
|     |    | 32  | 4.32 | 2.67      | 0.28  | 0.29  | 2.66  | -0.16    | -0.89 | -4.86  | -4.76  | -1.00 | 0.63  |

|     |    |     |      |       |           |           |       |       |       |       |       |       |       |
|-----|----|-----|------|-------|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|
| 181 | 13 | 28  | 5.36 | 1.43  | -0.59     | -0.49     | 1.33  | 0.44  | -1.07 | -6.00 | -5.96 | -1.11 | -0.44 |
|     |    | 233 | 2.18 | -0.32 | -1.72     | -0.33     | -1.71 | -0.10 | -0.30 | -2.40 | -2.09 | -0.60 | 0.74  |
|     |    | 234 | 1.78 | -0.68 | -1.45     | -0.73     | -1.40 | 0.18  | -0.51 | -2.04 | -2.03 | -0.52 | -0.15 |
|     |    | 32  | 5.18 | 1.01  | -0.30     | -0.30     | 1.01  | -0.08 | -1.03 | -5.81 | -5.70 | -1.14 | 0.72  |
| 181 | 45 | 28  | 4.92 | 2.23  | -0.24     | -0.19     | 2.18  | 0.36  | -0.98 | -5.51 | -5.45 | -1.03 | -0.49 |
|     |    | 233 | 1.77 | 0.05  | -0.72     | 4.76e-03  | -0.67 | -0.19 | -0.19 | -1.91 | -1.58 | -0.52 | 0.68  |
|     |    | 234 | 1.37 | -0.23 | -0.52     | -0.39     | -0.36 | 0.14  | -0.41 | -1.57 | -1.54 | -0.44 | -0.20 |
|     |    | 32  | 4.73 | 1.87  | -1.46e-03 | 6.74e-03  | 1.86  | -0.12 | -0.96 | -5.32 | -5.21 | -1.07 | 0.67  |
| 182 | 1  | 32  | 6.43 | 4.24  | -0.15     | -0.03     | 4.11  | 0.72  | -1.30 | -7.20 | -7.09 | -1.41 | -0.80 |
|     |    | 234 | 1.74 | 0.76  | -0.09     | 0.15      | 0.53  | -0.38 | -0.19 | -1.88 | -1.53 | -0.55 | 0.69  |
|     |    | 235 | 1.56 | 0.81  | -0.17     | -0.02     | 0.66  | 0.35  | -0.29 | -1.74 | -1.51 | -0.51 | -0.53 |
|     |    | 36  | 6.35 | 4.08  | -0.10     | -6.37e-03 | 3.98  | -0.63 | -1.30 | -7.12 | -7.00 | -1.43 | 0.85  |
| 182 | 2  | 32  | 4.35 | 3.07  | -0.11     | -0.03     | 2.99  | 0.49  | -0.88 | -4.87 | -4.80 | -0.96 | -0.54 |
|     |    | 234 | 1.20 | 0.58  | -0.03     | 0.10      | 0.44  | -0.25 | -0.14 | -1.30 | -1.06 | -0.39 | 0.47  |
|     |    | 235 | 1.07 | 0.63  | -0.10     | -0.01     | 0.55  | 0.24  | -0.21 | -1.20 | -1.05 | -0.37 | -0.36 |
|     |    | 36  | 4.29 | 2.95  | -0.07     | -0.01     | 2.89  | -0.42 | -0.88 | -4.82 | -4.73 | -0.97 | 0.58  |
| 182 | 14 | 32  | 5.16 | 1.42  | -1.00     | -0.67     | 1.09  | 0.83  | -1.05 | -5.78 | -5.74 | -1.10 | -0.46 |
|     |    | 234 | 1.98 | -0.57 | -1.67     | -0.57     | -1.66 | 0.08  | -0.33 | -2.20 | -2.00 | -0.53 | 0.58  |
|     |    | 235 | 1.75 | -0.44 | -1.85     | -0.72     | -1.57 | 0.56  | -0.46 | -2.01 | -1.96 | -0.50 | -0.25 |
|     |    | 36  | 5.13 | 0.99  | -0.68     | -0.68     | 0.98  | -0.08 | -1.01 | -5.74 | -5.65 | -1.10 | 0.66  |
| 182 | 46 | 32  | 4.74 | 2.24  | -0.50     | -0.34     | 2.08  | 0.66  | -0.97 | -5.31 | -5.25 | -1.03 | -0.50 |
|     |    | 234 | 1.56 | -0.20 | -0.59     | -0.22     | -0.57 | -0.09 | -0.24 | -1.73 | -1.51 | -0.46 | 0.52  |
|     |    | 235 | 1.38 | -0.01 | -0.81     | -0.35     | -0.47 | 0.39  | -0.35 | -1.57 | -1.49 | -0.43 | -0.31 |
|     |    | 36  | 4.70 | 2.00  | -0.36     | -0.33     | 1.97  | -0.26 | -0.94 | -5.26 | -5.17 | -1.03 | 0.62  |
| 183 | 1  | 36  | 6.35 | 4.08  | -0.10     | -6.37e-03 | 3.98  | 0.63  | -1.30 | -7.12 | -7.00 | -1.43 | -0.85 |
|     |    | 235 | 1.56 | 0.81  | -0.17     | -0.02     | 0.66  | -0.35 | -0.29 | -1.74 | -1.51 | -0.51 | 0.53  |
|     |    | 236 | 1.74 | 0.76  | -0.09     | 0.15      | 0.53  | 0.38  | -0.19 | -1.88 | -1.53 | -0.55 | -0.69 |
|     |    | 40  | 6.43 | 4.24  | -0.15     | -0.03     | 4.11  | -0.72 | -1.30 | -7.20 | -7.09 | -1.41 | 0.80  |
| 183 | 2  | 36  | 4.29 | 2.95  | -0.07     | -0.01     | 2.89  | 0.42  | -0.88 | -4.82 | -4.73 | -0.97 | -0.58 |
|     |    | 235 | 1.07 | 0.63  | -0.10     | -0.01     | 0.55  | -0.24 | -0.21 | -1.20 | -1.05 | -0.37 | 0.36  |
|     |    | 236 | 1.20 | 0.58  | -0.03     | 0.10      | 0.44  | 0.25  | -0.14 | -1.30 | -1.06 | -0.39 | -0.47 |
|     |    | 40  | 4.35 | 3.07  | -0.11     | -0.03     | 2.99  | -0.49 | -0.88 | -4.87 | -4.80 | -0.96 | 0.54  |
| 183 | 17 | 36  | 5.10 | 0.91  | -0.76     | -0.70     | 0.86  | 0.30  | -1.03 | -5.72 | -5.65 | -1.10 | -0.57 |
|     |    | 235 | 1.79 | -0.58 | -1.69     | -0.72     | -1.56 | -0.36 | -0.42 | -2.04 | -1.96 | -0.50 | 0.34  |
|     |    | 236 | 1.92 | -0.59 | -1.68     | -0.60     | -1.67 | 0.11  | -0.38 | -2.16 | -2.01 | -0.53 | -0.49 |
|     |    | 40  | 5.19 | 1.17  | -0.93     | -0.72     | 0.96  | -0.63 | -1.03 | -5.81 | -5.75 | -1.09 | 0.55  |
| 183 | 49 | 36  | 4.68 | 1.97  | -0.40     | -0.34     | 1.91  | 0.37  | -0.95 | -5.25 | -5.17 | -1.03 | -0.57 |
|     |    | 235 | 1.40 | -0.11 | -0.71     | -0.35     | -0.47 | -0.29 | -0.33 | -1.59 | -1.49 | -0.43 | 0.35  |
|     |    | 236 | 1.53 | -0.15 | -0.66     | -0.23     | -0.57 | 0.19  | -0.27 | -1.70 | -1.52 | -0.46 | -0.48 |
|     |    | 40  | 4.75 | 2.14  | -0.49     | -0.36     | 2.01  | -0.56 | -0.95 | -5.32 | -5.26 | -1.02 | 0.54  |
| 184 | 1  | 40  | 6.39 | 3.69  | 0.40      | 0.43      | 3.67  | 0.27  | -1.32 | -7.18 | -7.03 | -1.47 | -0.93 |
|     |    | 236 | 1.47 | 0.78  | -0.14     | -0.10     | 0.75  | -0.17 | -0.39 | -1.69 | -1.56 | -0.52 | 0.39  |
|     |    | 237 | 2.04 | 0.81  | -0.01     | 0.45      | 0.34  | 0.41  | -0.08 | -2.13 | -1.60 | -0.62 | -0.90 |
|     |    | 44  | 6.65 | 4.12  | 0.10      | 0.14      | 4.08  | -0.40 | -1.31 | -7.44 | -7.34 | -1.41 | 0.79  |
| 184 | 2  | 40  | 4.32 | 2.67  | 0.28      | 0.29      | 2.66  | 0.16  | -0.89 | -4.86 | -4.76 | -1.00 | -0.63 |
|     |    | 236 | 1.01 | 0.63  | -0.09     | -0.07     | 0.61  | -0.11 | -0.29 | -1.16 | -1.08 | -0.37 | 0.26  |
|     |    | 237 | 1.41 | 0.57  | 0.04      | 0.31      | 0.30  | 0.27  | -0.07 | -1.48 | -1.11 | -0.44 | -0.63 |
|     |    | 44  | 4.51 | 3.00  | 0.06      | 0.08      | 2.97  | -0.28 | -0.89 | -5.05 | -4.98 | -0.96 | 0.53  |
| 184 | 17 | 40  | 5.15 | 0.73  | -0.50     | -0.40     | 0.63  | 0.33  | -1.04 | -5.79 | -5.71 | -1.13 | -0.63 |
|     |    | 236 | 1.81 | -0.75 | -1.40     | -0.76     | -1.40 | 0.05  | -0.48 | -2.07 | -2.03 | -0.51 | 0.23  |
|     |    | 237 | 2.13 | -0.27 | -1.84     | -0.40     | -1.71 | 0.42  | -0.35 | -2.36 | -2.11 | -0.59 | -0.66 |
|     |    | 44  | 5.40 | 0.95  | -0.64     | -0.63     | 0.94  | -0.10 | -1.04 | -6.04 | -5.98 | -1.10 | 0.53  |
| 184 | 49 | 40  | 4.72 | 1.72  | -0.08     | -0.04     | 1.68  | 0.24  | -0.97 | -5.31 | -5.21 | -1.06 | -0.63 |
|     |    | 236 | 1.39 | -0.34 | -0.42     | -0.40     | -0.35 | -0.03 | -0.39 | -1.59 | -1.54 | -0.44 | 0.24  |
|     |    | 237 | 1.74 | 0.12  | -0.82     | -0.03     | -0.67 | 0.34  | -0.22 | -1.89 | -1.59 | -0.51 | -0.64 |
|     |    | 44  | 4.94 | 2.01  | -0.28     | -0.26     | 2.00  | -0.19 | -0.96 | -5.52 | -5.46 | -1.03 | 0.53  |

|     |    |     |       |       |        |       |       |       |       |        |        |       |           |
|-----|----|-----|-------|-------|--------|-------|-------|-------|-------|--------|--------|-------|-----------|
| 185 | 1  | 44  | 6.56  | 3.14  | 1.27   | 1.36  | 3.05  | -0.40 | -1.34 | -7.39  | -7.20  | -1.53 | -1.06     |
|     |    | 237 | 1.50  | 1.00  | -0.39  | -0.23 | 0.84  | 0.45  | -0.51 | -1.72  | -1.67  | -0.56 | 0.25      |
|     |    | 238 | 2.49  | 1.03  | 0.03   | 0.86  | 0.20  | 0.38  | 0.08  | -2.52  | -1.71  | -0.73 | -1.20     |
|     |    | 48  | 7.11  | 3.85  | -0.04  | 0.08  | 3.73  | 0.66  | -1.32 | -7.92  | -7.82  | -1.43 | 0.81      |
| 185 | 2  | 44  | 4.44  | 2.28  | 0.85   | 0.93  | 2.21  | -0.32 | -0.91 | -5.01  | -4.88  | -1.05 | -0.73     |
|     |    | 237 | 1.03  | 0.79  | -0.26  | -0.16 | 0.68  | 0.32  | -0.37 | -1.19  | -1.16  | -0.40 | 0.15      |
|     |    | 238 | 1.74  | 0.71  | 0.07   | 0.60  | 0.18  | 0.24  | 0.05  | -1.76  | -1.19  | -0.52 | -0.84     |
|     |    | 48  | 4.85  | 2.81  | -0.03  | 0.04  | 2.74  | 0.45  | -0.90 | -5.40  | -5.33  | -0.97 | 0.55      |
| 185 | 17 | 44  | 5.32  | 0.48  | 0.10   | 0.25  | 0.33  | 0.18  | -1.08 | -5.99  | -5.88  | -1.19 | -0.73     |
|     |    | 237 | 1.91  | -0.21 | -1.69  | -0.82 | -1.08 | 0.73  | -0.55 | -2.17  | -2.17  | -0.55 | 0.11      |
|     |    | 238 | 2.47  | 0.07  | -1.88  | -0.21 | -1.60 | 0.68  | -0.30 | -2.67  | -2.27  | -0.70 | -0.89     |
|     |    | 48  | 5.81  | 1.30  | -1.26  | -0.79 | 0.83  | 0.99  | -1.07 | -6.46  | -6.40  | -1.12 | 0.54      |
| 185 | 49 | 44  | 4.86  | 1.31  | 0.59   | 0.60  | 1.30  | -0.08 | -0.99 | -5.48  | -5.36  | -1.11 | -0.73     |
|     |    | 237 | 1.45  | 0.22  | -0.86  | -0.48 | -0.17 | 0.52  | -0.46 | -1.66  | -1.64  | -0.47 | 0.13      |
|     |    | 238 | 2.07  | 0.40  | -0.87  | 0.21  | -0.68 | 0.45  | -0.13 | -2.18  | -1.71  | -0.61 | -0.86     |
|     |    | 48  | 5.31  | 2.03  | -0.57  | -0.36 | 1.82  | 0.71  | -0.98 | -5.91  | -5.85  | -1.04 | 0.55      |
| 186 | 1  | 48  | 6.98  | 4.00  | 0.65   | 2.70  | 1.94  | -1.63 | -1.36 | -7.81  | -7.55  | -1.62 | -1.27     |
|     |    | 238 | 1.63  | 2.14  | -1.74  | -0.60 | 1.01  | 1.77  | -0.62 | -1.87  | -1.87  | -0.63 | 0.08      |
|     |    | 239 | 3.15  | 1.23  | 0.32   | 1.21  | 0.34  | -0.14 | 0.36  | -3.07  | -1.83  | -0.88 | -1.65     |
|     |    | 52  | 7.99  | 4.48  | -2.59  | -1.00 | 2.89  | 2.96  | -1.38 | -8.79  | -8.69  | -1.48 | 0.89      |
| 186 | 2  | 48  | 4.75  | 2.85  | 0.41   | 1.86  | 1.40  | -1.20 | -0.93 | -5.32  | -5.14  | -1.12 | -0.88     |
|     |    | 238 | 1.13  | 1.57  | -1.19  | -0.42 | 0.80  | 1.24  | -0.45 | -1.30  | -1.30  | -0.45 | 0.04      |
|     |    | 239 | 2.21  | 0.86  | 0.23   | 0.84  | 0.26  | -0.13 | 0.26  | -2.16  | -1.27  | -0.63 | -1.16     |
|     |    | 52  | 5.47  | 3.21  | -1.77  | -0.70 | 2.14  | 2.04  | -0.94 | -6.02  | -5.95  | -1.01 | 0.60      |
| 186 | 18 | 48  | 5.69  | 1.15  | -0.18  | 1.08  | -0.11 | -0.28 | -1.10 | -6.36  | -6.20  | -1.25 | -0.88     |
|     |    | 238 | 2.09  | 1.03  | -2.77  | -1.16 | -0.57 | 1.88  | -0.63 | -2.38  | -2.38  | -0.63 | -0.04     |
|     |    | 239 | 2.97  | -0.06 | -1.47  | -0.33 | -1.20 | 0.55  | -0.16 | -3.15  | -2.47  | -0.84 | -1.25     |
|     |    | 52  | 6.56  | 2.55  | -3.91  | -1.90 | 0.54  | 2.99  | -1.11 | -7.19  | -7.14  | -1.17 | 0.59      |
| 186 | 50 | 48  | 5.20  | 1.94  | 0.22   | 1.49  | 0.67  | -0.76 | -1.01 | -5.82  | -5.65  | -1.18 | -0.88     |
|     |    | 238 | 1.59  | 1.29  | -1.93  | -0.78 | 0.14  | 1.55  | -0.54 | -1.82  | -1.82  | -0.54 | -1.08e-03 |
|     |    | 239 | 2.55  | 0.33  | -0.49  | 0.27  | -0.44 | 0.20  | 0.04  | -2.62  | -1.85  | -0.73 | -1.21     |
|     |    | 52  | 5.99  | 2.88  | -2.78  | -1.28 | 1.37  | 2.50  | -1.02 | -6.59  | -6.52  | -1.09 | 0.59      |
| 187 | 1  | 52  | 7.74  | 6.51  | -2.10  | 4.05  | 0.36  | -3.89 | -1.32 | -8.58  | -8.19  | -1.71 | -1.64     |
|     |    | 239 | 1.87  | 4.04  | -4.33  | -1.64 | 1.35  | 3.91  | -0.76 | -2.15  | -2.14  | -0.77 | -0.12     |
|     |    | 240 | 4.05  | 3.29  | -0.71  | 1.23  | 1.35  | -2.00 | 0.85  | -3.61  | -1.68  | -1.08 | -2.21     |
|     |    | 56  | 9.52  | 6.20  | -8.91  | -4.16 | 1.45  | 7.02  | -1.82 | -10.41 | -10.29 | -1.93 | 0.97      |
| 187 | 2  | 52  | 5.30  | 4.58  | -1.54  | 2.78  | 0.26  | -2.79 | -0.90 | -5.88  | -5.60  | -1.18 | -1.15     |
|     |    | 239 | 1.30  | 2.88  | -2.98  | -1.13 | 1.03  | 2.73  | -0.53 | -1.50  | -1.49  | -0.54 | -0.11     |
|     |    | 240 | 2.86  | 2.30  | -0.53  | 0.84  | 0.94  | -1.42 | 0.61  | -2.54  | -1.17  | -0.77 | -1.56     |
|     |    | 56  | 6.56  | 4.37  | -6.13  | -2.87 | 1.11  | 4.85  | -1.25 | -7.17  | -7.10  | -1.32 | 0.66      |
| 187 | 18 | 52  | 6.32  | 2.46  | -1.46  | 1.71  | -0.71 | -1.54 | -1.09 | -7.02  | -6.78  | -1.32 | -1.16     |
|     |    | 239 | 2.39  | 2.57  | -4.50  | -2.17 | 0.24  | 3.32  | -0.82 | -2.73  | -2.70  | -0.85 | -0.24     |
|     |    | 240 | 3.65  | 0.33  | -1.59  | -1.20 | -0.06 | -0.78 | 0.04  | -3.71  | -2.56  | -1.11 | -1.73     |
|     |    | 56  | 7.83  | 4.11  | -9.10  | -4.93 | -0.06 | 6.14  | -1.45 | -8.51  | -8.46  | -1.50 | 0.60      |
| 187 | 50 | 52  | 5.79  | 3.54  | -1.48  | 2.27  | -0.20 | -2.19 | -0.99 | -6.43  | -6.17  | -1.25 | -1.15     |
|     |    | 239 | 1.82  | 2.73  | -3.71  | -1.63 | 0.65  | 3.01  | -0.67 | -2.09  | -2.07  | -0.69 | -0.17     |
|     |    | 240 | 3.20  | 1.30  | -0.99  | -0.14 | 0.46  | -1.11 | 0.32  | -3.09  | -1.84  | -0.93 | -1.64     |
|     |    | 56  | 7.17  | 4.24  | -7.56  | -3.87 | 0.55  | 5.47  | -1.35 | -7.81  | -7.75  | -1.41 | 0.63      |
| 188 | 1  | 56  | 9.49  | 9.31  | -7.06  | 3.42  | -1.17 | -7.86 | -1.01 | -10.23 | -9.54  | -1.70 | -2.43     |
|     |    | 240 | 2.11  | 6.42  | -7.47  | -3.15 | 2.10  | 6.43  | -1.33 | -2.39  | -2.25  | -1.47 | -0.37     |
|     |    | 241 | 3.51  | 7.86  | -2.65  | 0.86  | 4.34  | -4.96 | 1.57  | -2.25  | -0.10  | -0.58 | -1.89     |
|     |    | 60  | 11.68 | 7.17  | -16.24 | -7.60 | -1.48 | 11.30 | -4.65 | -13.38 | -13.31 | -4.72 | 0.79      |
| 188 | 2  | 56  | 6.56  | 6.53  | -5.05  | 2.35  | -0.87 | -5.56 | -0.69 | -7.06  | -6.57  | -1.18 | -1.70     |
|     |    | 240 | 1.49  | 4.54  | -5.17  | -2.18 | 1.55  | 4.48  | -0.91 | -1.69  | -1.56  | -1.03 | -0.28     |
|     |    | 241 | 2.49  | 5.49  | -1.87  | 0.58  | 3.04  | -3.47 | 1.12  | -1.59  | -0.06  | -0.41 | -1.34     |
|     |    | 60  | 8.09  | 5.00  | -11.24 | -5.23 | -1.01 | 7.84  | -3.22 | -9.27  | -9.23  | -3.27 | 0.53      |

|       |           |       |       |         |         |        |        |       |        |        |        |       |       |
|-------|-----------|-------|-------|---------|---------|--------|--------|-------|--------|--------|--------|-------|-------|
| 188   | 18        | 56    | 7.67  | 4.90    | -4.41   | 0.64   | -0.14  | -4.64 | -1.27  | -8.44  | -8.00  | -1.71 | -1.72 |
|       |           | 240   | 2.65  | 3.87    | -7.14   | -4.16  | 0.89   | 4.89  | -1.29  | -3.09  | -2.97  | -1.42 | -0.46 |
|       |           | 241   | 3.08  | 4.10    | -4.01   | -2.17  | 2.26   | -3.40 | 0.30   | -2.79  | -1.66  | -0.83 | -1.49 |
|       |           | 60    | 9.55  | 5.12    | -13.19  | -7.63  | -0.44  | 8.42  | -3.80  | -10.90 | -10.86 | -3.84 | 0.52  |
|       | 50        | 56    | 7.08  | 5.72    | -4.71   | 1.53   | -0.52  | -5.11 | -0.97  | -7.72  | -7.25  | -1.44 | -1.71 |
|       |           | 240   | 2.00  | 4.22    | -6.11   | -3.14  | 1.24   | 4.68  | -1.10  | -2.36  | -2.24  | -1.22 | -0.37 |
|       |           | 241   | 2.68  | 4.79    | -2.88   | -0.74  | 2.66   | -3.44 | 0.70   | -2.14  | -0.83  | -0.61 | -1.41 |
|       |           | 60    | 8.80  | 5.04    | -12.16  | -6.39  | -0.74  | 8.12  | -3.50  | -10.06 | -10.01 | -3.54 | 0.53  |
| <hr/> |           |       |       |         |         |        |        |       |        |        |        |       |       |
| 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 |       |
|       |           |       |       | -133.60 | -132.14 | -73.75 | -43.60 |       | -15.36 | -14.74 | -6.30  | -2.78 |       |
|       |           | 31.37 | 91.33 |         | 52.43   | 89.29  | 43.60  | 3.56  |        | 2.98   | 1.43   | 2.78  |       |

# VERIFICHE ELEMENTI PARETE E/O GUSCIO IN C.A.

## LEGENDA TABELLA VERIFICHE ELEMENTI PARETE E GUSCIO IN C.A.

Per le pareti in c.a., in ottemperanza al cap. 7 del DM 17-01-18, viene effettuata una doppia progettazione: sia come *Singolo Elemento* sia come *Parete Sismica* o *Parete Debolmente Armata*.

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 taglianti), 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.

Per la progettazione come *Parete Sismica* o *Parete Debolmente Armata* vengono riportate invece le caratteristiche geometriche della parete e delle zone dissipative (quest'ultime solo nel caso di parete sismica), i coefficienti di verifica a compressione assiale, pressoflessione e sollecitazioni taglianti.

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 taglianti) 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.

Simbologia adottata nelle tabelle di verifica

Per gli elementi con progettazione di tipo "*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 gli elementi con progettazione di tipo “*Parete Sismica*” e “*Parete Debolmente Armata*” è presente una tabella con i simboli di seguito descritti:

|                    |                                                                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Parete             | Numero della PARETE SISMICA                                                                                                          |
| Parete PDA         | Numero della PARETE DEBOLMENTE ARMATA                                                                                                |
| H totale           | Altezza complessiva della parete                                                                                                     |
| Spessore           | Spessore della parete                                                                                                                |
| H critica          | Altezza come da punto 7.4.4.5.1 per traslazione momento (solo in Parete Sismica)                                                     |
| H critica V        | Altezza della zona dissipativa (solo in Parete Sismica)                                                                              |
| L totale           | Larghezza di base della parete                                                                                                       |
| L confinata        | Lunghezza della zona dissipativa (solo in Parete Sismica)                                                                            |
| Verif. N           | Verifica di cui al punto 7.4.4.5.1 compressione semplice                                                                             |
| Verif. N-M         | Verifica di cui al punto 7.4.4.5.1 pressoflessione                                                                                   |
| Fattore V          | Fattore di amplificazione del taglio di cui al punto 7.4.4.5.1                                                                       |
| Diagramma V        | Diagramma elaborato per effetto modi superiori come da fig. 7.4.4                                                                    |
| Verif. V           | Verifica di cui al punto 7.4.4.5.1 taglio (compressione cls, trazione acciaio, scorrimento in zona critica) (solo in Parete Sismica) |
| Verifica Snellezza | Verifica di cui al punto 7.4.4.5.1 limitazione compressione per prevenire l'instabilità (solo in Parete Debolmente Armata)           |
| Prog. composta     | Sigla per la progettazione composta                                                                                                  |

Sia per le verifiche degli elementi con progettazione di tipo “*Singolo Elemento ...*” e “*Parete ...*” è presente una tabella con i simboli di seguito descritti:

|          |                                                                                                                                                            |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nodo     | numero del nodo                                                                                                                                            |
| Stato    | codice di verifica dell'elemento <b>ok</b> o <b>NV</b>                                                                                                     |
| 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 <b>ok</b> o <b>NV</b>         |
| 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              |

Per le verifiche degli elementi con progettazione “*Parete Sismica o Parete Debolmente Armata*”, oltre alla tabella con le verifiche per gli elementi con progettazione “*Singolo Elemento ...*”, è presente una tabella con i simboli di seguito descritti:

|                 |                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Quota           | Ascissa verticale di riferimento                                                                                                    |
| Af conf.        | Numero e diametro armatura presente in una zona confinata                                                                           |
| Af std          | Diametro e passo armatura in zona non confinata (doppia maglia)                                                                     |
| Af estremi      | Diametro dei ferri di estremità del pannello; se posto uguale 0, viene utilizzato il diametro standard                              |
| Af V (ori)      | Diametro e passo armatura orizzontale (doppia maglia)                                                                               |
| Ver. N          | Rapporto tra azione di calcolo e resistenza a compressione (normalizzato a 1 in quanto da confrontare con 40% in CDB e 35 % in CDA) |
| Ver. N/M        | Rapporto tra azione di calcolo e resistenza a pressoflessione                                                                       |
| Ver. V acc(7)   | Rapporto tra azione di calcolo e resistenza a taglio-trazione per $\alpha_s$ minore di 2 secondo paragrafo 7.4.4.5.1                |
| Ver. V cls      | Rapporto tra azione di calcolo e resistenza a taglio-compressione                                                                   |
| Ver. V acc      | Rapporto tra azione di calcolo e resistenza a taglio-trazione                                                                       |
| Ver. V scorr.   | Rapporto tra azione di calcolo e resistenza a taglio scorrimento                                                                    |
| N add           | Sforzo assiale di cui al punto 7.4.4.5.1 da sommare e sottrarre nelle verifiche quando $q$ supera 2                                 |
| N invil M invil | Inviluppo del Momento e Sforzo Normale come al punto 7.4.4.5.1 (informativo) (solo in Parete Sismica)                               |

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| Quota            | Ascissa verticale di riferimento                                                 |
| N v.N            | Valore dello sforzo assiale per cui Ver. N attinge il massimo valore             |
| N v.M/N, M v.M/N | Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore |

|                                     |                                                                                                                               |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| N v.M/N, M v.M/N Mo v.M/N           | Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate) |
| N v.Vcls, V v.Vcls,                 | Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore                                            |
| N v.Vacc, M v.Vacc, V v.Vacc,       | Valore dello sforzo assiale, momento e taglio per cui Ver. V. acc attinge il massimo valore                                   |
| N v.Vscorr, M v.Vscorr, V v.Vscorr, | Valore dello sforzo assiale, momento e taglio per cui Ver. V. scorr.e attinge il massimo valore                               |
| N v.N                               | Valore dello sforzo assiale per cui Ver. N attinge il massimo valore                                                          |
| N v.M/N, M v.M/N                    | Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore                                              |
| N v.M/N, M v.M/N Mo v.M/N           | Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate) |
| N v.Vcls, V v.Vcls,                 | Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore                                            |

|           |                                                                         |
|-----------|-------------------------------------------------------------------------|
| Quota     | Ascissa verticale di riferimento                                        |
| CtgT Vcls | Valore di ctg(teta) adottato nella verifica V compressione cls          |
| Vrsd Vcls | Valore della resistenza a taglio trazione (armatura di calcolo)         |
| Vrcd Vcls | Valore della resistenza a taglio compressione                           |
| CtgT Vacc | Valore di ctg(teta) adottato nella verifica V trazione armatura         |
| Vrsd Vacc | Valore della resistenza a taglio trazione (armatura presente)           |
| Vrcd Vacc | Valore della resistenza a taglio compressione                           |
| Vdd       | Valore del contributo alla resistenza allo scorrimento come da [7.4.20] |
| Vid       | Valore del contributo alla resistenza allo scorrimento come da [7.4.21] |
| A s.i.    | Somma delle aree di armature                                            |
| Incli.    | Angolo di inclinazione delle armature                                   |
| Dist.     | Distanza alla base tra le armature inclinate                            |

|           |                                                                                     |
|-----------|-------------------------------------------------------------------------------------|
| Quota     | Ascissa verticale di riferimento                                                    |
| V[7.4.16] | Verifica a taglio-trazione dell'armatura dell'anima (7.4.16)                        |
| N M V     | Sollecitazioni di calcolo della condizione più gravosa                              |
| Alfas     | Rapporto di Taglio                                                                  |
| Vrd,c     | Resistenza a taglio degli elementi non armati                                       |
| VRd,s     | Resistenza a taglio nei confronti dello scorrimento                                 |
| V[7.4.17] | Verifica a taglio-trazione dell'armatura dell'anima (7.4.17)                        |
| roH       | Rapporto tra l'armatura orizzontale e l'area della sezione relativa di calcestruzzo |
| roV       | Rapporto tra l'armatura verticale e l'area della sezione relativa di calcestruzzo   |
| roN       | Sforzo normale adimensionalizzato Ned/(bw fyd)                                      |

Per la verifica a *Punzonamento* è presente una tabella con i simboli di seguito descritti:

|         |                                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------------|
| Nodo    | numero del nodo                                                                                              |
| Stato   | codice di verifica dell'elemento <b>ok</b> o <b>NV</b>                                                       |
| V. 6.47 | Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro resistente U1 |

|            |                                                                                                                                          |
|------------|------------------------------------------------------------------------------------------------------------------------------------------|
| V. 6.53    | Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro del pilastro U0                           |
| Beta       | Fattore di incremento dovuto ai momenti flettenti                                                                                        |
| f. a fon   | fattore di amplificazione per le fondazioni (solo per gusci di fondazione)                                                               |
| f. Uout    | fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta |
| Aw tot     | Quantitativo di armatura per la verifica di piastre munite di armatura (formula 6.52 dell'EC2)                                           |
| Asw,min    | Quantitativo minimo di armatura previsto dai dettagli costruttivi (formula 9.11 dell'EC2)                                                |
| n. x serie | Numero di serie di armature                                                                                                              |
| n.ser 0(R) | Numero di braccia delle armature in direzione 0 (o numero di braccia radiale)                                                            |
| n.ser 90   | Numero di braccia delle armature in direzione 90 (solo se armatura cruciforme)                                                           |
| Rif. cmb   | Riferimento combinazioni da cui si generano le verifiche più gravose                                                                     |

## PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

“Sia per CD“A” sia per CD“B” il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- [...];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”;

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO\_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO\_SAP (per travi e platee) o da PRO\_CAD Plinti (per plinti e pali di fondazione) incrementando la componente sismica delle combinazioni di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche di pali, plinti, plinti su pali, travi e platee vengono effettuate dal modulo geotecnico incrementando automaticamente la componente sismica delle azioni di un fattore 1.1 in CDB e 1.3 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

| Macro Guscio | Spessore | Id Materiale | Id Criterio | Progettazione |
|--------------|----------|--------------|-------------|---------------|
|              | cm       |              |             |               |

| Macro Guscio | Spessore | Id Materiale | Id Criterio | Progettazione    |
|--------------|----------|--------------|-------------|------------------|
| 1            | 25.00    | 1            | 2           | 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 |
|------|-------|------|----------|----------|--------|--------|---------|---------|-----------|-------|-----------|-----------|-----------|------|
|      |       |      |          |          |        |        |         |         | kN/ m     | kN/ m | kN/ m     | kN        | kN        | kN   |
| 1    | ok    | 0.19 | 2.44e-02 | 5.55e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -1.5      | -1.4  | -0.1      | -0.6      | -0.4      | -0.6 |
| 2    | ok    | 0.19 | 2.44e-02 | 5.55e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -1.5      | -1.4  | 0.1       | -0.6      | -0.4      | 0.6  |
| 3    | ok    | 0.19 | 2.44e-02 | 5.55e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -0.8      | -1.7  | -7.17e-02 | -0.3      | -0.5      | -0.6 |
| 4    | ok    | 0.19 | 2.44e-02 | 5.55e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -0.8      | -1.7  | 7.17e-02  | -0.3      | -0.5      | 0.6  |
| 5    | ok    | 0.19 | 0.2      | 1.96e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 10.4      | 1.2   | 8.3       | -8.7      | 1.0       | -0.3 |
| 6    | ok    | 0.19 | 0.2      | 1.96e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 10.4      | 1.2   | -8.3      | -8.7      | 1.0       | 0.3  |
| 7    | ok    | 0.19 | 0.2      | 1.96e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 10.4      | 1.2   | -8.3      | -8.7      | 1.0       | 0.3  |
| 8    | ok    | 0.19 | 0.2      | 1.96e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 10.4      | 1.2   | 8.3       | -8.7      | 1.0       | -0.3 |
| 9    | ok    | 0.19 | 2.20e-02 | 2.64e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 6.33e-02  | 0.9   | -0.3      | -8.77e-02 | -5.39e-02 | -0.9 |
| 10   | ok    | 0.19 | 2.20e-02 | 2.64e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 6.33e-02  | 0.9   | 0.3       | -8.77e-02 | -5.39e-02 | 0.9  |
| 11   | ok    | 0.19 | 0.3      | 5.95e-03 | 5.7    | 5.7    | 5.7     | 5.7     | -8.7      | -1.2  | -12.9     | -14.7     | -6.3      | -2.4 |
| 12   | ok    | 0.19 | 0.3      | 5.95e-03 | 5.7    | 5.7    | 5.7     | 5.7     | -8.7      | -1.2  | 12.9      | -14.7     | -6.3      | 2.4  |
| 13   | ok    | 0.19 | 3.09e-02 | 1.23e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.2       | 2.2   | -0.5      | 6.26e-02  | -0.6      | -0.8 |
| 14   | ok    | 0.19 | 3.09e-02 | 1.23e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.2       | 2.2   | 0.5       | 6.26e-02  | -0.6      | 0.8  |
| 15   | ok    | 0.19 | 0.2      | 2.89e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 3.4       | -1.2  | -7.9      | -9.5      | -1.7      | -2.4 |
| 16   | ok    | 0.19 | 0.2      | 2.89e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 3.4       | -1.2  | 7.9       | -9.5      | -1.7      | 2.4  |
| 17   | ok    | 0.19 | 2.86e-02 | 2.99e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.2       | 0.7   | -0.1      | 5.63e-02  | -0.7      | -0.8 |
| 18   | ok    | 0.19 | 2.86e-02 | 2.99e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.2       | 0.7   | 0.1       | 5.63e-02  | -0.7      | 0.8  |
| 19   | ok    | 0.19 | 0.2      | 1.17e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 4.0       | 0.4   | -3.9      | -8.2      | -1.7      | -1.6 |
| 20   | ok    | 0.19 | 0.2      | 1.17e-03 | 5.7    | 5.7    | 5.7     | 5.7     | 4.0       | 0.4   | 3.9       | -8.2      | -1.7      | 1.6  |
| 21   | ok    | 0.19 | 2.09e-02 | 6.87e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.1       | -0.7  | -2.52e-03 | 3.63e-02  | -0.6      | -0.6 |
| 22   | ok    | 0.19 | 2.09e-02 | 6.87e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.1       | -0.7  | 2.52e-03  | 3.63e-02  | -0.6      | 0.6  |
| 23   | ok    | 0.19 | 0.2      | 5.15e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 2.7       | 1.9   | -1.6      | -7.6      | -1.6      | -1.3 |
| 24   | ok    | 0.19 | 0.2      | 5.15e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 2.7       | 1.9   | 1.6       | -7.6      | -1.6      | 1.3  |
| 25   | ok    | 0.19 | 1.70e-02 | 8.81e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 5.05e-02  | -1.4  | 2.62e-02  | 2.10e-02  | -0.5      | -0.4 |
| 26   | ok    | 0.19 | 1.70e-02 | 8.81e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 5.05e-02  | -1.4  | -2.62e-02 | 2.10e-02  | -0.5      | 0.4  |
| 27   | ok    | 0.19 | 0.2      | 2.52e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.4       | 3.1   | -0.4      | -7.2      | -1.5      | -1.1 |
| 28   | ok    | 0.19 | 0.2      | 2.52e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.4       | 3.1   | 0.4       | -7.2      | -1.5      | 1.1  |
| 29   | ok    | 0.19 | 1.50e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.4       | 1.5   | -8.41e-02 | 0.2       | -0.3      | -0.3 |
| 30   | ok    | 0.19 | 1.50e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.67e-02  | -1.5  | -3.73e-02 | 1.27e-02  | -0.4      | 0.3  |
| 31   | ok    | 0.19 | 0.2      | 4.20e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.4       | 3.7   | 0.3       | -7.0      | -1.5      | -0.9 |
| 32   | ok    | 0.19 | 0.2      | 4.20e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.4       | 3.7   | -0.3      | -7.0      | -1.5      | 0.9  |
| 33   | ok    | 0.19 | 1.40e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.3       | 1.6   | -1.01e-02 | 0.2       | -0.3      | -0.2 |
| 34   | ok    | 0.19 | 1.40e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -1.42e-02 | -1.6  | 4.06e-02  | 8.27e-03  | -0.4      | -0.2 |
| 35   | ok    | 0.19 | 0.1      | 4.65e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -6.37e-03 | 4.0   | 0.6       | -7.0      | -1.4      | -0.9 |
| 36   | ok    | 0.19 | 0.1      | 4.65e-04 | 5.7    | 5.7    | 5.7     | 5.7     | -6.37e-03 | 4.0   | -0.6      | -7.0      | -1.4      | 0.9  |
| 37   | ok    | 0.19 | 1.50e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.67e-02  | -1.5  | -3.73e-02 | 1.27e-02  | -0.4      | 0.3  |
| 38   | ok    | 0.19 | 1.50e-02 | 9.26e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.67e-02  | -1.5  | 3.73e-02  | 1.27e-02  | -0.4      | -0.3 |
| 39   | ok    | 0.19 | 0.2      | 4.20e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.4       | 3.7   | -0.3      | -7.0      | -1.5      | 0.9  |
| 40   | ok    | 0.19 | 0.2      | 4.20e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.4       | 3.7   | 0.3       | -7.0      | -1.5      | -0.9 |
| 41   | ok    | 0.19 | 1.70e-02 | 8.81e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 5.05e-02  | -1.4  | -2.62e-02 | 2.10e-02  | -0.5      | 0.4  |
| 42   | ok    | 0.19 | 1.70e-02 | 8.81e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 5.05e-02  | -1.4  | 2.62e-02  | 2.10e-02  | -0.5      | -0.4 |
| 43   | ok    | 0.19 | 0.2      | 2.52e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.4       | 3.1   | 0.4       | -7.2      | -1.5      | 1.1  |
| 44   | ok    | 0.19 | 0.2      | 2.52e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 1.4       | 3.1   | -0.4      | -7.2      | -1.5      | -1.1 |
| 45   | ok    | 0.19 | 2.09e-02 | 6.87e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.1       | -0.7  | 2.52e-03  | 3.63e-02  | -0.6      | 0.6  |
| 46   | ok    | 0.19 | 2.09e-02 | 6.87e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 0.1       | -0.7  | -2.52e-03 | 3.63e-02  | -0.6      | -0.6 |
| 47   | ok    | 0.19 | 0.2      | 5.15e-04 | 5.7    | 5.7    | 5.7     | 5.7     | 2.7       | 1.9   | 1.6       | -7.6      | -1.6      | 1.3  |

|     |    |      |          |          |     |     |     |     |           |           |       |           |           |          |
|-----|----|------|----------|----------|-----|-----|-----|-----|-----------|-----------|-------|-----------|-----------|----------|
| 48  | ok | 0.19 | 0.2      | 5.15e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 2.7       | 1.9       | -1.6  | -7.6      | -1.6      | -1.3     |
| 49  | ok | 0.19 | 2.86e-02 | 2.99e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 0.7       | 0.1   | 5.63e-02  | -0.7      | 0.8      |
| 50  | ok | 0.19 | 2.86e-02 | 2.99e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 0.7       | -0.1  | 5.63e-02  | -0.7      | -0.8     |
| 51  | ok | 0.19 | 0.2      | 1.17e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 4.0       | 0.4       | 3.9   | -8.2      | -1.7      | 1.6      |
| 52  | ok | 0.19 | 0.2      | 1.17e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 4.0       | 0.4       | -3.9  | -8.2      | -1.7      | -1.6     |
| 53  | ok | 0.19 | 3.09e-02 | 1.23e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 2.2       | 0.5   | 6.26e-02  | -0.6      | 0.8      |
| 54  | ok | 0.19 | 3.09e-02 | 1.23e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 2.2       | -0.5  | 6.26e-02  | -0.6      | -0.8     |
| 55  | ok | 0.19 | 0.2      | 2.89e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 3.4       | -1.2      | 7.9   | -9.5      | -1.7      | 2.4      |
| 56  | ok | 0.19 | 0.2      | 2.89e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 3.4       | -1.2      | -7.9  | -9.5      | -1.7      | -2.4     |
| 57  | ok | 0.19 | 2.20e-02 | 2.64e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 6.33e-02  | 0.9       | 0.3   | -8.77e-02 | -5.39e-02 | 0.9      |
| 58  | ok | 0.19 | 2.20e-02 | 2.64e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 6.33e-02  | 0.9       | -0.3  | -8.77e-02 | -5.39e-02 | -0.9     |
| 59  | ok | 0.19 | 0.3      | 5.95e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -8.7      | -1.2      | 12.9  | -14.7     | -6.3      | 2.4      |
| 60  | ok | 0.19 | 0.3      | 5.95e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -8.7      | -1.2      | -12.9 | -14.7     | -6.3      | -2.4     |
| 87  | ok | 0.19 | 9.80e-02 | 3.05e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 19.0      | 1.9       | -7.3  | -2.0      | -0.8      | -0.2     |
| 88  | ok | 0.19 | 9.80e-02 | 3.05e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 13.8      | 1.4       | 5.4   | -2.4      | -0.7      | 7.41e-02 |
| 89  | ok | 0.19 | 9.66e-02 | 1.72e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 13.6      | 1.9       | 8.6   | -2.7      | 0.3       | 1.2      |
| 90  | ok | 0.19 | 9.66e-02 | 1.72e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 13.6      | 1.9       | 8.6   | -2.7      | 0.3       | 1.2      |
| 91  | ok | 0.19 | 0.1      | 6.89e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 14.8      | 1.4       | -7.7  | -2.8      | -1.2      | -1.7     |
| 92  | ok | 0.19 | 9.41e-02 | 0.0      | 5.7 | 5.7 | 5.7 | 5.7 | 7.1       | 2.7       | 2.0   | -3.4      | -0.8      | 0.9      |
| 93  | ok | 0.19 | 8.32e-02 | 0.0      | 5.7 | 5.7 | 5.7 | 5.7 | 3.4       | 4.1       | -0.6  | -3.4      | -0.7      | -0.8     |
| 94  | ok | 0.19 | 7.58e-02 | 2.87e-05 | 5.7 | 5.7 | 5.7 | 5.7 | 0.8       | 4.8       | -0.1  | -3.3      | -0.7      | 0.7      |
| 95  | ok | 0.19 | 7.29e-02 | 2.83e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.7      | 5.2       | -0.4  | -3.3      | -0.7      | 0.7      |
| 96  | ok | 0.19 | 7.25e-02 | 3.60e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | 5.4       | 0.4   | -3.3      | -0.7      | -0.7     |
| 97  | ok | 0.19 | 7.29e-02 | 2.83e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.7      | 5.2       | 0.4   | -3.3      | -0.7      | -0.7     |
| 98  | ok | 0.19 | 7.58e-02 | 2.87e-05 | 5.7 | 5.7 | 5.7 | 5.7 | 0.8       | 4.8       | 0.1   | -3.3      | -0.7      | -0.7     |
| 99  | ok | 0.19 | 8.32e-02 | 0.0      | 5.7 | 5.7 | 5.7 | 5.7 | 3.4       | 4.1       | -0.6  | -3.4      | -0.7      | -0.8     |
| 100 | ok | 0.19 | 9.41e-02 | 0.0      | 5.7 | 5.7 | 5.7 | 5.7 | 7.1       | 2.7       | -2.0  | -3.4      | -0.8      | -0.9     |
| 101 | ok | 0.19 | 0.1      | 6.89e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 14.8      | 1.4       | 7.7   | -2.8      | -1.2      | 1.7      |
| 212 | ok | 0.19 | 9.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | 1.6       | -4.3  | -3.6      | -1.1      | -1.0     |
| 213 | ok | 0.19 | 9.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | 1.6       | 4.3   | -3.6      | -1.1      | 1.0      |
| 214 | ok | 0.19 | 7.38e-02 | 1.80e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -2.3      | -0.7      | -3.4  | -2.2      | -1.0      | -1.6     |
| 215 | ok | 0.19 | 9.34e-02 | 2.42e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | -6.01e-02 | -0.8  | -2.6      | -1.1      | -1.7     |
| 216 | ok | 0.19 | 8.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -4.88e-03 | -1.2      | 0.1   | -2.4      | -0.8      | -1.3     |
| 217 | ok | 0.19 | 7.05e-02 | 8.50e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -6.71e-02 | -1.6      | 0.3   | -2.2      | -0.7      | -1.0     |
| 218 | ok | 0.19 | 6.16e-02 | 6.02e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.3      | -1.7      | 0.1   | -2.1      | -0.6      | -0.7     |
| 219 | ok | 0.19 | 5.58e-02 | 5.53e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.6      | -1.7      | -0.1  | -2.0      | -0.5      | -0.6     |
| 220 | ok | 0.19 | 5.25e-02 | 4.77e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.7      | -1.5      | -0.4  | -2.0      | -0.5      | -0.5     |
| 221 | ok | 0.19 | 5.58e-02 | 5.53e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -0.8      | -1.2      | -0.8  | -2.0      | -0.5      | -0.3     |
| 222 | ok | 0.19 | 6.16e-02 | 6.02e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.5       | 0.3       | -0.4  | -1.6      | -0.6      | 0.9      |
| 223 | ok | 0.19 | 7.05e-02 | 8.50e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.9       | 0.2       | -0.4  | -1.7      | -0.7      | 1.2      |
| 224 | ok | 0.19 | 8.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2       | 0.3       | 0.1   | -1.8      | -0.9      | 1.6      |
| 225 | ok | 0.19 | 9.34e-02 | 2.42e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2       | 1.4       | 2.0   | -1.7      | -1.1      | 2.2      |
| 226 | ok | 0.19 | 7.38e-02 | 1.80e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -2.3      | -0.7      | 3.4   | -2.2      | -1.0      | 1.6      |
| 227 | ok | 0.19 | 9.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | 1.6       | 4.3   | -3.6      | -1.1      | 1.0      |
| 228 | ok | 0.19 | 9.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -1.1      | 1.6       | -4.3  | -3.6      | -1.1      | -1.0     |
| 229 | ok | 0.19 | 7.38e-02 | 1.80e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -2.3      | -0.7      | 3.4   | -2.2      | -1.0      | 1.6      |
| 230 | ok | 0.19 | 9.34e-02 | 2.42e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2       | 1.4       | 2.0   | -1.7      | -1.1      | 2.2      |
| 231 | ok | 0.19 | 8.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2       | 0.3       | 0.1   | -1.8      | -0.9      | 1.6      |
| 232 | ok | 0.19 | 7.05e-02 | 8.50e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.9       | 0.2       | -0.4  | -1.7      | -0.7      | 1.2      |
| 233 | ok | 0.19 | 6.16e-02 | 6.02e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.5       | 0.3       | -0.4  | -1.6      | -0.6      | 0.9      |
| 234 | ok | 0.19 | 5.58e-02 | 5.53e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 0.5       | -0.4  | -1.5      | -0.5      | 0.7      |
| 235 | ok | 0.19 | 5.25e-02 | 4.77e-04 | 5.7 | 5.7 | 5.7 | 5.7 | -1.74e-02 | 0.7       | 0.4   | -1.5      | -0.5      | -0.5     |
| 236 | ok | 0.19 | 5.58e-02 | 5.53e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.2       | 0.5       | 0.4   | -1.5      | -0.5      | -0.7     |
| 237 | ok | 0.19 | 6.16e-02 | 6.02e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.5       | 0.3       | 0.4   | -1.6      | -0.6      | -0.9     |
| 238 | ok | 0.19 | 7.05e-02 | 8.50e-04 | 5.7 | 5.7 | 5.7 | 5.7 | 0.9       | 0.2       | 0.4   | -1.7      | -0.7      | -1.2     |
| 239 | ok | 0.19 | 8.22e-02 | 1.40e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2       | 0.3       | -0.1  | -1.8      | -0.9      | -1.6     |

|     |    |      |          |          |     |     |     |     |      |      |      |      |      |      |
|-----|----|------|----------|----------|-----|-----|-----|-----|------|------|------|------|------|------|
| 240 | ok | 0.19 | 9.34e-02 | 2.42e-03 | 5.7 | 5.7 | 5.7 | 5.7 | 1.2  | 1.4  | -2.0 | -1.7 | -1.1 | -2.2 |
| 241 | ok | 0.19 | 7.38e-02 | 1.80e-03 | 5.7 | 5.7 | 5.7 | 5.7 | -2.3 | -0.7 | -3.4 | -2.2 | -1.0 | -1.6 |

| 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  |
|------|------|-------|----------|--------|--------|---------|---------|-------|-------|--------|--------|-------|-------|
|      |      |       |          |        |        |         |         | -8.70 | -1.71 | -12.89 | -14.74 | -6.30 | -2.43 |
|      | 0.19 | 0.31  | 5.95e-03 | 5.65   | 5.65   | 5.65    | 5.65    | 19.01 | 5.38  | 12.89  | 0.16   | 1.00  | 2.43  |

| Nodo | Stato | Max tau<br>daN/cm2 | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr<br>kN/ m | V sec<br>kN/ m |
|------|-------|--------------------|----------|-----------|---------|----------|---------------|----------------|
| 1    | ok    | 0.15               |          |           |         |          |               |                |
| 2    | ok    | 0.15               |          |           |         |          |               |                |
| 3    | ok    | 0.15               |          |           |         |          |               |                |
| 4    | ok    | 0.15               |          |           |         |          |               |                |
| 5    | ok    | 0.55               |          |           |         |          |               |                |
| 6    | ok    | 0.55               |          |           |         |          |               |                |
| 7    | ok    | 0.55               |          |           |         |          |               |                |
| 8    | ok    | 0.55               |          |           |         |          |               |                |
| 9    | ok    | 0.15               |          |           |         |          |               |                |
| 10   | ok    | 0.15               |          |           |         |          |               |                |
| 11   | ok    | 0.55               |          |           |         |          |               |                |
| 12   | ok    | 0.55               |          |           |         |          |               |                |
| 13   | ok    | 0.16               |          |           |         |          |               |                |
| 14   | ok    | 0.16               |          |           |         |          |               |                |
| 15   | ok    | 0.54               |          |           |         |          |               |                |
| 16   | ok    | 0.54               |          |           |         |          |               |                |
| 17   | ok    | 0.16               |          |           |         |          |               |                |
| 18   | ok    | 0.16               |          |           |         |          |               |                |
| 19   | ok    | 0.33               |          |           |         |          |               |                |
| 20   | ok    | 0.33               |          |           |         |          |               |                |
| 21   | ok    | 0.14               |          |           |         |          |               |                |
| 22   | ok    | 0.14               |          |           |         |          |               |                |
| 23   | ok    | 0.28               |          |           |         |          |               |                |
| 24   | ok    | 0.28               |          |           |         |          |               |                |
| 25   | ok    | 0.13               |          |           |         |          |               |                |
| 26   | ok    | 0.13               |          |           |         |          |               |                |
| 27   | ok    | 0.27               |          |           |         |          |               |                |
| 28   | ok    | 0.27               |          |           |         |          |               |                |
| 29   | ok    | 0.12               |          |           |         |          |               |                |
| 30   | ok    | 0.12               |          |           |         |          |               |                |
| 31   | ok    | 0.26               |          |           |         |          |               |                |
| 32   | ok    | 0.26               |          |           |         |          |               |                |
| 33   | ok    | 0.12               |          |           |         |          |               |                |
| 34   | ok    | 0.12               |          |           |         |          |               |                |
| 35   | ok    | 0.26               |          |           |         |          |               |                |
| 36   | ok    | 0.26               |          |           |         |          |               |                |
| 37   | ok    | 0.12               |          |           |         |          |               |                |
| 38   | ok    | 0.12               |          |           |         |          |               |                |
| 39   | ok    | 0.26               |          |           |         |          |               |                |
| 40   | ok    | 0.26               |          |           |         |          |               |                |
| 41   | ok    | 0.13               |          |           |         |          |               |                |
| 42   | ok    | 0.13               |          |           |         |          |               |                |
| 43   | ok    | 0.27               |          |           |         |          |               |                |
| 44   | ok    | 0.27               |          |           |         |          |               |                |
| 45   | ok    | 0.14               |          |           |         |          |               |                |
| 46   | ok    | 0.14               |          |           |         |          |               |                |

|     |    |      |
|-----|----|------|
| 47  | ok | 0.28 |
| 48  | ok | 0.28 |
| 49  | ok | 0.16 |
| 50  | ok | 0.16 |
| 51  | ok | 0.33 |
| 52  | ok | 0.33 |
| 53  | ok | 0.16 |
| 54  | ok | 0.16 |
| 55  | ok | 0.54 |
| 56  | ok | 0.54 |
| 57  | ok | 0.15 |
| 58  | ok | 0.15 |
| 59  | ok | 0.55 |
| 60  | ok | 0.55 |
| 87  | ok | 0.35 |
| 88  | ok | 0.35 |
| 89  | ok | 0.35 |
| 90  | ok | 0.35 |
| 91  | ok | 0.31 |
| 92  | ok | 0.17 |
| 93  | ok | 0.13 |
| 94  | ok | 0.12 |
| 95  | ok | 0.11 |
| 96  | ok | 0.11 |
| 97  | ok | 0.11 |
| 98  | ok | 0.12 |
| 99  | ok | 0.13 |
| 100 | ok | 0.17 |
| 101 | ok | 0.31 |
| 212 | ok | 0.55 |
| 213 | ok | 0.55 |
| 214 | ok | 0.55 |
| 215 | ok | 0.54 |
| 216 | ok | 0.33 |
| 217 | ok | 0.28 |
| 218 | ok | 0.27 |
| 219 | ok | 0.26 |
| 220 | ok | 0.26 |
| 221 | ok | 0.26 |
| 222 | ok | 0.27 |
| 223 | ok | 0.28 |
| 224 | ok | 0.33 |
| 225 | ok | 0.54 |
| 226 | ok | 0.55 |
| 227 | ok | 0.55 |
| 228 | ok | 0.55 |
| 229 | ok | 0.55 |
| 230 | ok | 0.54 |
| 231 | ok | 0.33 |
| 232 | ok | 0.28 |
| 233 | ok | 0.27 |
| 234 | ok | 0.26 |
| 235 | ok | 0.26 |
| 236 | ok | 0.26 |
| 237 | ok | 0.27 |
| 238 | ok | 0.28 |

|     |    |      |
|-----|----|------|
| 239 | ok | 0.33 |
| 240 | ok | 0.54 |
| 241 | ok | 0.55 |

| Nodo |  | Max tau | Ver V pr | Ver V sec | Af V pr | Af V sec | V pr | V sec |
|------|--|---------|----------|-----------|---------|----------|------|-------|
|      |  | 0.55    |          |           |         |          |      |       |

# STATI LIMITE D' 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:

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

|               |              |              |              |                                |
|---------------|--------------|--------------|--------------|--------------------------------|
| pilastrì      | <b>rRfck</b> | <b>rRfyk</b> | <b>rPfck</b> | per sezioni significative      |
| travi         | <b>rRfck</b> | <b>rRfyk</b> | <b>rPfck</b> | per sezioni significative      |
|               | <b>wR</b>    | <b>wF</b>    | <b>wP</b>    | per sezioni significative      |
|               | <b>dR</b>    | <b>dF</b>    | <b>dP</b>    | massimi in campata             |
| setti e gusci | <b>rRfck</b> | <b>rRfyk</b> | <b>rPfck</b> | massimi nei nodi dell'elemento |
|               | <b>wR</b>    | <b>wF</b>    | <b>wP</b>    | 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).

| Guscio | rRfck | rRfyk | rPfck | Rif. cmb | wR<br>mm | wF<br>mm | wP<br>mm | Rif. cmb |
|--------|-------|-------|-------|----------|----------|----------|----------|----------|
| 1      | 0.03  | 0.05  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 2      | 0.09  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 3      | 0.16  | 0.27  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 4      | 0.03  | 0.05  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 5      | 0.09  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 6      | 0.16  | 0.27  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 7      | 0.03  | 0.06  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 8      | 0.08  | 0.17  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 9      | 0.14  | 0.24  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 10     | 0.03  | 0.06  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 11     | 0.06  | 0.12  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 12     | 0.11  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 13     | 0.02  | 0.05  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 14     | 0.05  | 0.10  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 15     | 0.09  | 0.16  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 16     | 0.02  | 0.04  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 17     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 18     | 0.08  | 0.15  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 19     | 0.02  | 0.03  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 20     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 21     | 0.08  | 0.14  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 22     | 0.02  | 0.03  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 23     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 24     | 0.08  | 0.13  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 25     | 0.02  | 0.03  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 26     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 27     | 0.08  | 0.13  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 28     | 0.02  | 0.03  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 29     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 30     | 0.08  | 0.14  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 31     | 0.02  | 0.04  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 32     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 33     | 0.08  | 0.15  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 34     | 0.02  | 0.05  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 35     | 0.05  | 0.10  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 36     | 0.09  | 0.16  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 37     | 0.03  | 0.06  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 38     | 0.06  | 0.12  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 39     | 0.11  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 40     | 0.03  | 0.06  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 41     | 0.08  | 0.17  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 42     | 0.14  | 0.24  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 43     | 0.09  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 44     | 0.09  | 0.19  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 45     | 0.08  | 0.17  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 46     | 0.06  | 0.12  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 47     | 0.05  | 0.10  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 48     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 49     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 50     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 51     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |
| 52     | 0.05  | 0.09  | 0.0   | 2,2,0    | 0.0      | 0.0      | 0.0      | 0,0,0    |

|        |       |       |       |       |     |     |     |       |
|--------|-------|-------|-------|-------|-----|-----|-----|-------|
| 53     | 0.05  | 0.09  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 54     | 0.05  | 0.10  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 55     | 0.06  | 0.12  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 56     | 0.08  | 0.17  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 161    | 0.03  | 0.05  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 162    | 0.03  | 0.05  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 163    | 0.03  | 0.06  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 164    | 0.03  | 0.06  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 165    | 0.02  | 0.05  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 166    | 0.02  | 0.04  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 167    | 0.02  | 0.03  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 168    | 0.02  | 0.03  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 169    | 0.02  | 0.03  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 170    | 0.02  | 0.03  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 171    | 0.02  | 0.04  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 172    | 0.02  | 0.05  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 173    | 0.03  | 0.06  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 174    | 0.03  | 0.06  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 175    | 0.16  | 0.27  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 176    | 0.16  | 0.27  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 177    | 0.14  | 0.24  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 178    | 0.11  | 0.19  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 179    | 0.09  | 0.16  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 180    | 0.08  | 0.15  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 181    | 0.08  | 0.14  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 182    | 0.08  | 0.13  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 183    | 0.08  | 0.13  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 184    | 0.08  | 0.14  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 185    | 0.08  | 0.15  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 186    | 0.09  | 0.16  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 187    | 0.11  | 0.19  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| 188    | 0.14  | 0.24  | 0.0   | 2,2,0 | 0.0 | 0.0 | 0.0 | 0,0,0 |
| Guscio | rRfck | rRfyk | rPfck |       | wR  | wF  | wP  |       |
|        | 0.16  | 0.27  | 0.0   |       | 0.0 | 0.0 | 0.0 |       |

# STATO LIMITE D' ESERCIZIO: SLD DANNO SISMICO

## LEGENDA TABELLA STATI LIMITE DI DANNO (VERIFICHE RES)

Le verifiche RES per SLD sono effettuate in accordo alle Norme Tecniche 17 Gennaio 2018 e alla circolare n.7 del 21 gennaio 2019 nonché alle linee guida del Consiglio Superiore LL.PP. “Linee guida per la Progettazione, l'Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP”.

Le verifiche RES per SLD, sono riportate nelle successive tabelle nella forma di rapporto “domanda” su “capacità” e hanno esito positivo quando il rapporto è non superiore al valore unitario.

La “domanda” è ottenuta direttamente dall’analisi per le previste combinazioni SLD (NTC18 2.5.3. COMBINAZIONI DELLE AZIONI formula [2.5.5]).

Per “capacità” si intende qui il valore della sollecitazione corrispondente al raggiungimento dello stato limite di danno per la sezione: per la resistenza flessionale questo stato limite si identifica con la tensione di snervamento dell’acciaio o la resistenza massima a compressione per il calcestruzzo e la muratura. Lo stato limite di danno si ritiene attinto anche in caso di superamento della resistenza a taglio.

Le resistenze flessionali sono valutate utilizzando i legami costitutivi del materiale limitati al solo tratto elastico, ottenendo così resistenze sostanzialmente elastiche come previsto dalla norma.

La seguente tabella identifica per quali configurazioni (materiale nuovo, esistente, con rinforzi e metodo di analisi) sono state condotte le verifiche di seguito riportate.

| <b>Configurazione</b>                                                          | Verifica SLD                    | NOTE                                                                                                                                                           |
|--------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1) c.a. nuovo e esist.</b><br><b>Verifica SLU con <math>q &gt; 1</math></b> | Verifica N/M SE<br>Verifica V/T | Sono verifiche per struttura non dissipativa condotte secondo il cap.4 NTC18 in regime sostanzialmente elastico; si verificano travi, pilastri, setti e gusci. |
|                                                                                |                                 |                                                                                                                                                                |
| <b>2) Muratura nuova</b><br><b>Verifica SLU con <math>q &gt; 1</math></b>      | Verifica N/M SE<br>Verifica V   | Per N/M identificato SL elastico, per V formulazione secondo cap.7                                                                                             |
|                                                                                |                                 |                                                                                                                                                                |
| <b>3) Muratura esist. AO</b><br><b>Verifica SLU con <math>q &gt; 1</math></b>  | Verifica N/M SE<br>Verifica V   | Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8                                                                                        |
|                                                                                |                                 |                                                                                                                                                                |
| <b>4) Muratura esist. PO</b><br><b>Verifica SLU con <math>q &gt; 1</math></b>  | Verifica N/M SE<br>Verifica V   | Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8;<br>Anche per rinforzi FRP è prevista verifica N/M SE e V                              |

## Simbologia adottata nelle tabelle di verifica

Per le verifiche agli SLD di pilastri, travi setti e gusci in c.a. è presente una tabella con i simboli di seguito descritti:

|               |                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------|
| Pilas./Trave/ | numero identificativo dell'elemento D2 o D3                                                                            |
| Setto/Guscio  |                                                                                                                        |
| Stato         | Codici relativi all'esito delle verifiche effettuate appresso descritte                                                |
| Pos.          | Posizione nell'elemento della sezione per la quale si riporta la verifica                                              |
| V N/M         | Verifica a pressoflessione con rapporto $E_d/R_d$ : valore minore o uguale a 1 per verifica positiva                   |
| V V/T cls     | Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ lato cls: valore minore o uguale a 1 per verifica positiva     |
| V V/T acc     | Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ lato acciaio: valore minore o uguale a 1 per verifica positiva |
| Rif. cmb.     | Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro                                   |

Per le verifiche agli SLD di maschi e fasce in **muratura**, è presente una tabella con i simboli di seguito descritti:

|                           |                                                                       |                               |
|---------------------------|-----------------------------------------------------------------------|-------------------------------|
| <b>Setto/Fascia/Elem.</b> | numero del macroelemento (D3) o elemento (D2) considerato             |                               |
| <b>Mat.</b>               | Materiale                                                             |                               |
| <b>s,m=</b>               | Indice della sezione e del materiale assegnati all' elemento (per D2) |                               |
| <b>Spessore</b>           | spessore dell'elemento                                                |                               |
| <b>Stato</b>              | <b>ok</b>                                                             | elemento verificato (SLD)     |
|                           | <b>NV</b>                                                             | elemento non verificato (SLD) |

e a seguire:

|                  |                                                                                                                                                                                                                                            |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nodo/Pos.</b> | numero del nodo appartenente al setto / posizione relativa al nodo I per D2                                                                                                                                                                |
| <b>h0/t</b>      | valore della snellezza convenzionale                                                                                                                                                                                                       |
| <b>P/Ap</b>      | tensione verticale media utilizzata per la verifica a pressoflessione nel piano del muro                                                                                                                                                   |
| <b>P/Acv</b>     | tensione verticale media nella parte compressa, utilizzata nella verifica a taglio nel piano del muro                                                                                                                                      |
| <b>Ver. Mp</b>   | rapporto tra il momento di progetto e il momento $M_{rd}$ in relazione alla verifica Par. 7.8.2.2.1 (pressoflessione complanare) effettuato per tutte le combinazioni                                                                      |
| <b>Ver. V</b>    | rapporto il taglio di progetto e il taglio ultimo in relazione alla verifica Par. 7.8.2.2.2 (taglio complanare) o C8.7.1.16 della circolare 21-01-19 per edifici esistenti effettuato per tutte le combinazioni (solo per elementi maschi) |
| <b>Ver. V</b>    | rapporto tra il taglio di progetto e il minore dei tagli resistenti $V_p$ e $V_t$ in relazione alla verifica del par. 7.8.2.2.3 (solo per elementi fasce)                                                                                  |
| <b>Rif. cmb</b>  | Combinazioni in cui si hanno i massimi valori dei rapporti Ver. Mp, Ver. V                                                                                                                                                                 |

Per elementi consolidati secondo il paragrafo C8.5.3.1 il programma opera come per gli elementi non rinforzati, considerando ai fini delle analisi e delle verifiche gli opportuni coefficienti correttivi delle rigidezze e delle resistenze.

Per elementi consolidati con FRP il programma implementa le verifiche previste dalle "Linee guida per la Progettazione, l'Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP" approvate dal CSLLPP il 24/07/2009.

Per elementi consolidati con FRCM il programma implementa le verifiche previste dalle CNR-DT 215/2018 "Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati a Matrice Inorganica"

Per semplicità la simbologia adottata nelle tabelle è uniformata a quella degli elementi non rinforzati.

Le tabelle riportano inoltre i seguenti parametri:

|                |                                                                                                                                                                                           |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fibra</b>   | Tipo di fibra del fibrorinforzo                                                                                                                                                           |
| <b>E fibra</b> | Modulo elastico del fibrorinforzo                                                                                                                                                         |
| <b>epsr</b>    | Dilatazione di rottura del fibrorinforzo                                                                                                                                                  |
| <b>epsd</b>    | Dilatazione di calcolo                                                                                                                                                                    |
| <b>epsd(s)</b> | Dilatazione di calcolo per combinazioni sismiche                                                                                                                                          |
| <b>Spess.</b>  | Spessore del fibrorinforzo, il programma prevede l' applicazione di uno strato di spessore s su entrambe le facce della parete (o sui quattro lati della sezione in caso di confinamento) |
| <b>AO fib.</b> | Area orizzontale complessiva di fibrorinforzo per metro lineare                                                                                                                           |
| <b>AV fib.</b> | Area verticale complessiva di fibrorinforzo per metro lineare                                                                                                                             |

Affinché l'elemento sia verificato deve essere:

**Ver. Mp, Ver.V** non superiore a 1

**TABELLA VERIFICHE ELEMENTI D3 GUSCI C.A.**

|  |
|--|
|  |
|--|

| Guscio | Stato | Nodo | V N/M    | V V/T cls | V V/T acc | Rif. cmb | Nodo | V N/M    | V V/T cls | V V/T acc | Rif. cmb |
|--------|-------|------|----------|-----------|-----------|----------|------|----------|-----------|-----------|----------|
| 1      | ok    | 241  | 0.05     | 0.0       | 0.0       | 38,0,0   | 58   | 8.28e-03 | 0.0       | 0.0       | 64,0,0   |
|        |       | 3    | 0.02     | 0.0       | 0.0       | 49,0,0   | 228  | 0.02     | 0.0       | 0.0       | 49,0,0   |
| 2      | ok    | 89   | 0.08     | 0.0       | 0.0       | 49,0,0   | 60   | 0.16     | 0.0       | 0.0       | 47,0,0   |
|        |       | 8    | 0.19     | 0.0       | 0.0       | 49,0,0   | 87   | 0.08     | 0.0       | 0.0       | 49,0,0   |
| 3      | ok    | 226  | 0.05     | 0.0       | 0.0       | 45,0,0   | 59   | 0.27     | 0.0       | 0.0       | 41,0,0   |
|        |       | 7    | 0.16     | 0.0       | 0.0       | 42,0,0   | 213  | 0.08     | 0.0       | 0.0       | 40,0,0   |
| 4      | ok    | 227  | 0.02     | 0.0       | 0.0       | 43,0,0   | 2    | 0.02     | 0.0       | 0.0       | 43,0,0   |
|        |       | 10   | 8.28e-03 | 0.0       | 0.0       | 62,0,0   | 229  | 0.05     | 0.0       | 0.0       | 40,0,0   |
| 5      | ok    | 88   | 0.08     | 0.0       | 0.0       | 43,0,0   | 6    | 0.19     | 0.0       | 0.0       | 43,0,0   |
|        |       | 12   | 0.16     | 0.0       | 0.0       | 45,0,0   | 90   | 0.08     | 0.0       | 0.0       | 43,0,0   |
| 6      | ok    | 212  | 0.08     | 0.0       | 0.0       | 38,0,0   | 5    | 0.16     | 0.0       | 0.0       | 36,0,0   |
|        |       | 11   | 0.27     | 0.0       | 0.0       | 35,0,0   | 214  | 0.05     | 0.0       | 0.0       | 47,0,0   |
| 7      | ok    | 229  | 0.03     | 0.0       | 0.0       | 45,0,0   | 10   | 0.02     | 0.0       | 0.0       | 52,0,0   |
|        |       | 14   | 0.02     | 0.0       | 0.0       | 47,0,0   | 230  | 0.06     | 0.0       | 0.0       | 46,0,0   |
| 8      | ok    | 90   | 0.08     | 0.0       | 0.0       | 45,0,0   | 12   | 0.17     | 0.0       | 0.0       | 43,0,0   |
|        |       | 16   | 0.13     | 0.0       | 0.0       | 45,0,0   | 91   | 0.09     | 0.0       | 0.0       | 43,0,0   |
| 9      | ok    | 214  | 0.06     | 0.0       | 0.0       | 47,0,0   | 11   | 0.25     | 0.0       | 0.0       | 35,0,0   |
|        |       | 15   | 0.20     | 0.0       | 0.0       | 36,0,0   | 215  | 0.07     | 0.0       | 0.0       | 36,0,0   |
| 10     | ok    | 230  | 0.05     | 0.0       | 0.0       | 44,0,0   | 14   | 0.03     | 0.0       | 0.0       | 44,0,0   |
|        |       | 18   | 0.02     | 0.0       | 0.0       | 43,0,0   | 231  | 0.06     | 0.0       | 0.0       | 46,0,0   |
| 11     | ok    | 91   | 0.09     | 0.0       | 0.0       | 45,0,0   | 16   | 0.13     | 0.0       | 0.0       | 43,0,0   |
|        |       | 20   | 0.11     | 0.0       | 0.0       | 45,0,0   | 92   | 0.09     | 0.0       | 0.0       | 43,0,0   |
| 12     | ok    | 215  | 0.08     | 0.0       | 0.0       | 36,0,0   | 15   | 0.19     | 0.0       | 0.0       | 36,0,0   |
|        |       | 19   | 0.17     | 0.0       | 0.0       | 36,0,0   | 216  | 0.05     | 0.0       | 0.0       | 36,0,0   |

|    |    |     |          |     |     |        |     |          |     |     |        |
|----|----|-----|----------|-----|-----|--------|-----|----------|-----|-----|--------|
| 13 | ok | 231 | 0.05     | 0.0 | 0.0 | 46,0,0 | 18  | 0.03     | 0.0 | 0.0 | 44,0,0 |
|    |    | 22  | 0.01     | 0.0 | 0.0 | 59,0,0 | 232 | 0.05     | 0.0 | 0.0 | 46,0,0 |
| 14 | ok | 92  | 0.08     | 0.0 | 0.0 | 45,0,0 | 20  | 0.10     | 0.0 | 0.0 | 45,0,0 |
|    |    | 24  | 0.10     | 0.0 | 0.0 | 45,0,0 | 93  | 0.08     | 0.0 | 0.0 | 43,0,0 |
| 15 | ok | 216 | 0.07     | 0.0 | 0.0 | 36,0,0 | 19  | 0.17     | 0.0 | 0.0 | 36,0,0 |
|    |    | 23  | 0.16     | 0.0 | 0.0 | 38,0,0 | 217 | 0.05     | 0.0 | 0.0 | 36,0,0 |
| 16 | ok | 232 | 0.04     | 0.0 | 0.0 | 46,0,0 | 22  | 0.02     | 0.0 | 0.0 | 61,0,0 |
|    |    | 26  | 9.80e-03 | 0.0 | 0.0 | 42,0,0 | 233 | 0.04     | 0.0 | 0.0 | 46,0,0 |
| 17 | ok | 93  | 0.08     | 0.0 | 0.0 | 45,0,0 | 24  | 0.09     | 0.0 | 0.0 | 45,0,0 |
|    |    | 28  | 0.09     | 0.0 | 0.0 | 45,0,0 | 94  | 0.07     | 0.0 | 0.0 | 43,0,0 |
| 18 | ok | 217 | 0.06     | 0.0 | 0.0 | 38,0,0 | 23  | 0.15     | 0.0 | 0.0 | 36,0,0 |
|    |    | 27  | 0.15     | 0.0 | 0.0 | 38,0,0 | 218 | 0.04     | 0.0 | 0.0 | 36,0,0 |
| 19 | ok | 233 | 0.03     | 0.0 | 0.0 | 46,0,0 | 26  | 0.01     | 0.0 | 0.0 | 35,0,0 |
|    |    | 30  | 9.72e-03 | 0.0 | 0.0 | 42,0,0 | 234 | 0.03     | 0.0 | 0.0 | 46,0,0 |
| 20 | ok | 94  | 0.07     | 0.0 | 0.0 | 45,0,0 | 28  | 0.09     | 0.0 | 0.0 | 46,0,0 |
|    |    | 32  | 0.09     | 0.0 | 0.0 | 45,0,0 | 95  | 0.07     | 0.0 | 0.0 | 45,0,0 |
| 21 | ok | 218 | 0.05     | 0.0 | 0.0 | 37,0,0 | 27  | 0.14     | 0.0 | 0.0 | 36,0,0 |
|    |    | 31  | 0.14     | 0.0 | 0.0 | 37,0,0 | 219 | 0.04     | 0.0 | 0.0 | 36,0,0 |
| 22 | ok | 234 | 0.03     | 0.0 | 0.0 | 48,0,0 | 30  | 0.01     | 0.0 | 0.0 | 36,0,0 |
|    |    | 34  | 0.01     | 0.0 | 0.0 | 42,0,0 | 235 | 0.03     | 0.0 | 0.0 | 46,0,0 |
| 23 | ok | 95  | 0.07     | 0.0 | 0.0 | 45,0,0 | 32  | 0.08     | 0.0 | 0.0 | 46,0,0 |
|    |    | 36  | 0.08     | 0.0 | 0.0 | 35,0,0 | 96  | 0.07     | 0.0 | 0.0 | 41,0,0 |
| 24 | ok | 219 | 0.04     | 0.0 | 0.0 | 37,0,0 | 31  | 0.14     | 0.0 | 0.0 | 36,0,0 |
|    |    | 35  | 0.14     | 0.0 | 0.0 | 37,0,0 | 220 | 0.04     | 0.0 | 0.0 | 39,0,0 |
| 25 | ok | 235 | 0.03     | 0.0 | 0.0 | 48,0,0 | 34  | 0.01     | 0.0 | 0.0 | 36,0,0 |
|    |    | 38  | 0.01     | 0.0 | 0.0 | 42,0,0 | 236 | 0.03     | 0.0 | 0.0 | 46,0,0 |
| 26 | ok | 96  | 0.07     | 0.0 | 0.0 | 35,0,0 | 36  | 0.08     | 0.0 | 0.0 | 41,0,0 |
|    |    | 40  | 0.08     | 0.0 | 0.0 | 48,0,0 | 97  | 0.07     | 0.0 | 0.0 | 47,0,0 |
| 27 | ok | 220 | 0.04     | 0.0 | 0.0 | 37,0,0 | 35  | 0.14     | 0.0 | 0.0 | 39,0,0 |
|    |    | 39  | 0.14     | 0.0 | 0.0 | 42,0,0 | 221 | 0.04     | 0.0 | 0.0 | 39,0,0 |
| 28 | ok | 236 | 0.03     | 0.0 | 0.0 | 48,0,0 | 38  | 9.72e-03 | 0.0 | 0.0 | 36,0,0 |
|    |    | 42  | 0.01     | 0.0 | 0.0 | 41,0,0 | 237 | 0.03     | 0.0 | 0.0 | 48,0,0 |
| 29 | ok | 97  | 0.07     | 0.0 | 0.0 | 47,0,0 | 40  | 0.09     | 0.0 | 0.0 | 47,0,0 |
|    |    | 44  | 0.09     | 0.0 | 0.0 | 48,0,0 | 98  | 0.07     | 0.0 | 0.0 | 47,0,0 |
| 30 | ok | 221 | 0.04     | 0.0 | 0.0 | 42,0,0 | 39  | 0.14     | 0.0 | 0.0 | 39,0,0 |
|    |    | 43  | 0.14     | 0.0 | 0.0 | 42,0,0 | 222 | 0.05     | 0.0 | 0.0 | 39,0,0 |
| 31 | ok | 237 | 0.04     | 0.0 | 0.0 | 48,0,0 | 42  | 9.80e-03 | 0.0 | 0.0 | 36,0,0 |
|    |    | 46  | 0.02     | 0.0 | 0.0 | 63,0,0 | 238 | 0.04     | 0.0 | 0.0 | 48,0,0 |
| 32 | ok | 98  | 0.07     | 0.0 | 0.0 | 49,0,0 | 44  | 0.09     | 0.0 | 0.0 | 47,0,0 |
|    |    | 48  | 0.09     | 0.0 | 0.0 | 47,0,0 | 99  | 0.08     | 0.0 | 0.0 | 47,0,0 |
| 33 | ok | 222 | 0.04     | 0.0 | 0.0 | 42,0,0 | 43  | 0.15     | 0.0 | 0.0 | 40,0,0 |
|    |    | 47  | 0.15     | 0.0 | 0.0 | 42,0,0 | 223 | 0.06     | 0.0 | 0.0 | 40,0,0 |
| 34 | ok | 238 | 0.05     | 0.0 | 0.0 | 48,0,0 | 46  | 0.01     | 0.0 | 0.0 | 65,0,0 |
|    |    | 50  | 0.03     | 0.0 | 0.0 | 50,0,0 | 239 | 0.05     | 0.0 | 0.0 | 48,0,0 |
| 35 | ok | 99  | 0.08     | 0.0 | 0.0 | 49,0,0 | 48  | 0.10     | 0.0 | 0.0 | 47,0,0 |
|    |    | 52  | 0.10     | 0.0 | 0.0 | 47,0,0 | 100 | 0.08     | 0.0 | 0.0 | 47,0,0 |
| 36 | ok | 223 | 0.05     | 0.0 | 0.0 | 42,0,0 | 47  | 0.16     | 0.0 | 0.0 | 40,0,0 |
|    |    | 51  | 0.17     | 0.0 | 0.0 | 42,0,0 | 224 | 0.07     | 0.0 | 0.0 | 42,0,0 |
| 37 | ok | 239 | 0.06     | 0.0 | 0.0 | 48,0,0 | 50  | 0.02     | 0.0 | 0.0 | 49,0,0 |
|    |    | 54  | 0.03     | 0.0 | 0.0 | 50,0,0 | 240 | 0.05     | 0.0 | 0.0 | 50,0,0 |
| 38 | ok | 100 | 0.09     | 0.0 | 0.0 | 49,0,0 | 52  | 0.11     | 0.0 | 0.0 | 47,0,0 |
|    |    | 56  | 0.13     | 0.0 | 0.0 | 49,0,0 | 101 | 0.09     | 0.0 | 0.0 | 47,0,0 |
| 39 | ok | 224 | 0.05     | 0.0 | 0.0 | 42,0,0 | 51  | 0.17     | 0.0 | 0.0 | 42,0,0 |
|    |    | 55  | 0.19     | 0.0 | 0.0 | 42,0,0 | 225 | 0.08     | 0.0 | 0.0 | 42,0,0 |
| 40 | ok | 240 | 0.06     | 0.0 | 0.0 | 48,0,0 | 54  | 0.02     | 0.0 | 0.0 | 45,0,0 |
|    |    | 58  | 0.02     | 0.0 | 0.0 | 58,0,0 | 241 | 0.03     | 0.0 | 0.0 | 47,0,0 |

|     |    |     |          |     |     |        |     |          |     |     |        |
|-----|----|-----|----------|-----|-----|--------|-----|----------|-----|-----|--------|
| 41  | ok | 101 | 0.09     | 0.0 | 0.0 | 49,0,0 | 56  | 0.13     | 0.0 | 0.0 | 47,0,0 |
|     |    | 60  | 0.17     | 0.0 | 0.0 | 49,0,0 | 89  | 0.08     | 0.0 | 0.0 | 47,0,0 |
| 42  | ok | 225 | 0.07     | 0.0 | 0.0 | 42,0,0 | 55  | 0.20     | 0.0 | 0.0 | 42,0,0 |
|     |    | 59  | 0.25     | 0.0 | 0.0 | 41,0,0 | 226 | 0.06     | 0.0 | 0.0 | 45,0,0 |
| 43  | ok | 59  | 0.16     | 0.0 | 0.0 | 40,0,0 | 89  | 0.08     | 0.0 | 0.0 | 42,0,0 |
|     |    | 87  | 0.08     | 0.0 | 0.0 | 42,0,0 | 7   | 0.19     | 0.0 | 0.0 | 42,0,0 |
| 44  | ok | 5   | 0.19     | 0.0 | 0.0 | 36,0,0 | 88  | 0.08     | 0.0 | 0.0 | 36,0,0 |
|     |    | 90  | 0.08     | 0.0 | 0.0 | 36,0,0 | 11  | 0.16     | 0.0 | 0.0 | 38,0,0 |
| 45  | ok | 11  | 0.17     | 0.0 | 0.0 | 36,0,0 | 90  | 0.08     | 0.0 | 0.0 | 38,0,0 |
|     |    | 91  | 0.09     | 0.0 | 0.0 | 36,0,0 | 15  | 0.13     | 0.0 | 0.0 | 38,0,0 |
| 46  | ok | 15  | 0.13     | 0.0 | 0.0 | 36,0,0 | 91  | 0.09     | 0.0 | 0.0 | 38,0,0 |
|     |    | 92  | 0.09     | 0.0 | 0.0 | 36,0,0 | 19  | 0.11     | 0.0 | 0.0 | 38,0,0 |
| 47  | ok | 19  | 0.10     | 0.0 | 0.0 | 38,0,0 | 92  | 0.08     | 0.0 | 0.0 | 38,0,0 |
|     |    | 93  | 0.08     | 0.0 | 0.0 | 36,0,0 | 23  | 0.10     | 0.0 | 0.0 | 38,0,0 |
| 48  | ok | 23  | 0.09     | 0.0 | 0.0 | 38,0,0 | 93  | 0.08     | 0.0 | 0.0 | 38,0,0 |
|     |    | 94  | 0.07     | 0.0 | 0.0 | 36,0,0 | 27  | 0.09     | 0.0 | 0.0 | 38,0,0 |
| 49  | ok | 27  | 0.09     | 0.0 | 0.0 | 37,0,0 | 94  | 0.07     | 0.0 | 0.0 | 38,0,0 |
|     |    | 95  | 0.07     | 0.0 | 0.0 | 38,0,0 | 31  | 0.09     | 0.0 | 0.0 | 38,0,0 |
| 50  | ok | 31  | 0.08     | 0.0 | 0.0 | 37,0,0 | 95  | 0.07     | 0.0 | 0.0 | 38,0,0 |
|     |    | 96  | 0.07     | 0.0 | 0.0 | 50,0,0 | 35  | 0.08     | 0.0 | 0.0 | 44,0,0 |
| 51  | ok | 35  | 0.08     | 0.0 | 0.0 | 50,0,0 | 96  | 0.07     | 0.0 | 0.0 | 44,0,0 |
|     |    | 97  | 0.07     | 0.0 | 0.0 | 40,0,0 | 39  | 0.08     | 0.0 | 0.0 | 39,0,0 |
| 52  | ok | 39  | 0.09     | 0.0 | 0.0 | 40,0,0 | 97  | 0.07     | 0.0 | 0.0 | 40,0,0 |
|     |    | 98  | 0.07     | 0.0 | 0.0 | 40,0,0 | 43  | 0.09     | 0.0 | 0.0 | 39,0,0 |
| 53  | ok | 43  | 0.09     | 0.0 | 0.0 | 40,0,0 | 98  | 0.07     | 0.0 | 0.0 | 42,0,0 |
|     |    | 99  | 0.08     | 0.0 | 0.0 | 40,0,0 | 47  | 0.09     | 0.0 | 0.0 | 40,0,0 |
| 54  | ok | 47  | 0.10     | 0.0 | 0.0 | 40,0,0 | 99  | 0.08     | 0.0 | 0.0 | 42,0,0 |
|     |    | 100 | 0.08     | 0.0 | 0.0 | 40,0,0 | 51  | 0.10     | 0.0 | 0.0 | 40,0,0 |
| 55  | ok | 51  | 0.11     | 0.0 | 0.0 | 40,0,0 | 100 | 0.09     | 0.0 | 0.0 | 42,0,0 |
|     |    | 101 | 0.09     | 0.0 | 0.0 | 40,0,0 | 55  | 0.13     | 0.0 | 0.0 | 42,0,0 |
| 56  | ok | 55  | 0.13     | 0.0 | 0.0 | 40,0,0 | 101 | 0.09     | 0.0 | 0.0 | 42,0,0 |
|     |    | 89  | 0.08     | 0.0 | 0.0 | 40,0,0 | 59  | 0.17     | 0.0 | 0.0 | 42,0,0 |
| 161 | ok | 57  | 8.28e-03 | 0.0 | 0.0 | 55,0,0 | 226 | 0.05     | 0.0 | 0.0 | 45,0,0 |
|     |    | 213 | 0.02     | 0.0 | 0.0 | 42,0,0 | 4   | 0.02     | 0.0 | 0.0 | 42,0,0 |
| 162 | ok | 1   | 0.02     | 0.0 | 0.0 | 36,0,0 | 212 | 0.02     | 0.0 | 0.0 | 36,0,0 |
|     |    | 214 | 0.05     | 0.0 | 0.0 | 47,0,0 | 9   | 8.28e-03 | 0.0 | 0.0 | 53,0,0 |
| 163 | ok | 9   | 0.02     | 0.0 | 0.0 | 59,0,0 | 214 | 0.03     | 0.0 | 0.0 | 38,0,0 |
|     |    | 215 | 0.06     | 0.0 | 0.0 | 37,0,0 | 13  | 0.02     | 0.0 | 0.0 | 40,0,0 |
| 164 | ok | 13  | 0.03     | 0.0 | 0.0 | 35,0,0 | 215 | 0.05     | 0.0 | 0.0 | 35,0,0 |
|     |    | 216 | 0.06     | 0.0 | 0.0 | 37,0,0 | 17  | 0.02     | 0.0 | 0.0 | 36,0,0 |
| 165 | ok | 17  | 0.03     | 0.0 | 0.0 | 35,0,0 | 216 | 0.05     | 0.0 | 0.0 | 37,0,0 |
|     |    | 217 | 0.05     | 0.0 | 0.0 | 37,0,0 | 21  | 0.01     | 0.0 | 0.0 | 52,0,0 |
| 166 | ok | 21  | 0.02     | 0.0 | 0.0 | 54,0,0 | 217 | 0.04     | 0.0 | 0.0 | 37,0,0 |
|     |    | 218 | 0.04     | 0.0 | 0.0 | 37,0,0 | 25  | 9.80e-03 | 0.0 | 0.0 | 49,0,0 |
| 167 | ok | 25  | 0.01     | 0.0 | 0.0 | 44,0,0 | 218 | 0.03     | 0.0 | 0.0 | 37,0,0 |
|     |    | 219 | 0.03     | 0.0 | 0.0 | 37,0,0 | 29  | 9.72e-03 | 0.0 | 0.0 | 49,0,0 |
| 168 | ok | 29  | 0.01     | 0.0 | 0.0 | 43,0,0 | 219 | 0.03     | 0.0 | 0.0 | 39,0,0 |
|     |    | 220 | 0.03     | 0.0 | 0.0 | 37,0,0 | 33  | 0.01     | 0.0 | 0.0 | 49,0,0 |
| 169 | ok | 33  | 0.01     | 0.0 | 0.0 | 43,0,0 | 220 | 0.03     | 0.0 | 0.0 | 39,0,0 |
|     |    | 221 | 0.03     | 0.0 | 0.0 | 37,0,0 | 37  | 0.01     | 0.0 | 0.0 | 49,0,0 |
| 170 | ok | 37  | 9.72e-03 | 0.0 | 0.0 | 43,0,0 | 221 | 0.03     | 0.0 | 0.0 | 39,0,0 |
|     |    | 222 | 0.03     | 0.0 | 0.0 | 39,0,0 | 41  | 0.01     | 0.0 | 0.0 | 50,0,0 |
| 171 | ok | 41  | 9.80e-03 | 0.0 | 0.0 | 43,0,0 | 222 | 0.04     | 0.0 | 0.0 | 39,0,0 |
|     |    | 223 | 0.04     | 0.0 | 0.0 | 39,0,0 | 45  | 0.02     | 0.0 | 0.0 | 56,0,0 |
| 172 | ok | 45  | 0.01     | 0.0 | 0.0 | 58,0,0 | 223 | 0.05     | 0.0 | 0.0 | 39,0,0 |
|     |    | 224 | 0.05     | 0.0 | 0.0 | 39,0,0 | 49  | 0.03     | 0.0 | 0.0 | 41,0,0 |

|     |    |     |      |     |     |        |     |      |     |     |        |
|-----|----|-----|------|-----|-----|--------|-----|------|-----|-----|--------|
| 173 | ok | 49  | 0.02 | 0.0 | 0.0 | 42,0,0 | 224 | 0.06 | 0.0 | 0.0 | 39,0,0 |
|     |    | 225 | 0.05 | 0.0 | 0.0 | 41,0,0 | 53  | 0.03 | 0.0 | 0.0 | 41,0,0 |
| 174 | ok | 53  | 0.02 | 0.0 | 0.0 | 38,0,0 | 225 | 0.06 | 0.0 | 0.0 | 39,0,0 |
|     |    | 226 | 0.03 | 0.0 | 0.0 | 40,0,0 | 57  | 0.02 | 0.0 | 0.0 | 65,0,0 |
| 175 | ok | 60  | 0.27 | 0.0 | 0.0 | 50,0,0 | 241 | 0.05 | 0.0 | 0.0 | 38,0,0 |
|     |    | 228 | 0.08 | 0.0 | 0.0 | 47,0,0 | 8   | 0.16 | 0.0 | 0.0 | 49,0,0 |
| 176 | ok | 6   | 0.16 | 0.0 | 0.0 | 43,0,0 | 227 | 0.08 | 0.0 | 0.0 | 45,0,0 |
|     |    | 229 | 0.05 | 0.0 | 0.0 | 40,0,0 | 12  | 0.27 | 0.0 | 0.0 | 44,0,0 |
| 177 | ok | 12  | 0.25 | 0.0 | 0.0 | 44,0,0 | 229 | 0.06 | 0.0 | 0.0 | 40,0,0 |
|     |    | 230 | 0.07 | 0.0 | 0.0 | 43,0,0 | 16  | 0.20 | 0.0 | 0.0 | 43,0,0 |
| 178 | ok | 16  | 0.19 | 0.0 | 0.0 | 43,0,0 | 230 | 0.08 | 0.0 | 0.0 | 43,0,0 |
|     |    | 231 | 0.05 | 0.0 | 0.0 | 43,0,0 | 20  | 0.17 | 0.0 | 0.0 | 43,0,0 |
| 179 | ok | 20  | 0.17 | 0.0 | 0.0 | 43,0,0 | 231 | 0.07 | 0.0 | 0.0 | 43,0,0 |
|     |    | 232 | 0.05 | 0.0 | 0.0 | 43,0,0 | 24  | 0.16 | 0.0 | 0.0 | 45,0,0 |
| 180 | ok | 24  | 0.15 | 0.0 | 0.0 | 43,0,0 | 232 | 0.06 | 0.0 | 0.0 | 45,0,0 |
|     |    | 233 | 0.04 | 0.0 | 0.0 | 43,0,0 | 28  | 0.15 | 0.0 | 0.0 | 45,0,0 |
| 181 | ok | 28  | 0.14 | 0.0 | 0.0 | 43,0,0 | 233 | 0.05 | 0.0 | 0.0 | 46,0,0 |
|     |    | 234 | 0.04 | 0.0 | 0.0 | 43,0,0 | 32  | 0.14 | 0.0 | 0.0 | 46,0,0 |
| 182 | ok | 32  | 0.14 | 0.0 | 0.0 | 43,0,0 | 234 | 0.04 | 0.0 | 0.0 | 46,0,0 |
|     |    | 235 | 0.04 | 0.0 | 0.0 | 48,0,0 | 36  | 0.14 | 0.0 | 0.0 | 46,0,0 |
| 183 | ok | 36  | 0.14 | 0.0 | 0.0 | 48,0,0 | 235 | 0.04 | 0.0 | 0.0 | 46,0,0 |
|     |    | 236 | 0.04 | 0.0 | 0.0 | 48,0,0 | 40  | 0.14 | 0.0 | 0.0 | 49,0,0 |
| 184 | ok | 40  | 0.14 | 0.0 | 0.0 | 48,0,0 | 236 | 0.04 | 0.0 | 0.0 | 49,0,0 |
|     |    | 237 | 0.05 | 0.0 | 0.0 | 48,0,0 | 44  | 0.14 | 0.0 | 0.0 | 49,0,0 |
| 185 | ok | 44  | 0.15 | 0.0 | 0.0 | 47,0,0 | 237 | 0.04 | 0.0 | 0.0 | 49,0,0 |
|     |    | 238 | 0.06 | 0.0 | 0.0 | 47,0,0 | 48  | 0.15 | 0.0 | 0.0 | 49,0,0 |
| 186 | ok | 48  | 0.16 | 0.0 | 0.0 | 47,0,0 | 238 | 0.05 | 0.0 | 0.0 | 49,0,0 |
|     |    | 239 | 0.07 | 0.0 | 0.0 | 49,0,0 | 52  | 0.17 | 0.0 | 0.0 | 49,0,0 |
| 187 | ok | 52  | 0.17 | 0.0 | 0.0 | 49,0,0 | 239 | 0.05 | 0.0 | 0.0 | 49,0,0 |
|     |    | 240 | 0.08 | 0.0 | 0.0 | 49,0,0 | 56  | 0.19 | 0.0 | 0.0 | 49,0,0 |
| 188 | ok | 56  | 0.20 | 0.0 | 0.0 | 49,0,0 | 240 | 0.07 | 0.0 | 0.0 | 49,0,0 |
|     |    | 241 | 0.06 | 0.0 | 0.0 | 38,0,0 | 60  | 0.25 | 0.0 | 0.0 | 50,0,0 |

|        |       |           |           |       |           |           |
|--------|-------|-----------|-----------|-------|-----------|-----------|
| Guscio | V N/M | V V/T cls | V V/T acc | V N/M | V V/T cls | V V/T acc |
|        | 0.27  | 0.0       | 0.0       |       |           |           |