We have compiled the data sources used to develop the salt cavern energy storage stability database. The relevant literature and detailed engineering background information are provided in **Table A1**. Detailed descriptions of the training and test datasets are provided in **Table A2** and **Table** **A3**, respectively.

**Table A1.** Data Sources and Engineering Background.

|  |  |  |  |
| --- | --- | --- | --- |
| **Reference** | **Number of data** | **Project Area** | **Detailed information** |
| [1] | 25 | Jintan, Jiangsu Province, China | To ensure construction feasibility and structural stability, the dissolution cavern was designed with a semi-ellipsoidal upper part and a hemispherical lower part. The cavern spans depths from 700.1 m to 780.1 m, has a total height of 80 m, with a 50 m semi-major axis for the ellipsoid and a 30 m radius for the hemisphere, resulting in an approximate volume of 104,000 m³.  Energies 17 00324 g005 |
| [2] | 8 | Jianghan, Hubei Province, China | Based on stratigraphic data and sonar tests, two separate salt caverns were constructed in the K3 and K4 mining layers of the Yunying salt mine to enhance gas storage. The K3 cavern lies between 520–590 m depth with a cylindrical shape, 70 m in diameter and 50 m in height. The K4 cavern is tunnel-shaped, 300 m in length and 25.81 m in height, located at 688–714 m depth. A 30.76 m-thick insoluble interlayer separates the two layers, preventing vertical connection.能量 16 07288 g005 |
| [3] | 15 | Pingdingshan, Henan Province, China | The proposed Salt Cavern Gas Storage (SCGS) system is designed with a horizontally oriented elliptical cylindrical geometry. The surrounding strata consist of an upper mudstone layer with a thickness of 320 meters, a central salt rock layer with a thickness of 60 meters, and a lower mudstone layer. Based on sonar measurements reported in previous studies, the cross-sectional shape of the SCGS is approximated as a horizontal ellipse with a major axis (diameter) of 60 meters and a minor axis (height) of 30 meters. To ensure the sealing integrity of the SCGS, protective salt rock layers with a thickness of 15 meters are reserved at both the roof and the floor of the cavern. |
| [4] | 6 | Jintan, Jiangsu Province, China | The Jintan Salt Mine, with its dustpan-shaped structure oriented northeast-southwest, has a salt layer buried at depths of 850–1250 m, covering an area of 23 km². The thickest part of the salt layer, exceeding 200 m and spanning 7.88 km², is located centrally and serves as the site for the hypothetical multi-step horizontal salt cavern construction simulations. The salt layer is overlain by approximately 500 m of ash stone and silty mudstone, and underlain by over 100 m of silty mudstone. To reduce boundary effects, a 3000 × 1300 × 1300 m geo-mechanical model (depth −400 m to −1700 m) is established, with the multi-step horizontal salt cavern placed at its center. The model is meshed with tetrahedral elements. |
| [5] | 6 | Pingdingshan, Henan Province, China | This study focuses on the stability analysis of a Small Spacing Twin Wells (SSTW) salt cavern located in a salt mine in Pingdingshan, Henan Province, China. The cavern is situated at a depth of 1800 m and has a height of 235 m. The target salt formation contains six interbedded mudstone layers with thicknesses of 8 m, 4 m, 5 m, 4 m, 5 m, and 4 m from top to bottom. Due to the symmetrical structure of the cavern, only half of it is modeled. A geomechanical model is first developed in ABAQUS and then imported into FLAC3D for stability simulation. The model includes overlying and underlying mudstone layers, salt rock, interbeds, and deposition layers. The simulation considers collapse of interbeds and sediment accumulation during construction. For simplification, the cavern geometry is assumed to be regular. The model dimensions are 1400 m in height and 1000 m × 500 m in the horizontal plane. An equivalent surface load of 26.62 MPa is applied, with horizontal displacement constrained on four vertical sides and vertical displacement constrained at the bottom. Mesh refinement is applied around the cavern to enhance accuracy, while coarser mesh is used farther away to reduce computational cost. |
| [6] | 7 | Ningjin, Hebei province, China | A 3D geomechanical model was developed based on the geological conditions of the Ningjin salt district to evaluate the stability of an ultra-deep salt cavern. The target formation lies at a depth of 2740–2942 m, within which a 167 m-high cavern with a 60 m diameter is designed. The cavern features a hemispherical roof, cylindrical body, and conical bottom, with an estimated usable gas storage volume of 37 × 10⁴ m³, accounting for 80% of the total volume. The in-situ stress is assumed to follow a hydrostatic gradient of 1.845 MPa/100 m. Boundary conditions include constrained displacement on vertical faces and bottom surface, while the internal pressure and overburden are applied as distributed loads. To enhance computational efficiency, a symmetrical half-model (600 m × 300 m × 1000 m) is used for simulation. |
| [7] | 6 | Huasu, Anhui Province, China | A 3D geomechanical model was developed for the Huasu salt mining area in Anhui Province based on Z24 drilling data. The salt-bearing strata lie between 301.6 and 403.3 m depth, with the thickest middle salt layer reaching 26.0 m and seven interlayers present, the thickest being 2.2 m. The average salt grade is 74.77%, and the formation dips steadily at 12°. The model, measuring 800 × 400 × 700 m, includes five rock salt layers and four interlayers, incorporating the effect of mudstone on salt creep. A hemispherical-cylindrical-conical cavity was designed with a protective roof thickness of 10 m, a height of 86.7 m, and a diameter of 50 m, giving a dissolved volume of approximately 1.35 × 10⁵ m³. |
| [8] | 15 | Pingdingshan, Henan Province, China | A typical salt cavern in the Pingdingshan salt district, buried at 1600 m depth with an 80 m diameter and 216 m height, is selected for stability analysis. Characterized by 12 thin mudstone interlayers (4–9 m), the cavern presents complex geological features. Using FLAC and Rhino, a 3D geomechanical model with 2,472,495 zones and 421,508 nodes is built. The model measures 2500 m × 1000 m × 1600 m, with full boundary constraints to ensure simulation accuracy. |
| [9] | 2 | Jintan, Jiangsu Province, China | The underground gas storage project is based on the Jintan Salt Mine in Jiangsu Province, where the salt layer lies at a depth of 970–1150 m and is 100–180 m thick. A 3D model was built with dimensions of 900 × 300 × 800 m and a burial depth of 1130 m. The cavern has a 238 m-long axis, 75 m height, 10 m sediment thickness, and is protected by 30 m and 20 m thick roof and floor layers, respectively. The layered salt rock (120 m thick) is flanked by >300 m mudstone. Three 2 m-thick interlayers are considered, while thinner layers (<1 m) are neglected due to minimal impact. In-situ stress is simplified as hydrostatic pressure. |
| [10] | 5 | Jintan, Jiangsu Province, China | This study focuses on the underground gas storage (UGS) project in the Jintan salt mine, Jiangsu Province. Geological surveys show that the salt formation is stable, with gently dipping layers and a simple structure comprising three main salt beds. The numerical model includes a 100 m-thick mudstone overburden, a 212 m-thick salt layer, and a 100 m-thick mudstone base, starting from a depth of 888 m. The salt cavern is located between 1018 m and 1154 m depth, with a maximum width of 70 m, a height of 136 m, and a volume of approximately 256,317 m³. Due to the irregular cavern shape, modeling is based on representative span and height. The overburden is simplified as an equivalent load to facilitate stability analysis and design. |
| [11] | 1 | Sanshui, Guangdong Province, China | The planned gas storage cavern in the Sanshui Basin lies in near-horizontal salt-bearing strata with weak tectonic stress. Vertical in-situ stress (31.05 MPa at 1242 m) is calculated based on overburden density, and equal principal stresses are assumed in the salt. A pear-shaped cavern (30 m cap, 60/70 m diameters, 95 m height) is designed within a 10-interbed salt layer. A FLAC3D model (244,044 zones) using the Cpower creep model simulates 30 years of operation under 10–23 MPa pressure cycles. |
| [12] | 30 | Jintan, Jiangsu Province, China | The simulation is based on the Jintan Salt Mine in Zhixi, Jiangsu Province, where the salt formation lies between 970–1140 m with a 170 m thickness. Designed SSTW caverns are 120 m high, considering reserved roof and floor. Strata are simplified as horizontal (dip 0–5°), and in-situ stress is assumed hydrostatic. A 600 m-high, 480 m-wide geomechanical model includes a typical small-spacing two-well salt cavern (35 m × 30 m, 120 m high) centered in the domain. The upper 80 m stores gas; the lower 40 m represents insoluble deposits. Three 2 m-thick mudstone interlayers penetrate the cavern. The model uses 134,400 hexahedral elements and 135,641 grids, with finer mesh around the cavern for efficiency. |
| [13] | 52 | Qianjiang, Hubei province, China | To analyze rock mass responses to caverns of varying sizes, a 3D geomechanical model was built for the Jianghan salt region. The model measures 1000 m × 500 m × 1500 m, with a 400 m-thick target formation containing 16 interlayers and 17 salt beds. A 1/2 symmetric model is used for efficiency. The cavern includes 8 interlayers, 3.8–7 m thick. A 27.0 MPa overburden load is applied on top, the base is fully constrained, and lateral boundaries prevent horizontal displacement. Internal gas pressure is applied to the cavern wall, with the bottom subjected to stress from insolubles and gas. Initial in-situ stress follows a hydrostatic state with a gradient of 2.3 MPa/100 m. Cavern excavation is assumed instantaneous, with redistributed stress used as the initial condition for creep analysis. |
| [14] | 6 | Jintan, Jiangsu Province, China | An in-situ leak test was conducted for five salt caverns in Jintan, Jiangsu Province, revealing a "micro-leakage interlayer" (MLI) with relatively high permeability in two under-construction caverns, causing gas leakage of 1–2 L/d. The completed cavern has a sonar-measured volume of 2.07 × 10⁵ m³. Based on prior geological data, a 3D FLAC3D geomechanical model (800 × 400 × 800 m) was developed, containing 672,100 elements and 707,764 nodes. The model covers depths of 550–1350 m, with a 195 m-thick salt layer (860–1055 m) containing four interlayers (1.00, 3.00, 2.50, and 2.00 m) and one MLI (1.50 m).  Fig. 6 |
| [15] | 6 | Huaian, Jiangsu Province, China | his study is based on a salt mine in Huaian, Jiangsu Province. The ultra-high-strength cavern (UHSC) is located between 1251 m and 1471 m depth, within a salt formation containing six interlayers (5, 10, 18, 12, 5, and 5 m thick), five of which intersect the UHSC. A 3D geomechanical model was built in ANSYS 19.0, leveraging its robust pre-processing capabilities. Due to model symmetry, a 1/2 cuboid model (1200 × 600 × 900 m) was used, with the UHSC centered. The mesh contains 55,993 nodes and 296,132 tetrahedral elements, refined near the UHSC. The UHSC consists of two vertical semi-cylinders (80 m diameter, 220 m height) and one horizontal semi-ellipsoid (240 m long), totaling approximately 2.64 × 10⁶ m³ in volume. To minimize boundary effects, the UHSC is placed at least six times its diameter away from model boundaries. |
| [16] | 8 | Jintan, Jiangsu Province, China | A 3D geomechanical model for West-1 and West-2 caverns at the Jintan salt mine was built in ANSYS and analysed in FLAC3D. The half-model (due to symmetry) is a cuboid 900 m × 400 m × 800 m, containing a 146.7 m layered salt bed sandwiched between two 300 m mudstone sequences. Vertical overburden pressure of 14.18 MPa, derived from depth and density, is applied to the top; the base and four vertical faces are simply supported. In-situ stress is assumed hydrostatic. The mesh (31 565 nodes, 173 130 elements: tetrahedral, hexahedral, pyramidal) was refined until displacement at the cavern crowns converged and global imbalance fell below 1 %. All further parameters follow earlier laboratory data. |
| [17] | 25 | - | This study investigates the mechanical behavior of horizontal ellipsoidal salt caverns with varying width-to-height ratios using FLAC3D. Numerical models were developed to analyze how cavern volume loss, stress distribution, and plastic zones evolve under different aspect ratios, leading to the identification of the optimal ratio. Based on this, long-term simulations of twin-cavern configurations were conducted to determine the optimal pillar width between caverns. |
| [18] | 35 | Huaian, Jiangsu Province, China | Based on the geological conditions of the Zhaoji block in the Huai'an salt mine, a 3D geomechanical model was established. Although the structure is axisymmetric, a 3D model (350 × 350 × 700 m) was used for greater realism. The mesh was built in ANSYS and imported into FLAC3D for simulation. Due to symmetry, only 1/4 of the ellipsoidal cavity is modeled numerically, though Fig. 2 displays a 1/2 section for clarity. The model includes 240 m upper and 220 m lower mudstone caprocks, and a 240 m-thick bedded rock salt layer (8–37 m thick), with 11 anhydrite interlayers (2–3.3 m thick, avg. 2.7 m), five of which lie above the cavity. |
| [19] | 12 | Jintan, Jiangsu Province, China | In this study, a 3D geomechanical model of two adjacent strategic petroleum reserve salt caverns was developed in ANSYS (800 × 400 × 800 m) to eliminate boundary effects and then imported into FLAC3D for static and creep analysis. The salt formation, 200 m thick (880–1080 m depth), contains two pear-shaped caverns (80 m diameter, 130 m height), located between 930–1060 m depth. Four interlayers (1.25–2.70 m thick) intersect the caverns. The model consists of 111,420 nodes and 648,800 elements (tetrahedral and pyramid), with denser mesh near the caverns. It is divided into 24 material blocks: 10 for rock salt, 4 for mudstone, 8 for interlayers, and 2 null blocks for caverns. |
| [20] | 30 | Qianjiang, Hubei province, China | Based on optimized cavity geometry, the model adopts a shape combining a top semi-ellipsoid and a bottom hemisphere to ensure cavern stability. The cavern lies between 1962.5 m and 2070.0 m depth, with a diameter of 64 m and a height of 96 m. The constant formation temperature is set at 86 °C based on Echo-Sounding data. The designed volume is 2.05 × 10⁵ m³, and the effective gas storage volume is 1.44 × 10⁵ m³, with the remainder occupied by collapsed interlayer slummage. The model was built in ANSYS, converted via custom software, and analyzed in FLAC3D. |
| [21] | 15 | - | In this study, a 3D geomechanical half-model of a horizontal salt cavern was established using ANSYS, taking advantage of geometric and stress symmetry to improve computational efficiency. The cavern center is located at a depth of 650 m, 150 m below the model top. The full model dimensions are 800 m in length, 300 m in width, and 250 m in height. The in-situ stress field is assumed to be hydrostatic, with vertical overburden pressure applied to the top surface. A 10 m protective layer is reserved above the cavern to ensure sealing, overlain by a 6 m thick mudstone–anhydrite caprock. The total thickness of the rock salt formation is 130 m. The cavern consists of an upper storage chamber and a lower sediment zone. The upper part is a cylindrical shape with a cross-section formed by two semicircles of 40 m radius and a central 80 m wide rectangle. The lower part is composed of two quarter-spheres (radius 40 m) on both sides and a central half-cylinder of length d, which represents the spacing between wells. The overall cavern size can be adjusted by varying d. |
| [22] | 30 | Anhui province, China | This study is based on representative geological data from Borehole No. 4 of a shallow-buried salt mine in Anhui Province. The salt formation is a stratified deposit with a plan-view shape resembling an irregular ellipse, approximately 8.5 km in length and 1.4–2.39 km in width, covering an area of about 14.4 km². Vertically, the salt layer lies between elevations −500 m and −100 m, with thicknesses ranging from 30 m to 110 m; Borehole No. 4 records a salt thickness of 101.7 m and an average purity of 74.77%. Seven interlayers (0.3–2.2 m thick) are present within the salt layer, and those thinner than 1 m are simplified as rock salt in the model. To ensure geometric stability after solution mining, the cavern is preliminarily designed with a hemispherical roof, cylindrical body, and inverted conical bottom with a 30° side dissolution angle. A 10 m roof and 5 m floor protective layer are reserved, resulting in a cavern height of 86.7 m and a maximum diameter of 50 m. |
| [23] | 12 | Jintan, Jiangsu Province, China | This study focuses on constructing a salt cavern UGS at the Jintan Salt Mine in Jiangsu Province using the large-spacing two-well (Wellhead spacing is greater than 20 m) with gas blanket method. The salt formation varies in thickness from 30–50 m (thinnest) to 180–230 m (thickest), with the cavern top buried at ~1130 m depth. The designed cavern height is 70 m, within a 120 m-thick salt layer, with 30 m and 20 m protective layers at the roof and floor, respectively. Based on field data and optimized cavern shapes, four 3D numerical models with RLH values of 1.60, 2.10, 2.60, and 3.10 were established, corresponding to wellhead spacings of 20 m, 30 m, 40 m, and 50 m. Effective cavern volumes are 22 m³, 36 m³, 54 m³, and 80 m³, respectively. |
| [24] | 37 | - | The salt cavern is saddle-shaped and fully embedded within a 200 m-thick rock salt formation, overlain and underlain by low-permeability mudstone layers. The cavern is approximately 120 m in height and length, 50 m in width, with a total volume of 3.02 × 10⁵ m³; its bottom lies at a depth of 1000 m. A 3D numerical model was established based on geological conditions. The model domain is a cuboid with a longitudinal section comprising 200 m of rock salt and 100 m of mudstone above and below, totaling 400 m in thickness. The bottom area is 300 m × 150 m. |
| [25] | 25 | - | To investigate the influence of injection–production parameters on salt cavern behavior during operation, a proposed layered rock salt underground gas storage is selected as the engineering background. The cavern shape after leaching is generated via WinUbro based on actual geological survey data. Interlayers with thicknesses from 1 m to 14 m are unevenly distributed within the salt formation. The cavern has a height of 150 m, a maximum diameter of 76 m, a burial depth of 730 m (from ground to cavern roof), and an effective volume of 33.6 × 10⁴ m³.  Figure 6Figure 6 |

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**Table A2.** Salt cavern energy storage stability assessment database training set.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | S/L | CD | CV | PW | SG | LP | HP | E | V | C | F | T | A | n | t | MD | Predicted MD | RV | Predicted RV |
| 1 | 0.67 | 830.00 | 25.45 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 15.00 | 1.12 | 1.19 | 3.92 | 3.89 |
| 2 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 15.00 | 14.73 | 14.77 | 37.70 | 38.40 |
| 3 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 11.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 1.00 | 0.32 | 0.27 | 0.69 | 0.68 |
| 4 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 4.08 | 4.20 | 12.30 | 13.29 |
| 5 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 32.00 | 32.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 2.61 | 2.60 | 15.25 | 15.20 |
| 6 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 0.78 | 0.74 | 2.91 | 2.76 |
| 7 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 5.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 9.80 | 9.77 | 31.00 | 31.13 |
| 8 | 0.04 | 1000.00 | 106.03 | 2.50 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.67 | 2.65 | 20.02 | 19.97 |
| 9 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 3.75 | 3.68 | 13.15 | 13.72 |
| 10 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 10.00 | 10.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 2.37 | 2.29 | 28.82 | 27.84 |
| 11 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 14.00 | 14.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 0.50 | 0.55 | 6.08 | 6.66 |
| 12 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 11.00 | 11.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 2.00 | 2.53 | 2.60 | 14.21 | 15.32 |
| 13 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 9.00 | 9.00 | 2.26 | 15.90 |
| 14 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 10.91 | 10.97 | 32.86 | 33.18 |
| 15 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 20.00 | 6.21 | 6.20 | 33.69 | 34.26 |
| 16 | 0.40 | 830.00 | 70.69 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 10.00 | 0.97 | 1.02 | 3.59 | 3.03 |
| 17 | 0.40 | 830.00 | 70.69 | 0.93 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.77 | 1.78 | 1.00 | 1.03 |
| 18 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 1.00 | 0.34 | 0.28 | 0.94 | 0.16 |
| 19 | 0.75 | 740.00 | 10.40 | 1.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 1.00 | 0.15 | 0.16 | 2.00 | 1.81 |
| 20 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 15.00 | 0.17 | 0.13 | 2.28 | 1.73 |
| 21 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 8.11 | 8.14 | 25.88 | 26.45 |
| 22 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 16.00 | 16.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 0.25 | 0.23 | 2.99 | 2.87 |
| 23 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 5.00 | 2.00 | 1.96 | 6.05 | 5.77 |
| 24 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 24.00 | 24.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 6.30 | 6.25 | 33.57 | 33.47 |
| 25 | 0.30 | 1800.00 | 99.60 | 0.75 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.85 | 3.83 | 32.20 | 32.35 |
| 26 | 0.05 | 1000.00 | 84.82 | 4.50 | 15.00 | 8.00 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.63 | 1.68 | 13.09 | 13.42 |
| 27 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 0.92 | 0.94 | 3.41 | 2.81 |
| 28 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 0.70 | 0.64 | 2.61 | 2.09 |
| 29 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 25.00 | 0.43 | 0.38 | 7.25 | 7.27 |
| 30 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 5.00 | 5.67 | 5.97 | 16.76 | 17.91 |
| 31 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.19 | 1.14 | 19.94 | 20.04 |
| 32 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 0.71 | 0.62 | 2.64 | 2.35 |
| 33 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 34.00 | 34.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 1.99 | 1.97 | 11.83 | 11.66 |
| 34 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 10.00 | 10.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 0.66 | 0.62 | 8.17 | 7.87 |
| 35 | 0.48 | 1888.00 | 84.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 10.00 | 10.00 | 30.63 | 30.64 |
| 36 | 0.25 | 650.00 | 235.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.24 | 1.19 | 25.26 | 25.39 |
| 37 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 15.00 | 2.43 | 2.50 | 7.39 | 6.95 |
| 38 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 20.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 8.07 | 8.18 | 14.19 | 14.44 |
| 39 | 0.75 | 740.00 | 10.40 | 1.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 5.00 | 0.94 | 0.97 | 8.16 | 8.42 |
| 40 | 0.40 | 830.00 | 70.69 | 1.20 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.80 | 1.78 | 1.00 | 0.57 |
| 41 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 2.00 | 0.48 | 0.52 | 0.30 | -0.41 |
| 42 | 0.18 | 555.00 | 118.61 | 3.63 | 4.40 | 5.00 | 9.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 3.62 | 3.23 | 14.52 | 14.61 |
| 43 | 0.75 | 740.00 | 10.40 | 3.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 1.00 | 0.15 | 0.09 | 1.98 | 1.19 |
| 44 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 1.06 | 1.03 | 3.95 | 3.42 |
| 45 | 0.75 | 740.00 | 10.40 | 1.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 1.00 | 0.15 | 0.09 | 2.05 | 2.29 |
| 46 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 10.00 | 0.53 | 0.56 | 3.51 | 3.29 |
| 47 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 14.00 | 14.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 0.63 | 0.56 | 7.64 | 7.52 |
| 48 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 15.00 | 0.87 | 0.86 | 14.91 | 15.08 |
| 49 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 2.00 | 0.82 | 0.79 | 3.87 | 3.23 |
| 50 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 8.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 7.20 | 7.18 | 22.60 | 23.03 |
| 51 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 5.00 | 0.49 | 0.45 | 2.42 | 2.19 |
| 52 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 8.00 | 8.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 3.80 | 3.61 | 45.07 | 43.46 |
| 53 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 17.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 6.59 | 6.61 | 11.53 | 11.71 |
| 54 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 8.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 2.00 | 1.95 | 16.00 | 15.10 |
| 55 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 13.00 | 27.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 2.34 | 2.47 | 15.58 | 16.05 |
| 56 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 11.00 | 25.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 3.80 | 3.95 | 23.73 | 24.74 |
| 57 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 10.00 | 0.06 | 0.05 | 0.43 | 0.43 |
| 58 | 0.50 | 830.00 | 45.24 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 15.00 | 1.14 | 1.06 | 4.33 | 4.16 |
| 59 | 0.48 | 1130.00 | 36.00 | 1.00 | 2.26 | 7.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.84 | 0.77 | 6.24 | 6.07 |
| 60 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 15.00 | 8.31 | 8.45 | 23.52 | 24.05 |
| 61 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 13.00 | 27.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 2.45 | 2.47 | 16.11 | 16.05 |
| 62 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 16.00 | 16.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 0.31 | 0.28 | 3.70 | 3.53 |
| 63 | 0.50 | 830.00 | 45.24 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.30 | 1.40 | 5.31 | 4.71 |
| 64 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 5.00 | 0.48 | 0.46 | 1.49 | 0.73 |
| 65 | 0.75 | 740.00 | 10.40 | 1.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 30.00 | 6.45 | 6.29 | 35.27 | 34.60 |
| 66 | 0.75 | 740.00 | 10.40 | 1.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 30.00 | 5.35 | 5.40 | 30.54 | 30.82 |
| 67 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.08 | 2.09 | 14.76 | 15.38 |
| 68 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 19.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 8.64 | 8.64 | 15.51 | 15.79 |
| 69 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 16.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 7.07 | 7.08 | 12.48 | 12.56 |
| 70 | 0.40 | 650.00 | 139.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.61 | 0.59 | 24.66 | 24.95 |
| 71 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 28.00 | 28.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 4.19 | 4.07 | 23.51 | 23.01 |
| 72 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 1.02 | 1.00 | 3.80 | 3.62 |
| 73 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 1.00 | 0.42 | 0.36 | 0.29 | -0.65 |
| 74 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 18.00 | 18.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 0.16 | 0.10 | 1.82 | 1.40 |
| 75 | 0.74 | 1420.00 | 21.00 | 1.00 | 2.50 | 10.00 | 23.00 | 6.16 | 0.30 | 8.32 | 28.10 | 1.51 | 3.61E-06 | 1.78 | 30.00 | 1.57 | 1.60 | 6.55 | 6.29 |
| 76 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 18.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 9.26 | 9.24 | 16.95 | 16.66 |
| 77 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 1.00 | 0.55 | 0.49 | 2.20 | 1.80 |
| 78 | 0.58 | 350.00 | 13.50 | 2.00 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.57 | 1.57 | 9.15 | 8.95 |
| 79 | 0.48 | 1130.00 | 36.00 | 1.00 | 2.26 | 8.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.65 | 0.63 | 4.07 | 3.94 |
| 80 | 0.09 | 701.00 | 19.98 | 3.63 | 4.40 | 6.00 | 12.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 5.15 | 4.84 | 34.79 | 31.75 |
| 81 | 0.51 | 1018.00 | 25.63 | 1.00 | 2.20 | 8.00 | 15.00 | 25.00 | 0.25 | 2.00 | 30.00 | 2.00 | 1.08E-08 | 3.00 | 5.00 | 0.29 | 0.28 | 4.54 | 4.28 |
| 82 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 12.00 | 26.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 3.23 | 3.08 | 20.45 | 19.86 |
| 83 | 0.09 | 701.00 | 19.98 | 3.63 | 4.40 | 7.00 | 12.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 5.07 | 4.74 | 33.91 | 30.83 |
| 84 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.94 | 0.94 | 24.08 | 24.91 |
| 85 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 25.00 | 12.26 | 12.33 | 34.73 | 35.81 |
| 86 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 10.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 14.34 | 14.28 | 37.50 | 37.14 |
| 87 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 0.73 | 0.72 | 12.91 | 12.85 |
| 88 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 1.38 | 1.37 | 5.13 | 4.88 |
| 89 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 15.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 9.36 | 9.38 | 17.42 | 17.73 |
| 90 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 11.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 5.00 | 0.50 | 0.53 | 2.55 | 2.58 |
| 91 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 0.57 | 0.52 | 2.12 | 2.18 |
| 92 | 0.75 | 740.00 | 10.40 | 1.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 5.00 | 0.81 | 0.81 | 7.27 | 7.50 |
| 93 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 20.00 | 0.93 | 0.92 | 8.09 | 7.82 |
| 94 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 11.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 30.00 | 1.27 | 1.24 | 12.43 | 12.22 |
| 95 | 0.75 | 740.00 | 10.40 | 2.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 10.00 | 1.39 | 1.39 | 11.00 | 10.80 |
| 96 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 20.00 | 0.39 | 0.37 | 6.56 | 6.09 |
| 97 | 0.40 | 830.00 | 70.69 | 0.40 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 2.00 | 1.95 | 0.98 | 1.01 |
| 98 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 0.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 1.17 | 1.11 | 1.79 | 1.39 |
| 99 | 0.75 | 740.00 | 10.40 | 2.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 20.00 | 2.51 | 2.50 | 17.22 | 17.62 |
| 100 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 16.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 8.75 | 8.78 | 15.99 | 16.16 |
| 101 | 0.32 | 1130.00 | 80.00 | 1.00 | 2.26 | 9.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.63 | 0.56 | 1.96 | 1.69 |
| 102 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 16.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 5.85 | 5.90 | 17.20 | 17.45 |
| 103 | 0.98 | 959.50 | 10492.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 15.00 | 1.20 | 1.15 | 17.60 | 17.75 |
| 104 | 0.26 | 1050.00 | 377.00 | 2.46 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 4.80 | 4.78 | 22.06 | 21.73 |
| 105 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 7.81 | 7.85 | 25.18 | 24.87 |
| 106 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 7.92 | 7.88 | 22.57 | 22.78 |
| 107 | 0.33 | 830.00 | 101.80 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.33 | 1.38 | 6.95 | 6.34 |
| 108 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 5.00 | 3.48 | 3.41 | 10.48 | 10.20 |
| 109 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 0.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 11.00 | 10.37 | 68.00 | 64.32 |
| 110 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 19.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 5.72 | 5.71 | 9.82 | 9.47 |
| 111 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 30.00 | 7.68 | 7.69 | 40.06 | 40.20 |
| 112 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 0.08 | 0.10 | 0.85 | 0.94 |
| 113 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 18.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 4.44 | 4.49 | 13.30 | 14.16 |
| 114 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 30.00 | 1.21 | 1.19 | 11.72 | 11.58 |
| 115 | 0.33 | 830.00 | 101.80 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 10.00 | 0.98 | 0.97 | 3.99 | 3.86 |
| 116 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 15.00 | 0.35 | 0.31 | 5.71 | 5.31 |
| 117 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 20.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 5.30 | 5.31 | 9.03 | 8.31 |
| 118 | 0.67 | 830.00 | 25.45 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.29 | 1.18 | 4.83 | 4.35 |
| 119 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 8.00 | 8.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 2.44 | 2.54 | 30.54 | 33.17 |
| 120 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 4.66 | 4.75 | 15.85 | 15.78 |
| 121 | 0.51 | 1018.00 | 25.63 | 1.00 | 2.20 | 8.00 | 15.00 | 25.00 | 0.25 | 2.00 | 30.00 | 2.00 | 1.08E-08 | 3.00 | 1.00 | 0.06 | 0.03 | 0.76 | 0.11 |
| 122 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 26.00 | 26.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 5.18 | 5.26 | 28.33 | 28.99 |
| 123 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 10.00 | 0.75 | 0.65 | 2.34 | 2.13 |
| 124 | 0.38 | 1888.00 | 55.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 8.00 | 8.06 | 24.78 | 24.66 |
| 125 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 5.00 | 0.22 | 0.20 | 3.29 | 2.84 |
| 126 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 4.90 | 4.90 | 16.75 | 16.33 |
| 127 | 0.04 | 1000.00 | 106.03 | 2.00 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.73 | 2.71 | 20.39 | 20.33 |
| 128 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 0.46 | 0.43 | 7.86 | 8.06 |
| 129 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 1.00 | 0.87 | 0.90 | 4.19 | 4.65 |
| 130 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 10.00 | 9.60 | 9.62 | 27.89 | 28.05 |
| 131 | 0.58 | 350.00 | 13.50 | 1.60 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.54 | 1.51 | 8.95 | 8.75 |
| 132 | 0.28 | 650.00 | 211.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.09 | 1.06 | 24.59 | 25.00 |
| 133 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 10.00 | 0.46 | 0.42 | 7.92 | 7.63 |
| 134 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 5.00 | 1.52 | 1.57 | 8.09 | 8.53 |
| 135 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 4.92 | 5.02 | 16.86 | 16.58 |
| 136 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 14.00 | 14.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 0.39 | 0.41 | 4.50 | 4.35 |
| 137 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 5.72 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.50 | 2.50 | 17.94 | 18.17 |
| 138 | 0.28 | 1800.00 | 99.60 | 0.63 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.82 | 3.81 | 30.53 | 31.13 |
| 139 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 20.00 | 0.99 | 0.96 | 16.93 | 16.89 |
| 140 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 6.93 | 6.97 | 22.23 | 21.79 |
| 141 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 25.00 | 1.41 | 1.42 | 4.35 | 4.10 |
| 142 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 9.50 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.79 | 0.78 | 15.60 | 14.81 |
| 143 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 10.00 | 1.17 | 1.16 | 0.31 | 0.15 |
| 144 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 5.00 | 0.37 | 0.28 | 3.42 | 3.42 |
| 145 | 0.63 | 937.40 | 12841.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 10.00 | 0.60 | 0.60 | 8.40 | 8.00 |
| 146 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 2.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 0.83 | 0.83 | 1.27 | 0.99 |
| 147 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 10.00 | 0.64 | 0.64 | 4.35 | 4.08 |
| 148 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 17.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 9.93 | 9.92 | 18.50 | 18.67 |
| 149 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 10.00 | 3.30 | 3.47 | 9.88 | 9.65 |
| 150 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 5.00 | 2.67 | 2.79 | 14.79 | 15.16 |
| 151 | 0.98 | 959.50 | 10492.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 20.00 | 1.40 | 1.42 | 22.24 | 21.86 |
| 152 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 5.00 | 1.13 | 1.16 | 3.45 | 3.10 |
| 153 | 0.09 | 701.00 | 19.98 | 3.63 | 4.40 | 7.00 | 12.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 4.41 | 4.74 | 26.96 | 30.83 |
| 154 | 0.03 | 1000.00 | 127.23 | 4.50 | 15.00 | 8.00 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.79 | 1.78 | 14.04 | 13.75 |
| 155 | 0.26 | 1800.00 | 99.60 | 0.50 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.46 | 3.49 | 29.02 | 29.50 |
| 156 | 0.63 | 937.40 | 12841.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 20.00 | 1.20 | 1.16 | 14.32 | 14.79 |
| 157 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 11.00 | 25.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 3.93 | 3.95 | 24.37 | 24.74 |
| 158 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 8.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 0.61 | 0.66 | 0.92 | 1.45 |
| 159 | 0.32 | 1130.00 | 80.00 | 1.00 | 2.26 | 8.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.74 | 0.77 | 3.94 | 3.71 |
| 160 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 17.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 10.85 | 10.84 | 20.97 | 20.53 |
| 161 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 15.51 | 15.70 | 39.83 | 40.46 |
| 162 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 7.48 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.89 | 1.83 | 19.81 | 19.13 |
| 163 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 15.00 | 1.04 | 1.08 | 3.20 | 2.97 |
| 164 | 0.75 | 740.00 | 10.40 | 1.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 10.00 | 2.07 | 2.02 | 14.86 | 14.83 |
| 165 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 9.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 6.30 | 6.41 | 20.04 | 20.21 |
| 166 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 25.00 | 20.52 | 20.75 | 54.21 | 55.16 |
| 167 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 3.00 | 1.86 | 1.81 | 10.14 | 9.94 |
| 168 | 0.75 | 740.00 | 10.40 | 3.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 30.00 | 3.24 | 3.37 | 20.77 | 21.87 |
| 169 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 8.00 | 8.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 1.03 | 1.10 | 12.84 | 13.46 |
| 170 | 0.58 | 300.00 | 8.59 | 1.00 | 2.30 | 3.53 | 3.53 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 10.00 | 0.29 | 0.29 | 4.72 | 4.37 |
| 171 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 5.00 | 0.54 | 0.54 | 9.02 | 9.33 |
| 172 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 5.00 | 0.11 | 0.06 | 1.27 | 0.60 |
| 173 | 0.33 | 1888.00 | 42.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 7.00 | 7.03 | 21.96 | 22.26 |
| 174 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 11.00 | 25.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 4.09 | 3.95 | 25.02 | 24.74 |
| 175 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 6.50 | 8.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.32 | 1.31 | 46.99 | 48.21 |
| 176 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 20.00 | 0.80 | 0.76 | 6.45 | 6.41 |
| 177 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 0.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 4.72 | 4.46 | 7.07 | 5.98 |
| 178 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 13.00 | 27.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 2.57 | 2.47 | 16.64 | 16.05 |
| 179 | 0.58 | 350.00 | 13.50 | 0.40 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.48 | 1.46 | 8.28 | 8.14 |
| 180 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 1.27 | 1.22 | 4.71 | 4.54 |
| 181 | 0.75 | 740.00 | 10.40 | 1.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 20.00 | 3.56 | 3.47 | 22.48 | 22.29 |
| 182 | 0.40 | 830.00 | 70.69 | 1.33 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.79 | 1.78 | 1.00 | 0.56 |
| 183 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 15.00 | 4.44 | 4.29 | 13.30 | 13.20 |
| 184 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 20.00 | 0.61 | 0.59 | 10.88 | 11.07 |
| 185 | 0.63 | 1130.00 | 22.00 | 1.00 | 2.26 | 7.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.77 | 0.76 | 6.50 | 6.25 |
| 186 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 13.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 20.00 | 0.77 | 0.75 | 6.04 | 5.98 |
| 187 | 0.75 | 740.00 | 10.40 | 2.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 5.00 | 0.69 | 0.64 | 6.47 | 6.26 |
| 188 | 0.40 | 830.00 | 70.69 | 0.27 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 2.00 | 1.94 | 0.97 | 1.01 |
| 189 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 3.00 | 0.36 | 0.38 | 2.25 | 1.89 |
| 190 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 3.00 | 0.56 | 0.55 | 0.30 | -0.02 |
| 191 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 12.00 | 12.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 0.67 | 0.66 | 8.16 | 8.42 |
| 192 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 18.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 3.60 | 3.64 | 5.95 | 5.86 |
| 193 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 5.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 10.00 | 0.61 | 0.63 | 3.92 | 3.75 |
| 194 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 17.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 8.18 | 8.31 | 14.71 | 14.94 |
| 195 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 7.86 | 7.88 | 22.50 | 22.78 |
| 196 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 5.54 | 5.61 | 18.78 | 19.04 |
| 197 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 20.00 | 0.39 | 0.38 | 10.13 | 10.13 |
| 198 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 11.00 | 11.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 4.00 | 4.21 | 4.20 | 23.43 | 23.49 |
| 199 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 4.00 | 1.30 | 1.28 | 6.79 | 6.94 |
| 200 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 3.00 | 1.07 | 1.08 | 5.39 | 4.90 |
| 201 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 6.00 | 6.02 | 20.25 | 20.90 |
| 202 | 0.26 | 1050.00 | 183.00 | 1.88 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 3.95 | 3.94 | 18.57 | 18.77 |
| 203 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 13.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 30.00 | 0.98 | 1.00 | 8.72 | 8.67 |
| 204 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 20.00 | 0.07 | 0.08 | 0.65 | 0.47 |
| 205 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 30.00 | 30.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 3.34 | 3.42 | 19.14 | 19.78 |
| 206 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 18.00 | 18.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 0.11 | 0.10 | 1.56 | 1.23 |
| 207 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 6.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 0.32 | 0.29 | 0.48 | 0.17 |
| 208 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 13.00 | 13.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 5.95 | 5.96 | 28.30 | 28.94 |
| 209 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 0.84 | 0.89 | 3.12 | 2.85 |
| 210 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 25.00 | 0.08 | 0.06 | 0.77 | 0.71 |
| 211 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 11.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 20.00 | 0.96 | 0.97 | 8.57 | 8.26 |
| 212 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 12.00 | 12.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 0.43 | 0.42 | 4.89 | 4.70 |
| 213 | 0.18 | 555.00 | 118.61 | 3.63 | 4.40 | 5.00 | 9.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 2.83 | 3.23 | 14.31 | 14.61 |
| 214 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 25.00 | 3.54 | 3.55 | 10.73 | 10.31 |
| 215 | 0.32 | 1130.00 | 500.00 | 1.00 | 2.33 | 7.00 | 21.00 | 10.29 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.50 | 30.00 | 0.62 | 0.62 | 3.64 | 3.50 |
| 216 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 12.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 10.37 | 10.53 | 28.50 | 29.13 |
| 217 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 1.00 | 0.31 | 0.28 | 0.56 | -0.09 |
| 218 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 5.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 5.00 | 0.48 | 0.46 | 2.19 | 1.79 |
| 219 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 0.81 | 0.78 | 3.03 | 2.70 |
| 220 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 18.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 6.14 | 6.14 | 10.66 | 10.31 |
| 221 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 30.00 | 2.43 | 2.45 | 0.32 | 0.67 |
| 222 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 20.00 | 5.55 | 5.78 | 16.52 | 16.68 |
| 223 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 16.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 4.11 | 4.14 | 6.85 | 6.85 |
| 224 | 0.40 | 830.00 | 70.69 | 1.07 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.78 | 1.78 | 1.00 | 0.54 |
| 225 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 15.00 | 0.54 | 0.52 | 9.51 | 9.67 |
| 226 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 12.00 | 26.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 3.00 | 3.08 | 19.28 | 19.86 |
| 227 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 26.54 | 26.39 | 60.96 | 60.71 |
| 228 | 0.18 | 555.00 | 118.61 | 3.63 | 4.40 | 4.00 | 9.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 3.73 | 3.71 | 18.82 | 18.27 |
| 229 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 6.38 | 6.40 | 20.98 | 21.09 |
| 230 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 27.00 | 27.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 1.17 | 1.15 | 3.00 | 2.21 |
| 231 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 30.00 | 0.39 | 0.45 | 13.41 | 13.04 |
| 232 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 8.50 | 10.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.63 | 0.57 | 8.68 | 8.54 |
| 233 | 0.51 | 1018.00 | 25.63 | 1.00 | 2.20 | 8.00 | 15.00 | 25.00 | 0.25 | 2.00 | 30.00 | 2.00 | 1.08E-08 | 3.00 | 15.00 | 0.60 | 0.59 | 8.71 | 8.68 |
| 234 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 16.00 | 16.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 0.36 | 0.36 | 4.34 | 3.97 |
| 235 | 0.35 | 650.00 | 163.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.80 | 0.79 | 23.98 | 24.55 |
| 236 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 0.50 | 0.53 | 1.88 | 1.58 |
| 237 | 0.58 | 350.00 | 13.50 | 0.20 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.47 | 1.46 | 8.24 | 8.11 |
| 238 | 0.75 | 740.00 | 10.40 | 1.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 20.00 | 3.88 | 4.05 | 23.95 | 24.87 |
| 239 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 10.00 | 1.82 | 1.80 | 5.55 | 5.19 |
| 240 | 0.75 | 740.00 | 10.40 | 2.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 20.00 | 2.82 | 2.87 | 18.85 | 18.84 |
| 241 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 20.00 | 1.87 | 1.80 | 0.32 | -0.19 |
| 242 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 20.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 3.15 | 3.09 | 5.17 | 4.98 |
| 243 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 0.75 | 0.67 | 2.78 | 2.33 |
| 244 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 4.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 0.54 | 0.61 | 0.85 | 0.70 |
| 245 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 10.00 | 10.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 1.95 | 1.95 | 24.17 | 24.51 |
| 246 | 0.67 | 830.00 | 25.45 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 5.00 | 0.69 | 0.66 | 1.73 | 0.92 |
| 247 | 0.67 | 830.00 | 25.45 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 10.00 | 0.93 | 0.97 | 2.93 | 2.93 |
| 248 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 10.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 1.00 | 1.03 | 10.80 | 11.08 |
| 249 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 4.00 | 0.37 | 0.37 | 2.85 | 2.68 |
| 250 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 8.00 | 8.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 1.74 | 1.73 | 22.25 | 22.92 |
| 251 | 0.07 | 1000.00 | 63.62 | 4.50 | 15.00 | 8.00 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.51 | 1.48 | 12.31 | 12.05 |
| 252 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 5.00 | 0.47 | 0.39 | 1.99 | 1.14 |
| 253 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 10.00 | 0.73 | 0.73 | 12.49 | 12.44 |
| 254 | 0.34 | 1800.00 | 99.60 | 1.00 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.92 | 3.92 | 35.55 | 35.46 |
| 255 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 15.00 | 0.07 | 0.06 | 0.58 | 0.50 |
| 256 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 7.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 8.20 | 8.26 | 25.30 | 25.61 |
| 257 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 11.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 10.00 | 0.70 | 0.65 | 4.61 | 4.48 |
| 258 | 0.32 | 1130.00 | 500.00 | 1.00 | 2.33 | 10.00 | 21.00 | 10.29 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.50 | 30.00 | 0.41 | 0.38 | 2.35 | 1.68 |
| 259 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 5.00 | 0.75 | 0.75 | 0.30 | -0.05 |
| 260 | 0.98 | 959.50 | 10492.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 10.00 | 0.90 | 0.88 | 13.10 | 12.92 |
| 261 | 0.50 | 1300.00 | 29.41 | 1.00 | 2.30 | 10.00 | 25.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 20.00 | 3.00 | 2.87 | 9.10 | 8.97 |
| 262 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 15.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 12.53 | 12.60 | 24.99 | 25.27 |
| 263 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 10.00 | 5.85 | 5.73 | 17.33 | 17.31 |
| 264 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 10.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.65 | 0.70 | 9.69 | 10.66 |
| 265 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 10.00 | 0.14 | 0.12 | 1.87 | 1.44 |
| 266 | 0.33 | 830.00 | 101.80 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 15.00 | 1.17 | 1.10 | 5.56 | 5.53 |
| 267 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 20.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 6.69 | 6.59 | 11.39 | 11.15 |
| 268 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 10.00 | 4.22 | 4.22 | 23.22 | 23.28 |
| 269 | 0.38 | 1130.00 | 54.00 | 1.00 | 2.26 | 9.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.58 | 0.55 | 2.06 | 1.53 |
| 270 | 0.75 | 740.00 | 10.40 | 1.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 10.00 | 1.71 | 1.69 | 12.86 | 12.88 |
| 271 | 0.50 | 1700.00 | 29.41 | 1.00 | 2.30 | 14.00 | 32.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 25.00 | 6.65 | 6.55 | 19.60 | 19.72 |
| 272 | 0.75 | 740.00 | 10.40 | 3.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 20.00 | 2.20 | 2.15 | 15.57 | 15.79 |
| 273 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 4.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 4.00 | 4.10 | 30.00 | 31.51 |
| 274 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 2.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 6.00 | 6.62 | 38.50 | 43.13 |
| 275 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 30.00 | 4.81 | 4.71 | 26.48 | 27.09 |
| 276 | 0.10 | 1000.00 | 42.41 | 4.50 | 15.00 | 8.00 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.36 | 1.36 | 11.27 | 11.20 |
| 277 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 12.00 | 12.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 1.38 | 1.27 | 16.93 | 15.91 |
| 278 | 0.33 | 830.00 | 101.80 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 5.00 | 0.74 | 0.71 | 2.15 | 2.10 |
| 279 | 0.50 | 830.00 | 45.24 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 5.00 | 0.72 | 0.70 | 1.84 | 1.39 |
| 280 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 10.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 0.45 | 0.47 | 0.68 | 0.51 |
| 281 | 0.75 | 740.00 | 10.40 | 2.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 1.00 | 0.15 | 0.16 | 2.01 | 1.46 |
| 282 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 2.00 | 1.40 | 1.32 | 7.38 | 7.28 |
| 283 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 0.21 | 0.21 | 3.23 | 2.69 |
| 284 | 0.50 | 2500.00 | 29.41 | 1.00 | 2.30 | 20.00 | 48.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 20.00 | 16.80 | 16.93 | 46.46 | 47.21 |
| 285 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 18.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 7.65 | 7.71 | 13.54 | 13.30 |
| 286 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 9.00 | 9.00 | 27.76 | 15.90 |
| 287 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 10.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 0.05 | 0.00 | 0.05 | -0.64 |
| 288 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 0.59 | 0.65 | 2.21 | 2.12 |
| 289 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 4.90 | 4.93 | 16.75 | 16.80 |
| 290 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 11.00 | 11.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 7.41 | 7.45 | 39.10 | 39.86 |
| 291 | 0.40 | 830.00 | 70.69 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 15.00 | 1.16 | 1.16 | 4.88 | 4.07 |
| 292 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 19.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 10.00 | 7.16 | 7.26 | 12.43 | 12.34 |
| 293 | 0.98 | 959.50 | 10492.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 5.00 | 0.56 | 0.54 | 7.60 | 8.02 |
| 294 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 20.00 | 3.83 | 3.87 | 21.13 | 21.21 |
| 295 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 6.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 9.10 | 9.19 | 27.80 | 28.36 |
| 296 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 10.00 | 10.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 1.53 | 1.63 | 19.24 | 20.60 |
| 297 | 0.75 | 740.00 | 10.40 | 3.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 10.00 | 1.16 | 1.15 | 9.55 | 9.03 |
| 298 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 2.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 2.84 | 3.04 | 4.28 | 3.95 |
| 299 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 15.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 5.00 | 7.56 | 7.62 | 13.49 | 13.30 |
| 300 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 10.00 | 10.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 1.11 | 1.07 | 13.88 | 13.71 |
| 301 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 1.08 | 1.08 | 4.02 | 3.83 |
| 302 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 12.00 | 12.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 0.91 | 0.93 | 11.24 | 11.88 |
| 303 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 14.00 | 14.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 0.26 | 0.18 | 2.78 | 1.77 |
| 304 | 0.04 | 1000.00 | 106.03 | 1.50 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.83 | 2.84 | 20.81 | 20.99 |
| 305 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 11.00 | 11.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 5.00 | 4.89 | 4.81 | 26.94 | 26.59 |
| 306 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 20.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 8.87 | 9.05 | 16.01 | 17.19 |
| 307 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 26.00 | 26.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 1.24 | 1.25 | 3.60 | 3.43 |
| 308 | 0.23 | 1800.00 | 99.60 | 0.38 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.40 | 3.44 | 27.50 | 28.41 |
| 309 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 30.00 | 1.02 | 1.00 | 9.32 | 9.23 |
| 310 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 8.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 1.00 | 0.15 | 0.09 | 0.23 | -0.11 |
| 311 | 0.75 | 740.00 | 10.40 | 3.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 5.00 | 0.61 | 0.55 | 5.91 | 5.19 |
| 312 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 1.33 | 1.39 | 4.94 | 4.85 |
| 313 | 0.63 | 1130.00 | 22.00 | 1.00 | 2.26 | 9.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.50 | 0.47 | 2.25 | 1.88 |
| 314 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.00 | 8.50 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.14 | 1.11 | 35.54 | 35.13 |
| 315 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 8.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.29 | 1.26 | 44.13 | 43.83 |
| 316 | 0.09 | 701.00 | 19.98 | 3.63 | 4.40 | 6.00 | 12.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 4.49 | 4.84 | 27.83 | 31.75 |
| 317 | 0.48 | 1130.00 | 36.00 | 1.00 | 2.26 | 9.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.55 | 0.60 | 2.17 | 1.80 |
| 318 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 17.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 3.84 | 3.90 | 6.39 | 6.25 |
| 319 | 0.66 | 860.00 | 21.00 | 1.50 | 2.40 | 6.00 | 18.00 | 10.72 | 0.25 | 2.21 | 48.43 | 1.68 | 3.00E-09 | 4.48 | 30.00 | 3.00 | 3.00 | 22.20 | 23.14 |
| 320 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 16.00 | 16.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 0.20 | 0.14 | 2.29 | 1.26 |
| 321 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 0.91 | 0.88 | 3.39 | 3.11 |
| 322 | 0.63 | 937.40 | 12841.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 5.00 | 0.40 | 0.37 | 4.90 | 4.45 |
| 323 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 14.00 | 14.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 4.00 | 2.29 | 2.28 | 12.59 | 12.45 |
| 324 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 3.92 | 3.96 | 13.59 | 13.65 |
| 325 | 0.75 | 740.00 | 10.40 | 2.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 5.00 | 0.66 | 0.67 | 6.27 | 6.04 |
| 326 | 0.47 | 650.00 | 115.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.51 | 0.53 | 25.73 | 26.00 |
| 327 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 9.67 | 9.71 | 29.00 | 29.54 |
| 328 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 0.64 | 0.62 | 2.37 | 1.94 |
| 329 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 19.00 | 19.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 6.44 | 6.42 | 21.37 | 21.55 |
| 330 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 25.00 | 0.67 | 0.68 | 11.99 | 11.47 |
| 331 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 4.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 1.00 | 0.32 | 0.34 | 0.65 | 0.28 |
| 332 | 0.36 | 2841.00 | 37.00 | 1.00 | 1.85 | 36.00 | 36.00 | 4.79 | 0.27 | 3.53 | 25.47 | 1.40 | 2.89E-10 | 3.96 | 30.00 | 1.47 | 1.56 | 8.90 | 9.64 |
| 333 | 0.75 | 740.00 | 10.40 | 2.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 30.00 | 4.27 | 4.22 | 25.64 | 26.18 |
| 334 | 0.50 | 830.00 | 45.24 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 10.00 | 0.95 | 0.91 | 3.22 | 3.15 |
| 335 | 0.26 | 1050.00 | 131.00 | 1.88 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 3.43 | 3.46 | 16.20 | 16.68 |

**Table A3.** Salt cavern energy storage stability assessment database test set.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | S/L | CD | CV | PW | SG | LP | HP | E | V | C | F | T | A | n | t | MD | Predicted MD | RV | Predicted RV |
| 1 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 18.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 10.13 | 9.76 | 19.20 | 19.37 |
| 2 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 6.33 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.28 | 2.23 | 16.29 | 17.08 |
| 3 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 32.00 | 32.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 0.98 | 0.81 | 3.63 | 3.30 |
| 4 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 11.55 | 11.76 | 34.30 | 27.09 |
| 5 | 0.75 | 740.00 | 10.40 | 2.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 10.00 | 1.28 | 1.43 | 10.35 | 9.79 |
| 6 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 3.02 | 3.07 | 10.67 | 11.54 |
| 7 | 0.58 | 100.00 | 8.59 | 1.00 | 2.30 | 1.18 | 1.18 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 5.00 | 0.06 | -0.03 | 0.26 | -0.51 |
| 8 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 8.00 | 8.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 3.13 | 3.27 | 38.16 | 38.30 |
| 9 | 0.32 | 1130.00 | 80.00 | 1.00 | 2.26 | 7.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.93 | 0.95 | 5.90 | 5.74 |
| 10 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 18.00 | 18.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 0.05 | 0.33 | 0.64 | 1.59 |
| 11 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 23.00 | 23.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 4.00 | 0.66 | 1.10 | 0.30 | 0.59 |
| 12 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 34.00 | 34.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 0.54 | 0.51 | 2.00 | 1.34 |
| 13 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 0.54 | 0.40 | 2.02 | 1.67 |
| 14 | 0.38 | 1130.00 | 54.00 | 1.00 | 2.26 | 7.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.89 | 0.92 | 6.01 | 5.12 |
| 15 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 6.33 | 6.47 | 20.93 | 20.14 |
| 16 | 0.75 | 740.00 | 10.40 | 2.50 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 30.00 | 3.69 | 3.75 | 23.27 | 24.74 |
| 17 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 13.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 10.00 | 0.57 | 0.54 | 3.29 | 3.12 |
| 18 | 0.26 | 1050.00 | 236.00 | 1.88 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 4.24 | 4.06 | 19.80 | 20.47 |
| 19 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 10.00 | 0.38 | 0.38 | 5.99 | 5.78 |
| 20 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 4.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 1.73 | 2.18 | 2.61 | 3.89 |
| 21 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 12.00 | 12.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 6.60 | 6.35 | 33.50 | 32.75 |
| 22 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 20.00 | 0.18 | 0.18 | 2.66 | 1.85 |
| 23 | 0.40 | 830.00 | 70.69 | 0.53 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 2.00 | 1.94 | 0.99 | 1.16 |
| 24 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 16.00 | 16.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 10.00 | 0.15 | 0.35 | 1.44 | 2.10 |
| 25 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 15.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 11.48 | 11.25 | 22.04 | 24.33 |
| 26 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 5.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 30.00 | 1.11 | 1.21 | 10.47 | 9.61 |
| 27 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 12.00 | 26.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 3.11 | 3.08 | 19.81 | 19.86 |
| 28 | 0.04 | 1000.00 | 106.03 | 1.00 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.94 | 3.11 | 21.44 | 23.20 |
| 29 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 25.00 | 8.39 | 8.36 | 26.67 | 22.17 |
| 30 | 0.04 | 1000.00 | 106.03 | 3.00 | 15.00 | 6.90 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 2.62 | 2.41 | 19.72 | 18.79 |
| 31 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 8.50 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 1.11 | 1.11 | 33.78 | 32.83 |
| 32 | 0.26 | 1050.00 | 295.00 | 2.04 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 4.37 | 4.58 | 20.47 | 20.83 |
| 33 | 0.58 | 350.00 | 13.50 | 1.20 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.51 | 1.40 | 8.74 | 7.82 |
| 34 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 11.00 | 11.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 1.00 | 1.63 | 2.45 | 8.73 | 12.80 |
| 35 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 4.34 | 4.29 | 14.82 | 15.87 |
| 36 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 19.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 9.47 | 9.55 | 17.54 | 19.23 |
| 37 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 21.00 | 21.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 30.00 | 5.26 | 5.39 | 17.45 | 16.30 |
| 38 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 5.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 20.00 | 0.86 | 0.93 | 7.23 | 6.69 |
| 39 | 0.37 | 1600.00 | 72.35 | 1.00 | 2.19 | 25.00 | 25.00 | 7.71 | 0.38 | 5.77 | 34.00 | 0.00 | 2.83E-09 | 3.60 | 30.00 | 1.31 | 1.21 | 4.30 | 4.90 |
| 40 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 11.00 | 11.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 3.00 | 3.44 | 3.43 | 19.27 | 21.56 |
| 41 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 12.00 | 12.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 40.00 | 1.15 | 0.96 | 14.06 | 15.23 |
| 42 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 20.00 | 1.20 | 1.35 | 3.73 | 4.34 |
| 43 | 0.75 | 740.00 | 10.40 | 2.00 | 15.05 | 6.50 | 17.00 | 2.85 | 0.28 | 5.45 | 30.51 | 1.08 | 3.00E-09 | 4.48 | 1.00 | 0.14 | 0.12 | 1.95 | 1.85 |
| 44 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 30.00 | 30.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 1.19 | 1.10 | 4.42 | 4.38 |
| 45 | 0.38 | 1130.00 | 54.00 | 1.00 | 2.26 | 8.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.69 | 0.78 | 3.95 | 3.17 |
| 46 | 0.40 | 830.00 | 70.69 | 0.80 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.82 | 1.81 | 1.00 | 1.04 |
| 47 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 5.00 | 0.38 | 0.26 | 1.44 | 0.17 |
| 48 | 0.26 | 1050.00 | 322.00 | 2.27 | 2.22 | 7.21 | 19.20 | 3.99 | 0.24 | 1.00 | 32.00 | 1.00 | 2.02E-09 | 3.47 | 30.00 | 4.70 | 4.78 | 21.65 | 21.73 |
| 49 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 5.00 | 12.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 1.00 | 0.31 | 0.41 | 0.61 | -0.14 |
| 50 | 0.36 | 1251.00 | 264.00 | 3.00 | 2.30 | 4.00 | 22.00 | 5.05 | 0.29 | 4.21 | 37.60 | 0.61 | 1.50E-06 | 3.50 | 30.00 | 10.90 | 9.82 | 34.80 | 32.20 |
| 51 | 0.58 | 400.00 | 8.59 | 1.00 | 2.30 | 4.71 | 4.71 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 5.00 | 0.34 | 0.22 | 5.62 | 4.42 |
| 52 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 7.50 | 9.00 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.94 | 0.94 | 24.17 | 24.91 |
| 53 | 0.63 | 937.40 | 12841.30 | 1.00 | 2.36 | 6.00 | 6.00 | 3.99 | 0.24 | 3.15 | 44.50 | 1.04 | 3.00E-09 | 4.48 | 15.00 | 1.10 | 0.89 | 11.80 | 12.27 |
| 54 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 16.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 20.00 | 10.67 | 10.38 | 20.19 | 19.85 |
| 55 | 0.50 | 2100.00 | 29.41 | 1.00 | 2.30 | 17.00 | 40.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 20.00 | 10.07 | 11.30 | 29.29 | 32.81 |
| 56 | 0.31 | 650.00 | 187.56 | 1.00 | 2.30 | 8.00 | 9.50 | 5.16 | 0.31 | 2.00 | 35.00 | 1.00 | 9.82E-08 | 3.50 | 30.00 | 0.78 | 0.87 | 13.83 | 14.18 |
| 57 | 0.40 | 830.00 | 70.69 | 0.67 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.79 | 1.82 | 1.00 | 1.16 |
| 58 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 13.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 1.00 | 0.31 | 0.18 | 0.53 | -1.46 |
| 59 | 0.58 | 200.00 | 8.59 | 1.00 | 2.30 | 2.35 | 2.35 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 25.00 | 0.20 | 0.16 | 2.98 | 2.38 |
| 60 | 0.21 | 1800.00 | 99.60 | 0.25 | 2.42 | 2.42 | 8.00 | 7.71 | 0.30 | 3.57 | 34.00 | 1.34 | 1.08E-08 | 3.17 | 30.00 | 3.27 | 3.44 | 26.60 | 28.41 |
| 61 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 14.00 | 14.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 50.00 | 0.74 | 0.84 | 9.03 | 9.35 |
| 62 | 0.40 | 830.00 | 70.69 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 20.00 | 1.32 | 1.86 | 6.04 | 2.45 |
| 63 | 0.40 | 830.00 | 70.69 | 1.00 | 2.80 | 16.00 | 16.00 | 3.00 | 0.30 | 10.00 | 21.72 | 1.00 | 8.48E-09 | 3.00 | 5.00 | 0.74 | 0.77 | 2.00 | 1.97 |
| 64 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 19.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 3.36 | 3.40 | 5.55 | 5.96 |
| 65 | 0.62 | 930.00 | 43.54 | 1.00 | 2.40 | 0.00 | 6.00 | 3.99 | 0.24 | 5.45 | 30.51 | 1.04 | 3.00E-09 | 4.48 | 30.00 | 1.05 | 1.57 | 1.59 | 3.09 |
| 66 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 36.00 | 36.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 10.00 | 0.46 | 0.36 | 1.71 | 1.47 |
| 67 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 8.00 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.72 | 1.86 | 13.61 | 14.86 |
| 68 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 16.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 30.00 | 11.66 | 11.36 | 22.90 | 21.06 |
| 69 | 0.63 | 1130.00 | 22.00 | 1.00 | 2.26 | 8.00 | 21.00 | 17.38 | 0.28 | 2.90 | 36.00 | 1.60 | 3.25E-06 | 3.50 | 30.00 | 0.61 | 0.71 | 4.25 | 4.02 |
| 70 | 0.51 | 1018.00 | 25.63 | 1.00 | 2.20 | 8.00 | 15.00 | 25.00 | 0.25 | 2.00 | 30.00 | 2.00 | 1.08E-08 | 3.00 | 20.00 | 0.73 | 1.68 | 10.56 | 14.56 |
| 71 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 17.00 | 17.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 15.00 | 7.27 | 7.41 | 23.51 | 23.81 |
| 72 | 0.50 | 900.00 | 29.41 | 1.00 | 2.30 | 7.00 | 17.00 | 10.27 | 0.30 | 1.93 | 37.50 | 1.20 | 3.25E-06 | 3.52 | 30.00 | 1.61 | 2.18 | 4.94 | 7.20 |
| 73 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 16.00 | 16.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 10.00 | 2.45 | 2.65 | 13.50 | 14.03 |
| 74 | 0.51 | 1018.00 | 25.63 | 1.00 | 2.20 | 8.00 | 15.00 | 25.00 | 0.25 | 2.00 | 30.00 | 2.00 | 1.08E-08 | 3.00 | 10.00 | 0.47 | 0.84 | 6.63 | 7.04 |
| 75 | 0.43 | 1888.00 | 68.00 | 1.00 | 2.30 | 15.00 | 15.00 | 6.37 | 0.27 | 2.42 | 41.30 | 0.94 | 5.08E-14 | 8.05 | 20.00 | 10.37 | 10.55 | 31.15 | 33.55 |
| 76 | 0.42 | 1000.00 | 30.20 | 1.00 | 2.44 | 18.00 | 18.00 | 12.92 | 0.29 | 2.00 | 30.00 | 2.00 | 1.02E-08 | 3.00 | 2.00 | 0.36 | 0.34 | 1.62 | 1.15 |
| 77 | 0.58 | 500.00 | 8.59 | 1.00 | 2.30 | 5.89 | 5.89 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 25.00 | 1.09 | 1.18 | 18.55 | 17.41 |
| 78 | 0.04 | 1000.00 | 106.03 | 4.50 | 15.00 | 8.05 | 18.00 | 8.20 | 0.30 | 1.00 | 37.50 | 1.00 | 1.12E-52 | 3.50 | 30.00 | 1.73 | 1.86 | 13.45 | 14.86 |
| 79 | 0.67 | 1962.50 | 20.30 | 1.00 | 2.25 | 15.00 | 32.00 | 3.50 | 0.37 | 1.60 | 41.00 | 1.00 | 6.11E-10 | 3.96 | 1.00 | 4.40 | 4.31 | 7.37 | 7.43 |
| 80 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 18.00 | 18.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 30.00 | 0.09 | -0.32 | 1.27 | -0.33 |
| 81 | 0.25 | 1055.00 | 6.58 | 1.00 | 2.30 | 18.00 | 18.00 | 15.00 | 0.30 | 1.00 | 35.00 | 1.00 | 6.00E-06 | 3.50 | 20.00 | 0.07 | -0.25 | 0.96 | -0.74 |
| 82 | 0.51 | 730.00 | 33.60 | 1.00 | 0.70 | 6.00 | 13.00 | 6.84 | 0.21 | 8.40 | 39.30 | 1.38 | 9.00E-07 | 2.62 | 5.00 | 0.44 | 0.17 | 1.86 | 0.46 |
| 83 | 0.58 | 350.00 | 13.50 | 0.80 | 1.20 | 4.10 | 4.10 | 1.39 | 0.28 | 1.78 | 45.64 | 1.22 | 1.12E-06 | 1.13 | 30.00 | 1.49 | 1.47 | 8.53 | 8.18 |
| 84 | 0.18 | 555.00 | 118.61 | 3.63 | 4.40 | 4.00 | 9.00 | 15.37 | 0.27 | 5.13 | 38.70 | 1.38 | 9.60E-08 | 4.15 | 30.00 | 3.49 | 3.71 | 18.61 | 18.27 |