# Core Performance Benchmarking
## Edwin I. Hatch Nuclear Plant Unit 1, Cycle 1

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**NP-1235**
**Research Project 1178-1**

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# EPRI PERSPECTIVE

## PROJECT DESCRIPTION

The qualification process for nuclear reactor core simulation requires benchmarking in the course of the methodology development. In anticipation of this general requirement, EPRI has funded a number of contracts that have culminated in documents summarizing various aspects of experimental data related to light water reactor (LWR) operation. In particular, EPRI Report NP-511 summarizes measurements related to the core power distribution of the Edwin I. Hatch Nuclear Plant Unit 1 at the end of the first cycle of operations. The latter data, in conjunction with other cycle 1 information summarized in EPRI reports NP-540 and NP-562 and processed by Southern Company Services technical staff, form the experimental data compared with analysis in this report.

## PROJECT OBJECTIVES

In the course of developing a unified system for LWR core physics analysis, EPRI had initially sponsored the Advanced Recycle Methodology Program (ARMP). This development included an elegant assembly analysis code, CPM, as well as separate nodal codes for pressurized and boiling water reactors (PWRs and BWRs). In later development, EPRI had sponsored the advanced nodal core code, SIMULATE. EPRI has assisted in the distribution of an assembly analysis code, CASMO, which is more user-oriented in its input and output even though it retains the accuracy of CPM. The work in this report constitutes the first combined application of CASMO and SIMULATE to BWR benchmarking. As particular geometric, nuclear, and thermal-

hydraulic approximations peculiar to BWRs are refined, we expect iterations of the comparisons embodied in this report.

## PROJECT RESULTS

Reasonable agreement between analysis and experiment is documented in this report. Those differences that exist tend to show that analytic results will generally be conservative from the standpoint of safety considerations. Nevertheless, the results have already, and will in the future, stimulate efforts to close gaps between experiment and analysis in terms of power distribution and state-point reactivities. Information similar to that in EPRI NP-511 has been collected for another BWR in EPRI NP-214; EPRI NP-240 provides the balance of the experimental data for this other BWR. Analogous PWR information is summarized in EPRI documents NP-509, NP-827, NP-79-2-LD, and NP-1252.

The content and conclusions of this report, and further work stemming from it should be of interest to utility engineers involved in BWR operational analysis and fuel management and safety analysis. Analysts in industry, government and universities interested in various aspects of BWR core physics will also find this report of interest.

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## ABSTRACT

In order to qualify the CASMO-SIMULATE system for BWR core analysis, the codes were used to model cycle 1 of Hatch 1. Comparisons of the SIMULATE results were made to gamma scan measurements at the end of cycle 1 and to the process computer at selected state points throughout the cycle to evaluate SIMULATE's ability to predict power distributions and reactivity in an operating BWR.

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# 1.0 INTRODUCTION

The ability to achieve maximum energy output from a nuclear power reactor core at minimum cost is strongly dependent on the optimization of the core design and operating strategy for the reactor core. For many years, boiling water reactor (BWR) owners were totally dependent upon the reactor vendor for core design and management services because the computer programs required to perform the necessary analyses were not available. Many light water reactor owners recognized the economic advantages of having the in-house capability to evaluate vendor designs and recommendations and perform independent analyses to support and improve the day-to-day operation of the plant. To fill the utilities' needs in this area, the Electric Power Research Institute (EPRI) has sponsored the development of reactor analysis programs collectively known as the Advanced Recycle Methodology Program (ARMP) package. This system of programs can be used for evaluating vendor core designs with respect to the optimization of batch size, enrichment, and loading pattern to minimize fuel costs and maximize operating margins. The programs can also be used to increase the plant capacity factor by providing more detailed optimizations of day-to-day reactor maneuvers than can be obtained from the reactor vendor.

This level of capability was not available from EPRI prior to 1978, when two new programs were released which significantly advanced the state of the art of reactor analysis. These two programs are the basic tools needed to perform reactor physics calculations. The first code, CASMO[1], a lattice physics program which calculates the nuclear characteristics of each type of fuel in a reactor core, was developed by Studsvik Energiteknik AB of Sweden. The second code uses the CASMO output to simulate and predict the detailed behavior of the nuclear reactor core. This program, SIMULATE[2], was developed by Yankee

Atomic Electric Company and Rensselaer Polytechnic Institute under EPRI sponsorship.

Before these programs can be used to design cores and support plant operation, they must be verified to correctly predict the detailed power distribution in the core. This validation must be accomplished by comparing the calculation results to measurements made at operating plants. This benchmarking is required to determine the uncertainty in the calculations and to define the areas where methods development should be directed. Minimizing the uncertainty in the calculations reduces the required operating margin to the safety limits, simultaneously increasing the capacity factor and the safety of the plant. The objective of EPRI project RP1178-1 is to qualify these codes for BWR analysis by comparison to measurements made at Edwin I. Hatch Nuclear Plant Unit 1 (Hatch 1).

The gamma scan performed by General Electric at Hatch 1 at the end of cycle 1 under EPRI project RP130-3[3] provides the most comprehensive set of power distribution data currently available for a BWR. Because the plant was shut down before it reached the end of full power reactivity, the end of cycle rod pattern produced a power distribution which is more representative of an operating BWR than those benchmarked in previous gamma scan measurements. The 106 bundles gamma scanned include a complete octant of the core and six four-bundle cells chosen to determine any real power asymmetries. Comparisons between the gamma scan data and SIMULATE allow detailed evaluations of the predictions of the axial and radial power shapes and albedos; individual bundle axial power shapes; axial, radial, and nodal peaking factors; and power sharing between controlled and uncontrolled bundles. The results of these comparisons may be used to define the current uncertainties in the

calculations, as well as to suggest areas for improvement in future development projects.

Because the gamma scan represents only one operating state at the end of cycle, the behavior of the calculated power distribution throughout the cycle was tracked by comparing SIMULATE and process computer core average axial power distributions at seven selected state points. These results verify the consistency of the SIMULATE calculation over a large range of operating conditions.

## 2.0 SUMMARY AND CONCLUSIONS

The SIMULATE comparisons to the gamma scan and process computer power distributions provide a complete evaluation of the predictive capabilities of the code. Because the results achieved with SIMULATE depend as much on the input nuclear properties of the fuel as on the methods actually programmed into the code, these comparisons implicitly qualify the CASMO calculation of lattice average parameters, as well as the SIMULATE methods, and demonstrate the compatibility of the two codes. Although the comparisons indicate areas where methods development is needed, the results show that SIMULATE is adequate for core management, provided that the known biases are taken into account in interpreting the output. In addition, the user oriented features of both programs allow core analyses to be performed with a reasonable amount of engineering effort. The major conclusions derived from these comparisons are summarized below.

1. The agreement between the SIMULATE and gamma scan core average axial distributions is reasonable. Although fairly significant differences are observed in the center region of the core, the axial peak is conservatively overestimated analytically by 5.6%.

2. Comparisons with the process computer core average axial distributions throughout the cycle indicate a general tendency toward underpredicting the peak in bottom peaked distributions and overpredicting it in the top peaked distributions. The magnitude of the difference at the peak is generally less than 10%. This accuracy is adequate for core management purposes; however, methods development should be directed toward reducing the bias in the axial shape.

3. The radial agreement between the gamma scan and SIMULATE is very good for interior bundles, as evidenced by a bias and standard deviation of 1.2% $\pm$ 1.8%. The edge bundles, however, are significantly underpredicted. The observed 15% bias cannot be improved by adjusting the radial albedos without introducing errors into the interior distribution.

4. Radial comparisons at each plane indicate an increase in the edge bundle bias with core height which cannot be removed with the current methods. Void dependent radial albedos or reflector spectral corrections will be required to model the edge effects more correctly.

5. The uncertainty in the calculated nodal Ba-140 distribution of 9.4% is within a reasonable range; however, the SIMULATE peak node, located above the tip of a deep control blade, is 11% higher than the measured peak. This overconservatism is consistent with the overall axial bias in the calculation.

6. An evaluation of the power sharing between controlled and uncontrolled nodes indicates that 4-5% too much power is allocated to controlled nodes relative to their uncontrolled neighbors in the half controlled region in the bottom of the core. In the region above the tips of the shallow blades, the overprediction is 2-3%.

7. An examination of the individual bundle axial comparisons indicates that the power rise above the shallow blade tips is generally underestimated, while the peaking above deep blades is overestimated. The observed differences appear to be due more to

the overall miscalculation of the axial shape than to localized blade effects.

8. The cycle 1 critical eigenvalue behavior was inconsistent. The average $k_{eff}$ excluding the points less than 1000 MWd/t is 0.9905 $\pm$ 0.0023. Two periods of relatively constant eigenvalue are bisected by very erratic behavior immediately after bypass hole plugging. A $k_{eff}$ rise near the end of cycle of approximately 0.3-0.4% $\Delta k$ was observed.

9. Based on the SIMULATE results summarized in Paragraphs 1 through 8 above, the CASMO cross sections are reasonably accurate. However, significant differences between CASMO and CPM $k_\infty$ curves were observed for a high gadolinia lattice. These differences are partially attributable to input procedure differences, such as thermal expansion of the bundle dimensions and the inclusion of a spacer. The remaining differences (up to 0.006 $\Delta k$) must be due to differences between the CASMO and CPM physics models. Since consistent cross sections must be used for all fuel types in SIMULATE, special caution must be exercised if both CASMO and CPM cross sections are to be input. The input procedures used to run the two codes must be consistent, and $k_\infty$ differences due to the physics models should be evaluated for each lattice type. Although close agreement between CPM and CASMO may be obtained for some lattices containing Gd, the user should not expect similar consistency for all lattice designs.

10. Because of its improved input/output features and execution time, CASMO is the recommended lattice physics code for production use.

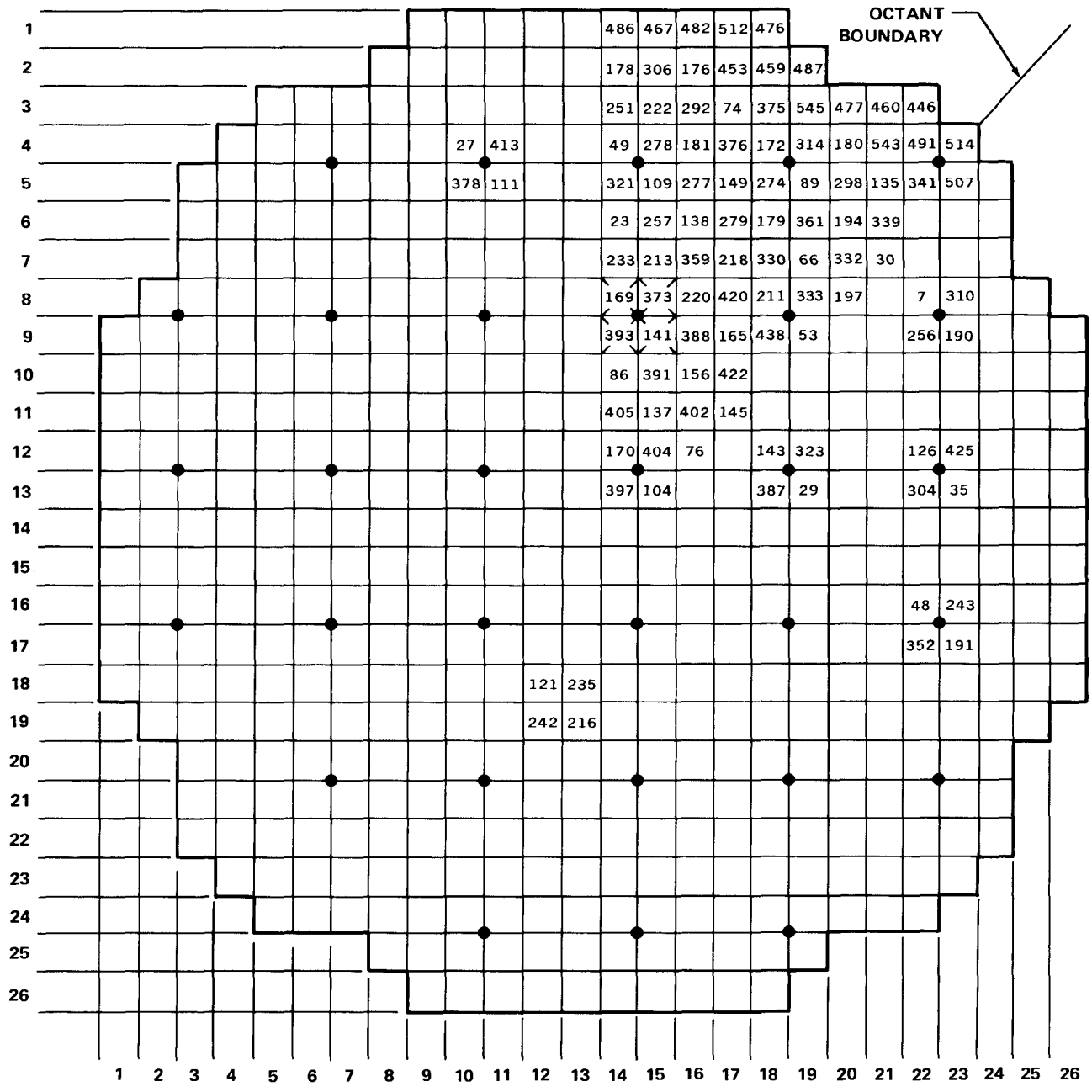
11. The interface code CASIM (soon to be replaced by an updated version named NORGE), which adapts CASMO output for use in SIMULATE, produces functions which accurately represent the CASMO cross sections. The minimal input requirements reduce user errors and the engineering time required to perform these types of analyses.

# 3.0 GAMMA SCAN MEASUREMENTS

Gamma scan measurements of 106 bundles were made by General Electric at the end of cycle 1 in a program jointly sponsored by EPRI and GE. The Hatch 1 measurements, as well as the gamma scan technique and the data acquisition system, are described in detail in Reference 3. For the reader's convenience, a brief discussion of the measurements follows.

The gamma scan system measures the activity of La-140 which has a 40.2 hour half-life. La-140 is produced in the fuel both by direct fission and by the beta decay of Ba-140, another direct fission product, which has a 12.8 day half-life. A few days after the shutdown of the reactor, the La-140 produced by fission decays to insignificant levels, and the Ba-140 and La-140 concentrations equilibrate. After this point, the La-140 concentration decays at a rate determined by the Ba-140 half-life. Thus, the measured La-140 distribution is equivalent to the Ba-140 distribution, and the two expressions are used interchangeably. Because of its 12.8 day half-life, the Ba-140 distribution at the end of cycle represents the core power distribution integrated over approximately the last two months of the cycle.

The 106 bundles gamma scanned are shown in Figure 3-1. Seventy-five of these comprise a complete octant of the core; the additional 31 bundles are located in four-bundle cells around real or pseudo instrument locations symmetric to those in the octant. These cells were chosen to evaluate any real asymmetry in the core. All 106 bundles were measured at a minimum of 12 axial positions, as shown in Table 3-1, which correspond to the midpoints of the odd numbered SIMULATE nodes. Partially controlled bundles were measured at additional positions in the vicinity of the control blade tip. Six bundles were measured at 24 or 27 axial elevations to obtain a detailed profile of the axial Ba-140




BUNDLES DISASSEMBLED FOR ROD SCANNING

● TIP LOCATIONS

HXnnn BUNDLE IDENTIFICATION

Figure 3-1 Gamma Scanned Bundles

TABLE 3-1

GAMMA SCAN MEASUREMENT POSITIONS

| Measurement[1] Elevation | Corresponding SIMULATE Node | Measurement Locations 24-Node Scans | 12-Node Scans | 14-Node Scans[3] |
|---|---|---|---|---|
| 141 | 24 | X | | |
| 135 | 23 | X | X | X |
| 129 | 22 | X | | |
| 123 | 21 | X | X | X |
| 117 | 20 | X | | |
| 111 | 19 | X | X | X |
| 106[2] | 18 | X | | |
| 97[2] | 17 | X | X | X |
| 93 | 16 | X | | X |
| 87 | 15 | X | X | X |
| 82[2] | 14 | X | | X |
| 75 | 13 | X | X | X |
| 69 | 12 | X | | |
| 63 | 11 | X | X | X |
| 57 | 10 | X | | |
| 51 | 9 | X | X | X |
| 45 | 8 | X | | |
| 37[2] | 7 | X | X | X |
| 33 | 6 | X | | |
| 27 | 5 | X | X | X |
| 21 | 4 | X | | |
| 15 | 3 | X | X | X |
| 9 | 2 | X | | |
| 3 | 1 | X | X | X |

1. Distance in inches above bottom of active fuel.
2. Measurement position moved from center of axial node to avoid spacer.
3. Example for a bundle with blade inserted to notch 20. Extra measurements are added in the vicinity of control blade tips.

shape. Four of these, which comprise the four-bundle cell surrounding the instrument tube located at reactor coordinates 2837, were disassembled for single rod scanning to obtain local power distribution measurements. No comparisons to these single rod data are included in this report.

The uncertainty in the measurements is determined from repeated measurements of the standard bundle. The total uncertainty in the nodal Ba-140 intensity quoted in Reference 3 is 1.7%. This value includes the uncertainty associated with representing the activity of a node by the average of the four corner count rates, as well as the single measurement reproducibility. Principles of statistics indicate that bundle average and core average activities would have smaller uncertainties because of the larger number of measurements which contribute to the average count rates.

# 4.0 CYCLE DESCRIPTION

Hatch 1 is a 560-bundle BWR-4 with a rated thermal power of 2436 megawatts. All assemblies loaded in the first cycle were designed with a 2.34 weight percent (w/o) initial average enrichment; the three bundle types differed only in axial gadolinia loading. A complete core characterization and summary of the cycle 1 operating history may be found in Reference 4, which was prepared by General Electric under EPRI contract RP130-3. After approximately 3600 MWd/st of cycle operation, the core support plate bypass flow holes were plugged to reduce the flow induced instrument tube vibrations generic to BWRs. From this point to the end of cycle, the reactor operated with reduced bypass flow. Large TIP asymmetries were observed in the core during cycle 1, primarily after the hole plugging outage. One of the purposes of the gamma scan was to determine if any of the observed asymmetries were real.

The reactor was shut down for the first refueling outage before it reached the end of full power reactivity. Because of the large number of deep and shallow blades still in the core at the end of cycle, the power distribution just before shutdown was representative of a typical first cycle BWR operating state. In order to obtain gamma scan data which closely approximates this power shape, the reactor was operated with a constant rod pattern (Figure 4-1) during the last two months of the cycle, with the exception of short scram recovery periods. The operating history for the last three months is shown in Figure 4-2.

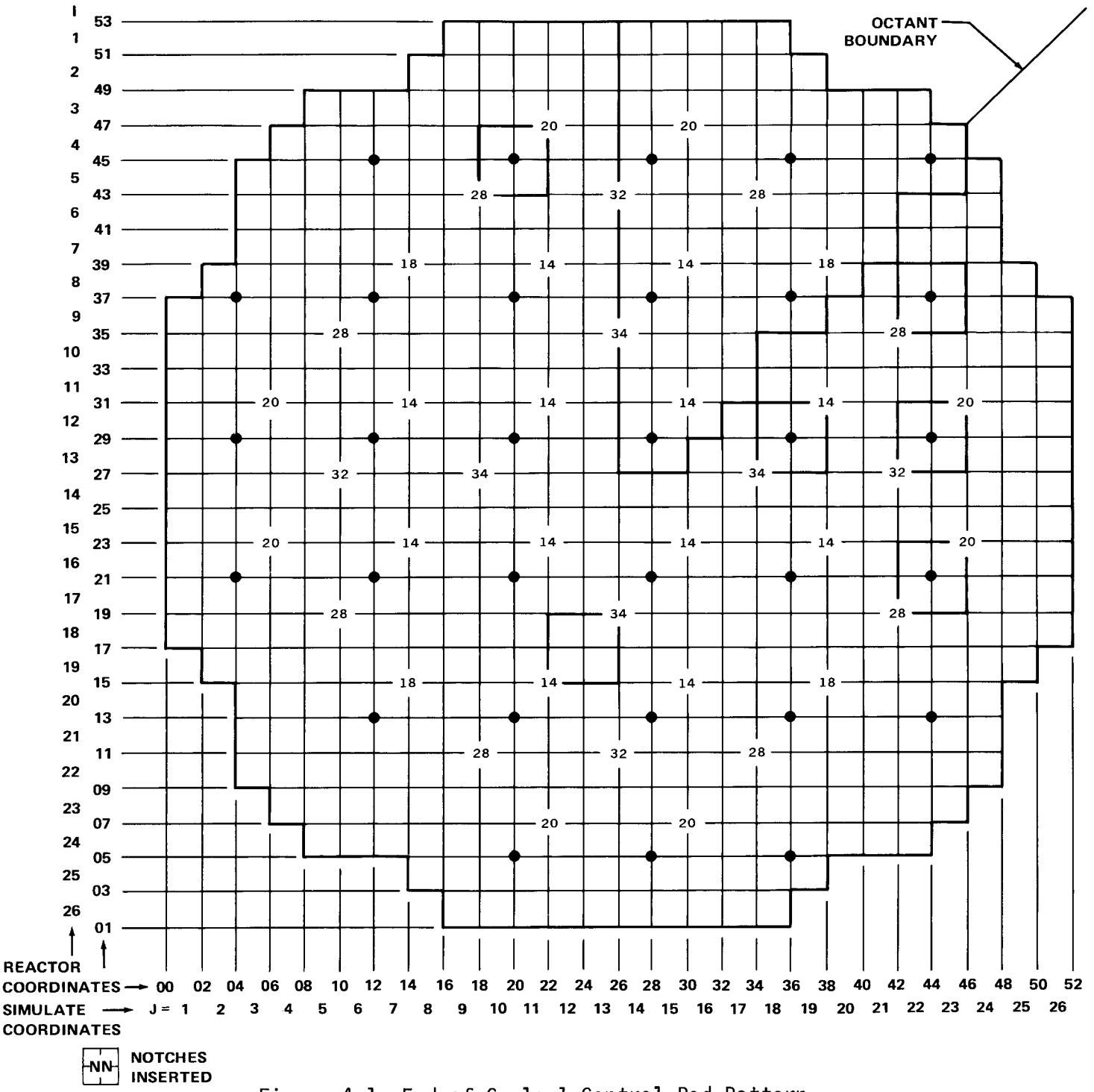



Figure 4-1 End of Cycle 1 Control Rod Pattern

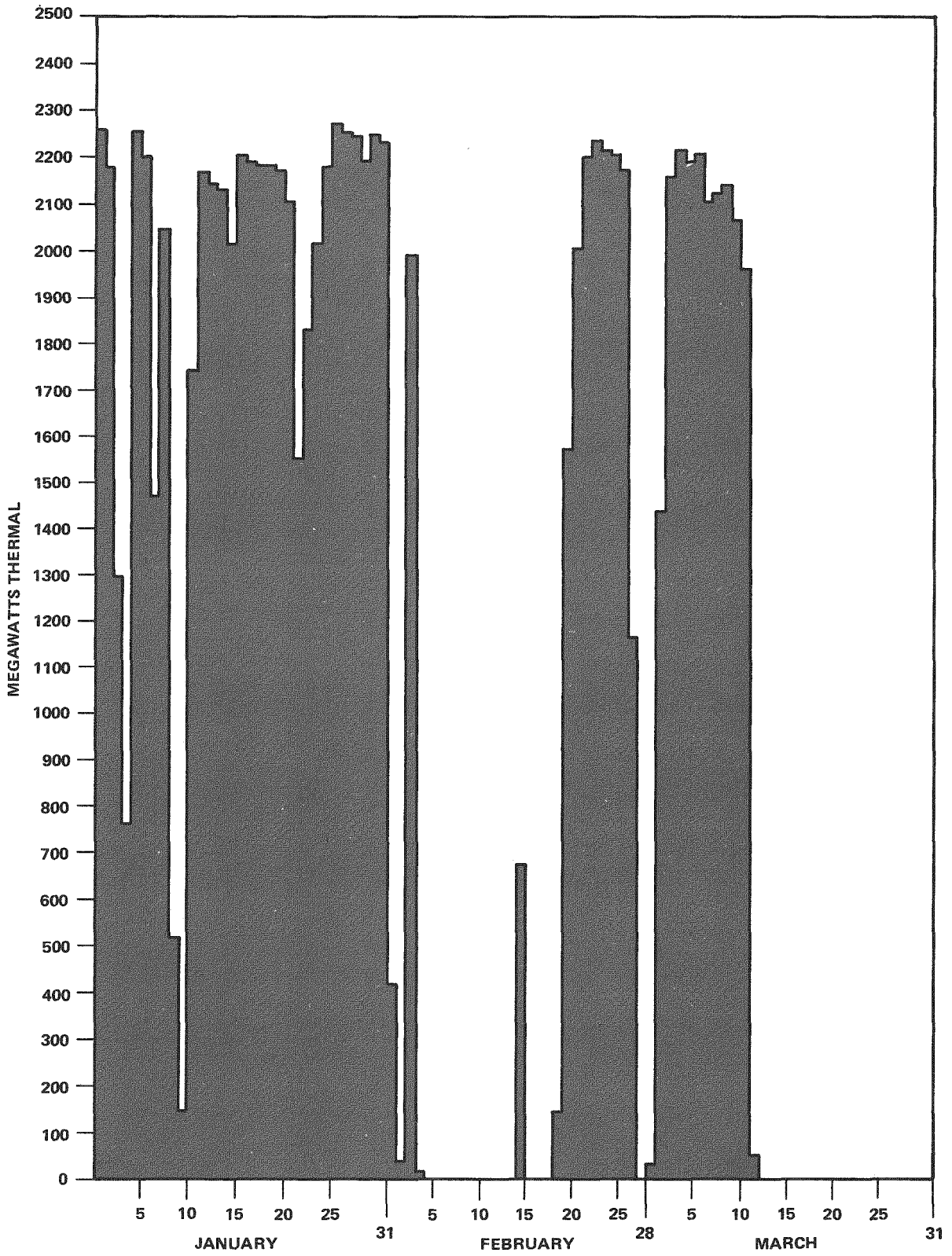



Figure 4-2 Operating History for January, February, and March 1977

# 5.0 CALCULATIONS

## 5.1 Lattice Physics Analysis

The CASMO lattice physics code was used to generate a complete set of the fuel type dependent cross sections for SIMULATE. Preliminary comparisons between CASMO and CPM (CASMO's predecessor) were made to ensure that the CASMO calculations were properly performed. Large differences observed in these comparisons initiated an investigation which resulted in a revision of the CASMO procedures. These analyses are described in more detail in Appendix A.

The generation of cross section tables for the four initial core fuel types required only 12 CASMO runs. Because the default tables of Gd cross sections available with CASMO are valid only for 8 x 8 lattice Gd rods, special MICBURN libraries were run for the 4.0 w/o and 2.5 w/o Gd rods in the Hatch 7 x 7 fuel. Preliminary evaluations indicated that MICBURNs run at 0.0% void fraction should be adequate for all three void levels (0, 40, and 70% void fractions) in CASMO. The CASMO runs also included thermal expansion of the input cold dimensions, a smeared spacer, and a 25-group cross section library. The code automatically adjusts number densities to account for the squaring of channel corners and other rounded structures and uses a leakage spectrum in the depletion calculation. Leakage spectrum cross sections are normally edited on the formatted output file. The mechanical and nuclear characteristics of the lattices were obtained from Reference 4. The lattices were burned at the core average power density of 23.27 W/g with no control blade to the exposures listed in Table 5-1. Branch calculations to determine instantaneous void effects were run at 5.0, 10.0, 15.0, 20.0, and 30.0 GWd/mt with no control blade inserted. Subsequent analyses[5] have indicated that an additional void branch at approximately 1.0 GWd/mt may be desirable for some lattices.

TABLE 5-1

CASMO CASES FOR EACH VOID FRACTION

| Exposure GWd/mt | Uncontrolled Burn | Instantaneous Void Changes $V_0 \rightarrow V_1, V_2$ | Control Blade Inserted | Temperature Change |
|---|---|---|---|---|
| 0 | X | | X | X |
| 0.2 | X | | | |
| 0.5 | X | | | |
| 1.0 | X | | X | |
| 1.5 | X | | | |
| 2.0 | X | | | |
| 2.5 | X | | | |
| 3.0 | X | | X | |
| 3.5 | X | | | |
| 4.0 | X | | | |
| 4.5 | X | | | |
| 5.0 | X | X | X | X |
| 5.5 | X | | | |
| 6.0 | X | | | |
| 6.5 | X | | | |
| 7.0 | X | | | |
| 7.5 | X | | X | |
| 8.0 | X | | | |
| 9.0 | X | | | |
| 10.0 | X | X | X | X |
| 12.5 | X | | | |
| 15.0 | X | X | X | X |
| 17.5 | X | | | |
| 20.0 | X | X | X | X |
| 22.5 | X | | | |
| 25.0 | X | | | |
| 27.5 | X | | | |
| 30.0 | X | X | X | X |
| 40.0 | X | | | |

Control and instantaneous void change effects are assumed to be separable in the interface code, so no controlled instantaneous void cases are necessary. Controlled branches were run at 0.0, 1.0, 3.0, 5.0, 7.5, 10.0, 15.0, 20.0, and 30.0 GWd/mt; however, fewer points would probably be adequate for modeling the blade effects, provided that at least one point between 0.0 and 5.0 GWd/mt is used. Branches to determine the Doppler effect were run with no blade inserted and an instantaneous temperature change to 1124.5°K at exposures of 0.0, 5.0, 10.0, 15.0, 20.0, and 30.0 GWd/mt.

The 54 cases described above may be completed in a single run for each of the three void fractions. A sample listing is given in Appendix B. The base burn and branches provide all the data needed by the interface code CASIM (NORGE) to completely define each cross section as a function of exposure, void history, instantaneous void fraction, control, xenon, and temperature (Doppler). When a control blade history option is added to SIMULATE, additional CASMO calculations will be required to provide data for evaluating the effect. An interface code other than CASIM (such as TABLES) may require a different set of CASMO cases for input, so the user should check the requirements of his fitting code before defining the cases to be run.

Additional CASMO calculations were required to determine the coefficients needed by the SIMULATE bypass boiling model. These constants, input on card type 13, are independent of fuel type, cross section type, and exposure. Therefore, the CASMO cases were run at 0.0 exposure only for fuel type 3, the predominant lattice type in the core. The axial bypass voiding profile shown in Table 5-2 was assumed for the purposes of generating the coefficients.

TABLE 5-2

ASSUMED BYPASS VOID DISTRIBUTION

| In-Channel Void Fraction (V) | Bypass Void Fraction (BV) |
|---|---|
| 0.00 | 0.00 |
| 0.40 | 0.03 |
| 0.70 | 0.12 |

Additional CASMO cases at 0.40V/0.05BV, 0.70V/0.10BV, and 0.70V/0.15BV were run to determine the sensitivity of the function to the assumed bypass void profile. The results, summarized in Table 5-3, indicate that the constants are not sensitive to small bypass void changes, and that the $\Delta k$ due to bypass boiling calculated in SIMULATE is reasonable.

TABLE 5-3

SENSITIVITY OF SIMULATE FITS
TO THE ASSUMED BYPASS VOID DISTRIBUTION

| In-Channel Void Fraction (V) | Bypass Void Fraction (BV) | $k_\infty$ Calculated from Fits | CASMO $k_\infty$ | $\Delta\%$ |
|---|---|---|---|---|
| 0.40 | 0.05 | 1.00860 | 1.00860 | 0.00 |
| 0.70 | 0.10 | 0.97744 | 0.97760 | -0.02 |
| 0.70 | 0.15 | 0.97485 | 0.97453 | -0.03 |

When the bypass boiling option was used in SIMULATE, the core average bypass void edit indicated that the bypass void profile assumed to generate the constants introduced errors of less than 0.001 into the $k_\infty$ calculation, thus confirming the accuracy of the assumption.

## 5.2 CASIM (NORGE)

CASIM[6] was used to generate the two group cross section input on SIMULATE card

types 5 and 31 based on the CASMO formatted output files. In addition, the code calculated quadratic fits of $\nu$ and the iodine, xenon, promethium, and samarium yields versus exposure for input on card type 3. Twenty-three tables (Table 5-4) are required to completely define the nine cross sections using appropriate functions of exposure, relative water density, void history, control, fuel temperature, and xenon number density. Additional tables will be required to account for control blade history when this option is added to SIMULATE. An extended version of CASIM will be released by EPRI as NORGE.

## 5.3 SIMULATE Calculations

The SIMULATE calculations were run using procedures and information which would normally be available to any utility wishing to model a BWR. Standard options available in the version released by EPRI in 1978 were used; no improvements under development were tested in these benchmark calculations. Modifications of the code were made only when they were necessary to allow execution of the problem or when programming corrections were required. Special programming changes were added to accommodate the Ba-140 calculation in the Pm-Sm chain already in SIMULATE. These temporary changes do not affect the neutronics or thermal hydraulics calculations in any way.

The PRESTO (MCMDT) model with no thermal leakage correction was used for the calculation of coupling probabilities from the input two group cross sections. Power-flow fits based on HYDRO (EPRI-THERM-B) calculations were input to approximate the power and flow conditions of the operating states because no flow balancing iterations are available. The EPRI-NODE-B void model and the built-in bypass void model were used in the thermal hydraulics calculations. The inlet subcooling from the process computer P-1 edit was input so that no internal heat balance calculation would be required.

TABLE 5-4

CROSS SECTION FUNCTIONS PRODUCED BY CASIM FOR INPUT TO SIMULATE

| Table No. | Cross Section | Independent Variable 1 in Table | Independent Variable 2 in Table | Independent Variable 3 in Function to be Multiplied by Table |
|---|---|---|---|---|
| 1 | $\Sigma_{tr1}$ | E | U | |
| 2 | $\Sigma_{a1}$ | E | V | |
| 3 | $\Sigma_{a1}$ | E | V | U |
| 4* | $\Sigma_{a1}$ | E | U | |
| 5 | $\Sigma_{a1}$ | E | U | $\sqrt{T_F}$ |
| 6 | $\Sigma_r$ | E | V | |
| 7 | $\Sigma_r$ | E | V | U |
| 8* | $\Sigma_r$ | E | U | |
| 9 | $\nu\Sigma_{f1}$ | E | V | |
| 10 | $\nu\Sigma_{f1}$ | E | V | U |
| 11 | $\kappa\Sigma_{f1}$ | E | V | |
| 12 | $\kappa\Sigma_{f1}$ | E | V | U |
| 13 | $\Sigma_{tr2}$ | E | U | |
| 14 | $\Sigma_{a2}$ | E | V | |
| 15 | $\Sigma_{a2}$ | E | V | U |
| 16* | $\Sigma_{a2}$ | E | U | |
| 17 | $\nu\Sigma_{f2}$ | E | V | |
| 18 | $\nu\Sigma_{f2}$ | E | V | U |
| 19* | $\nu\Sigma_{f2}$ | E | U | |
| 20 | $\kappa\Sigma_{f2}$ | E | V | |
| 21 | $\kappa\Sigma_{f2}$ | E | V | U |
| 22* | $\kappa\Sigma_{f2}$ | E | U | |
| 23 | $\Sigma_{a2}$ | E | U | N(Xe) |

Where

| | |
|---|---|
| E | Exposure in MWd/mt |
| V | Void history |
| U | Instantaneous relative water density |
| $\sqrt{T_F}$ | Square root of the fuel temperature |
| N(Xe) | Xenon number density |

* These tables give $\Delta\Sigma$ due to control as a function of E and U; however, control is not explicitly defined as an independent variable.

The core simulation was run using 24 six-inch axial nodes and half core rotational symmetry; thus, the problem dimensions were 13 x 26 x 24. A problem of this size cannot currently be run on a CDC machine without using the Version 2 source iteration scheme; therefore, the cases were run on the Amdahl 470V/6 II system owned by Southern Company Services, Inc. Central processor time for a half core case was approximately 5-6 minutes. A full core calculation required twice the central processor time and approximately 1200K memory when all possible arrays were placed on disk files.

Core physical dimensions and parameters required in the SIMULATE input were obtained from Reference 4. Nuclear cross section tables and fits of $\nu$ and the Xe and I yields were obtained from the CASIM runs described in Section 5.2. The BWR sample problem listing from Reference 7 was used extensively as a guide for preparing input. Convergence criteria and iteration limits were taken from this sample listing; these criteria are somewhat larger than those recommended in the user's manual and reduce the execution time without an appreciable sacrifice in accuracy. A listing of the BOC independent case input deck is given in Appendix B.

### 5.3.1 Albedos

Determining the proper axial and radial albedos is generally a difficult task in constructing a core model because of the lack of reliable plant data before the beginning of cycle. Although the gamma scan distribution at the end of cycle provides a benchmark against which the results of albedo changes may be evaluated, this information was not used in this effort to determine the boundary conditions because it is not normally available to a utility. Ideally, albedos should be core design and cycle independent. This insensitivity is required because predictive calculations for future cycles

cannot be made if the albedos change from cycle to cycle. Therefore, in the absence of any other information, the albedos from the Vermont Yankee BWR sample problem in Reference 7 were used as a first guess. Because the peripheral geometries of the two cores are similar, the radial albedo array (card type 7) was easily adapted to the Hatch 1 configuration. It was assumed that some adjustment of the axial boundary conditions would be required because the axial node spacing was twice as large in the Vermont Yankee problem as in the Hatch problem. These axial and radial albedos were evaluated by comparing the resulting SIMULATE core average axial and radial power distributions to the equivalent process computer distributions obtained from P-1 and BUCLE[8]. The BUCLE runs were performed by General Electric under EPRI project RP130-3.

The Vermont Yankee axial albedos were determined to be adequate from comparisons at 1800 and 2344 MWd/st. An early operating state comparison which indicated a significant bias was discarded because of some question of the operating state data validity. The SIMULATE process computer radial distribution comparison at 2344 MWd/st showed a significant bias in the peripheral bundle powers. The known bias between the process computer and gamma scan[8] increased the observed bias by an additional 11%. When the radial albedos were adjusted to improve the peripheral bundle powers, the resulting power distribution was severely depressed in the interior high power region. Because this shift in the radial shape results in a probable nonconservative prediction of the peak bundle and nodal powers, it was decided to accept the peripheral bias which results from the Vermont Yankee boundary conditions. In summary, extensive evaluations showed that no improvement could be obtained by adjusting the Vermont Yankee boundary conditions, and, therefore, those albedos were used in all subsequent calculations. These results indicate that

it may be possible to use standard boundary conditions which are cycle and even plant independent. This capability would increase the range of applications for which the code could be accurately and confidently used.

### 5.3.2 Cycle Simulation

In NP-562[4] General Electric provided a list of operating states which could be used to model the operating history of cycle 1 of Hatch 1. Each state point was chosen to be representative of the typical operation over a given time interval. In general, these data sets were used to simulate cycle 1; however, a few alternate points were selected to better approximate the power history of a given period of operation. These operating states are listed in Table 5-5. In all cases, including those from Reference 4, the power, flow, pressure, subcooling, and rod pattern input for SIMULATE were determined from process computer P-1 edits. Bypass flows were also obtained from graphs in Reference 4.

Because there was very little steady state operation during the first 3000 MWd/st of operation, the simulation of that part of the cycle was coarse. Exposure increments used ranged from approximately 100 to 650 MWd/st. However, an accurate simulation would require almost daily operating state data, and exposure increments of this size in a steady state calculation would yield meaningless results. Throughout the cycle, the exposure steps chosen were consistent with those typically used in core management, ranging from 100 to 800 MWd/st, with most increments falling between 200 and 400 MWd/st. (These steps were converted to GWd/mt for input to SIMULATE because the independent variable exposure on card types 5 and 31 was defined in terms of metric tons.)

TABLE 5-5

OPERATING STATES USED FOR THE SIMULATION OF CYCLE 1

| Case No. | Initial Exposure (MWd/st) | Final Exposure (MWd/st) | Operating State Exposure (MWd/st) | Power (MWt) | Flow (Mlb/hr) | Sequence |
|---|---|---|---|---|---|---|
| 1 | 0. | 180. | 180. | 1451. | 50.8 | A |
| 2 | 180. | 280. | 180. | 1451. | 50.8 | A |
| 3 | 280 | 448. | 448. | 1289. | 36.5 | B |
| 4 | 448. | 637. | 567. | 1803. | 76.7 | A |
| 5 | 637. | 944. | 637. | 1218. | 34.5 | A |
| 6 | 944. | 1163. | 1163. | 2189. | 68.0 | A |
| 7 | 1163. | 1480. | 1163. | 2189. | 68.0 | A |
| 8 | 1480. | 1827. | 1800. | 1950. | 56.8 | A |
| 9 | 1827. | 2344. | 2344. | 2331. | 78.8 | B |
| 10 | 2344. | 2827. | 2827. | 2098. | 66.7 | B |
| 11 | 2827. | 3002. | 2827. | 2098. | 66.7 | B |
| 12 | 3002. | 3308. | 3308. | 2091. | 60.9 | B |
| 13 | 3308. | 3582. | 3308. | 2091. | 60.9 | B |
| 14 | 3582. | 3772. | 3772. | 1947. | 64.3 | B |
| 15 | 3772. | 3814. | 3772. | 1947. | 64.3 | B |
| 16 | 3814. | 3919. | 3919. | 1853. | 78.5 | A |
| 17 | 3919. | 4251. | 3919. | 1853. | 78.5 | A |
| 18 | 4251. | 4558. | 4251. | 1914. | 74.1 | A |
| 19 | 4558. | 4809. | 4558. | 1962. | 71.4 | A |
| 20 | 4809. | 5256. | 5256. | 2104. | 73.5 | B |
| 21 | 5256. | 5694. | 5256. | 2104 | 73.5 | B |
| 22 | 5694. | 6268. | 5981. | 2021. | 62.4 | A |
| 23 | 6268. | 6497. | 6332. | 2269. | 75.3 | A |
| 24 | 6497. | 7312. | 6912. | 2230. | 78.4 | B |
| 25 | 7312. | 7650. | 7312. | 2129. | 75.8 | B |
| 26 | 7650. | 8188. | 8109. | 2037. | 78.5 | B |
| 27 | 8188. | 8530. | 8530. | 2231. | 78.2 | A |
| 28 | 8530. | 8917. | 8917. | 2131. | 78.7 | A |
| 29 | 8917. | 9112. | 8966. | 2153. | 71.3 | A |
| 30 | 9112. | 9256. | 9180. | 2208. | 78.6 | A |
| 31 | 9256. | 9435. | 9354. | 2114. | 77.2 | A |

Special care was taken to simulate the steady state operation of the last two months of the cycle using cases which would allow the proper buildup and decay of Ba-140 in the Pm-Sm chain. Two extra cases were added to allow Ba-140 decay during shutdown periods in this final time interval. However, the scram recovery periods, during which rods were pulled to return to the target pattern, were not explicitly modeled in SIMULATE. These transient periods are not typically included in a cycle simulation because they contribute so little to the exposure of the core and because the resulting power distributions are not meaningful. These periods of time were modeled using the operating conditions associated with the final rod pattern. The greatest effect of this simplification on Ba-140 production would be evident in the nodes above the deep control blades, since these blades were the last to be pulled to their final pattern positions. The calculated Ba-140 activity in these nodes was slightly higher than would have been calculated if the scram recovery had been simulated in detail.

### 5.3.3 Ba-140 Calculation

Although the gamma scan system measures the La-140 intensity, the data are actually representative of the Ba-140 distribution in the core at the end of cycle. Thus, an end of cycle Ba-140 distribution must be calculated from the SIMULATE flux distributions which represent the last two months of operation for comparison to the gamma scan. The method which should be used for calculating the accumulation of Ba-140 is discussed in detail in Reference 3. These production and decay equations are equivalent to those programmed for the Pm-Sm chain in SIMULATE when the absorption cross sections are set at zero; thus, the SIMULATE routine may be used to track the Ba-140 accumulation during the last two months of the cycle. The Ba-140 yield versus exposure

fits input on card type 3 were determined from the table of effective yields also given in Reference 3.

SIMULATE was temporarily modified to allow a time step to be used in the Ba-140 calculation which is not equivalent to the exposure step used elsewhere in the same case. This feature allows Ba-140 decay during periods of shutdown with no concomitant increase in exposure. Temporary changes were also added to allow the punching of the Ba-140 distribution for input to a normalization code.

## 5.4 Calculations for Normalization and Comparisons

Comparisons between the calculated and measured Ba-140 distributions must be made using consistently normalized sets of data. To assure consistency, all nodal distributions were 12-node octant normalized as follows. The normalization factor (or average nodal value) was calculated by summing over the 12 odd numbered nodes of the 75 bundles in the gamma scanned octant. The 10 diagonal bundles were weighted half as much as the other 65 bundles in order to approximate a whole core normalization. This weighting can be understood by looking at a core map. The two octants in a quadrant must share the 10 bundles on the diagonal axis of symmetry, so that half of each of these 10 bundles belongs to each octant. Distributions normalized in this manner are weighted in the same way that a full core power distribution would be, except that only the odd numbered nodes are used. Even numbered nodes must be omitted because not all bundles were scanned at 24 elevations.

The planar and integrated radial distributions are also octant normalized. The integrated radial distribution is similar to the "Relative Bundle Power" edit in SIMULATE. The 12 odd numbered nodal Ba-140 activities were summed for

all bundles to obtain integrated bundle activities which were then octant normalized. The planar normalized distributions are simply arrays containing the nodal values for a given plane which have been normalized to the octant average nodal value for that plane. The 106-bundle average axial distributions were calculated by summing all 106 nodal values for each of the odd numbered planes. These sums were normalized to the average of the 12 sums.

The comparisons which follow in Section 6.0 and the appendices include both absolute and percent differences. The absolute difference is given by

$$\Delta = \text{SIMULATE} - \text{Gamma Scan}$$

and the percent difference is given by

$$\Delta\% = \frac{\text{SIMULATE} - \text{Gamma Scan}}{\text{Gamma Scan}} \times 100\ \%.$$

The standard deviations quoted were calculated from the differences between the calculation and the gamma scan for all elements in the distribution. For some comparisons, the standard deviation was calculated from the percent differences. This alternate method is noted explicitly where it is used.

# 6.0 GAMMA SCAN COMPARISONS

Comparisons between SIMULATE and the gamma scan data must be made using the 12-node octant normalized Ba-140 distribution in Section 5.4. These distributions are presented in Appendices C and D, respectively. Further normalization for individual comparisons was based on the procedure in Section 5.4. Conclusions based on the results of the following Ba-140 comparisons may be used directly in reporting power distribution accuracy, because the almost constant operating conditions for the last two months of the cycle yielded a Ba-140 distribution essentially equivalent to the power distribution.

Gross core comparisons of the average axial and radial distributions give an indication of the general accuracy of the calculation. Since the thermal limit MCPR is related to the total bundle power, the accuracy of the radial power distribution has additional importance. The overall nodal uncertainty and nodal peaking factor bias determine the peak kW/ft accuracy. Thus, the power distribution accuracy becomes critical when the code is used for developing rod patterns.

## 6.1 Core Average Axial Comparison

Figure 6-1 presents the 106-bundle average axial Ba-140 distributions for SIMULATE and the gamma scan. Both distributions have been normalized to the 12 odd numbered nodes. The gamma scan distribution peak is 1.506 at node 19, while the SIMULATE peak is 1.590 at node 17. Thus, SIMULATE overpredicts the magnitude of the axial peak by 5.6%. At node 19, the gamma scan peak location, SIMULATE is higher by approximately 3.6%. This peaking factor difference is quite reasonable.

In nodes 1 through 7 the difference between the calculation and the measure-

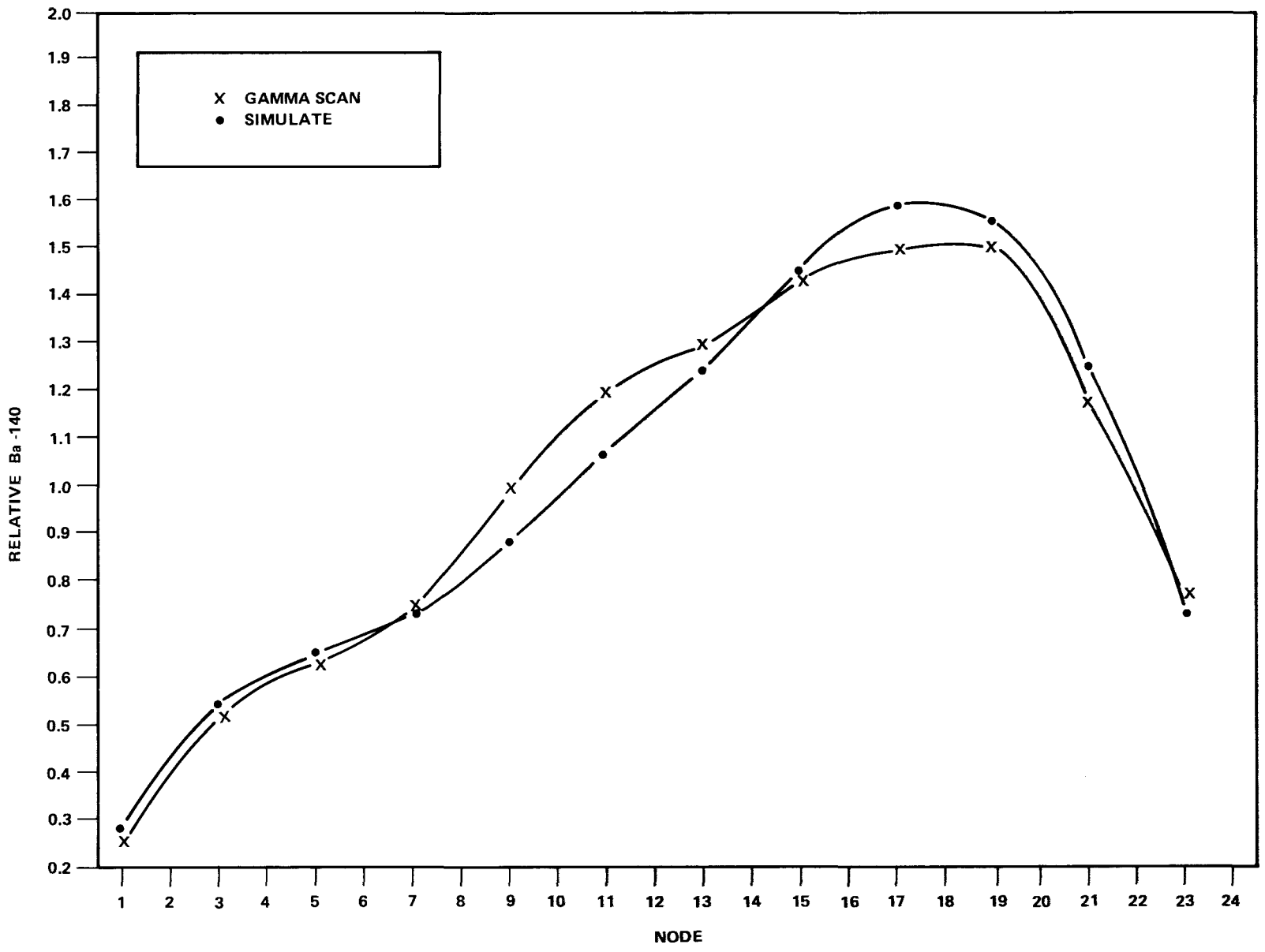



Figure 6-1 106-Bundle Average Axial Ba-140 Distribution

ment is very small. However, in nodes 9 and 11 SIMULATE is approximately 10% lower than the gamma scan. The reason for this deviation is unknown. It should be noted that the abrupt change in slope at node 7 in the gamma scan was not predicted in the calculation. The SIMULATE distribution instead is smoothly increasing from the bottom of the core to the peak at node 19, which suggests that SIMULATE is not properly modeling some fairly localized but undefined effects. In spite of the significant differences at nodes 9, 11, and 17, the overall agreement between the two shapes is adequate, and the axial peaking factor is conservatively predicted.

## 6.2 Integrated Bundle Power Distribution

The relative integrated bundle Ba-140 or radial distribution comparison is given in Figure 6-2. The agreement between interior bundles is very close, as indicated by the bias and standard deviation for the interior bundle comparisons which are 1.4% $\pm$ 1.7%; however, the average bias of 15.2% $\pm$ 5.5% shows a significant underprediction of the peripheral bundles by SIMULATE. These differences range from 10% to 26%. Adjusting the radial albedos to improve the peripheral agreement introduced a significant bias in the interior. Preliminary analysis has indicated that the thermal leakage from the reflector may be of the correct magnitude to explain these differences. SIMULATE already has the basic mechanism for including this correction, once the appropriate value is known.[9]

The peak bundle activity was conservatively calculated by 2.6%, although the location was incorrectly predicted. The magnitude of the gamma scan peak was overpredicted by only 0.9%. A small bias in the power sharing between controlled and uncontrolled bundles exists on an integrated basis. The controlled bundle activities are approximately 3% too high relative to their

| I = \ J = | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.701<br>0.627<br>-10.6 | 0.684<br>0.612<br>-10.5 | 0.665<br>0.592<br>-11.0 | 0.618<br>0.556<br>-10.0 | 0.574<br>0.454<br>-20.9 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.907<br>0.923<br>1.8 | 0.883<br>0.895<br>1.4 | 0.845<br>0.873<br>3.3 | 0.849<br>0.868<br>2.2 | 0.792<br>0.798<br>0.8 | 0.687<br>0.576<br>-16.2 | | | | |
| 3 | | | | | 1.041<br>1.040<br>-0.1 | 0.916<br>0.943<br>3.0 | 0.895<br>0.930<br>3.9 | 0.973<br>0.995<br>2.3 | 0.968<br>0.975<br>0.7 | 0.902<br>0.892<br>-1.1 | 0.797<br>0.675<br>-15.3 | 0.692<br>0.579<br>-16.3 | 0.592<br>0.438<br>-26.0 | |
| 4 | 1.058<br>1.060<br>0.2 | 0.970<br>1.002<br>3.3 | | | 1.075<br>1.106<br>2.9 | 0.959<br>1.014<br>5.7 | 0.966<br>1.000<br>3.5 | 1.066<br>1.072<br>0.6 | 1.042<br>1.070<br>2.6 | 1.019<br>1.042<br>2.3 | 0.962<br>0.974<br>1.3 | 0.906<br>0.905<br>-0.1 | 0.778<br>0.782<br>0.5 | 0.596<br>0.505<br>-15.3 |
| 5 | 1.074<br>1.085<br>1.0 | 1.117<br>1.125<br>0.7 | | | 1.113<br>1.136<br>2.1 | 1.127<br>1.138<br>1.0 | 1.125<br>1.126<br>0.1 | 1.057<br>1.084<br>2.6 | 1.043<br>1.080<br>3.6 | 1.096<br>1.107<br>1.0 | 1.072<br>1.084<br>1.1 | 1.021<br>1.035<br>1.4 | 0.941<br>0.946<br>0.5 | 0.772<br>0.779<br>0.9 |
| 6 | | | | | 1.131<br>1.141<br>0.9 | 1.128<br>1.142<br>1.2 | 1.152<br>1.133<br>-1.7 | 1.103<br>1.107<br>0.4 | 1.078<br>1.100<br>2.0 | 1.121<br>1.120<br>-0.1 | 1.099<br>1.106<br>0.6 | 1.085<br>1.093<br>0.7 | | |
| 7 | | | | | 1.133<br>1.139<br>0.5 | 0.935<br>0.983<br>5.1 | 0.975<br>0.988<br>1.3 | 1.188<br>1.160<br>-2.4 | 1.170<br>1.166<br>-0.3 | 1.002<br>1.022<br>2.0 | 0.986<br>1.001<br>1.5 | 1.105<br>1.098<br>-0.6 | | |
| 8 | | | | | 1.137<br>1.147<br>0.9 | 0.944<br>0.997<br>5.6 | 0.972<br>1.010<br>3.9 | 1.225<br>1.205<br>-1.6 | 1.190<br>1.209<br>1.6 | 1.050<br>1.049<br>-0.1 | 1.009<br>1.013<br>0.4 | | 1.084<br>1.087<br>0.3 | 1.011<br>1.025<br>1.4 |
| 9 | | | | | 1.111<br>1.159<br>3.8 | 1.186<br>1.186<br>0.0 | 1.205<br>1.213<br>0.7 | 1.241<br>1.266<br>2.0 | 1.232<br>1.265<br>2.7 | 1.194<br>1.202<br>0.7 | | | 1.038<br>1.048<br>1.0 | 1.028<br>1.048<br>2.0 |
| 10 | | | | | 1.142<br>1.170<br>2.5 | 1.197<br>1.197<br>0.0 | 1.235<br>1.217<br>-1.5 | 1.258<br>1.269<br>0.9 | | | | | | |
| 11 | | | | | 1.209<br>1.206<br>-0.2 | 0.978<br>1.018<br>4.1 | 1.012<br>1.021<br>0.9 | 1.218<br>1.211<br>-0.6 | | | | | | |
| 12 | | | | | 1.201<br>1.236<br>2.6 | 0.996<br>1.027<br>3.1 | 1.003<br>1.013<br>1.0 | | 1.168<br>1.174<br>0.5 | 0.958<br>0.983<br>2.6 | | | 1.110<br>1.100<br>-0.9 | 0.954<br>0.968<br>1.5 |
| 13 | | | | | 1.250<br>1.291<br>3.3 | 1.203<br>1.228<br>2.1 | | | 1.118<br>1.146<br>2.5 | 1.149<br>1.148<br>-0.1 | | | 1.097<br>1.110<br>1.2 | 1.093<br>1.078<br>-1.4 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.086<br>1.086<br>0.0 | 0.938<br>0.957<br>2.0 |
| 17 | | | | | | | | | | | | | 1.042<br>1.047<br>0.5 | 1.043<br>1.041<br>-0.2 |
| 18 | | | 1.169<br>1.186<br>1.5 | 1.135<br>1.159<br>2.1 | | | | | | | | | | |
| 19 | | | 0.928<br>0.997<br>7.4 | 1.143<br>1.147<br>0.3 | | | | | | | | | | |

Figure 6-2 Relative Bundle Integrated Ba-140 Distribution

uncontrolled neighbors. Nodal biases would be expected to be higher. The overall standard deviation of the radial comparisons is 5.3% based on percent differences between the calculation and the measurement.

## 6.3 Nodal Comparisons

The nodal comparisons are based on the 12-node octant normalized distributions. Because of this normalization, the mean nodal difference is very close to zero. The nodal distribution of differences between SIMULATE and the gamma scan is given in Appendix E. The standard deviation of the differences between calculation and measurement is 0.094, which is in the range typically observed for core simulators. The nodal peaking factor, however, is significantly overpredicted by SIMULATE. The difference between the calculated and measured peaks is 11.0%. Although they are located in different bundles, the predicted and actual peaks have similar local environments (e.g., core location, control blade depth). The 15 highest nodes from both distributions are given in Table 6-1. All are located above the tips of deeply inserted control blades where the calculation is consistently higher than the measurement. All 15 of the SIMULATE values are at least 5% higher than the highest gamma scan node, which indicates that this significant overprediction occurs throughout the core. These differences are large enough to have a significant impact on predicted rod patterns.

## 6.4 Planar Normalized Radial Comparisons

Normalizing all the nodes in a plane to the average of that plane removes all biases due to the miscalculation of the axial shape and allows a better evaluation of the radial effects. These include power sharing between controlled and uncontrolled bundles, power allocation to peripheral bundles,

TABLE 6-1

COMPARISON OF THE FIFTEEN HIGHEST NODAL Ba-140 INTENSITIES NORMALIZED TO THE OCTANT

| Gamma Scan | | | | SIMULATE | | | |
|---|---|---|---|---|---|---|---|
| I | J | K | Ba-140 Intensity | I | J | K | Ba-140 Intensity |
| 4 | 11 | 16 | 1.917 | 4 | 15 | 16 | 2.127 |
| 4 | 11 | 17 | 1.908 | 4 | 15 | 17 | 2.120 |
| 4 | 16 | 17 | 1.899 | 4 | 16 | 16 | 2.105 |
| 4 | 16 | 16 | 1.896 | 4 | 11 | 16 | 2.097 |
| 12 | 16 | 19 | 1.889 | 4 | 16 | 17 | 2.094 |
| 12 | 15 | 19 | 1.876 | 4 | 11 | 17 | 2.088 |
| 8 | 16 | 19 | 1.875 | 5 | 14 | 17 | 2.056 |
| 7 | 16 | 19 | 1.873 | 5 | 15 | 17 | 2.052 |
| 4 | 15 | 17 | 1.859 | 5 | 11 | 17 | 2.029 |
| 4 | 15 | 16 | 1.855 | 4 | 14 | 17 | 2.026 |
| 5 | 14 | 17 | 1.849 | 5 | 16 | 17 | 2.025 |
| 7 | 16 | 18 | 1.845 | 8 | 19 | 17 | 2.024 |
| 11 | 16 | 19 | 1.842 | 7 | 19 | 17 | 2.023 |
| 8 | 19 | 18 | 1.841 | 4 | 15 | 18 | 2.015 |
| 11 | 15 | 19 | 1.836 | 7 | 15 | 19 | 2.015 |

and the behavior of the overall radial power shape as a function of distance from the bottom of the core.

The 12 planar radial comparisons are presented in Appendix F. The overall standard deviation of the percent differences for each comparison is presented in Table 6-2. These comparisons indicate a significant fluctuation in the uncertainty with core height. The standard deviations are largest in nodes 3, 5, and 7 where a large number of control blades are present. At node 9, just above the tips of the shallow blades, the standard deviation decreases sharply and then rises again for nodes above the tips of the deep blades.

The bias and standard deviation for the peripheral and interior bundles are also given. A significant increase in the edge bundle bias with core height can be observed, which strongly suggests that either void dependent radial albedos or void dependent reflector thermal leakage correction factors, or both, are needed to correctly model the core periphery. The best agreement in peripheral bundle Ba-140 intensities occurs in nodes 7 through 11 with average biases of less than 10%. Mean differences greater than 20% are observed at nodes 19, 21, and 23. The planar comparisons also show that the percent differences for the peripheral bundles at (1, 18) and (3, 22) are consistently much larger at all elevations than those for neighboring bundles. Both of these bundles have two faces adjacent to the reflector and only one diagonally adjacent neighbor which is also on the periphery. The albedos for these two bundles could probably be adjusted to improve the agreement without significantly affecting the interior bundle powers. A reflector thermal leakage correction would also have approximately twice the effect on these bundles and on the bundles at (2,19) and (4,23).[9]

The close agreement of interior bundles on an integrated basis is not observed

TABLE 6-2

PLANAR NORMALIZED COMPARISONS

| Node | Standard Deviation | Peripheral Bundles Mean Bias | Peripheral Bundles Std Dev | Interior Bundles Mean Bias | Interior Bundles Std Dev |
|---|---|---|---|---|---|
| 1 | 6.6 | -10.1 | 3.9 | 1.8 | 5.8 |
| 3 | 8.0 | -11.3 | 4.5 | 2.7 | 7.1 |
| 5 | 9.7 | -12.3 | 3.7 | 3.4 | 8.9 |
| 7 | 8.7 | -9.8 | 4.0 | 2.7 | 8.2 |
| 9 | 6.1 | -8.1 | 5.0 | 2.1 | 5.4 |
| 11 | 3.9 | -8.2 | 5.4 | 1.0 | 2.4 |
| 13 | 5.3 | -11.5 | 6.4 | 0.5 | 3.7 |
| 15 | 6.7 | -14.8 | 6.5 | 0.0 | 4.9 |
| 17 | 6.8 | -18.3 | 6.7 | 0.5 | 3.6 |
| 19 | 7.4 | -21.3 | 5.4 | 1.2 | 3.1 |
| 21 | 7.9 | -23.6 | 6.6 | 1.3 | 2.3 |
| 23 | 7.7 | -22.8 | 7.1 | 1.1 | 2.5 |

Based on the percent difference between calculation and measurement:

$$\Delta\% = \frac{\text{SIMULATE - Gamma Scan}}{\text{Gamma Scan}} \text{ X } 100\%.$$

in the planar comparisons. The largest standard deviations occur once again in the bottom region of the core beneath the shallow blade tips. At these elevations significant numbers of large differences are distributed over the whole octant; however, the locations of the regions of large differences are inconsistent from elevation to elevation, and no general trends can be observed. At node 11 and in the uncontrolled region above the tips of the deep blades, the agreement is very close. There is no explanation for the fact that the node 11 comparison is significantly better than its neighbors.

## 6.5 Power Sharing Between Controlled and Uncontrolled Bundles

The allocation of power to controlled nodes is one of the most difficult effects to calculate properly in a coarse mesh core simulator. SIMULATE's capability in this area was evaluated using distributions which were normalized to the octant average value at that plane to remove the axial bias between the calculation and measurement. The remaining differences between Ba-140 intensities in adjacent nodes must be due to radial effects, including blade worth.

To minimize the uncertainty in the evaluation due to gross core tilts, the power allocation between controlled and uncontrolled nodes was evaluated using the following procedure. The Ba-140 distribution around each control blade was analyzed separately at each plane. The average power in a controlled cell ($\bar{P}_c$) was determined by summing over the gamma scanned nodes surrounding the control blade (two, three, or four nodes depending on the location of the blade). The average intensity of the adjacent uncontrolled region ($\bar{P}_u$) was also calculated from the sum of all uncontrolled nodes adjacent to the nodes used in obtaining the controlled average. The ratio of the intensity of the uncontrolled region to that of control cell was then

calculated for both the SIMULATE and gamma scan distributions. The difference between the predicted and measured power allocation was then determined by:

$$\Delta\% = \frac{\left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{SIMULATE} - \left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{Gamma\ Scan}}{\left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{Gamma\ Scan}} \times 100\%$$

for each control blade in the octant. The average percent difference and standard deviation for each plane are reported in Table 6-3.

Not surprisingly, the largest biases are observed at the elevations which exhibited the largest uncertainties in the overall comparisons. At nodes 3, 5, and 7 where the blade density is almost 50%, the average differences are 4-5%. These biases indicate that SIMULATE allocates 4-5% too much power to controlled nodes relative to their uncontrolled neighbors. Above node 7, where there are fewer blades present, the biases are smaller (2-3%). The apparent positive bias at node 15 is due to a single control cell on the diagonal which exhibits a significant (11.1%) underprediction of the power in the controlled bundles. This bias is in the opposite direction from most of the other comparisons. The other two control cells at that plane have approximately 2.8% less power than predicted by SIMULATE. The comparisons for this control cell at other planes typically show less bias than the other comparisons at those planes. There is no explanation for this deviation from the general trend. Although the four-bundle cells outside the octant were not included in this evaluation, the comparisons at those locations generally substantiate the conclusion that SIMULATE allocates too much power to controlled nodes. The magnitude of the bias appears to depend on the number of blades inserted.

TABLE 6-3

POWER SHARING BETWEEN CONTROLLED AND UNCONTROLLED BUNDLES

| Node | Average Percent Difference[1] for the Octant | Standard Deviation |
|---|---|---|
| 1 | -2.0% | 2.6% |
| 3 | -4.3 | 2.1 |
| 5 | -4.6 | 1.8 |
| 7 | -5.0 | 2.4 |
| 9 | -2.7 | 1.6 |
| 11 | -1.7 | 0.7 |
| 13 | -3.0 | 0.9 |
| 15 | 1.9 | 8.0 |
| 17[2] | -1.9 | 3.7 |

1. $$\Delta\% = \frac{\sum_{i=1}^{N} \left[ \frac{\left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{\text{SIMULATE}} - \left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{\text{Gamma Scan}}}{\left(\frac{\bar{P}_u}{\bar{P}_c}\right)_{\text{Gamma Scan}}} \times 100\% \right]_i}{N}$$

where N is the number of control blades in the octant inserted at that elevation.

2. No control blades are inserted above node 17.

## 6.6 Individual Bundle Axial Comparisons

Just as the planar comparisons can be used to evaluate control blade effects in the x-y plane, individual bundle axial distributions display control blade effects in the vertical plane. These comparisons also show in more detail the areas where SIMULATE miscalculates the axial shape. Figures 6-3 through 6-13 present octant normalized comparisons for several of the gamma scanned bundles. These include an example for each control blade depth, the bundle which contains the peak node in the gamma scan data set, uncontrolled bundles adjacent to controlled bundles with deep and shallow blades, a typical peripheral bundle, and the center bundle in the core. A core map showing the exact locations of these bundles is given in Figure 6-14.

The large rod inventory in the core allows comparisons to be made for blades inserted to notches 34, 32, 28, 20, 18, and 14. These distributions, given in Figures 6-3 through 6-9, indicate that the prediction of the power rise at the tip of the blade depends on the depth of the blade in the core. For shallow blades at 34, 32, and 28 the peaking above the blade tip is underpredicted. When the blades are more than halfway inserted, the peak region is severely overpredicted. These trends coincide with the regions in which the core average axial distribution is miscalculated. Thus, if the control blade tip is in a region where SIMULATE underpredicts the gamma scan, then the peak above the blade is also underpredicted, and if the blade tip is located in a region where SIMULATE is higher than the gamma scan, then the peak above the blade tip is also higher than measured. It should also be noted that even the bundles with shallow control blades show a significant overprediction in nodes 17 through 20. Thus, an overall bias in the axial calculation appears to be "superimposed" on the effects of the blades.

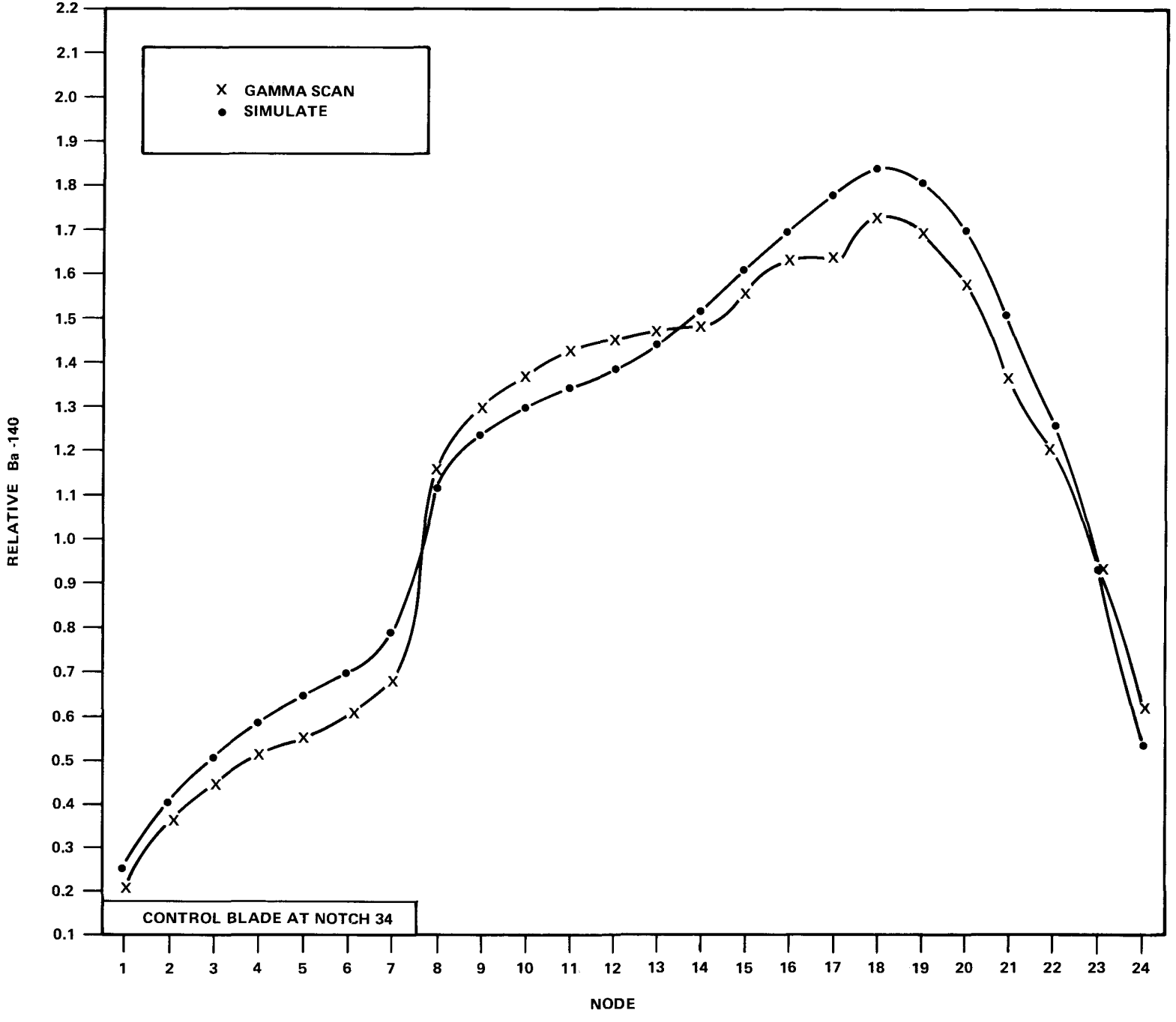



Figure 6-3 Octant Normalized Axial Ba-140 Distribution for HX 393

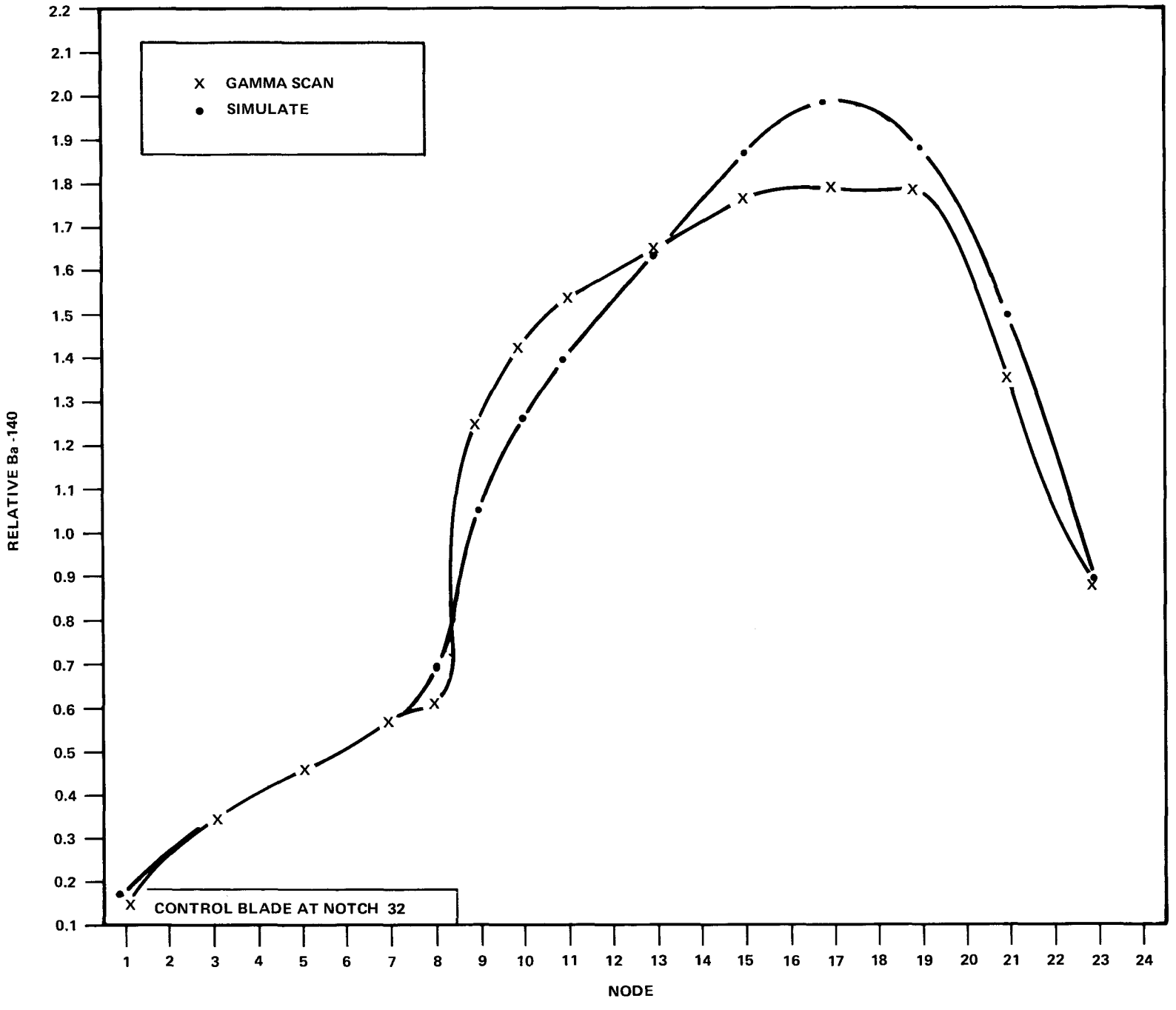



Figure 6-4 Octant Normalized Axial Ba-140 Distribution for HX 023

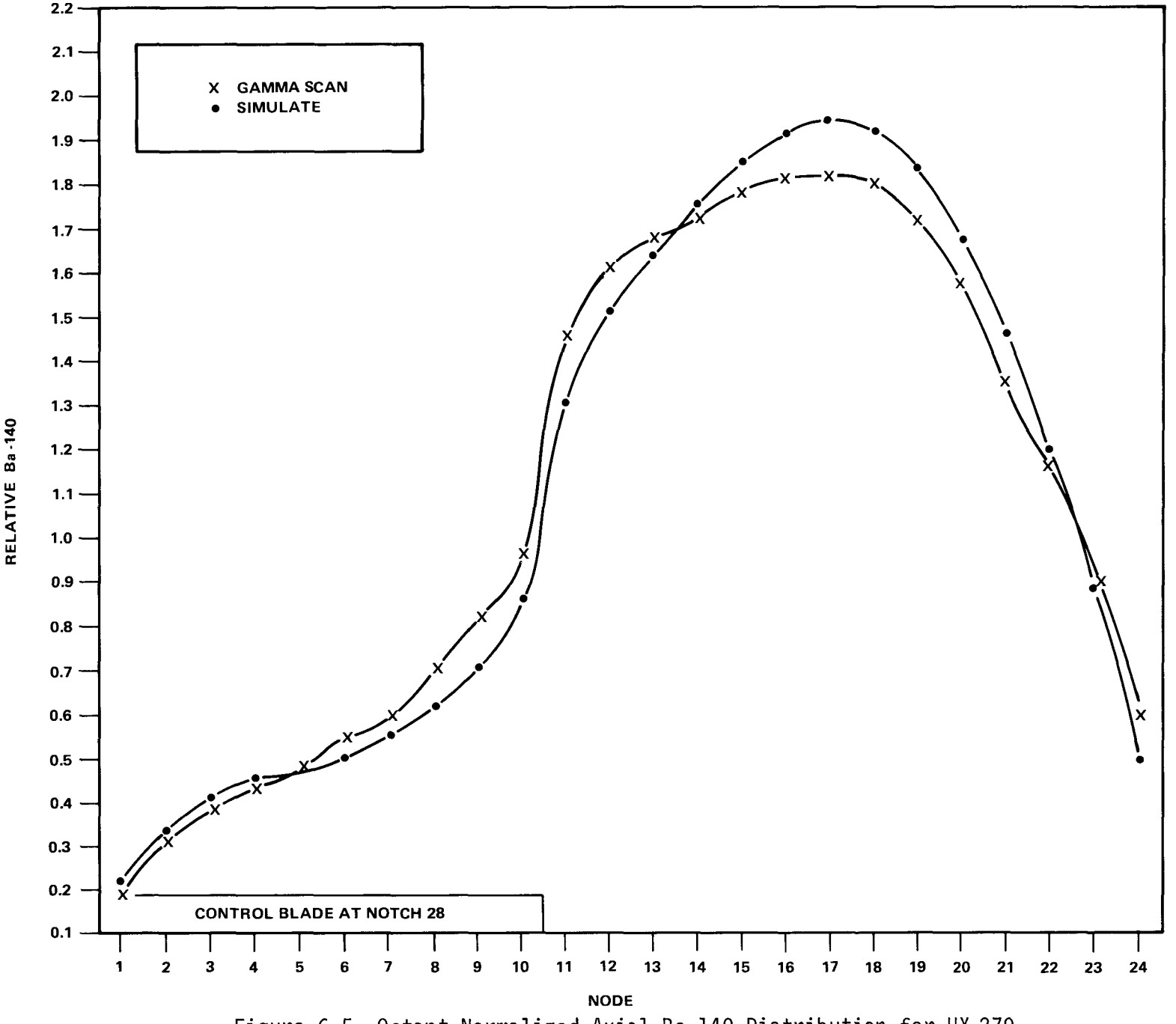



Figure 6-5 Octant Normalized Axial Ba-140 Distribution for HX 279

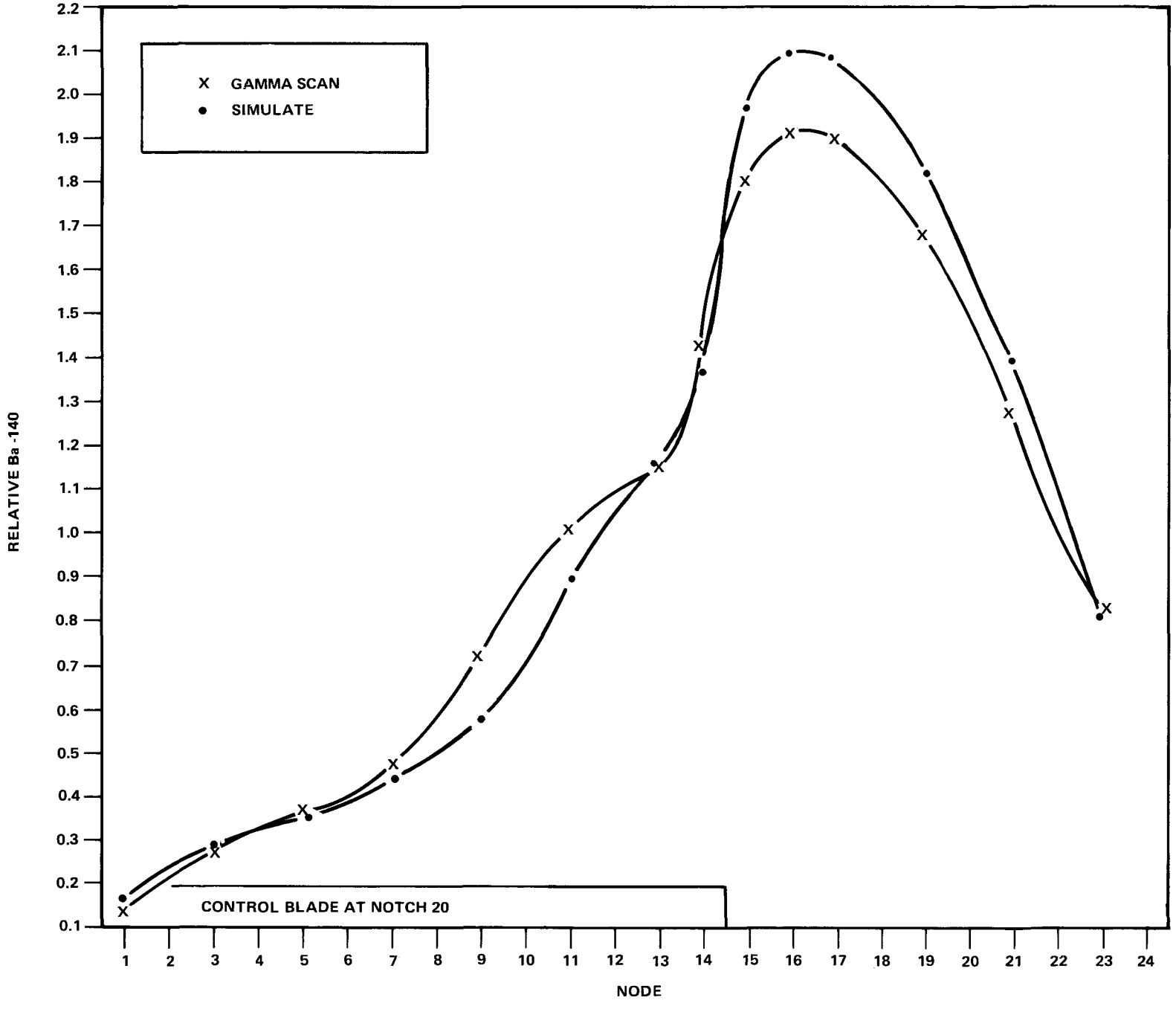



Figure 6-6 Octant Normalized Axial Ba-140 Distribution for HX 413

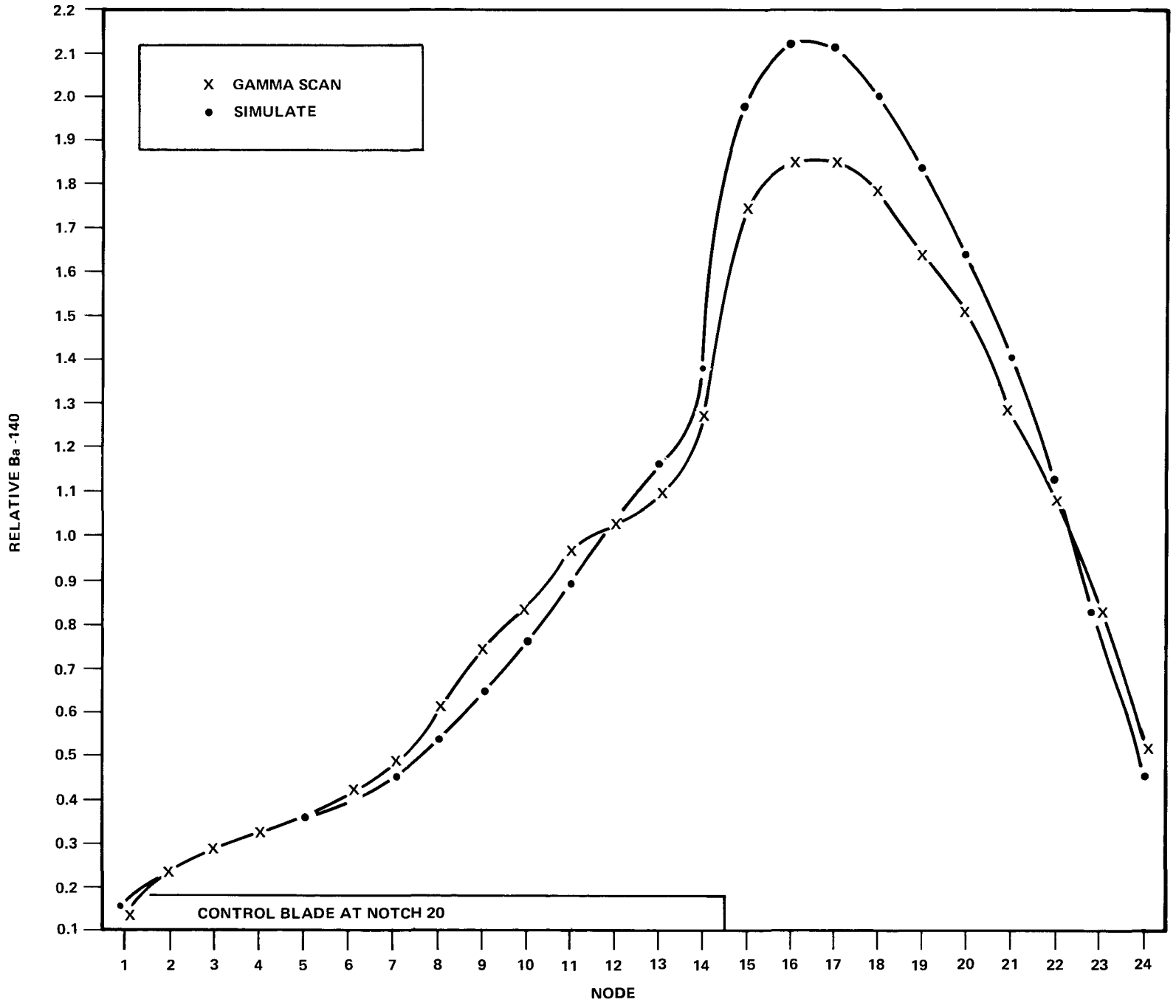



Figure 6-7 Octant Normalized Axial Ba-140 Distribution for HX 278

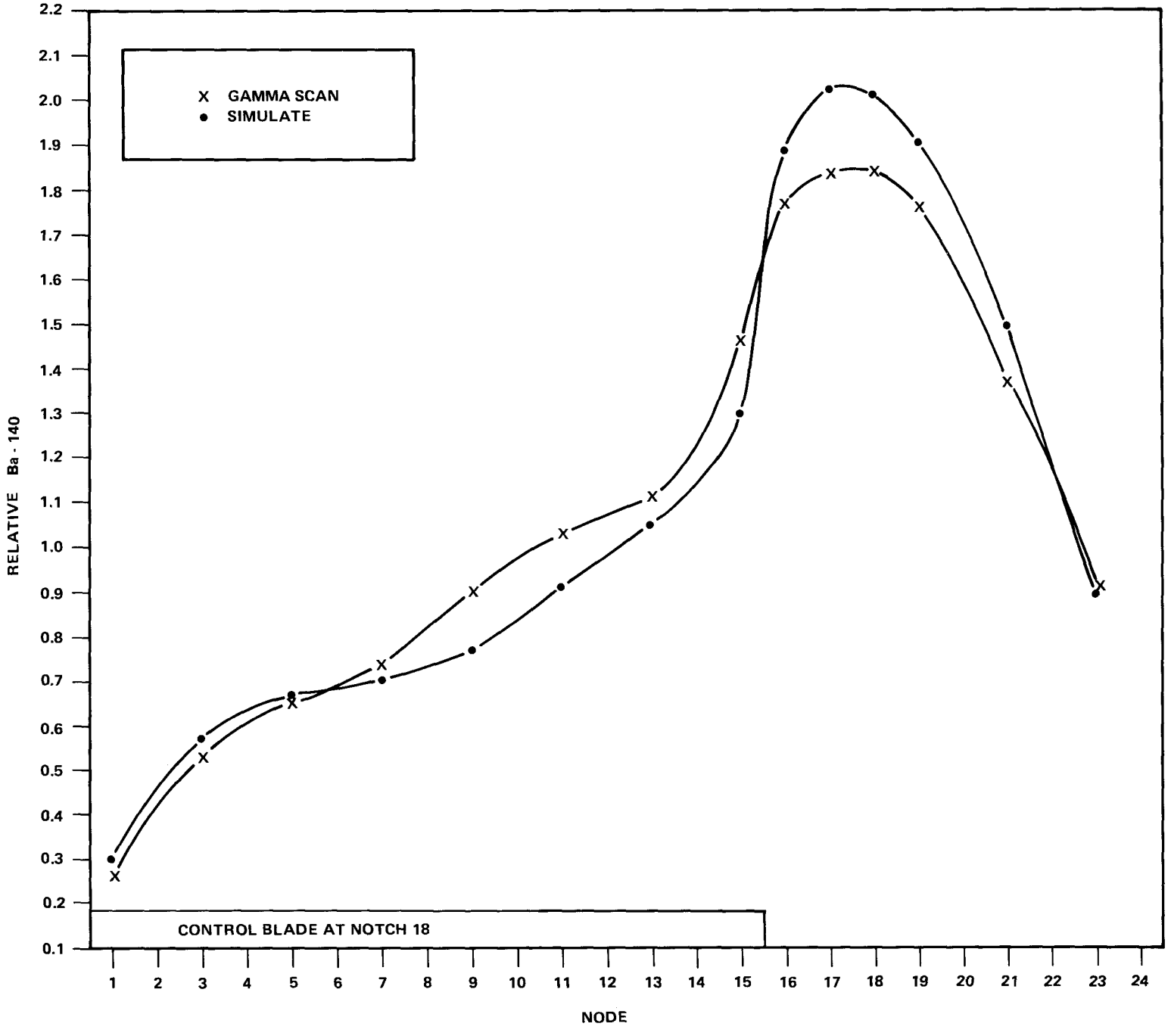



Figure 6-8 Octant Normalized Axial Ba-140 Distribution for HX 333

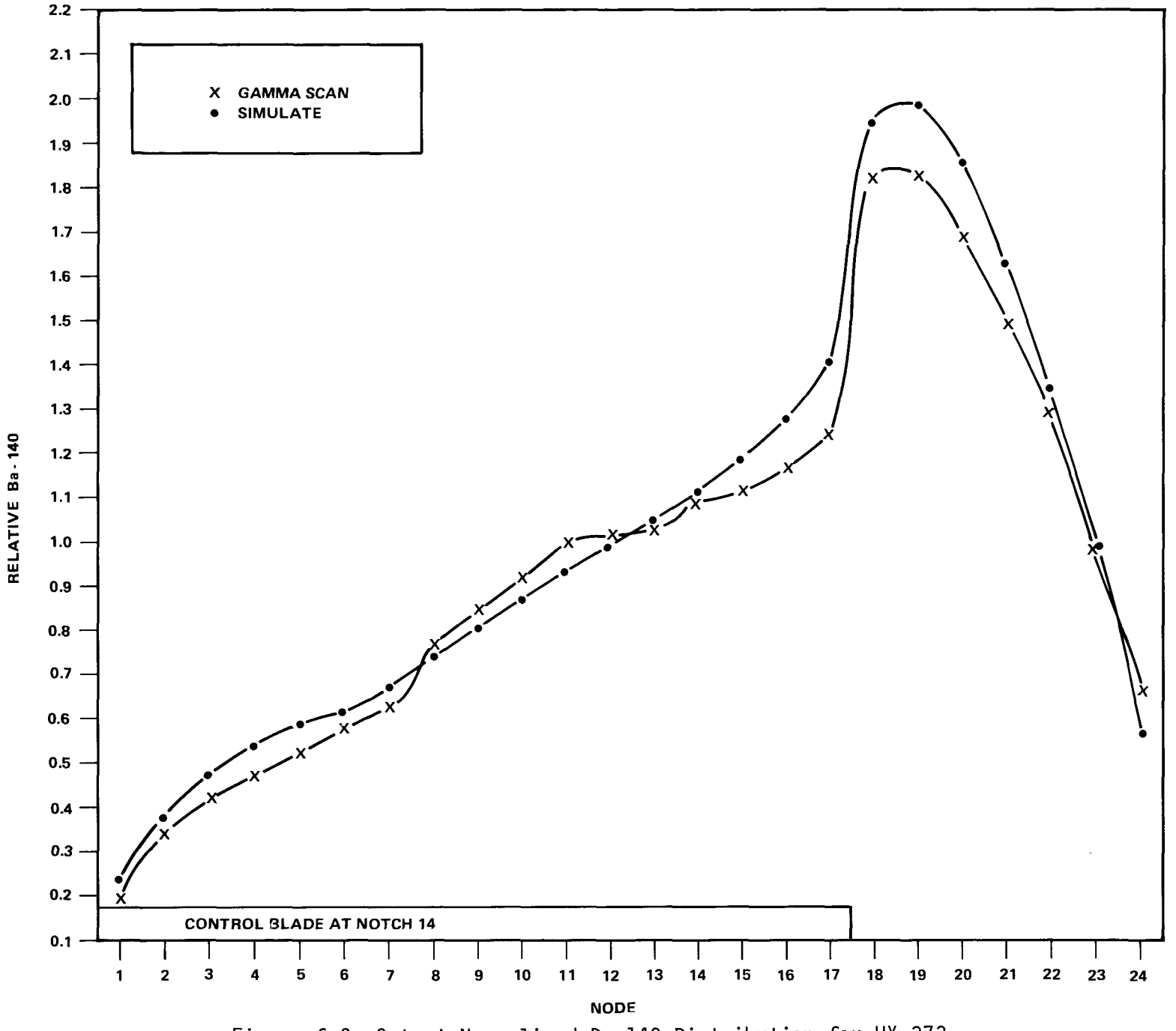



Figure 6-9 Octant Normalized Ba-140 Distribution for HX 373

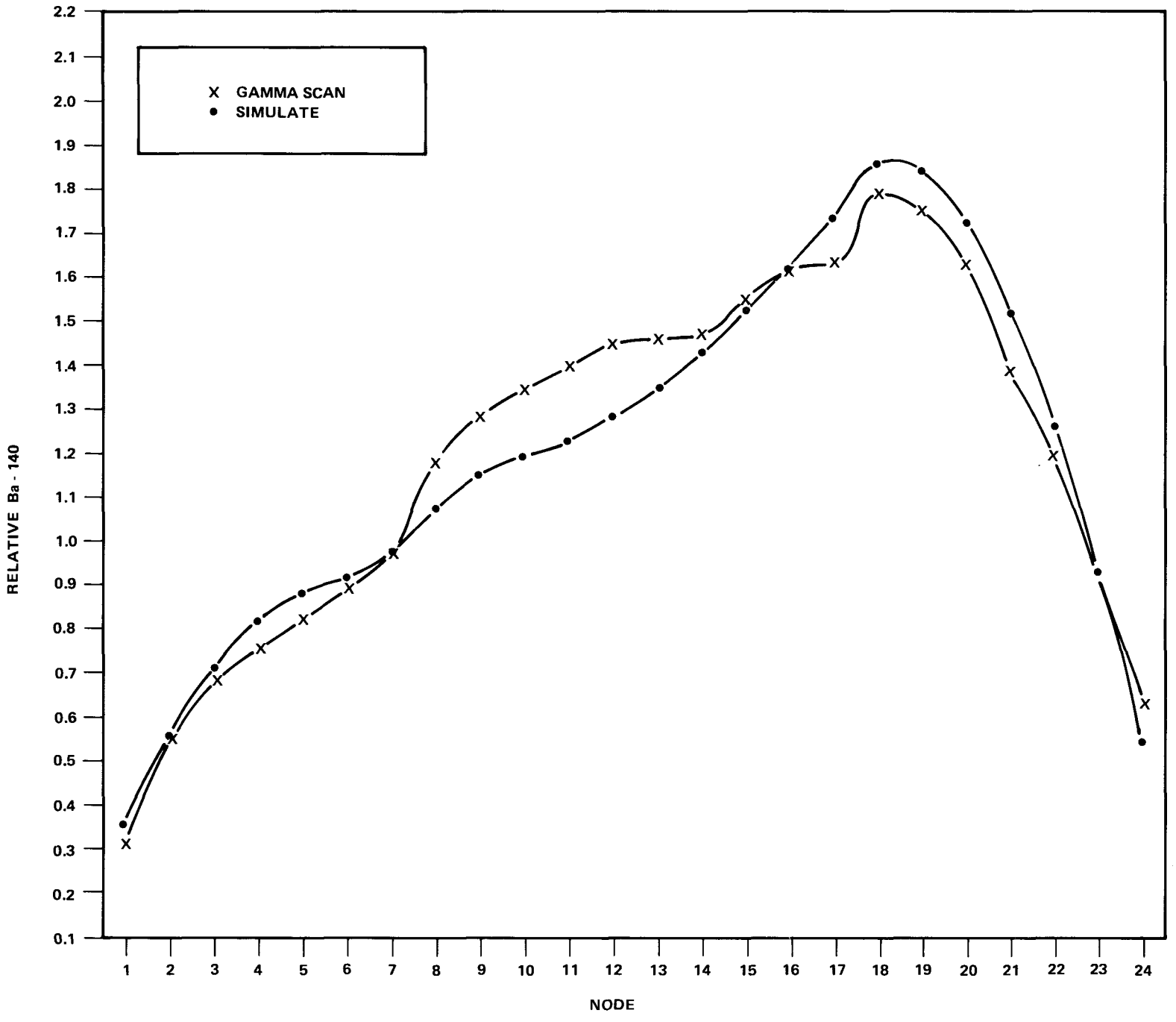



Figure 6-10 Octant Normalized Axial Ba-140 Distribution for HX 141

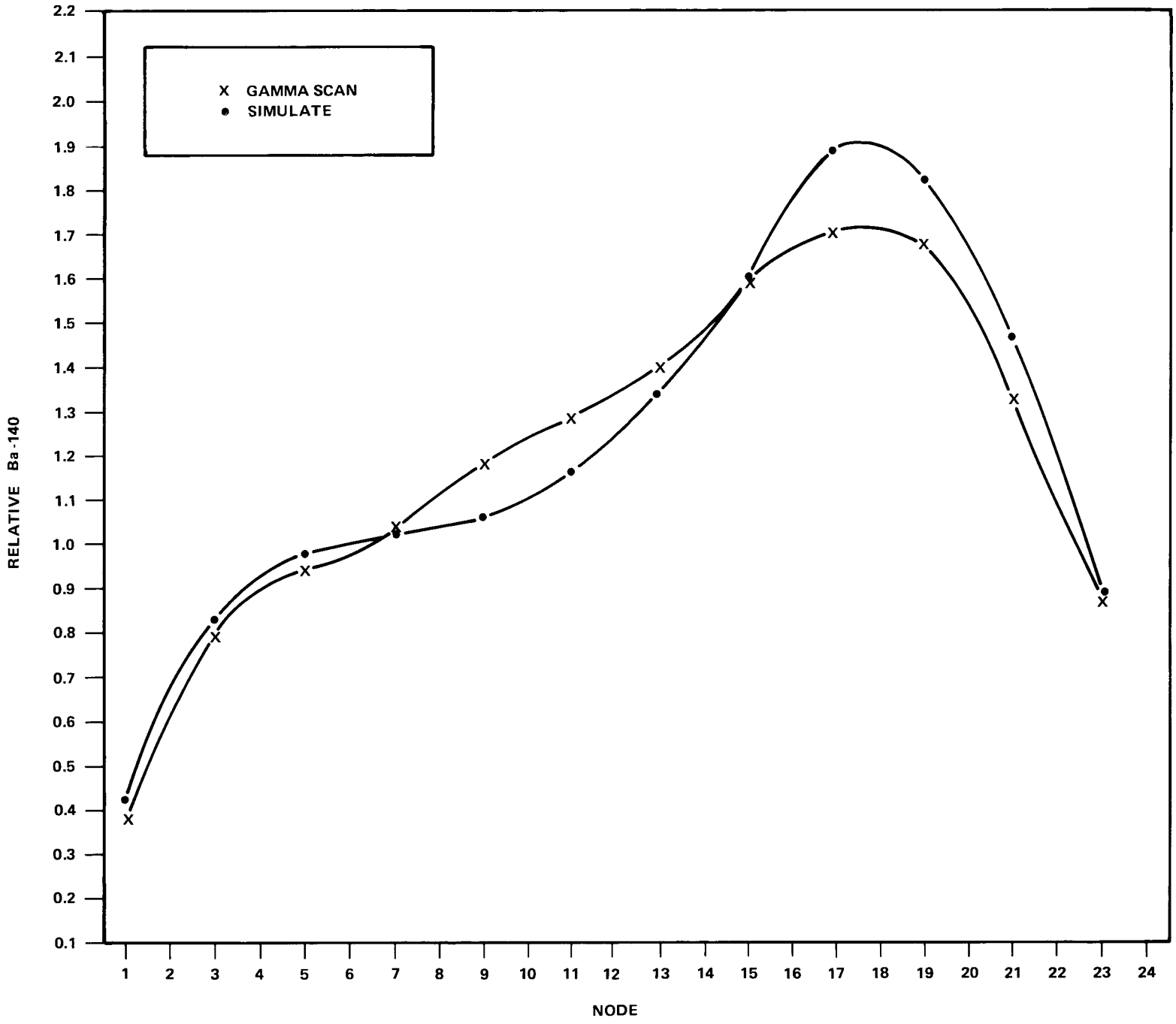



Figure 6-11 Octant Normalized Axial Ba-140 Distribution for HX 211

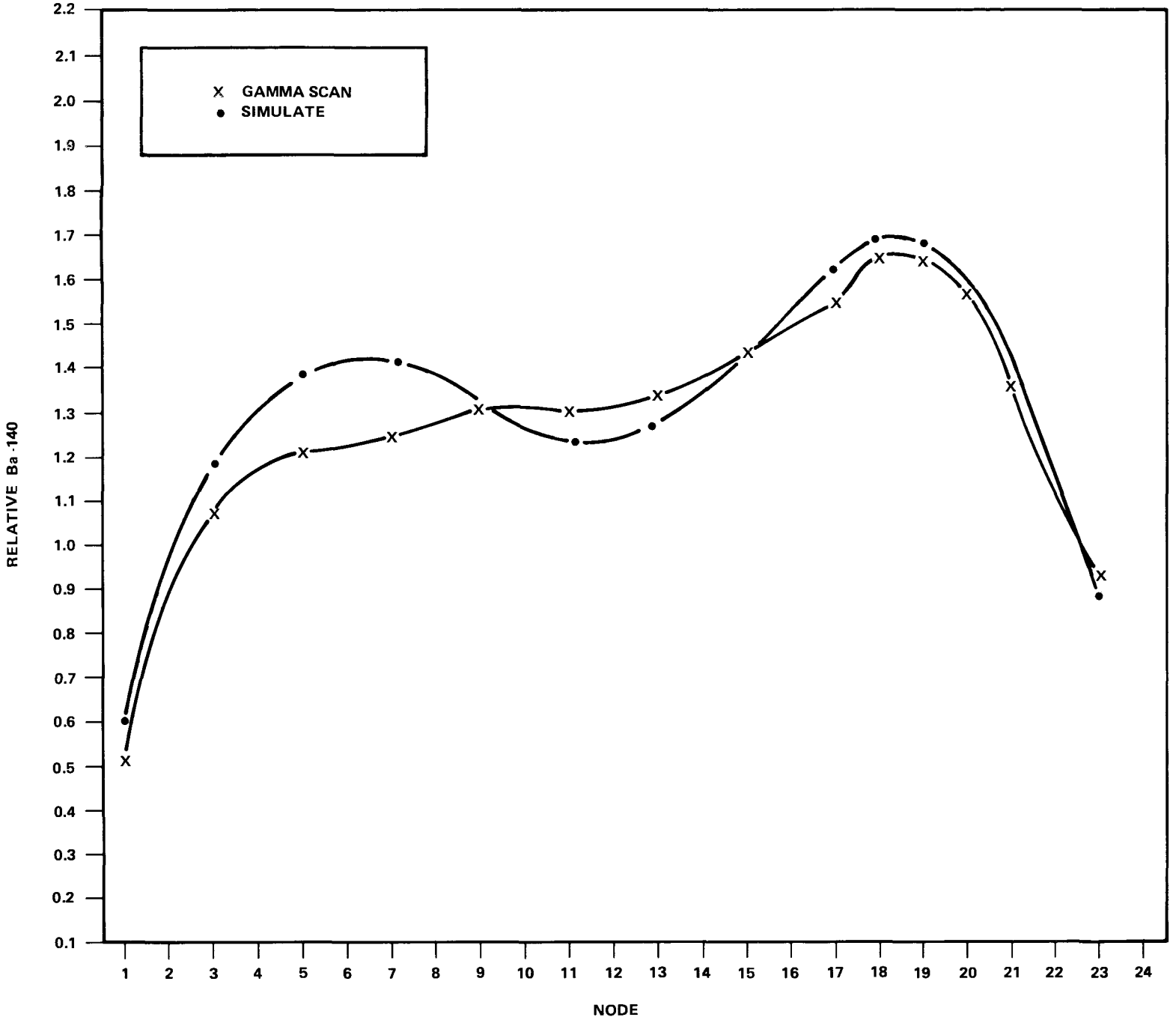



Figure 6-12 Octant Normalized Axial Ba-140 Distribution for HX 397

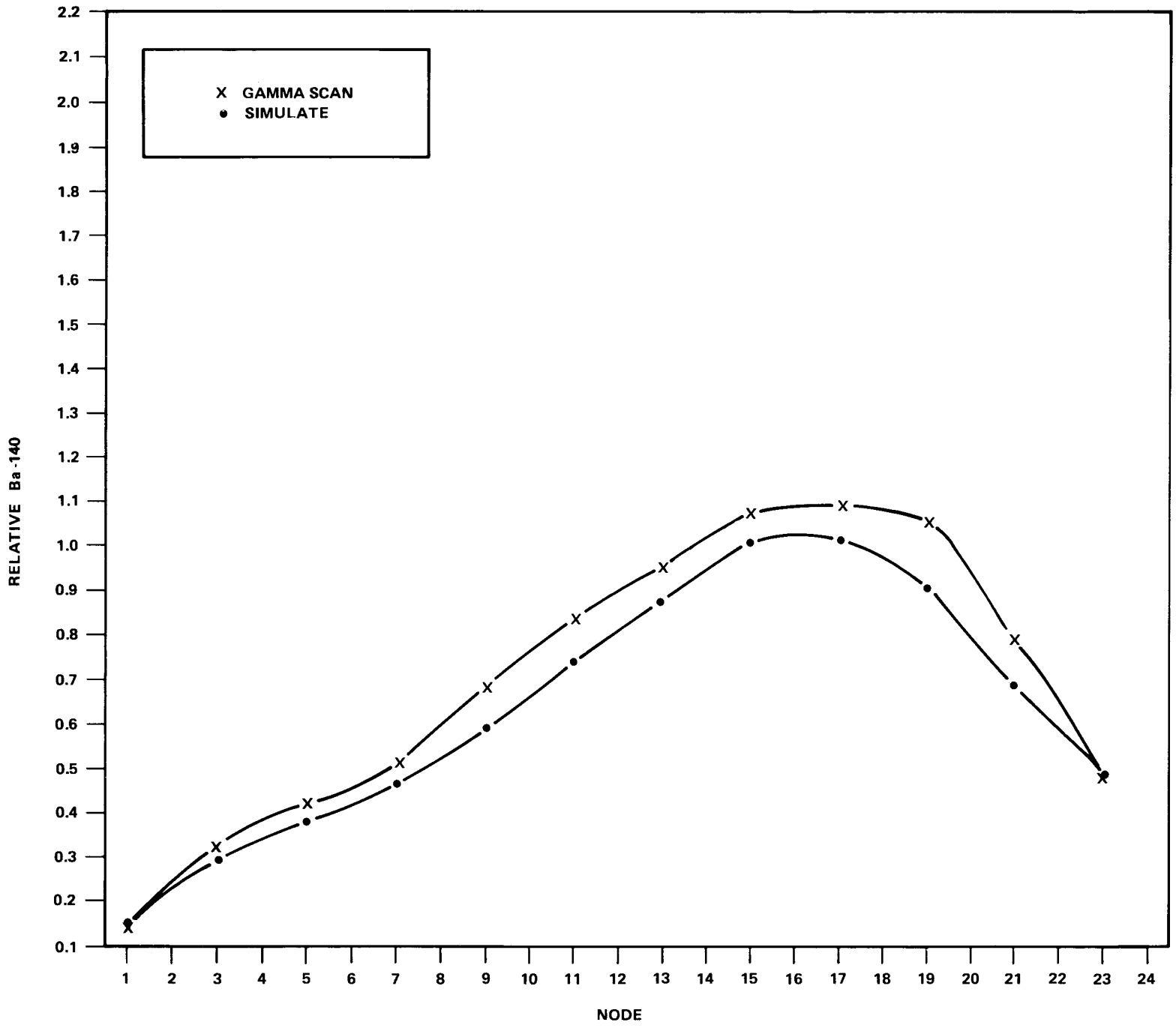



Figure 6-13 Octant Normalized Axial Ba-140 Distribution for HX 486

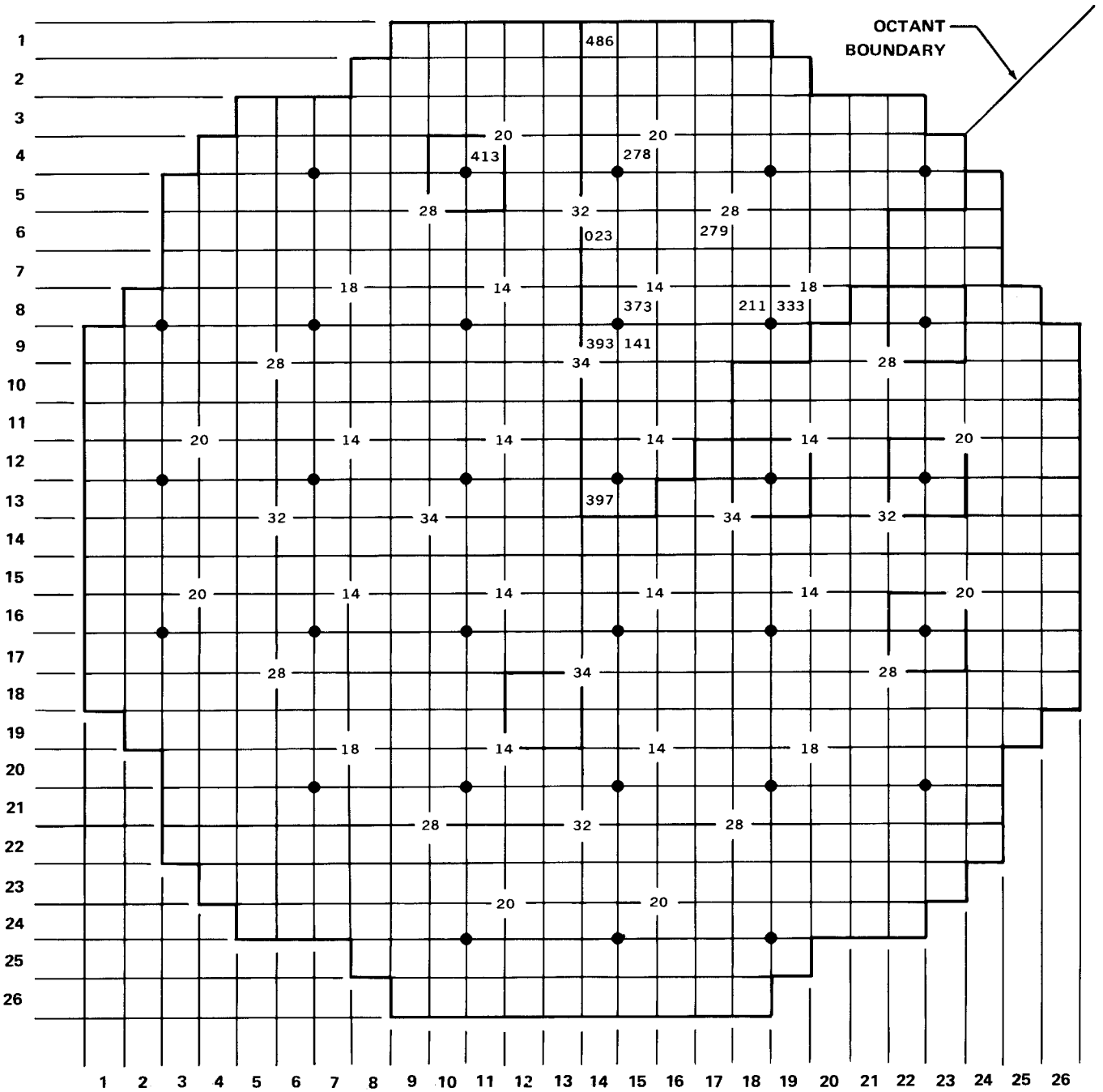



Figure 6-14 Locations of Bundles for Which Axial Plots Are Given

The effects of nearby control blades can generally be observed in the gamma scan distributions for uncontrolled bundles (Figures 6-10 through 6-12). The SIMULATE distributions, on the other hand, show no abrupt changes in slope at the tip of nearby blades. This lack of fine detail in the SIMULATE axial shapes could be due to errors in the prediction of adjacent nodes or to the infinite lattice assumption used in generating the bundle homogenized parameters.

Consistent biases are observed in both uncontrolled and controlled bundles between nodes 7 and 21 with a crossover point at node 13-15; i.e., SIMULATE is consistently lower than the gamma scan between nodes 7 and 13 and higher in nodes 17 to 21. Even the peripheral bundles are more sharply top peaked than the gamma scan when the bias in integrated bundle power is removed. These results indicate an overall miscalculation of the axial shape which should be reduced before the treatment of localized blade effects can be evaluated.

# 7.0 SIMULATE - PROCESS COMPUTER COMPARISONS

Although the gamma scan provides the most accurate and complete set of benchmark data for qualifying core calculations, the measurement represents only one operating state point at 9435 MWd/st. To track the behavior of the calculation throughout the cycle, comparisons were made at selected state points to the process computer core average axial power distribution from either P-1 or BUCLE. Since the process computer axial distribution has been shown to be quite accurate[10], these comparisons provide a good evaluation of the capability of SIMULATE to predict the axial power shape throughout the cycle. These comparisons, corresponding to core exposures of 180, 1800, 2344, 3308, 5256, 6332, 7312, and 9354 MWd/st, are given in Figures 7-1 through 7-8.

The low exposure data points prior to hole plugging were used to evaluate the axial albedos, as described in Section 5.3.1. Although the first state point examined was not representative of a long period of steady state operation, an examination of several P-1's taken over a two-day period indicates that the axial power shape was not changing and that OD-1 had been recently run. Thus, it would seem reasonable that the SIMULATE and P-1 axial distributions would have the same general shape, even though close agreement between the two might not be expected. Figure 7-1 shows that the two distributions are completely different. The reason for this lack of agreement has not been determined because the several possible sources of the disagreement could not be evaluated within the scope of work of this contract. They include: 1) nonsteady state data, 2) process computer inaccuracies at low power (60% of rated power) and flow, and 3) inaccuracies or weaknesses in the SIMULATE model or input at low exposure, low power and flow, or for very flat axial shapes. Thus, the user should be wary of benchmarking his albedos

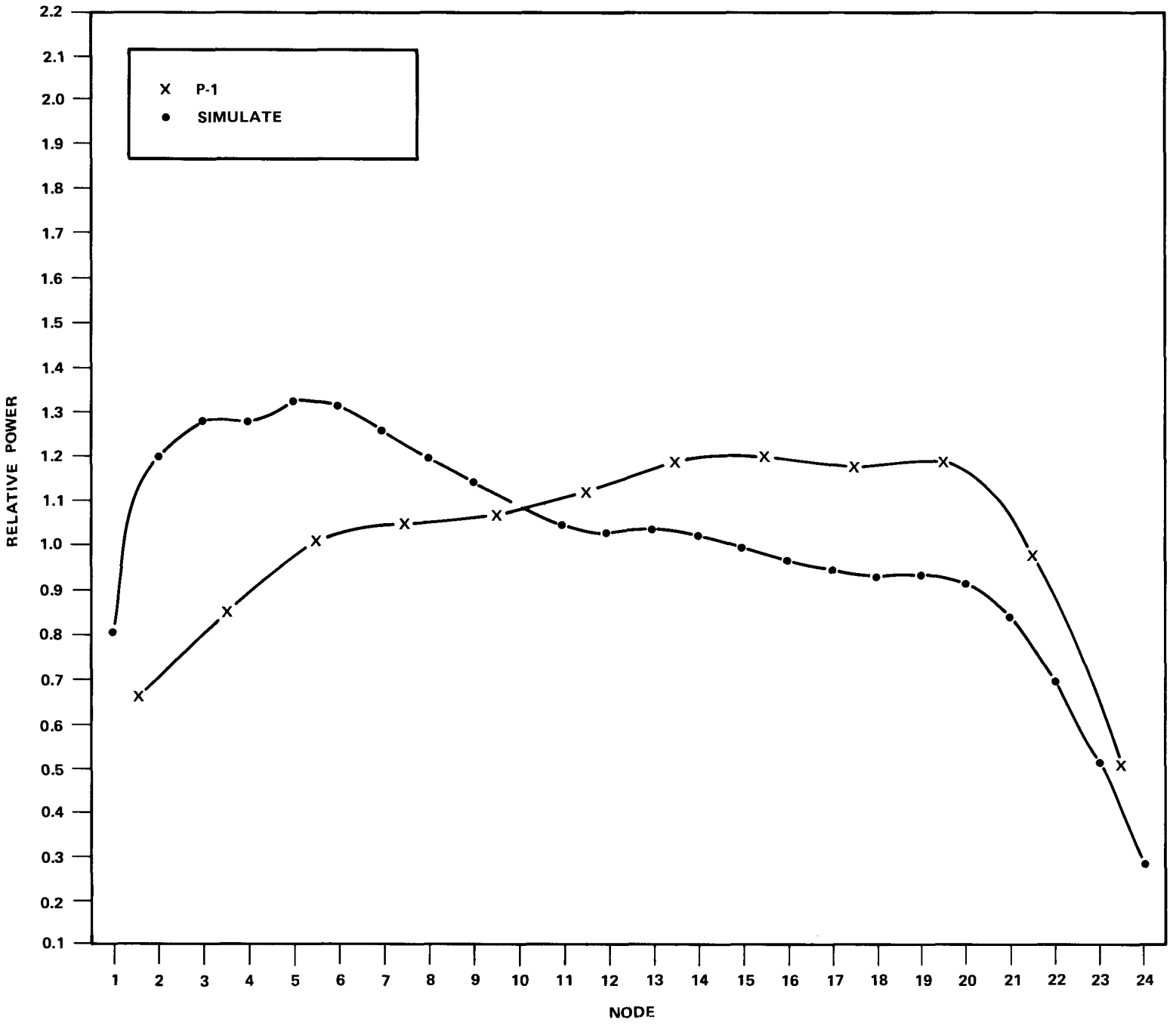



Figure 7-1 Core Average Axial Power Distribution on January 16, 1975 at 180 MWd/st

against a low exposure, low power data point even if the process computer indicates a reasonably steady state power shape.

The three comparisons at 1800, 2344, and 3308 MWd/st show reasonably close agreement, which cannot be improved by adjusting the axial albedos. At 1800 MWd/st (Figure 7-2), the agreement is very close in all nodes except those between 7 and 11. SIMULATE overpredicts the peak in node 6 by approximately 4%. The plant operation was reasonably steady state for several days prior to this state point at 80% of rated power. The operation between 1800 and 2344 MWd/st was very erratic; however, the data point at 2344 MWd/t follows approximately three days of steady state operation, so the inaccuracies in the process computer distribution should be minimal, while the 3308 MWd/st data point falls at the end of 300 MWd/st of steady state operation. The comparisons (Figures 7-3 and 7-4) at these two state points are very similar. In both cases SIMULATE underpredicts the power in the bottom five nodes of the core. The calculated peak in both cases is approximately 7% less than the process computer at that node. Adjustment of the axial albedos does not improve these results. However, the agreement in the upper 19 nodes is very close, and the overall comparisons are adequate.

After hole plugging the axial peak began to shift upward in the core until at the end of cycle the distribution was very top peaked. The first comparison of axial shapes at approximately 1700 MWd/st after hole plugging (Figure 7-5) indicates that SIMULATE shifted the power shape higher than the process computer. This comparison is the worst in the cycle, with the exception of the low power state point at 180 MWd/st. The SIMULATE underprediction of the power in the bottom five nodes is 20-25%, and the calculated peak is three nodes higher than BUCLE indicated; however, the difference between the

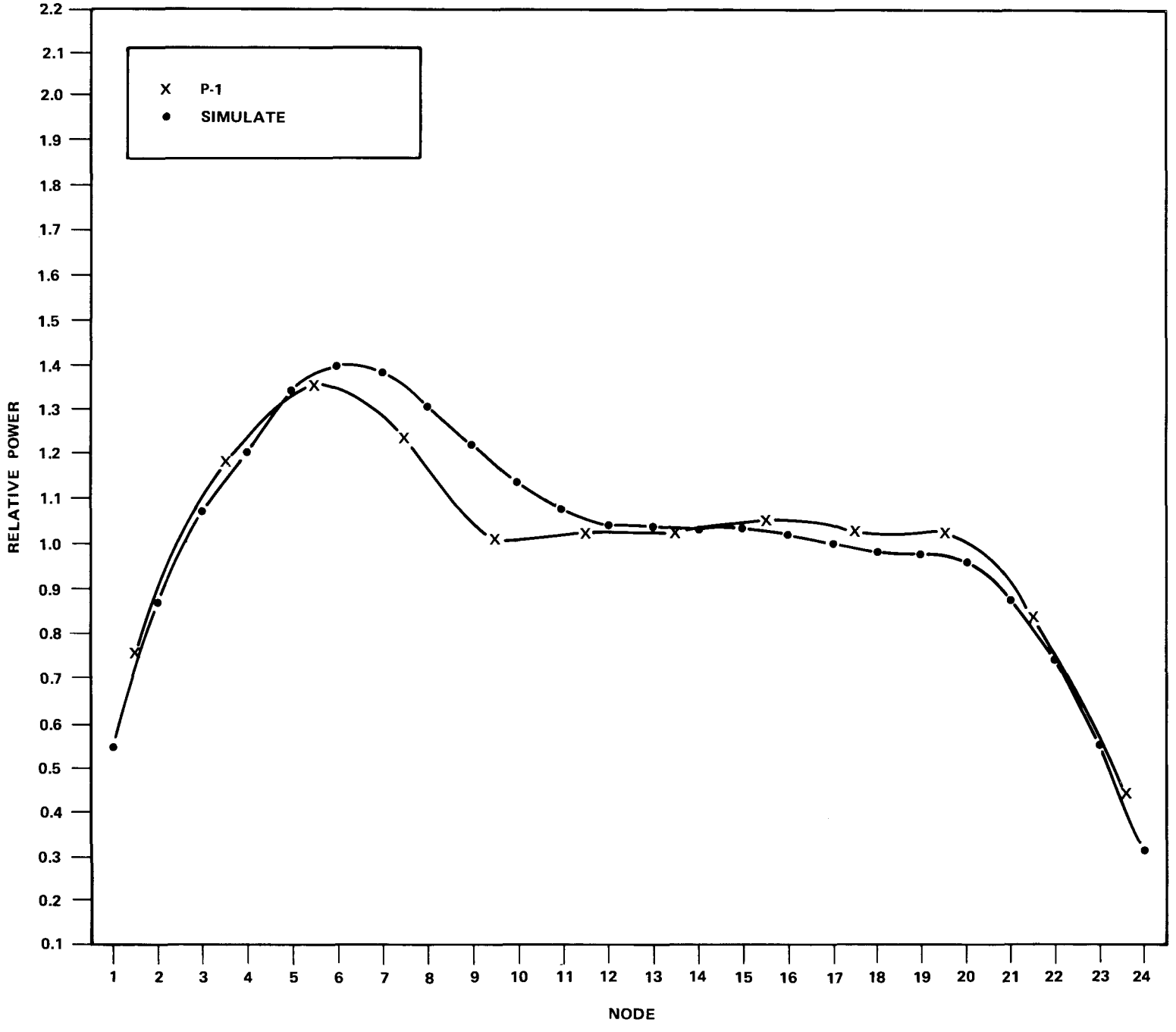



Figure 7-2 Core Average Axial Power Distribution on July 4, 1975 at 1800 MWd/st

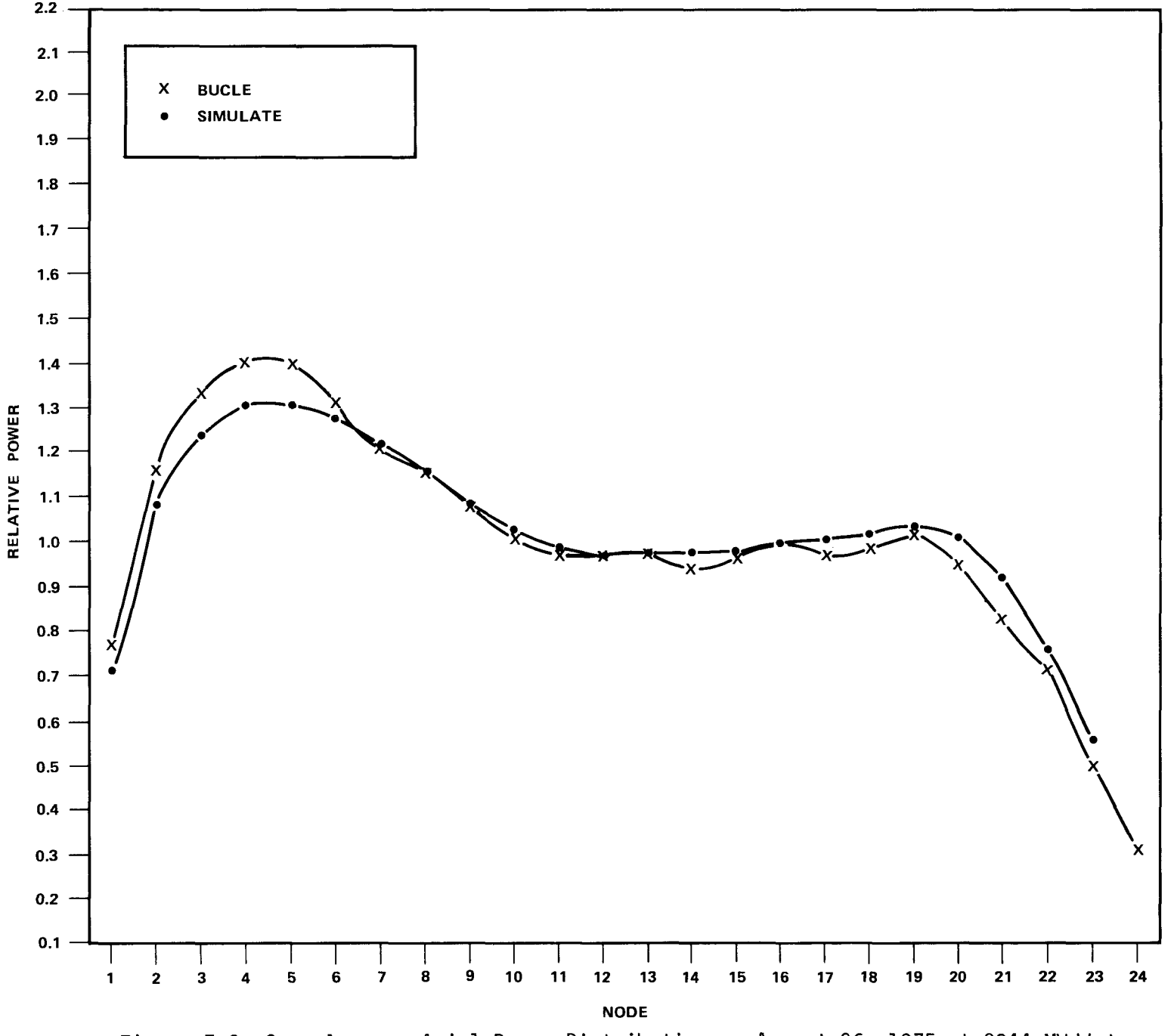



Figure 7-3 Core Average Axial Power Distribution on August 26, 1975 at 2344 MWd/st

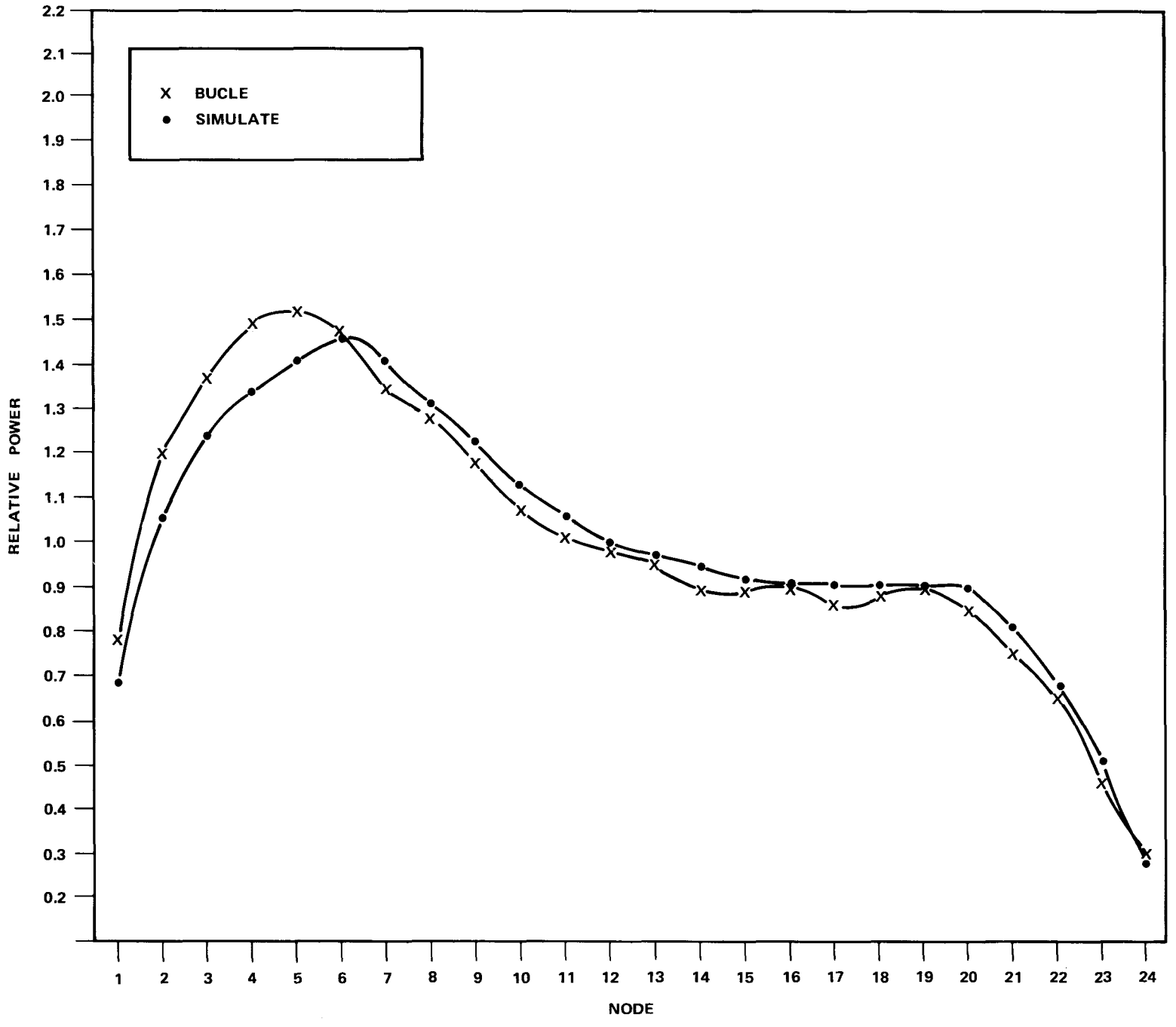



Figure 7-4 Core Average Axial Power Distribution on October 24, 1975 at 3308 MWd/st

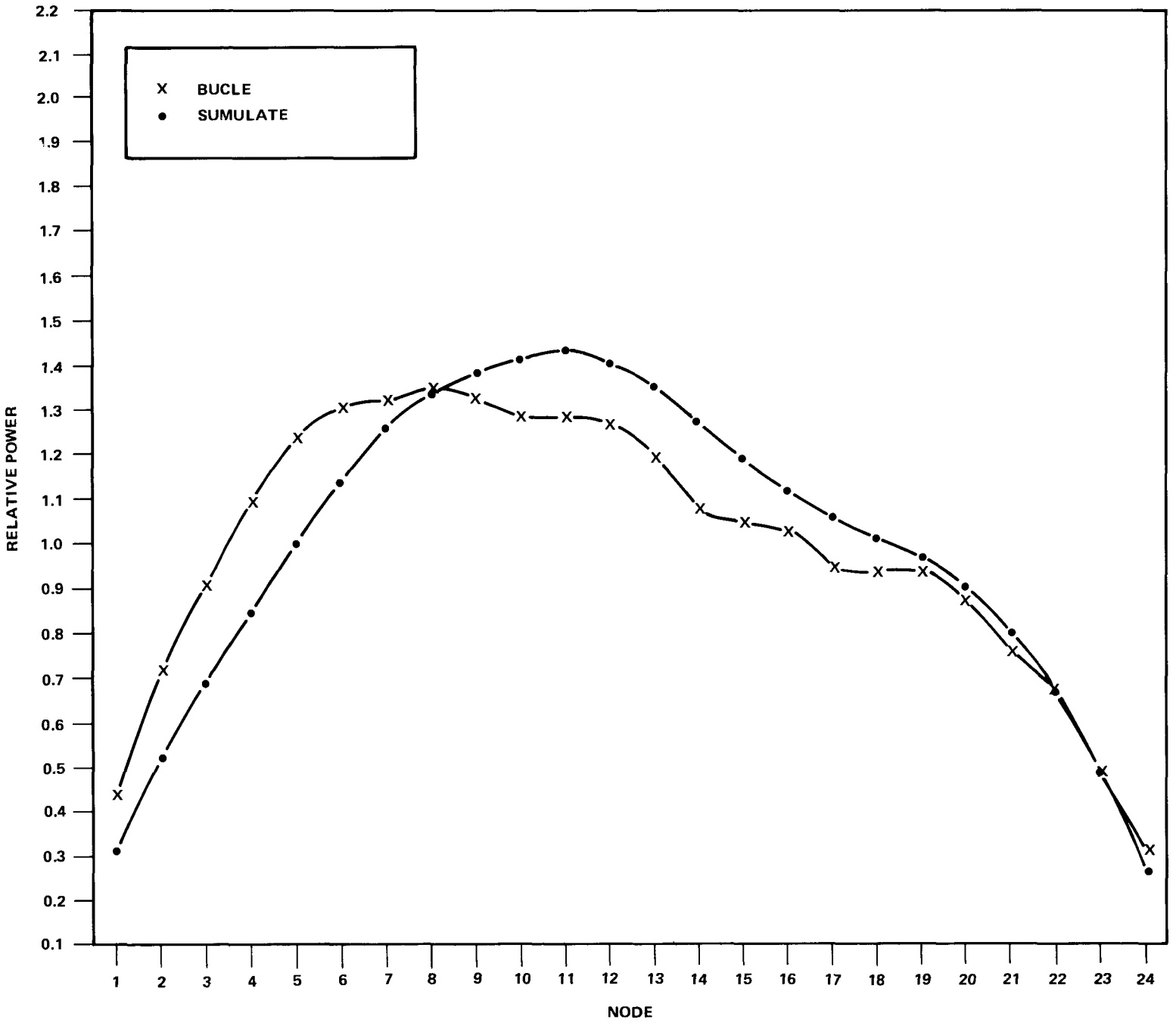



Figure 7-5 Core Average Axial Power Distribution on May 25, 1976 at 5256 MWd/st

magnitudes of the two peaks is only 7%. No unique characteristics of this state point have been found which could explain why this comparison is significantly worse than those preceding and succeeding it. The comparison at 6332 MWd/st (Figure 7-6) shows much closer agreement than the previous one. The power shape is peaked in the middle region of the core, and the agreement in the bottom nodes is much more reasonable. The calculated peak is only 5% higher than the BUCLE peak, and only one node separates the peak locations. The comparison at 7312 MWd/st (Figure 7-7) is remarkable. There is essentially no difference between SIMULATE and BUCLE in the lower 13 nodes of the core, and the differences in the top half are small. The power shape has continued shifting toward the top, and the peak, now at node 12, shows a difference between the prediction and BUCLE of less than 1%. The last comparison (Figure 7-8) represents steady state operating conditions only four days before the end of cycle. The peak, at node 18, is overpredicted by approximately 8%, while the center region between nodes 7 and 13 is underpredicted by 8-10%.

Examination of the seven comparisons described above indicates a general tendency in SIMULATE to underpredict the peak node in extremely bottom peaked distributions and to overpredict it in middle and top peaked distributions, with the magnitude of the difference ranging from 1-8%. This fluctuation in the comparisons, although not desirable, is within a reasonable range.

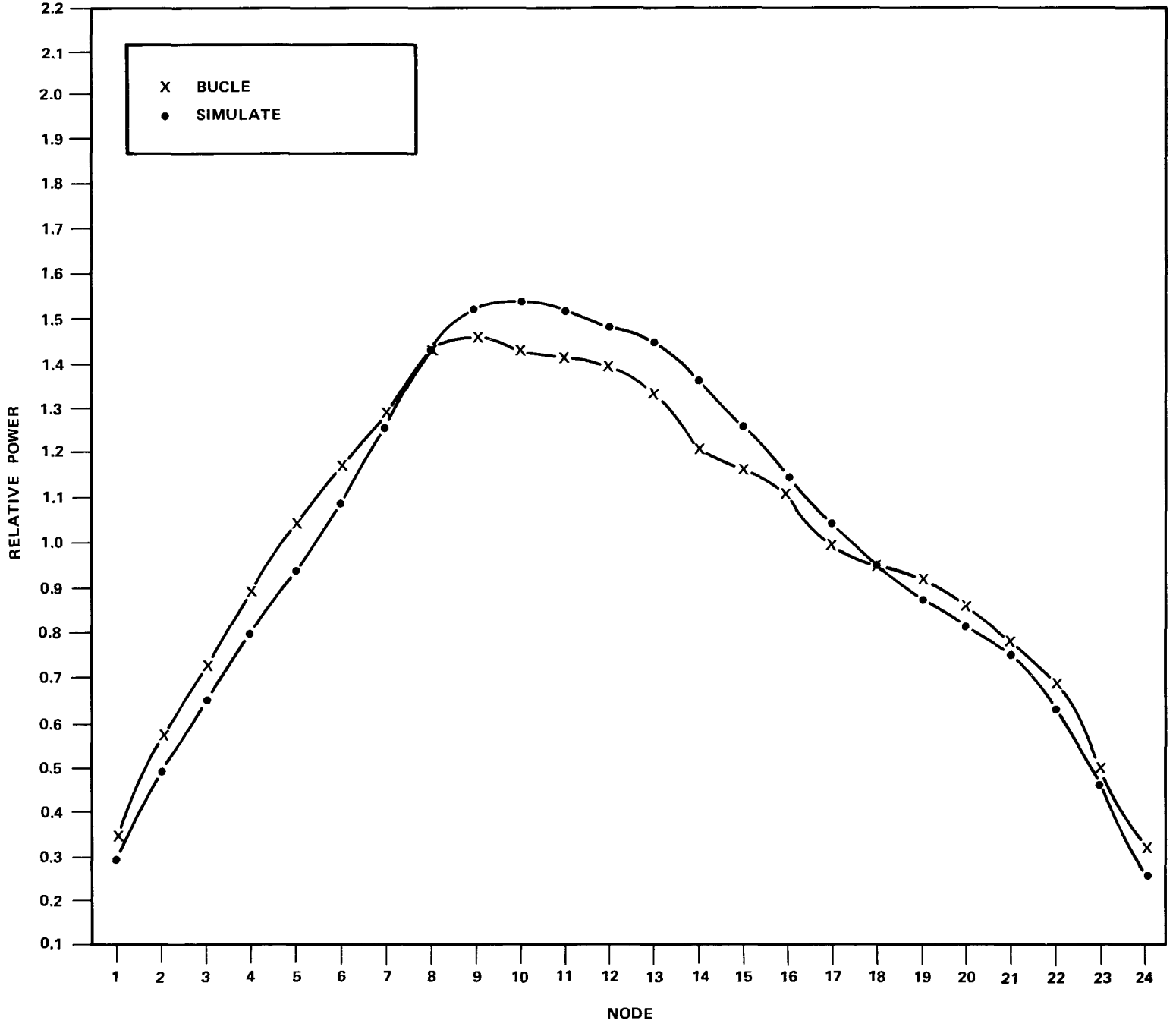



Figure 7-6 Core Average Axial Power Distribution on August 13, 1976 at 6332 MWd/st

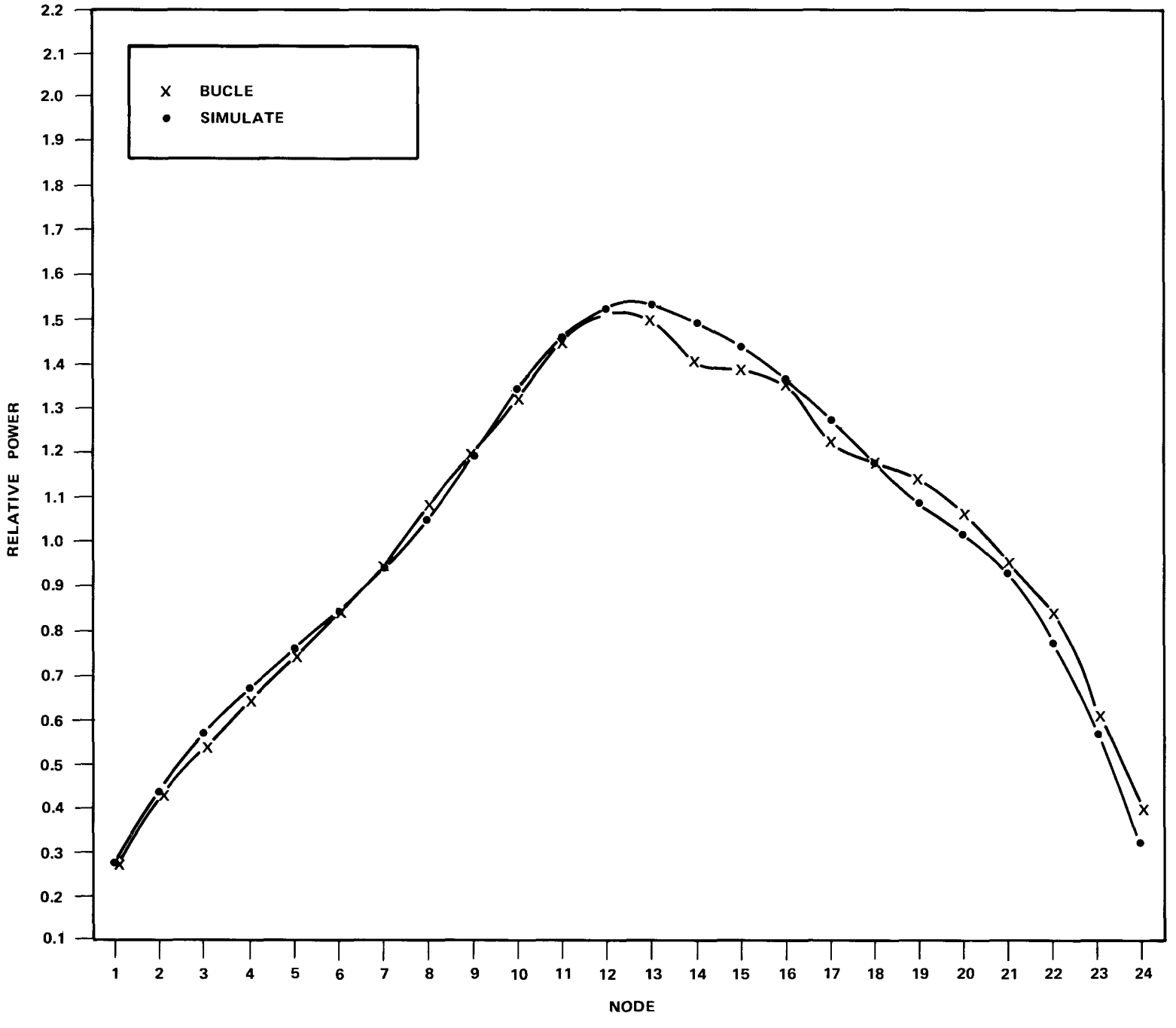



Figure 7-7 Core Average Axial Power Distribution on October 12, 1976 at 7312 MWd/st

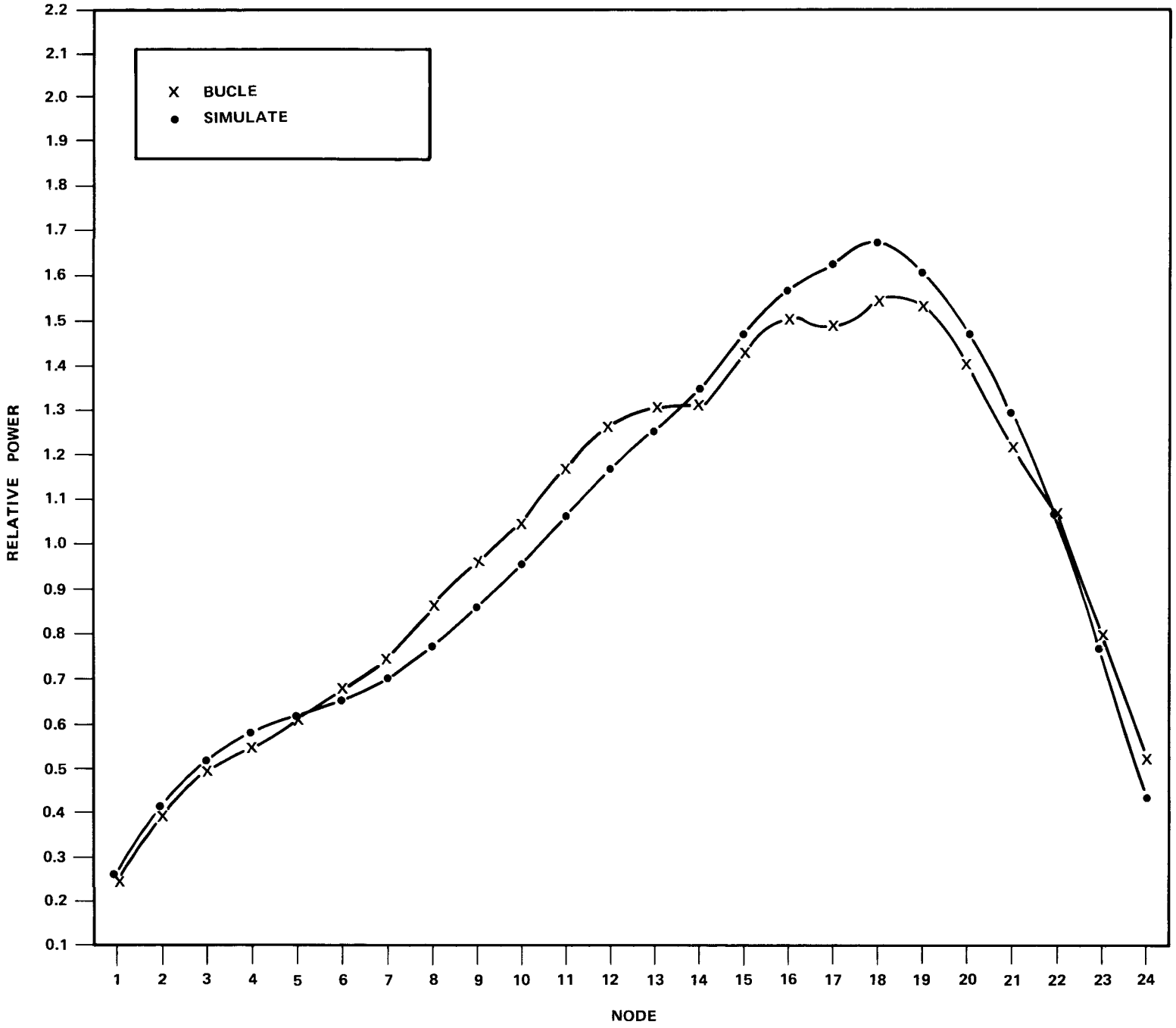



Figure 7-8 Core Average Axial Power Distribution on March 7, 1977 at 9354 MWd/st

## 8.0 CYCLE 1 CRITICAL EIGENVALUE

In addition to an accurate power distribution, a constant critical eigenvalue is required for predictive core calculations. To evaluate the consistency of $k_{eff}$ through cycle 1, flux solutions were obtained at exposures corresponding to steady state data points throughout the cycle. A plot of $k_{eff}$ versus core exposure is given in Figure 8-1. Two points at less than 1000 MWd/st are included, although there is reason to doubt the accuracy of these low power, low exposure operating states. Between 1000 MWd/st and hole plugging, the eigenvalue is constant at approximately 0.991. After bypass boiling is added to the calculation, the $k_{eff}$ behavior is extremely erratic for approximately 1700 MWd/st, swinging from 0.986 to 0.927 in one exposure step. After this period of fluctuation, the eigenvalue again becomes fairly constant at approximately 0.990 until 8530 MWd/st, when it begins to increase.

The last two data points indicate a reduction in the rate of increase at the end of cycle. From the graph, it is impossible to predict what the eigenvalue would have been at the end of full power reactivity because it cannot be determined whether the eigenvalue is increasing sharply with exposure or has become constant after a sharp increase. Selective elimination of data points might also allow one to conclude that the eigenvalue continuously rises after a step decrease at hole plugging; however, there is no valid basis for eliminating any of the operating states following hole plugging.

No analyses have been done to explain the erratic eigenvalue behavior. The rise at the end of cycle coincides with, but is not necessarily caused by, a shift in the axial power shape from peaking in the center of the core to peaking in the top. A correction of the overprediction of the top peak would act in a direction which might also decrease the eigenvalue. This bias in the

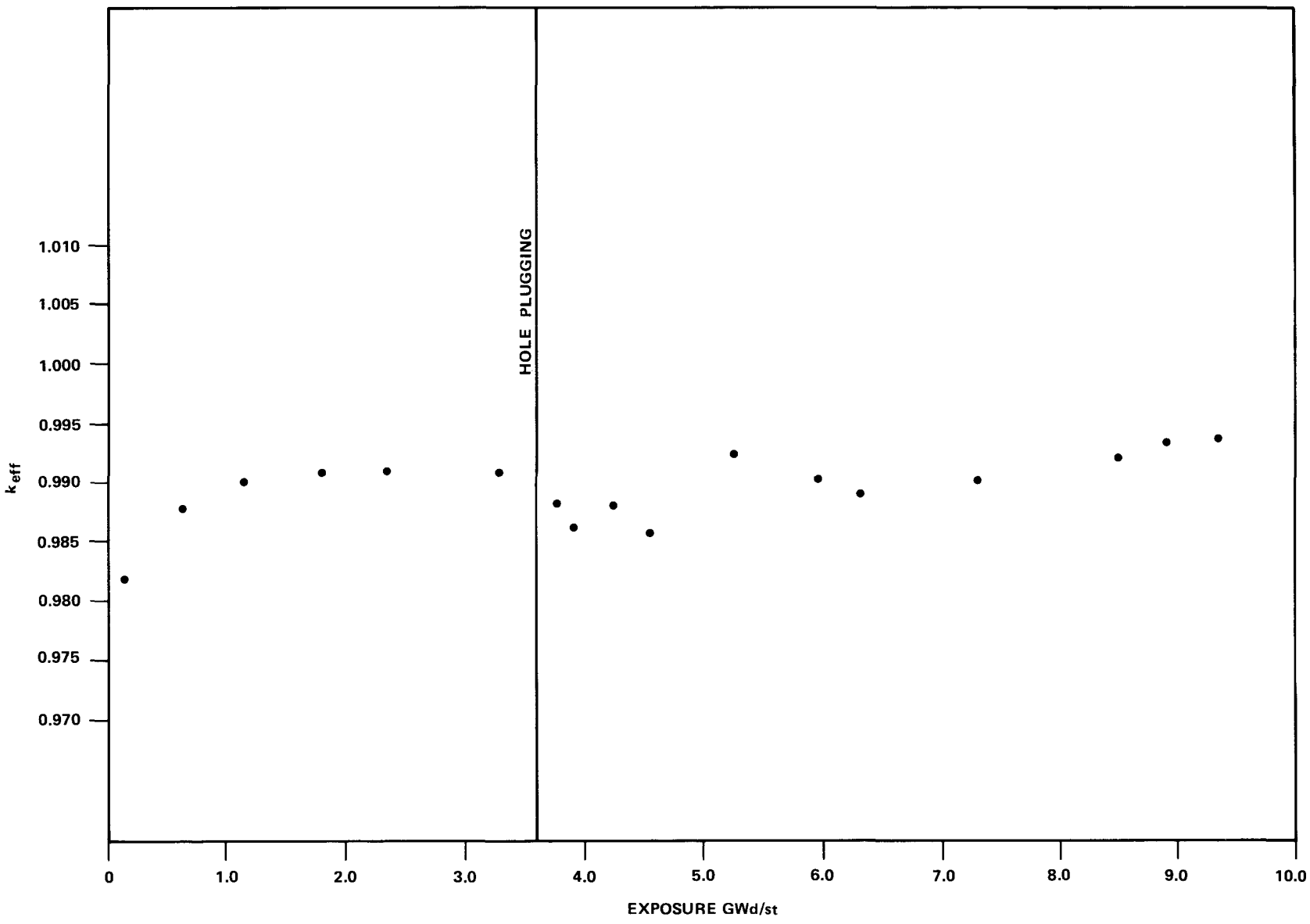



Figure 8-1 SIMULATE $k_{eff}$ versus Exposure for Hatch 1 Cycle 1

eigenvalue and power shape might be due to a bias in the axial void distribution, an incorrect void worth in the CASMO data, or other undefined sources. It should be noted that the procedure of using a single MICBURN library for all three void points introduces a small void worth bias which peaks at the exposure at which the gadolinia burns out. For fuel type 3 this bias is approximately 0.003 between 0.0 and 0.70V $k_\infty$'s. This bias was considered to be negligible because other uncertainties are larger; however, an evaluation of the effect of the bias in SIMULATE might be appropriate, based on the SIMULATE results above.

Although the eigenvalue is not as stable as one would desire, the behavior is less erratic than that of previously available codes. While methods development effort should be directed toward improving its consistency, the current version of the code may be used with reasonable confidence for core management calculations.

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# APPENDIX A

# PRELIMINARY CASMO EVALUATIONS

## PRELIMINARY EVALUATIONS OF CASMO

Before the CASMO lattice physics program was used to generate lattice average cross sections for SIMULATE, preliminary comparisons were made with CPM to verify the CASMO input procedures. The initial test runs were performed for the fuel type 3 lattice which contains four 4.0 w/o Gd rods, because any errors due to Gd modeling would be largest for this fuel type. Since CPM was developed for use as a benchmark tool, it was assumed that close agreement between the two codes would indicate that proper procedures were being followed.

The CASMO procedures originally recommended that a 25-group MICBURN library at 0.40V be used for all void fractions in CASMO because previous CPM evaluations had shown an insensitivity to the MICBURN void fraction. Because the MICBURN cross section tables available with the CASMO program are valid only for 8 x 8 lattices, special MICBURNs at 0.40V were run for the 4.0 w/o and 2.5 w/o Gd rods present in the Hatch 1 initial core 7 x 7 fuel. Fuel type 3 was thus burned to 10.0 GWd/mt at 0.0V in both CPM and CASMO using 0.40V MICBURN cross section tables generated specifically for the two cases. The CPM calculations were run on the Southern Company Services Amdahl system, while CASMO calculations were performed using the CDC version of CASMO at Lawrence Berkeley Laboratory (LBL). The two resulting $k_\infty$ curves are given in Figure A-1. The large difference of 1.7% $\Delta k$ observed at the reactivity peak indicated a significant inconsistency between the two calculations. Both calculations were run using standard procedures. No "production version" approximations were made in the CPM run. The 69-group MICBURN calculation was run using the 69-group cross section library available with CPM; the 25-group MICBURN run to obtain the CASMO input used the 25-group cross section library from CASMO.

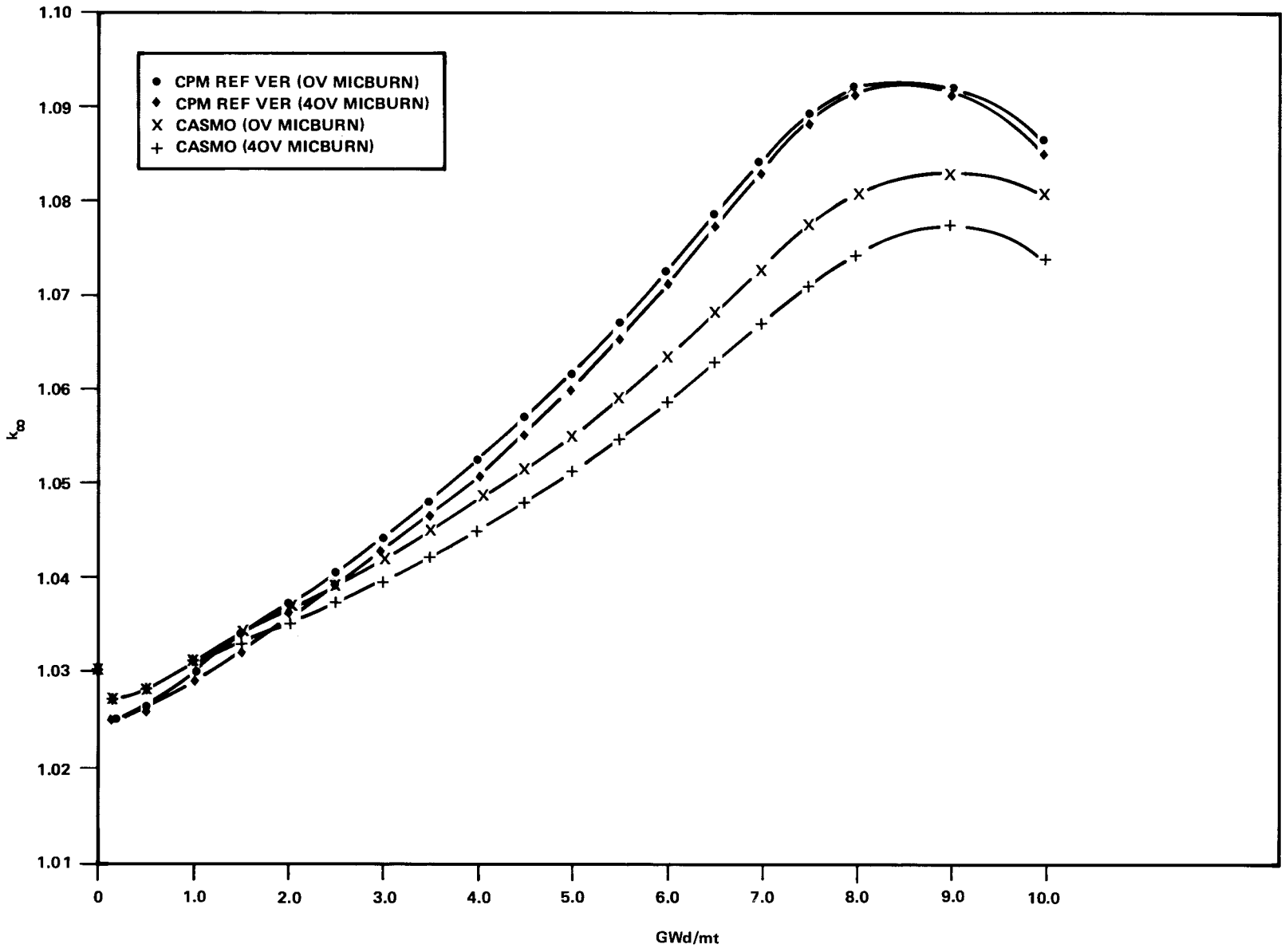


Figure A-1 Effects of the MICBURN Void Fraction on CPM and CASMO $k_\infty$'s for Hatch 1 Fuel Type 3 at 0.0V

The only other differences between the CPM and CASMO runs were the inclusion of thermal expansion and a smeared spacer in CASMO. These options should not be worth 1.7% in reactivity.

The CASMO and CPM calculations were then rerun using MICBURN cross sections at 0.0V. These results are also presented in Figure A-1. The CPM calculations which used 0.0V and 0.40V MICBURN libraries yielded essentially identical $k_\infty$ curves, while the difference between the two CASMO curves is very large. After an extensive investigation of the CPM and CASMO cross section libraries used to run the MICBURN cases, M. Edenius[5] determined that significant differences between the Gd-156 and Gd-158 cross sections in the two libraries existed in both the thermal and resonance regions. The CASMO 69- and 25-group libraries based on a later ENDF/B version with revised Gd 156 and 158 cross sections caused the effective Gd cross sections to be more sensitive to the neutron spectrum in MICBURN than had been observed previously. As Figure A-1 shows, using a MICBURN library generated at 0.0V increased the CASMO peak $k_\infty$ by 0.0055 $\Delta k$. This procedure change did not, however, remove the entire 0.017 $\Delta k$ difference between CASMO and CPM originally observed. Almost 1.2% in reactivity remains to be explained.

Several cases were run to quantify the effects of a smeared spacer, thermal expansion of the cold dimensions, and differences between the two versions of the 69-group library. Figure A-2 presents CPM and CASMO $k_\infty$ curves which were generated with all possible procedural differences removed. The CPM "reference version" case was run at LBL using the revised 69-group cross section library and MICBURN 69-group cross sections generated at 0.0V using the revised 69-group library. CASMO was run with no spacer, cold dimensions, and MICBURN 25-group cross sections generated at 0.0V. The comparison of the

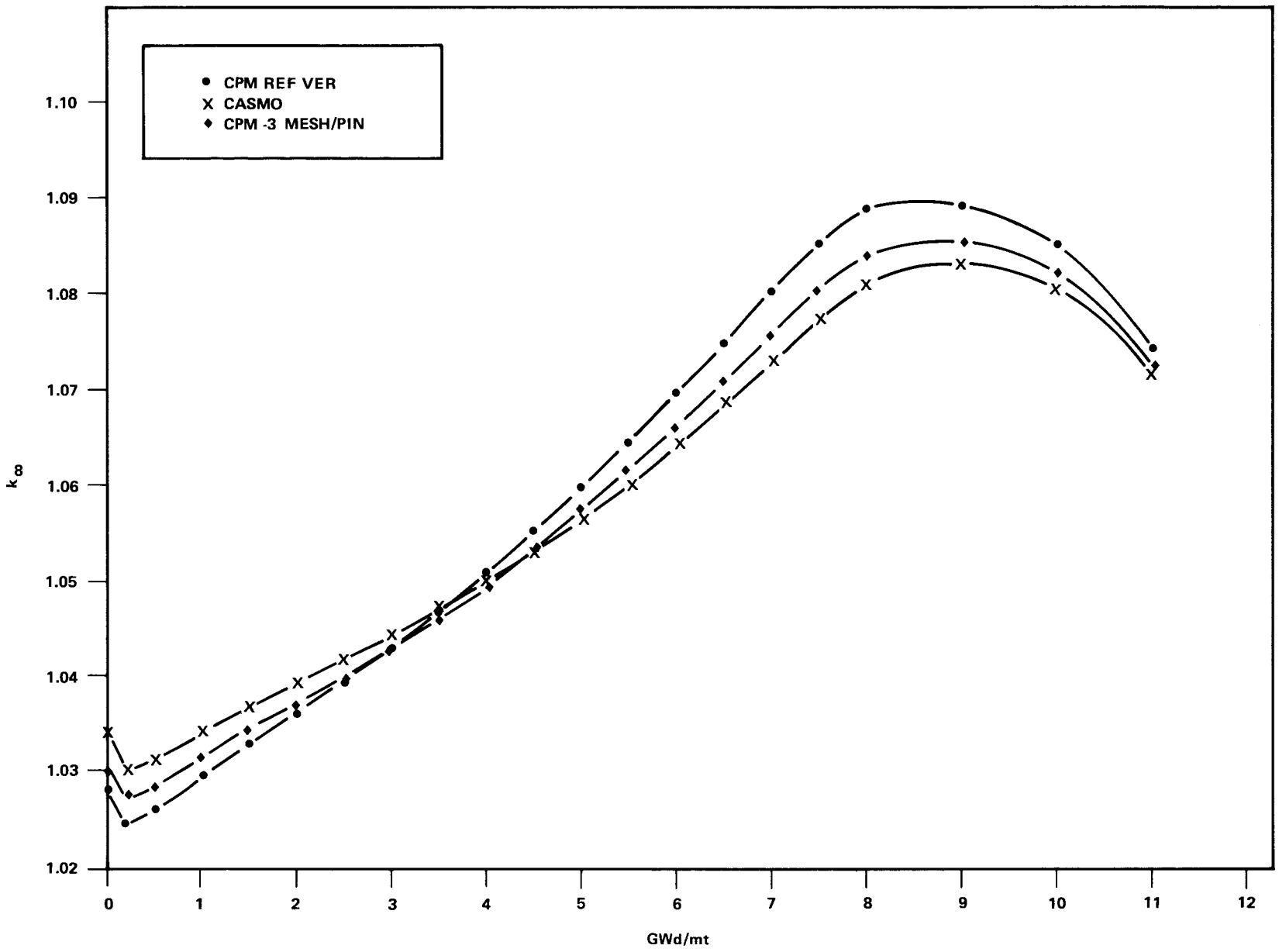


Figure A-2 $k_\infty$ Comparison between CPM and CASMO Run for Hatch 1 Fuel Type 3 at 0.0V Using Consistent Input Procedures

two $k_\infty$ curves indicates a residual $\Delta k$ of 0.006 at the peak after all procedural differences are accounted for. As the graph shows, this bias is not constant with exposure. Instead, CASMO is approximately 0.6% higher than CPM at beginning of life and approximately 0.6% lower at the end of Gd burnup, resulting in a significant difference between the slopes of the two curves.

To attempt to resolve this significant bias, Edenius suggested that CPM be run using three mesh points per fuel pin instead of the usual two to obtain a better estimation of the flux gradients within the bundle. The resulting $k_\infty$ curve given in Figure A-2 bisects the distance between the other two curves. Because increasing the number of CPM mesh points increases the accuracy of the CPM calculation, the resulting $\Delta k$ of 0.0035 indicates that the CASMO curve should reasonably represent the behavior of the bundle $k_\infty$. Since no methods were available to determine the relative accuracy of CASMO and the CPM reference version, it was decided to proceed with the development of CASMO cross sections for SIMULATE. The core simulator results should provide an implicit qualification of the CASMO calculation of lattice average nuclear parameters.

Because the effective Gd cross sections were shown in Figure A-1 to be sensitive to the neutron spectrum in MICBURN, it became necessary to determine the void fraction which should be used in MICBURN to produce the same spectrum that the Gd rod would "see" in CASMO. Thus, the MICBURN void fraction should not be considered physically meaningful; it is merely a tool which should be used to produce the correct spectrum.

The proper void fractions to be used were calculated by Edenius for an 8 x 8 lattice and were verified using data for the Hatch 1 initial core 7 x 7 lattice. Because the average spectrum in the Gd rod is not edited by MICBURN,

flux ratios could not be determined directly. To consistently estimate the epithermal to thermal flux ratios in MICBURN and in CASMO, Edenius calculated the ratios of the Pu-239 production to the Gd depletion during short exposure steps at beginning of life. By plotting the MICBURN "flux" ratios as a function of void fraction, he was able to determine that the "flux" ratio obtained from a -0.20V MICBURN calculation would be equivalent to the CASMO "flux" ratio at 0.0V. The 0.40V and 0.70V CASMO spectra were found to correspond to the 0.0V and 0.20V MICBURN spectra, respectively.

To determine whether the CASMO $k_\infty$'s are sensitive to these small variations in the MICBURN spectrum or whether a single MICBURN at 0.0V is adequate for all CASMO void fractions, CASMO $k_\infty$ curves were generated at 0.0V using 0.0 and -0.20V MICBURN libraries and at 0.70V using 0.0 and 0.20V MICBURNs. These results are presented in Figures A-3 and A-4. The 0.40V CASMO would be run using a 0.0V MICBURN in any case. Figure 3 indicates essentially no difference between the $k_\infty$ curves generated with 0.0 and -0.20V MICBURNs. The largest difference is observed at the peak reactivity where the $k_\infty$ obtained using a -0.20V MICBURN is approximately 0.0015 $\Delta k$ higher than the other case. The 0.70V $k_\infty$ curves in Figure A-4 show similar agreement, except that the bias is in the opposite direction. The $k_\infty$ difference at the peak reactivity is approximately 0.002. Both of these differences are much smaller than the difference observed between CASMO and the CPM benchmark calculation, so it was concluded that a single MICBURN generated at 0.0V should be adequate for modeling Gd rods at all CASMO void fractions. This simplified procedure does, however, introduce a bias of approximately 0.0035 between the 0.0V and 0.70V $k_\infty$'s for fuel type 3 with four Gd rods. This bias in the void coefficient would probably be smaller for the other fuel types with less Gd. The direction of the bias in the axial power shape observed in the SIMULATE

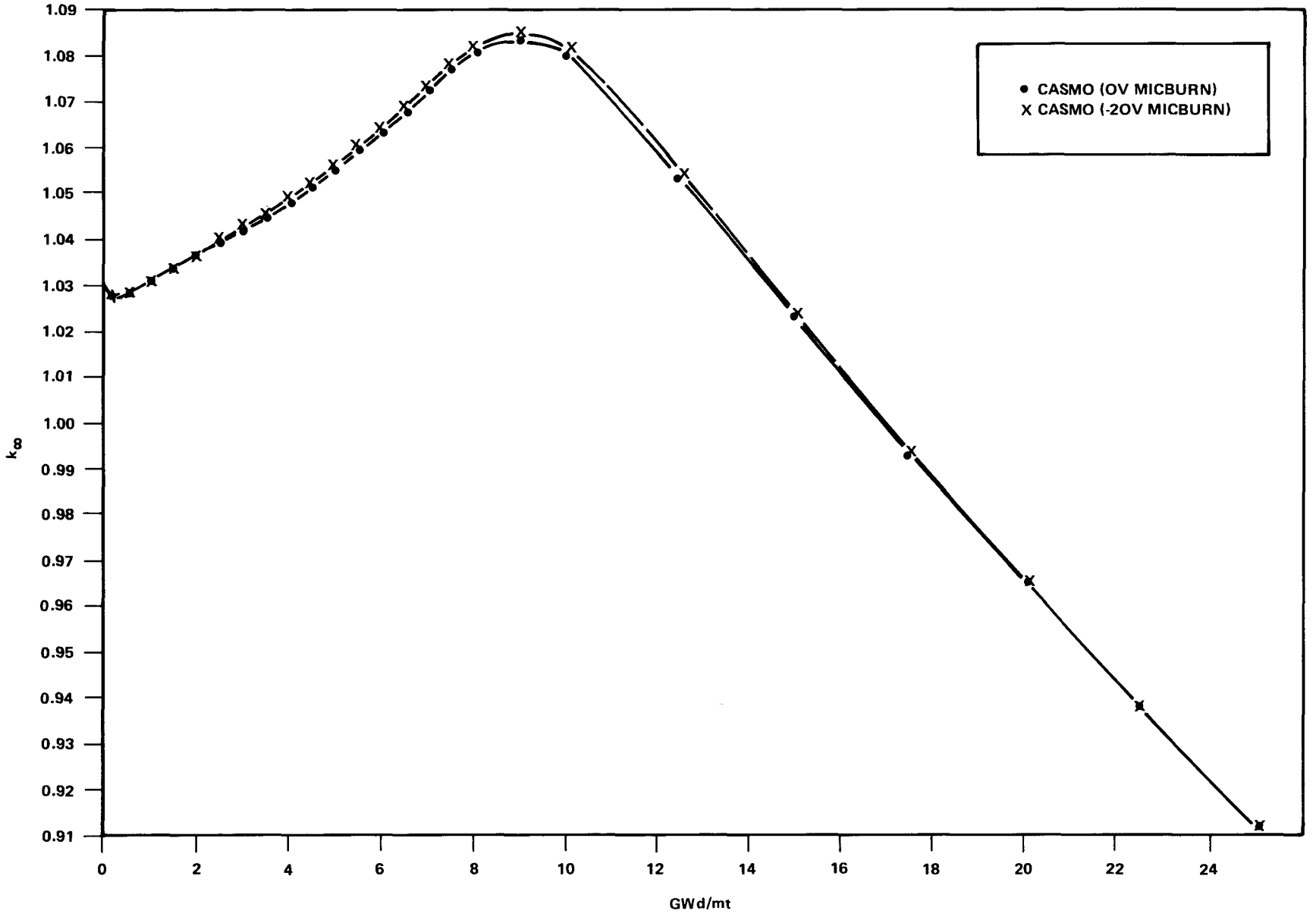


Figure A-3 Effects of Using 0.0V and -0.20 MICBURNs on the CASMO $k_\infty$ for Hatch 1 Fuel Type 3 at 0.0V

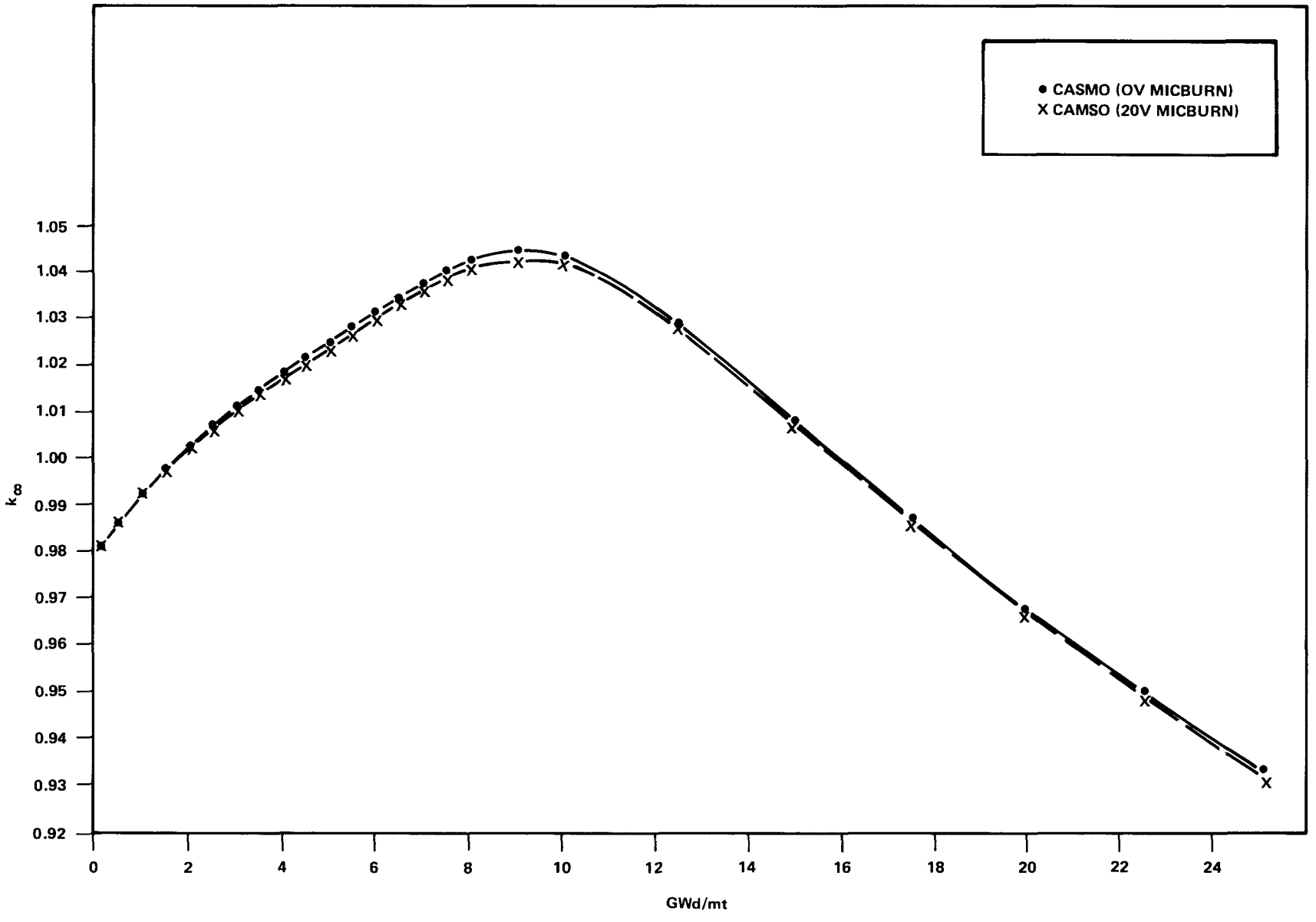


Figure A-4 Effect of Using 0.0V and 0.20V MICBURNs on the CASMO $k_\infty$ for Hatch 1 Fuel Type 3 at 0.70V

comparisons is consistent with this CASMO bias; however, there are other phenomena which could introduce a similar axial bias which have not been accounted for in SIMULATE. Further investigation would be required to conclude that libraries generated using a single MICBURN run at 0.0V are inadequate.

# APPENDIX B

# SAMPLE INPUT LISTINGS

CASMO INPUT LISTING FOR HATCH 1 FUEL TYPE 1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
CASMO,4,8000,60000, XXXXXX ,FOLK,N
$ID=
GETTAPE,LGO=CASMO1/LG3CAS,31946,
GETTAPE,TAPE10=DATLIB7/BDAT25,31946,
GETTAPE,TAPE13=MICBURN/E279/GD40/VF00,18824,
REWIND,LGO,TAPE10,TAPE13,
LINKX,X,F=LGO,L=0,
FIN,
EXIT,
FIN,
STOTAPE,TAPE7=CASMO/CARDS/HA1FT1/VF40,18824,
STOTAPE,TAPE12=CASMO/WRAPUP/HA1FT1/VF40,18824,
7/8/9
TIT TFU=***, TMO=***, VOI=40, * HA1 FT1 2GD4%   40V
FUE 1 10.32/2.79
FUE 2 10.32/1.94
FUE 3 10.32/1.69
FUE 4 10.32/1.27
FUE 5 10.16/2.79 7300=4.0
CAN 5.70
BWR 7,1.8745,13.4061,0.2032,0.9525,0.4775,1.1684
SPA 5.55/750=15.96 302=84.04
PIN 1 0.60579 0.71501
THE ,,,7.E-6
BAD,7300,1
LFU
 4
 4 2
 3 2 1
 3 1 1 1
 3 1 1 1 1
 2 1 5 1 1 1
 3 2 1 1 1 2 2
PDE 23.27
```

***PROPRIETARY INFORMATION

CASMO INPUT LISTING FOR HATCH 1 FUEL TYPE 1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
DEP 0. 0.2 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0
9.0 10.0 12.5 15.0 17.5 20.0 22.5 25.0 27.5 30.0 40.0
NLI
STA
TIT
RES,,5 10 15 20 30
VOI 0 40 70
NLI
STA
TIT
RES,,0 5 10 15 20 30
TFU 1124.5
NLI
STA
TIT
RES,,0 1 3 5 7.5 10 15 20 30
CRO 0 1.985 10.397 0. 0.3247 0.1753 0.4775
NLI
STA
END
6/7/8/9
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
//SIMULATE JOB
// CLASS=D,TIME=20,REGION=1300K
// EXEC EN2137S1,LIB='DDD5.TEMPLINK.EN2137S1',
// TIME.GO=20,
// NFILE=SIMMVS
//GO.FT01F001 DD DUMMY
//GO.FT04F001 DD SPACE=(TRK,(75,5))
//GO.FT05F001 DD *
 26 26 24  6  0              13 14164 31      0 92 60     23
  0  0  0  0  0  0
ISAVE HA1C101 0-180 MWD/ST (198.4 MWD/MT) A-1 STATE POINT AT 1-16-75
 1          1          0.         0.1984     0.1984     1451.      50.8
 2          1          23.1       979.       0.         0          0.
 3          1          0          0          0          0.0        0.0
 4          1          0          .7         .5         1.0        15.24
 5          1          15.24      0          0          0          0
 6          1          0          0          2436.      78.5       51.21
 7          1          1          1          1          1          6.0355
 8          1          0.
 1          2          0          2          0          1          0
 2          2          0          4          0.005      6          0.0001
 3          2          12         0.0001     3          0.001      1
 4          2          0          1          0          0          1.0
 5          2          1.         1.         0          1.         5.
 6          2          0          0.         0.         0.         0.3
 1          3    1     *** .      *** .      0.         S          0
 2          3    1     23         0          0          0          2
 3          3    1     30.48      3          274.32     2          365.76
 4          3    1     S3                                .1868      1.0
 5          3    1     S4                                           0.34
 6          3    1     0.62       1.0        S3
 7          3    1     S3                                1.0E+06    2.4643
 8          3    1     .17872E-01 -.2577E-03 2           0          .063578
 9          3    1     .38663E-05 .7649E-06 2.87E-05 .27121E-02 .31204E-03
 0          3    1     -.5881E-05 2.09E-05  S3
```

*** PROPRIETARY INFORMATION

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
11-16       3   1    S29                                          49
17          3   1    49          7.222     0.10788
 1          3   2    ***.       ***.       0.         5         0
 2          3   2    23         S3                               1
 3          3   2    30.48      2          45.72      3         182.88
 4          3   2    2          289.56     1          0.1870    1.0
 5          3   2    S4                                          0.34
 6          3   2    0.62       1.0        S3
 7          3   2    S3                                 1.0E06   2.4659
            3   2    .17901E-01 -.26125E-03 2          0         .063579
            3   2    .4114E-05 .75467E-06 2.87E-05 .0027297  .31297E-03
            3   2    -.59455E-5 2.09E-05  S3
            3   2    S25
            3   2    S4                                          49
            3   2    49          7.222     0.10788
            3   3    ***.       ***.       0.         5         0
 2          3   3    23         S3                               4
 3          3   3    365.76     S4
 4          3   3    S3                                 0.1873   1.0
 5          3   3    S4                                          0.34
 6          3   3    0.62       1.0        S3
 7          3   3    S3                                 1.0E06   2.4676
 8          3   3    .017845    -.26196E-03 2           0        0.063582
 9          3   3    .4027E-05 .755E-06   2.87E-05 .0027455  .31345E-03
10          3   3    -.5992E-05 2.09E-05  S3
11          3   3    S25
12          3   3    S4                                          49
13          3   3    49          7.222     0.10788
 1          3   4    ***.       ***.       0.         5         0
 2          3   4    23         S4
 3          3   4    S5
 4          3   4    S3                                 0.0      1.0
 5          3   4    S4                                          0.34
 6          3   4    0.62       1.0        S3
 7          3   4    S3                                 1.0E06   2.4638
```

*** PROPRIETARY INFORMATION

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
 8          3    4     .017774    -.00025305 2           0          .063577
 9          3    4     .36492E-5 .77358E-6  2.87E-05 .0027075  .00031056
10          3    4     -.58141E-5 2.09E-05  83
11          3    4     829                                       49
12          3    4     49          7.222     0.10788
            4    1     0 0 0 0 0 0 0 0 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0
            4    2     0 0 0 0 0 0 0 3 3 3 2 1 2 1 2 1 3 3 3 0 0 0 0 0 0 0
            4    3     0 0 0 0 3 3 3 3 1 2 1 2 1 2 1 2 1 2 3 3 3 3 0 0 0 0
            4    4     0 0 0 3 3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3 3 0 0 0
            4    5     0 0 3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3 0 0
            4    6     0 0 3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3 0 0
            4    7     0 0 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 0 0
            4    8     0 3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3 0
            4    9     3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3
            4   10     3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3
            4   11     3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3
            4   12     3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3
            4   13     3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3
            4   14     3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3
            4   15     3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3
            4   16     3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3
            4   17     3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3
            4   18     3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3
            4   19     0 3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3 0
            4   20     0 0 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 0 0
            4   21     0 0 3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3 0 0
            4   22     0 0 3 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 3 3 0 0
            4   23     0 0 0 3 3 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 3 3 3 0 0 0
            4   24     0 0 0 0 3 3 3 3 2 1 2 1 2 1 2 1 2 1 3 3 3 3 0 0 0 0
            4   25     0 0 0 0 0 0 0 3 3 3 1 2 1 2 1 2 3 3 3 0 0 0 0 0 0 0
            4   26     0 0 0 0 0 0 0 0 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0
            5 1 1  1  1  4  0  2   1
            5 2 1  2  1  5  0  2   2
            5 3 1  2  1  5  4  2   3  2  .19204E+01 -.31121E+01  .11918E+01
            5 4 1 -2  1  4  0  2   4
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          5 5 1  2  1  4  6  2   5  1 -.10408E+02  .34020E+00
          5 6 1  3  1  5  0  2   6
          5 7 1  3  1  5  4  2   7  2  .15059E+01 -.14787E+01 -.27179E-01
          5 8 1 -3  1  4  0  2   8
          5 9 1  4  1  5  0  2   9
          510 1  4  1  5  4  2  10  2  .18573E+01 -.28637E+01  .10064E+01
          511 1  5  1  5  0  2  11
          512 1  5  1  5  4  2  12  2  .18548E+01 -.28539E+01  .99908E+00
          513 1  6  1  4  0  2  13
          514 1  7  1  5  0  2  14
          515 1  7  1  5  4  2  15  2  .16794E+01 -.21623E+01  .48298E+00
          516 1 -7  1  4  0  2  16
          517 1  8  1  5  0  2  17
          518 1  8  1  5  4  2  18  2  .18106E+01 -.26797E+01  .86907E+00
          519 1 -8  1  4  0  2  19
          520 1  9  1  5  0  2  20
          521 1  9  1  5  4  2  21  2  .18105E+01 -.26792E+01  .86866E+00
          522 1 -9  1  4  0  2  22
          523 1  7  1  4 22  2  23  1 0.            .10000E+01
          5 1 2  1  1  4  0  2  24
          5 2 2  2  1  5  0  2  25
          5 3 2  2  1  5  4  2  26  2  .19286E+01 -.31446E+01  .12160E+01
          5 4 2 -2  1  4  0  2  27
          5 5 2  2  1  4  6  2  28  1 -.10408E+02  .34020E+00
          5 6 2  3  1  5  0  2  29
          5 7 2  3  1  5  4  2  30  2  .15064E+01 -.14806E+01 -.25788E-01
          5 8 2 -3  1  4  0  2  31
          5 9 2  4  1  5  0  2  32
          510 2  4  1  5  4  2  33  2  .18682E+01 -.29064E+01  .10383E+01
          511 2  5  1  5  0  2  34
          512 2  5  1  5  4  2  35  2  .18651E+01 -.28943E+01  .10292E+01
          513 2  6  1  4  0  2  36
          514 2  7  1  5  0  2  37
          515 2  7  1  5  4  2  38  2  .16830E+01 -.21767E+01  .49371E+00
          516 2 -7  1  4  0  2  39
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
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518 2  8  1  5  4  2  41  2  .18191E+01 -.27132E+01  .89404E+00
519 2 -8  1  4  0  2  42
520 2  9  1  5  0  2  43
521 2  9  1  5  4  2  44  2  .18185E+01 -.27108E+01  .89228E+00
522 2 -9  1  4  0  2  45
523 2  7  1  4 22  2  46  1 0.            .10000E+01
5 1 3  1  1  4  0  2  47
5 2 3  2  1  5  0  2  48
5 3 3  2  1  5  4  2  49  2  .19317E+01 -.31569E+01  .12252E+01
5 4 3 -2  1  4  0  2  50
5 5 3  2  1  4  6  2  51  1 -.10408E+02  .34020E+00
5 6 3  3  1  5  0  2  52
5 7 3  3  1  5  4  2  53  2  .15070E+01 -.14829E+01 -.24095E-01
5 8 3 -3  1  4  0  2  54
5 9 3  4  1  5  0  2  55
510 3  4  1  5  4  2  56  2  .18708E+01 -.29168E+01  .10460E+01
511 3  5  1  5  0  2  57
512 3  5  1  5  4  2  58  2  .18675E+01 -.29037E+01  .10363E+01
513 3  6  1  4  0  2  59
514 3  7  1  5  0  2  60
515 3  7  1  5  4  2  61  2  .16752E+01 -.21459E+01  .47072E+00
516 3 -7  1  4  0  2  62
517 3  8  1  5  0  2  63
518 3  8  1  5  4  2  64  2  .18106E+01 -.26795E+01  .86894E+00
519 3 -8  1  4  0  2  65
520 3  9  1  5  0  2  66
521 3  9  1  5  4  2  67  2  .18102E+01 -.26781E+01  .86786E+00
522 3 -9  1  4  0  2  68
523 3  7  1  4 22  2  69  1 0.            .10000E+01
5 1 4  1  1  4  0  2  70
5 2 4  2  1  5  0  2  71
5 3 4  2  1  5  4  2  72  2  .19196E+01 -.31091E+01  .11895E+01
5 4 4 -2  1  4  0  2  73
5 5 4  2  1  4  6  2  74  1 -.10408E+02  .34020E+00
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          5 6 4  3  1  5  0  2  75
          5 7 4  3  1  5  4  2  76  2  .15059E+01 -.14787E+01 -.27235E-01
          5 8 4 -3  1  4  0  2  77
          5 9 4  4  1  5  0  2  78
          510 4  4  1  5  4  2  79  2  .18568E+01 -.28616E+01  .10048E+01
          511 4  5  1  5  0  2  80
          512 4  5  1  5  4  2  81  2  .18543E+01 -.28516E+01  .99736E+00
          513 4  6  1  4  0  2  82
          514 4  7  1  5  0  2  83
          515 4  7  1  5  4  2  84  2  .16824E+01 -.21742E+01  .49183E+00
          516 4 -7  1  4  0  2  85
          517 4  8  1  5  0  2  86
          518 4  8  1  5  4  2  87  2  .18126E+01 -.26875E+01  .87486E+00
          519 4 -8  1  4  0  2  88
          520 4  9  1  5  0  2  89
          521 4  9  1  5  4  2  90  2  .18123E+01 -.26863E+01  .87396E+00
          522 4 -9  1  4  0  2  91
          523 4  7  1  4 22  2  92  1 0.            .10000E+01
          7   1     0 R7 0.65 0.60 R7 0.65 0 R7
          7   2     0 R6 0.70     0 R9 0.70 0 R6
          7   3     0 R3 0.60 0.55 0.52 0 R11 0.52 0.55 0.60 0 R3
          7   4     0 R2 0.65   0 R17 0.65 0 R2
          7   5     0 0  0.60   0 R19 0.60 0 0
          7   6     0 0  0.55   0 R19 0.55 0 0
          7   7     0 0  0.52   0 R19 0.52 0 0
          7   8     0    0.70   0 R21 0.70 0
          7   9     0.65        0 R23 0.65
          7  10     0.6         0 R23 0.60
          7  11     0.6         0 R23 0.60
          7  12     0.6         0 R23 0.60
          7  13     0.6         0 R23 0.60
          7  14     0.6         0 R23 0.60
          7  15     0.6         0 R23 0.60
          7  16     0.6         0 R23 0.60
          7  17     0.6         0 R23 0.60
          7  18     0.65        0 R23 0.65
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          7  19    0     0.70    0 R21 0.70 0
          7  20    0 0   0.52    0 R19 0.52 0 0
          7  21    0 0   0.55    0 R19 0.55 0 0
          7  22    0 0   0.60    0 R19 0.60 0 0
          7  23    0 R2 0.65     0 R17 0.65 0 R2
          7  24    0 R3 0.60 0.55 0.52 0 R11 0.52 0.55 0.60 0 R3
          7  25    0 R6 0.70 0 R9    0.70 0 R6
          7  26    0 R7 0.65 0.60 R7 0.65 0 R7
         13        0.62      S4
         13        S3                              3          S1
         13        S5
         13        S1        1.0        S3
         13        S5
         13        S2                   0.02       0.02        S1
         13        5.75      0.         0.         S2
         13        S2                   0.0        0.0        5.75
         14   1    1.08234   -0.15895
         14   2    .62668    .16800
         15   1    0 R7 2 R9
         15   2    0 R6 2    1 R9  2
         15   3    0 R3 2 R2 1 R11 2 R2
         15   4    0 R2 2    1 R17 2
         15   5    0 R1 2    1 R19 2
         15   6    0 R1 2    1 R19 2
         15   7    0 R1 2    1 R19 2
         15   8    0    2    1 R21 2
         15   9         2    1 R23 2
         15  10         2    1 R23 2
         15  11         2    1 R23 2
         15  12         2    1 R23 2
         15  13         2    1 R23 2
         15  14         2    1 R23 2
         15  15         2    1 R23 2
         15  16         2    1 R23 2
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
15  17          2     1 R23 2
15  18          2     1 R23 2
15  19     0    2     1 R21 2
15  20     0 R1 2     1 R19 2
15  21     0 R1 2     1 R19 2
15  22     0 R1 2     1 R19 2
15  23     0 R2 2     1 R17 2
15  24     0 R3 2 R2 1 R11 2 R2
15  25     0 R6 2     1 R9  2
15  26     0 R7 2 R9
19         1 S3 0 0 S2 0 0
19         1 R4
19         1          0          1          R2
19         1          0          1          1          0
19         0          1          0          1          S1
19         1          R4
19         S5
19         0          R4
19         1          0          1          1          1
19         S2                    0          0          0
19         S3                               0          0
19         0          1          R3
19         0          1          0          1          0
19         0
20         0          0          0          2          0
20         2          0          4          0          0
20         0          1          S3
20         4
21         1          1          2          1          0
21         0          0          0          S1         0
21         0          0          0          0          1
26         1          2          26         2          48
26         0          0          0          0          2
28   1     0 0 0 0 1 1 1 1 1 0 0 0 0
28   2     0 0 1 1 1 1 1 1 1 1 1 0 0
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          28   3     0 1 1 1 1 1 1 1 1 1 1 1 0
          28   4     0 1 1 1 1 1 1 1 1 1 1 1 0
          28   5     1 1 1 1 1 1 1 1 1 1 1 1 1
          28   6     1 1 1 1 1 1 1 1 1 1 1 1 1
          28   7     1 1 1 1 1 1 1 1 1 1 1 1 1
          28   8     1 1 1 1 1 1 1 1 1 1 1 1 1
          28   9     1 1 1 1 1 1 1 1 1 1 1 1 1
          28  10     0 1 1 1 1 1 1 1 1 1 1 1 0
          28  11     0 1 1 1 1 1 1 1 1 1 1 1 0
          28  12     0 0 1 1 1 1 1 1 1 1 1 0 0
          28  13     0 0 0 0 1 1 1 1 1 0 0 0 0
          30   1     S6 40 S6
          30   2     S13
          30   3     S2 32 S1 40 48 0 48 40 48 32 S2
          30   4     S13
          30   5     S2 40 48  0 48 8 48  0 48 40 S2
          30   6     S13
          30   7     40 48  0 48  8 48 0 48  8 48  0 48 40
          30   8     S13
          30   9     S2 40 48  0 48 8 48  0 48 40 S2
          30  10     S13
          30  11     S2 32 48 40 48 0 48 40 48 32 S2
          30  12     S13
          30  13     S6 40 S6
          31   1 13  3  3
          31   1      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31   1       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31   1       .20000E+02  .25000E+02  .30000E+02
          31   1       .34000E+00  .62000E+00  .10000E+01
          31   1       .18277E+00  .18264E+00  .18256E+00  .18238E+00  .18219E+00
          31   1       .18201E+00  .18182E+00  .18139E+00  .18092E+00  .17985E+00
          31   1       .17884E+00  .17790E+00  .17703E+00
          31   1       .20878E+00  .20861E+00  .20851E+00  .20831E+00  .20810E+00
          31   1       .20790E+00  .20771E+00  .20725E+00  .20670E+00  .20528E+00
          31   1       .20391E+00  .20260E+00  .20138E+00
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31    1        .24318E+00  .24294E+00  .24282E+00  .24257E+00  .24233E+00
          31    1        .24210E+00  .24188E+00  .24142E+00  .24077E+00  .23879E+00
          31    1        .23680E+00  .23485E+00  .23298E+00
          31    2 13   3  3
          31    2       0.           .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31    2        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31    2        .20000E+02  .25000E+02  .30000E+02
          31    2        .34000E+00  .62000E+00  .10000E+01
          31    2        .71815E-02  .71988E-02  .72198E-02  .72784E-02  .73465E-02
          31    2        .74154E-02  .74828E-02  .76419E-02  .77962E-02  .80635E-02
          31    2        .82861E-02  .84749E-02  .86364E-02
          31    2        .71815E-02  .71927E-02  .72072E-02  .72535E-02  .73128E-02
          31    2        .73762E-02  .74388E-02  .75872E-02  .77315E-02  .79837E-02
          31    2        .81930E-02  .83705E-02  .85241E-02
          31    2        .71815E-02  .71875E-02  .71961E-02  .72310E-02  .72803E-02
          31    2        .73358E-02  .73925E-02  .75279E-02  .76599E-02  .79015E-02
          31    2        .81005E-02  .82697E-02  .84186E-02
          31    3 13   3  3
          31    3       0.           .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31    3        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31    3        .20000E+02  .25000E+02  .30000E+02
          31    3        .34000E+00  .62000E+00  .10000E+01
          31    3       -.95012E-03 -.95606E-03 -.96222E-03 -.97521E-03 -.98911E-03
          31    3       -.10039E-02 -.10196E-02 -.10628E-02 -.11116E-02 -.11884E-02
          31    3       -.12525E-02 -.13061E-02 -.13492E-02
          31    3       -.95012E-03 -.95506E-03 -.96033E-03 -.97182E-03 -.98460E-03
          31    3       -.99867E-03 -.10140E-02 -.10580E-02 -.11101E-02 -.11860E-02
          31    3       -.12485E-02 -.13006E-02 -.13423E-02
          31    3       -.95012E-03 -.95391E-03 -.95804E-03 -.96732E-03 -.97796E-03
          31    3       -.98996E-03 -.10033E-02 -.10427E-02 -.10906E-02 -.11633E-02
          31    3       -.12226E-02 -.12707E-02 -.13076E-02
          31    4  9   3  3
          31    4       0.           .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31    4        .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31    4        .34000E+00  .62000E+00  .10000E+01
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31    4        .26933E-02  .26799E-02  .26486E-02  .26228E-02  .25990E-02
          31    4        .25840E-02  .25708E-02  .25620E-02  .25486E-02
          31    4        .26500E-02  .26412E-02  .26206E-02  .26027E-02  .25853E-02
          31    4        .25767E-02  .25745E-02  .25746E-02  .25770E-02
          31    4        .25586E-02  .25532E-02  .25403E-02  .25277E-02  .25149E-02
          31    4        .25104E-02  .25176E-02  .25257E-02  .25433E-02
          31    5   6  3  3
          31    5        0.          .50000E+01  .10000E+02  .15000E+02  .20000E+02
          31    5        .30000E+02
          31    5        .34000E+00  .62000E+00  .10000E+01
          31    5        .74345E-04  .70847E-04  .75013E-04  .78518E-04  .79784E-04
          31    5        .78367E-04
          31    5        .86999E-04  .81761E-04  .87685E-04  .91038E-04  .91894E-04
          31    5        .91844E-04
          31    5        .97945E-04  .89817E-04  .96166E-04  .10113E-03  .10126E-03
          31    5        .97706E-04
          31    6  13  3  3
          31    6        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31    6        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31    6        .20000E+02  .25000E+02  .30000E+02
          31    6        .34000E+00  .62000E+00  .10000E+01
          31    6        .19669E-01  .19658E-01  .19629E-01  .19560E-01  .19486E-01
          31    6        .19413E-01  .19340E-01  .19169E-01  .19022E-01  .18898E-01
          31    6        .18824E-01  .18768E-01  .18726E-01
          31    6        .19669E-01  .19672E-01  .19650E-01  .19596E-01  .19533E-01
          31    6        .19466E-01  .19399E-01  .19235E-01  .19108E-01  .19037E-01
          31    6        .19008E-01  .18996E-01  .18992E-01
          31    6        .19669E-01  .19686E-01  .19673E-01  .19636E-01  .19587E-01
          31    6        .19533E-01  .19476E-01  .19329E-01  .19236E-01  .19226E-01
          31    6        .19253E-01  .19296E-01  .19338E-01
          31    7  13  3  3
          31    7        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31    7        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31    7        .20000E+02  .25000E+02  .30000E+02
          31    7        .34000E+00  .62000E+00  .10000E+01
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31    7      -.97717E-02 -.97633E-02 -.97547E-02 -.97366E-02 -.97175E-02
          31    7      -.96973E-02 -.96762E-02 -.96187E-02 -.95549E-02 -.95112E-02
          31    7      -.94884E-02 -.94726E-02 -.94639E-02
          31    7      -.97717E-02 -.97666E-02 -.97611E-02 -.97489E-02 -.97352E-02
          31    7      -.97200E-02 -.97032E-02 -.96545E-02 -.95962E-02 -.95780E-02
          31    7      -.95765E-02 -.95804E-02 -.95897E-02
          31    7      -.97717E-02 -.97704E-02 -.97685E-02 -.97630E-02 -.97553E-02
          31    7      -.97454E-02 -.97333E-02 -.96932E-02 -.96392E-02 -.96449E-02
          31    7      -.96646E-02 -.96884E-02 -.97163E-02
          31    8  9   3  3
          31    8      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31    8       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31    8       .34000E+00  .62000E+00  .10000E+01
          31    8      -.20583E-02 -.20657E-02 -.20591E-02 -.20495E-02 -.20380E-02
          31    8      -.20326E-02 -.20445E-02 -.20590E-02 -.20858E-02
          31    8      -.20232E-02 -.20350E-02 -.20368E-02 -.20333E-02 -.20266E-02
          31    8      -.20276E-02 -.20537E-02 -.20808E-02 -.21311E-02
          31    8      -.19181E-02 -.19325E-02 -.19410E-02 -.19435E-02 -.19430E-02
          31    8      -.19493E-02 -.19876E-02 -.20266E-02 -.21062E-02
          31    9 13   3  3
          31    9      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31    9       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31    9       .20000E+02  .25000E+02  .30000E+02
          31    9       .34000E+00  .62000E+00  .10000E+01
          31    9       .47466E-02  .47365E-02  .47226E-02  .46890E-02  .46511E-02
          31    9       .46116E-02  .45717E-02  .44729E-02  .43776E-02  .42076E-02
          31    9       .40627E-02  .39383E-02  .38307E-02
          31    9       .47466E-02  .47295E-02  .47091E-02  .46633E-02  .46139E-02
          31    9       .45632E-02  .45118E-02  .43840E-02  .42595E-02  .40330E-02
          31    9       .38371E-02  .36672E-02  .35213E-02
          31    9       .47466E-02  .47225E-02  .46957E-02  .46382E-02  .45779E-02
          31    9       .45160E-02  .44534E-02  .42983E-02  .41476E-02  .38719E-02
          31    9       .36288E-02  .34187E-02  .32448E-02
          31   10 13   3  3
          31   10      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  10       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  10       .20000E+02  .25000E+02  .30000E+02
          31  10       .34000E+00  .62000E+00  .10000E+01
          31  10      -.50811E-03 -.50818E-03 -.50819E-03 -.50804E-03 -.50767E-03
          31  10      -.50707E-03 -.50624E-03 -.50318E-03 -.49871E-03 -.49403E-03
          31  10      -.49144E-03 -.48643E-03 -.47899E-03
          31  10      -.50811E-03 -.50752E-03 -.50688E-03 -.50546E-03 -.50386E-03
          31  10      -.50207E-03 -.50009E-03 -.49434E-03 -.48742E-03 -.47574E-03
          31  10      -.46771E-03 -.45844E-03 -.44792E-03
          31  10      -.50811E-03 -.50661E-03 -.50510E-03 -.50205E-03 -.49896E-03
          31  10      -.49583E-03 -.49266E-03 -.48456E-03 -.47620E-03 -.46037E-03
          31  10      -.44734E-03 -.43425E-03 -.42111E-03
          31  11 13   3  3
          31  11       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  11       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  11       .20000E+02  .25000E+02  .30000E+02
          31  11       .34000E+00  .62000E+00  .10000E+01
          31  11       .62848E-13  .62357E-13  .61865E-13  .60908E-13  .59990E-13
          31  11       .59119E-13  .58294E-13  .56400E-13  .54703E-13  .51795E-13
          31  11       .49412E-13  .47428E-13  .45761E-13
          31  11       .62848E-13  .62301E-13  .61753E-13  .60679E-13  .59644E-13
          31  11       .58654E-13  .57700E-13  .55473E-13  .53424E-13  .49816E-13
          31  11       .46795E-13  .44242E-13  .42095E-13
          31  11       .62848E-13  .62246E-13  .61644E-13  .60462E-13  .59317E-13
          31  11       .58207E-13  .57130E-13  .54590E-13  .52224E-13  .48002E-13
          31  11       .44380E-13  .41306E-13  .38788E-13
          31  12 13   3  3
          31  12       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  12       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  12       .20000E+02  .25000E+02  .30000E+02
          31  12       .34000E+00  .62000E+00  .10000E+01
          31  12      -.69781E-14 -.69486E-14 -.69192E-14 -.68610E-14 -.68036E-14
          31  12      -.67471E-14 -.66913E-14 -.65554E-14 -.64246E-14 -.62388E-14
          31  12      -.61072E-14 -.59651E-14 -.58126E-14
          31  12      -.69781E-14 -.69427E-14 -.69075E-14 -.68377E-14 -.67688E-14
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  12      -.67008E-14 -.66336E-14 -.64695E-14 -.63108E-14 -.60388E-14
          31  12      -.58374E-14 -.56389E-14 -.54434E-14
          31  12      -.69781E-14 -.69333E-14 -.68891E-14 -.68024E-14 -.67181E-14
          31  12      -.66363E-14 -.65568E-14 -.63687E-14 -.61957E-14 -.58718E-14
          31  12      -.56042E-14 -.53525E-14 -.51168E-14
          31  13 13   3  3
          31  13      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  13       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  13       .20000E+02  .25000E+02  .30000E+02
          31  13       .34000E+00  .62000E+00  .10000E+01
          31  13       .61121E+00  .61279E+00  .61420E+00  .61662E+00  .61862E+00
          31  13       .62026E+00  .62165E+00  .62438E+00  .62683E+00  .63104E+00
          31  13       .63392E+00  .63592E+00  .63733E+00
          31  13       .74950E+00  .75035E+00  .75123E+00  .75273E+00  .75395E+00
          31  13       .75494E+00  .75576E+00  .75734E+00  .75913E+00  .76230E+00
          31  13       .76438E+00  .76566E+00  .76626E+00
          31  13       .94124E+00  .94171E+00  .94232E+00  .94339E+00  .94425E+00
          31  13       .94498E+00  .94561E+00  .94699E+00  .94882E+00  .95196E+00
          31  13       .95410E+00  .95557E+00  .95653E+00
          31  14 13   3  3
          31  14      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  14       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  14       .20000E+02  .25000E+02  .30000E+02
          31  14       .34000E+00  .62000E+00  .10000E+01
          31  14       .49766E-01  .50896E-01  .51634E-01  .52767E-01  .53574E-01
          31  14       .54147E-01  .54541E-01  .55006E-01  .55201E-01  .55800E-01
          31  14       .56101E-01  .56186E-01  .56188E-01
          31  14       .49766E-01  .50707E-01  .51263E-01  .52081E-01  .52615E-01
          31  14       .52935E-01  .53087E-01  .52968E-01  .52685E-01  .52440E-01
          31  14       .51895E-01  .51246E-01  .50647E-01
          31  14       .49766E-01  .50543E-01  .50939E-01  .51495E-01  .51810E-01
          31  14       .51923E-01  .51882E-01  .51266E-01  .50557E-01  .49598E-01
          31  14       .48385E-01  .47161E-01  .46069E-01
          31  15 13   3  3
          31  15      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  15       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  15       .20000E+02  .25000E+02  .30000E+02
          31  15       .34000E+00  .62000E+00  .10000E+01
          31  15      -.55946E-02 -.56021E-02 -.56080E-02 -.56150E-02 -.56159E-02
          31  15      -.56104E-02 -.55988E-02 -.55421E-02 -.54464E-02 -.53640E-02
          31  15      -.53174E-02 -.52786E-02 -.52476E-02
          31  15      -.55946E-02 -.55878E-02 -.55799E-02 -.55604E-02 -.55362E-02
          31  15      -.55073E-02 -.54736E-02 -.53686E-02 -.52339E-02 -.50566E-02
          31  15      -.49006E-02 -.47774E-02 -.46871E-02
          31  15      -.55946E-02 -.55667E-02 -.55389E-02 -.54837E-02 -.54292E-02
          31  15      -.53752E-02 -.53219E-02 -.51912E-02 -.50643E-02 -.48033E-02
          31  15      -.45883E-02 -.44107E-02 -.42706E-02
          31  16   9   3   3
          31  16       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  16       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  16       .34000E+00  .62000E+00  .10000E+01
          31  16       .19194E-01  .19515E-01  .19871E-01  .20028E-01  .20050E-01
          31  16       .20116E-01  .20576E-01  .20913E-01  .21236E-01
          31  16       .19127E-01  .19357E-01  .19501E-01  .19428E-01  .19122E-01
          31  16       .18936E-01  .19037E-01  .18998E-01  .18598E-01
          31  16       .18881E-01  .19020E-01  .18989E-01  .18727E-01  .18142E-01
          31  16       .17716E-01  .17470E-01  .17065E-01  .16092E-01
          31  17  13   3   3
          31  17       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  17       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  17       .20000E+02  .25000E+02  .30000E+02
          31  17       .34000E+00  .62000E+00  .10000E+01
          31  17       .65883E-01  .67133E-01  .68309E-01  .70224E-01  .71695E-01
          31  17       .72859E-01  .73792E-01  .75411E-01  .76139E-01  .75327E-01
          31  17       .73724E-01  .71939E-01  .70208E-01
          31  17       .65883E-01  .66794E-01  .67651E-01  .69006E-01  .69991E-01
          31  17       .70722E-01  .71255E-01  .71989E-01  .71774E-01  .69137E-01
          31  17       .65914E-01  .62731E-01  .59867E-01
          31  17       .65883E-01  .66492E-01  .67069E-01  .67930E-01  .68491E-01
          31  17       .68834E-01  .69009E-01  .68944E-01  .67901E-01  .63678E-01
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  17       .59101E-01  .54755E-01  .50932E-01
          31  18 13  3  3
          31  18       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  18       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  18       .20000E+02  .25000E+02  .30000E+02
          31  18       .34000E+00  .62000E+00  .10000E+01
          31  18      -.58704E-02 -.57740E-02 -.56826E-02 -.55148E-02 -.53667E-02
          31  18      -.52386E-02 -.51303E-02 -.49465E-02 -.48869E-02 -.46900E-02
          31  18      -.44860E-02 -.42992E-02 -.41297E-02
          31  18      -.58704E-02 -.57488E-02 -.56327E-02 -.54171E-02 -.52236E-02
          31  18      -.50521E-02 -.49026E-02 -.46254E-02 -.44860E-02 -.40667E-02
          31  18      -.36501E-02 -.32984E-02 -.30117E-02
          31  18      -.58704E-02 -.57135E-02 -.55640E-02 -.52875E-02 -.50408E-02
          31  18      -.48240E-02 -.46370E-02 -.43002E-02 -.41499E-02 -.35387E-02
          31  18      -.29979E-02 -.25373E-02 -.21569E-02
          31  19  9  3  3
          31  19       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  19       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  19       .34000E+00  .62000E+00  .10000E+01
          31  19       .73840E-02  .79261E-02  .89297E-02  .97307E-02  .10489E-01
          31  19       .10992E-01  .11500E-01  .11716E-01  .11701E-01
          31  19       .97023E-02  .10107E-01  .10839E-01  .11390E-01  .11846E-01
          31  19       .12069E-01  .12029E-01  .11711E-01  .10652E-01
          31  19       .11609E-01  .11838E-01  .12254E-01  .12513E-01  .12642E-01
          31  19       .12549E-01  .11915E-01  .11026E-01  .90946E-02
          31  20 13  3  3
          31  20       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  20       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  20       .20000E+02  .25000E+02  .30000E+02
          31  20       .34000E+00  .62000E+00  .10000E+01
          31  20       .87233E-12  .88382E-12  .89484E-12  .91217E-12  .92472E-12
          31  20       .93403E-12  .94093E-12  .95088E-12  .95144E-12  .92727E-12
          31  20       .89666E-12  .86635E-12  .83869E-12
          31  20       .87233E-12  .87988E-12  .88716E-12  .89794E-12  .90480E-12
          31  20       .90905E-12  .91129E-12  .91093E-12  .90022E-12  .85398E-12
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  20        .80387E-12  .75680E-12  .71565E-12
          31  20        .87233E-12  .87642E-12  .88047E-12  .88550E-12  .88747E-12
          31  20        .88721E-12  .88528E-12  .87561E-12  .85498E-12  .78945E-12
          31  20        .72280E-12  .66155E-12  .60883E-12
          31  21  13  3  3
          31  21        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  21        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  21        .20000E+02  .25000E+02  .30000E+02
          31  21        .34000E+00  .62000E+00  .10000E+01
          31  21       -.81274E-13 -.79769E-13 -.78335E-13 -.75679E-13 -.73305E-13
          31  21       -.71214E-13 -.69406E-13 -.66123E-13 -.64606E-13 -.60726E-13
          31  21       -.57083E-13 -.53881E-13 -.51120E-13
          31  21       -.81274E-13 -.79460E-13 -.77723E-13 -.74485E-13 -.71557E-13
          31  21       -.68941E-13 -.66636E-13 -.62235E-13 -.59780E-13 -.53194E-13
          31  21       -.46971E-13 -.41785E-13 -.37638E-13
          31  21       -.81274E-13 -.79015E-13 -.76859E-13 -.72858E-13 -.69270E-13
          31  21       -.66095E-13 -.63333E-13 -.58235E-13 -.55719E-13 -.46768E-13
          31  21       -.39014E-13 -.32496E-13 -.27216E-13
          31  22   9  3  3
          31  22        0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  22        .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  22        .34000E+00  .62000E+00  .10000E+01
          31  22        .93714E-13  .10057E-12  .11293E-12  .12248E-12  .13125E-12
          31  22        .13677E-12  .14152E-12  .14277E-12  .14024E-12
          31  22        .12553E-12  .13031E-12  .13880E-12  .14493E-12  .14968E-12
          31  22        .15151E-12  .14915E-12  .14360E-12  .12812E-12
          31  22        .15185E-12  .15419E-12  .15841E-12  .16068E-12  .16116E-12
          31  22        .15891E-12  .14891E-12  .13612E-12  .10974E-12
          31  23  13  3  3
          31  23        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  23        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  23        .20000E+02  .25000E+02  .30000E+02
          31  23        .34000E+00  .62000E+00  .10000E+01
          31  23        .10528E+07  .10492E+07  .10495E+07  .10510E+07  .10535E+07
          31  23        .10571E+07  .10615E+07  .10758E+07  .10884E+07  .10920E+07
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  23       .10933E+07  .10957E+07  .10988E+07
          31  23       .11347E+07  .11313E+07  .11313E+07  .11323E+07  .11347E+07
          31  23       .11387E+07  .11441E+07  .11635E+07  .11802E+07  .11903E+07
          31  23       .12009E+07  .12136E+07  .12282E+07
          31  23       .12120E+07  .12090E+07  .12089E+07  .12098E+07  .12125E+07
          31  23       .12171E+07  .12236E+07  .12479E+07  .12700E+07  .12885E+07
          31  23       .13101E+07  .13345E+07  .13598E+07
          31  24 13  3  3
          31  24       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  24       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  24       .20000E+02  .25000E+02  .30000E+02
          31  24       .34000E+00  .62000E+00  .10000E+01
          31  24       .18238E+00  .18227E+00  .18221E+00  .18206E+00  .18189E+00
          31  24       .18173E+00  .18157E+00  .18119E+00  .18078E+00  .17977E+00
          31  24       .17876E+00  .17783E+00  .17696E+00
          31  24       .20820E+00  .20805E+00  .20797E+00  .20781E+00  .20765E+00
          31  24       .20749E+00  .20733E+00  .20699E+00  .20656E+00  .20521E+00
          31  24       .20384E+00  .20254E+00  .20132E+00
          31  24       .24232E+00  .24211E+00  .24202E+00  .24183E+00  .24165E+00
          31  24       .24148E+00  .24134E+00  .24109E+00  .24064E+00  .23874E+00
          31  24       .23677E+00  .23482E+00  .23295E+00
          31  25 13  3  3
          31  25       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  25       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  25       .20000E+02  .25000E+02  .30000E+02
          31  25       .34000E+00  .62000E+00  .10000E+01
          31  25       .72564E-02  .72698E-02  .72877E-02  .73406E-02  .74032E-02
          31  25       .74667E-02  .75287E-02  .76755E-02  .78189E-02  .80777E-02
          31  25       .82995E-02  .84874E-02  .86479E-02
          31  25       .72564E-02  .72634E-02  .72744E-02  .73144E-02  .73677E-02
          31  25       .74250E-02  .74816E-02  .76160E-02  .77489E-02  .79956E-02
          31  25       .82031E-02  .83795E-02  .85322E-02
          31  25       .72564E-02  .72584E-02  .72633E-02  .72918E-02  .73351E-02
          31  25       .73849E-02  .74358E-02  .75568E-02  .76791E-02  .79164E-02
          31  25       .81143E-02  .82823E-02  .84300E-02
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  26 13  3  3
          31  26      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  26       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  26       .20000E+02   .25000E+02  .30000E+02
          31  26       .34000E+00   .62000E+00  .10000E+01
          31  26      -.95301E-03 -.95928E-03 -.96574E-03 -.97927E-03 -.99358E-03
          31  26      -.10087E-02 -.10246E-02 -.10678E-02 -.11160E-02 -.11921E-02
          31  26      -.12562E-02 -.13096E-02 -.13526E-02
          31  26      -.95301E-03 -.95824E-03 -.96376E-03 -.97571E-03 -.98884E-03
          31  26      -.10032E-02 -.10187E-02 -.10627E-02 -.11141E-02 -.11904E-02
          31  26      -.12522E-02 -.13040E-02 -.13458E-02
          31  26      -.95301E-03 -.95686E-03 -.96105E-03 -.97046E-03 -.98126E-03
          31  26      -.99343E-03 -.10070E-02 -.10469E-02 -.10953E-02 -.11677E-02
          31  26      -.12267E-02 -.12744E-02 -.13109E-02
          31  27  9  3  3
          31  27      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  27       .10000E+02   .15000E+02  .20000E+02  .30000E+02
          31  27       .34000E+00   .62000E+00  .10000E+01
          31  27       .27284E-02   .27111E-02  .26722E-02  .26399E-02  .26091E-02
          31  27       .25880E-02   .25707E-02  .25614E-02  .25481E-02
          31  27       .26927E-02   .26803E-02  .26518E-02  .26256E-02  .25978E-02
          31  27       .25808E-02   .25750E-02  .25744E-02  .25768E-02
          31  27       .26136E-02   .26049E-02  .25814E-02  .25555E-02  .25280E-02
          31  27       .25132E-02   .25177E-02  .25250E-02  .25430E-02
          31  28  6  3  3
          31  28      0.            .50000E+01  .10000E+02  .15000E+02  .20000E+02
          31  28       .30000E+02
          31  28       .34000E+00   .62000E+00  .10000E+01
          31  28       .75845E-04   .71659E-04  .74872E-04  .78548E-04  .79654E-04
          31  28       .78201E-04
          31  28       .88815E-04   .83934E-04  .87054E-04  .91788E-04  .92144E-04
          31  28       .91604E-04
          31  28       .10025E-03   .93024E-04  .96777E-04  .97003E-04  .10148E-03
          31  28       .98111E-04
          31  29 13  3  3
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  29      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  29       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  29       .20000E+02   .25000E+02  .30000E+02
          31  29       .34000E+00   .62000E+00  .10000E+01
          31  29       .19801E-01   .19784E-01  .19750E-01  .19670E-01  .19587E-01
          31  29       .19503E-01   .19421E-01  .19224E-01  .19048E-01  .18895E-01
          31  29       .18821E-01   .18766E-01  .18724E-01
          31  29       .19801E-01   .19799E-01  .19773E-01  .19709E-01  .19636E-01
          31  29       .19558E-01   .19480E-01  .19286E-01  .19124E-01  .19031E-01
          31  29       .19003E-01   .18992E-01  .18988E-01
          31  29       .19801E-01   .19814E-01  .19797E-01  .19751E-01  .19694E-01
          31  29       .19628E-01   .19559E-01  .19378E-01  .19246E-01  .19224E-01
          31  29       .19251E-01   .19293E-01  .19336E-01
          31  30 13  3  3
          31  30      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  30       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  30       .20000E+02   .25000E+02  .30000E+02
          31  30       .34000E+00   .62000E+00  .10000E+01
          31  30      -.98389E-02  -.98285E-02  -.98178E-02  -.97955E-02  -.97720E-02
          31  30      -.97473E-02  -.97212E-02  -.96508E-02  -.95727E-02  -.95127E-02
          31  30      -.94897E-02  -.94741E-02  -.94658E-02
          31  30      -.98389E-02  -.98322E-02  -.98249E-02  -.98090E-02  -.97910E-02
          31  30      -.97711E-02  -.97491E-02  -.96853E-02  -.96090E-02  -.95787E-02
          31  30      -.95775E-02  -.95817E-02  -.95912E-02
          31  30      -.98389E-02  -.98364E-02  -.98331E-02  -.98243E-02  -.98126E-02
          31  30      -.97979E-02  -.97803E-02  -.97231E-02  -.96473E-02  -.96462E-02
          31  30      -.96657E-02  -.96896E-02  -.97179E-02
          31  31  9  3  3
          31  31      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  31       .10000E+02   .15000E+02  .20000E+02  .30000E+02
          31  31       .34000E+00   .62000E+00  .10000E+01
          31  31      -.20874E-02  -.20917E-02  -.20800E-02  -.20653E-02  -.20488E-02
          31  31      -.20388E-02  -.20461E-02  -.20603E-02  -.20868E-02
          31  31      -.20518E-02  -.20617E-02  -.20586E-02  -.20501E-02  -.20379E-02
          31  31      -.20336E-02  -.20555E-02  -.20823E-02  -.21325E-02
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  31      -.19472E-02 -.19605E-02 -.19645E-02 -.19600E-02 -.19524E-02
          31  31      -.19526E-02 -.19894E-02 -.20276E-02 -.21072E-02
          31  32 13  3  3
          31  32      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  32       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  32       .20000E+02  .25000E+02  .30000E+02
          31  32       .34000E+00  .62000E+00  .10000E+01
          31  32       .47268E-02  .47183E-02  .47059E-02  .46752E-02  .46399E-02
          31  32       .46030E-02  .45654E-02  .44711E-02  .43783E-02  .42091E-02
          31  32       .40634E-02  .39383E-02  .38299E-02
          31  32       .47268E-02  .47109E-02  .46917E-02  .46484E-02  .46015E-02
          31  32       .45532E-02  .45039E-02  .43806E-02  .42586E-02  .40329E-02
          31  32       .38363E-02  .36659E-02  .35197E-02
          31  32       .47268E-02  .47040E-02  .46781E-02  .46230E-02  .45650E-02
          31  32       .45058E-02  .44459E-02  .42957E-02  .41479E-02  .38725E-02
          31  32       .36292E-02  .34189E-02  .32444E-02
          31  33 13  3  3
          31  33      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  33       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  33       .20000E+02  .25000E+02  .30000E+02
          31  33       .34000E+00  .62000E+00  .10000E+01
          31  33      -.50126E-03 -.50180E-03 -.50226E-03 -.50297E-03 -.50339E-03
          31  33      -.50351E-03 -.50334E-03 -.50163E-03 -.49809E-03 -.49386E-03
          31  33      -.49095E-03 -.48570E-03 -.47812E-03
          31  33      -.50126E-03 -.50112E-03 -.50091E-03 -.50033E-03 -.49952E-03
          31  33      -.49848E-03 -.49720E-03 -.49299E-03 -.48732E-03 -.47588E-03
          31  33      -.46736E-03 -.45781E-03 -.44723E-03
          31  33      -.50126E-03 -.50013E-03 -.49899E-03 -.49668E-03 -.49432E-03
          31  33      -.49193E-03 -.48950E-03 -.48324E-03 -.47674E-03 -.46062E-03
          31  33      -.44710E-03 -.43367E-03 -.42033E-03
          31  34 13  3  3
          31  34      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  34       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  34       .20000E+02  .25000E+02  .30000E+02
          31  34       .34000E+00  .62000E+00  .10000E+01
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  34       .62574E-13  .62095E-13  .61617E-13  .60689E-13  .59801E-13
          31  34       .58961E-13  .58166E-13  .56337E-13  .54684E-13  .51805E-13
          31  34       .49418E-13  .47429E-13  .45755E-13
          31  34       .62574E-13  .62035E-13  .61496E-13  .60446E-13  .59440E-13
          31  34       .58478E-13  .57554E-13  .55392E-13  .53389E-13  .49807E-13
          31  34       .46785E-13  .44229E-13  .42080E-13
          31  34       .62574E-13  .61980E-13  .61384E-13  .60224E-13  .59107E-13
          31  34       .58031E-13  .56990E-13  .54522E-13  .52209E-13  .48001E-13
          31  34       .44383E-13  .41310E-13  .38788E-13
          31  35 13   3  3
          31  35      0.           .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  35       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  35       .20000E+02  .25000E+02  .30000E+02
          31  35       .34000E+00  .62000E+00  .10000E+01
          31  35      -.68896E-14 -.68648E-14 -.68400E-14 -.67908E-14 -.67420E-14
          31  35      -.66936E-14 -.66455E-14 -.65273E-14 -.64115E-14 -.62355E-14
          31  35      -.61012E-14 -.59571E-14 -.58031E-14
          31  35      -.68896E-14 -.68587E-14 -.68280E-14 -.67671E-14 -.67069E-14
          31  35      -.66475E-14 -.65888E-14 -.64451E-14 -.63061E-14 -.60401E-14
          31  35      -.58338E-14 -.56325E-14 -.54364E-14
          31  35      -.68896E-14 -.68483E-14 -.68076E-14 -.67286E-14 -.66524E-14
          31  35      -.65791E-14 -.65087E-14 -.63455E-14 -.62004E-14 -.58743E-14
          31  35      -.56021E-14 -.53470E-14 -.51090E-14
          31  36 13   3  3
          31  36      0.           .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  36       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  36       .20000E+02  .25000E+02  .30000E+02
          31  36       .34000E+00  .62000E+00  .10000E+01
          31  36       .61501E+00  .61644E+00  .61768E+00  .61975E+00  .62140E+00
          31  36       .62271E+00  .62377E+00  .62573E+00  .62757E+00  .63139E+00
          31  36       .63419E+00  .63613E+00  .63751E+00
          31  36       .75300E+00  .75374E+00  .75447E+00  .75566E+00  .75653E+00
          31  36       .75716E+00  .75764E+00  .75846E+00  .75968E+00  .76256E+00
          31  36       .76460E+00  .76585E+00  .76642E+00
          31  36       .94424E+00  .94458E+00  .94509E+00  .94586E+00  .94640E+00
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  36       .94680E+00  .94710E+00  .94776E+00  .94909E+00  .95224E+00
          31  36       .95424E+00  .95568E+00  .95662E+00
          31  37 13  3  3
          31  37       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  37       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  37       .20000E+02  .25000E+02  .30000E+02
          31  37       .34000E+00  .62000E+00  .10000E+01
          31  37       .50490E-01  .51611E-01  .52348E-01  .53473E-01  .54262E-01
          31  37       .54805E-01  .55161E-01  .55491E-01  .55469E-01  .55841E-01
          31  37       .56138E-01  .56220E-01  .56210E-01
          31  37       .50490E-01  .51418E-01  .51967E-01  .52767E-01  .53274E-01
          31  37       .53559E-01  .53664E-01  .53372E-01  .52866E-01  .52476E-01
          31  37       .51924E-01  .51275E-01  .50673E-01
          31  37       .50490E-01  .51255E-01  .51637E-01  .52170E-01  .52449E-01
          31  37       .52516E-01  .52420E-01  .51602E-01  .50678E-01  .49600E-01
          31  37       .48413E-01  .47193E-01  .46107E-01
          31  38 13  3  3
          31  38       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  38       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  38       .20000E+02  .25000E+02  .30000E+02
          31  38       .34000E+00  .62000E+00  .10000E+01
          31  38      -.54611E-02 -.54896E-02 -.55150E-02 -.55571E-02 -.55872E-02
          31  38      -.56054E-02 -.56118E-02 -.55757E-02 -.54654E-02 -.53458E-02
          31  38      -.53145E-02 -.52805E-02 -.52436E-02
          31  38      -.54611E-02 -.54729E-02 -.54824E-02 -.54945E-02 -.54973E-02
          31  38      -.54909E-02 -.54751E-02 -.53953E-02 -.52575E-02 -.50532E-02
          31  38      -.49069E-02 -.47862E-02 -.46910E-02
          31  38      -.54611E-02 -.54467E-02 -.54318E-02 -.54006E-02 -.53676E-02
          31  38      -.53328E-02 -.52961E-02 -.51962E-02 -.50848E-02 -.47875E-02
          31  38      -.45960E-02 -.44261E-02 -.42777E-02
          31  39  9  3  3
          31  39       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  39       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  39       .34000E+00  .62000E+00  .10000E+01
          31  39       .20408E-01  .20650E-01  .20837E-01  .20811E-01  .20596E-01
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  39        .20421E-01  .20674E-01  .20995E-01  .21292E-01
          31  39        .20422E-01  .20572E-01  .20555E-01  .20276E-01  .19682E-01
          31  39        .19211E-01  .19139E-01  .19088E-01  .18667E-01
          31  39        .20241E-01  .20319E-01  .20120E-01  .19626E-01  .18686E-01
          31  39        .17935E-01  .17597E-01  .17157E-01  .16164E-01
          31  40 13  3  3
          31  40        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  40        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  40        .20000E+02  .25000E+02  .30000E+02
          31  40        .34000E+00  .62000E+00  .10000E+01
          31  40        .64081E-01  .65421E-01  .66678E-01  .68737E-01  .70343E-01
          31  40        .71642E-01  .72715E-01  .74688E-01  .75788E-01  .75325E-01
          31  40        .73723E-01  .71939E-01  .70190E-01
          31  40        .64081E-01  .65066E-01  .65992E-01  .67479E-01  .68600E-01
          31  40        .69477E-01  .70163E-01  .71296E-01  .71503E-01  .69115E-01
          31  40        .65894E-01  .62718E-01  .59857E-01
          31  40        .64081E-01  .64760E-01  .65395E-01  .66379E-01  .67072E-01
          31  40        .67562E-01  .67900E-01  .68287E-01  .67710E-01  .63596E-01
          31  40        .59072E-01  .54745E-01  .50939E-01
          31  41 13  3  3
          31  41        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  41        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  41        .20000E+02  .25000E+02  .30000E+02
          31  41        .34000E+00  .62000E+00  .10000E+01
          31  41       -.55142E-02 -.54265E-02 -.53441E-02 -.51951E-02 -.50671E-02
          31  41       -.49600E-02 -.48740E-02 -.47509E-02 -.47590E-02 -.46495E-02
          31  41       -.44724E-02 -.42938E-02 -.41138E-02
          31  41       -.55142E-02 -.53990E-02 -.52902E-02 -.50917E-02 -.49186E-02
          31  41       -.47709E-02 -.46486E-02 -.44541E-02 -.44185E-02 -.40526E-02
          31  41       -.36534E-02 -.33060E-02 -.30104E-02
          31  41       -.55142E-02 -.53591E-02 -.52130E-02 -.49477E-02 -.47182E-02
          31  41       -.45246E-02 -.43669E-02 -.41295E-02 -.41163E-02 -.35053E-02
          31  41       -.30042E-02 -.25560E-02 -.21608E-02
          31  42  9  3  3
          31  42        0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  42       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  42       .34000E+00  .62000E+00  .10000E+01
          31  42       .67807E-02  .73858E-02  .85236E-02  .94582E-02  .10371E-01
          31  42       .11009E-01  .11597E-01  .11799E-01  .11747E-01
          31  42       .90812E-02  .95361E-02  .10417E-01  .11109E-01  .11758E-01
          31  42       .12133E-01  .12126E-01  .11800E-01  .10713E-01
          31  42       .11051E-01  .11331E-01  .11884E-01  .12290E-01  .12599E-01
          31  42       .12631E-01  .12060E-01  .11123E-01  .91598E-02
          31  43 13  3  3
          31  43       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  43       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  43       .20000E+02  .25000E+02  .30000E+02
          31  43       .34000E+00  .62000E+00  .10000E+01
          31  43       .84832E-12  .86097E-12  .87304E-12  .89226E-12  .90660E-12
          31  43       .91769E-12  .92644E-12  .94110E-12  .94656E-12  .92707E-12
          31  43       .89660E-12  .86638E-12  .83855E-12
          31  43       .84832E-12  .85681E-12  .86498E-12  .87749E-12  .88616E-12
          31  43       .89234E-12  .89661E-12  .90155E-12  .89642E-12  .85358E-12
          31  43       .80359E-12  .75667E-12  .71560E-12
          31  43       .84832E-12  .85329E-12  .85807E-12  .86473E-12  .86844E-12
          31  43       .87015E-12  .87038E-12  .86672E-12  .85225E-12  .78831E-12
          31  43       .72242E-12  .66147E-12  .60898E-12
          31  44 13  3  3
          31  44       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  44       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  44       .20000E+02  .25000E+02  .30000E+02
          31  44       .34000E+00  .62000E+00  .10000E+01
          31  44      -.76516E-13 -.75127E-13 -.73812E-13 -.71406E-13 -.69300E-13
          31  44      -.67492E-13 -.65983E-13 -.63520E-13 -.62926E-13 -.60215E-13
          31  44      -.56919E-13 -.53828E-13 -.50943E-13
          31  44      -.76516E-13 -.74789E-13 -.73150E-13 -.70140E-13 -.67486E-13
          31  44      -.65189E-13 -.63248E-13 -.59953E-13 -.58885E-13 -.53020E-13
          31  44      -.47023E-13 -.41896E-13 -.37638E-13
          31  44      -.76516E-13 -.74284E-13 -.72175E-13 -.68326E-13 -.64970E-13
          31  44      -.62106E-13 -.59735E-13 -.55964E-13 -.55271E-13 -.46350E-13
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31   44      -.39107E-13 -.32750E-13 -.27281E-13
          31   45   9   3   3
          31   45      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31   45       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31   45       .34000E+00  .62000E+00  .10000E+01
          31   45       .85589E-13  .93388E-13  .10761E-12  .11895E-12  .12975E-12
          31   45       .13701E-12  .14280E-12  .14387E-12  .14087E-12
          31   45       .11714E-12  .12268E-12  .13323E-12  .14126E-12  .14854E-12
          31   45       .15237E-12  .15046E-12  .14480E-12  .12894E-12
          31   45       .14428E-12  .14739E-12  .15352E-12  .15777E-12  .16065E-12
          31   45       .16004E-12  .15086E-12  .13745E-12  .11063E-12
          31   46  13   3   3
          31   46      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31   46       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31   46       .20000E+02  .25000E+02  .30000E+02
          31   46       .34000E+00  .62000E+00  .10000E+01
          31   46       .10292E+07  .10261E+07  .10269E+07  .10291E+07  .10323E+07
          31   46       .10366E+07  .10421E+07  .10599E+07  .10781E+07  .10882E+07
          31   46       .10899E+07  .10927E+07  .10960E+07
          31   46       .11112E+07  .11079E+07  .11080E+07  .11092E+07  .11121E+07
          31   46       .11169E+07  .11234E+07  .11470E+07  .11707E+07  .11860E+07
          31   46       .11969E+07  .12098E+07  .12247E+07
          31   46       .11887E+07  .11857E+07  .11853E+07  .11859E+07  .11887E+07
          31   46       .11939E+07  .12014E+07  .12311E+07  .12619E+07  .12829E+07
          31   46       .13055E+07  .13301E+07  .13556E+07
          31   47  13   3   3
          31   47      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31   47       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31   47       .20000E+02  .25000E+02  .30000E+02
          31   47       .34000E+00  .62000E+00  .10000E+01
          31   47       .18185E+00  .18178E+00  .18175E+00  .18165E+00  .18154E+00
          31   47       .18143E+00  .18132E+00  .18105E+00  .18069E+00  .17969E+00
          31   47       .17868E+00  .17775E+00  .17688E+00
          31   47       .20745E+00  .20734E+00  .20731E+00  .20723E+00  .20714E+00
          31   47       .20705E+00  .20698E+00  .20683E+00  .20649E+00  .20513E+00
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  47       .20376E+00  .20247E+00  .20125E+00
          31  47       .24133E+00  .24116E+00  .24111E+00  .24102E+00  .24095E+00
          31  47       .24090E+00  .24087E+00  .24092E+00  .24061E+00  .23869E+00
          31  47       .23672E+00  .23478E+00  .23291E+00
          31  48 13  3  3
          31  48       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  48       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  48       .20000E+02  .25000E+02  .30000E+02
          31  48       .34000E+00  .62000E+00  .10000E+01
          31  48       .73513E-02  .73580E-02  .73699E-02  .74116E-02  .74637E-02
          31  48       .75174E-02  .75706E-02  .76998E-02  .78349E-02  .80921E-02
          31  48       .83125E-02  .84993E-02  .86589E-02
          31  48       .73513E-02  .73517E-02  .73568E-02  .73855E-02  .74279E-02
          31  48       .74749E-02  .75222E-02  .76376E-02  .77625E-02  .80073E-02
          31  48       .82140E-02  .83893E-02  .85409E-02
          31  48       .73513E-02  .73469E-02  .73461E-02  .73637E-02  .73962E-02
          31  48       .74351E-02  .74760E-02  .75774E-02  .76924E-02  .79290E-02
          31  48       .81257E-02  .82929E-02  .84398E-02
          31  49 13  3  3
          31  49       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  49       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  49       .20000E+02  .25000E+02  .30000E+02
          31  49       .34000E+00  .62000E+00  .10000E+01
          31  49      -.96215E-03 -.96806E-03 -.97417E-03 -.98702E-03 -.10007E-02
          31  49      -.10152E-02 -.10305E-02 -.10725E-02 -.11197E-02 -.11958E-02
          31  49      -.12597E-02 -.13130E-02 -.13557E-02
          31  49      -.96215E-03 -.96691E-03 -.97200E-03 -.98311E-03 -.99550E-03
          31  49      -.10092E-02 -.10241E-02 -.10670E-02 -.11178E-02 -.11928E-02
          31  49      -.12551E-02 -.13070E-02 -.13483E-02
          31  49      -.96215E-03 -.96565E-03 -.96950E-03 -.97826E-03 -.98841E-03
          31  49      -.99995E-03 -.10129E-02 -.10514E-02 -.10986E-02 -.11707E-02
          31  49      -.12296E-02 -.12771E-02 -.13135E-02
          31  50  9  3  3
          31  50       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  50       .10000E+02  .15000E+02  .20000E+02  .30000E+02
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SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  50        .34000E+00  .62000E+00  .10000E+01
          31  50        .27084E-02  .26928E-02  .26569E-02  .26280E-02  .26012E-02
          31  50        .25836E-02  .25683E-02  .25596E-02  .25466E-02
          31  50        .26647E-02  .26537E-02  .26291E-02  .26090E-02  .25888E-02
          31  50        .25768E-02  .25732E-02  .25735E-02  .25762E-02
          31  50        .25677E-02  .25608E-02  .25460E-02  .25329E-02  .25180E-02
          31  50        .25107E-02  .25175E-02  .25259E-02  .25441E-02
          31  51   6  3  3
          31  51        0.          .50000E+01  .10000E+02  .15000E+02  .20000E+02
          31  51        .30000E+02
          31  51        .34000E+00  .62000E+00  .10000E+01
          31  51        .77893E-04  .70486E-04  .74405E-04  .78194E-04  .79375E-04
          31  51        .78006E-04
          31  51        .91556E-04  .82749E-04  .86720E-04  .90783E-04  .91493E-04
          31  51        .91683E-04
          31  51        .10354E-03  .91019E-04  .96589E-04  .97810E-04  .10139E-03
          31  51        .97764E-04
          31  52  13  3  3
          31  52        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  52        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  52        .20000E+02  .25000E+02  .30000E+02
          31  52        .34000E+00  .62000E+00  .10000E+01
          31  52        .19933E-01  .19908E-01  .19865E-01  .19771E-01  .19672E-01
          31  52        .19574E-01  .19477E-01  .19244E-01  .19042E-01  .18890E-01
          31  52        .18817E-01  .18763E-01  .18722E-01
          31  52        .19933E-01  .19924E-01  .19891E-01  .19813E-01  .19725E-01
          31  52        .19632E-01  .19538E-01  .19301E-01  .19113E-01  .19026E-01
          31  52        .18999E-01  .18988E-01  .18985E-01
          31  52        .19933E-01  .19940E-01  .19918E-01  .19860E-01  .19789E-01
          31  52        .19708E-01  .19622E-01  .19392E-01  .19239E-01  .19222E-01
          31  52        .19250E-01  .19293E-01  .19336E-01
          31  53  13  3  3
          31  53        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  53        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  53        .20000E+02  .25000E+02  .30000E+02
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  53       .34000E+00  .62000E+00  .10000E+01
          31  53      -.98945E-02 -.98816E-02 -.98683E-02 -.98408E-02 -.98120E-02
          31  53      -.97818E-02 -.97503E-02 -.96657E-02 -.95728E-02 -.95131E-02
          31  53      -.94902E-02 -.94748E-02 -.94670E-02
          31  53      -.98945E-02 -.98856E-02 -.98761E-02 -.98555E-02 -.98325E-02
          31  53      -.98073E-02 -.97798E-02 -.97010E-02 -.96079E-02 -.95799E-02
          31  53      -.95792E-02 -.95836E-02 -.95931E-02
          31  53      -.98945E-02 -.98898E-02 -.98842E-02 -.98708E-02 -.98541E-02
          31  53      -.98341E-02 -.98110E-02 -.97391E-02 -.96470E-02 -.96485E-02
          31  53      -.96682E-02 -.96921E-02 -.97203E-02
          31  54   9  3  3
          31  54      0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  54       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  54       .34000E+00  .62000E+00  .10000E+01
          31  54      -.21442E-02 -.21394E-02 -.21138E-02 -.20875E-02 -.20571E-02
          31  54      -.20392E-02 -.20465E-02 -.20610E-02 -.20877E-02
          31  54      -.21040E-02 -.21061E-02 -.20908E-02 -.20716E-02 -.20452E-02
          31  54      -.20329E-02 -.20564E-02 -.20834E-02 -.21338E-02
          31  54      -.19817E-02 -.19896E-02 -.19867E-02 -.19767E-02 -.19581E-02
          31  54      -.19531E-02 -.19911E-02 -.20298E-02 -.21098E-02
          31  55  13  3  3
          31  55      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  55       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  55       .20000E+02  .25000E+02  .30000E+02
          31  55       .34000E+00  .62000E+00  .10000E+01
          31  55       .47222E-02  .47151E-02  .47039E-02  .46752E-02  .46414E-02
          31  55       .46054E-02  .45684E-02  .44741E-02  .43801E-02  .42098E-02
          31  55       .40634E-02  .39374E-02  .38284E-02
          31  55       .47222E-02  .47074E-02  .46892E-02  .46474E-02  .46017E-02
          31  55       .45541E-02  .45053E-02  .43816E-02  .42585E-02  .40317E-02
          31  55       .38348E-02  .36640E-02  .35172E-02
          31  55       .47222E-02  .47002E-02  .46752E-02  .46214E-02  .45645E-02
          31  55       .45056E-02  .44458E-02  .42949E-02  .41460E-02  .38701E-02
          31  55       .36268E-02  .34164E-02  .32417E-02
          31  56  13  3  3
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  56      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  56       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  56       .20000E+02   .25000E+02  .30000E+02
          31  56       .34000E+00   .62000E+00  .10000E+01
          31  56      -.50346E-03 -.50392E-03 -.50431E-03 -.50485E-03 -.50508E-03
          31  56      -.50501E-03 -.50462E-03 -.50230E-03 -.49806E-03 -.49360E-03
          31  56      -.49038E-03 -.48495E-03 -.47731E-03
          31  56      -.50346E-03 -.50320E-03 -.50287E-03 -.50205E-03 -.50099E-03
          31  56      -.49970E-03 -.49818E-03 -.49335E-03 -.48705E-03 -.47523E-03
          31  56      -.46648E-03 -.45678E-03 -.44614E-03
          31  56      -.50346E-03 -.50228E-03 -.50108E-03 -.49863E-03 -.49609E-03
          31  56      -.49347E-03 -.49077E-03 -.48367E-03 -.47606E-03 -.45964E-03
          31  56      -.44597E-03 -.43244E-03 -.41905E-03
          31  57 13  3  3
          31  57      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  57       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  57       .20000E+02   .25000E+02  .30000E+02
          31  57       .34000E+00   .62000E+00  .10000E+01
          31  57       .62498E-13   .62026E-13  .61556E-13  .60646E-13  .59774E-13
          31  57       .58947E-13   .58161E-13  .56344E-13  .54691E-13  .51808E-13
          31  57       .49417E-13   .47421E-13  .45741E-13
          31  57       .62498E-13   .61963E-13  .61430E-13  .60393E-13  .59400E-13
          31  57       .58449E-13   .57533E-13  .55380E-13  .53375E-13  .49788E-13
          31  57       .46766E-13   .44209E-13  .42055E-13
          31  57       .62498E-13   .61907E-13  .61315E-13  .60168E-13  .59062E-13
          31  57       .57992E-13   .56954E-13  .54491E-13  .52174E-13  .47968E-13
          31  57       .44353E-13   .41282E-13  .38759E-13
          31  58 13  3  3
          31  58      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  58       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  58       .20000E+02   .25000E+02  .30000E+02
          31  58       .34000E+00   .62000E+00  .10000E+01
          31  58      -.69240E-14 -.68965E-14 -.68692E-14 -.68151E-14 -.67617E-14
          31  58      -.67091E-14 -.66572E-14 -.65306E-14 -.64086E-14 -.62312E-14
          31  58      -.60939E-14 -.59481E-14 -.57939E-14
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  58      -.69240E-14 -.68900E-14 -.68562E-14 -.67896E-14 -.67242E-14
          31  58      -.66600E-14 -.65970E-14 -.64447E-14 -.63000E-14 -.60306E-14
          31  58      -.58221E-14 -.56198E-14 -.54235E-14
          31  58      -.69240E-14 -.68807E-14 -.68381E-14 -.67549E-14 -.66745E-14
          31  58      -.65969E-14 -.65220E-14 -.63470E-14 -.61893E-14 -.58603E-14
          31  58      -.55873E-14 -.53317E-14 -.50936E-14
          31  59 13  3  3
          31  59      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  59       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  59       .20000E+02  .25000E+02  .30000E+02
          31  59       .34000E+00  .62000E+00  .10000E+01
          31  59       .61873E+00  .61987E+00  .62082E+00  .62235E+00  .62351E+00
          31  59       .62439E+00  .62507E+00  .62627E+00  .62785E+00  .63163E+00
          31  59       .63439E+00  .63630E+00  .63766E+00
          31  59       .75601E+00  .75652E+00  .75701E+00  .75773E+00  .75814E+00
          31  59       .75839E+00  .75853E+00  .75875E+00  .75985E+00  .76277E+00
          31  59       .76474E+00  .76588E+00  .76653E+00
          31  59       .94650E+00  .94667E+00  .94698E+00  .94730E+00  .94748E+00
          31  59       .94757E+00  .94761E+00  .94783E+00  .94923E+00  .95237E+00
          31  59       .95434E+00  .95577E+00  .95669E+00
          31  60 13  3  3
          31  60      0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  60       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  60       .20000E+02  .25000E+02  .30000E+02
          31  60       .34000E+00  .62000E+00  .10000E+01
          31  60       .51869E-01  .52948E-01  .53649E-01  .54687E-01  .55361E-01
          31  60       .55770E-01  .55975E-01  .55895E-01  .55614E-01  .55941E-01
          31  60       .56209E-01  .56275E-01  .56254E-01
          31  60       .51869E-01  .52756E-01  .53271E-01  .53979E-01  .54375E-01
          31  60       .54515E-01  .54454E-01  .53714E-01  .52955E-01  .52547E-01
          31  60       .51985E-01  .51343E-01  .50724E-01
          31  60       .51869E-01  .52591E-01  .52934E-01  .53387E-01  .53537E-01
          31  60       .53448E-01  .53175E-01  .51875E-01  .50714E-01  .49640E-01
          31  60       .48449E-01  .47229E-01  .46143E-01
          31  61 13  3  3
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  61      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  61       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  61       .20000E+02   .25000E+02  .30000E+02
          31  61       .34000E+00   .62000E+00  .10000E+01
          31  61      -.53492E-02  -.53974E-02  -.54412E-02  -.55156E-02  -.55724E-02
          31  61      -.56114E-02  -.56329E-02  -.56092E-02  -.54753E-02  -.53566E-02
          31  61      -.53205E-02  -.52840E-02  -.52469E-02
          31  61      -.53492E-02  -.53785E-02  -.54041E-02  -.54445E-02  -.54704E-02
          31  61      -.54818E-02  -.54787E-02  -.54074E-02  -.52455E-02  -.50497E-02
          31  61      -.48996E-02  -.47790E-02  -.46879E-02
          31  61      -.53492E-02  -.53546E-02  -.53580E-02  -.53585E-02  -.53509E-02
          31  61      -.53351E-02  -.53110E-02  -.52151E-02  -.50680E-02  -.47750E-02
          31  61      -.45871E-02  -.44195E-02  -.42721E-02
          31  62   9   3   3
          31  62      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  62       .10000E+02   .15000E+02  .20000E+02  .30000E+02
          31  62       .34000E+00   .62000E+00  .10000E+01
          31  62       .20210E-01   .20510E-01  .20723E-01  .20725E-01  .20543E-01
          31  62       .20402E-01   .20680E-01  .20998E-01  .21295E-01
          31  62       .20376E-01   .20549E-01  .20507E-01  .20221E-01  .19613E-01
          31  62       .19164E-01   .19129E-01  .19076E-01  .18656E-01
          31  62       .20256E-01   .20338E-01  .20097E-01  .19585E-01  .18592E-01
          31  62       .17874E-01   .17576E-01  .17140E-01  .16159E-01
          31  63  13   3   3
          31  63      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  63       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  63       .20000E+02   .25000E+02  .30000E+02
          31  63       .34000E+00   .62000E+00  .10000E+01
          31  63       .62513E-01   .63963E-01  .65330E-01  .67599E-01  .69411E-01
          31  63       .70909E-01   .72172E-01  .74593E-01  .75942E-01  .75422E-01
          31  63       .73782E-01   .71973E-01  .70206E-01
          31  63       .62513E-01   .63587E-01  .64611E-01  .66293E-01  .67623E-01
          31  63       .68700E-01   .69584E-01  .71194E-01  .71632E-01  .69157E-01
          31  63       .65920E-01   .62758E-01  .59868E-01
          31  63       .62513E-01   .63261E-01  .63980E-01  .65158E-01  .66037E-01
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  63       .66723E-01  .67259E-01  .68164E-01  .67775E-01  .63586E-01
          31  63       .59060E-01  .54735E-01  .50932E-01
          31  64  13   3   3
          31  64       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  64       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  64       .20000E+02  .25000E+02  .30000E+02
          31  64       .34000E+00  .62000E+00  .10000E+01
          31  64      -.55905E-02 -.54893E-02 -.53945E-02 -.52238E-02 -.50784E-02
          31  64      -.49583E-02 -.48636E-02 -.47375E-02 -.47697E-02 -.46595E-02
          31  64      -.44767E-02 -.42944E-02 -.41127E-02
          31  64      -.55905E-02 -.54594E-02 -.53358E-02 -.51112E-02 -.49168E-02
          31  64      -.47526E-02 -.46186E-02 -.44156E-02 -.44013E-02 -.40384E-02
          31  64      -.36327E-02 -.32857E-02 -.29975E-02
          31  64      -.55905E-02 -.54240E-02 -.52671E-02 -.49822E-02 -.47359E-02
          31  64      -.45283E-02 -.43592E-02 -.41053E-02 -.40927E-02 -.34734E-02
          31  64      -.29795E-02 -.25363E-02 -.21437E-02
          31  65   9   3   3
          31  65       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  65       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  65       .34000E+00  .62000E+00  .10000E+01
          31  65       .72458E-02  .78176E-02  .88814E-02  .97280E-02  .10513E-01
          31  65       .11050E-01  .11598E-01  .11800E-01  .11748E-01
          31  65       .93091E-02  .97579E-02  .10599E-01  .11255E-01  .11824E-01
          31  65       .12132E-01  .12111E-01  .11772E-01  .10687E-01
          31  65       .11058E-01  .11355E-01  .11901E-01  .12315E-01  .12595E-01
          31  65       .12603E-01  .12016E-01  .11076E-01  .91316E-02
          31  66  13   3   3
          31  66       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  66       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  66       .20000E+02  .25000E+02  .30000E+02
          31  66       .34000E+00  .62000E+00  .10000E+01
          31  66       .82735E-12  .84142E-12  .85492E-12  .87687E-12  .89389E-12
          31  66       .90760E-12  .91884E-12  .93939E-12  .94823E-12  .92817E-12
          31  66       .89732E-12  .86683E-12  .83880E-12
          31  66       .82735E-12  .83700E-12  .84645E-12  .86150E-12  .87291E-12
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  66        .88173E-12  .88861E-12  .89984E-12  .89784E-12  .85402E-12
          31  66        .80391E-12  .75720E-12  .71581E-12
          31  66        .82735E-12  .83322E-12  .83911E-12  .84832E-12  .85448E-12
          31  66        .85878E-12  .86164E-12  .86483E-12  .85290E-12  .78811E-12
          31  66        .72227E-12  .66139E-12  .60896E-12
          31  67 13  3  3
          31  67        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  67        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  67        .20000E+02  .25000E+02  .30000E+02
          31  67        .34000E+00  .62000E+00  .10000E+01
          31  67       -.77508E-13 -.75930E-13 -.74442E-13 -.71736E-13 -.69389E-13
          31  67       -.67402E-13 -.65775E-13 -.63280E-13 -.63034E-13 -.60327E-13
          31  67       -.56966E-13 -.53835E-13 -.50934E-13
          31  67       -.77508E-13 -.75561E-13 -.73719E-13 -.70353E-13 -.67410E-13
          31  67       -.64889E-13 -.62791E-13 -.59395E-13 -.58641E-13 -.52826E-13
          31  67       -.46757E-13 -.41642E-13 -.37483E-13
          31  67       -.77508E-13 -.75117E-13 -.72859E-13 -.68741E-13 -.65156E-13
          31  67       -.62102E-13 -.59580E-13 -.55601E-13 -.54947E-13 -.45930E-13
          31  67       -.38788E-13 -.32502E-13 -.27071E-13
          31  68  9  3  3
          31  68        0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  68        .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  68        .34000E+00  .62000E+00  .10000E+01
          31  68        .91779E-13  .99060E-13  .11222E-12  .12236E-12  .13147E-12
          31  68        .13744E-12  .14274E-12  .14382E-12  .14084E-12
          31  68        .12016E-12  .12556E-12  .13552E-12  .14304E-12  .14929E-12
          31  68        .15225E-12  .15017E-12  .14439E-12  .12858E-12
          31  68        .14436E-12  .14764E-12  .15362E-12  .15795E-12  .16045E-12
          31  68        .15957E-12  .15021E-12  .13679E-12  .11024E-12
          31  69 13  3  3
          31  69        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  69        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  69        .20000E+02  .25000E+02  .30000E+02
          31  69        .34000E+00  .62000E+00  .10000E+01
          31  69        .99617E+06  .99404E+06  .99598E+06  .10007E+07  .10068E+07
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  69        .10144E+07  .10232E+07  .10505E+07  .10748E+07  .10853E+07
          31  69        .10873E+07  .10903E+07  .10938E+07
          31  69        .10814E+07  .10784E+07  .10791E+07  .10821E+07  .10875E+07
          31  69        .10952E+07  .11050E+07  .11387E+07  .11683E+07  .11831E+07
          31  69        .11942E+07  .12077E+07  .12223E+07
          31  69        .11632E+07  .11597E+07  .11594E+07  .11609E+07  .11653E+07
          31  69        .11729E+07  .11835E+07  .12238E+07  .12596E+07  .12797E+07
          31  69        .13025E+07  .13272E+07  .13529E+07
          31  70  13  3  3
          31  70        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  70        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  70        .20000E+02  .25000E+02  .30000E+02
          31  70        .34000E+00  .62000E+00  .10000E+01
          31  70        .18288E+00  .18276E+00  .18269E+00  .18254E+00  .18237E+00
          31  70        .18221E+00  .18204E+00  .18155E+00  .18097E+00  .17987E+00
          31  70        .17886E+00  .17792E+00  .17705E+00
          31  70        .20891E+00  .20876E+00  .20868E+00  .20853E+00  .20838E+00
          31  70        .20823E+00  .20808E+00  .20751E+00  .20676E+00  .20531E+00
          31  70        .20393E+00  .20262E+00  .20140E+00
          31  70        .24334E+00  .24312E+00  .24303E+00  .24287E+00  .24272E+00
          31  70        .24259E+00  .24248E+00  .24182E+00  .24082E+00  .23881E+00
          31  70        .23682E+00  .23487E+00  .23300E+00
          31  71  13  3  3
          31  71        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  71        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  71        .20000E+02  .25000E+02  .30000E+02
          31  71        .34000E+00  .62000E+00  .10000E+01
          31  71        .71335E-02  .71507E-02  .71717E-02  .72301E-02  .72987E-02
          31  71        .73689E-02  .74384E-02  .76117E-02  .77807E-02  .80526E-02
          31  71        .82757E-02  .84651E-02  .86273E-02
          31  71        .71335E-02  .71445E-02  .71587E-02  .72043E-02  .72636E-02
          31  71        .73277E-02  .73921E-02  .75579E-02  .77179E-02  .79732E-02
          31  71        .81831E-02  .83613E-02  .85155E-02
          31  71        .71335E-02  .71394E-02  .71474E-02  .71813E-02  .72302E-02
          31  71        .72860E-02  .73445E-02  .74996E-02  .76479E-02  .78910E-02
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  71       .80904E-02  .82604E-02  .84098E-02
          31  72 13  3  3
          31  72       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  72       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  72       .20000E+02  .25000E+02  .30000E+02
          31  72       .34000E+00  .62000E+00  .10000E+01
          31  72      -.94516E-03 -.95135E-03 -.95775E-03 -.97118E-03 -.98547E-03
          31  72      -.10006E-02 -.10166E-02 -.10602E-02 -.11092E-02 -.11866E-02
          31  72      -.12507E-02 -.13044E-02 -.13478E-02
          31  72      -.94516E-03 -.95049E-03 -.95612E-03 -.96825E-03 -.98157E-03
          31  72      -.99607E-03 -.10117E-02 -.10561E-02 -.11078E-02 -.11843E-02
          31  72      -.12470E-02 -.12992E-02 -.13409E-02
          31  72      -.94516E-03 -.94927E-03 -.95370E-03 -.96353E-03 -.97464E-03
          31  72      -.98704E-03 -.10007E-02 -.10406E-02 -.10885E-02 -.11614E-02
          31  72      -.12206E-02 -.12688E-02 -.13060E-02
          31  73  9  3  3
          31  73       0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  73       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  73       .34000E+00  .62000E+00  .10000E+01
          31  73       .26890E-02  .26745E-02  .26411E-02  .26144E-02  .25943E-02
          31  73       .25842E-02  .25721E-02  .25632E-02  .25494E-02
          31  73       .26447E-02  .26349E-02  .26121E-02  .25924E-02  .25803E-02
          31  73       .25771E-02  .25757E-02  .25757E-02  .25776E-02
          31  73       .25528E-02  .25465E-02  .25307E-02  .25157E-02  .25094E-02
          31  73       .25115E-02  .25189E-02  .25269E-02  .25441E-02
          31  74  6  3  3
          31  74       0.          .50000E+01  .10000E+02  .15000E+02  .20000E+02
          31  74       .30000E+02
          31  74       .34000E+00  .62000E+00  .10000E+01
          31  74       .73529E-04  .69048E-04  .75432E-04  .78695E-04  .79998E-04
          31  74       .78423E-04
          31  74       .86180E-04  .78692E-04  .87368E-04  .91021E-04  .92038E-04
          31  74       .91113E-04
          31  74       .97267E-04  .84429E-04  .96746E-04  .10054E-03  .10000E-03
          31  74       .97862E-04
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  75 13  3  3
          31  75     0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  75      .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  75      .20000E+02   .25000E+02  .30000E+02
          31  75      .34000E+00   .62000E+00  .10000E+01
          31  75      .19676E-01   .19655E-01  .19616E-01  .19529E-01  .19438E-01
          31  75      .19350E-01   .19268E-01  .19110E-01  .19011E-01  .18903E-01
          31  75      .18829E-01   .18772E-01  .18730E-01
          31  75      .19676E-01   .19670E-01  .19639E-01  .19565E-01  .19482E-01
          31  75      .19397E-01   .19315E-01  .19172E-01  .19104E-01  .19042E-01
          31  75      .19013E-01   .19001E-01  .18997E-01
          31  75      .19676E-01   .19687E-01  .19668E-01  .19613E-01  .19543E-01
          31  75      .19465E-01   .19383E-01  .19264E-01  .19236E-01  .19230E-01
          31  75      .19258E-01   .19300E-01  .19341E-01
          31  76 13  3  3
          31  76     0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  76      .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  76      .20000E+02   .25000E+02  .30000E+02
          31  76      .34000E+00   .62000E+00  .10000E+01
          31  76     -.97747E-02  -.97600E-02  -.97457E-02  -.97181E-02  -.96919E-02
          31  76     -.96671E-02  -.96437E-02  -.95915E-02  -.95481E-02  -.95123E-02
          31  76     -.94895E-02  -.94736E-02  -.94647E-02
          31  76     -.97747E-02  -.97622E-02  -.97501E-02  -.97270E-02  -.97052E-02
          31  76     -.96850E-02  -.96661E-02  -.96253E-02  -.95936E-02  -.95796E-02
          31  76     -.95777E-02  -.95814E-02  -.95907E-02
          31  76     -.97747E-02  -.97653E-02  -.97561E-02  -.97386E-02  -.97222E-02
          31  76     -.97069E-02  -.96927E-02  -.96620E-02  -.96383E-02  -.96462E-02
          31  76     -.96663E-02  -.96900E-02  -.97173E-02
          31  77  9  3  3
          31  77     0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  77      .10000E+02   .15000E+02  .20000E+02  .30000E+02
          31  77      .34000E+00   .62000E+00  .10000E+01
          31  77     -.20513E-02  -.20565E-02  -.20444E-02  -.20296E-02  -.20224E-02
          31  77     -.20282E-02  -.20437E-02  -.20585E-02  -.20854E-02
          31  77     -.20160E-02  -.20260E-02  -.20218E-02  -.20120E-02  -.20113E-02
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  77      -.20240E-02 -.20525E-02 -.20800E-02 -.21306E-02
          31  77      -.19118E-02 -.19248E-02 -.19274E-02 -.19229E-02 -.19284E-02
          31  77      -.19468E-02 -.19864E-02 -.20264E-02 -.21058E-02
          31  78 13  3  3
          31  78      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  78       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  78       .20000E+02  .25000E+02  .30000E+02
          31  78       .34000E+00  .62000E+00  .10000E+01
          31  78       .47541E-02  .47437E-02  .47294E-02  .46948E-02  .46556E-02
          31  78       .46145E-02  .45729E-02  .44704E-02  .43732E-02  .42039E-02
          31  78       .40596E-02  .39357E-02  .38286E-02
          31  78       .47541E-02  .47367E-02  .47160E-02  .46692E-02  .46187E-02
          31  78       .45665E-02  .45133E-02  .43817E-02  .42560E-02  .40301E-02
          31  78       .38345E-02  .36650E-02  .35196E-02
          31  78       .47541E-02  .47300E-02  .47027E-02  .46445E-02  .45832E-02
          31  78       .45200E-02  .44562E-02  .42973E-02  .41452E-02  .38698E-02
          31  78       .36267E-02  .34170E-02  .32436E-02
          31  79 13  3  3
          31  79      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  79       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  79       .20000E+02  .25000E+02  .30000E+02
          31  79       .34000E+00  .62000E+00  .10000E+01
          31  79      -.50748E-03 -.50770E-03 -.50785E-03 -.50793E-03 -.50771E-03
          31  79      -.50719E-03 -.50637E-03 -.50302E-03 -.49781E-03 -.49333E-03
          31  79      -.49090E-03 -.48598E-03 -.47856E-03
          31  79      -.50748E-03 -.50708E-03 -.50661E-03 -.50547E-03 -.50404E-03
          31  79      -.50234E-03 -.50035E-03 -.49416E-03 -.48621E-03 -.47503E-03
          31  79      -.46712E-03 -.45795E-03 -.44752E-03
          31  79      -.50748E-03 -.50619E-03 -.50486E-03 -.50211E-03 -.49923E-03
          31  79      -.49622E-03 -.49308E-03 -.48465E-03 -.47541E-03 -.45971E-03
          31  79      -.44664E-03 -.43366E-03 -.42076E-03
          31  80 13  3  3
          31  80      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  80       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  80       .20000E+02  .25000E+02  .30000E+02
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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  80       .34000E+00  .62000E+00  .10000E+01
          31  80       .62949E-13  .62457E-13  .61962E-13  .60997E-13  .60068E-13
          31  80       .59183E-13  .58343E-13  .56404E-13  .54668E-13  .51756E-13
          31  80       .49375E-13  .47395E-13  .45733E-13
          31  80       .62949E-13  .62401E-13  .61850E-13  .60768E-13  .59725E-13
          31  80       .58722E-13  .57753E-13  .55479E-13  .53396E-13  .49785E-13
          31  80       .46765E-13  .44214E-13  .42071E-13
          31  80       .62949E-13  .62348E-13  .61740E-13  .60553E-13  .59402E-13
          31  80       .58283E-13  .57199E-13  .54609E-13  .52208E-13  .47980E-13
          31  80       .44354E-13  .41282E-13  .38769E-13
          31  81  13   3   3
          31  81       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  81       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  81       .20000E+02  .25000E+02  .30000E+02
          31  81       .34000E+00  .62000E+00  .10000E+01
          31  81      -.69691E-14 -.69423E-14 -.69154E-14 -.68614E-14 -.68070E-14
          31  81      -.67523E-14 -.66972E-14 -.65581E-14 -.64168E-14 -.62316E-14
          31  81      -.61009E-14 -.59593E-14 -.58069E-14
          31  81      -.69691E-14 -.69370E-14 -.69047E-14 -.68396E-14 -.67740E-14
          31  81      -.67078E-14 -.66410E-14 -.64715E-14 -.62983E-14 -.60309E-14
          31  81      -.58304E-14 -.56328E-14 -.54381E-14
          31  81      -.69691E-14 -.69277E-14 -.68864E-14 -.68048E-14 -.67241E-14
          31  81      -.66444E-14 -.65658E-14 -.63736E-14 -.61877E-14 -.58639E-14
          31  81      -.55957E-14 -.53450E-14 -.51119E-14
          31  82  13   3   3
          31  82       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  82       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  82       .20000E+02  .25000E+02  .30000E+02
          31  82       .34000E+00  .62000E+00  .10000E+01
          31  82       .61004E+00  .61149E+00  .61277E+00  .61495E+00  .61678E+00
          31  82       .61834E+00  .61974E+00  .62325E+00  .62638E+00  .63084E+00
          31  82       .63377E+00  .63582E+00  .63724E+00
          31  82       .74852E+00  .74926E+00  .75002E+00  .75128E+00  .75229E+00
          31  82       .75318E+00  .75404E+00  .75655E+00  .75882E+00  .76212E+00
          31  82       .76427E+00  .76559E+00  .76623E+00
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  82        .94042E+00  .94077E+00  .94129E+00  .94212E+00  .94283E+00
          31  82        .94350E+00  .94422E+00  .94656E+00  .94871E+00  .95189E+00
          31  82        .95411E+00  .95559E+00  .95653E+00
          31  83 13  3  3
          31  83        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  83        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  83        .20000E+02  .25000E+02  .30000E+02
          31  83        .34000E+00  .62000E+00  .10000E+01
          31  83        .49658E-01  .50737E-01  .51418E-01  .52417E-01  .53083E-01
          31  83        .53520E-01  .53805E-01  .54402E-01  .54969E-01  .55731E-01
          31  83        .56038E-01  .56128E-01  .56139E-01
          31  83        .49658E-01  .50550E-01  .51051E-01  .51740E-01  .52127E-01
          31  83        .52288E-01  .52303E-01  .52380E-01  .52525E-01  .52374E-01
          31  83        .51836E-01  .51191E-01  .50589E-01
          31  83        .49658E-01  .50394E-01  .50741E-01  .51175E-01  .51329E-01
          31  83        .51270E-01  .51064E-01  .50698E-01  .50457E-01  .49544E-01
          31  83        .48329E-01  .47105E-01  .46021E-01
          31  84 13  3  3
          31  84        0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  84        .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  84        .20000E+02  .25000E+02  .30000E+02
          31  84        .34000E+00  .62000E+00  .10000E+01
          31  84       -.56674E-02 -.56743E-02 -.56792E-02 -.56831E-02 -.56789E-02
          31  84       -.56668E-02 -.56466E-02 -.55613E-02 -.54260E-02 -.53717E-02
          31  84       -.53160E-02 -.52737E-02 -.52448E-02
          31  84       -.56674E-02 -.56614E-02 -.56537E-02 -.56331E-02 -.56056E-02
          31  84       -.55712E-02 -.55300E-02 -.53965E-02 -.52199E-02 -.50489E-02
          31  84       -.48963E-02 -.47738E-02 -.46813E-02
          31  84       -.56674E-02 -.56411E-02 -.56144E-02 -.55596E-02 -.55028E-02
          31  84       -.54440E-02 -.53833E-02 -.52231E-02 -.50507E-02 -.47939E-02
          31  84       -.45770E-02 -.44005E-02 -.42645E-02
          31  85  9  3  3
          31  85        0.          .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  85        .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  85        .34000E+00  .62000E+00  .10000E+01
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  85       .19008E-01  .19263E-01  .19427E-01  .19439E-01  .19599E-01
          31  85       .19961E-01  .20516E-01  .20863E-01  .21201E-01
          31  85       .18964E-01  .19108E-01  .19030E-01  .18753E-01  .18648E-01
          31  85       .18809E-01  .18974E-01  .18946E-01  .18563E-01
          31  85       .18745E-01  .18808E-01  .18541E-01  .18004E-01  .17656E-01
          31  85       .17634E-01  .17422E-01  .17029E-01  .16057E-01
          31  86 13  3  3
          31  86       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  86       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  86       .20000E+02  .25000E+02  .30000E+02
          31  86       .34000E+00  .62000E+00  .10000E+01
          31  86       .66066E-01  .67379E-01  .68628E-01  .70699E-01  .72318E-01
          31  86       .73613E-01  .74647E-01  .76051E-01  .76215E-01  .75257E-01
          31  86       .73661E-01  .71883E-01  .70164E-01
          31  86       .66066E-01  .67033E-01  .67959E-01  .69480E-01  .70647E-01
          31  86       .71545E-01  .72220E-01  .72639E-01  .71805E-01  .69082E-01
          31  86       .65868E-01  .62688E-01  .59818E-01
          31  86       .66066E-01  .66727E-01  .67362E-01  .68389E-01  .69141E-01
          31  86       .69684E-01  .70061E-01  .69634E-01  .67897E-01  .63644E-01
          31  86       .59058E-01  .54711E-01  .50899E-01
          31  87 13  3  3
          31  87       0.          .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  87       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  87       .20000E+02  .25000E+02  .30000E+02
          31  87       .34000E+00  .62000E+00  .10000E+01
          31  87      -.58520E-02 -.57671E-02 -.56862E-02 -.55365E-02 -.54031E-02
          31  87      -.52858E-02 -.51848E-02 -.50031E-02 -.49226E-02 -.47086E-02
          31  87      -.44888E-02 -.42960E-02 -.41301E-02
          31  87      -.58520E-02 -.57447E-02 -.56416E-02 -.54479E-02 -.52710E-02
          31  87      -.51109E-02 -.49676E-02 -.46826E-02 -.45025E-02 -.40577E-02
          31  87      -.36475E-02 -.32974E-02 -.30074E-02
          31  87      -.58520E-02 -.57081E-02 -.55704E-02 -.53135E-02 -.50813E-02
          31  87      -.48738E-02 -.46909E-02 -.43417E-02 -.41468E-02 -.35271E-02
          31  87      -.29840E-02 -.25257E-02 -.21521E-02
          31  88  9  3  3
```

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12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  88      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  88       .10000E+02   .15000E+02  .20000E+02  .30000E+02
          31  88       .34000E+00   .62000E+00  .10000E+01
          31  88       .74103E-02   .79946E-02  .90274E-02  .98203E-02  .10496E-01
          31  88       .10920E-01   .11422E-01  .11656E-01  .11664E-01
          31  88       .97198E-02   .10146E-01  .10918E-01  .11479E-01  .11857E-01
          31  88       .11987E-01   .11946E-01  .11646E-01  .10618E-01
          31  88       .11618E-01   .11874E-01  .12331E-01  .12606E-01  .12638E-01
          31  88       .12475E-01   .11851E-01  .10986E-01  .90629E-02
          31  89 13  3  3
          31  89      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  89       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  89       .20000E+02   .25000E+02  .30000E+02
          31  89       .34000E+00   .62000E+00  .10000E+01
          31  89       .87478E-12   .88713E-12  .89913E-12  .91854E-12  .93307E-12
          31  89       .94412E-12   .95236E-12  .95958E-12  .95274E-12  .92652E-12
          31  89       .89591E-12   .86564E-12  .83812E-12
          31  89       .87478E-12   .88310E-12  .89129E-12  .90428E-12  .91356E-12
          31  89       .92004E-12   .92417E-12  .91974E-12  .90089E-12  .85341E-12
          31  89       .80332E-12   .75624E-12  .71501E-12
          31  89       .87478E-12   .87955E-12  .88438E-12  .89164E-12  .89613E-12
          31  89       .89853E-12   .89928E-12  .88491E-12  .85515E-12  .78909E-12
          31  89       .72227E-12   .66098E-12  .60838E-12
          31  90 13  3  3
          31  90      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  90       .40000E+01   .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  90       .20000E+02   .25000E+02  .30000E+02
          31  90       .34000E+00   .62000E+00  .10000E+01
          31  90      -.81025E-13  -.79684E-13  -.78400E-13  -.76004E-13  -.73837E-13
          31  90      -.71901E-13  -.70194E-13  -.66930E-13  -.65102E-13  -.60973E-13
          31  90      -.57120E-13  -.53835E-13  -.51118E-13
          31  90      -.81025E-13  -.79412E-13  -.77859E-13  -.74929E-13  -.72237E-13
          31  90      -.69781E-13  -.67562E-13  -.63052E-13  -.60023E-13  -.53093E-13
          31  90      -.46941E-13  -.41770E-13  -.37582E-13
          31  90      -.81025E-13  -.78952E-13  -.76964E-13  -.73242E-13  -.69860E-13
```

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
          31  90      -.66818E-13 -.64116E-13 -.58847E-13 -.55702E-13 -.46625E-13
          31  90      -.38845E-13 -.32353E-13 -.27151E-13
          31  91   9  3  3
          31  91      0.            .10000E+01  .30000E+01  .50000E+01  .75000E+01
          31  91       .10000E+02  .15000E+02  .20000E+02  .30000E+02
          31  91       .34000E+00  .62000E+00  .10000E+01
          31  91       .94100E-13  .10150E-12  .11423E-12  .12369E-12  .13139E-12
          31  91       .13586E-12  .14053E-12  .14200E-12  .13976E-12
          31  91       .12580E-12  .13086E-12  .13988E-12  .14617E-12  .14989E-12
          31  91       .15047E-12  .14809E-12  .14277E-12  .12768E-12
          31  91       .15198E-12  .15469E-12  .15947E-12  .16198E-12  .16118E-12
          31  91       .15795E-12  .14807E-12  .13559E-12  .10933E-12
          31  92 13  3  3
          31  92      0.            .50000E+00  .10000E+01  .20000E+01  .30000E+01
          31  92       .40000E+01  .50000E+01  .75000E+01  .10000E+02  .15000E+02
          31  92       .20000E+02  .25000E+02  .30000E+02
          31  92       .34000E+00  .62000E+00  .10000E+01
          31  92       .10521E+07  .10496E+07  .10514E+07  .10566E+07  .10633E+07
          31  92       .10712E+07  .10799E+07  .10936E+07  .10946E+07  .10941E+07
          31  92       .10952E+07  .10973E+07  .11002E+07
          31  92       .11336E+07  .11311E+07  .11323E+07  .11370E+07  .11442E+07
          31  92       .11535E+07  .11642E+07  .11812E+07  .11853E+07  .11929E+07
          31  92       .12031E+07  .12155E+07  .12298E+07
          31  92       .12103E+07  .12079E+07  .12087E+07  .12131E+07  .12206E+07
          31  92       .12312E+07  .12443E+07  .12659E+07  .12737E+07  .12907E+07
          31  92       .13120E+07  .13363E+07  .13615E+07
          99
ILAST
/*
//GO.FT08F001 DD SPACE=(TRK,(32,5))
//GO.FT09F001 DD SPACE=(TRK,(10,10))
//GO.FT10F001 DD SPACE=(TRK,(10,10))
//GO.FT11F001 DD SPACE=(TRK,(32,5))
//GO.FT15F001 DD SPACE=(TRK,(10,10))
```

SIMULATE INPUT LISTING FOR HATCH 1 BOC-1

```
12345678901234567890123456789012345678901234567890123456789012345678901234567890
//GO.FT16F001 DD SPACE=(TRK,(10,10))
//GO.FT17F001 DD SPACE=(TRK,(10,10))
//GO.FT30F001 DD DUMMY
/*
//
```

# APPENDIX C

## TWELVE-NODE OCTANT NORMALIZED Ba-140 DISTRIBUTION FROM SIMULATE

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 1

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 1

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.2153 | 0.2132 | 0.2041 | 0.1880 | 0.1506 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.3921 | 0.3891 | 0.3739 | 0.3436 | 0.2779 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.5528 | 0.5477 | 0.5275 | 0.4851 | 0.3931 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.6953 | 0.6892 | 0.6629 | 0.6084 | 0.4932 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.8155 | 0.8074 | 0.7771 | 0.7135 | 0.5770 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.9115 | 0.9024 | 0.8701 | 0.7984 | 0.6458 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.9833 | 0.9752 | 0.9408 | 0.8630 | 0.6973 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.0278 | 1.0197 | 0.9853 | 0.9045 | 0.7306 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.0379 | 1.0298 | 0.9964 | 0.9186 | 0.7428 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.0086 | 0.9974 | 0.9681 | 0.9004 | 0.7337 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.9449 | 0.9257 | 0.9024 | 0.8549 | 0.7054 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.8741 | 0.8529 | 0.8357 | 0.8024 | 0.6680 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.8064 | 0.7862 | 0.7721 | 0.7468 | 0.6175 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.7408 | 0.7185 | 0.7023 | 0.6791 | 0.5588 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.6650 | 0.6427 | 0.6266 | 0.6043 | 0.4972 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.5932 | 0.5690 | 0.5518 | 0.5306 | 0.4345 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.5275 | 0.5002 | 0.4810 | 0.4618 | 0.3780 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.4719 | 0.4426 | 0.4214 | 0.4032 | 0.3284 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.4244 | 0.3941 | 0.3709 | 0.3547 | 0.2910 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.3810 | 0.3537 | 0.3335 | 0.3183 | 0.2617 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.3406 | 0.3163 | 0.3001 | 0.2880 | 0.2375 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.2921 | 0.2749 | 0.2627 | 0.2547 | 0.2112 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.2294 | 0.2183 | 0.2122 | 0.2082 | 0.1708 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1425 | 0.1374 | 0.1354 | 0.1344 | 0.1102 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 2

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 2

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.3315 | 0.3385 | 0.3214 | 0.3113 | 0.2759 | 0.1920 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.5972 | 0.6094 | 0.5831 | 0.5669 | 0.5043 | 0.3517 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.8357 | 0.8519 | 0.8186 | 0.7963 | 0.7094 | 0.4942 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.0490 | 1.0672 | 1.0288 | 0.9954 | 0.8873 | 0.6165 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.2299 | 1.2511 | 1.2086 | 1.1642 | 1.0358 | 0.7185 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.3804 | 1.3905 | 1.3592 | 1.3016 | 1.1561 | 0.7984 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.4997 | 1.5138 | 1.4764 | 1.4098 | 1.2481 | 0.8560 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.5805 | 1.5967 | 1.5593 | 1.4764 | 1.3057 | 0.8913 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.6018 | 1.6139 | 1.5795 | 1.4946 | 1.3228 | 0.9024 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5452 | 1.5421 | 1.5159 | 1.4532 | 1.2996 | 0.8903 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.4199 | 1.3703 | 1.3562 | 1.3582 | 1.2460 | 0.8610 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2945 | 1.2299 | 1.2208 | 1.2572 | 1.1702 | 0.8206 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.1753 | 1.1046 | 1.0955 | 1.1409 | 1.0753 | 0.7721 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.0520 | 0.9843 | 0.9752 | 1.0176 | 0.9651 | 0.7135 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.9338 | 0.8681 | 0.8549 | 0.8893 | 0.8479 | 0.6377 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.8236 | 0.7569 | 0.7387 | 0.7660 | 0.7347 | 0.5619 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.7266 | 0.6508 | 0.6255 | 0.6549 | 0.6296 | 0.4942 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.6437 | 0.5669 | 0.5376 | 0.5609 | 0.5437 | 0.4376 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.5750 | 0.5063 | 0.4729 | 0.4921 | 0.4820 | 0.3931 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5184 | 0.4558 | 0.4265 | 0.4447 | 0.4376 | 0.3598 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.4639 | 0.4103 | 0.3911 | 0.4063 | 0.4032 | 0.3335 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3992 | 0.3567 | 0.3466 | 0.3678 | 0.3678 | 0.3032 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.3143 | 0.2880 | 0.2830 | 0.3113 | 0.3143 | 0.2537 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1981 | 0.1859 | 0.1839 | 0.2142 | 0.2142 | 0.1678 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 3

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 3

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.4133 | 0.4083 | 0.4073 | 0.3729 | 0.3486 | 0.3072 | 0.2163 | 0.1769 | 0.1304 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.7327 | 0.7317 | 0.7276 | 0.6690 | 0.6235 | 0.5538 | 0.3911 | 0.3234 | 0.2395 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 1.0176 | 1.0237 | 1.0166 | 0.9358 | 0.8681 | 0.7751 | 0.5487 | 0.4537 | 0.3375 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.2642 | 1.2834 | 1.2713 | 1.1692 | 1.0813 | 0.9631 | 0.6852 | 0.5659 | 0.4214 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.4744 | 1.5098 | 1.4926 | 1.3693 | 1.2602 | 1.1177 | 0.7973 | 0.6569 | 0.4901 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6432 | 1.7038 | 1.6735 | 1.5341 | 1.3946 | 1.2390 | 0.8853 | 0.7276 | 0.5437 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7867 | 1.8696 | 1.8312 | 1.6654 | 1.5078 | 1.3279 | 0.9439 | 0.7781 | 0.5821 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.8756 | 1.9827 | 1.9413 | 1.7523 | 1.5805 | 1.3815 | 0.9782 | 0.8064 | 0.6053 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.8898 | 2.0100 | 1.9706 | 1.7776 | 1.6068 | 1.3976 | 0.9863 | 0.8155 | 0.6134 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.7998 | 1.8797 | 1.8473 | 1.7139 | 1.5785 | 1.3744 | 0.9732 | 0.8074 | 0.6094 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.5785 | 1.2925 | 1.2784 | 1.5533 | 1.5017 | 1.3249 | 0.9449 | 0.7882 | 0.5972 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.3966 | 1.0803 | 1.0773 | 1.4138 | 1.4148 | 1.2652 | 0.9085 | 0.7620 | 0.5791 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.2551 | 0.9398 | 0.9449 | 1.2824 | 1.3259 | 1.1945 | 0.8661 | 0.7317 | 0.5568 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.1096 | 0.8216 | 0.8236 | 1.1318 | 1.1844 | 1.0894 | 0.8135 | 0.6933 | 0.5285 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.9762 | 0.7114 | 0.7064 | 0.9722 | 1.0288 | 0.9681 | 0.7509 | 0.6498 | 0.4911 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.8489 | 0.6053 | 0.5942 | 0.8277 | 0.8873 | 0.8499 | 0.6862 | 0.6023 | 0.4558 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.7468 | 0.5134 | 0.5002 | 0.7064 | 0.7660 | 0.7468 | 0.6225 | 0.5568 | 0.4265 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.6619 | 0.4457 | 0.4305 | 0.6053 | 0.6670 | 0.6619 | 0.5700 | 0.5225 | 0.4052 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.5892 | 0.3921 | 0.3769 | 0.5316 | 0.5922 | 0.5983 | 0.5346 | 0.5002 | 0.3891 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5336 | 0.3537 | 0.3396 | 0.4841 | 0.5447 | 0.5568 | 0.5114 | 0.4861 | 0.3759 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.4790 | 0.3234 | 0.3102 | 0.4457 | 0.5073 | 0.5235 | 0.4891 | 0.4649 | 0.3598 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.4133 | 0.2840 | 0.2779 | 0.4063 | 0.4689 | 0.4851 | 0.4527 | 0.4285 | 0.3284 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.3294 | 0.2294 | 0.2324 | 0.3466 | 0.4012 | 0.4174 | 0.3820 | 0.3567 | 0.2678 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2112 | 0.1475 | 0.1566 | 0.2345 | 0.2749 | 0.2900 | 0.2526 | 0.2314 | 0.1718 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 4

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4275 | 0.4588 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7589 | 0.8125 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0540 | 1.1258 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3097 | 1.3976 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5239 | 1.6311 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6968 | 1.8241 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8342 | 1.9848 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9150 | 2.0878 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9231 | 2.0969 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8463 | 1.9635 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6735 | 1.3713 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5330 | 1.1723 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3956 | 1.0318 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2188 | 0.8933 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9984 | 0.7498 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8307 | 0.6245 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7023 | 0.5194 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6033 | 0.4436 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5316 | 0.3881 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4871 | 0.3507 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4537 | 0.3224 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4164 | 0.2900 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3547 | 0.2435 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2395 | 0.1647 | 0.0 | 0.0 |

I = 4

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.4568 | 0.4679 | 0.4497 | 0.4356 | 0.3972 | 0.3689 | 0.3173 | 0.2880 | 0.2395 | 0.1486 | 0.0 | 0.0 | 0.0 |
| 23 | 0.8054 | 0.8256 | 0.7994 | 0.7701 | 0.7054 | 0.6549 | 0.5700 | 0.5215 | 0.4366 | 0.2729 | 0.0 | 0.0 | 0.0 |
| 22 | 1.1147 | 1.1419 | 1.1126 | 1.0662 | 0.9813 | 0.9085 | 0.7943 | 0.7286 | 0.6124 | 0.3840 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3804 | 1.4168 | 1.3875 | 1.3188 | 1.2188 | 1.1248 | 0.9894 | 0.9045 | 0.7640 | 0.4790 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6048 | 1.6533 | 1.6230 | 1.5310 | 1.4168 | 1.3036 | 1.1500 | 1.0470 | 0.8863 | 0.5558 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7897 | 1.8514 | 1.8231 | 1.6978 | 1.5755 | 1.4370 | 1.2753 | 1.1571 | 0.9803 | 0.6144 | 0.0 | 0.0 | 0.0 |
| 18 | 1.9403 | 2.0151 | 1.9888 | 1.8312 | 1.6978 | 1.5411 | 1.3663 | 1.2339 | 1.0470 | 0.6569 | 0.0 | 0.0 | 0.0 |
| 17 | 2.0262 | 2.1202 | 2.0939 | 1.9110 | 1.7715 | 1.6028 | 1.4209 | 1.2764 | 1.0864 | 0.6811 | 0.0 | 0.0 | 0.0 |
| 16 | 2.0222 | 2.1273 | 2.1050 | 1.9201 | 1.7907 | 1.6169 | 1.4340 | 1.2844 | 1.0945 | 0.6892 | 0.0 | 0.0 | 0.0 |
| 15 | 1.9211 | 1.9858 | 1.9686 | 1.8453 | 1.7463 | 1.5866 | 1.4118 | 1.2632 | 1.0783 | 0.6831 | 0.0 | 0.0 | 0.0 |
| 14 | 1.6947 | 1.3764 | 1.3754 | 1.6725 | 1.6523 | 1.5179 | 1.3643 | 1.2218 | 1.0490 | 0.6680 | 0.0 | 0.0 | 0.0 |
| 13 | 1.5108 | 1.1682 | 1.1743 | 1.5310 | 1.5553 | 1.4451 | 1.3097 | 1.1753 | 1.0126 | 0.6458 | 0.0 | 0.0 | 0.0 |
| 12 | 1.3602 | 1.0257 | 1.0318 | 1.3966 | 1.4512 | 1.3713 | 1.2511 | 1.1238 | 0.9712 | 0.6205 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2046 | 0.8964 | 0.8933 | 1.2198 | 1.2966 | 1.2652 | 1.1763 | 1.0621 | 0.9136 | 0.5902 | 0.0 | 0.0 | 0.0 |
| 10 | 1.0560 | 0.7711 | 0.7498 | 0.9995 | 1.0833 | 1.1207 | 1.0702 | 0.9833 | 0.8448 | 0.5588 | 0.0 | 0.0 | 0.0 |
| 9 | 0.8984 | 0.6488 | 0.6245 | 0.8317 | 0.9176 | 0.9833 | 0.9641 | 0.9004 | 0.7812 | 0.5225 | 0.0 | 0.0 | 0.0 |
| 8 | 0.7448 | 0.5356 | 0.5184 | 0.7023 | 0.7893 | 0.8691 | 0.8731 | 0.8317 | 0.7327 | 0.4942 | 0.0 | 0.0 | 0.0 |
| 7 | 0.6377 | 0.4558 | 0.4426 | 0.6033 | 0.6922 | 0.7802 | 0.8054 | 0.7862 | 0.7023 | 0.4770 | 0.0 | 0.0 | 0.0 |
| 6 | 0.5629 | 0.3982 | 0.3881 | 0.5316 | 0.6205 | 0.7195 | 0.7620 | 0.7600 | 0.6831 | 0.4689 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5093 | 0.3577 | 0.3507 | 0.4881 | 0.5760 | 0.6761 | 0.7317 | 0.7397 | 0.6710 | 0.4628 | 0.0 | 0.0 | 0.0 |
| 4 | 0.4578 | 0.3254 | 0.3214 | 0.4537 | 0.5427 | 0.6427 | 0.7094 | 0.7226 | 0.6559 | 0.4487 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3961 | 0.2900 | 0.2910 | 0.4143 | 0.5033 | 0.5983 | 0.6660 | 0.6791 | 0.6154 | 0.4143 | 0.0 | 0.0 | 0.0 |
| 2 | 0.3133 | 0.2365 | 0.2435 | 0.3547 | 0.4315 | 0.5164 | 0.5629 | 0.5831 | 0.5215 | 0.3396 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1991 | 0.1546 | 0.1617 | 0.2415 | 0.2921 | 0.3527 | 0.3729 | 0.3941 | 0.3436 | 0.2183 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 5

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4719 | 0.4831 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8277 | 0.8489 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1379 | 1.1682 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4007 | 1.4360 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6169 | 1.6553 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7877 | 1.8413 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9120 | 1.9686 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9676 | 2.0292 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9747 | 2.0201 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9231 | 1.9201 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8089 | 1.7271 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6887 | 1.5725 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5472 | 1.4320 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3178 | 1.2541 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8469 | 1.0328 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6730 | 0.8570 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5649 | 0.7175 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4901 | 0.6144 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4376 | 0.5407 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4052 | 0.4921 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3850 | 0.4568 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3537 | 0.4153 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2951 | 0.3406 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1950 | 0.2223 | 0.0 | 0.0 |

I = 5

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.4932 | 0.4901 | 0.4921 | 0.4628 | 0.4477 | 0.4113 | 0.3820 | 0.3355 | 0.2971 | 0.2385 | 0.0 | 0.0 | 0.0 |
| 23 | 0.8590 | 0.8590 | 0.8600 | 0.8155 | 0.7872 | 0.7266 | 0.6761 | 0.5993 | 0.5326 | 0.4345 | 0.0 | 0.0 | 0.0 |
| 22 | 1.1743 | 1.1793 | 1.1773 | 1.1278 | 1.0854 | 1.0065 | 0.9338 | 0.8337 | 0.7408 | 0.6084 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4441 | 1.4492 | 1.4431 | 1.3936 | 1.3380 | 1.2450 | 1.1531 | 1.0348 | 0.9186 | 0.7579 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6695 | 1.6705 | 1.6604 | 1.6119 | 1.5452 | 1.4391 | 1.3309 | 1.1996 | 1.0641 | 0.8782 | 0.0 | 0.0 | 0.0 |
| 19 | 1.8514 | 1.8584 | 1.8423 | 1.7867 | 1.7058 | 1.5886 | 1.4623 | 1.3269 | 1.1652 | 0.9691 | 0.0 | 0.0 | 0.0 |
| 18 | 1.9888 | 1.9898 | 1.9656 | 1.9171 | 1.8241 | 1.6978 | 1.5583 | 1.4178 | 1.2470 | 1.0338 | 0.0 | 0.0 | 0.0 |
| 17 | 2.0555 | 2.0515 | 2.0252 | 1.9706 | 1.8797 | 1.7463 | 1.6028 | 1.4663 | 1.2935 | 1.0702 | 0.0 | 0.0 | 0.0 |
| 16 | 2.0525 | 2.0393 | 2.0151 | 1.9797 | 1.8867 | 1.7250 | 1.5856 | 1.4684 | 1.3036 | 1.0783 | 0.0 | 0.0 | 0.0 |
| 15 | 1.9666 | 1.9332 | 1.9171 | 1.9272 | 1.8574 | 1.6594 | 1.5219 | 1.4300 | 1.2834 | 1.0611 | 0.0 | 0.0 | 0.0 |
| 14 | 1.8200 | 1.7311 | 1.7250 | 1.8140 | 1.7776 | 1.5755 | 1.4482 | 1.3653 | 1.2420 | 1.0318 | 0.0 | 0.0 | 0.0 |
| 13 | 1.6735 | 1.5694 | 1.5704 | 1.6917 | 1.6745 | 1.4906 | 1.3754 | 1.3006 | 1.1925 | 0.9954 | 0.0 | 0.0 | 0.0 |
| 12 | 1.5341 | 1.4340 | 1.4330 | 1.5472 | 1.5613 | 1.4239 | 1.3239 | 1.2390 | 1.1430 | 0.9530 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3774 | 1.2764 | 1.2551 | 1.3178 | 1.3532 | 1.3047 | 1.2410 | 1.1642 | 1.0712 | 0.8984 | 0.0 | 0.0 | 0.0 |
| 10 | 1.2188 | 1.1046 | 1.0328 | 0.8469 | 0.8873 | 1.1399 | 1.1460 | 1.0843 | 1.0015 | 0.8327 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0075 | 0.9287 | 0.8570 | 0.6720 | 0.7195 | 0.9934 | 1.0459 | 1.0086 | 0.9338 | 0.7751 | 0.0 | 0.0 | 0.0 |
| 8 | 0.6458 | 0.7488 | 0.7185 | 0.5649 | 0.6175 | 0.8832 | 0.9560 | 0.9429 | 0.8822 | 0.7327 | 0.0 | 0.0 | 0.0 |
| 7 | 0.5225 | 0.6296 | 0.6154 | 0.4901 | 0.5447 | 0.8044 | 0.8923 | 0.9065 | 0.8610 | 0.7094 | 0.0 | 0.0 | 0.0 |
| 6 | 0.4507 | 0.5477 | 0.5407 | 0.4376 | 0.4942 | 0.7519 | 0.8549 | 0.8933 | 0.8671 | 0.6973 | 0.0 | 0.0 | 0.0 |
| 5 | 0.4052 | 0.4952 | 0.4921 | 0.4052 | 0.4639 | 0.7165 | 0.8378 | 0.8944 | 0.8701 | 0.6912 | 0.0 | 0.0 | 0.0 |
| 4 | 0.3648 | 0.4568 | 0.4568 | 0.3850 | 0.4457 | 0.6902 | 0.8196 | 0.8964 | 0.8590 | 0.6801 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3153 | 0.4042 | 0.4133 | 0.3547 | 0.4153 | 0.6508 | 0.7701 | 0.8388 | 0.7973 | 0.6407 | 0.0 | 0.0 | 0.0 |
| 2 | 0.2516 | 0.3254 | 0.3406 | 0.2931 | 0.3486 | 0.5477 | 0.6518 | 0.7013 | 0.6730 | 0.5407 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1607 | 0.2102 | 0.2264 | 0.1910 | 0.2324 | 0.3638 | 0.4376 | 0.4588 | 0.4426 | 0.3537 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 6

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 6

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5124 | 0.5295 | 0.5134 | 0.5023 | 0.4729 | 0.4628 | 0.4214 | 0.3881 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.8933 | 0.9186 | 0.8984 | 0.8752 | 0.8317 | 0.8105 | 0.7438 | 0.6852 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2198 | 1.2481 | 1.2289 | 1.1985 | 1.1470 | 1.1126 | 1.0288 | 0.9449 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4936 | 1.5159 | 1.5007 | 1.4663 | 1.4128 | 1.3653 | 1.2693 | 1.1642 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.7129 | 1.7281 | 1.7160 | 1.6816 | 1.6280 | 1.5694 | 1.4653 | 1.3410 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.8787 | 1.8948 | 1.8837 | 1.8423 | 1.7907 | 1.7210 | 1.6129 | 1.4704 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.9817 | 1.9676 | 1.9615 | 1.9322 | 1.8958 | 1.8211 | 1.7149 | 1.5623 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.9888 | 1.9322 | 1.9282 | 1.9443 | 1.9262 | 1.8423 | 1.7392 | 1.5987 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.9423 | 1.8716 | 1.8706 | 1.9150 | 1.8979 | 1.7837 | 1.6806 | 1.5684 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.8605 | 1.7746 | 1.7746 | 1.8564 | 1.8120 | 1.6351 | 1.5381 | 1.4896 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.7493 | 1.6442 | 1.6472 | 1.7564 | 1.7149 | 1.5098 | 1.4229 | 1.4057 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.6311 | 1.5229 | 1.5260 | 1.6402 | 1.6109 | 1.4098 | 1.3309 | 1.3259 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.5179 | 1.4118 | 1.4087 | 1.5169 | 1.5037 | 1.3390 | 1.2683 | 1.2551 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3825 | 1.2804 | 1.2551 | 1.3107 | 1.3117 | 1.2248 | 1.1814 | 1.1723 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.2430 | 1.1268 | 1.0520 | 0.8620 | 0.8731 | 1.0712 | 1.0894 | 1.0864 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0439 | 0.9641 | 0.8923 | 0.7054 | 0.7246 | 0.9408 | 0.9954 | 1.0116 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.6801 | 0.7923 | 0.7650 | 0.6144 | 0.6407 | 0.8489 | 0.9166 | 0.9530 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.5578 | 0.6771 | 0.6720 | 0.5477 | 0.5791 | 0.7832 | 0.8620 | 0.9196 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.4901 | 0.5993 | 0.6023 | 0.5012 | 0.5366 | 0.7418 | 0.8317 | 0.9115 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.4447 | 0.5498 | 0.5568 | 0.4709 | 0.5103 | 0.7135 | 0.8216 | 0.9216 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.4022 | 0.5093 | 0.5265 | 0.4527 | 0.4972 | 0.6933 | 0.8115 | 0.9398 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3476 | 0.4467 | 0.4709 | 0.4083 | 0.4537 | 0.6437 | 0.7620 | 0.8782 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.2739 | 0.3598 | 0.3810 | 0.3345 | 0.3709 | 0.5386 | 0.6367 | 0.7408 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1718 | 0.2334 | 0.2456 | 0.2173 | 0.2385 | 0.3577 | 0.4174 | 0.4881 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba-140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 7

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 7

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5528 | 0.5568 | 0.5578 | 0.5174 | 0.5083 | 0.4881 | 0.4719 | 0.4194 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9570 | 0.9752 | 0.9742 | 0.9045 | 0.8863 | 0.8600 | 0.8297 | 0.7397 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2925 | 1.3350 | 1.3289 | 1.2390 | 1.2117 | 1.1864 | 1.1419 | 1.0217 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.5603 | 1.6311 | 1.6230 | 1.5148 | 1.4815 | 1.4653 | 1.4067 | 1.2592 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.7584 | 1.8686 | 1.8625 | 1.7301 | 1.6947 | 1.6998 | 1.6311 | 1.4502 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.8837 | 2.0151 | 2.0151 | 1.8746 | 1.8453 | 1.8847 | 1.8049 | 1.5937 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.9120 | 2.0009 | 1.9939 | 1.9292 | 1.9282 | 2.0070 | 1.9231 | 1.6917 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.8130 | 1.4663 | 1.4653 | 1.8595 | 1.9171 | 2.0232 | 1.9474 | 1.7139 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.7180 | 1.3491 | 1.3511 | 1.7614 | 1.8291 | 1.8989 | 1.8332 | 1.6563 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.6189 | 1.2642 | 1.2642 | 1.6422 | 1.6573 | 1.3168 | 1.2713 | 1.5179 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.5118 | 1.1834 | 1.1814 | 1.5239 | 1.5159 | 1.1622 | 1.1248 | 1.4047 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4077 | 1.1066 | 1.1015 | 1.4118 | 1.3986 | 1.0692 | 1.0389 | 1.3097 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.3168 | 1.0227 | 1.0197 | 1.3077 | 1.2986 | 0.9995 | 0.9752 | 1.2248 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2309 | 0.9317 | 0.9216 | 1.1905 | 1.1844 | 0.9095 | 0.8944 | 1.1308 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.1419 | 0.8408 | 0.8176 | 1.0591 | 1.0550 | 0.8115 | 0.8064 | 1.0328 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0166 | 0.7478 | 0.7286 | 0.9510 | 0.9540 | 0.7327 | 0.7317 | 0.9530 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.8721 | 0.6538 | 0.6579 | 0.8923 | 0.8994 | 0.6781 | 0.6781 | 0.8944 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.7620 | 0.5740 | 0.5942 | 0.8398 | 0.8529 | 0.6346 | 0.6387 | 0.8539 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.7064 | 0.5215 | 0.5487 | 0.8004 | 0.8196 | 0.6023 | 0.6104 | 0.8388 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.6498 | 0.4871 | 0.5174 | 0.7680 | 0.7933 | 0.5831 | 0.5993 | 0.8549 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.5902 | 0.4548 | 0.4911 | 0.7226 | 0.7519 | 0.5669 | 0.5962 | 0.8741 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5103 | 0.3982 | 0.4345 | 0.6427 | 0.6730 | 0.5164 | 0.5498 | 0.8145 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.4073 | 0.3163 | 0.3507 | 0.5164 | 0.5498 | 0.4214 | 0.4568 | 0.6751 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2587 | 0.2001 | 0.2264 | 0.3294 | 0.3547 | 0.2708 | 0.3001 | 0.4366 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 8

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 8

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5518 | 0.5740 | 0.5538 | 0.5306 | 0.5073 | 0.5134 | 0.4861 | 0.0 | 0.4042 | 0.3598 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9570 | 0.9964 | 0.9681 | 0.9196 | 0.8832 | 0.8944 | 0.8539 | 0.0 | 0.7145 | 0.6367 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2935 | 1.3501 | 1.3218 | 1.2481 | 1.2076 | 1.2228 | 1.1763 | 0.0 | 0.9843 | 0.8772 | 0.0 | 0.0 | 0.0 |
| 21 | 1.5593 | 1.6381 | 1.6149 | 1.5159 | 1.4754 | 1.4987 | 1.4492 | 0.0 | 1.2086 | 1.0763 | 0.0 | 0.0 | 0.0 |
| 20 | 1.7544 | 1.8675 | 1.8483 | 1.7210 | 1.6856 | 1.7301 | 1.6786 | 0.0 | 1.3865 | 1.2339 | 0.0 | 0.0 | 0.0 |
| 19 | 1.8625 | 1.9959 | 1.9888 | 1.8493 | 1.8322 | 1.9059 | 1.8564 | 0.0 | 1.5179 | 1.3451 | 0.0 | 0.0 | 0.0 |
| 18 | 1.8726 | 1.9524 | 1.9534 | 1.8827 | 1.9070 | 2.0141 | 1.9747 | 0.0 | 1.6088 | 1.4269 | 0.0 | 0.0 | 0.0 |
| 17 | 1.7544 | 1.4057 | 1.4098 | 1.7958 | 1.8878 | 2.0242 | 1.9908 | 0.0 | 1.6381 | 1.4674 | 0.0 | 0.0 | 0.0 |
| 16 | 1.6442 | 1.2774 | 1.2885 | 1.6866 | 1.7887 | 1.8857 | 1.8686 | 0.0 | 1.6179 | 1.4694 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5421 | 1.1905 | 1.1955 | 1.5613 | 1.6018 | 1.2966 | 1.2966 | 0.0 | 1.5583 | 1.4370 | 0.0 | 0.0 | 0.0 |
| 14 | 1.4441 | 1.1157 | 1.1147 | 1.4441 | 1.4583 | 1.1409 | 1.1470 | 0.0 | 1.4866 | 1.3895 | 0.0 | 0.0 | 0.0 |
| 13 | 1.3521 | 1.0480 | 1.0419 | 1.3390 | 1.3431 | 1.0470 | 1.0581 | 0.0 | 1.4087 | 1.3309 | 0.0 | 0.0 | 0.0 |
| 12 | 1.2743 | 0.9934 | 0.9813 | 1.2511 | 1.2501 | 0.9792 | 0.9873 | 0.0 | 1.3249 | 1.2673 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2107 | 0.9297 | 0.9227 | 1.1713 | 1.1672 | 0.9115 | 0.8984 | 0.0 | 1.2127 | 1.1824 | 0.0 | 0.0 | 0.0 |
| 10 | 1.1611 | 0.8671 | 0.8590 | 1.1167 | 1.1086 | 0.8347 | 0.7994 | 0.0 | 1.0621 | 1.0813 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0763 | 0.8034 | 0.8034 | 1.0712 | 1.0611 | 0.7721 | 0.7226 | 0.0 | 0.9550 | 0.9863 | 0.0 | 0.0 | 0.0 |
| 8 | 0.9772 | 0.7367 | 0.7569 | 1.0540 | 1.0449 | 0.7317 | 0.6700 | 0.0 | 0.8832 | 0.9095 | 0.0 | 0.0 | 0.0 |
| 7 | 0.8519 | 0.6670 | 0.7155 | 1.0257 | 1.0197 | 0.7023 | 0.6316 | 0.0 | 0.8327 | 0.8549 | 0.0 | 0.0 | 0.0 |
| 6 | 0.7933 | 0.6154 | 0.6791 | 1.0015 | 1.0005 | 0.6781 | 0.6053 | 0.0 | 0.8115 | 0.8266 | 0.0 | 0.0 | 0.0 |
| 5 | 0.7367 | 0.5851 | 0.6549 | 0.9762 | 0.9803 | 0.6660 | 0.5942 | 0.0 | 0.8196 | 0.8196 | 0.0 | 0.0 | 0.0 |
| 4 | 0.6700 | 0.5417 | 0.6144 | 0.9277 | 0.9358 | 0.6357 | 0.5861 | 0.0 | 0.8317 | 0.8135 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5780 | 0.4719 | 0.5417 | 0.8216 | 0.8327 | 0.5700 | 0.5356 | 0.0 | 0.7701 | 0.7519 | 0.0 | 0.0 | 0.0 |
| 2 | 0.4558 | 0.3769 | 0.4305 | 0.6639 | 0.6680 | 0.4649 | 0.4356 | 0.0 | 0.6346 | 0.6286 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2860 | 0.2415 | 0.2729 | 0.4255 | 0.4255 | 0.3012 | 0.2789 | 0.0 | 0.4093 | 0.4153 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 9

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 9

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5498 | 0.5447 | 0.5437 | 0.5154 | 0.5144 | 0.5023 | 0.0 | 0.0 | 0.4396 | 0.3840 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9429 | 0.9398 | 0.9328 | 0.8903 | 0.8853 | 0.8731 | 0.0 | 0.0 | 0.7690 | 0.6811 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2642 | 1.2662 | 1.2531 | 1.2066 | 1.1965 | 1.1884 | 0.0 | 0.0 | 1.0520 | 0.9378 | 0.0 | 0.0 | 0.0 |
| 21 | 1.5199 | 1.5300 | 1.5138 | 1.4663 | 1.4532 | 1.4461 | 0.0 | 0.0 | 1.2834 | 1.1510 | 0.0 | 0.0 | 0.0 |
| 20 | 1.7109 | 1.7352 | 1.7200 | 1.6664 | 1.6543 | 1.6594 | 0.0 | 0.0 | 1.4633 | 1.3158 | 0.0 | 0.0 | 0.0 |
| 19 | 1.8211 | 1.8483 | 1.8332 | 1.7897 | 1.7837 | 1.8029 | 0.0 | 0.0 | 1.5947 | 1.4370 | 0.0 | 0.0 | 0.0 |
| 18 | 1.8514 | 1.8584 | 1.8423 | 1.8322 | 1.8423 | 1.8776 | 0.0 | 0.0 | 1.6776 | 1.5229 | 0.0 | 0.0 | 0.0 |
| 17 | 1.7897 | 1.7382 | 1.7271 | 1.7816 | 1.8190 | 1.8625 | 0.0 | 0.0 | 1.7160 | 1.5563 | 0.0 | 0.0 | 0.0 |
| 16 | 1.6978 | 1.6260 | 1.6169 | 1.6947 | 1.7382 | 1.7725 | 0.0 | 0.0 | 1.7149 | 1.5512 | 0.0 | 0.0 | 0.0 |
| 15 | 1.6068 | 1.5270 | 1.5148 | 1.5906 | 1.6149 | 1.6048 | 0.0 | 0.0 | 1.6715 | 1.5169 | 0.0 | 0.0 | 0.0 |
| 14 | 1.5250 | 1.4320 | 1.4158 | 1.4805 | 1.4916 | 1.4734 | 0.0 | 0.0 | 1.6169 | 1.4764 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4492 | 1.3471 | 1.3289 | 1.3845 | 1.3916 | 1.3602 | 0.0 | 0.0 | 1.5502 | 1.4128 | 0.0 | 0.0 | 0.0 |
| 12 | 1.3905 | 1.2824 | 1.2622 | 1.3087 | 1.3127 | 1.2743 | 0.0 | 0.0 | 1.4714 | 1.3420 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3461 | 1.2319 | 1.2056 | 1.2450 | 1.2430 | 1.1925 | 0.0 | 0.0 | 1.3036 | 1.2430 | 0.0 | 0.0 | 0.0 |
| 10 | 1.3016 | 1.1935 | 1.1662 | 1.2026 | 1.1905 | 1.1147 | 0.0 | 0.0 | 0.8792 | 1.1035 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2339 | 1.1500 | 1.1369 | 1.1814 | 1.1611 | 1.0591 | 0.0 | 0.0 | 0.7397 | 0.9823 | 0.0 | 0.0 | 0.0 |
| 8 | 1.1167 | 1.0763 | 1.1076 | 1.1844 | 1.1601 | 1.0187 | 0.0 | 0.0 | 0.6629 | 0.8903 | 0.0 | 0.0 | 0.0 |
| 7 | 0.7893 | 0.9732 | 1.0662 | 1.1996 | 1.1763 | 0.9894 | 0.0 | 0.0 | 0.6084 | 0.8216 | 0.0 | 0.0 | 0.0 |
| 6 | 0.6983 | 0.9166 | 1.0379 | 1.1884 | 1.1682 | 0.9742 | 0.0 | 0.0 | 0.5750 | 0.7792 | 0.0 | 0.0 | 0.0 |
| 5 | 0.6498 | 0.8832 | 1.0156 | 1.1662 | 1.1510 | 0.9691 | 0.0 | 0.0 | 0.5649 | 0.7539 | 0.0 | 0.0 | 0.0 |
| 4 | 0.5902 | 0.8176 | 0.9621 | 1.1106 | 1.1005 | 0.9338 | 0.0 | 0.0 | 0.5558 | 0.7327 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5083 | 0.7135 | 0.8479 | 0.9944 | 0.9904 | 0.8357 | 0.0 | 0.0 | 0.5063 | 0.6680 | 0.0 | 0.0 | 0.0 |
| 2 | 0.4042 | 0.5649 | 0.6811 | 0.7953 | 0.8024 | 0.6730 | 0.0 | 0.0 | 0.4164 | 0.5477 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2557 | 0.3577 | 0.4386 | 0.5043 | 0.5154 | 0.4295 | 0.0 | 0.0 | 0.2688 | 0.3537 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT. 12 NODES

I = 10

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 10

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5386 | 0.5528 | 0.5346 | 0.5275 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9257 | 0.9449 | 0.9206 | 0.9035 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2450 | 1.2632 | 1.2390 | 1.2117 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4987 | 1.5179 | 1.4946 | 1.4613 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6866 | 1.7149 | 1.6917 | 1.6513 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7968 | 1.8190 | 1.7998 | 1.7624 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.8291 | 1.8211 | 1.8099 | 1.7907 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.7655 | 1.6998 | 1.6927 | 1.7291 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.6664 | 1.5856 | 1.5815 | 1.6402 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5704 | 1.4866 | 1.4835 | 1.5421 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.4896 | 1.3956 | 1.3936 | 1.4411 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4209 | 1.3188 | 1.3107 | 1.3572 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.3693 | 1.2652 | 1.2460 | 1.2935 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3390 | 1.2268 | 1.2016 | 1.2420 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.3239 | 1.2036 | 1.1763 | 1.2137 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2895 | 1.1854 | 1.1642 | 1.2137 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 1.1965 | 1.1339 | 1.1541 | 1.2299 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.8640 | 1.0449 | 1.1238 | 1.2501 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.7771 | 0.9954 | 1.1025 | 1.2380 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.7296 | 0.9550 | 1.0722 | 1.2127 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.6650 | 0.8883 | 1.0126 | 1.1510 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5720 | 0.7731 | 0.8954 | 1.0278 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.4487 | 0.6175 | 0.7114 | 0.8317 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2799 | 0.3941 | 0.4507 | 0.5306 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 11

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 11

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5518 | 0.5629 | 0.5690 | 0.5316 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9429 | 0.9732 | 0.9782 | 0.9146 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2592 | 1.3148 | 1.3127 | 1.2299 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.5118 | 1.5846 | 1.5775 | 1.4734 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6907 | 1.7837 | 1.7715 | 1.6513 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7857 | 1.8776 | 1.8706 | 1.7594 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7796 | 1.8504 | 1.8423 | 1.7746 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6513 | 1.3097 | 1.3067 | 1.6584 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 1.5300 | 1.1834 | 1.1834 | 1.5472 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4188 | 1.1005 | 1.0975 | 1.4401 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 1.3279 | 1.0278 | 1.0278 | 1.3441 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2561 | 0.9742 | 0.9732 | 1.2652 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1.2097 | 0.9378 | 0.9358 | 1.2046 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.1975 | 0.9196 | 0.9105 | 1.1652 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.2026 | 0.9146 | 0.9035 | 1.1551 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2420 | 0.9065 | 0.8964 | 1.1965 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 1.2278 | 0.8853 | 0.8812 | 1.2046 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 1.1480 | 0.8549 | 0.8590 | 1.1773 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 1.0945 | 0.8236 | 0.8398 | 1.1490 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 1.0459 | 0.7852 | 0.8064 | 1.1116 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.9702 | 0.7246 | 0.7478 | 1.0439 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.8448 | 0.6276 | 0.6498 | 0.9176 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.6771 | 0.4942 | 0.5194 | 0.7276 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.4285 | 0.3082 | 0.3305 | 0.4578 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 12

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 12

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5356 | 0.5690 | 0.5599 | 0.0 | 0.5336 | 0.5578 | 0.0 | 0.0 | 0.4709 | 0.4507 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9186 | 0.9752 | 0.9681 | 0.0 | 0.9186 | 0.9631 | 0.0 | 0.0 | 0.8216 | 0.7903 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2309 | 1.3067 | 1.3026 | 0.0 | 1.2319 | 1.2925 | 0.0 | 0.0 | 1.1147 | 1.0793 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4785 | 1.5654 | 1.5634 | 0.0 | 1.4684 | 1.5492 | 0.0 | 0.0 | 1.3441 | 1.3127 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6513 | 1.7523 | 1.7503 | 0.0 | 1.6371 | 1.7432 | 0.0 | 0.0 | 1.5098 | 1.4936 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7432 | 1.8443 | 1.8473 | 0.0 | 1.7453 | 1.8635 | 0.0 | 0.0 | 1.6240 | 1.6270 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7382 | 1.8099 | 1.8241 | 0.0 | 1.7675 | 1.8211 | 0.0 | 0.0 | 1.6947 | 1.7230 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6088 | 1.2743 | 1.2925 | 0.0 | 1.6573 | 1.3158 | 0.0 | 0.0 | 1.7170 | 1.7776 | 0.0 | 0.0 | 0.0 |
| 16 | 1.4896 | 1.1500 | 1.1692 | 0.0 | 1.5452 | 1.2016 | 0.0 | 0.0 | 1.7028 | 1.7796 | 0.0 | 0.0 | 0.0 |
| 15 | 1.3784 | 1.0641 | 1.0904 | 0.0 | 1.4482 | 1.1288 | 0.0 | 0.0 | 1.6392 | 1.6816 | 0.0 | 0.0 | 0.0 |
| 14 | 1.2854 | 0.9974 | 1.0197 | 0.0 | 1.3643 | 1.0712 | 0.0 | 0.0 | 1.5017 | 1.1905 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2167 | 0.9489 | 0.9691 | 0.0 | 1.2925 | 1.0227 | 0.0 | 0.0 | 1.4067 | 1.0702 | 0.0 | 0.0 | 0.0 |
| 12 | 1.1763 | 0.9196 | 0.9348 | 0.0 | 1.2380 | 0.9894 | 0.0 | 0.0 | 1.3521 | 1.0035 | 0.0 | 0.0 | 0.0 |
| 11 | 1.1713 | 0.9065 | 0.9166 | 0.0 | 1.2026 | 0.9560 | 0.0 | 0.0 | 1.3319 | 0.9408 | 0.0 | 0.0 | 0.0 |
| 10 | 1.1894 | 0.9146 | 0.9156 | 0.0 | 1.1905 | 0.9105 | 0.0 | 0.0 | 1.2319 | 0.8620 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2531 | 0.9287 | 0.9125 | 0.0 | 1.2198 | 0.8671 | 0.0 | 0.0 | 1.0904 | 0.7690 | 0.0 | 0.0 | 0.0 |
| 8 | 1.2865 | 0.9277 | 0.8964 | 0.0 | 1.1702 | 0.8054 | 0.0 | 0.0 | 0.9176 | 0.6771 | 0.0 | 0.0 | 0.0 |
| 7 | 1.2844 | 0.9156 | 0.8671 | 0.0 | 1.0682 | 0.7367 | 0.0 | 0.0 | 0.8024 | 0.5932 | 0.0 | 0.0 | 0.0 |
| 6 | 1.2622 | 0.8944 | 0.8347 | 0.0 | 1.0015 | 0.6882 | 0.0 | 0.0 | 0.7317 | 0.5356 | 0.0 | 0.0 | 0.0 |
| 5 | 1.2238 | 0.8630 | 0.7953 | 0.0 | 0.9469 | 0.6397 | 0.0 | 0.0 | 0.6670 | 0.4891 | 0.0 | 0.0 | 0.0 |
| 4 | 1.1460 | 0.7973 | 0.7327 | 0.0 | 0.8701 | 0.5841 | 0.0 | 0.0 | 0.5993 | 0.4426 | 0.0 | 0.0 | 0.0 |
| 3 | 1.0096 | 0.6922 | 0.6336 | 0.0 | 0.7509 | 0.5053 | 0.0 | 0.0 | 0.5134 | 0.3800 | 0.0 | 0.0 | 0.0 |
| 2 | 0.8044 | 0.5538 | 0.4972 | 0.0 | 0.5922 | 0.4022 | 0.0 | 0.0 | 0.4022 | 0.3012 | 0.0 | 0.0 | 0.0 |
| 1 | 0.5053 | 0.3507 | 0.3102 | 0.0 | 0.3709 | 0.2547 | 0.0 | 0.0 | 0.2516 | 0.1920 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 13

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 13

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.5306 | 0.5336 | 0.0 | 0.0 | 0.5366 | 0.5306 | 0.0 | 0.0 | 0.4729 | 0.4345 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9024 | 0.9125 | 0.0 | 0.0 | 0.9156 | 0.9125 | 0.0 | 0.0 | 0.8186 | 0.7620 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2016 | 1.2177 | 0.0 | 0.0 | 1.2167 | 1.2188 | 0.0 | 0.0 | 1.1025 | 1.0389 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4391 | 1.4502 | 0.0 | 0.0 | 1.4451 | 1.4482 | 0.0 | 0.0 | 1.3279 | 1.2612 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6048 | 1.6250 | 0.0 | 0.0 | 1.6078 | 1.6098 | 0.0 | 0.0 | 1.5058 | 1.4290 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6937 | 1.7180 | 0.0 | 0.0 | 1.7180 | 1.7463 | 0.0 | 0.0 | 1.6260 | 1.5442 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7018 | 1.7261 | 0.0 | 0.0 | 1.7503 | 1.7675 | 0.0 | 0.0 | 1.7069 | 1.6280 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6220 | 1.6038 | 0.0 | 0.0 | 1.7069 | 1.6674 | 0.0 | 0.0 | 1.7372 | 1.6674 | 0.0 | 0.0 | 0.0 |
| 16 | 1.5239 | 1.4916 | 0.0 | 0.0 | 1.6280 | 1.5775 | 0.0 | 0.0 | 1.7321 | 1.6705 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4290 | 1.3966 | 0.0 | 0.0 | 1.5502 | 1.4997 | 0.0 | 0.0 | 1.6947 | 1.6563 | 0.0 | 0.0 | 0.0 |
| 14 | 1.3420 | 1.3168 | 0.0 | 0.0 | 1.4845 | 1.4269 | 0.0 | 0.0 | 1.6149 | 1.5179 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2743 | 1.2491 | 0.0 | 0.0 | 1.4269 | 1.3653 | 0.0 | 0.0 | 1.5472 | 1.4199 | 0.0 | 0.0 | 0.0 |
| 12 | 1.2390 | 1.2107 | 0.0 | 0.0 | 1.3875 | 1.3239 | 0.0 | 0.0 | 1.5159 | 1.3623 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2319 | 1.1925 | 0.0 | 0.0 | 1.3602 | 1.2925 | 0.0 | 0.0 | 1.4987 | 1.3188 | 0.0 | 0.0 | 0.0 |
| 10 | 1.2561 | 1.2016 | 0.0 | 0.0 | 1.3400 | 1.2561 | 0.0 | 0.0 | 1.3986 | 1.2329 | 0.0 | 0.0 | 0.0 |
| 9 | 1.3289 | 1.2359 | 0.0 | 0.0 | 1.3036 | 1.1905 | 0.0 | 0.0 | 1.2076 | 1.1015 | 0.0 | 0.0 | 0.0 |
| 8 | 1.3825 | 1.2683 | 0.0 | 0.0 | 1.2016 | 1.0803 | 0.0 | 0.0 | 0.7903 | 0.9317 | 0.0 | 0.0 | 0.0 |
| 7 | 1.4209 | 1.2662 | 0.0 | 0.0 | 0.8499 | 0.9429 | 0.0 | 0.0 | 0.6488 | 0.8095 | 0.0 | 0.0 | 0.0 |
| 6 | 1.4188 | 1.2460 | 0.0 | 0.0 | 0.7509 | 0.8610 | 0.0 | 0.0 | 0.5730 | 0.7246 | 0.0 | 0.0 | 0.0 |
| 5 | 1.3885 | 1.2107 | 0.0 | 0.0 | 0.6902 | 0.7963 | 0.0 | 0.0 | 0.5154 | 0.6528 | 0.0 | 0.0 | 0.0 |
| 4 | 1.3097 | 1.1379 | 0.0 | 0.0 | 0.6205 | 0.7185 | 0.0 | 0.0 | 0.4568 | 0.5831 | 0.0 | 0.0 | 0.0 |
| 3 | 1.1662 | 1.0065 | 0.0 | 0.0 | 0.5306 | 0.6195 | 0.0 | 0.0 | 0.3881 | 0.4982 | 0.0 | 0.0 | 0.0 |
| 2 | 0.9510 | 0.8014 | 0.0 | 0.0 | 0.4224 | 0.4861 | 0.0 | 0.0 | 0.3062 | 0.3891 | 0.0 | 0.0 | 0.0 |
| 1 | 0.6043 | 0.5043 | 0.0 | 0.0 | 0.2658 | 0.3032 | 0.0 | 0.0 | 0.1920 | 0.2435 | 0.0 | 0.0 | 0.0 |

## Ba-140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 14

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 14

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 15

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 15

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 16

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 16

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4669 | 0.4436 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8176 | 0.7812 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1116 | 1.0692 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3451 | 1.3036 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5169 | 1.4876 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6290 | 1.6240 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6998 | 1.7170 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7230 | 1.7695 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7079 | 1.7685 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6422 | 1.6644 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5017 | 1.1814 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4007 | 1.0611 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3309 | 0.9833 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2652 | 0.9055 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1137 | 0.8095 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9752 | 0.7185 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8580 | 0.6417 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7741 | 0.5720 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7185 | 0.5215 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6690 | 0.4911 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6144 | 0.4537 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5346 | 0.3972 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4234 | 0.3183 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2658 | 0.2041 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 17

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 17

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4598 | 0.4123 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8034 | 0.7286 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0934 | 1.0005 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3259 | 1.2238 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5047 | 1.3946 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6270 | 1.5189 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7079 | 1.6007 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7412 | 1.6361 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7412 | 1.6301 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6998 | 1.5745 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6260 | 1.4704 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5462 | 1.3794 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4663 | 1.3026 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3057 | 1.2056 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8812 | 1.0560 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7367 | 0.9297 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6498 | 0.8337 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5861 | 0.7600 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5457 | 0.7064 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5265 | 0.6720 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5002 | 0.6377 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4447 | 0.5710 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3608 | 0.4618 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2304 | 0.2961 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 18

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5447 | 0.5498 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9398 | 0.9429 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2662 | 1.2642 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5300 | 1.5199 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7352 | 1.7109 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8483 | 1.8211 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8584 | 1.8514 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7382 | 1.7897 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6260 | 1.6978 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5270 | 1.6068 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4320 | 1.5250 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3471 | 1.4492 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2824 | 1.3905 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2319 | 1.3461 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1935 | 1.3016 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1500 | 1.2339 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0763 | 1.1167 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9732 | 0.7893 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9166 | 0.6983 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8832 | 0.6498 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8176 | 0.5902 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7135 | 0.5083 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5649 | 0.4042 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3577 | 0.2557 |

I = 18

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Ba -140 FROM SIMULATE - NORMALIZED OVER OCTANT, 12 NODES

I = 19

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5740 | 0.5518 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9964 | 0.9570 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3501 | 1.2935 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6381 | 1.5593 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8675 | 1.7544 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9959 | 1.8625 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9524 | 1.8726 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4057 | 1.7544 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2774 | 1.6442 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1905 | 1.5421 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1157 | 1.4441 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0480 | 1.3521 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9934 | 1.2743 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9297 | 1.2107 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8671 | 1.1611 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8034 | 1.0763 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7367 | 0.9772 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6670 | 0.8519 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6154 | 0.7933 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5851 | 0.7367 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5417 | 0.6700 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4719 | 0.5780 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3769 | 0.4558 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2415 | 0.2860 |

I = 19

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

# APPENDIX D

# TWELVE-NODE OCTANT NORMALIZED GAMMA SCAN DATA

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 1

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 1

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.4780 | 0.4672 | 0.4441 | 0.4184 | 0.4030 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.7897 | 0.7614 | 0.7475 | 0.6940 | 0.6650 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.0598 | 1.0423 | 1.0395 | 0.8973 | 0.8516 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.0929 | 1.0671 | 1.0368 | 0.9512 | 0.8933 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.0782 | 1.0579 | 1.0303 | 0.9632 | 0.8848 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.9540 | 0.9310 | 0.9007 | 0.8705 | 0.8110 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.8377 | 0.8238 | 0.8157 | 0.7625 | 0.7098 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.6859 | 0.6715 | 0.6573 | 0.6257 | 0.5635 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.5152 | 0.5010 | 0.4680 | 0.4475 | 0.4033 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.4249 | 0.4090 | 0.3771 | 0.3574 | 0.3221 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3287 | 0.3091 | 0.2974 | 0.2769 | 0.2510 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1430 | 0.1419 | 0.1382 | 0.1274 | 0.1140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 2

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 2

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.5889 | 0.5900 | 0.5696 | 0.5587 | 0.5035 | 0.4752 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.9567 | 0.9530 | 0.9135 | 0.9147 | 0.8292 | 0.7653 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.3072 | 1.3247 | 1.2345 | 1.1931 | 1.0993 | 0.9622 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.4047 | 1.4001 | 1.3652 | 1.3247 | 1.1876 | 1.0202 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4139 | 1.4112 | 1.3486 | 1.3091 | 1.2051 | 1.0046 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2649 | 1.2051 | 1.1959 | 1.2115 | 1.1453 | 0.9494 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.1150 | 1.0947 | 1.0607 | 1.0920 | 1.0386 | 0.8503 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.9254 | 0.8726 | 0.8331 | 0.8693 | 0.8199 | 0.7132 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.6888 | 0.6324 | 0.5909 | 0.6136 | 0.5946 | 0.5288 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5566 | 0.5035 | 0.4696 | 0.4906 | 0.4779 | 0.4302 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.4352 | 0.3938 | 0.3626 | 0.3860 | 0.3841 | 0.3460 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1954 | 0.1873 | 0.1718 | 0.1936 | 0.1945 | 0.1767 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 3

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 3

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.7255 | 0.7421 | 0.7152 | 0.6620 | 0.6428 | 0.5765 | 0.5284 | 0.4417 | 0.3821 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.1591 | 1.1803 | 1.1518 | 1.0644 | 1.0027 | 0.9310 | 0.8418 | 0.7067 | 0.6185 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.5804 | 1.6421 | 1.6117 | 1.4130 | 1.3275 | 1.2088 | 1.0616 | 0.9000 | 0.7786 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6513 | 1.7681 | 1.6862 | 1.5280 | 1.4360 | 1.2953 | 1.1140 | 0.9383 | 0.8296 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 1.7727 | 1.7258 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.6467 | 1.6963 | 1.6237 | 1.5436 | 1.4489 | 1.3376 | 1.1306 | 0.9622 | 0.8326 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 1.2732 | 1.2548 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4075 | 1.0349 | 1.0386 | 1.3716 | 1.3836 | 1.2640 | 1.0745 | 0.9236 | 0.7927 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2410 | 0.8878 | 0.9110 | 1.2327 | 1.2750 | 1.1757 | 0.9935 | 0.8598 | 0.7199 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0073 | 0.6965 | 0.6944 | 0.9816 | 1.0193 | 0.9797 | 0.8497 | 0.7644 | 0.6330 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.7445 | 0.4849 | 0.4716 | 0.6692 | 0.7267 | 0.7177 | 0.6632 | 0.6079 | 0.5046 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.6074 | 0.3845 | 0.3740 | 0.5382 | 0.5889 | 0.5851 | 0.5693 | 0.5300 | 0.4486 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.4749 | 0.2996 | 0.2867 | 0.4271 | 0.4828 | 0.4704 | 0.4682 | 0.4366 | 0.3702 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2138 | 0.1482 | 0.1487 | 0.2147 | 0.2533 | 0.2519 | 0.2446 | 0.2154 | 0.1734 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 4

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7682 | 0.8389 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1803 | 1.2815 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5363 | 1.6871 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7230 | 1.9079 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9171 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7157 | 1.8003 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4277 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5381 | 1.1407 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3707 | 1.0046 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0036 | 0.7196 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6881 | 0.4735 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5348 | 0.3616 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4267 | 0.2786 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2154 | 0.1442 | 0.0 | 0.0 |

I = 4

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.5242 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.7810 | 0.8414 | 0.8142 | 0.7809 | 0.7016 | 0.6554 | 0.5876 | 0.5300 | 0.4582 | 0.3683 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 1.0883 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.2088 | 1.2870 | 1.2796 | 1.1931 | 1.1021 | 1.0331 | 0.9291 | 0.8586 | 0.7299 | 0.5896 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 1.5252 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6310 | 1.6494 | 1.6697 | 1.5593 | 1.4443 | 1.3339 | 1.1941 | 1.0993 | 0.9365 | 0.7337 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 1.7920 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.7442 | 1.8592 | 1.8987 | 1.7295 | 1.5703 | 1.4572 | 1.3045 | 1.1968 | 1.0193 | 0.7947 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 1.8546 | 1.8960 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.7313 | 1.7525 | 1.7856 | 1.7258 | 1.5740 | 1.4664 | 1.3201 | 1.2272 | 1.0469 | 0.8018 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 1.2732 | 1.3173 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4848 | 1.0947 | 1.1251 | 1.5363 | 1.5252 | 1.4286 | 1.3118 | 1.2051 | 1.0386 | 0.7751 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 1.0257 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3146 | 0.9705 | 0.9806 | 1.3633 | 1.3735 | 1.3265 | 1.2419 | 1.1628 | 0.9935 | 0.7277 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.8393 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.0579 | 0.7424 | 0.7259 | 0.9871 | 1.0515 | 1.1012 | 1.0883 | 1.0257 | 0.8763 | 0.6527 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.6114 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.7072 | 0.4841 | 0.4758 | 0.6806 | 0.7509 | 0.8277 | 0.8653 | 0.8460 | 0.7192 | 0.5492 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.4268 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5668 | 0.3709 | 0.3672 | 0.5433 | 0.6143 | 0.6972 | 0.7393 | 0.7404 | 0.6486 | 0.5031 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.3299 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.4395 | 0.2888 | 0.2950 | 0.4345 | 0.5065 | 0.5641 | 0.6121 | 0.6262 | 0.5496 | 0.4313 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.2323 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1995 | 0.1390 | 0.1426 | 0.2212 | 0.2585 | 0.2970 | 0.3112 | 0.3282 | 0.2902 | 0.2033 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 5

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8576 | 0.8255 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2953 | 1.2861 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6688 | 1.6660 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8251 | 1.8187 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8215 | 1.8178 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7341 | 1.6126 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6504 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4986 | 1.4415 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0368 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7781 | 1.0653 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5235 | 0.6978 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4076 | 0.5429 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3182 | 0.4220 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1648 | 0.2121 | 0.0 | 0.0 |

I = 5

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.8567 | 0.8503 | 0.8230 | 0.8214 | 0.8022 | 0.7387 | 0.6823 | 0.6133 | 0.5510 | 0.4628 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.2943 | 1.2815 | 1.2787 | 1.2677 | 1.2180 | 1.1324 | 1.0542 | 0.9622 | 0.8612 | 0.7192 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6835 | 1.6945 | 1.7681 | 1.6439 | 1.5593 | 1.4599 | 1.3661 | 1.2548 | 1.1729 | 0.9392 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.8491 | 1.8187 | 1.8086 | 1.7837 | 1.7019 | 1.5804 | 1.4507 | 1.3357 | 1.2060 | 1.0018 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.8049 | 1.8067 | 1.7994 | 1.7874 | 1.7101 | 1.5630 | 1.4590 | 1.3624 | 1.2401 | 1.0395 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.6458 | 1.5777 | 1.5869 | 1.6614 | 1.6366 | 1.5197 | 1.4038 | 1.3302 | 1.2299 | 1.0092 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 1.6099 | 1.6117 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.5308 | 1.4415 | 1.4130 | 1.4507 | 1.4378 | 1.4231 | 1.3459 | 1.2686 | 1.1665 | 0.9834 | 0.0 | 0.0 | 0.0 |
| 10 | 1.3974 | 0.0 | 0.0 | 0.9687 | 0.9668 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2014 | 1.1288 | 1.0671 | 0.7813 | 0.7953 | 1.1610 | 1.1913 | 1.1315 | 1.0542 | 0.8605 | 0.0 | 0.0 | 0.0 |
| 8 | 0.7723 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.5469 | 0.7144 | 0.7060 | 0.5308 | 0.5842 | 0.8826 | 0.9714 | 0.9696 | 0.8886 | 0.7188 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.4252 | 0.5417 | 0.5526 | 0.4228 | 0.4613 | 0.7432 | 0.8404 | 0.8776 | 0.8072 | 0.6573 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3248 | 0.4242 | 0.4362 | 0.3356 | 0.3806 | 0.6108 | 0.7049 | 0.7382 | 0.7119 | 0.5567 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1523 | 0.2033 | 0.2206 | 0.1654 | 0.1969 | 0.3038 | 0.3644 | 0.3788 | 0.3717 | 0.2860 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 6

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 6

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.5890 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.8779 | 0.8835 | 0.8487 | 0.8987 | 0.8472 | 0.8131 | 0.7550 | 0.6964 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 1.1600 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3578 | 1.3210 | 1.3357 | 1.3587 | 1.2907 | 1.2483 | 1.1554 | 1.0828 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 1.5832 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7865 | 1.7285 | 1.8031 | 1.7175 | 1.6660 | 1.5915 | 1.4765 | 1.3624 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 1.8086 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.7819 | 1.7203 | 1.7745 | 1.8196 | 1.7865 | 1.6816 | 1.6034 | 1.4783 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 1.8242 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.7681 | 1.7009 | 1.7239 | 1.7874 | 1.7644 | 1.6329 | 1.5133 | 1.4774 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 1.7313 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.6494 | 1.5584 | 1.5970 | 1.6798 | 1.6559 | 1.4654 | 1.3873 | 1.3983 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 1.6191 | 1.5850 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.5363 | 1.4342 | 1.4452 | 1.4645 | 1.4443 | 1.3514 | 1.3127 | 1.2907 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.4222 | 0.0 | 0.0 | 0.9641 | 0.8988 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2401 | 1.1435 | 1.1076 | 0.8204 | 0.7852 | 1.1122 | 1.1462 | 1.1389 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.8077 | 0.0 | 0.0 | 0.7120 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.5733 | 0.7468 | 0.7837 | 0.5982 | 0.5923 | 0.8612 | 0.9346 | 0.9806 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.5485 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.4529 | 0.5893 | 0.6251 | 0.4797 | 0.4819 | 0.7452 | 0.8181 | 0.8983 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.4360 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.3525 | 0.4556 | 0.4930 | 0.3832 | 0.3929 | 0.6020 | 0.6967 | 0.7818 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.3131 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.1576 | 0.2143 | 0.2433 | 0.1886 | 0.1980 | 0.3057 | 0.3512 | 0.3963 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 7

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 7

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9448 | 0.9494 | 0.9604 | 0.9127 | 0.8864 | 0.8473 | 0.8341 | 0.7543 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4084 | 1.4378 | 1.4590 | 1.4047 | 1.3486 | 1.3137 | 1.2989 | 1.1665 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 1.6458 | 1.6844 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6963 | 1.7874 | 1.8730 | 1.7939 | 1.7304 | 1.7948 | 1.7525 | 1.4820 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 1.7994 | 1.8445 | 0.0 | 0.0 | 1.8067 | 1.7442 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6706 | 1.3091 | 1.3238 | 1.7525 | 1.7552 | 1.8233 | 1.7810 | 1.5979 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7819 | 1.7267 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5832 | 1.1766 | 1.2437 | 1.6577 | 1.6632 | 1.4572 | 1.3753 | 1.5363 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4673 | 1.0910 | 1.1582 | 1.5151 | 1.4811 | 1.0855 | 1.0184 | 1.3698 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3771 | 1.0239 | 1.0331 | 1.3569 | 1.3256 | 0.9825 | 0.9429 | 1.2713 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.1895 | 0.8450 | 0.8462 | 1.1398 | 1.1104 | 0.8128 | 0.8169 | 1.1113 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.8057 | 0.5740 | 0.6248 | 0.9218 | 0.9208 | 0.6402 | 0.6546 | 0.9411 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.6591 | 0.4590 | 0.5131 | 0.7881 | 0.7976 | 0.5421 | 0.5747 | 0.8507 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5124 | 0.3639 | 0.4209 | 0.6551 | 0.6631 | 0.4566 | 0.4933 | 0.7684 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2418 | 0.1702 | 0.2062 | 0.3132 | 0.3158 | 0.2332 | 0.2629 | 0.3718 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 8

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 8

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.6490 | 0.6658 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9420 | 0.9852 | 0.9512 | 0.9282 | 0.8753 | 0.9126 | 0.8458 | 0.0 | 0.7361 | 0.6428 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2134 | 1.2999 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3882 | 1.4958 | 1.4636 | 1.4057 | 1.3330 | 1.3707 | 1.3311 | 0.0 | 1.1094 | 0.9898 | 0.0 | 0.0 | 0.0 |
| 20 | 1.6025 | 1.6890 | 1.6835 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7055 | 1.8353 | 1.8748 | 1.7745 | 1.6807 | 1.7644 | 1.8159 | 0.0 | 1.4222 | 1.2916 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7433 | 1.8251 | 1.8067 | 0.0 | 0.0 | 1.8408 | 1.8233 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6191 | 1.2336 | 1.2088 | 1.6826 | 1.7129 | 1.8343 | 1.8141 | 0.0 | 1.5501 | 1.3587 | 0.0 | 0.0 | 0.0 |
| 16 | 1.5814 | 1.1692 | 0.0 | 0.0 | 0.0 | 1.7727 | 1.7865 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5372 | 1.1150 | 1.1306 | 1.5777 | 1.5970 | 1.4627 | 1.4388 | 0.0 | 1.5271 | 1.3928 | 0.0 | 0.0 | 0.0 |
| 14 | 1.4526 | 1.0874 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4213 | 1.0294 | 1.0322 | 1.4406 | 1.4001 | 1.1076 | 1.0984 | 0.0 | 1.5022 | 1.3836 | 0.0 | 0.0 | 0.0 |
| 12 | 1.3799 | 1.0156 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3514 | 0.9963 | 0.9770 | 1.3367 | 1.2879 | 1.0266 | 0.9852 | 0.0 | 1.3422 | 1.3063 | 0.0 | 0.0 | 0.0 |
| 10 | 1.2962 | 0.9218 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2180 | 0.8452 | 0.8854 | 1.2226 | 1.1867 | 0.9013 | 0.8182 | 0.0 | 1.0791 | 1.0910 | 0.0 | 0.0 | 0.0 |
| 8 | 1.0975 | 0.7661 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.8649 | 0.6241 | 0.7136 | 1.0782 | 1.0423 | 0.7385 | 0.6397 | 0.0 | 0.8786 | 0.8740 | 0.0 | 0.0 | 0.0 |
| 6 | 0.8025 | 0.5799 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.7175 | 0.5199 | 0.6212 | 0.9825 | 0.9420 | 0.6497 | 0.5578 | 0.0 | 0.7787 | 0.7624 | 0.0 | 0.0 | 0.0 |
| 4 | 0.6461 | 0.4707 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5778 | 0.4199 | 0.5220 | 0.8290 | 0.7973 | 0.5359 | 0.4851 | 0.0 | 0.6991 | 0.6562 | 0.0 | 0.0 | 0.0 |
| 2 | 0.4602 | 0.3387 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2655 | 0.1969 | 0.2568 | 0.3961 | 0.3831 | 0.2659 | 0.2434 | 0.0 | 0.3452 | 0.3448 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 9

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 9

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.6641 | 0.6315 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9420 | 0.9310 | 0.9291 | 0.8857 | 0.8902 | 0.8668 | 0.0 | 0.0 | 0.7936 | 0.6926 | 0.0 | 0.0 | 0.0 |
| 22 | 1.2143 | 1.2005 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3753 | 1.3919 | 1.3735 | 1.3486 | 1.3403 | 1.3192 | 0.0 | 0.0 | 1.1968 | 1.0524 | 0.0 | 0.0 | 0.0 |
| 20 | 1.5869 | 1.6366 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7074 | 1.7543 | 1.7543 | 1.7074 | 1.6917 | 1.7055 | 0.0 | 0.0 | 1.5335 | 1.3477 | 0.0 | 0.0 | 0.0 |
| 18 | 1.7423 | 1.7929 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6476 | 1.6421 | 1.6329 | 1.6605 | 1.6789 | 1.7276 | 0.0 | 0.0 | 1.6347 | 1.4351 | 0.0 | 0.0 | 0.0 |
| 16 | 1.6402 | 1.6218 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5666 | 1.5501 | 1.5188 | 1.5924 | 1.5942 | 1.6182 | 0.0 | 0.0 | 1.6467 | 1.4470 | 0.0 | 0.0 | 0.0 |
| 14 | 1.4894 | 1.4756 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4811 | 1.4618 | 1.4038 | 1.4406 | 1.4599 | 1.4682 | 0.0 | 0.0 | 1.6080 | 1.4673 | 0.0 | 0.0 | 0.0 |
| 12 | 1.4535 | 1.4470 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5565 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.4360 | 1.3965 | 1.3560 | 1.3523 | 1.3440 | 1.3293 | 0.0 | 0.0 | 1.4176 | 1.3495 | 0.0 | 0.0 | 0.0 |
| 10 | 1.3716 | 1.3422 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9613 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.3017 | 1.2805 | 1.2502 | 1.2759 | 1.2575 | 1.1959 | 0.0 | 0.0 | 0.8007 | 1.0910 | 0.0 | 0.0 | 0.0 |
| 8 | 1.1554 | 1.1812 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.6827 | 0.9714 | 1.0671 | 1.1490 | 1.1251 | 1.0036 | 0.0 | 0.0 | 0.6104 | 0.8343 | 0.0 | 0.0 | 0.0 |
| 6 | 0.6157 | 0.8938 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.5552 | 0.8197 | 0.9549 | 1.0754 | 1.0349 | 0.9128 | 0.0 | 0.0 | 0.5148 | 0.6992 | 0.0 | 0.0 | 0.0 |
| 4 | 0.5156 | 0.7535 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.4530 | 0.6808 | 0.7991 | 0.9264 | 0.8963 | 0.7688 | 0.0 | 0.0 | 0.4458 | 0.5868 | 0.0 | 0.0 | 0.0 |
| 2 | 0.3678 | 0.5539 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2132 | 0.3144 | 0.3827 | 0.4383 | 0.4337 | 0.3774 | 0.0 | 0.0 | 0.2241 | 0.2958 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 10

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 10

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9282 | 0.9383 | 0.9310 | 0.8954 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3790 | 1.3909 | 1.4103 | 1.3643 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7065 | 1.7331 | 1.7469 | 1.7727 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.6614 | 1.6191 | 1.6513 | 1.6504 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.5528 | 1.5142 | 1.5344 | 1.5501 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.4710 | 1.4185 | 1.4424 | 1.4572 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.4029 | 1.3781 | 1.3753 | 1.3569 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 1.3799 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.3357 | 1.2934 | 1.2971 | 1.2999 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 1.2364 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.7822 | 1.0331 | 1.1113 | 1.1812 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.6554 | 0.8941 | 1.0082 | 1.1048 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.5405 | 0.7460 | 0.8608 | 0.9567 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.2518 | 0.3600 | 0.4071 | 0.4706 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 11

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 11

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9448 | 0.9558 | 0.9650 | 0.9254 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.4121 | 1.4452 | 1.4535 | 1.3919 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 1.6485 | 1.6605 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.7515 | 1.8362 | 1.8417 | 1.6734 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 1.7515 | 1.7534 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.5915 | 1.2115 | 1.2897 | 1.6007 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4756 | 1.0956 | 1.1196 | 1.4802 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.3551 | 1.0202 | 1.0515 | 1.3891 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3219 | 0.9908 | 1.0046 | 1.2934 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.3219 | 0.9218 | 0.9356 | 1.2870 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 1.0938 | 0.7474 | 0.8033 | 1.1582 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.9770 | 0.6532 | 0.7182 | 1.0579 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.8390 | 0.5566 | 0.6216 | 0.9076 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.3843 | 0.2659 | 0.3047 | 0.4093 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 12

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 12

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9245 | 0.9944 | 0.9954 | 0.0 | 0.9236 | 0.9926 | 0.0 | 0.0 | 0.8240 | 0.8515 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3661 | 1.4765 | 1.4645 | 0.0 | 1.3569 | 1.4498 | 0.0 | 0.0 | 1.2695 | 1.2667 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 1.7000 | 1.6816 | 0.0 | 0.0 | 1.6540 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6789 | 1.8757 | 1.8886 | 0.0 | 1.6577 | 1.7994 | 0.0 | 0.0 | 1.6062 | 1.6172 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 1.7975 | 1.7837 | 0.0 | 0.0 | 1.7883 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.5271 | 1.2244 | 1.2824 | 0.0 | 1.5722 | 1.2309 | 0.0 | 0.0 | 1.6973 | 1.7644 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7819 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4011 | 1.0404 | 1.0818 | 0.0 | 1.4838 | 1.1315 | 0.0 | 0.0 | 1.6623 | 1.6651 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3219 | 0.0 | 0.0 | 0.0 |
| 13 | 1.2713 | 0.9696 | 1.0156 | 0.0 | 1.3845 | 1.0588 | 0.0 | 0.0 | 1.5105 | 1.0745 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.2483 | 0.9567 | 0.9852 | 0.0 | 1.3275 | 1.0211 | 0.0 | 0.0 | 1.4286 | 1.0000 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.2741 | 0.9065 | 0.9310 | 0.0 | 1.2870 | 0.8859 | 0.0 | 0.0 | 1.1747 | 0.7827 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 1.1674 | 0.8025 | 0.7918 | 0.0 | 1.0331 | 0.6663 | 0.0 | 0.0 | 0.7686 | 0.5131 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 1.0920 | 0.7263 | 0.6877 | 0.0 | 0.8716 | 0.5466 | 0.0 | 0.0 | 0.6271 | 0.4090 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.9613 | 0.6320 | 0.5873 | 0.0 | 0.7341 | 0.4552 | 0.0 | 0.0 | 0.4916 | 0.3187 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.4567 | 0.3099 | 0.2932 | 0.0 | 0.3442 | 0.2207 | 0.0 | 0.0 | 0.2222 | 0.1525 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 13

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 13

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.9365 | 0.9245 | 0.0 | 0.0 | 0.9457 | 0.9282 | 0.0 | 0.0 | 0.8544 | 0.7969 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 1.3597 | 1.3670 | 0.0 | 0.0 | 1.3486 | 1.3495 | 0.0 | 0.0 | 1.2677 | 1.2079 | 0.0 | 0.0 | 0.0 |
| 20 | 1.5795 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 1.6494 | 1.6485 | 0.0 | 0.0 | 1.6642 | 1.6798 | 0.0 | 0.0 | 1.6117 | 1.5446 | 0.0 | 0.0 | 0.0 |
| 18 | 1.6614 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 1.5556 | 1.5446 | 0.0 | 0.0 | 1.6090 | 1.6053 | 0.0 | 0.0 | 1.7055 | 1.6540 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 1.4397 | 1.4231 | 0.0 | 0.0 | 1.5326 | 1.5216 | 0.0 | 0.0 | 1.7175 | 1.6899 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1.3403 | 1.3265 | 0.0 | 0.0 | 1.4673 | 1.4728 | 0.0 | 0.0 | 1.6264 | 1.5565 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 1.3091 | 1.2925 | 0.0 | 0.0 | 1.4314 | 1.4231 | 0.0 | 0.0 | 1.5740 | 1.4452 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3679 | 0.0 | 0.0 | 0.0 | 1.4553 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 1.3127 | 1.2631 | 0.0 | 0.0 | 1.3321 | 1.2796 | 0.0 | 0.0 | 1.2594 | 1.1931 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1904 | 0.0 | 0.0 | 0.0 | 0.8485 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 1.2529 | 1.1453 | 0.0 | 0.0 | 0.7683 | 0.9075 | 0.0 | 0.0 | 0.5703 | 0.7541 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 1.2125 | 1.0809 | 0.0 | 0.0 | 0.5770 | 0.7048 | 0.0 | 0.0 | 0.4389 | 0.5850 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 1.0763 | 0.9374 | 0.0 | 0.0 | 0.4772 | 0.5969 | 0.0 | 0.0 | 0.3420 | 0.4495 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.5196 | 0.4482 | 0.0 | 0.0 | 0.2285 | 0.2752 | 0.0 | 0.0 | 0.1591 | 0.2094 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 14

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 14

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 15

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 15

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 16

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 16

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8381 | 0.8434 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2824 | 1.2787 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5952 | 1.6062 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6504 | 1.7414 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7304 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6412 | 1.6550 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2529 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4866 | 1.0616 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3919 | 0.9521 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0653 | 0.7278 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7471 | 0.5124 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6094 | 0.4045 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4899 | 0.3201 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2329 | 0.1575 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 17

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

I = 17

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8505 | 0.7625 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2870 | 1.1674 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5887 | 1.4884 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6936 | 1.5804 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7037 | 1.5666 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6053 | 1.4737 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5648 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4259 | 1.3468 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0441 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8002 | 1.0487 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5608 | 0.7463 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4478 | 0.6022 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3672 | 0.4897 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1770 | 0.2443 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 18

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9227 | 0.9576 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3955 | 1.4176 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7460 | 1.7543 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6255 | 1.6715 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5335 | 1.6053 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4277 | 1.4967 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3679 | 1.4498 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3946 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2704 | 1.3293 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1849 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9613 | 0.7083 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7990 | 0.5587 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6563 | 0.4527 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3191 | 0.2160 |

I = 18

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TWELVE - NODE OCTANT NORMALIZED GAMMA SCAN DATA

I = 19

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9825 | 0.9448 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4562 | 1.4057 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6835 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8123 | 1.7387 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7764 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1711 | 1.6310 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0901 | 1.5216 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0101 | 1.4323 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9834 | 1.3431 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8559 | 1.2364 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6352 | 0.8970 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5115 | 0.7261 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4202 | 0.5740 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2034 | 0.2627 |

I = 19

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

# APPENDIX E

## NODAL DIFFERENCES BETWEEN THE SIMULATE AND GAMMA SCAN DISTRIBUTIONS

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 1

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 1

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0859 | 0.0781 | 0.0702 | 0.0748 | 0.1251 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -17.9701 | -16.7228 | -15.8045 | -17.8788 | -31.0402 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0944 | 0.0722 | 0.0846 | 0.0856 | 0.1718 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -11.9571 | -9.4810 | -11.3128 | -12.3393 | -25.8406 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1483 | 0.1399 | 0.1694 | 0.0989 | 0.2058 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -13.9896 | -13.4182 | -16.2959 | -11.0271 | -24.1713 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0651 | 0.0474 | 0.0515 | 0.0467 | 0.1627 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -5.9609 | -4.4449 | -4.9663 | -4.9134 | -18.2083 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0696 | 0.0605 | 0.0622 | 0.0628 | 0.1511 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -6.4596 | -5.7155 | -6.0342 | -6.5177 | -17.0799 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0799 | 0.0781 | 0.0650 | 0.0681 | 0.1430 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -8.3704 | -8.3862 | -7.2116 | -7.8236 | -17.6338 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0969 | 0.1053 | 0.1134 | 0.0834 | 0.1510 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -11.5733 | -12.7800 | -13.8962 | -10.9369 | -21.2669 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0927 | 0.1025 | 0.1055 | 0.0951 | 0.1290 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -13.5141 | -15.2713 | -16.0546 | -15.2067 | -22.8843 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0433 | 0.0584 | 0.0466 | 0.0443 | 0.0749 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -8.3971 | -11.6504 | -9.9553 | -9.8952 | -18.5627 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0439 | 0.0553 | 0.0436 | 0.0391 | 0.0604 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.3350 | -13.5205 | -11.5647 | -10.9315 | -18.7399 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0366 | 0.0342 | 0.0347 | 0.0222 | 0.0398 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -11.1482 | -11.0721 | -11.6512 | -8.0301 | -15.8526 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0005 | 0.0045 | 0.0028 | 0.0070 | 0.0038 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.3560 | -3.1445 | -2.0138 | 5.4995 | -3.3749 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 2

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 2

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0083 | 0.0194 | 0.0135 | 0.0082 | 0.0008 | 0.1235 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.4178 | 3.2841 | 2.3703 | 1.4734 | 0.1542 | -25.9933 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0923 | 0.1142 | 0.1153 | 0.0807 | 0.0581 | 0.1488 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.6452 | 11.9796 | 12.6178 | 8.8243 | 7.0048 | -19.4499 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0732 | 0.0658 | 0.1247 | 0.1085 | 0.0568 | 0.1638 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5.6031 | 4.9709 | 10.1031 | 9.0956 | 5.1666 | -17.0283 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.1758 | 0.1966 | 0.1941 | 0.1517 | 0.1181 | 0.1289 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 12.5178 | 14.0423 | 14.2188 | 11.4553 | 9.9411 | -12.6322 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.1313 | 0.1309 | 0.1673 | 0.1441 | 0.0945 | 0.1143 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.2841 | 9.2783 | 12.4025 | 11.0079 | 7.8415 | -11.3761 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0296 | 0.0248 | 0.0249 | 0.0457 | 0.0249 | 0.1288 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2.3437 | 2.0553 | 2.0799 | 3.7684 | 2.1780 | -13.5679 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0630 | 0.1104 | 0.0855 | 0.0744 | 0.0735 | 0.1368 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -5.6495 | -10.0850 | -8.0604 | -6.8088 | -7.0770 | -16.0925 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1018 | 0.1157 | 0.0944 | 0.1033 | 0.0852 | 0.1513 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.9987 | -13.2569 | -11.3276 | -11.8814 | -10.3931 | -21.2172 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0451 | 0.0655 | 0.0533 | 0.0527 | 0.0509 | 0.0912 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -6.5424 | -10.3523 | -9.0158 | -8.5938 | -8.5623 | -17.2506 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0382 | 0.0477 | 0.0431 | 0.0459 | 0.0403 | 0.0704 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -6.8587 | -9.4799 | -9.1861 | -9.3656 | -8.4372 | -16.3728 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0360 | 0.0371 | 0.0160 | 0.0182 | 0.0163 | 0.0428 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -8.2774 | -9.4128 | -4.4052 | -4.7023 | -4.2309 | -12.3780 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0027 | 0.0014 | 0.0121 | 0.0206 | 0.0197 | 0.0089 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.3677 | -0.7231 | 7.0573 | 10.6620 | 10.1499 | -5.0621 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 3

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 3

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0072 | 0.0104 | 0.0124 | 0.0070 | 0.0193 | 0.0227 | 0.1373 | 0.1183 | 0.1426 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.9878 | -1.4074 | 1.7357 | 1.0574 | -2.9987 | -3.9385 | -25.9856 | -26.7866 | -37.3185 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1051 | 0.1031 | 0.1195 | 0.1048 | 0.0786 | 0.0321 | 0.1566 | 0.1408 | 0.1971 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.0698 | 8.7376 | 10.3752 | 9.8491 | 7.8402 | 3.4454 | -18.6066 | -19.9205 | -31.8659 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0628 | 0.0617 | 0.0618 | 0.1211 | 0.0671 | 0.0302 | 0.1763 | 0.1724 | 0.2349 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.9732 | 3.7590 | 3.8351 | 8.5669 | 5.0540 | 2.4953 | -16.6105 | -19.1541 | -30.1709 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.2243 | 0.2146 | 0.2551 | 0.2243 | 0.1445 | 0.0862 | 0.1358 | 0.1319 | 0.2243 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 13.5847 | 12.1399 | 15.1294 | 14.6817 | 10.0653 | 6.6513 | -12.1871 | -14.0533 | -27.0330 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.2373 | 0.2448 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 13.3881 | 14.1859 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.1531 | 0.1834 | 0.2236 | 0.1703 | 0.1296 | 0.0368 | 0.1574 | 0.1548 | 0.2232 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.2994 | 10.8099 | 13.7728 | 11.0348 | 8.9459 | 2.7497 | -13.9233 | -16.0831 | -26.8104 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0193 | 0.0236 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 1.5178 | 1.8789 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0109 | 0.0454 | 0.0387 | 0.0422 | 0.0312 | 0.0012 | 0.1660 | 0.1616 | 0.2136 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.7735 | 4.3872 | 3.7234 | 3.0761 | 2.2552 | 0.0979 | -15.4485 | -17.4997 | -26.9510 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1314 | 0.0662 | 0.0874 | 0.1009 | 0.0906 | 0.0863 | 0.1800 | 0.1665 | 0.1914 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.5875 | -7.4570 | -9.5919 | -8.1819 | -7.1065 | -7.3405 | -18.1165 | -19.3703 | -26.5828 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1584 | 0.0912 | 0.1002 | 0.1539 | 0.1320 | 0.1298 | 0.1635 | 0.1621 | 0.1772 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -15.7270 | -13.0892 | -14.4272 | -15.6825 | -12.9517 | -13.2497 | -19.2444 | -21.2059 | -27.9986 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0826 | 0.0392 | 0.0411 | 0.0639 | 0.0597 | 0.0558 | 0.0932 | 0.0854 | 0.0994 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -11.0912 | -8.0917 | -8.7140 | -9.5437 | -8.2181 | -7.7712 | -14.0585 | -14.0538 | -19.6908 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0738 | 0.0308 | 0.0344 | 0.0541 | 0.0442 | 0.0283 | 0.0579 | 0.0439 | 0.0727 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -12.1529 | -8.0102 | -9.2105 | -10.0585 | -7.5056 | -4.8323 | -10.1791 | -8.2856 | -16.1985 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0616 | 0.0156 | 0.0088 | 0.0208 | 0.0139 | 0.0147 | 0.0155 | 0.0081 | 0.0418 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -12.9659 | -5.2165 | -3.0667 | -4.8816 | -2.8777 | 3.1198 | -3.3026 | -1.8590 | -11.2813 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0026 | 0.0007 | 0.0079 | 0.0198 | 0.0216 | 0.0381 | 0.0080 | 0.0160 | 0.0016 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.2114 | -0.4427 | 5.3389 | 9.2003 | 8.5180 | 15.1388 | 3.2884 | 7.4380 | -0.9241 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 4

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0093 | 0.0264 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2053 | -3.1468 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1294 | 0.1161 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.9636 | 9.0616 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1605 | 0.1370 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.4442 | 8.1196 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1920 | 0.1799 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1456 | 9.4316 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1798 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.3809 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1306 | 0.1632 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6131 | 9.0677 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0564 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -3.9470 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0051 | 0.0316 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3289 | 2.7671 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1519 | 0.1113 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -11.0854 | -11.0743 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1729 | 0.0951 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -17.2288 | -13.2109 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0848 | 0.0299 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.3219 | -6.3058 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0477 | 0.0109 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -8.9198 | -3.0229 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0103 | 0.0114 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -2.4241 | 4.1044 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0241 | 0.0205 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1913 | 14.2326 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 4

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0563 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | -10.7410 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0244 | 0.0158 | 0.0148 | 0.0108 | 0.0038 | 0.0005 | 0.0176 | 0.0085 | 0.0216 | 0.0954 | 0.0 | 0.0 | 0.0 |
| | 3.1277 | -1.8732 | -1.8221 | -1.3885 | 0.5389 | -0.0836 | -3.0014 | -1.6120 | -4.7211 | -25.9150 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0536 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 4.9296 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1716 | 0.1298 | 0.1079 | 0.1257 | 0.1167 | 0.0917 | 0.0603 | 0.0459 | 0.0341 | 0.1106 | 0.0 | 0.0 | 0.0 |
| | 14.1995 | 10.0875 | 8.4337 | 10.5355 | 10.5845 | 8.8731 | 6.4850 | 5.3417 | 4.6710 | -18.7564 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.1281 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 8.3988 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1587 | 0.2020 | 0.1534 | 0.1385 | 0.1312 | 0.1031 | 0.0812 | 0.0578 | 0.0438 | 0.1193 | 0.0 | 0.0 | 0.0 |
| | 9.7319 | 12.2451 | 9.1858 | 8.8799 | 9.0829 | 7.7318 | 6.8037 | 5.2585 | 4.6724 | -16.2561 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.2231 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 12.4490 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.2820 | 0.2610 | 0.1952 | 0.1815 | 0.2012 | 0.1456 | 0.1164 | 0.0796 | 0.0671 | 0.1136 | 0.0 | 0.0 | 0.0 |
| | 16.1679 | 14.0375 | 10.2812 | 10.4941 | 12.8151 | 9.9898 | 8.9205 | 6.6472 | 6.5796 | -14.2913 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.2727 | 0.2090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 14.7017 | 11.0245 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.1898 | 0.2333 | 0.1830 | 0.1195 | 0.1723 | 0.1202 | 0.0917 | 0.0360 | 0.0314 | 0.1187 | 0.0 | 0.0 | 0.0 |
| | 10.9629 | 13.3112 | 10.2485 | 6.9248 | 10.9448 | 8.1970 | 6.9443 | 2.9349 | 2.9977 | -14.7982 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.1032 | 0.0581 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 8.1057 | 4.4099 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0260 | 0.0735 | 0.0492 | 0.0053 | 0.0301 | 0.0165 | 0.0021 | 0.0298 | 0.0260 | 0.1293 | 0.0 | 0.0 | 0.0 |
| | 1.7516 | 6.7163 | 4.3717 | -0.3437 | 1.9718 | 1.1564 | -0.1599 | -2.4730 | -2.5039 | -16.6873 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0000 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0033 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1100 | 0.0741 | 0.0873 | 0.1435 | 0.0769 | 0.0613 | 0.0656 | 0.1007 | 0.0799 | 0.1375 | 0.0 | 0.0 | 0.0 |
| | -8.3672 | -7.6374 | -8.8979 | -10.5287 | -5.6013 | -4.6183 | -5.2816 | -8.6590 | -8.0464 | -18.8985 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0682 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | -8.1296 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1595 | 0.0936 | 0.1014 | 0.1554 | 0.1339 | 0.1179 | 0.1242 | 0.1253 | 0.0951 | 0.1302 | 0.0 | 0.0 | 0.0 |
| | -15.0770 | -12.6093 | -13.9641 | -15.7428 | -12.7341 | -10.7075 | -11.4134 | -12.2139 | -10.8554 | -19.9530 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0758 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | -12.3971 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0695 | 0.0283 | 0.0332 | 0.0773 | 0.0587 | 0.0475 | 0.0599 | 0.0598 | 0.0169 | 0.0722 | 0.0 | 0.0 | 0.0 |
| | -9.8314 | -5.8523 | -6.9711 | -11.3558 | -7.8115 | -5.7432 | -6.9193 | -7.0654 | -2.3430 | -13.1480 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0286 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | -6.7090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0575 | 0.0132 | 0.0165 | 0.0552 | 0.0383 | 0.0211 | 0.0076 | 0.0007 | 0.0224 | 0.0403 | 0.0 | 0.0 | 0.0 |
| | -10.1395 | -3.5473 | -4.5019 | -10.1588 | -6.2303 | -3.0301 | -1.0340 | -0.0891 | 3.4569 | -8.0018 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0045 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | -1.3626 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0434 | 0.0012 | 0.0040 | 0.0202 | 0.0032 | 0.0342 | 0.0539 | 0.0529 | 0.0658 | 0.0170 | 0.0 | 0.0 | 0.0 |
| | -9.8646 | 0.4276 | -1.3406 | -4.6409 | -0.6385 | 6.0556 | 8.8006 | 8.4487 | 11.9796 | -3.9334 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0042 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 1.7970 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0004 | 0.0156 | 0.0191 | 0.0203 | 0.0336 | 0.0557 | 0.0617 | 0.0659 | 0.0534 | 0.0150 | 0.0 | 0.0 | 0.0 |
| | -0.2090 | 11.2358 | 13.3884 | 9.1895 | 12.9810 | 18.7509 | 19.8271 | 20.0865 | 18.3994 | 7.3704 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 5

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0299 | 0.0234 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -3.4911 | 2.8325 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1054 | 0.1499 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1337 | 11.6573 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1189 | 0.1753 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1252 | 10.5201 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1425 | 0.2105 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.8071 | 11.5760 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1016 | 0.1023 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5791 | 5.6271 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0454 | 0.0401 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -2.6199 | -2.4896 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1032 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.2537 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1808 | 0.1874 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.0654 | -12.9988 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1899 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -18.3197 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1051 | 0.2083 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.5018 | -19.5563 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0334 | 0.0834 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.3747 | -11.9477 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0024 | 0.0508 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.5789 | -9.3480 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0355 | 0.0067 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1568 | -1.5768 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0302 | 0.0102 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.3500 | 4.8214 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 5

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0023 | 0.0087 | 0.0370 | 0.0059 | 0.0150 | 0.0121 | 0.0062 | 0.0140 | 0.0184 | 0.0283 | 0.0 | 0.0 | 0.0 |
| | 0.2671 | 1.0218 | 4.4956 | -0.7142 | -1.8652 | -1.6376 | -0.9125 | -2.2876 | -3.3444 | -6.1048 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1498 | 0.1677 | 0.1644 | 0.1259 | 0.1200 | 0.1126 | 0.0989 | 0.0726 | 0.0574 | 0.0387 | 0.0 | 0.0 | 0.0 |
| | 11.5746 | 13.0833 | 12.8568 | 9.9299 | 9.8522 | 9.9460 | 9.3782 | 7.5480 | 6.6665 | 5.3852 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1679 | 0.1639 | 0.0742 | 0.1428 | 0.1465 | 0.1287 | 0.0962 | 0.0721 | 0.0077 | 0.0299 | 0.0 | 0.0 | 0.0 |
| | 9.9715 | 9.6751 | 4.1952 | 8.6863 | 9.3983 | 8.8171 | 7.0419 | 5.7446 | -0.6572 | 3.1879 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.2064 | 0.2328 | 0.2166 | 0.1869 | 0.1778 | 0.1659 | 0.1521 | 0.1306 | 0.0875 | 0.0684 | 0.0 | 0.0 | 0.0 |
| | 11.1626 | 12.7984 | 11.9755 | 10.4793 | 10.4452 | 10.4955 | 10.4826 | 9.7809 | 7.2582 | 6.8275 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.1617 | 0.1265 | 0.1177 | 0.1398 | 0.1473 | 0.0964 | 0.0629 | 0.0676 | 0.0433 | 0.0216 | 0.0 | 0.0 | 0.0 |
| | 8.9576 | 7.0033 | 6.5388 | 7.8194 | 8.6156 | 6.1653 | 4.3128 | 4.9591 | 3.4940 | 2.0782 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0277 | 0.0083 | 0.0165 | 0.0303 | 0.0379 | 0.0291 | 0.0284 | 0.0296 | 0.0374 | 0.0138 | 0.0 | 0.0 | 0.0 |
| | 1.6837 | -0.5247 | -1.0377 | 1.8238 | 2.3171 | -1.9151 | -2.0237 | -2.2247 | -3.0428 | -1.3659 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0627 | 0.0504 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | -3.8954 | -3.1249 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1534 | 0.1651 | 0.1579 | 0.1329 | 0.0846 | 0.1184 | 0.1049 | 0.1044 | 0.0953 | 0.0850 | 0.0 | 0.0 | 0.0 |
| | -10.0201 | -11.4565 | -11.1725 | -9.1619 | -5.8869 | -8.3233 | -7.7952 | -8.2310 | -8.1690 | -8.6434 | 0.0 | 0.0 | 0.0 |
| 10 | 0.1786 | 0.0 | 0.0 | 0.1218 | 0.0795 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -12.7843 | 0.0 | 0.0 | -12.5776 | -8.2247 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1939 | 0.2001 | 0.2101 | 0.1093 | 0.0758 | 0.1676 | 0.1454 | 0.1229 | 0.1204 | 0.0854 | 0.0 | 0.0 | 0.0 |
| | -16.1360 | -17.7253 | -19.6919 | -13.9854 | -9.5274 | -14.4363 | -12.2016 | -10.8659 | -11.4238 | -9.9233 | 0.0 | 0.0 | 0.0 |
| 8 | 0.1265 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -16.3852 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0244 | 0.0848 | 0.0906 | 0.0407 | 0.0395 | 0.0782 | 0.0791 | 0.0631 | 0.0276 | 0.0094 | 0.0 | 0.0 | 0.0 |
| | -4.4676 | -11.8718 | -12.8272 | -7.6623 | -6.7615 | -8.8583 | -8.1391 | -6.5094 | -3.1050 | -1.3045 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0200 | 0.0465 | 0.0605 | 0.0176 | 0.0026 | 0.0267 | 0.0026 | 0.0168 | 0.0629 | 0.0339 | 0.0 | 0.0 | 0.0 |
| | -4.6942 | -8.5875 | -10.9393 | -4.1532 | 0.5535 | -3.5930 | -0.3134 | 1.9095 | 7.7929 | 5.1624 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0095 | 0.0200 | 0.0229 | 0.0191 | 0.0347 | 0.0400 | 0.0652 | 0.1006 | 0.0854 | 0.0840 | 0.0 | 0.0 | 0.0 |
| | -2.9252 | -4.7078 | -5.2442 | 5.6947 | 9.1293 | 6.5504 | 9.2435 | 13.6246 | 12.0021 | 15.0896 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0084 | 0.0069 | 0.0058 | 0.0256 | 0.0355 | 0.0600 | 0.0732 | 0.0800 | 0.0709 | 0.0677 | 0.0 | 0.0 | 0.0 |
| | 5.5031 | 3.3937 | 2.6149 | 15.4767 | 18.0457 | 19.7520 | 20.0819 | 21.1195 | 19.0830 | 23.6716 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 6

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 6

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0867 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | -14.7275 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0154 | 0.0351 | 0.0497 | 0.0235 | 0.0155 | 0.0026 | 0.0112 | 0.0112 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.7596 | 3.9742 | 5.8561 | -2.6197 | -1.8293 | -0.3222 | -1.4858 | -1.6127 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0385 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 3.3225 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1358 | 0.1949 | 0.1650 | 0.1076 | 0.1221 | 0.1170 | 0.1139 | 0.0814 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 10.0035 | 14.7510 | 12.3532 | 7.9225 | 9.4586 | 9.3716 | 9.8563 | 7.5159 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0984 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 6.2149 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0922 | 0.1663 | 0.0806 | 0.1248 | 0.1247 | 0.1295 | 0.1364 | 0.1080 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5.1585 | 9.6225 | 4.4706 | 7.2650 | 7.4872 | 8.1374 | 9.2365 | 7.9261 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.1236 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 6.8349 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.2069 | 0.2119 | 0.1537 | 0.1247 | 0.1397 | 0.1607 | 0.1358 | 0.1204 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 11.6117 | 12.3186 | 8.6602 | 6.8555 | 7.8172 | 9.5549 | 8.4693 | 8.1463 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0908 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 4.9796 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0924 | 0.0737 | 0.0507 | 0.0690 | 0.0476 | 0.0022 | 0.0248 | 0.0122 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5.2240 | 4.3311 | 2.9391 | 3.8617 | 2.6955 | 0.1353 | 1.6384 | 0.8248 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0251 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 1.4484 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0183 | 0.0355 | 0.0710 | 0.0396 | 0.0450 | 0.0556 | 0.0564 | 0.0724 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.1115 | -2.2757 | -4.4479 | -2.3597 | -2.7203 | -3.7975 | -4.0635 | -5.1796 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.1022 | 0.0813 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | -6.3139 | -5.1272 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1538 | 0.1538 | 0.1901 | 0.1538 | 0.1326 | 0.1266 | 0.1313 | 0.1184 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.0133 | -10.7239 | -13.1516 | -10.5010 | -9.1792 | -9.3670 | -10.0053 | -9.1760 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.1792 | 0.0 | 0.0 | 0.1021 | 0.0257 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -12.5999 | 0.0 | 0.0 | -10.5881 | -2.8554 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1962 | 0.1794 | 0.2153 | 0.1150 | 0.0606 | 0.1714 | 0.1508 | 0.1273 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -15.8195 | -15.6898 | -19.4351 | -14.0199 | -7.7201 | -15.4069 | -13.1552 | -11.1788 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.1276 | 0.0 | 0.0 | 0.0976 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -15.7959 | 0.0 | 0.0 | -13.7038 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0155 | 0.0697 | 0.1117 | 0.0505 | 0.0132 | 0.0780 | 0.0726 | 0.0610 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -2.6972 | -9.3352 | -14.2488 | -8.4368 | -2.2355 | -9.0577 | -7.7659 | -6.2184 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0473 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | -8.6154 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0082 | 0.0395 | 0.0683 | 0.0088 | 0.0284 | 0.0317 | 0.0035 | 0.0233 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.8210 | -6.7110 | -10.9220 | -1.8287 | 5.9016 | -4.2585 | 0.4274 | 2.5986 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0167 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 3.8388 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0049 | 0.0089 | 0.0221 | 0.0251 | 0.0608 | 0.0417 | 0.0653 | 0.0964 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.3794 | -1.9592 | -4.4772 | 6.5428 | 15.4868 | 6.9328 | 9.3689 | 12.3291 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0214 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 6.8349 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0142 | 0.0191 | 0.0023 | 0.0287 | 0.0405 | 0.0520 | 0.0662 | 0.0918 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.0086 | 8.9326 | 0.9328 | 15.2033 | 20.4522 | 17.0243 | 18.8403 | 23.1661 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 7

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 7

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0122 | 0.0258 | 0.0138 | 0.0082 | 0.0001 | 0.0127 | 0.0044 | 0.0146 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.2927 | 2.7179 | 1.4362 | -0.9024 | -0.0143 | 1.4987 | -0.5298 | -1.9302 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1519 | 0.1933 | 0.1640 | 0.1101 | 0.1329 | 0.1516 | 0.1078 | 0.0927 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 10.7871 | 13.4418 | 11.2393 | 7.8415 | 9.8547 | 11.5424 | 8.3008 | 7.9447 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.2228 | 0.1781 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 13.5346 | 10.5728 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1874 | 0.2277 | 0.1421 | 0.0807 | 0.1149 | 0.0899 | 0.0524 | 0.1117 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 11.0482 | 12.7383 | 7.5860 | 4.4994 | 6.6406 | 5.0100 | 2.9892 | 7.5354 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.2015 | 0.1494 | 0.0 | 0.0 | 0.2003 | 0.1789 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 11.2001 | 8.0977 | 0.0 | 0.0 | 11.0865 | 10.2581 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.1424 | 0.1572 | 0.1415 | 0.1070 | 0.1619 | 0.1999 | 0.1664 | 0.1160 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 8.5220 | 12.0115 | 10.6913 | 6.1031 | 9.2217 | 10.9619 | 9.3417 | 7.2616 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1170 | 0.1065 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5642 | 6.1668 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0357 | 0.0876 | 0.0205 | 0.0155 | 0.0059 | 0.1404 | 0.1040 | 0.0184 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2.2574 | 7.4475 | 1.6505 | -0.9361 | -0.3523 | -9.6364 | -7.5619 | -1.1989 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0596 | 0.0156 | 0.0567 | 0.1033 | 0.0825 | 0.0163 | 0.0205 | 0.0601 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -4.0599 | 1.4280 | -4.8934 | -6.8199 | -5.5679 | -1.5029 | 2.0100 | -4.3873 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1462 | 0.0922 | 0.1115 | 0.1664 | 0.1412 | 0.0730 | 0.0485 | 0.1405 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.6180 | -9.0000 | -10.7886 | -12.2665 | -10.6524 | -7.4283 | -5.1482 | -11.0491 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1729 | 0.0972 | 0.1176 | 0.1888 | 0.1564 | 0.0801 | 0.0852 | 0.1583 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -14.5324 | -11.5000 | -13.8946 | -16.5687 | -14.0867 | -9.8590 | -10.4351 | -14.2472 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0437 | 0.0000 | 0.0306 | 0.0820 | 0.0679 | 0.0056 | 0.0159 | 0.0872 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -5.4272 | 0.0011 | -4.8948 | -8.8970 | -7.3714 | -0.8684 | -2.4316 | -9.2620 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0093 | 0.0281 | 0.0043 | 0.0201 | 0.0043 | 0.0410 | 0.0246 | 0.0042 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.4111 | 6.1213 | 0.8407 | -2.5458 | -0.5390 | 7.5634 | 4.2753 | 0.4991 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0021 | 0.0343 | 0.0136 | 0.0124 | 0.0099 | 0.0598 | 0.0565 | 0.0461 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.4020 | 9.4164 | 3.2423 | -1.8890 | 1.4994 | 13.0975 | 11.4438 | 6.0024 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0169 | 0.0299 | 0.0202 | 0.0162 | 0.0389 | 0.0376 | 0.0372 | 0.0648 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 6.9921 | 17.5639 | 9.7811 | 5.1874 | 12.3215 | 16.1380 | 14.1653 | 17.4201 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 8

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 8

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0972 | 0.0918 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -14.9810 | -13.7870 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0150 | 0.0112 | 0.0169 | 0.0086 | 0.0079 | 0.0182 | 0.0081 | 0.0 | 0.0216 | 0.0061 | 0.0 | 0.0 | 0.0 |
| | 1.5938 | 1.1395 | 1.7799 | -0.9241 | 0.9073 | -1.9989 | 0.9618 | 0.0 | -2.9377 | -0.9549 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0801 | 0.0502 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 6.6041 | 3.8639 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1711 | 0.1423 | 0.1513 | 0.1102 | 0.1424 | 0.1280 | 0.1181 | 0.0 | 0.0992 | 0.0865 | 0.0 | 0.0 | 0.0 |
| | 12.3265 | 9.5160 | 10.3373 | 7.8367 | 10.6855 | 9.3369 | 8.8695 | 0.0 | 8.9459 | 8.7352 | 0.0 | 0.0 | 0.0 |
| 20 | 0.1519 | 0.1785 | 0.1648 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.4762 | 10.5708 | 9.7915 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1570 | 0.1606 | 0.1140 | 0.0749 | 0.1515 | 0.1415 | 0.0405 | 0.0 | 0.0957 | 0.0535 | 0.0 | 0.0 | 0.0 |
| | 9.2048 | 8.7497 | 6.0812 | 4.2181 | 9.0123 | 8.0221 | 2.2316 | 0.0 | 6.7277 | 4.1401 | 0.0 | 0.0 | 0.0 |
| 18 | 0.1293 | 0.1273 | 0.1467 | 0.0 | 0.0 | 0.1733 | 0.1514 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 7.4165 | 6.9765 | 8.1219 | 0.0 | 0.0 | 9.4129 | 8.3015 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.1353 | 0.1721 | 0.2010 | 0.1132 | 0.1749 | 0.1899 | 0.1767 | 0.0 | 0.0880 | 0.1087 | 0.0 | 0.0 | 0.0 |
| | 8.3538 | 13.9517 | 16.6240 | 6.7271 | 10.2079 | 10.3516 | 9.7420 | 0.0 | 5.6797 | 7.9968 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0628 | 0.1082 | 0.0 | 0.0 | 0.0 | 0.1130 | 0.0821 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.9714 | 9.2512 | 0.0 | 0.0 | 0.0 | 6.3762 | 4.5929 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0049 | 0.0755 | 0.0649 | 0.0164 | 0.0048 | 0.1661 | 0.1422 | 0.0 | 0.0312 | 0.0442 | 0.0 | 0.0 | 0.0 |
| | 0.3211 | 6.7674 | 5.7410 | -1.0372 | 0.2980 | -11.3580 | -9.8856 | 0.0 | 2.0434 | 3.1760 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0085 | 0.0283 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.5844 | 2.6000 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0692 | 0.0186 | 0.0097 | 0.1016 | 0.0570 | 0.0606 | 0.0403 | 0.0 | 0.0935 | 0.0527 | 0.0 | 0.0 | 0.0 |
| | -4.8654 | 1.8035 | 0.9399 | -7.0519 | -4.0745 | -5.4754 | -3.6717 | 0.0 | -6.2215 | -3.8070 | 0.0 | 0.0 | 0.0 |
| 12 | 0.1056 | 0.0222 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -7.6503 | -2.1865 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1407 | 0.0666 | 0.0543 | 0.1654 | 0.1207 | 0.1151 | 0.0868 | 0.0 | 0.1295 | 0.1239 | 0.0 | 0.0 | 0.0 |
| | -10.4138 | -6.6819 | -5.5625 | -12.3771 | -9.3709 | -11.2081 | -8.8104 | 0.0 | -9.6492 | -9.4870 | 0.0 | 0.0 | 0.0 |
| 10 | 0.1351 | 0.0547 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.4190 | -5.9370 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.1417 | 0.0418 | 0.0820 | 0.1514 | 0.1256 | 0.1292 | 0.0956 | 0.0 | 0.1241 | 0.1047 | 0.0 | 0.0 | 0.0 |
| | -11.6371 | -4.9448 | -9.2606 | -12.3827 | -10.5837 | -14.3372 | -11.6890 | 0.0 | -11.5010 | -9.5948 | 0.0 | 0.0 | 0.0 |
| 8 | 0.1203 | 0.0294 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -10.9590 | -3.8365 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0130 | 0.0429 | 0.0019 | 0.0525 | 0.0226 | 0.0362 | 0.0081 | 0.0 | 0.0459 | 0.0191 | 0.0 | 0.0 | 0.0 |
| | -1.5015 | 6.8705 | 0.2644 | -4.8662 | -2.1713 | -4.8952 | -1.2648 | 0.0 | -5.2227 | -2.1801 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0092 | 0.0355 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -1.1463 | 6.1286 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0192 | 0.0652 | 0.0337 | 0.0063 | 0.0383 | 0.0163 | 0.0364 | 0.0 | 0.0409 | 0.0572 | 0.0 | 0.0 | 0.0 |
| | 2.6771 | 12.5452 | 5.4172 | -0.6397 | 4.0612 | 2.5040 | 6.5288 | 0.0 | 5.2492 | 7.4994 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0239 | 0.0710 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.7008 | 15.0770 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0002 | 0.0520 | 0.0197 | 0.0074 | 0.0354 | 0.0341 | 0.0505 | 0.0 | 0.0710 | 0.0957 | 0.0 | 0.0 | 0.0 |
| | 0.0430 | 12.3930 | 3.7678 | -0.8930 | 4.4416 | 6.3564 | 10.4111 | 0.0 | 10.1498 | 14.5790 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0044 | 0.0382 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.9629 | 11.2914 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0205 | 0.0446 | 0.0161 | 0.0294 | 0.0424 | 0.0353 | 0.0355 | 0.0 | 0.0641 | 0.0705 | 0.0 | 0.0 | 0.0 |
| | 7.7184 | 22.6649 | 6.2519 | 7.4102 | 11.0550 | 13.2572 | 14.5926 | 0.0 | 18.5639 | 20.4600 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 9

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 9

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.1143 | 0.0868 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -17.2184 | -13.7452 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0009 | 0.0088 | 0.0037 | 0.0046 | 0.0049 | 0.0063 | 0.0 | 0.0 | 0.0246 | 0.0115 | 0.0 | 0.0 | 0.0 |
| | 0.0919 | 0.9489 | 0.3939 | 0.5211 | -0.5546 | 0.7310 | 0.0 | 0.0 | -3.0939 | -1.6565 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0499 | 0.0657 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4.1116 | 5.4768 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1446 | 0.1381 | 0.1403 | 0.1177 | 0.1129 | 0.1269 | 0.0 | 0.0 | 0.0866 | 0.0986 | 0.0 | 0.0 | 0.0 |
| | 10.5142 | 9.9223 | 10.2177 | 8.7307 | 8.4239 | 9.6218 | 0.0 | 0.0 | 7.2384 | 9.3732 | 0.0 | 0.0 | 0.0 |
| 20 | 0.1240 | 0.0986 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 7.8141 | 6.0220 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.1137 | 0.0940 | 0.0789 | 0.0823 | 0.0920 | 0.0974 | 0.0 | 0.0 | 0.0612 | 0.0893 | 0.0 | 0.0 | 0.0 |
| | 6.6566 | 5.3605 | 4.4965 | 4.8217 | 5.4361 | 5.7088 | 0.0 | 0.0 | 3.9899 | 6.6287 | 0.0 | 0.0 | 0.0 |
| 18 | 0.1091 | 0.0655 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 6.2602 | 3.6558 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.1421 | 0.0961 | 0.0942 | 0.1211 | 0.1401 | 0.1349 | 0.0 | 0.0 | 0.0813 | 0.1212 | 0.0 | 0.0 | 0.0 |
| | 8.6262 | 5.8514 | 5.7670 | 7.2955 | 8.3467 | 7.8078 | 0.0 | 0.0 | 4.9706 | 8.4443 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0576 | 0.0042 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.5096 | 0.2598 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0402 | 0.0231 | 0.0040 | 0.0018 | 0.0207 | 0.0134 | 0.0 | 0.0 | 0.0248 | 0.0699 | 0.0 | 0.0 | 0.0 |
| | 2.5669 | -1.4918 | -0.2601 | -0.1103 | 1.2982 | -0.8286 | 0.0 | 0.0 | 1.5054 | 4.8287 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0356 | 0.0436 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2.3873 | -2.9559 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0319 | 0.1147 | 0.0749 | 0.0561 | 0.0683 | 0.1080 | 0.0 | 0.0 | 0.0578 | 0.0545 | 0.0 | 0.0 | 0.0 |
| | -2.1563 | -7.8468 | -5.3352 | -3.8952 | -4.6812 | -7.3537 | 0.0 | 0.0 | -3.5932 | -3.7156 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0630 | 0.1646 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0851 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -4.3309 | -11.3740 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.4677 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0899 | 0.1646 | 0.1504 | 0.1073 | 0.1010 | 0.1368 | 0.0 | 0.0 | 0.1140 | 0.1065 | 0.0 | 0.0 | 0.0 |
| | -6.2616 | -11.7874 | -11.0904 | -7.9326 | -7.5145 | -10.2928 | 0.0 | 0.0 | -8.0389 | -7.8914 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0700 | 0.1487 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0821 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -5.1021 | -11.0798 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -8.5406 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0678 | 0.1305 | 0.1133 | 0.0945 | 0.0964 | 0.1368 | 0.0 | 0.0 | 0.0610 | 0.1087 | 0.0 | 0.0 | 0.0 |
| | -5.2077 | -10.1889 | -9.0630 | -7.4096 | -7.6621 | -11.4407 | 0.0 | 0.0 | -7.6133 | -9.9653 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0387 | 0.1049 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -3.3510 | -8.8841 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.1066 | 0.0018 | 0.0009 | 0.0506 | 0.0512 | 0.0142 | 0.0 | 0.0 | 0.0020 | 0.0127 | 0.0 | 0.0 | 0.0 |
| | 15.6084 | 0.1835 | -0.0885 | 4.3996 | 4.5514 | -1.4197 | 0.0 | 0.0 | -0.3333 | -1.5226 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0826 | 0.0228 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 13.4167 | 2.5499 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0946 | 0.0635 | 0.0607 | 0.0908 | 0.1161 | 0.0563 | 0.0 | 0.0 | 0.0501 | 0.0547 | 0.0 | 0.0 | 0.0 |
| | 17.0387 | 7.7518 | 6.3595 | 8.4436 | 11.2227 | 6.1723 | 0.0 | 0.0 | 9.7340 | 7.8215 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0746 | 0.0641 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 14.4638 | 8.5009 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0553 | 0.0327 | 0.0488 | 0.0680 | 0.0941 | 0.0669 | 0.0 | 0.0 | 0.0605 | 0.0812 | 0.0 | 0.0 | 0.0 |
| | 12.2116 | 4.7981 | 6.1033 | 7.3408 | 10.4945 | 8.7077 | 0.0 | 0.0 | 13.5706 | 13.8360 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0364 | 0.0110 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 9.9047 | 1.9879 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0425 | 0.0433 | 0.0559 | 0.0660 | 0.0817 | 0.0521 | 0.0 | 0.0 | 0.0447 | 0.0579 | 0.0 | 0.0 | 0.0 |
| | 19.9227 | 13.7860 | 14.6039 | 15.0528 | 18.8362 | 13.8034 | 0.0 | 0.0 | 19.9521 | 19.5744 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 10

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 10

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0025 | 0.0066 | 0.0104 | 0.0081 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.2709 | 0.7020 | -1.1135 | 0.8994 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1197 | 0.1270 | 0.0843 | 0.0970 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 8.6789 | 9.1295 | 5.9802 | 7.1091 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0903 | 0.0859 | 0.0529 | 0.0103 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5.2916 | 4.9583 | 3.0301 | -0.5787 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.1041 | 0.0807 | 0.0414 | 0.0787 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 6.2641 | 4.9834 | 2.5078 | 4.7681 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0176 | 0.0276 | 0.0509 | 0.0080 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.1355 | -1.8258 | -3.3158 | -0.5138 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0501 | 0.0997 | 0.1317 | 0.1000 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -3.4081 | -7.0286 | -9.1297 | -6.8624 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0639 | 0.1513 | 0.1737 | 0.1149 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -4.5541 | -10.9763 | -12.6320 | -8.4682 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0560 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -4.0618 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0462 | 0.1080 | 0.1329 | 0.0862 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -3.4595 | -8.3498 | -10.2473 | -6.6313 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0399 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -3.2256 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0818 | 0.0118 | 0.0125 | 0.0689 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 10.4629 | 1.1454 | 1.1210 | 5.8314 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0742 | 0.0609 | 0.0640 | 0.1079 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 11.3266 | 6.8105 | 6.3499 | 9.7654 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0315 | 0.0271 | 0.0346 | 0.0711 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5.8251 | 3.6313 | 4.0159 | 7.4270 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0281 | 0.0341 | 0.0436 | 0.0600 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 11.1712 | 9.4788 | 10.7138 | 12.7393 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 11

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 11

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0019 | 0.0174 | 0.0132 | 0.0108 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -0.2047 | 1.8187 | 1.3716 | -1.1704 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0997 | 0.1394 | 0.1240 | 0.0815 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 7.0618 | 9.6443 | 8.5316 | 5.8565 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.1352 | 0.1110 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 8.1991 | 6.6869 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0342 | 0.0414 | 0.0289 | 0.0860 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.9517 | 2.2572 | 1.5677 | 5.1398 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0989 | 0.0889 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 5.6443 | 5.0688 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0598 | 0.0982 | 0.0170 | 0.0577 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.7560 | 8.1059 | 1.3160 | 3.6016 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0568 | 0.0049 | 0.0221 | 0.0401 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -3.8462 | 0.4485 | -1.9754 | -2.7112 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0990 | 0.0460 | 0.0783 | 0.1239 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -7.3025 | -4.5095 | -7.4482 | -8.9167 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.1244 | 0.0712 | 0.0941 | 0.1282 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -9.4084 | -7.1839 | -9.3642 | -9.9125 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0799 | 0.0153 | 0.0392 | 0.0905 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | -6.0447 | -1.6614 | -4.1920 | -7.0304 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0542 | 0.1075 | 0.0557 | 0.0191 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4.9563 | 14.3893 | 6.9324 | 1.6507 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0689 | 0.1320 | 0.0882 | 0.0537 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 7.0566 | 20.2107 | 12.2860 | 5.0790 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0058 | 0.0710 | 0.0282 | 0.0100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.6961 | 12.7500 | 4.5365 | 1.1019 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0442 | 0.0423 | 0.0258 | 0.0485 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 11.4971 | 15.9177 | 8.4535 | 11.8471 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 12

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 12

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0059 | 0.0192 | 0.0273 | 0.0 | 0.0050 | 0.0295 | 0.0 | 0.0 | 0.0024 | 0.0612 | 0.0 | 0.0 | 0.0 |
| | -0.6369 | -1.9304 | -2.7396 | 0.0 | -0.5401 | -2.9743 | 0.0 | 0.0 | -0.2917 | -7.1910 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.1124 | 0.0889 | 0.0989 | 0.0 | 0.1115 | 0.0994 | 0.0 | 0.0 | 0.0746 | 0.0460 | 0.0 | 0.0 | 0.0 |
| | 8.2256 | 6.0195 | 6.7502 | 0.0 | 8.2146 | 6.8568 | 0.0 | 0.0 | 5.8734 | 3.6343 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0523 | 0.0687 | 0.0 | 0.0 | 0.0892 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 3.0786 | 4.0863 | 0.0 | 0.0 | 5.3954 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0643 | 0.0314 | 0.0413 | 0.0 | 0.0876 | 0.0641 | 0.0 | 0.0 | 0.0178 | 0.0098 | 0.0 | 0.0 | 0.0 |
| | 3.8323 | -1.6742 | -2.1853 | 0.0 | 5.2821 | 3.5622 | 0.0 | 0.0 | 1.1078 | 0.6075 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0124 | 0.0404 | 0.0 | 0.0 | 0.0328 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.6920 | 2.2642 | 0.0 | 0.0 | 1.8316 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0817 | 0.0499 | 0.0101 | 0.0 | 0.0851 | 0.0849 | 0.0 | 0.0 | 0.0197 | 0.0132 | 0.0 | 0.0 | 0.0 |
| | 5.3522 | 4.0782 | 0.7895 | 0.0 | 5.4154 | 6.8948 | 0.0 | 0.0 | 1.1586 | 0.7481 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0023 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1280 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0227 | 0.0237 | 0.0086 | 0.0 | 0.0356 | 0.0027 | 0.0 | 0.0 | 0.0231 | 0.0165 | 0.0 | 0.0 | 0.0 |
| | -1.6185 | 2.2813 | 0.7958 | 0.0 | -2.4025 | -0.2377 | 0.0 | 0.0 | -1.3926 | 0.9906 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1314 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -9.9436 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0546 | 0.0207 | 0.0465 | 0.0 | 0.0920 | 0.0361 | 0.0 | 0.0 | 0.1038 | 0.0043 | 0.0 | 0.0 | 0.0 |
| | -4.2924 | -2.1319 | -4.5746 | 0.0 | -6.6432 | -3.4095 | 0.0 | 0.0 | -6.8706 | -0.4005 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0770 | 0.0502 | 0.0686 | 0.0 | 0.1249 | 0.0651 | 0.0 | 0.0 | 0.0967 | 0.0592 | 0.0 | 0.0 | 0.0 |
| | -6.1720 | -5.2488 | -6.9640 | 0.0 | -9.4100 | -6.3752 | 0.0 | 0.0 | -6.7664 | -5.9156 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0210 | 0.0222 | 0.0185 | 0.0 | 0.0672 | 0.0188 | 0.0 | 0.0 | 0.0843 | 0.0137 | 0.0 | 0.0 | 0.0 |
| | -1.6474 | 2.4509 | -1.9819 | 0.0 | -5.2244 | -2.1252 | 0.0 | 0.0 | -7.1755 | -1.7444 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.1170 | 0.1131 | 0.0753 | 0.0 | 0.0351 | 0.0704 | 0.0 | 0.0 | 0.0338 | 0.0801 | 0.0 | 0.0 | 0.0 |
| | 10.0256 | 14.0910 | 9.5065 | 0.0 | 3.3952 | 10.5671 | 0.0 | 0.0 | 4.3971 | 15.6123 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.1318 | 0.1367 | 0.1076 | 0.0 | 0.0753 | 0.0931 | 0.0 | 0.0 | 0.0399 | 0.0801 | 0.0 | 0.0 | 0.0 |
| | 12.0701 | 18.8256 | 15.6495 | 0.0 | 8.6402 | 17.0314 | 0.0 | 0.0 | 6.3593 | 19.5887 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0483 | 0.0602 | 0.0463 | 0.0 | 0.0168 | 0.0501 | 0.0 | 0.0 | 0.0218 | 0.0613 | 0.0 | 0.0 | 0.0 |
| | 5.0206 | 9.5321 | 7.8886 | 0.0 | 2.2826 | 11.0033 | 0.0 | 0.0 | 4.4287 | 19.2268 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0486 | 0.0408 | 0.0170 | 0.0 | 0.0267 | 0.0340 | 0.0 | 0.0 | 0.0294 | 0.0395 | 0.0 | 0.0 | 0.0 |
| | 10.6387 | 13.1556 | 5.8139 | 0.0 | 7.7515 | 15.3895 | 0.0 | 0.0 | 13.2462 | 25.9076 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 13

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 13

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0341 | 0.0120 | 0.0 | 0.0 | 0.0301 | 0.0157 | 0.0 | 0.0 | 0.0358 | 0.0349 | 0.0 | 0.0 | 0.0 |
| | -3.6367 | -1.2928 | 0.0 | 0.0 | -3.1849 | -1.6862 | 0.0 | 0.0 | -4.1942 | -4.3829 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0794 | 0.0832 | 0.0 | 0.0 | 0.0965 | 0.0987 | 0.0 | 0.0 | 0.0602 | 0.0533 | 0.0 | 0.0 | 0.0 |
| | 5.8363 | 6.0844 | 0.0 | 0.0 | 7.1571 | 7.3103 | 0.0 | 0.0 | 4.7483 | 4.4123 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0253 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.6012 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0443 | 0.0695 | 0.0 | 0.0 | 0.0538 | 0.0665 | 0.0 | 0.0 | 0.0143 | 0.0004 | 0.0 | 0.0 | 0.0 |
| | 2.6872 | 4.2144 | 0.0 | 0.0 | 3.2313 | 3.9571 | 0.0 | 0.0 | 0.8881 | -0.0286 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0404 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2.4321 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0664 | 0.0592 | 0.0 | 0.0 | 0.0979 | 0.0621 | 0.0 | 0.0 | 0.0317 | 0.0134 | 0.0 | 0.0 | 0.0 |
| | 4.2665 | 3.8315 | 0.0 | 0.0 | 6.0820 | 3.8713 | 0.0 | 0.0 | 1.8573 | 0.8129 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0107 | 0.0265 | 0.0 | 0.0 | 0.0176 | 0.0219 | 0.0 | 0.0 | 0.0228 | 0.0336 | 0.0 | 0.0 | 0.0 |
| | -0.7466 | -1.8612 | 0.0 | 0.0 | 1.1497 | -1.4398 | 0.0 | 0.0 | -1.3256 | -1.9865 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0660 | 0.0774 | 0.0 | 0.0 | 0.0404 | 0.1075 | 0.0 | 0.0 | 0.0792 | 0.1366 | 0.0 | 0.0 | 0.0 |
| | -4.9218 | -5.8372 | 0.0 | 0.0 | -2.7514 | -7.3001 | 0.0 | 0.0 | -4.8703 | -8.7789 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0772 | 0.1000 | 0.0 | 0.0 | 0.0712 | 0.1306 | 0.0 | 0.0 | 0.0753 | 0.1264 | 0.0 | 0.0 | 0.0 |
| | -5.8980 | -7.7387 | 0.0 | 0.0 | -4.9719 | -9.1755 | 0.0 | 0.0 | -4.7852 | -8.7463 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0279 | 0.0 | 0.0 | 0.0 | 0.0567 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | -2.0381 | 0.0 | 0.0 | 0.0 | -3.8938 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0162 | 0.0272 | 0.0 | 0.0 | 0.0285 | 0.0891 | 0.0 | 0.0 | 0.0518 | 0.0916 | 0.0 | 0.0 | 0.0 |
| | 1.2344 | -2.1509 | 0.0 | 0.0 | -2.1364 | -6.9665 | 0.0 | 0.0 | -4.1103 | -7.6754 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0112 | 0.0 | 0.0 | 0.0 | 0.0582 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.9385 | 0.0 | 0.0 | 0.0 | -6.8628 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.1680 | 0.1209 | 0.0 | 0.0 | 0.0816 | 0.0354 | 0.0 | 0.0 | 0.0785 | 0.0554 | 0.0 | 0.0 | 0.0 |
| | 13.4062 | 10.5604 | 0.0 | 0.0 | 10.6199 | 3.8970 | 0.0 | 0.0 | 13.7627 | 7.3425 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.1760 | 0.1298 | 0.0 | 0.0 | 0.1132 | 0.0915 | 0.0 | 0.0 | 0.0765 | 0.0678 | 0.0 | 0.0 | 0.0 |
| | 14.5178 | 12.0055 | 0.0 | 0.0 | 19.6225 | 12.9870 | 0.0 | 0.0 | 17.4283 | 11.5950 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0899 | 0.0691 | 0.0 | 0.0 | 0.0534 | 0.0226 | 0.0 | 0.0 | 0.0461 | 0.0487 | 0.0 | 0.0 | 0.0 |
| | 8.3530 | 7.3748 | 0.0 | 0.0 | 11.1801 | 3.7832 | 0.0 | 0.0 | 13.4680 | 10.8371 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0847 | 0.0561 | 0.0 | 0.0 | 0.0373 | 0.0280 | 0.0 | 0.0 | 0.0329 | 0.0341 | 0.0 | 0.0 | 0.0 |
| | 16.3055 | 12.5115 | 0.0 | 0.0 | 16.3155 | 10.1643 | 0.0 | 0.0 | 20.6845 | 16.3077 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 14

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 14

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 15

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 15

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 16

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 16

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0205 | 0.0622 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -2.4514 | -7.3780 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0627 | 0.0249 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8872 | 1.9505 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0338 | 0.0178 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1217 | 1.1078 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0726 | 0.0281 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4006 | 1.6145 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0381 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2020 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0010 | 0.0094 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0599 | 0.5689 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0715 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.7099 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0859 | 0.0005 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.7813 | -0.0468 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1267 | 0.0466 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -9.1000 | -4.8971 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0901 | 0.0093 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -8.4573 | -1.2753 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0270 | 0.0596 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6139 | 11.6286 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0596 | 0.0866 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7801 | 21.4188 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0447 | 0.0771 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.1230 | 24.0723 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0329 | 0.0466 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.1181 | 29.6101 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 17

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 17

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0471 | 0.0339 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.5372 | -4.4428 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0389 | 0.0564 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0205 | 4.8317 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0383 | 0.0305 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4122 | 2.0486 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0476 | 0.0557 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8117 | 3.5256 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0039 | 0.0079 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2298 | 0.5026 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0591 | 0.0943 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -3.6829 | -6.3966 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0985 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.2920 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1202 | 0.1412 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -8.4325 | -10.4831 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1629 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -15.6000 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0635 | 0.1190 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -7.9345 | -11.3447 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0253 | 0.0137 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5173 | 1.8293 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0787 | 0.0698 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5768 | 11.5961 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0775 | 0.0813 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.0927 | 16.5968 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0534 | 0.0518 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.1756 | 21.2027 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 18

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0171 | 0.0147 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8569 | -1.5387 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1345 | 0.1023 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6387 | 7.2166 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1023 | 0.0668 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8614 | 3.8052 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1127 | 0.1182 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9325 | 7.0730 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0065 | 0.0015 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4254 | 0.0942 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0806 | 0.0475 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.6458 | -3.1762 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1360 | 0.1037 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -9.9431 | -7.1538 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0930 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.6672 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1204 | 0.0954 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -9.4748 | -7.1759 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0682 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.7572 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0119 | 0.0810 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2361 | 11.4300 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0842 | 0.0911 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.5434 | 16.3055 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0572 | 0.0556 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7102 | 12.2860 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0386 | 0.0397 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.1101 | 18.3681 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 18

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 19

| K/J | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0139 | 0.0122 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4174 | 1.2927 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1819 | 0.1536 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.4942 | 10.9281 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1840 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.9320 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1836 | 0.1238 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.1299 | 7.1196 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1760 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9093 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2346 | 0.1234 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0332 | 7.5633 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1004 | 0.0205 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.2061 | 1.3496 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0379 | 0.0802 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7486 | -5.5960 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0537 | 0.1324 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -5.4578 | -9.8602 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0525 | 0.1601 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.1331 | -12.9520 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0318 | 0.0451 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0030 | -5.0263 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0736 | 0.0106 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3934 | 1.4610 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0517 | 0.0040 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.3127 | 0.7053 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0381 | 0.0233 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.7449 | 8.8665 |

## NODAL COMPARISONS - ABSOLUTE DIFFERENCES / PERCENT DIFFERENCES

I = 19

| K/J | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

NUMBER OF NODES = 1408 MEAN = 0.0076 STANDARD DEVIATION = 0.0934

# APPENDIX F

# PLANAR NORMALIZED RADIAL COMPARISONS

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.566<br>0.506<br>-10.6 | 0.561<br>0.488<br>-13.0 | 0.547<br>0.481<br>-12.1 | 0.504<br>0.477<br>-5.4 | 0.451<br>0.391<br>-13.3 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.773<br>0.703<br>-9.1 | 0.741<br>0.660<br>-10.9 | 0.679<br>0.653<br>-3.8 | 0.766<br>0.760<br>-0.8 | 0.769<br>0.760<br>-1.2 | 0.699<br>0.595<br>-14.9 | | | | |
| 3 | | | | | 0.846<br>0.750<br>-11.3 | 0.586<br>0.524<br>-10.6 | 0.588<br>0.556<br>-5.4 | 0.849<br>0.832<br>-2.0 | 1.002<br>0.976<br>-2.6 | 0.996<br>1.029<br>-3.3 | 0.967<br>0.897<br>-7.2 | 0.852<br>0.821<br>-3.6 | 0.686<br>0.610<br>-11.1 | |
| 4 | 0.852<br>0.850<br>-0.2 | 0.570<br>0.585<br>2.6 | | | 0.789<br>0.707<br>-10.4 | 0.550<br>0.549<br>-0.2 | 0.564<br>0.574<br>1.8 | 0.875<br>0.857<br>-2.1 | 1.022<br>1.0387<br>1.5 | 1.175<br>1.252<br>6.6 | 1.231<br>1.323<br>7.5 | 1.298<br>1.399<br>7.8 | 1.148<br>1.219<br>6.2 | 0.804<br>0.775<br>-3.6 |
| 5 | 0.652<br>0.692<br>6.1 | 0.839<br>0.789<br>-6.0 | | | 0.602<br>0.570<br>-5.3 | 0.804<br>0.746<br>-7.2 | 0.872<br>0.803<br>-7.9 | 0.654<br>0.678<br>3.7 | 0.779<br>0.825<br>5.9 | 1.201<br>1.291<br>7.5 | 1.441<br>1.553<br>7.8 | 1.498<br>1.628<br>8.7 | 1.470<br>1.571<br>6.9 | 1.131<br>1.255<br>11.0 |
| 6 | | | | | 0.623<br>0.610<br>-2.1 | 0.847<br>0.829<br>-2.1 | 0.962<br>0.872<br>-9.4 | 0.746<br>0.771<br>3.4 | 0.783<br>0.846<br>8.0 | 1.209<br>1.270<br>5.0 | 1.389<br>1.481<br>6.6 | 1.567<br>1.732<br>10.5 | | |
| 7 | | | | | 0.956<br>0.918<br>-4.0 | 0.673<br>0.710<br>5.5 | 0.815<br>0.803<br>-1.5 | 1.239<br>1.169<br>-5.6 | 1.249<br>1.259<br>0.8 | 0.922<br>0.961<br>4.2 | 1.040<br>1.065<br>2.4 | 1.470<br>1.549<br>5.4 | | |
| 8 | | | | | 1.050<br>1.015<br>-3.3 | 0.779<br>0.857<br>10.0 | 1.016<br>0.968<br>-4.7 | 1.566<br>1.510<br>-3.6 | 1.515<br>1.510<br>-0.3 | 1.052<br>1.069<br>1.6 | 0.963<br>0.990<br>2.8 | | 1.364<br>1.453<br>6.5 | 1.365<br>1.474<br>8.0 |
| 9 | | | | | 0.843<br>0.907<br>7.6 | 1.243<br>1.270<br>2.2 | 1.513<br>1.557<br>2.9 | 1.733<br>1.790<br>3.3 | 1.715<br>1.829<br>6.6 | 1.492<br>1.524<br>2.1 | | | 0.886<br>0.954<br>7.7 | 1.170<br>1.255<br>7.3 |
| 10 | | | | | 0.996<br>0.993<br>-0.3 | 1.424<br>1.399<br>-1.8 | 1.610<br>1.600<br>-0.6 | 1.861<br>1.883<br>1.2 | | | | | | |
| 11 | | | | | 1.520<br>1.521<br>0.1 | 1.052<br>1.094<br>4.0 | 1.205<br>1.173<br>-2.7 | 1.619<br>1.625<br>0.4 | | | | | | |
| 12 | | | | | 1.806<br>1.793<br>-0.7 | 1.226<br>1.245<br>1.5 | 1.159<br>1.101<br>-5.0 | | 1.361<br>1.316<br>-3.3 | 0.873<br>0.904<br>3.6 | | | 0.879<br>0.893<br>1.6 | 0.603<br>0.681<br>12.9 |
| 13 | | | | | 2.055<br>2.145<br>4.4 | 1.772<br>1.790<br>1.0 | | | 0.904<br>0.943<br>4.3 | 1.088<br>1.076<br>-1.1 | | | 0.629<br>0.681<br>8.3 | 0.828<br>0.864<br>4.3 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 0.921<br>0.943<br>2.4 | 0.623<br>0.724<br>16.2 |
| 17 | | | | | | | | | | | | | 0.700<br>0.818<br>16.9 | 0.966<br>1.051<br>8.8 |
| 18 | | | 1.262<br>1.270<br>0.6 | 0.854<br>0.907<br>6.2 | | | | | | | | | | |
| 19 | | | 0.804<br>0.857<br>6.6 | 1.039<br>1.015<br>-2.3 | | | | | | | | | | |

Planar Normalized Comparison at K=1

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.634<br>0.550<br>-13.2 | 0.596<br>0.517<br>-13.3 | 0.574<br>0.494<br>-13.8 | 0.534<br>0.479<br>-10.3 | 0.484<br>0.397<br>-18.0 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.840<br>0.751<br>-10.6 | 0.760<br>0.671<br>-11.7 | 0.700<br>0.652<br>-6.9 | 0.745<br>0.692<br>-7.1 | 0.741<br>0.692<br>-6.6 | 0.668<br>0.570<br>-14.7 | | | | |
| 3 | | | | | 0.916<br>0.778<br>-15.1 | 0.578<br>0.534<br>-7.6 | 0.553<br>0.523<br>-5.4 | 0.824<br>0.744<br>-9.7 | 0.931<br>0.882<br>-5.3 | 0.908<br>0.913<br>0.6 | 0.903<br>0.852<br>-5.6 | 0.842<br>0.806<br>-4.3 | 0.714<br>0.618<br>-13.4 | |
| 4 | 0.823<br>0.783<br>-4.9 | 0.538<br>0.546<br>1.5 | | | 0.848<br>0.745<br>-12.1 | 0.557<br>0.546<br>-2.0 | 0.569<br>0.548<br>-3.7 | 0.838<br>0.780<br>-6.9 | 0.977<br>0.947<br>-3.1 | 1.088<br>1.126<br>3.5 | 1.181<br>1.253<br>6.1 | 1.208<br>1.278<br>5.8 | 1.060<br>1.158<br>9.2 | 0.832<br>0.780<br>-6.3 |
| 5 | 0.614<br>0.666<br>8.5 | 0.814<br>0.781<br>-4.1 | | | 0.627<br>0.593<br>-5.4 | 0.818<br>0.761<br>-7.0 | 0.842<br>0.778<br>-7.6 | 0.647<br>0.667<br>3.1 | 0.734<br>0.781<br>6.4 | 1.178<br>1.224<br>3.9 | 1.360<br>1.449<br>6.5 | 1.424<br>1.578<br>10.8 | 1.373<br>1.500<br>9.2 | 1.074<br>1.205<br>12.2 |
| 6 | | | | | 0.680<br>0.654<br>-3.8 | 0.879<br>0.840<br>-4.4 | 0.951<br>0.886<br>-6.8 | 0.739<br>0.768<br>3.9 | 0.758<br>0.854<br>12.7 | 1.161<br>1.211<br>4.3 | 1.344<br>1.434<br>6.7 | 1.508<br>1.652<br>9.5 | | |
| 7 | | | | | 0.989<br>0.960<br>-2.9 | 0.702<br>0.749<br>6.7 | 0.812<br>0.818<br>0.7 | 1.264<br>1.209<br>-4.4 | 1.279<br>1.266<br>-1.0 | 0.881<br>0.972<br>10.3 | 0.952<br>1.034<br>8.6 | 1.482<br>1.532<br>3.4 | | |
| 8 | | | | | 1.115<br>1.088<br>-2.4 | 0.810<br>0.888<br>9.6 | 1.007<br>1.019<br>1.2 | 1.599<br>1.546<br>-3.3 | 1.538<br>1.547<br>1.9 | 1.034<br>1.072<br>3.7 | 0.936<br>1.008<br>7.7 | | 1.349<br>1.449<br>7.4 | 1.266<br>1.415<br>11.8 |
| 9 | | | | | 0.874<br>0.956<br>9.4 | 1.313<br>1.342<br>2.2 | 1.542<br>1.595<br>3.4 | 1.787<br>1.871<br>4.7 | 1.729<br>1.863<br>7.8 | 1.483<br>1.572<br>6.0 | | | 0.860<br>0.953<br>10.8 | 1.132<br>1.257<br>11.0 |
| 10 | | | | | 1.043<br>1.076<br>3.2 | 1.439<br>1.455<br>1.1 | 1.661<br>1.685<br>1.4 | 1.846<br>1.934<br>4.8 | | | | | | |
| 11 | | | | | 1.619<br>1.590<br>-1.8 | 1.074<br>1.181<br>10.0 | 1.199<br>1.223<br>2.0 | 1.751<br>1.726<br>-1.4 | | | | | | |
| 12 | | | | | 1.855<br>1.899<br>2.4 | 1.219<br>1.302<br>6.8 | 1.133<br>1.192<br>5.2 | | 1.416<br>1.413<br>-0.2 | 0.878<br>0.951<br>8.3 | | | 0.948<br>0.966<br>1.9 | 0.615<br>0.715<br>16.3 |
| 13 | | | | | 2.076<br>2.194<br>5.7 | 1.808<br>1.894<br>4.8 | | | 0.921<br>0.998<br>8.4 | 1.152<br>1.166<br>1.2 | | | 0.660<br>0.730<br>10.6 | 0.867<br>0.937<br>8.1 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 0.945<br>1.006<br>6.5 | 0.618<br>0.747<br>20.9 |
| 17 | | | | | | | | | | | | | 0.708<br>0.837<br>18.2 | 0.945<br>1.074<br>13.7 |
| 18 | | | 1.266<br>1.342<br>6.0 | 0.873<br>0.956<br>9.5 | | | | | | | | | | |
| 19 | | | 0.811<br>0.888<br>9.5 | 1.107<br>1.088<br>-1.7 | | | | | | | | | | |

Planar Normalized Comparison at K=3

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.674<br>0.605<br>-10.2 | 0.649<br>0.562<br>-13.4 | 0.598<br>0.530<br>-11.4 | 0.567<br>0.506<br>-10.8 | 0.511<br>0.416<br>-18.6 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.883<br>0.823<br>-6.8 | 0.799<br>0.724<br>-9.4 | 0.745<br>0.677<br>-9.1 | 0.778<br>0.706<br>-9.3 | 0.758<br>0.695<br>-8.3 | 0.682<br>0.571<br>-16.3 | | | | |
| 3 | | | | | 0.963<br>0.847<br>-12.0 | 0.610<br>0.562<br>-7.9 | 0.593<br>0.539<br>-9.1 | 0.854<br>0.769<br>-10.0 | 0.934<br>0.865<br>-7.4 | 0.928<br>0.884<br>-4.7 | 0.903<br>0.812<br>-10.1 | 0.841<br>0.772<br>-8.2 | 0.712<br>0.597<br>-16.2 | |
| 4 | 0.848<br>0.774<br>-8.7 | 0.574<br>0.557<br>-3.0 | | | 0.899<br>0.809<br>-10.0 | 0.588<br>0.568<br>-3.4 | 0.582<br>0.557<br>-4.3 | 0.862<br>0.775<br>-10.1 | 0.974<br>0.915<br>-6.1 | 1.106<br>1.074<br>-2.9 | 1.173<br>1.162<br>-0.9 | 1.174<br>1.177<br>0.1 | 1.029<br>1.066<br>3.6 | 0.798<br>0.735<br>-7.9 |
| 5 | 0.647<br>0.644<br>-0.5 | 0.861<br>0.782<br>-9.2 | | | .0674<br>0.644<br>-4.5 | 0.859<br>0.786<br>-8.5 | 0.877<br>0.782<br>-10.8 | 0.671<br>0.644<br>-4.0 | 0.732<br>0.737<br>0.7 | 1.179<br>1.138<br>-3.5 | 1.333<br>1.330<br>-0.2 | 1.392<br>1.420<br>2.0 | 1.280<br>1.382<br>8.0 | 1.043<br>1.098<br>5.3 |
| 6 | | | | | 0.718<br>0.706<br>-1.7 | 0.935<br>0.873<br>-6.6 | 0.992<br>0.884<br>-10.9 | 0.761<br>0.748<br>-1.7 | 0.764<br>0.810<br>6.0 | 1.182<br>1.133<br>-4.1 | 1.298<br>1.305<br>0.5 | 1.425<br>1.464<br>2.7 | | |
| 7 | | | | | 1.045<br>1.032<br>-1.2 | 0.728<br>0.774<br>6.3 | 0.814<br>0.822<br>1.0 | 1.250<br>1.220<br>-2.4 | 1.265<br>1.260<br>-0.4 | 0.860<br>0.926<br>7.7 | 0.912<br>0.952<br>4.4 | 1.349<br>1.358<br>0.7 | | |
| 8 | | | | | 1.138<br>1.170<br>2.8 | 0.825<br>0.929<br>12.6 | 0.985<br>1.040<br>5.6 | 1.558<br>1.550<br>-0.5 | 1.494<br>1.557<br>4.2 | 1.031<br>1.058<br>2.6 | 0.885<br>0.944<br>6.7 | | 1.235<br>1.301<br>5.3 | 1.209<br>1.301<br>7.6 |
| 9 | | | | | 0.881<br>1.032<br>17.1 | 1.300<br>1.403<br>7.9 | 1.515<br>1.613<br>6.5 | 1.706<br>1.852<br>8.6 | 1.642<br>1.828<br>11.3 | 1.448<br>1.540<br>6.4 | | | 0.817<br>0.897<br>9.8 | 1.109<br>1.197<br>7.9 |
| 10 | | | | | 1.040<br>1.159<br>11.4 | 1.418<br>1.516<br>6.9 | 1.599<br>1.703<br>6.5 | 1.752<br>1.926<br>9.9 | | | | | | |
| 11 | | | | | 1.550<br>1.661<br>7.2 | 1.036<br>1.247<br>20.4 | 1.139<br>1.281<br>12.5 | 1.678<br>1.765<br>5.2 | | | | | | |
| 12 | | | | | 1.732<br>1.943<br>12.2 | 1.152<br>1.370<br>18.9 | 1.091<br>1.263<br>15.8 | | 1.383<br>1.504<br>8.7 | 0.867<br>1.016<br>17.2 | | | 0.995<br>1.059<br>6.4 | 0.649<br>0.777<br>19.7 |
| 13 | | | | | 1.923<br>2.205<br>14.7 | 1.715<br>1.922<br>12.1 | | | 0.915<br>1.096<br>19.8 | 1.118<br>1.265<br>13.1 | | | 0.696<br>0.818<br>17.5 | 0.928<br>1.037<br>11.7 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 0.967<br>1.062<br>9.8 | 0.642<br>0.780<br>21.5 |
| 17 | | | | | | | | | | | | | 0.710<br>0.836<br>17.7 | 0.955<br>1.067<br>11.7 |
| 18 | | | 1.267<br>1.403<br>10.7 | 0.886<br>1.032<br>16.5 | | | | | | | | | | |
| 19 | | | 0.811<br>0.929<br>14.5 | 1.152<br>1.170<br>1.6 | | | | | | | | | | |

Planar Normalized Comparison at K=5

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.693<br>0.663<br>-4.3 | 0.674<br>0.622<br>-7.7 | 0.630<br>0.592<br>-6.0 | 0.602<br>0.567<br>-5.8 | 0.543<br>0.462<br>-14.9 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.927<br>0.905<br>-2.4 | 0.851<br>0.797<br>-6.3 | 0.795<br>0.756<br>-4.9 | 0.826<br>0.788<br>-4.6 | 0.800<br>0.764<br>-4.5 | 0.711<br>0.615<br>-13.5 | | | | |
| 3 | | | | | 1.001<br>0.930<br>-7.1 | 0.652<br>0.626<br>-4.0 | 0.635<br>0.605<br>-4.7 | 0.900<br>0.851<br>-5.4 | 0.978<br>0.937<br>-4.2 | 0.966<br>0.930<br>-3.7 | 0.892<br>0.801<br>-10.2 | 0.818<br>0.734<br>-10.3 | 0.679<br>0.570<br>-16.1 | |
| 4 | 0.926<br>0.848<br>-8.4 | 0.637<br>0.623<br>-2.2 | | | 0.951<br>0.896<br>-5.8 | 0.651<br>0.641<br>-1.5 | 0.640<br>0.622<br>-2.8 | 0.916<br>0.848<br>-7.4 | 1.010<br>0.973<br>-3.7 | 1.114<br>1.096<br>-1.6 | 1.164<br>1.132<br>-2.7 | 1.138<br>1.105<br>-2.9 | 0.968<br>0.987<br>2.0 | 0.739<br>0.670<br>-9.3 |
| 5 | 0.704<br>0.689<br>-2.1 | 0.939<br>0.863<br>-8.1 | | | 0.736<br>0.734<br>-0.3 | 0.961<br>0.885<br>-7.9 | 0.950<br>0.865<br>-8.9 | 0.714<br>0.689<br>-3.5 | 0.786<br>0.765<br>-2.7 | 1.187<br>1.130<br>-4.8 | 1.307<br>1.254<br>-4.1 | 1.305<br>1.274<br>-2.4 | 1.196<br>1.210<br>1.2 | 0.967<br>0.997<br>3.1 |
| 6 | | | | | 0.771<br>0.784<br>1.7 | 1.005<br>0.952<br>-5.3 | 1.054<br>0.944<br>-10.4 | 0.805<br>0.770<br>-4.3 | 0.797<br>0.814<br>2.1 | 1.159<br>1.001<br>-13.6 | 1.257<br>1.211<br>-3.7 | 1.319<br>1.292<br>-2.0 | | |
| 7 | | | | | 1.084<br>1.071<br>-1.2 | 0.772<br>0.807<br>4.5 | 0.841<br>0.835<br>-0.7 | 1.240<br>1.180<br>-4.8 | 1.239<br>1.199<br>-3.2 | 0.861<br>0.892<br>3.6 | 0.881<br>0.898<br>1.9 | 1.266<br>1.200<br>-5.2 | | |
| 8 | | | | | 1.164<br>1.197<br>2.8 | 0.840<br>0.937<br>11.5 | 0.960<br>1.005<br>4.7 | 1.451<br>1.441<br>-0.7 | 1.402<br>1.433<br>2.2 | 0.994<br>0.987<br>-0.7 | 0.861<br>0.888<br>3.1 | | 1.182<br>1.170<br>-1.0 | 1.176<br>1.201<br>2.1 |
| 9 | | | | | 0.919<br>1.109<br>20.7 | 1.307<br>1.368<br>4.7 | 1.436<br>1.498<br>4.3 | 1.546<br>1.686<br>9.1 | 1.514<br>1.653<br>9.2 | 1.350<br>1.390<br>3.0 | | | 0.821<br>0.855<br>4.1 | 1.122<br>1.155<br>2.9 |
| 10 | | | | | 1.052<br>1.214<br>15.4 | 1.390<br>1.468<br>5.6 | 1.495<br>1.579<br>5.6 | 1.589<br>1.757<br>10.6 | | | | | | |
| 11 | | | | | 1.472<br>1.613<br>9.6 | 1.006<br>1.201<br>19.4 | 1.081<br>1.207<br>11.7 | 1.558<br>1.654<br>6.2 | | | | | | |
| 12 | | | | | 1.571<br>1.805<br>14.9 | 1.080<br>1.287<br>19.2 | 1.065<br>1.218<br>14.4 | | 1.390<br>1.501<br>8.0 | 0.896<br>1.035<br>15.5 | | | 1.034<br>1.128<br>9.1 | 0.690<br>0.834<br>20.9 |
| 13 | | | | | 1.686<br>1.997<br>18.4 | 1.541<br>1.779<br>15.4 | | | 1.034<br>1.194<br>15.5 | 1.221<br>1.325<br>8.5 | | | 0.767<br>0.912<br>18.9 | 1.015<br>1.138<br>12.1 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.005<br>1.088<br>8.3 | 0.689<br>0.804<br>16.7 |
| 17 | | | | | | | | | | | | | 0.755<br>0.824<br>9.1 | 1.004<br>1.068<br>6.4 |
| 18 | | | 1.293<br>1.368<br>5.8 | 0.953<br>1.109<br>16.4 | | | | | | | | | | |
| 19 | | | 0.855<br>0.937<br>9.6 | 1.207<br>1.197<br>-0.8 | | | | | | | | | | |

Planar Normalized Comparison at K=7

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.693<br>0.682<br>-1.6 | 0.678<br>0.654<br>-3.5 | 0.664<br>0.634<br>-4.5 | 0.632<br>0.610<br>-3.5 | 0.569<br>0.499<br>-12.3 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.934<br>0.947<br>1.4 | 0.881<br>0.870<br>-1.2 | 0.841<br>0.849<br>1.0 | 0.878<br>0.880<br>0.2 | 0.828<br>0.844<br>1.9 | 0.720<br>0.646<br>-10.3 | | | | |
| 3 | | | | | 1.017<br>0.976<br>-4.0 | 0.703<br>0.696<br>-1.0 | 0.701<br>0.683<br>-2.6 | 0.991<br>0.951<br>-4.0 | 1.029<br>1.020<br>-0.9 | 0.989<br>0.977<br>-1.2 | 0.858<br>0.789<br>-8.0 | 0.772<br>0.692<br>-10.4 | 0.639<br>0.524<br>-18.0 | |
| 4 | 1.013<br>0.955<br>-5.7 | 0.727<br>0.718<br>-1.2 | | | 1.068<br>1.033<br>-3.3 | 0.750<br>0.746<br>-0.5 | 0.733<br>0.718<br>-2.0 | 0.997<br>0.956<br>-4.1 | 1.062<br>1.055<br>-0.7 | 1.112<br>1.130<br>1.6 | 1.099<br>1.108<br>0.8 | 1.036<br>1.035<br>-0.1 | 0.885<br>0.898<br>1.5 | 0.659<br>0.601<br>-8.8 |
| 5 | 0.786<br>0.774<br>-1.5 | 1.076<br>0.985<br>-8.5 | | | 1.213<br>1.158<br>-4.5 | 1.140<br>1.067<br>-6.4 | 1.078<br>0.985<br>-8.6 | 0.789<br>0.772<br>-2.2 | 0.803<br>0.827<br>3.0 | 1.172<br>1.142<br>-2.6 | 1.203<br>1.202<br>-0.1 | 1.143<br>1.159<br>1.4 | 1.065<br>1.073<br>0.8 | 0.869<br>0.891<br>2.5 |
| 6 | | | | | 1.252<br>1.200<br>-4.2 | 1.155<br>1.108<br>-4.1 | 1.118<br>1.026<br>-8.2 | 0.828<br>0.811<br>-2.1 | 0.793<br>0.833<br>5.0 | 1.123<br>1.081<br>-3.7 | 1.157<br>1.144<br>-1.1 | 1.150<br>1.163<br>1.1 | | |
| 7 | | | | | 1.201<br>1.168<br>-2.7 | 0.853<br>0.860<br>0.8 | 0.855<br>0.837<br>-2.1 | 1.151<br>1.093<br>-5.0 | 1.121<br>1.096<br>-2.2 | 0.821<br>0.842<br>2.6 | 0.825<br>0.841<br>1.9 | 1.122<br>1.095<br>-2.4 | | |
| 8 | | | | | 1.230<br>1.237<br>0.6 | 0.853<br>0.923<br>8.2 | 0.894<br>0.923<br>3.2 | 1.235<br>1.231<br>-0.3 | 1.198<br>1.220<br>1.8 | 0.910<br>0.887<br>-2.5 | 0.826<br>0.830<br>0.5 | | 1.090<br>1.098<br>0.7 | 1.102<br>1.134<br>2.9 |
| 9 | | | | | 1.314<br>1.418<br>7.9 | 1.293<br>1.322<br>2.2 | 1.262<br>1.307<br>3.6 | 1.288<br>1.358<br>5.4 | 1.270<br>1.334<br>5.0 | 1.208<br>1.217<br>0.7 | | | 0.809<br>0.850<br>5.1 | 1.102<br>1.129<br>2.5 |
| 10 | | | | | 1.349<br>1.482<br>9.9 | 1.306<br>1.362<br>4.3 | 1.310<br>1.338<br>2.1 | 1.313<br>1.395<br>6.2 | | | | | | |
| 11 | | | | | 1.335<br>1.427<br>6.9 | 0.931<br>1.042<br>11.9 | 0.945<br>1.030<br>9.0 | 1.300<br>1.375<br>5.8 | | | | | | |
| 12 | | | | | 1.287<br>1.440<br>11.9 | 0.915<br>1.067<br>16.6 | 0.940<br>1.049<br>11.6 | | 1.300<br>1.402<br>7.8 | 0.895<br>0.997<br>11.4 | | | 1.186<br>1.253<br>5.6 | 0.791<br>0.884<br>11.9 |
| 13 | | | | | 1.326<br>1.527<br>15.2 | 1.275<br>1.421<br>11.5 | | | 1.345<br>1.498<br>11.4 | 1.292<br>1.368<br>5.9 | | | 1.272<br>1.388<br>9.1 | 1.205<br>1.266<br>5.1 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.076<br>1.121<br>4.2 | 0.735<br>0.826<br>12.4 |
| 17 | | | | | | | | | | | | | 0.808<br>0.847<br>4.8 | 1.059<br>1.069<br>0.9 |
| 18 | | | 1.283<br>1.322<br>3.0 | 1.342<br>1.418<br>5.7 | | | | | | | | | | |
| 19 | | | 0.864<br>0.923<br>6.8 | 1.249<br>1.237<br>-1.0 | | | | | | | | | | |

Planar Normalized Comparison at K=9

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.703<br>0.688<br>-2.1 | 0.692<br>0.667<br>-3.6 | 0.685<br>0.652<br>-4.8 | 0.640<br>0.630<br>-1.6 | 0.596<br>0.519<br>-12.9 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.936<br>0.977<br>4.4 | 0.919<br>0.914<br>-0.5 | 0.890<br>0.905<br>1.7 | 0.917<br>0.945<br>3.1 | 0.872<br>0.896<br>2.8 | 0.714<br>0.662<br>-7.3 | | | | |
| 3 | | | | | 1.042<br>1.030<br>-1.2 | 0.745<br>0.763<br>2.4 | 0.765<br>0.765<br>0.0 | 1.035<br>1.051<br>1.5 | 1.070<br>1.100<br>2.8 | 0.987<br>1.011<br>2.4 | 0.834<br>0.755<br>-9.5 | 0.722<br>0.644<br>-10.8 | 0.604<br>0.491<br>-18.7 | |
| 4 | 1.151<br>1.131<br>-1.7 | 0.843<br>0.829<br>-1.7 | | | 1.104<br>1.118<br>1.3 | 0.815<br>0.832<br>2.1 | 0.823<br>0.829<br>0.7 | 1.144<br>1.132<br>-1.0 | 1.153<br>1.204<br>4.4 | 1.114<br>1.175<br>5.5 | 1.042<br>1.092<br>4.8 | 0.976<br>0.986<br>1.0 | 0.834<br>0.848<br>1.7 | 0.611<br>0.548<br>-10.3 |
| 5 | 1.258<br>1.223<br>-2.8 | 1.210<br>1.164<br>-3.8 | | | 1.285<br>1.279<br>-0.5 | 1.210<br>1.185<br>-2.1 | 1.186<br>1.165<br>-1.8 | 1.218<br>1.223<br>0.4 | 1.207<br>1.256<br>4.1 | 1.195<br>1.211<br>1.3 | 1.130<br>1.152<br>1.9 | 1.065<br>1.081<br>1.5 | 0.979<br>0.994<br>1.5 | 0.826<br>0.834<br>1.0 |
| 6 | | | | | 1.290<br>1.283<br>-0.5 | 1.204<br>1.189<br>-1.2 | 1.213<br>1.165<br>-4.0 | 1.229<br>1.217<br>-1.0 | 1.212<br>1.218<br>0.5 | 1.134<br>1.137<br>0.3 | 1.102<br>1.097<br>-0.5 | 1.083<br>1.088<br>0.5 | | |
| 7 | | | | | 1.156<br>1.143<br>-1.1 | 0.860<br>0.865<br>0.6 | 0.867<br>0.856<br>-1.3 | 1.139<br>1.105<br>-3.0 | 1.113<br>1.100<br>-1.2 | 0.825<br>0.844<br>2.3 | 0.792<br>0.830<br>4.8 | 1.067<br>1.050<br>-1.6 | | |
| 8 | | | | | 1.134<br>1.124<br>-0.9 | 0.836<br>0.863<br>3.2 | 0.820<br>0.857<br>4.5 | 1.122<br>1.087<br>-3.1 | 1.081<br>1.084<br>0.3 | 0.862<br>0.846<br>-1.9 | 0.827<br>0.834<br>0.8 | | 1.127<br>1.126<br>-0.1 | 1.097<br>1.098<br>0.1 |
| 9 | | | | | 1.205<br>1.250<br>3.7 | 1.172<br>1.144<br>-2.4 | 1.138<br>1.119<br>-1.7 | 1.135<br>1.156<br>1.9 | 1.128<br>1.154<br>2.3 | 1.116<br>1.107<br>-0.8 | | | 1.190<br>1.210<br>1.7 | 1.133<br>1.154<br>1.9 |
| 10 | | | | | 1.178<br>1.243<br>5.5 | 1.157<br>1.139<br>-1.6 | 1.154<br>1.115<br>-3.4 | 1.139<br>1.153<br>1.2 | | | | | | |
| 11 | | | | | 1.110<br>1.112<br>0.2 | 0.832<br>0.854<br>2.6 | 0.843<br>0.845<br>0.2 | 1.086<br>1.082<br>-0.4 | | | | | | |
| 12 | | | | | 1.048<br>1.087<br>3.7 | 0.803<br>0.842<br>4.9 | 0.827<br>0.851<br>2.9 | | 1.114<br>1.116<br>0.2 | 0.857<br>0.887<br>3.5 | | | 1.199<br>1.236<br>3.1 | 0.839<br>0.873<br>4.1 |
| 13 | | | | | 1.099<br>1.144<br>4.1 | 1.085<br>1.107<br>2.0 | | | 1.202<br>1.263<br>5.1 | 1.195<br>1.200<br>0.4 | | | 1.321<br>1.391<br>5.3 | 1.213<br>1.224<br>0.9 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.168<br>1.175<br>0.6 | 0.799<br>0.841<br>5.3 |
| 17 | | | | | | | | | | | | | 1.197<br>1.212<br>1.3 | 1.131<br>1.119<br>-1.1 |
| 18 | | | 1.148<br>1.144<br>-0.3 | 1.217<br>1.250<br>2.7 | | | | | | | | | | |
| 19 | | | 0.826<br>0.863<br>4.5 | 1.127<br>1.124<br>-0.3 | | | | | | | | | | |

Planar Normalized Comparison at K=11

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.737<br>0.695<br>-5.7 | 0.719<br>0.678<br>-5.7 | 0.696<br>0.664<br>-4.6 | 0.672<br>0.638<br>-5.1 | 0.626<br>0.531<br>-15.2 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.977<br>1.029<br>5.3 | 0.931<br>0.978<br>5.0 | 0.924<br>0.971<br>5.1 | 0.936<br>1.000<br>6.8 | 0.885<br>0.930<br>5.1 | 0.733<br>0.652<br>-11.1 | | | | |
| 3 | | | | | 1.087<br>1.110<br>2.1 | 0.799<br>0.859<br>7.5 | 0.802<br>0.857<br>6.9 | 1.059<br>1.124<br>6.1 | 1.069<br>1.125<br>5.2 | 0.976<br>1.006<br>3.1 | 0.830<br>0.722<br>-13.0 | 0.713<br>0.606<br>-15.0 | 0.612<br>0.460<br>-24.8 | |
| 4 | 1.188<br>1.219<br>2.6 | 0.881<br>0.932<br>5.8 | | | 1.147<br>1.201<br>4.7 | 0.846<br>0.929<br>9.8 | 0.869<br>0.934<br>7.5 | 1.187<br>1.217<br>2.5 | 1.178<br>1.237<br>5.0 | 1.103<br>1.149<br>4.2 | 1.013<br>1.041<br>2.8 | 0.931<br>0.934<br>0.3 | 0.802<br>0.805<br>0.4 | 0.599<br>0.513<br>-14.4 |
| 5 | 1.339<br>1.343<br>0.3 | 1.246<br>1.250<br>0.3 | | | 1.271<br>1.331<br>4.7 | 1.219<br>1.248<br>2.4 | 1.226<br>1.249<br>1.9 | 1.283<br>1.345<br>4.8 | 1.264<br>1.331<br>5.3 | 1.174<br>1.185<br>0.9 | 1.084<br>1.094<br>0.9 | 1.027<br>1.034<br>0.7 | 0.950<br>0.948<br>-0.2 | 0.780<br>0.791<br>1.4 |
| 6 | | | | | 1.274<br>1.297<br>1.8 | 1.204<br>1.211<br>0.6 | 1.234<br>1.213<br>-1.7 | 1.298<br>1.304<br>0.5 | 1.279<br>1.281<br>0.2 | 1.132<br>1.121<br>-1.0 | 1.072<br>1.058<br>-1.3 | 1.080<br>1.054<br>-2.4 | | |
| 7 | | | | | 1.133<br>1.119<br>-1.2 | 0.843<br>0.880<br>4.4 | 0.895<br>0.876<br>-2.1 | 1.170<br>1.122<br>-4.1 | 1.144<br>1.112<br>-2.8 | 0.838<br>0.850<br>1.4 | 0.787<br>0.826<br>5.0 | 1.058<br>1.041<br>-1.6 | | |
| 8 | | | | | 1.098<br>1.075<br>-2.1 | 0.795<br>0.833<br>4.8 | 0.797<br>0.828<br>3.9 | 1.113<br>1.065<br>-4.3 | 1.081<br>1.068<br>-1.2 | 0.856<br>0.832<br>-2.8 | 0.848<br>0.841<br>-0.8 | | 1.160<br>1.120<br>-3.4 | 1.069<br>1.058<br>-1.0 |
| 9 | | | | | 1.144<br>1.152<br>0.7 | 1.129<br>1.071<br>-5.1 | 1.084<br>1.057<br>-2.5 | 1.113<br>1.101<br>-1.1 | 1.128<br>1.106<br>-2.0 | 1.134<br>1.081<br>-4.7 | | | 1.242<br>1.233<br>-0.7 | 1.133<br>1.123<br>-0.9 |
| 10 | | | | | 1.136<br>1.130<br>-0.5 | 1.096<br>1.049<br>-4.3 | 1.114<br>1.042<br>-6.5 | 1.126<br>1.079<br>-4.2 | | | | | | |
| 11 | | | | | 1.047<br>0.999<br>-4.6 | 0.788<br>0.775<br>-1.6 | 0.812<br>0.774<br>-4.7 | 1.073<br>1.006<br>-6.2 | | | | | | |
| 12 | | | | | 0.982<br>0.967<br>-1.5 | 0.749<br>0.754<br>0.7 | 0.784<br>0.771<br>-1.7 | | 1.069<br>1.028<br>-3.8 | 0.818<br>0.813<br>-0.6 | | | 1.167<br>1.118<br>-4.2 | 0.830<br>0.851<br>2.5 |
| 13 | | | | | 1.035<br>1.013<br>-2.1 | 1.025<br>0.993<br>-3.1 | | | 1.133<br>1.134<br>0.1 | 1.138<br>1.085<br>-4.7 | | | 1.256<br>1.230<br>-2.1 | 1.202<br>1.129<br>-6.1 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | 1.148<br>1.114<br>-3.0 | 0.820<br>0.844<br>2.9 |
| 16 | | | | | | | | | | | | | 1.240<br>1.229<br>-0.9 | 1.138<br>1.097<br>-3.6 |
| 17 | | | | | | | | | | | | | | |
| 18 | | | 1.103<br>1.071<br>-2.9 | 1.156<br>1.152<br>-0.3 | | | | | | | | | | |
| 19 | | | 0.780<br>0.833<br>6.8 | 1.106<br>1.075<br>-2.8 | | | | | | | | | | |

Planar Normalized Comparison at K=13

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.749<br>0.681<br>-9.1 | 0.734<br>0.674<br>-8.2 | 0.715<br>0.654<br>-8.5 | 0.669<br>0.608<br>-9.1 | 0.614<br>0.496<br>-19.2 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.982<br>1.044<br>6.3 | 0.980<br>1.042<br>6.3 | 0.936<br>1.024<br>9.4 | 0.909<br>0.982<br>8.0 | 0.837<br>0.878<br>4.9 | 0.697<br>0.601<br>-13.8 | | | | |
| 3 | | | | | 1.143<br>1.216<br>6.4 | 1.178<br>1.270<br>7.8 | 1.127<br>1.248<br>10.7 | 1.072<br>1.158<br>8.0 | 1.006<br>1.066<br>6.0 | 0.929<br>0.928<br>-0.1 | 0.785<br>0.657<br>-16.3 | 0.668<br>0.545<br>-18.4 | 0.578<br>0.412<br>-28.7 | |
| 4 | 1.191<br>1.247<br>4.7 | 1.250<br>1.326<br>6.1 | | | 1.202<br>1.298<br>8.0 | 1.217<br>1.341<br>10.2 | 1.240<br>1.330<br>7.3 | 1.198<br>1.247<br>4.1 | 1.093<br>1.180<br>8.0 | 1.018<br>1.072<br>5.3 | 0.916<br>0.954<br>4.1 | 0.852<br>0.853<br>0.1 | 0.727<br>0.728<br>0.1 | 0.557<br>0.462<br>-17.1 |
| 5 | 1.265<br>1.299<br>2.7 | 1.262<br>1.297<br>2.8 | | | 1.253<br>1.328<br>6.0 | 1.254<br>1.306<br>4.1 | 1.249<br>1.295<br>3.7 | 1.241<br>1.302<br>4.9 | 1.187<br>1.255<br>5.7 | 1.085<br>1.121<br>3.3 | 1.013<br>1.028<br>1.5 | 0.946<br>0.966<br>2.1 | 0.861<br>0.867<br>0.7 | 0.722<br>0.712<br>-0.7 |
| 6 | | | | | 1.227<br>1.257<br>2.4 | 1.181<br>1.199<br>1.5 | 1.197<br>1.199<br>0.2 | 1.241<br>1.254<br>1.0 | 1.225<br>1.224<br>-0.1 | 1.134<br>1.105<br>-2.6 | 1.051<br>1.039<br>-1.1 | 1.026<br>1.006<br>-1.9 | | |
| 7 | | | | | 1.099<br>1.094<br>-0.5 | 0.817<br>0.854<br>4.5 | 0.863<br>0.854<br>-1.0 | 1.151<br>1.109<br>-3.6 | 1.155<br>1.120<br>-3.0 | 1.012<br>0.890<br>-12.1 | 0.955<br>0.859<br>-10.1 | 1.067<br>1.025<br>-3.9 | | |
| 8 | | | | | 1.067<br>1.042<br>-2.3 | 0.774<br>0.804<br>3.9 | 0.785<br>0.808<br>2.9 | 1.095<br>1.055<br>-3.7 | 1.109<br>1.082<br>-2.4 | 1.015<br>0.876<br>-13.7 | 0.999<br>0.876<br>-12.3 | | 1.060<br>1.053<br>-0.7 | 0.967<br>0.971<br>0.4 |
| 9 | | | | | 1.088<br>1.085<br>-0.3 | 1.076<br>1.032<br>-4.1 | 1.054<br>1.023<br>-2.9 | 1.106<br>1.075<br>-2.8 | 1.107<br>1.091<br>1.5 | 1.123<br>1.084<br>-3.5 | | | 1.143<br>1.129<br>-1.2 | 1.005<br>1.025<br>2.0 |
| 10 | | | | | 1.078<br>1.061<br>-1.6 | 1.051<br>1.004<br>-4.5 | 1.065<br>1.002<br>-5.9 | 1.076<br>1.042<br>-3.2 | | | | | | |
| 11 | | | | | 1.024<br>0.958<br>-6.4 | 0.761<br>0.743<br>-2.4 | 0.777<br>0.741<br>-4.6 | 1.028<br>0.973<br>-5.4 | | | | | | |
| 12 | | | | | 0.973<br>0.931<br>-4.3 | 0.722<br>0.719<br>-0.4 | 0.751<br>0.737<br>-1.9 | | 1.030<br>0.978<br>-5.0 | 0.786<br>0.763<br>-2.9 | | | 1.154<br>1.107<br>-4.1 | 1.156<br>1.136<br>-1.7 |
| 13 | | | | | 1.000<br>0.965<br>-3.5 | 0.988<br>0.943<br>-4.6 | | | 1.064<br>1.047<br>-1.6 | 1.056<br>1.013<br>-4.1 | | | 1.192<br>1.145<br>-3.9 | 1.173<br>1.119<br>-4.6 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.139<br>1.109<br>-2.6 | 1.149<br>1.124<br>-2.2 |
| 17 | | | | | | | | | | | | | 1.183<br>1.148<br>-3.0 | 1.088<br>1.064<br>-2.2 |
| 18 | | | 1.065<br>1.032<br>-3.1 | 1.114<br>1.085<br>-2.6 | | | | | | | | | | |
| 19 | | | 0.757<br>0.804<br>6.2 | 1.056<br>1.042<br>-1.3 | | | | | | | | | | |

Planar Normalized Comparison at K=15

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.732<br>0.639<br>-12.7 | 0.715<br>0.634<br>-11.3 | 0.695<br>0.613<br>-11.8 | 0.638<br>0.562<br>-11.9 | 0.599<br>0.454<br>-24.2 | GAMMA SCAN<br>SIMULATE<br>△% | | | | |
| 2 | | | | | 0.941<br>0.983<br>4.5 | 0.938<br>0.993<br>5.9 | 0.915<br>0.969<br>5.9 | 0.888<br>0.918<br>3.4 | 0.796<br>0.812<br>2.0 | 0.684<br>0.554<br>-19.0 | | | | |
| 3 | | | | | 1.107<br>1.166<br>5.3 | 1.185<br>1.233<br>4.1 | 1.130<br>1.207<br>6.8 | 1.024<br>1.089<br>6.3 | 0.962<br>0.983<br>2.2 | 0.868<br>0.859<br>-1.0 | 0.747<br>0.608<br>-18.6 | 0.629<br>0.501<br>-20.3 | 0.556<br>0.376<br>-32.4 | |
| 4 | 1.155<br>1.191<br>3.1 | 1.279<br>1.298<br>1.5 | | | 1.169<br>1.260<br>7.8 | 1.246<br>1.318<br>5.8 | 1.273<br>1.302<br>2.3 | 1.159<br>1.188<br>2.5 | 1.052<br>1.101<br>4.7 | 0.977<br>0.996<br>1.9 | 0.874<br>0.883<br>1.0 | 0.802<br>0.794<br>-1.0 | 0.683<br>0.675<br>-1.2 | 0.533<br>0.423<br>-20.6 |
| 5 | 1.223<br>1.223<br>0.0 | 1.219<br>1.262<br>3.5 | | | 1.239<br>1.278<br>3.1 | 1.219<br>1.275<br>4.6 | 1.212<br>1.259<br>3.9 | 1.195<br>1.225<br>2.5 | 1.141<br>1.169<br>2.5 | 1.059<br>1.086<br>2.5 | 0.972<br>0.996<br>2.5 | 0.895<br>0.912<br>1.9 | 0.808<br>0.804<br>-0.5 | 0.671<br>0.665<br>-0.9 |
| 6 | | | | | 1.194<br>1.236<br>3.5 | 1.153<br>1.201<br>4.2 | 1.189<br>1.199<br>0.8 | 1.220<br>1.209<br>-0.9 | 1.197<br>1.197<br>0.0 | 1.127<br>1.145<br>1.6 | 1.075<br>1.081<br>0.6 | 0.991<br>0.994<br>0.3 | | |
| 7 | | | | | 1.120<br>1.127<br>0.6 | 0.877<br>0.912<br>4.0 | 0.887<br>0.911<br>2.7 | 1.175<br>1.156<br>-1.6 | 1.176<br>1.192<br>1.4 | 1.222<br>1.258<br>2.9 | 1.194<br>1.211<br>1.4 | 1.071<br>1.066<br>-0.5 | | |
| 8 | | | | | 1.085<br>1.091<br>0.6 | 0.827<br>0.874<br>5.7 | 0.810<br>0.876<br>8.1 | 1.128<br>1.116<br>-1.1 | 1.148<br>1.174<br>2.3 | 1.229<br>1.258<br>2.4 | 1.216<br>1.238<br>1.8 | | 1.039<br>1.018<br>-2.0 | 0.911<br>0.912<br>0.1 |
| 9 | | | | | 1.104<br>1.113<br>0.8 | 1.101<br>1.081<br>-1.8 | 1.094<br>1.074<br>-1.8 | 1.113<br>1.108<br>-0.4 | 1.125<br>1.131<br>0.5 | 1.158<br>1.158<br>0.0 | | | 1.096<br>1.067<br>-2.6 | 0.962<br>0.968<br>-0.6 |
| 10 | | | | | 1.113<br>1.098<br>-1.3 | 1.085<br>1.057<br>-2.6 | 1.107<br>1.052<br>-5.0 | 1.106<br>1.075<br>-2.8 | | | | | | |
| 11 | | | | | 1.067<br>1.027<br>-3.7 | 0.812<br>0.814<br>0.2 | 0.864<br>0.812<br>-6.0 | 1.073<br>1.031<br>-3.9 | | | | | | |
| 12 | | | | | 1.023<br>1.000<br>-2.2 | 0.821<br>0.792<br>-3.5 | 0.859<br>0.804<br>-6.4 | | 1.054<br>1.030<br>-2.3 | 0.825<br>0.818<br>-0.8 | | | 1.138<br>1.067<br>-6.2 | 1.183<br>1.105<br>-6.6 |
| 13 | | | | | 1.043<br>1.008<br>-3.4 | 1.035<br>0.997<br>-3.7 | | | 1.078<br>1.061<br>-1.6 | 1.076<br>1.037<br>-3.6 | | | 1.143<br>1.080<br>-5.5 | 1.109<br>1.037<br>-6.5 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.106<br>1.071<br>-3.2 | 1.167<br>1.100<br>-5.7 |
| 17 | | | | | | | | | | | | | 1.135<br>1.083<br>-4.6 | 1.059<br>1.017<br>-4.0 |
| 18 | | | 1.089<br>1.081<br>-0.7 | 1.120<br>1.113<br>-0.6 | | | | | | | | | | |
| 19 | | | 0.785<br>0.874<br>11.3 | 1.093<br>1.091<br>-0.2 | | | | | | | | | | |

Planar Normalized Comparison at K=17

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.707<br>0.582<br>-17.7 | 0.695<br>0.576<br>-17.1 | 0.693<br>0.556<br>-19.8 | 0.598<br>0.510<br>-14.7 | 0.568<br>0.412<br>-27.5 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.872<br>0.882<br>1.1 | 0.883<br>0.888<br>0.6 | 0.823<br>0.868<br>5.5 | 0.796<br>0.831<br>4.4 | 0.733<br>0.738<br>0.7 | 0.642<br>0.510<br>-20.6 | | | | |
| 3 | | | | | 1.054<br>1.049<br>-0.5 | 1.095<br>1.088<br>-0.6 | 1.075<br>1.069<br>-0.6 | 0.942<br>0.980<br>4.0 | 0.885<br>0.891<br>0.7 | 0.806<br>0.791<br>-1.9 | 0.708<br>0.565<br>-20.2 | 0.600<br>0.465<br>-22.5 | 0.519<br>0.347<br>-33.1 | |
| 4 | 1.024<br>1.084<br>5.9 | 1.125<br>1.165<br>3.6 | | | 1.088<br>1.143<br>5.1 | 1.100<br>1.182<br>7.5 | 1.113<br>1.164<br>4.6 | 1.040<br>1.084<br>4.2 | 0.963<br>1.006<br>4.5 | 0.889<br>0.918<br>3.3 | 0.796<br>0.815<br>2.4 | 0.733<br>0.739<br>0.8 | 0.624<br>0.626<br>0.3 | 0.489<br>0.392<br>-19.8 |
| 5 | 1.113<br>1.142<br>2.6 | 1.111<br>1.176<br>5.9 | | | 1.123<br>1.182<br>5.3 | 1.130<br>1.187<br>5.0 | 1.179<br>1.177<br>-0.2 | 1.096<br>1.141<br>4.1 | 1.040<br>1.089<br>4.7 | 0.973<br>1.015<br>4.3 | 0.911<br>0.934<br>2.5 | 0.837<br>0.847<br>1.2 | 0.782<br>0.744<br>-4.9 | 0.626<br>0.619<br>1.1 |
| 6 | | | | | 1.191<br>1.200<br>0.8 | 1.153<br>1.210<br>4.9 | 1.202<br>1.203<br>0.1 | 1.145<br>1.177<br>2.8 | 1.111<br>1.144<br>3.0 | 1.061<br>1.099<br>3.6 | 0.985<br>1.030<br>4.6 | 0.908<br>0.939<br>3.4 | | |
| 7 | | | | | 1.131<br>1.203<br>6.4 | 1.192<br>1.287<br>8.0 | 1.249<br>1.287<br>3.0 | 1.196<br>1.197<br>0.1 | 1.154<br>1.178<br>2.1 | 1.197<br>1.204<br>0.6 | 1.169<br>1.153<br>-1.4 | 0.988<br>1.108<br>3.0 | | |
| 8 | | | | | 1.137<br>1.189<br>4.6 | 1.224<br>1.275<br>4.2 | 1.250<br>1.270<br>1.6 | 1.183<br>1.181<br>-0.2 | 1.121<br>1.170<br>4.4 | 1.177<br>1.217<br>3.4 | 1.211<br>1.186<br>-2.1 | | 0.948<br>0.969<br>2.2 | 0.861<br>0.859<br>-0.2 |
| 9 | | | | | 1.138<br>1.163<br>-2.1 | 1.170<br>1.180<br>0.9 | 1.170<br>1.171<br>0.1 | 1.138<br>1.143<br>0.4 | 1.128<br>1.139<br>1.0 | 1.137<br>1.151<br>1.2 | | | 1.023<br>1.018<br>-0.5 | 0.899<br>0.918<br>2.1 |
| 10 | | | | | 1.138<br>1.148<br>0.9 | 1.155<br>1.162<br>0.6 | 1.165<br>1.149<br>-1.4 | 1.182<br>1.126<br>-4.7 | | | | | | |
| 11 | | | | | 1.168<br>1.140<br>-2.4 | 1.224<br>1.199<br>2.1 | 1.228<br>1.195<br>-2.7 | 1.116<br>1.124<br>0.7 | | | | | | |
| 12 | | | | | 1.119<br>1.113<br>-0.5 | 1.251<br>1.178<br>-5.8 | 1.259<br>1.180<br>-6.3 | | 1.105<br>1.115<br>0.9 | 1.200<br>1.190<br>-0.8 | | | 1.071<br>1.037<br>-3.2 | 1.078<br>1.039<br>-3.6 |
| 13 | | | | | 1.100<br>1.082<br>-1.6 | 1.099<br>1.097<br>-0.2 | | | 1.110<br>1.097<br>-1.2 | 1.120<br>1.115<br>-0.4 | | | 1.075<br>1.038<br>-3.4 | 1.030<br>0.986<br>-4.3 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.064<br>1.040<br>-2.3 | 1.071<br>1.037<br>-3.2 |
| 17 | | | | | | | | | | | | | 1.059<br>1.039<br>-1.9 | 0.992<br>0.970<br>-2.2 |
| 18 | | | 1.164<br>1.180<br>1.4 | 1.170<br>1.163<br>-0.6 | | | | | | | | | | |
| 19 | | | 1.208<br>1.275<br>5.5 | 1.159<br>1.189<br>2.6 | | | | | | | | | | |

Planar Normalized Comparison at K=19

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.680<br>0.558<br>-17.9 | 0.656<br>0.553<br>-15.7 | 0.644<br>0.532<br>-17.4 | 0.598<br>0.488<br>-18.4 | 0.573<br>0.396<br>-30.9 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.824<br>0.842<br>2.2 | 0.821<br>0.857<br>4.4 | 0.787<br>0.826<br>5.0 | 0.788<br>0.799<br>1.4 | 0.714<br>0.712<br>-0.3 | 0.659<br>0.495<br>-24.9 | | | | |
| 3 | | | | | 0.998<br>1.015<br>1.7 | 1.017<br>1.030<br>1.3 | 0.992<br>1.021<br>2.9 | 0.917<br>0.939<br>2.4 | 0.864<br>0.868<br>0.5 | 0.802<br>0.773<br>-3.6 | 0.725<br>0.550<br>-24.1 | 0.609<br>0.454<br>-25.5 | 0.533<br>0.338<br>-36.6 | |
| 4 | 1.017<br>1.051<br>3.3 | 1.104<br>1.122<br>1.6 | | | 1.041<br>1.108<br>6.4 | 1.109<br>1.137<br>2.5 | 1.102<br>1.114<br>1.1 | 1.028<br>1.059<br>3.0 | 0.949<br>0.978<br>3.1 | 0.890<br>0.903<br>1.5 | 0.800<br>0.794<br>-0.8 | 0.740<br>0.726<br>-1.9 | 0.629<br>0.613<br>-2.5 | 0.508<br>0.385<br>-24.2 |
| 5 | 1.116<br>1.124<br>0.7 | 1.108<br>1.153<br>4.1 | | | 1.115<br>1.159<br>3.9 | 1.104<br>1.163<br>5.3 | 1.101<br>1.158<br>5.2 | 1.092<br>1.119<br>2.5 | 1.049<br>1.074<br>2.4 | 0.975<br>0.999<br>2.5 | 0.908<br>0.926<br>2.0 | 0.829<br>0.831<br>0.2 | 0.742<br>0.737<br>0.7 | 0.619<br>0.608<br>-1.8 |
| 6 | | | | | 1.170<br>1.199<br>2.5 | 1.138<br>1.217<br>6.9 | 1.150<br>1.205<br>4.8 | 1.170<br>1.177<br>0.6 | 1.112<br>1.134<br>2.0 | 1.075<br>1.096<br>2.0 | 0.995<br>1.019<br>2.4 | 0.933<br>0.935<br>0.2 | | |
| 7 | | | | | 1.213<br>1.253<br>3.3 | 1.238<br>1.309<br>5.7 | 1.257<br>1.303<br>3.7 | 1.210<br>1.216<br>0.5 | 1.162<br>1.189<br>2.3 | 1.132<br>1.176<br>3.9 | 1.119<br>1.129<br>0.9 | 1.005<br>1.011<br>0.6 | | |
| 8 | | | | | 1.196<br>1.252<br>4.7 | 1.288<br>1.315<br>2.1 | 1.261<br>1.296<br>2.8 | 1.211<br>1.217<br>0.5 | 1.148<br>1.184<br>3.1 | 1.181<br>1.203<br>1.9 | 1.147<br>1.163<br>1.4 | | 0.956<br>0.970<br>1.5 | 0.853<br>0.864<br>1.3 |
| 9 | | | | | 1.185<br>1.220<br>2.7 | 1.199<br>1.228<br>2.4 | 1.183<br>1.215<br>2.7 | 1.162<br>1.177<br>1.3 | 1.154<br>1.167<br>1.1 | 1.136<br>1.161<br>2.2 | | | 1.031<br>1.030<br>-0.1 | 0.906<br>0.924<br>2.0 |
| 10 | | | | | 1.188<br>1.203<br>1.3 | 1.198<br>1.218<br>1.7 | 1.215<br>1.200<br>-1.2 | 1.175<br>1.173<br>-0.2 | | | | | | |
| 11 | | | | | 1.216<br>1.214<br>-0.2 | 1.245<br>1.272<br>2.2 | 1.252<br>1.266<br>1.1 | 1.199<br>1.183<br>-1.3 | | | | | | |
| 12 | | | | | 1.177<br>1.187<br>0.8 | 1.272<br>1.257<br>-1.2 | 1.261<br>1.255<br>-0.5 | | 1.169<br>1.179<br>0.9 | 1.249<br>1.244<br>-0.4 | | | 1.093<br>1.079<br>-1.3 | 1.091<br>1.054<br>-3.4 |
| 13 | | | | | 1.171<br>1.155<br>-1.4 | 1.177<br>1.164<br>-1.1 | | | 1.162<br>1.160<br>-0.2 | 1.162<br>1.162<br>0.0 | | | 1.092<br>1.066<br>-2.4 | 1.040<br>1.012<br>-2.7 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.105<br>1.080<br>-2.3 | 1.101<br>1.046<br>-5.0 |
| 17 | | | | | | | | | | | | | 1.109<br>1.064<br>-4.1 | 1.006<br>0.982<br>-2.4 |
| 18 | | | 1.202<br>1.228<br>2.2 | 1.221<br>1.220<br>-0.1 | | | | | | | | | | |
| 19 | | | 1.254<br>1.315<br>4.9 | 1.211<br>1.252<br>3.4 | | | | | | | | | | |

Planar Normalized Comparison at K=21

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 0.635<br>0.530<br>-16.5 | 0.621<br>0.526<br>-15.3 | 0.590<br>0.506<br>-14.2 | 0.556<br>0.465<br>-16.4 | 0.535<br>0.376<br>-29.7 | GAMMA SCAN<br>SIMULATE<br>△ % | | | | |
| 2 | | | | | 0.782<br>0.808<br>3.3 | 0.784<br>0.824<br>5.1 | 0.757<br>0.789<br>4.2 | 0.742<br>0.767<br>3.4 | 0.669<br>0.682<br>1.9 | 0.631<br>0.476<br>-24.6 | | | | |
| 3 | | | | | 0.964<br>0.991<br>2.8 | 0.986<br>0.989<br>0.3 | 0.950<br>0.984<br>3.6 | 0.880<br>0.905<br>2.8 | 0.854<br>0.843<br>-1.3 | 0.766<br>0.749<br>-2.2 | 0.702<br>0.529<br>-24.6 | 0.587<br>0.437<br>-25.6 | 0.508<br>0.324<br>-36.2 | |
| 4 | 1.021<br>1.026<br>0.5 | 1.115<br>1.099<br>-1.4 | | | 1.038<br>1.089<br>4.9 | 1.118<br>1.116<br>-0.2 | 1.082<br>1.081<br>-0.1 | 1.037<br>1.041<br>0.4 | 0.932<br>0.954<br>2.4 | 0.871<br>0.886<br>1.7 | 0.781<br>0.771<br>-1.3 | 0.704<br>0.705<br>0.1 | 0.609<br>0.590<br>-3.1 | 0.489<br>0.369<br>-24.5 |
| 5 | 1.139<br>1.119<br>-1.8 | 1.097<br>1.148<br>4.6 | | | 1.138<br>1.162<br>2.1 | 1.130<br>1.162<br>2.8 | 1.093<br>1.163<br>6.4 | 1.091<br>1.103<br>1.1 | 1.066<br>1.065<br>-0.1 | 0.981<br>0.983<br>0.2 | 0.907<br>0.914<br>0.8 | 0.815<br>0.810<br>-0.6 | 0.732<br>0.720<br>-1.6 | 0.615<br>0.588<br>-4.4 |
| 6 | | | | | 1.166<br>1.208<br>3.6 | 1.174<br>1.242<br>5.8 | 1.128<br>1.215<br>7.7 | 1.194<br>1.183<br>-0.9 | 1.126<br>1.125<br>-0.1 | 1.080<br>1.096<br>1.5 | 1.003<br>1.006<br>0.3 | 0.925<br>0.927<br>0.2 | | |
| 7 | | | | | 1.255<br>1.294<br>3.1 | 1.261<br>1.319<br>4.6 | 1.276<br>1.317<br>3.2 | 1.213<br>1.223<br>0.8 | 1.178<br>1.198<br>1.7 | 1.126<br>1.163<br>3.3 | 1.108<br>1.122<br>1.3 | 1.002<br>1.000<br>-0.2 | | |
| 8 | | | | | 1.252<br>1.294<br>3.4 | 1.309<br>1.347<br>2.9 | 1.264<br>1.309<br>3.6 | 1.233<br>1.244<br>0.9 | 1.163<br>1.194<br>2.7 | 1.212<br>1.209<br>-0.2 | 1.124<br>1.155<br>2.8 | | 0.978<br>0.966<br>-1.2 | 0.854<br>0.861<br>0.8 |
| 9 | | | | | 1.252<br>1.275<br>1.8 | 1.237<br>1.271<br>2.7 | 1.234<br>1.261<br>2.2 | 1.177<br>1.204<br>2.3 | 1.183<br>1.197<br>1.2 | 1.152<br>1.181<br>2.5 | | | 1.054<br>1.040<br>-1.3 | 0.920<br>0.921<br>0.1 |
| 10 | | | | | 1.233<br>1.252<br>1.5 | 1.247<br>1.278<br>2.5 | 1.237<br>1.245<br>0.6 | 1.190<br>1.222<br>2.7 | | | | | | |
| 11 | | | | | 1.255<br>1.275<br>1.6 | 1.270<br>1.316<br>3.6 | 1.282<br>1.323<br>3.2 | 1.229<br>1.237<br>0.7 | | | | | | |
| 12 | | | | | 1.228<br>1.242<br>1.1 | 1.321<br>1.319<br>-0.2 | 1.322<br>1.309<br>-1.0 | | 1.227<br>1.242<br>1.2 | 1.319<br>1.302<br>-1.3 | | | 1.095<br>1.111<br>1.5 | 1.131<br>1.069<br>-5.5 |
| 13 | | | | | 1.244<br>1.220<br>-1.9 | 1.228<br>1.234<br>0.5 | | | 1.256<br>1.238<br>-1.4 | 1.233<br>1.234<br>0.1 | | | 1.135<br>1.107<br>-2.5 | 1.059<br>1.030<br>-2.7 |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | 1.113<br>1.106<br>-0.6 | 1.121<br>1.056<br>-5.8 |
| 17 | | | | | | | | | | | | | 1.130<br>1.086<br>-3.9 | 1.013<br>0.985<br>-2.8 |
| 18 | | | 1.226<br>1.271<br>3.7 | 1.272<br>1.275<br>0.2 | | | | | | | | | | |
| 19 | | | 1.305<br>1.347<br>3.2 | 1.255<br>1.294<br>3.1 | | | | | | | | | | |

Planar Normalized Comparison at K=23