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L L Smith; F. E. Roach and R. W. Owen

June 1970

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Applied Mathematics Department
Systems and Electronics Division

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A PHOTOMETRIC MAP OF THE MILKY WAY

L. L. Smith, F. E. Roach and R. W. Owen

I. Introduction

For several years we have had a working map of the Milky Way in the form of digitized absolute values of brightness in one degree intervals. It has been useful to us in studies of the zodiacal light, the night airglow, the diffuse galactic light and the cosmic light. These several components of the light of the night sky are inter-dependent so that the accuracy of the deduced absolute brightness of any one depends on the accuracy of all the others.

Our published tabulation (Smith, Roach and Owen, 1965) of the brightness of the zodiacal light over the entire sky has been extensively used by us and by others and has been useful in first order approximations of the nature of the zodiacal cloud. We have furnished machine print-outs of our Milky Way map to some investigators upon request and have been gratified to note that these unpublished data have been helpful in their research (Felton, 1966 and Witt, 1968). The purpose of this report is to make the data generally available in the form of tables with galactic longitude and latitude as arguments. We shall reserve for other research reports discussions of (1) the interrelationships among the several photometric components of the light of the night sky and (2) comparisons of our results with those of other investigators.

II. The Nature of the Data

The observational material was obtained as a part of a program on the night airglow where we frequently have one "control" photometer which is filtered to

avoid prominent airglow emissions. For this purpose we have used an interference filter centered on 5300A (half width \approx 30A). A focal plane diaphragm defines a circular field 5° in diameter. The sky is "covered" in about five minutes in a series of five almucantars with zenith angles of 80° , 75° , 70° , 60° and 40° . These zenith angles were chosen to optimize the airglow program but they also serve to give a highly redundant coverage of the astronomical sky. Currently we obtain digitized field results but the observations of this investigation were obtained on strip charts and digitized for machine calculations in the laboratory.

A typical night of observations includes some forty complete sky surveys resulting in about 72,000 individual readings with zenith angle, azimuth and time known for each. For a given station the calculation of equatorial, ecliptic and galactic coordinates is accomplished for each point by an electronic computer. Star crossings serve the dual purpose of providing a check on the accuracy of the scanning mount and an absolute calibration. Methods of calibration and of correcting for the extinction and scattering of the troposphere have been described by us in earlier publications (Roach and Smith, 1964, and Smith, Roach, and Owen, 1965).

Because of the great quantity of observational material available we can be very selective in the choice of data utilized in any particular investigation. Thus, in zodiacal light studies we avoid the region of the Milky Way and in the present study we have avoided the bright zodiacal light.

The 5300A filter was selected to avoid all prominent airglow emissions, however, the airglow continuum still contributes significantly to the observations. We assumed that this airglow continuum is a function of zenith angle only, not of time or of azimuth. The mean airglow continuum for an entire night was

determined by subtracting from the original observations the values of the integrated starlight choosing only high galactic latitudes ($>|30^{\circ}|$) and plotting the residuals for each zenith angle against the point-by-point values of the zodiacal light from Smith, Roach and Owen (1965). The intercept is the air-glow continuum for the particular zenith angle (plus a small amount of diffuse galactic light and cosmic light). This procedure illustrates the cyclical type of analysis used to obtain consistent results. The whole analytical process is an iterative one in which each result is dependent on every step in the analysis.

In order to include the entire Milky Way we used four nights (February 11/12, February 21/22, March 15/16, and March 16/17, 1966) of observations from Haleakala, Maui, Hawaii, U.S.A. (latitude 20.7° N, longitude 156.3° W) and one night (August 15/16, 1966) of observations from El Leoncito, Argentina (latitude 21.8° S, longitude 69.5° W).

The results of this study are given in Table 1 in which we list the brightness in S10 (VIS) units* for one degree intervals in galactic longitude** for galactic latitudes from -20° to $+19^{\circ}$. The decision to tabulate in one degree intervals in spite of the fact that the photometric field is five degrees in diameter calls for discussion. The optical systems of our photometers employ the so-called Fabry optics in which a field lens focusses the objective on the photomultiplier cathode. Stars anywhere in the field appear on the cathode as extended disks. Thus a star in our original tabulation appears not as a point

* The S10 (VIS) unit is the equivalent number of 10th mag (VIS) stars per square degree)

** Galactic coordinate system as adopted by the IAU in 1958.

but over a region. Extended photometric surfaces correspond to an infinity of point sources. Results based upon optical systems with smaller or larger fields than ours, or without the Fabry field lens, should be compared with our tabulations with some caution.

In our original tabulation we included all the observations without any underdrawing of the discrete stars (and planets). This was done so that the user would find the sky as the table as it is in fact. However we believe that the tables will be of more general usefulness if the stars which can be identified are not included. Since our field of view is 19,625 square degrees we have the following deflections in S_{10} (VIS) units for stars of magnitude m (VIS).

| M(VIS) | S_{10} (VIS) |
|--------|----------------|
| 1.0 | 203 |
| 2.0 | 81 |
| 3.0 | 32 |
| 4.0 | 13 |
| 5.0 | 5 |

In underdrawing the star deflections we made use of a tabulation of all stars of visual magnitude brighter than 4.00 to assure positive identification.

Acknowledgements

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sity of Hawaii, the University of Cuyo (Argentina) and the Yale-Columbia Observatory at El Leoncito (Argentina). The analysis of the data was done chiefly at the Environmental Science Services Administration of Boulder, Colorado. The preparation of the data for publication has been done at the Battelle-Northwest Laboratories (Richland, Washington) under the sponsorship of the Aeronomy/Astronomy Laboratory. We are especially indebted to the following individuals for the procurement of the data: at Haleakala, Mr. Alex Kowalski, at El Leoncito, Engineer Evan Ciner.

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TABLE I MILKY WAY BRIGHTNESS IN S10(VIS) UNITS FOR ONE DEGREE INTERVALS IN GALACTIC LONGITUDE FOR GALACTIC LATITUDES FROM - 20° TO + 19°.

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 |
| 16 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 |
| 15 | 120 | 130 | 140 | 140 | 150 | 150 | 160 | 170 | 170 | 170 | 180 | 180 | 170 | 170 | 160 |
| 14 | 160 | 170 | 180 | 190 | 200 | 200 | 200 | 200 | 210 | 210 | 200 | 200 | 190 | 170 | 160 |
| 13 | 180 | 190 | 190 | 200 | 210 | 220 | 240 | 250 | 250 | 250 | 230 | 210 | 190 | 170 | 170 |
| 12 | 180 | 180 | 190 | 190 | 200 | 220 | 230 | 230 | 230 | 230 | 210 | 200 | 190 | 170 | 160 |
| 11 | 240 | 240 | 250 | 260 | 260 | 270 | 270 | 260 | 240 | 210 | 200 | 200 | 190 | 190 | 180 |
| 10 | 270 | 260 | 260 | 250 | 250 | 240 | 240 | 230 | 230 | 240 | 250 | 290 | 290 | 270 | 230 |
| 9 | 250 | 240 | 230 | 230 | 220 | 210 | 210 | 210 | 220 | 250 | 260 | 280 | 310 | 310 | 300 |
| 8 | 290 | 270 | 250 | 250 | 270 | 280 | 300 | 320 | 330 | 310 | 290 | 260 | 230 | 210 | 190 |
| 7 | 260 | 260 | 260 | 270 | 280 | 290 | 300 | 320 | 350 | 330 | 310 | 270 | 260 | 240 | 230 |
| 6 | 300 | 290 | 270 | 250 | 250 | 260 | 270 | 290 | 290 | 290 | 290 | 290 | 280 | 270 | 250 |
| 5 | 310 | 300 | 300 | 300 | 320 | 330 | 340 | 340 | 340 | 340 | 340 | 330 | 290 | 250 | 220 |
| 4 | 280 | 280 | 290 | 310 | 320 | 330 | 340 | 320 | 310 | 290 | 280 | 270 | 260 | 250 | 240 |
| 3 | 260 | 260 | 270 | 290 | 310 | 330 | 330 | 330 | 310 | 280 | 270 | 270 | 290 | 300 | 310 |
| 2 | 260 | 230 | 260 | 290 | 310 | 330 | 330 | 340 | 340 | 330 | 320 | 310 | 290 | 280 | 270 |
| 1 | 290 | 290 | 290 | 410 | 400 | 390 | 380 | 340 | 330 | 350 | 340 | 340 | 330 | 320 | 310 |
| 0 | 360 | 350 | 450 | 560 | 530 | 520 | 560 | 490 | 460 | 470 | 500 | 500 | 480 | 450 | 430 |
| -1 | 580 | 600 | 880 | 1160 | 990 | 880 | 760 | 660 | 620 | 600 | 540 | 510 | 460 | 450 | 440 |
| -2 | 770 | 980 | 980 | 980 | 970 | 940 | 840 | 610 | 530 | 540 | 550 | 560 | 550 | 540 | 520 |
| -3 | 860 | 890 | 980 | 1020 | 1040 | 1020 | 960 | 920 | 860 | 800 | 710 | 680 | 650 | 620 | 580 |
| -4 | 850 | 840 | 840 | 820 | 810 | 790 | 780 | 760 | 740 | 740 | 740 | 720 | 700 | 680 | 650 |
| -5 | 920 | 950 | 890 | 820 | 700 | 680 | 660 | 620 | 590 | 560 | 540 | 510 | 480 | 460 | 450 |
| -6 | 730 | 780 | 880 | 980 | 1000 | 990 | 960 | 920 | 880 | 860 | 820 | 790 | 740 | 700 | 660 |
| -7 | 860 | 810 | 740 | 700 | 620 | 580 | 540 | 510 | 480 | 480 | 460 | 450 | 440 | 430 | 420 |
| -8 | 740 | 730 | 700 | 660 | 640 | 600 | 550 | 500 | 480 | 450 | 440 | 440 | 440 | 440 | 440 |
| -9 | 400 | 410 | 420 | 480 | 510 | 540 | 590 | 650 | 640 | 610 | 570 | 550 | 540 | 540 | 590 |
| -10 | 530 | 520 | 510 | 510 | 510 | 530 | 560 | 580 | 610 | 620 | 620 | 580 | 520 | 480 | 470 |
| -11 | 560 | 540 | 470 | 480 | 500 | 520 | 540 | 540 | 500 | 460 | 420 | 400 | 380 | 360 | 360 |
| -12 | 340 | 310 | 300 | 320 | 420 | 500 | 530 | 540 | 520 | 470 | 460 | 460 | 450 | 440 | 440 |
| -13 | 310 | 320 | 360 | 400 | 420 | 440 | 460 | 480 | 480 | 420 | 380 | 360 | 340 | 310 | 330 |
| -14 | 420 | 410 | 400 | 400 | 390 | 380 | 380 | 370 | 360 | 350 | 340 | 330 | 320 | 300 | 300 |
| -15 | 280 | 300 | 360 | 400 | 460 | 450 | 420 | 420 | 380 | 380 | 370 | 380 | 380 | 380 | 380 |
| -16 | 380 | 380 | 380 | 380 | 370 | 370 | 360 | 360 | 360 | 360 | 360 | 350 | 340 | 340 | 340 |
| -17 | 340 | 320 | 320 | 320 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 290 | 280 | 280 | 280 |
| -18 | 300 | 300 | 310 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 330 | 330 |
| -19 | 340 | 340 | 340 | 330 | 320 | 320 | 310 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| -20 | 260 | 240 | 260 | 270 | 280 | 280 | 280 | 280 | 270 | 270 | 260 | 260 | 250 | 240 | |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 16 | 140 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 130 | 140 | 140 | 150 | 150 | 150 | 150 |
| 15 | 150 | 140 | 140 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 160 | 160 | 170 | 170 | 170 |
| 14 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 |
| 13 | 160 | 150 | 150 | 150 | 140 | 140 | 140 | 150 | 150 | 160 | 170 | 180 | 180 | 180 | 180 |
| 12 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 170 | 180 | 190 | 210 | 220 | 220 | 220 | 220 |
| 11 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 160 | 170 | 180 | 190 | 190 | 200 | 200 | 200 |
| 10 | 200 | 190 | 170 | 170 | 160 | 160 | 160 | 170 | 170 | 170 | 180 | 190 | 210 | 230 | 240 |
| 9 | 260 | 210 | 190 | 180 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 180 | 190 |
| 8 | 180 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 190 | 200 | 210 | 230 | 230 |
| 7 | 220 | 220 | 200 | 190 | 170 | 160 | 160 | 170 | 170 | 180 | 200 | 210 | 210 | 210 | 210 |
| 6 | 230 | 200 | 180 | 170 | 160 | 150 | 150 | 150 | 150 | 160 | 170 | 180 | 190 | 200 | 200 |
| 5 | 200 | 180 | 170 | 160 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 160 |
| 4 | 230 | 220 | 210 | 200 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 |
| 3 | 300 | 260 | 240 | 220 | 200 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 2 | 260 | 240 | 230 | 210 | 210 | 200 | 190 | 180 | 170 | 160 | 160 | 160 | 150 | 150 | 150 |
| 1 | 300 | 300 | 290 | 270 | 260 | 250 | 240 | 240 | 240 | 240 | 230 | 230 | 240 | 240 | 240 |
| 0 | 410 | 390 | 380 | 350 | 330 | 310 | 290 | 280 | 310 | 330 | 330 | 330 | 330 | 310 | 270 |
| -1 | 440 | 440 | 440 | 400 | 360 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 |
| -2 | 480 | 400 | 370 | 340 | 330 | 320 | 320 | 340 | 420 | 440 | 440 | 440 | 430 | 420 | 410 |
| -3 | 560 | 510 | 470 | 440 | 430 | 420 | 410 | 400 | 380 | 380 | 360 | 360 | 360 | 360 | 350 |
| -4 | 580 | 540 | 480 | 440 | 400 | 340 | 300 | 320 | 400 | 500 | 520 | 520 | 440 | 340 | 340 |
| -5 | 420 | 390 | 360 | 360 | 350 | 360 | 360 | 360 | 360 | 360 | 360 | 360 | 360 | 350 | 330 |
| -6 | 630 | 570 | 510 | 480 | 410 | 380 | 340 | 310 | 260 | 220 | 210 | 210 | 340 | 380 | 380 |
| -7 | 410 | 410 | 410 | 420 | 420 | 420 | 410 | 400 | 400 | 400 | 380 | 360 | 340 | 320 | 300 |
| -8 | 430 | 420 | 400 | 380 | 380 | 360 | 340 | 320 | 310 | 300 | 300 | 300 | 290 | 290 | 280 |
| -9 | 570 | 540 | 480 | 440 | 400 | 380 | 330 | 310 | 300 | 300 | 300 | 300 | 320 | 320 | 320 |
| -10 | 480 | 490 | 450 | 440 | 420 | 400 | 400 | 380 | 380 | 370 | 360 | 340 | 220 | 180 | 160 |
| -11 | 350 | 340 | 340 | 340 | 340 | 330 | 320 | 320 | 320 | 320 | 320 | 300 | 300 | 300 | 280 |
| -12 | 460 | 460 | 470 | 480 | 450 | 360 | 310 | 260 | 240 | 240 | 240 | 260 | 260 | 260 | 250 |
| -13 | 340 | 340 | 350 | 340 | 330 | 340 | 350 | 360 | 360 | 260 | 220 | 180 | 180 | 180 | 180 |
| -14 | 280 | 270 | 260 | 270 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 270 | 270 | 260 | 260 |
| -15 | 380 | 370 | 360 | 340 | 340 | 340 | 320 | 300 | 290 | 270 | 260 | 240 | 190 | 170 | 150 |
| -16 | 340 | 340 | 340 | 330 | 320 | 320 | 320 | 320 | 310 | 300 | 300 | 300 | 300 | 290 | 280 |
| -17 | 270 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 250 | 250 | 240 | 240 | 240 | 240 | 230 |
| -18 | 330 | 330 | 320 | 320 | 320 | 320 | 300 | 280 | 260 | 250 | 240 | 220 | 220 | 210 | 210 |
| -19 | 300 | 300 | 300 | 300 | 300 | 290 | 280 | 280 | 270 | 260 | 260 | 260 | 260 | 250 | 250 |
| -20 | 240 | 230 | 230 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 210 | 200 | 200 | 200 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 16 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 |
| 15 | 170 | 170 | 170 | 160 | 150 | 150 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 120 | 120 |
| 14 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 130 | 130 | 130 |
| 13 | 180 | 180 | 180 | 170 | 160 | 140 | 120 | 120 | 130 | 150 | 160 | 170 | 180 | 180 | 170 |
| 12 | 220 | 210 | 210 | 210 | 210 | 200 | 190 | 180 | 170 | 150 | 130 | 130 | 130 | 140 | 150 |
| 11 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 160 |
| 10 | 250 | 250 | 250 | 250 | 240 | 240 | 240 | 230 | 210 | 190 | 190 | 180 | 180 | 180 | 180 |
| 9 | 200 | 210 | 220 | 230 | 230 | 230 | 240 | 240 | 240 | 230 | 220 | 190 | 180 | 160 | 160 |
| 8 | 240 | 240 | 240 | 240 | 230 | 220 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| 7 | 210 | 210 | 220 | 240 | 270 | 270 | 270 | 270 | 260 | 250 | 240 | 230 | 210 | 190 | 180 |
| 6 | 210 | 240 | 270 | 290 | 290 | 280 | 260 | 240 | 240 | 240 | 260 | 280 | 300 | 300 | 270 |
| 5 | 200 | 190 | 180 | 180 | 180 | 200 | 260 | 280 | 300 | 200 | 180 | 180 | 210 | 250 | 260 |
| 4 | 180 | 190 | 200 | 200 | 210 | 210 | 220 | 230 | 240 | 240 | 250 | 260 | 270 | 270 | 270 |
| 3 | 180 | 190 | 190 | 200 | 200 | 210 | 210 | 220 | 230 | 230 | 250 | 260 | 270 | 290 | 300 |
| 2 | 150 | 160 | 160 | 170 | 180 | 180 | 190 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 210 |
| 1 | 240 | 240 | 240 | 240 | 230 | 230 | 200 | 200 | 200 | 210 | 230 | 240 | 250 | 250 | 250 |
| 0 | 240 | 230 | 230 | 220 | 210 | 210 | 210 | 200 | 210 | 200 | 200 | 200 | 200 | 200 | 210 |
| -1 | 340 | 330 | 320 | 320 | 260 | 240 | 230 | 260 | 260 | 240 | 220 | 220 | 230 | 240 | 240 |
| -2 | 310 | 280 | 260 | 260 | 250 | 250 | 240 | 330 | 320 | 290 | 250 | 250 | 250 | 250 | 250 |
| -3 | 340 | 320 | 310 | 300 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 300 | 300 |
| -4 | 340 | 330 | 320 | 320 | 310 | 310 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 310 |
| -5 | 300 | 290 | 290 | 290 | 290 | 300 | 300 | 300 | 310 | 310 | 320 | 320 | 330 | 340 | 350 |
| -6 | 360 | 300 | 280 | 270 | 290 | 300 | 310 | 310 | 320 | 320 | 330 | 330 | 340 | 340 | 350 |
| -7 | 280 | 280 | 270 | 270 | 270 | 290 | 300 | 310 | 310 | 320 | 320 | 320 | 320 | 320 | 330 |
| -8 | 280 | 280 | 280 | 270 | 260 | 260 | 250 | 250 | 250 | 250 | 260 | 260 | 260 | 260 | 260 |
| -9 | 300 | 280 | 250 | 240 | 230 | 220 | 210 | 210 | 220 | 230 | 230 | 240 | 240 | 240 | 240 |
| -10 | 160 | 160 | 170 | 190 | 200 | 220 | 230 | 240 | 240 | 240 | 240 | 260 | 260 | 270 | 270 |
| -11 | 280 | 270 | 260 | 260 | 270 | 280 | 260 | 280 | 280 | 270 | 260 | 220 | 240 | 240 | 250 |
| -12 | 230 | 200 | 160 | 120 | 120 | 110 | 120 | 120 | 160 | 190 | 200 | 220 | 230 | 240 | 240 |
| -13 | 180 | 200 | 200 | 200 | 210 | 210 | 220 | 220 | 220 | 220 | 210 | 200 | 180 | 160 | 150 |
| -14 | 240 | 220 | 200 | 200 | 200 | 190 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 180 |
| -15 | 130 | 120 | 120 | 120 | 120 | 130 | 180 | 200 | 220 | 220 | 220 | 220 | 200 | 200 | 190 |
| -16 | 280 | 270 | 260 | 260 | 240 | 240 | 220 | 210 | 200 | 190 | 180 | 160 | 150 | 150 | 140 |
| -17 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| -18 | 200 | 210 | 210 | 210 | 220 | 220 | 210 | 210 | 200 | 200 | 210 | 200 | 200 | 200 | 190 |
| -19 | 240 | 240 | 240 | 220 | 220 | 210 | 200 | 200 | 180 | 180 | 170 | 160 | 160 | 160 | 150 |
| -20 | 200 | 200 | 200 | 190 | 180 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 150 |

| GAL | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LAT | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 |
| 19 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 |
| 16 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 15 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 140 |
| 14 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 |
| 13 | 180 | 190 | 190 | 190 | 200 | 190 | 190 | 190 | 180 | 180 | 170 | 160 | 160 | 150 | 150 |
| 12 | 220 | 230 | 230 | 230 | 220 | 220 | 210 | 190 | 170 | 160 | 150 | 150 | 150 | 150 | 150 |
| 11 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 |
| 10 | 230 | 240 | 240 | 240 | 240 | 240 | 240 | 230 | 230 | 230 | 220 | 220 | 210 | 210 | 210 |
| 9 | 240 | 240 | 240 | 240 | 240 | 230 | 210 | 200 | 200 | 200 | 210 | 210 | 220 | 230 | 240 |
| 8 | 220 | 220 | 230 | 230 | 230 | 230 | 240 | 260 | 280 | 290 | 300 | 310 | 310 | 310 | 310 |
| 7 | 260 | 270 | 280 | 290 | 300 | 330 | 340 | 350 | 350 | 350 | 340 | 300 | 280 | 270 | 270 |
| 6 | 310 | 340 | 370 | 370 | 360 | 330 | 370 | 320 | 310 | 310 | 310 | 320 | 320 | 320 | 300 |
| 5 | 320 | 330 | 340 | 350 | 360 | 370 | 430 | 410 | 390 | 370 | 360 | 340 | 310 | 300 | 290 |
| 4 | 330 | 390 | 430 | 430 | 430 | 430 | 420 | 410 | 390 | 380 | 380 | 370 | 370 | 370 | 360 |
| 3 | 440 | 470 | 400 | 390 | 380 | 390 | 390 | 390 | 400 | 400 | 400 | 390 | 390 | 390 | 370 |
| 2 | 310 | 320 | 330 | 340 | 400 | 420 | 430 | 430 | 430 | 430 | 430 | 420 | 390 | 370 | 340 |
| 1 | 280 | 320 | 350 | 410 | 420 | 390 | 380 | 370 | 360 | 360 | 360 | 350 | 350 | 350 | 340 |
| 0 | 290 | 300 | 310 | 320 | 330 | 330 | 330 | 340 | 340 | 350 | 350 | 330 | 310 | 310 | 310 |
| -1 | 230 | 270 | 280 | 300 | 330 | 330 | 300 | 290 | 280 | 290 | 270 | 270 | 270 | 340 | 340 |
| -2 | 320 | 330 | 330 | 330 | 330 | 320 | 320 | 310 | 300 | 290 | 280 | 280 | 260 | 240 | 250 |
| -3 | 410 | 400 | 380 | 370 | 350 | 340 | 340 | 340 | 360 | 360 | 300 | 270 | 260 | 280 | 310 |
| -4 | 380 | 380 | 370 | 370 | 360 | 360 | 350 | 330 | 300 | 280 | 280 | 290 | 290 | 300 | 330 |
| -5 | 380 | 370 | 360 | 360 | 350 | 330 | 300 | 290 | 290 | 290 | 290 | 300 | 310 | 320 | 330 |
| -6 | 320 | 300 | 290 | 290 | 280 | 280 | 280 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 |
| -7 | 300 | 360 | 300 | 290 | 290 | 290 | 290 | 280 | 280 | 280 | 280 | 280 | 280 | 290 | 290 |
| -8 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 |
| -9 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 270 | 270 | 270 | 270 | 270 | 270 | 280 | 280 |
| -10 | 280 | 280 | 280 | 280 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 280 |
| -11 | 280 | 280 | 280 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 |
| -12 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 250 | 240 | 240 | 230 | 230 |
| -13 | 290 | 290 | 300 | 300 | 300 | 300 | 290 | 280 | 260 | 250 | 240 | 240 | 240 | 240 | 240 |
| -14 | 320 | 340 | 330 | 330 | 330 | 300 | 300 | 280 | 260 | 240 | 200 | 200 | 210 | 240 | 280 |
| -15 | 300 | 300 | 290 | 280 | 220 | 180 | 160 | 150 | 140 | 140 | 130 | 130 | 130 | 130 | 130 |
| -16 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 190 | 190 |
| -17 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 140 | 130 | 130 | 130 | 130 | 120 | 120 | 120 |
| -18 | 200 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 180 | 180 | 180 | 180 | 170 | 170 | 170 |
| -19 | 230 | 230 | 230 | 230 | 230 | 230 | 220 | 220 | 210 | 200 | 190 | 180 | 160 | 150 | 140 |
| -20 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 120 | 120 | 120 | 100 | 100 | 100 | 100 | 100 |

| LAT | GAL LON | | | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | | |
| 19 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 120 |
| 16 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 |
| 15 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 14 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 13 | 150 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 |
| 12 | 160 | 160 | 160 | 170 | 170 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 170 |
| 11 | 200 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 |
| 10 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 190 | 190 | 190 | 190 |
| 9 | 250 | 250 | 250 | 240 | 240 | 230 | 220 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 200 | 200 | 200 |
| 8 | 300 | 260 | 230 | 230 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 230 | 230 | 230 | 230 | 230 | 230 |
| 7 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 260 | 260 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| 6 | 290 | 280 | 250 | 230 | 220 | 260 | 260 | 270 | 270 | 260 | 250 | 250 | 240 | 230 | 210 | | |
| 5 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 260 | 260 | 260 | 260 | 250 | 250 | 250 | 250 |
| 4 | 350 | 320 | 270 | 270 | 260 | 250 | 250 | 250 | 250 | 260 | 280 | 300 | 300 | 300 | 300 | 300 | 260 |
| 3 | 360 | 340 | 320 | 250 | 250 | 280 | 300 | 310 | 320 | 330 | 330 | 330 | 330 | 330 | 330 | 330 | 320 |
| 2 | 320 | 300 | 260 | 260 | 280 | 310 | 330 | 340 | 390 | 470 | 430 | 380 | 340 | 320 | | | |
| 1 | 340 | 340 | 330 | 320 | 280 | 300 | 340 | 390 | 410 | 470 | 460 | 420 | 380 | 350 | 330 | | |
| 0 | 310 | 310 | 300 | 280 | 250 | 250 | 260 | 270 | 270 | 280 | 290 | 300 | 330 | 350 | 340 | | |
| -1 | 320 | 270 | 210 | 220 | 220 | 270 | 280 | 270 | 270 | 260 | 270 | 290 | 300 | 300 | 300 | 290 | |
| -2 | 280 | 280 | 290 | 290 | 280 | 280 | 270 | 260 | 250 | 250 | 260 | 260 | 260 | 260 | 260 | 260 | |
| -3 | 320 | 330 | 340 | 350 | 330 | 290 | 260 | 240 | 230 | 220 | 260 | 280 | 280 | 270 | 270 | | |
| -4 | 350 | 360 | 370 | 380 | 340 | 270 | 250 | 230 | 270 | 290 | 290 | 290 | 290 | 280 | 280 | 270 | |
| -5 | 370 | 370 | 340 | 320 | 300 | 260 | 240 | 290 | 290 | 290 | 300 | 300 | 300 | 300 | 300 | 260 | |
| -6 | 290 | 290 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 310 | 310 | 310 | 310 | 310 | 310 | |
| -7 | 290 | 290 | 290 | 290 | 290 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 310 | 310 | |
| -8 | 300 | 310 | 310 | 310 | 290 | 280 | 280 | 280 | 290 | 300 | 300 | 300 | 300 | 300 | 290 | 290 | |
| -9 | 280 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | 280 | 280 | 280 | 280 | 270 | |
| -10 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 270 | 270 | 260 | 250 | 240 | | |
| -11 | 270 | 270 | 270 | 260 | 260 | 250 | 250 | 240 | 230 | 220 | 210 | 210 | 210 | 200 | 200 | | |
| -12 | 220 | 220 | 210 | 210 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | | |
| -13 | 240 | 270 | 290 | 290 | 270 | 220 | 210 | 210 | 200 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | |
| -14 | 280 | 270 | 250 | 240 | 220 | 220 | 200 | 200 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | |
| -15 | 140 | 150 | 160 | 170 | 180 | 180 | 160 | 150 | 140 | 130 | 130 | 120 | 120 | 130 | 130 | 130 | |
| -16 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 150 | 150 | 140 | | |
| -17 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 160 | 160 | 160 | |
| -18 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 160 | |
| -19 | 140 | 140 | 140 | 140 | 150 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 160 | 150 | |
| -20 | 100 | 100 | 100 | 100 | 110 | 110 | 120 | 120 | 120 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 |
| 19 | 90 | 90 | SO | 90 | SO | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 18 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 17 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 | 100 | 100 |
| 16 | 130 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 110 |
| 15 | 160 | 150 | 150 | 150 | 140 | 140 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| 14 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| 13 | 170 | 160 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 |
| 12 | 160 | 160 | 150 | 150 | 140 | 140 | 140 | 130 | 130 | 130 | 140 | 160 | 170 | 180 | 180 |
| 11 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 10 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 9 | 200 | 200 | 200 | 200 | 200 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 220 | 220 |
| 8 | 220 | 220 | 210 | 200 | 170 | 170 | 170 | 180 | 210 | 250 | 260 | 260 | 260 | 250 | |
| 7 | 250 | 230 | 180 | 150 | 160 | 170 | 180 | 200 | 230 | 240 | 250 | 250 | 250 | 240 | 230 |
| 6 | 160 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 |
| 5 | 200 | 180 | 180 | 180 | 170 | 180 | 180 | 180 | 180 | 180 | 190 | 200 | 210 | 220 | 220 |
| 4 | 230 | 220 | 210 | 200 | 190 | 180 | 180 | 170 | 180 | 190 | 210 | 220 | 220 | 220 | 220 |
| 3 | 290 | 230 | 180 | 180 | 180 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 210 | 210 | 210 |
| 2 | 250 | 230 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 230 | 230 |
| 1 | 290 | 260 | 250 | 240 | 230 | 200 | 210 | 240 | 250 | 260 | 260 | 260 | 260 | 260 | 260 |
| 0 | 290 | 270 | 250 | 220 | 210 | 230 | 270 | 270 | 280 | 280 | 280 | 290 | 290 | 300 | 300 |
| -1 | 290 | 280 | 270 | 250 | 230 | 220 | 220 | 220 | 220 | 240 | 250 | 260 | 270 | 270 | 270 |
| -2 | 270 | 280 | 300 | 310 | 320 | 320 | 320 | 320 | 330 | 330 | 340 | 330 | 310 | 300 | 290 |
| -3 | 260 | 260 | 300 | 320 | 330 | 350 | 340 | 340 | 340 | 340 | 340 | 340 | 320 | 310 | 280 |
| -4 | 290 | 300 | 320 | 350 | 350 | 350 | 350 | 350 | 340 | 340 | 340 | 340 | 320 | 300 | 280 |
| -5 | 310 | 320 | 330 | 340 | 340 | 340 | 340 | 340 | 340 | 330 | 330 | 330 | 320 | 300 | 280 |
| -6 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 310 | 290 | 260 | 250 |
| -7 | 310 | 310 | 310 | 310 | 310 | 310 | 310 | 310 | 300 | 300 | 300 | 290 | 270 | 250 | 230 |
| -8 | 280 | 280 | 280 | 270 | 260 | 260 | 260 | 250 | 250 | 240 | 240 | 230 | 220 | 220 | 210 |
| -9 | 270 | 260 | 250 | 250 | 240 | 230 | 230 | 220 | 220 | 220 | 220 | 210 | 210 | 210 | 210 |
| -10 | 230 | 220 | 220 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 200 | 200 |
| -11 | 200 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 200 | 200 | 190 | 190 |
| -12 | 200 | 200 | 200 | 190 | 190 | 200 | 200 | 210 | 210 | 210 | 210 | 200 | 190 | 170 | 160 |
| -13 | 170 | 180 | 170 | 170 | 170 | 180 | 180 | 180 | 190 | 200 | 200 | 200 | 200 | 190 | 170 |
| -14 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 210 | 200 | 220 | 220 | 230 | 200 | 170 |
| -15 | 130 | 140 | 140 | 150 | 160 | 160 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 |
| -16 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 170 | 170 | 170 | 160 |
| -17 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 160 |
| -18 | 140 | 120 | 110 | 110 | 120 | 120 | 130 | 140 | 150 | 180 | 180 | 170 | 160 | 160 | 150 |
| -19 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 160 | 160 | 150 | 150 | 140 |
| -20 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 19 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 18 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 100 | 100 | 100 | 100 |
| 17 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 16 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| 15 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| 14 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 |
| 13 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 130 |
| 12 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 160 | 160 | 150 | 140 | 140 | 140 | 140 | 130 |
| 11 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 |
| 10 | 180 | 170 | 170 | 170 | 170 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 140 | 140 |
| 9 | 210 | 200 | 200 | 190 | 180 | 170 | 170 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 8 | 240 | 210 | 200 | 190 | 180 | 170 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 7 | 220 | 210 | 200 | 190 | 180 | 170 | 170 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 |
| 6 | 220 | 210 | 210 | 200 | 190 | 180 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 5 | 220 | 220 | 210 | 200 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 |
| 4 | 220 | 210 | 210 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 |
| 3 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 |
| 2 | 240 | 240 | 250 | 240 | 240 | 230 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| 1 | 260 | 260 | 260 | 260 | 250 | 250 | 240 | 230 | 220 | 230 | 270 | 280 | 280 | 250 | 240 |
| 0 | 300 | 300 | 280 | 270 | 270 | 250 | 240 | 220 | 230 | 230 | 350 | 330 | 300 | 280 | 280 |
| -1 | 270 | 270 | 270 | 260 | 260 | 250 | 250 | 240 | 230 | 230 | 240 | 250 | 260 | 270 | 280 |
| -2 | 280 | 260 | 260 | 250 | 240 | 240 | 240 | 240 | 250 | 260 | 300 | 310 | 310 | 320 | 320 |
| -3 | 260 | 290 | 280 | 260 | 290 | 250 | 230 | 230 | 240 | 270 | 310 | 320 | 320 | 320 | 320 |
| -4 | 270 | 260 | 250 | 250 | 240 | 240 | 240 | 240 | 250 | 280 | 290 | 300 | 300 | 300 | 300 |
| -5 | 270 | 270 | 260 | 260 | 250 | 240 | 230 | 230 | 240 | 250 | 260 | 270 | 280 | 290 | 290 |
| -6 | 240 | 240 | 230 | 230 | 230 | 220 | 220 | 230 | 230 | 240 | 250 | 260 | 270 | 280 | 280 |
| -7 | 220 | 220 | 220 | 210 | 220 | 220 | 220 | 220 | 230 | 230 | 230 | 240 | 240 | 240 | 240 |
| -8 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 |
| -9 | 210 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 |
| -10 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 |
| -11 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| -12 | 170 | 170 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| -13 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 |
| -14 | 170 | 170 | 160 | 160 | 150 | 160 | 160 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 |
| -15 | 170 | 170 | 160 | 160 | 150 | 150 | 140 | 130 | 120 | 120 | 120 | 120 | 120 | 130 | 130 |
| -16 | 160 | 160 | 150 | 160 | 160 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 |
| -17 | 160 | 160 | 150 | 150 | 150 | 140 | 140 | 140 | 130 | 130 | 120 | 120 | 110 | 110 | 120 |
| -18 | 150 | 150 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 130 |
| -19 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 |
| -20 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 | 130 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 |
| 19 | 90 | 90 | 90 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 110 | 110 | 110 |
| 17 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 16 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 15 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 14 | 130 | 130 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 | 110 |
| 13 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 12 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 11 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 |
| 10 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 120 |
| 9 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 |
| 8 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 | 130 | 130 | 130 | 130 |
| 7 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 140 | 140 |
| 6 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 |
| 5 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 4 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| 3 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 | 180 |
| 2 | 210 | 210 | 210 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 190 | 190 |
| 1 | 240 | 240 | 240 | 230 | 220 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 190 |
| 0 | 270 | 270 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 250 | 250 | 240 | 240 | 230 | 220 |
| -1 | 300 | 330 | 330 | 330 | 320 | 310 | 300 | 290 | 280 | 280 | 270 | 270 | 260 | 250 | 240 |
| -2 | 330 | 330 | 330 | 320 | 320 | 310 | 310 | 300 | 290 | 290 | 280 | 270 | 260 | 250 | 240 |
| -3 | 320 | 320 | 320 | 310 | 310 | 310 | 300 | 300 | 290 | 290 | 280 | 270 | 270 | 260 | 260 |
| -4 | 300 | 300 | 300 | 300 | 300 | 290 | 290 | 290 | 280 | 270 | 270 | 260 | 250 | 240 | 240 |
| -5 | 300 | 300 | 300 | 300 | 300 | 290 | 280 | 270 | 260 | 260 | 250 | 250 | 250 | 240 | 230 |
| -6 | 290 | 290 | 290 | 290 | 280 | 260 | 250 | 250 | 240 | 240 | 240 | 230 | 230 | 230 | 220 |
| -7 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 230 | 230 | 220 | 220 | 220 | 220 | 220 | 210 |
| -8 | 220 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| -9 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 190 | 190 |
| -10 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| -11 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| -12 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| -13 | 150 | 150 | 150 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 |
| -14 | 150 | 150 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| -15 | 130 | 140 | 140 | 150 | 150 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 180 |
| -16 | 130 | 140 | 140 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 170 | 170 |
| -17 | 120 | 130 | 130 | 140 | 140 | 150 | 150 | 160 | 160 | 170 | 180 | 180 | 180 | 190 | 190 |
| -18 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 |
| -19 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 160 | 160 | 160 | 170 | 170 |
| -20 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 160 | 160 | 160 |

| GAL LAT | GAL LON | | | | | | | | | | | | | | |
|------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 |
| 19 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 120 | 120 | 120 |
| 18 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 |
| 17 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 120 | 120 |
| 16 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 15 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 |
| 14 | 110 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 |
| 13 | 110 | 110 | 110 | 120 | 120 | 120 | 130 | 130 | 140 | 140 | 150 | 150 | 150 | 150 | 150 |
| 12 | 110 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 140 | 140 | 150 | 160 | 170 | 170 |
| 11 | 110 | 110 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 140 | 140 | 150 | 150 | 160 | 160 |
| 10 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 140 | 150 | 150 | 170 | 180 | 190 | 200 | 200 |
| 9 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 150 | 150 | 160 | 160 | 170 | 180 |
| 8 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 150 | 150 | 170 |
| 7 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 160 | 160 |
| 6 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 |
| 5 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 |
| 4 | 150 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 160 | 160 |
| 3 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 170 |
| 2 | 140 | 140 | 140 | 140 | 150 | 150 | 160 | 160 | 160 | 170 | 180 | 190 | 190 | 200 | 200 |
| 1 | 160 | 160 | 150 | 140 | 140 | 130 | 130 | 130 | 140 | 150 | 150 | 160 | 180 | 190 | 200 |
| 0 | 170 | 170 | 180 | 180 | 170 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 220 |
| -1 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 200 |
| -2 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 190 | 190 |
| -3 | 200 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 180 | 180 |
| -4 | 190 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 150 | 150 | 160 |
| -5 | 180 | 180 | 180 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 140 |
| -6 | 190 | 190 | 180 | 180 | 170 | 170 | 160 | 160 | 150 | 150 | 140 | 140 | 130 | 130 | 130 |
| -7 | 190 | 190 | 180 | 180 | 180 | 170 | 170 | 160 | 160 | 150 | 150 | 140 | 140 | 140 | 140 |
| -8 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 160 | 160 |
| -9 | 210 | 210 | 200 | 190 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 160 | 160 | 160 |
| -10 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 |
| -11 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 |
| -12 | 190 | 190 | 190 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 160 |
| -13 | 220 | 200 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 150 |
| -14 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 150 | 150 |
| -15 | 200 | 190 | 150 | 140 | 140 | 150 | 150 | 160 | 170 | 180 | 180 | 180 | 190 | 190 | 190 |
| -16 | 230 | 220 | 190 | 180 | 170 | 170 | 170 | 170 | 170 | 210 | 210 | 210 | 210 | 210 | 190 |
| -17 | 180 | 180 | 180 | 170 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 |
| -18 | 170 | 170 | 170 | 160 | 160 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 130 |
| -19 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 160 | 160 |
| -20 | 160 | 160 | 160 | 160 | 170 | 170 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |

| GAL | LAT | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 19 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 |
| 18 | 100 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 120 | 120 | 120 | 120 | 130 | 130 |
| 17 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 140 |
| 16 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 |
| 15 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 |
| 14 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 |
| 13 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 160 | 160 | 160 |
| 12 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 160 | 150 | 150 | 150 | 150 | 150 | 150 |
| 11 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 10 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 190 | 180 | 170 | 170 | 170 | 170 | 180 |
| 9 | 180 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 |
| 8 | 190 | 200 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 200 | 200 | 200 | 190 |
| 7 | 170 | 170 | 180 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| 6 | 160 | 170 | 180 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 200 | 190 |
| 5 | 160 | 160 | 160 | 170 | 170 | 190 | 220 | 230 | 230 | 240 | 250 | 260 | 260 | 260 | 260 | 220 |
| 4 | 160 | 160 | 160 | 170 | 170 | 180 | 180 | 190 | 200 | 200 | 210 | 210 | 220 | 220 | 220 | 220 |
| 3 | 170 | 170 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 200 | 210 | 210 | 220 | 230 | 240 |
| 2 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| 1 | 200 | 210 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 240 | 240 | 240 | 240 |
| 0 | 230 | 230 | 230 | 230 | 230 | 240 | 240 | 240 | 250 | 250 | 250 | 250 | 250 | 250 | 230 | 220 |
| -1 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 230 |
| -2 | 190 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 |
| -3 | 180 | 180 | 180 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 220 |
| -4 | 160 | 170 | 170 | 180 | 180 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 210 | 210 | 210 |
| -5 | 120 | 130 | 160 | 170 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 |
| -6 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 170 |
| -7 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 140 |
| -8 | 150 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 |
| -9 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| -10 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| -11 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| -12 | 160 | 150 | 130 | 120 | 120 | 140 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 |
| -13 | 150 | 150 | 140 | 130 | 120 | 110 | 110 | 110 | 110 | 110 | 130 | 140 | 140 | 150 | 150 | 160 |
| -14 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 |
| -15 | 180 | 120 | 100 | 130 | 240 | 220 | 190 | 160 | 140 | 150 | 160 | 170 | 180 | 180 | 180 | 180 |
| -16 | 130 | 120 | 100 | 100 | 150 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 170 | 160 | 160 | 150 |
| -17 | 170 | 170 | 170 | 140 | 120 | 130 | 140 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| -18 | 130 | 130 | 130 | 120 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 |
| -19 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 |
| -20 | 190 | 190 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 |
| 19 | 140 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 170 | 160 | 160 | 160 | 160 | 160 |
| 18 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 17 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 |
| 16 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 |
| 15 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 160 |
| 14 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 13 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| 12 | 150 | 160 | 170 | 180 | 180 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 190 | 190 | 180 |
| 11 | 170 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 200 | 200 | 190 | 190 | 190 |
| 10 | 180 | 190 | 190 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 200 |
| 9 | 190 | 190 | 190 | 200 | 210 | 220 | 220 | 230 | 230 | 230 | 230 | 220 | 220 | 220 | 220 |
| 8 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| 7 | 200 | 200 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| 6 | 190 | 190 | 200 | 220 | 230 | 230 | 240 | 240 | 240 | 240 | 240 | 240 | 250 | 260 | 260 |
| 5 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 230 | 230 | 230 | 240 | 240 | 250 | 270 | 270 |
| 4 | 220 | 220 | 220 | 220 | 230 | 230 | 250 | 290 | 280 | 260 | 250 | 250 | 300 | 320 | 330 |
| 3 | 250 | 260 | 300 | 340 | 300 | 260 | 260 | 240 | 240 | 240 | 250 | 290 | 300 | 300 | 300 |
| 2 | 240 | 240 | 240 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 240 | 240 | 230 | 230 |
| 1 | 240 | 240 | 240 | 230 | 230 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 220 | 220 |
| 0 | 220 | 240 | 240 | 250 | 250 | 240 | 230 | 230 | 220 | 220 | 220 | 220 | 220 | 220 | 230 |
| -1 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| -2 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 220 | 220 | 220 |
| -3 | 220 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| -4 | 210 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| -5 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 240 |
| -6 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| -7 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 170 | 170 | 170 | 170 |
| -8 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| -9 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 170 | 170 | 160 | 160 | 160 | 160 |
| -10 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| -11 | 150 | 150 | 150 | 150 | 150 | 150 | 160 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| -12 | 160 | 160 | 160 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 |
| -13 | 160 | 170 | 170 | 160 | 150 | 130 | 110 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 |
| -14 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 |
| -15 | 130 | 130 | 130 | 140 | 160 | 170 | 170 | 170 | 160 | 170 | 170 | 160 | 160 | 160 | 160 |
| -16 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 |
| -17 | 170 | 170 | 160 | 160 | 150 | 150 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| -18 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 130 | 130 | 120 | 120 | 120 | 120 | 120 |
| -19 | 150 | 150 | 150 | 140 | 140 | 140 | 130 | 120 | 120 | 110 | 110 | 110 | 100 | 100 | 100 |
| -20 | 170 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 140 | 140 | 130 | 130 | 120 | 120 | 120 |

| LAT | GAL | | | | | GAL | | | | | LON | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 |
| 16 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 |
| 15 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 120 | 120 | 120 |
| 14 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 |
| 13 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 |
| 12 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 |
| 11 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 140 |
| 10 | 180 | 180 | 180 | 180 | 180 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 |
| 9 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 |
| 8 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |
| 7 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| 6 | 200 | 200 | 200 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 |
| 5 | 200 | 200 | 200 | 200 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 200 | 210 |
| 4 | 220 | 230 | 230 | 240 | 250 | 250 | 250 | 250 | 240 | 240 | 230 | 230 | 220 | 220 | 220 |
| 3 | 220 | 220 | 230 | 230 | 240 | 250 | 250 | 250 | 250 | 240 | 240 | 240 | 240 | 240 | 240 |
| 2 | 230 | 230 | 230 | 240 | 250 | 250 | 260 | 260 | 250 | 250 | 240 | 240 | 240 | 230 | 230 |
| 1 | 230 | 240 | 240 | 240 | 250 | 270 | 270 | 250 | 240 | 240 | 240 | 230 | 230 | 220 | 230 |
| 0 | 230 | 230 | 230 | 230 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 230 | 230 | 230 |
| -1 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 240 | 240 |
| -2 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 230 | 230 |
| -3 | 180 | 180 | 180 | 180 | 190 | 190 | 200 | 200 | 210 | 210 | 210 | 210 | 220 | 220 | 220 |
| -4 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 200 | 200 | 220 |
| -5 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 200 | 200 | 200 | 210 | 210 | 220 | 220 | 220 |
| -6 | 160 | 180 | 180 | 200 | 200 | 200 | 190 | 170 | 160 | 160 | 170 | 180 | 190 | 200 | 200 |
| -7 | 170 | 180 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 200 | 200 | 210 | 220 | 220 | 230 |
| -8 | 160 | 160 | 160 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| -9 | 140 | 160 | 180 | 180 | 180 | 170 | 160 | 140 | 140 | 140 | 140 | 150 | 150 | 160 | 160 |
| -10 | 140 | 150 | 150 | 160 | 170 | 170 | 180 | 190 | 190 | 200 | 200 | 210 | 210 | 210 | 220 |
| -11 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 170 | 170 |
| -12 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 160 |
| -13 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 140 | 150 | 150 | 160 |
| -14 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 120 | 130 | 130 | 140 | 140 |
| -15 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 | 150 | 160 | 170 |
| -16 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 |
| -17 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| -18 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| -19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| -20 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 110 | 110 | 110 | 110 | 110 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 110 |
| 18 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 110 | 110 | 110 | 110 | 110 | 110 |
| 17 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 130 | 130 |
| 16 | 120 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 140 |
| 15 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 160 |
| 14 | 140 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 |
| 13 | 150 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 190 | 190 | 190 |
| 12 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 200 | 200 | 200 |
| 11 | 180 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 210 |
| 10 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 |
| 9 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| 8 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 |
| 7 | 250 | 260 | 260 | 260 | 270 | 270 | 270 | 270 | 270 | 270 | 280 | 280 | 280 | 280 | 280 |
| 6 | 270 | 270 | 280 | 280 | 290 | 300 | 310 | 370 | 370 | 370 | 370 | 370 | 370 | 370 | 370 |
| 5 | 300 | 300 | 310 | 330 | 340 | 340 | 350 | 370 | 380 | 400 | 430 | 440 | 460 | 530 | 530 |
| 4 | 350 | 360 | 380 | 410 | 430 | 440 | 470 | 470 | 440 | 430 | 470 | 550 | 560 | 560 | 550 |
| 3 | 410 | 430 | 440 | 480 | 470 | 440 | 430 | 430 | 440 | 460 | 470 | 500 | 520 | 560 | 570 |
| 2 | 470 | 500 | 530 | 560 | 560 | 550 | 490 | 470 | 460 | 460 | 460 | 480 | 510 | 550 | 570 |
| 1 | 520 | 590 | 600 | 600 | 560 | 530 | 550 | 510 | 490 | 480 | 450 | 570 | 620 | 630 | 630 |
| 0 | 530 | 630 | 650 | 650 | 640 | 600 | 580 | 550 | 530 | 510 | 510 | 540 | 610 | 650 | 660 |
| -1 | 640 | 640 | 620 | 580 | 510 | 520 | 500 | 480 | 490 | 510 | 550 | 580 | 580 | 590 | 600 |
| -2 | 560 | 560 | 560 | 540 | 480 | 410 | 400 | 400 | 420 | 440 | 410 | 400 | 510 | 560 | 560 |
| -3 | 490 | 500 | 510 | 510 | 500 | 480 | 470 | 400 | 370 | 370 | 380 | 380 | 380 | 400 | 400 |
| -4 | 460 | 460 | 460 | 460 | 450 | 390 | 360 | 340 | 340 | 340 | 360 | 360 | 380 | 380 | 390 |
| -5 | 400 | 380 | 370 | 360 | 360 | 350 | 340 | 340 | 340 | 340 | 340 | 340 | 360 | 370 | 380 |
| -6 | 350 | 340 | 330 | 330 | 320 | 310 | 310 | 300 | 290 | 290 | 280 | 270 | 270 | 270 | 260 |
| -7 | 320 | 310 | 300 | 290 | 280 | 270 | 260 | 260 | 250 | 250 | 250 | 260 | 260 | 270 | 280 |
| -8 | 320 | 310 | 300 | 300 | 290 | 280 | 260 | 260 | 240 | 240 | 240 | 240 | 240 | 240 | 250 |
| -9 | 300 | 290 | 280 | 280 | 270 | 270 | 260 | 260 | 250 | 250 | 240 | 240 | 240 | 240 | 250 |
| -10 | 270 | 270 | 270 | 270 | 270 | 260 | 260 | 260 | 240 | 230 | 220 | 220 | 220 | 220 | 220 |
| -11 | 260 | 260 | 260 | 260 | 250 | 240 | 220 | 210 | 200 | 180 | 170 | 160 | 140 | 130 | 120 |
| -12 | 290 | 300 | 300 | 300 | 260 | 240 | 210 | 200 | 180 | 160 | 150 | 140 | 120 | 120 | 120 |
| -13 | 280 | 300 | 310 | 290 | 240 | 210 | 200 | 190 | 180 | 170 | 160 | 140 | 140 | 140 | 140 |
| -14 | 230 | 220 | 220 | 220 | 200 | 190 | 180 | 180 | 170 | 160 | 150 | 140 | 140 | 140 | 140 |
| -15 | 180 | 180 | 170 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 |
| -16 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 140 | 140 | 110 | 90 | 80 |
| -17 | 160 | 160 | 160 | 170 | 160 | 160 | 150 | 130 | 100 | 100 | 90 | 80 | 60 | 60 | 60 |
| -18 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 120 | 110 | 100 | 90 | 80 | 80 | 70 | 60 |
| -19 | 130 | 130 | 130 | 130 | 130 | 130 | 120 | 100 | 90 | 80 | 80 | 70 | 60 | 60 | 50 |
| -20 | 130 | 130 | 130 | 120 | 120 | 120 | 100 | 100 | 100 | 90 | 80 | 80 | 70 | 70 | 70 |

| LAT | GAL | | | | | | GAL | | | | | | LON | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | | | |
| 19 | 110 | 110 | 110 | 110 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | | | |
| 18 | 110 | 110 | 110 | 110 | 120 | 120 | 120 | 120 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | | |
| 17 | 130 | 130 | 130 | 130 | 130 | 130 | 140 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | |
| 16 | 140 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | |
| 15 | 160 | 160 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | |
| 14 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | |
| 13 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | | |
| 12 | 200 | 200 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | | |
| 11 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | |
| 10 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 210 | | |
| 9 | 230 | 230 | 230 | 230 | 230 | 230 | 240 | 250 | 250 | 250 | 260 | 260 | 250 | 250 | 250 | 250 | | |
| 8 | 240 | 240 | 240 | 240 | 250 | 250 | 250 | 260 | 280 | 290 | 280 | 280 | 270 | 250 | 250 | 230 | | |
| 7 | 280 | 280 | 280 | 280 | 280 | 280 | 280 | 270 | 270 | 270 | 270 | 270 | 260 | 260 | 260 | 250 | | |
| 6 | 370 | 370 | 360 | 360 | 350 | 330 | 300 | 290 | 290 | 290 | 300 | 300 | 300 | 290 | 290 | 270 | | |
| 5 | 510 | 480 | 420 | 450 | 330 | 340 | 340 | 350 | 360 | 370 | 360 | 300 | 280 | 270 | 250 | | | |
| 4 | 530 | 520 | 510 | 500 | 490 | 420 | 380 | 340 | 330 | 320 | 310 | 300 | 290 | 280 | 260 | | | |
| 3 | 540 | 500 | 480 | 460 | 440 | 460 | 490 | 500 | 510 | 480 | 450 | 420 | 390 | 380 | 370 | | | |
| 2 | 560 | 540 | 510 | 420 | 390 | 400 | 410 | 450 | 520 | 530 | 540 | 540 | 520 | 440 | 390 | | | |
| 1 | 610 | 530 | 450 | 390 | 380 | 400 | 460 | 570 | 660 | 720 | 730 | 740 | 750 | 900 | 580 | | | |
| 0 | 600 | 520 | 380 | 370 | 380 | 480 | 570 | 600 | 590 | 570 | 560 | 650 | 850 | 860 | 870 | | | |
| -1 | 590 | 460 | 430 | 440 | 460 | 480 | 480 | 470 | 440 | 460 | 550 | 620 | 780 | 780 | 730 | | | |
| -2 | 560 | 550 | 540 | 540 | 530 | 520 | 510 | 490 | 480 | 460 | 460 | 460 | 460 | 460 | 460 | 460 | | |
| -3 | 440 | 450 | 470 | 490 | 500 | 510 | 510 | 490 | 430 | 420 | 440 | 450 | 450 | 440 | 420 | | | |
| -4 | 400 | 420 | 440 | 450 | 440 | 420 | 410 | 380 | 360 | 360 | 360 | 360 | 360 | 360 | 350 | 350 | | |
| -5 | 400 | 400 | 400 | 410 | 420 | 410 | 400 | 370 | 350 | 330 | 320 | 320 | 320 | 320 | 320 | 340 | | |
| -6 | 260 | 260 | 260 | 260 | 260 | 260 | 270 | 280 | 290 | 300 | 310 | 320 | 330 | 340 | 360 | | | |
| -7 | 270 | 250 | 250 | 240 | 230 | 220 | 210 | 200 | 200 | 200 | 210 | 280 | 300 | 330 | 340 | | | |
| -8 | 260 | 260 | 260 | 260 | 250 | 250 | 240 | 240 | 240 | 240 | 250 | 260 | 320 | 340 | 350 | | | |
| -9 | 260 | 270 | 280 | 280 | 270 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 270 | 280 | 290 | | | |
| -10 | 230 | 240 | 240 | 250 | 250 | 250 | 240 | 240 | 240 | 250 | 260 | 260 | 280 | 280 | 280 | | | |
| -11 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 140 | 220 | 220 | 220 | 210 | 210 | 220 | 220 | | | |
| -12 | 110 | 110 | 110 | 120 | 120 | 120 | 130 | 140 | 160 | 200 | 220 | 240 | 250 | 250 | 240 | | | |
| -13 | 140 | 140 | 140 | 140 | 140 | 140 | 150 | 160 | 180 | 200 | 210 | 220 | 220 | 230 | 230 | | | |
| -14 | 140 | 140 | 140 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 200 | 200 | 200 | 210 | 220 | | | |
| -15 | 150 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 180 | 200 | 230 | | | |
| -16 | 80 | 80 | 80 | 80 | 80 | 80 | 90 | 180 | 180 | 180 | 190 | 200 | 220 | 220 | 220 | | | |
| -17 | 60 | 60 | 50 | 50 | 60 | 60 | 60 | 60 | 60 | 70 | 100 | 170 | 210 | 220 | 240 | | | |
| -18 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 70 | 120 | 130 | 140 | 160 | 160 | 160 | | | |
| -19 | 50 | 50 | 40 | 40 | 40 | 50 | 50 | 60 | 60 | 60 | 80 | 80 | 90 | 90 | 100 | 140 | | |
| -20 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 70 | 80 | 80 | 90 | 90 | 100 | 120 | | |

| GAL | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LAT | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 |
| 19 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 120 |
| 18 | 140 | 140 | 150 | 150 | 150 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 130 | 130 |
| 17 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 160 | 160 | 150 | 150 | 140 | |
| 16 | 180 | 180 | 180 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 180 | 180 | 180 | 180 |
| 15 | 200 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 200 | 200 | 200 | 200 | 190 |
| 14 | 210 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 210 |
| 13 | 230 | 230 | 230 | 230 | 240 | 240 | 240 | 240 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| 12 | 230 | 230 | 240 | 250 | 250 | 250 | 260 | 260 | 260 | 260 | 260 | 260 | 250 | 240 | 230 |
| 11 | 210 | 210 | 220 | 220 | 230 | 250 | 260 | 260 | 270 | 270 | 270 | 260 | 260 | 260 | 250 |
| 10 | 210 | 210 | 210 | 220 | 230 | 240 | 250 | 250 | 260 | 260 | 260 | 270 | 260 | 260 | 260 |
| 9 | 240 | 240 | 240 | 250 | 260 | 270 | 270 | 280 | 280 | 280 | 290 | 290 | 290 | 290 | 290 |
| 8 | 220 | 220 | 220 | 220 | 230 | 250 | 250 | 260 | 270 | 280 | 290 | 290 | 300 | 300 | 290 |
| 7 | 250 | 250 | 240 | 240 | 240 | 250 | 250 | 260 | 270 | 280 | 300 | 300 | 300 | 300 | 300 |
| 6 | 260 | 240 | 240 | 240 | 240 | 250 | 270 | 280 | 290 | 300 | 300 | 300 | 300 | 300 | 290 |
| 5 | 240 | 240 | 240 | 250 | 270 | 280 | 280 | 300 | 310 | 320 | 320 | 320 | 310 | 290 | 270 |
| 4 | 260 | 270 | 280 | 290 | 300 | 310 | 310 | 320 | 330 | 330 | 330 | 330 | 320 | 300 | 290 |
| 3 | 360 | 350 | 350 | 340 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 310 | 290 | 270 |
| 2 | 330 | 310 | 290 | 290 | 280 | 290 | 290 | 300 | 310 | 320 | 330 | 330 | 320 | 320 | 280 |
| 1 | 470 | 350 | 310 | 290 | 280 | 270 | 290 | 300 | 310 | 330 | 330 | 300 | 290 | 280 | 270 |
| 0 | 660 | 520 | 360 | 300 | 260 | 270 | 260 | 260 | 280 | 290 | 310 | 320 | 330 | 360 | 390 |
| -1 | 640 | 620 | 630 | 630 | 400 | 380 | 370 | 370 | 370 | 370 | 360 | 430 | 500 | 560 | 440 |
| -2 | 440 | 420 | 400 | 380 | 360 | 360 | 360 | 450 | 450 | 400 | 400 | 450 | 500 | 530 | 610 |
| -3 | 380 | 350 | 350 | 350 | 360 | 360 | 410 | 430 | 450 | 460 | 460 | 460 | 450 | 510 | 540 |
| -4 | 350 | 360 | 360 | 360 | 360 | 370 | 380 | 420 | 440 | 450 | 450 | 450 | 460 | 470 | 490 |
| -5 | 360 | 370 | 380 | 400 | 420 | 430 | 440 | 450 | 450 | 460 | 460 | 460 | 460 | 460 | 460 |
| -6 | 360 | 370 | 380 | 400 | 400 | 420 | 420 | 420 | 430 | 440 | 440 | 440 | 440 | 440 | 430 |
| -7 | 350 | 370 | 390 | 400 | 410 | 430 | 430 | 440 | 440 | 440 | 440 | 440 | 430 | 420 | 420 |
| -8 | 360 | 360 | 370 | 380 | 390 | 400 | 400 | 410 | 420 | 420 | 420 | 400 | 390 | 380 | 380 |
| -9 | 300 | 310 | 320 | 330 | 340 | 340 | 350 | 360 | 360 | 360 | 380 | 380 | 390 | 400 | 400 |
| -10 | 280 | 260 | 250 | 260 | 320 | 330 | 340 | 340 | 340 | 340 | 340 | 340 | 330 | 320 | 310 |
| -11 | 220 | 220 | 220 | 230 | 240 | 280 | 300 | 300 | 310 | 300 | 290 | 270 | 270 | 280 | 280 |
| -12 | 240 | 240 | 250 | 250 | 260 | 260 | 280 | 280 | 280 | 280 | 270 | 250 | 240 | 240 | 240 |
| -13 | 240 | 240 | 250 | 260 | 260 | 270 | 280 | 280 | 280 | 260 | 260 | 260 | 250 | 250 | 250 |
| -14 | 220 | 230 | 240 | 240 | 250 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 250 | 250 | 240 |
| -15 | 240 | 240 | 250 | 250 | 250 | 250 | 240 | 230 | 220 | 220 | 220 | 220 | 210 | 210 | 210 |
| -16 | 220 | 220 | 200 | 180 | 180 | 180 | 200 | 200 | 210 | 220 | 220 | 220 | 220 | 220 | 220 |
| -17 | 240 | 220 | 210 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 190 | 200 | 200 | 200 |
| -18 | 160 | 160 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| -19 | 140 | 150 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| -20 | 120 | 130 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 140 | 140 | 150 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 |
| 19 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 18 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 17 | 140 | 140 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| 16 | 170 | 170 | 160 | 160 | 150 | 150 | 150 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 |
| 15 | 190 | 180 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 |
| 14 | 210 | 210 | 200 | 200 | 190 | 170 | 160 | 150 | 150 | 150 | 150 | 150 | 160 | 160 | 170 |
| 13 | 250 | 250 | 240 | 230 | 210 | 190 | 180 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 12 | 220 | 210 | 200 | 190 | 180 | 180 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 180 | 190 |
| 11 | 240 | 240 | 230 | 220 | 220 | 210 | 200 | 200 | 190 | 180 | 180 | 180 | 190 | 190 | 200 |
| 10 | 250 | 250 | 240 | 230 | 220 | 210 | 200 | 180 | 170 | 170 | 170 | 170 | 180 | 180 | 190 |
| 9 | 280 | 280 | 280 | 270 | 250 | 230 | 200 | 170 | 160 | 160 | 160 | 160 | 170 | 170 | 180 |
| 8 | 280 | 270 | 260 | 230 | 210 | 200 | 190 | 170 | 160 | 150 | 140 | 130 | 140 | 160 | 200 |
| 7 | 290 | 270 | 230 | 200 | 170 | 140 | 140 | 130 | 130 | 140 | 140 | 150 | 160 | 170 | 190 |
| 6 | 290 | 280 | 270 | 260 | 240 | 230 | 220 | 210 | 200 | 180 | 170 | 150 | 180 | 220 | 240 |
| 5 | 250 | 240 | 220 | 210 | 200 | 180 | 160 | 150 | 150 | 140 | 140 | 150 | 190 | 220 | 250 |
| 4 | 280 | 270 | 260 | 230 | 220 | 210 | 200 | 200 | 220 | 260 | 270 | 260 | 240 | 260 | 290 |
| 3 | 270 | 260 | 260 | 250 | 240 | 240 | 230 | 230 | 220 | 220 | 210 | 240 | 270 | 290 | 310 |
| 2 | 250 | 240 | 250 | 250 | 260 | 270 | 270 | 280 | 280 | 280 | 290 | 300 | 310 | 320 | 340 |
| 1 | 270 | 280 | 280 | 290 | 300 | 310 | 320 | 340 | 350 | 340 | 320 | 300 | 320 | 330 | 340 |
| 0 | 380 | 370 | 360 | 350 | 340 | 340 | 340 | 330 | 320 | 300 | 290 | 290 | 380 | 540 | 420 |
| -1 | 420 | 400 | 400 | 390 | 370 | 350 | 360 | 360 | 360 | 350 | 350 | 350 | 350 | 350 | 350 |
| -2 | 600 | 560 | 510 | 450 | 490 | 410 | 360 | 310 | 310 | 300 | 290 | 360 | 400 | 510 | 340 |
| -3 | 520 | 490 | 480 | 460 | 430 | 380 | 340 | 330 | 310 | 300 | 300 | 320 | 320 | 330 | 370 |
| -4 | 520 | 540 | 440 | 420 | 430 | 430 | 350 | 350 | 330 | 320 | 320 | 330 | 340 | 350 | 370 |
| -5 | 470 | 490 | 540 | 500 | 460 | 390 | 390 | 390 | 340 | 330 | 310 | 340 | 460 | 490 | 510 |
| -6 | 430 | 440 | 420 | 400 | 490 | 460 | 460 | 420 | 410 | 410 | 370 | 320 | 350 | 370 | 460 |
| -7 | 420 | 400 | 360 | 360 | 420 | 440 | 450 | 450 | 450 | 430 | 420 | 420 | 420 | 420 | 430 |
| -8 | 400 | 420 | 420 | 330 | 330 | 390 | 440 | 430 | 430 | 410 | 400 | 440 | 480 | 480 | 440 |
| -9 | 400 | 410 | 410 | 420 | 420 | 330 | 350 | 340 | 390 | 420 | 400 | 410 | 430 | 420 | 450 |
| -10 | 310 | 320 | 320 | 340 | 380 | 420 | 420 | 360 | 340 | 340 | 370 | 370 | 370 | 370 | 410 |
| -11 | 300 | 320 | 320 | 330 | 340 | 370 | 390 | 360 | 320 | 330 | 340 | 380 | 380 | 350 | 370 |
| -12 | 240 | 240 | 240 | 250 | 260 | 260 | 260 | 260 | 280 | 300 | 310 | 310 | 320 | 320 | 320 |
| -13 | 260 | 260 | 270 | 280 | 280 | 280 | 280 | 290 | 300 | 320 | 320 | 330 | 330 | 320 | 310 |
| -14 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 250 | 260 | 330 | 320 |
| -15 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 240 | 240 | 250 | 260 | 270 | 280 | 280 |
| -16 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 230 | 240 | 250 | 260 |
| -17 | 200 | 200 | 200 | 200 | 210 | 210 | 210 | 210 | 220 | 220 | 220 | 220 | 220 | 230 | 240 |
| -18 | 190 | 190 | 190 | 190 | 200 | 200 | 200 | 200 | 200 | 200 | 210 | 220 | 220 | 230 | 240 |
| -19 | 160 | 160 | 160 | 160 | 170 | 170 | 180 | 180 | 180 | 190 | 200 | 200 | 210 | 220 | 220 |
| -20 | 160 | 160 | 160 | 160 | 160 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 200 | 200 | 200 |

| LAT | GAL LON | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 |
| 19 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 100 | 100 | 100 | 100 | 100 |
| 18 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| 17 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| 16 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 130 | 120 | 120 | 120 | 120 | 120 |
| 15 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 130 | 130 | 130 | 130 | 130 | 130 |
| 14 | 170 | 170 | 170 | 170 | 160 | 160 | 160 | 160 | 160 | 150 | 150 | 150 | 150 | 150 | 150 |
| 13 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| 12 | 200 | 200 | 210 | 220 | 220 | 220 | 220 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 150 |
| 11 | 200 | 200 | 210 | 210 | 220 | 230 | 250 | 260 | 270 | 280 | 280 | 280 | 270 | 260 | 240 |
| 10 | 190 | 210 | 230 | 270 | 290 | 310 | 310 | 310 | 300 | 290 | 280 | 270 | 270 | 270 | 260 |
| 9 | 210 | 240 | 270 | 310 | 330 | 350 | 370 | 370 | 330 | 290 | 280 | 270 | 260 | 260 | 250 |
| 8 | 230 | 260 | 280 | 300 | 300 | 330 | 330 | 340 | 360 | 380 | 370 | 350 | 340 | 330 | 320 |
| 7 | 200 | 230 | 270 | 290 | 390 | 400 | 410 | 410 | 410 | 400 | 370 | 360 | 340 | 320 | 310 |
| 6 | 260 | 270 | 330 | 390 | 400 | 400 | 400 | 400 | 400 | 400 | 370 | 350 | 330 | 310 | 300 |
| 5 | 270 | 290 | 320 | 340 | 360 | 390 | 400 | 400 | 400 | 390 | 380 | 370 | 360 | 350 | 330 |
| 4 | 310 | 340 | 350 | 320 | 290 | 300 | 350 | 390 | 400 | 400 | 340 | 310 | 310 | 300 | 280 |
| 3 | 320 | 340 | 350 | 360 | 360 | 370 | 370 | 380 | 380 | 350 | 340 | 310 | 290 | 260 | 260 |
| 2 | 400 | 400 | 380 | 360 | 350 | 340 | 330 | 320 | 330 | 330 | 350 | 340 | 310 | 300 | 280 |
| 1 | 350 | 350 | 350 | 350 | 340 | 300 | 280 | 270 | 270 | 280 | 280 | 290 | 320 | 310 | 300 |
| 0 | 430 | 380 | 470 | 370 | 360 | 320 | 400 | 410 | 260 | 260 | 280 | 300 | 310 | 340 | 380 |
| -1 | 420 | 560 | 560 | 570 | 440 | 420 | 410 | 360 | 410 | 460 | 520 | 590 | 660 | 670 | 480 |
| -2 | 300 | 500 | 730 | 560 | 700 | 690 | 720 | 720 | 560 | 640 | 660 | 660 | 700 | 860 | 540 |
| -3 | 390 | 410 | 460 | 490 | 570 | 630 | 630 | 680 | 710 | 820 | 720 | 720 | 740 | 830 | 700 |
| -4 | 390 | 510 | 530 | 540 | 570 | 440 | 500 | 550 | 610 | 660 | 660 | 790 | 780 | 800 | 810 |
| -5 | 520 | 540 | 550 | 540 | 560 | 510 | 540 | 540 | 540 | 570 | 600 | 660 | 780 | 800 | 800 |
| -6 | 500 | 580 | 580 | 550 | 560 | 630 | 650 | 620 | 570 | 600 | 610 | 640 | 680 | 670 | 820 |
| -7 | 440 | 480 | 480 | 490 | 560 | 560 | 570 | 700 | 690 | 690 | 620 | 630 | 640 | 740 | 840 |
| -8 | 430 | 440 | 460 | 420 | 440 | 440 | 440 | 500 | 520 | 580 | 630 | 630 | 600 | 700 | 850 |
| -9 | 420 | 380 | 380 | 400 | 410 | 410 | 410 | 450 | 450 | 440 | 480 | 580 | 590 | 520 | 460 |
| -10 | 390 | 370 | 380 | 380 | 400 | 420 | 410 | 400 | 390 | 410 | 440 | 480 | 500 | 470 | 500 |
| -11 | 360 | 360 | 360 | 360 | 370 | 360 | 390 | 380 | 330 | 350 | 390 | 390 | 410 | 420 | 490 |
| -12 | 320 | 330 | 330 | 330 | 330 | 340 | 340 | 350 | 350 | 350 | 350 | 360 | 360 | 360 | 370 |
| -13 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 310 | 280 | 310 | 340 | 340 | 340 | 340 | 320 |
| -14 | 310 | 310 | 310 | 300 | 320 | 320 | 310 | 310 | 280 | 300 | 270 | 260 | 300 | 310 | 370 |
| -15 | 300 | 300 | 310 | 310 | 310 | 310 | 310 | 310 | 300 | 300 | 300 | 290 | 290 | 280 | 230 |
| -16 | 280 | 290 | 300 | 320 | 320 | 260 | 260 | 270 | 280 | 270 | 270 | 240 | 240 | 340 | 370 |
| -17 | 240 | 240 | 240 | 250 | 260 | 310 | 310 | 320 | 280 | 280 | 280 | 300 | 300 | 310 | 320 |
| -18 | 250 | 260 | 240 | 250 | 280 | 280 | 300 | 300 | 320 | 310 | 310 | 300 | 300 | 300 | 300 |
| -19 | 220 | 240 | 240 | 260 | 260 | 270 | 280 | 290 | 300 | 300 | 300 | 300 | 300 | 260 | 270 |
| -20 | 210 | 220 | 220 | 230 | 240 | 240 | 240 | 240 | 240 | 230 | 230 | 230 | 230 | 230 | 240 |

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