

World Data Center for Geomagnetism, Kyoto

DATA BOOK SPECIAL ISSUE No.3

Field-Aligned Currents Flowing Through the
Surface Surrounded by the Magsat Satellite Orbit
Calculated by Use of the Ampère's Law

MARCH 2002

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Graduate School of Science
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Field aligned currents flowing through the surface surrounded by the MAGSAT satellite orbit calculated by use of the Ampère's law

by

Akira Suzuki

(Saga University, Saga 840-8502, JAPAN)

1 Introduction

We have calculated the electric currents flowing across the surface enclosed by the MAGSAT orbit by use of the Ampère's law. By courtesy of the World Data Center for geomagnetism, Kyoto, we can publish the final results of the current intensity and its time variation as the present report.

The MAGSAT satellite was launched on November 2, 1979 and it observed the earth's magnetic fields beginning next day to May 18, 1980, at the interval of 1/16 seconds. Valuable data were obtained as long as over half a year, though the reliability of the data slightly diminished in the last part of the observation period. In the present report calculation results are given only until April 13 considering the accuracy. After that date, some offset values seem to be added occasionally to the observed data, though we thought they can also be available after some arrangement, if we are not afraid of the contamination of small errors, As mentioned later, the current intensities are summarized in Figures 2 and Table. Some supplementary figures are also added in the present report for the convenience of short explanations of the calculation method and for giving some statistical results.

2 The method of calculation

Only key points of the method of calculations are given here, so please see the papers by Suzuki et al. (1985) and Suzuki and Fukushima (1998) if you need the details.

The Ampère's law:

$$I = \frac{1}{\mu_0} \oint B_t ds$$

was employed to calculate the current I , where ds is the line segment along the satellite orbit, B_t is the magnetic field component tangential to it and μ_0 is the permeability of the empty space. The law implies that when the line integral for B_t was carried out with a closed path and divided by μ_0 , it gives the current intensity I flowing across the surface enclosed by that path. Thus, using the satellite orbit as the integral path and the observed magnetic fields tangential to it, we can get the current intensity flowing across the satellite orbit (see Figure 1). Vector magnetic data named Chronfin were used which were observed by the satellite every 1/16 seconds. By averaging the data one second values were made first and the tangential components B_t were calculated and then the

numerical integral was made after the model field MGST(4/81) was removed.

The satellite makes the sun-synchronous orbit with the 96.76° inclination. Its path reaches the geographic latitude a little over than 83° , but its path in the geomagnetic coordinates draws complicated configurations especially in the relation to the auroral ovals. The perigee and the apogee of the satellite are roughly over 300 km and 500 km, respectively, but as a matter of course they descend gradually in the long observation period. For detailed descriptions about the field observation and the orbit data, see Langel (1982) and Langel et al. (1982). The geometrical relation between the orbit and the oval and the resulting effects on the obtained current intensities are given in Suzuki and Fukushima (1998).

In calculating the B_t components, we mapped the orbit on to the geographic coordinate system and calculated the tangential components to it. The terminal points of the integral were chosen in the polar regions where the satellite orbit crosses in the geographic coordinates. Two terminal points decided in this way come to one point, but if we stop the earth's rotation, the point is separated into two and the satellite needs to rotate a little more to return to the starting point. In the case of the revolutioning earth, the orbit has no crossing point in the inertial space, at least within a year and we cannot apply the Ampère's law.

Terminal points exist in the region where the earth's dipole field has small tangential components to the orbit, but because they are in the polar regions, the fields are often contaminated more or less by high latitude disturbances. The discussion for B_t and the choice for terminal points, see Suzuki et al. (1985).

3 Results and some remarks

The current intensities calculated are summarized in Figure 2. Current intensities are shown by small full square marks with the vertical lines connecting them to the base line. Successively calculated values are lined up from left to right and then day by day from up to down. Dates and UT's are shown in the left-hand ordinate and the abscissa, respectively. It takes about 93 minutes for the satellite to complete a full circular orbit, though the period becomes slightly shorter in later months. Actually, the current intensities are plotted every about 46.5 minutes, i.e. the number of integral is doubled by making an independent round path by connecting the latter half of the previous path to the next first half of the path. Thus, terminal points change alternately from the northern polar region to the southern polar region. The scale of current intensities is given in the left-side ordinate in the unit of 10^6 amperes, where the positive sign indicates the sunward flow of the current. The curves shown in the figure are AE indices which are used from the back number of this catalogue. They are drawn downward positive for the convenience of comparison with I and their scales are given in the right-side ordinate. The numerical figures shown are three hour indices Kp. The results shown in the figure are given in numerical form in the table, where UT's are the central hour of the two

terminal points and I is the calculated current intensities in 10^6 amperes.

From the tendency of a data book, it may not be appropriate to write any comment, but it would be clear without any question that the currents become anti-sunward when AE grows larger and that the parallel tendency is very high between the current intensity and the AE index. From the rough estimate, the intensity of 10^6 amperes of currents corresponds to 500 nT of AE index. We do not have enough space to show the change of B_t with latitudes, but two examples are given in Figure 3, one from a quiet day and the other from a disturbed day both with terminal points in the southern polar region. On quiet days B_t shows small variations everywhere. On disturbed days there usually exist clearly noticeable bulges in mid latitudes and no more than four steep horn typed variations near the auroral oval zones. As the sign of B_t is taken positive in the satellite orbit direction, the bulges have opposite signs between the north-bound and south-bound passes and thus they have a tendency to be cancelled largely in the course of integration. On the other hand, the variations in the oval regions do not usually resemble much in their shapes and the residuals seem to make up the integration results.

The dependence of the current intensity on the Kp index is summarized in Figure 4. In the figure calculated current intensities are given classified by the Kp indices, but only the cases are shown where the sub-indices of Kp are 0.

Theoretically the Ampère's law gives the total currents which pass through the integral circuit, but as a matter of course currents can not flow through the solid earth nor the neutral atmosphere, and so it seems quite natural to take the total currents to flow through the ionosphere below the orbit height. In Figure 5 the comparison is made between the current intensities obtained in the early months (November and December) and later months (March and April). Two typical examples of the orbit height are shown in Figure 6, one from a day soon after the launch and the other from a day in the final stage of the present analysis. The comparison of the current intensity is made in geomagnetically calm conditions ($Kp=0_0$ and 0_+) to see the influence of the satellite orbit height. Though the change in the orbit height is not small especially in the southern hemisphere, its effect on the current intensity is rarely seen. This may be because the current intensity itself is too small to compare on those days, so we cannot draw any conclusion from this result.

4 References

- Langel, R. A., The magnetic earth as seen from MAGSAT, initial results, *Geophys. Res. Lett.*, *9*, 239-242, 1982.
- Langel, R. A., G. Ousley, J. Berbert, J. Murphy, and M. Settle, The MAGSAT mission, *Geophys. Res. Lett.*, *9*, 243-245, 1982.
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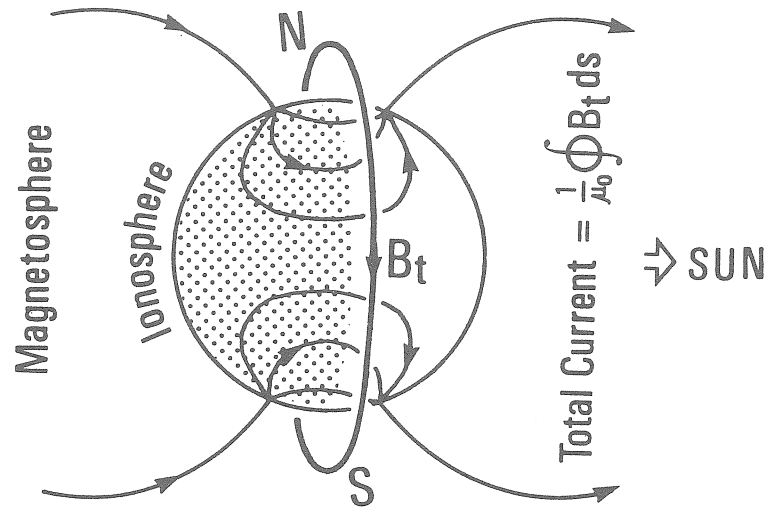
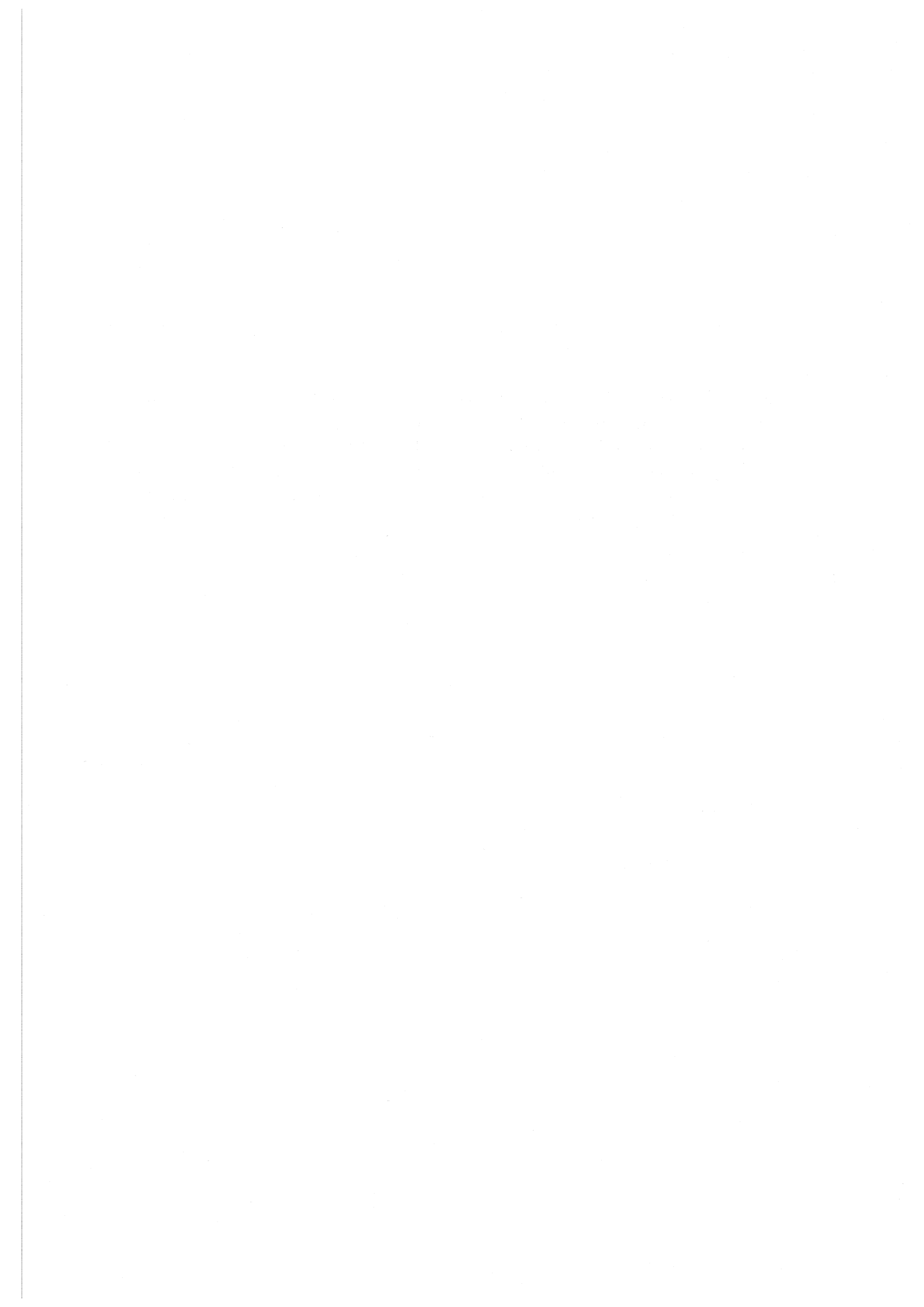


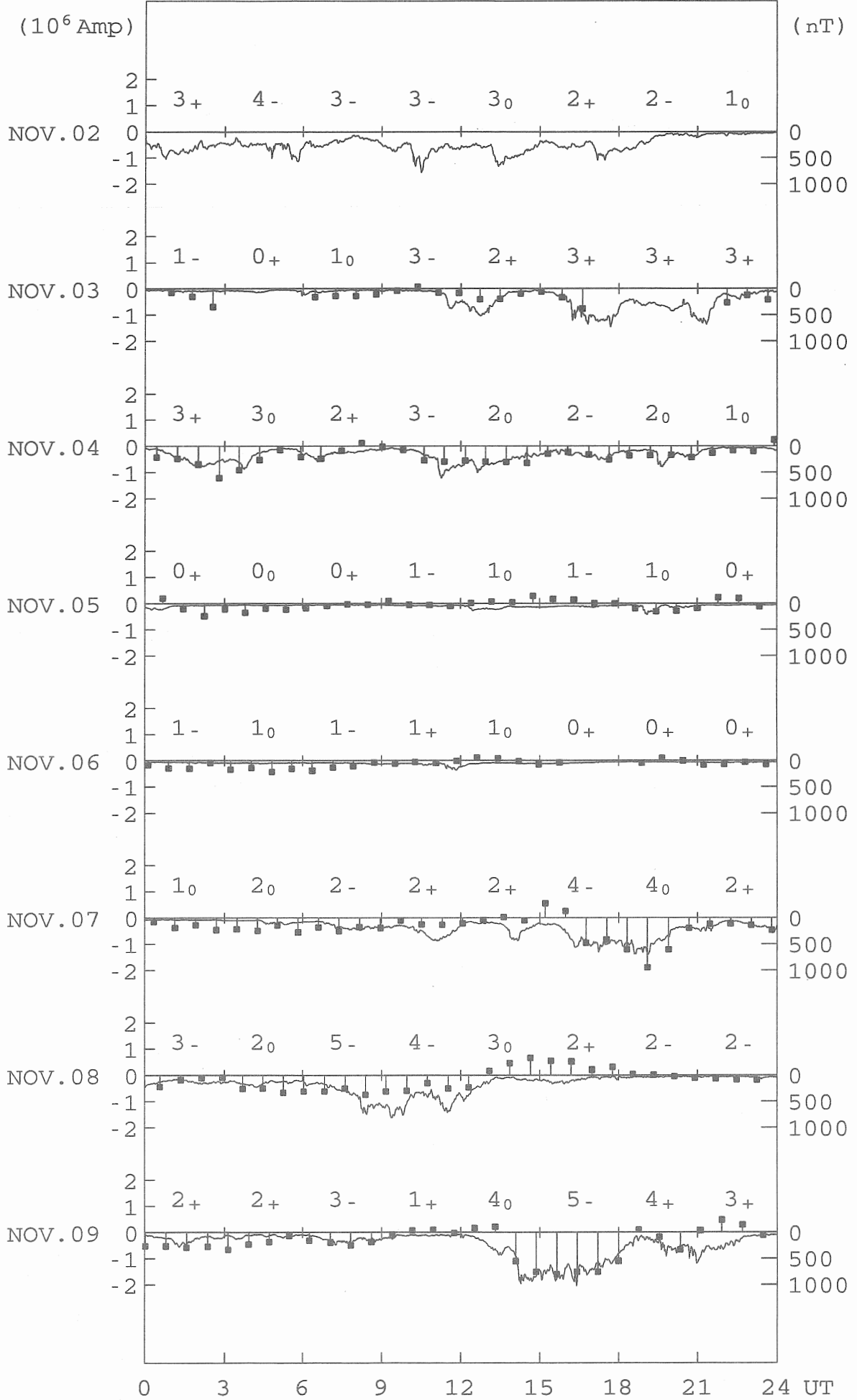
Figure 1. Schematic diagram showing the MAGSAT orbit and possible currents flowing through it. The Ampère's law was applied to calculate the current intensity integrating the magnetic components B_t tangential to the satellite orbit.

Figure 2. Intensities of total space currents under the MAGSAT orbit. Small full square marks connected with vertical lines show the current intensity flowing across the surface enclosed by the satellite orbit circle. Scales are shown in the left-side ordinate in 10^6 amperes and UT hours are at the bottom. Curves shown together are AE indices drawn downward positive with scales at the right-side ordinate. Numeral figures are three hour indices Kp's.



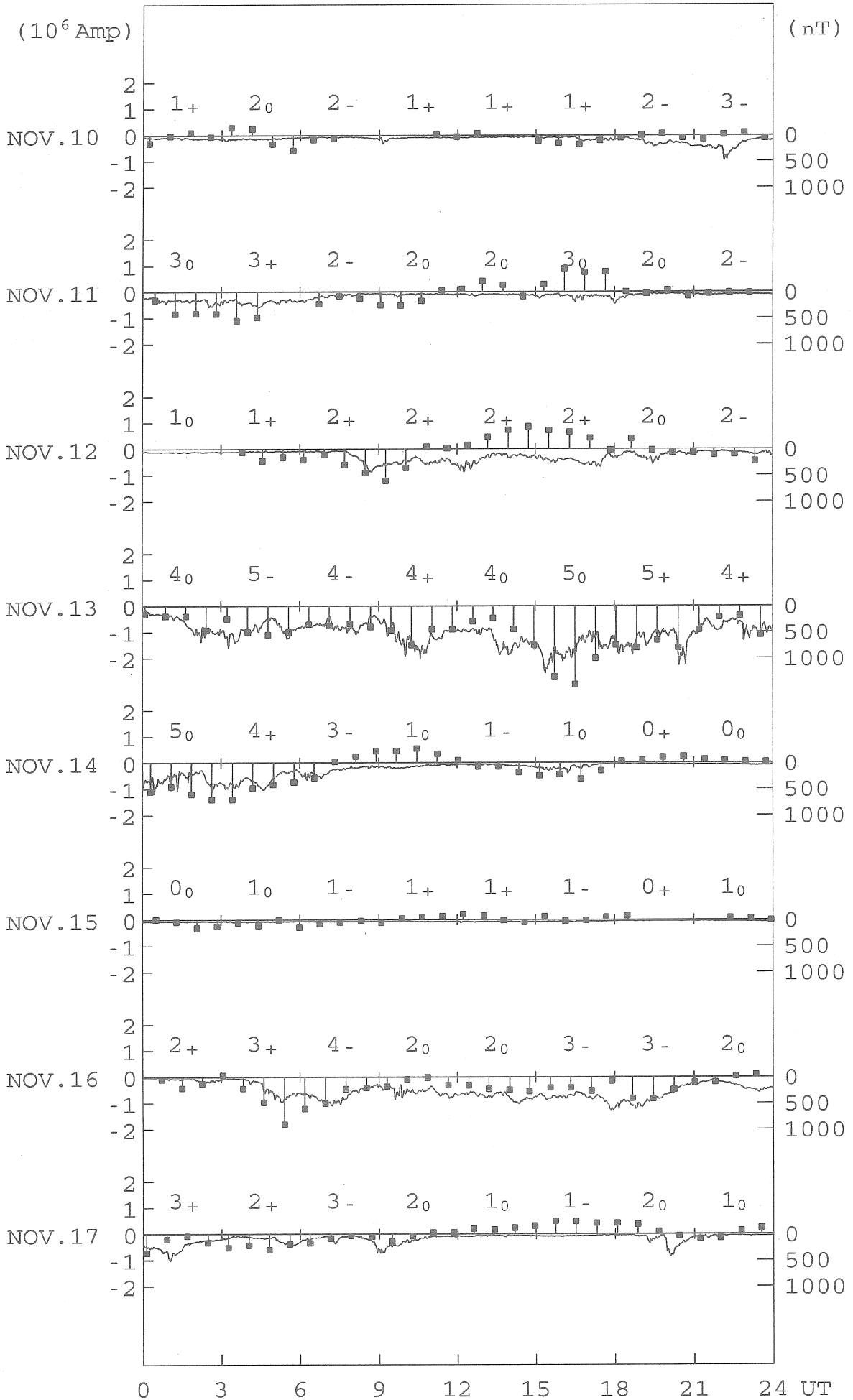
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AE INDEX



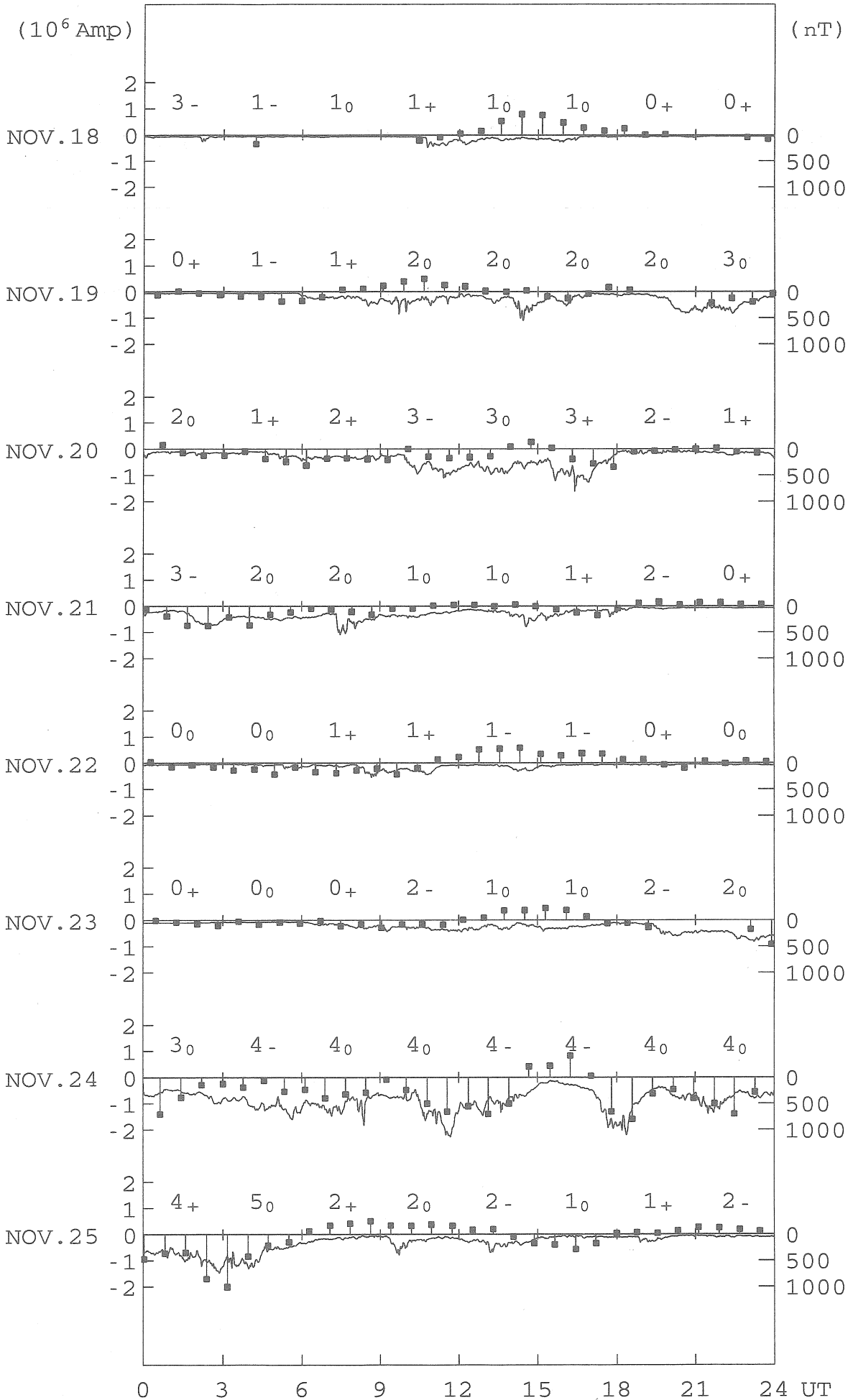
CURRENT INTENSITY

AE INDEX



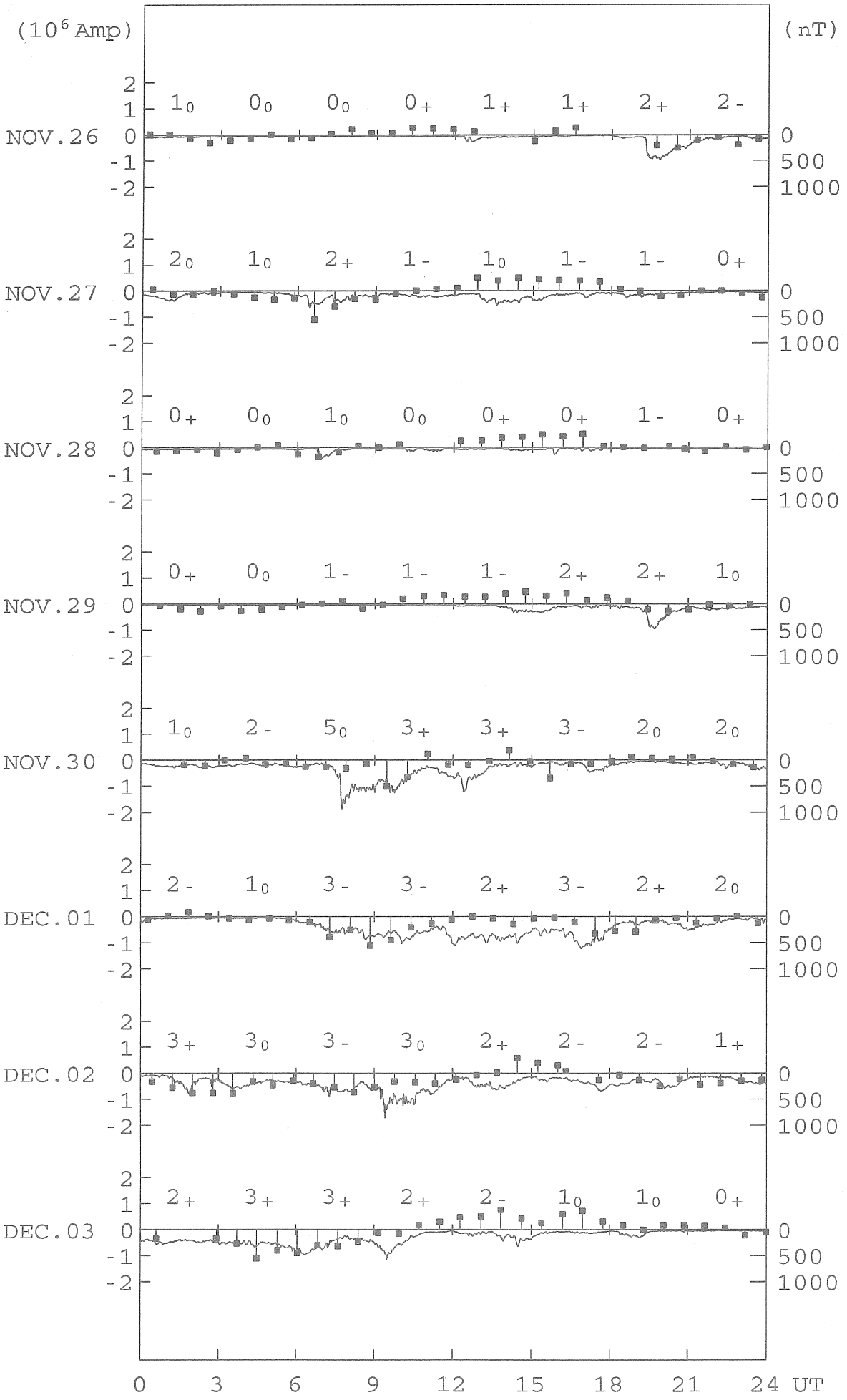
CURRENT INTENSITY

AE INDEX



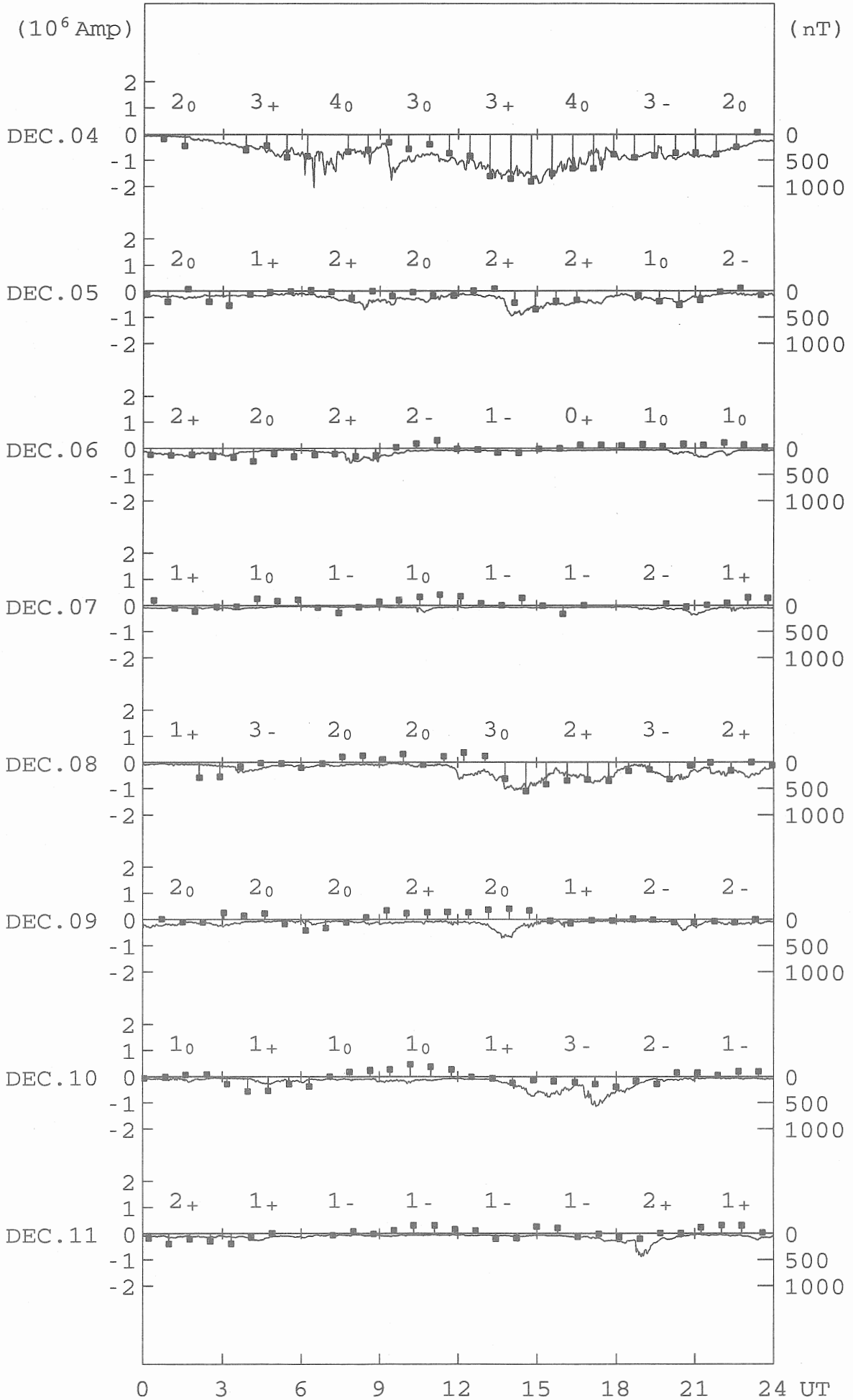
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AE INDEX



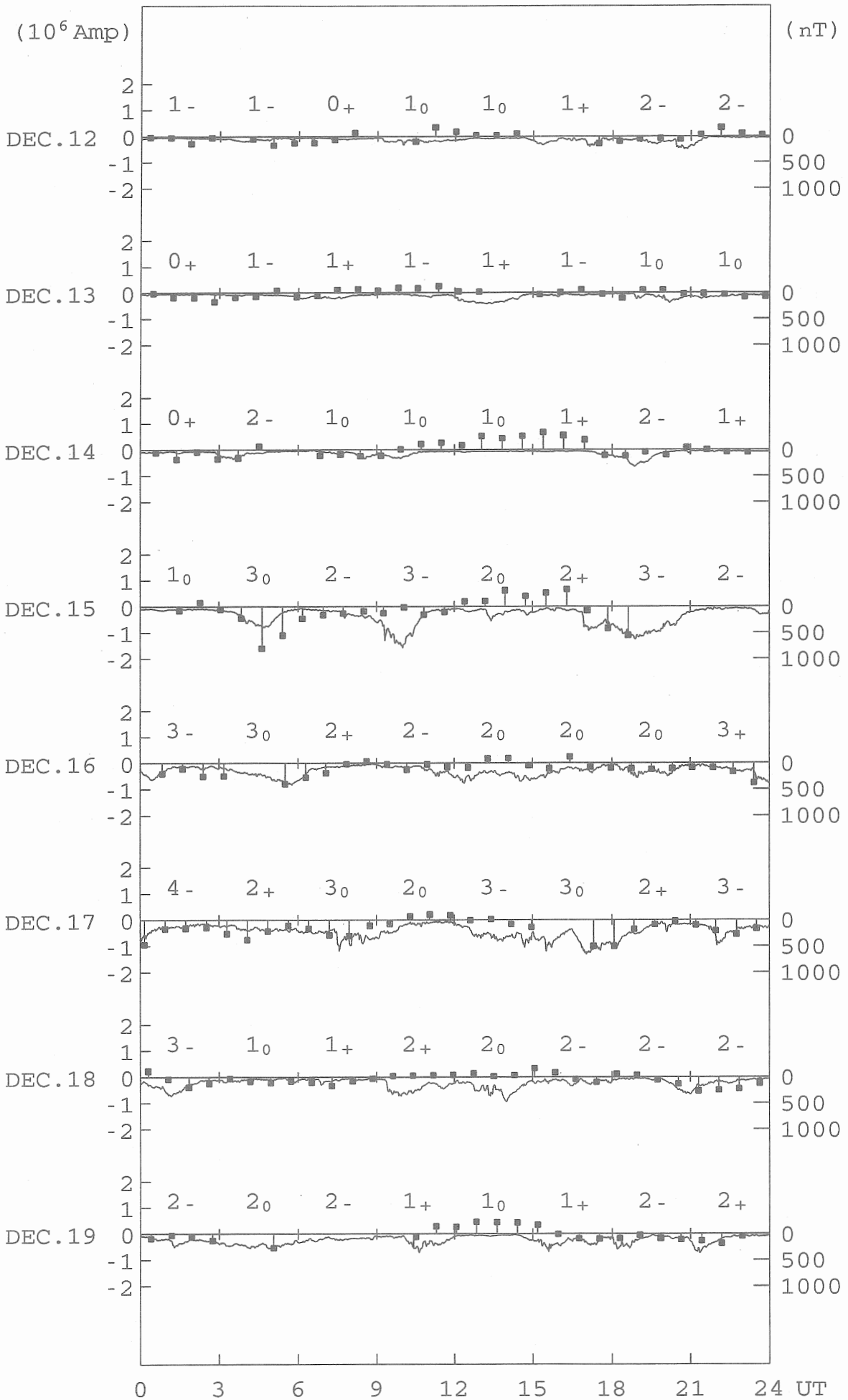
CURRENT INTENSITY

AE INDEX



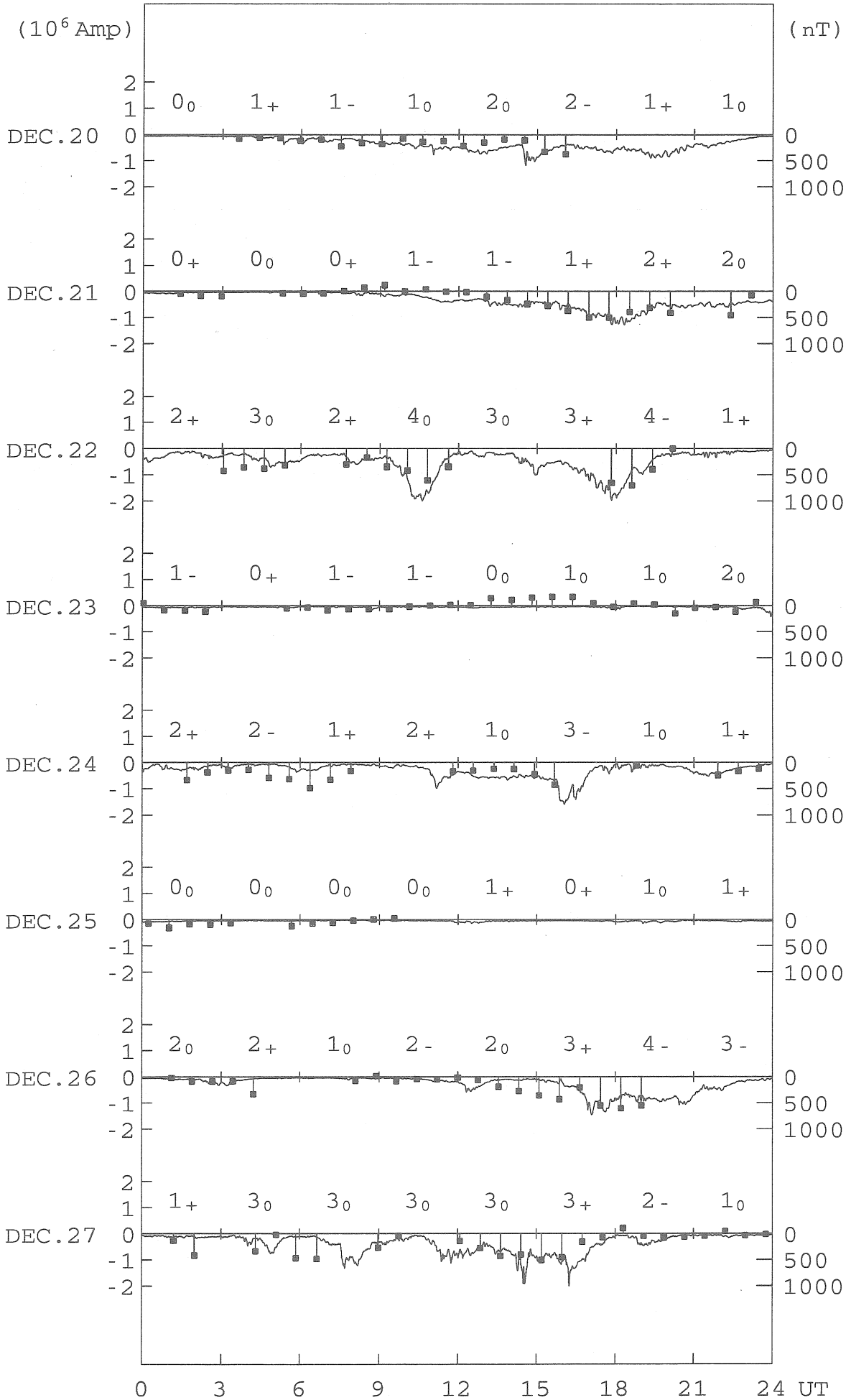
CURRENT INTENSITY

AE INDEX



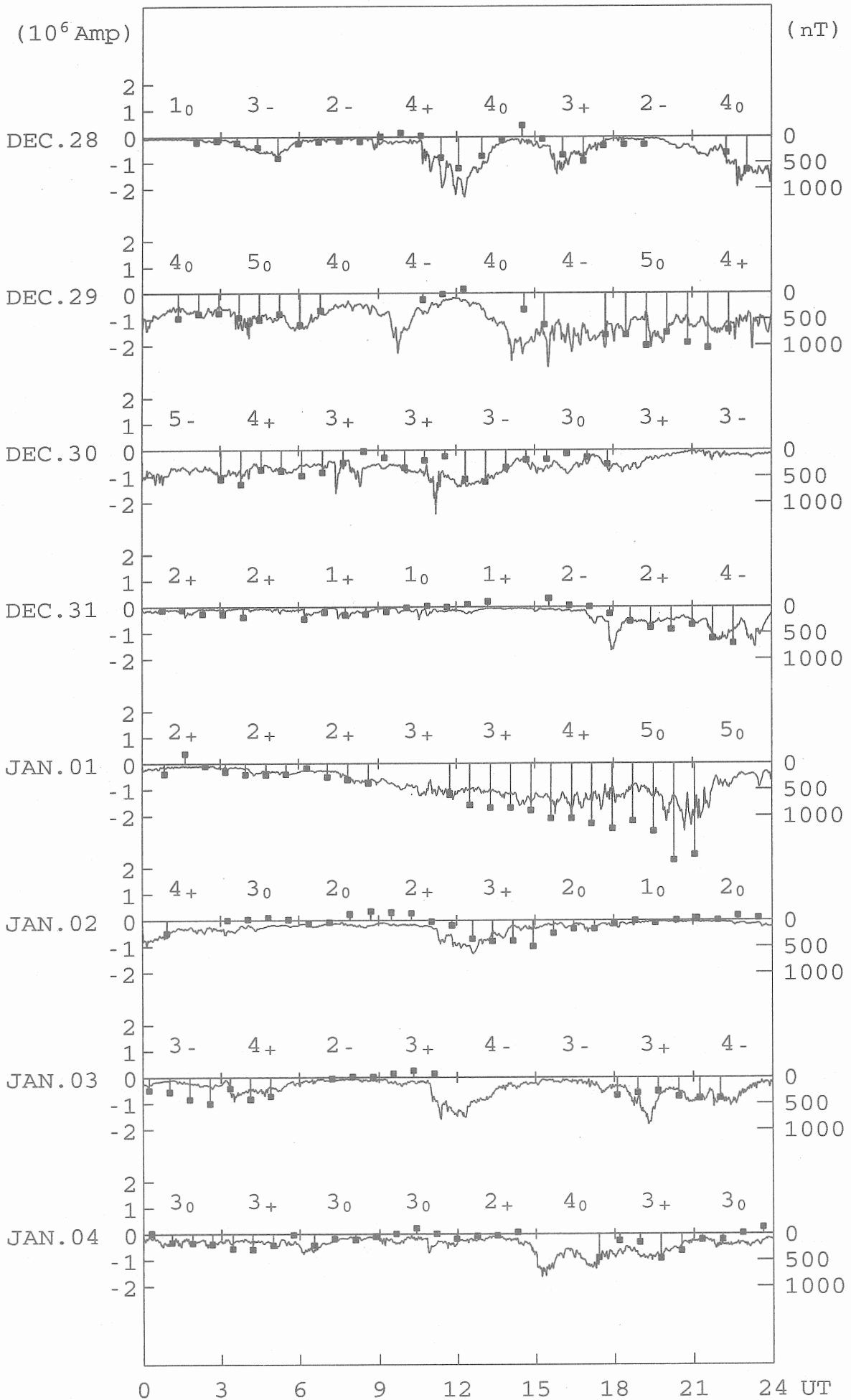
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AE INDEX



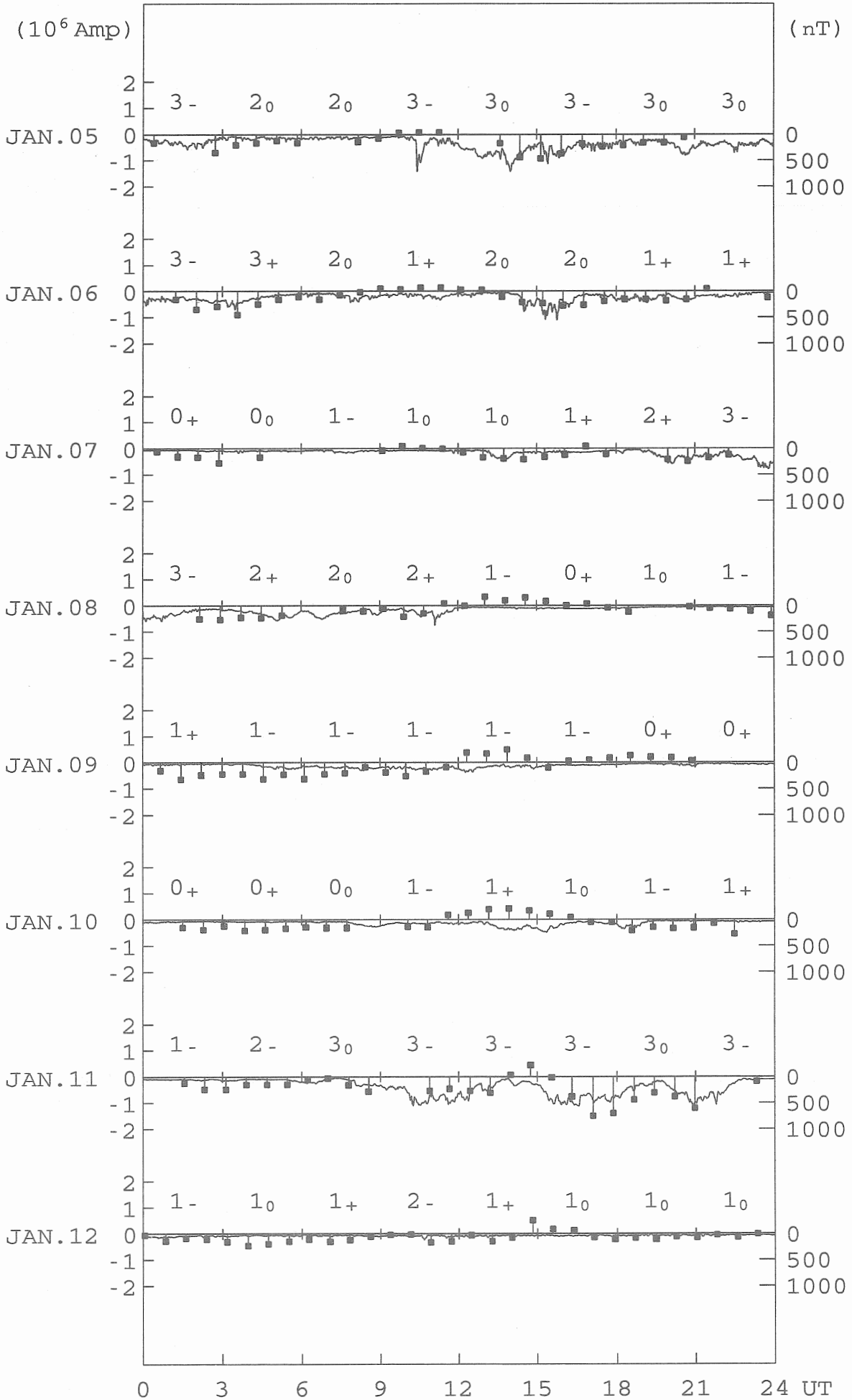
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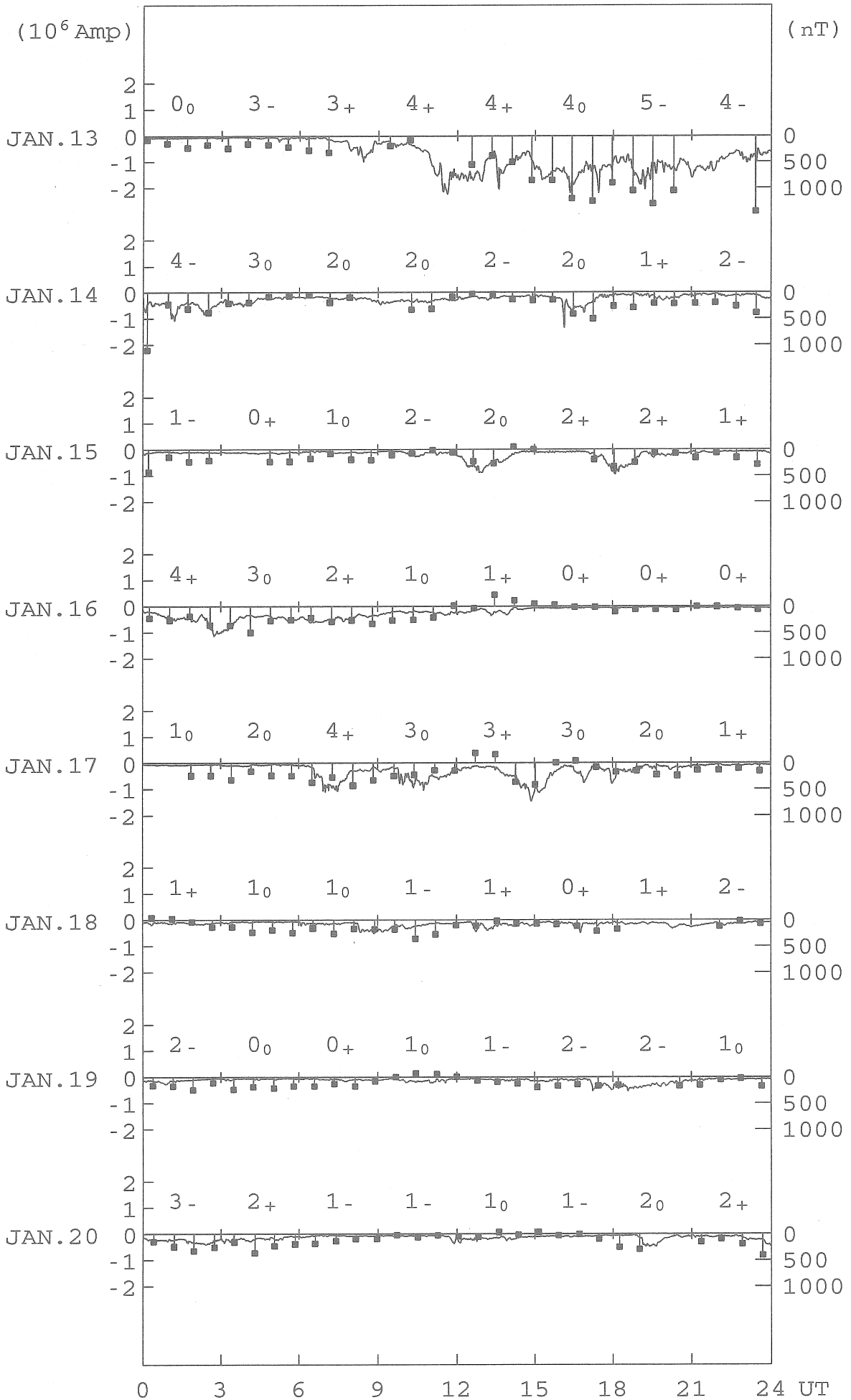
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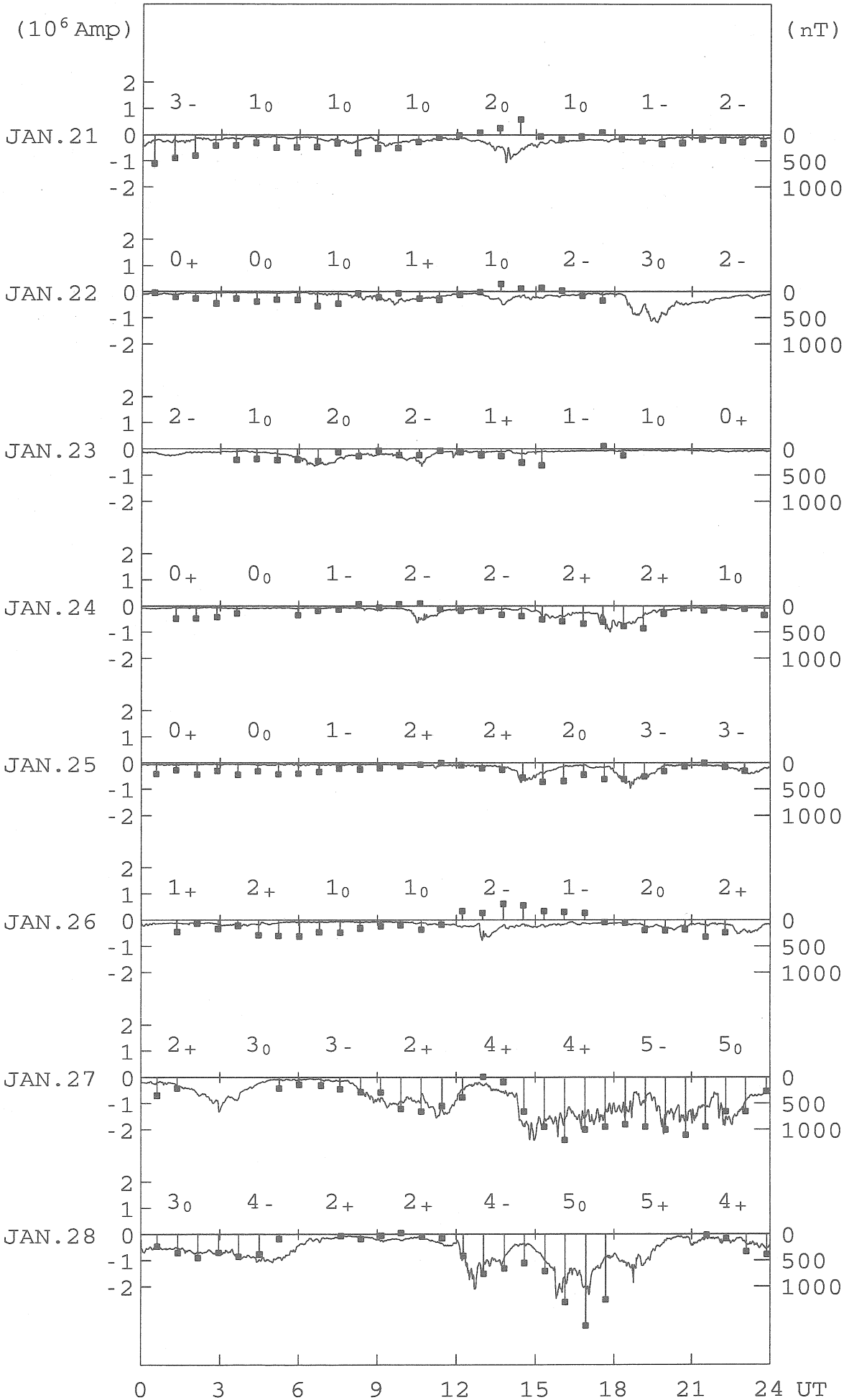
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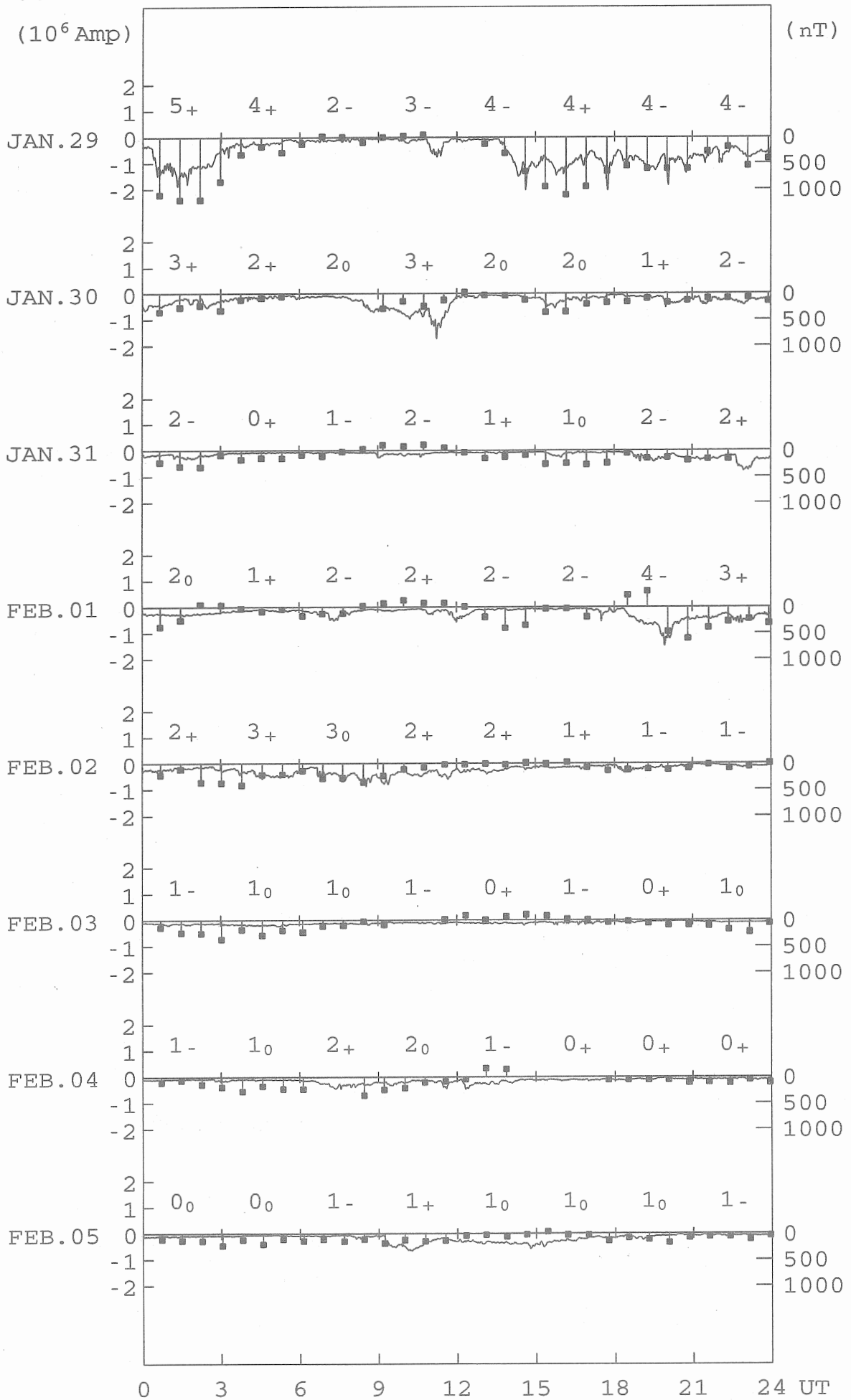
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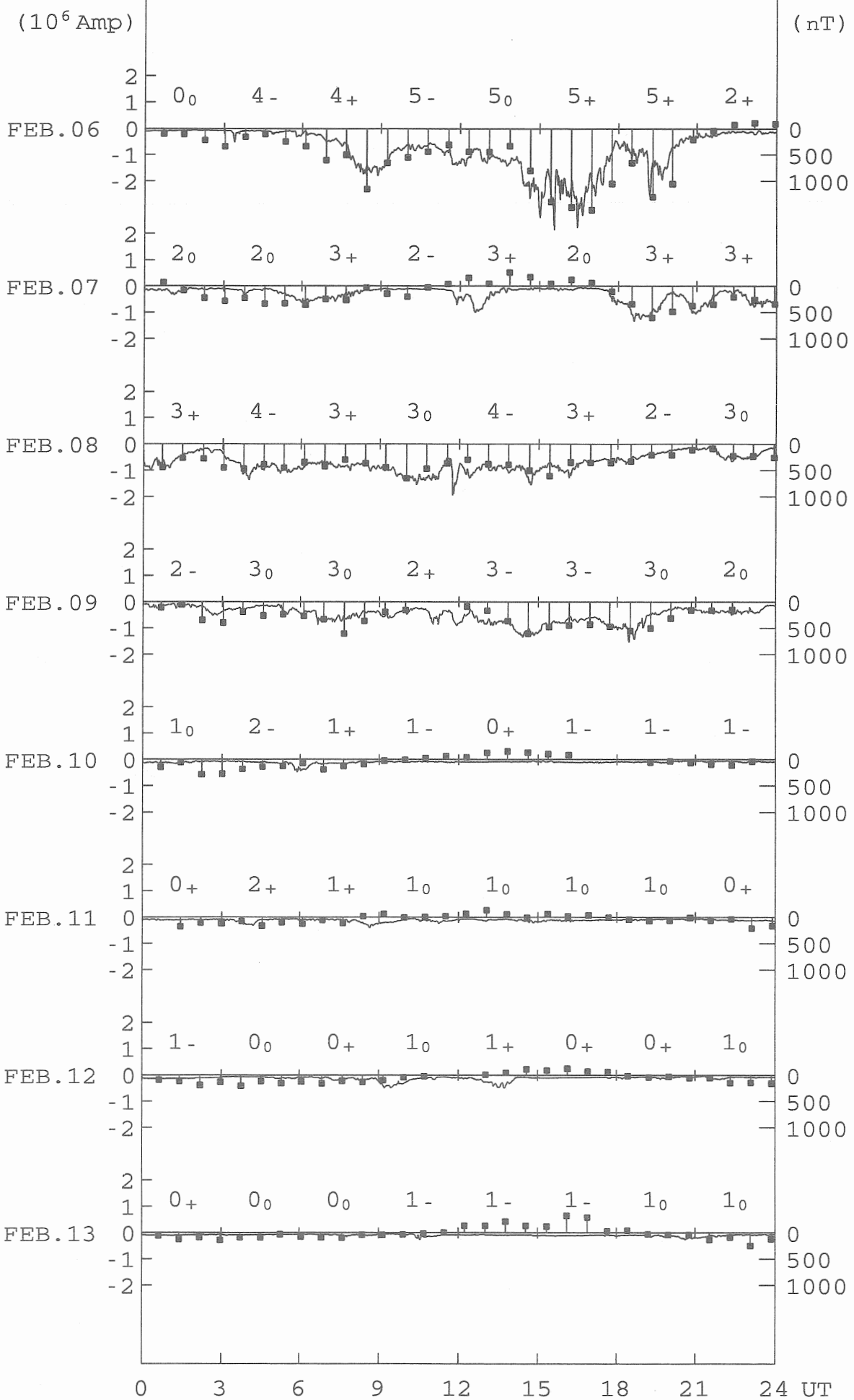
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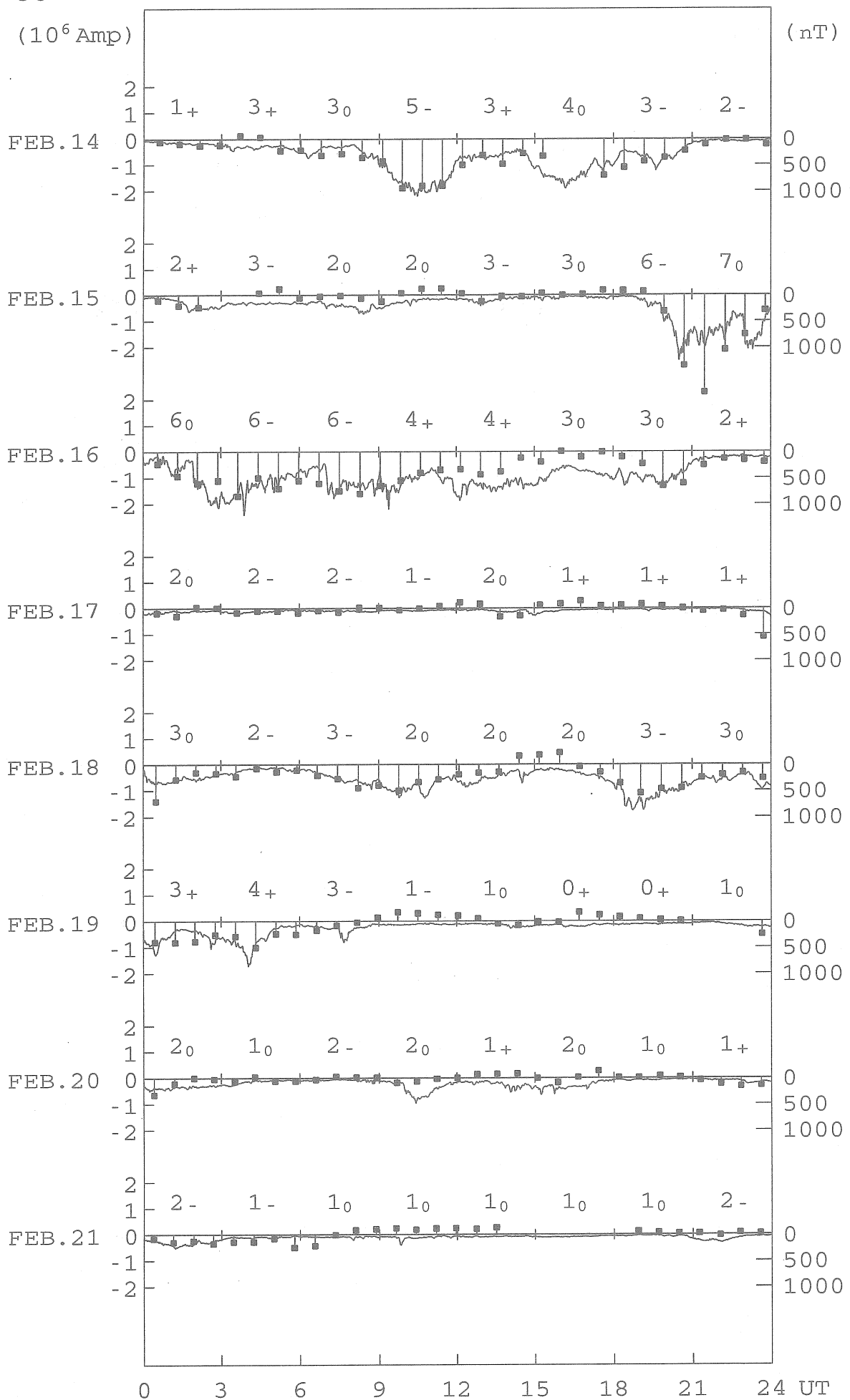
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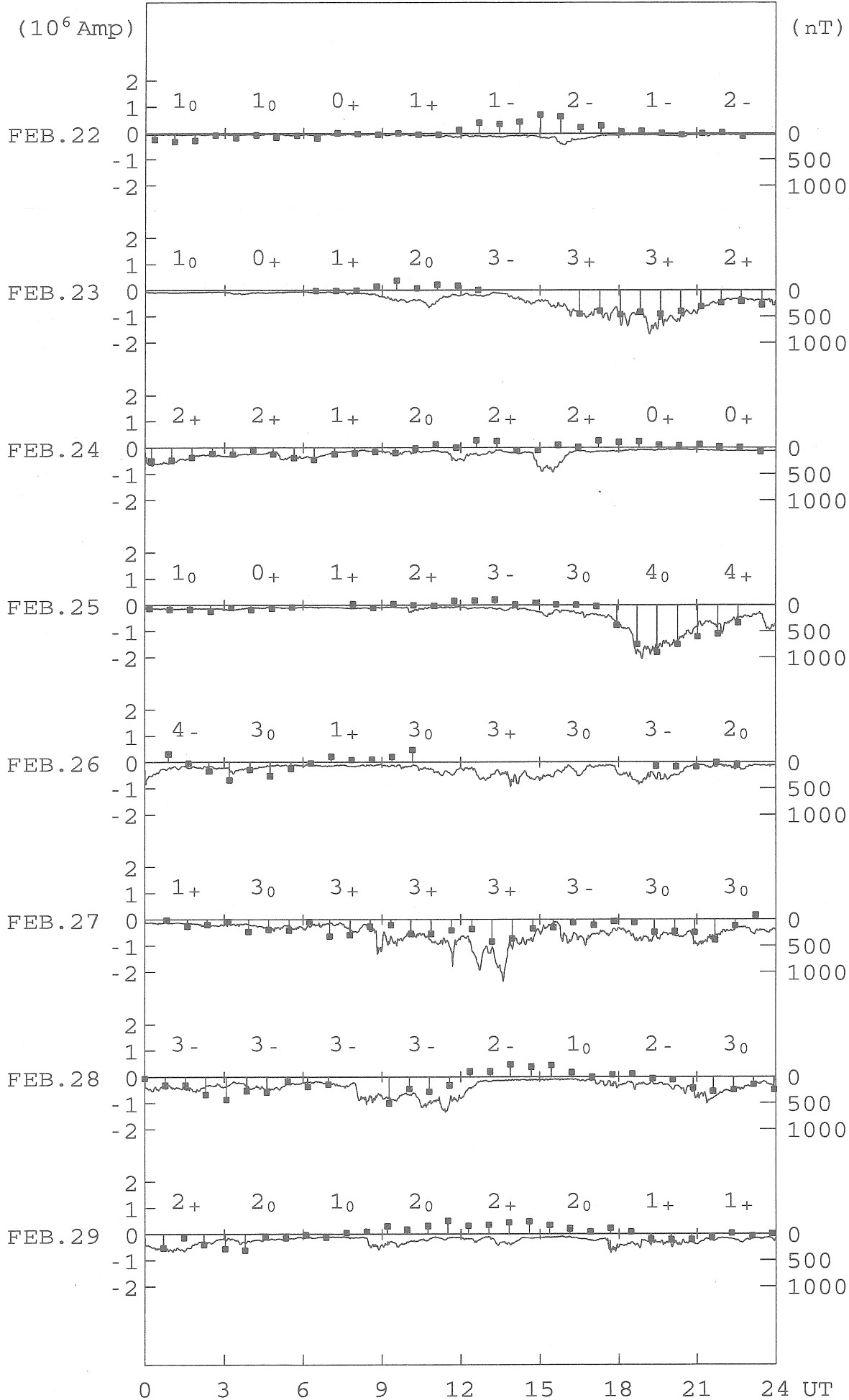
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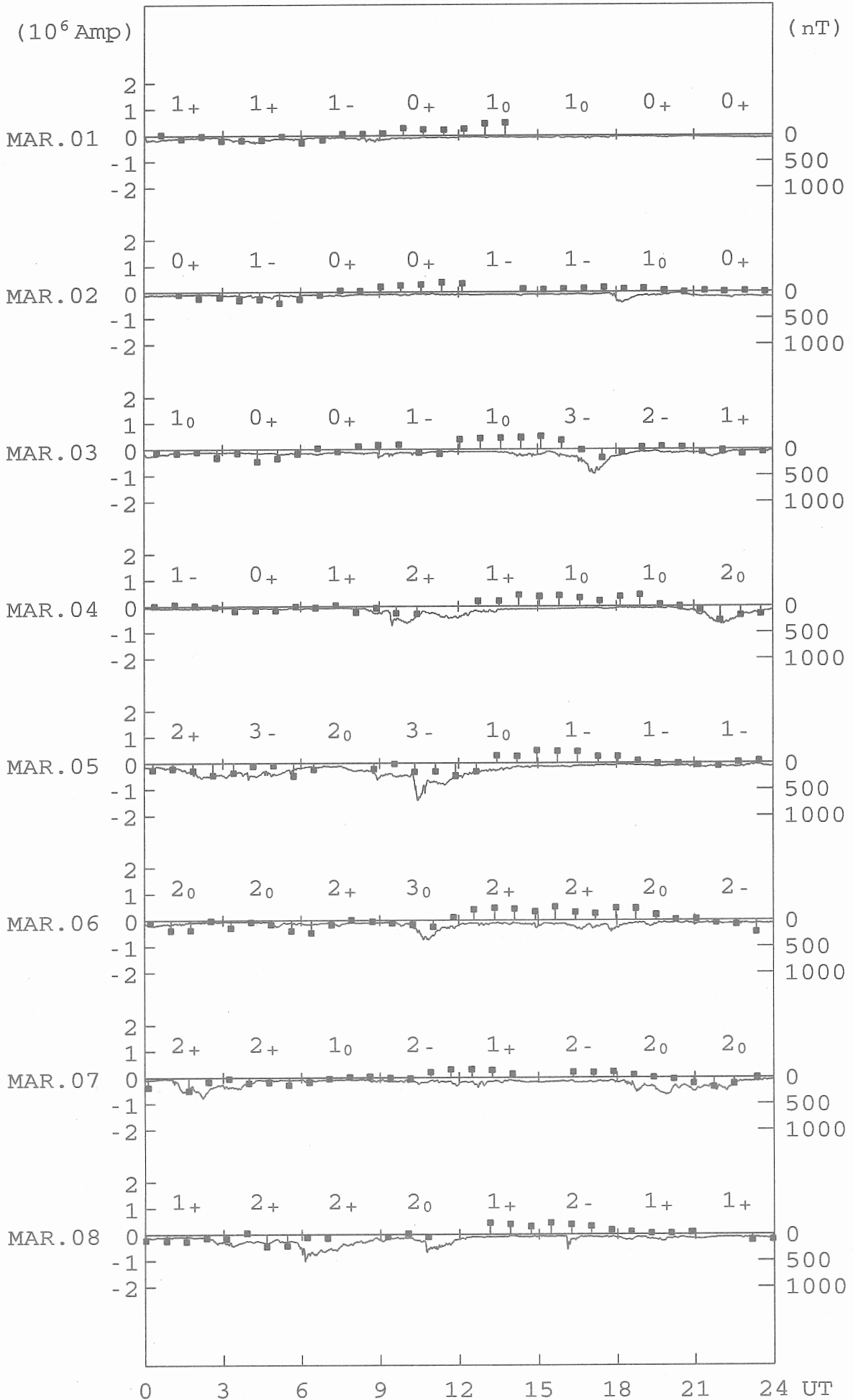
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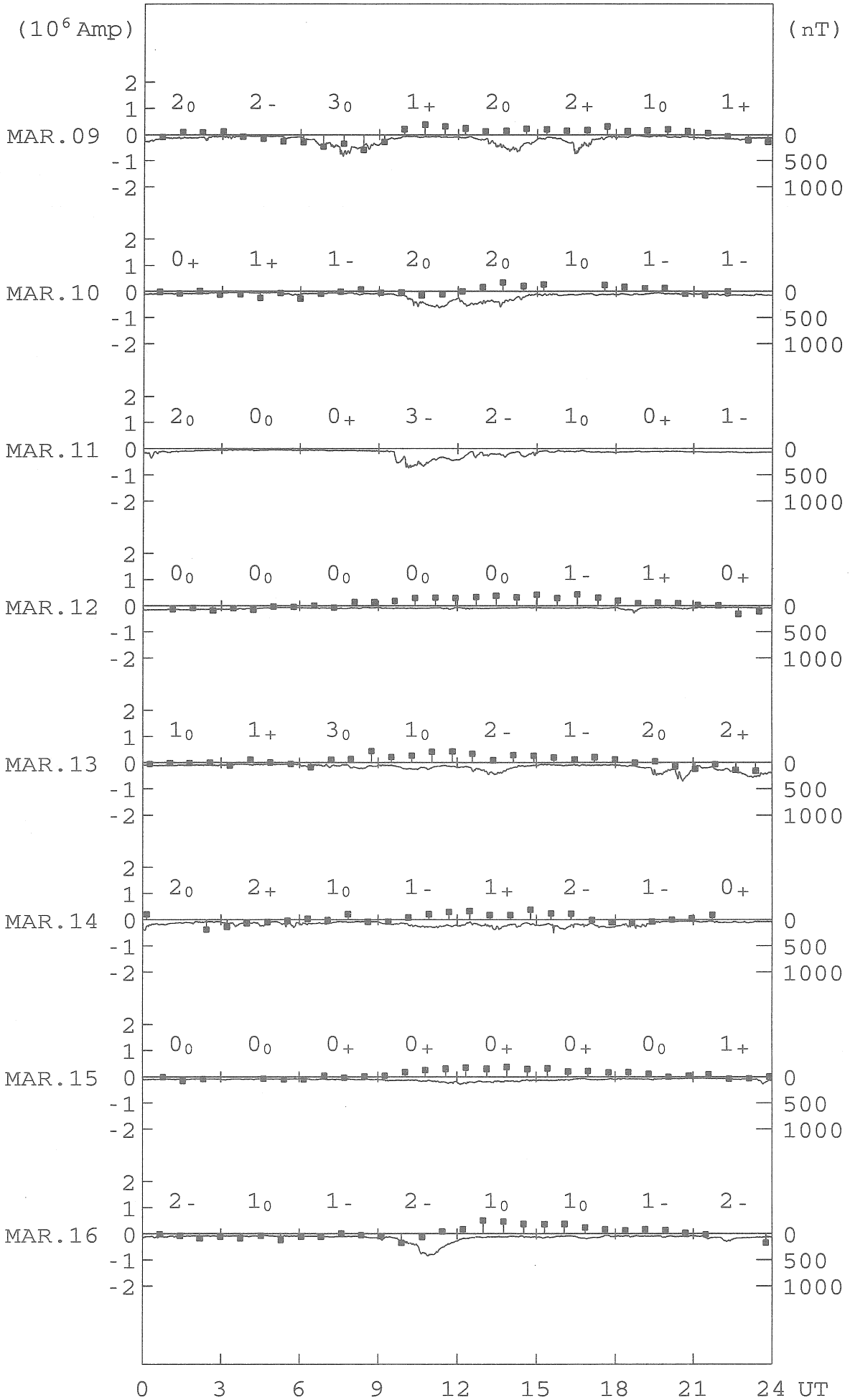
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AE INDEX



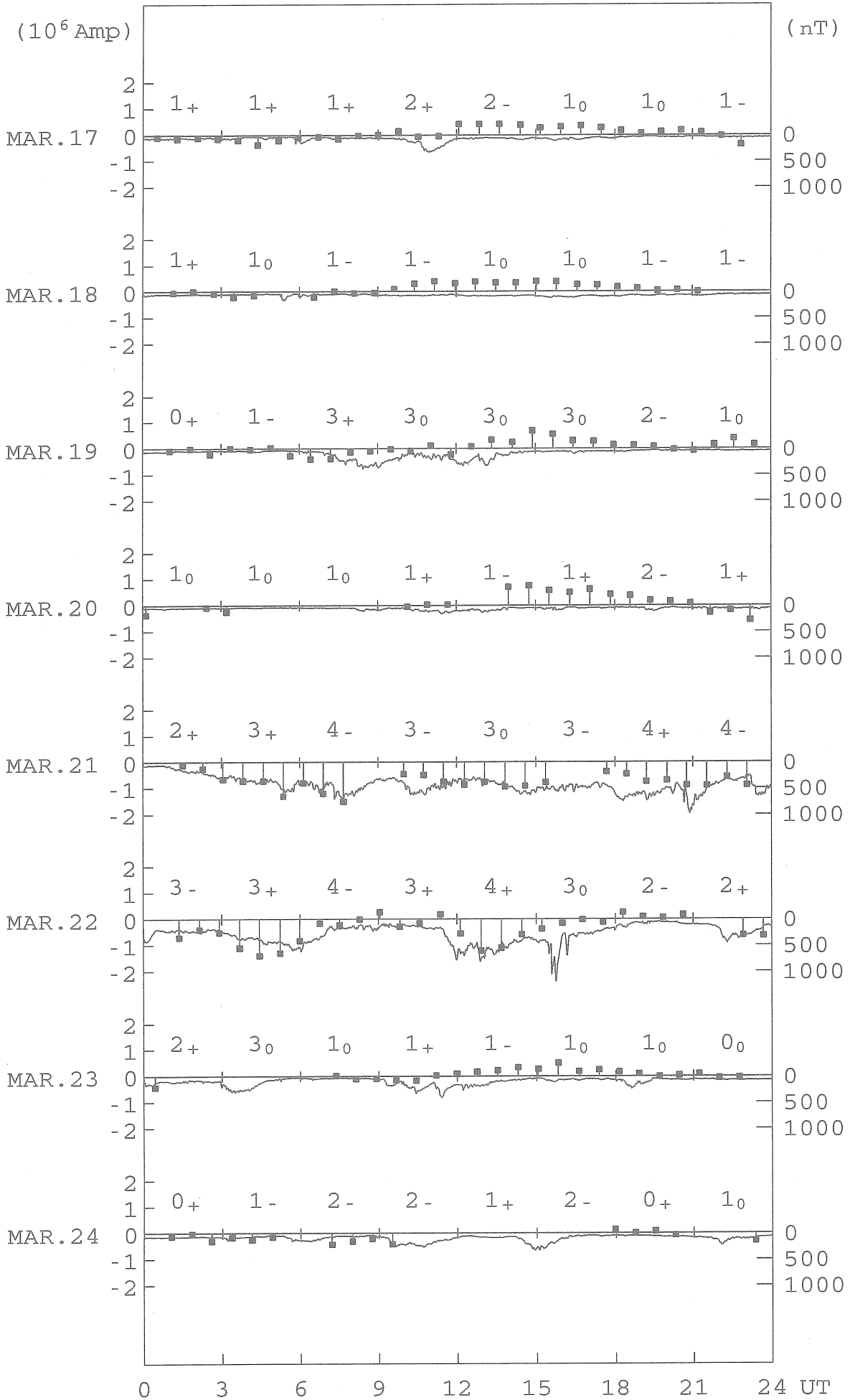
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AE INDEX



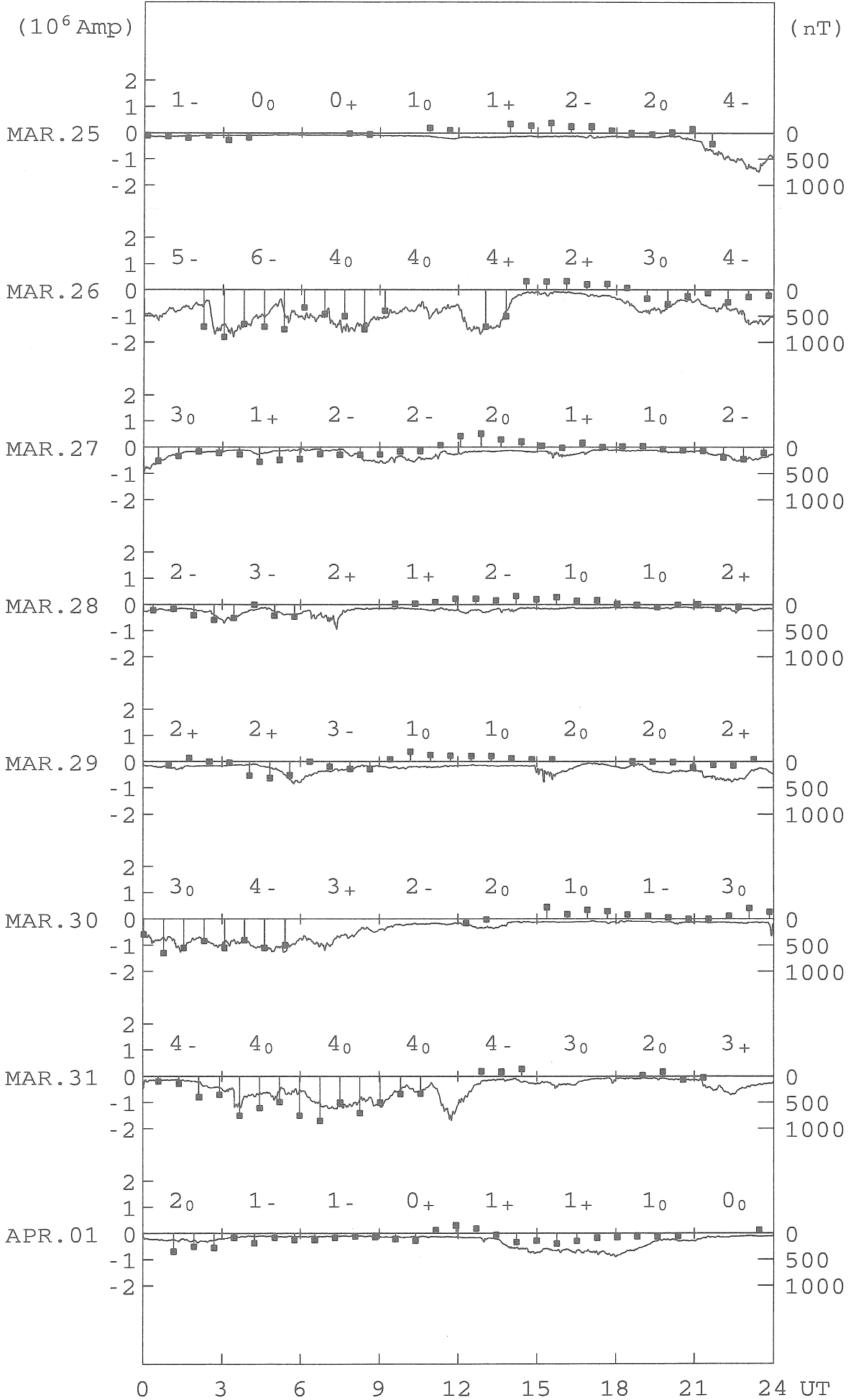
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AE INDEX



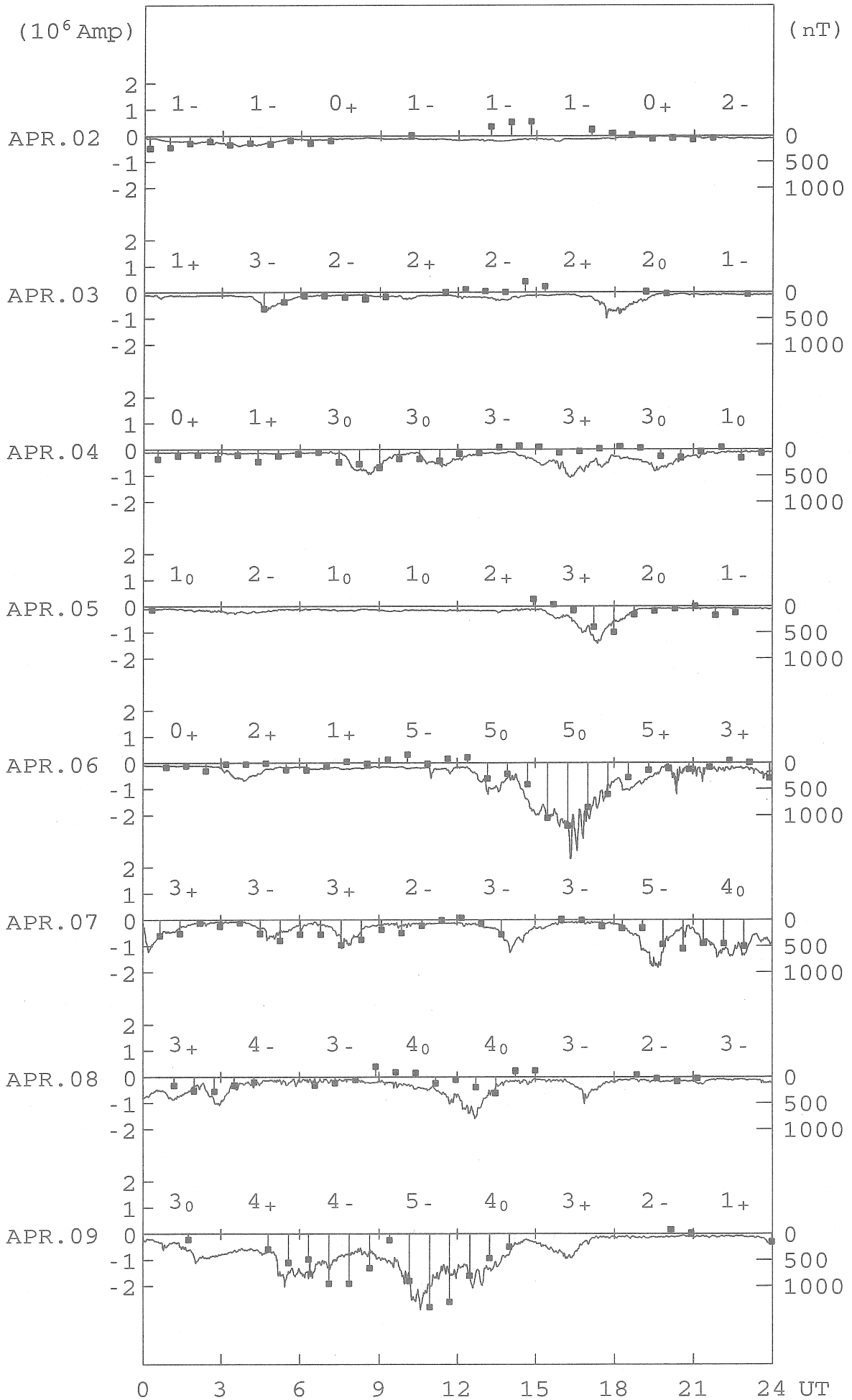
CURRENT INTENSITY

AE INDEX



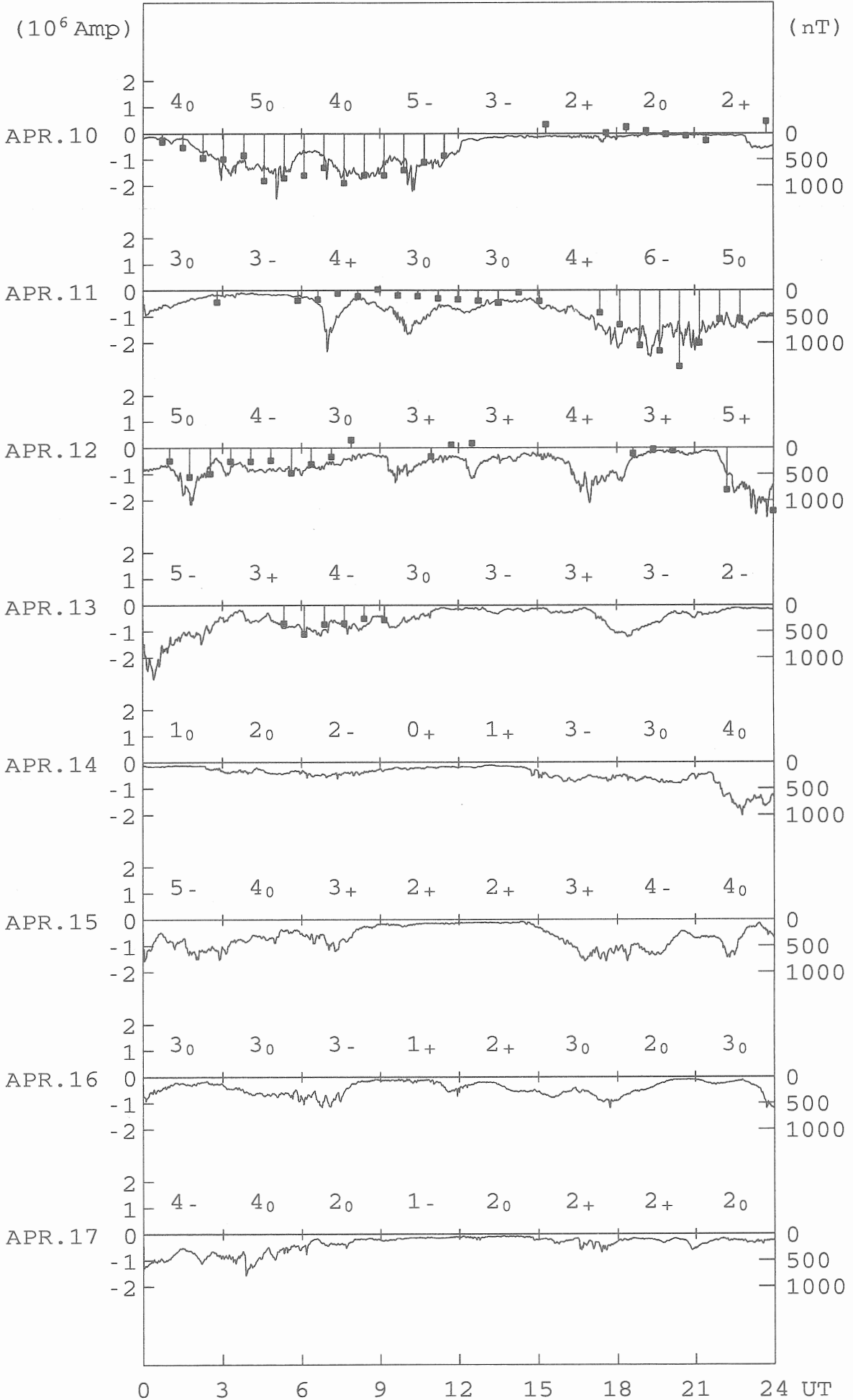
CURRENT INTENSITY

AE INDEX



CURRENT INTENSITY

AE INDEX



NOV.15,1979

400 T

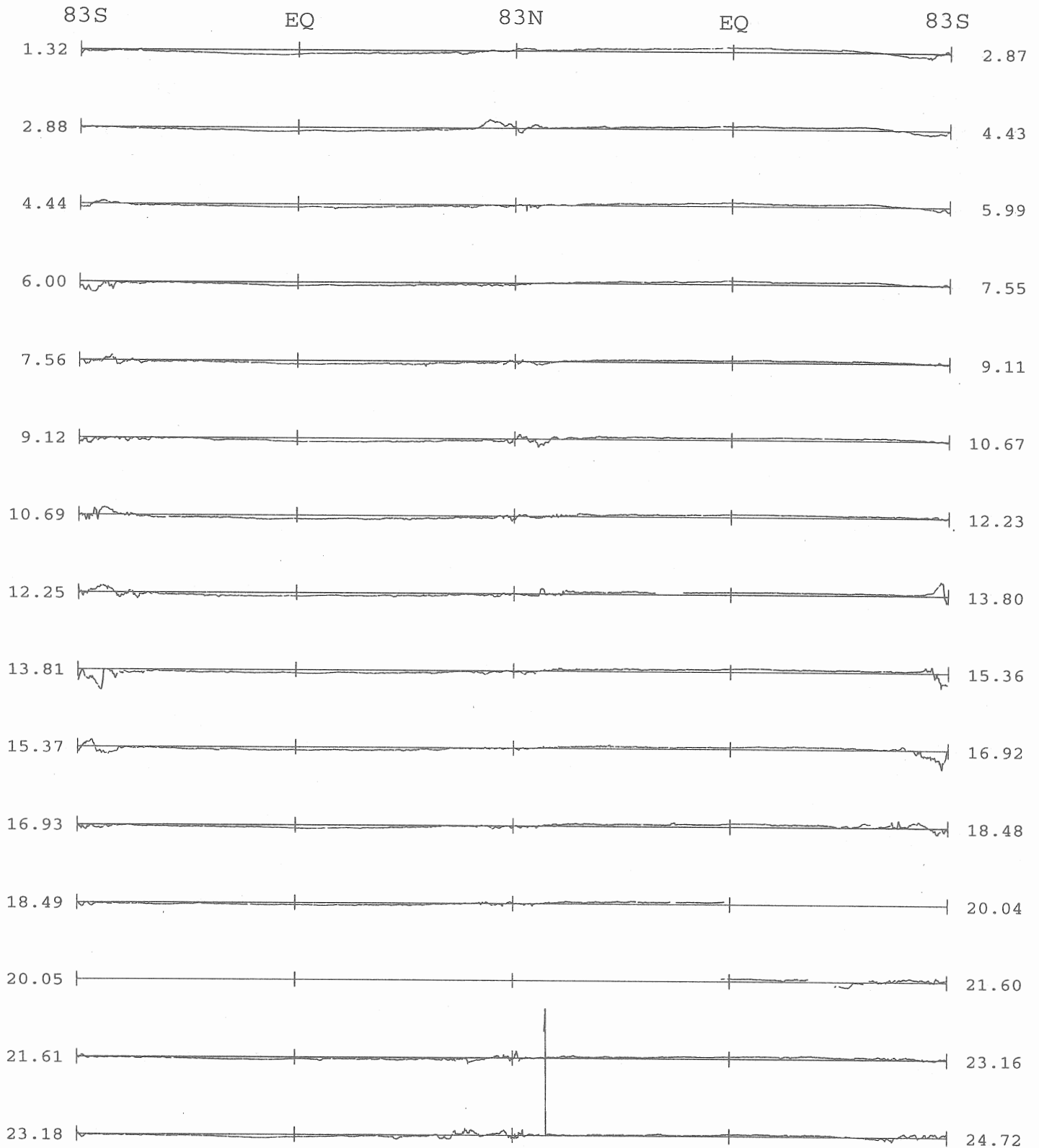
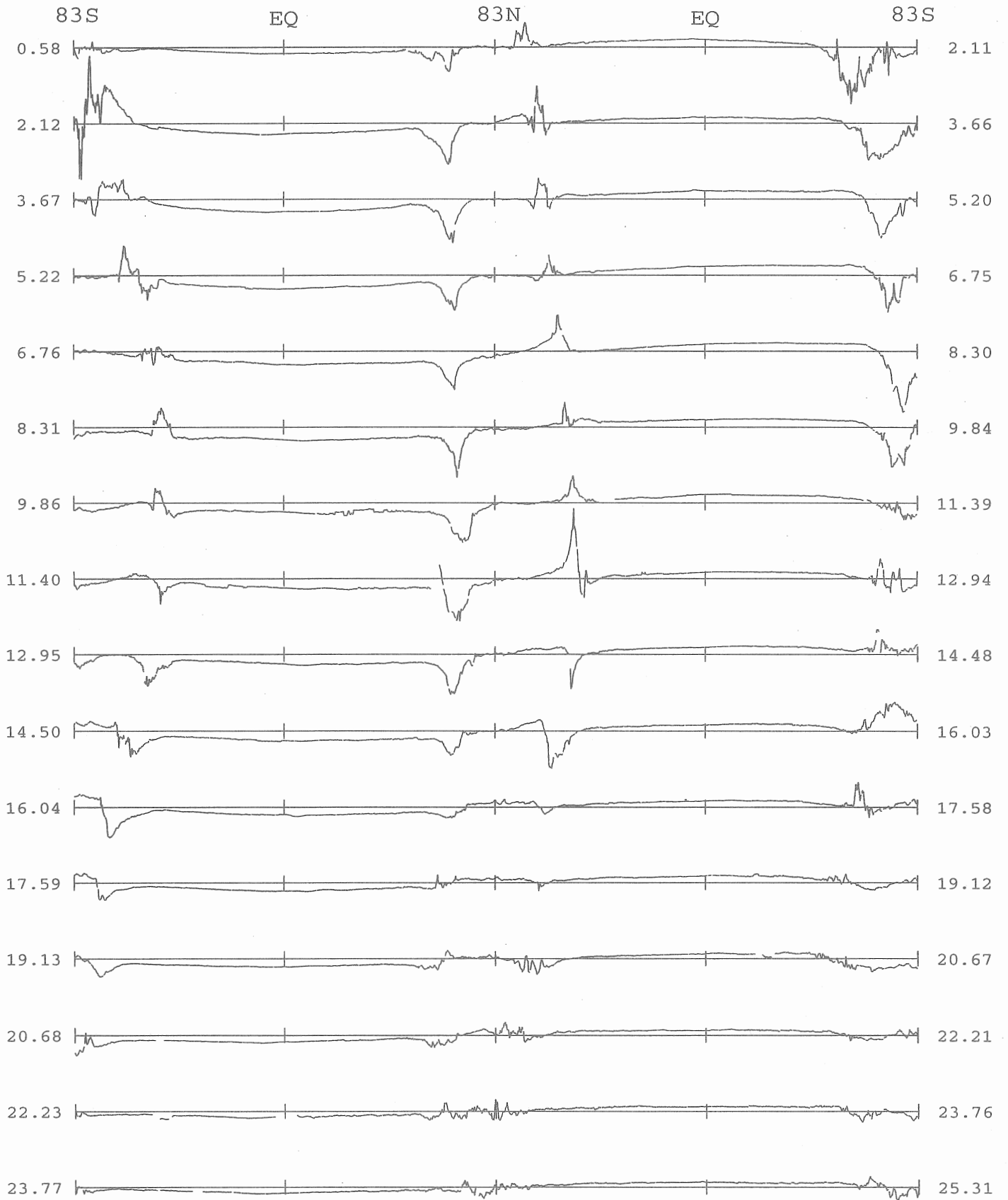


Figure 3a and 3b. Examples of B_t change with latitudes plotted every 4 seconds. One is on a typically quiet day (3a, November 15) and the other on a very disturbed day (3b, February 16).

FEB.16,1980

400 T



CURRENT INTENSITY

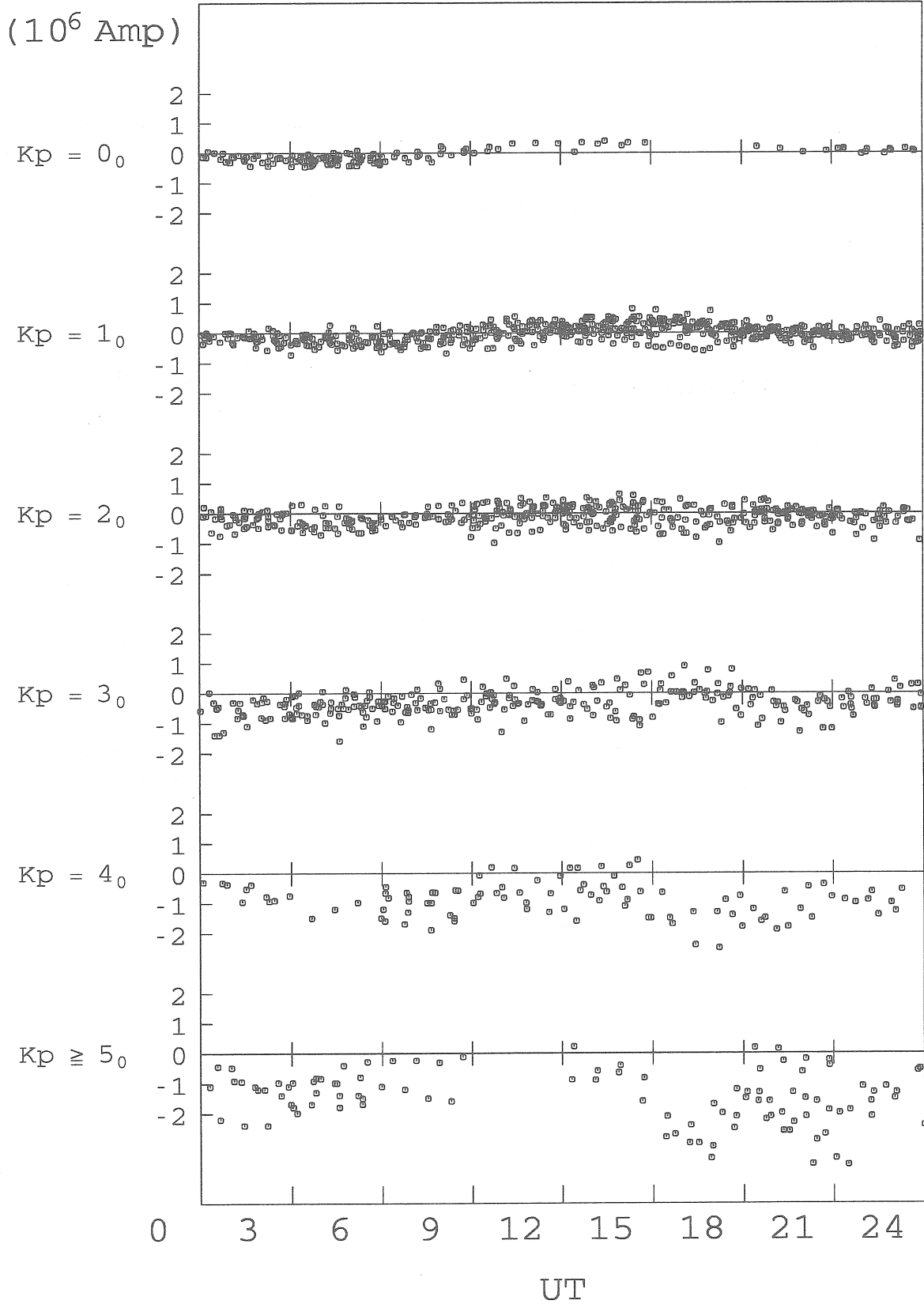


Figure 4. Dependence of the current intensity on Kp indices. All calculated current intensities are classified with Kp indices and only the cases when Kp have 0 sub-index are shown.

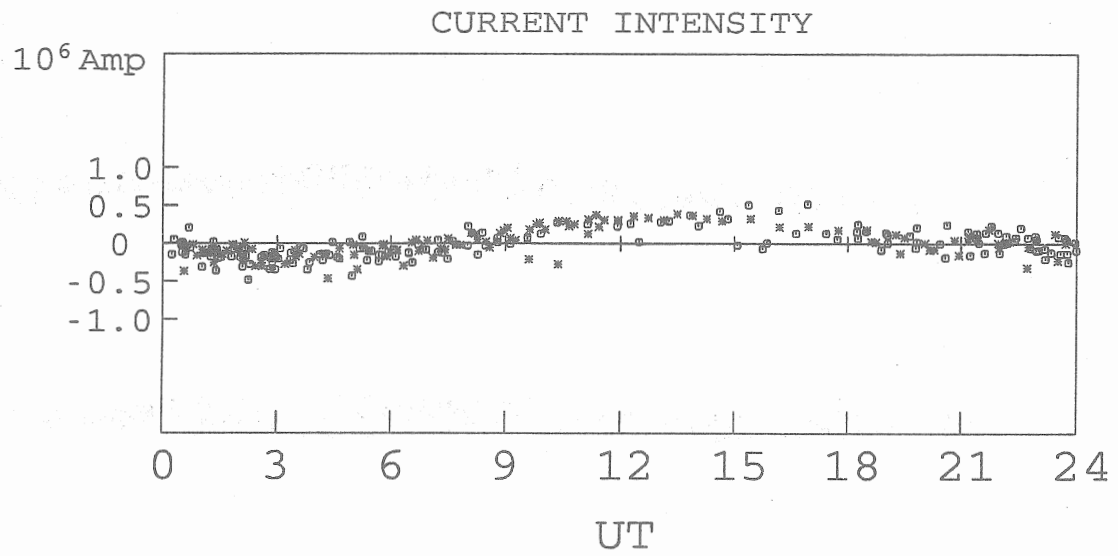


Figure 5. Calculated current intensities in geomagnetically calm conditions are shown classified between the early months (November-December, □ marks) and the later months (March-April, * marks). Only the cases are used when K_p is 0_0 and 0_+ .

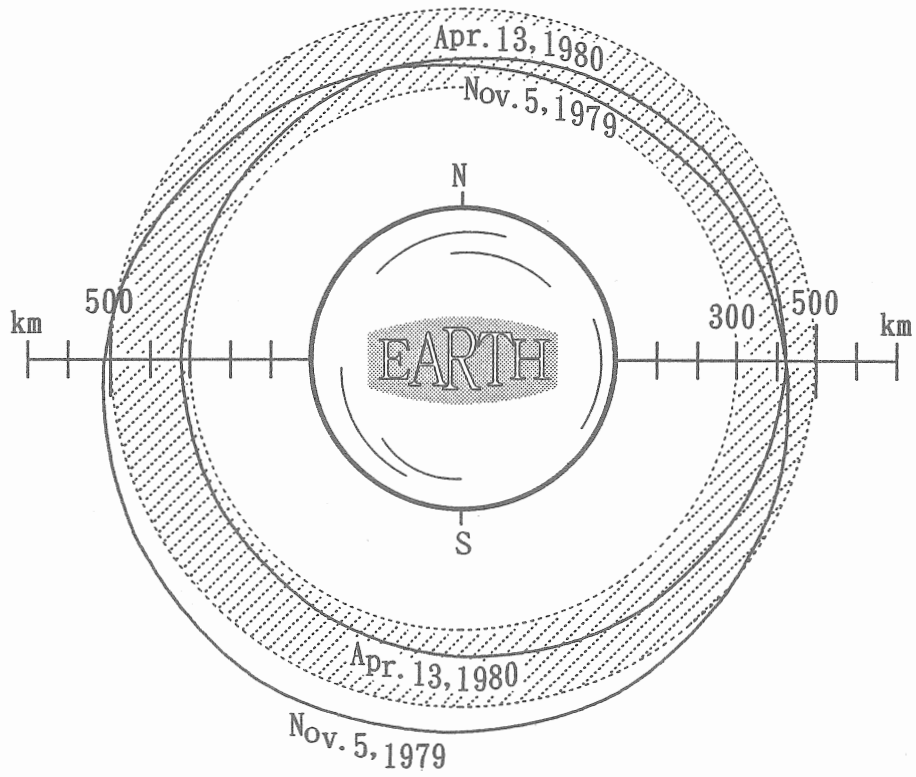


Figure 6. Two examples of the satellite orbit height; one is soon after the orbit launch (November 5, 1979) and the other in the last stage (April 13, 1980) of the flight. The height range of 300–500 km is hatched.

Table. Calculated current intensities " I " in unit of 10^6 amperes. The absence of the calculation is shown by * marks. UT's are central hours of two terminal points of the integral.

| NOV. 02, 1979 | | | NOV. 03, 1979 | | | NOV. 04, 1979 | | | NOV. 05, 1979 | | |
|---------------|---|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.21 | * | 1- | 0.98 | -0.14 | 1- | 0.44 | -0.43 | 3+ | 0.68 | 0.20 | 0+ |
| 1.09 | * | 4- | 1.77 | -0.30 | 1- | 1.22 | -0.47 | 3+ | 1.45 | -0.20 | 0+ |
| 3.88 | * | 4- | 2.54 | -0.69 | 1- | 2.00 | -0.69 | 3+ | 2.24 | -0.48 | 0+ |
| 4.65 | * | 4- | 3.33 | * | 0+ | 2.79 | -1.2 | 3+ | 3.02 | -0.21 | 00 |
| 5.44 | * | 4- | 4.11 | * | 0+ | 3.56 | -0.91 | 30 | 3.80 | -0.35 | 00 |
| 6.21 | * | 3- | 4.90 | * | 0+ | 4.35 | -0.52 | 30 | 4.58 | -0.19 | 00 |
| 7.00 | * | 3- | 5.67 | * | 0+ | 5.13 | -0.14 | 30 | 5.37 | -0.23 | 00 |
| 7.78 | * | 3- | 6.46 | -0.32 | 10 | 5.92 | -0.42 | 30 | 6.14 | -0.18 | 0+ |
| 8.57 | * | 3- | 7.24 | -0.27 | 10 | 6.69 | -0.47 | 2+ | 6.93 | -0.090 | 0+ |
| 9.34 | * | 3- | 8.02 | -0.27 | 10 | 7.48 | -0.18 | 2+ | 7.71 | -0.018 | 0+ |
| 10.13 | * | 3- | 8.80 | -0.22 | 10 | 8.25 | 0.12 | 2+ | 8.49 | -0.034 | 0+ |
| 10.91 | * | 3- | 9.59 | -0.072 | 3- | 9.04 | -0.027 | 3- | 9.27 | 0.098 | 1- |
| 11.70 | * | 3- | 10.36 | 0.074 | 3- | 9.82 | -0.15 | 3- | 10.06 | -0.042 | 1- |
| 12.47 | * | 30 | 11.15 | -0.15 | 3- | 10.61 | -0.54 | 3- | 10.83 | -0.053 | 1- |
| 13.26 | * | 30 | 11.93 | -0.16 | 3- | 11.38 | -0.58 | 3- | 11.62 | -0.087 | 1- |
| 14.03 | * | 30 | 12.72 | -0.40 | 2+ | 12.17 | -0.56 | 20 | 12.40 | 0.020 | 10 |
| 14.82 | * | 30 | 13.49 | -0.39 | 2+ | 12.94 | -0.58 | 20 | 13.18 | 0.072 | 10 |
| 15.60 | * | 2+ | 14.28 | -0.19 | 2+ | 13.73 | -0.60 | 20 | 13.96 | 0.047 | 10 |
| | | | 15.05 | -0.10 | 3+ | 14.51 | -0.64 | 20 | 14.75 | 0.29 | 10 |
| | | | 15.84 | -0.33 | 3+ | 15.30 | -0.29 | 2- | 15.52 | 0.18 | 1- |
| | | | 16.62 | -0.76 | 3+ | 16.07 | -0.22 | 2- | 16.31 | 0.15 | 1- |
| | | | 17.41 | * | 3+ | 16.86 | -0.32 | 2- | 17.09 | 0.007 | 1- |
| | | | 18.18 | * | 3+ | 17.64 | -0.51 | 2- | 17.87 | -0.004 | 1- |
| | | | 18.97 | * | 3+ | 18.42 | -0.36 | 20 | 18.65 | -0.19 | 10 |
| | | | 19.74 | * | 3+ | 19.20 | -0.35 | 20 | 19.44 | -0.30 | 10 |
| | | | 20.53 | * | 3+ | 19.99 | -0.33 | 20 | 20.21 | -0.27 | 10 |
| | | | 21.31 | * | 3+ | 20.76 | -0.43 | 20 | 21.00 | -0.18 | 10 |
| | | | 22.10 | -0.53 | 3+ | 21.55 | -0.26 | 10 | 21.78 | 0.23 | 0+ |
| | | | 22.87 | -0.24 | 3+ | 22.33 | -0.16 | 10 | 22.56 | 0.20 | 0+ |
| | | | 23.66 | -0.41 | 3+ | 23.11 | -0.19 | 10 | 23.34 | -0.12 | 0+ |
| | | | | | | 23.89 | 0.24 | 10 | | | |

| NOV. 06, 1979 | | | NOV. 07, 1979 | | | NOV. 08, 1979 | | | NOV. 09, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.13 | -0.16 | 1- | 0.35 | -0.15 | 10 | 0.59 | -0.43 | 3- | 0.03 | -0.51 | 2+ |
| 0.90 | -0.29 | 1- | 1.14 | -0.37 | 10 | 1.36 | -0.17 | 3- | 0.81 | -0.52 | 2+ |
| 1.69 | -0.30 | 1- | 1.92 | -0.27 | 10 | 2.15 | -0.11 | 3- | 1.59 | -0.59 | 2+ |
| 2.47 | -0.091 | 1- | 2.70 | -0.45 | 10 | 2.93 | -0.078 | 3- | 2.37 | -0.54 | 2+ |
| 3.25 | -0.35 | 10 | 3.48 | -0.43 | 20 | 3.71 | -0.51 | 20 | 3.15 | -0.65 | 2+ |
| 4.03 | -0.28 | 10 | 4.27 | -0.49 | 20 | 4.49 | -0.50 | 20 | 3.93 | -0.46 | 2+ |
| 4.82 | -0.43 | 10 | 5.04 | -0.29 | 20 | 5.27 | -0.65 | 20 | 4.72 | -0.36 | 2+ |
| 5.59 | -0.31 | 10 | 5.83 | -0.55 | 20 | 6.05 | -0.61 | 5- | 5.50 | -0.13 | 2+ |
| 6.38 | -0.38 | 1- | 6.61 | -0.36 | 2- | 6.84 | -0.61 | 5- | 6.28 | -0.32 | 3- |
| 7.16 | -0.26 | 1- | 7.39 | -0.50 | 2- | 7.62 | -0.50 | 5- | 7.06 | -0.38 | 3- |
| 7.94 | -0.22 | 1- | 8.17 | -0.34 | 2- | 8.40 | -0.74 | 5- | 7.84 | -0.49 | 3- |
| 8.72 | -0.073 | 1- | 8.96 | -0.38 | 2- | 9.18 | -0.61 | 4- | 8.62 | -0.36 | 3- |
| 9.51 | -0.10 | 1+ | 9.73 | -0.093 | 2+ | 9.96 | -0.59 | 4- | 9.41 | -0.084 | 1+ |
| 10.28 | -0.053 | 1+ | 10.52 | -0.25 | 2+ | 10.74 | -0.29 | 4- | 10.18 | 0.076 | 1+ |
| 11.07 | -0.092 | 1+ | 11.30 | -0.26 | 2+ | 11.53 | -0.50 | 4- | 10.97 | 0.11 | 1+ |
| 11.85 | -0.006 | 1+ | 12.08 | -0.20 | 2+ | 12.30 | -0.46 | 30 | 11.75 | -0.022 | 1+ |
| 12.63 | 0.12 | 10 | 12.86 | -0.08 | 2+ | 13.09 | 0.18 | 30 | 12.53 | 0.16 | 40 |
| 13.41 | 0.084 | 10 | 13.64 | 0.03 | 2+ | 13.87 | 0.46 | 30 | 13.31 | 0.22 | 40 |
| 14.20 | -0.026 | 10 | 14.42 | -0.09 | 2+ | 14.65 | 0.66 | 30 | 14.09 | -1.1 | 40 |
| 14.97 | -0.14 | 10 | 15.21 | 0.56 | 4- | 15.43 | 0.54 | 2+ | 14.87 | -1.5 | 40 |
| 15.76 | -0.072 | 0+ | 15.98 | 0.26 | 4- | 16.21 | 0.52 | 2+ | 15.66 | -1.6 | 5- |
| 16.54 | * | 0+ | 16.77 | -0.95 | 4- | 16.99 | 0.21 | 2+ | 16.43 | -1.5 | 5- |
| 17.32 | * | 0+ | 17.55 | -0.83 | 4- | 17.78 | 0.32 | 2+ | 17.22 | -1.5 | 5- |
| 18.10 | * | 0+ | 18.33 | -1.2 | 40 | 18.56 | 0.052 | 2- | 18.00 | -1.1 | 5- |
| 18.89 | -0.091 | 0+ | 19.11 | -1.9 | 40 | 19.34 | 0.013 | 2- | 18.78 | 0.10 | 4+ |
| 19.66 | 0.10 | 0+ | 19.90 | -1.2 | 40 | 20.12 | -0.040 | 2- | 19.56 | -0.18 | 4+ |
| 20.45 | -0.000 | 0+ | 20.67 | -0.3 | 40 | 20.90 | -0.10 | 2- | 20.34 | -0.66 | 4+ |
| 21.23 | -0.16 | 0+ | 21.46 | -0.23 | 2+ | 21.68 | -0.13 | 2- | 21.12 | 0.071 | 3+ |
| 22.01 | -0.13 | 0+ | 22.24 | -0.21 | 2+ | 22.47 | -0.16 | 2- | 21.91 | 0.48 | 3+ |
| 22.79 | -0.067 | 0+ | 23.02 | -0.27 | 2+ | 23.24 | -0.18 | 2- | 22.69 | 0.29 | 3+ |
| 23.58 | -0.14 | 0+ | 23.80 | -0.4 | 2+ | | | | 23.47 | -0.099 | 3+ |

| NOV. 10, 1979 | | | NOV. 11, 1979 | | | NOV. 12, 1979 | | | NOV. 13, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|-------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.25 | -0.31 | 1+ | 0.47 | -0.31 | 30 | 3.03 | * | 1+ | 0.11 | -0.30 | 40 |
| 1.03 | -0.037 | 1+ | 1.25 | -0.84 | 30 | 3.81 | -0.12 | 1+ | 0.89 | -0.38 | 40 |
| 1.81 | 0.11 | 1+ | 2.03 | -0.82 | 30 | 4.59 | -0.45 | 1+ | 1.67 | -0.39 | 40 |
| 2.59 | -0.067 | 1+ | 2.81 | -0.84 | 30 | 5.37 | -0.31 | 1+ | 2.45 | -0.91 | 40 |
| 3.37 | 0.29 | 20 | 3.59 | -1.1 | 3+ | 6.15 | -0.41 | 2+ | 3.24 | -0.49 | 5- |
| 4.16 | 0.24 | 20 | 4.37 | -0.98 | 3+ | 6.93 | -0.20 | 2+ | 4.02 | -1.0 | 5- |
| 4.94 | -0.34 | 20 | 5.15 | * | 3+ | 7.71 | -0.60 | 2+ | 4.80 | -1.1 | 5- |
| 5.72 | -0.59 | 20 | 5.94 | * | 3+ | 8.49 | -0.91 | 2+ | 5.58 | -1.0 | 5- |
| 6.50 | -0.17 | 2- | 6.72 | -0.46 | 2- | 9.27 | -1.2 | 2+ | 6.36 | -0.70 | 4- |
| 7.28 | -0.13 | 2- | 7.50 | -0.16 | 2- | 10.05 | -0.71 | 2+ | 7.14 | -0.75 | 4- |
| 8.06 | * | 2- | 8.28 | -0.25 | 2- | 10.84 | 0.084 | 2+ | 7.92 | -0.67 | 4- |
| 8.84 | * | 2- | 9.06 | -0.50 | 20 | 11.62 | 0.043 | 2+ | 8.70 | -0.79 | 4- |
| 9.62 | * | 1+ | 9.84 | -0.51 | 20 | 12.40 | 0.16 | 2+ | 9.48 | -0.92 | 4+ |
| 10.41 | * | 1+ | 10.62 | -0.34 | 20 | 13.18 | 0.46 | 2+ | 10.26 | -1.5 | 4+ |
| 11.19 | 0.028 | 1+ | 11.40 | 0.062 | 20 | 13.96 | 0.72 | 2+ | 11.05 | -0.89 | 4+ |
| 11.97 | -0.057 | 1+ | 12.18 | 0.12 | 20 | 14.74 | 0.86 | 2+ | 11.83 | -0.89 | 4+ |
| 12.75 | 0.075 | 1+ | 12.97 | 0.42 | 20 | 15.52 | 0.71 | 2+ | 12.61 | -0.58 | 40 |
| 13.53 | * | 1+ | 13.75 | 0.27 | 20 | 16.30 | 0.65 | 2+ | 13.39 | -0.46 | 40 |
| 14.31 | * | 1+ | 14.53 | -0.17 | 20 | 17.08 | 0.43 | 2+ | 14.17 | -0.89 | 40 |
| 15.09 | -0.22 | 1+ | 15.31 | 0.29 | 30 | 17.86 | -0.033 | 2+ | 14.95 | -1.5 | 40 |
| 15.87 | -0.30 | 1+ | 16.09 | 0.90 | 30 | 18.64 | 0.40 | 20 | 15.73 | -2.7 | 50 |
| 16.66 | -0.34 | 1+ | 16.87 | 0.75 | 30 | 19.43 | -0.043 | 20 | 16.51 | -3.0 | 50 |
| 17.44 | -0.20 | 1+ | 17.65 | 0.78 | 30 | 20.21 | -0.13 | 20 | 17.29 | -2.0 | 50 |
| 18.22 | -0.11 | 2- | 18.43 | 0.020 | 20 | 20.99 | -0.13 | 20 | 18.07 | -1.5 | 5+ |
| 19.00 | 0.00 | 2- | 19.21 | -0.057 | 20 | 21.77 | -0.22 | 2- | 18.85 | -1.6 | 5+ |
| 19.78 | 0.060 | 2- | 20.00 | 0.079 | 20 | 22.55 | -0.19 | 2- | 19.63 | -1.3 | 5+ |
| 20.56 | -0.11 | 2- | 20.78 | -0.16 | 20 | 23.33 | -0.45 | 2- | 20.42 | -1.6 | 5+ |
| 21.34 | -0.14 | 3- | 21.56 | -0.065 | 2- | | | | 21.20 | -0.91 | 4+ |
| 22.12 | 0.027 | 3- | 22.34 | -0.015 | 2- | | | | 21.98 | -0.41 | 4+ |
| 22.91 | 0.10 | 3- | 23.12 | -0.025 | 2- | | | | 22.76 | -0.38 | 4+ |
| 23.69 | -0.12 | 3- | | | | | | | 23.54 | -1.1 | 4+ |

| NOV. 14, 1979 | | | NOV. 15, 1979 | | | NOV. 16, 1979 | | | NOV. 17, 1979 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.32 | -1.1 | 50 | 0.52 | 0.014 | 00 | 0.72 | -0.087 | 2+ | 0.14 | -0.72 | 3+ |
| 1.10 | -0.91 | 50 | 1.30 | -0.078 | 00 | 1.51 | -0.41 | 2+ | 0.92 | -0.20 | 3+ |
| 1.88 | -1.2 | 50 | 2.09 | -0.31 | 00 | 2.28 | -0.25 | 2+ | 1.70 | -0.079 | 3+ |
| 2.66 | -1.4 | 50 | 2.86 | -0.25 | 00 | 3.07 | 0.077 | 3+ | 2.49 | -0.33 | 3+ |
| 3.44 | -1.4 | 4+ | 3.65 | -0.12 | 10 | 3.84 | -0.43 | 3+ | 3.26 | -0.51 | 2+ |
| 4.22 | -0.96 | 4+ | 4.43 | -0.21 | 10 | 4.63 | -0.97 | 3+ | 4.05 | -0.43 | 2+ |
| 5.00 | -0.84 | 4+ | 5.21 | -0.001 | 10 | 5.41 | -1.8 | 3+ | 4.82 | -0.60 | 2+ |
| 5.79 | -0.74 | 4+ | 5.99 | -0.29 | 10 | 6.19 | -1.2 | 4- | 5.61 | -0.37 | 2+ |
| 6.56 | -0.58 | 3- | 6.77 | -0.15 | 1- | 6.97 | -1.0 | 4- | 6.38 | -0.35 | 3- |
| 7.35 | 0.043 | 3- | 7.55 | -0.085 | 1- | 7.75 | -0.45 | 4- | 7.17 | -0.16 | 3- |
| 8.13 | 0.25 | 3- | 8.33 | -0.035 | 1- | 8.53 | -0.40 | 4- | 7.94 | -0.068 | 3- |
| 8.91 | 0.45 | 3- | 9.11 | -0.099 | 1+ | 9.31 | -0.36 | 20 | 8.73 | -0.094 | 3- |
| 9.69 | 0.45 | 10 | 9.89 | 0.057 | 1+ | 10.09 | -0.072 | 20 | 9.50 | -0.28 | 20 |
| 10.47 | 0.54 | 10 | 10.67 | 0.11 | 1+ | 10.87 | -0.013 | 20 | 10.29 | -0.070 | 20 |
| 11.25 | 0.35 | 10 | 11.45 | 0.15 | 1+ | 11.65 | -0.30 | 20 | 11.07 | 0.057 | 20 |
| 12.03 | 0.11 | 1- | 12.23 | 0.22 | 1+ | 12.44 | -0.31 | 20 | 11.85 | 0.063 | 20 |
| 12.81 | -0.14 | 1- | 13.02 | 0.17 | 1+ | 13.21 | -0.45 | 20 | 12.63 | 0.20 | 10 |
| 13.59 | -0.15 | 1- | 13.79 | -0.026 | 1+ | 14.00 | -0.49 | 20 | 13.41 | 0.18 | 10 |
| 14.37 | -0.36 | 1- | 14.58 | -0.086 | 1+ | 14.77 | -0.54 | 20 | 14.19 | 0.24 | 10 |
| 15.16 | -0.49 | 10 | 15.35 | 0.13 | 1- | 15.56 | -0.40 | 3- | 14.97 | 0.31 | 10 |
| 15.93 | -0.44 | 10 | 16.14 | -0.043 | 1- | 16.33 | -0.40 | 3- | 15.75 | 0.50 | 1- |
| 16.72 | -0.61 | 10 | 16.92 | -0.026 | 1- | 17.12 | -0.52 | 3- | 16.53 | 0.49 | 1- |
| 17.50 | -0.30 | 10 | 17.70 | 0.10 | 1- | 17.89 | -0.15 | 3- | 17.31 | 0.42 | 1- |
| 18.28 | 0.067 | 0+ | 18.48 | 0.16 | 0+ | 18.68 | -0.81 | 3- | 18.09 | 0.41 | 20 |
| 19.06 | 0.11 | 0+ | 19.26 | * | 0+ | 19.46 | -0.82 | 3- | 18.87 | 0.38 | 20 |
| 19.84 | 0.21 | 0+ | 20.04 | * | 0+ | 20.24 | -0.47 | 3- | 19.66 | 0.11 | 20 |
| 20.62 | 0.24 | 0+ | 20.82 | * | 0+ | 21.02 | -0.20 | 20 | 20.43 | -0.060 | 20 |
| 21.40 | 0.13 | 00 | 21.60 | * | 10 | 21.80 | -0.19 | 20 | 21.22 | -0.18 | 10 |
| 22.18 | 0.097 | 00 | 22.38 | 0.072 | 10 | 22.58 | 0.037 | 20 | 21.99 | -0.14 | 10 |
| 22.96 | 0.053 | 00 | 23.16 | 0.059 | 10 | 23.36 | 0.10 | 20 | 22.78 | 0.15 | 10 |
| 23.74 | 0.037 | 00 | 23.94 | -0.010 | 10 | | | | 23.55 | 0.25 | 10 |

| NOV. 18, 1979 | | | NOV. 19, 1979 | | | NOV. 20, 1979 | | | NOV. 21, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.34 | * | 3- | 0.52 | -0.12 | 0+ | 0.72 | 0.16 | 20 | 0.12 | -0.12 | 3- |
| 1.11 | * | 3- | 1.31 | 0.019 | 0+ | 1.49 | -0.15 | 20 | 0.90 | -0.39 | 3- |
| 1.90 | * | 3- | 2.08 | -0.064 | 0+ | 2.28 | -0.24 | 20 | 1.68 | -0.74 | 3- |
| 2.67 | * | 3- | 2.87 | -0.12 | 0+ | 3.05 | -0.24 | 1+ | 2.46 | -0.75 | 3- |
| 3.46 | * | 1- | 3.65 | -0.18 | 1- | 3.84 | -0.084 | 1+ | 3.25 | -0.42 | 20 |
| 4.23 | -0.35 | 1- | 4.43 | -0.19 | 1- | 4.61 | -0.37 | 1+ | 4.02 | -0.72 | 20 |
| 5.02 | * | 1- | 5.21 | -0.36 | 1- | 5.40 | -0.48 | 1+ | 4.81 | -0.32 | 20 |
| 5.80 | * | 1- | 5.99 | -0.35 | 1- | 6.17 | -0.62 | 2+ | 5.58 | -0.23 | 20 |
| 6.58 | * | 10 | 6.77 | -0.20 | 1+ | 6.96 | -0.36 | 2+ | 6.37 | -0.086 | 20 |
| 7.36 | * | 10 | 7.55 | 0.076 | 1+ | 7.73 | -0.34 | 2+ | 7.14 | -0.12 | 20 |
| 8.14 | * | 10 | 8.33 | 0.12 | 1+ | 8.52 | -0.39 | 2+ | 7.93 | -0.21 | 20 |
| 8.92 | * | 10 | 9.11 | 0.23 | 20 | 9.29 | -0.41 | 3- | 8.70 | -0.32 | 20 |
| 9.70 | * | 1+ | 9.89 | 0.40 | 20 | 10.08 | 0.003 | 3- | 9.49 | -0.093 | 10 |
| 10.48 | -0.22 | 1+ | 10.67 | 0.50 | 20 | 10.85 | -0.29 | 3- | 10.26 | -0.088 | 10 |
| 11.26 | -0.088 | 1+ | 11.45 | 0.26 | 20 | 11.64 | -0.34 | 3- | 11.05 | 0.024 | 10 |
| 12.04 | 0.049 | 10 | 12.23 | 0.21 | 20 | 12.41 | -0.31 | 30 | 11.82 | 0.049 | 10 |
| 12.83 | 0.15 | 10 | 13.01 | 0.027 | 20 | 13.20 | -0.27 | 30 | 12.61 | 0.047 | 10 |
| 13.60 | 0.53 | 10 | 13.80 | 0.010 | 20 | 13.97 | 0.095 | 30 | 13.38 | -0.008 | 10 |
| 14.39 | 0.79 | 10 | 14.57 | 0.047 | 20 | 14.76 | 0.28 | 30 | 14.17 | 0.068 | 10 |
| 15.16 | 0.75 | 10 | 15.36 | -0.18 | 20 | 15.54 | 0.049 | 3+ | 14.94 | -0.011 | 10 |
| 15.95 | 0.48 | 10 | 16.13 | -0.24 | 20 | 16.32 | -0.38 | 3+ | 15.73 | -0.12 | 1+ |
| 16.72 | 0.28 | 10 | 16.92 | -0.073 | 20 | 17.10 | -0.56 | 3+ | 16.50 | -0.25 | 1+ |
| 17.51 | 0.16 | 10 | 17.69 | 0.18 | 20 | 17.88 | -0.68 | 3+ | 17.29 | -0.34 | 1+ |
| 18.28 | 0.25 | 0+ | 18.48 | 0.078 | 20 | 18.66 | -0.089 | 2- | 18.06 | -0.076 | 2- |
| 19.07 | 0.002 | 0+ | 19.25 | * | 20 | 19.44 | -0.067 | 2- | 18.85 | 0.12 | 2- |
| 19.84 | 0.021 | 0+ | 20.04 | * | 20 | 20.22 | -0.019 | 2- | 19.62 | 0.17 | 2- |
| 20.63 | * | 0+ | 20.81 | * | 20 | 21.00 | -0.000 | 2- | 20.41 | 0.058 | 2- |
| 21.40 | * | 0+ | 21.60 | -0.42 | 30 | 21.78 | 0.045 | 1+ | 21.18 | 0.15 | 0+ |
| 22.19 | * | 0+ | 22.37 | -0.24 | 30 | 22.56 | -0.088 | 1+ | 21.97 | 0.14 | 0+ |
| 22.96 | -0.095 | 0+ | 23.16 | -0.37 | 30 | 23.34 | -0.14 | 1+ | 22.74 | 0.077 | 0+ |
| 23.75 | -0.14 | 0+ | 23.93 | -0.066 | 30 | | | | 23.53 | 0.080 | 0+ |

| NOV. 22, 1979 | | | NOV. 23, 1979 | | | NOV. 24, 1979 | | | NOV. 25, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.30 | 0.044 | 00 | 0.49 | -0.010 | 0+ | 0.66 | -1.4 | 30 | 0.05 | -0.94 | 4+ |
| 1.09 | -0.14 | 00 | 1.26 | -0.074 | 0+ | 1.45 | -0.76 | 30 | 0.84 | -0.72 | 4+ |
| 1.86 | -0.078 | 00 | 2.05 | -0.14 | 0+ | 2.22 | -0.27 | 30 | 1.61 | -0.69 | 4+ |
| 2.65 | -0.16 | 00 | 2.82 | -0.20 | 0+ | 3.01 | -0.24 | 4- | 2.40 | -1.7 | 4+ |
| 3.42 | -0.27 | 00 | 3.61 | -0.053 | 00 | 3.78 | -0.37 | 4- | 3.17 | -2.0 | 50 |
| 4.21 | -0.23 | 00 | 4.38 | -0.16 | 00 | 4.57 | -0.12 | 4- | 3.96 | -0.84 | 50 |
| 4.98 | -0.43 | 00 | 5.17 | -0.072 | 00 | 5.34 | -0.53 | 4- | 4.73 | -0.42 | 50 |
| 5.77 | -0.16 | 00 | 5.94 | -0.12 | 00 | 6.13 | -0.46 | 40 | 5.52 | -0.29 | 50 |
| 6.54 | -0.34 | 1+ | 6.73 | -0.021 | 0+ | 6.90 | -0.78 | 40 | 6.29 | 0.13 | 2+ |
| 7.33 | -0.37 | 1+ | 7.50 | -0.21 | 0+ | 7.69 | -0.64 | 40 | 7.08 | 0.35 | 2+ |
| 8.10 | -0.27 | 1+ | 8.29 | -0.15 | 0+ | 8.46 | -0.57 | 40 | 7.85 | 0.41 | 2+ |
| 8.89 | -0.21 | 1+ | 9.06 | -0.29 | 2- | 9.25 | -0.072 | 40 | 8.64 | 0.51 | 2+ |
| 9.66 | -0.43 | 1+ | 9.85 | -0.16 | 2- | 10.01 | -0.47 | 40 | 9.41 | 0.35 | 20 |
| 10.45 | -0.19 | 1+ | 10.62 | -0.15 | 2- | 10.81 | -1.0 | 40 | 10.20 | 0.33 | 20 |
| 11.22 | 0.15 | 1+ | 11.41 | -0.18 | 2- | 11.57 | -1.3 | 40 | 10.97 | 0.38 | 20 |
| 12.01 | 0.23 | 1- | 12.18 | 0.023 | 10 | 12.37 | -1.1 | 4- | 11.76 | 0.33 | 20 |
| 12.78 | 0.53 | 1- | 12.97 | 0.094 | 10 | 13.13 | -1.4 | 4- | 12.53 | 0.17 | 2- |
| 13.57 | 0.55 | 1- | 13.74 | 0.37 | 10 | 13.92 | -1.0 | 4- | 13.32 | 0.20 | 2- |
| 14.34 | 0.58 | 1- | 14.53 | 0.38 | 10 | 14.69 | 0.41 | 4- | 14.09 | -0.084 | 2- |
| 15.13 | 0.34 | 1- | 15.30 | 0.46 | 10 | 15.48 | 0.44 | 4- | 14.88 | -0.35 | 2- |
| 15.90 | 0.29 | 1- | 16.09 | 0.39 | 10 | 16.25 | 0.82 | 4- | 15.65 | -0.39 | 10 |
| 16.69 | 0.38 | 1- | 16.86 | 0.15 | 10 | 17.04 | 0.061 | 4- | 16.44 | -0.57 | 10 |
| 17.46 | 0.36 | 1- | 17.65 | -0.12 | 10 | 17.81 | -1.3 | 4- | 17.21 | -0.34 | 10 |
| 18.25 | 0.15 | 0+ | 18.42 | -0.10 | 2- | 18.60 | -1.6 | 40 | 18.00 | 0.039 | 10 |
| 19.02 | 0.14 | 0+ | 19.21 | -0.28 | 2- | 19.37 | -0.62 | 40 | 18.77 | 0.076 | 1+ |
| 19.81 | -0.061 | 0+ | 19.98 | * | 2- | 20.16 | -0.46 | 40 | 19.56 | 0.046 | 1+ |
| 20.58 | -0.19 | 0+ | 20.77 | * | 2- | 20.93 | -0.80 | 40 | 20.33 | 0.15 | 1+ |
| 21.37 | 0.076 | 00 | 21.54 | * | 20 | 21.72 | -1.0 | 40 | 21.12 | 0.27 | 2- |
| 22.14 | -0.011 | 00 | 22.33 | * | 20 | 22.49 | -1.4 | 40 | 21.89 | 0.26 | 2- |
| 22.93 | 0.094 | 00 | 23.10 | -0.35 | 20 | 23.28 | -0.55 | 40 | 22.68 | 0.19 | 2- |
| 23.70 | 0.065 | 00 | 23.89 | -0.92 | 20 | | | | 23.45 | 0.13 | 2- |

| NOV. 26, 1979 | | | NOV. 27, 1979 | | | NOV. 28, 1979 | | | NOV. 29, 1979 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.24 | 0.013 | 10 | 0.40 | 0.058 | 20 | 0.58 | -0.15 | 0+ | 0.73 | -0.058 | 0+ |
| 1.00 | 0.004 | 10 | 1.19 | -0.12 | 20 | 1.34 | -0.13 | 0+ | 1.52 | -0.19 | 0+ |
| 1.80 | -0.14 | 10 | 1.95 | -0.14 | 20 | 2.13 | -0.066 | 0+ | 2.29 | -0.28 | 0+ |
| 2.56 | -0.30 | 10 | 2.75 | 0.008 | 20 | 2.90 | -0.20 | 0+ | 3.08 | -0.071 | 00 |
| 3.35 | -0.22 | 00 | 3.51 | -0.12 | 10 | 3.69 | -0.073 | 00 | 3.85 | -0.26 | 00 |
| 4.12 | -0.15 | 00 | 4.31 | -0.25 | 10 | 4.46 | 0.014 | 00 | 4.64 | -0.21 | 00 |
| 4.91 | 0.007 | 00 | 5.07 | -0.33 | 10 | 5.25 | 0.079 | 00 | 5.41 | -0.11 | 00 |
| 5.68 | -0.16 | 00 | 5.86 | -0.29 | 10 | 6.02 | -0.26 | 10 | 6.20 | -0.023 | 1- |
| 6.47 | -0.12 | 00 | 6.63 | -1.1 | 2+ | 6.81 | -0.35 | 10 | 6.97 | 0.018 | 1- |
| 7.24 | 0.040 | 00 | 7.42 | -0.60 | 2+ | 7.58 | -0.18 | 10 | 7.76 | 0.12 | 1- |
| 8.03 | 0.22 | 00 | 8.19 | -0.30 | 2+ | 8.34 | 0.060 | 10 | 8.53 | -0.17 | 1- |
| 8.80 | 0.064 | 00 | 8.98 | -0.33 | 2+ | 9.14 | -0.012 | 00 | 9.32 | -0.029 | 1- |
| 9.59 | 0.073 | 0+ | 9.75 | -0.11 | 1- | 9.93 | 0.12 | 00 | 10.08 | 0.21 | 1- |
| 10.36 | 0.27 | 0+ | 10.54 | 0.014 | 1- | 10.70 | * | 00 | 10.88 | 0.30 | 1- |
| 11.15 | 0.25 | 0+ | 11.31 | 0.082 | 1- | 11.49 | * | 00 | 11.64 | 0.34 | 1- |
| 11.92 | 0.22 | 0+ | 12.10 | 0.12 | 10 | 12.26 | 0.26 | 0+ | 12.44 | 0.27 | 1- |
| 12.71 | 0.12 | 1+ | 12.87 | 0.51 | 10 | 13.05 | 0.28 | 0+ | 13.20 | 0.27 | 1- |
| 13.48 | * | 1+ | 13.66 | 0.40 | 10 | 13.82 | 0.37 | 0+ | 13.99 | 0.39 | 1- |
| 14.27 | * | 1+ | 14.43 | 0.51 | 10 | 14.61 | 0.42 | 0+ | 14.76 | 0.48 | 1- |
| 15.04 | -0.25 | 1+ | 15.22 | 0.46 | 1- | 15.38 | 0.50 | 0+ | 15.55 | 0.32 | 2+ |
| 15.83 | 0.14 | 1+ | 15.99 | 0.42 | 1- | 16.17 | 0.43 | 0+ | 16.32 | 0.40 | 2+ |
| 16.60 | 0.27 | 1+ | 16.78 | 0.40 | 1- | 16.93 | 0.52 | 0+ | 17.11 | 0.15 | 2+ |
| 17.39 | * | 1+ | 17.55 | 0.36 | 1- | 17.73 | 0.052 | 0+ | 17.88 | 0.24 | 2+ |
| 18.16 | * | 2+ | 18.34 | 0.064 | 1- | 18.49 | 0.021 | 1- | 18.67 | 0.12 | 2+ |
| 18.95 | * | 2+ | 19.11 | 0.000 | 1- | 19.29 | -0.023 | 1- | 19.44 | -0.20 | 2+ |
| 19.72 | -0.40 | 2+ | 19.90 | -0.20 | 1- | 20.25 | 0.041 | 1- | 20.23 | -0.26 | 2+ |
| 20.51 | -0.50 | 2+ | 20.67 | -0.18 | 1- | 20.84 | -0.057 | 1- | 21.00 | -0.20 | 2+ |
| 21.28 | -0.20 | 2- | 21.46 | 0.005 | 0+ | 21.61 | -0.13 | 0+ | 21.79 | -0.026 | 10 |
| 22.07 | -0.11 | 2- | 22.22 | 0.004 | 0+ | 22.40 | 0.031 | 0+ | 22.56 | -0.060 | 10 |
| 22.84 | -0.39 | 2- | 23.02 | -0.087 | 0+ | 23.17 | -0.072 | 0+ | 23.35 | -0.011 | 10 |
| 23.63 | -0.16 | 2- | 23.78 | -0.25 | 0+ | 23.96 | 0.007 | 0+ | | | |

| NOV. 30, 1979 | | | DEC. 01, 1979 | | | DEC. 02, 1979 | | | DEC. 03, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.12 | * | 10 | 0.29 | -0.11 | 2- | 0.44 | -0.31 | 3+ | 0.61 | -0.34 | 2+ |
| 0.91 | * | 10 | 1.06 | 0.045 | 2- | 1.23 | -0.54 | 3+ | 1.38 | * | 2+ |
| 1.67 | -0.17 | 10 | 1.85 | 0.18 | 2- | 2.00 | -0.75 | 3+ | 2.17 | * | 2+ |
| 2.47 | -0.22 | 10 | 2.62 | 0.022 | 2- | 2.79 | -0.75 | 3+ | 2.93 | -0.33 | 2+ |
| 3.23 | 0.006 | 2- | 3.41 | -0.063 | 10 | 3.56 | -0.76 | 30 | 3.73 | -0.53 | 3+ |
| 4.03 | 0.076 | 2- | 4.18 | -0.12 | 10 | 4.35 | -0.30 | 30 | 4.49 | -1.1 | 3+ |
| 4.79 | -0.15 | 2- | 4.97 | -0.064 | 10 | 5.11 | -0.45 | 30 | 5.29 | -0.79 | 3+ |
| 5.58 | -0.089 | 2- | 5.73 | -0.14 | 10 | 5.91 | -0.27 | 30 | 6.05 | -0.89 | 3+ |
| 6.35 | -0.25 | 50 | 6.53 | -0.20 | 3- | 6.67 | -0.39 | 3- | 6.84 | -0.60 | 3+ |
| 7.14 | -0.25 | 50 | 7.29 | -0.79 | 3- | 7.47 | -0.52 | 3- | 7.61 | -0.62 | 3+ |
| 7.91 | -0.31 | 50 | 8.09 | -0.50 | 3- | 8.23 | -0.72 | 3- | 8.40 | -0.45 | 3+ |
| 8.70 | -0.14 | 50 | 8.85 | -1.1 | 3- | 9.02 | -0.52 | 30 | 9.17 | -0.12 | 2+ |
| 9.47 | -1.0 | 3+ | 9.64 | -0.90 | 3- | 9.79 | -0.31 | 30 | 9.96 | -0.15 | 2+ |
| 10.26 | -0.64 | 3+ | 10.41 | -0.42 | 3- | 10.58 | -0.34 | 30 | 10.73 | 0.18 | 2+ |
| 11.03 | 0.25 | 3+ | 11.20 | -0.28 | 3- | 11.35 | -0.39 | 30 | 11.52 | 0.30 | 2+ |
| 11.82 | -0.17 | 3+ | 11.97 | -0.12 | 3- | 12.14 | -0.24 | 2+ | 12.29 | 0.49 | 2- |
| 12.59 | -0.19 | 3+ | 12.76 | 0.008 | 2+ | 12.91 | -0.066 | 2+ | 13.08 | 0.51 | 2- |
| 13.38 | -0.042 | 3+ | 13.53 | -0.065 | 2+ | 13.70 | 0.029 | 2+ | 13.84 | 0.77 | 2- |
| 14.15 | 0.39 | 3+ | 14.32 | -0.29 | 2+ | 14.47 | 0.58 | 2+ | 14.64 | 0.43 | 2- |
| 14.94 | -0.053 | 3+ | 15.09 | -0.060 | 3- | 15.26 | 0.40 | 2- | 15.40 | 0.27 | 10 |
| 15.70 | -0.69 | 3- | 15.88 | -0.043 | 3- | 16.02 | 0.32 | 2- | 16.20 | 0.60 | 10 |
| 16.50 | -0.15 | 3- | 16.65 | -0.21 | 3- | 16.32 | 0.093 | 2- | 16.96 | 0.72 | 10 |
| 17.26 | -0.13 | 3- | 17.44 | -0.66 | 3- | 17.58 | -0.26 | 2- | 17.75 | 0.32 | 10 |
| 18.06 | -0.039 | 20 | 18.20 | -0.56 | 2+ | 18.38 | -0.070 | 2- | 18.52 | 0.16 | 10 |
| 18.82 | 0.12 | 20 | 19.00 | -0.57 | 2+ | 19.14 | -0.26 | 2- | 19.31 | 0.004 | 10 |
| 19.61 | 0.082 | 20 | 19.76 | -0.14 | 2+ | 19.93 | -0.47 | 2- | 20.08 | 0.16 | 10 |
| 20.38 | 0.053 | 20 | 20.55 | -0.050 | 2+ | 20.70 | -0.21 | 2- | 20.87 | 0.17 | 10 |
| 21.17 | 0.087 | 20 | 21.32 | -0.23 | 20 | 21.49 | -0.43 | 1+ | 21.64 | 0.14 | 0+ |
| 21.94 | -0.036 | 20 | 22.11 | -0.064 | 20 | 22.26 | -0.37 | 1+ | 22.43 | 0.071 | 0+ |
| 22.73 | -0.16 | 20 | 22.88 | 0.023 | 20 | 23.05 | -0.28 | 1+ | 23.19 | -0.21 | 0+ |
| 23.50 | -0.28 | 20 | 23.67 | -0.24 | 20 | 23.82 | -0.26 | 1+ | 23.99 | -0.093 | 0+ |

| DEC. 04, 1979 | | | DEC. 05, 1979 | | | DEC. 06, 1979 | | | DEC. 07, 1979 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.75 | -0.18 | 20 | 0.13 | -0.10 | 20 | 0.29 | -0.23 | 2+ | 0.43 | 0.20 | 1+ |
| 1.55 | -0.44 | 20 | 0.92 | -0.40 | 20 | 1.06 | -0.26 | 2+ | 1.22 | -0.11 | 1+ |
| 2.31 | * | 20 | 1.69 | 0.082 | 20 | 1.85 | -0.24 | 2+ | 1.98 | -0.23 | 1+ |
| 3.10 | * | 3+ | 2.48 | -0.40 | 20 | 2.62 | -0.31 | 2+ | 2.78 | -0.045 | 1+ |
| 3.87 | -0.61 | 3+ | 3.24 | -0.55 | 1+ | 3.41 | -0.34 | 20 | 3.54 | -0.041 | 10 |
| 4.66 | -0.43 | 3+ | 4.04 | -0.12 | 1+ | 4.17 | -0.49 | 20 | 4.33 | 0.26 | 10 |
| 5.43 | -0.88 | 3+ | 4.80 | -0.035 | 1+ | 4.97 | -0.20 | 20 | 5.10 | 0.18 | 10 |
| 6.22 | -0.83 | 40 | 5.59 | -0.009 | 1+ | 5.73 | -0.31 | 20 | 5.89 | 0.23 | 10 |
| 7.78 | -0.65 | 40 | 6.36 | 0.032 | 2+ | 6.52 | -0.25 | 2+ | 6.66 | -0.081 | 1- |
| 8.54 | -0.58 | 40 | 7.15 | -0.022 | 2+ | 7.29 | -0.20 | 2+ | 7.45 | -0.28 | 1- |
| 9.34 | -0.30 | 30 | 7.92 | -0.25 | 2+ | 8.08 | -0.30 | 2+ | 8.22 | -0.057 | 1- |
| 10.10 | -0.56 | 30 | 8.71 | 0.008 | 2+ | 8.85 | -0.26 | 2+ | 9.01 | 0.15 | 10 |
| 10.90 | -0.39 | 30 | 9.48 | -0.19 | 20 | 9.64 | 0.046 | 2- | 9.77 | 0.21 | 10 |
| 11.66 | -0.72 | 30 | 10.27 | -0.039 | 20 | 10.41 | 0.19 | 2- | 10.57 | 0.33 | 10 |
| 12.45 | -0.83 | 3+ | 11.03 | -0.16 | 20 | 11.20 | 0.31 | 2- | 11.33 | 0.42 | 10 |
| 13.22 | -1.6 | 3+ | 11.83 | -0.17 | 20 | 11.96 | -0.021 | 2- | 12.12 | 0.36 | 1- |
| 14.01 | -1.7 | 3+ | 12.59 | 0.018 | 2+ | 12.76 | -0.044 | 1- | 12.89 | 0.088 | 1- |
| 14.78 | -1.8 | 3+ | 13.39 | 0.092 | 2+ | 13.52 | -0.16 | 1- | 13.68 | 0.008 | 1- |
| 15.57 | -1.5 | 40 | 14.15 | -0.44 | 2+ | 14.31 | -0.17 | 1- | 14.45 | 0.29 | 1- |
| 16.34 | -1.3 | 40 | 14.94 | -0.69 | 2+ | 15.08 | -0.023 | 0+ | 15.24 | -0.004 | 1- |
| 17.13 | -1.3 | 40 | 15.71 | -0.37 | 2+ | 15.87 | 0.000 | 0+ | 16.00 | -0.32 | 1- |
| 17.89 | -0.77 | 40 | 16.50 | -0.35 | 2+ | 16.64 | 0.13 | 0+ | 16.80 | 0.007 | 1- |
| 18.69 | -0.90 | 3- | 17.27 | * | 2+ | 17.43 | 0.13 | 0+ | 17.56 | * | 1- |
| 19.45 | -0.81 | 3- | 18.06 | * | 10 | 18.20 | 0.11 | 10 | 18.36 | * | 2- |
| 20.25 | -0.71 | 3- | 18.83 | -0.16 | 10 | 18.99 | 0.16 | 10 | 19.12 | * | 2- |
| 21.01 | -0.70 | 20 | 19.62 | -0.39 | 10 | 19.75 | 0.078 | 10 | 19.91 | 0.073 | 2- |
| 21.80 | -0.76 | 20 | 20.38 | -0.52 | 10 | 20.55 | 0.17 | 10 | 20.68 | -0.041 | 2- |
| 22.57 | -0.49 | 20 | 21.18 | -0.35 | 2- | 21.31 | 0.13 | 10 | 21.47 | 0.020 | 1+ |
| 23.37 | 0.074 | 20 | 21.94 | -0.016 | 2- | 22.10 | 0.22 | 10 | 22.24 | 0.099 | 1+ |
| | | | 22.73 | 0.12 | 2- | 22.87 | 0.14 | 10 | 23.03 | 0.31 | 1+ |
| | | | 23.50 | -0.15 | 2- | 23.66 | 0.066 | 10 | 23.79 | 0.29 | 1+ |

| DEC. 08, 1979 | | | DEC. 09, 1979 | | | DEC. 10, 1979 | | | DEC. 11, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.59 | * | 1+ | 0.72 | 0.024 | 20 | 0.08 | -0.049 | 10 | 0.23 | -0.17 | 2+ |
| 1.35 | * | 1+ | 1.51 | -0.097 | 20 | 0.87 | -0.014 | 10 | 0.99 | -0.39 | 2+ |
| 2.14 | -0.58 | 1+ | 2.27 | -0.10 | 20 | 1.63 | 0.078 | 10 | 1.78 | -0.22 | 2+ |
| 2.91 | -0.55 | 1+ | 3.06 | 0.26 | 20 | 2.43 | 0.095 | 10 | 2.55 | -0.29 | 2+ |
| 3.70 | -0.17 | 3- | 3.83 | 0.14 | 20 | 3.19 | -0.28 | 1+ | 3.34 | -0.38 | 1+ |
| 4.47 | -0.018 | 3- | 4.62 | 0.23 | 20 | 3.98 | -0.56 | 1+ | 4.11 | -0.14 | 1+ |
| 5.26 | -0.041 | 3- | 5.39 | -0.17 | 20 | 4.75 | -0.53 | 1+ | 4.90 | 0.021 | 1+ |
| 6.02 | -0.20 | 20 | 6.18 | -0.41 | 20 | 5.54 | -0.27 | 1+ | 5.66 | * | 1+ |
| 6.82 | -0.041 | 20 | 6.95 | -0.32 | 20 | 6.31 | -0.37 | 10 | 6.45 | * | 1- |
| 7.58 | 0.22 | 20 | 7.74 | -0.11 | 20 | 7.10 | 0.003 | 10 | 7.22 | -0.068 | 1- |
| 8.37 | 0.26 | 20 | 8.50 | 0.078 | 20 | 7.86 | 0.19 | 10 | 8.01 | 0.091 | 1- |
| 9.14 | 0.12 | 20 | 9.29 | 0.34 | 2+ | 8.65 | 0.24 | 10 | 8.78 | -0.002 | 1- |
| 9.93 | 0.32 | 20 | 10.06 | 0.24 | 2+ | 9.42 | 0.28 | 10 | 9.57 | 0.13 | 1- |
| 10.70 | -0.095 | 20 | 10.85 | 0.28 | 2+ | 10.21 | 0.47 | 10 | 10.33 | 0.31 | 1- |
| 11.49 | 0.23 | 20 | 11.62 | 0.29 | 2+ | 10.98 | 0.37 | 10 | 11.12 | 0.31 | 1- |
| 12.25 | 0.38 | 30 | 12.41 | 0.28 | 20 | 11.77 | 0.27 | 10 | 11.89 | 0.16 | 1- |
| 13.05 | 0.25 | 30 | 13.17 | 0.37 | 20 | 12.53 | -0.012 | 1+ | 12.68 | 0.12 | 1- |
| 13.81 | -0.62 | 30 | 13.97 | 0.41 | 20 | 13.33 | -0.055 | 1+ | 13.45 | -0.20 | 1- |
| 14.60 | -1.1 | 30 | 14.73 | 0.34 | 20 | 14.09 | -0.23 | 1+ | 14.24 | -0.17 | 1- |
| 15.37 | -0.84 | 2+ | 15.52 | -0.045 | 1+ | 14.88 | -0.13 | 1+ | 15.00 | 0.28 | 1- |
| 16.16 | -0.70 | 2+ | 16.29 | -0.14 | 1+ | 15.65 | -0.17 | 3- | 15.80 | 0.22 | 1- |
| 16.93 | -0.66 | 2+ | 17.08 | -0.036 | 1+ | 16.44 | -0.20 | 3- | 16.56 | -0.12 | 1- |
| 17.72 | -0.71 | 2+ | 17.85 | -0.046 | 1+ | 17.21 | -0.27 | 3- | 17.35 | -0.010 | 1- |
| 18.48 | -0.33 | 3- | 18.64 | 0.038 | 2- | 18.00 | -0.39 | 3- | 18.12 | -0.13 | 2+ |
| 19.28 | -0.27 | 3- | 19.40 | -0.006 | 2- | 18.76 | -0.17 | 2- | 18.91 | -0.20 | 2+ |
| 20.04 | -0.64 | 3- | 20.20 | -0.10 | 2- | 19.55 | -0.27 | 2- | 19.68 | 0.025 | 2+ |
| 20.83 | -0.12 | 3- | 20.96 | -0.11 | 2- | 20.32 | 0.16 | 2- | 20.47 | 0.017 | 2+ |
| 21.60 | -0.000 | 2+ | 21.75 | -0.064 | 2- | 21.11 | 0.16 | 1- | 21.23 | 0.24 | 1+ |
| 22.39 | -0.31 | 2+ | 22.52 | -0.098 | 2- | 21.88 | 0.064 | 1- | 22.02 | 0.32 | 1+ |
| 23.16 | 0.013 | 2+ | 23.31 | 0.007 | 2- | 22.67 | 0.21 | 1- | 22.79 | 0.31 | 1+ |
| 23.95 | -0.11 | 2+ | | | | 23.43 | 0.20 | 1- | 23.58 | 0.031 | 1+ |

| DEC. 12, 1979 | | | DEC. 13, 1979 | | | DEC. 14, 1979 | | | DEC. 15, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.35 | -0.027 | 1- | 0.49 | -0.025 | 0+ | 0.60 | -0.11 | 0+ | 0.74 | * | 10 |
| 1.14 | -0.047 | 1- | 1.25 | -0.18 | 0+ | 1.39 | -0.36 | 0+ | 1.50 | -0.15 | 10 |
| 1.9 | -0.27 | 1- | 2.04 | -0.19 | 0+ | 2.16 | -0.073 | 0+ | 2.29 | 0.16 | 10 |
| 2.69 | -0.053 | 1- | 2.81 | -0.34 | 0+ | 2.95 | -0.35 | 0+ | 3.06 | -0.11 | 30 |
| 3.46 | * | 1- | 3.6 | -0.18 | 1- | 3.72 | -0.31 | 2- | 3.85 | -0.44 | 30 |
| 4.25 | -0.10 | 1- | 4.37 | -0.13 | 1- | 4.51 | 0.13 | 2- | 4.62 | -1.6 | 30 |
| 5.02 | -0.34 | 1- | 5.16 | 0.085 | 1- | 5.27 | * | 2- | 5.41 | -1.1 | 30 |
| 5.81 | -0.26 | 1- | 5.92 | -0.15 | 1- | 6.06 | * | 10 | 6.17 | -0.46 | 2- |
| 6.57 | -0.26 | 0+ | 6.71 | -0.11 | 1+ | 6.83 | -0.22 | 10 | 6.96 | -0.32 | 2- |
| 7.36 | -0.13 | 0+ | 7.48 | 0.12 | 1+ | 7.62 | -0.17 | 10 | 7.73 | -0.26 | 2- |
| 8.13 | 0.13 | 0+ | 8.27 | 0.15 | 1+ | 8.38 | -0.23 | 10 | 8.52 | -0.18 | 2- |
| 8.92 | * | 0+ | 9.04 | 0.084 | 1- | 9.17 | -0.22 | 10 | 9.28 | -0.25 | 3- |
| 9.69 | * | 10 | 9.83 | 0.19 | 1- | 9.94 | 0.024 | 10 | 10.07 | -0.023 | 3- |
| 10.48 | -0.20 | 10 | 10.59 | 0.18 | 1- | 10.73 | 0.22 | 10 | 10.84 | -0.30 | 3- |
| 11.24 | 0.35 | 10 | 11.38 | 0.26 | 1- | 11.50 | 0.28 | 10 | 11.63 | -0.20 | 3- |
| 12.03 | 0.18 | 10 | 12.15 | 0.045 | 1+ | 12.29 | 0.18 | 10 | 12.40 | 0.20 | 20 |
| 12.80 | 0.040 | 10 | 12.94 | 0.032 | 1+ | 13.05 | 0.52 | 10 | 13.19 | 0.22 | 20 |
| 13.59 | 0.039 | 10 | 13.71 | * | 1+ | 13.84 | 0.44 | 10 | 13.95 | 0.62 | 20 |
| 14.36 | 0.11 | 10 | 14.50 | * | 1+ | 14.61 | 0.53 | 10 | 14.74 | 0.40 | 20 |
| 15.15 | * | 1+ | 15.26 | -0.068 | 1- | 15.40 | 0.67 | 1+ | 15.51 | 0.53 | 2+ |
| 15.91 | * | 1+ | 16.05 | 0.020 | 1- | 16.17 | 0.55 | 1+ | 16.30 | 0.65 | 2+ |
| 16.70 | * | 1+ | 16.82 | 0.12 | 1- | 16.96 | 0.38 | 1+ | 17.07 | -0.14 | 2+ |
| 17.47 | -0.27 | 1+ | 17.61 | -0.051 | 1- | 17.72 | -0.20 | 1+ | 17.85 | -0.83 | 2+ |
| 18.26 | -0.19 | 2- | 18.38 | -0.20 | 10 | 18.51 | -0.23 | 2- | 18.62 | -1.1 | 3- |
| 19.03 | -0.10 | 2- | 19.17 | 0.10 | 10 | 19.28 | -0.080 | 2- | 19.41 | * | 3- |
| 19.82 | -0.079 | 2- | 19.93 | 0.11 | 10 | 20.07 | -0.19 | 2- | 20.18 | * | 3- |
| 20.58 | -0.12 | 2- | 20.72 | -0.042 | 10 | 20.84 | 0.076 | 2- | 20.97 | * | 3- |
| 21.37 | 0.068 | 2- | 21.49 | -0.021 | 10 | 21.62 | 0.007 | 1+ | 21.73 | * | 2- |
| 22.14 | 0.33 | 2- | 22.28 | -0.064 | 10 | 22.39 | -0.073 | 1+ | 22.52 | * | 2- |
| 22.93 | 0.10 | 2- | 23.05 | -0.16 | 10 | 23.18 | -0.089 | 1+ | 23.29 | * | 2- |
| 23.70 | 0.052 | 2- | 23.84 | -0.14 | 10 | 23.95 | * | 1+ | | | |

| DEC. 16, 1979 | | | DEC. 17, 1979 | | | DEC. 18, 1979 | | | DEC. 19, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.08 | * | 3- | 0.18 | -0.94 | 4- | 0.31 | 0.24 | 3- | 0.41 | -0.18 | 2- |
| 0.85 | -0.40 | 3- | 0.97 | -0.33 | 4- | 1.08 | -0.079 | 3- | 1.20 | -0.044 | 2- |
| 1.63 | -0.21 | 3- | 1.74 | -0.31 | 4- | 1.86 | -0.39 | 3- | 1.96 | -0.090 | 2- |
| 2.40 | -0.50 | 3- | 2.53 | -0.29 | 4- | 2.63 | -0.24 | 3- | 2.75 | -0.25 | 2- |
| 3.19 | -0.49 | 30 | 3.30 | -0.52 | 2+ | 3.42 | -0.044 | 10 | 3.52 | * | 20 |
| 3.96 | * | 30 | 4.08 | -0.75 | 2+ | 4.19 | -0.16 | 10 | 4.31 | * | 20 |
| 4.75 | * | 30 | 4.85 | -0.43 | 2+ | 4.97 | -0.21 | 10 | 5.07 | -0.53 | 20 |
| 5.51 | -0.80 | 30 | 5.64 | -0.21 | 2+ | 5.74 | -0.14 | 10 | 5.86 | * | 20 |
| 6.30 | -0.54 | 2+ | 6.41 | -0.32 | 30 | 6.53 | -0.20 | 1+ | 6.63 | * | 2- |
| 7.07 | -0.37 | 2+ | 7.20 | -0.57 | 30 | 7.30 | -0.33 | 1+ | 7.42 | * | 2- |
| 7.86 | -0.034 | 2+ | 7.96 | -0.60 | 30 | 8.09 | -0.15 | 1+ | 8.19 | * | 2- |
| 8.63 | 0.080 | 2+ | 8.75 | -0.21 | 30 | 8.85 | -0.048 | 1+ | 8.97 | * | 2- |
| 9.41 | -0.041 | 2- | 9.52 | -0.14 | 20 | 9.64 | 0.049 | 2+ | 9.74 | * | 1+ |
| 10.18 | -0.24 | 2- | 10.31 | 0.14 | 20 | 10.41 | 0.061 | 2+ | 10.53 | -0.11 | 1+ |
| 10.97 | -0.041 | 2- | 11.07 | 0.21 | 20 | 11.20 | 0.078 | 2+ | 11.30 | 0.29 | 1+ |
| 11.74 | -0.14 | 2- | 11.86 | 0.19 | 20 | 11.96 | 0.090 | 2+ | 12.08 | 0.28 | 10 |
| 12.53 | -0.17 | 20 | 12.63 | -0.012 | 3- | 12.75 | 0.15 | 20 | 12.85 | 0.46 | 10 |
| 13.29 | 0.17 | 20 | 13.42 | 0.030 | 3- | 13.52 | 0.036 | 20 | 13.64 | 0.44 | 10 |
| 14.08 | 0.19 | 20 | 14.19 | -0.16 | 3- | 14.31 | 0.078 | 20 | 14.41 | 0.43 | 10 |
| 14.85 | -0.088 | 20 | 14.97 | -0.28 | 3- | 15.08 | 0.35 | 2- | 15.19 | 0.35 | 1+ |
| 15.64 | -0.210 | 20 | 15.74 | * | 30 | 15.86 | 0.18 | 2- | 15.96 | -0.001 | 1+ |
| 16.41 | 0.25 | 20 | 16.53 | * | 30 | 16.63 | -0.080 | 2- | 16.75 | -0.18 | 1+ |
| 17.19 | -0.15 | 20 | 17.30 | -1.0 | 30 | 17.42 | -0.19 | 2- | 17.52 | -0.19 | 1+ |
| 17.96 | -0.19 | 20 | 18.09 | -1.0 | 2+ | 18.19 | 0.12 | 2- | 18.30 | -0.18 | 2- |
| 18.75 | -0.21 | 20 | 18.85 | -0.34 | 2+ | 18.97 | 0.079 | 2- | 19.07 | -0.047 | 2- |
| 19.52 | -0.23 | 20 | 19.64 | -0.18 | 2+ | 19.74 | -0.11 | 2- | 19.86 | -0.17 | 2- |
| 20.31 | -0.21 | 20 | 20.41 | -0.040 | 2+ | 20.53 | -0.26 | 2- | 20.63 | -0.22 | 2- |
| 21.07 | -0.17 | 3+ | 21.20 | -0.19 | 3- | 21.30 | -0.53 | 2- | 21.41 | -0.26 | 2+ |
| 21.86 | -0.18 | 3+ | 21.96 | -0.41 | 3- | 22.08 | -0.50 | 2- | 22.18 | -0.36 | 2+ |
| 22.63 | -0.33 | 3+ | 22.75 | -0.55 | 3- | 22.85 | -0.44 | 2- | 22.97 | -0.096 | 2+ |
| 23.42 | -0.75 | 3+ | 23.52 | -0.33 | 3- | 23.64 | -0.24 | 2- | 23.74 | * | 2+ |

| DEC. 20, 1979 | | | DEC. 21, 1979 | | | DEC. 22, 1979 | | | DEC. 23, 1979 | | |
|---------------|-------|----|---------------|--------|----|---------------|-------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.52 | * | 00 | 1.41 | -0.089 | 0+ | 0.73 | * | 2+ | 0.05 | 0.11 | 1- |
| 1.29 | * | 00 | 2.18 | -0.17 | 0+ | 1.50 | * | 2+ | 0.83 | -0.16 | 1- |
| 2.08 | * | 00 | 2.96 | -0.19 | 0+ | 2.29 | * | 2+ | 1.61 | -0.19 | 1- |
| 2.85 | * | 00 | 3.73 | * | 00 | 3.06 | -0.85 | 30 | 2.38 | -0.23 | 1- |
| 3.63 | -0.15 | 1+ | 4.52 | * | 00 | 3.84 | -0.71 | 30 | 3.16 | * | 0+ |
| 4.40 | -0.12 | 1+ | 5.29 | -0.076 | 00 | 4.61 | -0.76 | 30 | 3.93 | * | 0+ |
| 5.19 | -0.13 | 1+ | 6.07 | -0.084 | 0+ | 5.40 | -0.64 | 30 | 4.72 | * | 0+ |
| 5.96 | -0.23 | 1+ | 6.84 | -0.082 | 0+ | 6.17 | * | 2+ | 5.49 | -0.11 | 0+ |
| 6.75 | -0.19 | 1- | 7.63 | 0.025 | 0+ | 6.95 | * | 2+ | 6.27 | -0.060 | 1- |
| 7.51 | -0.44 | 1- | 8.40 | 0.14 | 0+ | 7.72 | -0.60 | 2+ | 7.04 | -0.18 | 1- |
| 8.30 | -0.32 | 1- | 9.18 | 0.24 | 1- | 8.51 | -0.33 | 2+ | 7.83 | -0.13 | 1- |
| 9.07 | -0.36 | 10 | 9.95 | 0.002 | 1- | 9.28 | -0.69 | 40 | 8.60 | -0.13 | 1- |
| 9.86 | -0.14 | 10 | 10.74 | 0.077 | 1- | 10.06 | -0.83 | 40 | 9.38 | -0.13 | 1- |
| 10.62 | -0.27 | 10 | 11.51 | -0.004 | 1- | 10.83 | -1.2 | 40 | 10.15 | -0.028 | 1- |
| 11.41 | -0.25 | 10 | 12.29 | -0.027 | 1- | 11.62 | -0.69 | 40 | 10.94 | 0.008 | 1- |
| 12.18 | -0.43 | 20 | 13.06 | -0.20 | 1- | 12.39 | * | 30 | 11.71 | 0.031 | 1- |
| 12.97 | -0.30 | 20 | 13.85 | -0.33 | 1- | 13.17 | * | 30 | 12.49 | 0.018 | 00 |
| 13.74 | -0.19 | 20 | 14.62 | -0.48 | 1- | 13.94 | * | 30 | 13.26 | 0.29 | 00 |
| 14.52 | -0.22 | 20 | 15.40 | -0.55 | 1+ | 14.73 | * | 30 | 14.05 | 0.23 | 00 |
| 15.29 | -0.66 | 2- | 16.17 | -0.74 | 1+ | 15.50 | * | 3+ | 14.82 | 0.32 | 00 |
| 16.08 | -0.75 | 2- | 16.96 | -0.99 | 1+ | 16.28 | * | 3+ | 15.60 | 0.35 | 10 |
| 16.85 | * | 2- | 17.73 | -0.99 | 1+ | 17.05 | * | 3+ | 16.37 | 0.35 | 10 |
| 17.63 | * | 2- | 18.51 | -0.78 | 2+ | 17.83 | -1.3 | 3+ | 17.16 | 0.11 | 10 |
| 18.40 | * | 1+ | 19.28 | -0.62 | 2+ | 18.61 | -1.4 | 4- | 17.93 | -0.033 | 10 |
| 19.19 | * | 1+ | 20.07 | -0.82 | 2+ | 19.39 | -0.79 | 4- | 18.71 | 0.097 | 10 |
| 23.07 | * | 10 | 20.84 | * | 2+ | 20.16 | 0.008 | 4- | 19.48 | 0.048 | 10 |
| 23.85 | * | 10 | 21.62 | * | 20 | 20.94 | * | 4- | 20.27 | -0.29 | 10 |
| | | | 22.39 | -0.91 | 20 | 21.72 | * | 1+ | 21.04 | -0.072 | 20 |
| | | | 23.18 | -0.15 | 20 | 22.50 | * | 1+ | 21.82 | -0.049 | 20 |
| | | | 23.95 | * | 20 | 23.27 | * | 1+ | 22.59 | -0.23 | 20 |
| | | | | | | | | | 23.37 | 0.13 | 20 |

| DEC. 24, 1979 | | | DEC. 25, 1979 | | | DEC. 26, 1979 | | | DEC. 27, 1979 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.15 | * | 2+ | 0.25 | -0.15 | 00 | 0.34 | * | 20 | 0.44 | * | 1+ |
| 0.93 | * | 2+ | 1.02 | -0.31 | 00 | 1.12 | -0.039 | 20 | 1.21 | -0.26 | 1+ |
| 1.70 | -0.67 | 2+ | 1.80 | -0.18 | 00 | 1.89 | -0.17 | 20 | 1.99 | -0.83 | 1+ |
| 2.48 | -0.37 | 2+ | 2.58 | -0.19 | 00 | 2.67 | -0.17 | 20 | 2.76 | * | 1+ |
| 3.26 | -0.30 | 2- | 3.36 | -0.13 | 00 | 3.45 | -0.16 | 1+ | 3.54 | * | 30 |
| 4.04 | -0.27 | 2- | 4.13 | * | 00 | 4.23 | -0.65 | 1+ | 4.32 | -0.67 | 30 |
| 4.81 | -0.59 | 2- | 4.91 | * | 00 | 5.00 | * | 1+ | 5.10 | -0.039 | 30 |
| 5.59 | -0.63 | 2- | 5.68 | -0.24 | 00 | 5.78 | * | 1+ | 5.87 | -0.93 | 30 |
| 6.37 | -0.98 | 1+ | 6.47 | -0.14 | 00 | 6.56 | * | 10 | 6.65 | -0.97 | 30 |
| 7.15 | -0.65 | 1+ | 7.24 | -0.12 | 00 | 7.34 | * | 10 | 7.43 | * | 30 |
| 7.92 | -0.32 | 1+ | 8.02 | -0.033 | 00 | 8.11 | -0.15 | 10 | 8.21 | * | 30 |
| 8.70 | * | 1+ | 8.79 | 0.013 | 00 | 8.89 | 0.030 | 10 | 8.98 | -0.53 | 30 |
| 9.47 | * | 2+ | 9.58 | 0.056 | 00 | 9.67 | -0.16 | 2- | 9.76 | -0.079 | 30 |
| 10.26 | * | 2+ | 10.35 | * | 00 | 10.45 | -0.072 | 2- | 10.54 | * | 30 |
| 11.03 | * | 2+ | 11.13 | * | 00 | 11.22 | -0.096 | 2- | 11.32 | * | 30 |
| 11.81 | -0.33 | 2+ | 11.90 | * | 00 | 12.00 | -0.019 | 2- | 12.09 | -0.27 | 30 |
| 12.58 | -0.30 | 10 | 12.68 | * | 1+ | 12.77 | -0.12 | 20 | 12.87 | -0.54 | 30 |
| 13.37 | -0.23 | 10 | 13.46 | * | 1+ | 13.56 | -0.38 | 20 | 13.64 | -0.85 | 30 |
| 14.14 | -0.24 | 10 | 14.24 | * | 1+ | 14.33 | -0.54 | 20 | 14.42 | -0.80 | 30 |
| 14.92 | -0.45 | 10 | 15.01 | * | 0+ | 15.11 | -0.71 | 3+ | 15.20 | -1.0 | 3+ |
| 15.69 | -0.85 | 3- | 15.79 | * | 0+ | 15.88 | -0.86 | 3+ | 15.98 | -0.89 | 3+ |
| 16.48 | * | 3- | 16.57 | * | 0+ | 16.66 | -0.40 | 3+ | 16.75 | -0.31 | 3+ |
| 17.25 | * | 3- | 17.35 | * | 0+ | 17.44 | -1.1 | 3+ | 17.53 | -0.13 | 3+ |
| 18.03 | * | 10 | 18.12 | * | 10 | 18.22 | -1.2 | 4- | 18.31 | 0.21 | 2- |
| 18.80 | -0.10 | 10 | 18.90 | * | 10 | 18.99 | -1.1 | 4- | 19.09 | -0.092 | 2- |
| 19.58 | * | 10 | 19.68 | * | 10 | 19.77 | * | 4- | 19.86 | -0.14 | 2- |
| 20.36 | * | 10 | 20.46 | * | 10 | 20.55 | * | 4- | 20.64 | -0.12 | 2- |
| 21.14 | * | 1+ | 21.23 | * | 1+ | 21.33 | * | 3- | 21.42 | -0.092 | 10 |
| 21.91 | -0.48 | 1+ | 22.01 | * | 1+ | 22.10 | * | 3- | 22.20 | 0.089 | 10 |
| 22.69 | -0.33 | 1+ | 22.78 | * | 1+ | 22.88 | * | 3- | 22.97 | -0.064 | 10 |
| 23.47 | -0.23 | 1+ | 23.57 | * | 1+ | 23.66 | * | 3- | 23.75 | -0.023 | 10 |

| DEC. 28, 1979 | | | DEC. 29, 1979 | | | DEC. 30, 1979 | | | DEC. 31, 1979 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.52 | * | 10 | 0.62 | * | 40 | 0.70 | * | 5- | 0.01 | * | 2+ |
| 1.30 | * | 10 | 1.39 | -0.95 | 40 | 1.48 | * | 5- | 0.79 | -0.12 | 2+ |
| 2.08 | -0.21 | 10 | 2.17 | -0.78 | 40 | 2.26 | * | 5- | 1.56 | -0.10 | 2+ |
| 2.86 | -0.14 | 10 | 2.95 | -0.75 | 40 | 3.03 | -1.1 | 4+ | 2.34 | -0.26 | 2+ |
| 3.63 | -0.24 | 3- | 3.72 | -0.92 | 50 | 3.81 | -1.3 | 4+ | 3.12 | -0.28 | 2+ |
| 4.41 | -0.40 | 3- | 4.50 | -1.0 | 50 | 4.59 | -0.74 | 4+ | 3.90 | -0.39 | 2+ |
| 5.19 | -0.81 | 3- | 5.28 | -0.79 | 50 | 5.36 | -0.79 | 4+ | 4.67 | * | 2+ |
| 5.97 | -0.26 | 3- | 6.05 | -1.2 | 40 | 6.14 | -0.96 | 3+ | 5.45 | * | 2+ |
| 6.74 | -0.19 | 2- | 6.83 | -0.66 | 40 | 6.92 | -0.84 | 3+ | 6.23 | -0.46 | 1+ |
| 7.52 | -0.14 | 2- | 7.61 | * | 40 | 7.70 | -0.47 | 3+ | 7.00 | -0.20 | 1+ |
| 8.30 | -0.17 | 2- | 8.39 | * | 40 | 8.47 | -0.041 | 3+ | 7.78 | -0.30 | 1+ |
| 9.07 | -0.000 | 4+ | 9.16 | * | 4- | 9.25 | -0.29 | 3+ | 8.56 | -0.28 | 1+ |
| 9.85 | 0.15 | 4+ | 9.94 | * | 4- | 10.03 | -0.67 | 3+ | 9.33 | -0.18 | 10 |
| 10.63 | 0.031 | 4+ | 10.72 | -0.24 | 4- | 10.80 | -0.39 | 3+ | 10.11 | -0.017 | 10 |
| 11.40 | -0.80 | 4+ | 11.49 | -0.032 | 4- | 11.58 | -0.23 | 3+ | 10.89 | 0.053 | 10 |
| 12.08 | -1.2 | 40 | 12.27 | 0.16 | 40 | 12.36 | -1.1 | 3- | 11.66 | -0.009 | 10 |
| 12.96 | -0.74 | 40 | 13.05 | * | 40 | 13.13 | -1.2 | 3- | 12.44 | 0.11 | 1+ |
| 13.74 | -0.11 | 40 | 13.82 | * | 40 | 13.91 | -0.66 | 3- | 13.22 | 0.21 | 1+ |
| 14.51 | 0.43 | 40 | 14.60 | -0.62 | 40 | 14.69 | -0.36 | 3- | 14.00 | * | 1+ |
| 15.29 | -0.088 | 3+ | 15.38 | -1.2 | 4- | 15.47 | -0.35 | 30 | 14.77 | * | 1+ |
| 16.07 | -0.70 | 3+ | 16.16 | * | 4- | 16.24 | -0.13 | 30 | 15.55 | 0.33 | 2- |
| 16.85 | -0.93 | 3+ | 16.93 | * | 4- | 17.02 | -0.27 | 30 | 16.33 | 0.058 | 2- |
| 17.62 | -0.34 | 3+ | 17.71 | -1.6 | 4- | 17.80 | -0.54 | 30 | 17.10 | 0.005 | 2- |
| 18.40 | -0.30 | 2- | 18.49 | -1.6 | 50 | 18.57 | * | 3+ | 17.88 | -0.26 | 2- |
| 19.17 | -0.30 | 2- | 19.26 | -2.0 | 50 | 19.35 | * | 3+ | 18.66 | -0.54 | 2+ |
| 19.95 | * | 2- | 20.04 | -1.5 | 50 | 20.13 | * | 3+ | 19.43 | -0.79 | 2+ |
| 20.73 | * | 2- | 20.82 | -1.9 | 50 | 20.90 | * | 3+ | 20.21 | -0.87 | 2+ |
| 21.51 | * | 40 | 21.59 | -2.1 | 4+ | 21.68 | * | 3- | 20.99 | -0.68 | 2+ |
| 22.28 | -0.63 | 40 | 22.37 | -1.4 | 4+ | 22.46 | * | 3- | 21.76 | -1.2 | 4- |
| 23.06 | -1.27 | 40 | 23.15 | * | 4+ | 23.23 | * | 3- | 22.54 | -1.4 | 4- |
| 23.84 | * | 40 | | | | | | | 23.32 | * | 4- |
| | | | | | | | | | | | |
| JAN. 01, 1980 | | | JAN. 02, 1980 | | | JAN. 03, 1980 | | | JAN. 04, 1980 | | |
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.09 | * | 2+ | 0.18 | * | 4+ | 0.25 | -0.49 | 3- | 0.33 | 0.028 | 30 |
| 0.87 | -0.38 | 2+ | 0.95 | -0.49 | 4+ | 1.03 | -0.55 | 3- | 1.11 | -0.32 | 30 |
| 1.65 | 0.39 | 2+ | 1.73 | * | 4+ | 1.81 | -0.84 | 3- | 1.89 | -0.34 | 30 |
| 2.43 | -0.094 | 2+ | 2.51 | * | 4+ | 2.59 | -1.0 | 3- | 2.66 | -0.38 | 30 |
| 3.20 | -0.32 | 2+ | 3.28 | 0.002 | 30 | 3.36 | -0.42 | 4+ | 3.44 | -0.56 | 3+ |
| 3.98 | -0.41 | 2+ | 4.06 | 0.046 | 30 | 4.14 | -0.83 | 4+ | 4.21 | -0.58 | 3+ |
| 4.76 | -0.43 | 2+ | 4.84 | 0.10 | 30 | 4.91 | -0.72 | 4+ | 4.99 | -0.41 | 3+ |
| 5.53 | -0.40 | 2+ | 5.61 | 0.041 | 30 | 5.69 | * | 4+ | 5.77 | -0.017 | 3+ |
| 6.31 | -0.18 | 2+ | 6.39 | -0.12 | 20 | 6.47 | * | 2- | 6.55 | -0.41 | 30 |
| 7.09 | -0.51 | 2+ | 7.17 | -0.059 | 20 | 7.25 | -0.043 | 2- | 7.32 | -0.18 | 30 |
| 7.86 | -0.61 | 2+ | 7.94 | 0.24 | 20 | 8.02 | 0.039 | 2- | 8.10 | -0.21 | 30 |
| 8.64 | -0.75 | 2+ | 8.72 | 0.35 | 20 | 8.80 | 0.013 | 2- | 8.87 | -0.084 | 30 |
| 9.42 | * | 3+ | 9.50 | 0.31 | 2+ | 9.57 | 0.14 | 3+ | 9.65 | 0.025 | 30 |
| 10.19 | * | 3+ | 10.27 | 0.27 | 2+ | 10.35 | 0.26 | 3+ | 10.43 | 0.23 | 30 |
| 10.97 | * | 3+ | 11.05 | -0.049 | 2+ | 11.13 | 0.14 | 3+ | 11.21 | 0.020 | 30 |
| 11.75 | -1.2 | 3+ | 11.83 | -0.19 | 2+ | 11.91 | * | 3+ | 11.98 | -0.18 | 30 |
| 12.52 | -1.6 | 3+ | 12.61 | -0.70 | 3+ | 12.68 | * | 4- | 12.76 | -0.066 | 2+ |
| 13.30 | -1.7 | 3+ | 13.38 | -0.80 | 3+ | 13.46 | * | 4- | 13.53 | -0.051 | 2+ |
| 14.08 | -1.7 | 3+ | 14.16 | -0.78 | 3+ | 14.23 | * | 4- | 14.31 | 0.080 | 2+ |
| 14.86 | -1.8 | 3+ | 14.93 | -0.99 | 3+ | 15.01 | * | 3- | 15.09 | * | 40 |
| 15.63 | -2.1 | 4+ | 15.71 | -0.49 | 20 | 15.79 | * | 3- | 15.87 | * | 40 |
| 16.41 | -2.1 | 4+ | 16.49 | -0.32 | 20 | 16.57 | * | 3- | 16.64 | * | 40 |
| 17.18 | -2.3 | 4+ | 17.27 | -0.32 | 20 | 17.34 | * | 3- | 17.42 | -0.90 | 40 |
| 17.96 | -2.5 | 4+ | 18.04 | -0.13 | 10 | 18.12 | -0.68 | 3- | 18.19 | -0.25 | 3+ |
| 18.74 | -2.2 | 50 | 18.82 | -0.012 | 10 | 18.89 | -0.59 | 3+ | 18.97 | -0.31 | 3+ |
| | | | | | | | | | | | |
| 19.52 | -2.6 | 50 | 19.59 | -0.089 | 10 | 19.67 | -0.52 | 3+ | 19.75 | -0.92 | 3+ |
| 20.29 | -3.7 | 50 | 20.37 | 0.010 | 10 | 20.45 | -0.72 | 3+ | 20.53 | -0.63 | 3+ |
| 21.07 | -3.5 | 50 | 21.15 | 0.072 | 20 | 21.23 | -0.79 | 4- | 21.30 | -0.21 | 30 |
| 21.85 | * | 50 | 21.93 | 0.007 | 20 | 22.00 | -0.78 | 4- | 22.08 | -0.20 | 30 |
| 22.62 | * | 50 | 22.70 | 0.19 | 20 | 22.78 | * | 4- | 22.85 | 0.034 | 30 |
| 23.40 | * | 50 | 23.48 | 0.090 | 20 | 23.55 | * | 4- | 23.63 | 0.26 | 30 |

| JAN. 05, 1980 | | | JAN. 06, 1980 | | | JAN. 07, 1980 | | | JAN. 08, 1980 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.41 | -0.33 | 3- | 0.48 | * | 3- | 0.55 | -0.12 | 0+ | 0.62 | * | 3- |
| 1.19 | * | 3- | 1.25 | -0.32 | 3- | 1.33 | -0.31 | 0+ | 1.39 | * | 3- |
| 1.96 | * | 3- | 2.03 | -0.70 | 3- | 2.10 | -0.33 | 0+ | 2.17 | -0.51 | 3- |
| 2.74 | -0.70 | 3- | 2.81 | -0.58 | 3- | 2.88 | -0.56 | 0+ | 2.94 | -0.53 | 3- |
| 3.51 | -0.40 | 20 | 3.59 | -0.90 | 3+ | 3.65 | * | 00 | 3.72 | -0.45 | 2+ |
| 4.29 | -0.33 | 20 | 4.36 | -0.49 | 3+ | 4.43 | -0.33 | 00 | 4.49 | -0.47 | 2+ |
| 5.06 | -0.25 | 20 | 5.14 | -0.32 | 3+ | 5.20 | * | 00 | 5.28 | -0.37 | 2+ |
| 5.85 | -0.33 | 20 | 5.91 | -0.21 | 3+ | 5.99 | * | 00 | 6.05 | * | 20 |
| 6.62 | * | 20 | 6.69 | -0.32 | 20 | 6.76 | * | 1- | 6.83 | * | 20 |
| 7.40 | * | 20 | 7.47 | -0.15 | 20 | 7.54 | * | 1- | 7.60 | -0.14 | 20 |
| 8.17 | -0.29 | 20 | 8.25 | -0.031 | 20 | 8.31 | * | 1- | 8.38 | -0.21 | 20 |
| 8.95 | -0.14 | 20 | 9.02 | 0.10 | 1+ | 9.09 | -0.071 | 10 | 9.15 | -0.12 | 2+ |
| 9.72 | 0.056 | 3- | 9.80 | 0.076 | 1+ | 9.86 | 0.093 | 10 | 9.93 | -0.42 | 2+ |
| 10.50 | 0.078 | 3- | 10.57 | 0.14 | 1+ | 10.64 | 0.022 | 10 | 10.70 | -0.29 | 2+ |
| 11.28 | 0.079 | 3- | 11.35 | 0.15 | 1+ | 11.41 | -0.012 | 10 | 11.49 | 0.091 | 2+ |
| 12.06 | * | 30 | 12.12 | 0.051 | 20 | 12.20 | -0.14 | 10 | 12.26 | -0.002 | 1- |
| 12.83 | * | 30 | 12.91 | 0.045 | 20 | 12.97 | -0.33 | 10 | 13.04 | 0.34 | 1- |
| 13.61 | -0.35 | 30 | 13.68 | -0.21 | 20 | 13.75 | -0.38 | 10 | 13.81 | 0.20 | 1- |
| 14.38 | -0.88 | 30 | 14.46 | -0.41 | 20 | 14.52 | -0.42 | 10 | 14.59 | 0.31 | 1- |
| 15.16 | -0.92 | 3- | 15.23 | -0.46 | 20 | 15.30 | -0.32 | 1+ | 15.36 | 0.17 | 0+ |
| 15.94 | -0.74 | 3- | 16.01 | -0.55 | 20 | 16.07 | -0.25 | 1+ | 16.14 | -0.000 | 0+ |
| 16.72 | -0.36 | 3- | 16.78 | -0.52 | 20 | 16.86 | 0.085 | 1+ | 16.91 | 0.077 | 0+ |
| 17.49 | -0.47 | 3- | 17.56 | -0.37 | 20 | 17.63 | -0.22 | 1+ | 17.70 | -0.080 | 0+ |
| 18.27 | -0.42 | 30 | 18.33 | -0.31 | 1+ | 18.41 | * | 2+ | 18.47 | -0.25 | 10 |
| 19.04 | -0.32 | 30 | 19.12 | -0.30 | 1+ | 19.18 | * | 2+ | 19.25 | * | 10 |
| 19.82 | -0.31 | 30 | 19.89 | -0.36 | 1+ | 19.96 | -0.41 | 2+ | 20.02 | * | 10 |
| 20.59 | -0.12 | 30 | 20.67 | -0.31 | 1+ | 20.73 | -0.49 | 2+ | 20.80 | -0.038 | 10 |
| 21.38 | * | 30 | 21.44 | 0.096 | 1+ | 21.51 | -0.34 | 3- | 21.57 | -0.11 | 1- |
| 22.15 | * | 30 | 22.22 | * | 1+ | 22.28 | -0.24 | 3- | 22.35 | -0.13 | 1- |
| 22.93 | * | 30 | 22.99 | * | 1+ | 23.07 | * | 3- | 23.12 | -0.22 | 1- |
| 23.70 | * | 30 | 23.77 | -0.24 | 1+ | 23.84 | * | 3- | 23.91 | -0.38 | 1- |

| JAN. 09, 1980 | | | JAN. 10, 1980 | | | JAN. 11, 1980 | | | JAN. 12, 1980 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.68 | -0.31 | 1+ | 0.74 | * | 0+ | 0.03 | * | 1- | 0.07 | -0.045 | 1- |
| 1.46 | -0.64 | 1+ | 1.51 | -0.30 | 0+ | 0.79 | * | 1- | 0.86 | -0.28 | 1- |
| 2.23 | -0.48 | 1+ | 2.30 | -0.39 | 0+ | 1.58 | -0.24 | 1- | 1.63 | -0.18 | 1- |
| 3.01 | -0.44 | 1- | 3.07 | -0.24 | 0+ | 2.35 | -0.48 | 1- | 2.41 | -0.22 | 1- |
| 3.78 | -0.44 | 1- | 3.85 | -0.41 | 0+ | 3.13 | -0.48 | 2- | 3.18 | -0.31 | 10 |
| 4.56 | -0.63 | 1- | 4.62 | -0.39 | 0+ | 3.90 | -0.29 | 2- | 3.96 | -0.46 | 10 |
| 5.33 | -0.46 | 1- | 5.40 | -0.33 | 0+ | 4.68 | -0.29 | 2- | 4.73 | -0.39 | 10 |
| 6.12 | -0.62 | 1- | 6.17 | -0.29 | 00 | 5.45 | -0.29 | 2- | 5.51 | -0.29 | 10 |
| 6.89 | -0.44 | 1- | 6.95 | -0.31 | 00 | 6.23 | -0.10 | 30 | 6.28 | -0.21 | 1+ |
| 7.67 | -0.40 | 1- | 7.72 | -0.31 | 00 | 7.00 | -0.053 | 30 | 7.07 | -0.30 | 1+ |
| 8.44 | -0.18 | 1- | 8.51 | * | 00 | 7.79 | -0.31 | 30 | 7.83 | -0.23 | 1+ |
| 9.22 | -0.37 | 1- | 9.27 | * | 1- | 8.55 | -0.56 | 30 | 8.62 | -0.11 | 1+ |
| 9.99 | -0.51 | 1- | 10.06 | -0.27 | 1- | 9.34 | * | 3- | 9.38 | -0.036 | 2- |
| 10.77 | -0.34 | 1- | 10.83 | -0.29 | 1- | 10.11 | * | 3- | 10.17 | -0.021 | 2- |
| 11.54 | -0.18 | 1- | 11.61 | 0.19 | 1- | 10.89 | -0.53 | 3- | 10.94 | -0.33 | 2- |
| 12.33 | 0.38 | 1- | 12.38 | 0.26 | 1+ | 11.66 | -0.45 | 3- | 11.72 | -0.29 | 2- |
| 13.09 | 0.35 | 1- | 13.16 | 0.40 | 1+ | 12.44 | -0.53 | 3- | 12.49 | -0.057 | 1+ |
| 13.88 | 0.50 | 1- | 13.93 | 0.43 | 1+ | 13.21 | -0.61 | 3- | 13.27 | -0.29 | 1+ |
| 14.65 | 0.18 | 1- | 14.71 | 0.34 | 1+ | 14.00 | 0.080 | 3- | 14.04 | -0.14 | 1+ |
| 15.43 | -0.20 | 1- | 15.48 | 0.22 | 10 | 14.76 | 0.44 | 3- | 14.82 | 0.51 | 1+ |
| 16.20 | 0.055 | 1- | 16.27 | 0.088 | 10 | 15.55 | -0.016 | 3- | 15.59 | 0.18 | 10 |
| 16.98 | 0.11 | 1- | 17.03 | -0.084 | 10 | 16.31 | -0.76 | 3- | 16.38 | 0.13 | 10 |
| 17.75 | 0.18 | 1- | 17.82 | -0.090 | 10 | 17.10 | -1.5 | 3- | 17.14 | -0.13 | 10 |
| 18.53 | 0.27 | 0+ | 18.59 | -0.42 | 1- | 17.87 | -1.4 | 3- | 17.93 | -0.22 | 10 |
| 19.30 | 0.21 | 0+ | 19.37 | -0.29 | 1- | 18.65 | -0.88 | 30 | 18.70 | -0.16 | 10 |
| 20.09 | 0.19 | 0+ | 20.14 | -0.33 | 1- | 19.42 | -0.61 | 30 | 19.48 | -0.22 | 10 |
| 20.86 | 0.067 | 0+ | 20.92 | -0.31 | 1- | 20.20 | -0.76 | 30 | 20.25 | -0.11 | 10 |
| 21.64 | * | 0+ | 21.69 | -0.14 | 1+ | 20.97 | -1.2 | 30 | 21.03 | -0.15 | 10 |
| 22.41 | * | 0+ | 22.47 | -0.56 | 1+ | 21.75 | * | 3- | 21.80 | -0.045 | 10 |
| 23.19 | * | 0+ | 23.24 | * | 1+ | 22.52 | * | 3- | 22.58 | -0.13 | 10 |
| 23.96 | * | 0+ | | | | 23.31 | -0.18 | 3- | 23.35 | -0.009 | 10 |

| JAN. 13, 1980 | | | JAN. 14, 1980 | | | JAN. 15, 1980 | | | JAN. 16, 1980 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.14 | -0.14 | 00 | 0.18 | -2.2 | 4- | 0.23 | -0.86 | 1- | 0.27 | -0.44 | 4+ |
| 0.90 | -0.29 | 00 | 0.96 | -0.45 | 4- | 1.00 | -0.29 | 1- | 1.05 | -0.52 | 4+ |
| 1.69 | -0.45 | 00 | 1.73 | -0.62 | 4- | 1.78 | -0.46 | 1- | 1.82 | -0.37 | 4+ |
| 2.45 | -0.34 | 00 | 2.51 | -0.76 | 4- | 2.55 | -0.42 | 1- | 2.60 | -0.71 | 4+ |
| 3.24 | -0.48 | 3- | 3.28 | -0.41 | 30 | 3.33 | * | 0+ | 3.37 | -0.73 | 30 |
| 4.01 | -0.31 | 3- | 4.06 | -0.38 | 30 | 4.10 | * | 0+ | 4.15 | -1.0 | 30 |
| 4.79 | -0.35 | 3- | 4.83 | -0.16 | 30 | 4.89 | -0.46 | 0+ | 4.92 | -0.54 | 30 |
| 5.56 | -0.43 | 3- | 5.62 | -0.13 | 30 | 5.65 | -0.45 | 0+ | 5.71 | -0.51 | 30 |
| 6.34 | -0.55 | 3+ | 6.38 | -0.091 | 20 | 6.44 | -0.34 | 10 | 6.47 | -0.43 | 2+ |
| 7.11 | -0.64 | 3+ | 7.17 | -0.38 | 20 | 7.20 | -0.16 | 10 | 7.26 | -0.59 | 2+ |
| 7.89 | * | 3+ | 7.93 | -0.19 | 20 | 7.99 | -0.38 | 10 | 8.02 | -0.52 | 2+ |
| 8.66 | * | 3+ | 8.72 | * | 20 | 8.75 | -0.40 | 10 | 8.81 | -0.65 | 2+ |
| 9.45 | -0.39 | 4+ | 9.48 | * | 20 | 9.54 | -0.20 | 2- | 9.57 | -0.53 | 10 |
| 10.21 | -0.16 | 4+ | 10.27 | -0.66 | 20 | 10.31 | -0.15 | 2- | 10.36 | -0.51 | 10 |
| 11.00 | * | 4+ | 11.04 | -0.62 | 20 | 11.09 | -0.019 | 2- | 11.12 | -0.42 | 10 |
| 11.76 | * | 4+ | 11.82 | -0.16 | 20 | 11.86 | -0.099 | 2- | 11.91 | 0.029 | 10 |
| 12.55 | -1.1 | 4+ | 12.59 | -0.068 | 2- | 12.64 | -0.44 | 20 | 12.67 | -0.061 | 1+ |
| 13.32 | -0.76 | 4+ | 13.37 | -0.085 | 2- | 13.41 | -0.53 | 20 | 13.46 | 0.44 | 1+ |
| 14.10 | -1.0 | 4+ | 14.14 | -0.26 | 2- | 14.19 | 0.10 | 20 | 14.23 | 0.23 | 1+ |
| 14.87 | -1.7 | 4+ | 14.92 | -0.30 | 2- | 14.96 | 0.008 | 20 | 15.01 | 0.11 | 0+ |
| 15.65 | -1.7 | 40 | 15.69 | -0.28 | 20 | 15.74 | * | 2+ | 15.78 | 0.061 | 0+ |
| 16.42 | -2.4 | 40 | 16.48 | -0.82 | 20 | 16.51 | * | 2+ | 16.56 | -0.022 | 0+ |
| 17.20 | -2.5 | 40 | 17.24 | -1.0 | 20 | 17.30 | -0.38 | 2+ | 17.33 | -0.018 | 0+ |
| 17.97 | -1.8 | 40 | 18.03 | -0.52 | 1+ | 18.06 | -0.65 | 2+ | 18.11 | -0.20 | 0+ |
| 18.75 | -2.1 | 5- | 18.79 | -0.58 | 1+ | 18.85 | -0.49 | 2+ | 18.88 | -0.12 | 0+ |
| 19.52 | -2.6 | 5- | 19.58 | -0.42 | 1+ | 19.61 | -0.12 | 2+ | 19.66 | -0.12 | 0+ |
| 20.31 | -2.1 | 5- | 20.34 | -0.43 | 1+ | 20.40 | -0.15 | 2+ | 20.43 | -0.13 | 0+ |
| 21.07 | * | 4- | 21.13 | -0.41 | 2- | 21.16 | -0.31 | 1+ | 21.22 | -0.003 | 0+ |
| 21.86 | * | 4- | 21.89 | -0.39 | 2- | 21.95 | -0.13 | 1+ | 21.98 | -0.015 | 0+ |
| 22.62 | * | 4- | 22.68 | -0.52 | 2- | 22.71 | -0.31 | 1+ | 22.77 | -0.060 | 0+ |
| 23.41 | -2.9 | 4- | 23.45 | -0.78 | 2- | 23.50 | -0.57 | 1+ | 23.53 | -0.13 | 0+ |

| JAN. 17, 1980 | | | JAN. 18, 1980 | | | JAN. 19, 1980 | | | JAN. 20, 1980 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.32 | * | 10 | 0.35 | 0.085 | 1+ | 0.39 | -0.32 | 2- | 0.42 | -0.29 | 3- |
| 1.08 | * | 10 | 1.13 | 0.057 | 1+ | 1.16 | -0.35 | 2- | 1.20 | -0.48 | 3- |
| 1.87 | -0.48 | 10 | 1.90 | -0.068 | 1+ | 1.94 | -0.49 | 2- | 1.97 | -0.64 | 3- |
| 2.63 | -0.48 | 10 | 2.68 | -0.27 | 1+ | 2.71 | -0.22 | 2- | 2.75 | -0.50 | 3- |
| 3.42 | -0.64 | 20 | 3.45 | -0.27 | 1- | 3.50 | -0.47 | 00 | 3.52 | -0.32 | 2+ |
| 4.18 | -0.32 | 20 | 4.23 | -0.47 | 1- | 4.26 | -0.37 | 00 | 4.31 | -0.72 | 2+ |
| 4.97 | -0.48 | 20 | 5.00 | -0.39 | 1- | 5.05 | -0.42 | 00 | 5.07 | -0.46 | 2+ |
| 5.74 | -0.49 | 20 | 5.78 | -0.49 | 1- | 5.81 | -0.35 | 00 | 5.86 | -0.38 | 2+ |
| 6.52 | -0.74 | 4+ | 6.55 | -0.31 | 10 | 6.60 | -0.35 | 0+ | 6.62 | -0.36 | 1- |
| 7.29 | -0.54 | 4+ | 7.34 | -0.52 | 10 | 7.36 | -0.26 | 0+ | 7.41 | -0.26 | 1- |
| 8.07 | -0.86 | 4+ | 8.10 | -0.33 | 10 | 8.15 | -0.35 | 0+ | 8.17 | -0.19 | 1- |
| 8.84 | -0.66 | 4+ | 8.89 | -0.34 | 10 | 8.91 | -0.14 | 0+ | 8.96 | -0.19 | 1- |
| 9.62 | -0.49 | 30 | 9.65 | -0.36 | 1- | 9.70 | 0.004 | 10 | 9.72 | -0.033 | 1- |
| 10.39 | -0.45 | 30 | 10.44 | -0.71 | 1- | 10.46 | 0.14 | 10 | 10.51 | -0.12 | 1- |
| 11.17 | -0.27 | 30 | 11.20 | -0.55 | 1- | 11.25 | 0.12 | 10 | 11.27 | -0.046 | 1- |
| 11.94 | -0.29 | 30 | 11.99 | -0.19 | 1- | 12.01 | 0.019 | 1- | 12.06 | -0.092 | 10 |
| 12.73 | 0.39 | 3+ | 12.75 | -0.22 | 1+ | 12.80 | -0.13 | 1- | 12.82 | -0.11 | 10 |
| 13.49 | 0.33 | 3+ | 13.54 | -0.043 | 1+ | 13.56 | -0.18 | 1- | 13.61 | 0.070 | 10 |
| 14.28 | -0.73 | 3+ | 14.30 | -0.14 | 1+ | 14.35 | -0.25 | 1- | 14.37 | -0.025 | 10 |
| 15.04 | -0.83 | 30 | 15.09 | -0.14 | 0+ | 15.11 | -0.38 | 2- | 15.16 | 0.072 | 1- |
| 15.83 | 0.019 | 30 | 15.85 | -0.17 | 0+ | 15.90 | -0.33 | 2- | 15.92 | -0.045 | 1- |
| 16.59 | 0.085 | 30 | 16.64 | -0.23 | 0+ | 16.66 | -0.28 | 2- | 16.71 | -0.003 | 1- |
| 17.38 | -0.16 | 30 | 17.40 | -0.43 | 0+ | 17.45 | -0.33 | 2- | 17.47 | -0.19 | 1- |
| 18.14 | -0.35 | 20 | 18.19 | -0.34 | 1+ | 18.22 | -0.30 | 2- | 18.26 | -0.50 | 20 |
| 18.93 | -0.30 | 20 | 18.95 | * | 1+ | 19.00 | * | 2- | 19.02 | -0.58 | 20 |
| 19.69 | -0.45 | 20 | 19.74 | * | 1+ | 19.77 | * | 2- | 19.81 | * | 20 |
| 20.48 | -0.48 | 20 | 20.51 | * | 1+ | 20.55 | -0.33 | 2- | 20.57 | * | 20 |
| 21.24 | -0.27 | 1+ | 21.29 | * | 2- | 21.32 | -0.30 | 10 | 21.36 | -0.30 | 2+ |
| 22.03 | -0.28 | 1+ | 22.06 | -0.25 | 2- | 22.10 | -0.099 | 10 | 22.12 | -0.19 | 2+ |
| 22.79 | -0.22 | 1+ | 22.84 | -0.041 | 2- | 22.87 | -0.041 | 10 | 22.91 | -0.37 | 2+ |
| 23.58 | -0.31 | 1+ | 23.61 | -0.14 | 2- | 23.65 | -0.35 | 10 | 23.68 | -0.81 | 2+ |

| JAN. 21, 1980 | | | JAN. 22, 1980 | | | JAN. 23, 1980 | | | JAN. 24, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.46 | -1.1 | 3- | 00.48 | -0.043 | 0+ | 0.52 | * | 2- | 0.54 | * | 0+ |
| 1.23 | -0.89 | 3- | 1.27 | -0.20 | 0+ | 1.29 | * | 2- | 1.33 | -0.48 | 0+ |
| 2.01 | -0.80 | 3- | 2.03 | -0.26 | 0+ | 2.07 | * | 2- | 2.09 | -0.47 | 0+ |
| 2.78 | -0.41 | 3- | 2.82 | -0.45 | 0+ | 2.84 | * | 2- | 2.88 | -0.41 | 0+ |
| 3.56 | -0.40 | 10 | 3.58 | -0.26 | 00 | 3.62 | -0.42 | 10 | 3.64 | -0.27 | 00 |
| 4.33 | -0.31 | 10 | 4.37 | -0.37 | 00 | 4.39 | -0.38 | 10 | 4.43 | * | 00 |
| 5.11 | -0.50 | 10 | 5.13 | -0.30 | 00 | 5.17 | -0.43 | 10 | 5.19 | * | 00 |
| 5.88 | -0.49 | 10 | 5.92 | -0.32 | 00 | 5.94 | -0.41 | 10 | 5.98 | -0.35 | 00 |
| 6.66 | -0.47 | 10 | 6.68 | -0.55 | 10 | 6.72 | -0.46 | 20 | 6.74 | -0.18 | 1- |
| 7.43 | -0.33 | 10 | 7.47 | -0.46 | 10 | 7.49 | -0.12 | 20 | 7.53 | -0.13 | 1- |
| 8.21 | -0.69 | 10 | 8.23 | -0.062 | 10 | 8.27 | -0.28 | 20 | 8.29 | 0.070 | 1- |
| 8.98 | -0.52 | 10 | 9.02 | -0.22 | 1+ | 9.04 | -0.069 | 2- | 9.08 | -0.044 | 2- |
| 9.76 | -0.51 | 10 | 9.78 | -0.061 | 1+ | 9.82 | -0.23 | 2- | 9.84 | 0.080 | 2- |
| 10.53 | -0.28 | 10 | 10.58 | -0.26 | 1+ | 10.59 | -0.23 | 2- | 10.63 | 0.11 | 2- |
| 11.32 | -0.12 | 10 | 11.33 | -0.32 | 1+ | 11.37 | -0.064 | 2- | 11.39 | -0.10 | 2- |
| 12.08 | -0.017 | 20 | 12.12 | -0.12 | 10 | 12.14 | -0.12 | 1+ | 12.18 | -0.17 | 2- |
| 12.87 | 0.080 | 20 | 12.88 | -0.016 | 10 | 12.93 | -0.25 | 1+ | 12.94 | -0.17 | 2- |
| 13.63 | 0.25 | 20 | 13.67 | 0.29 | 10 | 13.69 | -0.28 | 1+ | 13.73 | -0.33 | 2- |
| 14.42 | 0.58 | 20 | 14.43 | 0.12 | 10 | 14.48 | -0.52 | 1+ | 14.49 | -0.39 | 2- |
| 15.18 | -0.068 | 10 | 15.22 | 0.14 | 2- | 15.24 | -0.63 | 1- | 15.28 | -0.51 | 2+ |
| 15.97 | -0.18 | 10 | 15.99 | 0.034 | 2- | 16.03 | * | 1- | 16.04 | -0.59 | 2+ |
| 16.73 | -0.060 | 10 | 16.77 | -0.16 | 2- | 16.79 | * | 1- | 16.83 | -0.67 | 2+ |
| 17.52 | 0.093 | 10 | 17.54 | -0.34 | 2- | 17.58 | 0.10 | 1- | 17.59 | -0.60 | 2+ |
| 18.28 | -0.16 | 1- | 18.32 | * | 30 | 18.34 | -0.25 | 10 | 18.38 | -0.77 | 2+ |
| 19.07 | -0.25 | 1- | 19.09 | * | 30 | 19.13 | * | 10 | 19.14 | -0.85 | 2+ |
| 19.83 | -0.36 | 1- | 19.87 | * | 30 | 22.99 | * | 0+ | 19.93 | -0.29 | 2+ |
| 20.62 | -0.31 | 1- | 20.64 | * | 30 | 23.78 | * | 0+ | 20.69 | -0.095 | 2+ |
| 21.38 | -0.17 | 2- | 21.42 | * | 2- | | | | 21.48 | -0.16 | 10 |
| 22.17 | -0.21 | 2- | 22.19 | * | 2- | | | | 22.24 | -0.061 | 10 |
| 22.93 | -0.27 | 2- | 22.97 | * | 2- | | | | 23.03 | -0.11 | 10 |
| 23.72 | -0.35 | 2- | 23.74 | * | 2- | | | | 23.79 | -0.34 | 10 |

| JAN. 25, 1980 | | | JAN. 26, 1980 | | | JAN. 27, 1980 | | | JAN. 28, 1980 | | |
|---------------|--------|----|---------------|-------|----|---------------|-------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.58 | -0.41 | 0+ | 0.59 | * | 1+ | 0.62 | -0.69 | 2+ | 0.63 | -0.46 | 30 |
| 1.34 | -0.28 | 0+ | 1.38 | -0.44 | 1+ | 1.39 | -0.42 | 2+ | 1.42 | -0.71 | 30 |
| 2.13 | -0.44 | 0+ | 2.14 | -0.13 | 1+ | 2.17 | * | 2+ | 2.18 | -0.89 | 30 |
| 2.89 | -0.30 | 0+ | 2.93 | -0.33 | 1+ | 2.94 | * | 2+ | 2.97 | -0.70 | 30 |
| 3.68 | -0.45 | 00 | 3.69 | -0.21 | 2+ | 3.72 | * | 30 | 3.73 | -0.85 | 4- |
| 4.44 | -0.32 | 00 | 4.48 | -0.57 | 2+ | 4.49 | * | 30 | 4.52 | -0.76 | 4- |
| 5.23 | -0.43 | 00 | 5.24 | -0.60 | 2+ | 5.27 | -0.42 | 30 | 5.28 | -0.18 | 4- |
| 5.99 | -0.40 | 00 | 6.03 | -0.62 | 10 | 6.04 | -0.27 | 3- | 6.07 | * | 2+ |
| 6.78 | -0.35 | 1- | 6.79 | -0.46 | 10 | 6.87 | -0.31 | 3- | 6.83 | * | 2+ |
| 7.54 | -0.21 | 1- | 7.58 | -0.47 | 10 | 7.59 | -0.44 | 3- | 7.62 | -0.068 | 2+ |
| 8.33 | -0.24 | 1- | 8.34 | -0.31 | 10 | 8.37 | -0.56 | 3- | 8.38 | -0.18 | 2+ |
| 9.09 | -0.20 | 2+ | 9.13 | -0.23 | 10 | 9.14 | -0.57 | 2+ | 9.17 | -0.047 | 2+ |
| 9.88 | -0.12 | 2+ | 9.89 | -0.19 | 10 | 9.92 | -1.2 | 2+ | 9.93 | 0.051 | 2+ |
| 10.64 | -0.069 | 2+ | 10.68 | -0.36 | 10 | 10.69 | -1.3 | 2+ | 10.72 | -0.097 | 2+ |
| 11.43 | 0.011 | 2+ | 11.44 | -0.18 | 10 | 11.47 | -1.1 | 2+ | 11.48 | -0.15 | 2+ |
| 12.19 | -0.085 | 2+ | 12.23 | 0.34 | 2- | 12.24 | -0.77 | 4+ | 12.27 | -0.82 | 4- |
| 12.98 | -0.20 | 2+ | 12.99 | 0.27 | 2- | 13.02 | 0.026 | 4+ | 13.03 | -1.5 | 4- |
| 13.74 | -0.26 | 2+ | 13.78 | 0.62 | 2- | 13.79 | -0.17 | 4+ | 13.82 | -1.3 | 4- |
| 14.53 | -0.56 | 2+ | 14.54 | 0.57 | 2- | 14.57 | -1.3 | 4+ | 14.58 | -1.1 | 4- |
| 15.29 | -0.72 | 20 | 15.33 | 0.34 | 1- | 15.34 | -1.9 | 4+ | 15.37 | -1.4 | 5- |
| 16.08 | -0.69 | 20 | 16.09 | 0.32 | 1- | 16.12 | -2.4 | 4+ | 16.13 | -2.6 | 5- |
| 16.84 | -0.45 | 20 | 16.88 | 0.28 | 1- | 16.89 | -2.0 | 4+ | 16.92 | -3.5 | 50 |
| 17.63 | -0.61 | 20 | 17.64 | -0.08 | 1- | 17.67 | -1.9 | 4+ | 17.68 | -2.5 | 50 |
| 18.39 | -0.61 | 3- | 18.43 | -0.10 | 20 | 18.44 | -1.8 | 5- | 18.47 | * | 5+ |
| 19.18 | -0.51 | 3- | 19.19 | -0.39 | 20 | 19.22 | -1.9 | 5- | 19.23 | * | 5+ |
| 19.94 | -0.32 | 3- | 19.98 | -0.40 | 20 | 19.99 | -2.0 | 5- | 20.02 | * | 5+ |
| 20.73 | -0.13 | 3- | 20.74 | -0.36 | 20 | 20.77 | -2.2 | 5- | 20.78 | * | 5+ |
| 21.49 | -0.000 | 3- | 21.53 | -0.64 | 2+ | 21.53 | -1.9 | 50 | 21.57 | -0.026 | 4+ |
| 22.28 | -0.15 | 3- | 22.29 | -0.47 | 2+ | 22.32 | -1.3 | 50 | 22.33 | -0.16 | 4+ |
| 23.04 | -0.30 | 3- | 23.08 | * | 2+ | 23.08 | -1.3 | 50 | 23.11 | -0.65 | 4+ |
| 23.83 | * | 3- | 23.84 | * | 2+ | 23.87 | -0.53 | 50 | 23.88 | -0.77 | 4+ |

| JAN. 29, 1980 | | | JAN. 30, 1980 | | | JAN. 31, 1980 | | | FEB. 01, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.66 | -2.2 | 5+ | 0.67 | -0.70 | 3+ | 0.69 | -0.44 | 2- | 0.70 | -0.75 | 20 |
| 1.43 | -2.4 | 5+ | 1.45 | -0.52 | 3+ | 1.46 | -0.60 | 2- | 1.48 | -0.50 | 20 |
| 2.21 | -2.4 | 5+ | 2.22 | -0.45 | 3+ | 2.24 | -0.63 | 2- | 2.24 | 0.11 | 20 |
| 2.98 | -1.7 | 5+ | 3.00 | -0.64 | 3+ | 3.01 | -0.17 | 0+ | 3.03 | 0.072 | 1+ |
| 3.76 | -0.65 | 4+ | 3.77 | -0.23 | 2+ | 3.79 | -0.35 | 0+ | 3.79 | -0.049 | 1+ |
| 4.53 | -0.36 | 4+ | 4.55 | -0.17 | 2+ | 4.56 | -0.29 | 0+ | 4.58 | -0.16 | 1+ |
| 5.31 | -0.59 | 4+ | 5.32 | -0.10 | 2+ | 5.34 | -0.30 | 0+ | 5.34 | -0.075 | 1+ |
| 6.08 | -0.26 | 2- | 6.10 | * | 20 | 6.11 | -0.17 | 1- | 6.13 | -0.33 | 2- |
| 6.86 | 0.031 | 2- | 6.87 | * | 20 | 6.89 | -0.22 | 1- | 6.89 | -0.25 | 2- |
| 7.63 | 0.010 | 2- | 7.65 | * | 20 | 7.65 | -0.048 | 1- | 7.68 | -0.23 | 2- |
| 8.41 | -0.20 | 2- | 8.42 | * | 20 | 8.44 | 0.055 | 1- | 8.44 | 0.054 | 2- |
| 9.18 | -0.001 | 3- | 9.20 | -0.57 | 3+ | 9.20 | 0.20 | 2- | 9.23 | 0.14 | 2+ |
| 9.96 | 0.043 | 3- | 9.97 | -0.29 | 3+ | 9.99 | 0.16 | 2- | 9.99 | 0.26 | 2+ |
| 10.72 | 0.086 | 3- | 10.75 | -0.48 | 3+ | 10.75 | 0.22 | 2- | 10.77 | 0.16 | 2+ |
| 11.51 | * | 3- | 11.51 | -0.24 | 3+ | 11.54 | 0.11 | 2- | 11.54 | 0.16 | 2+ |
| 12.27 | * | 4- | 12.30 | 0.056 | 20 | 12.30 | -0.064 | 1+ | 12.32 | 0.024 | 2- |
| 13.06 | -0.26 | 4- | 13.06 | -0.055 | 20 | 13.09 | -0.30 | 1+ | 13.09 | -0.38 | 2- |
| 13.82 | -0.61 | 4- | 13.85 | -0.077 | 20 | 13.85 | -0.24 | 1+ | 13.87 | -0.80 | 2- |
| 14.61 | -1.3 | 4- | 14.61 | -0.23 | 20 | 14.64 | -0.18 | 1+ | 14.64 | -0.68 | 2- |
| 15.37 | -1.9 | 4+ | 15.40 | -0.71 | 20 | 15.40 | -0.52 | 10 | 15.42 | -0.055 | 2- |
| 16.16 | -2.2 | 4+ | 16.16 | -0.69 | 20 | 16.19 | -0.49 | 10 | 16.19 | -0.053 | 2- |
| 16.92 | -1.9 | 4+ | 16.95 | -0.40 | 20 | 16.95 | -0.54 | 10 | 16.97 | -0.38 | 2- |
| 17.71 | -1.3 | 4+ | 17.71 | -0.34 | 20 | 17.73 | -0.48 | 10 | 17.73 | * | 2- |
| 18.47 | -1.1 | 4- | 18.50 | -0.32 | 1+ | 18.50 | -0.11 | 2- | 18.52 | 0.46 | 4- |
| 19.26 | -1.2 | 4- | 19.26 | -0.19 | 1+ | 19.28 | -0.30 | 2- | 19.28 | 0.61 | 4- |
| 20.02 | -1.2 | 4- | 20.05 | -0.34 | 1+ | 20.05 | -0.27 | 2- | 20.07 | -0.94 | 4- |
| 20.81 | -1.2 | 4- | 20.81 | -0.26 | 1+ | 20.83 | -0.37 | 2- | 20.83 | -1.2 | 4- |
| 21.57 | -0.55 | 4- | 21.60 | -0.18 | 2- | 21.60 | -0.32 | 2+ | 21.62 | -0.78 | 3+ |
| 22.36 | -0.38 | 4- | 22.36 | -0.18 | 2- | 22.38 | -0.31 | 2+ | 22.38 | -0.55 | 3+ |
| 23.12 | -1.1 | 4- | 23.14 | -0.15 | 2- | 23.15 | * | 2+ | 23.17 | -0.46 | 3+ |
| 23.91 | -0.82 | 4- | 23.91 | -0.29 | 2- | 23.93 | * | 2+ | 23.93 | -0.62 | 3+ |

| FEB. 02, 1980 | | | FEB. 03, 1980 | | | FEB. 04, 1980 | | | FEB. 05, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.71 | -0.44 | 2+ | 0.71 | -0.27 | 1- | 0.73 | -0.20 | 1- | 0.72 | -0.21 | 00 |
| 1.48 | -0.22 | 2+ | 1.50 | -0.47 | 1- | 1.49 | -0.13 | 1- | 1.50 | -0.26 | 00 |
| 2.26 | -0.73 | 2+ | 2.26 | -0.50 | 1- | 2.27 | -0.28 | 1- | 2.27 | -0.28 | 00 |
| 3.03 | -0.74 | 3+ | 3.04 | -0.72 | 10 | 3.04 | -0.39 | 10 | 3.05 | -0.46 | 00 |
| 3.81 | -0.83 | 3+ | 3.81 | -0.36 | 10 | 3.82 | -0.54 | 10 | 3.82 | -0.23 | 00 |
| 4.58 | -0.43 | 3+ | 4.59 | -0.57 | 10 | 4.59 | -0.35 | 10 | 4.60 | -0.40 | 00 |
| 5.36 | -0.41 | 3+ | 5.36 | -0.39 | 10 | 5.37 | -0.45 | 10 | 5.36 | -0.21 | 00 |
| 6.13 | -0.27 | 30 | 6.14 | -0.45 | 10 | 6.14 | -0.46 | 2+ | 6.15 | -0.27 | 1- |
| 6.91 | -0.57 | 30 | 6.91 | -0.22 | 10 | 6.92 | * | 2+ | 6.91 | -0.21 | 1- |
| 7.67 | -0.55 | 30 | 7.69 | -0.19 | 10 | 7.69 | * | 2+ | 7.70 | -0.29 | 1- |
| 8.46 | -0.73 | 30 | 8.46 | -0.053 | 10 | 8.47 | -0.70 | 2+ | 8.46 | -0.22 | 1- |
| 9.22 | -0.47 | 2+ | 9.24 | -0.17 | 1- | 9.23 | -0.49 | 20 | 9.24 | -0.36 | 1+ |
| 10.01 | -0.22 | 2+ | 10.00 | * | 1- | 10.02 | -0.41 | 20 | 10.01 | -0.24 | 1+ |
| 10.77 | -0.15 | 2+ | 10.79 | * | 1- | 10.78 | -0.20 | 20 | 10.79 | -0.29 | 1+ |
| 11.56 | -0.038 | 2+ | 11.55 | 0.037 | 1- | 11.57 | -0.16 | 20 | 11.56 | -0.26 | 1+ |
| 12.32 | -0.028 | 2+ | 12.34 | 0.19 | 0+ | 12.33 | -0.094 | 1- | 12.34 | -0.083 | 10 |
| 13.11 | -0.008 | 2+ | 13.10 | 0.020 | 0+ | 13.11 | 0.35 | 1- | 13.11 | -0.050 | 10 |
| 13.87 | -0.040 | 2+ | 13.89 | 0.14 | 0+ | 13.88 | 0.30 | 1- | 13.89 | -0.11 | 10 |
| 14.65 | 0.029 | 2+ | 14.65 | 0.21 | 0+ | 14.66 | * | 1- | 14.66 | -0.035 | 10 |
| 15.42 | -0.007 | 1+ | 15.43 | 0.18 | 1- | 15.43 | * | 0+ | 15.44 | 0.076 | 10 |
| 16.20 | 0.054 | 1+ | 16.20 | 0.044 | 1- | 16.21 | * | 0+ | 16.20 | -0.042 | 10 |
| 16.97 | -0.14 | 1+ | 16.98 | 0.014 | 1- | 16.98 | * | 0+ | 16.99 | -0.054 | 10 |
| 17.75 | -0.28 | 1+ | 17.75 | -0.074 | 1- | 17.76 | -0.11 | 0+ | 17.75 | -0.28 | 10 |
| 18.52 | -0.24 | 1- | 18.53 | -0.050 | 0+ | 18.53 | -0.11 | 0+ | 18.53 | -0.16 | 10 |
| 19.30 | -0.22 | 1- | 19.30 | -0.12 | 0+ | 19.31 | -0.11 | 0+ | 19.30 | -0.22 | 10 |
| 20.07 | -0.23 | 1- | 20.08 | -0.19 | 0+ | 20.07 | -0.11 | 0+ | 20.08 | -0.34 | 10 |
| 20.85 | -0.19 | 1- | 20.85 | -0.19 | 0+ | 20.86 | -0.21 | 0+ | 20.85 | -0.15 | 10 |
| 21.61 | -0.036 | 1- | 21.63 | -0.22 | 10 | 21.62 | -0.19 | 0+ | 21.63 | -0.10 | 1- |
| 22.40 | -0.19 | 1- | 22.39 | -0.36 | 10 | 22.41 | -0.23 | 0+ | 22.40 | -0.10 | 1- |
| 23.16 | -0.12 | 1- | 23.18 | -0.45 | 10 | 23.17 | -0.098 | 0+ | 23.18 | -0.22 | 1- |
| 23.95 | 0.014 | 1- | 23.94 | -0.12 | 10 | 23.95 | -0.21 | 0+ | 23.95 | -0.073 | 1- |

| FEB. 06, 1980 | | | FEB. 07, 1980 | | | FEB. 08, 1980 | | | FEB. 09, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|-------|----|---------------|-------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.73 | -0.20 | 00 | 0.72 | 0.15 | 20 | 0.72 | -0.88 | 3+ | 0.70 | -0.21 | 2- |
| 1.49 | -0.21 | 00 | 1.50 | -0.16 | 20 | 1.49 | -0.53 | 3+ | 1.48 | -0.11 | 2- |
| 2.28 | -0.44 | 00 | 2.27 | -0.45 | 20 | 2.27 | -0.56 | 3+ | 2.25 | -0.69 | 2- |
| 3.04 | -0.68 | 4- | 3.05 | -0.57 | 20 | 3.03 | -0.89 | 4- | 3.03 | -0.79 | 30 |
| 3.82 | -0.32 | 4- | 3.81 | -0.46 | 20 | 3.81 | -0.94 | 4- | 3.80 | -0.38 | 30 |
| 4.59 | -0.21 | 4- | 4.59 | -0.67 | 20 | 4.58 | -0.77 | 4- | 4.58 | -0.52 | 30 |
| 5.37 | -0.50 | 4- | 5.36 | -0.65 | 20 | 5.36 | -0.90 | 4- | 5.35 | -0.47 | 30 |
| 6.14 | -0.67 | 4+ | 6.14 | -0.71 | 3+ | 6.13 | -0.69 | 3+ | 6.13 | -0.53 | 30 |
| 6.92 | -1.2 | 4+ | 6.91 | -0.49 | 3+ | 6.91 | -0.83 | 3+ | 6.89 | -0.65 | 30 |
| 7.69 | -1.0 | 4+ | 7.69 | -0.52 | 3+ | 7.68 | -0.59 | 3+ | 7.67 | -1.2 | 30 |
| 8.47 | -2.3 | 4+ | 8.46 | -0.061 | 3+ | 8.46 | -0.73 | 3+ | 8.44 | -0.72 | 30 |
| 9.24 | -1.3 | 5- | 9.24 | -0.29 | 2- | 9.22 | -0.88 | 30 | 9.22 | -0.39 | 2+ |
| 10.02 | -1.1 | 5- | 10.01 | -0.40 | 2- | 10.01 | -1.3 | 30 | 9.99 | -0.30 | 2+ |
| 10.78 | -0.88 | 5- | 10.79 | -0.045 | 2- | 10.77 | -0.94 | 30 | 10.77 | * | 2+ |
| 11.57 | -0.62 | 5- | 11.55 | 0.081 | 2- | 11.55 | -0.73 | 30 | 11.54 | * | 2+ |
| 12.33 | -0.88 | 50 | 12.33 | 0.32 | 3+ | 12.32 | -0.58 | 4- | 12.32 | -0.17 | 3- |
| 13.11 | -0.89 | 50 | 13.10 | 0.096 | 3+ | 13.10 | -0.76 | 4- | 13.08 | -0.33 | 3- |
| 13.88 | -0.65 | 50 | 13.88 | 0.53 | 3+ | 13.87 | -0.78 | 4- | 13.86 | -0.73 | 3- |
| 14.66 | -1.6 | 50 | 14.65 | 0.35 | 3+ | 14.65 | -1.0 | 4- | 14.63 | -1.2 | 3- |
| 15.43 | -2.8 | 5+ | 15.43 | 0.093 | 20 | 15.42 | -1.2 | 3+ | 15.41 | -0.95 | 3- |
| 16.21 | -3.0 | 5+ | 16.20 | 0.25 | 20 | 16.20 | -0.69 | 3+ | 16.18 | -0.89 | 3- |
| 16.98 | -3.1 | 5+ | 16.98 | 0.13 | 20 | 16.96 | -0.70 | 3+ | 16.96 | -0.86 | 3- |
| 17.76 | -2.1 | 5+ | 17.75 | -0.21 | 20 | 17.74 | -0.71 | 3+ | 17.73 | -0.94 | 3- |
| 18.52 | -1.3 | 5+ | 18.53 | -0.68 | 3+ | 18.51 | -0.66 | 2- | 18.51 | -1.1 | 30 |
| 19.31 | -2.6 | 5+ | 19.29 | -1.2 | 3+ | 19.29 | -0.41 | 2- | 19.27 | -1.0 | 30 |
| 20.07 | -2.1 | 5+ | 20.07 | -0.97 | 3+ | 20.06 | -0.42 | 2- | 20.05 | -0.62 | 30 |
| 20.85 | -0.41 | 5+ | 20.84 | -0.74 | 3+ | 20.84 | -0.22 | 2- | 20.82 | -0.31 | 30 |
| 21.62 | -0.078 | 2+ | 21.62 | -0.70 | 3+ | 21.61 | -0.18 | 30 | 21.60 | -0.32 | 20 |
| 22.40 | 0.15 | 2+ | 22.39 | -0.41 | 3+ | 22.39 | -0.44 | 30 | 22.37 | -0.29 | 20 |
| 23.17 | 0.22 | 2+ | 23.17 | -0.52 | 3+ | 23.15 | -0.45 | 30 | 23.15 | * | 20 |
| 23.95 | 0.18 | 2+ | 23.94 | -0.68 | 3+ | 23.93 | -0.51 | 30 | 23.92 | * | 20 |

| FEB. 10, 1980 | | | FEB. 11, 1980 | | | FEB. 12, 1980 | | | FEB. 13, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.70 | -0.29 | 10 | 0.68 | * | 0+ | 0.66 | -0.18 | 1- | 0.64 | -0.11 | 0+ |
| 1.46 | -0.11 | 10 | 1.46 | -0.35 | 0+ | 1.43 | -0.23 | 1- | 1.42 | -0.24 | 0+ |
| 2.24 | -0.57 | 10 | 2.22 | -0.20 | 0+ | 2.21 | -0.38 | 1- | 2.19 | -0.17 | 0+ |
| 3.01 | -0.55 | 2- | 3.00 | -0.23 | 2+ | 2.98 | -0.26 | 1- | 2.96 | -0.27 | 0+ |
| 3.79 | -0.36 | 2- | 3.77 | -0.15 | 2+ | 3.76 | -0.40 | 00 | 3.73 | -0.18 | 00 |
| 4.56 | -0.28 | 2- | 4.55 | -0.32 | 2+ | 4.53 | -0.23 | 00 | 4.51 | -0.17 | 00 |
| 5.34 | -0.25 | 2- | 5.32 | -0.19 | 2+ | 5.31 | -0.30 | 00 | 5.28 | -0.057 | 00 |
| 6.11 | -0.13 | 1+ | 6.10 | -0.25 | 1+ | 6.08 | -0.24 | 0+ | 6.06 | -0.14 | 00 |
| 6.89 | -0.37 | 1+ | 6.87 | -0.10 | 1+ | 6.85 | -0.31 | 0+ | 6.83 | -0.17 | 00 |
| 7.65 | -0.24 | 1+ | 7.64 | -0.21 | 1+ | 7.62 | -0.21 | 0+ | 7.61 | -0.19 | 00 |
| 8.43 | -0.17 | 1+ | 8.41 | 0.049 | 1+ | 8.40 | -0.26 | 0+ | 8.38 | -0.072 | 00 |
| 9.20 | -0.042 | 1- | 9.19 | 0.13 | 10 | 9.17 | -0.19 | 10 | 9.15 | -0.076 | 1- |
| 9.98 | -0.011 | 1- | 9.96 | -0.001 | 10 | 9.95 | -0.080 | 10 | 9.92 | -0.069 | 1- |
| 10.75 | 0.064 | 1- | 10.74 | 0.021 | 10 | 10.72 | -0.034 | 10 | 10.70 | -0.021 | 1- |
| 11.53 | 0.13 | 1- | 11.51 | 0.045 | 10 | 11.49 | * | 10 | 11.47 | 0.017 | 1- |
| 12.30 | 0.089 | 0+ | 12.29 | 0.15 | 10 | 12.26 | * | 1+ | 12.25 | 0.27 | 1- |
| 13.08 | 0.26 | 0+ | 13.06 | 0.27 | 10 | 13.04 | 0.023 | 1+ | 13.02 | 0.28 | 1- |
| 13.85 | 0.31 | 0+ | 13.83 | 0.12 | 10 | 13.81 | 0.10 | 1+ | 13.79 | 0.43 | 1- |
| 14.62 | 0.27 | 0+ | 14.60 | -0.014 | 10 | 14.59 | 0.23 | 1+ | 14.56 | 0.28 | 1- |
| 15.39 | 0.21 | 1- | 15.38 | 0.13 | 10 | 15.36 | 0.19 | 0+ | 15.34 | 0.25 | 1- |
| 16.17 | 0.18 | 1- | 16.15 | 0.041 | 10 | 16.14 | 0.25 | 0+ | 16.11 | 0.65 | 1- |
| 16.94 | * | 1- | 16.93 | 0.080 | 10 | 16.91 | 0.14 | 0+ | 16.89 | 0.59 | 1- |
| 17.72 | * | 1- | 17.70 | -0.010 | 10 | 17.68 | 0.13 | 0+ | 17.66 | 0.068 | 1- |
| 18.49 | * | 1- | 18.48 | -0.082 | 10 | 18.45 | -0.018 | 0+ | 18.43 | 0.094 | 10 |
| 19.27 | -0.11 | 1- | 19.24 | -0.13 | 10 | 19.23 | -0.074 | 0+ | 19.20 | -0.045 | 10 |
| 20.03 | -0.063 | 1- | 20.02 | -0.12 | 10 | 20.00 | -0.051 | 0+ | 19.98 | -0.076 | 10 |
| 20.81 | -0.12 | 1- | 20.79 | -0.014 | 10 | 20.78 | -0.11 | 0+ | 20.75 | -0.072 | 10 |
| 21.58 | -0.19 | 1- | 21.57 | -0.12 | 0+ | 21.55 | -0.11 | 10 | 21.53 | -0.26 | 10 |
| 22.36 | -0.22 | 1- | 22.34 | -0.066 | 0+ | 22.32 | -0.29 | 10 | 22.30 | -0.17 | 10 |
| 23.13 | -0.071 | 1- | 23.12 | -0.42 | 0+ | 23.09 | -0.27 | 10 | 23.07 | -0.49 | 10 |
| 23.91 | * | 00 | 23.89 | -0.32 | 0+ | 23.87 | -0.31 | 10 | 23.85 | -0.23 | 10 |

| FEB. 14, 1980 | | | FEB. 15, 1980 | | | FEB. 16, 1980 | | | FEB. 17, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.62 | -0.12 | 1+ | 0.59 | -0.20 | 2+ | 0.57 | -0.45 | 60 | 0.54 | -0.18 | 20 |
| 1.39 | -0.19 | 1+ | 1.37 | -0.40 | 2+ | 1.34 | -0.93 | 60 | 1.31 | -0.29 | 20 |
| 2.17 | -0.26 | 1+ | 2.14 | -0.47 | 2+ | 2.11 | -1.2 | 60 | 2.08 | 0.054 | 20 |
| 2.94 | -0.24 | 1+ | 2.92 | * | 2+ | 2.89 | -1.1 | 60 | 2.86 | 0.009 | 20 |
| 3.72 | 0.12 | 3+ | 3.69 | * | 3- | 3.66 | -1.7 | 6- | 3.63 | -0.16 | 2- |
| 4.49 | 0.068 | 3+ | 4.46 | 0.075 | 3- | 4.43 | -0.99 | 6- | 4.40 | -0.10 | 2- |
| 5.26 | -0.45 | 3+ | 5.23 | 0.24 | 3- | 5.21 | -1.4 | 6- | 5.17 | -0.099 | 2- |
| 6.03 | -0.43 | 30 | 6.01 | -0.11 | 20 | 5.98 | -1.1 | 6- | 5.95 | -0.18 | 2- |
| 6.81 | -0.64 | 30 | 6.78 | -0.048 | 20 | 6.75 | -1.2 | 6- | 6.72 | -0.093 | 2- |
| 7.58 | -0.57 | 30 | 7.56 | -0.023 | 20 | 7.53 | -1.5 | 6- | 7.49 | -0.14 | 2- |
| 8.36 | -0.72 | 30 | 8.33 | -0.12 | 20 | 8.30 | -1.6 | 6- | 8.27 | 0.028 | 2- |
| 9.13 | -0.86 | 5- | 9.10 | -0.24 | 20 | 9.07 | -1.3 | 4+ | 9.04 | 0.024 | 1- |
| 9.90 | -1.9 | 5- | 9.87 | 0.079 | 20 | 9.85 | -1.1 | 4+ | 9.81 | -0.060 | 1- |
| 10.67 | -1.8 | 5- | 10.65 | 0.25 | 20 | 10.62 | -0.81 | 4+ | 10.59 | -0.001 | 1- |
| 11.45 | -1.8 | 5- | 11.42 | 0.26 | 20 | 11.39 | -0.69 | 4+ | 11.36 | 0.093 | 1- |
| 12.22 | -1.0 | 3+ | 12.20 | 0.068 | 3- | 12.16 | -0.67 | 4+ | 12.13 | 0.23 | 20 |
| 13.00 | -0.63 | 3+ | 12.97 | -0.23 | 3- | 12.94 | -0.87 | 4+ | 12.91 | 0.17 | 20 |
| 13.77 | -0.97 | 3+ | 13.74 | -0.031 | 3- | 13.71 | -0.75 | 4+ | 13.68 | -0.32 | 20 |
| 14.54 | -0.56 | 3+ | 14.51 | -0.057 | 3- | 14.49 | -0.23 | 4+ | 14.45 | -0.28 | 20 |
| 15.31 | -0.65 | 40 | 15.29 | 0.073 | 30 | 15.26 | -0.39 | 30 | 15.22 | 0.12 | 1+ |
| 16.09 | * | 40 | 16.06 | 0.002 | 30 | 16.03 | 0.021 | 30 | 16.00 | 0.18 | 1+ |
| 16.86 | * | 40 | 16.84 | 0.033 | 30 | 16.80 | -0.19 | 30 | 16.77 | 0.29 | 1+ |
| 17.64 | -1.4 | 40 | 17.61 | 0.19 | 30 | 17.58 | -0.009 | 30 | 17.54 | 0.11 | 1+ |
| 18.41 | -1.1 | 3- | 18.38 | 0.17 | 6- | 18.35 | -0.19 | 30 | 18.32 | 0.12 | 1+ |
| 19.18 | -0.87 | 3- | 19.15 | 0.14 | 6- | 19.12 | -0.46 | 30 | 19.09 | 0.16 | 1+ |
| 19.95 | -0.72 | 3- | 19.93 | -0.62 | 6- | 19.90 | -1.3 | 30 | 19.86 | 0.097 | 1+ |
| 20.73 | -0.46 | 3- | 20.70 | -2.7 | 6- | 20.67 | -1.2 | 30 | 20.64 | 0.0 | 1+ |
| 21.50 | -0.22 | 2- | 21.47 | -3.73 | 70 | 21.44 | -0.51 | 2+ | 21.41 | -0.099 | 1+ |
| 22.28 | -0.033 | 2- | 22.25 | -2.1 | 70 | 22.22 | -0.27 | 2+ | 22.18 | -0.068 | 1+ |
| 23.05 | -0.027 | 2- | 23.02 | -1.5 | 70 | 22.99 | -0.31 | 2+ | 22.95 | -0.28 | 1+ |
| 23.82 | -0.23 | 2- | 23.79 | -0.58 | 70 | 23.76 | -0.40 | 2+ | 23.73 | -1.1 | 1+ |

| FEB. 18, 1980 | | | FEB. 19, 1980 | | | FEB. 20, 1980 | | | FEB. 21, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.50 | -1.4 | 30 | 0.46 | -0.80 | 3+ | 0.42 | -0.64 | 20 | 0.38 | -0.15 | 2- |
| 1.27 | -0.57 | 30 | 1.24 | -0.81 | 3+ | 1.20 | -0.21 | 20 | 1.15 | -0.29 | 2- |
| 2.05 | -0.30 | 30 | 2.01 | -0.77 | 3+ | 1.97 | -0.001 | 20 | 1.93 | -0.23 | 2- |
| 2.82 | -0.34 | 30 | 2.78 | -0.52 | 3+ | 2.74 | -0.033 | 20 | 2.70 | -0.34 | 2- |
| 3.59 | -0.46 | 2- | 3.56 | -0.57 | 4+ | 3.52 | -0.13 | 10 | 3.47 | -0.28 | 1- |
| 4.37 | -0.15 | 2- | 4.33 | -1.0 | 4+ | 4.29 | 0.041 | 10 | 4.24 | -0.27 | 1- |
| 5.14 | -0.27 | 2- | 5.10 | -0.48 | 4+ | 5.06 | -0.12 | 10 | 5.02 | -0.15 | 1- |
| 5.91 | -0.22 | 2- | 5.87 | -0.50 | 4+ | 5.84 | -0.12 | 10 | 5.79 | -0.49 | 1- |
| 6.69 | -0.42 | 3- | 6.65 | -0.35 | 3- | 6.61 | -0.057 | 2- | 6.57 | -0.43 | 10 |
| 7.46 | -0.54 | 3- | 7.42 | -0.18 | 3- | 7.38 | 0.064 | 2- | 7.34 | -0.006 | 10 |
| 8.23 | -0.90 | 3- | 8.19 | -0.052 | 3- | 8.15 | 0.027 | 2- | 8.11 | 0.17 | 10 |
| 9.01 | -0.79 | 20 | 8.97 | 0.14 | 3- | 8.93 | 0.014 | 2- | 8.88 | 0.21 | 10 |
| 9.78 | -0.99 | 20 | 9.74 | 0.35 | 1- | 9.70 | -0.18 | 20 | 9.66 | 0.25 | 10 |
| 10.55 | -0.67 | 20 | 10.51 | 0.31 | 1- | 10.47 | -0.13 | 20 | 10.43 | 0.19 | 10 |
| 11.32 | -0.57 | 20 | 11.29 | 0.25 | 1- | 11.24 | -0.024 | 20 | 11.20 | 0.24 | 10 |
| 12.10 | -0.37 | 20 | 12.06 | 0.21 | 10 | 12.02 | 0.012 | 1+ | 11.97 | 0.25 | 10 |
| 12.87 | -0.32 | 20 | 12.83 | 0.10 | 10 | 12.79 | 0.14 | 1+ | 12.75 | 0.22 | 10 |
| 13.64 | -0.27 | 20 | 13.60 | -0.092 | 10 | 13.56 | 0.16 | 1+ | 13.52 | 0.28 | 10 |
| 14.42 | 0.33 | 20 | 14.38 | -0.16 | 10 | 14.33 | 0.18 | 1+ | 14.29 | * | 10 |
| 15.19 | 0.37 | 20 | 15.15 | -0.023 | 0+ | 15.11 | -0.004 | 20 | 15.06 | * | 10 |
| 15.96 | 0.46 | 20 | 15.92 | -0.033 | 0+ | 15.88 | -0.17 | 20 | 16.61 | * | 10 |
| 16.73 | -0.082 | 20 | 16.70 | 0.34 | 0+ | 16.66 | 0.031 | 20 | 17.38 | * | 10 |
| 17.51 | -0.29 | 20 | 17.47 | 0.24 | 0+ | 17.43 | 0.28 | 20 | 18.93 | 0.13 | 10 |
| 18.28 | -0.71 | 3- | 18.24 | 0.17 | 0+ | 18.20 | 0.021 | 10 | 19.70 | 0.092 | 10 |
| 19.05 | -1.1 | 3- | 19.01 | 0.10 | 0+ | 18.97 | 0.025 | 10 | 20.47 | 0.043 | 10 |
| 19.83 | -0.94 | 3- | 19.79 | 0.056 | 0+ | 19.75 | 0.092 | 10 | 21.24 | 0.049 | 2- |
| 20.60 | -0.90 | 3- | 20.56 | 0.013 | 0+ | 20.52 | 0.035 | 10 | 22.02 | -0.025 | 2- |
| 21.36 | -0.50 | 30 | 21.33 | * | 10 | 21.29 | -0.084 | 1+ | 22.79 | 0.082 | 2- |
| 22.14 | -0.39 | 30 | 22.11 | * | 10 | 22.06 | -0.23 | 1+ | 23.57 | 0.041 | 2- |
| 22.92 | -0.31 | 30 | 22.88 | * | 10 | 22.84 | -0.32 | 1+ | | | |
| 23.69 | -0.53 | 30 | 23.65 | -0.50 | 10 | 23.61 | -0.27 | 1+ | | | |

| FEB. 22, 1980 | | | FEB. 23, 1980 | | | FEB. 24, 1980 | | | FEB. 25, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.34 | -0.25 | 10 | 1.06 | * | 10 | 0.24 | -0.50 | 2+ | 0.19 | -0.13 | 10 |
| 1.11 | -0.32 | 10 | 1.84 | * | 10 | 1.01 | -0.48 | 2+ | 0.95 | -0.16 | 10 |
| 1.88 | -0.28 | 10 | 2.61 | * | 10 | 1.78 | -0.37 | 2+ | 1.73 | -0.16 | 10 |
| 2.66 | -0.072 | 10 | 3.38 | * | 0+ | 2.56 | -0.22 | 2+ | 2.50 | -0.24 | 10 |
| 3.43 | -0.17 | 10 | 4.15 | * | 0+ | 3.33 | -0.25 | 2+ | 3.28 | -0.11 | 0+ |
| 4.20 | -0.071 | 10 | 4.93 | * | 0+ | 4.10 | -0.082 | 2+ | 4.04 | -0.18 | 0+ |
| 4.97 | -0.16 | 10 | 5.70 | * | 0+ | 4.87 | -0.25 | 2+ | 4.82 | -0.13 | 0+ |
| 5.75 | -0.090 | 10 | 6.47 | -0.019 | 1+ | 5.65 | -0.39 | 2+ | 5.59 | -0.083 | 0+ |
| 6.52 | -0.19 | 0+ | 7.24 | -0.023 | 1+ | 6.42 | -0.46 | 1+ | 6.37 | * | 1+ |
| 7.29 | -0.000 | 0+ | 8.02 | -0.012 | 1+ | 7.19 | -0.24 | 1+ | 7.13 | * | 1+ |
| 8.06 | -0.016 | 0+ | 8.79 | 0.14 | 1+ | 7.96 | -0.20 | 1+ | 7.91 | 0.043 | 1+ |
| 8.84 | -0.048 | 0+ | 9.56 | 0.37 | 20 | 8.74 | -0.16 | 1+ | 8.68 | -0.11 | 1+ |
| 9.61 | -0.010 | 1+ | 10.33 | 0.076 | 20 | 9.51 | -0.19 | 20 | 9.46 | 0.053 | 2+ |
| 10.38 | -0.047 | 1+ | 11.11 | 0.22 | 20 | 10.28 | -0.020 | 20 | 10.22 | -0.007 | 2+ |
| 11.15 | -0.055 | 1+ | 11.88 | 0.18 | 20 | 11.05 | 0.13 | 20 | 11.00 | -0.019 | 2+ |
| 11.93 | 0.12 | 1+ | 12.65 | 0.023 | 3- | 11.83 | 0.005 | 20 | 11.77 | 0.16 | 2+ |
| 12.70 | 0.40 | 1- | 13.42 | * | 3- | 12.60 | 0.29 | 2+ | 12.55 | 0.18 | 3- |
| 13.47 | 0.36 | 1- | 14.20 | * | 3- | 13.37 | 0.26 | 2+ | 13.31 | 0.21 | 3- |
| 14.24 | 0.44 | 1- | 14.97 | * | 3- | 14.14 | -0.091 | 2+ | 14.09 | 0.025 | 3- |
| 15.02 | 0.71 | 2- | 15.74 | * | 3+ | 14.92 | -0.097 | 2+ | 14.86 | 0.089 | 3- |
| 15.79 | 0.64 | 2- | 16.51 | -0.90 | 3+ | 15.69 | 0.099 | 2+ | 15.64 | 0.025 | 30 |
| 16.56 | 0.23 | 2- | 17.29 | -0.78 | 3+ | 16.46 | 0.033 | 2+ | 16.40 | 0.012 | 30 |
| 17.33 | 0.29 | 2- | 18.06 | -0.92 | 3+ | 17.23 | 0.28 | 2+ | 17.18 | -0.041 | 30 |
| 18.11 | 0.064 | 1- | 18.83 | -0.83 | 3+ | 18.01 | 0.21 | 0+ | 17.95 | -0.77 | 30 |
| 18.88 | 0.084 | 1- | 19.60 | -0.90 | 3+ | 18.78 | 0.25 | 0+ | 18.72 | -1.5 | 40 |
| 19.65 | 0.005 | 1- | 20.38 | -0.80 | 3+ | 19.55 | 0.10 | 0+ | 19.49 | -1.8 | 40 |
| 20.42 | -0.053 | 1- | 21.15 | -0.61 | 3- | 20.32 | 0.076 | 0+ | 20.27 | -1.5 | 40 |
| 21.20 | -0.004 | 2- | 21.92 | -0.47 | 2+ | 21.10 | 0.13 | 0+ | 21.04 | -1.2 | 4+ |
| 21.97 | 0.029 | 2- | 22.69 | -0.43 | 2+ | 21.86 | 0.047 | 0+ | 21.81 | -1.1 | 4+ |
| 22.75 | -0.11 | 2- | 23.47 | -0.56 | 2+ | 22.64 | 0.025 | 0+ | 22.58 | -0.67 | 4+ |
| 23.51 | * | 2- | | | | 23.41 | -0.14 | 0+ | 23.36 | * | 4+ |

| FEB. 26, 1980 | | | FEB. 27, 1980 | | | FEB. 28, 1980 | | | FEB. 29, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.13 | * | 4- | 0.07 | * | 1+ | 0.00 | -0.047 | 3- | 0.71 | -0.52 | 2+ |
| 0.90 | 0.31 | 4- | 0.84 | -0.016 | 1+ | 0.78 | -0.31 | 3- | 1.49 | -0.13 | 2+ |
| 1.67 | -0.033 | 4- | 1.62 | -0.26 | 1+ | 1.55 | -0.31 | 3- | 2.25 | -0.40 | 2+ |
| 2.45 | -0.35 | 4- | 2.38 | -0.19 | 1+ | 2.32 | -0.67 | 3- | 3.03 | -0.56 | 20 |
| 3.21 | -0.68 | 30 | 3.16 | -0.076 | 30 | 3.09 | -0.87 | 3- | 3.80 | -0.61 | 20 |
| 3.99 | -0.29 | 30 | 3.93 | -0.46 | 30 | 3.87 | -0.52 | 3- | 4.57 | -0.10 | 20 |
| 4.76 | -0.52 | 30 | 4.70 | -0.38 | 30 | 4.63 | -0.59 | 3- | 5.34 | -0.15 | 20 |
| 5.54 | -0.25 | 30 | 5.47 | -0.41 | 30 | 5.41 | -0.17 | 3- | 6.12 | -0.027 | 10 |
| 6.30 | -0.031 | 1+ | 6.25 | -0.080 | 3+ | 6.18 | -0.37 | 3- | 6.88 | -0.12 | 10 |
| 7.08 | 0.22 | 1+ | 7.02 | -0.64 | 3+ | 6.96 | -0.28 | 3- | 7.66 | 0.054 | 10 |
| 7.85 | 0.097 | 1+ | 7.79 | -0.58 | 3+ | 7.72 | * | 3- | 8.43 | 0.10 | 10 |
| 8.63 | 0.11 | 1+ | 8.56 | -0.26 | 3+ | 8.50 | * | 3- | 9.21 | 0.30 | 20 |
| 9.39 | 0.20 | 30 | 9.34 | -0.20 | 3+ | 9.27 | -1.0 | 3- | 9.97 | 0.17 | 20 |
| 10.17 | 0.47 | 30 | 10.10 | -0.55 | 3+ | 10.05 | -0.44 | 3- | 10.75 | 0.31 | 20 |
| 10.94 | * | 30 | 10.88 | -0.55 | 3+ | 10.81 | -0.56 | 3- | 11.51 | 0.51 | 20 |
| 11.72 | * | 30 | 11.65 | -0.42 | 3+ | 11.59 | -0.31 | 3- | 12.29 | 0.32 | 2+ |
| 12.48 | * | 3+ | 12.43 | -0.36 | 3+ | 12.36 | 0.21 | 2- | 13.06 | 0.36 | 2+ |
| 17.89 | * | 30 | 13.19 | -0.84 | 3+ | 13.13 | 0.21 | 2- | 13.84 | 0.44 | 2+ |
| 18.66 | * | 3- | 13.97 | -0.73 | 3+ | 13.90 | 0.47 | 2- | 14.60 | 0.49 | 2+ |
| 19.44 | -0.14 | 3- | 14.74 | -0.35 | 3+ | 14.68 | 0.38 | 2- | 15.38 | 0.35 | 20 |
| 20.20 | -0.17 | 3- | 15.52 | -0.30 | 3- | 15.44 | 0.44 | 10 | 16.15 | 0.21 | 20 |
| 20.98 | -0.18 | 3- | 16.28 | -0.11 | 3- | 16.22 | 0.18 | 10 | 16.93 | 0.094 | 20 |
| 21.75 | -0.014 | 20 | 17.06 | -0.20 | 3- | 16.99 | 0.004 | 10 | 17.69 | 0.23 | 20 |
| 22.53 | -0.077 | 20 | 17.83 | -0.068 | 3- | 17.77 | 0.088 | 10 | 18.47 | 0.095 | 1+ |
| 23.29 | * | 20 | 18.60 | -0.11 | 30 | 18.53 | 0.12 | 2- | 19.23 | -0.19 | 1+ |
| | | | 19.37 | -0.47 | 30 | 19.31 | -0.053 | 2- | 20.01 | -0.21 | 1+ |
| | | | 20.15 | -0.45 | 30 | 20.08 | -0.10 | 2- | 20.78 | -0.20 | 1+ |
| | | | 20.91 | -0.49 | 30 | 20.85 | -0.41 | 2- | 21.56 | -0.089 | 1+ |
| | | | 21.69 | -0.78 | 30 | 21.62 | -0.54 | 30 | 22.32 | 0.033 | 1+ |
| | | | 22.46 | -0.23 | 30 | 22.40 | -0.49 | 30 | 23.10 | -0.059 | 1+ |
| | | | 23.24 | 0.17 | 30 | 23.16 | -0.28 | 30 | 23.86 | 0.017 | 1+ |
| | | | | | | 2.94 | -0.49 | 30 | | | |

| MAR. 01, 1980 | | | MAR. 02, 1980 | | | MAR. 03, 1980 | | | MAR. 04, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.64 | 0.039 | 1+ | 0.56 | * | 0+ | 0.49 | -0.10 | 10 | 0.40 | 0.020 | 1- |
| 1.41 | -0.13 | 1+ | 1.34 | -0.091 | 0+ | 1.26 | -0.15 | 10 | 1.18 | 0.076 | 1- |
| 2.19 | -0.029 | 1+ | 2.11 | -0.23 | 0+ | 2.04 | -0.087 | 10 | 1.95 | 0.029 | 1- |
| 2.95 | -0.20 | 1+ | 2.89 | -0.20 | 0+ | 2.80 | -0.31 | 10 | 2.73 | -0.025 | 1- |
| 3.73 | -0.19 | 1+ | 3.65 | -0.31 | 1- | 3.58 | -0.14 | 0+ | 3.49 | -0.17 | 0+ |
| 4.50 | -0.18 | 1+ | 4.43 | -0.27 | 1- | 4.34 | -0.46 | 0+ | 4.27 | -0.14 | 0+ |
| 5.28 | -0.035 | 1+ | 5.19 | -0.42 | 1- | 5.12 | -0.34 | 0+ | 5.03 | -0.15 | 0+ |
| 6.04 | -0.27 | 1- | 5.97 | -0.28 | 1- | 5.89 | -0.17 | 0+ | 5.81 | -0.008 | 0+ |
| 6.82 | -0.16 | 1- | 6.74 | -0.099 | 0+ | 6.67 | 0.049 | 0+ | 6.57 | -0.041 | 1+ |
| 7.58 | 0.064 | 1- | 7.52 | 0.069 | 0+ | 7.43 | -0.078 | 0+ | 7.35 | 0.052 | 1+ |
| 8.36 | 0.059 | 1- | 8.28 | 0.054 | 0+ | 8.21 | 0.12 | 0+ | 8.12 | -0.23 | 1+ |
| 9.13 | 0.075 | 0+ | 9.06 | 0.21 | 0+ | 8.97 | 0.17 | 0+ | 8.90 | -0.055 | 1+ |
| 9.91 | 0.28 | 0+ | 9.82 | 0.26 | 0+ | 9.75 | 0.19 | 1- | 9.66 | -0.26 | 2+ |
| 10.67 | 0.23 | 0+ | 10.60 | 0.29 | 0+ | 10.52 | -0.12 | 1- | 10.44 | -0.27 | 2+ |
| 11.45 | 0.22 | 0+ | 11.37 | 0.38 | 0+ | 11.30 | -0.17 | 1- | 11.20 | * | 2+ |
| 12.21 | 0.25 | 10 | 12.15 | 0.33 | 1- | 12.06 | 0.38 | 10 | 11.98 | * | 2+ |
| 12.99 | 0.45 | 10 | 12.91 | * | 1- | 12.84 | 0.43 | 10 | 12.75 | 0.21 | 1+ |
| 13.76 | 0.49 | 10 | 13.69 | * | 1- | 13.60 | 0.44 | 10 | 13.53 | 0.22 | 1+ |
| 14.54 | * | 10 | 14.45 | 0.13 | 1- | 14.38 | 0.45 | 10 | 14.29 | 0.44 | 1+ |
| | | | 15.23 | 0.099 | 1- | 15.14 | 0.50 | 3- | 15.07 | 0.38 | 10 |
| | | | 16.00 | 0.12 | 1- | 15.92 | 0.34 | 3- | 15.83 | 0.41 | 10 |
| | | | 16.78 | 0.15 | 1- | 16.69 | -0.024 | 3- | 16.61 | 0.33 | 10 |
| | | | 17.54 | 0.18 | 1- | 17.47 | -0.32 | 3- | 17.37 | 0.22 | 10 |
| | | | 18.32 | 0.12 | 10 | 18.23 | -0.11 | 2- | 18.16 | 0.37 | 10 |
| | | | 19.08 | 0.14 | 10 | 19.01 | 0.070 | 2- | 18.92 | 0.44 | 10 |
| | | | 19.86 | 0.057 | 10 | 19.77 | 0.11 | 2- | 19.70 | 0.080 | 10 |
| | | | 20.63 | 0.000 | 10 | 20.55 | 0.080 | 2- | 20.46 | 0.001 | 10 |
| | | | 21.41 | 0.049 | 0+ | 21.32 | -0.087 | 1+ | 21.24 | -0.13 | 20 |
| | | | 22.17 | 0.022 | 0+ | 22.10 | -0.041 | 1+ | 22.00 | -0.53 | 20 |
| | | | 22.95 | 0.039 | 0+ | 22.86 | -0.18 | 1+ | 22.78 | -0.35 | 20 |
| | | | 23.71 | 0.001 | 0+ | 23.64 | -0.088 | 1+ | 23.55 | -0.29 | 20 |

| MAR. 05, 1980 | | | MAR. 06, 1980 | | | MAR. 07, 1980 | | | MAR. 08, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.33 | -0.25 | 2+ | 0.23 | -0.087 | 20 | 0.14 | -0.37 | 2+ | 0.04 | -0.22 | 1+ |
| 1.09 | -0.21 | 2+ | 1.01 | -0.38 | 20 | 1.69 | -0.50 | 2+ | 0.82 | -0.23 | 1+ |
| 1.87 | -0.27 | 2+ | 1.77 | -0.37 | 20 | 2.45 | -0.16 | 2+ | 1.58 | -0.26 | 1+ |
| 2.63 | -0.46 | 2+ | 2.55 | -0.025 | 20 | 3.23 | -0.032 | 2+ | 2.36 | -0.13 | 1+ |
| 3.41 | -0.36 | 3- | 3.31 | -0.29 | 20 | 3.99 | -0.20 | 2+ | 3.12 | -0.16 | 2+ |
| 4.17 | -0.11 | 3- | 4.09 | -0.066 | 20 | 4.77 | -0.17 | 2+ | 3.90 | 0.057 | 2+ |
| 4.95 | -0.092 | 3- | 4.86 | -0.16 | 20 | 5.53 | -0.28 | 2+ | 4.66 | -0.45 | 2+ |
| 5.72 | -0.48 | 3- | 5.64 | -0.40 | 20 | 6.31 | -0.17 | 10 | 5.44 | -0.43 | 2+ |
| 6.50 | -0.23 | 20 | 6.40 | -0.47 | 2+ | 7.07 | -0.037 | 10 | 6.21 | -0.11 | 2+ |
| 7.26 | * | 20 | 7.18 | -0.17 | 2+ | 7.86 | 0.021 | 10 | 6.99 | -0.13 | 2+ |
| 8.04 | * | 20 | 7.94 | 0.018 | 2+ | 8.62 | 0.041 | 10 | 7.75 | * | 2+ |
| 8.80 | -0.22 | 20 | 8.72 | -0.047 | 2+ | 9.40 | -0.008 | 2- | 8.53 | * | 2+ |
| 9.58 | -0.017 | 3- | 9.48 | -0.10 | 30 | 10.16 | -0.024 | 2- | 9.29 | -0.095 | 20 |
| 10.34 | -0.33 | 3- | 10.26 | -0.17 | 30 | 10.94 | 0.22 | 2- | 10.07 | 0.040 | 20 |
| 11.13 | -0.32 | 3- | 11.03 | -0.25 | 30 | 11.70 | 0.32 | 2- | 10.83 | -0.094 | 20 |
| 11.89 | -0.48 | 3- | 11.81 | 0.12 | 30 | 12.48 | 0.32 | 1+ | 11.61 | * | 20 |
| 12.67 | -0.32 | 10 | 12.57 | 0.42 | 2+ | 13.24 | 0.29 | 1+ | 12.37 | * | 1+ |
| 13.43 | 0.29 | 10 | 13.35 | 0.47 | 2+ | 14.02 | 0.15 | 1+ | 13.15 | 0.44 | 1+ |
| 14.21 | 0.27 | 10 | 14.11 | 0.44 | 2+ | 14.79 | * | 1+ | 13.91 | 0.40 | 1+ |
| 14.97 | 0.49 | 10 | 14.89 | 0.33 | 2+ | 15.57 | * | 2- | 14.70 | 0.31 | 1+ |
| 15.75 | 0.46 | 1- | 15.65 | 0.51 | 2+ | 16.33 | 0.22 | 2- | 15.46 | 0.44 | 2- |
| 16.52 | 0.44 | 1- | 16.43 | 0.32 | 2+ | 17.11 | 0.20 | 2- | 16.24 | 0.39 | 2- |
| 17.30 | 0.26 | 1- | 17.19 | 0.26 | 2+ | 17.87 | 0.23 | 2- | 17.00 | 0.32 | 2- |
| 18.06 | 0.26 | 1- | 17.98 | 0.46 | 2+ | 18.65 | 0.11 | 20 | 17.78 | 0.17 | 2- |
| 18.84 | 0.092 | 1- | 18.74 | 0.45 | 20 | 19.41 | 0.004 | 20 | 18.54 | 0.11 | 1+ |
| 19.60 | -0.004 | 1- | 19.52 | 0.21 | 20 | 20.19 | -0.046 | 20 | 19.32 | 0.045 | 1+ |
| 20.38 | -0.003 | 1- | 20.28 | 0.030 | 20 | 20.95 | -0.22 | 20 | 20.08 | 0.046 | 1+ |
| 21.14 | -0.082 | 1- | 21.06 | 0.045 | 2- | 21.73 | -0.36 | 20 | 20.86 | 0.093 | 1+ |
| 21.92 | -0.11 | 1- | 21.82 | -0.088 | 2- | 22.50 | -0.24 | 20 | 21.62 | * | 1+ |
| 22.69 | 0.038 | 1- | 22.60 | -0.16 | 2- | 23.38 | 0.005 | 20 | 22.40 | * | 1+ |
| 23.47 | 0.088 | 1- | 23.36 | -0.44 | 2- | | | | 23.17 | -0.21 | 1+ |
| | | | | | | | | | 23.95 | -0.19 | 1+ |

| MAR. 09, 1980 | | | MAR. 10, 1980 | | | MAR. 11, 1980 | | | MAR. 12, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|---|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.71 | -0.088 | 20 | 0.61 | -0.015 | 0+ | 2.82 | * | 20 | 0.39 | * | 00 |
| 1.49 | 0.11 | 20 | 1.37 | -0.074 | 0+ | 3.58 | * | 00 | 1.15 | -0.13 | 00 |
| 2.25 | 0.088 | 20 | 2.15 | 0.014 | 0+ | 4.36 | * | 00 | 1.93 | -0.083 | 00 |
| 3.03 | 0.12 | 2- | 2.91 | -0.12 | 0+ | 5.12 | * | 00 | 2.69 | -0.18 | 00 |
| 3.79 | -0.083 | 2- | 3.70 | -0.099 | 1+ | 5.90 | * | 00 | 3.47 | -0.086 | 00 |
| 4.57 | -0.14 | 2- | 4.46 | -0.25 | 1+ | 6.66 | * | 0+ | 4.23 | -0.14 | 00 |
| 5.33 | -0.26 | 2- | 5.24 | -0.061 | 1+ | 7.44 | * | 0+ | 5.01 | -0.018 | 00 |
| 6.11 | -0.29 | 30 | 6.00 | -0.28 | 1- | 8.20 | * | 0+ | 5.78 | -0.033 | 00 |
| 6.87 | -0.46 | 30 | 6.78 | -0.089 | 1- | 8.98 | * | 0+ | 6.56 | 0.012 | 00 |
| 7.66 | -0.34 | 30 | 7.54 | -0.004 | 1- | 9.74 | * | 3- | 7.32 | -0.068 | 00 |
| 8.42 | -0.58 | 30 | 8.32 | 0.083 | 1- | 10.52 | * | 3- | 8.10 | 0.14 | 00 |
| 9.20 | -0.27 | 1+ | 9.08 | -0.046 | 20 | 11.28 | * | 3- | 8.86 | 0.14 | 00 |
| 9.96 | 0.21 | 1+ | 9.86 | -0.041 | 20 | 12.06 | * | 2- | 9.64 | 0.19 | 00 |
| 10.74 | 0.38 | 1+ | 10.62 | -0.14 | 20 | 12.82 | * | 2- | 10.40 | 0.30 | 00 |
| 11.50 | 0.32 | 1+ | 11.40 | -0.11 | 20 | 13.60 | * | 2- | 11.18 | 0.32 | 00 |
| 12.28 | 0.24 | 20 | 12.16 | 0.008 | 20 | 14.36 | * | 2- | 11.94 | 0.30 | 00 |
| 13.04 | 0.12 | 20 | 12.94 | 0.16 | 20 | 15.15 | * | 10 | 12.72 | 0.34 | 00 |
| 13.82 | 0.14 | 20 | 13.70 | 0.34 | 20 | 15.91 | * | 10 | 13.48 | 0.39 | 00 |
| 14.58 | 0.23 | 20 | 14.49 | 0.21 | 20 | 16.69 | * | 10 | 14.26 | 0.33 | 00 |
| 15.36 | 0.20 | 2+ | 15.25 | 0.27 | 10 | 17.45 | * | 10 | 15.02 | 0.43 | 1- |
| 16.12 | 0.15 | 2+ | 16.03 | * | 10 | 18.23 | * | 0+ | 15.80 | 0.30 | 1- |
| 16.90 | 0.18 | 2+ | 16.79 | * | 10 | 18.99 | * | 0+ | 16.56 | 0.44 | 1- |
| 17.67 | 0.31 | 2+ | 17.57 | 0.25 | 10 | 19.77 | * | 0+ | 17.34 | 0.32 | 1- |
| 18.45 | 0.13 | 10 | 18.33 | 0.17 | 1- | 20.53 | * | 0+ | 18.10 | 0.20 | 1+ |
| 19.21 | 0.16 | 10 | 19.11 | 0.12 | 1- | 21.31 | * | 1- | 18.88 | 0.10 | 1+ |
| 19.99 | 0.20 | 10 | 19.87 | 0.13 | 1- | 22.07 | * | 1- | 19.64 | 0.12 | 1+ |
| 20.75 | 0.13 | 10 | 20.65 | -0.091 | 1- | 22.85 | * | 1- | 20.42 | 0.11 | 1+ |
| 21.53 | 0.067 | 1+ | 21.41 | -0.14 | 1- | 23.61 | * | 1- | 21.18 | 0.038 | 0+ |
| 22.29 | -0.064 | 1+ | 22.29 | 0.008 | 1- | | | | 21.96 | 0.014 | 0+ |
| 23.07 | -0.21 | 1+ | 22.95 | * | 1- | | | | 22.73 | -0.31 | 0+ |
| 23.83 | -0.27 | 1+ | | | | | | | 23.51 | -0.22 | 0+ |

| MAR. 13, 1980 | | | MAR. 14, 1980 | | | MAR. 15, 1980 | | | MAR. 16, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.27 | -0.054 | 10 | 0.16 | 0.20 | 20 | 0.02 | * | 00 | 0.67 | -0.009 | 2- |
| 1.05 | -0.009 | 10 | 0.92 | * | 20 | 0.80 | -0.010 | 00 | 1.45 | -0.072 | 2- |
| 1.81 | -0.010 | 10 | 1.70 | * | 20 | 1.56 | -0.14 | 00 | 2.21 | -0.18 | 2- |
| 2.59 | 0.010 | 10 | 2.46 | -0.37 | 20 | 2.34 | -0.072 | 00 | 2.99 | -0.099 | 2- |
| 3.35 | -0.10 | 1+ | 3.24 | -0.28 | 2+ | 3.10 | * | 00 | 3.75 | -0.17 | 10 |
| 4.13 | 0.12 | 1+ | 4.00 | -0.13 | 2+ | 3.88 | * | 00 | 4.53 | -0.083 | 10 |
| 4.89 | 0.014 | 1+ | 4.78 | -0.085 | 2+ | 4.64 | -0.068 | 00 | 5.29 | -0.23 | 10 |
| 5.67 | -0.045 | 1+ | 5.54 | -0.037 | 2+ | 5.42 | -0.093 | 00 | 6.07 | -0.11 | 1- |
| 6.43 | -0.18 | 30 | 6.32 | 0.041 | 10 | 6.18 | -0.088 | 0+ | 6.83 | -0.10 | 1- |
| 7.21 | 0.12 | 30 | 7.08 | -0.014 | 10 | 6.96 | 0.042 | 0+ | 7.61 | 0.014 | 1- |
| 7.97 | 0.15 | 30 | 7.86 | 0.21 | 10 | 7.73 | -0.021 | 0+ | 8.37 | -0.050 | 1- |
| 8.75 | 0.44 | 30 | 8.62 | -0.071 | 10 | 8.50 | 0.025 | 0+ | 9.15 | -0.094 | 2- |
| 9.51 | 0.22 | 10 | 9.40 | -0.064 | 1- | 9.27 | 0.049 | 0+ | 9.91 | -0.35 | 2- |
| 10.29 | 0.28 | 10 | 10.16 | 0.084 | 1- | 10.05 | 0.19 | 0+ | 10.69 | -0.12 | 2- |
| 11.05 | 0.41 | 10 | 10.94 | 0.21 | 1- | 10.81 | 0.26 | 0+ | 11.45 | 0.096 | 2- |
| 11.83 | 0.43 | 10 | 11.70 | 0.30 | 1- | 11.59 | 0.31 | 0+ | 12.23 | 0.18 | 10 |
| 12.59 | 0.34 | 2- | 12.48 | 0.33 | 1+ | 12.35 | 0.36 | 0+ | 12.99 | 0.51 | 10 |
| 13.37 | 0.099 | 2- | 13.24 | 0.19 | 1+ | 13.13 | 0.31 | 0+ | 13.77 | 0.47 | 10 |
| 14.13 | 0.29 | 2- | 14.02 | 0.19 | 1+ | 13.89 | 0.37 | 0+ | 14.53 | 0.38 | 10 |
| 14.91 | 0.28 | 2- | 14.78 | 0.39 | 1+ | 14.67 | 0.30 | 0+ | 15.31 | 0.37 | 10 |
| 15.67 | 0.20 | 1- | 15.56 | 0.25 | 2- | 15.43 | 0.33 | 0+ | 16.07 | 0.38 | 10 |
| 16.45 | 0.13 | 1- | 16.32 | 0.23 | 2- | 16.21 | 0.22 | 0+ | 16.85 | 0.25 | 10 |
| 17.21 | 0.21 | 1- | 17.10 | -0.011 | 2- | 16.97 | 0.23 | 0+ | 17.61 | 0.17 | 10 |
| 17.99 | 0.13 | 1- | 17.86 | -0.091 | 2- | 17.75 | 0.18 | 0+ | 18.39 | 0.13 | 1- |
| 18.75 | 0.012 | 20 | 18.64 | -0.10 | 1- | 18.51 | 0.19 | 00 | 19.15 | 0.17 | 1- |
| 19.53 | 0.051 | 20 | 19.40 | -0.068 | 1- | 19.29 | 0.12 | 00 | 19.93 | 0.15 | 1- |
| 20.30 | -0.14 | 20 | 20.18 | 0.001 | 1- | 20.05 | 0.011 | 00 | 20.69 | 0.029 | 1- |
| 21.07 | -0.23 | 2+ | 20.94 | 0.069 | 1- | 20.83 | 0.045 | 00 | 21.47 | -0.021 | 2- |
| 21.84 | -0.061 | 2+ | 21.72 | 0.19 | 0+ | 21.59 | 0.11 | 1+ | 22.23 | * | 2- |
| 22.62 | -0.27 | 2+ | 22.48 | * | 0+ | 22.37 | -0.065 | 1+ | 23.01 | * | 2- |
| 23.38 | -0.31 | 2+ | 23.26 | * | 0+ | 23.13 | -0.045 | 1+ | 23.77 | -0.34 | 2- |
| | | | | | | 23.91 | 0.015 | 1+ | | | |

| MAR. 17, 1980 | | | MAR. 18, 1980 | | | MAR. 19, 1980 | | | MAR. 20, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.55 | -0.091 | 1+ | 0.40 | * | 1+ | 0.28 | * | 0+ | 0.13 | -0.36 | 10 |
| 1.31 | -0.14 | 1+ | 1.18 | -0.052 | 1+ | 1.04 | -0.078 | 0+ | 0.91 | * | 10 |
| 2.09 | -0.12 | 1+ | 1.94 | 0.001 | 1+ | 1.82 | -0.010 | 0+ | 1.67 | * | 10 |
| 2.85 | -0.15 | 1+ | 2.72 | -0.078 | 1+ | 2.58 | -0.22 | 0+ | 2.44 | -0.072 | 10 |
| 3.63 | -0.20 | 1+ | 3.48 | -0.22 | 10 | 3.36 | 0.012 | 1- | 3.21 | -0.24 | 10 |
| 4.39 | -0.38 | 1+ | 4.26 | -0.14 | 10 | 4.12 | -0.040 | 1- | 3.98 | * | 10 |
| 5.17 | -0.21 | 1+ | 5.02 | * | 10 | 4.89 | 0.029 | 1- | 4.74 | * | 10 |
| 5.93 | -0.11 | 1+ | 5.80 | * | 10 | 5.66 | -0.27 | 1- | 5.52 | * | 10 |
| 6.71 | -0.070 | 1+ | 6.56 | -0.22 | 1- | 6.43 | -0.40 | 3+ | 6.28 | * | 10 |
| 7.47 | -0.14 | 1+ | 7.34 | 0.015 | 1- | 7.20 | -0.39 | 3+ | 7.06 | * | 10 |
| 8.25 | -0.025 | 1+ | 8.10 | -0.061 | 1- | 7.97 | -0.13 | 3+ | 7.82 | * | 10 |
| 9.01 | 0.003 | 2+ | 8.88 | -0.054 | 1- | 8.73 | -0.097 | 3+ | 8.60 | * | 10 |
| 9.79 | 0.14 | 2+ | 9.64 | 0.11 | 1- | 9.51 | -0.017 | 30 | 9.36 | * | 1+ |
| 10.55 | -0.069 | 2+ | 10.42 | 0.30 | 1- | 10.27 | -0.074 | 30 | 10.14 | -0.038 | 1+ |
| 11.33 | -0.043 | 2+ | 11.18 | 0.40 | 1- | 11.05 | 0.12 | 30 | 10.90 | 0.037 | 1+ |
| 12.09 | 0.42 | 2- | 11.96 | 0.32 | 1- | 11.81 | -0.22 | 30 | 11.68 | 0.032 | 1+ |
| 12.87 | 0.41 | 2- | 12.72 | 0.39 | 10 | 12.59 | 0.072 | 30 | 12.44 | * | 1- |
| 13.63 | 0.42 | 2- | 13.50 | 0.35 | 10 | 13.35 | 0.33 | 30 | 13.22 | * | 1- |
| 14.41 | 0.38 | 2- | 14.26 | 0.35 | 10 | 14.13 | 0.25 | 30 | 13.98 | 0.71 | 1- |
| 15.17 | 0.28 | 10 | 15.04 | 0.40 | 10 | 14.89 | 0.69 | 30 | 14.76 | 0.75 | 1- |
| 15.95 | 0.32 | 10 | 15.80 | 0.39 | 10 | 15.67 | 0.56 | 30 | 15.52 | 0.59 | 1+ |
| 16.71 | 0.36 | 10 | 16.58 | 0.27 | 10 | 16.43 | 0.31 | 30 | 16.30 | 0.50 | 1+ |
| 17.48 | 0.28 | 10 | 17.34 | 0.26 | 10 | 17.21 | 0.29 | 30 | 17.06 | 0.62 | 1+ |
| 18.25 | 0.17 | 10 | 18.12 | 0.18 | 1- | 17.97 | 0.14 | 30 | 17.84 | 0.43 | 1+ |
| 19.02 | 0.060 | 10 | 18.88 | 0.13 | 1- | 18.75 | 0.13 | 2- | 18.60 | 0.38 | 2- |
| 19.79 | 0.12 | 10 | 19.66 | 0.028 | 1- | 19.51 | 0.083 | 2- | 19.37 | 0.20 | 2- |
| 20.56 | 0.18 | 10 | 20.42 | 0.060 | 1- | 20.29 | -0.032 | 2- | 20.14 | 0.16 | 2- |
| 21.33 | 0.11 | 1- | 21.20 | 0.012 | 1- | 21.05 | -0.074 | 10 | 20.91 | 0.090 | 2- |
| 22.10 | -0.030 | 1- | 21.96 | * | 1- | 21.83 | 0.16 | 10 | 21.67 | -0.28 | 1+ |
| 22.86 | -0.37 | 1- | 22.74 | * | 1- | 22.59 | 0.39 | 10 | 22.45 | -0.18 | 1+ |
| 23.64 | * | 1- | 23.50 | * | 1- | 23.37 | 0.16 | 10 | 23.21 | -0.56 | 1+ |
| | | | | | | | | | 23.99 | * | 1+ |

| MAR. 21, 1980 | | | MAR. 22, 1980 | | | MAR. 23, 1980 | | | MAR. 24, 1980 | | |
|---------------|-------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.75 | * | 2+ | 0.61 | * | 3- | 0.45 | -0.42 | 2+ | 0.30 | * | 0+ |
| 1.53 | -0.11 | 2+ | 1.37 | -0.70 | 3- | 1.23 | * | 2+ | 1.06 | -0.12 | 0+ |
| 2.29 | -0.25 | 2+ | 2.15 | -0.40 | 3- | 1.99 | * | 2+ | 1.84 | -0.020 | 0+ |
| 3.07 | -0.65 | 3+ | 2.91 | -0.51 | 3- | 2.77 | * | 2+ | 2.60 | -0.30 | 0+ |
| 3.83 | -0.73 | 3+ | 3.69 | -1.1 | 3+ | 3.53 | * | 30 | 3.38 | -0.16 | 1- |
| 4.61 | -0.73 | 3+ | 4.45 | -1.4 | 3+ | 4.30 | * | 30 | 4.14 | -0.25 | 1- |
| 5.37 | -1.3 | 3+ | 5.23 | -1.3 | 3+ | 5.07 | * | 30 | 4.91 | -0.15 | 1- |
| 6.15 | -0.80 | 4- | 5.99 | -0.82 | 3+ | 5.84 | * | 30 | 5.68 | * | 1- |
| 6.91 | -1.2 | 4- | 6.77 | -0.16 | 4- | 6.60 | * | 10 | 6.45 | * | 2- |
| 7.69 | -1.5 | 4- | 7.53 | -0.22 | 4- | 7.38 | 0.026 | 10 | 7.21 | -0.43 | 2- |
| 8.45 | * | 4- | 8.30 | -0.006 | 4- | 8.14 | -0.10 | 10 | 7.99 | -0.31 | 2- |
| 9.22 | * | 3- | 9.07 | 0.28 | 3+ | 8.92 | -0.086 | 1+ | 8.75 | -0.22 | 2- |
| 9.99 | -0.46 | 3- | 9.84 | -0.29 | 3+ | 9.68 | -0.14 | 1+ | 9.53 | -0.42 | 2- |
| 10.76 | -0.49 | 3- | 10.60 | -0.16 | 3+ | 10.46 | -0.16 | 1+ | 10.29 | * | 2- |
| 11.52 | -0.74 | 3- | 11.38 | 0.19 | 3+ | 11.22 | 0.035 | 1+ | 11.07 | * | 2- |
| 12.30 | -0.86 | 30 | 12.14 | -0.56 | 4+ | 12.00 | 0.099 | 1- | 11.83 | * | 2- |
| 13.06 | -0.75 | 30 | 12.92 | -1.2 | 4+ | 12.76 | 0.18 | 1- | 12.60 | * | 1+ |
| 13.84 | -0.94 | 30 | 13.68 | -1.1 | 4+ | 13.53 | 0.23 | 1- | 13.37 | * | 1+ |
| 14.60 | -0.91 | 30 | 14.46 | -0.58 | 4+ | 14.30 | 0.35 | 1- | 14.14 | * | 1+ |
| 15.38 | -0.77 | 3- | 15.22 | -0.37 | 30 | 15.07 | 0.28 | 10 | 14.90 | * | 1+ |
| 16.14 | * | 3- | 16.00 | -0.16 | 30 | 15.83 | 0.50 | 10 | 15.68 | * | 2- |
| 16.92 | * | 3- | 16.76 | -0.016 | 30 | 16.61 | 0.19 | 10 | 16.44 | * | 2- |
| 17.68 | -0.36 | 3- | 17.54 | -0.12 | 30 | 17.37 | 0.25 | 10 | 17.22 | * | 2- |
| 18.46 | -0.46 | 4+ | 18.30 | 0.26 | 2- | 18.15 | 0.18 | 10 | 17.98 | 0.14 | 2- |
| 19.22 | -0.74 | 4+ | 19.07 | 0.095 | 2- | 18.91 | 0.11 | 10 | 18.76 | 0.015 | 0+ |
| 20.00 | -0.70 | 4+ | 19.84 | 0.064 | 2- | 19.69 | -0.006 | 10 | 19.52 | 0.084 | 0+ |
| 20.76 | -0.88 | 4+ | 20.61 | 0.17 | 2- | 20.45 | 0.041 | 10 | 20.29 | -0.072 | 0+ |
| 21.53 | -0.90 | 4- | 21.37 | * | 2+ | 21.22 | 0.10 | 00 | 21.06 | * | 10 |
| 22.30 | -0.57 | 4- | 22.15 | * | 2+ | 21.99 | -0.055 | 00 | 21.83 | * | 10 |
| 23.07 | -0.88 | 4- | 22.91 | -0.61 | 2+ | 22.76 | -0.042 | 00 | 22.59 | * | 10 |
| 23.83 | * | 4- | 23.69 | -0.64 | 2+ | 23.52 | * | 00 | 23.37 | -0.29 | 10 |

| MAR. 25, 1980 | | | MAR. 26, 1980 | | | MAR. 27, 1980 | | | MAR. 28, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.13 | -0.099 | 1- | 0.74 | * | 5- | 0.57 | -0.52 | 30 | 0.39 | -0.22 | 2- |
| 0.91 | -0.13 | 1- | 1.51 | * | 5- | 1.33 | -0.33 | 30 | 1.16 | -0.16 | 2- |
| 1.67 | -0.19 | 1- | 2.27 | -1.4 | 5- | 2.11 | -0.16 | 30 | 1.93 | -0.40 | 2- |
| 2.45 | -0.11 | 1- | 3.05 | -1.8 | 6- | 2.87 | -0.21 | 30 | 2.70 | -0.58 | 2- |
| 3.21 | -0.27 | 00 | 3.81 | -1.3 | 6- | 3.65 | -0.28 | 1+ | 3.46 | -0.51 | 3- |
| 3.98 | -0.18 | 00 | 4.59 | -1.4 | 6- | 4.41 | -0.56 | 1+ | 4.24 | -0.002 | 3- |
| 4.75 | * | 00 | 5.35 | -1.5 | 6- | 5.18 | -0.48 | 1+ | 5.00 | -0.41 | 3- |
| 5.52 | * | 00 | 6.12 | -0.67 | 40 | 5.95 | -0.44 | 1+ | 5.77 | -0.46 | 3- |
| 6.28 | * | 0+ | 6.89 | -0.93 | 40 | 6.72 | -0.26 | 2- | 6.54 | * | 2+ |
| 7.06 | * | 0+ | 7.66 | -1.0 | 40 | 7.48 | -0.29 | 2- | 7.31 | * | 2+ |
| 7.82 | -0.016 | 0+ | 8.42 | -1.5 | 40 | 8.26 | -0.29 | 2- | 8.07 | * | 2+ |
| 8.60 | -0.055 | 0+ | 9.20 | -0.80 | 40 | 9.02 | -0.28 | 2- | 8.85 | * | 2+ |
| 9.36 | * | 10 | 9.96 | * | 40 | 9.79 | -0.16 | 2- | 9.61 | 0.029 | 1+ |
| 10.13 | * | 10 | 10.74 | * | 40 | 10.56 | -0.14 | 2- | 10.38 | 0.033 | 1+ |
| 10.90 | 0.19 | 10 | 11.50 | * | 40 | 11.33 | 0.076 | 2- | 11.15 | 0.11 | 1+ |
| 11.67 | 0.10 | 10 | 12.27 | * | 4+ | 12.09 | 0.43 | 20 | 11.92 | 0.23 | 1+ |
| 12.43 | * | 1+ | 13.04 | -1.4 | 4+ | 12.87 | 0.52 | 20 | 12.69 | 0.23 | 2- |
| 13.21 | * | 1+ | 13.81 | -1.0 | 4+ | 13.63 | 0.30 | 20 | 13.46 | 0.16 | 2- |
| 13.97 | 0.34 | 1+ | 14.57 | 0.33 | 4+ | 14.40 | 0.21 | 20 | 14.22 | 0.33 | 2- |
| 14.75 | 0.27 | 1+ | 15.35 | 0.32 | 2+ | 15.17 | 0.059 | 1+ | 14.99 | 0.21 | 2- |
| 15.51 | 0.37 | 2- | 16.11 | 0.33 | 2+ | 15.94 | -0.024 | 1+ | 15.76 | 0.29 | 10 |
| 16.28 | 0.24 | 2- | 16.88 | 0.21 | 2+ | 16.71 | 0.17 | 1+ | 16.53 | 0.15 | 10 |
| 17.05 | 0.24 | 2- | 17.65 | 0.23 | 2+ | 17.48 | 0.008 | 1+ | 17.30 | 0.17 | 10 |
| 17.82 | 0.097 | 2- | 18.42 | 0.082 | 30 | 18.24 | 0.038 | 10 | 18.07 | 0.032 | 10 |
| 18.59 | -0.004 | 20 | 19.18 | -0.33 | 30 | 19.02 | 0.045 | 10 | 18.83 | -0.006 | 10 |
| 19.36 | -0.048 | 20 | 19.96 | -0.55 | 30 | 19.78 | -0.061 | 10 | 19.60 | -0.091 | 10 |
| 20.12 | 0.016 | 20 | 20.72 | -0.23 | 30 | 20.55 | -0.10 | 10 | 20.37 | -0.012 | 10 |
| 20.90 | 0.14 | 20 | 21.50 | -0.12 | 4- | 21.32 | -0.13 | 2- | 21.14 | 0.021 | 2+ |
| 21.66 | -0.42 | 4- | 22.26 | -0.47 | 4- | 22.09 | -0.39 | 2- | 21.91 | -0.14 | 2+ |
| 22.44 | * | 4- | 23.03 | -0.26 | 4- | 22.85 | -0.44 | 2- | 22.68 | -0.083 | 2+ |
| 23.20 | * | 4- | 23.80 | -0.22 | 4- | 23.63 | -0.20 | 2- | 23.44 | * | 2+ |
| 23.97 | * | 4- | | | | | | | | | |
| MAR. 29, 1980 | | | MAR. 30, 1980 | | | MAR. 31, 1980 | | | APR. 01, 1980 | | |
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.21 | * | 2+ | 0.03 | -0.58 | 30 | 0.60 | -0.19 | 4- | 0.41 | * | 20 |
| 0.98 | -0.13 | 2+ | 0.80 | -1.3 | 30 | 1.37 | -0.27 | 4- | 1.18 | -0.69 | 20 |
| 1.75 | 0.14 | 2+ | 1.56 | -1.1 | 30 | 2.14 | -0.79 | 4- | 1.95 | -0.50 | 20 |
| 2.52 | 0.006 | 2+ | 2.33 | -0.84 | 30 | 2.91 | -0.70 | 4- | 2.71 | -0.55 | 20 |
| 3.29 | -0.040 | 2+ | 3.10 | -1.1 | 4- | 3.68 | -1.5 | 40 | 3.48 | -0.16 | 1- |
| 4.05 | -0.53 | 2+ | 3.87 | -0.81 | 4- | 4.45 | -1.2 | 40 | 4.25 | -0.36 | 1- |
| 4.82 | -0.62 | 2+ | 4.63 | -1.1 | 4- | 5.21 | -0.98 | 40 | 5.02 | -0.16 | 1- |
| 5.59 | -0.52 | 2+ | 5.41 | -1.0 | 4- | 5.98 | -1.5 | 40 | 5.78 | -0.24 | 1- |
| 6.36 | 0.004 | 3- | 6.17 | * | 3+ | 6.75 | -1.7 | 40 | 6.55 | -0.24 | 1- |
| 7.12 | -0.19 | 3- | 6.94 | * | 3+ | 7.52 | -0.99 | 40 | 7.32 | -0.16 | 1- |
| 7.90 | -0.28 | 3- | 7.71 | * | 3+ | 8.28 | -1.4 | 40 | 8.09 | -0.11 | 1- |
| 8.66 | -0.29 | 3- | 8.48 | * | 3+ | 9.05 | -1.0 | 40 | 8.85 | -0.13 | 1- |
| 9.43 | 0.093 | 10 | 9.24 | * | 2- | 9.82 | -0.67 | 40 | 9.62 | -0.21 | 0+ |
| 10.20 | 0.39 | 10 | 10.01 | * | 2- | 10.59 | -0.66 | 40 | 10.39 | -0.27 | 0+ |
| 10.97 | 0.26 | 10 | 10.78 | * | 2- | 11.36 | * | 40 | 11.16 | 0.13 | 0+ |
| 11.73 | 0.23 | 10 | 11.55 | * | 2- | 12.13 | * | 4- | 11.93 | 0.31 | 0+ |
| 12.51 | 0.22 | 10 | 12.32 | -0.16 | 20 | 12.89 | 0.19 | 4- | 12.70 | 0.19 | 1+ |
| 13.27 | 0.22 | 10 | 13.09 | -0.021 | 20 | 13.66 | 0.17 | 4- | 13.46 | -0.053 | 1+ |
| 14.04 | 0.13 | 10 | 13.85 | * | 20 | 14.43 | 0.28 | 4- | 14.23 | -0.33 | 1+ |
| 14.81 | 0.095 | 10 | 14.62 | * | 20 | 15.20 | * | 30 | 15.00 | -0.28 | 1+ |
| 15.58 | 0.095 | 20 | 15.39 | 0.45 | 10 | 15.96 | * | 30 | 15.77 | -0.39 | 1+ |
| 16.34 | * | 20 | 16.16 | 0.19 | 10 | 16.73 | * | 30 | 16.53 | -0.29 | 1+ |
| 17.12 | * | 20 | 16.92 | 0.34 | 10 | 17.50 | * | 30 | 17.30 | -0.17 | 1+ |
| 17.88 | * | 20 | 17.69 | 0.30 | 10 | 18.27 | * | 20 | 18.07 | -0.14 | 10 |
| 18.65 | 0.021 | 20 | 18.46 | 0.18 | 1- | 19.03 | 0.050 | 20 | 18.84 | -0.12 | 10 |
| 19.42 | 0.008 | 20 | 19.23 | 0.12 | 1- | 19.80 | 0.18 | 20 | 19.60 | -0.12 | 10 |
| 20.19 | -0.015 | 20 | 20.00 | 0.067 | 1- | 20.57 | -0.13 | 20 | 20.37 | -0.10 | 10 |
| 20.95 | -0.22 | 20 | 20.77 | 0.000 | 1- | 21.34 | -0.041 | 3+ | 21.14 | * | 00 |
| 21.72 | -0.12 | 2+ | 21.53 | 0.008 | 30 | 22.11 | * | 3+ | 21.91 | * | 00 |
| 22.49 | -0.14 | 2+ | 22.30 | 0.12 | 30 | 22.88 | * | 3+ | 22.67 | * | 00 |
| 23.26 | 0.089 | 2+ | 23.07 | 0.41 | 30 | 23.64 | * | 3+ | 23.44 | 0.13 | 00 |
| | | | 23.84 | 0.28 | 30 | | | | | | |

| APR. 02, 1980 | | | APR. 03, 1980 | | | APR. 04, 1980 | | | APR. 05, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|--------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.21 | -0.48 | 1- | 0.01 | * | 1+ | 0.56 | -0.36 | 0+ | 0.35 | -0.13 | 10 |
| 0.98 | -0.44 | 1- | 2.31 | * | 1+ | 1.33 | -0.25 | 0+ | 1.12 | * | 10 |
| 1.74 | -0.29 | 1- | 3.08 | * | 3- | 2.10 | -0.20 | 0+ | 1.88 | * | 10 |
| 2.51 | -0.22 | 1- | 3.84 | * | 3- | 2.87 | -0.34 | 0+ | 2.65 | * | 10 |
| 3.28 | -0.34 | 1- | 4.61 | -0.62 | 3- | 3.63 | -0.21 | 1+ | 3.42 | * | 2- |
| 4.05 | -0.28 | 1- | 5.38 | -0.36 | 3- | 4.40 | -0.46 | 1+ | 4.19 | * | 2- |
| 4.82 | -0.31 | 1- | 6.15 | -0.13 | 2- | 5.17 | -0.25 | 1+ | 4.95 | * | 2- |
| 5.58 | -0.18 | 1- | 6.91 | -0.13 | 2- | 5.93 | -0.18 | 1+ | 5.72 | * | 2- |
| 6.35 | -0.29 | 0+ | 7.68 | -0.19 | 2- | 6.70 | -0.11 | 30 | 6.49 | * | 10 |
| 7.12 | -0.19 | 0+ | 8.45 | -0.26 | 2- | 7.47 | -0.48 | 30 | 7.25 | * | 10 |
| 7.89 | * | 0+ | 9.22 | -0.17 | 2+ | 8.24 | -0.56 | 30 | 8.02 | * | 10 |
| 8.65 | * | 0+ | 9.98 | * | 2+ | 9.00 | -0.69 | 30 | 8.79 | * | 10 |
| 9.42 | * | 1- | 10.75 | * | 2+ | 9.77 | -0.36 | 30 | 9.56 | * | 10 |
| 10.19 | 0.016 | 1- | 11.52 | 0.017 | 2+ | 10.54 | -0.36 | 30 | 10.32 | * | 10 |
| 10.96 | * | 1- | 12.29 | 0.12 | 2- | 11.31 | -0.43 | 30 | 11.09 | * | 10 |
| 11.73 | * | 1- | 13.05 | 0.046 | 2- | 12.07 | -0.16 | 3- | 11.86 | * | 10 |
| 12.49 | * | 1- | 13.82 | 0.021 | 2- | 12.84 | -0.13 | 3- | 12.62 | * | 2+ |
| 13.26 | 0.36 | 1- | 14.59 | 0.41 | 2- | 13.61 | 0.084 | 3- | 13.39 | * | 2+ |
| 14.03 | 0.52 | 1- | 15.35 | 0.23 | 2+ | 14.38 | 0.14 | 3- | 14.16 | * | 2+ |
| 14.80 | 0.54 | 1- | 16.12 | * | 2+ | 15.14 | 0.096 | 3+ | 14.93 | 0.28 | 2+ |
| 15.56 | * | 1- | 16.89 | * | 2+ | 15.91 | -0.12 | 3+ | 15.69 | 0.080 | 3+ |
| 16.33 | * | 1- | 17.66 | * | 2+ | 16.68 | -0.062 | 3+ | 16.46 | -0.14 | 3+ |
| 17.10 | 0.24 | 1- | 18.42 | * | 20 | 17.44 | 0.033 | 3+ | 17.23 | -0.78 | 3+ |
| 17.87 | 0.096 | 1- | 19.19 | 0.027 | 20 | 18.21 | 0.11 | 30 | 17.99 | -0.99 | 3+ |
| 18.63 | 0.031 | 0+ | 19.96 | -0.053 | 20 | 18.98 | 0.062 | 30 | 18.76 | -0.32 | 20 |
| 19.40 | -0.12 | 0+ | 20.73 | * | 20 | 19.75 | -0.26 | 30 | 19.53 | -0.18 | 20 |
| 20.17 | -0.084 | 0+ | 21.49 | * | 1- | 20.51 | -0.31 | 30 | 20.30 | -0.097 | 20 |
| 20.94 | -0.15 | 0+ | 22.26 | * | 1- | 21.28 | -0.072 | 10 | 21.06 | 0.0 | 1- |
| 21.70 | -0.088 | 2- | 23.03 | -0.072 | 1- | 22.05 | 0.082 | 10 | 21.83 | -0.35 | 1- |
| 22.47 | * | 2- | | | | 22.81 | -0.32 | 10 | 22.60 | -0.25 | 1- |
| 23.24 | * | 2- | | | | 23.58 | -0.14 | 10 | 23.36 | * | 1- |

| APR. 06, 1980 | | | APR. 07, 1980 | | | APR. 08, 1980 | | | APR. 09, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|-------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.13 | * | 0+ | 0.67 | -0.60 | 3+ | 0.45 | * | 3+ | 0.21 | * | 30 |
| 0.90 | -0.16 | 0+ | 1.44 | -0.52 | 3+ | 1.21 | -0.32 | 3+ | 0.98 | * | 30 |
| 1.67 | -0.098 | 0+ | 2.21 | -0.12 | 3+ | 1.98 | -0.52 | 3+ | 1.75 | -0.22 | 30 |
| 2.43 | -0.30 | 0+ | 2.98 | -0.24 | 3+ | 2.75 | -0.54 | 3+ | 2.52 | * | 30 |
| 3.20 | -0.054 | 2+ | 3.74 | -0.11 | 3- | 3.52 | -0.30 | 4- | 3.28 | * | 4+ |
| 3.97 | -0.048 | 2+ | 4.51 | -0.52 | 3- | 4.28 | -0.19 | 4- | 4.05 | * | 4+ |
| 4.73 | -0.011 | 2+ | 5.28 | -0.80 | 3- | 5.05 | * | 4- | 4.81 | -0.58 | 4+ |
| 5.50 | -0.26 | 2+ | 6.04 | -0.56 | 3+ | 5.81 | * | 4- | 5.58 | -1.1 | 4+ |
| 6.27 | -0.28 | 1+ | 6.81 | -0.56 | 3+ | 6.58 | -0.31 | 3- | 6.35 | -0.96 | 4- |
| 7.04 | -0.12 | 1+ | 7.58 | -0.95 | 3+ | 7.35 | -0.23 | 3- | 7.12 | -1.9 | 4- |
| 7.80 | 0.051 | 1+ | 8.34 | -0.75 | 3+ | 8.12 | -0.099 | 3- | 7.88 | -1.9 | 4- |
| 8.57 | -0.017 | 1+ | 9.11 | -0.37 | 2- | 8.88 | 0.40 | 3- | 8.65 | -1.3 | 4- |
| 9.34 | 0.13 | 5- | 9.88 | -0.50 | 2- | 9.65 | 0.19 | 40 | 9.41 | -0.23 | 5- |
| 10.10 | 0.32 | 5- | 10.65 | -0.22 | 2- | 10.41 | 0.16 | 40 | 10.18 | -1.8 | 5- |
| 10.87 | -0.029 | 5- | 11.41 | -0.007 | 2- | 11.18 | -0.24 | 40 | 10.95 | -2.8 | 5- |
| 11.64 | 0.16 | 5- | 12.18 | 0.081 | 3- | 11.95 | -0.11 | 40 | 11.71 | -2.6 | 5- |
| 12.40 | 0.22 | 50 | 12.94 | -0.14 | 3- | 12.72 | -0.39 | 40 | 12.48 | -1.6 | 40 |
| 13.17 | -0.60 | 50 | 13.71 | -0.56 | 3- | 13.48 | -0.62 | 40 | 13.25 | -0.92 | 40 |
| 13.94 | -0.41 | 50 | 14.48 | * | 3- | 14.25 | 0.24 | 40 | 14.01 | -0.49 | 40 |
| 14.71 | -0.82 | 50 | 15.25 | * | 3- | 15.01 | 0.25 | 3- | 14.78 | * | 40 |
| 15.47 | -2.1 | 50 | 16.01 | 0.029 | 3- | 15.78 | * | 3- | 15.54 | * | 3+ |
| 16.24 | -2.4 | 50 | 16.78 | -0.008 | 3- | 16.55 | * | 3- | 16.31 | * | 3+ |
| 17.01 | -1.7 | 50 | 17.55 | -0.25 | 3- | 17.32 | * | 3- | 17.08 | * | 3+ |
| 17.77 | -1.2 | 50 | 18.31 | -0.32 | 5- | 18.08 | * | 2- | 17.85 | * | 3+ |
| 18.54 | -0.56 | 5+ | 19.08 | -0.31 | 5- | 18.85 | 0.094 | 2- | 18.61 | * | 2- |
| 19.31 | -0.27 | 5+ | 19.85 | -0.94 | 5- | 19.61 | -0.048 | 2- | 19.38 | * | 2- |
| 20.07 | -0.21 | 5+ | 20.61 | -1.1 | 5- | 20.38 | -0.16 | 2- | 20.14 | 0.16 | 2- |
| 20.84 | -0.23 | 5+ | 21.38 | -0.90 | 40 | 21.15 | -0.045 | 3- | 20.91 | 0.029 | 2- |
| 21.61 | -0.16 | 3+ | 22.15 | -0.91 | 40 | 21.92 | * | 3- | 21.68 | * | 1+ |
| 22.37 | 0.095 | 3+ | 22.92 | -1.0 | 40 | 22.68 | * | 3- | 22.45 | * | 1+ |
| 23.14 | 0.016 | 3+ | 23.68 | * | 40 | 23.45 | * | 3- | 23.21 | * | 1+ |
| 23.91 | -0.59 | 3+ | | | | | | | 23.98 | -0.31 | 1+ |

| APR. 10, 1980 | | | APR. 11, 1980 | | | APR. 12, 1980 | | | APR. 13, 1980 | | |
|---------------|--------|----|---------------|--------|----|---------------|--------|----|---------------|-------|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.74 | -0.32 | 40 | 0.50 | * | 30 | 0.25 | * | 50 | 0.76 | * | 5- |
| 1.51 | -0.53 | 40 | 1.26 | * | 30 | 1.02 | -0.49 | 50 | 1.53 | * | 5- |
| 2.27 | -0.93 | 40 | 2.03 | * | 30 | 1.78 | -1.1 | 50 | 2.29 | * | 5- |
| 3.04 | -0.98 | 50 | 2.80 | -0.44 | 30 | 2.55 | -0.98 | 50 | 3.06 | * | 3+ |
| 3.81 | -0.83 | 50 | 3.57 | * | 3- | 3.31 | -0.51 | 4- | 3.82 | * | 3+ |
| 4.58 | -1.8 | 50 | 4.33 | * | 3- | 4.08 | -0.51 | 4- | 4.59 | * | 3+ |
| 5.34 | -1.7 | 50 | 5.10 | * | 3- | 4.84 | -0.47 | 4- | 5.35 | -0.69 | 3+ |
| 6.11 | -1.6 | 40 | 5.86 | -0.37 | 3- | 5.62 | -0.95 | 4- | 6.12 | -1.1 | 4- |
| 6.87 | -1.3 | 40 | 6.63 | -0.34 | 4+ | 6.38 | -0.61 | 30 | 6.89 | -0.73 | 4- |
| 7.64 | -1.9 | 40 | 7.39 | -0.099 | 4+ | 7.15 | -0.33 | 30 | 7.66 | -0.69 | 4- |
| 8.41 | -1.6 | 40 | 8.16 | -0.22 | 4+ | 7.91 | 0.31 | 30 | 8.42 | -0.51 | 4- |
| 9.18 | -1.6 | 5- | 8.93 | 0.034 | 4+ | 8.68 | * | 30 | 9.19 | -0.56 | 30 |
| 9.94 | -1.4 | 5- | 9.70 | -0.19 | 30 | 9.44 | * | 3+ | 9.95 | * | 30 |
| 10.71 | -1.1 | 5- | 10.46 | -0.22 | 30 | 10.21 | * | 3+ | 10.72 | * | 30 |
| 11.47 | -0.85 | 5- | 11.23 | -0.30 | 30 | 10.97 | -0.32 | 3+ | 11.48 | * | 30 |
| 12.24 | * | 3- | 11.99 | -0.35 | 30 | 11.74 | 0.12 | 3+ | 12.25 | * | 3- |
| 13.00 | * | 3- | 12.76 | -0.39 | 30 | 12.51 | 0.19 | 3+ | 13.01 | * | 3- |
| 13.77 | * | 3- | 13.52 | -0.47 | 30 | 13.28 | * | 3+ | 13.78 | * | 3- |
| 14.54 | * | 3- | 14.29 | -0.080 | 30 | 14.04 | * | 3+ | 14.54 | * | 3- |
| 15.31 | 0.35 | 2+ | 15.06 | -0.40 | 4+ | 14.81 | * | 3+ | 15.31 | * | 3+ |
| 16.07 | * | 2+ | 15.83 | * | 4+ | 15.57 | * | 4+ | 16.08 | * | 3+ |
| 16.84 | * | 2+ | 16.59 | * | 4+ | 16.34 | * | 4+ | 16.85 | * | 3+ |
| 17.60 | 0.018 | 2+ | 17.36 | -0.85 | 4+ | 17.10 | * | 4+ | 17.61 | * | 3+ |
| 18.37 | 0.24 | 20 | 18.12 | -1.3 | 6- | 17.87 | * | 4+ | 18.38 | * | 3- |
| 19.13 | 0.11 | 20 | 18.89 | -2.1 | 6- | 18.63 | -0.21 | 3+ | 19.14 | * | 3- |
| 19.90 | -0.027 | 20 | 19.65 | -2.3 | 6- | 19.40 | -0.053 | 3+ | 19.91 | * | 3- |
| 20.67 | -0.097 | 20 | 20.42 | -2.9 | 6- | 20.16 | -0.11 | 3+ | 20.67 | * | 3- |
| 21.44 | -0.28 | 2+ | 21.18 | -2.0 | 50 | 20.93 | * | 3+ | 21.44 | * | 2- |
| 22.20 | * | 2+ | 21.95 | -1.1 | 50 | 21.70 | * | 5+ | 22.20 | * | 2- |
| 22.97 | * | 2+ | 22.72 | -1.1 | 50 | 22.47 | * | 5+ | 22.97 | * | 2- |
| 23.73 | 0.46 | 2+ | 23.49 | * | 50 | 22.23 | -1.6 | 5+ | 23.73 | * | 2- |
| | | | | | | 24.00 | -2.4 | 5+ | | | |

| APR. 14, 1980 | | | APR. 15, 1980 | | | APR. 16, 1980 | | | APR. 17, 1980 | | |
|---------------|---|----|---------------|---|----|---------------|---|----|---------------|---|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.50 | * | 10 | 0.23 | * | 5- | 0.72 | * | 30 | 1.21 | * | 4- |
| 1.26 | * | 10 | 1.00 | * | 5- | 1.49 | * | 30 | 1.98 | * | 4- |
| 2.03 | * | 10 | 1.76 | * | 5- | 2.25 | * | 30 | 2.74 | * | 4- |
| 2.80 | * | 10 | 2.53 | * | 5- | 3.03 | * | 30 | 3.51 | * | 40 |
| 3.57 | * | 20 | 3.29 | * | 40 | 3.78 | * | 30 | 4.27 | * | 40 |
| 4.33 | * | 20 | 4.06 | * | 40 | 4.56 | * | 30 | 5.04 | * | 40 |
| 5.10 | * | 20 | 4.82 | * | 40 | 5.32 | * | 30 | 11.16 | * | 1- |
| 5.86 | * | 20 | 5.59 | * | 40 | 6.09 | * | 3- | 11.92 | * | 1- |
| 6.63 | * | 2- | 6.36 | * | 3+ | 6.85 | * | 3- | 12.69 | * | 20 |
| 7.39 | * | 2- | 7.13 | * | 3+ | 7.62 | * | 3- | 13.45 | * | 20 |
| 8.16 | * | 2- | 7.89 | * | 3+ | 8.38 | * | 3- | 14.22 | * | 20 |
| 8.92 | * | 2- | 8.66 | * | 3+ | 9.15 | * | 1+ | 14.98 | * | 2+ |
| 9.69 | * | 0+ | 9.42 | * | 2+ | 9.91 | * | 1+ | 15.75 | * | 2+ |
| 10.45 | * | 0+ | 10.19 | * | 2+ | 10.68 | * | 1+ | 16.51 | * | 2+ |
| 11.22 | * | 0+ | 10.95 | * | 2+ | 11.44 | * | 1+ | 17.28 | * | 2+ |
| 11.98 | * | 0+ | 11.72 | * | 2+ | 12.21 | * | 2+ | 18.04 | * | 2+ |
| 12.75 | * | 1+ | 12.48 | * | 2+ | 12.97 | * | 2+ | 18.81 | * | 2+ |
| 13.51 | * | 1+ | 13.25 | * | 2+ | 13.74 | * | 2+ | 19.57 | * | 2+ |
| 14.28 | * | 1+ | 14.01 | * | 2+ | 14.50 | * | 2+ | 20.34 | * | 2+ |
| 15.05 | * | 3- | 14.78 | * | 2+ | 15.27 | * | 30 | 21.10 | * | 20 |
| 15.82 | * | 3- | 15.54 | * | 3+ | 16.03 | * | 30 | 21.87 | * | 20 |
| 16.58 | * | 3- | 16.31 | * | 3+ | 16.80 | * | 30 | 22.63 | * | 20 |
| 17.35 | * | 3- | 17.07 | * | 3+ | 17.56 | * | 30 | 23.40 | * | 20 |
| 18.11 | * | 30 | 17.84 | * | 3+ | 18.33 | * | 20 | | | |
| 18.88 | * | 30 | 18.60 | * | 4- | 19.09 | * | 20 | | | |
| 19.64 | * | 30 | 19.37 | * | 4- | 19.86 | * | 20 | | | |
| 20.41 | * | 30 | 20.13 | * | 4- | 20.62 | * | 20 | | | |
| 21.17 | * | 40 | 20.90 | * | 4- | 21.39 | * | 30 | | | |
| 21.94 | * | 40 | 21.66 | * | 40 | 22.15 | * | 30 | | | |
| 22.70 | * | 40 | 22.43 | * | 40 | 22.92 | * | 30 | | | |
| 23.47 | * | 40 | 23.19 | * | 40 | 23.68 | * | 30 | | | |
| | | | 23.96 | * | 40 | | | | | | |

APR. 18, 1980

| APR. 18, 1980 | | | | | | | | | | | |
|---------------|---|----|-------|---|----|-------|---|----|-------|---|----|
| UT | I | Kp | UT | I | Kp | UT | I | Kp | UT | I | Kp |
| 0.16 | * | 10 | 0.23 | * | 5- | 0.72 | * | 30 | 1.21 | * | 4- |
| 0.93 | * | 10 | 1.00 | * | 5- | 1.49 | * | 30 | 1.98 | * | 4- |
| 1.69 | * | 10 | 1.76 | * | 5- | 2.25 | * | 30 | 2.74 | * | 4- |
| 2.46 | * | 10 | 2.53 | * | 5- | 3.03 | * | 30 | 3.51 | * | 40 |
| 3.22 | * | 20 | 3.29 | * | 40 | 3.78 | * | 30 | 4.27 | * | 40 |
| 3.99 | * | 20 | 4.06 | * | 40 | 4.56 | * | 30 | 5.04 | * | 40 |
| 4.75 | * | 20 | 4.82 | * | 40 | 5.32 | * | 30 | 11.16 | * | 1- |
| 5.52 | * | 20 | 5.59 | * | 40 | 6.09 | * | 3- | 11.92 | * | 1- |
| 6.28 | * | 1- | 6.36 | * | 3+ | 6.85 | * | 3- | 12.69 | * | 20 |
| 7.05 | * | 1- | 7.13 | * | 3+ | 7.62 | * | 3- | 13.45 | * | 20 |
| 7.81 | * | 1- | 7.89 | * | 3+ | 8.38 | * | 3- | 14.22 | * | 20 |
| 8.58 | * | 1- | 8.66 | * | 3+ | 9.15 | * | 1+ | 14.98 | * | 2+ |
| 9.34 | * | 10 | 9.42 | * | 2+ | 9.91 | * | 1+ | 15.75 | * | 2+ |
| 10.11 | * | 10 | 10.19 | * | 2+ | 10.68 | * | 1+ | 16.51 | * | 2+ |
| 10.87 | * | 10 | 10.95 | * | 2+ | 11.44 | * | 1+ | 17.28 | * | 2+ |
| 11.64 | * | 10 | 11.72 | * | 2+ | 12.21 | * | 2+ | 18.04 | * | 2+ |
| 12.40 | * | 10 | 12.48 | * | 2+ | 12.97 | * | 2+ | 18.81 | * | 2+ |
| 13.17 | * | 10 | 13.25 | * | 2+ | 13.74 | * | 2+ | 19.57 | * | 2+ |
| 13.93 | * | 10 | 14.01 | * | 2+ | 14.50 | * | 2+ | 20.34 | * | 2+ |
| 14.70 | * | 10 | 14.78 | * | 2+ | 15.27 | * | 30 | 21.10 | * | 20 |
| 15.46 | * | 1- | 15.54 | * | 3+ | 16.03 | * | 30 | 21.87 | * | 20 |
| 16.23 | * | 1- | 16.31 | * | 3+ | 16.80 | * | 30 | 22.63 | * | 20 |
| 16.99 | * | 1- | 17.07 | * | 3+ | 17.56 | * | 30 | 23.40 | * | 20 |
| 17.76 | * | 1- | 17.84 | * | 3+ | 18.33 | * | 20 | | | |
| 18.52 | * | 1- | 18.60 | * | 4- | 19.09 | * | 20 | | | |
| 19.29 | * | 1- | 19.37 | * | 4- | 19.86 | * | 20 | | | |
| 20.05 | * | 1- | 20.13 | * | 4- | 20.62 | * | 20 | | | |
| 20.82 | * | 1- | 20.90 | * | 4- | 21.39 | * | 30 | | | |
| 21.58 | * | 2- | 21.66 | * | 40 | 22.15 | * | 30 | | | |
| 22.35 | * | 2- | 22.43 | * | 40 | 22.92 | * | 30 | | | |
| 23.10 | * | 2- | 23.19 | * | 40 | 23.68 | * | 30 | | | |
| 23.88 | * | 2- | 23.96 | * | 40 | | | | | | |

