REPORT UAG-71

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for
Solar-Terrestrial Physics

MAGNETIC POTENTIAL PLOTS OVER THE NORTHERN HEMISPHERE FOR 26–28 MARCH 1976

April 1979

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MAGNETIC POTENTIAL PLOTS OVER THE NORTHERN HEMISPHERE FOR 26-28 MARCH 1976

by

A. D. Richmond[1], H. W. Kroehl[2], M. A. Henning[3], and Y. Kamide[4]

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PART 1

I. Introduction

The magnetic storm of 26-28 March 1976 has been the subject of considerable scientific interest, being part of a Retrospective World Interval, a Study of Traveling Interplanetary Phenomena Interval II and a Special International Magnetospheric Study Interval [e.g., Coffey and McKinnon, 1977]. This report presents contour maps of magnetic potential variations over the Northern Hemisphere at 10-min intervals between 0000 UT, 26 March and 0550 UT, 28 March 1978 as an aid to further study of this event. These are excerpts from a larger data set, with plots every minute, which were used to make a data moving picture. An analysis of these maps for several magnetic substorms occurring during this period is presented in Kroehl and Richmond [1979].

A geomagnetic variation field $\underline{B}$ at ground level can be described as the negative gradient of a scalar magnetic potential V, if the magnetic effects of electrical currents within the lower atmosphere are negligible. The magnetic potential is closely related to the so-called "equivalent" ionospheric current often discussed in the literature. For many purposes, it is sufficient to make the approximation that 1 T-m of magnetic potential variation at ground level represents 10^6 A of equivalent overhead current, a relation that takes into account the contribution of induced earth currents to $\underline{B}$. For example, if the magnetic potential is increasing toward the north at the rate of 10^{-6} Tesla-meters per meter (a 1,000-nT southward magnetic variation), the equivalent overhead ionospheric current is approximately 1 Ampere per meter toward the west. In reality the actual currents responsible for the ground-based magnetic variations are not confined to the ionosphere but extend far out into the magnetosphere.

II. Data Processing

The magnetic potentials are derived from observed magnetic variation data at the 52 observatories listed in Table 1 and shown in Figure 1. From the 1-min digitized H and D (or X and Y) magnetogram traces on 26-28 March 1976, the corresponding values on 25 March 1976 (a quiet day) are subtracted in an attempt to remove Sq effects. For intervals when data gaps or unusable data occur, the problem station or stations are excluded from the magnetic potential derivation. The computerized procedure used to obtain the potentials, as outlined by Kroehl and Richmond [1979], is reproduced in the Appendix. This procedure differs from one used by Kamide et al. [1976] in a report presenting magnetic potential maps for 8-9 November 1969.

Because ring current effects are strong throughout most of the storm period, it is useful to remove these effects in order to reveal other features of the potential patterns more clearly. This is done as described in the Appendix. In this report we present maps of the total potential V and the potential with symmetric ring current effects removed V'.

III. Derived Parameters

Several parameters have been extracted from the potential plots, and the time variations of some of these are shown in Figure 2. "Dst" is derived as explained in the Appendix. "Potential maximum (with Dst)" is the maximum value of V in the northern geomagnetic hemisphere, while "potential maximum (without Dst)" is the maximum value of V'. "AU(13)" and "AL(13)" are defined in a similar manner to the standard AE indices, except that we have used our own digitizations of auroral-zone magnetic data in their derivations.

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3 Lockheed Missiles and Space Co., Aurora, Colorado
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TABLE 1

STATION	GEOMAG LAT	GEOMAG EAST LONG
Thule	89.0	3.6
Alert	85.9	167.3
Resolute Bay	83.1	290.2
Godhavn	79.8	33.3
Mould Bay	79.3	256.4
Cambridge	77.4	290.0
New Alesund	76.4	131.0
Baker Lake	73.8	316.0
Heiss Island	71.3	156.3
Narssarssuaq	71.1	37.4
Leirvogur	70.1	71.5
Yellowknife	69.1	294.3
Fort Churchill	68.7	323.5
Point Barrow	68.6	241.6
Great Whale River	66.6	348.1
Cape Chelyuskin	66.3	176.7
Abisko	65.9	115.3
College	64.7	257.0
Dixon Island	63.0	161.8
Meanook	61.9	301.6
Tixie Bay	60.5	191.7
St. Johns	58.4	21.8
Ottawa	56.8	352.1
Newport	55.2	300.8
Wingst	54.3	95.3
Dourbes	51.9	88.2
Minsk	51.4	111.0
Fredericksburg	49.5	350.4
Boulder	49.0	317.0
Furstenfeldbruck	48.7	93.8
Sverdlovsk	48.5	141.1
Tihany	46.2	99.8
Logrono	46.0	77.7
Petropavlosk	44.8	219.3
Toledo	43.8	75.1
Odessa	43.6	111.5
Almeria	40.5	75.8
Tucson	40.5	312.7
Karanganda	40.3	148.7
Tbilisi	36.6	122.5
Memambetsu	34.1	208.8
Vladivostock	32.9	198.5
Tashkent	32.3	144.4
San Juan	29.6	3.6
Kakioka	26.1	206.4
Honolulu	21.2	267.0
M'Bour	21.2	55.5
Kanoya	20.6	198.5
Fuquene	16.9	355.6
Bangui	4.7	89.0
Guam	4.0	213.4
Davao	-4.0	195.3

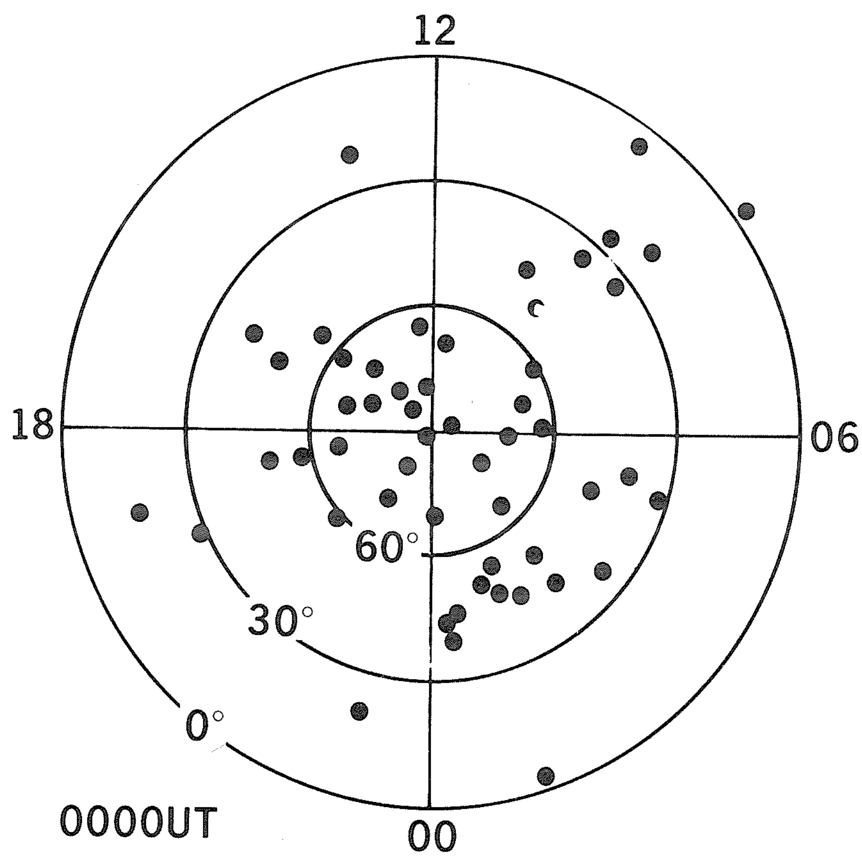


Fig. 1. Station locations in geomagnetic latitude and geomagnetic local time (MLT) at 0000 UT. The geomagnetic prime meridian (0° geomagnetic longitude) is at 1920 MLT.

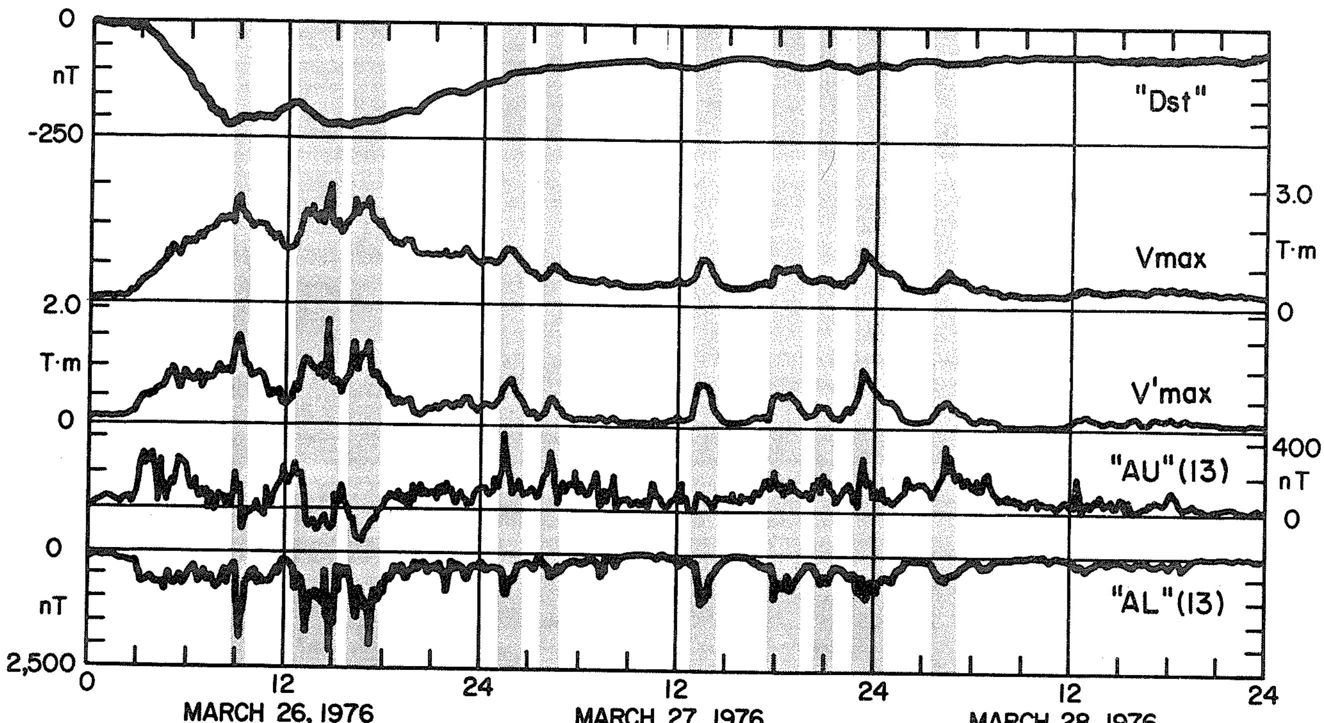


Fig. 2. The geomagnetic history of 26-28 March 1976 is shown by indices of magnetic activity, i.e. "Dst", maximum values of V and V', "AU" and "AL". "Dst", "AU", and "AL" are comparable to the standard magnetic indices though they were derived from our techniques and data. Note that the 600-nT range of "AU" is plotted in the same vertical displacement as the 2,300-nT range of "AL".

IV. Acknowledgments

This work was done when two of us (A.D. Richmond and Y. Kamide) were guest workers at NGSDC/ World Data Center A for Solar-Terrestrial Physics, and another (M.A. Henning) was a work-study employee. A.D. Richmond was supported in part by a Resident Research Associateship from the National Research Council. We wish to express our gratitude to P.R. Yotka for preparation of the data and to J.H. Allen and A.H. Shapley for their financial support and encouragement.

V. References

COFFEY, H. E. and J. A. MCKINNON, eds. 1977 Collected Data Reports for STIP Interval II, 20 March - 5 May 1976, World Data Center-A for Solar-Terrestrial Physics, Report UAG-61.

KAMIDE, Y., H. W. KROEHL, M. KANAMITSU, J. H. ALLEN, and S.-I. AKASOFU 1976 Equivalent Ionospheric Current Representations by a New Method, Illustrated for 8-9 November 1969 Magnetic Disturbances, World Data Center-A for Solar-Terrestrial Physics, Report UAG-55.

KROEHL, H. W., and A. D. RICHMOND 1979 Magnetic Substorm Characteristics Described by Magnetic Potential Maps for 26-28 March 1976, Space Sci. Rev., in press.

VI. Appendix

The magnetic variation potential V at any given time is expressed as a spherical harmonic series as a function of geomagnetic colatitude θ and east longitude ϕ :

$$V(\theta,\phi) = \sum_{m=o}^{12} \sum_{n} (a_n^m \cos m\phi + b_n^m \sin m\phi) P_n^m(\cos\theta) \tag{1}$$

The values of n to be included in this series are determined from the following considerations. First, the spacing of our stations permits resolution of features down to scales of a few hundred kilometers at some high-latitude locations. It is found that including values of n up to 34 gives the desired resolution in the potential. Because this degree of spatial resolution is required only at colatitudes less than 30 degrees, and because the associated Lengendre polynomials P_n^m for m>12 and n<35 are insignificant at these colatitudes, it is unnecessary to include in the series values of m greater than 12. Second, since our data are only from the northern hemisphere and since an infinite series including only terms with (n−m) odd would form a complete set of orthonormal functions over one hemisphere, most of the terms for which (n−m) is even are omitted from our series. The exception is when n=m>0, which terms are included in our series in order to allow magnetic potential contours to intersect the equator in our finite series representation. Because those coefficients b_n^m with m=0 are indeterminate, we have in total 377 coefficients a_n^m and b_n^m to be determined in our series.

Two fundamental criteria guided our selection of a principle from which to determine the 377 coefficients. First, the negative gradient of the potential should match up reasonably well to the observed magnetic variation vectors at each station. An exact fit could be required, but in practice is not necessary nor perhaps even desirable. Some data error should be allowed for; and, probably even more importantly, allowance should be made for the fact that an observation at a given station may be unduly influenced by a localized feature in the ionospheric currents and therefore may not accurately represent mean conditions over a spatial scale characteristic of inter-station distances, an implicit assumption of any global mapping procedure. Our second fundamental criterion is that the potential vary smoothly between stations.

The principle we selected to determine the coefficients is the minimization of the following function Ψ with respect to variations of the coefficients a_n^m and b_n^m:

$$\Psi(V) = \sum_j \left\{ \alpha_j \left[X_j - \frac{1}{R_E}\frac{\partial V}{\partial\theta}(\theta_j,\phi_j) \right]^2 + \beta_j \left[Y_j + \frac{1}{R_E \sin\theta} \frac{\partial V}{\partial\phi}(\theta_j,\phi_j) \right]^2 \right\}$$

$$+ \frac{\Gamma}{2\pi R_E} \int_o^{\pi/2} \sin\theta \, d\theta \int_o^{2\pi} d\phi \, \Theta(\theta) \left\{ \frac{1}{\sin\theta}\frac{\partial}{\partial\theta}\left[\frac{\sin\theta \partial V}{\partial\theta}\right] + \frac{1}{\sin^2\theta}\frac{\partial^2 V}{\partial\phi^2} \right\}^2$$

$$+ \frac{\gamma}{2\pi R_E} \int_o^{2\pi} d\phi \left[\frac{\partial^2 V(\pi/2,\phi)}{\partial\phi^2} \right]^2 \tag{2}$$

where R_E is the radius of the earth (6371 km); X_j and Y_j are the observed geomagnetic north and east variations at the jth station; α_j, β_j, Γ, and γ are prechosen weighting factors, and $\Theta(\theta)$ is a latitudinal weighting function defined by

$$\Theta(\theta) = 1 - 12\cos^6\theta + 19.078125\cos^8\theta - 8.0625\cos^{10}\theta \tag{3}$$

The choice of weighting factors determines the relative importance of each of the constraints in (2). Because the measurement errors and spatial variability are generally much greater at high latitudes than at low latitudes, the weighting factors α_j and β_j are chosen to increase with decreasing geomagnetic latitude, being generally 0.25 above 56 degrees, 0.5 at 50 − 56 degrees, 1.0 at 45 − 50 degrees, 2.0 at 40 − 45 degrees, and 4.0 below 40 degrees. At the magnetic equator (Davao) α_j is set equal to zero in order to avoid influencing the global pattern by the localized feature of the equatorial electrojet. The term in (2) containing Γ is a weighted hemispherical integral of the horizontal Laplacian of V, which represents a measure of roughness of the potential. The weighting function Θ is small at high latitudes and large at low latitudes, so that this constraint for V to be smooth operates more strongly at low latitudes, where spatial structure is expected to be much smoother than at high latitudes. The resultant potential patterns are found to be fairly insensitive to the choice of Γ; a value of 2.0 is used. Finally, initial computations with $\gamma = 0$ often yielded unrealistic wavy patterns around the equator. This can occur because certain types of structure are not suppressed by the constraint on the Laplacian (for example, functions like $\tan^m(\theta/2)\cos(m\theta)$ have a zero Laplacian in the northern hemisphere, but their importance increases with θ). This structure is suppressed by constraining potential contours to tend not to cross the equator, accomplished by use of a non-zero value (4.0) for γ.

In order to solve for V, partial derivatives of $\Psi(V)$ with respect to each of the a_n^m and b_n^m are set equal to zero, yielding 377 linear equations with 377 unknowns. An iterative procedure is used to solve for the coefficients. After V is determined, the computed magnetic variation components at each station are compared with the observed values. Typically, the root-mean-square difference for all stations is about 8% of the root-mean-square observed variation. However, at certain times the average discrepancy rises to as much as 20%. An important practical advantage of comparing the computed and observed variations at each station is that it permits us to locate easily bad data sets, for which the fit is consistently poor.

We define the ring current component of the potential as

$$V_{rc}(\theta) = Dst\ R_E \cos\theta \tag{4}$$

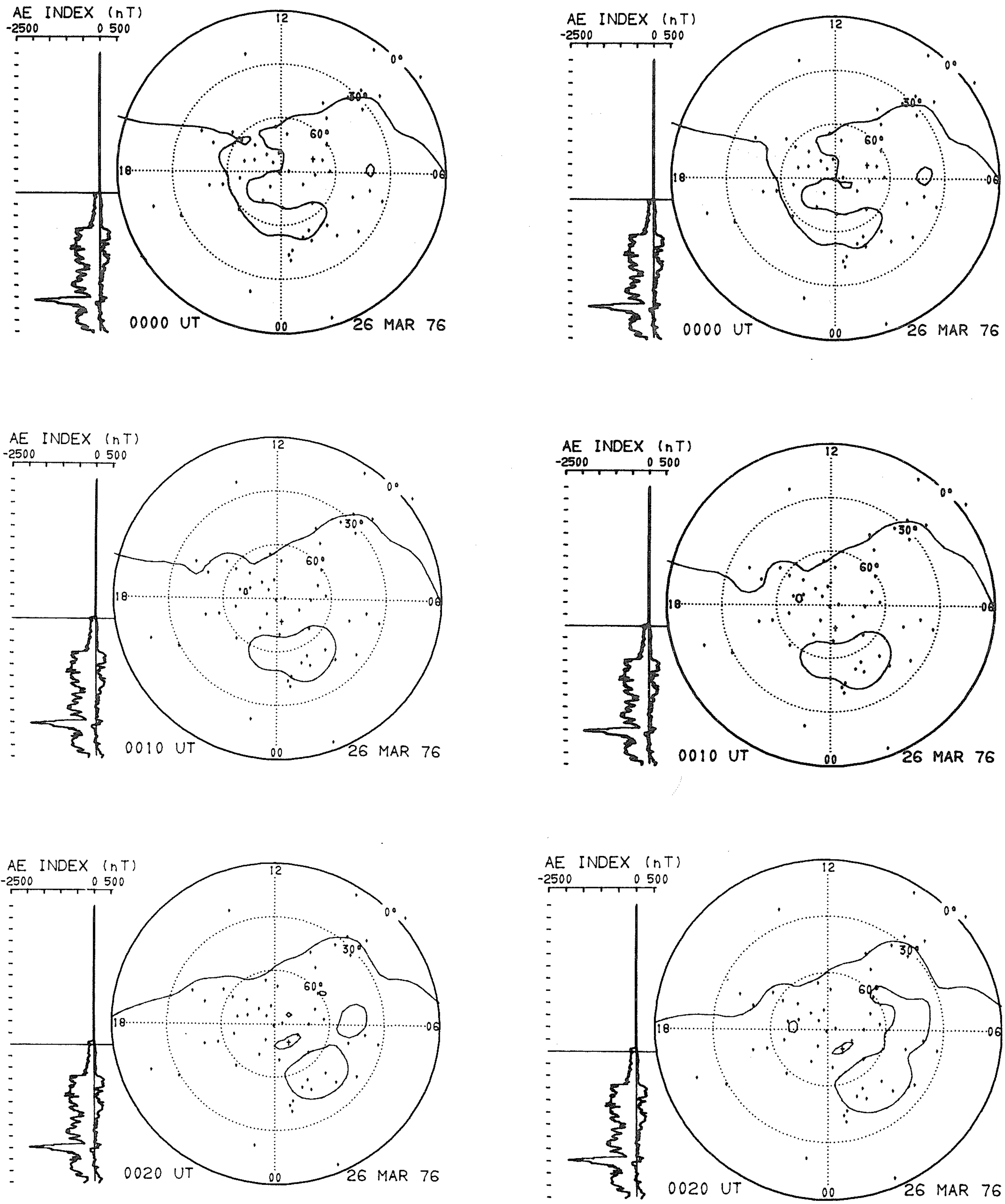
in which Dst is chosen such that V_{rc} at 60 degrees colatitude equals the average value of V around the 60 degrees colatitude circle. (Note that both V_{rc} and the average value of V around the equator are zero). The magnetic variation potential with longitudinally symmetric ring current effects removed V' is then defined simply as

$$V'(\theta,\phi) = V(\theta,\phi) - V_{rc}(\theta) \tag{5}$$

PART 2

The 10-Minute Plots for 26-28 March 1976

Two magnetic potential contour plots for the northern geomagnetic hemisphere are presented for each time. On the left is shown the total potential V and on the right is shown the potential V' which has symmetric ring current effects removed. Coordinates are geomagnetic latitude and geomagnetic local time. At 0440 UT the geomagnetic prime meridian extends straight down from the pole; for any later (earlier) time the contours are rotated clockwise (counterclockwise) by 2.5 degrees per 10 minutes. Thus geomagnetic local midnight is always at the bottom of the plot. The contour interval is 0.1 T·m corresponding to approximately 10^5 Amperes of equivalent overhead current. Station locations are indicated by small crosses. The positions of the maximum and minimum potentials are shown by a plus and minus sign, respectively. To the left are shown the AU and AL indices (whose difference gives the AE index) for a 24-hour period, with time increasing downwards. The horizontal bar across the middle of the AE plot marks the time of the contour plot to the right.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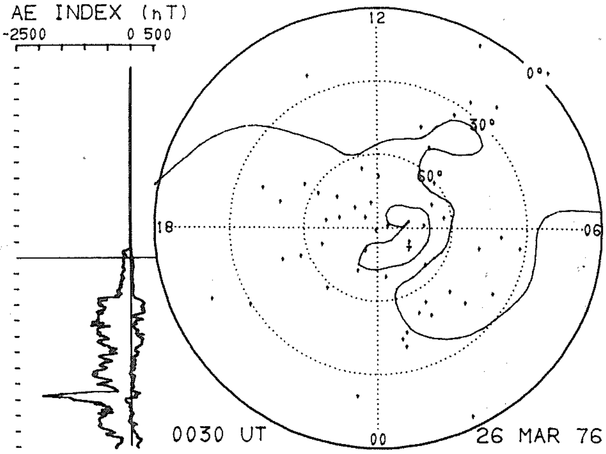
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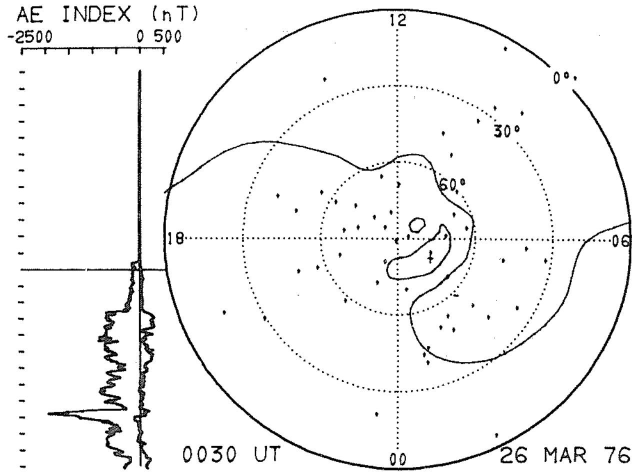
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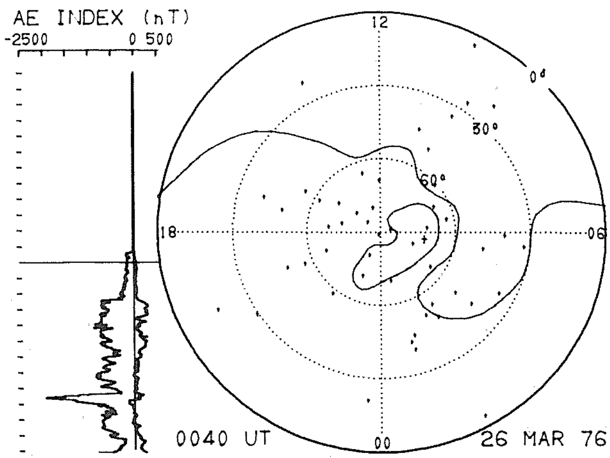
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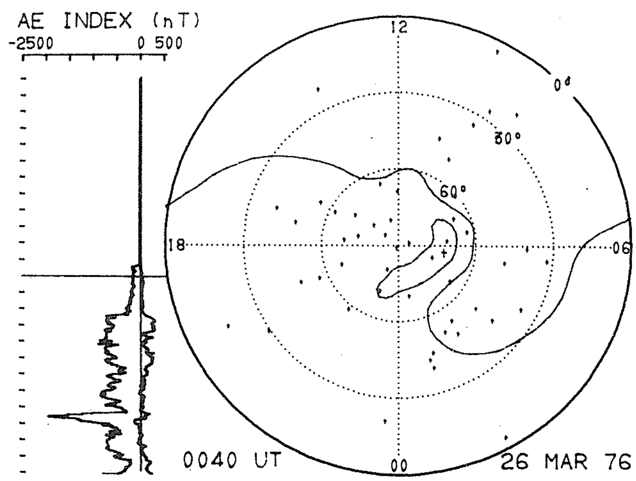
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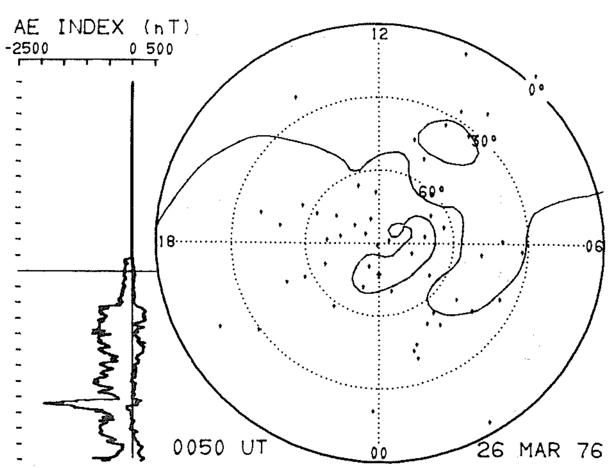
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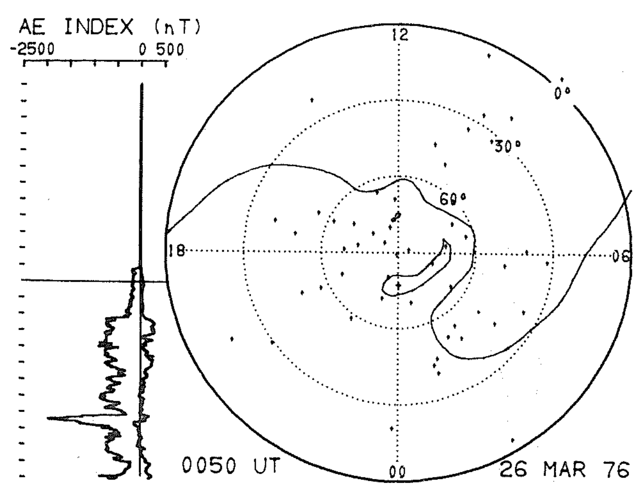
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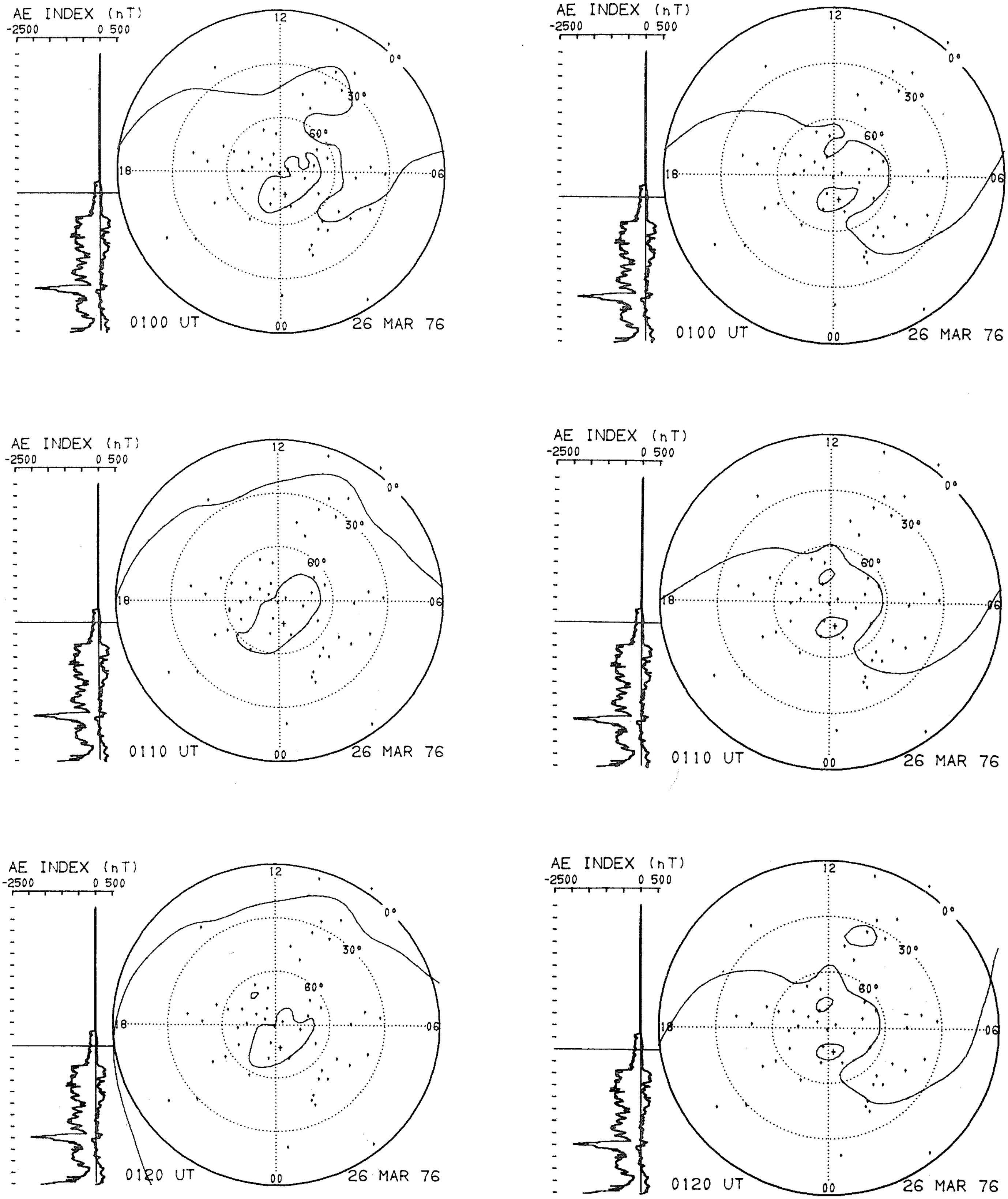
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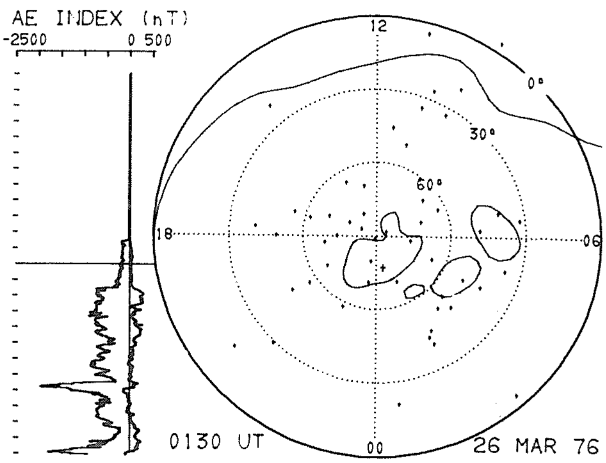
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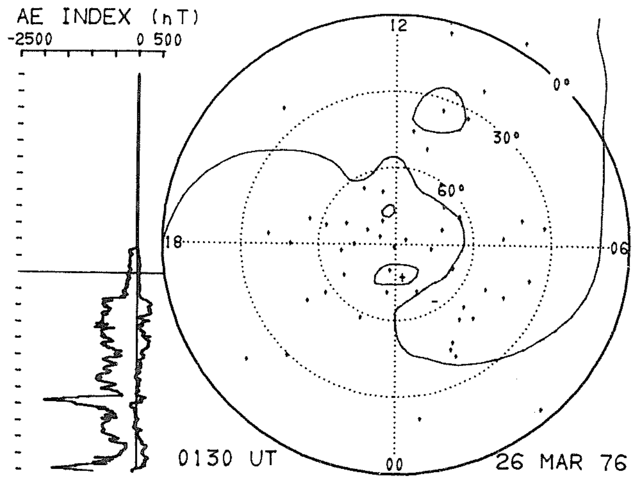
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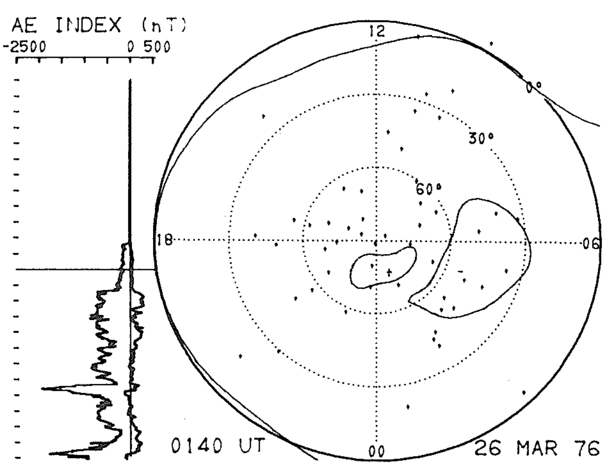
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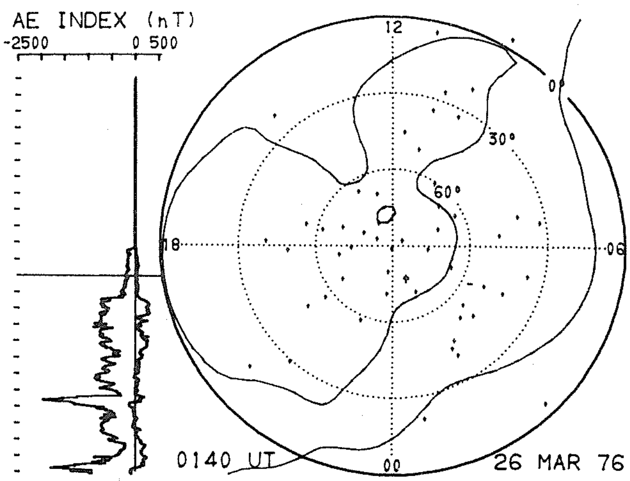
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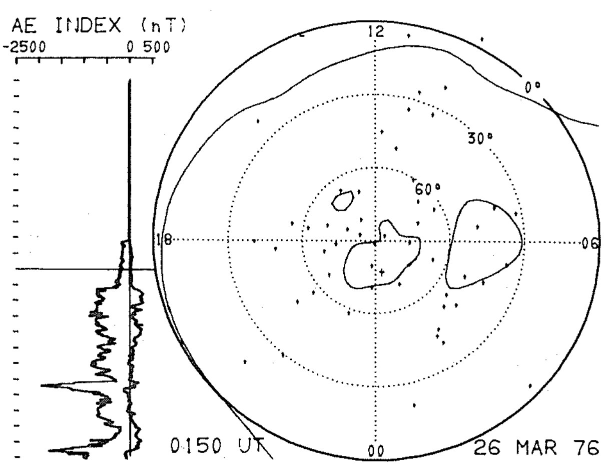
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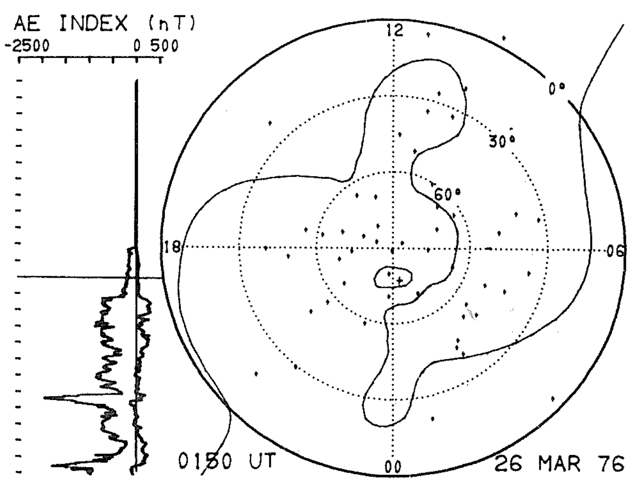
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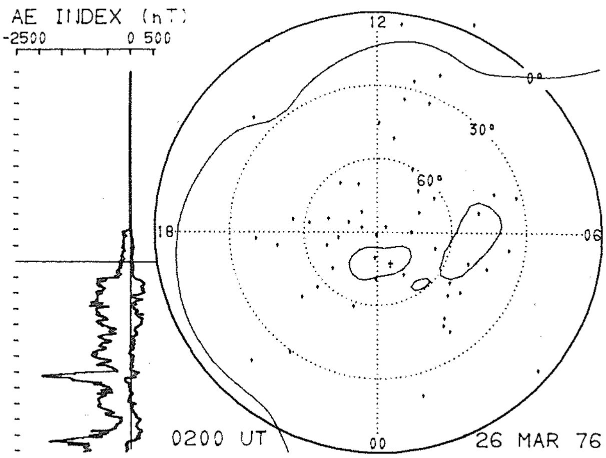
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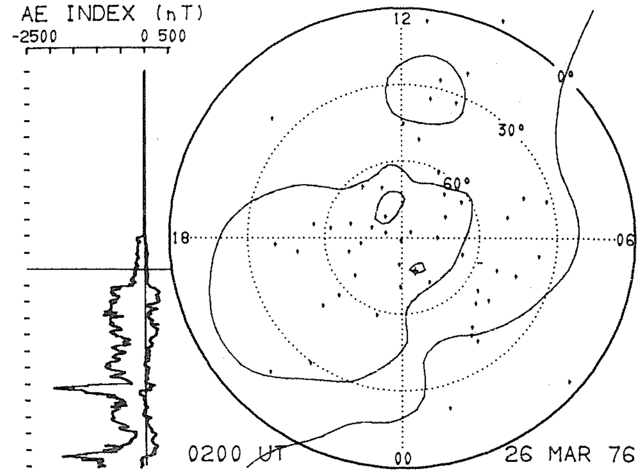
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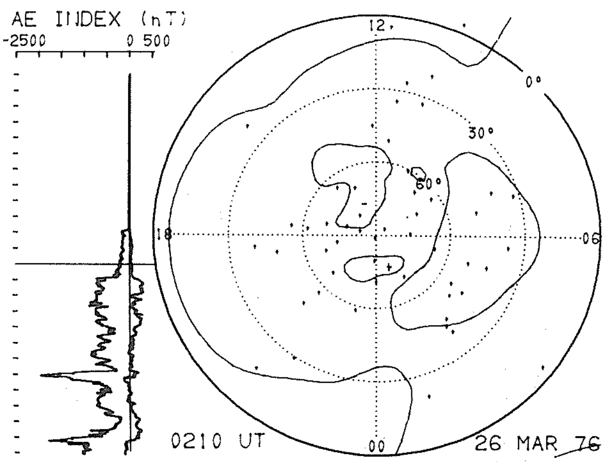
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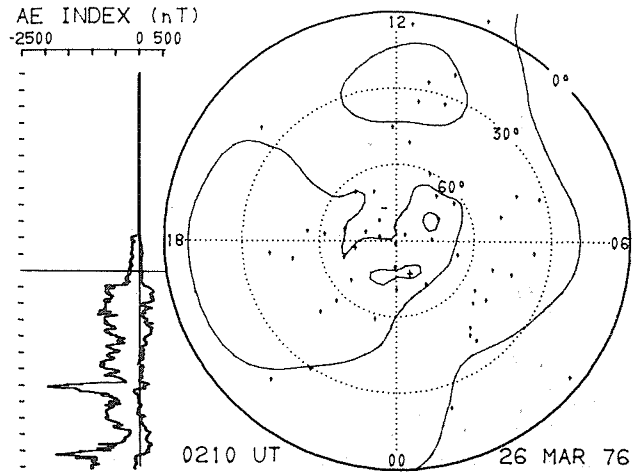
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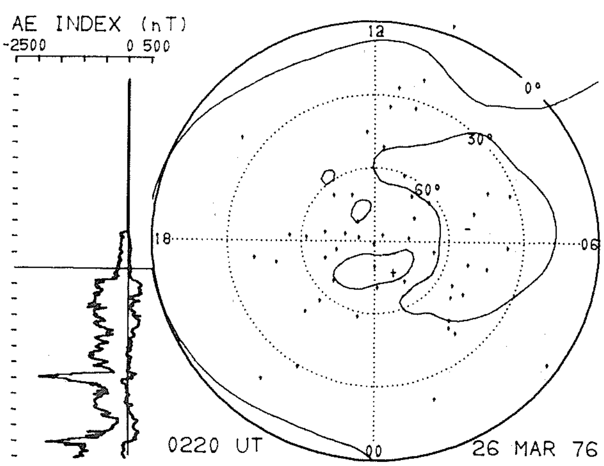
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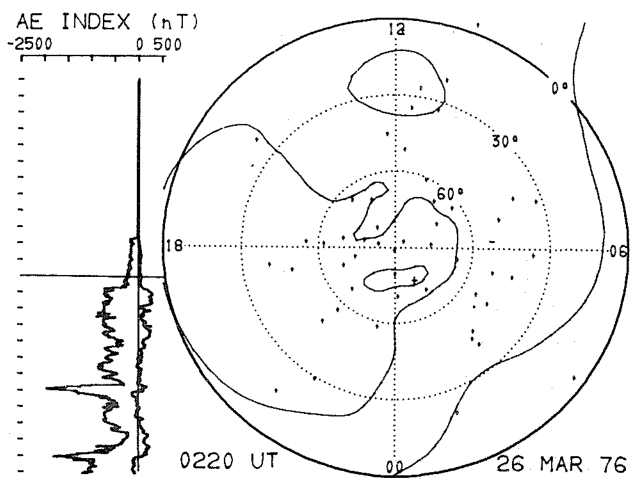
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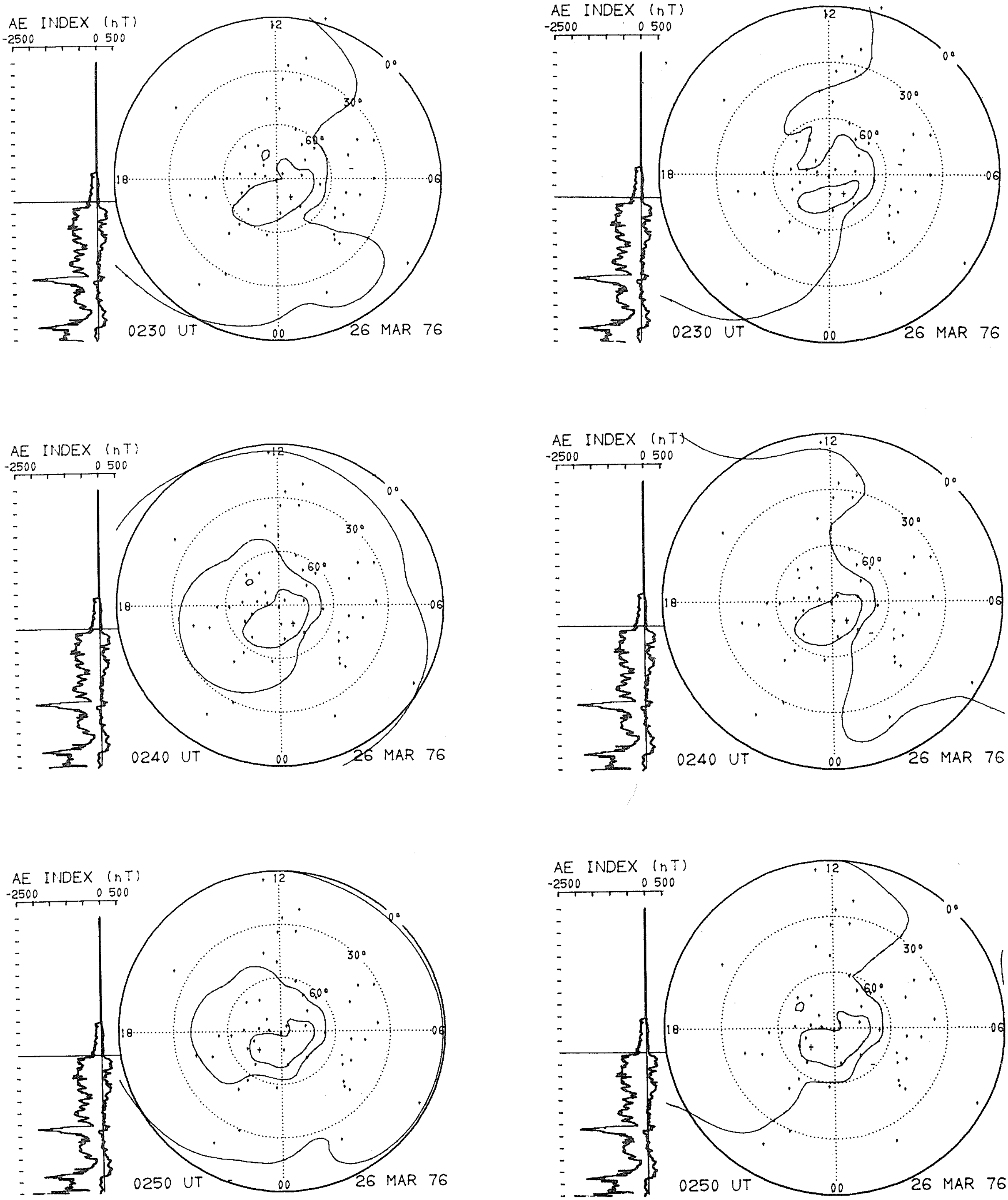
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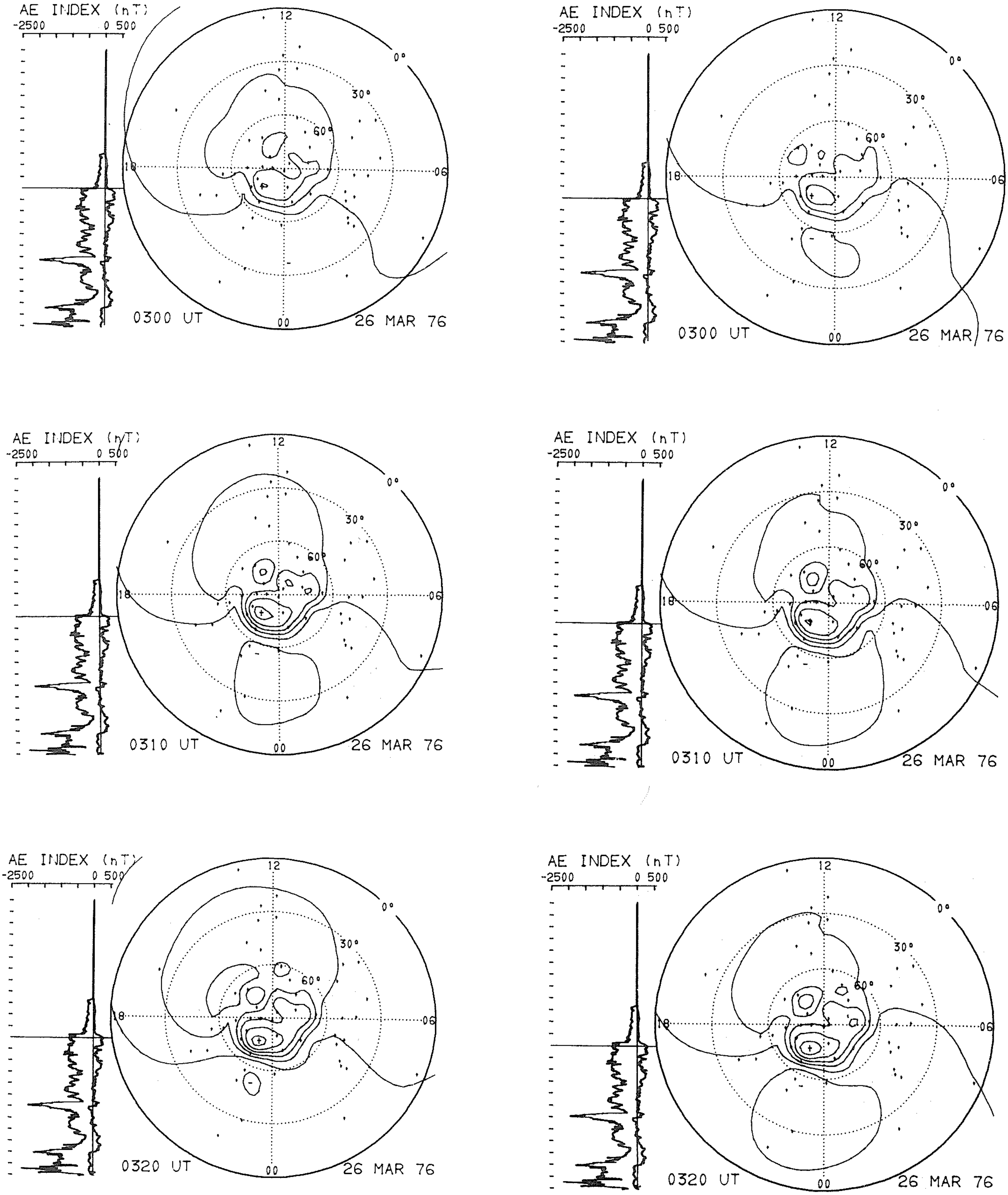
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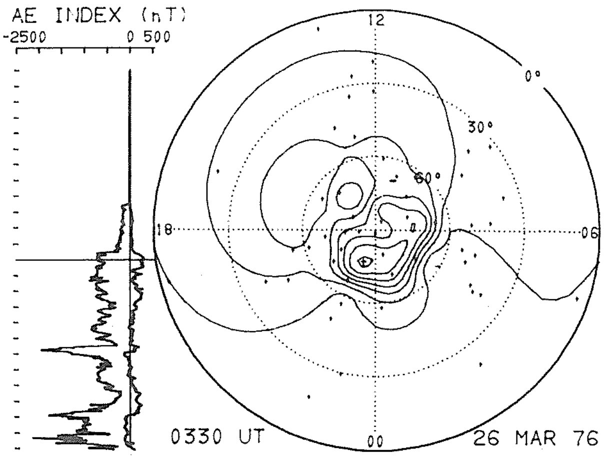
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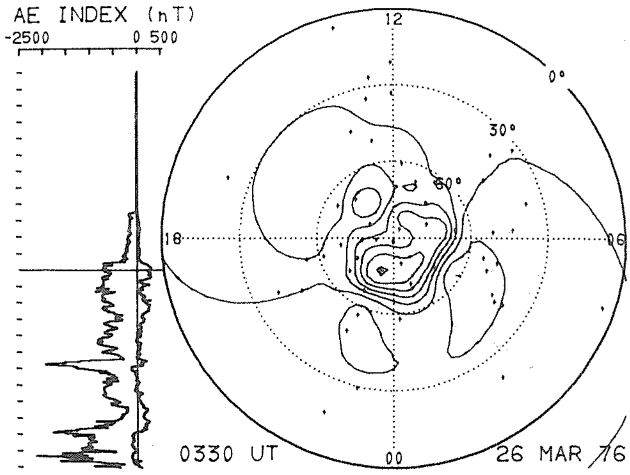
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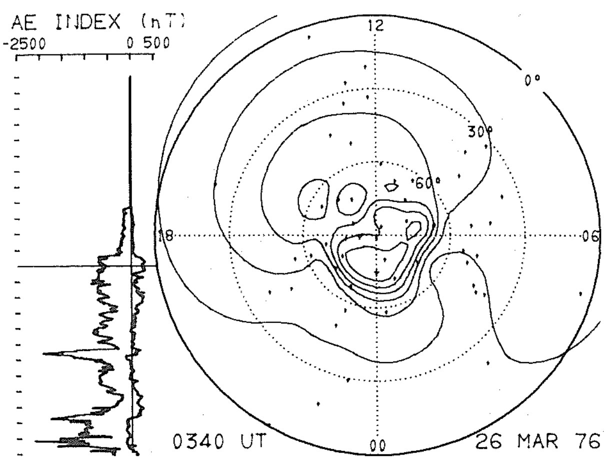
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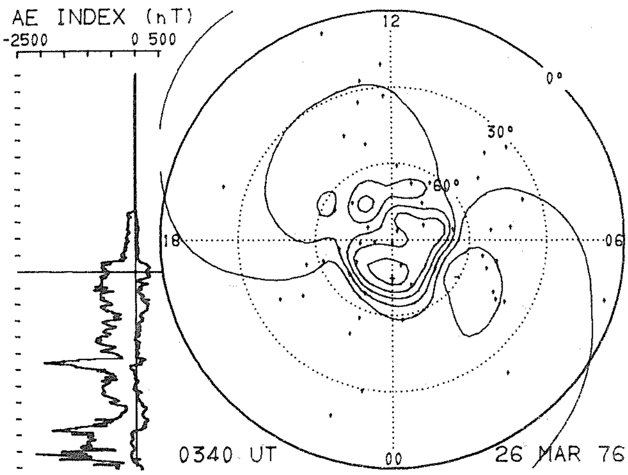
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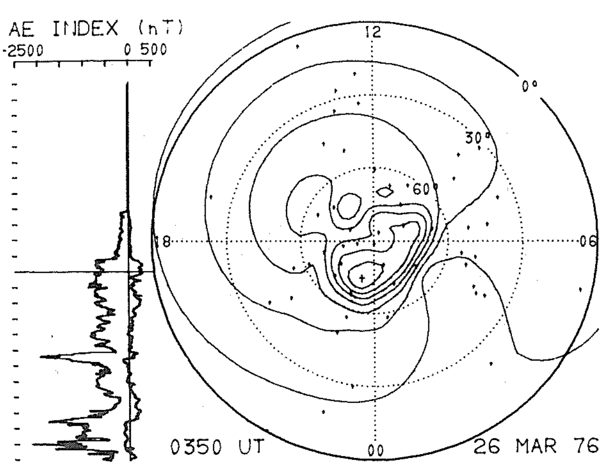
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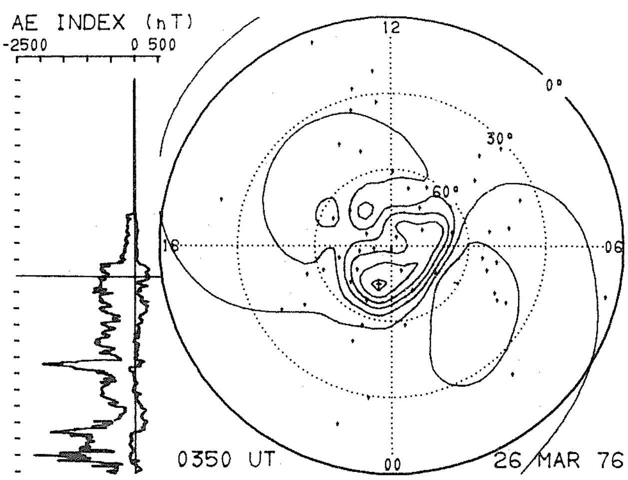
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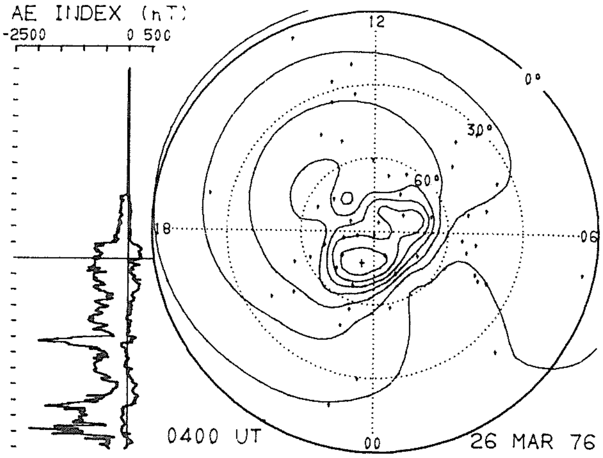
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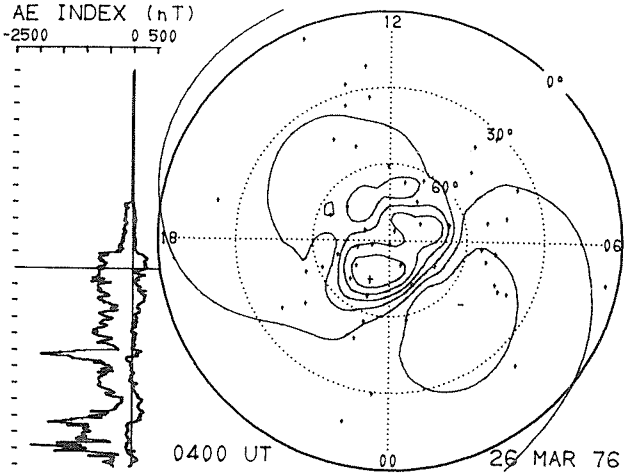
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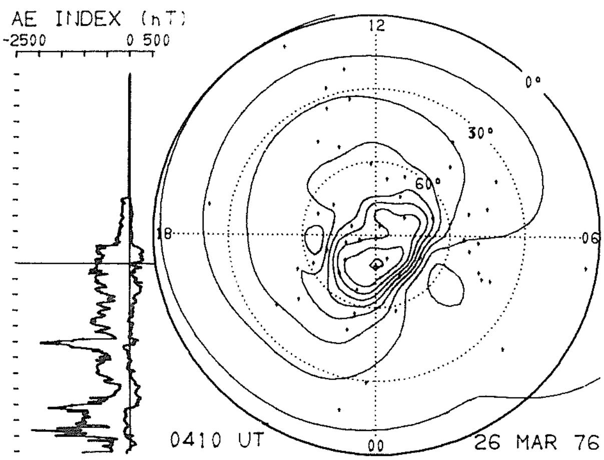
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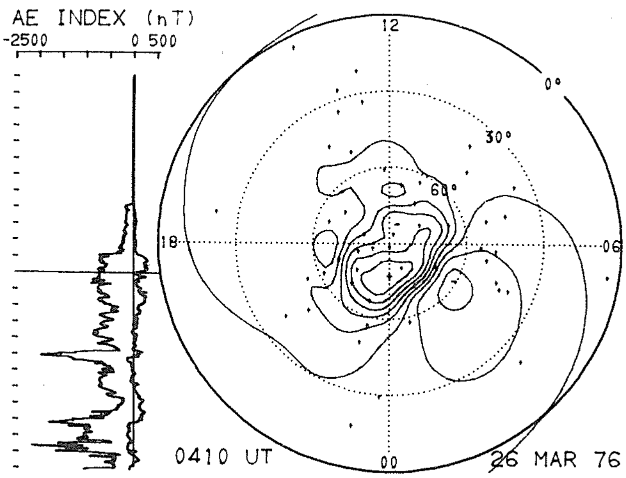
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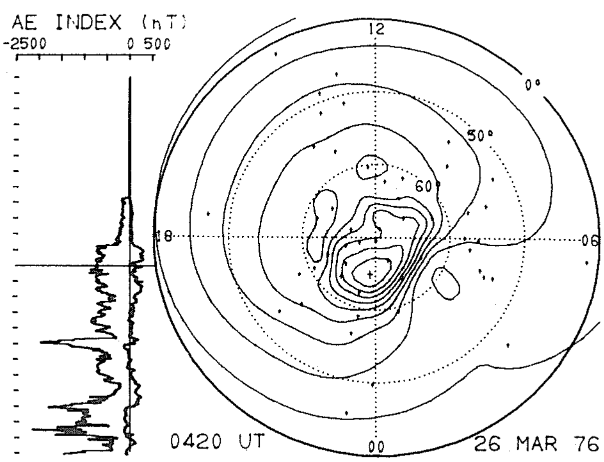
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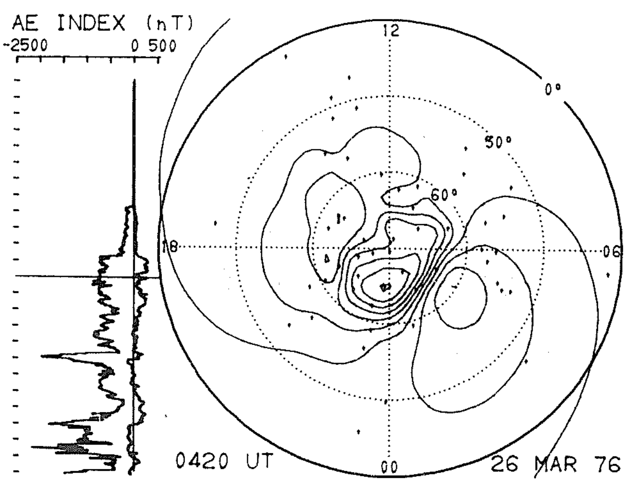
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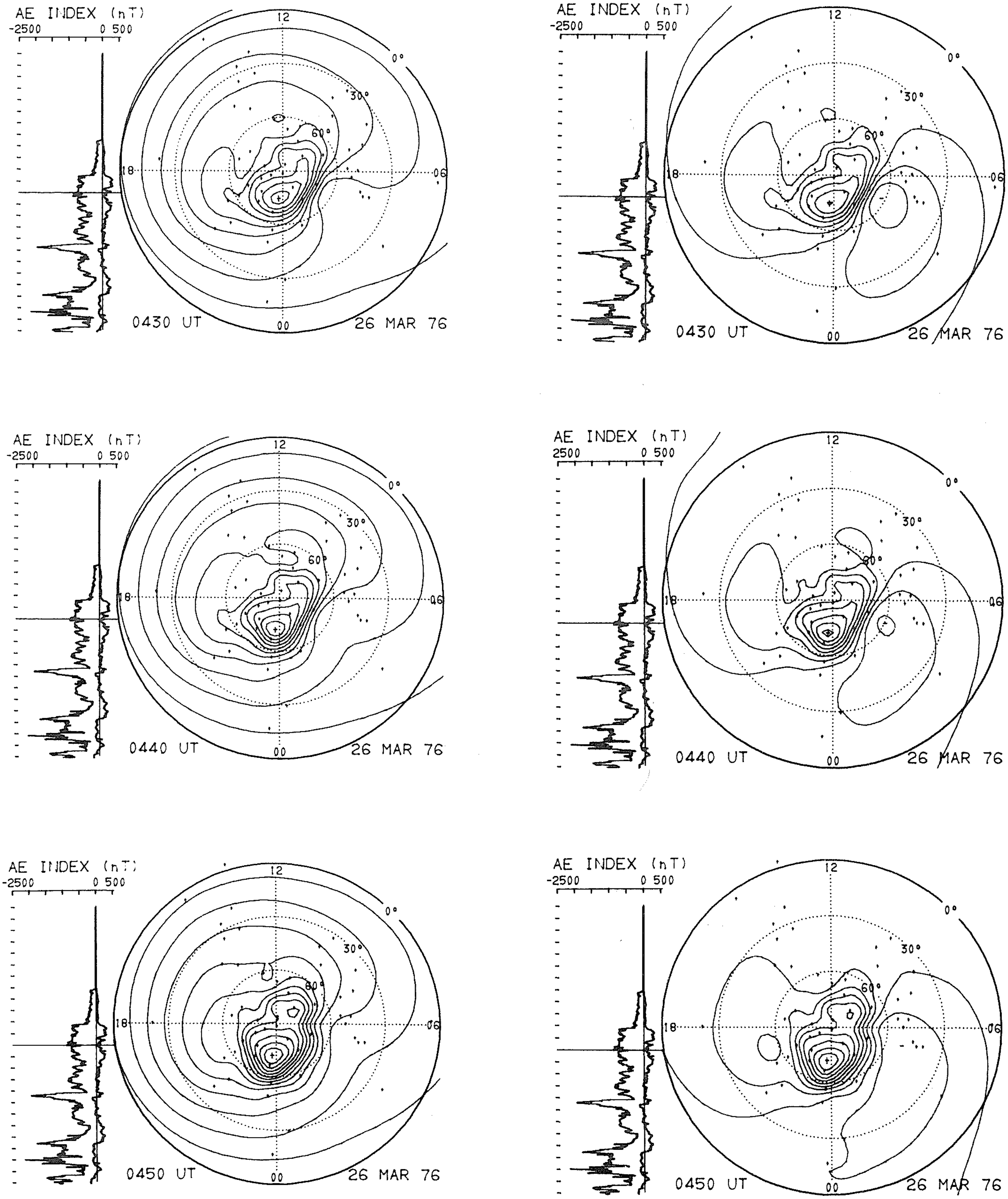
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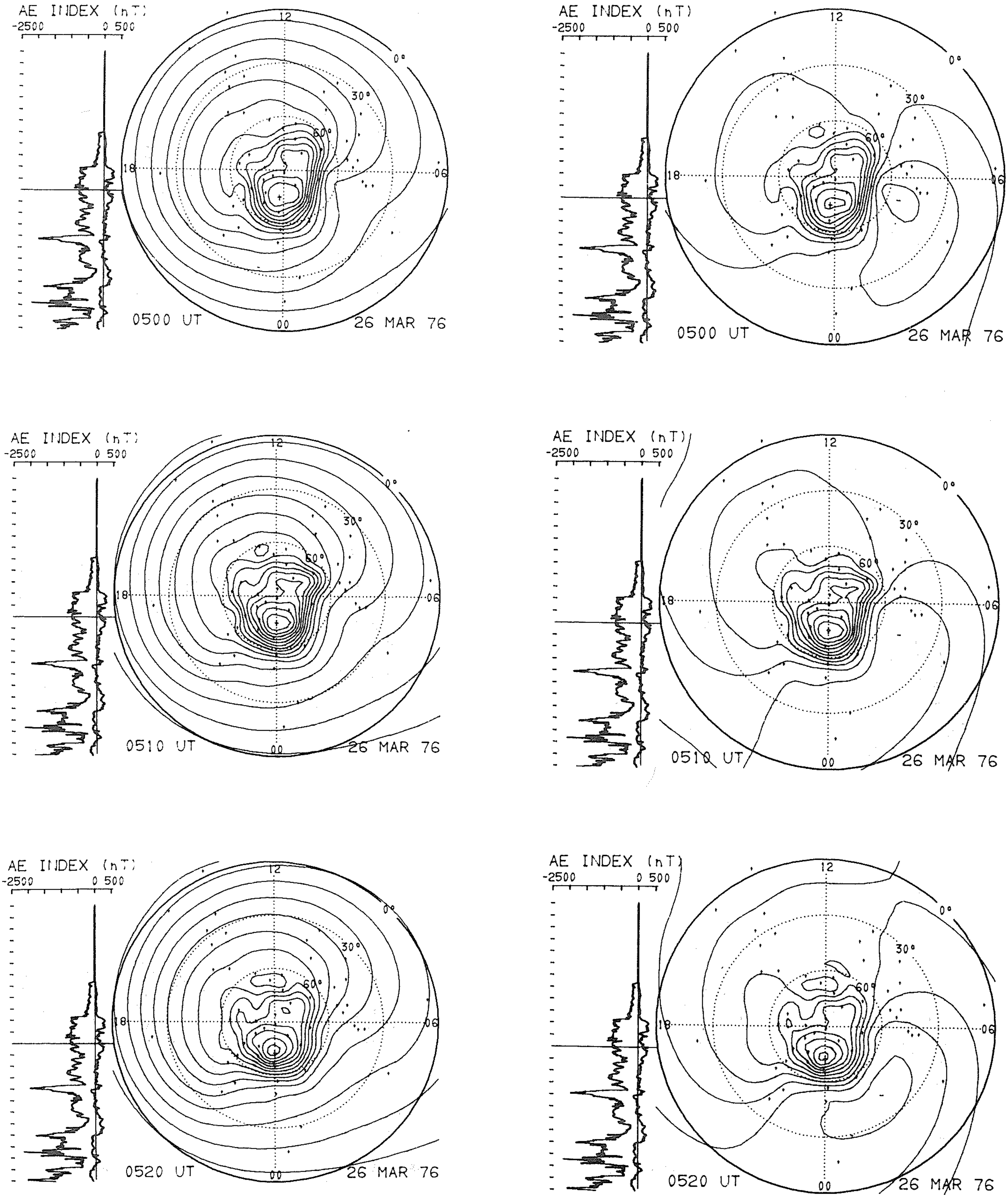
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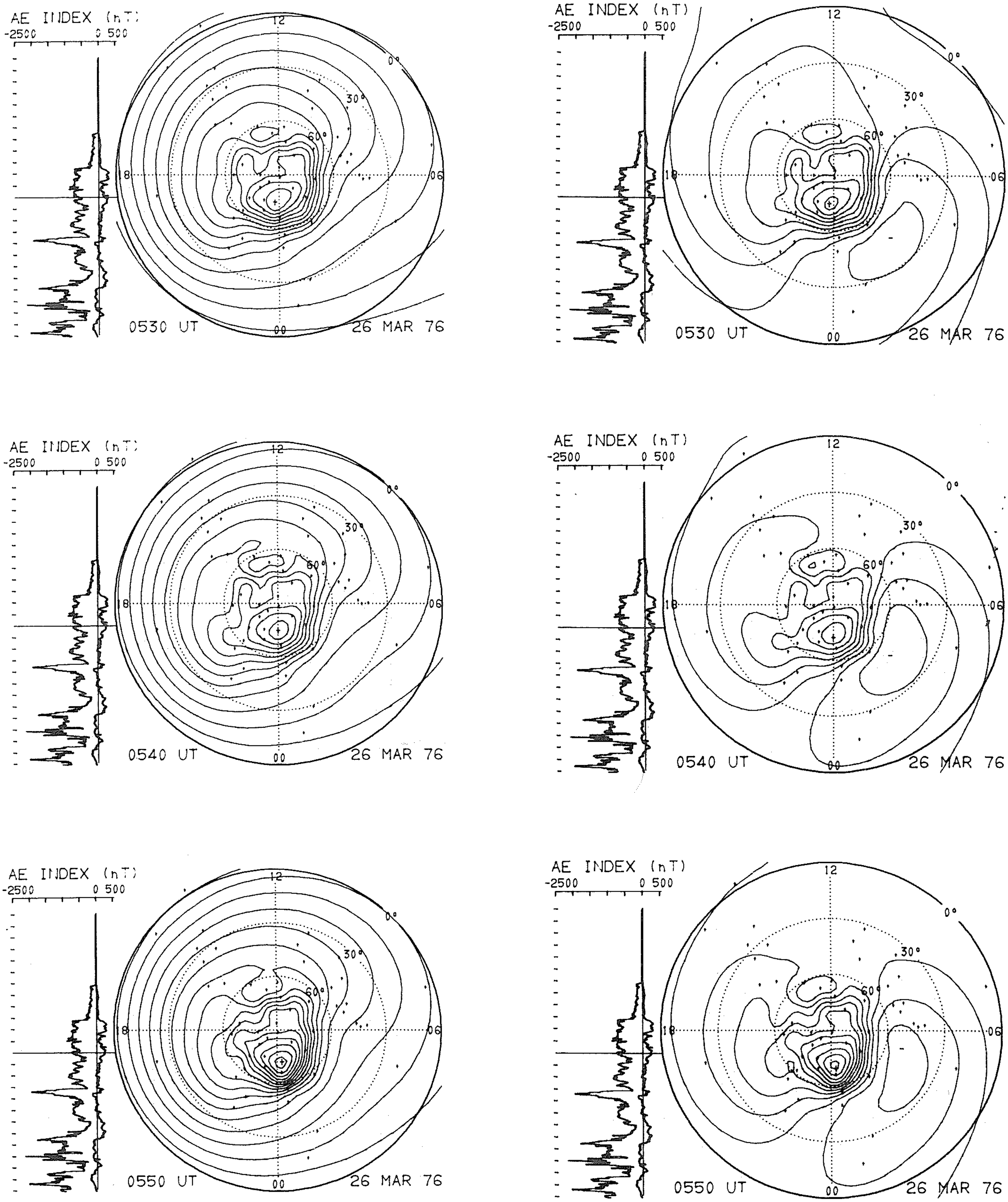
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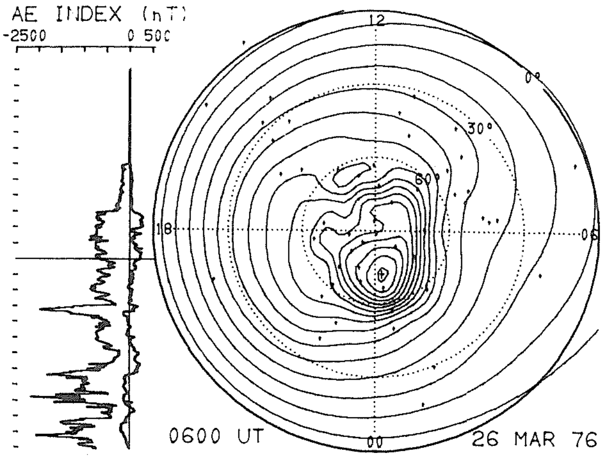
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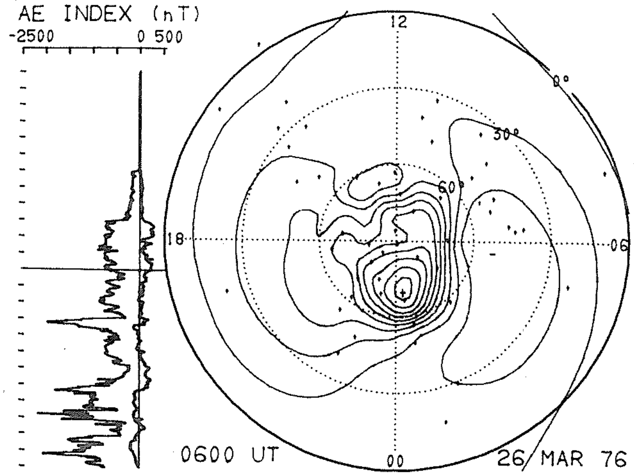
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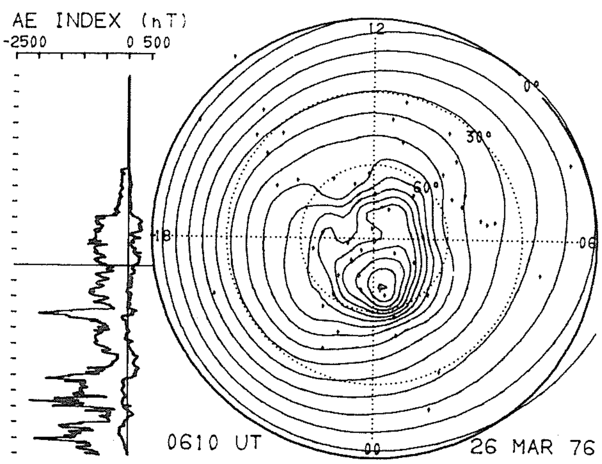
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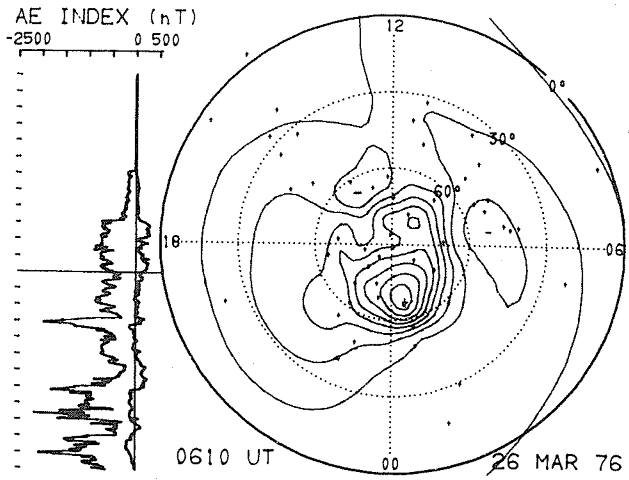
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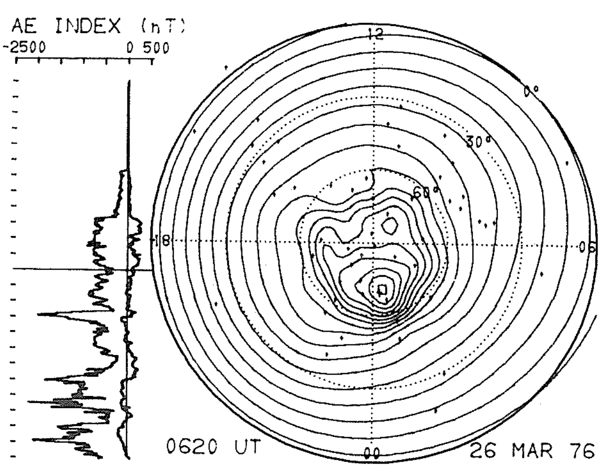
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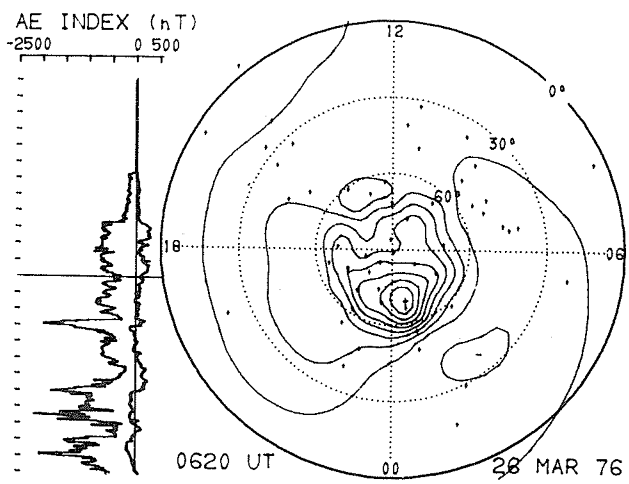
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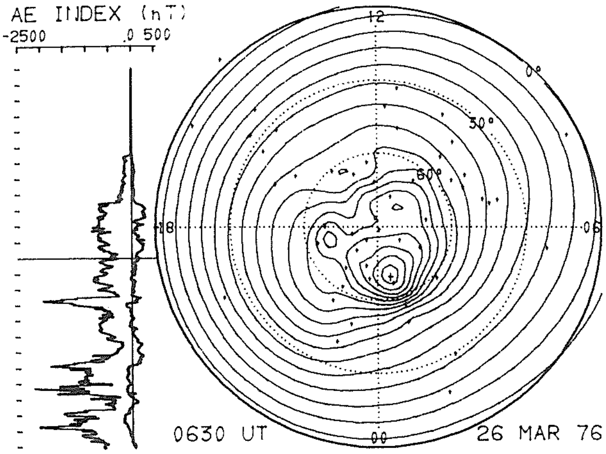
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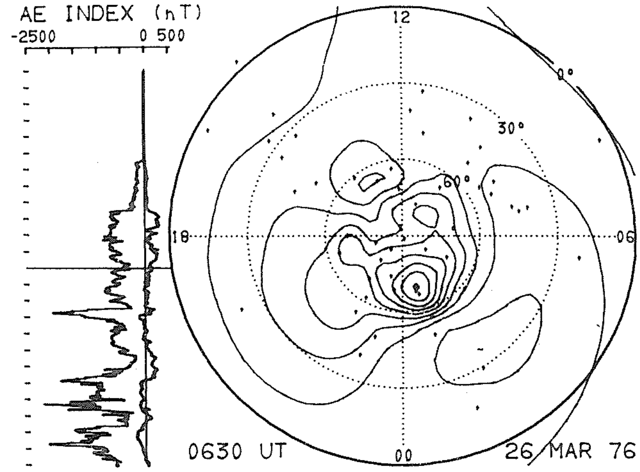
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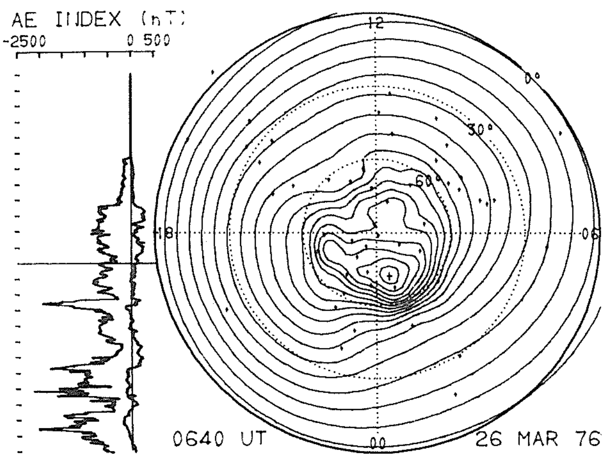
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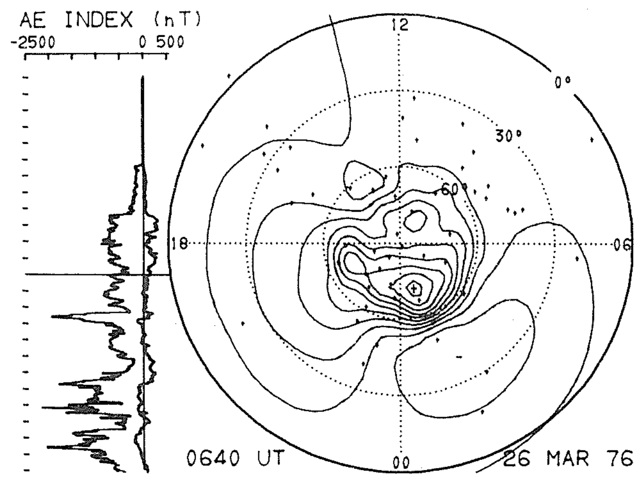
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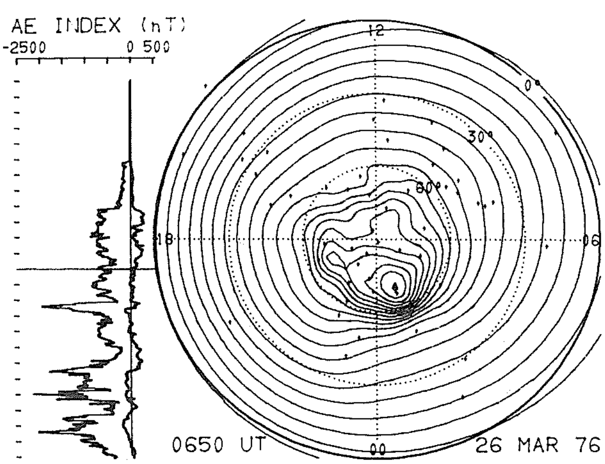
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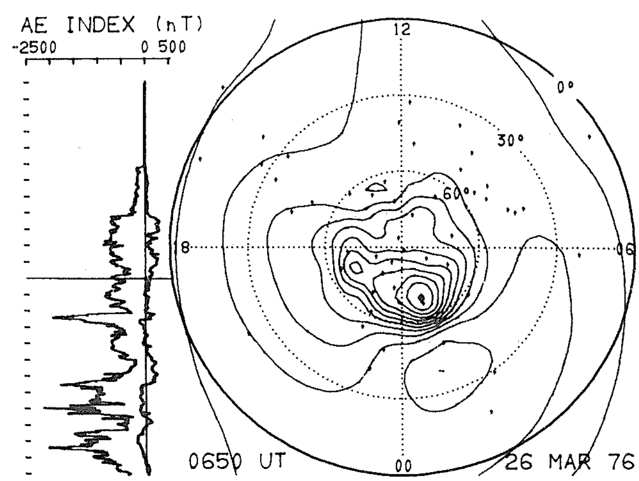
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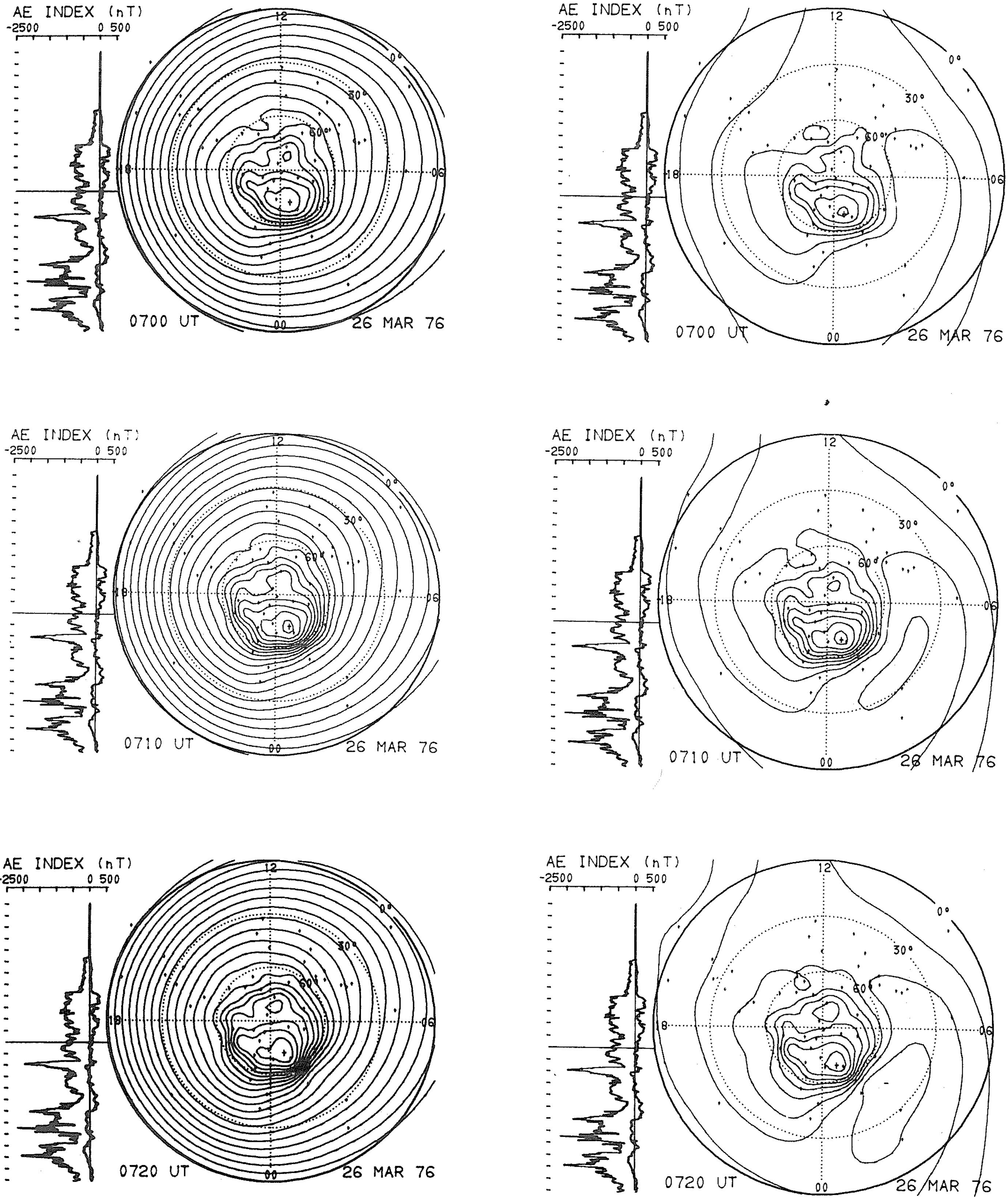
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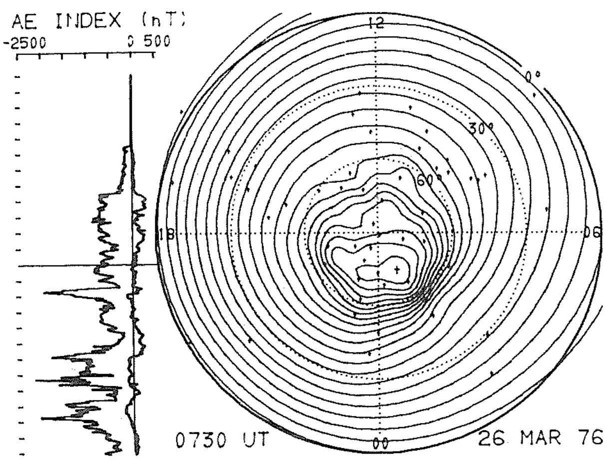
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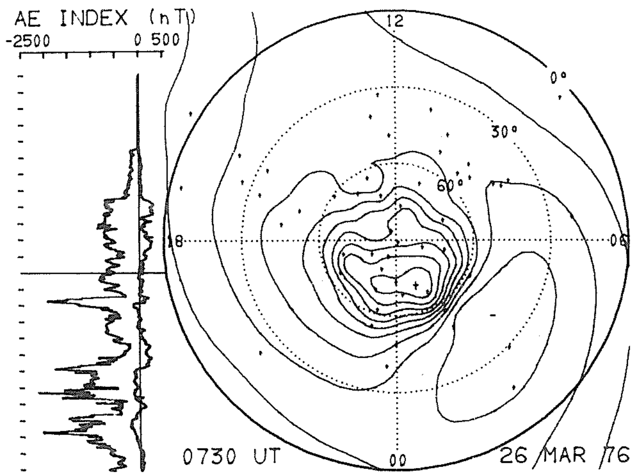
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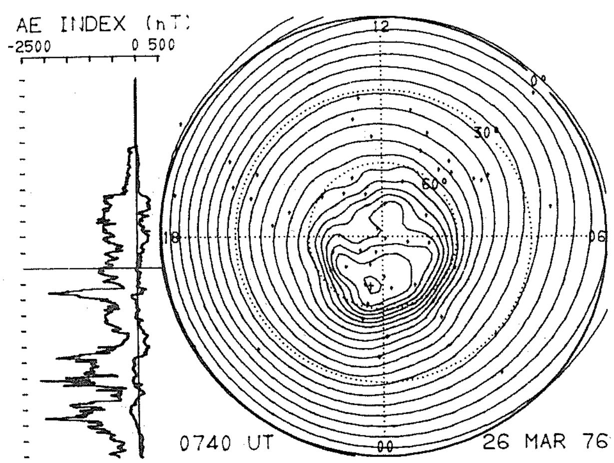
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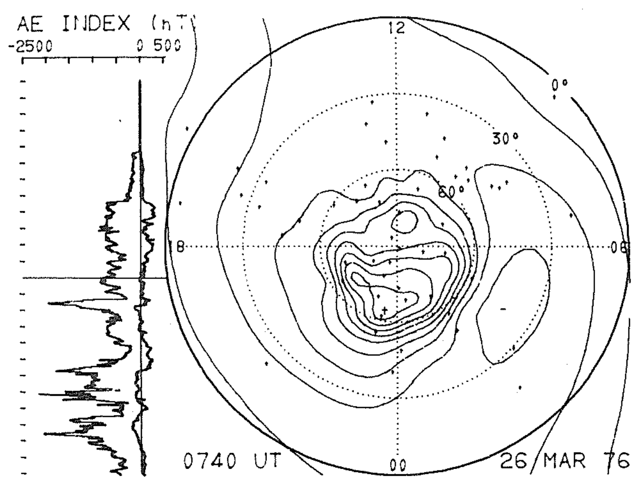
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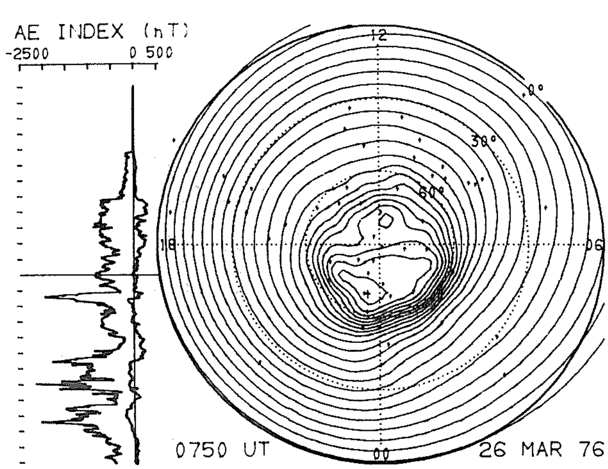
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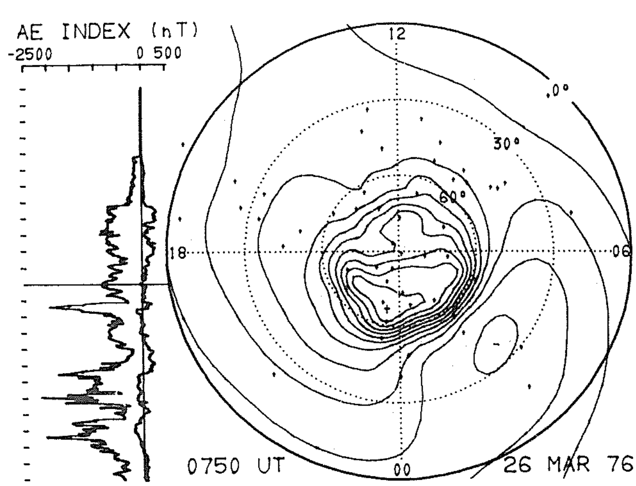
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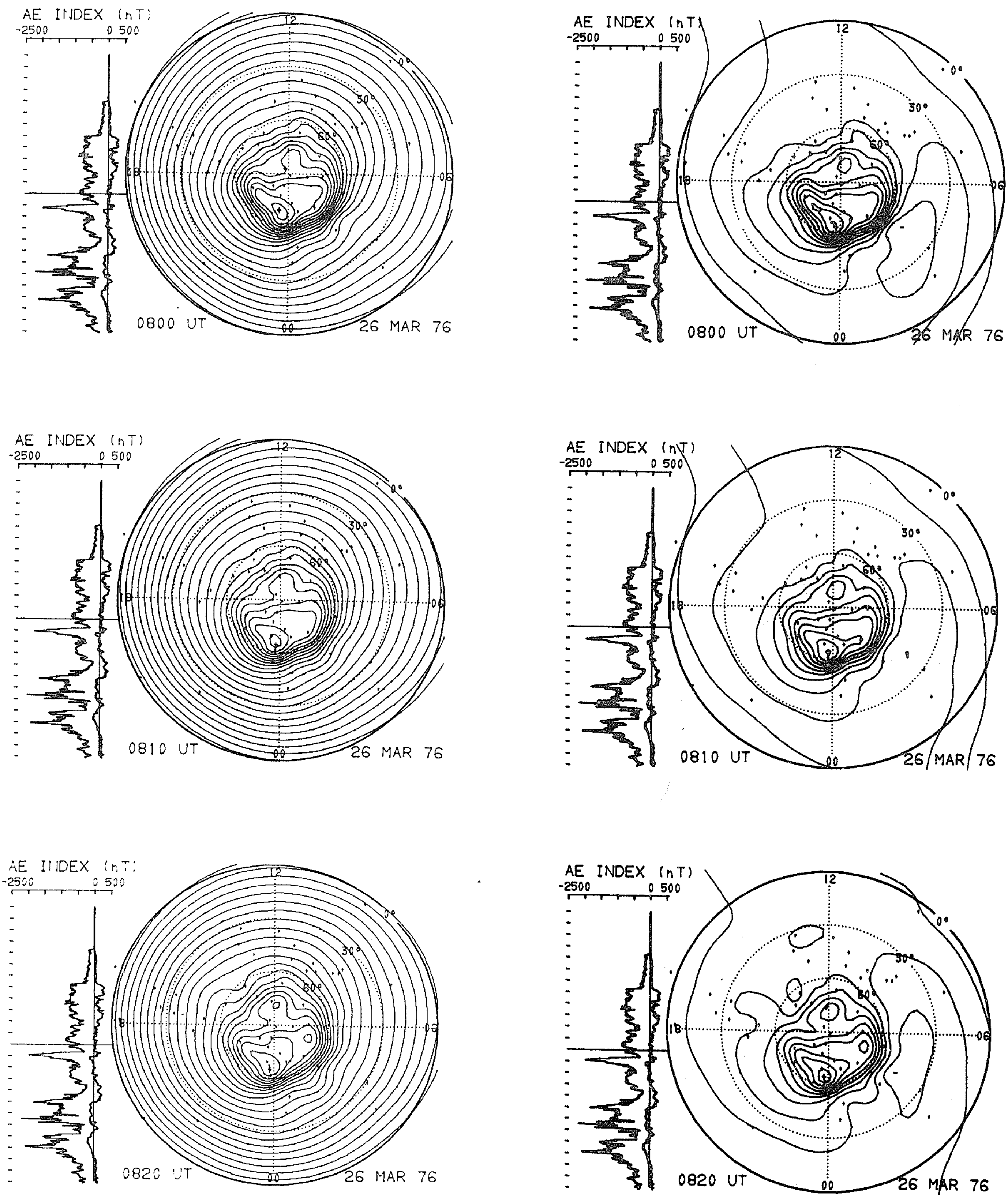
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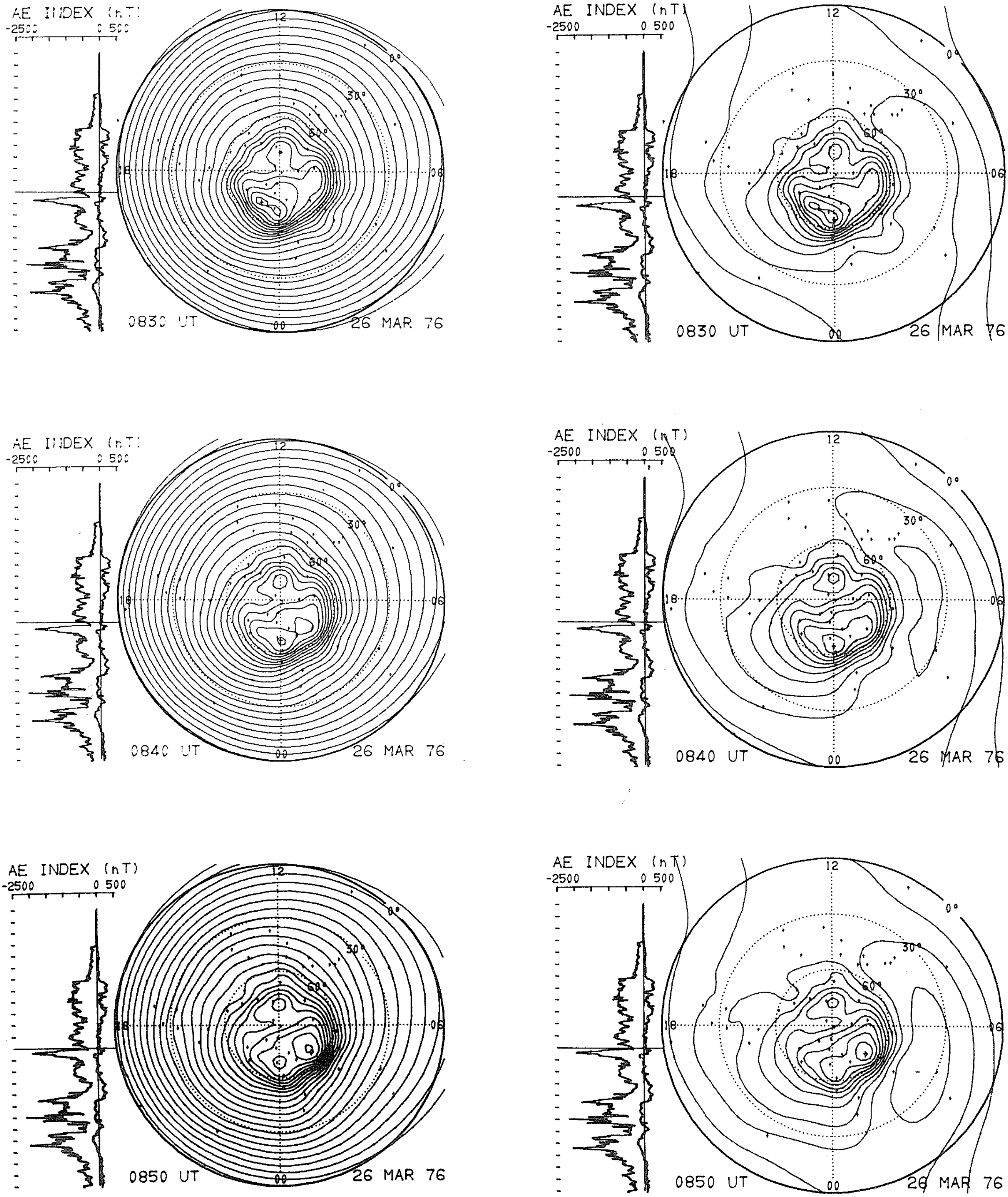
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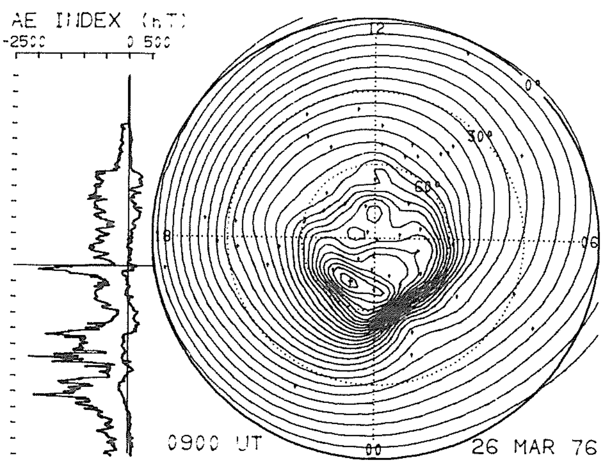
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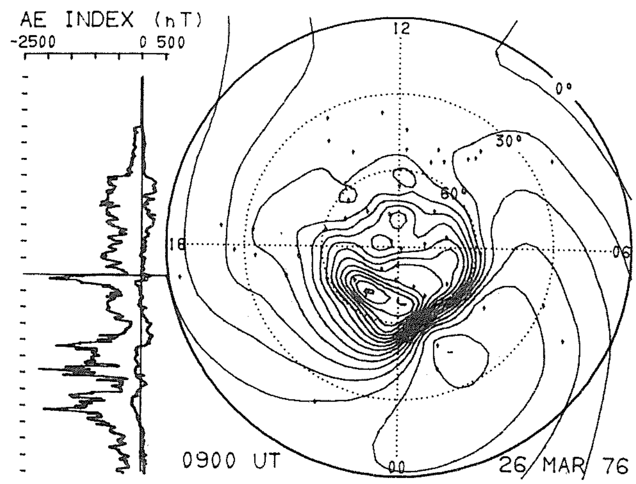
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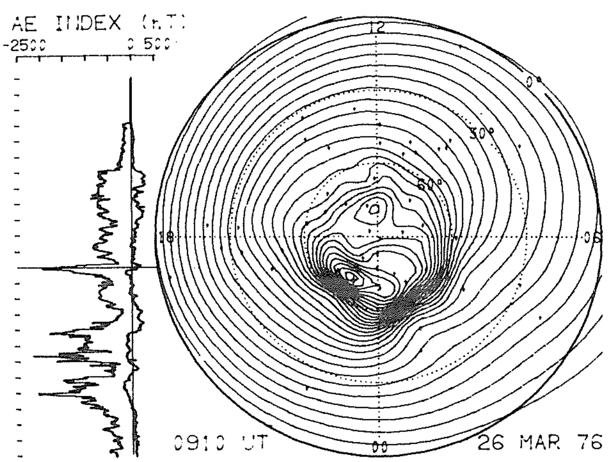
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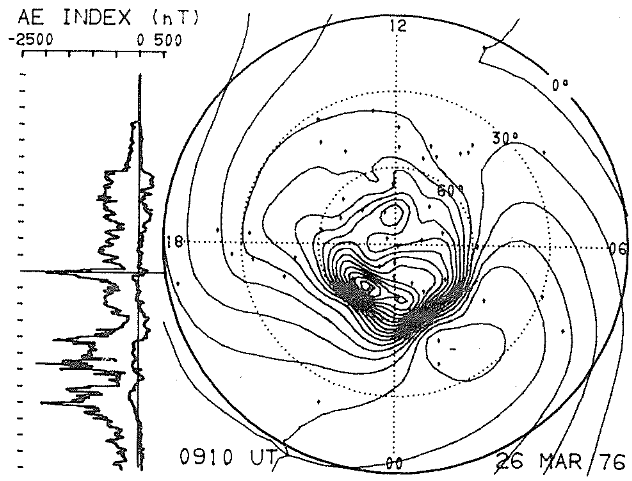
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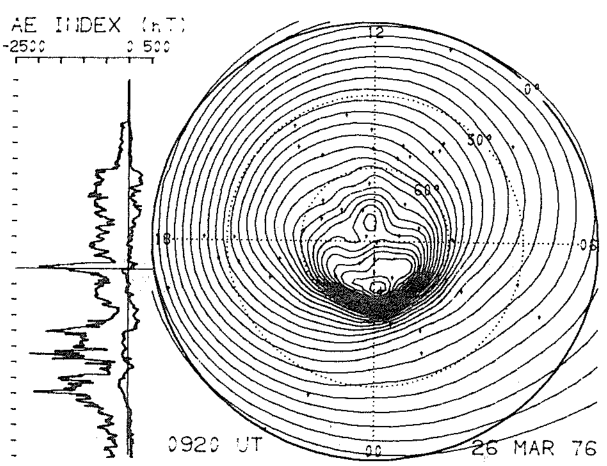
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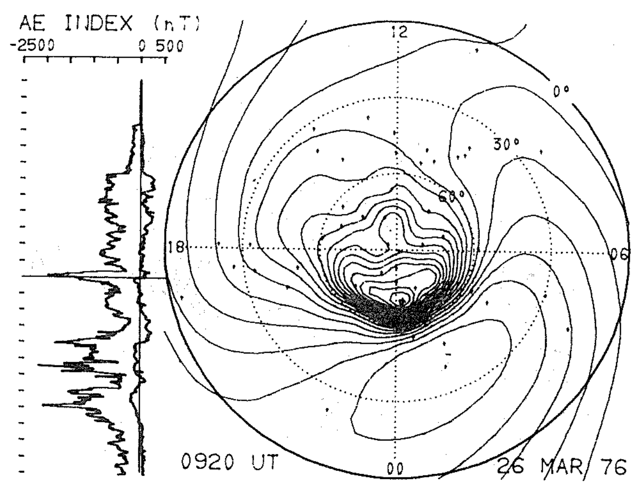
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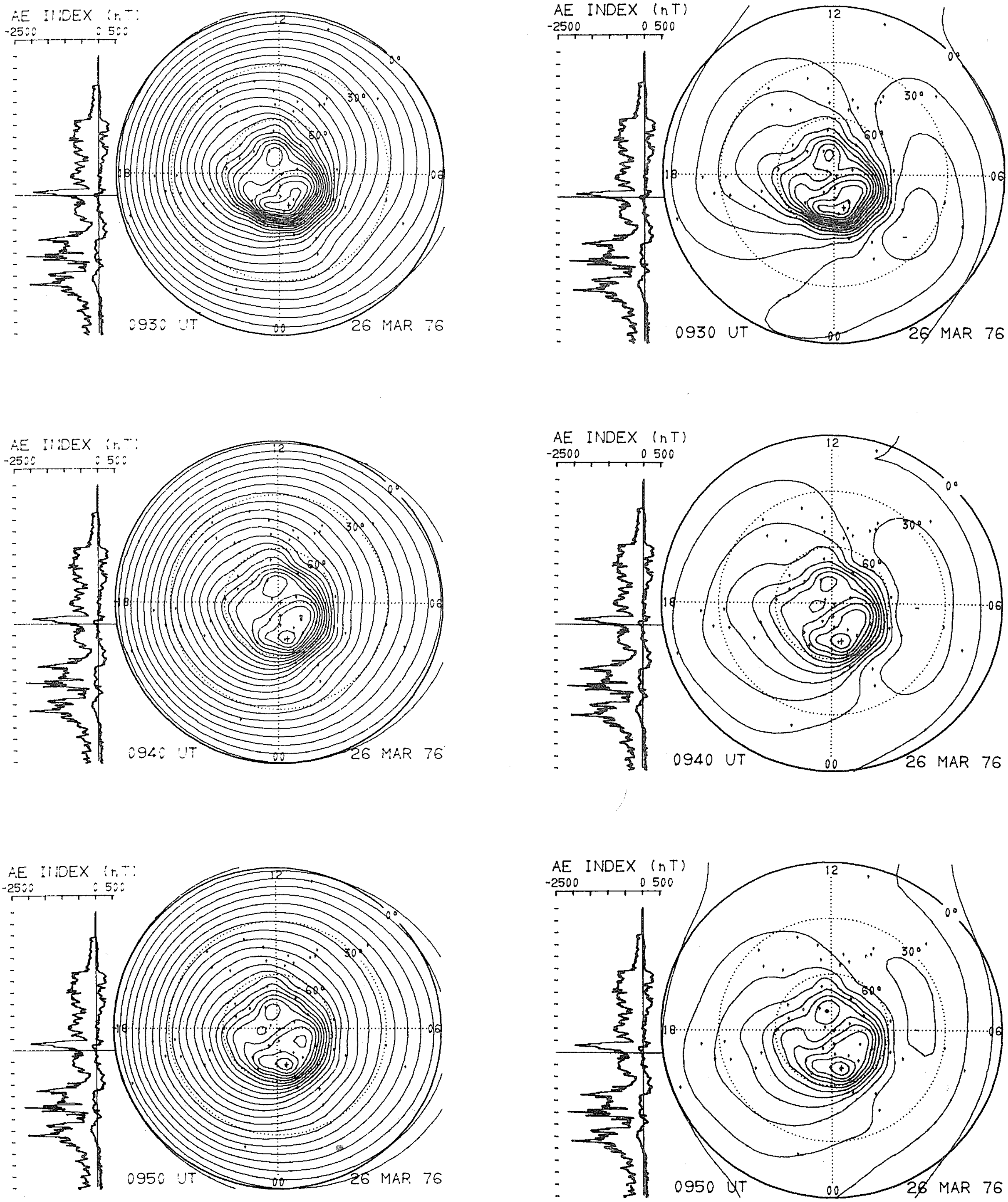
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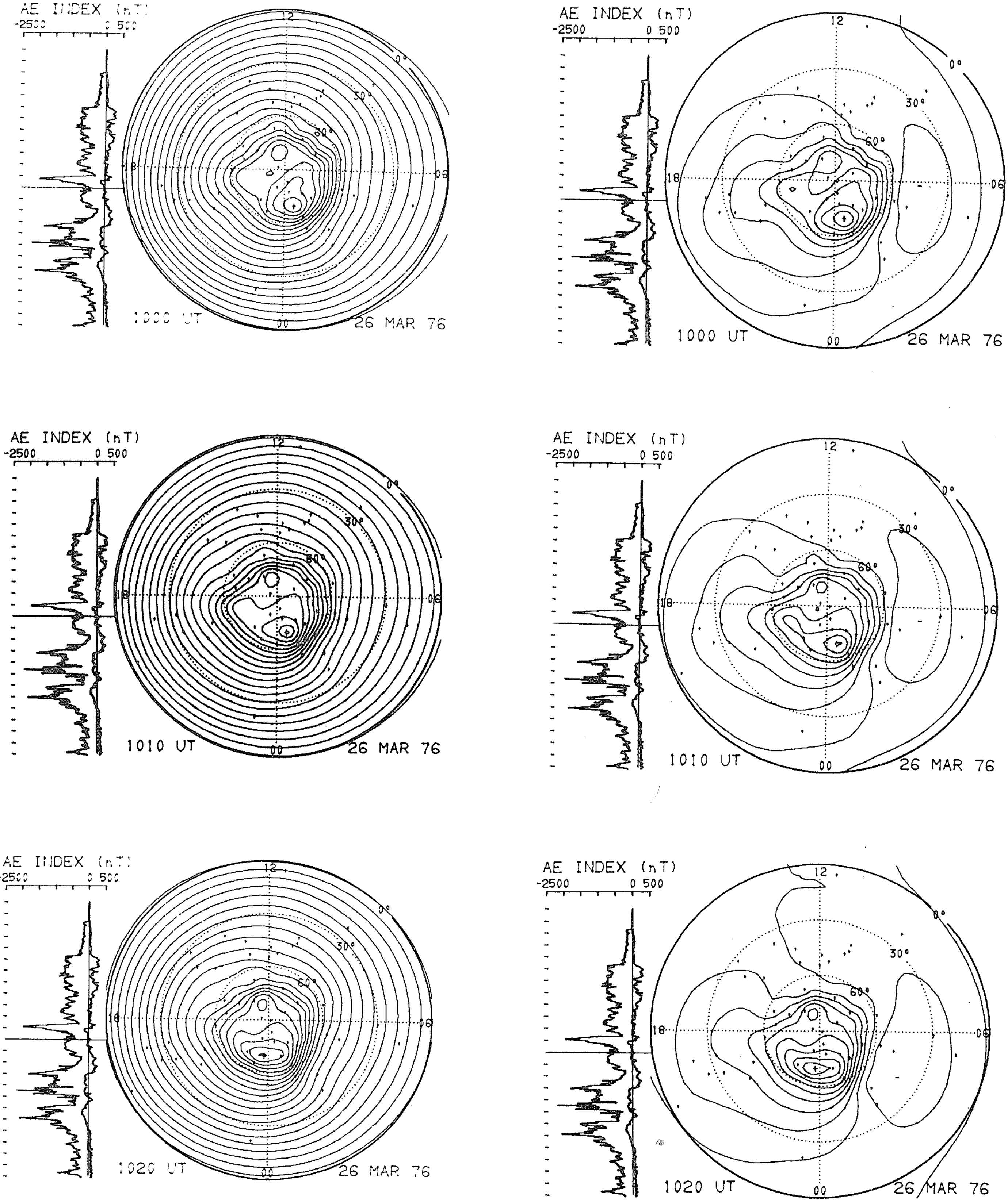
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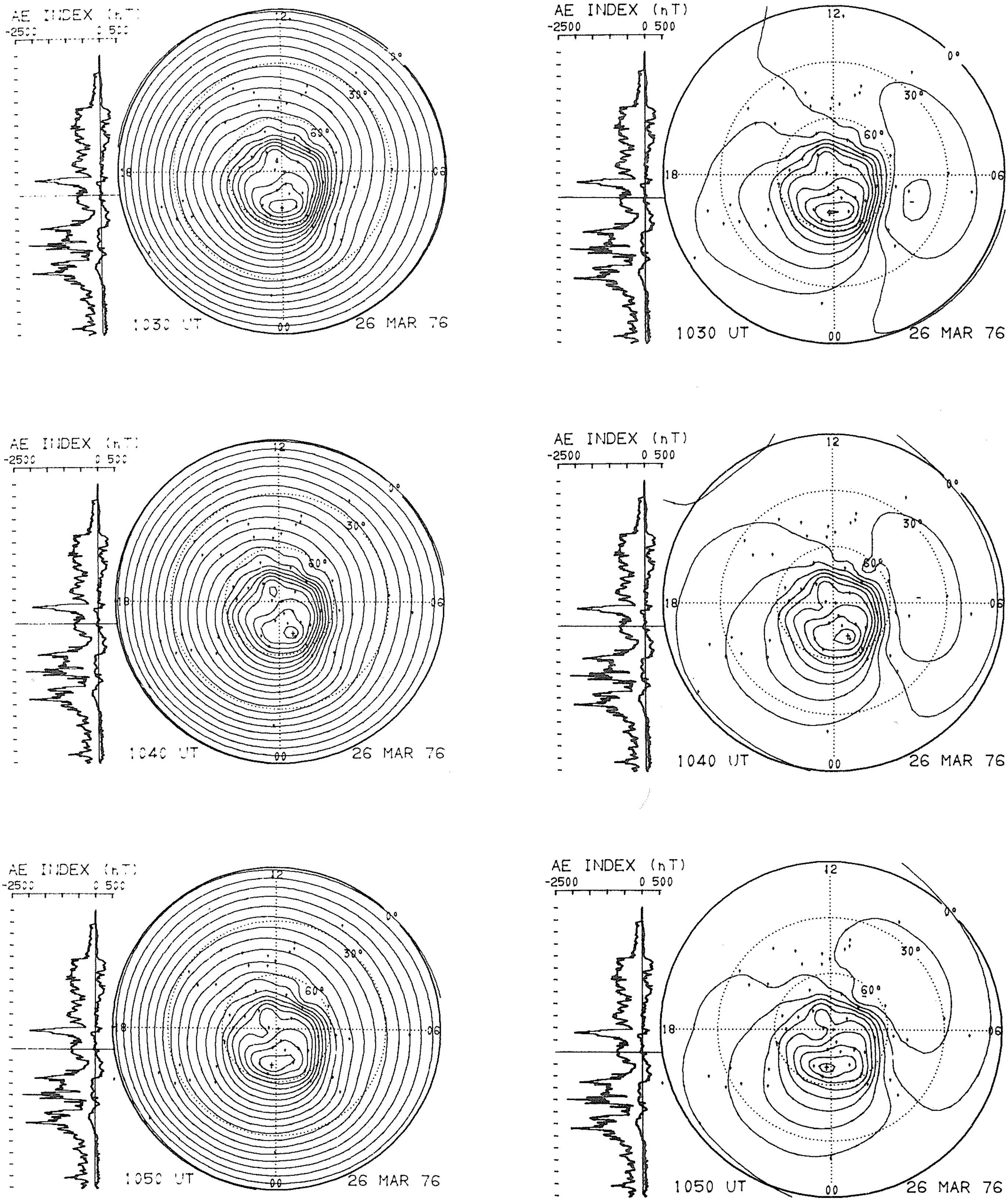
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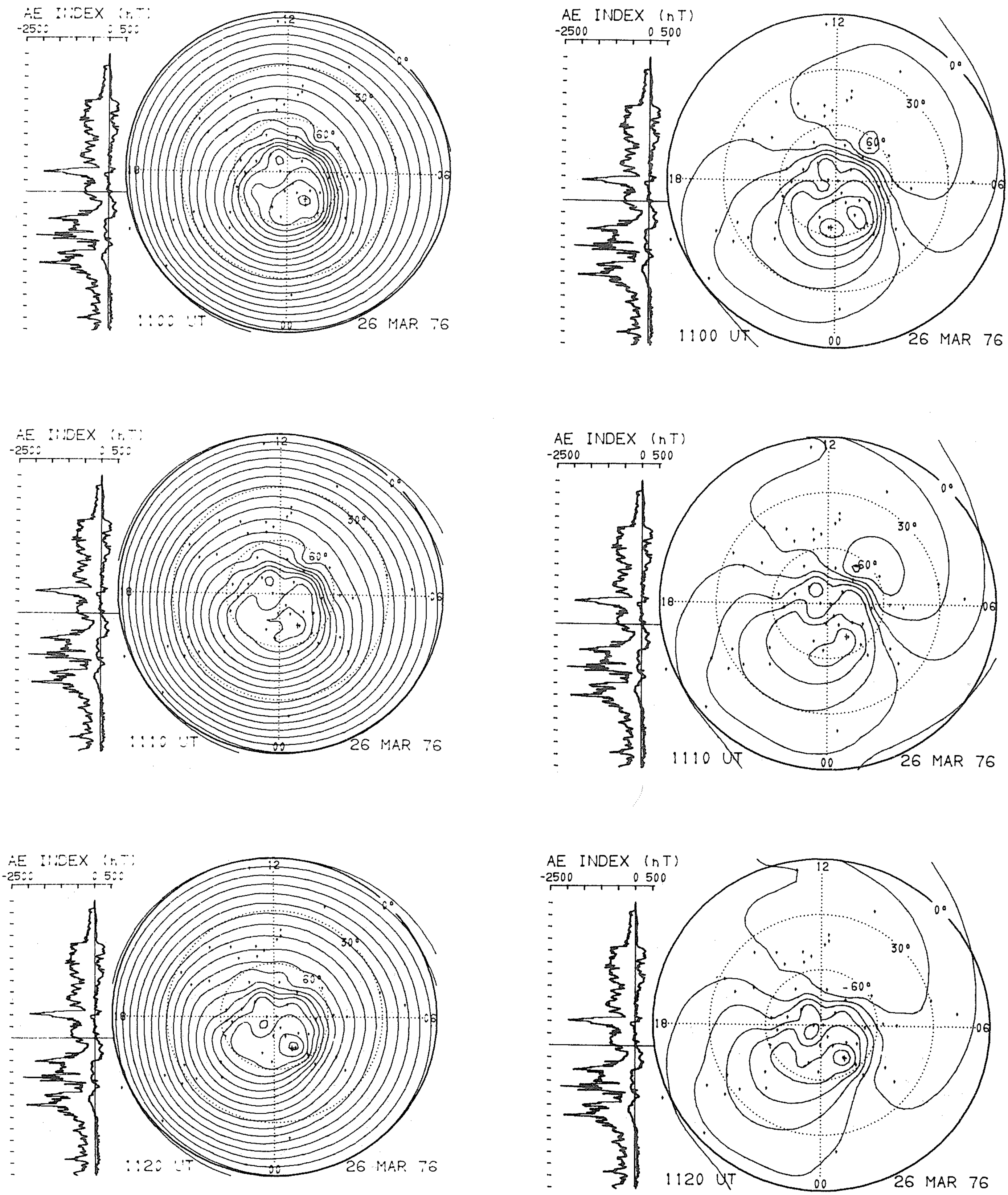
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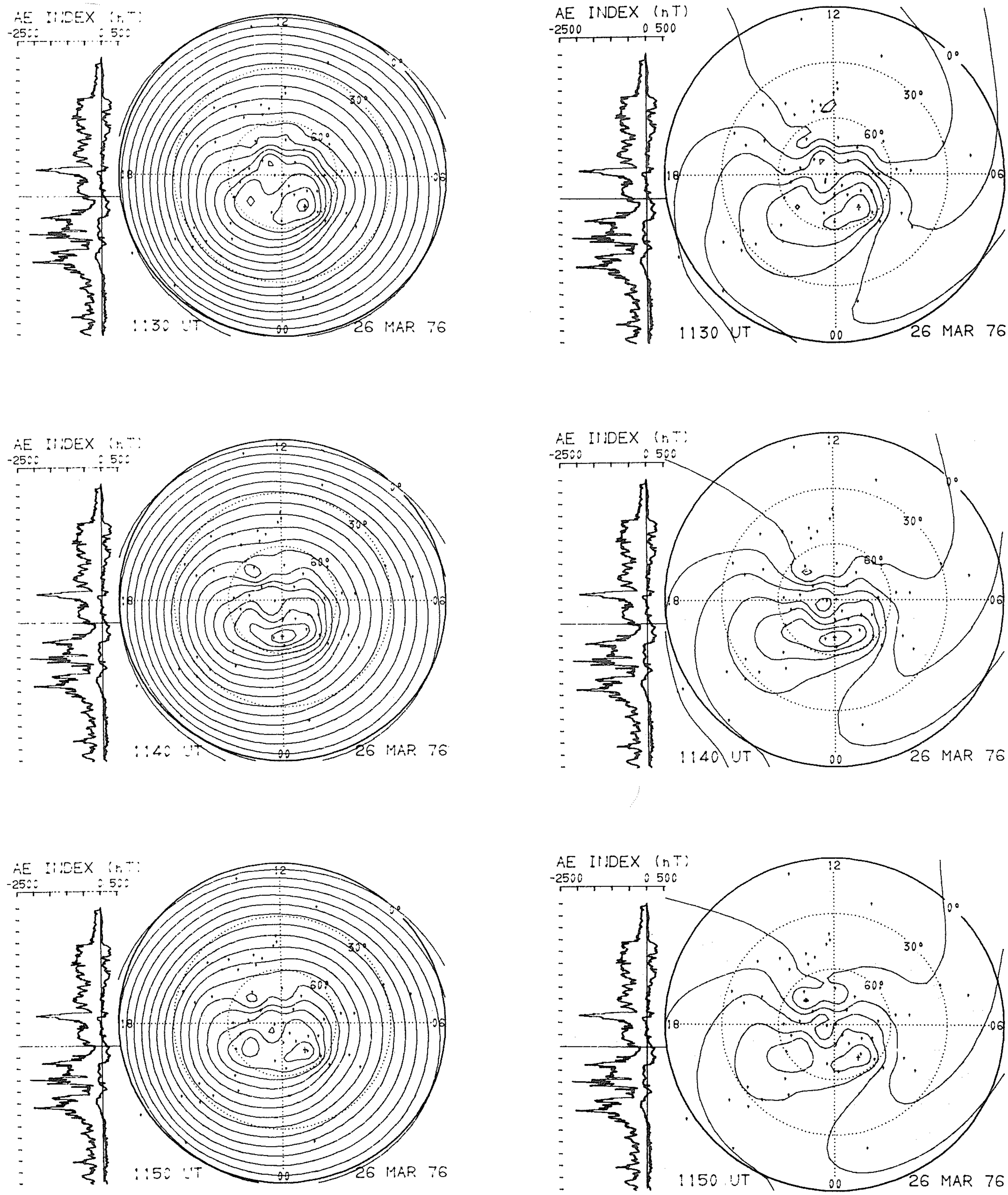
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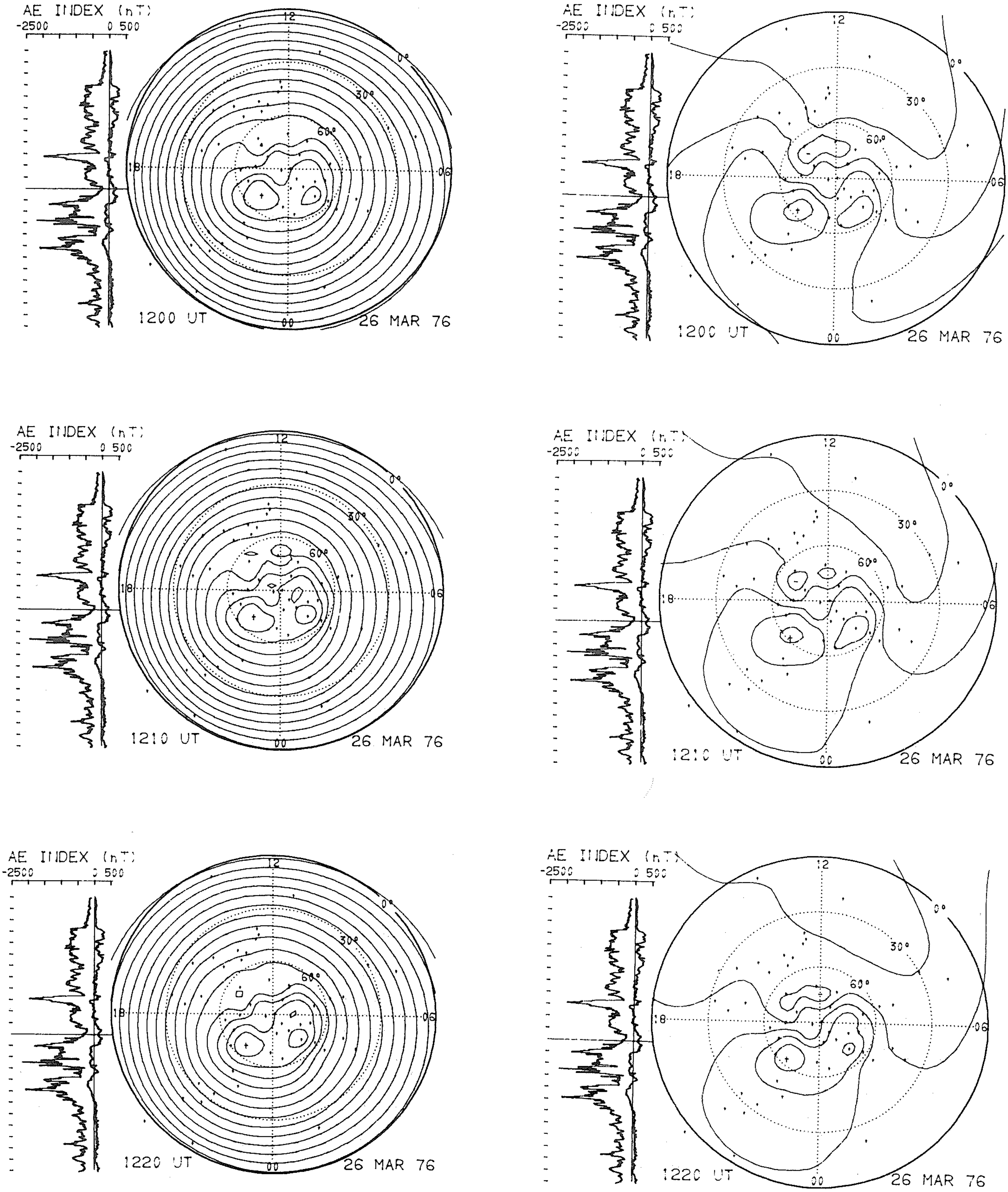
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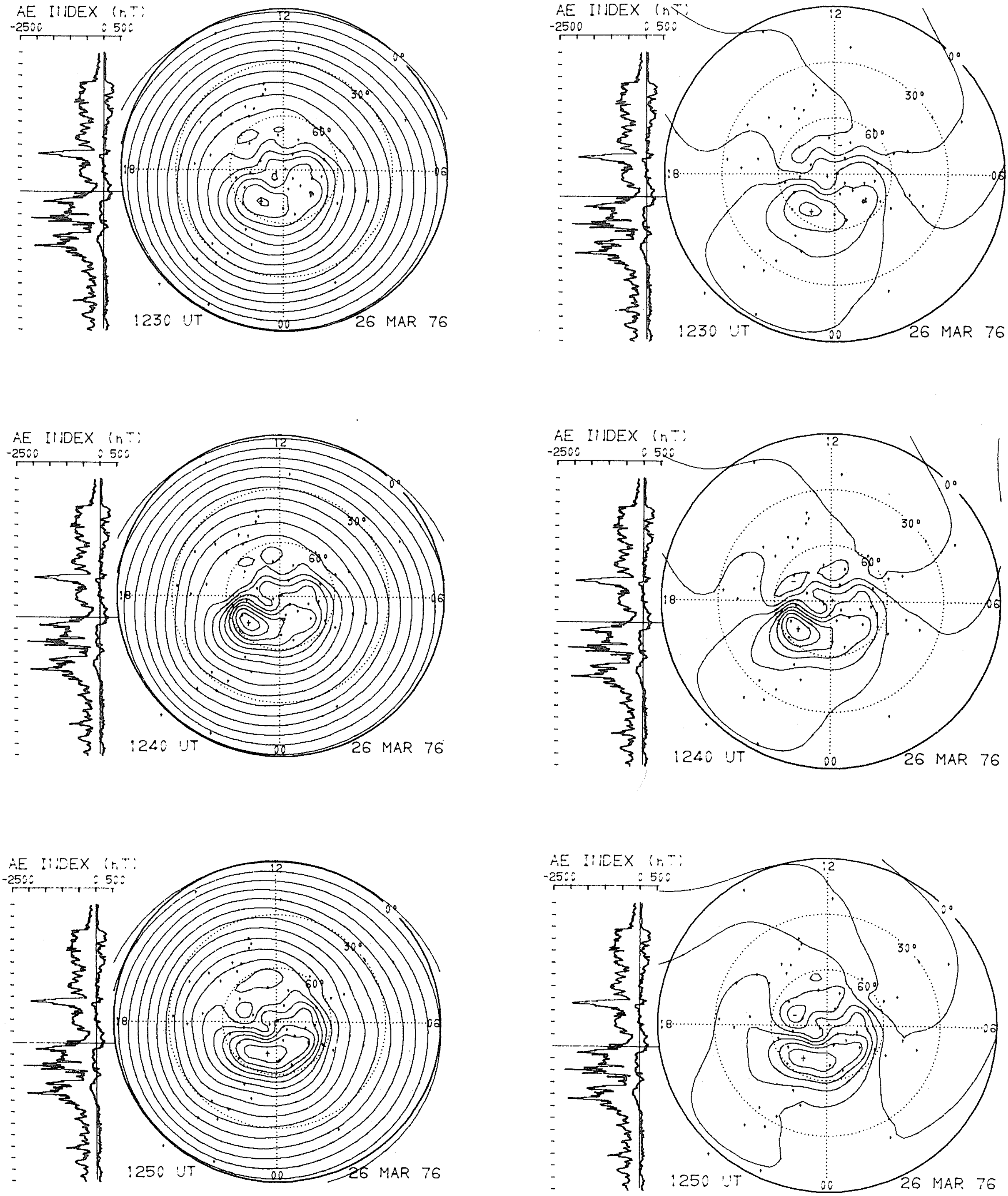
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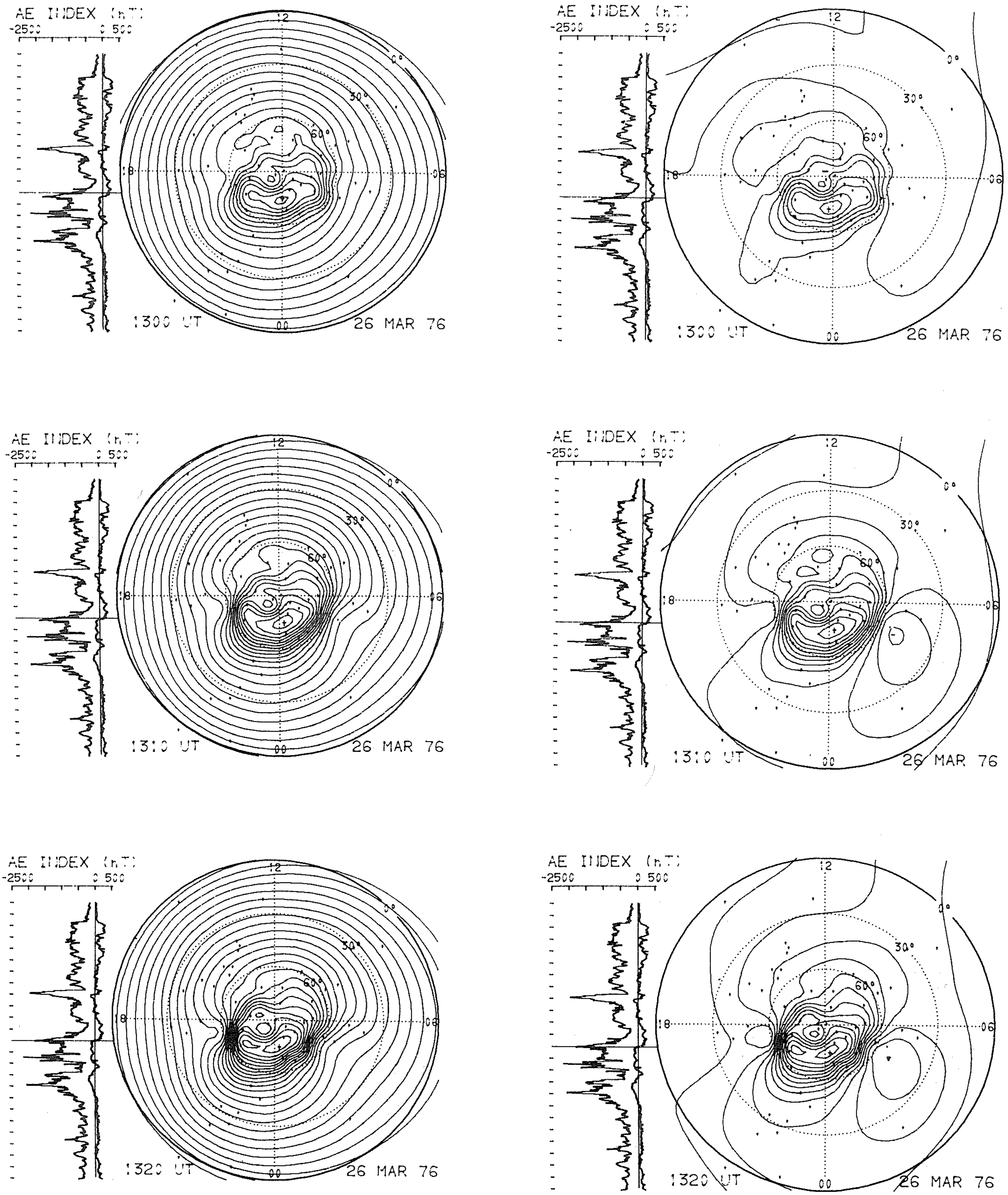
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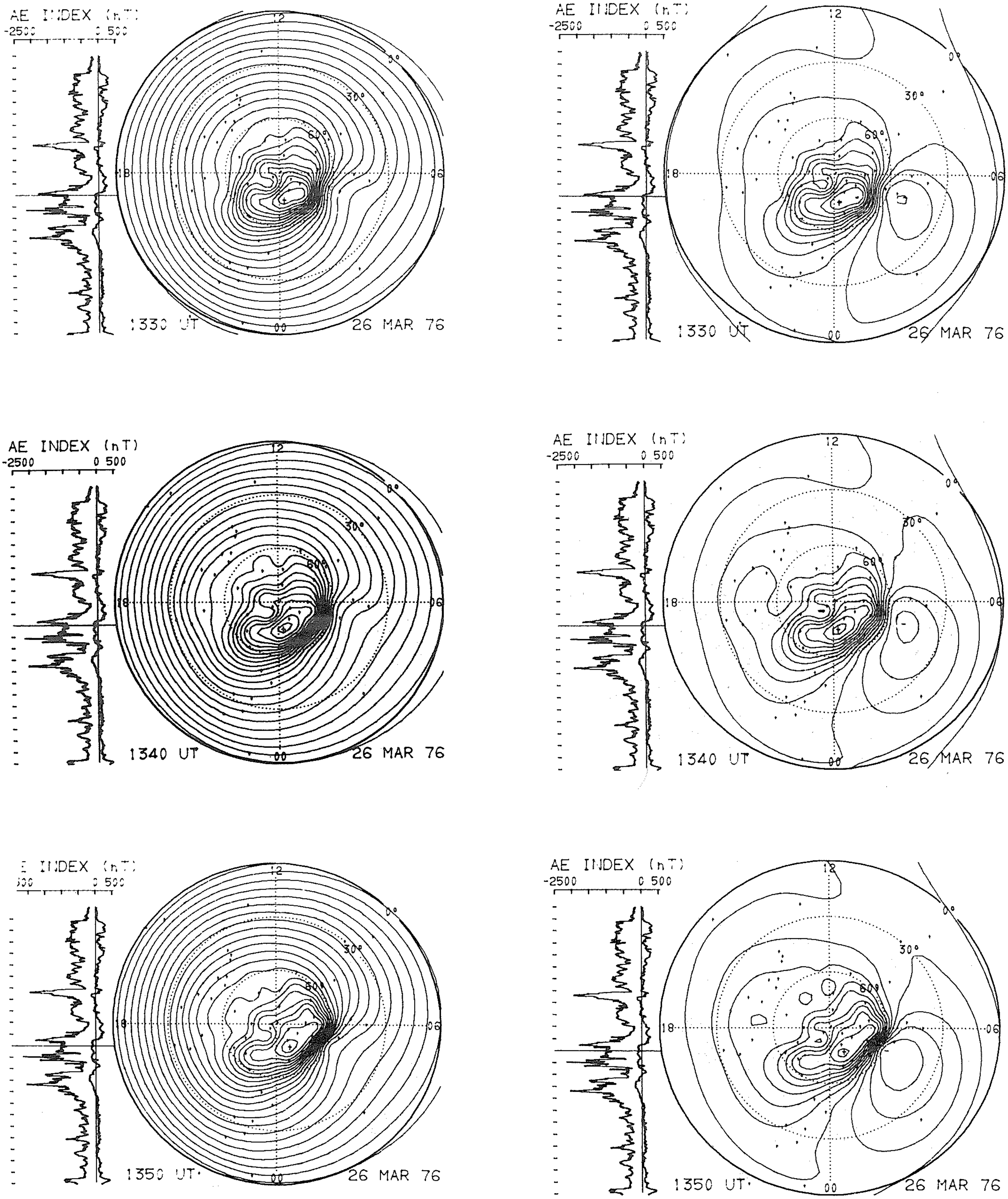
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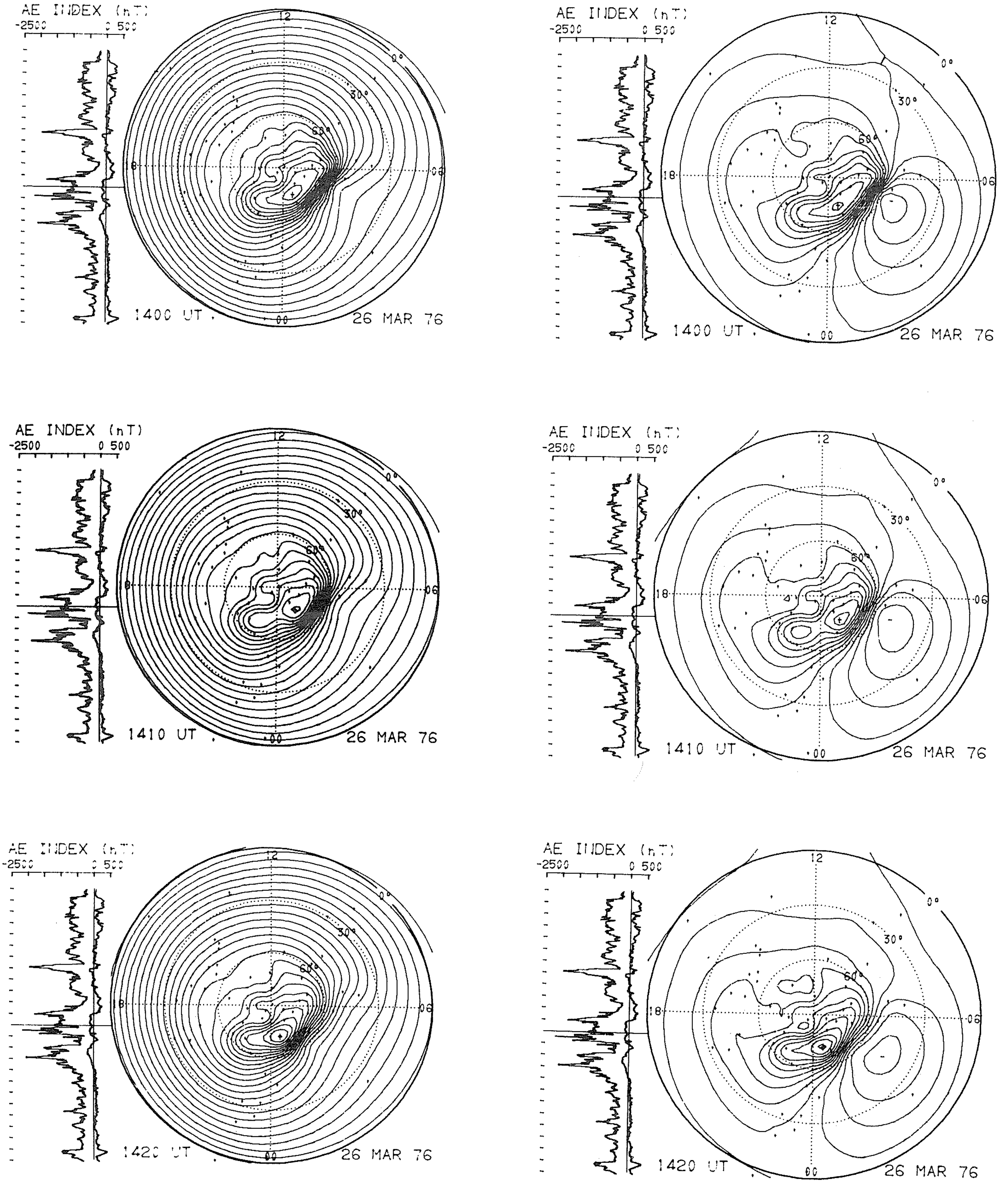
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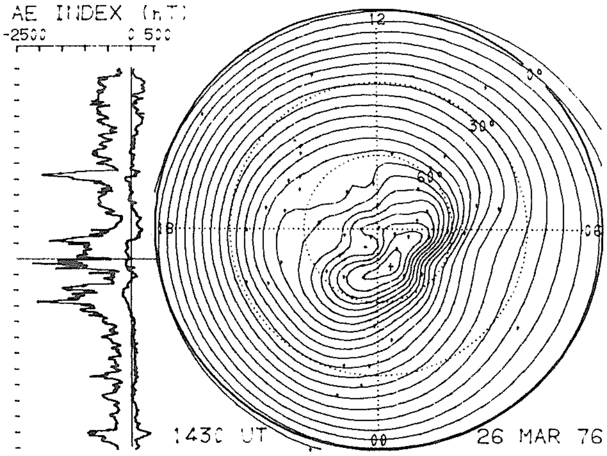
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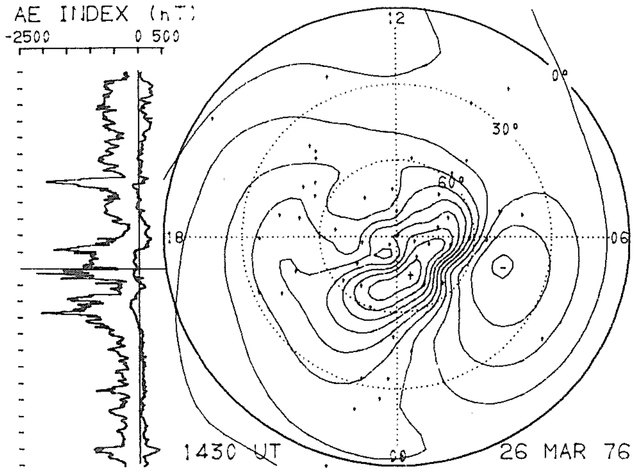
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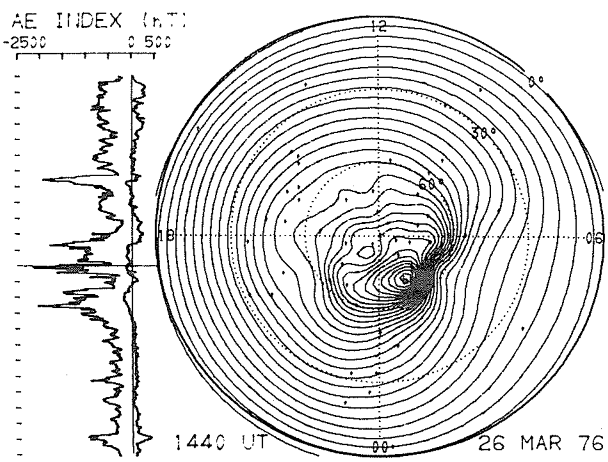
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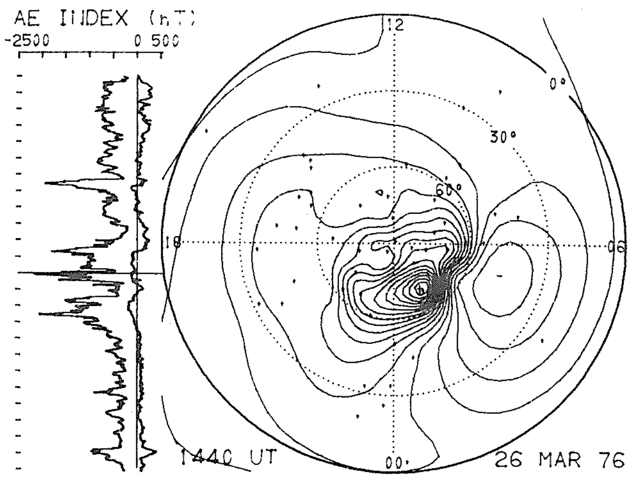
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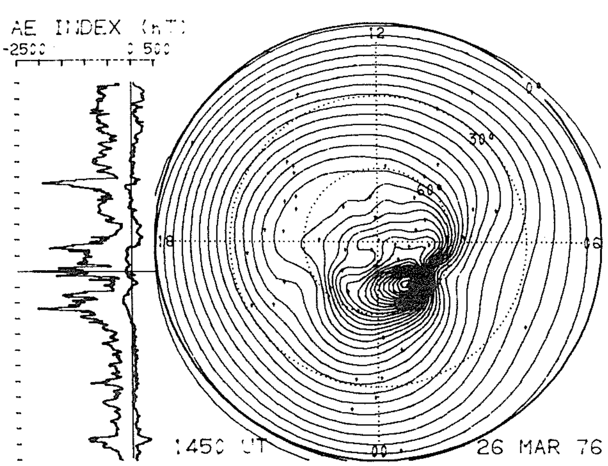
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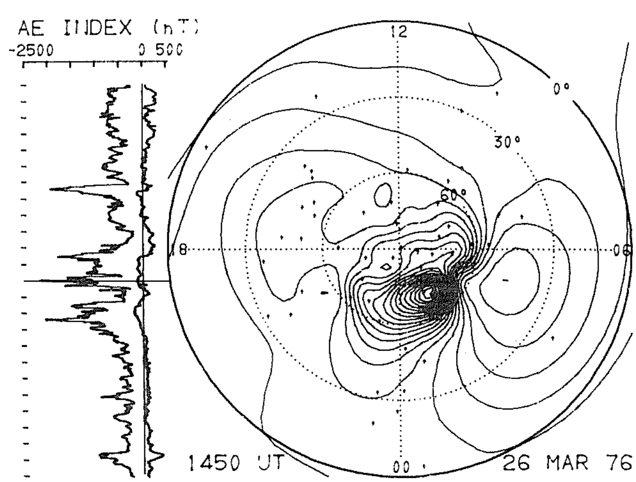
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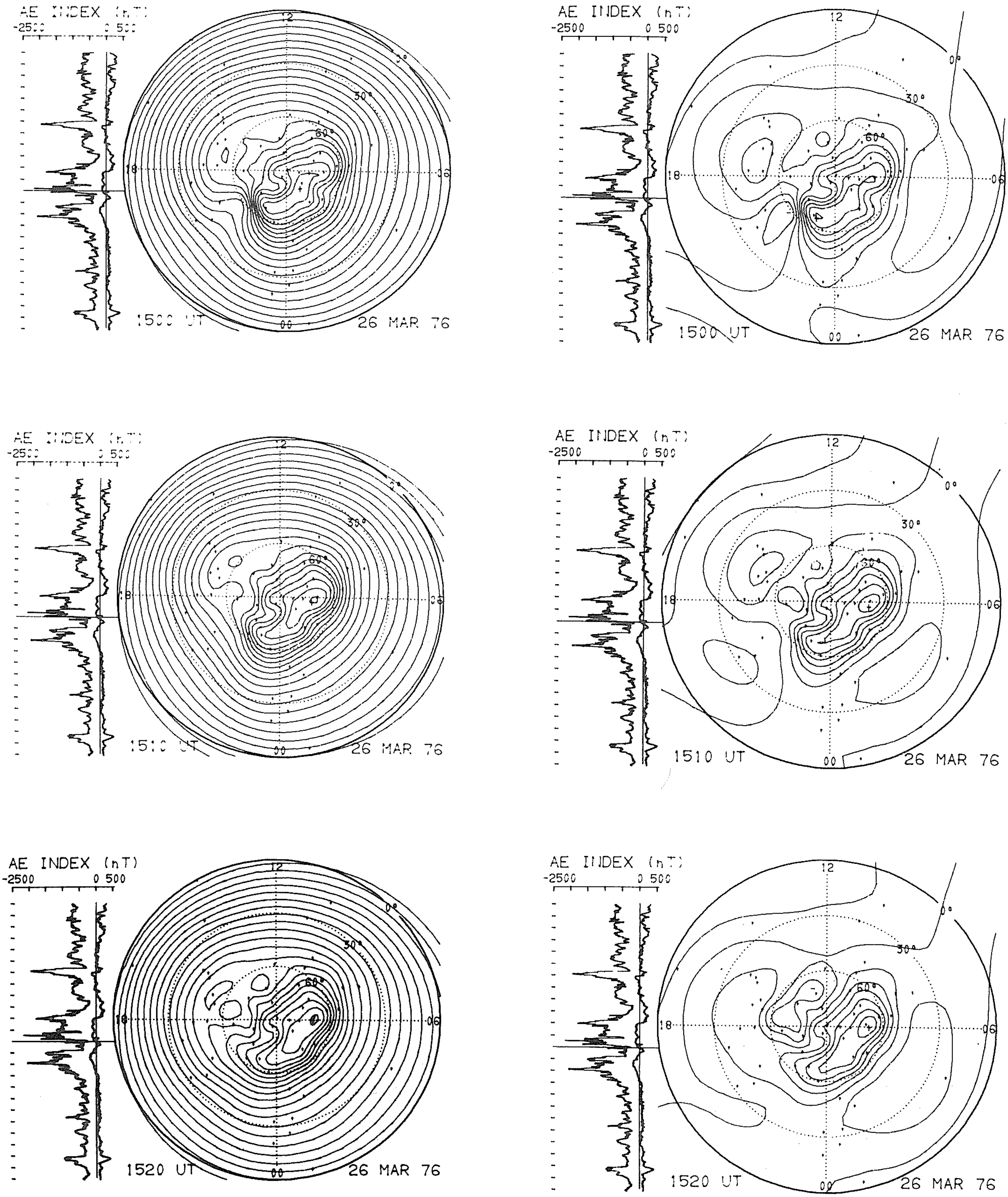
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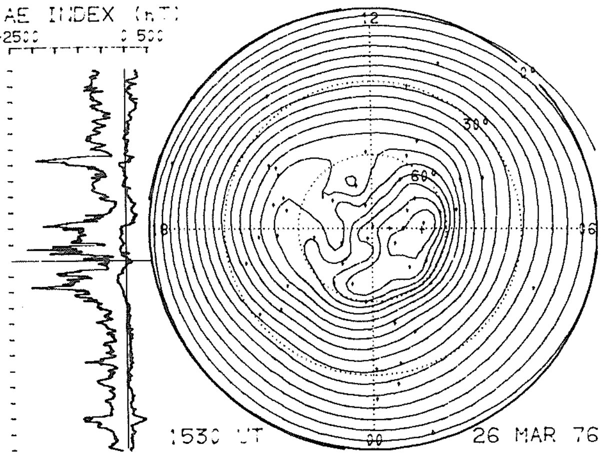
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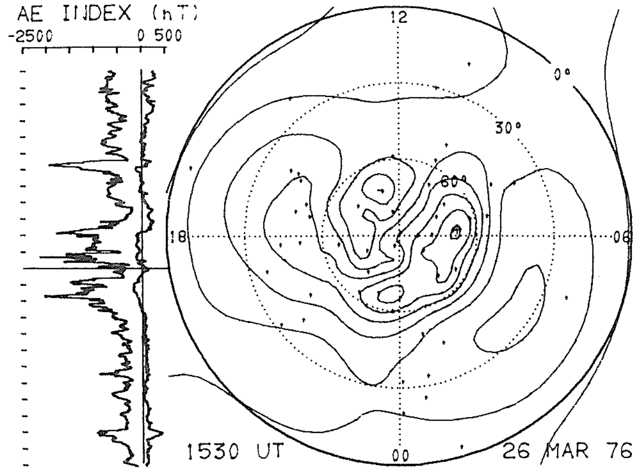
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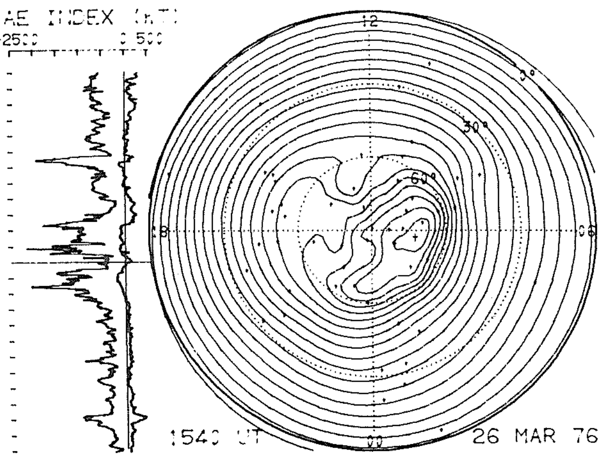
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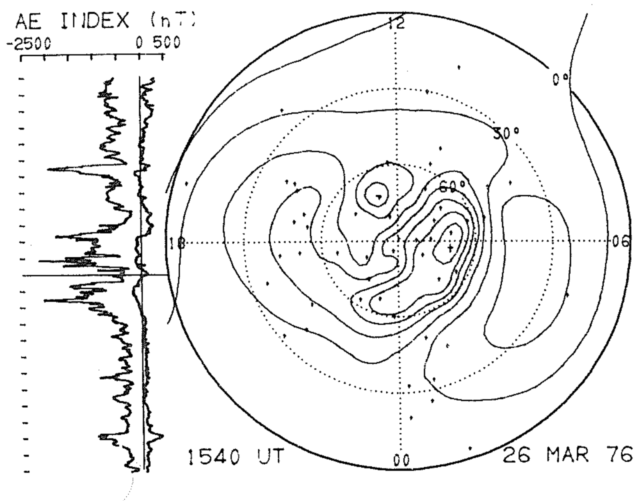
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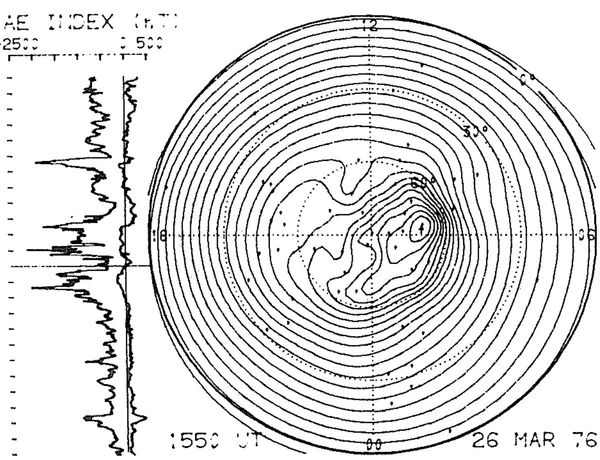
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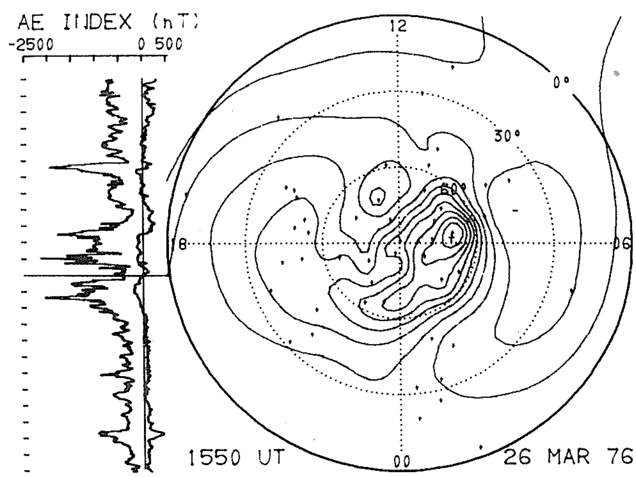
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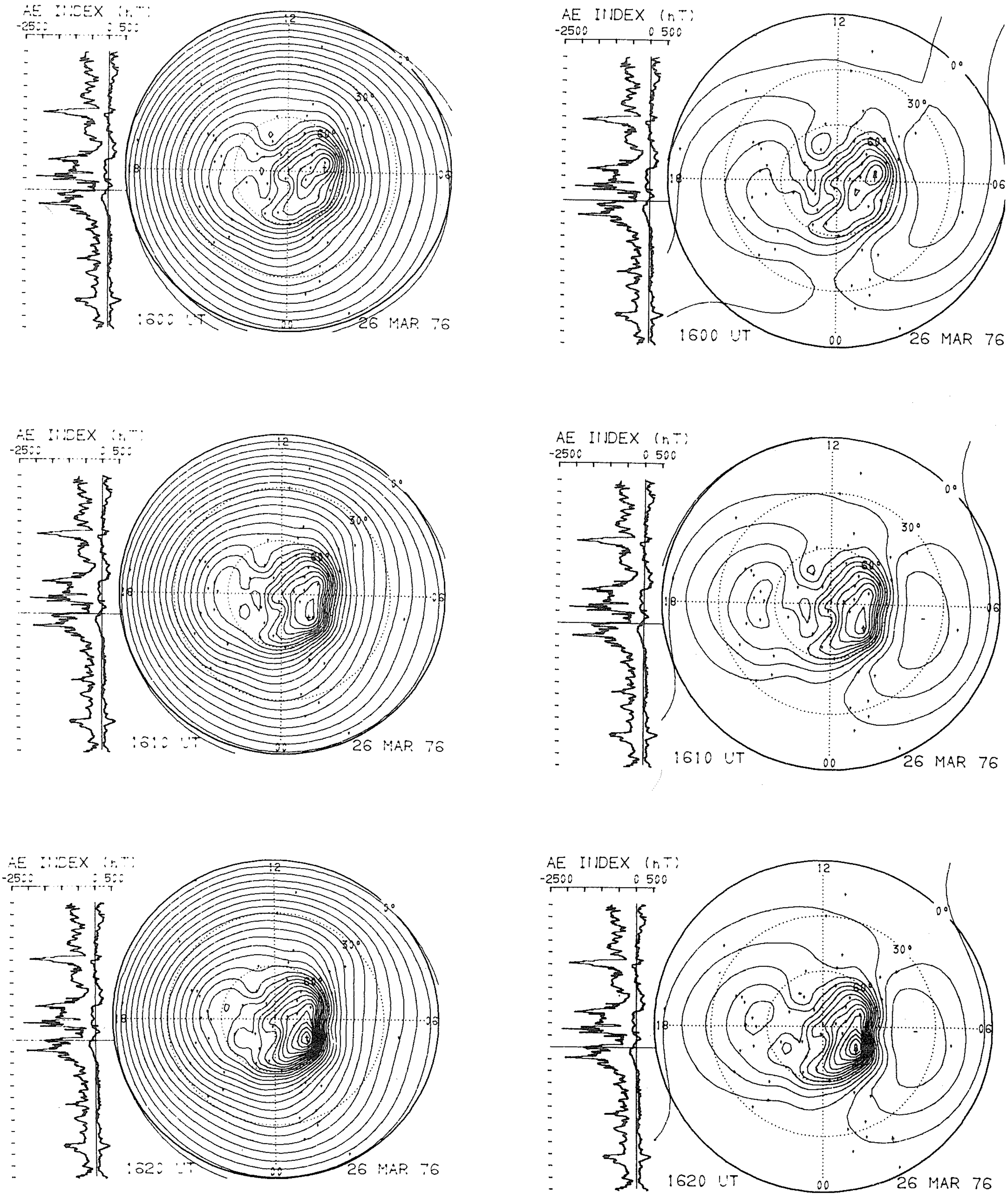
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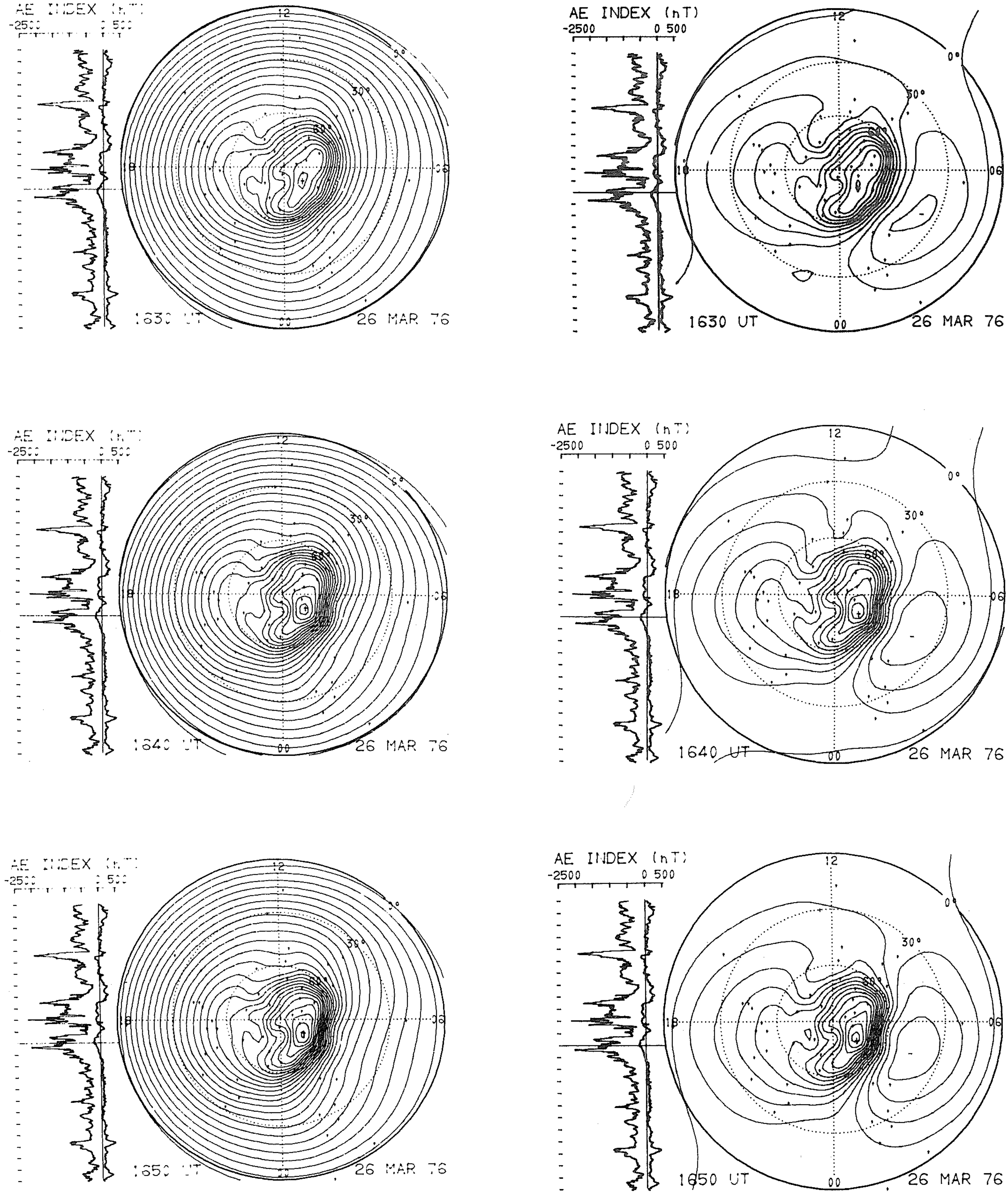
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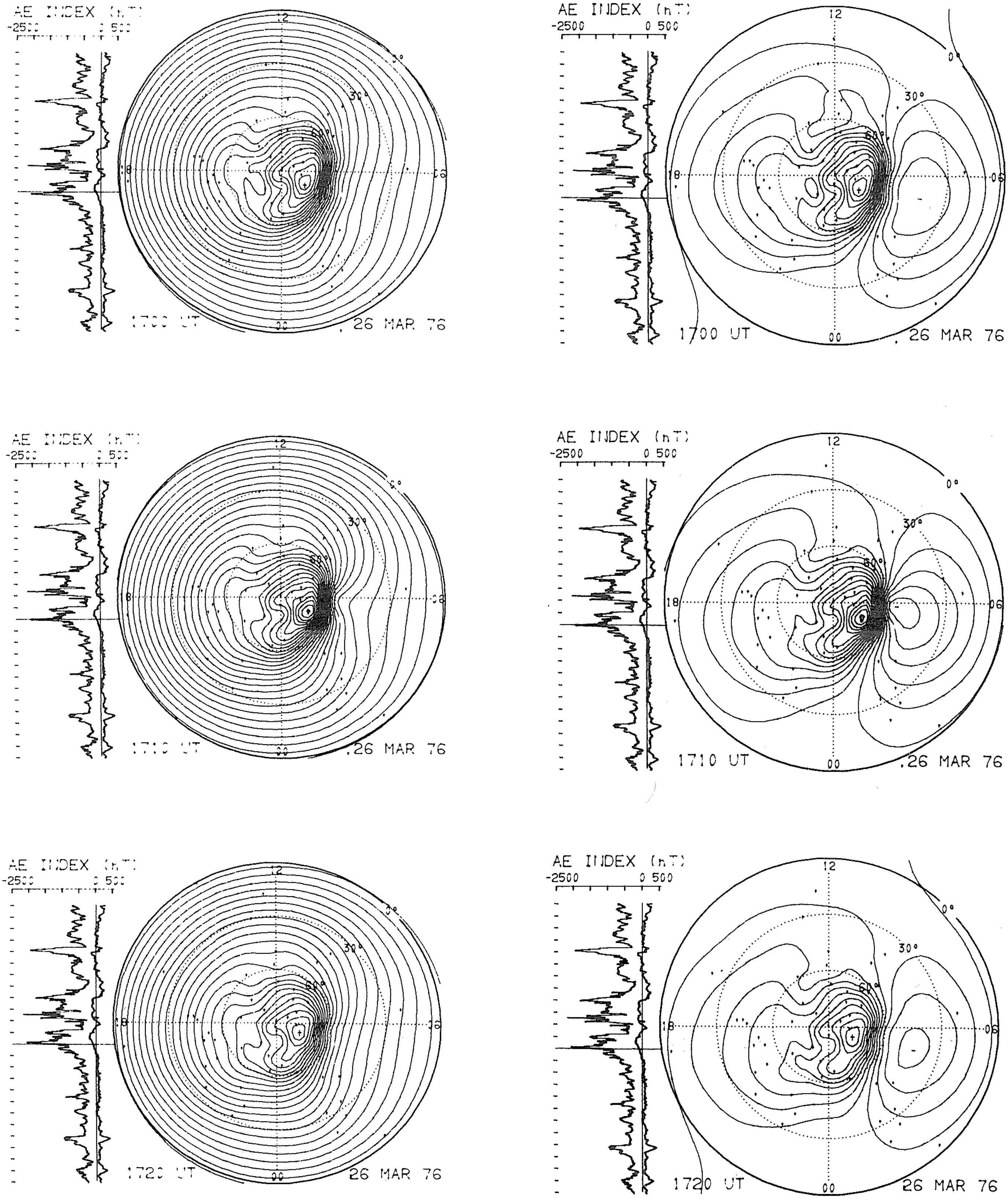

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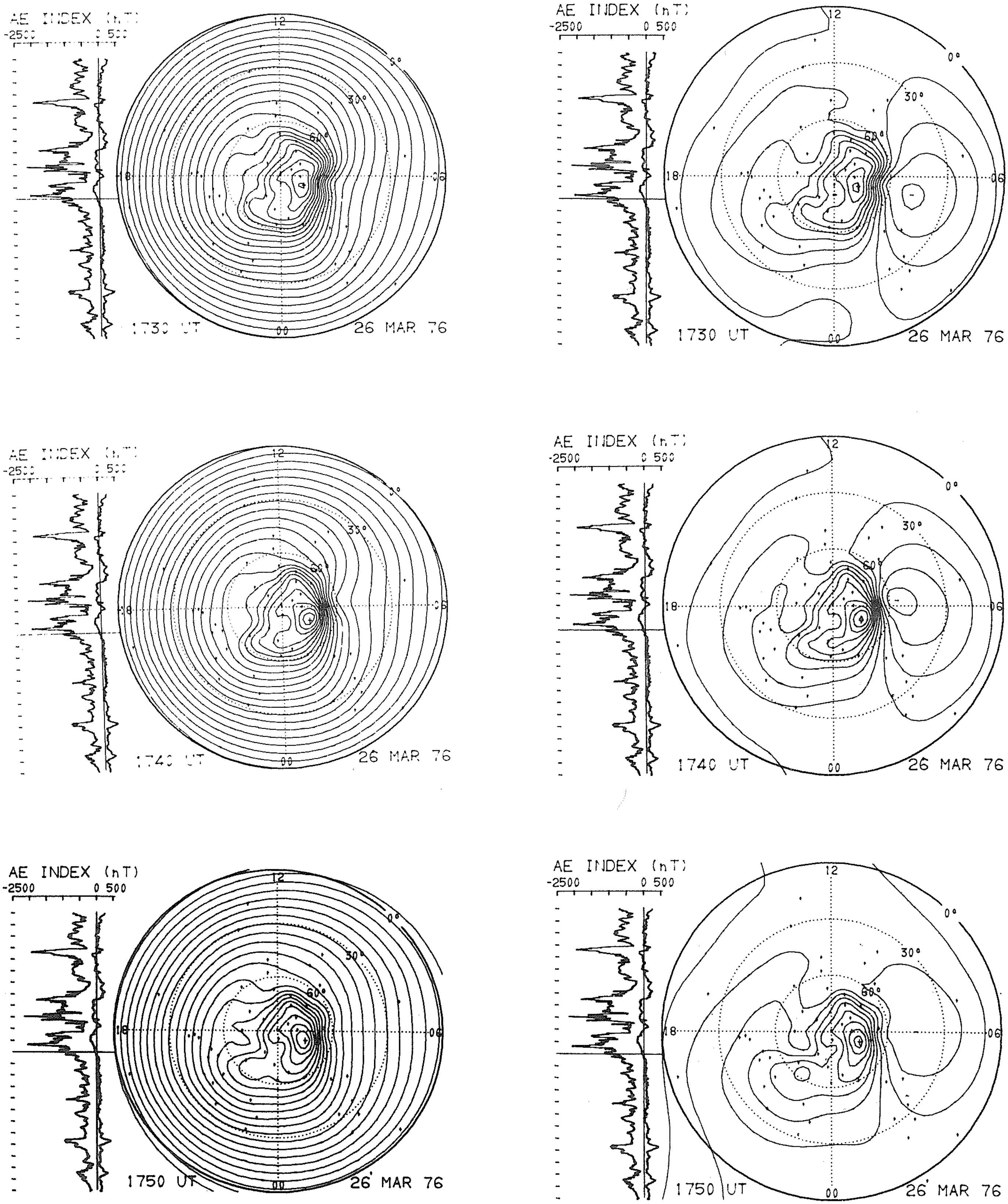
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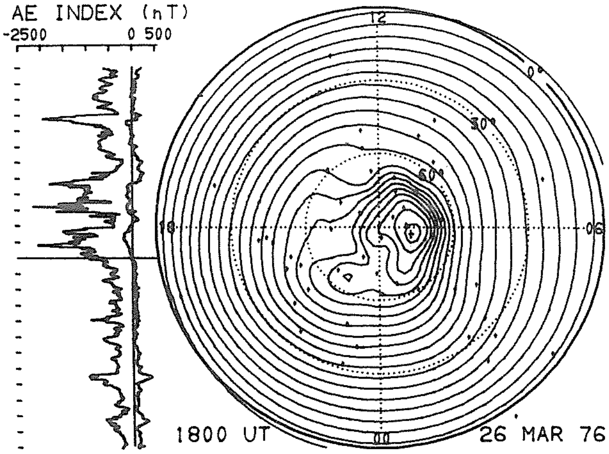
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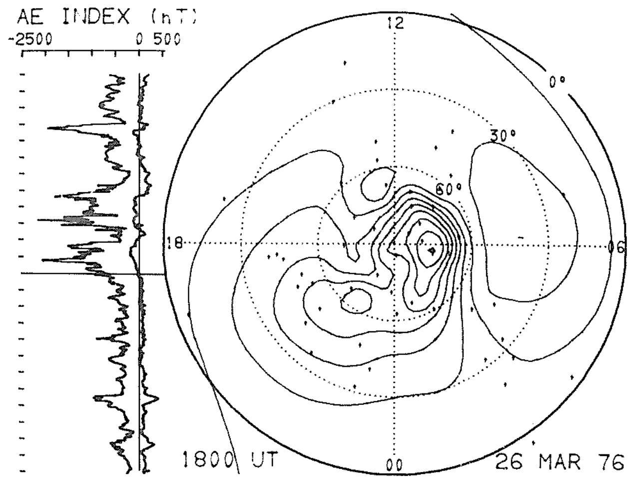
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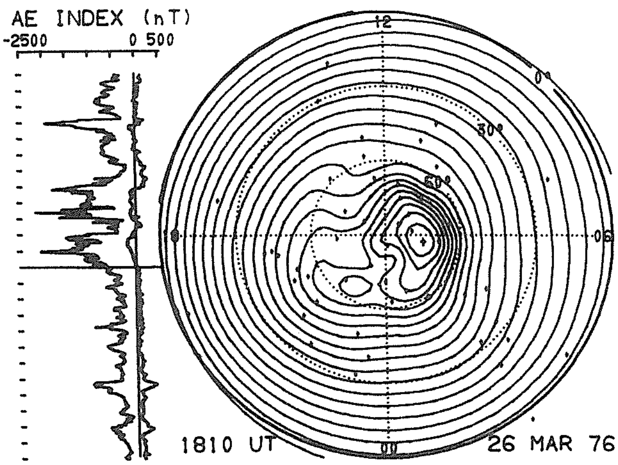
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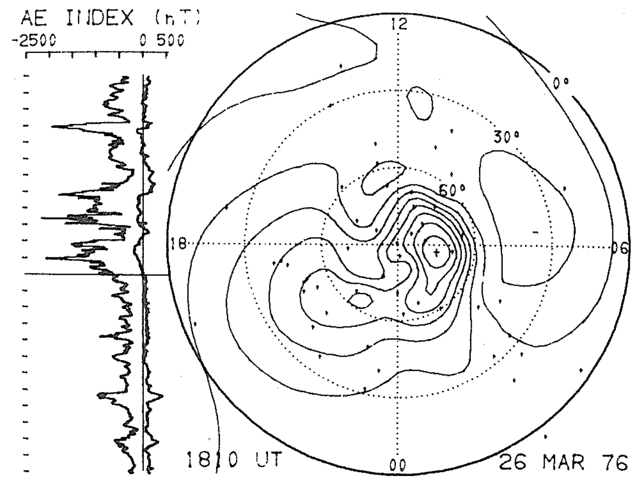
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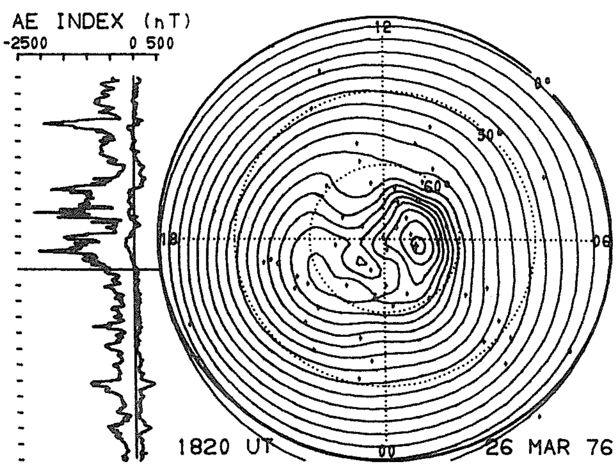
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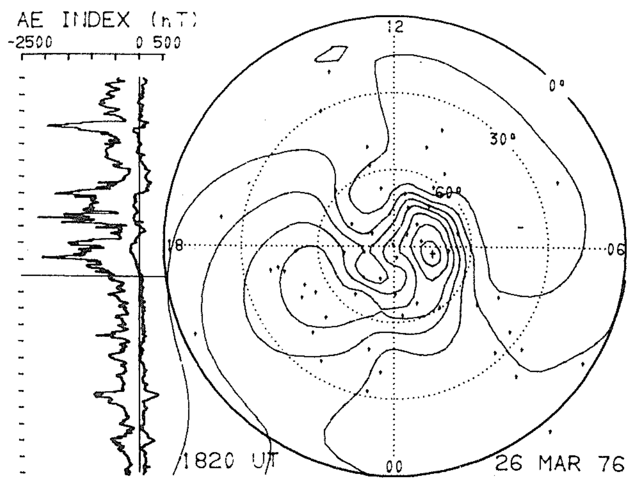
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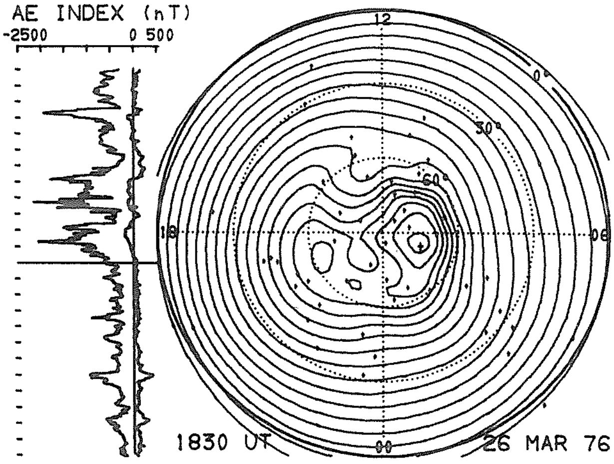
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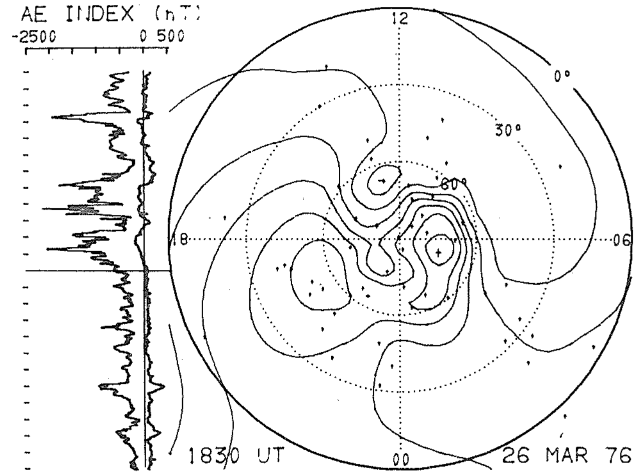
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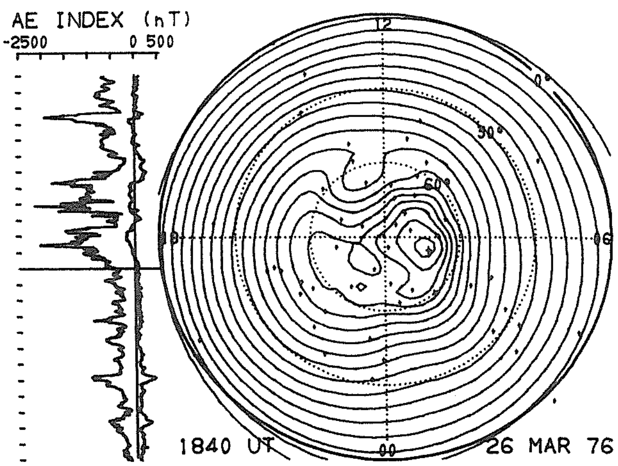
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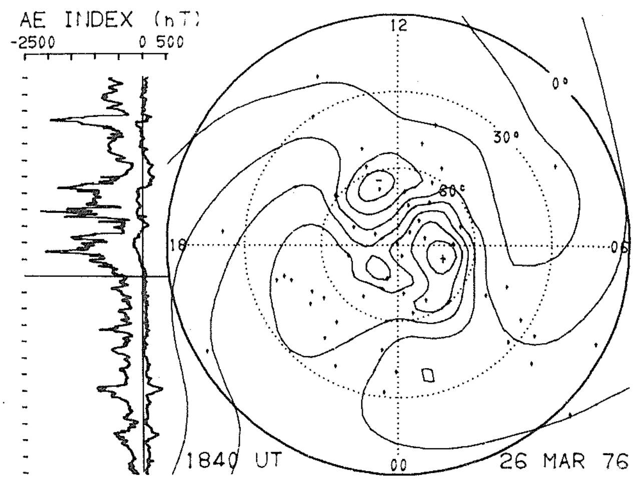
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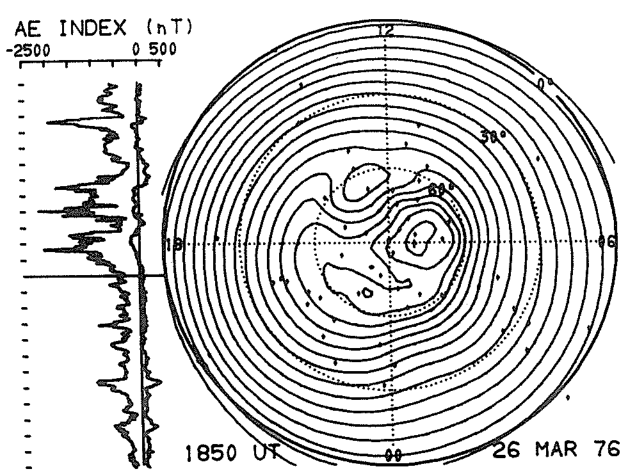
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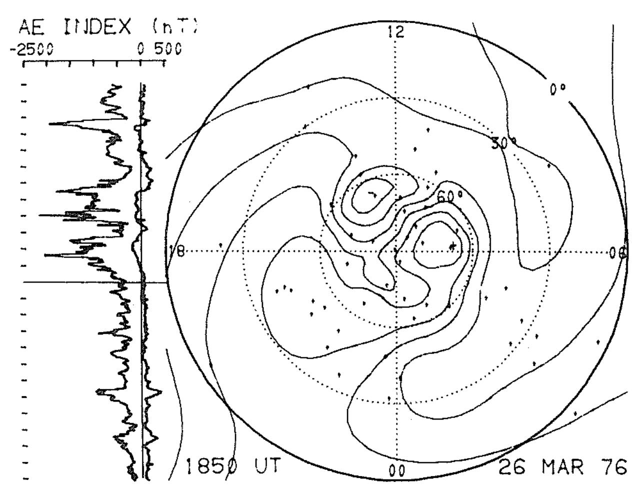
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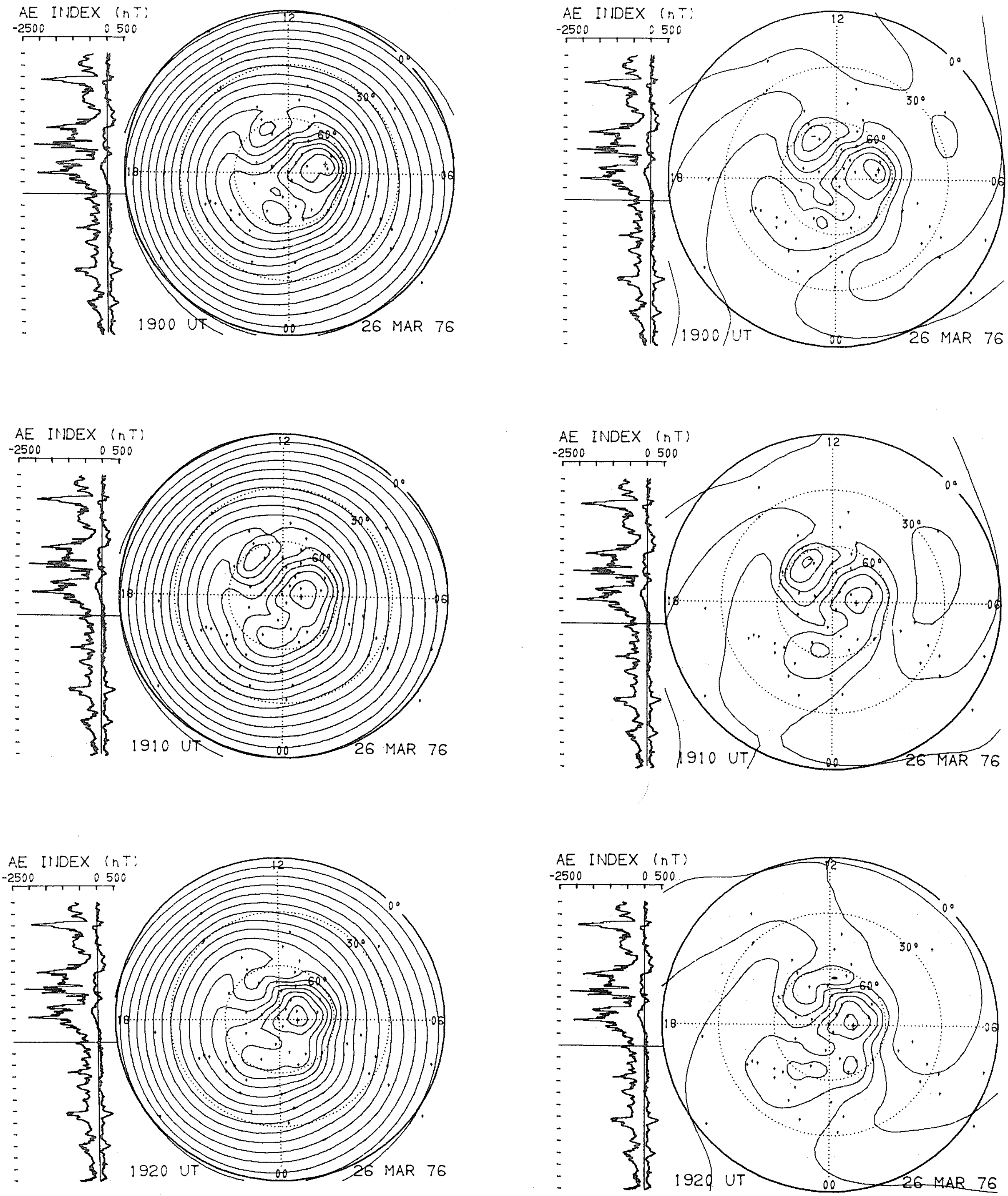
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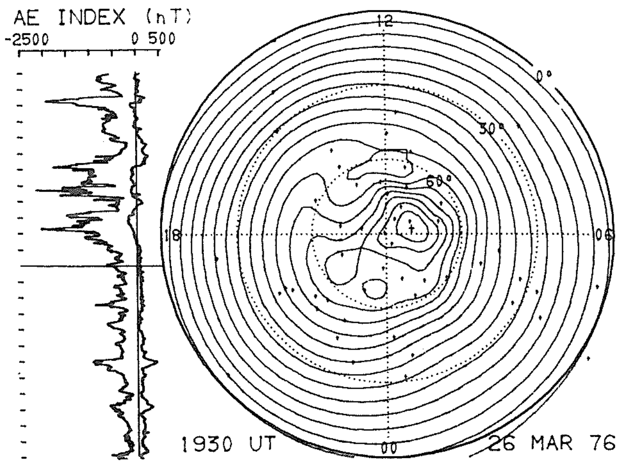
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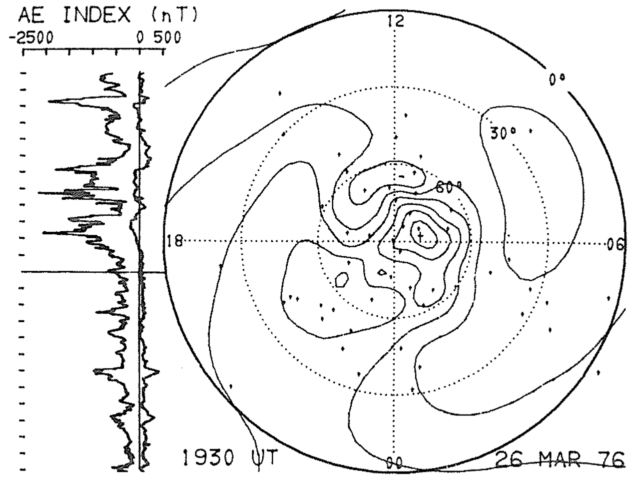
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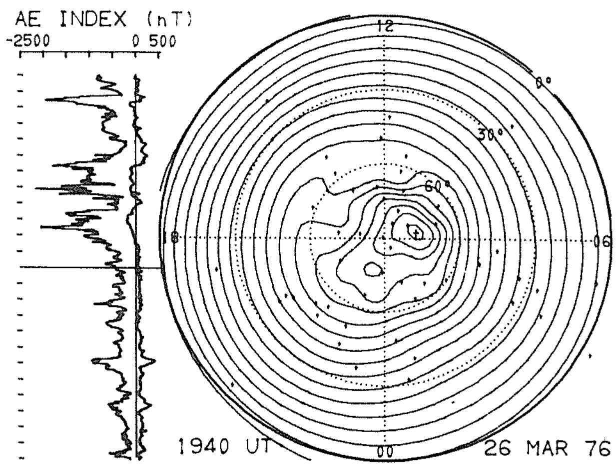
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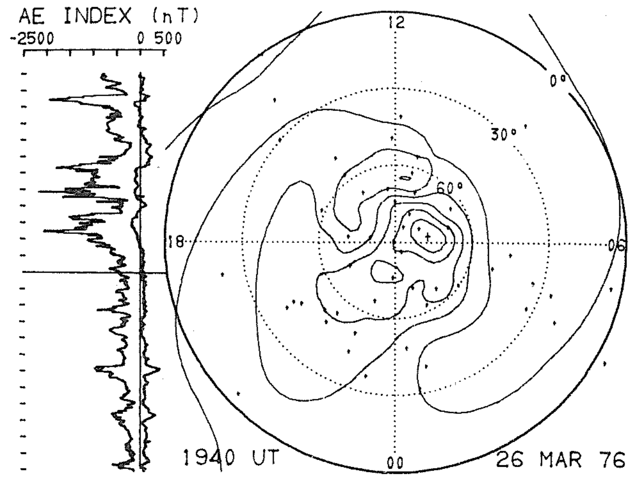
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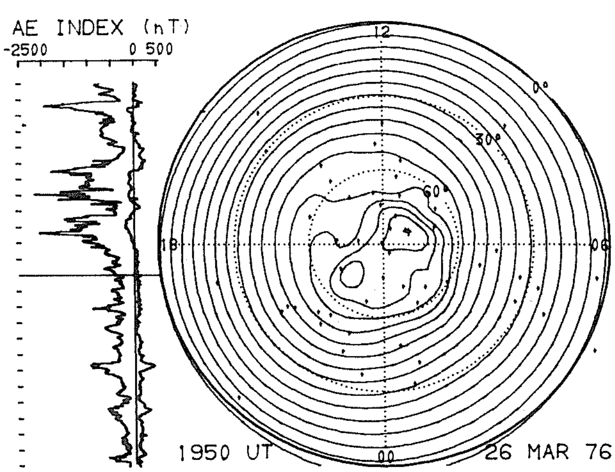
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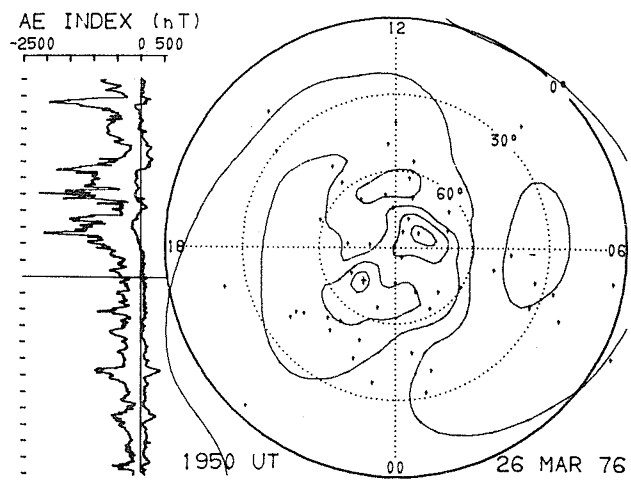
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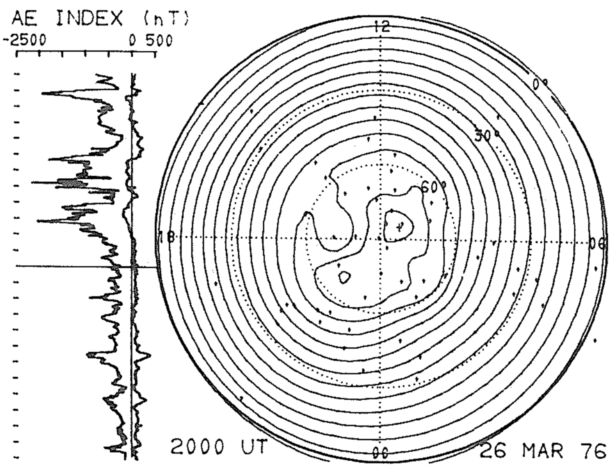
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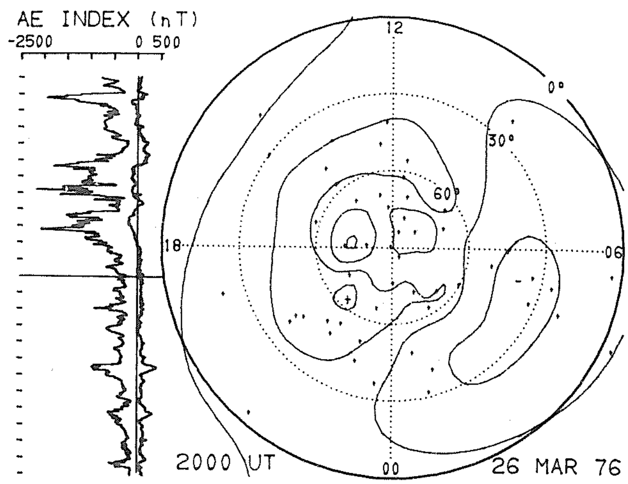
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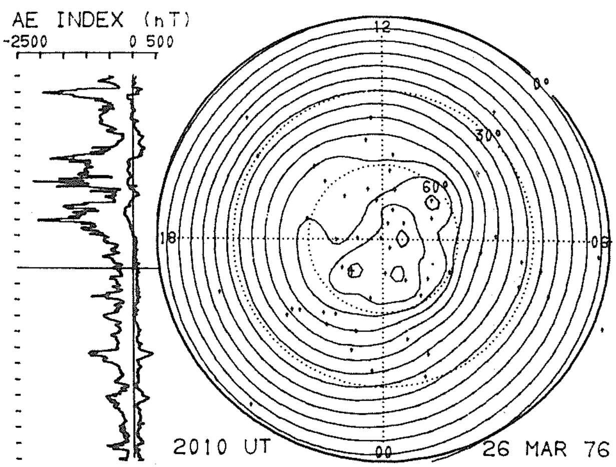
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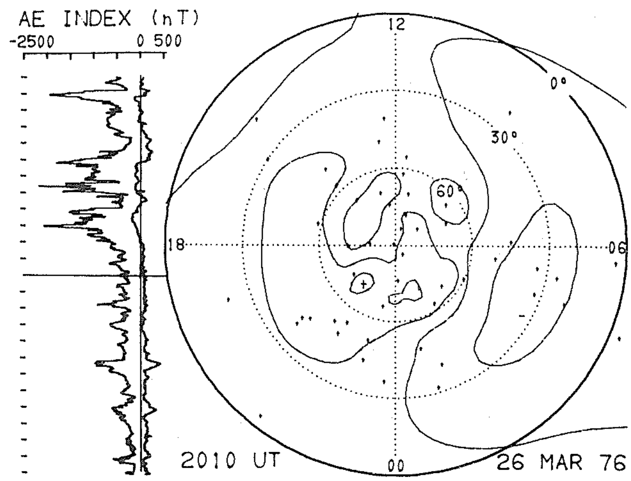
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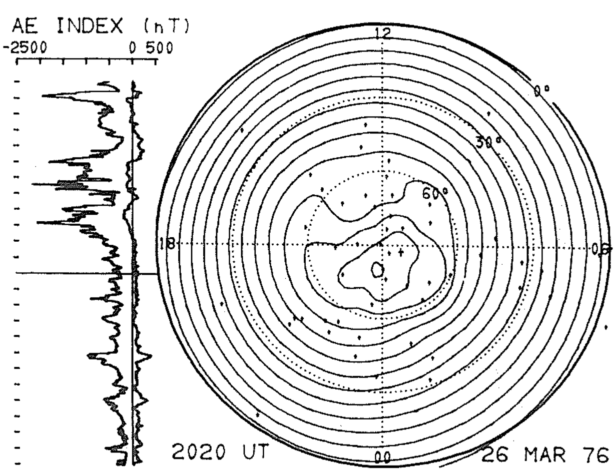
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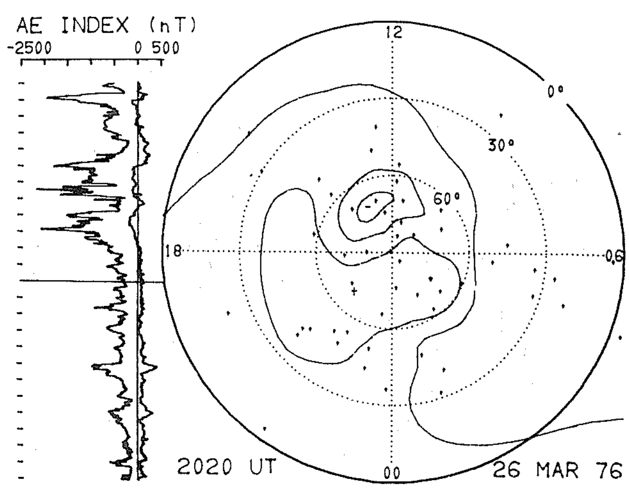
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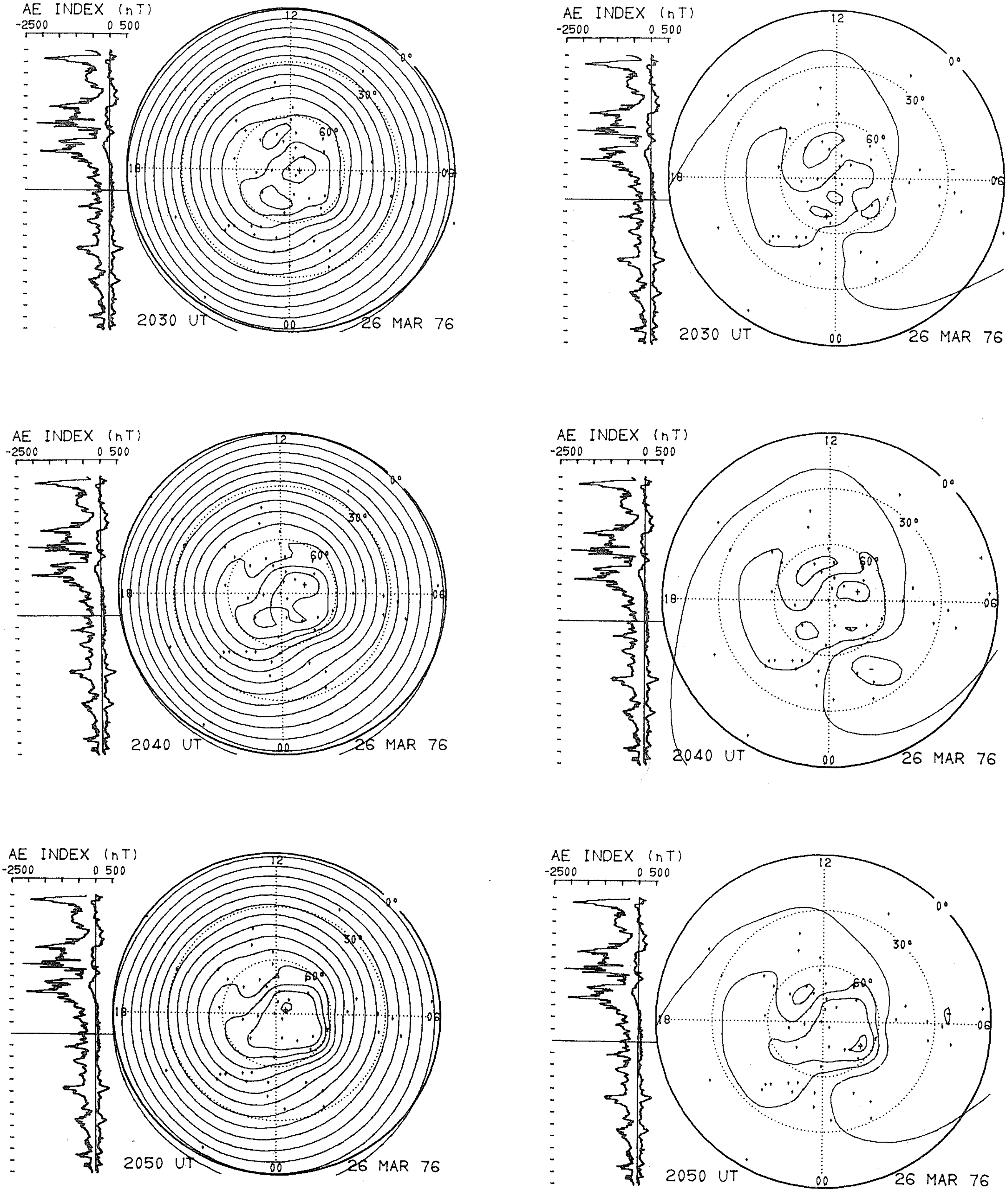
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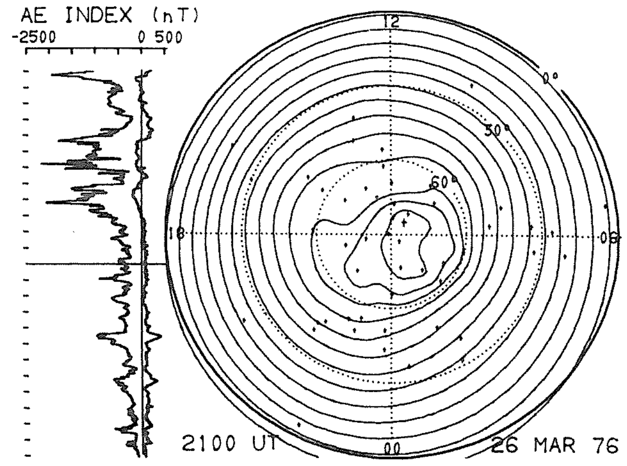
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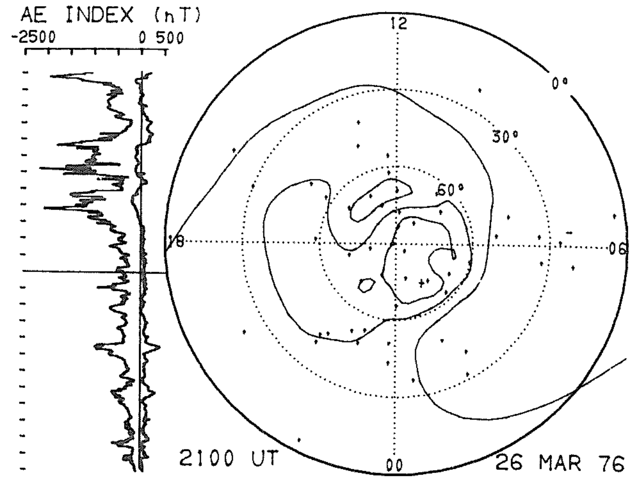
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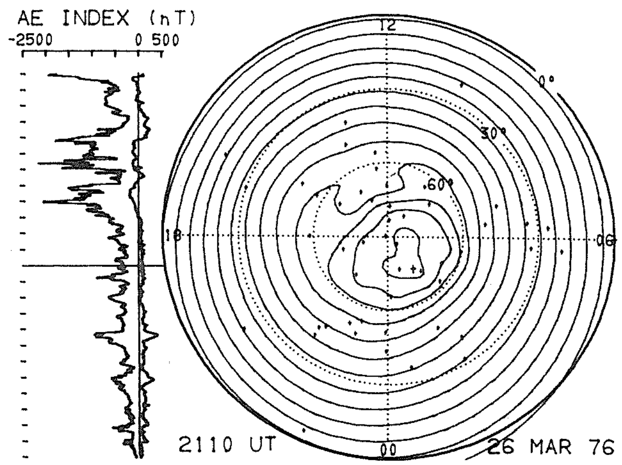
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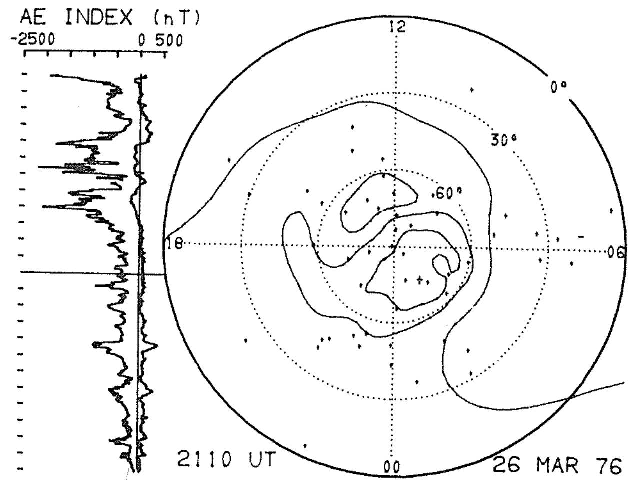
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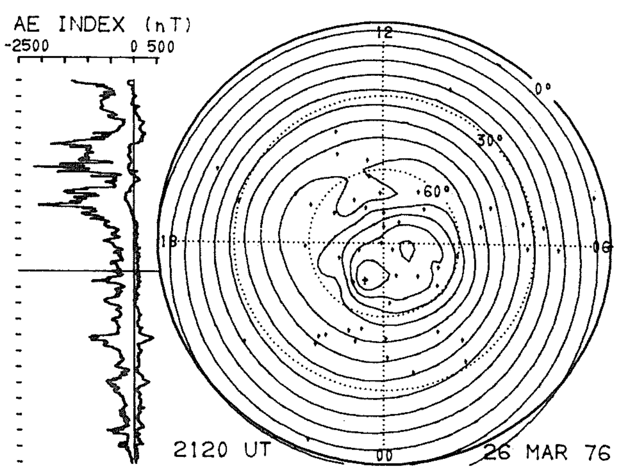
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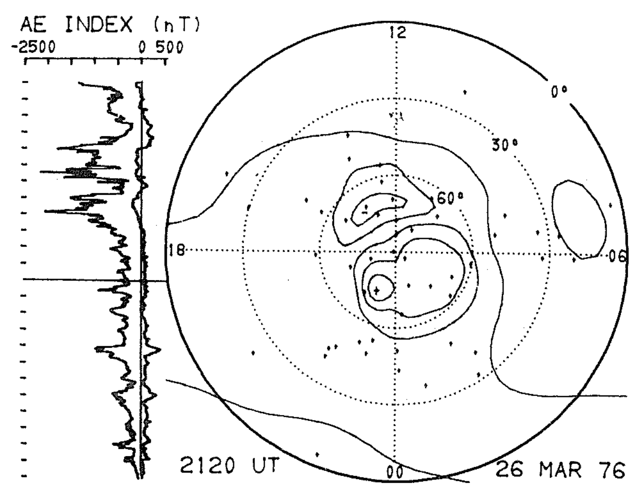
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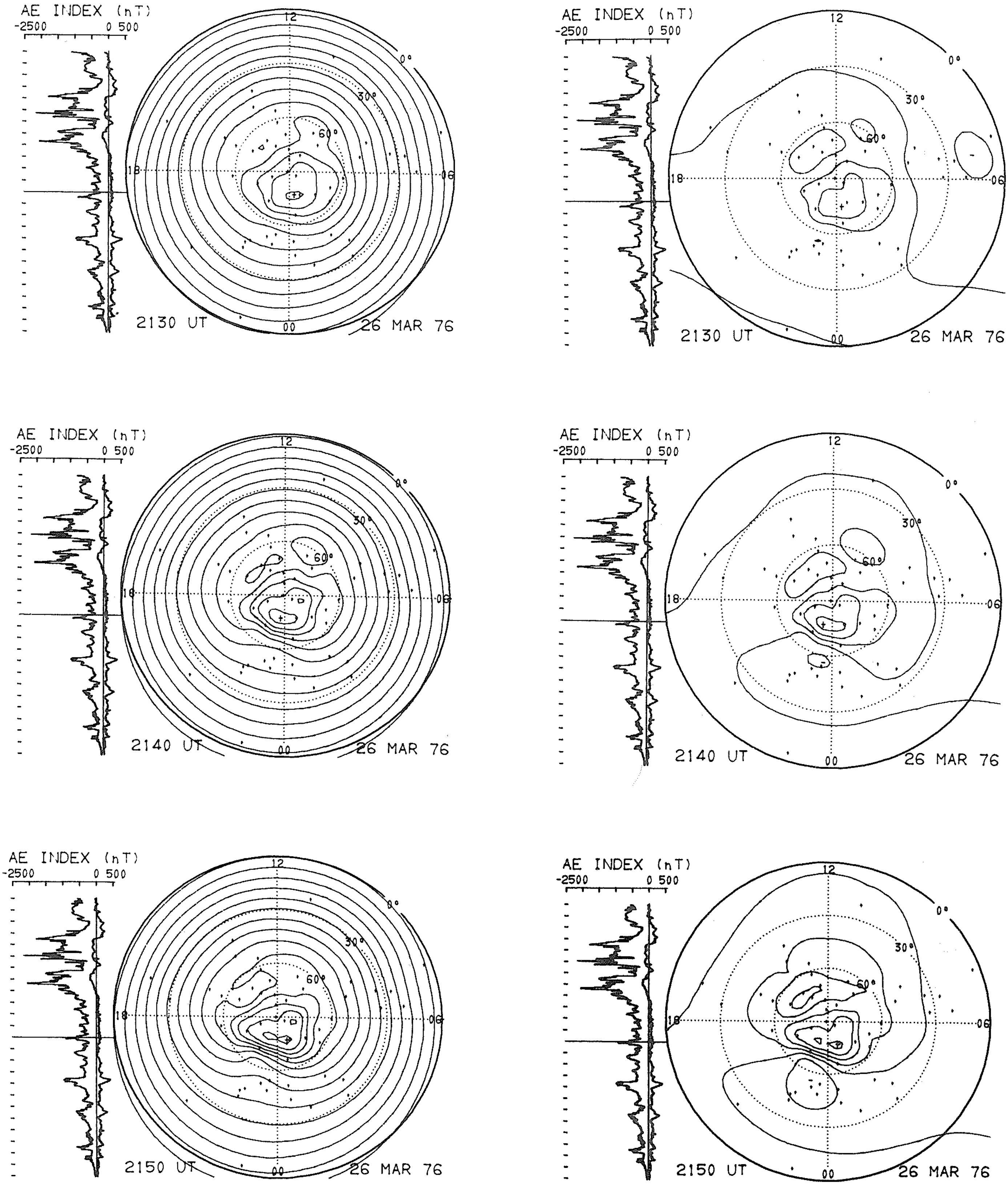
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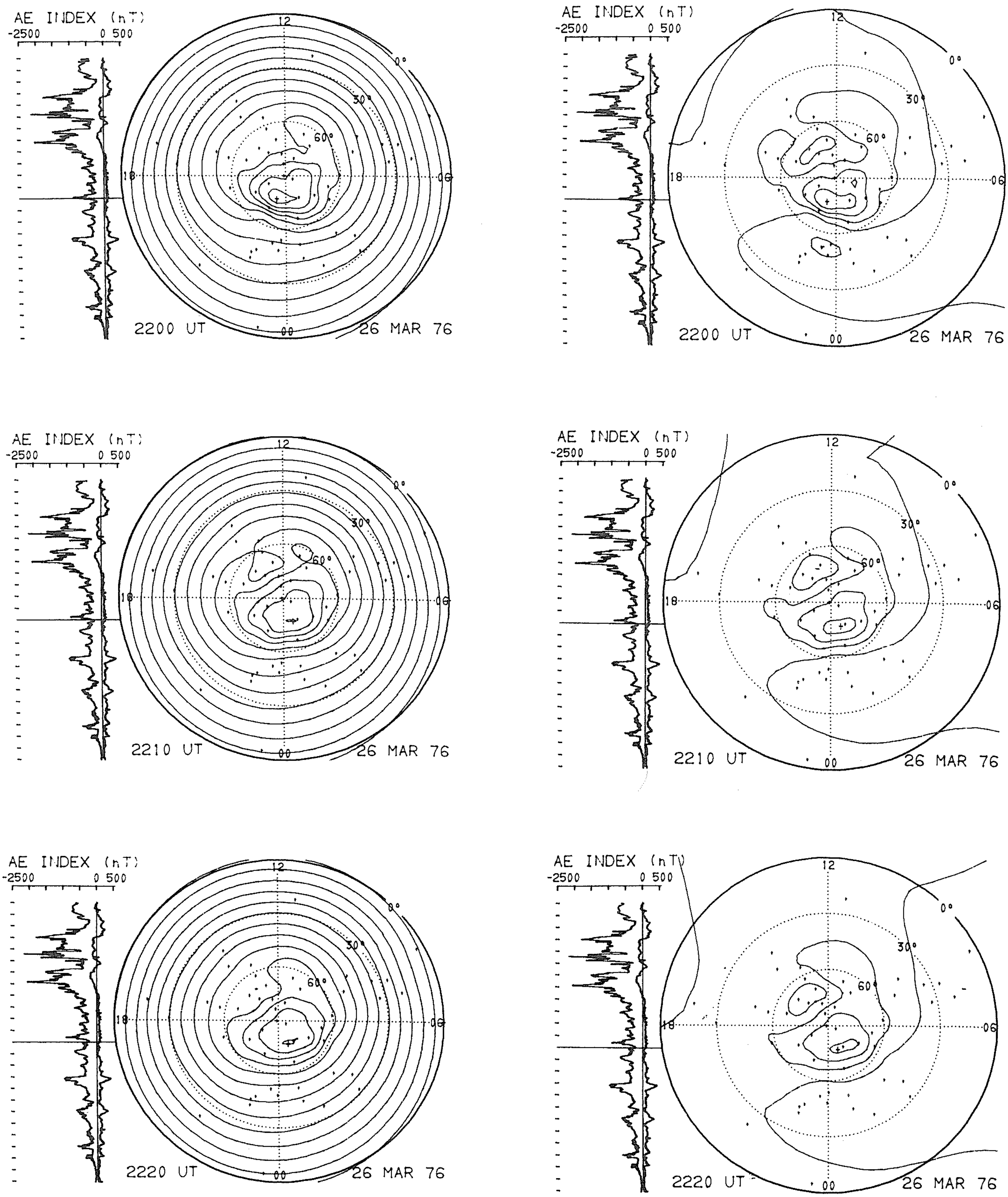
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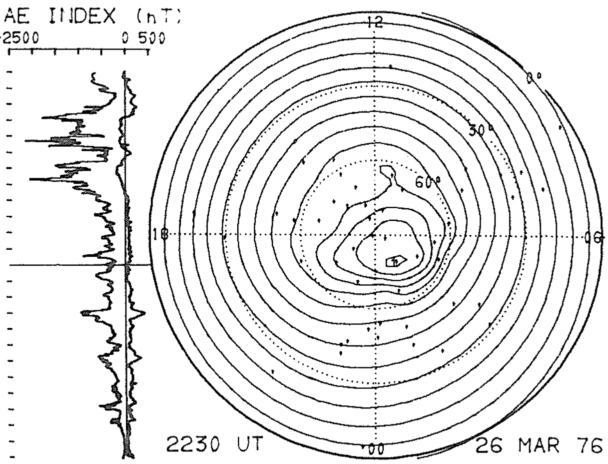
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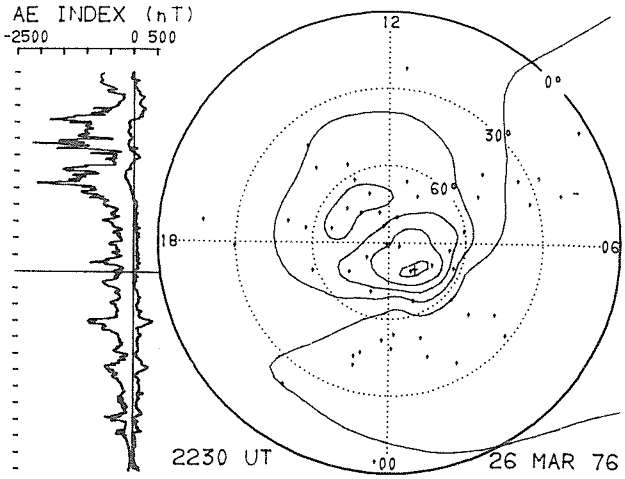
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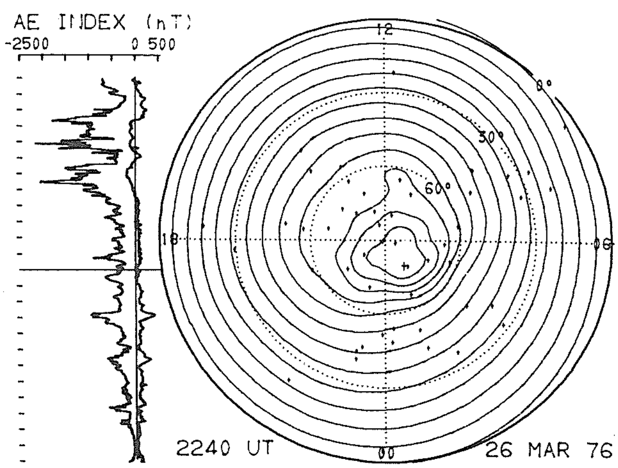
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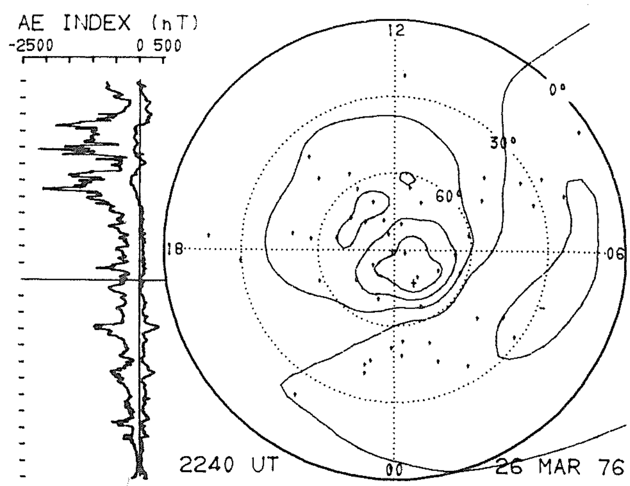
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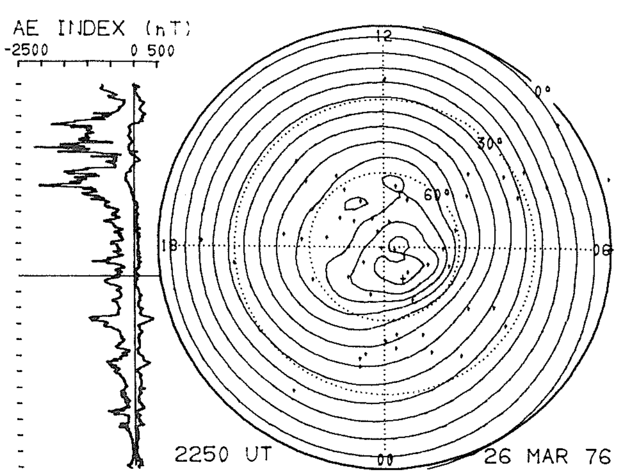
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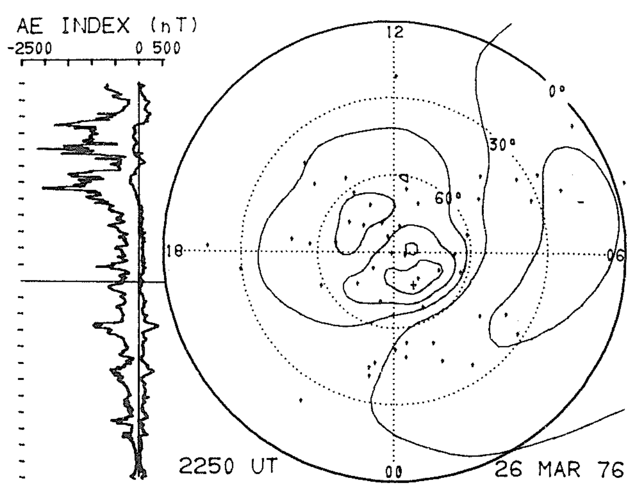
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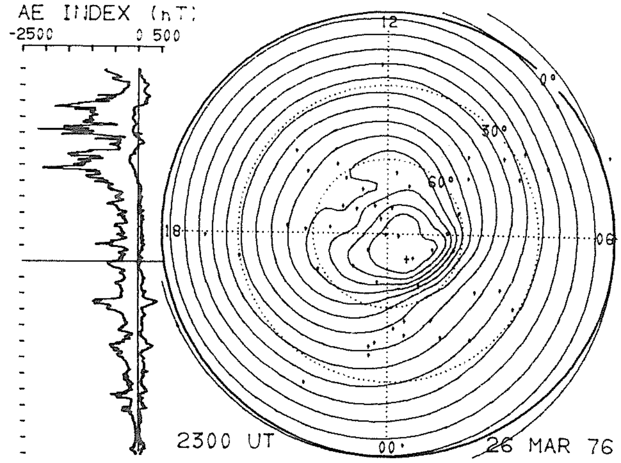
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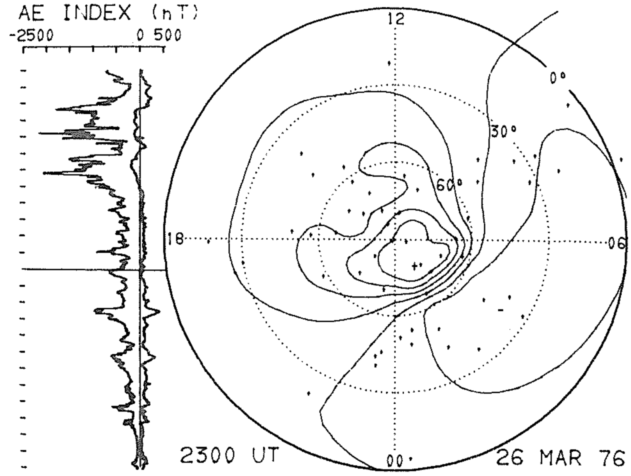
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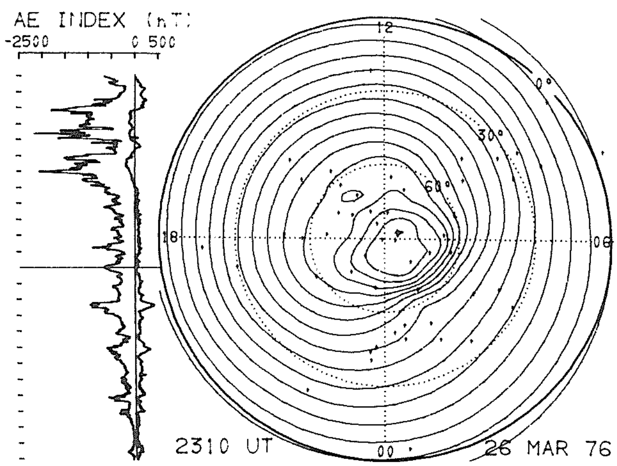
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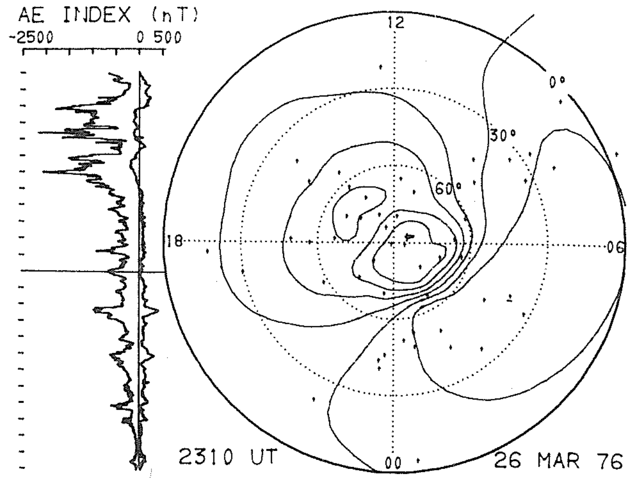
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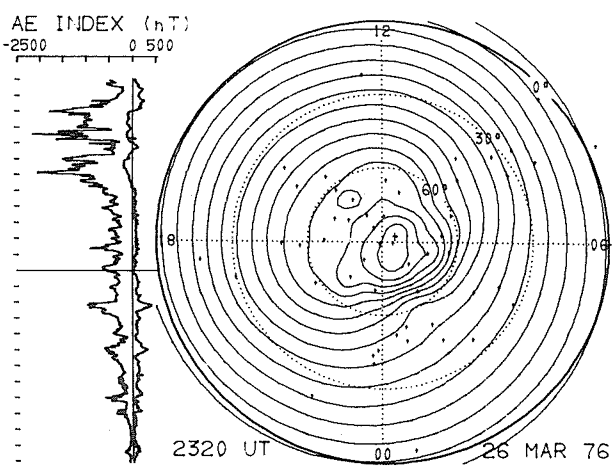
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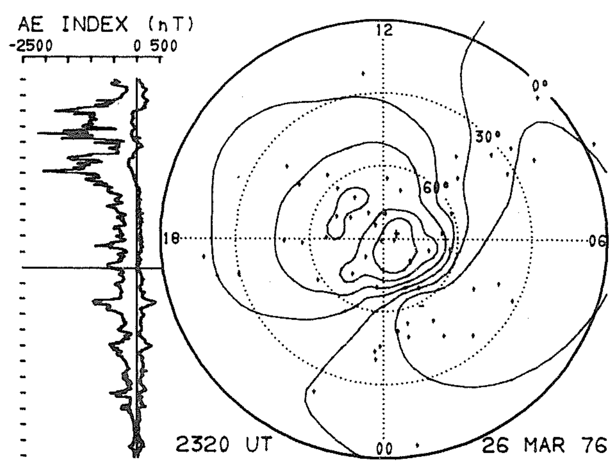
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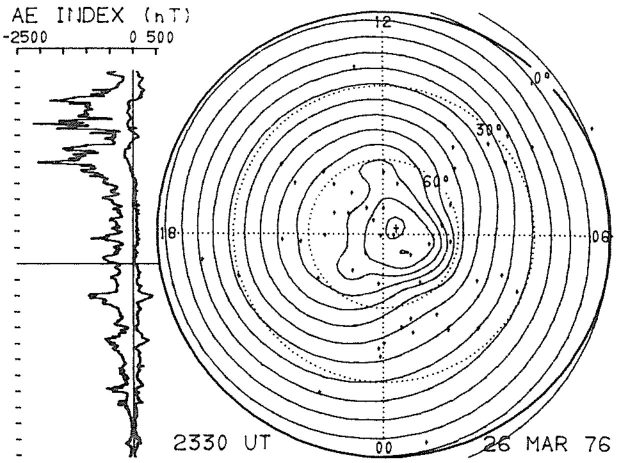
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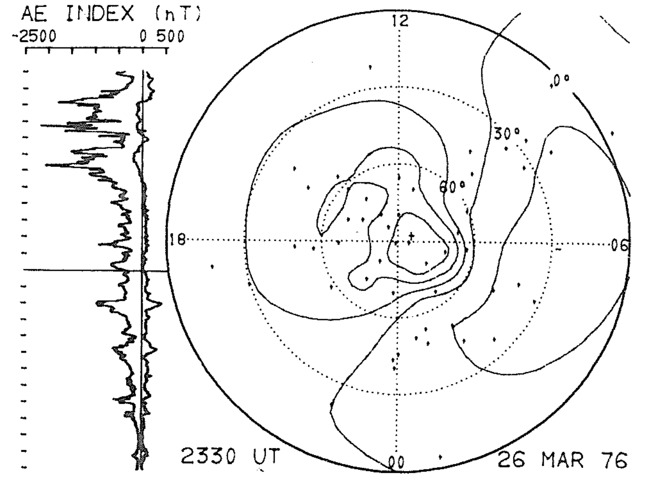
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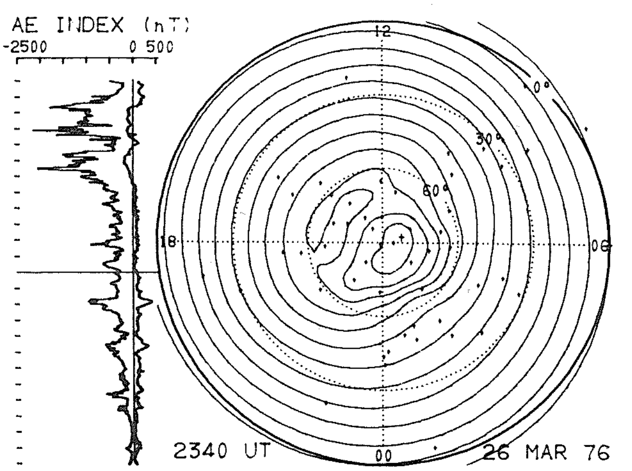
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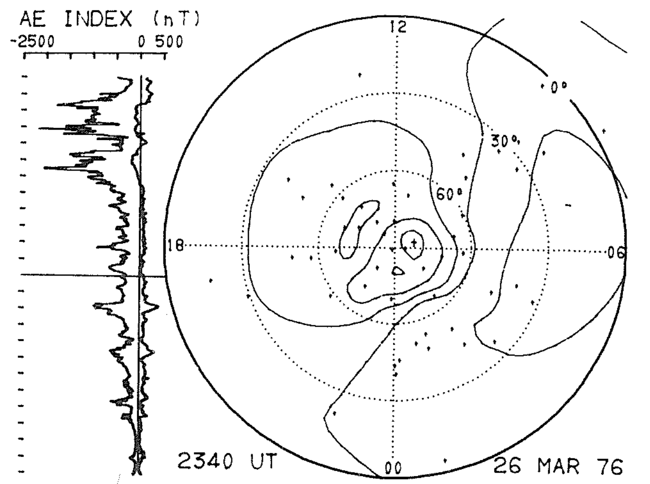
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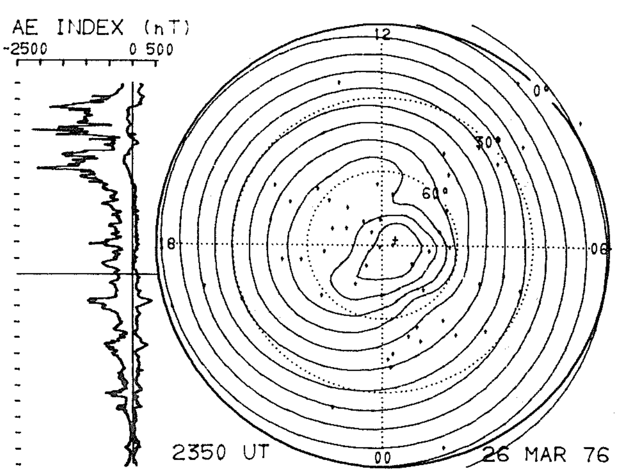
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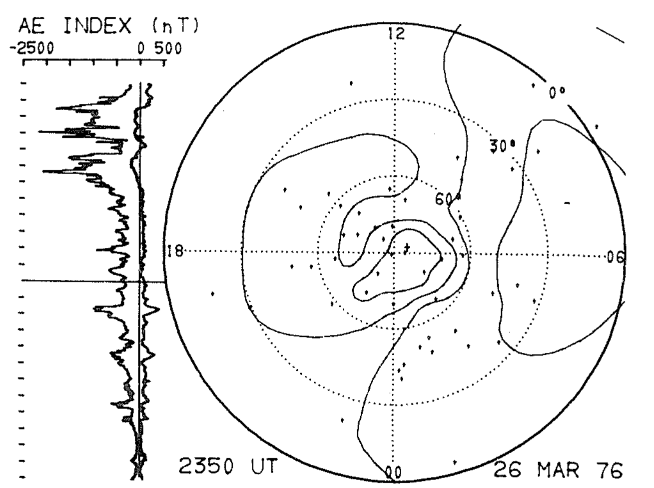
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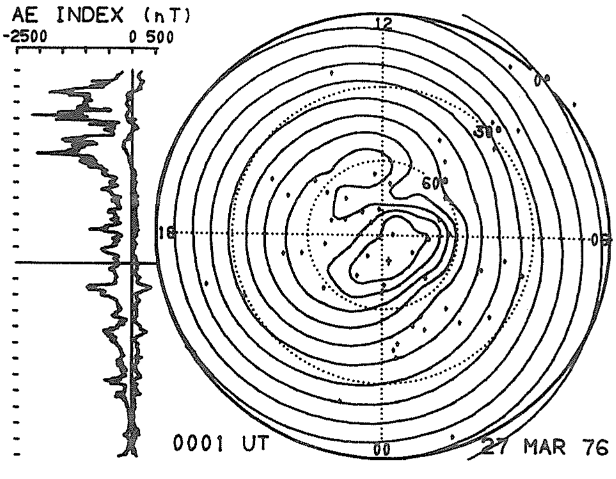
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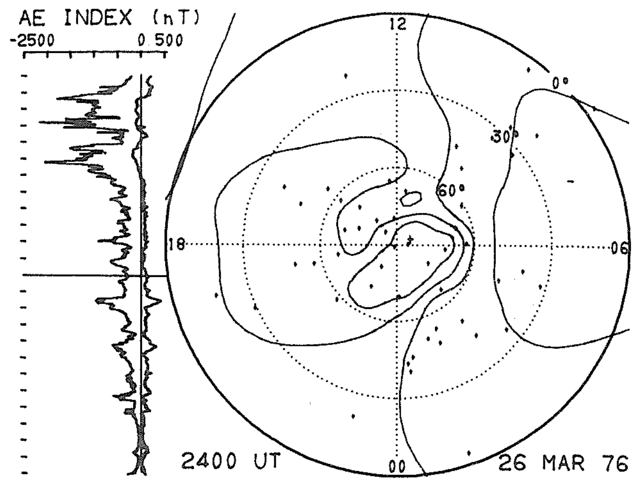
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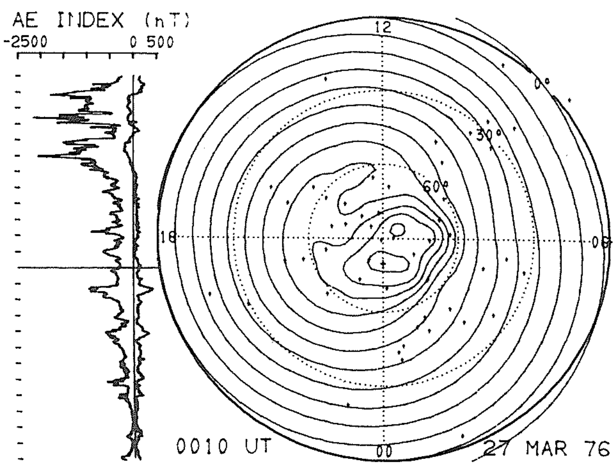
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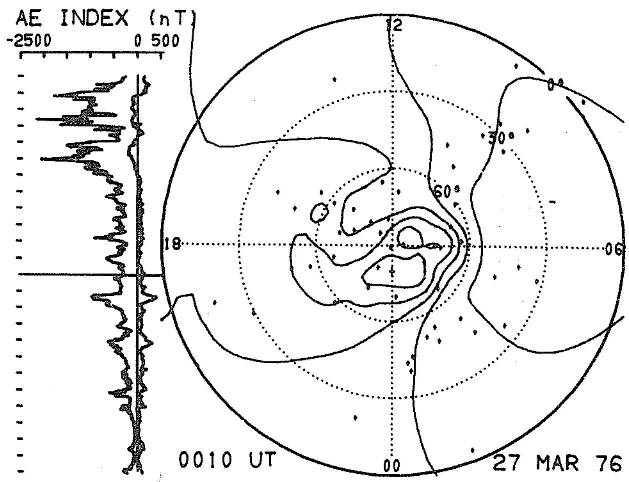
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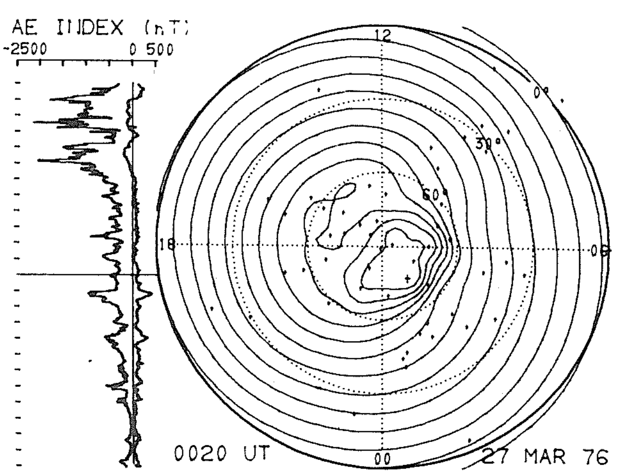
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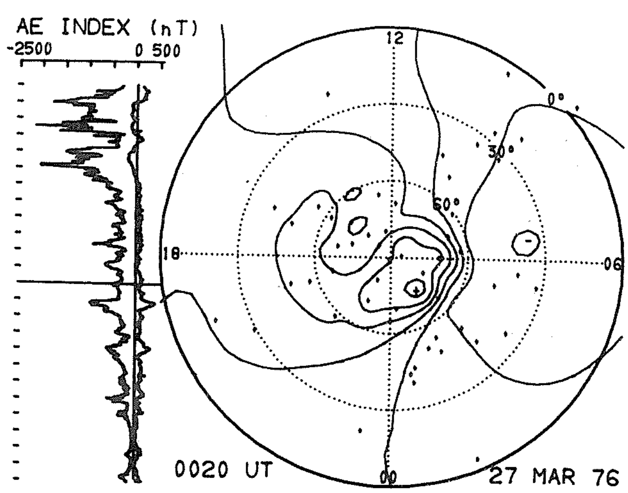
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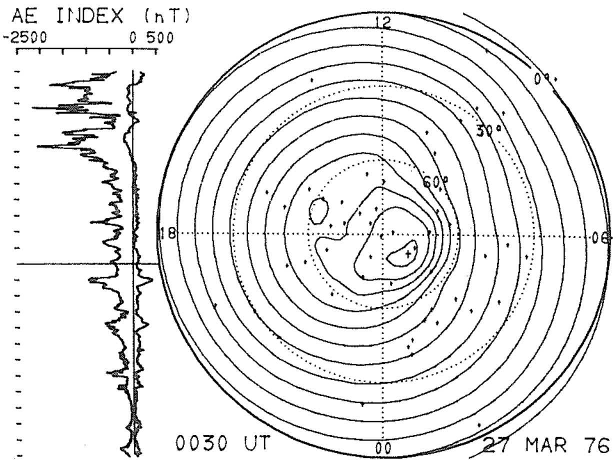
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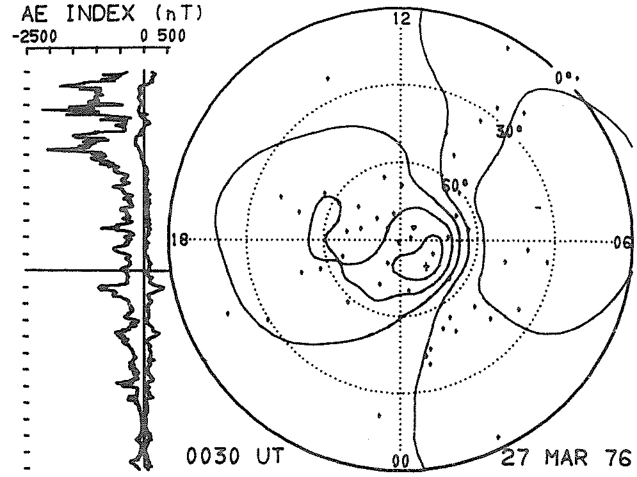
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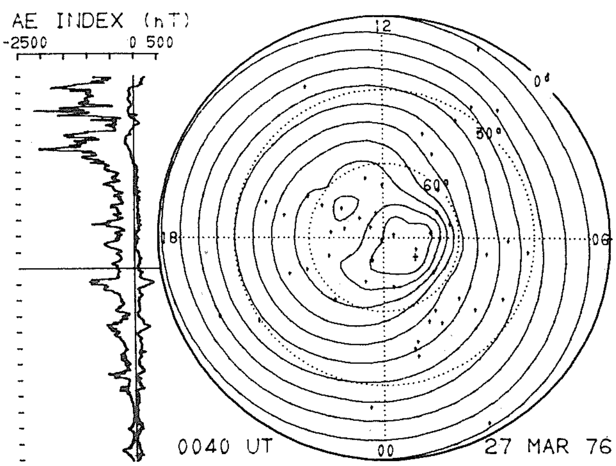
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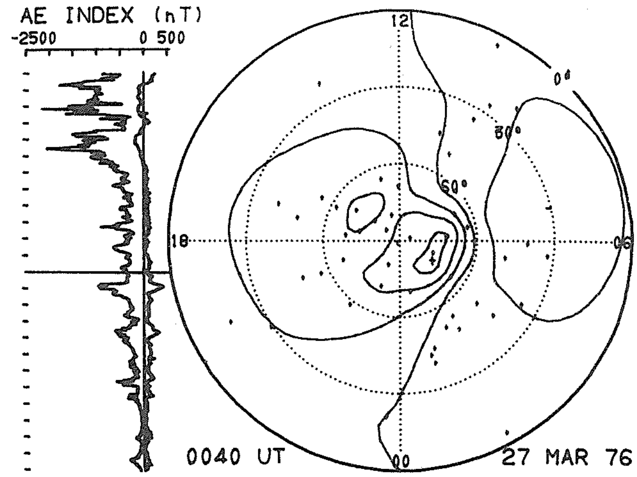
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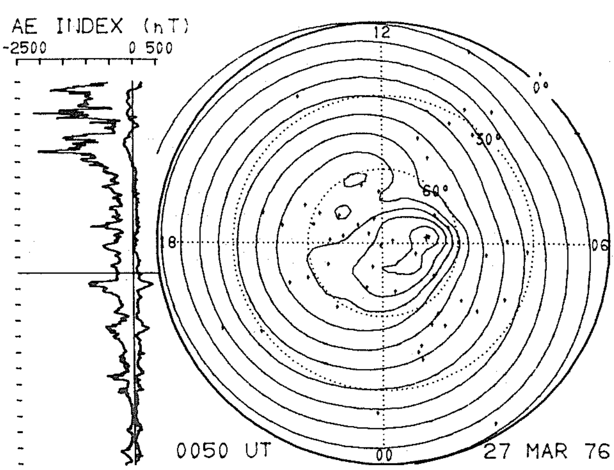
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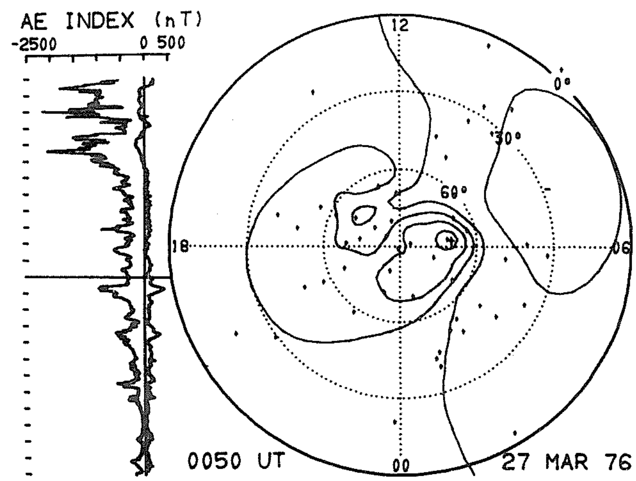
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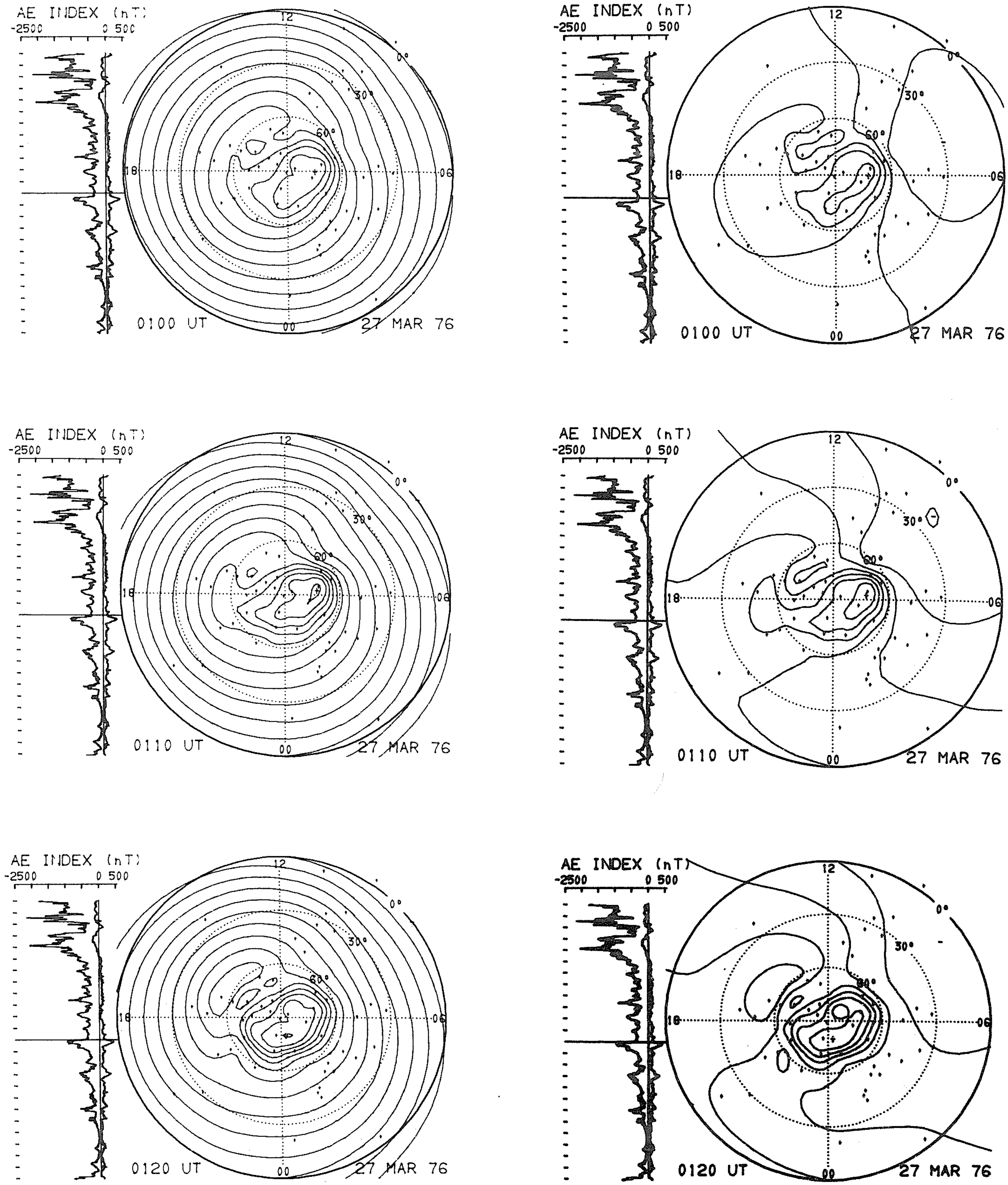
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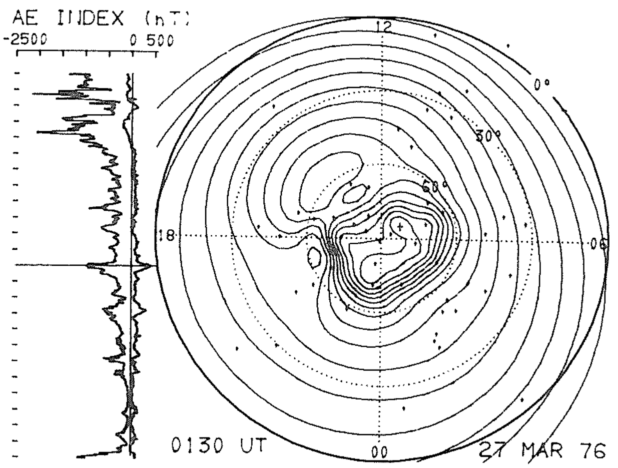
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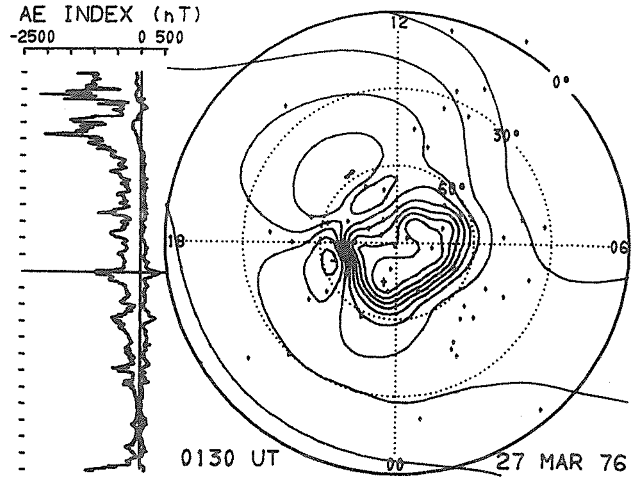
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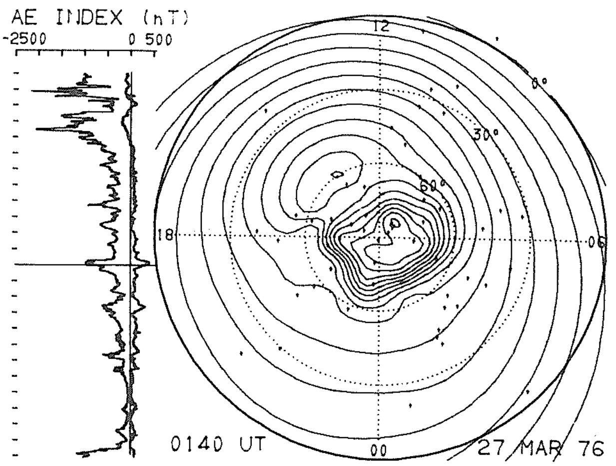
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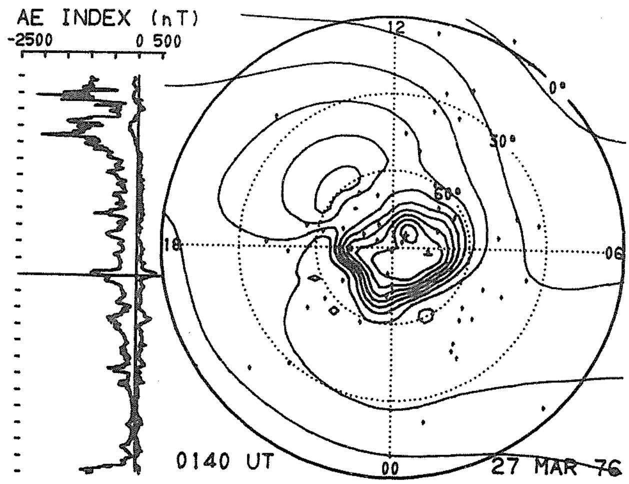
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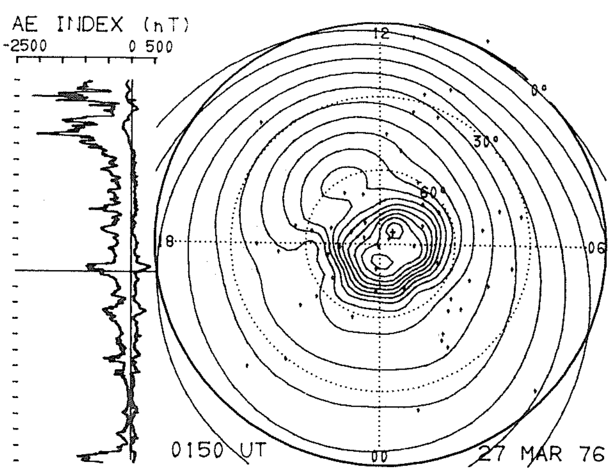
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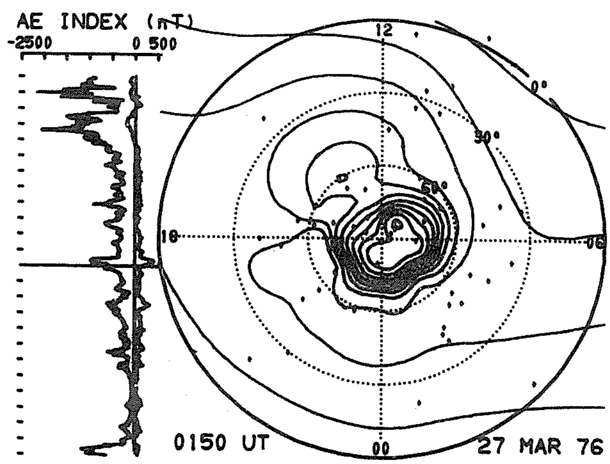
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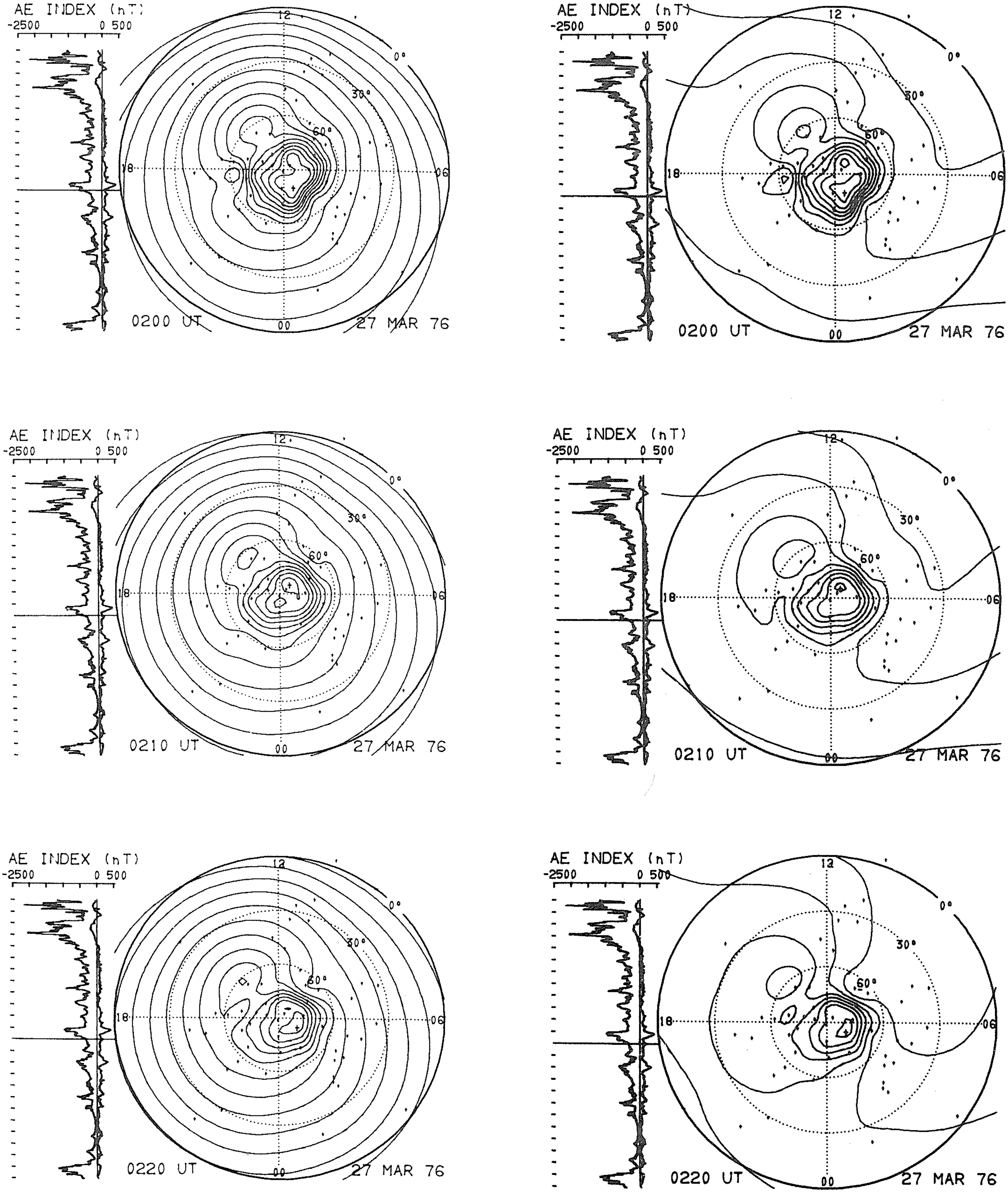
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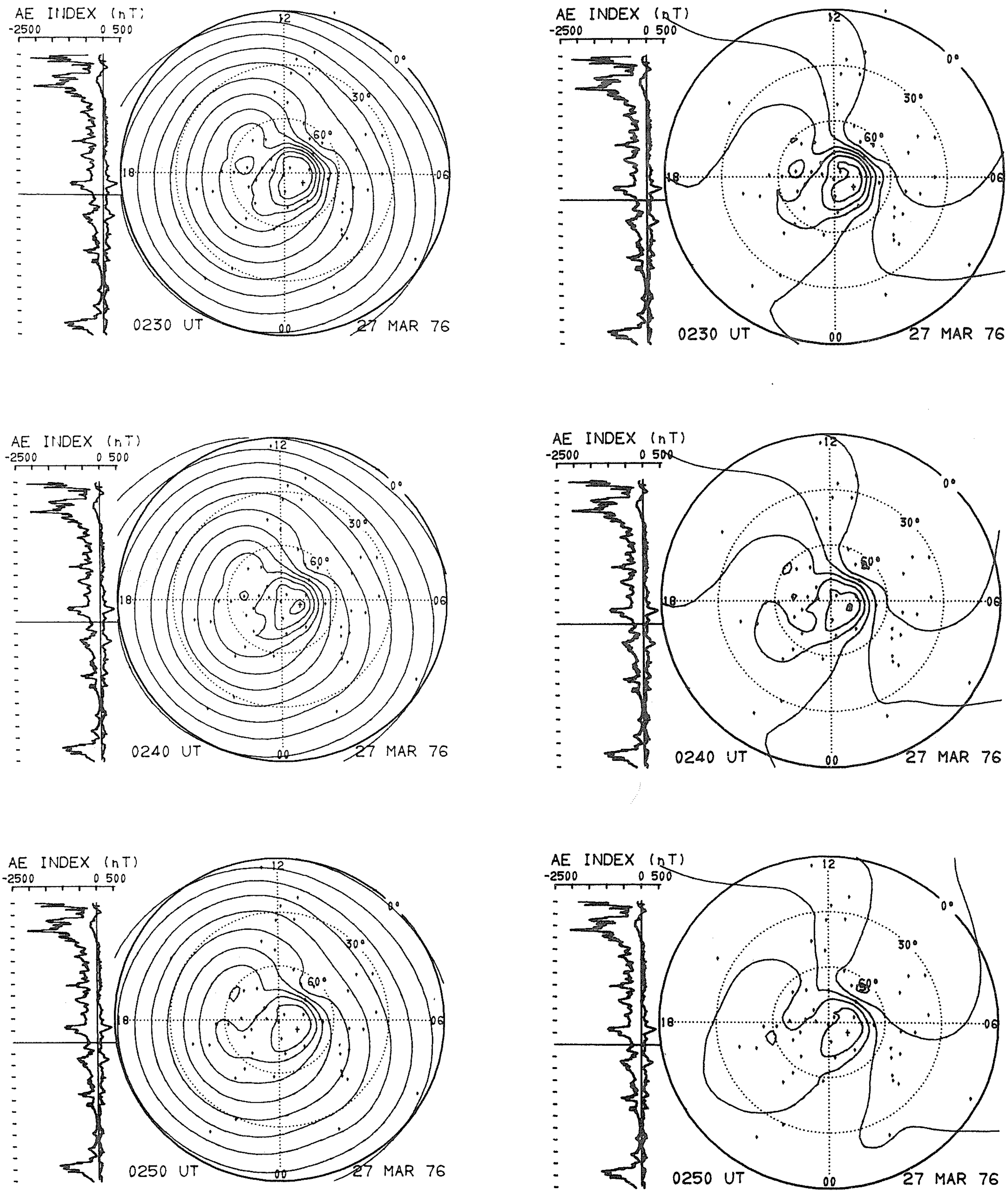
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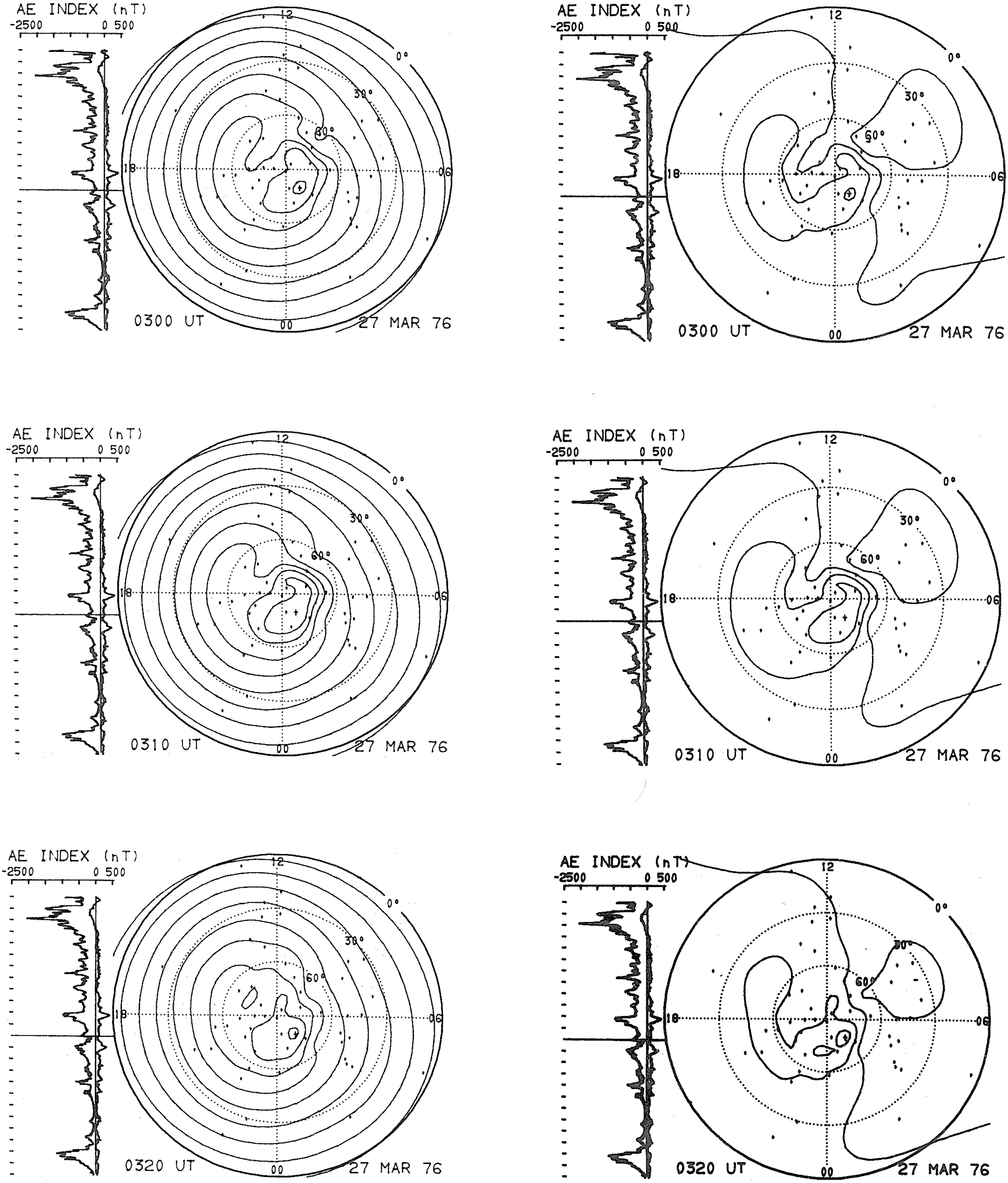
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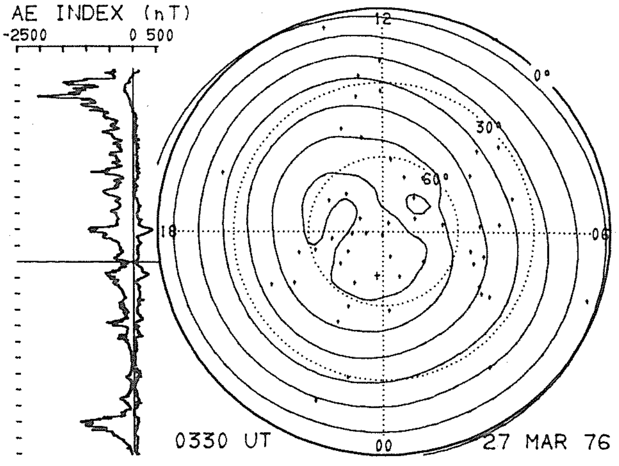
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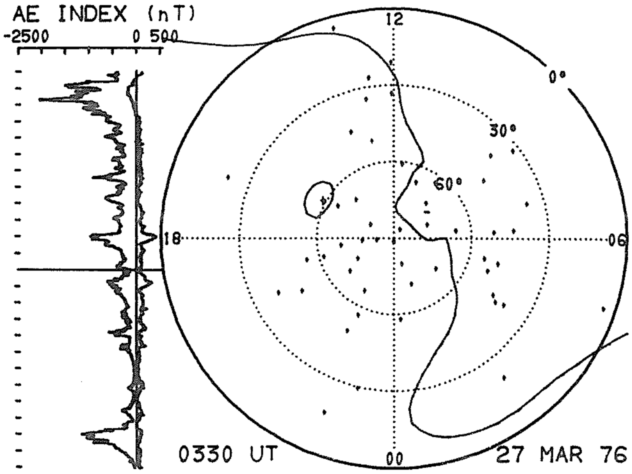
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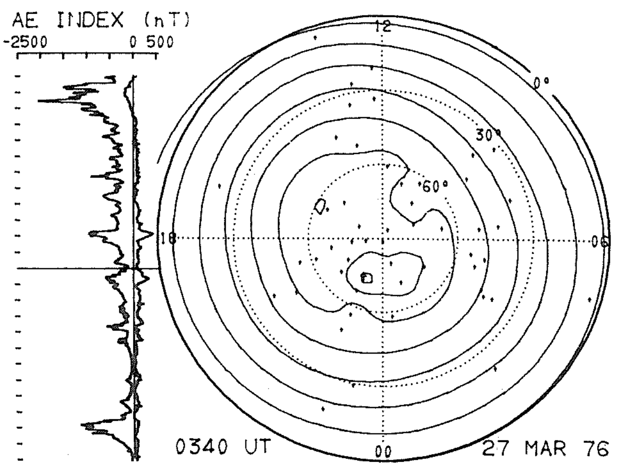
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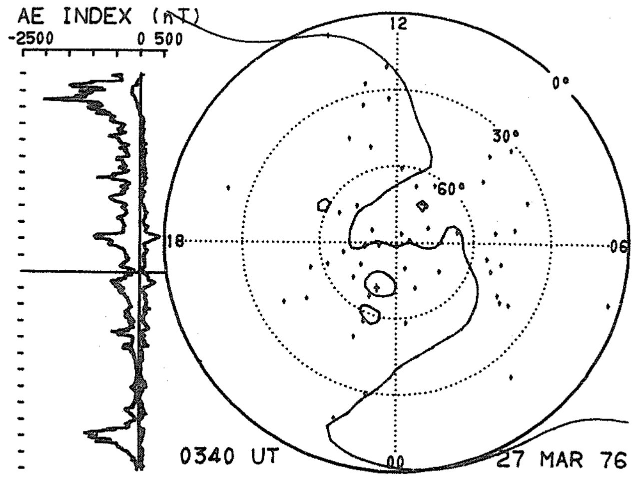
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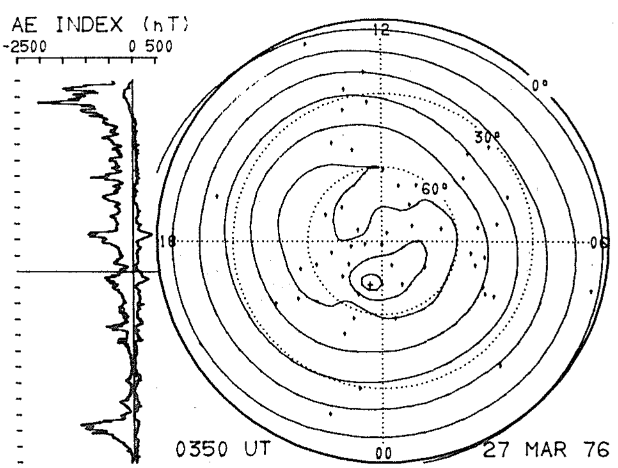
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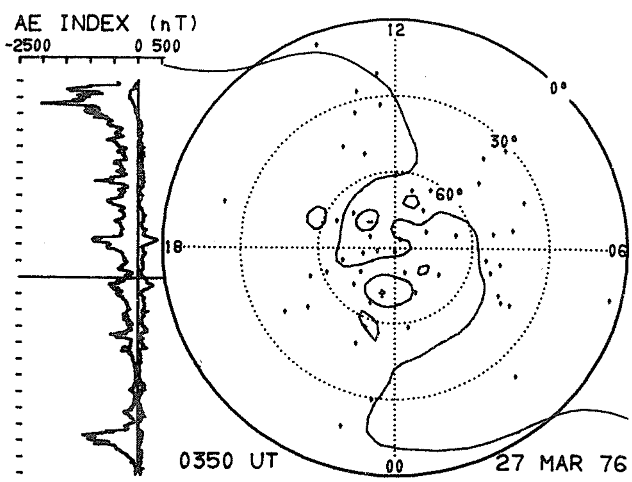
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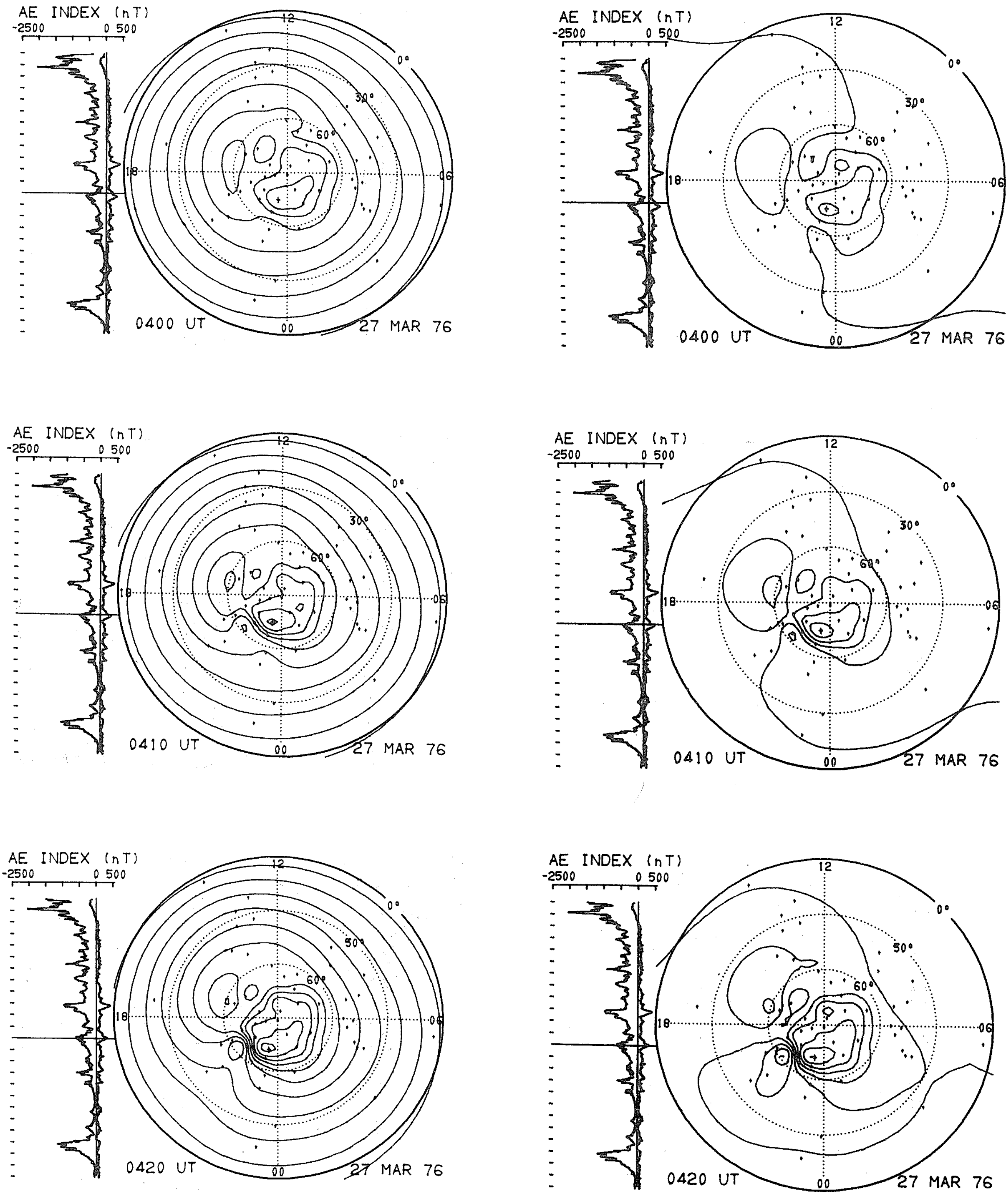
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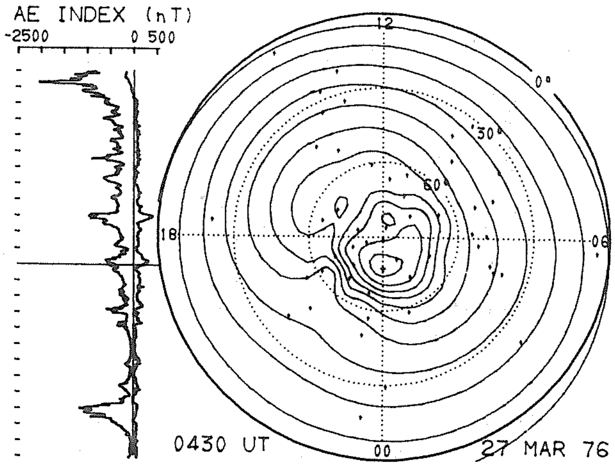
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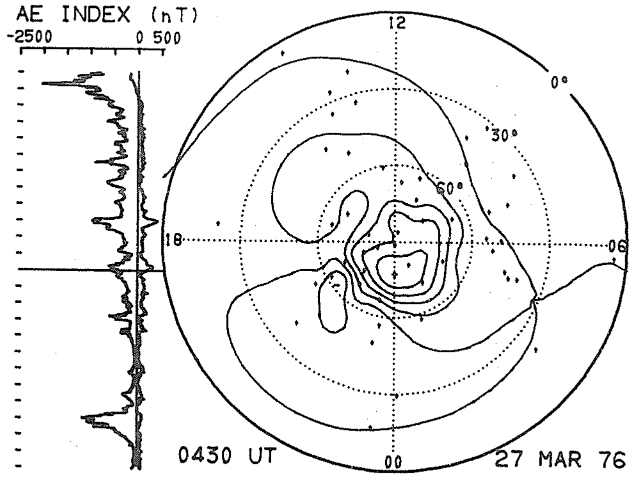
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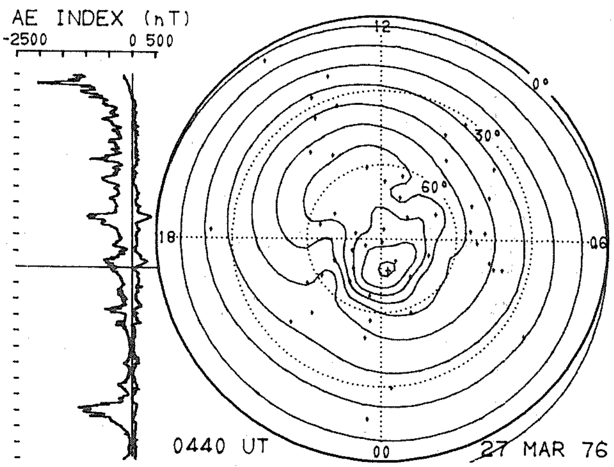
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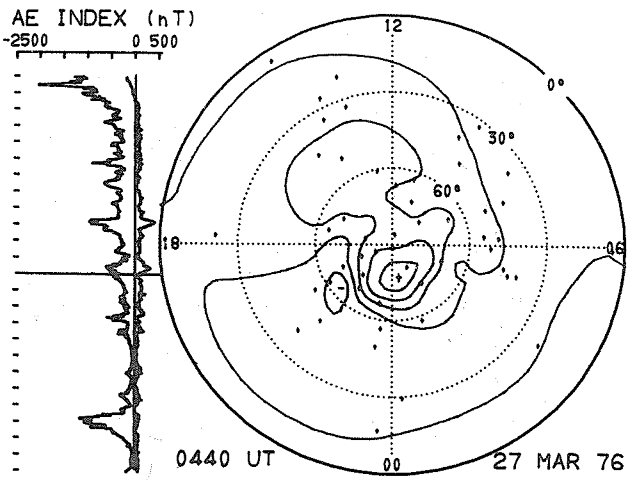
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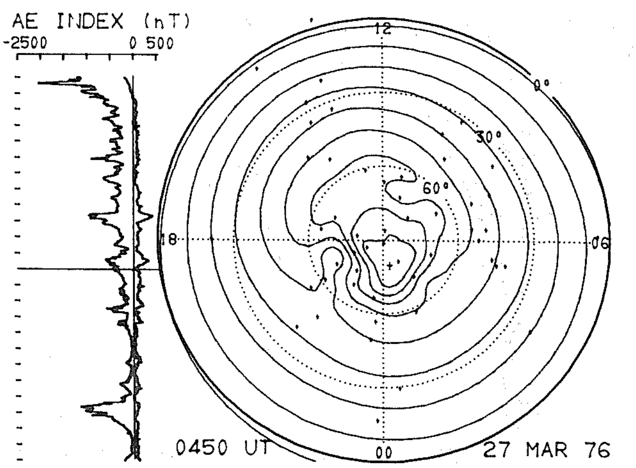
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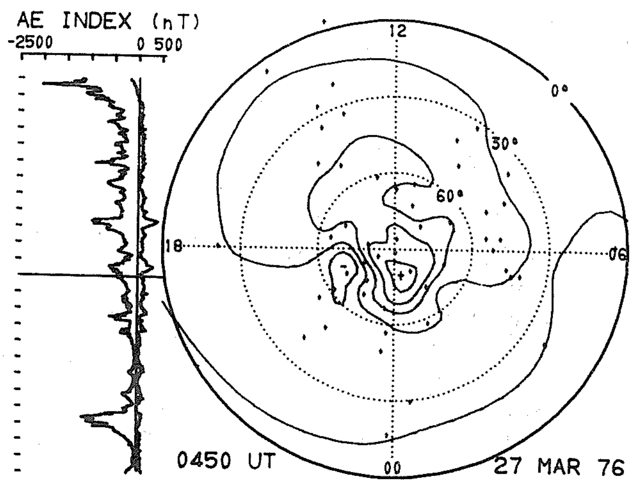
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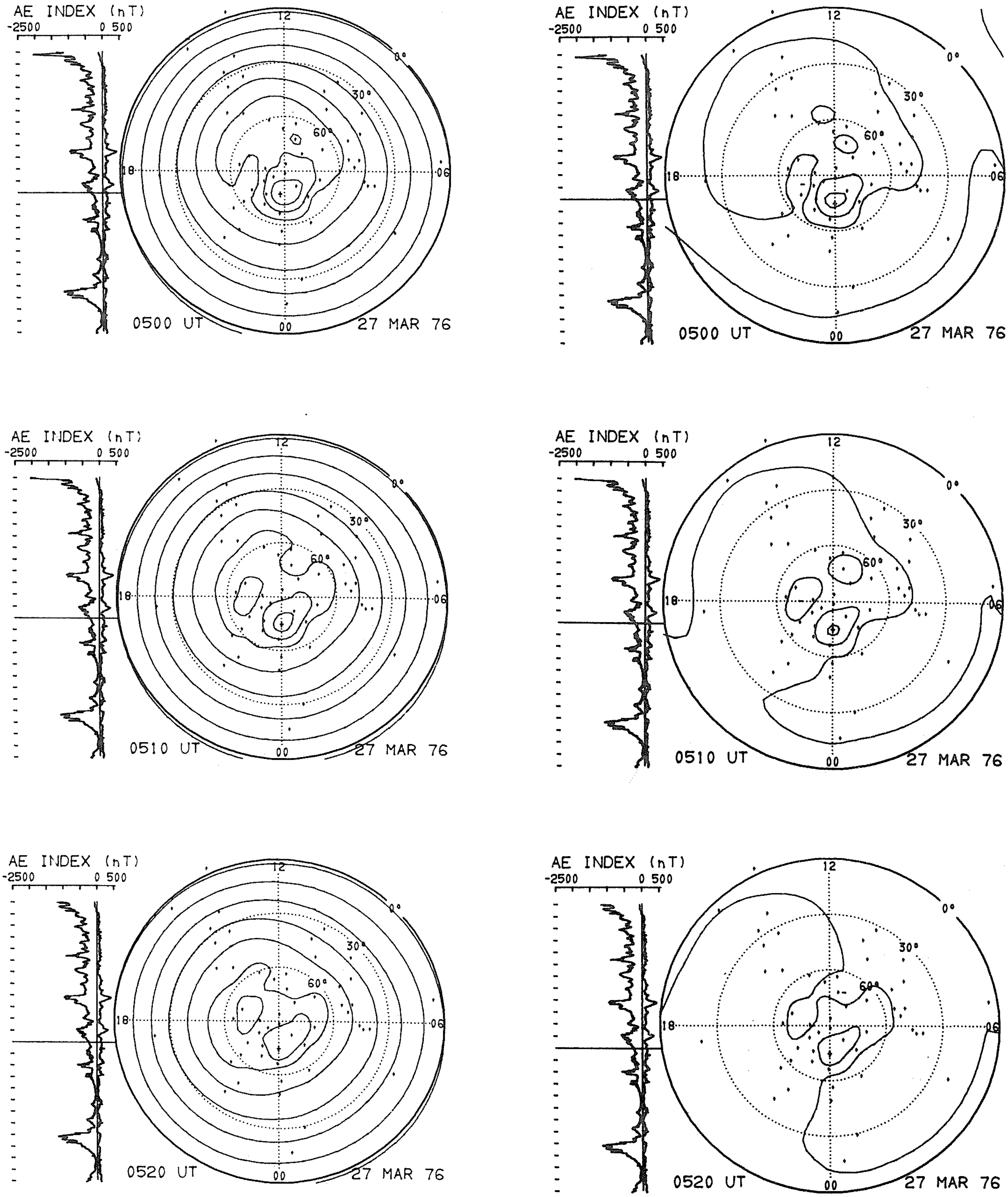
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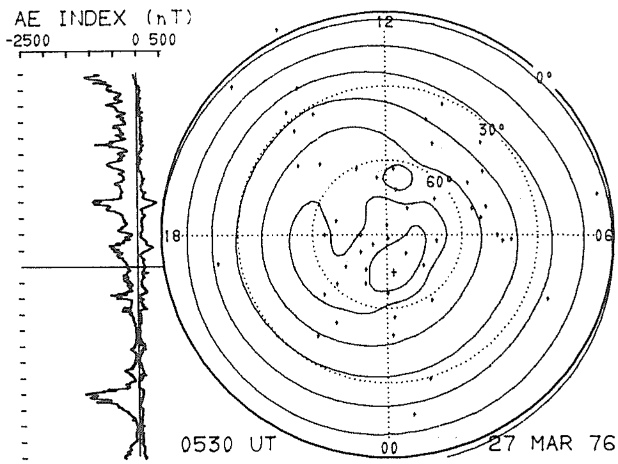
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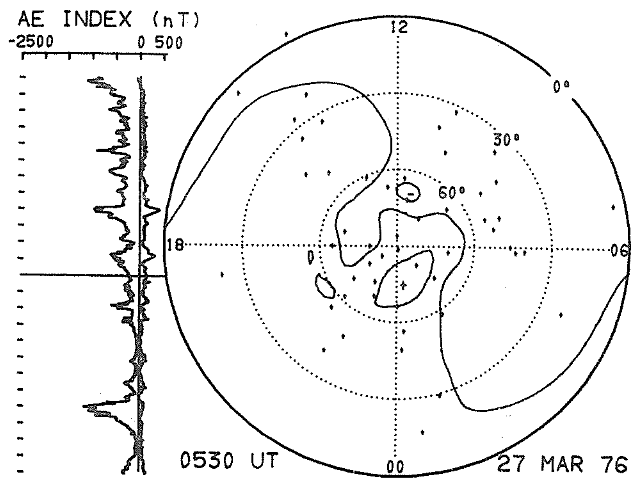
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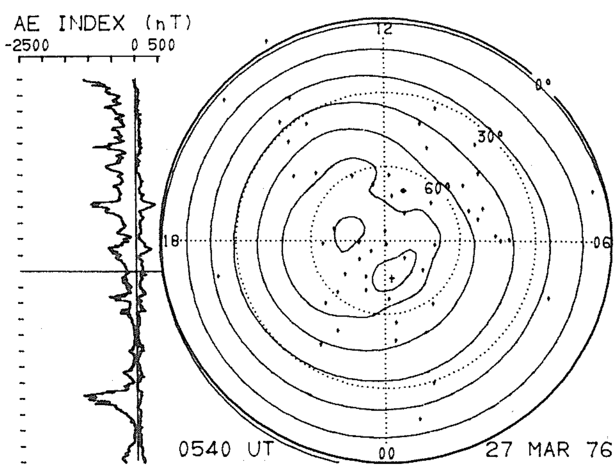
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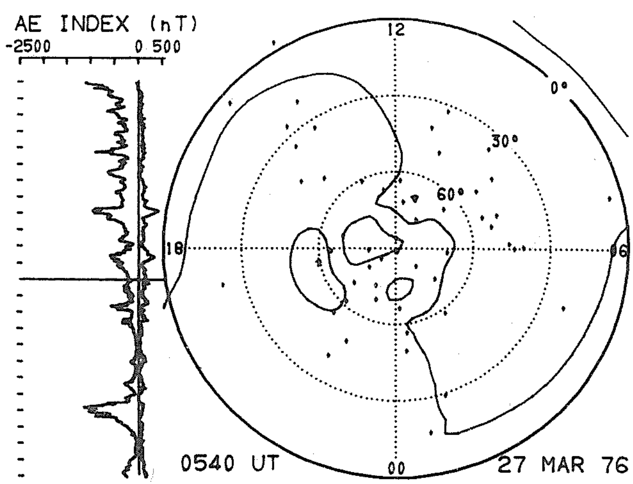
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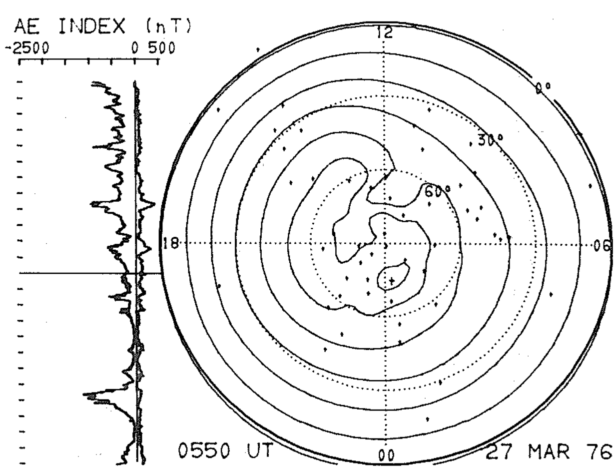
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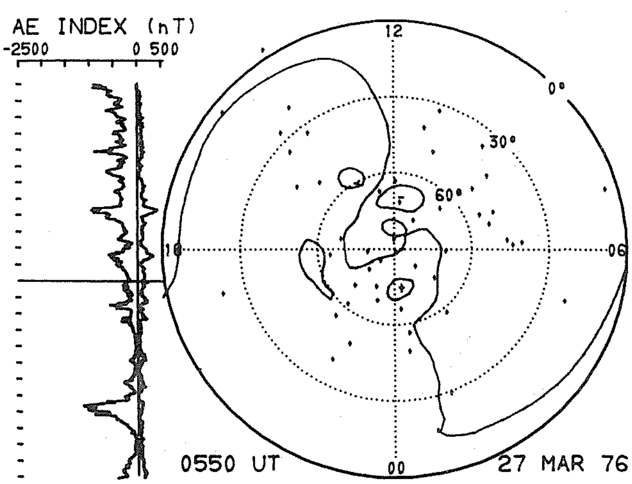
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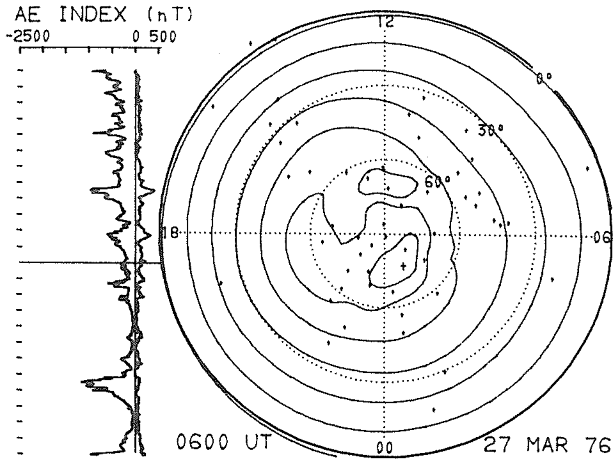
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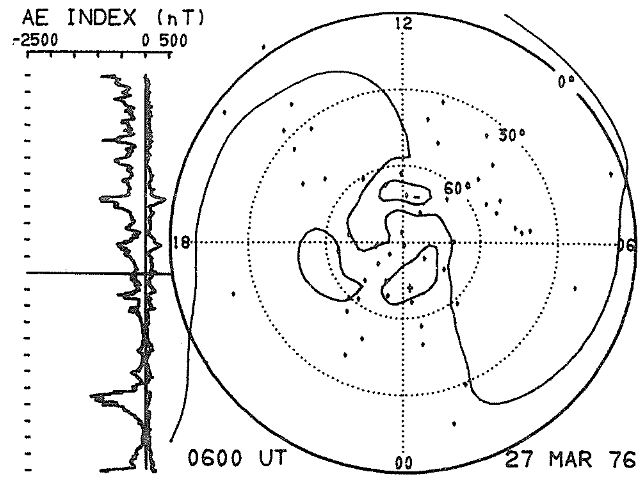
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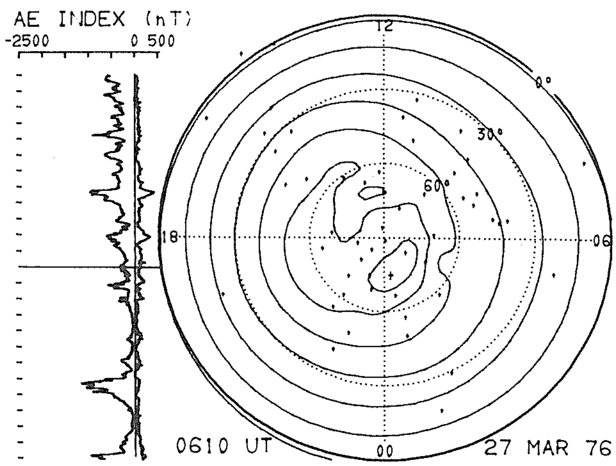
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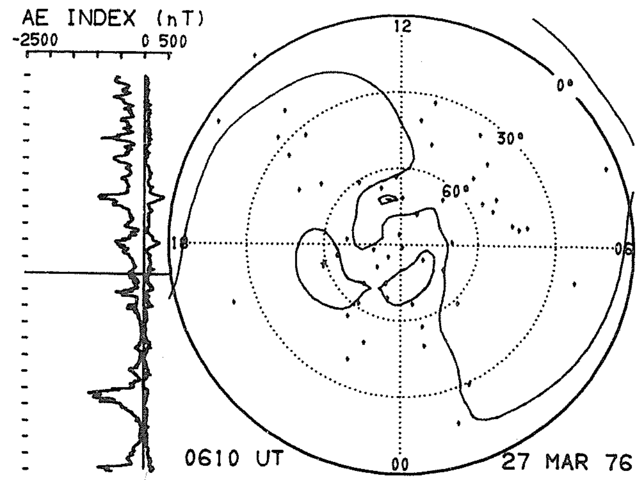
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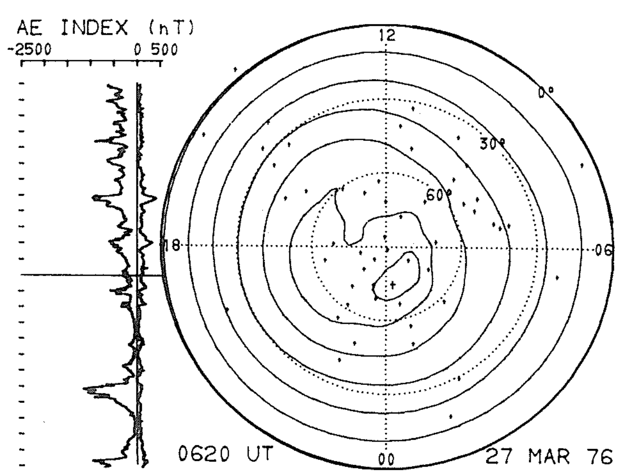
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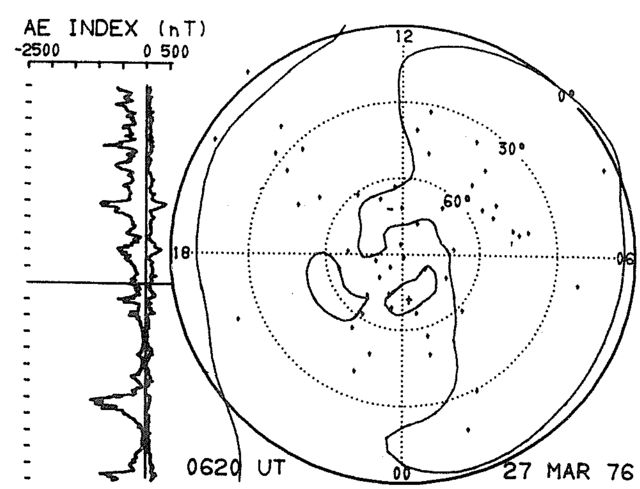
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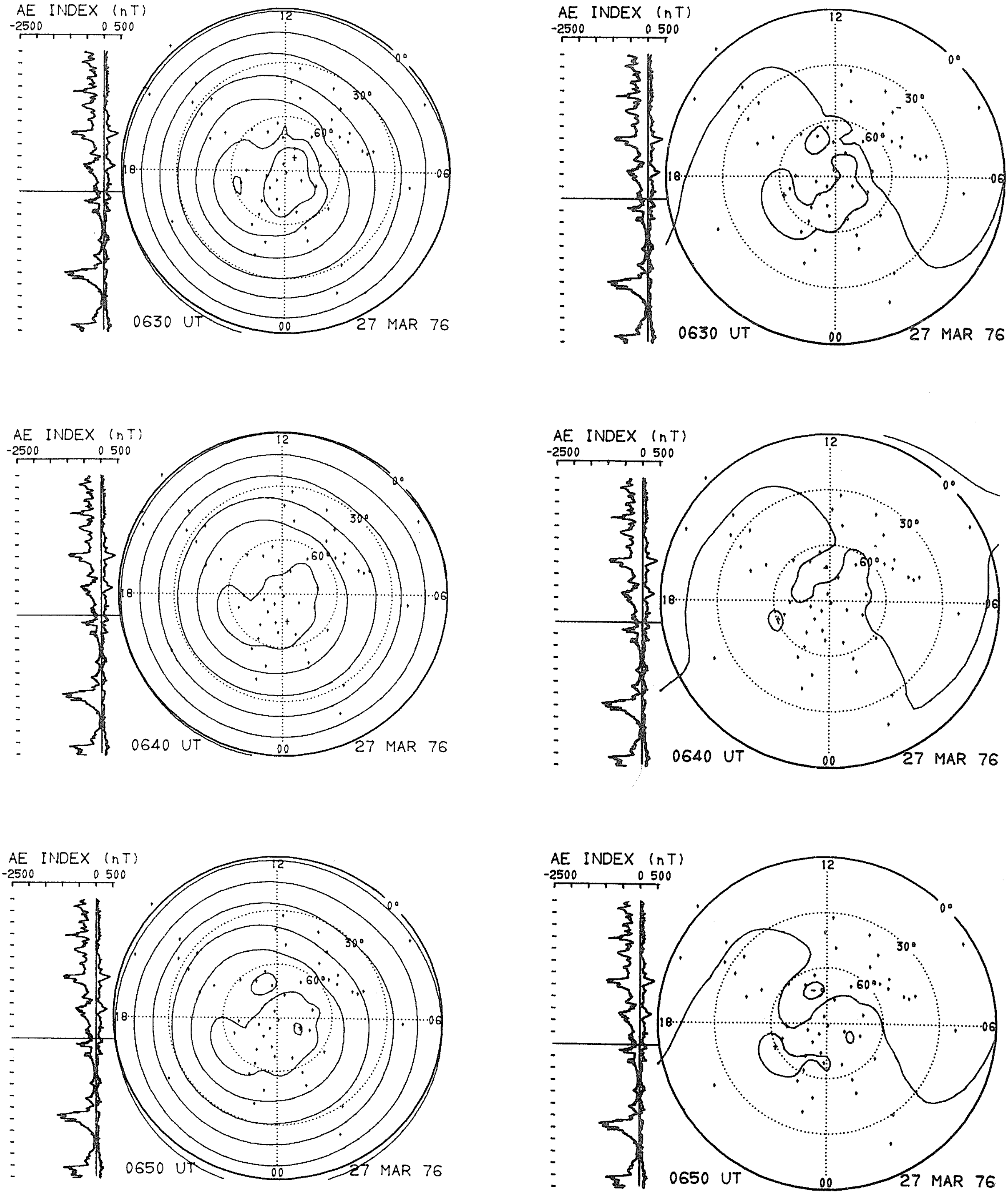

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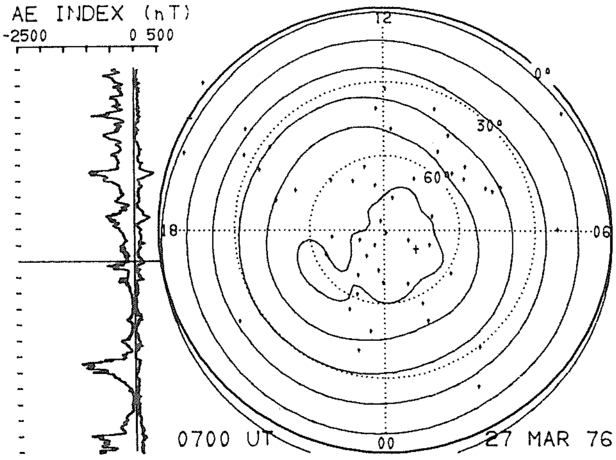
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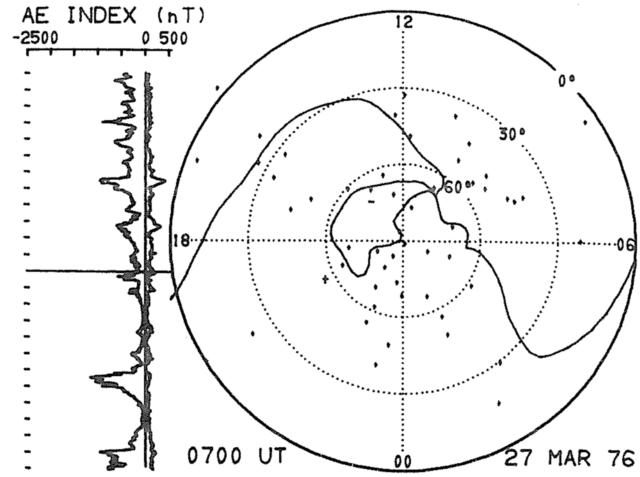
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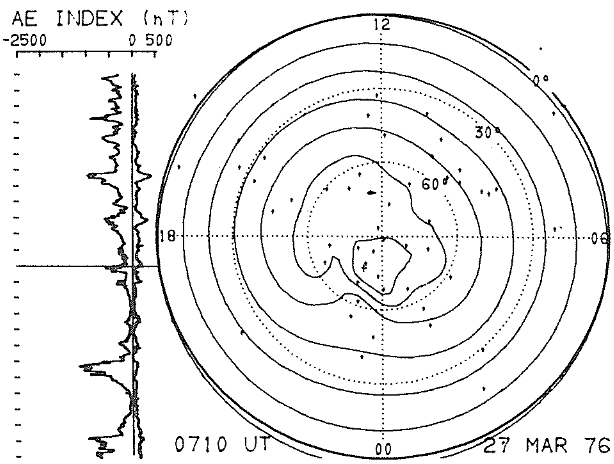
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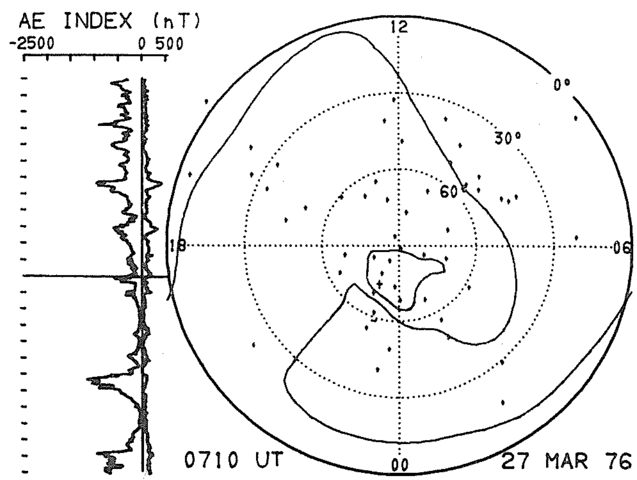
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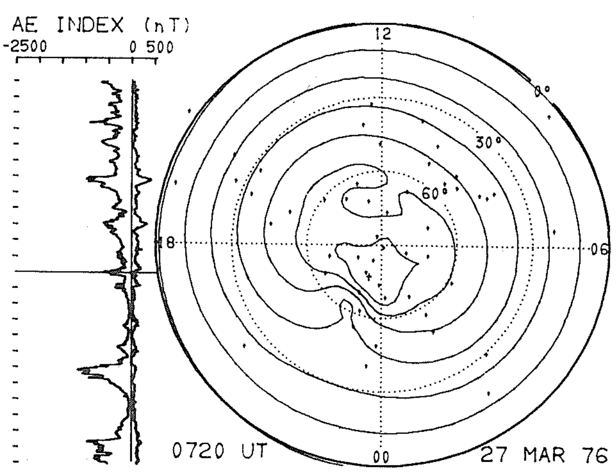
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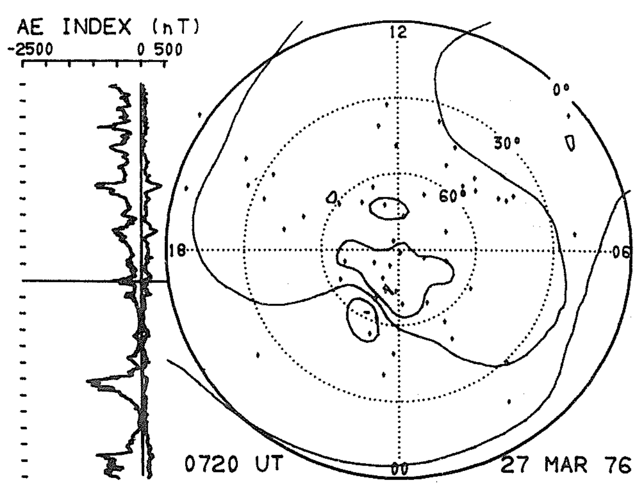
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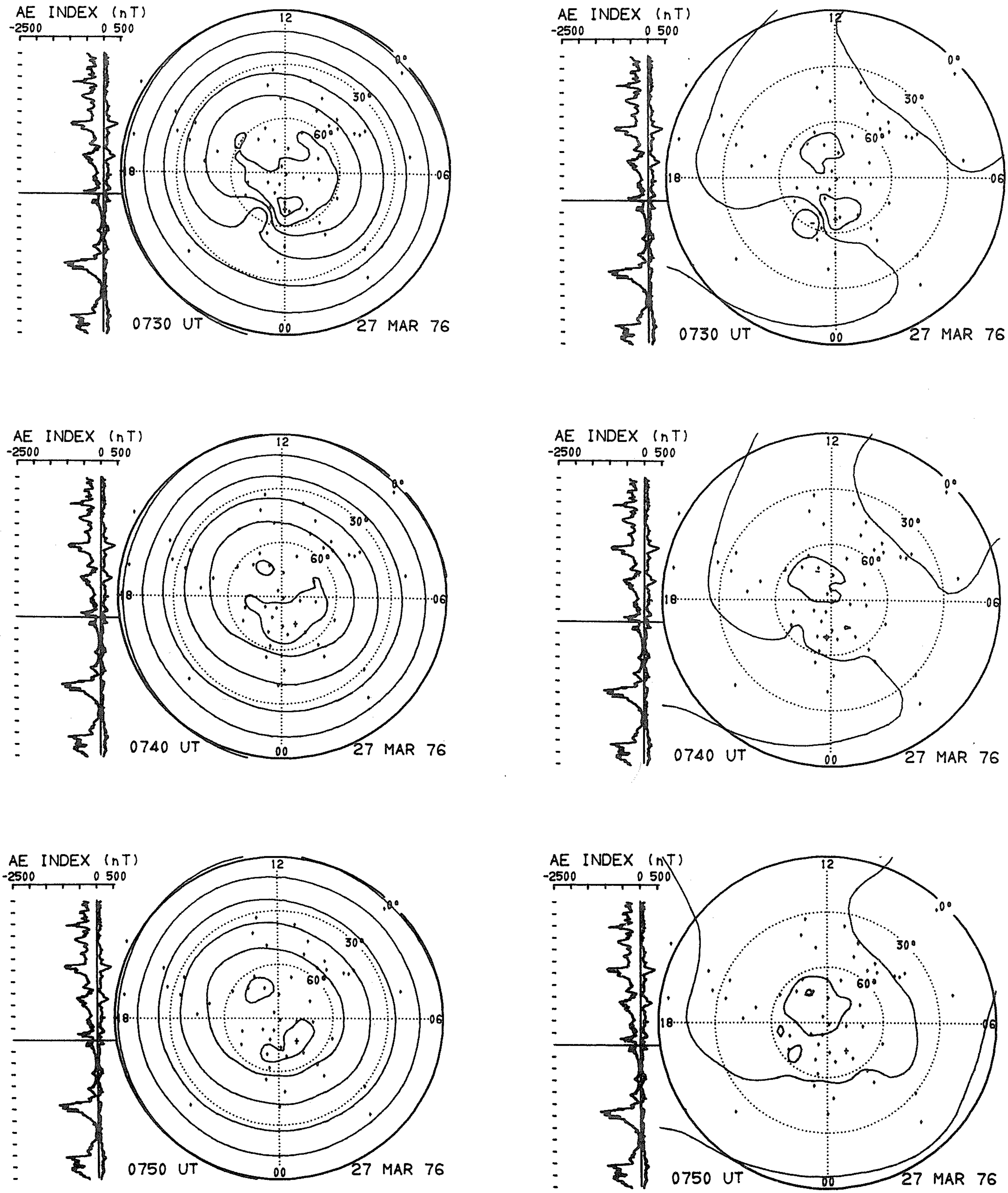
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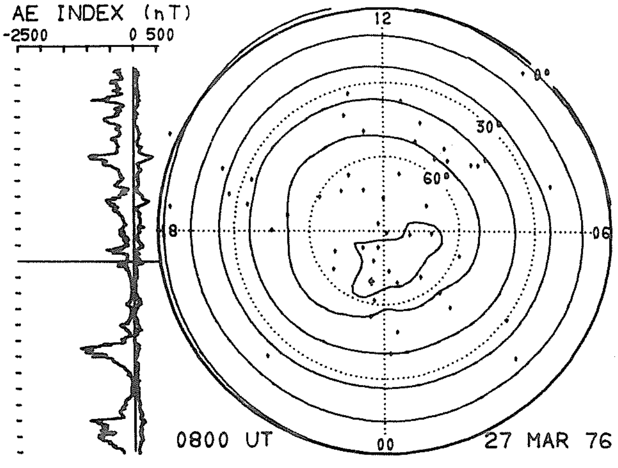
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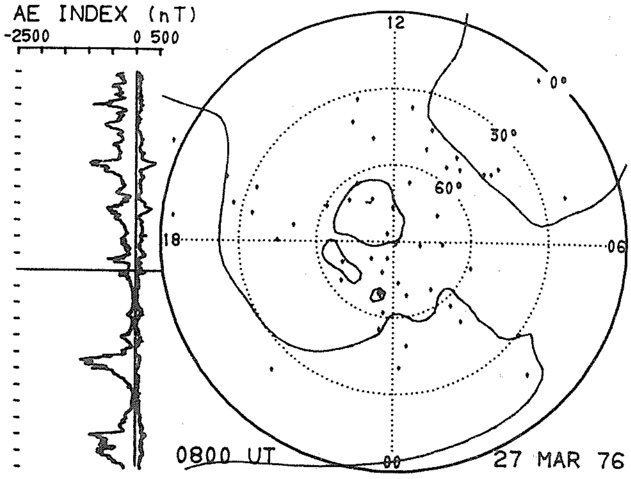
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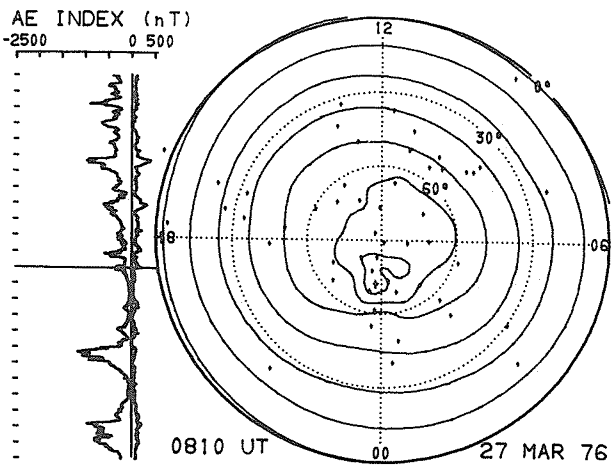
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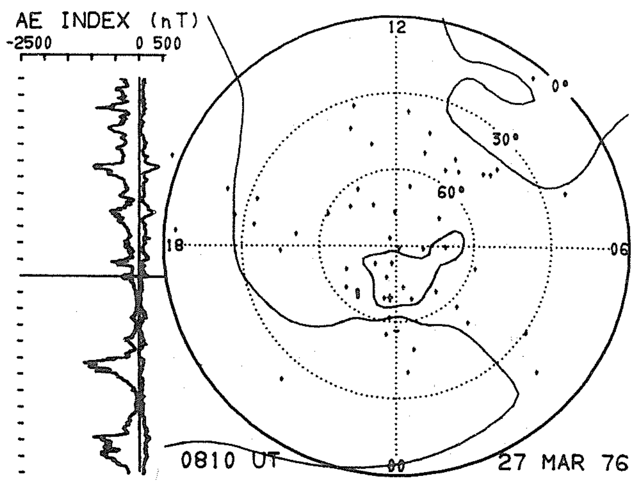
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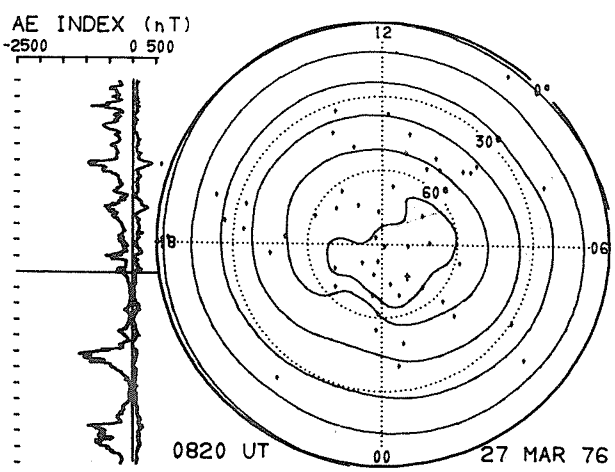
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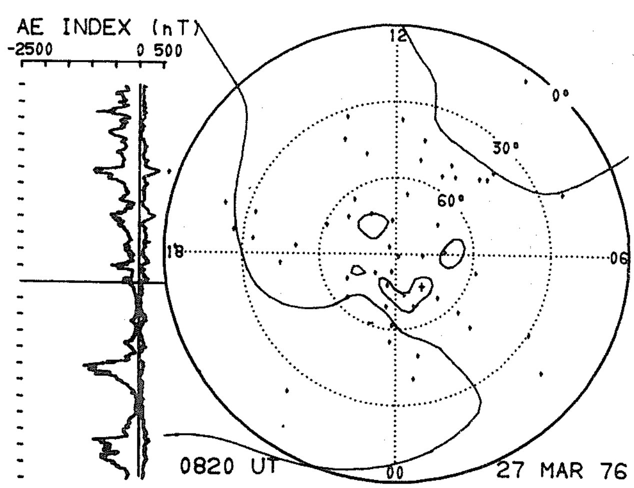
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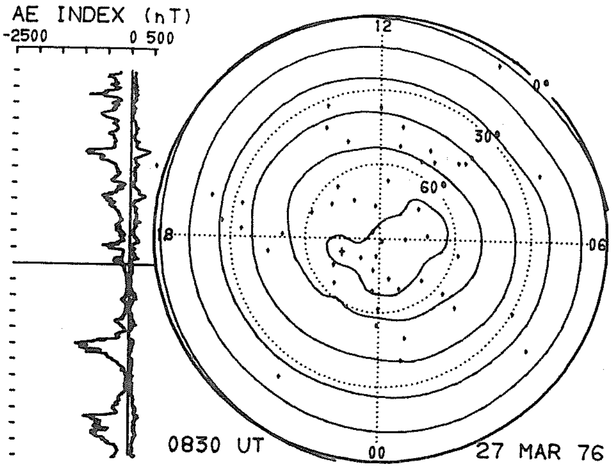
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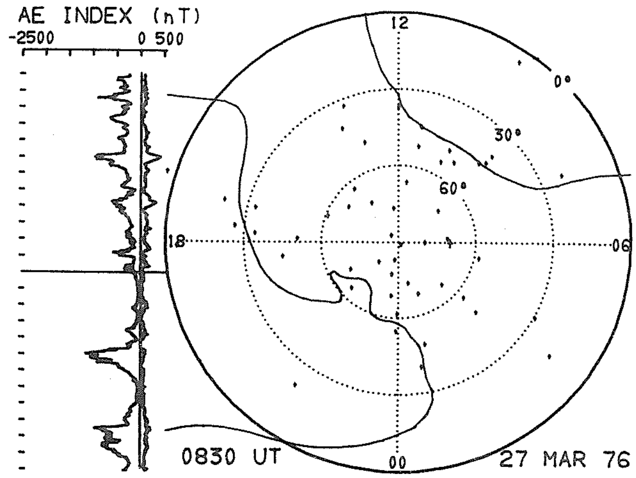
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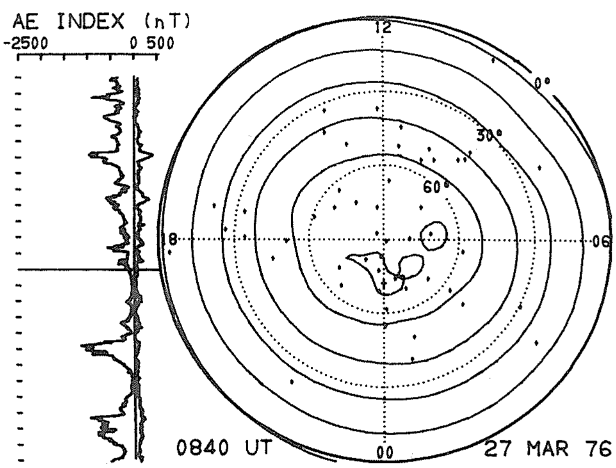
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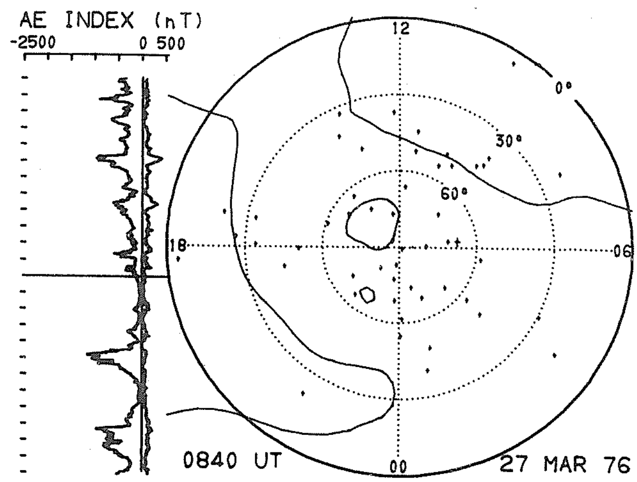
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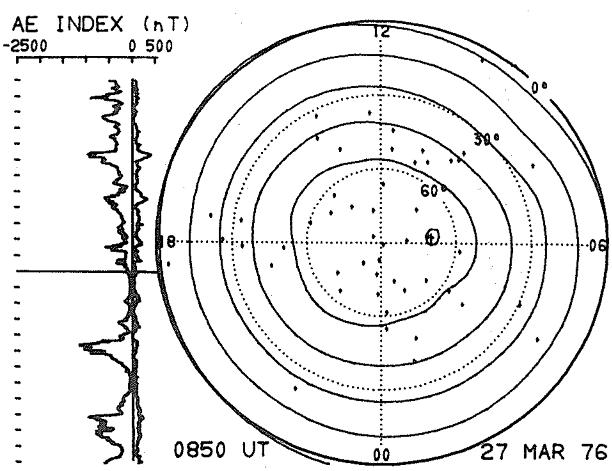
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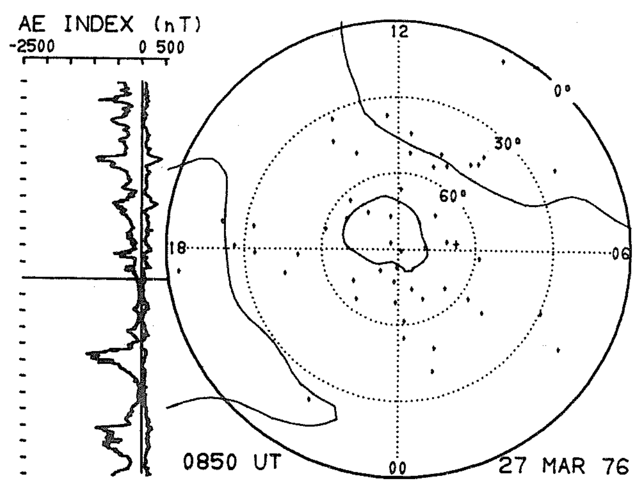
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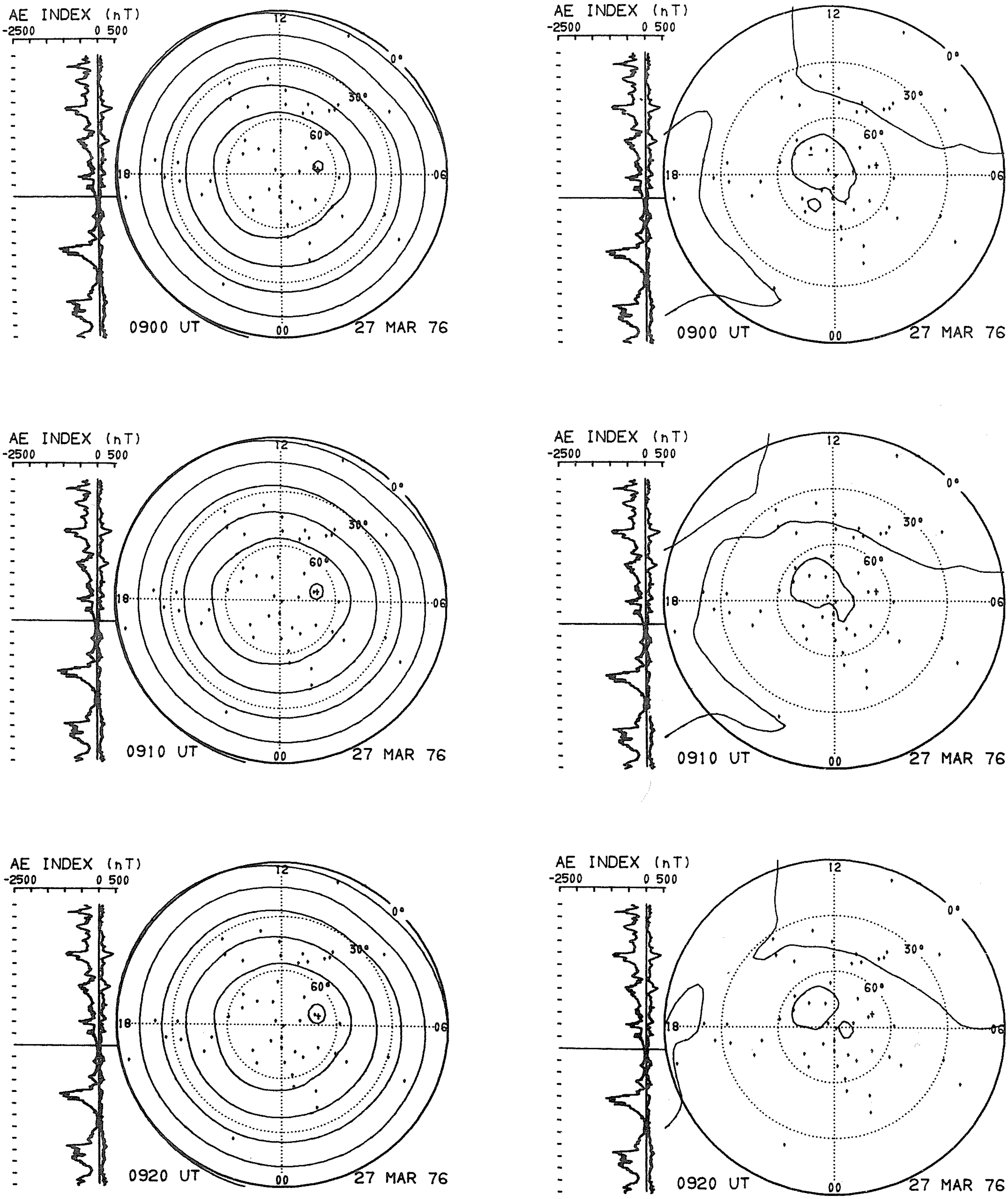
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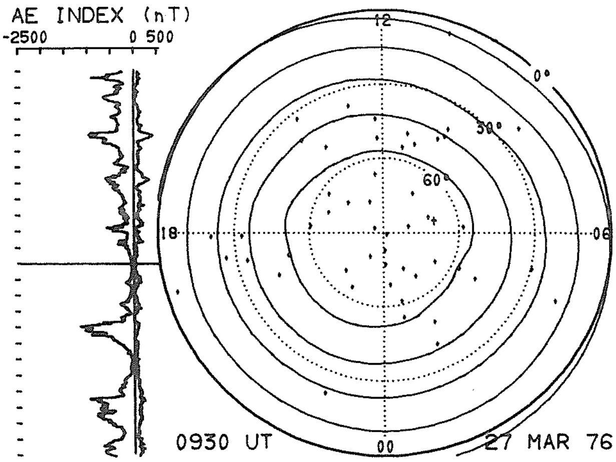
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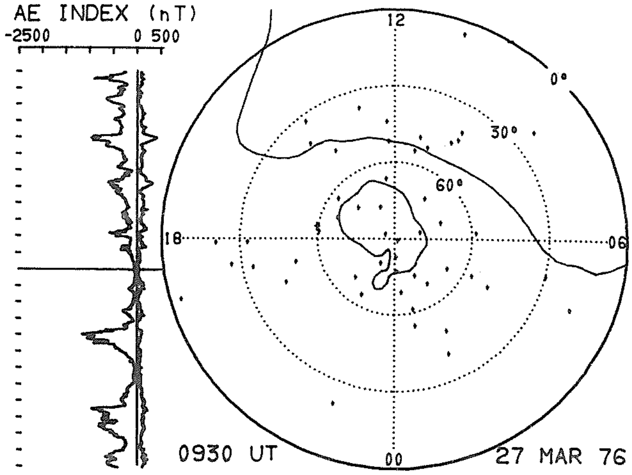
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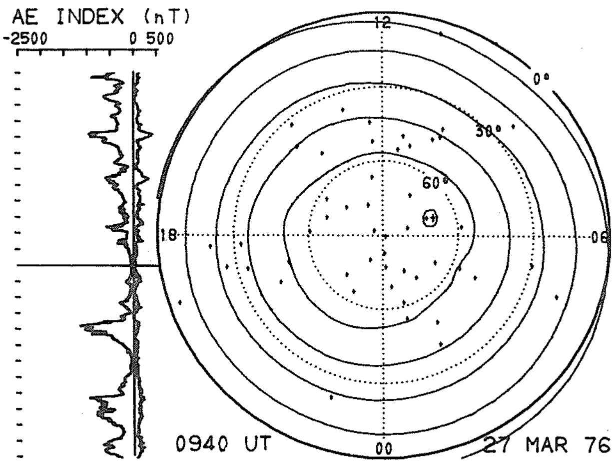
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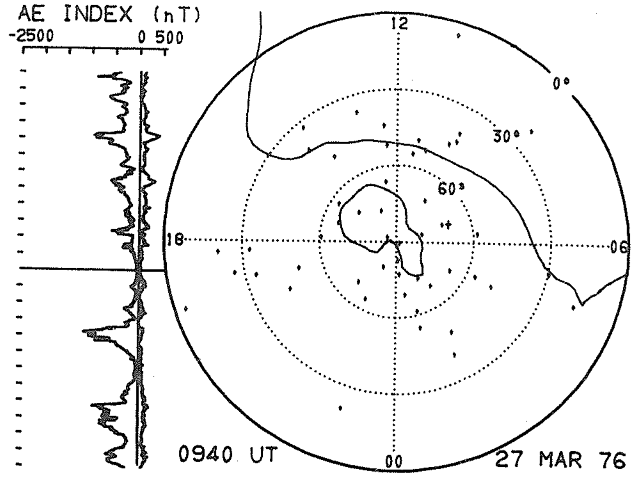
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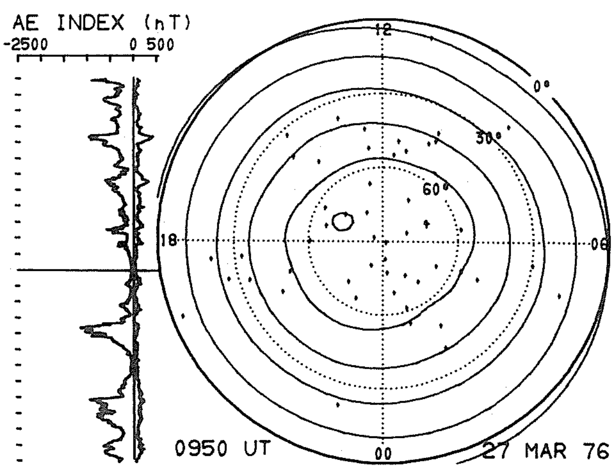
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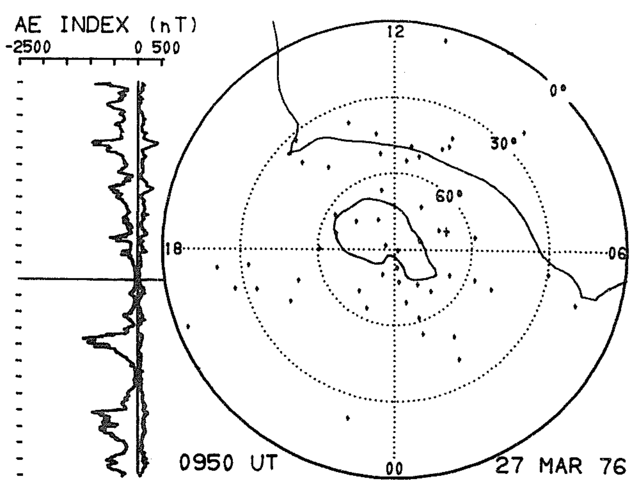
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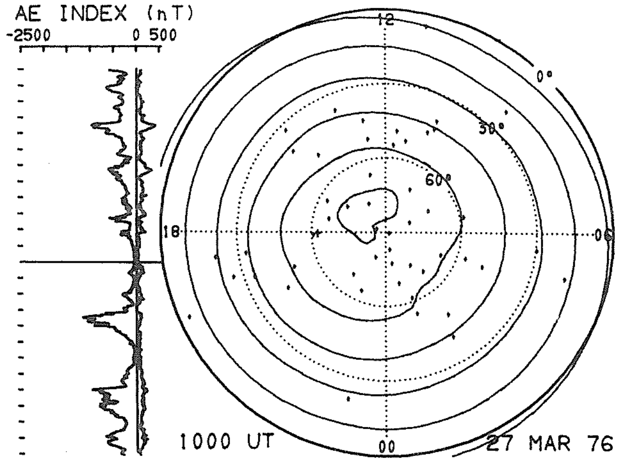
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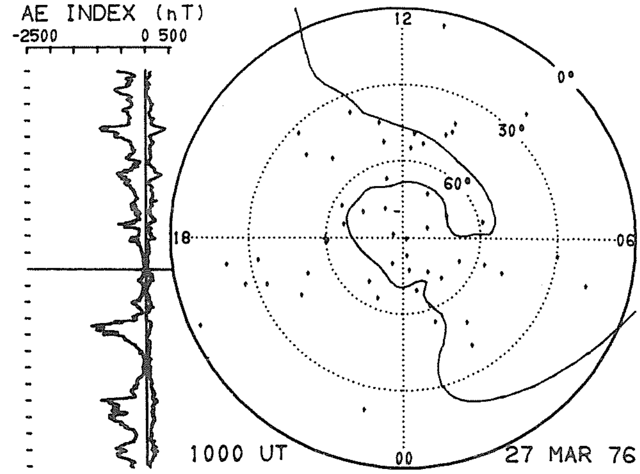
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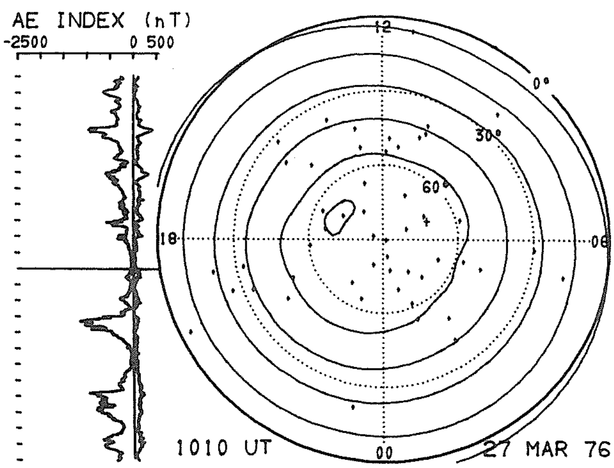
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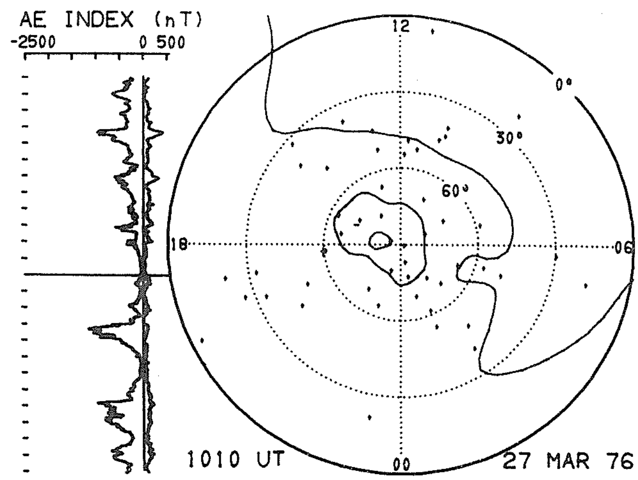
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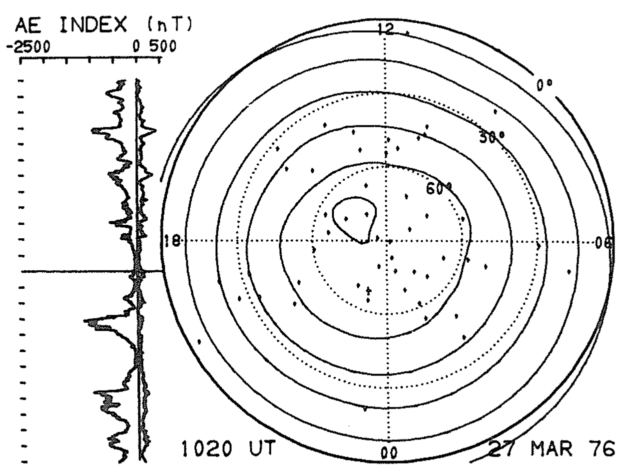
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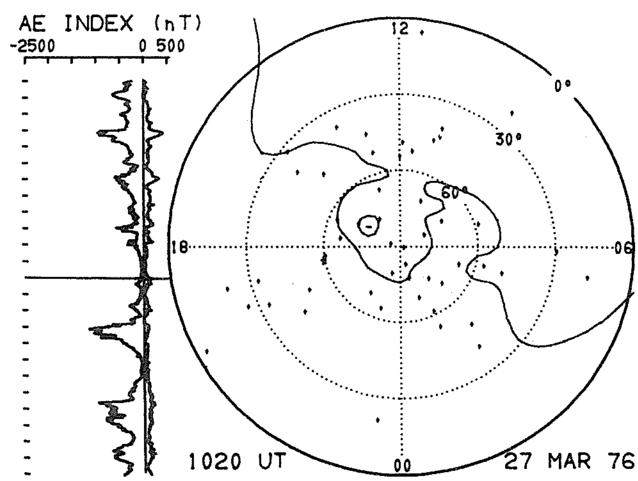
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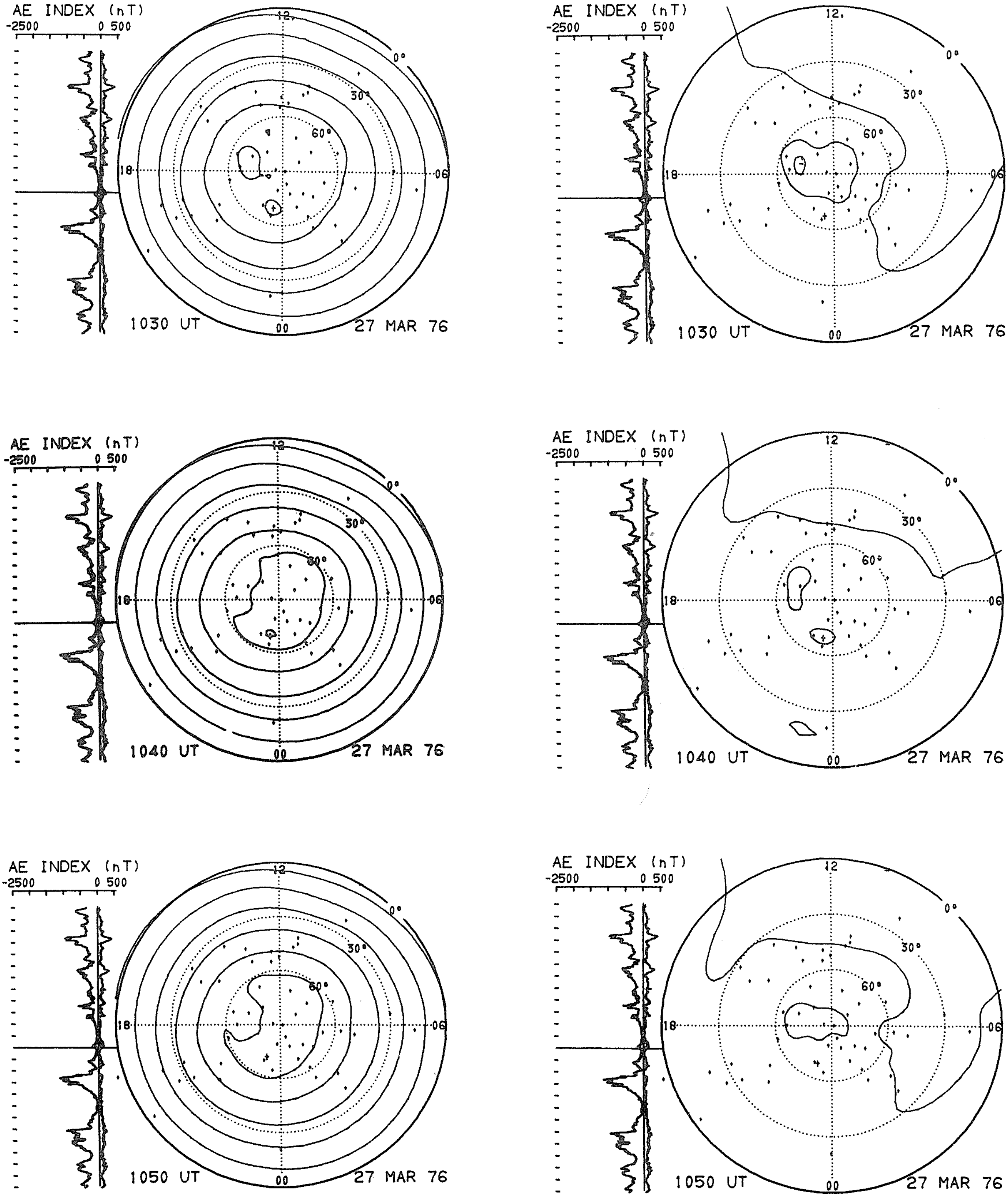
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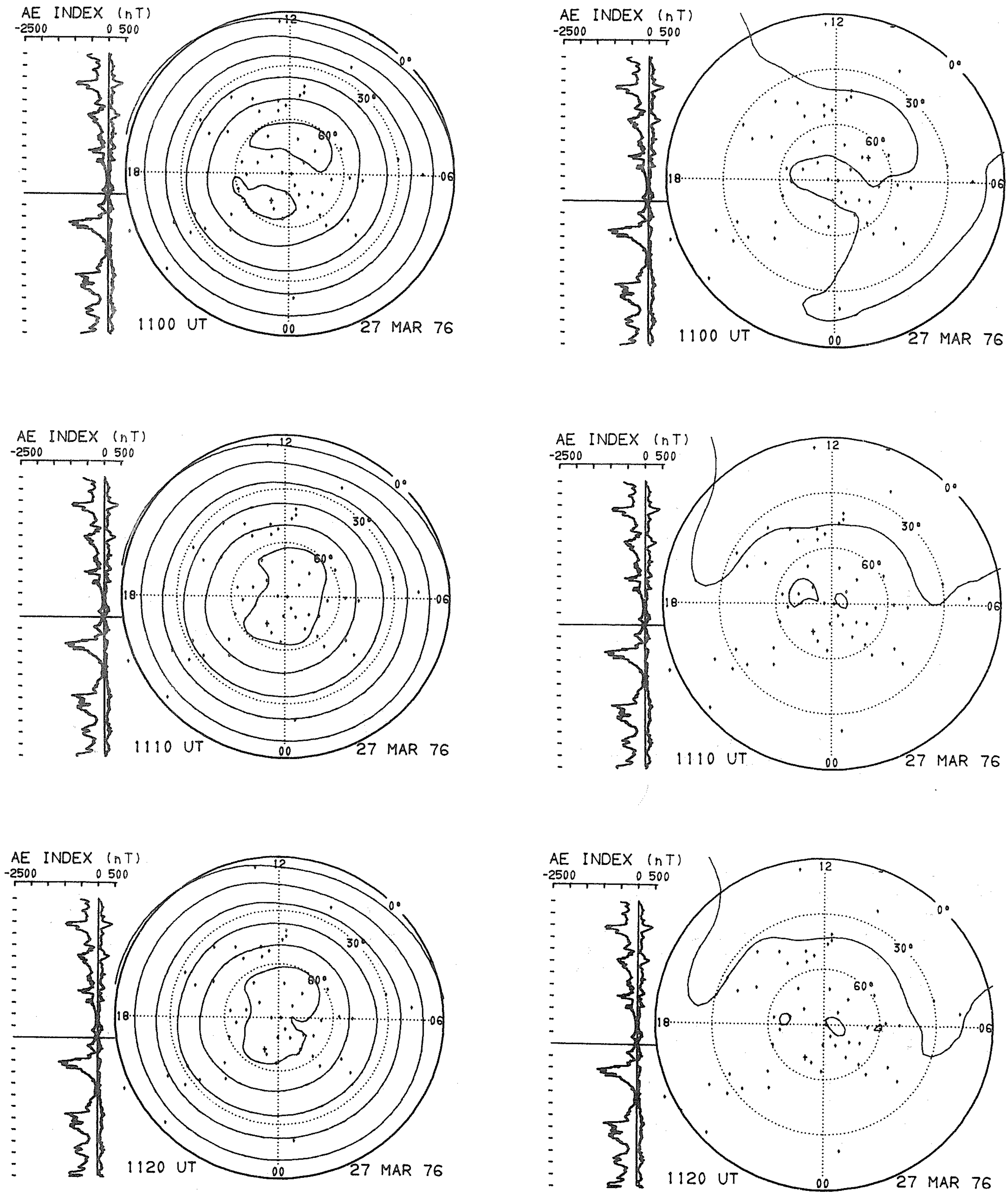
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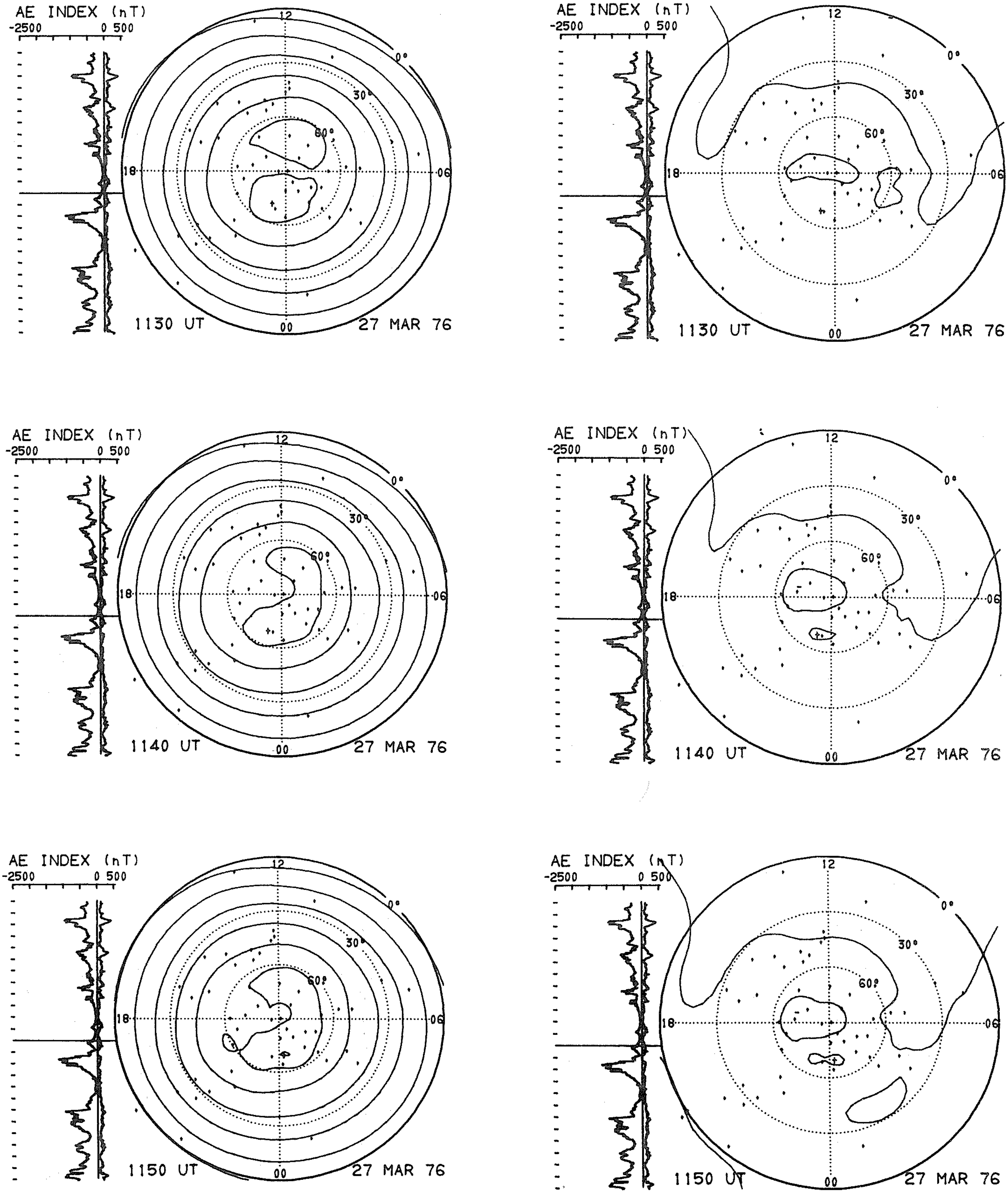
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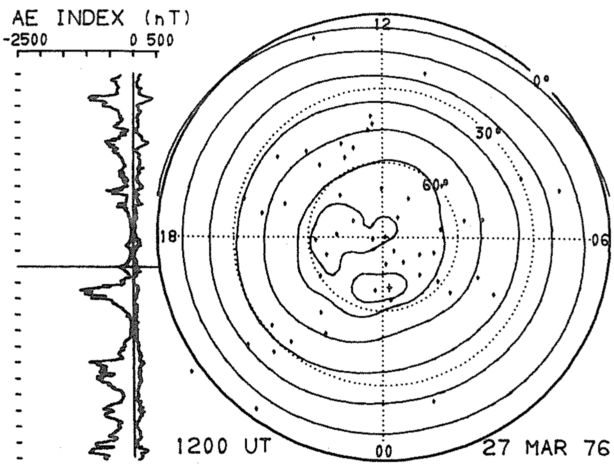
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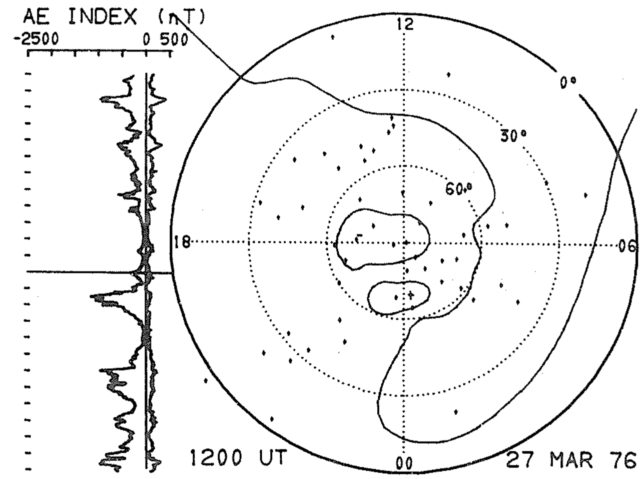
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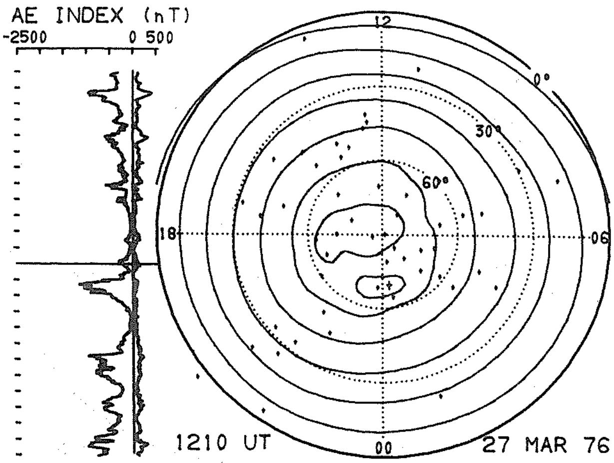
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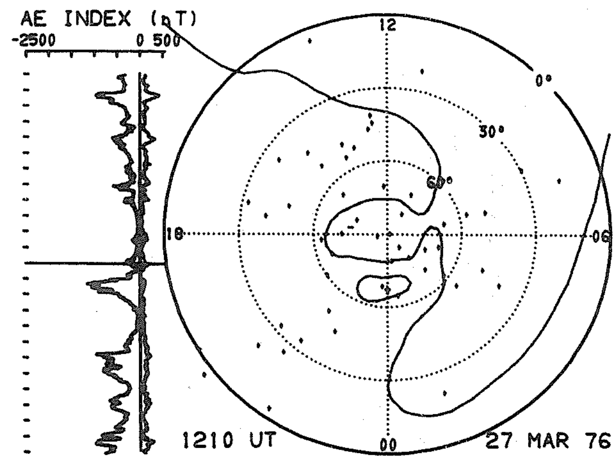
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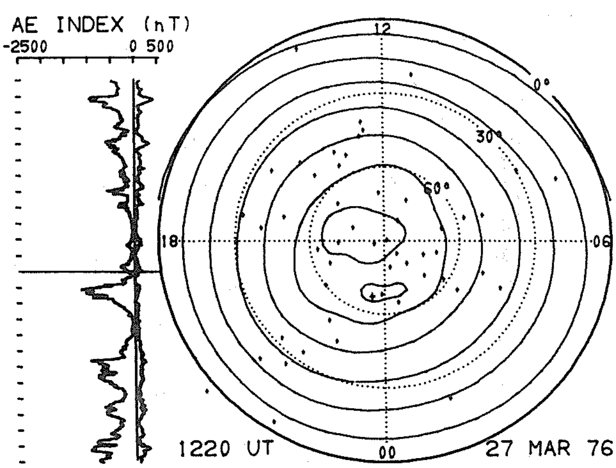
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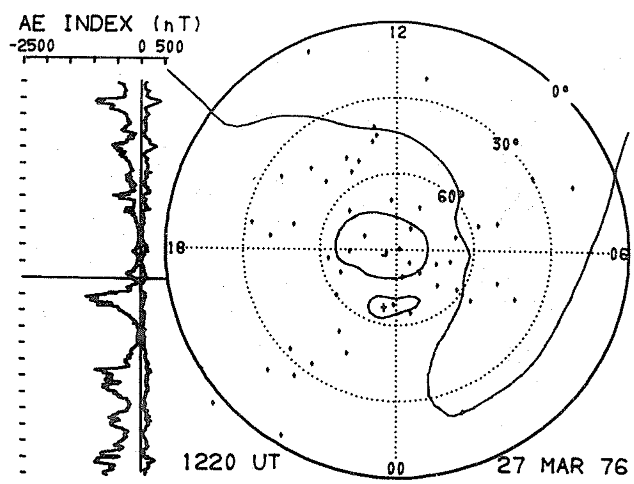
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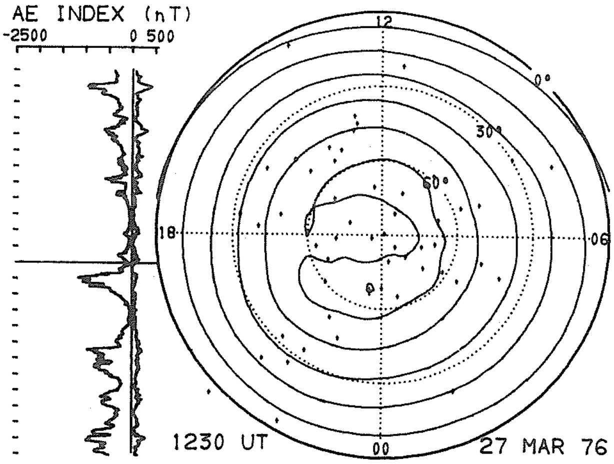
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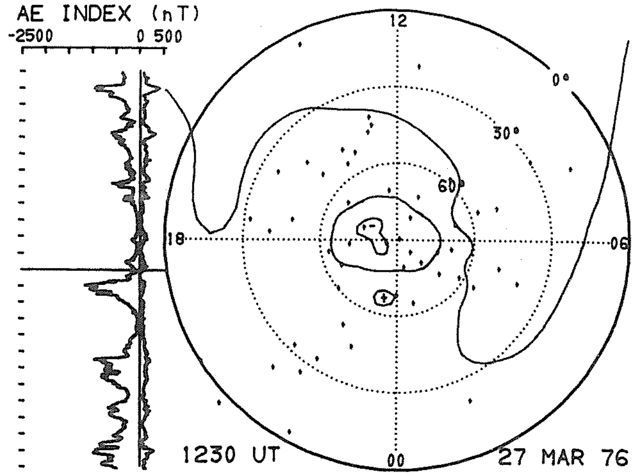
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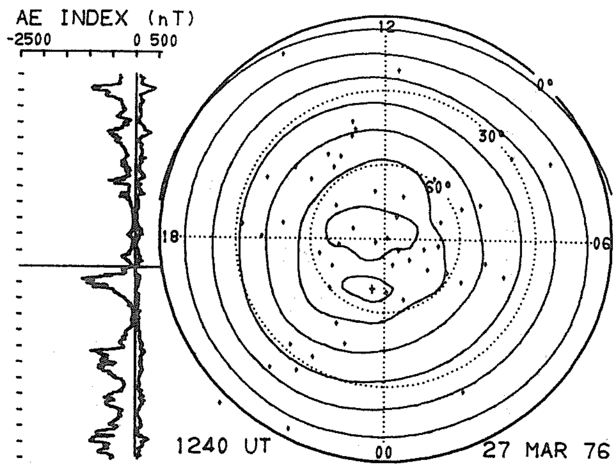
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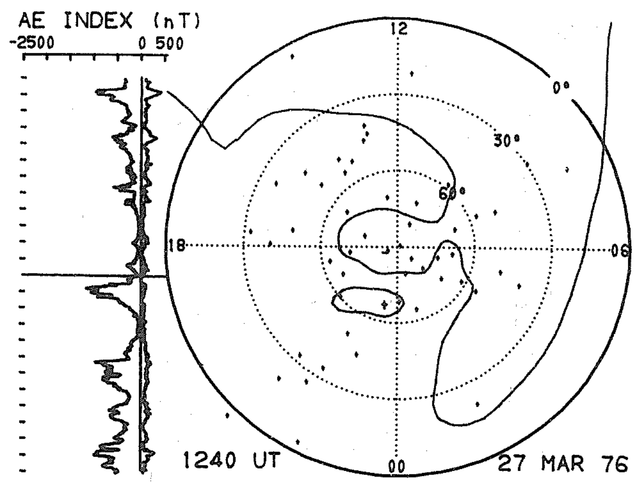
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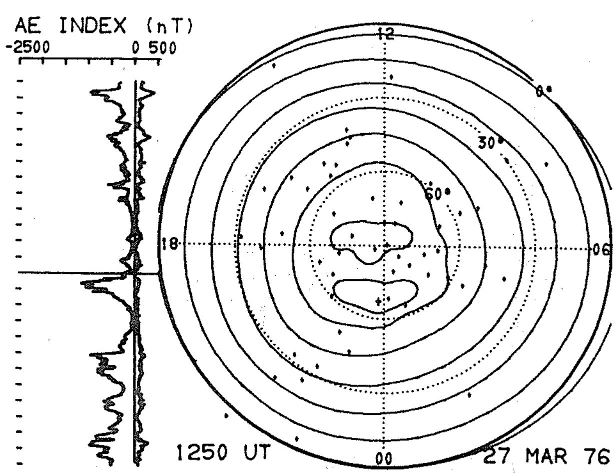
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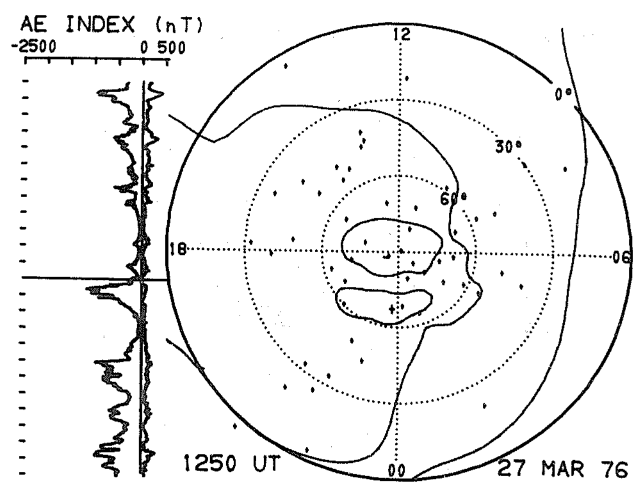
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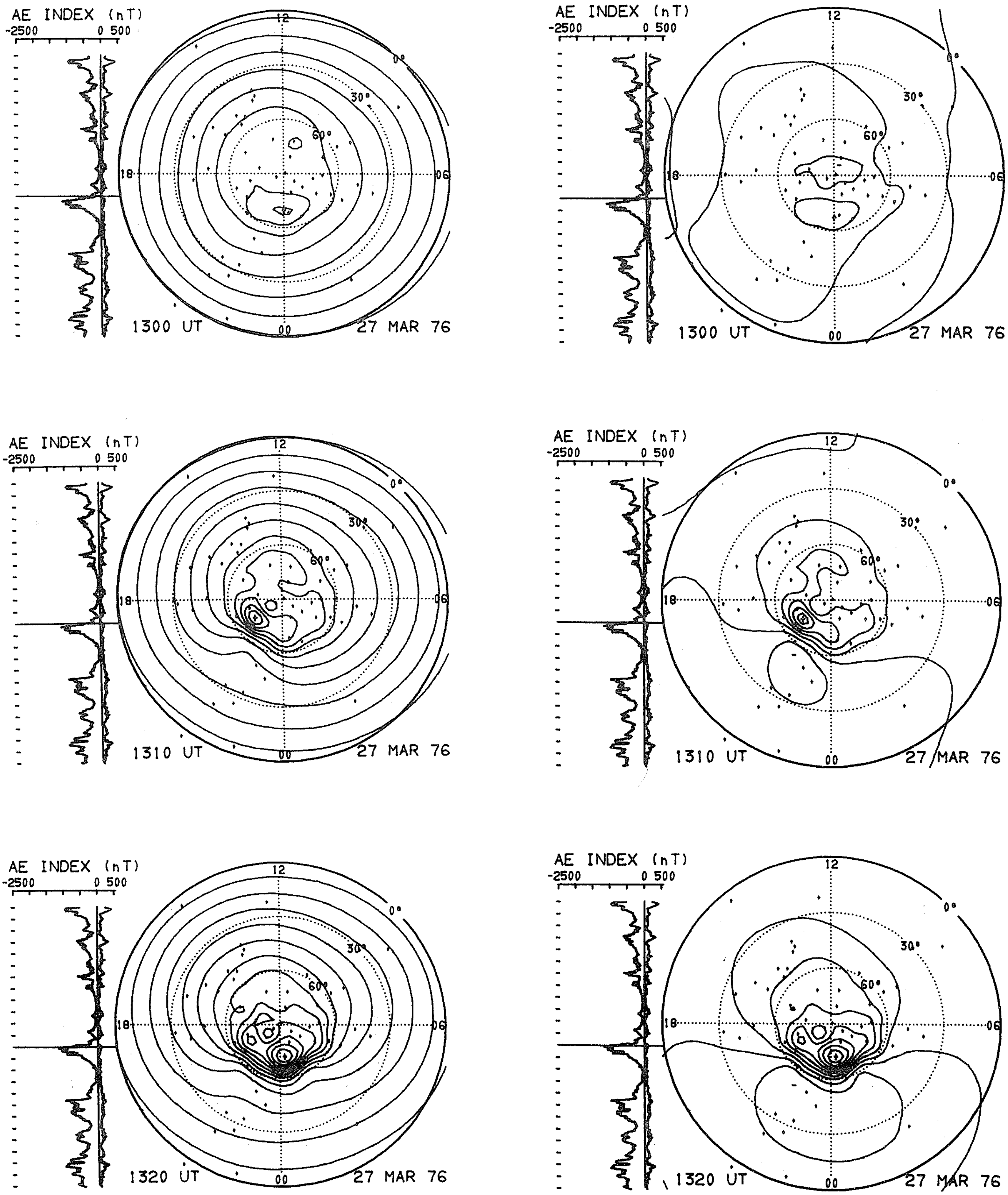
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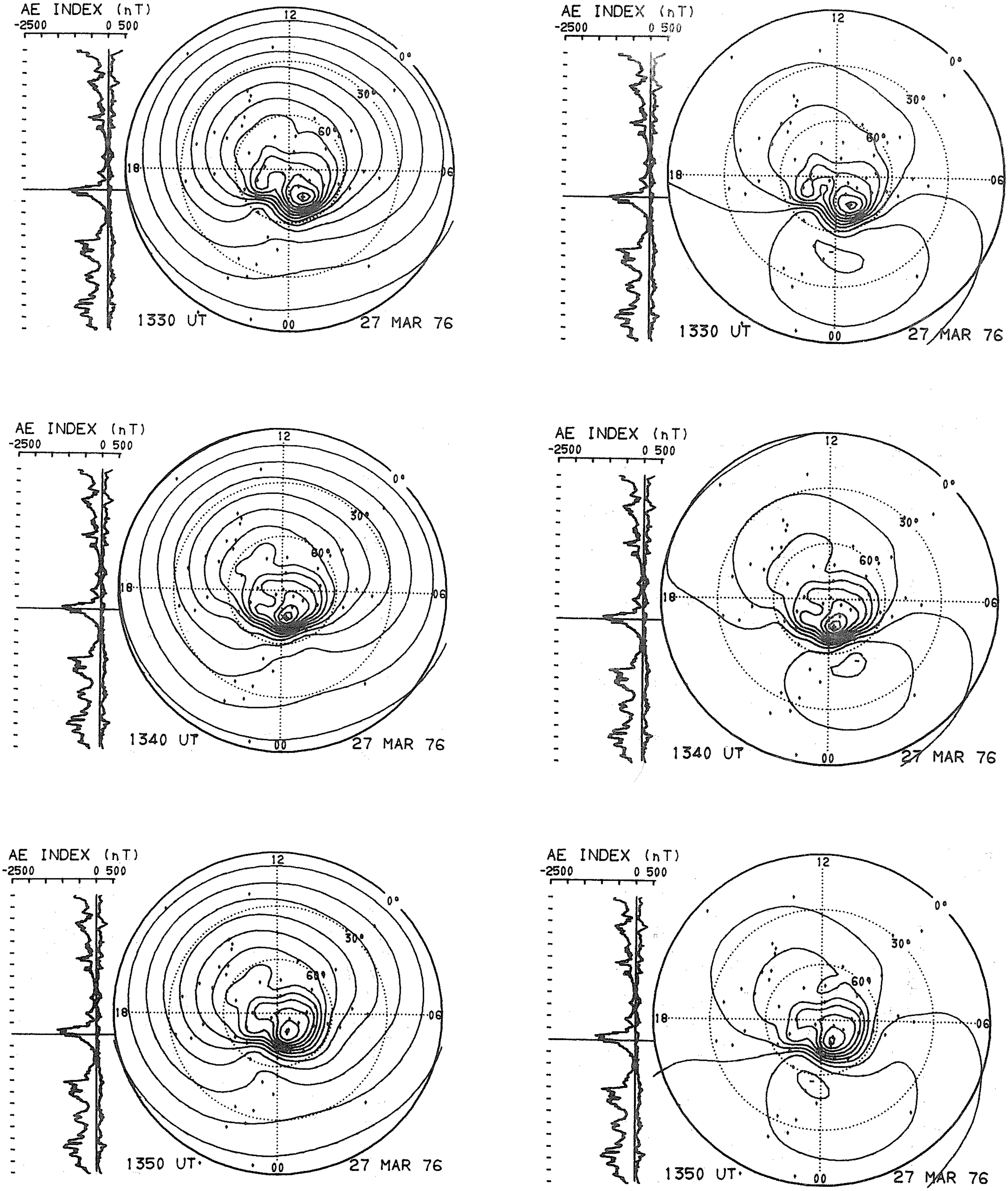
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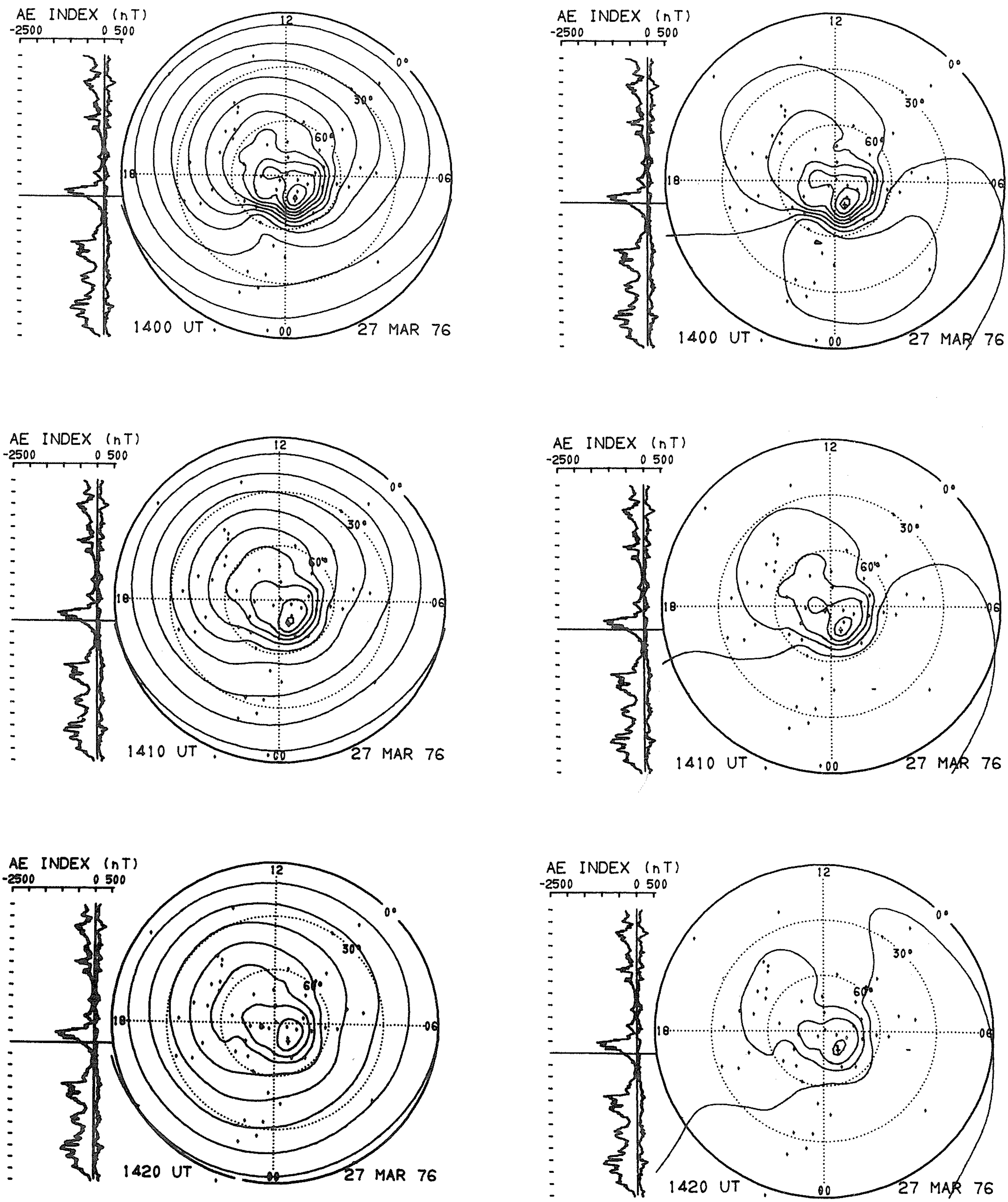
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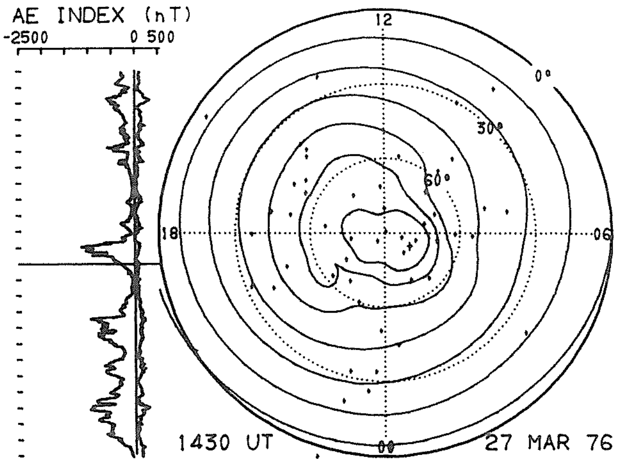
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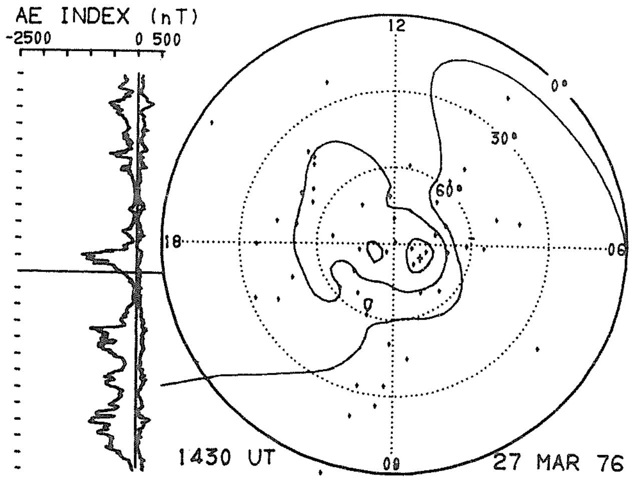
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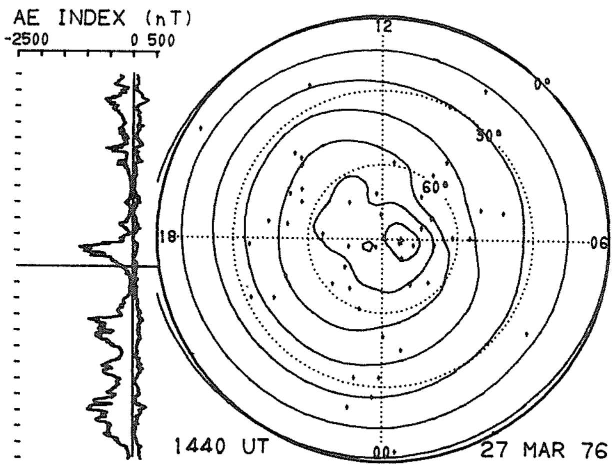
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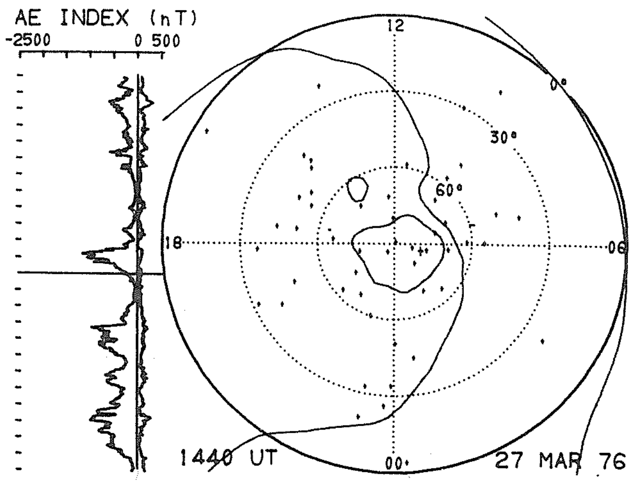
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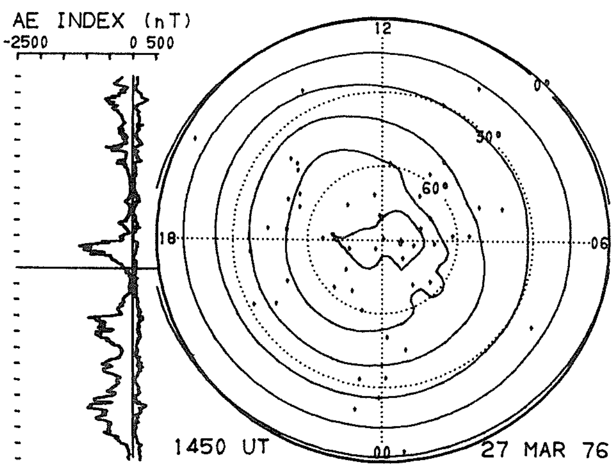
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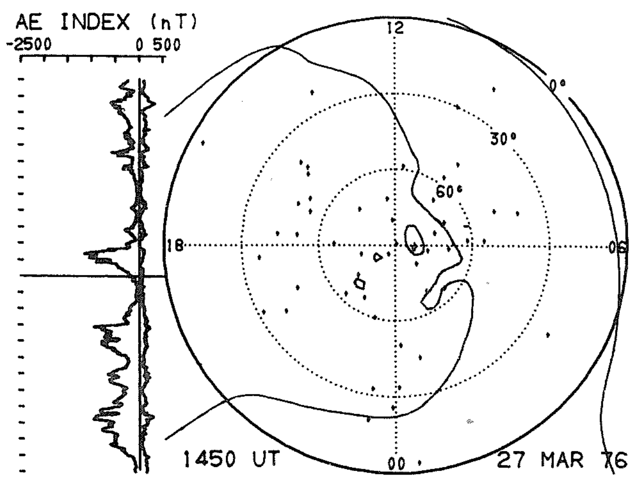
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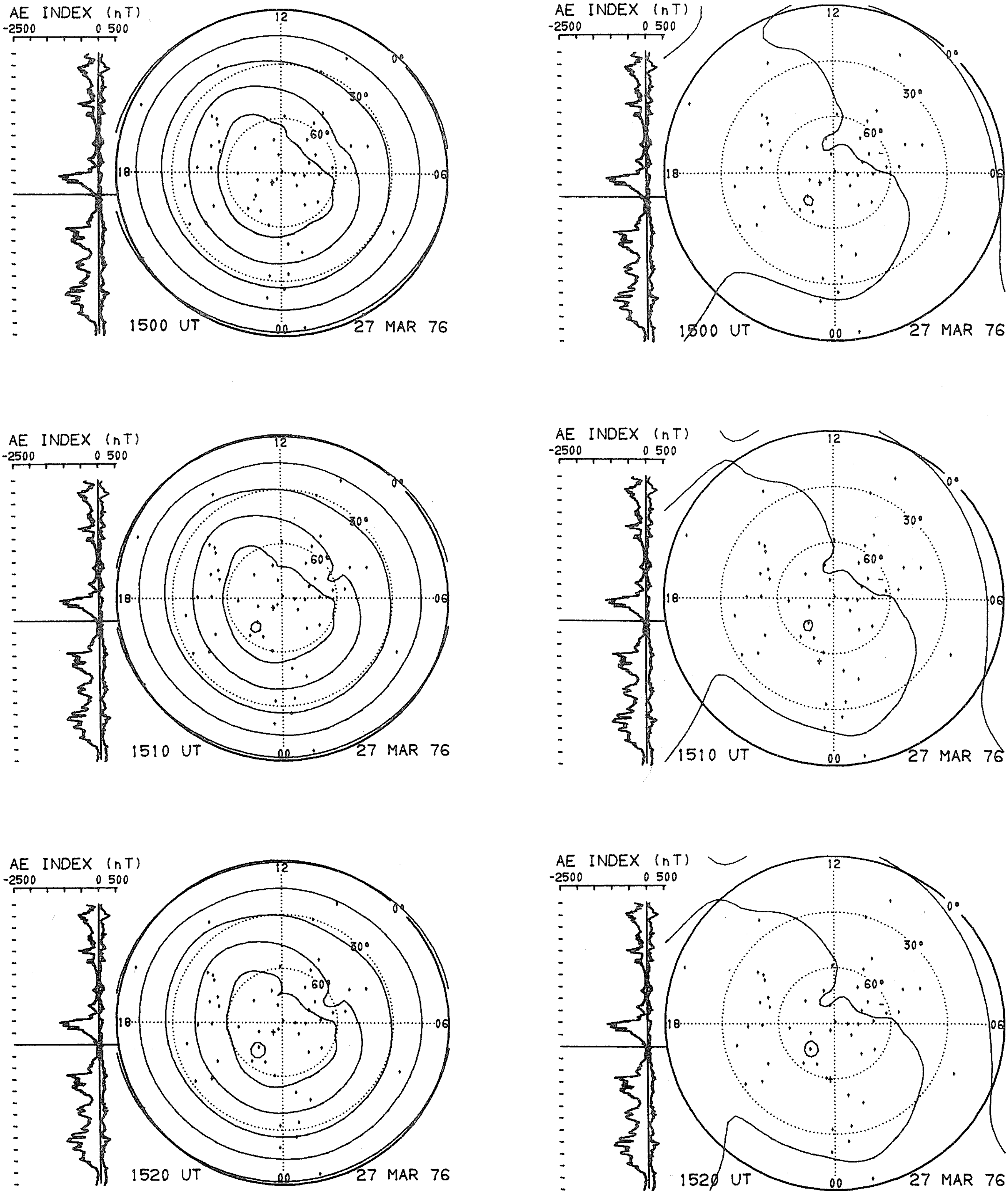
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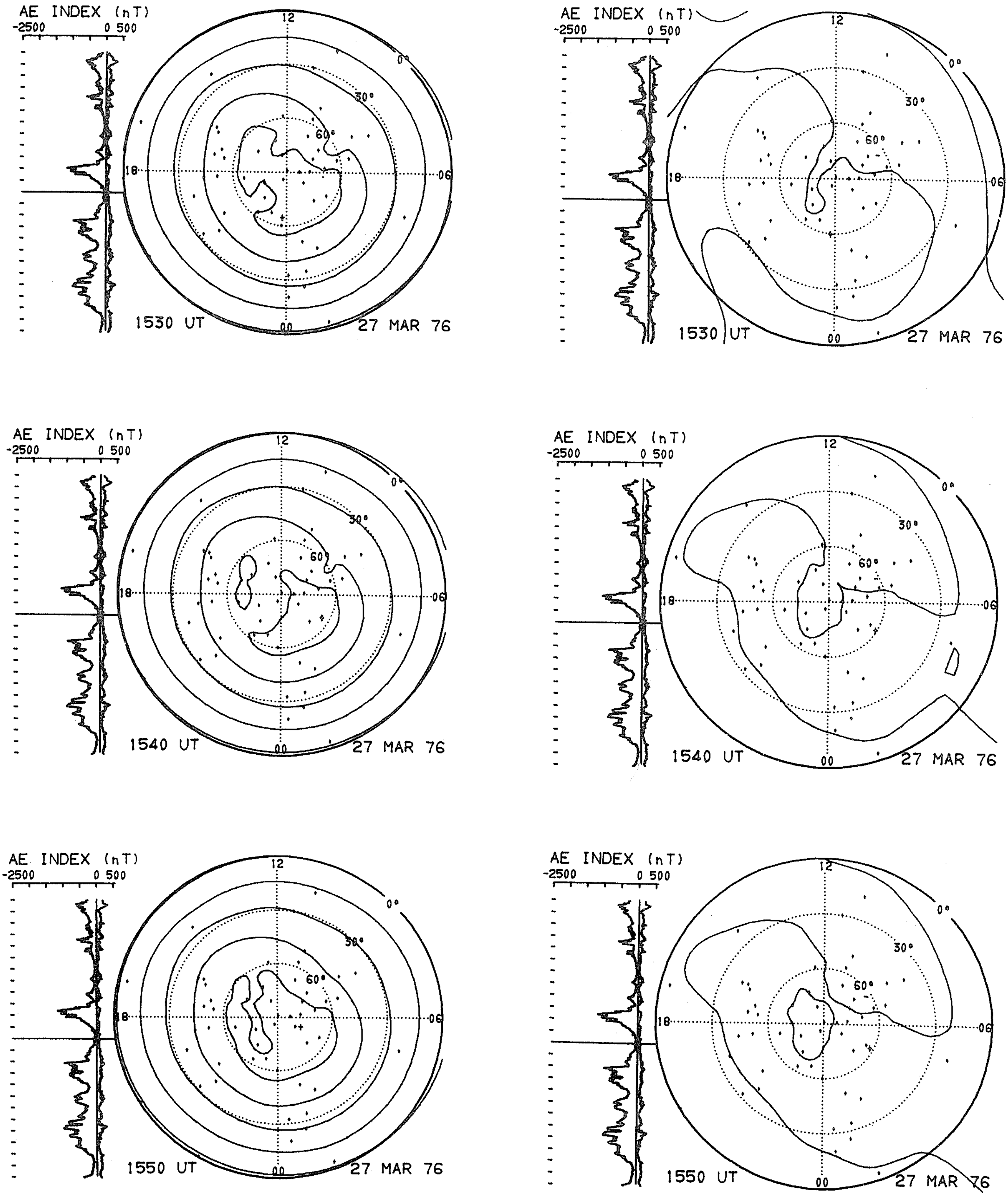
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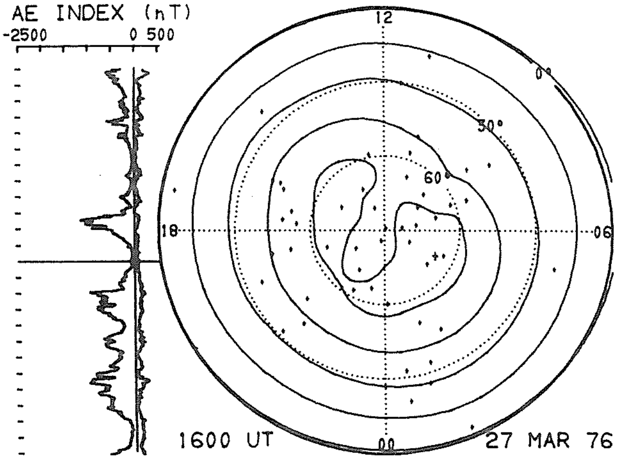
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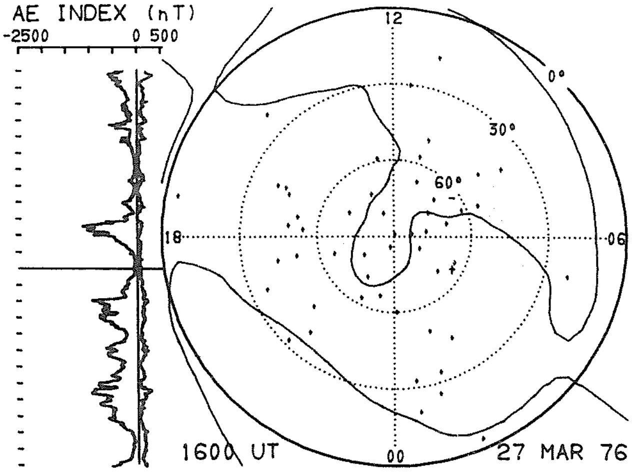
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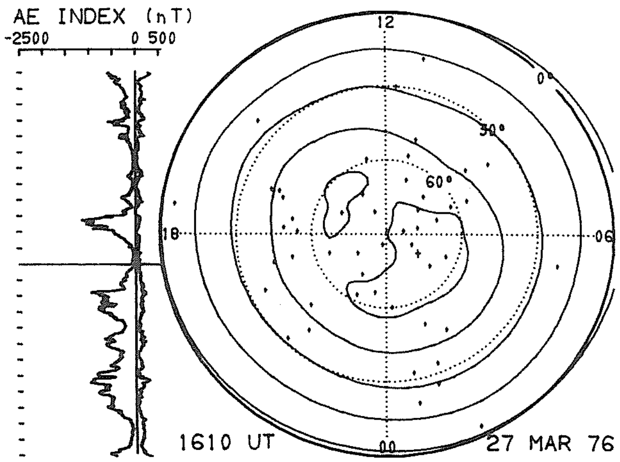
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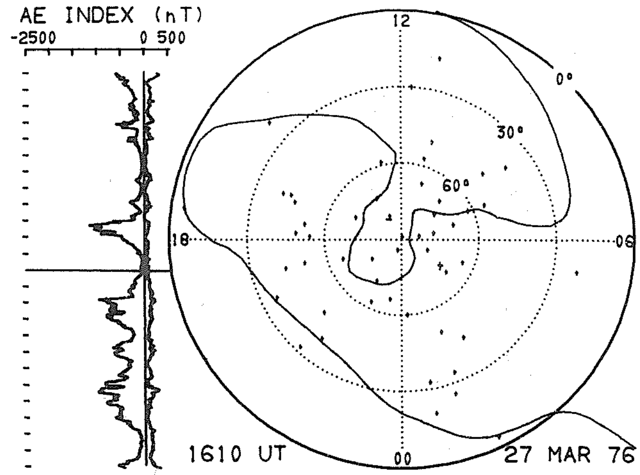
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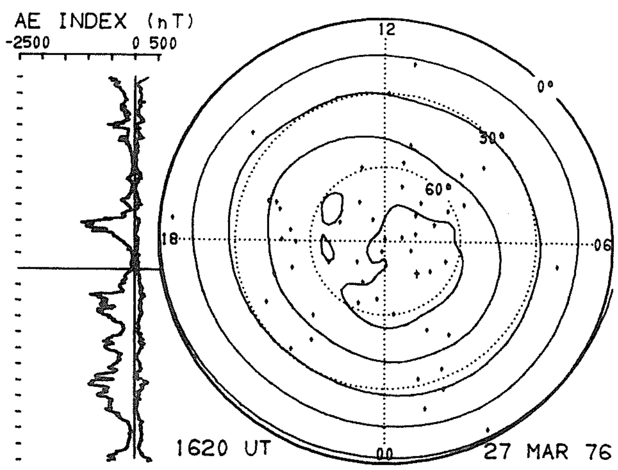
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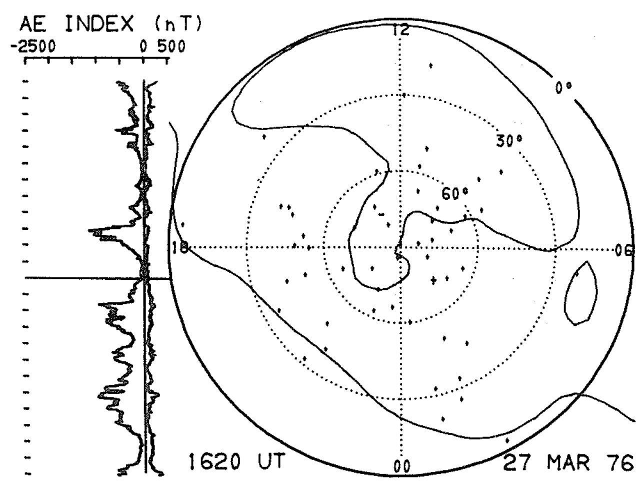
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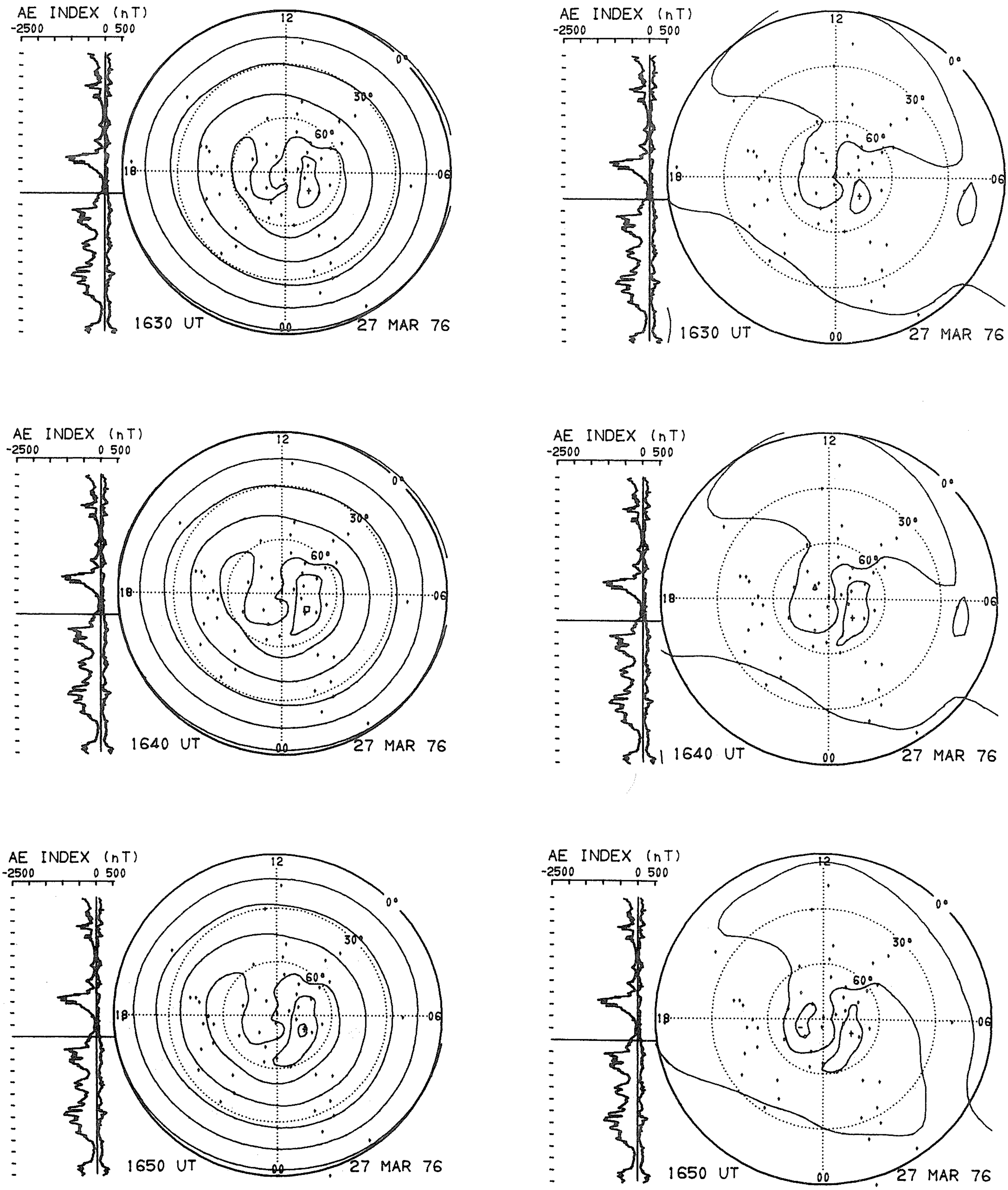
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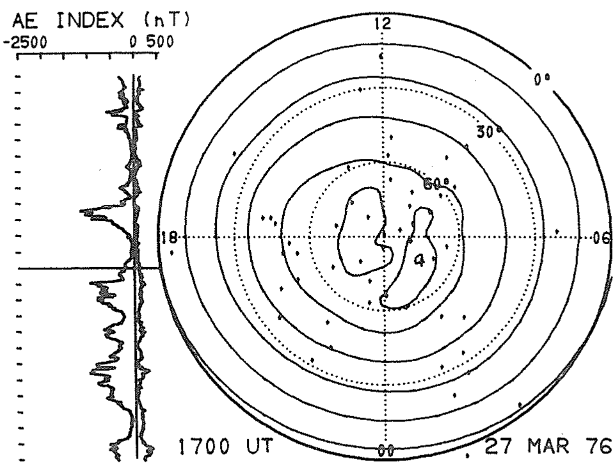
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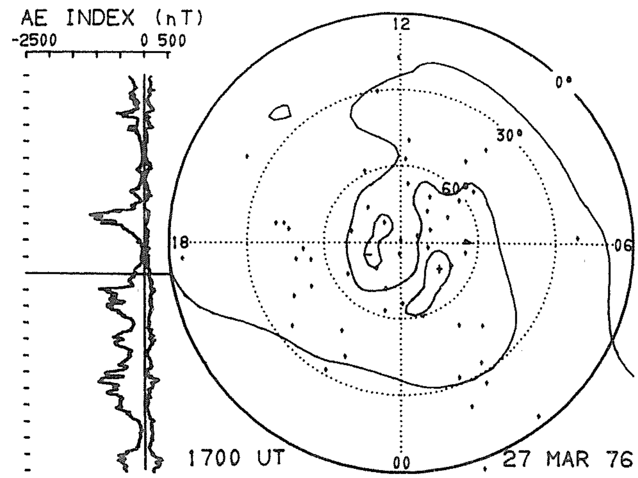
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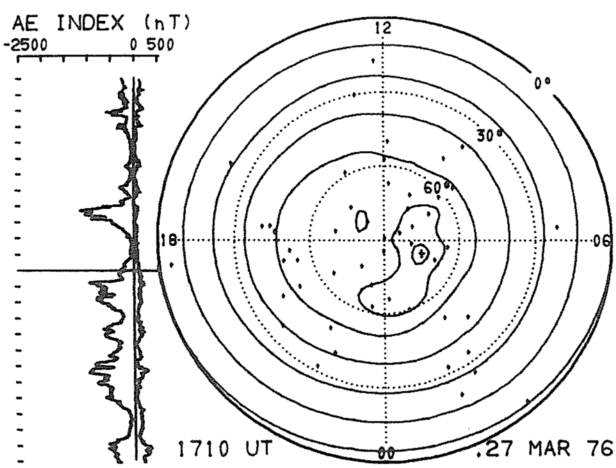
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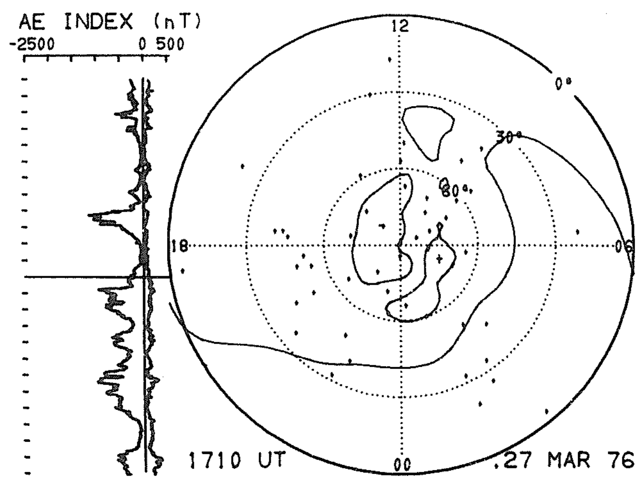
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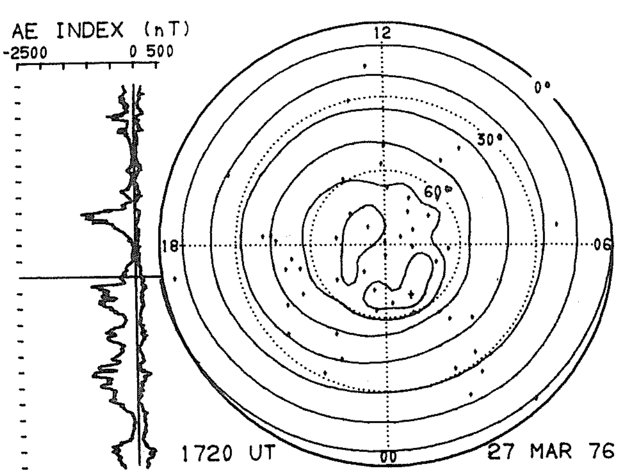
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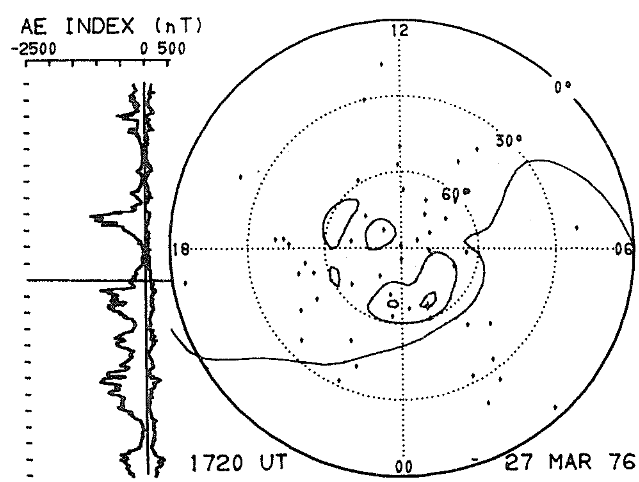
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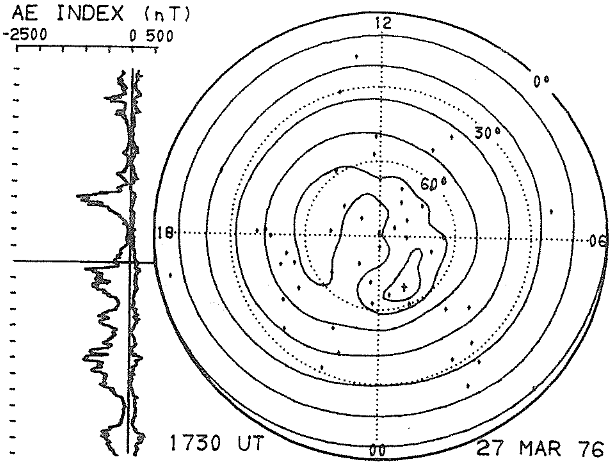
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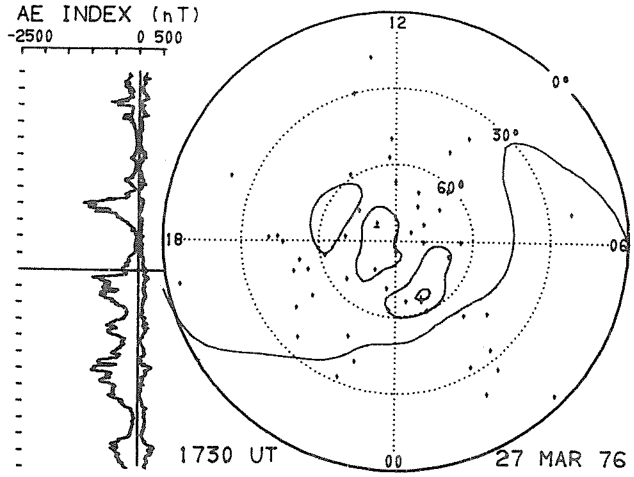
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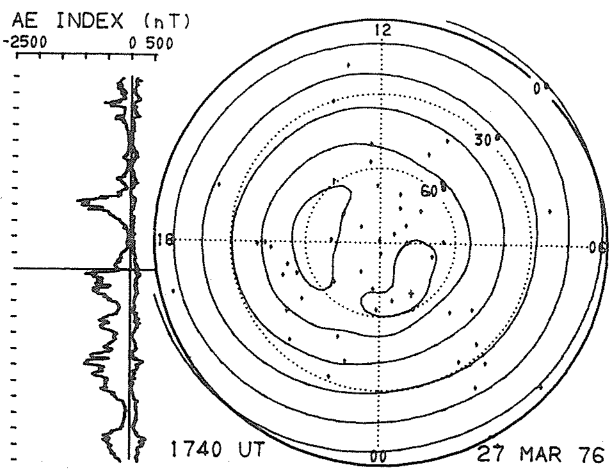
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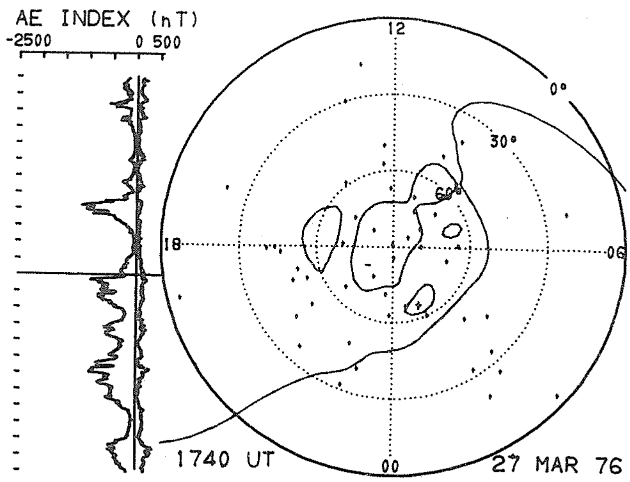
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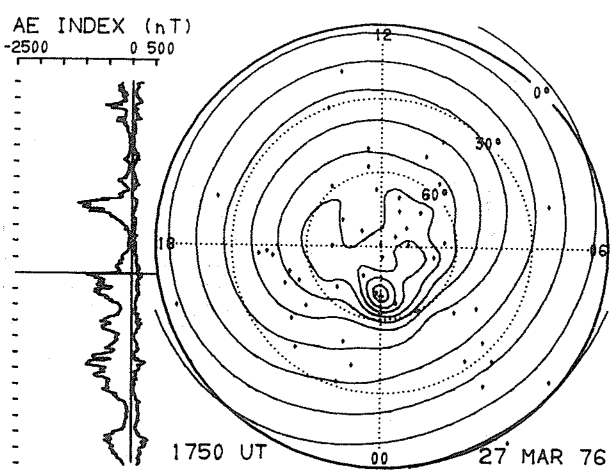
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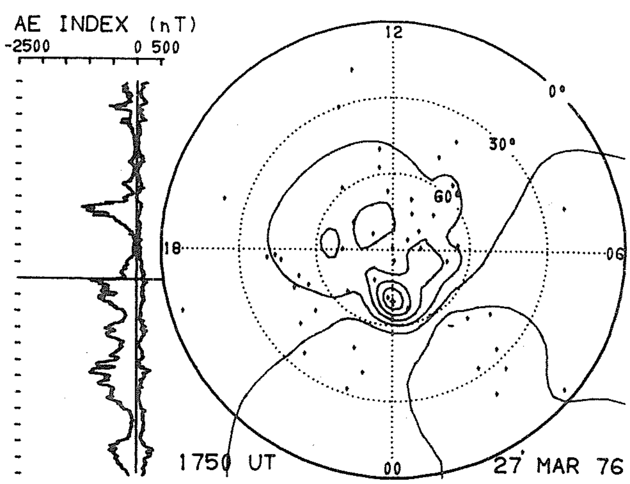
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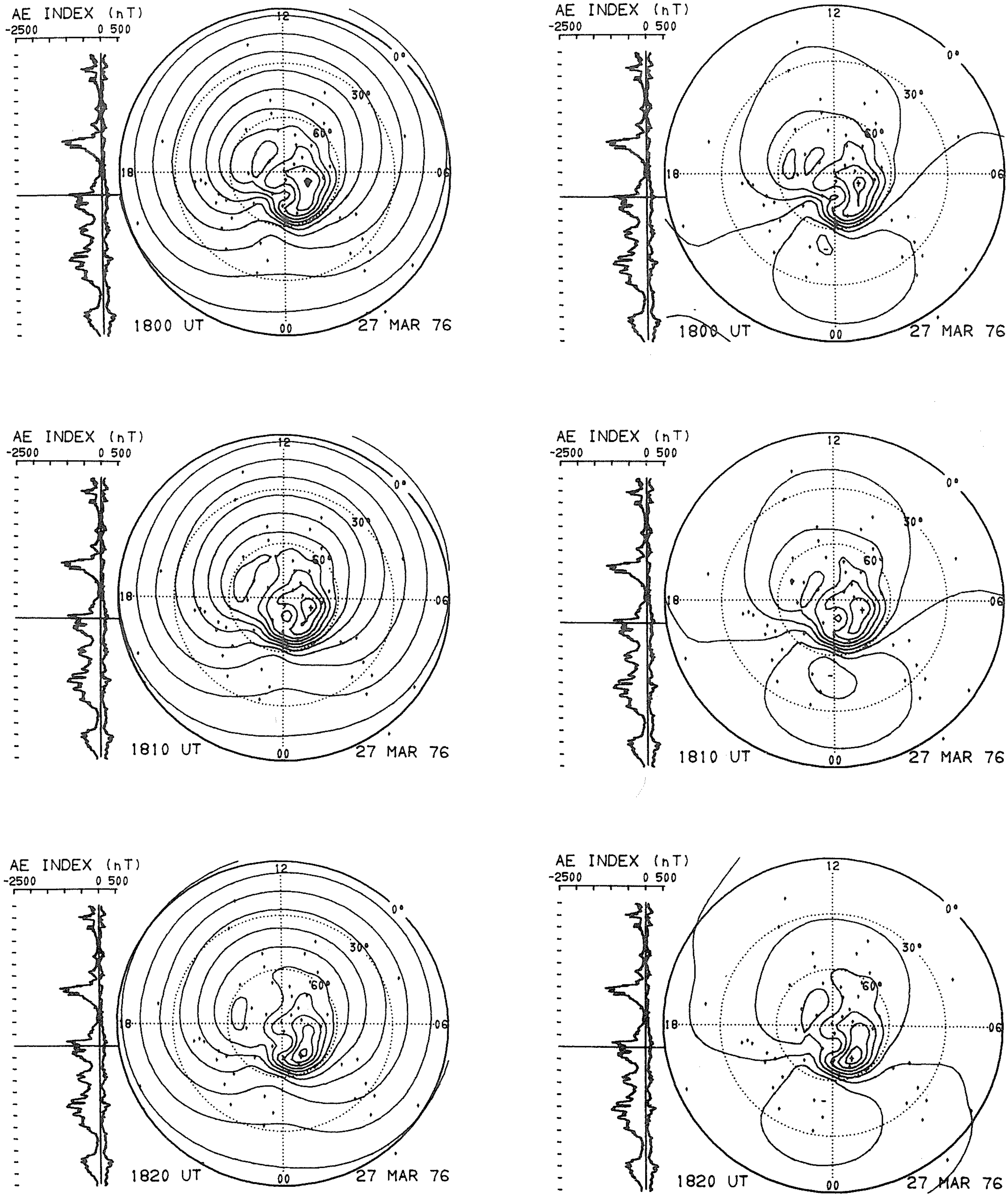
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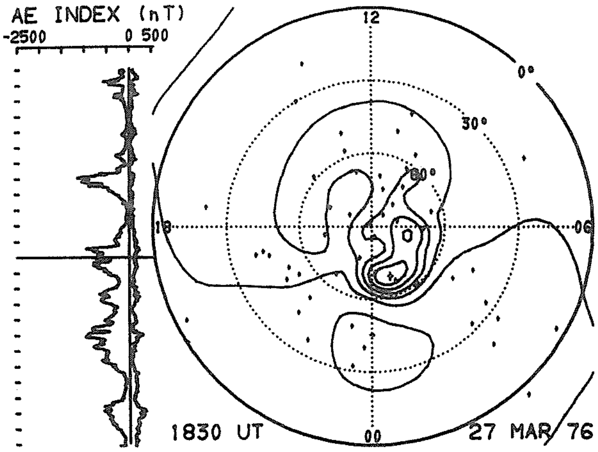
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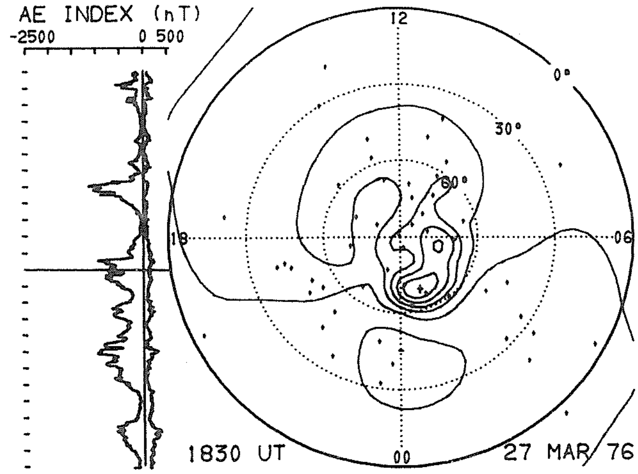
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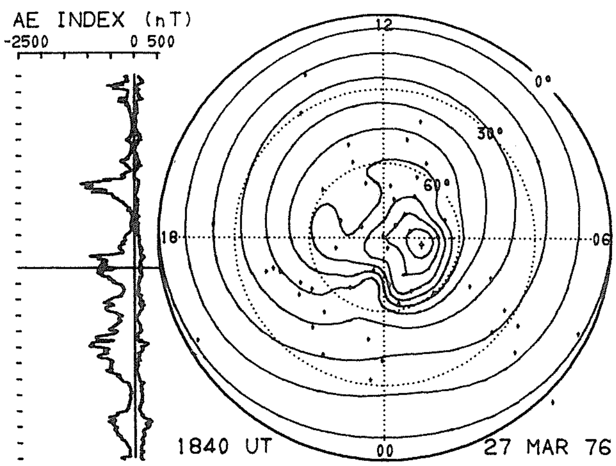
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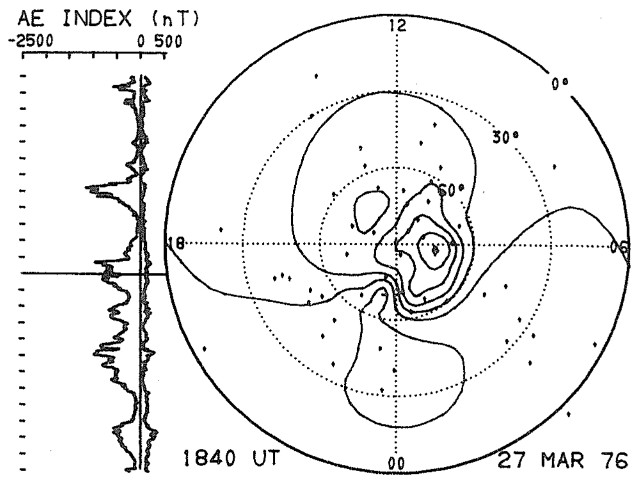
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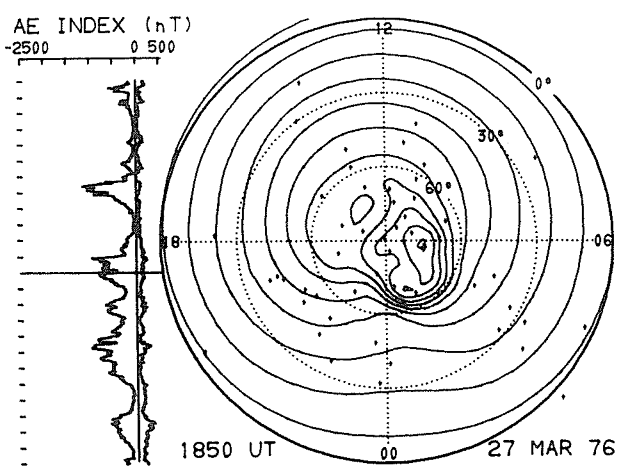
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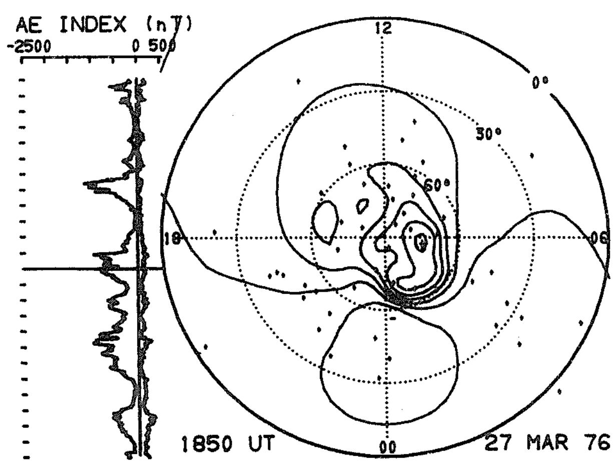
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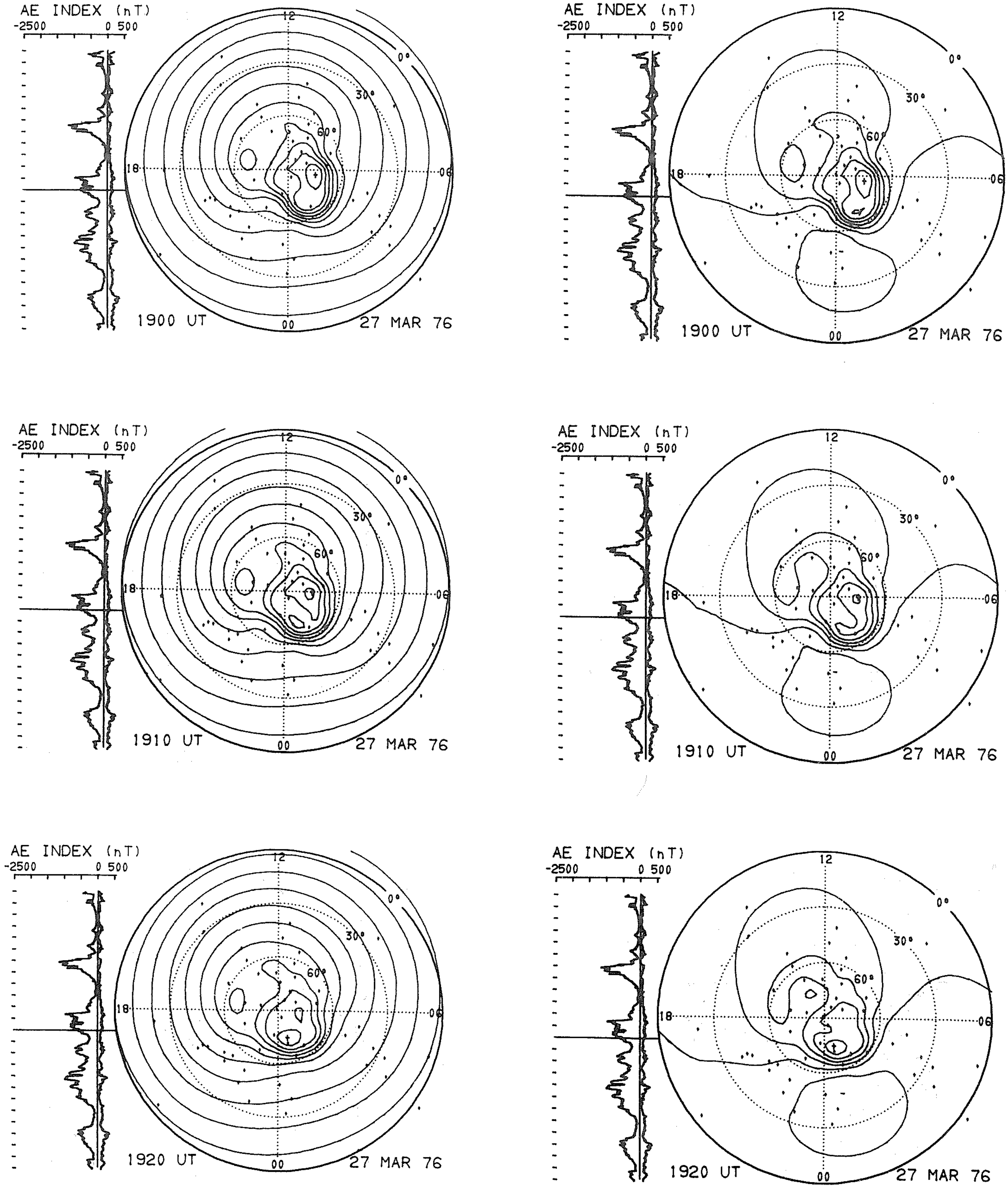
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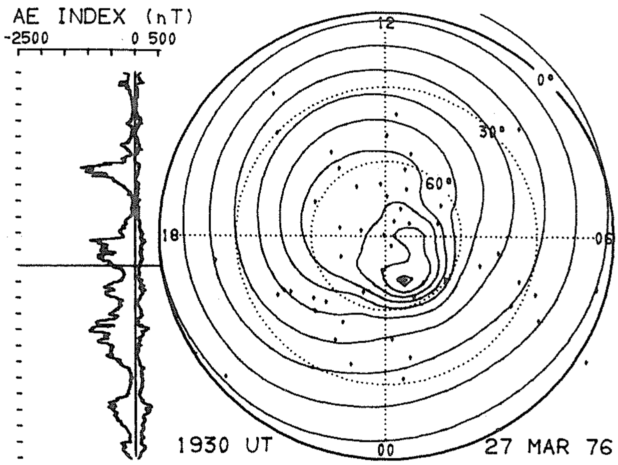
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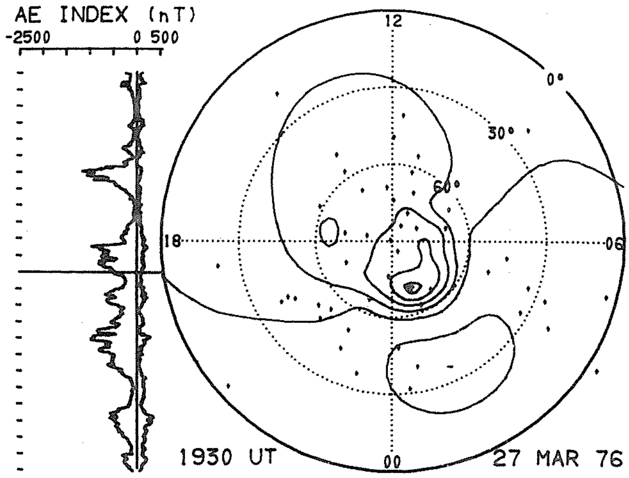
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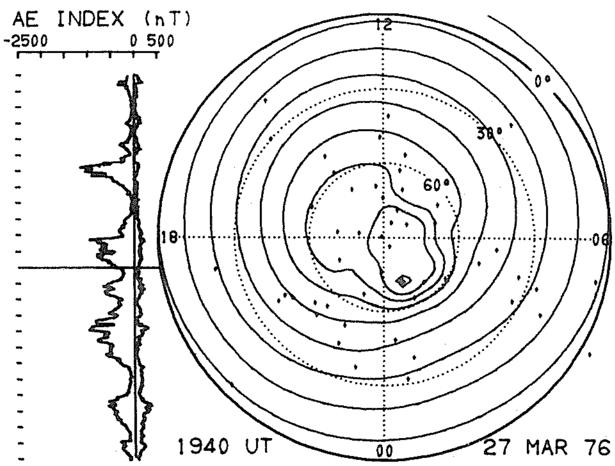
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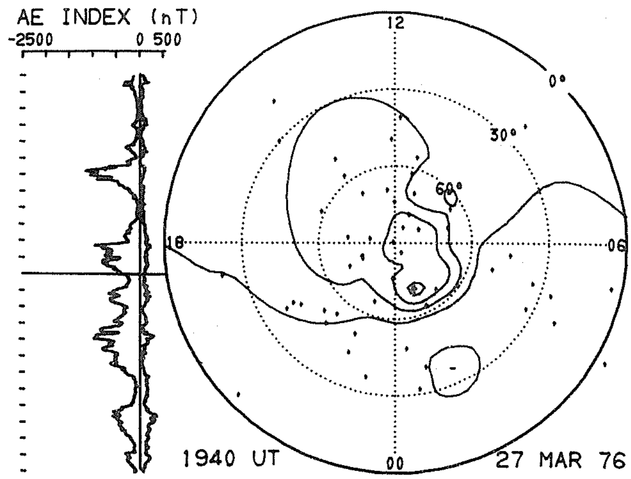
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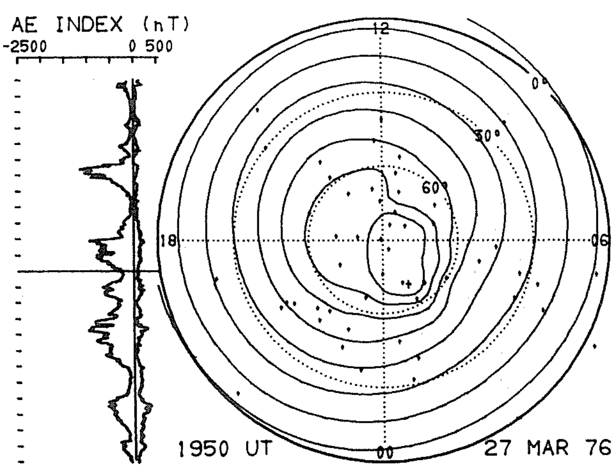
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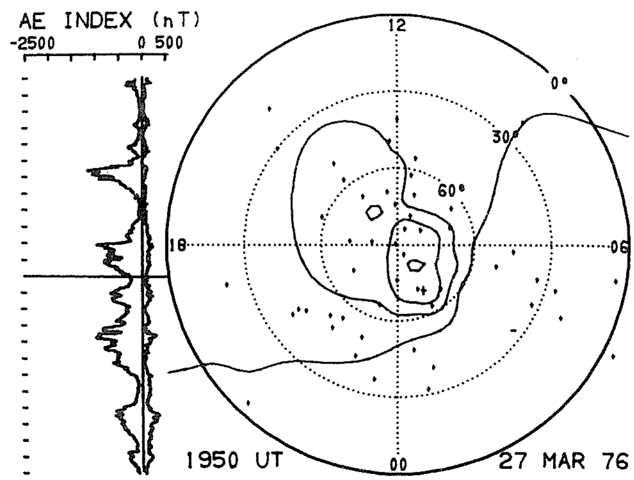
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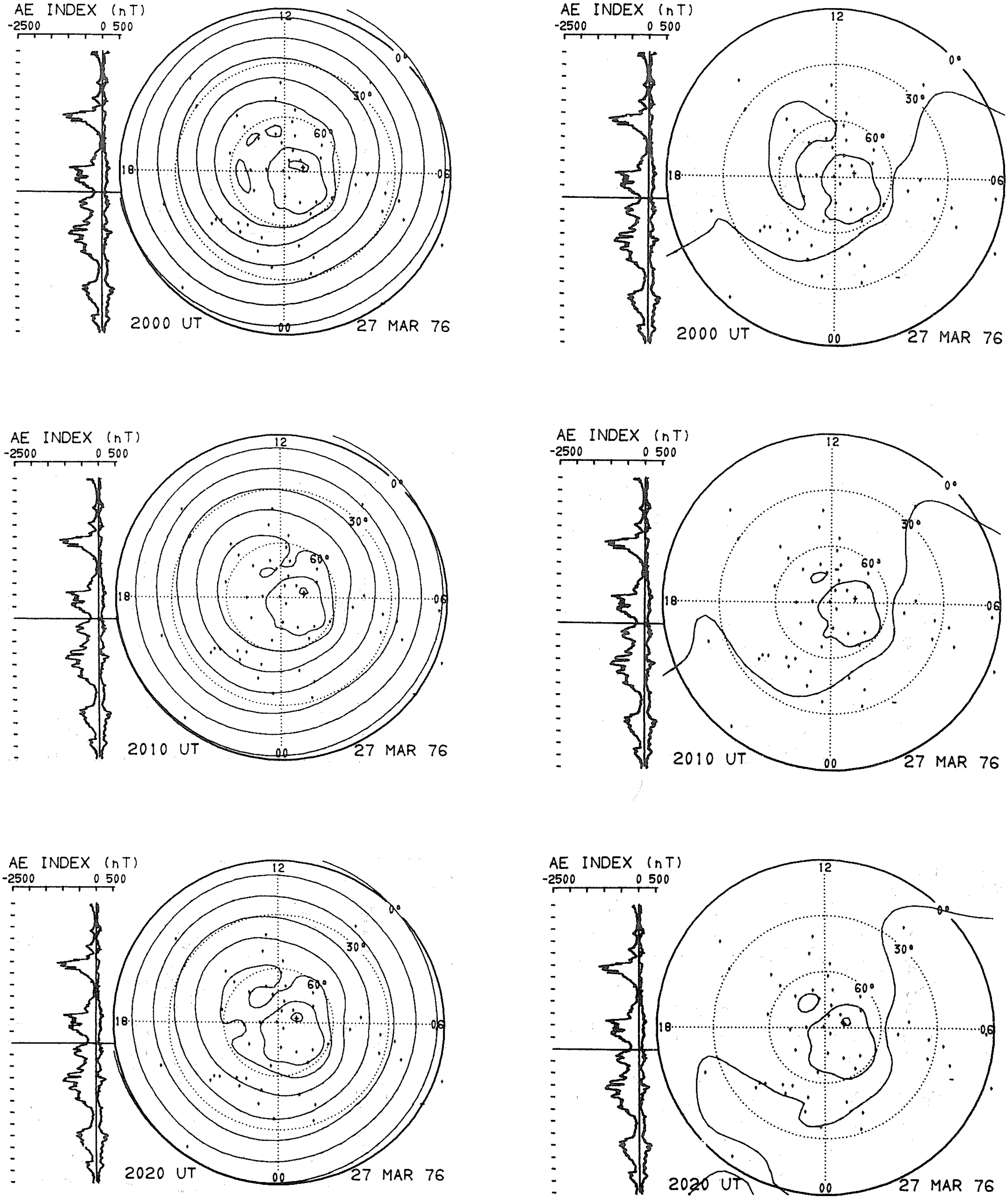
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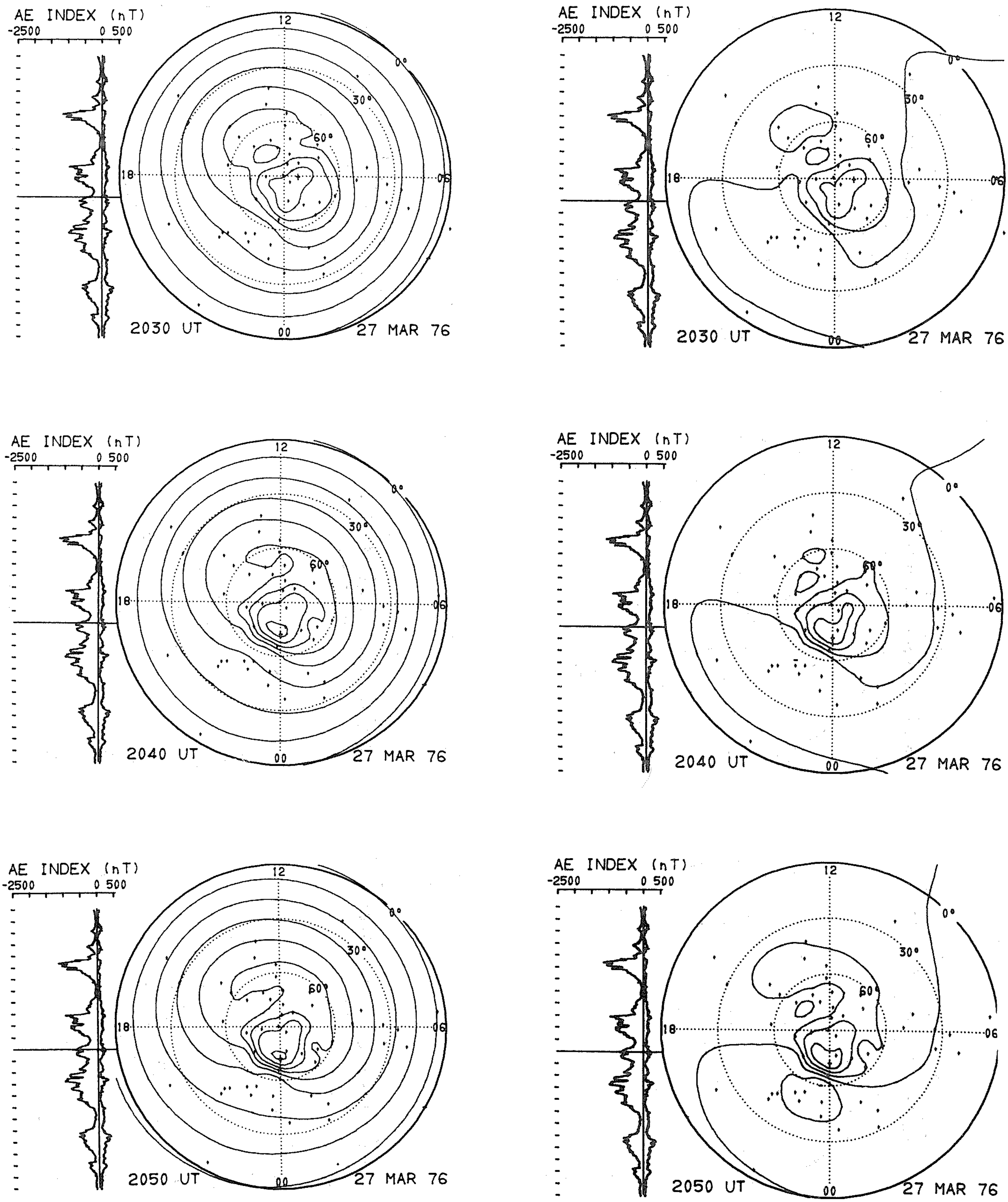
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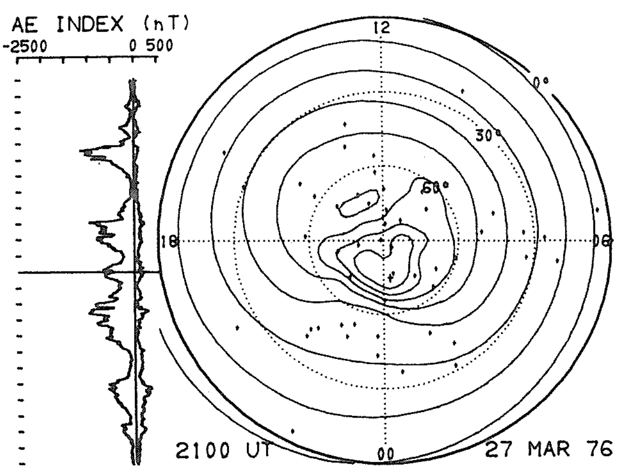
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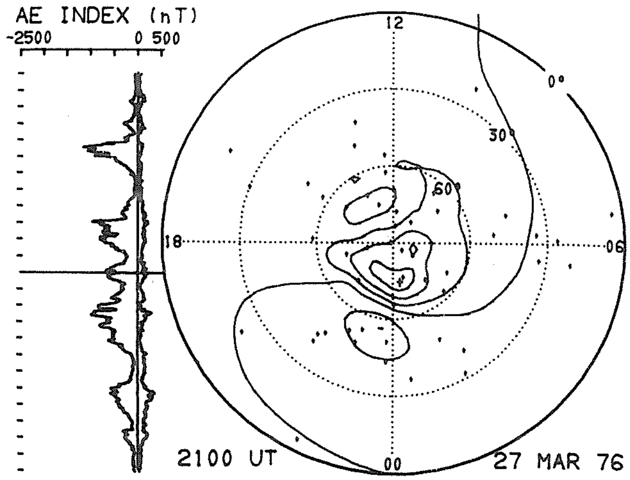
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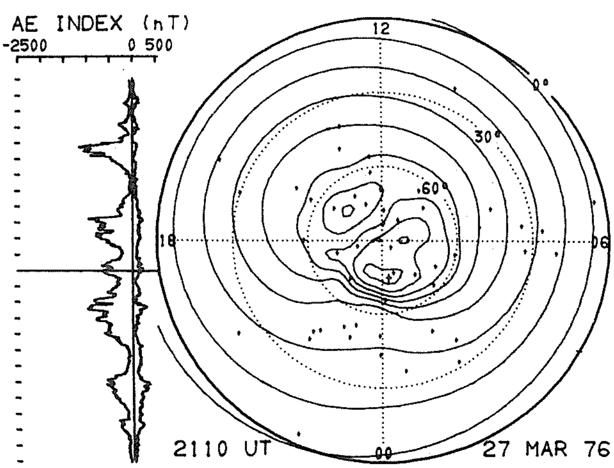
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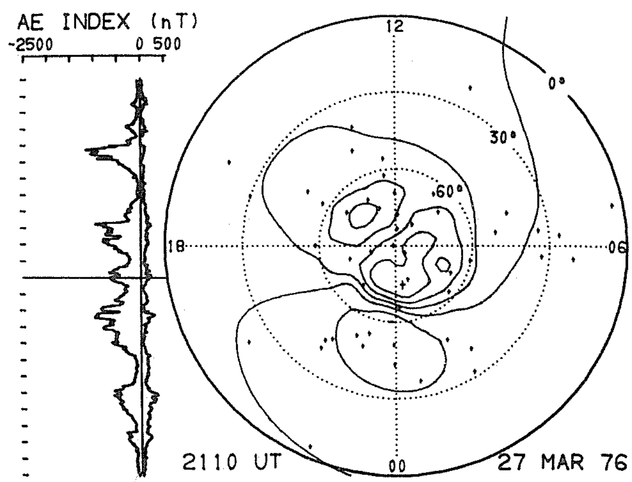
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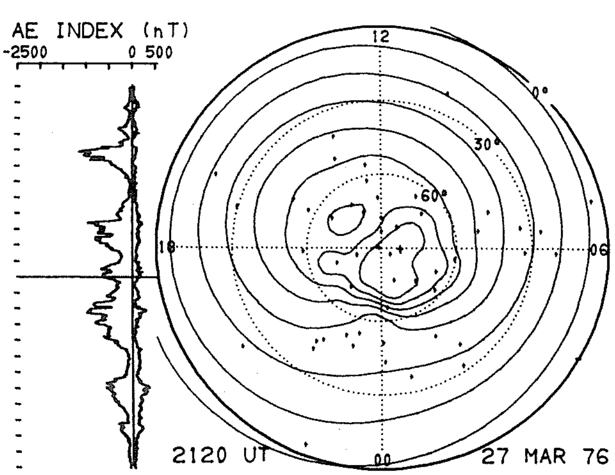
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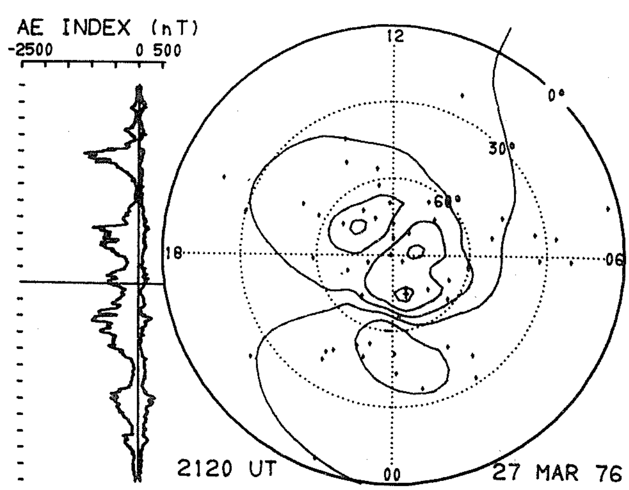
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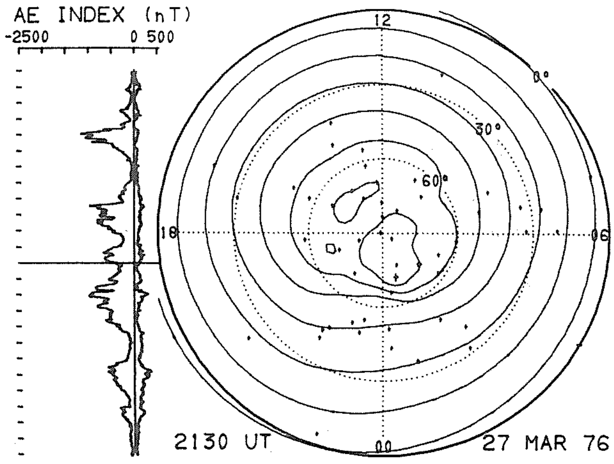
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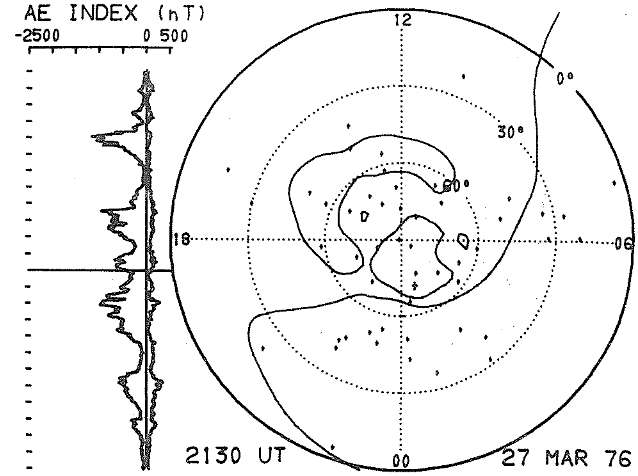
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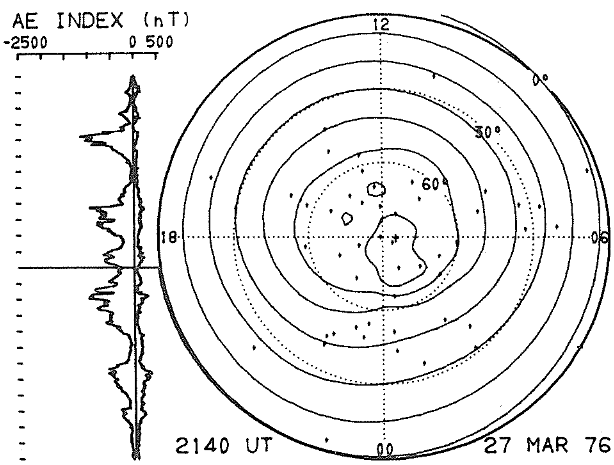
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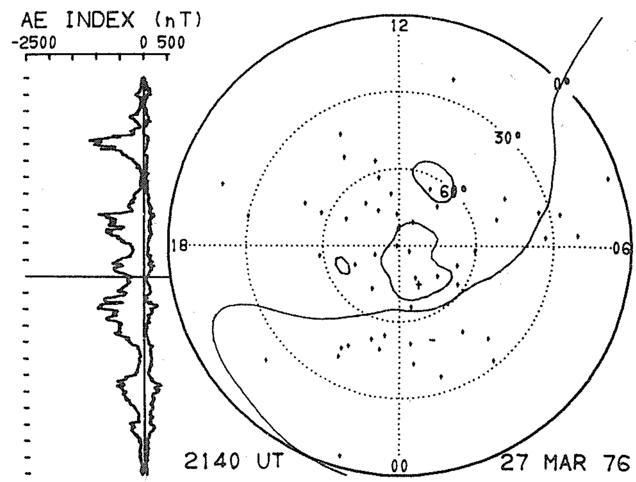
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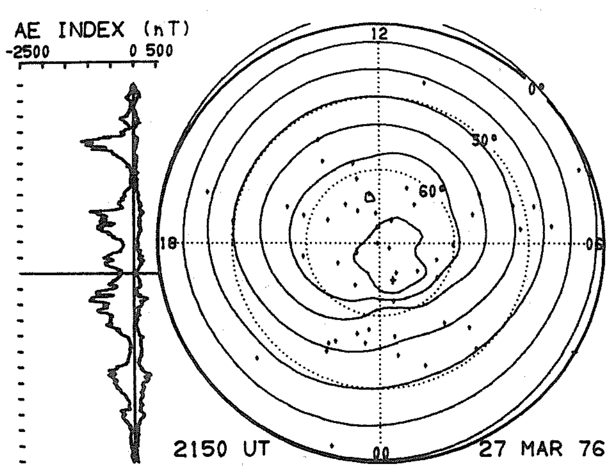
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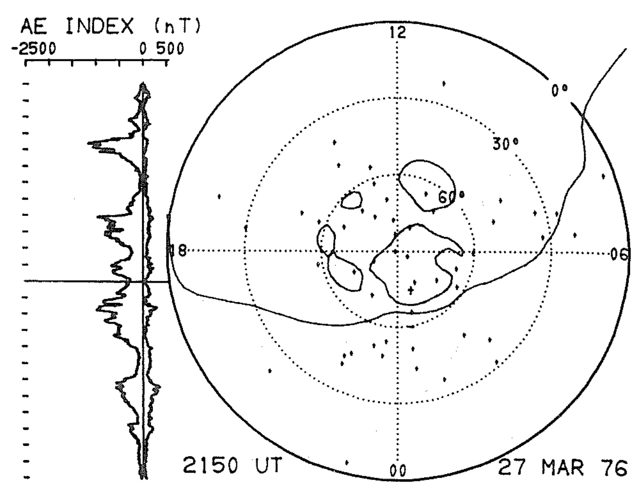
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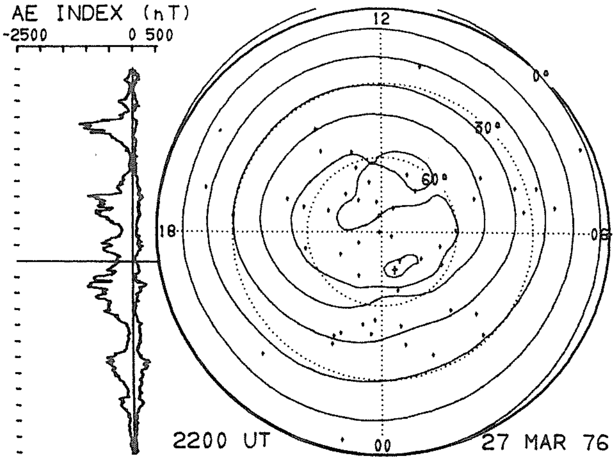
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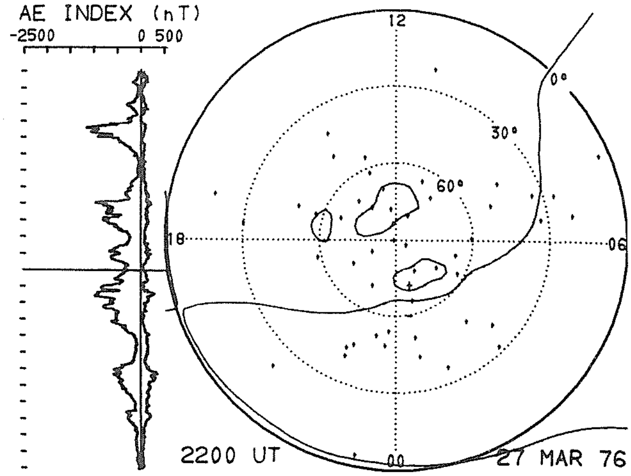
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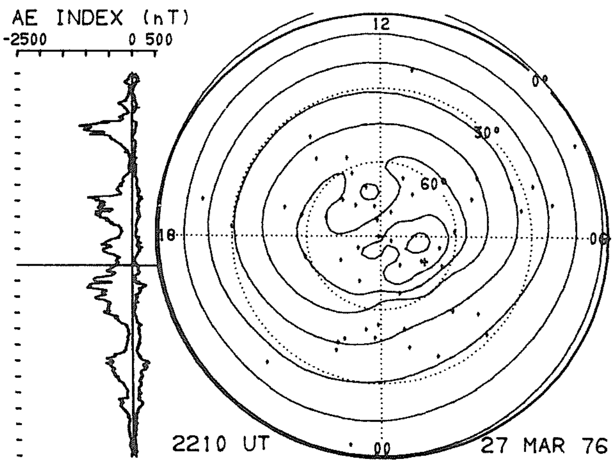
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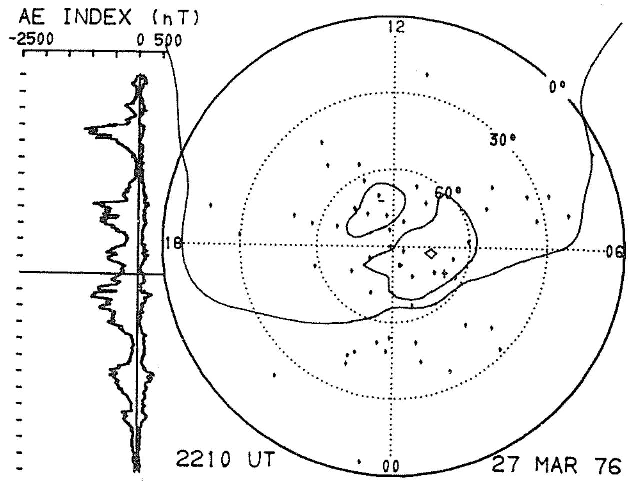
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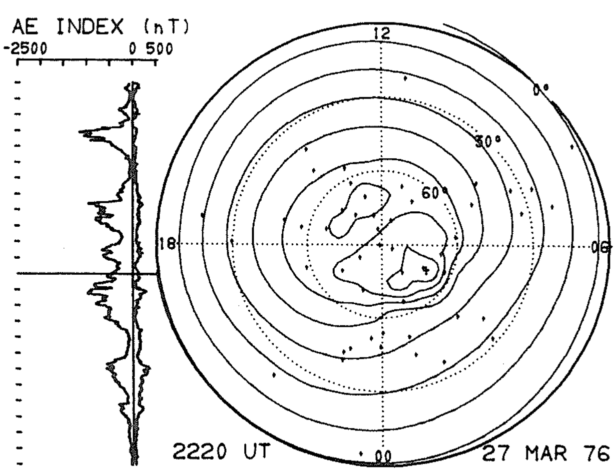
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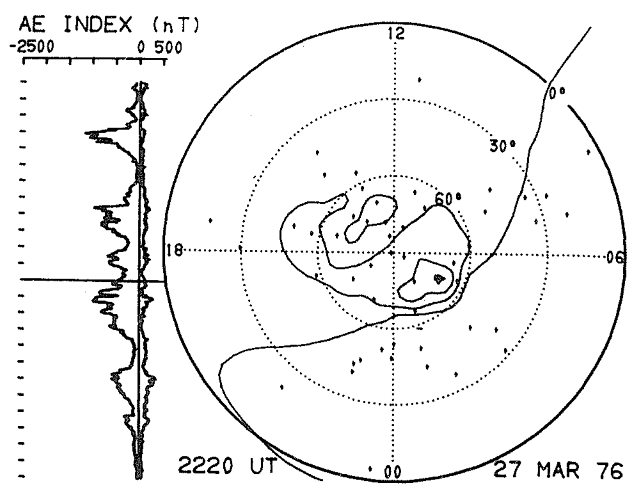
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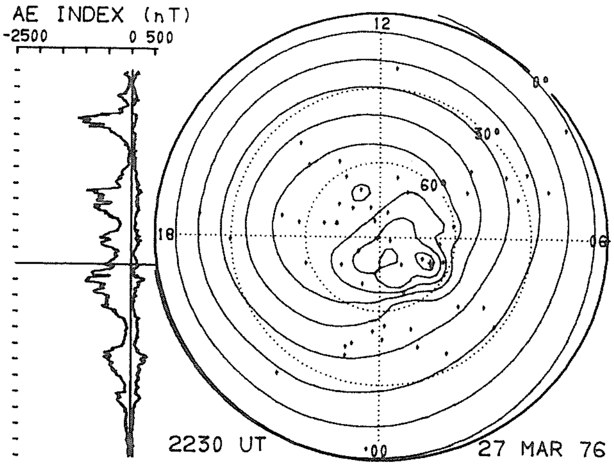
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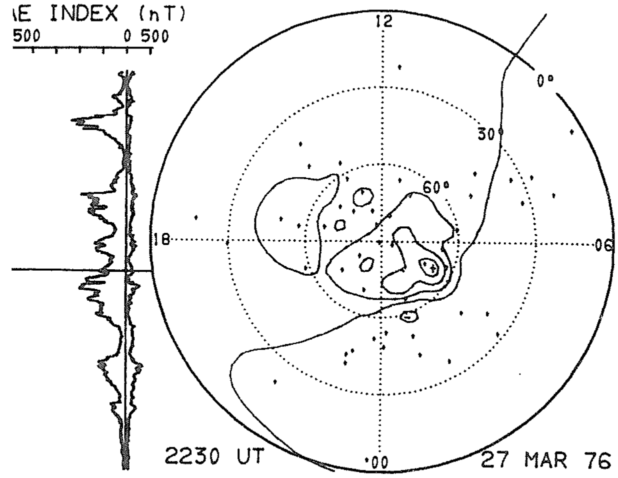
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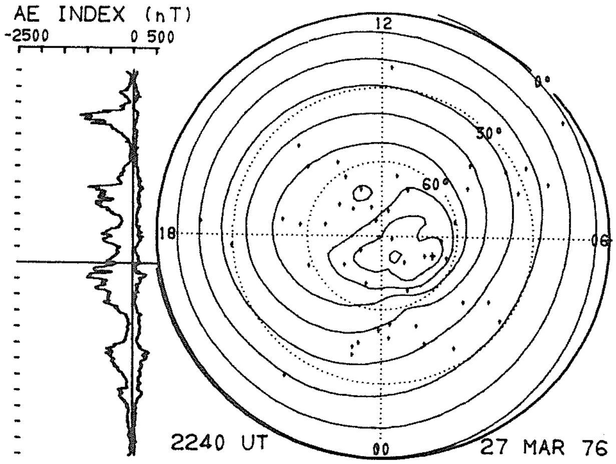
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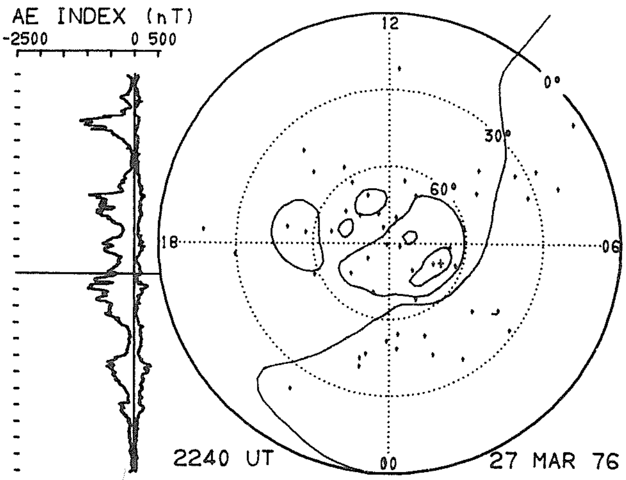
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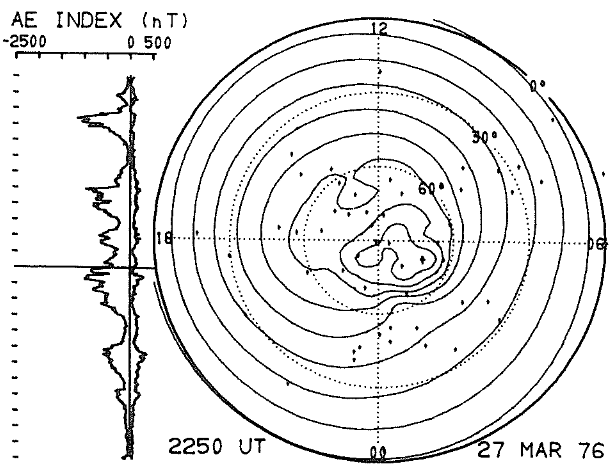
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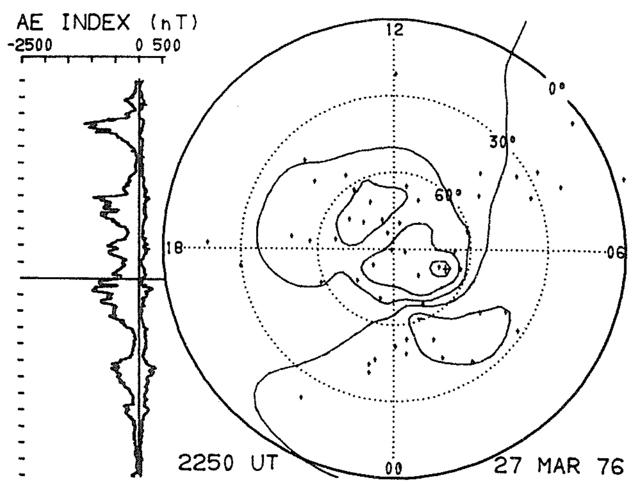
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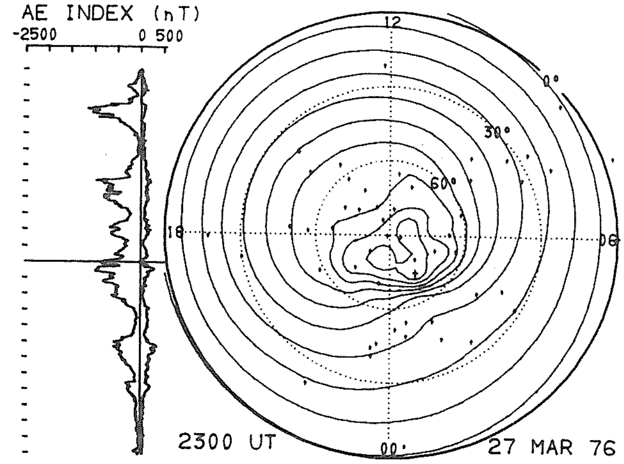
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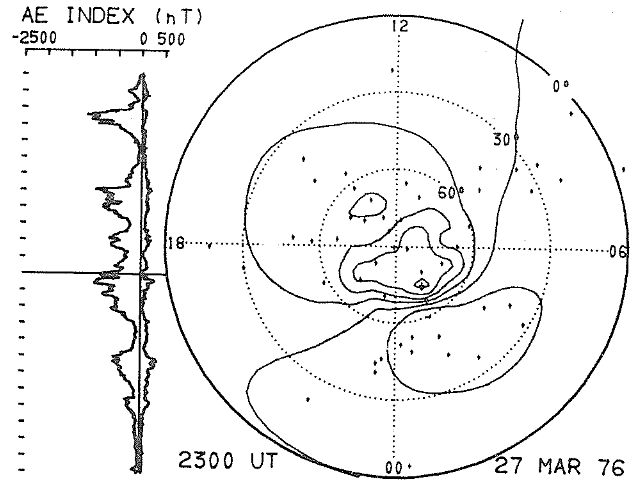
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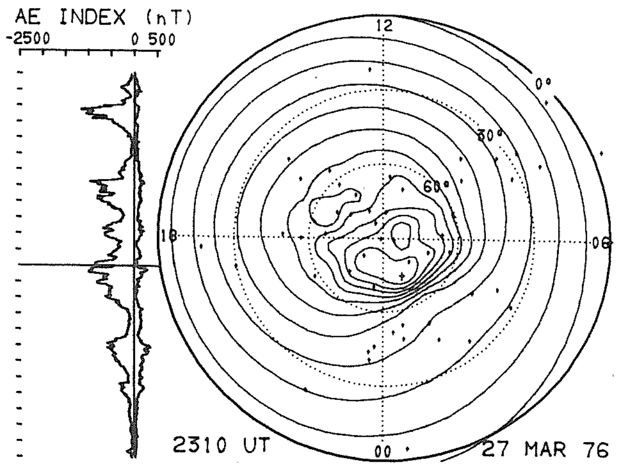
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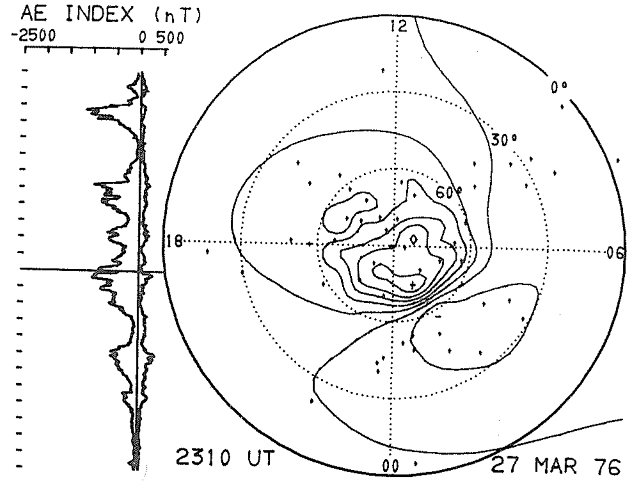
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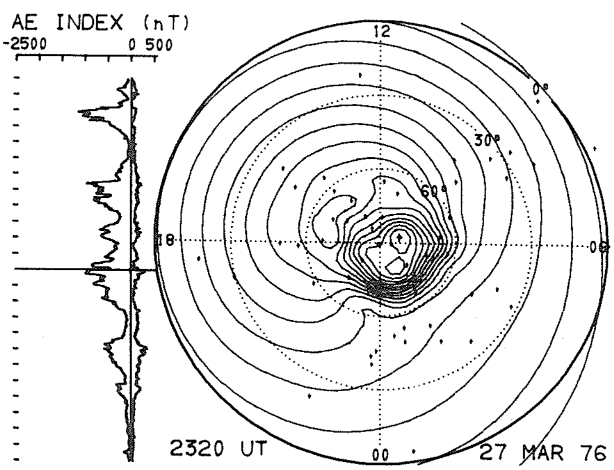
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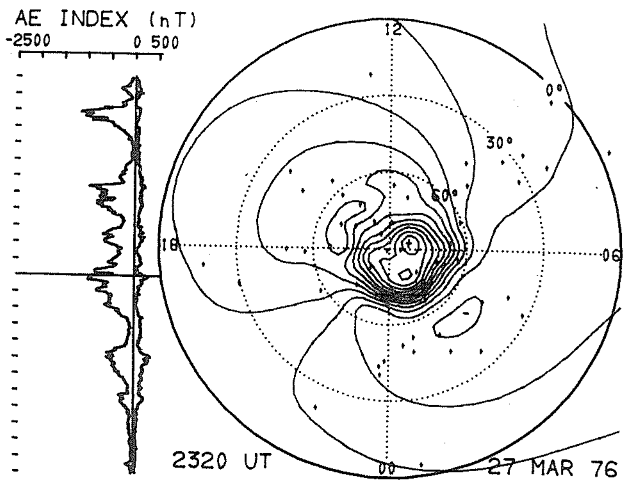
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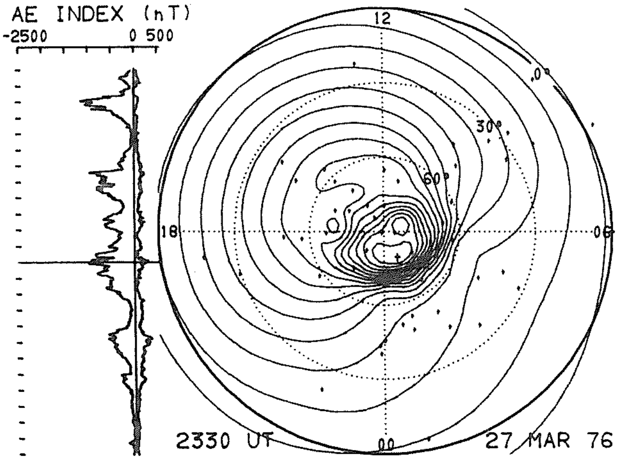
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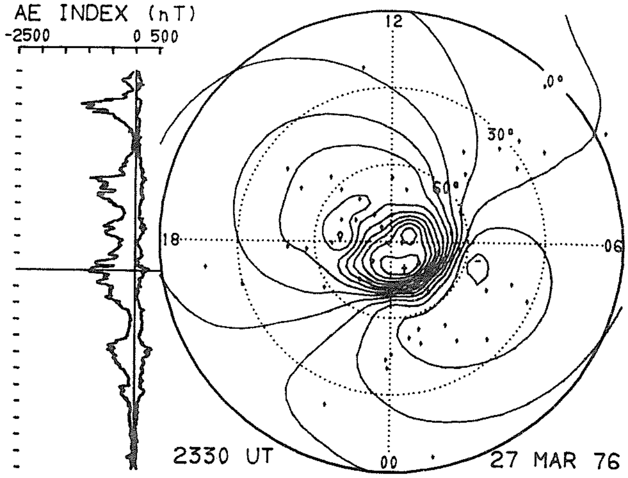
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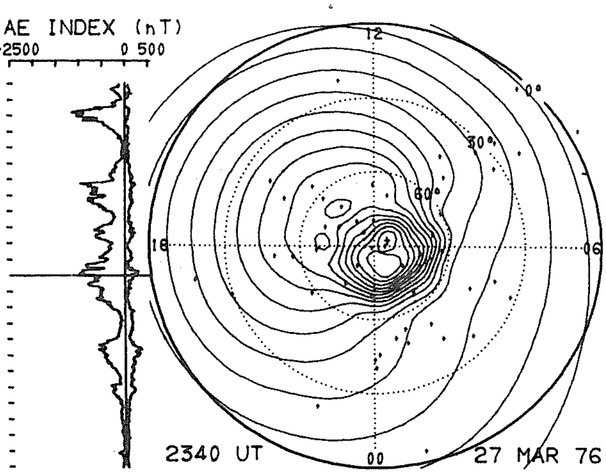
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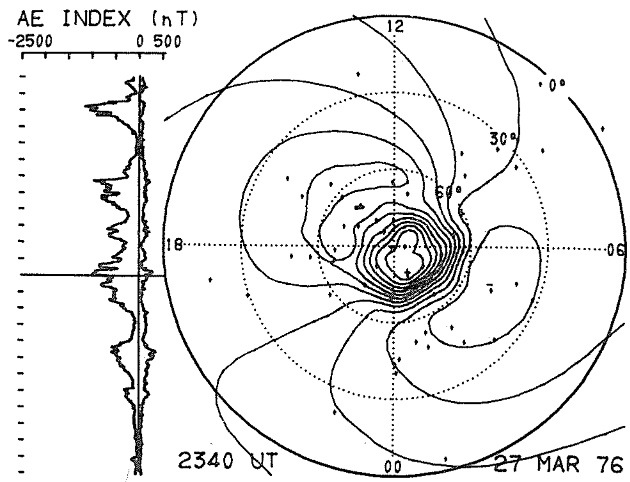
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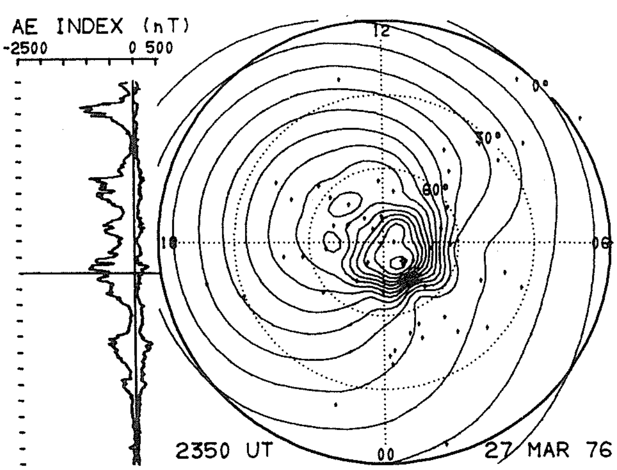
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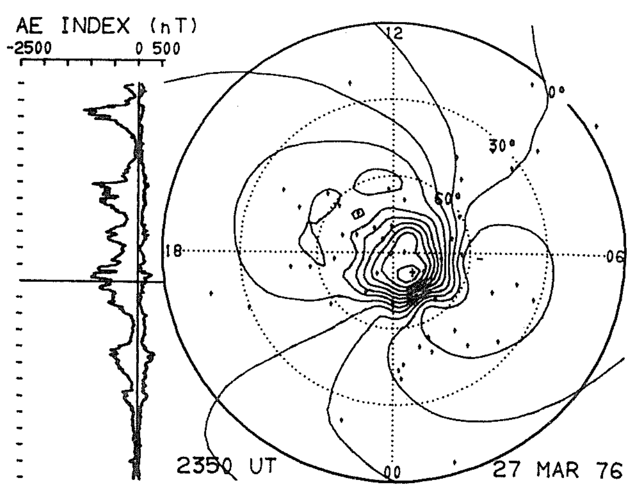
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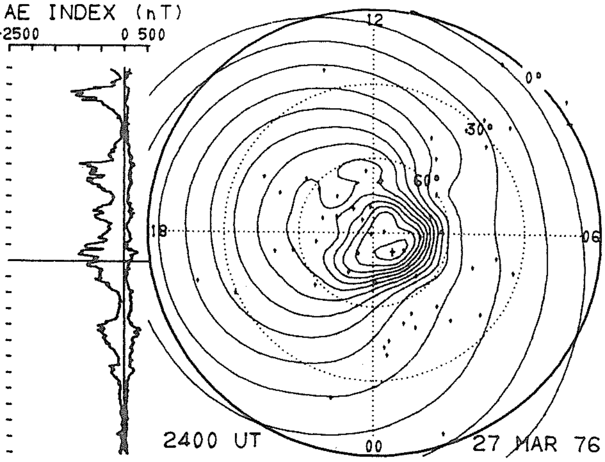
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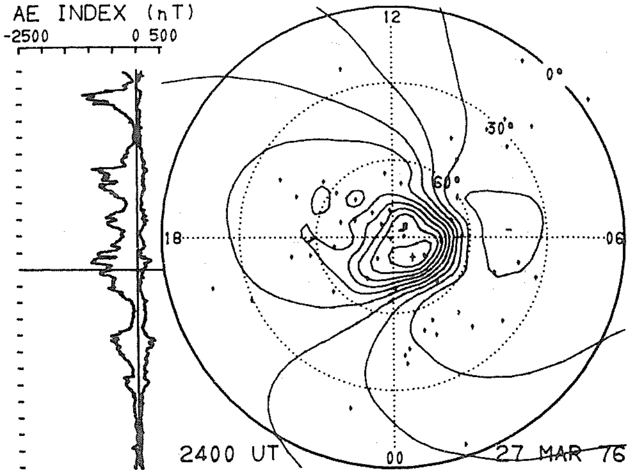
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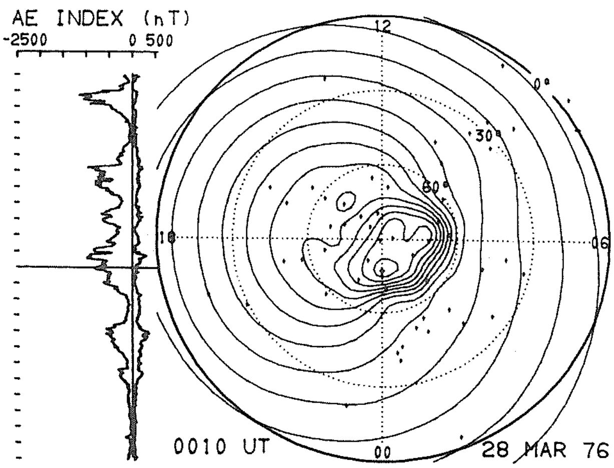
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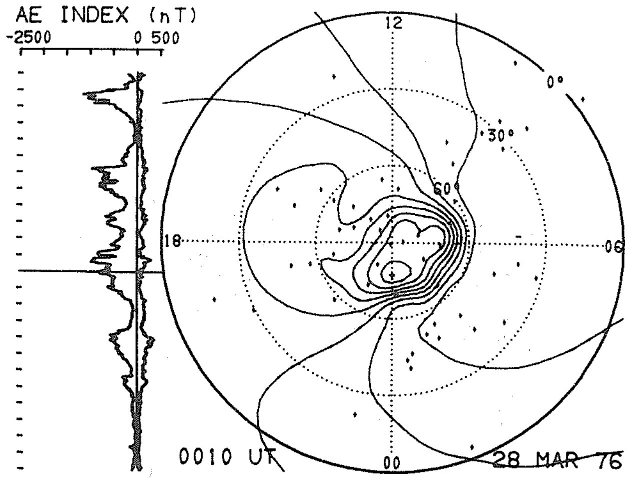
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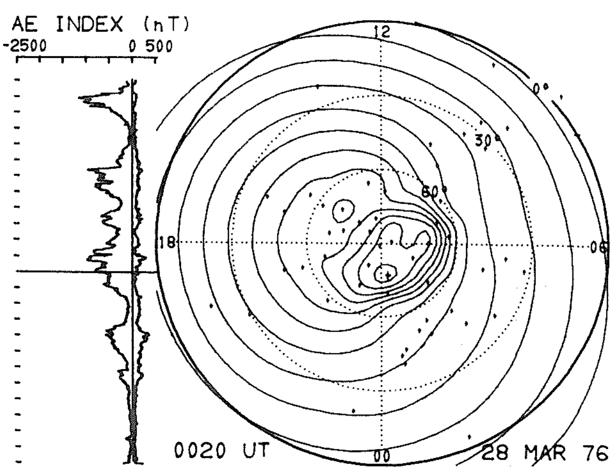
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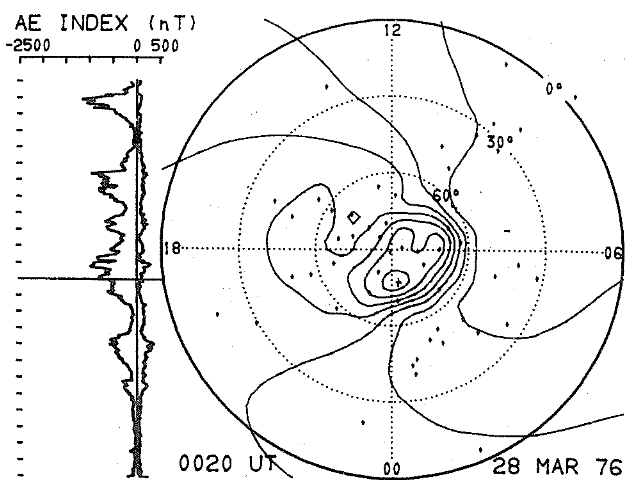
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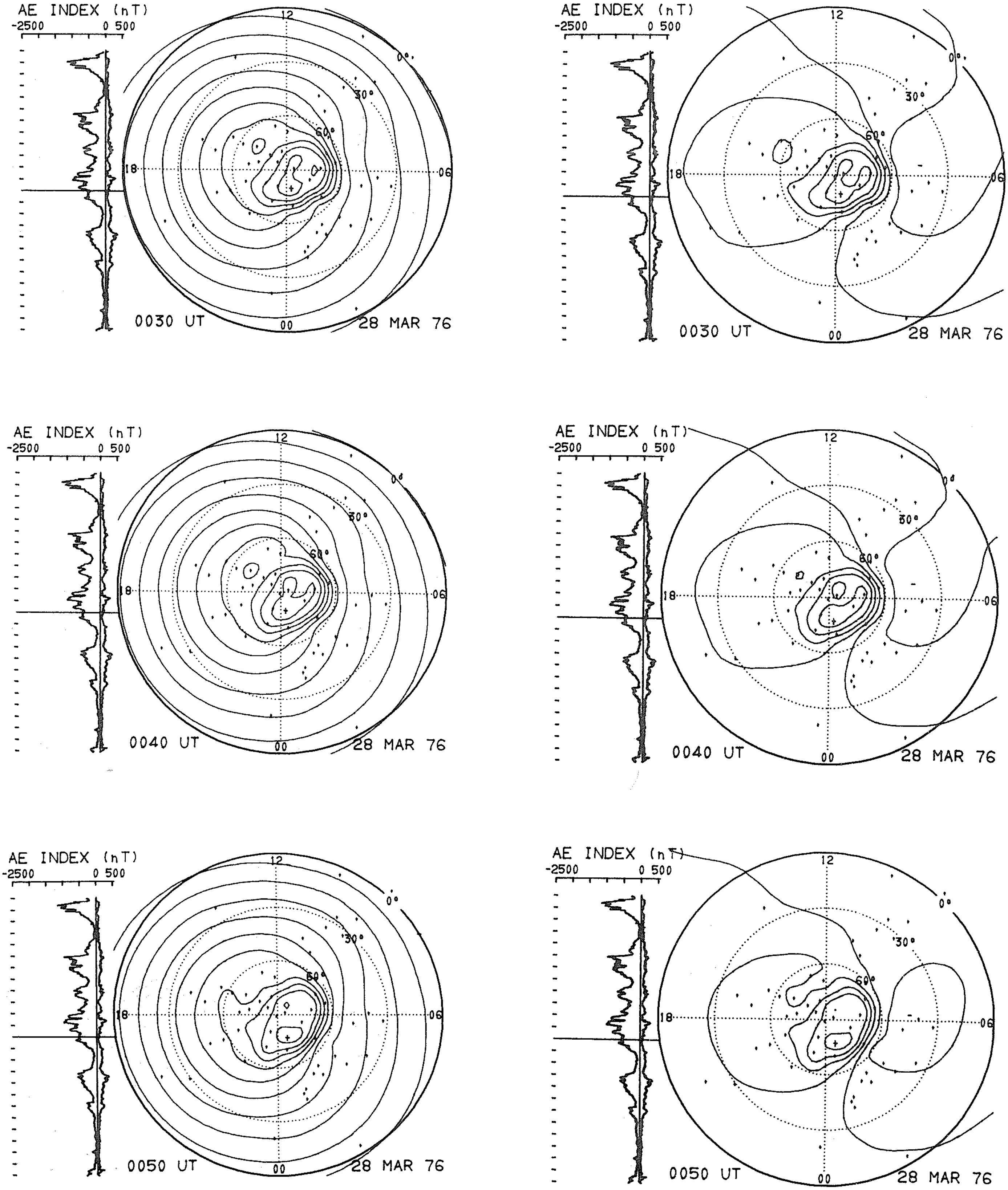
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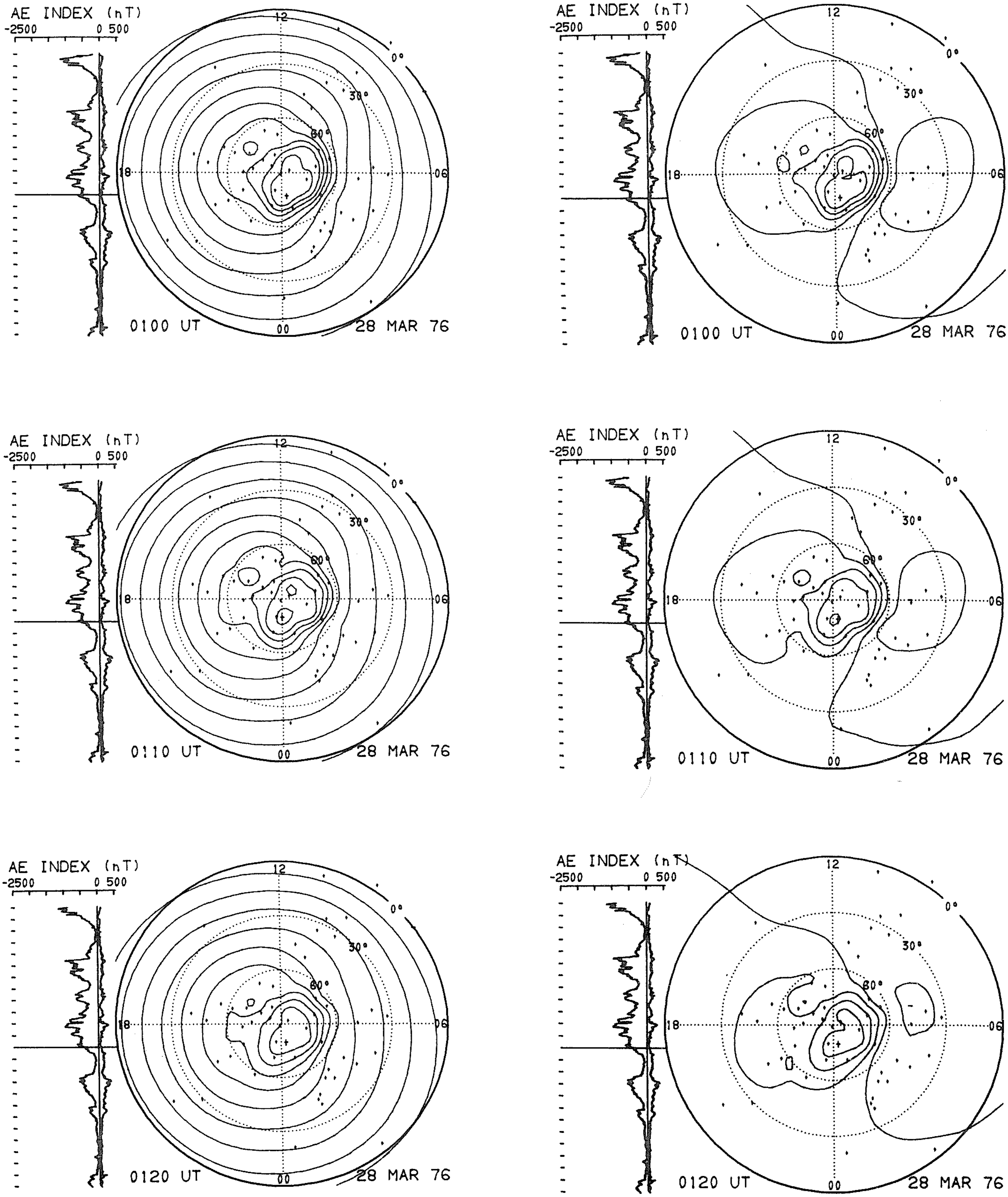
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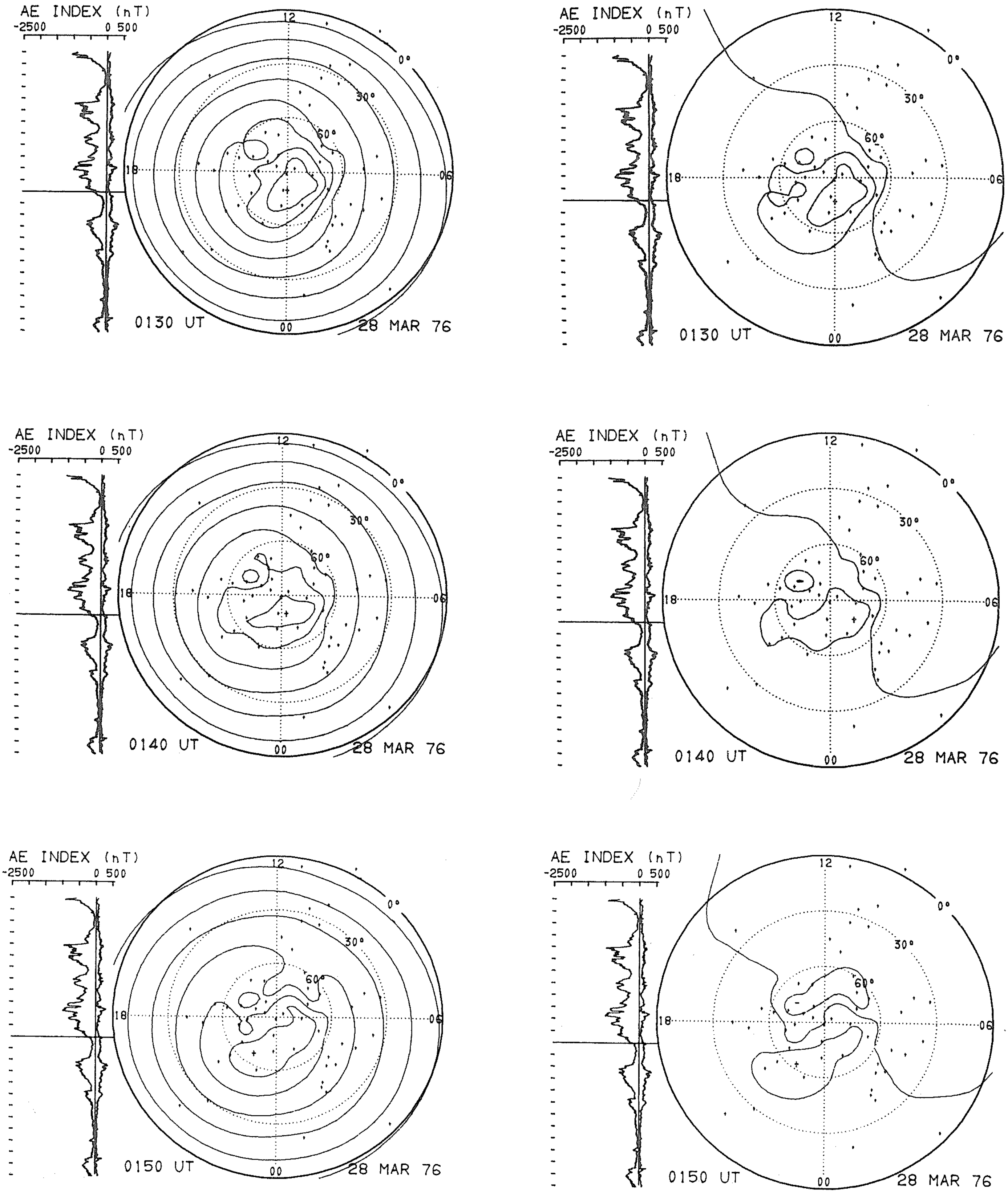
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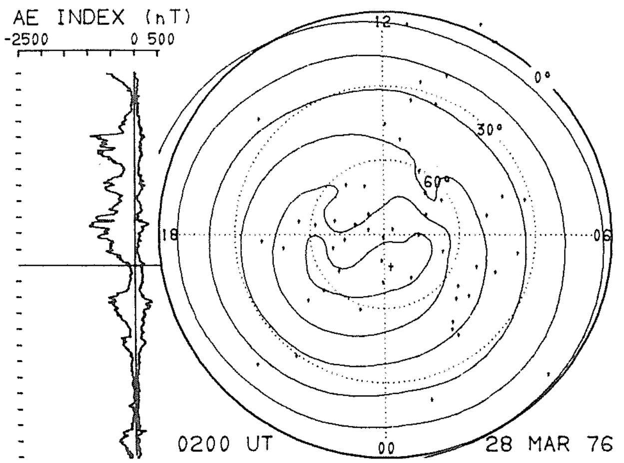
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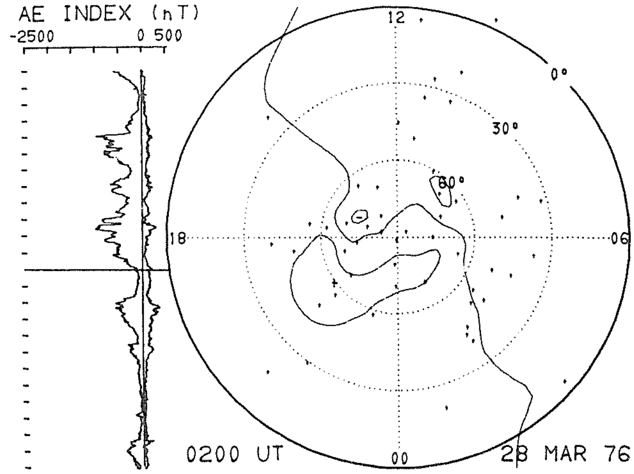
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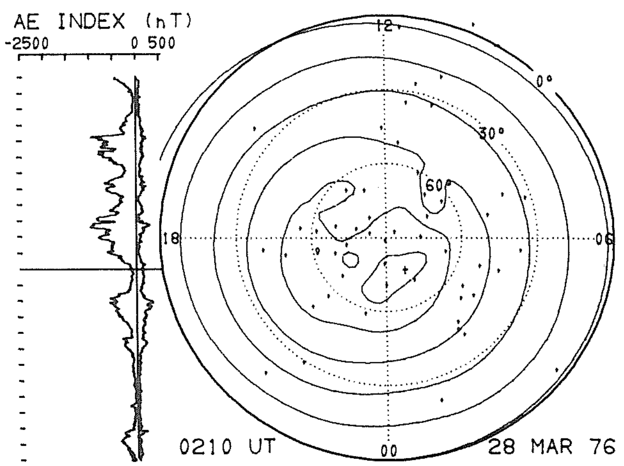
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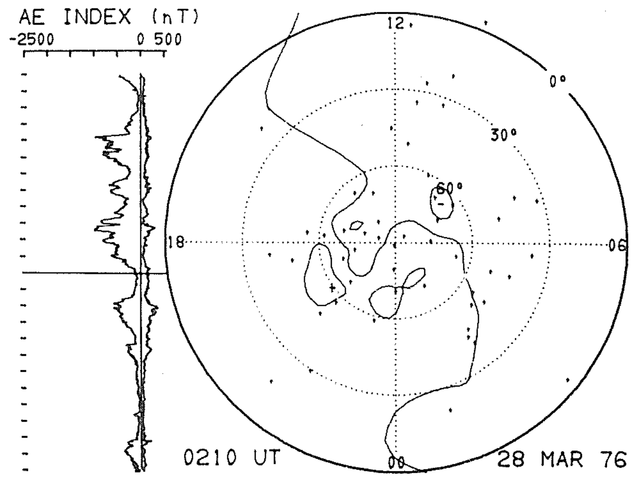
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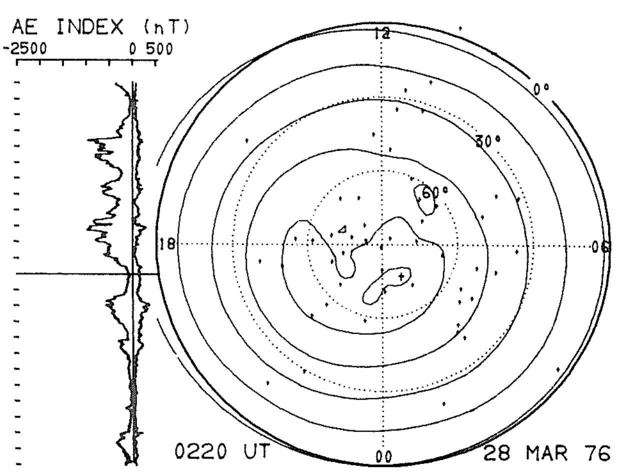
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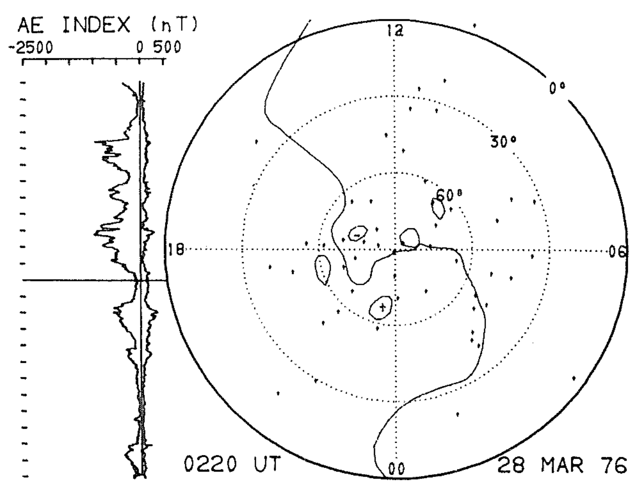
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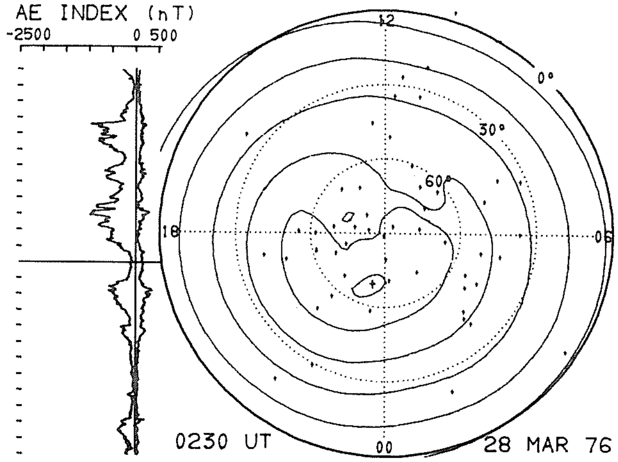
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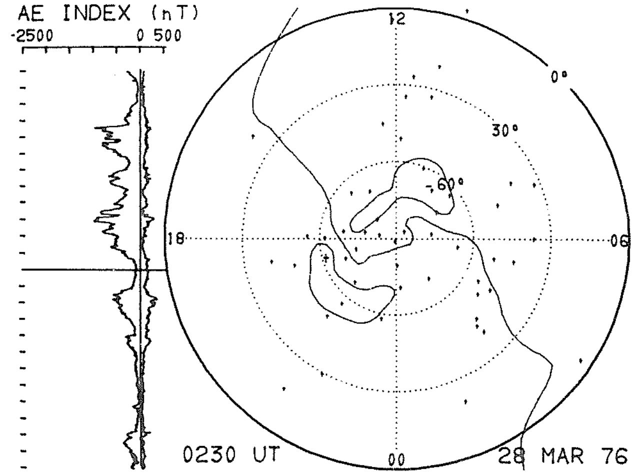
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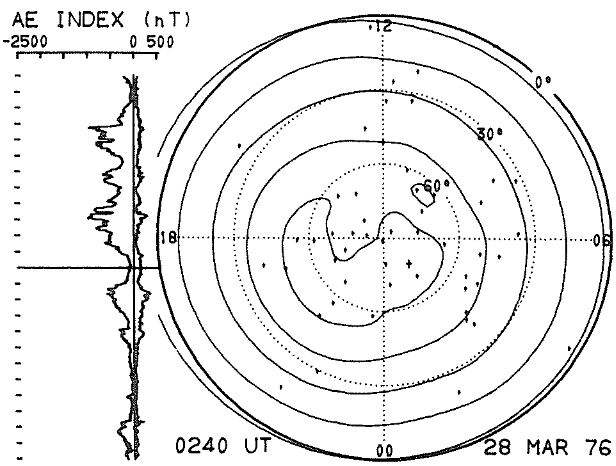
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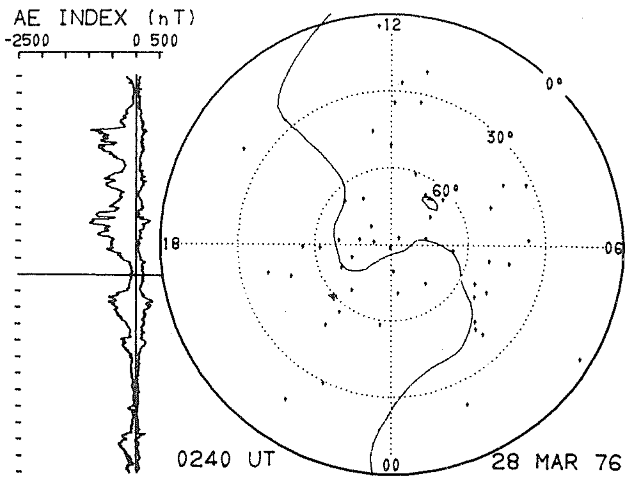
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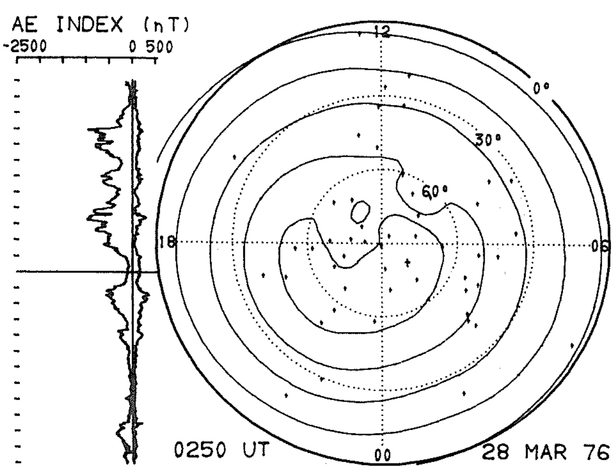
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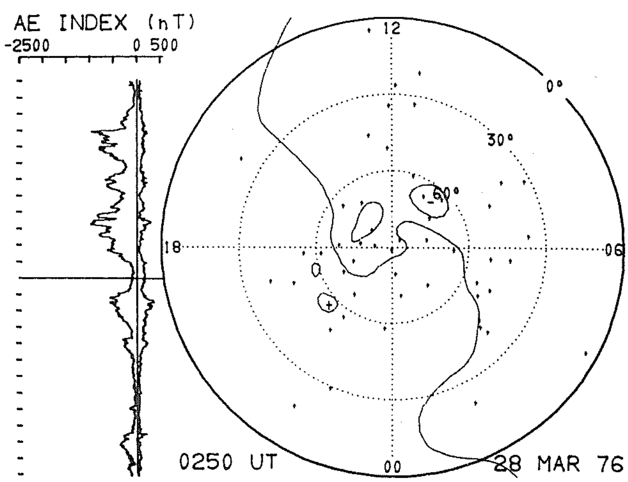
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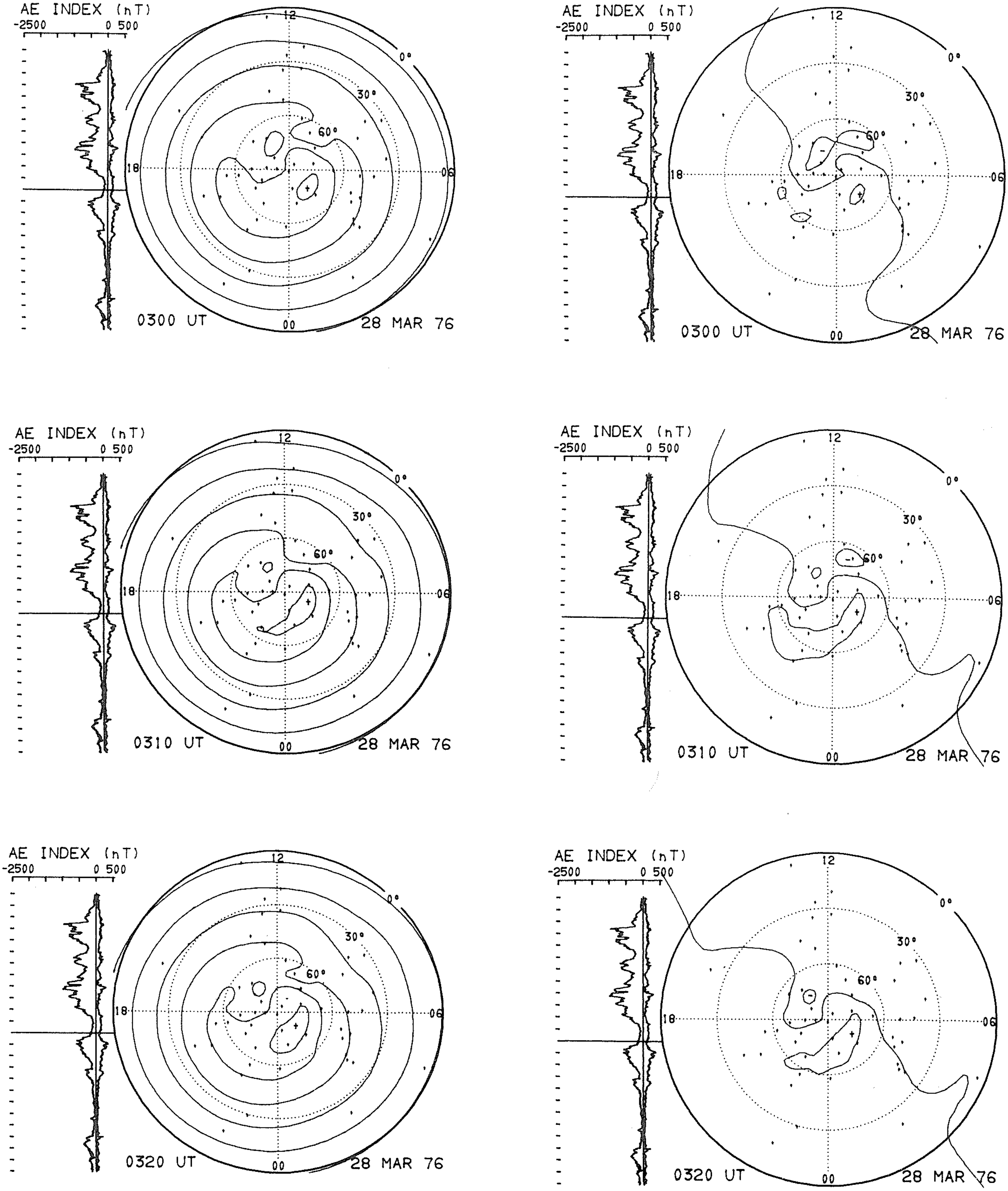
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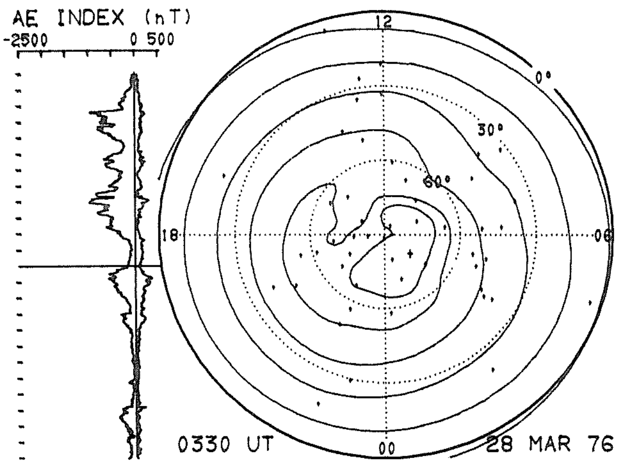
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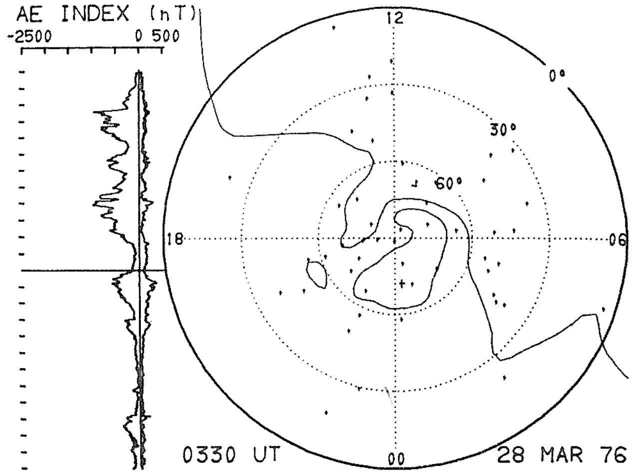
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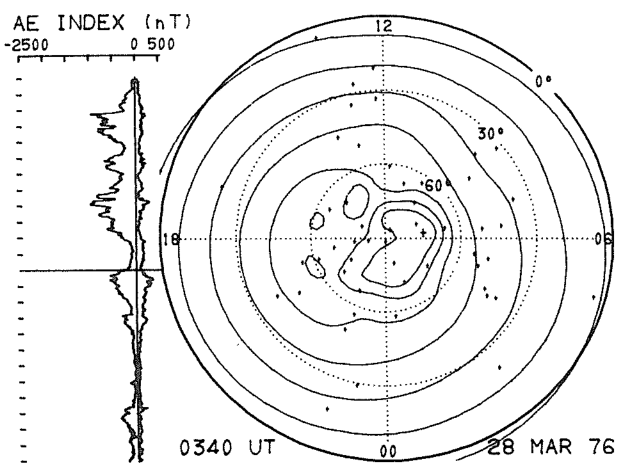
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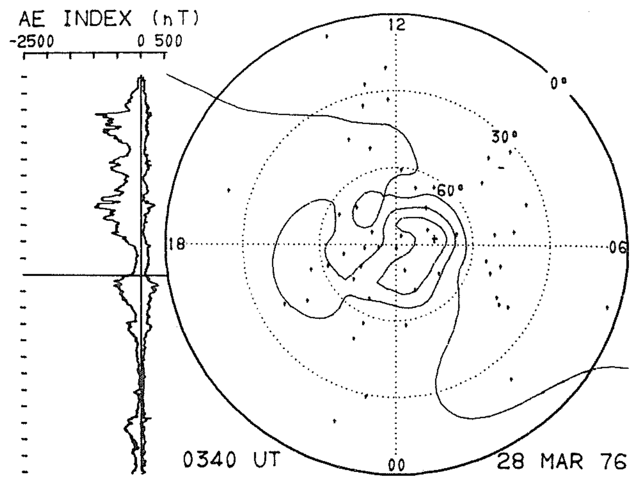
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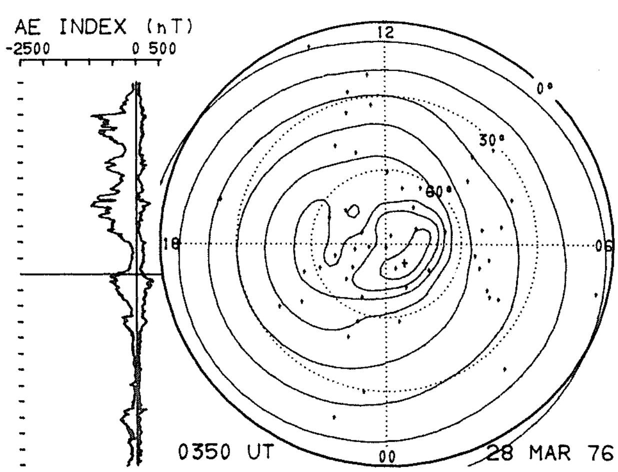
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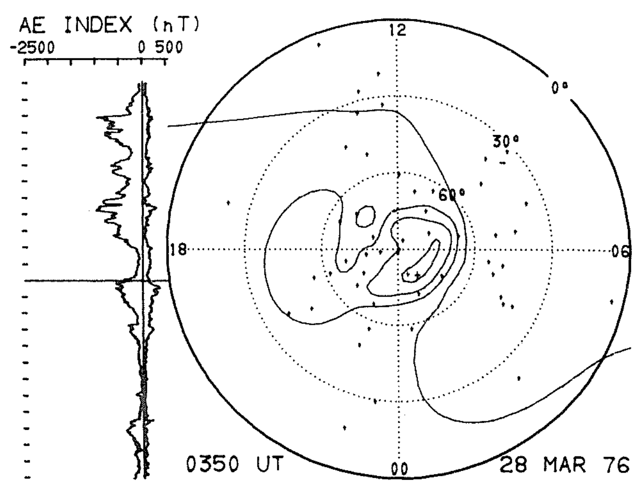
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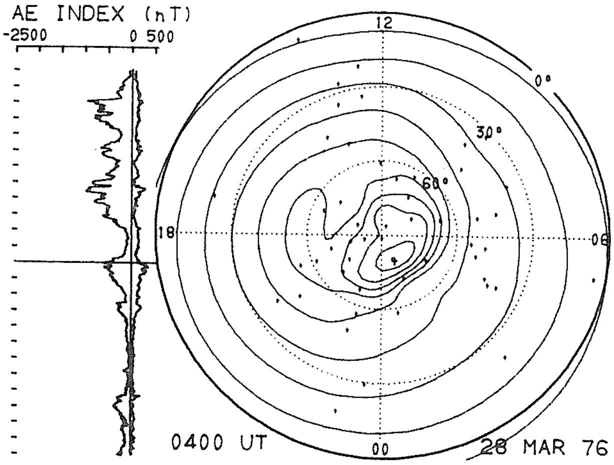
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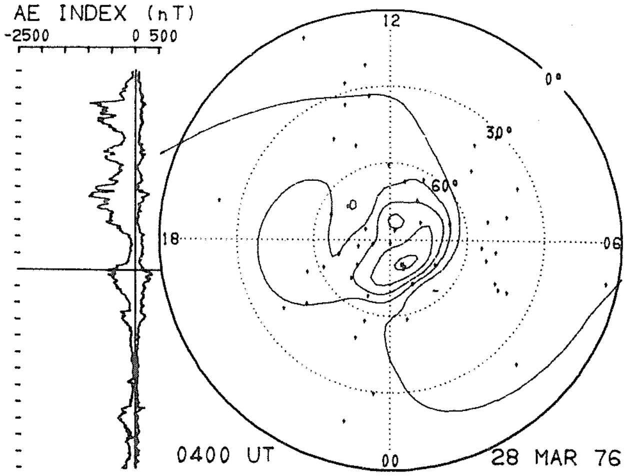
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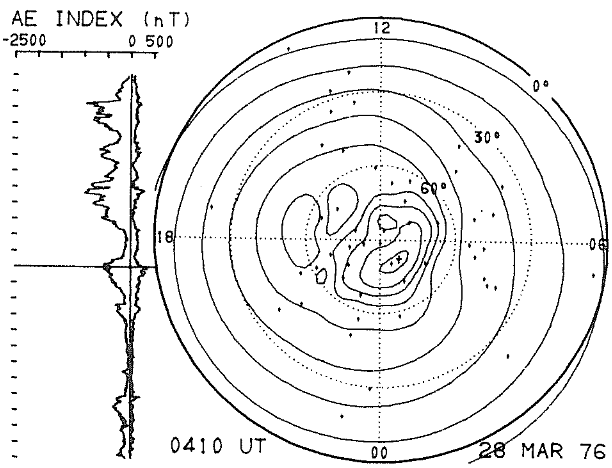
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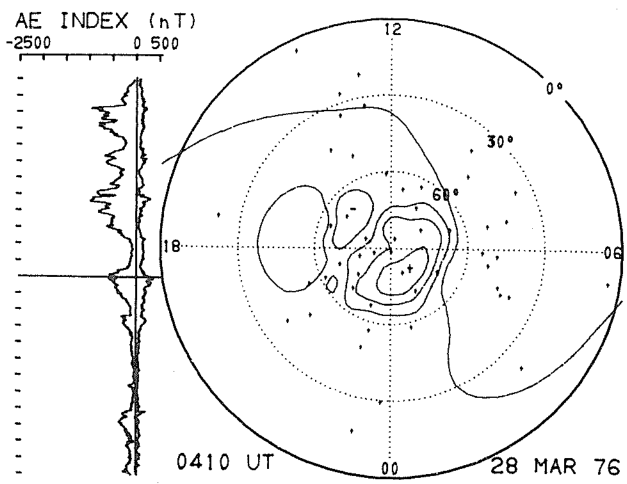
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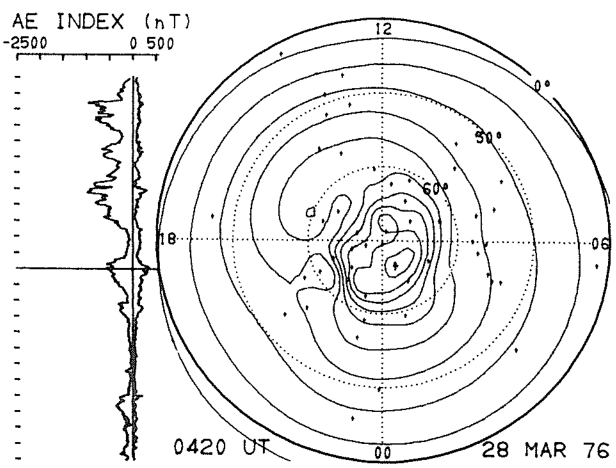
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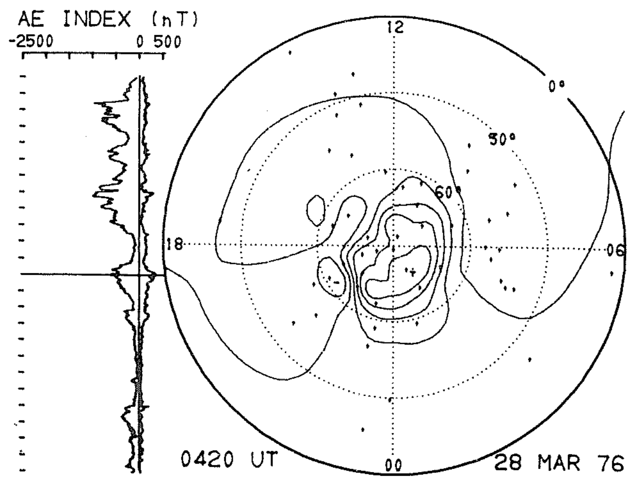
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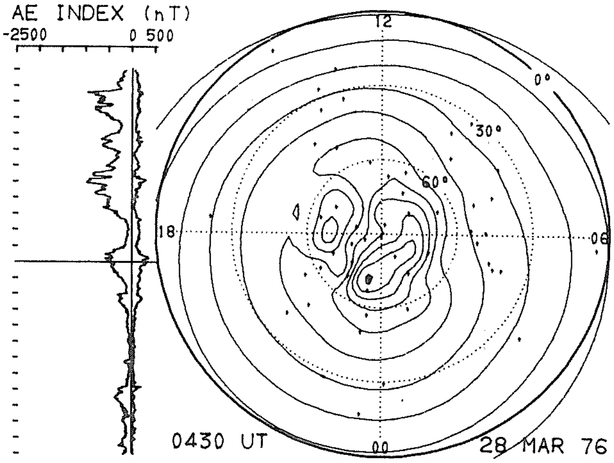
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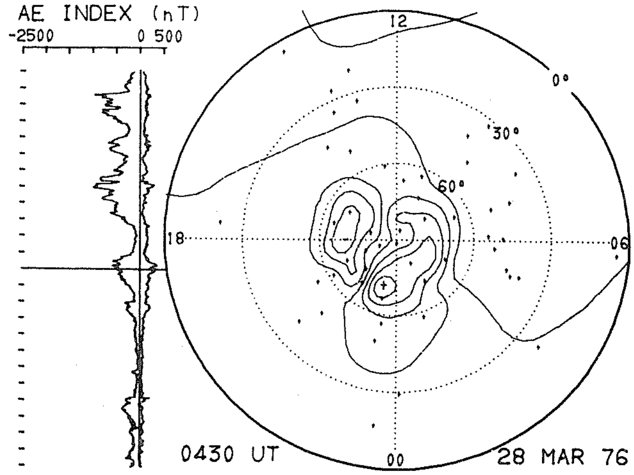
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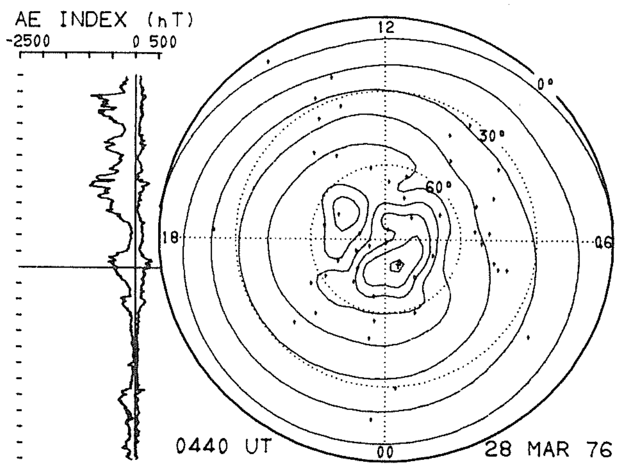
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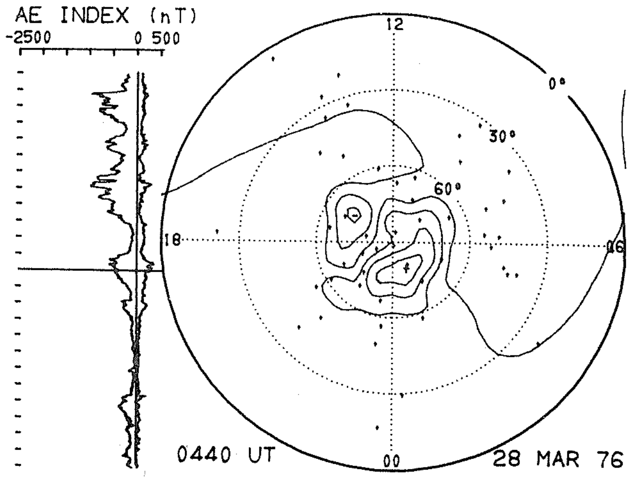
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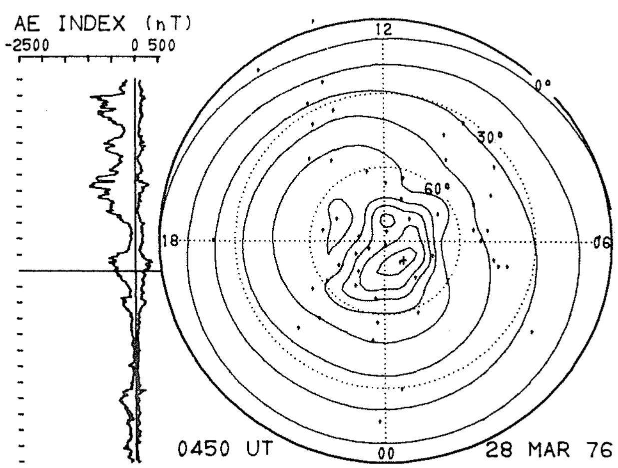
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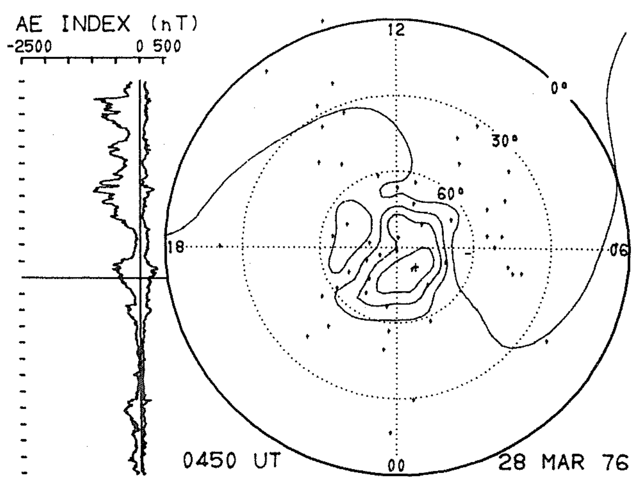
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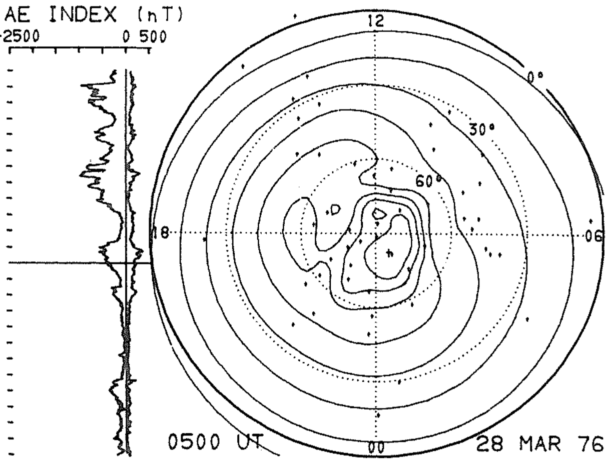
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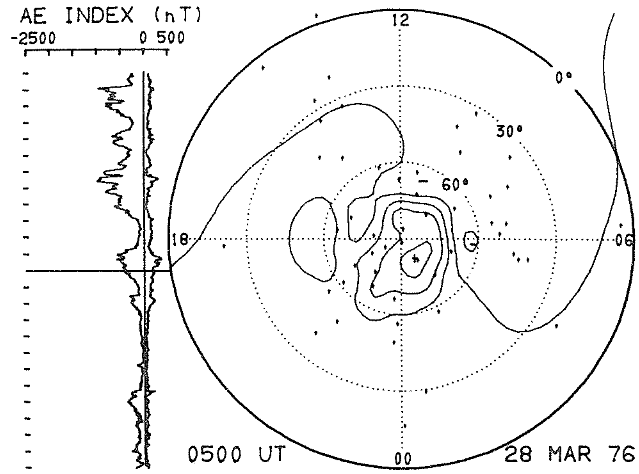
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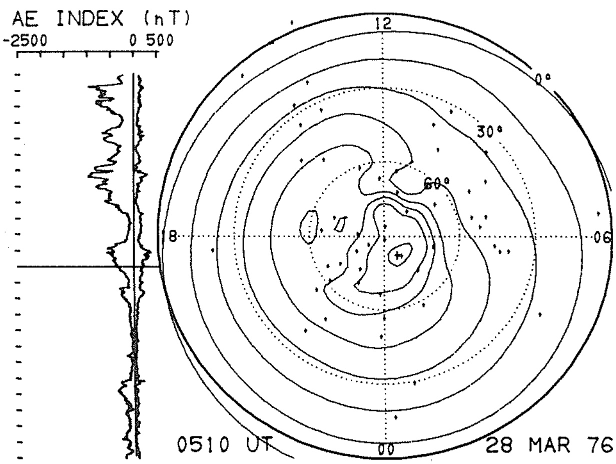
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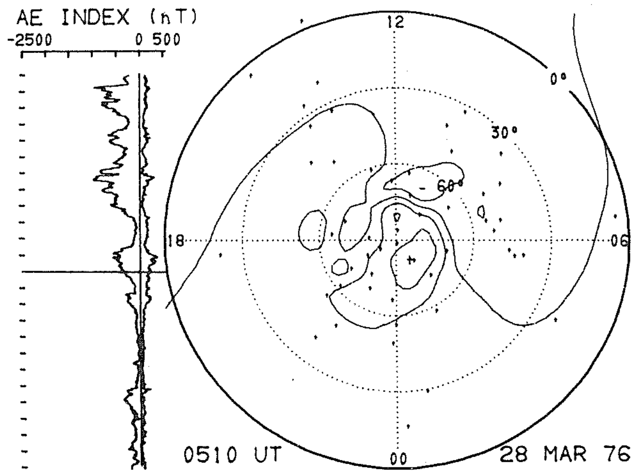
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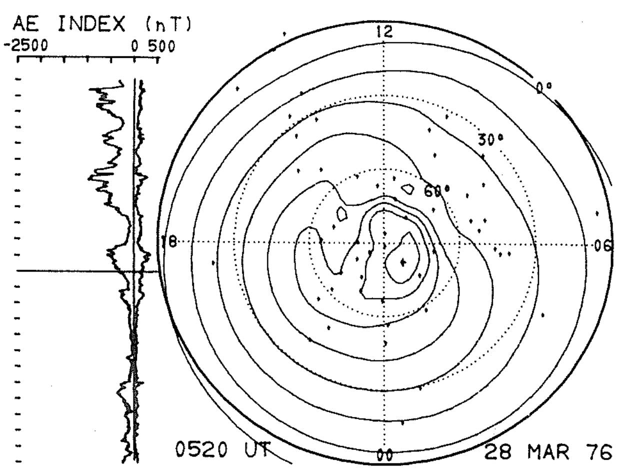
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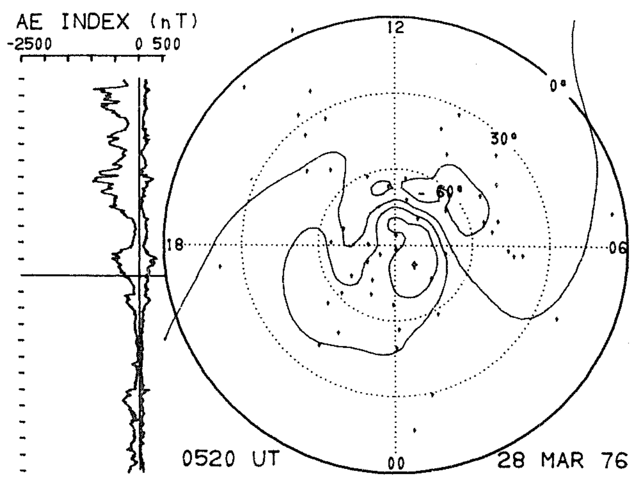
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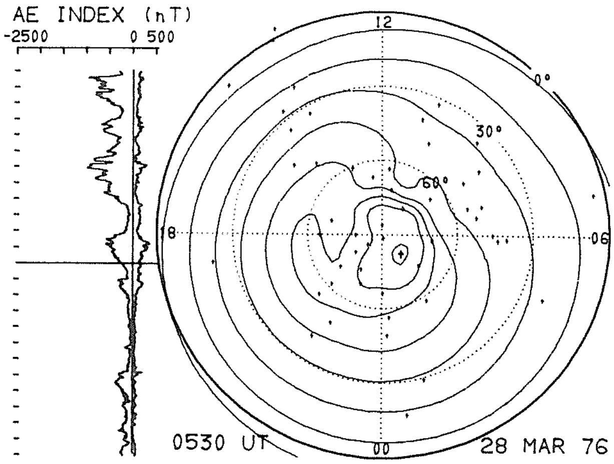
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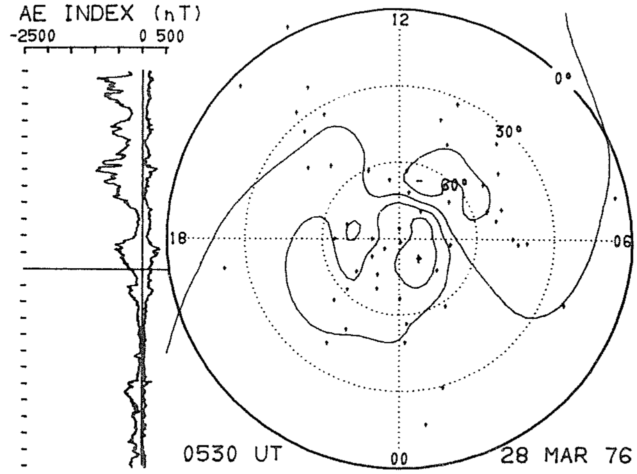
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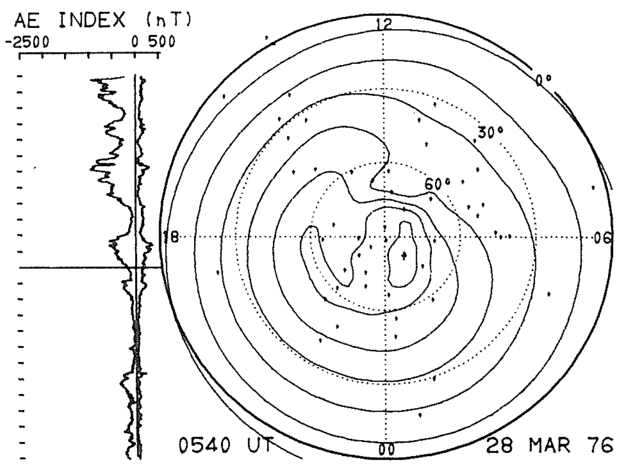
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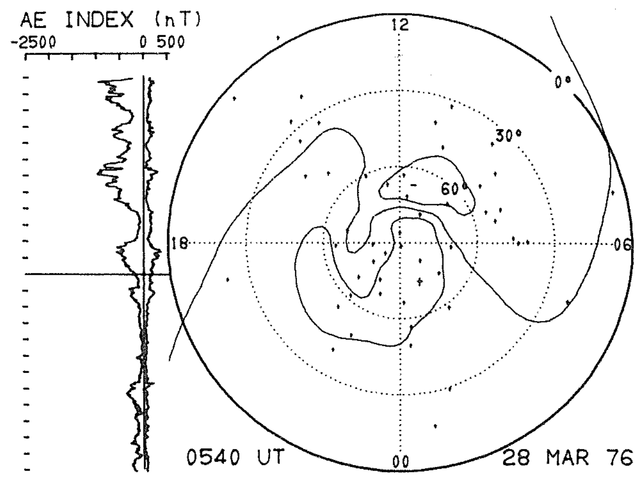
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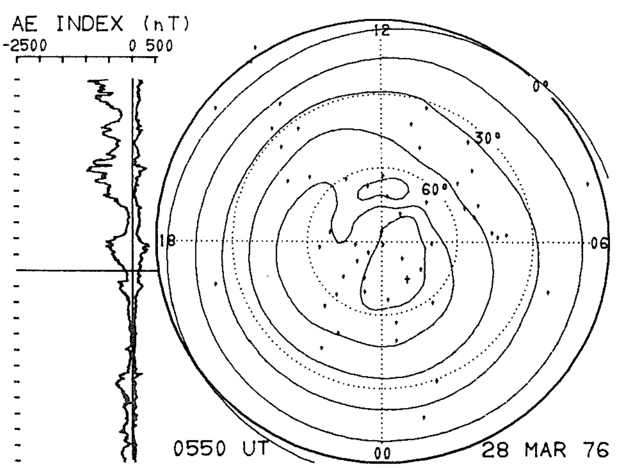
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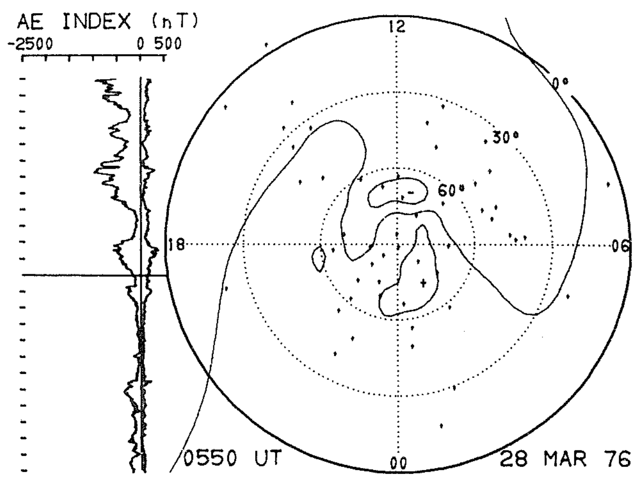
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