

I A G A Bulletin No. 32g

INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS

ASSOCIATION OF GEOMAGNETISM AND AERONOMY

GEO MAGNETIC DATA 1976
INDICES
RAPID VARIATIONS
SPECIAL INTERVALS

Edited by D. van Sabben
in co-operation with
M. Siebert, P. N. Mayaud, M. Sugiura, A. Romana,
J. V. Lincoln, J. H. Allen

Published for the International Council of Scientific Unions with the
financial assistance of Unesco through the mediation of the
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The IAGA-Bulletin No. 32 series is a yearly compilation of magnetic indices and other geomagnetic data, based on the reports of a great number of magnetic observatories. The series is the continuation of the former IAGA-Bulletin No. 12 and is prepared for publication by the International Service of Geomagnetic Indices (ISGI) at De Bilt. The elaborated data are at present provided by the following institutes, under the responsibility of the adjoining collaborators:

Institut für Geophysik, Göttingen (M. Siebert): Kp, ap, Ap, Cp, Q- and D-days.
Institut de Physique du Globe, Paris (P. N. Mayaud): aa, Kn, Ks, Km, An etc.
NASA-Goddard Space Flight Center, Greenbelt (M. Sugiura): Dst.
Observatorio del Ebro, Roquetas (A. Romana): Rapid variations.
Environmental Data Service, Boulder (J. V. Lincoln): Magnetic storm data, K-tables, magnetograms; (J. H. Allen): AE-data.

The ISGI, formerly called Permanent Service or "C- and K center", operates under the supervision of IAGA-Division V : Observatories, Instruments, Indices and Data. Since 1954 it forms part of the Federation of Astronomical and Geophysical Services. The work began in 1906 with the collection and publication of the daily character figure C (as reported by the observatories in a scale 0-2) and its daily mean value Ci, together with lists of selected quiet and disturbed days. In 1938, this work was extended backwards to 1890.

The three-hourly K-index (scale 0-9) was introduced by Bartels in 1938. From the K-figures of 12 selected stations, planetary indices Kp were derived. Both K and Kp were officially adopted by the IAGA in 1951 and the series of Kp was extended backwards to 1932 during the subsequent period. The K-figures of the selected stations for these early years were published as supplementary (table 1b) in Bulletins 12g and 12l. In addition to Kp, the corresponding range figures ap and related daily indices Ap and Cp have been published regularly in the IAGA-Bulletins 12.

In accordance with recommendations of the IAGA-Assemblies in Madrid (1969) and Moscow (1971), the publication in the IAGA-Bulletins of C- and K-indices of individual observatories ended with the 1969-data, whereas planetary indices like Dst, Kn, Km and a survey of magnetic storms were included from 1970 onwards. This change marked the end of the series IAGA-Bulletin No 12 and the beginning of the new series IAGA-Bulletin No. 32. The publication of the derived indices Ci, Kp etc. and the international quiet and disturbed days (Q- and D-days) continued in the new series.

The K-indices of individual observatories have been put on magnetic tape for the years 1969 through 1974. These tapes are available through the World Digital Data Centers for Geomagnetism. Besides tables of local K-indices can be found in the bulletins or yearbooks of many observatories.

According to a recommendation of the IAGA-Assembly in Grenoble (1975) a new index aa is published instead of Ci since 1976 and the C-figures are no longer compiled.

The aa-indices form a series of indices beginning in the year 1868. A full description of these indices is given in the IAGA-Bulletin No. 33, which contains tables and graphs of aa for the years 1868-1967. Descriptions are also given in two short papers (Ann. Géophys., 27, 62-70, 1971 and J. Geophys. Res., 77, 6870-6874, 1972) , in connection with comparisons with other indices am, ap or Ci. All data given in the tables are available on magnetic tape from the appropriate World Data Centers, using the format described in IAGA-Bulletin No. 33.

The meaning of C, Ci, K and Kp, is explained in textbooks, e.g. Landolt-Börnstein, Zahlenwerte und Funktionen, Band 3. pp. 731-744 (Berlin 1952, Springer Verlag), and in Terrestrial Magnetism and Atmospheric Electricity 44, pp. 441-433 (1939) and 46, pp. 301-303 (1941). The results of an extensive study on the index K by P.N. Mayaud are given, together with practical rules for its determination, in the "Atlas of Indices K", IAGA-Bulletin No. 21 (1967). The exact definition of Kp is given in IATME-Bulletin No. 12b, reprinted at the end of the IAGA-Bulletin No. 12i, and in the Journal of Geophysical Research, Vol. 54, pp. 295 - 299, Sept. 1949. The indices have also been described, for use in correlation studies in other geophysical fields, in the Annals of the IGY, Vol. 4, pp. 227 - 236 (London, Pergamon Press 1957).

A collection of diagrams for Kp, 1932/33 and 1940 to 1950, together with diagrams for the daily characters 1884 - 1950, is given in: Abhandlungen Akad. Wiss. Göttingen, Math.-Phys. Klasse, Sonderheft 1 (1951). A second collection from 1937 (up to 1958) has appeared in: Abhandlungen Akad. Wiss. Göttingen, Math.-Phys. Klasse, Beiträge zum Geophysikalischen Jahr, Heft 3 (1958). A discussion on time variations of geomagnetic activity, indices Kp and Ap, 1932 - 1961 has appeared in Annales de Géophysique, Tome 19, pp. 1 - 20, 1963. Tables and diagrams of these planetary indices for the whole period 1932 - 1961 are printed in IAGA-Bulletin No. 18.

Other planetary indices derived from the K-indices, are the three-hourly indices Kn and Ks for the Northern- and Southern hemisphere and the mondial index Km. These indices are published in the IAGA-Bulletin No. 32 from 1968*) onwards: They are described in a publication of the Centre National de la Recherche Scientifique, Paris 1968: "Indices Kn, Ks et Km, 1964 - 1967", by P.N. Mayaud. The indices for the years 1959 - 1963 are published in the special IAGA-Bulletin No. 39. The complete series of these indices and the related quantities an, as etc. for the years from 1959 onwards is available on punched cards at WDC - A for Solar Terr. Physics, Boulder, in the same format as in the above publication.

The equatorial Dst-index for ring current intensity is also published in the IAGA-Bulletin 32 from 1970 onwards. A description of this index is given in the reports for earlier years. Hourly values of Dst for the years 1957 - 1970 based on the data of three stations, have been published by M. Sugiura and D.J. Poros in the report No. X - 645 - 71 - 278 of the Goddard Space Flight Center. This report supersedes earlier Dst-publications by Sugiura and co-workers. Recently, these Dst values have been recomputed, using the data of four stations. Hourly Dst-values for the IGY, based on the data of eight stations, are given in Annals of the IGY, Vol. 35. The same volume contains three-hourly values of Dst for the IGY as determined by W. Kertz in a somewhat different way. The hourly values from 1957 onwards are available on magnetic tape at WDC - A for Solar Terr. Physics in Boulder.

The auroral electrojet index AE cannot yet be included in the IAGA - Bulletin. At present this index is not available in time. However, data on preliminary AE-indices for selected intervals are included in part D of this Bulletin. References to AE are given at the end of part B, together with references to the indices Q and R from individual observatories and to indices Kp, Ap and Cp of earlier years.

A description of many indices mentioned in this introduction is given by M. Siebert in "Handbuch der Physik", Vol. 49/3, pp. 206 - 275 (Springer Verlag 1971).

*) For Kn, Ks etc. 1969 and 1968 see Supplementary Tables in Part E of the IAGA-Bulletins 32a and 32b.

Data on rapid variations are given less extensive than in the former IAGA-Bulletins. According to decisions made at the IAGA-Assemblies in Madrid, 1969, and in Grenoble, 1975, the lists of sudden impulses (si), bays and pulsations, minor disturbances and rejected solar-flare effects are omitted. Storm sudden commencements (ssc) are presented in a new way (see: Explanation, page X). Pulsations without bays have been published in the quarterly bulletins and their yearly supplement up to 1 January 1974. Checklists are now sent to the observatories for the reported "very remarkable events" and solar-flare effects only.

The Bulletin 32 further contains a data survey for special intervals (mostly magnetic storms) consisting of a survey of indices over the selected time intervals, data on sc's, ranges etc. from individual observatories and magnetograms of selected stations, reduced to the same time scale and comparable intensity scales.

Most data appearing in the yearly IAGA-Bulletin 32 have been given earlier in monthly bulletins, partly in a preliminary form.

The values of K_p, A_p and C_p for a calendar month are usually available, in a table and in graphical representation, before the end of the next month, and they are distributed, in time for 27-day recurrence forecasts, to about 400 institutions in many countries. This service is carried out by the Institut für Geophysik, Herzberger Landstrasse 180, 34 Göttingen, Germany. Requests may be directed to this address.

Monthly tables of K_n, K_s, K_m and related quantities are distributed by the Institut de Physique du Globe, 4 Place Jussieu, Tour 14, 75230 Paris Cedex 05, France.

Monthly bulletins on aa, selected quiet and disturbed days and preliminary data on rapid geomagnetic variations are sent to about 190 observatories and institutions by the International Service of Geomagnetic Indices, c/o Royal Netherlands Meteorological Institute, De Bilt, Netherlands.

The data on rapid variations are collected and prepared for publication at the Observatorio del Ebro, Roquetas, Spain.

Much of the data published in these bulletins can also be found in the monthly publication "Solar Geophysical Data" issued by the NOAA Environmental Data Service, Boulder, Colorado, USA.

IAGA - Division V: Observatories, Instruments, Indices and Data

Paul H. Serson, Chairman

International Service of Geomagnetic Indices

D. van Sabben, Director
Koninklijk Nederlands Meteorologisch Instituut, De Bilt, Netherlands

Part A. List of Observatories.

The observatories are arranged according to their geographic latitudes. The two letter symbols have been chosen as far as possible in accordance with the List of Observatories, compiled by G. Fanselau (IAGA-Bulletin No. 20, 1965). For observatories which have removed over a small distance, the old name is sometimes maintained, but the coordinates correspond always with the new site. The symbols are used in the tables of K-figures for the selected intervals in part D of this Bulletin and in the lists of rapid variations (Part C of this Bulletin). Observatories taking into consideration certain data from ionospheric or solar observatories for their reports of solar-flare effects, are marked by an asterisk.

The last three columns contain the scale value of the H-records in nT/mm, the lower limit for $K = 9$ used by the observatory in scaling K-indices and the period of time for which the observatory reported K-indices. Of this period, the first and, if the reporting has ended, the last year are given. A letter indicates whether the reporting has been continuous or almost continuous (C) or with interruptions (I). Details of the reporting-periods can be found in IAGA-Bulletin 12, page 12 (up to 1947) and corresponding places in later IAGA-Bulletins.

Part B. Indices.

B. 1, 2a The aa-indices are derived from the K-indices of two antipodal observatories (invariant magnetic latitude 50°). They provide a quantitative characterization of the magnetic activity, which is homogeneous through the whole series. Half-daily and daily values give an estimate of the activity level very close to that obtained with am indices. Values are in nanotesla's (nT) and correspond to the activity level at an invariant magnetic latitude of 50° . In the table B1 the following values are listed for 1976:

N = daily values for the Northern hemisphere

S = daily values for the Southern hemisphere

M = half-daily values of aa-indices for the Greenwich day.

Letters C and K in the tables refer to a classification of the quiet days of the month (C = really quiet, K = quiet, but with one or a few slightly disturbed three hourly intervals). The letters on the left refer to the 24 hours Greenwich day, on the right to a period of 48 hours centered on the Greenwich noon.

Table B2a provides a survey of monthly and yearly mean values of aa for the years 1868 - 1976.

Note that for the years 1974 - 1976 the N and M values (as well as the classification of C and K days), given in the tables B1 and B2 of this Bulletin, are slightly different from those published in the Journal of Geophysical Research. This difference is because of the erroneous substitution of the constant of Abinger instead of that of Hartland - see Bulletin No. 33, p. 6, Table III - when computing the monthly values. The magnetic tape deposited in World Data Center A for Solar-Terrestrial Physics has been corrected in February 1977.

A graph of aa-indices for the years 1868-1976 is given below table B2a. This graph is drawn from a series of points representing yearly averages of aa-indices. The ordinate of each point (one point per month) is a twelve months average such that the

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points plotted at the marked year intervals are in each case averages for January to December of that year. Ordinates are in nT's.

B. 2b. For explanation of Ap, see B4.

B. 3. The international quiet and disturbed days are explained below the table.

B. 4. The planetary three-hour-range index K_p is the mean standardized K-index from 13 observatories between 46° and 63° northern or southern geomagnetic latitude. The scale is 0 to 9, expressed in thirds of a unit, e.g., 5- is 4 2/3, 5o is 5, 5+ is 5 1/3. This planetary index is designed to measure solar particle radiation by its magnetic effects, especially to meet the need of research workers in the ionospheric field. Several other indices are derived from K_p, namely the 3 hour index ap (the equivalent range) and the daily indices Ap and Cp.

The K_p-stations are: Meanook (Canada), Sitka (Alaska), Lerwick (Shetlands), Eskdalemuir (Scotland), Lovö (Sweden), Rude Skov (Denmark), Wingst (Germany), Witteveen (Netherlands), Hartland (England), Ottawa (Canada), Fredericksburg (Virginia), Amberley (New Zealand), Toolangi (Australia).

The three hour equivalent amplitude ap is related to K_p as follows:

K _p = 0o	0+	1-	1o	1+	2-	2o	2+	3-	3o	3+	4-	4o	4+
ap = 0	2	3	4	5	6	7	9	12	15	18	22	27	32

K _p = 5-	5o	5+	6-	6o	6+	7-	7o	7+	8-	8o	8+	9-	9o
ap = 39	48	56	67	80	94	111	132	154	179	207	236	300	400

In order to use ap as an equivalent amplitude, it is considered in relation to the conditions at a standard station, which is a station having the lower limit of 500γ for K = 9. At such a station the average range in γ's of the most disturbed of the three force components in a three hour-interval can be taken as 2·ap (for instance, for K_p = 3+, as 36γ). In other words ap is an equivalent amplitude in the unit 2γ.

The column headed Ap gives the daily average for the eight values ap per day. Therefore, Ap may be called the "equivalent daily amplitude Ap", expressed in the unit 2γ for a standard station.

Observatories wishing to compute, from their own K-indices, a local equivalent amplitude ak, may proceed as follows:

K = 0	1	2	3	4	5	6	7	8	9
ak = 0	3	7	15	27	48	80	140	240	400

This table is valid for all observatories. Using the values of the table, ak has the meaning of an index. If it is desired to convert the index ak into an equivalent amplitude in the unit γ*, the conversion factor is obtained from the lower limit for K = 9 valid at the station by dividing the limit by 250. For instance, at Sodankylä, where the lower limit for K = 9 is 1500γ, the factor is 6, so that, for K = 3, the equivalent amplitude is 90γ, or, in other words the index ak for Sodankylä expresses equivalent amplitudes in the unit 6γ. Similary, Ak is the daily average of the ak.

* 1γ = 1 nT

Use of the daily Ap (planetary) or Ak (local value) is recommended in preference to the sum of the indices Kp or K.

The last column gives the daily planetary character figure Cp, as defined in Bulletin 12e, p. 111. It should be noted that Cp, introduced for a standardization of the international character-figures Ci, has not been approved by the Association. Instead, Ap was preferred. For a rough conversion of Ci-figures (prior to 1932) into Ap, the following table (derived from Bulletin 12e, p. 111, Table 2) may be used:

10·Ci =	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ap =	2	4	5	6	8	9	11	12	14	16	19	22	26	31	37	44	52	63	80	110	160

B. 5 - 8 These tables give the frequencies of occurrence of Kp-values during the year, the monthly average values of Ap and Cp and lists of magnetic storms and of very quiet intervals, based on the successive occurrence of certain Kp-values.

The diagrams of Kp show the values of Kp from the table B 4 in a "musical note script" as defined in the key. The arrangement in solar rotations is made in order to show the 27-day recurrence tendency.

B. 9. The three-hourly indices Kn and Ks for the Northern and Southern hemispheres are based on the amplitude-indices an and as, which are derived from the K-indices of observatories in the sub-auroral zones of the Northern and Southern hemispheres. These K-indices are standardized according to the distances of the stations to the auroral zones. The stations are arranged in groups, each group representing a longitude sector in one of the hemispheres. The mean standardized K for each sector is converted back into an equivalent amplitude and the weighted means an and as of these amplitudes are converted back into Kn and Ks. The mondial index am is the average of an and as, and Km is determined in the same way by conversion of am (this method is different from the method followed in the case of Kp, where ap is derived from Kp).

As the tables are printed mechanically by computer, the values of Kn, Ks and Km, which vary by thirds of a unit, are tabulated in the form 3Kn, 3Ks and 3Km. An, As and Am are the daily mean values of the amplitudes an, as and am, Am2 is the mean of am over a 48-hour period centered in the middle of the day. σ_n and σ_s indicate the standard deviations of the sector values of K in the N. - and S. hemispheres. They are about equal to six times these standard deviations. Monthly mean values of An, As and Am are given at the bottom of the tables.

The diagram of magnetic activity displays the variation of $(an - as)/2$ (upper curve), of $am = (an+as)/2$ (mid-curve), and Dst (bottom curve). It also shows the ssc's of the year, as listed in part C of this bulletin, in two ways: Vertical bars below the am curve refer to the quality of the ssc (the length of the bar is proportional to the sum of the five code numbers attributed to the event); those below the Dst curve refer to its amplitude. See IAGA-Bulletin 39 for others details.

B. 10, 11. The equatorial Dst-index for the intensity of the ring current is the deviation of the horizontal component H from its quiet time value, averaged over a number of low latitude stations. These stations are: Honolulu (Pacific), San Juan (USA), Hermanus (South Africa) and Kakioka (Japan). The exact definition of Dst is given in earlier data publications (see Introduction, for references). Monthly tables of hourly Dst-values are given, followed by a table of daily mean values and a graph of hourly values for the whole year.

Part C. Rapid Variations.

C. 1. Sudden commencements followed by a magnetic storm or by an increase in activity lasting at least one hour (ssc). This list is based upon the data as reported monthly by the observatories mentioned in the heading of the table.

The final identification of the storm sudden commencements (ssc) is made from copies of records supplied to the central bureau by five low - latitude observatories (MB, FQ, HO, PM, AL) or five supplementary observatories (TA, PA, AP, KY, HD). These copies are requested for all events, also for those reported by other observatories only. Furthermore all events are checked on the microfilm-copies of magnetograms of two low-latitude observatories. In doubtful cases, attention is especially given to the monthly reports of all observatories. See Bulletin 39, pp. 103-111 for a full explanation of this method, and some statistical results concerning the years 1968 - 1975.

The times in the column at the left are mean values obtained from all observatories; but the earliest and latest times reported by the observatories for the beginning of the event are added in parenthesis. For printing reasons only the minutes are given. These minutes generally belong to the hour of the event; but if they are underlined, they belong to the preceding hour. The next five figures indicate the qualification given to the event by the central bureau, using the above mentioned copies of low-latitude stations (if a figure is underlined, it means that the supplementary station is used). The meaning of these numbers is as follows:

2 or 3 the event can be unmistakably identified as being an ssc from the single record under consideration; 3 is imposed instead of 2 when the following three features are present: very sharp change of rhythm, large amplitude of the sudden move, remarkably morphology of it;

1 means that the event seen in this particular record is possibly an ssc, but is not sufficiently clear by itself for stating that it is a true ssc; one needs records from other longitudes for getting a firm judgement;

0 means that, from the record under consideration, the event could escape from the attention of the observer or does not deserve to be called an ssc.

After these numbers are given the average duration of the event in minutes (time-interval between the beginning and the maximum of the sudden move) and its average amplitude in nT at the five low-latitude observatories. The next group indicate the number of observatories which have given either letter A, either letter B or letter C in their monthly report (letters A, B and C are approximatively equivalent to the preceding numbers 3, 2 and 1*; they differ from them because at the central bureau the observers give their qualifications independently). The last group indicates the number of observatories which have identified the event as an si (sudden impuls, a sudden magnetic change which could not be classified as an ssc).

C. 2a. Solar-flare effects (sfe) were reported by many observatories. A check of the reported cases has been made by the observatories, mentioned in the heading of the table. In some cases data from the monthly reports of other stations have also been used, in order to get a better idea of the reported effects. The symbols of such stations are included in square brackets. The times tabulated in the column at the left are mean values of the times given for the beginning of a phenomenon. In cases where a clear simultaneous disturbance from an ionospheric or solar observatory or from a radio service, which gives support to the geomagnetic solar-flare effect, has been well established, the indicated time has been underlined. Stations in the daylight hemisphere have been written behind the indicated time and grouped according to the quality - indications A, B, C, D, E in their reports (viz. heading Table C3).

Observatories near the subsolar point are underlined. Stations lying in the twi-

* The meaning of the letters A, B, C is explained in the heading of Table C3.

light-zone, which reported a clear disturbance are indicated by dotted brackets. Stations under the same circumstances in full dark have been given in parentheses. Stations on the night-side of the earth, which gave a negative or doubtful answer, have been omitted.

C. 2b. Doubtful solar-flare effects. In general, the following cases have been considered as doubtful: those where well located stations (with respect to the subsolar point) did not report such an effect, (although several other stations have reported it), and those where some stations in full dark mentioned a disturbance which considering the hour and their geographic position, was probably no night-side bay co-existing with a sfe at the day-side of the earth. Further some cases were considered doubtful because the interpretation of the totality of data was hindered by simultaneous world wide perturbation and also when the solar, radioelectric and ionospheric records were available, but did not show any clear effect at the time of the presumed sfe. Nevertheless it is very probable that several of these cases are real solar-flare effects.

C. 3. Remarkable events. In this list exceptional magnetic disturbances are given of the types which are no longer reported regularly. These disturbances have been checked by the observatories mentioned in the heading of the table. They are listed because of exceptional amplitude, unusual sharp onset or other very remarkable features.

Part D. Data on special intervals.

The data for each interval are given on four successive pages. One page contains a selection of magnetograms. On the opposite page, the first lines give a survey of indices K_p, K_n and K_s for the selected interval. Dst is given in a graphical form as follows: A single horizontal line indicates that Dst is negative, a double line means Dst < -50, a triple line means Dst < -100 etc. In the list of data from individual observatories, the sign of the amplitude of an ssc is to be taken algebraically for D and Z, D reckoned positive if towards the East and Z reckoned positive if downwards. sc* means that the sc-movement (for which the amplitudes are given) was preceded by a small reverse impuls. The ranges of D, H and Z are the differences between the highest and the lowest values of these components attained during the storm. The end of the storm is indicated by the cessation time of reasonably marked disturbance movements in the traces, more specifically when the K-index diminishes to 2 or less for a reasonable period.

The stations for which K-indices are given, are selected on the basis of a representative distribution over all parts of the world. The stations are indicated by their symbols, according to part A of this Bulletin.

Magnetograms are given for three groups of stations, namely for stations inside the polar caps (upper diagram), for stations in the auroral zones (middle diagrams) and for stations in lower latitudes (lower diagram). The selected stations may not always be the same, depending on the availability of the magnetograms. The magnetograms have been reduced to the same time scale and comparable intensity scales. Only the H-component is shown, except for some stations near by the geomagnetic pole, where both H and D or X and Y are given. The Sq-variation has been subtracted from the records.

Graphs of preliminary AU, AL and AE (=AU - AL) values for the selected intervals are given at the bottom of the magnetogram-pages in the same time scale. These graphs are indicative of the definite AE (11) values to be published later.

Tables of provisional one-minute values of AE for each selected interval are given on two pages following the two pages mentioned above. These tables contain the values-

of AE (5) in nanoTesla's (nT) for each minute of the 2-days-interval. The print-out is clustered in 3-line groups with 20 values per line, each group covering one hour U.T.

The tables and graphs of preliminary AE are included only if the number of observatories from which the data have been received is sufficient.

Note on the unit γ

In this Bulletin the unit γ (gamma) for the intensity of the geomagnetic field has still been used in some tables and diagrams, although the IAGA has now officially adopted the SI-unit tesla. One gamma corresponds with one nano-tesla (nT).

Errata

- IAGA-Bulletin No. 32f, page 5

In the table of international quiet and disturbed days for 1975 (Table 3 of IAGA-Bulletin No. 32f) the asterisks indicating the not really disturbed days have been abusively omitted. This pertains to the following days: 1975: July 11, 26; August 14, 15, 21; September 12, 13; December 8.

- IAGA-Bulletin No. 32d, pages 46 and 47

There is an error in the scales of Dst, indicated beside the graphs of Dst for 1973. The bar scale given on p. 46 should be 110 gamma instead of 100 gamma and that on p. 47 should be 60 gamma instead of 100 gamma.

Symbol	Observatory	Collaborator	Geographic		Geomagnetic		S _H γ/mm	K=9 lower limit	K rep.
			Lat.	Long.	Lat.	Long.			
AT ^c	Alert		+82° 30'	297° 30'	+85.7°	168.7°	13		
BT	Cheisa (B. Tikhaya)	V. Y. Danilov	+80 37	58 03	+71.3	156.0	5	2000	34I -
CC	Cape Chelyuskin	V. A. Smirnov	+77 43	104 17	+66.2	176.5	10	2500	55C -
TH	Thule	K. Lassen	+77 29	290 50	+89.0	358.0	8	1000	55C70
MX	Mould Bay		+76 12	240 36	+79.1	284.7	13		
RB	Resolute Bay		+74 41	265 10	+83.0	289.6		1500	52C55
B4	Bear Island	S. Berger	+74 31	19 01	+71.1	124.0	17	2000	57C59
DI	Dikson	A. M. Denisova	+73 33	80 34	+63.0	161.6	10	1500	34I -
MS	Matoshkin Shar	N. D. Medvedev	+73 16	56 24	+64.8	146.5		2500	55C56
TI	Tiksy	T. L. Kaplan	+71 35	129 00	+60.4	191.4	5	1000	55I -
PB	Point Barrow	T. L. Hardiman	+71 18	203 15	+68.5	241.1	30	2500	57C -
TR	Tromsø	S. Berger	+69 40	18 57	+67.2	116.8	5	2000	47C -
GO	Godhavn	K. Lassen	+69 14	306 29	+79.9	32.5	10	1800	43I -
CB	Cambridge Bay		+69 06	255 00			10		
AI	Abisko	K. Borg	+68 21	18 49	+66.0	115.0	10	1500	
MM	Murmansk	G. A. Lokinov	+68 15	33 05	+63.5	126.2	7	2500	57C -
LZ	Lovozero		+67 59	35 01	+62.8	127.3			
KI	Kiruna	G. Gustafsson	+67 50	20 25	+65.3	115.8	11	1500	52I -
SO	Sodankylä *	E. Kataja	+67 22	26 38	+63.8	120.0	9	1500	14I -
WE	Welen	N. I. Zueva	+66 10	190 10	+61.8	237.1	8	1250	55C -
CO	College *	J. B. Townsend	+64 52	212 10	+64.6	256.5	8	2500	41C -
BL	Baker Lake		+64 20	263 58	+73.8	315.2	13	2500	52C55
RY	Leirvogur (Reykj.)	Th. Saemundsson	+64 11	338 18	+70.2	71.0	15	1500	64C -
YK	Yellowknife		+62 28	245 32			10		
SR	Srednikan	N. W. Savangeewa	+62 26	152 19	+53.2	210.6	4	550	40I -
DO	Dombås	E. Gjøen	+62 04	9 07	+62.3	100.1	9	750	25C -
YA	Yakutsk	A. A. Danilov	+62 01	129 40	+51.0	193.8	6	550	41I -
PT	Podk. Tungusta		+61 31	90 00			3.	650	72C -
NU	Nurmijärvi *	M. Kivinen	+60 30	24 39	+57.8	112.6	8	750	58C -
LE	Lerwick *	B. R. Leaton	+60 08	358 49	+62.5	88.6	4	1000	32C -
MG	Magadan *		+60 07	151 01	+50.6	210.1	2	550	67C -
LN	Leningrad	G. D. Swetlajev	+59 57	30 42	+56.2	117.4	3	600	55C -
LO	Lovö	F. Eleman	+59 21	17 50	+58.1	105.8	4	600	30C -
CH	Churchill		+58 48	265 54	+68.8	322.5	13		
SI	Sitka *	W. J. Osbakken	+57 04	224 40	+60.0	275.4	7	1000	32C -
SV	Sverdlovsk	T. N. Panov	+56 44	61 04	+48.5	140.7	5	550	41I -
TM	Tomsk	O. K. Gordjev	+56 28	84 56	+45.9	159.6	4	350	58C70
RS	Rude Skov	A. Lundbak	+55 51	12 27	+55.8	98.5	10	600	40C -
KN	Kazan	M. P. Tsjerzor	+55 50	48 51	+49.3	130.4	5	550	41I -
MO	Moskva	W. N. Bobrov	+55 28	37 19	+50.8	120.5	2	550	45I -
ES	Eskdalemuir *	B. R. Leaton	+55 19	356 48	+58.5	82.9	4	750	32C -
GW	Great Whale River		+55 16	282 13	+66.8	347.2	13		
NS	Novosibirsk		+55 02	82 54			2.	500	72C -
ME	Meanook	Anne B. Cook	+54 37	246 34	+61.8	301.0	11	1500	32C -
HL	Helu	W. Czyszek	+54 37	18 49	+53.4	103.7	4	550	56C -
MN	Minsk	Yu. N. Kuznetsov	+54 30	27 53	+51.5	112.0	3	550	62C -
ST	Stonyhurst	J. E. Worthy S. J.	+53 51	357 32	+56.9	82.7	6	600	60C66
WN	Wingst *	D. Voppel	+53 45	9 04	+54.5	94.1	5	500	40C -
PK	Petropavlovsk		+53 06	158 38	+44.4	218.2		350	
WI	Witteveen *	D. van Sabben	+52 49	6 40	+54.2	91.0	10	500	40C -
IR	Irkutsk	W. S. Pirozjkov	+52 10	104 27	+41.0	176.9	6	350	41I -
SW	Swider	Z. Kalinowska	+52 07	21 15	+50.6	104.6	4	500	42I -
NI	Niemegk *	K. Lengning	+52 04	12 40	+52.2	96.3	2	500	37C -
VL	Valentia *	S. Mc Williams	+51 56	349 45	+56.6	73.4	3	500	58C -
BE	Belsk	A. Gnoifski	+51 50	20 47	+50.4	104.1	1	500	60C -
GT	Göttingen	M. Siebert	+51 33	9 58	+52.3	93.7	3	500	
CM	Collmberg *	R. Schminder	+51 19	13 00	+51.5	96.5	1	500	54I67
HA	Hartland *		+51 00	355 31	+54.6	79.0	4	500	29C -
KV	Kiev	I. A. Mjelnitsjok	+50 43	30 18	+47.3	112.2	2	350	58C -
MA	Manhay	L. Koenigsfeld	+50 18	5 41	+52.0	88.8	2	500	40C -
DB	Dourbes *	A. de Vuyst	+50 06	4 36	+51.7	88.7	4	500	55C -
RA	Racibórz	W. Kraiński	+50 05	18 11					
PR	Pruhonice *	V. Bucha	+49 59	14 32	+49.9	97.3	4	500	53C -

LIST OF OBSERVATORIES - continued

Symbol	Observatory	Collaborator	Geographic		Geomagnetic		S _H γ/mm	K=9 lower limit	K rep.
			Lat.	Long.	Lat.	Long.			
LV	Lvov	P. W. Soemaroek	+49° 54'	23° 45'	+48.0°	105.8°	3	550	55C -
KD	Karaganda	G. I. Gerasimov	+49 49	73 05	+40.0	148.4	2	350	66C -
WS	White Shell		+49 45	264 45			5		
BV	Budkov	M. Konecný	+49 04	14 01	+49.1	96.2	1		69I -
VI	Victoria		+48 31	236 35	+54.3	292.7	2	500	57C -
NE	Newport	L. E. Kerry	+48 16	242 53	+55.1	300.0	5	600	68C -
FU	Fürstenfeldbruck *	K. Wienert	+48 10	11 17	+48.8	93.3	3	500	48C -
CF	Chambon-la-Forêt*	J. P. le Mouel	+48 01	2 16	+50.4	83.9	6	500	40I -
HB	Hurbanovo *	S. Pintér	+47 54	18 12	+47.1	99.8	4	350	51C -
UB	Ulan Bator	G. Chimidorrj	+47 52	107 03	+36.1	178.0	1	300	56C -
JO	St. Johns	G. A. Brown	+47 36	307 19	+58.7	21.4	5	750	69C -
NA	Nantes	O. Noblanc	+47 15	358 27	+50.5	80.1	6	500	50C59
SA	Yushno-Sakhalinsk	B. E. Mardjerfjeld	+46 57	142 43	+36.9	206.7	3	350	54C -
TY	Tihany	P. Toth	+46 54	17 53	+46.4	99.1	2		58C -
OD	Odessa	V. N. Shaeovsky	+46 47	30 53	+43.7	111.1	3	350	55C -
KK	Novo Kazalinsk	A. K. Karpjenko	+45 46	62 07	+39.9	138.6	1	350	66C -
OT	Ottawa	J. Hruska	+45 24	284 27	+57.0	351.5	6	750	32C -
SU	Surlari		+44 41	26 15	+42.5	106.0	2	350	57C -
GC	Grocka *	M. Stojković	+44 38	20 46	+43.6	100.9	3	350	58I -
RT	Roburent	* M. Bossolasco	+44 18	7 53	+45.8	88.5			56C -
MT	Memambetsu *	K. Kawamura	+43 55	144 12	+34.0	208.4	2	350	57C -
AG	Agincourt	A. A. Onhauser	+43 47	280 44	+55.0	347.0	5	600	40C69
VK	Vladivostok	V. V. Osipov	+43 41	132 10	+32.8	198.1	3	300	55C -
AT	Alma Ata	V. V. Kazakov	+43 15	76 55	+33.3	150.5	3		64C -
PN	Panagjuriste	K. Kostov	+42 31	24 11			3	350	72C -
LG	Logroño *	T. Miguel Lafuente	+42 27	357 30	+46.1	77.0	4	350	57C -
AQ	Aquila *	F. Molina	+42 23	13 19	+42.9	92.9	5	350	58C -
TF	Tbilisi (Tiflis)	N. A. Katziachwili	+42 05	44 42	+36.7	122.1	1	350	40I -
TK	Tashkent	Zarotsjentseva	+41 25	69 12	+32.4	143.7	2	300	41I -
MD	Maddalena	M. Giorgi	+41 13	9 24	+42.7	88.5	3	350	58C63
IK	Istanbul-Kandilli	O. Uyar	+41 04	29 04	+38.5	107.5	3	300	52C -
EB	Ebro *	J. O. Cardus	+40 49	0 30	+43.9	79.7	3	350	42C -
CI	Coimbra	V. Seica	+40 13	351 35	+44.8	71.3	4	350	51C -
BD	Boulder	D. C. Herzog	+40 08	254 46	+49.0	316.5	2	500	
TL	Toledo	R. Gómez-Menor	+39 53	355 57	+43.6	75.7	6	350	48C -
ON	Onagawa		+38 36	141 28	+28.4	206.7			
FR	Fredericksburg	C. Beers/A. Travis	+38 12	282 38	+49.6	349.8	2	500	32C -
PE	Pendeli *		+38 03	23 52	+36.2	102.0	4	300	59C -
GI	Gibilmanna *	M. Georgi	+37 59	14 01	+38.5	92.2	2	350	54C57
AK	Ashkhabad	W. G. Dubrovskij	+37 57	58 06	+30.5	133.4	2	300	58C -
SM	San Miguel	A. Silva de Sousa	+37 46	334 21	+45.6	50.9	4	350	51C -
AE	Almeria	L. Valbuena Vera	+36 51	357 32	+40.6	75.3	5	350	64C -
SF	San Fernando	M. Catalán	+36 28	353 48	+41.0	71.3	3	350	40C -
KA	Kakioka *	K. Kawamura	+36 14	140 11	+26.0	206.0	3	300	36C -
TP	Teheran (Persia) *	H. K. Afshar	+35 44	51 23	+29.3	126.4	2	300	57I -
KS	Ksara	J. Plassard	+33 50	35 54	+30.4	112.0	6	300	49C -
SS	Simosato	K. Sugiura	+33 34	135 56	+23.0	202.4	2	300	57C59
AV	Averroes (Maroc)	P. Stahl	+33 18	352 35	+38.1	69.1	3	350	70C -
DS	Dallas	Lavon Posey	+32 59	263 15	+43.0	327.7			69C -
AS	Aso *	Y. Tamura	+32 53	131 01	+22.1	198.1	3	300	57157
TU	Tuscon	J. Minsch/L. Davis	+32 15	249 10	+40.4	312.2	3	350	38C -
KY	Kanoya *	K. Kawamura	+31 25	130 53	+20.5	198.1	2	300	58C -
QU	Quetta *	K. U. Siddiqi	+30 11	66 57	+21.6	139.7	2	300	55I -
ML	Misallat	M. Fahim	+29 45	30 54	+26.7	105.8	2	300	56C -
SZ	Santa Cruz (Ten.)	A. G. Cogollor	+28 29	343 43	+35.0	58.6	2	300	64C -
LP	Lumping *	Yinn-Nien Huang	+25 00	121 10	+13.8	189.5	2	300	68C -
TA	Tamanrasset	L. Le Donche	+22 48	5 31	+25.4	80.6	4	300	52I -
HO	Honolulu	J. R. Dickey	+21 19	202 00	+21.1	266.5	3	300	38I -
TE	Teoloyucan *	C. Cañón Amaro	+19 45	260 49	+29.6	327.1	3	300	51I -
AL	Alibag		+18 38	72 52	+ 9.5	143.6	4	300	40C -
SJ	San Juan	M. Vazquez	+18 23	293 53	+29.9	3.2	2	300	38C -

*) Symbol BU is used as well

LIST OF OBSERVATORIES - continued

Symbol	Observatory	Collaborator	Geographic		Geomagnetic		S _H γ/mm	K=9 lower limit	K rep.
			Lat	Long.	Lat.	Long.			
HD	Hyderabad	B. J. Srivastava	+17° 25'	78° 33'	+ 7; 6°	148; 9°	5	300	69I -
MB	M'Bour	O. Fambitakoye	+14 24	343 03	+21.3	55.0	6	350	52C -
MU	Muntinlupa	* C. M. Santos	+14 22	121 01	+ 3.0	189.7	4	300	64C -
GU	Guam	W. S. Jacobs	+13 35	144 52	+ 4.0	212.9	3	300	58C -
AN	Annamalaiagar		+11 24	79 41	+ 1.5	149.4			
AA	Addis Ababa	E. Cambron	+09 02	38 46	+ 5.3	109.2		300	
TV	Trivandrum		+08 29	76 57	- 1.1	146.4			
KR	Koror	K. Gravens	+07 20	134 30	+ 3.2	203.4		300	58
PA	Paramaribo	D. van Sabben	+05 49	304 47	+17.0	14.5	7		57C58
FQ	Fdquene	J. del C. Quintero	+05 28	286 16	+16.9	355.1	4	300	57C60
BA	Bangui	J. Vassal	+04 26	18 34	+ 4.6	88.5	3	350	52I -
MC	Moca	A. G. Cogolor	+03 21	8 40	+ 5.7	78.6	3	300	64C -
BN	Bunia	P. Herrinck	+01 32	30 11	- 0.4	99.3	2		
TT	Tatuoca	J. A. Ferreira	-01 12	311 29	+ 9.6	20.8	3		
LR	Lwiro	* G. Bonnet	-02 15	28 48	- 4.0	98.2	5	350	58C60
HN	Hollandia	D. van Sabben	-02 34	140 31	-12.6	210.3	5	300	57C58
BI	Binza	(P. Herrinck	-04 23	15 16	- 3.4	83.2	4		65I -
TG	Tangerang	(G. Lesambo	-06 10	106 38	-17.6	175.4	4	300	40I -
LU	Luanda	R. Susanto	-08 55	13 10	- 7.2	80.5	3	350	61C -
PM	Port Moresbey	I. B. Everingham	-09 25	147 09	-18.6	218.0	3		58C -
KC	Karavia (Congo)	(P. Herrinck	-11 39	27 28	-12.7	94.1	5		
HU	Huancayo	(G. Lesambo	-12 02	284 41	- 0.6	353.8	3	600	37C -
DA	Darwin	A. A. Giesecke M.	-12 20	131 00	-22.0	201.3			
AP	Apia	L. S. Prior	-13 48	188 14	-16.0	260.2	4	300	40C57
PP	Papeete-Pamata'i	H. G. Barsczus	-17 34	210 25	-15.3	282.8	2	350	68C -
TN	Tananaive	* (Kakoto	-18 55	47 33	-23.1	112.1	1	300	50C -
MR	Mauritius	(Hee B. M. Badya	-20 06	57 33	-26.6	122.4	3	500	56C60
LQ	La Quiaca	R. P. J. Hernández	-22 06	294 24	-10.6	3.2	3	350	64C -
VA	Vassouras	S. L. Fontes	-22 24	316 21	-11.9	23.9	4	600	52C64
LM	Lourenco Marques	F. Augusto Leal	-25 55	32 35	-27.7	95.8	3	300	67C68
BR	Brisbane	R. F. Thyer	-27 32	152 55	-35.8	226.9	500		57C64
WA	Watheroo	P. M. Mc Gregor	-30 19	115 53	-41.8	185.6	3	350	37C59
PI	Pilar	R. P. J. Hernández	-31 40	296 07	-20.2	4.0	3	300	40I -
GN	Gnangara	P. J. Gregson	-31 47	115 57	-43.2	185.8	3	350	59C -
HR	Hermanus	* L. Loubsen	-34 25	19 14	-33.7	81.7	2,3	300	40C -
AC	Las Acacias	H. A. Hartmann	-35 00	302 19	-24.0	10.3	2	350	64C -
TO	Toolangi	* L. S. Prior	-37 32	145 28	-46.7	220.8	4	500	41C -
AM	Amberley	A. L. Burrows	-43 09	172 43	-47.7	252.5	5	500	37C -
TW	Trelew	* O. P. Pelliciuoli	-43 15	294 41	-31.7	3.2	3	350	57C -
CZ	Crozet	R. Schlich	-46 26	51 52	-51.4	109.7	2	500	72C -
KG	Kerguelen	R. Schlich	-49 21	70 12	-56.5	127.8	6	750	57I -
SG	South Georgia		-54 17	323 31	-42.2	26.0	5	350	
MI	Macquarie Island	N. G. Chamberlain	-54 30	158 57	-60.7	243.0	25	1500	52C -
OR	Orcadas del Sur		-60 44	315 13	-50.1	18.2			
AR	Argentine Island	J. C. Farman	-65 15	295 44	-53.8	3.3	4	500	57C -
OA	Oasis		-66 06	92 09	-77.2	160.8	8	2000	57C58
WK	Wilkes		-66 15	110 35	-77.2	179.2	25	2500	58C66
MY	Mirny	U. N. Oviannikov	-66 33	93 01	-77.0	146.8	6	2000	57C -
DU	Dumont d'Urville	R. Schlich	-66 40	140 01	-75.6	230.9	8	1800	57C -
MW	Mawson	* N. G. Chamberlain	-67 36	62 53	-73.2	103.1	10	1500	55C -
CT	Charcot		-69 23	139 01	-78.3	234.5		1500	57C58
PO	Pionerskaya		-69 44	95 30	-80.3	146.5	12	2000	57C58
NL	Novolazarevskaya	V. A. Kazarin	-70 46	11 50	-66.2	53.6	15	1500	60C -
BB	Base Baudouin		-70 26	24 19	-69.	63.			64C66
HT	Hallett		-72 19	170 13	-74.7	278.2	31	2500	57C62
HY	Halley Bay	J. C. Farman	-75 31	333 20	-65.8	24.2	7	1500	57C -
SB	Scott Base	* A. L. Burrows	-77 51	166 47	-79.0	294.4	22	2000	57C -
LA	Little America	J. J. Gniewek	-78 11	197 50	-74.0	312.0		2500	57C58
VO	Vostok	I. N. Babakov	-78 27	106 52	-89.2	91.4	11	2000	58I -
BY	Byrd Island		-80 01	240 29	-70.6	336.3	24	2500	58C60
SP	South Pole		-90		-78.5	0.0	29	2000	60

TABLE 1 INDICES aa 1976

VALEURS ERROREES

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TABLE 1 - aa 1976 - continued

JULY			AUG.			SEP.			OCT.			NOV.			DEC.		
N	S	M	N	S	M	N	S	M	N	S	M	N	S	M	N	S	M
1 34	50	23	21	15	12	24	24	16	17	24	29	30	37	23	14	19	17
2 24	20	23	19	12	21	10	36	46	29	33	44	23	19	13	19	14	9
3 28	30	32	26	27	17	16	26	23	25	24	19	17	21	22	11	14	7
4 29	36	32	34	16	10	12	14 C	27	24	29	15	13	14	15	11	9 CK	7
5 19	13	13	19	17	12	10	19	25	21	29	18	22	19	31	10	5	10
6 16	10	16	10 C	18	7	14	11 C	20	11	18	13	22	22	28	4	6	7
7 25	11	20	16	17	12	12	17 K	20	18	20	19	14	9	14 KK	5	10	11
8 31	21	20	34	12	7	10	9QC	20	13	17	16	14	12	9	19 K	12	12
9 27	14	25	17	26	22	29	12	11	15	14 C	14	11	11	14 C	17	14	18
10 18	9	16	11 CC	23	18	26	15	14	11	9	16QCC	18	11	11	18	21	50
11 13	5	8	110QC	14	8	13	9 CC	13	10	12	110QC	20	12	16	45	38	24
12 16	8	11	13 CC	14	6	5	150QC	22	17	19	21	34	18	17	36	23	31
13 13	6	10	9QC	10	4	7	7QCK	15	7	11	12QC	13	12	15	10 C	57	46
14 20	7	14	13 CC	14	11	13	12 KK	24	17	19	23	16	12	8	21	31	24
15 41	16	13	45	6	5	3	8QCK	20	19	25	14	59	42	39	62	20	16
16 38	30	36	32	17	16	11	23 K	18	9	13	14 C	45	44	62	27	10	13
17 17	11	12	15 C	15	6	9	13	15 CK	22	14	15	50	45	44	51	13	14
18 15	7	11	12 CC	13	6	9	10QCC	41	52	62	32	36	20	31	26	14	16
19 17	9	15	11 CC	15	9	12	13 CC	37	34	24	48	20	15	7	28	18	19
20 14	4	10	8QC	17	7	13	11 CC	71	61	65	67	18	13	15	15	15	17
21 10	5	8	7QCC	20	13	14	20	43	35	31	48	16	18	20	15	8	12
22 22	14	8	14	8 CC	18	6	12 C	36	35	34	38	11	18	19	10Q	8	12
23	16	8	10	14 CC	62	70	39	92	25	24	26	23	14	13	11 C	8	11
24 27	7	6	15 C	45	43	55	33	16	11	17	11	15	12	10	17 KK	4	10
25	15	25	17	48	35	43	41	48	37	36	50	12	10	14	8QCK	21	22
26	12	6	9	9QCK	32	30	34	28	32	20	26	11	13	12	13QCC	17	17
27	20	20	17	23	34	23	31	27	26	25	24	19	14	11	22	16	14
28	43	28	33	39	27	26	19	34	17	8	13	13QC	11	14	10	16 QC	4
29	36	25	34	28	15	12	15	12	21	17	16	23	7	8	7QCK	14	13
30	42	28	39	32	14	8	9	14 CC	24	13	11	27	33	30	13	50	21
31	20	14	18	17	15	9	7	18 C	15	9	7	18 C	59	42	53	48	28
32	22.0	15.1	21.3	15.7	21.5	18.6	18.6	21.8	21.5	21.8	21.5	21.5	23.0	19.5	21.5	18.3	22.0
33	ANNUAL MEAN	N 25.73	S 21.62	M 23.79												17.4	20.5

TABLE 2a MONTHLY AND YEARLY aa 1868 - 1976

Valeurs erreuses de 1969 à 1977

	J	F	M	A	M	J	J	A	S	O	N	D	year
1868	10.6	16.0	19.7	21.0	16.4	17.9	21.5	19.4	24.0	25.9	13.3	13.7	18.3
1869	19.2	23.6	22.3	29.5	23.1	19.2	17.4	19.9	29.8	17.9	14.7	14.6	20.9
1870	21.6	23.2	21.2	25.8	20.9	16.4	14.1	21.4	35.2	26.2	21.9	19.9	22.3
1871	19.3	24.8	21.4	31.2	17.2	17.1	21.5	23.5	17.7	20.0	28.1	15.7	21.5
1872	17.0	28.0	23.0	23.4	20.4	17.7	25.3	25.2	20.7	28.6	25.0	20.5	23.7
1873	29.4	20.6	24.1	20.8	20.8	25.8	20.6	18.7	19.3	16.6	14.6	12.1	20.3
1874	17.8	16.1	12.7	19.1	14.0	12.8	13.1	13.0	15.7	17.8	14.3	10.1	14.7
1875	10.0	13.5	12.7	12.7	13.0	10.1	11.8	8.7	13.1	11.9	9.8	8.5	11.3
1876	9.8	12.6	11.0	6.5	7.6	7.7	9.1	10.2	10.1	10.5	10.2	10.1	9.6
1877	9.3	9.6	10.4	8.9	13.0	8.9	7.8	7.6	7.4	6.9	11.6	6.8	9.0
1878	7.4	7.5	6.2	8.5	7.3	8.6	4.8	6.4	7.9	6.8	7.1	9.3	7.3
1879	6.2	5.8	8.6	5.5	6.2	5.9	5.8	8.0	8.9	7.0	7.1	9.3	7.0
1880	7.3	4.7	9.8	8.9	13.1	7.3	9.9	23.1	11.4	14.4	14.5	14.6	11.6
1881	15.1	12.8	13.2	11.4	8.5	10.7	12.2	7.8	17.9	14.0	20.2	20.3	13.7
1882	15.7	19.5	16.5	35.9	20.6	19.0	14.5	19.7	15.0	25.0	55.0	20.1	23.0
1883	15.4	26.7	23.3	17.8	13.9	18.5	21.5	12.4	19.5	13.7	17.6	12.0	17.7
1884	9.1	14.3	17.5	15.6	12.8	13.1	15.5	13.0	13.5	16.0	16.9	13.2	14.2
1885	13.2	15.5	15.3	13.4	20.0	21.2	14.2	13.0	17.7	22.1	15.9	13.7	12.1
1886	17.7	17.1	27.6	21.6	22.6	21.6	19.3	18.1	19.0	21.7	20.7	20.6	20.6
1887	16.9	22.9	15.2	20.6	17.3	12.6	12.5	17.2	18.9	14.1	14.5	15.2	16.5
1888	18.2	15.9	15.2	16.4	19.3	14.5	12.9	13.7	15.1	15.0	15.3	14.0	15.5
1889	9.8	11.0	13.9	11.6	10.2	9.8	13.5	12.6	14.6	13.6	18.5	11.8	12.6
1890	11.7	11.8	10.0	8.4	8.4	7.3	10.0	10.3	13.8	15.6	13.3	8.3	10.7
1891	10.4	14.2	20.6	22.5	23.7	11.7	11.2	15.0	22.3	20.7	16.5	16.2	17.1
1892	19.5	35.1	36.3	20.4	25.1	17.7	33.7	22.1	20.1	23.1	15.7	22.1	24.2
1893	18.2	19.1	18.4	14.0	12.0	17.1	14.5	18.5	19.5	20.9	18.5	13.9	17.0
1894	19.2	33.9	20.0	17.4	19.0	20.0	26.3	21.0	22.5	17.0	21.9	12.0	20.8
1895	15.4	20.8	23.0	20.7	16.6	17.6	17.9	10.5	15.9	22.7	22.5	14.5	18.2
1896	25.4	23.6	21.8	17.2	20.6	11.7	15.6	18.1	17.8	17.5	13.1	13.8	18.0
1897	12.0	14.0	14.2	22.2	14.6	12.0	9.3	10.7	11.0	13.8	12.6	17.2	13.6
1898	13.5	15.1	20.5	13.4	15.1	14.3	13.5	14.6	21.5	14.1	13.6	13.0	15.2
1899	14.3	17.8	15.6	14.2	15.9	13.5	11.6	11.4	13.5	9.4	8.7	12.1	13.2
1900	13.5	8.9	12.5	7.2	9.6	4.7	5.2	6.0	5.2	7.1	5.4	5.4	7.6
1901	7.3	7.0	6.5	5.2	6.2	6.0	5.6	6.1	6.0	5.4	5.6	6.4	6.1
1902	6.1	7.6	5.9	7.9	5.6	5.4	6.3	6.2	7.0	7.2	7.6	6.1	6.6
1903	6.5	5.9	6.7	10.3	7.8	11.3	10.8	14.1	14.0	26.3	16.3	13.5	12.0
1904	15.1	12.6	8.7	13.1	13.0	10.5	10.8	10.2	11.2	13.0	11.6	10.6	11.7
1905	16.0	20.3	16.6	16.6	10.6	13.8	11.8	16.8	16.3	11.2	20.1	10.7	15.1
1906	7.6	17.5	14.0	11.6	11.4	11.3	12.4	12.0	14.2	12.7	9.6	16.4	12.6
1907	16.5	25.3	14.3	12.1	16.8	14.8	16.9	15.5	16.8	18.5	14.6	11.5	16.1
1908	13.6	17.0	23.2	15.6	18.9	12.5	10.4	18.2	31.6	15.8	17.4	11.4	17.1
1909	24.8	17.0	19.8	12.1	18.3	11.5	12.6	17.6	27.6	19.4	11.6	13.8	17.2
1910	12.8	14.6	20.9	19.7	17.2	13.7	10.8	20.2	19.2	24.4	17.9	19.5	17.6
1911	21.3	23.7	21.5	21.1	16.6	13.6	15.3	11.9	12.2	12.5	10.6	11.0	15.9
1912	7.6	8.0	7.7	9.4	9.6	8.4	7.8	10.5	9.8	9.5	9.4	9.4	8.9
1913	10.3	9.5	9.9	9.8	9.0	7.0	7.0	6.7	10.0	10.7	7.6	6.6	8.7
1914	7.1	7.3	10.1	13.5	8.1	10.3	12.9	14.9	11.8	13.3	13.4	9.3	11.0
1915	10.9	13.5	15.0	15.3	13.9	17.9	11.2	14.7	17.0	21.3	24.9	12.4	15.7
1916	16.0	11.6	25.0	19.2	20.2	15.7	19.7	21.4	22.4	24.5	24.0	18.9	19.9
1917	25.1	19.1	16.2	16.7	15.9	12.7	14.6	28.1	16.1	20.2	14.8	19.8	18.3
1918	17.8	21.3	19.7	20.5	18.8	15.6	17.4	22.2	28.4	26.4	23.1	28.1	21.6
1919	27.8	26.5	30.7	21.3	27.5	13.9	14.9	22.7	25.3	26.9	14.3	18.4	22.5
1920	16.7	14.1	28.5	17.8	17.7	12.9	14.0	14.8	25.7	17.3	15.1	17.0	17.6
1921	11.7	10.6	15.6	17.2	40.5	12.4	13.3	14.6	12.4	16.2	16.2	17.8	16.5
1922	18.0	18.6	24.1	23.5	18.3	18.6	20.0	20.7	19.7	20.1	13.1	10.4	18.8
1923	10.2	13.7	12.1	10.0	10.1	11.1	8.4	7.3	10.7	12.6	7.8	9.6	10.3
1924	13.6	10.9	9.2	7.9	7.3	10.2	12.3	9.7	6.9	12.6	8.7	9.3	10.2
1925	9.4	8.6	8.6	10.8	11.0	17.7	11.8	13.6	18.0	21.7	13.2	12.9	13.1
1926	27.1	26.2	27.6	27.1	19.6	16.2	11.4	13.2	22.7	23.3	11.9	13.3	20.0
1927	15.5	15.2	20.7	15.6	16.8	11.2	16.5	18.5	20.9	24.7	8.0	15.8	16.6
1928	10.1	13.5	11.3	12.8	23.6	20.2	27.8	15.9	19.6	23.4	18.2	15.6	17.7
1929	13.0	24.0	26.2	13.9	16.3	14.7	18.6	15.9	21.5	25.5	22.7	21.0	19.4
1930	20.9	27.9	30.9	38.2	36.4	33.3	28.3	33.3	28.8	29.3	18.8	17.2	28.6
1931	13.0	15.4	12.9	9.9	12.0	14.7	13.1	17.7	21.2	27.3	23.7	21.1	16.8
1932	20.2	21.4	27.9	28.2	22.2	11.8	12.4	19.1	19.1	17.2	13.8	15.3	19.0
1933	15.9	18.4	19.2	21.1	17.5	13.6	12.3	14.2	18.4	16.8	16.0	13.0	16.4
1934	11.5	14.9	20.0	11.3	11.4	10.0	10.3	17.4	17.6	11.6	9.5	15.5	13.4
1935	15.6	16.5	17.8	13.6	11.6	16.4	12.5	9.9	20.7	20.2	15.6	17.7	15.7
1936	17.4	19.8	15.5	22.1	17.5	19.8	18.0	10.2	9.8	15.4	16.0	12.0	16.3
1937	12.2	22.2	18.6	26.3	18.6	18.9	18.8	14.7	14.7	27.8	19.3	16.5	19.0
1938	46.6	26.0	20.4	26.1	23.7	14.8	14.8	19.7	19.9	24.7	24.0	17.8	23.6
1939	13.5	21.7	27.0	36.1	27.8	22.8	26.1	23.0	19.2	28.4	14.5	18.6	23.2

TABLE 2a . . . continued

	J	F	M	A	M	J	J	A	S	O	N	D	year
1940	24.8	20.1	43.4	22.4	20.0	23.6	18.4	18.4	20.1	21.9	25.1	23.7	23.5
1941	21.9	27.6	42.5	21.6	19.1	17.4	27.9	22.3	38.2	17.5	23.6	19.3	24.9
1942	14.6	18.8	32.4	24.4	14.2	14.6	23.0	21.9	25.8	20.3	22.8	18.4	21.8
1943	18.1	17.1	21.0	21.9	24.5	21.2	24.4	41.0	35.3	32.8	29.6	23.3	25.8
1944	21.2	17.9	26.6	21.6	16.1	14.9	11.1	16.5	17.5	17.2	11.2	21.8	17.8
1945	16.1	16.4	25.0	19.1	15.4	11.1	15.3	12.1	15.6	17.9	12.0	20.2	16.3
1946	19.2	30.2	43.5	25.0	24.1	22.3	28.6	16.7	41.7	19.6	19.3	14.3	25.4
1947	20.6	17.1	37.9	23.3	19.1	21.1	21.4	32.9	39.1	31.3	20.7	17.9	25.2
1948	20.8	21.0	24.2	17.7	23.7	15.0	16.2	28.3	22.0	35.1	23.1	23.0	22.6
1949	29.8	20.4	24.7	17.6	22.4	17.9	11.8	19.2	17.8	32.7	24.6	15.1	21.2
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	22.5	26.1	29.0	22.4	20.2	12.6	22.2
1954	13.9	24.5	25.5	20.6	12.0	9.7	13.1	16.5	25.4	21.1	14.5	10.9	17.3
1955	19.3	18.2	23.6	21.1	16.7	15.1	12.3	14.3	19.1	17.8	19.9	14.1	17.6
1956	28.7	23.3	27.6	31.7	29.3	23.5	19.8	20.7	22.4	19.3	32.3	18.2	24.7
1957	28.7	26.8	36.7	28.8	18.1	29.1	21.7	20.7	57.0	24.0	29.5	31.7	29.4
1958	25.5	43.2	36.1	27.6	25.2	29.7	36.0	25.1	26.5	24.7	15.0	27.2	28.5
1959	24.3	35.9	29.9	24.2	25.7	21.6	42.5	31.2	36.1	28.2	32.1	30.8	30.2
1960	25.2	23.5	27.6	51.5	31.6	27.6	28.1	27.2	26.4	45.6	45.9	34.5	22.9
1961	20.6	25.1	22.0	21.8	22.3	20.1	36.0	18.5	20.7	23.3	17.3	21.1	22.4
1962	13.2	19.2	15.5	22.6	13.4	18.1	21.0	26.2	29.8	33.3	22.5	23.5	21.5
1963	19.3	15.3	14.9	18.2	20.4	20.5	20.8	22.5	40.2	23.5	20.7	18.9	21.3
1964	20.1	20.1	21.0	21.7	17.5	15.1	16.9	14.8	18.2	16.9	13.8	10.3	17.2
1965	11.8	16.3	14.3	12.6	10.5	15.7	14.7	16.8	17.5	13.1	11.7	13.8	14.1
1966	14.2	14.8	18.6	12.0	14.8	12.5	17.1	20.0	29.4	17.5	16.8	20.5	17.3
1967	18.9	19.8	13.8	15.5	33.1	18.6	14.4	17.5	24.7	17.8	18.9	24.5	19.8
1968	21.1	26.5	23.3	22.2	21.4	24.9	18.0	20.1	22.0	24.8	26.2	20.3	22.6
1969	17.5	25.8	27.8	23.8	26.2	18.8	15.9	16.9	24.8	18.1	19.7	14.5	20.8
1970	16.4	14.1	27.5	23.8	17.9	20.4	29.8	22.2	21.2	23.0	21.8	16.6	21.3
1971	23.1	20.8	20.7	23.7	21.5	18.3	16.7	17.9	22.3	24.7	21.6	21.2	21.0
1972	25.0	21.7	23.8	20.7	19.4	23.6	15.4	35.3	22.8	23.0	24.6	20.7	23.0
1973	29.0	34.8	38.9	41.4	28.2	30.2	23.9	22.7	26.0	31.3	22.7	21.9	29.2
1974	27.8	28.7	36.4	35.8	31.8	31.9	35.6	34.1	37.4	39.7	29.7	29.6	33.2
1975	29.8	33.1	34.3	26.7	24.8	22.9	24.3	20.1	18.7	21.5	31.4	23.1	25.9
1976	24.8	30.5	35.8	28.0	25.5	19.6	19.1	18.6	24.3	21.5	17.3	20.5	23.8

12 - MONTH'S RUNNING MEAN VALUES OF aa - INDICES

1868 - 1976

||||||| 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 |||||

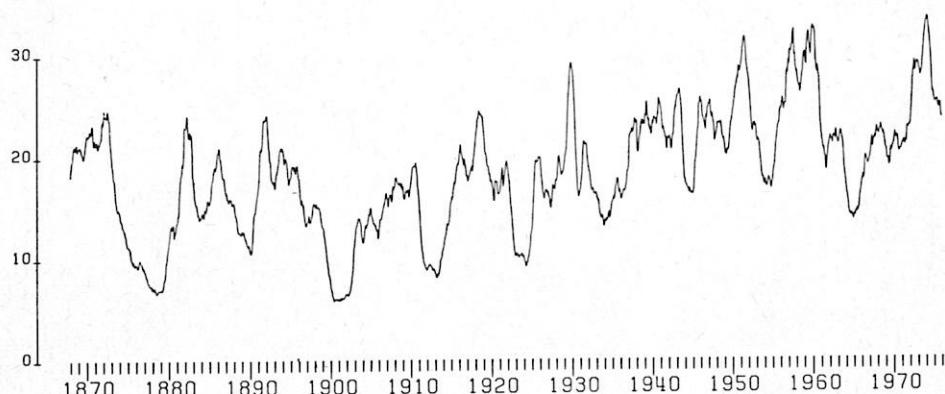


TABLE 2b MONTHLY Ap, 1932 - 1976

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
1932	11	12	18	17	15	7	7	12	12	10	8	9	11.5
1933	10	11	12	12	12	8	7	9	12	10	9	7	10.1
1934	6	8	11	6	7	5	6	9	10	6	5	8	7.2
1935	9	10	10	8	6	9	7	5	13	12	8	9	8.9
1936	9	11	9	15	10	12	11	5	5	9	10	5	9.1
1937	7	13	12	20	13	12	12	10	9	20	12	10	12.5
1938	28	16	13	18	18	9	13	12	17	16	10	11	15.3
1939	7	15	19	28	21	15	19	19	13	22	9	11	16.5
1940	15	12	36	18	13	16	12	11	14	14	16	15	16.1
1941	14	18	33	15	11	11	19	16	27	11	16	11	16.8
1942	9	12	22	17	8	8	13	13	17	22	15	11	13.8
1943	11	9	13	14	14	12	15	31	25	24	20	14	17.0
1944	13	12	17	15	9	8	6	9	10	11	6	14	10.8
1945	10	10	17	13	9	7	9	7	10	11	8	13	10.4
1946	12	22	33	20	18	16	22	11	34	13	12	9	18.6
1947	12	12	32	18	14	16	16	25	32	23	14	11	18.8
1948	12	13	17	13	19	10	10	20	15	27	16	13	15.4
1949	20	14	19	14	18	14	8	14	13	25	15	9	15.4
1950	12	18	14	18	16	14	14	25	22	28	20	16	18.1
1951	16	22	21	27	20	17	20	22	40	24	18	20	22.3
1952	19	26	33	34	27	18	15	13	23	20	12	15	21.2
1953	15	15	21	16	16	13	16	19	21	16	14	7	15.7
1954	9	16	16	14	7	6	8	10	17	15	9	6	11.0
1955	12	12	14	14	11	9	8	9	13	11	13	8	11.3
1956	18	15	20	27	26	17	13	15	18	14	24	10	18.0
1957	17	17	26	21	11	22	16	14	49	14	18	18	20.1
1958	15	27	26	20	17	24	25	18	20	16	8	15	19.2
1959	14	24	24	17	19	15	32	23	28	19	22	19	21.3
1960	15	14	18	42	24	20	20	20	20	36	32	21	23.6
1961	12	16	14	14	13	14	28	11	13	16	10	12	14.4
1962	7	11	8	14	7	9	12	15	19	20	13	13	12.3
1963	11	9	8	10	11	11	12	13	28	15	12	11	12.6
1964	12	12	13	13	10	9	9	8	11	10	7	5	9.9
1965	6	9	8	8	6	10	8	9	10	7	6	7	7.7
1966	7	8	13	7	9	6	9	11	21	11	9	11	10.2
1967	11	11	7	9	25	12	8	9	16	10	10	14	12.0
1968	11	16	13	13	13	17	10	12	14	16	17	10	13.5
1969	8	15	17	14	17	9	8	8	15	9	10	7	11.3
1970	7	7	18	15	9	10	19	13	11	12	12	9	11.9
1971	12	12	11	15	13	9	8	9	13	12	11	10	11.3
1972	13	10	12	11	10	14	8	24	13	12	14	10	12.6
1973	16	20	25	30	17	17	12	12	14	18	12	11	17.0
1974	15	16	23	21	18	17	24	19	23	26	18	15	19.6
1975	16	18	20	16	13	11	12	10	10	12	18	12	13.9
1976	13	17	23	17	14	10	9	9	13	12	9	10	12.9

TABLE 3 INTERNATIONAL QUIET AND DISTURBED DAYS 1976

Month	Quietest Days 1-5					Quietest Days 6-10					Most Disturbed Days 1-5				
Jan	9	2	1	28	26	8	29	27K	15A	19A	11	10	31	22	24
Feb	24	25	23	16	15A	6A	5A	26A	4A	11A	29	8	27	19	9
Mar	22	24	25	23	21	20A	31A	19A	30A	13A	26	8	9	27	10
Apr	20	18	15	19	21	26	17	23A	16A	25A	1	3	4	6	5
May	18	17	14	16	9	27	15K	26	13	24	3	2	4	29	20*
Jun	14	22	21	9	19	23	15K	13	16	29	11	30	18	4	5
Jul	21	20	11	13	26	22	24	23	17	12	30*	29*	1*	15*	16*
Aug	15	13	12	18	8	14	4	17	6	11	23	25	24	26*	27*
Sep	11	13	10	28	9	16	24A	6A	8A	12A	20	18	25	21	2
Oct	29	26	28	25	22	24K	7	8	4	9	31	15	17	16	2
Nov	28	6	5	24	23	21	7	4	18	22	13	12	11	10*	14*
Dec	15	2	6	3	14	21	20	23	28	5	29	18	8	9*	12*

From now on these days are arranged according to their degree of quietness or disturbance, respectively.

Explanation: The selection of the quiet and disturbed days is made on the basis of three criteria: (a) the sum of the eight values of Kp. (b) the sum of the squares of these values. (c) the greatest of the eight values of Kp. According to each of these criteria, a relative "order number" is assigned to each day of a month, the three order numbers are averaged and the days with the lowest and the highest mean order numbers are selected as the five quietest, the ten quietest and the five most disturbed days.

It should be noted that these selection criteria give only a relative indication of the character of the selected days with respect to the other days of the same month. As the general disturbance level may be quite different for different years and even for different months of the same year, the selected quiet days of a month may sometimes be rather disturbed or vice versa. In order to indicate such a situation, selected days which do not satisfy certain absolute criteria are marked as follows:

A selected "quiet day" is considered not "really quiet" and marked by the letter A if for that day: $Ap > 6$, or marked by the letter K if $Ap \leq 6$, and one $Kp > 30$ or two Kp values are ≥ 3 .

A selected "disturbed day" is considered "not really disturbed" and marked by an asterisk if $Ap < 20$. (Ref.: P.N. Mayaud, Ann. Géophysique t. 26, 1969, pp. 901 - 921).

TABLE 4 PLANETARY THREE-HOUR-INDICES Kp, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	Jan	1976	ap	Sum	Ap	Cp					
1	1+ 1- 1o 2- 2o 1- 1o 1-	9o	5	3	4	6	7	3	4	3	35	4	0.2
2	0o 1+ 1o 1o 1o 1o 2o 1+	9-	0	5	4	4	4	4	7	5	33	4	0.1
3	2o 2o 2+ 2+ 4- 3- 4o 4o	23o	7	7	9	9	22	12	27	27	120	15	0.8
4	3- 3o 3- 1+ 2+ 2+ 3- 2+	19+	12	15	12	5	9	9	12	9	83	10	0.6
5	2+ 3o 2+ 3- 1+ 2- 2+ 2o	18-	9	15	9	12	5	6	9	7	72	9	0.5
6	2- 3- 2o 1o 2o 3o 4- 4+	20+	6	12	7	4	7	15	22	32	105	13	0.8
7	4o 3o 2+ 2o 2o 3- 2-	19+	27	15	9	7	7	12	6	6	89	11	0.6
8	0+ 2- 1o 1+ 1+ 1+ 2o 2+	11+	2	6	4	5	5	5	7	9	43	5	0.2
9	1+ 2- 1o 1- 1- 1- 0+ 1o	7+	5	6	4	3	3	3	2	4	30	4	0.1
10	1+ 1o 2+ 4- 4o 5o 7o 7o	31+	5	4	9	22	27	48	132	132	379	47	1.5
11	7+ 5o 3+ 1o 2o 3+ 4+ 5o	31+	154	48	18	4	7	18	32	48	329	41	1.5
12	5- 2+ 2+ 2+ 2o 3- 3- 3o	22o	39	9	9	9	7	12	12	15	112	14	0.8
13	2+ 4- 2- 2- 2- 2- 2o 2o	17-	9	22	6	6	6	6	7	7	69	9	0.5
14	3- 3- 3o 3- 3o 3- 2+ 2+	21+	12	12	15	12	15	12	9	9	96	12	0.7
15	1+ 0o 0o 1- 2o 3o 3- 3-	12+	5	0	0	3	7	15	12	12	54	7	0.3
16	3o 2o 1+ 1+ 1+ 2+ 3+ 4-	18+	15	7	5	5	5	9	18	22	86	11	0.6
17	2+ 4- 3- 2+ 2- 2- 4o 4-	22o	9	22	12	9	6	6	27	22	113	14	0.8
18	3- 3- 3o 3- 1o 0+ 3- 2o	17o	12	12	15	12	4	2	12	7	76	10	0.5
19	2o 2+ 1o 2o 2+ 2+ 2+ 2+	17-	7	9	4	7	9	9	9	9	63	8	0.4
20	3- 3- 2o 1- 2- 3+ 2+ 3+	19-	12	12	7	3	6	18	9	18	85	11	0.6
21	3+ 4o 3+ 4- 3o 4+ 4- 2o	27+	18	27	18	22	15	32	22	7	161	20	1.0
22	3+ 5- 2o 2+ 4+ 4o 4+ 4o	29o	18	39	7	9	32	27	32	27	191	24	1.2
23	4+ 3o 3+ 4- 4o 4o 3- 3-	28-	32	15	18	22	27	27	12	12	165	21	1.1
24	3o 3+ 5- 4- 3o 4- 3o 4o	28+	15	18	39	22	15	22	15	27	173	22	1.1
25	3o 2+ 2o 2+ 4- 4o 3+ 2+	20+	15	9	7	9	22	15	9	6	92	12	0.7
26	1- 2+ 1o 2- 2- 2- 1o 1o	11o	3	9	4	6	6	6	4	4	42	5	0.2
27	1o 2- 3o 1+ 1+ 1o 1- 1+	11+	4	6	15	5	5	4	3	5	47	6	0.3
28	1+ 1o 1+ 2- 1o 1o 1+ 1+	10o	5	4	5	6	4	4	5	5	38	5	0.2
29	2- 2+ 2- 2- 2- 1o 1+ 1-	11+	6	9	9	6	6	3	2	3	44	6	0.2
30	0+ 0o 1o 1- 2o 3o 3+ 4-	14o	2	0	4	3	7	15	18	22	71	9	0.5
31	3- 4+ 3o 3o 5+ 4+ 4- 5o	31+	12	32	15	15	56	32	22	48	232	29	1.3

	Kp	Sum	Feb	1976	ap	Sum	Ap	Cp					
1	4o 4- 3o 4- 4o 3+ 4+ 4+	30+	27	22	15	22	27	18	32	32	195	24	1.2
2	4- 3o 3o 2+ 3+ 5- 4o 3o	27o	22	15	15	9	18	39	27	15	160	20	1.0
3	4- 2+ 4o 3+ 3- 2+ 3- 3o	24o	22	9	27	18	12	9	12	15	124	16	0.9
4	3+ 2o 2o 2+ 2+ 3o 3o 3+	21+	18	7	7	9	9	15	15	18	98	12	0.7
5	2- 2- 1- 2o 2+ 3- 2o 3+	16+	6	6	3	7	9	12	7	18	68	8	0.5
6	3+ 3o 2+ 1+ 1o 2- 1+ 2o	16o	18	15	9	5	4	6	5	7	69	9	0.5
7	2- 2o 1- 5+ 4+ 4o 4o 3+	25+	6	7	3	56	32	27	27	18	176	22	1.1
8	4+ 3- 3+ 4+ 5- 5+ 4o 4o	33-	32	12	18	32	39	56	27	27	243	30	1.3
9	4+ 4- 3+ 4- 4- 4- 4o 4+	31-	32	22	18	22	22	22	27	32	197	25	1.2
10	4+ 3+ 4- 3+ 3+ 3+ 5o 4-	30o	32	18	22	18	18	18	48	22	196	24	1.2
11	2o 2- 3- 3o 3o 2o 2+ 4+	21o	7	6	12	15	15	7	9	32	103	13	0.7
12	3o 3+ 3+ 2+ 2+ 3+ 3o 4o	25o	15	18	18	9	9	18	15	32	134	17	0.9
13	5o 3+ 2+ 3+ 4- 3o 3o 4o	28-	48	18	9	18	22	15	15	27	172	22	1.1
14	3o 5- 3o 3+ 4- 3+ 2o 2o	25o	15	39	15	18	22	18	7	7	141	18	1.0
15	2- 1+ 2o 2o 3- 3- 2+ 2-	16+	6	5	7	7	12	12	9	6	64	8	0.4
16	1+ 1o 1+ 2o 1o 1o 1- 3- 2-	12o	5	4	5	7	4	4	12	6	47	6	0.3
17	1+ 2o 2o 3- 3- 3+ 3+ 4-	22-	5	7	7	12	12	18	18	32	111	14	0.8
18	5- 4- 4o 4- 4- 2o 2+ 4o	28o	39	22	27	22	22	7	9	27	175	22	1.1
19	3+ 4o 4o 3+ 4o 4o 4o 4+	31o	18	27	27	18	27	27	27	32	203	25	1.2
20	3+ 3o 4o 4o 3+ 4- 2+ 4-	27+	18	15	27	27	18	22	9	22	158	20	1.0
21	3+ 3+ 2+ 4o 2+ 3o 3o 3-	24o	18	18	9	27	9	15	15	12	123	15	0.9
22	4- 3+ 2+ 3+ 3o 2o 3- 2o	22+	22	18	9	18	15	7	12	7	108	14	0.8
23	2o 2o 2- 1+ 2- 1o 0o 0o	9+	7	7	6	5	6	3	0	0	34	4	0.1
24	0+ 1- 1o 1o 1o 1- 1- 0+	6-	2	3	4	4	4	3	3	2	25	3	0.1
25	1o 2- 1+ 1+ 0+ 1+ 1+ 0+	9-	4	6	5	5	2	5	5	2	34	4	0.1
26	1o 2- 2+ 2+ 3- 2- 2- 3+	17-	4	6	9	9	12	6	6	18	70	9	0.5
27	3o 2+ 3- 3o 5o 5+ 5-	31-	15	9	12	15	48	56	39	39	233	29	1.3
28	4- 3+ 3+ 3- 3o 4- 4o 4o	28-	22	18	18	12	15	22	27	27	161	20	1.0
29	5+ 6o 5- 3- 2+ 3- 4- 5o	32+	56	80	39	12	9	12	22	48	278	35	1.4

TABLE 4 PLANETARY THREE-HOUR-INDICES Kp, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	Mar	1976	ap	Sum	Ap	Cp
1	4- 4o 3o 3o 4- 3o 3- 4-	27-	22	27	15 15	22 15 12 22	150	19 1.0
2	3o 5- 4- 3+ 4o 5o 5o 5o	34-	15	39	22 18	27 48 48 48	265	33 1.3
3	4o 4o 4o 3+ 4o 4+ 4+ 5-	33-	27	27	27 18	27 32 32 39	229	29 1.3
4	4+ 3o 2o 3- 2+ 2+ 2+ 2-	21-	32	15	7 12	9 9 9 6	99	12 0.7
5	2o 3- 3o 3o 2o 2+ 2o 5o	22o	7	12	15 15	7 9 7 48	120	15 0.8
6	3+ 4- 3+ 3+ 4- 5o 5- 6o	33o	18	22	18 18	22 48 39 80	265	33 1.3
7	5- 4- 3+ 4- 3+ 5o 4- 4o	31+	39	22	18 22	18 48 22 27	216	27 1.2
8	6- 6o 6- 4- 4+ 4- 3o 4o	37-	67	80	67 32	32 22 15 27	342	43 1.5
9	4o 5o 4o 4- 5- 4+ 5o 5+	36o	27	48	27 22	39 32 48 56	299	37 1.4
10	4+ 5o 3+ 4- 4o 5- 4o 5o	34o	32	48	18 22	27 39 27 48	261	33 1.3
11	5- 4o 3o 4+ 4o + 4o 3+	32-	39	27	15 32	27 32 27 18	217	27 1.2
12	5- 5- 4o 4+ 3+ 3o 3+ 4-	31o	39	39	27 32	18 15 18 22	210	26 1.2
13	4o 2+ 2+ 2o 2+ 2- 3- 3-	20o	27	9	9 7	9 6 12 12	91	11 0.7
14	5- 4+ 3- 2+ 2o 1+ 1o 2-	20o	39	32	12 9	7 5 4 6	114	14 0.8
15	2o 3- 3o 2+ 3o 4- 3- 4o	23+	7	12	15 9	15 22 12 27	119	15 0.8
16	3+ 4- 4- 2+ 3+ 3+ 4+ 2+	26+	18	22	22 9	18 18 32 9	148	18 1.0
17	4o 3o 4o 4- 3- 2o 3o 4+	27-	27	15	27 22	12 7 15 32	157	20 1.0
18	4- 2- 2o 4- 2- 1+ 4- 3o	21-	22	6	7 22	6 5 22 15	105	13 0.8
19	2+ 3- 4- 3- 2+ 2- 3- 1-	19+	9	12	22 12	9 6 12 5	87	11 0.6
20	2o 2+ 3o 2+ 3o 2- 1o 1-	16o	7	9	15 9	15 6 4 3	68	8 0.5
21	1- 1o 2- 2o 3- 2- 1o 0+	11o	3	4	6 7	12 6 4 2	44	6 0.2
22	0+ 0- 1- 1+ 1- 1- 1- 0+	5o	2	2	3 5	3 3 3 2	23	3 0.1
23	0o 0o 1o 2- 2- 1+ 3- 2-	10o	0	0	4 6	6 5 12 6	39	5 0.2
24	2+ 1+ 1o 0o 0+ 0o 1o 1o	7o	9	5	4 0	2 0 4 4	28	4 0.1
25	1- 0+ 1o 0+ 1+ 1+ 2o 2+	9+	3	2	4 2	5 5 7 9	37	5 0.2
26	4+ 7+ 8o 7+ 8o 8o 7o 6-	56-	32	154	207 154	207 207 132 67	1160	145 2.0
27	6o 4+ 4- 2+ 4o 4+ 5o 4+	34o	80	32	22 9	27 32 48 32	282	35 1.4
28	4- 4+ 3o 1o 3- 3- 3o 2-	22o	22	32	15 4	12 12 15 6	118	15 0.8
29	4o 5o 4o 2+ 1+ 2- 1- 1o	20o	27	48	27 9	5 6 3 4	129	16 0.9
30	1+ 1o 3- 2o 3- 3- 4- 3+	19+	5	4	12 7	12 12 22 18	92	12 0.7
31	3o 2- 3- 2o 2+ 2- 3- 1o	17o	15	6	12 7	9 6 12 4	71	9 0.5

	Kp	Sum	Apr	1976	ap	Sum	Ap	Cp
1	6+ 8+ 8+ 8+ 6o 4+ 3+ 3-	48-	94	236	236 236	80 32 18 12	944	118 1.9
2	4o 3+ 2+ 1- 1o 2+ 3o 5-	21+	27	18	9 3	4 9 15 39	124	16 0.9
3	4o 5+ 5o 2o 4o 5- 5o 6+	37-	27	56	56 7	27 39 48 94	354	44 1.5
4	5+ 4o 4+ 5- 4o 4+ 3- 4-	33o	56	27	32 39	27 32 12 22	247	31 1.3
5	4o 5- 4+ 4o 4- 3o 5- 3+	32-	27	39	32 27	22 15 39 18	219	27 1.2
6	5- 5- 4+ 4- 4+ 3+ 4+ 4o	33+	39	39	32 32	22 18 32 27	241	30 1.3
7	4o 4- 5- 3+ 5o 3- 3+ 5-	31+	27	22	39 18	48 12 18 39	223	28 1.2
8	5- 3+ 2+ 3- 3- 2- 3o 2+	23-	39	18	9 12	12 6 15 9	120	15 0.8
9	4+ 4- 2- 2- 3o 3+ 3- 3o	23+	32	22	6 6	15 18 12 15	126	16 0.9
10	3+ 4o 3- 2+ 3o 2o 1+ 1+	20o	18	27	12 9	15 7 5 5	98	12 0.7
11	3- 2o 2- 3+ 3o 2o 3- 4-	21o	12	7	6 18	15 7 12 22	99	12 0.7
12	2o 3- 4- 3- 1+ 1o 1+ 2o	17-	7	12	22 12	5 4 5 7	74	9 0.5
13	4- 3- 2o 3- 2+ 2- 3+ 3o	21+	22	12	7 12	9 6 18 15	101	13 0.7
14	3- 3- 3+ 3- 3+ 4- 3- 3+	24+	12	12	18 12	18 22 12 18	124	16 0.9
15	2- 1- 1- 1o 1o 1+ 1o 2-	9o	6	3	3 4	4 5 4 6	35	4 0.2
16	3- 3- 2+ 2- 1- 1- 1+ 2+	15o	12	12	9 6	5 3 5 9	61	8 0.4
17	1+ 3- 1+ 1- 1- 2- 2o 0o	10+	5	12	5 3	3 6 2 2	41	5 0.2
18	0o 0+ 1- 1o 0+ 0+ 0+	3+	0	2	3 4	2 2 2 2	17	2 0.0
19	1+ 1- 1- 2+ 1o 2- 1+ 0+	9+	5	3	3 9	4 6 5 2	37	5 0.2
20	0+ 0+ 0+ 1- 1- 0+ 1- 0+	4-	2	2	2 3	3 2 3 2	19	2 0.0
21	0+ 0+ 1o 2+ 2o 1+ 1o 2-	10o	2	2	4 9	7 5 4 6	39	5 0.2
22	3- 4- 5- 4- 3o 2+ 3o 3+	26+	12	22	39 22	15 9 15 18	152	19 1.0
23	3+ 3- 1+ 2- 2- 1+ 1o 1+	14+	18	12	5 6	6 5 4 5	61	8 0.4
24	1+ 4- 3+ 3o 3o 2+ 4o 3o	24-	5	22	18 15	15 9 27 15	126	16 0.9
25	2+ 3+ 2+ 1o 1+ 2- 2o 3-	17-	9	18	9 4	5 6 7 12	70	9 0.5
26	2- 1+ 1+ 1+ 1+ 2o 1o 2-	12-	6	5	5 5	5 7 4 6	43	5 0.2
27	3+ 3+ 2+ 1+ 2- 2+ 3o 3-	19-	18	18	9 5	6 5 9 15	85	11 0.6
28	3o 2+ 3+ 1o 1+ 2+ 2+ 3-	18+	15	9	18 4	5 9 9 12	81	10 0.6
29	2o 3- 1+ 2+ 3o 4o 4+ 4+	24o	7	12	5 9	15 27 32 32	139	17 0.9
30	2+ 3+ 3+ 2+ 2o 2- 2+ 1+	19-	9	18	18 9	7 6 9 5	81	10 0.6

TABLE 4 PLANETARY THREE-HOUR-INDICES Kp, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	May	1976	ap	Sum	Ap	Cp
1	3+ 2- 2- 1+ 2- 2+ 3- 3o	18-	18	6 6 5	6 9 12 15	77	10	0.5
2	4o 4- 2o 4o 6- 4- 7o 8-	38-	27 22 7 27	67 22 132 179	483	60	1.7	
3	8+ 8- 7- 7o 5+ 4+ 4- 2+	45+	236 179 111 132	56 32 22 9	777	97	1.9	
4	2+ 4- 4- 3o 3o 4+ 4+ 3o	27+	9 22 22	15 15 32 32 15	162	20	1.0	
5	4+ 4o 2+ 2+ 3- 1+ 2o 2+	21+	32 27 9 9	12 5 7 9	110	14	0.8	
6	2+ 3o 2+ 2o 2- 1+ 1+ 3-	17-	9 15 9 7	6 5 5 12	68	8	0.5	
7	4- 2+ 2- 2- 1+ 2o 2- 3o	17+	22 9 6 6	5 7 6 15	76	-10	0.5	
8	3+ 3o 2+ 1+ 3- 2o 2- 1+	18-	18 15 9 5	12 7 6 5	77	10	0.5	
9	3- 2- 1o 0+ 1- 1o 0+ 1-	8+	12 6 4	2 3 4 2 3	36	4	0.2	
10	0+ 2o 1+ 1o 2o 3o 2- 1-	12o	2 7 5 4	7 15 6 3	49	6	0.3	
11	2o 2+ 3o 2o 2o 2+ 4- 3o	20+	7 9 15 7	7 9 22 15	91	11	0.7	
12	3o 2- 2o 2o 1+ 2- 1+ 2-	15-	15 6 7 7	5 6 5 6	57	7	0.4	
13	1+ 2- 2- 1o 2+ 2o 2- 1+	13o	5 6 6 4	9 7 6 5	48	6	0.3	
14	1+ 1+ 1o 0o 2- 1o 1- 0-	7+	5 5 4	0 6 4 3 2	29	4	0.1	
15	1- 1+ 0+ 0+ 2o 2- 1- 3o	10o	3 5 2 2	7 6 3 15	43	5	0.2	
16	2o 2o 1- 2o 1+ 1o 1- 0+	10o	7 7 3 7	5 4 3 2	38	5	0.2	
17	0+ 1o 1o 1+ 1- 0+ 1o 1o	7-	2 4 4 5	3 2 4 4	28	4	0.1	
18	0+ 0o 0o 1- 1o 1o 1- 1-	4+	2 0 0 3	4 4 3 3	19	2	0.0	
19	1- 1- 1- 1- 1o 3+ 4o 4+	15+	3 3 3 3	4 18 27 32	93	12	0.7	
20	4- 4+ 4- 3- 2+ 2+ 4+ 3-	26o	22 32 22 12	9 32 12	150	19	1.0	
21	3+ 3- 2- 2- 3- 2+ 3- 2+	19+	18 12 6 6	12 9 12 9	84	10	0.6	
22	2+ 2o 3+ 2- 2+ 2+ 3+ 3o	20+	9 7 18 6	9 9 18 15	91	11	0.7	
23	1o 1o 4+ 3+ 4- 3+ 3- 2o	21+	4 4 32 18	22 18 12 7	117	15	0.8	
24	2o 2o 2- 2- 1- 2- 1- 2+	13-	7 7 6 6	3 6 3 9	47	6	0.3	
25	3- 3- 2+ 2- 2- 2+ 3- 1-	17-	12 12 9 6	6 9 12 3	69	9	0.5	
26	2- 2- 1- 1+ 1+ 2+ 2o 1o	12o	6 6 3 5	5 9 7 4	45	6	0.3	
27	0o 2o 1+ 2o 1+ 1o 2- 1o	10+	0 7 5 7	5 4 6 4	38	5	0.2	
28	2+ 3o 4- 3o 3o 3- 3-	22-	9 15 22 15	15 15 12 6	109	14	0.8	
29	3o 3o 2o 3o 2o 3- 5+ 5o	26o	15 15 7 15	7 12 56 48	175	22	1.1	
30	4o 3o 2+ 4+ 3- 2o 3+ 3o	25-	27 15 9 32	12 7 18 15	135	17	0.9	
31	2o 3- 3- 1+ 2+ 2- 2o 3-	17+	7 12 12 5	9 6 7 12	70	9	0.5	

	Kp	Sum	Jun	1976	ap	Sum	Ap	Cp
1	1- 1o 2- 1+ 2- 1+ 3- 2+	13-	3 4 6 5	6 5 12 9	50	6	0.3	
2	2- 2o 2+ 2- 1+ 2+ 2- 1o	14o	6 7 9 6	5 9 6 4	52	6	0.3	
3	2- 2- 1- 1+ 2- 2o 5- 4-	17+	6 6 3 5	6 7 39 22	94	12	0.7	
4	4o 5+ 3- 3o 4- 2- 2o 3-	25o	27 56 12 15	22 6 7 12	157	20	1.0	
5	3- 4- 3+ 4o 4+ 3o 3- 3-	27o	12 22 18 27	32 15 12 18	156	20	1.0	
6	2o 2o 2+ 2o 2o 2- 2-	16+	7 7 9 7	7 7 6 9	59	7	0.4	
7	3- 3- 3+ 3- 3- 2+ 2- 4-	22-	12 12 18 12	12 9 6 22	103	13	0.7	
8	2+ 2+ 2+ 3o 1+ 2- 2+ 2-	17o	9 9 9 15	5 6 9 6	68	8	0.5	
9	1o 2- 1+ 1o 0+ 0+ 1o 1-	7+	4 6 5 4	2 2 4 3	30	4	0.1	
10	1- 1+ 1o 1+ 2- 1+ 1o 3-	11o	3 5 4 5	6 5 4 12	44	6	0.2	
11	4+ 5+ 4o 4- 5- 3o 3- 2+	30o	32 56 27 22	39 15 12 9	212	26	1.2	
12	1+ 1+ 1- 3- 2+ 3- 2- 1o	14+	5 5 5 12	9 12 6 4	58	7	0.4	
13	1o 2- 2+ 0+ 1+ 0+ 0+ 1+	9-	4 6 9 2	5 2 2 5	35	4	0.2	
14	1o 1+ 0+ 0+ 0+ 0+ 1- 1-	5o	4 5 2 2	2 2 3 3	23	3	0.1	
15	0+ 0o 0+ 0o 0+ 1- 2- 3o	6+	2 0 2 0	2 3 6 15	30	4	0.1	
16	2- 2o 1o 2- 0+ 1- 1o 2-	10o	6 7 4 6	2 3 4 6	38	5	0.2	
17	2- 2o 3- 5- 3+ 2+ 3- 3-	22o	6 7 12 39	18 9 12 12	115	14	0.8	
18	4- 4- 5- 4+ 3+ 2+ 2+ 3o	27+	22 22 39 32	18 9 9 15	166	21	1.1	
19	1- 1+ 1+ 1+ 1+ 1o 1- 1-	8+	3 5 5 5	5 4 3 3	33	4	0.1	
20	1+ 1o 1+ 2o 2- 2+ 1- 1-	11o	5 4 5 7	6 6 5 3	41	5	0.2	
21	0+ 1- 1- 1- 1- 2- 0+	6+	2 3 3 3	5 3 6 2	27	3	0.1	
22	0+ 0+ 1o 1- 1+ 1- 1- 1-	6-	2 2 4 3	5 3 3 3	25	3	0.1	
23	2o 1+ 1o 1o 1o 1- 1- 1o	9-	7 5 4 4	4 3 3 4	34	4	0.1	
24	1- 2- 1+ 1+ 1o 4- 5o 5-	19+	3 6 5 5	4 22 48 39	132	16	0.9	
25	4+ 3o 4- 3- 3+ 3+ 3-	26-	32 15 22 12	12 18 18 12	141	18	1.0	
26	2o 1o 1- 1o 1o 1o 3+ 3-	13-	7 4 3 4	4 4 18 12	56	7	0.4	
27	2o 2o 2+ 1+ 2o 1+ 1+	14-	7 7 9 5	7 5 5 5	50	6	0.3	
28	2o 1o 2- 1- 1+ 2+ 2-	11+	7 4 6 3	3 5 9 6	43	5	0.2	
29	1o 1+ 1+ 1+ 0+ 2o 1-	10o	4 5 5 5	2 7 7 3	38	5	0.2	
30	2o 3- 4- 7- 2+ 3o 4- 4-	28+	7 12 32 111	9 15 22 22	230	29	1.3	

TABLE 4 PLANETARY THREE-HOUR-INDICES K_p, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	Jul	1976	ap	Sum	Ap	Cp
1	3+ 5- 3+ 4o 3- 3- 2o 2o	25-	18	39 18 27	12 12 7 7	140	18	1.0
2	3o 2- 2+ 2+ 3- 2+ 2- 2-	18-	15	6 9 9	12 9 6 6	72	9	0.5
3	1o 3o 3- 3+ 2+ 3+ 2- 3o	20+	4	15 12 18	9 18 6 15	97	12	0.7
4	2o 2o 4- 3+ 3o 3+ 4- 1+	22+	7	7 22 18	15 18 22 5	114	14	0.8
5	1o 1+ 2- 2- 2o 2o 1+ 1+	12+	4	5 6 6	7 7 5 5	45	6	0.3
6	3o 1+ 2o 1+ 1+ 1o 1o 1o	12o	15	5 7 5	5 4 4 4	49	6	0.3
7	3o 3- 1+ 3o 2- 2- 1+ 2+	16+	15	12 5 15	6 6 3 9	71	9	0.5
8	2- 3- 2+ 2- 4- 3- 4o 3-	21+	6	12 9 6	22 12 27 12	106	13	0.8
9	3+ 4- 2- 2+ 2o 2+ 2- 2-	19-	18	22 6 9	7 9 6 6	83	10	0.6
10	1+ 2+ 2o 2o 1o 1o 1+ 1+	12+	5	9 7 7	4 4 5 5	46	6	0.3
11	1o 1o 1o 1o 1- 1o 1+ 1+	8+	4	4 4 4	3 4 5 5	33	4	0.1
12	2o 2- 1o 1- 1+ 1o 1+ 2o	11o	7	6 4 3	5 4 5 7	41	5	0.2
13	1+ 1+ 2- 1- 1o 1- 1- 1+	9-	5	5 6 3	4 3 3 5	34	4	0.1
14	1+ 2o 2+ 2o 2o 1+ 1o 1-	13-	5	7 9 7	7 5 4 3	47	6	0.3
15	2- 2- 2o 2o 2- 4+ 6- 4-	23-	6	6 7 7	6 32 67 22	153	19	1.0
16	3o 3o 4+ 3- 3o 3o 3+ 2+	25-	15	15 32 12	15 15 18 9	131	16	0.9
17	1+ 2- 1o 1o 1o 1+ 2- 2-	11-	5	6 4 4	4 5 6 6	40	5	0.2
18	1+ 2o 2o 0+ 1- 1o 2+ 2o	12-	5	7 7 2	3 4 9 7	44	6	0.2
19	3- 1o 2o 1o 1+ 2- 1o 0+	11o	12	4 7 4	5 6 4 2	44	6	0.2
20	1+ 1+ 1o 1o 1- 1- 1-	8o	5	5 4	4 3 3 3	32	4	0.1
21	1+ 1- 0o 1+ 2- 1o 0o 0o	6o	5	3 0 5	6 4 0 0	23	3	0.1
22	2- 1o 2o 2- 1+ 0+ 0+ 1-	9o	6	4 7 6	5 2 2 3	35	4	0.2
23	2- 2- 1o 1o 2o 1+ 1o 0+	10o	6	6 4 4	7 5 4 2	38	5	0.2
24	0+ 0+ 0o 1- 1+ 2+ 2o	8+	2	2 0 3	5 5 9 7	33	4	0.1
25	4- 2+ 2o 2- 3- 2- 1o 2-	17+	22	9 7 6	12 6 4 9	75	9	0.5
26	3- 1- 0o 0o 1- 0+ 1o 2-	7o	12	3 0 0	3 2 4 6	30	4	0.1
27	1- 1+ 1- 3- 2- 1+ 3o 3o	14+	3	5 3 12	6 5 15 15	64	8	0.4
28	3+ 3- 4- 3o 3+ 3o 4- 2+	25o	18	12 22 15	18 15 22 9	131	16	0.9
29	4o 4- 3o 4- 3- 3- 3+	26-	27	22 15 22	12 12 12 18	140	18	1.0
30	3- 4- 4- 4o 4+ 2+ 3- 3o	26+	12	22 22 27	32 9 12 15	151	19	1.0
31	2- 1+ 2+ 2o 2+ 2o 2- 2o	15+	6	5 9 7	9 7 6 7	56	7	0.4

	Kp	Sum	Aug	1976	ap	Sum	Ap	Cp
1	1- 2o 2+ 1+ 1o 2- 3- 4-	15+	3	7 9 5	4 6 12 22	68	8	0.5
2	3o 3o 2o 2+ 2- 1- 0+ 1+	14+	15	15 7 9	6 3 2 5	62	8	0.4
3	1+ 3- 3- 1+ 2o 4- 2- 2o	17+	5	12 12 5	7 22 6 7	76	10	0.5
4	2+ 1+ 1o 1o 1+ 1o 1o 1+	10+	9	5 4 4	5 4 4 5	40	5	0.2
5	2o 1- 1- 1o 2- 3- 1+ 1o	11o	7	3 3 4	6 12 5 4	44	6	0.2
6	2- 2o 2o 1o 1o 1o 1+ 1o	11o	6	7 7 4	4 4 5 4	41	5	0.2
7	0o 1o 2o 2- 2+ 0+ 1o 2+	11-	0	4 7 6	9 2 4 9	41	5	0.2
8	2- 2o 1- 0+ 0+ 1o 2o 1o	9o	6	7 3 2	2 4 7 4	35	4	0.2
9	1+ 2- 4+ 3+ 3+ 1- 1o 2+	18o	5	6 32 18	18 3 4 9	95	12	0.7
10	3o 4- 2- 2+ 2- 2- 0+ 2-	16o	15	22 6 9	6 6 2 6	72	9	0.5
11	2o 2- 2+ 2- 1- 1o 0o	10o	7	6 9 6	3 3 4 0	38	5	0.2
12	1- 0+ 0o 1- 1o 1o 2- 1+	7-	3	2 0 3	4 4 6 5	27	3	0.1
13	0+ 1- 0+ 2o 0+ 1- 1- 1-	6-	2	3 2 7	2 3 3 3	25	3	0.1
14	1- 1o 0o 2+ 2+ 1- 0+ 1-	8+	3	4 2 9	9 3 2 3	35	4	0.2
15	0o 0o 0o 1- 1o 1- 1o 1o	4+	0	0 0 3	4 3 4 4	18	2	0.0
16	0o 2- 1- 2o 3o 2o 2- 2o	13o	0	6 3 7	15 7 6 7	51	6	0.3
17	3- 1o 0o 0+ 1- 2- 1o 2-	9o	12	4 0 2	3 6 4 6	37	5	0.2
18	2- 2- 0+ 1o 1+ 0+ 1+ 1+	9o	6	6 2 4	5 2 5 5	35	4	0.2
19	1+ 2- 2+ 1+ 2+ 1+ 1o	13-	5	6 9 5	9 5 5 4	48	6	0.3
20	2- 2o 1+ 2- 1o 1o 1+ 1+	11+	6	7 5 6	4 4 5 5	42	5	0.2
21	1- 1- 3- 2+ 1+ 2o 3- 3-	15o	3	3 12 9	5 7 12 12	63	8	0.4
22	3- 1+ 0+ 2- 1+ 1+ 1- 1o	10+	12	5 2 6	5 5 3 4	42	5	0.2
23	2- 2o 4o 4+ 4+ 5o 4- 6-	31-	6	7 27 32	32 48 22 67	241	30	1.3
24	4o 4- 3+ 6- 4- 4- 3o 2o	29o	27	22 18 67	22 22 15 7	200	25	1.2
25	4+ 4o 4o 4o 4- 4- 4- 3o	30+	32	27 27 27	22 22 22 15	194	24	1.2
26	4- 4o 4o 3o 3o 2+ 3o 3o	26o	22	27 27 15	15 9 15 15	145	18	1.0
27	3o 2- 2- 4+ 2- 2o 3+ 3-	20+	15	6 32	6 7 18 12	102	13	0.7
28	2+ 2o 2+ 2+ 3- 3+ 3+ 0+	19-	9	7 9 9	12 18 18 2	84	10	0.6
29	1+ 2+ 2+ 2o 1o 1+ 2- 2o	14o	5	9 9 7	4 5 6 7	52	6	0.3
30	2o 2o 1- 1+ 1+ 1o 1+ 3-	12+	7	7 3 5	5 4 5 12	48	6	0.3
31	0o 1o 1+ 1+ 1+ 2o 2o 2o	11o	0	4 5 5	5 7 7 7	40	5	0.2

TABLE 4 PLANETARY THREE-HOUR-INDICES Kp, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	Sep	1976	ap	Sum	Ap	Cp					
1	3 - 3 - 2o 1+ 2o 3o 3- 2+	19-	12	12	7	5	7	15	12	9	79	10	0.6
2	3+ 5- 5o 4+ 3+ 3- 3- 2+	28+	18	39	48	32	18	12	12	9	188	24	1.1
3	3- 3o 2+ 2+ 1+ 2o 3- 3o	19+	12	15	9	9	5	7	12	15	84	10	0.6
4	3+ 3+ 3o 2o 3+ 3o 2- 3+	23o	18	18	15	7	18	15	6	18	115	14	0.8
5	4o 2+ 2o 2+ 2- 2- 1o 2o	17o	27	9	7	9	6	6	4	7	75	9	0.5
6	3o 3- 2o 2- 2- 2- 1o 1-	14+	15	12	7	6	6	6	4	3	59	7	0.4
7	3o 3- 3- 2o 2- 2- 1+ 3o	18o	15	12	12	7	6	6	5	15	78	10	0.5
8	3- 2o 1o 3- 2o 1+ 2+ 1-	15-	12	7	4	12	7	5	9	3	59	7	0.4
9	3- 2o 1+ 1+ 2o 1o 1o 0o	11+	12	7	5	5	7	4	4	0	44	6	0.2
10	2- 0+ 1- 2- 1o 2o 2o 2o	11+	6	2	3	6	4	7	7	7	42	5	0.2
11	1- 2o 1+ 1- 1+ 1- 1+ 1-	9-	3	7	5	3	5	3	3	5	34	4	0.1
12	2- 3- 2+ 2- 2- 3- 2o 2-	16+	6	12	9	6	6	12	7	6	64	8	0.4
13	2o 2- 1+ 1o 0+ 1- 1+ 2o	10+	7	6	5	4	2	3	5	7	39	5	0.2
14	2o 2+ 2- 3o 3o 3- 2- 2+	19-	7	9	6	15	15	12	6	9	79	10	0.6
15	1- 4- 3+ 3- 2+ 0+ 1+ 2o	16+	3	22	18	12	9	2	5	7	78	10	0.5
16	2+ 2+ 1o 1+ 2o 2o 2- 1o	14-	9	9	4	5	7	7	6	4	51	6	0.3
17	2o 3- 2o 2- 2- 1- 3- 4o	17+	7	12	7	6	6	3	12	27	80	10	0.6
18	3- 5+ 6o 5+ 5- 3- 1+ 1+	29+	12	56	80	56	39	12	5	5	265	33	1.3
19	1o 2- 2o 4+ 4- 4o 4+ 4o	25o	4	6	7	32	22	27	32	27	157	20	1.0
20	5+ 6o 5o 5o 5+ 5o 4o 5o	41-	56	80	48	48	56	48	27	48	411	51	1.6
21	4o 4o 3- 3+ 4o 5- 3+ 4-	30-	27	27	12	18	27	39	18	22	190	24	1.1
22	3o 4- 3+ 3o 3o 4- 3o 3o	26-	15	22	18	15	15	22	15	15	137	17	0.9
23	2- 2- 4o 4- 3+ 2o 2+ 1+	20o	6	6	27	22	18	7	9	5	100	12	0.7
24	3o 1+ 1o 2+ 2- 1o 1+ 2-	13+	15	5	4	9	6	4	5	6	54	7	0.3
25	4o 3o 4- 4- 3+ 4o 4o 4+	30o	27	15	22	22	18	27	27	32	190	24	1.1
26	5- 3- 2- 2o 2+ 2o 3- 2+	20+	39	12	6	7	9	7	12	9	101	13	0.7
27	3o 3- 3+ 3- 3- 2o 3-	22-	15	12	12	18	12	12	7	12	100	12	0.7
28	2o 2+ 1+ 1- 0+ 1- 2o 2o	11+	7	9	5	3	2	3	7	7	43	5	0.2
29	1- 3o 2o 3- 3- 2+ 3o 2-	18o	3	15	7	12	12	9	15	6	79	10	0.6
30	1+ 2o 1- 2- 2o 2- 3+ 4-	16+	5	7	3	6	7	6	18	22	74	9	0.5

	Kp	Sum	Oct	1976	ap	Sum	Ap	Cp					
1	2o 2- 4- 4o 3- 1+ 2- 3+	21o	7	6	32	27	12	5	6	18	113	14	0.8
2	3+ 5+ 4+ 3+ 3o 3o 2o 1o	25+	18	56	32	18	15	15	7	4	165	21	1.1
3	3- 2+ 2+ 3+ 2+ 2- 1- 1o	16+	12	9	9	18	9	6	3	4	70	9	0.5
4	1o 2- 2- 2- 2+ 1- 2- 2o	13+	4	6	6	9	9	3	6	7	50	6	0.3
5	4+ 4o 2+ 3+ 1- 1+ 2- 1+	19o	32	27	9	18	3	5	6	5	105	13	0.8
6	1+ 3o 4o 3o 1- 1- 3- 2+	18-	5	15	27	15	3	3	12	9	89	11	0.6
7	2+ 1o 0+ 0+ 2- 2- 3- 1-	11-	9	4	2	2	6	6	12	3	44	6	0.2
8	0+ 0+ 2o 2o 2- 1+ 2o 2+	12o	2	2	7	7	6	5	7	9	45	6	0.3
9	2o 2+ 1+ 2- 2o 1+ 2o 1o	14-	7	9	5	6	7	5	7	4	50	6	0.3
10	2- 2- 1+ 1- 1+ 2- 2- 3-	13+	6	5	5	5	3	9	6	12	52	6	0.3
11	4- 2- 1o 1- 1+ 2- 2- 3-	14+	22	6	4	3	5	6	6	12	64	8	0.4
12	3- 3o 1o 0+ 2- 2o 4o 5-	19+	12	15	4	2	6	7	27	39	112	14	0.8
13	2- 3o 3- 2o 2- 1- 2- 2-	15o	6	15	12	7	6	3	6	6	61	8	0.4
14	0+ 1o 1o 1- 1- 1o 3o 4-	12o	2	4	4	5	3	4	15	22	59	7	0.4
15	3o 4- 4o 4+ 5+ 5o 5- 4o	34o	15	22	27	32	56	48	39	27	266	33	1.3
16	6- 5- 5- 4- 3o 2+ 3+ 4-	31o	67	39	39	22	15	9	18	22	231	29	1.3
17	3+ 4o 5+ 4+ 5+ 3+ 3o 4-	32+	18	27	56	32	56	18	15	22	244	30	1.3
18	5- 4o 4- 3o 3+ 3- 3o 2o	26+	39	27	22	15	18	12	15	7	155	19	1.0
19	0+ 0o 0+ 2- 3o 4- 2o 1+	12+	2	0	2	6	15	22	7	5	59	7	0.4
20	3o 2o 2- 2- 1o 2- 2- 2+	15o	15	7	6	6	4	6	6	9	59	7	0.4
21	2- 3- 2+ 2o 2- 2o 2o 1o	15+	6	12	9	7	6	7	7	4	58	7	0.4
22	2o 1+ 2o 2o 2o 1o 1- 1-	12-	7	5	7	7	7	4	3	3	43	5	0.2
23	2o 2+ 2+ 2- 1- 1+ 1o	13+	7	9	9	9	3	5	5	4	51	6	0.3
24	1- 0+ 1o 1o 1- 2- 2+ 3+ 1+	10o	3	2	4	4	3	6	18	5	45	6	0.3
25	3- 2+ 1o 1- 1o 1- 1- 1-	10-	12	9	4	3	4	3	3	3	41	5	0.2
26	1o 2- 1- 1- 1- 0+ 1- 2-	7+	4	6	3	3	3	2	3	6	30	4	0.1
27	0+ 1+ 2o 1o 2- 2o 3- 3o	14o	2	5	7	4	6	7	12	15	58	7	0.4
28	2+ 0+ 0+ 1o 2o 2- 1o 1+	10o	9	2	2	4	7	6	4	5	39	5	0.2
29	1- 2o 1o 1- 0+ 0o 1o 0+	5+	3	7	3	2	2	0	4	2	23	3	0.1
30	0+ 0+ 2- 3o 3+ 3+ 3o 5o	20o	2	2	6	15	18	18	15	48	124	16	0.9
31	4o 4+ 5+ 4+ 5o 4o 3o 4+	34+	27	32	56	32	48	27	15	32	269	34	1.3

TABLE 4 PLANETARY THREE-HOUR-INDICES K_p, EQUIVALENT RANGES ap,
DAILY AVERAGE RANGES Ap, AND PLANETARY DAILY CHARACTER FIGURES Cp.

	Kp	Sum	Nov	1976	ap		Sum	Ap	Cp	
1	4- 3- 3- 3- 1o 1o 2+ 2+	18+	22	12	12	12	4	4	9	9
2	2+ 3- 2o 1+ 2- 2+ 2- 1o	15o	9	12	7	5	6	9	6	4
3	2+ 1o 2o 1+ 1- 1+ 1o 3o	13-	9	4	7	5	3	5	4	15
4	1+ 1o 2- 1+ 0+ 1- 1+ 1+	9o	5	4	6	5	2	3	5	5
5	0+ 1- 1+ 1+ 1- 1- 0+ 0o	5+	2	3	5	5	3	3	2	0
6	0+ 0+ 1o 0+ 0o 0o 1- 0+	3o	2	2	4	2	0	0	3	2
7	0o 2+ 2- 1o 0+ 0+ 0o 0+	6o	0	9	6	4	2	2	0	2
8	1o 1- 0o 0+ 1- 2o 2+ 3+	10+	4	3	0	2	3	7	9	18
9	3- 3+ 2- 2- 2- 1o 1o 2o	15o	12	18	6	6	6	4	4	7
10	2+ 3o 3o 3- 3- 3- 4+ 5-	25+	9	15	15	12	12	12	32	39
11	3o 4- 3- 3o 4o 5o 4+ 3-	28+	15	22	12	15	27	48	32	12
12	5+ 3o 3o 3o 3+ 3+ 4- 4+	29o	56	15	15	15	18	18	22	32
13	4+ 4o 5o 4+ 4+ 4+ 4+ 3-	33+	32	27	48	32	32	32	12	247
14	4- 2- 2o 2+ 4- 4- 4- 4o 3-	24-	22	6	7	9	22	22	27	12
15	3o 3- 1+ 2o 3- 3- 3o 2- 1-	17o	15	12	5	7	12	12	7	3
16	1- 2- 2- 1+ 2o 2- 1o 1+	11+	3	6	6	5	7	6	4	5
17	3- 3- 2- 2- 1+ 1o 1+ 2-	14o	12	12	6	6	5	4	5	6
18	2+ 2- 1- 1- 1- 0+ 2o 2-	10o	9	6	3	3	3	2	7	6
19	2+ 3+ 2- 1+ 2o 2- 2+ 2+	17o	9	18	6	5	7	6	9	9
20	2+ 2+ 1+ 2+ 2o 1- 3- 1+	15o	9	9	5	9	7	3	12	5
21	1+ 2- 1- 0+ 1o 0+ 1o 1+	8-	5	6	3	2	4	2	4	5
22	1o 2+ 1+ 1o 1+ 1- 2- 1+	11-	4	9	5	4	5	3	6	5
23	1+ 1- 1o 0+ 1- 1o 1o 2-	8-	5	3	4	2	3	4	4	6
24	0+ 2o 0+ 1o 1- 0+ 0o 0+	5o	2	7	2	4	3	2	0	2
25	1+ 3o 3o 3o 2+ 3o 2+ 2-	20-	5	15	15	15	9	15	9	6
26	2+ 3- 1- 1+ 1+ 2o 4- 3-	17-	9	12	3	5	5	7	22	12
27	3- 4- 3- 1o 0+ 1- 2- 2o	15-	12	22	12	4	2	3	6	7
28	0+ 1- 0+ 0+ 0+ 1- 1- 0o	3+	2	3	2	2	2	3	3	0
29	0o 1- 2+ 1+ 1o 2+ 1+ 2+	11+	0	3	9	5	4	9	5	9
30	3o 4- 2o 2- 2+ 3o 1o 2o	19-	15	22	7	6	9	15	4	7
								85	11	0.6

	Kp	Sum	Dec	1976	ap		Sum	Ap	Cp	
1	2- 0+ 1+ 1+ 2+ 2- 2+ 3-	14-	6	2	5	5	9	6	9	12
2	1o 1- 0+ 0+ 1o 0+ 1- 1-	5o	4	3	2	2	4	2	3	3
3	1- 1- 1o + 1o 1- 1+ 1o	7o	3	3	5	2	4	3	5	4
4	1o 2- 4- 3+ 4o 4o 2o 20	22-	4	6	22	18	27	27	7	7
5	3- 2- 1+ 1o 2o 1o 1+ 1o	12o	12	6	5	4	7	4	5	4
6	1- 0+ 0+ 0o 0+ 1o 1+ 2-	6-	3	2	2	0	2	4	5	6
7	3o 3+ 0+ 2o 2+ 2+ 2+ 3o	19-	15	18	2	7	9	9	9	15
8	4o 3o 4+ 5o 5o 2o 1o 1-	26-	27	15	32	48	48	7	4	5
9	1- 1+ 4+ 4o 3- 3+ 2+ 4-	22+	3	5	32	27	12	18	9	22
10	2+ 3o 2- 2+ 2+ 4o 2o 4-	21+	9	15	6	9	9	27	7	22
11	4- 4- 4- 2+ 1o 2o 2- 3-	21-	22	22	22	9	4	7	6	12
12	4- 2+ 3- 3- 4- 4o 2+ 1+	23-	22	9	12	12	22	27	9	5
13	2o 3o 2o 1+ 3- 1o 1+ 1+	15-	7	15	7	5	12	4	5	5
14	1+ 2+ 1- 1- 1- 0+ 0+ 1-	7o	5	9	3	3	3	2	2	3
15	0+ 1- 0+ 1+ 0o 0o 0+ 0o	3o	2	3	2	5	0	0	2	0
16	0+ 1+ 1+ 2+ 2+ 3o 2+ 2-	15-	2	5	5	9	9	15	9	6
17	2o 2o 1- 1+ 2o 3- 3+ 4-	18-	7	7	3	5	7	12	18	22
18	5- 6+ 5- 2- 1+ 1o 2+ 4o	26o	39	94	39	6	5	4	9	27
19	3- 3- 2+ 1+ 1+ 2- 1- 4o	14-	12	9	5	5	5	6	3	4
20	2o 1+ 0+ 1- 1+ 2+ 1o 1o	10o	7	5	2	3	5	9	4	4
21	0+ 1- 1+ 1o 1- 2o 1+ 1o	8+	2	3	5	4	3	7	5	4
22	0+ 3- 2+ 2o 3- 2o 2o 2+	16+	2	12	9	7	12	7	7	9
23	2+ 3- 2o 1+ 0o 0+ 0o 1o	10-	9	12	7	5	0	2	0	4
24	2o 2- 2+ 2o 2o 1o 2- 1-	13+	7	6	9	7	7	4	6	3
25	1- 3- 1o 3- 3+ 2- 2+ 1+	16-	3	12	4	12	18	6	9	5
26	2+ 3o 2o 1+ 1o 1- 1- 1+	12+	9	15	7	5	4	3	3	5
27	2o 0+ 0+ 1+ 1+ 2- 3o 1+	11+	7	2	2	5	5	6	15	5
28	2- 2o 1+ 2- 1- 1o 2o 2	12o	6	7	5	6	3	3	7	7
29	6+ 6- 6- 5+ 4+ 4o 2+ 2+	36o	94	67	67	56	32	27	9	9
30	1+ 1+ 2+ 2+ 3o 3o 4- 4-	21-	5	5	9	9	15	15	22	22
31	4- 4o 2+ 1- 1+ 1o 3+ 3-	19o	22	27	9	3	5	4	18	12
								100	12	0.7

TABLE 5 FREQUENCIES OF K_p INDICES, 1976

K _p	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0 ^o ₊	4 5	2 4	4 7	2 13	4 10	2 18	6 8	9 16	1 4	2 18	9 24	6 21
-	13	6	8	12	20	27	18	25	14	25	25	25
1 ^o	23	9	13	13	19	26	32	33	12	23	24	23
+ 2 ^o	21	11	10	26	22	35	36	33	20	18	28	36
- 2 ^o ₊	23 24	14 20	16 14	18 13	31 29	28 20	33 28	30 28	29 36	35 26	24 16	16 26
- 3 ^o ₊	33	21	20	23	27	19	19	19	19	19	24	30
- 3 ^o	25 21	17 23	21 20	25 16	20 22	21 8	19 17	12 11	31 20	12 18	22 15	16 10
+ 4 ^o	11	22	23	12	5	3	4	7	12	10	3	9
- 4 ^o ₊	8	12	18	10	9	5	3	5	4	8	8	3
- 5 ^o ₊	3 4	7 4	10 12	11 2	.	5	1	.	4	5	1	2
- 5 ^o	1	4	1	3	2	2	.	.	4	5	2	2
- 6 ^o ₊	.	.	3	.	1	.	1	2	.	1	2	.
- 6 ^o	.	1	3	1	.	.	.	.	2	.	.	2
- 7 ^o ₊	1	1	.	.	.	.	.	.
- 7 ^o	2	1	.	.	2	.	.	.	.	.	.	.
- 8 ^o ₊	1	2	.	.	.	.	.	.	.	.	.	.
- 8 ^o	.	3	.	.	2	.	.	.	.	.	.	.
- 9 ^o ₊	.	3	.	3	.	1	.	.	.	.	.	.
- 9 ^o	248	232	248	240	248	240	248	248	240	248	240	248

TABLE 6 MONTHLY AVERAGES OF Ap AND Cp, 1976

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Ap	13	17	23	17	14	10	9	9	13	12	9	10	12.9
Cp	0.64	0.84	0.89	0.71	0.59	0.47	0.45	0.41	0.62	0.56	0.43	0.48	0.59

TABLE 7 LIST OF MAGNETIC STORMS, 1976

Gives consecutive sequences of three-hour-intervals (Eighths E of the Greenwich day) in which at least one K_p reached or surpassed 7+, and no K_p was smaller than 5-.

Beginning			s.c. d. GMT	Duration Eighths	Number of Eighths with K _p =			
					7- 7o 7+	8- 8o 8+	9- 9o	
Jan	10	E6	10 10.04	5	. 2 1	. . .	. .
Mar	26	E2	26 02.33	8	. 1 2	. 3 .	. .	
Apr	01	E1	01 02.54	5	. . .	. . 3	. .	
May	02	E7	02 18.29	7	1 2 .	2 . 1	. .	

TABLE 8 VERY QUIET INTERVALS, 1976

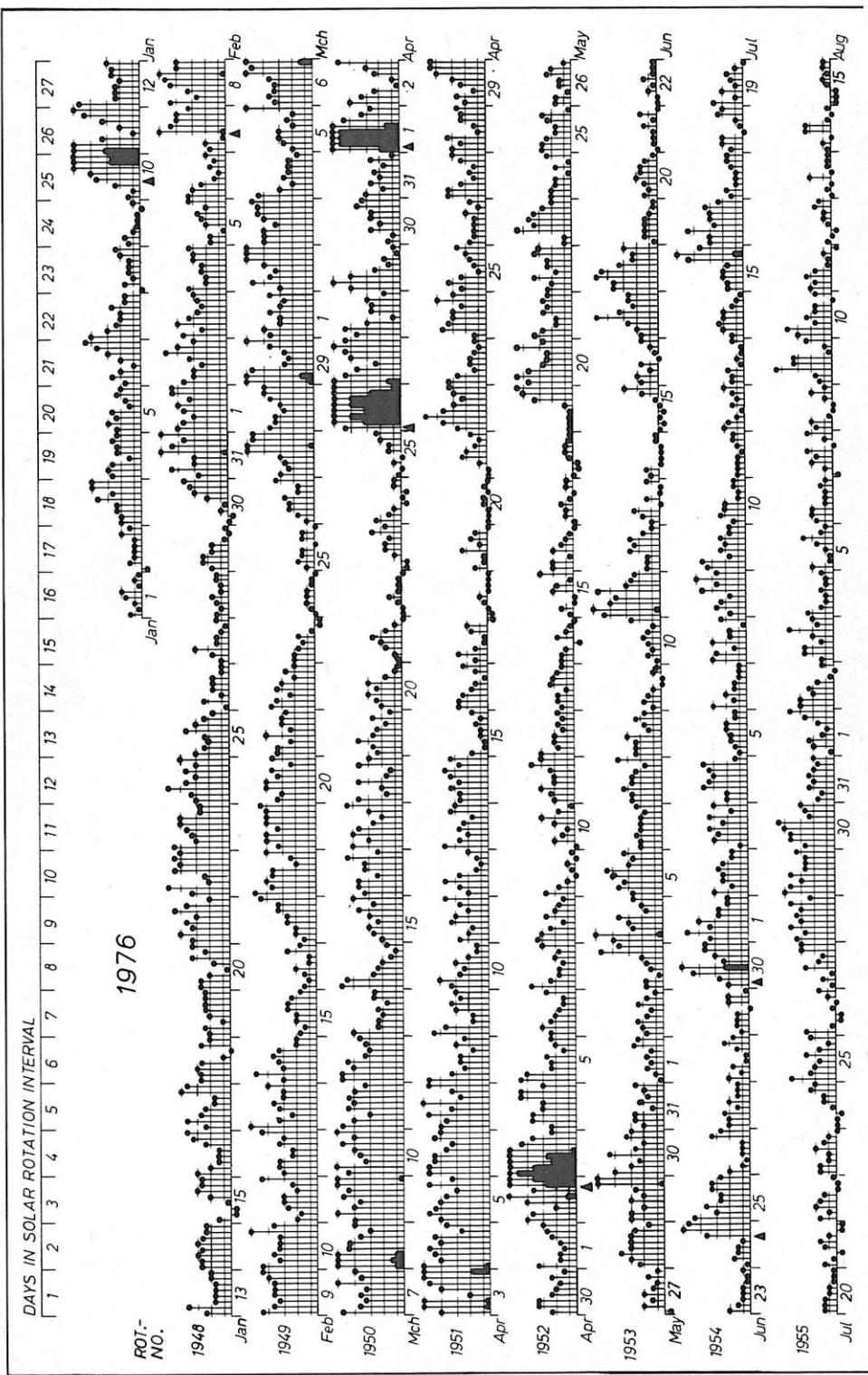
K_p not exceeding 1+ for at least 8 intervals
(= one day) in succession

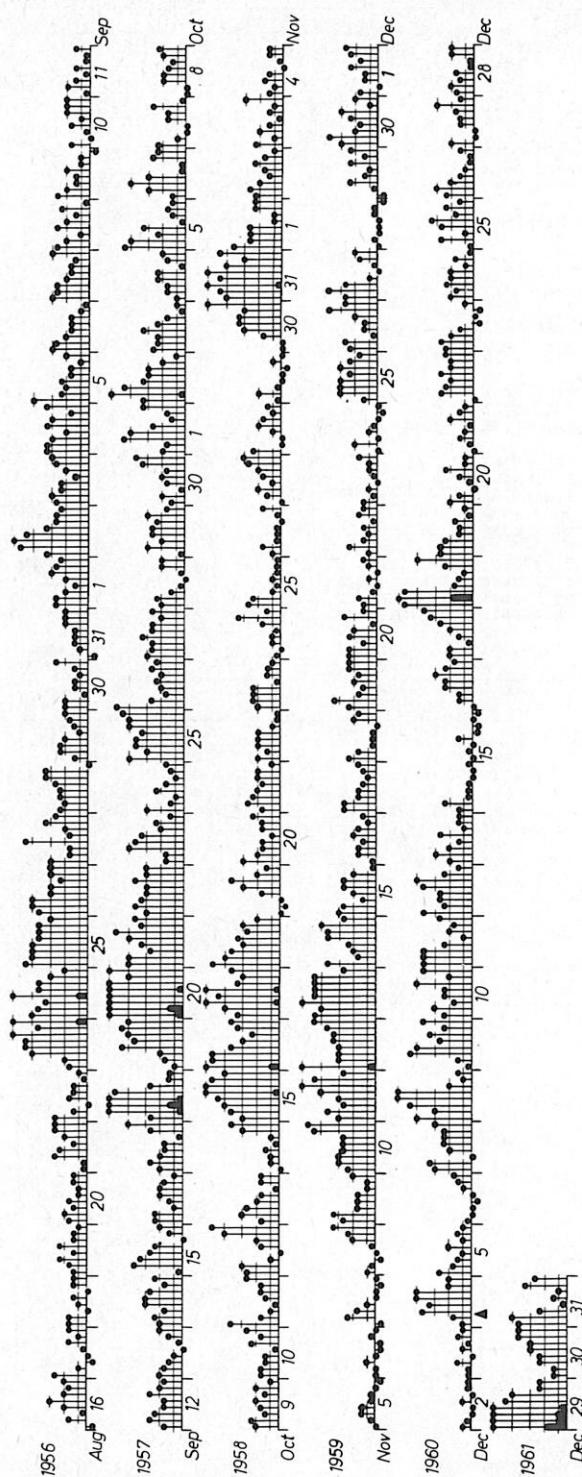
First.....last Eighth			Duration Eighths	First.....last Eighth			Duration Eighths	
Jan	01 E6	02 E6	9	Jul	10 E5	11 E8	12	
09 E3	10 E2	8		19 E7	21 E4	14		
27 E4	28 E3	8		23 E6	24 E6	9		
Feb	23 E6	25 E1	12	Aug	11 E5	12 E6	10	
Mar	21 E7	23 E3	13		14 E6	16 E1	12	
24 E2	25 E6	13		Oct	23 E5	24 E5	9	
Apr	17 E8	19 E3	12		29 E3	30 E2	8	
	19 E7	21 E3	13		Nov	04 E4	07 E1	22
	16 E5	19 E5	25			07 E4	08 E5	10
May	09 E3	10 E7	13			22 E8	23 E7	8
	13 E4	15 E6	19			28 E1	29 E2	10
	19 E1	20 E3	11		Dec	02 E1	04 E1	17
	20 E7	21 E6	8			05 E6	06 E7	10
	21 E8	22 E8	9			14 E3	16 E3	17
	23 E2	24 E1	8					

TABLE 8a LIST OF K_p', 1976

Reduction of K_p to K_p' due to solar flare effects

Month	Day	Eighth	K _p	K _p '
-	-	-	-	-



*Kp (after Bartels)*

1976

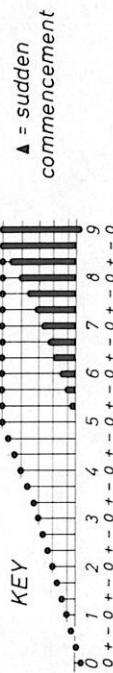


Table 9 Indices Kn, Ks, Km, etc.
(For explanation: see page IX)

JAN. 1976																								
	3 Km						Σ Km			am						Am		Am2						
1	4	2	4	5	6	4	4	3	10.7	8	4	8	11	15	9	8	7	9	9	22	19			
2	1	3	3	4	4	5	6	4	10.0	2	6	7	8	10	11	14	8	8	8	11				
3	4	6	7	8	12	8	12	9	22.0	10	14	18	24	57	23	55	29	29	29	21				
4	6	7	7	5	8	8	8	7	18.7	16	19	17	12	26	21	24	19	19	19	25				
5	6	7	6	8	5	6	8	5	17.0	15	19	16	25	11	16	21	12	17	17	17				
6	4	6	5	3	7	10	10	11	18.7	8	15	12	6	17	36	37	44	22	22	19				
7	9	7	5	5	5	8	3	4	15.3	27	18	13	12	12	26	7	9	16	16	18				
8	1	4	2	4	6	4	5	5	10.3	3	9	5	9	14	9	11	13	9	9	9				
9	3	4	2	2	2	1	2	3	6.3	6	8	5	4	4	3	4	6	5	5	10				
10	3	4	8	10	12	16	18	20	30.3	6	8	21	37	53	104	172	210	70	70	55				
11	18	11	7	4	7	9	11	14	27.0	167	48	20	9	19	33	50	63	54	54	67				
12	12	5	6	7	6	9	8	8	20.3	58	13	14	17	15	29	21	24	24	24	27				
13	6	8	4	4	5	5	6	5	14.3	15	25	9	9	13	12	14	12	14	14	17				
14	5	6	7	8	8	8	6	6	18.0	13	15	20	25	25	25	16	16	19	19	14				
15	3	1	1	2	5	9	7	7	11.7	6	2	2	4	13	28	20	17	12	12	13				
16	6	4	3	3	4	9	9	10	16.0	14	8	7	7	10	27	31	34	17	17	18				
17	6	8	7	6	6	7	11	9	20.0	14	26	19	14	16	17	49	30	23	23	23				
18	7	6	8	8	5	2	7	5	16.0	17	16	22	24	11	5	18	13	16	16	18				
19	5	5	3	6	6	8	7	7	15.7	11	12	6	14	14	25	20	20	15	15	14				
20	6	7	4	3	6	11	8	8	17.7	16	17	10	6	14	48	25	26	20	20	23				
21	8	10	9	11	10	14	9	5	25.3	24	34	28	45	35	76	33	12	36	36	31				
22	8	10	6	6	12	11	12	10	25.0	25	38	15	15	59	48	54	39	37	37	35				
23	10	8	8	10	12	12	9	7	25.3	40	21	22	34	58	53	29	20	35	35	37				
24	8	8	11	9	9	10	8	10	24.3	21	22	42	32	30	37	25	37	31	31	29				
25	8	4	6	6	10	8	8	7	17.7	23	10	16	16	34	22	18	10	19	19	20				
26	3	5	3	4	5	5	3	3	10.3	6	13	7	10	12	12	7	6	9	9	13				
27	3	4	8	6	6	5	2	4	12.7	7	9	24	14	15	12	5	9	12	12	10				
28	4	3	4	5	4	4	4	4	10.7	8	6	9	11	10	8	10	9	9	9	10				
29	4	6	7	5	6	3	2	3	12.0	9	15	17	12	16	6	4	6	11	11	9				
30	1	1	3	3	7	9	10	9	14.3	3	2	7	6	17	30	36	31	17	17	16				
31	6	10	7	9	15	11	11	14	27.7	15	34	20	28	93	49	44	74	45	45	36				
																				22.1				

FEB. 1976																								
	3 Km						Σ Km			am						Am		Am2						
1	9	8	7	9	11	10	13	10	25.7	32	24	19	29	43	38	61	36	35	39					
2	9	8	8	7	10	12	10	7	23.7	30	21	21	17	34	53	35	20	29	33					
3	9	5	10	10	8	6	9	8	21.7	27	13	40	34	25	16	27	25	26	26					
4	9	5	5	6	6	8	9	8	18.7	31	11	13	16	16	24	31	23	21	18					
5	4	3	3	6	8	8	6	10	16.0	10	6	6	14	24	23	14	35	17	18					
6	9	7	5	4	4	5	5	5	14.7	28	19	13	8	10	11	11	12	14	14	19				
7	3	2	14	12	11	11	12	12	21.7	7	7	4	71	54	46	50	30	34	31					
8	11	8	10	14	12	15	12	11	31.0	44	21	36	75	58	88	52	43	52	46					
9	11	8	8	11	11	10	11	13	27.7	43	26	22	44	42	39	46	63	41	43					
10	10	9	8	9	10	9	13	9	25.7	35	29	26	30	36	29	62	31	35	33					
11	5	4	7	9	9	5	7	12	19.3	11	10	17	28	27	13	18	51	22	26					
12	7	7	8	6	6	10	8	11	21.0	19	19	24	14	15	34	26	49	25	28					
13	13	9	6	8	10	10	9	11	25.3	68	28	15	21	40	34	29	43	35	32					
14	7	12	6	8	11	10	6	5	21.7	20	53	16	23	45	38	15	12	26	26					
15	4	4	6	5	8	8	7	4	15.3	9	9	14	12	26	22	18	10	15	16					
16	2	2	3	4	5	5	7	4	10.7	4	5	6	10	11	11	17	10	9	13					
17	3	4	5	6	8	10	11	12	20.3	7	10	12	23	22	39	45	60	27	26					
18	11	9	10	10	10	8	7	10	25.0	44	32	40	38	36	23	19	39	34	36					
19	8	9	11	9	11	11	11	11	27.0	25	32	42	32	48	43	43	42	38	34					
20	8	7	10	10	9	10	8	9	23.7	21	20	36	35	32	35	21	29	29	29					
21	8	8	6	10	8	8	9	7	21.3	23	21	16	38	25	23	31	20	25	25					
22	8	6	6	9	8	7	7	5	18.7	24	16	15	27	25	18	17	13	19	18					
23	4	4	4	4	5	4	0	1	8.7	8	8	8	9	11	8	1	2	7	7					
24	1	1	2	3	3	3	3	1	5.7	2	3	5	6	7	6	7	2	5	6					
25	2	4	4	4	1	4	4	1	8.0	4	8	8	8	3	10	10	3	7	7					
26	4	3	6	9	7	5	6	9	16.3	8	7	14	27	17	12	14	30	16	15					
27	7	5	7	10	15	16	14	13	29.0	20	13	18	36	97	111	76	61	54	38					
28	9	8	9	8	9	10	11	11	25.0	32	23	29	23	28	36	42	43	32	32	52				
29	14	14	12	8	6	8	11	14	29.0	73	77	58	22	14	21	44	77	48	41					
																				26.9				

Table 9 - continued

Part B.

FEB. 1976																			
	3 Kn					Gn		an											
1	9	9	8	10	10	11	13	10	1233	2554	32	28	21	35	40	42	62	38	37
2	9	8	8	7	10	12	10	8	3252	4334	32	23	25	19	37	57	40	21	32
3	9	6	11	9	8	7	9	8	4145	4484	28	15	46	32	24	17	29	24	27
4	9	4	6	7	6	8	9	8	4122	3365	30	9	14	18	16	23	31	25	21
5	4	3	3	6	8	8	6	10	2131	4313	8	7	6	15	23	23	14	35	16
6	8	7	5	4	4	5	5	5	3332	2453	25	19	13	8	8	12	13	12	14
7	4	4	2	14	13	11	11	9	3332	3453	8	8	4	81	61	48	45	28	35
8	10	6	9	14	13	15	11	11	5346	2554	39	15	29	81	68	98	46	43	52
9	10	8	8	11	11	11	11	12	3223	4231	40	26	26	46	47	45	47	53	41
10	10	9	9	9	11	9	13	9	3222	5443	38	32	31	32	43	28	69	32	38
11	5	4	8	9	9	6	8	12	2234	4233	11	10	21	30	28	14	21	53	24
12	7	8	9	6	6	9	8	12	4311	2333	18	22	27	16	14	33	25	51	26
13	14	9	5	8	11	9	8	10	2412	5432	74	29	13	25	44	33	26	38	35
14	7	13	7	8	11	10	5	5	2523	4324	19	61	17	24	45	38	12	12	29
15	3	4	6	6	9	8	8	4	2342	5354	7	9	15	15	28	22	21	9	16
16	1	2	3	5	4	5	7	4	3122	3642	3	5	6	11	10	11	18	8	9
17	3	4	5	8	7	10	12	12	1223	5673	6	9	13	21	19	37	51	59	27
18	11	9	11	11	10	8	7	10	5044	3335	46	28	45	44	40	21	18	40	35
19	8	10	11	9	12	11	11	11	2351	4553	24	39	45	32	55	47	44	42	41
20	8	7	11	11	10	10	8	9	3322	3523	21	19	41	45	36	37	22	31	32
21	8	8	7	11	9	8	9	8	2344	5542	25	23	18	46	31	23	33	23	28
22	9	7	7	9	9	7	7	6	4523	4333	27	17	17	32	28	19	17	15	22
23	4	4	4	5	6	4	0	0	3144	4521	9	8	10	13	15	10	1	1	8
24	0	1	2	3	4	3	3	0	1232	3431	1	2	5	6	8	6	7	1	5
25	2	3	4	3	1	5	5	1	2231	1532	4	7	10	7	2	13	11	3	7
26	3	3	7	8	7	5	5	9	1333	2235	6	7	18	25	18	11	11	29	16
27	7	5	7	10	16	17	13	13	3243	5363	20	11	18	36	111	123	68	62	56
28	9	8	9	8	9	10	11	11	1113	3453	30	25	30	23	28	40	48	46	34
29	14	14	13	8	6	8	11	13	2452	1332	74	82	68	23	15	21	43	66	49

FEB. 1976																			
	3 Ks						GS			AS									
1	9	8	6	8	11	10	12	9	2122	2243	33	21	16	24	46	35	59	33	33
2	9	7	6	6	9	11	9	7	2230	2223	29	18	16	16	31	48	31	19	26
3	8	5	10	10	8	6	8	8	2213	1355	25	12	34	36	25	16	26	25	25
4	9	5	5	6	6	8	9	8	4321	2234	32	13	12	14	16	25	32	21	21
5	5	2	3	6	8	8	6	10	2423	2135	12	4	6	14	25	23	14	35	17
6	9	7	5	3	5	4	4	5	4201	2223	32	20	13	7	13	10	9	12	15
7	3	2	1	13	11	11	12	9	2110	3233	6	5	3	61	48	44	55	33	32
8	11	9	11	13	11	14	12	11	4212	0153	50	27	42	69	48	77	57	43	52
9	11	9	7	11	10	9	11	14	3213	1235	46	27	18	42	37	33	46	73	40
10	9	8	7	9	9	9	12	9	3331	1322	31	26	20	28	30	30	55	31	31
11	5	4	5	8	8	5	6	11	2324	0313	12	10	13	25	26	13	16	50	21
12	7	6	8	5	6	10	9	11	4321	2032	20	15	21	12	15	36	28	48	24
13	13	9	7	7	10	10	9	11	2512	0232	61	27	17	17	36	36	33	48	34
14	7	11	6	8	11	10	7	5	3211	1452	20	45	15	22	44	37	17	13	27
15	5	4	5	4	8	8	6	5	2121	2232	11	8	13	9	24	23	15	11	14
16	2	2	3	4	5	5	6	5	1233	1344	5	4	6	9	11	11	16	11	9
17	4	5	5	8	8	11	10	12	2322	3103	8	11	12	25	25	42	38	60	28
18	11	10	10	9	9	8	7	10	1121	2234	42	37	35	32	32	24	20	37	32
19	8	8	10	9	11	10	11	11	3332	1235	25	26	39	32	41	39	42	42	36
20	6	8	9	8	9	10	7	9	2523	2343	22	21	31	25	28	34	20	26	26
21	8	7	5	9	7	8	9	7	3221	0323	22	20	13	31	19	22	29	17	22
22	7	6	5	8	8	6	7	5	2322	2232	20	14	13	22	21	16	17	12	17
23	3	4	2	3	4	3	1	2	1231	4322	7	8	5	6	8	6	2	4	6
24	2	2	2	2	3	2	3	1	2220	3223	4	4	5	5	6	5	7	3	5
25	2	4	3	4	2	4	4	2	2311	1422	4	8	7	9	4	8	9	4	7
26	4	3	5	9	7	5	7	9	2252	1324	10	7	11	29	17	13	18	32	17
27	6	6	7	10	14	15	14	12	2123	2364	21	14	17	36	83	98	83	60	52
28	10	8	9	8	9	9	10	10	5303	3322	35	22	28	23	28	32	27	40	31
29	14	14	11	8	5	7	11	15	5332	3113	72	72	48	21	13	20	45	88	47

MAR. 1976																			
	3 Kn					on			an				An						
1	9	11	9	9	11	8	7	10	2643	4333	27	45	28	28	41	26	18	35	31
2	7	11	9	9	11	13	14	14	2333	3543	17	50	31	27	46	64	72	75	48
3	11	10	11	9	11	12	12	13	1223	4454	47	38	41	29	50	57	62	54	47
4	11	7	5	9	7	6	8	4	3314	3233	45	20	13	27	20	14	21	8	21
5	5	6	8	9	6	7	6	13	4324	4554	13	16	22	32	15	18	15	67	25
6	9	9	8	10	11	14	12	15	2212	5553	30	31	25	36	47	72	57	87	48
7	13	9	10	12	9	13	10	11	1224	2421	65	29	34	54	30	68	34	43	45
8	14	15	15	12	14	10	10	11	3545	6564	84	88	93	55	71	39	37	45	64
9	11	13	11	11	14	12	13	15	4244	4443	47	64	47	44	76	59	68	95	63
10	11	13	8	10	11	11	10	14	2212	3443	46	66	24	38	47	48	39	76	48
11	11	11	8	12	12	11	11	9	3224	4441	45	45	21	53	56	44	45	29	42
12	13	12	10	13	10	8	8	11	3535	4323	66	53	37	64	35	25	26	43	44
13	11	5	8	7	8	6	7	8	2334	3433	42	12	22	17	21	15	19	23	21
14	12	10	8	7	6	5	4	5	6632	4412	56	39	22	20	16	11	8	12	23
15	6	8	9	7	11	11	8	11	2362	7823	14	21	32	18	49	46	23	50	32
16	8	9	11	6	10	11	12	7	1322	5551	24	30	41	15	36	44	55	17	33
17	9	8	11	11	9	7	9	12	2234	4261	33	24	50	45	31	18	31	53	36
18	9	4	7	11	6	5	10	8	3323	2134	32	10	17	44	14	13	35	26	24
19	5	7	10	8	7	6	9	4	1342	3442	11	18	39	23	20	14	27	10	20
20	5	6	8	8	9	5	4	3	4333	4210	13	16	24	26	28	11	8	6	17
21	3	2	5	6	8	5	3	2	3232	2232	6	5	11	15	23	13	7	4	11
22	0	1	3	4	2	4	2	2	1212	2223	1	3	6	9	4	8	4	5	5
23	0	0	3	4	5	6	8	5	1233	1433	1	1	6	9	13	15	23	13	10
24	6	4	4	1	2	1	2	3	2242	2111	14	8	9	2	5	2	5	6	6
25	1	2	4	1	4	4	6	7	2333	2422	3	4	10	3	9	9	14	18	9
26	11	18	21	21	20	20	18	13	2566	4444	43	158	284	256	223	242	160	67	179
27	16	12	10	7	12	11	13	12	5323	5462	111	55	36	17	60	44	64	60	56
28	9	11	8	5	8	8	8	6	2323	3431	30	43	22	11	23	26	26	14	24
29	10	12	12	7	4	5	4	3	3632	1232	34	60	51	19	9	12	8	7	25
30	3	3	7	7	9	7	10	10	1033	4243	7	6	20	17	27	17	37	39	21
31	8	4	8	6	8	6	8	5	2342	5344	23	9	21	15	22	14	23	12	17

MAR. 1976												
	3 Ks						as		as			
1	10	11	6	8	11	8	7	10	2622	2145	40	43
2	7	10	8	7	10	12	14	13	2312	0343	19	39
3	10	9	10	8	11	13	13	13	2242	3245	38	29
4	10	7	5	7	6	6	6	4	4221	0144	40	19
5	7	5	6	7	6	9	6	12	4301	2024	17	13
6	9	10	7	9	11	13	12	16	3432	3552	31	36
7	13	9	7	10	8	12	10	11	3302	2024	69	31
8	14	12	13	11	12	9	8	11	4324	4435	72	52
9	12	13	10	10	12	12	13	15	2334	2232	55	70
10	11	12	7	10	10	11	11	15	5424	0323	50	58
11	11	10	6	10	11	11	10	9	3002	2124	43	36
12	13	11	10	13	10	8	9	11	3315	2122	63	41
13	12	5	6	7	8	5	9	8	3454	1343	52	11
14	11	9	7	6	7	5	3	5	6444	5223	47	32
15	6	8	9	6	10	9	7	11	2530	5223	15	26
16	8	8	8	6	9	9	11	6	1330	2032	24	23
17	10	8	10	11	8	7	8	12	3233	2122	34	21
18	9	5	6	9	4	4	8	8	1224	0323	31	13
19	6	6	9	7	7	5	8	3	2453	3120	16	16
20	5	6	8	7	7	5	3	2	2333	2332	11	14
21	4	4	3	5	6	5	3	2	0111	2222	9	8
22	2	2	3	3	1	3	1	1	3321	2432	4	4
23	1	1	3	3	4	6	8	6	2321	4113	2	3
24	8	4	1	0	1	1	1	2	3310	2212	21	10
25	1	2	4	1	4	2	5	7	1241	3341	3	4
26	10	16	20	18	19	19	18	15	1535	4556	34	119
27	17	11	9	6	12	11	13	12	3221	4124	128	48
28	10	11	8	5	7	7	7	5	3232	1133	34	48
29	12	12	10	6	4	4	3	3	6511	3233	52	52
30	3	3	7	5	9	6	11	9	1142	3114	7	7
31	9	4	8	6	7	5	7	2	2322	3233	29	10

Table 9 - continued

MAR. 1976																	
	3 Km						Σ Km		dm				Am		Am2		
1	9	11	8	8	11	8	7	10	24.0	33	44	22	25	42	24	19	35
2	7	11	9	8	11	13	14	14	29.0	18	45	27	24	42	61	71	72
3	11	10	10	8	13	12	13	12	29.0	43	34	38	25	49	59	62	58
4	11	7	5	8	7	6	7	4	18.3	43	20	12	22	17	15	18	9
5	6	6	7	8	6	8	6	13	20.0	15	14	19	25	14	23	15	63
6	9	9	8	9	11	13	12	15	28.7	31	33	23	31	48	66	55	96
7	13	9	9	11	9	13	10	11	28.3	67	30	27	46	27	62	36	45
8	14	13	14	12	13	10	9	11	32.0	78	70	77	52	64	35	31	46
9	12	13	11	11	13	12	13	15	33.3	51	67	41	42	66	56	68	91
10	11	13	8	10	11	11	11	14	29.7	48	62	22	39	42	48	41	83
11	11	10	7	11	12	11	11	9	27.3	44	40	18	46	51	44	41	31
12	13	11	10	13	10	8	8	11	28.0	65	47	37	63	38	24	26	45
13	11	5	7	7	8	6	8	8	20.0	47	12	18	17	22	14	23	22
14	12	10	7	7	6	5	3	5	18.3	51	35	20	17	16	11	7	13
15	6	8	9	7	11	10	8	11	23.3	14	24	30	17	42	37	21	50
16	8	8	9	6	10	10	11	6	22.7	24	26	33	15	34	38	49	16
17	9	8	11	11	9	7	8	12	25.0	33	23	42	44	27	17	26	54
18	9	5	6	10	5	5	9	8	19.0	31	11	16	38	12	11	31	24
19	6	7	10	8	7	5	8	4	18.3	14	17	35	21	20	13	25	9
20	5	6	8	8	8	5	3	2	15.0	12	15	22	23	24	11	7	5
21	4	3	4	5	7	5	3	2	11.0	8	7	9	13	19	12	7	4
22	1	2	3	3	2	3	1	2	5.7	2	4	6	7	4	7	3	4
23	0	1	3	4	5	6	8	6	11.0	1	2	6	8	11	15	22	14
24	7	4	3	0	1	1	2	2	6.7	17	9	6	1	3	2	4	5
25	1	2	4	1	4	3	5	7	9.0	3	4	10	3	9	7	13	17
26	10	17	21	20	20	20	18	14	46.7	39	138	247	206	207	221	166	81
27	16	12	9	6	12	11	13	12	30.3	119	52	32	16	60	46	64	59
28	9	11	8	5	7	8	8	5	20.3	32	45	22	11	20	22	21	13
29	11	12	11	7	4	4	3	3	18.3	43	56	44	17	9	10	7	7
30	3	3	7	6	9	6	11	10	18.3	7	7	20	15	29	16	41	36
31	8	4	8	6	7	5	8	4	16.7	26	9	22	15	20	12	21	9

APR. 1976												
	3 Kn						On		an			
1	16	21	22	22	16	10	8	8	2554	3445	107	266
2	10	9	7	3	3	6	9	12	3643	3424	40	33
3	9	14	14	5	12	11	12	14	2331	3353	33	77
4	14	11	13	13	11	11	7	11	1344	3532	84	43
5	10	12	11	10	9	8	11	9	2323	3332	36	52
6	12	12	11	12	11	9	11	10	3534	4233	52	59
7	10	9	11	11	13	7	9	12	2425	4233	40	30
8	12	9	5	8	8	4	8	8	3212	5243	52	30
9	11	9	5	5	9	10	7	8	4233	5543	42	31
10	8	10	8	8	8	6	4	6	3443	4322	21	38
11	7	5	5	9	10	5	7	10	3314	6134	18	13
12	6	8	10	8	5	4	3	6	4443	3314	14	22
13	9	6	5	7	6	6	9	7	4322	1232	30	16
14	7	7	9	7	10	9	7	9	3323	3433	17	17
15	4	1	3	3	4	3	4	5	2221	2212	9	3
16	7	8	7	5	4	4	4	7	3332	2224	17	22
17	4	8	5	3	2	5	6	1	1232	3241	8	25
18	0	0	2	4	1	0	1	1	1111	2212	0	1
19	4	2	3	7	3	5	5	2	3122	2431	8	5
20	0	2	1	3	2	1	2	1	1232	2221	1	4
21	1	2	4	7	6	5	3	6	2243	2421	2	5
22	7	10	12	11	8	7	8	8	2132	3432	20	35
23	8	7	4	4	5	5	5	5	2433	3242	25	19
24	3	9	9	9	10	6	10	9	1234	5441	7	28
25	5	8	7	4	5	5	5	7	2123	3413	12	25
26	5	4	5	5	5	5	3	5	2334	4311	12	10
27	9	9	7	5	6	6	7	8	1523	1551	33	31
28	8	7	9	4	4	5	6	8	1342	2433	22	20
29	5	7	5	8	8	11	11	11	4133	2614	12	18
30	6	10	10	7	6	5	6	5	2223	5134	16	34

APR. 1976		3 Ks					QS			AS					As					
1		16	21	21	21	14	11	9	9	2412	3217	105	251	258	267	82	42	30	30	133
2		11	9	6	2	2	5	9	13	3541	3333	41	33	15	4	5	12	29	62	25
3		11	14	13	5	13	12	13	17	5213	1133	50	71	62	13	62	53	69	141	65
4		15	10	12	13	13	10	6	12	1224	2406	93	40	59	69	61	38	14	57	54
5		11	12	11	10	9	9	13	9	4312	3234	43	60	45	40	28	31	69	32	44
6		11	11	11	13	12	10	12	11	4445	1224	43	47	45	63	55	35	55	43	48
7		9	11	10	13	6	9	12		2223	4232	43	30	48	36	63	15	32	58	41
8		13	8	5	7	7	4	9	8	5241	3245	62	22	11	17	19	10	27	22	24
9		12	9	4	3	9	9	7	7	6421	3133	52	30	9	6	29	29	20	17	24
10		9	10	7	7	7	5	3	4	6625	2442	27	39	17	19	17	12	6	9	18
11		7	5	4	7	9	6	7	9	5123	2123	20	11	10	20	30	15	17	30	19
12		6	8	8	7	4	2	3	4	4444	1313	16	23	24	18	8	4	7	6	14
13		9	7	3	6	5	6	8	8	2421	0212	29	18	7	15	13	15	25	26	19
14		6	6	8	8	10	9	7	9	3233	5212	14	16	26	22	38	30	18	29	24
15		3	1	1	2	3	2	3	4	2222	1313	6	3	3	4	6	4	6	8	5
16		6	7	7	4	4	1	2	9	4143	1124	15	17	17	10	8	2	5	27	13
17		4	8	6	2	0	4	5	0	3322	1131	10	26	16	4	1	9	11	1	10
18		0	1	1	3	0	0	0	0	1202	1101	1	3	2	6	1	1	0	1	2
19		4	2	2	5	2	4	5	1	5322	2122	10	5	4	12	4	10	12	2	7
20		2	3	0	1	2	0	1	0	2300	3120	4	7	0	2	5	1	2	0	3
21		0	1	3	6	6	4	2	4	1123	2122	1	3	7	15	16	10	5	9	8
22		7	11	12	10	7	7	9	9	4331	2023	19	42	54	37	17	17	29	30	31
23		9	7	5	3	5	4	3	4	4342	2215	28	20	11	6	13	9	7	8	13
24		4	8	8	10	11	6	11	13	4333	3124	8	25	26	34	42	16	45	25	28
25		8	7	5	2	5	5	5	8	5232	2245	24	20	13	5	12	12	13	22	15
26		4	4	4	4	4	4	2	5	3556	4125	10	8	10	10	9	9	5	12	9
27		9	9	7	4	3	6	7	9	5432	3223	33	32	20	9	7	14	17	30	20
28		9	6	7	4	4	5	5	8	4442	3123	28	15	17	9	9	12	13	24	16
29		6	7	4	8	9	12	11	13	4343	1435	15	17	9	24	31	53	43	63	32
30		8	10	10	7	6	4	5	2	6231	0333	26	36	34	17	16	8	12	5	19

MAY 1976											an											An
3 Kn											an					an					An	
1	9	5	6	5	5	8	8	9	4232	3531	28	11	14	11	12	22	21	31	19	19		
2	11	11	6	12	14	10	16	19	3344	4353	46	42	16	56	75	37	119	192	73	73		
3	20	20	19	18	14	11	.9	7	3824	1422	232	233	179	164	75	49	32	17	123	123		
4	6	10	11	10	8	12	11	8	3532	1432	16	38	47	34	25	52	42	23	35	35		
5	12	11	7	8	7	4	7	7	5423	2246	57	42	17	23	17	10	18	19	25	25		
6	6	9	8	8	5	5	5	8	1544	3332	16	30	24	23	13	12	11	21	19	19		
7	9	7	5	5	5	7	5	8	2233	4624	33	18	12	13	13	20	12	25	18	18		
8	9	8	8	5	9	6	5	5	4341	3211	29	24	22	11	28	16	13	12	19	19		
9	7	5	5	2	2	2	2	3	4223	1430	17	12	11	5	5	4	6	6	6	6		
10	1	5	5	4	7	8	5	3	2133	3331	3	13	11	10	17	26	12	6	12	12		
11	5	6	9	7	8	8	10	9	1343	3430	13	15	28	19	21	21	34	30	23	23		
12	8	5	6	7	5	5	4	5	3122	3422	23	11	15	17	13	12	10	11	14	14		
13	4	5	6	4	8	6	4	4	1222	3423	8	13	15	8	21	15	10	9	12	12		
14	4	3	5	1	4	4	2	1	2233	3323	10	6	11	3	8	8	5	3	7	7		
15	4	4	3	2	5	5	4	8	4353	3432	9	8	7	5	13	12	8	25	11	11		
16	6	6	4	7	5	4	3	3	2233	2212	14	14	9	18	12	8	6	6	11	11		
17	3	4	4	4	2	2	4	4	3242	2323	6	9	10	10	5	5	8	9	8	8		
18	1	2	1	3	4	4	3	3	2332	2331	3	4	2	7	8	9	6	7	6	6		
19	3	3	4	4	4	9	11	12	3433	1431	7	7	10	9	9	33	43	52	21	21		
20	10	11	11	9	7	8	11	9	1323	5450	34	50	41	27	20	21	44	28	33	33		
21	10	7	5	7	8	8	7	7	4333	4524	35	18	13	17	23	22	18	20	21	21		
22	6	6	11	6	8	8	8	8	2132	3334	15	16	42	14	21	22	23	23	22	22		
23	4	3	11	11	11	9	8	5	3233	3332	8	7	50	42	41	32	21	13	27	27		
24	5	6	6	6	4	5	3	7	3132	2322	11	15	16	16	11	11	7	18	13	13		
25	7	9	8	8	6	8	8	3	3224	2410	20	28	22	21	15	23	21	7	20	20		
26	6	6	3	5	5	7	6	5	1324	3222	14	14	7	12	12	17	14	11	13	13		
27	2	7	5	6	5	4	6	4	2224	2212	4	20	12	16	11	9	14	9	12	12		
28	6	10	10	10	10	10	7	6	3424	6320	15	34	39	38	35	34	18	15	29	29		
29	8	9	7	11	7	8	12	11	2023	2233	23	30	18	42	19	21	57	49	32	32		
30	10	8	8	11	8	7	9	9	3121	3522	38	25	21	49	22	19	27	27	29	29		
31	6	7	8	7	7	6	6	8	2223	3523	15	20	25	17	18	16	14	21	18	23.6		
MAY 1976											as					as					As	
3 Ks											as					as					As	
1	8	5	6	3	4	7	7	9	5232	2231	25	11	14	7	10	19	18	32	17	17		
2	13	11	5	12	14	11	15	20	3314	3213	62	48	12	59	82	42	97	205	76	76		
3	21	18	19	19	13	11	10	8	6543	2223	261	159	199	196	67	43	36	26	123	123		
4	7	11	11	10	9	12	10	9	5314	2304	18	41	45	34	27	58	38	33	37	37		
5	14	13	5	7	6	3	9	7	4303	1215	86	65	13	20	15	6	27	20	32	32		
6	8	8	7	8	5	5	5	9	4444	2224	23	22	19	22	12	11	13	27	19	19		
7	12	6	4	4	5	6	4	10	4310	3316	52	14	10	9	13	14	10	34	20	20		
8	10	9	7	4	8	4	4	4	5541	2221	35	29	20	8	22	9	10	8	18	18		
9	7	5	3	0	1	1	0	0	3401	1211	18	11	7	1	2	3	1	1	6	6		
10	0	4	3	4	5	10	1	1	1341	2333	1	9	7	8	12	36	3	3	10	10		
11	5	6	7	7	5	6	10	9	4441	2222	12	16	18	18	13	15	40	31	20	20		
12	7	6	5	6	4	4	2	6	2331	2214	20	14	13	14	10	9	4	14	12	12		
13	3	7	5	3	5	3	2	3	1320	2232	7	18	12	7	13	6	5	6	9	9		
14	5	2	2	0	2	1	1	0	4220	2301	11	5	4	0	5	3	2	1	4	4		
15	0	2	0	0	4	4	2	9	1111	2122	1	5	1	1	8	9	4	29	7	7		
16	4	5	3	5	5	1	0	0	3432	2211	10	11	6	13	11	2	1	1	7	7		
17	1	2	2	3	1	0	2	3	1023	2011	2	5	4	7	3	0	5	6	4	4		
18	0	1	0	1	1	1	1	1	1110	2222	1	2	1	2	3	3	2	3	2	2		
19	2	1	2	2	2	6	11	10	2231	0432	4	3	5	5	5	16	50	40	16	16		
20	10	13	11	8	7	8	11	8	3211	1042	34	65	42	24	17	25	49	24	35	35		
21	11	8	7	7	8	7	6	6	5432	4131	44	22	20	17	22	17	15	16	22	22		
22	6	6	9	5	5	8	9	8	3231	2341	16	14	31	12	11	24	28	23	20	20		
23	2	2	12	11	11	8	7	6	0210	3242	5	4	51	48	42	24	19	14	26	26		
24	7	6	5	5	3	2	2	5	3332	3312	17	14	11	12	6	5	5	13	10	10		
25	6	7	5	6	4	6	6	1	2223	2202	15	18	13	16	10	15	15	3	13	13		
26	6	6	1	3	2	4	4	2	2532	2522	14	15	3	6	5	8	10	5	8	8		
27	0	5	4	4	4	3	4	3	0351	3213	0	13	8	9	8	6	10	6	8	8		
28	7	9	9	10	9	10	8	5	5524	3322	18	32	31	37	27	35	24	13	27	27		
29	8	9	6	10	6	7	15	14	4215	3135	22	29	14	38	16	18	91	73	38	38		
30	13	9	6	10	8	7	9	8	7432	3243	64	32	15	40	23	17	32	23	31	31		
31	7	8	8	6	4	7	4	8	3622	4124	17	25	22	16	9	17	10	26	18	18		

22.4

MAY 1976		3 Km										Σ Km		am								Am	
		9	5	6	4	5	7	7	9	17.3	27	11	14	9	11	20	20	32	18	23			
1		9	5	6	4	5	7	7	9	17.3	27	11	14	9	11	20	20	32	18	23			
2		12	11	6	12	14	10	16	19	33.3	54	45	14	57	79	40	108	198	74	93			
3		21	19	19	19	14	11	10	8	40.3	246	196	189	180	71	46	34	22	123	97			
4		7	10	11	10	8	12	10	9	25.7	17	40	46	34	26	55	40	28	36	39			
5		14	12	6	8	6	4	8	7	21.7	72	53	15	21	16	8	22	20	26	29			
6		7	8	8	8	5	5	5	8	18.0	20	26	21	22	12	11	12	24	19	18			
7		11	6	5	5	5	7	5	9	17.7	42	16	11	11	13	17	12	19	19	19			
8		9	8	8	4	8	5	5	4	17.0	32	26	21	9	25	12	11	10	18	16			
9		7	5	4	1	1	2	1	1	7.3	17	11	9	3	3	4	3	3	7	9			
10		1	5	4	4	6	9	3	2	11.3	2	11	9	9	14	31	7	4	11	11			
11		5	6	8	7	7	7	10	9	19.7	12	16	23	18	17	18	37	30	21	18			
12		8	5	6	6	5	5	3	5	14.3	22	13	14	16	11	11	7	13	13	16			
13		4	6	5	3	7	4	4	4	12.3	8	15	13	7	17	10	8	8	11	10			
14		4	3	4	1	3	3	1	1	6.7	10	6	8	2	7	6	3	2	6	7			
15		2	3	2	1	4	4	3	9	9.3	5	7	4	3	10	10	6	27	9	9			
16		5	5	3	6	5	2	1	1	9.3	12	13	7	15	11	5	3	3	9	9			
17		2	3	3	4	2	1	3	3	7.0	4	7	7	9	4	3	6	7	6	5			
18		1	1	1	2	2	3	2	2	4.7	2	3	2	5	5	6	4	5	4	5			
19		3	2	3	3	3	8	11	11	14.7	6	5	7	7	7	24	47	46	19	20			
20		10	12	11	8	7	8	11	6	25.0	34	57	41	26	19	23	46	26	34	31			
21		10	7	6	7	8	7	7	7	19.7	40	20	16	17	22	20	17	18	21	22			
22		6	6	10	5	6	8	8	8	19.0	16	15	36	13	16	23	26	23	21	22			
23		3	3	11	11	11	9	7	5	20.0	7	6	50	45	42	28	20	13	26	22			
24		6	6	5	6	3	4	3	6	13.0	14	15	13	14	7	8	6	15	12	17			
25		7	8	7	7	5	7	7	2	16.7	17	23	17	19	13	19	18	5	16	13			
26		6	6	2	4	4	5	5	4	12.0	14	14	5	9	8	13	12	8	10	11			
27		1	6	4	5	4	4	5	4	11.0	2	16	10	13	9	8	12	8	10	15			
28		7	9	10	10	9	10	8	6	23.0	17	33	35	38	31	34	21	14	28	23			
29		8	9	6	10	7	7	14	13	24.7	22	29	16	40	18	20	74	61	35	33			
30		12	9	7	11	8	7	9	8	23.7	51	28	18	45	23	18	29	25	30	31			
31		6	8	8	7	6	7	5	8	18.3	16	22	23	17	14	17	12	24	18	17			

Table 9 - continued

JUNE 1976																			
	3 Kn					Gn		an					An						
1	4	4	6	5	6	6	7	7	1333	5421	8	8	16	12	15	16	19	19	14
2	5	6	8	6	4	7	6	4	2132	3232	13	15	24	15	9	19	14	8	15
3	6	5	3	5	7	8	12	9	1222	6532	14	12	7	12	17	23	56	32	22
4	10	13	8	9	10	6	7	8	2333	3131	37	64	26	27	35	14	19	23	31
5	8	11	11	11	11	8	8	10	1344	4311	21	44	44	50	48	26	23	36	37
6	6	7	8	7	7	8	5	7	2433	2411	16	18	22	19	19	24	12	17	18
7	8	8	10	8	8	7	5	10	3324	2323	22	24	35	24	23	20	13	36	25
8	7	8	7	10	5	6	7	6	1323	2220	17	23	19	35	11	14	17	15	19
9	4	5	6	4	1	1	3	2	1133	4211	9	11	14	10	3	3	7	5	8
10	4	5	5	5	5	4	5	8	2134	3312	8	12	12	12	13	9	11	22	12
11	11	14	11	12	13	9	8	6	3535	7423	46	75	49	60	62	29	21	15	45
12	4	6	7	9	8	9	5	4	3243	3422	10	14	18	29	26	?7	13	10	18
13	4	5	8	3	5	1	1	4	2124	2222	9	12	24	6	11	2	3	10	10
14	5	4	2	2	1	1	3	3	3213	2112	12	10	5	4	2	2	6	6	6
15	2	2	2	2	2	4	6	8	3332	2132	5	4	5	4	4	8	14	22	8
16	5	6	4	7	3	4	4	5	2134	4312	11	15	10	17	6	8	8	12	11
17	6	6	9	12	10	9	7	9	2142	5422	14	16	27	52	37	31	20	31	29
18	10	11	12	13	9	8	7	8	2213	2322	39	47	59	63	28	21	20	24	38
19	3	5	5	6	4	4	3	3	2232	3211	7	11	13	14	9	10	7	6	10
20	5	3	5	8	5	4	4	3	2223	3332	11	7	13	21	11	10	8	6	11
21	2	1	2	4	4	3	5	3	2132	4111	4	3	5	8	10	7	13	7	7
22	3	1	3	3	4	3	3	3	1212	4222	6	3	7	6	9	6	7	7	6
23	6	3	6	4	4	3	3	4	2244	2332	14	7	14	9	10	7	7	9	10
24	3	5	5	5	4	11	13	12	1133	4413	7	13	13	11	8	45	65	58	28
25	11	9	11	8	8	6	8	7	2344	1333	48	27	44	22	23	26	26	18	29
26	7	4	3	4	4	3	8	8	2332	2253	17	8	7	9	8	7	26	23	13
27	6	7	8	6	7	5	5	5	1353	3312	15	17	26	14	17	12	13	11	16
28	6	4	5	4	3	4	6	5	2223	4342	14	10	12	8	6	10	15	13	11
29	3	5	5	5	2	6	6	2	2243	2332	7	11	12	13	4	16	14	5	10
30	5	7	13	18	8	9	9	10	2323	2221	13	20	68	165	25	28	30	35	48

JUNE 1976																			
	3 Ks						QS			QS				AS					
1	3	1	5	4	4	4	7	7	4031	4166	6	2	13	9	10	9	17	20	11
2	8	6	7	4	1	7	5	2	5412	3022	21	15	17	10	3	17	13	5	13
3	6	4	3	4	5	6	12	10	3333	4251	15	10	6	8	11	15	58	34	20
4	11	11	8	7	10	4	4	5	3323	3432	46	49	24	20	36	9	10	13	26
5	9	9	9	10	11	7	7	9	4243	2144	32	27	32	36	46	18	18	27	30
6	7	5	6	7	7	7	5	6	3303	3022	17	13	15	18	19	17	11	15	16
7	8	8	9	6	8	5	4	9	3331	2223	23	21	28	16	21	13	9	33	21
8	7	6	6	8	6	3	5	5	1312	2123	18	21	15	24	14	7	11	11	15
9	2	2	5	3	0	0	0	0	2322	1011	4	5	12	7	1	0	1	1	4
10	2	3	3	3	5	3	2	9	3302	4337	5	7	7	7	12	7	5	28	10
11	13	13	10	12	12	9	7	7	4524	3025	65	69	40	60	55	30	19	18	45
12	2	4	4	8	8	7	4	2	1232	2232	5	9	10	21	22	20	9	5	13
13	1	4	6	1	4	1	0	4	1212	5203	3	9	15	3	8	2	0	8	6
14	3	4	2	0	0	0	0	0	4552	0000	6	10	5	1	0	0	0	0	3
15	0	0	0	0	0	1	6	7	0111	0233	0	1	1	1	0	2	14	20	5
16	4	5	3	5	1	0	0	4	3311	2113	10	12	7	11	3	1	1	8	7
17	4	6	7	11	10	8	6	7	2523	3311	9	14	20	42	36	26	14	17	22
18	9	9	12	12	8	8	7	7	5222	1164	31	27	55	56	23	23	20	19	32
19	1	2	4	4	3	2	2	0	1241	2200	3	4	9	8	6	5	5	0	5
20	5	2	4	5	1	3	2	1	4232	1112	13	4	9	12	3	6	4	2	7
21	0	0	0	1	1	1	3	1	1011	2232	1	0	1	3	3	2	6	2	2
22	0	0	2	1	1	1	0	0	0102	1211	0	1	5	3	3	2	3	1	2
23	4	2	2	1	2	3	0	3	3320	2113	10	4	5	2	5	6	1	6	5
24	2	6	5	2	1	10	11	12	3522	2315	4	15	13	4	2	34	45	53	21
25	13	9	11	7	6	7	10	7	5513	2232	63	31	42	20	15	19	38	19	31
26	8	3	3	2	3	2	12	10	4212	1253	22	6	6	5	6	4	52	34	17
27	8	7	7	4	4	5	5	3	4400	2244	23	20	18	9	10	11	12	7	14
28	7	3	5	2	1	1	7	4	5331	1124	19	7	13	5	3	3	18	9	10
29	4	5	4	4	1	4	5	1	4643	2331	9	12	9	10	2	8	13	3	8
30	5	6	13	16	8	7	8	9	3433	2213	12	15	63	118	21	20	21	29	37

JULY 1976												AUGUST 1976												
	3 Kn						Gn			an						An								
1	10	14	9	12	9	8	7	5	2423	3322	34	76	30	55	30	22	18	12	35					
2	9	5	9	8	8	7	5	4	2342	3222	27	11	31	21	23	17	13	10	19					
3	3	9	8	11	7	9	6	9	2235	3312	7	29	24	48	17	29	14	27	24					
4	6	7	12	9	8	8	9	5	3373	3553	15	17	59	33	22	25	32	11	27					
5	5	5	5	6	7	6	5	5	3223	4522	11	13	13	15	20	14	11	11	14					
6	8	4	6	4	5	5	4	4	3123	3223	23	9	14	9	13	12	8	10	12					
7	8	6	7	8	5	8	4	7	2352	4632	23	16	18	24	22	21	10	19	18					
8	5	8	7	6	10	8	10	7	2323	4432	11	25	20	16	40	25	36	19	24					
9	9	10	7	8	6	7	6	6	2353	3201	32	34	17	22	16	20	14	15	21					
10	4	8	6	8	5	3	4	4	2532	2222	9	26	16	21	11	7	10	8	14					
11	4	3	4	4	4	4	5	4	1223	4222	9	6	9	10	8	8	11	10	9					
12	6	5	4	3	4	4	4	5	2224	4422	15	11	10	6	10	9	12	17	11					
13	4	6	5	4	5	4	3	4	2223	4422	10	14	13	8	11	8	7	9	10					
14	4	5	8	5	7	5	3	3	1233	3402	10	13	23	13	18	11	7	7	13					
15	5	5	6	7	8	12	13	10	3212	5542	11	11	16	19	22	59	67	37	30					
16	9	8	12	7	9	8	10	7	2232	3541	27	25	53	19	32	22	34	17	29					
17	4	6	3	4	5	4	4	5	2123	3332	10	14	7	10	11	10	10	11	10					
18	4	7	6	2	3	3	6	6	1304	1221	9	18	14	5	6	7	14	14	11					
19	8	3	5	4	4	5	4	3	5213	3232	21	7	13	8	10	12	9	6	11					
20	4	4	5	5	4	4	3	4	2331	3311	8	9	11	11	9	8	7	8	9					
21	4.	1	2	4	5	5	0	1	3122	2312	8	3	4	8	11	12	1	3	6					
22	5	4	7	6	4	3	2	3	1131	3221	11	9	19	15	10	6	5	7	10					
23	5	5	4	3	7	6	4	2	1122	4732	12	13	9	7	17	14	8	4	11					
24	1	3	2	3	5	5	7	6	2224	4332	3	6	5	7	12	12	18	14	10					
25	10	7	7	6	8	5	4	7	2232	3333	39	20	17	15	22	12	9	20	19					
26	8	2	0	2	2	2	4	5	2222	2231	22	5	1	4	4	4	10	13	8					
27	4	6	4	8	7	5	9	9	3233	2322	10	14	10	24	17	13	27	29	18					
28	10	8	12	9	10	8	10	8	1142	4341	35	25	55	30	38	26	38	23	34					
29	11	10	10	10	8	8	8	9	3352	4234	41	40	34	40	23	26	22	31	32					
30	8	12	11	11	13	6	7	8	2523	5323	21	54	43	43	63	16	20	25	36					
31	6	5	9	9	8	7	5	6	0145	3322	14	12	31	29	22	19	11	15	19					

JULY 1976																			
	3 Ks					6s			8s				As						
1	11	13	9	11	8	9	6	4	5524	1223	44	63	27	46	25	27	16	10	32
2	9	5	9	7	8	7	4	5	4201	2222	28	13	28	17	24	20	10	13	19
3	2	8	8	11	6	8	5	9	3336	1022	4	26	23	47	16	26	13	31	23
4	6	5	11	10	8	9	10	4	1343	2341	14	12	46	34	25	27	34	8	25
5	3	5	5	4	6	7	3	4	3420	1211	7	11	13	9	14	20	7	8	11
6	9	3	5	3	6	4	4	3	5031	1300	32	7	13	7	14	10	9	7	12
7	7	6	5	6	4	6	3	8	5444	1144	20	16	21	15	9	16	7	23	15
8	5	8	7	6	9	7	10	7	2433	1024	11	23	20	15	28	18	36	19	21
9	8	10	5	8	5	5	5	4	2503	3223	24	35	13	23	12	11	12	10	18
10	3	7	7	5	4	1	3	4	4453	1223	7	20	19	13	8	3	7	8	11
11	4	2	3	3	1	3	4	2	1231	2032	8	5	6	6	2	7	10	5	6
12	5	4	3	2	2	3	3	5	2322	3032	13	10	7	5	5	7	6	13	8
13	3	4	4	3	2	2	2	1	1354	1222	6	10	8	7	5	4	4	3	6
14	4	4	7	4	4	3	0	1	4532	1412	9	10	18	9	8	7	1	2	8
15	5	5	5	6	5	9	11	9	4423	2233	12	11	12	15	12	30	50	30	22
16	8	9	12	6	8	6	10	7	1440	2003	23	28	52	15	24	15	36	19	27
17	4	5	3	3	4	2	2	5	2225	3322	9	12	7	7	9	4	5	12	8
18	3	5	5	1	2	3	4	6	2322	2315	7	13	12	2	4	6	8	15	8
19	9	3	5	2	3	3	2	1	5332	0452	27	7	11	5	7	7	5	2	9
20	3	3	4	3	1	1	2	2	2341	1113	7	7	9	6	3	3	5	5	6
21	3	2	0	3	4	2	0	0	3211	4200	6	5	1	6	8	4	0	0	4
22	2	2	7	5	2	0	0	2	2132	2112	4	4	18	12	4	1	1	4	6
23	4	4	2	1	4	4	2	1	2321	2011	9	10	4	3	10	9	5	3	7
24	0	2	1	1	3	4	7	4	1332	2131	1	4	3	3	7	8	19	10	7
25	11	7	5	5	5	5	2	5	3222	0234	41	18	13	11	13	13	4	13	16
26	7	3	0	0	1	1	3	5	2210	3122	18	7	1	0	2	3	6	12	6
27	4	5	3	8	6	4	8	8	1214	4353	8	11	7	23	14	8	22	25	15
28	10	8	10	9	8	8	10	7	4320	3212	36	21	40	28	26	24	39	19	29
29	11	10	9	10	9	8	7	8	3314	1152	42	38	31	37	30	25	18	26	31
30	7	11	9	10	11	6	6	8	5523	3025	17	44	27	36	44	15	15	22	28
31	7	4	8	8	6	4	4	4	4222	0122	17	9	21	21	14	8	9	10	14

Table 9 - continued

AUG. 1976											AM										
	3 Km					Σ Km			am					Am		Am2					
1	3	7	7	5	4	5	8	10	16.3	7	18	20	11	8	13	24	37	17	18		
2	9	8	6	7	4	2	2	4	14.0	28	26	16	19	10	5	4	9	15	17		
3	3	8	5	5	9	4	5	6	16.0	7	26	22	13	11	32	10	14	17	13		
4	7	4	4	4	5	3	2	4	11.0	20	9	9	9	13	7	5	10	10	12		
5	6	3	3	4	6	8	4	4	12.7	15	7	6	9	16	25	9	8	12	11		
6	5	6	6	4	4	4	4	3	12.0	12	16	14	8	9	9	9	6	10	11		
7	1	4	6	6	8	1	3	7	12.0	3	8	16	14	25	3	7	18	12	10		
8	4	6	2	1	2	5	5	4	9.7	10	16	5	3	4	11	13	9	9	16		
9	5	6	12	11	10	2	4	7	19.0	12	15	59	43	38	5	6	18	25	20		
10	8	10	4	7	5	5	2	6	15.7	24	37	8	17	13	12	4	14	16	16		
11	6	6	6	4	3	2	3	0	10.0	15	14	16	10	7	5	6	1	9	8		
12	2	2	0	2	2	3	6	4	7.0	5	5	1	5	5	6	16	9	7	6		
13	2	3	2	5	2	3	2	2	7.0	4	7	5	5	12	4	6	5	5	6		
14	3	4	2	7	8	3	2	1	10.0	6	8	5	15	21	6	5	3	9	6		
15	0	1	0	1	3	2	3	4	4.7	1	2	1	3	7	4	6	9	4	7		
16	2	4	2	7	9	7	5	7	14.3	5	10	5	17	33	17	11	17	14	11		
17	7	4	0	1	3	5	3	5	9.3	18	8	1	2	7	12	7	13	9	11		
18	4	4	2	4	5	1	4	4	9.3	10	10	5	8	12	3	10	8	8	10		
19	4	5	7	4	6	4	4	3	12.3	9	12	18	9	15	10	9	7	11	10		
20	5	5	5	4	3	3	4	4	11.0	11	12	11	9	6	6	9	8	9	11		
21	2	4	8	9	6	5	7	9	16.7	5	8	25	27	14	11	20	28	17	13		
22	7	3	2	5	4	4	2	3	10.0	20	7	4	12	8	9	5	7	9	17		
23	5	6	11	13	14	14	9	15	29.0	12	15	43	62	83	75	30	90	51	40		
24	11	10	9	14	11	10	9	6	26.7	43	36	33	81	41	34	32	16	40	48		
25	11	11	11	11	11	10	10	8	27.7	47	41	45	43	45	36	36	24	40	38		
26	11	11	11	10	9	8	8	9	25.7	45	44	50	34	28	23	24	31	35	32		
27	8	3	4	12	6	7	9	8	19.0	25	7	10	53	15	17	30	23	23	22		
28	6	5	7	8	9	10	9	2	18.7	14	12	17	22	28	34	32	4	20	19		
29	3	6	6	5	5	4	4	4	12.3	7	15	16	11	11	10	10	9	11	14		
30	6	5	1	4	4	3	4	7	11.3	15	12	3	8	10	7	9	20	11	10		
31	0	4	4	4	6	6	5	6	11.7	1	8	10	10	16	14	13	16	11	12		16.0

AUG. 1976																			
	3 Kn					on		an					An						
1	4	7	8	5	4	5	8	10	2431	4454	9	17	21	12	9	13	23	39	18
2	9	9	7	8	5	4	2	5	5332	2211	29	30	17	21	11	8	5	11	17
3	4	9	8	5	6	10	5	5	3331	2623	9	31	26	13	15	34	11	12	19
4	7	4	4	5	6	4	4	6	4223	5221	19	9	10	11	14	8	8	14	12
5	7	4	4	4	6	9	5	5	3232	4322	17	8	8	10	16	31	11	11	14
6	6	6	7	4	4	4	4	4	1114	3232	14	16	17	10	10	10	9	9	12
7	2	4	7	6	9	2	5	7	2134	3325	4	8	18	15	27	4	12	20	14
8	4	7	3	2	2	5	5	3	3432	2321	10	19	7	4	4	12	13	7	10
9	5	6	13	11	11	4	4	7	3153	4432	13	15	65	49	45	8	10	17	28
10	8	11	4	8	6	5	3	6	2432	3315	23	43	9	21	14	12	6	14	18
11	6	7	7	5	4	4	4	0	4541	2121	15	17	20	11	9	8	8	1	11
12	2	3	1	3	3	4	6	5	1231	0452	5	6	3	6	6	8	16	11	8
13	2	3	3	6	2	4	4	3	2232	3222	5	7	7	15	5	9	8	6	8
14	3	4	2	8	8	3	4	3	1223	4112	7	9	5	21	22	7	8	6	11
15	1	1	1	2	4	3	4	4	2222	2332	2	3	2	4	9	7	9	10	6
16	3	5	3	7	10	7	5	7	2322	3321	6	11	6	20	34	19	13	18	16
17	7	4	1	2	4	6	3	6	3221	2422	17	9	3	4	9	14	7	16	10
18	5	4	3	4	6	2	5	5	2322	1212	11	10	7	9	14	5	12	11	10
19	4	5	8	5	7	5	4	4	2322	2121	10	12	22	12	20	13	10	8	13
20	5	5	5	5	3	4	5	4	2133	2232	12	13	13	11	7	8	11	10	11
21	3	4	9	9	6	6	8	9	2224	1533	6	8	28	32	15	15	22	27	19
22	8	3	2	5	4	5	3	4	4023	3323	21	6	5	12	9	12	7	9	10
23	5	6	11	13	13	13	9	14	3213	2234	13	15	45	62	62	64	31	85	47
24	10	11	10	15	11	10	9	7	1343	3542	39	44	40	92	42	39	33	17	43
25	11	11	12	12	11	10	10	9	4144	5454	47	43	55	51	47	37	39	29	44
26	11	11	12	10	9	8	9	9	4352	4631	47	45	58	35	30	25	28	29	37
27	8	4	5	13	6	7	10	8	3213	4453	22	8	12	62	16	18	35	24	25
28	6	5	7	8	8	10	9	2	4333	3643	15	12	18	26	25	40	31	5	22
29	4	7	7	5	5	5	5	5	2453	4314	9	18	18	13	12	12	12	13	13
30	5	6	2	4	4	3	4	8	4532	2233	13	16	5	9	10	7	10	21	11
31	1	4	5	5	7	6	6	6	3332	4242	3	9	11	12	19	14	15	16	12

AUG. 1976												
	3 Ks				GS			AS				AS
1	2	7	7	5	3	5	8	10	1333	0032	5	19
2	9	8	6	7	4	1	1	3	6241	2334	27	22
3	3	8	7	5	3	9	4	6	3352	0335	6	21
4	7	4	4	3	5	2	1	3	6520	3332	20	8
5	6	3	2	3	6	7	3	2	3221	3213	14	6
6	5	6	5	3	3	3	4	1	2512	1323	11	16
7	1	3	5	5	8	1	1	6	2122	3225	2	7
8	4	5	2	0	1	5	6	4	2322	4433	10	13
9	4	6	12	10	9	1	3	7	3133	0345	10	14
10	8	9	4	6	5	5	1	5	2224	4114	25	30
11	6	5	5	4	3	1	2	0	5232	3340	15	11
12	2	2	0	2	2	2	6	3	2402	3114	5	4
13	1	4	2	4	1	1	1	1	3522	2232	3	8
14	3	3	2	6	7	2	1	0	3121	3331	6	6
15	0	1	0	1	2	0	2	4	0201	3113	0	2
16	1	4	2	6	9	6	4	6	1431	3125	3	9
17	7	3	0	0	2	4	3	5	5201	3334	20	6
18	4	4	1	3	4	1	3	3	4432	2253	9	9
19	4	5	5	2	4	3	4	2	3421	2332	9	12
20	5	5	4	3	2	2	3	3	3231	2313	11	12
21	2	4	8	8	5	4	7	9	3322	2226	5	8
22	7	4	1	5	3	3	2	2	6233	5423	20	8
23	5	6	11	13	16	14	9	15	6411	0336	12	14
24	11	9	8	13	10	9	9	6	3332	2133	48	28
25	11	10	10	10	11	10	9	7	6341	3242	47	39
26	11	11	11	10	8	8	7	9	2330	2234	43	43
27	9	3	4	11	6	7	8	8	7113	2343	28	7
28	6	5	6	7	9	9	9	2	5321	4122	14	11
29	2	5	6	4	4	4	4	3	3331	2224	5	13
30	7	4	0	3	4	3	4	7	5411	2112	17	9
31	0	3	4	4	6	6	5	6	0631	2034	0	6

SEP. 1976											An										
	3 Kn					Gn					an										
1	6	7	6	4	5	7	8	7	3303	1432	16	19	15	9	13	19	26	18	17	17	
2	8	13	15	11	10	8	8	7	4473	3231	24	69	94	47	38	21	21	18	42	42	
3	7	9	8	8	7	6	8	8	2343	3433	20	28	23	26	18	16	26	26	23	23	
4	8	9	10	7	10	9	4	9	3452	5422	26	33	34	20	40	29	10	30	28	28	
5	10	7	5	9	8	6	4	6	2323	5323	37	20	11	30	23	15	10	14	20	20	
6	8	7	6	5	4	7	5	4	4423	3531	22	18	15	12	9	18	11	8	14	14	
7	8	7	9	7	6	4	4	9	5343	5213	25	19	28	17	14	10	9	27	19	19	
8	7	5	3	7	7	5	7	2	2232	2342	19	12	7	19	19	11	20	4	14	14	
9	6	6	4	6	5	3	2	0	4224	1441	16	14	10	14	13	7	5	1	10	10	
10	4	1	2	5	4	5	7	7	3232	3422	10	3	4	11	9	13	16	17	11	11	
11	2	5	4	2	5	3	2	4	1112	3423	5	12	8	5	11	7	4	8	8	8	
12	4	7	8	6	5	9	6	4	3144	3765	8	19	21	16	13	27	16	10	16	16	
13	6	5	5	5	0	3	4	6	3444	1233	15	13	12	11	1	6	9	14	10	10	
14	4	6	7	8	9	7	5	7	2343	2311	10	14	18	24	30	18	13	18	18	18	
15	2	10	9	9	7	2	4	6	1323	2324	5	36	30	27	20	5	9	15	18	18	
16	6	7	4	5	6	5	5	3	4542	2241	16	17	8	12	14	13	12	7	12	12	
17	6	7	6	5	5	3	8	10	4422	2334	14	19	14	11	13	6	23	37	17	17	
18	7	14	14	15	13	6	4	4	2345	3222	17	80	79	101	65	16	10	10	47	47	
19	4	5	6	12	11	11	11	10	2323	5432	8	12	14	53	47	50	50	40	34	34	
20	13	15	14	13	15	13	11	12	3663	6533	70	97	76	62	97	63	43	57	71	71	
21	10	10	7	9	11	12	10	9	3523	4363	35	37	18	33	46	54	38	33	37	37	
22	7	10	9	9	10	10	8	8	3315	4444	20	35	32	31	39	40	23	22	30	30	
23	4	4	11	11	9	7	8	5	3222	2453	9	9	49	47	32	18	21	11	25	25	
24	7	3	4	8	4	4	4	5	4013	3332	19	6	9	21	9	9	9	13	12	12	
25	11	7	10	12	10	11	11	11	1134	3654	42	19	36	52	36	49	45	45	41	41	
26	11	7	4	6	7	6	7	7	4223	4432	49	19	9	15	17	15	20	20	21	21	
27	9	6	7	11	9	8	5	7	4224	5312	29	14	19	42	29	21	12	18	23	23	
28	5	6	5	3	1	2	5	7	2222	2244	11	15	11	6	3	5	13	18	10	10	
29	3	8	7	9	8	6	8	5	2531	2233	7	21	17	27	23	16	23	13	18	18	
30	4	6	2	6	7	6	10	8	3412	4344	8	14	5	14	20	14	36	25	17	22.8	

SEP. 1976											As										
	3 Ks					Gs					as										
1	6	8	6	4	6	8	8	7	1502	0232	16	22	14	8	15	25	23	19	18	18	
2	9	13	14	11	10	7	8	7	2253	1123	29	63	77	44	37	20	22	17	39	39	
3	8	9	7	7	5	5	8	8	4243	3124	25	30	19	18	11	11	21	21	20	20	
4	7	8	8	8	9	8	4	8	4221	2122	19	22	25	22	33	24	10	26	23	23	
5	11	7	4	7	5	6	3	5	3111	2323	43	11	18	10	18	13	14	6	11	17	
6	6	7	4	4	5	6	3	3	3232	2123	16	18	10	9	13	15	7	7	12	12	
7	7	7	7	6	5	5	4	7	4320	2214	20	18	20	16	12	13	8	19	16	16	
8	7	4	1	6	5	5	7	1	4120	1340	17	10	2	14	11	12	17	2	11	11	
9	6	4	3	4	5	3	1	0	4302	1231	16	8	7	10	12	7	2	1	8	8	
10	4	1	1	3	2	5	6	5	3201	1012	10	3	2	7	5	13	16	13	9	9	
11	2	5	4	1	4	2	1	3	2212	0214	5	13	8	2	9	5	3	7	7	7	
12	5	7	7	6	4	8	7	4	3342	2223	12	17	17	15	10	25	17	9	15	15	
13	6	4	3	3	1	2	4	4	4322	2412	15	10	6	7	2	5	8	9	8	8	
14	6	6	5	9	8	6	4	7	2321	1223	14	14	12	30	21	15	10	18	17	17	
15	1	10	9	8	7	2	5	6	2422	1243	3	38	30	24	18	4	11	14	18	18	
16	7	6	4	5	5	5	4	3	5133	2241	17	14	10	13	12	11	10	7	12	12	
17	6	6	7	4	5	3	9	11	3011	3466	16	15	17	8	13	7	31	50	20	20	
18	8	14	12	15	11	7	4	4	5422	3432	24	86	59	102	50	20	9	9	45	45	
19	4	6	7	11	11	12	12	11	1412	3334	8	16	17	46	44	52	58	50	36	36	
20	13	14	12	12	14	12	12	11	2214	2143	61	79	53	58	74	53	52	43	59	59	
21	11	10	7	9	11	12	9	9	3422	2244	41	34	19	32	46	60	32	30	37	37	
22	8	8	9	8	9	9	8	8	3233	2145	24	24	27	23	27	32	27	22	26	26	
23	3	4	10	9	10	6	7	4	4322	3255	6	10	38	33	39	16	18	9	21	21	
24	7	2	2	7	3	2	2	6	2223	3223	18	5	4	19	6	5	5	14	10	10	
25	12	7	8	9	10	11	12	12	5333	2235	55	20	24	33	40	42	58	57	41	41	
26	13	5	3	6	6	7	8	6	5212	3132	64	13	7	14	15	18	23	16	21	21	
27	9	7	8	9	9	7	5	7	3413	2422	31	17	22	27	29	19	13	19	22	22	
28	5	7	3	2	1	3	6	7	2532	3444	13	19	7	5	3	6	14	19	11	11	
29	2	7	7	8	9	7	8	5	2541	5553	4	19	20	22	28	19	26	13	19	19	
30	4	6	1	5	6	6	11	9	4512	2344	8	15	2	12	15	16	43	28	17	21.2	

OCT. 1976																			
	3 Km					Σ Km	am					A m	Am 2						
1	5	5	11	13	9	5	5	9	20.7	11	12	46	63	29	11	11	28	26	31
2	9	13	12	11	9	9	5	4	24.0	30	65	53	42	30	33	12	8	34	26
3	6	6	5	8	8	6	1	2	14.0	15	15	13	24	23	16	3	5	14	15
4	3	4	5	7	7	4	5	5	13.3	6	8	11	19	17	8	11	13	12	17
5	11	9	7	10	3	5	5	4	18.0	41	32	19	37	6	11	12	9	21	19
6	3	8	9	9	3	3	8	6	16.3	7	22	29	28	7	7	24	16	18	13
7	5	2	1	1	5	5	7	1	9.0	13	4	2	3	12	13	20	2	9	10
8	1	3	6	6	7	4	6	6	13.0	2	6	14	14	18	10	15	15	12	12
9	5	6	4	5	6	4	7	3	13.3	13	15	8	12	14	9	18	7	12	12
10	4	3	4	4	4	6	5	7	12.3	9	7	9	10	8	16	12	20	11	12
11	9	4	1	3	5	6	6	8	14.0	27	9	3	6	13	16	16	21	14	14
12	6	8	4	2	6	7	11	12	18.7	16	23	8	4	14	17	44	57	23	19
13	4	7	7	6	6	4	4	4	14.0	30	17	20	15	15	8	10	10	13	16
14	2	1	3	5	2	5	9	10	12.3	4	3	6	11	5	12	28	37	13	18
15	7	9	10	11	14	13	12	11	29.0	20	32	38	44	80	65	54	44	47	42
16	14	12	11	11	9	7	10	10	28.0	71	52	44	43	29	20	34	38	41	48
17	8	9	14	12	14	9	10	9	28.3	25	32	76	58	28	36	32	47	40	
18	11	10	9	10	9	8	9	5	23.7	48	37	33	34	32	24	28	11	31	28
19	1	0	2	5	9	11	6	4	12.7	2	1	5	13	32	41	15	8	15	17
20	8	4	5	5	5	6	5	6	14.7	21	8	12	13	11	16	13	15	14	16
21	4	6	6	7	6	6	8	3	15.3	10	15	14	19	15	14	21	7	14	14
22	4	4	6	8	7	4	2	3	12.7	9	8	16	24	18	8	5	7	12	13
23	5	5	7	7	5	6	5	4	14.7	12	13	17	18	11	14	11	8	13	11
24	3	2	4	4	4	6	9	4	12.0	6	4	9	9	9	16	32	8	12	11
25	6	4	4	3	4	2	2	2	9.0	15	9	8	6	8	5	4	5	8	9
26	2	4	4	2	2	1	3	6	8.0	5	8	8	5	5	3	6	14	7	7
27	2	3	5	4	6	8	8	9	15.0	4	7	13	8	15	23	24	27	15	11
28	6	1	1	4	6	5	3	5	10.3	15	2	3	9	14	13	7	11	9	11
29	2	5	2	0	0	1	2	3	5.0	4	11	4	1	1	2	5	6	4	8
30	1	2	6	9	9	10	9	13	19.7	2	5	16	31	31	39	33	66	28	28
31	11	11	13	12	13	11	8	11	30.0	42	47	67	51	68	45	26	43	49	40

Table 9 - continued

Part B.

OCT. 1976																			
	3 Kn					On		an					An						
1	4	5	11	13	9	5	5	9	2236	4323	9	11	48	67	33	12	11	28	27
2	9	14	13	11	9	9	5	4	2465	3654	33	71	63	47	27	32	12	8	37
3	7	6	9	8	7	2	2	4312	5522	17	15	16	30	23	17	4	5	16	
4	3	4	5	8	7	4	5	5	3312	2331	7	8	12	21	18	8	12	13	12
5	11	9	7	11	3	5	6	4	3223	0363	41	33	20	45	6	11	16	10	23
6	3	7	9	9	3	4	8	7	2332	4445	7	19	30	27	6	8	22	18	17
7	6	3	1	2	5	6	8	1	3223	2462	14	6	3	4	13	14	22	3	10
8	1	2	7	6	7	5	7	7	1243	4353	2	4	17	16	17	12	17	18	13
9	5	6	4	5	6	4	7	3	3424	4333	13	14	10	13	16	10	18	7	13
10	4	4	5	5	4	7	5	7	4343	5632	8	8	12	13	9	20	11	20	13
11	9	4	1	2	6	7	6	8	6333	5714	28	8	3	5	14	17	15	21	14
12	7	8	4	1	6	7	11	13	3412	2234	19	21	8	3	15	17	43	64	24
13	5	7	8	7	7	4	4	5	3322	5454	11	17	21	17	18	8	10	11	14
14	1	2	3	4	3	4	9	10	1214	2443	3	4	7	10	6	10	27	35	13
15	8	10	10	11	15	13	12	11	2233	1352	21	35	37	45	90	69	53	41	49
16	14	13	11	11	9	8	10	10	4233	4422	74	61	50	41	30	21	37	36	44
17	8	10	14	13	15	10	10	10	3155	2243	22	34	84	64	101	35	38	37	52
18	12	11	11	11	11	8	9	6	1334	3552	59	43	43	41	41	25	30	14	37
19	1	0	2	5	10	11	7	4	2134	3552	2	1	4	12	35	48	18	8	16
20	8	4	5	6	5	7	6	7	2233	3525	23	8	13	15	11	18	14	17	15
21	4	6	6	7	6	5	7	4	2322	2122	10	16	15	19	15	12	20	8	14
22	4	3	7	9	7	4	3	3	3256	4432	10	7	20	27	20	8	6	6	13
23	5	5	6	8	5	6	5	3	3314	6642	13	12	15	22	11	14	11	7	13
24	3	1	3	3	4	6	9	4	2211	3553	6	2	6	7	9	15	31	8	11
25	6	4	3	3	4	3	2	2	3231	2322	16	10	7	6	8	6	4	4	8
26	2	3	3	2	3	2	3	6	2121	1205	4	7	7	5	6	4	7	16	7
27	2	3	5	4	6	7	8	9	1212	4224	5	7	13	8	16	18	23	29	15
28	6	1	1	3	7	5	3	4	4211	2522	14	2	3	7	17	13	7	9	9
29	2	4	2	1	1	1	2	3	1212	2211	5	10	5	2	2	3	5	6	5
30	1	2	5	9	10	11	10	14	1234	3663	2	5	13	28	34	46	38	72	30
31	10	11	14	12	14	12	8	11	2334	3445	39	43	78	59	81	53	25	49	53

OCT. 1976												
	3 Ks					GS		AS				
1	5	5	11	12	8	4	5	9	2325	2323	13	13
2	9	12	11	10	9	10	5	3	2212	0034	27	59
3	5	6	4	7	8	6	1	2	6311	2214	13	14
4	2	4	4	7	6	4	5	5	3520	5423	5	8
5	10	9	7	9	3	5	4	4	6202	5322	40	31
6	3	8	9	9	3	3	8	6	1624	1233	7	25
7	5	1	0	1	5	5	7	0	1102	2231	12	3
8	1	3	4	5	7	4	5	5	2032	5143	3	7
9	5	6	3	5	5	4	7	4	3402	2423	13	16
10	4	3	3	4	3	5	5	7	4232	1334	9	7
11	9	4	1	3	5	6	7	8	6021	2034	27	9
12	6	8	4	2	5	7	11	11	2442	3354	14	25
13	4	7	7	5	5	3	4	4	3442	3441	10	17
14	2	1	3	5	2	6	9	10	2212	3422	4	3
15	7	9	10	11	13	13	12	11	5323	2242	20	29
16	13	11	10	11	9	7	9	10	3224	1214	68	43
17	9	9	13	12	13	8	10	8	2242	2434	27	31
18	10	9	8	9	8	8	8	4	5311	3246	36	31
19	1	0	2	5	9	10	5	4	2112	0321	2	1
20	7	3	4	5	4	6	5	6	4433	2124	19	7
21	5	6	5	7	6	6	8	3	4242	0422	11	14
22	4	4	5	8	6	4	2	3	3224	2554	8	10
23	5	6	7	5	5	6	5	4	4412	3223	11	15
24	3	3	5	5	4	7	10	4	3331	2435	7	6
25	6	4	4	3	4	2	2	2	4220	2323	14	9
26	2	4	4	3	2	1	3	5	3413	3324	5	8
27	1	4	5	4	6	9	8	8	3131	1446	3	8
28	6	1	2	5	5	5	3	5	2222	2021	15	3
29	2	5	1	0	0	0	2	2	3331	1123	4	11
30	0	2	7	10	9	9	9	12	1223	2033	1	5
31	11	12	12	11	12	10	9	10	6333	1236	45	52

NOV. 1976																			
	3 Kn						an		an				An						
1	10	7	7	9	4	4	7	7	5433	2334	37	17	20	29	10	8	18	18	20
2	6	7	7	5	7	8	6	3	4553	6674	14	17	17	11	19	25	15	7	16
3	6	2	6	4	4	5	3	9	4132	4546	16	5	15	10	8	12	7	29	13
4	3	4	4	5	2	4	4	5	1223	3345	7	8	8	11	5	8	9	11	8
5	1	3	4	3	3	3	1	0	2241	2220	2	6	9	7	7	6	3	0	5
6	1	2	3	3	1	1	2	1	2230	3222	2	4	7	6	3	3	5	3	4
7	1	4	5	3	2	0	0	1	1322	2111	2	10	12	6	5	1	1	3	5
8	2	1	0	1	4	7	6	9	1212	4524	5	3	1	3	9	17	15	33	11
9	7	7	5	6	5	4	3	5	2343	4424	19	17	13	14	13	8	6	13	13
10	4	8	8	9	11	10	13	11	4534	6754	10	23	23	30	42	36	66	49	35
11	8	9	7	9	12	14	11	8	2434	3653	22	32	19	30	54	81	50	21	39
12	14	7	7	9	10	11	11	11	3224	3453	73	20	19	31	40	44	46	47	40
13	10	11	13	14	14	13	11	7	2336	5643	40	41	67	75	71	65	48	20	53
14	9	3	5	7	11	10	11	8	4222	4543	31	7	11	17	42	36	41	21	26
15	8	6	3	6	9	8	6	2	3122	5662	21	14	6	15	29	25	15	5	16
16	2	4	4	4	6	7	3	3	3343	5421	5	8	10	10	16	17	7	6	10
17	6	5	5	7	6	3	4	4	3225	5234	16	12	11	18	14	6	10	10	12
18	5	3	0	2	3	1	5	4	4312	1164	11	7	1	4	6	2	13	9	7
19	6	7	4	4	6	6	8	7	4332	4343	16	20	9	8	15	14	22	17	15
20	5	6	4	8	6	3	7	3	2024	3252	12	14	9	23	14	7	18	6	13
21	3	3	3	3	3	2	3	3	2223	2315	6	6	6	6	7	4	7	7	6
22	2	5	4	3	4	2	5	3	2233	3232	5	12	10	7	8	4	11	6	8
23	2	2	3	1	4	2	4	3	2223	2253	5	5	6	3	8	5	8	7	6
24	1	4	1	4	3	1	0	1	2333	3211	2	8	3	8	7	3	1	3	4
25	3	7	6	9	7	9	7	5	2432	3646	6	17	22	30	19	27	18	11	19
26	5	6	2	5	6	6	11	7	2325	4352	12	15	5	13	14	14	47	20	18
27	6	8	7	4	2	2	5	6	1352	1133	15	26	16	8	5	5	12	14	13
28	0	1	1	2	1	4	3	0	1213	3531	1	3	2	5	3	9	6	1	4
29	0	2	7	4	4	7	4	7	2343	2533	1	4	19	10	9	19	9	17	11
30	7	8	5	6	7	10	3	5	1134	2614	18	25	12	15	17	39	6	13	18

NOV. 1976																			
	3 Ks					GS			AS					AS					
1	9	5	5	7	4	2	7	5	5201	2354	29	12	13	17	9	5	17	13	14
2	7	5	5	3	7	8	6	3	3423	1134	17	11	11	7	17	22	14	6	13
3	5	2	4	3	3	4	3	7	5210	2126	12	5	9	7	6	8	6	20	9
4	4	5	5	3	2	4	3	3	2210	2343	8	11	12	7	4	8	6	6	8
5	1	3	4	4	5	5	1	1	2002	2232	2	7	9	10	13	11	3	2	7
6	2	3	2	2	1	0	1	1	2322	3123	4	7	5	4	3	1	3	3	4
7	1	5	8	3	3	1	2	2	2351	2253	3	13	21	7	6	2	4	4	8
8	3	2	1	2	4	6	8	10	1012	5033	7	4	3	5	8	14	23	39	13
9	8	7	5	5	4	3	3	6	3332	2213	26	20	12	13	10	7	7	14	14
10	5	8	8	8	10	10	12	12	3512	3355	12	21	22	21	34	36	54	53	32
11	7	9	7	9	11	12	11	9	4330	0122	19	28	20	32	48	56	48	27	35
12	11	6	6	8	10	10	12	11	4022	1153	45	15	15	24	34	34	58	43	34
13	10	9	10	11	12	11	12	7	1324	1225	34	29	38	45	58	50	55	20	41
14	9	4	5	7	11	9	9	7	4022	3233	27	9	12	17	47	27	32	18	24
15	6	5	3	4	8	7	7	4	1310	3152	15	13	7	9	23	20	17	10	14
16	2	4	3	4	6	6	5	5	3331	3332	5	9	7	8	14	15	12	11	10
17	6	5	5	6	4	4	4	5	1210	2524	16	13	12	14	10	8	9	11	12
18	5	3	1	1	2	2	6	6	2233	2457	12	7	3	3	4	4	15	16	8
19	5	6	5	4	6	8	8	8	3022	2523	13	16	12	10	15	21	26	21	17
20	8	7	5	7	5	4	8	5	3110	1466	21	17	12	18	12	8	24	12	16
21	3	3	3	2	3	3	3	4	2011	3635	6	7	6	4	7	6	7	9	7
22	2	5	6	4	4	4	6	4	2330	2445	5	12	15	9	9	9	15	10	11
23	2	2	4	2	4	4	4	4	2232	3353	4	5	9	5	10	8	10	10	8
24	3	5	1	3	3	2	1	4	2311	3324	6	11	3	6	7	4	2	9	6
25	6	8	7	6	7	8	6	4	2221	2234	15	24	20	16	19	22	16	9	18
26	4	8	2	6	5	8	11	7	0532	3522	9	21	4	16	12	26	43	18	19
27	8	9	7	3	4	5	5	5	2340	4442	21	28	19	7	8	11	12	12	15
28	1	2	1	1	3	4	5	3	1312	3553	2	5	3	3	6	10	11	7	6
29	1	4	5	3	7	7	4	6	2231	5644	3	8	13	7	17	20	9	14	11
30	7	8	5	6	6	9	4	7	5232	3232	19	21	11	14	16	33	10	20	18

NOV. 1976												DEC. 1976											
	3 Km						Σ Km						am						Am		Am2		
1	9	6	7	8	4	3	7	6	16.7	33	14	17	23	9	7	17	15	17	17	23			
2	6	6	6	4	7	8	6	3	15.3	16	14	14	9	18	23	14	6	14	14	13			
3	6	2	5	4	3	4	3	8	11.7	14	5	12	9	7	10	6	25	11	11	12			
4	3	4	4	4	2	4	4	4	9.7	7	9	10	9	5	8	8	8	8	9	9			
5	1	3	4	4	4	4	1	0	7.0	2	6	9	9	10	9	3	1	6	6	6			
6	1	2	3	2	1	1	2	1	4.3	3	5	6	5	3	2	4	3	4	4	6			
7	1	5	6	3	2	0	1	1	6.3	2	12	16	7	5	1	3	3	6	6	5			
8	3	1	1	2	4	6	7	10	11.3	6	3	2	4	9	16	19	36	12	12	11			
9	8	7	5	6	5	3	3	6	14.3	22	18	13	14	12	7	7	14	13	13	17			
10	5	8	8	8	10	10	12	12	24.3	11	22	22	26	38	36	60	51	33	33	26			
11	8	9	7	9	12	13	11	8	25.7	21	30	20	31	51	69	49	24	37	37	38			
12	7	7	9	10	10	12	11	11	26.0	59	18	17	28	37	39	52	45	37	37	42			
13	10	10	12	12	13	12	12	7	29.3	37	35	53	60	64	58	51	20	47	47	39			
14	9	4	5	7	11	9	10	7	20.7	29	8	12	17	45	31	36	19	25	25	28			
15	7	6	3	5	8	8	6	4	15.7	18	14	7	12	26	23	16	8	16	16	16			
16	2	4	4	4	6	6	4	4	11.3	5	8	8	9	15	16	10	9	10	10	13			
17	6	5	5	6	5	3	4	4	12.7	16	12	11	16	12	7	9	10	12	12	10			
18	5	3	1	1	2	1	6	5	8.0	12	7	2	3	5	3	14	12	7	7	9			
19	6	7	5	4	6	7	8	7	16.7	14	18	11	9	15	18	24	19	16	16	14			
20	6	6	4	8	5	3	8	4	14.7	16	16	10	21	13	7	21	9	14	14	13			
21	3	3	3	2	3	2	3	4	7.7	6	7	6	5	7	5	7	8	6	6	9			
22	2	5	5	4	4	3	5	4	10.7	5	12	13	8	9	6	13	8	9	9	8			
23	2	2	3	2	4	3	4	4	8.0	5	5	7	4	9	6	9	9	7	7	7			
24	2	4	1	3	3	1	0	3	5.7	4	10	3	7	7	3	1	6	5	5	9			
25	5	7	8	8	7	8	7	4	18.0	11	20	21	23	19	24	17	10	10	10	13			
26	4	7	2	6	5	7	11	7	16.3	10	18	4	15	13	20	45	19	16	16	18			
27	7	9	7	3	3	4	5	5	14.3	18	27	18	7	7	8	12	13	13	14	14			
28	1	2	1	2	2	4	4	2	6.0	2	4	2	4	5	10	8	4	5	5	7			
29	1	3	6	4	5	7	4	6	12.0	2	6	16	9	13	20	9	15	11	11	12			
30	7	8	5	6	7	10	4	6	17.7	18	23	11	15	17	36	8	16	18	18	14			
																				15.2			
	3 Km						Σ Km						am						Am		Am2		
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3	2	2	3	2	4	2	5	3	7.7	4	5	7	4	9	5	11	7	7	7	11			
4	3	4	12	10	12	11	5	5	20.7	5	10	55	35	56	45	13	13	29	29	19			
5	7	4	4	4	8	4	4	2	12.3	20	8	9	8	24	8	9	5	11	11	14			
6	1	1	1	1	2	3	5	5	6.3	2	3	2	2	5	7	11	12	6	6	9			
7	7	2	6	8	8	7	10	10	18.3	20	18	5	15	24	22	20	35	20	20	23			
8	11	7	10	13	14	7	4	5	23.7	43	20	39	65	79	18	8	11	13	13	31			
9	2	5	11	11	7	10	9	10	21.7	4	11	45	44	20	38	27	36	28	28	25			
10	5	6	5	7	8	11	5	10	19.0	12	16	11	19	23	48	12	34	22	22	26			
11	9	9	9	8	4	7	4	6	18.7	29	32	29	24	8	20	10	16	21	21	23			
12	9	5	7	7	10	11	8	4	20.3	28	12	17	19	38	47	21	9	24	24	19			
13	3	7	5	6	8	3	6	2	13.3	7	20	13	14	23	6	14	5	13	13	15			
14	3	5	1	3	3	2	2	2	7.0	6	11	3	6	6	5	4	5	6	6	7			
15	1	1	2	4	2	0	1	1	4.0	3	3	4	9	4	1	2	3	4	5	5			
16	1	4	3	8	9	10	9	5	16.3	2	8	7	21	28	34	27	11	17	17	12			
17	5	3	3	4	7	9	10	10	17.7	12	11	7	10	19	29	35	38	20	20	28			
18	11	14	11	5	4	4	7	11	22.3	47	76	49	12	9	8	17	41	32	32	27			
19	7	5	4	4	4	6	4	4	12.7	19	11	10	8	10	15	9	8	11	11	12			
20	4	3	3	3	5	6	4	3	10.3	10	7	7	7	12	14	8	6	9	9	9			
21	2	3	4	3	2	7	4	4	9.7	4	6	8	7	4	20	8	8	8	8	10			
22	3	7	6	7	8	7	7	8	17.7	7	20	14	19	22	20	20	25	18	18	15			
23	7	6	4	5	1	1	1	4	9.7	20	15	10	11	3	3	2	8	9	9	13			
24	5	4	6	6	8	6	5	3	14.3	11	8	15	16	22	14	11	7	13	13	11			
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26	4	7	4	4	4	3	3	4	11.0	10	17	10	10	10	6	6	9	10	10	13			
27	5	2	3	5	4	6	10	5	13.3	11	5	6	12	10	16	35	11	13	13	11			
28	4	5	4	6	3	4	9	7	14.0	8	11	10	14	7	9	27	20	13	13	37			
29	17	14	16	16	12	12	8	9	34.7	127	78	104	112	56	55	22	30	73	73	45			
30	6	6	7	8	9	9	11	12	22.7	14	16	19	25	32	32	44	51	29	29	31			
31	11	10	6	4	4	4	9	8	18.7	46	34	16	9	10	9	33	23	23	23	27			
																				18.1			

DEC. 1976																			
	3 Kn					an			an			An							
1	4	1	4	4	8	8	6	8	1132	3635	8	2	9	8	21	21	14	22	13
2	3	1	1	1	3	1	2	3	1122	2222	7	2	2	3	7	3	4	6	4
3	1	2	3	1	4	2	4	2	1232	3222	2	4	7	2	8	4	8	5	5
4	3	3	10	9	12	11	6	5	2332	5402	6	7	37	31	52	50	14	12	26
5	7	4	3	3	7	3	4	2	4211	4122	18	8	7	7	19	6	9	4	10
6	1	1	1	0	1	4	4	4	2221	1322	3	2	2	1	3	9	9	9	5
7	7	8	2	5	7	6	8	6	5523	2253	20	25	4	13	20	20	14	23	17
8	10	6	11	13	14	6	3	3	4152	3212	39	16	41	69	79	16	6	7	34
9	1	5	12	12	8	11	9	10	2364	3664	3	11	59	52	21	41	28	40	32
10	5	7	5	8	7	11	5	10	2422	2443	11	19	11	22	20	50	12	35	23
11	9	9	10	9	4	7	5	6	2344	2443	29	32	37	33	8	18	11	16	23
12	9	5	7	7	11	12	8	4	4122	5662	32	13	20	20	42	52	24	10	27
13	4	8	6	6	9	3	4	2	2324	6324	8	24	14	16	28	6	9	5	14
14	3	5	2	3	3	2	0	1	0333	4212	6	12	4	6	6	5	1	3	5
15	1	1	1	5	1	0	0	0	1213	2111	2	2	3	13	2	1	1	1	3
16	0	2	3	6	8	9	8	5	1322	4322	1	5	7	14	25	32	21	11	15
17	4	5	2	4	7	8	9	9	2224	4232	10	11	5	9	19	23	33	32	18
18	11	14	12	4	4	3	6	10	4342	2254	48	77	52	10	8	7	14	37	32
19	6	5	5	3	5	5	1	3	1512	4303	15	12	11	6	13	11	3	7	10
20	4	3	2	2	4	6	3	2	2122	3303	9	6	5	4	10	16	6	5	8
21	1	2	4	3	1	8	4	2	1251	1531	3	5	10	7	3	21	8	5	8
22	2	7	6	7	9	7	6	6	2443	4531	4	17	15	20	27	20	18	15	17
23	5	6	4	5	1	1	1	3	1422	2224	13	15	9	11	2	2	2	6	8
24	4	4	5	6	6	5	5	2	3442	2651	10	9	15	16	15	12	13	5	12
25	3	6	4	8	12	5	8	4	2233	5243	6	14	9	23	51	11	21	9	18
26	4	8	4	4	4	3	2	4	2422	3333	9	21	9	8	9	6	5	9	10
27	4	1	2	5	4	7	10	5	3124	2656	10	3	4	13	9	17	39	12	13
28	4	4	5	6	4	3	7	6	2234	2231	8	10	11	16	8	6	18	14	11
29	17	13	16	17	13	13	6	7	1256	2413	126	67	107	124	62	69	16	20	74
30	4	4	5	8	9	9	11	11	3214	3363	9	9	13	26	33	31	44	41	26
31	10	10	5	3	4	3	9	8	3432	2134	37	35	12	7	8	7	30	21	20

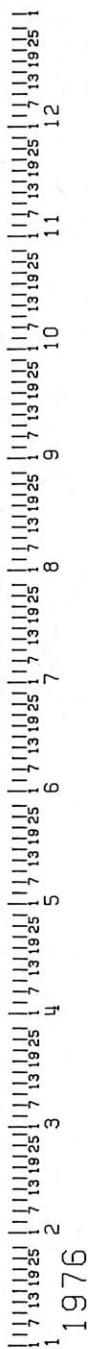
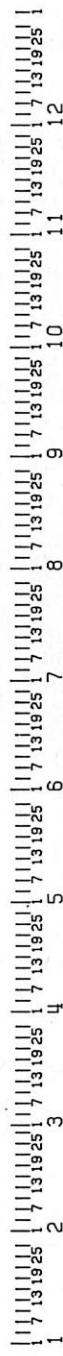
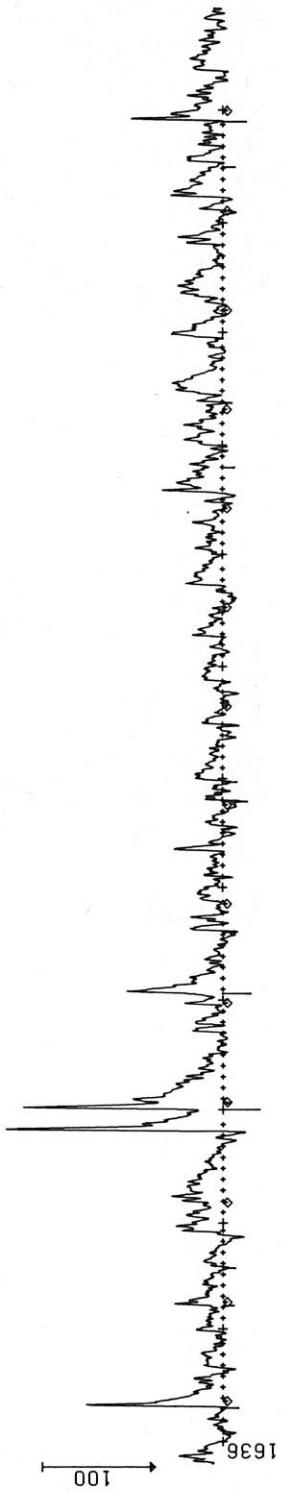
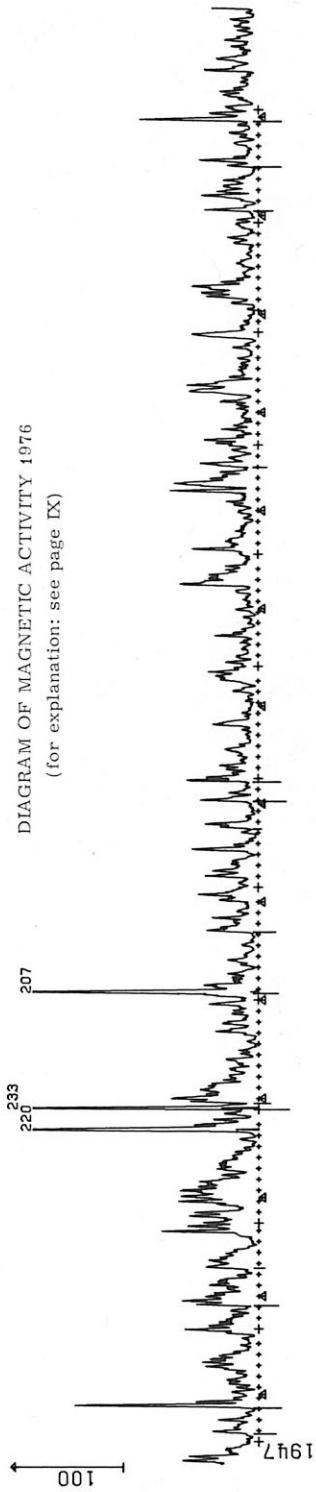


DIAGRAM OF MAGNETIC ACTIVITY 1976
(for explanation: see page IX)



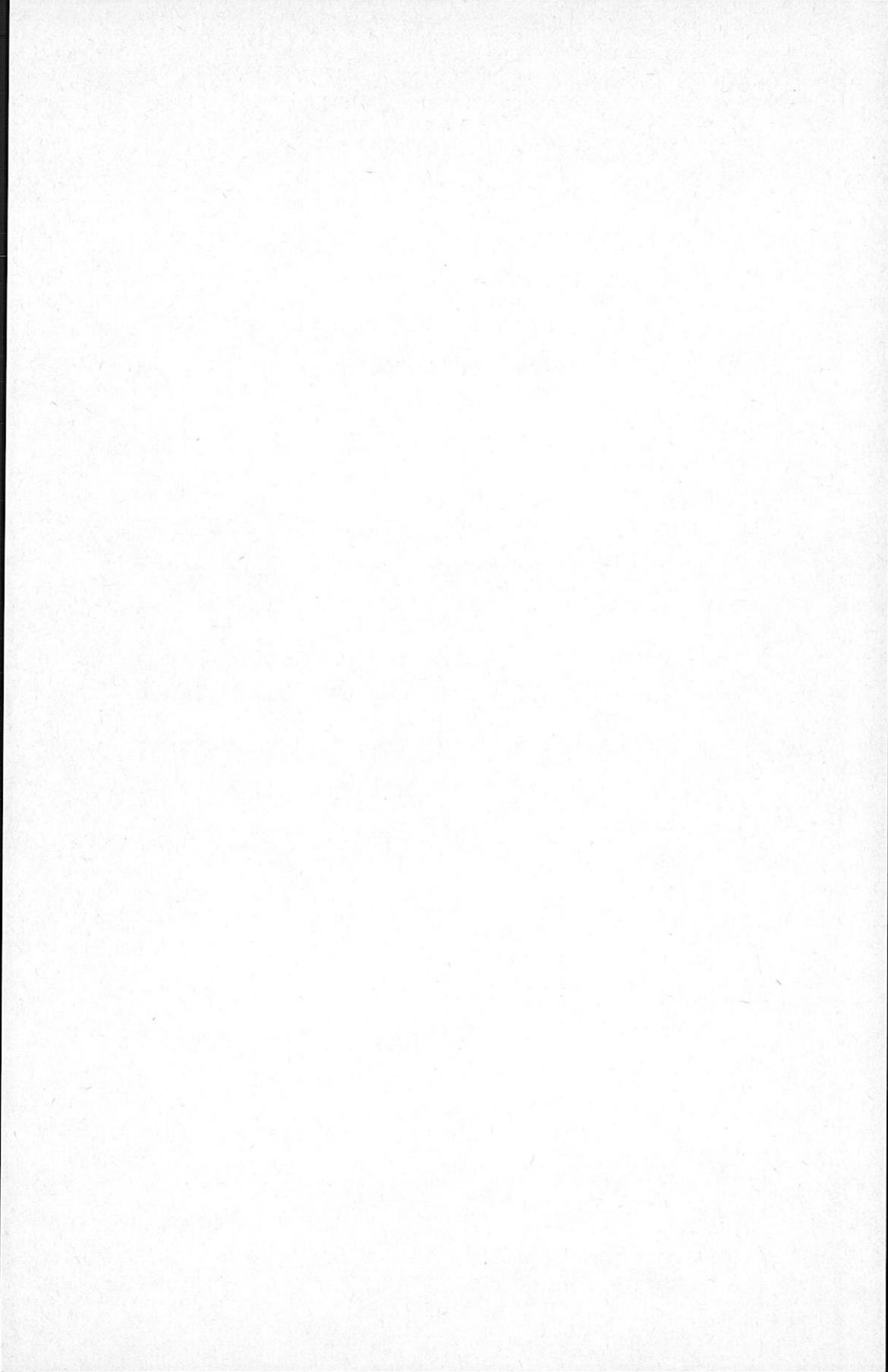


TABLE 10 HOURLY Dst
(for explanation see page IX)

JANUARY 1976

	UNIT=GAMMAS												G.M.T.											
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	4	5	4	3	2	3	2	1	1	-1	0	0	16	6	1	1	2	2	4	4	5	5	8	
2	9	10	9	7	5	5	6	3	5	8	7	8	6	4	5	5	1	1	1	3	0	2		
3	7	7	12	15	19	14	10	6	7	14	18	11	4	-5	-5	-1	4	7	1	-9	-6	-5	0	
4	7	4	1	0	-1	-5	-10	-11	-8	-7	-6	-5	-9	-3	3	2	-2	-1	3	1	3	0	-6	
5	-3	-1	2	1	-3	-7	-13	-13	-1.2	-10	-9	-7	-8	-9	-7	-7	-3	-2	-1	-2	-4	-6	-9	
6	-5	-2	-1	0	1	2	-2	-5	-3	-1	1	5	8	3	17	20	3	-9	-7	-3	-11	-15	-16	
7	-13	-11	-11	-11	-16	-19	-15	-12	-9	-6	-4	-8	-11	-10	-4	-4	-7	-3	0	3	2	0	-6	
8	-11	-10	-9	-7	-7	-7	-6	-6	-8	-5	-1	-2	-4	-6	-3	-3	-8	-8	-5	-4	-3	-1	1	
9	0	-4	-4	-2	0	0	-1	-3	-4	-1	-1	-2	-3	-2	1	0	-2	-1	1	6	6	1	-4	
10	-7	-7	-6	-6	-3	-1	5	10	7	12	4	2	8	2	-8	-28	-55	-78	-98	-119	-141	-144	-152	
11	-14.6	-127	-107	-90	-89	-88	-85	-79	-72	-68	-63	-62	-58	-49	-53	-55	-64	-65	-61	-51	-57	-54	-67	
12	-61	-55	-51	-49	-48	-48	-50	-51	-55	-53	-49	-46	-44	-45	-43	-40	-42	-46	-42	-40	-37	-31	-36	
13	-37	-36	-33	-34	-40	-36	-31	-28	-27	-26	-25	-26	-27	-27	-27	-33	-30	-30	-27	-25	-26	-28	-37	
14	-27	-27	-23	-20	-19	-17	-20	-20	-20	-20	-24	-25	-25	-24	-24	-21	-23	-31	-36	-31	-23	-21	-20	
15	-20	-19	-20	-20	-23	-23	-23	-22	-19	-15	-15	-15	-13	-8	-4	-2	-1	-6	-12	-15	-17	-19	-14	
16	-16	-16	-14	-13	-14	-15	-15	-13	-11	-10	-9	-7	-6	-5	-1	-2	-8	-15	-15	-17	-21	-24	-18	
17	-1.3	-1.5	-1.5	-2.1	-2.0	-2.5	-3.6	-3.2	-2.5	-2.0	-1.5	-1.4	-1.2	-1.9	-6	-3	-3	-3	-4	-9	-20	-29	-22	
18	-1.9	-2.0	-2.1	-2.2	-2.5	-2.6	-2.9	-2.9	-2.9	-2.0	-1.5	-1.2	-1.2	-1.8	-14	-12	-13	-11	-11	-9	-11	-8	-8	
19	-1.1	-1.3	-1.4	-1.5	-1.4	-1.9	-1.9	-1.7	-1.7	-1.7	-1.6	-1.5	-1.6	-1.7	-1.6	-5	-2	-6	6	10	10	4	9	
20	5	4	5	-2	-3	-6	-3	-2	-4	-2	-3	-4	0	6	10	14	15	21	11	10	12	8	2	
21	1	1	5	1	2	-6	-8	-11	-12	-10	-12	-7	-2	1	-19	-19	-27	-26	-20	-15	-12	-14	-15	
22	-1.6	-1.7	-1.2	-9	-15	-15	-16	-1.0	-9	-11	-12	-12	-13	-17	-15	-14	-13	-22	-16	-9	-12	-13	-9	
23	-9	-16	-20	-17	-16	-12	-11	-15	-19	-16	-15	-12	-11	-13	-18	-12	-20	-17	-13	-13	-12	-12	-8	
24	-7	-7	-8	-10	-9	-11	-16	-1.5	-1.7	-1.6	-1.5	-1.6	-1.7	-1.6	-1.5	-1.5	-14	-13	-10	-1.3	-1.3	-19	-21	
25	-22	-22	-23	-18	-17	-18	-18	-15	-19	-18	-19	-19	-19	-15	-16	-13	-13	-11	-8	-3	-5	-4	-7	
26	-7	-7	-7	-6	-5	-8	-6	-3	-3	-7	-10	-8	-8	-10	-7	-8	-8	-6	-6	-9	-11	-10	-8	
27	-8	-8	-4	3	10	11	9	-5	-5	-3	-4	-6	-7	-1.3	-14	-12	-11	-9	-6	-5	-8	-6	-5	
28	-3	-1	-2	-4	-6	-3	-1	0	1	-2	-4	-6	-5	-1	0	2	3	1	-3	2	4	2	4	
29	10	9	6	1	-2	-7	-10	-1.2	-1.3	-14	-12	-6	1	2	5	4	1	2	-1	-4	-7	-9	-10	
30	-10	-8	-6	-7	-6	-4	-5	-4	-4	0	3	2	2	3	1	2	6	10	8	1	-4	0		
31	-1	3	2	-4	-7	-14	-9	-2	-2	-15	-21	-21	-24	-33	-39	-37	-33	-19	-10	-7	-18	-23	-16	

TABLE 10 Dst - continued

FEBRUARY 1975

DAY	UNIT=GAMMAS		G.M.T.																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	-18	-24	-22	-20	-20	-16	-16	-16	-17	-17	-19	-10	-9	-7	-1	1	-5	-12	-7	-12	-16	-23	-20			
2	-13	-11	-9	-12	-10	-11	-12	-13	-12	-18	-15	-11	-7	-4	-7	-5	-6	-10	-14	-16	-18	-19	-14	-16		
3	-17	-15	-10	-11	-13	-12	-19	-16	-21	-17	-13	-11	-14	-10	-9	-7	-4	-2	0	-5	-11	-12	-17	-13		
4	-12	-15	-17	-14	-11	-13	-12	-13	-12	-7	-8	-11	-10	-9	-10	-13	-14	-12	-7	-8	-12	-19	-15	-13		
5	-12	-12	-12	-12	-10	-11	-7	-8	-10	-6	-6	-7	-6	-6	-3	-3	-6	-2	1	2	1	-9	-15	-15		
6	-15	-14	-14	-14	-11	-12	-10	-10	-10	-10	-5	-3	-2	-1	-3	-8	-10	-10	-8	-5	-4	-6	-11	-14	-13	
7	-14	-15	-15	-15	-13	-10	-9	-7	-5	-4	-2	-12	-21	-30	-37	-44	-41	-40	-42	-46	-47	-51	-46			
8	-41	-32	-20	-15	-12	-13	-17	-12	-25	-19	-22	-28	-27	-13	-29	-30	-32	-33	-33	-26	-25	-26	-29	-31	-26	
9	-20	-26	-27	-25	-24	-24	-24	-19	-19	-18	-21	-18	-15	-10	-13	-19	-15	-9	-7	-9	-12	-17	-19	-11		
10	-11	-8	-13	-14	-17	-17	-17	-19	-10	-8	-13	-15	-21	-22	-16	-9	-6	-8	-15	-17	-18	-16	-15	-12		
11	-14	-12	-14	-14	-15	-16	-14	-11	-15	-18	-15	-15	-13	-11	-12	-7	-7	-5	-6	-5	-8	-12	-21	-18		
12	-17	-13	-12	-13	-16	-14	-11	-9	-3	-2	-5	-5	-5	-5	-6	-4	-5	-7	-4	-5	-7	-7	-15	-22	-22	
13	-21	-23	-23	-23	-20	-16	-16	-18	-11	-9	-8	-8	-13	-13	-10	-17	-18	-17	-16	-11	-13	-20	-25	-22	-19	
14	-14	-10	-10	-15	-15	-24	-19	-16	-16	-13	-10	-12	-13	-12	-10	-15	-17	-14	-8	-5	-6	-13	-14	-12	-12	
15	-15	-8	-5	-3	-4	-6	-10	-12	-9	-10	-11	-11	-10	-11	-12	-14	-11	-9	-7	-8	-8	-8	-11	-14	-15	
16	-14	-11	-12	-12	-9	-7	-6	-7	-8	-8	-5	3	5	4	0	-4	-5	-7	-5	-3	-2	-5	-7	-7		
17	-4	0	2	4	3	1	1	4	3	2	0	6	2	5	3	7	9	15	13	-1	0	10	14	-7		
18	-4	-10	-6	-6	-3	-15	-19	-19	-21	-19	-16	-10	-8	-5	-3	-3	-2	-1	-2	-4	-4	-16	-15	-15		
19	-14	-11	-11	-13	-10	-12	-18	-23	-20	-18	-20	-20	-17	-18	-18	-13	-11	-11	-17	-13	-9	-15	-23	-22		
20	-15	-12	-11	-8	-9	-9	-11	-8	-12	-16	-7	-8	-10	-13	-13	-13	-9	-10	-9	-10	-8	-8	-9	-5		
21	-5	-1	-7	-8	-9	-8	-6	-3	-2	-9	-10	-9	-9	-11	-8	-7	-13	-22	-20	-16	-9	-12	-11			
22	-6	-6	-3	-4	-5	-5	-6	-8	-9	-8	-7	-6	-8	-8	-8	-7	-5	-6	-8	-7	-6	-4	-5			
23	-5	-6	-6	-8	-6	-3	0	-1	-3	-4	-4	-4	-5	-5	-5	-5	-6	-5	-4	-4	-4	-3	1	2		
24	2	2	3	4	3	3	4	5	6	5	4	4	4	2	3	3	4	4	4	4	4	5	5	6		
25	6	7	8	9	8	7	6	6	7	10	9	7	7	8	6	6	4	4	4	4	6	9	12	19	21	
26	26	25	21	19	18	19	20	18	13	5	4	5	5	3	-5	-6	-4	-1	0	2	2	-3	-4	-8		
27	-14	-15	-10	-3	-1	-5	-6	-3	-3	-1	-3	-4	-4	-4	-8	-5	-28	-38	-40	-38	-34	-37	-49	-44		
28	-33	-29	-23	-23	-25	-24	-25	-27	-29	-29	-25	-24	-26	-26	-28	-28	-28	-28	-29	-31	-32	-33	-34	-33		
29	-31	-24	-33	-42	-54	-65	-56	-49	-43	-33	-25	-24	-18	-16	-15	-19	-23	-27	-23	-26	-27	-39	-33	-29		

TABLE 10 Dst - continued

MARCH 1975

	UNIT=GAMMAS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	G+NeT*	24	
DAY																											
1	-27	-25	-25	-24	-23	-25	-24	-21	-21	-19	-23	-20	-22	-18	-18	-17	-20	-17	-16	-21	-19	-12	-11	-11	-11	-11	
2	-7	-5	-6	-13	-13	-19	-20	-18	-15	-18	-21	-24	-19	-16	-23	-36	-40	-34	-25	-22	-32	-32	-29	-29	-26	-26	
3	-29	-35	-29	-31	-38	-38	-39	-26	-25	-22	-22	-21	-21	-19	-19	-13	-13	-23	-19	-15	-29	-33	-33	-33	-33	-33	
4	-31	-28	-27	-26	-26	-23	-20	-20	-23	-24	-19	-16	-14	-14	-15	-17	-20	-14	-15	-13	-11	-10	-12	-11	-11	-11	
5	-12	-12	-11	-13	-12	-11	-9	-3	-11	-18	-15	-14	-13	-10	-14	-20	-22	-17	-18	-18	-17	-20	-20	-20	-15	-15	
6	-14	-10	-18	-24	-22	-20	-13	-9	-8	-18	-15	-10	-8	-8	-5	-5	-16	-28	-28	-32	-31	-32	-41	-34	-34	-34	
7	-29	-4.1	-4.7	-4.1	-3.3	-3.2	-3.5	-3.4	-3.1	-3.1	-2.3	-2.4	-2.0	-1.3	-1.3	-1.2	-1.9	-2.6	-2.7	-2.3	-1.7	-1.9	-3.5	-3.1	-2.4	-2.4	
8	-26	-38	-55	-54	-59	-52	-45	-45	-45	-45	-42	-42	-35	-30	-28	-32	-32	-36	-34	-31	-33	-36	-37	-32	-32	-32	-32
9	-13	-6	-6	-16	-16	-19	-20	-24	-26	-26	-24	-19	-23	-23	-26	-33	-33	-37	-29	-27	-34	-28	-28	-33	-33	-33	
10	-34	-26	-22	-24	-4.1	-37	-27	-22	-23	-23	-27	-30	-28	-22	-22	-30	-37	-36	-36	-29	-29	-23	-22	-29	-34	-34	-34
11	-37	-35	-34	-33	-31	-28	-27	-27	-21	-21	-18	-16	-20	-19	-19	-19	-19	-25	-24	-21	-21	-21	-22	-22	-22	-22	
12	-32	-33	-32	-32	-32	-26	-24	-26	-3.6	-38	-36	-38	-30	-29	-25	-20	-22	-26	-27	-25	-21	-18	-18	-24	-23	-23	
13	-21	-15	-14	-16	-17	-16	-17	-21	-21	-25	-27	-26	-20	-18	-18	-20	-22	-23	-24	-20	-22	-24	-18	-18	-18	-18	
14	-25	-28	-28	-24	-26	-23	-16	-15	-15	-16	-16	-16	-20	-19	-17	-17	-18	-19	-16	-18	-15	-14	-14	-13	-13	-13	
15	-11	-11	-14	-10	-15	-10	-15	-23	-23	-22	-19	-22	-20	-14	-12	-8	-13	-19	-14	-9	-3	5	14	12	6	-15	
16	-1.2	-11	-1.4	-1.5	-1.5	-1.1	-1.2	-1.1	-1.1	-1.1	-1.5	-1.6	-1.4	-1.1	-1.1	-1.4	-1.2	-1.3	-1.4	-1.4	-1.3	-1.0	-9	-8	-8	-8	
17	-1.4	-1.5	-1.2	-8	-8	-8	-11	-14	-14	-1.5	-1.5	-1.6	-1.4	-1.1	-1.3	-1.1	-1.6	-1.7	-1.6	-1.5	-1.6	-1.6	-1.8	-1.6	-1.6	-1.6	
18	-1.2	-1.1	-1.7	-6	-8	-7	-8	-12	-12	-1.6	-1.6	-1.5	-1.1	-9	-9	-12	-14	-12	-12	-14	-11	-11	-10	-10	-10	-10	
19	-6	-6	-4	-5	-8	-7	-8	-11	-11	-1.4	-1.3	-1.0	-9	-7	-8	-6	-6	-7	-7	-10	-14	-10	-4	-2	-3	-3	
20	-2	0	0	1	0	-2	-2	-5	-8	-10	-12	-4	-2	-5	-5	-5	-5	-5	-4	-3	-1	-3	0	-1	-1	-1	
21	0	2	-1	-2	-4	-4	-5	-6	-7	-6	-4	-5	-5	-5	-8	-8	-4	-4	-2	-3	-3	-1	0	-1	0	-1	
22	-1	-1	-2	-2	0	-1	-2	-3	-2	-2	-3	-1	-2	0	-1	-1	-2	-1	-3	5	5	3	3	3	3	3	
23	6	8	7	7	7	8	1.2	1.3	1.4	1.4	1.4	1.1	1.2	1.6	1.6	1.6	1.6	1.5	2	2	1	1	1	1	1	1	
24	0	-3	-6	-8	-6	-8	-6	-8	-11	-10	-8	-5	-4	-3	-1	-4	-3	1	1	3	3	4	5	7	7	7	
25	9	11	12	12	11	9	9	10	9	10	14	16	19	20	20	19	20	19	21	21	21	17	22	19	19	19	
26	9	3	-7	-4.3	-86	-136	-186	-226	-211	-202	-187	-169	-130	-200	-204	-203	-197	-184	-176	-154	-146	-140					
27	-12.5	-10.9	-9.7	-9.2	-9.1	-8.9	-8.8	-8.3	-7.1	-6.5	-6.2	-6.4	-5.9	-5.4	-5.0	-5.2	-6.1	-6.7	-7.2	-7.0	-6.9	-7.2					
28	-7.4	-7.2	-6.4	-6.8	-7.7	-7.8	-7.2	-6.4	-6.4	-6.3	-5.8	-4.8	-4.6	-4.9	-4.7	-4.7	-5.0	-5.2	-5.0	-5.1	-5.0	-4.8					
29	-4.5	-4.4	-4.8	-5.7	-6.2	-5.5	-5.0	-5.5	-4.8	-4.3	-3.9	-3.9	-4.0	-3.7	-4.0	-4.0	-4.2	-4.3	-4.1	-3.7	-3.2						
30	-29	-29	-25	-30	-33	-31	-32	-32	-37	-32	-28	-26	-32	-29	-25	-23	-23	-20	-22	-28	-35	-40	-36	-29	-29	-29	
31	-28	-32	-33	-34	-34	-29	-27	-26	-26	-23	-23	-20	-18	-17	-17	-20	-24	-28	-26	-23	-24	-25	-24	-24	-24	-24	

Part B.

TABLE 10 Dst - continued

DAY	APRIL 1976												G-MeTo											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-25	-31	-46	-33	-100	-145	-172	-191	-218	-210	-192	-171	-166	-159	-149	-145	-139	-138	-136	-132	-123	-110		
2	-101	-97	-89	-89	-84	-81	-77	-77	-75	-72	-69	-67	-56	-62	-58	-53	-49	-43	-41	-51	-70	-62	-65	
3	-67	-67	-61	-58	-63	-69	-72	-92	-87	-85	-71	-66	-55	-67	-74	-83	-89	-85	-77	-73	-85	-91	-88	-78
4	-64	-64	-64	-56	-50	-53	-55	-56	-62	-56	-50	-45	-42	-51	-55	-59	-55	-51	-50	-49	-53	-52	-50	-51
5	-52	-49	-48	-53	-54	-51	-50	-54	-57	-57	-51	-48	-43	-45	-43	-40	-40	-45	-53	-50	-49	-47	-39	
6	-39	-41	-46	-47	-39	-44	-49	-48	-52	-47	-43	-39	-33	-36	-41	-43	-44	-39	-40	-39	-39	-41	-43	
7	-39	-36	-32	-31	-30	-32	-30	-31	-39	-43	-43	-34	-36	-40	-36	-37	-37	-37	-37	-37	-37	-50	-55	-49
8	-41	-38	-39	-39	-38	-36	-37	-32	-32	-30	-32	-28	-34	-30	-26	-25	-27	-27	-29	-31	-35	-35	-40	-38
9	-33	-33	-34	-32	-32	-30	-22	-21	-22	-23	-18	-13	-13	-13	-11	-18	-16	-20	-26	-33	-36	-32	-29	-31
10	-36	-38	-39	-32	-26	-28	-30	-28	-28	-25	-23	-19	-17	-17	-11	-8	-8	-18	-22	-25	-26	-22	-22	
11	-24	-20	-16	-16	-11	-11	-12	-11	-8	-6	-7	-10	-10	-10	-13	-11	-7	-2	-1	-7	-9	-10	-24	-21
12	-23	-23	-25	-25	-22	-17	-19	-20	-18	-19	-19	-16	-17	-16	-17	-19	-13	-11	-13	-12	-14	-19	-17	-10
13	-7	-13	-16	-21	-18	-16	-13	-10	-11	-10	-12	-10	-8	-6	-9	-7	-5	-5	-9	-11	-17	-19	-13	
14	-7	-10	-12	-15	-16	-18	-20	-17	-17	-13	-7	-4	-10	-12	-12	-11	-11	-12	-10	-14	-20	-25	-27	-23
15	-19	-17	-16	-17	-16	-13	-10	-11	-12	-10	-10	-8	-11	-11	-9	-8	-8	-8	-12	-11	-13	-15	-16	-16
16	-14	-12	-14	-11	-9	-6	-10	-4	0	10	7	7	9	8	5	9	4	-3	-7	-8	-7	-5	-2	
17	2	-2	-3	-4	1	-2	-9	-9	-11	-11	-9	-6	-2	-2	1	2	-2	-5	-6	-6	-5	-5	-2	
18	-3	-5	-6	-6	-3	-2	-2	-2	-3	-3	0	1	3	4	6	7	7	5	4	2	-1	0		
19	-1	-1	1	2	4	3	4	3	2	4	-8	-6	-3	-3	-6	-9	-8	-6	-7	-1	0	2		
20	4	2	4	3	4	3	3	3	4	4	5	7	7	5	2	5	3	2	3	2	1	-1		
21	0	-1	-2	-3	-3	-1	2	1	4	2	-3	-7	-10	-8	-7	-4	0	4	4	3	10	8		
22	3	4	6	-2	1	-13	-27	-34	-26	-31	-31	-29	-25	-24	-22	-19	-18	-18	-22	-21	-22	-22	-27	
23	-26	-23	-23	-25	-25	-23	-22	-21	-18	-18	-15	-15	-9	-3	-4	-5	-6	-4	-4	-3	-2	3	8	
24	11	12	11	6	-3	-17	-23	-23	-30	-31	-23	-23	-25	-27	-23	-19	-17	-20	-24	-25	-33	-31		
25	-23	-20	-20	-18	-18	-24	-20	-16	-15	-14	-14	-16	-15	-13	-11	-11	-14	-19	-19	-21	-27	-23	-16	
26	-11	-10	-12	-13	-13	-11	-11	-12	-13	-13	-13	-10	-5	-4	-3	-1	-1	3	1	-5	-9	-10		
27	-13	-17	-8	-6	-16	-13	-9	-7	-5	-2	1	1	2	2	6	5	6	5	1	0	-3	-8	-10	
28	-7	-7	0	-5	-7	-4	-2	-9	-6	-7	-4	-1	-3	-4	-7	-8	-3	-2	-4	-8	-12	-14	-10	
29	-2	-3	-6	-6	-5	-6	-4	2	5	5	2	-2	-3	0	3	-6	-24	-28	-20	-35	-43	-42	-45	
30	-34	-31	-28	-26	-36	-35	-27	-26	-28	-26	-19	-19	-18	-18	-15	-12	-14	-12	-13	-17	-19	-17	-14	

TABLE 10 Dst - continued

DAY	MAY 1976								MAY 1975								GEO. MEAN T.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-14	-15	-12	-11	-10	-8	-11	-16	-16	-12	-9	-4	-4	-6	-9	-7	-8	-8	-10	-18	-16	-12	-12	
2	-16	-14	-19	-25	-19	-15	-12	-11	-14	-22	-19	-25	-39	-35	-30	-28	-29	-30	-32	-39	-31	-31	-36	
3	-92	-107	-74	-85	-63	-101	-96	-92	-71	-73	-86	-59	-59	-64	-61	-63	-60	-73	-75	-68	-75	-67	-58	
4	-54	-54	-52	-52	-55	-53	-49	-52	-51	-51	-49	-45	-39	-29	-28	-33	-38	-42	-44	-46	-52	-51	-43	
5	-40	-38	-38	-32	-27	-24	-24	-22	-24	-26	-30	-25	-18	-16	-22	-24	-25	-24	-28	-33	-31	-28	-30	
6	-26	-23	-22	-25	-24	-23	-25	-25	-27	-26	-25	-24	-26	-26	-26	-26	-24	-18	-18	-20	-22	-25	-26	
7	-31	-39	-38	-32	-32	-29	-26	-25	-23	-23	-21	-21	-22	-24	-23	-21	-19	-17	-17	-17	-20	-22	-19	
8	-18	-21	-15	-17	-3	-6	-11	-11	-11	-14	-13	-13	-13	-13	-13	-13	-6	-8	-10	-13	-12	-14	-11	
9	-11	-14	-16	-17	-18	-16	-13	-12	-12	-12	-12	-10	-11	-11	-11	-11	-5	-10	-10	-10	-11	-12	-10	
10	-7	-5	-6	-8	-7	-6	-5	-2	1	0	-1	-1	4	6	6	3	3	1	-5	-11	-15	-16	-13	
11	-11	-13	-11	-12	-10	-10	-11	-14	-12	-4	-1	-1	-1	-1	-1	2	3	3	-5	-11	-18	-24	-23	
12	-19	-15	-18	-16	-16	-10	-8	-12	-12	-29	-22	-18	-15	-15	-11	-6	-7	-8	-9	-12	-11	-12	-7	
13	-8	-7	-3	0	1	8	6	-15	-3	-5	-6	-6	-6	-4	0	-4	-4	-5	-7	-14	-14	-14	-4	
14	-2	-1	-1	-2	-3	-4	-6	-6	-6	-7	-10	-10	-10	-7	-5	-5	-4	-5	0	1	3	0	-9	
15	-6	-5	-3	-2	0	3	3	1	-1	-1	0	-3	-7	-3	-1	-3	-1	0	0	1	3	0	-11	
16	-11	-7	-6	-7	-6	-2	0	0	2	1	-2	3	6	9	5	6	4	3	6	3	4	4	2	
17	2	3	6	6	6	9	1	0	-2	-4	-1	2	2	-3	-5	-6	-5	-4	-3	-2	1	5	4	
18	2	1	3	5	5	7	7	6	5	5	3	4	7	8	7	10	8	10	12	15	18	16	14	
19	11	6	5	6	6	8	11	9	4	-6	9	9	9	10	12	15	19	30	30	21	8	3	-14	
20	-24	-23	-24	-22	-26	-29	-35	-29	-22	-27	-28	-25	-22	-22	-23	-28	-36	-38	-32	-16	-18	-16	-17	-23
21	-26	-21	-23	-18	-19	-19	-20	-23	-23	-15	-9	-4	-3	1	3	-5	-6	0	11	9	7	7	4	
22	1	-4	0	3	7	11	0	-1	-4	0	1	-2	-13	-17	-16	-17	-16	-15	-15	-14	-16	-11	-8	
23	-8	-8	-4	-2	1	1	1	-10	-21	-26	-20	-16	-31	-37	-36	-36	-20	-26	-26	-27	-27	-25	-20	
24	-19	-18	-15	-11	-12	-8	-6	-4	-3	0	0	-3	-1	2	1	-5	-2	-4	-2	0	4	13	8	
25	6	8	5	13	8	-2	-3	-7	-5	1	-4	-6	-5	-5	-3	1	6	7	-1	-6	-11	-11	-9	
26	-8	-7	-5	-2	0	-2	-6	-6	-4	-1	2	2	1	-7	-5	-5	-4	-2	-4	-7	-9	-8	-7	
27	-5	-4	-3	-2	-5	-4	-1	1	3	1	0	2	0	0	0	-1	0	0	-3	-7	-6	-7	-7	
28	-3	1	3	-4	-10	-7	-15	-26	-25	-19	-15	-13	-10	-13	-15	-15	-18	-21	-19	-22	-25	-24	-23	
29	-20	-17	-14	-15	-15	-14	-12	-13	-16	-11	-13	-12	-10	-7	-10	-7	-10	-9	-1	-8	-22	-19	-21	
30	-26	-31	-23	-24	-27	-23	-17	-13	-16	-22	-23	-19	-13	-17	-19	-19	-21	-24	-26	-19	-22	-21	-20	
31	-21	-19	-18	-18	-16	-18	-20	-20	-19	-16	-14	-12	-10	-8	-7	-11	-12	-16	-16	-16	-18	-20	-21	

TABLE 10 Dst - continued

UNIT=GAMMAS		JUNE 1976												G.M.T.											
	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-18	-15	-10	-6	-5	-5	-5	-5	-5	-7	-7	-4	-2	-3	-1	4	-1	-10	-14	-10	-8	-5	-6	-10	-10
2	-8	-3	1	2	1	-1	-4	-6	-8	-7	-3	-2	0	1	3	0	-4	-8	-6	-3	-3	-7	-7	-10	-11
3	-11	-10	-7	-4	-6	-6	-10	-11	-10	-7	-5	-4	-1	5	7	12	22	27	24	22	15	-12	-22	-19	-14
4	-14	-11	-16	-19	-16	-15	-16	-14	-19	-17	-15	-15	-15	-18	-15	-11	-5	-3	-3	0	0	-1	-6	-3	-5
5	-10	-10	-8	-11	-11	-15	-17	-18	-14	-11	-6	-6	-11	-10	-12	-8	-6	-11	-7	-9	-11	-13	-14	-15	-20
6	-19	-17	-14	-11	-11	-11	-11	-11	-10	-6	-5	-4	-1	-5	-6	-5	-6	-6	-4	-3	-4	-4	-6	-8	-10
7	-11	-9	-13	-8	-5	-5	-10	-11	-7	-9	-12	-11	-8	-4	-1	-4	-6	-2	-3	-6	-3	-6	-8	-8	-11
8	-9	-10	-10	-10	-12	-11	-7	-9	-10	-12	-17	-16	-13	-11	-9	-7	-8	-8	-5	-6	-7	-7	-12	-10	-5
9	-8	-9	-10	-10	-8	-10	-8	-10	-12	-17	-16	-13	-11	-9	-7	-8	-3	-4	-3	0	4	5	5	6	-6
10	-1	1	2	0	-4	-4	-2	0	2	3	6	3	-2	-4	-4	-3	-3	0	4	5	5	6	5	6	-6
11	-26	-40	-41	-32	-28	-38	-45	-48	-53	-57	-46	-46	-44	-39	-31	-30	-31	-32	-35	-35	-34	-32	-28	-26	-26
12	-22	-20	-17	-17	-17	-18	-20	-19	-21	-19	-19	-19	-13	-12	-4	-7	-1	2	2	-1	-6	-9	-12	-16	-16
13	-12	-13	-12	-12	-12	-14	-11	-11	-13	-13	-11	-11	-11	-11	-11	-11	-9	-9	-6	-6	-5	-5	-7	-9	-6
14	-4	0	2	0	-3	-2	-2	-2	-3	-3	-2	-2	-1	-1	-1	-1	-3	-2	0	1	0	-1	-2	0	4
15	6	7	8	6	7	6	6	7	9	9	9	10	12	11	9	10	9	8	9	14	20	17	9	3	4
16	1	1	3	-1	1	2	1	2	0	-3	2	5	6	4	1	-1	-1	1	0	1	0	1	-7	-7	
17	-4	-2	4	10	14	16	24	14	15	8	7	16	15	13	10	4	-1	2	-3	-3	-2	-2	0	2	
18	-4	-9	-13	-15	-16	-18	-15	-16	-14	-15	-13	-5	-3	-2	-7	-15	-16	-14	-15	-17	-16	-18	-17	-17	
19	-16	-14	-13	-13	-11	-9	-7	-4	-2	-3	-6	-5	-3	-4	-3	-6	-6	-6	-6	-9	-9	-9	-11	-11	
20	-14	-14	-9	-7	-6	-6	-6	-3	-5	-11	-13	-11	-11	-6	-6	-9	-8	-7	-9	-10	-6	-6	-5	-5	
21	-4	-5	-3	-2	-1	1	2	3	6	6	6	4	-1	-2	1	3	5	7	6	5	5	9	9	7	
22	6	4	3	3	4	4	4	6	5	7	5	5	7	7	5	5	6	8	6	6	6	12	14	15	
23	12	8	6	10	14	16	16	12	14	13	13	10	9	8	10	13	14	13	13	14	10	7	6	6	
24	2	1	3	3	8	7	11	16	17	17	17	14	14	15	14	19	28	34	22	16	16	4	2	-10	
25	-23	-25	-21	-17	-17	-19	-20	-17	-13	-12	-7	-2	-4	-5	-7	-9	-5	-5	-7	-12	-12	-19	-19	-18	
26	-17	-17	-16	-14	-13	-12	-11	-6	-4	-2	0	-2	-3	-2	1	3	4	4	4	2	-4	-11	-13	-12	
27	-14	-11	-2	-3	-2	0	8	11	13	13	6	7	5	1	3	2	1	-1	-1	-5	-8	-9	-9	-9	
28	-11	-11	-11	-9	-9	-11	-11	-8	-8	-8	-7	-5	-5	-6	-6	-3	0	-1	-5	-7	-12	-14	-14	-14	
29	-12	-12	-8	-4	-3	-3	0	3	2	5	6	7	5	3	1	3	7	11	11	8	6	7	4	4	
30	-1	-3	3	14	15	9	9	15	5	4	-19	-25	-14	-7	-9	-9	-17	-21	-28	-26	-26	-19	-18	-17	

TABLE 10. Dst - continued

DAY	JULY 1975												G•HeT•											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-25	-30	-26	-24	-30	-22	-24	-21	-20	-19	-20	-20	-17	-17	-20	-21	-20	-20	-20	-21	-22	-22	-23	
2	-28	-30	-26	-25	-25	-25	-24	-22	-18	-17	-20	-18	-17	-13	-14	-15	-13	-14	-15	-16	-16	-19	-20	-19
3	-19	-19	-16	-14	-15	-22	-24	-18	-16	-16	-20	-22	-15	-13	-14	-13	-17	-11	-6	-4	-12	-10	-5	
4	-6	-11	-9	-9	-7	-10	-11	-16	-16	-16	-12	-10	-11	-9	-11	-9	-15	-17	-21	-15	-15	-12	-12	
5	-14	-15	-14	-14	-16	-14	-16	-10	-7	-3	-12	-13	-15	-17	-14	-10	-10	-10	-10	-6	-3	-5	-7	
6	-6	-8	-8	-6	-7	-8	-5	-6	-9	-8	-8	-4	-7	-11	-14	-11	-4	-2	-2	-1	-3	-3	-2	
7	-3	-6	-13	-11	-9	-9	-11	-6	-3	-3	-3	-12	-14	-13	-13	-15	-15	-11	-11	-12	-10	-11	-10	
8	-8	-8	-7	-10	-8	-11	-11	-10	-7	-4	-5	-4	-4	-4	-2	-2	-1	0	-4	-5	-11	-6	-1	
9	-3	-2	-5	-15	-15	-22	-18	-13	-11	-12	-12	-8	-3	-1	-2	-1	-5	-4	0	0	1	-5	-7	
10	-9	-10	-7	-10	-9	-3	0	-3	-2	-6	-8	-7	-7	-6	-6	-6	-3	-2	-5	-3	-5	-4	-3	
11	-4	-3	-2	-3	-1	-4	-6	-7	-7	-8	-6	-5	-2	0	0	-1	-2	1	1	5	4	5	5	
12	6	9	13	10	12	12	17	19	17	13	10	5	3	2	2	1	2	4	2	3	2	3	2	
13	5	6	5	2	7	6	5	4	3	5	7	6	6	7	8	8	11	12	11	9	5	5	1	
14	1	0	1	0	-2	-3	-5	-6	0	1	0	3	2	0	-1	-2	-3	-4	-5	-4	-4	-3	-3	
15	-7	-11	-12	-8	-3	-1	3	4	12	10	7	11	14	21	26	37	29	9	7	-1	-3	-1	-4	
16	-12	-11	-9	-10	-11	-24	-35	-29	-25	-18	-15	-13	-14	-15	-11	-9	-8	-7	-8	-15	-23	-21	-15	
17	-11	-13	-14	-14	-14	-18	-15	-17	-11	-11	-15	-14	-15	-16	-14	-11	-11	-10	-7	-7	-11	-15	-7	
18	-5	-7	-5	-7	-7	-4	0	3	2	2	2	3	2	3	2	4	4	4	5	2	-2	-6	-9	
19	-11	-11	-10	-7	-6	-4	-4	-7	-6	-4	0	1	2	-3	-7	-7	-8	-6	-4	-3	-1	2	4	
20	-1	-5	-3	-1	-2	0	2	-1	2	3	3	5	4	5	6	4	5	4	3	3	1	4	4	
21	2	3	4	3	2	5	7	7	6	7	6	2	3	2	0	0	-1	-2	0	5	6	7	7	
22	3	2	2	3	3	6	11	12	6	1	-1	2	3	3	5	3	0	-3	-5	-4	-1	0	0	
23	-2	-2	-3	-4	-2	-1	0	3	4	3	5	6	5	5	1	1	-3	-5	-4	0	3	4	2	
24	7	8	11	11	13	15	13	14	17	17	15	13	13	15	11	9	10	11	9	3	-1	1	-1	
25	3	-5	-15	-14	-9	-6	-6	-2	0	2	1	-5	-1	0	-6	-9	-11	-8	-7	-9	-6	-5	-9	
26	-10	-8	-5	-5	-4	-4	-5	-4	-1	1	-1	-2	0	-1	-1	-1	-3	-4	-3	-1	-1	-4	-3	
27	0	-3	-1	0	-2	2	4	5	3	9	8	7	7	4	5	4	8	5	8	14	5	0	-6	
28	-14	-21	-18	-13	-8	-15	-23	-21	-12	-15	-15	-15	-16	-17	-11	-10	-15	-16	-22	-13	-9	-11	-12	
29	-11	-15	-25	-28	-22	-20	-18	-19	-14	-19	-12	-9	-13	-20	-19	-16	-15	-16	-16	-17	-16	-14	-12	
30	-16	-16	-15	-16	-15	-18	-19	-15	-7	-3	-5	-17	-20	-16	-13	-10	-9	-10	-9	-11	-14	-15	-14	
31	-15	-17	-16	-15	-15	-17	-19	-15	-16	-11	-13	-16	-16	-16	-18	-18	-16	-12	-9	-7	-4	-8	-10	

TABLE 10 Dst - continued

AUGUST 1975

	UNIT=GAMMAS												G.M.T.												
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	-11	-6	-4	-3	0	1	-6	-9	-6	-7	-4	-6	-10	-13	-15	-18	-19	-15	-16	-15	-16	-15	-12	-5	-6
2	-7	-10	-12	-13	-12	-11	-11	-8	-1	0	-4	-3	-1	-4	-2	-8	-10	-10	-10	-10	-10	-10	-10	-4	-4
3	-8	-11	-14	-12	-6	-11	-13	-11	-9	-7	-3	-1	-4	-6	-4	-2	-8	-12	-6	-4	-5	-14	-16	-12	-8
4	-8	-6	-6	-8	-5	-4	-5	-3	0	5	6	4	2	3	6	5	1	2	6	5	5	5	10	12	
5	12	9	5	1	1	-2	-2	1	2	4	4	7	3	-5	-1	-2	-3	-5	-6	-2	0	1	-1	-1	
6	-2	-5	-10	-15	-19	-16	-17	-14	-9	-8	-9	-7	-7	-9	-7	-4	-5	-10	-10	-9	-3	-2	-4	-5	
7	-3	-2	-2	-3	-6	-5	-3	-1	0	-1	0	-1	0	-3	-4	-2	-3	0	1	1	-1	-5	-10	-4	-4
8	-1	1	1	1	0	-2	1	1	3	1	-3	-2	-2	-3	-3	-4	-2	4	5	-1	1	1	0	-1	-1
9	3	2	2	6	12	8	6	-23	-31	-25	-25	-24	-26	-29	-27	-28	-31	-32	-29	-23	-16	-11	-11	-14	
10	-14	-16	-22	-19	-19	-16	-13	-11	-12	-14	-16	-18	-19	-19	-16	-15	-15	-17	-16	-15	-15	-17	-20	-23	
11	-24	-25	-27	-23	-18	-20	-21	-22	-19	-16	-17	-19	-20	-21	-19	-16	-13	-11	-13	-8	-10	-12	-14	-15	
12	-13	-12	-11	-9	-9	-10	-9	-8	-5	-4	-5	-6	-9	-12	-13	-12	-10	-12	-15	-14	-13	-16	-10	-11	
13	-12	-8	-7	-9	-10	-8	-5	-2	0	-3	-7	-6	-4	-6	-4	-7	-10	-10	-10	-8	-5	-1	2	4	
14	5	2	1	3	1	-4	-7	-6	-3	-2	-5	-9	-18	-22	-15	-7	-4	-3	-5	-5	-7	-11	-12	-9	
15	-10	-14	-14	-13	-13	-13	-13	-12	-12	-11	-9	-8	-8	-4	3	-1	-2	0	2	0	-2	-4	-7	-5	
16	-2	-2	-3	-7	-9	-7	-4	0	2	6	4	-4	-3	1	3	9	6	5	0	-2	-5	-9	-14	-13	
17	-12	-12	-14	-11	-8	-3	-3	-3	-2	1	1	-2	-3	-3	1	1	1	3	6	6	6	3	5	0	
18	0	-3	-4	-5	0	4	3	6	7	8	12	15	14	11	9	7	7	5	3	6	6	7	9	13	
19	14	12	15	14	13	11	9	7	6	11	11	10	8	6	4	6	8	11	15	18	21	22	20		
20	15	6	3	2	3	2	2	5	7	9	9	6	4	4	8	9	9	9	10	9	8	9	10	12	
21	12	7	6	8	9	9	6	12	6	-7	-6	-3	-3	-4	-4	-5	-7	-8	-9	-7	-2	-3	-4	-3	
22	-4	-7	-5	-7	-9	-10	-7	-5	-4	1	4	5	3	3	1	-1	-2	-2	0	1	2	1	3		
23	4	5	4	5	6	3	2	0	-10	-18	-5	3	6	4	-4	-28	-43	-32	-27	-28	-33	-26	-27		
24	-21	-26	-33	-32	-35	-29	-27	-25	-19	-16	-23	-23	-21	-19	-18	-23	-24	-23	-23	-15	-18	-17	-12		
25	-13	-21	-20	-21	-21	-18	-19	-21	-22	-17	-17	-18	-17	-17	-17	-23	-27	-31	-28	-26	-27	-22	-16		
26	-17	-23	-27	-21	-17	-21	-24	-26	-22	-21	-20	-28	-28	-24	-23	-26	-30	-28	-26	-24	-20	-23	-21	-20	
27	-20	-22	-21	-19	-19	-18	-16	-15	-13	-14	-18	-15	-11	-11	-17	-24	-23	-22	-14	-14	-18	-22	-17		
28	-14	-14	-14	-13	-12	-10	-8	-8	-15	-15	-14	-14	-15	-17	-14	-15	-17	-16	-20	-24	-20	-18	-17		
29	-14	-15	-17	-15	-12	-9	-9	-10	-12	-12	-12	-11	-9	-8	-9	-8	-9	-8	-9	-8	-9	-11	-12		
30	-13	-10	-13	-18	-16	-13	-11	-9	-8	-5	-6	-9	-11	-10	-5	-6	-6	-5	-7	-11	-11	-12	-8		
31	-5	-4	-5	-8	-9	-5	-2	1	1	-4	-5	-5	-5	-1	3	2	-1	-6	-8	-7	-5	-5	-4	-10	

TABLE 10 Dst - continued

SEPTEMBER 1975

DAY	UNIT=GAMMAS												G.M.T.											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-12	-12	-15	-18	-14	-9	-6	-4	2	5	1	-1	-4	-6	-4	-16	-18	-13	-12	-18	-10	-3	-7	
2	-12	-12	-12	-8	-1	-5	-15	-21	-23	-21	-24	-23	-22	-23	-26	-28	-28	-22	-23	-19	-16	-23	-18	
3	-17	-14	-12	-13	-12	-14	-12	-11	-7	-6	-7	-9	-16	-15	-12	-11	-12	-14	-9	-9	-13	-7	-5	
4	-5	-10	-16	-14	-20	-19	-18	-15	-10	-15	-10	-9	-12	-10	-9	-12	-10	-6	-4	-5	-4	0	1	
5	-4	-11	-12	-14	-14	-13	-12	-10	-9	-15	-17	-18	-15	-15	-16	-15	-17	-12	-12	-11	-8	-6	-4	
6	3	-2	-11	-17	-21	-20	-16	-12	-13	-12	-12	-12	-12	-12	-7	-7	-11	-14	-16	-11	-6	-4	3	
7	7	4	1	-3	-6	-7	-5	-8	-8	-11	-12	-12	-9	-6	-6	-10	-14	-17	-12	-9	-6	-4	-7	
8	-9	-7	-7	-7	-11	-11	-10	-8	-10	-9	-7	-9	-6	-5	-4	-4	-4	-10	-15	-17	-14	-13	-11	
9	-12	-11	-13	-12	-14	-16	-16	-17	-19	-18	-19	-18	-24	-31	-32	-30	-28	-27	-28	-26	-23	-21	-18	
10	-13	-10	-11	-11	-13	-13	-13	-15	-16	-14	-9	-4	-1	-1	-3	-6	-7	-5	-9	-6	-7	-9	-7	
11	-9	-11	-8	-6	-4	-1	-2	-4	-6	-7	-6	-7	-6	-3	0	0	-2	-5	-4	-6	-6	-5	-4	
12	-2	-1	-6	-3	-4	-4	-7	-8	-6	-5	-14	-13	-9	-6	-9	-10	-11	-10	-8	-4	-3	-3	-4	
13	-6	-9	-6	-4	-2	1	6	8	6	5	2	0	1	3	2	1	-2	1	7	7	8	8	5	
14	1	0	3	-2	-5	-3	-2	4	10	16	8	-6	-9	-4	2	5	8	10	14	16	21	11	9	
15	7	6	3	-2	-9	-10	-20	-17	-15	-20	-21	-18	-10	-12	-11	-16	-16	-13	-12	-10	-11	-10	-5	0
16	-1	0	-2	-5	-6	-3	-3	-4	-3	1	3	2	2	5	5	7	9	10	9	13	12	15	14	
17	12	11	10	8	11	15	12	2	0	-2	-2	1	1	5	5	5	6	8	8	-2	-15	-25	-17	
18	-12	-12	-3	-4	-3	-20	-40	-44	-56	-61	-67	-65	-52	-50	-57	-56	-48	-42	-40	-35	-30	-27	-23	-20
19	-16	-17	-16	-18	-18	-19	-20	-19	-19	-25	-32	-33	-30	-20	-17	-17	-33	-31	-30	-31	-22	-33	-31	-26
20	-22	-24	-22	-26	-36	-42	-45	-41	-38	-42	-46	-42	-46	-37	-37	-32	-31	-34	-45	-51	-47	-35	-33	-30
21	-23	-28	-27	-26	-31	-32	-25	-24	-27	-30	-33	-35	-31	-27	-28	-33	-30	-27	-31	-29	-25	-23	-18	
22	-14	-15	-16	-17	-14	-15	-14	-16	-18	-23	-21	-16	-19	-22	-24	-27	-24	-23	-20	-20	-23	-24	-20	
23	-18	-16	-16	-18	-17	-16	-13	-17	-23	-19	-22	-25	-24	-25	-25	-30	-29	-27	-22	-22	-26	-25	-22	
24	-17	-16	-19	-18	-17	-14	-14	-15	-16	-15	-19	-21	-22	-21	-21	-18	-15	-9	-7	-8	-9	-8	-6	
25	-10	-17	-16	-22	-22	-21	-17	-15	-13	-11	-16	-24	-32	-38	-41	-35	-31	-29	-27	-30	-22	-17	-16	
26	-9	-16	-20	-24	-21	-17	-13	-12	-12	-14	-17	-21	-26	-23	-18	-16	-19	-15	-13	-11	-9	-5	-7	
27	-5	-1	5	0	-2	0	-1	-7	-7	-11	-14	-14	-16	-19	-16	-17	-18	-17	-16	-15	-9	-8	-5	
28	-10	-13	-14	-9	-7	-12	-12	-7	-6	-7	-9	-7	-4	-5	-4	-2	-2	-2	-2	-7	-3	-11	-11	
29	-3	-2	-3	0	3	7	11	11	7	3	11	8	4	2	-5	-9	-2	0	-9	-15	-10	-9	-12	
30	-13	-10	-9	-8	-8	-7	-6	-5	-2	0	1	4	7	5	10	16	6	2	-5	-16	-24	-22	-19	

TABLE 10 Dst - continued

OCTOBER 1975

	UNIT=GAMMAS												G.M.T.											
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-20	-21	-19	-17	-14	-15	-13	-13	-22	-22	-24	-21	-17	-19	-23	-22	-18	-15	-22	-20	-20	-18	-11	
2	-9	-18	-21	-28	-35	-41	-41	-35	-32	-24	-28	-31	-36	-33	-37	-34	-29	-26	-28	-28	-25	-24	-25	
3	-24	-29	-18	-21	-29	-25	-21	-18	-14	-18	-22	-20	-20	-21	-21	-21	-22	-19	-21	-24	-25	-23	-21	
4	-18	-17	-16	-18	-21	-23	-24	-20	-16	-14	-12	-7	-1	-8	-8	-6	-5	-5	-6	-5	-13	-11	-11	
5	-10	-10	-11	-11	-21	-22	-17	-15	-14	-18	-28	-26	-22	-20	-20	-22	-19	-21	-20	-18	-15	-15	-16	
6	-19	-17	-14	-15	-15	-20	-27	-34	-37	-36	-32	-35	-38	-37	-34	-36	-34	-30	-24	-19	-17	-25	-22	
7	-8	-17	-12	-9	-8	-10	-10	-10	-17	-14	-14	-17	-18	-16	-13	-19	-20	-20	-23	-26	-24	-22	-19	
8	-9	-12	-9	-10	-11	-12	-8	-6	-6	-2	0	-2	-3	-4	-5	-5	-8	-9	-11	-14	-14	-13	-13	
9	-10	-13	-12	-12	-14	-19	-21	-20	-14	-10	-10	-12	-12	-12	-14	-15	-15	-9	-1	0	-4	-10	-17	
11	-19	-14	-10	-7	-8	-10	-7	-4	-3	-2	-6	-7	-9	-13	-18	-17	-14	-8	-7	-12	-17	-15	-17	
12	-15	-12	-8	-6	-3	-2	1	0	9	7	4	5	5	7	8	11	16	18	6	-3	-23	-34	-20	
13	-20	-20	-23	-23	-23	-27	-23	-17	-14	-16	-18	-16	-15	-14	-13	-12	-12	-13	-13	-16	-17	-14	-13	
14	-12	-13	-15	-13	-13	-11	-7	-1	0	-3	-1	-1	-2	-3	-1	-4	-5	-2	11	11	-3	-8	-15	
15	-33	-27	-22	-18	-17	-23	-23	-25	-22	-12	-6	-11	-28	-36	-30	-37	-30	-25	-30	-29	-28	-31	-37	-39
16	-39	-36	-48	-51	-46	-44	-43	-40	-37	-36	-36	-30	-29	-29	-30	-29	-26	-29	-29	-29	-37	-43	-37	-38
17	-40	-40	-38	-34	-34	-38	-44	-34	-38	-40	-40	-47	-40	-37	-35	-36	-32	-28	-32	-40	-46	-41	-38	-47
18	-44	-42	-44	-47	-51	-48	-48	-43	-33	-35	-37	-39	-36	-32	-32	-30	-29	-30	-27	-31	-37	-38	-34	
19	-35	-33	-33	-31	-28	-26	-24	-24	-22	-21	-23	-26	-26	-28	-31	-31	-27	-24	-25	-26	-28	-27	-26	
20	-29	-29	-26	-23	-23	-25	-24	-21	-18	-20	-18	-20	-20	-21	-21	-20	-20	-17	-21	-18	-13	-12	-16	
21	-14	-9	-7	-15	-18	-20	-18	-16	-14	-8	-9	-11	-11	-7	-9	-7	-8	-11	-6	-7	-9	-9	-8	
22	-6	-4	-3	-1	-3	-4	-7	-6	-7	-7	-9	-8	-2	-1	0	-1	-7	-12	-12	-16	-14	-12	-10	
23	-10	-9	-7	-7	-9	-13	-15	-16	-9	-7	-9	-7	-5	0	1	-2	-6	-9	-14	-17	-16	-12	-8	
24	0	4	1	-3	-6	-8	-2	2	1	1	3	4	1	-3	-4	-5	0	2	0	2	0	-8	-7	
25	-10	-9	-14	-13	-10	-9	-12	-13	-13	-12	-13	-14	-12	-11	-8	-5	-6	-5	-5	-4	-4	-6	-6	
26	-8	-10	-7	-2	4	3	1	1	2	4	3	1	2	3	1	0	2	2	4	5	5	3	4	
27	4	4	5	0	-1	-2	-6	-6	-2	2	0	-1	6	6	8	-1	-1	-3	-9	-17	-20	-18	-18	
28	-17	-15	-13	-12	-10	-8	-4	-2	-4	-5	-7	-11	-14	-13	-17	-17	-14	-12	-11	-12	-12	-11	-11	
29	-10	-12	-15	-15	-18	-17	-14	-10	-6	-5	-7	-7	-5	-3	-3	-4	-2	0	-2	-4	-8	-6	-6	
30	-7	-8	-9	-6	-4	-1	2	5	12	12	18	4	-11	-15	-18	-21	-24	-30	-29	-21	-19	-33	-39	
31	-34	-20	-14	-13	-18	-35	-55	-57	-44	-39	-43	-40	-37	-32	-36	-47	-53	-47	-45	-47	-49	-43	-37	-39

TABLE 10 Dst - continued

NOVEMBER 1976

DAY	UNIT=GAMMAS						G.W.E.T.																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	-41	-38	-36	-35	-35	-34	-32	-31	-29	-26	-22	-23	-25	-24	-25	-23	-22	-21	-21	-26	-27	-25	-26	
2	-28	-29	-30	-29	-28	-28	-25	-25	-21	-21	-20	-17	-15	-13	-13	-14	-16	-19	-15	-12	-11	-23	-24	
3	-26	-25	-25	-25	-26	-26	-24	-24	-22	-22	-20	-17	-15	-11	-11	-10	-10	-10	-9	-7	-8	-9	-16	
4	-17	-19	-20	-14	-13	-13	-11	-12	-9	-11	-11	-10	-9	-6	-4	-8	-8	-10	-10	-9	-11	-11	-27	
5	-15	-15	-12	-11	-9	-8	-7	-2	-3	-3	-3	-7	9	6	0	2	4	1	1	0	1	3	0	
6	-1	-3	-5	-7	-8	-6	-7	-7	-6	-7	-7	-5	-4	-5	-4	-5	-7	-6	-5	-9	-10	-12	-13	
7	-8	-4	-1	-1	-2	-3	-3	-5	-4	-4	-4	-7	-6	-5	-3	-2	-5	-8	-7	-7	-5	-5	-4	
8	-2	-2	-4	-3	0	2	3	4	4	4	4	3	4	5	6	3	3	-7	-5	-1	1	-12	-11	
9	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-17	-17	-13	-12	-13	-13	-15	-17	-14	-13	-14	-13	-5
10	-5	-7	-11	-12	-10	-6	-2	-3	-1	-1	-1	-10	-16	-18	-12	-10	-9	-12	-17	-26	-30	-28	-25	-28
11	-23	-24	-27	-27	-21	-19	-21	-24	-17	-17	-21	-34	-48	-41	-34	-42	-45	-39	-31	-28	-37	-34	-29	
12	-32	-43	-41	-39	-36	-36	-34	-27	-23	-21	-22	-21	-23	-20	-17	-21	-22	-21	-19	-18	-32	-36	-27	-25
13	-29	-34	-31	-31	-34	-33	-32	-28	-26	-26	-28	-31	-39	-42	-40	-40	-43	-46	-43	-43	-37	-35	-31	-30
14	-31	-34	-30	-25	-21	-21	-24	-23	-23	-23	-27	-30	-26	-29	-28	-28	-31	-34	-31	-30	-31	-32	-31	
15	-35	-37	-36	-35	-34	-30	-28	-24	-18	-17	-22	-26	-26	-22	-23	-28	-31	-28	-26	-23	-22	-24	-26	-25
16	-24	-23	-20	-20	-21	-21	-19	-21	-16	-16	-17	-15	-15	-16	-19	-23	-27	-25	-22	-22	-21	-21	-20	
17	-22	-26	-30	-25	-19	-17	-17	-17	-15	-13	-18	-23	-27	-27	-23	-21	-22	-22	-21	-19	-20	-21	-19	
18	-21	-22	-24	-24	-22	-16	-12	-12	-12	-11	-11	-9	-8	-9	-10	-9	-11	-12	-10	-9	-12	-9	-6	
19	-4	-8	-12	-15	-8	-5	-6	-5	-6	-3	-1	3	5	7	6	0	-5	0	2	-1	-8	-10	-7	
20	-9	-7	-8	-9	-4	-2	-2	-5	-6	-5	-7	-6	-5	-6	-5	-6	-10	-11	-12	-14	-13	-12	-5	
21	-2	-3	-4	-4	-6	-4	-3	-2	-3	-3	-3	-3	-3	-4	-3	-2	-3	-5	-10	-7	-8	-6	-4	
22	-3	-3	-2	-4	-2	-6	2	-3	-1	-1	-1	-3	-3	-1	-2	-1	-4	-3	-4	-8	-10	-8	-6	
23	-5	-5	-6	-5	-5	-1	-2	-3	-6	-6	-8	-6	-4	-3	-3	-3	-4	-3	-5	-7	-7	-5	-6	
24	-7	-7	-7	-7	-8	-6	-5	-6	-8	-9	-8	-12	-9	-13	-9	-6	-6	-7	-7	-5	-3	-1	5	
25	4	3	6	-2	-12	-19	-26	-30	-29	-33	-36	-35	-36	-37	-34	-29	-27	-25	-27	-25	-26	-23	-21	
26	-23	-25	-22	-18	-14	-14	-9	-10	-10	-12	-9	-8	-8	-8	-10	-15	-14	-15	-22	-28	-37	-40	-39	
27	-39	-37	-40	-45	-41	-36	-37	-36	-33	-31	-27	-23	-20	-18	-18	-15	-15	-13	-19	-21	-20	-19	-22	
28	-19	-19	-17	-16	-16	-17	-15	-14	-15	-18	-20	-18	-16	-15	-15	-15	-15	-13	-7	-5	-2	-3	-5	
29	-4	-4	-2	-1	-2	-1	-2	-1	-7	-10	-8	-9	-7	-6	-12	-7	-14	-17	-13	-10	-8	-6	-9	
30	-14	-9	-9	-14	-16	-10	-10	-5	-3	-1	-6	-8	-6	-6	-6	-3	-4	-6	3	2	5	2	3	

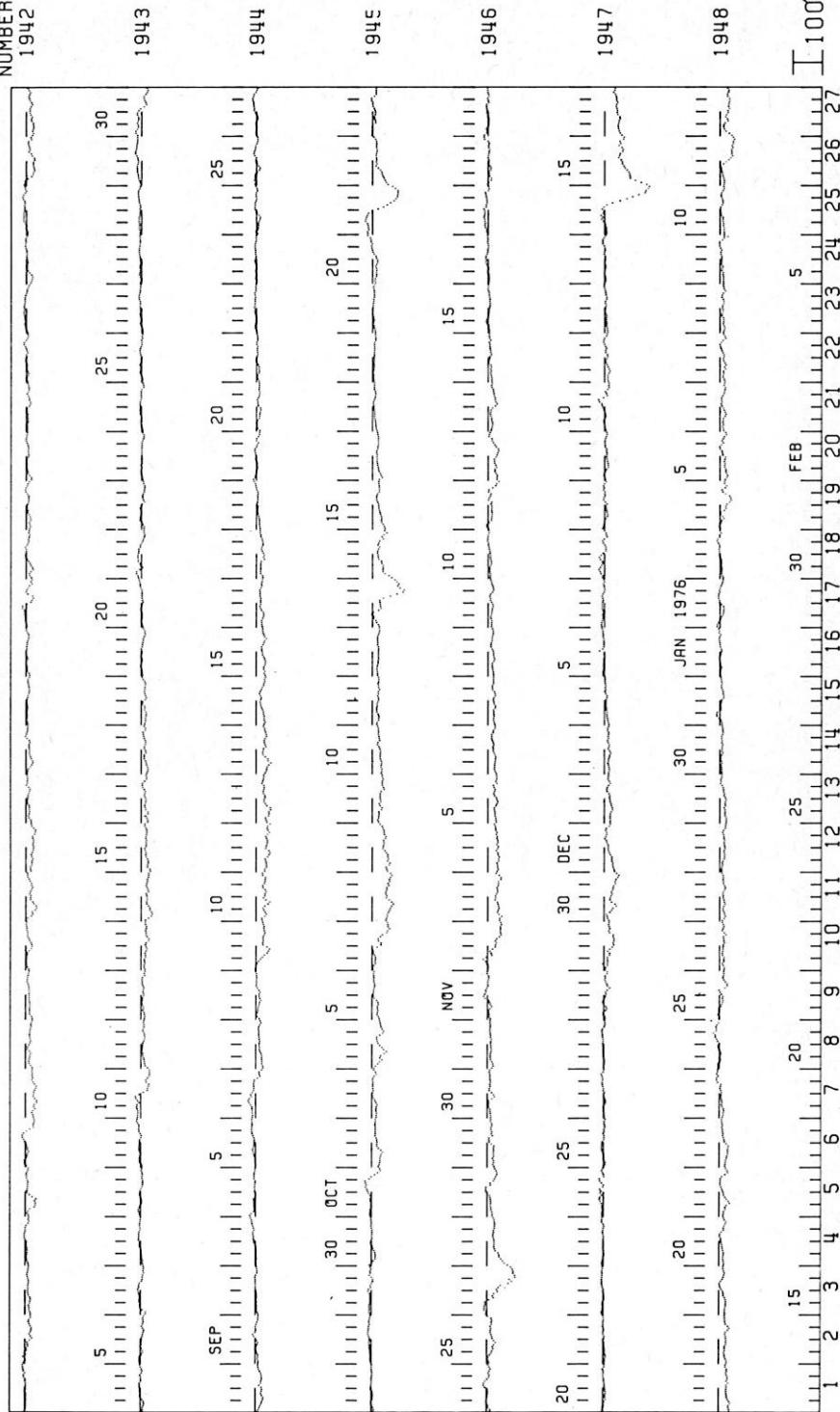
TABLE 10 Dst - continued

DECEMBER 1975

DAY	UNIT=GAMMAS												G-M-T										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	5	-1	-7	-7	-6	-5	-4	-3	-3	-7	-8	-6	-8	-9	-10	-8	-4	-3	1	-2	-2	1	4
2	4	-1	-2	-7	-6	-5	-4	-1	-2	-2	-4	-4	-3	-2	-2	-1	-1	0	-1	1	3	0	
3	1	3	4	1	0	1	-1	2	3	4	5	6	5	10	13	14	16	17	15	16	15	19	8
4	8	7	6	3	5	6	13	17	12	4	10	5	-4	-6	-11	-22	-30	-29	-23	-20	-17	-18	-21
5	-17	-15	-17	-17	-14	-11	-12	-14	-13	-11	-11	-11	-11	-11	-7	-7	-10	-11	-9	-11	-11	-9	
6	-11	-12	-12	-8	-4	-3	-5	-4	-3	-4	-5	-2	0	3	5	6	1	-3	-2	0	-5	0	
7	6	-2	-1	10	15	15	12	8	9	6	5	5	3	3	10	8	6	10	12	6	3	4	
8	9	-1	-7	-4	-17	-14	-15	-23	-32	-41	-45	-57	-67	-61	-53	-46	-48	-42	-37	-33	-29	-26	-19
9	-18	-21	-22	-20	-24	-30	-31	-38	-37	-37	-46	-42	-40	-43	-43	-47	-44	-44	-41	-43	-40	-41	-38
10	-33	-29	-31	-35	-38	-37	-34	-34	-33	-29	-25	-26	-23	-25	-28	-26	-30	-36	-33	-31	-29	-27	-23
11	-23	-23	-27	-26	-32	-32	-31	-31	-28	-25	-24	-22	-22	-18	-19	-20	-17	-20	-21	-19	-17	-17	-16
12	-22	-21	-23	-23	-25	-25	-22	-25	-27	-25	-25	-24	-24	-24	-19	-26	-35	-40	-35	-29	-24	-21	-25
13	-25	-23	-23	-23	-25	-23	-24	-22	-19	-21	-24	-22	-22	-22	-19	-19	-25	-28	-25	-24	-18	-19	-26
14	-17	-17	-18	-19	-17	-15	-15	-17	-16	-13	-14	-16	-16	-18	-21	-21	-19	-21	-23	-22	-20	-18	-18
15	-18	-16	-15	-13	-12	-12	-10	-9	-9	-10	-10	-10	-10	-8	-11	-14	-13	-14	-11	-13	-15	-16	
16	-13	-12	-13	-13	-12	-12	-12	-8	-5	-5	-7	-2	3	3	-2	-5	-6	-7	-9	-13	-6	-1	-5
17	-4	0	1	-1	-5	-6	-5	-2	1	5	8	13	10	2	-5	-10	-17	-16	-26	-27	-29	-30	-23
18	-29	-22	-25	-33	-32	-46	-42	-35	-27	-25	-26	-26	-28	-28	-25	-25	-28	-30	-32	-38	-36	-40	
19	-25	-25	-33	-35	-32	-31	-27	-24	-19	-18	-16	-13	-12	-16	-17	-15	-15	-17	-18	-16	-17	-17	
20	-14	-13	-10	-11	-10	-13	-12	-11	-13	-10	-9	-9	-11	-12	-10	-11	-13	-12	-14	-14	-13	-12	
21	-6	-3	-1	-2	-1	-3	-8	-11	-9	-6	-1	1	2	3	1	-2	0	3	1	-1	-4	-3	
22	4	6	-1	-13	-22	-23	-22	-22	-21	-23	-24	-27	-25	-22	-20	-17	-17	-18	-12	-9	-6	-2	
23	-7	-5	-5	-12	-16	-22	-23	-22	-19	-17	-17	-17	-15	-15	-15	-16	-13	-12	-13	-11	-10	-8	
24	-4	4	5	3	-1	-6	-11	-17	-19	-18	-17	-13	-9	-9	-17	-15	-21	-19	-14	-9	-8	-3	
25	3	4	-1	-5	-3	-6	-2	-2	-5	-11	-1.5	-1.6	-1.7	-1.8	-2.3	-2.5	-2.1	-16	-17	-16	-13	-12	
26	-10	-7	-5	-7	-10	-11	-12	-12	-8	-9	-12	-1.3	-1.3	-1.3	-1.3	-1.3	-1.5	-1.4	-1.0	-1.0	-1.3	-1.6	
27	-12	-9	-8	-7	-9	-10	-13	-11	-10	-11	-13	-13	-16	-15	-14	-15	-12	-8	-16	-12	-12	-18	
28	-17	-15	-14	-11	-12	-10	-9	-7	-9	-6	-9	-11	-9	-3	-3	-3	-1	-2	-1	0	7	15	
29	13	-10	-38	-56	-52	-66	-71	-98	-95	-88	-89	-93	-94	-81	-72	-68	-60	-51	-43	-38	-31	-24	
30	-27	-29	-28	-31	-30	-31	-26	-29	-24	-31	-35	-43	-46	-43	-45	-44	-44	-44	-44	-48	-55	-43	
31	-48	-46	-41	-41	-38	-38	-34	-34	-33	-33	-36	-36	-31	-30	-26	-25	-25	-30	-27	-19	-19	-21	

Graph of hourly equatorial Dst, 1975 - 1976

Part B.

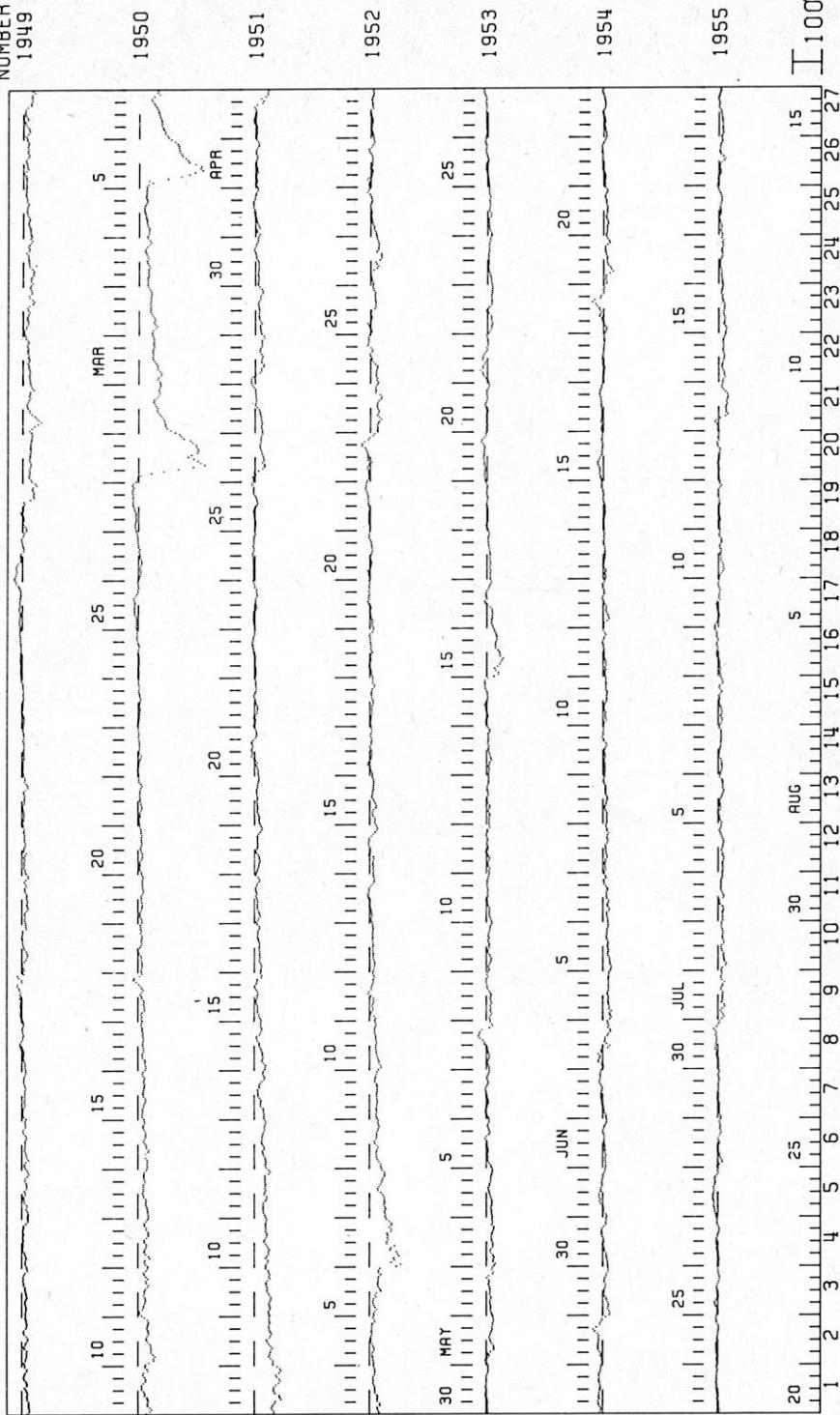


Part B.

Graph of hourly equatorial Dst, 1976

53

SOL. ROT.
NUMBER
1949



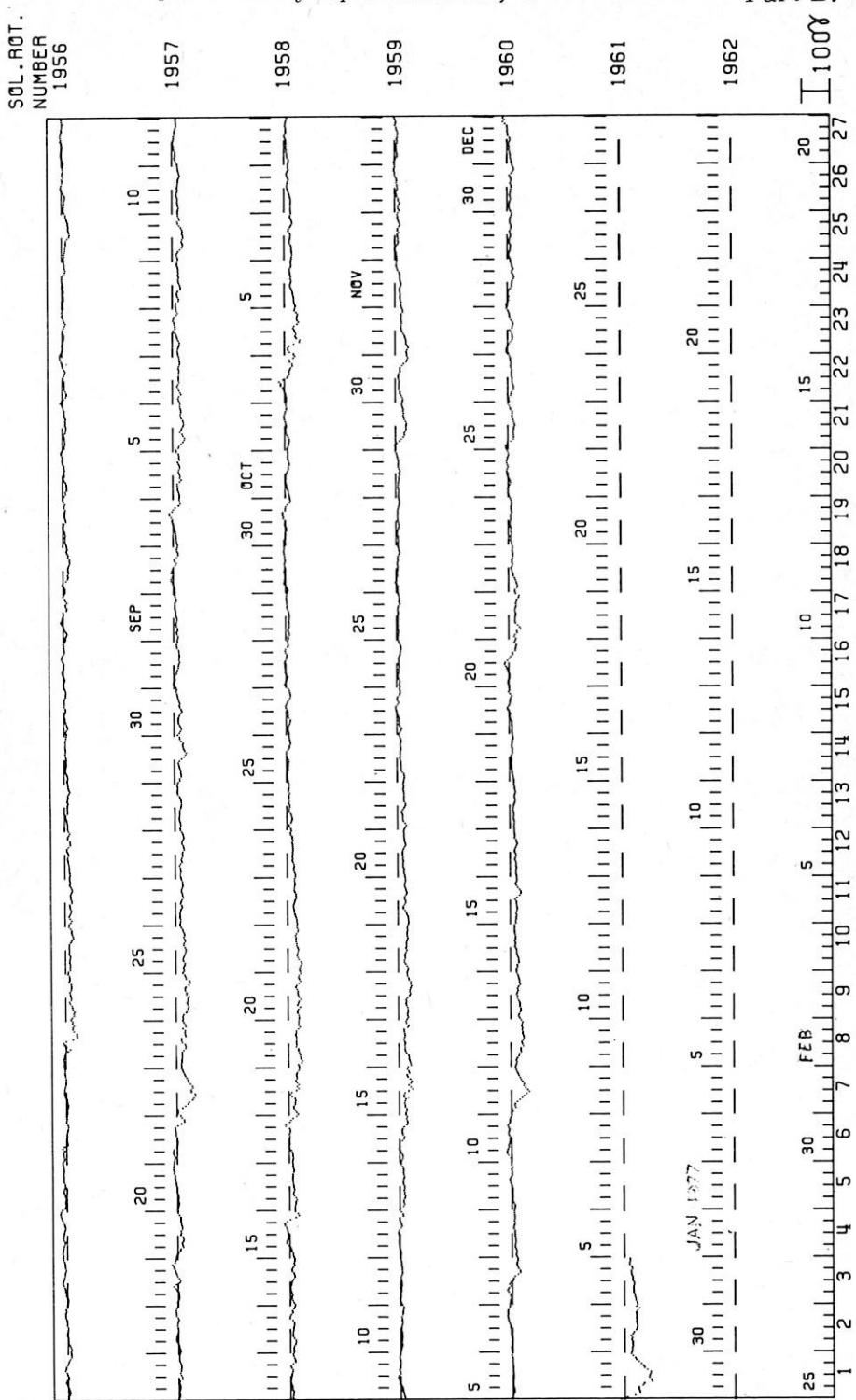


TABLE MEAN VALUES OF Dst - 1976

DAILY MEANS OF EQUATORIAL DST FOR 1976

	DAY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	ANN JAL	MEAN
1	3	-15	-21	-137	-13	-7	-22	-9	-9	-19	-22.8	-4			
2	5	-12	-21	-70	-25	-4	-20	-8	-19	-29	-25	-2			
3	5	-12	-27	-76	-76	-1	-14	-8	-11	-21	-19	7			
4	4	-12	-19	-54	-46	-11	-13	1	-10	-12	-11	-5			
5	6	-7	-14	-49	-27	-11	-11	1	-12	-19	-2	-12			
6	6	-1	-9	-20	-42	-24	-8	-6	-9	-27	-7	-3			
7	7	-8	-27	-27	-38	-24	-6	-10	-2	-7	-19	-4	6		
8	8	-5	-26	-39	-34	-10	-7	-6	0	-9	-9	-32			
9	9	-1	-18	-23	-25	-12	-9	-7	-16	-21	-8	-37			
10	10	-40	-14	-29	-24	-4	0	-5	-17	-9	-12	-30			
11	11	-74	-12	-26	-12	-8	-37	-2	-18	-4	-11	-29			
12	12	-46	-10	-27	-18	-13	-11	8	-10	-6	-2	-27	-26		
13	13	-29	-16	-20	-11	-3	-10	6	-6	2	-17	-35	-22		
14	14	-23	-13	-19	-14	-6	-1	-2	-6	4	-6	-23	-16		
15	15	-15	-10	-12	-12	-2	9	6	-7	-10	-26	-27	-12		
16	16	-13	-6	-11	-11	-2	1	0	-15	-2	4	-20	-7		
17	17	-1.7	4	-14	-4	-4	1	7	-13	-2	2	-38	-21		
18	18	-1.9	-9	-11	0	8	-1.3	-1	6	-37	-37	-1.3	-30		
19	19	-4	-16	-8	-2	9	-7	-4	12	-24	-27	-4	-21		
20	20	6	-10	-3	3	-25	-8	2	7	-37	-21	-7	-12		
21	21	-9	-9	-4	0	-8	3	3	0	-28	-11	-4	-2		
22	22	-1.3	-6	0	-19	-6	7	2	-2	-20	-7	-3	-15		
23	23	-1.4	-4	8	-12	-19	11	1	-1.4	-22	-9	-5	-14		
24	24	-1.4	4	-3	-18	-3	12	10	-2.3	-1.5	-2	-6	-5		
25	25	-1.5	8	16	-18	-1	-13	-6	-21	-23	-9	-23	-12		
26	26	-7	7	-142	-8	-4	-7	-3	-23	-1.5	1	-19	-11		
27	27	-5	-1.7	-76	-4	-2	1	3	-1.8	-9	-2	-28	-13		
28	28	-1	-2.8	-58	-6	-15	-8	-15	-1.5	-7	-11	-1.3	-5		
29	29	-3	-32	-45	-11	-14	2	-1.6	-1.1	-1	-8	-7	-59		
30	30	-1	0	-30	-22	-22	-8	-13	-1.3	-4	-11	-5	-38		
31	31	-1.5	0	-25	0	-16	0	-1.4	-4	0	-39	0	-32		
MEAN		-12	-11	-24	-25	-1.3	-5	-6	-8	-1.2	-1.6	-1.5	-1.6		

REFERENCES TO OTHER INDICES

Q QUARTER HOURLY DISTURBANCE INDEX FOR HIGH LATITUDE STATIONS

The Q-index was introduced in order to enable a precise correlation of geomagnetic activity with ionospheric, auroral and other observations for stations at latitudes higher than 58° . (Ref.: IAGA-resolutions Toronto 1957 and Helsinki 1960). It is a quarter hourly measure, on a quasi logarithmic scale, of the maximum deviation in γ 's of the most disturbed horizontal component from its normal quiet-day value (the highest value of either ΔH and ΔD , or ΔX and ΔY). When the trace shows both positive and negative deviations during a 15 minute-interval, however, the total range is used instead.

The relation between Q and this deviation (or range) Δ is as follows:

$Q =$	0	1	2	3	4	5	6	7	8	9	10(T)	11(E)
$\Delta \leq$	10	20	40	80	140	240	400	660	1000	1500	2200	> 2200

The details of the scaling technique of the Q-indices are explained in:

J. Bartels and N. Fukushima, Abh. Akad. Wiss. Göttingen, Math.-Phys. Klasse,
Sonderheft 3 (1956).
or: J. Bartels, Annals of the IGY, 4, 220 - 236 (1957).

Since the IGY Q-indices have been determined and published for certain periods of time by 26 stations. In recent years only Sodankylä seems to have continued this practice. Mimeographed publications are available directly from this observatory.

The following data are available through the World Data Centers for Geomagnetism: (IGY = 7.57 - 12.58).

Arctica III	5.59 - 3.60	Welen	7.57 - 11.59, 64, 65
Heiss Isl.	64, 65	College	7.57, 6 - 9.58
Tikhaya Bay	7.57 - 2.59	Baker Lake 1)	IGY
Murchison Bay	7.57 - 7.59	Yellowknife 1)	7.57 - 7.58
C. Chelyuskin	IGY, 59, 64, 65	Nurmijärvi	5 - 6.61
Thule	IGY	Lerwick	IGY
Resolute Bay 1)	IGY	Eskdalemuir	IGY
Dikson	7.57 - 9.59, 64, 65	Macquarie Isl.	IGY
Tiksy	IGY, 64, 65	Mirny	IGY, 3 - 10.59, 64, 65
P. Barrow	7.57 - 8.58	Mawson	IGY
Godhavn	IGY	Novolazarevskaja	64, 65
Kiruna 2)	7.57 - 12.61	Halley Bay	IGY, 7.60 - 10.62
Sodankylä	1.57 - today	Vostok	64, 65
		Base Roi Baudouin	5.58 - 2.59

1) Publications of the Dominion Observatory, Ottawa, Vol. 27, No. 4 (1963)

2) Kiruna Geophysical Data, Data Report No. 631 (febr. 1963)

R HOURLY DISTURBANCE INDEX FOR HIGH LATITUDE STATIONS

For some observatories in geomagnetic latitudes higher than about 65° , hourly R-indices are available. The R-index is defined as the absolute hourly range in each horizontal component, expressed in tens of gamma (Ref.: IAGA resolution, Berkeley 1963).

The hourly range in the horizontal component was introduced as a measure of magnetic activity by Russian workers (especially Nikolski).

R-indices for Canadian stations are given in the magnetic yearbooks (Publications of the Dominion Observatory, Ottawa, Canada up to and including Volume 39; thereafter Publications of the Earth Physics Branch), for the stations:

Resolute Bay and Baker Lake (IGY and from 1960 onwards).

Alert (starting 1 October 1961).

Mould Bay (starting 1 August 1962).

Fort Churchill (IGY and from 1966 onwards).

Great Whale River (starting 1 January 1967).

Prior to 1964 the hourly range was measured at the Canadian arctic observatories in the principal horizontal component only, from 1964 onwards it was measured in both components X and Y.

R-indices of the stations Thule and Godhavn (Greenland) are determined since 1964, for the components H, D and Z. They are published in the magnetic yearbooks for these stations, which are issued by the Meteorologisk Institut, Charlottenlund, Denmark.

Daily, monthly and yearly mean values of R-indices (based on the H-component) from arctic and antarctic USSR-stations for the period 1934 through 1967 are given in a publication of the Arctic and Antarctic Institute, Fontanka 34, Leningrad (1970). This concerns the following stations:

Welen (1935 - '47, 1951 - '67),

Mirny (1956 - '67),

Tiksi (1944 - '67),

Molodezhnaya (1964 - '67),

Dikson (1934 - '67),

Lazarev (1960 - '61),

C. Chelyuskin (1935 - '67),

Novolazarevskaya (1961 - '67),

B. Tikhaya (1934 - '58),

Vostok (1958 - '67).

O. Cheisa (1958 - '67).

Arctic drifting stations:

NP 3-13 (1954 - '67).

R-indices of the station Loparskaya (near Murmansk) from 1954 onwards are available at WDC-B2, Molodezhnaya 3, Moscow, 117-296, USSR. These indices are also given in the publication "Auroral Phenomena" of the Polar Geophysical Institute, Ac. of Sciences of the USSR, Apatity, starting with the year 1970.

AE AURORAL ELECTROJET ACTIVITY INDEX

AE, at any instant of time, is the range of deviation from quiet time reference levels of the horizontal magnetic field (H) around the auroral oval. In practice, it is defined as the largest positive deviation (AU) minus the largest negative deviation (AL) from the H-variation records of a network of northern hemisphere auroral zone magnetic observatories. The average $\frac{AU+AL}{2}$ is called AO, an auxiliary auroral electrojet index. These indices may be derived from instantaneous values of H-deviations, or from averages over any suitable time interval.

(Ref: IAGA-resolution 2, Madrid 1969 and IAGA-resolution 13, Moscow 1971. For complete definition see: Davis, T.N. and Sugiura, M., J. G. Res. Vol. 71, 3, p. 736 - 792, 1966).

For the period January 1966 through December 1974, 2.5-min and hourly average AE, AU, AL and AO indices have been derived by the National Geophysical and Solar-Terrestrial Data Center of NOAA in the U.S.A. A network of stations as uniformly spaced in longitude as possible, was used. The number of stations contributing data to the derivation for each month is indicated parenthetically in identifying the index, such as, AE(10) or AE(11). These indices are available on magnetic tape from World Data Center A for Solar-Terrestrial Physics, National Oceanic and Atmospheric Administration, Boulder, Colorado 80302, U.S.A. Daily graphs of the 2.5-min indices are available on 35mm microfilm. Annual summaries of the hourly average indices, explanatory text, and 2.5-min daily graphs have been published for these years in the WDC-A UAG Report series. Graphical representations of AU, AL, and AE appear for some intervals of special interest in Solar-Geophysical Data, Part II (Comprehensive Reports), published monthly by NGSDC.

For the period September 1964 through 1965, the indices AE, AU, and AL for each 2.5-min and as hourly averages were derived at the NASA Goddard Space Flight Center. For July 1957 through September 1964, hourly values of AE were derived and published by the Geophysical Institute, University of Alaska. These indices are available from WDC-A for STP on either magnetic tape or 35 mm microfilm. All AE indices have been exchanged with other WDC's as outlined in the Guide to International Data Exchange, ICSU, December 1973.

REFERENCES TO TABLES AND DIAGRAMS FOR Kp, Ap AND Cp

Year	Kp-Indices Tables		Kp-Diagrams		Frequencies of Kp	Stormy Intervals	Quiet Intervals
	Bull.	No. pp.	Bull.	No. pp.			
1932	12	1 222-227	12	1 258-259	12 1 252	12 1 255	12 1 255
1933	12	1 228-233	12	1 260-261	12 1 252	12 1 255	12 1 256
1934	12	1 234-239	12	1 262-263	12 1 253	12 1 255	12 1 256
1935	12	1 240-245	12	1 264-265	12 1 253	12 1 255	12 1 257
1936	12	1 246-251	12	1 266-267	12 1 254	12 1 255	12 1 257
1937	12	g 97-98	12	g 113-114	12 g 112	12 g 111	12 k 154
1938	12	g 99-100	12	g 114-116	12 g 112	12 g 111	12 k 154
1939	12	g 101-102	12	g 116-117	12 g 112	12 g 111	12 k 154
1940	12	c 104-105	12	c 114-115	12 c 131	12 c 135	12 k 154
1941	12	c 106-107	12	c 116-117	12 c 131	12 c 135	12 k 155
1942	12	c 108-109	12	c 118-119	12 c 131	12 c 135	12 k 155
1943	12	c 110-111	12	c 120-121	12 c 132	12 c 135	12 k 155
1944	12	c 112-113	12	c 122-123	12 c 132	12 c 135	12 k 155
1945	12	i 106-107	12	c 124-125	12 c 132	12 c 135	12 k 156
1946	12	i 108-109	12	c 126-127	12 c 132	12 c 135	12 k 156
1947	12	i 110-111	12	i 102-103	12 c 133	12 c 136	12 k 156
1948	12	i 112-113	12	i 104-105	12 c 133	12 c 136	12 c 137
1949	12	c 102-103	12	c 128-129	12 c 133	12 c 136	12 c 137
1950	12	e 104-105	12	e 106-107	12 c 133	12 c 136	12 f 105
1951	12	f 86-87	12	f 88-89	12 f 98	12 f 105	12 f 105
1952	12	g 103-108	12	g 118-119	12 g 112	12 g 111	12 g 110
1953	12	h 80-85	12	h 88-89	12 h 86	12 h 87	12 h 87
1954	12	i 78-83	12	i 114-115	12 i 84	12 i 87	12 i 87
1955	12	j 114-119	12	j 122-123	12 j 120	12 j 121	12 j 121

Year	Ap		Ap		Cp Daily values	Cp Monthly and annual means
	Daily values	Bull.	Monthly and annual means	Bull.	No. p.	
1932	12	1 222-227	12	1 254	12 1 222-227	12 1 254
1933	12	1 228-233	12	1 254	12 1 228-233	12 1 254
1934	12	1 234-239	12	1 254	12 1 234-239	12 1 254
1935	12	1 240-245	12	1 254	12 1 240-245	12 1 254
1936	12	1 246-251	12	1 254	12 1 246-251	12 1 254
1937	12	g 109	12	g 110	12 i 85	12 i 86
1938	12	g 109	12	g 110	12 i 85	12 i 86
1939	12	g 109	12	g 110	12 i 85	12 i 86
1940	12	f 91	12	f 97	12 e 113	12 e 120
1941	12	f 92	12	f 97	12 e 113-114	12 e 120
1942	12	f 92	12	f 97	12 e 114	12 e 120
1943	12	f 93	12	f 97	12 e 115	12 e 120
1944	12	f 93	12	f 97	12 e 115-116	12 e 120
1945	12	f 94	12	f 97	12 e 116	12 e 120
1946	12	f 94	12	f 97	12 e 117	12 e 120
1947	12	f 95	12	f 97	12 e 117-118	12 e 120
1948	12	f 95	12	f 97	12 e 118	12 e 120
1949	12	f 96	12	f 97	12 e 119	12 e 120
1950	12	f 96	12	f 97	12 e 119	12 e 120
1951	12	f 97	12	f 97	12 i 86	12 i 86
1952	12	g 103-108	12	g 110	12 g 103-108	12 i 86
1953	12	h 80-85	12	h 86	12 h 80-85	12 i 86
1954	12	i 78-83	12	i 84	12 i 78-83	12 i 86
1955	12	j 114-119	12	j 120	12 j 114-119	12 j 120

The tables and diagrams of the following years up to 1970 may be found in the corresponding yearbooks of the series IAGA - Bulletin No. 12 (from 1958 onwards in the Bulletins with index 1), always in the last pages of each book, and from 1970 onwards in part B of the new series IAGA-Bulletins No. 32.

All tables and diagrams of the 30 years 1932-1961 are reprinted in IAGA-Bulletin No. 18.

TABLE 1 STORM SUDDEN COMMENCEMENTS (ssc) 1976

Sudden commencements followed by a storm or period of storminess, as selected from the reports of the following 50 observatories:

SO DO NU LE ES HL WN WI NI DB BU FU CF HB SU MT LG AQ IK EB CI TL
 FR PE SM AF SF KA TI KS SS KY QU SZ BA LU PM HU AP PP TN LM GN HR
 AC TO TW CZ KG DU and from the copies of magnetograms sent by five observatories (see the introduction).

JANUARY

03 0356 (55-60)	12122	6.6	9	3A	2B	3C	1si
10 0620 (18-30)	22222	11.2	14	7A	14B	4C	2bp

FEBRUARY

07 0928 (27-34)	12222	5.5	10	3A	16B	12C	2s fe
17 1638 (37-40)	02011	6.6	11	1A	5B	3C	2si

MARCH

none

APRIL

01 0254 (50-63)	33223	4.0	33	17A	14B	-	2s i
02 1747 (45-49)	12012	4.0	7	1A	6B	4C	1s i

MAY

02 1829 (27-32)	22122	2.4	25	16A	13B	1C	3si
19 1648 (45-52)	12122	3.1	6	2A	12B	11C	-

JUNE

24 1633 (30-35)	23223	3.9	22	23A	16B	5C	1si
30 0250 (49-53)	22222	3.2	13	3A	10B	9C	3si

JULY

none

AUGUST

none

TABLE 1 STORM SUDDEN COMMENCEMENTS (ssc) 1976 - continued

<u>SEPTEMBER</u>								
24 2346 (44-48)	11111	5.6	11	1A	8B	4C	4si	
<u>OCTOBER</u>								
			none					
<u>NOVEMBER</u>								
			none					
<u>DECEMBER</u>								
04 0625 (24-32)	12121	4.2	8	2A	13B	13C	3si	
16 1107 (05-08)	22222	6.0	11	5A	6B	5C	2si	
28 2037 (32-38)	22222	5.7	21	7A	9B	6C	1si	

TABLE 2a SOLAR - FLARE EFFECTS (sfe) 1976

Times of commencement of solar-flare effects (sfe) checked by 83 observatories, namely: AY MX RB CB SO CO BL YK DO YA NU LE LO CH SI SV ES GW ME MN WN PK WI NI VL BE GT CM HA DB WS BU NE FU JO TY OD OT GC MT VK AT LG AQ IK EB CI BD TL FR PE KA SS TU KY QU LP HO AL SJ HD MB MU GU PA BA TT HU AP PP VA LM GN HR AC TO TW CZ KG MI DU MW SB. Strong effects are marked by an asterisk. See also page X.

JANUARY

none

FEBRUARY

none

MARCH

23 0844 A: CM AQ HR; B: SV MN WN BE GT BU FU TY VK HD BA LM ;
 C: SO WI NI LG IK FB SS KY LP MB MW; D: DO NU LE LO ES
VL DB GC CI TL PE AL MU GN CZ KG DU; E: YA HA -
 (bp: B: OD)

APRIL

30 2102 A: BD FR TU GU HU; B: NE; C: MX OT MT VK KA SS KY; D: AY
 RB CO BL YA SI CH GW ME WS HO SJ PA TT AP PP AM TW
 E: CB

MAY

none

JUNE

none

JULY

none

AUGUST

18 1842 A: FR TW; B: BD HO (MU) VA (LM) AC; C: LE SI ES PK NE TU
 BA TT; D: AY MX RB CB CO BL DO CH GW ME VL JO OT LG
 CI TL MB PA HU AP PP; E: HA SJ

SEPTEMBER

none

OCTOBER

none

NOVEMBER

none

DECEMBER

none

TABLE 2b DOUBTFUL SOLAR-FLARE EFFECTS (sfe) 1976

Times of commencement of presumed solar-flare effects checked by 83 observatories, the same as for Table 2a. Effects which very probable are real sfe's, are marked by an asterisk. See also pages X and XI.

JANUARY

none

FEBRUARY

none

MARCH

24 0014* A: GU; B: VK (VL) LP GN; C: MX RB CB CO YK SI PK NE MT
BD KA SS TU KY HO AL AP PP TO MI; D: BL CH NF WS MU
AM SB; E: (HA) -(b: B: (AY)

30 1239 A: NU LO MN (PK) GT FU (VK) FR PE (HO) (PP) TT VA LM AC
TW; B: LE SV WN NI BE CM HA DB BU (MT) IK CI (KA) (KY)
(LP) AL HD SJ MB BA HU (AP); C: WI OT LG TL PA HR CZ;
D: RB CB BL DO ES GW VL WS JO GC AQ FB; E: (CO) (YAC)
(SS) KG -(b: C: AY -bp: OD -psc: C: SO)

APRIL

none

MAY

16 0604* B: MX PK CM VK LP AL ; C: WN BF TY MT KA SS KY HD LM
D: AY RB SO CO DO YA NU LE LO SV ES WI NI VL GT HA DB
BU FU OD GC LG AQ IK EB CI TL PE MU GU GN HR CZ KG

JUNE

13 0043 A: NE VK (FR) HO; B: YK YA (DO) SI PK (HA) (TY); BD TU LP AL
(SJ) GU PP (AC) (TW); C: MX SO CO CH GW MT KA SS KY HD
MU AP TO; D: AY RB CB BL SV ME GN AM MI

14 0232 A: CO SI PK NE VK (FR) (TU); B: AY YK DO YA SV (WN) (HA) (TY)
(OT) (BD) LP HO AL (SJ) GU TO MI (MW) (SB); C: MX SO BL
NU OD MT KA SS KY HD MU AP PP GN AM; D: LO ME

JULY

07 0919 A: DO NU MN GT CM TY OD (FR); B: LE LO SV ES WN PK VL BE
HA DB (NE) FU VK IK CT (BD) (TU) LP (HO) (SJ) TO (AC) (TW)
(MW); C: AY MX CB BL WI BU GC MT AQ TL KA SS KY HD MB
MU BA LM HR CZ KG; D: NI LG EB PE AL GN; E: YA -(s i:B:SO)

14 0554 A: CO PK; B: YA MN WN TY OD VK (TU) LP (HO); C: AY MX CB SO
NU LE LO SV ES NI BE GT HA MT LG AQ IK KA SS KY AL MU
GU GN TO; D: RB DO WI VL DB BU FU GC FB CI TL PE HD HR
CZ KG

TABLE 2b DOUBTFUL SOLAR-FLARE EFFECTS (s fe) 1976 - continuedAUGUST

22 1159 B: WN HR; C: FS MN BE TY LG IK TL HD BA LM AC; D: AY MX RB CB SO BL DO NU LE LO CH SV GW WI NI VL GT CMDB BU FU JO OD OT GC AQ FB CI FR PE AL SJ MB PA TT HU VA TW KG

SEPTEMBER

07 1736* A: FR TW; B: CM (TY); (OD); OT (VK) HO SJ (GU) TT PP VA AC; C: MX CB BL CH SI WT BE GT HA DB F^U LG TU MB HU; D: AYRB CO YK DO LE LO ES GW WI VL DB NE JO EB CI BD TL PA; E: (DU)

OCTOBER

04 1236 A: TW; B: NU SV MN WN FU TY OD FR TT VA LM AC; C: LO CH BE GT HA JO OT LG AQ IK CI AL SJ BA HU HR CZ MW; D: DO LE ES GW WI NI VL CM DB BU GC F^B TL PE MB PA; E: (SS) KG -(b); C: SO)

NOVEMBER

none

DECEMBER

none

TABLE 3 REMARKABLE EVENTS

Times of commencements (and ending) of presumed very unusual events.

The meaning of the symbols at the left is as follows:

- ssc sudden commencement, followed by a storm or period of storminess.
- si sudden magnetic change which could not be classified as ssc.
- pg giant pulsations, viz. exceptional pulsations of very great period and regularity, with sufficient relative amplitude.
- pi train of pulsations of irregular shape, consisting of several series of oscillations, each series lasting about 10 minutes; period of the pulsations: pi1 shorter than 40 s, pi2 40 - 150 s, pi3 longer than 150 s.
- pc pulsations of more continuous character, generally with long duration; period: pc1 0;2 - 5 s; pc2 5,1 - 10s; pc3 10 - 45s; pc4 45 - 150s; pc5 150 - 600 s; pc6 longer than 600s.
- E the phenomenon could not be discerned because of heavy disturbance.
- D it was decided not recorded, although the records were satisfactory.
- ncl no classification given in the report
- cr crochet-like disturbance
- X record missing

The events are checked by 78 observatories, the same as for table 2a, minus CM PK AL MB AT, plus MM. The observatories are arranged in groups with respect to the quality-indications W, A, B, C, wcl which have the following meaning:

- W - extra-ordinary and very unusual
- A - very remarkable
- B - fair, ordinary, but unmistakable
- C - very poor, doubtful
- wcl - without quality indication

Period or duration in minutes or seconds and amplitudes as reported by some stations are added in parenthesis. Amplitudes are given in nanotesla's (nT), if not otherwise indicated. The plus or minus sign indicates the sense of the sharp movement. Beginning and ending times of the phenomenon are added in square brackets if deviating from the time at the left.

JANUARY - MARCH

none

APRIL

- 01 0254 ssc: A: AY* MX* RB* MN* GT FU AQ IK BA* HU HR (H+41) AC AM* TW CZ* (D+67 H+27 Z+4) MI DU; B: WN VL MT* EB (D+1' H+60 Z+41) KA* KY* KG TO; C: TL; wcl: BL YK LO DB BU JO TT VA
- si: A: NU BE OD; B: ES SS* (D 8s + 4; H 18s + 13) SB; C: HA AP
- pg: W: CB(9m - 80); A: LM(2m D 6 H 53) VK (2m + 15); B: SV (2m + 15); C: MW
- pi 2: W: MT (70s, x 3. 2nT / s, y 1. 7nT / s, z 0. 8nT / s) KY (70s, x 1. 7nT / s, y 0. 4 nT / s, z 0, 2nT / s) GU (D + 2, H + 33, Z - 6); A: TY KA
- pi: W: SI (D + 23 H + 247 Z + 55) FR (D - 41 H + 47 Z - 15); B: LP (8m D 15 H 54); wcl: MU
- pc5: B: BV
- pc 4: W: CO (D - 81 H + 307 Z - 220) NE (D + 19 H + 20 Z + 10) HO (D - 4 H + 14 Z + 8)
- pc: A: PP
- p: W: SJ (D - 11 H + 34 Z + 9)
- E: MM SO DO YA LE CH GW ME WS OT PE GN
- D: WI DB CI TU PA
- ncl: B: NI; C: LG
- X: QU

TABLE 3 REMARKABLE EVENTS - CONTINUED
APRIL - CONTINUED

01 0347 ssc: B: AY* LF ES CZ (D -55 H -5 Z+27); C: KG (D 85 H 200)
 si : A: NU WN BE FU VK (12m+24) AQ BA HU HR (H -32) AM AC TW
 B: WN GT MT EB SS (2m D+6 H -25) KY AP TO; C: VL HA JO
 pg : A: GC LM (1m D 26 H 10); C: MI MW
 pi 2 : B: MT KA KY SB
 pi : W: FR (D+28 H -58 Z -12); A: TY OD LP (8m D 15 H 54)
 pc 5 : A: BU
 pc 4 : W: HO(D+2 H+18 Z-7) GU(D+9 H-41 Z+13); B: BD
 pc : A: PP
 p : W: SJ(D+5 H-35 Z-9); A: NE (D-37 H+87 Z+56)
 E : RB CB MM SO CO BL DO YA CH SI GW ME WS OT IK PE MU
 TT VA GN DU
 D : WI DB CI PA
 ncl : C: YK SV NI LG TU
 X : QU

MAY

none

JUNE

07 1338-
 1410 pg: A: BE FU [-1350] VK(5m +7); B: HA [1330-1343] TY OD LM(2m D 4
 H 4) AM; C: LE FS [1335-1340] KG(30s D 12 H 11)
 pi 2: W: BD(D+16 H -7 Z -7); A: MM [-1344] MN BU; B: GW; C: SO [-1343]
 MT KA KY AC [-1341] TW [-1341]
 pi : A: WN BA [-1344]; B: GB(4m -30) YK(5m+73) CH SV(4m 5) OT
 [1330-1350] EB [-1343] LP(D 4m 3 H 5m 7) MU PP; C: MX BL YA
 WI [-1343] JO IK [-1354] TT VA MW; wcl: AQ [-1341]
 pc 5: A: SJ(D+4 H+7 Z+3); B: CO
 pc 4: W: FR(D -13 H -13 Z -4); B: GT; C: SB
 pc 3: B: SI(D+18 H -11 Z+2)
 pc : A: HO [-1340] (D -1 H -2 Z -2); B: BA [-1412]
 p : W: NF (D -20 H -12 Z 2); A: TU(D+10 H+5); B: HR (1m 8)
 E : TL PE
 D : DO LO ME VL GC PA AP GN TO MI DU
 ncl : C: AY RB NI DB LG CI SS HU
 X : QU GU

11 0229 ssc B: BA
 si : A: FU OD; B: BE TT; C: WN GT HA VA HR (6m H6) AC TW
 pg : W: FR (D -3 H+17 Z -4); VK(4m+8) LM(3m D 9 H10); B: AY MU AM; C:
 BU
 pi : B: SV(2m 2) GW; C: CH JO KG [-0240] (D 24 H 32); wcl: CZ (12m D 18
 H 6 Z 7)
 pc 4 : B: AP; C: MT KA KY
 pc : A: HO [-0234] (D -6 H+4 Z -4); B: PP; C: YA
 p : W: GU(H+10 Z -4)
 F : MU SO CO NU LF SI MN NF OT PF SJ DU
 D : CB BL YK DO LO ES ME WI VL DB CI TL TU PA GN TO MI
 MW SB
 wcl : W: IK (H 12m 13); B: LG; C: NI
 bay : MX AQ HU
 cr : RB TY SS
 X : WS BD QU LP

JULY - SEPTEMBER

none

TABLE 3 REMARKABLE EVENTS - CONTINUED

OCTOBER

12 1359 ssc: A: OD; B: LE* FS* GT HA* AQ* IK BA; C: VL
 si : A: NU MN TT VA; B: BL(6m 119) LO WN FU SS(4m H 9) HR (H+6)
 AC TW; C: SO GC MT KA KY; wcl: DO TL PE
 pg : A: VK (18m+14) LM(3m D 2 H 8); B: SV (4m 13); C: KG (2m D 8 H 15);
 wcl: YA
 pi2: A: BD (D -7 H +4 Z +1); C: MM [1400-1402]
 pi : A: SI [-1402] (D+10 H+18 Z -2); B: CH; C: MX CB (5m -28) YK GW
 JO MU; wcl: CZ (5m D5 H 4 Z 2)
 pc5: W: CO (D+14 H+28 Z+4)
 pc3: W: FR (D+7 H+5 Z+1); C: BU
 pc : W: HO [-1410] (D+1 H -5 Z +2); A: OT; B: MW; C: MI
 p : W: GU (D+1 H+6 Z -2); A: NF(D+4 H+8 Z -1); TU(D -5 H+6) SJ [-1406]
 (D+2 H+5 Z -1)
 F : DU
 D :: AY RB WI DB LP PA AP PP GN AM TO SB
 nc1: B: TY LG; C: NI CI HU
 cr : BE
 X : ME WS QU

NOVEMBER - DECEMBER

none

1976, JANUARY 9 - 12

Data from Individual Observatories:

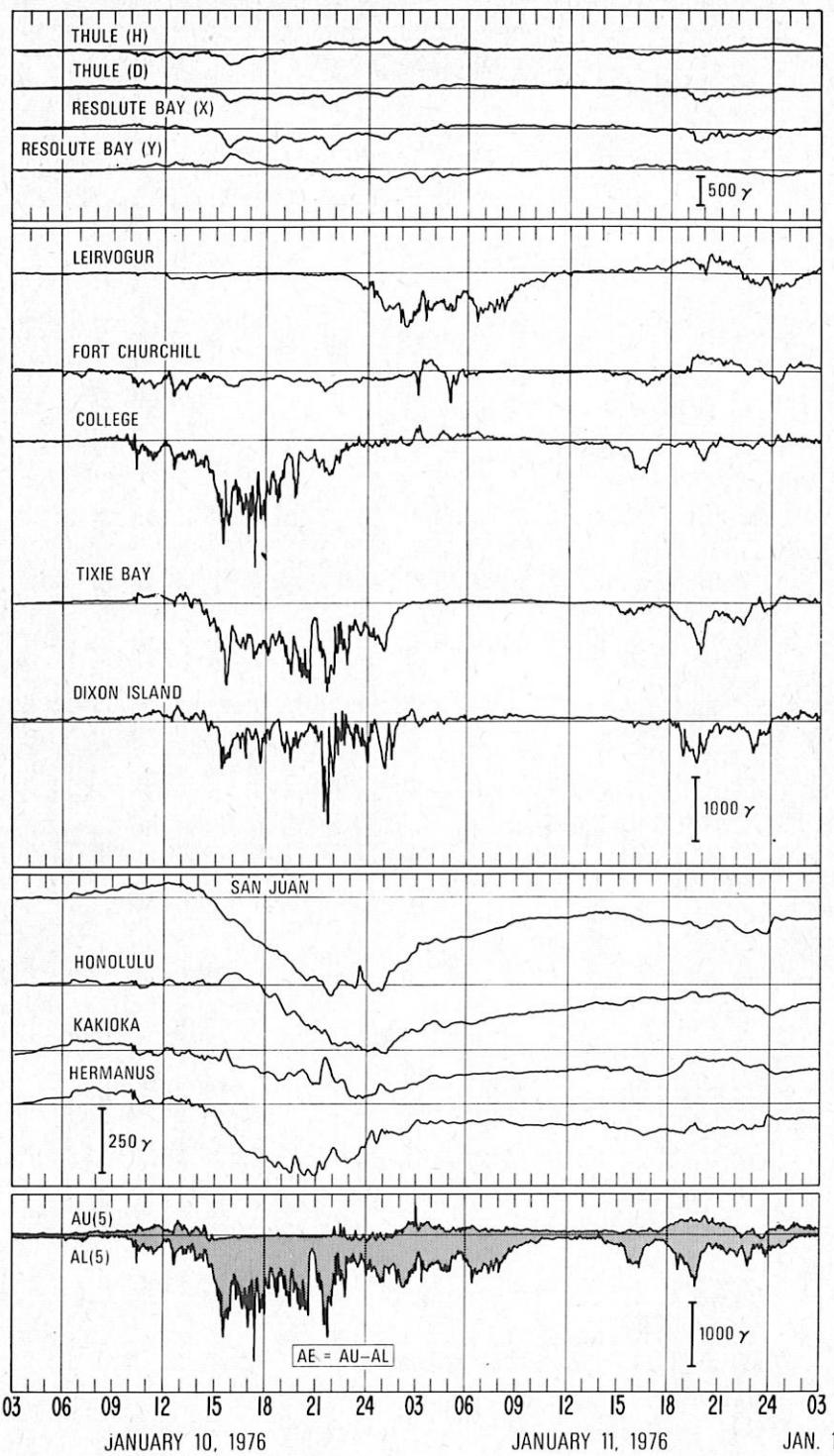
JANUARY 1970

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

OBS.	GEOMAGNETIC LATITUDE	COMMENCEMENT		SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END	
		DAY	hr min (UT)	TYPE	D(')	H(y)	Z(z)	DAY (3 HOUR PERIOD)	K	D(')	H(y)	Z(z)	DAY	HR
AL	9.5N	10	0520	SC	- 2.0	12	- 4	10(5,6,8)	6	5	238	37	12	03
HD	7.6N	10	0620	SC	- 0.2	+17	- 2	10(6,7,8)	7	6	249	29	12	03
AN	1.4N	10	0620	SC	- 0.8	26	8	-	-	5	257	62	12	03
RB	63.0N	10	0600	..	..	..	..	10(8)	-	448	395	126	11	03
CB	76.7N	10	1100	..	..	..	..	10(6)	-	110	400	192	12	03
BL	73.9N	10	0600	..	..	..	..	11(7)	-	304	356	512	12	03
CH	66.8N	10	0500	..	..	..	..	11(2)	-	391	787	628	12	04
GO	64.6N	10	06--	..	..	..	..	10(6)	7	395	2220	1260	11	04
YK	62.5N	10	0705	..	..	..	..	10(6)	-	740	640	460	12	01
ME	61.8N	10	1603	SC	..	..	..	10(7)	6	65	82	45	11	09
SI	60.8N	10	10--	..	..	..	..	10(6)	6	--	590	600	11	09
JO	56.7N	10	1006	..	..	..	..	10(8)	9	350	780	490	12	02
OT	57.0N	10	..	..	..	..	..	10(7) 11(1)	6	640	600	550	11	07
NE	55.1N	10	0554	..	..	..	..	10(6,8)	6	47	219	314	11	07
WI	54.2N	10	1004	SC	- 1	-30	0	10(7,8) 11(1)	7	72	315	160	11	08
FR	49.6N	10	06--	..	..	..	..	10(8)	8	60	190	180	11	09
BD	46.9N	10	06--	..	..	..	..	10(8)	6	29	216	133	12	06
IR	41.0N	10	0624	SC	- 0.4	16	2	10(7,8) 11(1)	6	34	184	85	13	03
TU	40.4N	10	06--	..	..	..	..	10(8) 11(1)	6	15	245	45	12	04
TR	34.0N	10	0622	SC	+ 1.0	+ 9	- 2	10(7,8)	6	243	138	26	11	11
SJ	29.9N	10	0622	SC	..	+ 9	+ 2	10(6)	6	11	224	93	11	06
KA	26.0N	10	0622	SC	+ 0.9	+10	+ 6	10(7,8)	6	139	130	59	11	06
HB	21.3N	10	0617	SC	..	..	..	-	-	-	-	-	11	06
HO	21.1N	10	0621	SC	- 0	+ 6	+ 1	10(7)	6	6	176	23	11	06
TY	20.5N	10	0622	SC	+ 0.8	+13	+ 8	10(8)	6	114	131	45	12	11
GU	04.0N	10	0621	SC	..	13	-03	10(8)	6	0	130	20	12	02
HU	00.6S	10	0621	SC	- 1	14	3	10(7,8)	6	13	391	40	12	01
AP	16.0S	10	0623	SC	0	+12	- 4	10(7)	5	5	127	27	12	02
PM	16.6S	10	0621	SC	+ .5	+15	+14	10(8)	5	6	100	70	13	06
HR	33.7S	10	06--	..	..	..	..	10(6)	6	36	188	175	11	04
GN	43.2S	10	0623	SC	+ 1.0	+10	+ 7	10(8)	7	30	160	200	11	06
TO	46.7S	10	06--	..	..	..	..	10(7,8)	6	33	260	80	11	09
CZ	51.4S	10	1004	SC	0.7	7	1	10(7) 11(1)	7	58	331	378	12	03
CZ	51.4S	10	0621	SC	..	2	1	10(7) 11(1)	7	58	331	378	12	03
KG	56.5S	10	0621	SC	1.3	6	4	10(8)	9	127	1145	657	11	04
KG	56.5S	10	1004	SC	1.5	16	3	10(8)	9	127	1145	657	11	04
MI	60.7S	10	06--	..	..	..	..	10(6,7,8)	7	290	1610	960	11	09
HM	73.2S	10	06--	..	..	..	..	10(6)	6	90	900	1090	11	12
DU	75.6S	10	1004	SC	7	8	10	11(2)	6	687	593	884	11	09
DU	75.6S	10	0621	SC	16	..	15	11(2)	6	687	593	884	11	09
TV	1.2S	10	0620	SC	0.0	23	27	-	5	274	136	12	03	
HE	61.8N	11	1320	SC	..	..	..	11(1,2)	6	114	790	452	11	09
HE	61.8N	12	..	..	..	..	..	12(1)	4	19	203	75	11	09

THREE-HOUR-RANGE INDICES 15

COMMON-SCALE MAGNETOGRAMS JANUARY 10-12, 1976



PRELIMINARY AE (5)-INDEX AT ONE MINUTE INTERVALS
 1976 January 10, 0300 - January 11, 0259 UT

03 UT	36	39	42	45	45	56	48	48	56	56	53	42	56	56	42	42	42	42	45	42
	42	42	56	56	56	56	68	68	56	68	68	65	53	55	56	56	56	56	56	45
	56	56	53	53	50	50	39	50	50	53	50	50	50	50	42	50	50	47	47	44
04 UT	33	44	44	41	38	41	44	44	47	47	44	41	41	41	41	38	38	38	49	38
	41	44	44	33	39	39	39	39	38	39	36	39	50	39	42	45	45	55	55	55
	55	55	55	55	52	52	56	49	46	46	53	50	50	47	47	44	44	44	41	44
05 UT	44	44	47	44	44	44	45	55	55	52	41	52	41	41	44	45	42	42	45	45
	44	45	48	47	44	47	47	47	44	44	44	44	55	58	58	58	58	57	47	44
	44	47	55	44	41	44	47	41	41	44	44	41	34	37	37	41	44	49	64	80
06 UT	103	103	95	100	95	87	74	69	72	74	56	43	45	45	45	45	45	41	44	52
	41	52	41	41	44	46	49	52	62	62	52	69	74	80	86	89	92	89	89	89
	85	82	82	79	79	76	74	76	82	76	76	73	75	80	85	90	92	90	90	90
07 UT	80	80	88	100	115	121	105	92	79	77	85	94	101	104	99	97	97	91	87	82
	79	85	62	51	51	54	50	57	57	60	57	54	51	51	51	48	37	51	51	51
	43	57	60	64	52	64	64	49	52	52	49	43	43	39	42	49	56	61	70	72
08 UT	69	69	69	69	69	60	54	45	42	45	50	59	67	69	77	83	77	69	60	55
	52	47	47	36	37	34	34	43	43	70	67	76	95	108	75	61	64	71	65	55
	68	54	60	61	64	57	66	66	52	47	45	45	39	42	48	51	59	55	50	60
09 UT	74	79	71	65	74	77	74	83	78	67	53	55	47	44	56	77	96	97	89	66
	43	44	59	65	79	90	80	71	73	79	89	92	92	89	92	92	91	82	73	127
	89	103	114	111	113	127	141	132	126	132	129	127	114	117	125	117	121	124	127	127
10 UT	154	185	185	179	201	236	250	274	255	222	245	224	187	149	138	214	309	455	524	375
	280	304	339	354	363	378	378	370	328	313	315	318	311	297	289	270	249	238	224	224
	216	214	229	245	256	263	271	279	292	295	297	300	300	298	287	275	296	313	347	336
11 UT	328	317	305	303	300	324	288	301	318	334	362	366	402	422	404	412	423	408	421	440
	421	408	397	400	397	383	372	386	386	384	365	357	349	344	344	346	343	346	348	335
	327	324	329	317	304	300	297	286	269	253	234	217	199	193	185	177	169	164	154	151
12 UT	176	171	171	176	191	180	166	169	159	145	147	150	153	170	170	172	189	208	250	275
	278	281	286	264	252	324	473	467	532	532	539	521	568	490	457	443	435	418	524	448
	457	461	459	471	466	469	456	425	411	398	406	405	402	377	363	342	333	304	300	307
13 UT	323	384	375	390	387	404	412	409	437	437	423	413	405	367	361	367	341	317	256	253
	247	218	203	206	217	214	222	231	238	274	296	231	229	209	224	255	263	286	272	265
	277	303	317	408	467	509	479	477	480	469	477	485	504	501	476	441	429	429	446	422
14 UT	405	368	339	398	391	360	357	376	379	372	379	350	364	454	522	538	494	395	394	368
	353	359	373	290	273	234	263	285	266	337	371	389	412	434	419	408	397	385	397	397
	404	453	495	484	464	452	492	536	566	598	609	621	632	643	669	673	684	695	707	707
15 UT	729	785	875	811	755	778	804	849	965	875	868	890	946	1084	1196	1196	1196	1062	849	1241
	1443	1510	1521	1454	1376	1335	1290	1155	1193	1185	1137	1165	1216	1213	1091	1111	1167	1167	1211	1234
	1238	1249	1170	1092	1118	1110	1111	1077	1010	999	921	842	790	756	700	674	674	697	723	727
16 UT	716	671	592	581	581	592	626	671	704	745	947	939	872	820	775	738	693	745	767	812
	866	883	857	823	823	846	973	999	1033	1055	1104	1104	1092	1074	1040	917	940	992	1025	866
	790	880	891	891	906	951	1063	1104	1059	1272	1384	1376	1231	1175	984	984	940	816	783	872
17 UT	973	1130	1063	932	865	677	729	772	839	868	936	1070	1115	1159	1910	1809	1619	1085	1096	940
	917	839	704	667	653	644	635	727	749	789	899	1070	1104	1182	1126	1089	1067	988	1016	1082
	1097	1119	1097	974	891	902	925	929	974	1030	1209	1052	947	846	708	638	650	701	746	746
18 UT	789	792	783	783	790	802	806	802	802	787	663	574	544	510	492	488	499	510	526	487
	504	512	582	611	611	635	638	624	746	806	772	828	806	839	849	889	803	787	700	861
	728	888	883	688	604	602	614	613	579	578	578	544	499	513	533	575	598	660	686	731
19 UT	745	760	772	800	806	622	622	707	769	907	909	915	902	883	852	857	871	891	912	932
	1017	1034	1060	1074	1013	885	788	711	632	545	510	539	543	548	558	667	869	790	746	757
	775	798	753	725	713	714	726	771	867	892	929	1036	1030	1025	823	821	835	946	1107	1109
20 UT	1109	1067	1038	1004	931	905	896	1079	1030	961	680	676	676	791	997	1023	1098	1117	1111	1097
	998	1001	1023	1051	1078	1100	1147	1164	1182	1199	799	731	604	538	473	336	314	288	262	226
	217	213	210	208	191	183	189	203	214	228	237	249	271	293	256	267	344	392	476	514
21 UT	518	602	687	665	646	661	676	711	559	613	722	750	812	775	761	713	678	704	757	773
	819	930	1019	1349	1309	1169	1128	1140	1270	1354	1277	1201	1102	1158	1327	1403	1449	1533	1500	1496
	1124	994	948	930	947	959	994	984	1006	1013	1024	1025	1037	1062	1034	999	937	817	790	756
22 UT	593	677	699	717	826	900	840	683	649	314	339	458	542	573	610	607	285	273	273	273
	426	457	524	577	614	625	698	656	815	693	586	537	557	589	600	657	658	683	705	914
	1045	963	865	752	687	577	554	275	309	324	356	370	372	337	323	307	290	286	293	307
23 UT	321	338	395	352	361	271	248	243	252	290	347	355	240	254	265	268	297	293	305	327
	366	442	476	456	445	437	434	423	294	429	426	415	400	375	370	383	375	367	355	347
	262	254	213	203	214	267	336	327	307	327	403	425	408	364	401	439	516	530	533	578
00 UT	454	420	420	420	418	426	420	401	361	381	449	490	439	405	344	313	409	426	485	524
	561	547	528	550	562	556	551	528	490	469	459	460	462	460	468	482	485	505	547	588
	629	645	628	600	586	603	646	660	688	724	738	738	736	735	730	690	684	655	681	674
01 UT	671	637	631	486	442	431	396	392	415	430	449	478	487	486	501	509	506	521	536	502
	495	495	506	570	502	483	475	483	475	490	490	475	441	426	434	411	433	441	448	437
	440	444	433	431	451	551	582	612	612	762	735	666	620	574	559	577	632	651	651	651
02 UT	700	737	777	796	812	832	848	846	841	838	854	863	881	857	826	838	862	854	856	858
	818	868	792	795	803	811	825	836	846	848	820	819	820	832	813	751	758	761	793	813
	818	816	797	783	754	691	689	724	777	784	769	743								

1976 January 11, 0300 - January 11, 0259 UT

03 UT	612 711 727 673 612 520 463 421 360 326 333 349 320 343 368 438 493 550 560 589 567 730 856 890 860 661 746 621 550 619 653 666 694 701 708 706 709 730 735 729 719 729 735 748 733 725. 699 672 619 610 600 615 613 608 602 587 574 542 529
04 UT	528 538 551 541 524 520 524 556 578 573 555 536 521 510 499 529 525 521 536 536 544 582 582 566 550 543 567 575 556 552 583 614 622 649 606 588 588 607 618 622 611 607 612 612 558 550 528 494 504 519 531 570 611 630 618 607 532 521 537 593
05 UT	597 597 584 593 604 612 596 585 557 476 449 406 433 460 471 464 445 421 418 422 422 422 418 407 407 419 426 411 397 399 388 357 360 329 333 352 360 371 368 354 331 334 327 328 338 367 371 348 352 371 387 409 421 433 441 468 449 434 423 415
06 UT	479 491 506 514 510 502 494 487 464 502 529 568 579 575 583 576 572 583 610 629 633 648 690 775 779 863 864 849 810 768 756 718 668 649 614 599 592 592 607 619 619 623 650 677 673 647 642 630 625 617 603 590 598 610 610 604 599 614 629 629
07 UT	629 636 618 591 545 538 517 523 553 581 570 561 546 544 557 546 539 529 526 522 554 550 557 594 607 613 656 655 641 628 576 520 503 471 473 472 480 528 543 550 557 569 613 620 613 575 559 542 518 492 421 431 435 450 478 481 632 651
08 UT	632 617 612 600 575 568 533 507 485 465 451 454 461 472 482 484 462 446 417 424 412 435 452 465 459 441 426 418 424 423 414 395 372 362 355 350 318 276 275 329 329 329 330 341 348 361 364 364 356 348 329 310 295 279 268 247 243 243 246 250
09 UT	250 254 254 284 268 268 268 256 264 269 258 258 246 241 234 219 215 218 225 225 226 226 226 222 218 218 214 214 217 217 213 216 210 210 206 206 206 206 209 209 206 202 198 195 195 192 196 199 199 199 192 188 192 177 164 157 154 144 147 147
10 UT	147 147 151 148 158 162 162 155 159 173 175 180 181 181 185 189 192 189 193 177 174 170 174 168 168 164 153 148 144 147 143 136 131 127 119 116 109 106 104 109 109 109 109 109 124 124 112 112 115 115 115 112 112 112 109 106 113 109 102
11 UT	103 103 100 100 97 97 108 94 94 94 94 97 108 100 100 100 100 100 100 100 100 100 105 105 105 102 91 94 97 108 108 108 108 108 100 100 100 100 100 100 100 100 97 97 97 100 89 86 97 97 97 100 89 100 100 89 100 95 95 95 95 95 95 94 94 95 97 97 97 100 89 86 97 97 97 100 89 100 100 89 100 95 95 95 95 95 95 94 94 95 97 97
12 UT	83 83 83 83 80 91 91 80 80 80 80 91 94 94 94 94 97 108 108 108 108 108 108 111 108 108 108 108 108 114 114 114 114 111 111 111 100 100 100 100 100 100 100 97 108 108 100 100 100 89 86 86 75 86 86 86 86 72 72 72 75 75 89 89 89 89 100
13 UT	97 97 94 94 94 108 108 89 89 89 89 89 92 92 92 92 103 103 103 103 103 103 103 103 114 106 103 103 103 103 103 103 103 103 100 100 100 100 100 100 100 103 103 103 103 89 89 100 111 100 100 100 100 108 111 95 98 104 107 96 74 55 57 56 65
14 UT	68 71 80 103 103 118 103 89 75 83 102 105 120 126 140 154 157 163 163 178 178 186 183 191 199 199 210 202 168 165 151 154 162 162 156 150 158 147 147 147 155 158 163 164 168 180 172 180 187 183 183 183 183 202 199 200 202 144 188 185
15 UT	182 176 176 180 183 165 164 166 185 185 185 185 191 189 202 199 205 191 176 160 156 159 171 187 184 190 205 220 220 217 205 205 220 228 239 254 284 303 329 355 378 404 427 453 486 502 502 490 479 457 461 468 468 468 476 460 463 486 446 498 509
16 UT	524 520 520 516 516 512 497 497 497 475 475 475 475 460 471 486 486 490 463 453 463 475 486 497 497 553 546 531 486 464 430 423 415 393 393 382 367 367 352 325 303 284 266 266 255 244 240 240 232 225 214 214 225 218 205 203 199 199 206 225 252 267
17 UT	254 260 249 249 245 230 230 226 222 214 199 188 173 173 173 180 172 162 155 142 139 128 135 135 124 135 143 143 139 131 124 116 105 105 105 105 123 124 124 128 128 143 158 158 150 151 151 155 177 189 170 162 153 153 153 153 193 200 193 197 197 208 204 219 227
18 UT	236 242 248 259 273 288 292 290 295 295 294 300 316 348 351 351 357 348 350 357 371 378 339 368 388 391 401 406 416 425 434 446 462 467 472 465 463 471 587 574 608 626 728 715 703 671 654 624 490 490 496 506 519 579 576 592 537 535 609 612
19 UT	608 599 592 610 616 630 643 638 626 623 639 664 666 668 664 665 665 672 662 672 662 653 642 640 652 668 668 717 743 759 786 794 827 847 883 902 910 884 856 760 744 713 707 665 839 856 868 879 896 986 1022 982 976 953 916 921 910 886 856 760 744 713 707 665
20 UT	651 618 616 617 563 542 518 464 447 466 470 492 502 511 532 536 538 537 537 542 541 534 525 526 506 499 474 437 417 391 369 349 331 302 299 302 307 312 325 325 326 337 356 377 391 418 457 439 410 396 377 366 355 362 359 350 342 314 316
21 UT	305 290 277 280 294 320 348 359 376 375 366 358 362 346 312 296 288 302 328 366 378 379 372 369 369 370 366 395 411 419 419 422 422 420 418 410 408 401 412 415 421 427 437 434 423 412 395 379 362 343 345 348 342 326 328 334 340 346 349 346
22 UT	341 336 338 341 360 371 374 363 361 353 354 363 366 370 373 376 379 377 375 367 354 335 321 312 304 270 256 237 215 194 173 165 162 164 156 153 147 144 170 191 200 244 261 276 299 308 326 344 356 380 406 466 477 532 544 549 513 465 393 390
23 UT	401 411 417 417 407 401 404 428 428 397 399 288 278 275 279 267 251 232 211 247 245 241 232 216 210 193 173 160 147 139 137 134 131 152 170 192 189 178 170 159 150 133 99 93 114 125 138 143 166 213 247 226 199 203 221 330 355 310 349 322
00 UT	323 315 311 306 283 279 233 225 218 198 233 241 226 259 286 318 316 318 313 309 308 289 255 246 242 249 249 252 260 264 272 279 273 263 262 270 291 285 295 286 277 250 277 252 256 265 282 314 300 297 305 313 298 286 293 317 324 319 322
01 UT	323 326 324 275 269 271 269 260 247 243 239 239 237 237 230 230 229 205 174 174 178 163 188 201 206 206 214 214 213 193 193 224 222 204 169 164 171 180 201 226 245 233 256 238 188 147 152 155 169 165 186 190 205 221 221 198 182 182 169 178 175 163 159
02 UT	146 134 135 149 151 142 129 131 129 130 126 131 129 132 110 105 101 114 119 133 132 135 113 116 127 122 100 93 86 88 92 81 91 95 98 113 173 136 113 97 103 119 107 84 87 108 92 81 91 95 98 113 173

1976, MARCH 25 - 28

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

Data from Individual Observatories:

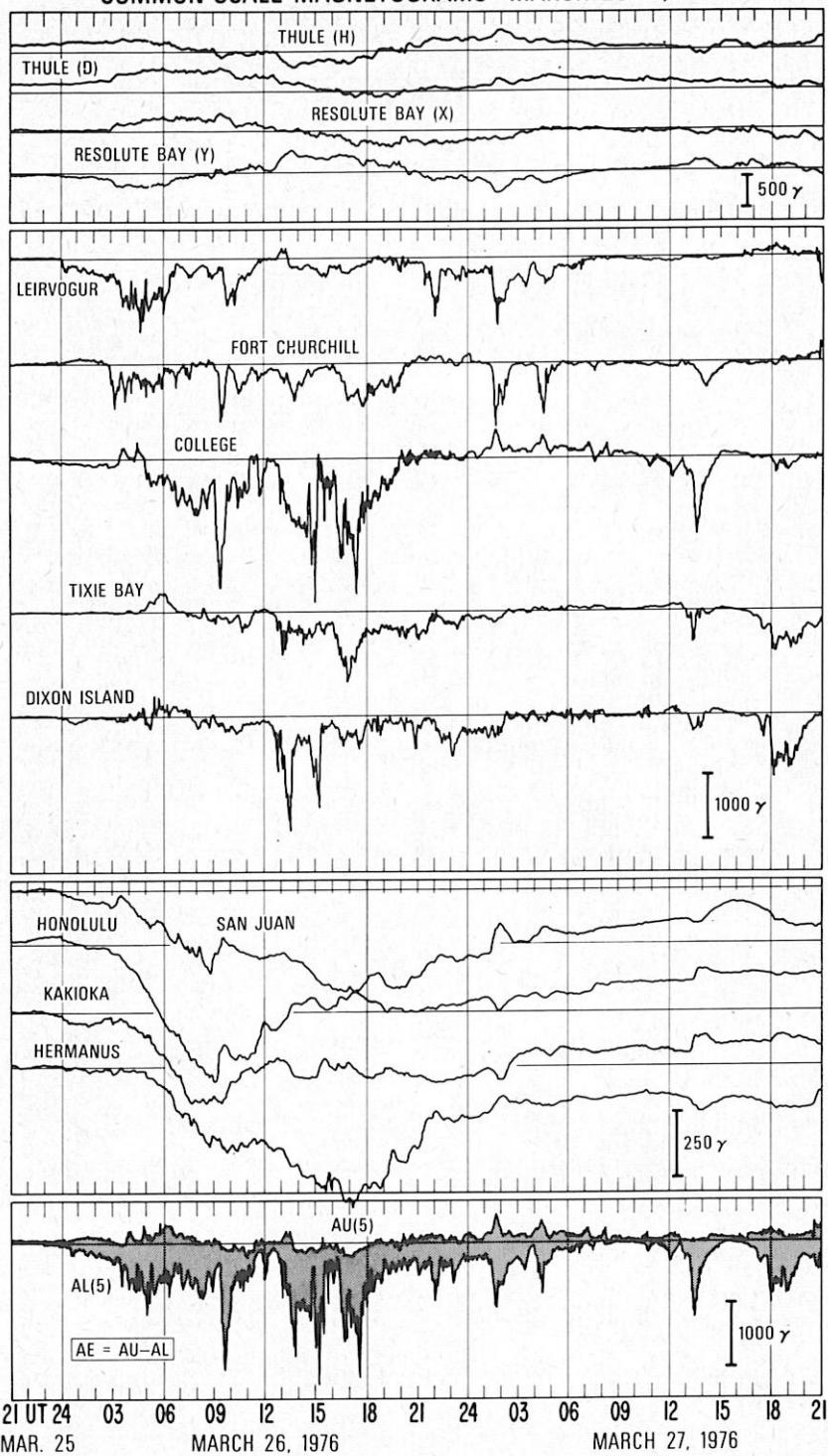
MARCH 1976

OBS.	GEOMAG- NETIC LATI- TITUDE	COMMENCEMENT DAY (UT)	SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END			
			TYPE	D(')	H(y)	Z(y)	DAY (3 HOUR PERIOD)		K	D(')	H(y)	Z(y)	DAY	HOUR	
							DAY	3 HOUR							
CB	76.7N	25 0700	SC	**	**	**	26(5)	-	-	110	180	328	29	06	
CH	68.8N	25 2050	SC	10	10	10	27(1)	-	-	1232	1558	1792	28	10	
HE	61.8N	25 2052	SC	5	89	18	25(6,7,8)	2	-	--	--	--	--	23	18
JO	54.7N	25 2050	SC	10	15	13	26(3)	8	540	720	840	29	08		
OT	57.0N	25 2054	SC	10	35	10	11(2,3)	8	560	880	700	28	07		
NE	55.1N	25 1857	**	**	**	**	26(3,+4)	9	199	1726	804	29	09		
HI	54.2N	25 2359	SC*	-1	+9	0	26(6)	8	45	350	330	28	01		
FR	49.6N	25 2051	SC*	+01	-15	-01	26(3)	8	55	470	520	29	09		
TU	40.4N	25 19--	**	**	**	**	26(2,3,4,5)	27(1)	6	32	245	50	28	10	
HT	34.0N	25 1302	**	**	**	**	26(3,1)	-	7	255	332	61	29	11	
KA	26.0N	25 1303	**	**	**	**	26(3)	7	167	319	107	27	24		
HB	21.3N	25 1310	**	**	**	**	26(3,5)	6	3	110	26	28	06		
HO	21.1N	25 16--	**	**	**	**	26(2)	7	8	330	53	29	09		
KY	20.5N	25 1302	**	**	**	**	26(3)	7	129	338	111	28	18		
AL	09.5N	25 14--	**	**	**	**	26(3,5)	7	5	385	56	28	09		
HD	07.6N	25 1300	**	**	**	**	26(4,5)	9	7	390	34	27	29		
AN	01.5N	25 14--	**	**	**	**	--	-	5	379	107	28	09		
HU	00.6S	25 2051	**	**	**	**	26(3,6)	7	16	314	53	28	07		
TV	01.1S	25 14--	**	**	**	**	--	-	4	439	283	28	09		
AP	16.0S	25 1308	**	**	**	**	26(2,3,4)	7	6	240	64	28	09		
PM	18.6S	25 21--	**	**	**	**	26(3)	7	10	370	110	29	12		
HR	33.7S	25 2340	SC*	-1	-10	-7	26(3,5,7)	6	48	306	233	27	03		
GN	43.2S	25 01--	**	**	**	**	26(4,6)	7	42	250	330	28	08		
TO	46.7S	25 21--	**	**	**	**	26(3,4,5,6)	7	62	270	380	27	09		
MI	60.7S	25 21--	**	**	**	**	26(5,6)	8	494	1730	1150	28	18		
MH	73.2S	25 23--	**	**	**	**	26(8)	27(1,8)	7	140	910	1090	29	12	
RB	83.0N	26 0230	SC	-23	**	**	26(5)	-	-	621	521	209	28	07	
BL	73.9N	26 0200	**	**	**	**	27(2)	-	-	716	1376	950	28	10	
CO	64.6N	26 0231	SC*	-7	+32	-8	26(5)	9	769	2630	1940	27	15		
YK	62.5N	26 0310	**	**	**	**	26(5)	-	1360	1600	1260	20	03		
ME	61.8N	26 --	**	**	**	**	26(5)	9	--	2276	2208	28	18		
SI	60.0N	26 0233	SC*	+ 4.1*	-40.4*	-11.9*	26(6)	9	--	--	--	--	28	08	
BD	48.9N	26 02--	**	**	**	**	26(3)	7	72	310	316	28	11		
IR	41.0N	26 01--	**	**	**	**	26(5,6)	7	44	252	110	28	20		
GU	40.0N	26 0231	SC*	**	-25	06	26(3)	7	10	390	50	28	01		
SJ	29.9N	26 0232	SC	**	12	02	26(2)	6	13	209	50	27	07		
CZ	51.4S	26 0233	SC	0.9	7	**	26(6)	8	110	628	335	26	23		
KG	56.5S	26 0232	SC*	7.4	26	12	26(7)	9	113	1220	660	27	03		
DU	75.6S	26 0233	SC	30	35	45	26(2,4)	5	687	510	598	27	07		
HE	61.8N	27 --	**	**	**	**	27(5)	6	77	745	358	28	18		
HE	61.8N	28 --	**	**	**	**	28(2)	5	--	--	--	--	28	18	

THREE-HOUR-RANGE INDICES. I

THREE-HOUR-SEGMENT INDICES, K	MAR	25	26	27	28		25	26	27	28							
	BT	3212	2222	4545	5544	7644	4677	6553	4443	TK	1121	2233	3665	6563	4433	4553	2422	3331
CC	2111	1023	3544	5555	5544	7566	6542	5543	IK	0011	2133	4555	6665	4323	4454	3211	2232
DI	1111	2123	4665	9866	7555	6877	7554	5863	TL	0020	1222	3465	6765	4321	3244	3221	1122
TI	1111	1122	3676	8687	5444	7776	6444	6652	FR	1121	1023	4687	6654	6442	3334	3432	2232
MM	0001	1111	3665	6676	6534	4477	6532	3343	SM								
KI	0011	1111	4655	6656	7533	4477	6522	3343	KS	0101	3233	4555	6665	4333	5555	2201	3412
WE	1010	1111	2689	8-84	5423	8454	3433	4321	TU	2333	2231	2211	1222	0322	1121	2443	2222
CO	0010	0011	2668	9863	5445	7443	3433	4321	KY	0100	2222	3676	6654	5423	5343	3321	3321
RY	1012	2223	5367	6557	7653	3578	7653	3444	QU								
DO	1001	1112	3765	7877	8433	4555	5522	3343	TA								
YA	1112	2122	5699	9985	5433	6455	4333	4432	HO	0010	1123	3776	6543	4332	4224	3431	2221
LE	0000	1111	3766	7786	6432	3355	4430	2232	AL								
NU	0001	1112	3556	8886	6333	4554	3322	2232	SJ	0020	1123	4665	6545	6432	4533	2230	1211
LO	0001	1112	3656	9886	6332	3564	5322	3242	GU	1011	2223	4776	5653	5433	5333	2-	-
SI	0020	1012	3798	(9)8954	5643	7333	2531	3221	BA								
SV	0000	1122	2545	6765	4323	4454	2321	2331	PM	1121	2122	4675	6543	5433	5333	4311	3221
RS	0001	2223	4565	7865	4333	3564	3321	3342	HU	0221	3232	3676	6765	5433	3543	2231	3332
ME	1020	1122	3778	9854	6553	6334	3541	3222	FP								
WI	0001	2223	4666	6866	5423	3554	4321	2342	TH	0000	1122	224-	—	3221	4333	2022	2121
IR	0221	2233	3666	7764	5434	5454	4542	3332	GN	0000	1122	2357	6764	5422	5453	2311	3322
VL	0022	1122	4565	5665	4332	3454	3331	2232	HR								
KV	1112	2233	4665	6766	4433	4564	3322	2342	TO	0110	1122	3577	7764	5432	5443	3243	3322
DB	0001	1122	4565	5665	4332	2454	3111	2232	AH	1021	1012	4577	7753	5332	5334	3431	2211
KD	2222	1111	2445	6653	2222	3322	2222	2221	MT	0110	0001	2667	8874	4443	6453	2534	4421
VI	1020	1112	4699	8754	6542	5334	3532	3322	MY	2232	1012	3445	6444	3444	3355	3353	3232
JO									MW	3112	1111	4556	6467	7653	4467	6654	3344
OT	0021	1112	2887	6554	7432	3334	3431	2222	NL	1112	1113	6886	4687	3362	3357	6633	2334
MT	0110	2113	3676	6654	5432	5344	3321	3321	SB	1020	1122	3444	5442	5532	3345	4431	2332
									VO	1121	1113	3444	43-	4443	3334	4332	2222

COMMON-SCALE MAGNETOTRIGRAMS MARCH 25-27, 1976



PRELIMINARY AE (5)-INDEX AT ONE MINUTE INTERVALS
 1976 March 25, 2100 - March 26, 2059 UT

21 UT	51	51	51	55	55	55	38	38	38	38	36	27	27	35	15	18	18	19	21	21
	23	23	26	26	23	21	21	19	19	19	27	27	16	15	25	25	24	13	16	16
	27	27	27	35	35	38	28	27	27	18	16	21	21	24	21	26	28	31	31	31
22 UT	31	28	31	31	28	26	23	23	23	21	26	26	26	23	23	21	21	26	26	24
	24	29	34	48	50	53	67	78	78	76	69	67	67	64	59	51	51	59	59	59
	48	48	51	51	51	53	59	45	40	37	35	32	32	29	27	38	40	43	46	48
23 UT	51	51	53	53	56	59	61	64	67	67	56	56	67	67	64	61	64	64	75	78
	91	91	91	100	100	86	86	86	86	78	78	75	75	75	72	83	91	91	91	91
	78	62	49	49	46	57	71	87	92	97	97	100	92	83	97	89	91	91	98	136
00 UT	123	141	173	191	213	223	229	216	207	203	207	219	249	238	211	194	179	169	160	162
	178	189	193	193	192	192	184	187	183	179	175	168	170	173	179	174	178	179	182	188
	183	190	192	193	189	191	194	194	188	187	210	223	231	242	250	254	258	264	269	263
01 UT	263	275	288	286	298	285	285	258	247	244	229	204	204	211	213	213	213	217	213	235
	254	240	245	254	261	272	279	279	278	274	233	231	295	299	299	295	287	273	257	261
	265	263	263	257	238	221	241	252	296	295	290	295	300	301	293	279	269	261	258	266
02 UT	270	275	284	279	271	266	268	272	266	262	265	283	301	303	300	300	288	288	297	298
	293	286	279	304	296	291	291	288	274	275	288	340	318	301	274	308	323	324	320	312
	305	289	282	232	216	214	223	227	246	246	233	227	237	274	214	206	240	282	326	363
03 UT	426	439	439	544	625	630	476	410	355	410	387	352	329	292	308	342	347	342	355	361
	433	486	519	600	661	680	721	746	604	811	896	838	827	819	804	788	768	754	728	702
	672	664	672	699	711	646	677	782	778	767	764	772	779	787	795	799	749	619	345	353
04 UT	361	442	485	573	589	646	712	754	772	691	603	565	416	416	446	499	636	692	754	818
	848	885	977	1007	1007	965	953	900	866	926	992	1091	1226	1184	1115	1035	689	694	710	736
	856	922	1034	1048	1005	923	879	713	599	554	336	547	637	655	704	759	776	824	853	896
05 UT	903	904	913	919	914	902	881	832	821	804	780	741	731	713	710	708	696	685	662	689
	722	807	818	903	748	742	724	746	767	788	797	791	736	703	679	656	651	679	709	695
	695	688	695	699	805	863	882	825	748	710	683	826	821	1057	1022	934	906	885	875	867
06 UT	833	810	768	745	736	710	692	671	694	631	599	578	523	464	436	441	444	445	472	449
	533	552	552	557	563	574	580	574	569	536	532	465	465	473	467	520	558	690	729	767
	778	778	789	811	816	788	771	738	711	694	694	678	683	683	656	639	617	612	585	546
07 UT	524	508	530	535	546	551	564	606	605	650	672	689	727	733	733	739	755	772	789	732
	676	627	638	643	642	617	612	617	595	589	599	588	588	588	662	763	752	750	772	757
	785	821	838	835	841	836	830	789	735	708	705	705	752	831	834	826	817	801	790	806
08 UT	803	788	761	755	749	743	702	669	636	600	562	537	499	461	448	458	496	526	532	522
	525	528	588	627	630	620	625	640	659	697	727	634	647	608	583	582	576	549	509	465
	433	414	403	405	397	394	383	381	367	345	339	331	328	324	319	291	279	466	466	916
09 UT	955	1136	1127	1154	1154	1198	1440	1448	1437	1511	1671	1710	1806	1842	1848	1779	1688	1598	1572	1471
	1262	1221	1292	1185	1179	1158	1147	1133	1155	1087	1023	985	935	895	830	775	723	624	592	579
	581	593	602	602	581	566	589	624	613	570	530	500	475	439	441	448	457	462	466	463
10 UT	431	327	330	418	437	568	559	512	503	501	491	377	355	351	344	411	505	584	686	639
	573	513	443	398	311	333	375	387	354	267	264	260	286	329	328	368	375	359	294	266
	249	205	200	216	238	293	320	365	392	409	403	404	393	376	354	326	315	299	266	266
11 UT	198	231	234	230	234	244	233	221	224	221	206	183	157	138	116	86	88	95	102	105
	110	152	171	153	145	140	157	181	194	219	187	221	303	358	558	539	511	539	552	547
	522	486	451	431	429	410	357	324	280	203	170	179	201	222	214	178	189	178	167	156
12 UT	133	133	130	124	131	113	103	109	105	109	109	113	109	115	116	116	120	125	140	146
	146	140	135	156	167	191	208	219	238	283	295	300	306	265	250	291	406	438	519	713
	899	915	911	541	566	385	584	757	816	479	479	544	644	820	827	828	821	891	885	825
13 UT	769	735	727	759	807	921	1015	1175	1246	1362	1233	1293	1255	1283	1230	1182	1246	1261	1337	1496
	1295	1322	1369	1459	1617	1093	1110	1120	1274	1023	793	777	778	796	785	811	815	808	812	808
	866	877	888	910	884	829	852	886	886	849	830	800	759	730	774	825	847	869	876	887
14 UT	894	894	872	869	869	865	866	917	921	892	889	889	922	893	853	933	1032	981	978	1099
	1088	1092	1067	997	806	546	487	403	392	355	296	266	332	1068	1264	1187	668	846	940	879
	1317	1152	1093	1064	1023	922	1161	2049	1880	1748	1743	1369	1294	1187	668	846	940	879	734	886
15 UT	965	1084	1183	1289	1391	1364	1295	688	564	430	424	306	316	249	241	233	230	230	380	333
	415	660	808	874	641	476	335	305	285	230	263	387	269	216	230	313	336	325	306	221
	386	482	494	523	336	493	343	306	292	274	293	310	350	389	232	190	225	227	260	276
16 UT	271	306	319	285	308	495	806	843	909	909	854	932	995	1047	1113	1227	1299	1341	1355	1366
	1353	1253	1179	1146	1101	1251	1251	768	712	669	581	677	776	592	559	561	551	549	634	777
	868	1082	1082	1009	837	826	810	800	877	921	998	965	958	969	937	970	1019	1114	1213	1235
17 UT	1221	1133	1001	975	1001	1081	1371	1452	1533	1746	1915	1896	1922	1915	1750	1622	1604	1410	1168	1113
	963	842	798	886	1007	1007	765	724	669	581	677	776	592	559	561	551	549	634	777	898
	872	754	659	564	533	678	711	678	634	584	582	515	510	452	360	566	632	684	713	721
18 UT	618	599	602	642	708	675	657	657	607	589	574	586	580	551	562	540	529	518	495	499
	551	595	551	528	520	531	542	575	664	636	614	589	592	595	605	509	473	429	454	388
	395	308	278	252	285	325	330	358	372	339	324	302	312	306	312	350	420	465	480	458
19 UT	384	417	472	465	454	466	433	426	408	408	360	334	342	364	411	426	385	362	343	305
	282	328	373	413	414	418	423	433	426	407	394	369	352	327	323	309	317	226	193	177
	187	209	232	238	308	427	424	414	409	393	326	329	415	390	330	281	302	315	372	415
20 UT	327	329	361	370	389	351	408	429	421	352	328	318	332	361	350	346	337	366	435	408
	312	269	264	352	412	376	28													

1976 March 26, 2100 - March 27, 2059 UT

21 UT	454 446 446 446 444 444 444 447 433 417 388 388 372 399 401 404 388 417 477 465 441 446 443 440 429 415 448 486 424 372 389 361 340 316 397 442 439 406 475 489 547 633 633 656 684 663 654 643 641 670 701 735 824 872 970 872 831 760 685 653 667
22 UT	734 765 734 692 638 588 465 415 366 358 356 349 344 338 370 381 405 390 415 445 466 471 444 385 377 353 286 279 304 320 321 329 338 349 377 389 379 378 364 366 395 412 418 410 402 328 325 378 356 341 349 404 433 511 545 596 627 650 672 680
23 UT	666 658 644 596 573 475 442 431 423 414 406 409 425 425 414 400 338 333 326 339 315 334 338 310 296 287 284 284 307 306 319 318 315 297 294 280 286 306 343 378 391 394 401 393 386 377 369 357 374 399 410 421 427 412 409 403 390 379 357 338
00 UT	302 305 305 308 313 341 358 367 369 356 353 347 342 328 308 297 294 285 278 267 260 261 267 287 290 287 280 274 257 277 257 248 241 232 222 236 261 253 264 270 272 278 263 280 333 333 322 313 313 364 372 313 298 298 301 309 318 329 349 360
01 UT	394 411 442 447 459 481 481 470 467 456 465 459 450 425 416 470 569 607 644 728 766 829 886 990 1056 1146 1244 1381 1390 1258 1237 1249 1304 1364 1299 1084 1026 996 955 875 903 934 892 866 882 840 806 799 777 755 738 754 745 739 728 728 739 742 749
02 UT	749 641 633 618 610 602 598 587 587 584 584 571 571 494 490 512 519 519 492 496 488 477 466 470 459 470 445 422 411 397 404 400 407 407 403 388 384 366 362 358 354 347 339 335 342 338 334 338 334 330 337 341 353 353 350 354 369 361 365 376 376 354
03 UT	406 417 433 452 471 471 456 452 460 468 483 498 503 514 522 541 545 526 507 476 443 401 382 362 343 316 293 270 200 189 185 231 242 200 189 162 198 151 195 173 164 164 164 183 197 201 208 208 239 296 311 338 349 376 387 402 408 425 429 469
04 UT	572 660 644 589 564 532 522 588 670 818 848 812 828 836 858 908 958 1020 1064 1082 1000 900 826 758 720 620 595 547 543 540 504 504 486 486 490 438 430 403 414 418 411 800 386 360 341 329 329 336 343 347 358 354 350 354 354 338 326 264 241 259 267 282
05 UT	289 304 308 305 282 251 248 237 237 226 218 214 221 213 206 213 232 251 266 274 274 281 277 270 250 254 262 270 277 274 278 278 289 285 281 277 270 255 255 259 259 251 243 232 236 229 222 211 193 229 233 226 223 223 252 257 254 264 260 252 255
06 UT	223 270 246 195 249 234 230 237 244 206 202 246 238 215 218 226 218 207 184 173 161 146 131 131 131 142 154 146 172 189 188 258 227 189 166 125 136 150 195 210 154 138 119 111 141 160 178 189 193 185 196 185 179 152 158 177 207 222 244 233
07 UT	233 203 212 218 229 237 218 211 199 207 152 163 163 152 130 117 92 89 102 128 179 192 184 172 142 131 122 101 81 78 67 62 62 50 47 58 69 55 51 55 64 55 73 79 76 70 51 59 45 42 53 62 68 69 80 82 90 101 130 152 168
08 UT	187 203 178 189 205 208 260 211 154 143 121 110 104 93 68 60 60 57 55 55 55 52 49 44 39 49 55 69 83 78 69 83 94 94 94 96 91 89 86 83 86 86 97 97 94 88 94 83 72 69 66 60 60 71 82 69 85 94 94 97 97
09 UT	94 91 66 75 72 55 41 41 45 45 45 48 50 50 50 50 48 61 64 61 64 61 61 59 56 56 59 59 61 75 75 75 75 75 75 72 72 72 59 59 59 59 63 59 56 55 55 41 41 38 42 45 37 42 56 63 66 66 63 61 50 50 52 58
10 UT	55 52 64 53 45 42 53 75 78 49 47 47 47 55 44 59 62 75 72 68 85 97 125 122 125 116 113 108 105 116 167 194 177 101 112 148 170 272 297 202 205 183 158 169 158 147 136 136 114 92 103 81 90 112 90 58 76 101 87 90
11 UT	79 68 50 52 50 62 52 55 60 65 68 73 71 71 71 82 71 71 69 69 69 69 69 69 69 69 95 95 106 95 76 87 84 109 120 116 102 90 121 138 152 155 144 146 179 193 196 185 174 177 199 188 221 232 227 221 202 238 274 307 342 375 375 378 395
12 UT	409 401 390 379 368 346 324 318 299 279 282 271 254 240 297 269 227 229 218 205 205 194 194 185 188 184 179 181 170 165 149 141 122 73 84 84 95 74 90 110 132 173 184 184 198 200 192 192 203 258 291 302 269 244 222 231 228 227 227 216
13 UT	205 205 216 238 271 256 241 227 272 356 474 437 415 418 439 740 773 733 810 869 964 1046 1068 1090 1089 1139 1140 1048 990 938 905 843 927 894 876 733 740 718 685 619 612 623 663 476 432 476 542 524 491 469 440 422 422 437 425 429 371 387 409 370
14 UT	362 350 342 338 332 332 313 306 309 280 270 249 249 267 253 237 237 243 270 289 284 263 269 275 267 269 275 272 262 273 270 246 238 248 240 221 205 203 213 209
15 UT	126 126 126 126 126 123 110 96 93 91 85 94 94 94 94 94 91 78 75 72 75 75 70 62 59 59 59 59 62 64 64 64 64 64 64 59 57 57 57 57 57 57 56 53 56 70 83 67 54 54 59 59 70 80 86 67 83 80 70 67 59 59 57 57 57 57 56 53 56
16 UT	59 48 72 64 58 61 84 62 59 128 120 106 77 56 80 79 72 68 70 70 70 70 70 70 70 85 94 98 88 64 78 83 85 76 74 75 74 67 55 62 66 66 70 74 179 177 173 168 167 184 197 200 201 203 212 216 220 221 218 216 216 217 213 213 209 209 208
17 UT	213 216 217 228 230 232 226 231 234 242 255 268 350 353 358 370 381 391 398 400 408 439 444 455 441 437 425 405 388 378 362 353 355 415 415 357 348 353 362 377 381 381 381 383 380 429 449 534 584 655 729 803 866 925 981 1041 1090 1053 1035 958
18 UT	915 884 894 925 957 966 949 853 776 760 745 728 710 764 774 787 795 799 794 776 764 753 710 710 711 701 746 777 772 843 833 844 850 851 838 842 593 562 510 474 533 608 643 634 535 510 523 619 729 757 849 838 804 752 705 721 741 768 785 810
19 UT	810 784 739 738 761 756 749 743 719 685 667 612 565 565 565 573 568 591 599 591 571 614 606 596 567 545 529 510 484 472 467 443 467 485 519 506 485 468 462 435 398 360 351 343 341 336 336 334 328 335 341 317 309 295 297 298 308 308 303 295 292
20 UT	292 290 313 321 326 329 334 342 347 345 345 345 347 353 355 363 369 374 379 387 401 408 416 419 411 430 387 379 376 379 376 379 365 366 362 371 319 399 463 660 671 643 608 602 600 597 603 617 638 655 662 565 565 499 495 417 411 445 628 631 656

1976, MARCH 31 - 1976, APRIL 1 - 3

Date	31			1			2			3																						
	UT	06	12	18	06	12	18	06	12	18	06	12	18																			
Kp	3o	2-	3-	2o	2+	2-	3-	1o	6+	8+	8+	8+	6o	4+	3+	3-	4o	3+	2+	1-	1o	2+	3o	5-	4o	5-	5o	6+				
3Kn	8	4	8	6	8	6	8	5	16	21	22	22	16	10	8	8	10	9	7	3	3	6	9	12	9	14	14	5	12	11	12	14
3Ks	9	4	8	6	7	5	7	2	16	21	21	21	14	11	9	9	11	9	6	2	2	5	9	13	11	14	13	5	13	12	13	17
Dst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

Data from Individual Observatories:

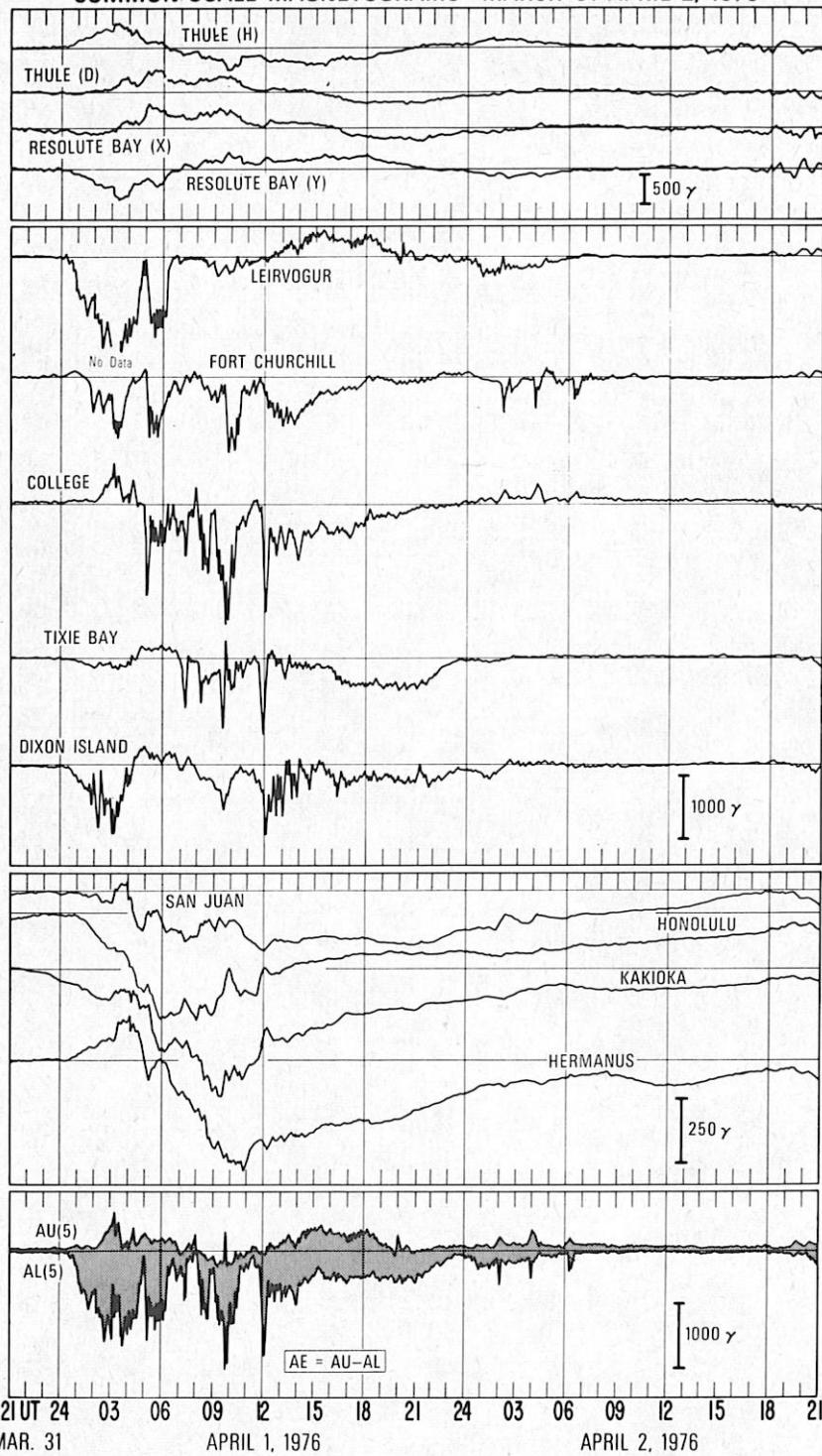
MARCH - APRIL 1976

OBS. 2-letter IAGA code	GEOMAG- NETIC LATI- TITUDE	COMMENCEMENT			SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END		
		hr min DAY (UT)	TYPE	D(')	H(y)	Z(z)	DAY (3 HOUR PERIOD)	K	D(')	H(y)	Z(z)	DAY	HOUR			
RB	83.0N	31	2200	**	**	**	01(2)	-	741	592	267	01	23			
CB	76.7N	31	0425	**	**	**	01(4)	-	224	120	344	03	24			
BL	73.9N	31	1400	**	**	**	01(2)	-	726	730	901	03	21			
CH	68.8N	31	2300	**	**	**	01(2)	-	984	1334	1648	02	11			
YK	62.5N	31	0600	**	**	**	01(4)	-	1000	1200	1130	02	10			
ME	61.8N	31	**	**	**	**	31(3)	5	24	318	198	02	09			
OT	57.0N	31	**	**	**	**	01(3,4)	8	600	720	700	02	05			
NE	55.1N	31	2307	**	**	**	01(2,3,4)	9	159	1903	1509	02	09			
CZ	51.4S	31	1820	SC	0.6	3	3	01(2)	8	76	290	203	02	05		
MW	73.2S	31	23-	**	**	**	01(2)	9	400	2220	2910	03	09			
CO	64.6N	1	01--	**	**	**	01(2,4)	8	632	2580	1840	02	09			
ME	61.8N	1	0140	**	**	**	01(2,4)	9	23	143	104	02	09			
SI	60.0N	1	0254	SC*	-20.1*	+240	+53.4	1(4)	9	--	--	--	01	18		
JO	58.7N	1	0030	**	**	**	01(4)	8	500	860	840	02	05			
WI	54.2N	1	0035	**	**	**	01(2)	7	40	455	250	02	05			
FR	49.6N	1	01--	**	**	**	01(3)	8	57	295	425	02	07			
BD	48.9N	1	01--	**	**	**	01(4)	7	60	298	274	01	18			
IR	41.0N	1	01--	**	**	**	01(2,4)	7	36	215	243	02	09			
TU	40.4N	1	00--	**	**	**	01(2,3,4)	6	23	150	65	01	16			
HT	36.0N	1	0254	SC*	+0.9*	+12	-2 *	01(3,4)	7	238	270	58	02	09		
SJ	29.9N	1	0254	SC	+01	+34	+10	01(2)	6	12	19	28	02	07		
KA	26.0N	1	0254	SC*	+0.7	+12 *	+ 5 *	01(2,3)	7	150	243	126	02	02		
NB	21.3N	1	0252	SC	--	+57	- 4	01(2)	6	81	126	29	02	09		
HO	21.1N	1	01--	**	**	**	01(2)	7	13	231	43	01	18			
KY	20.5N	1	0255	SC*	+0.6	+15 *	+ 6	01(2,3,4)	7	119	282	137	02	09		
JP	17.3N	1	0254	SC	-0.9	32	- 8	--	6	342	30	02	10			
UJ	13.5N	1	0254	SC	--	30	- 8	--	6	364	30	02	10			
AL	09.5N	1	0254	SC	-0.7	36	- 5	01(2)	8	353	39	02	10			
HD	07.5N	1	0254	SC	-0.1	+37	- 3	01(4)	9	352	47	02	09			
GU	04.0N	1	0255	SC*	--	36	-10	01(2)	8	10	330	50	01	15		
AN	01.5N	1	0254	SC	-1.4	53	15	--	5	367	117	02	10			
HU	00.6S	1	0204	SC	1	59	9	01(2,3,4,5,6)	6	12	179	44	01	23		
TV	01.15	1	0254	SC	--	--	--	--	5	355	174	02	10			
AP	16.0S	1	0255	SC	+ 1	+ 8	- 4	01(2)	7	4	192	42	02	09		
PM	18.6S	1	00--	**	**	**	01(2)	7	12	320	130	08	16			
HR	33.7S	1	00--	**	**	**	01(2,3)	7	46	346	197	08	06			
GN	43.2S	1	00--	**	**	**	01(4)	8	48	240	350	01	22			
TO	46.7S	1	00--	**	**	**	01(4)	8	66	240	200	04	18			
CZ	51.4S	1	0349	SC*	12.4	5	25	01(2)	8	76	290	203	02	05		
CZ	51.4S	1	0255	SC	12.0	27	4	01(2)	8	76	290	203	02	05		
KG	56.5S	1	0255	SC*	17.6	30	10	01(2,3,4)	8	60	890	348	02	03		
HI	60.7S	1	01--	**	**	**	01(2,3,4)	7	240	1440	990	02	10			
DU	75.6S	1	0255	SC*	48	174	233	01(1,4)	6	621	798	657	01	19		
ME	61.8N	2	--	**	**	**	02(1)	5	39	226	160	02	09			

THREE-HOUR-RANGE INDICES, K

MAR/APR	31	1	2	3	31			1			2			3			
					1	2	3	1	2	3	1	2	3	1	2	3	
BT	4444	4342	6656	5444	4443	3346	4563	5456	TK	2231	2242	3777	4433	3345	1335	3544	5354
CC	4333	5432	---	5543	4322	2223	----	----	IK	2122	2241	6766	5332	3221	1335	3432	5455
DI	5343	4673	8867	8666	5432	3357	5653	7677	TL	2111	2230	6766	6443	3110	0233	3331	3445
TI	3232	5552	5799	7667	4332	2367	5553	8778	FR	3122	1121	5787	4323	4431	0134	3452	4435
MM	5122	2231	7975	7665	5321	2258	6442	5667	SM	---	3-56	2232	3222	2333	3344	3444	
KI	5112	2231	8975	6654	5321	2256	6442	5566	KS	0012	413-	-65	---	-011	0235	3344	5465
WE	2143	4111	478-	8633	3310	0123	3562	6765	TU	2132	2222	5666	4212	4431	1134	3552	4345
CO	2244	3221	6678	6533	3431	1123	3463	7744	KY	1222	3231	5777	4322	2211	1333	3552	3434
RY	5223	3332	9975	6564	5422	2346	5674	5568	QU	--	--	--	--	--	--	--	--
DI	4112	3241	5977	6654	4321	2335	5442	4677	TA	--	--	--	--	--	--	--	--
YA	3223	3341	6681	6433	3220	0135	3342	5455	HO	1133	2211	5756	3322	2221	0233	2453	4324
LE	3111	2230	6766	5443	4310	1214	4441	3556	AL	--	--	--	--	--	--	--	--
NU	2112	2131	4767	6533	3211	0134	3442	3456	SJ	2111	1211	4656	3234	4321	0244	4442	4334
LO	2122	3131	6877	5543	3221	1345	4452	4456	GU	1222	3221	5867	5422	3312	1333	3453	4333
SI	2143	2121	6999	(7)521	3431	1233	3662	6544	BA	--	7655	3344	3422	2244	3342	6455	
SV	2122	3231	5656	5333	3321	1334	2442	5454	PM	2232	3121	4756	3322	2232	1233	3452	4434
RS	3122	2231	5761	5433	3221	2335	3442	3456	HU	2221	3332	4666	6654	4322	3443	3432	4444
ME	3152	2222	6984	7433	5441	1224	4673	5545	PP	--	--	--	--	--	--	--	--
WI	3122	3241	6766	5443	4221	1335	4442	4456	TN	1222	0201	--	--	--	--	--	--
IR	2242	3231	5767	5433	3342	1334	3552	5444	GH	2132	3231	5678	7532	3211	0135	3451	5556
KV	2123	3242	6766	5443	4322	3345	4452	4456	HR	--	--	--	--	--	--	--	--
DB	3122	2231	5765	4332	3211	1354	2342	3355	AH	3233	3121	5777	5331	3221	1223	3542	4335
KD	2222	2221	3434	3212	2221	1013	1331	3232	HI	--	4777	6643	3320	0212	3563	7764	
VI	3143	2229	5989	8221	4541	1233	3652	4334	MH	4343	2342	8985	4666	5542	2237	4563	5477
OT	4542	2111	4788	3223	4421	1133	4452	2335	NL	5212	2221	8988	5453	7521	1247	6863	2458
MT	2122	3222	4677	5322	2111	0224	2552	4434	SB	4132	3223	--	--	--	3332	2134	3443

COMMON-SCALE MAGNETOGRAMS MARCH 31-APRIL 2, 1976



21 UT	33	33	29	29	29	36	29	29	33	44	33	30	29	29	29	33	33	36	36	36	
	44	44	33	33	33	35	40	38	35	35	33	33	33	33	33	33	33	40	36	33	
	33	33	19	33	33	33	33	33	33	24	35	33	44	33	33	33	44	33	33	33	
22 UT	36	47	46	49	49	36	36	36	36	36	33	35	38	38	38	40	40	51	49	58	
	62	62	57	57	46	43	32	35	35	46	32	43	40	40	50	51	51	49	49	46	
	46	46	46	49	41	44	47	50	50	52	63	52	50	50	50	47	47	47	47	47	
23 UT	36	36	44	44	44	30	41	30	30	33	36	47	50	61	63	63	66	72	75	75	
	75	75	72	83	83	72	72	69	70	69	62	58	58	55	55	52	50	50	50	48	
	47	44	48	48	44	44	48	48	48	48	44	44	37	41	52	52	48	52	56	56	
00 UT	56	52	52	56	56	52	47	47	47	47	58	61	67	71	65	94	105	113	136	147	159
	163	163	159	159	147	146	143	134	126	134	142	160	158	149	166	199	213	239	254	276	
	312	301	292	306	376	460	478	491	514	535	553	577	580	576	562	556	576	592	612	630	
01 UT	645	664	673	688	680	657	649	656	683	695	683	675	664	659	655	655	690	736	740	771	
	767	779	791	802	818	837	854	888	880	927	942	884	850	842	812	799	784	727			
	711	692	677	653	677	677	711	692	677	700	677	650	646	630	615	776	1004	985	969	965	
02 UT	972	984	1006	998	987	971	967	993	1090	1125	1135	1138	1138	1161	1135	1119	1107	1215	1257	1306	
	1359	1435	1508	1527	1630	1656	1683	1640	1613	1541	1492	1487	1447	1424	1369	1359	1328	1323	1277	1296	
	1345	1449	1468	1506	1562	1600	1624	1628	1640	1670	1696	1708	1743	1761	942	1028	1181	1140	1251	1492	
03 UT	1564	1294	1154	1002	1127	1341	1223	1152	1113	1157	1189	1219	1235	1346	1353	1150	1084	1042	1048	1069	
	918	1510	1531	1523	1460	1523	1609	1576	1520	1478	1418	1341	1332	1353	1347	1287	1234	1188	1164	1147	
	1147	1162	1271	1372	1345	1325	1423	1447	1269	1130	1164	1050	986	988	1132	1189	1258	1279	1383	1435	
04 UT	1422	1391	1371	1366	1409	1404	1352	1298	1264	1230	1200	1229	1259	1194	1113	1093	1118	1121	1110	1119	
	1123	1058	981	924	899	881	829	749	723	703	652	658	637	672	694	679	660	637	630	630	
	580	531	396	259	268	384	482	529	568	556	676	1083	1563	1621	1497	1415	1283	1560	1340	1196	
05 UT	1012	888	870	1140	1116	981	953	967	1154	1109	1086	1068	1077	1135	1140	1112	1105	1098	1079	1037	
	1014	1242	1319	1361	1356	1316	1150	1117	1094	1042	962	954	1173	1201	1248	1183	1129	1107	1097	1037	
	983	966	1256	1194	1118	1098	1036	993	953	921	1204	1268	1154	1215	1086	988	1042	1074	1083	1077	
06 UT	1049	984	974	912	834	818	705	526	484	392	417	474	535	560	580	569	536	500	431	376	
	334	361	369	333	290	289	274	280	300	341	355	381	386	401	386	397	416	474	527	626	
	618	571	589	575	513	421	408	425	430	389	346	275	237	227	230	233	198	154	210	190	
07 UT	242	301	334	360	343	318	350	425	775	756	663	662	696	741	747	737	249	221	207	174	
	180	228	248	278	303	245	220	201	193	184	205	191	155	163	182	221	226	199	165	162	
	107	100	135	212	217	286	300	295	260	179	171	165	107	34	123	223	292	371	418	429	
08 UT	448	481	527	498	388	284	549	650	781	950	832	447	389	455	504	539	641	674	769	843	
	803	767	736	721	713	716	774	835	876	897	879	861	781	638	484	392	286	196	181	177	
	165	167	167	218	246	259	269	216	189	208	232	204	197	238	170	194	461	516	640	578	
09 UT	492	491	673	810	686	645	559	470	709	849	813	893	967	907	836	801	840	782	794	872	
	838	707	741	826	885	1050	951	866	1146	1421	1568	1937	1922	1783	1388	1433	1544	1634	1677	1707	
	1554	1547	1048	871	905	913	899	902	865	776	735	694	652	605	567	688	765	837	925	912	
10 UT	876	870	848	853	862	884	940	987	994	809	749	714	604	652	710	736	744	811	736	679	
	614	450	489	528	558	515	363	262	245	221	182	178	199	186	164	180	229	183	183	183	
	180	180	200	218	241	272	264	230	176	165	177	177	177	160	167	169	175	188	214	222	
11 UT	241	254	218	230	216	239	161	149	149	154	160	180	212	170	151	136	126	126	160		
	182	258	295	301	269	296	303	306	288	280	267	223	209	211	226	225	209	190	195	221	
	331	390	412	534	736	858	905	953	1130	1126	1265	1309	1364	1507	1566	1573	1544	1478	1335	1273	
12 UT	1117	974	970	867	881	802	754	638	585	519	454	458	524	632	636	771	830	739	706	744	
	769	775	726	622	575	578	629	655	706	736	770	765	767	781	792	718	794	840	640	611	
	589	574	644	683	700	695	659	639	665	687	709	715	592	560	654	714	775	904	904	923	
13 UT	842	820	810	775	772	810	799	745	716	795	788	748	712	751	848	844	807	773	779	791	
	780	769	790	782	777	784	737	770	764	794	756	730	720	705	757	785	845	821	825	812	
	798	786	812	894	856	792	791	789	846	879	912	866	875	880	877	845	824	756	734	734	
14 UT	716	702	712	712	671	636	609	638	648	681	704	784	770	746	741	737	718	749	740	728	
	710	698	689	691	694	647	647	653	653	674	808	742	737	760	775	760	737	729	765	731	
	766	771	787	787	755	771	784	730	726	697	719	715	697	705	701	689	693	727	762	743	
15 UT	718	680	642	601	578	555	560	580	581	625	659	643	614	606	595	603	622	630	659	681	
	693	708	723	737	741	741	730	711	692	684	675	689	700	695	710	736	730	711	677	696	
	722	690	632	725	730	699	680	715	715	715	719	718	737	771	786	788	777	748	732	706	
16 UT	696	679	668	654	673	651	624	639	673	665	652	635	626	644	665	666	664	676	678	722	
	688	651	624	610	595	624	639	673	676	655	652	635	646	648	683	666	642	631	616	608	
	619	626	637	652	682	715	727	716	698	698	701	708	748	718	707	676	683	646	631	673	
17 UT	734	700	649	562	663	657	626	590	586	614	629	643	648	527	580	543	606	628	660	686	
	701	710	664	670	683	689	598	593	601	613	578	589	600	542	517	476	488	473	475	456	
	561	570	584	631	719	756	752	740	724	715	685	658	641	647	654	664	676	687	695	703	
18 UT	691	669	674	677	687	658	678	684	689	704	720	709	717	726	714	694	665	654	644	636	
	632	631	638	642	652	635	617	580	557	543	557	579	607	509	637	637	623	562	559	605	
	608	608	602	621	636	593	589	572	558	548	545	562	579	541	562	576	590	573	537	571	
19 UT	572	571	566	538	539	535	483	466	481	500	520	526	515	503	519	513	486	473	475	451	
	448	456	468	477	489	493	497	493	485	479	475	473	476	468	456	441	423	421	417	396	
	409	427	440	441	424	401	399	399	419	456	479	433	428	409	393	383	446	411	411	416	
20 UT	675	638	604	586	587	580	542	435	434	472	479	431	410	445	480	479	513	523			

1976 April 1, 2100 - April 2, 2059 UT

21 UT	125	440	444	448	456	461	428	409	410	417	373	326	312	320	341	344	352	376	378		
	377	377	380	376	375	379	385	395	403	411	424	443	439	415	392	375	359	330	323	315	
	315	315	325	345	357	330	334	328	332	322	312	311	318	322	323	324	315	297	280	279	
22 UT	282	285	282	274	271	282	292	298	282	275	270	264	264	258	255	249	241	237	231	236	
	253	267	273	265	257	260	276	287	289	283	283	292	285	294	275	272	284	289	279	260	
	265	273	273	259	253	245	226	214	201	195	187	182	179	176	173	170	167	162	161	156	
23 UT	156	153	155	158	163	171	168	158	156	159	159	164	172	174	164	159	166	168	173	173	
	172	169	161	145	139	131	120	109	95	87	87	98	104	115	118	123	131	128	120	115	
	117	123	128	131	134	136	136	139	139	142	143	148	156	167	161	153	145	142	140		
00 UT	139	140	137	134	135	141	160	161	164	164	164	157	149	144	137	112	110	106	110	129	
	127	135	135	127	118	149	168	187	179	179	179	206	199	160	171	164	159	155	182	223	
	247	282	293	320	335	332	324	324	336	344	367	378	374	385	276	278	275	256	260	271	
01 UT	256	245	279	294	310	332	321	290	278	298	313	313	321	321	320	313	313	324	321	321	
	312	309	307	293	287	286	298	298	271	253	284	307	308	281	242	238	261	272	264	211	
	203	203	203	199	218	219	249	283	284	310	248	248	170	191	208	224	245	266	275	296	330
02 UT	433	526	563	648	700	745	701	524	392	393	369	292	326	363	355	281	297	286	290	283	
	295	288	291	284	281	281	292	326	318	323	339	318	312	304	280	272	259	273	238	228	
	220	231	235	250	265	269	261	228	239	250	250	288	291	273	273	288	307	307	303	299	
03 UT	285	285	281	273	266	274	235	285	285	269	254	250	254	258	258	254	250	254	258	258	
	258	239	220	213	205	205	201	205	205	209	213	217	231	231	235	246	250	254	258	258	
	258	254	250	231	224	231	238	234	241	248	263	274	365	413	447	479	505	686	469	461	
04 UT	493	509	485	456	460	418	425	430	454	431	431	404	378	336	310	277	255	240	221	203	
	184	177	137	108	90	110	123	134	147	160	173	188	205	188	163	148	161	156	153	180	
	167	155	147	150	164	162	147	143	147	151	159	159	148	159	171	155	162	158	158	158	
05 UT	147	147	143	143	162	155	155	155	159	172	178	170	148	133	167	172	151	135	140	132	
	122	106	102	101	124	124	143	152	150	164	185	180	154	143	125	109	101	115	104	105	
	112	112	104	106	106	129	114	112	111	106	92	90	82	79	90	88	85	84	86	93	
06 UT	148	145	147	153	143	146	140	143	148	174	209	269	350	385	422	669	439	431	411	382	
	353	449	391	391	391	324	343	398	268	248	290	189	194	168	150	143	133	133	130	126	
	132	145	155	129	105	108	142	147	142	129	113	90	84	91	111	134	155	125	128	113	
07 UT	111	113	119	122	114	117	119	119	119	117	117	117	114	114	114	117	121	119	122	111	
	111	119	117	114	122	111	114	114	114	114	114	114	114	114	114	117	115	114	111	111	
	122	108	108	111	122	111	114	114	114	114	114	114	114	114	114	125	124	121	108	107	
08 UT	105	105	105	105	113	111	124	116	118	107	110	107	107	94	92	102	108	111	113	116	
	119	127	111	114	117	119	122	122	111	114	103	103	95	95	95	95	95	95	95	103	103
	103	108	114	108	105	100	100	91	94	96	96	107	107	107	96	96	85	83	91	94	
09 UT	100	92	95	95	97	100	103	106	95	98	98	95	95	95	92	81	92	89	89	89	
	92	92	92	106	95	95	98	98	98	98	109	106	106	105	103	103	100	97	95	95	
	92	92	92	92	103	103	103	92	89	89	89	89	89	89	89	89	86	86	100	111	
10 UT	100	89	78	75	75	75	72	61	61	69	69	69	69	69	69	86	86	89	89	86	
	83	69	69	69	80	80	78	68	68	69	69	66	66	66	66	78	80	83	89	89	
	92	92	92	92	95	92	92	89	89	89	89	65	72	75	75	75	78	78	78	86	
11 UT	86	86	72	72	75	75	75	89	78	92	78	78	75	75	75	86	75	75	64	61	
	72	72	72	72	72	72	72	86	83	83	80	69	78	78	78	80	80	80	78	80	
	72	72	75	89	89	86	89	86	86	86	80	78	75	75	75	74	74	74	63	63	
12 UT	67	67	69	69	72	72	63	66	77	77	74	74	74	88	85	85	88	74	74	77	
	77	74	85	85	85	85	83	80	83	83	83	80	67	69	69	72	72	69	80	80	
	63	83	85	85	85	85	82	82	82	85	88	80	84	84	84	85	74	74	77	74	
13 UT	74	74	74	74	74	74	72	74	77	63	63	74	74	74	74	74	74	74	88	85	
	88	85	85	85	88	88	91	93	96	101	101	101	101	99	96	91	88	88	88	88	
	91	93	95	82	82	82	82	82	85	85	88	90	93	84	84	82	82	79	79	79	
14 UT	82	84	87	90	90	92	92	95	95	84	84	87	87	87	87	82	83	84	85	92	
	92	81	82	79	90	90	90	90	90	90	87	82	71	81	79	79	79	79	79	82	
	82	84	84	84	79	66	66	60	58	58	69	66	63	50	50	61	72	74	74	58	
15 UT	58	61	63	66	69	71	77	91	83	74	77	79	79	79	79	77	77	79	68	69	
	69	71	71	71	66	74	77	74	63	74	71	74	74	77	77	74	80	82	82	82	
	85	62	80	80	80	80	70	61	64	64	69	63	78	75	75	61	75	80	72	74	
16 UT	82	91	88	91	77	77	80	80	82	80	91	93	93	93	93	91	88	88	88	88	
	91	83	88	91	91	85	74	80	80	77	77	77	77	77	77	72	72	72	72	58	
	74	72	69	83	74	77	85	85	85	85	83	83	83	83	80	72	72	72	72	61	
17 UT	56	56	56	58	56	50	50	69	67	69	69	64	64	53	45	43	45	56	56	53	
	53	53	54	64	78	80	72	70	61	64	64	69	63	78	75	75	61	75	80	72	
	42	42	50	59	63	54	51	63	76	73	93	78	55	52	76	76	77	100	97	91	
18 UT	94	94	94	83	64	67	90	83	86	86	92	106	103	111	119	105	86	86	89	89	
	58	55	52	52	52	55	55	55	55	55	52	52	49	46	46	46	44	44	44	40	
	40	49	49	52	52	50	40	51	66	69	62	78	70	55	55	62	44	44	47	58	
19 UT	66	62	66	66	58	58	66	81	85	69	77	73	62	77	89	78	74	74	74	74	
	85	89	93	93	96	107	108	124	134	134	153	153	171	172	194	198	198	198	210		
	214	207	221	221	203	195	222	223	207	188	177	174	158	154	155	139	145	148	147		
20 UT	153	136	128	135	135	124	114	111	117	128	123	101	97	101	86	86	93	89	89	88	
	118	137	145	153	168	185	198	200	204	210	218	220	214	218	223	232	232	253	253	254	
	241	227	223	223	222	230	222	223	225	230	243	241	255	263	263	268	268	276	281	281	

Date	1976, MAY 1 - 4																																					
	1			2			3			4																												
UT	06	12	18	06	12	18	06	12	18	06	12	18																										
Kp	3+	2-	2-	1+	2-	2+	3-	3-	3o	4o	4-	2o	4o	6-	4-	7o	8-	8+	8-	7-	7o	8+	5+	4+	4-	2+	2+	4-	4-	3o	3o	4+	4+ 3o					
3Kn	9	5	6	5	5	8	8	9	11	11	6	12	14	10	16	19	20	20	19	18	14	11	9	7	6	10	11	10	8	12	11	8						
3Ks	8	5	6	3	4	7	7	9	13	11	5	12	14	11	15	20	21	18	19	19	13	11	10	8	7	11	11	10	9	12	10	9						
Dst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

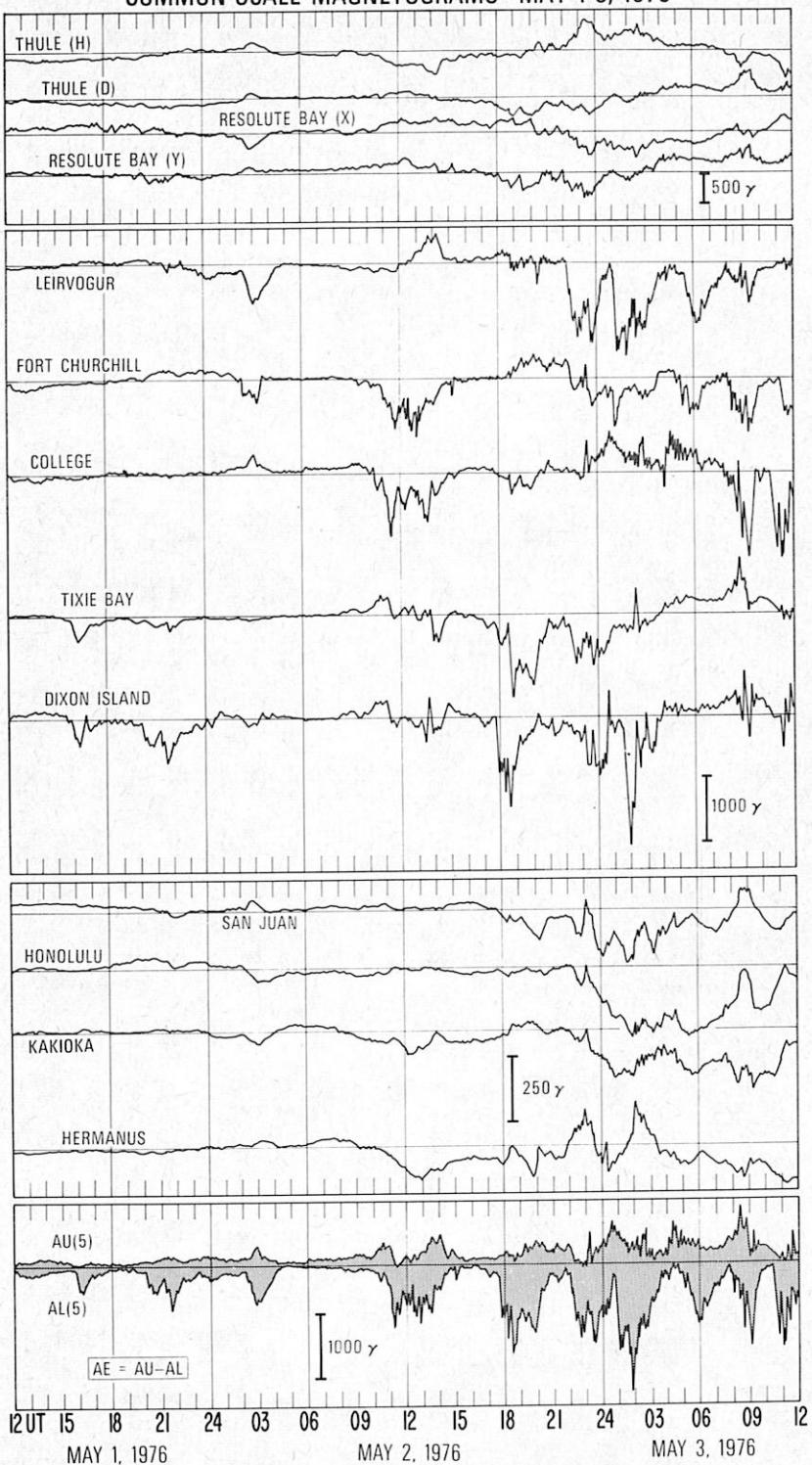
Data from Individual Observatories:

*MAY 1976

OBS. 2 letter TAGA code.	GEO MAG- NETIC LATI- TUDE	COMMENCEMENT			SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END		
		hr min DAY (UT)	TYPE	D(')	H(y)	Z(y)	DAY (3 HOUR PERIOD)	K	D(')	H(y)	Z(y)	DAY	HOUR			
RB	83.0N	1 1200	**	**	**	**	02(19)	-	838	898	542	03	22			
CB	1 1200	**	**	**	**	**	02(17)	-	550	610	790	03	21			
BL	73.9N	1 1200	**	**	**	**	03(5)	-	1089	1533	1455	03	22			
CH	68.8N	1 2100	**	**	**	**	03(5)	-	1310	1288	1224	03	22			
YK	62.5N	1 0510	**	**	**	**	02(8)	-	1000	1160	1170	03	17			
ME	61.8N	1 0100	SC	5	5	5	01(3,8)	3	--	--	--	02	04			
JO	58.7N	1 1210	SC	5	5	5	03(1,1)	7	500	440	800	05	05			
OT	57.0N	1 05--	**	**	**	**	02(8) 03(1)	7	990	1150	640	05	03			
IR	41.0N	1 05--	**	**	**	**	03(1,2,3)	6	10	307	70	03	22			
HU	00.6S	1 1200	**	**	**	**	02(8) 03(1)	9	290	1840	2300	03	17			
HM	73.2S	1 15--	**	**	**	**	02(8) 03(1)									
CO	64.6N	2 18--	**	**	**	**	02(4) 03(3,4)	7	295	1950	1530	03	22			
ME	61.8N	2 0900	**	**	**	**	02(5)	7	80	1456	904	03	21			
SI	60.0N	2 01--	**	**	**	**	03(4)	8	140	--	900	03	18			
NE	55.1N	2 1828	SC*	8	45	3	03(2)	9	131	840	717	05	14			
WI	54.2N	2 1829	SC	+ 4	+60	0	03(1)	8	60	495	185	03	22			
FR	49.6N	2 09--	**	**	**	**	02(3) 03(2)	7	79	235	260	05	04			
BD	48.9N	2 02--	**	**	**	**	03(2)	8	74	258	224	03	18			
TU	40.4N	2 09--	**	**	**	**	03(2)	7	30	270	75	05	15			
MT	34.0N	2 1828	SC*	- 1.9*	+25	+ 4 *	02(9) 03(1,3,4)	6	215	163	45	03	22			
SJ	29.9N	2 1828	SC	+ 1	+14	+ 3	03(1)	6	12	144	44	03	21			
KA	26.0N	2 1828	SC*	- 0.7*	+18	+11	03(1,3,4)	6	141	152	93	03	22			
HB	21.3N	2 10--	**	**	**	**	03(3)	7	14	157	58	03	17			
HD	21.1N	2 10--	**	**	**	**	02(8) 03(1)	6	118	150	90	03	22			
KY	20.5N	2 1829	SC*	- 0.4*	+23	+ 9	02(8) 03(1,2,3,4)	9	179	41	32	03	22			
JP	17.3N	2 06--	**	**	**	**	--	-	7	191	33	03	22			
SH	14.6N	2 06--	**	**	**	**	--	-	9	176	44	03	22			
UJ	13.5N	2 06--	**	**	**	**	--	-	9	197	78	03	22			
AL	09.5N	2 06--	**	**	**	**	02(8) 03(1,2)	6	9	178	56	03	22			
HO	07.6N	2 1828	SC	- 0.3	+31	- 2	03(1,2,3)	6	7	181	32	03	22			
GU	04.0N	2 1828	SC	15	-04	--	03(4)	6	0	170	30	03	18			
AN	01.5N	2 06--	**	**	**	**	--	-	7	244	189	03	22			
TV	01.1S	2 06--	**	**	**	**	--	-	7	6	180	61	03	19		
AP	16.0S	2 0140	**	**	**	**	02(8) 03(1,4)	6	7	190	60	04	12			
PM	18.6S	2 1831	SC	+ .5	+15	+16	03(4)	7	47	190	187	03	18			
HR	33.7S	2 02--	**	**	**	**	03(1)	7	37	190	190	03	22			
GN	43.2S	2 1828	SC	+ 4.7	+24	+24	03(4)	7	44	270	80	03	22			
TD	46.7S	2 1829	SC	+ 3.5	+14	+ 3	03(4)	8	69	275	176	03	15			
CZ	51.4S	2 1829	SC	5.7	14	11	03(1)	8	68	700	414	03	17			
KG	56.5S	2 1829	SC	3.0	12	12	02(8) 03(1)	8	250	1580	860	03	24			
HI	60.7S	2 08--	**	**	**	**	03(3,4)	7	789	889	1010	03	15			
DU	75.6S	2 1828	SC*	26	41	16	03(4)	9	155	1298	999	03	21			
HE	61.8N	3 05--	**	**	**	**	03(2)									

THREE-HOUR-RANGE INDICES, K	MAY	1	2	3	4	1	2	3	4
BT	5444	3545	5556	5577	7666	5454	4654	4766	IK 1333 2333 5344 5466 6666 5532 1244 3544
CC	4333	3545	4445	5456	6657	5544	3444	3655	IK 2111 2333 2224 5367 7655 4442 1233 3433
DI	4333	3767	5546	7890	9888	5535	3444	5777	TL 1000 1222 2223 4236 7654 4342 1232 3323
TI	3222	3756	3346	8798	9777	6676	3355	6775	FR 4222 1233 4324 3357 6766 4332 3443 3433
MM	4212	2454	5426	5476	9666	5365	3333	3655	SM 2222 2222 2323 424- --4 3232 2222 3332
KI	4112	2345	5525	5379	8746	5454	2322	3556	SK 1103 1333 2123 5667 7465 4550 1033 3434
WE	1231	2224	--27	7365	7788	7432	2345	4652	TU 3121 1123 4243 4356 6876 5333 2443 3343
CO	2232	3212	4327	6456	6677	6433	3454	4542	KY 2212 2323 4434 5346 6666 5432 1332 3433
RY	6221	2335	6624	6469	8777	5544	4553	4556	QU 3021 2223 4323 3336 6576 4421 2334 2222
DO	3211	2333	5524	5478	9656	4442	2332	4433	TA 2111 2333 2224 5367 6666 5433 3332 3332
YA	3121	3334	4415	5456	6577	5333	2343	3543	AL 2111 2333 2224 5367 6666 4433 3332 3332
LE	3101	1222	4412	5368	9655	4332	2221	3443	HR 2111 2333 2224 5367 6666 4433 3332 3332
NU	2112	2333	3324	5467	8756	4432	2322	3544	SJ 2110 1123 4233 4327 7365 6668 5432 2355 5642
LO	3112	2333	3323	5467	9656	4432	2322	3545	GU 2211 2223 4334 5335 6556 4421 3233 3332
SI	2122	3122	4417	7356	7777	6432	2444	3332	BA 3222 2233 3335 4266 7556 4533 3333 3334
SV	1112	1333	3223	5456	6546	4432	1233	2433	FM 3332 3222 5434 5245 5657 5322 2443 2233
RS	3101	3323	3223	4467	8665	4432	2232	3443	HU 1111 3333 3223 5456 6665 5543 2331 4433
ME									PP
WI	3102	2333	3334	5477	8665	5542	2333	3553	TN 1123 1122 3124 41-- --43 3422 1232 3223
IR	3233	2333	5434	5467	7666	5542	2243	3544	GN 1110 2333 3215 6566 6574 4432 1344 3543
VL	3111	2223	3313	4376	7665	5432	2232	3433	HR 2121 2322 3237 4347 6668 5432 2355 5642
KV	2323	3333	3334	5567	7655	4443	2344	3544	AM 2231 2213 4245 5446 5567 5332 2444 3332
DB									AM
KD	1121	1222	3122	3344	4334	3321	1122	2322	MI 2121 2322 3237 4347 6668 5432 2355 5642
VI									MY 3433 2425 4344 4376 6668 5432 2355 5642
JO									MW 5332 3346 5544 6579 9877 5465 4554 3463
OT	4220	1132	3213	3267	9975	4332	3443	3332	NL 4222 1224 7623 5368 9877 5333 3543 3445
MT	2222	2223	4424	5346	6566	5432	2343	3432	SB 3221 2232 5424 4355 6676 5333 2334 3332
									VO 3222 2132 4334 4347 6445 5333 2333 3333

COMMON-SCALE MAGNETOGRAMS MAY 1-3, 1976



PRELIMINARY AE (5)-INDEX AT ONE MINUTE INTERVALS
 1976 May 1, 1200 - May 2, 1159 UT

	12 UT	124	121	113	106	100	95	90	88	87	87	90	96	102	109	123	144	168	184	200	194	
		191	186	186	180	177	174	174	177	183	185	188	197	200	199	199	196	199	201	201	201	
		198	200	200	200	203	206	208	208	208	208	208	205	202	202	200	200	203	203	200	205	
	13 UT	208	207	208	210	229	221	219	214	217	217	220	220	218	221	221	224	224	224	217	214	
		214	217	220	223	226	229	232	238	243	246	252	255	260	270	264	264	261	256	256	247	
		242	242	234	223	219	222	222	222	216	210	205	212	212	215	215	215	215	212	212	201	
	14 UT	195	199	218	213	213	216	219	211	192	184	190	176	181	180	180	172	170	164	167	172	
		175	175	178	175	175	175	175	172	169	169	166	163	159	155	148	145	139	136	128	125	
		132	138	147	153	153	153	159	162	165	167	167	167	164	153	141	130	124	118	117	111	
	15 UT	119	122	123	118	-115	112	118	121	124	121	121	115	115	110	112	109	109	106	101	101	
		98	95	92	95	98	101	101	91	82	73	59	59	57	71	71	71	71	67	55	55	
		58	61	64	64	67	73	78	106	123	144	165	193	219	233	264	276	294	305	337		
	16 UT	346	359	367	376	385	391	388	385	385	386	388	389	393	409	428	443	462	468	456	447	
		422	406	394	366	345	314	308	306	300	294	288	278	270	270	262	253	241	224	212	233	
		237	193	185	182	175	172	169	169	170	173	176	186	189	192	198	197	200	199	195	189	
	17 UT	190	184	182	186	184	181	165	159	159	156	149	145	141	140	143	146	149	155	158	161	
		164	167	167	168	172	169	169	166	163	160	151	148	138	135	132	123	120	113	106	100	
		97	95	92	89	79	71	68	64	57	64	64	53	50	52	50	51	52	50	51	55	
	18 UT	89	89	91	91	91	91	91	91	91	91	91	91	90	83	85	89	81	78	75	75	69
		74	80	74	66	69	72	56	54	53	59	62	68	65	68	80	77	76	63	63	66	
		66	66	57	51	44	41	41	38	38	48	65	68	60	63	77	80	83	86	89	93	
	19 UT	99	99	99	95	96	96	92	85	79	73	67	65	66	66	73	77	80	84	90	93	
		93	100	103	102	102	105	108	111	115	125	129	134	145	148	154	158	159	159	156		
		156	153	149	149	149	149	149	143	147	145	149	159	162	155	152	149	145	142	139		
	20 UT	143	146	152	260	278	299	306	318	327	342	358	369	382	366	351	336	320	323	332	337	
		359	379	397	407	419	434	451	456	462	462	459	461	458	457	454	462	460	463	465		
		465	474	486	498	510	510	489	467	442	418	408	405	395	389	385	376	359	366	378	378	
	21 UT	332	325	321	312	308	304	309	309	306	309	315	333	358	389	417	519	526	517	508	501	506
		490	477	468	464	480	521	531	534	544	593	608	627	657	752	765	779	788	795	797	792	782
		770	739	712	685	664	635	618	607	597	585	567	555	543	466	469	485	494	501	499	496	
	22 UT	487	484	478	453	435	421	406	393	382	367	355	343	310	310	311	299	291	288	282	282	281
		243	240	237	240	252	268	280	282	285	287	290	293	292	294	296	293	288	282	282	281	
		292	322	319	321	321	317	311	311	313	315	315	315	315	315	315	291	291	285	289	304	304
	23 UT	291	275	262	256	249	243	237	231	222	211	200	191	186	180	180	177	177	177	177	180	
		184	197	206	232	257	284	311	299	290	285	279	303	309	300	298	289	285	282	283	294	
		299	312	318	316	312	310	313	317	315	326	354	340	339	337	336	327	327	331	338		
	00 UT	327	350	350	342	339	331	323	321	336	338	321	301	300	310	323	340	350	348	323	305	
		294	298	305	309	314	313	300	296	289	278	274	271	268	262	236	223	221	218	219	217	
		233	236	232	232	235	235	239	239	233	226	220	210	203	196	194	195	196	202	201		
	01 UT	204	197	197	199	200	205	208	213	216	218	225	227	227	234	234	234	236	236	236	234	
		231	228	226	221	215	210	209	208	208	208	216	220	224	216	216	216	208	224	235		
		235	231	209	193	182	201	212	227	227	229	242	234	227	211	193	193	193	193	193		
	02 UT	133	200	208	204	204	204	204	204	196	200	219	238	254	255	275	294	341	287	299		
		346	363	347	329	330	334	345	403	426	487	498	502	574	571	574	589	615	653	665	684	
		714	745	733	786	778	735	812	847	854	866	862	854	820	808	800	812	808	816	812	760	
	03 UT	737	707	700	704	708	689	689	684	636	614	606	606	598	598	601	597	586	555	555	540	
		536	533	514	506	502	479	464	449	444	426	415	415	411	396	388	369	369	369	369		
		369	365	354	342	331	327	323	316	293	289	278	281	258	239	232	228	220	219	225		
	04 UT	209	188	167	154	146	124	124	117	114	106	102	98	94	94	94	94	91	91	91	87	
		87	87	87	87	83	79	79	75	64	60	56	56	53	53	49	49	49	45	45	45	
		45	45	41	41	41	52	52	63	63	52	52	52	52	52	52	41	41	41	41		
	05 UT	45	56	52	52	41	41	52	67	67	56	45	45	49	49	49	49	60	60	60	60	64
		64	53	53	49	45	34	38	38	38	49	49	49	49	49	49	64	64	56	56	64	
		64	68	56	60	64	64	64	64	64	60	60	60	60	60	60	56	56	56	56	67	
	06 UT	112	115	118	118	121	124	111	118	115	115	112	100	100	97	97	97	112	112	112	112	94
		94	97	101	101	90	90	90	90	90	90	90	90	97	97	97	112	112	112	112		
		112	101	101	101	112	112	112	101	101	101	101	101	90	90	90	101	101	101	101		
	07 UT	101	101	112	112	112	101	101	112	112	112	112	112	112	101	101	101	101	101	101	101	112
		112	112	116	116	105	94	105	94	94	94	94	94	98	98	109	109	98	98	109	109	
		120	120	124	124	113	113	113	128	128	132	132	132	128	124	124	124	120	131	131	120	
	08 UT	98	101	109	109	113	128	132	135	147	162	166	166	170	170	170	170	173	177	173	173	
		177	177	185	181	170	177	177	181	181	181	185	185	185	195	195	192	192	207	211	211	
		200	204	211	223	223	219	219	215	215	222	222	233	233	233	233	230	230	241	237		
	09 UT	237	222	211	211	207	218	214	214	226	210	210	207	192	188	224	224	221	225	221	228	
		226	226	228	226	204	192	195	188	188	192	181	181	170	158	158	168	170	170	170		
		170	170	170	158	158	147	143	150	160	166	172	176	179	184	190	193	193	193	200		
	10 UT	217	231	252	250	248	251	270	270	299	319	335	332	325	325	326	332	326	332	398	409	414
		448	477	488	485	482	486	479	479	467	466	458	441	431	463	455	457	423	400	382	394	
		385	390	428	444	451	465	475	489	499	523	538	572	572	561	561	553	601	604	607	624	
	11 UT	650	669	722	901	976	969	897	899	870												

1976 May 2, 1200 - May 3, 1159 UT

12 UT	708	638	573	514	491	529	552	541	546	557	590	627	644	632	696	659	601	548	489	445	
	368	363	424	574	750	823	856	851	816	793	769	799	854	886	864	799	825	851	875	820	
	801	769	728	696	659	686	717	717	668	687	723	931	1066	1058	1004	983	967	938	885	856	
13 UT	757	668	663	687	755	781	828	826	772	751	750	742	741	704	668	688	739	779	819	835	
	875	888	961	1001	1014	1039	993	966	937	985	1034	1050	1098	1105	1114	1136	1114	1058	964	864	
	793	718	686	668	644	631	639	677	675	683	688	721	719	727	740	757	807	603	785	778	
14 UT	765	794	804	798	787	783	796	796	778	760	685	605	587	555	534	514	511	495	440	386	
	372	362	359	366	351	332	302	286	272	262	248	232	228	218	213	219	232	244	223	236	
	240	271	270	269	272	281	298	311	316	309	293	283	277	266	249	225	201	189	193	199	
15 UT	179	215	300	379	308	258	206	200	197	180	191	185	152	140	134	134	117	113	102		
	94	101	125	133	131	124	124	120	129	125	102	84	73	64	80	110	105	99	105	120	
	107	103	93	85	90	101	108	122	120	106	103	101	109	107	107	104	118	120	120	94	
16 UT	87	103	103	103	103	106	108	110	110	113	111	108	92	94	86	79	91	91	91	99	
	108	114	114	114	114	115	123	121	122	130	135	143	151	158	152	147	152	155	155	152	
	149	154	154	155	160	160	149	152	149	163	169	172	183	184	184	193	207	221	227	250	
17 UT	226	219	217	229	246	264	265	269	269	268	264	263	257	251	240	233	217	205	214	211	
	202	196	193	190	179	174	184	190	207	208	218	243	249	252	231	226	255	261	289	310	
	327	337	355	599	608	656	792	833	861	876	902	922	951	884	841	827	795	812	855	861	
18 UT	919	972	994	976	922	880	825	821	806	803	918	992	1288	1226	1172	1126	935	931	921	906	
	831	808	783	855	916	977	1055	1149	1262	1353	1407	1481	1485	1443	1300	1239	1244	1289	1274	1242	
	1213	1267	1273	1278	1286	1189	1031	1053	973	905	922	941	960	966	950	944	949	953	927	904	
19 UT	793	810	824	841	863	891	921	939	946	990	1051	1073	1095	1116	1133	1183	1200	1201	1192	1150	
	1088	1031	980	937	909	891	907	973	1016	1026	1049	1072	1090	1119	1144	1130	1118	1108	1134	1106	
	1154	1176	1198	1183	1196	1218	1234	1253	1273	1285	1292	1306	1325	1342	1406	1399	1348	1277	1161	1106	
20 UT	1090	1076	1040	1004	946	912	876	850	822	797	766	735	732	729	708	675	685	693	698	701	
	686	664	670	676	687	698	713	695	645	593	558	531	526	535	547	531	501	478	378	378	
	351	330	339	350	346	338	324	323	333	334	304	356	366	376	382	384	376	363	356	300	
21 UT	297	355	390	415	424	439	460	468	440	469	491	502	514	509	484	490	515	525	501	485	
	458	450	442	437	443	456	461	452	450	465	436	431	421	417	403	388	364	347	329	320	
	298	266	242	247	225	245	330	343	413	418	411	416	448	469	469	461	450	439	426	415	
22 UT	406	411	432	460	486	571	559	570	636	556	536	506	488	513	571	636	745	745	820	858	
	877	874	859	845	882	948	818	750	748	802	840	998	977	1002	1005	1029	1033	1051	1052	1055	
	1138	1125	1084	1041	840	827	781	773	786	877	945	1012	1075	1005	833	822	825	814	772	660	
23 UT	614	596	578	572	582	617	929	973	755	767	929	1161	1249	1108	1045	889	738	727	745	820	
	883	959	1037	1094	1242	1287	1248	1279	1277	1247	1254	1349	1403	1404	1409	1387	1305	1246	1192	1213	
	1146	1058	995	951	937	895	919	988	913	957	979	939	910	915	914	930	963	979	979	979	
00 UT	1173	1094	1075	1061	1096	1076	1003	1023	981	987	985	1068	1098	1080	1080	1038	968	876	884	811	915
	1081	1171	1169	1110	1034	986	977	968	873	856	850	855	860	895	872	931	895	885	867	831	
	780	718	682	659	669	711	745	755	768	784	700	858	919	959	938	1099	1158	1204	1289	1400	
01 UT	1601	1712	1800	1811	1594	1626	1588	1515	1479	1460	1484	1493	1585	1650	1602	1511	1536	1475	1456	1388	
	1362	1345	1312	1306	1312	1333	1347	1324	1274	1308	1291	1258	1305	1307	1234	1233	1274	1346	1506	1556	
	1577	1530	1437	1487	1551	1716	1808	1812	1879	2068	2143	2215	2250	2238	2213	2102	1907	1738	1470		
02 UT	1592	1612	1633	1555	1512	1469	1599	1520	1544	1553	1532	1457	1408	1175	1322	1323	1344	1378	1287	1196	
	1092	1029	1122	960	923	969	1143	1189	1208	1221	1213	1165	1217	1201	1248	1368	1386	1357	1354	1437	
	1356	1490	1401	1326	1403	1397	1400	1350	1285	1162	1030	964	955	982	985	998	1004	843	758	667	
03 UT	681	688	717	750	766	758	770	770	724	644	608	633	632	625	608	603	611	628	620	616	
	585	566	569	560	550	568	609	609	579	566	597	550	492	412	346	373	373	384	375	348	
	318	307	278	292	300	345	350	328	283	259	277	299	336	339	315	298	299	296	349	408	
04 UT	344	392	345	282	224	432	520	568	624	648	577	479	432	411	416	409	341	330	320	440	
	482	404	669	680	493	445	554	586	589	593	593	573	533	543	640	681	659	446	552	554	
	554	523	499	458	333	376	369	426	479	460	494	644	666	593	487	476	364	342	420	510	
05 UT	534	595	574	623	610	624	694	730	738	624	548	527	559	440	448	471	568	615	671	736	
	733	736	750	782	772	727	717	712	757	757	750	778	824	900	924	972	981	985	994	997	
	989	970	982	1047	1034	1002	983	960	993	1044	1076	1195	1223	1231	1225	1226	1235	1232	1211	1209	
06 UT	1134	1132	1102	1044	1034	1066	1072	1062	1025	1008	980	942	876	833	809	781	748	808	808	796	
	791	613	537	578	880	874	883	886	866	847	839	855	848	802	770	775	770	768	714	708	
	709	702	688	669	650	631	612	622	638	617	594	577	552	530	519	545	563	542	529	516	
07 UT	511	547	576	561	533	535	517	506	486	506	548	578	605	611	546	532	517	451	446	456	
	451	446	446	445	432	429	437	470	445	426	443	451	444	441	463	465	465	464	449	425	
	433	456	391	408	447	466	485	406	431	428	400	387	428	489	491	488	467	561	508	486	
08 UT	507	503	620	761	802	728	654	603	646	684	696	713	771	725	685	662	699	664	686	892	
	938	1023	1074	1159	1165	1036	1102	1230	1244	1304	1363	1260	1194	880	848	844	930	1109	1417	1508	
	1386	1197	1173	1196	1210	1185	1093	958	914	1055	1151	1351	1302	1321	1215	1227	1244	1219	1216	1124	
09 UT	1076	1150	1235	1322	1368	1442	1429	1389	1330	1284	1155	1116	1021	962	953	908	924	993	1157	1137	
	814	658	620	625	636	626	610	591	570	568	611	623	638	570	501	469	456	436	426	422	
	417	399	391	381	376	371	370	370	356	384	418	349	355	361	367	372	361	357	353	356	
10 UT	351	343	329	305	284	292	295	297	292	293	290	280	284	278	273	272	272	269	260	255	
	255	255	249	242	231	225	219	221	226	213	209	205	200	195	191	185	185	174	172	170	
	7																				

1976, SEPTEMBER 18 - 21

Date	18			19			20			21																									
UT	06	12	18	06	12	18	06	12	18	06	12	18																							
Kp	3-	5+	6o	5+	5-	3-	1+	1+	10	2-	2o	4+	4-	4o	4+	4o	5+	6o	5o	5o	5+	5o	4o	5o	4o	3-	3+	4o	5-	3+	4-				
3Kn	7	14	14	15	13	6	4	4	4	5	6	12	11	11	11	10	13	15	14	13	15	13	11	12	10	10	7	9	11	12	10	9			
3Ks	8	14	12	15	11	7	4	4	4	6	7	11	11	12	12	11	13	14	12	12	14	12	12	11	11	10	7	9	11	12	9	9			
Dst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

Data from Individual Observatories:

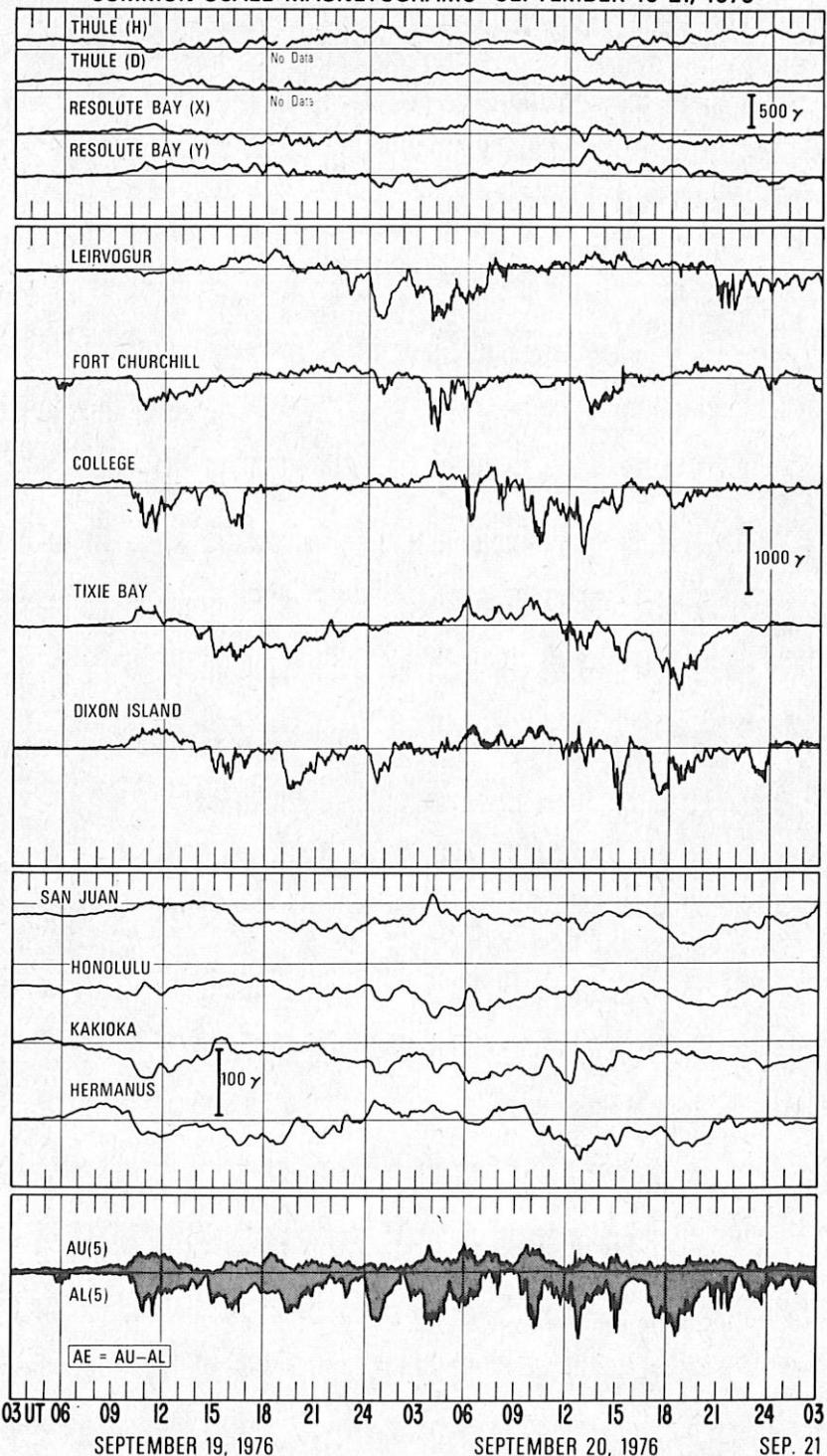
SEPTEMBER 1976

OBS. 2 letter IAGA code	GEOMAG- NETIC LATI- TUDE	COMMENCEMENT		SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END		
		hr	min	DAY	TYPE	D(')	H(y)	Z(z)	DAY (3 HOUR PERIOD)	K	D(')	H(y)	Z(z)		
AP	16.0S	18	0312	..	..	..	..	..	18(4)	6	5	149	28	21	21
PM	18.6S	18	03--	..	..	..	..	..	18(4)	6	6	190	70	22	18
AL	9.5N	19	08--	..	..	..	..	..	19(7) 20(2,5) 21(7)	5	5	87	36	21	21
HD	7.6N	19	0500	..	..	..	..	..	19(7) 20(5)	5	5	96	24	20	23
GU	4.0N	19	1008	..	..	..	..	..	20(5)	5	0	80	20	21	01
AH	1.5N	19	08--	..	..	..	..	..	--	-	4	102	66	21	21
RG	83.0N	19	0200	..	..	..	..	..	20(5)	-	580	402	292	21	05
CB	76.7N	19	1015	..	..	..	..	..	19(7)	-	330	580	500	22	24
BL	73.9N	19	0500	..	..	..	..	..	20(2)	-	803	1323	839	21	02
CH	68.8N	19	0400	..	..	..	..	..	20(2)	-	1212	1500	1269	21	07
CO	64.6N	19	09--	..	..	..	..	..	20(4,5)	7	262	1480	980	21	20
YK	62.5N	19	1010	..	..	..	..	..	19(6)	-	230	490	300	22	18
SI	60.0N	19	10--	..	..	..	..	..	20(5)	7	70	710	510	21	20
JO	58.7N	19	0500	..	..	..	..	..	20(3)	6	40	195	200	21	24
OT	57.0N	19	07--	..	..	..	..	..	20(2)	7	225	300	150	21	05
NE	55.1N	19	0857	..	..	..	..	..	20(2,3)	6	56	148	179	23	01
WI	54.2N	19	10--	..	..	..	..	..	20(6)	6	30	160	75	22	02
FR	49.6N	19	10--	..	..	..	..	..	20(2)	6	32	160	75	23	01
BD	48.9N	19	05--	..	..	..	..	..	20(2)	7	54	129	87	22	18
TU	40.4N	19	10--	..	..	..	..	..	20(2,3)	6	23	110	20	22	22
MT	34.0N	19	0408	..	..	..	..	..	19(5) 20(4,5)	5	111	104	26	22	24
KA	26.0N	19	0408	..	..	..	..	..	20(5)	5	87	73	45	21	22
KY	20.5N	19	0408	..	..	..	..	..	20(4,5)	5	72	83	51	21	22
JP	17.3N	19	08--	..	..	..	..	..	--	-	7	98	35	21	21
SH	14.6N	19	08--	..	..	..	..	..	--	-	5	109	23	21	21
UJ	13.5N	19	08--	..	..	..	..	..	--	-	6	99	36	21	21
HU	00.6S	19	0550	..	..	..	..	..	20(5,6)	5	6	238	35	20	24
HR	33.7S	19	16--	..	..	..	..	..	20(2)	5	18	94	70	20	23
GH	43.2S	19	04--	..	..	..	..	..	20(5)	6	22	90	110	21	02
TO	46.7S	19	10--	..	..	..	..	..	20(4,5)	5	24	140	40	20	16
CZ	51.4S	19	0900	..	..	..	..	..	19(7) 20(1,6,7)	5	27	123	62	22	21
KG	56.5S	19	0900	..	..	..	..	..	20(5)	6	18	213	159	22	21
HI	60.7S	19	09--	..	..	..	..	..	20(5) 21(4,6)	7	180	1310	730	21	21
HM	73.2S	19	04--	..	..	..	..	..	19(7) 21(7,8)	7	160	1140	1150	22	11
TV	1.1S	19	08--	..	..	..	..	..	--	-	3	133	73	21	21

THREE-HOUR-RANGE INDICES, K

SEP	18			19			20			21			18			19			20			21						
	THREE-HOUR-RANGE INDICES, K	BT	CC	DI	TI	MM	MM	KI	WE	CO	RY	SD																
SEPT	BT	3434	4222	2334	4554	4454	6544	-433	3643	TK	3544	5322	2235	4553	5555	5532	3324	5543	5543	4434	5543	3323	5544	3323	5544			
SD	CC	4454	7323	2236	6665	5545	7655	5444	7644	TL	2344	3321	1113	2344	4333	4543	2312	3243	4543	4433	5543	2312	3243	4433	5543			
SD	DI	5556	6424	2235	7677	7666	8876	5545	6854	SL	3524	3212	1123	2433	3534	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443		
SD	TI	4569	7532	1226	7766	5667	8785	4435	8864	FR	2555	4222	1124	3344	5654	4435	4422	3423	4422	4422	4422	4422	4422	4422	4422	4422	4422	
SD	MM	5554	5233	1123	3466	7635	6666	6423	4454	SM	2444	3222	1223	2342	2422	3222	3222	3222	3222	3222	3222	3222	3222	3222	3222	3222	3222	3222
SD	MM	5554	5222	0113	3566	7635	6666	6423	4354	KS	3655	4023	0024	3464	4565	5554	3233	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	KI	2757	7111	0116	4433	3667	7433	3434	5522	BA	2444	3222	1224	2444	4244	4444	4444	4444	4444	4444	4444	4444	4444	4444	4444	4444	4444	
SD	WE	2777	8312	2127	6634	3767	9663	2326	6732	TU	2555	4122	1224	3433	5663	5434	3232	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	CO	2675	6311	1126	5623	3667	7543	3236	5622	KY	1545	5211	1124	4433	3435	3435	3232	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	RY	5756	4322	1224	3566	8775	5577	5634	5466	TA	3544	4445	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	4442	
SD	SD	3444	4311	0123	4445	5434	5454	5754	4324	HO	3235	3211	1223	2133	4353	3333	3232	2222	3333	3333	3333	3333	3333	3333	3333	3333	3333	
SD	YA	3447	6212	3125	4554	5455	5454	5454	4324	HO	3235	3211	1223	2133	4353	3333	3232	2222	3333	3333	3333	3333	3333	3333	3333	3333	3333	
SD	LE	4332	3223	0211	1211	2111	2211	0100	1120	AL	2444	3222	1224	2224	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	
SD	WT	3454	4221	1113	3454	5434	5444	3223	4554	SJ	3524	3212	1123	2433	3534	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	IR	3546	6322	2335	5544	5555	6544	3225	5554	GN	2446	5212	2224	3453	4545	6543	3223	5532	5532	5532	5532	5532	5532	5532	5532	5532	5532	
SD	VL	2553	3311	0123	3444	5433	4444	3313	4444	HR	2555	3221	1134	3444	4544	4443	3334	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	KV	2554	4322	2224	3454	5544	5555	3333	4554	TO	1446	5211	1224	3433	4445	5433	3322	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	DB	2453	4221	1113	3444	5434	5544	2323	3543	AM	2445	4201	1225	3433	4555	4333	3322	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	KD	2332	4211	2112	2232	3223	4321	1213	3322	MI	2776	7311	1216	3563	3556	7563	3327	4443	4443	4443	4443	4443	4443	4443	4443	4443	4443	
SD	VI	2556	5211	1224	3334	4654	5334	4534	3433	VO	2446	4111	2344	3563	4454	5453	4454	3334	4443									

COMMON-SCALE MAGNETOGRAMS SEPTEMBER 19-21, 1976



PRELIMINARY AE (5)-INDEX AT ONE MINUTE INTERVALS

1976 September 19, 0300 - September 20 0259, UT

Part D.

03 UT	622	622	625	625	625	628	628	625	625	622	622	622	619	622	622	625	625	625	622
	622	619	619	622	622	622	622	622	622	622	622	622	625	622	622	625	625	625	622
	619	619	616	616	616	613	613	616	616	619	619	625	625	628	631	628	631	625	622
04 UT	625	625	625	625	625	622	622	619	616	616	616	622	622	622	622	622	625	625	622
	622	622	622	622	622	622	619	619	619	619	622	628	628	628	631	631	625	625	631
	631	628	631	631	631	631	628	628	631	631	628	625	625	625	625	625	622	625	625
05 UT	625	631	634	636	639	639	643	643	643	643	643	637	634	634	634	628	628	628	634
	637	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	637	634	631
	637	640	649	649	649	652	655	655	655	649	649	643	643	640	643	649	649	649	656
06 UT	649	649	652	656	650	646	646	638	637	640	644	647	647	647	647	644	644	644	644
	644	644	647	647	647	647	647	650	650	647	647	646	646	646	646	646	644	644	646
	649	646	643	643	643	640	643	655	670	658	646	628	634	652	646	649	661	658	652
07 UT	652	664	667	667	658	652	646	643	646	649	649	652	652	652	652	655	658	652	649
	643	649	652	655	652	649	649	652	655	655	655	652	646	646	649	649	643	643	639
	639	642	642	642	645	645	649	649	649	646	646	649	649	649	649	649	649	649	649
08 UT	652	652	649	652	655	649	648	651	651	651	648	645	648	648	648	645	645	645	642
	648	645	648	648	651	651	651	651	651	651	648	645	648	648	648	648	639	636	639
	639	639	629	623	626	626	626	626	626	629	629	632	632	638	641	644	647	647	651
09 UT	654	648	645	642	642	648	645	647	641	644	647	638	635	638	638	638	641	641	644
	644	641	641	644	638	611	638	635	641	635	626	626	620	620	631	637	643	659	659
	668	671	674	668	659	650	644	635	632	638	638	637	634	631	631	625	619	619	613
10 UT	610	603	597	591	581	578	572	565	568	590	605	598	577	582	585	602	614	629	662
	697	711	716	716	710	706	696	712	776	795	811	846	849	815	871	897	911	925	953
	937	933	946	946	943	938	969	1022	1036	1029	1052	1047	1044	1069	1081	1080	1077	1060	1057
	829	820	737	742	742	748	736	684	693	623	590	573	562	564	582	598	598	609	629
11 UT	990	948	918	909	876	850	848	867	898	898	901	864	842	830	830	811	808	789	798
	845	912	903	923	953	987	1049	1189	1251	1206	1118	1084	1056	987	949	901	887	864	819
	829	680	682	737	742	742	748	736	684	693	623	590	573	562	564	582	598	598	651
12 UT	648	623	618	600	636	674	686	689	687	682	669	656	651	640	642	631	631	667	673
	664	690	710	713	702	673	647	630	611	620	648	667	681	692	686	686	691	702	716
	705	683	667	659	659	651	637	629	616	621	624	623	618	626	617	626	624	621	615
13 UT	615	615	617	620	627	633	646	622	579	575	583	588	600	597	606	597	591	577	568
	562	559	559	550	544	570	600	595	578	573	565	565	566	571	571	572	569	578	553
	553	563	557	554	551	545	536	534	570	586	585	574	584	594	591	588	577	559	559
14 UT	515	483	486	503	506	494	482	470	456	519	511	472	469	479	479	513	533	521	521
	531	536	536	542	551	557	554	550	541	538	531	531	534	534	540	540	549	558	581
	590	590	590	596	602	603	594	572	514	531	538	543	577	582	538	556	550	589	601
15 UT	624	646	656	679	639	687	708	731	741	739	700	654	593	575	569	571	557	527	509
	470	489	514	490	507	514	513	500	557	557	682	657	682	676	672	659	718	760	787
	812	838	831	771	770	766	757	753	749	743	782	815	845	913	944	968	977	957	933
16 UT	939	937	891	873	864	835	772	716	645	675	671	682	727	719	689	637	611	562	540
	567	569	583	604	604	602	577	575	601	621	632	646	646	523	746	799	765	653	640
	650	666	685	719	739	793	815	838	843	828	782	794	723	705	739	778	795	797	760
17 UT	689	670	656	656	681	686	672	656	637	630	612	589	568	548	545	549	553	576	582
	576	572	571	571	564	558	563	556	542	535	520	517	511	504	502	499	496	493	496
	502	505	514	516	525	521	513	509	506	509	512	515	515	512	512	532	536	547	558
18 UT	565	575	581	592	599	600	594	602	606	607	605	603	602	603	601	605	612	626	642
	669	687	697	691	703	729	733	730	731	719	713	702	690	674	662	651	638	645	638
	631	624	614	605	602	609	613	613	605	596	612	601	587	569	561	567	565	584	623
19 UT	648	663	732	786	805	824	847	839	825	831	859	863	880	891	885	890	900	927	974
	1011	1030	1072	1072	1078	1048	1028	986	1018	1033	1046	1048	1052	1043	1009	997	948	952	955
	979	1004	1026	974	928	974	957	926	910	922	910	895	907	917	923	925	917	928	944
20 UT	963	978	996	1004	1015	1025	1021	999	989	976	963	936	925	902	872	850	843	812	828
	831	829	826	817	799	767	778	805	811	806	809	812	834	855	866	880	883	834	785
	695	680	694	716	744	771	804	837	843	847	844	855	872	894	908	922	911	862	838
21 UT	781	748	675	636	618	597	567	573	590	618	631	659	658	651	648	664	661	653	641
	611	609	622	626	648	657	645	653	662	671	689	713	729	747	755	773	791	775	743
	757	753	759	761	781	811	850	856	849	843	830	827	823	826	802	766	732	680	616
22 UT	624	639	634	626	627	636	667	648	633	630	630	635	638	672	678	685	708	718	712
	688	664	640	628	607	609	613	616	625	631	647	650	655	661	679	700	706	719	710
	680	664	661	654	654	651	653	638	614	560	587	599	601	612	595	598	591	630	593
23 UT	590	597	599	580	586	595	604	613	623	640	649	652	658	661	661	652	643	655	667
	654	639	626	617	629	645	682	658	658	658	661	661	670	667	661	661	654	645	639
	636	633	630	629	626	623	620	620	620	623	624	624	624	633	642	652	667	673	680
00 UT	713	713	710	707	702	696	690	687	691	700	704	719	701	683	671	717	760	770	798
	819	841	859	874	883	905	920	947	974	1016	1050	1085	1089	1073	1082	1104	1076	1061	1043
	1028	1015	981	961	975	981	986	985	984	977	980	991	991	990	988	987	979	943	950
01 UT	978	946	897	881	873	877	880	890	928	913	929	923	960	972	996	1013	979	970	936
	905	889	868	807	785	782	770	749	734	715	703	687	656	656	616	621	611	599	590
	579	563	589	598	619	650	644	635	629	626	624	624	639	666	681	675	680	695	704
02 UT	649	624	655	689	696	653	635	620	598	586	583	583	583	579	576	576	579	591	649
	655	664	676	686	701	710	682	631	579	583	623	641	650	653	659	662	641	577	653
	663	687	696	712	730	748	752	761	745	745	709	681	690	705	705	711	687	699	724

1976 September 20, 0300 - September 21, 0259 UT

03 UT	749	773	758	743	727	697	672	660	657	651	688	688	688	691	697	709	728	734	734	731	
	722	722	722	719	709	706	725	706	703	709	703	697	684	687	696	684	681	705	795	795	
	759	805	834	974	1020	952	933	982	1019	1015	1137	1114	1128	1121	1105	1075	1064	1071	1068	1072	
04 UT	1076	1080	966	943	979	1003	1036	1074	1117	1142	1003	968	1041	1044	946	954	1027	1037	988	977	
	949	940	938	947	1014	1024	1041	1055	1048	1034	1029	1029	1047	1025	1015	1006	947	920	935	962	
	994	977	967	972	931	937	942	909	906	930	942	959	968	747	758	757	757	745	741	763	787
05 UT	793	724	730	736	741	741	733	736	743	740	725	700	673	658	661	664	662	665	660	666	
	685	783	718	737	808	761	769	778	784	781	773	784	805	791	846	853	876	895	922	955	
	939	935	951	981	1049	1069	1097	1115	1136	1092	1057	1010	998	1010	1009	1002	990	1027	1001	1010	
06 UT	1052	1127	1156	1126	1096	1120	1161	1156	1147	1118	1095	1086	1043	992	1008	962	913	875	877	910	
	897	875	850	813	745	734	746	725	695	734	752	747	725	704	732	757	766	783	807	817	
	736	695	655	755	709	716	700	704	718	728	719	702	712	744	772	783	744	740	728	782	
07 UT	694	677	657	696	739	733	715	700	657	666	654	657	673	639	603	655	704	711	713	679	
	660	641	715	706	690	684	678	711	702	681	665	659	693	708	713	723	733	748	759	830	
	821	780	710	777	788	739	730	806	781	763	759	737	762	805	879	735	711	696	696	694	
08 UT	688	624	600	658	836	799	760	664	611	585	586	618	621	627	630	627	615	634	641	653	
	665	672	678	687	693	788	717	726	732	740	746	763	765	763	751	745	750	741	729	714	
	693	675	651	694	710	695	689	699	699	690	687	693	694	597	703	685	675	682	694	693	
09 UT	684	678	671	677	692	707	670	660	676	697	658	678	681	687	696	705	729	747	756	761	
	775	776	772	779	791	802	858	886	903	730	918	918	898	893	904	915	912	890	896	895	
	821	746	771	769	885	913	930	829	781	859	905	1067	1173	1185	1202	1249	1199	1187	1132	1045	
10 UT	1031	1054	1088	1126	1336	1342	1275	1225	1284	1275	1213	1307	1366	1405	1451	1428	1339	1300	1225	1244	
	1277	1282	1271	1278	1266	1187	1143	1131	1123	1084	1056	1001	931	877	849	798	798	815	829	828	
	819	780	752	673	629	593	550	544	542	539	537	549	568	573	585	577	580	578	578	572	
11 UT	578	577	608	620	685	651	632	598	580	595	600	584	608	614	619	627	644	695	768	793	
	776	754	768	782	813	814	805	785	765	751	729	698	622	561	556	536	562	561	575	580	
	599	611	646	663	702	707	678	675	666	649	625	590	517	423	398	413	489	519	513	521	
12 UT	564	618	660	632	616	785	806	804	765	730	747	714	555	568	548	607	603	663	664	616	
	565	454	520	566	589	584	551	489	436	340	523	546	579	491	498	542	587	595	674	700	
	700	738	902	950	1049	1050	1047	1058	1068	1093	1081	1110	1107	1095	1161	1135	1071	1023	955	899	
13 UT	828	889	779	739	759	743	764	789	765	739	701	661	689	578	591	722	688	632	599	600	
	643	621	623	616	579	615	675	636	607	610	673	678	712	693	718	697	728	751	757	786	
	779	765	751	719	704	686	666	652	684	673	615	616	564	603	573	518	523	547	600		
14 UT	540	499	511	520	515	589	516	525	535	538	548	575	575	551	545	526	531	529	522	529	
	555	573	581	584	572	567	572	579	582	573	559	530	519	528	541	578	587	597	609	628	
	666	745	775	788	867	1059	1081	1120	1181	1174	1092	999	944	956	1004	1062	872	817	1106	1299	
15 UT	1344	1360	1337	1336	1352	1364	1335	1507	1540	1490	1412	1339	1100	1046	1079	1065	1035	923	876	841	
	866	901	902	889	829	806	773	737	674	636	618	588	583	577	601	630	615	574	463		
	411	379	375	365	309	346	379	382	391	397	409	425	434	449	458	467	479	491	506	518	
16 UT	527	527	527	527	521	509	503	503	512	524	534	537	537	546	546	549	535	514	504	507	
	513	510	504	499	493	484	487	484	493	499	496	495	495	507	516	538	535	529	529	531	
	522	520	520	514	512	549	570	623	598	563	562	534	540	542	534	525	556	584	630	661	
17 UT	828	899	944	977	976	934	921	904	901	899	918	931	942	987	1023	1012	995	1008	1025	1070	
	1074	1085	1096	1108	1110	1115	1118	1121	1115	1113	1108	1101	1099	1130	1147	1148	1139	1121	1090	1072	
	1035	1028	1015	1002	1047	1099	1017	985	966	975	1000	1010	1016	1038	1061	1091	1092	1054	890	807	
18 UT	645	629	621	615	650	683	695	697	704	701	684	681	674	654	612	599	576	605	650	710	
	696	676	772	772	748	738	716	697	743	774	776	744	795	833	946	944	975	998	978		
	759	801	827	839	807	718	865	938	959	901	893	916	944	939	913	886	871	895	914	907	
19 UT	764	735	745	800	831	799	712	722	734	719	694	663	663	695	724	759	775	804	849	802	
	883	968	877	854	831	827	843	865	891	985	945	867	867	796	703	743	742	677	652	664	
	650	627	582	571	600	605	613	621	617	653	642	655	674	705	717	707	696	676	675	682	
20 UT	706	677	666	658	668	699	689	687	655	589	569	569	529	538	531	526	515	513	511	520	
	548	554	549	569	595	624	658	676	691	691	690	682	684	684	679	655	628	588	566	531	
	522	515	509	506	511	520	524	524	524	535	552	566	635	558	561	560	553	575	552	575	
21 UT	566	560	554	551	548	551	554	555	555	555	558	564	573	579	587	590	591	591	600	696	
	707	730	769	638	651	659	654	651	654	665	680	665	654	640	631	628	643	642	636		
	638	681	728	770	790	807	802	812	804	778	752	702	702	692	648	651	666	678	690		
22 UT	689	729	750	762	783	795	801	814	811	763	777	764	749	752	767	777	778	741	770	750	
	747	737	719	712	706	700	718	727	734	737	737	737	737	738	735	736	738	705	699	689	
	690	693	696	693	688	679	673	664	661	692	710	744	751	763	785	794	813	825	838	912	
23 UT	915	912	909	909	903	897	891	885	891	921	952	989	977	971	961	955	952	966	943	940	
	937	961	1005	1014	1011	987	966	944	923	926	954	967	968	992	974	959	970	947	903	1019	
	976	997	1015	1104	1123	943	940	924	859	850	886	898	880	864	858	824	796	768	725	710	
00 UT	634	634	634	643	649	659	662	659	656	662	662	657	637	643	646	649	646	647	647	647	
	653	614	595	577	561	588	705	704	686	646	617	660	660	648	627	608	596	611	630	639	
	630	627	623	623	626	626	626	626	628	605	605	605	608	610	613	604	595	586	586	592	
01 UT	598	595	595	607	619	616	607	598	592	598	607	613	610	607	604	604	607	610	613	644	
	621	622	616	613	623	623	626	626	626	626	626	626	633	636	640	658	712	734	658	655	
	588	597	603	612	621	609	602	602	608	593	593	605	608	608	611	648	645	636	636		
02 UT	603	544	612	593	581	584	590	596	593	584	587	590	596	605	612	624	563	5			

1976, OCTOBER 14 - 1

Data from Individual Observatories:

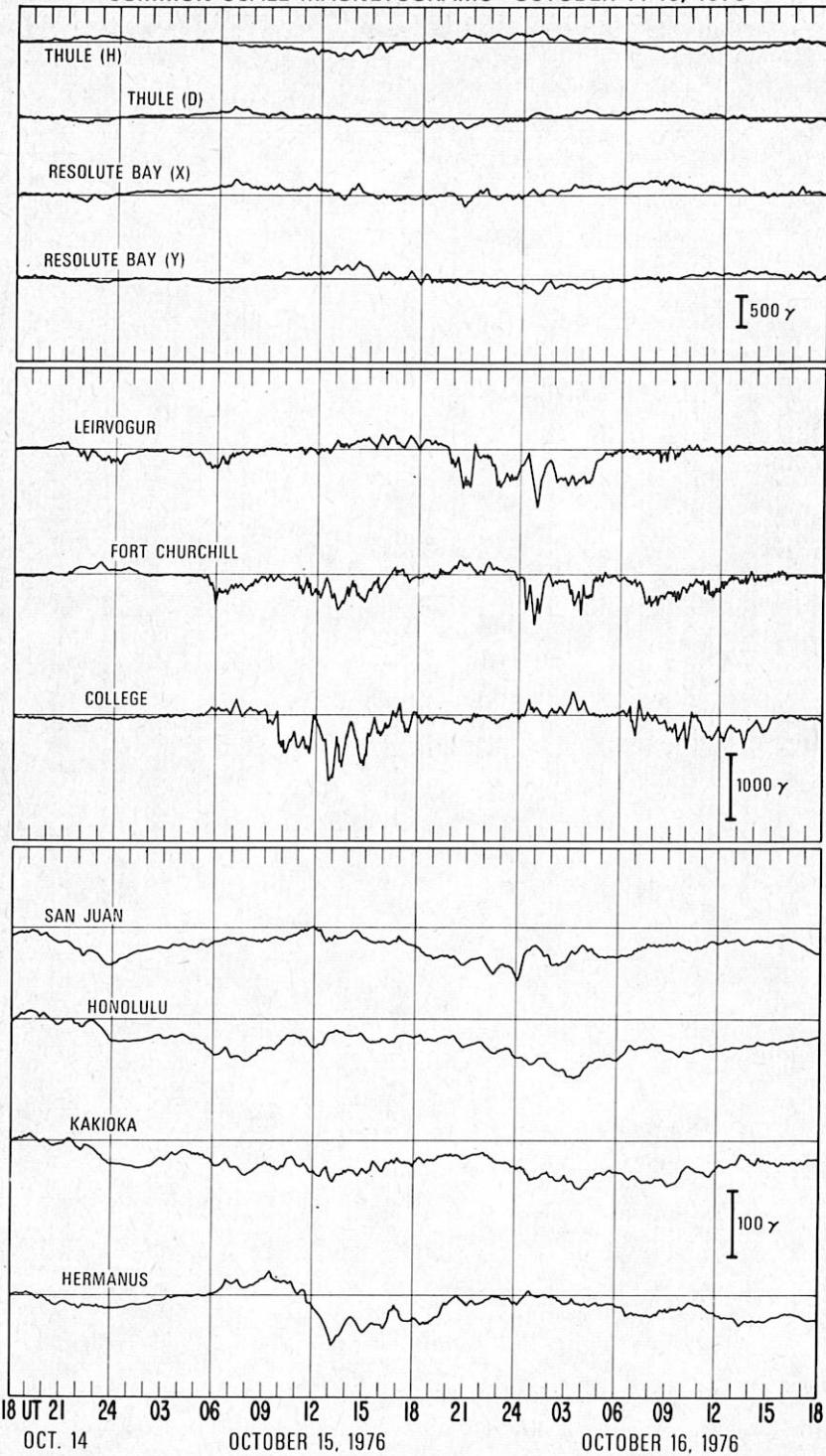
OCTOBER 1933

Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

THREE-HOUR-RANGE INDICES. II

OCT	14		15		16		17		14		15		16		17				
	BT	2222	1234	4343	5443	4443	3333	4443	5343	TK	0021	1244	1333	5633	4433	3232	1444	4343	
THREE-HOUR-RANGE INDICES, K	CC	2121	1245	4344	6545	5655	6544	6545	7545	IX	1011	1234	2233	5643	4333	3334	2234	5343	
	DI	2122	1246	5455	7777	6755	6775	5565	7766	TL	1011	1232	1233	4453	3342	2133	3132	5243	
	TI	2111	1245	3255	8665	5545	7684	3466	7775	FR	1111	1123	3433	5444	5443	2244	3355	5433	
	MM	1111	0146	5233	6677	6544	3366	5454	5455	SH	1122	3222	2223	4322	2432	3322	2232	4222	
	KI	0011	1036	5223	6677	6544	3266	5443	5356	KS	0133	0356	3334	6565	3234	3336	2135	6346	
	WE	1113	1112	2346	8844	4447	6323	2377	8332	TU	0012	0234	4344	5444	4543	3244	3355	5334	
	CO	0013	1012	2346	6534	5556	5233	3367	7332	YK	0011	1233	1234	3333	3334	3232	2344	4332	
	RY	1012	1435	5554	5577	7765	3356	5664	4456	QU									
	DO	1112	1144	3334	4563	7433	3343	2343	4453	TA									
	YA	1012	1243	3334	5544	4444	4343	3354	6454	HO	0012	0234	3433	4333	3433	2133	1355	5233	
	LE	0011	0134	3233	3455	6432	2233	3333	4334	AL									
	NU	0012	1144	3233	4544	5343	3333	2343	4434	SJ	0000	0223	0222	3334	5322	2133	2222	2433	
	LO	0012	1144	3334	4554	5443	3333	3343	4444	GU	1011	1334	3334	3334	4343	3233	2343	3113	
	SI	0013	1123	1235	6533	4455	3233	2475	6222	BA	1113	2344	2243	5443	2233	3334	2244	4343	
	SV	1111	1123	2233	5543	3333	4433	2333	6344	FH	1011	1233	2234	3333	3434	3232	2444	4122	
	SL	1111	1144	3334	4544	5433	3233	2443	6444	HU	1112	3344	3213	6553	4333	4433	2223	4534	
	ME	11—	—23	2345	6443	5565	3233	3576	6323	PP									
	WT	0011	1144	3344	5554	5443	3334	3443	5455	TN	0112	1123	1123	4432	2242	2222	1233	4232	
	IR	2322	1243	3444	5543	4444	4333	3454	5453	ND	1112	1234	1344	5544	4334	3233	3355	6242	
	UL	0012	1233	3333	4444	5433	2233	2343	4334	HR	1122	1233	1234	5453	4444	3333	3344	5343	
	KV	2222	1244	4343	5643	5564	4544	4343	2444	5454	TO	0012	0133	2344	4433	4435	3233	2534	5232
	DB	0011	0233	2233	5544	5433	3233	2243	5344	AM	1012	1123	2344	3343	4345	3232	3365	4222	
	KD	0111	0122	1123	3333	2322	2212	1224	1322	HM	1003	0013	1456	6633	4557	5332	3467	7332	
	VI	1112	1123	2345	5433	5544	3233	3465	6333	MY	2322	1123	2454	3343	4554	3233	3464	5333	
	JO									HW	2321	1155	4564	5566	5564	4366	5675	5477	
	OT	0111	1022	2433	5443	6444	2134	3355	5223	NL									
	MT	0012	1233	1333	4433	4434	3232	2354	4332	SB	2111	2244	3334	4454	4434	3344	3343	4333	

COMMON-SCALE MAGNETOGRAMS OCTOBER 14-16, 1976



1976, DECEMBER 28 - 31

Date	28			29			30			31		
UT	06	12	18	06	12	18	06	12	18	06	12	18
Kp	2	-2	0	1	-1	-1	2	0	6+	6-	6-	5+
3Kn	4	4	5	6	4	3	7	6	17	13	16	17
3Ks	4	5	4	5	3	5	10	8	17	15	15	11
	1	1	1	1	1	1	1	1	1	1	1	1
Dst	-	-	-	-	-	-	-	-	-	-	-	-

Data from Individual Observatories:

DECEMBER 1976

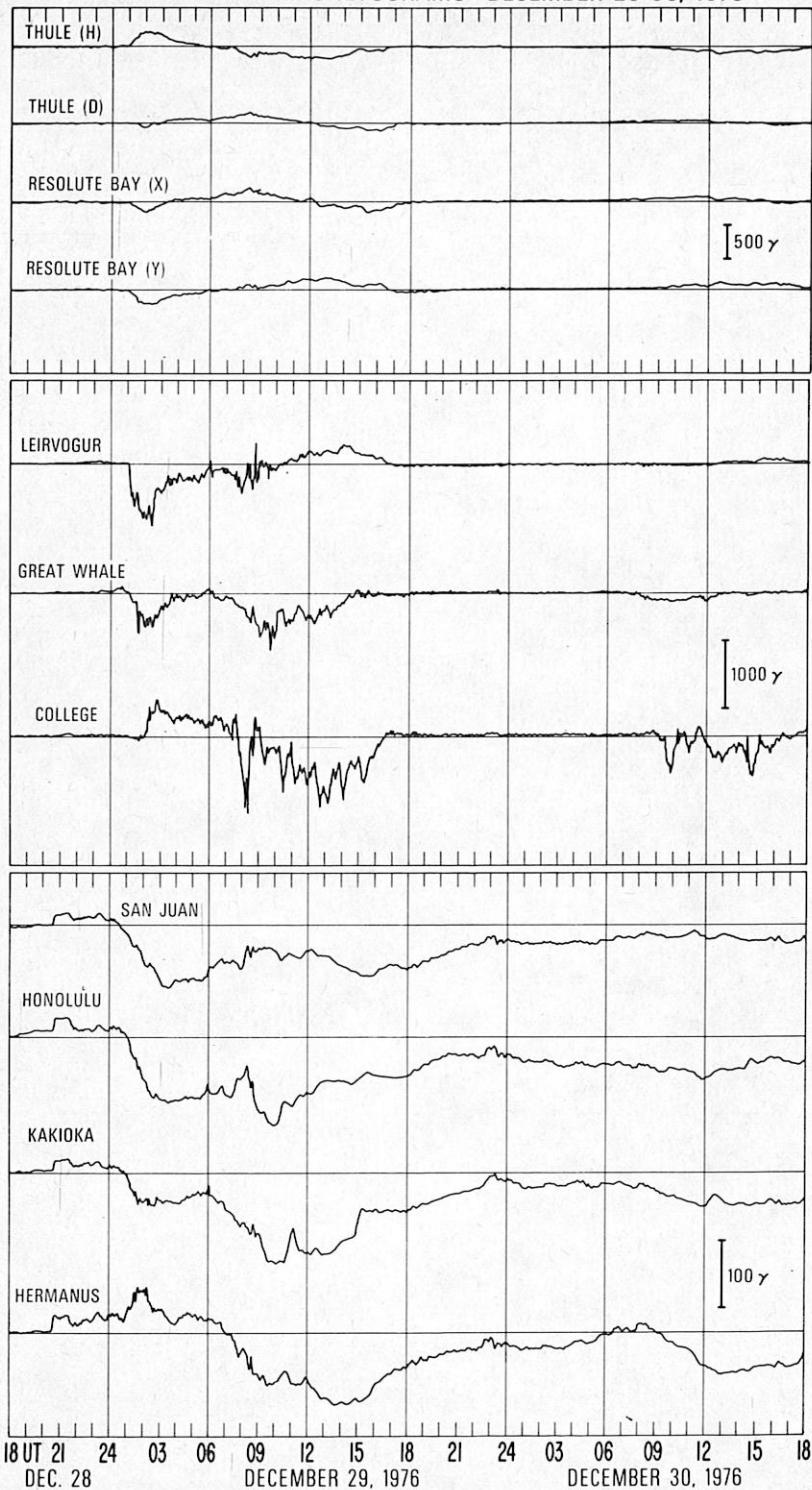
Values underlined are for X and Y.
X, Y, H and Z are given in gammas,
D in minutes.

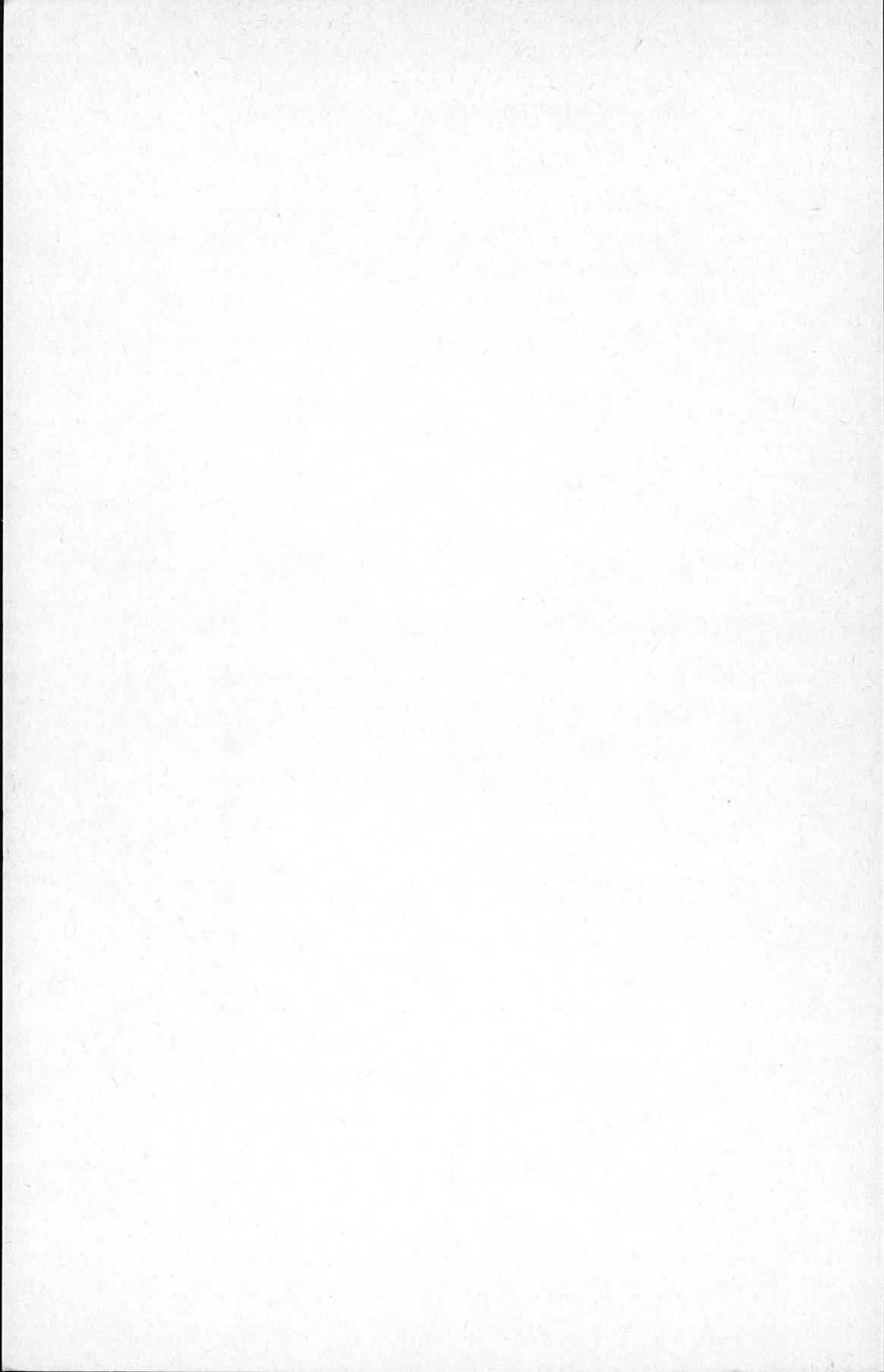
OBS. 2 letter IAGA code	GEOMAG- NETIC LATI- TUDE	COMMENCEMENT		SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K			RANGES			UT END	
		hr	min	DAY	(UT)	TYPE	D(')	H(Y)	Z(Y)	DAY (3 HOUR PERIOD)	K	D(')	H(Y)	Z(Y)	DAY HOUR
RB	83.0N	28	2037	SC	-2	+35	+15	29(1)	-	427	394	205	30 00	
CB	76.7N	28	2035	**	**	**	**	29(3)	-	500	300	540	30 23	
BL	73.9N	28	2000	**	**	**	**	29(3)	-	378	314	1072	30 01	
CH	68.8N	28	2000	**	**	**	**	29(3)	-	664	758	868	30 01	
CO	64.6N	28	2038	SC*	-5	90	42	29(3)	7	265	1750	950	29 19	
YK	62.5N	28	2047	SC	60	90	42	29(3)	-	800	1420	1120	30 24	
ME	61.8N	28	**	**	**	**	**	28(4)	3	--	--	--	29 08	
SI	60.0N	28	2039	SC	-2.0	+6.8	+3.7	29(1)	7	--	--	660	29 17	
JO	58.7N	28	2035	**	**	**	**	29(1)	6	215	120	210	31 05	
OT	57.0N	28	**	**	**	**	**	29(1,3)	6	48	271	190	29 16	
NE	55.1N	28	2036	SC	1	18	**	29(3)	7	50	206	303	30 01	
M1	54.2N	28	20--	**	**	**	**	29(1)	6	30	175	90	29 19	
FR	49.6N	28	20--	**	**	**	**	29(1)	6	36	132	70	30 01	
BD	48.9N	28	2036	SC	+1	+21	**	29(3)	7	36	152	89	29 20	
IR	41.0N	28	2042	SC	20	18	-4	28(1,3,4,6)	6	16	156	51	31 08	
TU	40.4N	28	2039	SC	+0	+22	+1	29(1)	7	17	160	25	31 09	
HT	34.0N	28	2038	SC*	-0.7*	+16	+2 *	29(4)	6	135	165	25	29 21	
SJ	29.9N	28	2036	SC	+0.5	+14	+03	29(1)	6	10	115	34	31 04	
KA	26.0N	28	2038	SC	+0.1	+13	+8	29(1,3,4)	5	93	158	63	31 09	
HO	21.1N	28	2036	SC	-0	+18	+04	29(1)	6	7	159	31	29 16	
KY	20.5N	28	2038	SC	-0.4	+17	+7	29(1)	6	91	168	72	31 10	
JP	17.3N	28	2037	SC	-0.7	18	-5	--	-	8	165	19	31 01	
SH	14.6N	28	2037	SC	-0.5	17	3	--	-	6	193	14	31 01	
UJ	13.5N	28	2037	SC	-0.5	22	-5	--	-	6	165	18	31 01	
AL	09.5N	28	2037	SC	-1.6	18	-5	29(2,3,4,5)	5	6	159	31	31 01	
HD	07.6N	28	2036	SC	-0.5	+21	-2	29(4)	6	6	181	30	31 01	
GU	04.0N	28	2037	SC	*+	+19	-04	29(1)	5	10	200	40	31 03	
AN	01.5N	28	2037	SC	-1.1	25	12	--	-	6	199	97	31 01	
HU	00.6S	28	2037	SC	2	53	5	29(1,2,5)	5	8	209	40	30 24	
TV	01.1S	28	2037	SC	0.1	20	22	--	-	5	248	121	31 01	
AP	16.0S	28	2037	SC	-1	+17	-5	09(4)	5	8	202	39	30 13	
PM	18.6S	28	2036	SC	-1	+24	+13	29(2,3,4)	5	12	190	80	31 08	
HR	33.7S	28	2037	SC	+2	+23	+17	29(1,3,6)	5	18	176	85	31 01	
GN	43.2S	28	2036	SC	+0.5	+24	+11	29(1,3,4)	6	23	130	70	29 22	
TD	46.7S	28	2038	SC	-1	+17	+4	29(1,2,4)	6	27	150	70	31 09	
CZ	51.4S	28	2037	SC	2.5	20	..	29(1,3,4)	5	36	140	121	31 21	
KG	56.5S	28	2037	SC	3.7	30	12	29(4)	7	43	559	354	29 21	
HZ	60.7S	28	20--	**	**	**	**	29(3)	8	140	1210	840	31 07	
HH	73.2S	28	20--	**	**	**	**	29(1)	8	140	1230	1160	31 01	
DU	75.6S	28	2038	SC	4	16	10	28(3) 29(1) 31(1,2)	6	693	913	817	02 10	
ME	61.8N	29	0100	**	**	**	**	29(4,5,6)	7	664	1080	880	29 00	
ME	61.8N	30	0715	**	**	**	**	30(4,5)	4	32	316	264	31 06	

THREE-HOUR-RANGE INDICES, K

DEC	28	29	30	31	28	29	30	31
BT					IK			
CC					IK	1112	1233	6555
DI					TL	1111	0121	5432
TI					FR	1222	1132	6455
MM					SM	2223	3222	4342
KI	2010	0013	7666	5412	1111	4466	5420	1044
WE					KS	0122	0144	6454
CO	0123	1011	6476	6622	1126	5654	3312	2132
RY	4221	0012	8686	4423	1132	3356	5521	2144
DO	1111	0022	6546	3322	1111	2354	3321	1143
YA					HO	1112	1233	6554
LE	1101	0012	5534	3411	0011	2244	3320	1133
NU	1111	1012	5445	4322	1221	2253	3321	1143
LO	1110	0122	5445	4422	0121	2343	3211	1143
SI	0223	1021	657(7)	6522	1025	4343	3211	1131
SV					BA	12--	—	44
RS	1111	1022	6544	4322	1121	3353	3321	1143
ME	1223	1111	5577	7422	1134	4333	3310	1121
WI	2111	1122	6544	4433	1122	3454	4421	2144
IR					GN	1222	2233	6566
VL	2111	1022	5543	3422	1121	2343	3321	1233
KV					HR	1222	1133	5454
DB					AM	2212	0132	4555
KD					MT	1123	0122	6486
VI	1233	2122	5466	5423	2124	4323	3322	1222
JO	2222	1022	6465	4322	1112	2213	2510	1121
OT	0112	1132	5356	4423	2223	3333	4221	1132
MT					SR	3323	3335	5544
					VO			4544

COMMON-SCALE MAGNETOGRAMS DECEMBER 28-30, 1976





TRANSACTIONS OF IAGA MEETINGS

		US \$
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No. 25	Transactions of the St Gall Meeting, 1967	8.00
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No. 28	The World Magnetic Survey, 1957-1969	12.00
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No. 35	Transactions of the Second General Scientific Assembly, Kyoto, 1973	8.00
No. 36	Programme and abstracts of the XVI General Assembly, Grenoble, 1975	8.00
No. 37	Transactions of the XVI General Assembly, Grenoble 1975.	
No. 38	Grid values and charts of the IGRF 1975.	

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IAGA	Symposium No. 8, Symposium on Laboratory Measurements of Aeronomie Interest, Toronto, 1963	8.00
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