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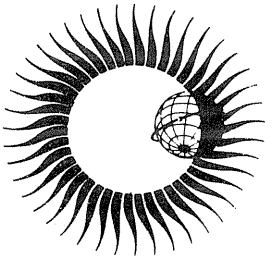
AURORAL ELECTROJET MAGNETIC ACTIVITY INDICES AE(12) FOR JULY-DECEMBER 1975



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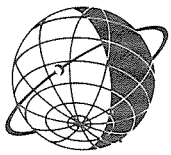

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by

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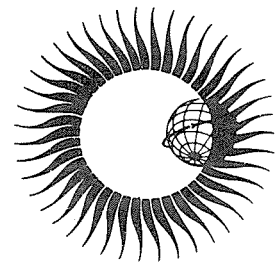
August 1980



Published by World Data Center A for
Solar-Terrestrial Physics, NOAA, Boulder, Colorado
and printed by

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA AND INFORMATION SERVICE
Boulder, Colorado, USA 80303

SUBSCRIPTION PRICE: $25.20 a year; $17.30 additional for foreign mailing; single copy price varies.*
Checks and money orders should be made payable to the Department of Commerce, NOAA/NGSDC.
Remittance and correspondence regarding subscriptions should be sent to the National Geophysical and Solar–Terrestrial Data Center, NOAA, Boulder, CO 80303.

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ABSTRACT

The Auroral Electrojet index (AE) is discussed and a brief description is given of the derivation of 12-station 1.0-min AE indices for July-December 1975. Tables are given of hourly average indices for each day, of the stations making the main contribution to the hourly indices, and of the average monthly quiet-time level of horizontal fields (H) at each magnetic observatory. Graphs of the index variations are included for each day of the second half of 1975 and for the frequency and amplitude of extreme variations at each site.

SECTION I. GENERAL DISCUSSION

1. Derivation of AE (12) Indices for July-December 1975

Introduction. The Auroral Electrojet index (AE) is designed to provide a global, quantitative measure of auroral zone magnetic activity produced by enhanced ionospheric currents flowing below and within the auroral oval. Ideally, it is the total range of deviation at an instant of time from quiet day values of the horizontal magnetic field (H) around the auroral oval. Defined and developed by Davis and Sugiura [1966], AE has been usefully employed both qualitatively and quantitatively as a correlation index in the studies of substorm morphology, in the behavior of communication satellites, in radio propagation and radio scintillation, and in the coupling between the interplanetary magnetic field and the Earth's magnetosphere. For these varied uses, AE possesses advantages over other geomagnetic indices or at least shares their advantagous properties. In particular it can

(1) be derived on an instantaneous basis or from averages of variations computed over any selected interval;

(2) be a quantitative index which, in general, is directly related to the processes producing the observed magnetic variations;

(3) be well suited to present computer processing techniques because its method of derivation is relatively simple, digital, and objective and;

(4) be used to study either individual events or statistical aggregates.

These indices are derived in response to indications of need as voiced by the scientific user community in journal articles, at meetings, in resolutions of national and international groups, and in personal communications. This report is one means of communicating a summary of the derived indices for 1 year and is the thirteenth such compilation published by the World Data Center A (WDC-A) for Solar-Terrestrial Physics [Allen, 1972; Allen et al., 1973, 1974a, 1974b, 1974c, 1975a, 1975b, 1975c, 1976, 1977a, 1977b, 1977c, 1977d and 1979]. Computer listings or digital magnetic tapes of detailed 2.5-min* indices and microfilm graphs of their variations can be obtained from WDC-A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80303, USA. Detailed lists of available indices are given, along with cost of acquisition information in Report UAG-49, Catalog of Standard Geomagnetic Variation Data, WDC-A for Solar-Terrestrial Physics, August 1975.

Definition of AE Indices. In practice, AE and associated indices may be defined by describing a graphical technique of derivation that is still used to generate preliminary sets of indices for single events (see Fig. 1). Magnetogram copies for a given UT-day are collected from a select group of auroral zone magnetic observatories. A quiet-time H (horizontal intensity of the Earth's field) reference level is selected for each site and subtracted from the instantaneous H values for that location. The resulting time series of H values for all locations are superposed graphically upon a common zero level and with a common amplitude scale and time base. Connecting successive positive extreme values produces an upper envelope for the set of overlapping traces, and connecting the negative extreme values produces a bounding lower envelope. At any instant, the amplitude of the upper envelope is designated AU and that of the lower envelope is AL. The range between them is defined as AE and their mean is AO. In general, AU is the function of the current flowing in the eastward-directed auroral electrojet, while AL is similarly related to the westward auroral electrojet.

*(more recently 1.0-min)

Observatory Selection for July-December 1975 AE (12). To provide comparable AE indices from year to year, data for the same Northern Hemisphere auroral zone observatories have been used for the derivation of AE(10) for 1966 (Report UAG-37) and 1967 (Report UAG-33); AE(11) for the years 1968 (Report UAG-29), 1969 (Report UAG-31), 1970 (Report UAG-22), 1971 (Report UAG-39), 1972 (Report UAG-45), 1973 (Report UAG-47), 1974 (Report UAG-59) the first 6 months of 1975 (Report UAG-73) and the second 6 months of 1975 in this report are listed below in Table 1 along with their abbreviations, geographic and geomagnetic coordinates, and time of Local Geomagnetic Midnight (LGM). The station locations are shown relative to the geomagnetic pole (extended geocentric dipole axis) in Figure 2.

Table 1. Observatories Used for the Derivation of 1966 and 1967 AE(10)** and 1968, 1969, 1970, 1971, 1972, 1973, 1974 AE(11) and 1975 AE(11-12)

	Observatory	Abbreviation	Geographic Coord. N. Lat.°	E. Long.°	Geomagnetic Coord. N. Lat.°	E. Long.°	LGM* UT
1.	Leirvogur	LR	64.18	338.30	70.22	71.04	2351
2.	Narssarssuaq**	NAS	61.20	314.16	71.21	36.79	0210
3.	Great Whale River	GWR	55.27	282.22	66.58	347.36	0526
4.	Fort Churchill	FC	58.80	265.90	68.70	322.77	0704
5.	Yellowknife	YEK	62.40	245.60	69.00	292.80	0902
6.	College	CO	64.87	212.17	64.63	256.52	1133
7.	Barrow	BW	71.30	203.25	68.54	241.15	1235
8.	Cape Wellen #	UE	66.17	190.17	61.79	237.10	1250
9.	Tixie Bay #	TI	71.58	129.00	60.44	191.41	1551
10.	Cape Chelyuskin	CC	77.72	104.28	66.26	176.46	1650
11.	Dixon Island #	DI	73.55	80.57	63.02	161.57	1748
12.	Abisko	AI	68.36	18.82	66.04	115.08	2052
13.	Sodankyla**	SO	67.37	26.63	63.76	119.99	2032

*Local Geomagnetic Midnight (LGM) at equinox.
Geomagnetic coordinates and time calculated for inclined geocentric dipole field.
**No records available for 1966 and 1967 from NAS, and SO substituted for AI in the 1966 and 1967 AE(10) derivations.
#Sometimes given as: Cape Uelen, Tiksi Bay and Dikson Island, respectively.

The choice of observatories was based upon a desire to achieve a nearly uniform longitudinal coverage and also to span a range of latitudes so that even contracted oval substorm effects might be recorded. Another consideration was that the magnetograms should come from established observatories whose records would continue to be available on a timely basis through the World Data Center system. Naturally, such a choice involved some compromise between the wish to use as much data as possible and the high cost of digitizing analog magnetograms. Statistical summaries are kept with each derivation, showing the relative contribution of each observatory to the indices to identify possible instances of duplication and to reveal inadequately represented regions.

Although we have been able to use the same set of stations for recent years, for earlier years the number of stations providing records changed from time to time. Prior to 1968, the station at Narssarssuag (NAS) did not exist, and there was no nearby substitute. During most years there have been intervals of varying length for which one or two of the network stations did not produce magnetograms. Further, it is hoped that additional stations may eventually be added to the network to fill longitude gaps. For these reasons we have chosen to indicate the number of contributing stations parenthetically, following the index letters, e.g., AE(10). The daily graphs of variations in 1.0-min AU, AL, AE and AO indices included in this report (Section III) show in the upper right corner the number of contributing stations during the month. If no value is given in the table of monthly average quiet-time H values (Section II-2), this indicates that records from that station were not available for use in the derivation of AE indices. This is also shown by the lable on the graphs, which reflects the reduced number of contributing stations. Intervals of lost records shorter than 1 month are not indicated.

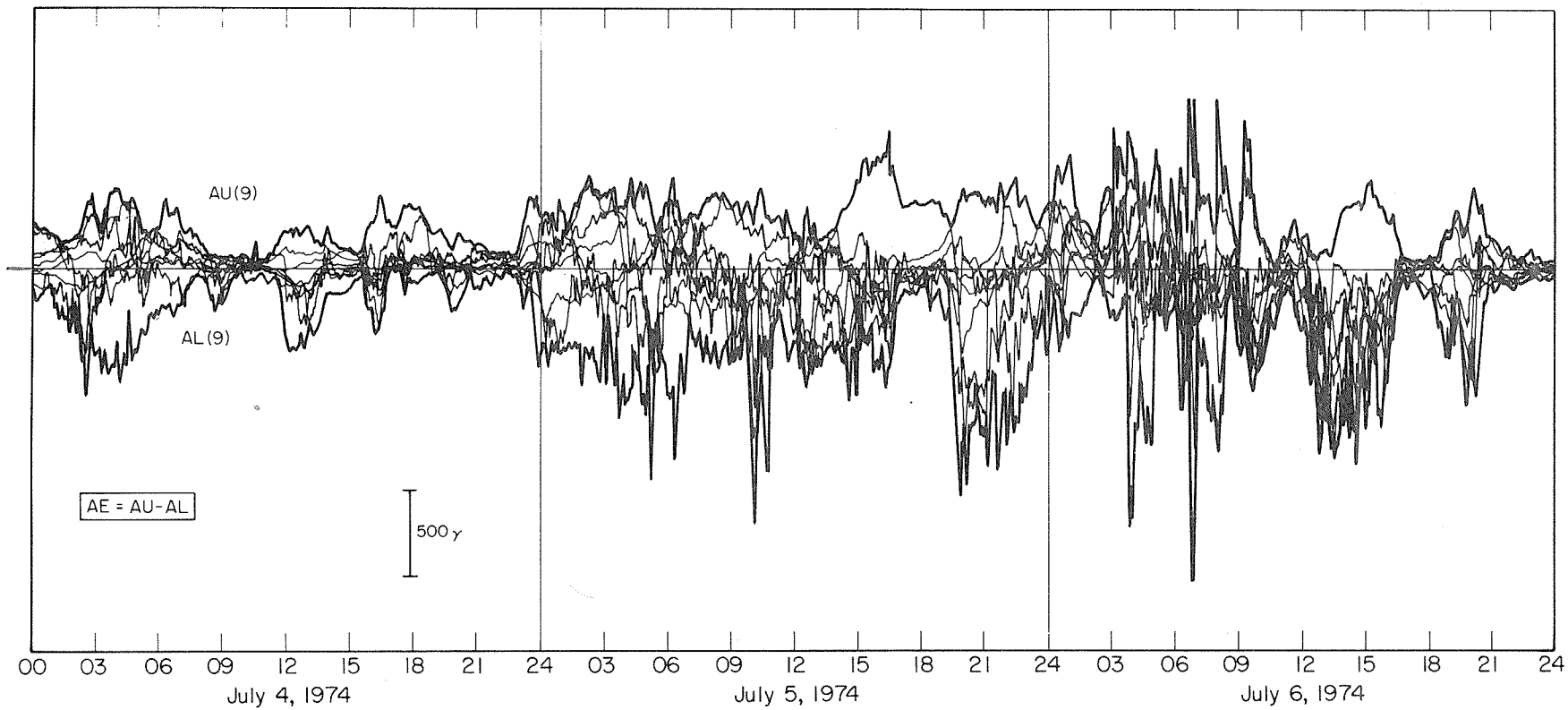

Fig. 1. Preliminary AU(9) and AL(9) by graphical superposition. Graphically derived AU(9) and AL(9) indices are formed by superposing ΔH traces from nine auroral zone observatories onto a common zero level. The AE index at any instant is AU minus AL.

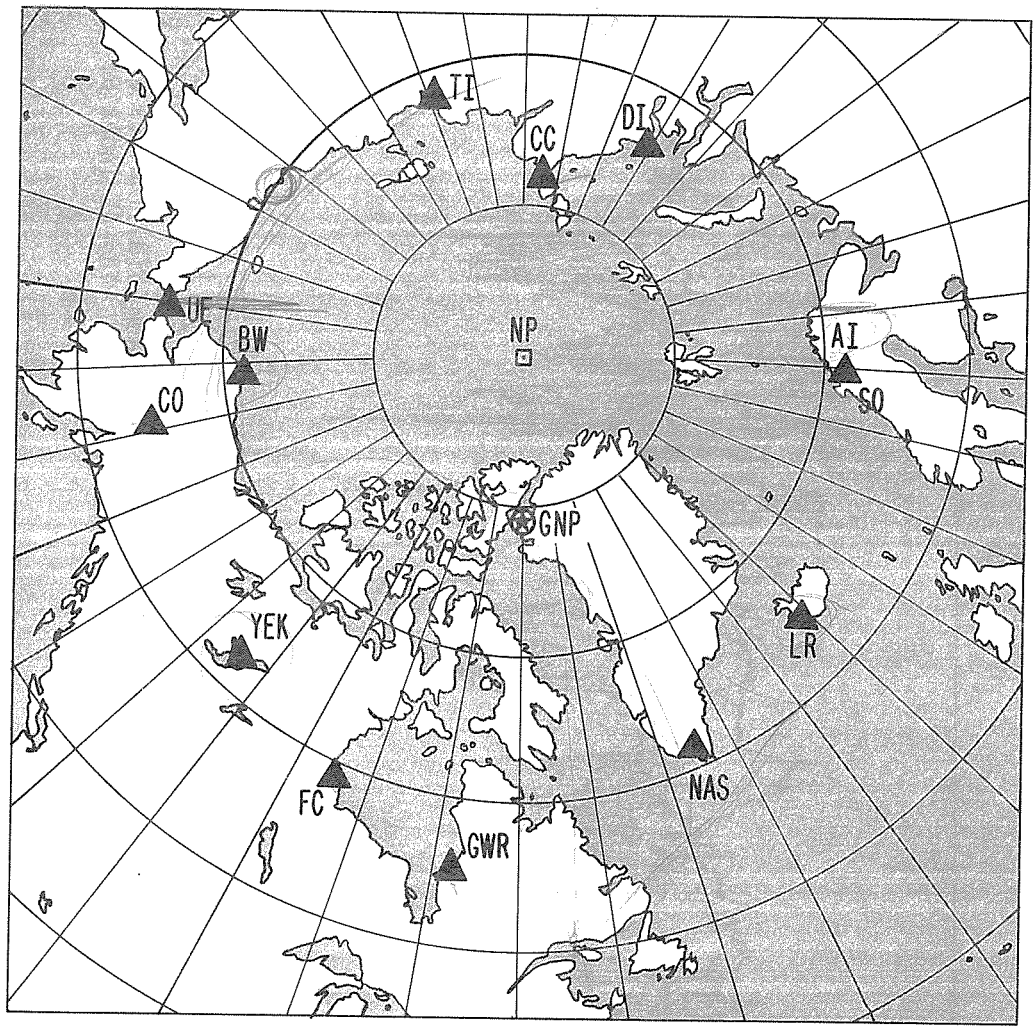

Fig. 2. Observatories whose records were used in the derivation of 1966 and 1967 AE(10) and 1968, 1969, 1970, 1971, 1972, 1973, 1974 AE(11) and 1975 AE(11-12) are shown as filled triangles. Their abbreviations correspond to the list given in Table 1. The map is a polar equal-area projection centered on the north geographic pole. The north geomagnetic pole (extended geocentric dipole axis) is indicated by a star inscribed in a circle.

Analysis of AE(11) index data for the years 1968 through 1970 suggests that an optimum station distribution would include locations just equatorward of the instantaneous auroral oval during the local evening hours which most often supplied AU (around 1800 LGT) and others directly under the oval during the early morning hours following Local Geomagnetic Midnight when most AL values are supplied (around 0300 LGT). [Note: LGT = Local Geomagnetic Time.]

Computation of AE(12) indices. The same technique of computation used for all prior AE derivations has been followed with the 1975 derivation. It is described in detail in *Report UAG-22* [Allen, 1972]. A constant quiet-time H reference level was computed for each month for each station. It is the average of all 1.0-min H values for the 5 International Quiet Days of that station-month. The quiet-time reference values were then subtracted from the 1.0-min H scalings of each station and the 11 (or 12) resulting H-deviation time series were compared. At each 1.0-min data interval the extreme positive and negative H deviations were identified and designated AU(11) respectively. According to their definitions, AE(11) = AU(11) - AL(11) and AO(11) is the mean of AU(11) and AL(11). These are the basic AE data. In addition, hourly average values of each index were computed and simple statistical information was collected.

Daily graphs of variations of all four 1.0-min indices (AU, AL, AE and AO) prepared from 35-mm microfilm are reproduced in this report in Section III. Also in Section III are monthly stacked plots of commonscale H (or X) component variations, of station frequency of AU and AL contribution, and of the cumulative (i.e. "total") amplitude of variations. Monthly summaries of hourly average values, daily averages, and hourly averages for special groups of days were prepared and are given in Section II. Also times at which each station supplied the extreme deviations. These results are the basis for monthly sets of tables of stations supplying AU and AL for each hour.

2. Precautionary Notes

Problems in Derived AE(11) Indices. Users of these indices should be aware of the following points that may affect the interpretation of index information contained in this report. Three potential sources of misleading or unreliable indices are

(1) the working definition of AE used in the derivation of the indices,

(2) the character of the magnetogram records and

(3) the digitization and data manipulation processes.

At an AE observatory an increased deviation from quiet-time H may be the same for either an enhanced electrojet current or for a constant current that moves closer to the fixed observatory location. Given a necessarily limited number of contributing observatories and an index based exclusively upon variations in the H component, it is not always possible to distinguish between these two alternatives. If an event is of sufficient magnitude and extent so as to be observed simultaneously at several locations or if it is of sufficient duration to be recorded by successive observatories rotating into the critical longitude sectors, then such ambiguity may be resolved.

Effects of low-amplitude electrojet variations of short duration that occur during otherwise quiet intervals when the auroral oval is contracted may be imperfectly recorded. If such small events occur over sectors between widely separated observatories, they could be missed entirely, although past experience does not suggest that this happens frequently. Also, during very large magnetic disturbances, the auroral oval may expand equatorward below the ring of stations used to derive AE. Thus, times of low AE may not guarantee a total absence of magnetic activity over the polar cap, and during large magnetic storms, the indices are of questionable reliability.

At the observatories, any problem that causes the H trace to be unstable or that causes loss of the record during disturbed times must inevitably affect the AE indices derived for such intervals. In general, periods of component drift at an observatory become relatively obvious when they reach an amplitude sufficient to obscure genuine variations recorded at other locations. Although efforts are made to salvage useful information during these intervals, sometimes the only solution has been elimination of that observatory's records until instrumental adjustments appear to have corrected the problem.

A more serious problem arising from the character of the magnetograms is any time for which the H trace is effectively lost. This can occur because the trace moves off the recording paper in response to a large magnetic variation, poor recording of a rapidly moving trace, or confusion of multiple traces on a magnetogram. At such times, unless there exist back-up sensitivity magnetograms from auxiliary systems at that location, the number of contributing stations is reduced. When the H trace is suddenly lost at a critically located station that was supplying either AU or AL, then some other station having the next most extreme H deviation at that instant begins to take the place of the lost data source and becomes the key to the affected index. Although such intervals are not usually noticeable in the graphs of AE variations, they commonly have the effect of producing a large bay-like feature in the affected AU or AL trace. An example of the effect of such data loss may be seen in the AU trace for 21 July 1970 (cf. Report UAG-22) beginning around 1330 UT. These characteristically-shaped spurious events have been dubbed "missing data effects" (mdes), and any suspected mdes in the 1975 graphs can be best checked by reference to the original magnetograms of the critical stations listed in Section II for those times.

Sometimes our technique of selecting a constant quiet-day H reference level for each station-month of data may produce low-amplitude month-end discontinuities in AU or AL. Also, quiet-time departures of station values from their monthly average may produce intervals having elevated AU or AL values but appearing relatively quiet. Such index discontinuities and intervals of higher noise level are considered relatively insignificant compared to the amplitude of substorm effects to be seen in the indices.

In spite of extensive quality control efforts, we expect that some errors will escape notice and be published or otherwise distributed. We request that anyone detecting questionable values in 1975 AE (11-12) or other AE indices please communicate with WDC-A for Solar-Terrestrial Physics concerning this matter. As necessary, corrections will be distributed to the user community on either a case-by-case basis or in future UAG Reports in this series.

3. Acknowledgments

We continue to acknowledge the support, advice and assistance provided by A.H. Shapley and by the many scientist-users of these indices. AE indices are the result of an international cooperative effort involving observatories of six countries, the World Data Center system, and the staff of the National Geophysical and Solar-Terrestrial Data Center. In particular we wish to acknowledge the numerous scientists who have shared with us information concerning their uses of AE indices.

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SECTION II. TABLES

1. Explanation

Table of Monthly Quiet-Time H Reference Values. The monthly quiet-time H reference values are given for each observatory in Table 2. These values are the base from which H deviations were derived and they are computed as the average of all 1.0-min digitized H values from the internationally adopted 5 Quiet Days for each month. The given values are in nanoTesla units and are absolute in the sense that they include the applied scale value and provisional baseline used for each observatory's magnetograms. Although subsequent changes in adopted baselines may shift the reference values slightly, they should not affect the derived indices because the method of derivation eliminates the H baseline provided it is constant for the month.

Tables of Hourly Mean Indices. These tables contain monthly listings of average hourly indices for each day: AE, AL, AU and AO. These hourly values were computed as the mean of the 1.0-min instantaneous values. The first hour of each day covers the data interval from 0000-0059 UT. All times are given in Universal Time and the indices are given in nanoTeslas. AE is always positive and although AU is positive most of the time, it may become negative during the main phase period of large storms when H is depressed globally by an enhanced ring current. Sometimes AU may briefly become negative as a result of missing data effects (see Section I-2). AL is almost always negative, and during most substorm events, it will exceed AU in absolute value. Consequently, AO is usually negative, and it provides a measure of the unequal amplitude of AU and AL effects.

Tables of Observatories Supplying Hourly AU and AL. As described above, the hourly average indices are computed from the 1.0-min instantaneous indices derived for that hour. Each pair of instantaneous values of AU and AL arises from H deviations at only two stations, and the station pair contributing these extremes may change from one 1.0-min interval to the next. To associate a single station with values of hourly AU and AL, some convention must be adopted as a basis for selection. We have chosen to designate the station having the maximum average H deviation during an hour as the source of hourly AU. Likewise, the station having the most negative H deviation is designated as the source of hourly AL. Within a disturbed hour it is common for one station pair to be the most frequent contributors of AU and AL and also to provide the greatest average deviations in H. There are times, however, when this does not hold. This is the case during an hour that is quiet until near the end or one that has only its first few values disturbed. Here the table will list the stations that provided AU and AL for the short disturbed portion of the hour rather than those stations providing AU and AL for the longer undisturbed portion of the hour. In effect, the listed station pairs are the same stations that would have supplied AU and AL, had the indices been derived from hourly scalings of H instead of from averages of 1.0-min values.

Tables of Station Frequency of AU and AL Contribution. Each tabulation presents the number of times (1-min intervals) during the month when the indicated station provided the AU and AL index in each hour of the UT day. The most frequent observation of the maximum positive H deviation occurs around 6 hours before Local Geomagnetic Midnight; the most negative H deviation occurs about 3 hours after Local Geomagnetic Midnight [Allen and Kroehl, 1975] Individual station deviations from this pattern may be due to the dominant influence of a few isolated large substorms during a relatively quiet month.

The tables of "observatories supplying hourly AU and AL" and of "station frequency of AU and AL contribution" serve to illustrate the nonuniform frequency of contribution of AU and AL for different stations of the network. They also illustrate the systematic grouping in Universal Time of the time of most frequent station contribution of AU and AL. Graphs corresponding to these tables are found in Section III-4.

Table 2. Monthly Quiet-Time H (or X) Reference Values (Units: Gammas = nT)

Observatory Name	Year	Jul	Aug	Sep	Oct	Nov	Dec
1. Leirvogur	1975	12306	12318	12318	12318	12320	12330
2. Narsarssuaq	1975	11916	11927	11926	11929	11927	11942
3. Great Whale River	1975	9725	9726	9753	9757	9760	9778
4. Fort Churchill	1975	7301	7292	7313	7322	7319	7336
5. Yellowknife	1975	7587	7582	7593	7599	7598	7568
6. College	1975	13043	13043	13047	13047	13037	13059
7. Barrow	1975	9846	9848	9848	9848	9841	9849
8. Cape Wellen	1975	14252	14254	14253	14256	14254	14256
9. Tixie Bay	1975	7932	7930	7925	7929	7927	7535
10. Cape Chelyuskin	1975	3517	3528	3521	3527	3514	3516
11. Dixon Island	1975	6489	6499	6496	6500	6494	6497
12. Abisko	1975	11817	11823	11822	11819	11819	11967*

*Sodankyla

3. TABLES OF HOURLY AVERAGE AE INDICES

JULY 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	254	163	208	403	265	257	412	339	331	698	243	066	042	105	183	309	330	090	079	066	048	047	198	378	230
	02	268	144	204	309	222	121	060	046	061	041	051	059	120	190	288	269	165	069	119	203	091	244	162	096	150
	03	203	344	241	177	167	232	096	241	413	237	218	198	240	180	049	065	077	259	257	188	142	168	170	089	194
	04	113	156	158	047	040	025	029	035	047	101	119	180	204	186	112	103	140	117	132	176	398	488	305	118	147
Q	05	061	037	031	030	031	065	417	425	191	054	053	062	060	040	043	042	060	070	069	053	067	132	092	053	093
	06	040	033	030	039	037	037	035	037	046	056	074	083	188	155	183	086	042	053	056	125	160	190	165	172	088
	07	450	551	140	099	183	074	098	056	061	085	150	341	314	380	273	233	336	522	742	605	616	675	549	484	334
D	08	491	620	719	820	696	758	802	600	554	396	600	1010	906	554	708	862	795	721	570	085	050	058	041	067	562
D	09	118	232	293	286	652	642	322	126	429	1349	858	158	241	311	760	403	268	333	487	563	284	234	209	075	401
	10	070	130	063	081	280	552	312	477	573	403	117	120	263	813	711	375	550	609	321	215	360	251	377	397	351
D	11	355	353	339	306	269	373	706	697	097	162	217	348	763	317	158	137	156	238	200	161	065	054	048	059	274
Q	12	067	086	095	087	131	151	201	293	174	066	048	061	051	114	124	202	266	222	142	134	311	100	061	068	136
	13	061	062	081	106	179	208	113	052	054	075	231	227	218	527	237	337	338	344	068	117	500	410	658	380	233
	14	331	286	276	259	163	124	315	363	130	134	181	297	203	115	203	223	248	102	109	090	310	678	665	475	262
	15	448	290	308	117	089	211	250	496	318	131	435	840	785	392	143	195	323	668	480	114	112	107	194	212	319
	16	222	268	461	260	164	248	374	399	273	303	546	424	620	290	087	119	147	256	235	178	176	216	197	077	273
	17	084	160	300	271	243	173	380	457	266	264	225	476	535	290	186	131	194	527	162	115	332	519	387	650	305
	18	279	130	064	081	092	256	435	254	167	625	505	500	582	461	531	545	513	559	346	240	192	306	254	260	341
	19	245	441	414	383	295	256	323	157	053	072	176	204	375	299	284	281	469	386	429	585	404	301	298	375	313
	20	402	359	275	128	053	083	258	302	408	386	269	205	078	052	045	054	061	061	088	138	159	137	179	106	179
	21	063	052	046	056	041	091	250	115	118	148	295	222	402	489	364	151	069	077	087	179	439	323	272	222	190
	22	136	094	108	076	134	249	432	266	107	093	158	094	093	094	173	171	103	136	157	181	089	149	094	081	145
	23	128	131	165	232	429	365	441	118	065	052	072	092	064	087	138	136	145	137	238	198	108	097	153	267	169
	24	502	297	056	038	037	049	197	371	326	236	300	363	210	174	096	059	059	117	093	120	094	054	074	078	167
D	25	060	103	136	285	526	727	866	744	811	216	102	118	511	1090	919	639	370	220	443	426	239	230	704	292	449
D	26	266	511	272	352	416	185	130	199	371	518	129	082	107	210	674	358	122	105	124	235	397	394	157	163	270
	27	177	142	357	502	154	264	150	246	339	137	154	194	107	167	117	111	201	281	387	446	542	332	255	183	248
	28	420	509	473	367	256	179	207	231	194	143	282	151	398	242	059	150	230	343	231	220	198	131	106	073	241
Q	29	061	131	214	192	132	115	093	113	062	106	104	144	139	302	167	044	040	045	064	085	125	107	188	248	126
Q	30	211	173	264	314	339	257	172	158	090	226	182	218	158	119	099	263	109	070	046	046	083	128	101	082	163
Q	31	099	211	208	146	044	037	035	026	025	043	033	026	031	084	099	196	119	061	094	062	069	101	220	376	102
	MEAN	216	232	226	221	218	238	287	272	231	244	230	244	291	285	265	234	227	252	228	205	231	237	243	215	240
5Q	MEAN	100	128	162	154	135	125	184	203	108	099	084	102	088	132	106	149	119	094	083	076	131	114	132	165	123
5D	MEAN	258	364	352	410	512	537	565	473	452	528	381	343	506	496	644	480	342	323	365	294	207	194	232	131	391

AUGUST 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	087	155	243	376	495	294	191	127	156	116	130	065	042	040	025	025	046	040	032	047	032	041	046	037	120
	02	047	061	078	063	076	105	276	169	148	107	069	088	073	054	060	063	060	155	216	151	087	062	108	223	108
Q	03	133	129	079	066	102	135	148	179	130	071	052	106	198	393	169	120	160	182	127	236	197	122	065	063	140
	04	100	250	333	297	280	159	082	063	097	251	096	110	079	145	146	192	200	192	206	172	228	121	070	064	164
D	05	197	486	241	573	360	440	594	338	597	453	692	1021	696	533	665	941	691	431	742	572	239	238	235	224	508
	06	362	477	266	147	188	631	499	306	331	287	238	127	062	048	042	067	050	139	148	100	094	099	070	059	202
	07	051	035	034	039	042	038	045	046	052	059	070	098	147	136	357	312	128	256	497	438	338	296	306	415	176
	08	571	554	502	759	867	804	576	462	405	417	110	059	039	059	087	108	127	164	235	178	140	182	199	204	325
	09	191	151	127	167	231	301	213	248	277	383	133	092	059	058	135	129	248	626	787	861	544	567	299	364	300
	10	331	318	204	510	655	662	505	595	827	464	865	248	122	196	449	401	256	243	209	088	060	053	074	073	350
	11	079	061	058	064	157	276	370	206	075	146	436	477	471	394	220	144	191	120	126	199	235	150	128	133	205
Q	12	174	116	141	238	214	111	064	087	163	178	130	135	156	170	095	115	122	125	092	111	185	163	107	105	137
Q	13	076	054	075	107	109	152	106	135	336	453	663	633	453	370	218	100	062	072	067	058	056	045	069	145	192
D	14	118	416	650	582	696	770	690	513	521	216	160	536	199	115	083	134	217	199	151	168	189	167	092	230	326
D	15	574	225	171	246	283	405	287	499	527	746	883	747	889	814	516	466	328	499	706	723	685	142	099	088	481
	16	065	064	039	042	046	035	036	040	116	070	091	250	285	081	120	179	116	045	111	108	055	044	041	040	088
	17	034	097	387	488	398	368	165	285	330	142	236	288	204	158	067	129	223	098	096	183	301	187	091	051	209
	18	043	059	101	134	096	088	210	126	146	368	457	163	131	132	070	106	137	170	184	171	148	098	209	239	158
Q	19	150	068	060	064	062	056	080	118	162	071	095	112	170	105	078	040	045	088	277	293	127	063	052	046	103
	20	045	046	048	047	043	048	058	053	059	083	197	423	671	581	759	710	207	282	341	487	441	264	386	583	286
D	21	268	127	113	294	592	340	198	113	127	077	081	064	045	052	097	121	229	471	385	321	416	533	464	147	236
	22	212	525	384	250	447	380	308	102	116	229	230	087	149	153	110	089	102	112	102	079	161	150	265	487	218
	23	503	370	355	378	197	071	052	060	103	197	281	433	263	077	058	079	181	195	190	087	075	087	105	069	186
	24	046	047	052	052	108	080	046	038	039	049	048	085	329	252	077	098	080	149	266	194	180	213	245	246	126
	25	222	114	214	352	233	181	334	306	149	101	220	166	129	099	256	397	233	044	051	100	285	393	341	260	216
Q	26	141	180	098	042	072	103	078	049	057	061	093	132	120	121	115	051	051	074	216	224	074	061	088	264	107
	27	341	423	567	591	344	168	091	064	077	093	099	065	050	034	021	018	024	022	027	045	053	070	083	070	143
	28	072	056	074	084	112	072	059	053	092	135	095	076	066	056	042	021	024	067	139	312	241	208	229	359	114
D	29	502	650	406	526	760	573	382	639	464	833	542	604	602	466	181	183	306	596	412	124	063	181	457	564	459
	30	550	474	431	413	667	535	420	253	428	391	247	110	150	047	103	162	299	157	084	061	084	153	128	097	269
	31	090	118	138	118	155	142	165	099	105	316	453	342	124	054	062	066	130	139	126	266	396	153	045	041	160
	MEAN	206	223	215	262	293	275	236	206	233	244	264	256	231	193	177	186	170	198	237	231	207	171	168	193	220
5Q	MEAN	135	109	091	103	112	111	095	114	170	167	207	224	219	232	135	085	088	108	156	184	128	091	076	125	136
5D	MEAN	332	381	316	444	538	506	430	420	447	465	472	594	486	396	308	369	354	439	479	382	318	252	269	251	402

SEPTEMBER 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	027	027	024	038	105	242	179	109	106	167	166	286	231	217	195	228	270	603	298	186	208	147	165	353	191
	02	350	265	189	066	034	027	039	145	198	173	068	039	038	034	040	082	106	240	263	251	290	301	294	185	155
Q	03	174	144	119	121	079	034	037	059	045	077	104	094	079	034	029	032	099	103	072	104	054	051	050	037	076
Q	04	036	066	084	072	086	112	161	141	211	076	042	031	036	042	076	118	091	035	020	037	040	052	067	052	074
	05	032	028	040	059	083	051	042	072	087	183	078	042	036	047	144	090	048	055	059	177	111	048	120	214	081
	06	448	291	158	124	060	044	160	398	262	169	126	397	454	682	866	877	494	107	049	067	118	324	476	446	317
	07	186	176	105	106	155	061	062	082	172	317	354	137	066	077	039	059	049	041	053	055	079	070	101	209	117
	08	386	288	233	145	061	101	094	123	171	323	325	259	278	119	106	261	230	223	220	164	130	274	283	275	211
D	09	388	315	404	290	220	286	292	446	673	591	606	461	367	672	1208	721	352	585	690	297	302	305	397	313	466
D	10	562	877	931	1137	610	297	610	191	060	239	542	291	357	797	761	700	433	365	253	122	233	563	436	610	499
D	11	905	339	165	433	678	322	257	415	250	524	312	935	600	356	209	534	660	671	591	493	685	549	153	320	473
D	12	688	387	555	454	394	376	235	241	575	531	350	564	715	247	393	204	161	240	095	084	176	364	444	304	366
D	13	333	402	554	634	256	245	167	169	155	272	691	329	128	062	085	091	084	145	083	064	152	262	438	360	257
	14	327	443	767	448	309	439	246	226	378	275	216	302	600	453	134	043	048	064	044	045	041	035	026	031	248
	15	030	046	051	070	073	048	134	425	288	089	047	046	071	035	027	036	069	266	284	220	283	417	255	105	142
	16	072	175	185	178	148	219	103	063	069	085	197	309	231	141	071	045	034	083	067	059	040	089	090	058	117
	17	100	102	052	057	097	293	283	061	033	031	029	024	030	033	095	399	246	225	443	306	317	382	200	268	171
	18	387	271	128	079	051	048	064	104	082	069	071	175	296	194	194	343	144	365	542	305	137	198	200	170	192
	19	088	073	139	093	050	103	227	150	294	274	285	192	128	299	416	097	036	043	052	071	059	102	051	060	141
	20	030	042	028	039	038	029	105	117	077	112	070	068	100	093	075	070	234	411	175	093	161	284	254	196	121
	21	180	120	175	100	033	025	033	031	032	068	063	038	027	032	034	037	075	165	226	202	167	154	063	039	088
	22	040	033	086	048	039	036	080	048	034	043	036	038	038	030	040	051	137	074	026	070	081	073	076	052	055
	23	136	217	109	060	048	030	024	029	052	123	144	057	029	030	027	033	036	060	042	029	034	052	051	036	062
Q	24	028	023	025	027	037	033	059	056	033	045	071	050	051	054	038	025	025	029	032	033	043	089	090	060	044
Q	25	030	026	037	096	052	101	081	069	065	037	042	034	046	047	094	049	046	035	070	033	034	027	030	085	053
	26	124	034	043	137	281	114	069	143	189	095	055	175	613	624	735	792	576	249	084	095	378	616	441	360	293
	27	467	285	491	297	305	360	404	335	504	325	337	372	333	652	436	604	658	468	447	183	140	149	063	077	362
	28	117	176	164	150	124	086	059	054	061	152	402	325	138	054	050	305	468	115	036	032	030	026	079	179	141
	29	168	062	027	053	025	049	159	154	155	205	169	209	149	055	016	022	029	067	070	140	107	045	028	026	091
Q	30	040	036	028	025	027	027	048	076	076	072	042	079	097	092	042	026	042	018	019	023	042	054	083	060	049
	MEAN	229	192	203	188	152	141	150	158	180	191	201	212	212	210	223	232	199	205	180	135	156	203	183	185	188
5Q	MEAN	062	059	059	068	056	061	077	080	086	061	060	058	062	054	056	050	061	044	043	046	043	055	064	059	059
5D	MEAN	575	464	522	590	432	305	312	292	343	431	500	516	433	427	531	450	338	401	342	212	310	409	374	381	412

OCTOBER 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	031	044	245	201	104	071	044	029	070	098	225	121	032	022	026	054	134	142	036	041	025	032	078	106	084
Q	02	097	132	166	084	033	025	028	031	028	031	034	030	031	027	019	023	028	026	027	021	030	077	034	023	045
	03	051	039	023	025	026	027	032	035	037	040	089	385	481	381	169	081	131	099	126	432	519	314	392	490	184
	04	521	705	358	220	111	127	090	196	235	119	110	093	089	097	059	024	036	082	241	109	166	212	201	267	186
	05	283	053	042	153	196	082	141	320	326	252	131	139	175	349	118	032	036	033	036	045	029	024	041	102	131
D	06	095	050	054	139	274	412	595	458	692	1030	831	352	150	304	438	520	509	700	644	789	468	237	334	307	433
D	07	165	468	640	625	675	515	320	727	846	579	764	473	573	472	453	314	428	761	567	503	466	794	308	348	533
D	08	476	538	444	420	749	410	341	582	837	786	606	1186	722	764	575	540	390	792	949	964	465	979	643	602	657
D	09	426	379	233	422	514	543	503	582	700	206	696	1064	254	142	213	502	465	283	430	400	374	477	625	463	454
D	10	330	360	411	461	613	778	629	373	239	165	047	082	368	477	341	421	343	588	683	521	520	493	465	427	422
	11	267	209	112	052	035	038	036	041	047	026	029	045	058	211	164	052	074	262	380	453	286	401	421	413	171
	12	292	147	406	307	231	234	209	315	408	438	317	188	115	130	284	631	482	443	699	265	164	112	084	064	290
	13	081	106	096	139	228	169	162	236	082	079	143	137	077	167	379	131	073	183	076	073	155	260	143	118	146
	14	161	093	031	023	021	019	148	372	445	523	642	567	528	382	331	233	158	398	321	199	122	227	298	122	265
Q	15	038	024	038	074	160	137	086	082	062	085	074	156	114	027	012	019	030	032	088	067	033	035	051	049	066
	16	041	063	220	087	050	027	047	050	044	089	088	276	178	117	103	100	117	149	576	261	137	148	129	146	135
	17	298	174	097	069	038	036	055	066	139	234	225	348	128	123	178	294	231	199	156	043	027	035	030	027	135
	18	022	017	015	030	083	067	025	028	025	038	055	065	257	462	280	158	151	152	050	045	034	026	025	027	089
Q	19	024	023	024	022	021	023	025	024	030	027	030	029	024	019	022	025	030	033	036	042	081	162	158	089	043
	20	063	050	196	075	053	043	040	064	062	044	030	046	091	057	041	106	050	046	046	025	038	064	217	251	075
	21	208	355	204	118	099	047	033	071	163	140	065	047	031	032	022	023	032	028	022	028	040	070	084	064	084
	22	051	045	031	078	102	068	174	222	289	125	065	083	046	115	270	173	108	100	094	080	144	177	168	111	122
	23	068	080	240	298	153	059	072	102	129	182	163	152	230	126	038	027	030	026	025	035	142	134	171	174	119
Q	24	177	147	048	067	061	173	221	156	047	027	027	027	027	023	051	086	043	031	058	068	033	022	024	027	070
Q	25	025	034	022	023	024	034	076	084	071	151	171	241	383	139	062	032	023	024	014	016	019	018	021	029	072
	26	165	112	030	025	024	024	031	101	195	170	105	095	077	159	128	169	313	349	080	044	034	071	091	086	112
	27	039	068	267	321	288	241	141	106	060	033	033	021	019	030	030	048	051	030	030	027	026	027	028	034	083
	28	087	070	057	073	043	028	024	022	046	139	109	034	040	030	031	041	036	045	190	515	533	463	516	354	147
	29	336	382	380	449	570	350	426	671	282	087	056	034	034	037	044	022	109	102	106	136	047	130	361	390	231
	30	303	291	203	115	063	133	345	188	061	062	199	163	286	344	200	077	074	030	050	169	228	531	219	181	188
	31	358	421	405	578	578	219	344	861	797	406	325	201	079	067	040	136	389	721	603	406	108	050	051	099	343
	MEAN	180	183	185	186	201	166	176	232	242	207	209	222	184	188	165	164	165	222	240	220	177	219	207	193	197
5Q	MEAN	072	072	060	054	060	078	087	075	048	064	067	097	116	047	033	037	031	029	045	043	039	063	058	043	059
5D	MEAN	298	359	356	413	565	532	478	544	663	553	589	631	413	432	404	459	427	625	655	635	459	596	475	429	499

NOVEMBER 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	060	025	033	051	121	111	167	175	144	322	146	142	255	085	125	155	224	132	070	066	082	128	476	373	153
D	02	115	114	177	220	294	311	287	261	239	299	301	441	633	479	547	739	563	576	566	843	924	552	436	766	445
D	03	574	679	727	395	803	842	951	688	868	1434	1250	1013	937	969	625	979	1032	964	1022	1168	808	710	640	403	853
D	04	425	948	838	755	645	396	538	413	654	502	1077	517	1023	896	669	526	553	613	305	181	346	171	073	122	549
	05	126	364	237	169	148	229	281	155	125	195	835	520	237	221	150	490	585	699	317	365	573	276	168	342	325
	06	400	461	368	398	267	165	125	077	047	106	338	328	640	436	103	419	273	073	033	026	023	040	026	024	217
	07	028	105	162	160	126	204	049	028	036	047	070	398	377	251	252	215	306	607	127	057	045	060	058	041	159
	08	059	075	062	140	094	063	081	150	273	146	248	191	137	130	128	188	089	051	047	066	222	193	153	097	128
	09	073	078	238	342	237	057	086	284	820	460	348	284	698	832	989	883	699	750	854	990	345	190	181	158	453
	10	183	276	156	103	098	127	106	112	216	195	138	156	157	082	093	109	103	119	388	391	229	265	627	631	211
	11	342	183	160	154	162	109	135	097	136	122	153	105	094	171	086	071	150	460	325	164	202	227	178	293	178
	12	367	526	245	063	180	186	148	137	071	051	037	049	107	154	126	151	230	087	043	150	071	078	035	054	139
Q	13	040	036	037	063	084	110	080	038	050	029	024	017	015	017	020	027	098	057	041	031	022	014	014	018	041
Q	14	027	021	017	024	025	026	020	023	044	015	013	024	025	027	028	047	082	111	106	084	043	034	045	062	041
Q	15	073	045	041	034	042	050	030	020	035	026	020	019	020	020	056	161	126	125	097	059	046	037	057	224	061
Q	16	207	065	103	242	185	078	134	183	186	124	157	130	143	068	029	046	048	030	022	025	035	021	016	017	096
	17	014	022	076	026	015	019	020	034	084	210	189	277	551	504	796	943	668	754	601	642	612	492	313	300	340
	18	184	145	113	090	077	092	090	181	059	055	038	036	037	036	043	050	052	049	068	048	034	034	031	033	070
	19	040	052	135	186	109	081	191	387	179	063	036	031	047	046	145	132	078	048	079	238	195	134	097	064	116
	20	075	131	088	071	053	046	041	075	063	171	075	059	040	045	047	084	278	458	167	094	161	391	322	284	138
	21	264	622	608	363	391	407	566	406	328	571	262	196	154	084	050	069	077	114	106	204	360	189	107	089	274
D	22	048	053	050	137	107	161	555	567	545	1481	1071	595	908	427	573	711	851	1000	663	610	385	169	174	167	500
	23	334	131	086	088	070	046	071	047	058	045	038	037	038	040	045	046	048	046	040	030	031	030	033	036	063
	24	038	035	039	035	031	036	029	031	030	033	043	064	074	083	180	500	418	584	591	328	358	135	140	152	166
	25	289	330	172	159	151	374	347	256	262	276	212	461	377	339	211	147	209	201	102	090	238	160	066	036	228
	26	036	035	062	041	117	186	202	248	614	394	737	743	434	125	108	065	046	047	049	044	033	034	039	062	188
Q	27	141	050	046	057	057	033	140	128	145	138	236	189	086	081	167	164	088	147	069	044	052	046	048	092	102
	28	091	093	079	068	058	118	187	448	191	222	297	180	205	319	430	227	124	111	124	084	059	053	042	046	161
	29	049	050	129	046	041	073	229	679	226	191	793	806	573	393	400	545	628	710	732	578	856	392	346	205	403
D	30	135	372	827	336	141	349	486	183	254	510	156	325	796	1137	420	724	550	632	628	982	663	638	411	504	507
	MEAN	161	204	204	167	164	170	212	217	233	281	311	278	327	283	255	320	309	345	279	289	268	196	178	190	244
5Q	MEAN	098	043	049	084	079	059	081	078	092	066	090	076	058	043	060	089	088	094	067	049	040	030	036	083	067
5D	MEAN	259	433	524	369	398	412	563	422	512	845	771	578	859	782	567	736	710	757	637	757	625	448	347	392	570

DECEMBER 1975 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
D	01	277	454	719	274	236	478	753	388	336	689	965	769	741	789	696	625	315	930	474	480	427	194	594	396	542
D	02	235	310	471	347	189	086	113	184	572	704	772	441	372	467	457	400	521	215	341	604	203	515	557	549	401
	03	330	118	054	072	065	065	078	147	171	255	389	181	122	199	481	303	194	077	086	094	108	140	249	215	175
	04	263	190	090	156	318	224	123	188	268	268	397	343	331	732	545	417	278	335	100	067	058	047	070	072	245
	05	097	127	166	136	069	028	050	108	255	167	120	200	452	116	079	173	237	302	133	108	395	190	059	039	159
	06	042	043	073	155	108	126	133	144	146	213	260	141	206	451	152	108	202	390	457	384	144	075	058	168	182
Q	07	074	056	057	056	097	101	110	110	069	051	031	030	029	024	030	190	198	114	062	053	114	055	054	056	076
D	08	066	066	096	241	514	377	265	286	300	249	196	217	303	203	096	177	516	801	363	591	445	392	598	627	333
	09	523	392	340	188	119	066	038	032	043	068	174	608	583	734	485	458	210	073	053	029	030	046	036	021	223
	10	022	027	032	032	042	046	032	030	041	105	218	444	450	411	625	278	064	051	042	028	018	037	042	059	132
	11	032	028	029	034	064	152	231	189	127	072	063	070	055	044	119	096	063	094	057	156	195	057	055	056	089
Q	12	048	032	032	036	031	030	028	032	033	070	054	037	041	054	036	034	079	083	024	018	014	009	013	013	037
Q	13	015	020	015	019	025	032	023	019	030	050	060	028	038	036	028	045	058	115	108	047	030	034	048	055	041
	14	044	029	030	035	045	044	081	059	050	061	031	034	073	085	064	094	168	128	071	084	138	281	187	056	082
	15	060	195	403	098	052	037	062	117	119	083	029	067	073	074	319	306	183	139	100	067	113	171	118	156	131
	16	175	157	297	315	204	117	146	144	184	205	100	127	152	159	158	213	156	197	099	132	125	232	069	129	166
	17	221	126	150	311	205	138	051	040	049	070	080	094	071	113	116	275	206	096	142	160	119	187	121	078	134
	18	043	074	156	145	056	032	029	029	046	050	030	099	087	117	303	110	112	118	045	036	097	163	053	031	086
	19	030	046	049	095	130	049	037	024	026	063	043	075	080	116	166	344	059	030	019	119	089	041	020	022	074
Q	20	020	028	048	109	059	043	040	058	065	045	043	027	025	028	023	022	062	036	024	014	014	017	019	029	037
	21	026	021	017	017	018	025	024	023	047	103	190	380	097	092	366	339	052	071	162	169	096	111	137	108	112
	22	175	322	185	092	133	135	317	194	090	101	060	063	152	362	370	292	226	168	053	071	244	173	098	064	173
	23	083	090	122	134	137	075	062	107	147	180	169	146	122	257	138	051	025	022	031	077	101	125	041	025	103
Q	24	015	017	015	064	094	024	015	021	019	015	012	013	018	020	017	018	024	032	023	029	215	170	178	156	051
	25	165	229	134	241	305	362	271	227	126	056	083	234	428	394	696	478	319	157	198	163	178	266	356	456	272
D	26	527	262	411	238	282	312	242	324	646	563	673	689	444	448	1093	713	616	538	300	191	606	281	156	260	451
D	27	166	183	080	197	276	411	410	647	327	108	184	092	046	059	292	1112	1179	813	677	720	671	473	435	341	412
	28	544	322	141	172	220	227	135	088	089	065	047	081	049	042	047	051	092	333	138	111	095	101	371	157	155
	29	275	198	082	142	176	361	360	299	385	353	293	133	461	338	119	092	338	161	345	525	172	202	085	085	249
	30	169	246	174	224	305	223	112	125	177	323	286	314	471	346	132	073	085	108	071	128	239	107	083	124	194
	31	042	051	113	162	037	032	051	104	036	033	043	113	126	134	099	078	103	053	054	047	037	041	063	042	071
	MEAN	155	144	154	146	149	144	143	145	162	175	197	203	216	240	269	257	224	219	157	177	178	159	162	150	180
5Q	MEAN	034	031	033	057	061	046	043	048	043	046	040	027	030	032	027	062	084	076	048	032	077	057	062	062	048
5D	MEAN	254	255	355	259	299	333	357	366	436	463	558	442	381	393	527	605	629	659	431	517	470	371	468	435	427

4. TABLES OF HOURLY AVERAGE AL INDICES

JULY 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-134	-076	-105	-306	-170	-157	-300	-246	-170	-400	-158	-025	-017	-050	-114	-209	-243	-024	-001	000	-008	-014	-085	-233	-135
	02	-172	-063	-122	-230	-127	-047	-019	-020	-028	-019	-025	-017	-042	-093	-189	-187	-117	-019	-046	-109	-022	-117	-057	-027	-080
	03	-103	-234	-144	-069	-088	-172	-044	-121	-296	-170	-101	-094	-134	-135	-014	-021	-024	-170	-132	-073	-046	-061	-082	-010	-106
	04	-037	-069	-097	-012	-016	-008	-012	-014	-013	-040	-046	-087	-137	-121	-062	-058	-084	-067	-078	-080	-208	-281	-177	-037	-077
Q	05	-017	-013	-009	-011	-004	-016	-278	-316	-130	-023	-017	-025	-029	-013	-017	-016	-023	-025	-016	-008	-014	-057	-039	-022	-047
	06	-012	-013	-014	-013	-008	-001	-006	-009	-016	-017	-034	-032	-094	-093	-133	-041	-011	-006	-005	-041	-060	-091	-097	-069	-038
	07	-272	-367	-052	-037	-069	-041	-036	-015	-016	-040	-032	-190	-164	-223	-187	-151	-182	-317	-454	-366	-313	-346	-247	-234	-181
D	08	-271	-413	-497	-604	-398	-368	-434	-335	-297	-169	-293	-824	-639	-345	-347	-442	-416	-388	-309	-008	-002	-013	-014	-033	-327
D	09	-039	-136	-164	-145	-371	-376	-147	-052	-220	-968	-476	-067	-092	-154	-475	-254	-121	-177	-240	-360	-150	-144	-147	-033	-230
	10	-020	-061	-023	-026	-136	-436	-202	-335	-394	-286	-063	-054	-129	-631	-516	-261	-349	-368	-172	-097	-234	-140	-239	-282	-227
D	11	-217	-260	-242	-227	-164	-192	-461	-410	-040	-043	-094	-190	-576	-203	-092	-090	-087	-137	-123	-077	-015	-010	-015	-022	-166
Q	12	-024	-032	-049	-038	-081	-076	-074	-193	-127	-029	-026	-040	-023	-068	-077	-134	-169	-121	-049	-056	-219	-040	-025	-037	-075
	13	-030	-027	-027	-050	-103	-110	-053	-021	-024	-033	-115	-107	-101	-343	-168	-215	-210	-249	-013	-031	-331	-257	-430	-228	-137
	14	-204	-215	-183	-183	-087	-071	-184	-267	-069	-040	-073	-197	-143	-066	-102	-132	-181	-038	-026	-016	-144	-428	-436	-277	-157
	15	-291	-189	-193	-048	-041	-122	-145	-347	-232	-053	-243	-630	-547	-277	-084	-135	-204	-412	-288	-040	-033	-022	-111	-123	-200
	16	-128	-154	-345	-144	-105	-166	-258	-297	-165	-145	-343	-265	-510	-224	-044	-040	-097	-175	-129	-072	-064	-088	-103	-022	-170
	17	-027	-081	-192	-188	-145	-105	-221	-267	-092	-129	-095	-254	-369	-211	-102	-065	-113	-326	-063	-023	-165	-378	-246	-433	-179
	18	-167	-053	-019	-032	-040	-120	-331	-140	-045	-371	-343	-317	-428	-341	-395	-377	-311	-359	-217	-073	-078	-174	-164	-168	-211
	19	-147	-293	-286	-219	-179	-153	-229	-081	-011	-018	-062	-103	-253	-181	-213	-219	-327	-235	-232	-347	-266	-187	-159	-231	-193
	20	-270	-251	-197	-083	-011	-021	-174	-200	-279	-256	-155	-116	-043	-021	-020	-011	-005	-005	-033	-072	-093	-063	-083	-058	-105
	21	-027	-020	-021	-022	-013	-035	-191	-042	-024	-024	-134	-125	-229	-324	-265	-095	-021	-017	-026	-085	-268	-183	-148	-119	-102
	22	-075	-036	-056	-030	-081	-136	-309	-168	-065	-042	-096	-036	-034	-038	-110	-118	-024	-052	-081	-099	-027	-067	-030	-022	-076
	23	-045	-041	-071	-132	-305	-216	-310	-067	-025	-019	-032	-048	-031	-037	-082	-094	-098	-083	-154	-134	-048	-041	-068	-121	-096
	24	-298	-167	-015	-012	-016	-004	-097	-250	-143	-073	-166	-223	-109	-088	-050	-029	-015	-046	-015	-037	-044	-021	-021	-025	-082
D	25	-021	-031	-049	-157	-284	-433	-491	-389	-436	-037	-016	-040	-371	-760	-595	-354	-140	-097	-258	-272	-129	-097	-495	-221	-257
D	26	-146	-376	-207	-210	-289	-103	-052	-085	-214	-393	-057	-025	-049	-093	-517	-217	-055	-051	-063	-107	-238	-249	-051	-060	-163
	27	-083	-048	-220	-365	-093	-168	-108	-145	-267	-064	-067	-119	-037	-076	-050	-054	-147	-190	-285	-319	-385	-183	-095	-062	-151
	28	-272	-358	-328	-211	-126	-118	-134	-156	-083	-053	-201	-078	-283	-162	-008	-073	-150	-241	-145	-117	-078	-065	-030	-018	-145
Q	29	-021	-082	-157	-135	-079	-062	-057	-051	-006	-052	-050	-065	-062	-231	-130	-024	-014	-012	-019	-034	-071	-043	-096	-152	-071
Q	30	-099	-078	-148	-199	-238	-178	-084	-057	-029	-129	-076	-092	-069	-053	-057	-219	-085	-036	-007	-009	-032	-053	-036	-022	-087
Q	31	-031	-120	-144	-071	-011	-010	-017	-012	-009	-015	-010	-007	-011	-047	-058	-138	-071	-026	-051	-024	-024	-031	-110	-253	-054
	MEAN	-119	-141	-141	-136	-125	-136	-176	-165	-128	-134	-119	-145	-186	-184	-170	-144	-132	-144	-120	-103	-123	-127	-133	-118	-140
5Q	MEAN	-038	-065	-101	-091	-083	-068	-102	-126	-060	-050	-036	-046	-039	-082	-068	-106	-072	-044	-028	-026	-072	-045	-061	-097	-066
5D	MEAN	-139	-243	-232	-269	-301	-294	-317	-254	-241	-322	-187	-229	-345	-311	-405	-271	-164	-170	-199	-165	-107	-103	-144	-074	-228

AUGUST 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-027	-039	-131	-198	-245	-109	-061	-032	-087	-055	-067	-017	-002	-008	-001	004	-009	-002	003	-007	000	-004	-013	-010	-047
	02	-017	-031	-034	-024	-024	-031	-164	-103	-069	-034	-022	-027	-023	-010	-016	-010	-005	-092	-129	-059	-022	-008	-049	-121	-047
Q	03	-044	-048	-031	-015	-046	-072	-089	-078	-045	-035	-021	-023	-116	-269	-118	-072	-109	-120	-057	-111	-103	-048	-019	-018	-071
	04	-031	-148	-215	-155	-135	-057	-028	-015	-023	-181	-046	-036	-033	-099	-112	-119	-147	-116	-119	-094	-125	-053	-015	-013	-088
D	05	-081	-336	-126	-338	-249	-218	-355	-200	-328	-219	-404	-707	-457	-387	-452	-614	-391	-221	-458	-341	-088	-134	-160	-139	-308
	06	-232	-383	-169	-065	-077	-478	-362	-168	-193	-171	-166	-078	-025	-018	-017	-047	-028	-103	-094	-045	-042	-052	-024	-020	-127
	07	-019	-016	-017	-019	-020	-020	-024	-023	-031	-036	-036	-049	-082	-067	-253	-217	-086	-158	-373	-256	-165	-175	-152	-212	-104
	08	-333	-329	-324	-557	-631	-579	-336	-241	-223	-257	-033	-014	-015	-035	-055	-054	-072	-098	-124	-088	-059	-072	-087	-095	-196
	09	-076	-060	-058	-086	-128	-160	-087	-113	-144	-253	-065	-038	-020	-022	-071	-057	-162	-315	-453	-541	-281	-269	-115	-208	-158
	10	-195	-212	-127	-261	-397	-491	-314	-392	-542	-261	-540	-119	-053	-111	-334	-316	-187	-169	-130	-048	-017	-014	-021	-027	-220
	11	-030	-030	-028	-023	-093	-196	-217	-127	-028	-040	-281	-288	-268	-263	-158	-103	-147	-075	-061	-123	-150	-075	-048	-049	-121
Q	12	-081	-063	-078	-159	-102	-041	-023	-045	-087	-101	-072	-068	-094	-115	-066	-074	-077	-084	-047	-060	-119	-098	-054	-031	-077
Q	13	-024	-018	-025	-066	-073	-117	-055	-050	-152	-279	-360	-312	-276	-262	-153	-067	-018	-017	-020	-014	-013	-006	-021	-062	-103
D	14	-046	-209	-488	-370	-496	-540	-426	-291	-325	-099	-062	-373	-127	-057	-049	-086	-163	-142	-088	-073	-080	-090	-024	-098	-200
D	15	-418	-157	-070	-160	-187	-227	-157	-377	-348	-533	-630	-474	-652	-533	-350	-254	-206	-260	-470	-459	-432	-071	-040	-041	-313
	16	-019	-023	-013	-011	-019	-013	-018	-016	-084	-035	-043	-144	-203	-031	-073	-137	-086	-013	-047	-052	-020	-007	-005	-008	-047
	17	-019	-079	-337	-357	-240	-207	-068	-138	-136	-030	-033	-087	-074	-079	-034	-076	-175	-053	-040	-099	-194	-105	-038	-018	-113
	18	-015	-031	-057	-088	-051	-051	-134	-078	-091	-236	-306	-094	-068	-084	-032	-077	-092	-126	-133	-089	-087	-045	-115	-135	-096
Q	19	-058	-020	-024	-027	-030	-022	-049	-082	-138	-052	-055	-064	-105	-077	-027	-008	-017	-031	-186	-181	-058	-018	-017	-018	-057
	20	-019	-021	-022	-020	-013	-013	-018	-010	-015	-040	-091	-272	-472	-403	-433	-432	-126	-184	-203	-314	-279	-128	-155	-406	-170
D	21	-109	-035	-049	-144	-439	-218	-089	-055	-077	-024	-034	-027	-015	-023	-048	-059	-130	-273	-248	-175	-220	-326	-291	-075	-133
	22	-097	-363	-267	-158	-276	-273	-195	-037	-023	-131	-179	-041	-092	-114	-060	-041	-061	-076	-047	-024	-088	-082	-140	-340	-134
	23	-348	-249	-255	-261	-113	-019	-013	-011	-041	-128	-155	-297	-178	-045	-038	-037	-124	-131	-125	-038	-019	-024	-036	-023	-113
	24	-017	-021	-020	-015	-041	-025	-013	-015	-020	-026	-033	-035	-222	-180	-043	-064	-036	-075	-161	-112	-098	-113	-135	-155	-070
	25	-156	-060	-123	-278	-162	-097	-241	-190	-041	-022	-105	-097	-063	-059	-194	-308	-166	-007	-015	-038	-168	-240	-177	-101	-130
Q	26	-022	-079	-042	-010	-017	-053	-036	-010	-018	-031	-047	-079	-080	-076	-085	-030	-025	-024	-142	-143	-034	-016	-028	-151	-053
	27	-192	-252	-393	-409	-193	-073	-032	-022	-027	-035	-046	-025	-020	-010	-005	-001	-003	-003	-008	-018	-017	-017	-023	-025	-077
	28	-026	-017	-024	-027	-058	-026	-030	-019	-037	-067	-033	-029	-026	-026	-015	-009	-005	-015	-060	-179	-107	-061	-084	-162	-048
D	29	-318	-474	-256	-350	-465	-331	-178	-383	-272	-502	-312	-332	-431	-350	-103	-093	-187	-350	-265	-043	-008	-056	-268	-398	-280
	30	-402	-340	-254	-254	-467	-412	-306	-161	-315	-266	-154	-033	-107	-018	-046	-102	-233	-093	-037	-017	-035	-084	-069	-045	-177
	31	-041	-065	-079	-064	-110	-115	-116	-025	-039	-217	-312	-222	-068	-024	-034	-032	-094	-105	-077	-160	-269	-088	-003	-011	-099
	MEAN	-113	-136	-133	-160	-181	-170	-137	-113	-129	-142	-153	-145	-144	-124	-112	-116	-109	-114	-142	-129	-110	-083	-078	-104	-128
5Q	MEAN	-046	-046	-040	-055	-054	-061	-050	-053	-088	-100	-111	-109	-134	-160	-090	-050	-049	-055	-090	-102	-065	-037	-028	-056	-072
5D	MEAN	-194	-242	-198	-272	-367	-307	-241	-261	-270	-275	-288	-383	-336	-270	-200	-221	-215	-249	-306	-218	-166	-135	-157	-150	-246

SEPTEMBER 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-010	-012	-010	-010	-049	-173	-109	-045	-052	-101	-089	-188	-138	-123	-136	-177	-206	-422	-173	-090	-114	-052	-073	-193	-114
	02	-225	-174	-112	-018	-011	-009	-007	-072	-105	-085	-027	-023	-020	-017	-020	-048	-075	-175	-189	-151	-174	-176	-146	-079	-089
Q	03	-062	-066	-086	-100	-063	-022	-012	-028	-019	-050	-059	-042	-038	-013	-019	-020	-064	-075	-042	-062	-022	-023	-023	-011	-043
Q	04	-017	-044	-057	-043	-055	-080	-107	-098	-098	-029	-020	-022	-025	-029	-070	-109	-080	-029	-009	-012	-015	-018	-034	-022	-047
	05	-016	-018	-018	-029	-058	-007	-012	-037	-053	-115	-046	-025	-021	-021	-091	-051	-024	-024	-021	-119	-069	-010	-047	-118	-044
	06	-318	-212	-076	-053	-014	-005	-045	-251	-133	-054	-037	-227	-246	-475	-548	-537	-296	-045	-018	-031	-050	-229	-301	-274	-186
	07	-108	-128	-059	-067	-110	-030	-033	-047	-112	-219	-259	-082	-022	-043	-018	-038	-024	-022	-030	-027	-038	-037	-049	-128	-072
	08	-258	-147	-141	-076	-031	-079	-081	-089	-123	-197	-171	-177	-191	-075	-073	-221	-173	-161	-160	-093	-046	-181	-186	-147	-137
D	09	-296	-201	-271	-164	-122	-149	-217	-306	-495	-409	-342	-273	-239	-469	-838	-529	-219	-404	-444	-160	-142	-207	-285	-185	-307
D	10	-402	-713	-771	-854	-414	-205	-413	-137	-024	-116	-420	-175	-241	-635	-572	-466	-288	-257	-172	-066	-158	-417	-329	-461	-363
D	11	-739	-224	-088	-320	-497	-221	-159	-339	-163	-443	-203	-740	-446	-261	-142	-365	-491	-466	-391	-312	-499	-401	-062	-203	-341
D	12	-569	-271	-384	-340	-272	-270	-180	-164	-446	-411	-223	-413	-573	-143	-280	-135	-108	-182	-046	-023	-081	-269	-336	-204	-263
D	13	-250	-298	-420	-508	-140	-143	-100	-096	-079	-170	-533	-234	-076	-035	-054	-054	-041	-090	-024	-006	-056	-150	-314	-241	-171
	14	-219	-339	-625	-338	-226	-262	-141	-091	-263	-196	-160	-195	-516	-345	-081	-015	-014	-029	-016	-014	-017	-069	-007	-008	-172
	15	-008	-014	-021	-040	-044	-021	-081	-337	-226	-032	-030	-021	-038	-023	-016	-021	-031	-199	-219	-145	-180	-304	-177	-064	-096
	16	-044	-142	-118	-091	-095	-176	-056	-028	-042	-038	-135	-209	-162	-119	-040	-028	-012	-049	-047	-034	-019	-057	-039	-017	-075
	17	-066	-060	-018	-018	-031	-178	-155	-023	-001	-009	-010	-011	-018	-016	-046	-336	-193	-125	-195	-194	-181	-287	-113	-151	-101
	18	-259	-119	-021	-011	-008	-009	-013	-045	-033	-032	-029	-108	-190	-130	-151	-213	-087	-237	-374	-229	-070	-124	-148	-118	-115
	19	-040	-022	-089	-048	-010	-051	-145	-082	-214	-206	-196	-146	-083	-225	-356	-066	-020	-018	-025	-047	-026	-057	-022	-026	-093
	20	-011	-026	-012	-012	-013	-009	-070	-073	-047	-088	-036	-036	-063	-071	-054	-041	-169	-336	-114	-044	-070	-208	-176	-144	-080
	21	-153	-065	-132	-036	-005	-004	-006	-009	-008	-036	-035	-014	-014	-014	-017	-019	-038	-117	-162	-137	-113	-097	-029	-012	-053
	22	-014	-010	-042	-017	-013	-008	-056	-017	-010	-014	-020	-019	-023	-015	-018	-024	-089	-047	-009	-036	-054	-042	-036	-015	-027
	23	-096	-159	-056	-031	-024	-008	-009	-017	-021	-093	-109	-031	-020	-019	-016	-020	-018	-038	-022	-011	-015	-028	-027	-007	-037
Q	24	-006	-007	-010	-010	-009	-009	-039	-028	-010	-021	-039	-023	-017	-027	-019	-013	-015	-011	-009	-011	-020	-054	-043	-021	-020
Q	25	-004	-005	-007	-058	-024	-082	-062	-053	-046	-017	-018	-018	-017	-021	-070	-029	-019	-010	-046	-007	-008	-006	-005	-057	-029
	26	-095	-008	-008	-102	-246	-091	-018	-069	-113	-041	-018	-092	-430	-489	-495	-477	-337	-121	-026	-023	-243	-396	-225	-229	-183
	27	-382	-201	-433	-219	-184	-221	-263	-188	-330	-199	-187	-214	-234	-542	-298	-392	-449	-275	-218	-071	-073	-086	-023	-034	-238
	28	-079	-136	-126	-116	-095	-046	-018	-013	-019	-092	-344	-250	-092	-025	-022	-248	-386	-081	-013	-008	-010	-008	-028	-120	-099
	29	-125	-030	-008	-023	-011	-025	-119	-113	-134	-161	-123	-153	-111	-033	-011	-016	-019	-051	-045	-113	-079	-024	-013	-011	-065
Q	30	-025	-022	-014	-012	-012	-009	-029	-049	-051	-025	-020	-052	-065	-054	-013	-016	-030	-009	-006	-004	-020	-033	-054	-039	-028
	MEAN	-163	-129	-141	-125	-096	-087	-092	-098	-116	-123	-131	-140	-146	-150	-153	-157	-134	-137	-109	-076	-089	-133	-112	-111	-123
5Q	MEAN	-023	-029	-035	-045	-033	-040	-050	-051	-045	-028	-031	-031	-032	-029	-038	-037	-042	-027	-022	-019	-017	-027	-032	-030	-033
5D	MEAN	-451	-341	-387	-437	-289	-198	-214	-208	-241	-310	-344	-367	-315	-309	-377	-310	-229	-280	-215	-113	-187	-289	-265	-259	-289

OCTOBER 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-011	-015	-195	-114	-031	-018	-012	-014	-022	-036	-176	-097	-021	-017	-016	-027	-105	-115	-023	-024	-005	-010	-041	-063	-050
Q	02	-056	-096	-129	-040	-011	-010	-014	-017	-016	-019	-024	-020	-022	-018	-012	-016	-016	-014	-012	-006	-010	-046	-015	-004	-027
	03	-030	-020	-006	-007	-009	-010	-012	-013	-016	-013	-048	-309	-315	-262	-109	-054	-100	-067	-074	-316	-356	-174	-270	-381	-124
	04	-379	-521	-220	-143	-074	-080	-056	-146	-170	-071	-064	-054	-057	-078	-052	-018	-018	-063	-205	-089	-120	-148	-151	-221	-133
	05	-263	-027	-015	-116	-148	-037	-070	-261	-237	-180	-087	-093	-094	-205	-085	-017	-013	-015	-015	-030	-017	-012	-016	-083	-089
D	06	-068	-028	-036	-111	-194	-257	-400	-297	-394	-566	-510	-205	-081	-217	-339	-376	-376	-453	-462	-565	-273	-135	-262	-239	-285
D	07	-094	-359	-487	-430	-466	-385	-184	-477	-589	-358	-617	-326	-483	-346	-310	-197	-270	-551	-337	-315	-318	-613	-212	-252	-374
D	08	-360	-413	-342	-288	-534	-249	-215	-451	-583	-597	-411	-935	-577	-599	-429	-360	-282	-615	-803	-776	-256	-882	-470	-471	-496
D	09	-302	-271	-122	-316	-406	-409	-332	-388	-521	-117	-567	-876	-165	-098	-153	-436	-372	-191	-297	-310	-300	-357	-476	-339	-338
D	10	-210	-281	-336	-375	-511	-618	-434	-241	-161	-116	-021	-041	-294	-401	-282	-341	-247	-472	-511	-391	-390	-374	-324	-321	-321
	11	-155	-107	-030	-018	-013	-013	-020	-018	-030	-013	-018	-025	-036	-160	-133	-034	-045	-203	-270	-339	-155	-281	-322	-337	-116
	12	-212	-091	-313	-225	-165	-188	-148	-213	-283	-334	-169	-117	-069	-101	-220	-488	-334	-278	-481	-163	-090	-059	-042	-026	-200
	13	-039	-070	-070	-120	-220	-151	-120	-217	-057	-061	-083	-083	-051	-113	-307	-072	-045	-156	-056	-050	-108	-209	-091	-074	-109
	14	-088	-049	-012	-012	-010	-009	-094	-267	-324	-359	-453	-308	-303	-287	-245	-180	-110	-285	-227	-128	-059	-127	-219	-023	-174
Q	15	-010	-009	-014	-047	-133	-094	-025	-015	-017	-029	-024	-115	-076	-014	-010	-015	-018	-019	-071	-046	-015	-015	-020	-019	-036
	16	-016	-022	-131	-025	-008	-006	-022	-018	-015	-043	-046	-183	-142	-074	-045	-050	-086	-101	-410	-207	-082	-071	-050	-055	-080
	17	-147	-072	-020	-021	-016	-012	-034	-048	-090	-168	-136	-188	-079	-055	-141	-241	-172	-154	-104	-020	-011	-021	-017	-011	-082
	18	-012	-011	-009	-015	-063	-056	-012	-011	-014	-022	-036	-041	-189	-341	-201	-111	-112	-106	-013	-016	-013	-011	-012	-010	-060
Q	19	-009	-012	-014	-014	-010	-009	-009	-009	-014	-015	-021	-018	-013	-012	-013	-014	-015	-015	-014	-018	-052	-099	-079	-029	-022
	20	-019	-011	-123	-024	-006	-004	-005	-013	-023	-010	-010	-019	-060	-039	-018	-065	-029	-021	-021	-010	-023	-032	-167	-187	-039
	21	-146	-268	-115	-055	-040	-006	-010	-040	-112	-091	-035	-026	-013	-011	-012	-017	-019	-014	-012	-010	-016	-036	-037	-027	-049
	22	-019	-012	-006	-055	-081	-037	-129	-189	-185	-064	-024	-023	-018	-081	-214	-143	-082	-070	-068	-047	-076	-115	-126	-075	-081
	23	-036	-037	-187	-215	-072	-019	-029	-037	-072	-095	-075	-085	-172	-084	-019	-013	-017	-011	-004	-013	-105	-077	-102	-112	-070
Q	24	-079	-038	-011	-043	-033	-085	-122	-054	-011	-011	-013	-010	-014	-017	-027	-059	-026	-018	-047	-053	-019	-009	-011	-010	-034
Q	25	-009	-013	-005	-007	-009	-018	-052	-044	-029	-098	-115	-169	-272	-107	-030	-010	-012	-011	-003	-004	-002	-001	-004	-008	-043
	26	-137	-083	-006	-006	-003	-005	-006	-049	-140	-117	-059	-035	-041	-059	-070	-115	-224	-232	-039	-017	-010	-029	-037	-045	-065
	27	-006	-038	-232	-204	-128	-089	-071	-040	-018	-014	-010	-009	-011	-021	-021	-035	-036	-015	-010	-010	-010	-011	-010	-011	-044
	28	-049	-024	-012	-015	-003	-002	-004	-005	-012	-082	-076	-005	-011	-011	-016	-024	-016	-014	-140	-383	-374	-271	-290	-185	-084
	29	-216	-279	-298	-289	-331	-196	-321	-530	-190	-042	-039	-025	-027	-025	-037	-014	-090	-083	-091	-100	-024	-077	-293	-320	-164
	30	-230	-201	-151	-081	-040	-068	-275	-114	-028	-025	-151	-135	-246	-246	-129	-040	-045	-016	-024	-142	-172	-442	-122	-093	-134
	31	-229	-284	-304	-424	-366	-086	-223	-660	-527	-222	-173	-108	-031	-035	-025	-079	-278	-588	-474	-334	-049	-018	-024	-074	-234
	MEAN	-117	-121	-127	-124	-133	-104	-112	-158	-158	-129	-138	-151	-128	-133	-120	-118	-116	-160	-172	-159	-113	-154	-139	-132	-134
5Q	MEAN	-033	-034	-035	-030	-039	-043	-044	-028	-017	-034	-039	-066	-079	-034	-018	-023	-017	-015	-029	-025	-020	-034	-026	-014	-032
5D	MEAN	-207	-270	-265	-304	-422	-384	-313	-371	-450	-351	-425	-477	-320	-332	-303	-342	-309	-456	-482	-471	-307	-472	-349	-324	-362

NOVEMBER 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-037	-008	-015	-032	-107	-093	-129	-138	-092	-241	-094	-094	-202	-055	-089	-134	-197	-108	-042	-037	-045	-066	-393	-304	-115
D	02	-066	-047	-133	-168	-195	-163	-145	-131	-088	-125	-172	-285	-485	-287	-355	-499	-333	-358	-397	-733	-622	-321	-245	-670	-293
D	03	-422	-554	-465	-246	-626	-670	-674	-408	-610	-1314	-1070	-787	-746	-674	-459	-805	-845	-859	-857	-964	-655	-623	-531	-351	-676
D	04	-262	-780	-667	-583	-443	-240	-319	-244	-450	-331	-890	-391	-845	-733	-517	-441	-443	-468	-232	-117	-281	-119	-025	-060	-412
	05	-072	-302	-182	-092	-080	-152	-191	-088	-048	-095	-710	-352	-168	-127	-101	-380	-446	-547	-226	-278	-488	-197	-092	-275	-237
	06	-330	-368	-284	-270	-178	-109	-067	-044	-014	-062	-264	-262	-507	-292	-064	-354	-241	-039	-009	-011	-010	-018	-011	-011	-159
	07	-010	-075	-134	-135	-090	-156	-032	-014	-013	-018	-035	-314	-302	-183	-196	-170	-253	-487	-076	-019	-021	-037	-038	-026	-118
	08	-030	-043	-040	-121	-069	-040	-054	-113	-229	-094	-198	-140	-105	-098	-093	-161	-062	-035	-032	-046	-180	-151	-103	-060	-096
	09	-048	-043	-150	-249	-110	-009	-025	-178	-680	-310	-194	-152	-529	-573	-691	-739	-628	-692	-634	-788	-259	-128	-157	-157	-338
	10	-175	-263	-137	-090	-087	-115	-098	-098	-206	-174	-125	-135	-139	-070	-068	-082	-068	-076	-265	-266	-132	-170	-519	-518	-170
	11	-198	-065	-096	-090	-091	-060	-071	-048	-066	-061	-090	-052	-041	-101	-046	-034	-115	-383	-259	-104	-139	-172	-131	-238	-115
	12	-299	-448	-152	-006	-099	-101	-067	-100	-036	-013	-015	-020	-079	-122	-097	-126	-185	-062	-020	-113	-049	-046	-016	-018	-095
Q	13	-016	-010	-006	-006	-016	-032	-012	-006	-011	-003	-003	-003	-004	-006	-012	-017	-062	-032	-019	-011	-007	-003	-002	-004	-013
Q	14	-011	-008	-005	-005	001	000	-002	-005	-010	-002	-003	-011	-015	-020	-021	-031	-069	-094	-088	-067	-024	-019	-030	-033	-024
Q	15	-032	-027	-024	-023	-016	-019	-014	000	-005	-005	-004	-004	-007	-011	-044	-129	-102	-112	-086	-044	-027	-020	-031	-181	-040
Q	16	-160	-014	-048	-168	-095	-018	-035	-134	-041	-038	-090	-069	-109	-039	-011	-024	-021	-012	-008	-009	-011	000	001	004	-048
	17	003	-001	-047	-006	005	002	007	001	-022	-103	-075	-103	-482	-451	-636	-817	-554	-623	-437	-448	-458	-357	-200	-177	-249
	18	-111	-091	-080	-064	-052	-066	-056	-153	-033	-015	-009	-009	-013	-011	-016	-026	-028	-029	-044	-022	-012	-009	-003	-002	-040
	19	000	-014	-075	-074	003	-013	-074	-309	-096	003	000	-003	-020	-018	-094	-076	-032	-012	-037	-168	-094	-078	-027	-015	-055
	20	-035	-076	-037	-026	000	-003	-003	-012	-023	-125	-040	-027	-005	-008	-010	-051	-232	-374	-110	-031	-049	-233	-176	-076	-073
	21	-066	-474	-373	-234	-188	-238	-417	-160	-164	-393	-161	-143	-115	-036	-015	-038	-047	-085	-056	-130	-305	-131	-070	-022	-169
D	22	-005	001	002	-059	-035	-052	-408	-398	-308	-1175	-936	-501	-638	-259	-386	-667	-812	-1063	-705	-631	-234	-097	-100	-121	-399
	23	-203	-049	-015	-012	-007	-004	-013	-003	-018	-009	-007	-011	-008	-010	-017	-018	-020	-016	-016	-010	-011	-010	-009	-005	-021
	24	-002	000	-004	-001	000	-003	000	-002	-002	-003	-011	-028	-034	-032	-116	-326	-275	-424	-440	-217	-224	-077	-091	-096	-100
	25	-219	-268	-108	-107	-083	-288	-279	-159	-167	-182	-153	-407	-306	-255	-156	-103	-163	-155	-063	-049	-186	-109	-024	-001	-166
	26	-001	000	-025	-006	-086	-123	-140	-163	-457	-271	-503	-523	-258	-057	-046	-022	-006	-008	-012	-008	-001	-004	-005	-024	-115
Q	27	-113	-020	-012	-025	-027	-003	-109	-094	-081	-077	-193	-128	-045	-058	-120	-113	-052	-109	-027	-001	-009	-005	-007	-057	-062
	28	-059	-058	-043	-029	-013	-079	-133	-328	-104	-113	-151	-077	-122	-262	-374	-167	-068	-061	-073	-043	-023	-014	-002	-007	-100
	29	-012	-011	-084	-006	005	-006	-131	-533	-094	-102	-669	-650	-376	-257	-260	-420	-490	-460	-468	-408	-621	-253	-239	-136	-278
D	30	-098	-251	-719	-248	-057	-216	-295	-065	-127	-391	-079	-233	-696	-959	-281	-549	-418	-485	-483	-875	-538	-506	-275	-383	-384
	MEAN	-103	-146	-139	-106	-095	-102	-133	-138	-143	-195	-231	-197	-247	-202	-180	-251	-242	-276	-207	-222	-191	-132	-118	-134	-172
5Q	MEAN	-066	-016	-019	-045	-031	-014	-034	-048	-030	-025	-059	-043	-036	-027	-042	-063	-061	-072	-046	-026	-016	-009	-014	-054	-037
5D	MEAN	-171	-326	-396	-261	-271	-268	-368	-249	-317	-667	-629	-439	-682	-582	-400	-592	-570	-647	-535	-664	-466	-333	-235	-317	-432

DECEMBER 1975 AL INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
D	01	-168	-323	-550	-227	-164	-343	-586	-269	-229	-571	-798	-643	-630	-619	-525	-455	-232	-794	-417	-371	-311	-109	-476	-261	-420
D	02	-138	-194	-364	-186	-100	-029	-041	-111	-431	-512	-549	-318	-283	-372	-376	-358	-471	-175	-276	-531	-133	-386	-402	-419	-298
	03	-186	-043	-013	-017	-016	-019	-044	-091	-124	-189	-339	-131	-090	-175	-444	-272	-165	-044	-058	-058	-071	-097	-192	-141	-126
	04	-188	-128	-050	-093	-224	-159	-072	-119	-196	-198	-322	-281	-268	-692	-460	-308	-208	-295	-071	-045	-041	-030	-048	-040	-189
	05	-062	-063	-108	-099	-042	-007	-014	-063	-212	-119	-085	-153	-377	-066	-037	-148	-222	-264	-119	-075	-352	-133	-033	-016	-120
	06	-012	-025	-052	-129	-080	-096	-080	-078	-085	-116	-190	-098	-139	-343	-098	-075	-163	-297	-308	-184	-081	-039	-024	-137	-122
Q	07	-036	-031	-036	-032	-061	-069	-065	-064	-048	-032	-015	-011	-012	-009	-017	-174	-179	-104	-052	-040	-097	-039	-031	-026	-053
D	08	-044	-042	-060	-193	-357	-144	-120	-144	-131	-091	-093	-137	-143	-083	-052	-124	-353	-525	-220	-387	-323	-265	-494	-614	-214
	09	-358	-223	-187	-067	-016	-017	-024	-017	-020	-039	-112	-560	-476	-594	-356	-344	-163	-017	-020	-017	-016	-016	-017	-010	-154
	10	-012	-013	-015	-020	-029	-031	-020	-013	-020	-072	-169	-336	-341	-345	-510	-217	-031	-024	-025	-017	-011	-018	-021	-032	-098
	11	-015	-011	-011	-010	-039	-110	-146	-083	-058	-034	-031	-037	-027	-025	-088	-042	-031	-072	-033	-113	-119	-035	-030	-029	-051
Q	12	-012	-002	-008	-007	-005	-007	-008	-011	-013	-047	-038	-017	-017	-039	-022	-016	-042	-045	-011	-007	-006	-003	-006	-003	-016
Q	13	-004	-009	-005	-005	-012	-017	-004	-001	-007	-023	-023	-007	-014	-013	-013	-030	-040	-104	-093	-037	-016	-024	-019	-022	-023
	14	-015	-003	-004	-001	-004	-003	-023	003	-003	-013	-002	-011	-032	-053	-042	-064	-148	-095	-023	-034	-092	-157	-037	-002	-036
	15	-016	-114	-276	-011	-005	-005	-012	-047	-085	-036	-006	-024	-048	-039	-230	-170	-091	-112	-070	-034	-055	-118	-053	-061	-072
	16	-076	-052	-224	-177	-075	-034	-062	-067	-113	-109	-022	-068	-070	-104	-113	-149	-100	-132	-048	-062	-065	-180	-028	-059	-091
	17	-099	-037	-029	-220	-072	-040	-002	-001	-021	-046	-045	-055	-040	-070	-082	-241	-184	-067	-116	-139	-096	-112	-060	-025	-079
	18	-002	-029	-096	-036	-003	-002	-001	-005	-010	-013	-009	-052	-061	-081	-270	-081	-090	-092	-026	-020	-077	-152	-043	-006	-052
	19	-001	-006	-017	-038	-068	000	-007	-004	-005	-026	-018	-034	-058	-087	-132	-259	-022	-009	-007	-103	-081	-031	-007	-004	-043
Q	20	-003	-005	-023	-078	-018	-009	-003	-012	-011	-015	-011	-006	-008	-007	-009	-011	-038	-016	-012	-006	-003	-005	-006	-010	-014
	21	-004	-005	-004	-002	-004	-008	-010	-003	-013	-051	-140	-290	-035	-056	-325	-235	-022	-040	-121	-110	-063	-057	-055	-052	-071
	22	-089	-217	-058	-010	-050	-052	-194	-079	-031	-041	-023	-030	-079	-250	-292	-171	-162	-121	-032	-027	-159	-135	-039	-031	-099
	23	-048	-052	-084	-074	-059	-010	-013	-048	-110	-124	-101	-076	-080	-209	-082	-003	-011	-010	-017	-064	-079	-097	-019	-007	-062
Q	24	-002	-003	-004	-048	-084	-004	-002	-008	-007	-005	-002	-003	-006	-007	-003	-005	-011	-016	-012	-017	-164	-106	-052	-040	-025
	25	-066	-134	-046	-144	-145	-210	-123	-110	-048	-027	-048	-165	-340	-356	-599	-392	-223	-105	-140	-103	-083	-196	-241	-322	-182
D	26	-391	-147	-285	-164	-157	-177	-142	-207	-431	-454	-465	-570	-383	-317	-833	-589	-469	-410	-195	-096	-494	-184	-084	-177	-326
D	27	-100	-112	-028	-081	-194	-269	-283	-360	-181	-022	-126	-047	-019	-030	-220	-914	-962	-636	-510	-609	-540	-362	-353	-270	-301
	28	-422	-205	-072	-100	-152	-142	-048	-016	-043	-020	-019	-035	-024	-021	-027	-030	-075	-272	-101	-045	-055	-066	-337	-102	-101
	29	-203	-142	-040	-075	-102	-265	-244	-175	-219	-191	-204	-084	-356	-282	-077	-064	-319	-148	-281	-461	-128	-121	-035	-052	-178
	30	-112	-188	-080	-159	-213	-140	-062	-083	-137	-219	-218	-235	-386	-278	-085	-049	-054	-085	-041	-096	-187	-064	-046	-098	-138
	31	-026	-023	-084	-130	-014	-012	-037	-093	-027	-020	-026	-090	-099	-122	-077	-049	-088	-043	-033	-034	-024	-023	-027	-024	-051
	MEAN	-094	-083	-094	-085	-083	-078	-080	-077	-099	-112	-137	-149	-159	-185	-210	-195	-173	-167	-113	-127	-130	-108	-107	-100	-123
5Q	MEAN	-011	-010	-015	-034	-036	-021	-016	-019	-017	-024	-018	-009	-011	-015	-013	-047	-062	-057	-036	-021	-057	-035	-023	-020	-026
5D	MEAN	-168	-164	-257	-170	-194	-192	-234	-218	-281	-330	-406	-343	-292	-284	-401	-488	-497	-508	-324	-399	-360	-261	-362	-348	-311

5. TABLES OF HOURLY AVERAGE AU INDICES

JULY 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	119	086	102	097	095	099	112	093	161	297	085	041	024	055	068	099	087	066	078	066	040	033	113	145	094
	02	096	080	082	078	094	074	040	025	032	021	025	041	078	097	099	081	047	050	072	094	069	127	105	068	070
	03	100	110	096	107	078	059	051	119	117	067	117	103	106	045	035	043	052	088	125	114	096	106	088	078	088
	04	076	086	060	035	023	017	017	021	034	060	073	092	067	065	049	044	055	049	053	095	190	206	128	080	070
Q	05	043	023	021	019	026	049	138	109	061	031	036	037	031	027	026	026	036	045	052	045	053	074	052	031	045
	06	027	020	016	025	029	036	029	028	030	038	039	051	093	061	049	044	030	047	051	084	100	099	068	102	050
	07	178	184	088	061	113	032	062	041	044	044	118	150	150	156	085	082	153	204	208	239	302	329	302	249	152
D	08	219	206	221	216	298	389	367	264	257	226	306	185	267	209	361	419	378	332	260	076	047	044	026	033	234
D	09	078	096	128	141	281	266	174	073	208	381	382	091	149	156	284	149	147	156	247	203	133	089	061	042	171
	10	050	069	040	055	144	116	110	142	179	117	054	066	134	181	194	113	201	240	149	118	125	110	137	114	123
D	11	138	092	097	078	105	180	244	286	056	118	122	157	186	113	065	047	068	101	077	083	050	044	032	037	107
Q	12	043	053	045	048	050	075	126	100	046	037	021	020	027	046	047	068	096	100	092	078	092	059	036	031	060
	13	031	034	054	055	075	097	060	030	029	041	116	119	116	184	068	122	127	094	054	085	168	152	228	151	095
	14	126	070	093	075	076	052	131	096	061	093	107	099	060	048	101	091	066	063	083	074	166	250	228	197	104
	15	156	101	114	068	048	089	105	148	085	077	191	210	237	114	059	059	119	255	191	074	079	084	083	088	118
	16	093	113	115	116	058	082	116	101	108	157	202	159	110	065	043	079	050	081	106	105	111	128	093	054	102
	17	056	078	107	082	097	068	158	189	173	135	129	221	166	079	083	066	080	200	099	092	167	141	141	216	126
	18	111	076	045	048	051	136	104	113	122	253	162	182	154	119	135	167	202	199	129	167	113	131	089	091	129
	19	097	148	128	164	116	102	093	076	041	053	114	100	121	118	071	061	142	150	197	238	138	113	139	144	119
	20	132	107	077	044	042	062	083	101	128	129	113	088	035	030	024	043	055	056	054	066	066	074	095	048	073
	21	036	032	024	034	027	056	059	073	094	123	161	096	173	164	098	055	047	059	060	094	170	140	123	102	088
	22	060	057	052	045	053	112	123	097	042	051	062	057	059	056	062	053	078	083	075	082	062	081	064	058	068
	23	082	089	094	100	124	149	130	051	040	032	040	043	033	050	055	042	047	054	084	064	060	055	084	145	073
	24	203	130	041	025	021	044	100	120	183	163	134	139	101	086	045	029	044	071	077	083	050	033	052	053	084
D	25	039	072	087	127	241	294	375	354	375	178	086	078	140	330	323	285	229	123	185	154	109	133	209	070	192
D	26	120	135	064	142	127	081	078	114	156	124	071	056	058	117	157	141	067	054	061	127	159	144	105	102	107
	27	094	093	137	137	060	095	042	101	071	072	086	075	069	090	066	057	053	091	102	126	156	149	160	120	096
	28	148	151	144	155	130	060	073	074	111	089	081	073	114	079	051	076	079	101	085	102	119	066	075	054	095
Q	29	039	049	056	057	052	052	035	062	055	053	054	079	077	071	036	020	025	032	044	051	054	064	092	095	054
Q	30	112	094	115	114	100	079	087	101	060	097	106	126	088	065	041	043	024	033	039	037	050	074	065	059	075
Q	31	068	090	063	075	033	027	017	013	015	027	022	018	019	037	041	058	048	035	043	038	045	070	110	122	047
	MEAN	096	091	084	085	092	101	111	107	102	109	110	098	105	100	094	089	095	107	107	102	108	110	109	096	100
5Q	MEAN	061	062	060	063	052	056	081	077	047	049	048	056	048	049	038	043	046	049	054	050	059	068	071	068	056
5D	MEAN	119	120	119	141	210	242	248	218	210	205	193	113	160	185	238	208	178	153	166	129	100	091	087	057	162

AUGUST 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	059	116	111	178	249	185	129	095	069	060	062	047	040	031	024	029	037	037	036	040	033	036	033	027	073
	02	029	030	043	038	052	073	111	065	079	072	046	061	049	044	043	052	054	063	087	091	065	053	058	102	061
Q	03	088	081	047	051	056	063	059	101	084	036	030	082	081	123	051	047	051	062	069	125	094	074	046	044	069
	04	068	102	117	141	144	102	053	047	073	070	050	074	046	046	034	072	053	076	087	077	102	067	054	050	075
D	05	115	149	115	234	110	222	238	137	269	233	287	313	239	146	213	327	300	210	283	231	151	104	074	085	199
	06	130	094	096	081	111	153	136	138	137	116	071	048	036	030	024	020	021	036	053	055	052	046	045	038	074
	07	031	019	016	020	021	017	021	022	021	023	033	048	065	068	104	094	041	097	124	182	172	121	153	202	071
	08	237	224	178	202	235	225	239	220	181	159	077	044	023	024	031	054	054	065	111	090	081	110	112	108	129
	09	114	091	068	080	103	140	125	134	132	129	067	054	039	035	064	072	085	311	334	319	263	298	183	155	141
	10	135	106	077	249	257	171	190	202	284	203	325	128	068	085	114	084	069	074	078	039	043	038	052	046	130
	11	048	031	030	040	064	079	152	078	046	106	154	188	202	130	062	041	043	045	064	076	084	074	080	083	083
Q	12	093	053	062	079	112	069	040	042	075	077	058	067	062	055	028	041	045	040	044	050	066	064	052	074	060
Q	13	051	035	050	040	035	034	051	084	184	173	302	320	177	108	064	033	043	055	047	044	042	038	047	082	089
D	14	072	206	162	212	200	229	264	221	196	116	098	162	072	057	033	047	054	057	062	094	108	076	067	131	125
D	15	155	067	101	086	096	177	129	121	178	212	252	273	236	280	166	212	122	239	236	264	253	070	058	047	168
	16	046	040	026	030	027	021	017	023	031	035	047	105	081	049	047	042	030	032	063	056	035	037	036	032	041
	17	014	017	049	131	158	161	097	146	194	112	203	201	129	078	033	052	048	044	056	084	106	081	052	033	095
	18	028	028	044	046	044	037	076	048	054	131	151	068	062	048	037	029	045	044	050	082	061	053	093	104	061
Q	19	091	047	036	037	031	034	030	035	023	018	040	047	065	028	050	032	028	056	090	112	069	044	035	028	046
	20	025	025	026	027	029	034	039	042	044	043	106	150	199	178	326	277	081	098	138	173	162	135	231	176	115
D	21	158	092	063	149	152	122	109	057	050	053	047	037	029	029	048	061	098	198	137	145	195	207	173	072	103
	22	114	162	117	092	171	107	113	064	092	098	050	045	056	038	049	047	041	035	054	054	073	068	124	147	084
	23	155	121	100	116	084	051	039	048	061	069	125	135	084	031	020	041	057	063	064	049	055	063	069	046	073
	24	028	025	032	036	067	055	032	022	019	023	015	050	106	072	033	033	043	074	104	081	081	100	110	091	056
	25	065	054	091	074	071	083	093	116	107	079	115	069	065	040	062	089	066	037	035	061	116	152	163	159	086
Q	26	119	101	056	032	055	050	041	039	039	030	046	053	039	045	030	021	026	049	073	081	040	045	059	113	053
	27	148	170	174	181	151	095	058	042	050	058	053	039	030	023	015	016	020	019	018	026	036	052	060	045	066
	28	046	039	049	057	054	045	028	034	054	068	061	047	040	029	026	011	019	051	078	132	134	147	144	196	066
D	29	183	175	150	175	294	242	204	256	192	331	229	272	170	115	077	090	119	246	146	081	055	124	189	166	178
	30	148	133	176	159	199	122	114	092	112	124	093	077	043	029	057	059	065	064	046	044	049	069	058	052	091
	31	049	052	058	053	045	027	049	073	066	098	141	119	056	030	027	033	036	033	048	106	126	064	042	030	061
	MEAN	092	087	081	101	112	104	099	092	103	102	111	110	087	069	064	070	061	084	094	101	097	087	089	089	091
5Q	MEAN	088	063	050	048	058	050	044	060	081	067	095	114	085	072	045	035	039	052	065	082	062	053	048	068	063
5D	MEAN	137	138	118	171	170	198	189	158	177	189	183	211	149	125	107	147	139	190	173	163	152	116	112	100	154

SEPTEMBER 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	017	015	013	027	056	068	069	064	054	066	076	098	092	093	059	050	064	181	125	095	094	094	092	159	076
	02	125	091	077	047	023	017	031	072	092	088	041	015	018	017	019	033	030	065	074	100	116	125	148	106	065
Q	03	112	078	033	021	016	011	024	030	026	026	044	052	041	020	009	011	035	027	030	042	032	028	026	025	033
Q	04	019	022	027	028	031	031	053	043	112	047	022	008	011	012	006	008	010	006	010	024	025	034	032	029	027
	05	016	009	022	030	024	043	029	034	034	068	031	017	015	025	053	039	023	030	038	057	042	038	072	096	037
	06	130	078	082	070	046	039	115	147	129	114	088	170	208	207	318	340	198	062	030	035	068	094	175	171	130
	07	077	047	045	039	044	030	028	034	060	098	094	054	044	033	021	020	024	019	022	028	041	033	052	081	045
	08	128	141	091	069	029	022	012	033	048	126	153	081	087	044	033	040	057	062	060	071	084	093	097	127	075
D	09	091	113	132	126	098	136	075	139	177	181	263	187	127	203	369	192	132	180	246	137	160	097	112	128	158
D	10	160	164	160	283	196	091	197	053	036	123	122	115	116	162	188	234	144	107	081	055	074	145	106	148	136
D	11	166	115	077	112	180	101	097	076	086	080	109	195	153	095	066	169	169	205	199	181	185	148	091	116	132
D	12	119	116	170	114	121	105	055	076	129	120	126	151	141	104	113	069	053	058	049	061	095	095	107	099	102
D	13	082	104	134	125	115	101	066	073	075	102	158	095	052	027	030	037	042	054	058	057	095	111	124	118	085
	14	107	104	141	110	082	177	104	135	114	078	056	106	084	108	052	027	034	034	028	031	023	025	019	023	075
	15	021	031	030	029	028	027	052	088	062	057	017	024	032	012	011	014	038	067	064	075	103	112	078	041	046
	16	027	033	066	086	052	043	047	034	027	046	061	099	069	022	031	017	021	034	019	025	020	031	051	040	042
	17	033	042	034	038	065	114	128	038	032	022	019	013	012	016	049	063	052	100	248	112	136	094	086	116	069
	18	128	151	106	067	042	038	051	058	048	036	042	066	105	063	042	129	057	127	168	076	066	073	051	051	077
	19	048	050	049	045	040	052	081	068	079	068	088	045	044	073	059	030	016	025	027	023	032	045	028	034	048
	20	019	016	015	026	024	019	035	043	029	024	033	031	036	022	021	029	065	074	061	049	091	076	077	052	040
	21	027	054	042	064	028	020	026	022	023	032	027	023	013	017	016	017	037	047	063	064	053	057	033	026	035
	22	025	023	044	030	026	027	024	031	023	029	015	018	015	014	021	026	048	026	017	033	027	031	040	037	027
	23	039	058	053	029	023	022	015	012	030	029	034	026	009	011	011	013	018	021	020	018	019	024	024	028	024
Q	24	022	015	014	016	028	024	020	028	023	023	032	026	033	027	019	011	010	017	023	022	023	035	046	039	024
Q	25	025	020	030	038	028	018	018	015	018	020	024	015	029	025	023	019	027	024	024	026	026	020	024	028	024
	26	029	026	035	035	035	022	050	073	075	054	037	082	183	135	240	315	239	128	057	072	135	220	216	131	109
	27	084	083	057	077	121	138	141	146	173	126	150	157	098	109	137	211	208	193	228	112	066	063	040	042	123
	28	037	039	037	033	028	040	041	040	041	060	058	074	046	029	028	057	081	033	022	023	019	017	051	059	041
	29	043	032	018	030	014	024	039	040	021	043	046	056	038	021	005	005	010	015	025	026	027	021	014	015	026
Q	30	014	013	014	013	014	017	019	027	025	046	022	027	032	037	028	009	011	008	013	019	022	021	029	021	021
	MEAN	066	063	062	062	055	054	058	059	063	068	070	071	066	059	069	074	065	068	071	058	067	070	071	073	065
5Q	MEAN	038	030	024	023	023	020	027	029	041	032	029	026	029	024	017	012	019	016	020	027	026	028	031	028	025
5D	MEAN	124	122	135	152	142	107	098	083	101	121	156	149	118	118	153	140	108	121	127	098	122	119	108	122	122

OCTOBER 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	019	029	050	086	072	052	031	014	048	061	049	024	011	004	009	027	028	027	012	016	020	022	036	043	033
Q	02	040	035	037	043	022	015	014	014	011	011	010	010	008	008	006	006	011	012	014	014	020	030	018	018	018
	03	020	018	017	018	016	016	019	022	021	026	041	075	165	119	060	027	030	031	051	116	163	139	122	108	060
	04	141	183	138	076	037	047	034	050	065	048	045	039	031	019	007	005	018	019	035	020	045	064	049	046	053
	05	020	026	026	036	047	044	071	058	088	071	043	045	081	143	033	015	022	018	021	014	012	012	024	018	041
D	06	026	022	018	027	079	155	195	160	297	464	320	147	068	086	099	143	132	247	182	224	194	101	071	067	147
D	07	070	109	153	194	209	129	136	249	256	221	147	147	089	125	142	117	157	210	230	188	147	181	096	096	158
D	08	116	125	101	132	215	160	125	131	253	189	194	250	145	164	146	180	107	177	145	188	208	096	173	131	160
D	09	124	107	111	106	108	133	170	193	179	088	128	188	089	043	059	066	093	091	132	089	073	120	149	123	115
D	10	119	078	075	086	101	160	194	132	078	048	025	041	074	075	058	079	096	115	171	129	129	119	140	106	101
	11	112	102	082	034	021	025	016	023	017	012	010	020	022	050	030	018	029	058	109	113	130	119	099	075	055
	12	080	056	092	081	065	046	061	101	124	103	148	071	045	028	063	142	148	164	217	101	074	052	041	038	089
	13	042	036	025	019	008	017	042	018	025	018	059	054	025	054	072	058	028	027	019	022	047	050	051	044	036
	14	072	044	018	011	010	010	053	105	121	164	189	258	225	095	085	053	048	113	093	071	062	099	078	098	091
Q	15	028	014	023	027	027	043	060	066	045	056	050	040	037	012	001	004	011	012	016	020	018	020	030	029	029
	16	025	041	088	062	042	020	025	031	028	045	042	093	036	043	057	049	030	047	165	053	055	076	079	091	055
	17	150	101	076	048	021	024	020	018	049	066	089	160	048	067	036	052	059	044	052	023	015	014	013	015	053
	18	009	006	005	014	020	011	012	017	011	015	018	024	067	121	079	047	039	045	037	028	020	015	013	017	029
Q	19	014	011	010	008	011	013	016	015	016	011	009	010	011	007	008	010	015	018	021	024	029	062	079	060	020
	20	044	038	072	050	047	038	034	050	038	034	020	026	031	018	022	041	020	025	025	014	015	032	050	063	035
	21	061	087	089	063	058	040	023	031	051	049	030	021	017	020	010	006	012	013	009	018	023	034	047	037	035
	22	032	032	024	023	021	031	045	033	104	061	040	059	028	034	056	030	025	029	026	032	068	061	041	036	040
	23	031	042	052	082	080	040	043	064	056	086	087	067	058	041	019	014	012	014	020	021	037	056	069	061	048
Q	24	097	108	036	024	028	087	099	102	035	016	013	017	012	006	024	027	017	013	010	014	014	013	013	016	035
Q	25	016	021	017	015	015	015	024	039	041	052	056	072	110	032	032	022	011	013	010	012	016	017	017	020	029
	26	027	029	023	019	020	018	024	052	054	053	045	059	036	100	057	053	089	116	040	027	023	042	053	041	046
	27	033	030	035	117	159	152	069	065	041	019	023	011	008	008	008	013	015	015	020	016	015	015	017	022	039
	28	037	046	044	058	040	025	019	016	034	056	032	028	028	019	014	017	020	031	050	131	158	192	226	168	062
	29	120	103	082	160	238	153	105	141	091	044	017	008	006	011	007	008	018	018	014	035	022	052	068	070	066
	30	073	090	051	033	022	064	070	074	033	036	048	028	040	097	071	036	028	013	026	027	056	088	097	088	054
	31	129	136	100	153	212	132	121	200	269	184	152	092	047	031	015	056	111	133	129	072	059	031	026	024	109
	MEAN	062	061	057	061	067	062	064	074	083	078	070	070	055	054	045	046	048	062	068	060	063	065	067	060	063
5Q	MEAN	039	038	025	023	021	035	043	047	030	029	028	030	036	013	014	014	013	014	014	017	019	028	031	029	026
5D	MEAN	091	088	092	109	142	147	164	173	213	202	163	155	093	099	101	117	117	168	172	164	150	123	126	105	136

NOVEMBER 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	022	017	017	019	014	017	037	036	051	081	052	048	053	030	036	021	027	024	028	029	037	062	083	069	038
D	02	048	067	044	051	099	148	142	129	151	174	129	155	148	192	192	240	229	217	169	110	301	231	190	095	152
D	03	152	125	262	149	177	171	276	279	257	119	179	226	191	294	165	174	187	105	165	203	153	086	109	052	177
D	04	162	167	170	171	201	155	218	168	203	171	187	126	177	163	152	085	109	144	073	064	065	051	048	061	137
	05	053	062	055	077	068	077	089	067	077	099	125	168	069	094	049	109	138	151	091	087	085	078	075	066	088
	06	069	092	084	128	089	056	058	032	033	044	073	066	132	144	038	064	032	034	023	015	013	022	014	012	057
	07	018	030	028	025	036	047	016	014	022	029	035	084	074	067	056	045	053	119	050	038	023	023	020	014	040
	08	029	031	021	019	025	022	026	036	043	051	050	050	031	032	035	026	026	015	015	020	041	042	050	036	032
	09	025	034	088	093	127	047	061	106	140	150	153	132	168	258	297	143	071	057	220	202	085	061	024	000	114
	10	007	012	019	012	010	011	008	013	009	021	012	021	018	011	025	026	035	043	123	125	097	094	108	113	041
	11	143	117	063	064	071	048	063	049	069	060	062	052	052	069	040	036	035	077	065	059	063	054	047	055	063
	12	067	077	092	057	081	084	080	037	035	038	022	029	027	032	029	024	045	025	022	037	022	031	019	035	044
Q	13	023	025	030	057	067	078	068	032	038	025	021	014	010	010	007	010	036	024	021	020	015	010	011	013	028
Q	14	016	013	012	018	026	027	018	018	034	013	009	013	009	007	007	016	012	016	018	017	018	015	015	029	017
Q	15	041	017	016	011	025	031	016	020	030	021	016	014	012	008	011	031	024	012	010	014	019	017	026	043	020
Q	16	047	050	055	074	090	060	098	048	145	085	066	060	033	029	017	022	027	018	014	015	023	021	018	022	047
	17	017	020	028	020	020	022	027	036	061	106	113	174	068	052	159	125	114	131	164	194	153	134	113	123	091
	18	073	054	033	026	025	026	033	028	025	040	028	026	023	025	026	023	023	019	024	025	022	025	027	031	030
	19	040	038	059	112	113	068	116	077	083	066	035	028	026	027	050	056	045	035	041	069	100	056	069	049	061
	20	039	055	051	045	054	042	037	063	040	046	034	031	034	036	036	032	046	083	056	063	112	158	146	208	064
	21	197	147	234	129	203	168	148	245	163	177	100	052	038	048	034	031	029	029	050	073	054	057	037	066	105
D	22	043	054	052	078	071	109	146	169	237	306	134	094	270	167	187	043	038	-062	-042	-020	151	072	074	046	101
	23	131	082	071	076	062	042	058	044	039	036	031	026	030	029	028	027	028	030	023	020	020	020	023	030	042
	24	036	035	035	033	031	032	030	029	028	029	031	035	040	050	063	174	143	160	150	111	134	057	049	056	065
	25	069	062	063	052	067	085	068	096	094	093	058	054	071	084	054	043	046	045	039	040	051	050	041	035	061
	26	034	035	036	034	031	062	062	085	156	123	233	220	175	068	062	043	040	038	036	035	032	030	033	038	073
Q	27	027	030	033	032	030	029	031	034	063	060	042	060	040	023	046	050	036	038	042	043	043	040	040	034	039
	28	032	035	035	039	045	039	054	120	087	108	146	103	083	056	055	059	056	050	050	040	035	038	039	038	060
	29	037	038	045	039	046	066	098	146	132	089	123	156	196	135	139	124	138	249	264	169	234	139	107	068	124
D	30	037	120	107	088	084	132	190	117	126	119	076	091	099	177	138	175	131	147	145	106	125	132	136	121	122
	MEAN	058	058	065	061	070	067	079	079	089	086	079	080	080	081	074	069	067	069	072	067	078	064	060	055	071
5Q	MEAN	031	027	029	038	048	045	046	030	062	041	031	032	021	015	018	026	027	022	021	022	024	021	022	028	030
5D	MEAN	088	107	127	107	126	143	194	172	195	178	141	138	177	199	167	143	139	110	102	093	159	114	111	075	137

DECEMBER 1975 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
D	01	109	130	169	046	071	134	166	119	106	118	166	126	111	170	170	170	082	136	057	109	115	085	117	134	122
D	02	096	115	106	160	088	057	072	073	141	191	222	122	089	095	080	042	049	039	064	073	069	128	155	130	102
	03	143	074	040	054	048	045	033	056	047	065	049	049	032	024	037	030	028	032	028	035	037	042	056	074	048
	04	074	062	040	063	094	065	051	069	071	069	074	062	062	040	085	109	070	039	028	022	017	017	021	032	056
	05	034	064	057	036	027	021	035	045	042	048	035	047	074	049	041	024	014	038	013	032	042	056	026	023	038
	06	030	017	021	026	027	030	053	066	060	096	070	043	067	107	054	033	039	093	149	200	062	035	033	031	060
Q	07	037	025	020	024	036	031	044	045	021	018	015	018	016	015	013	016	018	009	010	012	017	016	023	029	022
D	08	022	024	036	048	156	232	145	142	169	158	102	079	160	119	044	053	162	276	142	203	121	126	104	013	118
	09	164	168	153	120	103	049	013	015	022	028	061	048	106	140	128	114	047	056	032	012	013	029	019	010	069
	10	009	014	016	012	012	015	012	017	021	033	049	108	109	065	115	061	032	027	017	011	006	019	021	027	035
	11	017	016	017	024	025	042	084	106	069	037	032	033	028	019	030	054	031	022	023	042	076	022	025	026	038
Q	12	035	030	024	028	026	022	020	020	019	022	015	019	023	014	013	017	037	038	012	011	007	006	007	010	020
Q	13	010	011	009	013	013	014	018	018	022	027	037	021	024	022	015	014	018	011	015	009	014	009	029	033	018
	14	029	025	025	033	040	041	058	062	046	047	029	022	041	031	022	029	020	033	048	050	046	123	150	054	046
	15	044	081	126	086	046	031	049	069	033	046	022	042	024	035	088	136	092	027	030	032	058	053	065	095	059
	16	098	105	072	137	128	083	084	077	070	095	078	058	081	055	045	063	055	065	050	069	059	052	041	069	075
	17	122	089	120	090	133	097	048	038	027	024	035	038	030	042	034	033	021	028	026	020	023	075	061	053	054
	18	040	044	060	109	053	030	027	023	035	036	020	047	025	035	033	029	022	026	019	015	020	010	010	025	033
	19	029	040	031	056	062	049	030	019	021	036	024	041	021	028	033	085	036	021	012	015	008	010	012	017	031
Q	20	017	022	025	031	040	034	037	046	053	029	031	020	017	020	013	010	024	019	012	008	010	011	012	018	023
	21	021	015	012	014	014	017	013	019	034	051	049	089	061	035	041	104	029	031	040	059	032	053	082	056	040
	22	085	105	127	082	082	083	122	114	058	059	037	033	072	112	078	121	063	047	021	043	084	037	059	032	073
	23	034	037	037	060	077	064	049	058	036	055	067	069	041	048	056	047	014	012	014	013	021	027	022	017	041
Q	24	012	014	011	015	010	019	013	013	012	010	010	009	012	013	013	012	012	015	010	012	051	063	125	116	025
	25	098	094	087	097	159	152	148	117	078	028	034	068	088	038	097	086	096	051	057	059	095	070	115	134	089
D	26	136	114	126	074	125	134	099	117	214	109	207	119	061	131	259	123	147	128	104	094	111	097	072	083	124
D	27	066	071	051	115	082	142	127	286	146	086	058	044	026	028	071	198	216	176	167	111	130	111	082	071	111
	28	122	116	068	071	068	085	086	071	046	044	028	045	025	020	019	020	017	060	037	066	039	034	033	054	053
	29	071	055	041	067	073	095	116	124	165	162	088	049	104	056	041	028	019	012	063	063	044	080	050	032	071
	30	056	058	094	064	092	082	049	042	040	103	067	078	084	068	046	023	031	023	029	032	051	043	036	025	055
	31	016	028	029	031	023	019	014	011	009	012	017	022	026	011	022	029	014	010	021	012	012	017	035	018	019
	MEAN	061	060	060	061	066	065	062	068	062	063	059	054	056	054	059	062	050	052	044	050	048	050	055	050	057
5Q	MEAN	022	020	018	022	025	024	026	028	025	021	022	017	018	017	013	014	022	018	012	010	020	021	039	041	021
5D	MEAN	086	091	098	089	104	140	122	147	155	132	151	098	089	109	125	117	131	151	107	118	109	109	106	086	115

6. TABLES OF HOURLY AVERAGE AO INDICES

JULY 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-007	004	-001	-104	-037	-028	-093	-076	-004	-051	-035	007	003	002	-022	-055	-077	020	038	033	015	009	013	-043	-020
	02	-037	008	-020	-075	-016	013	010	002	001	000	000	011	018	002	-044	-052	-034	015	013	-007	023	004	023	020	-005
	03	-001	-061	-023	018	-004	-056	003	000	-089	-051	007	004	-014	-044	010	011	014	-040	-003	020	024	022	002	033	-009
	04	019	008	-018	011	003	004	002	003	010	009	013	002	-034	-027	-006	-006	-014	-008	-012	007	-008	-037	-023	021	-003
Q	05	012	004	005	004	010	016	-069	-103	-033	003	009	005	001	006	004	004	006	010	017	018	019	008	006	004	-001
	06	006	003	000	005	010	017	011	009	006	010	002	009	000	-015	-041	001	009	020	022	021	019	003	-014	016	005
	07	-046	-091	017	011	021	-004	012	012	013	001	042	-019	-007	-032	-050	-034	-014	-056	-082	-062	-005	-008	027	007	-014
D	08	-026	-103	-137	-194	-049	010	-033	-035	-019	028	006	-319	-185	-067	007	-011	-018	-027	-024	033	022	015	005	000	-047
D	09	019	-019	-017	-001	-044	-054	013	009	-006	-293	-046	011	028	000	-095	-052	012	-010	003	-078	-008	-026	-042	004	-029
	10	014	004	008	013	004	-159	-045	-095	-107	-084	-004	005	002	-224	-160	-073	-073	-063	-011	010	-054	-014	-050	-083	-052
D	11	-039	-083	-072	-074	-029	-006	-108	-061	007	037	014	-016	-194	-045	-013	-021	-009	-018	-022	003	017	016	008	006	-029
Q	12	009	010	-002	004	-015	000	025	-046	-040	003	-002	-010	001	-010	-014	-032	-036	-010	021	011	-063	009	005	-002	-008
	13	000	003	013	002	-014	-006	003	004	002	004	000	005	007	-079	-049	-046	-041	-077	020	026	-081	-052	-100	-038	-021
	14	-038	-072	-045	-053	-005	-008	-026	-085	-004	026	016	-048	-041	-009	000	-020	-057	012	028	029	010	-088	-103	-040	-026
	15	-067	-043	-039	010	003	-016	-019	-099	-073	012	-026	-209	-154	-081	-012	-037	-042	-077	-048	016	022	030	-013	-017	-041
	16	-016	-020	-114	-014	-023	-042	-070	-097	-028	006	-070	-052	-199	-079	000	019	-023	-046	-011	016	023	019	-004	015	-034
	17	014	-001	-042	-052	-023	-018	-031	-039	040	003	016	-016	-101	-065	-009	000	-016	-062	017	034	001	-118	-052	-108	-026
	18	-027	011	012	007	005	008	-113	-013	038	-059	-090	-067	-137	-110	-129	-104	-054	-079	-043	047	016	-021	-037	-038	-041
	19	-024	-072	-078	-027	-031	-025	-067	-002	014	017	025	-001	-066	-031	-070	-078	-092	-041	-017	-054	-064	-036	-009	-043	-036
	20	-069	-071	-060	-019	015	020	-044	-049	-075	-062	-020	-013	-003	004	002	015	025	024	010	-002	-013	005	006	-004	-016
	21	004	005	001	006	007	010	-065	015	034	049	013	-014	-027	-079	-083	-019	012	020	016	004	-048	-021	-012	-008	-008
	22	-007	010	-002	007	-014	-012	-092	-035	-011	004	-016	010	012	008	-023	-032	026	015	-002	-008	017	006	016	017	-004
	23	018	023	011	-015	-090	-033	-089	-008	007	006	003	-002	001	006	-013	-025	-025	-014	-034	-034	006	006	008	011	-012
	24	-046	-018	012	006	002	019	001	-064	020	044	-015	-041	-003	-001	-002	000	014	012	030	022	002	005	015	013	001
D	25	008	020	018	-014	-021	-069	-057	-017	-030	070	034	018	-115	-214	-135	-034	044	012	-036	-059	-010	017	-142	-074	-033
D	26	-012	-120	-071	-033	-080	-010	012	014	-029	-134	006	015	004	011	-179	-037	005	001	000	009	-039	-051	026	020	-028
	27	005	022	-041	-113	-016	-036	-032	-022	-097	004	009	-021	015	006	008	001	-046	-049	-091	-096	-114	-016	032	028	-028
	28	-061	-103	-091	-028	002	-028	-030	-040	013	017	-059	-002	-083	-041	021	001	-035	-069	-030	-007	020	000	022	017	-025
Q	29	008	-016	-050	-038	-013	-004	-010	005	024	000	001	007	007	-079	-046	-002	005	009	012	008	-008	010	-001	-028	-008
Q	30	006	008	-016	-042	-068	-049	001	022	015	-016	014	016	009	005	-007	-087	-030	-001	015	013	009	010	014	018	-006
Q	31	018	-015	-040	002	010	008	000	000	002	005	005	005	003	-004	-008	-039	-011	004	-004	006	010	019	000	-065	-004
	MEAN	-012	-025	-028	-025	-016	-017	-032	-029	-013	-013	-005	-023	-040	-041	-037	-027	-019	-018	-007	-001	-008	-009	-012	-011	-020
5Q	MEAN	011	-002	-021	-014	-015	-006	-011	-024	-006	-001	005	005	004	-016	-014	-031	-013	002	012	011	-007	011	005	-015	-005
5D	MEAN	-010	-061	-056	-063	-045	-026	-035	-018	-015	-058	003	-058	-092	-063	-083	-031	007	-008	-016	-018	-004	-006	-029	-009	-033

AUGUST 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	015	038	-009	-009	001	037	033	031	-009	002	-002	014	018	011	011	016	013	017	019	016	016	015	009	008	013
	02	005	000	004	006	013	020	-026	-018	004	018	012	017	012	016	013	021	024	-014	-020	015	021	022	004	-009	007
Q	03	022	016	007	018	004	-004	-014	011	019	000	004	029	-017	-072	-033	-012	-028	-029	006	006	-004	012	013	012	-001
	04	018	-022	-049	-007	004	022	012	015	024	-055	001	019	006	-026	-039	-022	-046	-019	-016	-008	-011	006	019	018	-007
D	05	017	-093	-005	-052	-069	002	-058	-031	-029	006	-058	-196	-108	-120	-119	-143	-045	-005	-086	-054	031	-015	-042	-026	-054
	06	-050	-144	-035	008	017	-162	-112	-015	-027	-027	-046	-014	005	005	003	-013	-002	-032	-020	004	004	-002	010	008	-027
	07	005	001	000	000	000	000	-001	000	-005	-006	-001	000	-008	000	-074	-061	-022	-030	-124	-036	003	-026	000	-005	-016
	08	-047	-052	-073	-177	-197	-176	-047	-010	-020	-048	021	015	003	-005	-011	000	-009	-016	-006	001	010	018	012	006	-034
	09	018	015	005	-002	-012	-010	018	010	-005	-061	000	007	009	006	-003	007	-038	-001	-058	-110	-009	014	033	-026	-008
	10	-029	-052	-024	-005	-069	-159	-062	-094	-128	-028	-106	004	007	-013	-109	-116	-058	-047	-025	-004	012	011	015	009	-045
	11	008	000	000	008	-014	-058	-032	-023	008	032	-063	-049	-032	-066	-048	-030	-051	-015	001	-023	-032	000	016	016	-019
Q	12	006	-004	-008	-039	005	014	008	-001	-005	-011	-006	000	-015	-029	-018	-016	-015	-021	-001	-005	-025	-017	-001	020	-008
Q	13	013	008	012	-012	-018	-041	-002	017	015	-052	-028	004	-049	-076	-044	-017	012	018	013	014	014	015	012	009	-007
D	14	012	-001	-163	-078	-147	-155	-080	-034	-064	008	017	-105	-027	000	-007	-019	-054	-042	-012	010	014	-007	021	016	-037
D	15	-131	-044	015	-037	-045	-025	-014	-127	-085	-160	-188	-100	-207	-126	-091	-020	-041	-010	-116	-097	-089	000	008	003	-072
	16	013	008	005	009	003	003	000	003	-026	000	001	-019	-060	008	-013	-047	-027	009	007	001	007	014	015	011	-003
	17	-002	-030	-143	-113	-040	-022	014	004	028	040	084	057	027	000	000	-011	-063	-004	008	-007	-043	-012	006	007	-009
	18	006	-001	-006	-021	-003	-007	-028	-015	-018	-052	-077	-013	-002	-017	002	-023	-023	-040	-041	-003	-012	004	-011	-015	-017
Q	19	016	013	005	004	000	005	-009	-022	-057	-016	-007	-008	-019	-024	011	011	005	012	-047	-034	005	012	008	004	-006
	20	002	001	001	003	007	010	009	015	014	001	007	-060	-136	-112	-053	-077	-022	-043	-032	-070	-058	003	038	-114	-028
D	21	024	028	007	002	-143	-047	009	000	-013	014	005	004	006	002	000	000	-016	-037	-054	-014	-012	-059	-058	-001	-015
	22	008	-100	-074	-032	-052	-082	-040	013	034	-016	-064	001	-017	-037	-005	002	-009	-020	003	015	-007	-007	-008	-096	-025
	23	-096	-063	-077	-071	-014	015	012	018	009	-029	-014	-080	-046	-007	-008	001	-033	-033	-030	005	017	019	016	011	-020
	24	004	001	005	010	012	014	009	003	000	-001	-008	007	-057	-054	-005	-015	003	000	-028	-015	-008	-006	-012	-031	-007
	25	-045	-003	-015	-101	-045	-006	-073	-037	032	028	004	-013	000	-009	-066	-109	-049	014	009	011	-025	-043	-006	028	-022
Q	26	048	011	007	011	018	-001	002	014	010	000	000	-012	-020	-015	-027	-004	000	012	-034	-030	003	014	015	-019	000
	27	-022	-040	-109	-113	-020	010	012	009	011	011	003	006	005	006	004	006	008	007	004	003	009	017	018	009	-006
	28	009	010	012	014	-001	009	000	007	008	000	013	008	006	001	005	001	006	017	009	-023	013	042	029	016	009
D	29	-067	-149	-052	-086	-085	-044	013	-063	-039	-085	-041	-029	-130	-117	-012	-001	-033	-052	-058	018	023	033	-039	-115	-050
	30	-126	-103	-039	-047	-133	-144	-095	-034	-100	-070	-030	021	-031	005	005	-021	-083	-014	004	013	007	-007	-005	003	-043
	31	003	-006	-010	-005	-032	-043	-033	023	012	-059	-085	-050	-005	003	-003	000	-028	-035	-014	-026	-071	-012	019	009	-019
	MEAN	-011	-024	-026	-029	-034	-033	-019	-011	-013	-020	-021	-017	-028	-028	-024	-023	-023	-015	-024	-014	-006	002	005	-008	-018
5Q	MEAN	021	009	005	-004	002	-005	-003	004	-004	-016	-007	003	-024	-043	-022	-008	-005	-002	-013	-010	-001	007	009	005	-004
5D	MEAN	-029	-052	-040	-050	-098	-054	-026	-051	-046	-043	-053	-085	-093	-072	-046	-037	-038	-029	-065	-027	-007	-010	-022	-025	-045

SEPTEMBER 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	003	001	001	008	003	-052	-019	009	001	-017	-006	-044	-022	-014	-038	-063	-070	-120	-024	002	-010	020	009	-016	-019
	02	-049	-041	-017	014	005	003	011	000	-006	001	006	-003	-001	000	000	-007	-022	-054	-056	-025	-029	-025	001	013	-012
Q	03	024	005	-026	-039	-023	-005	005	000	003	-011	-007	005	001	003	-004	-004	-014	-023	-006	-010	004	002	001	006	-005
Q	04	000	-011	-014	-007	-011	-024	-026	-027	006	009	001	-006	-006	-008	-031	-050	-034	-011	000	005	004	007	-001	003	-010
	05	000	-004	001	000	-016	017	008	-001	-009	-022	-007	-003	-002	001	-019	-006	000	002	008	-030	-012	013	012	-010	-003
	06	-093	-066	002	008	015	017	034	-051	-002	029	025	-028	-019	-134	-114	-098	-048	007	005	002	008	-067	-062	-051	-028
	07	-015	-040	-007	-013	-032	000	-002	-006	-025	-060	-082	-013	010	-004	001	-008	000	-001	-003	000	001	-002	001	-023	-013
	08	-065	-002	-024	-003	000	-028	-034	-028	-037	-035	-008	-047	-052	-015	-019	-090	-057	-049	-049	-010	018	-043	-044	-009	-030
D	09	-102	-043	-069	-019	-011	-006	-070	-083	-159	-113	-039	-042	-055	-133	-234	-168	-043	-111	-099	-011	008	-054	-086	-028	-074
D	10	-120	-274	-305	-285	-108	-056	-108	-041	006	003	-149	-030	-062	-236	-191	-116	-071	-074	-045	-005	-041	-135	-111	-156	-113
D	11	-286	-054	-005	-103	-158	-059	-030	-130	-038	-181	-046	-271	-146	-082	-037	-097	-160	-130	-095	-065	-156	-126	014	-043	-104
D	12	-224	-077	-106	-112	-075	-082	-062	-043	-158	-145	-048	-130	-215	-019	-082	-032	-027	-061	001	018	006	-086	-114	-052	-080
D	13	-083	-096	-142	-191	-012	-020	-016	-011	-002	-033	-186	-069	-012	-003	-011	-008	000	-017	016	025	019	-019	-094	-061	-043
	14	-055	-117	-241	-113	-071	-041	-018	021	-074	-058	-051	-044	-215	-118	-014	005	009	002	005	008	002	008	005	007	-048
	15	006	008	004	-005	-007	003	-014	-124	-081	012	-006	001	-003	-005	-002	-003	003	-065	-077	-034	-038	-096	-048	-011	-024
	16	-008	-054	-025	-002	-021	-066	-004	003	-007	004	-036	-054	-046	-048	-004	-005	004	-007	-013	-004	000	-012	006	011	-016
	17	-016	-009	007	010	017	-031	-012	007	015	006	004	001	-002	000	001	-136	-070	-012	026	-040	-022	-096	-013	-017	-016
	18	-065	015	041	027	017	014	018	006	007	001	006	-020	-042	-033	-054	-041	-015	-055	-102	-076	-002	-025	-048	-033	-019
	19	004	013	-019	-001	014	000	-031	-006	-067	-068	-053	-050	-019	-075	-148	-018	-001	003	001	-012	002	-005	002	003	-022
	20	004	-004	001	006	005	004	-017	-014	-008	-031	-001	-002	-013	-024	-015	-005	-051	-130	-026	002	010	-065	-049	-045	-020
	21	-062	-005	-044	013	011	007	009	006	007	-002	-004	004	000	001	000	-001	000	-035	-049	-035	-029	-019	001	006	-009
	22	005	006	000	006	006	009	-015	006	006	007	-002	000	-003	000	001	000	-020	-010	003	-001	-013	-005	001	011	-000
	23	-028	-050	-001	-001	000	006	002	-002	004	-032	-037	-002	-005	-003	-002	-003	000	-008	000	003	001	-001	-001	010	-006
Q	24	007	003	002	002	009	006	-009	000	005	000	-003	001	007	000	000	000	-002	002	006	005	001	-009	001	009	002
Q	25	010	007	010	-010	001	-031	-021	-019	-013	001	003	-001	005	001	-023	-004	003	006	-011	009	008	006	009	-014	-003
	26	-032	008	013	-033	-105	-033	015	001	-018	006	009	-004	-123	-176	-127	-080	-048	003	015	024	-054	-088	-004	-048	-037
	27	-148	-058	-187	-070	-031	-041	-060	-020	-078	-036	-018	-028	-068	-216	-080	-090	-120	-040	004	020	-003	-011	008	003	-057
	28	-021	-048	-044	-041	-033	-003	011	013	010	-016	-143	-087	-022	001	002	-095	-152	-024	004	007	004	003	011	-030	-029
	29	-041	000	004	003	001	000	-039	-036	-056	-059	-038	-048	-036	-006	-002	-005	-004	-017	-010	-043	-025	-001	000	002	-019
Q	30	-005	-004	000	000	001	003	-004	-010	-012	010	001	-012	-016	-008	007	-003	-009	000	003	006	000	-005	-012	-008	-003
	MEAN	-049	-033	-040	-032	-020	-016	-017	-019	-026	-028	-031	-034	-039	-045	-041	-041	-034	-034	-019	-009	-011	-031	-020	-019	-029
5Q	MEAN	007	000	-006	-011	-005	-010	-011	-011	-002	002	-001	-003	-002	-002	-010	-012	-011	-005	-002	003	003	000	-000	-001	-003
5D	MEAN	-163	-109	-125	-142	-073	-045	-057	-062	-070	-094	-094	-108	-098	-095	-111	-084	-060	-079	-044	-008	-033	-084	-078	-068	-082

OCTOBER 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	003	006	-072	-014	020	016	009	000	012	012	-063	-036	-005	-006	-003	000	-038	-043	-005	-003	007	005	-002	-009	-00
Q	02	-007	-030	-045	001	005	002	000	-001	-002	-003	-006	-004	-006	-004	-003	-004	-002	-001	000	003	004	-007	001	006	-00
	03	-004	-001	005	005	003	002	003	004	002	006	-003	-116	-075	-070	-024	-013	-034	-017	-011	-099	-095	-017	-074	-136	-032
	04	-118	-168	-040	-033	-018	-016	-010	-048	-052	-011	-009	-007	-013	-029	-022	-006	000	-021	-084	-034	-036	-041	-050	-087	-040
	05	-121	000	005	-039	-050	003	000	-101	-074	-054	-021	-024	-006	-030	-025	000	004	001	003	-007	-002	000	003	-032	-024
D	06	-021	-003	-008	-042	-057	-050	-102	-068	-048	-051	-095	-028	-006	-065	-119	-116	-121	-102	-140	-170	-039	-017	-095	-085	-069
D	07	-011	-124	-166	-117	-128	-127	-024	-113	-165	-068	-234	-089	-197	-110	-083	-039	-056	-170	-053	-063	-085	-215	-057	-078	-107
D	08	-121	-143	-120	-077	-159	-044	-045	-159	-165	-203	-108	-342	-215	-217	-141	-089	-086	-218	-328	-294	-023	-392	-148	-169	-167
D	09	-088	-081	-005	-104	-149	-137	-080	-096	-170	-014	-219	-343	-038	-026	-047	-184	-139	-049	-082	-109	-113	-118	-162	-107	-111
D	10	-044	-101	-130	-144	-204	-228	-119	-054	-040	-033	001	000	-110	-163	-111	-130	-074	-178	-169	-130	-130	-127	-092	-107	-109
	11	-021	-002	025	008	003	005	-002	002	-006	000	-003	-002	-006	-054	-051	-007	-007	-072	-080	-112	-012	-080	-111	-130	-030
	12	-065	-017	-110	-071	-049	-070	-043	-055	-079	-115	-010	-022	-011	-036	-078	-172	-093	-056	-132	-030	-008	-003	000	005	-055
	13	001	-016	-022	-049	-105	-066	-038	-099	-015	-021	-011	-014	-012	-028	-117	-007	-008	-064	-018	-013	-030	-079	-020	-014	-036
	14	-007	-002	002	000	000	000	-020	-080	-101	-097	-132	-025	-038	-095	-079	-063	-030	-086	-066	-028	001	-014	-070	037	-041
Q	15	008	002	004	-010	-052	-025	017	025	013	013	012	-037	-019	000	-004	-004	-003	-003	-027	-013	001	002	004	005	-004
	16	004	009	-021	018	016	006	001	006	005	000	-002	-044	-053	-015	005	000	-027	-026	-122	-076	-013	002	014	017	-012
	17	001	014	027	013	002	006	-006	-014	-020	-050	-023	-013	-015	005	-052	-094	-055	-054	-025	001	001	-003	-001	001	-015
	18	-001	-002	-002	000	-021	-022	000	002	-001	-003	-008	-008	-061	-109	-061	-031	-036	-030	012	005	003	001	000	003	-015
Q	19	002	000	-001	-002	000	002	002	003	001	-001	-005	-003	000	-001	-002	-001	000	001	003	002	-011	-018	000	015	-001
	20	012	013	-025	012	020	016	014	018	006	012	004	003	-014	-010	001	-011	-004	001	001	001	-003	000	-057	-061	-002
	21	-042	-090	-012	003	008	016	006	-004	-030	-020	-002	-002	001	003	-001	-005	-003	000	-001	003	003	000	004	005	-007
	22	006	009	008	-015	-030	-002	-041	-077	-040	-001	007	018	004	-023	-078	-056	-028	-020	-020	-007	-004	-026	-042	-019	-020
	23	-002	002	-067	-066	004	010	007	013	-008	-004	005	-009	-056	-021	000	000	-002	001	008	003	-033	-010	-016	-025	-011
Q	24	008	034	012	-009	-002	000	-011	023	011	002	000	003	000	-005	-001	-015	-004	-002	-018	-019	-002	001	001	002	000
Q	25	003	003	005	003	002	-001	-013	-002	005	-023	-029	-048	-080	-037	000	005	000	000	003	003	006	007	006	005	-007
	26	-054	-026	008	006	007	006	008	001	-042	-031	-007	012	-002	020	-006	-030	-066	-057	000	004	006	005	007	-002	-010
	27	013	-004	-098	-043	015	030	-001	012	011	002	006	001	-001	-006	-006	-010	-010	000	004	003	002	001	003	005	-003
	28	-005	011	015	021	018	011	006	005	010	-012	-022	011	008	003	-001	-003	001	007	-045	-125	-107	-039	-031	-008	-011
	29	-048	-087	-108	-064	-046	-021	-107	-194	-049	000	-010	-008	-010	-007	-014	-003	-035	-032	-038	-032	000	-012	-112	-124	-048
	30	-078	-055	-049	-023	-008	-002	-101	-020	002	005	-051	-053	-102	-074	-029	-001	-008	-001	000	-057	-057	-176	-012	-002	-040
	31	-049	-073	-101	-135	-076	023	-050	-229	-129	-018	-010	-007	007	-001	-004	-011	-083	-227	-172	-131	004	006	001	-024	-062
	MEAN	-027	-030	-035	-031	-033	-021	-024	-042	-037	-025	-034	-040	-036	-039	-037	-035	-034	-049	-052	-049	-025	-044	-036	-036	-035
5Q	MEAN	003	002	-005	-003	-009	-004	-001	010	006	-002	-006	-018	-021	-009	-002	-004	-002	-001	-008	-005	-000	-003	002	007	-003
5D	MEAN	-057	-090	-086	-097	-139	-117	-074	-098	-118	-074	-131	-160	-113	-116	-100	-112	-095	-143	-154	-153	-078	-174	-111	-109	-112

NOVEMBER 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
	01	-007	004	000	-006	-046	-037	-046	-050	-020	-079	-020	-022	-074	-012	-026	-056	-084	-041	-006	-003	-003	-002	-155	-117	-038
D	02	-008	010	-044	-058	-047	-007	-001	000	031	023	-021	-064	-168	-047	-081	-129	-051	-078	-113	-311	-159	-044	-027	-287	-070
D	03	-135	-214	-101	-048	-224	-249	-199	-063	-176	-597	-444	-280	-276	-189	-146	-314	-328	-376	-345	-380	-250	-268	-210	-149	-248
D	04	-049	-306	-248	-205	-120	-042	-049	-038	-123	-079	-350	-132	-333	-284	-182	-177	-166	-161	-079	-026	-107	-033	011	000	-137
	05	-009	-119	-063	-007	-006	-037	-050	-010	014	002	-292	-091	-049	-016	-026	-135	-153	-197	-067	-095	-201	-058	-008	-104	-074
	06	-130	-138	-099	-070	-044	-026	-004	-006	009	-009	-095	-097	-187	-073	-012	-144	-104	-002	006	002	001	001	001	000	-051
	07	003	-022	-052	-054	-026	-054	-007	000	004	005	000	-114	-113	-057	-069	-062	-100	-184	-013	009	000	-006	-008	-005	-039
	08	000	-005	-009	-050	-021	-008	-013	-038	-092	-021	-073	-044	-036	-032	-028	-066	-018	-009	-008	-012	-069	-054	-026	-011	-031
	09	-011	-004	-030	-078	008	018	018	-035	-269	-079	-019	-010	-180	-157	-196	-297	-278	-317	-206	-292	-086	-033	-066	-078	-112
	10	-083	-125	-058	-038	-038	-051	-044	-042	-098	-075	-056	-056	-060	-029	-021	-027	-016	-016	-070	-070	-017	-037	-204	-202	-064
	11	-027	026	-016	-012	-010	-006	-004	000	001	000	-013	000	005	-015	-003	000	-039	-152	-096	-022	-037	-058	-041	-091	-025
	12	-116	-185	-029	025	-008	-008	006	-031	000	011	003	004	-025	-044	-033	-050	-069	-017	000	-037	-013	-007	001	008	-026
Q	13	003	006	011	025	025	022	027	012	013	010	008	005	003	002	-002	-003	-013	-003	000	004	003	003	003	004	007
Q	14	002	002	003	006	013	013	008	006	011	005	002	000	-002	-005	-006	-007	-028	-038	-034	-024	-003	-002	-007	-001	-004
Q	15	004	-004	-003	-005	004	005	000	009	011	007	005	005	002	-001	-016	-048	-038	-049	-037	-014	-004	-001	-002	-068	-010
Q	16	-056	017	003	-046	-002	020	031	-042	051	023	-011	-004	-037	-004	002	000	002	002	002	002	005	010	009	013	-000
	17	010	009	-009	006	012	012	017	019	019	001	018	035	-206	-198	-237	-345	-219	-245	-136	-126	-152	-111	-043	-026	-079
	18	-018	-018	-023	-018	-013	-019	-011	-062	-004	012	009	008	004	006	005	-001	-002	-004	-010	001	004	007	011	014	-005
	19	019	011	-008	018	058	027	021	-115	-006	034	016	012	002	004	-021	-010	006	010	002	-049	002	-010	020	016	002
	20	001	-010	007	009	026	019	016	024	008	-039	-003	001	014	013	012	-009	-092	-144	-026	015	031	-037	-014	066	-005
	21	064	-163	-069	-052	007	-034	-134	042	000	-107	-030	-045	-038	006	009	-003	-008	-027	-003	-028	-125	-036	-016	021	-032
D	22	018	027	027	009	017	028	-130	-114	-035	-434	-400	-203	-183	-046	-099	-311	-386	-562	-373	-325	-041	-012	-012	-037	-149
	23	-036	016	027	031	027	019	022	020	010	013	011	007	010	009	005	004	003	007	003	004	004	004	006	012	010
	24	016	017	015	015	015	014	015	013	012	012	009	003	002	008	-026	-076	-065	-131	-144	-052	-044	-009	-021	-020	-018
	25	-074	-102	-022	-027	-008	-101	-105	-031	-036	-044	-047	-176	-117	-085	-050	-029	-058	-055	-011	-004	-067	-029	008	016	-052
	26	016	017	005	013	-026	-030	-038	-038	-150	-074	-134	-151	-041	005	008	010	016	014	011	013	015	012	013	006	-021
Q	27	-042	005	010	003	001	012	-038	-030	-008	-008	-075	-033	-002	-017	-036	-031	-008	-034	007	020	016	017	016	-011	-011
	28	-013	-011	-003	004	015	-019	-039	-104	-008	-002	-002	012	-019	-102	-159	-053	-005	-005	-011	-001	005	011	018	015	-020
	29	012	013	-019	015	025	029	-016	-193	018	-007	-272	-246	-089	-060	-060	-148	-175	-105	-101	-119	-192	-056	-065	-033	-077
D	30	-030	-065	-305	-079	013	-041	-052	025	000	-135	-001	-070	-298	-390	-071	-186	-143	-168	-168	-384	-206	-186	-069	-130	-131
	MEAN	-023	-044	-037	-022	-012	-018	-027	-029	-027	-054	-076	-058	-083	-060	-052	-090	-087	-103	-068	-077	-056	-034	-029	-039	-050
5Q	MEAN	-018	005	005	-003	008	014	006	-009	016	007	-014	-005	-007	-005	-012	-018	-017	-024	-012	-002	003	005	004	-013	-003
5D	MEAN	-041	-110	-134	-076	-072	-062	-086	-038	-061	-244	-243	-150	-252	-191	-116	-223	-215	-267	-216	-285	-153	-109	-061	-121	-146

DECEMBER 1975 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

	UT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
D	01	-029	-096	-190	-090	-046	-104	-209	-074	-061	-226	-315	-258	-259	-224	-177	-141	-074	-328	-179	-130	-097	-011	-179	-063	-148
D	02	-020	-039	-128	-013	-006	013	015	-018	-144	-160	-163	-098	-096	-138	-147	-157	-211	-067	-105	-228	-031	-128	-123	-144	-097
	03	-021	015	013	018	015	012	-005	-017	-038	-061	-144	-040	-028	-075	-202	-120	-068	-005	-014	-011	-017	-027	-067	-032	-038
	04	-056	-032	-004	-014	-064	-046	-010	-024	-062	-064	-123	-109	-102	-326	-187	-099	-068	-127	-021	-011	-011	-006	-013	-003	-066
	05	-013	000	-025	-031	-006	006	010	-009	-084	-035	-024	-053	-151	-008	001	-061	-103	-112	-052	-021	-154	-038	-003	003	-040
	06	009	-003	-015	-050	-026	-032	-013	-005	-012	-010	-059	-027	-035	-117	-021	-020	-061	-101	-079	007	-009	-001	004	-052	-030
Q	07	000	-003	-007	-003	-012	-018	-010	-009	-013	-006	000	003	001	002	-001	-078	-080	-047	-020	-013	-039	-011	-004	001	-015
D	08	-010	-008	-011	-072	-099	044	012	000	018	033	004	-028	008	018	-003	-035	-095	-124	-038	-091	-100	-069	-194	-300	-048
	09	-096	-027	-016	026	043	015	-005	000	001	-005	-025	-256	-184	-226	-113	-114	-057	019	005	-002	-001	006	000	000	-042
	10	-001	000	000	-003	-008	-007	-003	001	000	-019	-059	-113	-115	-139	-197	-077	000	001	-004	-002	-002	000	000	-002	-031
	11	001	002	002	006	-007	-033	-030	011	005	001	000	-001	000	-003	-028	005	000	-024	-004	-035	-021	-006	-002	-001	-007
Q	12	011	013	008	010	009	007	005	004	002	-012	-011	000	002	-012	-004	000	-002	-003	000	001	000	001	000	003	001
Q	13	002	000	001	003	000	-001	006	008	007	001	006	007	004	004	001	-007	-010	-046	-039	-014	-001	-007	004	005	-003
	14	006	010	010	015	018	018	017	032	021	016	013	005	004	-010	-009	-017	-063	-030	012	008	-022	-017	056	025	005
	15	013	-016	-074	036	019	012	018	010	-025	005	007	008	-011	-002	-070	-017	000	-042	-019	-001	001	-032	005	017	-007
	16	011	026	-075	-020	026	024	010	004	-021	-006	027	-005	005	-024	-033	-042	-022	-033	000	003	-003	-063	006	005	-008
	17	011	026	045	-065	030	028	022	018	002	-010	-004	-008	-004	-013	-023	-103	-081	-019	-044	-059	-036	-018	000	013	-012
	18	018	007	-017	036	024	014	012	008	012	011	005	-002	-017	-022	-118	-025	-033	-032	-003	-002	-028	-070	-016	009	-010
	19	013	016	006	008	-003	023	011	006	007	004	003	003	-018	-029	-049	-086	006	005	002	-043	-036	-010	002	006	-006
Q	20	006	008	000	-022	011	012	017	016	020	006	009	007	004	006	001	000	-007	001	000	001	003	002	002	003	004
	21	008	004	004	006	004	004	001	008	010	000	-044	-100	013	-010	-142	-065	003	-004	-040	-024	-015	-001	013	001	-015
	22	-001	-055	034	035	015	015	-035	017	013	008	006	001	-003	-069	-107	-024	-049	-036	-005	007	-037	-048	009	000	-013
	23	-006	-007	-023	-006	008	026	017	005	-036	-034	-016	-003	-019	-080	-013	022	001	000	-001	-025	-028	-034	001	004	-010
Q	24	004	004	003	-016	-036	007	005	002	001	002	003	002	002	004	002	000	000	000	-002	-056	-021	036	037	-001	
	25	015	-020	020	-023	006	-028	012	003	014	000	-006	-048	-125	-158	-250	-152	-063	-027	-041	-021	005	-062	-062	-093	-046
D	26	-126	-016	-079	-045	-015	-021	-021	-044	-108	-172	-128	-225	-160	-092	-286	-232	-160	-140	-045	-001	-191	-043	-006	-046	-100
D	27	-016	-020	011	017	-055	-063	-077	-036	-017	031	-033	-001	003	000	-074	-357	-372	-229	-171	-248	-204	-125	-135	-099	-095
	28	-149	-044	-002	-014	-041	-028	018	027	001	011	004	004	000	000	-003	-004	-028	-106	-031	010	-008	-015	-151	-023	-024
	29	-065	-042	000	-003	-014	-084	-063	-025	-026	-014	-058	-017	-125	-113	-018	-018	-149	-067	-108	-198	-041	-020	007	-009	-053
	30	-027	-064	007	-047	-060	-028	-006	-020	-048	-057	-075	-078	-150	-104	-019	-013	-011	-030	-006	-032	-067	-010	-004	-036	-041
	31	-004	002	-027	-049	004	003	-011	-040	-008	-004	-004	-033	-036	-055	-027	-010	-036	-016	-005	-010	-005	-003	003	-003	-016
	MEAN	-017	-012	-017	-012	-009	-007	-009	-005	-018	-025	-039	-047	-051	-065	-075	-066	-061	-057	-034	-038	-040	-029	-026	-025	-033
5Q	MEAN	005	004	001	-006	-006	001	005	004	003	-002	001	004	003	000	000	-017	-020	-019	-012	-005	-019	-007	008	010	-002
5D	MEAN	-040	-036	-079	-041	-044	-026	-056	-034	-062	-099	-127	-122	-101	-087	-137	-184	-182	-178	-108	-140	-125	-075	-127	-130	-097

TABLE OF OBSERVATORIES SUPPLYING HOURLY AU-AL BASED ON MEAN VALUE

JULY 1975

AU = MAXIMUM DELTA H

UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	YEK	GWR	YEK	BW	BW	BW	BW	CC	CC	DI	TI	YEK	CC	CC	DI	AI	AI	NAS	NAS	LR	GWR	NAS	FC	GWR
2	GWR	GWR	YEK	BW	YEK	YEK	YEK	BW	BW	BW	BW	CC	CC	DI	AI	AI	LR	LR	LR	NAS	NAS	FC	NAS	GWR
3	FC	YEK	YEK	YEK	YEK	BW	BW	BW	CC	CC	CC	DI	DI	CC	LR	LR	LR	LR	LR	NAS	NAS	NAS	FC	NAS
4	YEK	FC	GWR	GWR	LR	LR	LR	BW	BW	BW	CC	CC	CC	DI	DI	DI	DI	NAS	NAS	NAS	NAS	FC	FC	DI
Q 5	DI	DI	DI	DI	GWR	BW	BW	CC	BW	YEK	YEK	BW	CC	CC	CC	NAS	NAS	NAS	NAS	NAS	NAS	NAS	NAS	DI
6	DI	DI	DI	FC	FC	YEK	YEK	YEK	BW	BW	BW	CC	CC	CC	CC	CC	NAS	NAS	NAS	NAS	NAS	NAS	NAS	FC
7	YEK	YEK	FC	YEK	BW	YEK	BW	BW	BW	CC	CC	CC	CC	DI	DI	LR	LR	LR	LR	LR	GWR	GWR	GWR	GWR
D 8	YEK	BW	CO	CO	UE	UE	UE	TI	TI	TI	DI	TI	AI	AI	AI	AI	LR	LR	LR	BW	BW	GWR	DI	YEK
D 9	FC	YEK	YEK	BW	BW	BW	BW	CO	DI	DI	DI	TI	DI	BW	AI	AI	AI	LR	LR	NAS	NAS	GWR	GWR	NAS
10	FC	GWR	YEK	YEK	BW	BW	BW	CC	CC	CC	CC	CC	DI	AI	AI	AI	LR	LR	LR	NAS	NAS	GWR	GWR	FC
D11	YEK	YEK	YEK	BW	BW	BW	UE	TI	CO	CC	TI	DI	DI	DI	DI	AI	NAS	LR	LR	NAS	NAS	NAS	NAS	FC
Q12	FC	YEK	YEK	YEK	YEK	YEK	BW	BW	BW	BW	CC	CC	CC	CC	DI	DI	LR	LR	LR	NAS	NAS	GWR	GWR	GWR
13	GWR	YEK	GWR	YEK	YEK	BW	BW	TI	GWR	CC	CC	CC	CC	DI	DI	LR	AI	LR	NAS	NAS	GWR	GWR	FC	GWR
14	YEK	YEK	YEK	BW	YEK	BW	BW	CC	BW	CC	CC	CC	DI	CC	DI	DI	DI	NAS	NAS	NAS	NAS	GWR	GWR	FC
15	YEK	YEK	YEK	YEK	YEK	BW	BW	CC	CC	CC	DI	DI	DI	DI	CC	DI	NAS	LR	NAS	NAS	NAS	NAS	NAS	FC
16	FC	YEK	BW	BW	BW	BW	BW	CC	BW	CC	CC	DI	DI	DI	LR	LR	DI	LR	LR	NAS	NAS	NAS	FC	NAS
17	GWR	FC	YEK	YEK	YEK	BW	BW	BW	BW	CC	CC	DI	DI	AI	DI	DI	AI	LR	LR	NAS	NAS	FC	GWR	FC
18	FC	BW	FC	YEK	YEK	BW	BW	BW	CC	CC	DI	DI	DI	DI	AI	LR	LR	LR	LR	LR	NAS	NAS	GWR	GWR
19	FC	YEK	YEK	YEK	BW	BW	BW	BW	YEK	BW	CC	CC	CC	DI	DI	AI	LR	LR	NAS	NAS	NAS	FC	FC	GWR
20	YEK	YEK	YEK	FC	YEK	YEK	BW	BW	CC	CC	CC	CC	CC	NAS	NAS	NAS	NAS	LR	NAS	LR	NAS	NAS	FC	GWR
21	GWR	YEK	FC	FC	YEK	BW	BW	BW	BW	CC	CC	TI	DI	DI	DI	LR	NAS	NAS	LR	NAS	NAS	NAS	NAS	FC
22	FC	FC	YEK	YEK	YEK	BW	BW	BW	CC	CC	CC	CC	CC	DI	DI	DI	LR	LR	LR	LR	NAS	NAS	NAS	FC
23	FC	GWR	YEK	BW	BW	BW	BW	CC	BW	GWR	CC	CC	CC	CC	CC	DI	LR	LR	LR	NAS	NAS	GWR	FC	FC
24	YEK	FC	DI	AI	NAS	BW	BW	CC	BW	CC	CC	CC	CC	CC	CC	CO	NAS	LR	LR	NAS	LR	NAS	FC	NAS
D25	GWR	FC	YEK	BW	BW	CO	UE	TI	DI	CO	CO	CC	AI	AI	AI	AI	LR	LR	NAS	NAS	NAS	FC	GWR	FC
D26	YEK	YEK	YEK	BW	BW	BW	BW	BW	CC	TI	CO	CC	CC	DI	AI	AI	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC
27	FC	YEK	BW	BW	YEK	BW	BW	CC	CC	CC	CC	CC	DI	DI	DI	DI	LR	LR	LR	NAS	GWR	NAS	NAS	NAS
28	YEK	YEK	BW	BW	YEK	YEK	BW	BW	BW	CC	CC	CC	DI	CC	CC	LR	NAS	LR	NAS	NAS	NAS	GWR	NAS	NAS
Q29	FC	FC	YEK	BW	YEK	BW	BW	BW	BW	CC	CC	CC	CC	DI	LR	CC	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC
Q30	FC	FC	YEK	BW	BW	BW	BW	BW	BW	CC	CC	CC	CC	CC	DI	DI	AI	NAS	LR	LR	NAS	NAS	FC	FC
Q31	FC	FC	YEK	FC	YEK	YEK	FC	FC	TI	BW	FC	UE	CC	CC	DI	DI	DI	NAS	LR	LR	NAS	NAS	NAS	FC

IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
AI = ABISKO	68 21.5	18 49.4	66.0	114.9
BW = BARROW	71 18.2	-156 44.9	68.5	241.1
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IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
FC = FT.CHURCHILL	58 48.0	-94 06.0	68.7	322.8
LR = LEIRVOGUR	64 11.0	-21 42.0	70.2	71.0
NAS= NARSSARSSUAQ	61 06.0	-45 12.0	71.0	37.0
TI = TIXIE BAY	71 35.0	129 00.0	60.4	191.4
UE = CAPE WELLEN	66 09.8	-169 50.1	61.7	237.0
YEK= YELLOWKNIFE	62 24.0	245 36.0	69.0	292.8

TABLE OF OBSERVATORIES SUPPLYING HOURLY AU-AL BASED ON MEAN VALUE

JULY 1975

AL = MINIMUM DELTA H

UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	AI	LR	LR	GWR	NAS	NAS	GWR	GWR	GWR	GWR	FC	DI	BW	BW	YEK	YEK	BW	BW	YEK	TI	CC	UE	AI	DI
2	LR	LR	NAS	NAS	NAS	DI	DI	DI	AI	AI	AI	AI	FC	YEK	BW	BW	BW	DI	DI	DI	CC	CC	CC	CC
3	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	GWR	FC	FC	FC	BW	BW	BW	BW	BW	BW	BW	CC	CC	CC	AI	TI
4	LR	LR	NAS	TI	BW	CC	CC	CC	AI	GWR	FC	FC	YEK	YEK	BW	BW	BW	BW	CC	CC	AI	DI	CC	TI
Q 5	TI	TI	BW	BW	NAS	GWR	GWR	GWR	FC	FC	AI	AI	AI	BW	BW	FC	FC	YEK	YEK	YEK	CO	DI	CC	UE
6	UE	TI	TI	TI	TI	CC	DI	AI	AI	AI	FC	FC	YEK	YEK	BW	BW	BW	YEK	YEK	BW	DI	CC	CC	CC
7	AI	NAS	CC	NAS	NAS	NAS	GWR	DI	FC	FC	YEK	YEK	YEK	YEK	BW	BW	BW	BW	BW	BW	TI	TI	TI	DI
D 8	AI	AI	AI	LR	LR	LR	GWR	NAS	NAS	NAS	UE	CO	GWR	GWR	UE	CO	CO	TI	YEK	CC	DI	TI	TI	TI
D 9	CC	LR	LR	LR	LR	NAS	NAS	NAS	NAS	CO	GWR	NAS	FC	FC	CO	YEK	YEK	TI	TI	TI	TI	AI	AI	AI
10	TI	LR	TI	CC	GWR	GWR	NAS	YEK	GWR	GWR	FC	FC	FC	CO	YEK	BW	BW	BW	TI	TI	DI	AI	AI	LR
D11	AI	LR	LR	LR	GWR	NAS	NAS	GWR	FC	FC	FC	CO	CO	BW	YEK	YEK	TI	DI	BW	DI	CO	UE	UE	UE
Q12	TI	TI	NAS	CC	NAS	NAS	GWR	GWR	FC	FC	FC	YEK	BW	YEK	BW	CC	BW	BW	DI	DI	DI	CC	UE	UE
13	CO	TI	NAS	NAS	NAS	GWR	GWR	AI	AI	AI	FC	FC	FC	FC	FC	YEK	BW	BW	CC	DI	DI	CC	AI	AI
14	AI	LR	LR	NAS	NAS	GWR	YEK	GWR	FC	FC	FC	YEK	YEK	YEK	YEK	YEK	BW	BW	DI	DI	DI	DI	DI	AI
15	AI	LR	LR	NAS	GWR	GWR	GWR	GWR	GWR	FC	BW	CO	BW	YEK	YEK	YEK	TI	TI	TI	TI	DI	DI	AI	AI
16	LR	LR	LR	NAS	FC	GWR	GWR	GWR	FC	GWR	BW	CO	YEK	YEK	YEK	YEK	BW	BW	BW	TI	DI	DI	AI	CC
17	LR	LR	NAS	NAS	NAS	GWR	GWR	FC	GWR	FC	FC	CO	CO	CO	FC	YEK	TI	TI	BW	CC	DI	CC	CC	AI
18	LR	LR	TI	GWR	NAS	NAS	GWR	NAS	GWR	YEK	YEK	FC	CO	YEK	YEK	YEK	TI	BW	BW	BW	AI	AI	AI	AI
19	LR	LR	NAS	NAS	NAS	NAS	GWR	GWR	DI	AI	FC	YEK	FC	FC	CO	BW	BW	BW	TI	DI	CC	CC	CC	AI
20	AI	LR	NAS	NAS	DI	NAS	FC	GWR	GWR	YEK	FC	FC	FC	YEK	BW	BW	FC	BW	DI	DI	DI	DI	AI	LR
21	TI	TI	TI	TI	TI	GWR	FC	FC	GWR	GWR	GWR	CO	CO	FC	YEK	BW	BW	BW	DI	DI	DI	DI	DI	CC
22	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	GWR	FC	FC	FC	FC	YEK	BW	BW	BW	BW	BW	CC	CC	CC	TI	TI
23	LR	LR	LR	NAS	NAS	NAS	GWR	FC	FC	AI	FC	YEK	BW	BW	BW	BW	BW	BW	DI	CC	CC	CC	CC	CC
24	LR	LR	BW	BW	CC	DI	GWR	GWR	FC	FC	CO	FC	FC	YEK	YEK	BW	YEK	BW	BW	DI	DI	CC	CC	TI
D25	TI	TI	LR	LR	LR	LR	LR	LR	LR	NAS	AI	AI	CO	CO	YEK	YEK	BW	TI	TI	AI	TI	AI	AI	AI
D26	AI	AI	LR	LR	FC	NAS	NAS	GWR	GWR	YEK	FC	AI	FC	CO	BW	YEK	BW	BW	DI	BW	DI	DI	TI	CC
27	LR	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	FC	BW	BW	FC	CO	YEK	BW	DI	DI	DI	DI	DI	DI	AI	CC
28	LR	LR	LR	LR	GWR	NAS	YEK	GWR	GWR	NAS	BW	FC	BW	BW	BW	BW	BW	BW	CC	CC	AI	AI	UE	TI
Q29	TI	NAS	NAS	NAS	NAS	GWR	FC	FC	AI	YEK	YEK	YEK	YEK	BW	BW	BW	YEK	YEK	CC	CC	CC	CC	CC	LR
Q30	LR	LR	LR	NAS	GWR	GWR	NAS	GWR	GWR	YEK	FC	FC	BW	YEK	YEK	BW	BW	BW	TI	DI	DI	DI	AI	TI
Q31	TI	NAS	NAS	NAS	TI	CC	CC	CC	AI	AI	AI	AI	YEK	YEK	BW	BW	BW	BW	CC	CO	CO	CC	CC	CC

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UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	GWR	YEK	YEK	BW	CO	BW	BW	BW	BW	CC	CC	GWR	FC	YEK	NAS	NAS	NAS	NAS	NAS	FC	FC	FC	FC	FC
2	FC	FC	FC	FC	FC	YEK	BW	BW	BW	CO	BW	CC	CC	BW	CC	CC	CC	AI	LR	NAS	NAS	NAS	FC	FC
Q 3	FC	FC	YEK	YEK	YEK	BW	BW	BW	BW	BW	BW	CC	CC	DI	DI	AI	AI	LR	LR	NAS	NAS	NAS	NAS	FC
4	FC	YEK	YEK	YEK	YEK	YEK	YEK	YEK	CC	CC	CC	CC	CC	CC	DI	DI	AI	AI	AI	LR	NAS	NAS	FC	FC
D 5	FC	YEK	FC	BW	BW	CO	CC	CO	UE	TI	DI	DI	DI	AI	AI	AI	LR	LR	NAS	NAS	NAS	GWR	GWR	FC
6	YEK	YEK	BW	YEK	BW	BW	BW	CC	CC	CC	CC	CC	CC	CC	FC	DI	LR	LR	LR	NAS	GWR	FC	FC	FC
7	FC	FC	FC	FC	FC	FC	YEK	YEK	BW	BW	CC	CC	CC	DI	DI	DI	NAS	LR	NAS	NAS	NAS	NAS	FC	FC
8	FC	FC	YEK	BW	CO	CO	CO	UE	TI	TI	CC	GWR	CC	CC	CC	LR	LR	NAS	LR	NAS	NAS	NAS	FC	FC
9	FC	FC	YEK	BW	BW	BW	BW	BW	CC	CC	CO	GWR	GWR	CC	DI	DI	NAS	LR	NAS	GWR	GWR	GWR	GWR	FC
10	FC	FC	YEK	BW	BW	BW	BW	TI	TI	TI	DI	DI	CC	DI	AI	AI	AI	LR	NAS	NAS	BW	FC	FC	FC
11	FC	FC	FC	FC	BW	BW	BW	BW	BW	CC	DI	DI	DI	DI	DI	DI	NAS	NAS	NAS	NAS	NAS	GWR	FC	FC
Q12	FC	FC	YEK	YEK	YEK	YEK	BW	BW	BW	CC	CC	CC	CC	DI	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC	FC	FC
Q13	FC	FC	FC	YEK	BW	BW	BW	BW	CC	CC	TI	DI	DI	DI	DI	GWR	FC	FC	FC	FC	FC	FC	FC	FC
D14	FC	YEK	BW	BW	CO	CO	UE	TI	TI	CC	CC	DI	DI	GWR	DI	LR	AI	LR	LR	NAS	NAS	FC	FC	FC
D15	YEK	FC	YEK	YEK	BW	BW	BW	CC	CC	DI	DI	DI	AI	AI	AI	AI	LR	NAS	LR	GWR	GWR	FC	BW	BW
16	BW	BW	FC	FC	FC	FC	FC	FC	BW	BW	CC	CC	CC	CC	DI	DI	NAS	NAS	NAS	NAS	FC	FC	FC	FC
17	NAS	BW	BW	BW	BW	BW	BW	CC	CC	CC	CC	CC	CC	CC	CC	AI	AI	LR	NAS	NAS	NAS	NAS	NAS	NAS
18	YEK	FC	FC	YEK	YEK	YEK	BW	BW	BW	CC	CC	CC	CC	CC	CC	NAS	NAS	NAS	LR	NAS	FC	FC	FC	FC
Q19	FC	GWR	GWR	FC	YEK	YEK	YEK	CC	CO	CO	CC	CC	CC	DI	CC	LR	NAS	NAS	NAS	NAS	NAS	GWR	GWR	YEK
20	FC	FC	FC	FC	FC	FC	YEK	YEK	BW	CO	CC	DI	TI	AI	AI	AI	AI	NAS	NAS	NAS	GWR	GWR	GWR	YEK
D21	GWR	GWR	YEK	BW	CO	CO	BW	CO	NAS	CC	CC	CC	CC	YEK	DI	LR	AI	LR	NAS	NAS	GWR	GWR	FC	FC
22	FC	YEK	BW	YEK	BW	BW	BW	BW	CC	CC	CC	CC	DI	CC	AI	DI	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC
23	YEK	BW	YEK	BW	YEK	YEK	YEK	BW	BW	CC	DI	DI	CC	CC	LR	NAS	LR	NAS	NAS	NAS	FC	FC	FC	FC
24	FC	FC	FC	FC	YEK	YEK	FC	YEK	GWR	YEK	GWR	CC	DI	DI	DI	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC	
25	FC	FC	YEK	YEK	YEK	BW	BW	BW	BW	CC	CC	CC	CC	DI	AI	AI	DI	NAS	GWR	GWR	NAS	NAS	FC	FC
Q26	GWR	GWR	FC	FC	BW	BW	BW	GWR	FC	BW	CC	CC	CC	DI	DI	YEK	NAS	NAS	NAS	NAS	NAS	FC	FC	FC
27	GWR	YEK	YEK	BW	BW	YEK	YEK	GWR	BW	CC	CC	GWR	GWR	GWR	YEK	CO	NAS	NAS	GWR	GWR	FC	FC	FC	FC
28	FC	GWR	FC	GWR	YEK	GWR	FC	BW	BW	BW	CC	CC	CC	GWR	FC	CO	NAS	NAS	NAS	NAS	NAS	NAS	GWR	FC
D29	GWR	YEK	YEK	BW	CO	CO	CC	CC	TI	TI	DI	DI	AI	AI	GWR	LR	NAS	LR	LR	NAS	FC	FC	GWR	FC
30	YEK	YEK	BW	BW	CO	CO	CC	CC	DI	TI	TI	CC	GWR	GWR	DI	DI	AI	NAS	NAS	FC	FC	NAS	FC	FC
31	FC	FC	GWR	YEK	BW	BW	BW	BW	CC	CC	CC	CC	CC	CC	DI	DI	NAS	NAS	NAS	NAS	NAS	FC	DI	FC

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1	CO	LR	LR	LR	LR	NAS	NAS	DI	GWR	BW	YEK	AI	AI	BW	CC	CC	CC	CC	DI	CC	CC	TI	TI	TI
2	TI	TI	TI	TI	CC	NAS	GWR	FC	GWR	DI	AI	LR	AI	DI	LR	YEK	BW	BW	DI	CC	CC	CO	CC	DI
Q 3	CC	NAS	NAS	CC	NAS	GWR	GWR	GWR	FC	DI	AI	FC	FC	FC	BW	BW	BW	BW	DI	DI	DI	DI	TI	TI
4	CC	LR	LR	NAS	NAS	NAS	CC	AI	GWR	FC	FC	FC	FC	YEK	YEK	YEK	BW	BW	BW	TI	DI	CC	TI	TI
D 5	CC	LR	LR	LR	LR	NAS	GWR	GWR	GWR	CO	CO	CO	CO	CC	CO	CO	BW	TI	TI	DI	DI	AI	AI	LR
6	LR	LR	LR	LR	NAS	GWR	GWR	GWR	GWR	YEK	YEK	YEK	AI	DI	BW	BW	BW	DI	DI	DI	CC	DI	CC	AI
7	TI	TI	TI	CC	CC	DI	DI	AI	AI	AI	AI	YEK	YEK	YEK	CO	YEK	BW	BW	BW	BW	TI	DI	DI	AI
8	AI	LR	LR	LR	LR	LR	NAS	NAS	NAS	CO	YEK	DI	AI	BW	BW	BW	BW	BW	DI	DI	CC	CC	CC	AI
9	AI	LR	LR	LR	NAS	NAS	NAS	GWR	GWR	YEK	FC	AI	LR	LR	YEK	YEK	BW	BW	BW	BW	TI	TI	DI	AI
10	AI	LR	NAS	LR	LR	GWR	NAS	NAS	GWR	GWR	CO	FC	YEK	CO	CO	YEK	BW	TI	BW	CC	UE	UE	TI	TI
11	TI	TI	TI	TI	NAS	NAS	GWR	GWR	DI	LR	FC	YEK	FC	YEK	YEK	BW	BW	BW	DI	DI	DI	DI	CC	CC
Q12	LR	LR	NAS	NAS	NAS	NAS	DI	GWR	YEK	FC	FC	FC	FC	YEK	BW	BW	BW	BW	DI	DI	DI	DI	CC	CC
Q13	LR	TI	TI	NAS	NAS	GWR	GWR	GWR	GWR	GWR	GWR	GWR	FC	FC	YEK	YEK	DI	TI	DI	DI	DI	TI	CC	CC
D14	LR	AI	AI	LR	LR	NAS	NAS	GWR	GWR	GWR	CO	CO	BW	BW	YEK	YEK	BW	BW	BW	DI	DI	AI	TI	CC
D15	LR	AI	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	GWR	GWR	CO	CO	CO	CO	TI	TI	BW	TI	TI	UE	UE	UE
16	LR	LR	YEK	TI	TI	DI	CC	DI	YEK	YEK	YEK	BW	BW	YEK	YEK	BW	BW	TI	DI	DI	DI	AI	TI	TI
17	TI	LR	NAS	LR	LR	NAS	NAS	NAS	BW	NAS	NAS	BW	BW	BW	BW	BW	DI	TI	BW	DI	DI	DI	AI	TI
18	TI	NAS	NAS	NAS	NAS	GWR	GWR	GWR	FC	GWR	CO	FC	FC	YEK	BW	BW	BW	BW	DI	DI	DI	DI	CC	CC
Q19	LR	TI	TI	TI	TI	CC	FC	GWR	FC	YEK	FC	FC	FC	YEK	YEK	YEK	YEK	TI	DI	CC	DI	UE	UE	TI
20	TI	TI	TI	TI	TI	CC	DI	DI	AI	AI	FC	FC	FC	FC	UE	YEK	BW	BW	BW	DI	TI	TI	DI	AI
D21	AI	LR	LR	LR	GWR	NAS	GWR	GWR	YEK	AI	AI	AI	LR	BW	BW	BW	BW	TI	TI	TI	TI	AI	AI	LR
22	AI	LR	NAS	NAS	LR	GWR	NAS	FC	NAS	YEK	BW	FC	BW	BW	YEK	BW	DI	DI	DI	TI	DI	DI	AI	LR
23	LR	LR	LR	NAS	NAS	CC	CC	AI	AI	YEK	FC	FC	YEK	YEK	BW	BW	BW	BW	DI	CC	UE	CC	CC	TI
24	TI	TI	TI	TI	NAS	CC	DI	DI	AI	AI	AI	LR	FC	YEK	YEK	BW	CC	BW	CC	CC	CC	CC	CC	LR
25	NAS	NAS	NAS	NAS	NAS	NAS	YEK	GWR	AI	AI	BW	BW	YEK	CC	YEK	BW	BW	TI	TI	BW	DI	CC	CC	CC
Q26	TI	NAS	NAS	TI	LR	NAS	NAS	CC	AI	AI	LR	BW	BW	BW	BW	BW	BW	BW	DI	CC	CC	TI	CC	LR
27	LR	LR	LR	LR	NAS	NAS	DI	DI	AI	FC	FC	LR	LR	NAS	BW	CC	CC	YEK	CO	CO	UE	UE	TI	CC
28	CC	TI	CC	NAS	NAS	DI	DI	AI	AI	FC	AI	AI	AI	BW	LR	LR	DI	YEK	BW	DI	DI	TI	AI	AI
D29	LR	LR	LR	GWR	LR	LR	LR	GWR	NAS	CO	CO	FC	CO	UE	TI	TI	TI	DI	TI	TI	UE	CC	AI	AI
30	AI	AI	GWR	LR	LR	NAS	NAS	BW	GWR	GWR	CO	CO	CO	BW	YEK	YEK	TI	DI	DI	TI	DI	DI	CC	LR
31	LR	NAS	NAS	NAS	NAS	GWR	FC	NAS	AI	YEK	YEK	FC	FC	YEK	YEK	BW	BW	BW	DI	DI	DI	CC	TI	TI

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2	YEK	YEK	DI	FC	YEK	YEK	BW	BW	CC	CO	CO	TI	TI	CO	CC	DI	CC	AI	AI	NAS	NAS	NAS	FC	LR
Q 3	FC	FC	FC	FC	FC	FC	BW	BW	BW	BW	CC	CC	CC	CC	CC	CC	LR	AI	AI	NAS	NAS	NAS	NAS	NAS
Q 4	DI	FC	FC	FC	YEK	BW	BW	CC	BW	BW	BW	TI	CC	CC	TI	AI	AI	AI	AI	FC	LR	FC	FC	NAS
5	YEK	DI	YEK	YEK	BW	YEK	YEK	BW	CC	CC	CC	CC	CO	CC	DI	DI	DI	NAS	NAS	NAS	LR	LR	FC	FC
6	GWR	FC	YEK	YEK	YEK	YEK	BW	CO	CO	CO	CC	DI	DI	AI	AI	AI	LR	LR	NAS	NAS	NAS	FC	FC	FC
7	FC	DI	YEK	YEK	BW	LR	LR	BW	CC	CC	DI	TI	LR	DI	DI	NAS	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC
8	FC	FC	YEK	YEK	YEK	YEK	BW	BW	CC	CC	CC	CC	CC	CC	LR	AI	LR	NAS	NAS	NAS	NAS	NAS	NAS	FC
D 9	FC	FC	YEK	YEK	BW	BW	CC	CC	CC	DI	DI	DI	DI	AI	AI	AI	LR	NAS	LR	LR	NAS	NAS	FC	GWR
D10	YEK	BW	CO	CO	BW	CO	CC	CO	YEK	CC	DI	CC	DI	AI	AI	LR	LR	LR	NAS	NAS	NAS	FC	FC	YEK
D11	YEK	YEK	BW	BW	BW	BW	CC	CC	CC	TI	CC	DI	DI	DI	DI	AI	LR	LR	LR	NAS	GWR	FC	NAS	FC
D12	YEK	BW	BW	BW	BW	BW	BW	CC	CC	CC	DI	DI	DI	NAS	AI	AI	AI	NAS	NAS	NAS	NAS	NAS	FC	FC
D13	YEK	BW	BW	BW	BW	BW	CO	BW	BW	CC	DI	DI	CC	LR	LR	LR	LR	LR	LR	LR	NAS	FC	FC	FC
14	GWR	YEK	BW	BW	BW	BW	BW	CC	CC	CC	CC	DI	AI	DI	CC	CO	NAS	NAS	NAS	NAS	NAS	NAS	NAS	NAS
15	DI	FC	FC	YEK	BW	BW	BW	CC	CO	BW	BW	CC	CC	CC	DI	DI	NAS	LR	NAS	NAS	NAS	FC	FC	FC
16	DI	YEK	FC	FC	YEK	BW	BW	BW	CC	CC	CC	CC	CC	CC	CC	DI	DI	NAS	LR	LR	NAS	NAS	NAS	NAS
17	FC	FC	FC	FC	BW	BW	BW	BW	YEK	YEK	YEK	TI	CC	CC	LR	AI	NAS	NAS	NAS	NAS	NAS	FC	NAS	FC
18	FC	GWR	GWR	YEK	BW	YEK	BW	BW	CO	CC	CC	TI	DI	DI	AI	LR	NAS	NAS	NAS	NAS	NAS	NAS	FC	FC
19	NAS	FC	FC	GWR	YEK	BW	BW	BW	CC	CC	CC	CC	DI	DI	DI	DI	LR	LR	LR	LR	LR	NAS	NAS	YEK
20	NAS	FC	FC	FC	YEK	YEK	BW	BW	CC	CO	CC	CC	CC	CC	DI	LR	LR	LR	NAS	GWR	NAS	NAS	FC	FC
21	YEK	FC	YEK	FC	FC	FC	YEK	YEK	BW	BW	BW	BW	UE	UE	UE	UE	LR	LR	NAS	NAS	NAS	NAS	NAS	DI
22	YEK	YEK	FC	FC	YEK	YEK	BW	BW	YEK	BW	BW	CC	CC	CC	DI	DI	DI	DI	NAS	NAS	LR	LR	NAS	NAS
23	FC	FC	GWR	YEK	YEK	FC	YEK	BW	BW	CC	CC	BW	TI	UE	UE	DI	LR	LR	LR	NAS	LR	NAS	NAS	NAS
Q24	NAS	DI	YEK	YEK	YEK	YEK	BW	YEK	YEK	BW	BW	CC	CC	CC	CC	CC	DI	NAS	NAS	NAS	NAS	NAS	NAS	NAS
Q25	NAS	FC	FC	GWR	YEK	BW	BW	LR	BW	BW	BW	CC	CC	CC	DI	DI	DI	LR	NAS	NAS	LR	NAS	NAS	FC
26	FC	FC	YEK	YEK	BW	AI	BW	CO	CO	CO	CC	TI	DI	AI	AI	AI	AI	LR	NAS	NAS	NAS	GWR	GWR	FC
27	YEK	YEK	BW	BW	BW	BW	CO	CC	TI	CC	DI	DI	DI	AI	AI	AI	LR	LR	LR	LR	BW	NAS	NAS	YEK
28	FC	YEK	YEK	YEK	BW	YEK	YEK	BW	BW	CC	DI	DI	CC	CC	DI	AI	AI	NAS	BW	BW	BW	FC	FC	FC
29	GWR	FC	DI	FC	LR	BW	BW	BW	BW	CC	CC	CC	CC	CC	DI	BW	AI	LR	LR	NAS	LR	LR	FC	DI
Q30	DI	DI	DI	FC	FC	YEK	BW	BW	BW	BW	BW	CC	CC	CC	CC	DI	LR	LR	LR	LR	LR	NAS	NAS	FC

IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
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NAS= NARSSARSSUAQ	61 06.0	-45 12.0	71.0	37.0
TI = TIXIE BAY	71 35.0	129 00.0	60.4	191.4
UE = CAPE WELLEN	66 09.8	-169 50.1	61.7	237.0
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SEPTEMBER 1975

AL = MINIMUM DELTA H

UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	TI	TI	TI	CC	GWR	NAS	NAS	GWR	GWR	GWR	FC	CO	BW	YEK	YEK	YEK	BW	DI	DI	DI	DI	DI	CC	AI
2	AI	GWR	NAS	NAS	GWR	GWR	DI	GWR	GWR	FC	AI	LR	NAS	LR	LR	YEK	YEK	BW	BW	DI	DI	DI	AI	CC
Q 3	CC	LR	LR	LR	LR	LR	DI	GWR	FC	FC	FC	FC	FC	YEK	GWR	GWR	GWR	BW	BW	BW	DI	CC	CC	TI
Q 4	TI	NAS	NAS	NAS	NAS	NAS	GWR	FC	FC	AI	LR	LR	LR	GWR	BW	BW	BW	CC	CO	CC	CC	CC	CC	CC
5	TI	TI	TI	NAS	FC	DI	DI	DI	YEK	FC	FC	LR	LR	GWR	YEK	BW	GWR	YEK	YEK	DI	DI	CC	CC	AI
6	LR	LR	LR	LR	CC	DI	NAS	GWR	GWR	GWR	AI	CO	CO	FC	FC	YEK	YEK	YEK	GWR	DI	AI	AI	AI	AI
7	LR	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	GWR	FC	FC	BW	YEK	BW	BW	GWR	YEK	YEK	CO	DI	CC	CC	LR
8	LR	LR	NAS	NAS	GWR	GWR	FC	FC	FC	FC	FC	FC	FC	YEK	YEK	CC	BW	BW	BW	DI	DI	DI	CC	CC
D 9	LR	LR	LR	LR	NAS	NAS	GWR	GWR	FC	GWR	GWR	FC	FC	CO	CO	YEK	YEK	TI	BW	TI	AI	AI	AI	AI
D10	AI	AI	LR	LR	LR	NAS	GWR	GWR	DI	GWR	CO	FC	FC	CO	YEK	DI	TI	TI	TI	TI	DI	DI	AI	AI
D11	AI	LR	LR	NAS	NAS	NAS	NAS	YEK	GWR	BW	FC	CO	YEK	YEK	YEK	DI	DI	BW	BW	TI	AI	DI	AI	AI
D12	AI	LR	LR	NAS	LR	GWR	GWR	GWR	GWR	GWR	FC	CO	CO	YEK	YEK	CC	DI	DI	DI	DI	AI	DI	DI	AI
D13	AI	LR	LR	LR	NAS	NAS	GWR	GWR	GWR	GWR	GWR	FC	YEK	YEK	CC	BW	BW	CC	CC	CC	BW	DI	DI	AI
14	AI	LR	LR	LR	NAS	NAS	NAS	GWR	GWR	GWR	BW	CO	CO	YEK	YEK	BW	BW	BW	DI	DI	DI	CC	JE	TI
15	TI	TI	LR	NAS	NAS	NAS	GWR	YEK	FC	FC	FC	AI	BW	BW	YEK	GWR	BW	DI	CC	DI	DI	DI	CC	CC
16	LR	NAS	NAS	NAS	GWR	GWR	GWR	GWR	YEK	FC	YEK	YEK	BW	BW	BW	BW	GWR	DI	DI	DI	CC	CC	CC	CC
17	LR	LR	NAS	NAS	NAS	NAS	NAS	DI	DI	AI	AI	LR	AI	GWR	YEK	BW	BW	BW	BW	DI	AI	AI	CC	CC
18	AI	LR	TI	TI	NAS	DI	DI	GWR	GWR	AI	AI	CO	CO	FC	BW	BW	BW	BW	AI	DI	DI	AI	AI	LR
19	LR	LR	NAS	NAS	CC	NAS	GWR	GWR	GWR	FC	FC	BW	YEK	CC	BW	BW	GWR	DI	DI	DI	DI	DI	CC	CC
20	TI	NAS	TI	TI	TI	TI	GWR	GWR	GWR	FC	FC	FC	BW	BW	BW	BW	BW	BW	BW	DI	AI	DI	DI	LR
21	LR	LR	NAS	NAS	BW	CC	DI	DI	DI	FC	FC	AI	LR	NAS	GWR	GWR	BW	BW	BW	CC	CC	CC	CC	CO
22	UE	TI	NAS	NAS	NAS	CC	FC	DI	AI	AI	AI	AI	LR	LR	GWR	BW	BW	BW	YEK	DI	CC	CC	CC	UE
23	LR	LR	LR	GWR	GWR	TI	DI	FC	YEK	YEK	YEK	YEK	LR	LR	GWR	GWR	GWR	CC	CC	CO	CO	CC	CC	TI
Q24	TI	TI	TI	TI	TI	CC	YEK	FC	DI	AI	YEK	AI	LR	LR	LR	GWR	GWR	YEK	YEK	CO	CC	CC	CC	CC
Q25	TI	TI	NAS	NAS	FC	GWR	FC	FC	FC	AI	AI	AI	LR	NAS	BW	BW	GWR	GWR	DI	CO	CO	CO	UE	AI
26	LR	BW	NAS	GWR	NAS	NAS	GWR	GWR	GWR	FC	FC	FC	CO	CO	CO	YEK	YEK	BW	TI	BW	AI	AI	DI	AI
27	LR	LR	LR	LR	NAS	NAS	NAS	NAS	CO	GWR	GWR	CO	FC	CO	CO	CO	BW	BW	BW	TI	AI	AI	AI	CC
28	LR	LR	LR	NAS	NAS	NAS	NAS	FC	NAS	GWR	CO	BW	BW	YEK	YEK	CC	BW	BW	DI	UE	UE	UE	CC	AI
29	LR	LR	CC	NAS	NAS	NAS	GWR	FC	FC	FC	FC	YEK	BW	BW	LR	GWR	GWR	DI	DI	DI	DI	CC	AI	UE
Q30	NAS	NAS	NAS	TI	TI	TI	FC	YEK	YEK	AI	AI	BW	BW	BW	NAS	GWR	CC	GWR	DI	UE	CC	CC	CC	LR

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1	FC	YEK	YEK	YEK	YEK	YEK	FC	YEK	CC	CC	CC	CC	CC	UE	AI	DI	AI	DI	AI	AI	NAS	NAS	NAS	NAS
Q 2	GWR	GWR	YEK	FC	FC	GWR	GWR	YEK	GWR	BW	GWR	GWR	CC	CC	UE	DI	DI	CC	AI	GWR	GWR	NAS	NAS	NAS
3	GWR	GWR	GWR	GWR	GWR	GWR	GWR	GWR	GWR	BW	CC	TI	DI	DI	DI	DI	LR	NAS	NAS	NAS	GWR	GWR	YEK	YEK
4	BW	BW	YEK	BW	BW	BW	BW	CC	BW	CC	CC	CC	CC	DI	DI	DI	NAS	LR	NAS	NAS	FC	NAS	NAS	FC
5	YEK	DI	BW	YEK	BW	YEK	BW	BW	CC	CO	CC	DI	DI	DI	DI	CO	BW	NAS	NAS	LR	LR	LR	NAS	FC
D 6	FC	FC	FC	YEK	BW	CO	CO	CO	TI	TI	TI	DI	DI	AI	AI	LR	LR	LR	NAS	NAS	NAS	FC	FC	FC
D 7	FC	BW	BW	CO	CO	CO	CO	TI	TI	TI	DI	DI	AI	AI	AI	AI	LR	NAS	LR	NAS	GWR	GWR	FC	FC
D 8	YEK	BW	BW	BW	BW	BW	BW	CC	TI	DI	DI	AI	AI	AI	AI	AI	LR	NAS	GWR	GWR	NAS	GWR	GWR	YEK
D 9	BW	YEK	BW	BW	CO	CC	CC	TI	DI	CC	DI	DI	DI	TI	AI	AI	LR	LR	LR	NAS	FC	FC	GWR	GWR
D10	FC	YEK	BW	BW	CO	UE	DI	CO	CC	LR	LR	DI	AI	AI	AI	LR	LR	NAS	NAS	NAS	GWR	FC	FC	YEK
11	FC	GWR	GWR	GWR	NAS	DI	BW	BW	BW	BW	CC	CC	DI	DI	DI	DI	LR	LR	NAS	NAS	NAS	GWR	FC	FC
12	GWR	DI	YEK	YEK	YEK	CO	CC	CC	CC	CC	CC	CC	CC	DI	AI	AI	LR	LR	LR	NAS	NAS	NAS	NAS	NAS
13	YEK	GWR	YEK	YEK	CC	CO	CC	CC	CC	CC	CC	CC	CC	DI	DI	AI	DI	LR	LR	AI	NAS	NAS	FC	FC	FC
14	FC	FC	DI	LR	LR	AI	CC	CC	CC	TI	DI	DI	DI	AI	AI	AI	AI	AI	NAS	LR	LR	LR	FC	LR
Q15	BW	CC	BW	BW	BW	BW	BW	BW	BW	CC	CC	TI	CC	CC	UE	AI	LR	LR	NAS	LR	LR	NAS	NAS	NAS
16	FC	FC	YEK	GWR	GWR	FC	BW	BW	BW	CC	CC	TI	TI	DI	DI	DI	AI	NAS	LR	NAS	FC	LR	LR	FC
17	GWR	GWR	FC	GWR	LR	FC	YEK	CO	CC	CO	TI	TI	TI	DI	AI	LR	NAS	NAS	NAS	BW	BW	NAS	FC	YEK
18	CC	LR	LR	BW	YEK	BW	YEK	YEK	BW	BW	BW	CC	DI	DI	DI	DI	LR	AI	BW	NAS	BW	FC	GWR	FC
Q19	FC	YEK	FC	FC	FC	FC	FC	FC	YEK	FC	FC	FC	DI	FC	DI	LR	LR	LR	LR	LR	LR	NAS	NAS	NAS
20	FC	FC	GWR	FC	FC	FC	FC	BW	BW	BW	BW	CC	DI	CC	DI	DI	DI	DI	NAS	AI	LR	LR	GWR	FC
21	YEK	YEK	YEK	YEK	YEK	NAS	BW	BW	CO	BW	CC	FC	CC	CC	CC	CC	LR	LR	AI	LR	LR	LR	LR	NAS
22	FC	GWR	FC	YEK	YEK	BW	BW	CO	CO	CO	CC	CC	CC	DI	DI	DI	NAS	NAS	AI	NAS	LR	NAS	FC	FC
23	FC	FC	YEK	YEK	YEK	YEK	BW	BW	CC	CC	CC	DI	DI	DI	FC	BW	BW	NAS	NAS	LR	NAS	NAS	LR	LR
Q24	GWR	YEK	FC	YEK	BW	BW	BW	BW	BW	NAS	CC	CC	CC	DI	DI	DI	DI	NAS	NAS	NAS	NAS	FC	FC	FC
Q25	FC	FC	FC	FC	YEK	YEK	BW	BW	CO	CO	CC	TI	DI	DI	DI	DI	BW	NAS	NAS	NAS	NAS	LR	LR	FC
26	FC	FC	NAS	FC	FC	YEK	BW	BW	BW	CC	CC	CC	DI	DI	DI	DI	AI	LR	NAS	NAS	DI	FC	NAS	NAS
27	NAS	FC	YEK	YEK	BW	BW	BW	BW	BW	BW	FC	YEK	CC	CC	CC	DI	DI	LR	LR	LR	LR	LR	NAS	NAS
28	BW	NAS	FC	FC	YEK	YEK	YEK	YEK	CC	CC	CC	FC	YEK	YEK	CO	LR	LR	LR	LR	NAS	NAS	GWR	GWR	FC
29	YEK	YEK	BW	BW	BW	BW	CO	TI	CC	CC	NAS	FC	LR	DI	DI	LR	LR	NAS	LR	AI	LR	NAS	GWR	FC
30	GWR	YEK	YEK	YEK	BW	BW	CO	BW	BW	CC	CC	DI	DI	DI	DI	FC	BW	LR	LR	LR	NAS	GWR	NAS	YEK
31	GWR	YEK	YEK	CO	CO	BW	CO	TI	TI	TI	TI	TI	GWR	GWR	FC	LR	LR	LR	LR	NAS	LR	BW	BW	FC

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1	CO	CC	NAS	NAS	NAS	CC	CC	CC	FC	FC	YEK	FC	LR	LR	BW	BW	BW	CC	CC	CC	CC	CC	AI	LR
Q 2	LR	LR	NAS	NAS	TI	DI	DI	DI	DI	AI	AI	LR	LR	LR	FC	FC	FC	FC	YEK	CO	CO	CC	CC	CO
3	LR	LR	UE	TI	CC	CC	DI	DI	DI	DI	FC	FC	FC	YEK	YEK	TI	TI	TI	DI	TI	DI	DI	AI	AI
4	AI	LR	LR	NAS	NAS	GWR	GWR	GWR	FC	FC	FC	YEK	YEK	YEK	BW	GWR	BW	DI	DI	DI	DI	DI	AI	AI
5	LR	TI	TI	NAS	NAS	NAS	GWR	YEK	GWR	GWR	FC	CO	FC	BW	YEK	CC	GWR	FC	YEK	DI	DI	CO	CC	LR
D 6	LR	NAS	NAS	NAS	NAS	NAS	NAS	GWR	GWR	GWR	GWR	GWR	UE	CO	CO	TI	BW	BW	TI	DI	TI	DI	LR	AI
D 7	AI	LR	LR	LR	GWR	NAS	NAS	YEK	YEK	GWR	CO	CO	CO	CO	CO	TI	TI	DI	TI	TI	AI	AI	AI	AI
D 8	AI	LR	LR	LR	NAS	NAS	NAS	GWR	GWR	GWR	CO	CO	CO	CO	CO	CO	TI	TI	TI	TI	TI	AI	AI	AI
D 9	LR	LR	LR	LR	NAS	NAS	GWR	NAS	CO	FC	CO	BW	YEK	YEK	CO	BW	BW	TI	DI	DI	DI	DI	AI	AI
D10	CC	LR	LR	LR	NAS	NAS	GWR	GWR	BW	BW	BW	CO	CO	CO	CC	BW	TI	TI	TI	TI	AI	AI	AI	LR
11	AI	LR	LR	TI	TI	GWR	GWR	GWR	YEK	AI	FC	BW	YEK	BW	BW	BW	BW	DI	TI	CC	TI	AI	AI	AI
12	LR	LR	LR	NAS	NAS	NAS	GWR	GWR	FC	YEK	FC	YEK	YEK	YEK	YEK	CC	TI	TI	TI	TI	DI	CC	CC	CC
13	LR	NAS	NAS	NAS	NAS	GWR	GWR	FC	FC	FC	FC	FC	YEK	YEK	TI	YEK	TI	DI	DI	DI	AI	DI	CC	CC
14	LR	LR	CO	TI	CC	GWR	GWR	GWR	GWR	GWR	CO	CO	FC	CC	UE	YEK	TI	TI	BW	DI	DI	AI	AI	AI
Q15	UE	UE	NAS	NAS	NAS	NAS	NAS	DI	DI	FC	FC	BW	BW	YEK	GWR	GWR	BW	BW	DI	DI	CO	CO	CC	CC
16	CC	AI	LR	LR	TI	TI	GWR	DI	DI	YEK	FC	CO	YEK	YEK	YEK	BW	BW	BW	DI	DI	DI	DI	AI	CC
17	CC	LR	CC	TI	TI	NAS	GWR	GWR	GWR	FC	FC	FC	YEK	YEK	TI	TI	BW	BW	BW	GWR	AI	CC	AI	UE
18	UE	UE	TI	NAS	NAS	GWR	NAS	DI	AI	AI	YEK	YEK	BW	BW	BW	BW	BW	BW	YEK	TI	CO	CO	CO	UE
Q19	TI	TI	TI	TI	TI	CC	DI	DI	AI	AI	AI	LR	NAS	NAS	GWR	GWR	GWR	YEK	YEK	YEK	DI	DI	CC	CC
20	CC	TI	NAS	TI	TI	DI	DI	DI	FC	AI	AI	YEK	BW	BW	BW	BW	BW	CC	BW	YEK	DI	CC	AI	CC
21	AI	LR	LR	NAS	NAS	TI	DI	GWR	GWR	YEK	YEK	BW	NAS	GWR	GWR	GWR	GWR	GWR	YEK	YEK	BW	DI	CC	CC
22	CC	UE	TI	NAS	GWR	GWR	GWR	GWR	GWR	YEK	YEK	BW	YEK	CC	BW	BW	BW	BW	DI	DI	AI	AI	DI	AI
23	LR	LR	NAS	NAS	NAS	GWR	GWR	GWR	GWR	YEK	FC	CO	BW	BW	BW	GWR	GWR	GWR	GWR	DI	DI	DI	AI	CC
Q24	LR	LR	NAS	NAS	NAS	NAS	GWR	GWR	DI	AI	AI	LR	LR	GWR	GWR	BW	GWR	GWR	DI	DI	YEK	CO	CO	CO
Q25	UE	UE	TI	TI	TI	FC	FC	FC	YEK	YEK	FC	BW	BW	YEK	BW	TI	TI	TI	YEK	YEK	TI	CC	CO	UE
26	LR	LR	TI	TI	CC	CC	DI	YEK	FC	FC	YEK	YEK	YEK	YEK	YEK	BW	TI	DI	CC	DI	GWR	CC	AI	AI
27	UE	LR	LR	LR	NAS	NAS	NAS	GWR	DI	DI	AI	GWR	GWR	BW	GWR	CC	BW	GWR	GWR	GWR	GWR	CC	UE	CC
28	LR	LR	TI	NAS	CC	DI	DI	DI	GWR	FC	YEK	AI	NAS	NAS	BW	GWR	GWR	GWR	TI	TI	DI	DI	AI	AI
29	LR	LR	LR	GWR	GWR	NAS	GWR	GWR	GWR	FC	DI	BW	YEK	BW	BW	BW	CC	BW	DI	DI	DI	DI	AI	AI
30	LR	LR	LR	NAS	GWR	GWR	GWR	GWR	FC	FC	BW	YEK	BW	BW	YEK	BW	CC	DI	DI	DI	DI	DI	DI	CC
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NOVEMBER 1975 — AU = MAXIMUM DELTA H

UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	BW	DI	CO	BW	BW	BW	BW	BW	CC	CC	CC	DI	DI	CO	DI	NAS	NAS	NAS	CO	CO	LR	NAS	FC	FC
D 2	NAS	FC	YEK	BW	BW	BW	BW	BW	CC	CC	DI	TI	AI	AI	AI	AI	LR	LR	GWR	GWR	GWR	GWR	GWR	BW
D 3	BW	BW	CO	CO	CO	TI	TI	DI	TI	AI	AI	AI	AI	AI	AI	LR	LR	GWR	GWR	GWR	GWR	YEK	YEK	
D 4	BW	BW	CO	CO	CO	CO	TI	CC	TI	TI	DI	AI	AI	AI	AI	LR	LR	NAS	FC	NAS	FC	FC	NAS	BW
5	FC	YEK	YEK	BW	BW	BW	CC	CO	CC	CC	DI	DI	TI	DI	DI	AI	LR	NAS	LR	LR	FC	NAS	NAS	FC
6	BW	BW	BW	BW	BW	BW	BW	BW	CC	CC	DI	DI	DI	DI	DI	LR	AI	DI	BW	BW	BW	FC	CC	FC
7	FC	FC	YEK	YEK	BW	BW	BW	LR	BW	CC	CC	DI	DI	DI	LR	LR	NAS	NAS	NAS	DI	BW	NAS	NAS	FC
8	FC	FC	YEK	BW	BW	YEK	BW	CC	CC	CC	CC	CC	CC	DI	FC	NAS	DI	NAS	BW	NAS	NAS	NAS	NAS	NAS
9	FC	FC	YEK	BW	YEK	YEK	CC	CC	TI	TI	TI	TI	AI	AI	AI	LR	GWR	GWR	GWR	GWR	FC	BW	BW	TI
10	BW	BW	BW	BW	BW	BW	LR	CC	CC	CC	NAS	NAS	GWR	FC	DI	LR	DI	TI	NAS	LR	NAS	GWR	GWR	YEK
11	GWR	GWR	BW	CC	BW	BW	BW	BW	CC	BW	CC	CC	DI	DI	DI	DI	LR	LR	LR	NAS	NAS	NAS	BW	FC
12	FC	BW	BW	DI	BW	BW	BW	BW	BW	CC	CC	CC	DI	DI	DI	LR	LR	AI	BW	NAS	LR	NAS	NAS	NAS
Q13	NAS	NAS	FC	FC	YEK	YEK	YEK	YEK	BW	FC	BW	FC	CC	CC	DI	DI	DI	DI	LR	CC	LR	LR	LR	FC
Q14	NAS	NAS	YEK	YEK	YEK	YEK	YEK	BW	BW	BW	BW	CC	CC	DI	DI	DI	LR	LR	LR	NAS	NAS	BW	NAS	NAS
Q15	NAS	NAS	BW	LR	BW	YEK	YEK	CC	BW	BW	BW	CO	CC	CC	DI	DI	DI	LR	LR	NAS	NAS	DI	YEK	GWR	
Q16	YEK	YEK	BW	YEK	YEK	BW	BW	CC	BW	CC	CC	CC	CC	CC	CC	CC	DI	DI	LR	LR	LR	LR	LR	CC	TI
17	TI	CC	GWR	YEK	CO	CC	BW	BW	CO	CO	CO	TI	TI	LR	LR	LR	LR	GWR	GWR	GWR	GWR	GWR	GWR	GWR
18	YEK	YEK	CO	CO	CO	BW	CO	CC	CO	CC	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO
19	CO	CO	GWR	YEK	YEK	BW	BW	CO	CO	YEK	CO	CO	CC	CO	DI	DI	DI	CO	NAS	LR	LR	NAS	NAS	NAS
20	FC	FC	NAS	CO	BW	CO	CO	CC	CO	CC	CO	CO	CO	CO	CO	LR	LR	LR	LR	NAS	NAS	NAS	NAS	GWR
21	GWR	BW	BW	BW	BW	CO	CO	TI	TI	TI	TI	TI	DI	CO	CO	CO	CO	CO	LR	LR	NAS	NAS	NAS	YEK
D22	CO	NAS	CO	YEK	BW	BW	CO	UE	TI	TI	AI	AI	AI	AI	AI	LR	GWR	GWR	GWR	GWR	GWR	GWR	GWR	YEK
23	GWR	CO	NAS	GWR	FC	YEK	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO
24	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	TI	TI	LR	AI	AI	LR	LR	NAS	LR	NAS	YEK	YEK
25	YEK	BW	CO	CO	BW	BW	CC	BW	CC	CC	DI	DI	DI	DI	DI	CO	LR	CO	CO	CO	NAS	LR	NAS	CO
26	CO	CO	CO	CO	CO	BW	BW	CC	DI	TI	TI	TI	DI	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO
Q27	CO	CO	CO	CO	CO	CO	BW	CO	CO	CC	CC	CC	CC	CO	DI	DI	CO	CO	CO	CO	CO	CO	CO	CO
28	CO	CO	CO	CO	YEK	BW	BW	CC	BW	CC	CC	CC	DI	DI	AI	AI	CO	CO	AI	CO	CO	CO	CO	CO
29	CO	CO	FC	CO	CO	BW	BW	CC	CO	DI	DI	AI	AI	AI	AI	LR	LR	NAS	LR	GWR	GWR	NAS	FC	FC
D30	YEK	BW	CO	GWR	CO	CO	CC	CO	CC	DI	CC	DI	AI	AI	AI	AI	LR	LR	GWR	GWR	GWR	GWR	YEK	YEK

IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
AI = ABISKO	68 21.5	18 49.4	66.0	114.9
BW = BARROW	71 18.2	-156 44.9	68.5	241.1
CC = C.CHELYUSKIN	77 43.0	104 17.0	66.2	176.4
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UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	AI	TI	NAS	NAS	FC	FC	FC	FC	FC	BW	YEK	BW	BW	YEK	CC	TI	TI	BW	DI	DI	DI	AI	LR	AI
D 2	LR	LR	LR	GWR	GWR	NAS	NAS	GWR	GWR	GWR	BW	FC	CO	UE	UE	CO	BW	TI	DI	TI	TI	TI	AI	AI
D 3	AI	LR	AI	LR	GWR	NAS	BW	NAS	GWR	CO	CO	CO	UE	UE	CO	CO	BW	BW	AI	AI	DI	DI	DI	AI
D 4	AI	LR	LR	LR	LR	NAS	NAS	NAS	CO	GWR	CO	CO	CO	BW	UE	BW	BW	DI	DI	TI	DI	DI	LR	LR
5	LR	LR	NAS	GWR	NAS	GWR	GWR	GWR	YEK	GWR	CO	FC	YEK	YEK	YEK	TI	TI	TI	TI	DI	DI	AI	AI	LR
6	LR	LR	LR	GWR	NAS	NAS	GWR	YEK	YEK	YEK	BW	FC	CO	BW	YEK	CC	CC	BW	TI	YEK	CO	CO	CO	CO
7	UE	LR	LR	NAS	NAS	GWR	GWR	DI	GWR	FC	FC	CO	BW	YEK	CC	TI	BW	DI	TI	GWR	CO	DI	CC	CO
8	CO	LR	NAS	GWR	GWR	GWR	FC	YEK	YEK	YEK	BW	BW	BW	BW	BW	TI	CC	CC	DI	DI	DI	DI	CC	CC
9	CC	LR	NAS	NAS	NAS	BW	GWR	GWR	YEK	FC	FC	FC	BW	YEK	UE	UE	BW	TI	UE	TI	TI	AI	LR	LR
10	LR	LR	NAS	NAS	GWR	GWR	GWR	FC	FC	YEK	BW	CO	BW	CO	CO	CO	CO	CO	BW	DI	TI	AI	AI	AI
11	AI	AI	NAS	NAS	GWR	GWR	GWR	YEK	GWR	FC	FC	YEK	YEK	CC	BW	BW	BW	TI	DI	DI	AI	AI	AI	LR
12	LR	LR	LR	LR	FC	GWR	GWR	FC	GWR	YEK	FC	YEK	YEK	BW	BW	BW	TI	TI	GWR	DI	DI	DI	CC	CC
Q13	AI	AI	TI	TI	DI	LR	GWR	GWR	GWR	GWR	YEK	LR	BW	BW	GWR	GWR	BW	BW	TI	YEK	CC	TI	UE	UE
Q14	CO	UE	UE	TI	TI	DI	CO	YEK	YEK	CO	CO	YEK	CO	BW	BW	BW	BW	CC	DI	CC	CC	CO	CO	CO
Q15	CO	CO	CO	CO	CO	CO	CO	AI	AI	LR	LR	LR	NAS	BW	BW	BW	CC	CC	CC	CC	CO	CO	CC	LR
Q16	LR	UE	NAS	NAS	NAS	NAS	GWR	YEK	GWR	YEK	BW	YEK	BW	BW	BW	BW	GWR	GWR	GWR	DI	DI	CO	CO	GWR
17	GWR	NAS	NAS	NAS	LR	GWR	GWR	GWR	GWR	YEK	YEK	GWR	CO	YEK	CO	CO	UE	CO	TI	TI	TI	TI	TI	LR
18	LR	LR	LR	NAS	GWR	GWR	GWR	YEK	GWR	GWR	UE	LR	LR	GWR	GWR	GWR	GWR	TI	TI	TI	TI	TI	TI	GWR
19	DI	CC	LR	LR	TI	GWR	NAS	YEK	NAS	TI	UE	TI	YEK	YEK	BW	BW	BW	GWR	BW	DI	DI	DI	CC	CC
20	CC	LR	LR	NAS	UE	GWR	GWR	GWR	YEK	YEK	YEK	BW	NAS	YEK	BW	BW	BW	BW	BW	TI	TI	DI	DI	CC
21	CC	LR	LR	LR	NAS	GWR	GWR	NAS	BW	CO	BW	CO	BW	YEK	TI	BW	TI	DI	TI	DI	DI	DI	DI	UE
D22	CC	UE	AI	LR	LR	YEK	GWR	NAS	NAS	BW	CO	FC	CO	UE	CO	CO	CO	CO	TI	TI	TI	CC	DI	AI
23	DI	AI	CC	AI	AI	AI	LR	NAS	FC	FC	FC	NAS	FC	FC	FC	FC	FC	FC	FC	UE	UE	UE	UE	UE
24	AI	LR	LR	LR	UE	LR	UE	UE	UE	YEK	BW	BW	YEK	YEK	CO	TI	TI	DI	TI	TI	DI	CC	CC	AI
25	LR	LR	LR	NAS	NAS	FC	FC	FC	FC	FC	BW	BW	BW	YEK	BW	TI	DI	DI	DI	DI	DI	DI	CC	UE
26	AI	AI	NAS	NAS	NAS	FC	FC	FC	CO	BW	BW	YEK	BW	YEK	BW	DI	TI	DI	DI	DI	DI	UE	CC	AI
Q27	LR	NAS	NAS	NAS	NAS	FC	FC	FC	FC	YEK	BW	BW	BW	BW	BW	BW	DI	DI	CC	TI	CC	CC	AI	LR
28	LR	LR	NAS	NAS	NAS	FC	GWR	GWR	FC	YEK	FC	YEK	YEK	CO	BW	YEK	TI	TI	DI	DI	DI	CC	AI	AI
29	AI	AI	LR	LR	GWR	GWR	GWR	YEK	GWR	GWR	BW	CO	FC	FC	TI	TI	BW	TI	TI	AI	AI	CC	AI	AI
D30	AI	AI	LR	LR	NAS	NAS	YEK	NAS	BW	BW	CO	CO	CO	BW	YEK	TI	TI	BW	TI	DI	TI	AI	AI	AI

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D 2	BW	BW	BW	BW	CC	CC	CC	CC	DI	DI	DI	TI	DI	NAS	NAS	NAS	LR	NAS	NAS	NAS	NAS	GWR	FC	YEK
3	YEK	GWR	CC	CC	CC	CC	CC	CC	CC	CC	UE	CC	TI	TI	SO	NAS	NAS	CO	NAS	NAS	NAS	YEK	FC	FC
4	YEK	BW	BW	BW	BW	CC	CC	CC	CC	CC	DI	DI	DI	LR	SO	LR	NAS	NAS	CO	CO	CO	NAS	YEK	YEK
5	BW	FC	FC	YEK	FC	CC	CC	CC	CC	CC	CC	DI	DI	CC	FC	DI	NAS	NAS	NAS	LR	NAS	LR	NAS	DI
6	YEK	YEK	YEK	YEK	CC	CC	BW	BW	CC	CC	TI	CC	DI	DI	DI	LR	NAS	LR	LR	LR	LR	NAS	YEK	YEK
Q 7	BW	BW	TI	CC	BW	BW	BW	BW	CC	CC	CC	CC	CC	CC	CC	LR	NAS	NAS	NAS	NAS	NAS	BW	NAS	NAS
D 8	FC	TI	YEK	BW	BW	BW	BW	CC	CC	CC	CC	DI	TI	DI	TI	LR	SO	LR	LR	NAS	GWR	GWR	GWR	YEK
9	GWR	YEK	YEK	YEK	LR	LR	CC	CC	CC	CC	DI	DI	SO	SO	SO	SO	SO	BW	BW	BW	YEK	YEK	FC	FC
10	CC	CC	BW	CC	CC	CC	CC	CC	BW	CC	CC	TI	TI	SO	SO	DI	CO	BW	BW	NAS	BW	FC	NAS	NAS
11	NAS	FC	FC	CC	CC	BW	BW	BW	CC	CC	CC	CC	CC	CC	CC	DI	DI	DI	NAS	SO	NAS	LR	LR	FC	FC
Q12	FC	NAS	FC	FC	BW	CC	CC	CC	CC	CC	CC	CC	CC	DI	DI	DI	DI	DI	CC	LR	LR	FC	FC	CC
Q13	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	BW	CC	CC	CC	CC	DI	LR	NAS	LR	NAS	BW	BW	NAS	NAS
14	FC	YEK	FC	FC	YEK	YEK	YEK	YEK	BW	BW	BW	CC	CC	DI	DI	LR	LR	LR	DI	LR	NAS	LR	NAS	NAS
15	BW	YEK	YEK	YEK	CC	CC	CC	BW	BW	BW	CC	CC	CC	DI	DI	DI	DI	NAS	LR	LR	LR	LR	LR	NAS
16	FC	GWR	YEK	BW	YEK	BW	BW	CC	CC	CC	BW	CC	DI	DI	DI	DI	SO	LR	NAS	LR	NAS	BW	NAS	NAS
17	NAS	NAS	FC	GWR	FC	BW	CC	CC	CC	CC	CC	CC	CC	DI	DI	DI	LR	FC	NAS	NAS	LR	GWR	NAS	NAS	NAS
18	NAS	FC	FC	FC	FC	CC	CC	CC	CC	CC	CC	CC	DI	DI	DI	DI	LR	SO	LR	LR	FC	NAS	FC	BW
19	BW	BW	BW	GWR	FC	FC	YEK	CC	CC	CC	CC	CC	CC	DI	DI	DI	DI	CC	NAS	SO	NAS	GWR	GWR	CC
Q20	CC	YEK	FC	YEK	BW	YEK	CC	BW	BW	BW	BW	CC	CC	CC	CC	CO	DI	DI	DI	CO	GWR	GWR	GWR	NAS
21	DI	YEK	GWR	BW	BW	YEK	YEK	BW	BW	BW	DI	DI	CC	DI	SO	DI	DI	NAS	NAS	LR	LR	NAS	LR	FC
22	FC	YEK	GWR	YEK	BW	BW	BW	BW	BW	CC	CC	CC	DI	DI	TI	DI	DI	DI	LR	LR	LR	NAS	NAS	FC
23	FC	BW	BW	FC	FC	FC	YEK	BW	CC	CC	CC	CC	CC	DI	DI	CC	CC	NAS	NAS	NAS	NAS	NAS	BW	BW
Q24	BW	BW	FC	FC	UE	CC	CC	CC	DI	CC	GWR	GWR	CC	CC	CC	CC	CC	DI	DI	NAS	LR	LR	NAS	NAS
25	GWR	GWR	GWR	BW	BW	BW	CO	CC	BW	LR	CC	DI	TI	SO	SO	LR	LR	NAS	NAS	NAS	NAS	FC	GWR	GWR
D26	YEK	BW	BW	GWR	BW	BW	BW	CC	DI	DI	TI	TI	SO	SO	SO	SO	SO	SO	SO	YEK	NAS	GWR	NAS	YEK	GWR
D27	FC	CC	CC	BW	BW	CC	TI	TI	CO	CC	CC	SO	SO	SO	SO	LR	NAS	LR	LR	GWR	GWR	GWR	GWR	YEK
28	YEK	BW	GWR	BW	BW	BW	FC	CC	CC	CC	CC	CC	CC	CC	DI	DI	NAS	SO	LR	LR	LR	LR	FC	FC
29	YEK	GWR	DI	BW	BW	BW	CC	CC	CC	BW	CC	NAS	DI	DI	CC	FC	LR	NAS	LR	NAS	FC	FC	DI	FC
30	FC	YEK	BW	BW	BW	BW	CC	CC	CC	BW	CC	DI	DI	DI	DI	FC	LR	SO	YEK	LR	NAS	BW	BW	BW
31	DI	BW	GWR	CC	BW	CC	CC	BW	CC	BW	CC	CC	CC	DI	DI	DI	DI	BW	BW	NAS	BW	BW	NAS	NAS

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3	LR	LR	GWR	GWR	GWR	GWR	FC	GWR	FC	BW	BW	YEK	YEK	YEK	CC	BW	BW	TI	TI	TI	TI	CC	CC	SO
4	LR	LR	NAS	NAS	GWR	GWR	GWR	FC	FC	BW	BW	BW	CO	CC	CO	DI	DI	DI	DI	DI	DI	TI	DI	CC
5	LR	LR	NAS	NAS	NAS	NAS	FC	GWR	FC	YEK	FC	BW	BW	BW	TI	BW	CC	BW	DI	DI	DI	CC	CC	BW
6	LR	NAS	NAS	NAS	NAS	GWR	GWR	FC	FC	YEK	CO	BW	CO	BW	BW	BW	BW	TI	BW	BW	DI	DI	CC	LR
Q 7	LR	LR	NAS	NAS	NAS	GWR	NAS	FC	FC	YEK	CO	CO	BW	BW	BW	CC	BW	BW	DI	DI	DI	DI	CC	LR
D 8	LR	LR	NAS	NAS	NAS	NAS	NAS	GWR	GWR	FC	FC	BW	FC	YEK	BW	YEK	TI	BW	BW	BW	TI	TI	SO	LR
9	CC	CC	LR	LR	CO	GWR	GWR	GWR	GWR	FC	CO	CO	FC	CC	YEK	BW	BW	GWR	GWR	GWR	GWR	SO	SO	GWR
10	GWR	GWR	GWR	GWR	GWR	GWR	FC	GWR	YEK	BW	YEK	FC	CO	CO	CO	YEK	CC	GWR	GWR	DI	CO	DI	CC	CC
11	CO	CO	CO	CO	NAS	GWR	GWR	GWR	FC	FC	CO	CO	CO	CO	BW	BW	CO	BW	CO	DI	DI	CO	CO	CO
Q12	LR	SO	LR	LR	LR	LR	GWR	GWR	FC	YEK	YEK	YEK	BW	BW	BW	BW	BW	BW	GWR	GWR	GWR	GWR	CC	GWR
Q13	NAS	NAS	NAS	NAS	NAS	NAS	NAS	LR	YEK	YEK	YEK	YEK	YEK	NAS	NAS	BW	BW	BW	CC	CC	CC	CC	CC	CC
14	LR	LR	LR	LR	LR	LR	FC	SO	FC	FC	YEK	YEK	YEK	YEK	BW	BW	BW	BW	CC	TI	DI	DI	CC	UE
15	UE	NAS	LR	UE	GWR	GWR	GWR	GWR	FC	YEK	UE	YEK	YEK	YEK	BW	BW	BW	DI	DI	TI	DI	DI	CC	CC
16	CC	CO	NAS	LR	NAS	NAS	GWR	GWR	YEK	FC	FC	FC	CO	BW	BW	BW	DI	TI	TI	TI	DI	DI	CC	CO
17	LR	LR	LR	LR	NAS	NAS	UE	SO	FC	YEK	BW	YEK	YEK	BW	BW	CC	CC	BW	DI	DI	DI	DI	DI	CC
18	SO	LR	LR	NAS	UE	UE	UE	YEK	YEK	FC	YEK	YEK	YEK	YEK	BW	BW	DI	DI	CC	CC	DI	DI	CC	UE
19	NAS	LR	LR	NAS	NAS	UE	NAS	GWR	GWR	FC	YEK	YEK	BW	BW	CC	CC	GWR	GWR	YEK	DI	CC	CC	UE	UE
Q20	NAS	LR	LR	NAS	NAS	NAS	NAS	FC	FC	YEK	YEK	FC	FC	FC	FC	BW	CC	BW	UE	YEK	UE	UE	UE	UE
21	SO	CC	SO	NAS	NAS	NAS	FC	CO	FC	FC	CO	BW	YEK	YEK	BW	YEK	CO	CO	BW	DI	CO	CO	CO	CO
22	CC	LR	CC	CO	NAS	GWR	GWR	GWR	CO	FC	CO	CO	CO	CO	BW	BW	BW	BW	CO	TI	DI	DI	CC	SO
23	LR	NAS	NAS	NAS	NAS	NAS	GWR	GWR	YEK	YEK	YEK	YEK	BW	BW	BW	GWR	GWR	GWR	DI	DI	DI	DI	CO	CO
Q24	SO	LR	LR	CC	CC	NAS	LR	FC	UE	YEK	NAS	NAS	NAS	NAS	UE	FC	FC	FC	FC	DI	DI	CC	DI	SO
25	CC	LR	LR	LR	NAS	NAS	NAS	FC	FC	CO	CO	CO	CO	CO	CO	BW	TI	BW	BW	DI	TI	DI	SO	LR
D26	LR	LR	LR	NAS	GWR	FC	FC	FC	YEK	FC	FC	FC	CO	CO	CO	BW	BW	DI	DI	DI	DI	DI	CC	CC
D27	LR	LR	NAS	NAS	GWR	GWR	FC	BW	FC	UE	CO	CO	TI	BW	CO	CO	BW	BW	BW	TI	DI	DI	SO	LR
28	LR	LR	CC	NAS	NAS	NAS	NAS	GWR	YEK	FC	FC	YEK	BW	BW	BW	BW	BW	TI	BW	TI	DI	DI	DI	CC
29	LR	LR	NAS	NAS	NAS	NAS	NAS	GWR	GWR	FC	FC	YEK	CO	BW	BW	BW	CC	CC	TI	DI	CC	CC	CO	CO
30	LR	LR	LR	NAS	GWR	GWR	CO	CO	YEK	FC	FC	CO	BW	BW	BW	BW	TI	CC	DI	DI	DI	DI	CC	DI
31	LR	NAS	NAS	NAS	NAS	FC	FC	FC	FC	YEK	YEK	BW	YEK	BW	BW	CC	CC	CC	CC	CC	DI	CC	CC	DI

IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
AI = ABISKO	68 21.5	18 49.4	66.0	114.9
BW = BARROW	71 18.2	-156 44.9	68.5	241.1
CC = C.CHELYUSKIN	77 43.0	104 17.0	66.2	176.4
CO = COLLEGE	64 51.6	-147 50.2	64.6	256.5
GWR= GREAT WHALE R.	55 16.0	-77 47.0	66.5	347.4
DI = DIXON ISLAND	73 32.6	80 33.7	63.0	161.5

IDENTIFICATION	GEOGRAPHIC LAT	GEOGRAPHIC LONG	GEOMAGNETIC LAT	GEOMAGNETIC LONG
FC = FT.CHURCHILL	58 48.0	-94 06.0	68.7	322.8
LR = LEIRVOGUR	64 11.0	-21 42.0	70.2	71.0
NAS= NARSSARSSUAQ	61 06.0	-45 12.0	71.0	37.0
TI = TIXIE BAY	71 35.0	129 00.0	60.4	191.4
UE = CAPE WELLEN	66 09.8	-169 50.1	61.7	237.0
YEK= YELLOWKNIFE	62 24.0	245 36.0	69.0	292.8

8. Tables of Station Frequency of AU and AL Contribution

STATION FREQUENCY OF AU-AL CONTRIBUTION

JULY 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	1	0	2	16	75	72	73	15	12	13	3	9	5	43	138	428	722	944	852	514	207	89	25	0
AL- LR	762	1052	782	349	176	126	68	84	49	25	8	32	6	3	0	0	0	0	0	8	14	23	61	302
AU- NAS	41	15	16	30	45	0	26	31	12	11	3	5	4	33	82	180	498	693	871	1148	1251	913	603	339
AL- NAS	52	215	534	817	801	737	285	204	168	115	42	4	29	13	0	0	0	0	0	0	0	0	0	0
AU- GWR	337	294	185	111	47	2	0	11	52	134	40	84	68	6	23	8	0	1	2	77	265	429	459	415
AL- GWR	5	0	73	151	326	558	874	761	593	294	169	47	66	31	1	16	5	0	0	0	0	0	0	0
AU- FC	609	525	224	262	123	9	23	46	7	29	38	10	6	11	4	9	19	0	17	21	79	315	611	737
AL- FC	0	2	4	30	109	89	173	372	427	501	733	684	645	329	149	91	145	88	27	3	3	0	0	0
AU- YEK	616	725	1025	687	745	439	182	121	78	56	32	71	1	18	2	2	0	0	8	11	0	6	51	155
AL- YEK	1	0	0	0	1	25	137	106	105	214	238	299	415	676	759	563	213	143	183	67	9	2	2	0
AU- CO	0	18	63	57	25	64	80	65	48	83	94	45	4	6	22	54	22	2	0	4	0	0	0	0
AL- CO	56	12	15	10	4	2	0	0	8	68	135	315	271	232	135	78	33	6	18	113	180	107	57	36
AU- BW	21	104	178	579	694	1162	1196	932	765	323	181	55	3	13	0	0	0	37	43	63	37	82	13	22
AL- BW	4	0	41	118	72	55	11	0	22	83	185	147	297	487	764	974	1065	1020	567	278	88	30	21	17
AU- UE	0	0	0	16	60	74	114	29	14	9	4	20	15	2	0	0	0	0	0	0	0	0	0	0
AL- UE	87	12	9	3	1	0	0	0	0	1	24	11	28	18	28	5	5	7	13	11	40	107	163	196
AU- CC	12	15	11	11	7	14	122	422	599	914	1130	1005	905	697	383	198	4	2	0	0	0	2	11	5
AL- CC	163	78	86	125	133	101	114	82	18	10	3	6	2	32	20	104	101	140	287	429	394	649	591	490
AU- TI	0	0	0	0	1	4	29	178	179	192	130	162	56	22	15	8	2	0	0	0	0	0	0	0
AL- TI	318	344	254	187	153	12	0	0	0	0	0	0	0	0	1	26	215	188	270	253	155	116	158	296
AU- DI	222	162	140	50	17	0	14	10	87	96	205	390	690	794	731	490	263	37	4	6	9	20	87	187
AL- DI	18	16	6	43	41	140	169	152	186	209	69	101	23	19	2	3	78	268	494	656	843	526	240	76
AU- AI	1	2	16	41	21	20	1	0	7	0	0	4	103	215	460	483	330	144	63	16	12	4	0	0
AL- AI	394	129	56	27	43	15	29	99	284	340	254	214	78	20	1	0	0	0	1	42	134	300	567	447
AU- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION FREQUENCY OF AU-AL CONTRIBUTION

AUGUST 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	2	0	0	0	0	0	7	20	0	0	3	1	3	23	157	264	429	566	538	216	85	31	7	0
AL- LR	637	799	716	640	385	167	61	89	66	99	146	167	138	98	71	40	0	0	0	0	0	15	135	434
AU- NAS	65	21	4	3	1	2	8	1	25	2	22	0	1	27	150	295	668	940	967	1132	995	651	231	77
AL- NAS	77	296	516	538	806	752	563	290	138	48	58	44	20	56	10	0	0	0	0	0	0	0	1	24
AU- GWR	235	218	141	88	52	46	77	102	30	69	97	211	151	118	71	7	8	24	134	235	208	333	301	210
AL- GWR	0	14	34	84	215	320	469	582	562	405	161	89	16	0	5	14	16	0	0	0	0	0	0	0
AU- FC	1145	877	674	533	267	247	174	92	71	28	21	41	66	183	157	69	113	48	55	214	465	800	1117	1304
AL- FC	1	0	5	9	48	80	114	158	223	242	358	553	553	196	62	17	3	1	0	0	0	0	0	0
AU- YEK	293	538	628	514	550	454	326	227	119	91	56	21	58	138	32	35	2	12	0	6	27	7	35	156
AL- YEK	0	0	23	13	0	28	50	97	222	256	266	230	330	692	623	435	139	87	3	1	0	0	0	0
AU- CO	11	24	9	47	267	269	129	135	120	190	98	47	12	10	40	86	16	0	5	1	0	0	0	0
AL- CO	36	20	2	0	1	4	6	3	50	183	271	198	194	116	151	119	25	4	74	115	40	51	38	5
AU- BW	58	152	386	674	719	777	899	704	675	286	136	38	47	26	7	8	15	30	32	41	79	21	85	27
AL- BW	20	3	1	0	0	5	1	55	91	83	178	220	295	432	647	894	1012	878	534	210	10	15	25	6
AU- UE	0	0	0	0	0	11	65	75	41	8	6	0	0	1	2	1	0	0	0	0	0	0	0	0
AL- UE	19	2	0	0	0	0	0	0	0	0	10	15	56	51	46	6	5	0	0	17	109	164	163	101
AU- CC	3	5	5	0	4	46	141	416	523	831	977	999	962	559	288	151	57	16	0	2	0	1	0	1
AL- CC	287	65	110	164	133	242	143	56	19	1	0	15	0	45	118	140	254	179	147	367	365	510	661	385
AU- TI	0	0	0	0	0	0	23	88	195	197	155	113	106	43	41	24	0	0	0	0	0	0	0	0
AL- TI	413	538	406	352	171	68	14	3	0	0	0	0	0	34	87	137	174	399	345	332	343	356	300	433
AU- DI	42	25	13	1	0	8	8	0	61	158	289	384	369	552	561	497	138	35	0	0	0	16	84	85
AL- DI	9	3	8	41	70	190	433	284	69	146	61	50	40	63	21	46	216	309	757	813	938	483	185	55
AU- AI	6	0	0	0	0	0	3	0	0	0	0	5	85	180	354	423	414	189	129	13	1	0	0	0
AL- AI	361	120	39	19	31	4	6	243	420	397	351	279	218	77	19	12	16	3	0	5	55	266	352	417
AU- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION FREQUENCY OF AU-AL CONTRIBUTION

SEPTEMBER 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	4	18	58	58	144	97	91	60	39	1	0	0	59	67	114	303	612	692	519	449	380	236	122	69
AL- LR	800	865	645	383	164	73	6	0	0	18	124	183	317	239	145	5	2	0	0	0	3	18	32	263
AU- NAS	197	71	32	16	32	34	10	6	2	1	16	1	2	11	46	155	351	589	905	1058	1018	912	685	439
AL- NAS	107	308	583	844	794	631	416	206	83	24	26	24	135	171	92	34	2	0	0	1	0	0	0	46
AU- GWR	182	123	173	111	60	11	0	5	6	6	17	6	0	0	3	0	0	0	4	29	67	128	126	96
AL- GWR	0	24	51	158	263	421	686	644	579	385	147	16	19	77	183	296	324	90	56	22	0	0	0	0
AU- FC	598	647	447	444	160	134	21	20	38	32	36	4	9	5	24	12	3	1	5	106	103	421	695	852
AL- FC	0	9	10	19	124	104	227	456	384	660	609	465	253	147	88	35	35	21	3	4	0	0	0	1
AU- YEK	446	403	464	623	567	544	277	162	139	31	57	39	52	21	13	1	0	17	2	9	21	7	77	178
AL- YEK	1	0	0	0	5	27	73	197	288	221	215	196	307	503	569	437	355	265	199	28	5	2	0	1
AU- CO	0	1	47	59	26	64	85	186	297	245	108	94	128	71	39	55	13	9	29	0	0	0	0	1
AL- CO	54	15	8	24	10	10	3	5	33	27	139	318	259	184	123	49	3	7	97	218	203	96	45	69
AU- BW	44	206	334	357	690	753	1092	894	501	476	389	111	25	47	37	41	28	24	107	85	129	45	48	16
AL- BW	14	38	5	32	59	7	20	8	33	80	97	265	357	328	484	682	764	749	464	186	83	1	19	22
AU- UE	0	0	0	3	5	0	12	0	7	25	9	28	59	94	142	22	0	0	0	0	0	0	0	0
AL- UE	72	27	48	3	0	0	0	0	0	0	0	1	21	16	10	23	0	0	30	102	62	93	120	63
AU- CC	33	16	22	33	21	50	148	415	668	795	727	837	819	764	317	133	89	38	23	2	1	4	0	22
AL- CC	86	28	57	82	151	221	72	26	15	4	2	0	17	59	51	127	112	189	190	149	287	592	868	532
AU- TI	0	0	0	0	7	0	2	11	46	103	126	312	120	99	23	26	4	0	0	0	0	0	0	0
AL- TI	312	342	348	247	205	97	20	0	0	0	0	0	0	13	27	41	103	146	235	171	34	46	30	147
AU- DI	274	263	166	8	2	1	13	10	47	85	315	368	446	315	505	427	245	85	21	14	8	11	37	126
AL- DI	1	1	5	6	14	192	229	202	223	77	21	5	4	6	0	62	95	333	473	818	741	593	237	29
AU- AI	22	52	57	88	86	112	49	31	10	0	0	0	81	306	537	625	455	345	185	48	73	36	10	1
AL- AI	353	143	40	2	11	17	48	56	162	304	420	327	111	57	28	9	5	0	53	101	382	359	449	627
AU- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION FREQUENCY OF AU-AL CONTRIBUTION

OCTOBER 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	32	73	114	72	108	61	39	26	119	87	47	13	60	67	137	449	738	651	611	556	594	409	242	198
AL- LR	772	994	673	442	109	33	7	2	11	8	56	141	197	105	24	0	0	0	0	0	0	21	137	272
AU- NAS	213	102	29	26	40	49	14	9	26	45	45	34	20	13	58	108	363	607	810	813	560	551	625	406
AL- NAS	81	199	622	734	724	581	443	125	48	6	4	3	77	133	45	4	0	0	0	0	0	0	6	20
AU- GWR	352	359	336	221	101	82	81	64	78	19	88	67	62	48	1	0	0	0	51	105	211	304	272	166
AL- GWR	27	8	27	100	232	458	672	754	537	370	113	68	47	82	232	323	391	295	100	38	35	13	0	0
AU- FC	641	438	327	333	274	187	150	88	33	42	111	193	102	69	98	34	10	2	7	70	220	428	506	722
AL- FC	0	0	1	31	144	108	159	203	403	482	609	362	214	49	48	69	99	80	12	19	11	28	0	0
AU- YEK	302	539	572	506	450	409	252	172	103	47	24	53	50	26	18	10	1	5	0	0	0	27	125	239
AL- YEK	3	0	1	25	25	30	44	187	251	369	328	337	548	604	438	111	31	113	277	225	116	7	10	6
AU- CO	1	12	12	142	148	171	245	219	270	235	44	8	2	61	80	61	25	10	0	2	0	9	0	1
AL- CO	78	27	42	2	3	5	0	36	70	52	178	369	235	219	163	36	16	7	12	87	183	228	145	115
AU- BW	160	149	357	433	536	600	654	669	468	372	137	43	18	47	35	138	176	122	76	65	106	93	41	79
AL- BW	14	16	9	3	8	19	23	8	53	75	184	372	394	429	545	681	573	384	326	68	112	38	24	5
AU- UE	0	0	0	0	0	28	23	31	18	26	0	3	18	31	70	7	0	0	0	0	0	0	0	0
AL- UE	214	190	44	1	2	3	0	0	1	2	50	61	64	10	36	38	3	0	1	0	5	18	109	187
AU- CC	74	51	18	21	106	121	263	361	437	675	905	672	490	205	107	37	10	47	21	8	6	3	14	23
AL- CC	267	129	65	52	233	288	135	77	19	0	0	16	49	192	178	331	148	157	121	173	226	426	494	534
AU- TI	0	0	0	0	0	30	44	211	265	248	253	329	203	81	31	2	0	0	0	0	0	0	0	0
AL- TI	88	174	348	431	323	128	30	0	0	0	0	4	4	30	133	198	495	432	386	356	191	50	2	13
AU- DI	84	122	72	46	18	37	39	10	40	59	109	363	743	964	772	654	256	139	23	35	91	9	26	16
AL- DI	7	12	3	8	46	205	328	417	355	169	64	2	1	0	18	65	104	392	617	847	727	641	248	101
AU- AI	1	15	23	60	79	85	56	0	3	5	17	82	92	248	453	360	281	277	261	206	72	27	9	10
AL- AI	317	111	25	31	11	2	19	51	112	327	274	125	30	7	0	4	0	0	8	47	254	390	685	607
AU- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION FREQUENCY OF AU-AL CONTRIBUTION

NOVEMBER 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	65	53	8	28	12	23	48	34	42	52	76	27	40	124	285	448	502	496	415	340	328	274	123	124
AL- LR	692	833	676	495	226	159	64	52	23	63	87	117	54	22	18	3	0	5	5	16	4	19	163	397
AU- NAS	237	191	152	27	12	46	3	9	22	33	88	46	54	23	70	181	239	358	338	435	433	470	438	277
AL- NAS	60	253	626	772	633	330	324	295	153	31	23	23	129	77	26	3	0	0	0	2	2	4	11	21
AU- GWR	140	90	157	96	45	26	0	1	0	0	8	24	20	14	2	4	97	183	243	330	280	260	135	138
AL- GWR	69	4	48	213	418	652	691	437	516	248	92	114	7	65	111	157	126	148	73	90	32	25	35	68
AU- FC	271	189	161	130	57	42	10	6	2	59	3	20	20	37	59	38	25	20	51	51	186	136	194	279
AL- FC	0	0	22	39	86	268	246	378	401	364	350	246	102	88	47	30	25	21	22	9	8	3	3	0
AU- YEK	255	260	313	395	429	229	183	73	9	29	2	4	0	7	27	13	20	11	37	27	72	82	255	243
AL- YEK	6	0	12	8	26	63	161	360	355	486	339	358	458	561	273	89	35	36	73	72	45	40	12	13
AU- CO	428	405	482	486	443	360	429	339	462	267	321	328	271	380	302	272	376	393	324	355	288	284	308	365
AL- CO	136	96	73	64	69	89	98	35	90	231	286	308	315	218	200	231	115	116	56	88	181	183	165	163
AU- BW	273	465	375	454	574	749	705	516	436	313	162	44	1	4	6	8	38	80	132	135	108	219	176	167
AL- BW	12	14	4	3	11	43	37	43	137	199	488	489	604	536	558	589	562	385	269	110	58	33	33	34
AU- UE	0	0	0	1	3	0	30	56	43	35	7	5	23	2	0	0	0	5	0	0	0	1	0	0
AL- UE	59	107	69	14	75	64	52	36	28	42	37	59	93	134	182	85	54	21	27	37	70	81	146	127
AU- CC	61	67	80	99	141	257	289	627	478	656	567	488	358	180	48	56	18	21	101	58	42	33	86	84
AL- CC	274	115	73	30	36	43	18	16	10	16	3	7	11	54	153	161	193	160	136	117	211	377	479	371
AU- TI	35	10	7	1	10	52	64	88	219	209	155	309	250	63	12	0	8	12	0	0	0	0	22	72
AL- TI	28	69	62	72	97	17	13	2	3	31	17	24	12	16	145	284	421	406	506	505	334	231	99	62
AU- DI	33	70	65	78	59	12	29	42	85	103	299	352	435	620	604	405	302	132	85	36	22	34	26	49
AL- DI	51	28	33	39	71	33	91	101	46	64	49	13	4	28	79	168	267	480	544	618	696	514	240	114
AU- AI	2	0	0	3	15	4	10	9	2	44	112	153	328	346	385	375	175	89	74	33	41	7	37	2
AL- AI	413	281	102	51	52	39	5	45	38	25	29	42	1	1	8	0	2	22	89	136	159	290	414	430
AU- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- SO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION FREQUENCY OF AU-AL CONTRIBUTION

DECEMBER 75

STA	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AU- LR	11	0	14	3	60	55	14	6	9	51	7	15	79	150	171	337	313	351	385	538	466	379	212	67
AL- LR	778	1001	778	406	218	143	93	62	43	13	32	30	58	6	7	4	4	12	11	3	4	6	67	406
AU- NAS	221	147	50	1	0	15	9	6	3	19	32	27	26	66	89	180	338	467	510	637	535	434	426	561
AL- NAS	252	320	646	988	977	605	437	129	62	29	92	81	41	88	82	14	5	0	0	0	0	4	0	23
AU- GWR	140	146	111	96	44	3	3	0	0	5	17	34	7	34	18	7	20	3	11	43	106	140	165	96
AL- GWR	49	86	98	144	296	578	583	578	323	98	5	9	11	0	11	81	90	180	182	123	79	37	14	85
AU- FC	400	301	409	358	300	129	69	19	2	3	7	3	16	23	80	108	114	67	99	119	250	397	447	402
AL- FC	6	16	35	23	126	263	466	618	767	764	574	392	210	67	38	69	78	81	54	13	3	0	4	8
AU- YEK	368	429	375	390	224	215	181	76	38	6	16	4	7	11	6	23	41	35	71	56	82	150	201	330
AL- YEK	3	0	1	8	15	37	60	157	404	647	494	558	553	402	194	201	60	33	63	49	11	5	2	0
AU- CO	31	25	38	9	12	46	48	40	57	32	11	20	10	29	27	58	84	43	71	63	38	13	4	12
AL- CO	96	82	134	96	52	38	73	112	126	151	402	350	404	282	191	102	110	75	126	63	103	179	237	199
AU- BW	362	451	518	471	725	662	601	661	499	544	272	123	17	2	29	48	47	225	231	179	223	254	184	201
AL- BW	15	1	12	10	6	27	25	46	79	129	186	405	477	750	1063	926	845	641	481	263	38	16	21	27
AU- UE	0	0	0	12	14	0	14	2	34	20	29	2	3	0	0	0	0	13	3	0	0	0	0	0
AL- UE	34	15	2	39	71	64	56	57	42	15	71	32	18	45	23	13	0	6	19	13	61	63	80	197
AU- CC	218	256	220	425	383	629	841	941	1063	971	1046	1009	793	456	252	136	114	98	140	51	62	12	35	130
AL- CC	335	210	64	72	72	20	21	11	0	4	0	0	34	157	166	252	335	236	246	166	218	517	769	443
AU- TI	19	24	59	9	22	34	41	55	9	19	197	191	237	157	121	25	10	0	9	0	0	0	0	1
AL- TI	9	0	9	3	1	16	8	1	0	0	0	0	31	34	28	127	206	251	260	297	225	101	11	30
AU- DI	84	81	66	94	76	58	35	54	146	189	220	382	520	728	719	733	474	300	220	58	17	36	104	60
AL- DI	88	4	9	17	10	33	16	19	7	5	4	0	23	29	55	71	127	340	418	824	1020	806	342	219
AU- AI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL- AI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AU- SO	0	6	0	0	0	0	14	4	0	0	1	6	50	145	204	348	205	305	258	110	116	81	45	2
AL- SO	0	195	125	72	62	16	36	22	70	7	5	0	3	0	0	2	0	0	5	0	46	98	126	313

SECTION III. GRAPHS OF INDICES, STATISTICAL DATA AND MAGNETOGRAMS

I. Explanation

Daily Graphs of 1.0-min Auroral Electrojet Indices. The following graphs are prints of computer-drawn plots of variations of the 1.0-min indices AU, AL, AE and AO for each day of July-December 1975. Dates on the graphs are given as year/month/day: 75/08/12 is 12 August 1975. Number of stations used for index derivations during each month is indicated in the upper right corner as, for example AE(12). Universal Time is indicated along the horizontal axis. Note that hour "1" in the tables in Section II refers to the interval from 0000-0100 UT on the graphs. The graph scale on which AU and AL are plotted is -1500 to 1000 nanoTeslas; that of AE and AO is -500 to 1000 nanoTeslas.

During some very disturbed intervals, the AO trace reached the lower limit of the microfilm plotting frame. Also, during large disturbances it is common for the AL and AE traces to overlap and become difficult to distinguish. It was not practical to change graph scales for such short, disturbed intervals and users interested in those times are encouraged to request listings of 1.0-min index values.

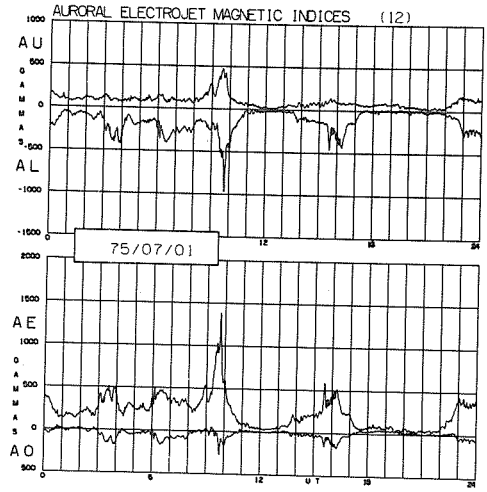
Stacked Common Scale Magnetograms. The following six graphs display the condensed stacked plots of the H (or X) 1-min variations for all stations for each month. Amplitude scales are given below each figure, corresponding to the centimeter scale at the lower right. Station abbreviations, component, north polar distance and east longitude are given for each station providing data for at least part of each month.

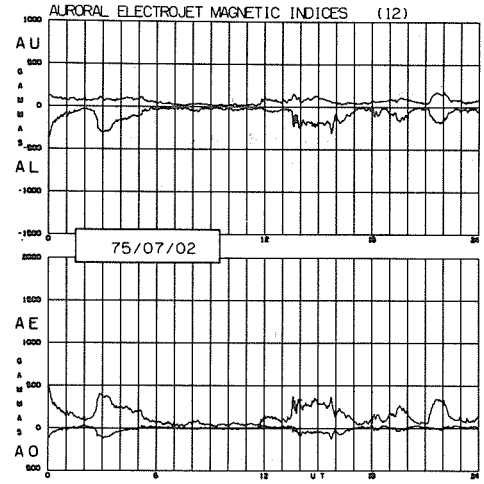
Frequency of AU and AL Provision by Station and Total Amplitude of Most Positive and Most Negative H Variations. Figures 1-24 display for each month statistical information concerning the time and frequency with which each station gives 1-min AU and AL indices and the total (cumulative) amplitude of extreme magnetic variations at those times when the stations were giving the indices. The curves were smoothed with an 11-point running mean. Arrows mark the UT time of Local Geomagnetic Midnight at each site. The UT day is shown twice so that patterns of systematic occurrence of extreme variations at the critically located sites will not be interrupted by day-end.

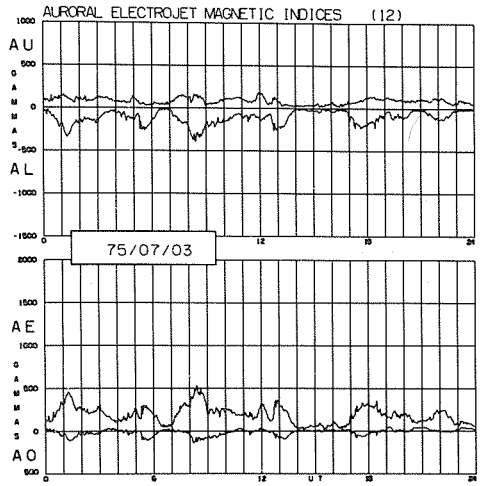
It is evident that the time at which AU is most frequently derived from each site, peaks some 6 h before Local Geomagnetic Midnight but that substorm related AU may occur frequently over a 6- to 9-h interval centered on 1800 LGT. Also, the larger amplitude positive variations occur during those hours when the sites are most often the source of AU.

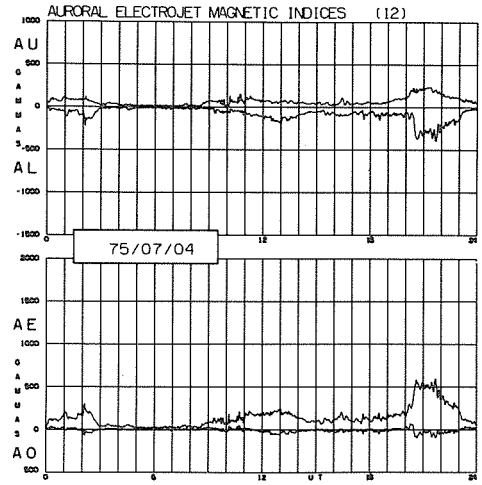
For AL, each site is most often in the critical position beneath the westward electrojet around 3 h after Local Geomagnetic Midnight. The larger negative H variations also occur most frequently arond 0300 LGT. A few pre-midnight and midnight large-amplitude events, however, often appear to complicate this simple pattern. The College Observatory site is somewhat exceptional because it, more than all the other AE stations, is optimally located to monitor large AL-producing events during several hours about Local Geomagnetic Midnight.

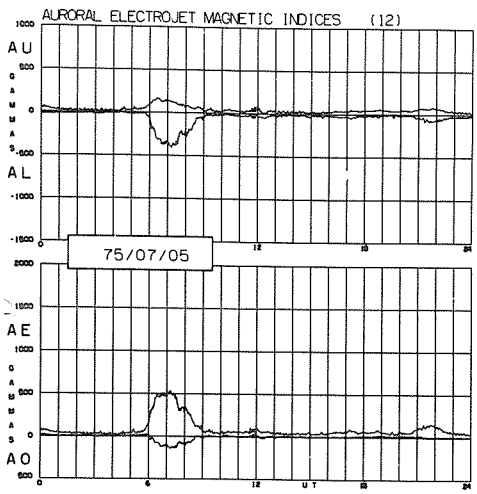
2. Daily Graphs of 1.0-min Auroral Electrojet Indices

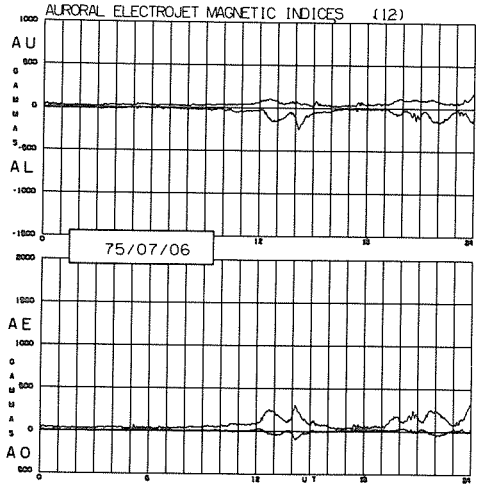


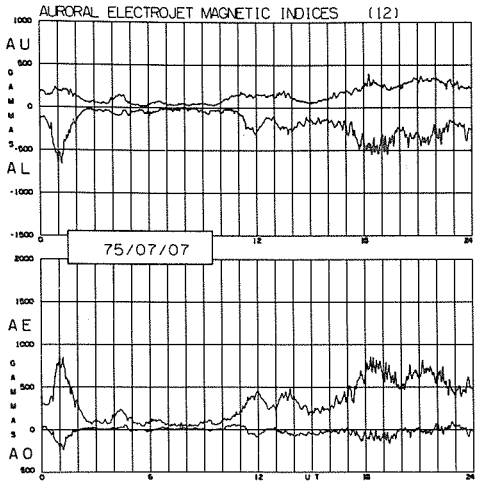








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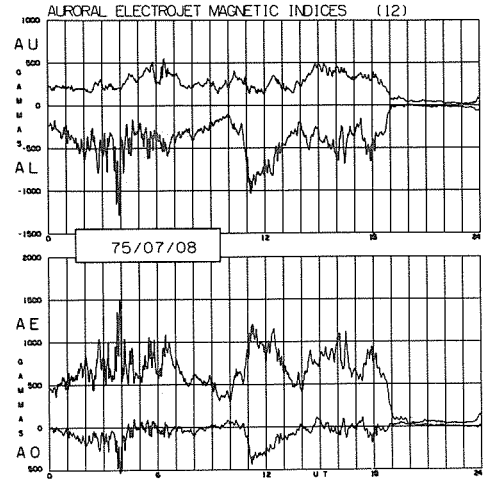
AU
AL
75/07/07
AE
AO
UT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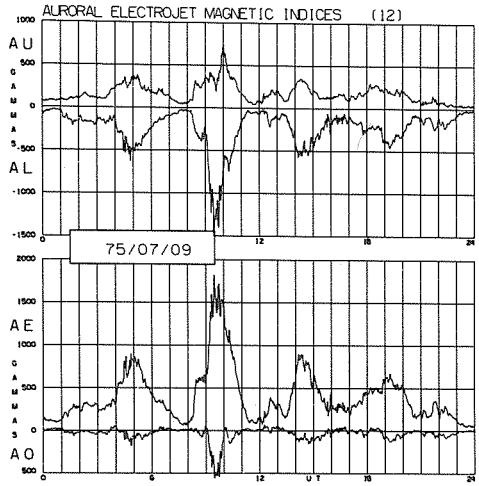
75/07/08
AE
AO
UT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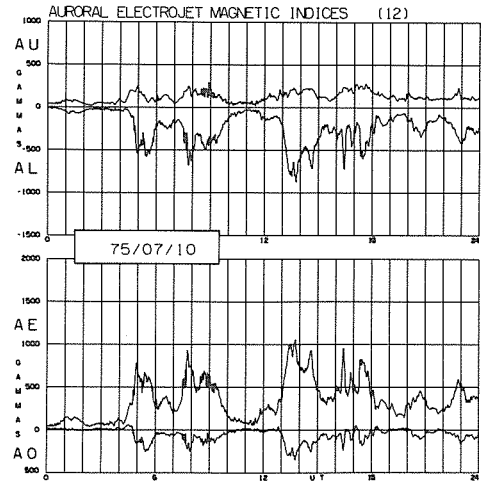
AE
AO
UT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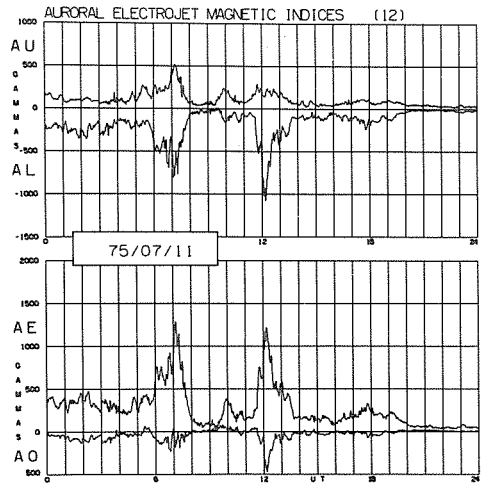
75/07/10
AE
AO
UT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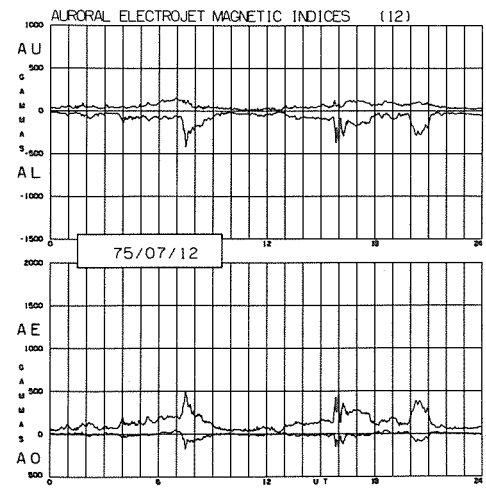
75/07/11
AE
AO
UT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AO
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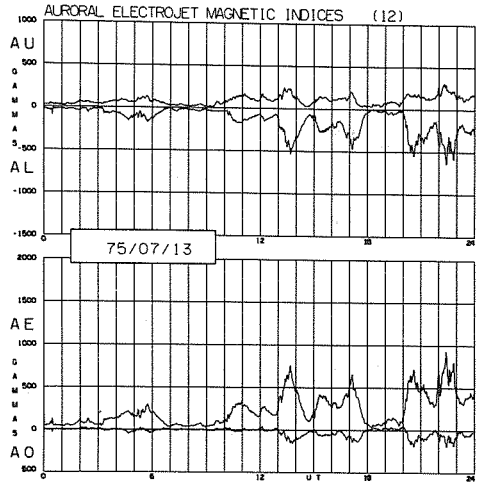
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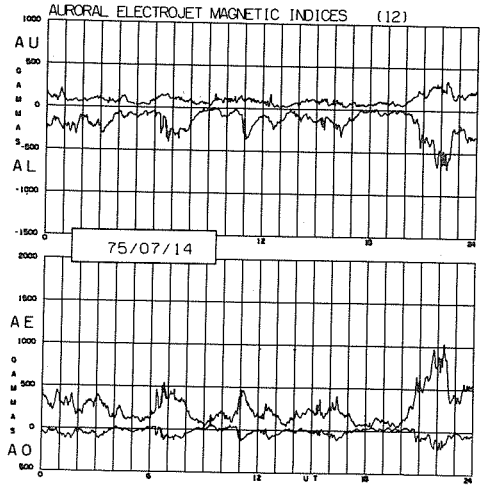
75/07/13
AE
AO
UT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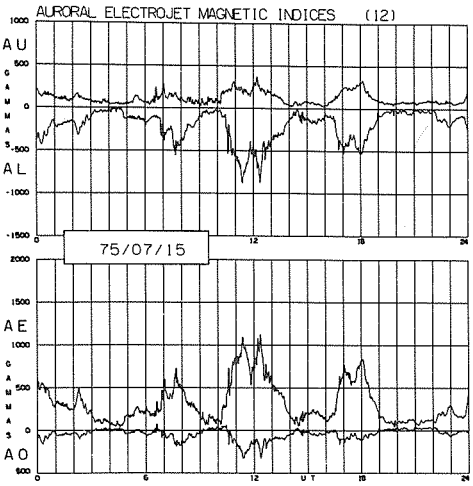
AE
AO
UT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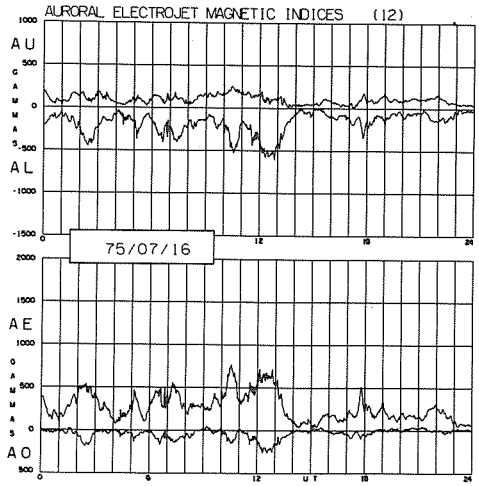
AO
UT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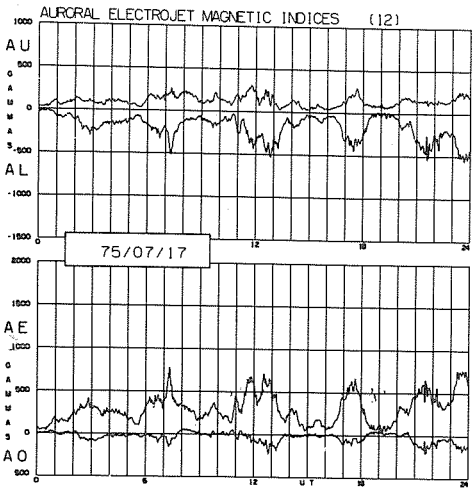
AO
UT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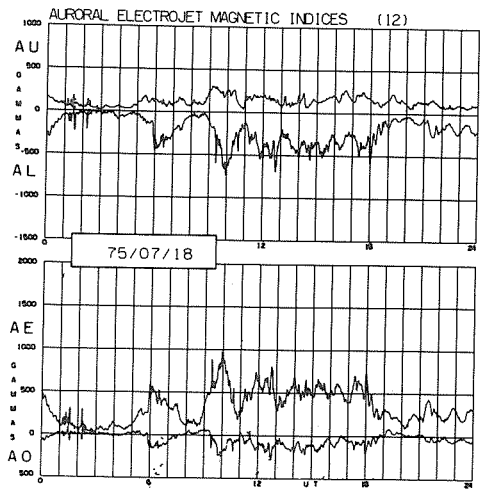
75/07/17
AE
AO
UT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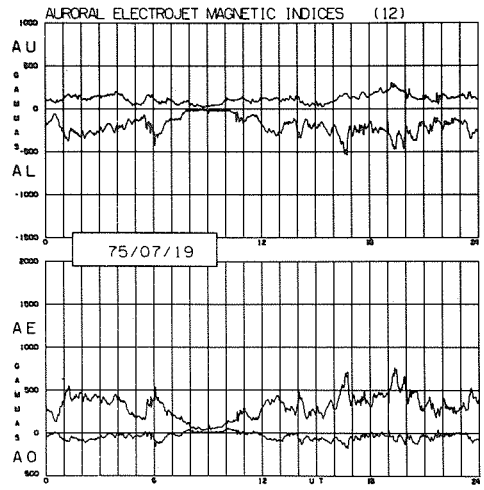
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AL
75/07/19
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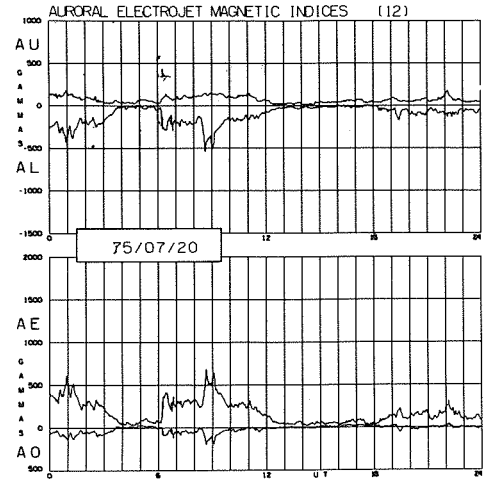
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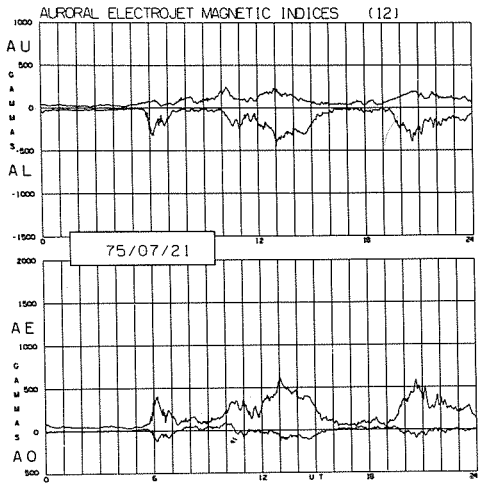
AO
UT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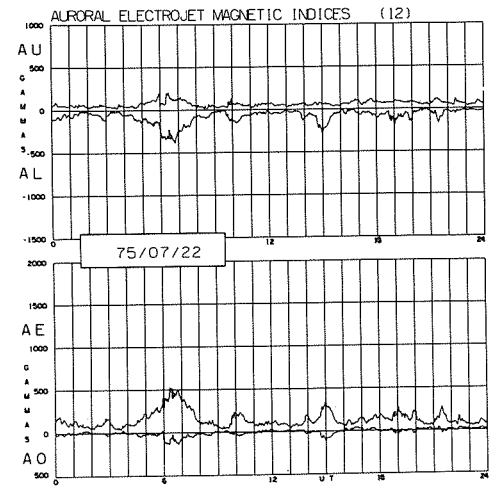
AL
75/07/21
AE
AO
UT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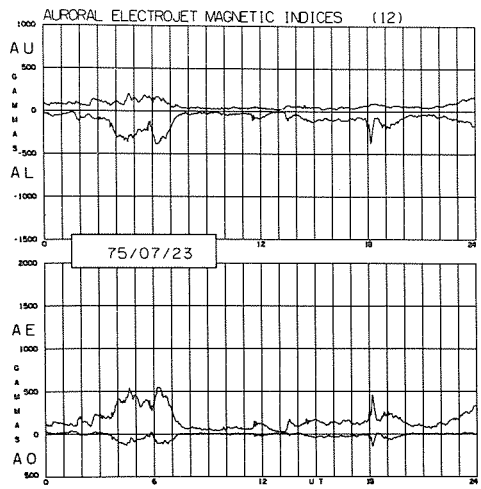
75/07/22
AE
AO
UT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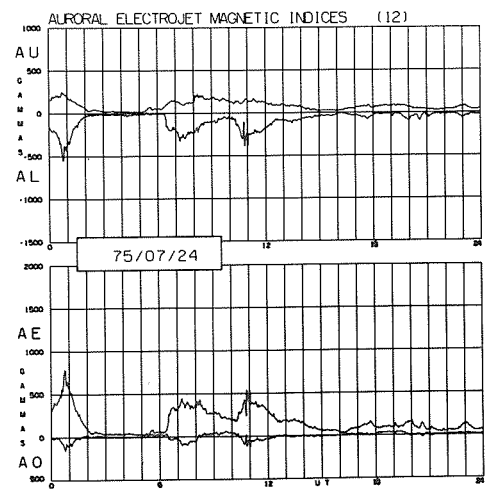
AO
UT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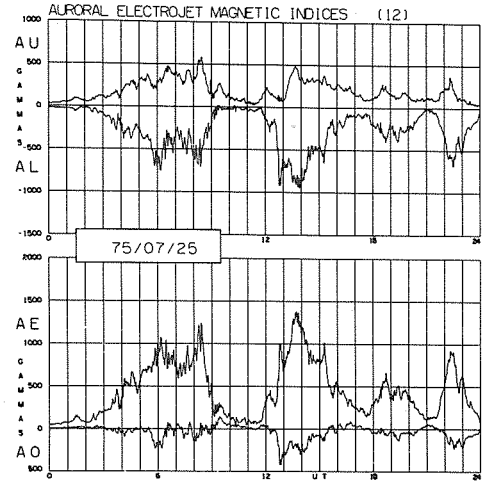
AO
UT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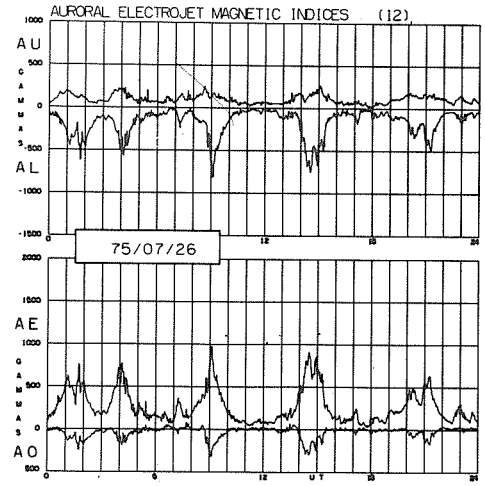
75/07/25
AE
AO
GAMMAS
UT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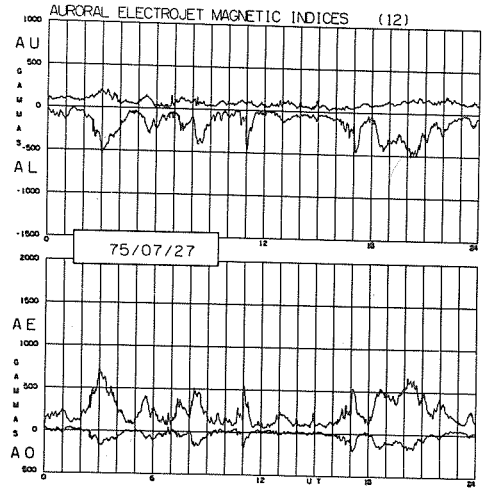
GAMMAS
UT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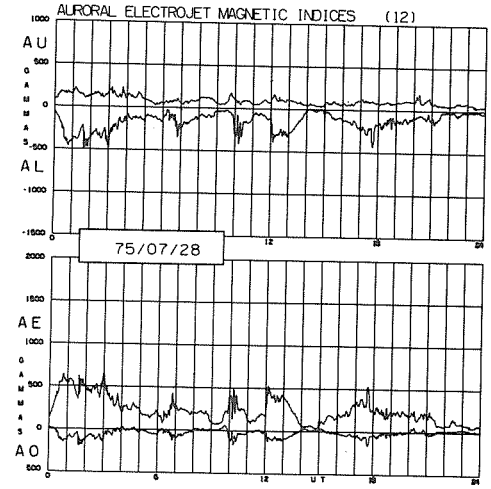
UT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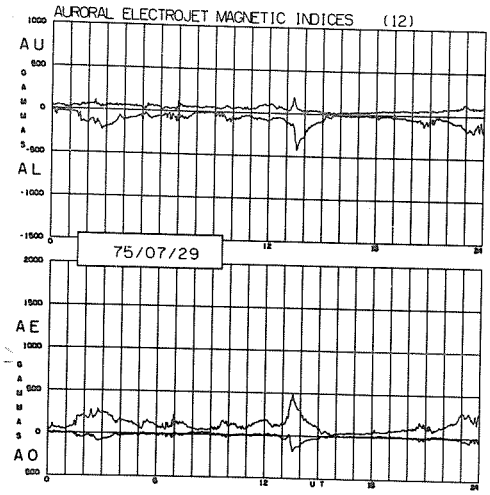
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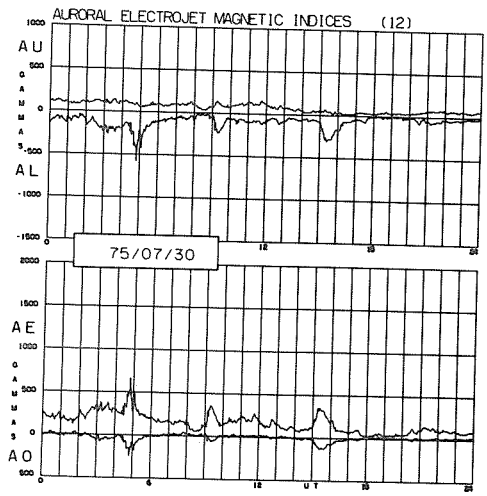
AO
GAMMAS
UT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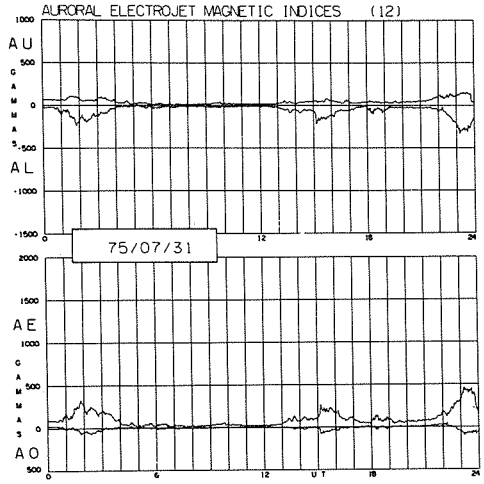
AL
75/07/30
AE
AO
GAMMAS
UT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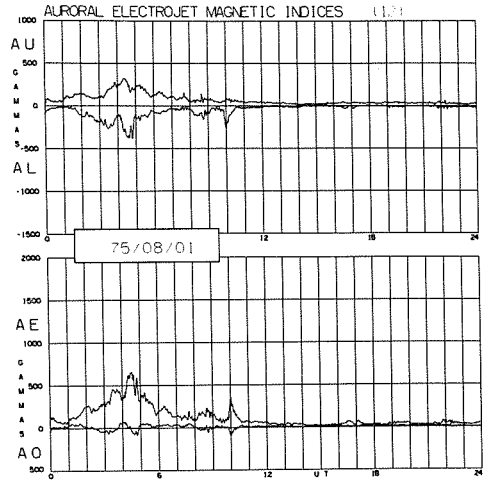
75/07/31
AE
AO
GAMMAS
UT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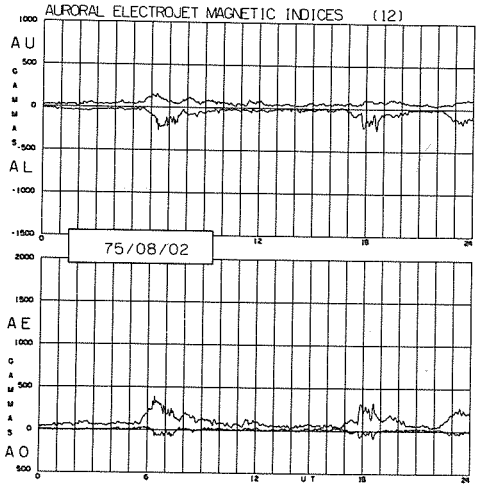
AL
75/08/01
AE
AO
GAMMAS
UT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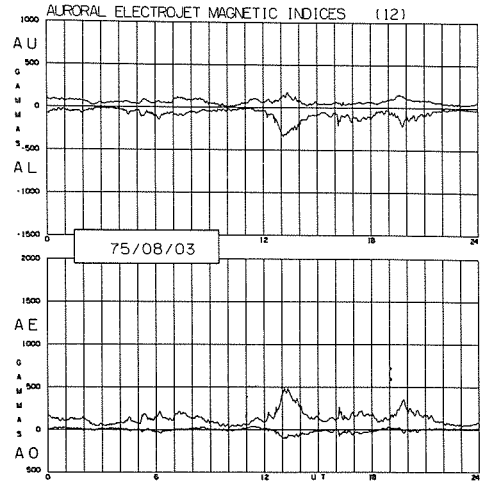
AU
AL
75/08/02
AE
AO
GAMMAS
UT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AL
75/08/03
AE
AO
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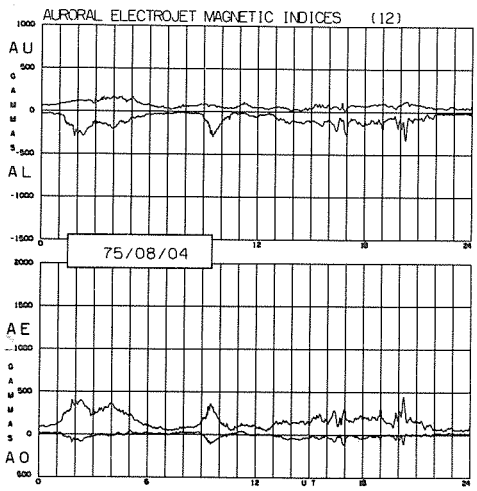
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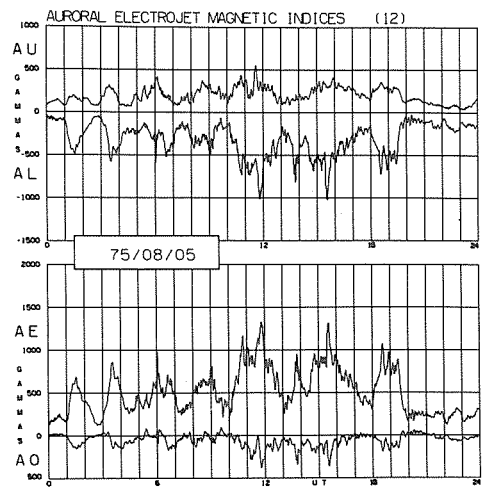
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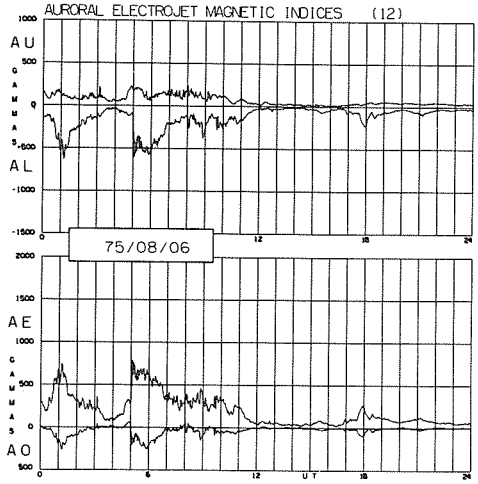
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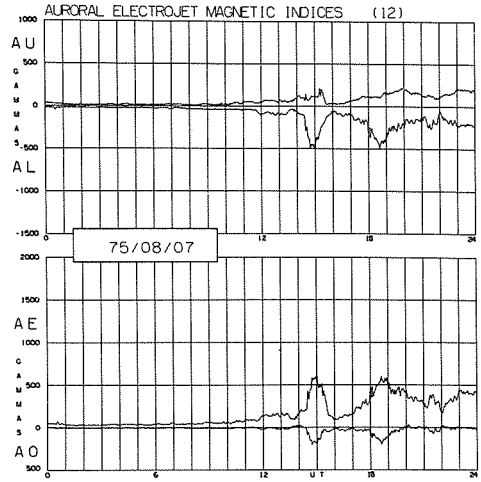
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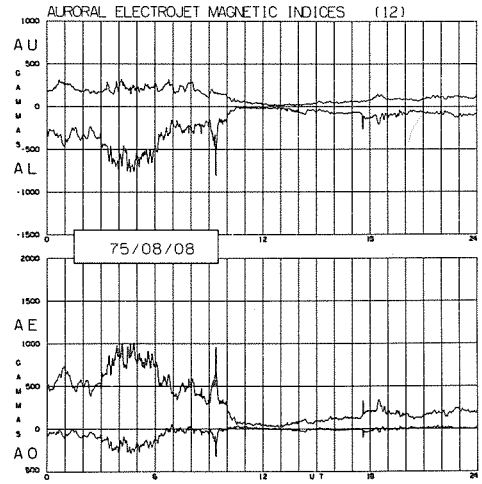
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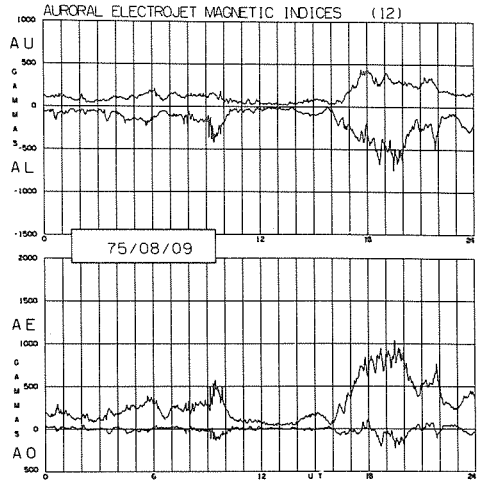
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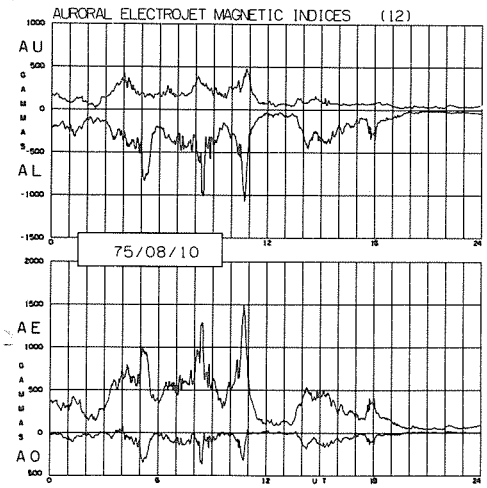
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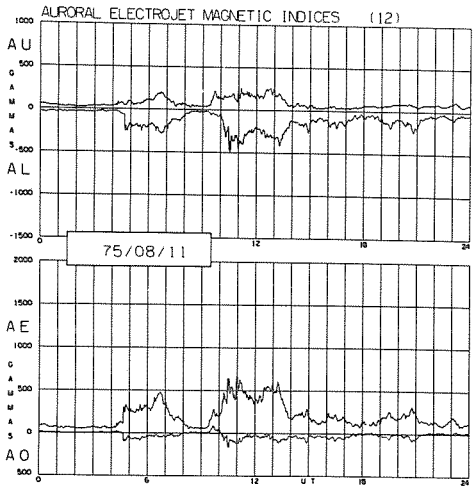
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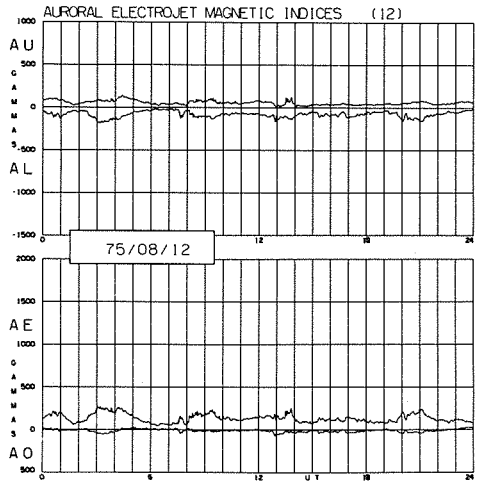
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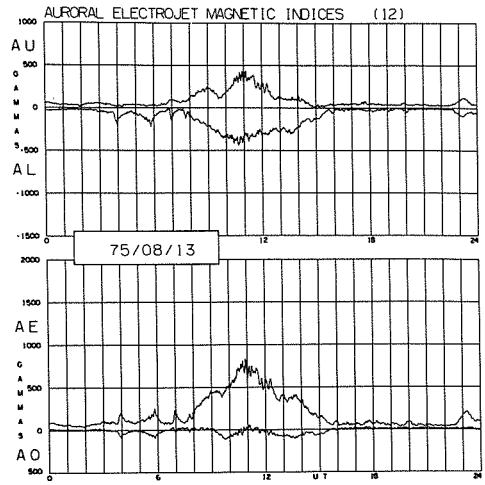
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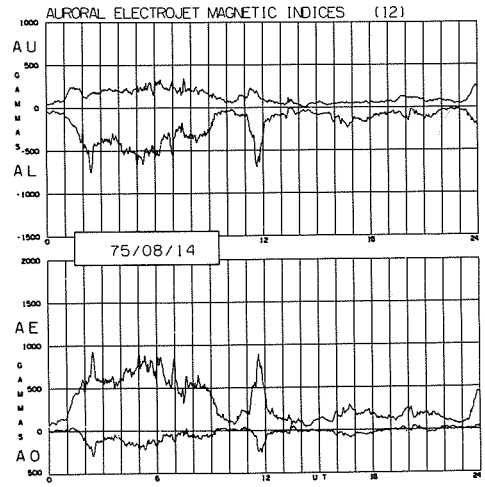
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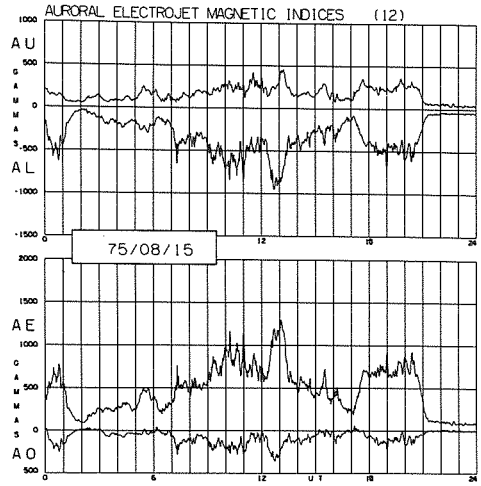
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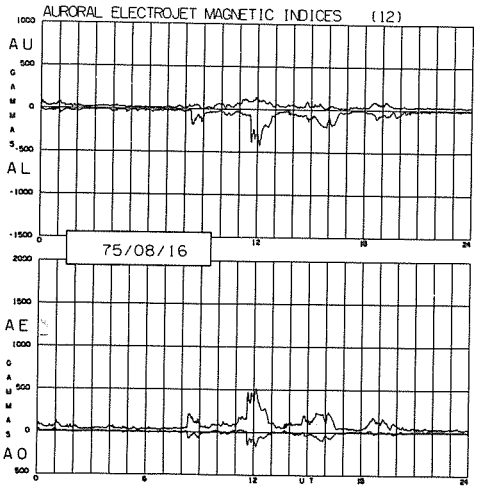
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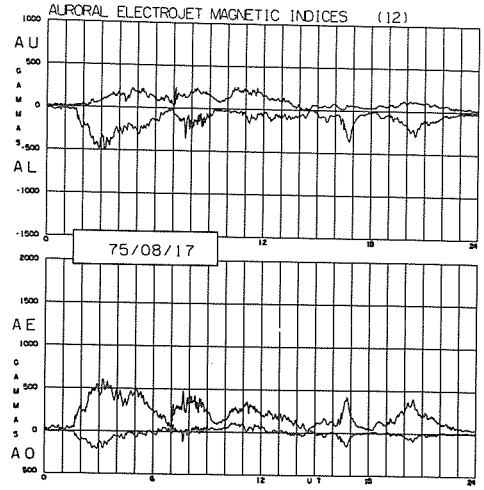
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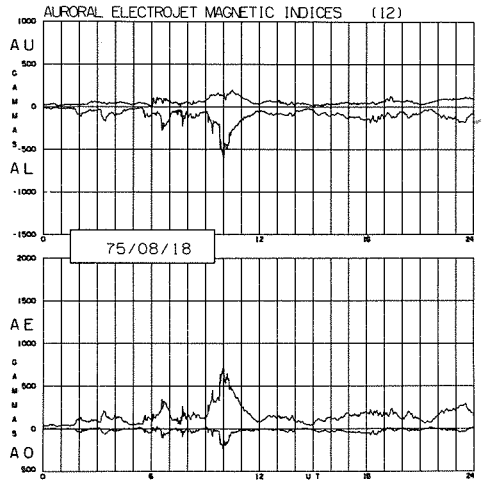
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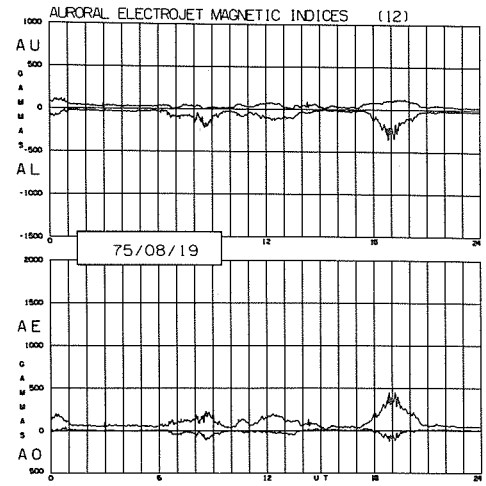
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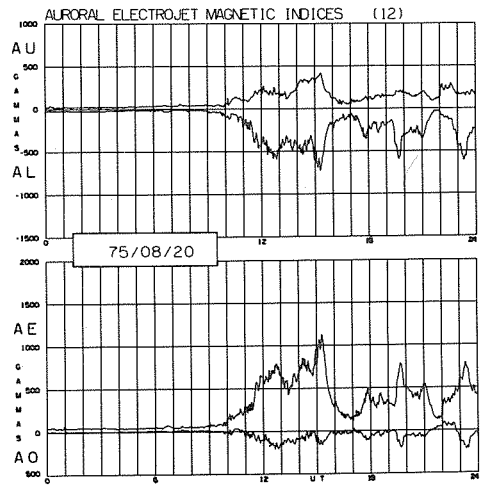
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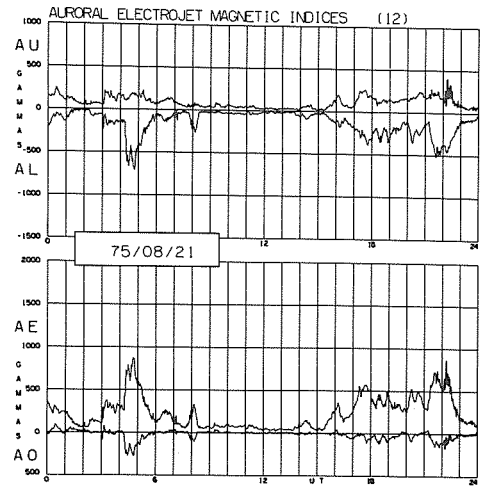
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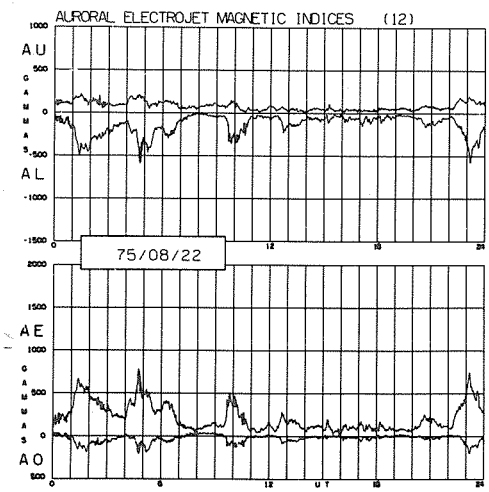
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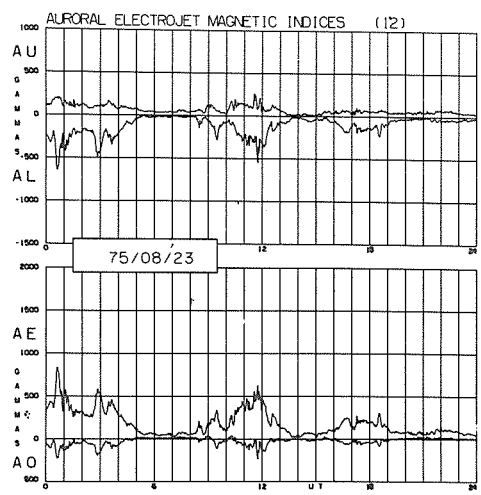
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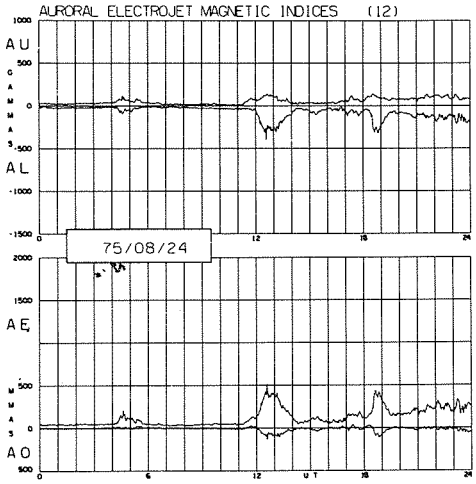
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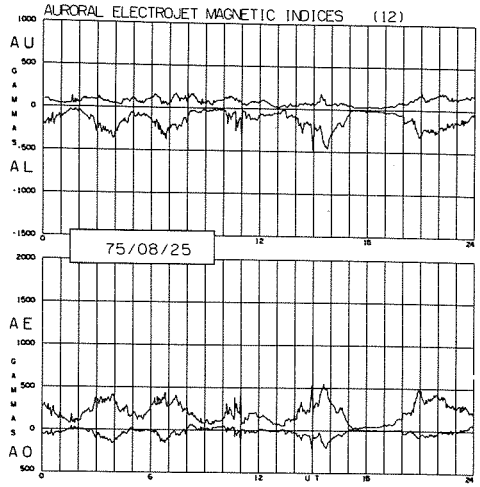
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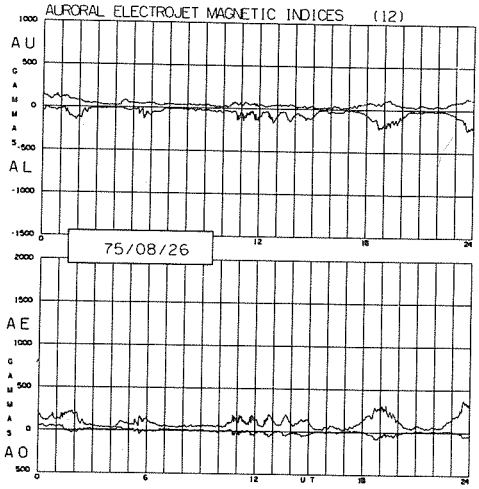
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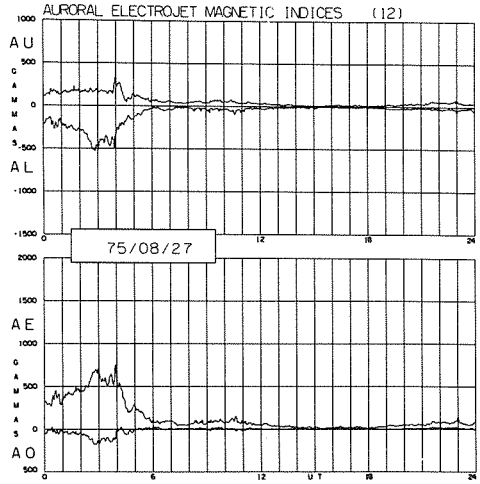
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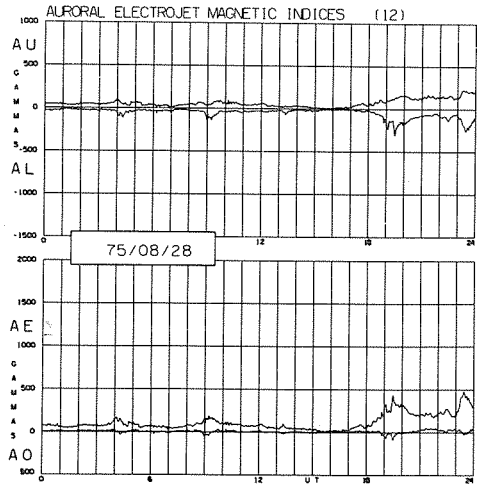
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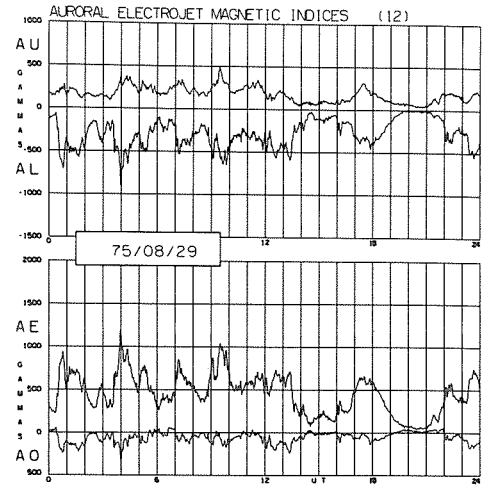
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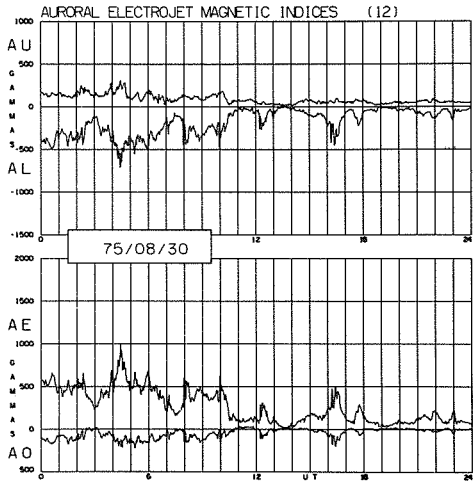
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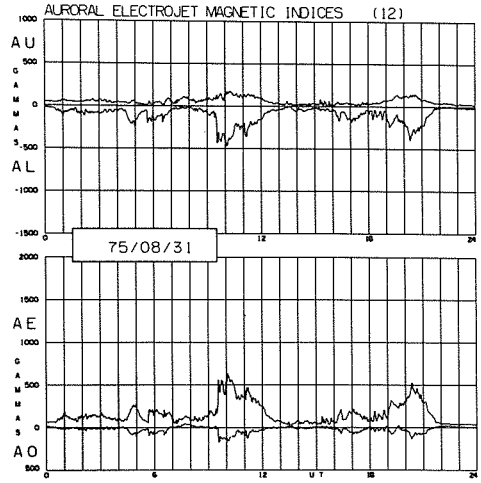
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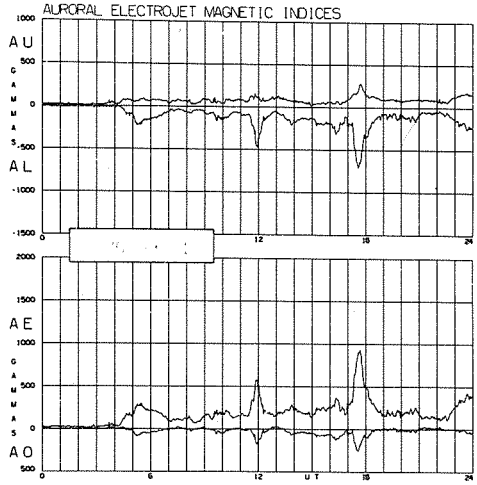
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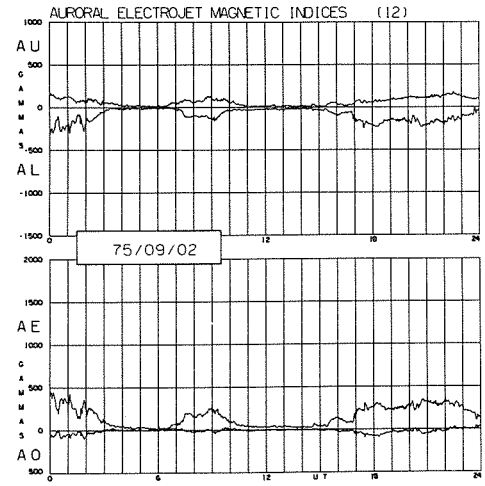
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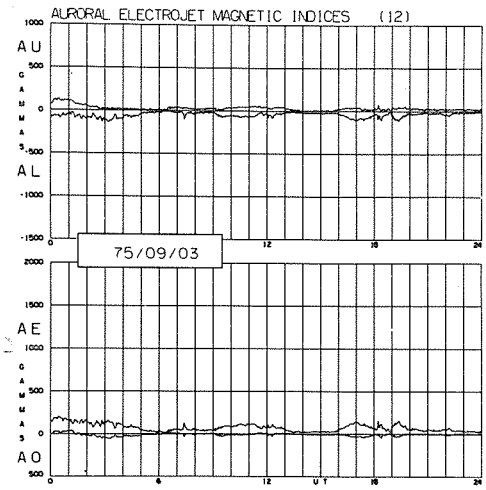
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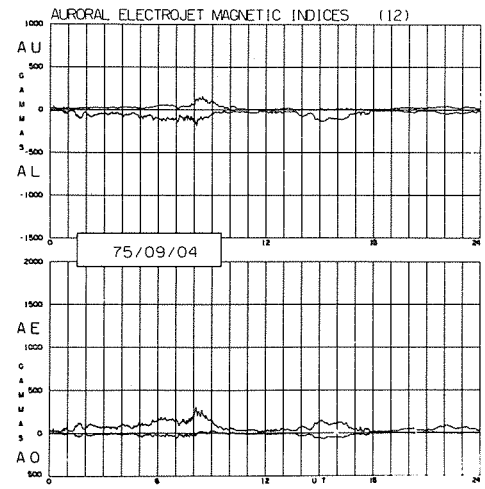
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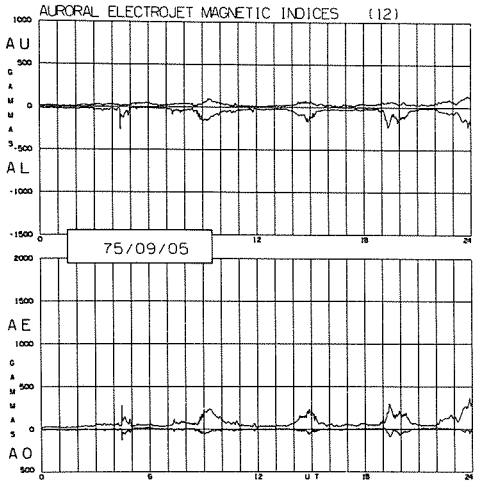
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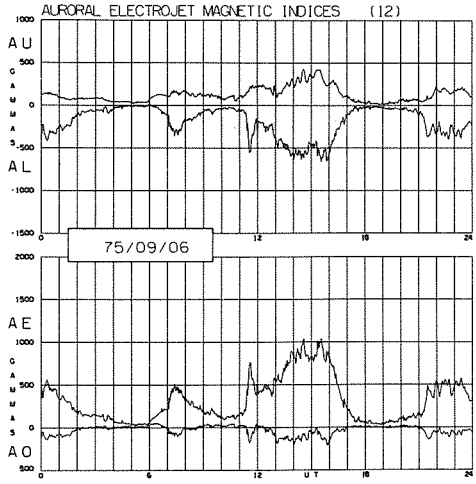
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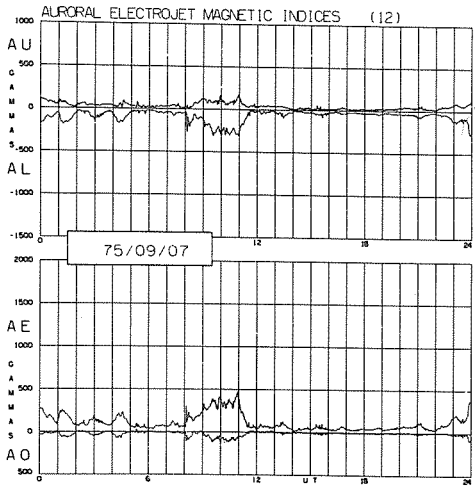
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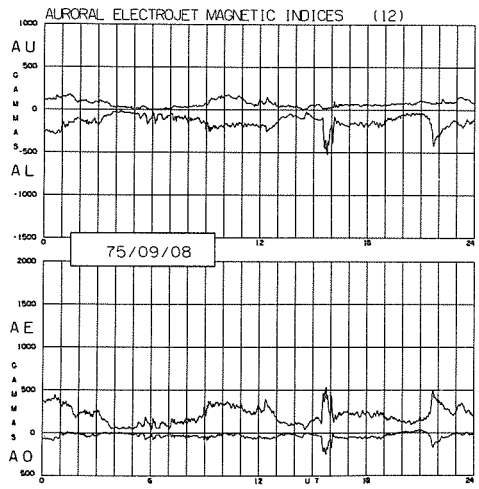
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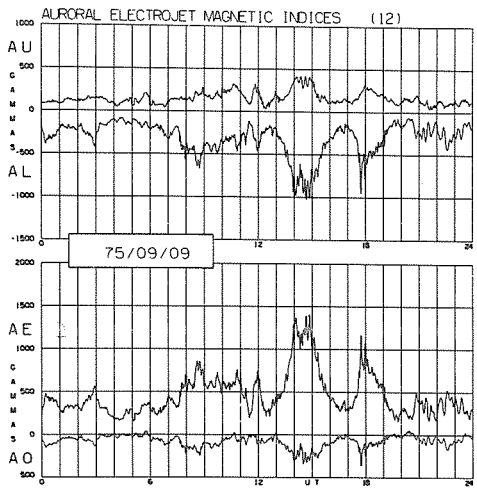
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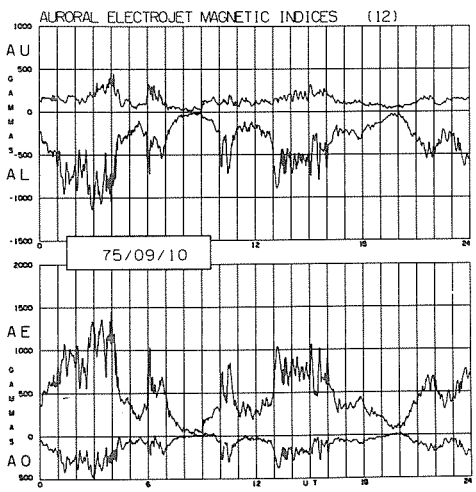
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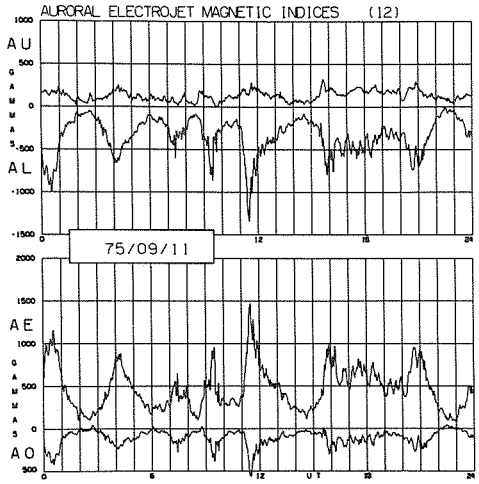
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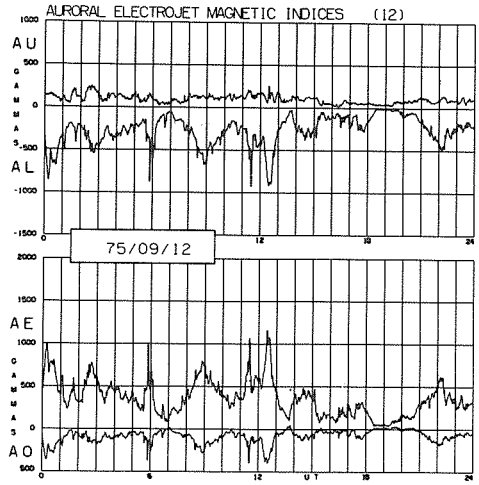
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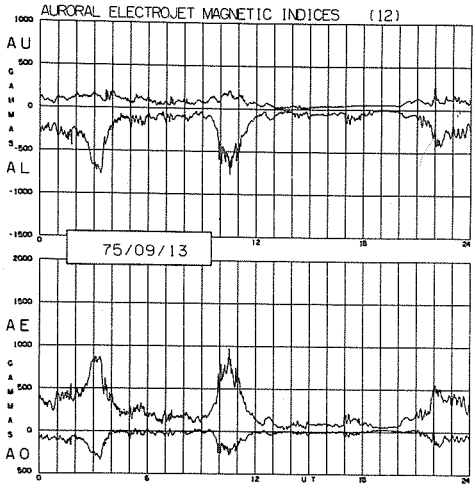
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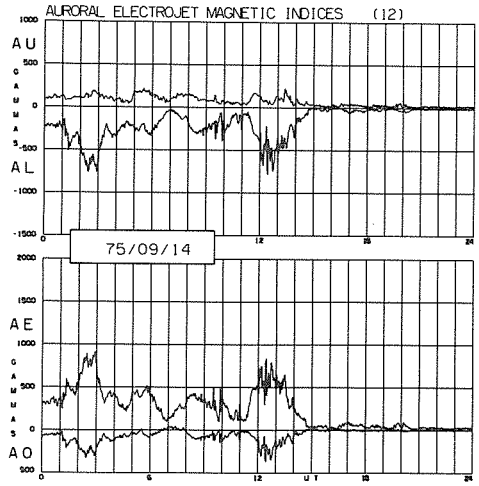
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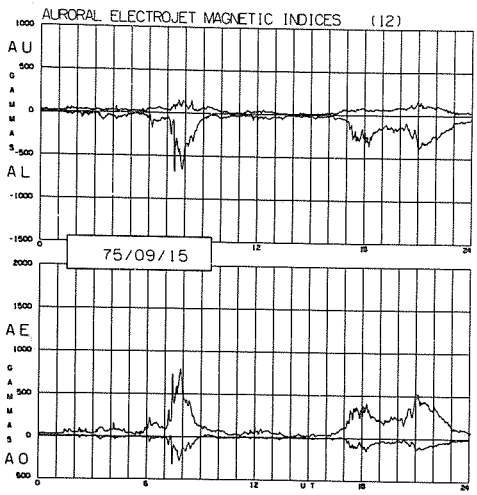
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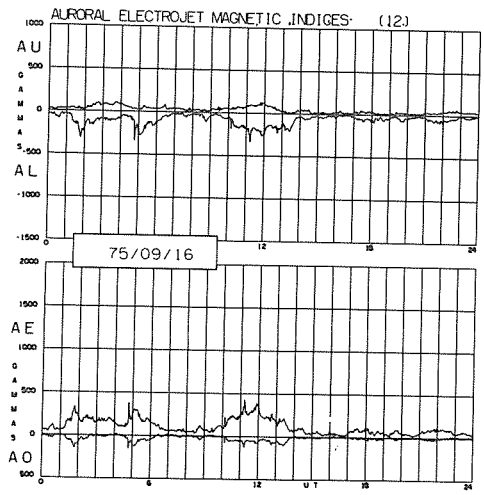
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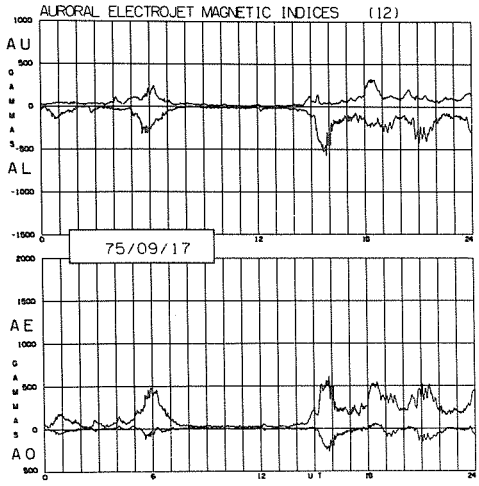
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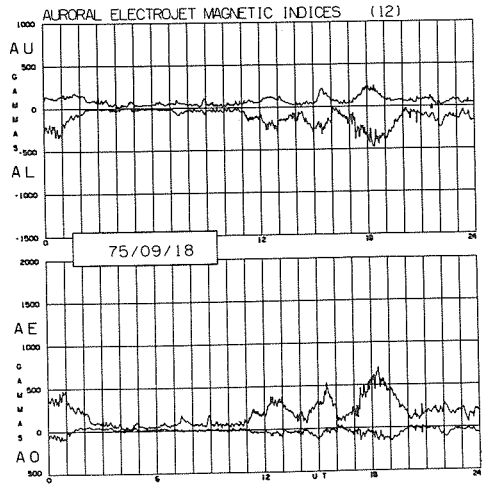
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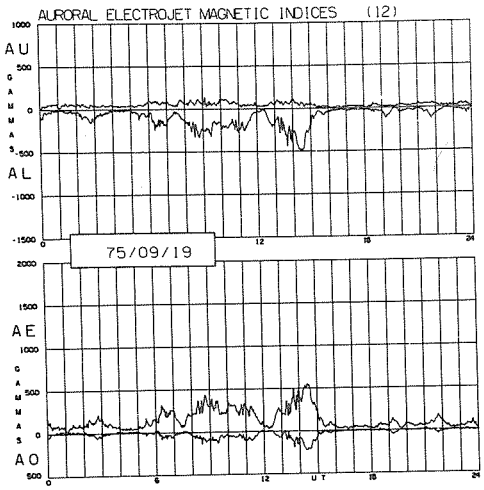
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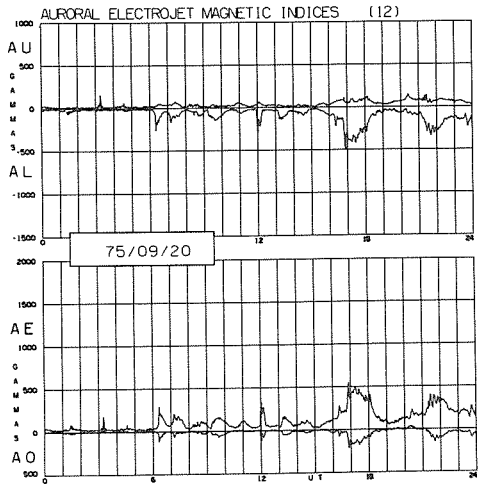
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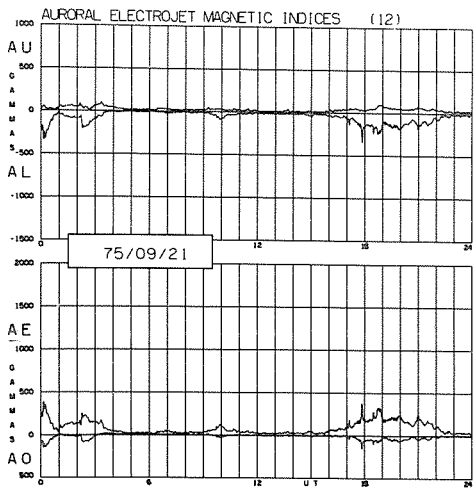
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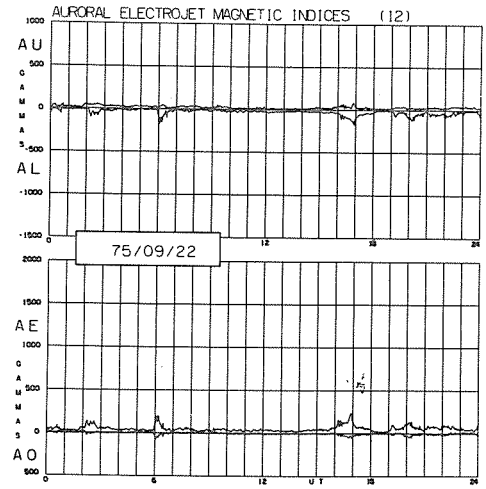
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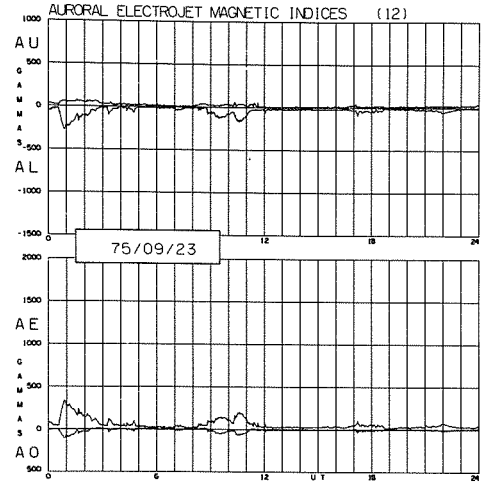
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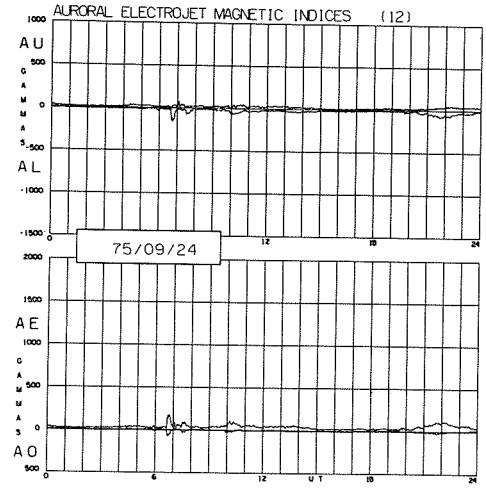
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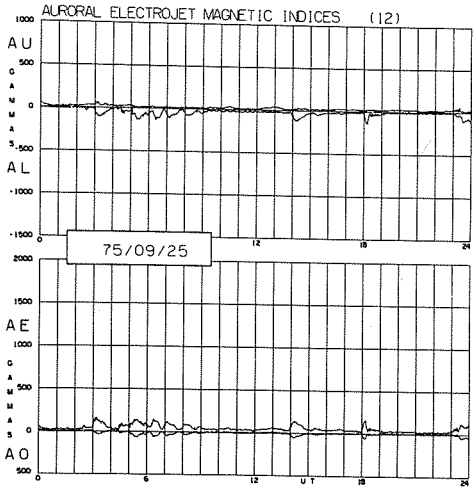
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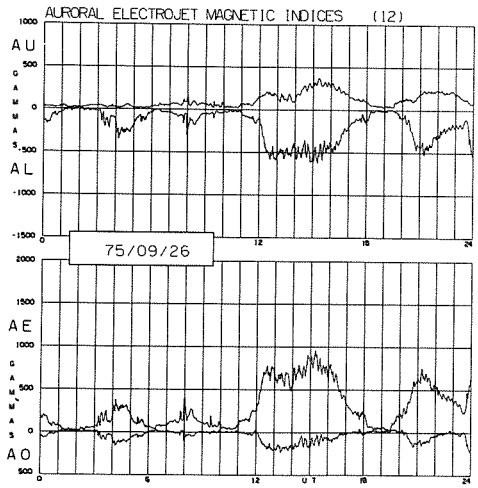
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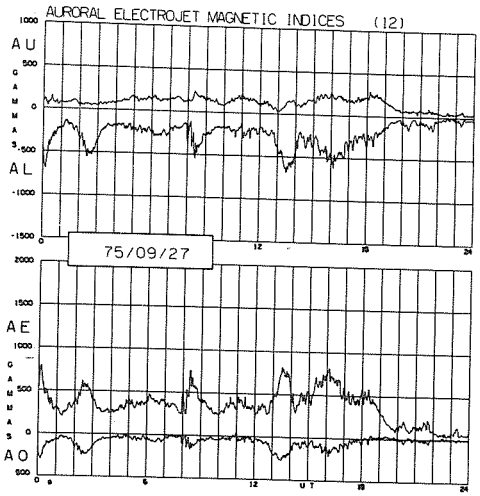
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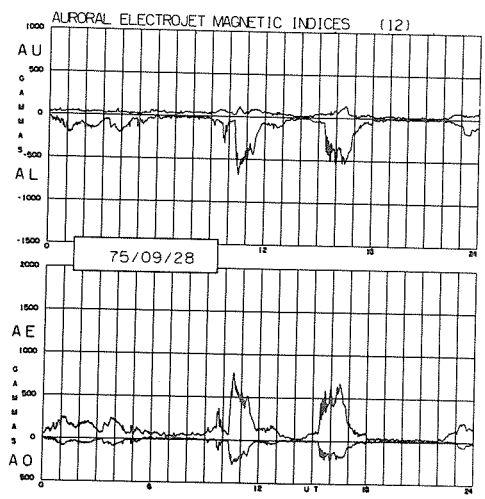
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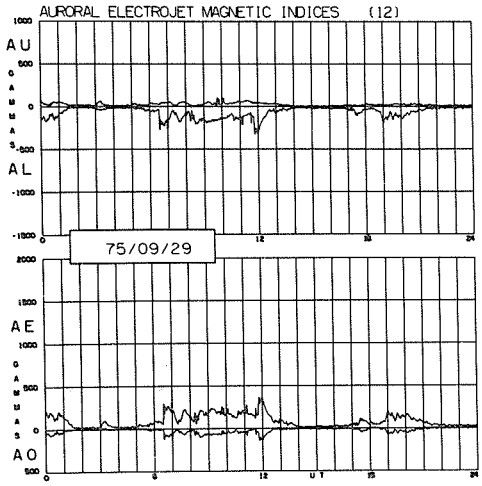
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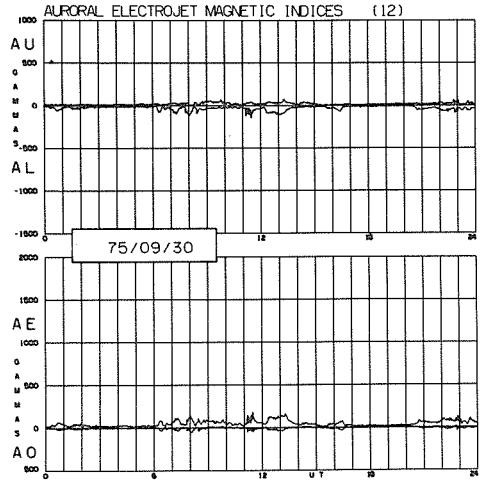
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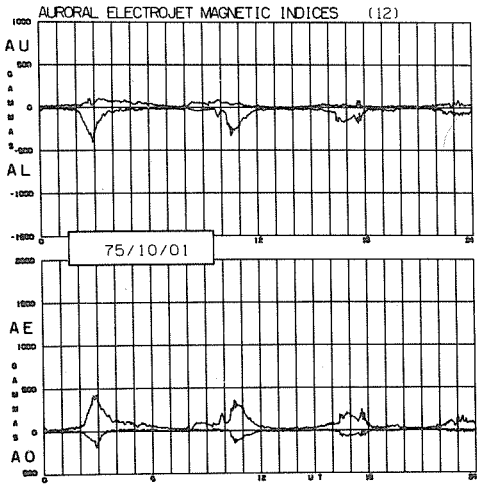
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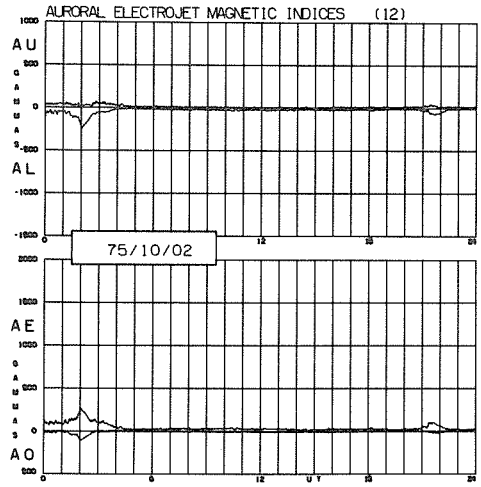
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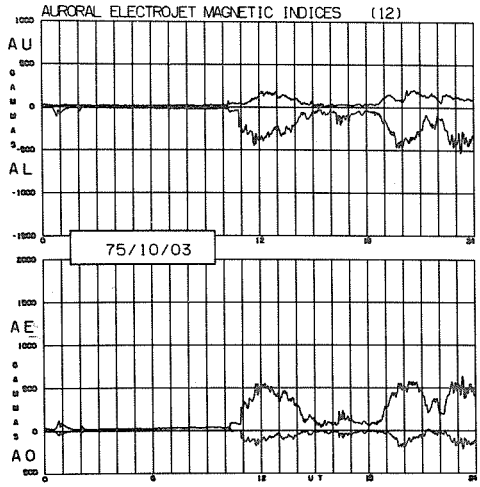
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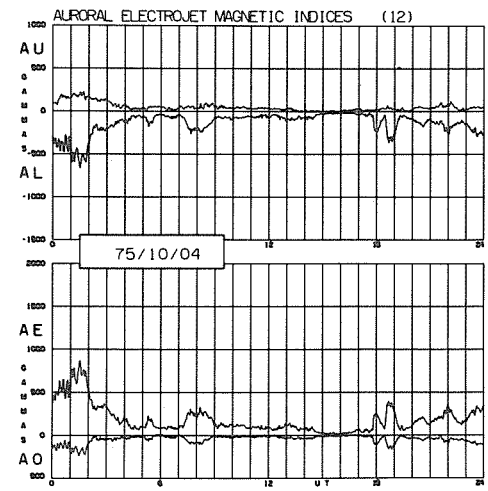
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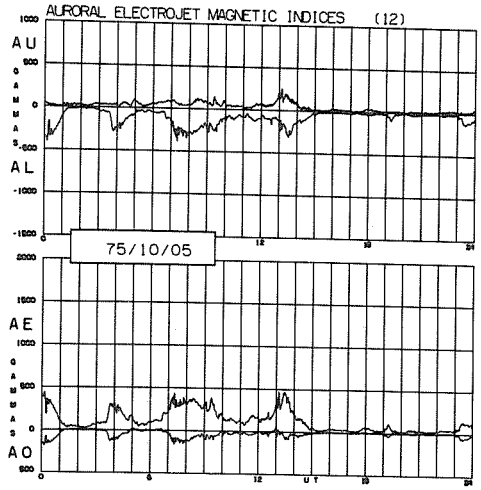
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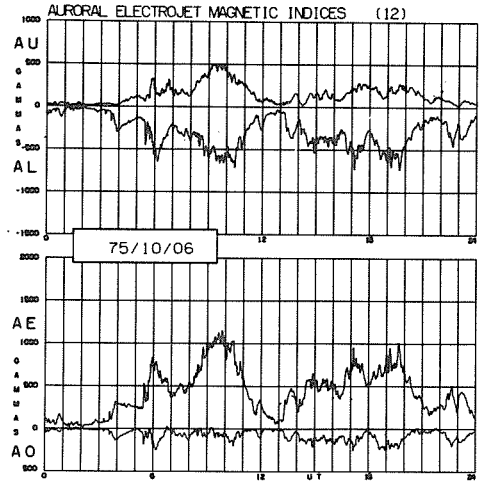
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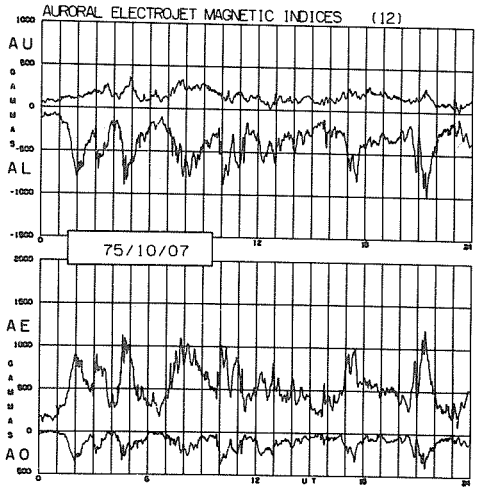
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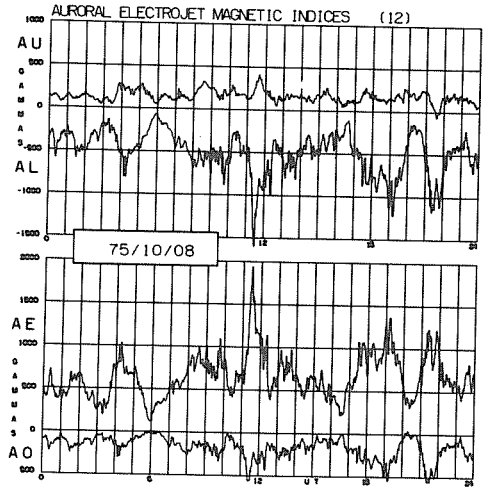
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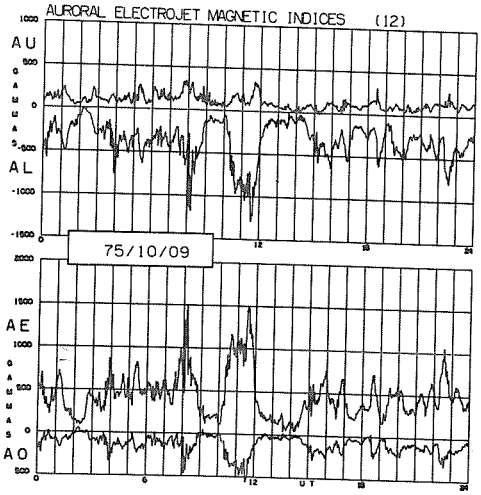
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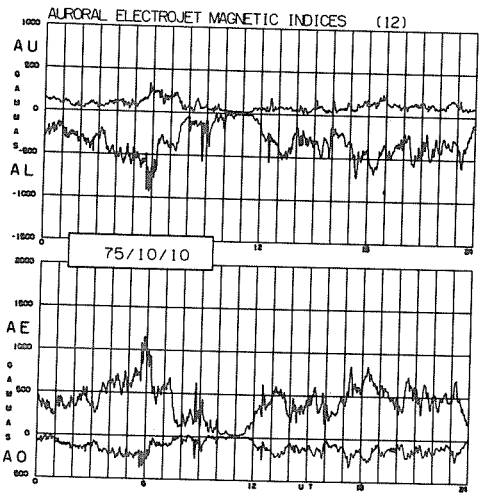
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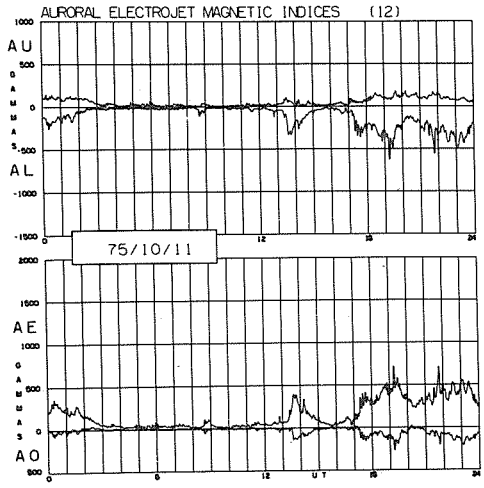
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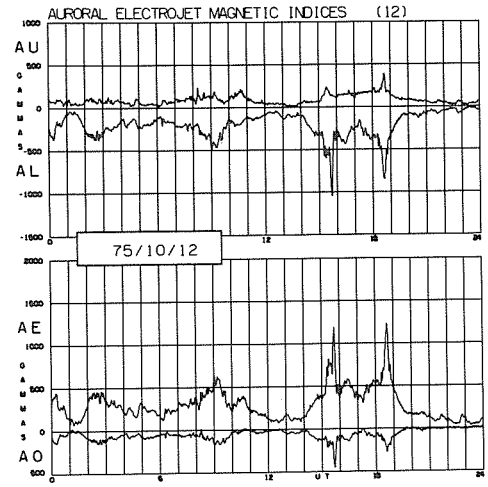
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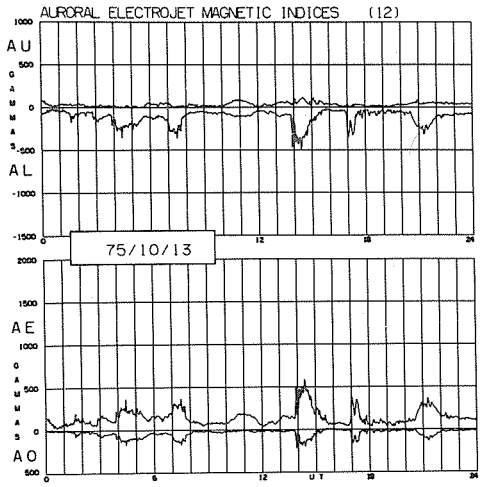
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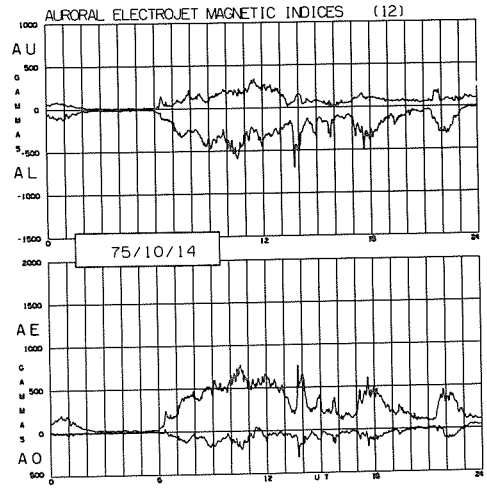
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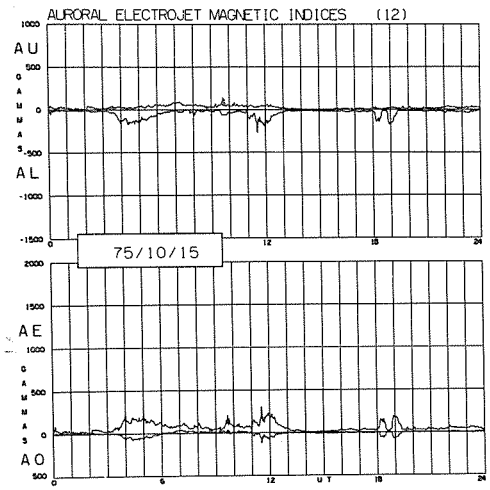
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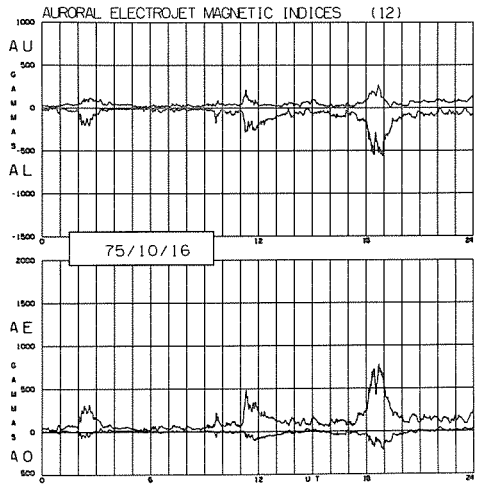
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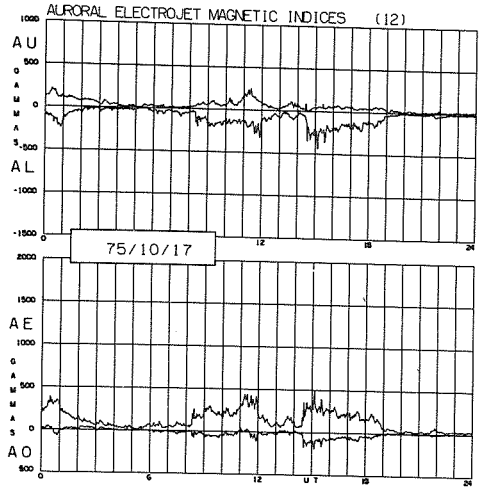
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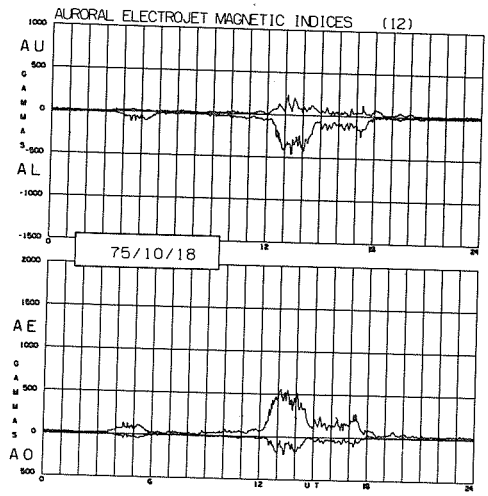
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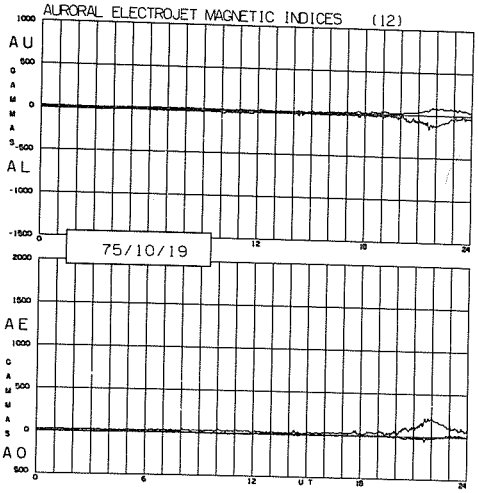
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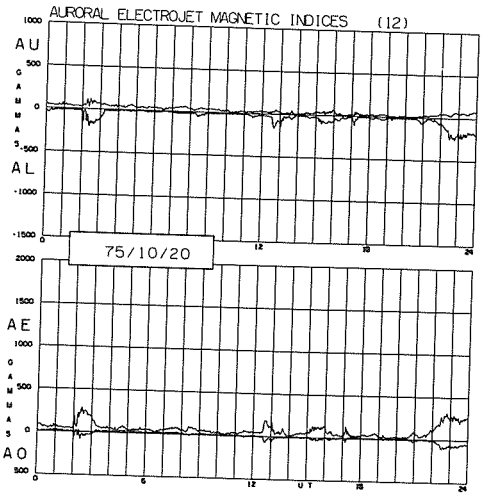
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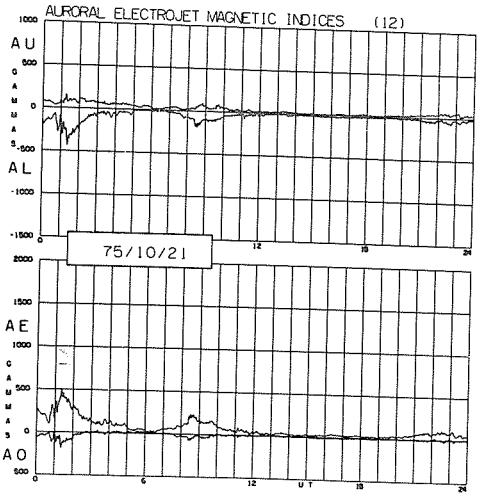
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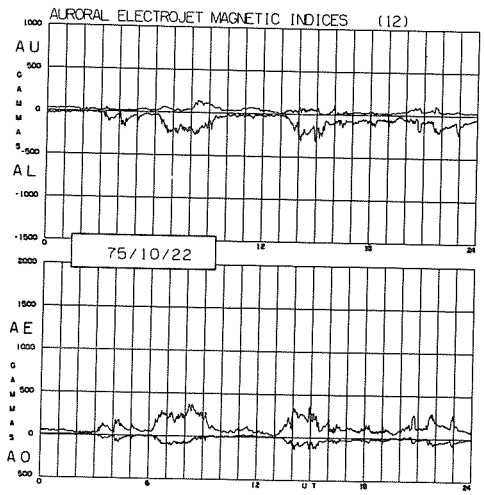
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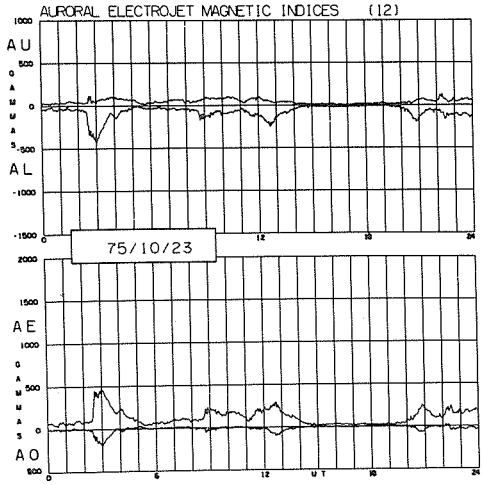
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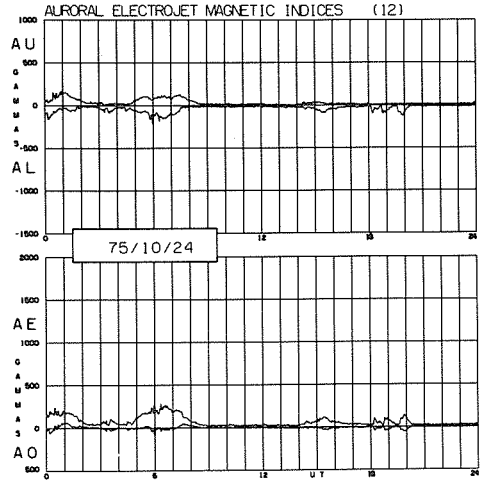
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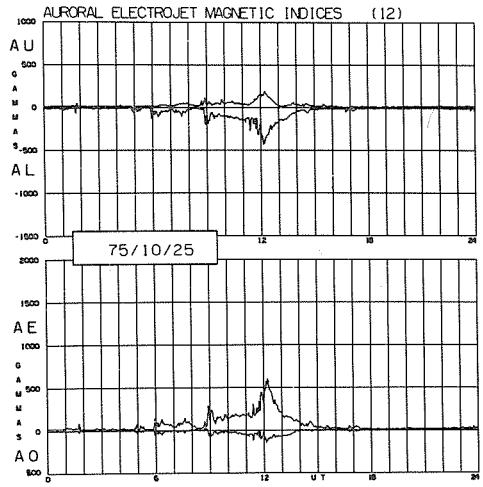
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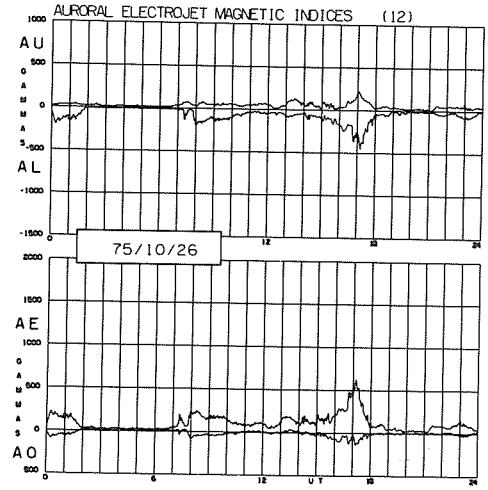
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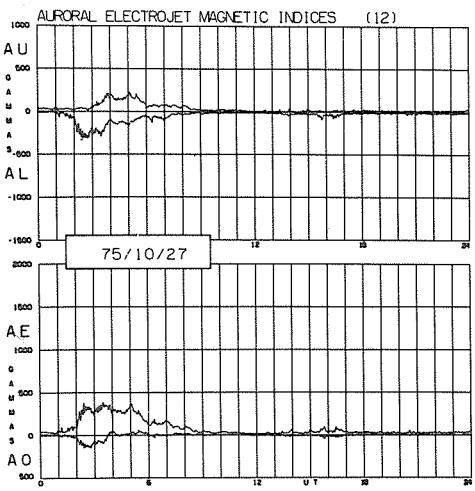
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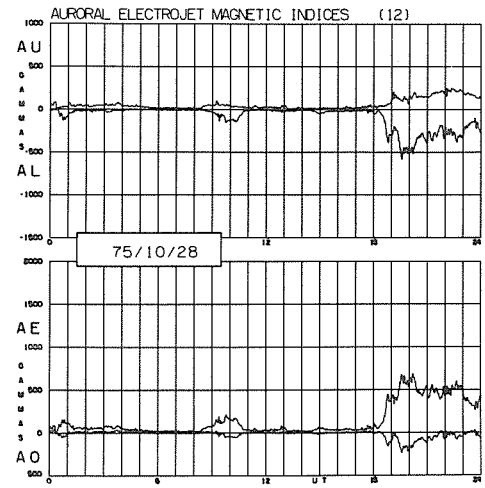
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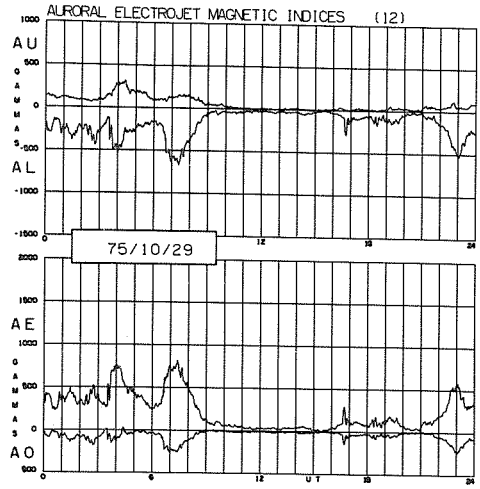
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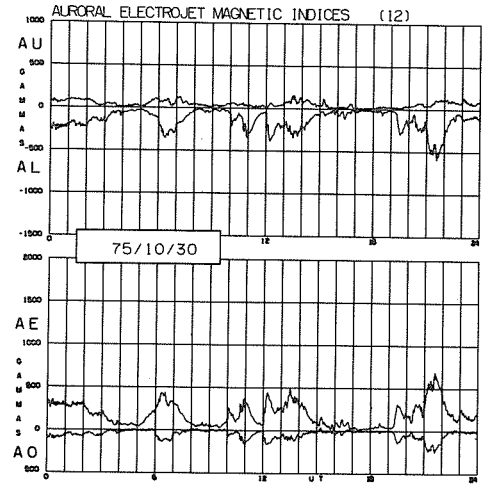
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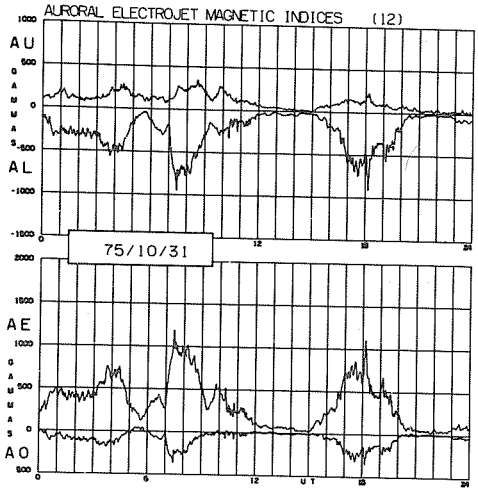
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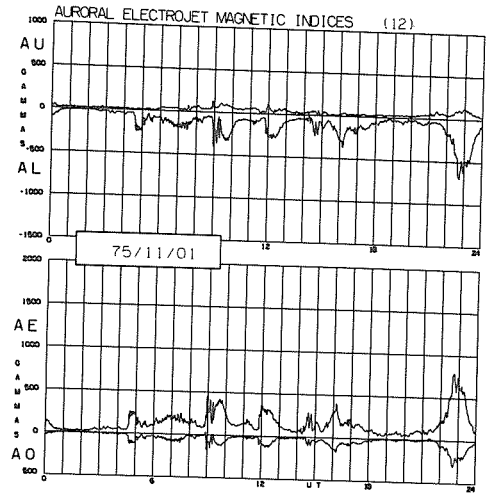
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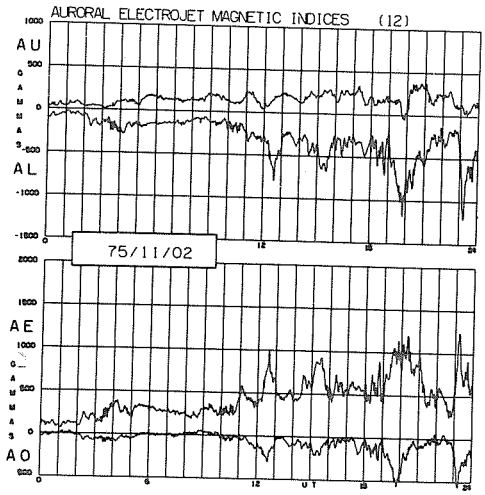
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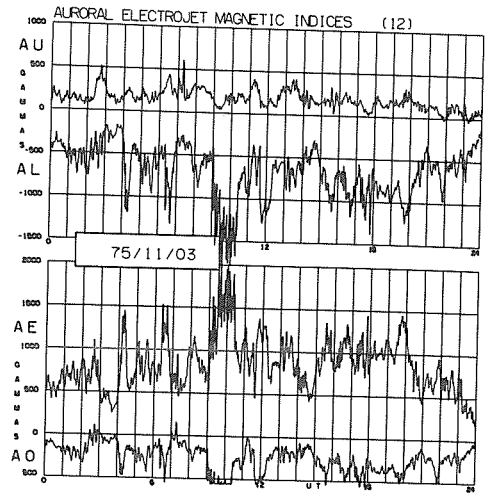
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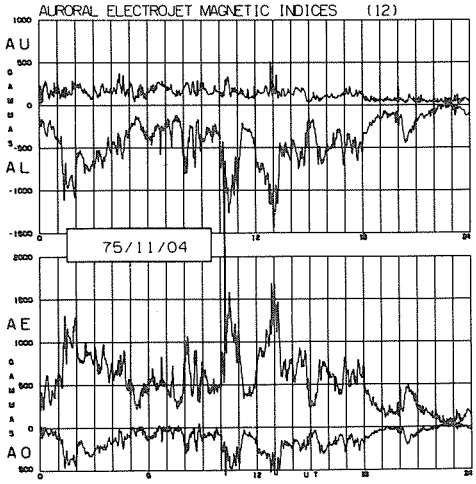
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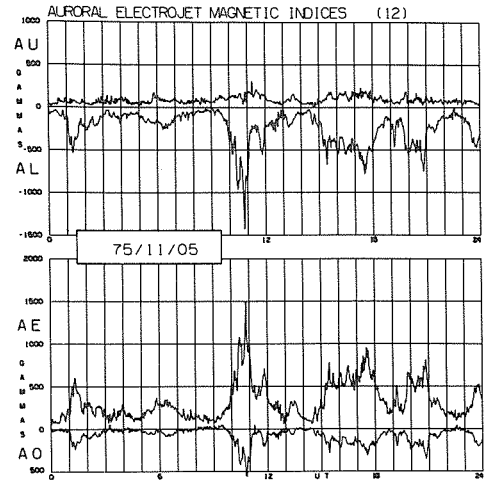
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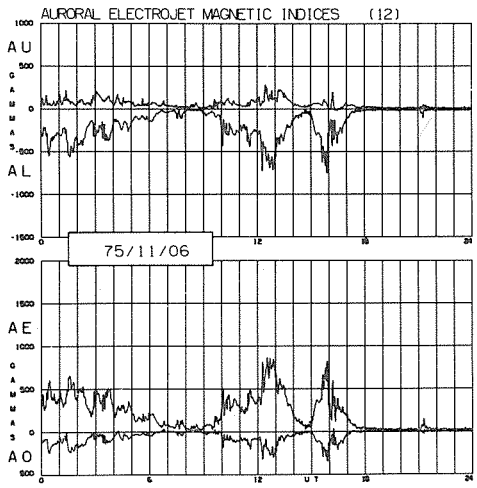
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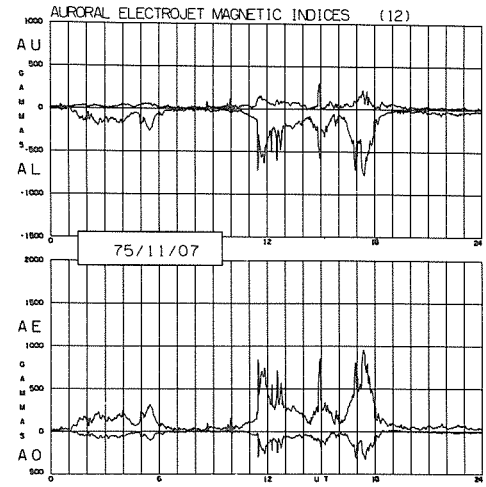
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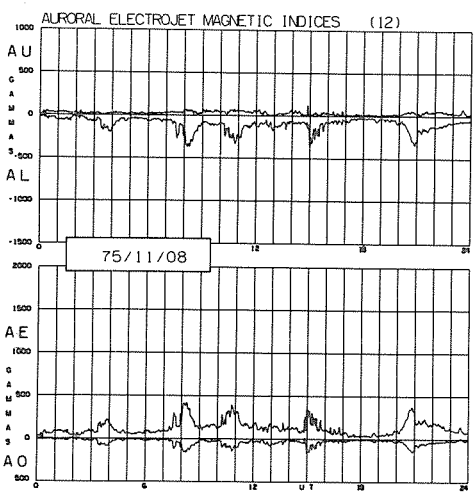
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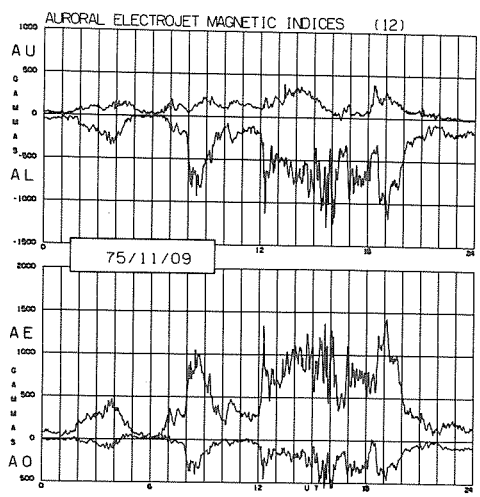
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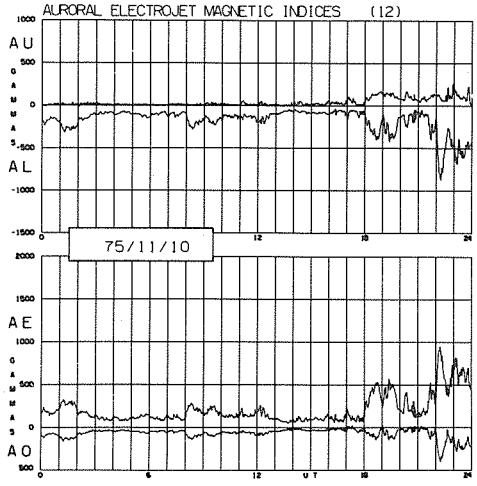
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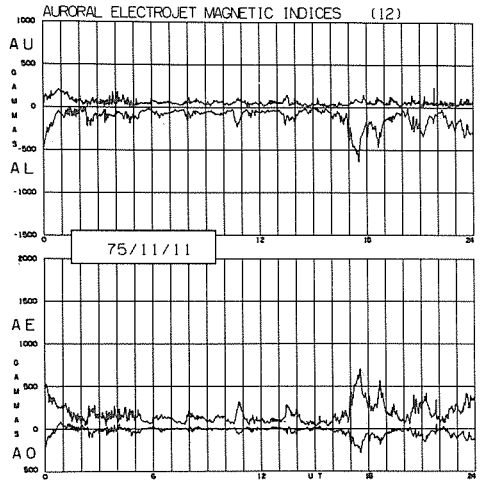
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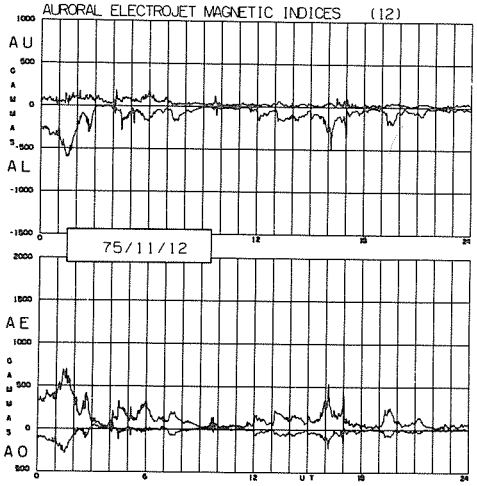
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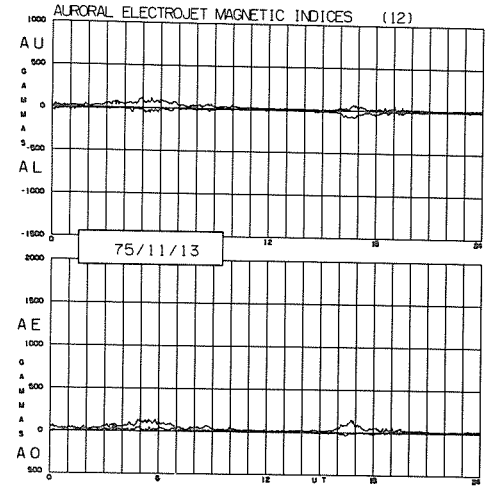
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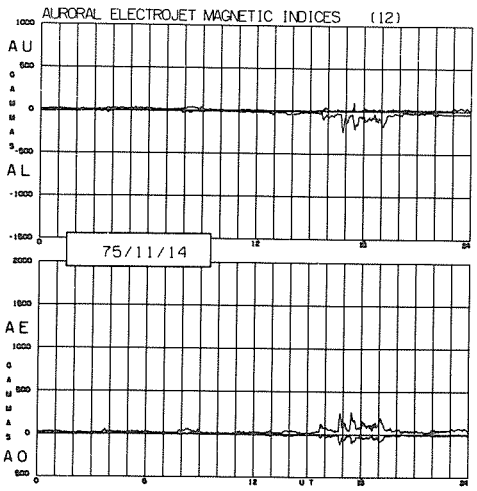
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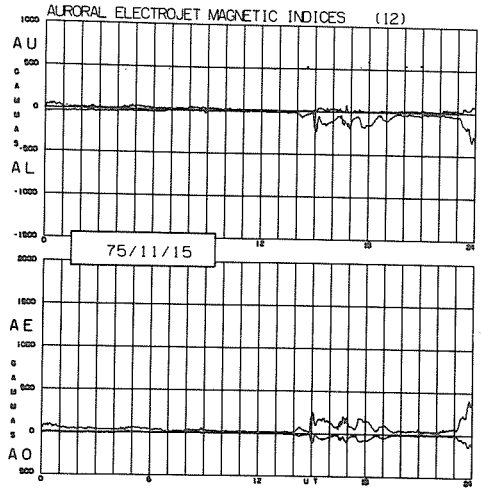
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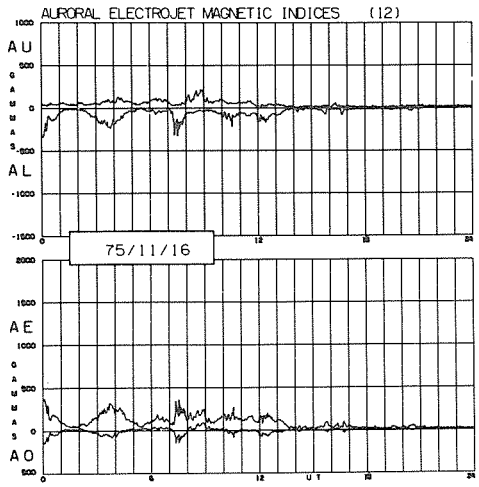
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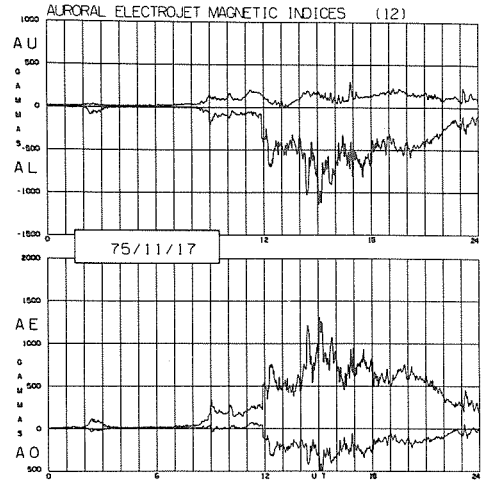
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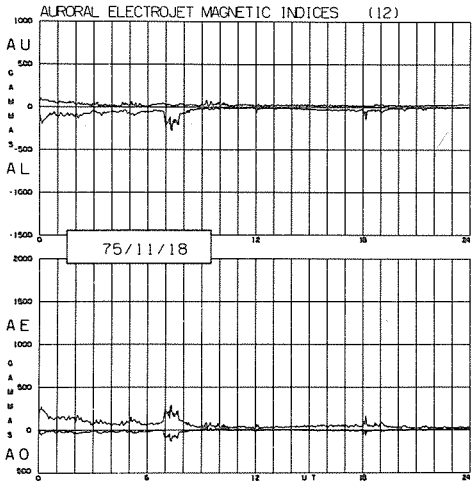
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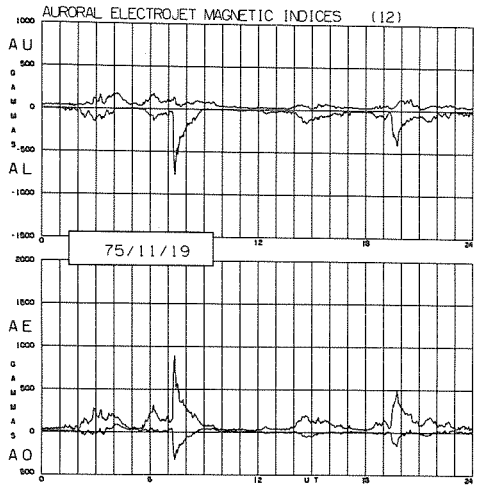
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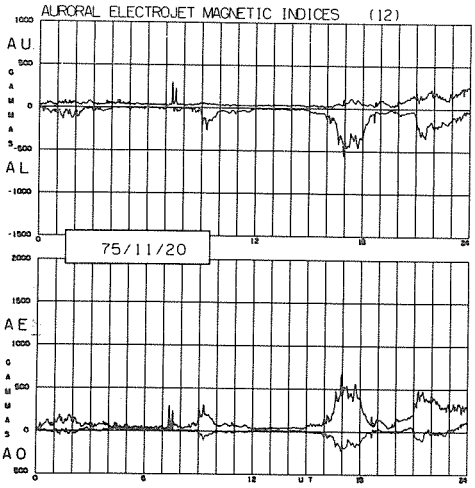
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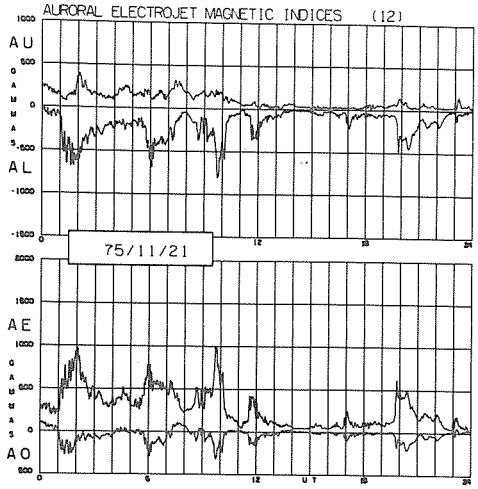
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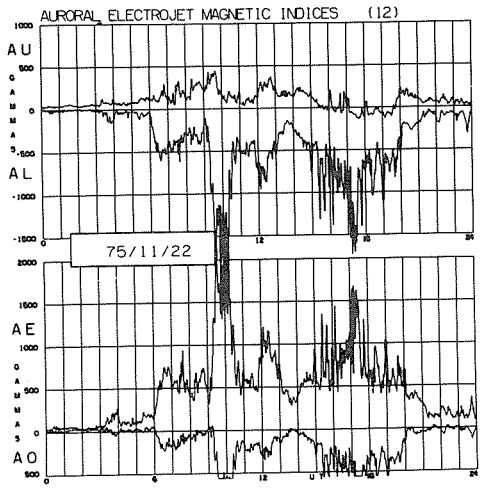
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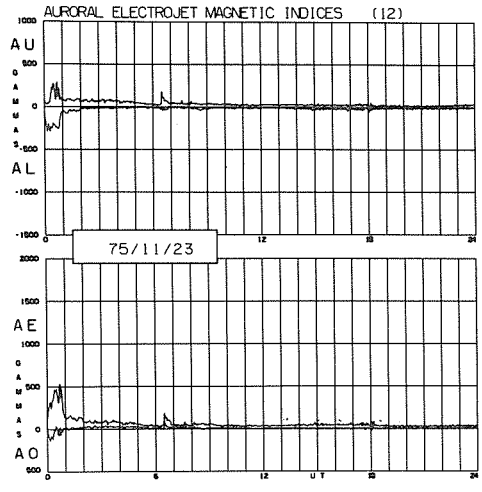
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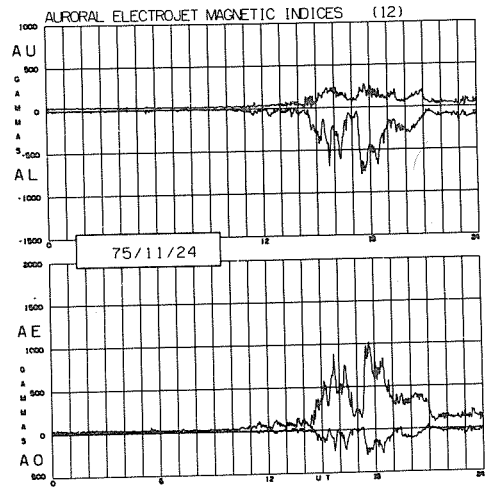
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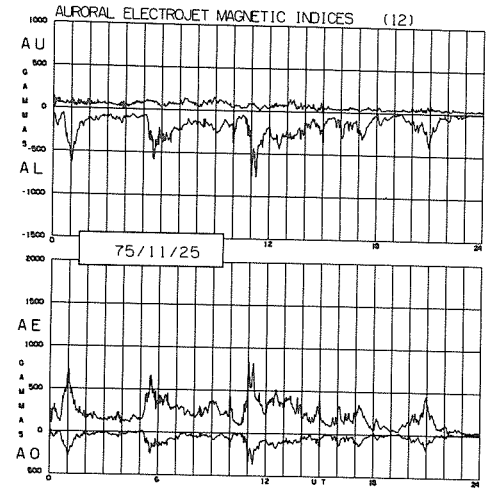
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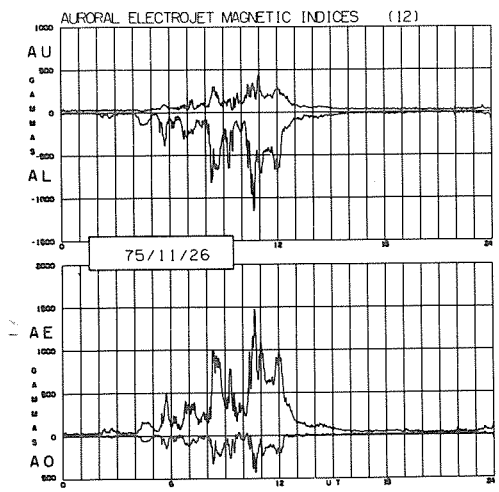
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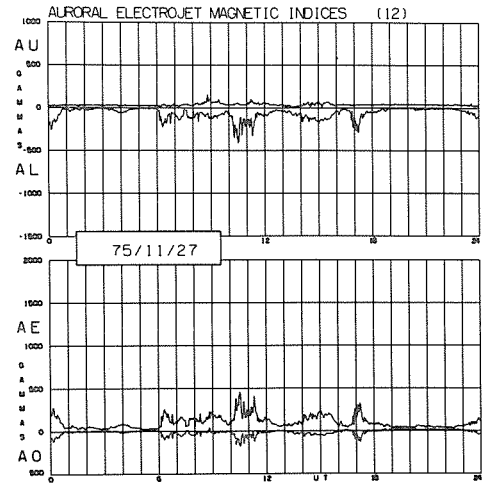
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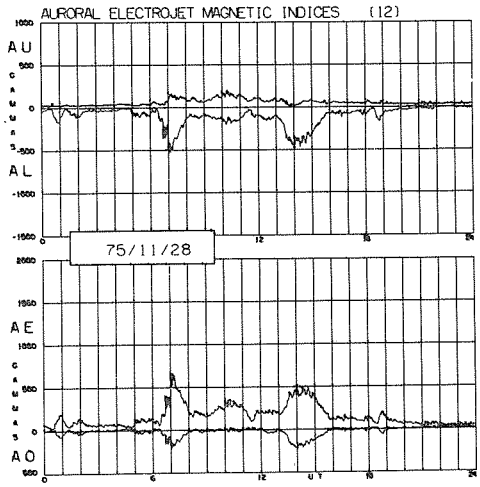
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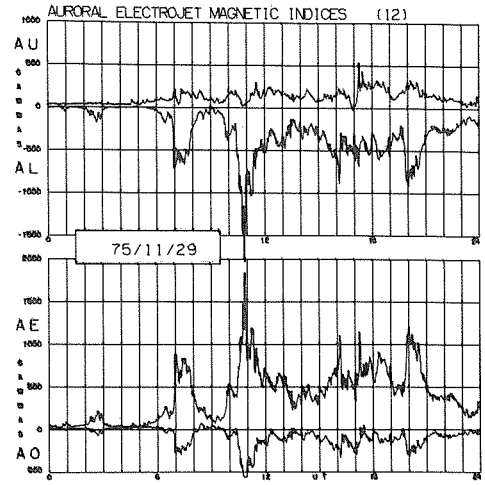
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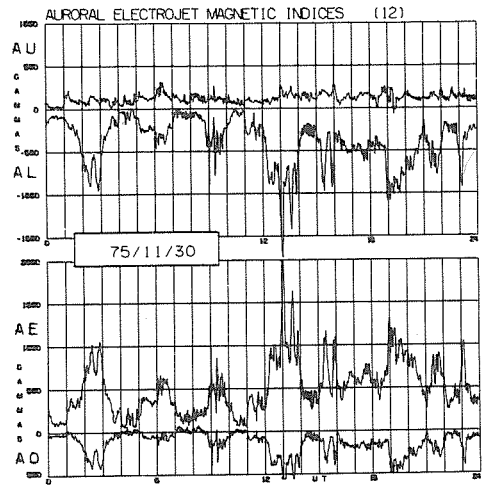
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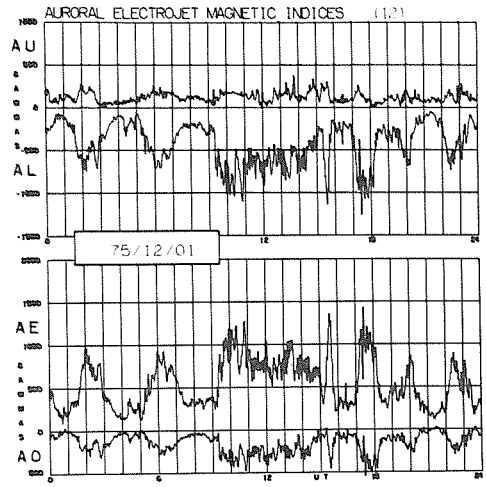
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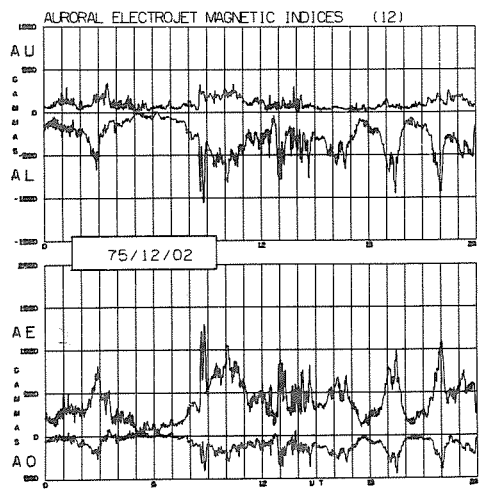
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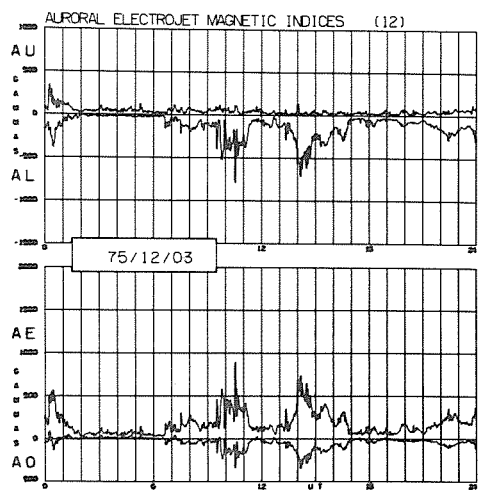
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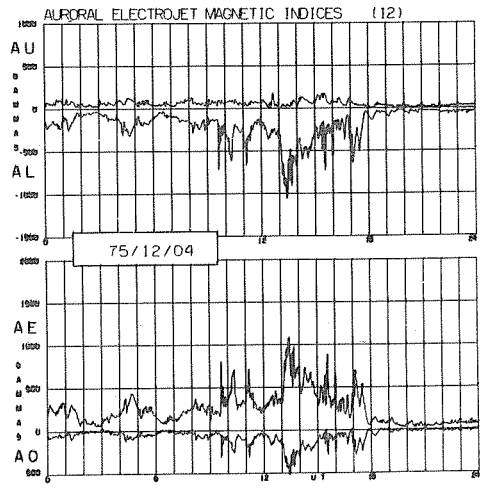
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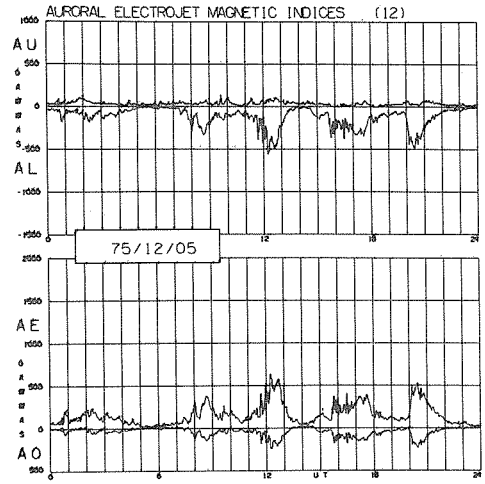
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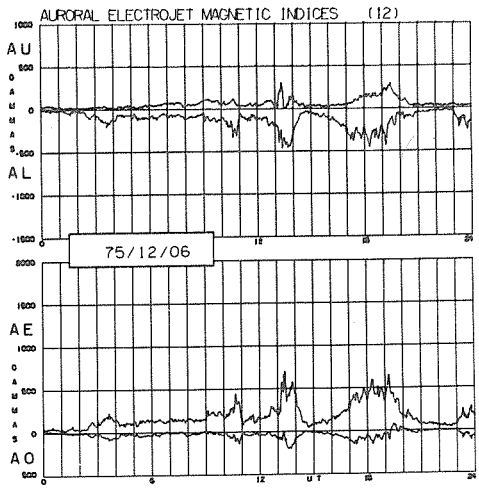
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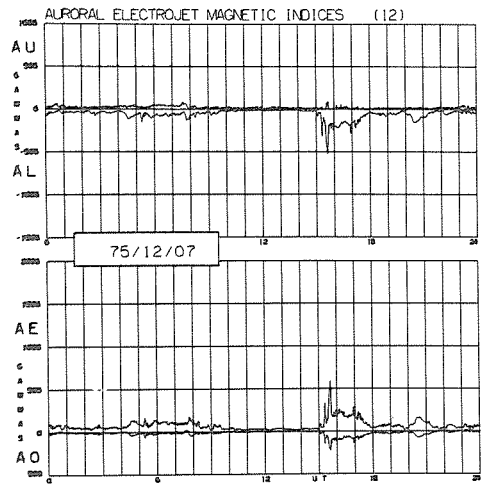
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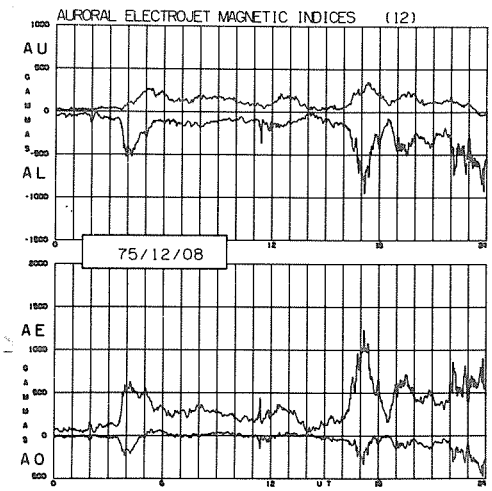
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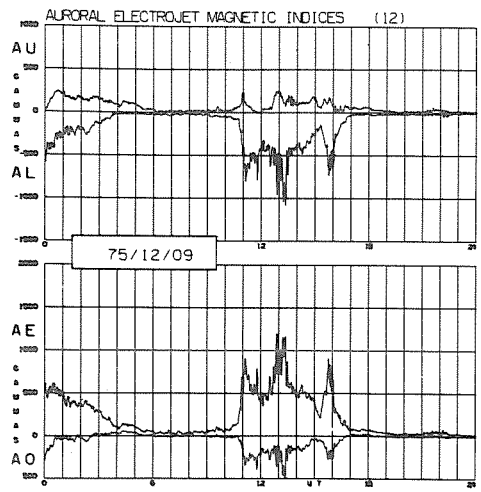
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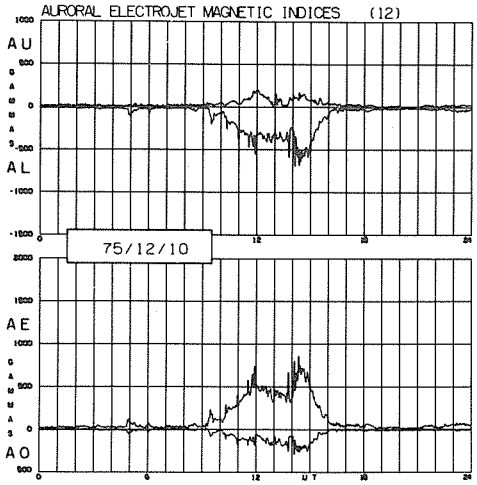
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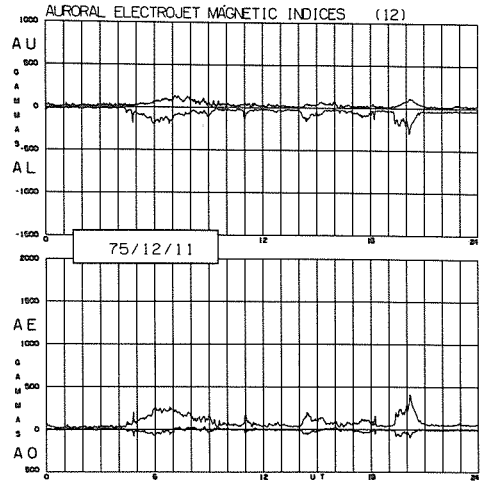
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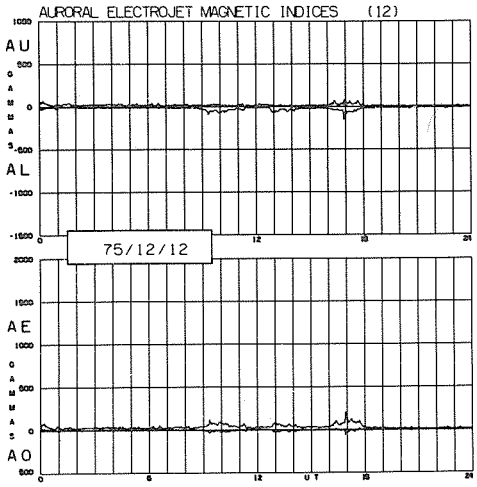
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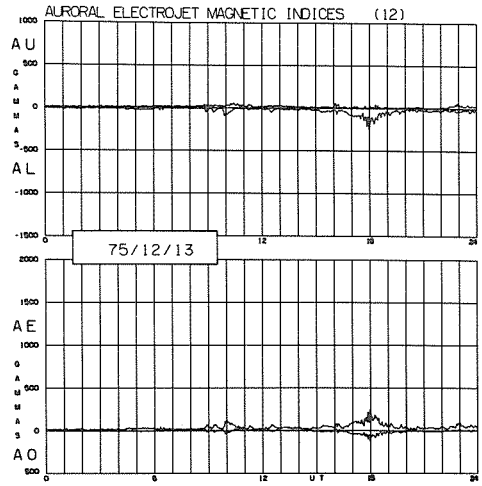
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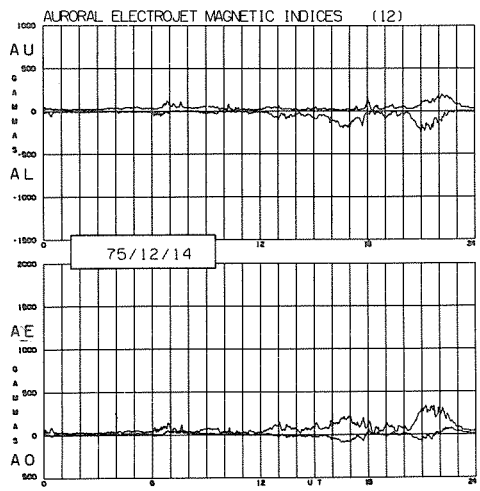
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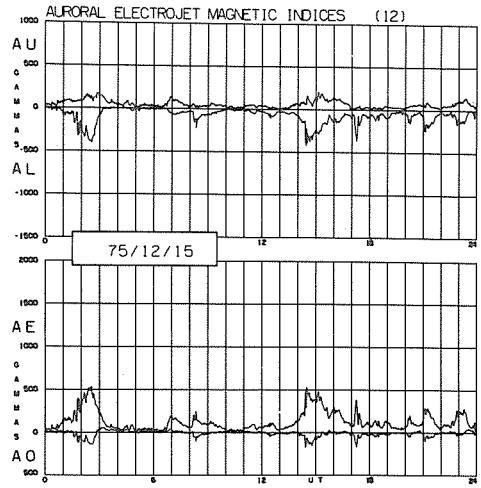
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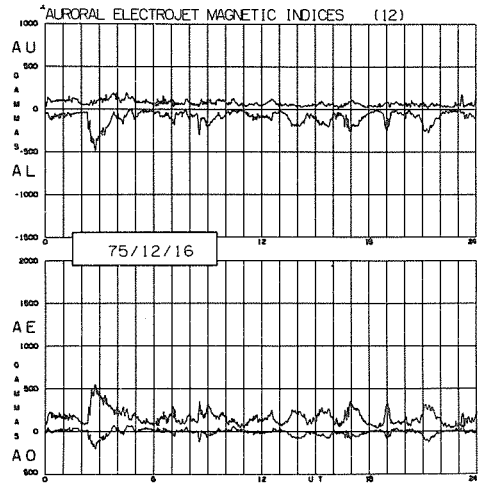
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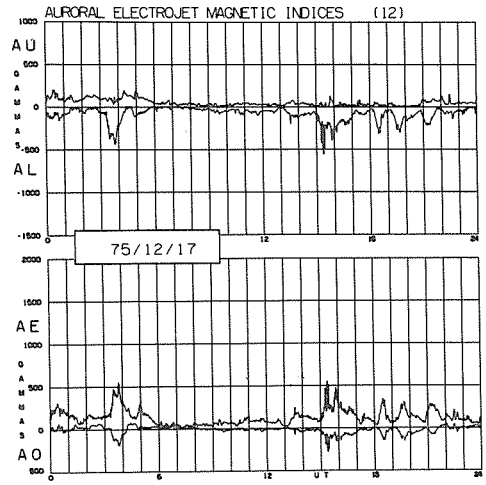
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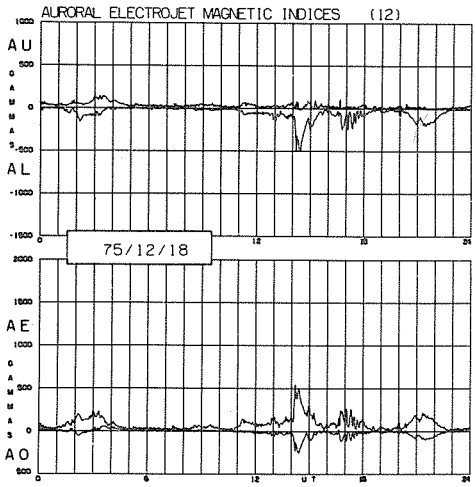
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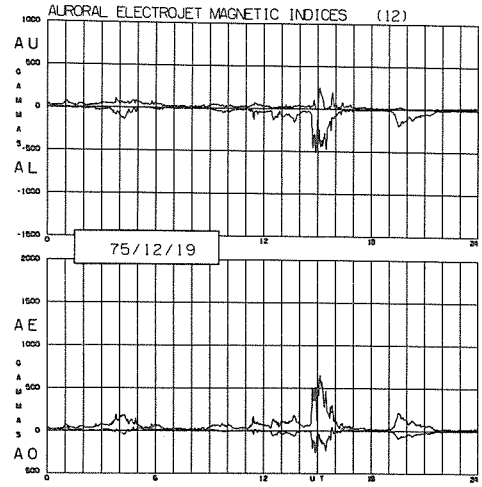
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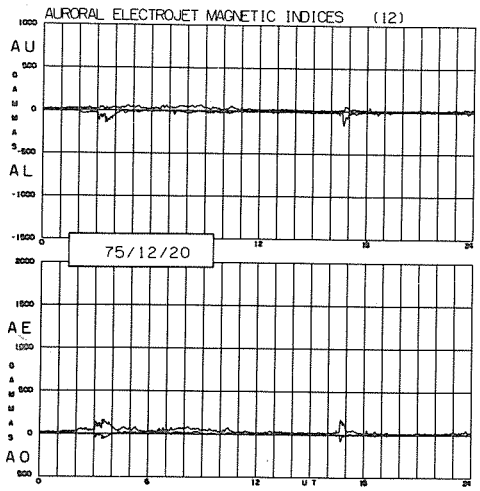
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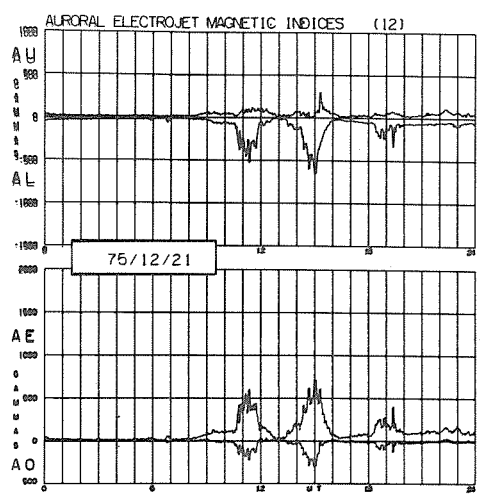
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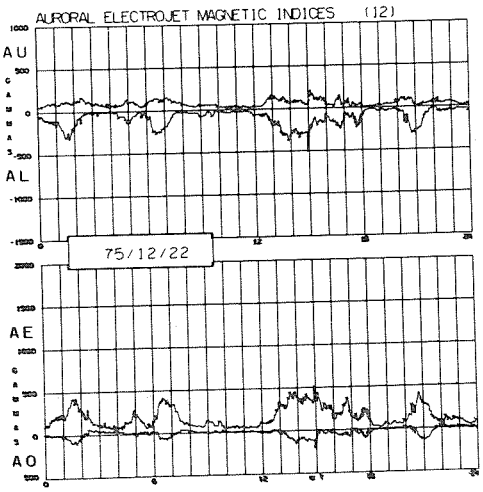
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AU
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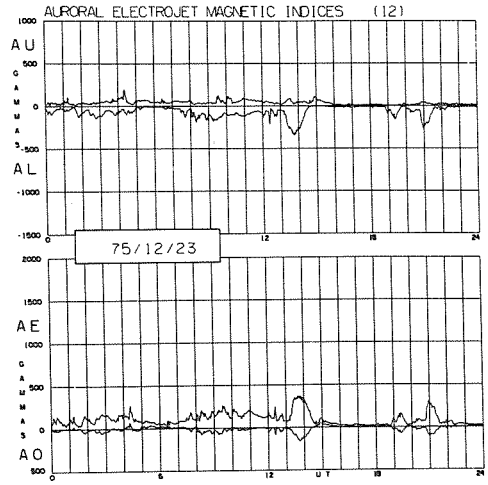
75/12/22
AE
AO
GAMMAS
UT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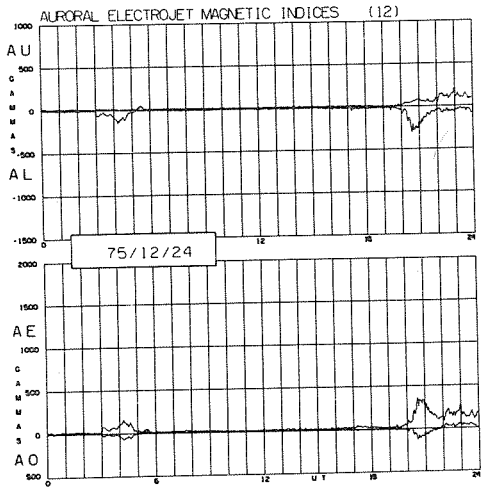
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75/12/24
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GAMMAS
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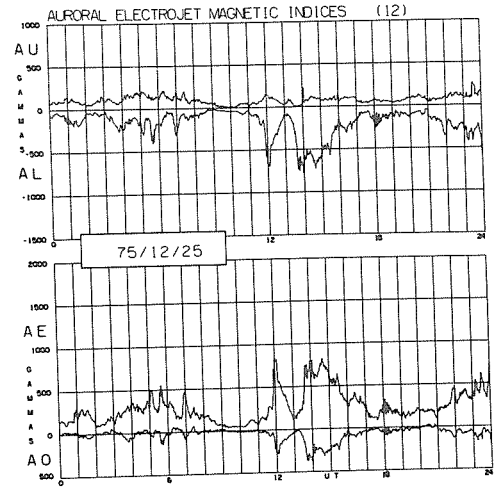
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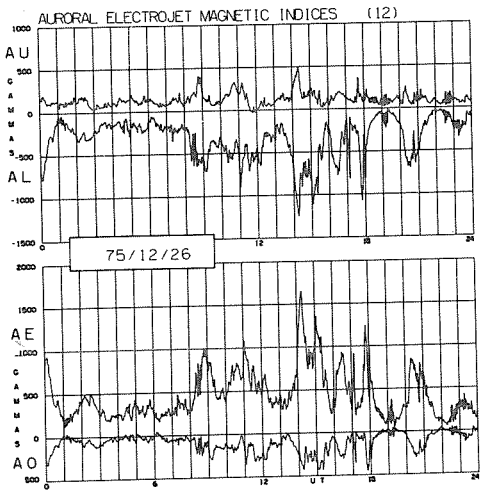
AU
AL
75/12/25
AE
AO
GAMMAS
UT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GAMMAS
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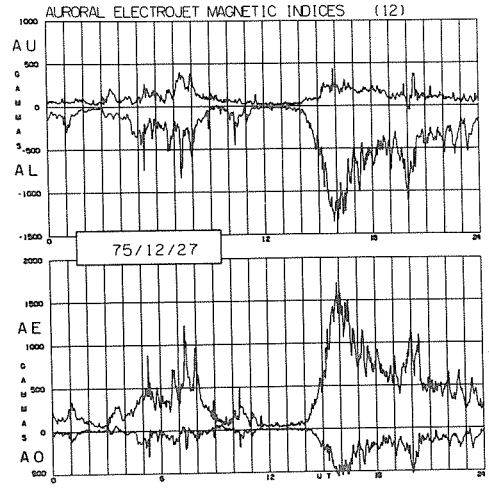
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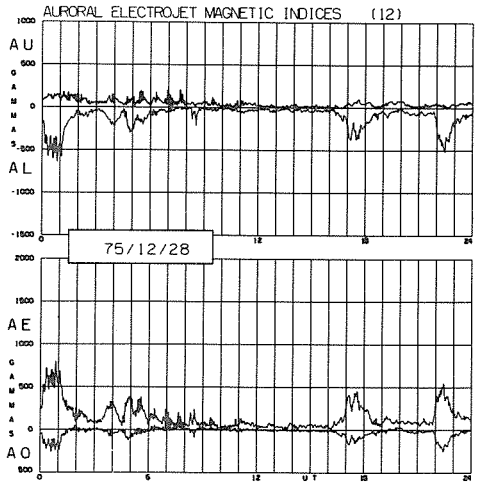
AL
75/12/27
AE
AO
GAMMAS
UT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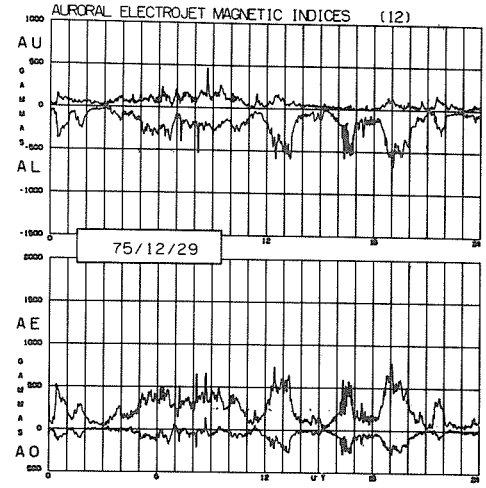
AU
AL
75/12/28
AE
AO
GAMMAS
UT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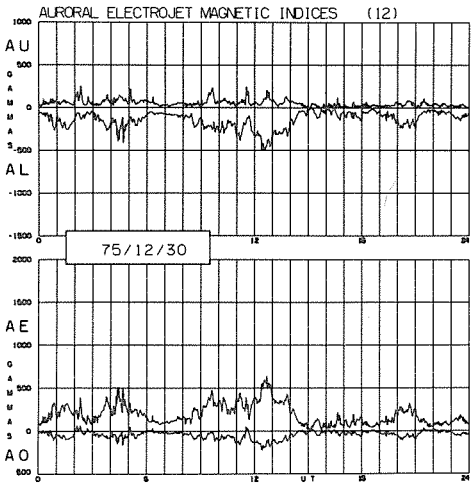
75/12/29
AE
AO
GAMMAS
UT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AU
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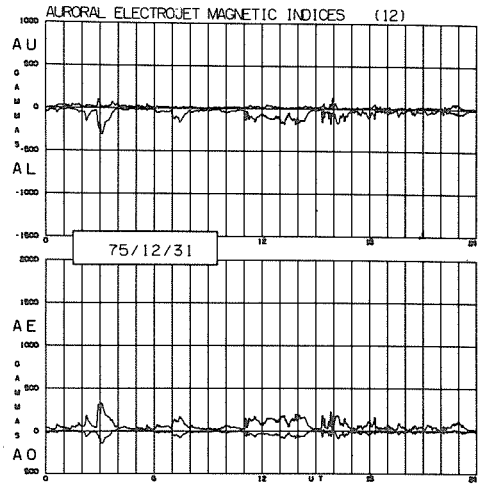
75/12/30
AE
AO
GAMMAS
UT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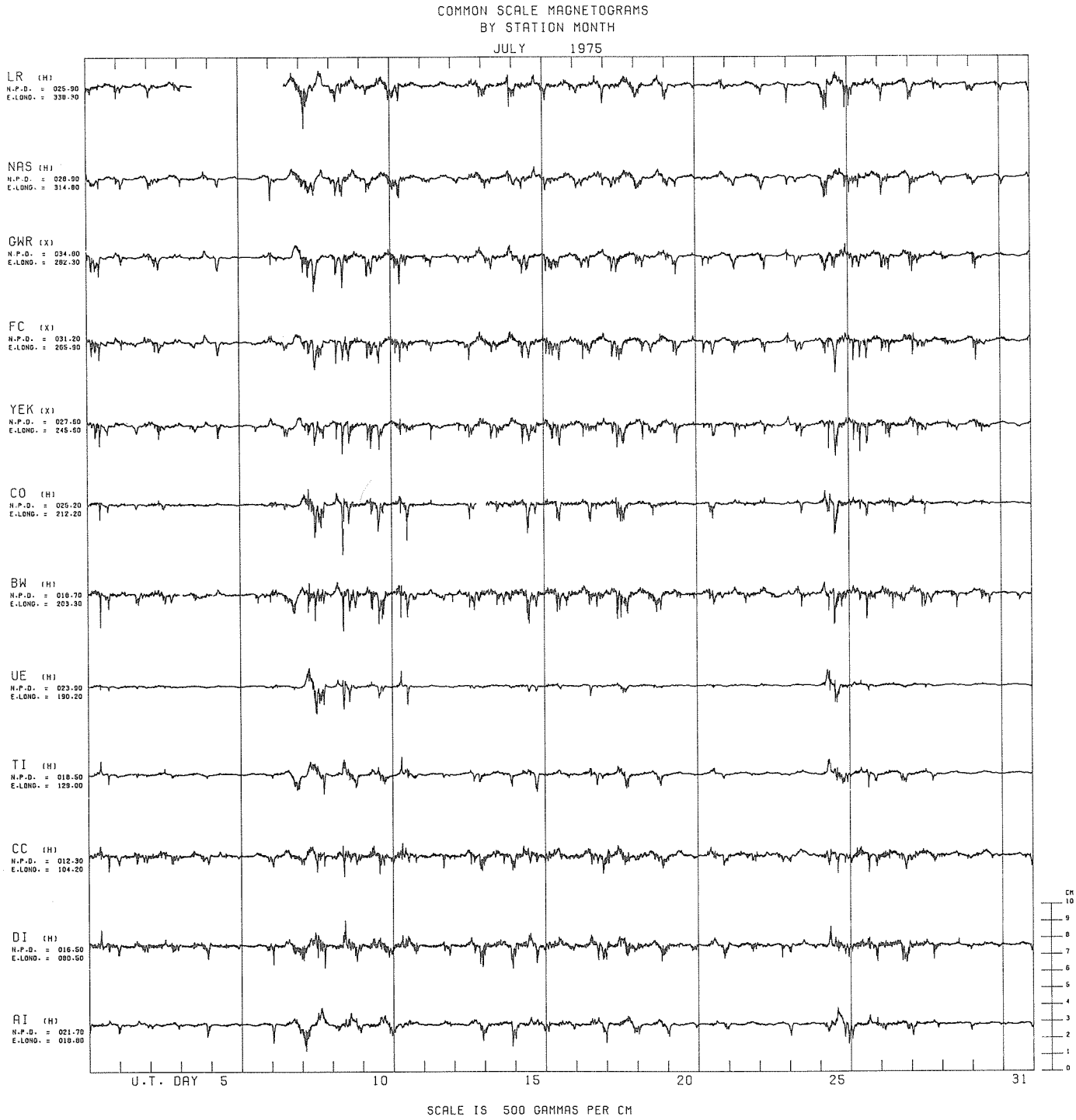
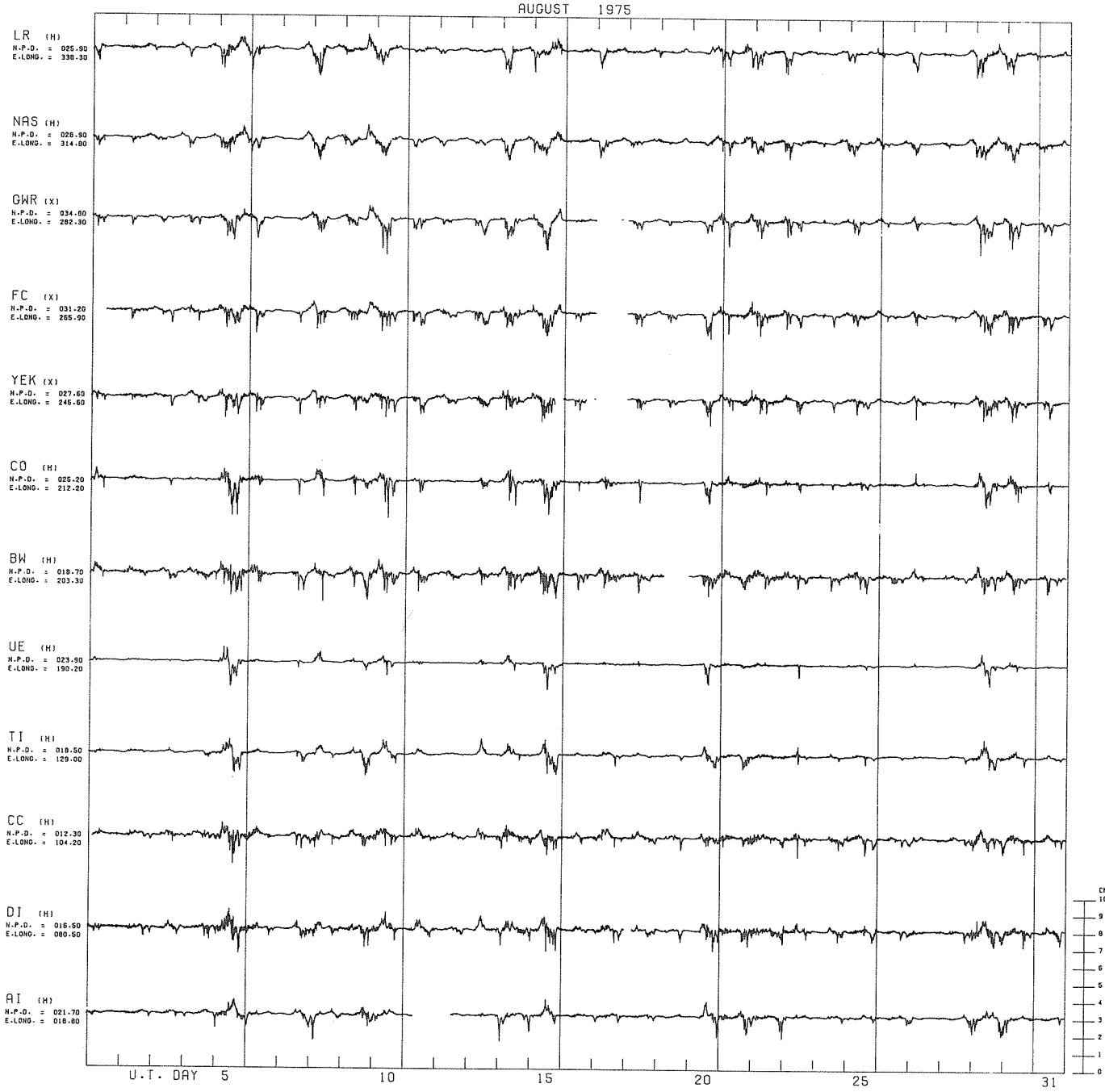
AU
AL
75/12/31
AE
AO
GAMMAS
UT

3. Stacked Common Scale Magnetograms



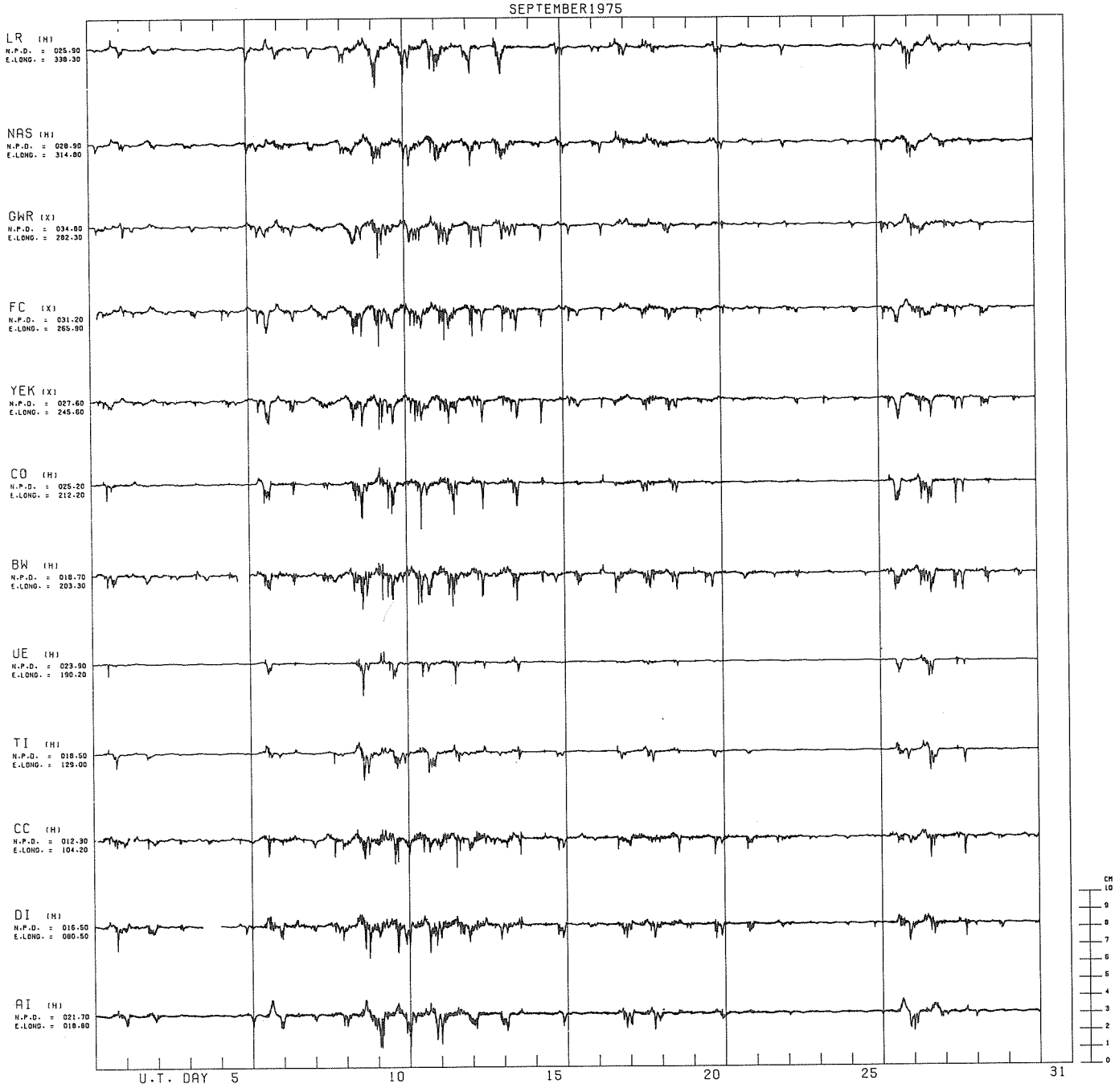
COMMON SCALE MAGNETOGRAMS
BY STATION MONTH

AUGUST 1975



SCALE IS 500 GAMMAS PER CM

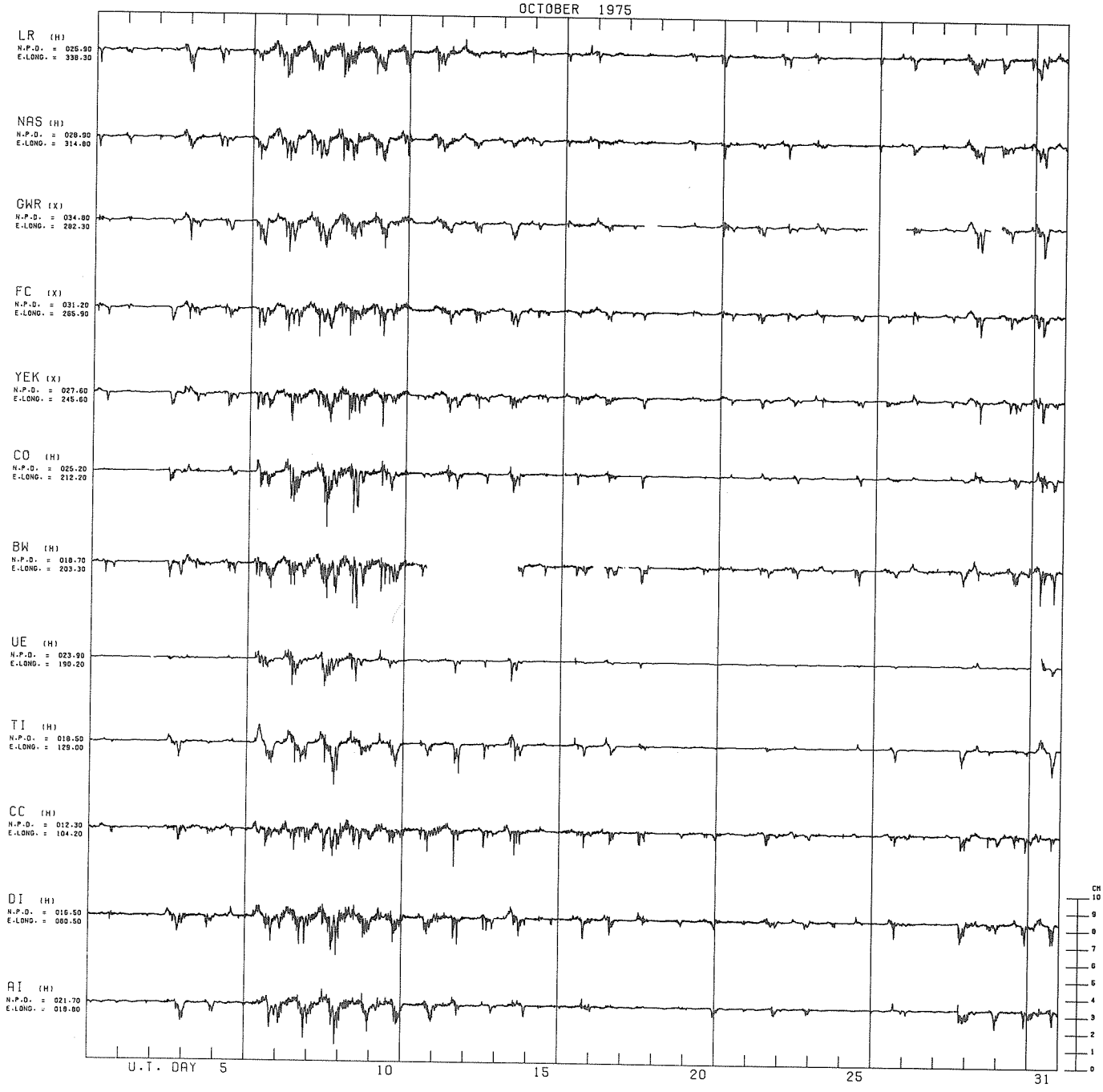
COMMON SCALE MAGNETOGRAMS
BY STATION MONTH
SEPTEMBER1975



SCALE IS 500 GAMMAS PER CM

COMMON SCALE MAGNETOGRAMS
BY STATION MONTH

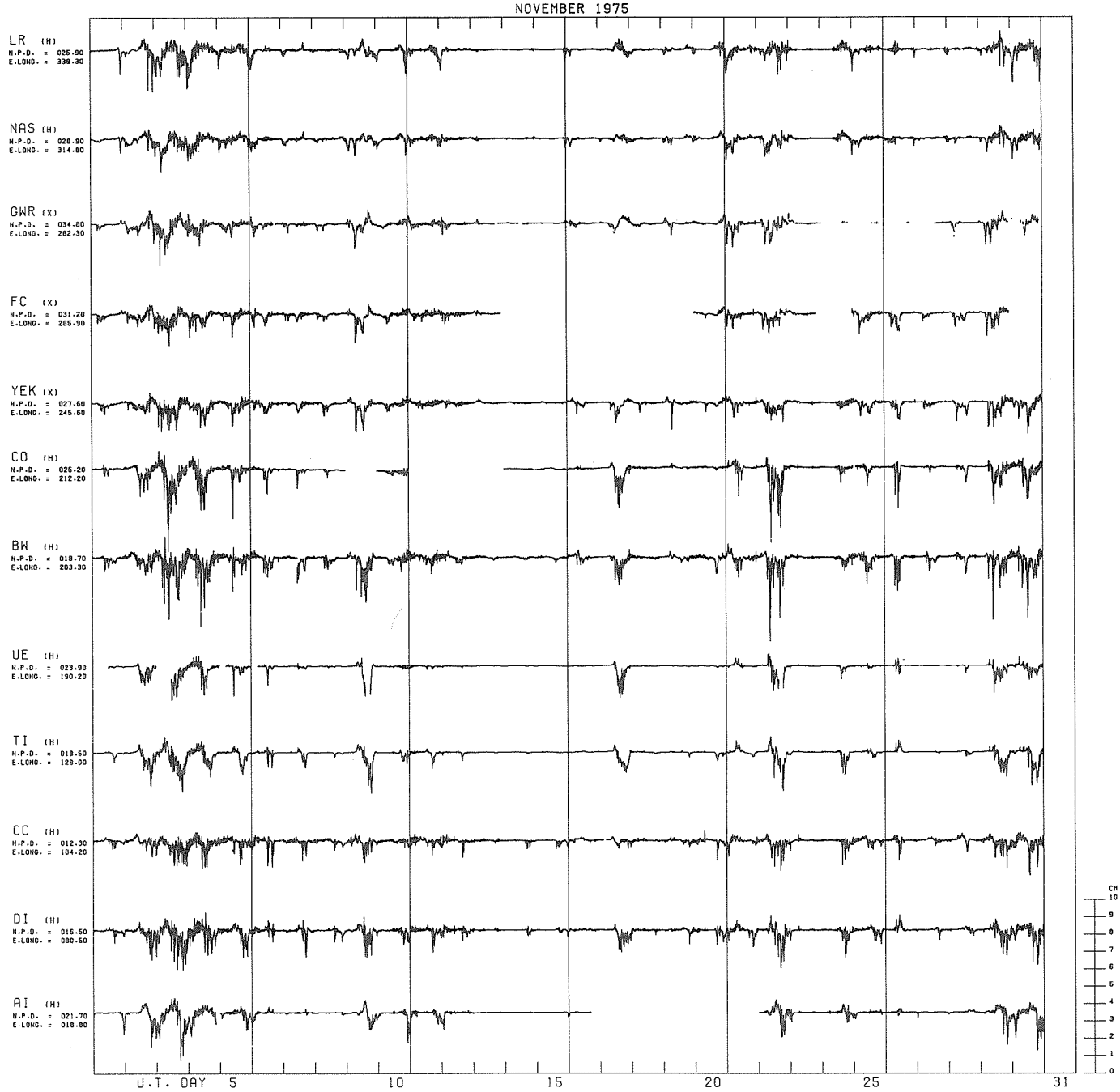
OCTOBER 1975



SCALE IS 500 GAMMAS PER CM

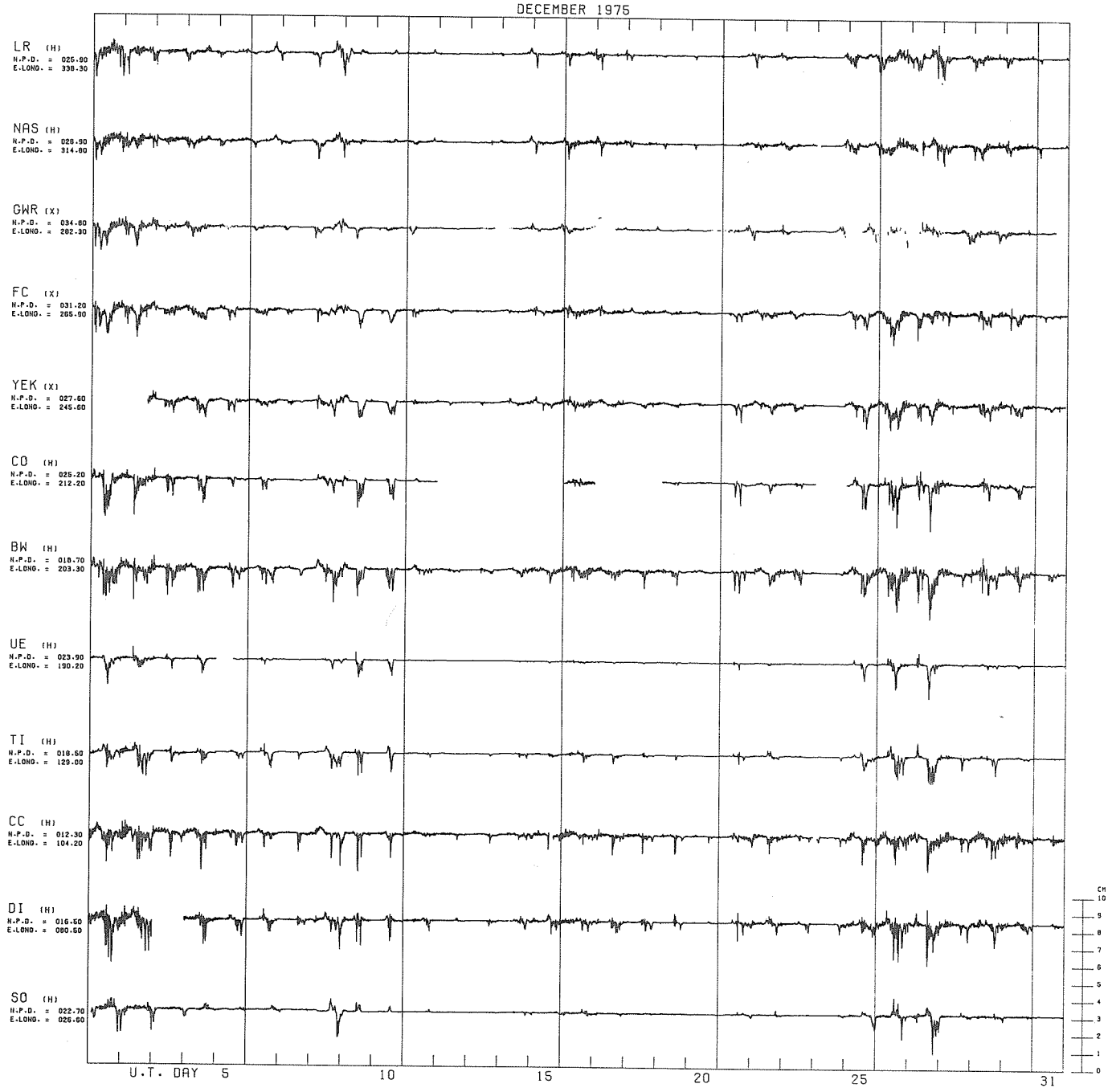
COMMON SCALE MAGNETOGRAMS
BY STATION MONTH

NOVEMBER 1975



SCALE IS 500 GAMMAS PER CM

COMMON SCALE MAGNETOGRAMS
BY STATION MONTH
DECEMBER 1975



SCALE IS 500 GAMMAS PER CM

4. Frequency of AU and AL and Total Amplitude Plots

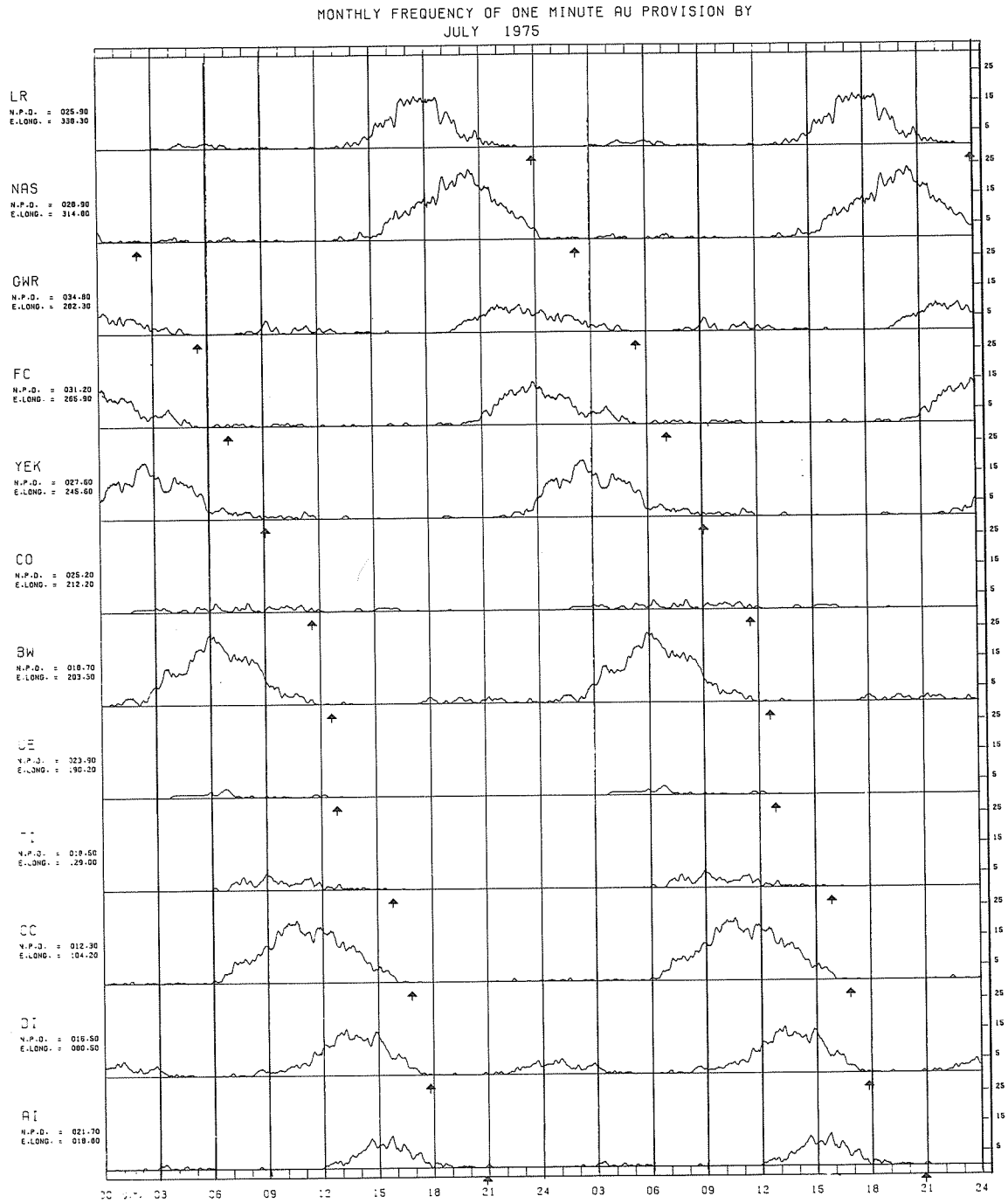


Fig. 1. Frequency of 1-min AU provision by station for July 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

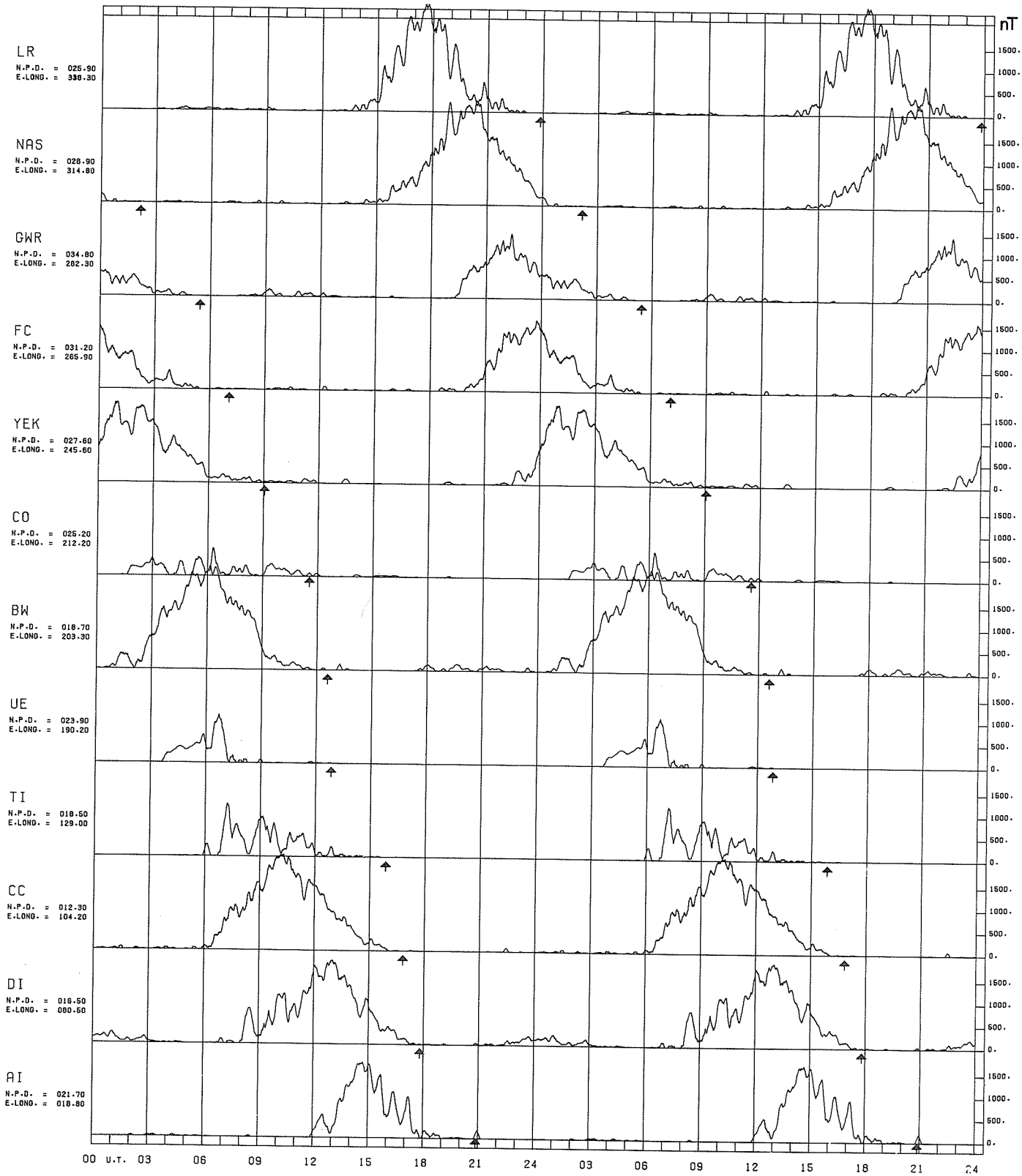


Fig. 2. Total amplitude of most positive H variations for July 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

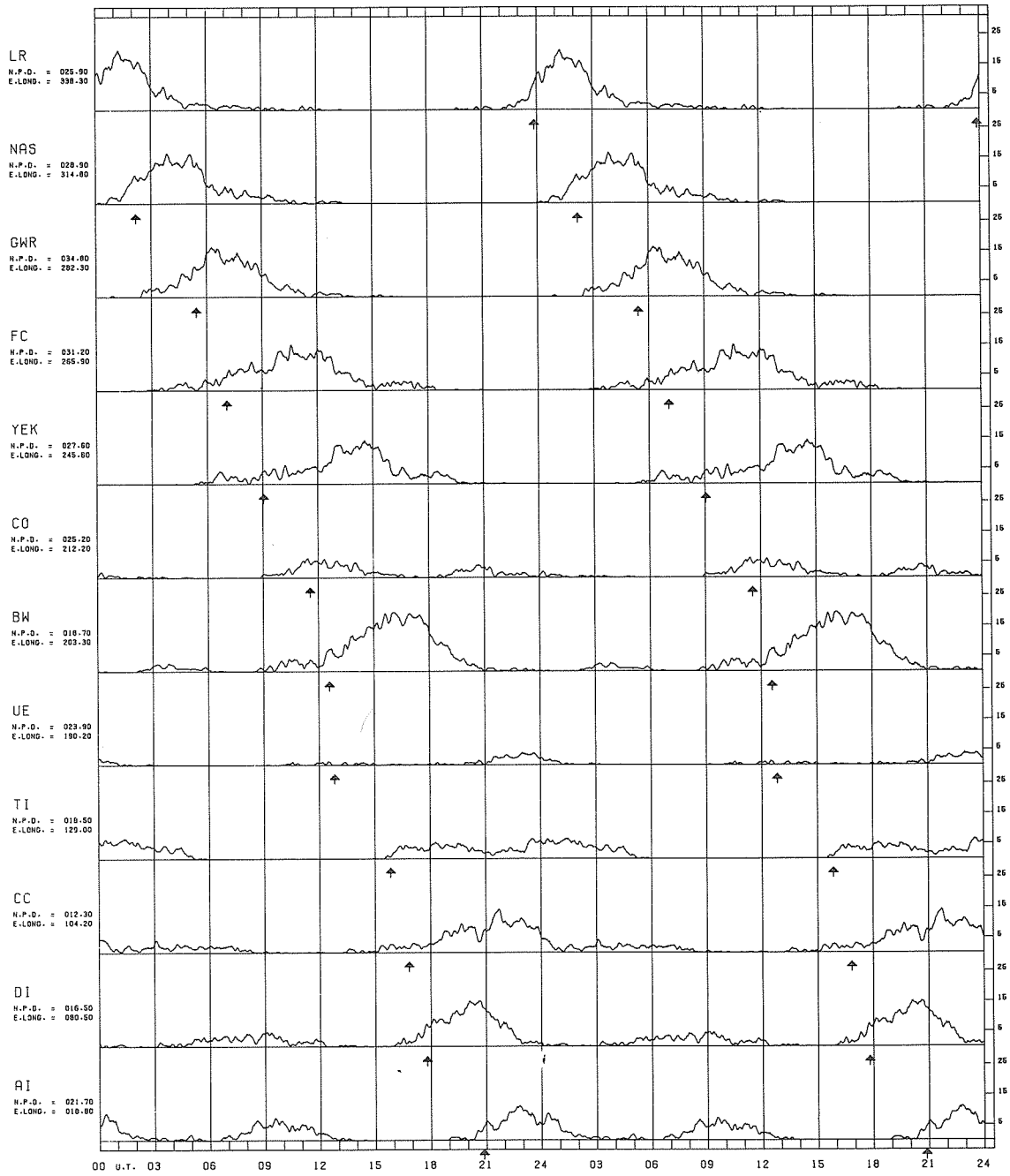


Fig. 3. Frequency of 1-min AL provision by station for July 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

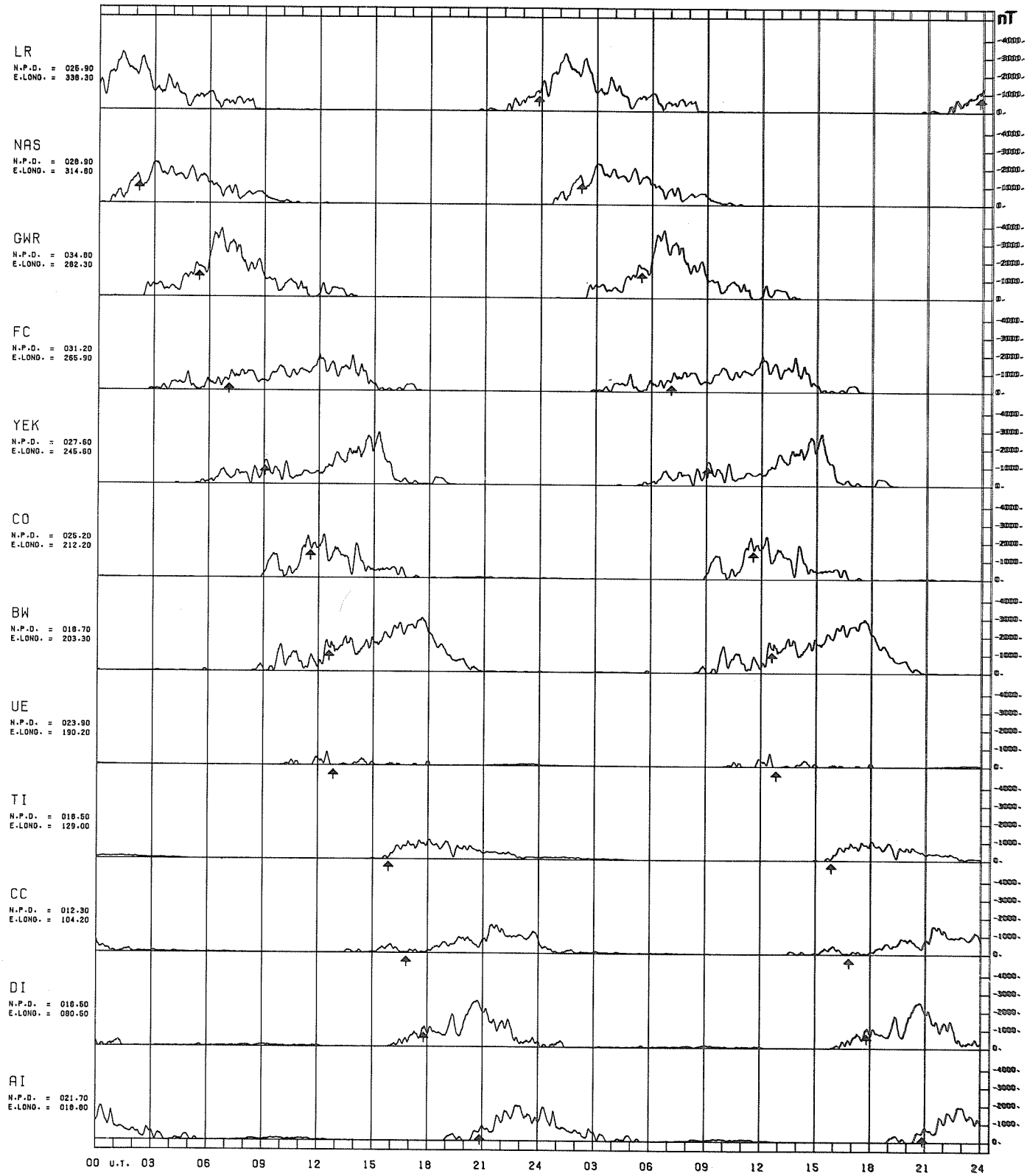


Fig. 4. Total amplitude of most negative H variations for July 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

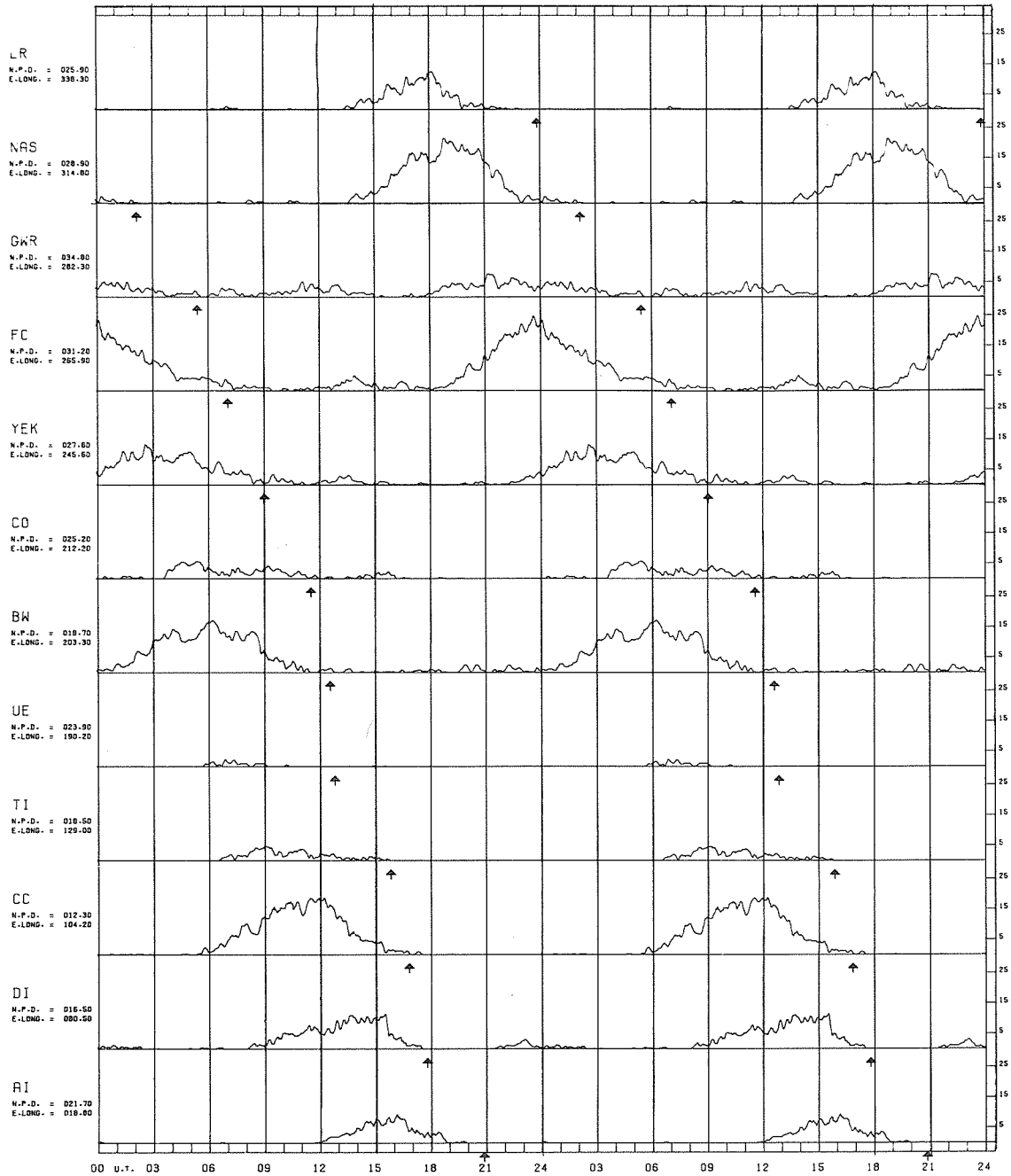


Fig. 5. Frequency of 1-min AU provision by station for August 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

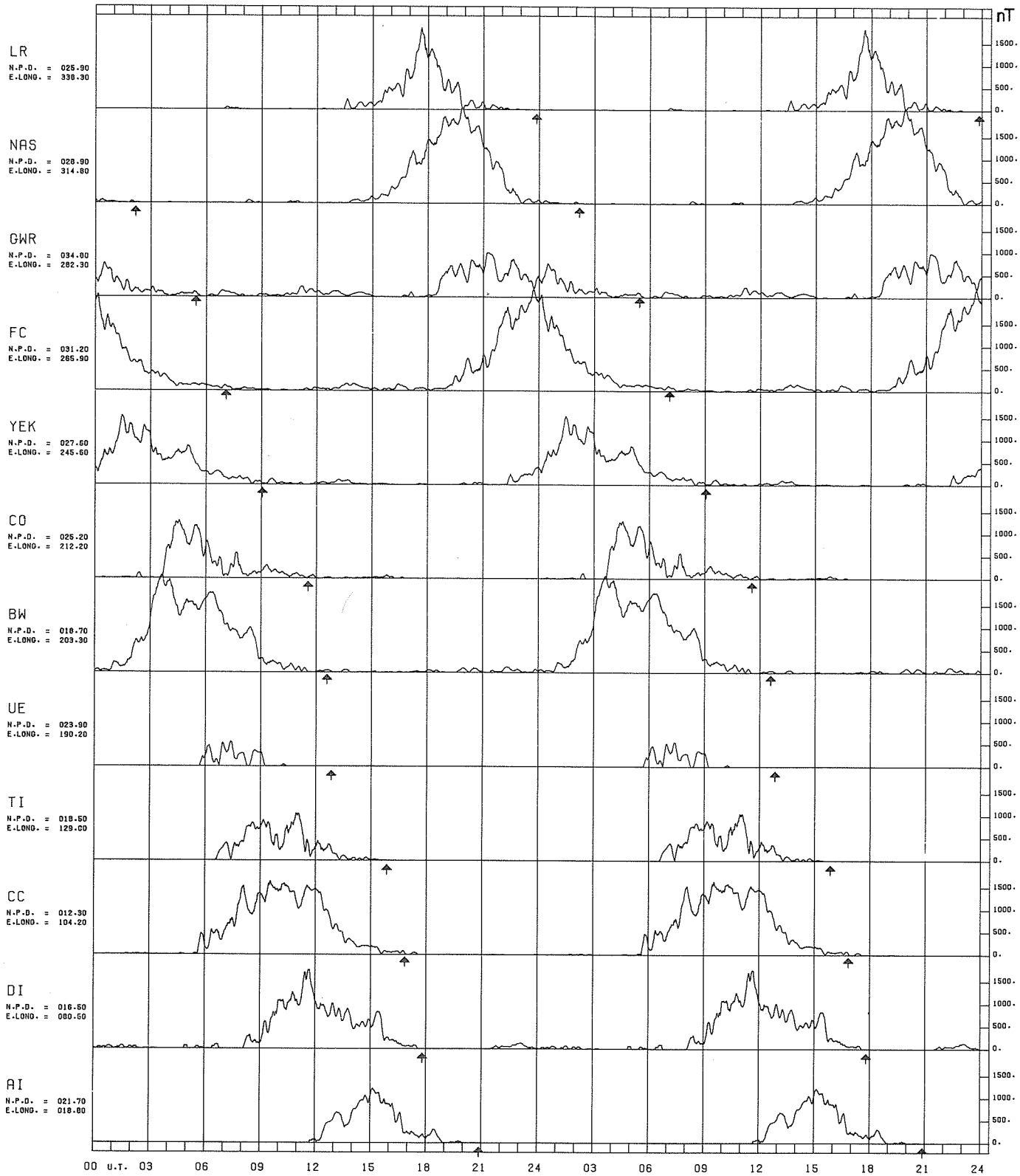


Fig. 6. Total amplitude of most positive H variations for August 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

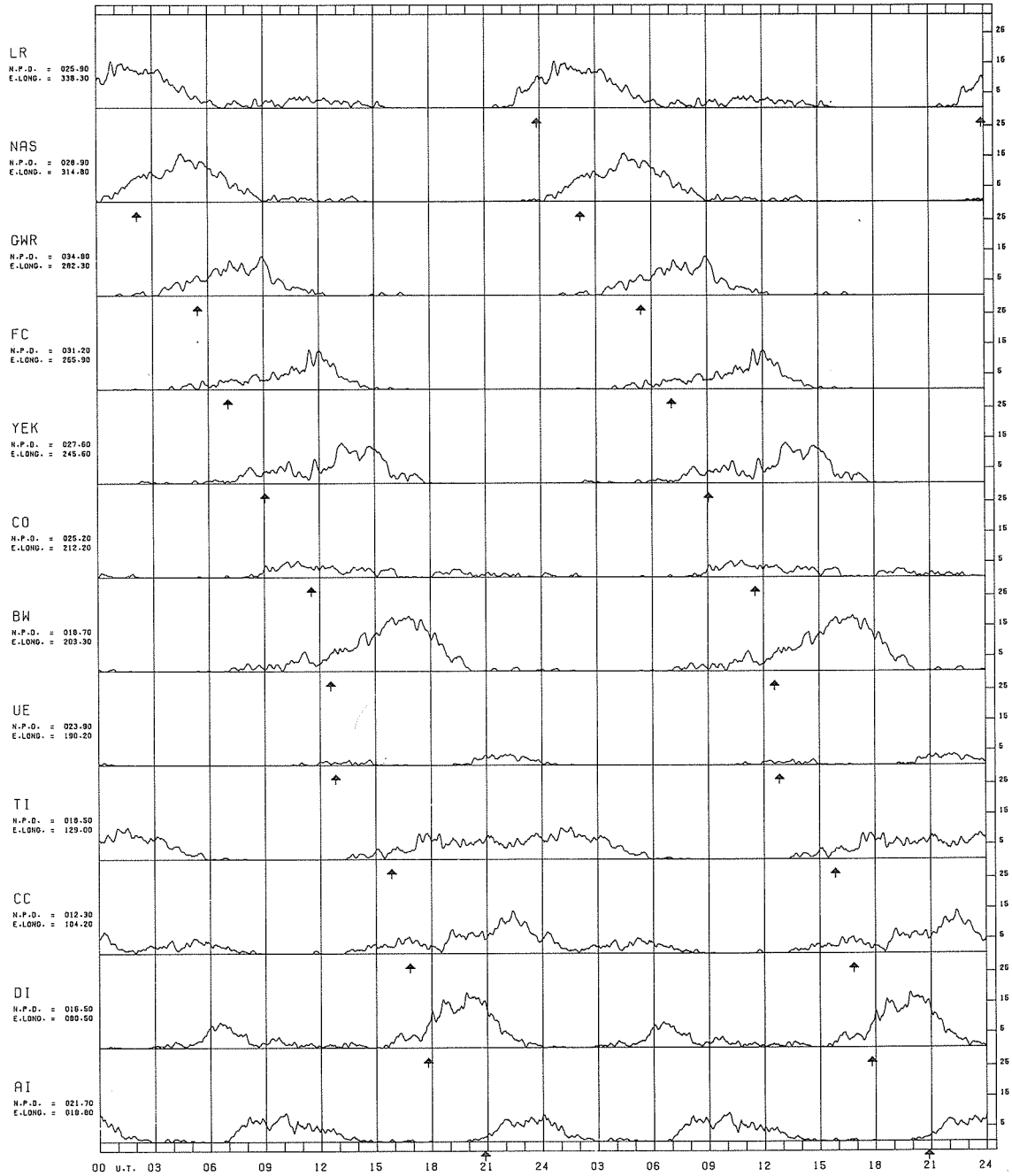


Fig. 7. Frequency of 1-min AL provision by station for August 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

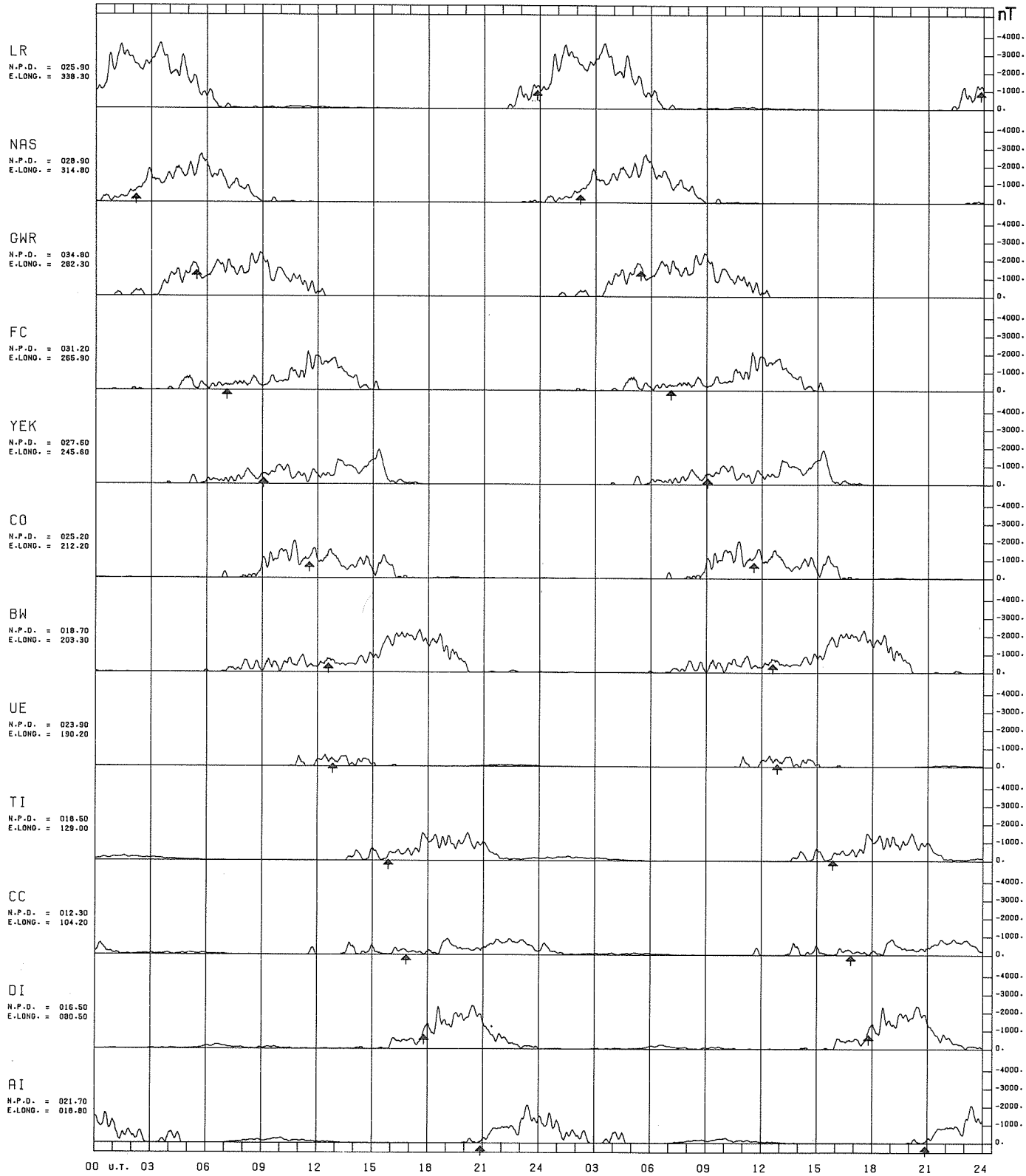


Fig. 8. Total amplitude of most negative H variations for August 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

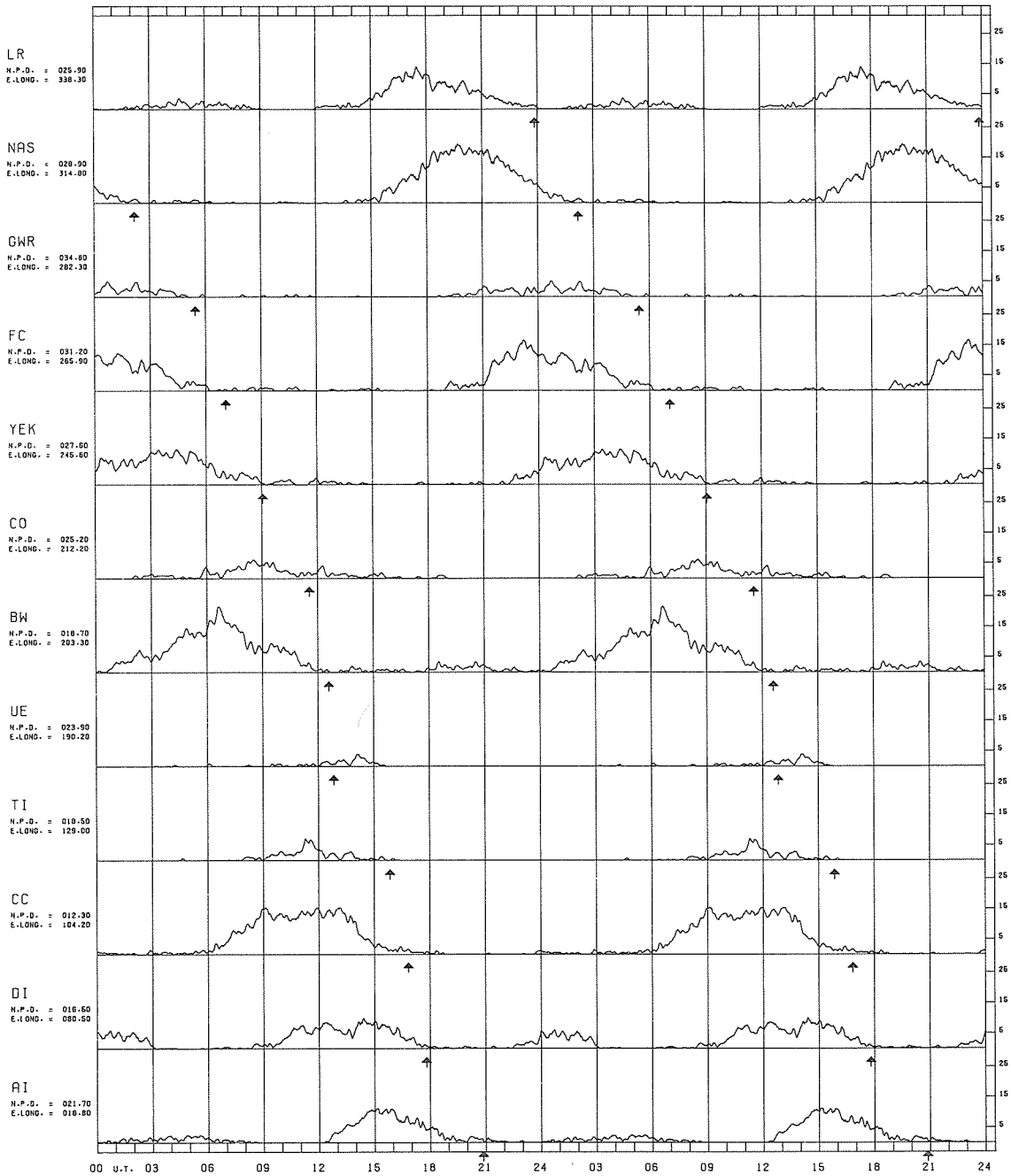


Fig. 9. Frequency of 1-min AU provision by station for September 1975. For each station an arrow marks the UT time of Local Geomagnetic midnight.

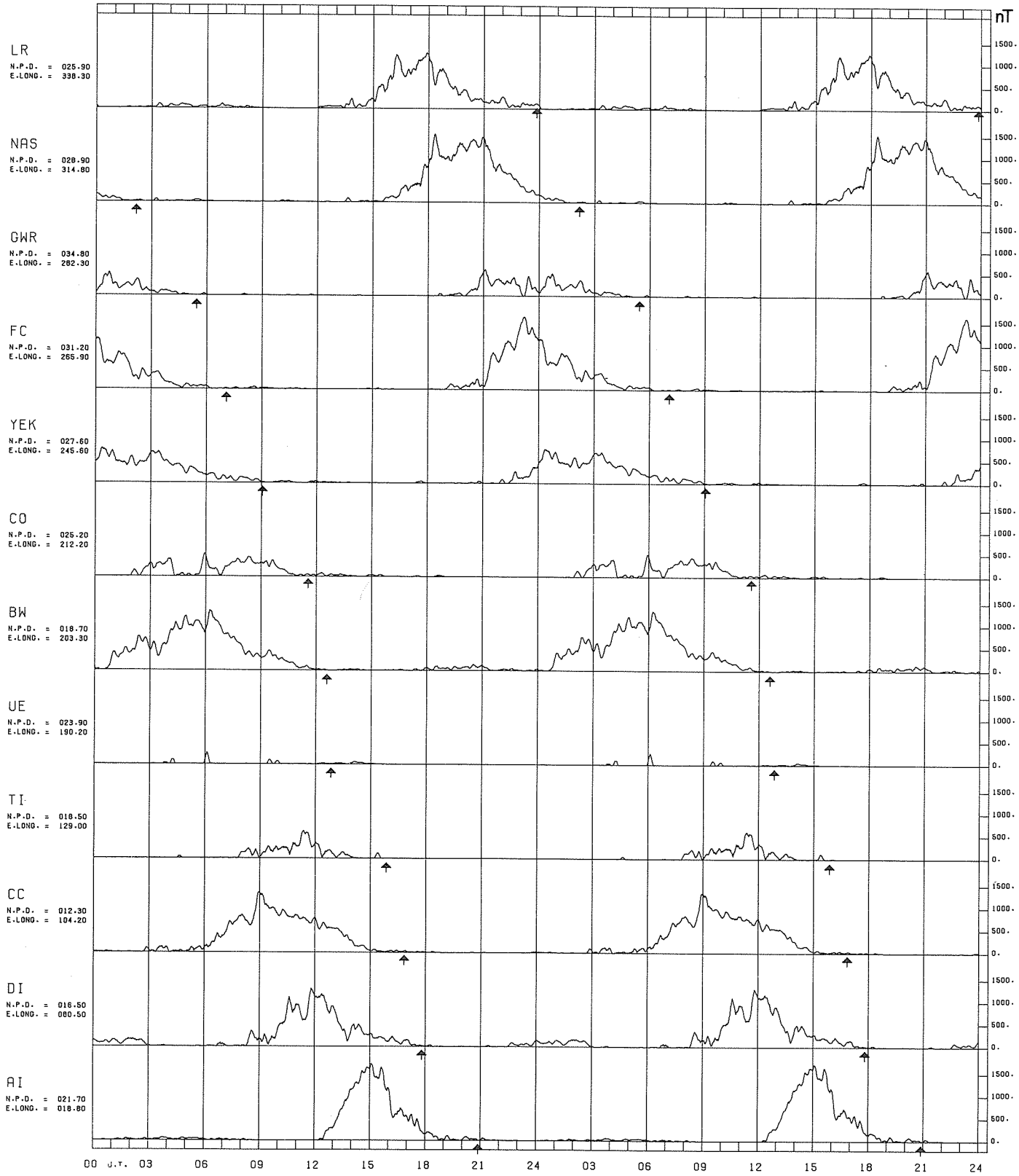


Fig. 10. Total amplitude of most positive H variations for September 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

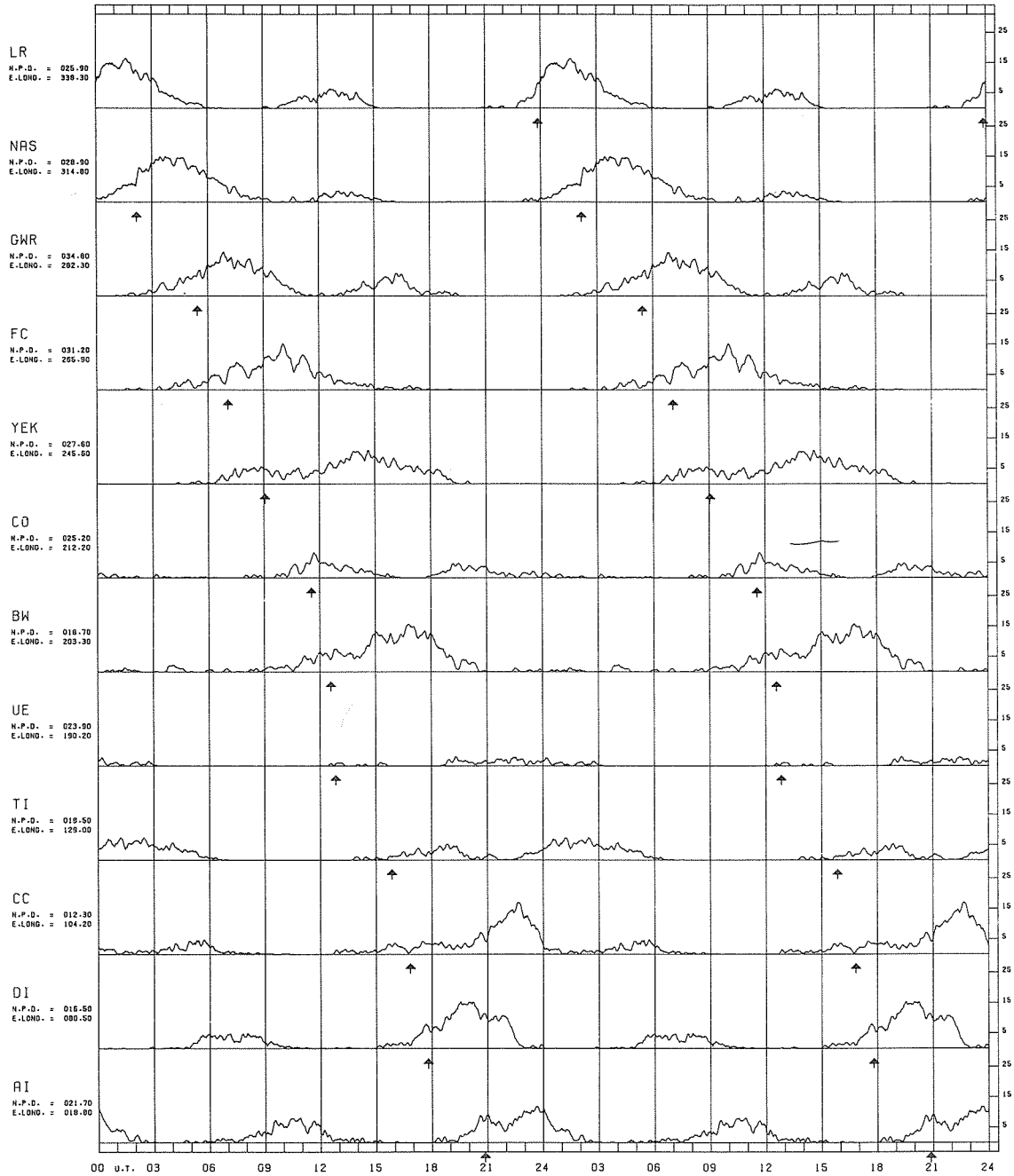


Fig. 11. Frequency of 1-min AL provision by station for September 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

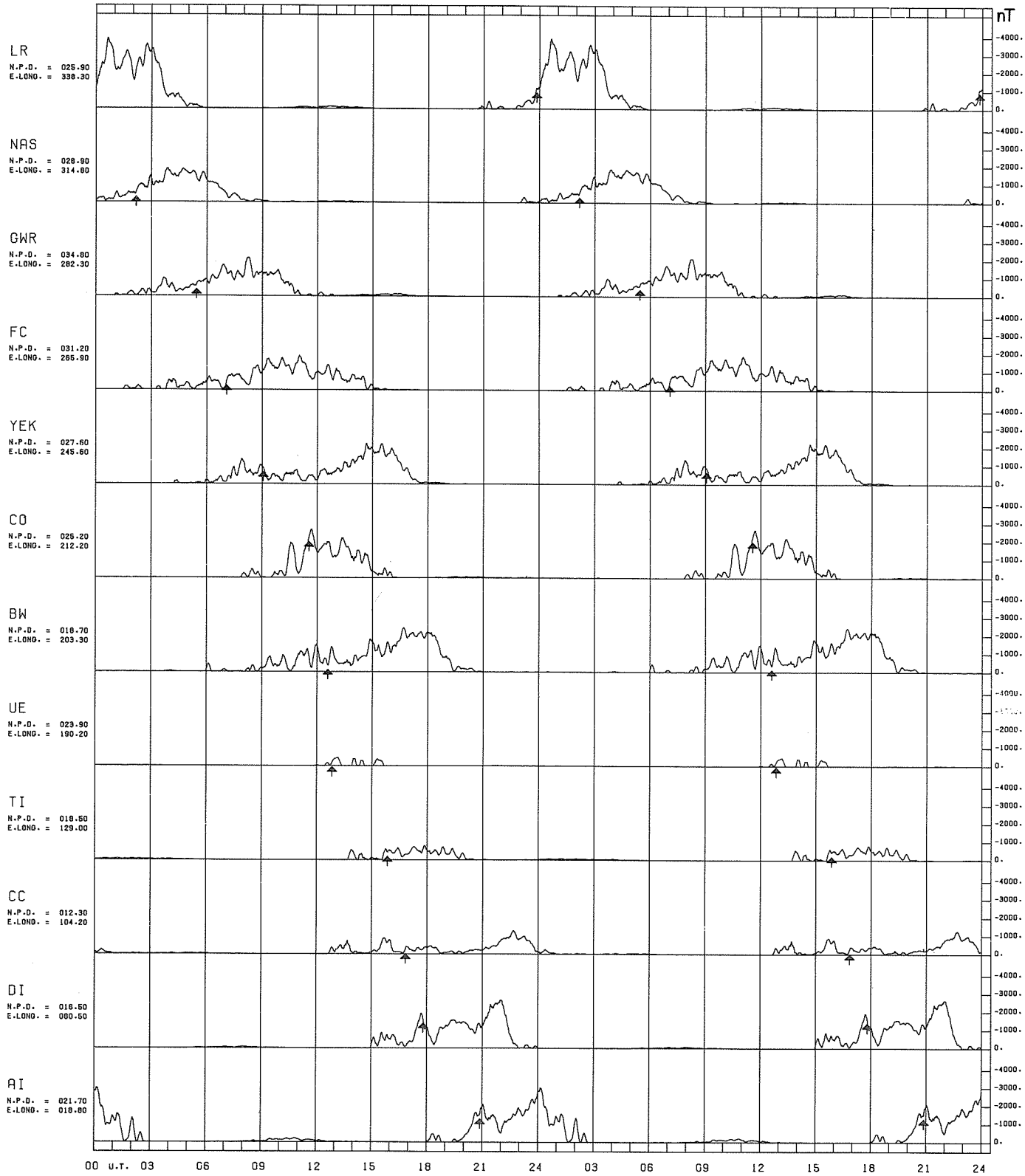


Fig. 12. Total amplitude of most negative H variations for September 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

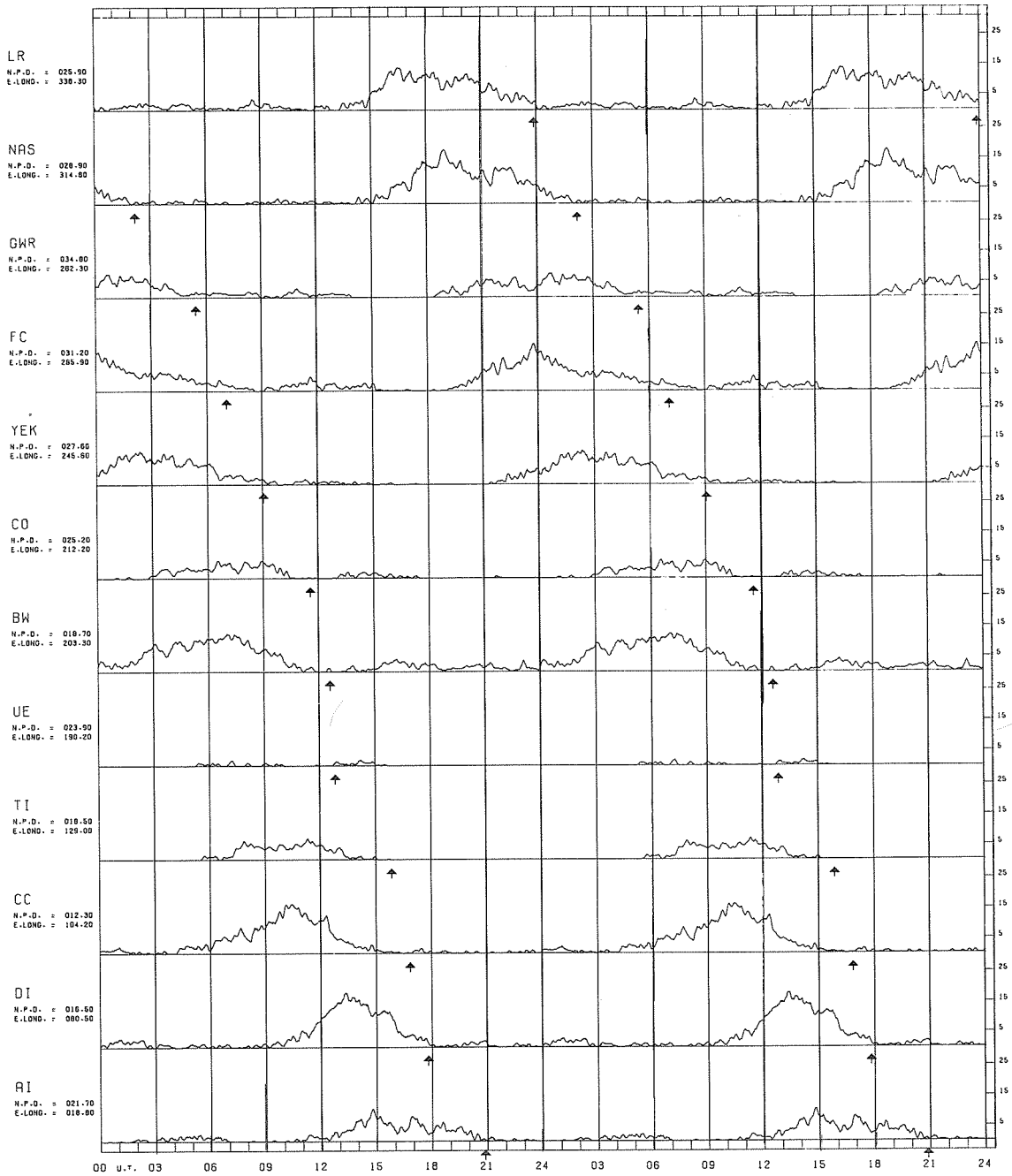


Fig. 13. Frequency of 1-min AU provision by station for October 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

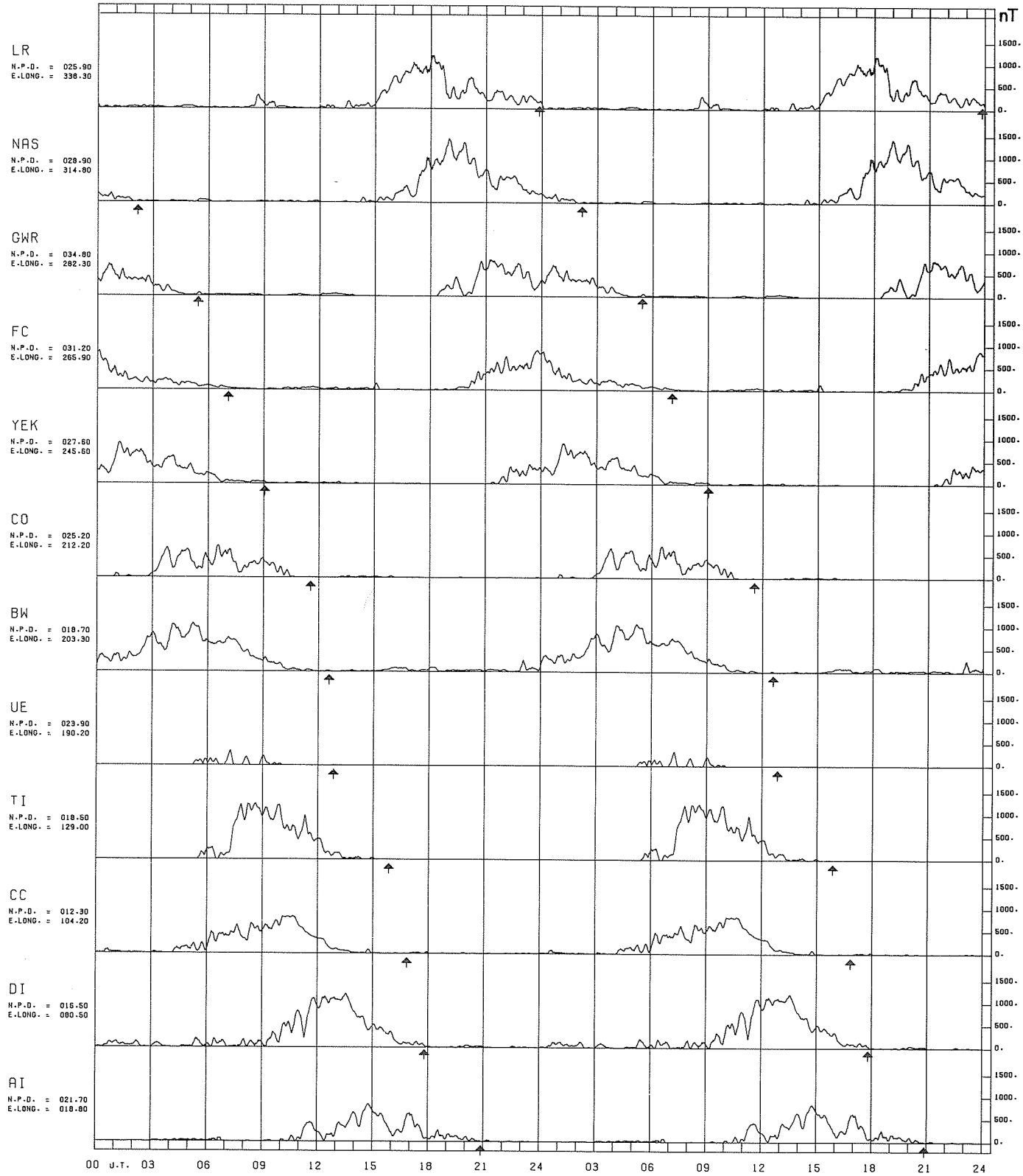


Fig. 14. Total amplitude of most positive H variations for October 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

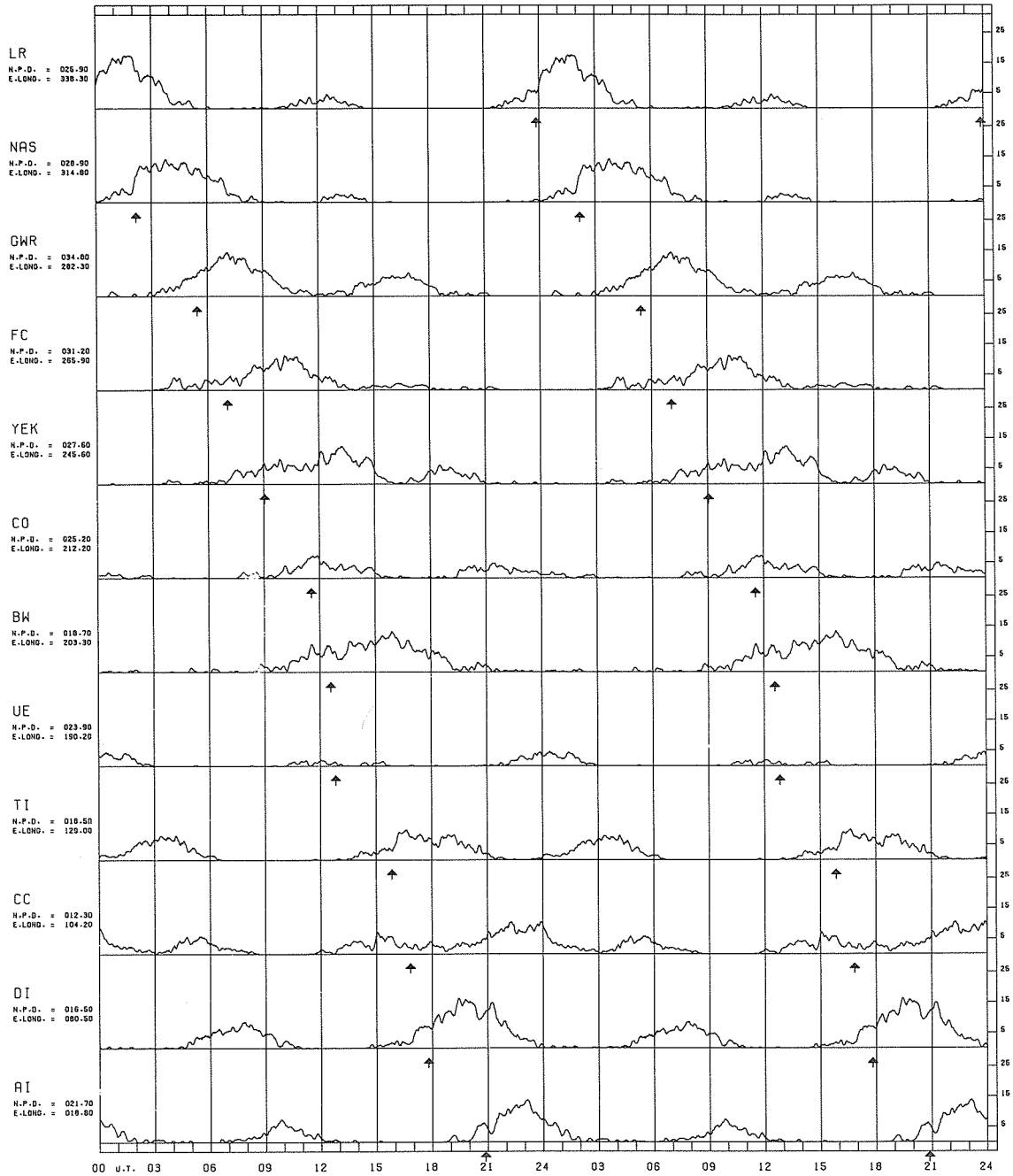


Fig. 15. Frequency of 1-min AL provision by station for October 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

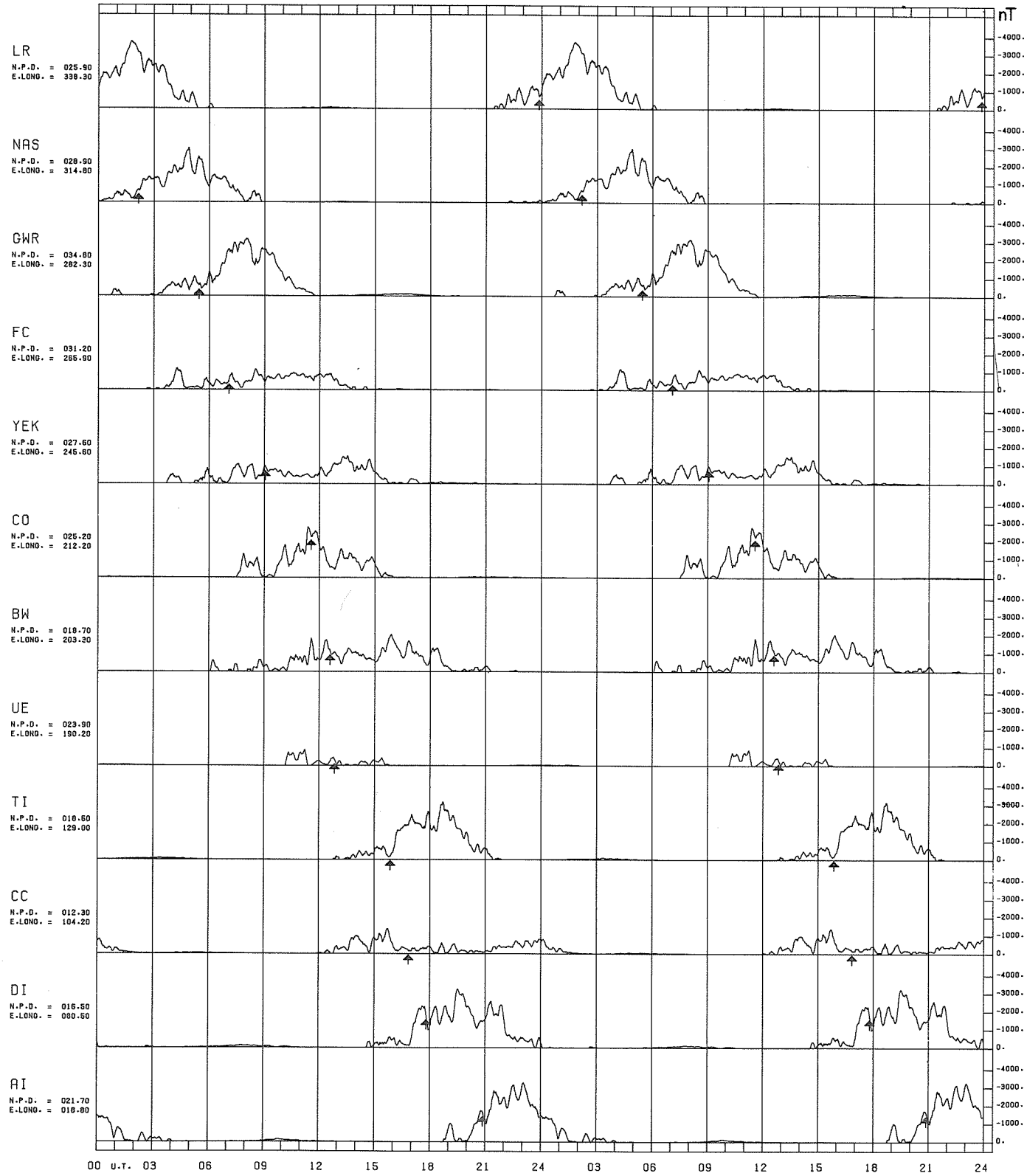


Fig. 16. Total amplitude of most negative H variations for October 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

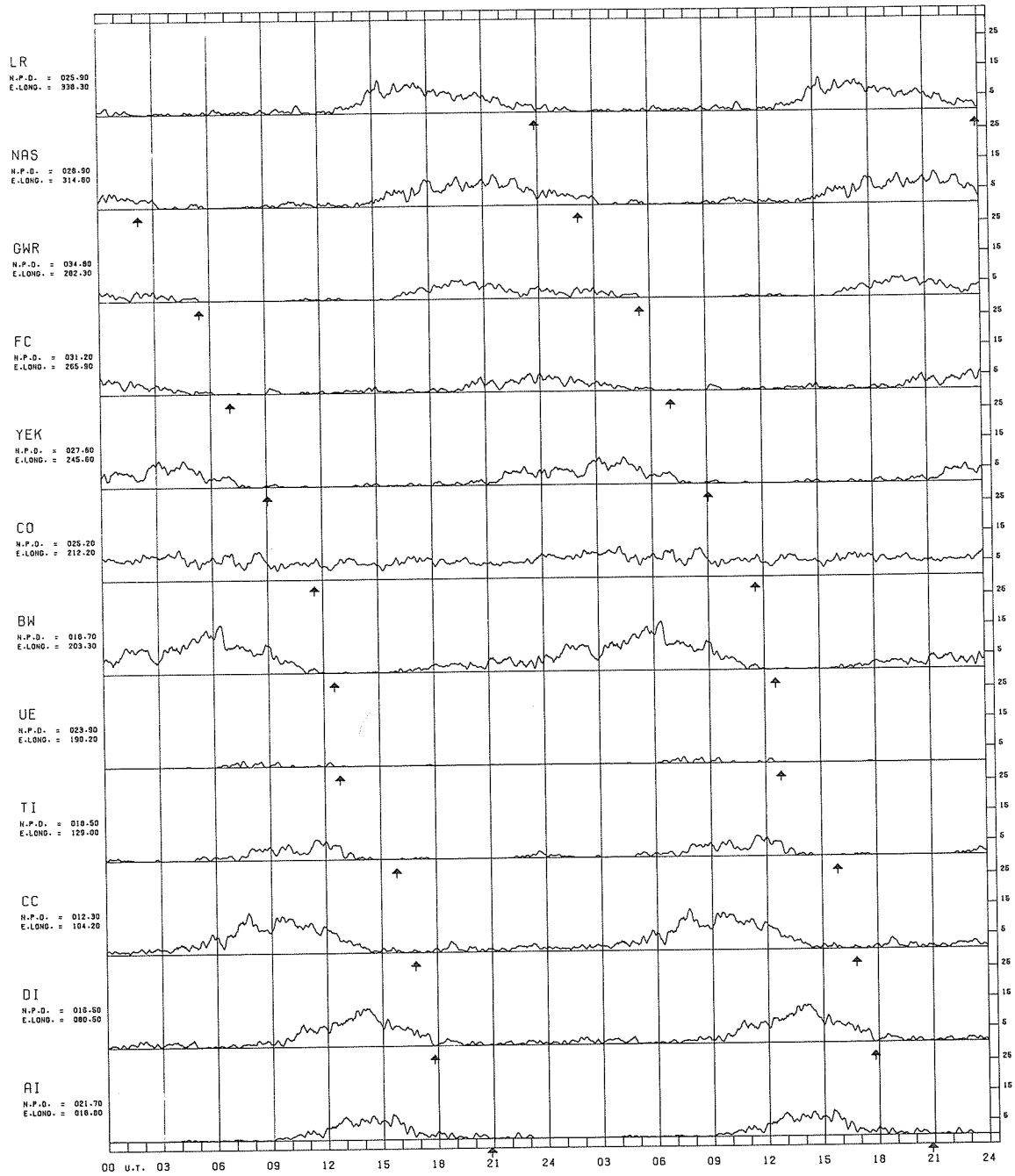


Fig. 17. Frequency of 1-min AU provision by station for November 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

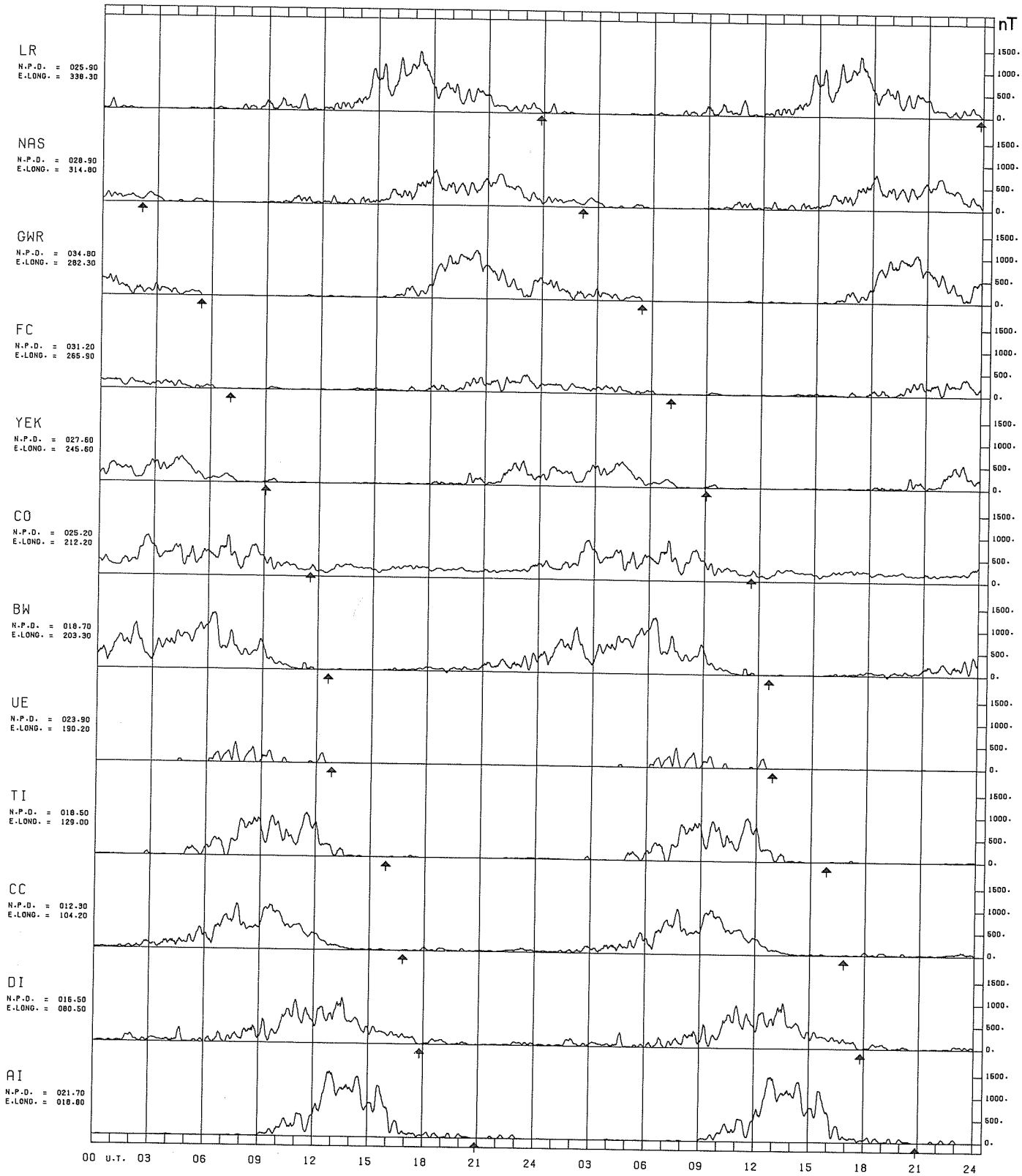


Fig. 18. Total amplitude of most positive H variations for November 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

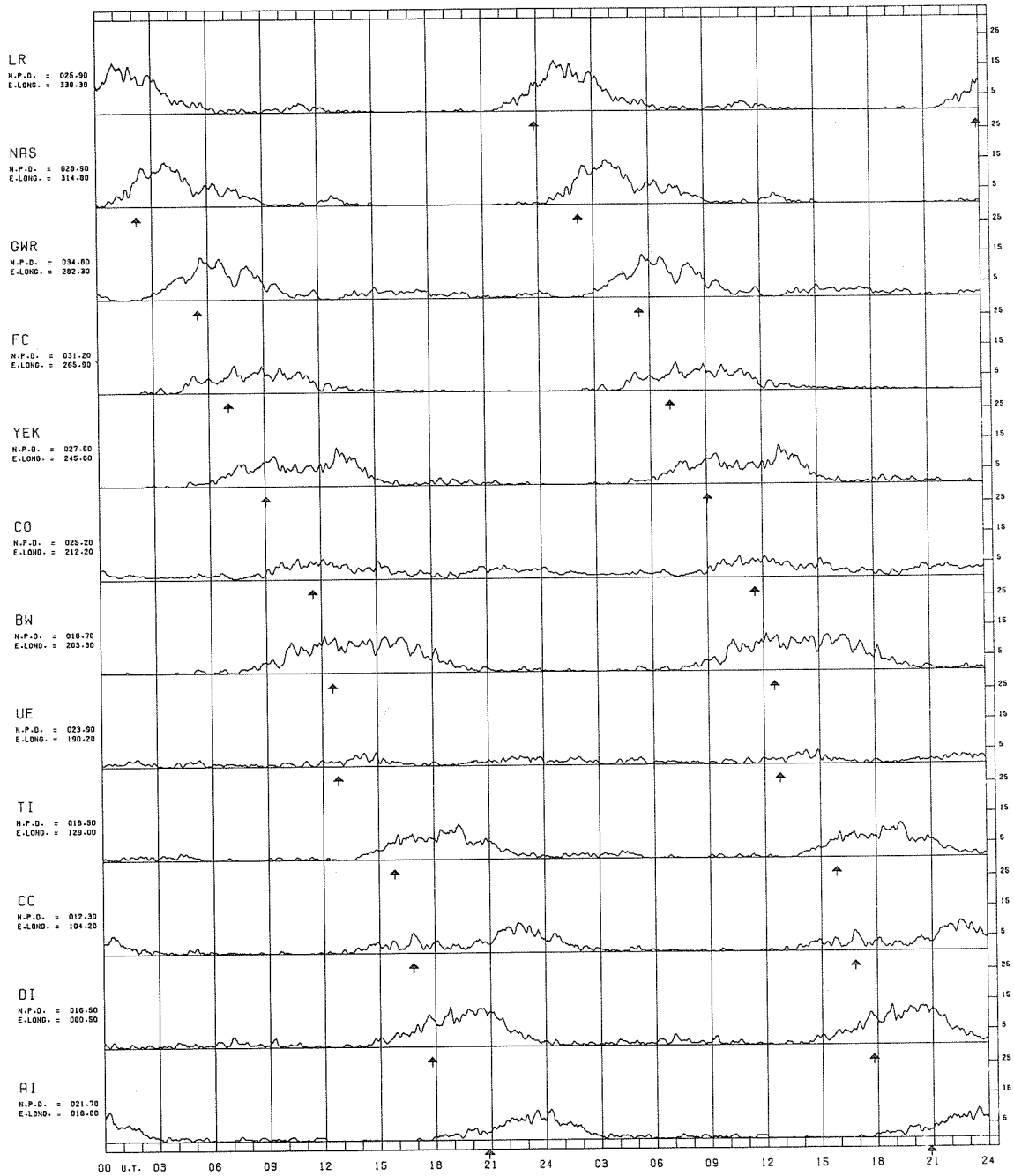


Fig. 19. Frequency of 1-min AL provision by station for November 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

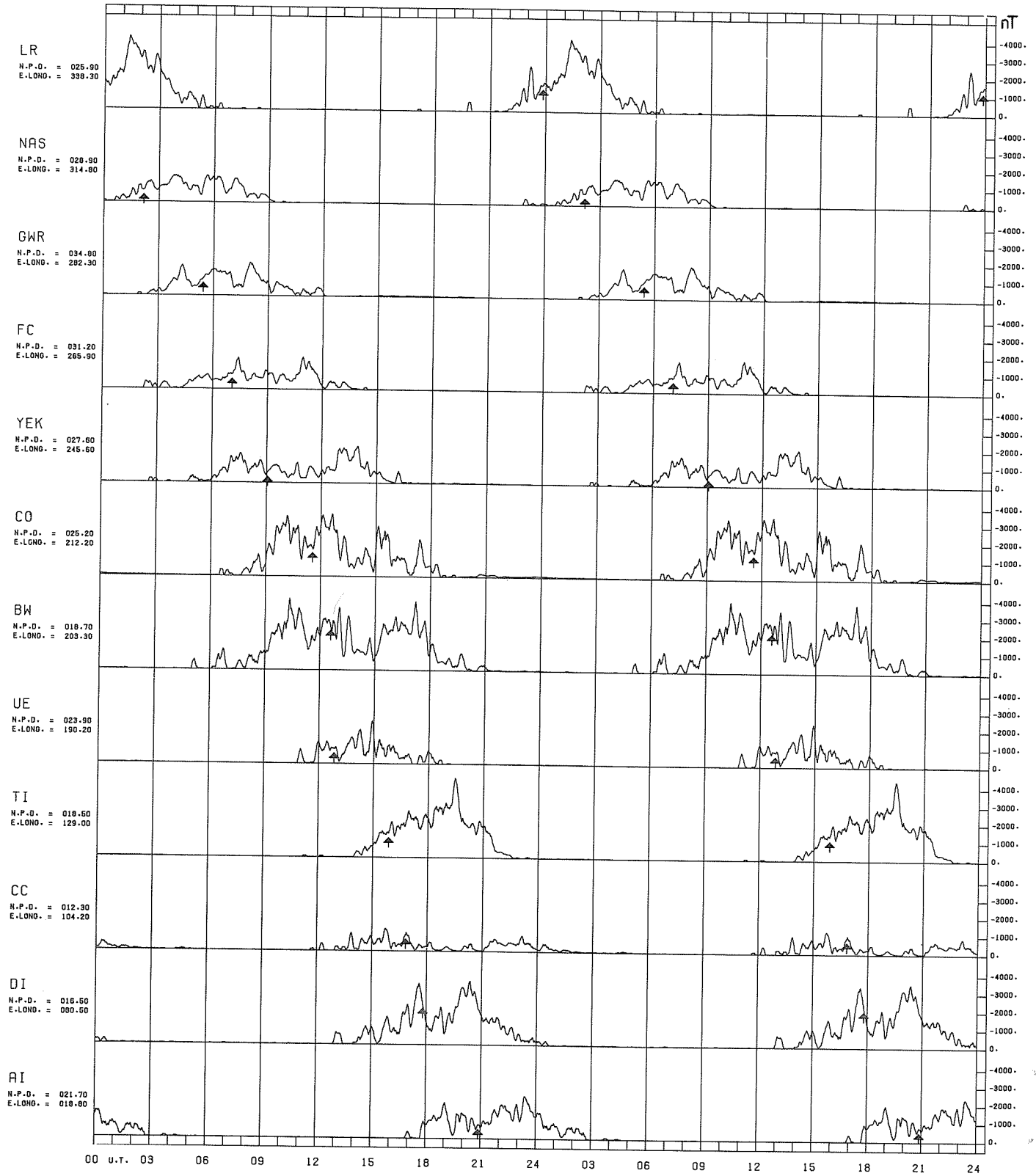


Fig. 20. Total amplitude of most negative H variations for November 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

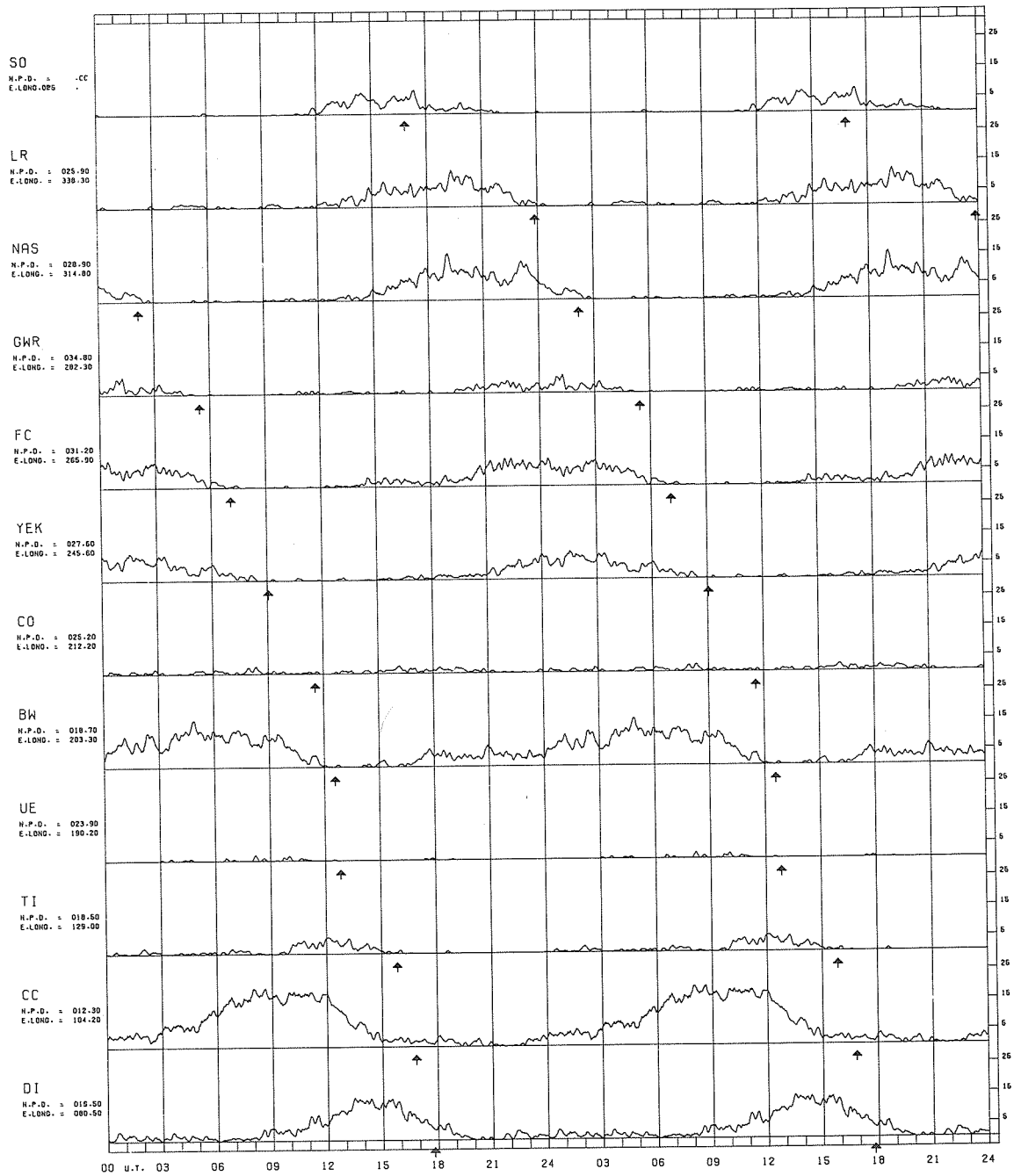


Fig. 21. Frequency of 1-min AU provision by station for December 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

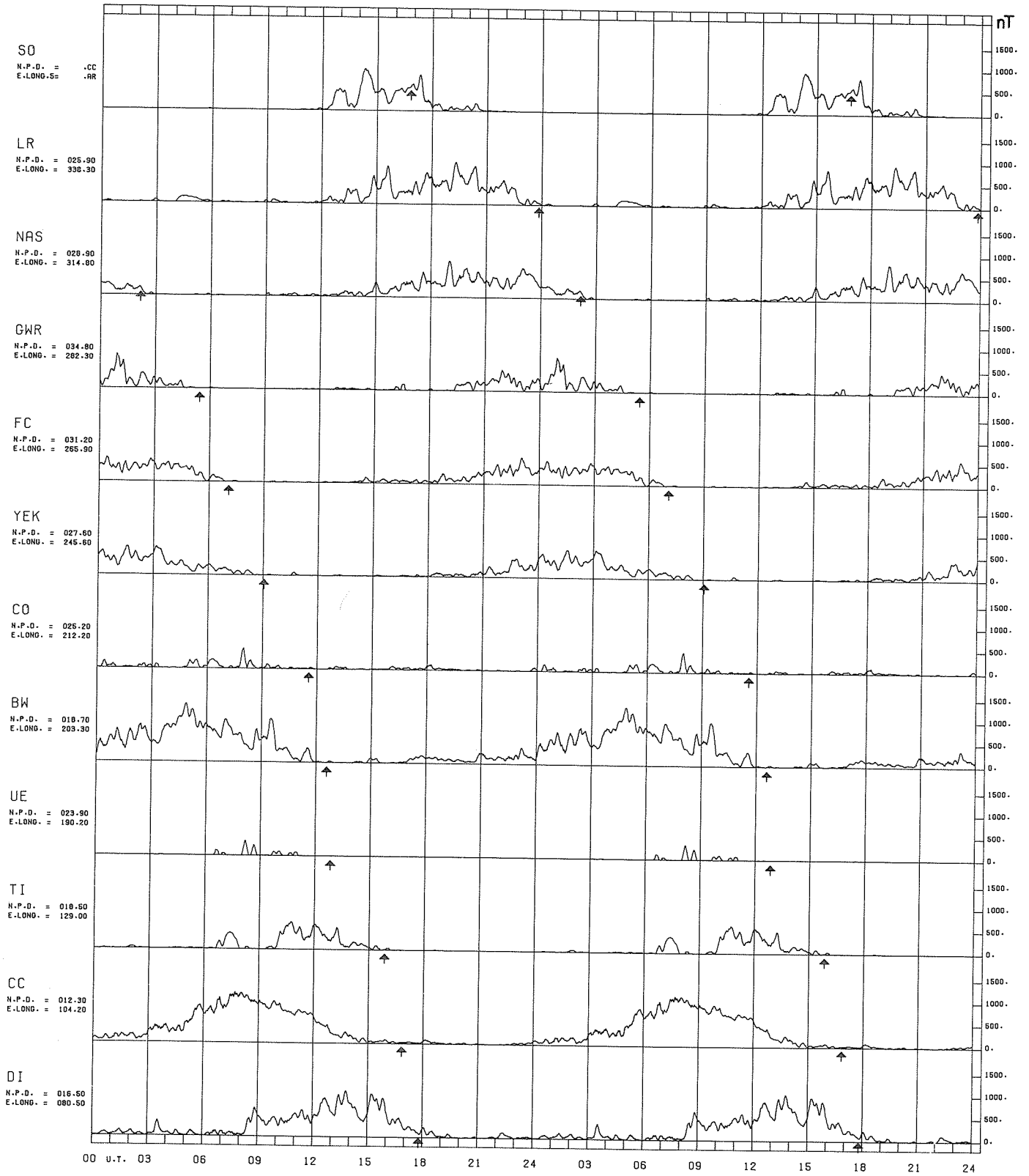


Fig. 22. Total amplitude of most positive H variations for December 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

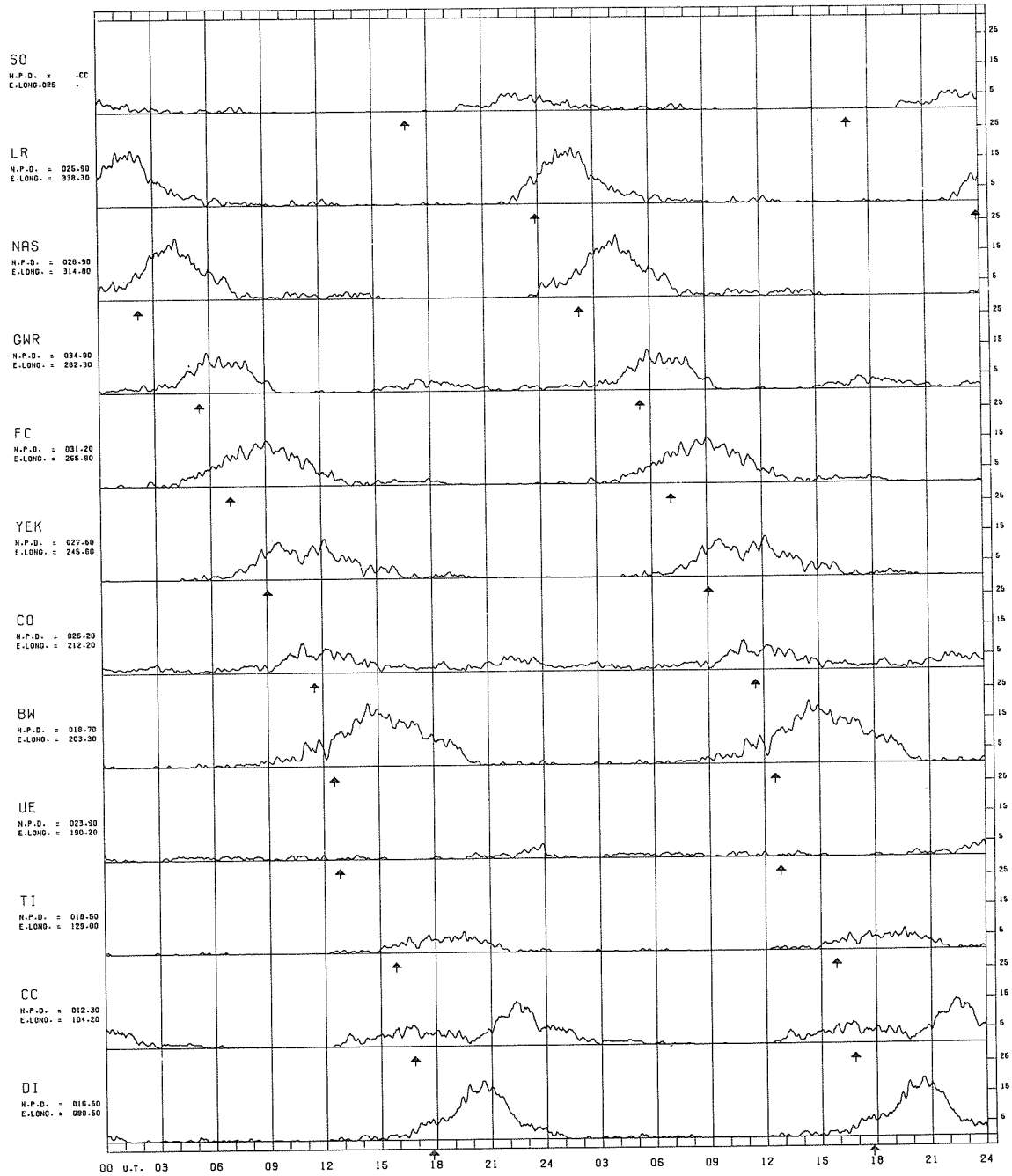


Fig. 23. Frequency of 1-min AL provision by station for December 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

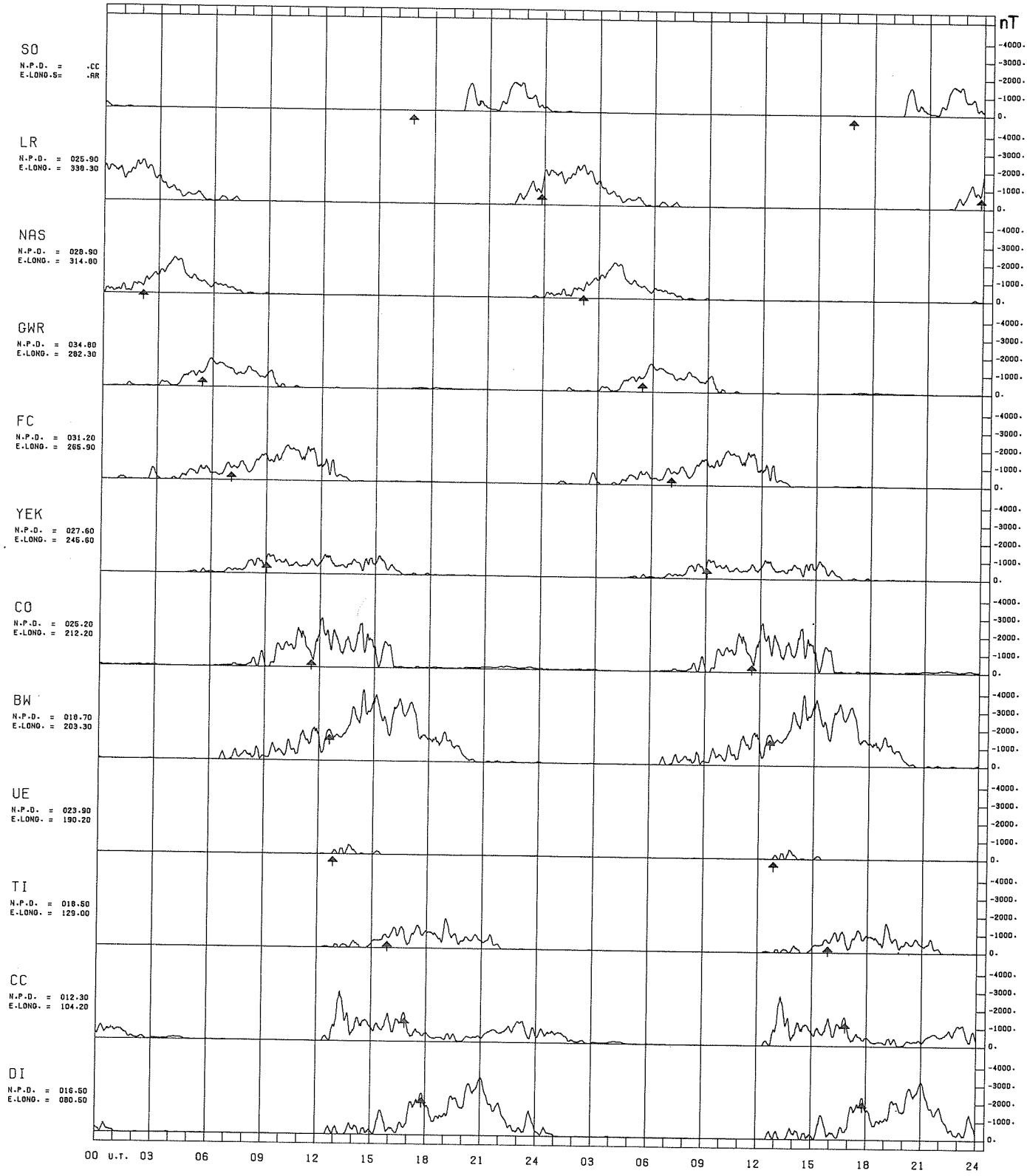


Fig. 24. Total amplitude of most negative H variations for December 1975. For each station an arrow marks the UT time of Local Geomagnetic Midnight.

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