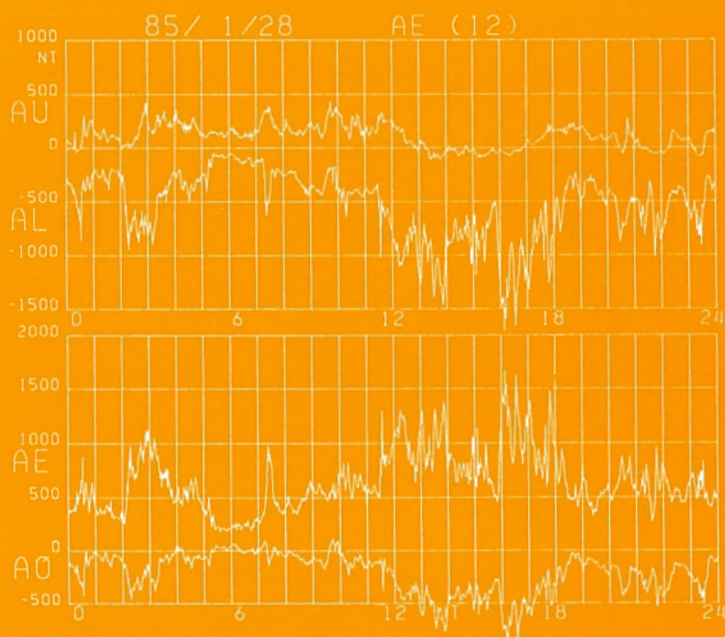


World Data Center C2 for Geomagnetism

# DATA BOOK

No. 18

Auroral electrojet (AE) indices  
for January-June 1985



JUNE 1989

Data Analysis Center for  
Geomagnetism and Space Magnetism  
FACULTY OF SCIENCE  
**KYOTO UNIVERSITY**  
KYOTO

Division of  
Data Collection and Processing  
**NATIONAL INSTITUTE OF  
POLAR RESEARCH**  
TOKYO

SPECIAL NOTICE

We published the AE indices for the latter half of 1985 in the Data Book No. 17 prior to publication of the AE indices for the first half of 1985. This Data Book, No. 18, fills the gap. The tentatively planned order of publication of the Data Books is as follows.

Data Book No. 19	AE indices for January - June 1986.
Data Book No. 20	AE indices for July - December 1986.
Data Book	AE indices for January - June 1977.
Data Book	AE indices for July - December 1977.

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All inquiries on Data Books and their distribution and notices of change of address should be sent to:

World Data Center C2 for Geomagnetism  
Faculty of Science, Kyoto University  
Kyoto 606, Japan

We prefer receiving inquiries and requests by ordinary mail. There have been cases when inquiries were made by TELEX or by FAX sent to our old address or to a wrong division of the University. For urgent communication, please use following addresses. Please note these addresses are subject to change in the future.

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## PPREFACE

The Auroral Electrojet (AE) index was originally introduced by Davis and Sugiura in 1966 as a measure of global electrojet activity in the auroral zone. The AE index is now widely used for researches in geomagnetism, aeronomy, and solar-terrestrial physics. After the initial development at the NASA/Goddard Space Flight Center the calculation of the index was first performed at the Geophysical Institute of the University of Alaska, which published hourly values of the index for the years 1957 to 1964. The production of 2.5 min values was then made at the Goddard Space Flight Center for the period from September 1964 to June 1968.

After these early publications the index was regularly issued by the World Data Center A for Solar-Terrestrial Physics (WDC-A for STP) in Boulder, Colorado, which published 2.5 min values for the years 1966 to 1974 and 1.0 min values for 1975 and the first 4 months of 1976.

When it became difficult for the WDC-A for STP to continue the production of the AE index, a question was raised if the index could be produced at the WDC-C2 for Geomagnetism, which is operated by the Data Analysis Center for Geomagnetism and Space Magnetism, Faculty of Science, Kyoto University. Responding to this request we decided to produce the index for the two years, 1978-1979, of the International Magnetospheric Study (IMS), and published 1.0 min values of the AE index for these years in the "WDC-C2 for Geomagnetism Data Book" series.

Although the International Association of Geomagnetism and Aeronomy (IAGA) recommended the continuation of the production of the AE index at the WDC-C2, the AE production could not be extended beyond IMS because of the constraints in manpower and computing capability. Increasing demands for the AE index, however, motivated us to resume its production, and we then published the Data Book No.7 for the first half of 1980. After this publication, various possibilities of financial support for the production of the index were explored by the Subcommittee on Solar Terrestrial Physics of the Special Committee for International Cooperation, Science Council of Japan. As a result, the National Institute of Polar Research (NIPR), Tokyo, offered assistance. Beginning with the Data Book No.8, the production of the AE index has been continued at the Kyoto University, but the printing and distribution of the Data Book have been done by NIPR.

## TABLE OF CONTENTS

	page
1. Derivation and Representation . . . . .	1
2. Data Used . . . . .	1
3. The Superposed Plot and the Plot of the Contributing Stations of the AE Indices . . . . .	4
4. Results . . . . .	6
5. Acknowledgements . . . . .	6
 List of AE Stations (Table 1) . . . . .	 2
Monthly Quiet-time H Reference Values (Table 2) . . . . .	7
Hourly Average AE Indices (Table 3) . . . . .	8
 Distribution of AE stations (Figure 1) . . . . .	 2
Explanatory Figure (Figure 2) . . . . .	3
GLT and MLT (Figure 3) . . . . .	5
Daily Graphs of AE Indices (Figure 4) . . . . .	33
	(even pages)
Plots of the Contributing Stations (Figure 5) . . . . .	33
	(odd pages)
Plots of AE Indices on Disturbed Days . . . . .	94
Stacked Common Scale Magnetograms (Figure 6) . . . . .	96
Plots of Hourly values of AE indices (Figure 7) . . . . .	103
A Summary plot of AU and AL (Figure 8) . . . . .	108

# Auroral Electrojet (AE) Indices

for January - June 1985

## 1. Derivation and Representation

The AE index is derived from geomagnetic variations in the horizontal component observed at selected (10-13) observatories along the auroral zone in the northern hemisphere. To normalize the data a base value for each station is first calculated for each month by averaging all the data from the station on the five international quietest days. This base value is subtracted from each value of one minute data obtained at the station during that month. Then among the data from all the stations at each given time (UT), the largest and smallest values are selected. The AU and AL indices are respectively defined by the largest and the smallest values so selected. The symbols, AU and AL, derive from the fact that these values form the upper and lower envelopes of the superposed plots of all the data from these stations as functions of UT. The difference, AU minus AL, defines the AE index, and the mean value of the AU and AL, i.e.  $(AU+AL)/2$ , defines the AO index. The term "AE indices" is usually used to represent these four indices (AU, AL, AE and AO). The AU and AL indices are intended to express the strongest current density of the eastward and westward auroral electrojets, respectively. The AE index represents the overall activity of the electrojets, and the AO index provides a measure of the equivalent zonal current.

In this report we present daily plots and hourly values of the AE indices and "contributing station" plots giving additional information on the indices. The stations that actually give the AU and AL values are named the "contributing stations" of the AU and AL indices. The pair of the AU and AL contributing stations is referred to as "the contributing stations of the AE indices". The plot identifies these AE contributing stations, and also gives information on the data availability for each station.

## 2. Data Used

To obtain reliable AE indices it is desirable to use as many observatories as possible. However, there are two major difficulties: one is that the distribution of the observatories in operation is not uniform along the auroral zone, and the other is that the digitization of magnetograms is a laborious task.

Table 1. List of AE(12) stations.

Observatory	Abbreviations		Geographic		Geomagnetic	
	IAGA	WDC-A	Lat.(°N)	Long.(°E)	Lat.(°N)	Long.(°E)
Abisko	ABK	AI	68.36	18.82	66.04	115.08
Dixon Island	DIK	DI	73.55	80.57	63.02	161.57
Cape Chelyuskin	CCS	CC	77.72	104.28	66.26	176.46
Tixie Bay	TIK	TI	71.58	129.00	60.44	191.41
Cape Wellen	CWE	UE	66.17	190.17	61.79	237.10
Barrow	BRW	BW	71.30	203.25	68.54	241.15
College	CMO	CO	64.87	212.17	64.63	256.52
Yellowknife	YKC	YEK	62.40	245.60	69.00	292.80
Fort Churchill	FCC	FC	58.80	265.90	68.70	322.77
Poste-de-la-Baleine (Great Whale River)	PBQ	PBQ	55.27	282.22	66.58	347.36
Narssarssuaq	NAQ	NAS	61.20	314.16	71.21	36.79
Leirvogur	LRV	LR	64.18	338.30	70.22	71.04

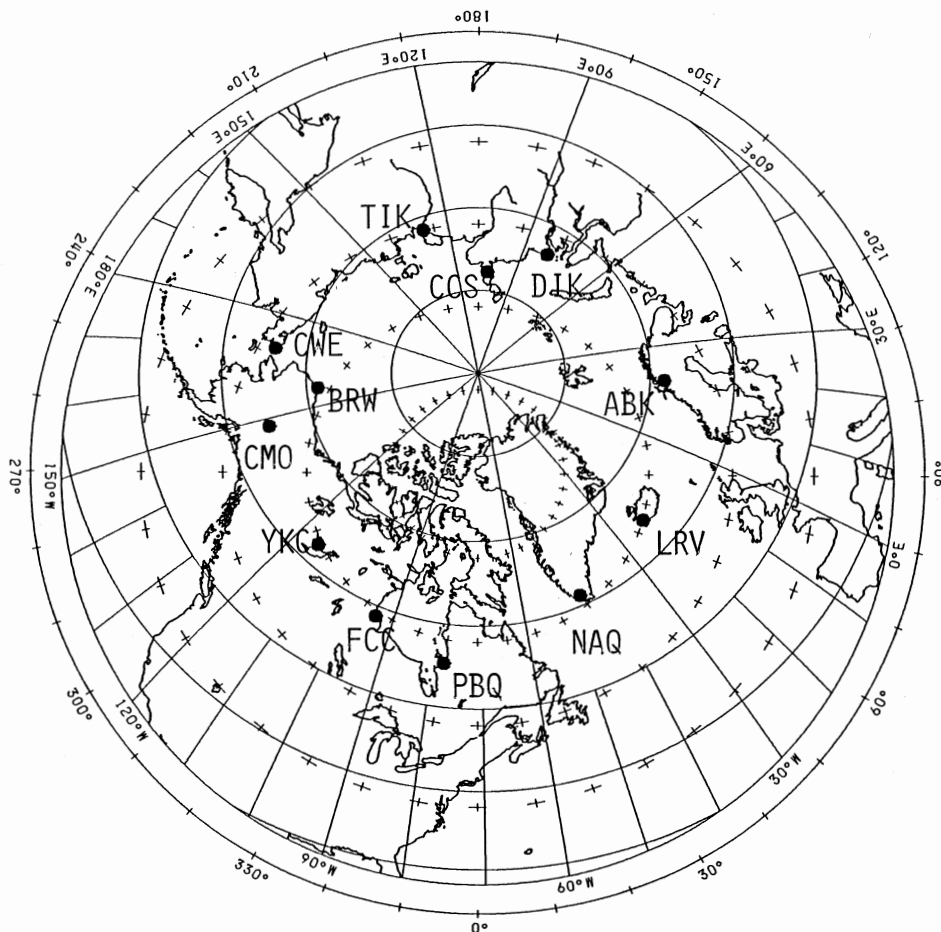
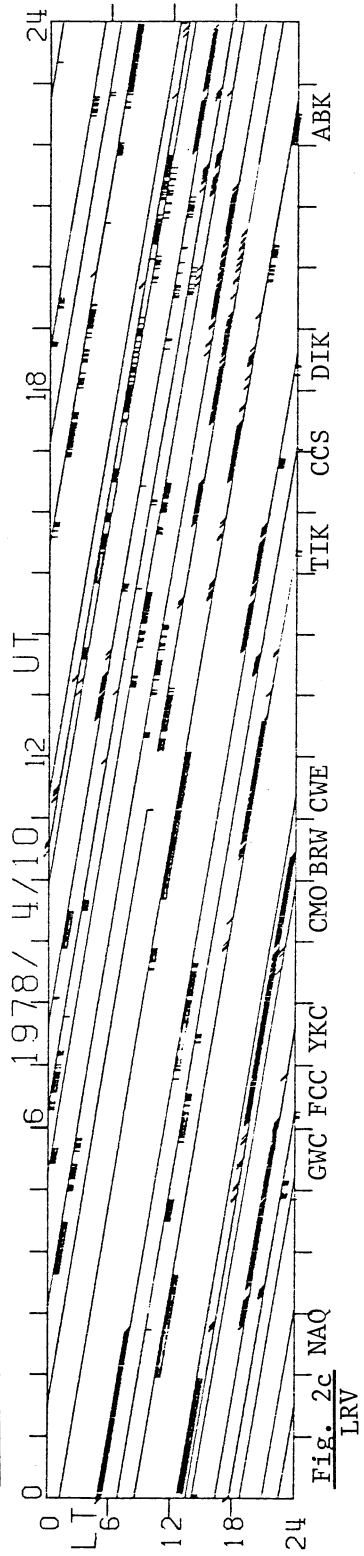
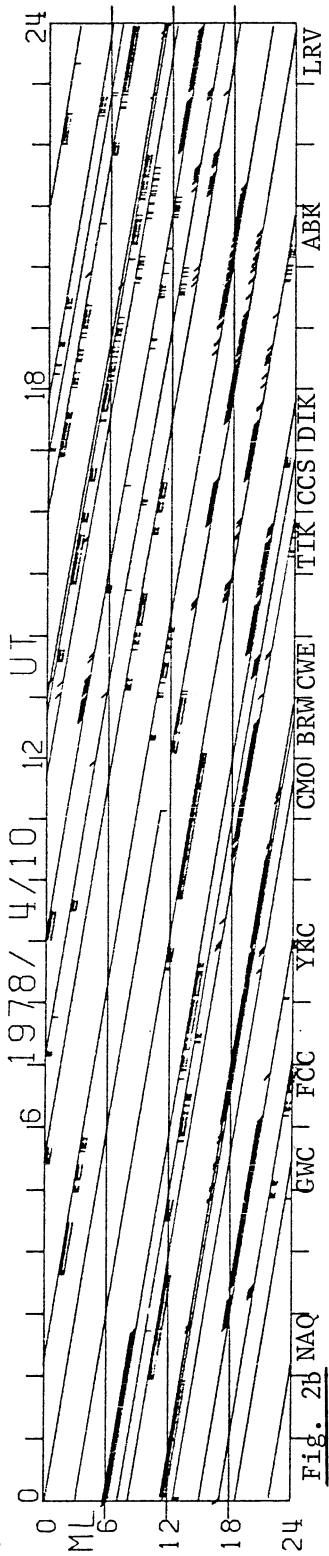
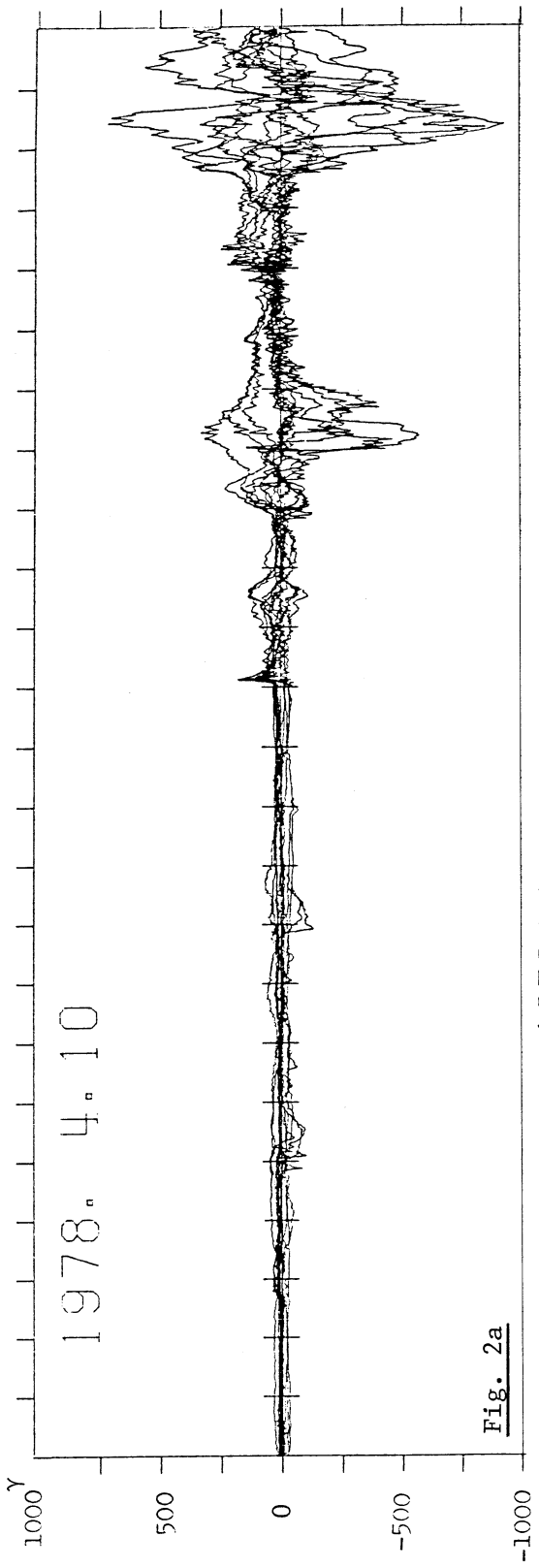


Figure 1. Distribution of AE(12) stations.

This figure is drawn by Lambert projection with the geomagnetic north pole at its center. Geographic coordinates are indicated by solid lines. Geomagnetic coordinates are shown by thin plus signs. Latitude circles are drawn at 10° intervals. Geomagnetic longitude is shown by the numbers along the outer circle and geographic longitude is given by the numbers along the inner circle with suffix E or W.





We used twelve observatories listed in Table 1. The distribution of the stations is shown in Fig. 1. The station Great Whale River was closed in July 1984 due to the high replacement cost of a broken power line and a new station Poste-de-la-Baleine was opened near the old site in September 1984. Its IAGA code is PBQ. In this Data Dook we denoted the sites of these stations by a single representative location under the name Poste-de-la-Baleine.

Of the twelve observatories six are taking digital data; these stations are referred to as digital stations below. Three of the digital stations, Fort Churchill, Poste-de-la-Baleine, and Yellowknife, give data in the X, Y, Z coordinate system. To make these data compatible with the other stations, we convert the X and Y components to the H component by  $H=\sqrt{X^2+Y^2}$ . If either X or Y is missing, H is also treated as being missing. For the other three digital stations, Barrow, College, and Narssarssuaq, the original digital H component data are used.

If there is any interval during which the digital recording appears faulty, the analog magnetogram is digitized whenever available. We used Abisko data digitized from analog records by the station. For the other non-digital stations the digitization was performed at this Data Center.

### 3. The Superposed Plot and the Plot of the Contributing Stations of the AE Indices

Figure 2a shows an example of the superposed plot of H traces from the AE stations for April 10, 1978. The upper envelope gives the AU index and the lower envelope, the AL index; Figs. 2b and 2c show sample plots of the contributing stations in geomagnetic (2b) and geographic (2c) local time, for the same day as in Fig. 2a. In these figures, the upper and lower plumes on a diagonal line for each station show the contribution of this station to the AU and AL indices, respectively. In Fig. 2b, for example, the data from Dixon Island (DIK) give the AU index from 0000 to 0240 UT and again from 1330 to 1530 UT, and the AL index from 0640 to 0830 UT. It is seen that from 1100 to 1200 UT Leirvogur (LRV) offers no data. Since Leirvogur is a key station for the AL index for this time interval, the exact AL values may be lower than was calculated for this interval.

We use geomagnetic local time (MLT) for the ordinate of the plot of the contributing stations. MLT is defined by the difference between the geomagnetic longitude of the station and the geomagnetic longitude of the meridian opposite to the subsolar point; and MLT is a function of the geomagnetic longitude of the station, the Sun's declination, and universal time. Figures 3a, 3b, and 3c show the differences between geographic local time GLT and MLT of the stations used to derive the AE indices for winter, summer and equinox, respectively. In these figures GLT is represented for

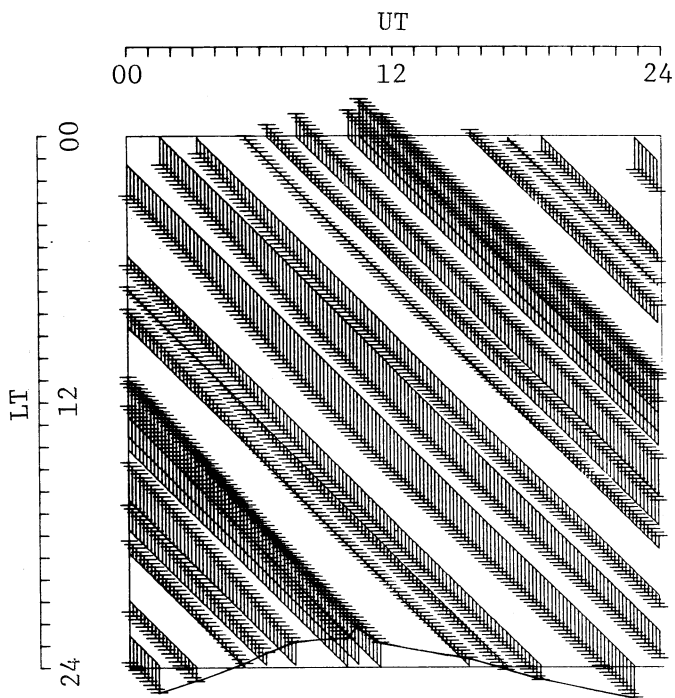


Fig. 3a Difference between GLT and MLT in winter.

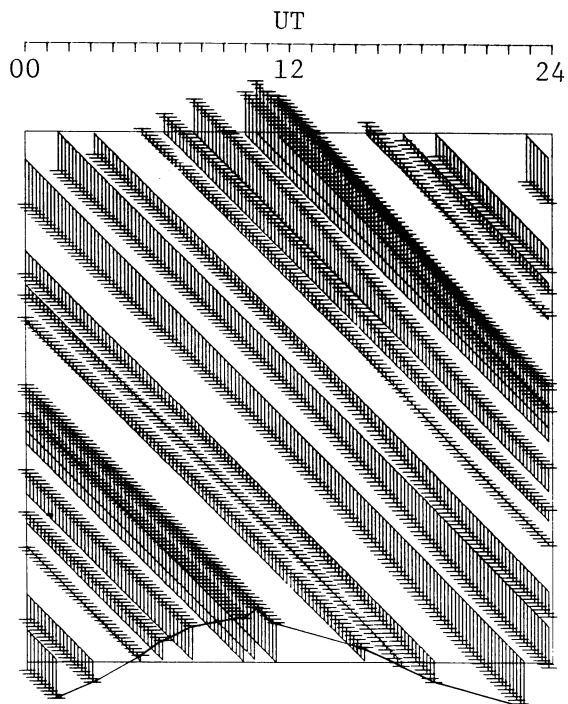


Fig. 3b Difference between GLT and MLT in summer.

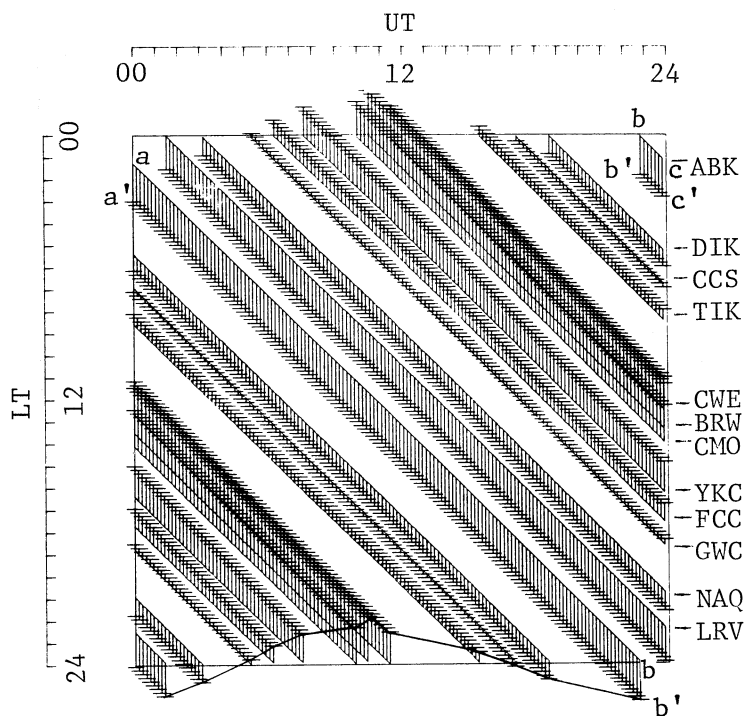


Fig. 3c Difference between GLT and MLT in equinox.

Fig. 3a, 3b and 3c show the difference between the geographic local time (GLT) and the geomagnetic local time (MLT) for winter, summer and equinox, where a-b-c (full line on the top or bottom of the vertical lines) shows the relation between UT and GLT, and a'-b'-c' (crossing of the vertical and horizontal lines) shows the relation between UT and MLT for each of the AE(12) stations.

each station by a straight line which runs diagonally, and MLT is shown by the top of T shaped mark (or the bottom of inverted T). The length of the vertical line of T from the diagonal line is the difference between GLT and MLT. Note that for some stations the difference between GLT and MLT is as much as 2 hours.

#### 4. Results

Monthly quiet-time H reference values for January-June 1985 are listed in Table 2. Table 3 gives hourly average values of the AE indices for each day from January to June 1985.

Daily graphs of 1.0-min AE indices (AU, AL, AE and AO) are shown in Fig. 4, and corresponding plots of the contributing stations are given in Fig. 5. Figure 6 shows the H-traces of magnetograms from AE(12) stations for each month from January to June 1985. Figure 7 shows hourly mean values of each index for the one half year. Finally, a summary plot of hourly values of AU and AL indices is given in Fig. 8.

#### 5. Acknowledgements

The calculation of the AE indices in this volume was made possible by the data provided by the AE stations through the World Data Centers. We thank Ms. Y. Yamamoto, Mr. T. Matsumoto and Dr. T. Iyemori of WDC-C2 for Geomagnetism for their assistance in the computation and production of plots, and also to Dr. M. Ayukawa and Dr. T. Ono of National Institute of Polar Research for their contributions in printing and distribution.

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Table 2. Monthly quiet-time H reference values (unit in nT)  
(Year 1985)

STATION	Jan.	Feb.	Mar.	Apr.	May	June
Abisko	11699	11687	11690	11684	11691	11690
Dixon Island	-562	-576	-555	-570	-562	-576 (H0+)
Cape Chelyuskin	322	321	337	331	330	329 (H0+)
Tixie Bay	114	102	111	98	99	90 (H0+)
Cape Wellen	45	40	41	37	41	35 (H0+)
Barrow	9682	9676	9688	9691	9688	9677
College	12912	12908	12908	12904	12909	12904
Yellowknife	8742	8739	8741	8742	8749	8744
Fort Churchill	7710	7711	7708	7709	7716	7733
Poste-de-la-Baleine	10709	10713	10710	10716	10724	10729 *
Narssarssuaq	12203	12198	12192	12195	12202	12207
Leirvogur	12430	12431	12418	12425	12427	12432

\* : Great Whale River was closed in July 1984 and Poste-de-la-Baleine is used since September 1984.

(H0+) : Deviation from the H base line on the ordinary magnetograms.

TABLE 3

Hourly average AE indices (AU, AL, AE and AO)  
for January-June 1985.

AU Index ( Hourly mean values, unit nT ) 1985 January

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	104	95	145	166	196	133	149	145	174	119	191	172	64	35	45	129	79	66	166	102	200	201	138	110	130
2	97	154	120	147	104	99	93	131	107	109	148	107	134	105	61	84	32	32	19	29	67	81	48	106	92
3	140	79	112	82	69	53	100	100	106	150	77	36	28	23	25	24	20	57	17	21	124	173	122	112	77
4	84	89	84	63	51	33	34	44	39	49	30	43	37	26	29	20	19	22	17	3	18	42	65	69	42
Q 5	83	88	73	49	31	57	37	40	34	50	32	51	35	22	23	19	12	27	9	29	81	83	120	185	53
Q 6	125	84	83	73	79	103	76	35	28	22	26	23	25	19	11	11	4	2	17	28	32	32	45	32	42
Q 7	32	48	43	52	45	76	109	49	46	45	32	31	24	28	29	52	21	45	94	68	62	34	37	38	47
8	121	38	41	44	40	43	51	58	98	125	49	15	13	19	33	35	34	163	141	134	178	216	168	213	83
D 9	145	98	173	232	223	170	170	312	224	289	193	124	145	277	169	78	124	152	101	89	39	51	58	39	153
D 10	84	68	109	168	157	127	58	85	170	113	112	124	85	68	41	38	50	102	47	57	37	37	50	48	85
11	61	45	53	57	54	91	140	118	102	125	129	55	28	51	71	46	40	80	126	66	118	84	59	37	77
12	50	42	57	56	80	64	85	54	94	91	135	112	92	75	89	75	65	86	70	57	69	104	73	67	77
13	72	75	78	118	89	94	69	114	104	127	91	59	58	55	68	60	77	45	36	57	24	21	24	29	69
14	31	28	21	33	39	44	44	33	36	62	56	65	83	33	57	59	53	41	19	16	22	29	19	23	39
15	27	23	25	35	27	29	33	43	45	66	54	78	102	110	57	100	87	50	125	141	84	35	47	25	60
16	39	55	78	89	74	60	89	76	82	83	44	86	81	48	89	33	29	12	20	18	18	15	21	20	52
17	20	18	20	19	21	21	22	30	29	70	78	167	165	137	104	132	96	127	80	47	17	25	25	27	62
18	29	26	36	33	34	31	37	44	62	80	42	48	46	78	84	24	44	27	18	23	31	19	47	79	42
19	51	36	27	27	31	36	46	51	66	106	86	95	163	207	87	22	41	33	22	25	23	25	19	14	56
Q 20	17	15	18	27	27	33	43	54	40	46	64	42	44	34	41	37	67	46	59	31	43	28	23	23	38
21	35	43	39	40	61	134	149	177	233	170	159	122	153	147	143	54	53	71	65	52	55	101	44	22	97
22	19	24	21	26	34	32	27	30	56	65	51	83	54	41	32	24	33	62	28	26	32	40	61	113	42
D 23	115	63	81	101	213	201	325	296	298	161	117	75	81	240	69	171	206	123	93	119	132	93	66	59	146
24	29	23	31	24	28	37	44	38	30	42	56	35	20	49	81	59	30	31	41	16	17	29	85	88	40
25	86	162	178	175	95	80	55	48	59	37	41	30	27	27	21	21	18	20	20	22	18	16	16	16	54
26	11	13	28	39	49	50	38	28	41	53	77	86	72	57	70	72	43	82	104	117	70	68	62	108	60
27	121	150	130	110	88	76	57	63	38	38	65	70	82	76	59	55	29	31	94	197	179	191	297	199	104
D 28	99	117	124	235	218	134	137	239	169	246	222	215	115	-36	-22	-49	-29	95	175	114	81	-11	58	47	112
29	158	120	90	64	66	47	20	14	19	48	51	72	105	127	96	39	50	44	67	111	106	152	230	254	90
30	197	62	28	59	48	70	49	34	52	59	43	42	61	69	92	35	73	49	44	42	71	83	62	50	61
31	71	76	84	73	58	38	41	45	120	102	95	94	99	150	98	45	92	56	31	16	15	21	26	29	66
Mean.	73	66	71	81	78	74	78	84	90	95	85	79	74	77	62	51	51	60	63	60	66	68	71	73	72
5Q Mean	57	52	50	46	43	60	60	44	42	48	39	39	34	36	37	28	29	29	39	35	49	39	54	71	44
5D Mean	109	88	126	180	201	153	167	215	207	185	167	142	98	116	60	73	86	107	116	96	97	74	74	60	125

AU Index ( Hourly mean values, unit nr ) February 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
1	33	42	65	71	74	46	72	83	152	190	122	150	103	155	100	54	124	51	58	60	57	47	43	45	83
2	41	32	38	38	84	140	178	99	64	85	74	63	45	45	22	78	45	40	29	29	24	31	30	41	58
3	32	36	43	33	40	42	51	54	46	37	67	54	56	83	49	44	49	57	50	33	27	29	25	23	44
4	26	28	26	28	28	23	23	26	21	22	20	20	24	23	16	19	23	25	21	18	22	23	17	23	23
5	35	39	38	52	63	92	192	230	204	156	82	70	45	60	157	139	95	63	63	103	91	88	52	106	98
D	173	55	93	50	152	163	176	255	277	129	119	105	321	188	87	69	88	147	137	109	93	118	90	65	136
6	84	65	51	42	53	46	83	124	97	107	79	106	139	158	59	53	44	37	42	30	31	79	65	43	72
7	50	90	69	69	64	36	39	43	52	91	137	123	120	53	51	105	93	217	168	156	134	145	132	72	96
D	83	116	101	81	111	152	139	233	140	118	103	164	121	140	79	98	86	67	67	35	38	56	63	43	101
8	49	89	111	80	136	147	116	92	146	71	67	56	92	91	116	90	86	134	146	209	62	72	33	39	97
9	30	30	43	53	49	65	88	59	67	78	79	75	58	99	91	69	51	54	71	52	51	44	55	28	60
10	41	50	33	37	49	99	55	105	141	135	103	76	131	111	91	91	43	35	18	23	23	16	22	22	65
11	24	26	27	28	28	24	23	23	29	27	41	56	91	54	39	50	55	34	56	96	51	43	64	51	43
12	54	66	78	69	63	97	115	148	113	94	96	62	54	46	92	63	99	131	72	50	88	109	97	75	85
13	52	81	42	54	83	53	43	48	50	84	31	35	23	29	25	29	32	20	26	27	15	26	19	33	40
14	31	35	32	31	32	24	32	46	53	59	47	47	46	55	61	38	36	35	68	58	41	27	38	77	44
15	80	41	63	75	131	108	149	159	141	146	91	108	170	138	141	222	260	290	285	223	86	67	40	29	135
16	31	29	31	33	30	24	27	28	34	40	59	23	21	20	26	19	17	14	11	18	20	24	20	17	26
17	22	16	24	26	36	35	32	24	30	33	25	32	30	39	85	96	59	52	133	132	218	147	130	185	68
18	214	132	106	165	193	297	416	357	291	235	246	239	225	217	84	27	21	23	33	43	20	21	41	52	154
19	33	21	16	23	33	50	53	65	49	34	38	38	45	53	70	110	157	59	53	98	136	208	216	187	77
20	174	102	79	61	35	35	48	76	70	88	106	89	71	65	130	103	95	40	35	57	44	48	62	57	74
21	66	41	40	46	41	76	155	164	129	195	136	76	57	77	85	82	62	47	108	177	233	226	123	107	106
22	134	201	189	152	289	242	250	169	98	105	181	151	91	64	51	58	62	54	45	31	85	162	137	97	129
23	103	143	148	98	153	152	205	165	295	199	322	264	184	145	109	64	77	57	50	48	35	35	29	42	130
24	42	80	90	114	92	53	79	59	77	53	39	30	28	25	25	23	31	28	57	65	51	49	57	55	54
25	55	40	39	55	62	69	67	79	80	49	68	74	102	194	133	49	37	34	48	71	92	115	79	341	85
26	225	113	203	401	265	396	383	277	158	117	174	112	167	166	91	170	142	131	78	66	68	37	38	36	167
27	72	65	68	73	88	99	117	117	110	99	98	89	95	92	77	75	73	71	72	75	69	74	64	71	83
28	30	37	40	46	43	31	38	36	43	41	38	30	29	32	42	39	33	30	58	58	70	54	52	71	42
5Q Mean	106	77	102	130	136	166	181	179	167	112	115	93	149	111	100	114	100	144	118	128	89	92	69	63	118



AU Index ( Hourly mean values, unit nT )

Date	1985																								
	March										1985														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D	34	34	52	93	144	162	137	114	101	52	77	41	31	19	16	11	9	10	11	18	19	42	58	38	55
	41	44	53	90	50	75	79	72	129	86	135	154	66	92	265	172	214	239	170	98	145	153	85	61	115
	52	41	90	84	131	138	125	67	45	27	18	29	28	19	14	40	21	10	27	40	80	68	57	64	55
	68	57	58	33	45	50	58	48	40	31	22	16	29	53	37	30	30	30	32	28	30	70	31	39	41
D	64	103	66	74	76	98	140	228	169	131	78	56	49	44	44	81	271	258	156	168	175	106	130	132	122
D	93	122	77	56	95	91	79	152	177	114	76	82	54	118	63	52	95	47	28	37	59	102	73	82	84
D	68	52	62	42	47	104	80	72	102	158	185	121	126	58	98	118	140	234	221	196	158	112	61	78	112
D	154	112	113	171	127	117	123	94	110	168	86	72	83	107	104	46	51	50	44	41	37	40	52	37	89
Q	34	42	46	27	18	13	10	20	12	9	9	8	12	9	4	7	6	7	8	10	10	15	27	62	18
	62	34	17	14	12	15	13	16	17	19	17	21	25	21	29	24	40	94	66	47	101	130	144	85	44
	47	28	12	8	10	13	11	27	30	44	44	65	155	109	95	65	15	15	15	21	16	18	14	10	37
	11	12	27	35	49	45	33	25	20	17	27	20	27	60	42	87	26	36	79	142	182	202	127	55	58
Q	13	38	27	10	23	34	46	47	57	74	101	71	43	29	21	27	17	14	7	8	9	12	17	14	32
	13	11	11	11	11	11	13	15	17	16	26	40	96	63	60	28	27	52	78	95	88	137	80	65	44
	54	41	42	42	49	84	121	258	282	315	120	36	94	59	44	31	11	18	23	14	22	26	53	32	78
	38	31	34	38	40	19	29	29	40	24	27	32	19	35	62	69	29	18	20	22	53	52	38	36	35
	38	38	30	25	24	17	20	26	24	30	25	32	23	16	12	15	13	18	18	45	94	75	88	65	34
	56	133	119	66	61	60	72	54	44	18	11	18	32	11	10	13	11	11	17	53	128	99	98	42	52
	41	30	34	50	54	34	37	53	51	70	78	119	147	88	78	86	48	49	77	156	121	153	115	101	78
Q	90	59	27	16	23	16	15	33	38	35	34	41	64	91	38	28	35	32	31	20	17	12	13	11	34
	20	36	47	58	26	19	16	14	15	18	17	13	22	28	52	30	27	17	25	55	63	58	72	42	33
Q	80	88	48	39	28	33	25	24	27	25	25	34	37	23	17	24	27	22	19	19	23	28	39	49	33
	67	96	72	126	116	32	18	15	16	16	13	24	21	17	25	34	21	14	28	59	48	48	97	134	48
	224	207	129	47	36	34	31	25	22	16	18	45	20	13	19	23	23	24	43	53	78	96	88	62	57
	78	44	29	13	11	8	13	11	17	19	19	23	24	61	86	37	31	28	103	135	63	62	75	63	44
	91	89	110	105	107	98	52	31	70	151	122	73	111	148	130	55	49	80	145	202	229	178	176	197	117
	193	189	113	79	73	61	83	75	98	129	137	78	128	129	72	56	93	135	168	223	264	127	88	151	123
	122	154	134	118	123	208	150	199	89	38	20	11	7	23	38	20	17	43	103	152	151	101	43	49	88
	50	24	24	17	14	12	18	27	26	18	13	13	22	16	21	23	23	34	50	70	79	68	88	103	36
	166	131	93	61	26	21	46	31	20	22	21	40	76	49	30	29	22	29	26	37	25	27	40	47	46
	31	39	48	56	44	38	41	85	136	235	123	56	32	19	19	14	19	37	66	53	35	28	29	18	54
Mean	71	69	58	55	54	56	54	61	68	70	56	47	54	51	53	44	47	54	61	74	84	78	70	65	61
5Q Mean	52	50	35	32	25	25	22	29	33	37	31	27	32	34	27	21	21	17	18	22	25	26	33	35	29
5D Mean	84	86	74	86	79	92	91	106	149	139	122	101	77	84	114	93	154	165	123	108	114	102	80	78	104

AU Index ( Hourly mean values, unit nT )

April 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
1	37	37	45	35	33	39	63	63	121	101	140	122	148	171	267	347	244	133	128	93	108	58	48	33	109	
2	30	25	17	51	47	66	76	76	94	91	89	72	66	85	96	66	107	96	189	129	85	58	47	52	75	
3	86	124	64	56	42	50	46	41	41	44	122	57	50	55	48	21	64	135	225	190	156	74	45	52	79	
4	45	44	46	73	126	94	113	144	83	115	91	92	49	38	48	74	144	94	99	156	143	96	47	41	87	
5	43	41	43	55	81	44	30	22	32	33	68	46	64	49	24	14	11	10	18	33	21	14	25	20	35	
Q	18	15	11	9	8	7	9	20	30	43	83	56	57	34	28	22	24	24	35	45	58	51	34	45	32	
7	31	29	27	22	31	81	80	107	165	144	66	31	21	28	29	29	39	74	47	34	25	21	14	15	50	
8	15	17	21	16	25	20	47	38	42	31	44	60	40	44	66	38	30	55	141	232	193	180	138	83	67	
D	163	57	33	48	124	176	169	250	265	293	288	255	209	192	475	357	344	89	65	43	62	45	27	24	169	
10	21	18	14	23	58	87	87	105	104	183	135	96	75	111	51	60	72	60	59	34	48	80	51	50	70	
11	41	114	128	115	131	143	40	28	27	80	54	37	46	57	31	44	74	52	34	24	21	20	30	33	58	
12	33	25	20	17	25	22	16	32	33	19	21	23	22	22	12	10	23	24	23	23	22	14	15	11	21	
13	13	9	11	13	15	16	16	22	27	31	45	36	43	35	38	49	45	55	41	34	53	111	112	59	39	
14	77	84	131	127	131	161	173	178	127	128	158	155	208	158	76	31	33	47	49	50	50	56	33	24	102	
Q	21	23	19	25	21	18	20	40	45	29	26	46	27	24	16	12	15	15	21	28	31	30	55	36	27	
16	42	33	37	35	39	44	40	49	54	67	63	163	118	90	45	35	36	42	58	40	23	39	64	75	55	
17	62	39	26	22	19	10	11	16	26	24	33	34	42	36	34	27	22	26	37	35	38	31	39	65	31	
Q	98	54	45	35	27	16	41	34	27	31	30	57	38	36	46	42	25	24	25	21	23	22	23	33	36	
19	40	40	40	32	75	152	209	121	108	171	253	263	262	174	126	217	304	328	323	241	295	218	227	139	177	
D	146	117	144	249	230	286	153	172	231	138	76	50	53	105	107	154	238	312	355	279	151	11	17	61	160	
21	195	226	373	213	300	78	184	110	-44	225	193	192	102	236	300	300	244	250	248	183	159	118	156	116	194	
22	55	50	41	27	21	53	58	39	118	151	79	31	34	30	44	77	61	34	31	51	28	26	28	81	52	
23	132	130	81	58	35	54	85	59	117	125	107	86	86	59	67	80	130	197	156	80	53	45	42	82	89	
24	99	114	153	129	92	158	231	146	128	186	174	111	113	96	78	30	51	80	66	60	57	39	42	44	103	
25	44	61	115	141	87	65	70	159	89	126	226	207	194	140	97	51	35	60	121	142	108	82	114	158	112	
26	188	166	215	369	227	301	317	259	333	319	306	158	127	118	42	31	61	78	157	152	120	207	214	157	192	
27	123	55	121	193	253	243	201	207	205	140	134	208	160	215	234	250	119	64	65	47	144	86	101	247	159	
D	167	167	281	198	113	171	205	65	-18	53	118	194	217	194	164	83	78	50	147	143	90	58	50	63	127	
29	132	148	112	303	343	274	76	39	19	16	14	22	32	59	16	45	45	45	63	45	31	27	27	22	81	
D	25	19	19	15	11	15	19	31	24	63	54	85	245	361	370	189	158	174	106	47	99	60	34	33	94	
Mean	74	69	80	91	94	100	92	88	90	109	110	101	95	100	105	95	96	90	101	92	80	66	60	66	66	89
5Q Mean	46	31	24	21	20	14	19	28	32	29	38	43	37	30	27	22	21	22	28	30	34	29	33	38	29	
5D Mean	139	117	170	144	155	145	146	125	91	154	145	155	165	217	283	216	212	175	184	139	112	58	56	59	148	

AU Index ( Hourly mean values, unit nr ) 1985

Date	May												Mean													
	0	1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16	17	18	19	20	21	22	23	
1	27	24	13	10	32	52	58	57	56	116	88	19	42	20	32	14	11	23	20	17	12	13	18	63	35	
D	128	132	176	219	249	268	356	339	225	236	218	120	54	59	51	25	33	23	31	45	36	25	53	46	131	
3	27	41	27	14	22	30	39	36	40	95	111	66	90	98	42	61	77	67	56	58	64	50	60	82	56	
4	36	25	39	49	42	64	71	73	131	125	144	198	169	102	118	119	180	123	86	50	47	79	64	39	91	
5	35	39	34	32	46	64	67	40	53	25	23	32	27	36	53	34	34	55	98	159	208	160	71	60	62	
6	98	130	124	183	134	153	130	73	56	28	21	45	48	44	57	40	37	70	48	18	21	22	37	59	70	
7	95	126	164	121	77	66	30	22	15	38	53	72	53	44	26	26	32	36	33	60	79	122	187	128	71	
8	199	155	66	98	46	54	58	81	77	117	113	93	63	54	59	60	119	117	93	86	64	71	83	109	89	
9	144	159	142	120	190	174	172	133	128	104	161	140	113	59	36	24	47	74	97	60	43	21	13	9	98	
10	11	15	14	21	15	11	19	15	21	29	14	18	21	19	18	19	22	36	57	94	80	127	110	57	36	
11	27	22	20	27	45	90	120	123	149	86	17	12	24	24	24	31	30	52	40	30	28	28	27	25	46	
D	12	52	80	61	58	31	38	55	155	167	144	200	98	120	143	74	41	87	151	213	206	224	190	179	165	122
D	13	152	194	124	109	176	231	251	131	124	103	115	104	56	82	35	41	107	127	141	190	181	213	269	233	145
14	172	200	148	196	134	79	50	99	103	65	41	21	25	29	52	70	90	99	117	131	88	96	75	56	93	
D	15	83	117	104	154	146	164	100	96	139	173	147	134	202	109	95	89	62	105	188	213	155	193	262	92	138
16	36	45	57	31	41	144	139	129	138	112	120	185	236	115	200	164	95	131	226	136	79	119	122	163	123	
17	125	63	48	60	35	14	23	15	23	34	91	55	86	106	98	83	71	53	57	66	122	176	113	174	75	
18	160	189	94	54	76	73	65	88	59	72	114	110	62	131	72	38	91	183	251	244	194	254	277	296	135	
19	238	133	180	142	89	203	168	153	164	170	108	92	72	85	92	61	46	138	154	200	207	242	261	225	151	
20	142	185	148	72	24	24	17	13	19	16	16	15	12	9	14	12	42	37	35	52	41	49	53	40	45	
21	42	29	23	28	42	70	47	46	27	29	36	73	103	116	69	57	106	200	167	75	76	83	75	93	71	
Q	22	159	149	116	42	34	33	54	47	42	62	24	18	21	22	17	21	19	25	68	45	34	41	33	33	48
Q	23	37	49	78	86	74	51	23	20	28	24	42	61	50	24	23	33	30	34	35	55	49	39	40	42	
24	54	64	60	46	24	17	13	17	14	14	28	37	45	47	29	25	26	28	32	42	91	105	46	26	39	
25	16	13	22	27	26	15	14	18	24	30	38	39	53	37	40	69	59	53	69	80	69	139	90	118	48	
26	136	163	84	54	41	25	22	38	49	36	48	53	66	79	64	86	76	88	129	112	68	52	54	24	68	
27	20	26	37	43	50	57	53	42	55	112	52	75	74	69	37	13	14	18	23	28	30	28	26	24	42	
Q	28	19	14	12	10	14	10	7	62	51	81	98	90	92	115	72	63	36	36	45	34	37	50	65	48	
Q	29	88	85	57	36	23	74	78	50	42	23	24	27	25	24	24	44	44	47	42	47	55	34	19	44	
Q	30	15	14	9	13	8	11	21	22	24	37	55	92	74	43	35	47	28	28	32	35	45	60	60	36	
31	53	47	81	52	70	109	107	77	61	25	19	22	37	41	19	25	35	37	42	46	63	79	81	136	57	
Mean	84	87	76	71	66	77	78	75	74	77	76	71	71	64	54	48	57	74	87	87	83	95	94	89	76	
5Q Mean	63	62	54	37	33	25	35	46	37	50	44	53	55	51	34	35	32	34	42	40	43	47	43	43	43	
5D Mean	90	113	104	114	128	169	180	170	158	153	160	128	133	101	91	72	74	107	159	158	135	148	177	139	132	

Date	AU Index ( Hourly mean values, unit nT )																				1985											
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean							
1	147	116	174	353	396	241	218	152	156	228	365	183	144	87	136	66	100	220	185	121	110	119	76	102	175							
2	88	44	21	22	15	31	77	89	43	36	28	47	95	116	110	70	30	30	51	94	108	86	54	46	60							
Q 3	29	21	27	25	17	18	19	17	24	48	39	42	37	31	39	71	73	106	71	84	100	66	79	145	51							
4	106	41	30	24	27	30	70	80	62	52	58	51	50	59	97	56	62	42	34	33	22	25	37	72	51							
5	105	103	140	115	116	130	138	87	98	82	50	46	54	58	84	57	30	28	44	43	42	53	58	80	77							
D 6	92	100	123	127	109	141	69	53	26	40	56	104	167	184	154	374	357	129	99	69	116	194	194	163	135							
D 7	116	148	103	184	366	96	126	99	205	116	65	81	193	116	68	96	239	113	130	205	152	120	120	113	140							
8	162	130	171	226	183	256	263	223	291	273	214	123	65	47	39	48	60	48	54	40	50	54	54	67	131							
9	33	40	53	60	44	71	85	89	65	33	31	31	23	22	24	29	21	30	72	240	329	281	411	321	102							
D 10	233	296	408	367	381	367	220	214	335	288	196	164	129	132	103	85	41	63	108	125	128	136	164	197	203							
11	141	91	136	202	95	154	89	96	41	65	133	83	61	44	59	72	57	46	27	57	64	78	88	141	88							
12	164	129	125	101	118	170	187	162	126	46	64	81	70	98	49	56	68	78	84	148	124	63	74	57	102							
13	62	34	24	15	15	34	5	14	18	21	19	26	40	55	48	56	105	115	111	126	143	200	190	131	67							
Q 14	82	66	34	22	22	11	45	72	67	40	17	15	14	14	21	16	19	28	35	31	35	75	61	54	37							
15	90	133	143	135	179	81	23	29	42	46	45	53	66	64	70	63	60	82	92	148	106	109	103	75	85							
Q 16	59	95	127	129	125	126	117	83	30	32	24	26	28	27	24	12	19	27	30	29	35	33	36	42	55							
17	49	41	32	24	19	19	16	19	64	58	43	42	51	68	69	64	70	85	54	52	43	30	46	81	47							
Q 18	68	68	52	36	38	38	36	25	45	40	36	29	38	69	52	33	26	31	32	41	31	26	20	24	39							
Q 19	24	42	29	15	12	14	24	34	42	32	43	30	57	50	60	53	46	46	44	45	41	30	29	27	36							
20	25	22	22	34	51	118	91	66	48	60	112	83	142	190	113	68	112	59	51	42	34	50	112	58	73							
21	57	102	48	123	77	49	26	32	65	59	75	77	108	95	58	48	30	47	33	41	41	59	50	29	59							
22	26	101	46	83	91	120	128	110	171	133	128	52	34	25	16	29	42	45	45	37	32	26	23	25	65							
23	34	100	158	189	209	193	54	36	29	26	34	126	81	53	35	36	26	25	27	24	21	16	14	19	65							
24	14	23	33	30	37	20	14	36	49	56	50	23	28	47	65	89	42	39	50	62	49	47	49	71	43							
25	150	134	136	116	64	93	107	95	108	131	142	95	69	53	26	31	27	26	102	151	158	145	109	133	100							
D 26	167	119	80	84	76	106	120	53	158	243	214	261	170	101	59	100	124	139	263	316	214	200	164	198	155							
27	129	84	76	63	34	42	86	92	86	112	90	72	72	109	49	42	132	192	182	128	152	223	106	86	102							
D 28	137	156	186	190	174	174	180	155	123	124	137	151	153	83	57	76	85	87	112	101	83	133	191	124	132							
29	167	132	60	53	112	120	133	113	126	179	114	114	115	73	80	65	79	106	114	97	143	86	78	113	107							
30	94	75	47	15	4	9	59	62	72	51	69	103	84	56	36	36	51	61	86	108	165	229	175	68	76							
Mean	95	92	94	105	106	102	94	82	93	91	89	80	81	74	63	66	74	72	80	94	95	99	98	95	88							
5Q Mean	52	58	53	45	42	41	48	46	41	38	31	28	34	38	39	37	36	47	42	46	48	46	45	58	43							
5D Mean	149	163	180	190	221	176	143	114	169	162	133	152	162	123	88	146	169	106	142	163	138	156	166	159	153							

AL Index ( Hourly mean values, unit nt ) 1985 January

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	-204	-123	-220	-430	-185	-148	-55	-212	-210	-178	-345	-224	-92	-32	-126	-535	-284	-224	-383	-595	-615	-686	-238	-100	-269
2	-168	-100	-357	-347	-233	-100	-150	-185	-27	-36	-163	-208	-116	-170	-81	-15	-56	-163	-187	-71	-140	-347	-360	-155	-164
3	-143	-141	-68	-83	-60	-11	-74	-126	-166	-149	-38	-41	-18	-25	-72	-134	-23	-32	-32	-80	-336	-212	-52	-152	-100
4	-189	-105	-30	-41	-18	-7	-15	-32	-40	-58	-31	-28	-50	-48	-28	-16	-22	-31	-24	-88	-110	-143	-87	-156	-58
Q 5	-65	-40	-4	-6	-18	-73	-21	-20	-22	-57	-40	-44	-31	-14	-20	-24	-96	-151	-61	-66	-93	-130	-93	-148	-56
Q 6	-14	-33	-36	-22	-51	-20	-18	-25	-16	-15	-19	-15	-31	-55	-24	-45	-202	-104	-51	-43	-35	-88	-12	-18	-41
Q 7	-26	-47	-20	-27	-24	-87	-36	-11	-11	-10	-9	-8	-7	-11	-20	-85	-158	-187	-198	-116	-50	-25	-16	-12	-50
8	-36	-42	-28	-24	-17	-33	-25	-171	-130	-45	-8	5	-5	-9	-19	-20	-169	-559	-598	-217	-425	-355	-518	-410	-161
D 9	-132	-67	-125	-418	-590	-275	-257	-692	-517	-799	-338	-160	-674	-1016	-469	-142	-309	-776	-321	-147	-109	-137	-126	-130	-364
D 10	-212	-397	-368	-418	-339	-139	-91	-266	-365	-180	-624	-480	-220	-97	-80	-259	-204	-601	-462	-97	-215	-145	-128	-247	-276
11	-77	-31	-103	-215	-83	-142	-429	-226	-96	-273	-419	-266	-94	-268	-192	-151	-79	-343	-537	-268	-201	-121	-70	-72	-198
12	-126	-92	-38	-105	-322	-109	-74	-196	-176	-268	-425	-442	-171	-368	-448	-187	-160	-388	-511	-233	-130	-336	-167	-105	-232
13	-184	-139	-110	-192	-84	-1	-35	-119	-197	-223	-56	-84	-37	-158	-272	-149	-322	-237	-138	-256	-132	-46	-40	-82	-137
14	-39	-23	-14	-24	-60	-134	-100	-69	-74	-67	-179	-402	-226	-327	-303	-161	-465	-229	-70	-63	-74	-57	-26	-21	-134
15	-26	-18	-13	-25	-31	-19	-19	-145	-242	-111	-133	-278	-171	-198	-315	-543	-387	-178	-502	-393	-105	-71	-173	-89	-174
16	-44	-50	-213	-165	-79	-18	-45	-113	-218	-152	-179	-342	-275	-299	-183	-54	-78	-69	-72	-96	-56	-54	-17	-26	-121
17	-15	-8	-11	-9	-10	-10	-8	-17	-18	-137	-421	-508	-369	-372	-338	-386	-314	-212	-224	-60	-29	-49	-74	-52	-152
18	-45	-13	-36	-39	-27	-19	-19	-15	-11	-79	-24	-37	-87	-115	-71	-66	-26	-15	-29	-43	-58	-38	-37	-84	-43
19	-44	-4	-2	-2	-2	-10	-16	-13	-11	-62	-221	-199	-129	-274	-231	-91	-54	-263	-350	-79	-10	-9	-7	-7	-87
Q 20	-12	-21	-39	-37	-26	-10	-23	-104	-31	-70	-82	-81	-73	-29	-33	-306	-251	-303	-239	-28	-12	-9	-6	-8	-77
21	-10	-7	-1	-5	-74	-477	-185	-131	-190	-146	-78	-55	-205	-162	-105	-67	-108	-89	-58	-15	-39	-79	-7	-12	-96
22	-6	-3	-5	-9	-8	-10	-15	-39	-169	-225	-133	-157	-119	-89	-35	-43	-163	-333	-74	-25	-9	-30	-437	-390	-105
23	-89	-56	-57	-210	-604	-324	-264	-425	-168	-22	-389	-727	-304	-437	-223	-415	-382	-265	-202	-244	-161	-160	-60	-43	-260
24	-35	-48	-27	-79	-26	-82	-96	-40	-112	-58	-29	-25	-35	-179	-116	-106	-43	-85	-92	-199	-105	-97	-134	-66	-80
25	-101	-42	-60	-42	0	3	-10	-21	-7	-10	-11	-21	-19	-10	-9	-10	-12	-11	-6	-2	-4	-6	-2	-2	-17
26	-5	-7	-11	-3	-4	-6	-8	-9	-11	-24	-44	-64	-77	-76	-66	-81	-92	-131	-115	-55	-8	-2	-101	-104	-46
27	-100	-75	-30	-2	-61	-143	-7	-29	-50	-17	-35	-131	-82	-42	-46	-28	-17	-93	-438	-452	-297	-463	-210	-155	-125
28	-394	-244	-646	-500	-320	-133	-106	-250	-298	-313	-426	-510	-910	-1074	-804	-768	-1221	-888	-450	-396	-569	-601	-498	-515	-535
29	-528	-474	-191	-240	-213	-47	-41	-28	-28	-45	-69	-176	-228	-194	-88	-154	-305	-230	-229	-358	-615	-533	-386	-553	-248
30	-150	-23	-18	-39	-68	-157	-320	-92	-37	-178	-71	-39	-75	-202	-159	-102	-275	-302	-162	-209	-126	-83	-128	-124	-131
31	-51	-224	-256	-60	-10	-16	-46	-69	-193	-183	-135	-496	-560	-272	-225	-162	-302	-252	-168	-168	-38	-42	-112	-154	-175
Mean	-105	-87	-101	-123	-117	-89	-84	-125	-125	-140	-169	-199	-182	-212	-161	-167	-222	-252	-216	-164	-158	-166	-139	-135	-151
5Q Mean	-32	-30	-27	-26	-29	-41	-23	-35	-18	-46	-34	-37	-45	-44	-33	-105	-146	-152	-115	-59	-49	-58	-32	-54	-53
5D Mean	-206	-177	-283	-395	-407	-203	-154	-369	-311	-298	-424	-420	-440	-531	-340	-423	-480	-550	-363	-295	-333	-345	-210	-207	-340

AL Index ( Hourly mean values, unit nT ) February 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
1	-103	-84	-61	-146	-105	-86	-137	-279	-345	-178	-120	-255	-359	-254	-139	-118	-348	-321	-212	-101	-33	-66	-21	-5	-161
2	-9	-6	-15	-59	-228	-302	-123	-72	-26	-93	-122	-182	-141	-88	-176	-155	-138	-234	-123	-93	-63	-30	-64	-79	-109
3	-64	-61	-15	-9	-25	-16	-32	-42	-39	-31	-108	-36	-130	-465	-490	-190	-168	-276	-69	-45	-117	-13	-10	-14	-103
Q	-12	-14	-8	-11	-17	-27	-12	-19	-6	-6	-12	-17	-17	-22	-20	-15	-12	-8	-6	-5	-12	-9	-10	-15	-15
D	-10	-36	-8	-13	-43	-131	-508	-315	-289	-99	-12	-22	-26	-132	-556	-596	-206	-170	-72	-274	-252	-116	-132	-488	-188
D	-683	-468	-114	-52	-102	-243	-551	-704	-488	-184	-188	-451	-627	-474	-127	-81	-225	-931	-533	-171	-114	-134	-173	-301	-338
7	-186	-168	-96	-22	-82	-108	-274	-269	-90	-101	-145	-406	-716	-315	-148	-285	-305	-74	-41	-71	-35	-208	-236	-82	-186
D	-44	-410	-211	-44	-35	-42	-38	-71	-104	-276	-472	-294	-286	-284	-110	-428	-296	-498	-627	-377	-393	-836	-165	-81	-268
9	-128	-319	-241	-148	-230	-184	-238	-539	-331	-222	-262	-271	-388	-494	-281	-264	-223	-123	-167	-73	-38	-170	-201	-150	-237
D	-94	-226	-352	-207	-184	-238	-61	-168	-433	-236	-77	-55	-260	-436	-419	-126	-227	-512	-492	-612	-93	-52	-23	-36	-234
11	-45	-30	-33	-89	-155	-163	-227	-139	-99	-96	-89	-158	-252	-253	-342	-379	-180	-171	-240	-127	-92	-59	-234	-124	-157
12	-9	-23	-66	-110	-62	-351	-192	-77	-170	-202	-133	-144	-301	-153	-346	-403	-158	-267	-192	-47	-30	-3	-6	-9	-144
13	-8	-13	-11	-9	-7	-6	-11	-26	-15	-46	-22	-162	-214	-124	-82	-165	-211	-66	-372	-743	-208	-23	-171	-165	-120
14	-119	-200	-167	-114	-36	-250	-436	-398	-194	-11	-126	-198	-276	-138	-89	-54	-274	-504	-132	-30	-122	-356	-462	-144	-201
15	-28	-326	-248	-113	-78	-198	-146	-59	-109	-52	-22	-30	-24	-20	-20	-18	-21	-56	-15	-65	-65	-97	-83	-18	-80
Q	-16	-16	-14	-8	-11	-9	-31	-40	-58	-28	-25	-22	-52	-67	-190	-318	-193	-146	-152	-121	-9	-33	-112	-116	-74
17	-47	-21	-57	-155	-318	-395	-364	-230	-141	-205	-195	-133	-188	-227	-546	-709	-643	-533	-351	-187	-43	-28	-21	-28	-240
Q	-26	-18	-24	-36	-87	-81	-15	-6	-168	-180	-48	-17	-18	-33	-39	-54	-20	-15	-29	-111	-20	-10	-5	-9	-45
Q	-15	-19	-20	-22	-34	-143	-1	0	-3	-5	-8	-15	-16	-15	-64	-66	-65	-93	-97	-69	-149	-86	-158	-238	-58
20	-162	-90	-188	-182	-206	-260	-266	-346	-325	-221	-157	-110	-181	-179	-37	-21	-19	-15	-35	-155	-58	-18	-39	-18	-137
21	-11	-9	-9	-7	-4	-8	-22	-143	-68	-22	-15	-11	-26	-52	-201	-331	-238	-88	-15	-115	-447	-250	-88	-113	-96
22	-110	-80	-44	-51	-78	-51	-36	-55	-64	-59	-52	-86	-47	-63	-198	-213	-150	-118	-88	-62	-47	-57	-186	-106	-87
23	-25	-3	3	-27	-72	-134	-98	-113	-92	-79	-64	-49	-68	-58	-71	-34	-21	-164	-268	-255	-139	-136	-65	-167	-92
24	-162	-237	-342	-299	-356	-127	-70	-57	-51	-31	-141	-177	-58	-47	-106	-281	-187	-38	-60	-44	-143	-388	-270	-65	-156
25	-93	-84	-99	-65	-226	-183	-78	-129	-543	-298	-177	-149	-119	-130	-70	-70	-356	-302	-38	-8	-1	-29	-37	-44	-139
Q	-120	-141	-169	-93	-55	-30	-103	-32	-24	-22	-15	-11	-14	-36	-29	-17	-19	-62	-333	-162	-51	-30	-73	-51	-70
27	-31	-18	-66	-69	-91	-117	-74	-22	-9	-7	-20	-101	-103	-172	-177	-77	-37	-55	-40	-12	-20	-29	-728	-479	-106
D	-327	-261	-541	-451	-465	-520	-718	-371	-205	-130	-745	-507	-655	-603	-189	-259	-294	-435	-298	-262	-125	-40	-25	-32	-352
Mean	-95	-120	-114	-93	-121	-157	-173	-168	-160	-111	-127	-145	-198	-190	-187	-204	-186	-224	-182	-157	-104	-119	-135	-113	-149
5Q Mean	-37	-41	-47	-34	-40	-58	-32	-19	-51	-48	-21	-16	-23	-34	-68	-94	-59	-64	-123	-93	-48	-43	-71	-84	-52
5D Mean	-231	-280	-245	-153	-165	-234	-375	-325	-303	-185	-298	-265	-370	-385	-280	-298	-249	-509	-404	-339	-195	-235	-103	-187	-276

AL Index ( Hourly mean values, unit nT ) March 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	-37	-122	-126	-368	-637	-369	-208	-218	-202	-187	-126	-57	-16	-17	-20	-38	-48	-63	-77	-96	-117	-172	-183	-120	-151
D 2	-70	-76	-142	-170	-226	-90	-120	-319	-208	-46	-300	-572	-648	-366	-598	-474	-544	-743	-435	-161	-387	-390	-101	-52	-302
D 3	-103	-67	-200	-320	-258	-376	-284	-86	-34	-57	-84	-42	-132	-92	-98	-255	-80	-54	-197	-137	-175	-211	-53	-113	-144
D 4	-77	-230	-110	-28	-126	-146	-81	-37	-19	116	-84	-62	-17	-49	-237	-216	-59	-12	-18	-8	-15	-69	-176	-103	-87
D 5	-126	-374	-207	-119	-173	-230	-398	-152	-400	-382	-122	-16	-39	-94	-218	-193	-323	-500	-592	-635	-661	-397	-562	-649	-315
D 6	-241	-171	-168	-230	-213	-266	-104	-248	-350	-313	-246	-131	-244	-470	-199	-131	-392	-139	-51	-34	-280	-233	-160	-144	-215
D 7	-266	-83	-53	-21	-92	-211	-181	-59	-221	-386	-386	-190	-235	-211	-431	-444	-606	-642	-520	-507	-456	-236	-72	-223	-280
D 8	-423	-302	-98	-454	-608	-419	-315	-220	-395	-369	-268	-242	-249	-368	-286	-195	-327	-150	-265	-86	-88	-159	-204	-18	-271
Q 9	-46	-91	-109	-19	-9	-7	-22	-38	-54	-14	-17	-17	-35	-33	-16	-35	-26	-27	-22	-12	-10	-17	-25	-166	-36
Q 10	-56	-15	-13	-13	-12	-9	-8	-7	-12	-16	-7	-10	-7	-7	-11	-20	-62	-186	-69	-20	-66	-323	-157	-140	-52
Q 11	-16	-29	-31	-13	-16	-14	-13	-16	-23	-74	-87	-75	-120	-161	-179	-42	-25	-39	-65	-30	-8	-11	-13	-14	-46
Q 12	-14	-11	-11	-31	-75	-32	-15	-9	-6	-12	-17	-14	-22	-107	-242	-209	-35	-45	-208	-326	-386	-245	-147	-27	-94
Q 13	-13	-13	-12	-13	-42	-97	-61	-48	-66	-247	-71	-13	-17	-7	-25	-12	-13	-11	-7	-5	-6	-11	-10	-10	-35
Q 14	-13	-15	-12	-12	-12	-10	-7	-3	-1	0	-30	-120	-233	-130	-61	-58	-63	-119	-378	-143	-148	-156	-182	-131	-85
Q 15	-52	-79	-229	-22	-19	-92	-240	-578	-502	-429	-136	-45	-124	-136	-107	-40	-16	-23	-39	-11	-17	-21	-50	-49	-127
Q 16	-114	-152	-135	-50	-21	-54	-54	-91	-36	-17	-31	-37	-15	-101	-442	-243	-38	-11	-13	-22	-40	-180	-62	-74	-85
Q 17	-188	-159	-203	-34	-15	-10	-20	-47	-23	-25	-8	-24	-16	-12	-13	-16	-20	-15	-20	-28	-213	-274	-245	-77	-71
Q 18	-80	-402	-200	-44	-77	-185	-194	-96	-28	-13	-15	-14	-25	-19	-17	-18	-16	-13	-10	-87	-359	-359	-88	-53	-100
Q 19	-54	-23	-36	-128	-35	-14	-15	-16	-35	-185	-123	-238	-207	-107	-218	-167	-56	-78	-136	-521	-305	-130	-79	-69	-124
Q 20	-37	-10	-13	-8	-7	-9	-8	-16	-13	-13	-21	-20	-101	-212	-110	-88	-138	-27	-10	-6	-7	-9	-13	-17	-38
Q 21	-14	-24	-110	-158	-11	-10	-14	-22	-22	-19	-20	-16	-17	-19	-23	-90	-78	-25	-23	-84	-163	-78	-73	-88	-50
Q 22	-122	-156	-73	-15	-8	-8	-23	-28	-21	-23	-23	-30	-70	-98	-19	-27	-22	-21	-21	-24	-27	-26	-23	-78	-41
Q 23	-139	-92	-127	-202	-25	-18	-21	-24	-23	-16	-18	-23	-51	-31	-35	-66	-57	-38	-32	-46	-117	-53	-71	-131	-61
Q 24	-150	-115	-64	-42	-22	-24	-18	-17	-19	-14	-15	-36	-55	-20	-47	-25	-23	-24	-63	-59	-47	-195	-275	-101	-61
Q 25	-43	-26	-23	-17	-18	-18	-18	-21	-15	-17	-19	-22	-24	-48	-118	-102	-93	-62	-131	-206	-84	-18	-25	-62	-51
Q 26	-161	-224	-226	-147	-51	-53	-54	-13	-19	-103	-127	-59	-65	-208	-140	-59	-75	-160	-250	-269	-219	-136	-106	-109	-126
Q 27	-131	-84	-94	-47	-41	-64	-125	-48	-42	-178	-74	-42	-181	-138	-46	-14	-130	-191	-269	-160	-205	-147	-109	-175	-114
Q 28	-255	-270	-140	-205	-321	-393	-378	-241	-55	-38	-22	-20	-22	-24	-35	-23	-42	-95	-244	-433	-300	-127	-73	-48	-159
Q 29	-45	-17	-13	-9	-15	-11	-14	-11	-14	-13	-15	-13	-15	-14	-19	-90	-178	-118	-68	-105	-265	-146	-95	-198	-64
Q 30	-390	-149	-73	-31	-27	-16	-28	-21	-13	-15	-20	-18	-100	-93	-27	-11	-24	-56	-11	-19	-10	-15	-27	-34	-51
Q 31	-59	-93	-35	-234	-137	-30	-15	-141	-365	-334	-76	-35	-28	-22	-23	-17	-11	-28	-208	-130	-32	-12	-15	-18	-87
Mean	-114	-118	-99	-103	-108	-105	-98	-93	-104	-119	-82	-72	-100	-110	-130	-110	-116	-119	-143	-142	-168	-146	-112	-106	-113
5Q Mean	-46	-58	-63	-42	-15	-26	-25	-30	-35	-63	-30	-19	-48	-73	-38	-50	-55	-22	-16	-26	-42	-28	-28	-71	-39
5D Mean	-225	-201	-133	-198	-262	-243	-223	-199	-314	-299	-264	-230	-283	-301	-346	-287	-438	-434	-372	-284	-374	-283	-219	-217	-276

AL Index ( Hourly mean values, unit nT )

1985

April

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
1	-16	-17	-24	-20	-24	-50	-43	-74	-208	-164	-341	-236	-562	-534	-777	-475	-193	-165	-126	-138	-196	-84	-45	-53	-190
2	-18	-34	-99	-144	-123	-198	-154	-303	-374	-363	-189	-111	-82	-82	-122	-181	-257	-197	-628	-429	-102	-171	-190	-14	-190
3	-130	-708	-215	-47	-54	-128	-256	-98	-30	-25	-169	-217	-119	-78	-61	-62	-103	-309	-559	-581	-183	-109	-172	-151	-190
4	-64	-23	-22	-170	-364	-324	-209	-323	-214	-129	-186	-385	-125	-52	-91	-256	-476	-312	-201	-209	-362	-138	-43	-8	-195
5	-19	-109	-182	-154	-301	-64	-17	-16	-28	-80	-163	-150	-132	-82	-25	-37	-26	-33	-31	-20	-16	-18	-19	-23	-73
6	-19	-18	-18	-17	-21	-20	-15	-61	-63	-120	-167	-85	-54	-22	-31	-24	-43	-23	-32	-108	-204	-215	-22	-21	-59
7	-20	-18	-19	-20	-89	-209	-251	-330	-205	-91	-28	-19	-20	-19	-26	-55	-123	-309	-147	-28	-9	-11	-20	-23	-87
8	-23	-18	-17	-22	-19	-18	-100	-70	-31	-17	-51	-168	-79	-67	-34	-41	-144	-66	-149	-391	-303	-238	-309	-613	-125
9	-134	-19	-27	-25	-43	-385	-394	-239	-413	-498	-570	-400	-307	-340	-873	-974	-781	-143	-159	-32	-37	-70	-20	-15	-287
10	-24	-17	-20	-20	-41	-82	-149	-247	-221	-191	-305	-76	-139	-113	-312	-279	-181	-175	-97	-34	-30	-161	-162	-92	-132
11	-27	-202	-562	-235	-220	-176	-82	-67	-16	-50	-62	-31	-43	-98	-76	-41	-177	-266	-25	-5	-10	-11	-20	-30	-105
12	-34	-22	-29	-34	-32	-29	-29	-15	-23	-12	-25	-19	-13	-15	-17	-24	-21	-46	-109	-52	-9	-12	-21	-19	-28
13	-26	-34	-29	-22	-22	-18	-26	-10	-15	-23	-66	-47	-23	-20	-37	-23	-118	-205	-46	-28	-66	-163	-178	-46	-54
14	-54	-106	-374	-236	-95	-346	-261	-185	-81	-96	-108	-178	-217	-261	-132	-79	-38	-43	-33	-35	-16	-62	-29	-10	-128
15	-16	-24	-29	-28	-21	-75	-19	-51	-67	-29	-35	-29	-65	-22	-22	-9	-6	-4	-3	-5	-2	-6	-37	-61	-28
16	-41	-25	-28	-34	-118	-141	-187	-27	-82	-61	-37	-250	-237	-128	-23	-54	-116	-154	-102	-7	-13	-23	-64	-104	-86
17	-52	-29	-28	-19	-20	-21	-20	-14	-17	-15	-19	-18	-19	-25	-23	-24	-27	-78	-57	-111	-70	-51	-84	-103	-39
18	-247	-59	-33	-15	-17	-19	-35	-30	-23	-24	-26	-53	-47	-27	-21	-38	-46	-10	-8	-11	-8	-11	-12	-17	-35
19	-10	-6	-13	-29	-214	-224	-113	-80	-212	-263	-171	-163	-172	-267	-312	-434	-446	-375	-606	-411	-308	-257	-576	-555	-259
20	-308	-450	-207	-392	-435	-348	-28	-171	-471	-137	-55	-81	-92	-137	-227	-343	-527	-650	-710	-683	-756	-990	-921	-593	-405
21	-894	-950	-1220	-1130	-764	-461	-388	-364	-1582	-605	-365	-244	-164	-680	-765	-772	-809	-551	-435	-322	-252	-189	-276	-204	-599
22	-129	-130	-34	-27	-43	-123	-155	-69	-174	-408	-232	-37	-47	-74	-134	-215	-249	-71	-13	-27	-10	-15	-23	-90	-105
23	-353	-384	-156	-84	-46	-107	-115	-36	-316	-167	-125	-114	-77	-34	-97	-102	-302	-344	-195	-74	-28	-20	-27	-74	-141
24	-209	-342	-387	-525	-228	-248	-570	-421	-198	-154	-189	-206	-196	-81	-54	-27	-127	-193	-101	-47	-63	-24	-28	-27	-194
25	-32	-142	-357	-642	-138	-51	-59	-449	-285	-133	-403	-624	-401	-207	-115	-68	-92	-101	-155	-201	-111	-66	-201	-370	-225
26	-476	-298	-610	-585	-389	-384	-588	-342	-361	-307	-378	-90	-94	-18	-15	-37	-33	-43	-112	-122	-93	-285	-474	-237	-266
27	-247	-336	-378	-758	-723	-505	-339	-289	-422	-413	-416	-498	-422	-388	-503	-369	-189	-139	-51	-48	-159	-163	-41	-507	-346
28	-881	-821	-919	-554	-370	-325	-574	-1217	-1050	-1246	-1088	-907	-598	-573	-459	-160	-140	-164	-270	-165	-33	-39	-52	-102	-529
29	-206	-309	-157	-507	-891	-583	-111	-33	-38	-27	-22	-24	-34	-72	-102	-147	-83	-81	-163	-130	-19	-24	-20	-24	-159
30	-32	-32	-27	-25	-22	-20	-18	-20	-23	-32	-19	-59	-463	-735	-414	-199	-78	-292	-188	-45	-31	-35	-48	-53	-121
Mean	-158	-189	-207	-217	-196	-189	-176	-188	-241	-196	-200	-183	-168	-175	-196	-184	-198	-184	-183	-149	-116	-122	-137	-141	-179
5Q Mean	-73	-30	-27	-22	-22	-32	-23	-34	-38	-40	-54	-40	-39	-22	-22	-23	-28	-32	-41	-57	-58	-59	-35	-44	-37
5D Mean	-449	-454	-480	-425	-326	-307	-280	-402	-707	-503	-419	-338	-324	-493	-547	-489	-467	-360	-352	-249	-221	-264	-263	-193	-388



AL Index ( Hourly mean values, unit nT )

May 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	-42	-34	-36	-47	-166	-247	-146	-47	-55	-114	-330	-92	-49	-74	-52	-56	-47	-29	-25	-24	-27	-28	-34	-77	-78
D 2	-161	-169	-546	-975	-702	-799	-700	-436	-297	-966	-321	-134	-242	-346	-285	-193	-121	-112	-99	-40	-23	-29	-47	-33	-324
D 3	-28	-43	-33	-25	-42	-59	-59	-78	-58	-167	-213	-101	-119	-85	-110	-247	-171	-89	-36	-32	-93	-49	-48	-121	-88
D 4	-46	-25	-30	-42	-197	-115	-89	-88	-286	-238	-188	-230	-239	-411	-332	-291	-177	-126	-75	-24	-43	-123	-94	-37	-147
D 5	-87	-34	-31	-54	-94	-81	-192	-59	-52	-44	-36	-39	-27	-40	-94	-121	-79	-61	-216	-354	-197	-86	-31	-40	-89
D 6	-84	-273	-392	-310	-210	-203	-324	-165	-67	-27	-33	-19	-44	-46	-90	-37	-95	-235	-102	-26	-31	-31	-34	-53	-122
D 7	-170	-126	-290	-153	-107	-85	-66	-39	-45	-31	-26	-120	-80	-47	-62	-80	-132	-123	-63	-69	-87	-106	-222	-122	-102
D 8	-155	-91	-47	-60	-49	-42	-89	-91	-14	-135	-200	-159	-80	-75	-83	-213	-493	-261	-78	-37	-42	-44	-50	-204	-116
D 9	-293	-138	-116	-137	-367	-306	-197	-91	-124	-119	-140	-96	-146	-105	-31	-25	-99	-164	-218	-81	-15	-15	-24	-29	-128
D 10	-31	-32	-26	-26	-23	-22	-30	-35	-30	-28	-27	-21	-19	-14	-66	-76	-35	-30	-69	-119	-46	-87	-207	-55	-48
D 11	-21	-29	-41	-93	-31	-54	-81	-226	-212	-73	-27	-27	-26	-34	-22	-41	-101	-77	-62	-36	-25	-26	-26	-24	-59
D 12	-30	-53	-120	-94	-24	-18	-24	-306	-449	-235	-136	-47	-71	-285	-213	-60	-209	-413	-467	-337	-282	-215	-112	-144	-181
D 13	-317	-281	-203	-168	-164	-260	-242	-67	-27	-59	-49	-62	-121	-115	-107	-165	-324	-300	-175	-143	-196	-347	-241	-228	-182
D 14	-157	-123	-221	-322	-145	-27	-42	-44	-181	-129	-43	-29	-32	-79	-113	-127	-254	-194	-109	-95	-94	-64	-47	-35	-113
D 15	-61	-212	-299	-209	-162	-366	-159	-90	-148	-181	-177	-135	-170	-204	-277	-356	-168	-119	-194	-225	-116	-230	-366	-134	-198
D 16	-17	-25	-44	-28	-43	-157	-208	-148	-187	-134	-96	-145	-254	-299	-312	-285	-243	-194	-227	-152	-29	-105	-252	-231	-159
D 17	-51	-43	-28	-68	-57	-17	-19	-22	-23	-28	-42	-66	-114	-172	-219	-239	-103	-66	-129	-72	-103	-241	-120	-191	-93
D 18	-312	-248	-89	-62	-170	-121	-50	-66	-29	-34	-62	-154	-80	-110	-155	-101	-145	-278	-425	-307	-132	-153	-314	-274	-161
D 19	-270	-345	-331	-184	-80	-95	-211	-245	-149	-117	-120	-74	-67	-108	-203	-231	-153	-271	-272	-148	-204	-203	-176	-264	-188
D 20	-367	-362	-187	-62	-36	-40	-31	-25	-36	-28	-35	-40	-29	-31	-35	-32	-25	-29	-19	-29	-37	-26	-34	-24	-67
D 21	-37	-71	-81	-58	-14	-89	-65	-42	-24	-30	-32	-38	-95	-137	-65	-57	-110	-368	-267	-33	-37	-74	-221	-118	-90
D 22	-164	-177	-67	-84	-28	-45	-85	-45	-54	-110	-80	-18	-11	-16	-26	-29	-20	-12	-50	-44	-32	-32	-26	-26	-53
D 23	-30	-72	-204	-240	-166	-41	-35	-30	-32	-30	-23	-22	-46	-77	-37	-58	-68	-43	-39	-27	-34	-36	-33	-35	-61
D 24	-29	-27	-85	-23	-17	-26	-36	-35	-32	-32	-24	-23	-22	-14	-24	-39	-78	-41	-14	-21	-127	-110	-27	-18	-39
D 25	-25	-28	-27	-25	-27	-28	-30	-22	-23	-22	-21	-14	-12	-13	-14	-38	-70	-8	-22	-29	-26	-167	-179	-109	-41
D 26	-131	-285	-99	-34	-29	-40	-28	-18	-35	-53	-23	-18	-20	-43	-121	-267	-232	-86	-146	-167	-26	-42	-60	-34	-85
D 27	-22	-23	-38	-21	-160	-153	-74	-34	-16	-132	-139	-76	-88	-182	-38	-38	-38	-24	-22	-62	-52	-34	-29	-64	-29
D 28	-26	-27	-27	-18	-20	-24	-25	-46	-21	-30	-69	-73	-128	-121	-41	-63	-87	-55	0	-11	-15	-24	-32	-70	-44
D 29	-69	-79	-73	-19	-31	-85	-80	-80	-141	-29	-20	-16	-19	-12	-20	-24	-96	-163	-65	-23	-14	-66	-67	-35	-56
D 30	-29	-27	-22	-18	-19	-14	-14	-18	-37	-32	-61	-120	-47	-17	-22	-36	-16	-11	-11	-14	-20	-54	-59	-28	-31
D 31	-27	-32	-181	-88	-98	-145	-220	-109	-26	-23	-21	-23	-19	-18	-34	-65	-89	-31	-22	-21	-29	-54	-45	-117	-64
Mean	-106	-114	-129	-120	-112	-122	-117	-91	-93	-110	-90	-71	-81	-107	-106	-119	-131	-129	-119	-90	-72	-93	-105	-94	-105
5Q Mean	-63	-76	-78	-75	-52	-41	-47	-43	-57	-46	-50	-49	-50	-48	-29	-42	-57	-56	-33	-23	-25	-42	-43	-38	-48
5D Mean	-117	-148	-242	-294	-219	-320	-266	-209	-221	-315	-155	-104	-171	-249	-238	-211	-213	-227	-232	-179	-129	-185	-203	-154	-208

AL Index ( Hourly mean values, unit nT )

June 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
Q	-224	-87	-242	-547	-552	-202	-197	-106	-90	-208	-711	-317	-193	-149	-276	-134	-152	-314	-479	-124	-64	-119	-89	-226	-242
	-139	-39	-15	-9	-11	-27	-101	-156	-98	-33	-25	-35	-152	-283	-248	-150	-60	-54	-123	-134	-239	-130	-51	-27	-97
	-23	-22	-31	-46	-23	-14	-17	-19	-23	-30	-30	-45	-52	-29	-53	-96	-319	-261	-127	-60	-55	-50	-65	-151	-68
	-93	-26	-22	-25	-27	-47	-106	-130	-57	-73	-95	-34	-31	-34	-150	-137	-172	-69	-6	-19	-19	-28	-33	-78	-63
	-143	-99	-82	-85	-169	-139	-95	-94	-89	-65	-65	-30	-24	-20	-64	-74	-41	-31	-27	-38	-34	-31	-29	-94	-68
D	-147	-97	-126	-278	-186	-121	-55	-37	-16	-16	-36	-71	-203	-231	-298	-509	-582	-132	-20	-37	-82	-189	-602	-289	-182
D	-175	-227	-284	-296	-584	-201	-152	-120	-361	-308	-79	-85	-483	-388	-92	-74	-335	-268	-105	-247	-364	-104	-249	-164	-239
	-405	-405	-337	-455	-498	-426	-392	-515	-477	-417	-281	-135	-80	-70	-21	-81	-137	-87	-21	-63	-71	-65	-61	-109	-234
	-73	-105	-127	-161	-98	-35	-141	-154	-115	-40	-31	-18	-17	-21	-24	-52	-33	-19	-69	-342	-599	-728	-853	-615	-186
D	-527	-525	-598	-590	-386	-497	-354	-410	-484	-331	-506	-428	-196	-156	-294	-204	-101	-158	-256	-224	-134	-122	-200	-275	-331
	-277	-167	-157	-296	-184	-213	-169	-150	-74	-38	-157	-105	-115	-68	-73	-144	-158	-46	-47	-33	-26	-31	-79	-165	-124
	-232	-226	-190	-153	-217	-297	-414	-422	-271	-73	-67	-175	-172	-165	-93	-98	-184	-183	-137	-77	-188	-125	-71	-68	-179
	-48	-29	-21	-24	-38	-25	-15	-23	-27	-20	-24	-19	-22	-44	-122	-130	-307	-218	-97	-125	-168	-194	-260	-153	-90
Q	-141	-106	-31	-18	-19	-44	-25	-30	-70	-28	-23	-24	-23	-17	-18	-21	-23	-25	-26	-25	-45	-78	-111	-54	-43
	-54	-73	-55	-122	-142	-46	-27	-21	-24	-38	-63	-59	-56	-64	-80	-133	-99	-224	-158	-181	-89	-71	-87	-44	-84
Q	-24	-36	-91	-113	-105	-97	-93	-75	-37	-50	-32	-28	-36	-32	-25	-31	-33	-28	-21	-23	-35	-32	-34	-34	-48
	-39	-30	-86	-31	-7	-5	-11	-14	-18	-24	-32	-27	-19	-49	-53	-222	-238	-151	-54	-10	0	-7	-22	-100	-52
	-36	-33	-28	-26	-47	-47	-30	-27	-24	-27	-24	-22	-23	-50	-61	-67	-30	-44	-35	-29	-29	-21	-23	-27	-34
Q	-37	-35	-48	-22	-16	-22	-28	-23	-30	-24	-30	-21	-19	-37	-39	-41	-51	-28	-42	-35	-36	-17	-19	-24	-30
	-25	-28	-21	-17	-55	-115	-75	-40	-54	-62	-137	-171	-120	-151	-157	-109	-186	-120	-15	0	-14	-32	-77	-67	-77
	-44	-93	-103	-130	-137	-180	-28	-21	-23	-26	-30	-35	-83	-144	-49	-19	-10	-21	-4	-8	-13	-41	-21	-13	-53
	-22	-46	-25	-109	-208	-143	-275	-252	-213	-135	-134	-136	-3	-7	-11	-31	-53	-27	-7	-6	-5	-8	-15	-25	-79
	-31	-98	-474	-384	-337	-234	-66	-21	-16	-26	-33	-61	-216	-66	-46	-29	-21	-21	-10	-19	-24	-15	-17	-23	-95
	-29	-29	-25	-37	-39	-40	-26	-89	-48	-42	-68	-22	-14	-13	-9	-110	-44	-7	0	0	5	-2	-23	-61	-32
	-215	-158	-132	-78	-81	-239	-338	-290	-177	-96	-171	-180	-86	-63	-31	-48	-26	-28	-95	-182	-271	-202	-131	-167	-145
D	-268	-212	-51	-94	-106	-215	-248	-107	-151	-526	-298	-483	-346	-269	-137	-153	-150	-282	-494	-693	-361	-379	-229	-272	-271
	-323	-319	-149	-65	-39	-35	-40	-129	-212	-285	-212	-144	-118	-184	-177	-123	-175	-410	-381	-147	-130	-254	-128	-88	-178
D	-246	-464	-515	-449	-273	-81	-342	-267	-135	-140	-227	-297	-281	-207	-65	-120	-163	-157	-160	-222	-132	-133	-307	-354	-239
	-280	-268	-165	-57	-173	-312	-242	-223	-177	-390	-303	-166	-219	-272	-106	-143	-224	-305	-156	-112	-383	-135	-70	-124	-209
	-199	-66	-35	-31	-18	-28	-80	-85	-117	-75	-52	-227	-53	-30	-45	-88	-188	-45	-65	-179	-461	-393	-251	-105	-121
Mean	-150	-138	-142	-157	-159	-137	-139	-135	-123	-121	-131	-119	-115	-110	-97	-112	-143	-125	-107	-113	-135	-124	-140	-133	-129
5Q Mean	-52	-46	-45	-45	-42	-44	-38	-34	-36	-31	-27	-28	-30	-33	-39	-51	-91	-77	-50	-34	-40	-39	-50	-58	-44
5D Mean	-272	-305	-314	-337	-307	-223	-230	-188	-229	-264	-229	-272	-301	-250	-177	-212	-266	-199	-207	-284	-214	-185	-317	-270	-252

1985

January

AE Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	309	218	366	598	382	283	206	358	384	298	537	397	156	68	171	665	364	292	549	698	816	888	377	211	400
2	266	255	479	496	339	200	244	317	134	146	312	316	250	276	143	99	89	197	207	101	208	429	409	262	257
3	284	221	181	166	131	65	175	226	273	307	227	75	70	42	51	97	155	81	51	102	460	385	174	265	178
4	275	196	116	105	70	40	49	77	79	107	62	72	89	75	58	36	42	53	43	92	128	186	153	225	101
Q 5	149	129	77	56	51	132	59	61	56	108	73	95	72	36	43	44	109	179	71	95	175	214	215	333	109
Q 6	140	118	120	96	132	124	95	61	45	38	46	39	57	74	37	57	207	107	70	72	69	122	58	50	85
Q 7	58	95	64	81	71	165	146	61	57	56	41	39	32	41	50	138	180	233	293	185	113	61	53	51	98
8	75	81	71	69	59	77	230	229	170	58	22	19	30	53	56	204	723	740	352	605	572	687	624	245	245
D 9	278	166	299	652	813	447	429	1004	741	1089	533	284	820	1294	640	221	434	928	423	237	149	189	185	170	518
D 10	298	467	478	587	498	267	150	352	535	294	737	605	305	166	121	298	254	704	510	156	253	183	179	296	362
11	139	77	157	273	138	233	570	345	198	399	549	322	123	320	263	198	120	424	664	336	319	206	130	109	275
12	177	134	96	162	404	175	160	251	270	360	561	555	264	445	538	262	225	476	583	292	200	441	241	173	310
13	258	215	189	311	174	96	104	233	303	351	148	144	96	214	342	210	401	283	174	315	157	68	64	112	207
14	51	36	58	100	179	145	102	111	130	236	467	309	309	361	361	221	519	272	90	80	97	88	46	45	174
15	54	42	39	62	59	49	52	188	288	177	188	356	273	308	373	645	475	228	628	534	190	106	221	115	235
16	84	107	293	256	154	79	134	189	301	235	224	429	356	347	273	88	108	82	94	116	75	71	39	48	174
17	37	28	33	30	32	32	31	48	48	208	500	676	535	509	443	519	411	340	305	108	47	74	100	80	215
18	75	40	73	74	62	51	57	60	75	160	66	85	133	194	156	91	71	43	48	67	90	59	85	164	87
19	96	41	30	30	42	54	60	63	129	328	286	224	439	438	178	76	305	384	102	37	33	36	28	23	144
Q 20	30	36	59	65	54	45	68	159	71	117	146	124	118	64	75	344	319	351	300	60	56	38	31	32	115
21	46	50	40	46	136	611	335	309	423	317	237	178	360	309	248	121	162	162	125	68	95	181	52	35	194
22	25	28	28	36	42	43	43	70	226	290	185	241	174	131	68	68	197	396	103	52	42	72	500	504	148
D 23	205	120	139	312	818	527	590	722	467	183	507	803	386	678	292	588	589	388	297	364	293	254	127	102	406
24	65	72	59	105	55	120	140	79	143	100	86	61	56	228	198	166	73	117	135	216	123	128	219	154	121
25	189	205	239	219	95	77	66	70	67	48	53	52	48	38	31	32	31	32	27	25	23	23	22	19	72
26	17	21	39	43	55	57	48	38	54	77	122	152	150	134	136	154	135	215	220	173	79	70	164	213	107
27	222	226	161	114	149	220	64	93	89	55	101	201	165	120	106	83	46	125	532	650	477	655	508	355	230
D 28	494	362	771	736	539	268	244	490	468	560	649	726	1025	1037	781	718	1190	983	625	511	651	589	557	563	647
29	686	594	282	304	279	95	61	43	48	93	121	249	334	322	185	194	357	297	470	722	686	617	808	338	338
30	348	85	47	99	117	228	369	128	89	239	115	82	137	271	251	138	350	352	208	252	197	167	191	175	193
Q 31	122	301	341	134	69	55	88	115	314	287	232	591	659	422	323	208	395	309	199	185	54	64	139	184	241
Mean	179	154	174	205	197	164	163	211	216	236	256	279	258	290	225	220	274	314	281	225	225	235	211	209	225
5Q Mean	90	83	78	74	74	103	85	80	60	95	74	76	81	81	72	134	177	182	156	95	100	98	88	126	98
5D Mean	316	266	410	577	610	358	323	585	519	484	592	563	538	648	401	498	566	659	480	393	432	420	285	268	466

AE Index ( Hourly mean values, unit nT ) February 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
1	137	127	127	217	179	133	209	362	498	369	243	407	463	410	241	173	473	373	270	162	91	114	65	51	246
2	51	40	54	98	313	443	302	171	90	179	197	246	187	134	199	235	184	275	153	122	87	62	96	121	168
3	98	98	59	43	66	59	84	97	87	69	175	91	187	550	540	236	218	334	120	79	144	42	36	38	148
Q 4	40	43	36	40	46	51	36	47	28	29	33	38	41	46	36	35	36	33	28	24	36	79	28	34	39
D 5	46	76	47	67	106	224	700	546	494	256	95	93	72	193	714	736	302	265	136	378	343	205	185	595	287
D 6	858	525	209	104	255	407	727	961	767	313	308	556	949	663	216	152	314	1079	670	280	207	253	264	367	475
7	271	234	149	65	136	155	359	394	188	208	225	514	857	474	208	339	350	111	84	102	67	287	302	126	259
D 8	95	500	280	115	101	79	78	115	156	368	611	419	407	339	161	534	389	715	795	534	528	982	298	154	365
9	213	436	344	230	341	337	379	773	472	341	366	437	511	635	361	363	309	190	235	109	76	228	265	194	339
D 10	144	315	463	287	321	386	178	261	579	308	146	113	354	528	535	217	313	646	638	822	157	125	57	77	332
11	76	61	77	143	205	230	316	199	166	174	168	234	311	353	434	449	232	225	312	180	143	104	291	153	218
12	52	74	100	148	112	451	248	182	311	337	237	220	433	265	438	495	202	303	210	71	53	27	23	32	209
13	34	40	40	39	36	31	36	50	45	74	64	219	307	179	122	216	267	101	429	840	260	67	237	217	165
14	175	267	246	183	99	348	551	546	307	105	223	261	331	185	182	118	374	635	204	81	212	467	561	220	287
15	81	407	291	168	163	253	190	108	160	138	54	66	47	49	46	47	54	78	41	92	81	123	103	53	121
Q 16	49	53	47	40	43	34	65	86	113	88	73	70	99	124	252	357	229	181	220	179	52	61	152	194	119
17	129	62	121	230	450	503	513	390	282	352	286	243	360	367	687	931	903	825	637	411	130	97	62	58	376
Q 18	58	48	57	70	118	107	43	34	203	221	108	40	40	54	67	74	38	30	41	129	41	35	27	28	71
Q 19	38	36	45	49	71	179	34	24	33	38	33	47	46	54	150	163	115	146	231	202	368	234	289	424	127
Q 20	378	224	294	347	401	559	683	704	617	457	403	350	407	398	122	49	40	39	69	199	79	40	81	71	292
21	45	32	26	32	38	58	76	210	119	56	53	50	72	107	272	442	395	148	69	214	584	460	306	302	174
22	285	184	124	113	113	87	84	132	134	147	158	175	119	129	330	318	246	159	124	119	91	106	250	164	162
23	92	44	37	74	114	211	253	278	221	275	200	125	126	137	157	117	84	212	377	432	373	362	189	276	199
24	297	440	531	451	646	370	321	227	149	137	323	329	151	112	158	340	250	94	106	76	229	551	408	164	286
25	198	228	248	164	380	337	284	296	840	498	501	415	304	276	180	136	434	359	89	57	37	64	67	87	270
Q 26	163	222	259	208	148	84	182	92	102	75	55	41	43	62	55	40	51	91	390	227	103	79	131	108	126
27	87	59	106	126	154	186	142	102	91	56	88	176	206	367	311	126	75	89	89	84	113	145	808	821	192
D 28	553	375	745	853	730	917	1102	649	364	249	921	620	823	770	281	429	436	567	377	329	194	77	64	70	521
Mean	169	187	184	168	210	257	291	287	272	211	226	235	294	284	266	280	261	296	255	233	174	195	201	185	234
5Q Mean	69	80	88	81	85	91	72	56	95	90	60	47	53	68	112	133	93	96	182	152	120	97	125	157	96
5D Mean	339	358	348	285	302	402	557	506	472	298	416	360	521	498	381	413	350	654	523	468	285	328	173	252	395

AE Index ( Hourly mean values, unit nT ) 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
D	1	72	157	179	462	782	532	346	332	304	240	204	99	48	37	37	51	58	74	89	115	137	214	242	159	207
	2	111	121	196	260	277	166	199	392	338	133	435	727	715	459	864	648	759	984	606	260	533	544	186	114	418
	3	156	110	290	405	389	516	410	154	86	42	73	161	111	114	296	102	65	225	177	256	280	111	177	199	199
	4	146	288	170	62	172	197	140	85	59	157	116	85	34	79	292	254	90	43	51	37	47	140	208	143	129
D	5	191	478	273	194	249	307	498	293	629	552	254	95	95	145	263	275	595	758	750	805	837	504	693	782	438
D	6	335	293	246	286	308	357	184	401	527	429	323	214	298	590	263	184	488	188	80	73	340	336	233	227	300
D	7	335	135	116	64	139	316	262	132	323	545	572	312	362	270	530	564	747	877	743	705	615	349	133	302	394
D	8	577	414	212	625	737	537	439	315	506	538	355	315	334	476	391	243	380	202	309	128	125	200	258	56	361
Q	9	81	134	156	47	28	21	33	58	67	23	26	48	44	21	43	33	35	31	24	22	33	54	230	55	55
	10	119	49	31	28	26	25	23	24	30	36	25	32	33	29	42	45	103	281	137	68	168	454	302	226	97
	11	64	59	45	22	27	28	25	44	54	119	132	140	275	272	275	108	40	55	87	47	28	26	23	24	84
	12	27	25	38	67	126	78	49	35	26	29	44	36	51	169	285	297	62	82	288	470	569	448	275	83	152
Q	13	53	42	23	37	76	144	109	105	141	349	143	57	46	28	53	30	28	18	16	15	20	29	25	25	67
	14	27	28	24	24	25	22	21	19	18	17	57	162	330	195	123	87	92	173	457	239	236	294	263	197	130
	15	108	121	273	65	69	176	363	836	785	744	256	81	219	196	153	72	28	42	62	26	40	49	104	82	206
	16	154	185	170	90	62	73	84	121	77	42	59	70	35	137	505	314	69	31	34	45	94	233	100	111	121
	17	228	199	234	60	40	28	40	73	48	56	34	57	39	30	26	32	33	34	39	74	307	349	333	142	106
	18	137	535	320	111	139	246	266	150	73	32	27	33	58	31	28	31	27	25	28	141	487	458	186	96	153
	19	97	54	72	178	89	49	52	69	87	255	202	358	355	196	297	255	105	129	215	677	426	284	195	170	203
Q	20	129	71	41	25	32	26	23	49	52	48	55	62	167	303	149	117	174	60	42	27	24	22	26	29	73
Q	21	34	62	158	216	39	30	32	37	38	38	37	29	41	48	76	121	106	44	49	139	227	137	145	132	84
Q	22	204	245	123	55	37	42	48	52	49	48	48	65	109	122	37	52	50	43	41	45	51	56	63	128	76
	23	207	189	199	328	142	50	40	40	40	33	32	48	74	49	62	102	79	54	61	107	165	101	168	266	110
	24	375	323	193	89	59	58	50	43	42	30	34	82	77	35	67	49	47	49	107	113	126	291	364	163	119
	25	121	72	53	31	30	27	31	32	33	37	39	48	49	109	204	141	124	92	235	342	147	81	100	126	96
	26	254	314	336	252	159	152	107	44	90	256	250	133	177	357	271	115	125	241	396	473	450	315	283	307	244
	27	326	274	207	126	115	126	209	124	141	309	212	121	310	269	119	70	225	327	438	384	470	275	197	327	237
	28	377	425	274	324	445	602	529	441	145	77	44	33	29	47	74	45	60	139	348	586	452	229	117	98	248
	29	96	43	38	27	30	24	33	38	44	58	29	27	38	31	42	115	202	153	119	176	345	215	184	302	100
	30	557	282	167	93	54	39	74	52	34	38	42	59	177	143	58	42	46	85	37	57	37	44	68	82	99
	31	91	133	84	291	181	69	56	236	502	569	200	91	60	42	43	32	31	66	274	183	67	41	46	37	142
Mean		186	189	159	159	163	163	154	155	173	191	139	121	156	162	185	155	164	175	206	218	253	226	183	172	175
5Q Mean		100	110	100	76	42	52	49	60	69	101	61	47	82	109	67	72	78	40	35	50	68	55	62	108	70
5D Mean		309	288	208	285	342	336	316	306	464	439	387	332	360	388	462	382	593	601	497	394	490	386	300	296	382

1985  
April

AE Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
1	55	56	70	56	57	91	107	139	330	267	482	358	710	705	1045	823	438	300	256	233	306	144	94	87	300
2	49	59	117	196	171	265	221	380	468	456	280	184	149	168	219	247	365	295	819	560	188	231	239	68	266
3	217	832	280	104	98	178	303	140	71	70	292	276	171	135	110	84	169	446	786	772	341	185	218	205	270
4	110	69	69	244	491	420	323	469	298	245	279	478	175	92	140	331	621	407	301	366	506	236	91	50	284
5	64	151	226	210	384	109	48	39	61	121	232	198	197	132	50	51	38	44	50	54	38	32	45	45	109
Q	39	34	30	26	29	27	25	82	95	164	251	143	111	58	60	47	68	47	67	155	263	267	58	67	92
7	53	48	47	43	120	291	332	439	371	237	96	52	42	48	56	84	163	385	195	63	35	33	35	39	138
8	40	36	39	38	45	39	148	109	74	49	97	229	120	112	101	80	175	122	291	624	498	419	448	697	193
D	298	77	61	74	169	562	564	490	679	791	859	656	516	532	1348	1332	1126	233	226	76	101	117	48	41	457
10	47	36	34	44	101	170	237	354	326	374	440	172	215	224	364	340	254	235	157	70	79	242	215	144	203
11	69	317	691	351	353	320	123	95	44	132	117	69	90	156	107	85	252	319	60	31	32	32	31	64	165
12	68	48	50	51	58	51	46	48	58	32	48	44	35	39	30	35	45	70	133	76	32	27	37	31	50
13	41	44	41	36	39	34	43	33	44	56	112	85	68	56	76	72	163	261	88	63	120	275	290	106	94
14	133	192	507	365	227	508	436	365	210	225	267	333	425	420	210	111	71	90	83	86	67	119	63	35	231
Q	39	48	49	54	43	94	40	92	113	60	63	76	93	48	39	23	22	20	25	34	35	36	93	98	56
16	84	60	66	70	158	185	228	77	138	129	102	413	356	220	70	91	153	197	161	48	37	62	130	181	142
17	116	69	54	41	40	31	31	31	44	40	54	53	62	63	58	52	50	105	95	148	110	83	123	169	72
Q	346	114	78	51	45	36	77	65	52	56	57	111	86	65	68	80	71	35	34	34	32	34	36	51	71
19	52	46	47	105	367	434	236	190	384	517	434	426	347	394	531	739	775	699	848	707	527	486	716	733	447
D	455	568	352	643	666	635	182	344	702	276	132	131	146	242	335	498	765	962	1065	963	908	1001	939	656	565
21	1090	1176	1593	1344	1065	540	573	475	1537	831	558	437	267	917	1065	1072	1055	802	683	506	413	308	434	321	794
22	184	182	76	54	64	177	213	109	293	561	312	69	82	104	179	293	311	106	46	80	39	42	52	171	158
23	485	515	238	143	82	162	200	96	434	294	234	201	164	94	166	184	433	542	352	156	83	66	70	157	231
24	309	456	541	655	322	408	802	568	328	341	365	317	309	178	134	58	179	274	168	108	121	65	72	71	298
25	76	204	473	785	225	117	130	609	376	260	630	831	596	347	213	120	129	163	277	344	220	150	316	529	338
26	665	465	826	955	617	686	907	602	695	626	685	248	282	136	57	69	95	122	270	275	215	494	690	395	459
27	371	391	500	953	978	749	541	497	628	554	552	707	583	603	738	621	309	204	117	96	304	251	144	754	506
D	1049	989	1201	753	484	497	780	1282	1030	1300	1207	1102	817	768	623	244	219	215	418	310	124	98	103	167	658
29	339	458	270	811	1235	858	189	73	58	44	38	47	67	132	120	193	130	127	227	177	51	52	48	47	241
D	58	53	48	41	34	36	38	52	49	96	75	145	709	1097	785	389	238	467	296	93	131	96	84	87	217
Mean	233	259	289	309	292	290	270	278	333	306	311	286	264	276	303	281	296	276	286	243	198	189	199	208	270
5Q Mean	121	62	52	44	43	47	43	63	72	70	94	85	77	54	51	47	51	55	70	89	94	89	69	83	68
5D Mean	590	572	651	571	483	454	427	528	799	658	566	494	491	711	831	707	680	535	537	389	335	324	321	254	538

AE Index ( Hourly mean values, unit nT ) May 1985

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D	70	59	49	59	199	300	206	106	112	232	419	112	92	94	85	72	59	53	47	42	40	41	53	140	114
	289	302	723	1196	952	1068	1057	775	523	1203	540	255	297	406	337	219	145	135	131	87	60	55	102	80	456
	55	85	60	40	64	91	99	115	99	263	325	168	210	184	154	309	248	156	93	92	159	100	108	204	145
	83	51	71	92	240	180	161	163	418	365	333	420	409	513	451	412	358	249	161	75	91	203	159	77	239
	123	73	65	86	141	145	260	101	107	71	60	72	55	78	148	156	113	117	315	514	407	247	103	101	152
	182	404	516	494	344	356	456	238	125	56	55	65	93	92	149	78	132	307	151	45	53	55	72	112	193
	266	252	454	275	185	152	98	63	61	71	80	193	134	92	89	107	164	160	97	130	168	229	410	251	174
	355	246	114	159	96	97	148	174	92	253	314	253	144	131	144	273	613	379	172	125	108	117	134	313	206
	438	298	258	258	558	481	369	225	253	224	302	238	261	165	68	50	148	239	317	141	59	37	38	39	228
	43	48	40	47	38	34	50	52	53	59	42	40	40	34	85	95	57	67	127	215	128	215	318	113	85
	49	52	61	120	77	145	202	350	363	160	45	40	51	59	47	73	132	130	103	67	55	55	54	49	106
	83	134	181	153	55	57	80	463	618	380	338	147	193	429	287	102	297	565	681	543	506	406	292	310	304
D	469	476	328	278	342	492	494	199	152	163	166	168	179	198	143	207	432	428	317	334	378	560	510	462	328
D	329	323	369	520	280	106	94	145	285	195	86	51	58	109	166	198	345	293	227	227	183	161	124	92	207
D	145	329	404	365	309	532	259	188	289	356	325	270	373	313	373	445	231	225	383	440	273	424	629	227	338
D	54	70	101	59	84	302	347	278	326	248	217	332	492	416	513	449	339	326	454	290	110	225	374	394	283
	177	106	77	128	92	32	42	38	47	63	135	123	201	279	318	322	175	119	187	140	227	418	233	366	168
	473	437	184	116	247	196	117	155	89	107	177	266	143	242	228	140	237	462	677	552	328	408	591	570	298
	509	479	512	327	170	299	380	399	314	289	230	168	140	194	296	293	200	410	428	350	412	446	438	490	341
	510	548	337	134	60	64	49	40	56	44	52	55	42	41	50	45	69	67	54	82	79	77	88	65	113
	79	101	105	87	58	160	114	89	53	60	69	112	199	254	136	114	216	568	434	109	115	158	297	213	162
	324	326	184	127	63	79	141	93	97	174	106	37	32	40	44	51	40	38	119	91	67	74	61	60	103
Q	67	122	282	327	240	92	59	55	54	59	48	64	108	127	62	82	101	74	74	64	91	87	73	76	104
Q	84	92	146	69	42	43	49	52	47	61	62	69	69	44	50	64	105	69	48	64	220	217	74	46	79
	42	42	49	53	53	44	45	41	48	54	61	54	65	50	55	108	129	62	93	111	96	307	270	228	90
	268	448	183	89	70	67	51	57	85	90	72	72	87	124	186	354	309	174	277	280	94	95	114	58	154
	43	49	75	65	210	211	129	78	72	245	192	153	163	251	76	51	53	43	46	92	83	62	60	53	106
	46	42	40	28	35	35	33	109	73	112	168	164	221	237	114	127	124	92	34	57	50	62	83	136	93
Q	29	158	165	130	55	68	110	156	159	193	72	45	42	38	45	50	141	218	113	66	72	122	101	54	101
Q	44	41	31	31	28	26	36	42	62	70	117	213	121	61	58	84	45	40	45	51	66	109	121	88	68
	81	80	263	141	169	255	329	187	89	49	41	46	57	59	54	91	125	70	64	69	94	134	127	254	122
Mean	191	202	206	192	179	201	197	168	169	188	168	143	154	172	161	168	189	204	208	178	157	190	200	184	182
5Q Mean	127	139	133	113	86	68	85	91	95	97	96	104	105	100	64	78	90	92	77	65	69	90	87	82	93
5D Mean	208	262	347	410	348	490	447	380	381	470	317	234	306	352	330	284	288	335	393	338	265	334	381	294	341

1985  
June

AE Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
Q	371	203	417	901	948	443	416	258	248	437	1077	501	338	237	414	202	253	535	665	246	175	239	166	329	417
	229	84	36	32	26	59	179	246	142	69	53	83	248	400	359	221	92	85	175	229	339	218	105	73	158
	53	43	59	72	41	34	36	37	47	79	70	88	90	62	93	168	393	368	199	145	156	117	145	297	120
	201	68	52	49	55	79	177	211	119	126	153	86	83	94	247	194	235	112	40	53	42	55	71	152	115
	250	203	234	202	286	270	235	183	188	149	80	71	75	81	148	132	71	59	72	82	77	85	88	175	146
D	241	198	251	406	296	263	125	92	44	58	93	175	371	416	454	884	940	262	120	107	199	383	798	453	318
D	292	376	388	480	951	298	279	220	567	425	144	166	677	504	162	171	575	383	236	452	518	225	370	278	381
	568	536	509	681	681	682	657	739	769	691	496	259	146	118	61	130	198	135	76	104	122	120	116	178	365
	108	146	182	222	143	108	226	245	181	73	63	50	41	45	49	81	54	50	143	583	929	1009	1264	937	289
D	762	822	1007	957	767	865	574	624	820	620	703	593	325	289	399	291	142	221	366	350	263	258	366	473	536
	419	260	294	499	279	368	260	247	115	104	291	188	177	113	132	217	216	93	76	91	90	110	167	307	213
	397	357	316	255	335	468	603	585	399	120	131	256	242	264	144	155	253	263	223	226	313	189	145	126	282
	111	63	46	40	54	60	21	38	46	42	44	46	64	99	170	188	413	335	210	253	313	396	452	285	158
Q	225	173	66	41	43	56	70	103	138	69	41	41	38	32	40	37	42	54	62	56	81	154	172	109	81
	145	208	200	258	321	128	52	51	67	84	108	113	123	128	150	197	160	308	251	331	197	181	191	120	170
Q	85	132	220	243	230	224	211	159	67	83	57	55	65	60	50	43	52	55	52	53	71	67	71	76	103
	89	72	119	56	27	25	28	34	82	83	76	70	71	117	122	288	310	237	109	63	44	39	69	183	100
Q	106	102	81	63	86	86	67	53	69	68	61	52	62	119	113	101	57	77	69	70	60	48	45	51	74
Q	61	78	78	38	28	38	52	58	73	57	74	53	77	88	100	95	99	75	87	80	77	48	49	52	67
	50	50	43	52	107	234	167	107	103	123	250	254	262	342	271	179	300	180	67	43	49	83	190	126	151
	102	196	153	254	215	230	55	54	89	87	105	112	192	240	108	68	41	68	37	50	55	101	73	43	114
	48	149	72	193	299	264	404	363	385	269	264	190	38	32	27	61	96	73	53	43	38	36	39	51	145
	66	199	633	573	547	427	121	58	46	54	68	189	299	119	83	66	49	47	38	44	45	33	32	44	162
	44	52	59	68	78	61	41	125	98	99	119	45	43	62	75	200	87	47	50	61	43	49	73	134	76
	366	293	269	195	146	333	446	386	287	228	314	276	155	117	58	81	54	55	198	334	430	348	240	301	246
D	436	333	133	160	183	322	369	161	311	770	514	745	516	371	197	254	275	423	759	1010	576	580	394	471	428
	454	404	226	129	174	78	127	222	299	397	303	216	192	294	227	166	308	604	564	275	283	478	234	176	280
D	384	621	701	639	447	256	523	423	259	266	365	448	434	291	123	197	249	246	273	325	216	267	500	479	372
	448	402	227	111	286	434	376	337	305	571	418	280	335	346	187	208	304	413	272	210	528	222	149	238	317
	295	143	83	47	23	38	140	148	189	126	122	331	137	87	82	124	240	108	152	288	628	426	174	198	
Mean	246	232	238	263	266	241	234	218	218	214	221	201	197	185	161	179	218	199	189	208	231	225	240	229	219
5Q Mean	106	105	100	91	85	87	87	82	78	71	60	57	66	72	79	88	128	125	93	80	89	86	96	117	89
5D Mean	423	470	496	528	528	400	374	304	400	427	363	425	464	374	267	359	436	307	350	448	354	342	485	430	406



January 1985

AO Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D	-49	-13	-36	-131	5	-7	46	-32	-17	-29	-76	-25	-13	1	-40	-202	-102	-78	-108	-246	-206	-241	-49	5	-68
	-34	26	-117	-99	-64	0	-28	-26	39	36	-7	-50	8	-32	-9	33	-12	-65	-84	-20	-36	-132	-155	-24	-35
	-1	-30	21	0	4	20	12	-12	-29	-2	-35	-1	6	2	0	-24	-56	16	-7	-28	-105	-19	34	-20	-11
	-52	-7	26	10	15	12	9	5	0	-4	0	7	-6	-10	0	2	-1	-4	-3	-42	-45	-50	-11	-43	-8
Q	8	23	34	21	6	-7	7	9	6	-3	-3	3	1	3	1	-2	-41	-61	-25	-18	-6	-23	13	18	-1
Q	54	24	22	24	13	41	28	4	5	2	3	3	-2	-17	-5	-16	-98	-50	-16	-7	-1	-27	15	6	0
Q	2	0	10	11	9	-5	35	18	17	16	10	11	7	8	3	16	-68	-70	-51	-23	5	4	10	12	-1
	0	-2	6	9	10	4	12	-56	-15	39	19	4	3	4	6	6	-67	-197	-228	-41	-122	-68	-174	-97	-39
D	6	15	23	-92	-183	-52	-43	-189	-146	-254	-72	-18	-264	-369	-149	-32	-91	-311	-109	-28	-34	-42	-33	-45	-105
D	-63	-164	-129	-124	-90	-6	-16	-90	-96	-33	-255	-177	-67	-14	-19	-109	-76	-249	-207	-20	-88	-54	-39	-99	-95
	-8	6	-25	-78	-13	-24	-143	-53	2	-74	-144	-104	-32	-107	-60	-52	-19	-130	-205	-100	-41	-18	-5	-17	-60
	-37	-24	8	-24	-120	-22	5	-70	-40	-87	-144	-164	-39	-145	-178	-55	-47	-150	-219	-87	-30	-115	-46	-19	-77
	-55	-32	-15	-36	2	45	17	-2	-45	-47	17	-12	9	-51	-101	-44	-122	-95	-50	-99	-53	-12	-7	-26	-34
	-3	2	2	3	-10	-45	-27	-17	-18	-2	-61	-168	-71	-146	-122	-50	-205	-93	-25	-23	-25	-13	-3	0	-46
	0	1	5	4	-1	4	6	-50	-97	-22	-38	-99	-34	-43	-128	-220	-149	-63	-188	-125	-10	-17	-62	-31	-56
	-2	2	-67	-37	-2	20	21	-18	-67	-34	-67	-127	-96	-125	-47	-10	-24	-28	-25	-38	-19	-19	1	-2	-34
	1	4	3	4	4	4	5	5	5	-33	-171	-170	-101	-117	-116	-126	-108	-42	-71	-6	-5	-11	-24	-12	-45
	-7	6	0	-3	2	5	8	13	25	0	8	5	-20	-18	5	-20	8	5	-5	-9	-13	-9	4	-2	0
Q	3	15	11	11	9	9	15	19	2	-57	-55	-16	-55	-11	-2	-15	-110	-157	-28	6	6	7	5	2	-16
Q	2	-2	-10	-5	0	10	9	-25	4	-11	-8	-19	-14	2	3	-134	-92	-127	-89	0	14	8	7	6	-19
	11	17	18	17	-6	-171	-17	22	20	11	40	32	-25	-7	18	-6	-27	-8	2	18	7	10	17	4	0
	6	9	7	8	12	10	5	-4	-55	-79	-40	-36	-31	-23	-1	-9	-64	-134	-22	0	11	4	-187	-137	-31
	12	3	11	-54	-195	-61	29	-64	64	68	-135	-326	-111	-97	-76	-121	-87	-70	-54	-62	-14	-33	2	7	-56
D	-3	-12	2	-26	0	-22	-25	-1	-40	7	12	5	-7	-64	-17	-23	-6	-26	-25	-91	-43	-33	-24	10	-19
	-7	59	58	65	47	41	22	13	25	12	14	4	3	7	5	4	2	4	6	9	6	4	7	6	17
	2	2	8	17	22	21	14	8	14	14	15	10	-2	-9	1	-4	-24	-24	-5	30	30	32	-19	1	6
	10	37	49	53	13	-32	24	16	-5	10	14	-30	0	16	6	12	5	-30	-171	-127	-59	-135	42	21	-10
	-146	-62	-260	-131	-51	0	15	-5	-64	-33	-101	-147	-396	-555	-413	-409	-625	-396	-137	-139	-243	-306	-219	-233	-211
D	-184	-176	-50	-87	-73	0	-9	-6	-4	1	-9	-51	-60	-33	3	-56	-127	-92	-80	-123	-253	-189	-77	-149	-78
	23	19	4	9	-9	-43	-134	-28	7	-58	-13	1	-6	-66	-33	-33	-100	-126	-58	-83	-27	0	-32	-36	-34
	9	-73	-85	5	23	10	-2	-11	-36	-40	-19	-200	-230	-60	-63	-58	-104	-97	-68	-75	-11	-10	-42	-62	-54
	-16	-10	-15	-21	-20	-7	-3	-20	-17	-22	-41	-59	-53	-66	-49	-57	-85	-95	-75	-51	-45	-48	-33	-30	-39
5Q Mean	11	10	11	9	6	8	17	3	11	0	2	0	-5	-4	1	-37	-58	-60	-37	-11	0	-9	9	8	-4
5D Mean	-48	-44	-78	-106	-102	-25	6	-76	-51	-56	-127	-138	-170	-206	-139	-174	-196	-220	-123	-99	-117	-135	-67	-73	-107

February 1985

AO Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
1	-34	-20	2	-36	-14	-19	-31	-97	-95	5	1	-51	-127	-49	-18	-31	-110	-134	-76	-20	11	-9	10	19	-38	
2	15	12	11	-9	-70	-80	27	13	18	-3	-23	-58	-47	-20	-76	-37	-45	-96	-46	-31	-19	0	-16	-18	-25	
3	-15	-12	14	11	7	12	9	6	3	2	-20	8	-36	-190	-219	-72	-58	-108	-9	-5	-43	7	7	4	-29	
Q	4	6	8	8	5	-2	5	3	7	7	3	1	3	0	-1	1	5	8	7	6	4	-15	3	6	3	
D	5	12	1	14	19	9	-19	-157	-41	-42	27	34	23	9	-35	-198	-227	-55	-36	-4	-84	-79	-13	-39	-190	-44
D	6	-254	-205	-10	0	24	-39	-187	-223	-104	-27	-33	-172	-152	-142	-19	-5	-68	-391	-197	-30	-10	-8	-40	-117	-100
7	-50	-50	-21	9	-14	-30	-94	-71	3	3	-32	-149	-287	-77	-43	-115	-129	-18	0	-19	-1	-63	-84	-18	-56	
D	8	2	-159	-70	12	14	-2	0	-13	-25	-92	-167	-85	-82	-114	-29	-160	-101	-139	-228	-110	-128	-344	-15	-3	-85
9	-22	-101	-69	-33	-58	-15	-48	-151	-95	-51	-78	-52	-133	-176	-100	-82	-67	-27	-49	-18	0	-56	-68	-52	-67	
D	10	-22	-68	-119	-62	-23	-45	27	-37	-143	-82	-4	0	-83	-171	-150	-17	-69	-188	-172	-201	-15	9	4	1	-68
11	-6	0	5	-17	-52	-48	-69	-39	-16	-8	-5	-41	-95	-76	-124	-154	-64	-57	-84	-36	-19	-6	-88	-47	-48	
12	15	13	-15	-35	-6	-125	-68	13	-14	-32	-14	-33	-84	-20	-127	-155	-57	-115	-86	-11	-3	9	4	6	-39	
13	7	6	7	9	10	8	5	-1	6	-9	9	-52	-61	-34	-21	-57	-77	-15	-157	-322	-77	9	-53	-56	-38	
14	-32	-66	-43	-21	13	-76	-159	-124	-40	41	-14	-66	-110	-45	1	4	-86	-185	-29	9	-16	-122	-181	-34	-57	
15	12	-121	-102	-28	2	-71	-50	-5	-29	16	4	2	0	4	2	5	5	-17	5	-19	-24	-34	-31	7	-19	
Q	16	7	8	8	11	10	7	0	3	-2	15	10	12	-2	-5	-63	-139	-77	-54	-41	-30	15	-2	-36	-19	-15
17	16	9	3	-39	-92	-142	-106	-35	0	-29	-51	-12	-8	-44	-201	-242	-190	-120	-32	18	21	19	9	0	-52	
Q	18	2	4	3	-1	-28	-27	5	10	-66	-69	5	3	1	-5	-6	-17	-1	0	-8	-45	0	6	7	3	-9
Q	19	3	-1	1	2	0	-53	15	12	13	7	8	6	11	10	14	2	-19	17	31	34	30	-13	-25	5	
20	25	20	-40	-7	-5	18	74	5	-16	7	44	64	21	19	22	2	1	3	0	-55	-18	1	0	16	8	
21	10	5	3	7	14	20	15	-38	-8	5	11	12	9	0	-65	-110	-39	-14	18	-7	-154	-20	63	36	-9	
22	31	10	17	5	-20	-7	5	10	2	14	26	1	11	1	-33	-54	-26	-38	-26	-2	-1	-4	-61	-24	-6	
23	20	18	21	9	-15	-28	28	25	18	57	35	12	-5	9	7	24	20	-57	-79	-38	46	44	28	-29	7	
24	-13	-17	-75	-73	-32	57	89	55	23	36	19	-12	15	8	-27	-110	-61	8	-7	-6	-28	-112	-66	15	-13	
25	4	28	24	16	-35	-15	63	18	-123	-48	72	57	32	7	19	-2	-138	-121	6	19	16	2	-3	-1	-4	
Q	26	-38	-29	-39	10	17	11	-11	13	26	15	11	8	6	-5	-1	3	5	-16	-137	-47	0	8	-8	1	-8
27	11	10	-13	-6	-13	-23	-3	27	35	20	23	-13	0	11	-21	-13	0	-9	4	29	35	42	-323	-68	-10	
D	28	-51	-73	-168	-24	-99	-61	-166	-46	-23	-6	-284	-196	-243	-218	-48	-44	-75	-151	-109	-97	-28	-1	6	1	-92
Mean	-12	-27	-22	-9	-16	-28	-27	-25	-24	-6	-14	-27	-51	-48	-54	-63	-55	-75	-54	-40	-17	-22	-35	-20	-32	
5Q Mean	-4	-2	-3	6	0	-12	2	8	-4	-3	7	6	2	0	-12	-27	-13	-16	-32	-17	10	5	-9	-6	-4	
5D Mean	-62	-100	-70	-11	-15	-33	-96	-72	-67	-36	-90	-86	-110	-136	-88	-90	-73	-181	-142	-104	-52	-71	-16	-61	-77	

AO Index ( Hourly mean values, unit nr )

Date	1985																								
	March																								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
D 1	-1	-43	-36	-137	-246	-102	-35	-51	-50	-67	-24	-8	7	0	-2	-13	-18	-26	-32	-38	-48	-64	-61	-40	-47
D 2	-14	-15	-44	-39	-87	-7	-20	-123	-38	19	-82	-208	-290	-136	-166	-150	-164	-251	-131	-31	-120	-117	-8	4	-92
D 3	-25	-12	-54	-117	-63	-118	-78	-9	5	-14	-1	-6	-52	-36	-41	-107	-29	-22	-84	-48	-47	-70	1	-24	-44
D 4	-4	-86	-26	2	-39	-47	-11	5	9	-37	-26	-20	0	-10	-91	-89	-14	8	6	9	6	0	-72	-31	-23
D 5	-30	-134	-70	-22	-47	-76	-149	-5	-86	-106	4	30	7	-22	-86	-55	-26	-120	-217	-233	-242	-145	-215	-258	-96
D 6	-73	-24	-45	-86	-58	-86	-12	-47	-85	-99	-84	-24	-94	-175	-67	-39	-148	-45	-11	1	-109	-64	-42	-30	-64
D 7	-98	-15	4	9	-21	-53	-50	6	-59	-113	-100	-34	-53	-76	-166	-162	-232	-203	-149	-155	-148	-61	-5	-71	-83
D 8	-134	-94	7	-141	-240	-150	-95	-62	-141	-100	-90	-84	-82	-129	-90	-74	-137	-49	-109	-21	-24	-59	-75	8	-90
Q 9	-5	-23	-31	3	3	2	-6	-9	-20	-2	-3	-3	-11	-11	-5	-13	-9	-9	-6	0	0	-1	0	-51	-9
Q 10	2	9	1	0	0	2	2	3	1	1	4	4	8	6	8	2	-10	-45	-1	12	16	-95	-5	-26	-4
Q 11	14	0	-8	-2	-2	0	0	4	3	-14	-20	-4	17	-25	-42	10	-4	-11	-22	-6	4	1	0	-1	-4
Q 12	-1	0	7	1	-12	6	8	6	5	1	4	2	1	-23	-99	-60	-3	-4	-64	-91	-101	-21	-9	13	-18
Q 13	12	6	-1	4	-4	-25	-7	3	3	-72	0	14	5	6	0	2	0	-1	0	2	2	2	1	0	-1
Q 14	0	-1	0	0	0	0	2	5	7	7	-2	-39	-67	-33	0	-15	-17	-33	-149	-23	-29	-8	-50	-32	-20
Q 15	1	-18	-93	9	14	-4	-59	-159	-109	-56	-8	-4	-15	-37	-31	-4	-2	-2	-7	1	2	2	1	-8	-24
Q 16	-37	-59	-49	-5	8	-17	-12	-30	1	2	-2	-2	1	-32	-189	-86	-4	2	3	0	6	-63	-11	-19	-24
Q 17	-74	-59	-85	-4	4	2	0	-10	0	1	8	3	3	1	0	0	-2	1	0	7	-58	-98	-77	-6	-18
Q 18	-11	-134	-40	11	-8	-62	-60	-20	7	2	-1	1	3	-3	-2	-2	-2	0	3	-17	-114	-128	4	-5	-24
Q 19	-6	3	-1	-38	9	9	10	17	7	-57	-21	-59	-29	-9	-70	-40	-3	-14	-29	-182	-91	11	17	15	-23
Q 20	26	24	6	3	7	3	2	7	11	10	6	9	-18	-60	-35	-29	-51	2	9	6	4	0	0	-2	-2
Q 21	2	5	-30	-50	6	4	0	-3	-3	0	-1	-1	2	4	13	-29	-25	-3	0	-14	-49	-9	0	-22	-8
Q 22	-20	-34	-12	11	9	11	0	-2	2	0	0	1	-16	-37	0	-1	2	0	0	-2	-2	0	6	-13	-3
Q 23	-35	2	-27	-37	44	7	-1	-3	-3	0	-2	0	-14	-6	-4	-15	-17	-11	-2	6	-33	-2	12	1	-6
Q 24	36	45	31	2	6	4	5	3	1	0	1	4	-17	-3	-13	-1	0	0	-9	-3	15	-49	-92	-18	-2
Q 25	16	8	2	-1	-2	-4	-2	-4	0	1	0	0	0	6	-15	-32	-30	-17	-13	-34	-10	21	24	0	-3
Q 26	-34	-67	-57	-21	27	21	-1	8	24	23	-2	6	22	-29	-5	-2	-12	-40	-52	-33	4	20	34	43	-5
Q 27	30	51	9	15	15	-2	-21	13	27	-24	31	17	-26	-4	12	20	-18	-27	-50	30	29	-10	-10	-11	4
Q 28	-66	-57	-3	-43	-98	-91	-113	-20	16	0	0	-3	-7	0	1	-1	-12	-25	-70	-140	-73	-12	-14	0	-34
Q 29	2	3	5	3	0	0	1	7	3	-10	-1	0	3	0	0	-33	-77	-41	-8	-17	-92	-38	-3	-46	-14
Q 30	-111	-8	10	14	0	2	8	4	2	2	0	10	-12	-21	1	8	-1	-13	6	8	6	5	6	5	-2
Q 31	-13	-26	6	-88	-46	3	12	-27	-114	-49	23	10	2	-1	-1	-1	3	4	-70	-38	1	7	6	0	-16
Mean	-21	-24	-20	-24	-26	-24	-22	-15	-18	-24	-12	-12	-23	-28	-38	-32	-34	-32	-40	-33	-41	-33	-20	-20	-26
5Q Mean	3	-4	-13	-5	4	-1	-2	0	-1	-12	0	4	-7	-19	-5	-14	-16	-2	0	-1	-9	-1	1	-17	-5
5D Mean	-69	-56	-29	-55	-90	-74	-65	-46	-81	-79	-70	-64	-102	-107	-115	-96	-141	-133	-123	-87	-128	-89	-69	-69	-85

AO Index ( Hourly mean values, unit nT ) 1985

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	5	-4	-40	-45	-37	-65	-42	-112	-139	-135	-49	-18	-7	1	-12	-56	-75	-49	-218	-149	-7	-55	-70	18	
	-21	-291	-75	4	-5	-38	-104	-27	5	9	-23	-79	-34	-11	-6	-20	-19	-86	-166	-194	-13	-16	-62	-49	
	-8	10	11	-48	-118	-114	-47	-89	-64	-6	-47	-145	-38	-7	-21	-90	-165	-108	-50	-25	-108	-20	2	15	
	11	-33	-69	-49	-109	-9	5	2	1	-19	-46	-51	-33	-15	0	-11	-6	-10	-6	6	1	-1	2	-1	
	0	-1	-3	-3	-5	-5	-2	-19	-16	-37	-40	-14	1	5	-1	0	-8	0	1	-31	-72	-81	5	11	
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	-3	0	1	-2	2	0	-26	-15	5	6	-3	-53	-19	-10	15	-1	-56	-5	-4	-78	-54	-28	-84	-264	
D	14	18	2	11	39	-104	-111	5	-73	-101	-139	-71	-48	-73	-198	-307	-217	-26	-46	5	12	-11	3	4	
	-1	0	-2	1	8	2	-30	-70	-57	-4	-84	10	-31	0	-129	-108	-54	-56	-18	0	8	-40	-54	-20	
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	-6	-11	-8	-3	-3	0	-4	5	5	3	-10	-4	9	7	0	12	-36	-74	-2	3	-5	-25	-32	6	
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D	20	-80	-165	-30	-71	-102	-30	62	0	-119	0	10	-15	-18	-15	-59	-94	-143	-168	-176	-201	-301	-489	-451	
	-348	-361	-423	-458	-231	-191	-101	-126	-813	-188	-85	-25	-30	-221	-232	-235	-282	-149	-92	-69	-45	-34	-59	-43	
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	-144	-65	-197	-107	-80	-41	-135	-41	-13	5	-35	33	16	49	13	-3	13	17	22	15	13	-38	-129	-38	
	-61	-140	-128	-281	-234	-129	-68	-40	-107	-135	-140	-144	-130	-86	-134	-59	-34	-36	7	0	27	-38	29	-129	
D	28	-356	-326	-318	-177	-127	-76	-184	-575	-534	-595	-484	-356	-189	-188	-146	-38	-30	-56	-61	-10	28	9	0	
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D	30	-3	-6	-3	-4	-5	-2	0	5	0	15	17	12	-108	-186	-21	-4	39	-58	-40	1	33	12	-6	
	-41	-59	-62	-62	-50	-43	-41	-49	-75	-42	-44	-40	-35	-37	-45	-44	-50	-46	-40	-28	-17	-27	-38	-37	
	-13	0	-1	0	0	-7	-1	-3	-3	-5	7	0	-1	3	2	0	-2	-4	-7	-13	-12	-14	-1	-2	
5Q Mean	-154	-168	-154	-139	-85	-80	-66	-138	-307	-173	-136	-91	-78	-136	-131	-135	-126	-91	-83	-54	-54	-102	-102	-66	
5D Mean																									-119

1985

May

AO Index ( Hourly mean values, unit nT )

Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
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	2	-16	-18	-184	-377	-226	-264	-171	-48	-35	-364	-51	-6	-93	-142	-116	-83	-48	-33	-33	2	6	1	2	-96	
	3	0	0	-2	-5	-9	-13	-9	-20	-8	-35	-50	-16	-13	6	-33	-92	-46	-10	9	12	-13	0	5	-15	
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	5	-25	2	1	-10	-23	-8	-61	-8	0	-8	-5	-3	0	-1	-20	-42	-22	-2	-58	-96	5	37	19	9	-13
	6	6	-70	-133	-62	-37	-24	-96	-45	0	-5	12	1	-1	-16	1	-28	-81	-26	-3	-4	-3	1	2	-25	
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	8	21	31	9	18	-1	6	-15	-5	30	-9	-43	-32	-8	-10	-11	-75	-186	-71	7	24	10	13	16	-47	
	9	-74	10	12	-8	-88	-65	-11	20	1	-7	10	21	-16	-22	2	0	-25	-44	-60	-9	14	2	-5	-9	
	10	-9	-7	-5	-1	-4	-5	-4	-9	-4	0	-5	0	1	2	-23	-27	-6	2	-6	-12	16	20	-48	1	
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D	13	-82	-42	-38	-28	5	-13	4	31	48	21	32	20	-32	-16	-35	-61	-107	-85	-16	23	-6	-66	13	2	-17
D	14	6	37	-35	-62	-5	25	4	27	-38	-31	-1	-3	-3	-24	-30	-27	-81	-46	4	17	-2	15	13	10	-9
D	15	10	-46	-96	-26	-7	-100	-28	2	-4	-3	-14	0	16	-46	-90	-132	-52	-6	-2	-5	19	-17	-51	-20	-29
D	16	9	9	6	1	0	-6	-33	-9	-24	-10	11	19	-8	-91	-54	-59	-73	-30	0	-7	24	6	-65	-33	-17
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	18	-75	-29	2	-3	-46	-23	7	10	14	18	25	-21	-8	10	-41	-30	-26	-46	-86	-30	30	50	-18	10	-12
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	20	-112	-88	-18	-4	-5	-7	-6	-5	-7	-5	-8	-12	-8	-10	-10	-9	7	3	7	11	2	11	9	7	-10
	21	2	-20	-28	-14	13	-9	-8	1	1	0	2	17	3	-9	1	0	-1	-83	-49	20	19	4	-72	-12	-9
Q	22	-2	-13	24	-20	2	-5	-14	1	-6	-23	-27	0	4	2	-4	-4	0	6	9	0	1	4	3	3	-2
Q	23	3	-11	-62	-76	-45	4	-5	-3	-4	0	0	9	7	-12	-5	-16	-16	-6	-2	4	10	6	2	2	-9
	24	12	18	-11	11	3	-4	-11	-8	-8	-1	6	10	12	6	0	-6	-24	-6	9	9	-17	-2	9	3	0
	25	-4	-7	-2	0	0	-6	-7	-2	0	3	8	12	19	11	12	15	-5	22	23	25	20	-14	-44	4	3
	26	2	-60	-7	9	5	-7	-2	9	6	7	12	16	22	17	-28	-89	-77	1	-8	-26	20	4	-3	-4	-8
	27	0	1	0	10	-53	-47	-9	3	19	-10	-43	0	-6	-55	0	-11	-10	-2	0	-16	-10	-2	-3	-2	-10
Q	28	-2	-5	-6	-3	-2	-6	-8	8	14	25	13	7	-17	-2	15	0	-24	-9	16	16	9	6	8	2	2
Q	29	8	3	-7	7	2	-30	-2	0	-44	6	1	3	3	6	2	0	-25	-53	-8	9	11	-5	-15	-7	-5
Q	30	-6	-6	-5	-2	-5	-1	3	2	-5	2	-2	-13	13	12	6	5	8	10	10	11	0	0	0	15	2
	31	12	7	-49	-16	-13	-17	-56	-15	17	1	0	0	8	11	-7	-19	-25	3	9	12	16	12	17	8	-3
Mean		-10	-12	-25	-24	-22	-21	-19	-7	-9	-16	-6	0	-4	-21	-25	-34	-36	-26	-15	-1	5	1	-5	-3	-14
5Q Mean		0	-6	-11	-18	-9	-7	-5	1	-9	2	-3	1	2	1	2	-3	-12	-10	5	7	8	2	0	2	-2
5D Mean		-13	-16	-68	-89	-45	-74	-42	-19	-31	-80	1	11	-18	-72	-72	-68	-68	-58	-35	-10	3	-17	-13	-7	-37

AO Index ( Hourly mean values, unit nT )

June 1985

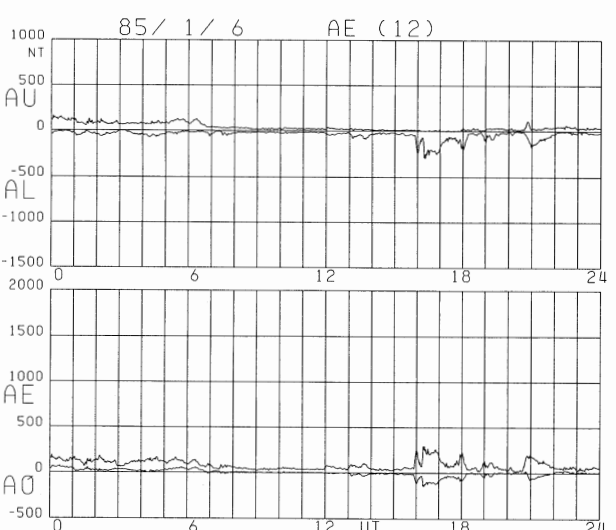
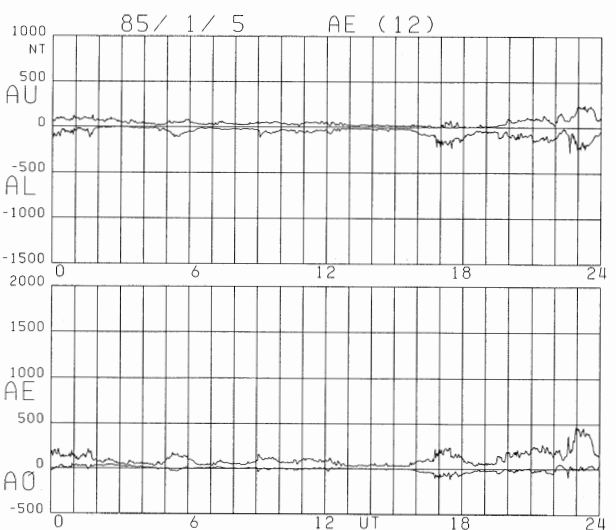
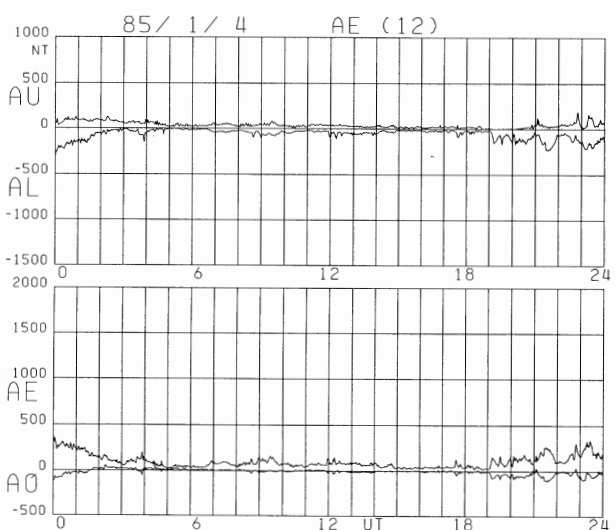
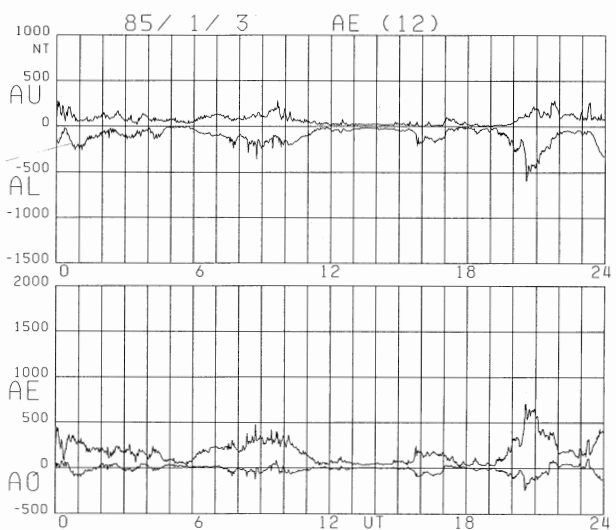
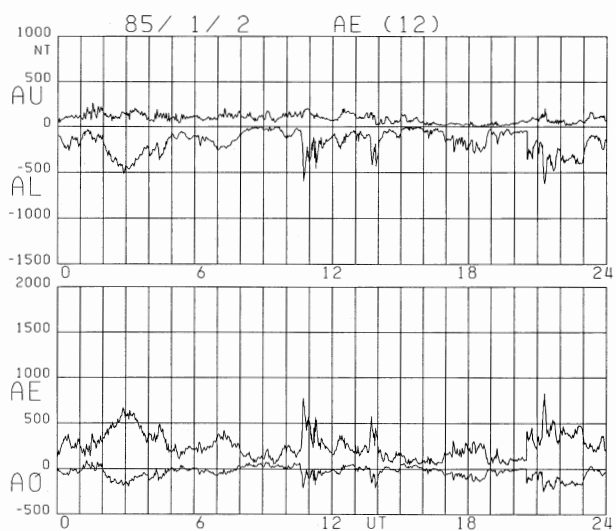
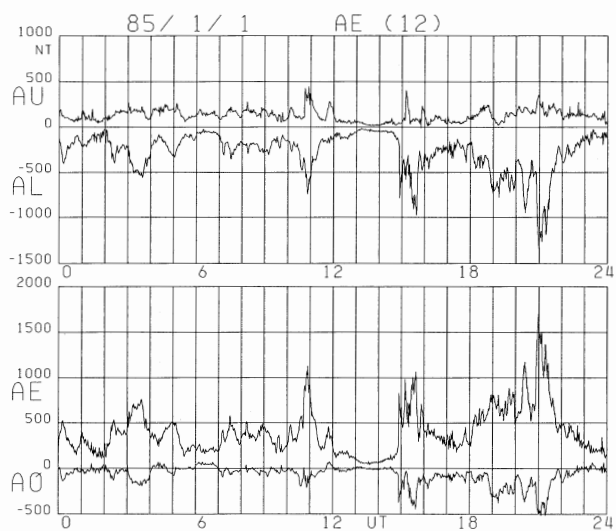
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2	-24	2	2	5	1	1	-12	-32	-27	1	1	5	-28	-83	-69	-39	-14	-11	-35	-19	-60	-21	1	8	-18
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4	6	7	3	0	0	-8	-18	-25	2	-10	-18	8	9	12	-26	-40	-54	-13	13	6	1	-1	1	-3	-6
5	-18	2	23	15	-26	-4	20	-3	8	9	10	16	16	17	9	-8	-5	0	7	2	3	10	14	-6	4
6	-27	1	-1	-75	-37	9	6	7	4	11	10	16	-17	-22	71	-67	-111	-1	39	15	16	2	-203	-62	-23
7	-29	-39	-89	-55	-108	-52	-12	-10	-77	-95	-6	-1	-144	-135	-11	10	-48	-77	12	-20	-105	7	-64	-24	-49
8	-121	-136	-82	-114	-157	-84	-64	-145	-92	-71	-33	-5	-7	-10	8	-15	-38	-18	15	-11	-10	-5	-3	-20	-51
9	-19	-31	-36	-49	-26	17	-28	-32	-24	-2	0	6	2	0	0	-11	-5	5	1	-51	-135	-223	-220	-146	-42
10	-146	-113	-94	-111	-2	-64	-66	-97	-74	-21	-154	-131	-32	-11	-95	-58	-29	-47	-73	-49	-3	6	-17	-38	-63
11	-66	-37	-10	-46	-44	-29	-39	-26	-16	13	-12	-11	-26	-11	-7	-36	-49	0	-9	11	18	23	4	-11	-17
12	-33	-48	-31	-25	-49	-62	-113	-129	-71	-13	-1	-46	-50	-33	-21	-20	-57	-52	-26	34	-31	-31	1	-5	-38
13	6	2	1	-4	-11	4	-4	-4	-4	0	-2	3	8	5	-36	-36	-100	-50	6	0	-12	3	-34	-10	-11
14	-29	-19	0	1	1	-15	9	20	-1	5	-2	-4	-4	-1	1	-2	-1	1	4	2	-4	-1	-24	0	-2
15	17	29	43	6	18	17	-1	3	8	4	-8	-2	4	0	-5	-34	-19	-70	-33	-16	8	18	7	15	0
16	17	29	17	7	9	13	11	3	-3	-8	-3	0	-3	-2	0	-8	-6	0	4	2	0	0	0	3	3
17	4	5	-26	-3	5	6	2	2	22	16	5	7	15	9	7	-78	-83	-32	0	20	21	10	11	-8	-2
18	15	17	11	4	-4	-4	2	0	9	6	5	3	7	9	-4	-16	-2	-6	-1	5	1	2	-1	-1	2
19	-6	3	-8	-2	-1	-3	-2	5	5	3	6	4	18	6	9	5	-2	8	0	4	2	6	4	0	2
20	0	-2	0	7	-2	1	7	12	-2	-1	-12	-43	10	19	-21	-20	-36	-30	17	20	9	8	17	-4	-1
21	6	4	-26	-3	-29	-65	-1	5	20	15	22	20	12	-23	4	13	9	12	13	15	13	8	13	7	2
22	2	26	10	-13	-58	-11	-73	-70	-21	-1	-3	-41	14	8	2	0	-5	9	18	15	12	8	3	0	-7
23	1	0	-157	-97	-63	-20	-6	7	6	0	0	32	-66	-6	-5	3	2	1	8	2	-1	0	-1	0	-15
24	-6	-2	3	-2	0	-9	-5	-26	0	6	-8	0	6	16	27	-10	-1	15	24	31	27	22	12	4	5
25	-31	-11	2	18	-8	-72	-114	-97	-34	17	-14	-41	-8	-4	-2	-8	0	-1	3	-15	-56	-28	-10	-16	-22
26	-50	-45	14	5	-14	-53	-63	-27	2	-141	-41	-109	-87	-83	-38	-26	-12	-71	-114	-188	-73	-88	-32	-36	-57
27	-96	-116	-35	0	-2	3	22	-18	-62	-85	-60	-35	-22	-37	-63	-40	-21	-108	-99	-9	11	-15	-10	0	-37
28	-53	-153	-164	-129	-49	45	-80	-55	-5	-7	-44	-72	-63	-61	-3	-21	-39	-34	-24	-60	-23	0	-57	-114	-53
29	-56	-67	-51	-2	-30	-96	-53	-54	-25	-105	-94	-25	-51	-99	-12	-38	-72	-99	-20	-7	-119	-23	4	-5	-50
30	-51	4	5	-7	-6	-8	-9	-11	-21	-11	8	-61	15	12	-4	-25	-68	7	10	-35	-147	-81	-37	-17	-22
Mean	-27	-22	-23	-25	-25	-17	-22	-25	-14	-14	-20	-19	-16	-17	-16	-22	-33	-26	-13	-9	-19	-12	-20	-18	-20
5Q Mean	0	6	3	0	0	-1	4	5	2	2	2	0	2	2	0	-6	-26	-14	-4	4	4	2	-3	0	0
5D Mean	-61	-69	-66	-73	-42	-23	-43	-36	-30	-50	-47	-59	-68	-62	-43	-32	-47	-46	-32	-60	-37	-14	-74	-54	-49

FIGURE 4 (on even pages)

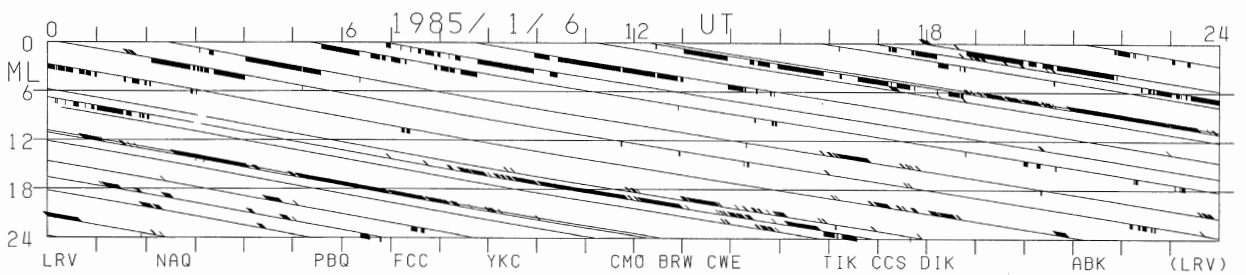
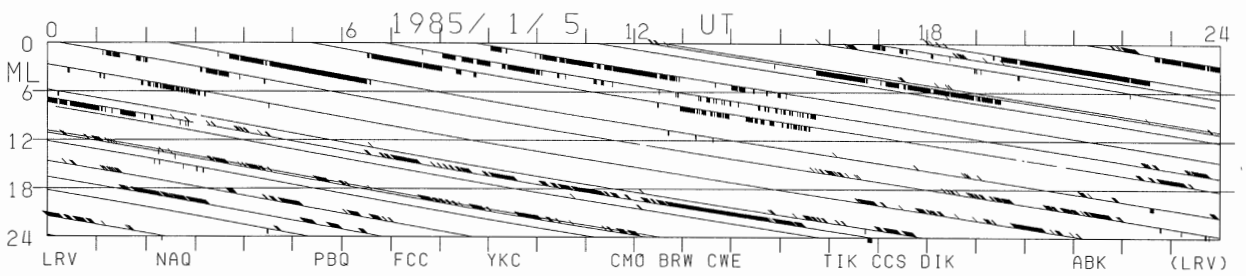
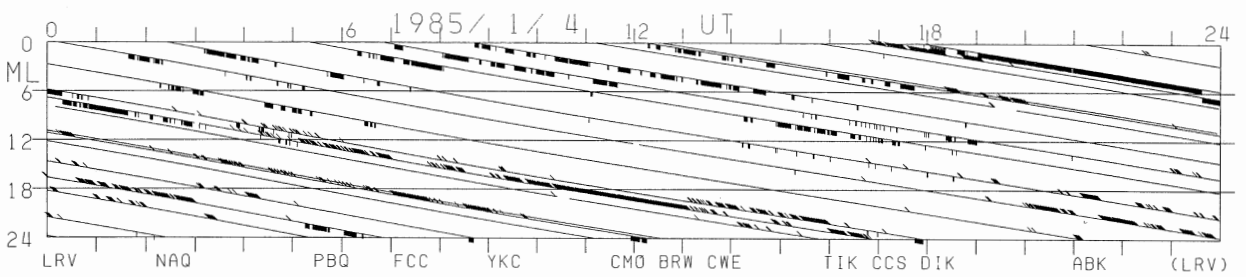
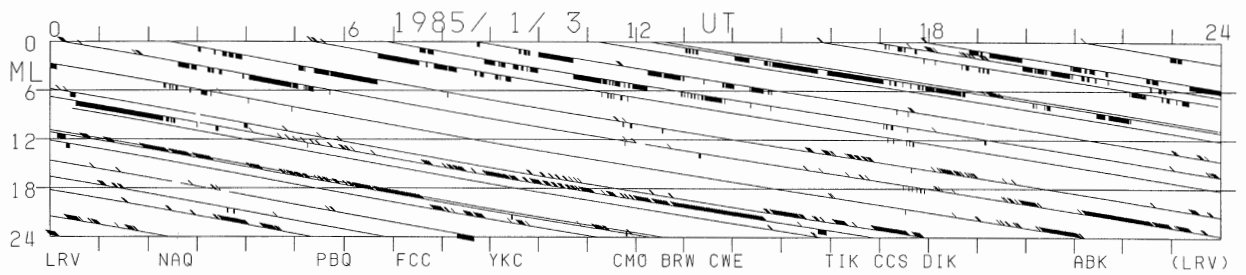
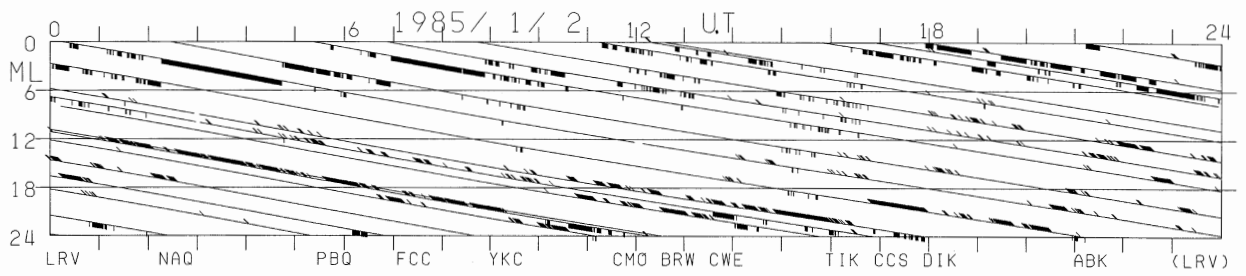
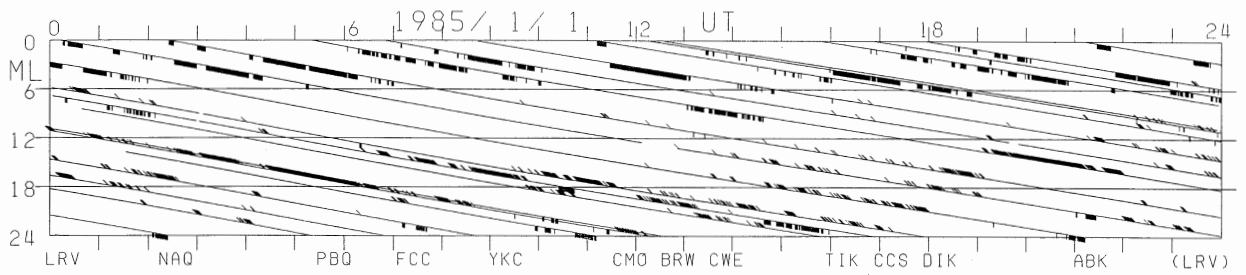
Daily graphs of 1.0 min AE indices (AU, AL, AE and AO) for January-June 1985. Graphs on disturbed days (April 21 and April 28) are reproduced on page 94.

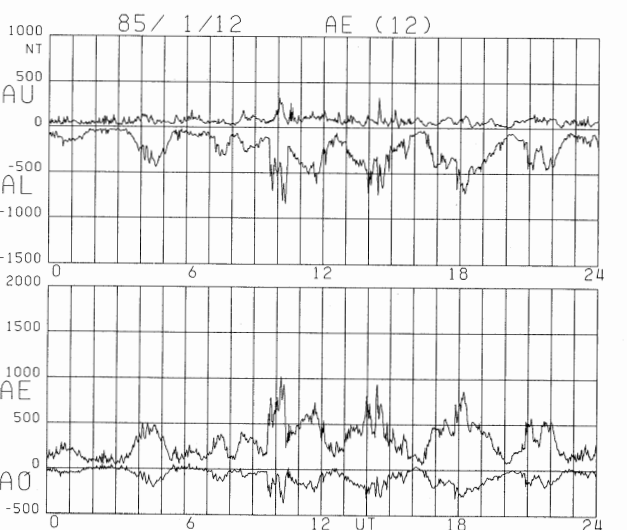
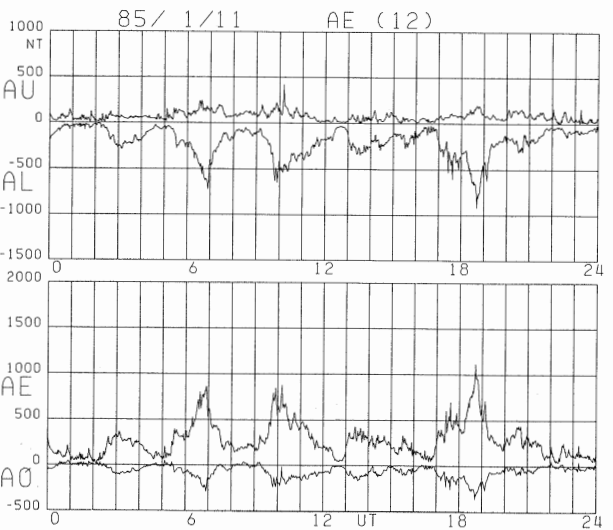
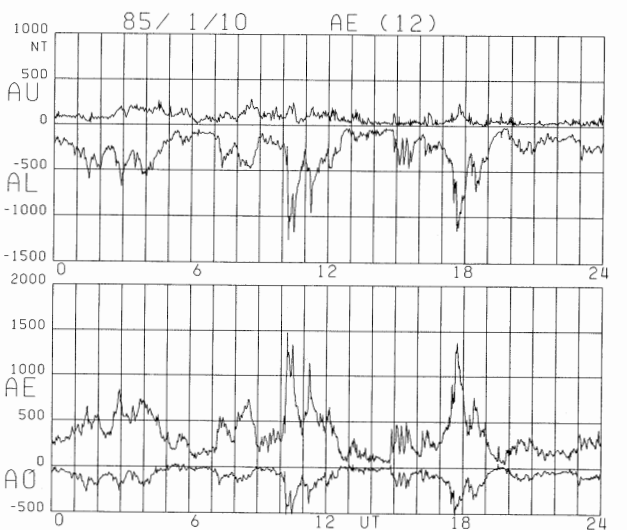
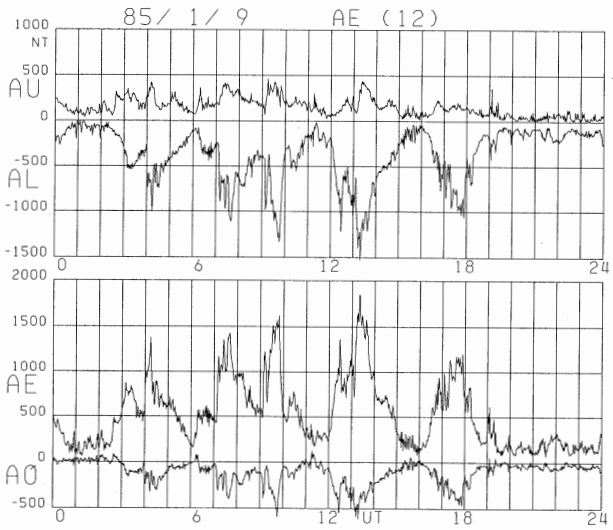
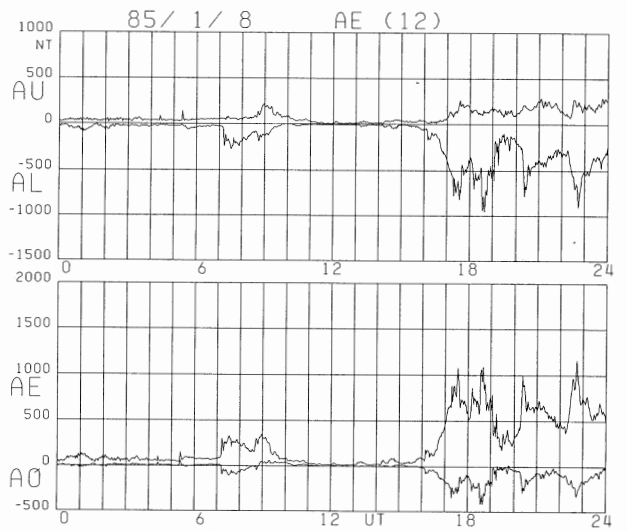
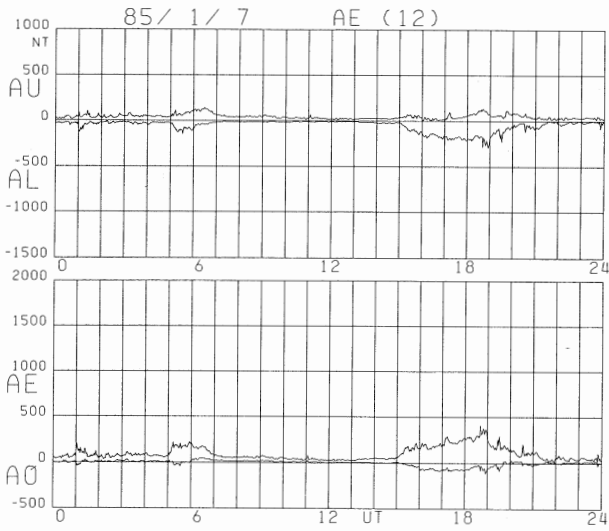
FIGURE 5 (on odd pages)

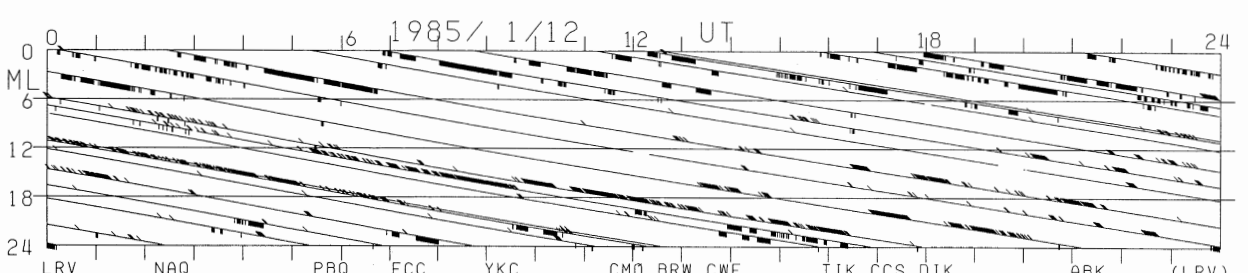
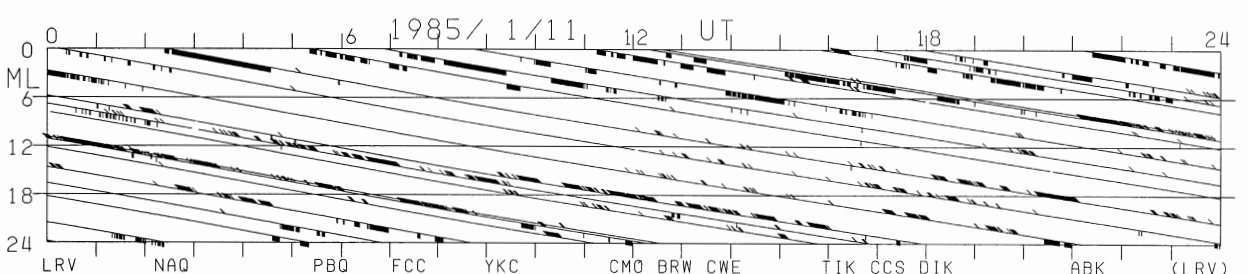
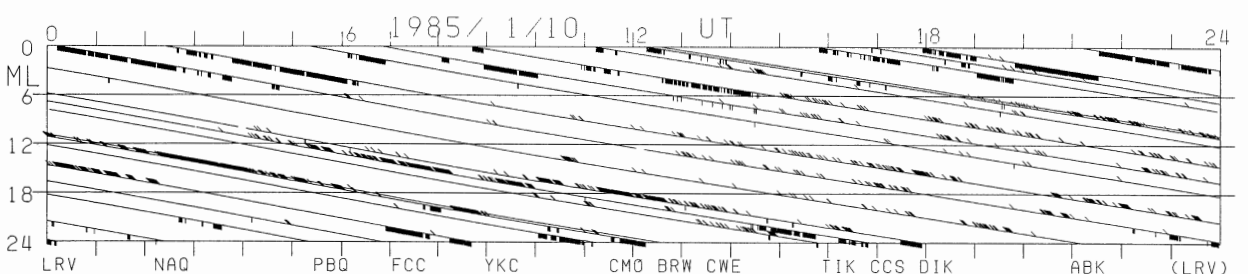
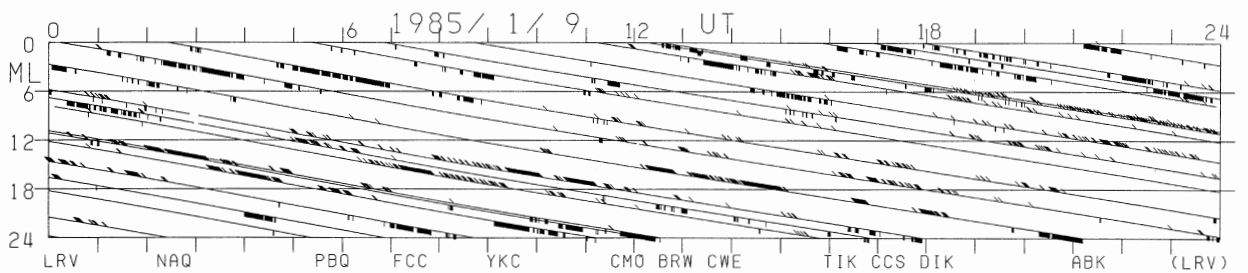
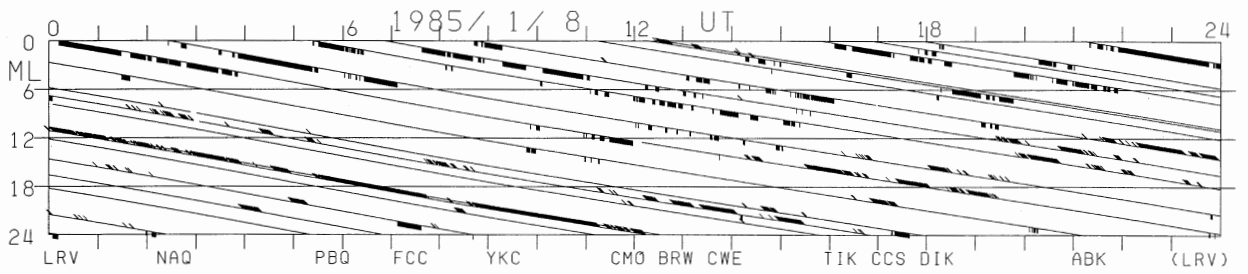
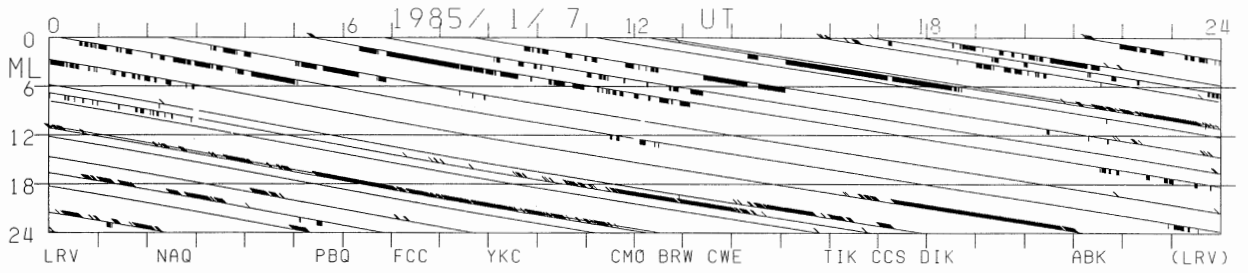
Plots of the contributing station to the AU (upper plumes) and AL (lower plumes) indices, showing which station contributes to these indices at each UT minute.

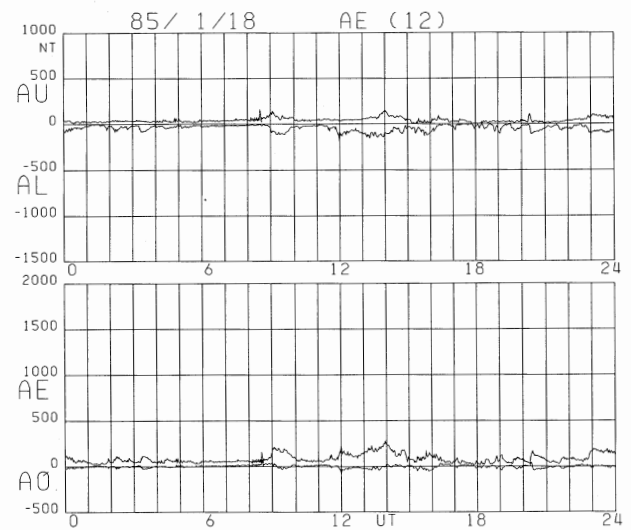
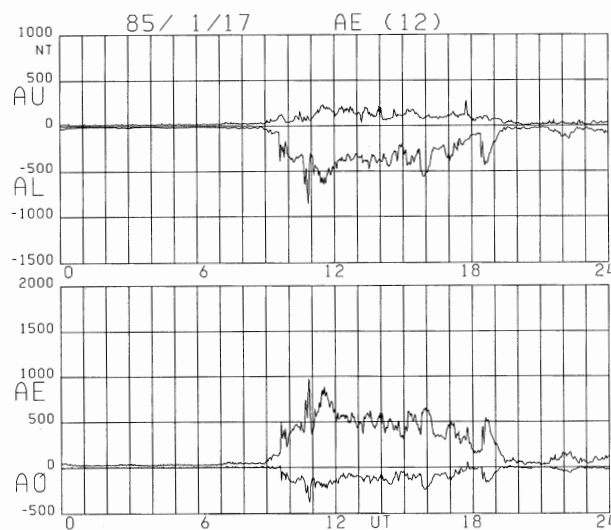
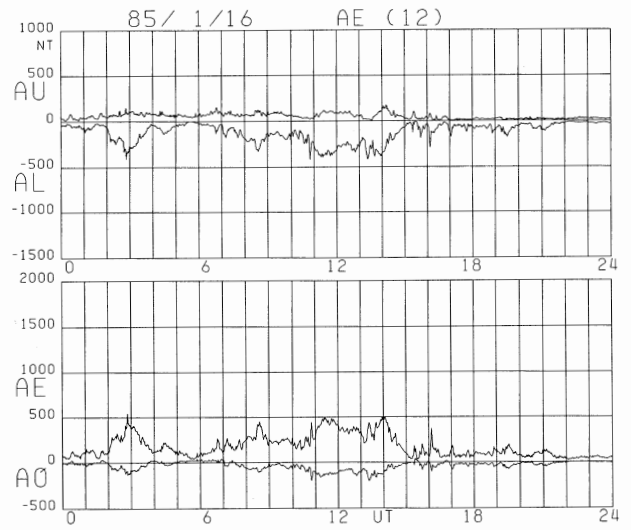
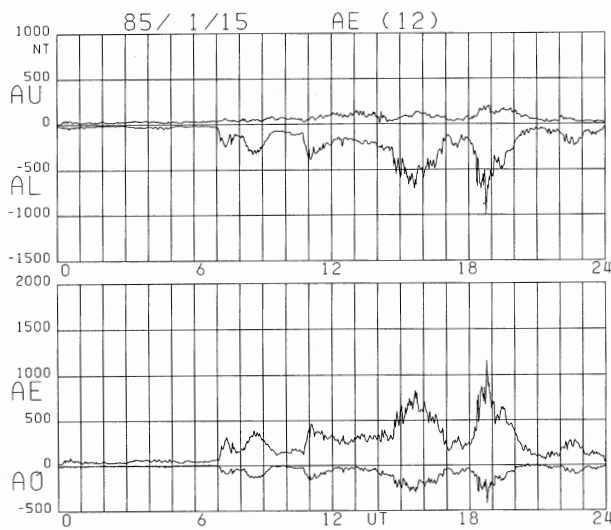
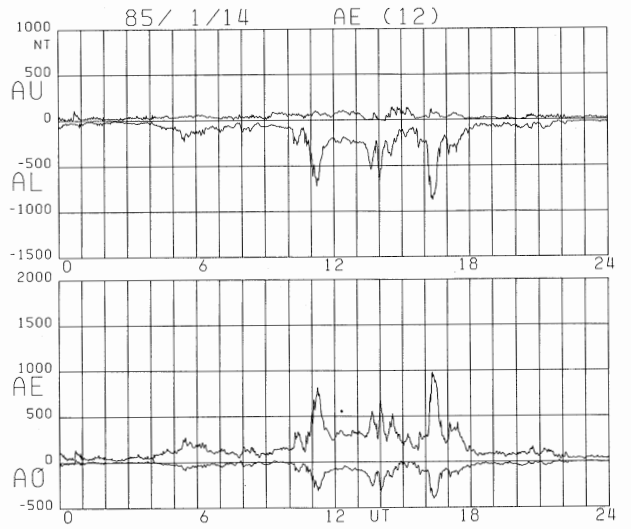
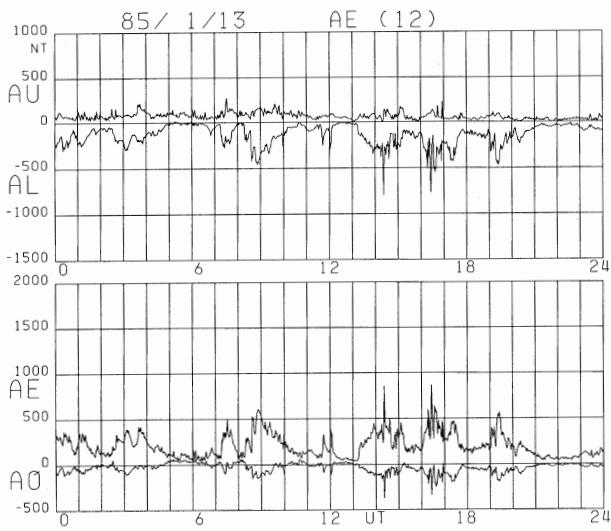


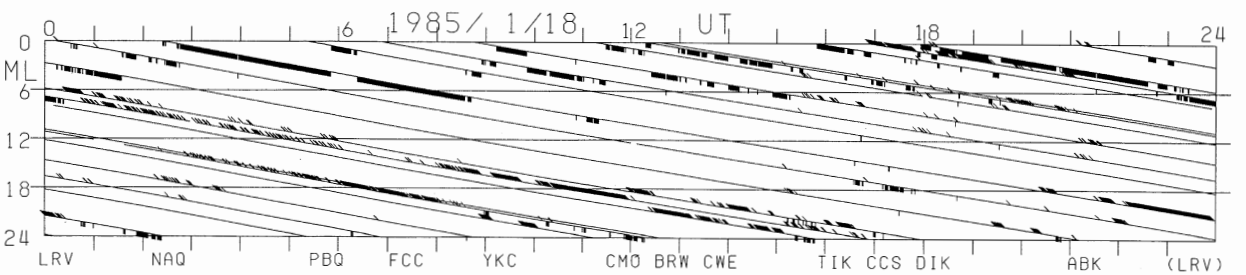
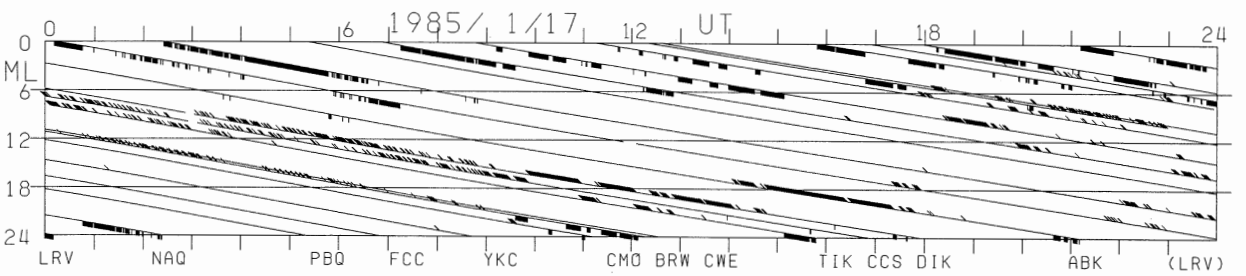
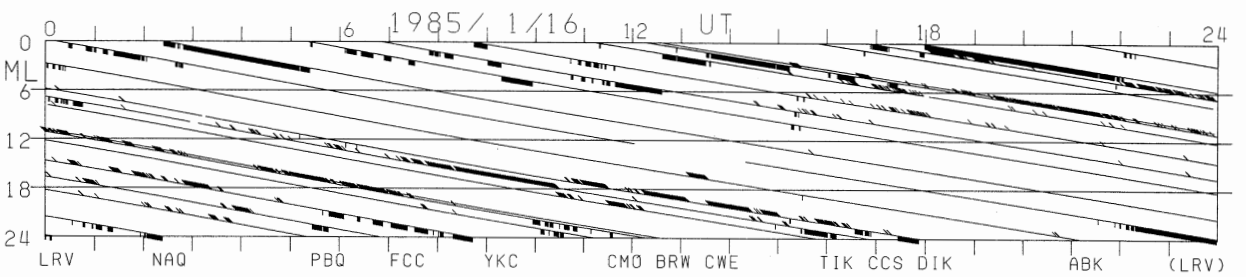
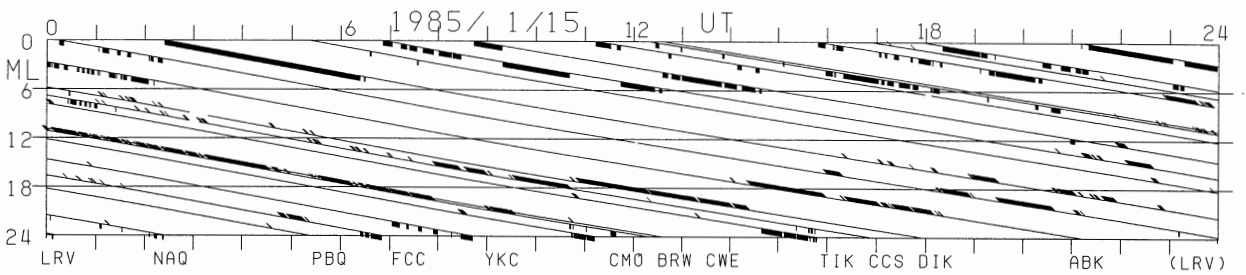
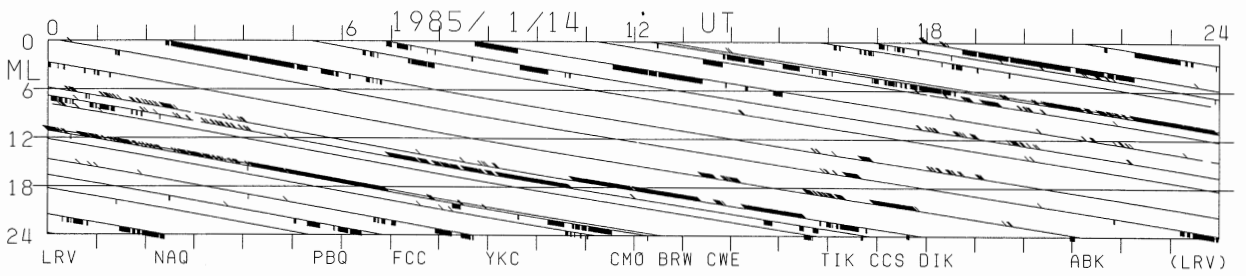
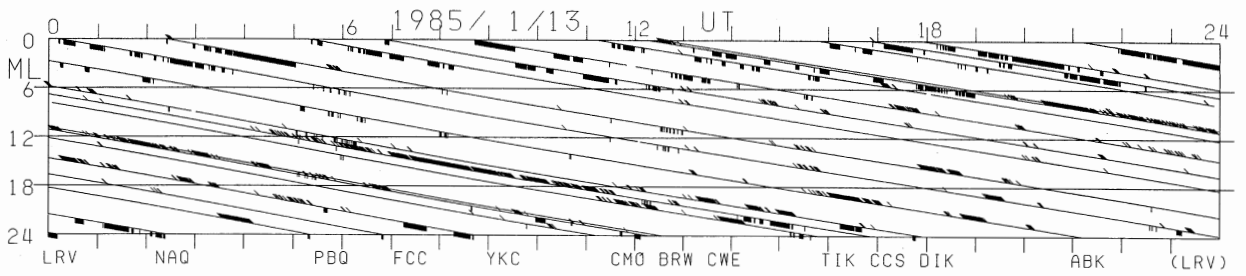


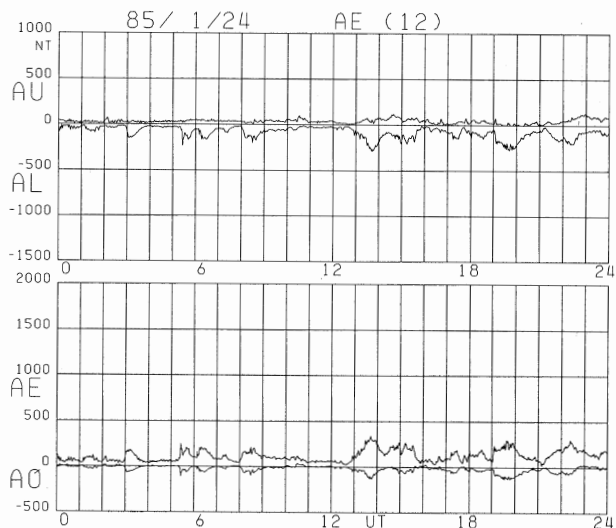
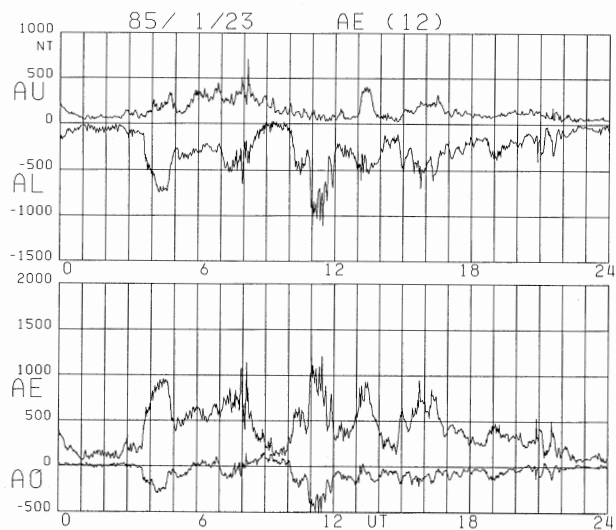
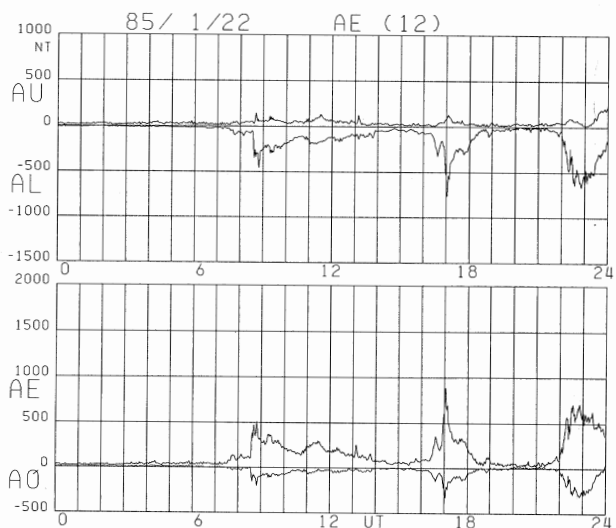
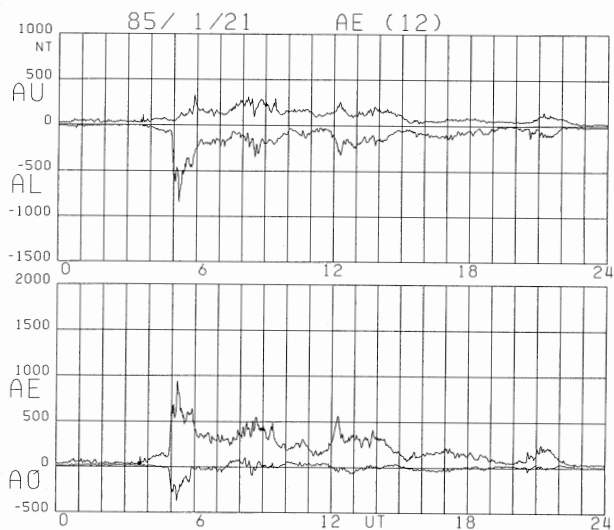
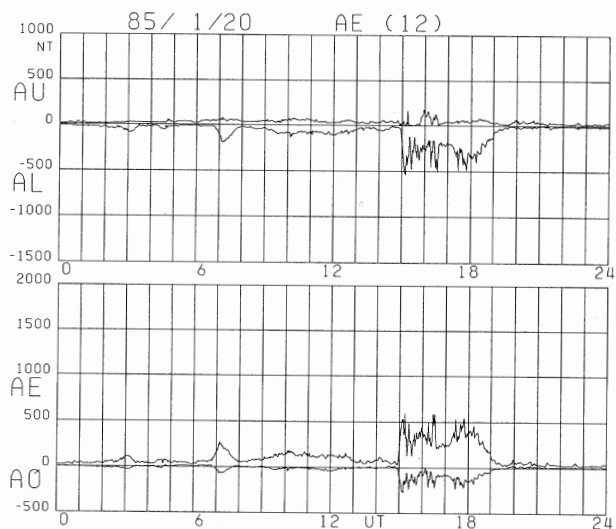
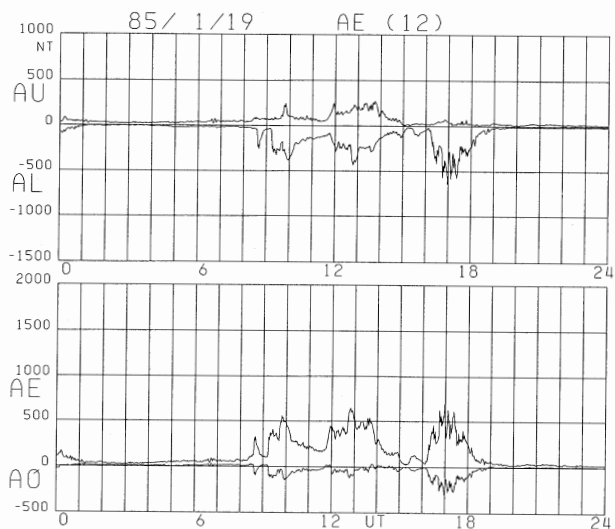


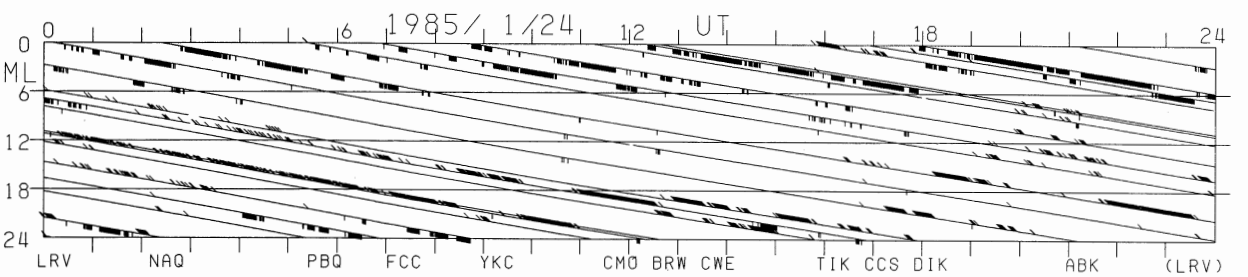
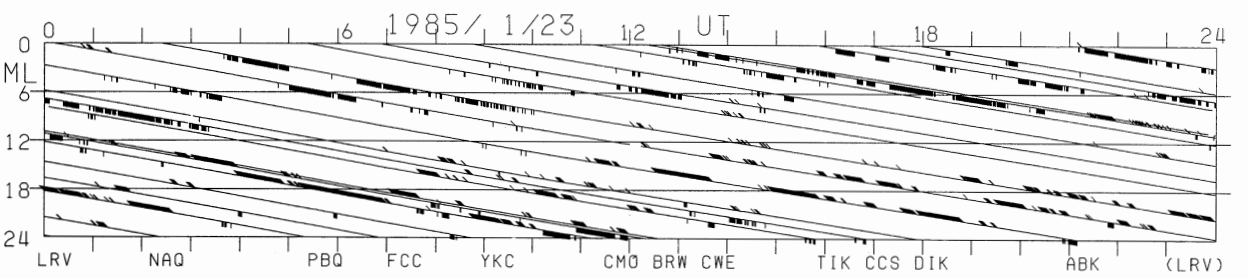
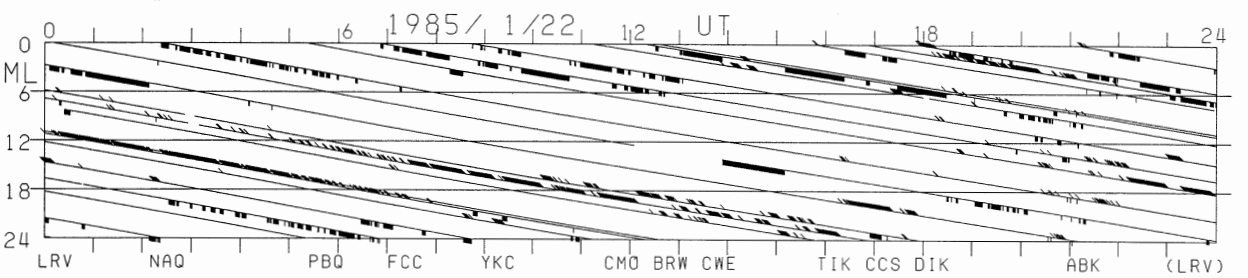
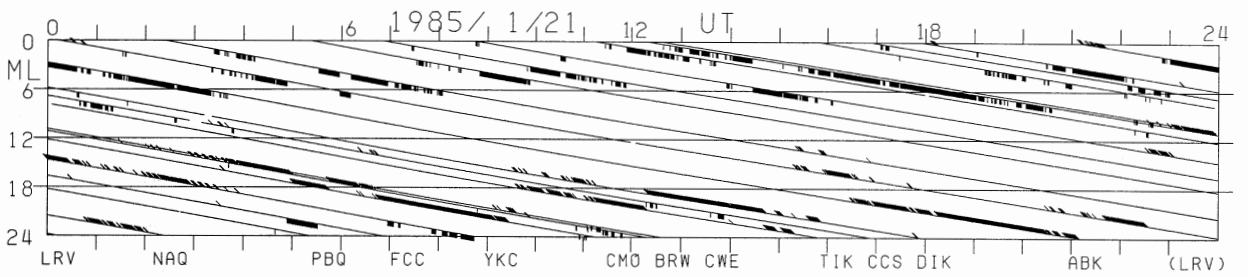
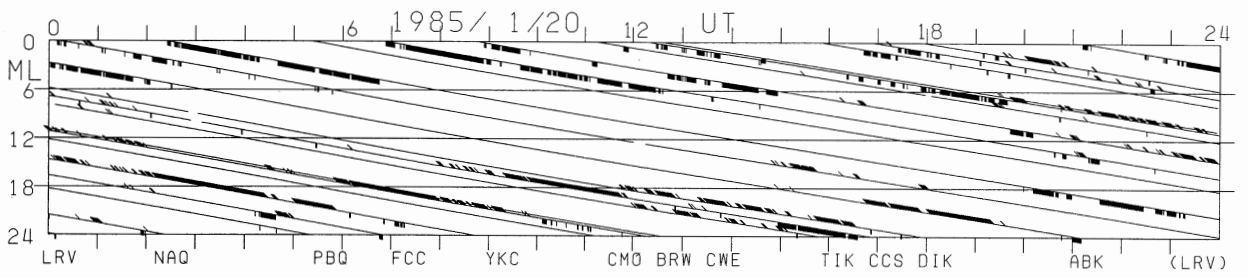
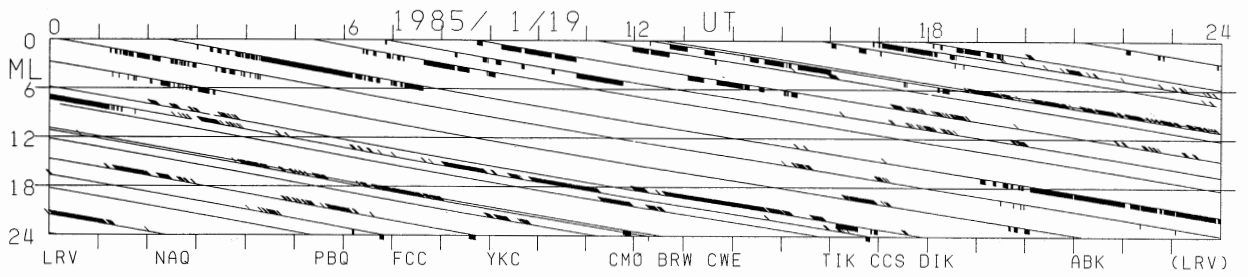


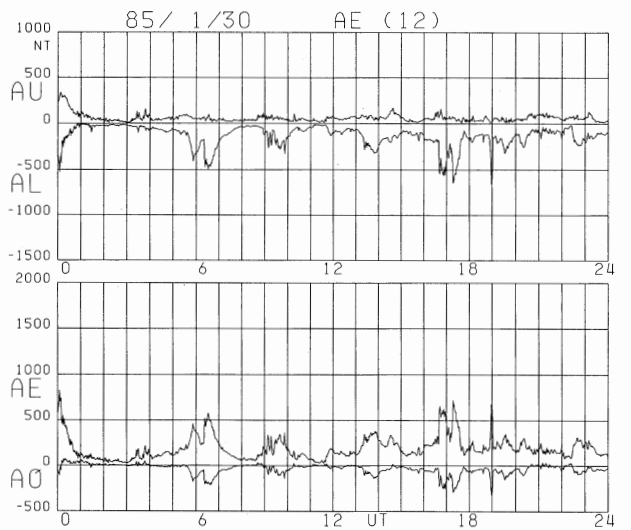
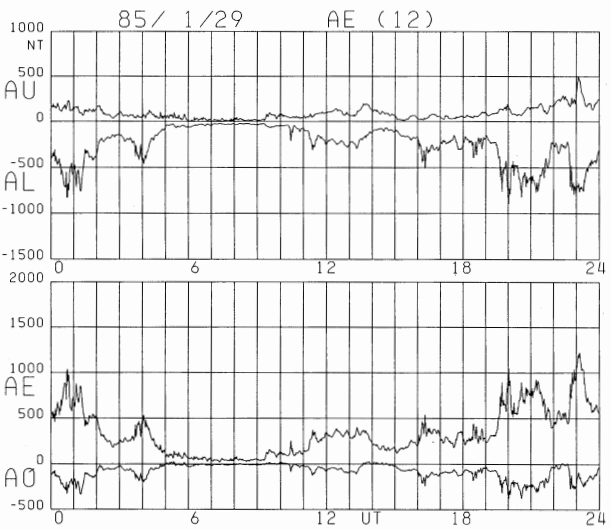
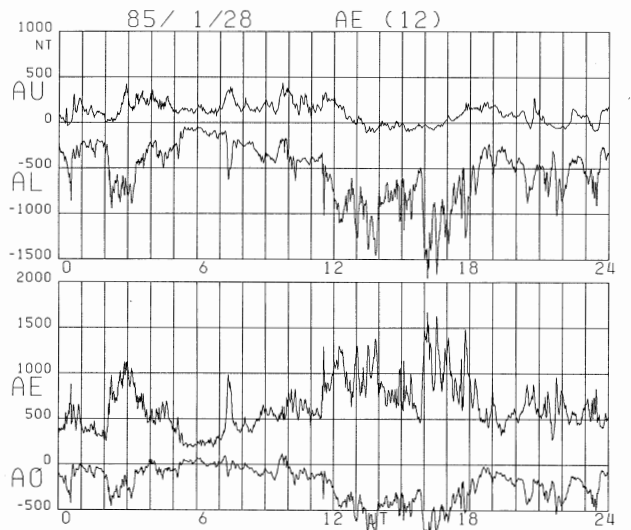
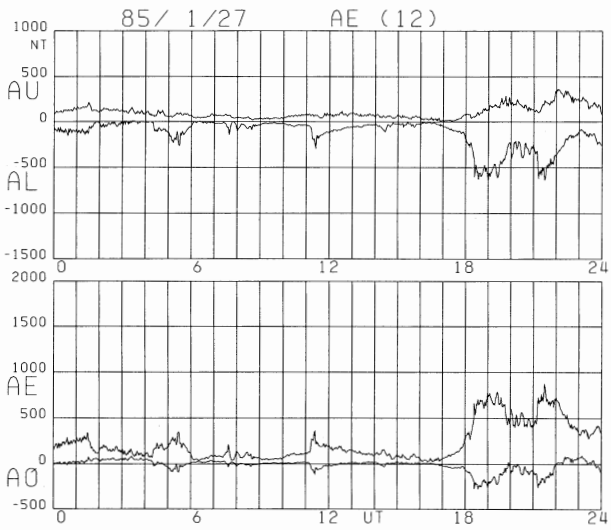
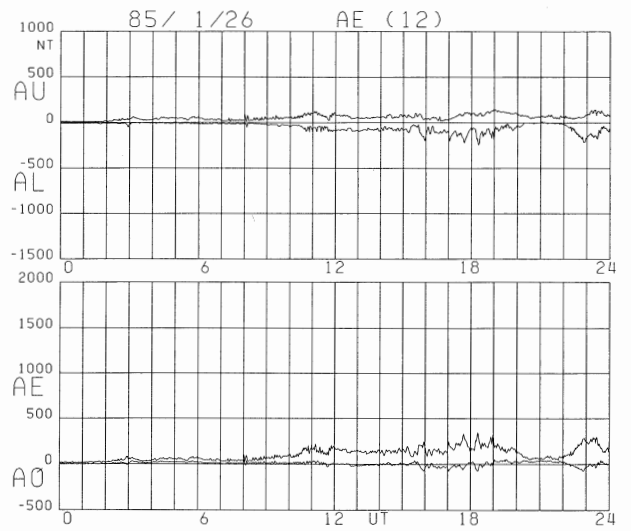
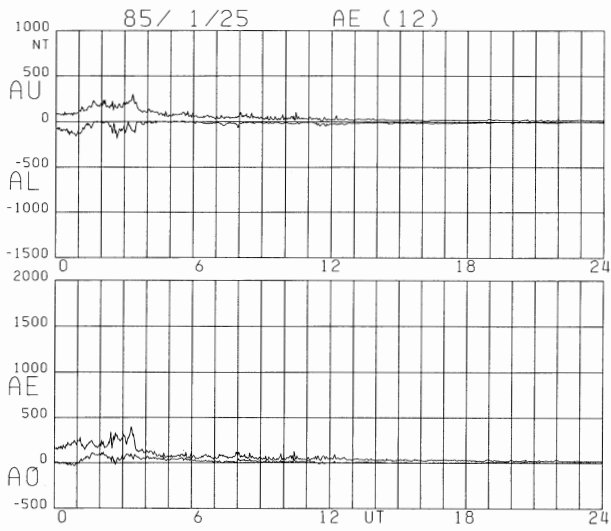




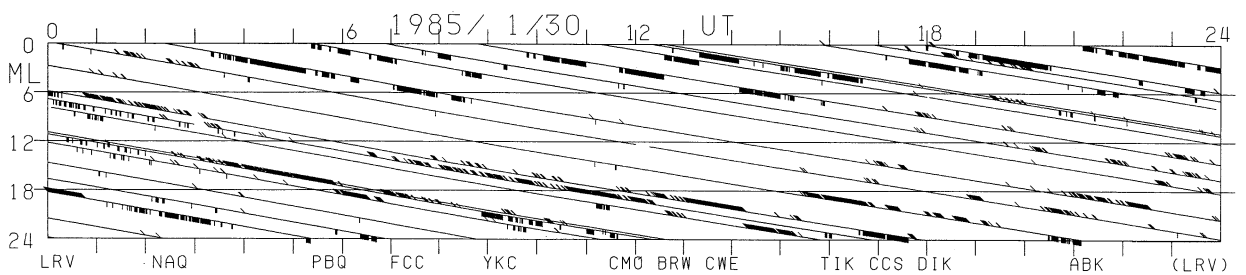
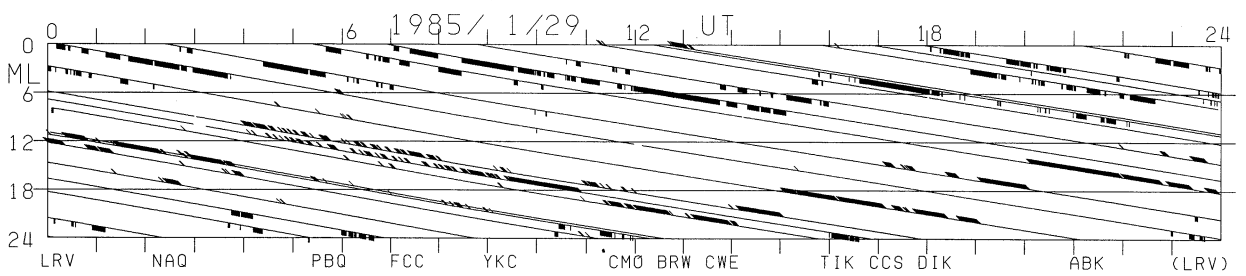
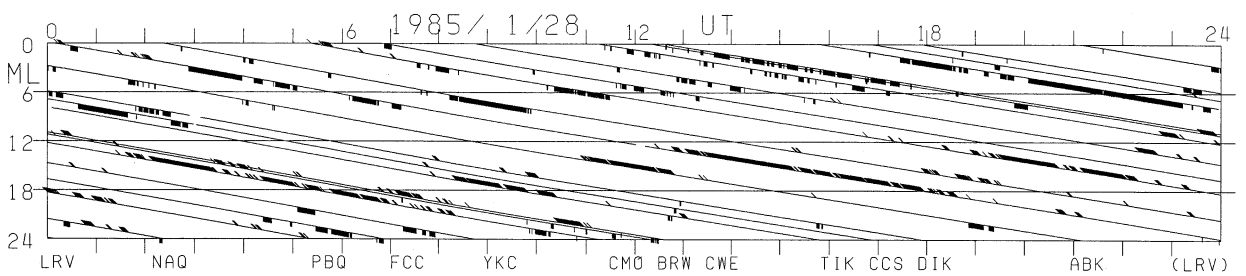
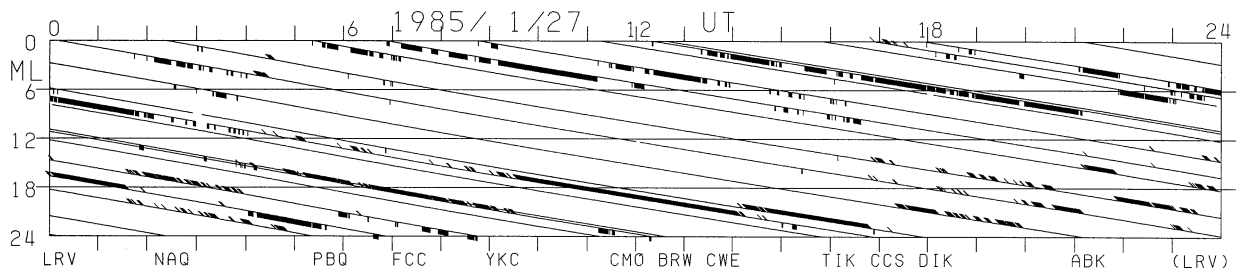
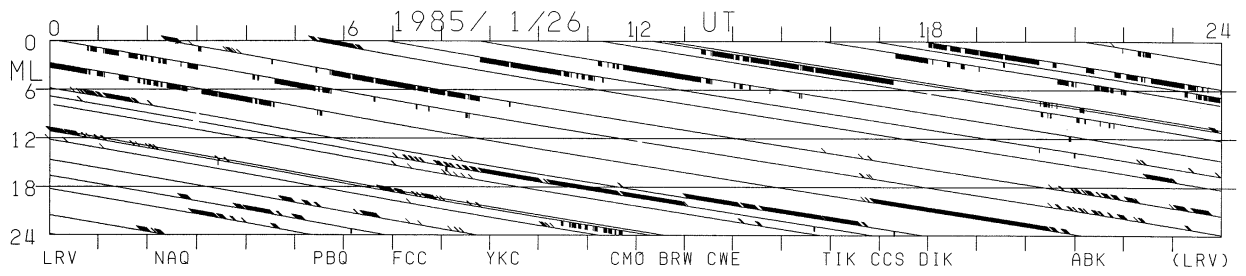
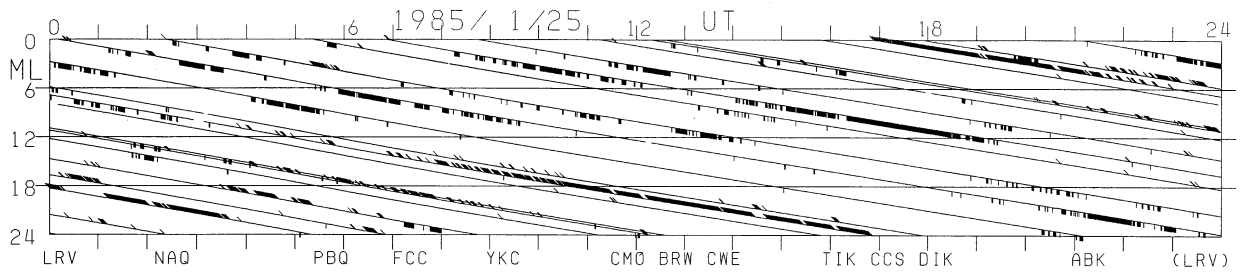


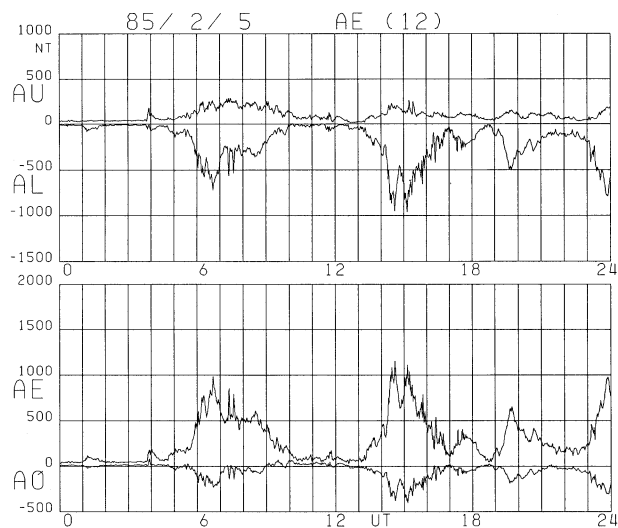
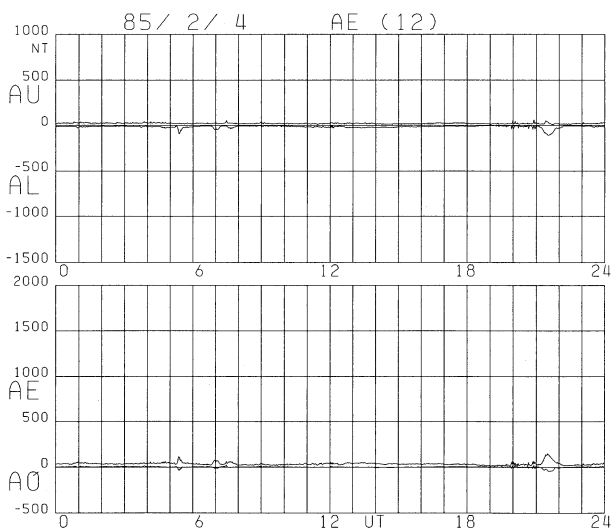
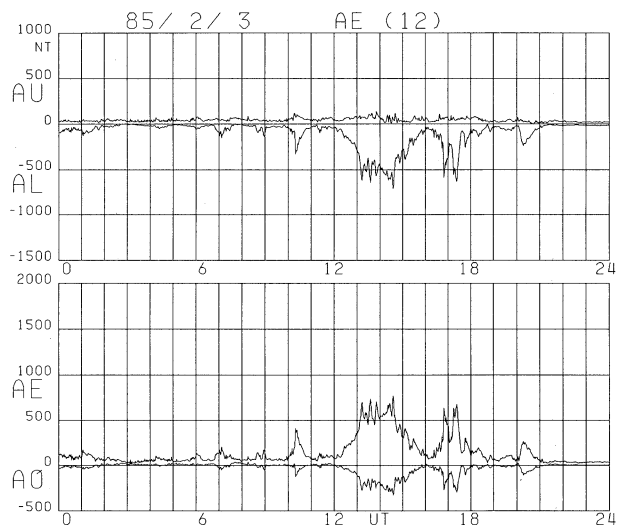
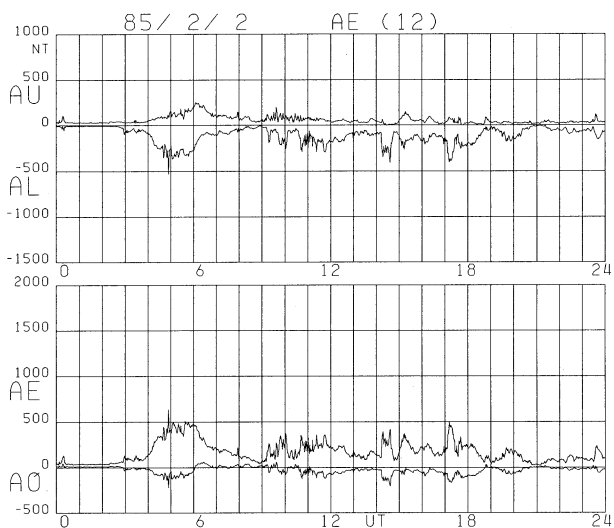
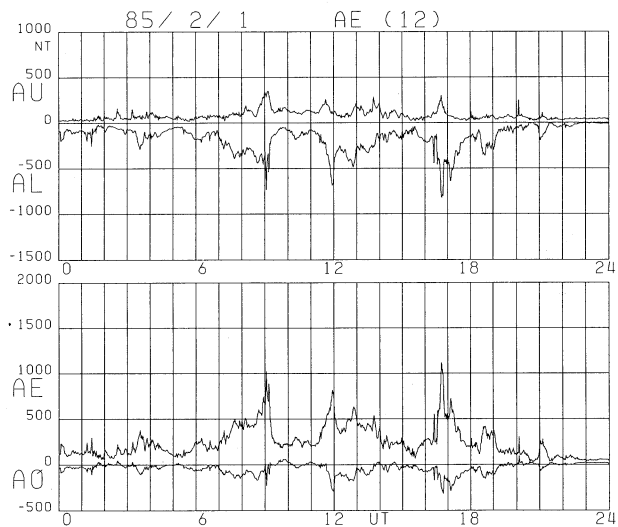
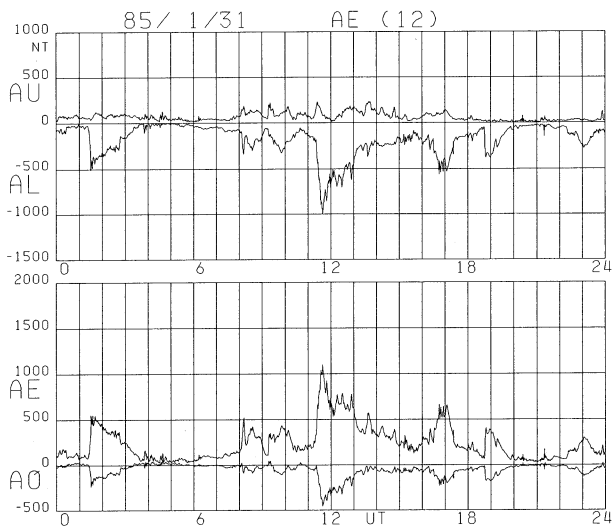


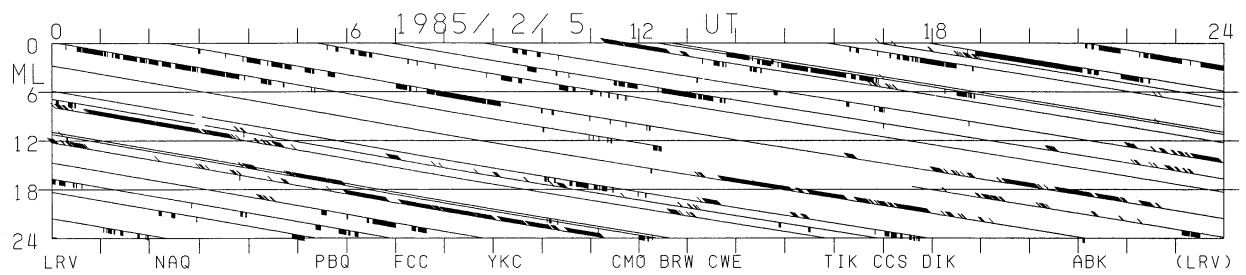
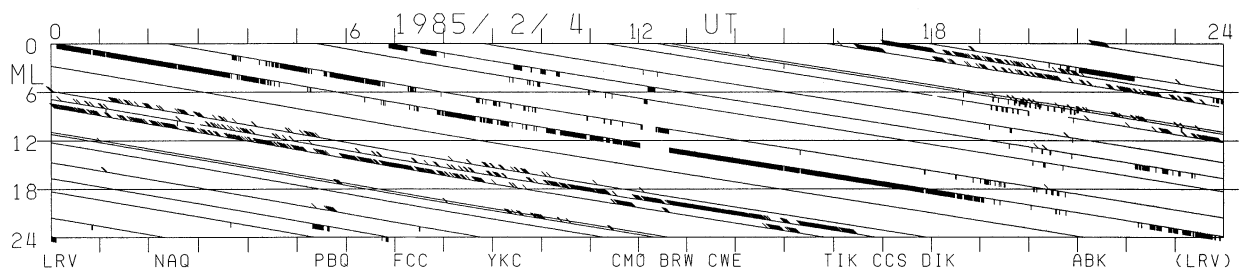
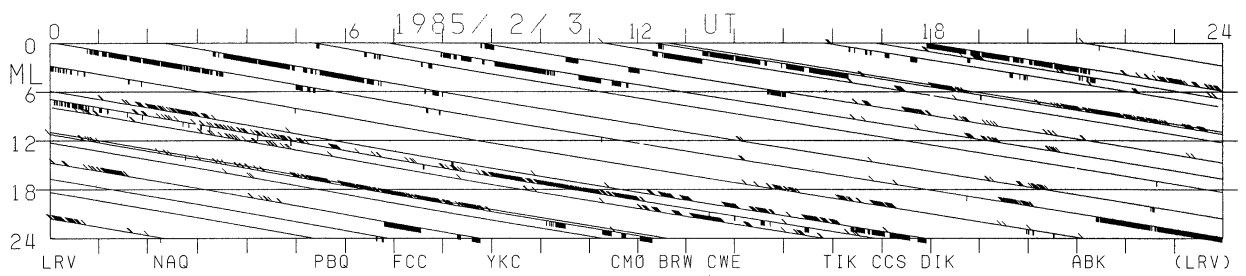
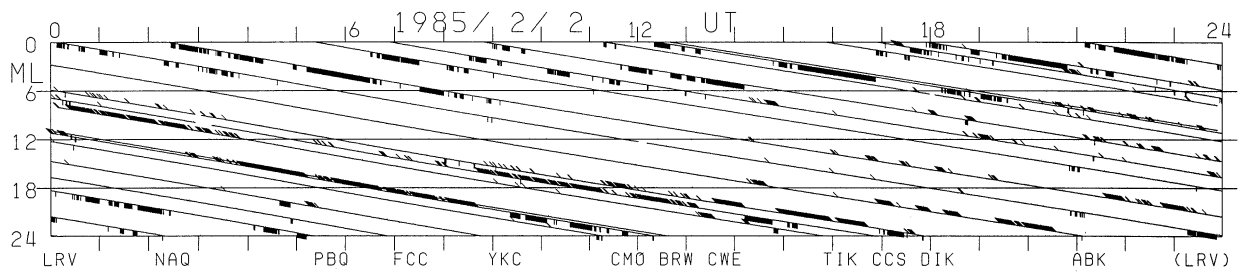
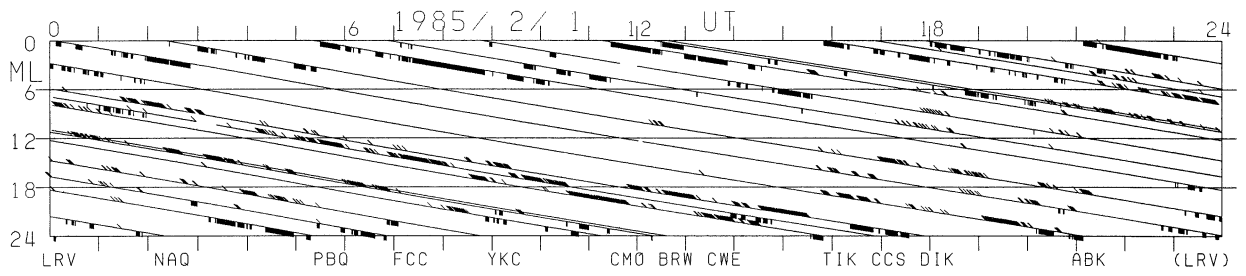
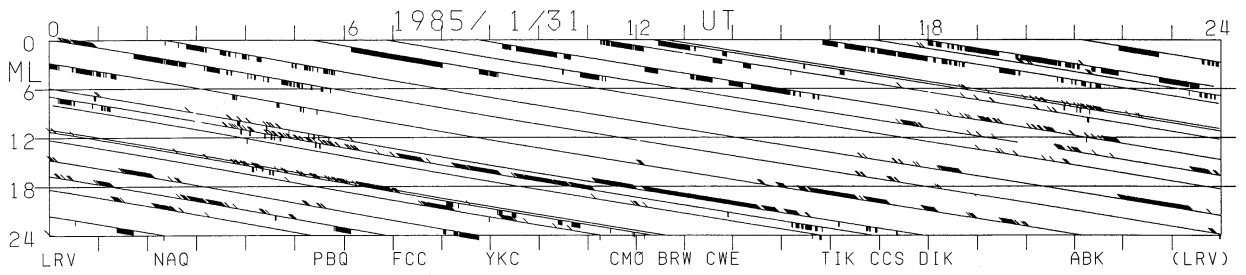


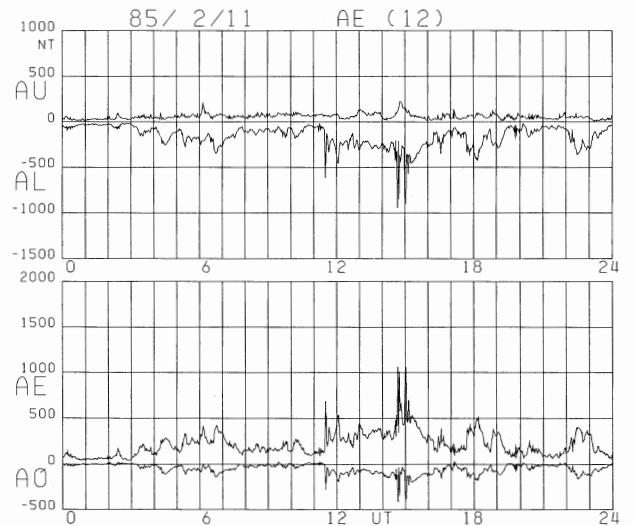
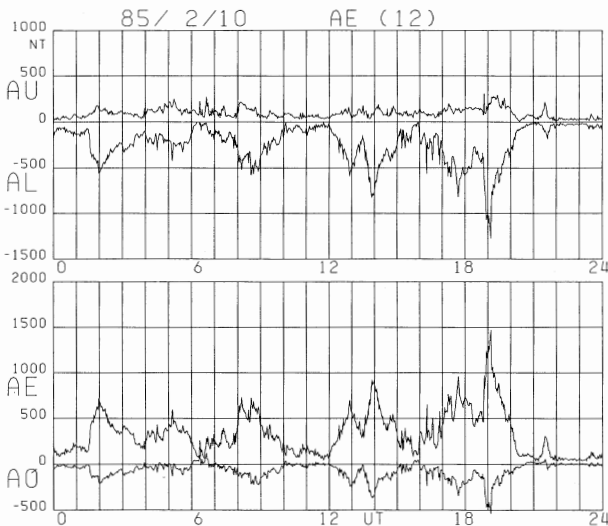
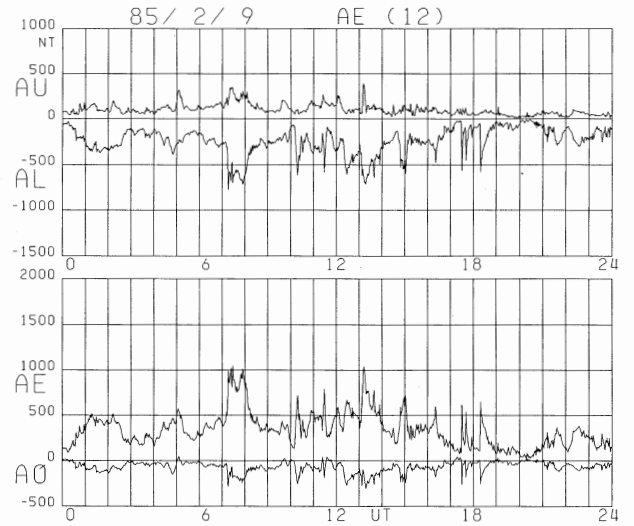
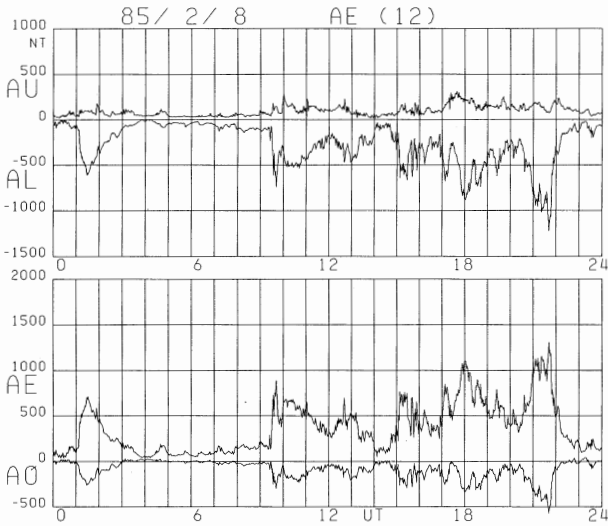
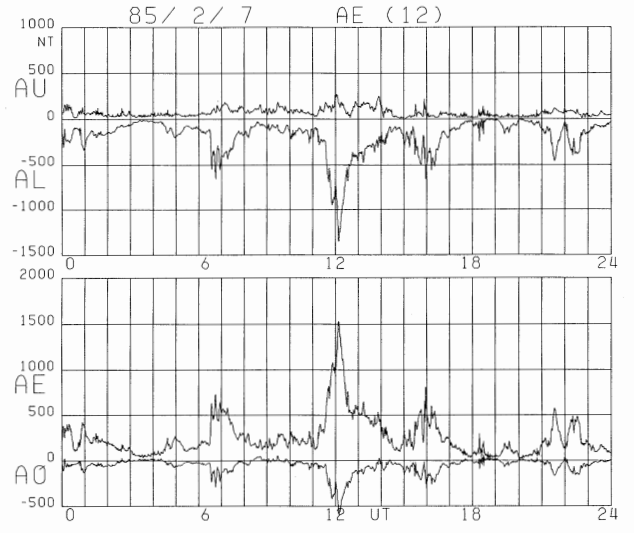
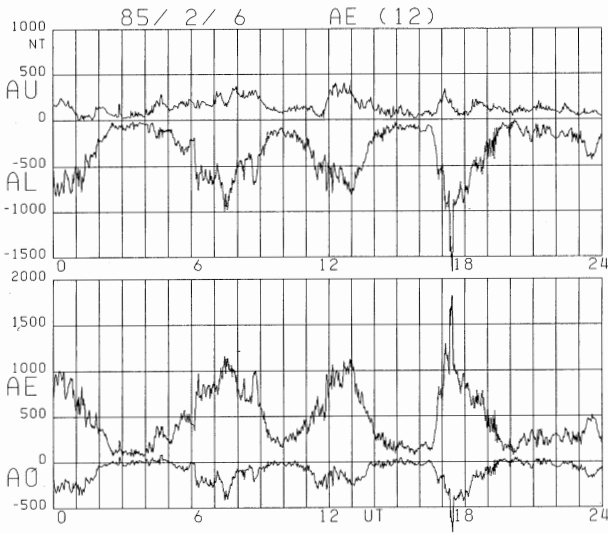


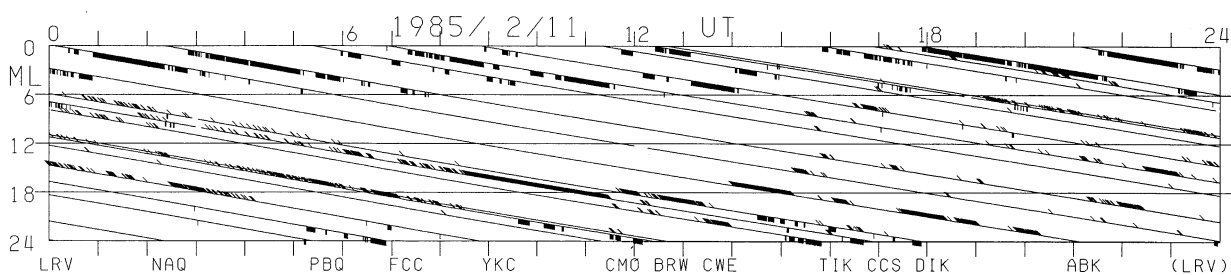
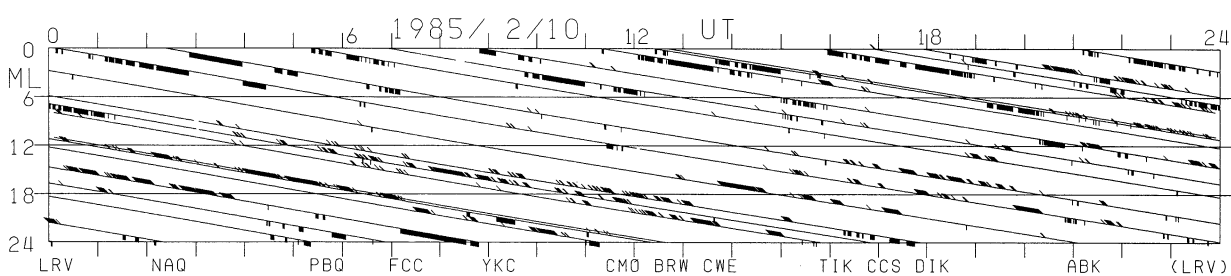
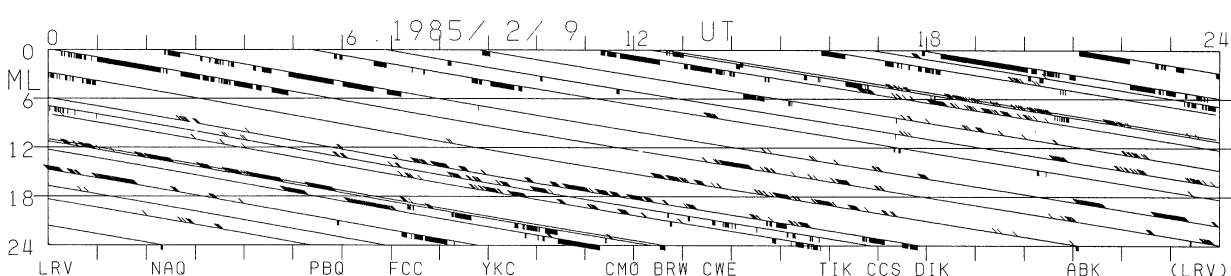
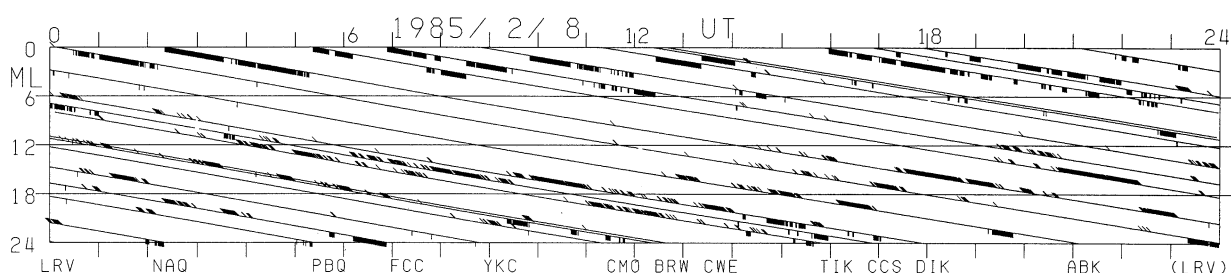
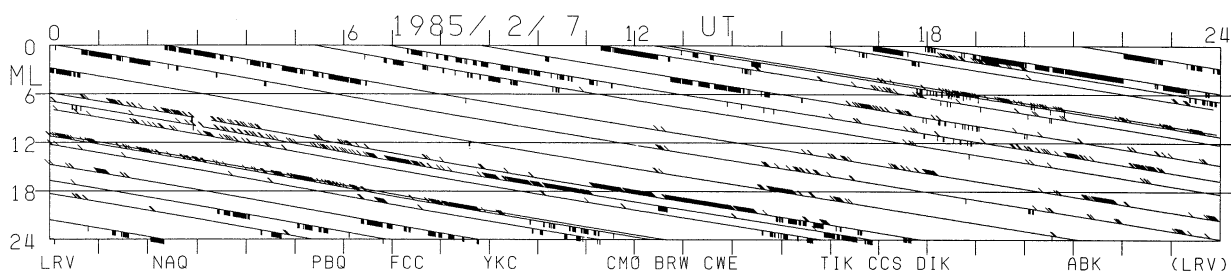
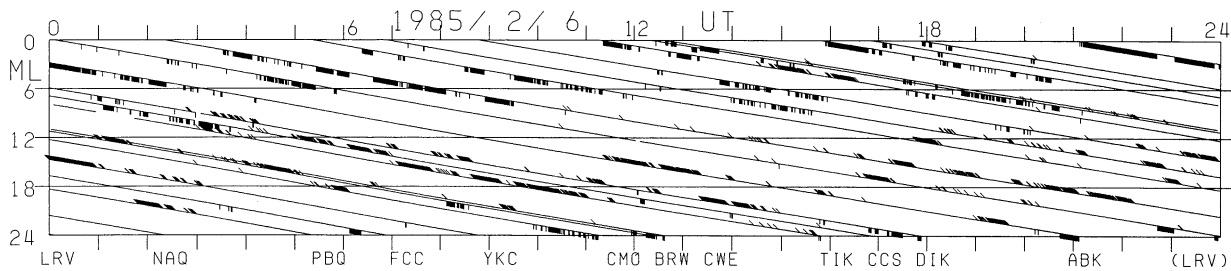


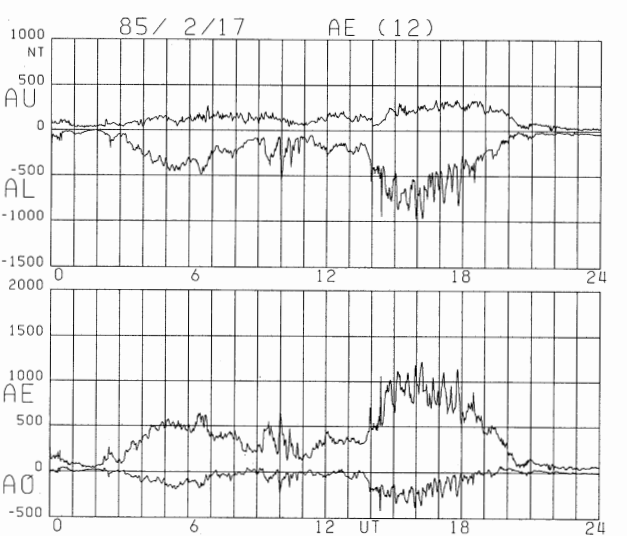
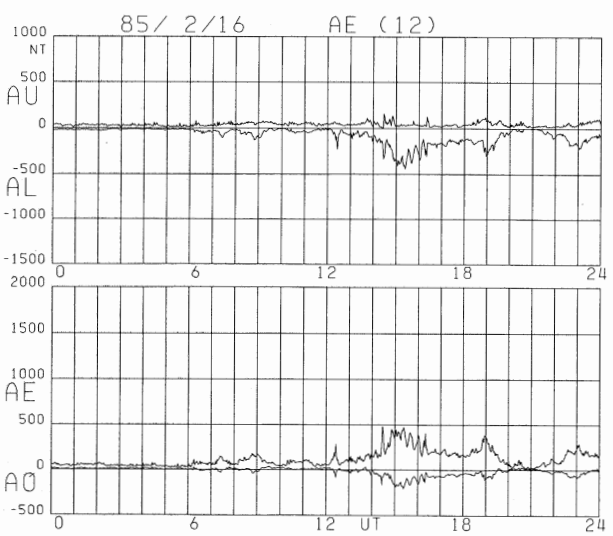
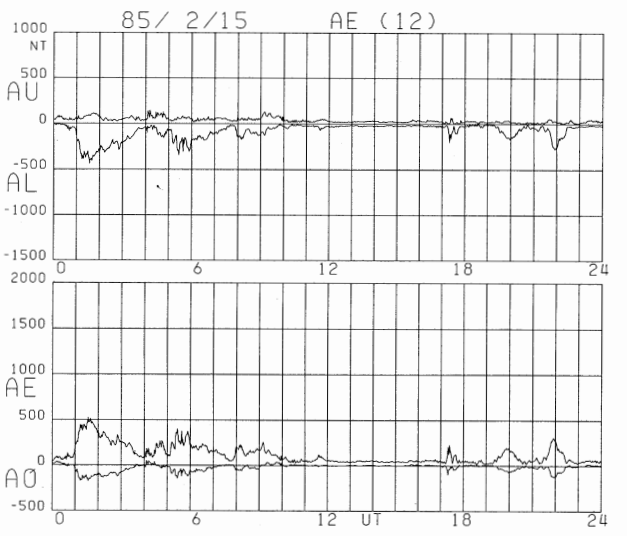
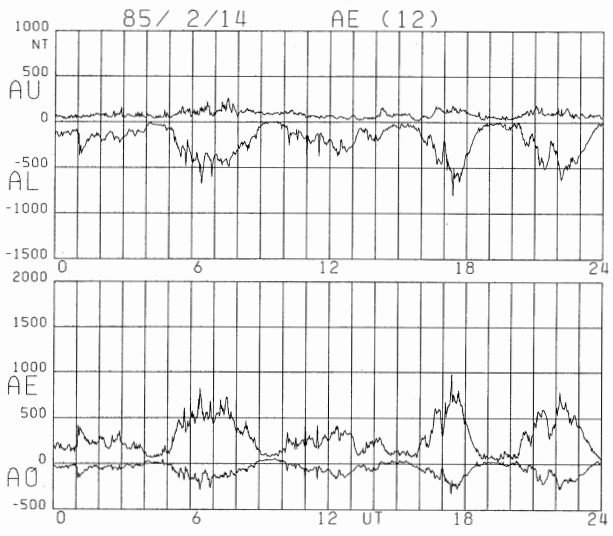
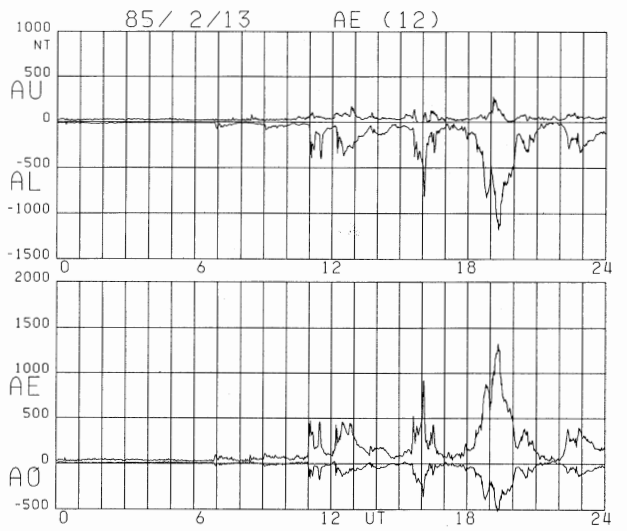
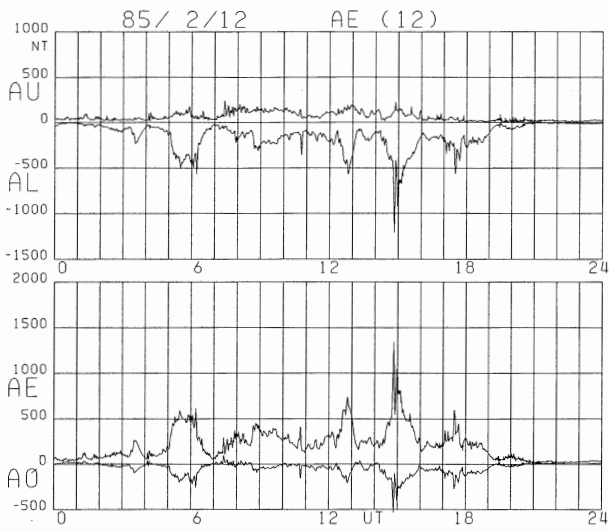


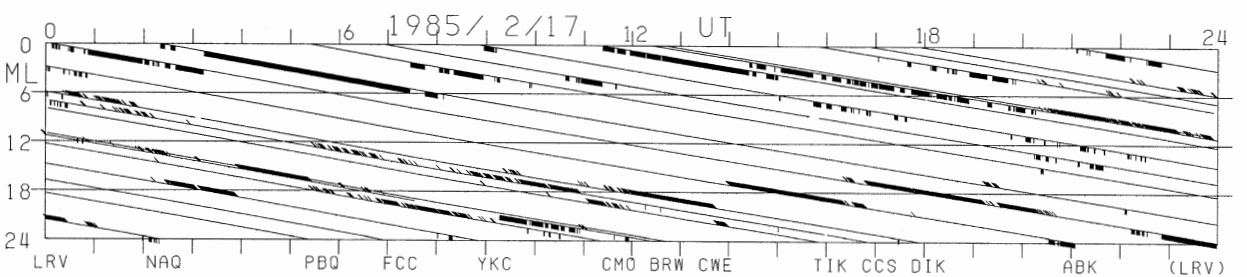
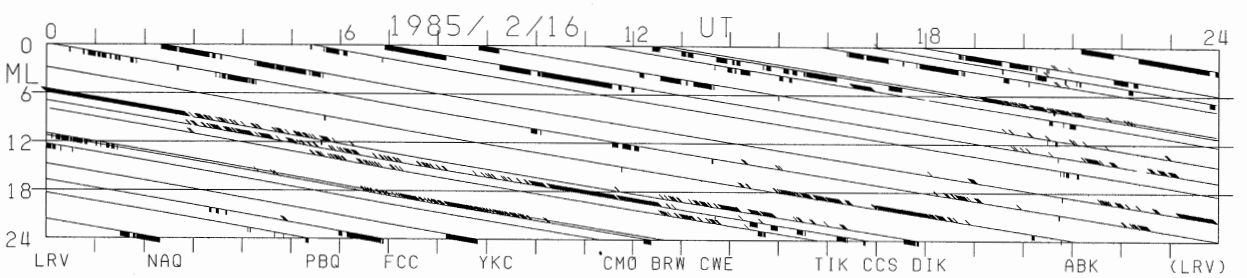
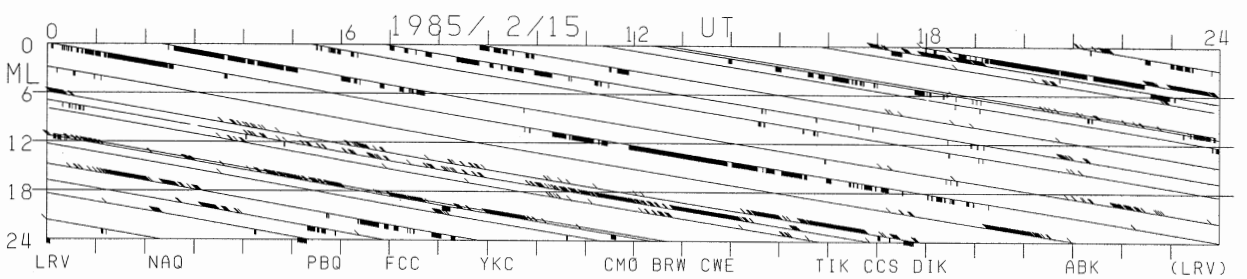
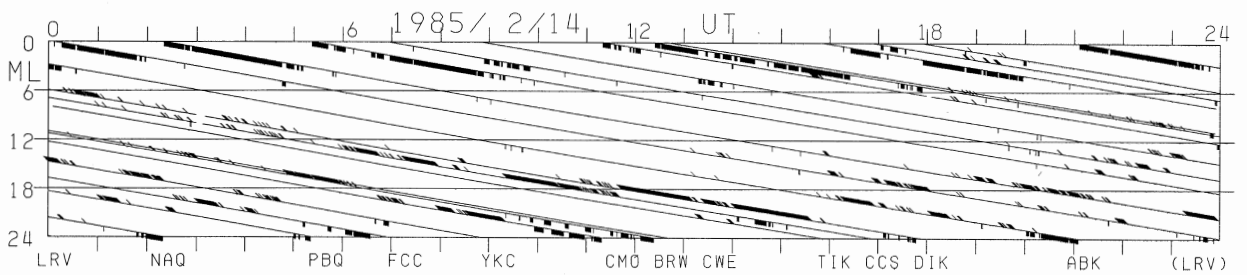
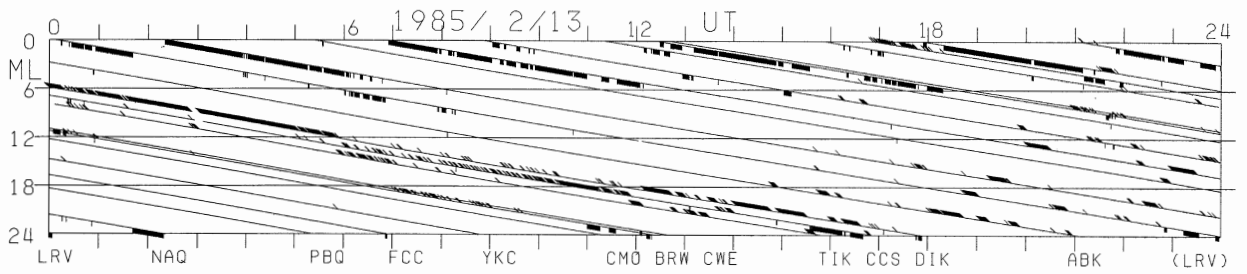
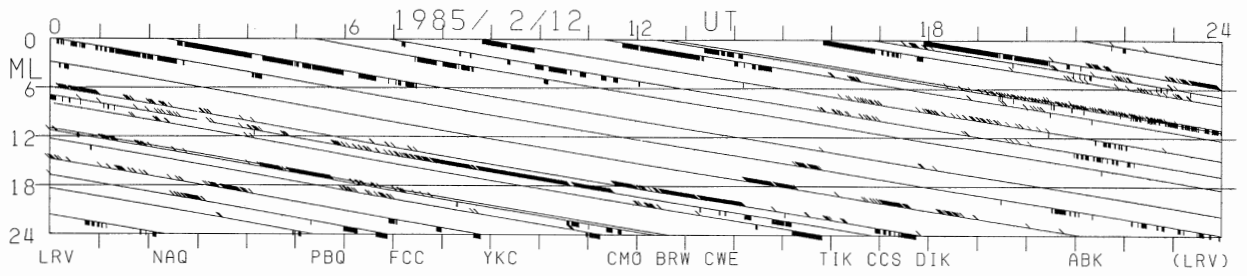


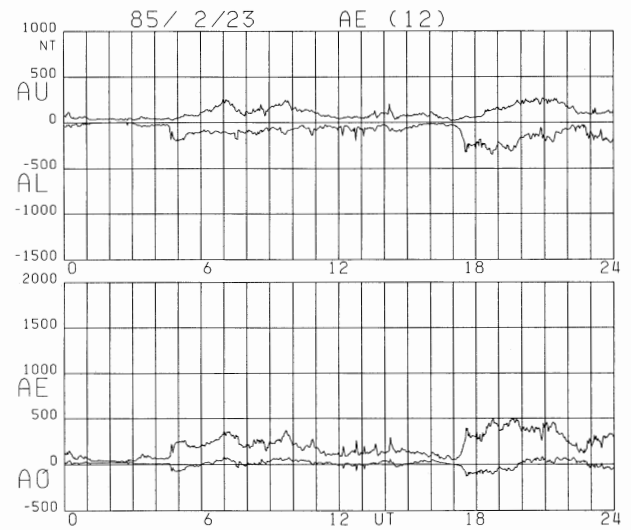
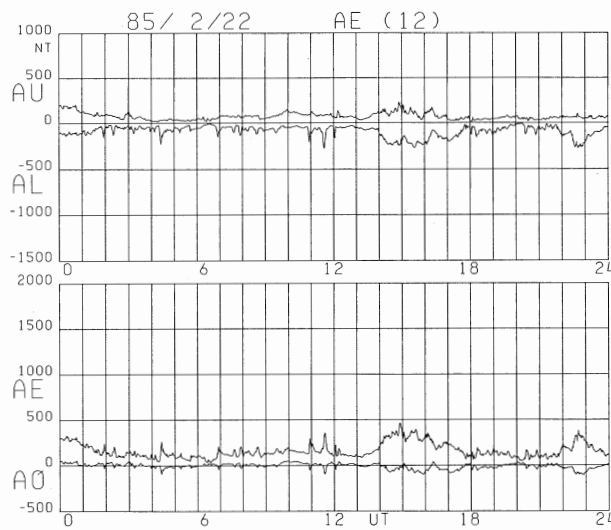
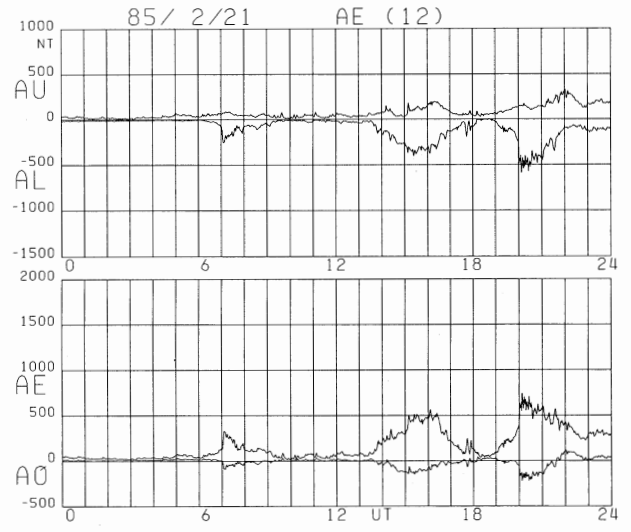
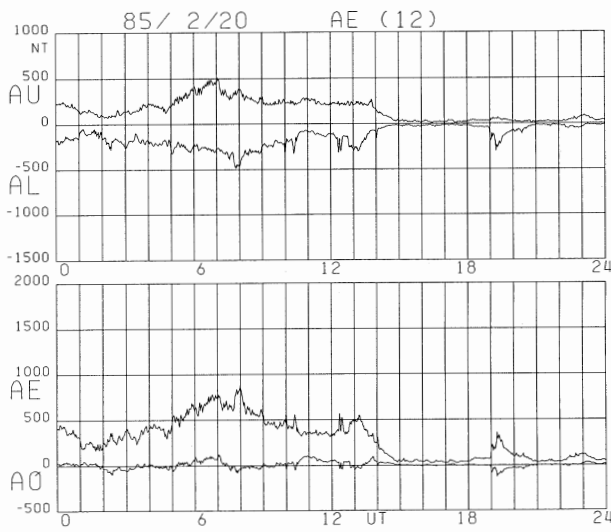
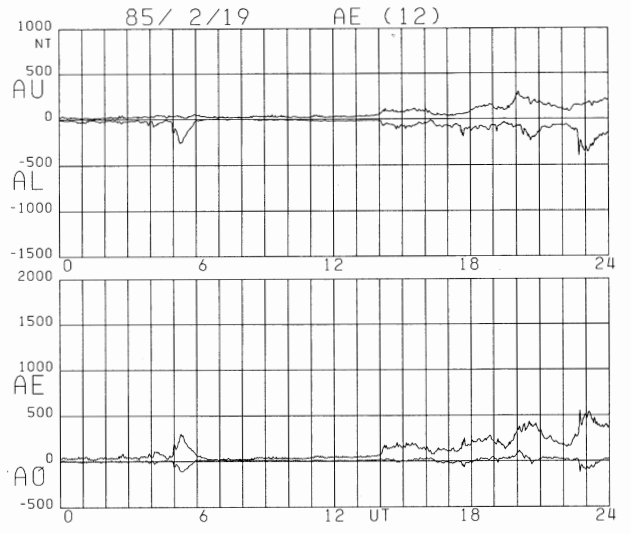
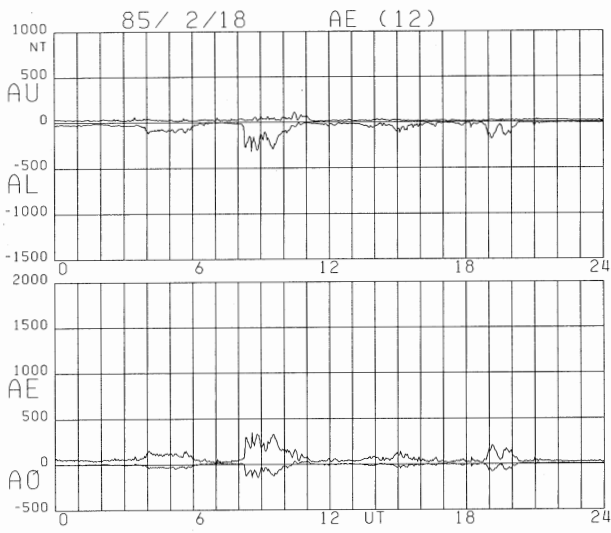




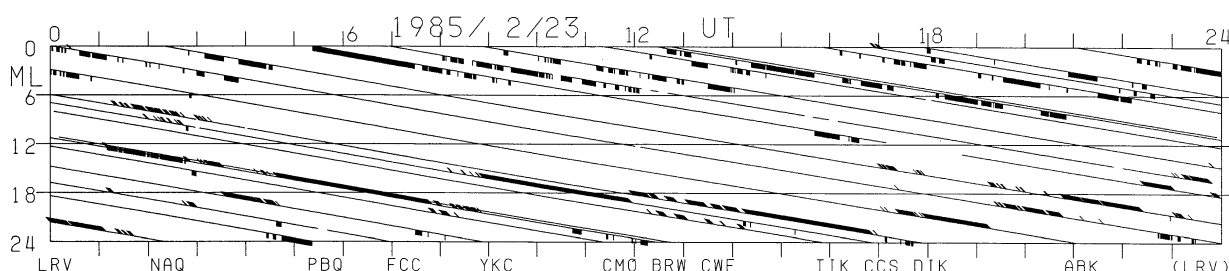
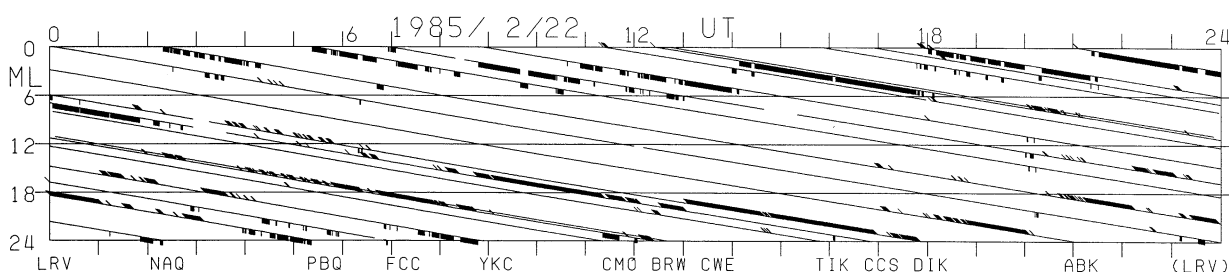
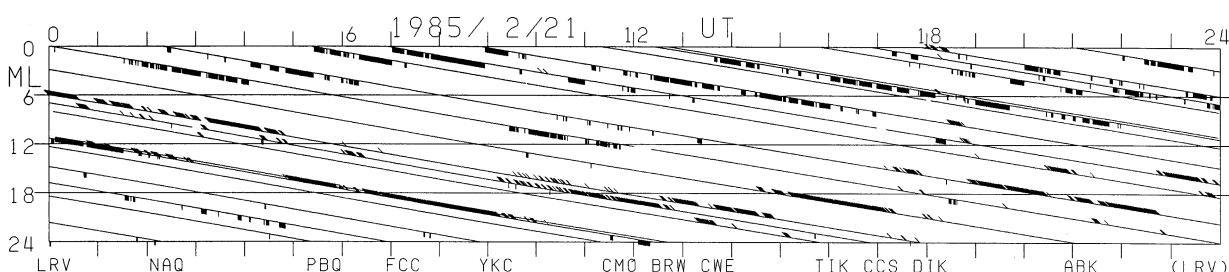
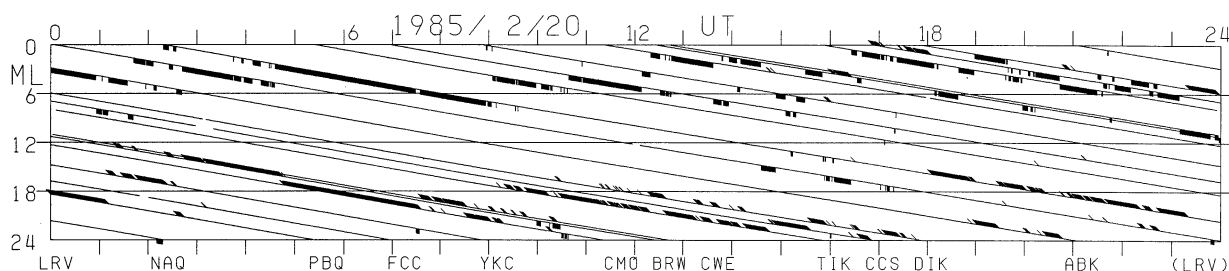
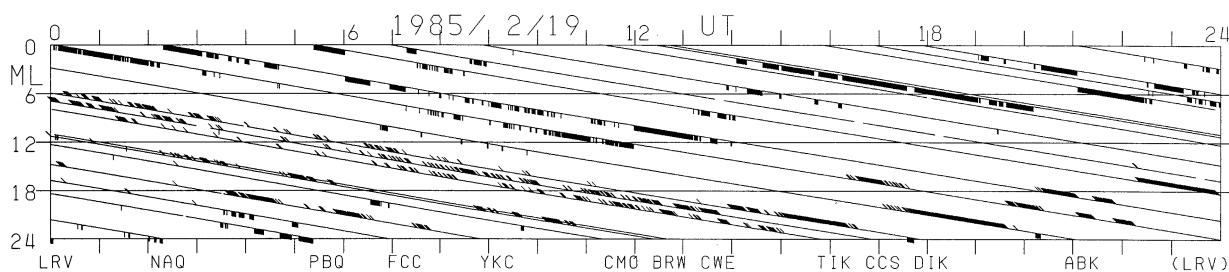
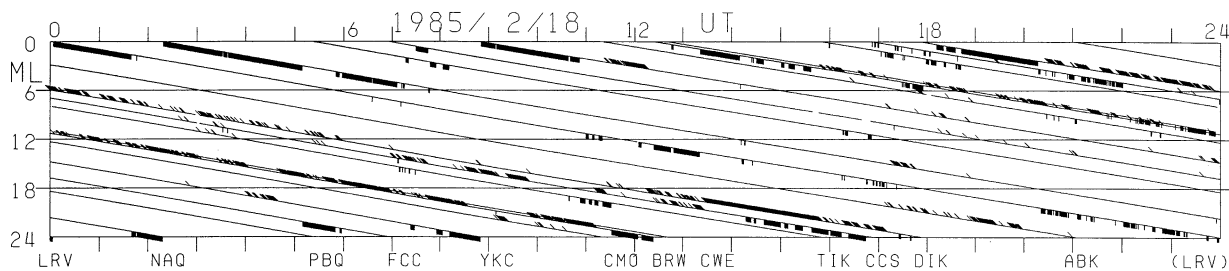


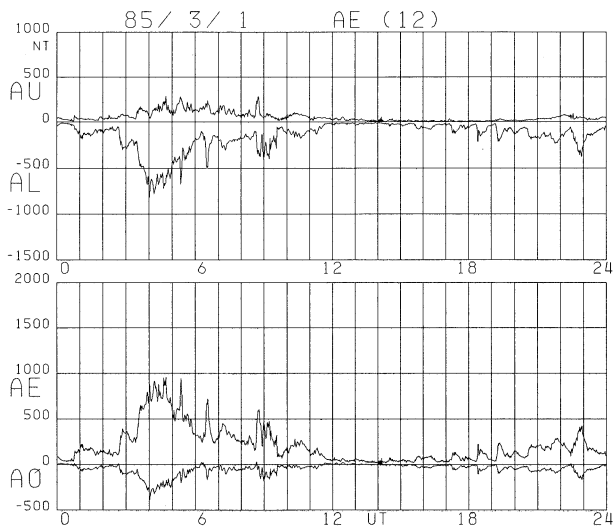
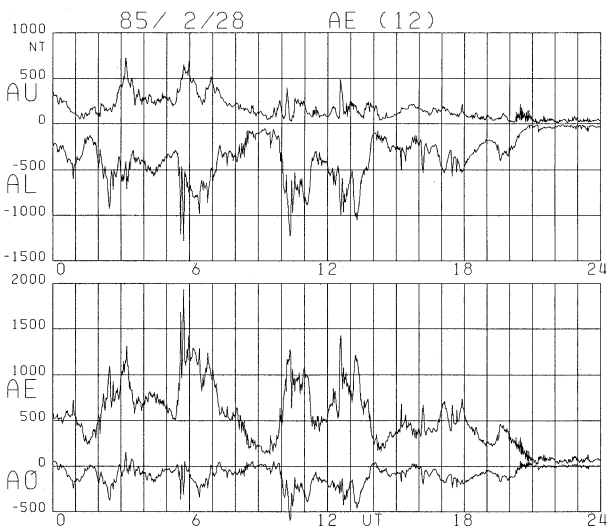
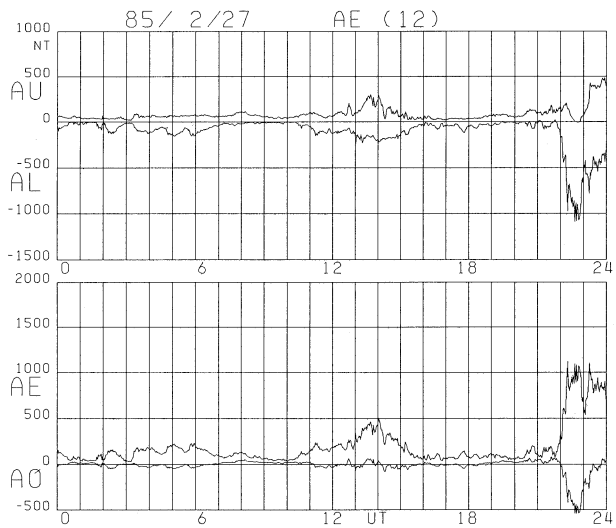
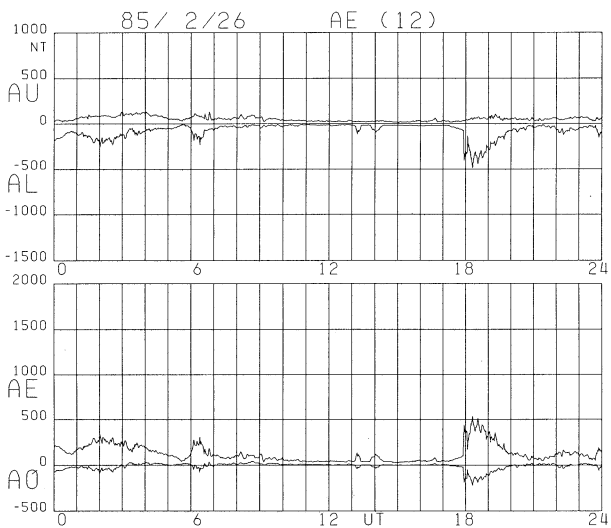
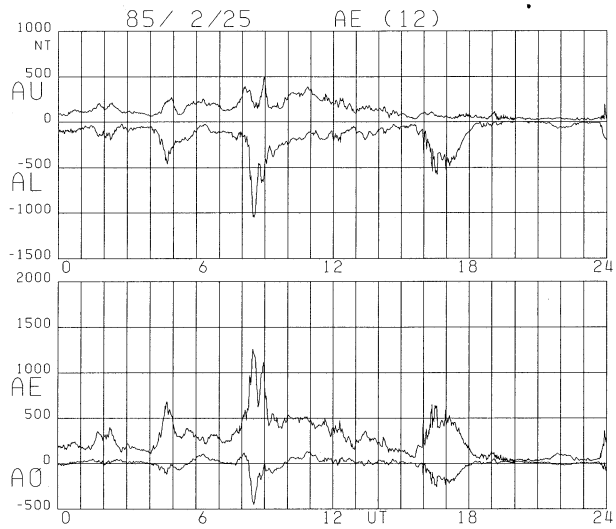
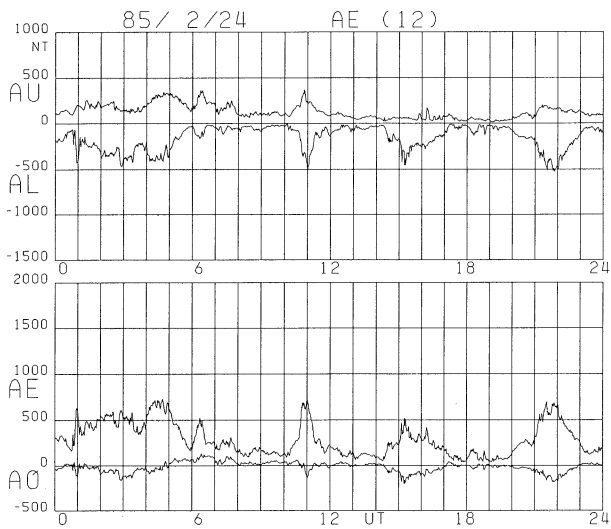


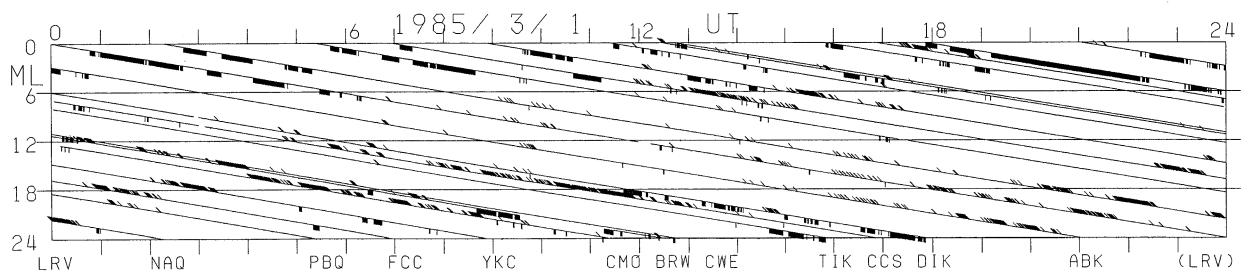
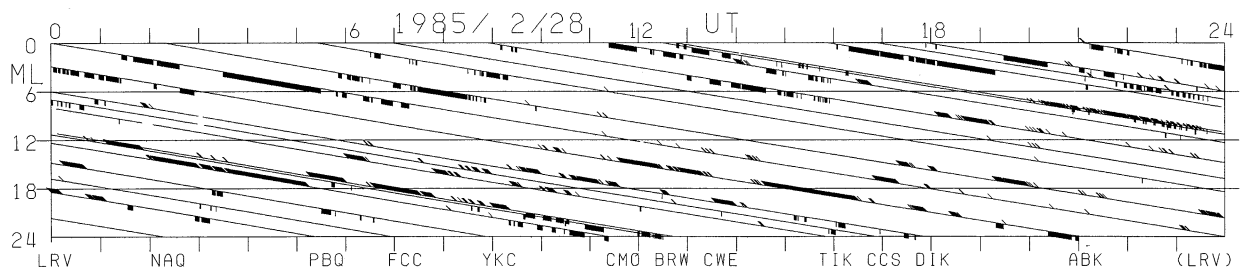
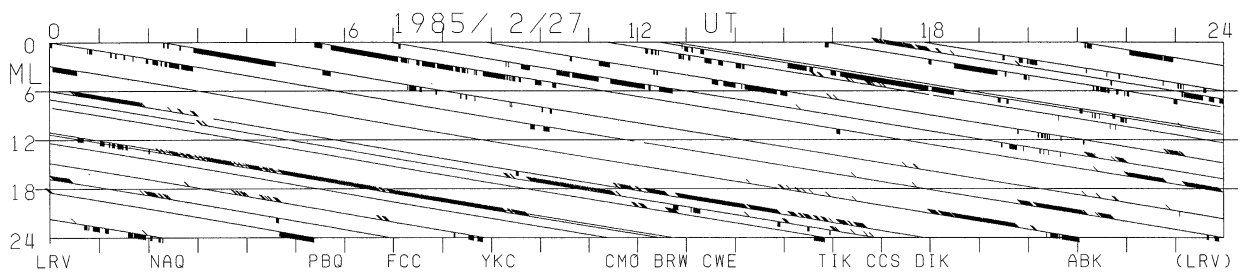
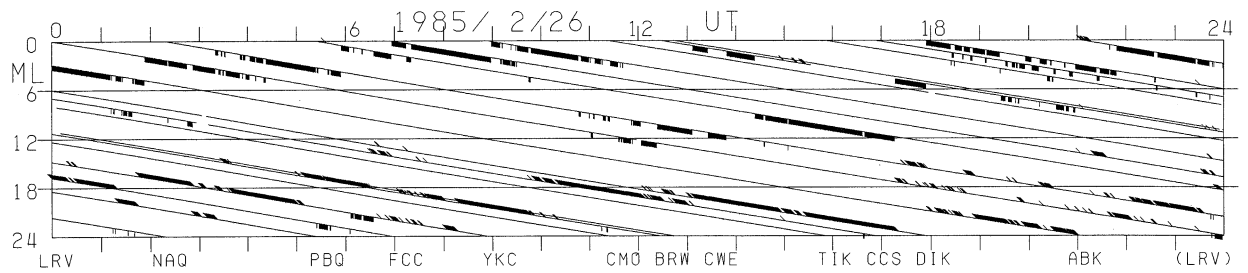
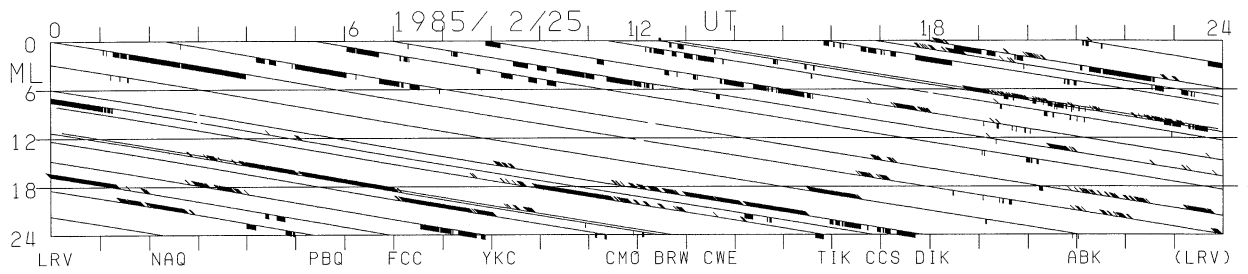
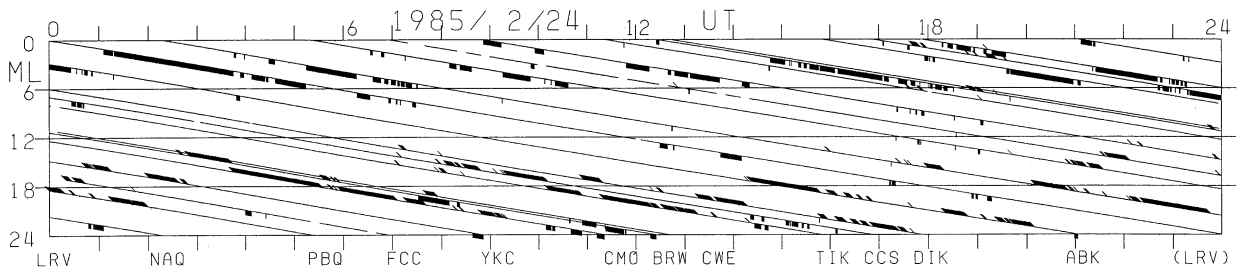


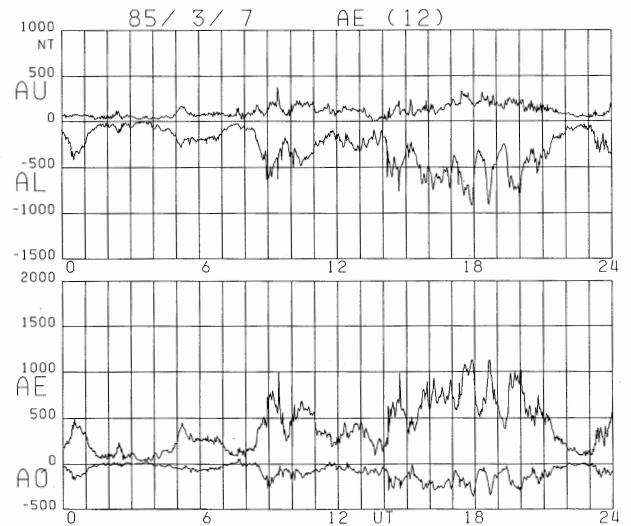
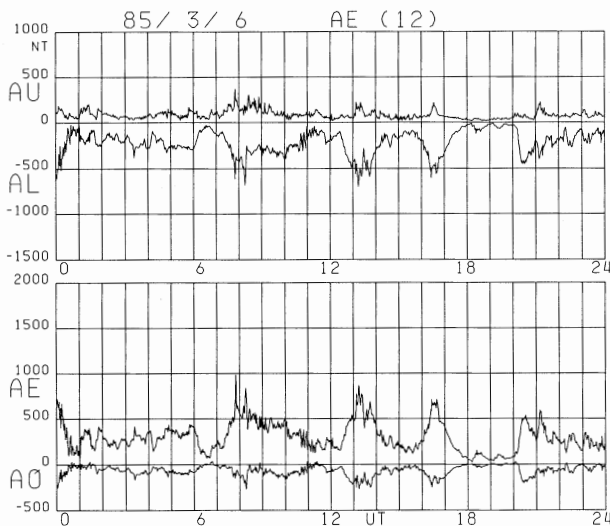
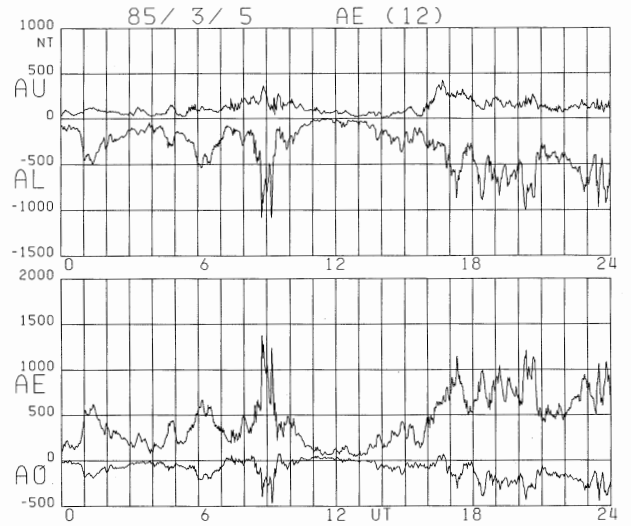
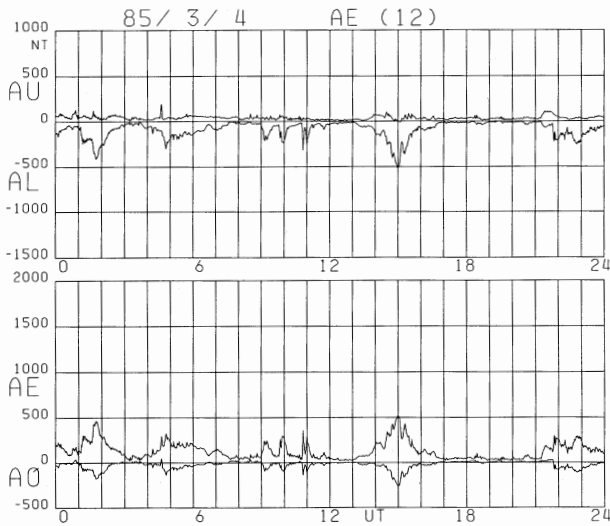
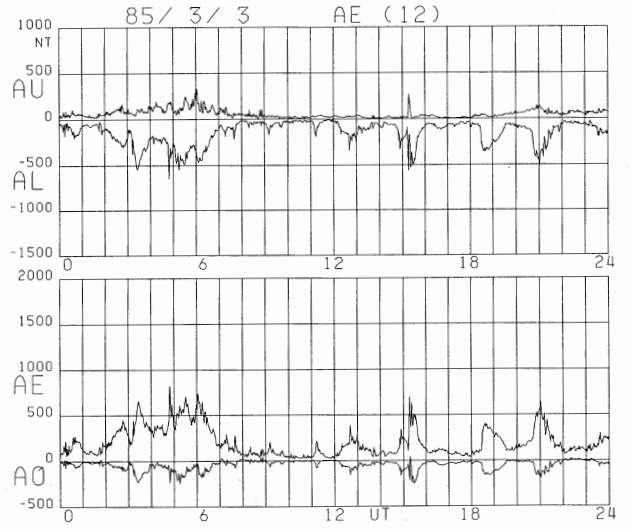
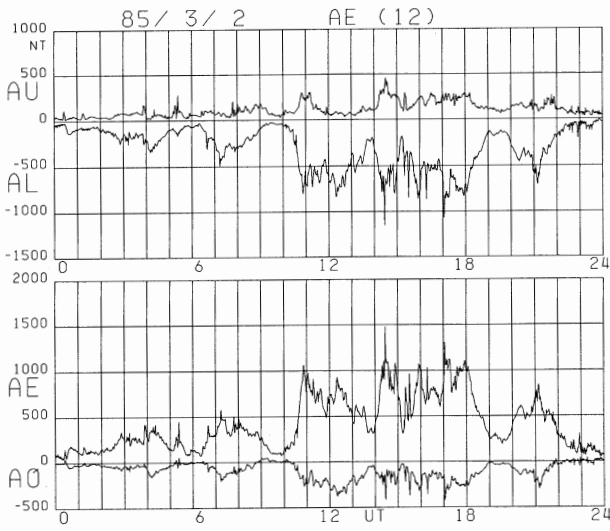


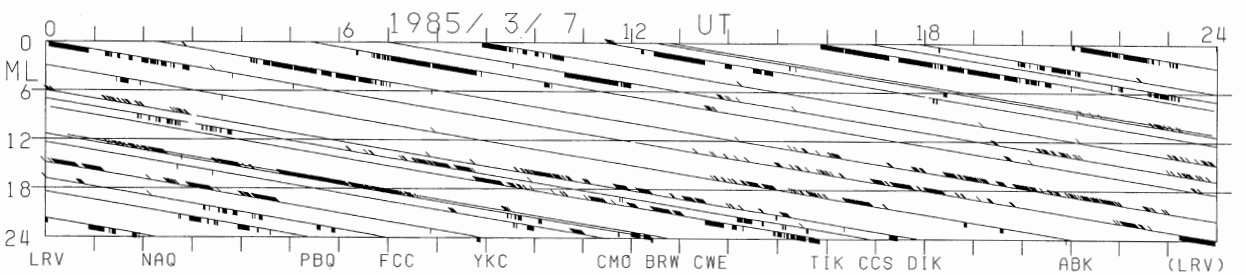
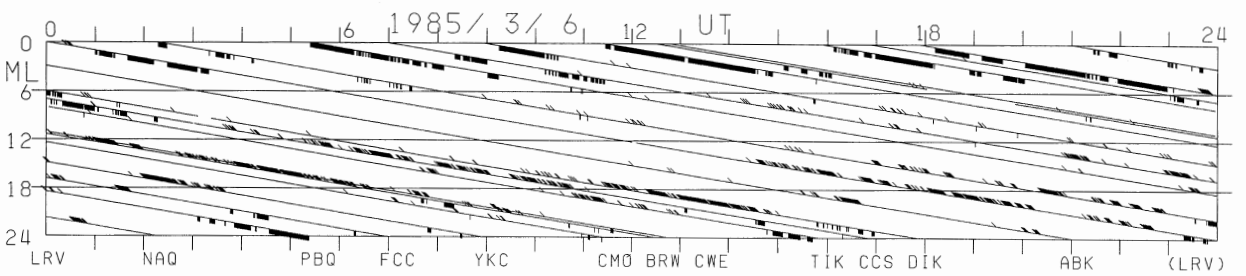
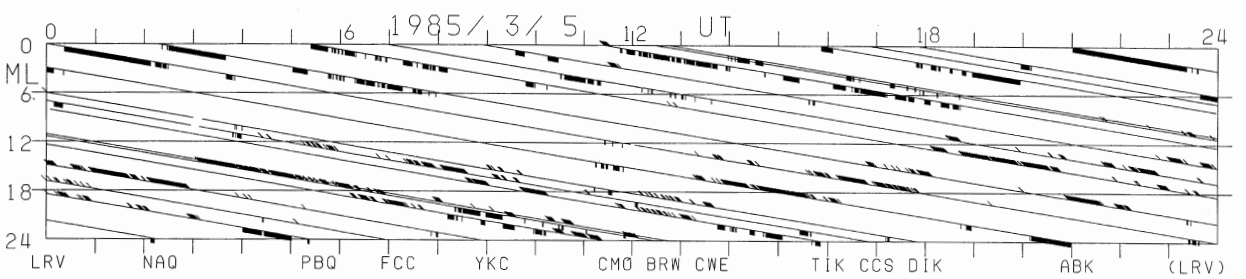
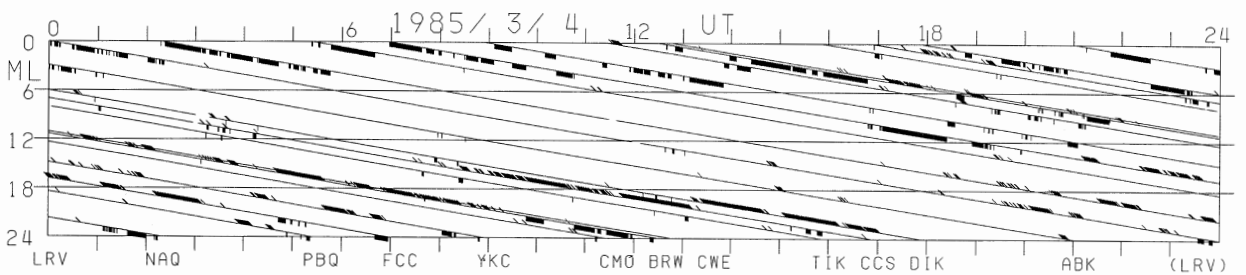
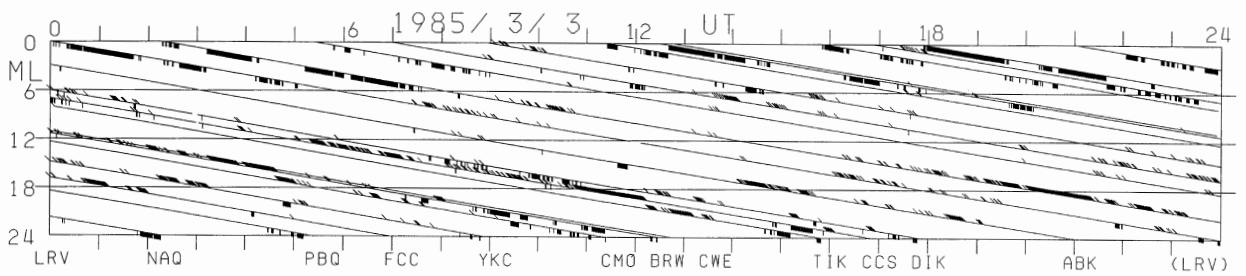
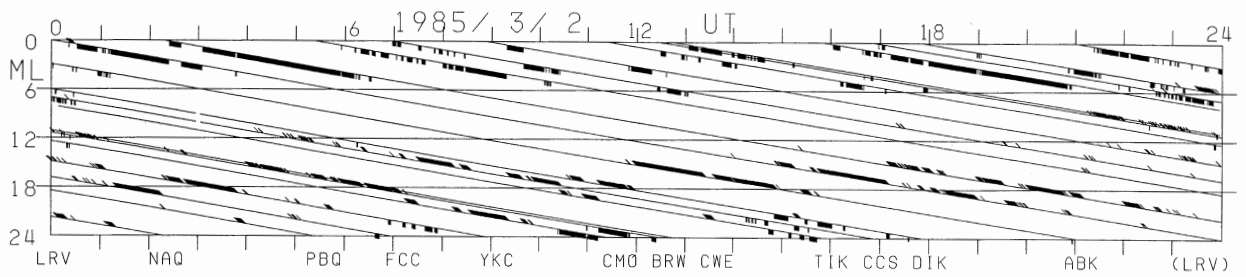


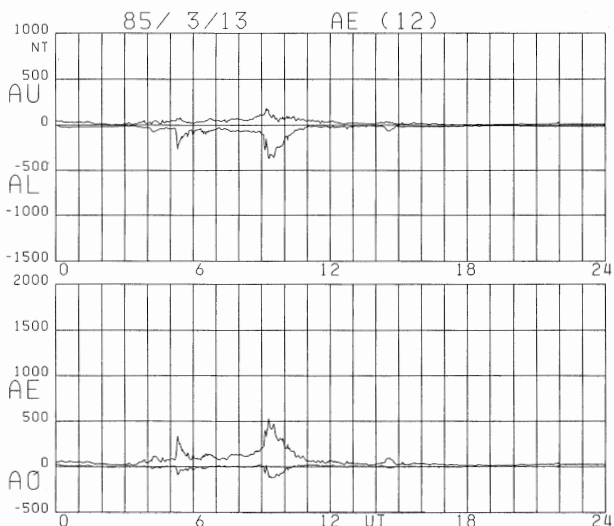
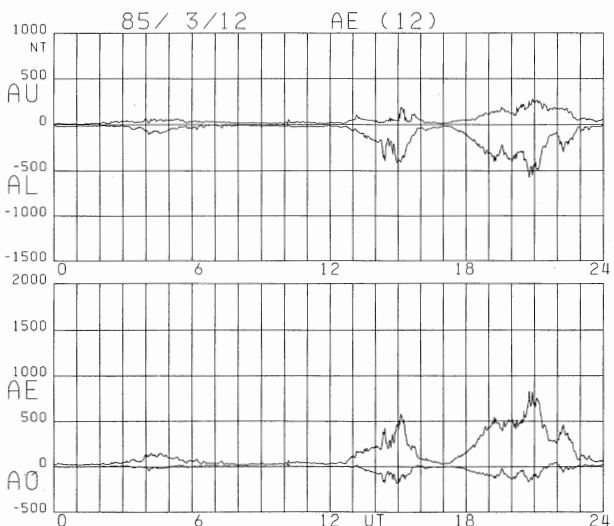
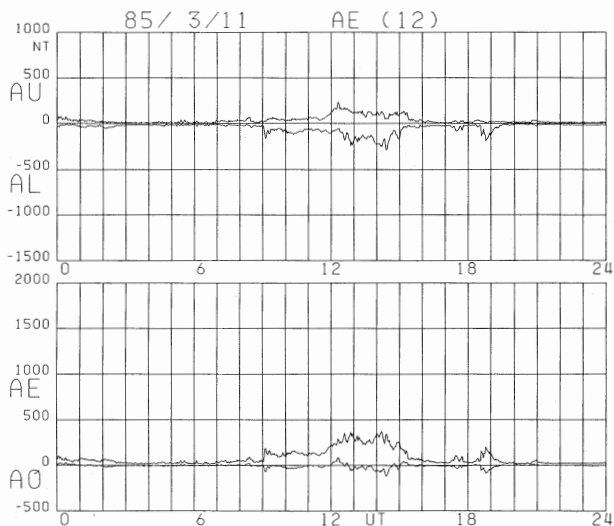
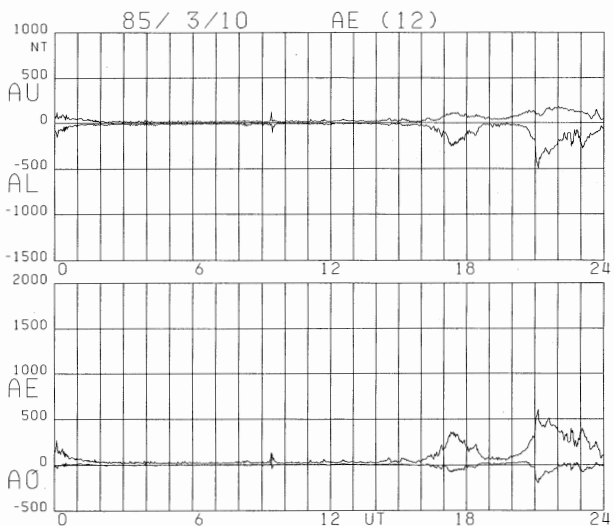
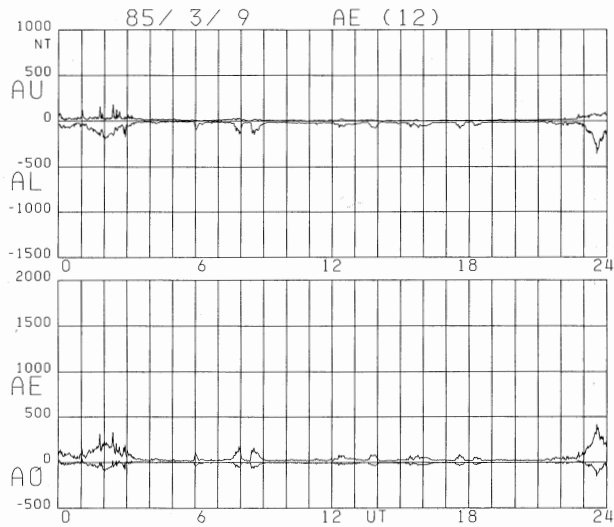
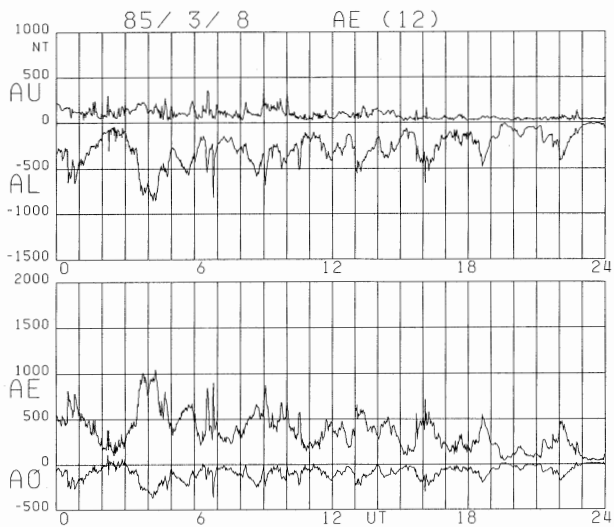


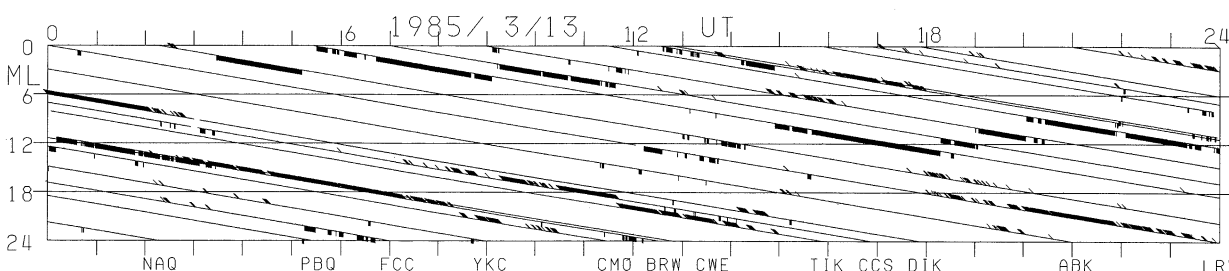
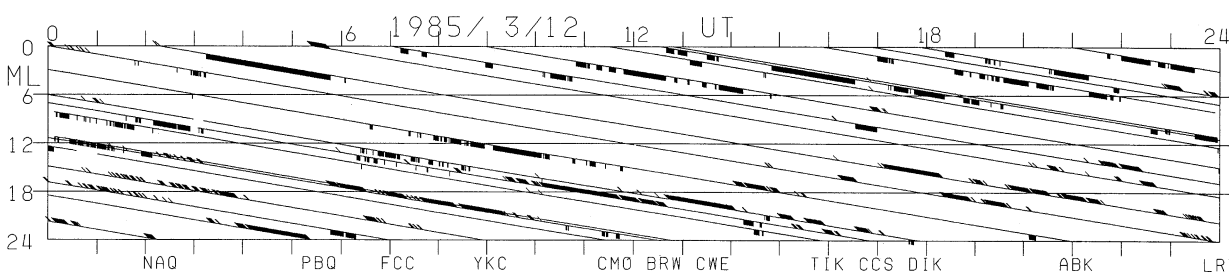
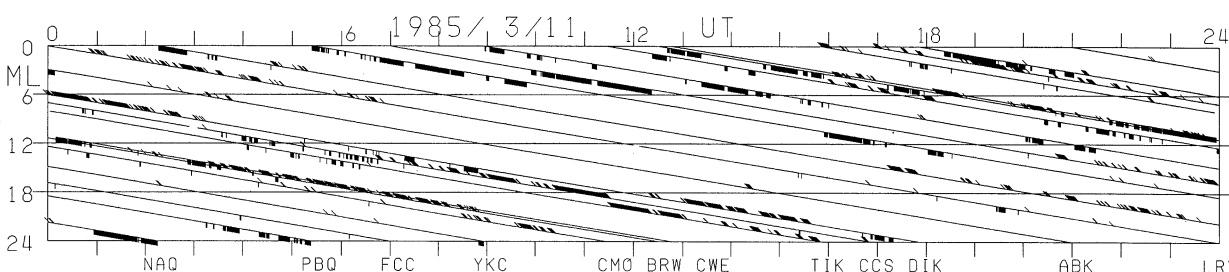
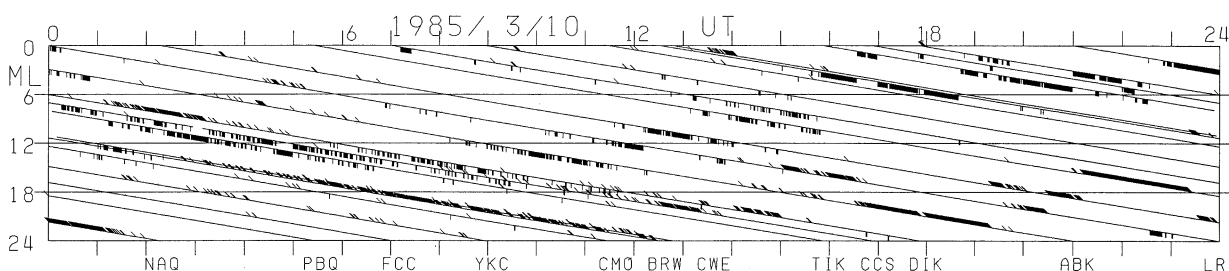
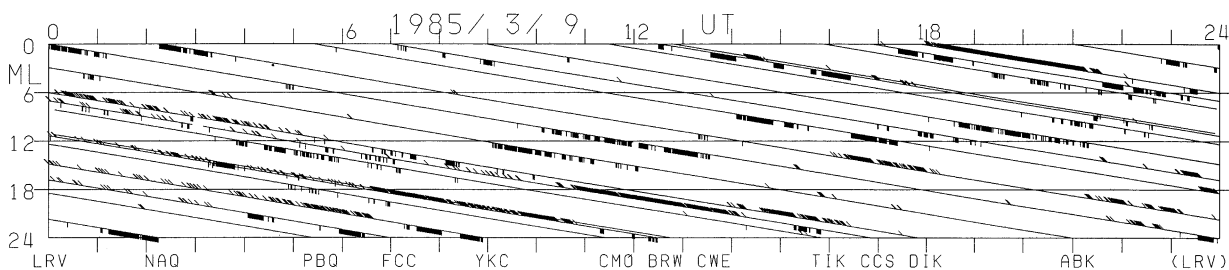
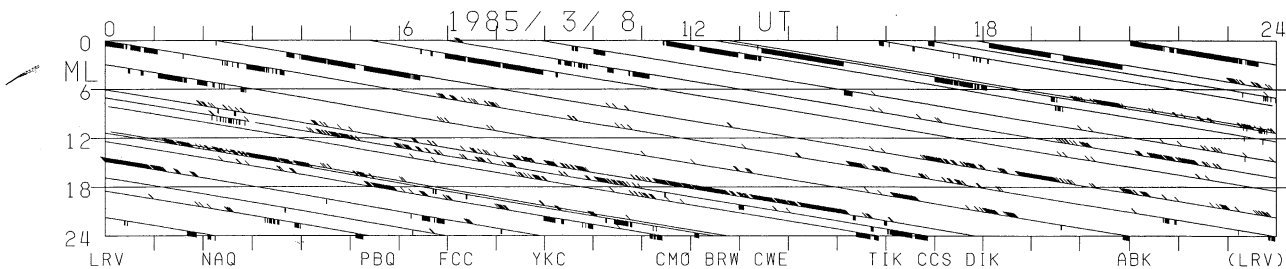


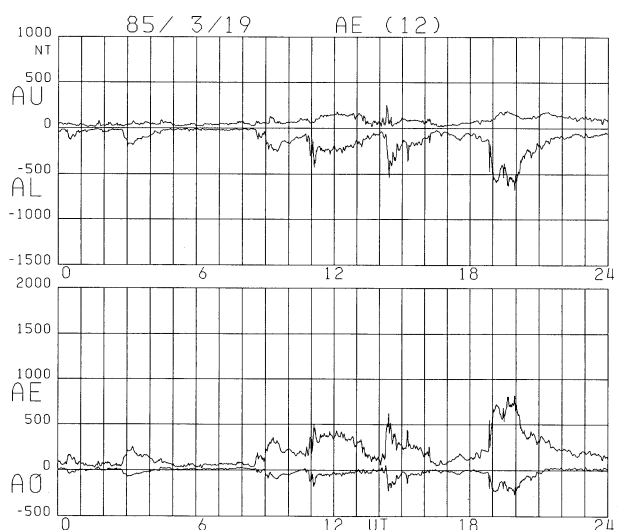
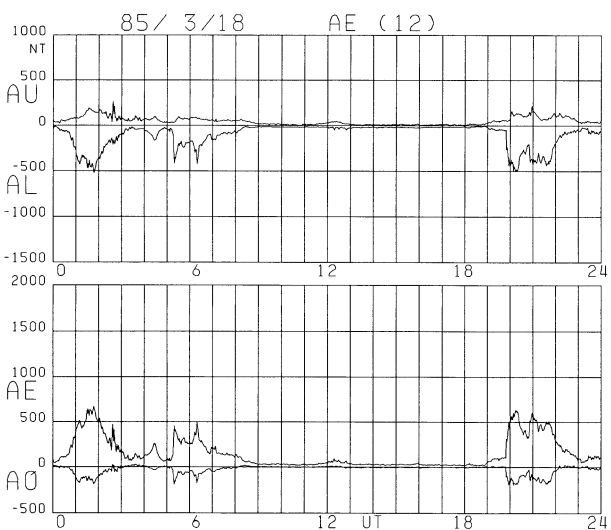
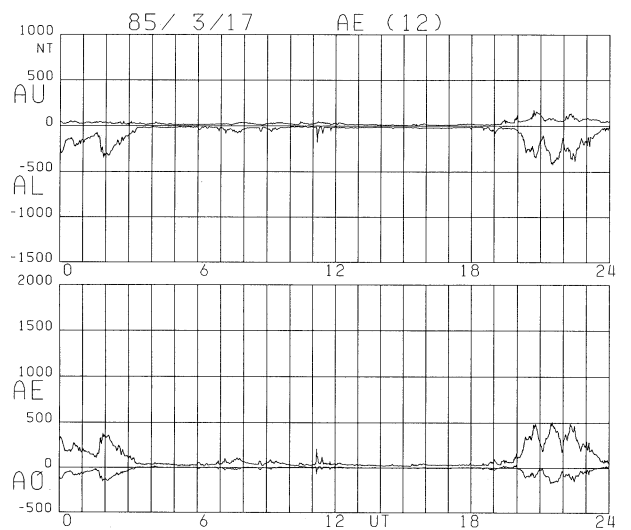
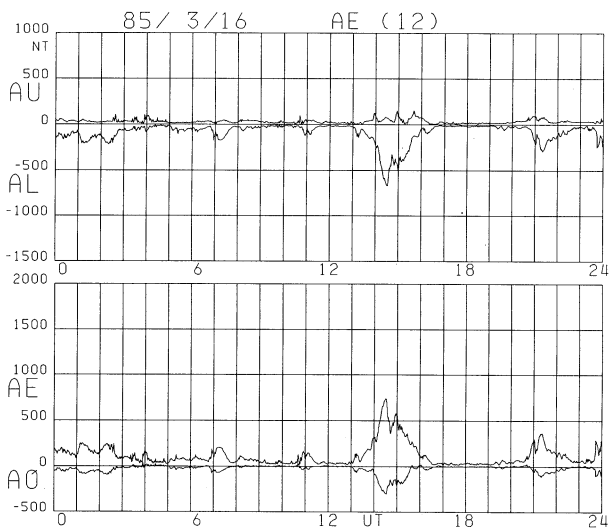
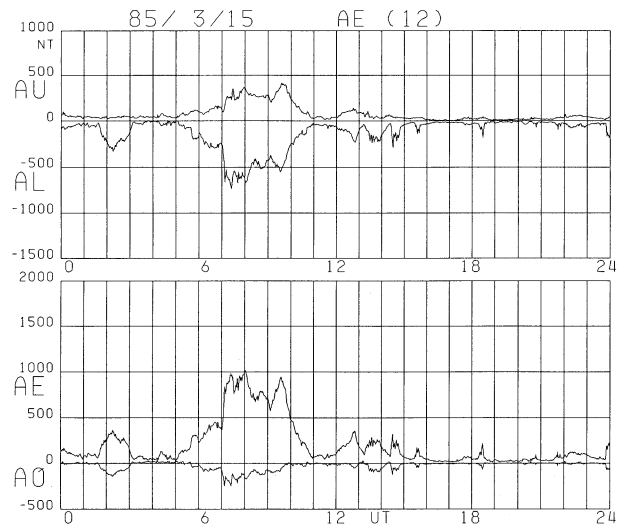
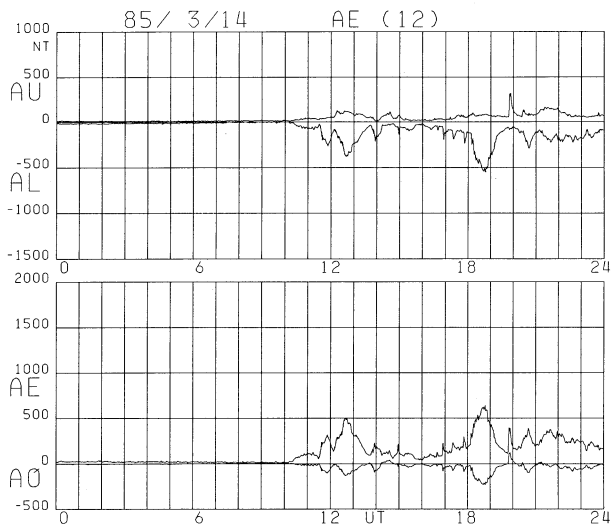




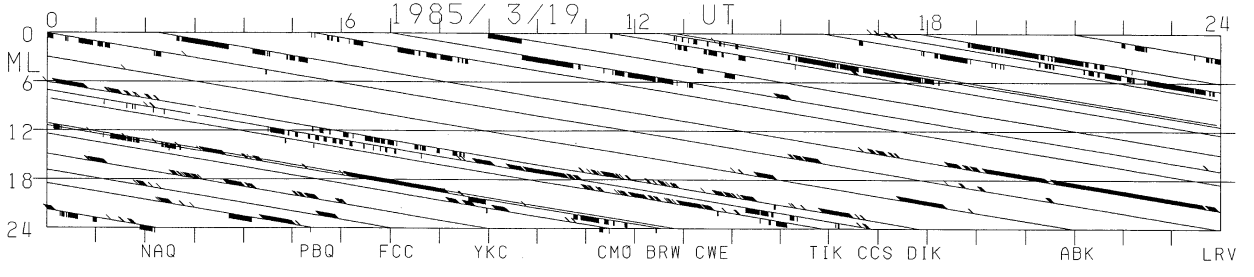
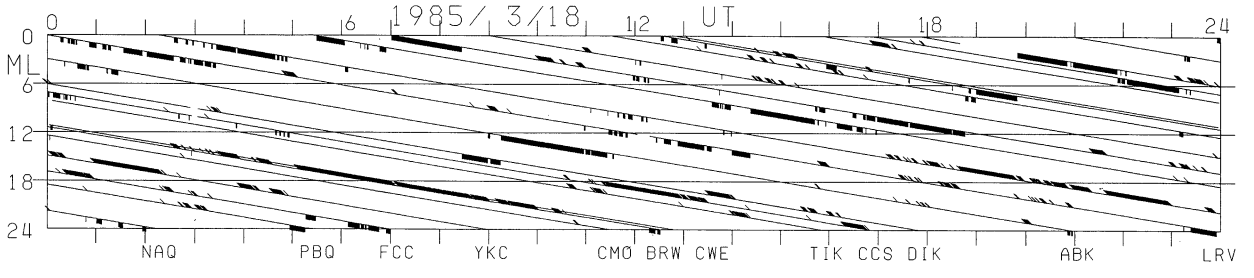
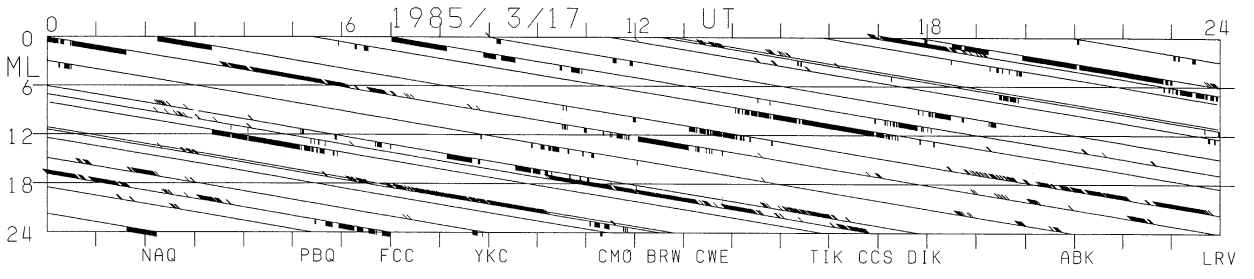
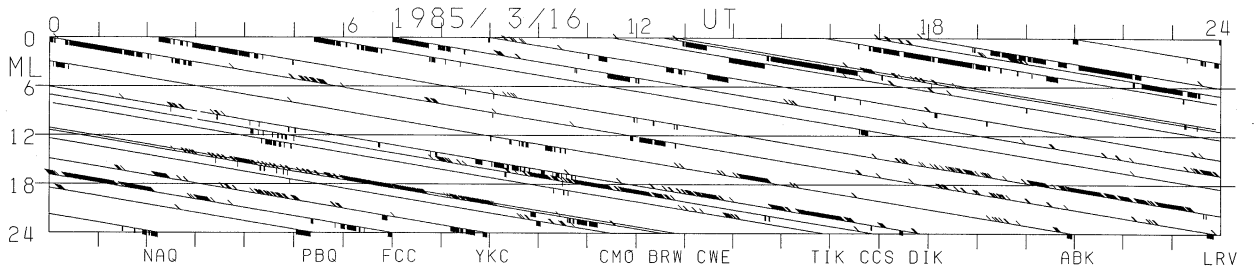
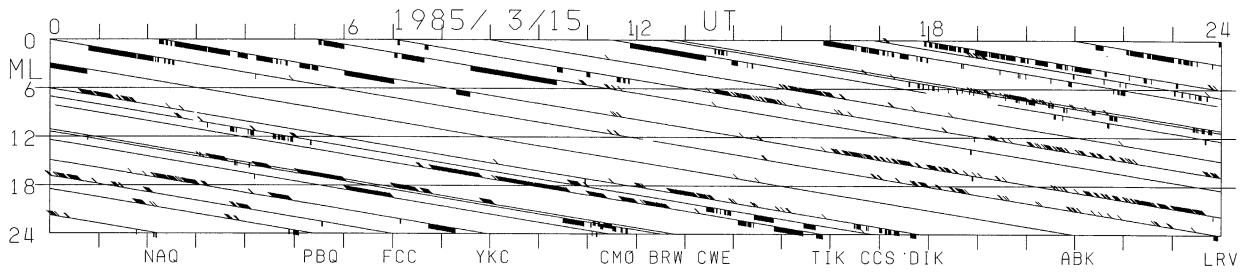
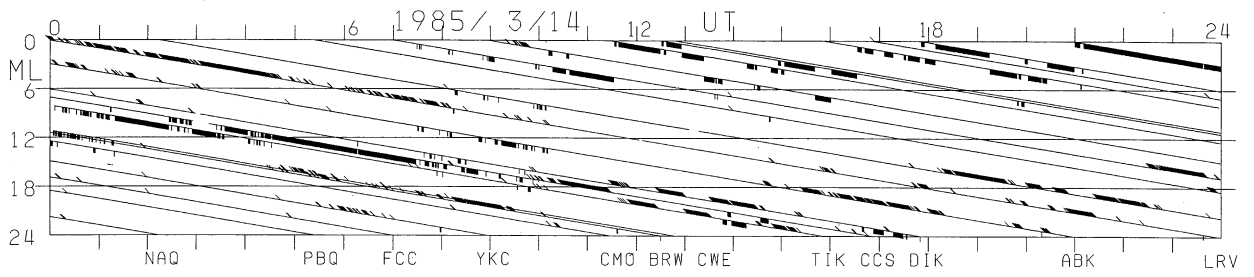


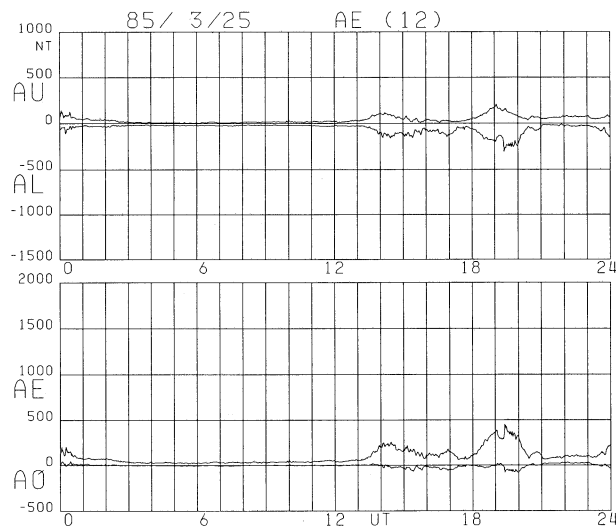
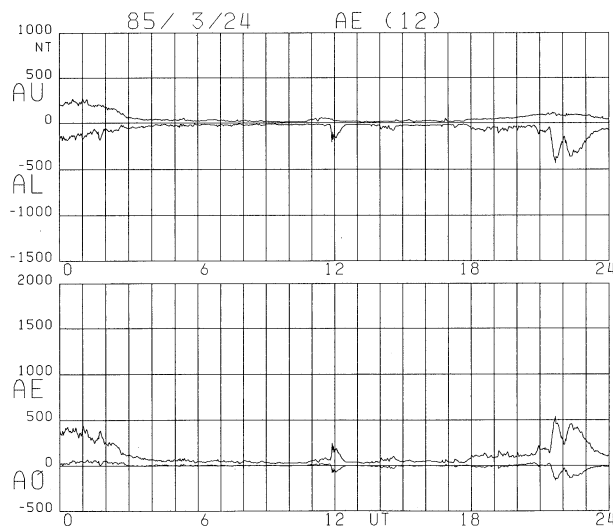
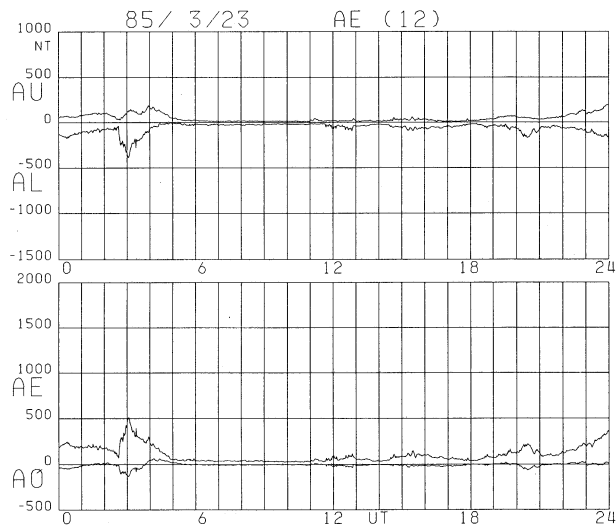
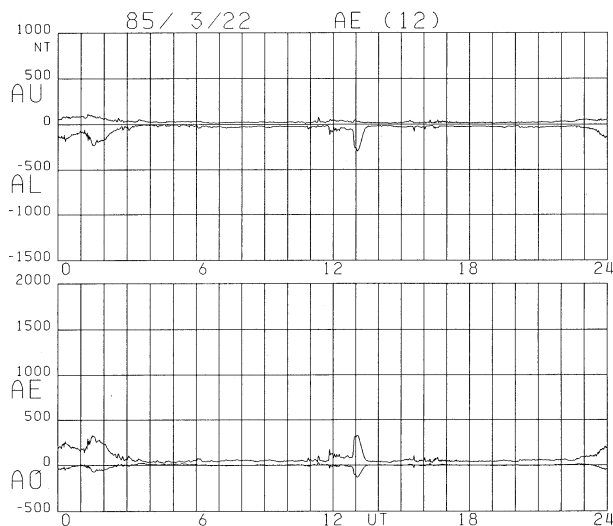
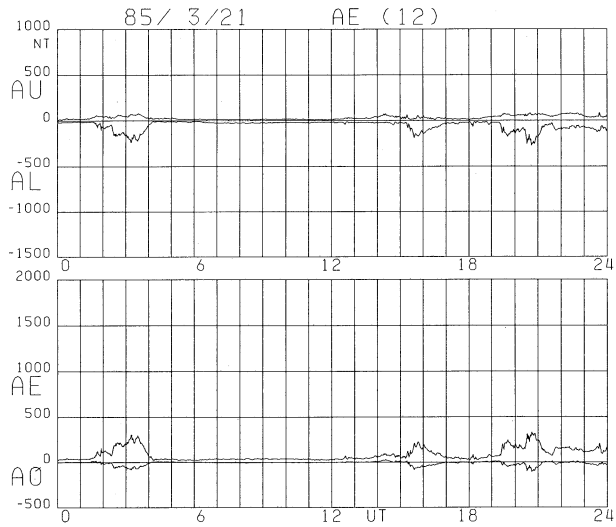
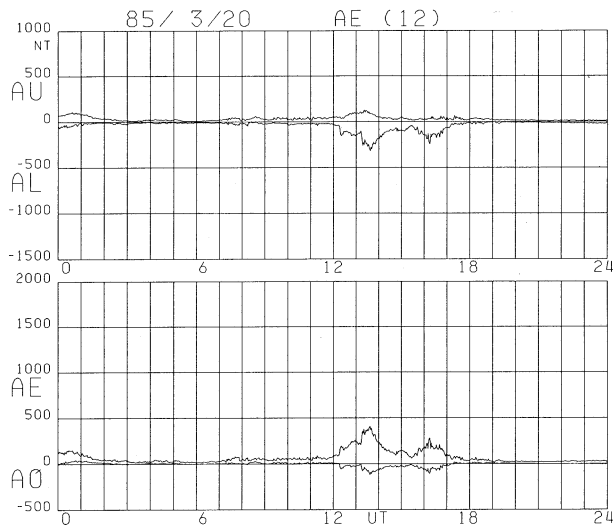


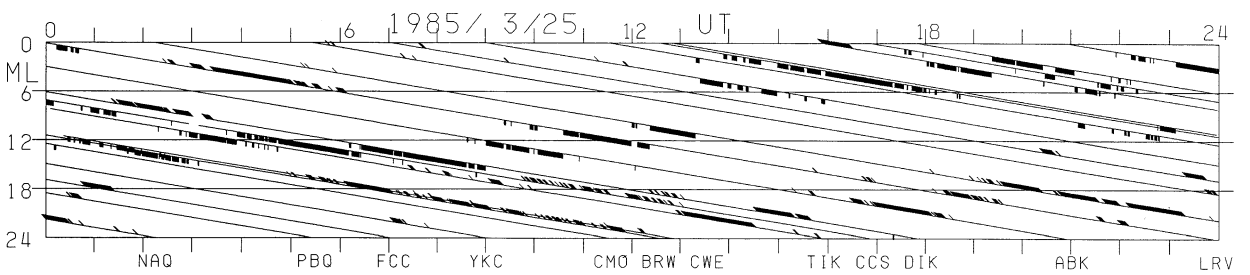
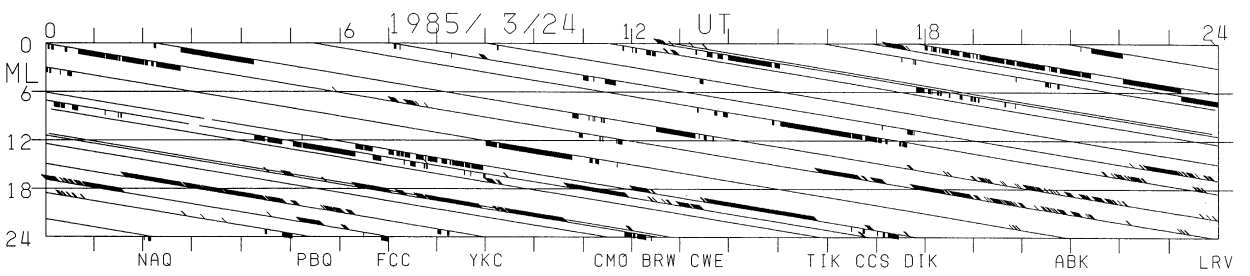
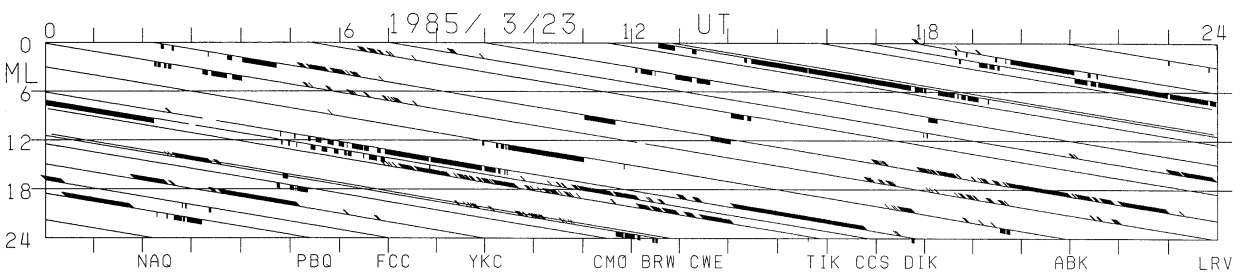
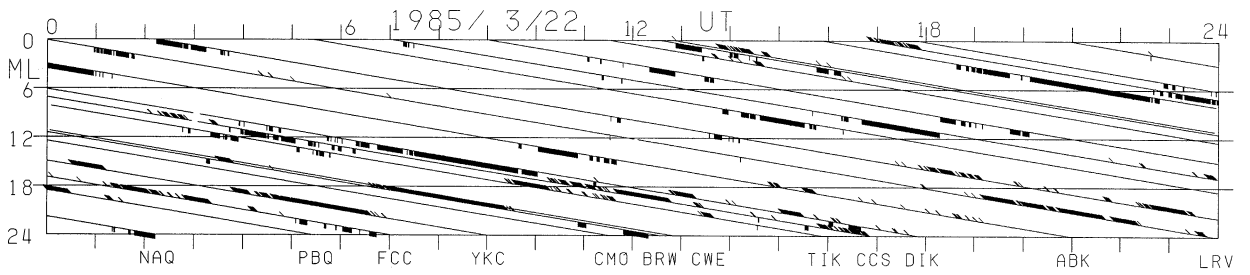
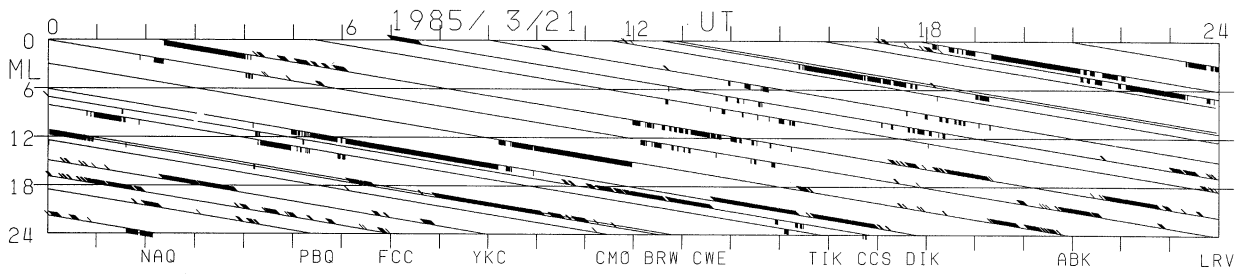
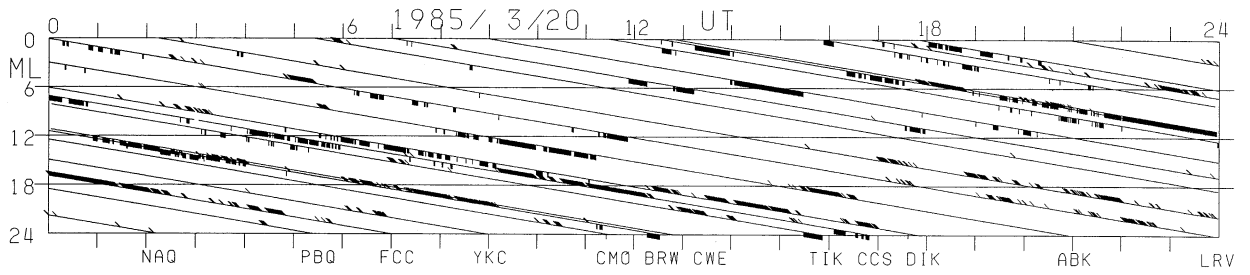


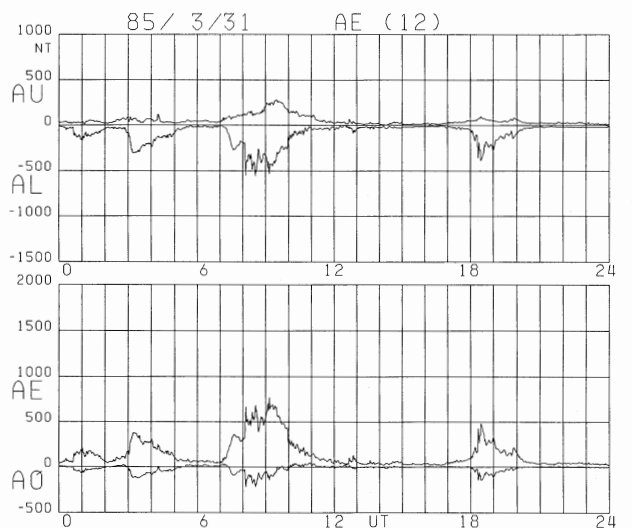
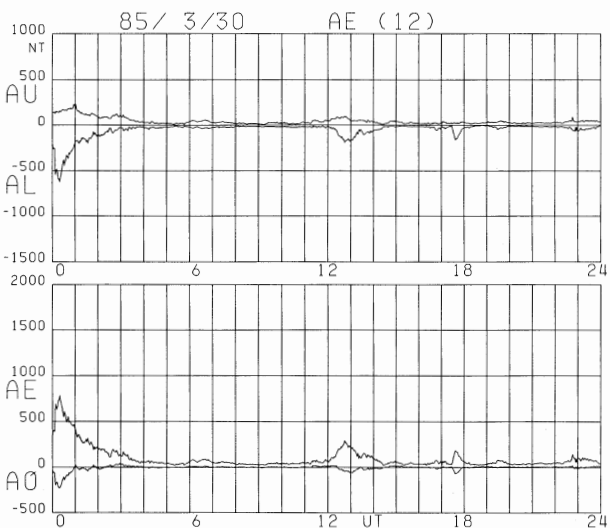
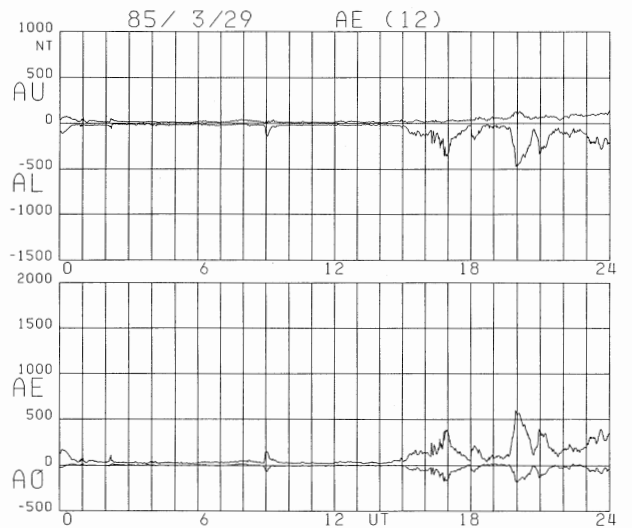
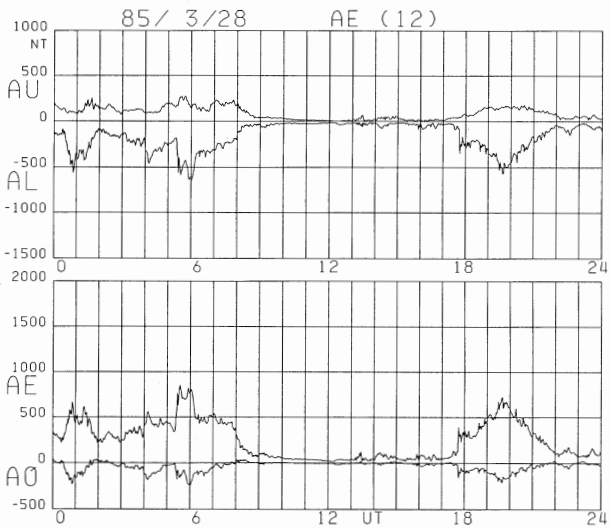
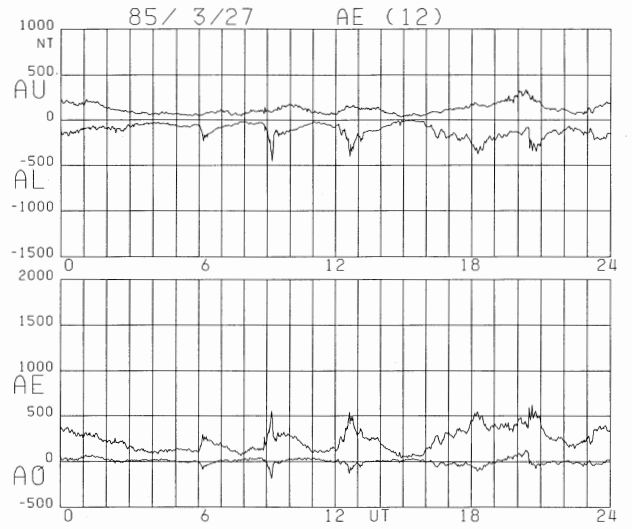
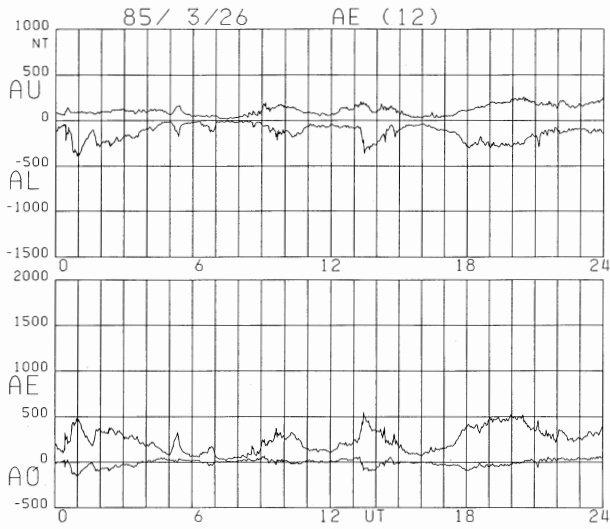


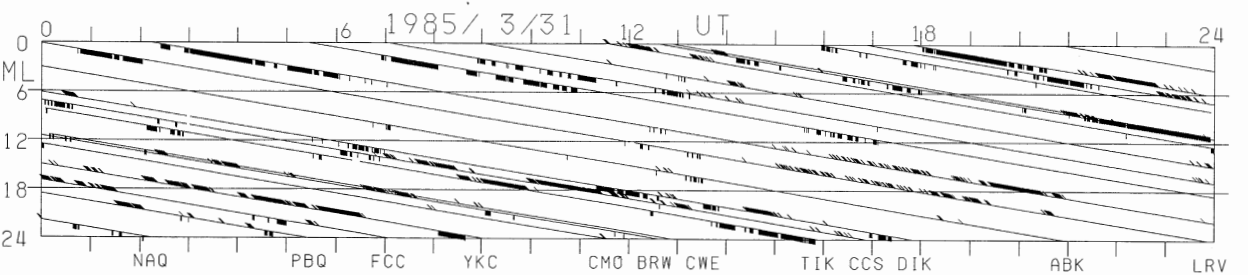
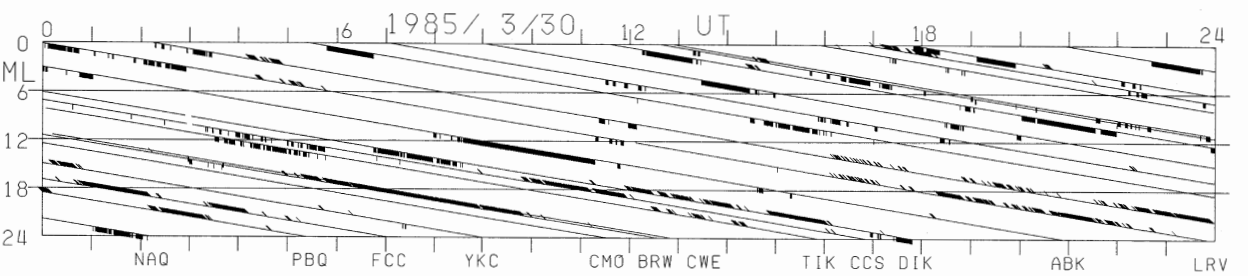
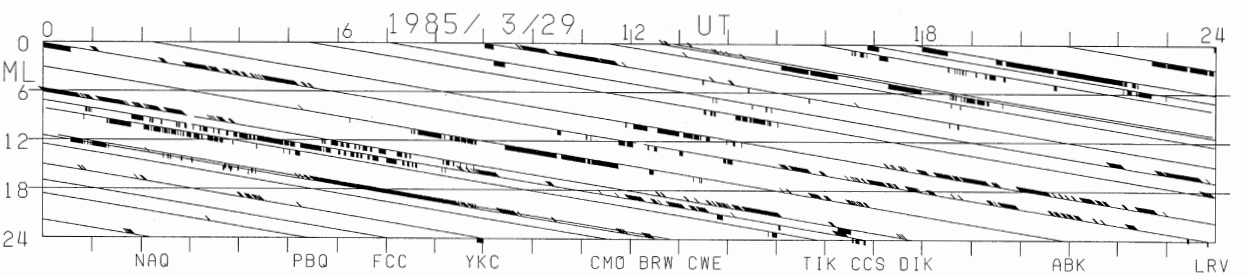
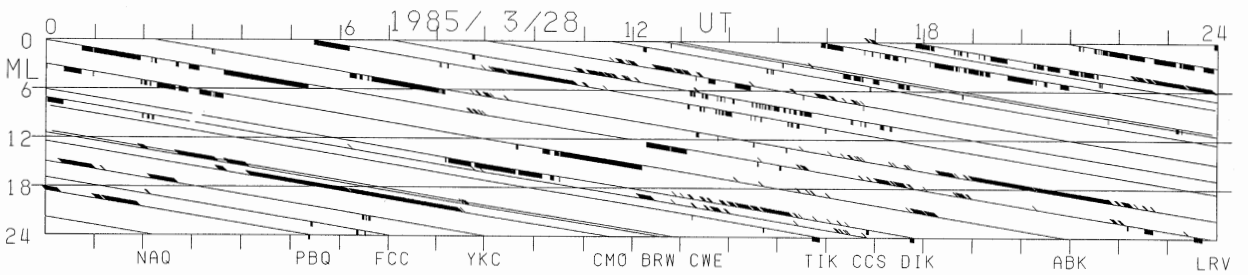
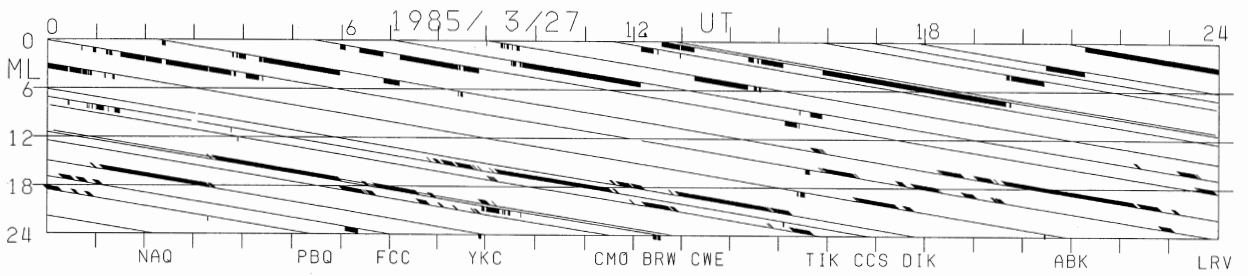
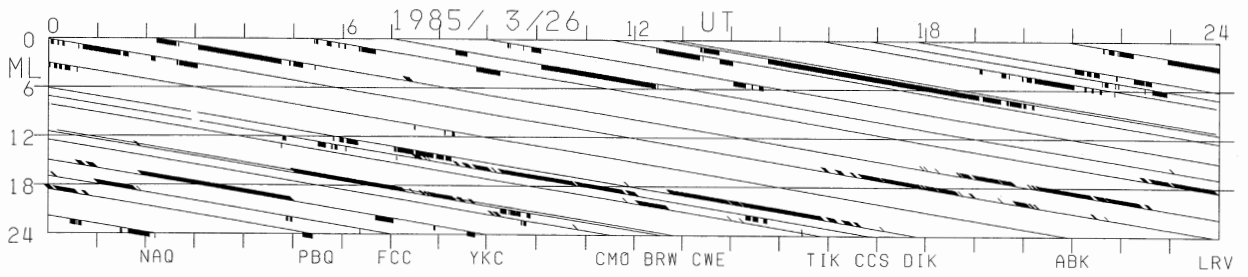


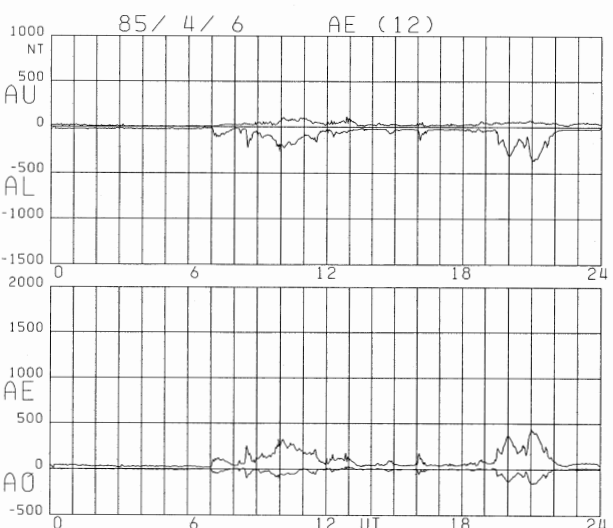
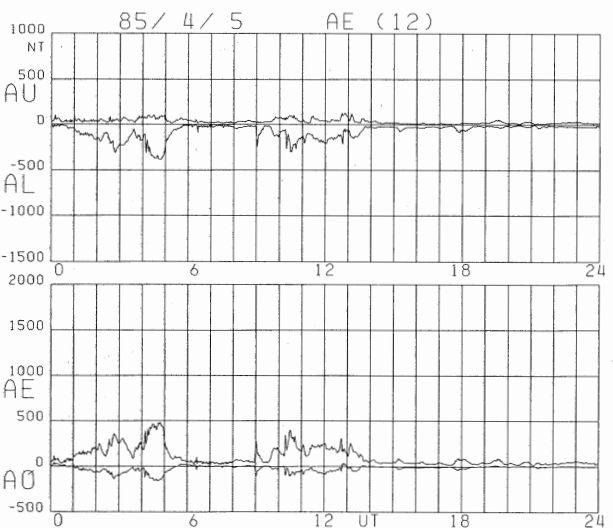
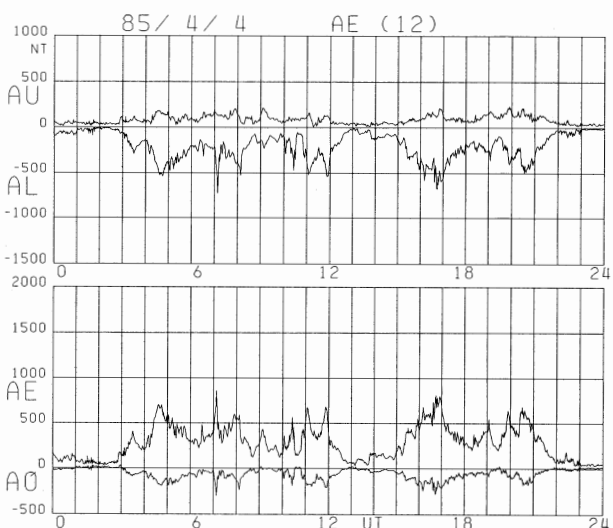
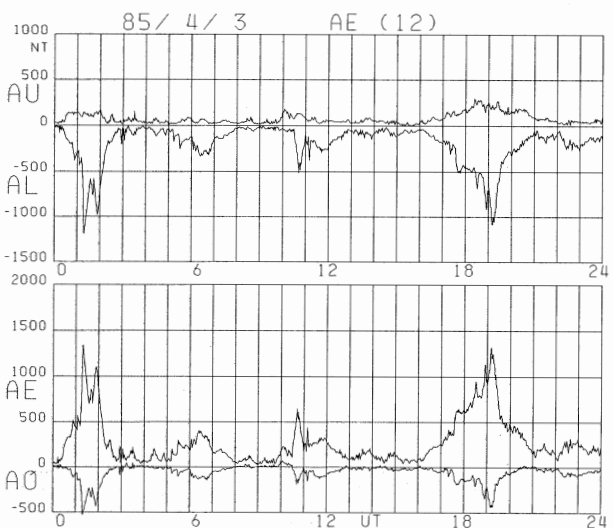
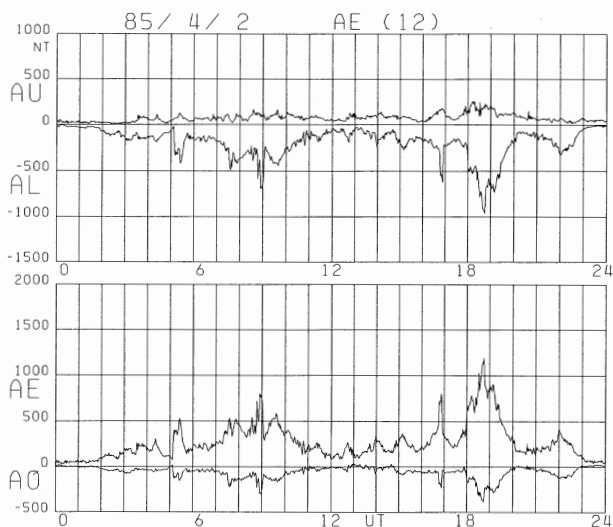
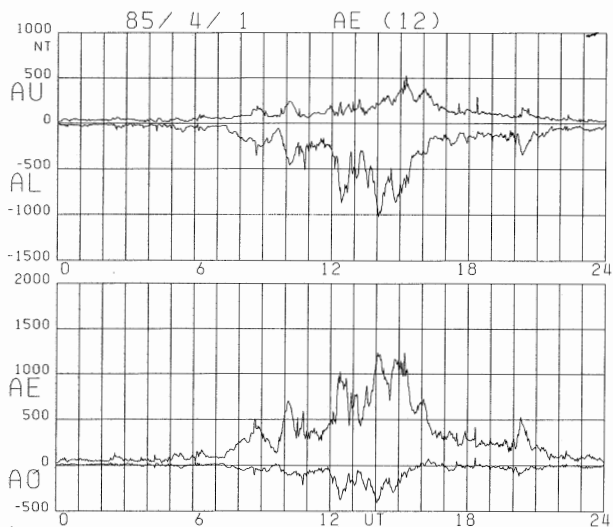


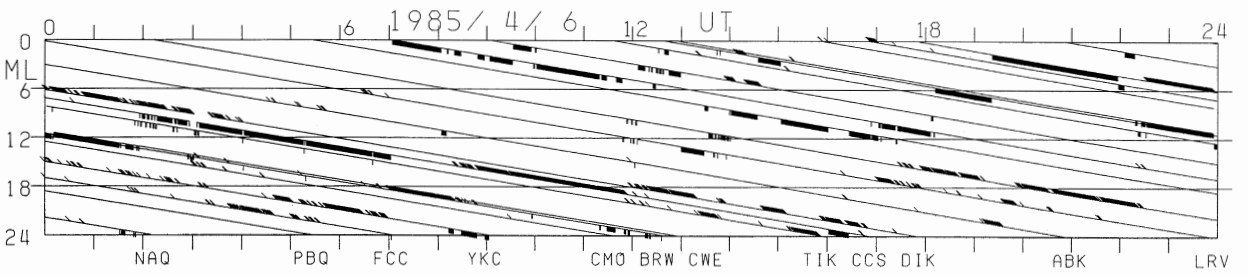
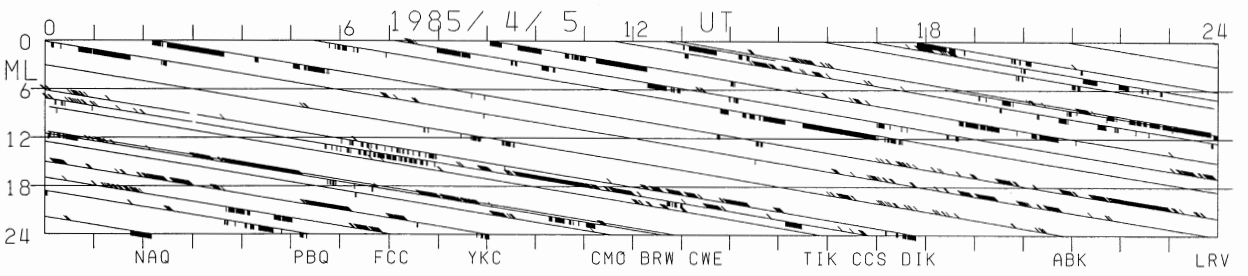
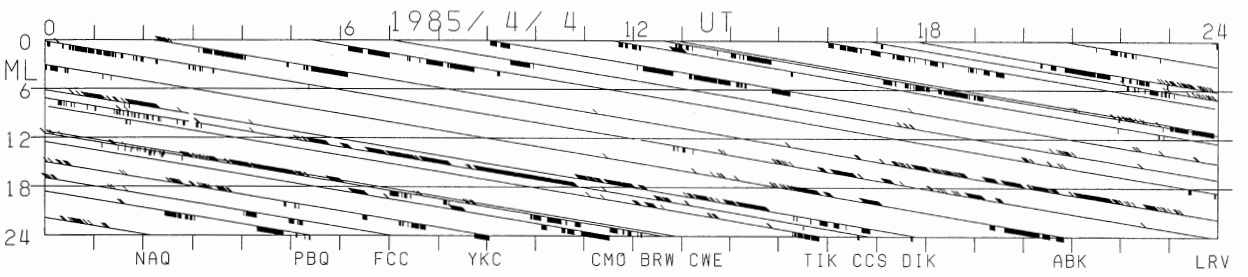
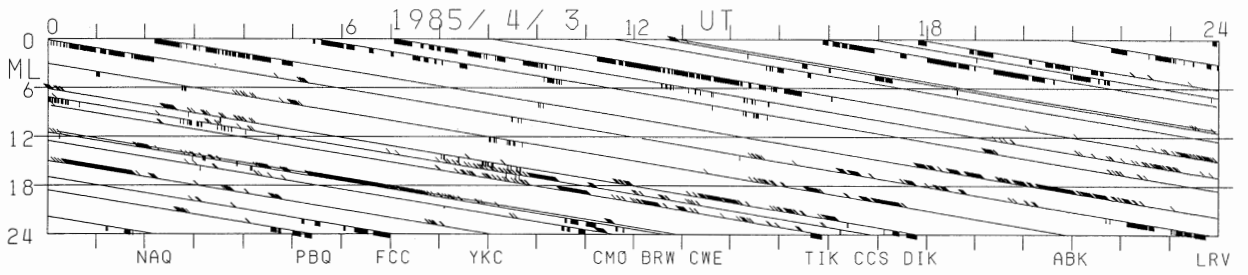
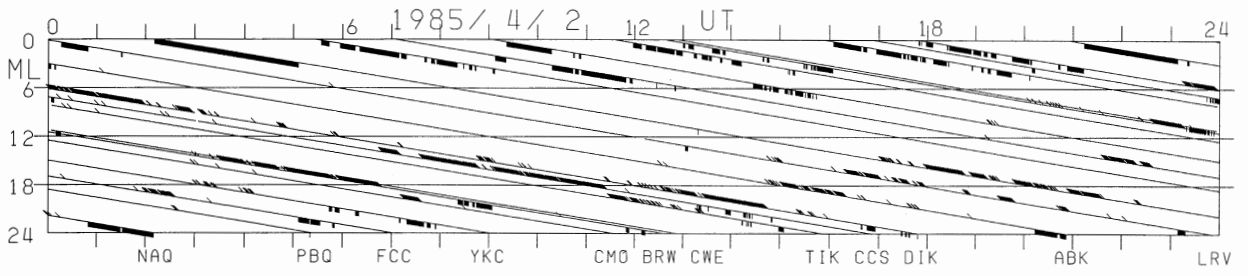
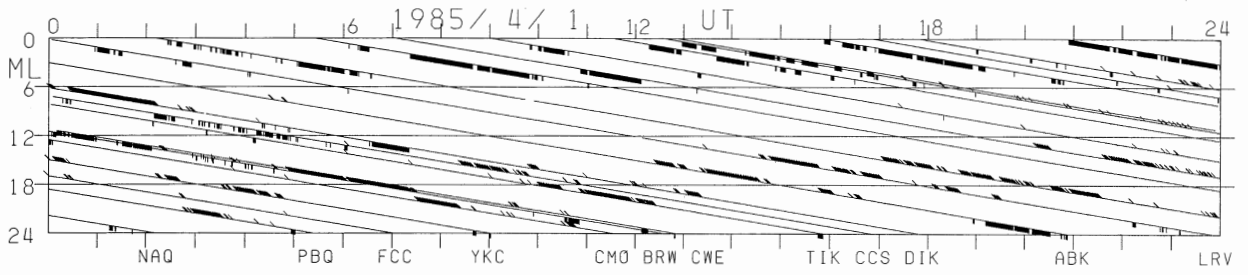


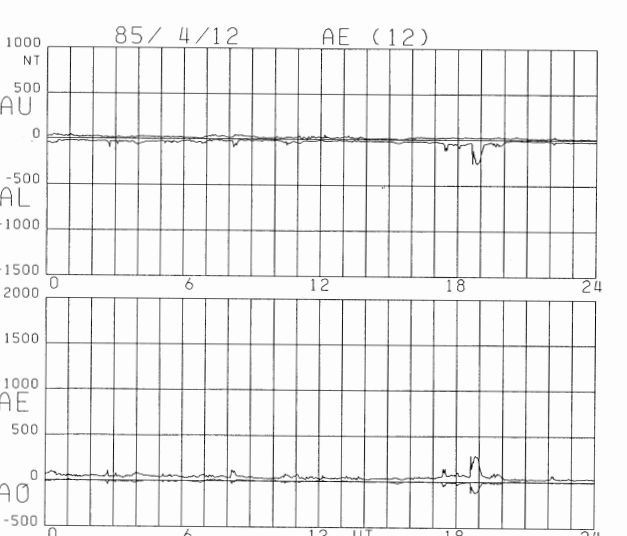
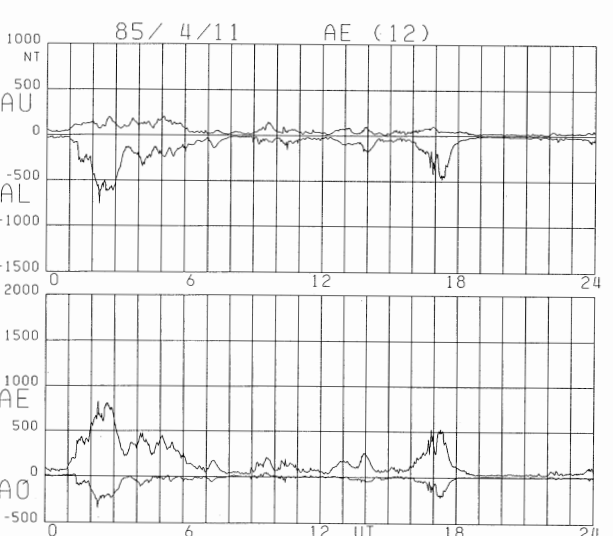
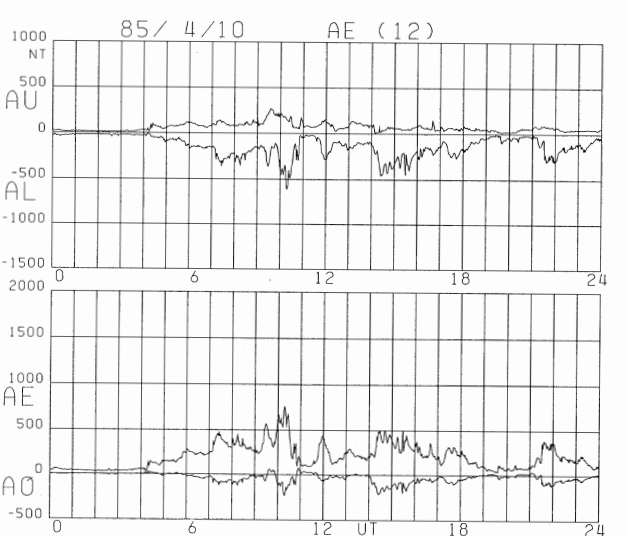
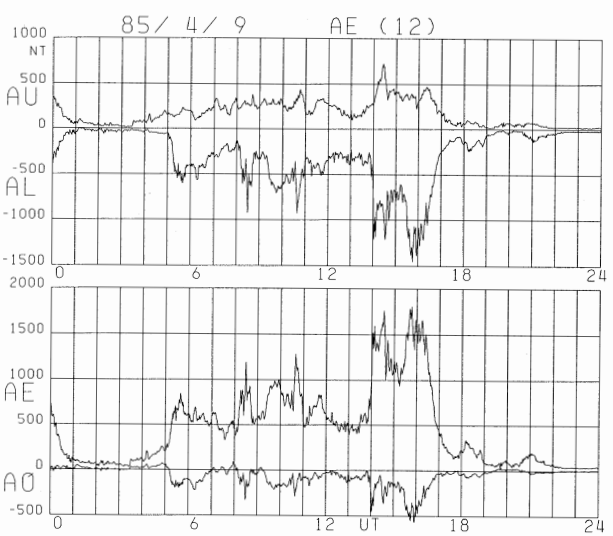
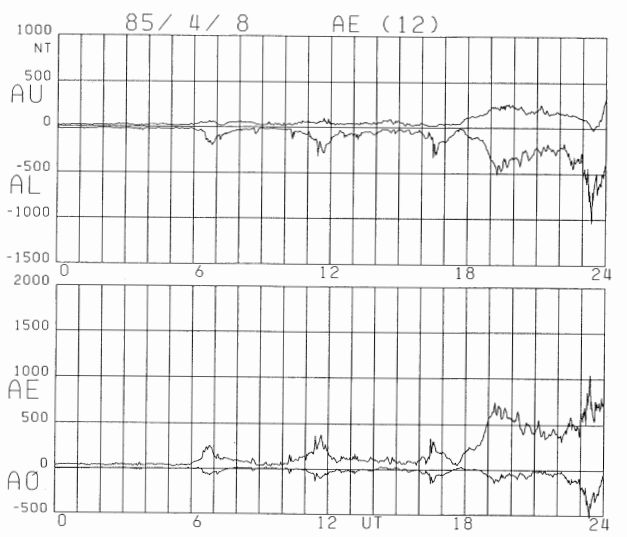
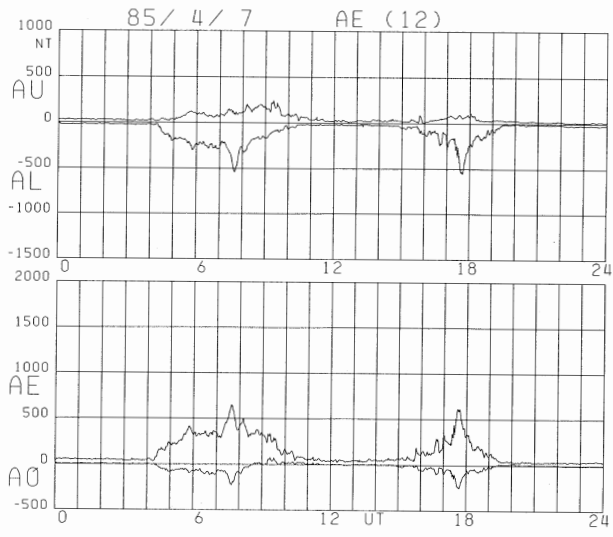




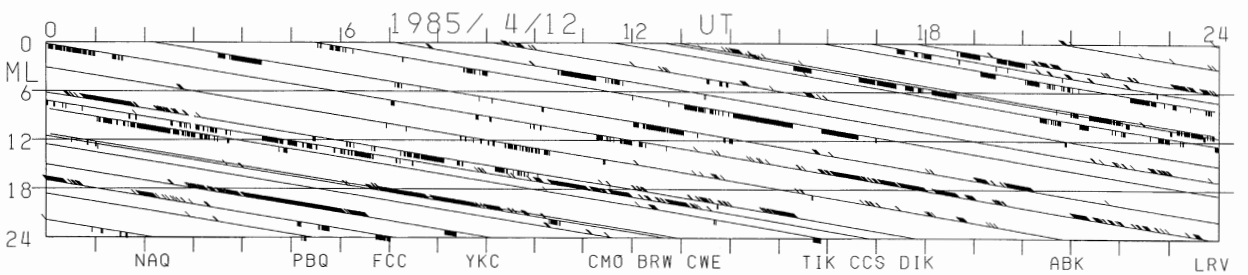
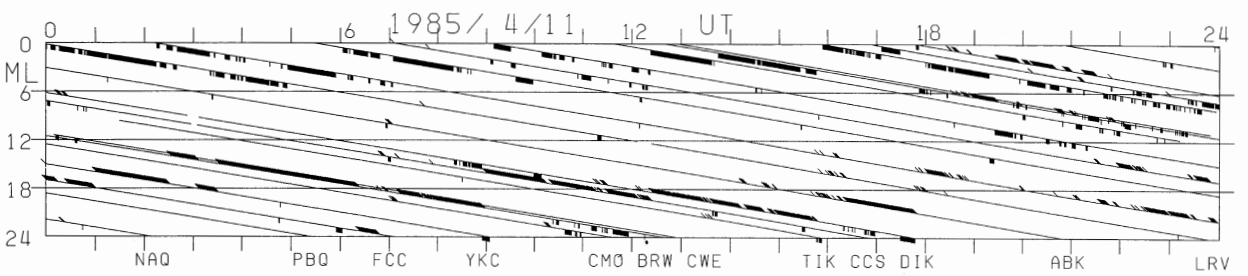
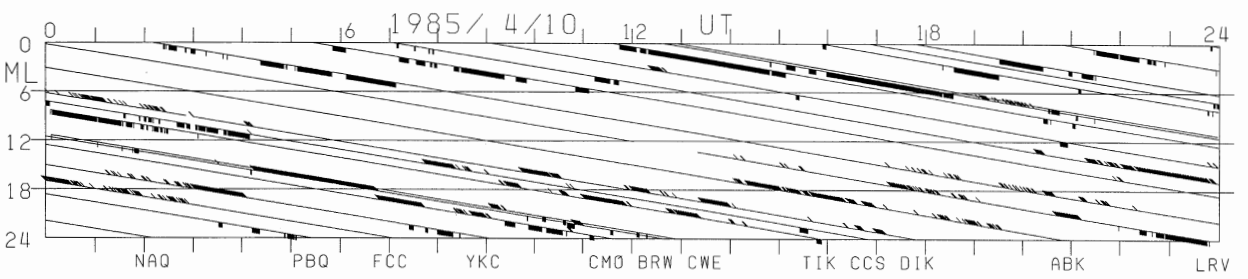
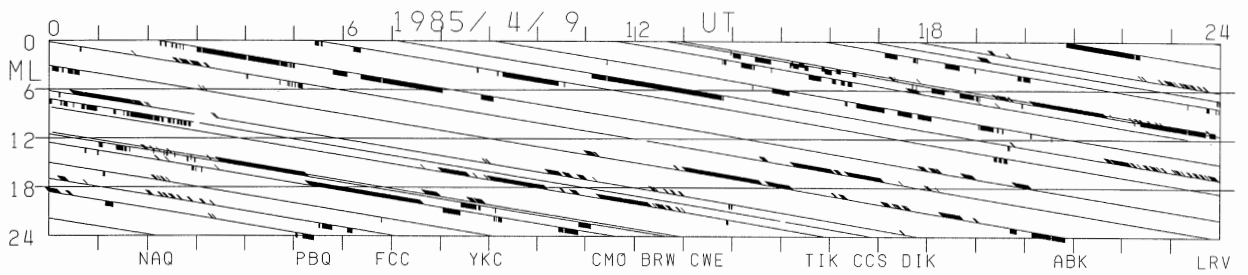
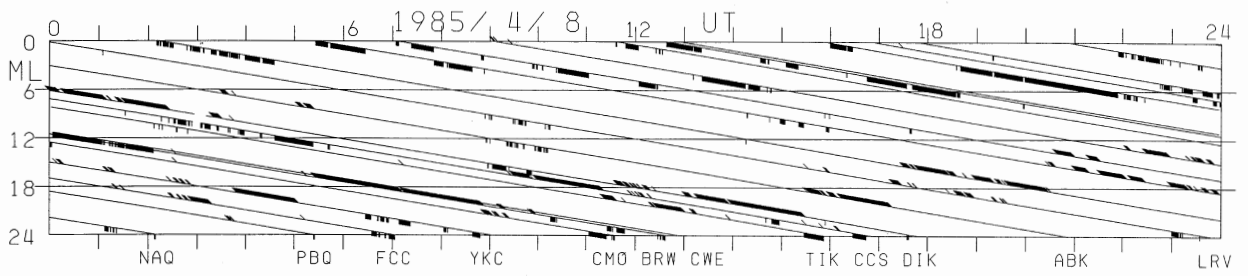
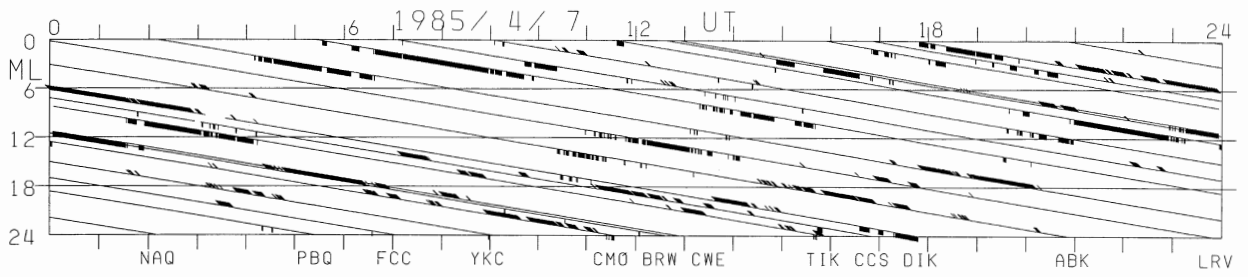


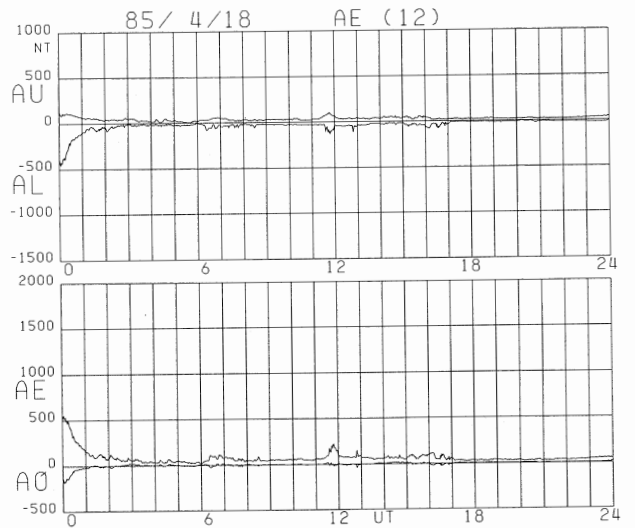
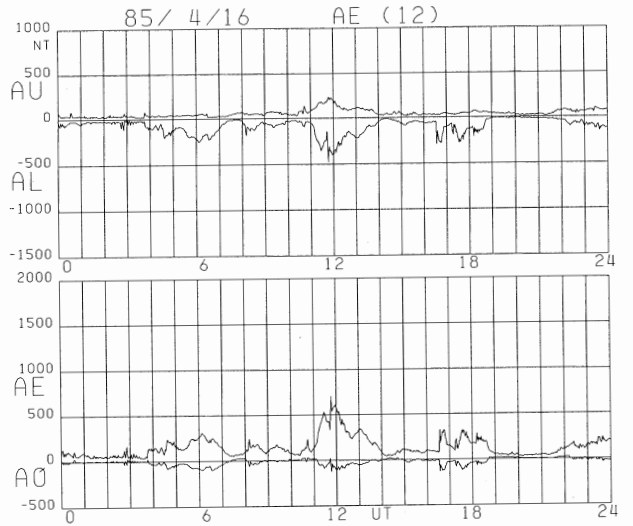
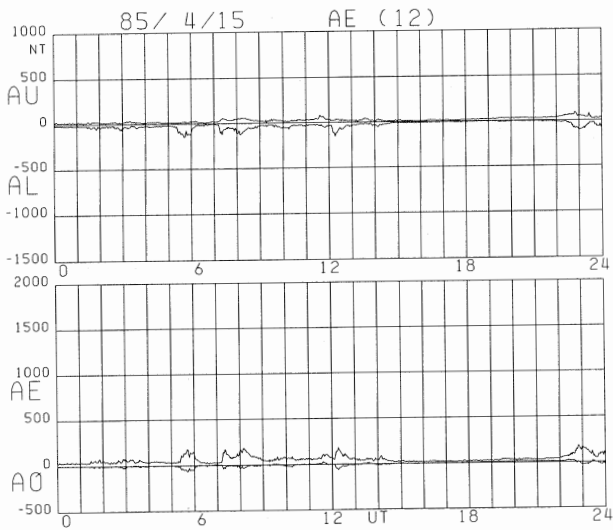
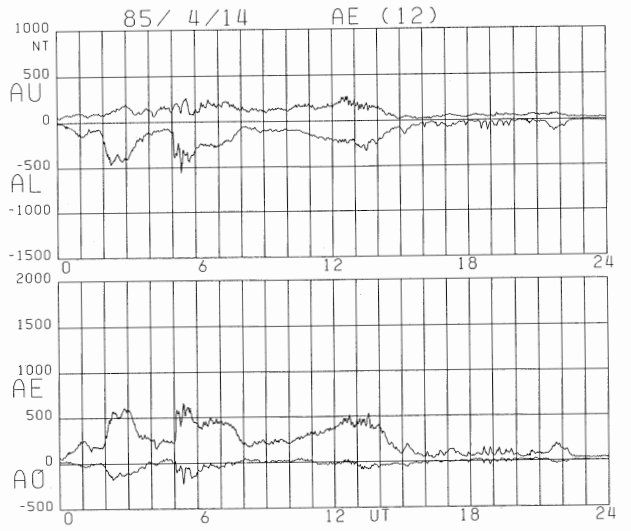
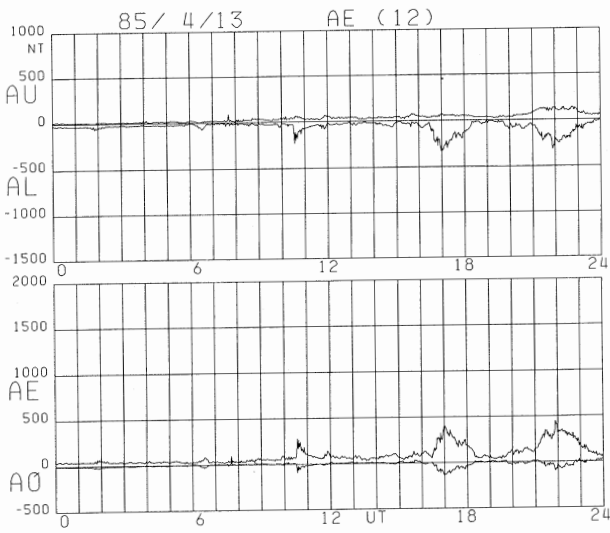


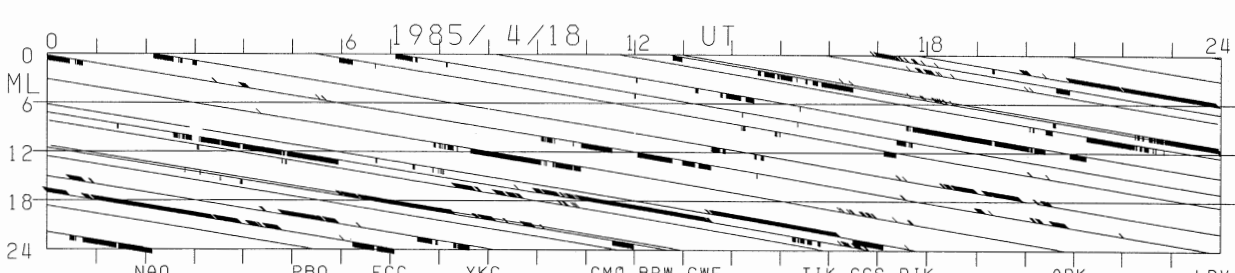
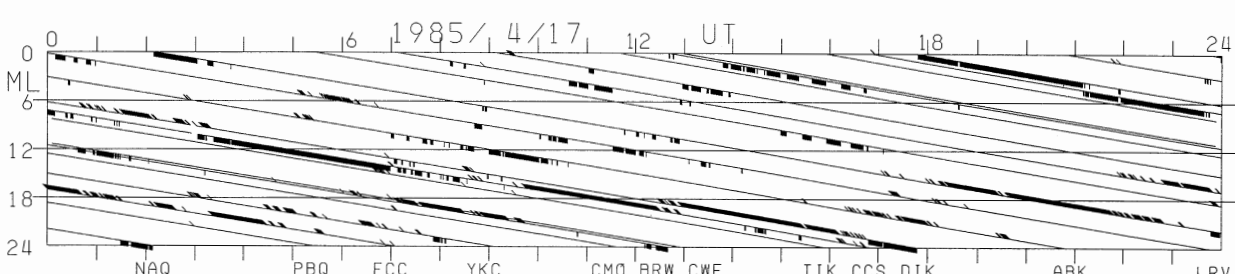
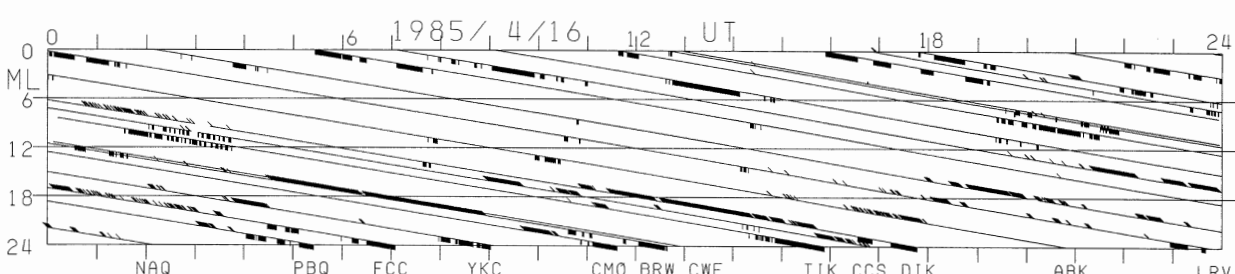
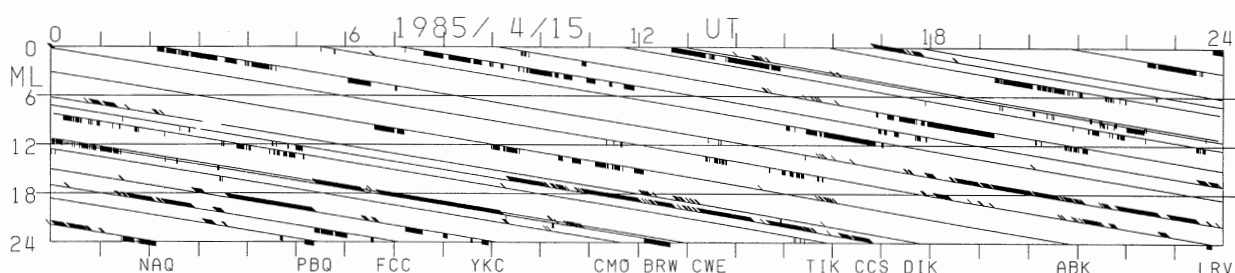
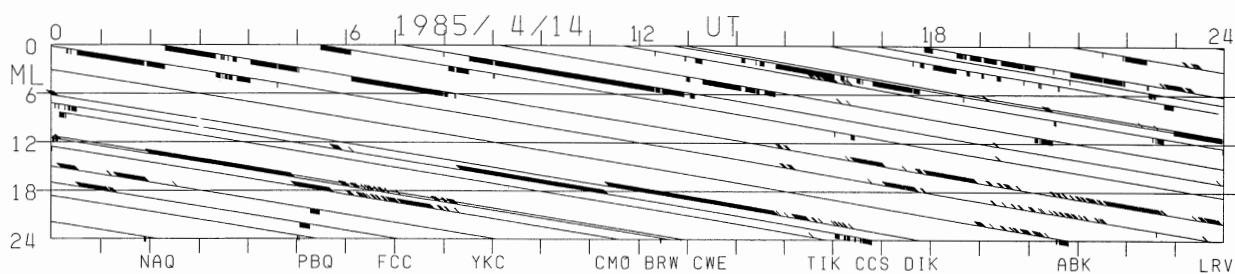
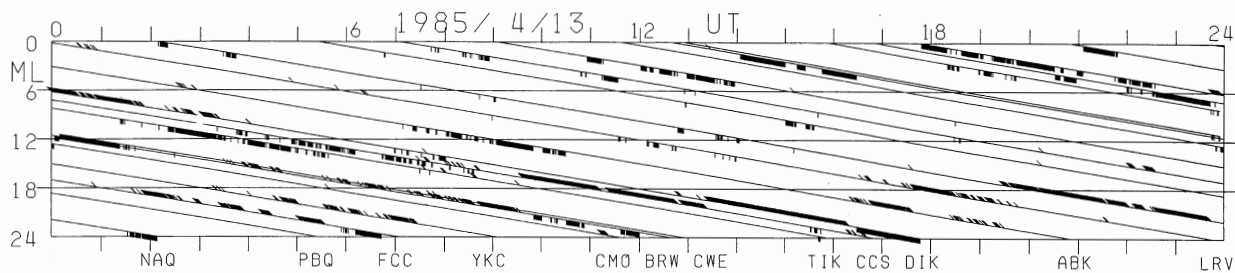


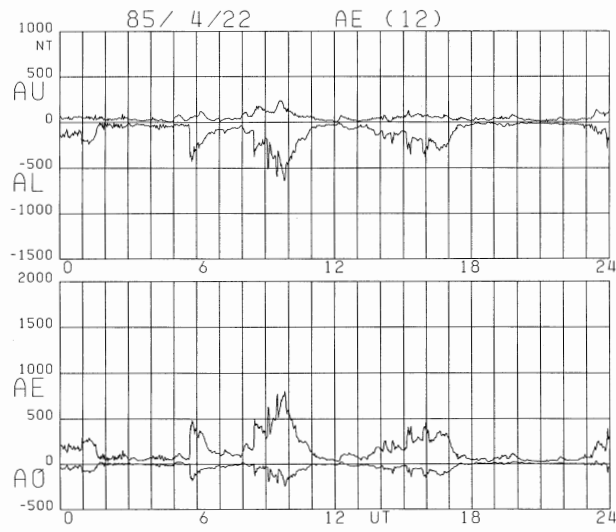
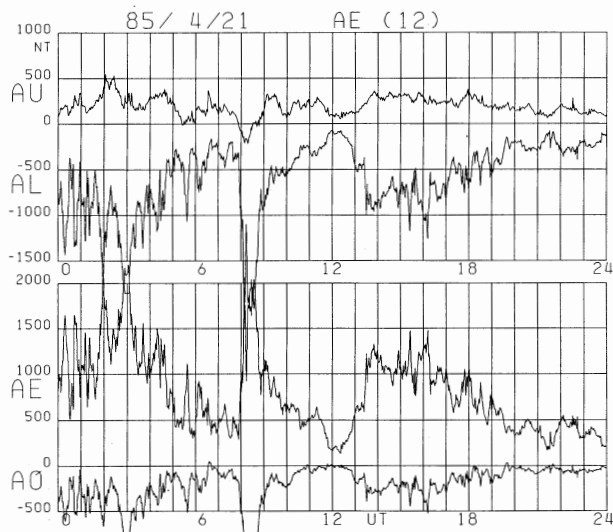
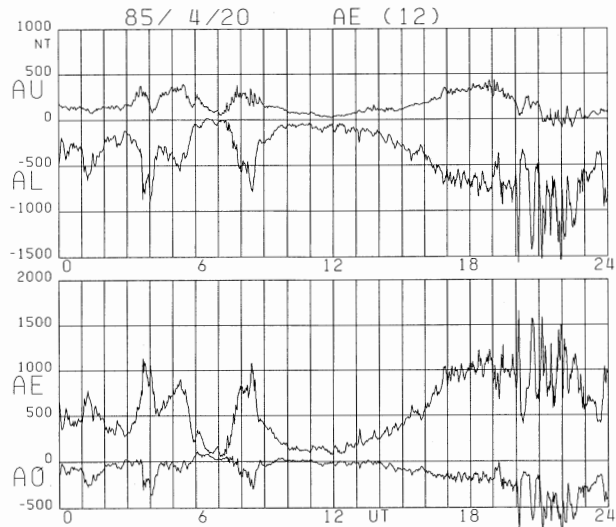
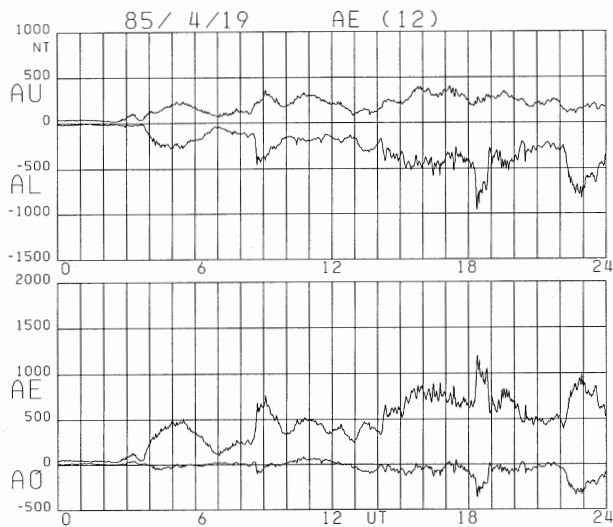




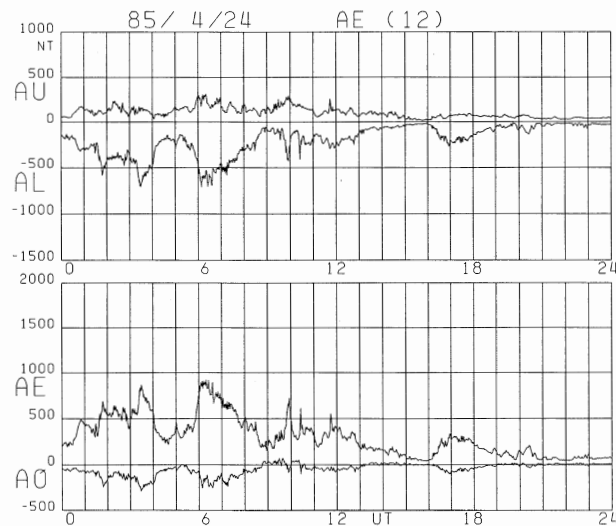
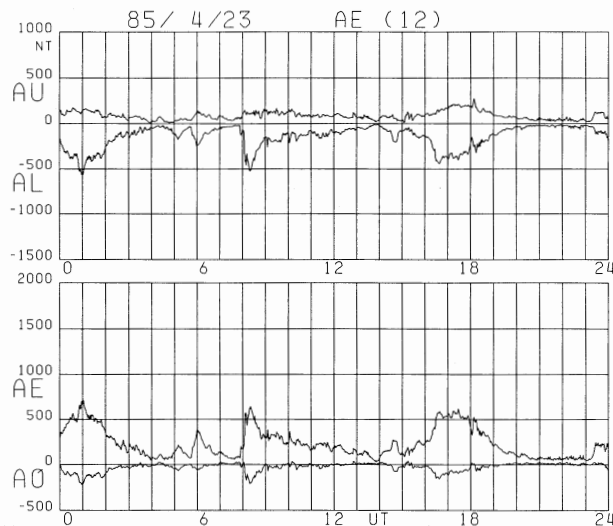


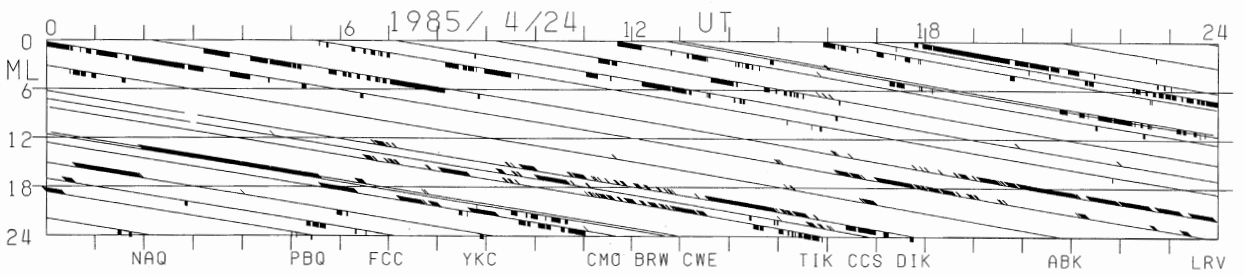
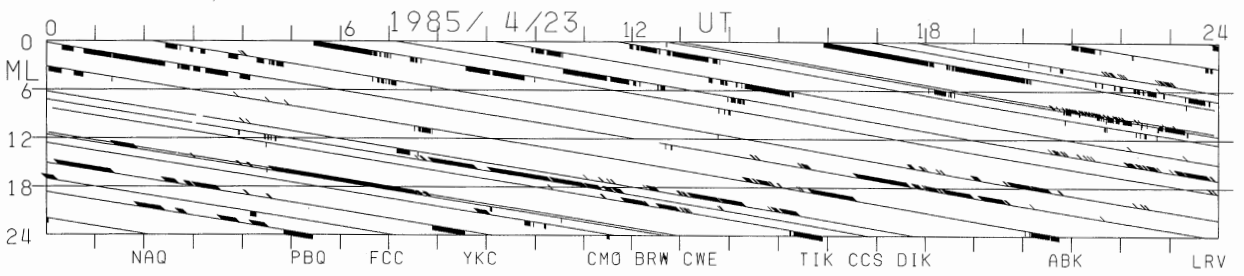
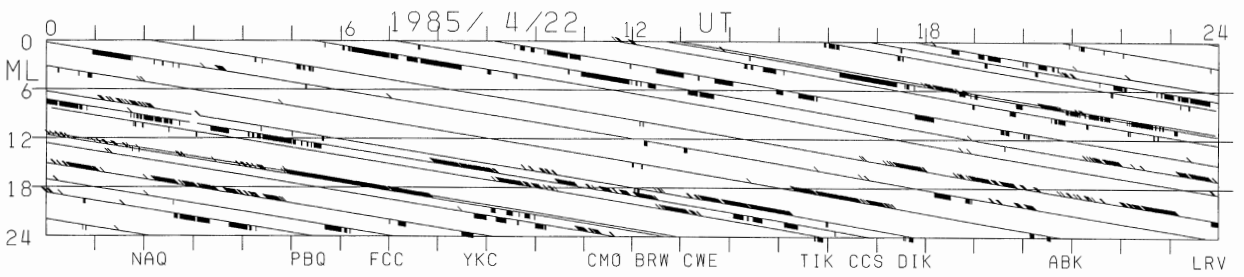
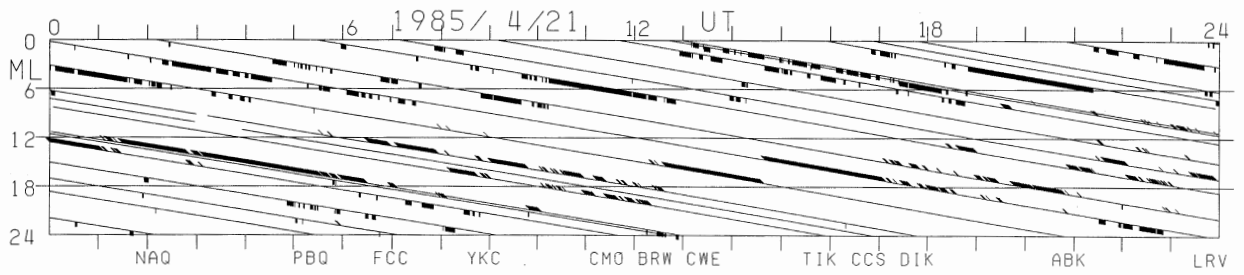
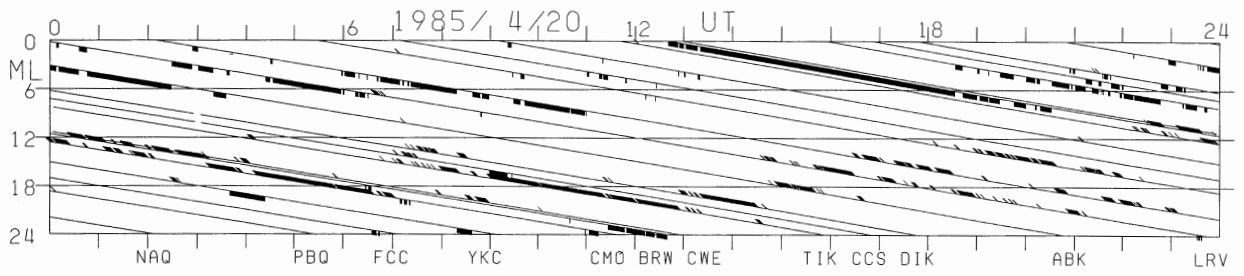
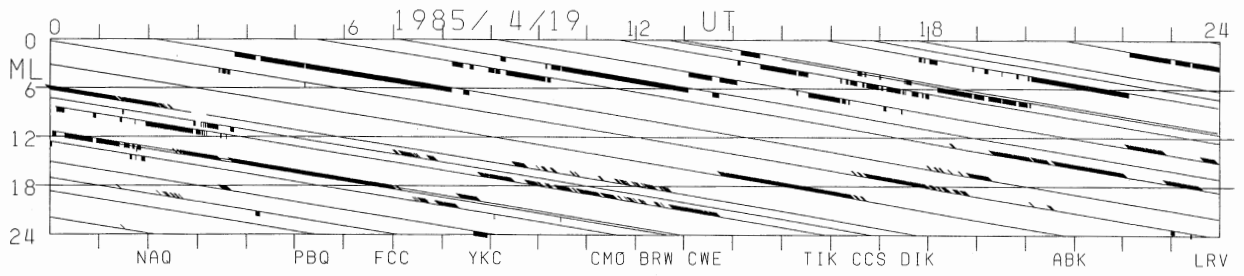


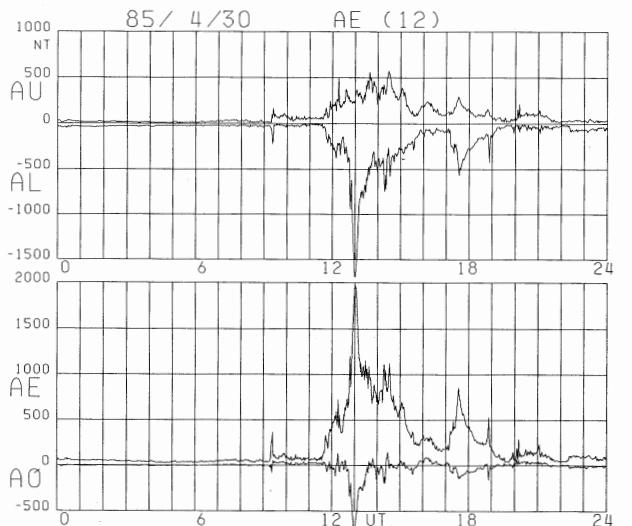
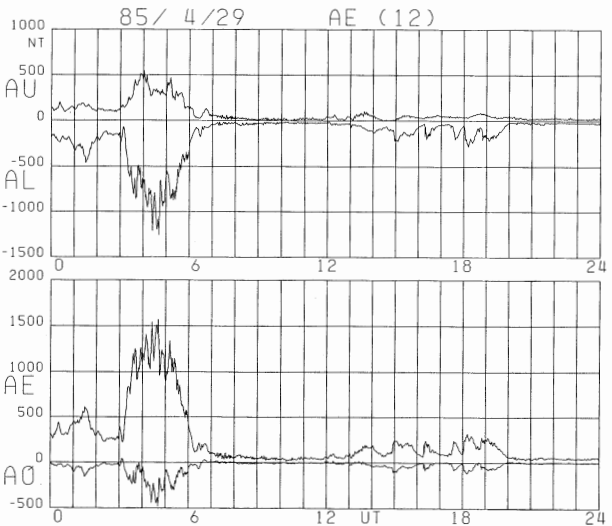
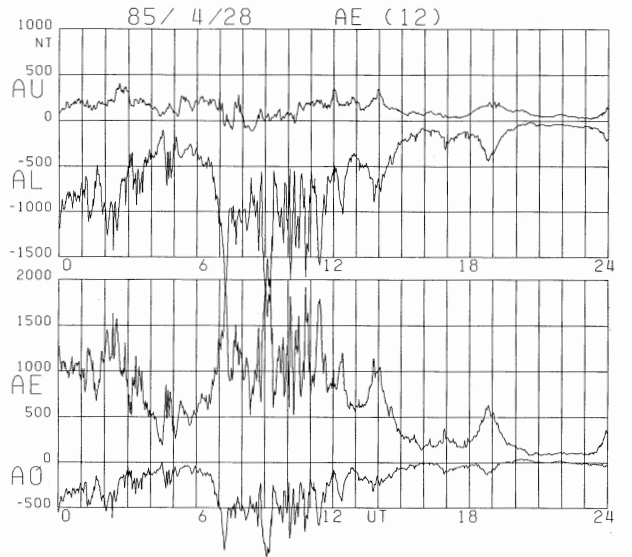
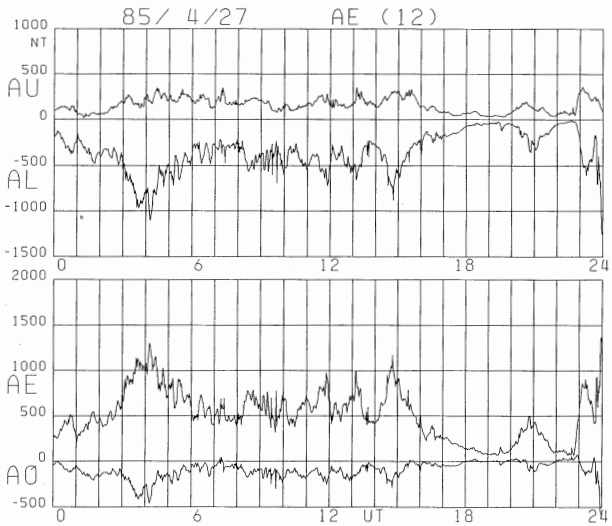
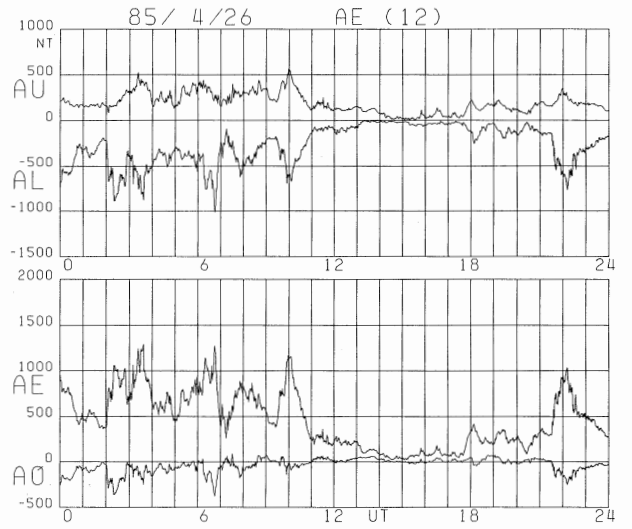
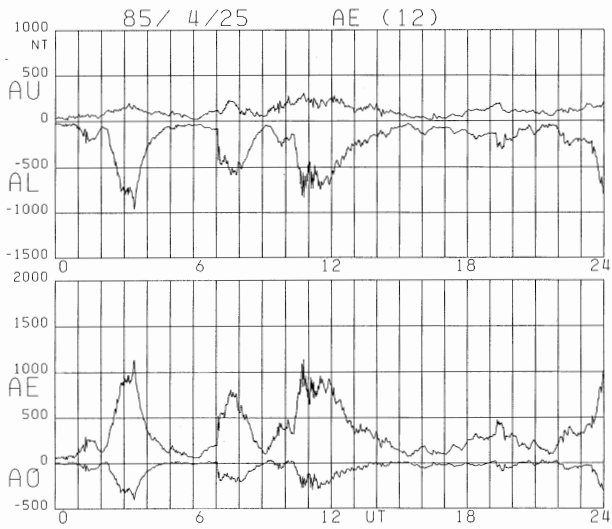


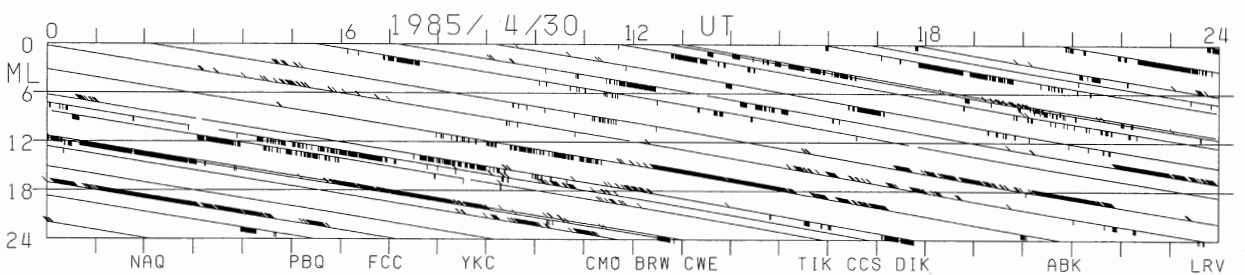
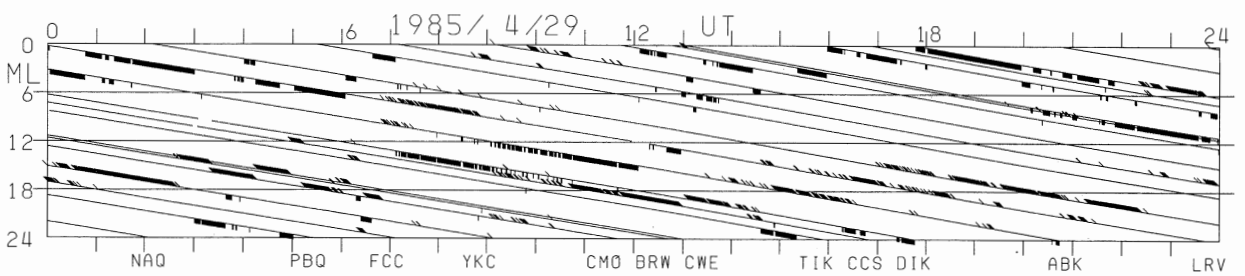
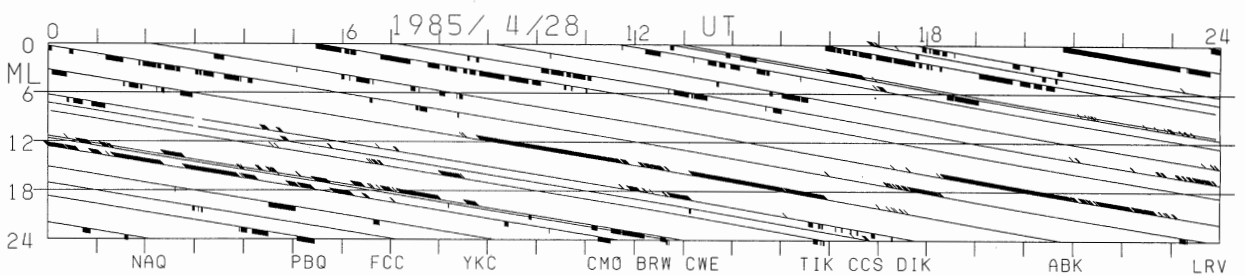
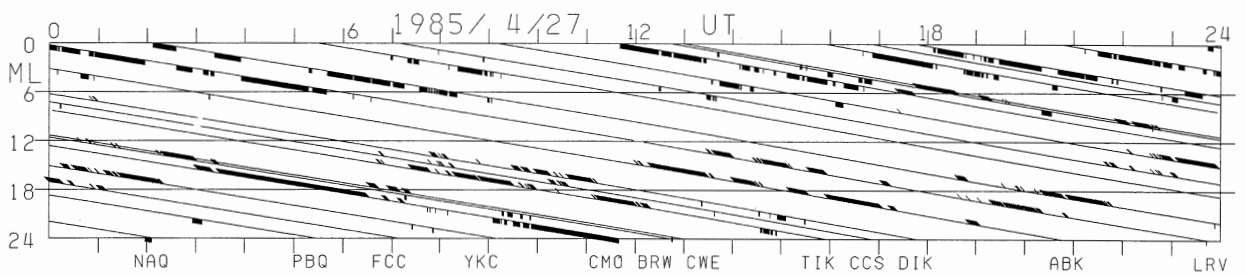
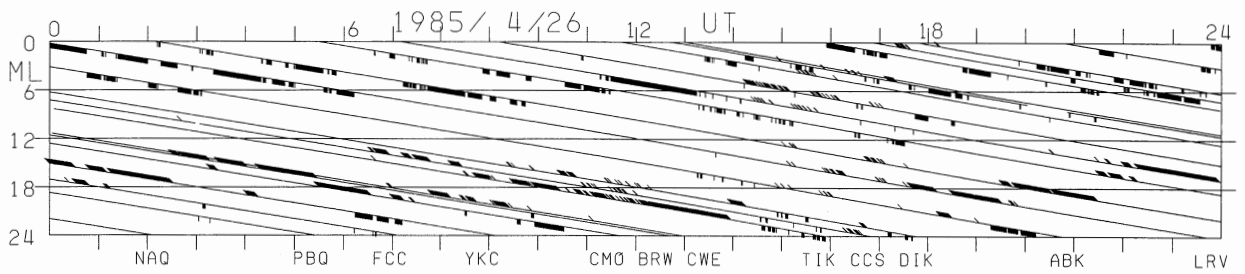
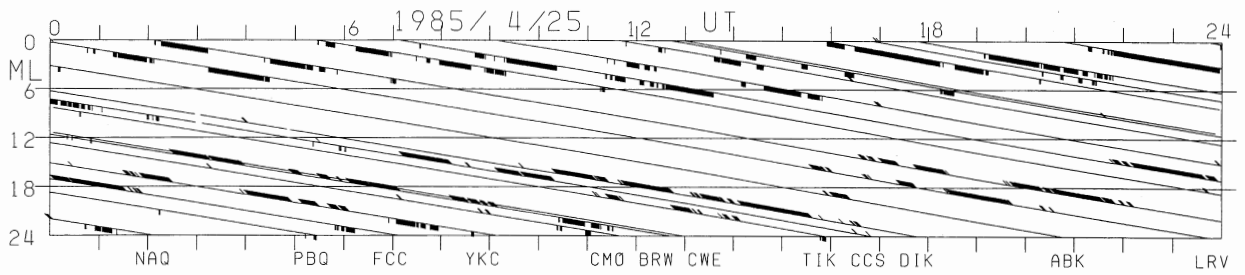


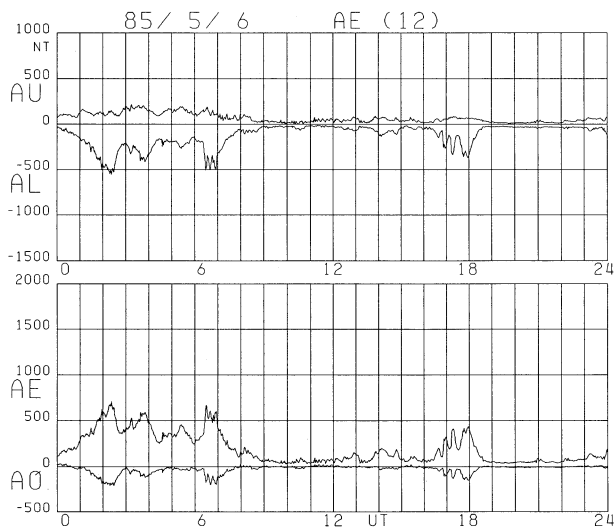
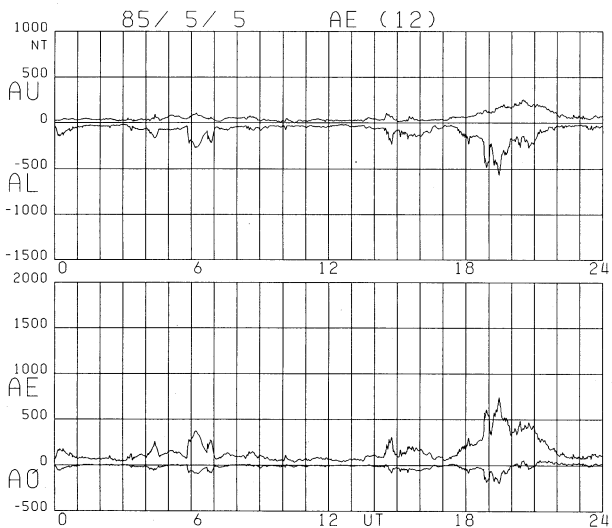
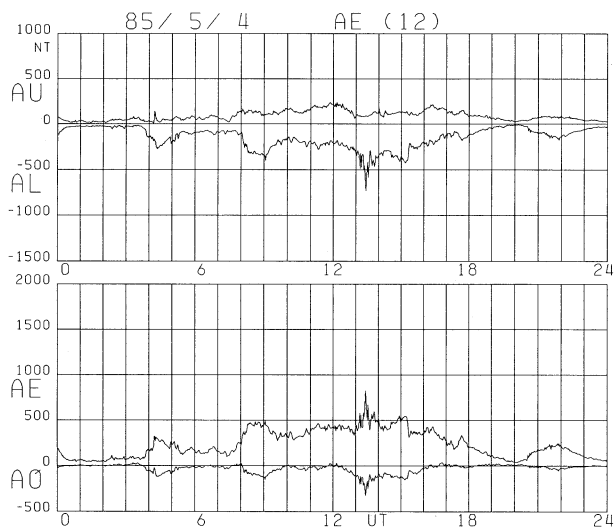
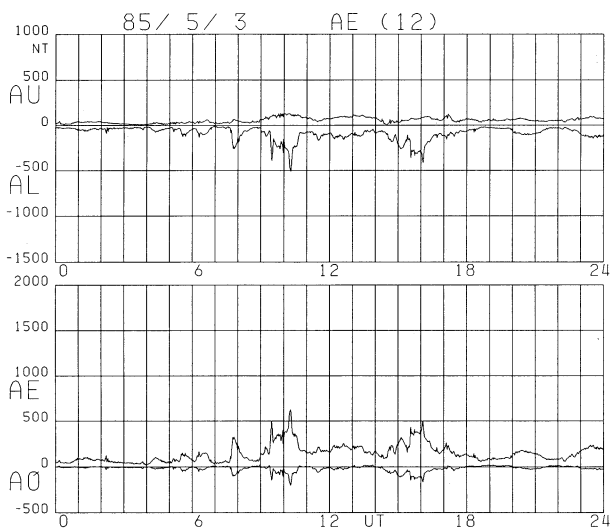
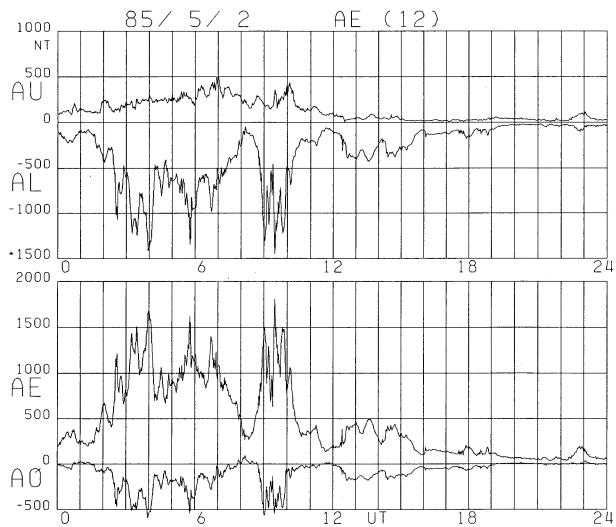
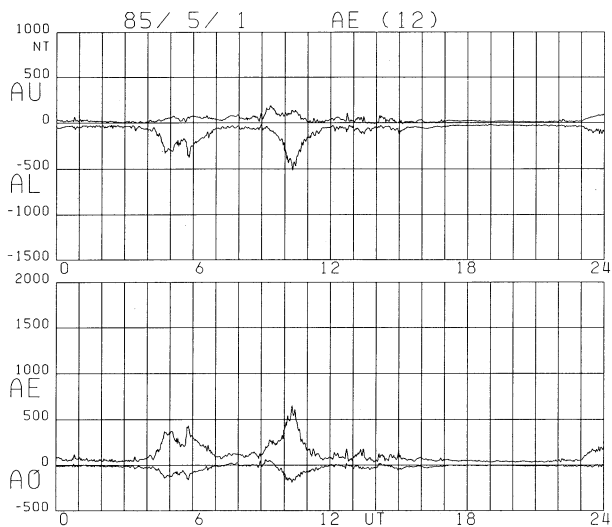
See Supplement



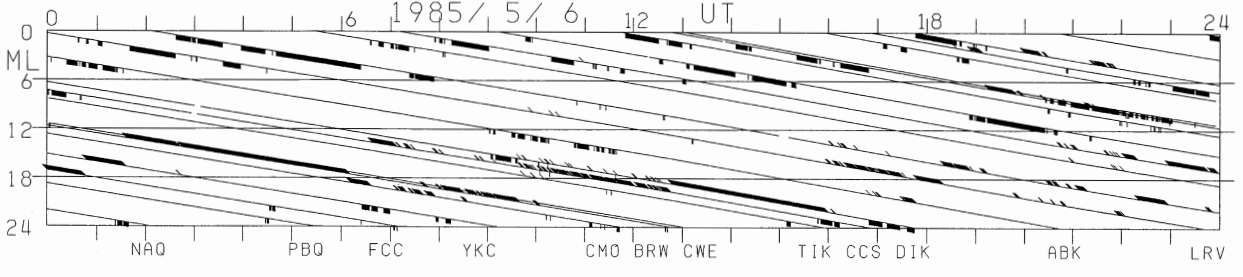
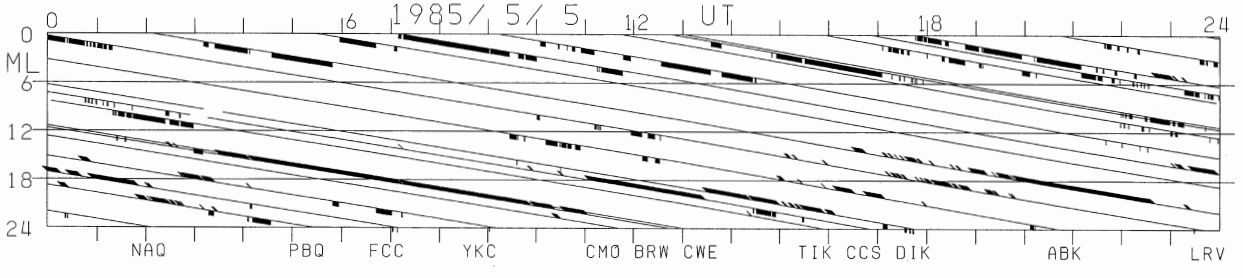
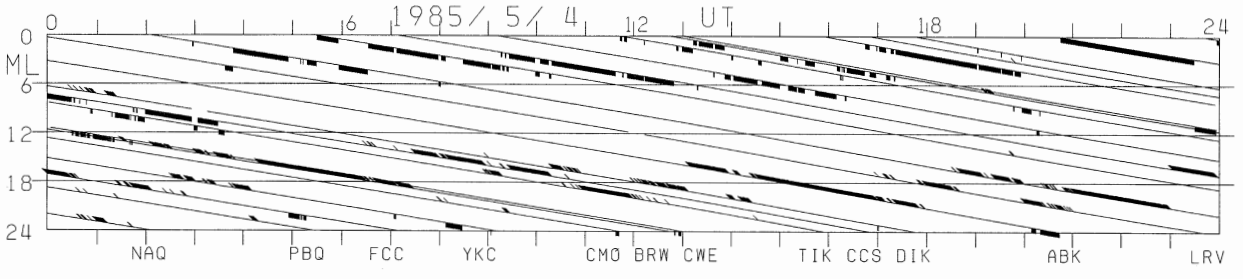
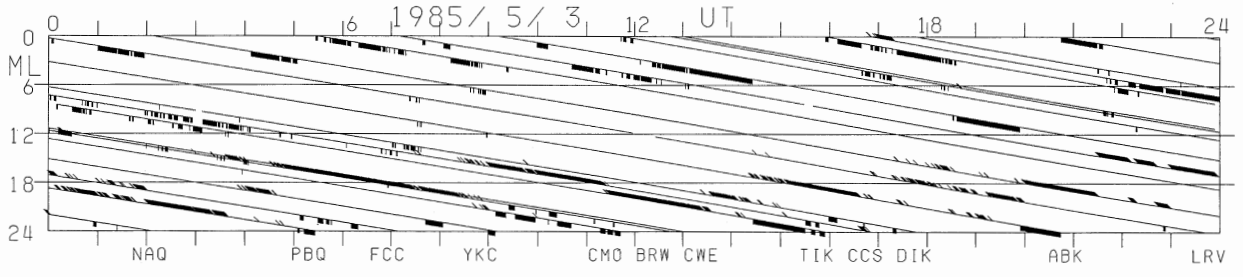
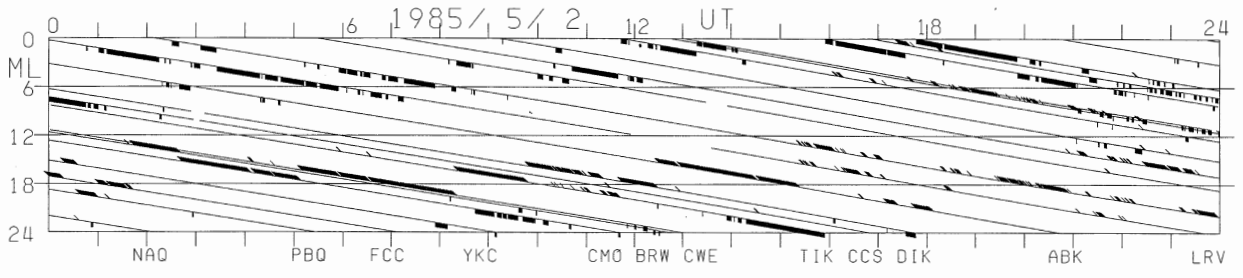
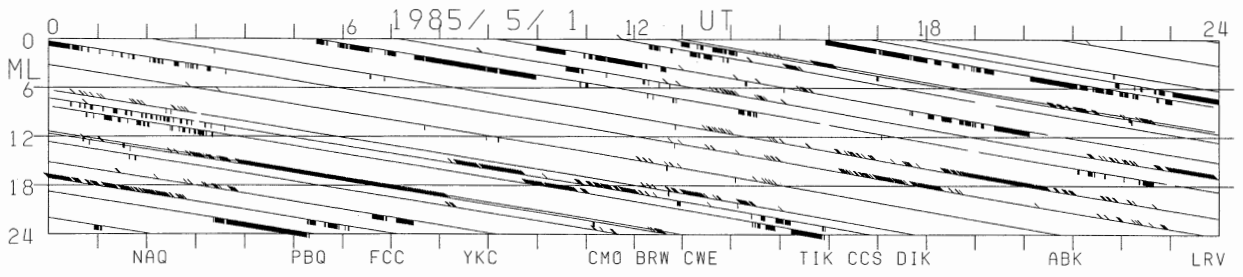


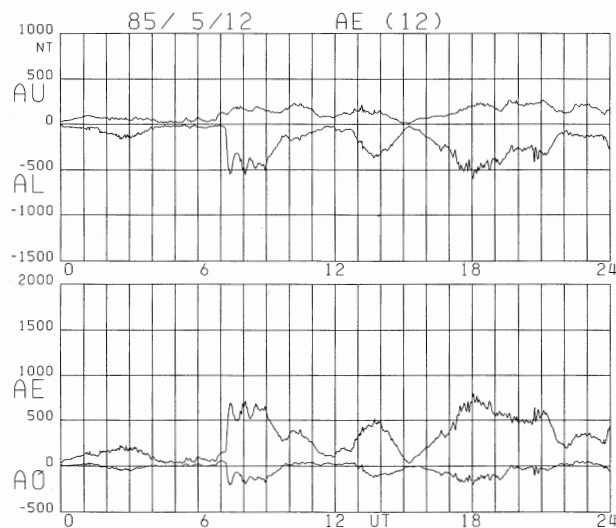
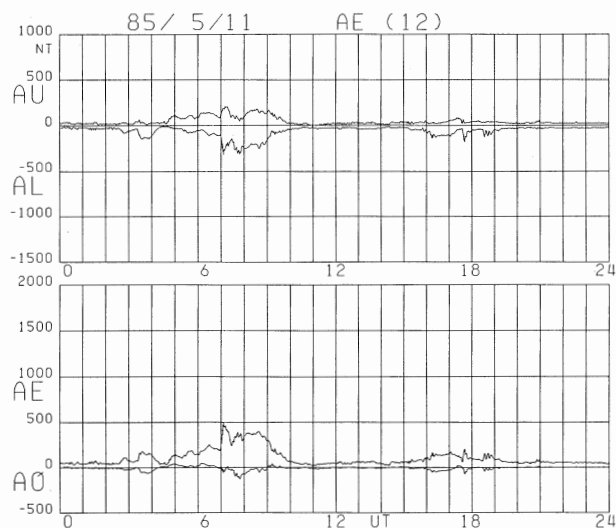
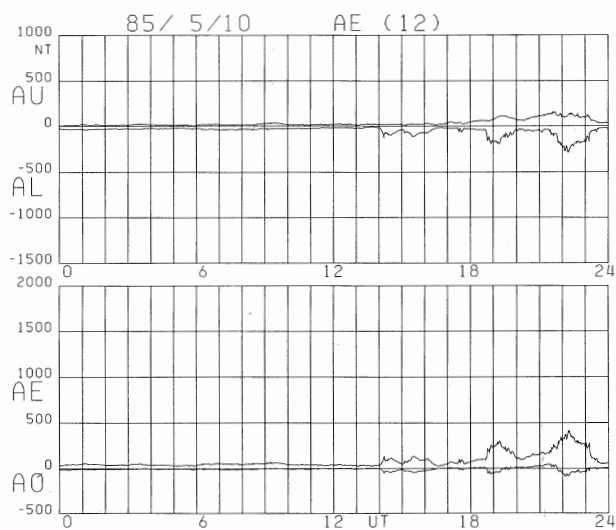
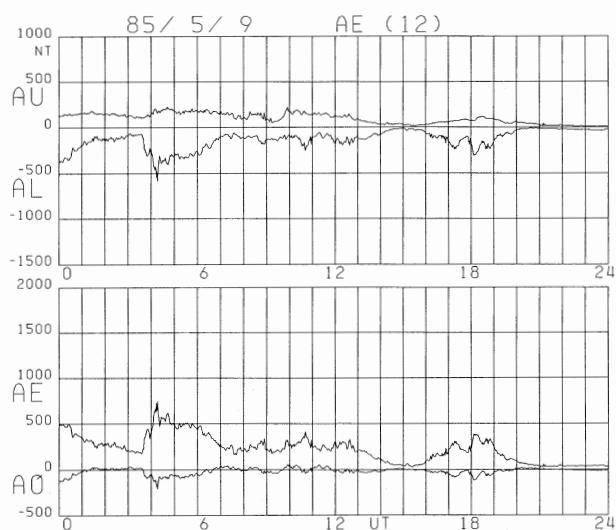
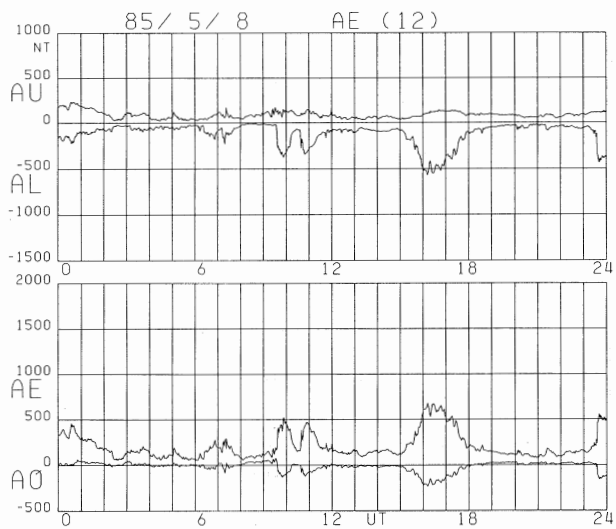
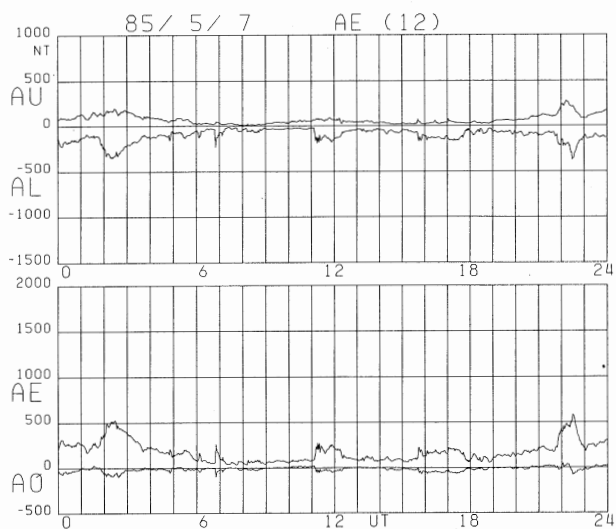


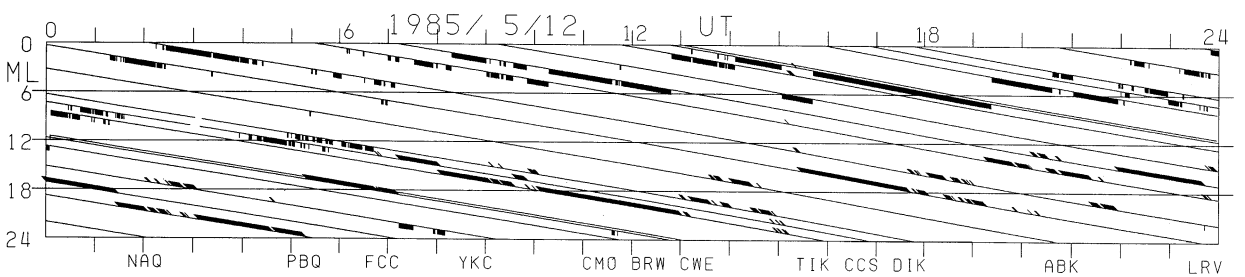
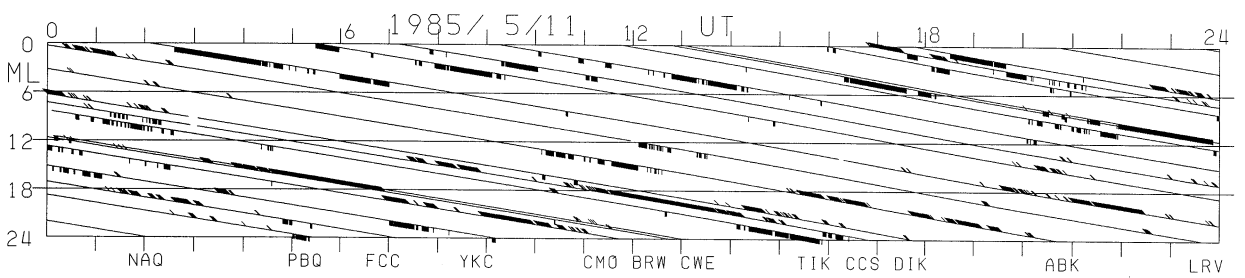
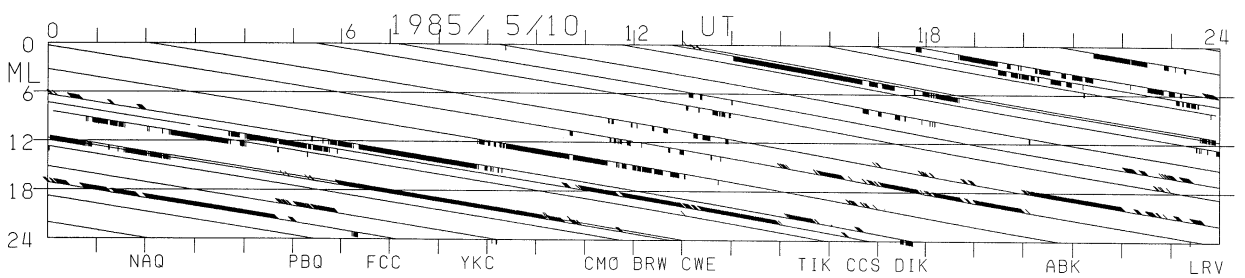
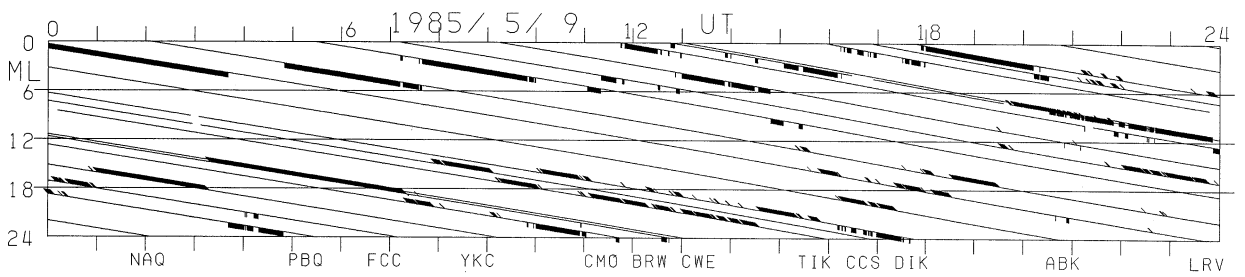
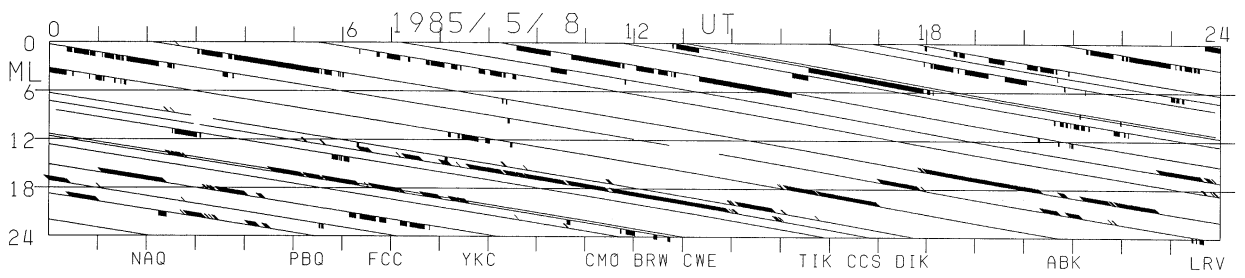
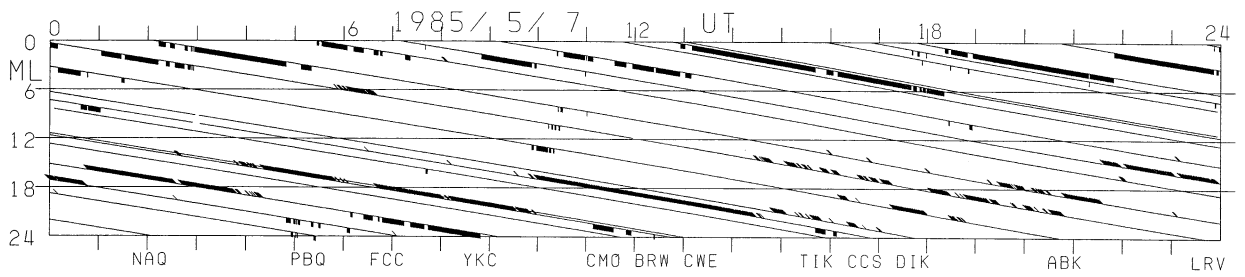


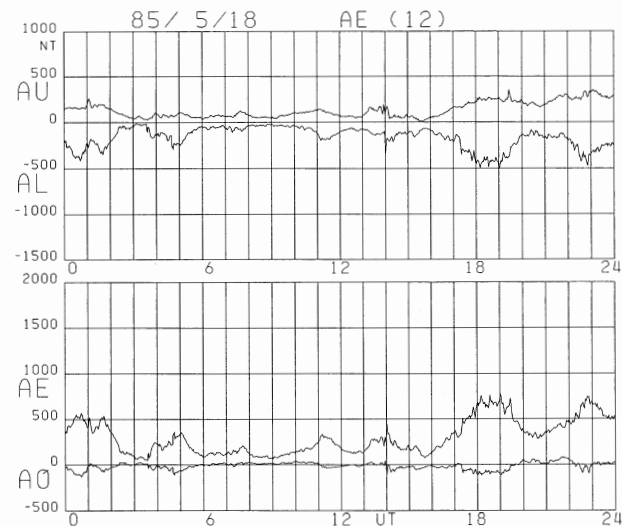
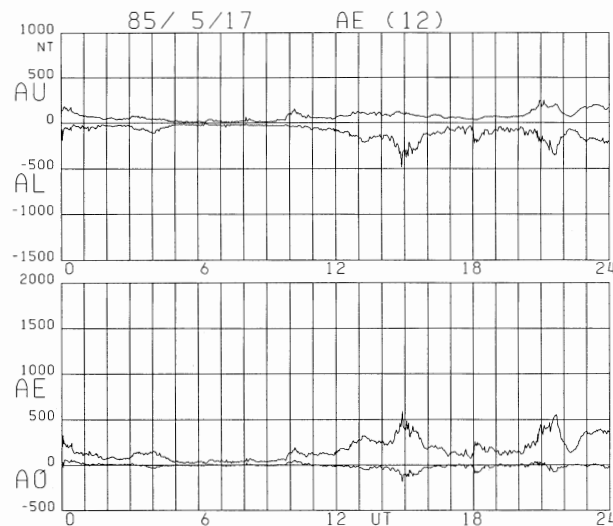
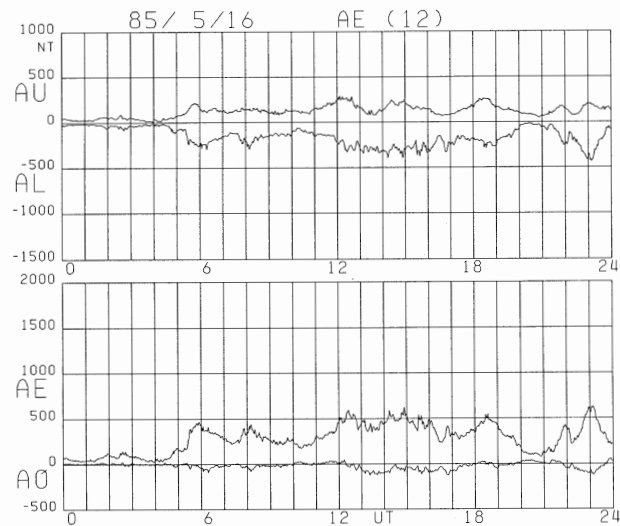
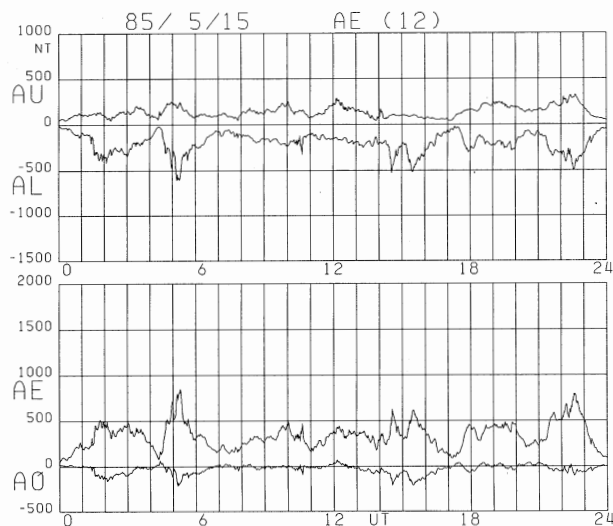
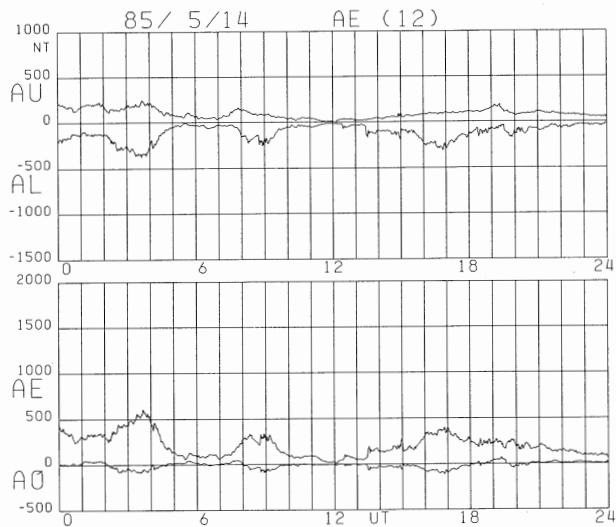
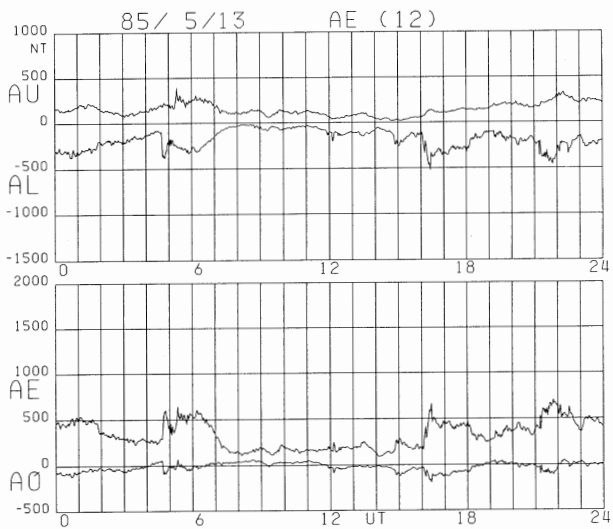


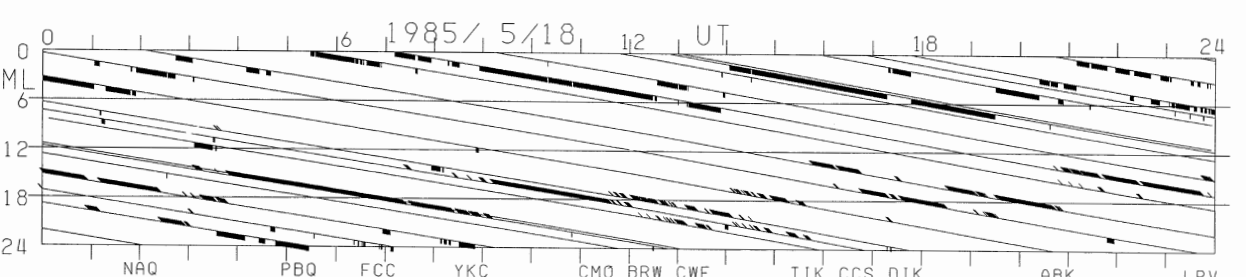
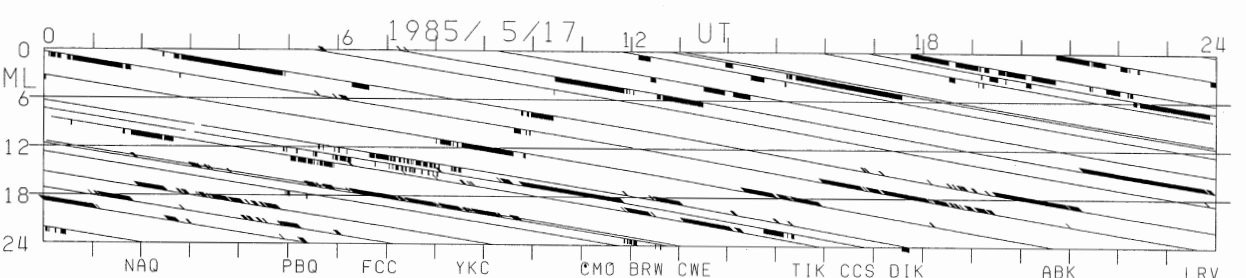
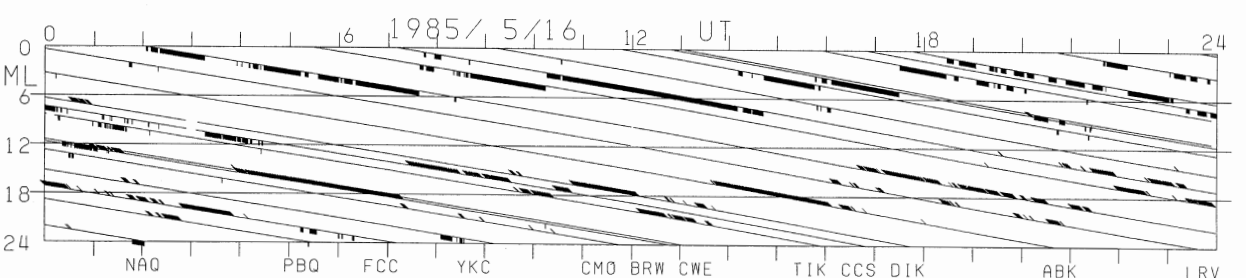
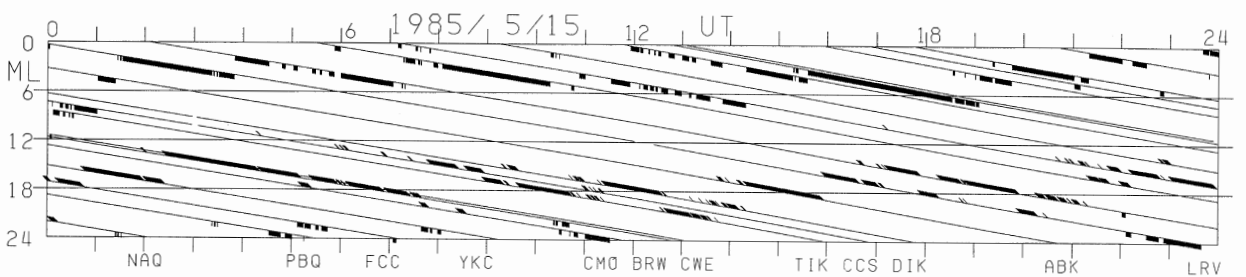
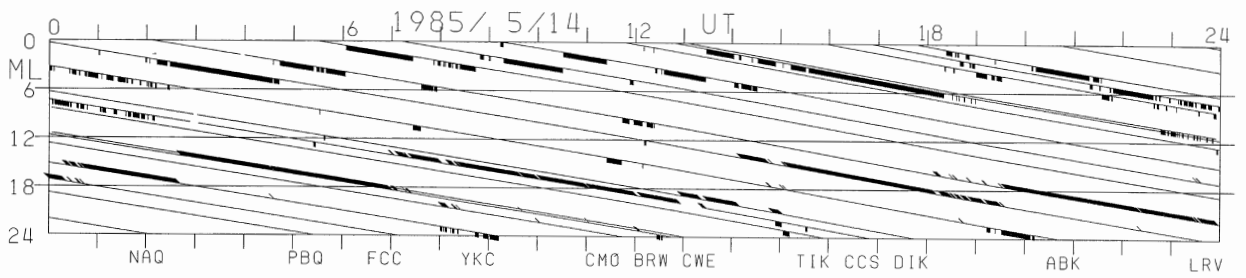
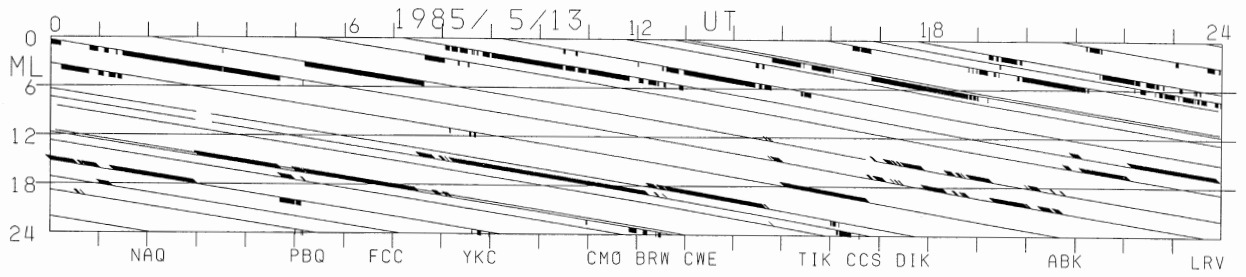


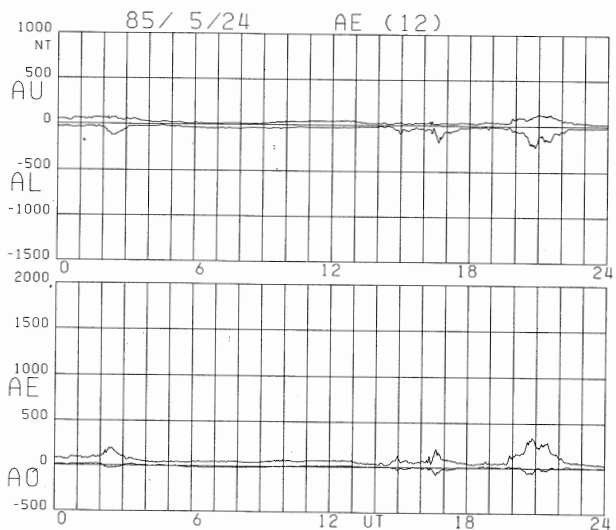
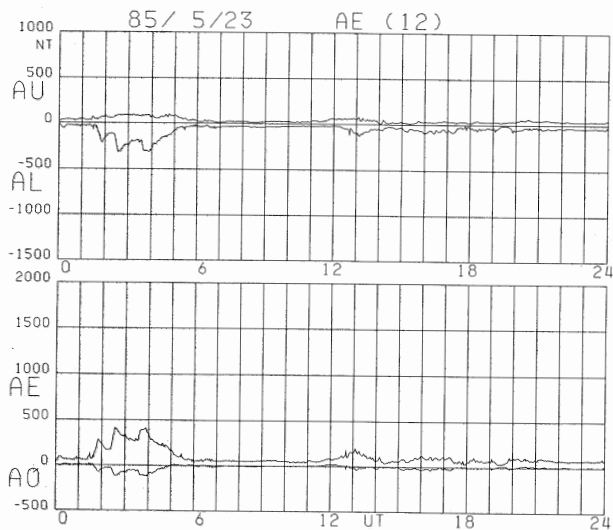
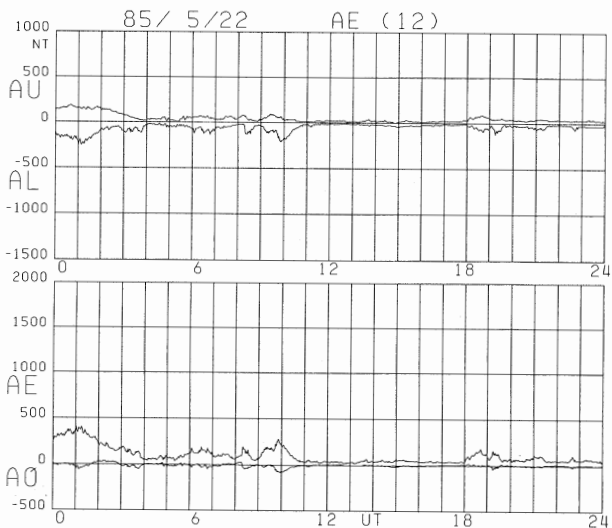
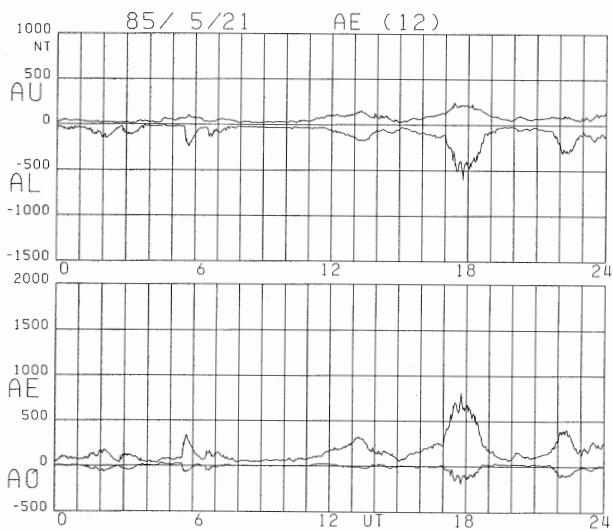
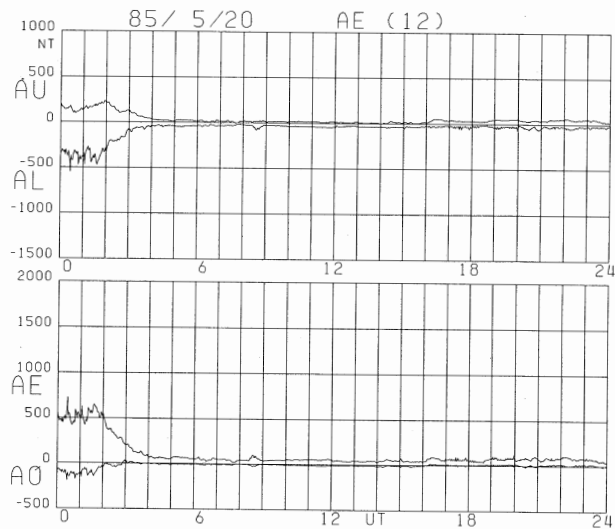
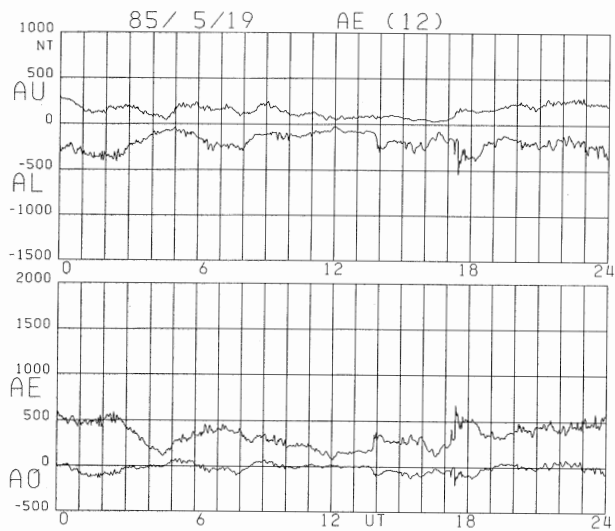


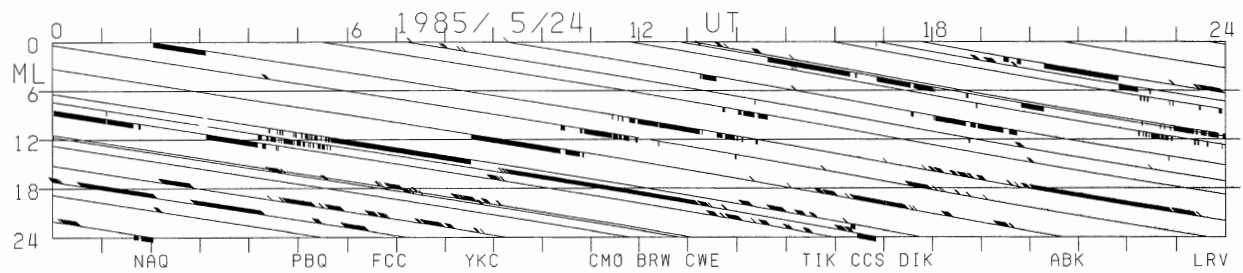
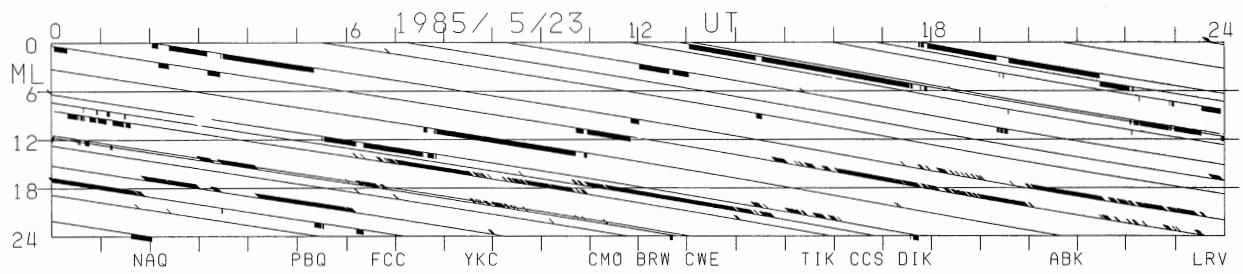
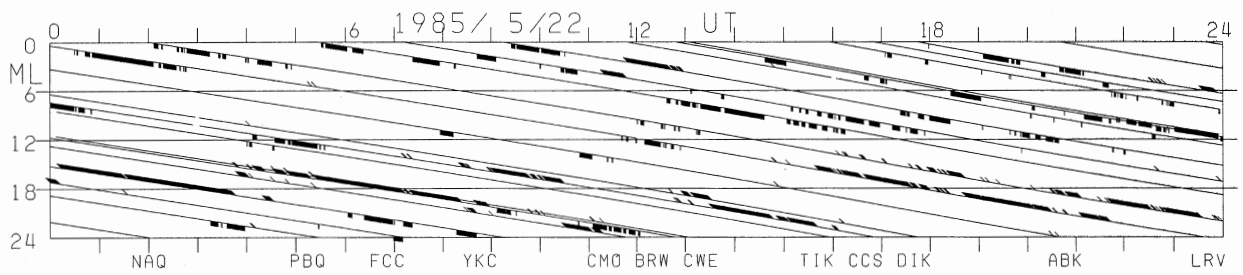
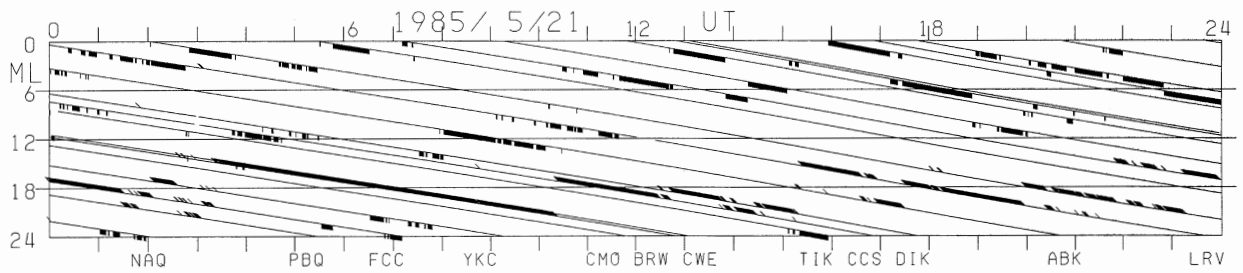
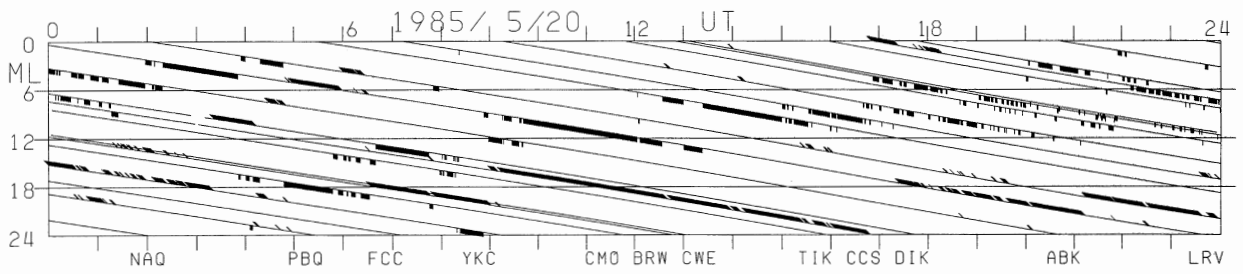
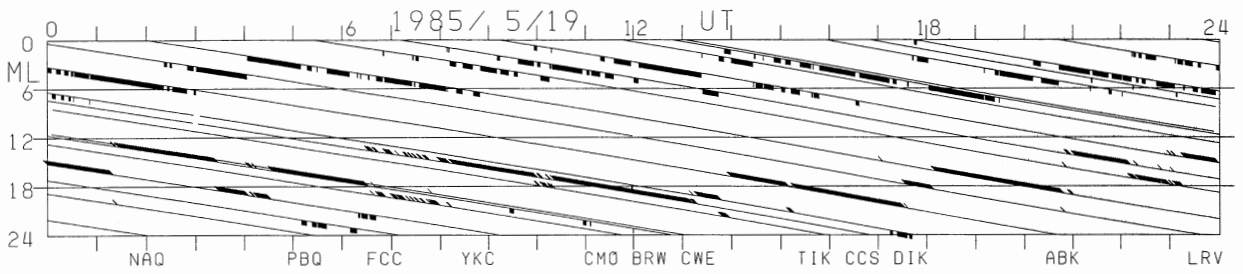


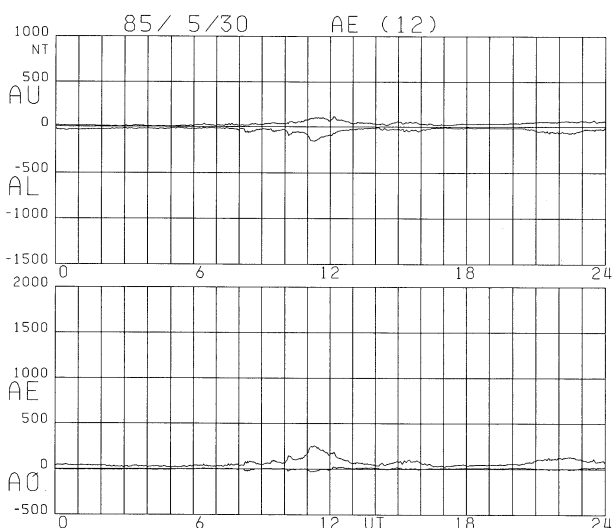
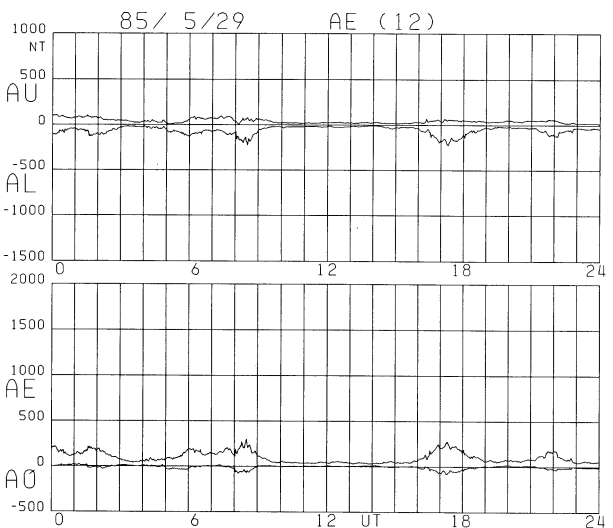
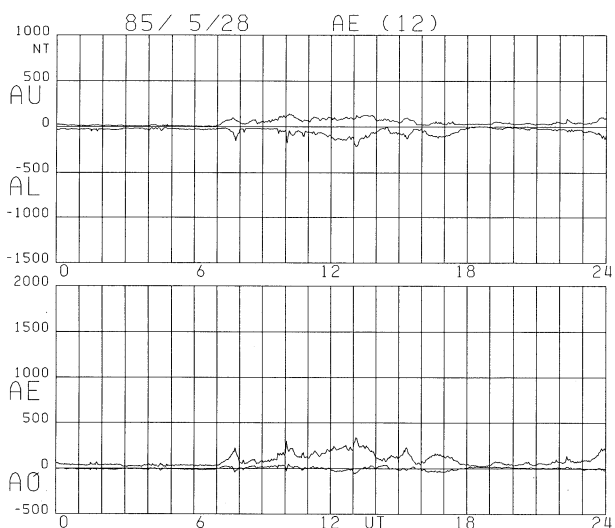
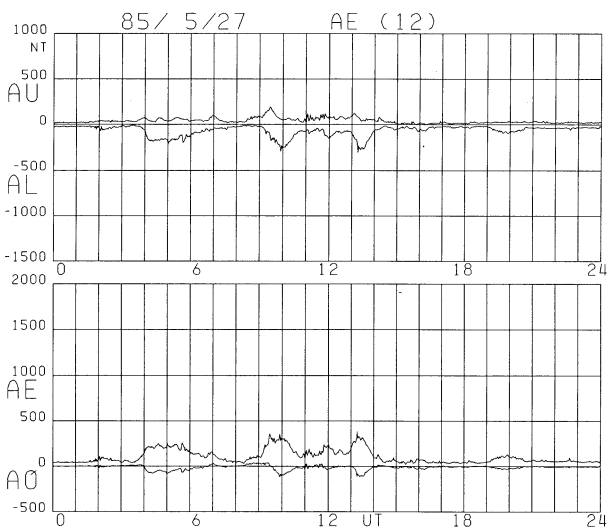
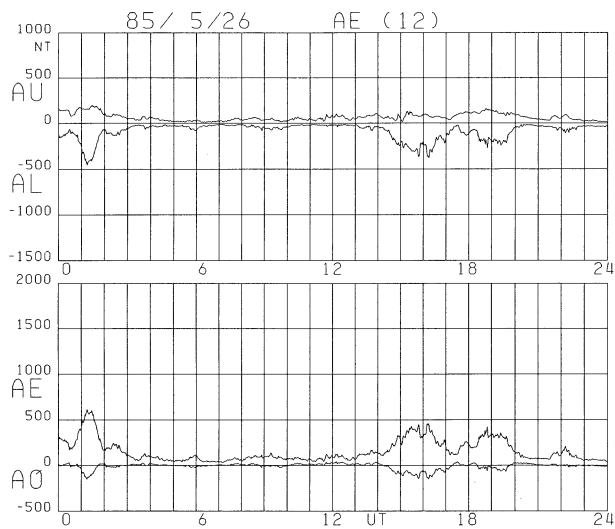
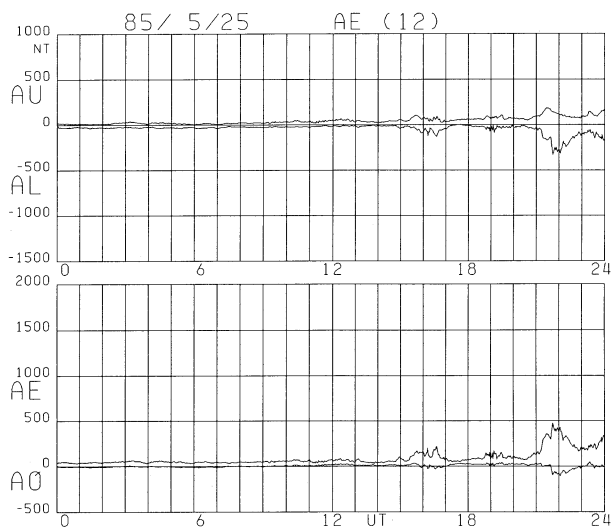




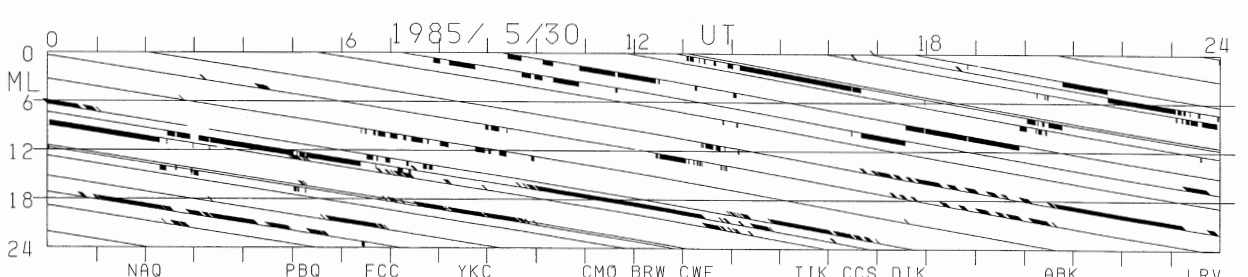
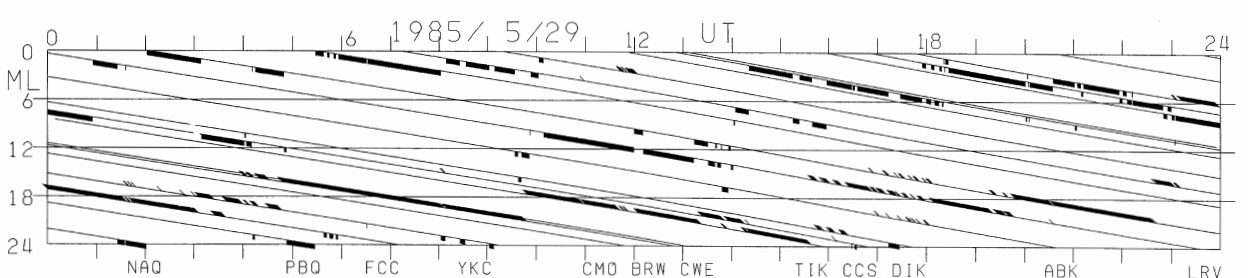
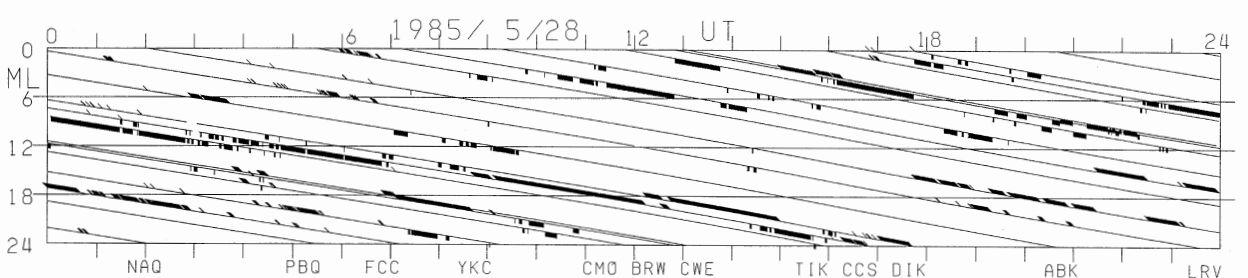
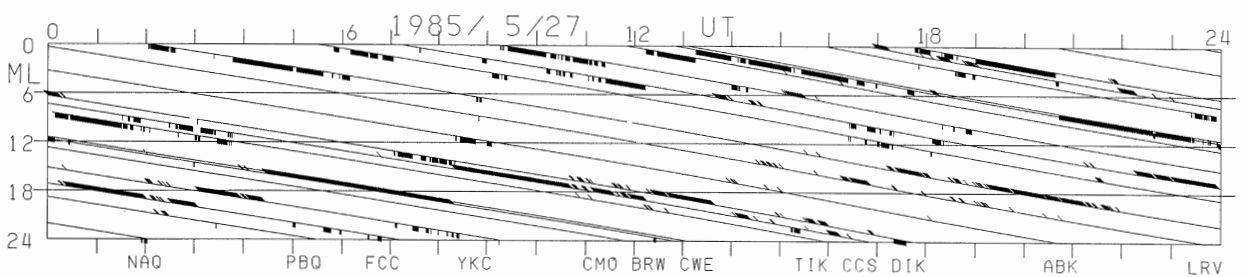
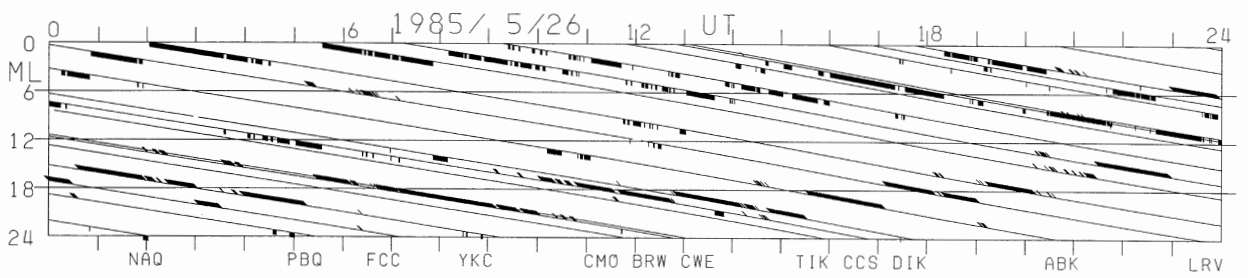
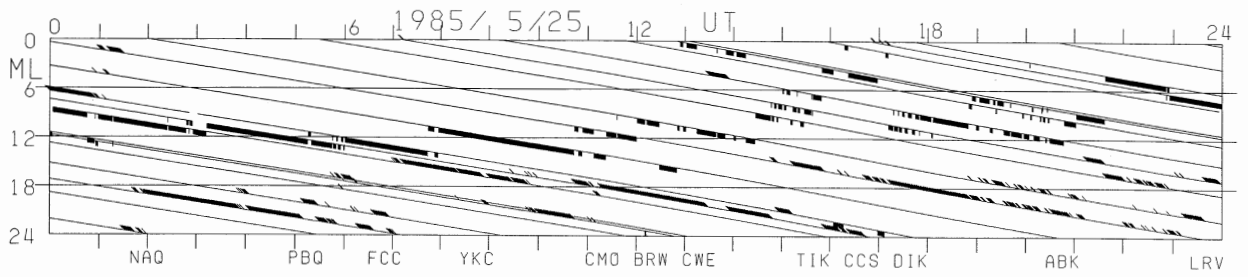


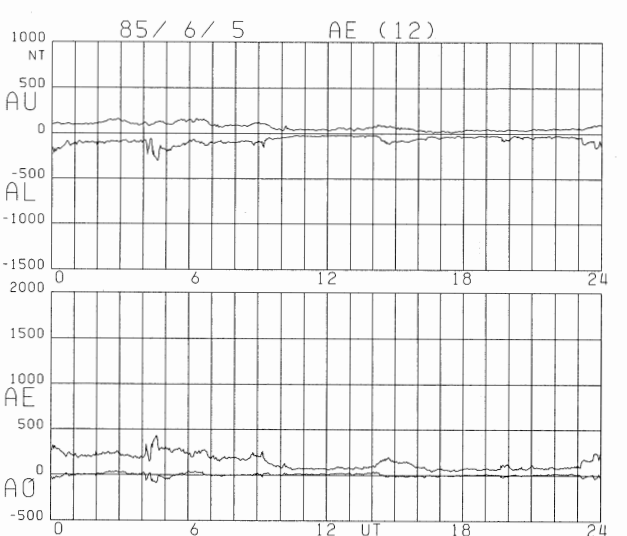
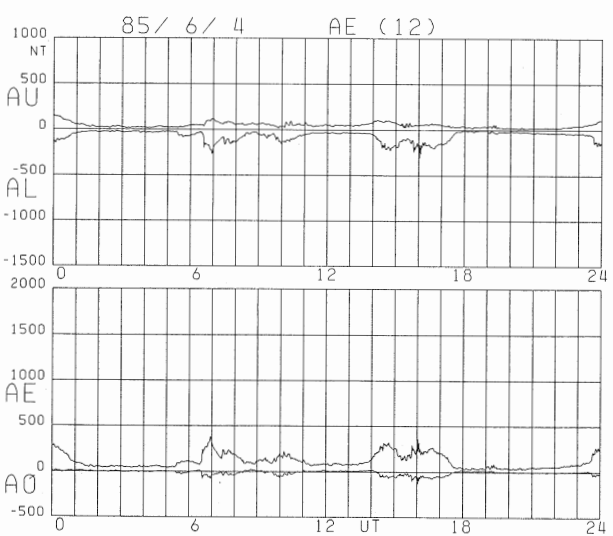
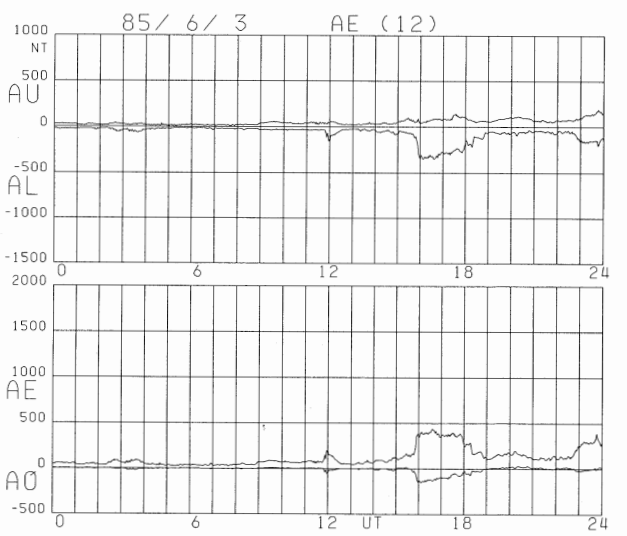
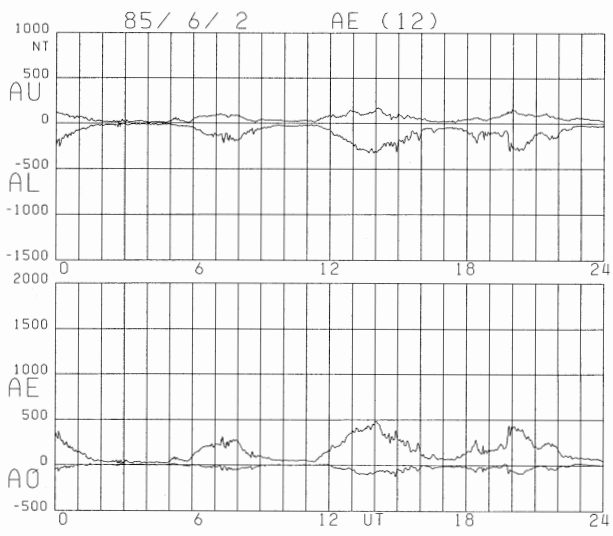
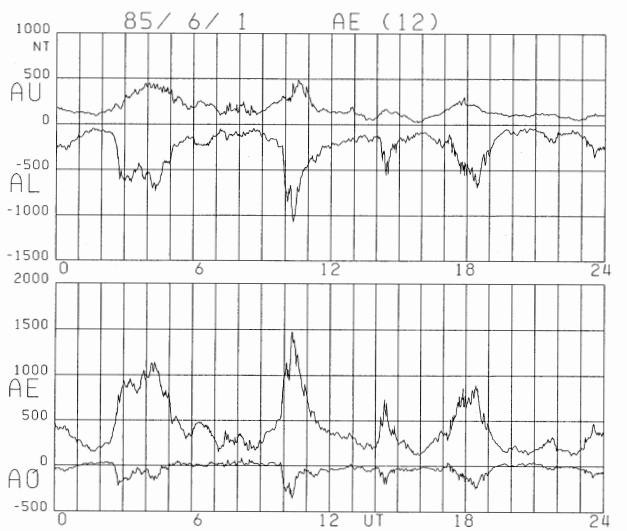
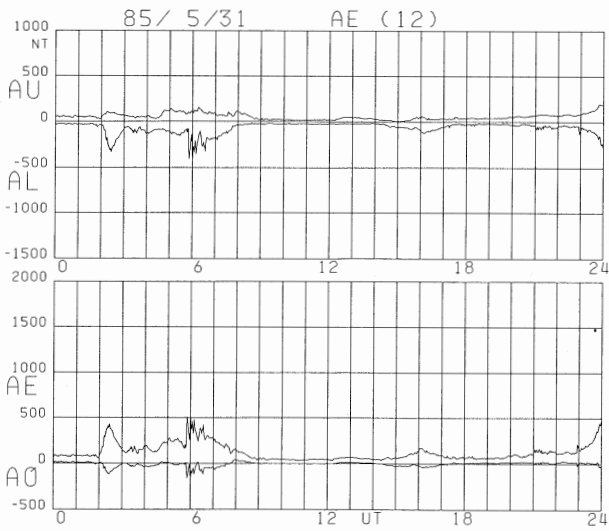


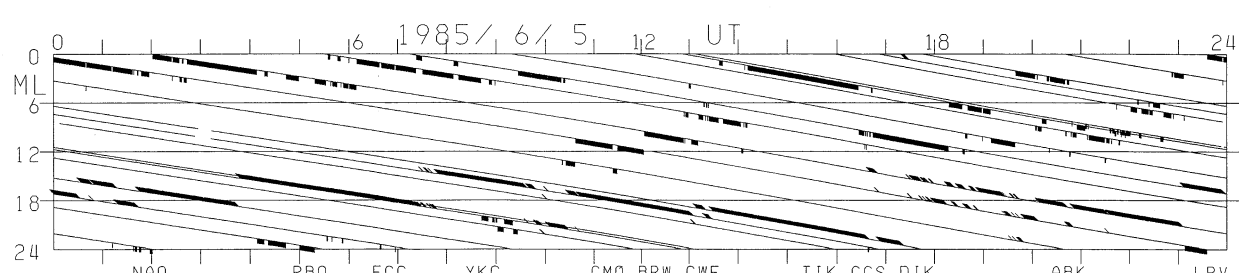
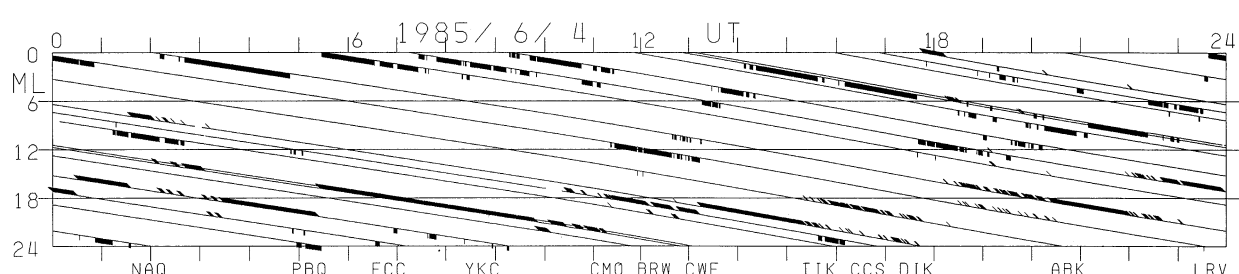
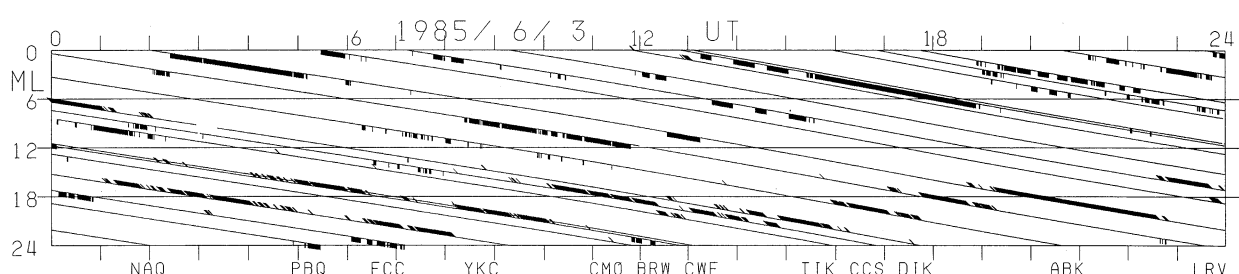
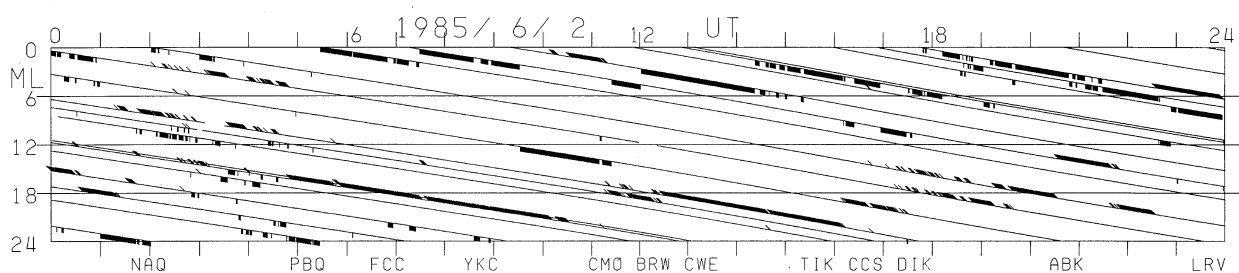
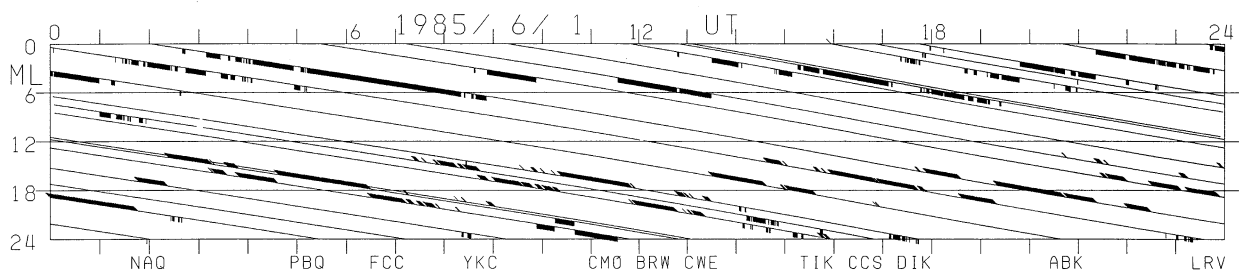
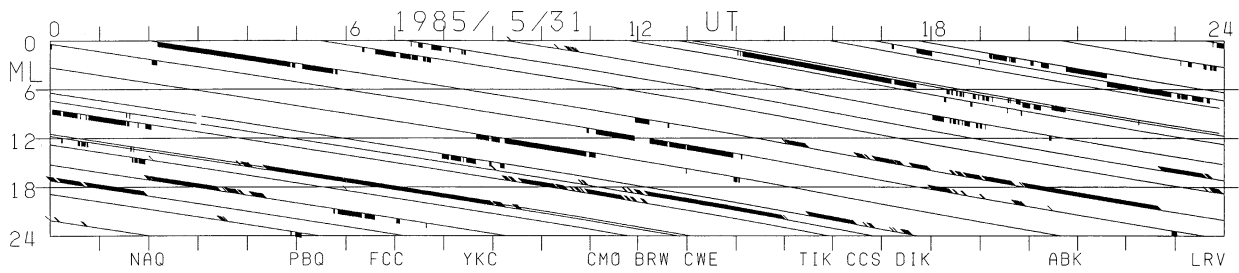


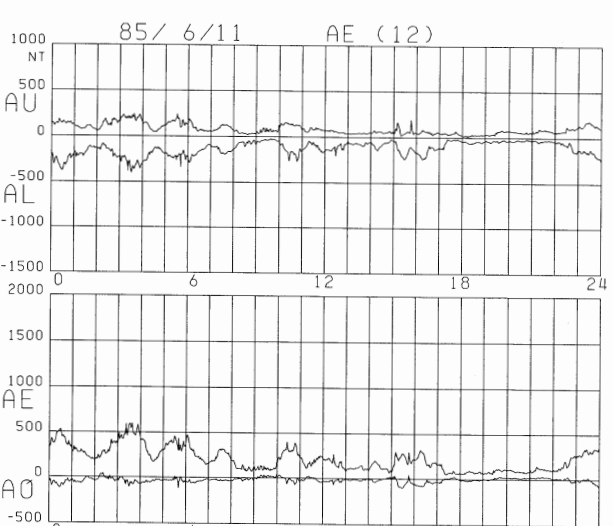
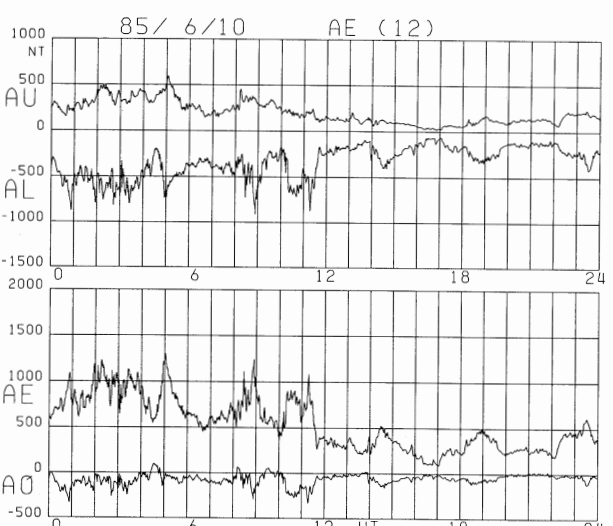
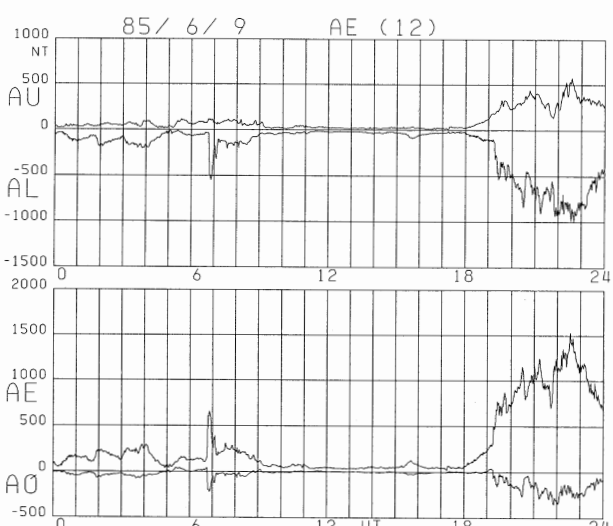
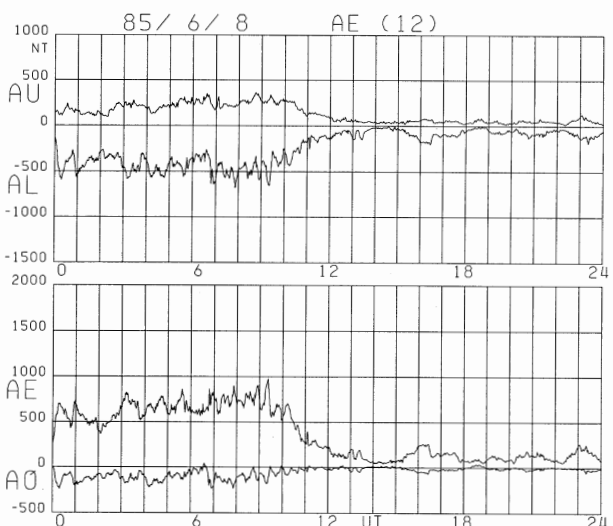
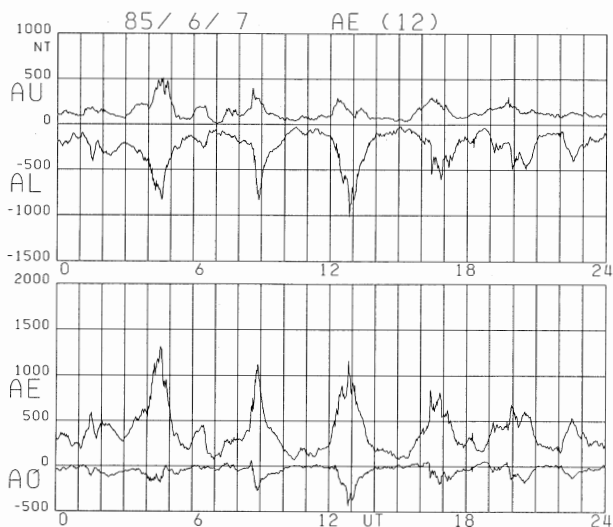
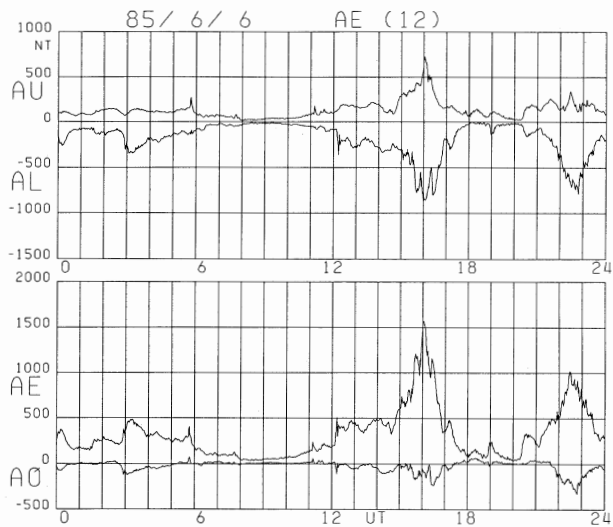


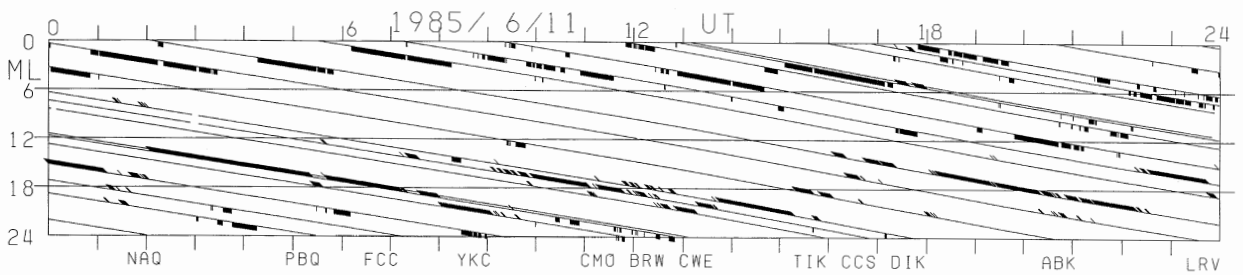
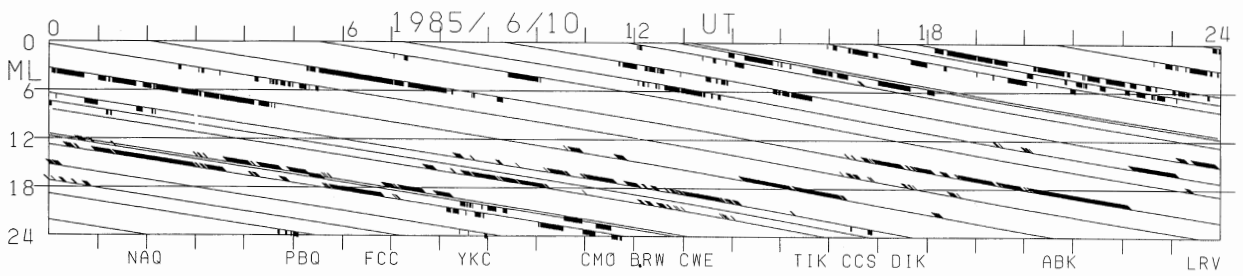
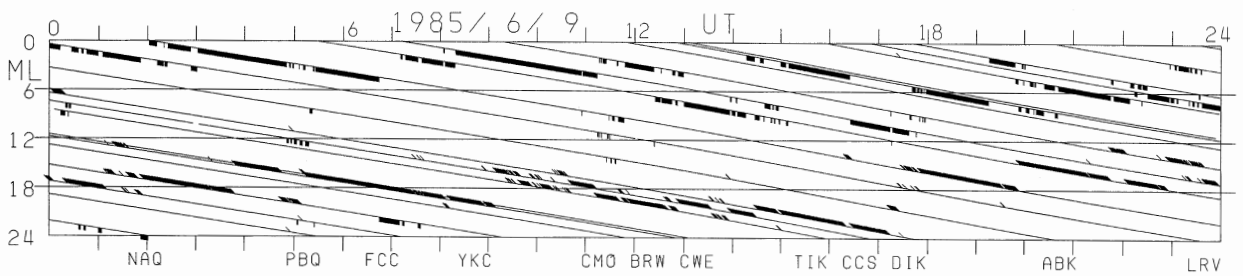
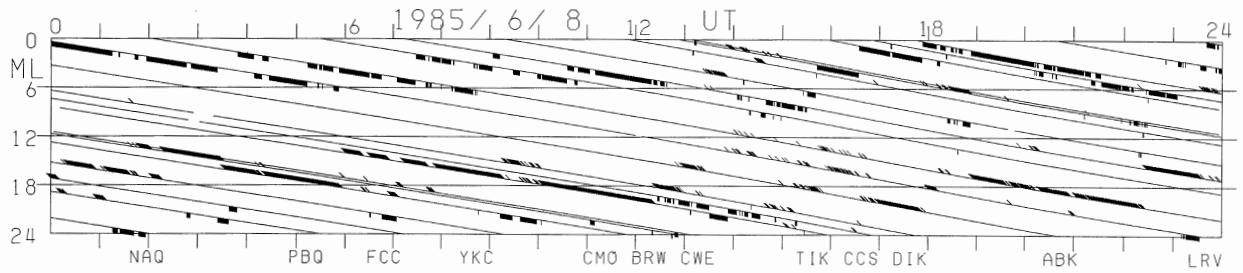
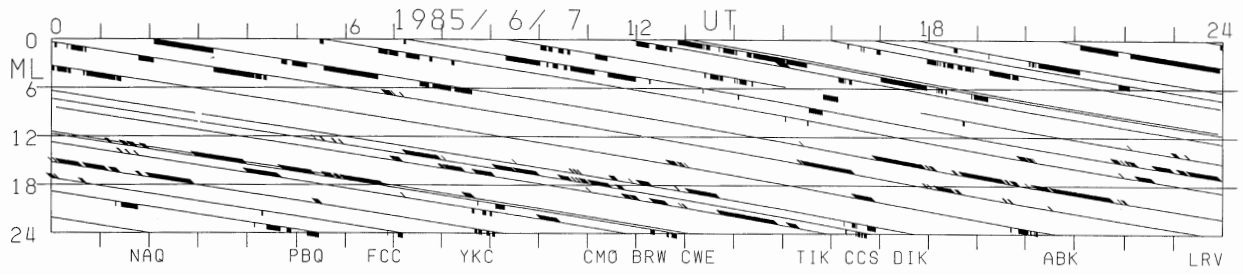
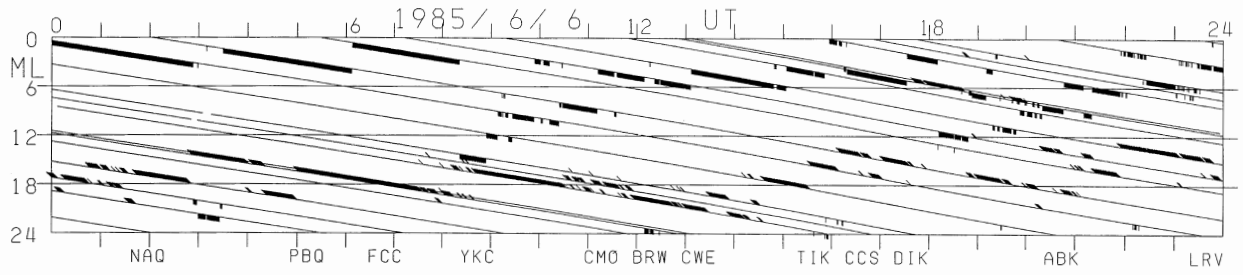




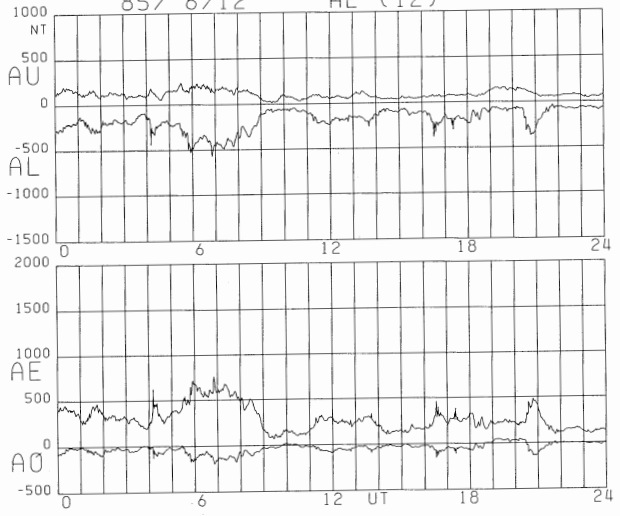




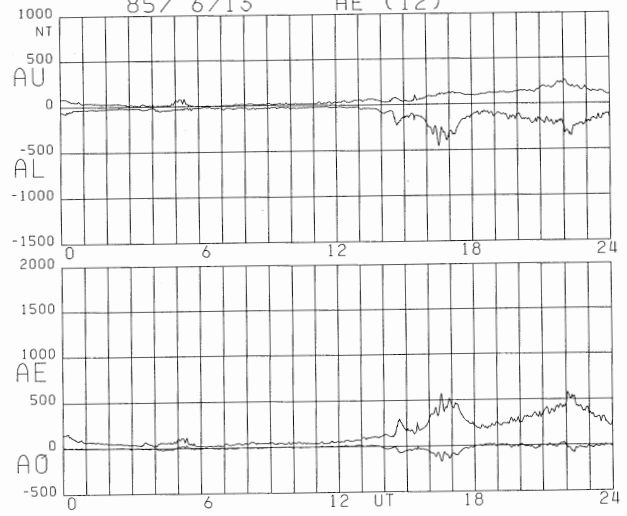




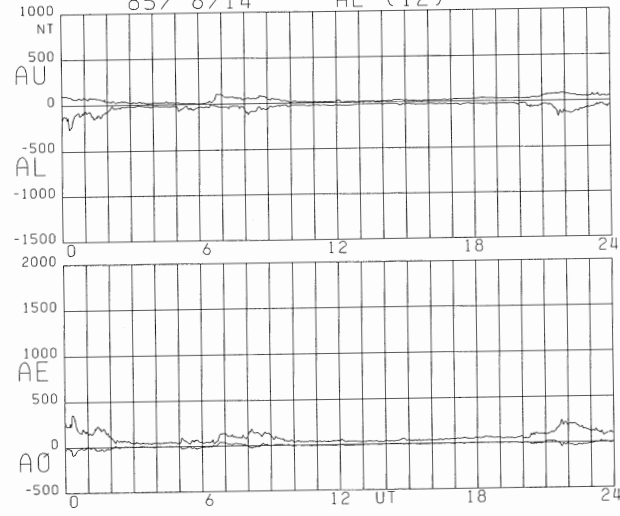
85/ 6/12 AE (12)



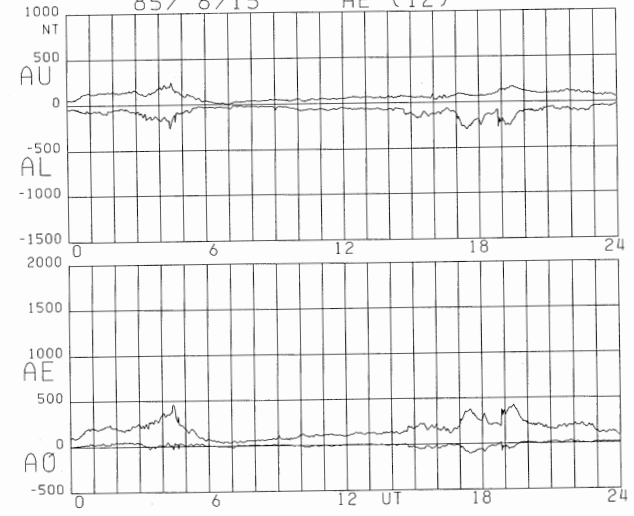
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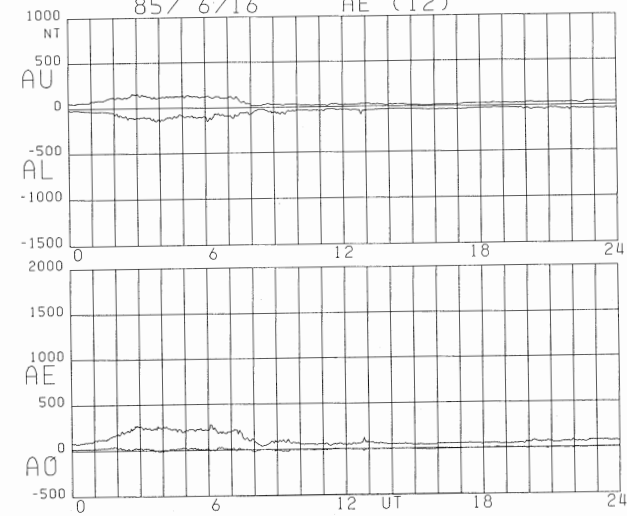
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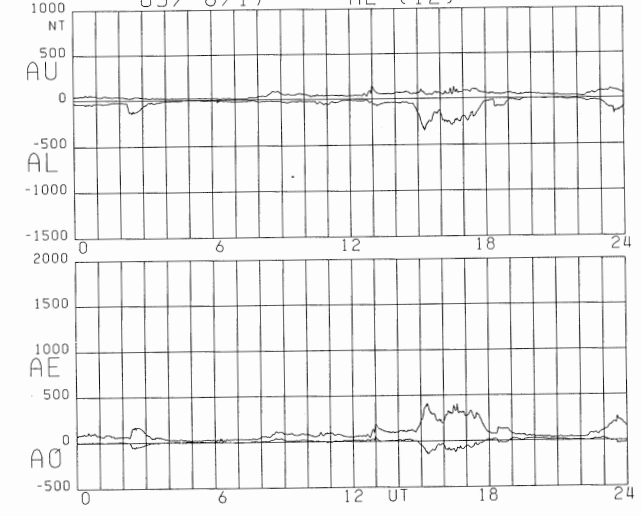
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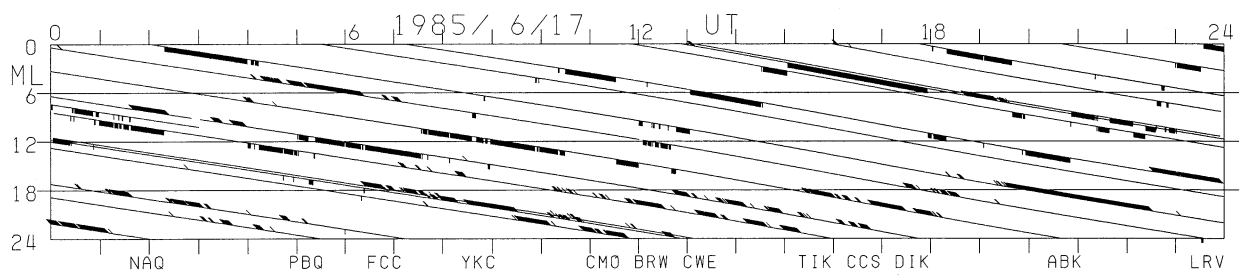
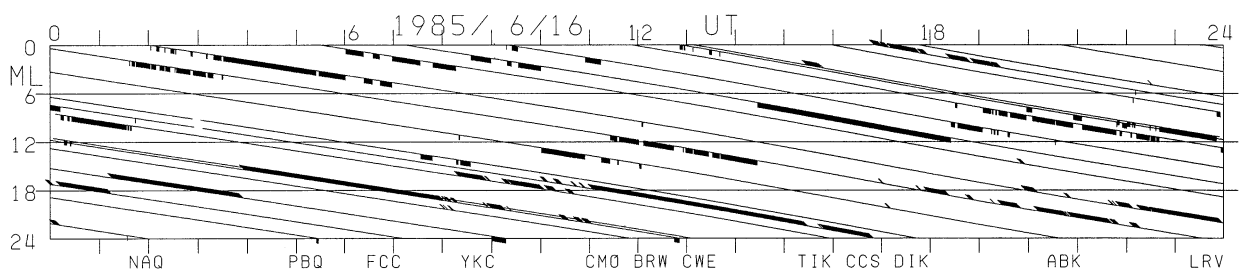
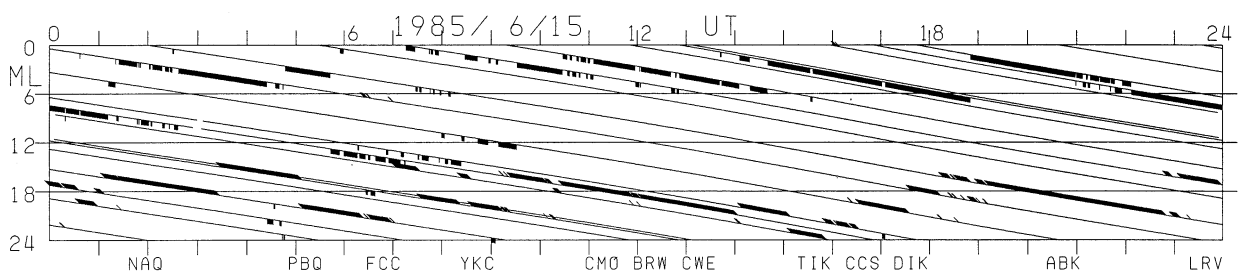
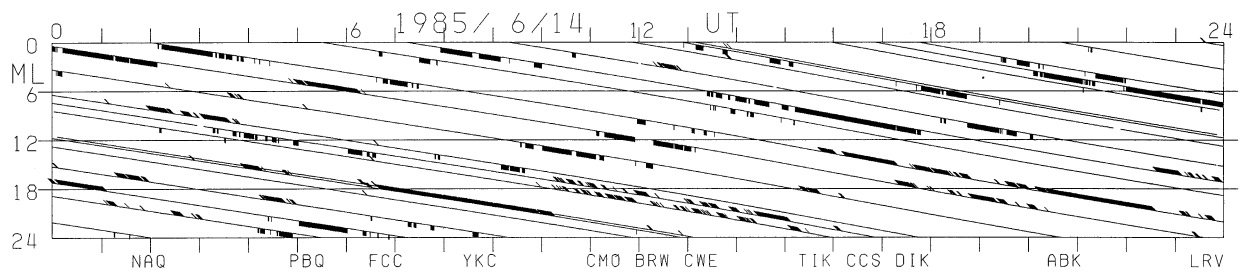
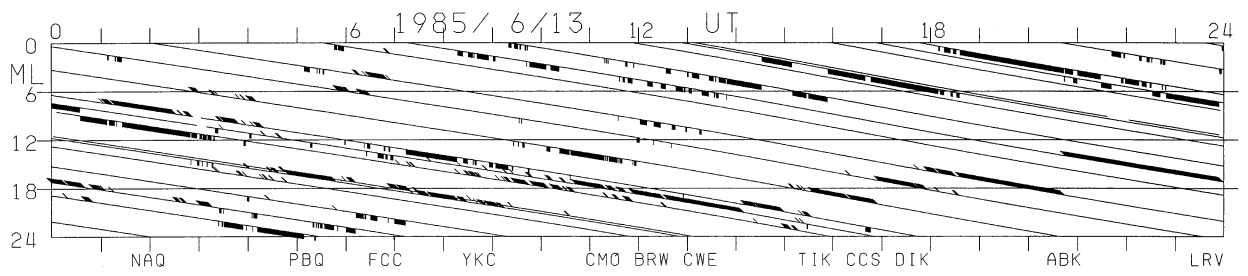
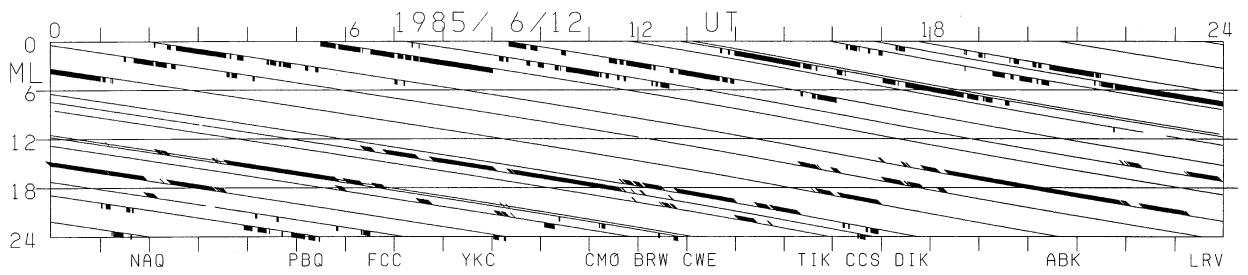


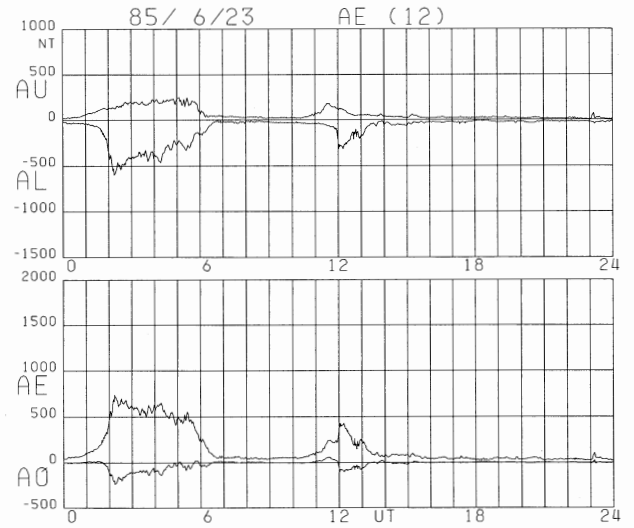
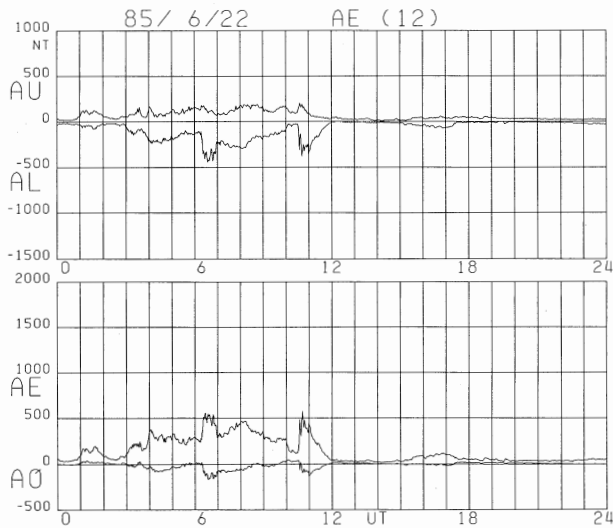
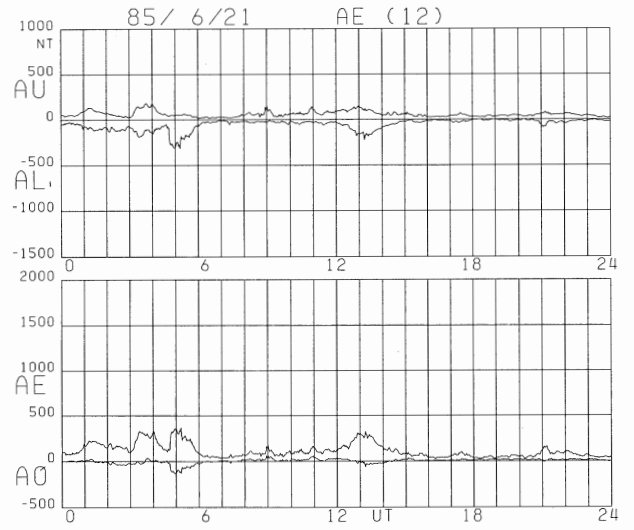
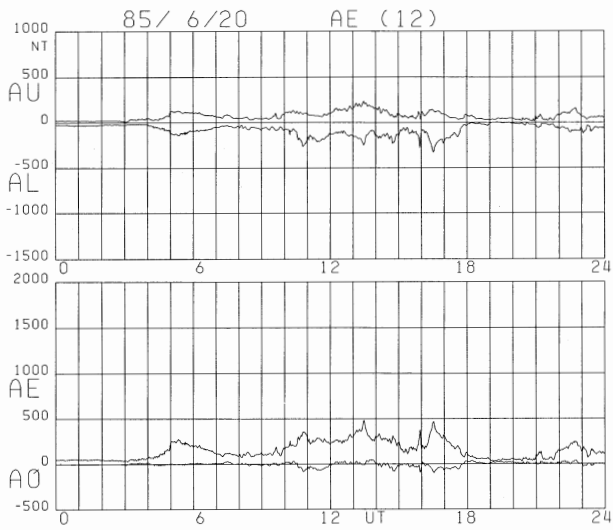
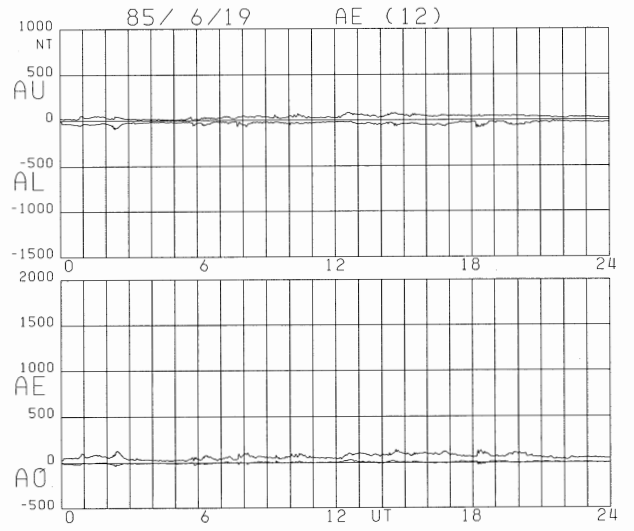
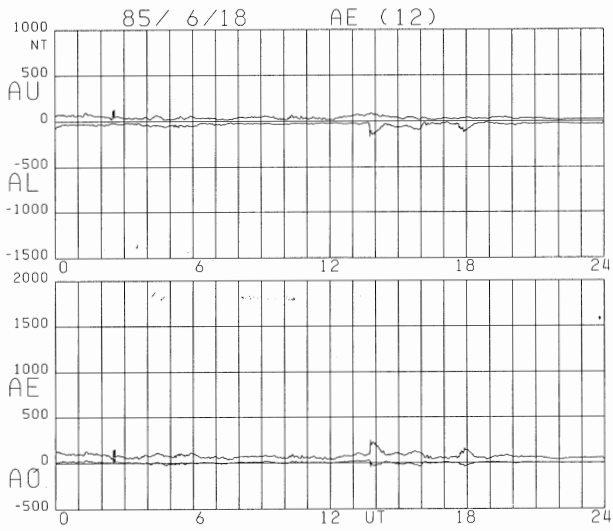
85/ 6/16 AE (12)



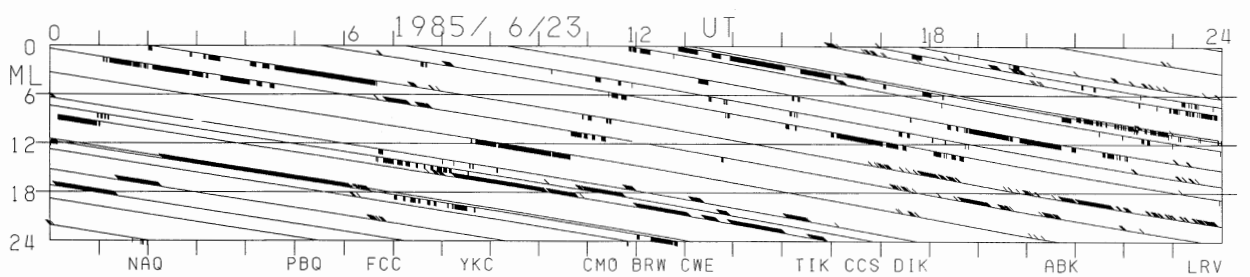
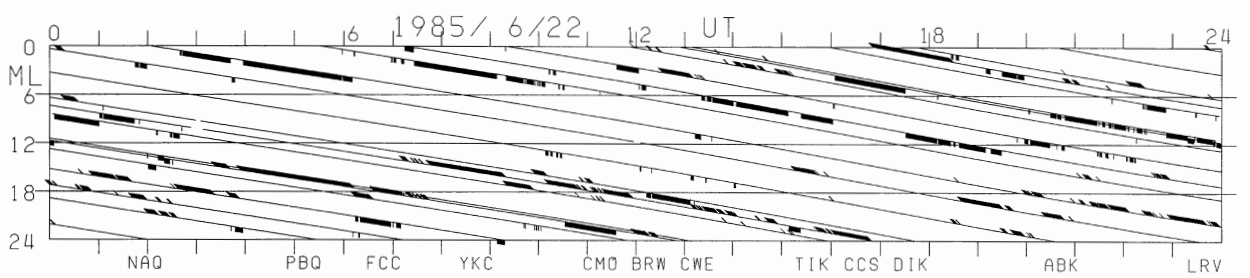
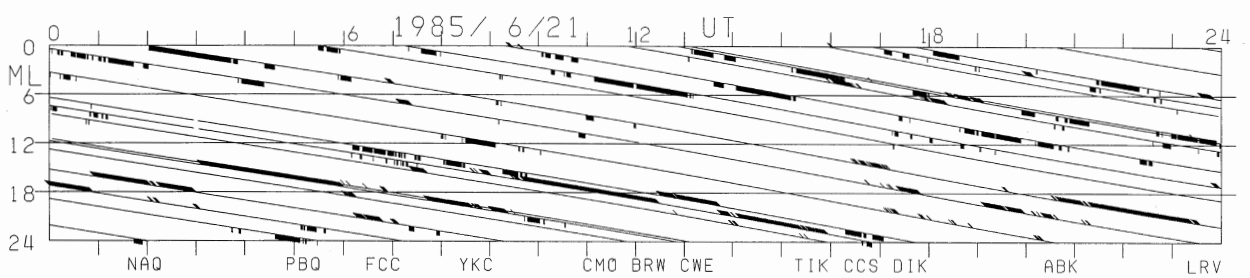
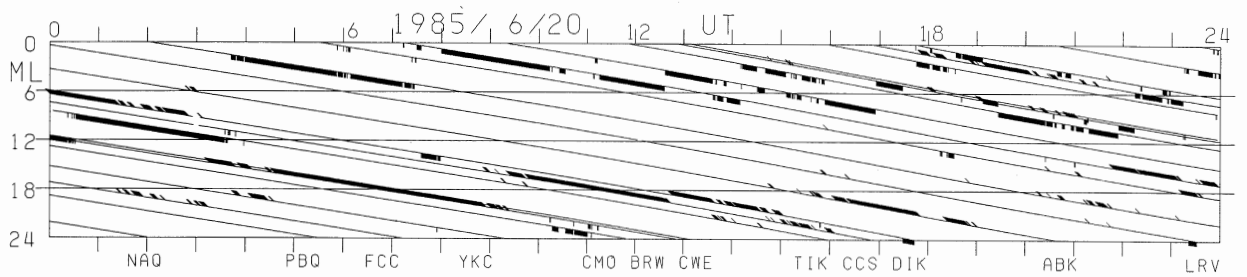
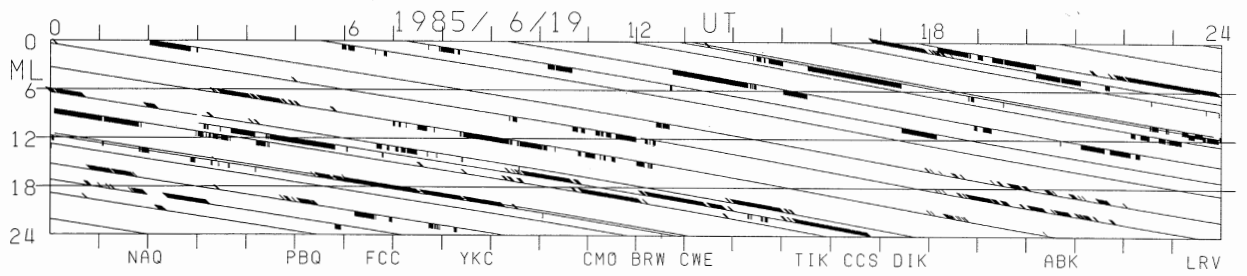
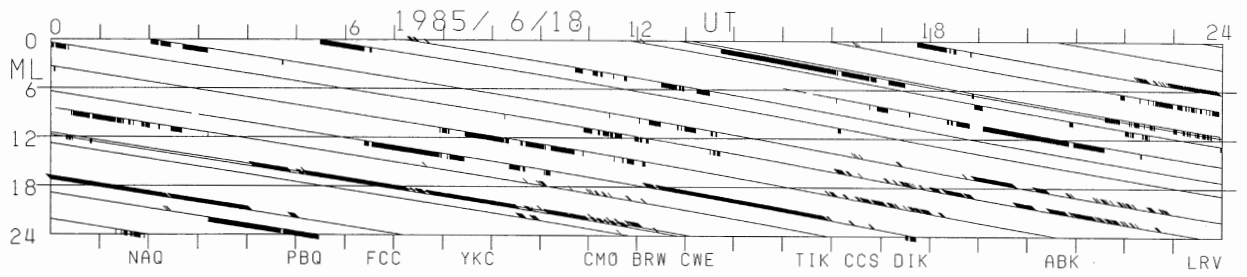
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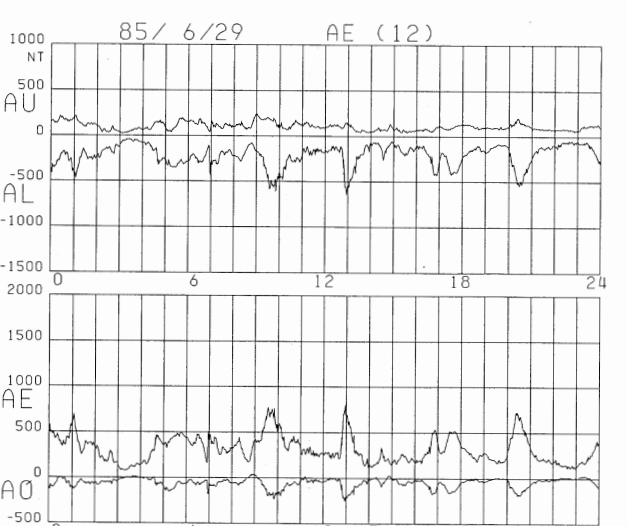
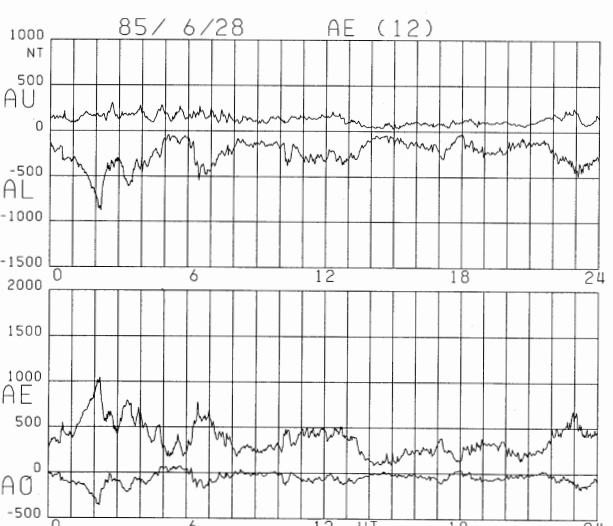
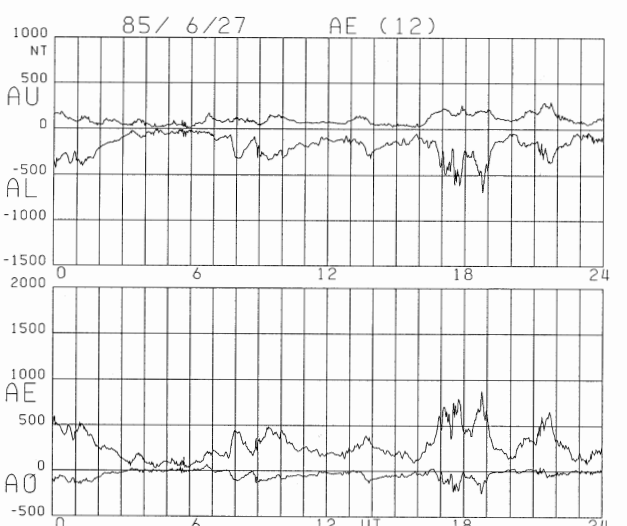
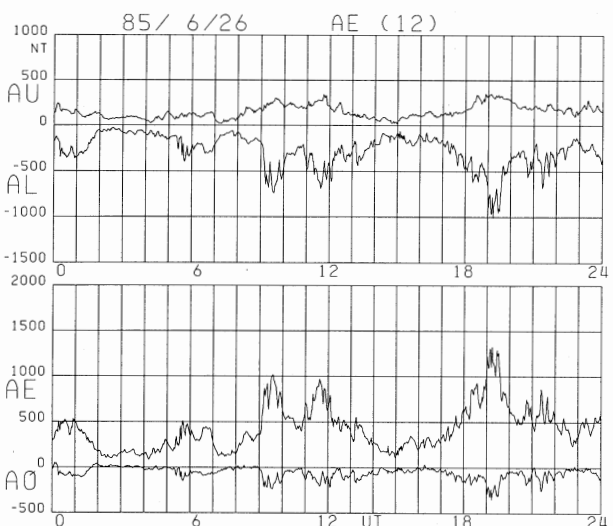
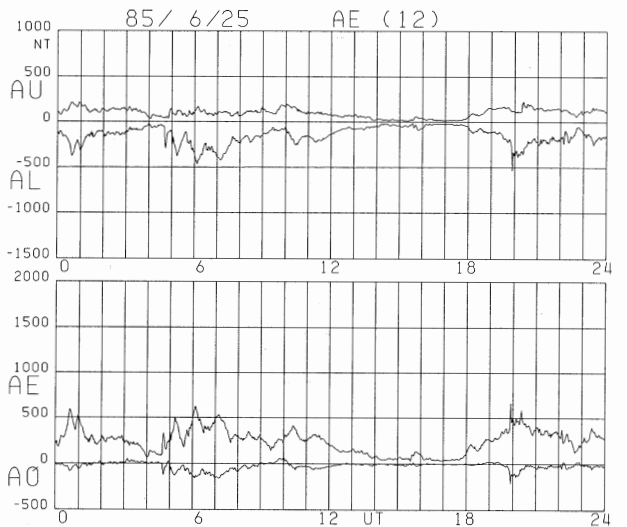
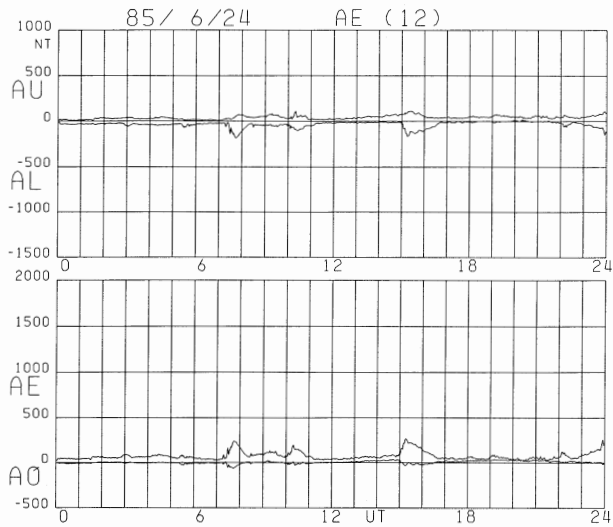


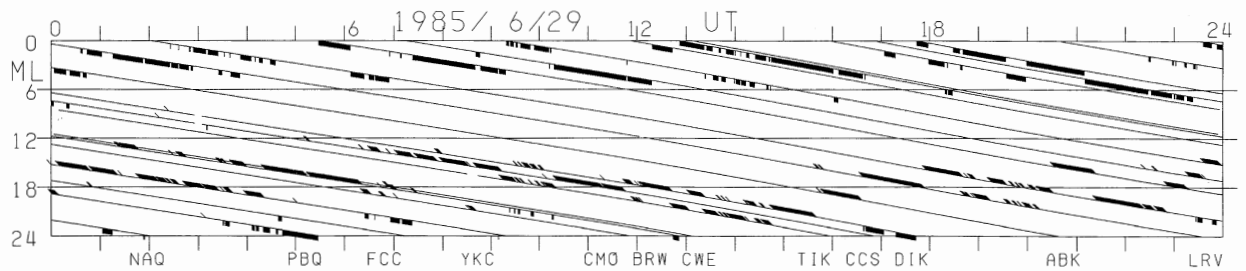
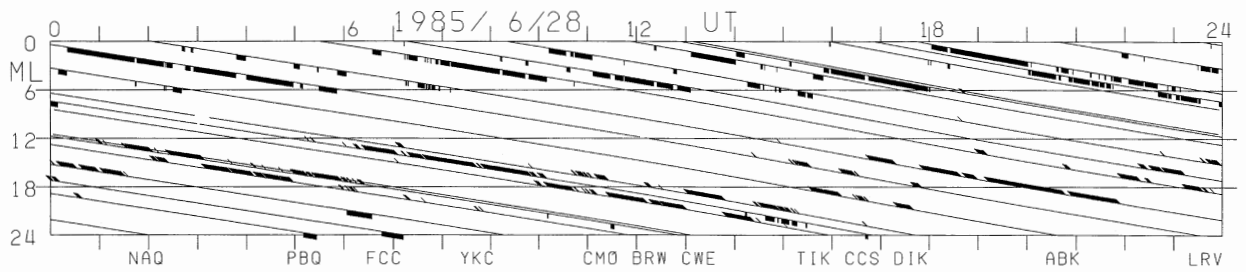
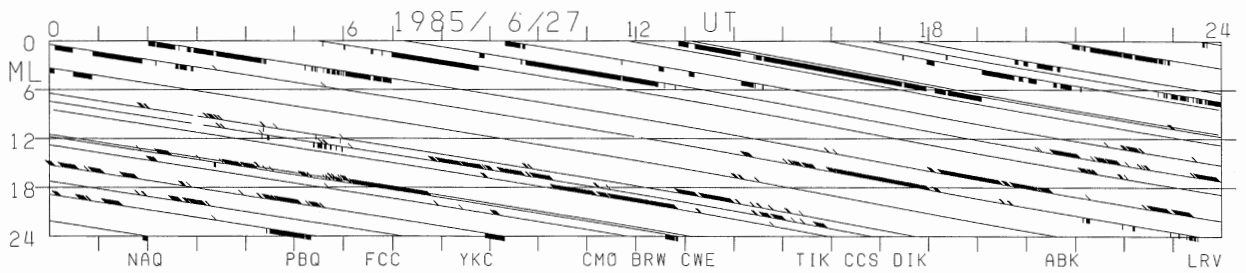
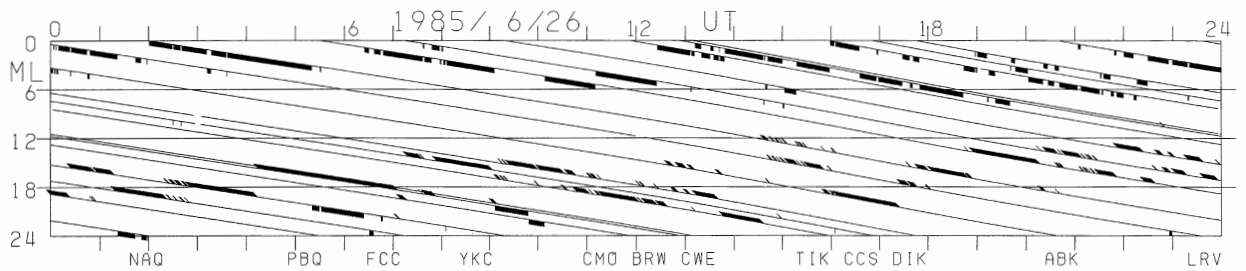
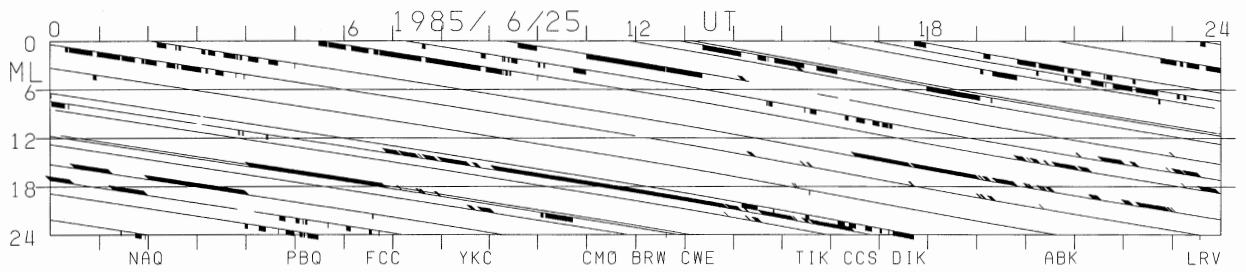
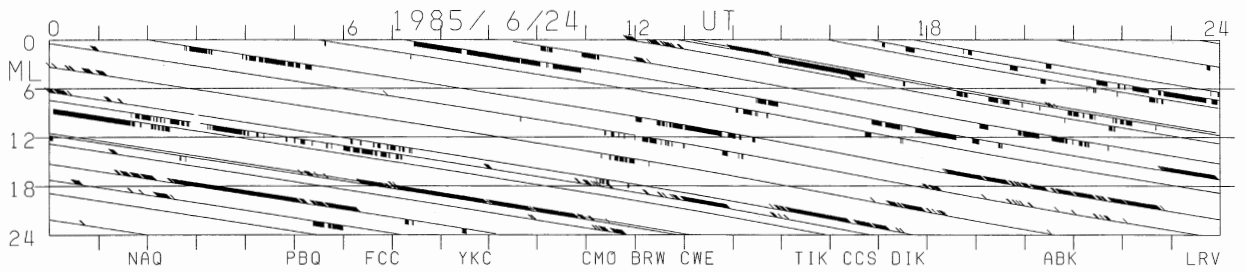


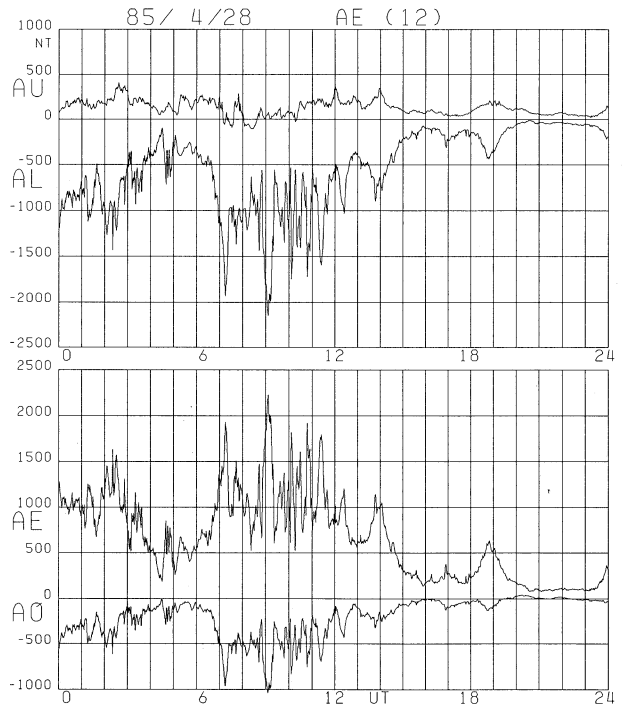
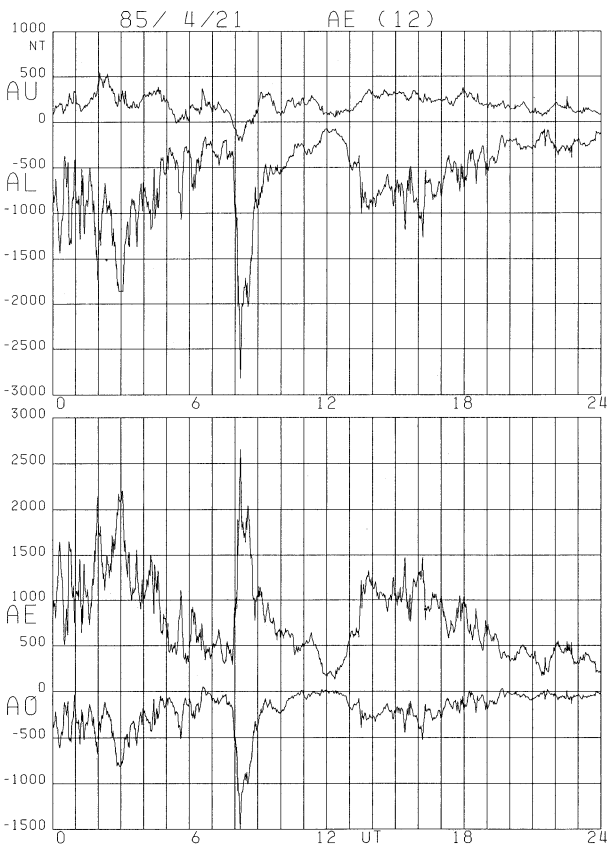
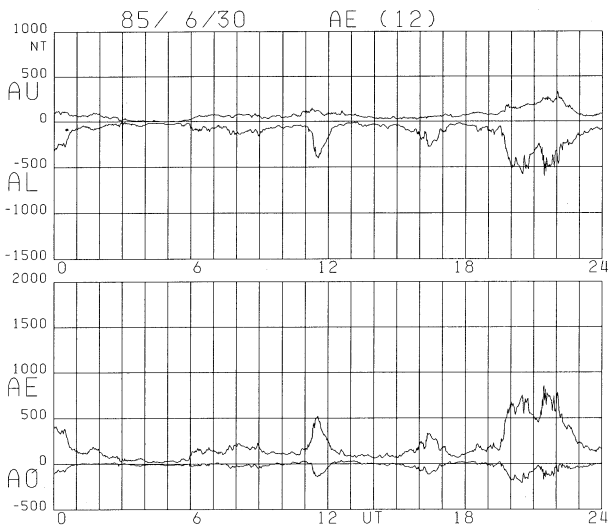












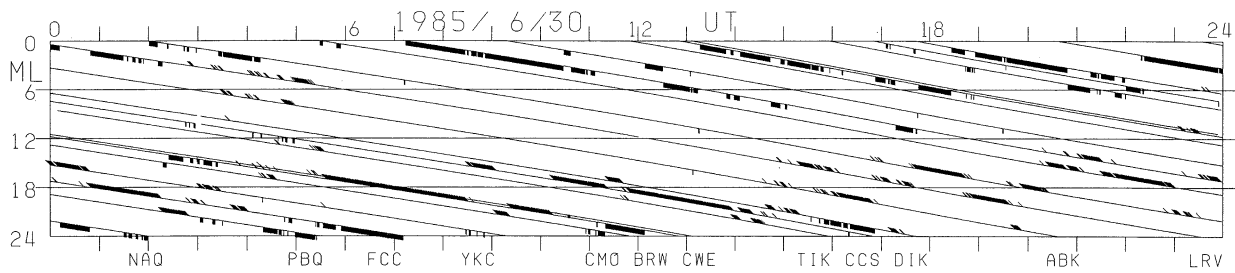
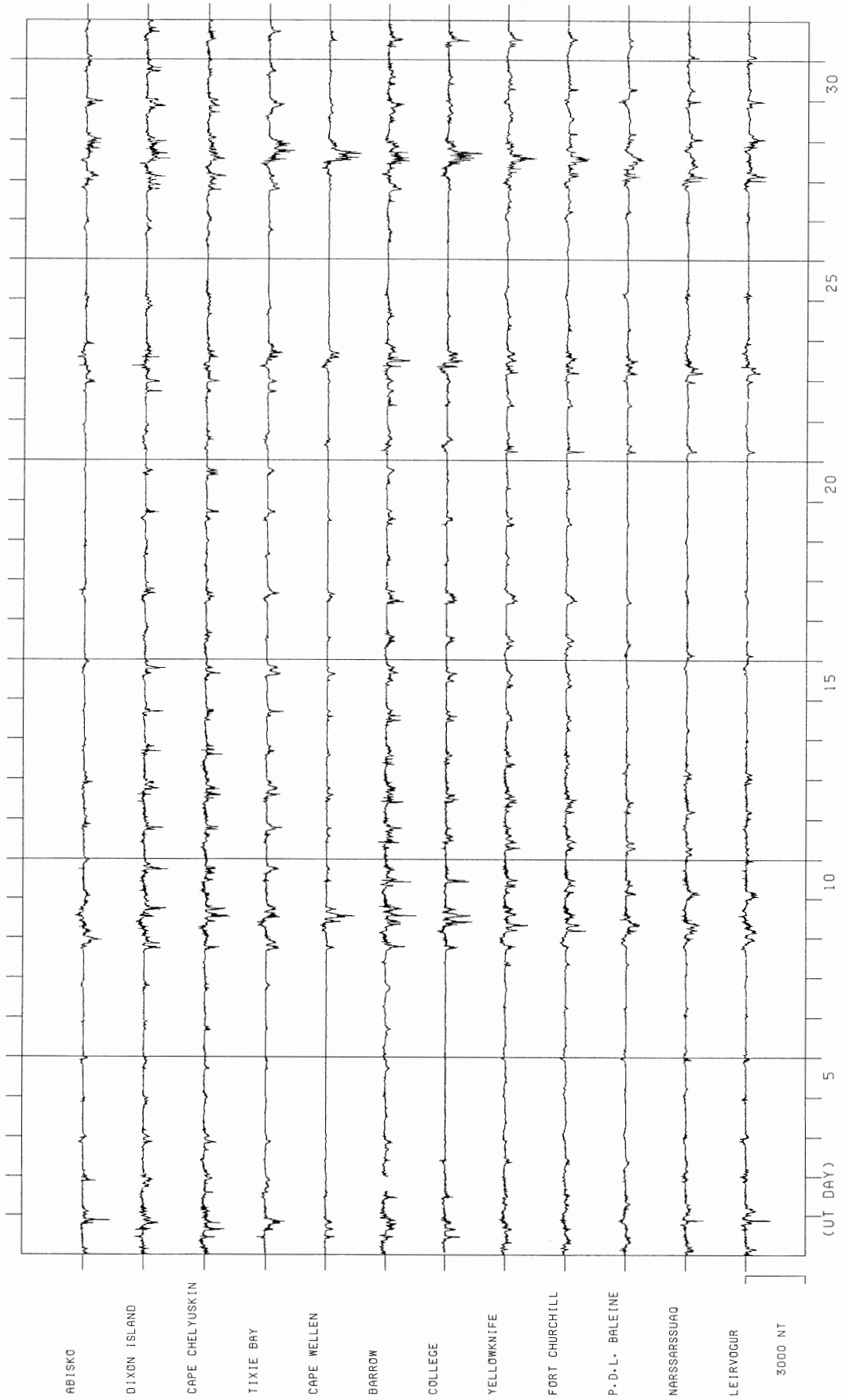
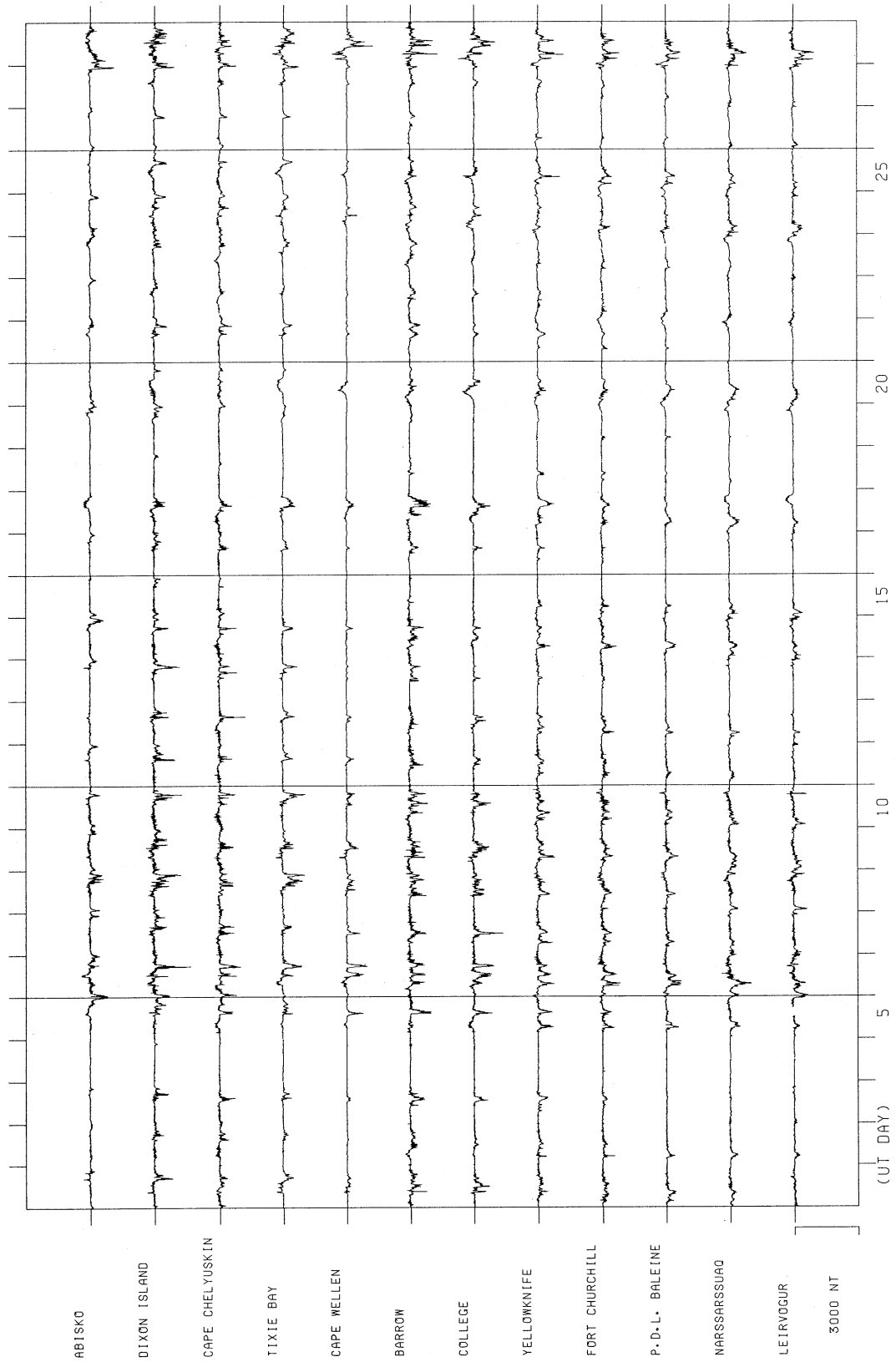


FIGURE 6

The H traces of magnetograms  
from AE(12) stations  
in each month  
for January-June 1985.

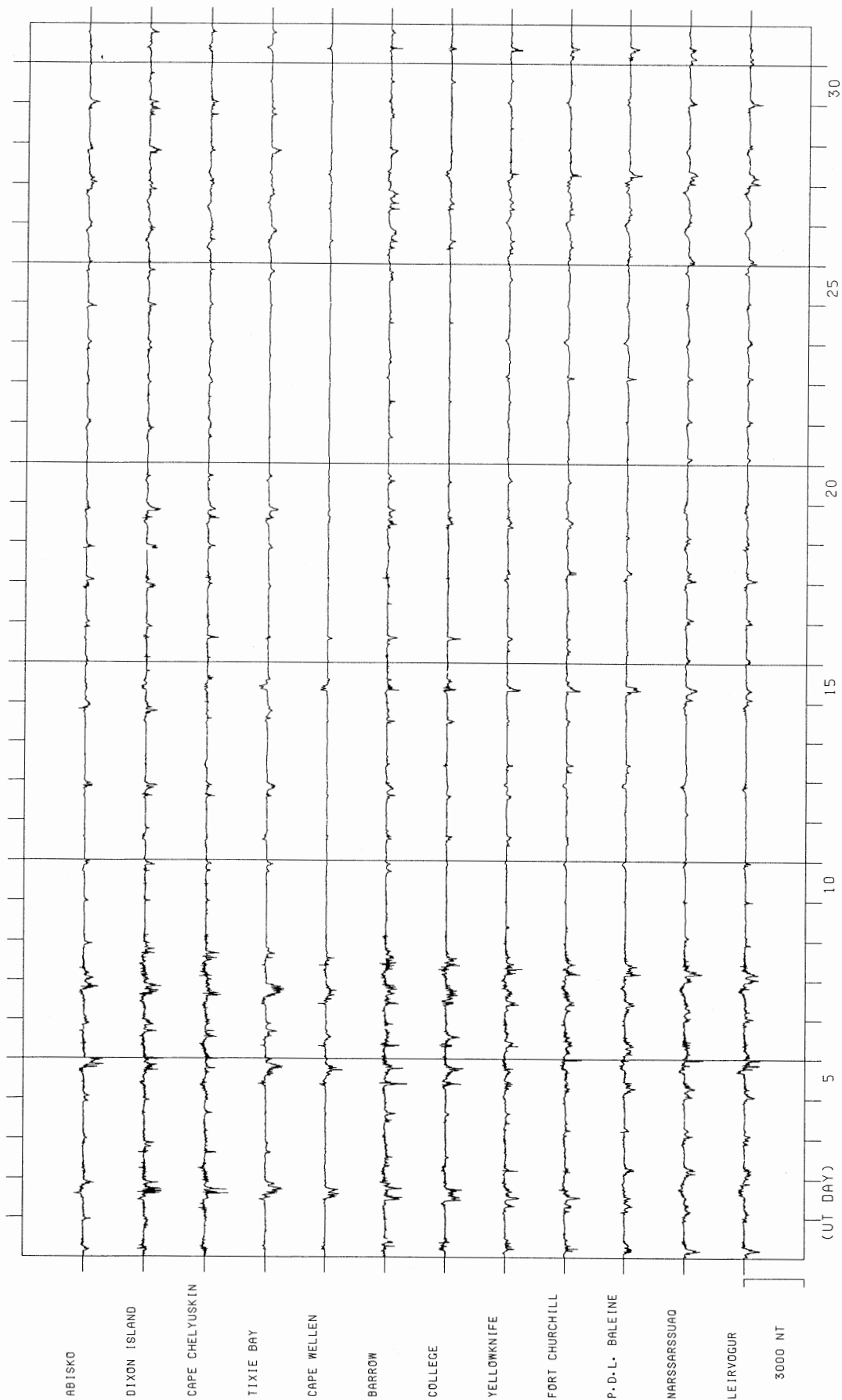


STACKED COMMON SCALE MAGNETOGRAMS FOR JANUARY 1985

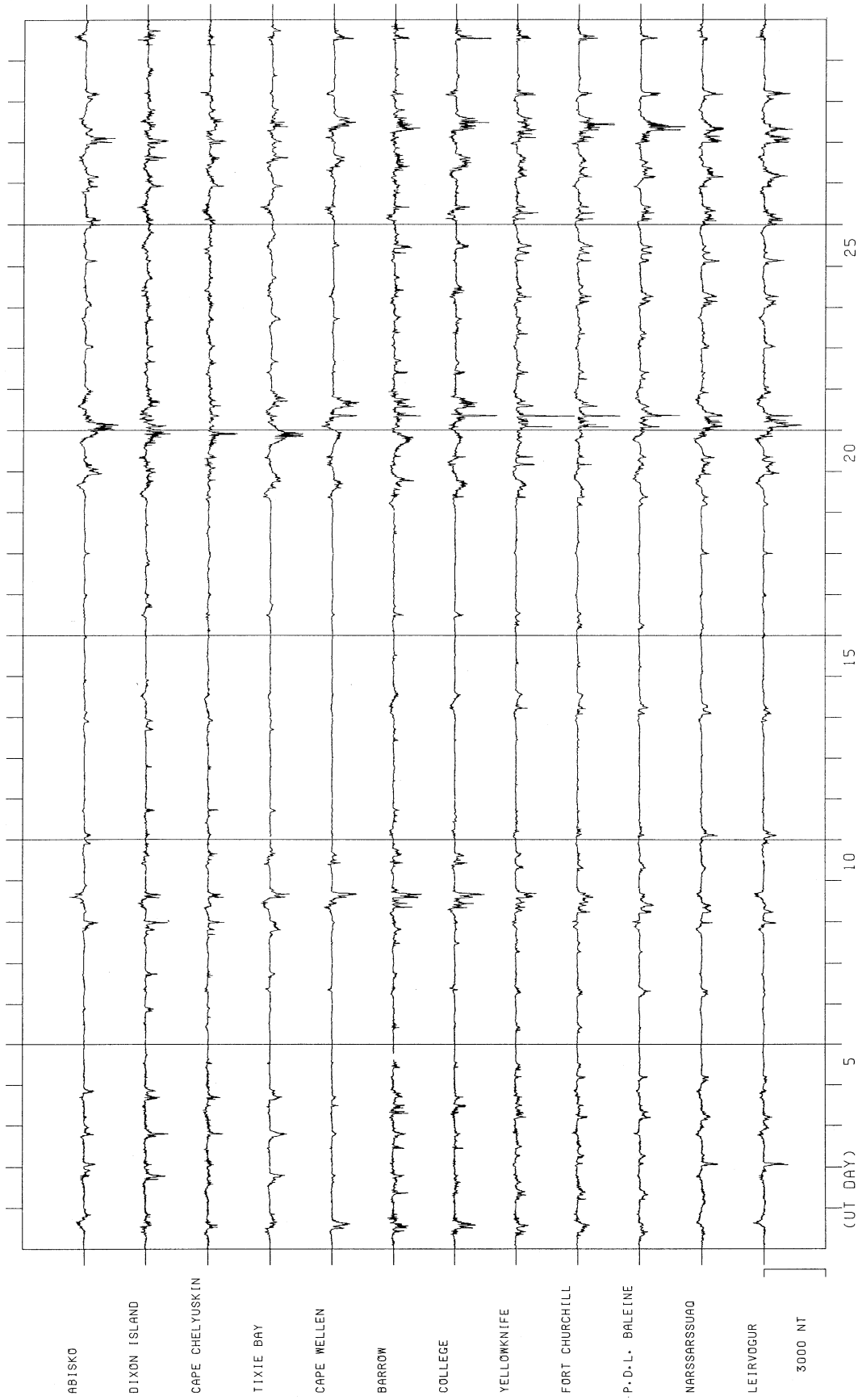


STACKED COMMON SCALE MAGNETOGRAMS FOR FEBRUARY 1985

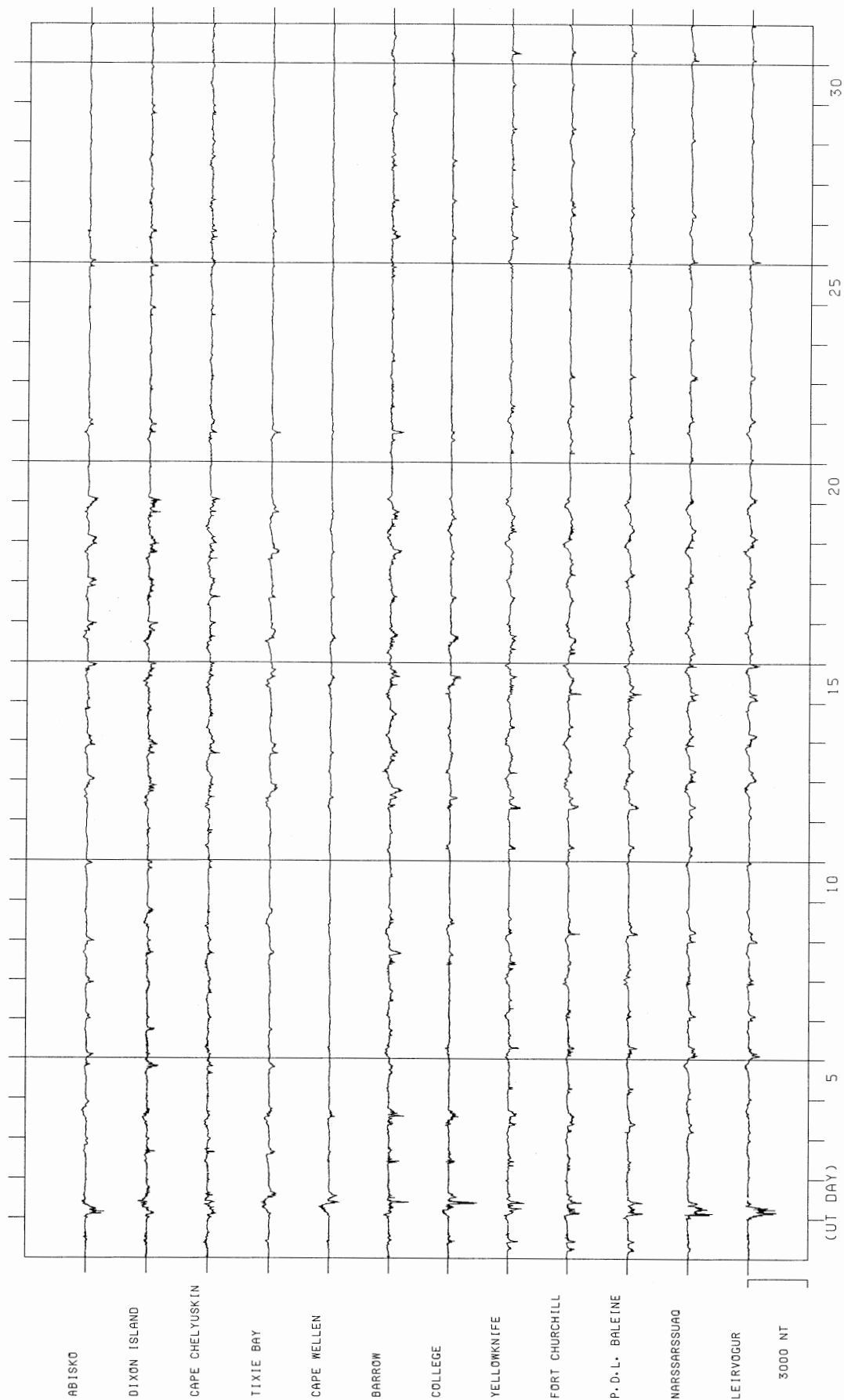




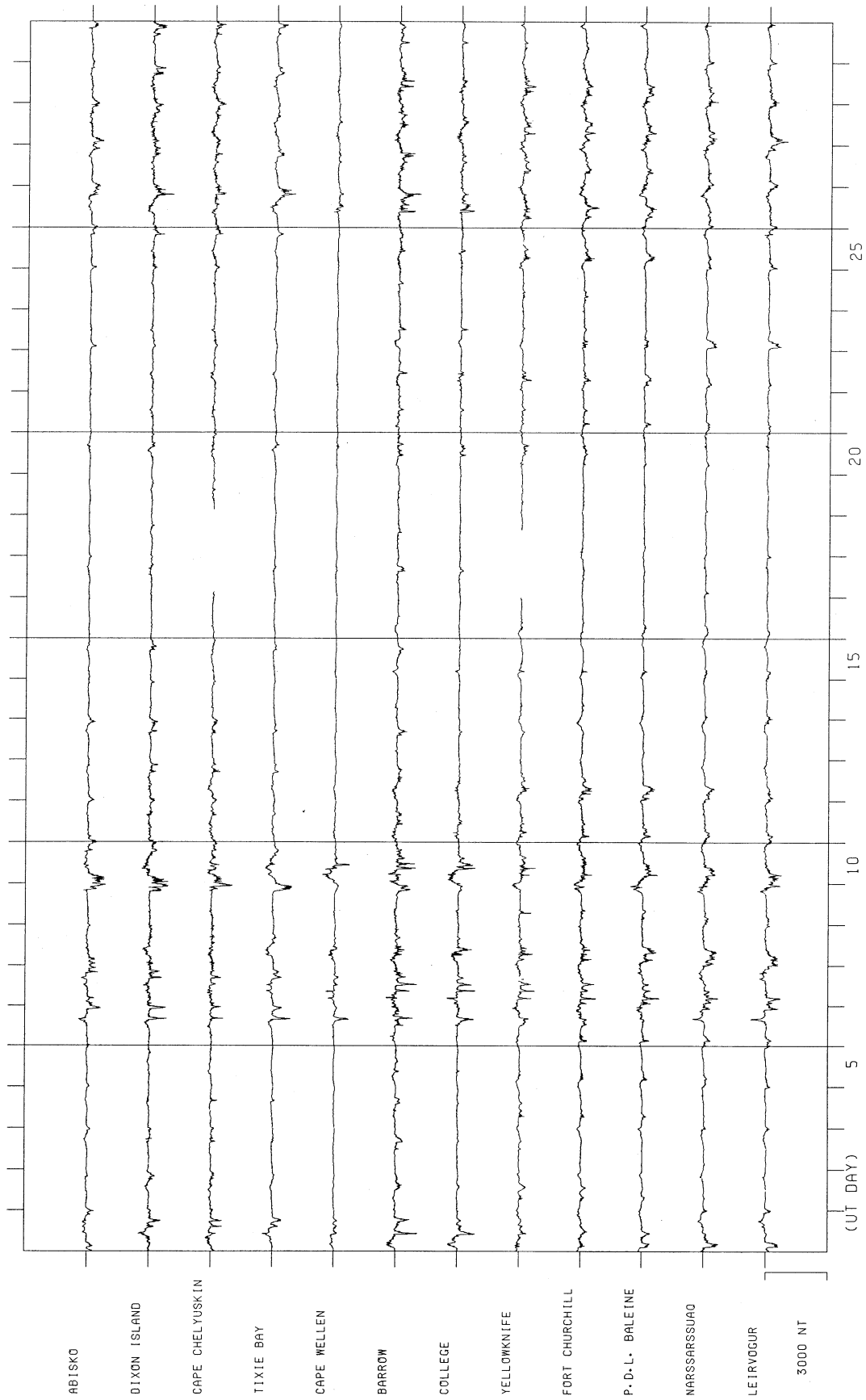
STACKED COMMON SCALE MAGNETOGRAMS FOR MARCH 1985



STACKED COMMON SCALE MAGNETOGRAMS FOR APRIL 1985



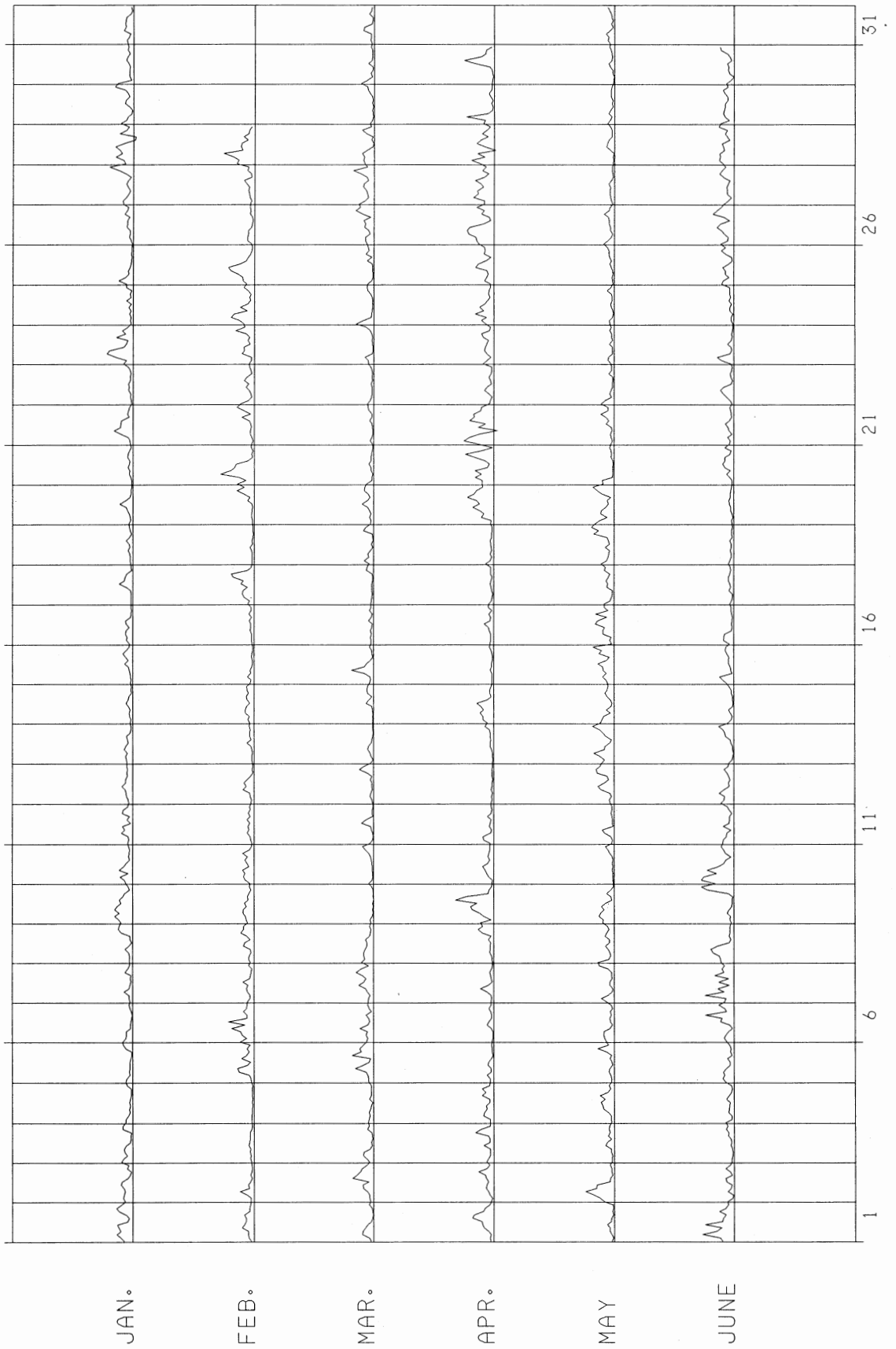
STACKED COMMON SCALE MAGNETOGRAMS FOR MAY 1985



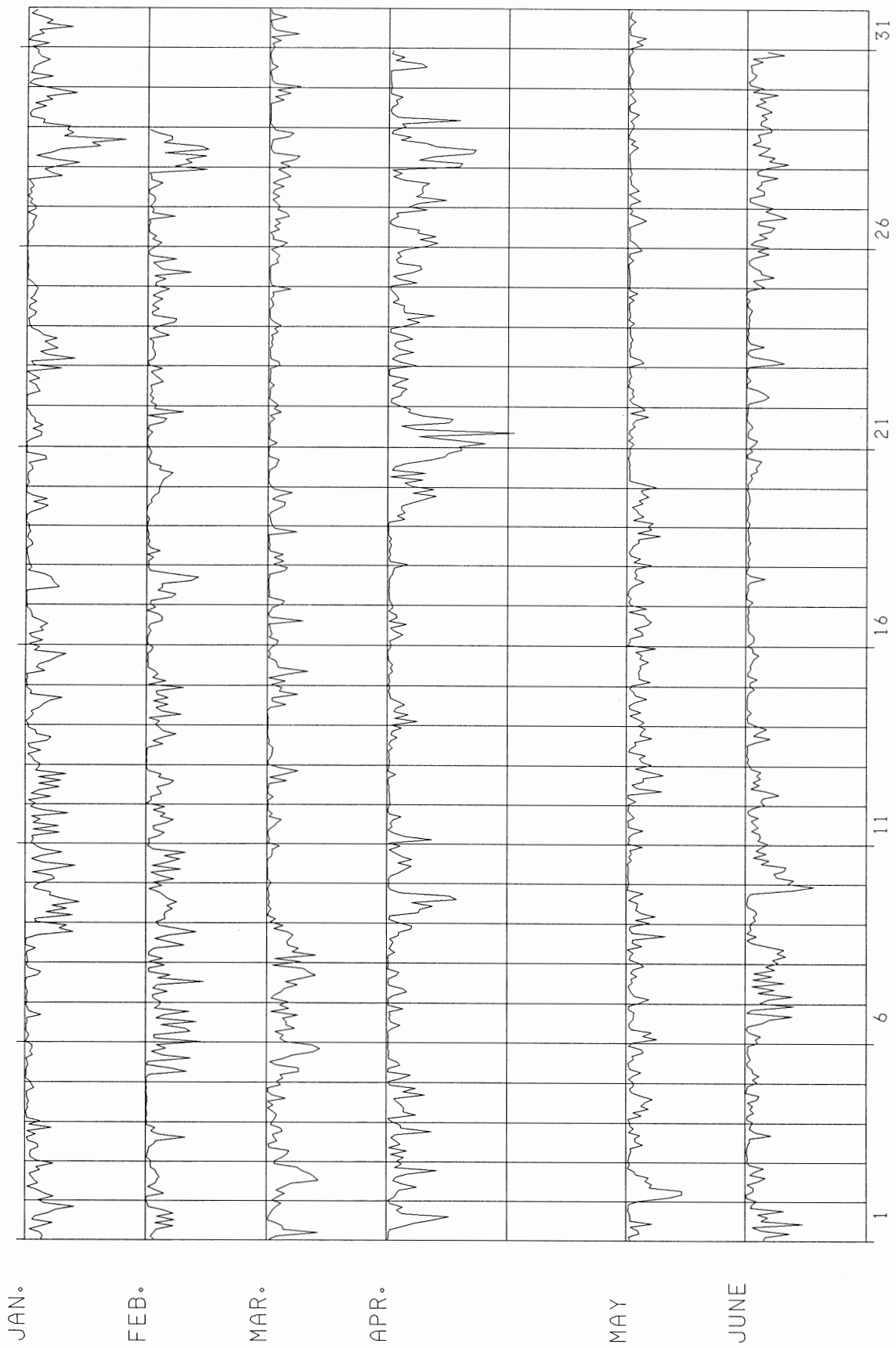
STACKED COMMON SCALE MAGNETOGRAMS FOR JUNE 1985

FIGURE 7

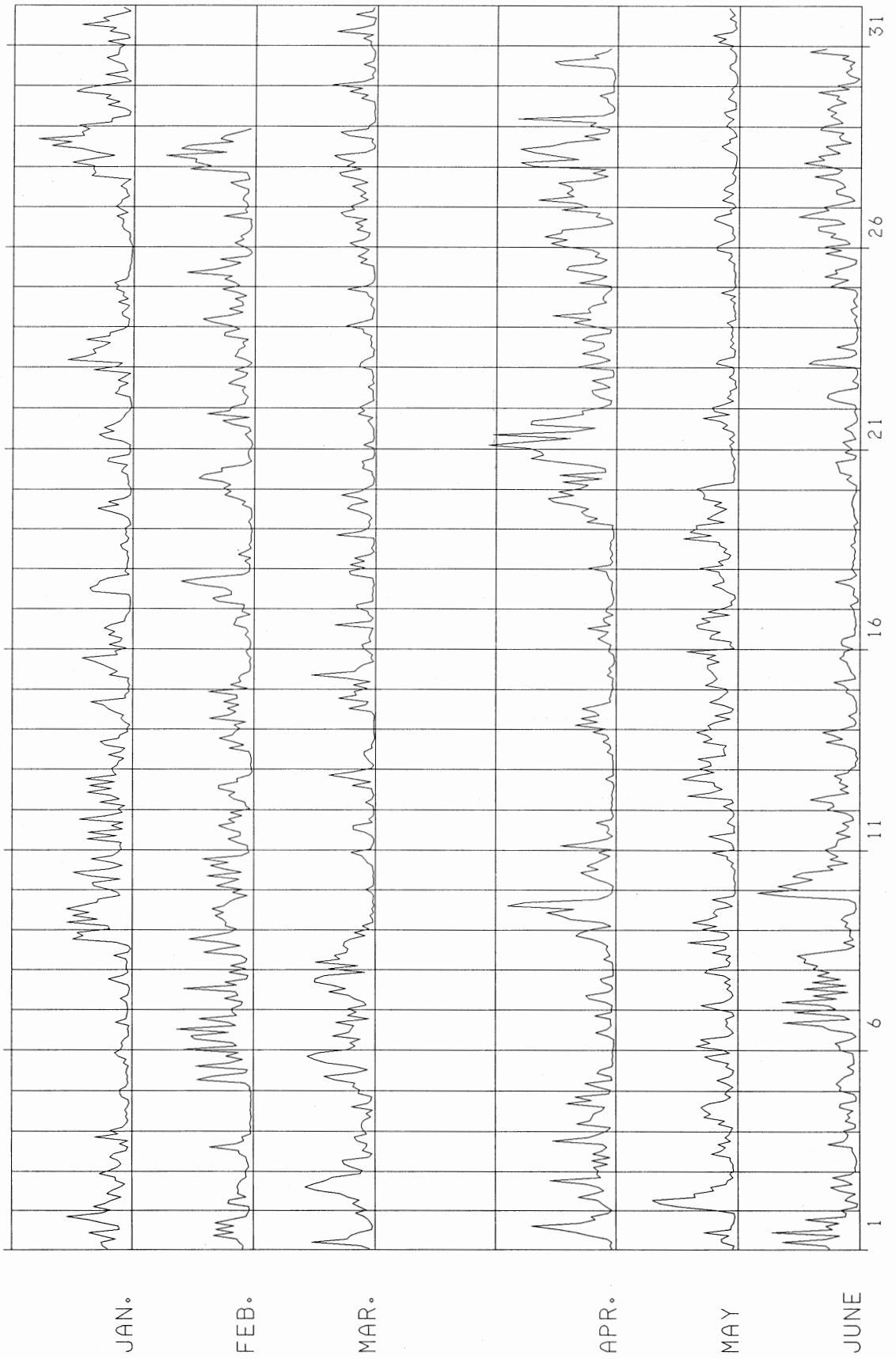
Plots of hourly values of each index  
(AU, AL, AE and AO)  
for January-June 1985.



AU HOURLY VALUES FOR THE FIRST HALF OF 1985 (1500NT/DIV)

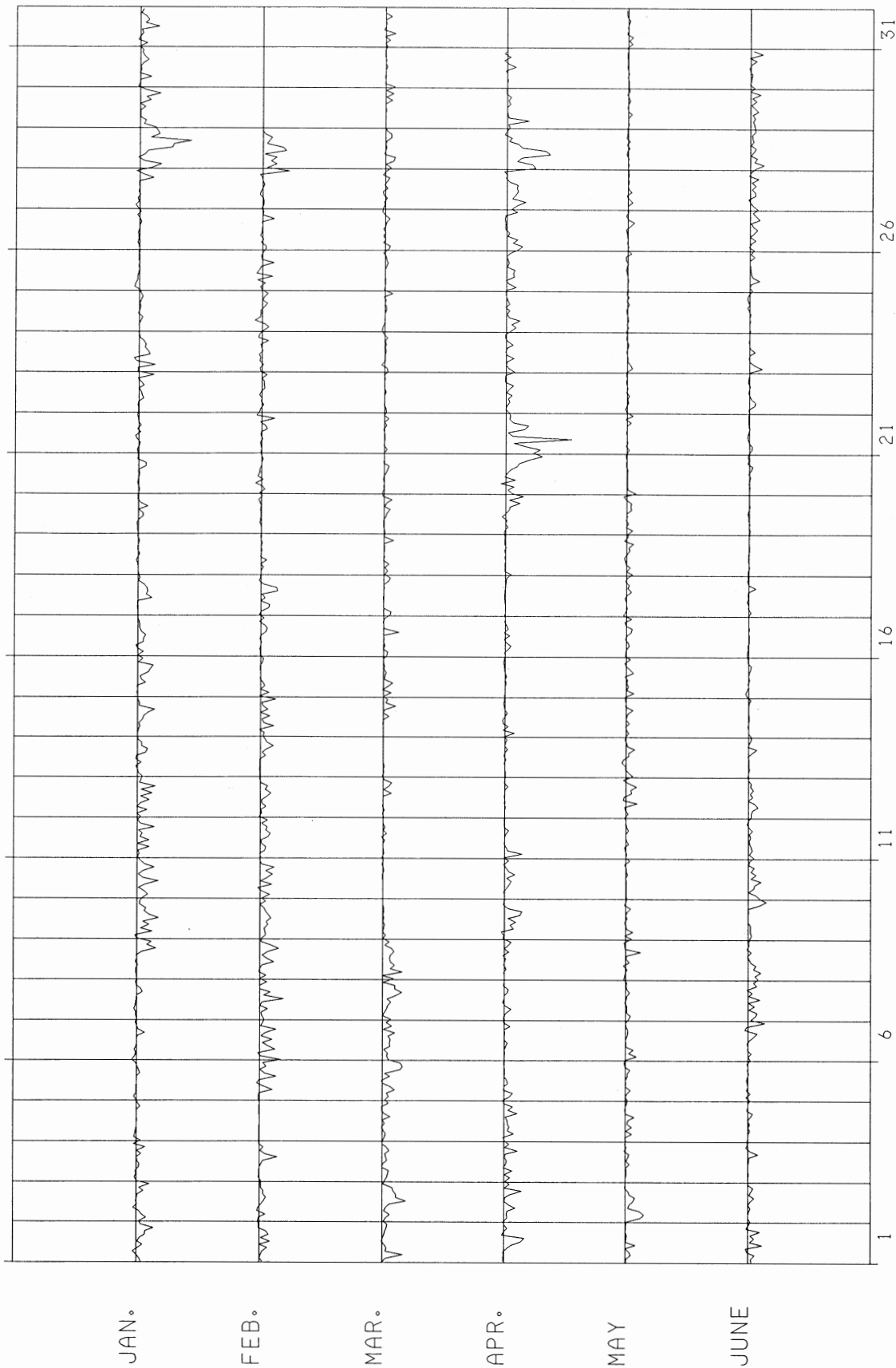


AL HOURLY VALUES FOR THE FIRST HALF OF 1985 (15000T/DIV)



AE HOURLY VALUES FOR THE FIRST HALF OF 1985 (1500NT/DIV)



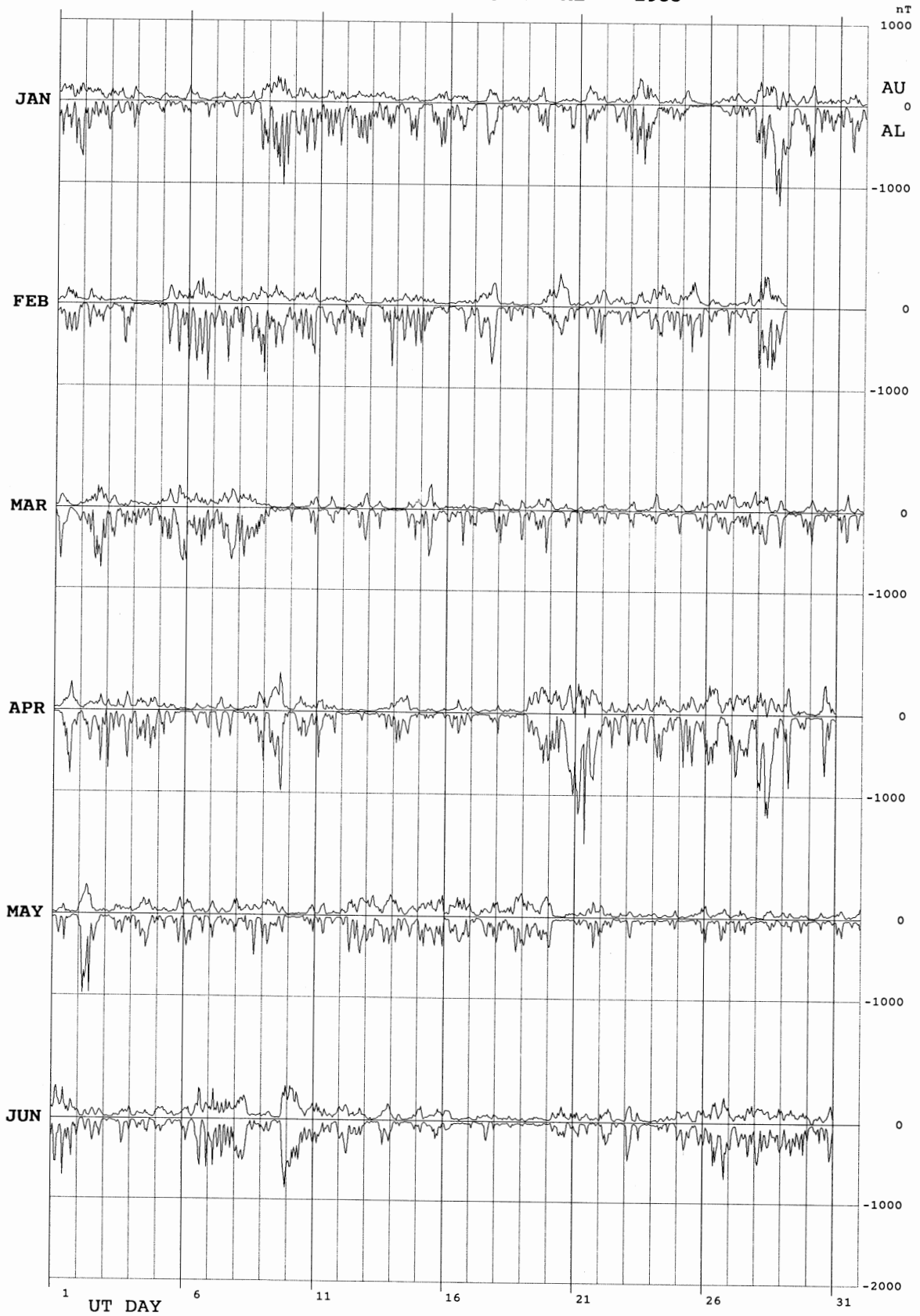


AO HOURLY VALUES FOR THE FIRST HALF OF 1985 (1500NT/DIV)

FIGURE 8

A summary plot of hourly values of  
AU and AL indices  
for January-June 1985.

HOURLY VALUES OF AU AND AL 1985



Publications by the World Data Center C2 for Geomagnetism.

1. Data Catalogue

	Published in
Data Catalogue of World Data Center C2 for Geomagnetism	1987

2. Data Books

No. 1	Equivalent current systems of the daily geomagnetic variations in December 1964	1978
No. 2	Electric fields and neutral winds in the ionospheric dynamo region as deduced from the daily geomagnetic variations in December 1964	1979
No. 3	Auroral electrojet (AE) indices for January-June 1978	1981
No. 4	Auroral electrojet (AE) indices for July-December 1978	1981
No. 5	Auroral electrojet (AE) indices for January-June 1979	1982
No. 6	Auroral electrojet (AE) indices for July-December 1979	1982
No. 7	Auroral electrojet (AE) indices for January-June 1980	1983
No. 8	Auroral electrojet (AE) indices for July-December 1980	1983
No. 9	Auroral electrojet (AE) indices for January-June 1981	1984
No.10	Auroral electrojet (AE) indices for July-December 1981	1984
No.11	Auroral electrojet (AE) indices for January-June 1983	1985
No.12	Auroral electrojet (AE) indices for July-December 1982	1985
No.13	Auroral electrojet (AE) indices for July-December 1983	1986
No.14	Auroral electrojet (AE) indices for January-June 1982	1986
No.15	Auroral electrojet (AE) indices for January-June 1984	1987
No.16	Auroral electrojet (AE) indices for July-December 1984	1988
No.17	Auroral electrojet (AE) indices for July-December 1985	1989
No.18	Auroral electrojet (AE) indices for January-June 1985	1989

3. Other publications

Report of Aeromagnetic Survey in Japan	1966
Japanese WMS Magnetic Charts for 1965	1966
WMA Inventory; First Issue	1970
WMA Inventory; Second Issue	1971

(WMA: World Magnetic Archives; WMS: World Magnetic Survey)

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The publications above are available on request. Requests should be made by mail to:

WDC-C2 for Geomagnetism  
Faculty of Science, Kyoto University  
Kyoto 606, Japan

(The WDC-C2 for Geomagnetism is operated by the Data Analysis Center for Geomagnetism and Space Magnetism, Faculty of Science, Kyoto University, Kyoto 606, Japan.)



