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Solar - Geophysical Data

NO. 372 AUGUST 1975

Part II (Comprehensive Reports)

DATA FOR
FEBRUARY 1975
JANUARY 1975
& MISCELLANEA

**NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO**

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302.

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SOLAR - GEOPHYSICAL DATA

No. 372

Issued in two parts

Hope I. Leighton, Editor

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Solar - Terrestrial Data Services Division

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FEBRUARY 1975 DATA

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H α SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS		
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCNATH FLARE REGION	CMP DAY			TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.			
RAHY	02	1310	1340	1314	S12	E61	.870		7.1	30	SF	4	C	36	OE		
HUAN	02	1509	1516		S13	E63	.886		7.4	7	SF	1	C				
MCHA	02	1510	1520	1511	S12	E62	.878	13465	7.3	10	SN		C	1511	25	.5	D
MCHA	02	1720	1731	1724	S12	E60	.861	13465	7.2	11	SF		C	1724	25	.5	D
ABST	03	0840	0901	0848	S07	E61	.871		7.9	21	SN		C	0848	87	1.7	DJ
ABST	03	0920	0935	0926	S08	E62	.879		8.0	15	SF		C	0926	96	1.9	DJ
HTPR	03	1020	1027	1024	S09	E58	.843		7.8	7	SF		C				
HTPR	03	1020	1027	1022	S09	E58	.843		7.8	7	SF		C	1022	10	.2	K
HTPR	03	1025	1028	1025	S12	E60	.861		7.9	3	SF		C	1025	10	.2	
HTPR	03	1028	1050	1032	S08	E59	.853		7.9	270	SF		C	1032	20	.4	
HTPR	03	1031	1050		S12	E48	.740		7.0	240	SF		C	1034	20	.2	
HTPR	03	1052	1050		S10	E57	.834		7.7	30	SF		C	1052	10	.2	
HTPR	03	1128	1130	1129	S10	E57	.834		7.8	2	SF		C	1129	10	.2	
HTPR	03	1133	1142	1134	S10	E57	.834		7.8	9	SN		C	1134	30	.5	K
HTPR	03	1205	1208	1207	S08	E58	.844		7.9	3	SF		C	1207	10	.2	
HTPR	03	1206	1208	1208	S10	E56	.824		7.7	2	SF		C	1208	10	.2	
HTPR	03	1211	1235	1215	S08	E58	.844		7.9	24	SN		C	1215	10	.2	
HTPR	03	1220	1227	1223	N01	E90	1.000		10.3	7	SF		C	1223	10		
HTPR	03	1236	12570		N01	E90	1.000		10.3	210	SF		C	1239	20		
HTPR	03	1245	1247	1246	S10	E56	.824		7.7	2	SF		C	1246	10	.1	
RAMY	03	1248	1257	1249	S 7	E56	.825		7.7	9	SF	3	C		27		DE H
HTPR	03	1249	1257	1250	S10	E56	.824		7.7	8	S3		C	1250	40	.7	
HTPR	03	1435	1441	1437	S08	E57	.834		7.9	6	SF		C	1437	10	.1	
HTPR	03	1515	1535	1516	S08	E56	.825		7.8	20	SB		C	1516	20	.3	EK
RAMY	03	1515	1533	1518	S 6	E58	.845		8.0	18	SF	3	C		20		OE
HTPR	03	1515	1535	1526	S08	E56	.825		7.8	20	SB		C				
MCHA	03	1516	1529	1518	S08	E58	.844	13465	8.0	13	SN		C	1518	35	.6	E
BOUL	03	1517	1539	1518	S 9	E57	.834		7.9	22	SF	2	C	1518	32	.6	
HTPR	03	1536	1553	1548	S12	E45	.704		7.0	17	SF		C	1548	20	.3	K
BOUL	03	1547	1600	1552	S10	E56	.824		7.9	13	SF	2	C	1552	21	.4	
HTPR	03	1551	1554	1552	S10	E55	.814		7.8	3	SN		C	1552	20	.3	
RAMY	04	2156	22060	2157	N 4	E64	.904		9.7	100	SF	2	C		36		DE
MANI	05	0049	0057	0052	N02	E64	.902		9.8	8	SN	2		0052	50	1.0	F
MANI	05	0655	0714	0657	N03	E62	.888		9.9	19	SF	2		0657	40	.8	F
HUAN	05	1324	1335	1330	N02	E54	.815		9.6	11	SF	1	C	1330	25	.4	DT
HUAN	05	1352	1358	1354	N02	E54	.815		9.6	6	SN	1	C	1354	45	.8	
MEUD	05	1352	1358	1352	N02	E56	.834		9.8	6	SF		C	1352	30	.5	
RAMY	05	1354	1406	1356	N 4	E53	.808		9.6	12	SN	3	C		36		OE H
HERS	05	1356E	1409	1356	N03	E54	.816		9.6	130	SN		P	1356	43	.8	E
HUAN	05	1432	1443	1438	N02	E53	.804		9.6	11	SF	2	C	1438	50	.9	
RAMY	05	1510	1528	1514	S 9	E26	.437		7.6	18	SF	3	C		27		OE
HUAN	05	1511	1522	1513	S11	E26	.440		7.6	11	SF	1	C	1513	40	.5	E
RAMY	05	1531	1548	1536	N 4	E52	.798		9.5	17	SN	3	C		27		OE H
HUAN	05	1532	1539	1536	N02	E54	.815		9.7	7	SN	2	C	1536	50	.9	E
MEUD	05	1532	1537	1533	N02	E55	.824		9.8	5	SF		C	1533	30	.5	
HUAN	05	1557	1606	1600	N02	E54	.815		9.7	9	SF	1	C	1600	48	.7	
HUAN	05	1639	1659	1645	N02	E53	.804		9.7	20	SN	1	C	1645	75	1.2	
RAMY	05	1643	1657	1647	N 4	E51	.787		9.5	14	SF	3	C		54		DE
HUAN	05	1735	17570		N02	E52	.794		9.6	220	SB	1	P	1756	40	.7	
RAMY	05	1753	1814	1758	N 4	E50	.777		9.5	21	SN	3	C		63		F
PALE	05	1755	1821	1803	N 4	E56	.837	13470	9.9	26	1B	2	V		120		OE H
PALE	05	1755	1821	1803	N 4	E56	.837	13470	9.9	26	1B	2	C		120		OE H
HUAN	05	1853	19100		N02	E52	.794		9.7	170	SN	1	P	1910	35	.5	E
PALE	05	1911	1932	1918	N 4	E55	.828		9.9	21	S3	3	V		80		OE H
RAMY	05	1911	1922	1913	N 4	E49	.766		9.5	11	S8	3	C		27		OE H
PALE	05	1913E	1932	1918	N 4	E53	.808		9.8	190	S3	3	C		90		OE H
RAMY	05	1914E	1923	1915	N 4	E51	.787		9.6	90	S8	4	V		25		OE H
RAMY	05	1914E	1923	1915	N 4	E51	.787		9.6	90	S8	4	C		25		OE H
PALE	05	2100E	21040	21030	N 2	E51	.784		9.7	40	SF	2	C		50		OE
PALE	05	2101E	21210	21050	N 3	E51	.785		9.7	200	SF	2	V		50		OE
RAMY	05	2132	2140	2133	N 4	E47	.744		9.4	8	SF	2	C		20		OE
RAMY	05	2203	22070		N 4	E46	.732		9.4	40	SF	2	C		27		OE
MANI	05	2256E	2301	22500	N03	E50	.775		9.7	110	SF	1		2250	40	.6	F
MANI	06	0227	0248	0229	N03	E49	.764		9.8	21	SF	2		0229	30	.4	
MANI	06	0250	0310	0259	N03	E49	.764		9.8	20	SF	2		0259	30	.4	
PALE	06	0254	0309	0259	N 2	E48	.751		9.7	15	SF	2	C		45		OE
PALE	06	0256E	03060	03003	N 2	E49	.762		9.8	100	SF	2	V		40		OE
MANI	06	0510	05420	05140	N03	E46	.730		9.7	320	SF			0514	40	.6	H
MANI	06	0510	05420	0538	N03	E46	.730		9.7	320	SF			0538	60	.9	
MONT	06	0940	0946	0942	N02	E43	.691		9.6	6	SF		C	0942	20		
MONT	06	1053	1105	1056	S10	E22	.376		8.1	12	SN		C	1056	60		O
MONT	06	1225	1230	1225	N03	E40	.656		9.5	5	SF		C	1225	20		O
BOUL	06	1451	1501	1455	N 1	E38	.624		9.5	10	SF	1	C	1455	32	.4	
CATA	06	1500	1555	1520	N01	E40	.651		9.6	55	SN	3		1520	56	.7	
HUAN	06	1731E	1737		N02	E41	.666		9.8	60	SF	1	P	1733	35	.5	
HUAN	06	1810	1922		N02	E39	.640		9.7	72	SF	1		1852	40	.5	

NOTE: The measured area is now reported in millionths of the solar disk.

Several changes in the presentation of the Grouped Flare Data have been planned to begin with the January 1975 data. The preparation of the new presentation has been delayed because of problems in computer conversions. Therefore, only the observatory flare reports are included here. The grouped flares will no longer be classified as "confirmed" or "unconfirmed". The flare list for this month will be republished later and will include a summary line for each flare.

H α SOLAR FLARES

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FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS		
	DATE FEB	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMA PLAGE REGION				CMP DAY	TIME UT	MEAS. AREA MIL of Disk		CORR. AREA Sq. Deg.	
					LAT.	MER. DIST.											
PALE	06	1811	1913	1832	N 4	E39	.647		9.7	62	SV	2	C		35		DE
PALE	06	1811	1845	1813	N 4	E43	.697		10.0	34	SF	3	V		40		DE
HUAN	06	1925	19280		N02	E37	.614		9.6	30	SF	1	P	1927	30	.4	
VORO	07	0210	0225	0215	N04	E34	.581		9.6	15	SB		C	0215	99	1.2	EJ
KODA	07	0211E	0426	0218	N03	E33	.563		9.6	1350	SV		P	0218	191	2.0	O
MANI	07	0213E	02160	02130	N03	E36	.604		9.8	30	SF	1		0213	80	1.0	F
HTPR	07	0959E	10120		N03	E31	.535		9.7	130	SF		C	0959	10	.1	
HTPR	07	1041E	10480		N03	E30	.521		9.7	70	SV		C	1048	20	.2	E
WEND	07	1130	1142		N03	E28	.492		9.6	12	SN						
WEND	07	1206	1220		N02	E27	.473		9.5	14	SN						
WEND	07	1349	1401		N02	E27	.473		9.6	12	SF						
WEND	07	1418	1432		N02	E27	.473		9.6	14	SB						
MCMA	07	1419	1425	1420	N03	E27	.478	13470	9.6	6	SF		C	1420	25	.3	D
WEND	07	1452	1500		N02	E25	.444		9.5	8	SN						
MCMA	07	1925	1931	1927	S12	W04	.119	13465	7.5	6	SF		P	1927	30	.3	E
PALE	07	1926	1933	1928	S12	W 4	.119		7.5	7	SF	3	V		30		U
PALE	07	1926	19300	1928	S12	W 6	.142		7.4	40	SF	3	C		35		U
HTPR	08	0742	0754	0750	N02	E18	.340		9.7	12	SF		C	0750	20	.2	K
HTPR	08	0812	0821	0814	S15	W14	.279		7.3	9	SF		C	0814	10	.1	
HTPR	08	0831	0902	0834	S15	W14	.279		7.3	31	SF		C	0834	10	.1	
HTPR	08	0958	1015	1004	S15	W13	.265		7.4	17	SF		C	1004	20	.2	
HTPR	08	1030	1105	1032	S15	W16	.307		7.2	35	SF		C	1042	10	.1	
HTPR	08	1030	1105	1042	S15	W16	.307		7.2	35	SF		C				
HTPR	08	1049	1126	1100	S15	W13	.265		7.5	37	SF		C	1100	20	.2	
HTPR	08	1120	1210	1150	N06	E15	.334		9.6	50	SF		C	1150	10	.1	
HTPR	08	1137	1208	1202	S15	W13	.265		7.5	31	SF		C	1202	10	.1	
HTPR	08	1155	1234	1218	S15	W12	.251		7.6	39	SF		C	1218	20	.2	E
HTPR	08	1505	1510	1505	N05	E12	.285		9.5	5	SF		C	1505	10	.1	
HTPR	09	1034	1038	1036	N05	W04	.211		9.1	4	SF		C	1036	10	.1	
ATHN	11	1301	1307	1303	N 4	W27	.484		9.5	6	SF	5	C		48		DE
ATHN	11	1301	1307	1303	N 4	W27	.484		9.5	6	SF	4	V		48		DE
RAMY	11	1301	1316	1306	N 3	W27	.479		9.5	15	SF	4	C		63		DE
HUAN	11	1302	1330	1303	N04	W29	.513		9.4	28	SN	1	C	1303	40	.5	E
LVOV	11	1305E	1315	13060	N04	W26	.470		9.6	100	1F		P	1306	400	4.7	E
WENO	11	1315E	1346		N02	W26	.459	13470	9.6	250	1N		P		500	5.5	
LVOV	13	1303	1330	13110	N04	W54	.819		9.5	27	1F		C	1311	250	4.5	E
RAMY	13	1308	1332	1313	N 3	W55	.827		9.4	24	SN	4	C		63		F
MCMA	13	1310E	1340		N04	W54	.819	13470	9.5	300	SN		C	1311	80	1.4	E
HTPR	13	1310	1338	1312	N05	W59	.866		9.1	28	SB		C	1312	80	1.3	E
MCMA	13	1435	1450	1437	N04	W56	.838	13470	9.4	15	SV		C	1437	80	1.5	E
RAMY	13	1435	1452	1437	N 3	W56	.836		9.4	17	SF	3	C		54		F
HTPR	13	1436	1500	1438	N05	W60	.875		9.1	24	SN		C	1438	20	.3	EK
HTPR	13	1455	1505	1500	S10	W78	.975		7.8	10	SF		C	1500	10		
HTPR	13	1458	16010		N05	W62	.891		9.0	630	SF		C	1501	10	.2	
BOUL	13	2011	20490	2019	N 3	W58	.855		9.5	380	SN	3	P	2019	96	1.8	
HTPR	20	1248	1254	1252	N10	W01	.293		20.5	6	SF		C	1252	20	.2	E
HTPR	20	1305	1325	1320	N10	W02	.294		20.4	20	SF		C	1320	20	.2	E
HTPR	20	1404	1437	1408	N10	W03	.297		20.4	33	SF		C	1408	20	.2	E
HTPR	22	1057E	1106		N02	W02	.161		22.3	90	SF		C	1057	10	.1	E
HTPR	22	1318	1333	1320	N02	W04	.172		22.3	15	SF		C	1318	20	.2	E
HTPR	23	1400	1408	1405	S10	E16	.277		24.8	8	SF		C	1405	20	.2	
HTPR	24	0800	0820	0816	S09	E04	.076		24.6	20	SF		C	0816	40	.4	ET
HTPR	24	0830	0857	0851	S09	E03	.061		24.6	27	SF		C	0851	30	.3	ET
TEHR	27	0418E	0429	0422	S 8	W31	.511		24.9	110	SF	4	V		60		F
WENO	27	0418E	0429	0422	S 8	W31	.511		24.6	15	SF		C	0416	30	.4	D

DAILY FLARE INDICES

Includes all Flares

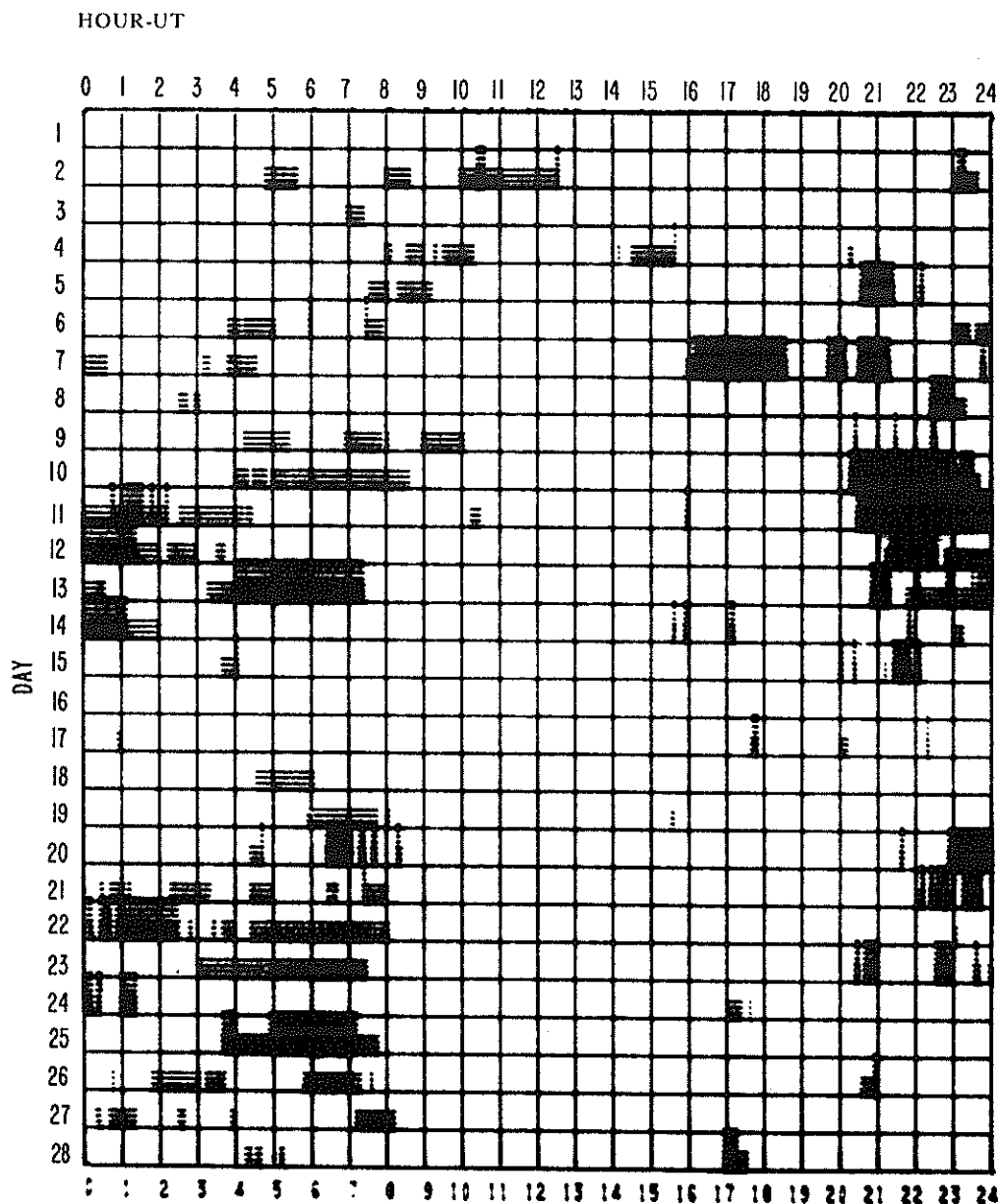
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
750202	1.34	23.3	750210	0.00	20.8	750221	0.00	22.6
750203	11.76	24.0	750211	12.28	18.1	750222	0.28	21.8
750204	0.68	24.0	750212	0.00	23.0	750223	0.22	22.9
750205	17.15	23.1	750213	16.47	13.3	750224	1.33	23.2
750206	8.48	23.9	750214	0.00	23.5	750225	0.00	21.2
750207	24.82	20.0	750215	0.00	23.2	750226	0.00	23.9
750208	0.75	23.5	750217	0.00	23.8	750227	2.38	24.0
750209	0.05	23.7	750220	0.69	21.5	750228	0.00	23.5

When no Flare Index is given, it is 0 for that day.

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INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

FEBRUARY 1975



Observatories included in total patrol:

Abastumani	Catania	Kiev	McMath-Hulbert	Tachkent
Arcetri	Culgoora	Kodaikanal	Meudon	Tehran
Athens	Haute Provence	Locarno	Mitaka	Upice
Boulder	Herstmonceux	Lvov	Monte Mario	Voroshilov
Bucharest	Kharkov	Manila	Palehua	Wendelstein
			Ramey	Zürich

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

FEBRUARY 1975

FEB DAYS	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
1	4995 BOUL	3 S	1850	1851.5	2.5	10	3		
2	4995 BOUL	3 S	1850.5	1850.2	2.5	8	3		
3	18 MCHA	6 S	1423	1425	2			1	
	18 MCHA	6 S	1527	1528	2			1	
	2800 OTTA	2 S/F	1942	1944	3	1.8	0.8		
4	1000 TYKH	5 S	0157.5	0158	2.5	1.5	0.5		OR
5	29 UPIC	8 S	1312.6	1312.8	0.4				
	33 UPIC	8 S	1312.6	1312.7	0.4				
	260 ONDR	3 S	1353.8	1354.7	1.7	11	1.1		
	245 SGHR	6 S	1354.1	1354.5	2.4	10	3		
	237 TRST	45	1354.2	1354.5	2	44	11		11R
	29 UPIC	8 S	1354.2	1354.6	0.5				
	33 UPIC	8 S	1354.3	1354.6	0.5				
	2800 OTTA	27AFRF	1715		135	1.8	1.3		
	2800 OTTA	24 R	1715	1800	45	1.8	0.9		
	2695 BOUL	40 F	1757	1803	6	7	2		
	2800 OTTA	24P R	1800		60	1.8			
	245 SGHR	6 S	1828.3	1829	6.2	20.7	6.2		
	410 SGHR	6 S	1828.5	1828.9	3.8	4.6	1.4		
	606 SGHR	4 S/F	1828.6	1829	3.8	12.2	3.7		
	2800 OTTA	26 FAL	1900	1930	30	-1.8	-1		
	410 SGHR	6 S	1908.9	1918	11.3	5.8	1.7		
	245 SGHR	6 S	1911.9	1919.5	8.6	44.9	13.5		
	1420 BOUL	45 C	1912	1913	3.5	6	2		
	2800 OTTA	2 S/F	1912	1913	3	1.6	0.9		
	2800 OTTA	240 R	1950	2140	110	2.8	1.6		
	2695 PENT	24P R	2140		100	2.8			
6	260 ONDR	43 NS	0910	1138.3	324	11		1	
	18 MCHA	6 S	1337	1338	2				
	2700 PENN	8	1537.7	1538.2	0.5	66			
7	200 GORK	44 NS	0606 E		114		10		
	260 ONDR	44 NS	0824 E		332	13			
	200 GORK	44 NS	1100 E		120		10		
	650 GORK	1 S	1125.7	1130.9	10.9	5		1	
	18 MCHA	6 S	1344	1345	1				
	2800 OTTA	27 RF	1840		100	0.8	0.7		
	2800 OTTA	24 R	1840	1845	5	0.8	0.4		
	2800 OTTA	24P R	1845		70	0.8			
	2800 OTTA	26 FAL	1955	2020	25	-0.8	-0.4		
	200 HIRA	44 NS	2135 E	0006	635	30	17		R
8	100 GORK	43 NS	0554		196		5		
	200 GORK	44 NS	0554 E		366		35		
	260 ONDR	44 NS	0752 E	0801	348				
	100 GORK	8 S	0611.7	0612	0.9	50			
	100 GORK	46 C	0709.3	0709.5U	2.7	80	D		
	100 GORK		0709.3	0711.5		80			
	113 POTS	C	0709.3	0709.3	0.1	175	40		
	234 POTS	C	0727.5	0727.6	0.2	130	6		
	100 GORK	2 S/F	0856.7	0958.3	2.1	60	30		
	113 POTS	C	0911.8	0911.8	0.2	150	30		
	33 UPIC	8 S	0911.8	0911.8	0.3				
	29 UPIC	8 S	0911.9	0912.1	0.5				
	200 GORK	8 S	0912	0912.2	0.5	75	30		
	100 GORK	S	0912	0912	0.3	100	D		
	100 GORK	8 S	0945.4	0945.8	0.6	90	45		
	200 GORK	2 S/F	0957.9	0958.9	1	85	40		
9	100 GORK	2 S/F	0934.1	0934.4	0.6	10	5		
	33 UPIC	3 S	0941.7		0.6				
	29 UPIC	3 S	0942.2	0942.5	0.5				
	100 GORK	2 S/F	0942.2	0942.8	1.1	30			
10	260 ONDR	44 NS	0820 E	1248.6	410	27		1	
	127 TORN	45 C	0950 U	1124	150	35			
	18 MCHA	6 S	2211	2212	2				
11	260 ONDR	44 NS	0822 E		395	11			
	2800 OTTA	1 S	1540	1540.5	3.5	0.7	0.5		
12	260 ONDR	44 NS	0815 E		380	22			

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Feb 75

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

FEBRUARY 1975

FEB 1975	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT		PEAK	MEAN		
13	200 GORK	44 NS	0900		210 0		10		
	260 ONDR	42 SER	1221.4	1221.9	6	7	0.8		
	3000 BERL	1	1307.5	1309.8	42	3.8	2		
	1470 BERL	2	1308	1309.7	11	1.2	0.7		
	2800 OTTA	1 S	1308	1310	6	4.4	2		
	2800 OTTA	29 PBI	1314	1314	20	1.8	1		
	18 MCMA	6 S	1345	1346	1			1	
	2800 OTTA	21A GRF	1434.3	1435	16	1.8	0.9		
	2800 OTTA	8 S	1438.4	1438.6	0.4	5.8			
	2800 OTTA	20 GRF	2005	2015	85	1.8	0.9		
18	1420 BOUL	3 S	2013	2015	5.5	2	1		
	18 MCMA	6 S	2339	2340	2			1	
	2800 OTTA	22F GRF	1935	1957	75	1.6	0.6		
	2695 PENT		1935	1957	75				NULL
	536 ONDR	45 C	1002.3	1003.5	3.7	7	4.5		UNCERTN
	260 ONDR	46 C	1002.7	1004	2.9	27	9		UNCERTN
	18 MCMA	6 S	1218	1219	2			1	
	18 MCMA	6 S	1323	1325	2			1	
	18 MCMA	6 S	1415	1416	2			1	
	1420 ARCE	20	0858.5	0904.1	20.8				
21	9240 ARCE		0905.9	0906.3	1.3				
	9240 ARCE	45	0905.9	0906.3	2.7				
	9240 ARCE		0907.2	0907.7	1.4				
	18 MCMA	6 S	1346	1347	2			1	
	18 MCMA	6 S	1507	1508	2			1	
	18 MCMA	6 S	1800	1802	2			1	
	9400 TYKH	5 S	0335	0335.5	1	17	4		OR
	930 BORD	42 SER	1332.4	1332.6	0.9	13	3		
	4995 BOUL	3 S	1840.5	1841.5	1.5	9	3		
	2695 BOUL	1 S	1841	1842	2.5	2	1		
25	4995 BOUL	3 S	1849.5	1851.5	3	6	2		
	2695 BOUL	1 S	1851	1852.5	3.5	3	1		
	18 MCMA	6 S	1347	1349	2			1	
	2700 PENN	1	1406.3	1407.5	4	1.6	0.5		
	2700 PENN	45	1521.5	1522.9	2.6	57.1	0.7		
	100 GORK	2 S/F	0912.3	0913.10	0.5	170 0			
	200 GORK	2 S/F	0912.8	0913.1	0.5	130	65		
	18 MCMA	6 S	1324	1325	2			1	
	18 MCMA	41 F	1239	1242	3			1	
	18 MCMA	6 S	1339	1341	2			1	
27	2700 PENN	1	1504.9	1505.2	3.3	3.2	0.4		
	1420 BOUL	40 F	1813	1829.5	24	38	10		
	18 MCMA	6 S	1209	1210	2			1	

Reports received from the following observatories:

ARCE = Arcetri
BERL = Berlin-Adlershof
BORD = Bordeaux
BOUL = Boulder

DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraïso
HUAN = Huancayo

MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO

PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill

SYDN = Sydney
TORN = Torun
TRST = Trieste
TYKH = Toyokawa
UPIC = Upice

Explanation of Type Code:

1 Simple 1	6 Minor	22 Simple 3F	27 Rise and Fall	32 Absorption	44 Noise storm in Progress
2 Simple 1F	7 Minor +	23 Simple 3AF	28 Precursor	40 Fluctuation	45 Complex
3 Simple 2	8 Spike	24 Rise	29 Post Burst Increase	41 Group of Bursts	46 Complex F
4 Simple 2F	20 Simple 3	25 Rise A	30 Post Burst Increase A	42 Series of Bursts	47 Great Burst
5 Simple	21 Simple 3A	26 Fall	31 Post Burst Decrease	43 Onset of Noise Storm	48 Major
					49 Major +

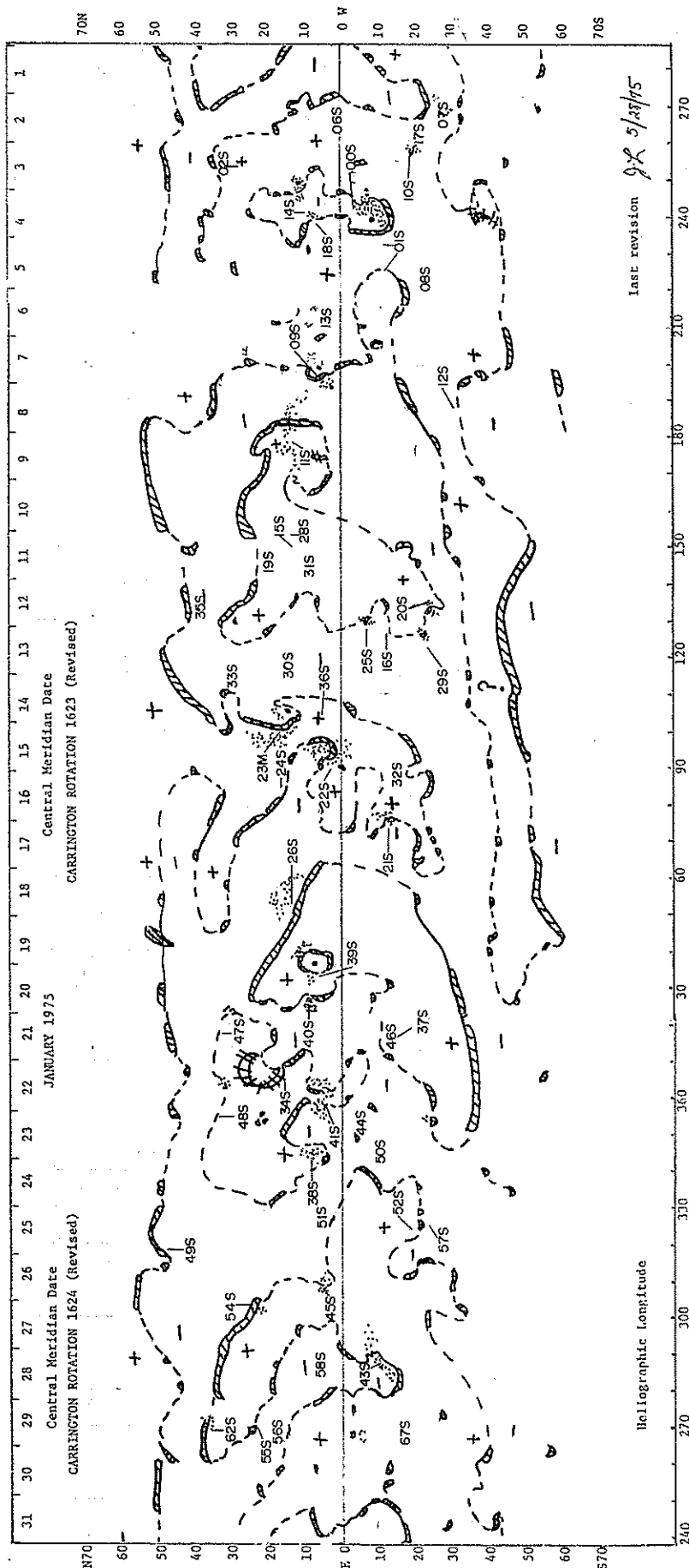
JANUARY 1975 DATA

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ABBREVIATED CALENDAR RECORD

JANUARY 1975



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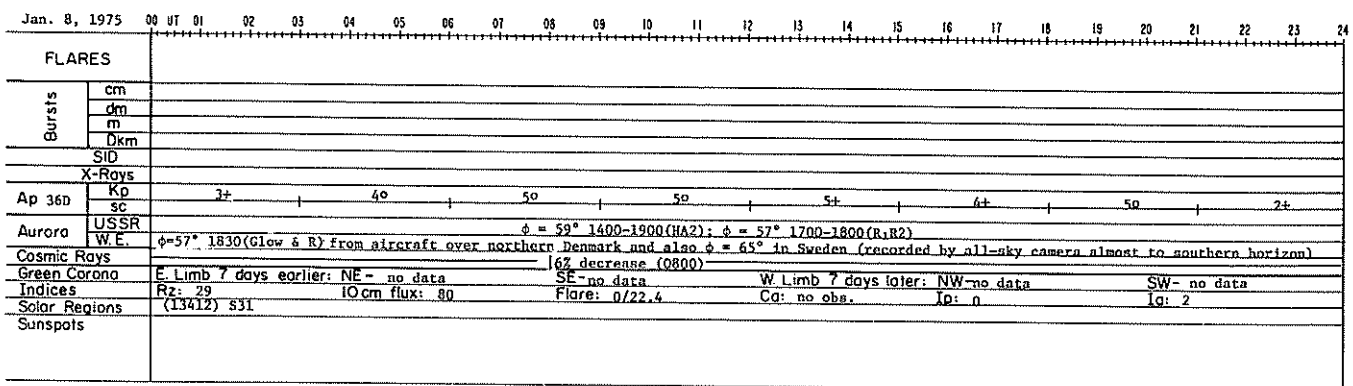
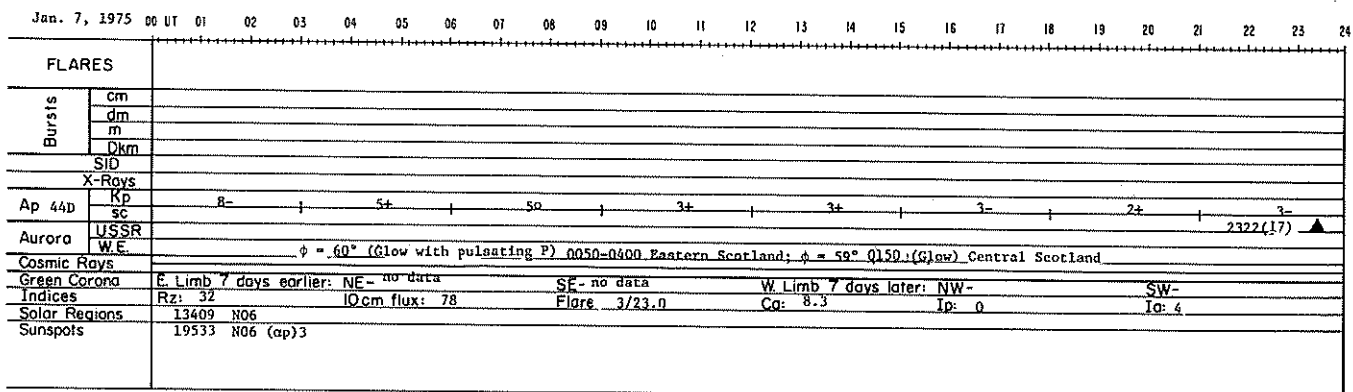
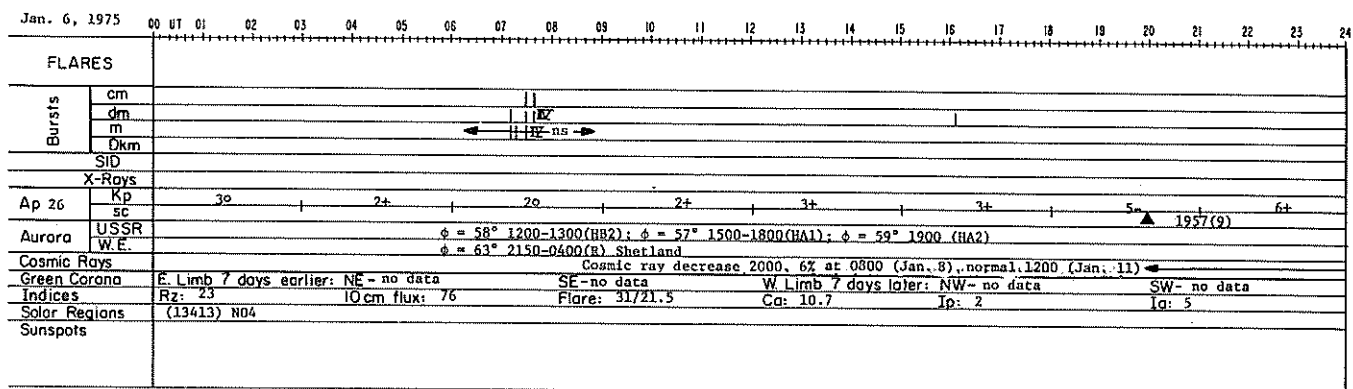
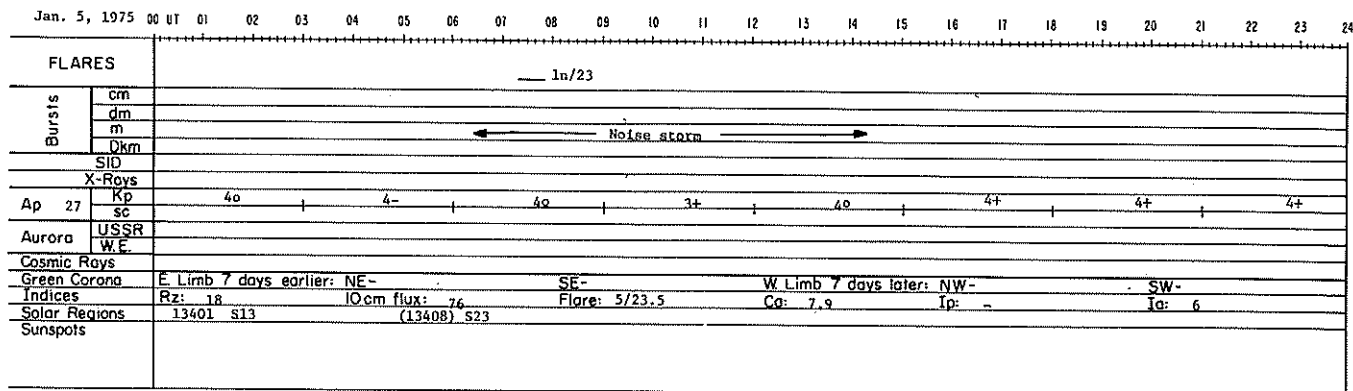
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FLARES																															
Bursts	cm																														
	dm																														
	m																														
	Dkm																														
SID																															
X-Rays																															
Ap 7	Kp	2+			3+				2+				1+						2-					2+				2-			
	sc																														
Aurora	USSR																														
	W.E.																														
Cosmic Rays																															
Green Corona		E Limb 7 days earlier: NE-										SE-					W Limb 7 days later: NW- no data					SW- no data									
Indices		Rz: 30					10cm flux: 81					Flare: 2/23.1					Ca: 4.7					Ip: 0					Ia: 1				
Solar Regions																															
Sunspots																															

Jan. 2, 1975			00	UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
FLARES																													
Bursts	cm																												
	dm																												
	m																												
	Dkm																												
SID																													
X-Rays																													
Ap	4QQ	Kp	1+ + 1+ 0+ 0+ 1- 0+ 2- 1-																										
		sc																											
Aurora	USSR																												
	W.E.																												
Cosmic Rays																													
Green Corona																													
Indices			E Limb 7 days earlier: NE -																										

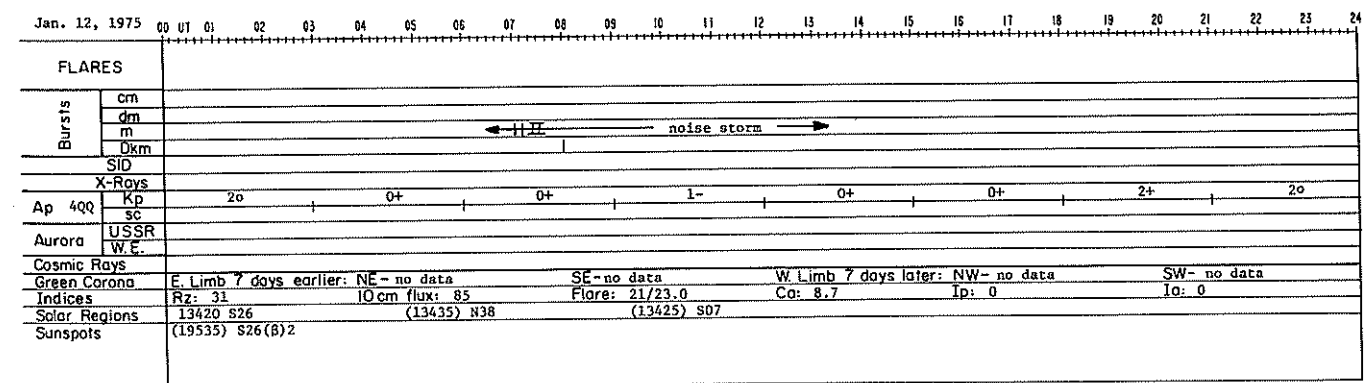
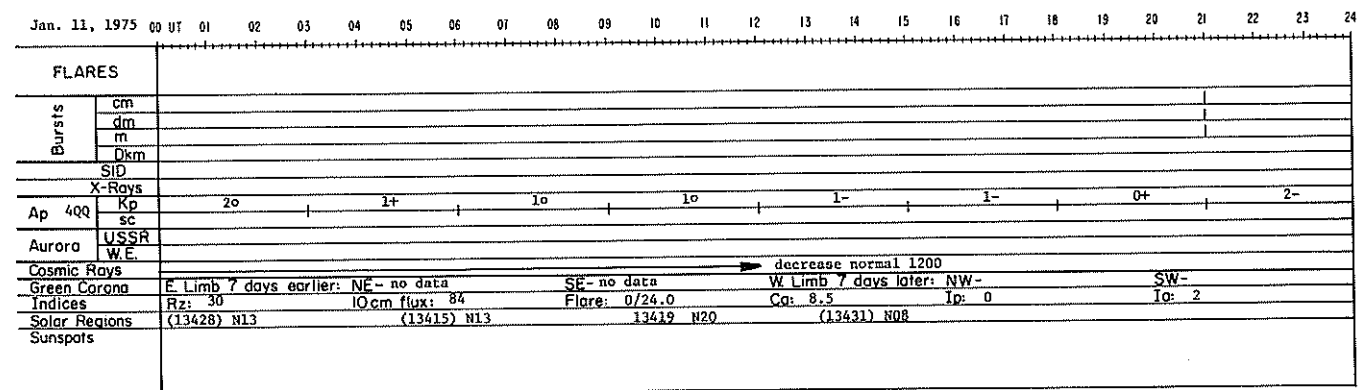
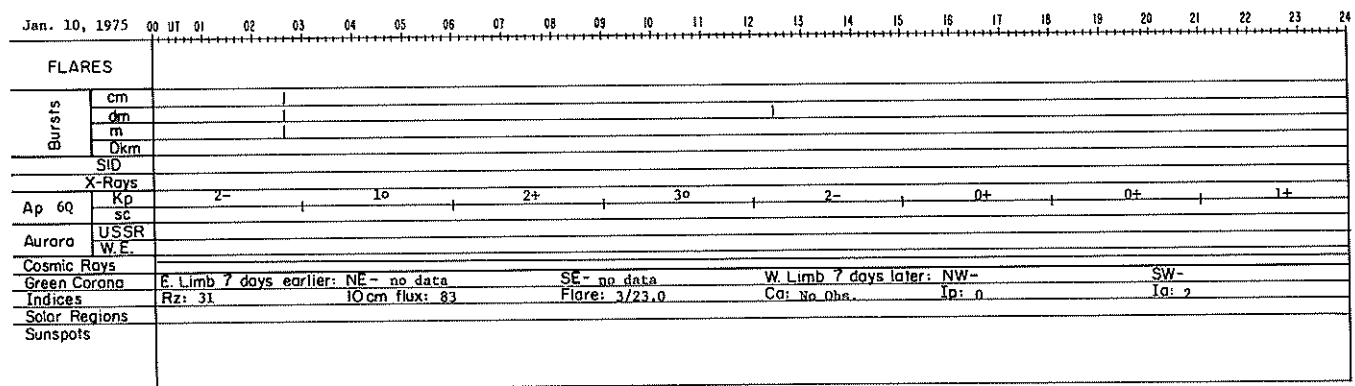
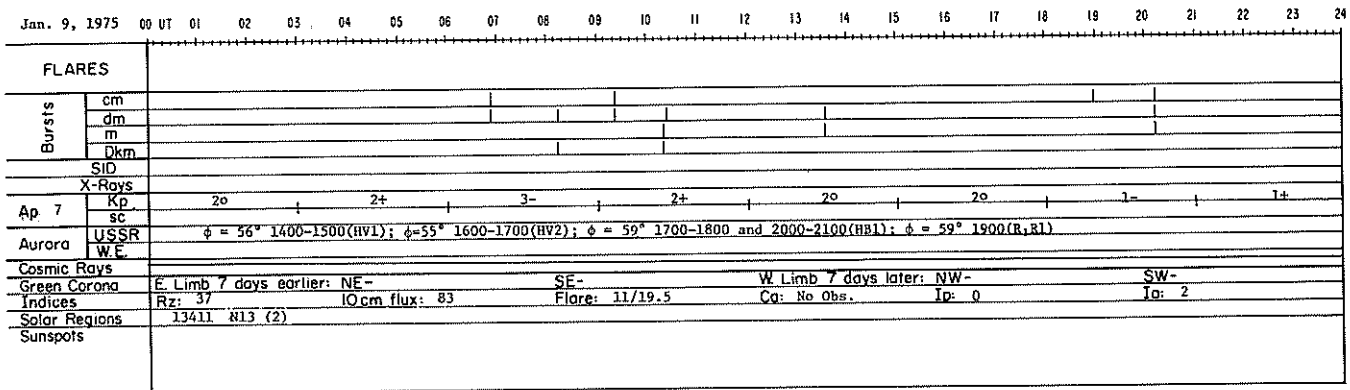
Jan. 3, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
FLARES																																	
Bursts	cm																																
	dm																																
	m																																
	ckm																																
SID																																	
X-Rays																																	
Ap 7	Kp	1+				1o				2+			1+			2-			2+			2+			3-								
	sc																																
Aurora	USSR																																
	W.E.	$\phi = 59^{\circ}$ 1200-1900 (HBI) and 1600-1700 (HAI) $\phi = 60^{\circ}$ (overhead 66° - 67°) (HA) Sweden																															
Cosmic Rays																																	
Green Corona	E Limb 7 days earlier: NE - no data									SE - no data									W Limb 7 days later: NW - no data														
Indices	Rz: 28	IQcm flux: 80								Flare: 3/22.5								Cg: no obs.								Ip: n							
Solar Regions	(13410) S20	(13402)N27																															
Sunspots																																	

Jan. 4, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24													
FLARES																																							
Bursts	cm																																						
	dm																																						
	m																																						
	Okm																																						
SID																																							
X-Rays																																							
Ap 32D	Kp	4-				4-				4o				5-				5-			5o				4o			4+											
Aurora	USSR																																						
	W.E.																																						
Cosmic Rays																																							
Green Corona																																							
Indices	Rz: 19	10cm flux: 77										Flare: 0/23.0										Cg: 5.7										Ip: 3							
Solar Regions																																							
Sunspots	13400 S08	(13414) N09										(13418) N06																											
	19531 S08 (Bp 3	(19534) N10 (Bp)2										N05																											

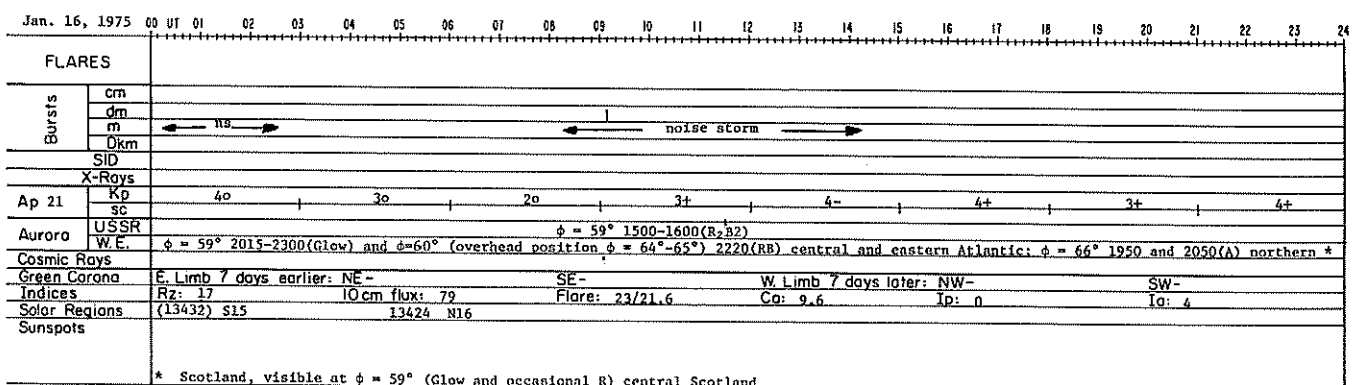
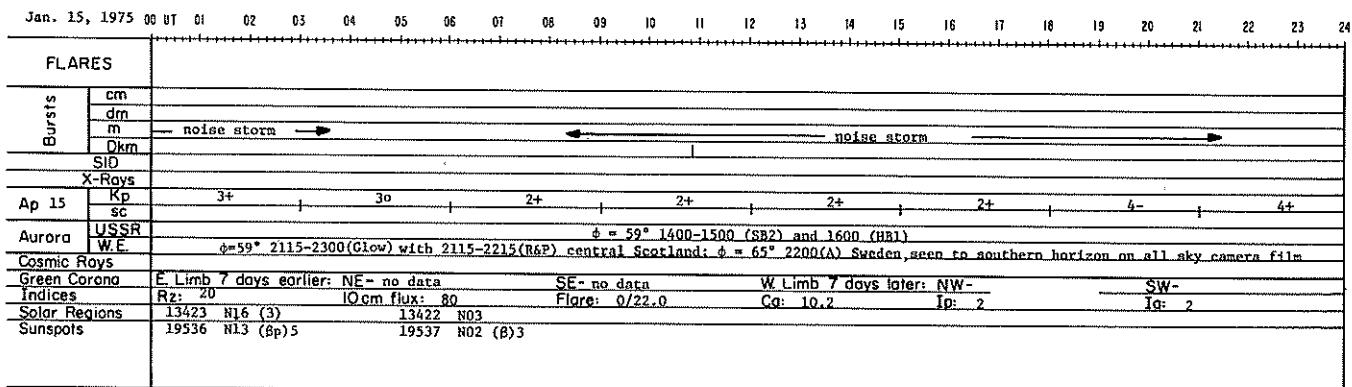
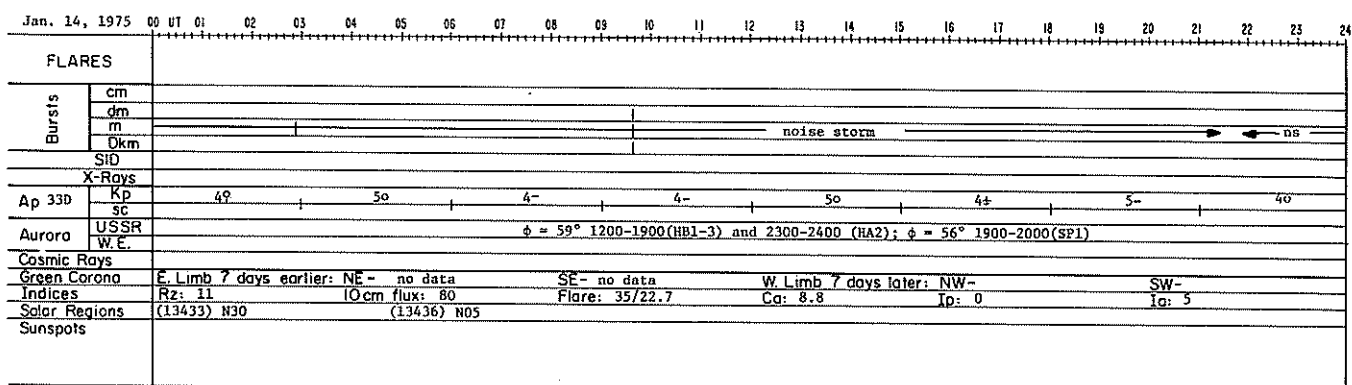
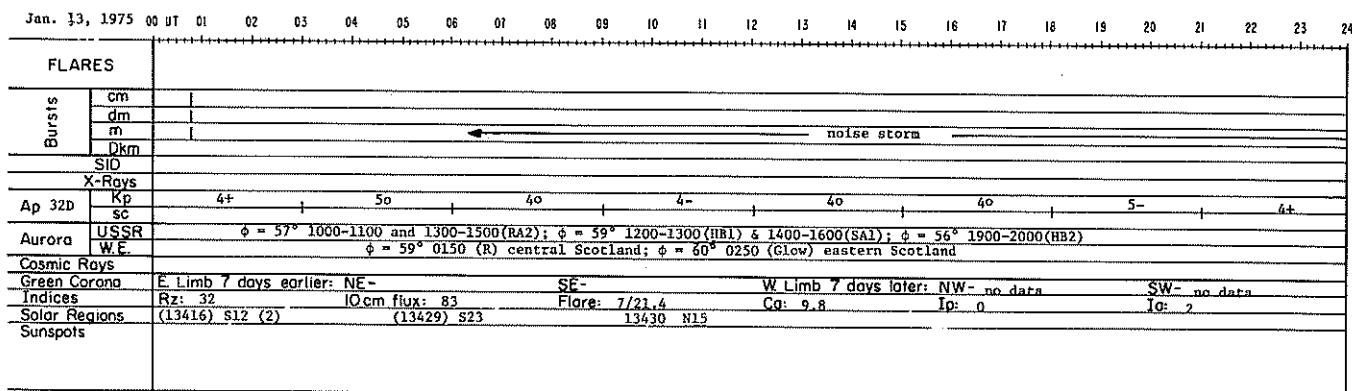
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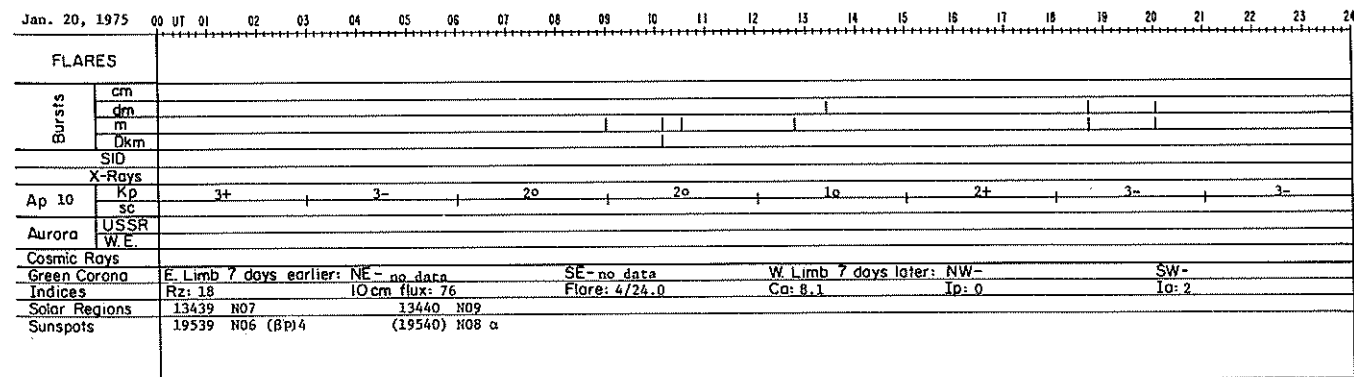
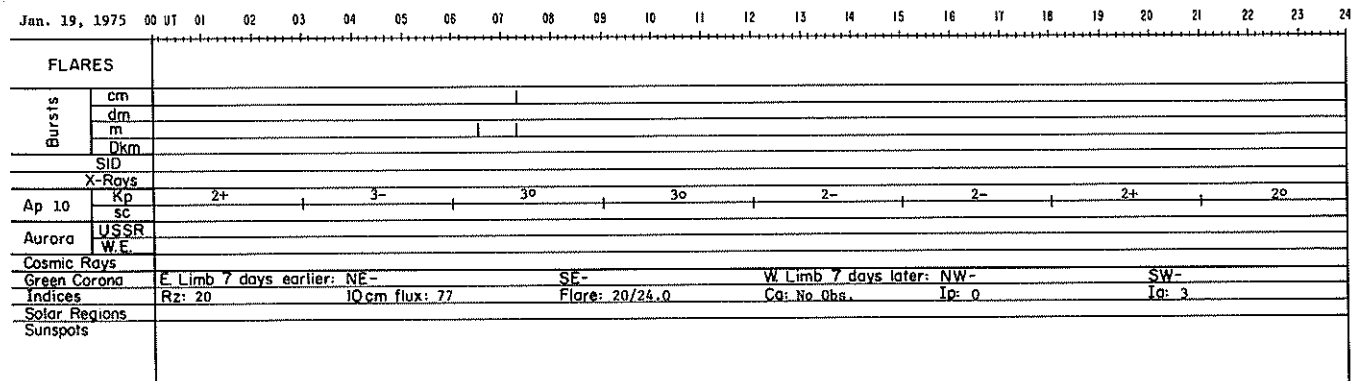
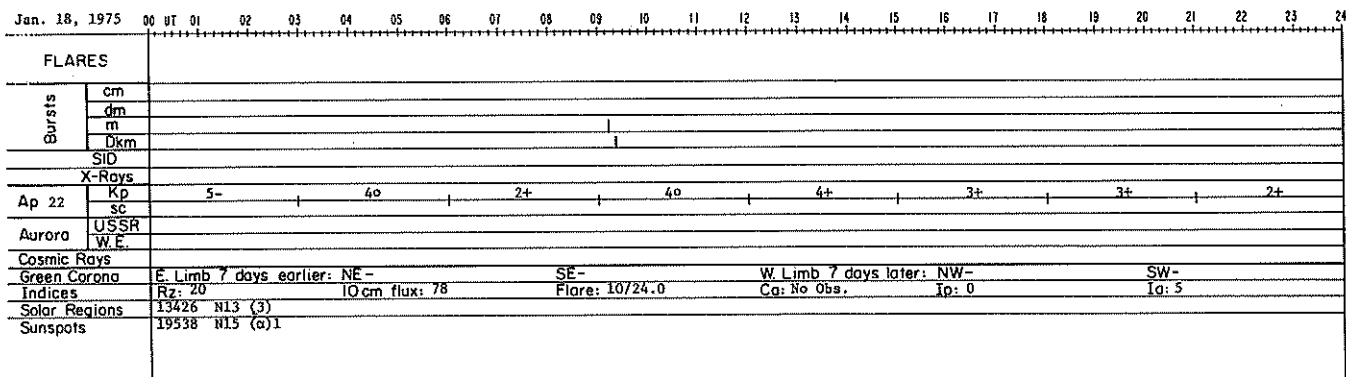
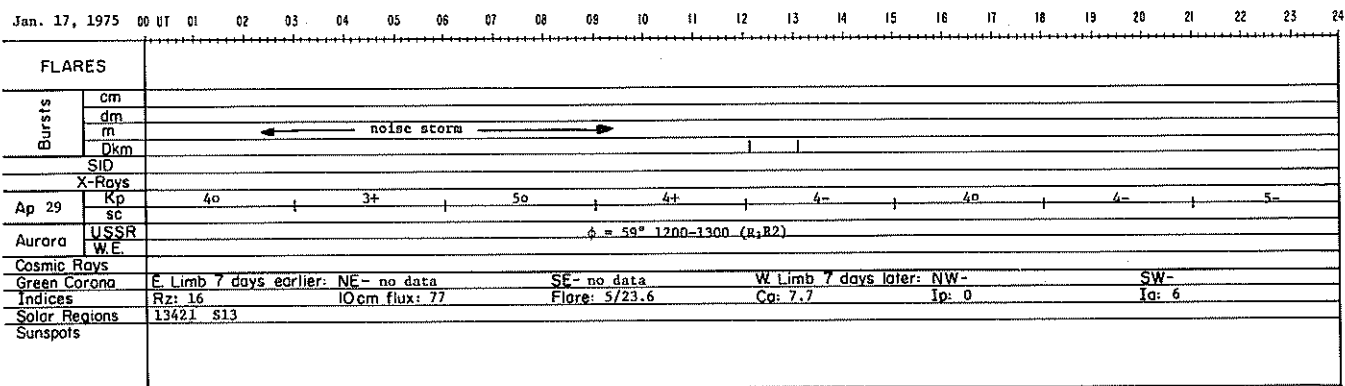
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15
Jan 75



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Jan 75



Jan. 21, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24								
FLARES																																		
Bursts	cm																																	
	dm																																	
	m																																	
	Dkm																																	
SID																																		
X-Rays																																		
Ap 6Q	Kp	2o				1o					1-					1+					2o					3-				2+				1-
	sc																																	
Aurora	USSR																																	
	W.E.																																	
Cosmic Rays																																		
Green Corona		E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data																																
Indices		Rz: 16 IOcm flux: 77 Flare: 5/23.0 Ca: 7.6 Ip: - Ig: 2																																
Solar Regions		(13437) S22 (13446) S19 (13447) N33																																
Sunspots																																		

Jan. 22, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																					
FLARES																																															
Bursts	cm																																														
	dm																																														
	m																																														
	Okm																																														
SID																																															
X-Rays																																															
Ap 8Q	Kp	1-				1o					1+																																				
	sc																																														
Aurora	USSR																																														
	W.E.																																														
Cosmic Rays																																															
Green Corona	E. Limb 7 days earlier: NE - no data											SE - no data											W. Limb 7 days later: NW -																								
Indices	Rz: 16											IO cm flux: 76											Flare: 2/22.9											Co: No Obs.							Ip: -						
Solar Regions	13434 N15 (2)											13441 N05																													1o: 4						
Sunspots												19541 N05 β																																			

Jan. 23, 1975		00	UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24								
FLARES																																			
Bursts	cm																																		
	dm																																		
	m																																		
	Dkm																																		
SID																																			
X-Rays																																			
Ap 12	Kp	3o				2o					2o					2-					3o					3-				4-					2+
	sc																																		
Aurora	USSR																																		
	W.E.																																		
Cosmic Rays																																			
Green Corona		E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data																																	
Indices		Rz: 15 10cm flux: 75 Flare: 0/21.3 Cg: 4.2 Ip: 1 Ig: 2																																	
Solar Regions		(13448) N33 (13444) S05 (13450) S10 13438 N08 (2) (19544) N05 ap CHF Jan. 24																																	
Sunspots																																			

Jan. 24, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
FLARES																											
Bursts	cm																										
	dm																										
	m																										
	Okm																										
SID																											
X-Rays																											
Ap 10	Kp	3o 3o 1+ 3+ 2- 2+ 2o 1+																									
	sc																										
Aurora	USSR																										
	W.E.																										
Cosmic Rays																											
Green Corona		E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- SW-																									
Indices		Rz: 7 10cm flux: 73 Flare: 8/20.4 Ca: 3.5 Ip: - Ia: 2																									
Solar Regions																											
Sunspots																											

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Jan. 25, 1975		00	UT	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
FLARES																													
Bursts	cm																												
	dm																												
	m																												
	Dkm																												
SID																													
X-Rays																													
Ap 500	Kp	1- 1- 0+ 10 1- 30 20 10																											
	sc																												
Aurora	USSR																												
	W.E.																												
Cosmic Rays																													
Green Corona		E. Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data																											
Indices		Rz: 7 10cm flux: 72 Flare: 0/21.8 Cq: No obs. Ip: - Id: 3																											
Solar Regions		(13451) N07 (13457) S23 (13452) S38 (13449) N48																											
Sunspots																													

Jan. 26, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																		
FLARES																																												
Bursts	cm																																											
	dm																																											
	m																																											
	0km																																											
SID																																												
X-Rays																																												
Ap 50Q	Kp	3+			1+				1-				0+				1+				1-				1+			1-																
Aurora	USSR																																											
	W.F.																																											
Cosmic Rays																																												
Green Corona	E. Limb 7 days earlier: NE - no data											SE - no data											W. Limb 7 days later: NW - no data									SW - no data												
Indices	Rz: 7											10 cm flux: 73											Flare: 0/23.0											Ca: 3.7					Ip: 0					Ia: 0
Solar Regions																																												
Sunspots																																												

Jan. 27, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
FLARES																											
Bursts	cm																										
	dm																										
	m																										
	ckm																										
SID																											
X-Rays																											
Ap 14	Kp	1-			3-				3-				4-				3-			3+			4-			2+	
	sc																										
Aurora	USSR																										
	W.E.																										
Cosmic Rays																											
Green Corona																											
Indices	E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data																										
	Rz: 0 IOcm flux: 72 Flare: 0/21,4 Cg: 2,5 Id: - Io: 2																										
Solar Regions	13445 N04 (2) (13454) N23																										
Sunspots	(19543) N04 (8p 3 CMP Jan. 26																										

Jan. 28, 1975		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																		
FLARES																																												
Bursts	cm																																											
	dm																																											
	m																																											
	Dkm																																											
SID																																												
X-Rays																																												
Ap 12	Kp	5-				3+					3-					2o					2o						2-																	
	sc																																											
Aurora	USSR																																											
	W.E.																																											
Cosmic Rays																																												
Green Corona	E. Limb 7 days earlier: NE -											SE -											W. Limb 7 days later: NW -									SW -												
Indices	Rz: 7											IO cm flux: 71											Flare: 0/22,8											Ca: 1,9									Ip: -	1a: 2
Solar Regions	13443 S10											(13458) N06																																
Sunspots	19542) S03 ap																																											

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Jan 75

Jan. 29, 1975 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES																					
Bursts	cm																				
	dm																				
	m																				
	dkm																				
SID																					
X-Rays																					
Ap 6Q	Kp	2-		2+		1+		2o		2+		1+		1+		1o					
	sc																				
Aurora	USSR																				
	W.E.																				
Cosmic Rays																					
Green Corona		E Limb 7 days earlier: NE-					SE-					W Limb 7 days later: NW-					SW- no data 245°-255°				
Indices		Rz: 7					IQcm flux: 73					Flare: 0/18.7					Cq: No Obs. Ip: 0 Ia: 0				
Solar Regions		(13455) N23					(13456) N19					(13462) N35					(13467) S16				
Sunspots																					

Jan. 30, 1975 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES											
Bursts	cm										
	dm										
	m										
	Dkm										
SID											
X-Rays											
Ap 7Q	Kp	2-	1+	2-	2+	1-	1°	2+	3°		
	sc										
Aurora	USSR										
	W.E.										
Cosmic Rays											
Green Corona	E. Limb 7 days earlier: NE-	SE-			W. Limb 7 days later: NW-			SW-			
Indices	Rz: 7	10cm flux: 73			Flare: 0/23,5			Ca: 1.6			Ip: 1 Ia: 2
Solar Regions											
Sunspots											

Jan. 31, 1975 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES																
Bursts	cm															
	dm															
	m															
	Dkm															
SID																
X-Rays																
Ap 16	Kp	2+		1+		1+		3+		2+		4+		4o		4o
	sc															
Aurora	USSR															
	W.E.	φ = 60° 1950-2100(Glow) central Scotland														
Cosmic Rays																
Green Corona	E Limb 7 days earlier: NE-	SE-				W Limb 7 days later: NW-				SW-						
Indices	Rz: 0	IQcm flux: 72				Flare: 0/23.9				Cq: 1.7				Ip: 0		Ia: 2
Solar Regions																
Sunspots																

20
Jan 75

REGIONAL FLARE INDEX
INCLUDES ALL FLARES
JANUARY 1975

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
13400	S 9	75/01/04.2	74/12/29	75/01/06	11.71	1.30	9
13414	N 9	75/01/04.4	75/01/06	75/01/10	6.91	1.38	3
13409	N 6	75/01/07.8	75/01/01	75/01/12	47.08	3.92	11
13411	N12	75/01/09.0	75/01/05	75/01/06	5.70	2.85	3
13423	N16	75/01/15.1	75/01/09	75/01/19	32.90	2.99	13
13422	N 4	75/01/15.8	75/01/12	75/01/19	71.56	8.95	14
--	N16	75/01/16.7	75/01/22	75/01/22	1.18	1.18	3
13421	S12	75/01/17.0	75/01/10	75/01/10	0.43	0.43	1
13439	N 7	75/01/20.1	75/01/18	75/01/24	22.75	3.25	7
13438	N 9	75/01/23.9	75/01/21	75/01/21	5.44	5.44	1

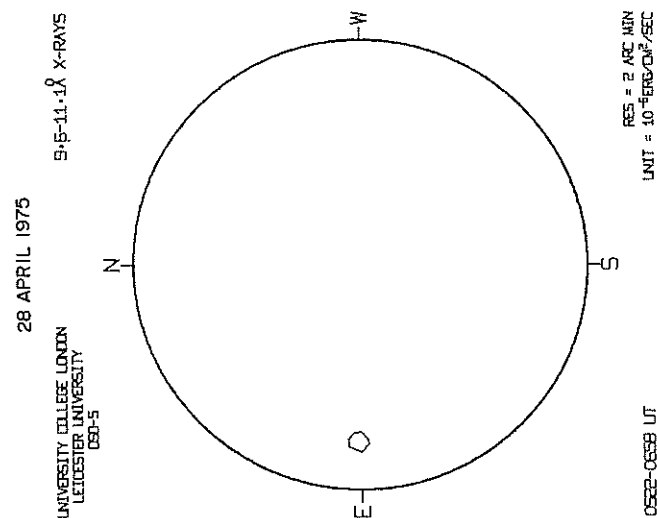
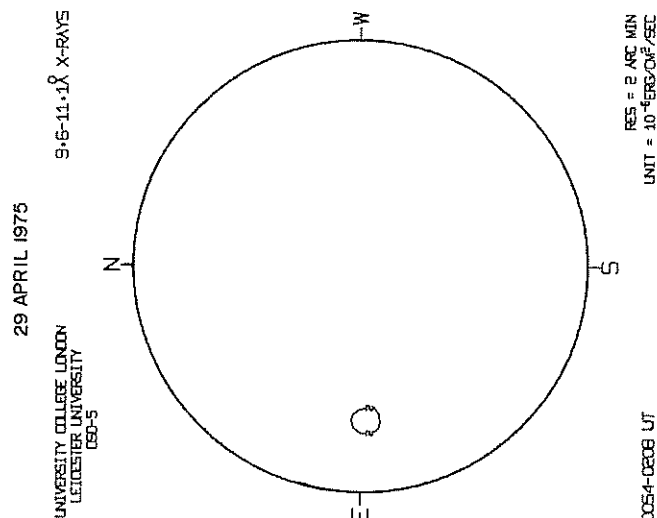
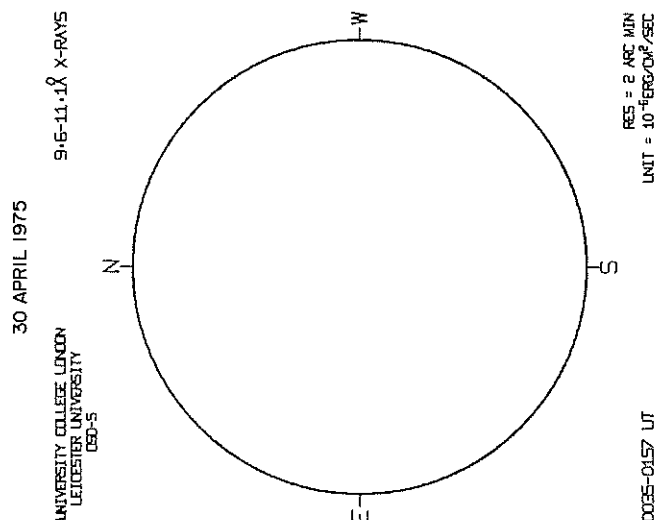
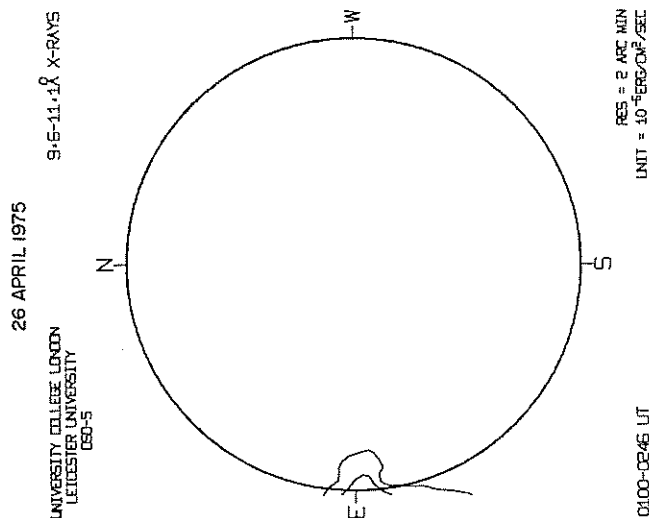
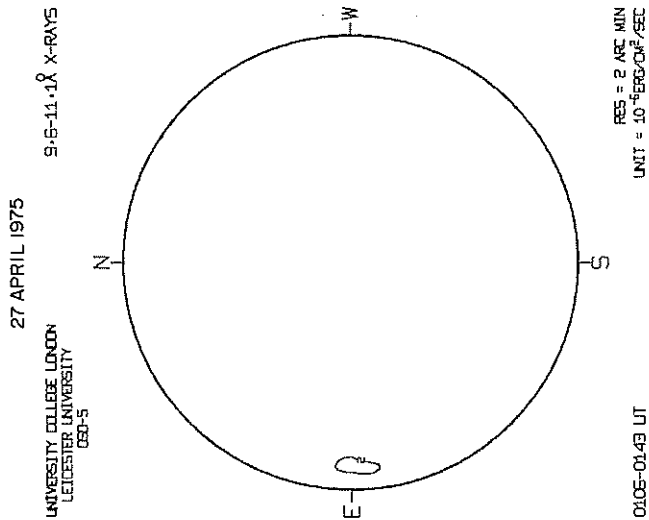
Note:

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no flares during its disk passage.

MISCELLANEOUS DATA

Contents

	Page
<u>Daily Solar Activity Centers</u>	
X-ray - OSO-5 -- March, April 1975 (Addenda)	23
<u>Geomagnetic Indices</u>	
Equatorial Indices Dst - May 1975	24



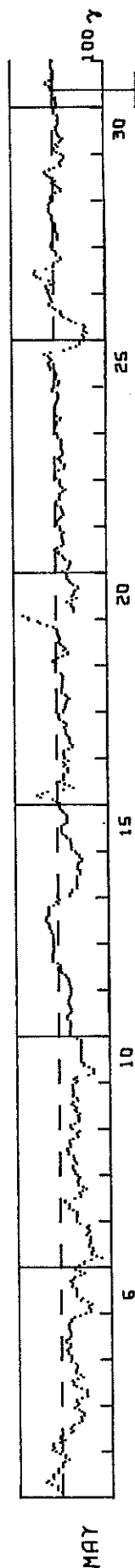
Note: OBSERVATIONS IN MARCH AT 25/0250-0343 UT, 27/0125-0231 UT, 28/0229-0340 UT and 29/0100-0200 UT SHOW NO ACTIVITY.

HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

MAY 1975

NASA/GODDARD SPACE FLIGHT CENTER

DAY	(Time-UT)												(Units--Gammas)											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-1	0	1	4	5	4	12	17	14	8	10	9	3	3	2	-2	-3	-3	-5	-9	-5	-4	2	6
2	10	7	10	9	0	-5	1	-1	-3	-13	-15	-11	-14	-16	-22	-25	-25	-23	-28	-27	-24	-21	-16	-20
3	-22	-18	-19	-25	-32	-30	-31	-31	-23	-18	-15	-15	-13	-21	-27	-23	-18	-17	-20	-21	-19	-17	-12	-14
4	-13	-14	-9	-8	-7	-11	-13	-12	-7	-6	-11	-13	-14	-12	-11	-10	-10	-9	-12	-14	-14	-17	-24	-31
5	-36	-36	-33	-35	-38	-32	-23	-27	-19	-19	-20	-19	-18	-14	-16	-15	-12	-16	-18	-25	-29	-23	-18	-16
6	-23	-29	-29	-38	-50	-42	-37	-37	-40	-38	-34	-34	-37	-36	-37	-35	-31	-34	-36	-33	-31	-35	-23	-20
7	-21	-21	-22	-21	-20	-16	-11	-13	-11	-6	-7	-19	-26	-25	-23	-28	-32	-28	-22	-21	-21	-24	-25	-21
8	-18	-18	-16	-15	-17	-21	-19	-17	-18	-16	-11	-11	-9	-11	-14	-15	-12	-13	-17	-23	-21	-21	-25	-15
9	-13	-14	-19	-24	-24	-24	-22	-26	-21	-18	-22	-18	-15	-18	-23	-21	-17	-18	-19	-15	-15	-16	-16	-21
10	-23	-18	-22	-36	-42	-41	-41	-35	-29	-31	-26	-27	-26	-27	-26	-28	-26	-26	-26	-27	-23	-27	-22	-18
11	-14	-14	-15	-15	-16	-15	-16	-14	-11	-12	-13	-15	-17	-16	-14	-13	-12	-13	-13	-15	-15	-17	-17	-16
12	-16	-14	-13	-13	-12	-12	-10	-8	-5	-3	-5	-5	-3	0	5	6	5	5	6	3	3	3	4	5
13	4	4	5	4	5	7	7	9	10	8	11	13	13	11	9	8	8	10	9	4	-2	1	-4	-48
14	-14	-15	-18	-19	-24	-24	-24	-24	-23	-23	-24	-28	-28	-26	-24	-24	-25	-27	-30	-29	-26	-25	-23	-21
15	-17	-18	-16	-16	-15	-15	-12	-10	-7	-5	-6	-6	-7	-10	-13	-13	-13	-13	-11	-8	-5	-4	-3	-3
16	-3	0	4	19	22	13	9	-10	-21	-15	-10	-4	-9	-10	-8	-8	-14	-14	-14	-9	-12	-8	-15	-10
17	-9	-8	-9	-11	-15	-20	-19	-16	-17	-15	-15	-13	-11	-12	-11	-9	-13	-12	-9	-5	-3	-3	-5	-9
18	-9	-12	-13	-13	-14	-15	-17	-13	-11	-7	-8	-8	-9	-8	-9	-9	-10	-10	-10	-6	0	0	0	0
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20	32	38	-2	-23	-22	-15	-12	-10	-14	-21	-26	-20	-23	-24	-25	-28	-26	-21	-18	-15	-14	-14	-13	-12
21	-9	-16	-18	-19	-2	-17	-12	-10	28	-5	-5	0	-4	-9	-12	-10	-9	-8	-9	-8	-12	-7	-6	-6
22	-3	-4	-5	-7	-9	-12	-10	-9	-8	-7	-4	-2	-3	-7	-6	-8	-8	-11	-14	-13	-7	-6	-7	-7
23	-3	-1	-2	-3	-6	-13	-14	-13	-8	-7	-5	-8	-11	-12	-11	-8	-10	-9	-8	-13	-9	-5	-4	-3
24	-1	-1	-3	-4	-5	-5	-8	-10	-4	-2	-1	-3	-3	-3	-4	-5	-6	-7	-6	-5	-4	1	0	-2
25	-6	-8	-8	-3	-3	-5	-4	-2	3	2	5	6	3	1	4	6	10	1	-14	-22	-29	-32	-31	-36
26	-36	-38	-34	-40	-35	-37	-39	-35	-26	-21	-18	-12	-10	-8	-8	-3	0	4	3	3	2	3	4	5
27	6	3	7	8	2	-3	4	14	18	21	22	19	6	-3	-3	-4	-7	-11	-9	-5	-5	-3	0	2
28	0	-1	-2	-7	-6	-7	-6	-4	-3	-5	-5	-3	-1	1	0	1	2	4	3	4	3	3	1	-1
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30	-6	-3	-4	-8	-5	-13	-12	-14	-9	-7	-6	-5	-5	-5	-8	-9	-8	-8	-8	-5	-3	-3	-4	-6
31	-7	-5	-5	-4	-4	-1	-3	-1	1	2	3	6	5	2	-3	-4	-2	-2	-2	0	1	1	0	-2



Note: Beginning May 1975, new representations were adopted for the secular changes for the observatories used in deriving the Dst index to take into account the marked deviations in the secular change from the extrapolated values. This resulted in an apparent sudden change in the zero level of the provisional Dst index between the end of April (already published) and the beginning of May. We plan to issue tables and plots of revised provisional Dst for the past several months that do not contain such an artificial sudden change in the reference level.

UAG Series of Reports

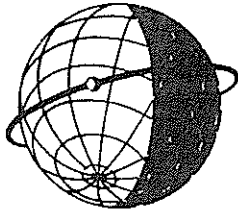
Prepared by World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado, U.S.A.

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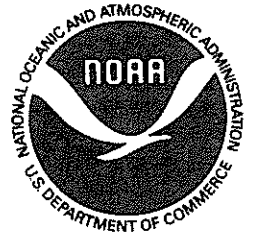
- UAG-32 "Synoptic Radio Maps of the Sun at 3.3 mm for the Years 1967-1969", by Earle B. Mayfield and Kennon P. White III, San Fernando Observatory, Space Physics Laboratory and Fred I. Shimabukuro, Electronics Research Laboratory, Laboratory Operations, The Aerospace Corporation, El Segundo, California, 90245, April 1974, 26 pages, price 35 cents.
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- UAG-39 "Auroral Electrojet Magnetic Activity Indices AE(11) for 1971", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, February 1975, 144 pages, price \$2.05.
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WORLD DATA CENTER A

FOR

SOLAR-TERRESTRIAL PHYSICS



The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."