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Solar - Geophysical Data

NO. 380 APRIL 1976

Part II (Comprehensive Reports)

DATA FOR
OCTOBER 1975
SEPTEMBER 1975
& MISCELLANEA

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

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SOLAR - GEOPHYSICAL DATA

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No. 380

Issued in two parts

Hope I. Leighton, Editor

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Solar - Terrestrial Data Services Division

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Note: A = Part I, B = Part II.

374A 28 listed under 1975 Aug shows that data for August 1975 were contained in *Solar-Geophysical Data* Number 374 - Part I beginning on page 28.

Errata: In "Solar-Geophysical Data, Explanation of Data Reports" published February 1976 the "Key" to the index for 1975 on page 83 is in error on five lines. A.11g should read A.11e; A.11h read A.11g; A.12ba read A.11h; A.12bb read A.12ba; and A.12d read A.12bb.

OCTOBER 1975 DATA

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H_α SOLAR FLARES

OCTOBER 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 OCT	START	MAX. PHASE	END	APPROX		CENTRAL DISTANCE	MCNATH FLARE REGION	CMP. DAY			COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	
					LAT.	MER. DIST.											
909 CATA	12	1225E	1250	13100	N05	E37	.600	13890	15.3	450	-F	3	1250		.7		
910 CATA	12	1325E	1325	13350	N05	E37	.600	13890	15.3	100	-F	3	1325		1.1		
911 CATA	13	0825	0825	08300	S11	E60	.884	13892	17.9	50	1N	3	0825		4.9		
912 MCMA	13	1615	1635	1705	N05	E20	.341	13890	15.2	50	-N		C	1635	100	1.1	E
	14	0021	0023	NO FLARE PATROL													
	14	0024	0030	NO FLARE PATROL													
	14	0040	0045	NO FLARE PATROL													
GRP62913	14	0809		0845	N06	E12	.207	13890	15.2	37	-N						
ISTA	14	0808		0820	N05	E16	.275	13890	15.5	12	-N						
HTPR	14	0809E		09030	N06	E11	.190	13890	15.2	540	-N		C	0814	60	.6	
CATA	14	0845E	0845	08450	N06	E09	.156	13890	15.0		-N	3	C	0845		1.2	
914 HTPR	14	0918E		09350	N06	E11	.190	13890	15.2	170	-N		C	0934	50	.5	
915 KHAR	14	1020E		10300	N05	E08	.140	13890	15.0	100	-F		P	1020	70	.7	T
916 HTPR	14	1132	1132	1133	N05	E05	.088	13890	14.9	1	-N		C	1132	40	.4	
917 HTPR	14	1225	1225	1229	N05	E04	.071	13890	14.8	4	-N		C	1226	40	.4	
918 HTPR	14	1426	1429	1440	N05	E06	.105	13890	15.1	14	-F		C	1429	20	.2	
GRP62919	14	1519+1	1538+2	1635	N05	E05	.088	13890	15.0	76	-F				60	.6	EK
MCMA	14	1519E		17450	N05	E05	.088	13890	15.0	1460	-N		F	1521	40	.4	EK
HTPR	14	1520	1540	1604	N05	E04	.071	13890	14.9	44	-F		C	1540	60	.6	E
BOUL	14	1537	1538	1635	N05	E05	.088	13890	15.0	58	-F	2	C	1538	64	.6	
	14	2151	2155	NO FLARE PATROL													
	14	2159	2205	NO FLARE PATROL													
920 ABST	15	0605E	0607	06090	N07	W03	.055	13890	15.0	40	-F		P	0607	87	.9	CJ
921 ABST	15	0620E	0623	06350	N10	W05	.112	13890	14.9	150	-F		P	0623	87	.8	EJ
922 ABST	15	0715E	0717	07310	N08	W04	.078	13890	15.0	160	-N		P	0717	79	.9	DJK
GRP62923	15	0840+1	0843	0855	N02	W05	.110	13890	15.0	15	-N				110	1.1	D
BUCA	15	0840		0855	N02	W05	.110	13890	15.0	15	-N		P	0842	107	1.2	
ABST	15	0841	0843	0851	N02	W04	.097	13890	15.1	10	-N		C	0843	105	1.1	D
CATA	15	0845E	0845	0855	N02	W05	.110	13890	15.0	100	-F	3		0845		.9	
	16	1332	1339	NO FLARE PATROL													
	16	1506	1520	NO FLARE PATROL													
	16	2030	2020	NO FLARE PATROL													
	16	2101	2132	NO FLARE PATROL													
	17	1000	1039	NO FLARE PATROL													
	18	0216	0246	NO FLARE PATROL													
	18	0256	0325	NO FLARE PATROL													
	18	0331	0335	NO FLARE PATROL													
	18	0407	0410	NO FLARE PATROL													
924 HTPR	18	0940	0940	0946	N07	W48	.740	13890	14.8	6	-F		C	0940	20	.2	
	19	0331	0346	NO FLARE PATROL													
	19	0352	0422	NO FLARE PATROL													
	19	0429	0601	NO FLARE PATROL													
925 VORO	20	0053	0054	0100	N05	W68	.925	13890	14.9	7	-N		C	0054	63	1.6	EJ
926 HTPR	20	0813		08170	S12	W30	.568	13892	18.1	40	-F		C	0814	30	.4	E
927 ISTA	20	0815		0827	S10	W45	.736	13892	17.0	12	-N						
	20	0951	1017	NO FLARE PATROL													
	20	1539	1554	NO FLARE PATROL													
	21	0335	0340	NO FLARE PATROL													
928 HTPR	21	0813	0814	0821	N05	E30	.498	13904	23.6	8	-F		C	0814	10	.1	
GRP62929	21	0855+2	0902+0	0916	N04	E27	.453	13904	23.4	21	-F						DGL
HTPR	21	0855	0902	0916	N05	E28	.468	13904	23.5	21	-F		C	0902	10	.1	
ABST	21	0857	0902	09070	N03	E27	.454	13904	23.4	100	-F		P	0902	77	.9	DGL

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Oct 75

H α SOLAR FLARES

OCTOBER 1975

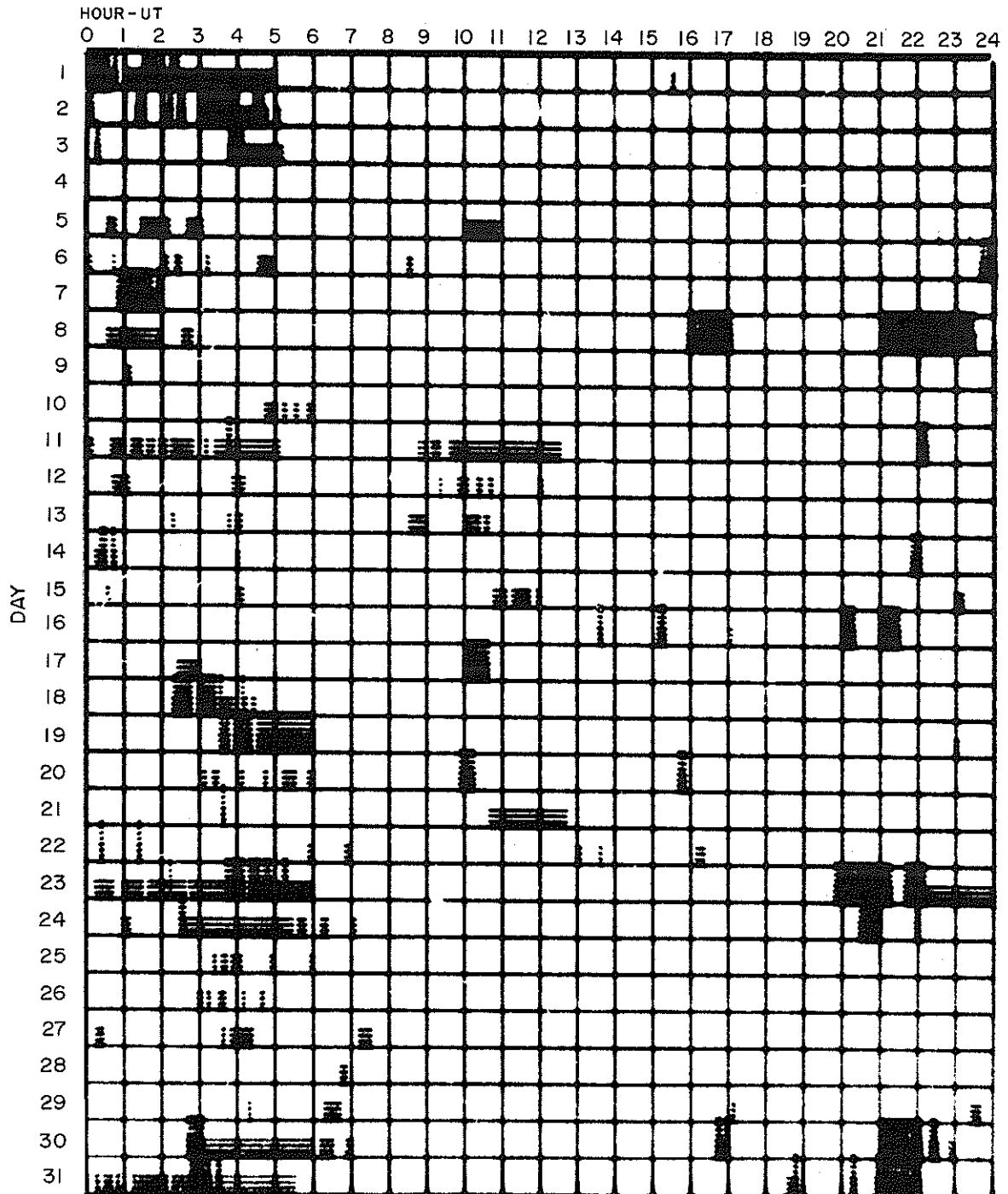
OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX		CENTRAL DISTANCE	MAGNITUDE REGION			CNR DAY	COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk		CORR. AREA Sq. Deg.
					LAT.	MER. DIST.											
930 ATHN	1975 OCT																
	22	0021	0026	NO FLARE	PATROL												
	22	0121	0125	NO FLARE	PATROL												
	23	0212	0215	NO FLARE	PATROL												
	23	0340	0412	NO FLARE	PATROL												
	23	0416	0436	NO FLARE	PATROL												
	23	0439	0453	NO FLARE	PATROL												
	23	0509	0518	NO FLARE	PATROL												
		23	0638	0639	0644	N02 E07	.134	13904	23.8	6	-N	4	V	16		CE	
		23	1948	2120	NO FLARE	PATROL											
		23	2140	2215	NO FLARE	PATROL											
		24	0225	0238	NO FLARE	PATROL											
		24	2028	2100	NO FLARE	PATROL											
		24	2158	2202	NO FLARE	PATROL											
		26	0255	0256	NO FLARE	PATROL											
		30	0236	0306	NO FLARE	PATROL											
		30	1639	1650	NO FLARE	PATROL											
		30	1654	1703	NO FLARE	PATROL											
		30	2104	2209	NO FLARE	PATROL											
		30	2221	2234	NO FLARE	PATROL											
		31	0242	0319	NO FLARE	PATROL											
		31	0322	0334	NO FLARE	PATROL											
		31	1844	1852	NO FLARE	PATROL											
		31	2015	2025	NO FLARE	PATROL											
		31	2053	2209	NO FLARE	PATROL											

DAILY FLARE INDICES								
Includes all Flares								
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
751001	.86	22.7	751011	0.00	23.7	751020	6.27	23.3
751002	.87	22.3	751012	6.76	24.0	751021	6.76	23.9
751003	.21	23.5	751013	8.66	24.0	751022	0.00	23.8
751004	9.50	24.0	751014	33.57	23.6	751023	5.97	20.6
751005	2.38	24.0	751015	22.22	24.0	751024	0.00	23.2
751006	3.38	23.8	751016	0.00	22.3	751026	0.00	24.0
751007	3.47	23.0	751017	0.00	23.4	751030	0.00	21.9
751008	4.09	20.4	751018	1.96	22.9	751031	0.00	21.6
751009	1.69	24.0	751019	0.00	21.7			

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

OCTOBER 1975



Observatories included in total patrol:

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

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).

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Oct 75

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

OCTOBER 1975

OCT 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	MINUTES	PEAK	MEAN		
1	113 POTS	45 C	0753.9	0754	0.4	200	50		
	221 ABST	41 F	0833.2	0834.5	1.5	22			
	221 ABST	41 F	1026.2	1027	1	50			
	18 MCMA	6	1211	1214	5				
	18 MCMA	6	1231	1232	3				
	18 MCMA	6	1357	1358	2				
2	3100 CRIM	24 R	0730	0856		2			
	2800 OTTA	24 R	1835	1845	10	0.6	0.3		
	2800 OTTA	27 RF	1835		105	0.6	0.5		
	2800 OTTA	24P R	1845		75	0.6			
	2800 OTTA	26 FAL	2000	2020	20	-0.6	-0.3		
3	2800 OTTA	1 S	2140.9	2142	2	1.4	0.8		NULL
	2695 PENT		2140.9						
4	18 MCMA	6	2048	2050	4			1	
5	3100 CRIM	26 FAL	0620	0838		5	1		
	100 GORK	41 F	0742.8	0743.4	1.7	10			
	100 GORK			0744.2		20			
	200 GORK	6 S	0743.2	0744.1	1.3	40			
	200 GORK	41 F	0850.1	0850.3	4.1	25			
	200 GORK			0852.2		10			
	200 GORK			0853.9		60			
	100 GORK	41 F	0858.2	0858.7	2	15			
	100 GORK			0859.8		15			
	200 GORK	41 F	1034.4	1036.9	6.2	15			
	200 GORK			1040.1		60			
	100 GORK	41 F	1034.6	1035.2	2.7	15			
	100 GORK			1036.9		15			
	100 GORK	41 F	1040	1040.2	0.7	15			
	9240 ARCE	20	1119.8	1146.6	136				
930 BORD	1 S	1432.7	1432.7	0.1	10	1			
6	9240 ARCE	1	1156.4	1157.2	1.5				
	930 BORD	45 C	1217.2	1217.3	0.1	12	2		
	2695 ATHN	45 C	1530.3	1531.4	3.8	24.20	20.20		
	2695 ATHN	45 C		1533.1		67.20			
7	221 ABST	45 C	0828.8	0830.2	1.5	43	35		
	9240 ARCE	2	0839.1	0840	1.5				
	2800 OTTA	20 GRF	2025	2030	30	0.6	0.3		
8	207 VORO	46 C	0105	0107	6	20			
	221 ABST	6 S	0903.2	0904	1.2	41			
	18 MCMA	41	1303	1305	2				
	245 SGMR	6 S	1656	1658.6	4	152	30.4		
	410 SGMR	6 S	1658.1	1658.4	3.4	21.2	4.2		
	1420 BOUL	8 S	1656.5	1657.5	1.5	7	3		
	1415 SGMR	2 S/F	1657.5	1658.3	1.8	7.9	2.4		
	606 SGMR	4 S/F	1657.9	1658.4	.8	17.6	5.3		
	930 BORD	45 C	1658.1	1658.7	0.6	47	8		
	18 MCMA	6	1658	1702	4				
	2695 BOUL	45 C	2335	2340.5	2.5	9	3		
	4995 BOUL	45 C	2337.5	2338.5	2	10	3		
	2695 PENT	45 C	2337	2339.5	4	3	1.4		
	2000 TYKH	45 C	2338	2338.6	3	1.7	0.8		
	3750 TYKH	45 C	2338	2338.7	3	5	2		
9400 TYKH	5 S	2338	2340	4	3	1			
207 VORO	40 F	2341	2343	3	48				
9	2000 TYKH	5 S	0241	0244	7	1	0.4		OL
	9240 ARCE	20	1008.2	1028.3	186				
	245 SGMR	44 NS	1053 E	1345.8	561 0	22.6			
	2800 OTTA	20 GRF	1615	1625	25	1	0.5		
10	200 HIRA	45 C	0535.5	0535.60	1	370 0	160 0		HL SR
	100 HIRA	45 C	0535.7	0535.8	0.5	80	30		
	200 GORK	6 S	0536	0536.20	8.5	65 0			
	1420 ARCE	20	0815.8	0837.2	54				
	9240 ARCE	21	0815.4	0829.6	48.5				
	9240 ARCE	40	0839.5	0842.5	5.5				
	9240 ARCE	8	0853.1	0853.5	1.4				
	9240 ARCE	20	0906.4	0909.4	11				
	3100 CRIM	20 GRF	0929	1100	91	2			
	9240 ARCE	1	0930.4	0931	1.5				
	3100 CRIM	1 S	1104	1105	6	3	1		
	1420 ARCE	20	1317.2	1359	110				
	9240 ARCE	20	1342.1	1344.2	12				
	3000 BERL	4	1344.7	1345.5	2.3	9.1	2.2		
	9240 ARCE	1	1439.5	1439.8	2.5				
11	221 ABST	41 F	0805.8	0806	1.5	29			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

OCTOBER 1975

OCT 1975	FREQUENCY STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			TIME	MAXIMUM		$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
			UT	UT		MINUTES	PEAK		
	221 ABST	6 S	0827	0827.2	1	29	14		
	221 ABST	41 F	0906	0907.2	1.5	24			
12	18 MCMA	6 S	1401	1404	3			1	
	4995 BOUL	1 S	1823	1824.5	3.5	6	2		
13	3100 CRIM	24 R	0814	0849		3	1		
	221 ABST	41 F	1028.5	1030.2	1.8	13			
	2800 OTTA	20 GFF	1620	1635	35	1.4	0.7		
14	9500 BERL	1	1224.2	1224.9	1.3	4.8	2.5		
	3000 BERL	1	1224.5	1224.9	1	3.4	1.2		
15	260 ONDR	44 NS	0723 E		439 D	47			
	410 SGMR	43 NS	1324.1	1554.5	513.90	33.6			
	245 SGMR	43 NS	1324.3	1349.4	513.70	33.8			
	221 ABST	41 F	0818	0818.5	1	24			
	221 ABST	41 F	0827.2	0830	2.8	35			
	29 UPIC	4 S/F	1045.6	1046.1	1.6				
	33 UPIC	4 S/F	1045.9	1046	0.7				
16	221 ABST	41 F	0848.2	0848.8	1.2	10			
	930 BORD	1 S	1101.3	1101.3	0.1	8	1		
	18 MCMA	6	2011	2013	2			1	
17	100 GORK	41 F	0804.1	0804.3	0.9	40 D			
	100 GORK			0804.8		40 D			
	221 ABST	6 S	0833.5	0833.8	1	32			
	33 UPIC	4 S/F	0833.9	0834.1	0.9				
	113 POTS	40 F	0833.9	0834	0.1	140	15		
	29 UPIC	4 S/F	0834	0834.3	1.1				
	200 GORK	41 F	0834.1	0834.2U	1	80 C			
	200 GORK			0834.8U		80 D			
	221 ABST	41 F	1027	1027.5	1	32			
	260 ONDR	4 S/F	1041.2	1041.8	2.5	31	4		
	221 ABST	45 C	1050	1050.5	1	25	9		
	33 UPIC	45 C	1051.5	1052.4	2.4				
	29 UPIC	45 C	1051.7	1052.6	2.3				
	113 POTS	40 F	1051.7	1051.7	0.4	150	15		
	410 SGMR	44 NS	1102 E	1204.1	653 D	3.1			
	245 SGMR	44 NS	1102 E	1203.9	653 D	35.7			
	260 ONDR	42 SER	1152	1210.8	70	21			
	33 UPIC	45 C	1203.5	1204	2				
	29 UPIC	45 C	1203.6	1204.3	2.7				
	260 ONDR	42 SER	1357.5	1415.8	27	15			
	18 MCMA	6	1746	1749	3			1	
19	260 ONDR	42 SER	1128	1158.2	82	10			
20	260 ONDR	44 NS	0730 E		380	19			
	250 DWIN	45 C	0936	0936.5	1	10	3		
	260 DWIN	45 C	0936	0936.5	1	10	3		
	160 DWIN	45 C	0936	0936.5	1	70	10		
	169 DWIN	45 C	0936	0936.5	1	70	10		
	234 DWIN	45 C	0936	0936.5	1	10	3		
	930 BORD	1 S	1104.6	1104.6	0.1	15	1		
21	100 GORK	6 S	0706.5	0706.6	1.1	30			
	100 GORK	41 F	0826.7	0827	2.5	50			
	100 GORK		0826.7	0827.3		50			
	221 ABST	45 C	0838.2	0838.5	1	10	6		
	221 ABST	41 F	1052.2	1052.8	0.8	27			
	221 ABST	45 C	1057.5	1058	1	31	24		
22	221 ABST	41 F	0740	0740.2	1.5	31			
	930 BORD	1 S	0802.7	0802.7	0.1	26	1		
	221 ABST	6 S	1051.8	1052	0.5	27			
	18 MCMA	41	2007	2011	4			1	
	18 MCMA	6	2026	2030	4			1	
	18 MCMA	41	2056	2058	5			1	
23	221 ABST	41 F	0810	0810	0.5	29			
	4995 BOUL	3 S	1859	1900	2.5	9	3		
	2695 BOUL	3 S	1900.5	1901.5	4.5	5	2		
24	9240 ARDE	22	1046.5	1056.2	12				
	2500 OTTA	20 GRF	1435	1545	220	1.4	0.7		
27	221 ABST	6 S	1048.2	1048.8	0.8	74			
	221 ABST	6 S	1052	1052	0.5	58			
28	720 SYDN	4 S/F	0346.6	0346.8	0.7				
	720 SYDN	8 S	0347.3	0347.6	0.5				
	720 SYDN	8 S	0424.3	0424.7	0.7				
	1420 SYDN	1 S	0424.4	0424.7	0.5				

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Oct 75

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

OCTOBER 1975

OCT 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	MINUTES	PEAK	MEAN		
	221 ABST	6 S	0812.8	0813	0.5	26			
	260 ONDR	8 S	0836.4	0836.4	0.2	8			
	221 ABST	6 S	1057	1057.2	0.5	52			
29	221 ABST	41 F	0818	0818	0.5	16			
30	930 BORD	45 C	0721	0721.5	0.5	10	2		
	221 ABST	41 F	0833.5	0834	0.5	17	7		
	930 BORD	45 C	1601.7	1602.3	0.6	11	2		
31	221 ABST	41 F	1012.8	1013.2	0.8	36			

Reports received from the following observatories:

ABST = Abastumani	DWIN = Dwingeloo	IZMI = Moscow Izmiran	OTTA = Ottawa	SYDN = Sydney
BERL = Berlin-Adlershof	GORK = Gorky	KIEV = Kiev	PENN = Penn. State Univ.	TORN = Torun
BORD = Bordeaux	HARS = Harestua	KISV = Kislovodsk	PENT = Penticton	TYKW = Toyokawa
BOUL = Boulder	HIRA = Hiraiso	MARI = Manila	POTS = Potsdam	TRST = Trieste
CRIM = Simferopol	HUAN = Huancayo	MCMA = McMath-Hulbert	SAOP = Sao Paulo	UPIC = Upice
	IRKU = Irkutsk	ONDR = Ondrejov	SGMR = Sagamore Hill	VORO = Voroshilov (Ussurisk)

SEPTEMBER 1975 DATA

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ABBREVIATED CALENDAR RECORD

SEPTEMBER 1975

Sep. 1, 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 7	Kp	1-																									
	sc																										
Aurora	USSR																										
	W.E.																										
Cosmic Rays																											
Green Corona	E. Limb 7 days earlier: NE- moderately br. SE- W. Limb 7 days later: NW- no data SW- no data																										
Indices	Rz: 14 (Final) IOcm flux: 86 Flare: 13/24.0 Ca: no data Ip: 0 Ia: 1																										
Solar Regions	13820 N05 (4)																										
Sunspots	(19612) N03 α CMP Aug. 31 (19614) N00 (ap)² CMP Aug. 31 (19616) N10 (α)³																										

Sep. 2, 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 6	Kp	3o																									
	sc																										
Aurora	USSR																										
	W.E.																										
Cosmic Rays																											
Green Corona	E. Limb 7 days earlier: NE- bright, no data 20° SE W. Limb 7 days later: NW- SW-																										
Indices	Rz: 16 IOcm flux: 86 Flare: 6/21.0 Ca: 18.5 Ip: 0 Ia: 2																										
Solar Regions	13827 S36																										
Sunspots																											

Sep. 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																										
	Dkm																										
SID																											
X-Rays																											
Ap 30Q	Kp	1+																									
	sc																										
Aurora	USSR																										
	W.E.																										
Cosmic Rays																											
Green Corona	E. Limb 7 days earlier: NE- moderately br. SE- W. Limb 7 days later: NW- moderately br. SW-																										
Indices	Rz: 19 IOcm flux: 86 Flare: 19/23.8 Ca: 18.2 Ip: 0 Ia: 0																										
Solar Regions																											
Sunspots																											

Sep. 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																										
	Dkm																										
SID																											
X-Rays																											
Ap 30Q	Kp	0+																									
	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: 29 IOcm flux: 91 Flare: 33/23.5 Ca: 19.6 Ip: 0 Ia: 0																										
Solar Regions																											
Sunspots																											

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Sep 75

Sep. 5, 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 4Q	Kp	1o		1-		1-		1o		1-		1o		1-		1o		1+		2-											
	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- bright						SW-												
Indices	Rz: 25	IO cm flux: 93						Flare: 1/24.0						Ca: no data						Ip: 0						Ia: 0					
Solar Regions	13826 N08 (2)																														
Sunspots	(19615) H12 α CMP Sep. 3 19617 H08 (β)3 19618 H10 (αf)1 CMP Sep. 4 (19619) N07 (αp)1 CMP Sep. 3																														

Sep. 6, 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 13	Kp	3-		2o		2o		3+		3+		3+		2-		3o															
	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- no data						SW- no data												
Indices	Rz: 24	IO cm flux: 92						Flare: 1/23.0						Ca: 17.5						Ip: 0						Ia: 0					
Solar Regions	(13830) S09 S12																														
Sunspots																															

Sep. 7, 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 7	Kp	2o		2o		2+		3-		1+		1-		1-		2o															
	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-						SW-												
Indices	Rz: 24	IO cm flux: 90						Flare: 3/23.2						Ca: 16.1						Ip: 0						Ia: 0					
Solar Regions	(13840) N36																														
Sunspots																															

Sep. 8, 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 6	Kp	2+		1+		1+		1o		2o		2-		2-		2o															
	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: 23	IO cm flux: 87						Flare: 15/23.3						Ca: 15.6						Ip: 0						Ia: 0					
Solar Regions																															
Sunspots																															

Sep. 9, 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 24D	Kp	3-			3-				4-				4o			5o			4o			4-			3+					
	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: 17	10cm flux: 83					Flare: 3/24.0					Ca: 12.3					Ip: 2					Ia: 2								
Solar Regions	(13847) N17					(13848) S24																								
Sunsports																														

Sep. 10, 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 26D	Kp	4+			5+				4o			4-			4-			4-			2+				3+	
	sc																									
Aurora	USSR																									
	W.E.	φ = 59° 2200-2400 (glow) central Scotland																								
Cosmic Rays																										
Green Corona	E. Limb 7 days earlier: NE-										SE					W. Limb 7 days later: NW- no data					SW- no data					
Indices	Rz: 10	10cm flux: 81					Flare: 1/23.6					Ca: 8.1					Ip: 1					Ia: 5				
Solar Regions																										
Sunsports																										

Sep. 11, 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 26D	Kp	4+			4+				3+			4+			4-			4o			4-			4-						
	sc																													
Aurora	USSR																													
	W.E.	φ = 60° 2350 (glow) central Scotland																												
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: 10	10cm flux: 80					Flare: 6/20.3					Ca: 4.6					Ip: 0					Ia: 6								
Solar Regions	(13833) N30					(13835) S28																								
Sunsports																														

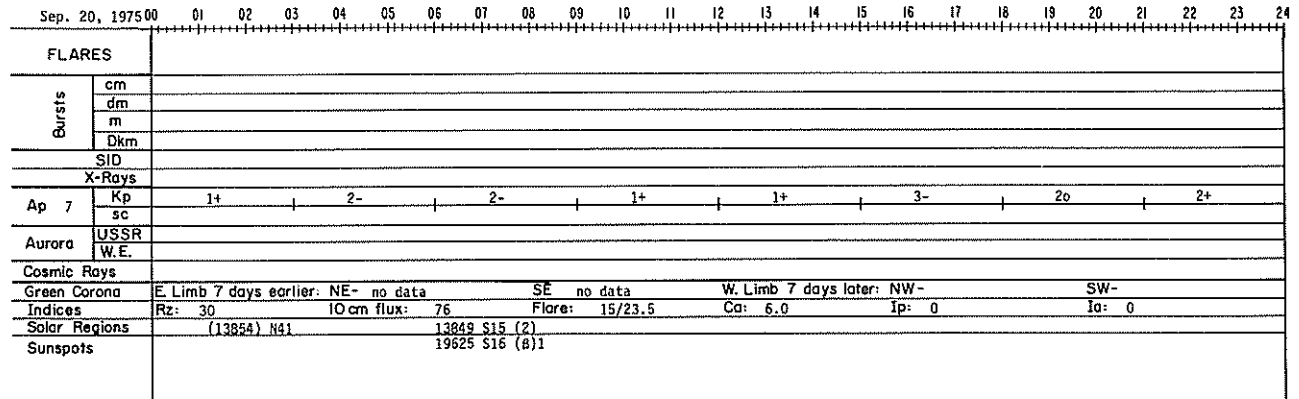
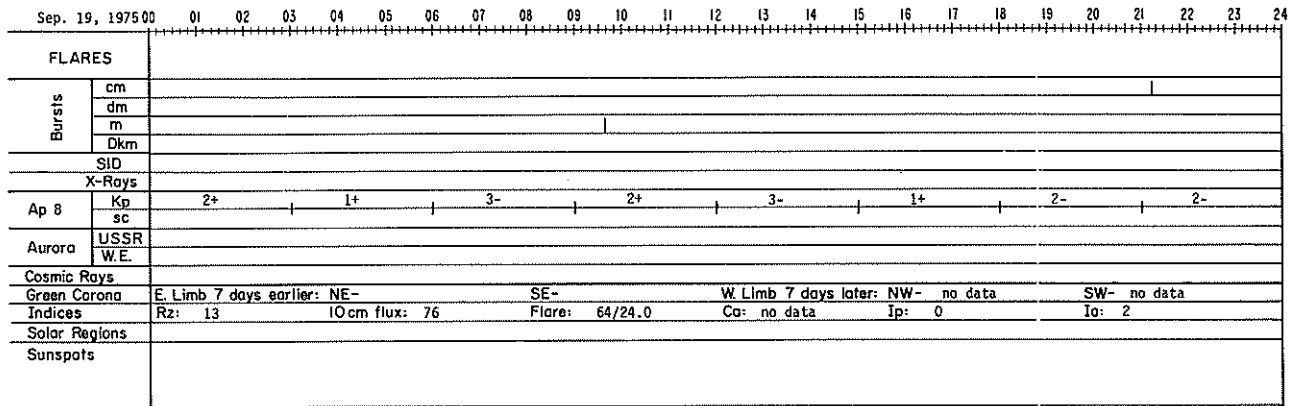
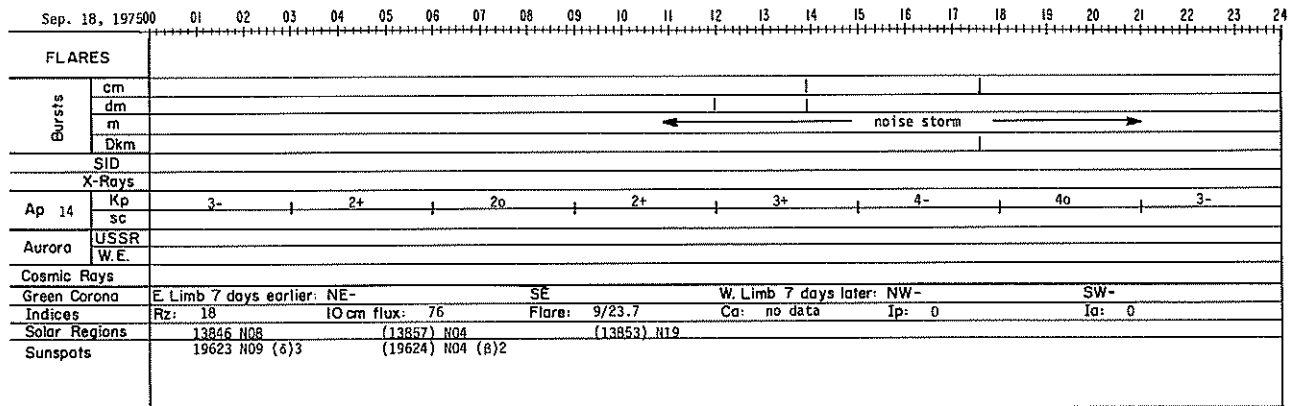
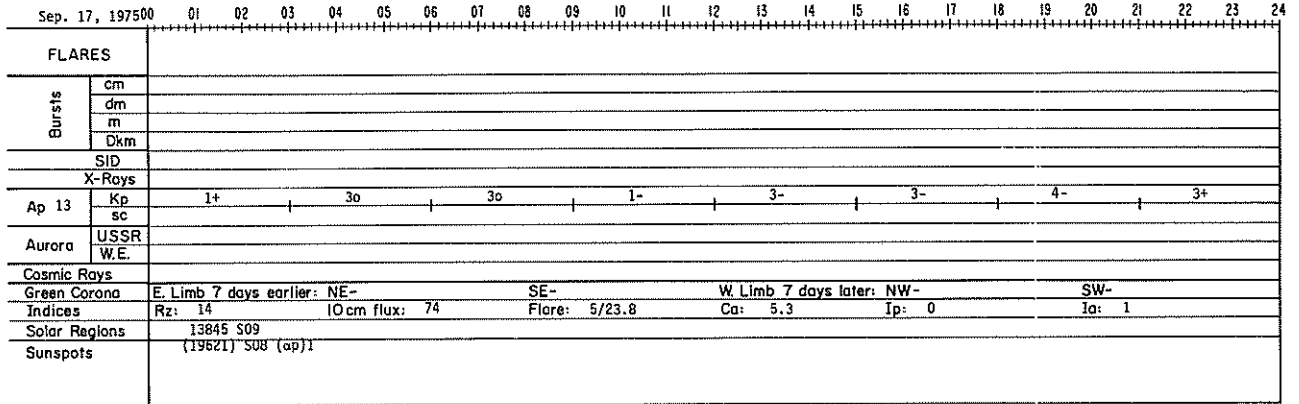
Sep. 12, 1975 00		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
FLARES																														
Bursts	cm																													
	dm																													
	m																													
	Dkm																													
SID																														
X-Rays																														
Ap 19D	Kp	5-			4-				4-			3o			4o			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-					SW-									
Indices	Rz: 16	10cm flux: 77					Flare: 11/23.0					Ca: 6.8					Ip: 0					Ia: 6								
Solar Regions	13831 N28 (2)					13832 S08 (4)																								
Sunsports	19620 S09 (ap)4 (19622) S07 Bf)2 CMP Sep. 11																													

Sep. 13, 197500		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 170	Kp	4b			4+			2+			4+			2-			1a			2-			4-			
	sc																									
Aurora	USSR																									
	W.E.	φ = 60° 0030-0100 (glow) central Scotland; φ = 58° 2345 (glow) southern Scotland																								
Cosmic Rays																										
Green Corona	E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- SW-																									
Indices	Rz: 19	10 cm flux: 74					Flare: 5/23.1					Ca: 6.8					Ip: 0					Ia: 3				
Solar Regions	(13838) N09																									
Sunspots																										

Sep. 14, 197500		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 13	Kp	4a			3+			3+			3-			3+			1a			1a			1-			
	sc																									
Aurora	USSR																									
	W.E.	φ = 60° 0050 (glow) central Scotland																								
Cosmic Rays																										
Green Corona	E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data																									
Indices	Rz: 17	10 cm flux: 73					Flare: 4/22.5					Ca: 7.9					Ip: 0					Ia: 2				
Solar Regions	(13836) N27 (13852) N01																									
Sunspots																										

Sep. 15, 197500		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 8	Kp	1+			1+			3+			1a			1a			2-			2+			2+			
	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- no data SW- no data																									
Indices	Rz: 8	10 cm flux: 73					Flare: 3/23.3					Ca: 7.1					Ip: 0					Ia: 1				
Solar Regions	13851 S18 (13855) S11																									
Sunspots																										

Sep. 16, 197500		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 60	Kp	2+			3-			1+			1a			1+			1a			1a			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: 14	10 cm flux: 74					Flare: 1/24.0					Ca: 5.9					Ip: 0					Ia: 0				
Solar Regions	(13843) S34 (13856) S39 (13861) N12																									
Sunspots																										



Sep. 21, 197500		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		— 1b/--																													
Bursts	cm																														
	dm																														
	m																														
	Dkm																														
SID																															
X-Rays																															
Ap 6	Kp	3o							1o																						
	sc								0+																						
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: 27	IO cm flux: 76						Flare: 8/23.5						Ca: 5.1						Ip: 0						Ia: 1					
Solar Regions																															
Sunspots																															

Sep. 22, 197500		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 4Q	Kp	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-						SW-					
Indices	Rz: 23	IO cm flux: 75						Flare: 21/23.3						Ca: no data						Ip: 0						Ia: 0					
Solar Regions		(13868) S07																													
Sunspots																															

Sep. 23, 197500		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 4Q	Kp	3-																													
	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-						SW-					
Indices	Rz: 0	IO cm flux: 76						Flare: 2/24.0						Ca: 4.2						Ip: 0						Ia: 1					
Solar Regions		13859 N07						(13858) S26						(13863) S05																	
Sunspots		(19626) N06 (8p)2																													

Sep. 24, 197500		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 2Q	Kp	0+																													
	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-						SW-					
Indices	Rz: 0	IO cm flux: 76						Flare: 7/24.0						Ca: 3.8						Ip: 0						Ia: 0					
Solar Regions		(13860) S06																													
Sunspots		S15																													

Sep. 25, 197500		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 300	Kp	1-			1o				1o				0+				0+			1-			0+			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- no data						SW- no data												
Indices	Rz: 0	10 cm flux: 76						Flare: 0/22.7						Ca: no data						Ip: 0						Ia: 0					
Solar Regions	(13864) S40						(13869) N10																								
Sunsports																															

Sep. 26, 197500		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 14	Kp	2-			3o				2+				2-				3+			3+			3+			4-					
	sc																														
Aurora	USSR																														
	W.E.	φ = 60° 2050-0400 (glow) central Scotland																													
Cosmic Rays																															
Green Corona	E Limb 7 days earlier: NE-						SE						W Limb 7 days later: NW- no data						SW- no data												
Indices	Rz: 0	10 cm flux: 76						Flare: 0/24.0						Ca: no data						Ip: 0						Ia: 2					
Solar Regions																															
Sunsports																															

Sep. 27, 197500		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 14	Kp	4+			3-				4-				2+				3-			3o			2+			1+					
	sc																														
Aurora	USSR																														
	W.E.	φ = 60° 0000-0400 (glow) central Scotland																													
Cosmic Rays																															
Green Corona	E Limb 7 days earlier: NE-						SE-						W Limb 7 days later: NW- no data						SW- no data												
Indices	Rz: 0	10 cm flux: 75						Flare: 0/24.0						Ca: 5.6						Ip: 0						Ia: 2					
Solar Regions	(13876) N32						13862 N02 (5)						(19627) N03 (ap)2																		
Sunsports																															

Sep. 28, 197500		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 8	Kp	2o			2o				2-				3-				2-			3o			1-			2o					
	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-						SW-												
Indices	Rz: 0	10 cm flux: 76						Flare: 0/23.0						Ca: 7.0						Ip: 0						Ia: 0					
Solar Regions	(13866) S32						13865 N11 (5)						(13877) S05																		
Sunsports																															

20
Sep 75

Sep. 29, 197500		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 5Q	Kp	2-			2-				2o				2-				1o				0+				1-			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-	very bright				SW-	moderately bright							
Indices	Rz:	0	10cm flux: 76										Flare:	0/21.2										Ca:	7.3				Ip:	0				Ia:	1			
Solar Regions	(13871) N26																																					
Sunspots																																						

Sep. 30, 197500		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 2Q	Kp	0+			0o				1-				0+				0+				0+				1-			2-										
	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-	no data				SW-	no data							
Indices	Rz:	7	10cm flux: 76										Flare:	0/24.0										Ca:	8.4				Ip:	0				Ia:	1			
Solar Regions																																						
Sunspots																																						

REGIONAL FLARE INDEX
INCLUDES ALL FLARES

MC MATH PLAGE NO.	LAT	CHP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
13820	N 5	75/09/01.1	75/09/03	75/09/03	3.38	3.38	1
13826	N 9	75/09/05.0	75/08/28	75/09/10	85.20	6.09	23
13832	S 8	75/09/12.1	75/09/05	75/09/16	35.97	2.96	12
13861	N12	75/09/16.9	75/09/21	75/09/21	7.60	7.60	1
13846	N 8	75/09/15.5	75/09/17	75/09/23	86.13	12.30	22
13859	N 7	75/09/23.2	75/09/20	75/09/25	28.32	4.72	7
13860	S 6	75/09/24.8	75/09/20	75/09/20	1.90	1.90	1
13862	N 3	75/09/27.3	75/09/24	75/09/24	6.76	6.76	2

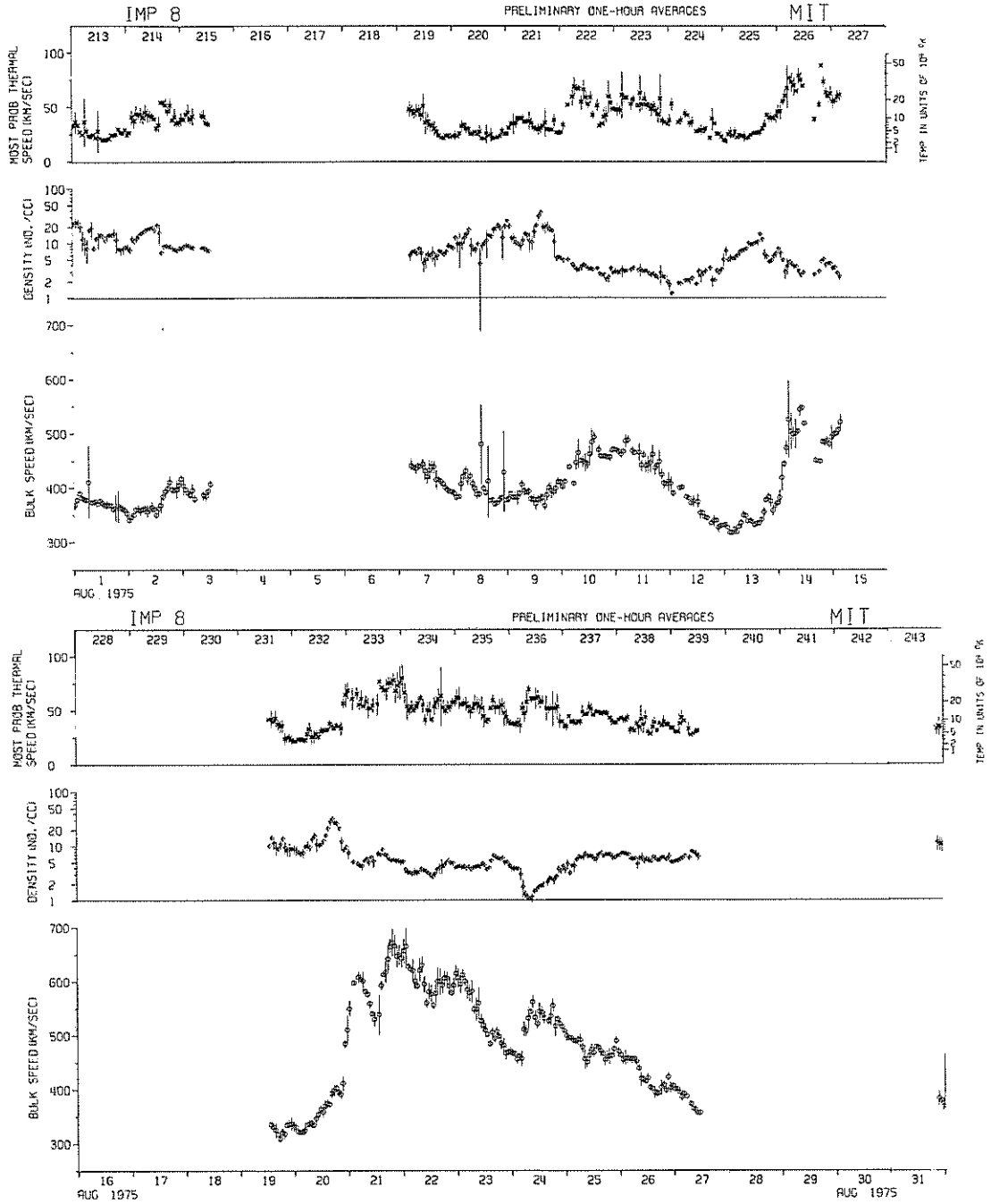
Note:
Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no flares during its disk passage.

MISCELLANEOUS DATA

Contents

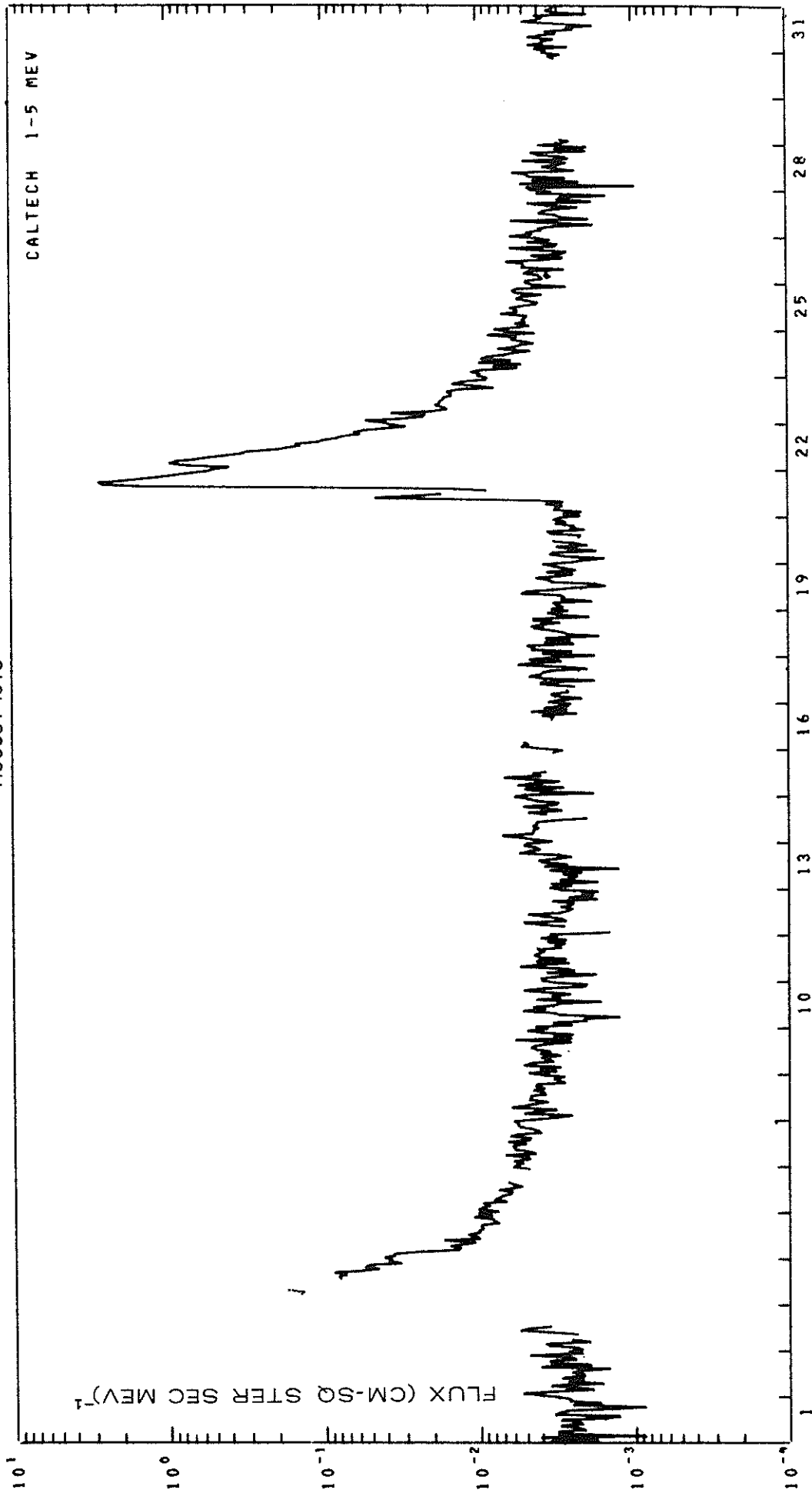
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IMP 7 AND 8 SOLAR WIND PLASMA
AUGUST 1975



IMP 7 AND 8 ELECTRONS

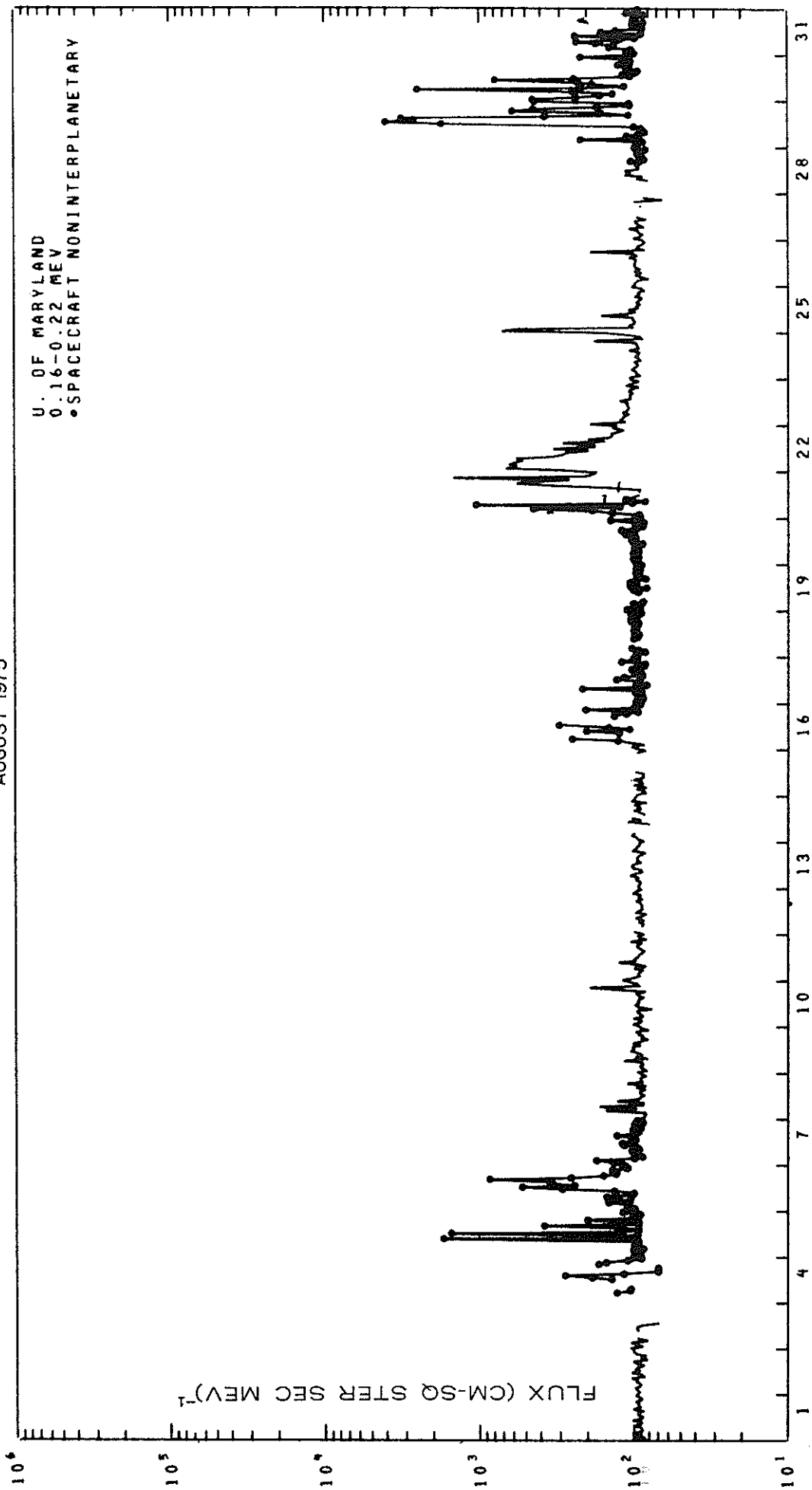
AUGUST 1975



23
Misc
Aug 75

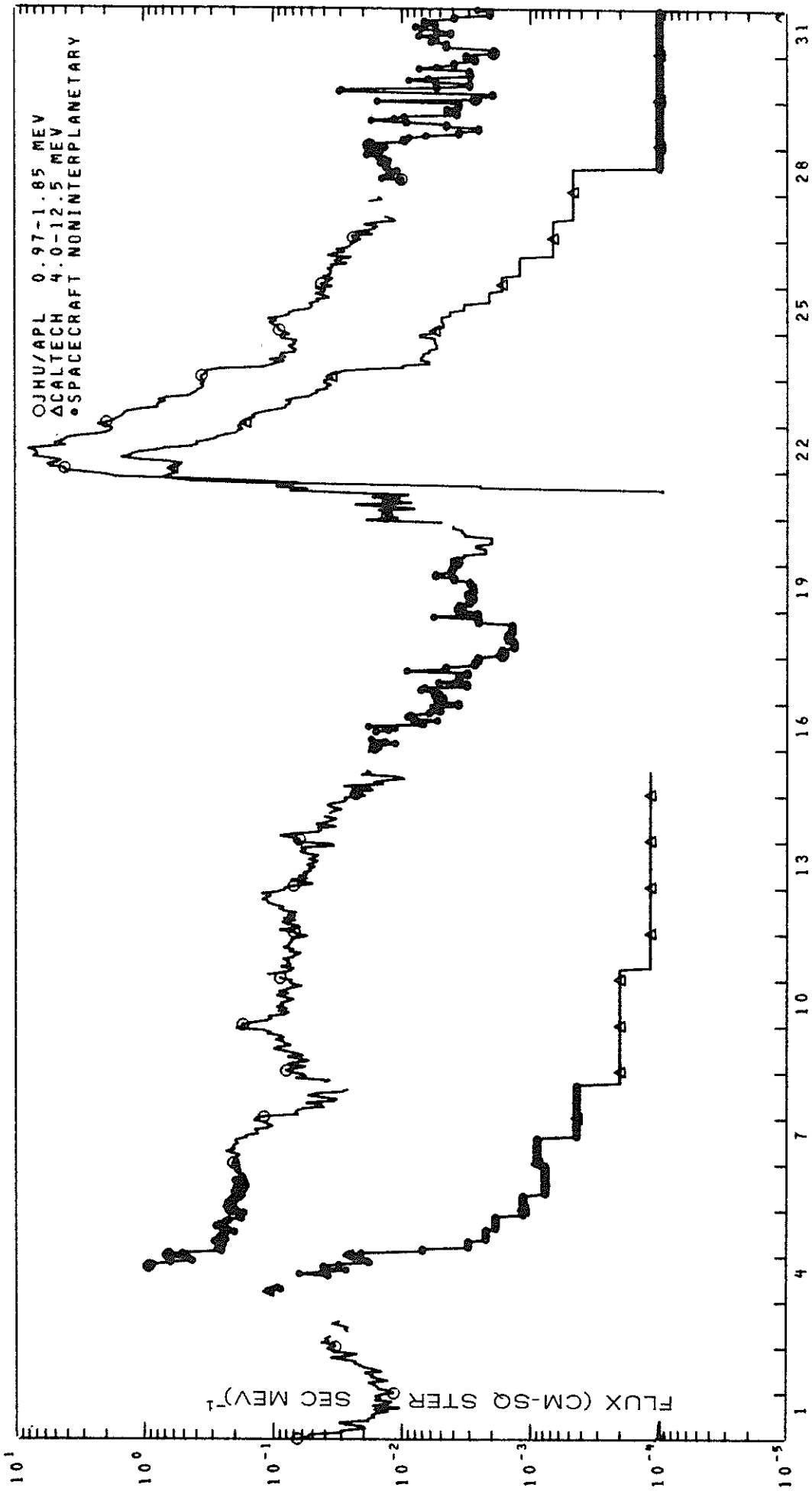
IMP 7 AND 8 LOW ENERGY PROTONS

AUGUST 1975

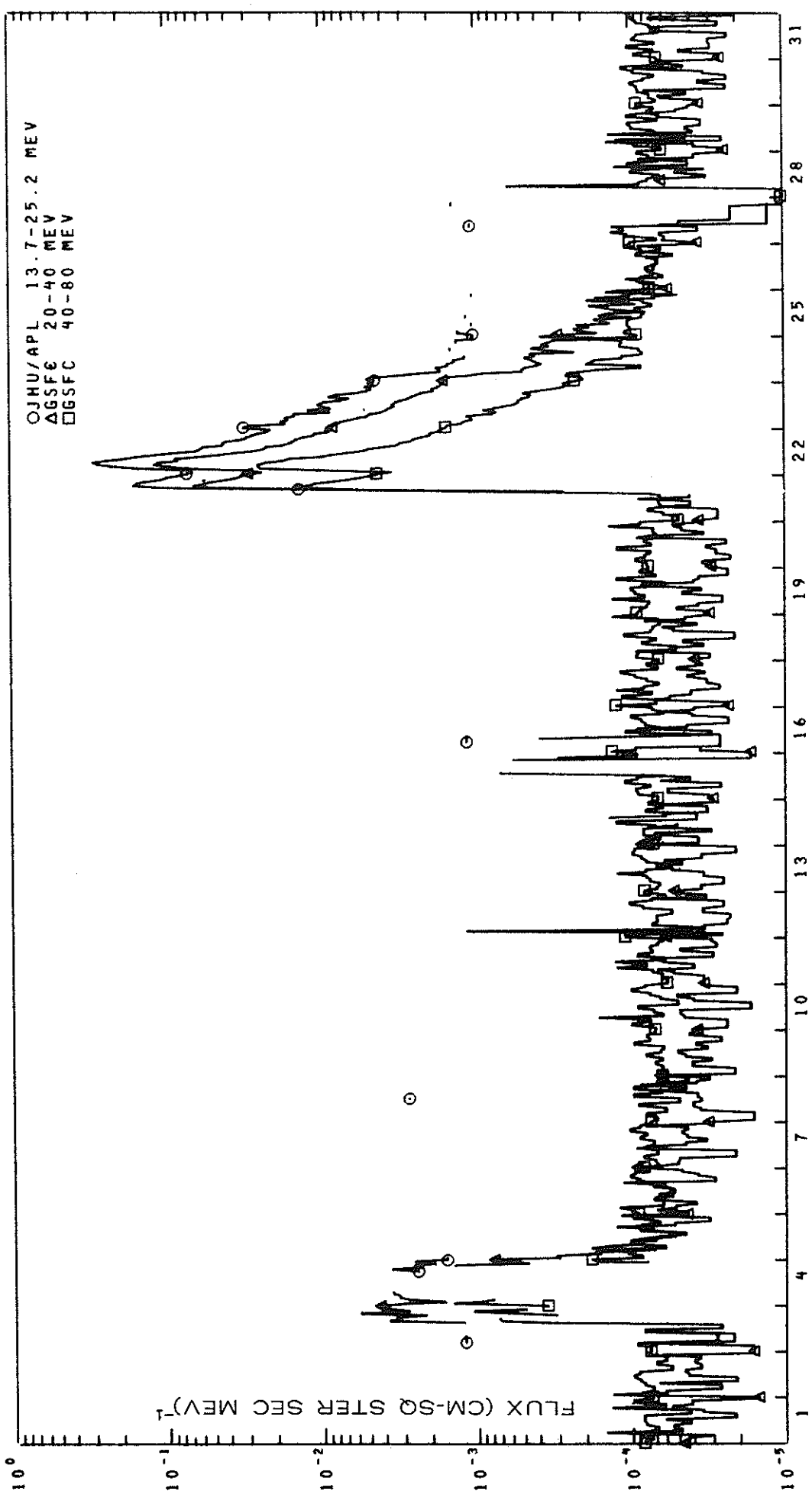


IMP 7 AND 8 INTERMEDIATE ENERGY PROTONS

AUGUST 1975

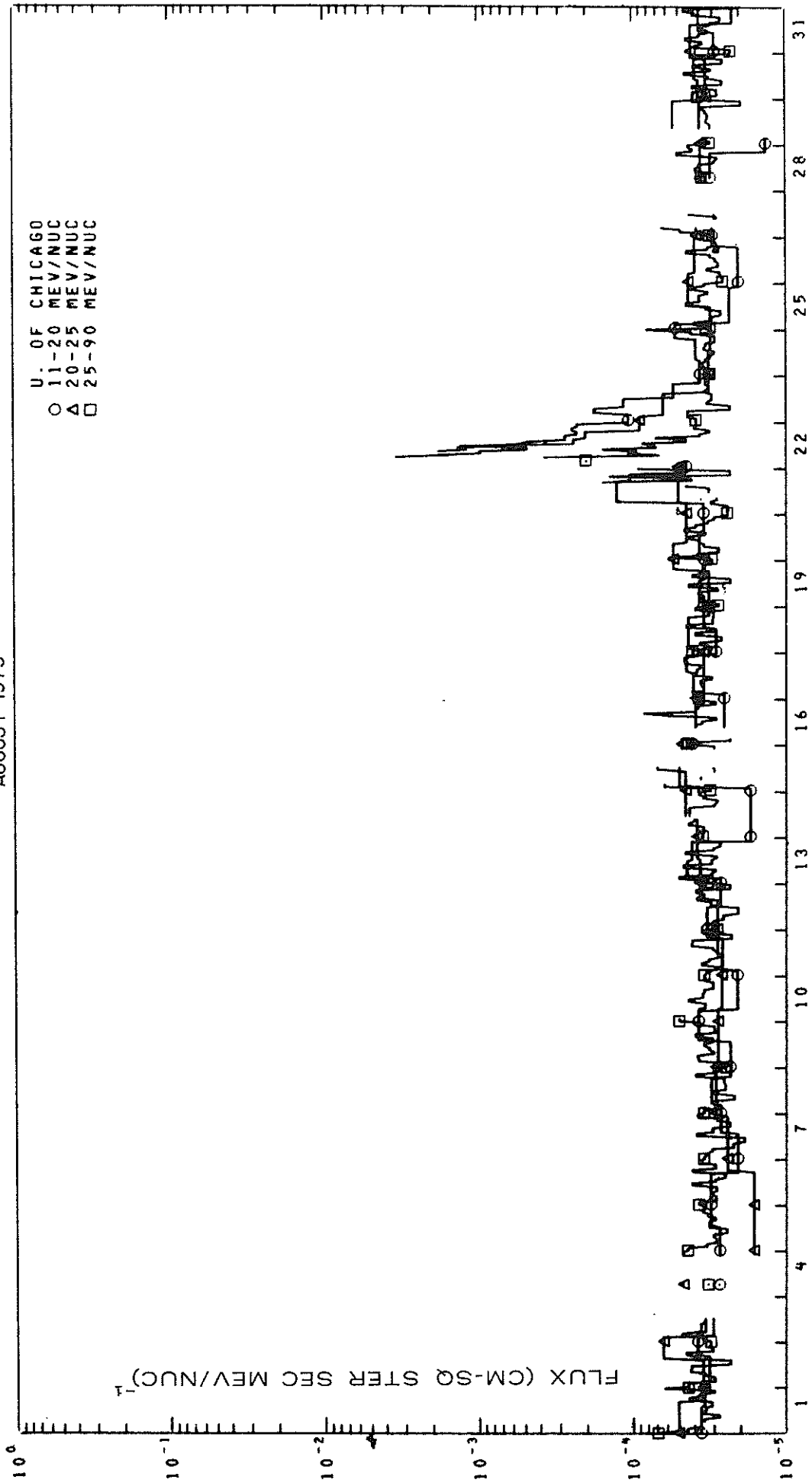


IMP 7 AND 8 HIGH ENERGY PROTONS
AUGUST 1975



IMP 7 AND 8 ALPHA PARTICLES

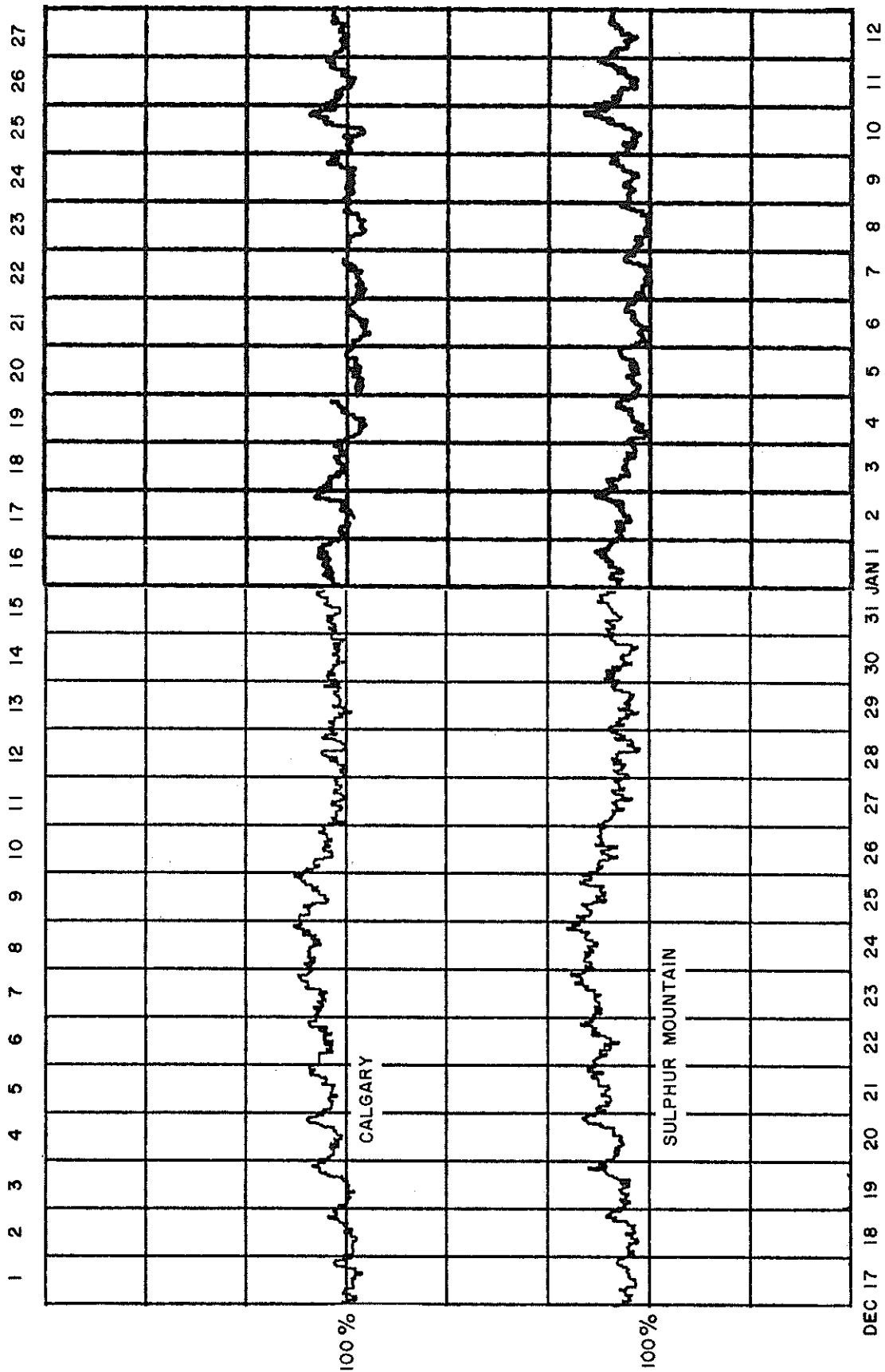
AUGUST 1975



COSMIC RAY INDICES
(Neutron Monitors)
JANUARY 1976

	CALGARY	SULPHUR MT.
JAN. 1976	Average cts/hr	Average cts/hr
1	11798.1	8935.4
2	11726.3	8906.1
3	11746.9	8881.3
4	11662.0	8845.0
5	11640.8	8850.1
6	11624.4	8826.6
7	11638.2	8807.3
8	11645.8	8807.7
9	11693.5	8870.2
10	11726.9	8899.7
11	11731.7	8903.1
12	11732.7	8906.0
13	11763.8	8907.6
14	11778.7	8912.2
15	11756.8	8915.9
16	11758.7	8893.7
17	11810.7	8914.4
18	11774.6	8901.0
19	11820.3	8922.3
20	11821.6	8924.4
21	11788.8	8895.5
22	11743.9	8868.6
23	11708.6	8840.6
24	11675.4	8839.9
25	11706.7	8868.2
26	11691.0	8837.2
27	11674.1	8822.3
28	11705.4	8829.7
29	11705.7	8846.9
30	11688.2	8822.7
31	11652.7	8791.2
MEAN	11722.4	8870.7

COSMIC RAY INDICES
(Neutron Monitors)
Bartel's Rotation 1947 (DEC 1975 - JAN 1976)



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- UAG-37 "Auroral Electrojet Magnetic Activity Indices AE(10) for 1966", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, December 1974, 142 pages, price 75 cents.
- UAG-38 "Master Station List for Solar-Terrestrial Physics Data at WDC-A for Solar-Terrestrial Physics", by R. W. Buhmann, World Data Center A for Solar-Terrestrial Physics, Juan D. Roederer, University of Denver, Denver, Colorado, M. A. Shea and D. F. Smart, A.F.C.R.L., Hanscom AFB, Massachusetts, December 1974, 110 pages, price \$1.60.
- 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.
- UAG-40 "H-Alpha Synoptic Charts of Solar Activity For the Period of Skylab Observations, May, 1973-March, 1974", by Patrick S. McIntosh, NOAA Environmental Research Laboratory, February 1975, 32 pages, price 56 cents.
- UAG-41 "H-Alpha Synoptic Charts of Solar Activity During the First Year of Solar Cycle 20 October, 1964 - August, 1965", by Patrick S. McIntosh, NOAA Environmental Research Laboratory, and Jerome T. Nolte, American Science and Engineering, Cambridge, Massachusetts, March 1975, 25 pages, price 48 cents.
- UAG-42 "Observations of Jupiter's Sporadic Radio Emission in the Range 7.6-80 MHz 10 December 1971 through 21 March 1975", by James W. Warwick, George A. Dulk, and Anthony C. Riddle, Department of Astro-Geophysics, University of Colorado, Boulder, Colorado 80302, April 1975, 49 pages, price \$1.15.
- UAG-43 "Catalog of Observation Times of Ground-Based Skylab-Coordinated Solar Observing Programs", compiled by Helen E. Coffey, World Data Center A for Solar-Terrestrial Physics, May 1975, 159 pages, price \$3.00.
- UAG-44 "Synoptic Maps of Solar 9.1 cm Microwave Emission from June 1962 to August 1973", by Werner Graf and Ronald N. Bracewell, Radio Astronomy Institute, Stanford University, Stanford, California 94305, May 1975, 183 pages, price \$2.55.
- UAG-45 "Auroral Electrojet Magnetic Activity Indices AE(11) for 1972", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, May 1975, 144 pages, price \$2.10.
- UAG-46 "Interplanetary Magnetic Field Data 1963-1974", by Joseph H. King, National Space Science Data Center, NASA Goddard Space Flight Center, Greenbelt, Maryland 20771, June 1975, 382 pages, price \$2.95.
- UAG-47 "Auroral Electrojet Magnetic Activity Indices AE(11) for 1973", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, June 1975, 144 pages, price \$2.10.
- UAG-48A "Synoptic Observations of the Solar Corona during Carrington Rotations 1580-1596 (11 October 1971 - 15 January 1973)", [Reissue with quality images] by R. A. Howard, M. J. Koomen, D. J. Michels, R. Tousey, C. R. Detwiler, D. E. Roberts, R. T. Seal and J. D. Whitney, E. O. Hulbert Center for Space Research, NRL, Washington, D. C. 20375 and R. T. and S. F. Hansen, C. J. Garcia and E. Yasukawa, High Altitude Observatory, NCAR, Boulder, Colorado 80303, February 1976, 200 pages.
- UAG-49 "Catalog of Standard Geomagnetic Variation Data", prepared by Environmental Data Service, NOAA, Boulder, Colorado, August 1975, 125 pages, price \$1.85.
- UAG-50 "High-Latitude Supplement to the URSI Handbook on Ionogram Interpretation and Reduction", by W. R. Piggott, British Antarctic Survey, c/o SRC, Appleton Laboratory, Ditton Park, Slough, England, October 1975, 292 pages, price \$4.00.
- UAG-51 "Synoptic Maps of Solar Coronal Hole Boundaries Derived from He II 304Å Spectroheliograms from the Manned Skylab Missions", by J. D. Bohlin and D. M. Rubenstein, E. O. Hulbert Center for Space Research, Naval Research Laboratory, Washington, D. C. 20375 U.S.A., November 1975, 30 pages, price 54 cents.
- UAG-52 "Experimental Comprehensive Solar Flare Indices for Certain Flares, 1970-1974", compiled by Helen W. Dodson and E. Ruth Hedeman, McMath-Hulbert Observatory, The University of Michigan, 895 Lake Angelus Road North, Pontiac, Michigan 48055 U.S.A., November 1975, 27 pages, price 60 cents.



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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."