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Solar - Geophysical Data

NO. 385 SEPTEMBER 1976

Part II (Comprehensive Reports)

DATA FOR
MARCH 1976
FEBRUARY 1976
& MISCELLANEA

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

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To standardize referencing these reports in the open literature, the following format is recommended:

Solar-Geophysical Data, 366 Part I (or Part II), pages, February 1975, U.S. Department of Commerce, (Boulder, Colorado, U.S.A. 80302)

SOLAR - GEOPHYSICAL DATA

No. 385

Issued in two parts

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Solar - Terrestrial Data Services Division

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H α SOLAR FLARES
MARCH 1976

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPOR- TANCE	OBS.		MEASUREMENTS			REMARKS		
	DATE	START	MAX. PHASE	END	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	OMP. DAY			COND.	TYPE	TIME UT	MEAS. AREA	CORR. AREA			
	MAR				LAT.	NER. DIST.									Mill of Disk	Sq. Deg.			
	02	1650	1737		NO FLARE PATROL														
	02	1748	1807		NO FLARE PATROL														
	02	1828	1910		NO FLARE PATROL														
	02	1937	1944		NO FLARE PATROL														
	02	1956	2059		NO FLARE PATROL														
	02	2114	2220		NO FLARE PATROL														
	03	0508	0510		NO FLARE PATROL														
	03	1735	1742		NO FLARE PATROL														
	03	1751	1830		NO FLARE PATROL														
	03	1842	1909		NO FLARE PATROL														
	03	1921	1936		NO FLARE PATROL														
	03	1953	1959		NO FLARE PATROL														
	03	2004	2040		NO FLARE PATROL														
	03	2051	2105		NO FLARE PATROL														
	03	2109	2126		NO FLARE PATROL														
	03	2129	2135		NO FLARE PATROL														
	04	1632	1657		NO FLARE PATROL														
	04	1810	1814		NO FLARE PATROL														
	04	1820	2220		NO FLARE PATROL														
	06	0658	0703		NO FLARE PATROL														
	06	0712	0729		NO FLARE PATROL														
	06	0858	0902		NO FLARE PATROL														
	06	0930	0950		NO FLARE PATROL														
	06	1002	1026		NO FLARE PATROL														
	06	1030	1034		NO FLARE PATROL														
	06	1044	1058		NO FLARE PATROL														
GRP63167	07	0634	0637+2	0653	S04	W51	.775	14118	3.4	19	-F				70	1.1	OJK		
ABST	07	0634	0639	0701	S04	W52	.786	14118	3.4	27	-F	C	0639		87	1.4	OJK		
CULG	07	0637E	0637U	0645	S05	W50	.763	14118	3.5	80	-F	P	0637		50	.8			
168 ABST	07	0740	0744	0810	S04	W50	.764	14118	3.6	30	-F	C	0744		131	1.9	E		
169 ARCE	07	0939	0941	0943	S05	E52	.785	14116	11.3	4	-F	C	0941		27	.5	H		
170 ABST	08	0710	0716	0725	S04	W60	.864	14118	3.8	15	-F	C	0716		87	1.7	EK		
171 BOUL	08	2201	2215	2240	S33	E42	.727	14120	12.1	39	-F	2 C	2215		42	.6			
172 ABST	09	0729	0731	0745	S34	E40	.714	14120	12.3	16	-F	C	0731		44	.6	DJ		
173 BOUL	09	2055	2057	2103	S04	W82	.989	14118	3.7	8	-F	2 C	2057		18	.4			
174 ABST	11	0641	0644	0700	S33	E14	.483	14120	12.3	19	-F	C	0644		87	1.0	D		
	11	2146	2153		NO FLARE PATROL														
	11	2207	2215		NO FLARE PATROL														
	12	0457	0458		NO FLARE PATROL														
175 ABST	13	1044E	1046	1056D	S34	W15	.503	14120	12.3	120	-F	P	1046		87	1.0	E		
	13	1210	1218		NO FLARE PATROL														
	13	1258	1348		NO FLARE PATROL														
	13	1451	1510		NO FLARE PATROL														
	13	1646	1713		NO FLARE PATROL														
	13	1731	1920		NO FLARE PATROL														
GRP63176	14	1830+6	1836+3	1848	S34	W31	.632	14120	12.4	18	-N				40	.5			
RAMY	14	1830	1839	1848	S35	W31	.640	14120	12.4	18	-N	4 C			41		DE		
BOUL	14	1832	1839	1848	S35	W31	.640	14120	12.4	16	-N	1 C	1839		42	.5			
RAMY	14	1833E	1839	1848	S34	W30	.623	14120	12.5	150	-N	4 V			48		DE		
PALE	14	1836	1836	1846	S34	W33	.650	14120	12.3	10	-F	3 C			29				
	15	0820	0842		NO FLARE PATROL														
177 CULG	16	0156	0158	0203	S35	W49	.797	14120	12.4	7	-F	C	0158		30	.5			
GRP63178	16	0908E	0923	1030D	N05	E41	.678	14127	19.5	82	-N						E		
KHAR	16	0908E		1030D	N06	E42	.694	14127	19.5	82D	-F	C			90	1.3	E		
KHAR	16	0908E		1030D	N04	E43	.699	14127	19.6	82D	-F								
KHAR	16	0923E	0923	0930D	N05	E40	.666	14127	19.4	70	-N	C			100	1.5	D		
179 KHAR	16	1120E		1200D	N07	E41	.685	14127	19.5	400	-F	C			100	1.5	DH		
	16	1258	1310		NO FLARE PATROL														
180 HTPR	17	1442	1444	1447	N06	E26	.486	14127	19.6	5	-F	C	1444		18	.1			

Note: Although these flare listings give all reported events, not all possible brightenings are reported. Thresholds of reporting vary from observatory to observatory.

H α SOLAR FLARES

MARCH 1976

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS		
	DATE 1976 MAR	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MC MATH PLAGE REGION	CMP DAY			MIN.		COND.	TYPE	TIME UT		MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.
					LAT.	MER. DIST.													
181 HTPR	17	1558	1603	1628	N06	E25	.472	14127	19.5	30	-F		C	1603	30	.3	E		
GRP63182	17	1748	1753 1800	1805D	S07	E28	.466	14134	19.8	17	-F								
BOUL	17	1748	1753	1803D	S08	E28	.466	14134	19.8	150	-F	2	P	1753	21	.2			
RAMY	17	1753E	1800	1805D	S07	E28	.466	14134	19.8	120	-F	4	C		45				
183 MCHA	17	1814E		1820D	S07	E27	.451	14134	19.8	60	-F		F	1814	20	.2	D		
184 MCHA	17	1833E		1833D	N05	E22	.424	14127	19.4		-F		P	1833	30	.3	OH		
185 MCHA	17	1922E		1940D	N05	E24	.452	14127	19.6	180	-F		P	1938	40	.4	E		
186 MCHA	17	2004		2008D	N05	E25	.465	14127	19.7	40	-F		F	2008	50	.5	E		
187 HTPR	18	0642	0646	0657	N06	E18	.378	14127	19.6	15	-F		C	0646	20	.2	E		
188 HTPR	18	0702	0715	0739	N06	E17	.365	14127	19.6	37	-F		C	0715	20	.2	E		
GRP63189	18	1104	1107+1	1117	N06	E11	.294	14127	19.3	13	-F				45	.5			
RAMY	18	1104	1108	1116	N06	E11	.294	14127	19.3	12	-F	3	C		36		DE		
RAMY	18	1106E	1107U	1117D	N06	E12	.305	14127	19.4	110	-F	3	V		48		DE		
GRP63190	18	1411+1	1412+2	1425	N06	E10	.284	14127	19.3	14	-F				30	.3	FH		
RAMY	18	1411	1414	1424	N06	E09	.274	14127	19.3	13	-F	4	C		45		F H		
HTPR	18	1412	1413	1425	N06	E10	.284	14127	19.3	13	-F			1413	20	.2	E		
RAMY	18	1412E	1412U	1418D	N06	E10	.284	14127	19.3	60	-F	4	V		32		F H		
191 RAMY	18	1521E	1522	1526	N05	E11	.281	14127	19.5	50	-F	4	V		90		F		
192 HTPR	18	1535	1536	1544	N06	E10	.284	14127	19.4	9	-F		C	1536	10	.1	E		
193 RAMY	18	1718E	1723	1732	N05	E10	.270	14127	19.5	140	-F	4	C		72		F		
194 RAMY	18	1833	1835	1836D	N04	E09	.247	14127	19.4	50	-F	4	C		45		F		
	18	1838	1920	NO FLARE PATROL															
	18	1932	2140	NO FLARE PATROL															
195 MANI	19	0042E	0042	0049	N04	E03	.199	14127	19.3	70	-F	3	P	0042	20	.2	H		
196 ABST	19	0651E	0651	0700D	N07	E02	.246	14127	19.4	90	-N		P	0651	87	.9	D		
197 ARCE	19	0945E		0958	N04	W02	.195	14127	19.3	130	-F		C	0945	34	.4			
198 HTPR	19	1245	1248	1253	N05	W07	.241	14127	19.0	8	-F		C	1248	10				
199 HTPR	19	1310	1311	1318	N05	W09	.260	14127	18.9	8	-F		C	1311	20				
200 ATHN	20	0754E	0754U	0803	N03	W18	.352	14127	19.0	90	-N	4	C		19		DE		
201 ATHN	20	1003	1005	1019	N03	W19	.366	14127	19.0	16	-N	4	C		48		DE H		
202 ATHN	20	1246	1247	1254	N04	W20	.388	14127	19.0	8	-F	4	C		48		DE		
203 HTPR	20	1356	1400	1408	N05	W20	.396	14127	19.1	12	-F		C	1400	20		E		
204 HTPR	20	1425		1429	N03	W20	.380	14127	19.1	4	-F		C	1428	30		E		
GRP63205	20	1435	1438 1453	1456	N03	W20	.380	14127	19.1	21	-F				50	.5	R		
ATHN	20	1435	1438	1456	N04	W20	.388	14127	19.1	21	-N	3	C		32		DE		
HTPR	20	1436E		1457	N03	W20	.380	14127	19.1	21D	-F		C	1436	20		E		
RAMY	20	1449E		1456	N04	W21	.402	14127	19.0	7D	-F	3	C		40		F R		
CATA	20	1450E	1450	1450D	N02	W21	.388	14127	19.0		-N	1		1450	56	.6			
	20	1744	1750	NO FLARE PATROL															
206 BOUL	20	1752	1757	1815	N02	W22	.403	14127	19.1	23	-N	2	C	1757	32	.3			
207 BOUL	20	1840	1849	1903	N05	W21	.410	14127	19.2	23	-F	2	C	1849	42	.5			
208 BOUL	20	2006	2018	2039	N18	W22	.547		19.2	33	-F	2	C	2018	32	.3			
209 CULG	20	2132	2134	2138	N04	W25	.458	14127	19.0	6	-F		C	2134	20	.2			

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Mar 76

H α SOLAR FLARES

MARCH 1976

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCMAH PLAGE REGION	CMP DAY			MIN	COND	TYPE	TIME UT	MEAS. AREA		CORR AREA
					LAT.	MER. DIST.												
GRP63210	20	2144+7	2152+3	2216	N03	W24	.438	14127	19.1	32	-N			60	.7			
CULG	20	2144	2152	2215	N03	W25	.452	14127	19.0	31	-F	C	2152	50	.5			
BOUL	20	2146	2153	2222	N02	W25	.447	14127	19.0	36	-N	2 C	2153	64	.7			
RAMY	20	2151	2155	2201D	N04	W23	.430	14127	19.2	100	-N	3 V		90		FDE		
RAMY	20	2151	2155	2216	N03	W24	.438	14127	19.1	25	-N	2 C		56		FDE		
	20	2247	2254	NO FLARE PATROL														
211 CULG	21	0040	0043	0105	S07	W13	.223	14134	20.1	25	-F	C	0043	50	.5			
GRP63212	21	0128+2	0140+3	0202	N03	W26	.467	14127	19.1	34	-N			110	1.2	OHU		
PALE	21	0128	01413	0207D	N04	W23	.430	14127	19.3	39D	-B	3 C		147		U H		
CULG	21	0129	0143	0157	N02	W27	.476	14127	19.0	28	-N	C	0143	60	.7			
MITK	21	0130	0141	0154	N04	W26	.472	14127	19.1	24	-B	C	0141	110	1.3	O		
KODA	21	0140E	0140	0208	N04	W28	.501	14127	19.0	28D	-N	V	0155	144	1.5	OH		
213 MITK	21	0203	0206	0215	N02	W27	.476	14127	19.1	12	-N	C	0206	110	1.3	O		
GRP63214	21	0502	0505	0532	N04	W26	.472	14127	19.3	30	-N					FH		
ATHN	21	0502	0505	0532	N04	W27	.487	14127	19.2	30	-N	3 C		48		F H		
MANI	21	0514E	0514U	0525D	N04	W26	.472	14127	19.3	110	-N	1 P	0514	50	.6	F		
215 CULG	21	0651	0653	0658	N04	W26	.472	14127	19.3	7	-F	C	0653	20	.2			
GRP63216	21	0750	0800+5	0835	N04	W29	.515	14127	19.2	45	1B					HKU		
KODA	21	0750	0805	0900	N04	W31	.542	14127	19.0	70	1B	V	0750			CEH		
ATHN	21	0756E	0800	0835	N04	W28	.501	14127	19.2	39D	-B	4 C		159		U		
ARCE	21	0801E		0835	N04	W28	.501	14127	19.2	34D	1N	C	0809	251	3.0	KFT		
GRP63217	21	0949	0951	1004	N04	W26	.472	14127	19.5	15	-N					F		
ATHN	21	0949	0951	1004	N04	W23	.430	14127	19.7	15	-N	3 C		64		F		
ARCE	21	0950E		0958D	N04	W30	.529	14127	19.2	8D	-N	F	0958	43	.5			
GRP63218	21	1016E		1032D	N03	W31	.538	14127	19.1	16	-F			30	.4	E		
HTPR	21	1016E		1032D	N02	W31	.533	14127	19.1	16D	-F	C	1016	20				
UPIC	21	1022E		1025U	N03	W33	.565	14127	19.0	30	-F	P	1022	41				
HTPR	21	1030		1032D	N04	W28	.501	14127	19.3	2D	-F	C	1031	20		E		
	21	1111	1130	NO FLARE PATROL														
	21	1135	1230	NO FLARE PATROL														
	21	1232	1238	NO FLARE PATROL														
	21	1241	1306	NO FLARE PATROL														
GRP63219	21	1306E	1310	1323D	N03	W33	.565	14127	19.1	17	-N			110	1.3			
ABST	21	1306E	1310	1310D	N03	W35	.593	14127	18.9	4D	-N	P	1310	131	1.6	O		
HTPR	21	1310E		1323D	N03	W32	.552	14127	19.1	13D	-B	C	1310	100	1.1	E		
	21	1323	1325	NO FLARE PATROL														
GRP63220	21	1357+1	1405	1447	N06	W28	.512	14127	19.5	50	-F			20	.2			
			1413															
ZURI	21	1357	1413	1447	N07	W29	.532	14127	19.4	50	-F	C	1413	71	.9			
BOUL	21	1358	1405	1412D	N05	W29	.520	14127	19.4	14D	-F	1 P	1405	21	.2			
HTPR	21	1408		1413D	N06	W27	.499	14127	19.6	5D	-F	C	1410	10				
221 ZURI	21	1513	1515	1517	N03	W35	.593	14127	19.0	4	-N	C	1515	122	1.6			
222 HTPR	21	1558	1558	1609	N03	W28	.495	14127	19.6	11	-F	C	1558	20		E		
	21	1759	1823	NO FLARE PATROL														
GRP63223	21	1829+9	1845+2	1924	N03	W34	.579	14127	19.2	55	-B			110	1.3	HU		
PALE	21	1829	1845	1917	N04	W32	.556	14127	19.4	48	-B	3 C		180		U H		
BOUL	21	1838	1847	1930	N01	W36	.599	14127	19.1	52	-B	1 P	1847	149	1.9			
RAMY	21	1843E	1845	1847D	N03	W35	.593	14127	19.2	4D	-B	3 V		78		FDE		
RAMY	21	1843E	1845	1847D	N03	W35	.593	14127	19.2	4D	-B	3 C		78		FOE		
224 PALE	21	1930	1931U	1935D	N05	W31	.547	14127	19.5	5D	-F	3 C		21				
	21	2148	2203	NO FLARE PATROL														
GRP63225	21	2228+3	2231+4	2255	N03	W37	.619	14127	19.2	27	-N			60	.8	E		
BOUL	21	2228	2231	2245D	N02	W37	.616	14127	19.2	17D	-N	1 P	2233	42	.5			
CULG	21	2230	2234	2255	N03	W38	.632	14127	19.1	25	-F	C	2234	40	.5			
PALE	21	2231	2234	2236D	N04	W35	.597	14127	19.3	5D	-N	2 C		90		DE		
VORO	21	2231	2235	2313	N03	W38	.632	14127	19.1	42	1N	C	2235	170	2.2	E		

H α SOLAR FLARES

MARCH 1976

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE 1976 MAR	START	MAX. PHASE	END	APPROX		CENTRAL DISTANCE	MC MATH PLAGE REGION	CMP DAY			COND	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg		
					LAT.	MER. DIST.												
GRP63226	21	2259+0	2301+1	2308	N04	W36	.610	14127	19.3	9	-N				40	.5	D	
VORO	21	2259	2302	2308.0	N06	W36	.619	14127	19.3	90	-B		C	2302	116	1.5	D	
BOUL	21	2259	2301	2310	N03	W35	.593	14127	19.3	11	-F	1	C	2301	42	.5		
CULG	21	2301E	2302	2307	N04	W36	.610	14127	19.3	60	-F		P	2302	40	.5		
227 VORO	21	2353	2354	2358	N02	W42	.680	14127	18.8	5	-B		C	2354	54	.8	D	
228 MANI	22	0121E	0125U	0127D	N04	W41	.674	14127	19.3	60	-F	2	P	0125	40	.6	F	
GRP63229	22	0427E	0428+3	0436	N03	W41	.671	14127	19.1	9	-N						E	
CULG	22	0427E	0428	0431.0	N02	W42	.680	14127	19.0	40	-N		P	0428	50	.7		
KODA	22	0430E	0431	0436	N05	W41	.677	14127	19.1	60	-N		V	0430			E	
230 ABST	22	0646	0649	0653	N07	W39	.661	14127	19.4	7	-F		C	0649	70	.9	O	
GRP63231	22	0800+9	0806	0830	N03	W43	.695	14127	19.1	30	-N				110	1.5		
ZURI	22	0800	0812+3	0814.0	N02	W43	.693	14127	19.1	140	-B		P	0812	122	1.7		
ABST	22	0802	0806	0830	N04	W44	.710	14127	19.0	28	-N		C	0806	87	1.3	D	
BUCA	22	0809	0905	0905	N02	W42	.680	14127	19.2	56	-B		C	0814	107	1.5		
KODA	22	0812	0815	0824	N05	W43	.702	14127	19.1	12	-N		V	0812			E	
232 ABST	22	0832	0842	0912	N07	W45	.732	14127	19.0	40	-F		C	0842	131	1.9	JKZ	
GRP63233	22	2156	2203	2237	N03	W51	.787	14127	19.1	41	-N				90	1.5	EU	
PALE	22	2156	2203	2221	N04	W48	.756	14127	19.3	25	-N	3	C		102		U	
CULG	22	2212E	2212	2228.0	N03	W53	.807	14127	19.0	160	-N		P	2212	60	1.0		
BOUL	22	2213E	2213E	2245	N03	W52	.797	14127	19.0	320	-N	2	P	2213	85	1.4		
VORO	22	2217E	2254	2254	N04	W53	.809	14127	19.0	370	1N		C	2218	125	2.2	E	
GRP63234	23	0114	0119	0135	N02	W54	.815	14127	19.0	21	-N				60	1.0	D	
CULG	23	0114	0119	0147	N03	W55	.827	14127	18.9	33	-F		C	0119	40	.7		
VORO	23	0115E		0133	N02	W54	.815	14127	19.0	180	-B		C	0117	99	1.7	D	
MITK	23	0124		0135	N02	W54	.815	14127	19.0	11	-F		C	0124	60	1.1	D	
235 MITK	23	0616		0628	N02	W57	.844	14127	19.0	12	-N		C	0616	90	1.7	D	
236 TEHR	23	0837	0839	0841	S05	E90	1.000	14143	30.1	4	-B	3	C		80			
GRP63237	23	0907+1	0915+0	0945	S07	E90	1.000	14143	30.1	38	-N				30			
TEHR	23	0907	0915	0945	S06	E90	1.000	14143	30.1	38	-N	3	C		35			
HTPR	23	0908	0915	0935	S07	E90	1.000	14143	30.1	27	-N		C	0915	20			
UPIC	23	0917E		1046.0	S09	E90	1.000	14143	30.1	890	1B		P	0932				
238 HTPR	23	1027		1033.0	N04	W58	.856	14127	19.1	60	-F		C	1029	20	.3		
	23	1057	1104	NO FLARE PATROL														
239 HTPR	23	1539		1544.0	N04	W61	.882	14127	19.1	50	-F		C	1541	10	.2		
240 MCHA	23	1718	1721	1730	N03	W64	.904	14127	18.9	12	-N		C	1721	40	1.0	DH	
241 BOUL	23	2237	2238	2258	S00	W65	.908	14127	19.1	21	-F	2	C	2238	21	.5		
GRP63242	24	0011+6	0018+2	0043	N02	W66	.917	14127	19.1	32	1N				90			
BOUL	24	0011	0020	0027.0	N01	W66	.916	14127	19.1	160	1B	2	C	0020	85	2.1		
VORO	24	0015	0018	0041	N02	W67	.924	14127	19.0	26	1N		C	0018	197	5.0	E	
MANI	24	0017	0019	0036.0	N02	W67	.924	14127	19.0	190	1N	3	P	0019	100	2.1		
MITK	24	0017	0020	0045	N02	W65	.910	14127	19.1	28	-B		C	0020	90	1.8	D	
243 MANI	24	0515E	0515U	0516.0	N02	W71	.948	14127	18.9	10	-F	3	P	0515	10	.2		
244 HTPR	24	0914		0939.0	N07	W70	.947	14127	19.1	250	-F		C	0928	20	.4	E	
245 HTPR	24	1021	1022	1025	N03	W70	.943	14127	19.2	4	-F		C	1022	10	.2		
246 HTPR	24	1032	1034	1040	N07	W70	.947	14127	19.2	8	-F		C	1034	10	.2		
	24	1146	1157	NO FLARE PATROL														
247 HTPR	24	1209	1211	1221	N07	W72	.957	14127	19.1	12	-F		C	1211	20	.2		
GRP63248	24	1334+2	1340+3	1346	S09	E83	.990	14143	30.8	12	-F				70		E	
ZURI	24	1334	1340	1344	S11	E85	.994	14143	30.9	10	-F		C	1340	81			
HTPR	24	1336	1343	1348	S08	E82	.988	14143	30.7	12	-N		C	1343	70		E	
249 HTPR	24	1433	1438	1444	S08	E81	.985	14143	30.7	11	-N		C	1438	30		E	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1976 MAR	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCMMATH PLAGE REGION	CMP DAY			COND	TYPE	TIME UT	MEAS. AREA MIN. of Disk	CORR AREA Sq. Deg	
					LAT.	MER. DIST.											
250 ZURI	24	1502	1506	1508	S11	E85	.994	14143	31.0	6	-F		C	1506	51		
251 MCMA	24	1900	1903	1913	S11	E85	.994	14143	31.2	13	-F		C	1903			E
252 BOUL	24	2028	2032	2048	S11	E77	.970	14143	30.5	20	-F	1	C	2032	21	.7	
253 MANI	25	0019	0023	0025	N04	W80	.987	14127	19.1	6	-F	2	C	0023	30	.8	
	25	0500	0544	NO FLARE PATROL													
GRP63254	25	0612+2	0615+1	0621	S06	E83	.991	14143	31.5	9	-F						
ABST	25	0612	0616	0622	S05	E88	.999	14143	31.9	10	1F		P	0616	87		D
MANI	25	0614	0615	0619	S08	E78	.975	14143	31.1	5	-F	2	C	0615	30	.8	
255 ATHN	25	0703	0704	0709	N03	W88	1.000	14127	18.7	6	-N	2		0704			
256 MANI	25	0704	0707	0714	S05	E76	.968	14143	31.0	10	-F	2	C	0707	40	1.0	
257 HTPR	25	0725E		0744	S06	E73	.954	14143	30.8	190	-F		C	0728	20	.5	
258 HTPR	25	0822	0825	0830	S0E	E73	.954	14143	30.8	16	-F		C	0825	20	.5	
GRP63259	25	0914+8	0926+1	0941	S06	E74	.959	14143	30.9	27	-F				45		E
HTPR	25	0914	0926	0942	S05	E72	.949	14143	30.8	28	-F		C	0926	30	.7	E
MONT	25	0922	0927	0939	S07	E76	.967	14143	31.1	17	-N		C	0927	60		E
GRP63260	25	1154+5	1201+5	1229	S06	E75	.963	14143	31.1	35	-N				40		FHKH
MONT	25	1154	1201	1219	S07	E75	.963	14143	31.1	25	-F		C	1201	40		
ATHN	25	1159	1202	1229D	S06	E74	.959	14143	31.0	300	-N	2		1202	33	1.3	
MCMA	25	1203E	1206	1300D	S06	E75	.963	14143	31.1	570	1B		C	1226	100	2.4	FHKTN
MCMA	25	1203E		1300D	S06	E75	.963	14143	31.1	570	1B		C	1206	60		
MCMA	25	1203E		1300D	S06	E75	.963	14143	31.1	570	1B		C	1246	120		
GRP63261	25	1305+5	1325+4	1430	S05	E69	.931	14143	30.7	85	1N				120		FHLWX
MCMA	25	1305	1325	1430	S05	E71	.943	14143	30.9	85	1B		C	1325	125	3.7	FHLWX
CATA	25	1310	1320	1320D	S06	E68	.924	14143	30.6	100	1N	1		1320	168		
BOUL	25	1322E	1329	1343D	S05	E67	.918	14143	30.6	210	1N	1	C	1329	96	2.4	
ATHN	25	1326E	1326	1414D	S05	E72	.949	14143	31.0	480	-N	2		1326	82	3.3	
GRP63262	25	1636	1649	1830D	S05	E68	.925	14143	30.8	114	-N						HK
MCMA	25	1636	1649	1830D	S05	E68	.925	14143	30.8	1140	-N		C	1649	60	1.8	HK
MCMA	25	1636		1830D	S05	E68	.925	14143	30.8	1140	-N		C	1701			
263 MCMA	25	1909	1917	1924	S05	E67	.918	14143	30.8	15	-N		C	1917	40	1.0	DH
264 MCMA	25	2039	2041	2053	S05	E67	.918	14143	30.9	14	-F		C	2041	40	1.0	E
	25	2244	2259	NO FLARE PATROL													
265 MANI	25	2310E	2312U	2318D	S07	E67	.917	14143	31.0	80	-F	2	V	2312	40	.8	
266 MANI	26	0001	0004	0011	S05	E64	.896	14143	30.8	10	-F	3	P	0004	30	.6	
267 KODA	26	0144	0154	0212	S05	E62	.880	14143	30.7	28	-N		V	0144			DH
268 KODA	26	0233	0250	0337	S05	E67	.918	14143	31.1	64	-B		V	0233			DH
GRP63269	26	0656+3	0658+2	0711	S05	E61	.872	14143	30.9	15	-N						DJZ
ABST	26	0656	0658	0712	S03	E62	.882	14143	30.9	16	1F		P	0658	131	2.8	JZ
HTPR	26	0659	0700	0710	S07	E60	.862	14143	30.8	11	-N		C	0700	10	.2	D
GRP63270	26	0715+4	0717	0739	S06	E65	.903	14143	31.2	24	-B						DHJZ
			0721+2														
MANI	26	0715	0717	0720	S08	E59	.852	14143	30.7	5	-F	3	P	0717	20	.4	
ABST	26	0718	0721	0742	S03	E70	.938	14143	31.6	24	2N		C	0721	131		DJZ
HTPR	26	0719	0721	0803	S08	E65	.902	14143	31.2	44	-B		C	0721	50	1.0	
MANI	26	0721	0723	0735	S06	E64	.895	14143	31.1	14	-B	3	P	0723	100	2.0	
KODA	26	0725E	0725	0730	S05	E65	.904	14143	31.2	50	-B		V	0725			DH
271 HTPR	26	0758	0759	0807	S08	E60	.861	14143	30.8	9	-N		C	0759	10	.2	D
GRP63272	26	0830+3	0837+3	0858	S09	E59	.852	14143	30.8	28	-N						EH
			0855														
HTPR	26	0830	0838	0855	S10	E60	.860	14143	30.3	25	-N		C	0838	30	.6	
MONT	26	0831	0837	0858	S08	E60	.861	14143	30.9	27	-B		C	0837	150		E
MANI	26	0833	0840	0858	S08	E58	.843	14143	30.7	25	-N			0840	90	1.6	
MANI	26	0833	0836	0858	S08	E58	.843	14143	30.7	25	-F	3	V	0836	30	.5	H
HTPR	26	0839	0855	0930D	S13	E57	.833	14143	30.6	510	-F		C	0855	20	.4	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN	IMPORTANCE	OBS		MEASUREMENTS			REMARKS
	DATE	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCNATH PLAGE REGION	CMP DAY			COND	TYPE	TIME UT	MEAS. AREA Min of Disk	CORR. AREA Sq Deg	
					LAT.	NER. DIST.											
273 HTPR	26	0932	0934	0941	S04	E64	.897	14143	31.2	9	-F	C	0934	30	.6		
274 MONT	26	1139	1141	1150	S04	E61	.873	14143	31.1	11	-F	C	1141	20			
GRP63275	26	1334+5	1341+4 1356+3	1401	S04	E61	.873	14143	31.1	27	-F			60	1.2	U	
HTPR	26	1334	1345	1405	S06	E62	.879	14143	31.2	31	-N	C	1345	20	.4		
MONT	26	1336	1341	1354	S04	E60	.864	14143	31.1	18	-F	C	1341	40		E	
RAMY	26	1338	1356	1403	S03	E60	.865	14143	31.1	25	-F	4 C		72		U F	
ZURI	26	1339	1343	1401	S04	E63	.889	14143	31.3	22	-F	C	1343	82	1.9		
LOCA	26	1348E	1348	1355D	S03	E60	.865	14143	31.1	70	-N	S	1348	92	1.7		
RAMY	26	1356E	1359	1409D	S03	E59	.856	14143	31.0	130	-F	4 V		36		DE	
GRP63276	26	1439+2	1441+6	1455	S08	E62	.878	14143	31.3	16	-N			80	1.7	FH	
RAMY	26	1439	1447	1504	S08	E61	.870	14143	31.2	25	-B	4 C		108		F H	
HTPR	26	1441	1443	1455	S08	E62	.873	14143	31.3	14	-N	C	1443	60	1.2		
ZURI	26	1441	1441	1453	S07	E62	.879	14143	31.3	12	-N	C	1441	61	1.3		
	26	1900	1910	NO FLARE PATROL													
277 BOUL	26	1944	1947	1958	S06	H26	.435	14147	24.9	14	-F	2 C	1946	10	.1		
278 MANI	26	2300E	2303	2311	S07	E51	.773	14143	30.8	11D	-F	3 P	2303	80	1.3		
GRP63279	27	0201+0	0204+0	0218	S07	E54	.805	14143	31.1	17	-N			90	1.5		
PALE	27	0201	0204	0222	S07	E51	.773	14143	30.9	21	-N	3 C		106		DE	
MANI	27	0201	0204	0213	S08	E58	.843	14143	31.4	12	-N	3 P	0204	80	1.4	F	
GRP63280	27	0318+6	0320+2	0337	S07	E50	.762	14143	30.9	19	-N			100	1.6	HU	
			0328														
MANI	27	0318	0320	0333	S07	E48	.739	14143	30.7	15	-N	3 P	0320	100	1.5	F	
PALE	27	0318	0322	0337	S07	E50	.762	14143	30.9	19	-N	2 C		101		U	
KODA	27	0324	0328	0343	S07	E52	.784	14143	31.0	19	-B	V	0324			EH	
281 MANI	27	0518	0522	0526	S07	E56	.825	14143	31.4	8	-F	3 P	0522	80	1.4	F	
282 MANI	27	0550	0602	0610	S10	E48	.738	14143	30.8	20	-F	2 P	0602	20	.3	F	
GRP63283	27	0626+3	0631+2	0641	S07	E52	.784	14143	31.2	15	-N			80	1.3	J	
ABST	27	0626E	0632	0642	S04	E52	.786	14143	31.2	16D	-F	P	0632	87	1.5	EJ	
MANI	27	0628E	0631	0640	S08	E52	.783	14143	31.2	120	-N	3 P	0631	60	1.0	F	
ATHN	27	0629	0631	0642	S10	E51	.772	14143	31.1	13	-N	3 C		80		F	
MITK	27	0629	0633	0640	S08	E53	.794	14143	31.2	11	-N	C	0633	110	1.8	D	
GRP63284	27	0720+3	0726+2	0738	S06	E53	.795	14143	31.3	18	-N			90	1.5		
MITK	27	0720	0727	0738	S05	E52	.785	14143	31.2	18	-B	C	0727	110	1.8	D	
BUCA	27	0723	0728	0744	S07	E54	.805	14143	31.4	21	-N	C	0728	75	1.2		
MANI	27	0726E	0726U	0730	S06	E53	.795	14143	31.3	40	-F	3 P	0726	80	1.3	F	
GRP63285	27	1156+8	1206+9	1230	S10	E49	.749	14143	31.2	34	1N			140	2.1	U	
HTPR	27	1156	1206	1240	S10	E49	.749	14143	31.2	44	-N	C	1206	120	1.7		
ATHN	27	1202	1208	1222	S10	E47	.726	14143	31.0	20	-B	3 C		95		U F	
UPIC	27	1204	1211	1220U	S17	E48	.742	14143	31.1	16D	1N	P	1211	306			
CATA	27	1210E	1210	1215D	S08	E48	.738	14143	31.1	5D	1B	2	1210	168	2.6		
RAMY	27	1211E	1215U	1230D	S06	E50	.762	14143	31.3	19D	-N	3 V		120		FDE	
RAMY	27	1225E	1225U	1230D	S11	E50	.761	14143	31.3	5D	-N	3 C		108		FOE	
GRP63286	27	1428+9	1439+4	1455	S05	E48	.740	14143	31.2	27	-F			50	.7		
HTPR	27	1428	1440	1455	S05	E49	.752	14143	31.3	27	-F	C	1440	30	.4		
BOUL	27	1429	1439	1500	S06	E47	.728	14143	31.1	31	-N	2 C	1439	42	.6		
RAMY	27	1438	1441U	1451	S05	E47	.729	14143	31.1	13	-F	4 C		63		DE	
RAMY	27	1440E	1443U	1450D	S04	E48	.741	14143	31.2	10D	-F	4 V		60		DE	
287 BOUL	27	1803	1805	1824	S06	E46	.716	14143	31.2	21	-F	2 C	1805	21	.3		
288 BOUL	27	1938	1944	2000	S09	E46	.714	14143	31.3	22	-F	2 C	1944	21	.3		
GRP63289	27	2043	2048+0	2108	S07	E42	.665	14143	31.1	25	-N			60	.8		
RAMY	27	2043	2048	2108	S08	E42	.665	14143	31.0	25	-N	4 C		63		FDE	
RAMY	27	2044E	2048	2108	S07	E42	.665	14143	31.0	24D	-N	4 V		64		FDE	
GRP63290	27	2327+1	2331	2357	S07	E43	.678	14143	31.2	30	-N					J	
			2337+2														
VORO	27	2327	2331	2334	S04	E44	.693	14143	31.3	7	1N	C	2331	179	2.5	EJ	
CULG	27	2328	2339	2357	S07	E44	.690	14143	31.3	29	-N	C	2339	30	.4		
MANI	27	2333E	2337	2339D	S10	E42	.665	14143	31.1	60	-F	2 P	2337	80	1.1	F	
MANI	27	2353E	2355U	0000	S08	E43	.677	14143	31.2	7D	-F	2 P	2355	50	.7	F	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS
	DATE	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCMAH PLAGE REGION	CMP DAY			COND	TYPE	TIME UT	MEAS AREA Mill. of Disk	CORR AREA Sq. Deg.	
					LAT.	NER. DIST.											
291 VORO	28	0003E		00240	S08	E44	.690	14143	31.3	210	-B	P	0011	143	2.0	E	
292 MANI	28	0202	0204U	0215	N05	W45	.724	14146	24.7	13	-F	2 P	0204	30	.5	H	
293 MANI	28	0357E	0403	0412	N06	W46	.739	14146	24.7	150	-F	3 P	0403	30	.5		
GRP63294	28	0546+9	0556+9	0613	S07	E37	.598	14143	31.0	27	-B						
ABST	28	0546E	0558	0615	S05	E42	.667	14143	31.4	290	-F	P	0558	44	.5	FHJ	
ABST	28	0548E	0556	06100	S06	E34	.556	14143	30.8	220	-N	P	0556	213	2.6	D	
CULG	28	0551	0558	0610	S09	E34	.555	14143	30.8	19	-N	C	0558	60	.7	FJ	
MANI	28	0555	0558	06080	S07	E34	.556	14143	30.8	130	-B	3 P	0558	120	1.5	FH	
KODA	28	0600E	0605	0611	S07	E42	.665	14143	31.4	110	-B	P	0608	166	1.7	D	
ATHN	28	0601E	0601	0605D	S06	E37	.599	14143	31.0	40	-B	2	0601	98	2.1		
TEHR	28	0604E	0604U	0615	S09	E37	.598	14143	31.0	110	-B	3 C		94		F H	
GRP63295	28	0638+9	0652+0	0709	N06	W48	.761	14146	24.7	31	-F			40	.6	F	
ABST	28	0638E	0652	07160	N07	W49	.775	14146	24.6	380	-F	P	0652	35	.6	F	
MANI	28	0649	0652U	0701	N06	W48	.761	14146	24.7	12	-F	3 P	0652	40	.6	F	
GRP63296	28	0922+8	0933	0946	S08	E31	.511	14143	30.7	40	-N					F	
ARCE	28	0922E		0920	S08	E31	.511	14143	30.7	400	1N	C	0947	208	2.5	F	
HTPR	28	0928	0946	10040	S09	E31	.512	14143	30.7	360	-N	C	0946	30	.4		
ATHN	28	0930	0933	0947	S08	E32	.526	14143	30.8	17	-N	2	0933	66	1.4		
297 HTPR	28	1110	1120	1130	S08	E32	.526	14143	30.9	20	-N	C	1120	30	.3	E	
GRP63298	28	1234+1	1237+2	1252	S06	E37	.599	14143	31.3	18	-B			60	.8	E	
HTPR	28	1234	1237	1252	S07	E36	.584	14143	31.2	18	-B	C	1237	70	.8	E	
MEUD	28	1235	1238	1247	S06	E36	.585	14143	31.2	12	-N	C	1238	70	.9	E	
MCHA	28	1235	1239	1300	S05	E38	.613	14143	31.4	25	-B	C	1239	50	.7	E	
GRP63299	28	1342+1	1344+1	1353	S06	E37	.599	14143	31.3	11	-F			20	.3	D	
HTPR	28	1342	1344	13530	S07	E36	.584	14143	31.3	110	-F	C	1344	10	.1		
MCHA	28	1343	1345	1353	S05	E38	.613	14143	31.4	10	-N	C	1345	25	.3	D	
GRP63300	28	1534+4	1539+4	1555	S06	E27	.452	14143	30.7	21	-F			30	.3		
HTPR	28	1534	1539	1550	S06	E26	.436	14143	30.6	16	-F	C	1539	20	.2	E	
RAMY	28	1535E	1540U	15450	S07	E29	.482	14143	30.8	100	-F	4 V	27	27		DE	
MCHA	28	1538	1543	1600	S05	E26	.437	14143	30.6	22	-N	C	1543	25	.3	D	
GRP63301	28	1623+2	1627+1	1632	N07	W52	.806	14146	24.8	9	-F			25	.4	DH	
HTPR	28	1623	1627	1631	N07	W52	.806	14146	24.8	8	-F	C	1627	20	.3		
MEUD	28	1625	1628	1632	N07	W53	.815	14146	24.7	7	-F	C	1628	30	.5	DH	
302 HTPR	28	1625	1631	1634	S06	E25	.420	14143	30.6	9	-F	C	1631	10	.1		
GRP63303	28	1738+1	1743+2	1805	S07	E27	.451	14143	30.8	27	-N			80	.9	FDE	
RAMY	28	1738	1743	1803	S07	E26	.435	14143	30.7	25	-N	4 C		80		F	
MCHA	28	1739	1745	1825	S06	E26	.436	14143	30.7	46	-B	C	1745	100	1.2	FDE	
RAMY	28	1742E	1745	18050	S07	E28	.466	14143	30.8	230	-N	4 V		64			
GRP63304	28	1834+7	1843+2	1855	S07	E26	.435	14143	30.7	21	-N			60	.7	FDE	
RAMY	28	1834	1843	1853	S08	E26	.435	14143	30.7	19	-N	4 C		45		FDE	
MCHA	28	1841	1845	1903	S05	E25	.421	14143	30.7	22	-N	C	1845	50	.6	E	
RAMY	28	1842E	1844	18550	S08	E26	.435	14143	30.7	130	-N	4 V		80		FDE	
GRP63305	28	1905E	1921+0	1932	S07	E28	.466	14143	30.9	76	18			260	2.9	FLUXZ	
RAMY	28	1905E	1921U	20170	S07	E28	.466	14143	30.9	720	18	4 C		250		Z U	
RAMY	28	1905E	19210	19210	S07	E28	.466	14143	30.9	160	18	4 V		250		Z U	
RAMY	28	1912	1932	20210	S07	E28	.466	14143	30.9	690	18	4 C		234		Z U	
MCHA	28	1915	1940	20000	S06	E27	.452	14143	30.8	450	18	C	1940	300	3.5	FLUXZ	
PALE	28	1915	19290	19290	S07	E28	.466	14143	30.9	140	18	3 V		307		Z U	
PALE	28	1915	19290	19290	S07	E28	.466	14143	30.9	140	18	3 C		235		Z U	
GRP63306	28	2058	2100+1	2110	S07	E23	.388	14143	30.5	12	-N			60	.7		
RAMY	28	2058	2100	2109	S07	E23	.388	14143	30.5	11	-N	4 C		56		DE	
RAMY	28	2059E	2101	21100	S07	E23	.388	14143	30.6	110	-N	4 V		64		DE	
307 RAMY	28	2148	2157	2209	S05	E32	.528	14143	31.3	21	-F	4 C		45			
308 CULG	29	0415	0432	0447	S11	E19	.330	14143	30.6	32	-F	C	0432	40	.4		
GRP63309	29	0523E	0523+1	0537	S06	E19	.324	14143	30.6	14	-N			70	.7	F	
CULG	29	0523E	0523	0550	S06	E20	.340	14143	30.7	270	-N	P	0523	60	.6		
MANI	29	0523E	0524U	0524	S07	E19	.323	14143	30.6	10	-N	2 V	0524	80	.9	F	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN	IMPORTANCE	OBS COND. TYPE	MEASUREMENTS			REMARKS	
	DATE 1976 MAR	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCNATH FLARE REGION	CMP DAY				TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg		
					LAT.	MER. DIST.											
310 HTPR	29	0900	0902	0910	N06	W63	.900	14146	24.6	10	-F	C	0802	20	.4		
GRP63311	29	0825+9	0840+0	0854	N06	W63	.900	14146	24.6	29	-F			20	.5	D	
ARCE	29	0825	0840	0900	N06	W62	.892	14146	24.7	35	-F	C	0840	24	.5	D	
HTPR	29	0837	0840	0843	N06	W64	.907	14146	24.6	11	-F	C	0840	20	.4		
GRP63312	29	0908+1	0910+1	0918	S06	E17	.291	14143	30.7	10	-F			30	.3	EL	
HTPR	29	0908	0910	0915	S06	E18	.287	14143	30.7	7	-F	C	0910	20	.2	E	
WEND	29	0908		0927	S06	E16	.274	14143	30.6	19	1N	V		300		L	
MONT	29	0909	0911	0918	S07	E17	.290	14143	30.7	9	-F	C	0911	40			
313 MONT	29	0910	0913	0921	N07	W61	.886	14146	24.8	11	-F	C	0913	20			
314 ZURI	29	0942	0946	1004	N05	W62	.891	14146	24.8	22	-N	C	0946	71	1.7		
GRP63315	29	1040+5	1047+4	1114	S10	E23	.391	14143	31.2	34	-N			80	.9	EH	
ZURI	29	1040	1050	1134	S12	E24	.411	14143	31.2	54	1N	C	1050	224	2.5		
HTPR	29	1042	1047	1122	S09	E23	.389	14143	31.2	40	-N	C	1047	60	.7	E	
MONT	29	1043	1047	1117D	S11	E24	.408	14143	31.2	34D	-N	C	1047	110		E	
RAMY	29	1043	1047	1057	S08	E20	.340	14143	30.9	14	-N	3	C	45		F	
MEUD	29	1045	1049	1120	S10	E24	.406	14143	31.2	35	-F	C	1049	110	1.2	E	
RAMY	29	1049E	1051	1057	S10	E22	.375	14143	31.1	80	-F	3	V	48		H	
GRP63316	29	1152+9	1221	1232	S09	E26	.436	14143	31.4	40	-F					EL	
WEND	29	1152E		1240D	S11	E27	.454	14143	31.5	48D	1F	V		300		EL	
HTPR	29	1218	1221	1224	S08	E25	.420	14143	31.4	6	-F	C	1221	70	.8	E	
GRP63317	29	1237+3	1240+3	1253	S07	E16	.274	14143	30.7	16	-N			80	.8		
HTPR	29	1228	1240	1301	S07	E15	.257	14143	30.6	33	-N	C	1240	80	.8	E	
MONT	29	1237	1240	1253	S08	E16	.274	14143	30.7	16	-B	C	1240	70		D	
ZURI	29	1238	1240	1252	S08	E16	.274	14143	30.7	14	-N	C	1240	122	1.3		
MEUD	29	1240	1243	1253	S07	E16	.274	14143	30.7	13	-F	C	1243	60	.6		
318 HTPR	29	1329	1343	1410	S09	E23	.389	14143	31.3	41	-F	C	1343	20	.2	E	
GRP63319	29	1701+3	1711+0	1717	S07	E17	.290	14143	31.0	16	-F			40	.4		
RAMY	29	1701	1711	1717	S07	E16	.274	14143	30.9	16	-F	3	C	36		FDE	
HTPR	29	1704		1706D	S08	E18	.307	14143	31.1	2D	-F	C	1706	20	.2	E	
RAMY	29	1710E	1711	1717	S07	E18	.307	14143	31.1	7D	-F	3	V	48		DE	
GRP63320	29	1751	1754	1808	S11	E21	.361	14143	31.3	17	-F					H	
RAMY	29	1751	1754	1807	S11	E20	.346	14143	31.2	16	-F	3	C	63		DE H	
RAMY	29	1759E	1803	1808D	S11	E22	.377	14143	31.4	90	-F	3	V	60		DE H	
	29	2048	2110		NO FLARE PATROL												
	29	2145	2202		NO FLARE PATROL												
	29	2205	2212		NO FLARE PATROL												
GRP63321	30	0353E	0401	0415	S09	E14	.243	14143	31.2	22	-N					D	
CULG	30	0353E	0401	0417	S12	E15	.271	14143	31.3	240	-N	P	0401	40	.4		
KODA	30	0403E	0403	0412	S07	E13	.223	14143	31.1	9D	-B	V	0403			D	
322 MANI	30	0531E	0533U	0539	S07	E06	.104	14143	30.7	80	-F	2	V	0533	60	.6	
323 ARCE	30	0910E		0953D	N07	W81	.990	14146	24.3	430	?F	C	0925	34			
IMP	1	NO	ZURI2	MONT2													
GRP63324	30	1023+0	1024	1057	S08	E06	.106	14143	30.9	34	-F					E	
ZURI	30	1023	1049	1057D	S08	E06	.106	14143	30.9	34D	-F	P	1049	190	2.0		
KHAR	30	1023E	1024	1025D	S09	E06	.111	14143	30.9	2D	-F	C				D	
KHAR	30	1027E		1153D	S06	E08	.139	14143	31.0	86D	-F	C				D	
MONT	30	1037	1041	1050	S08	E04	.073	14143	30.7	13	-F	C	1041	40		E	
GRP63325	30	1138+1	1141+1	1151	S07	E05	.087	14143	30.9	13	-F			40	.4		
MONT	30	1138	1141	1156	S08	E04	.073	14143	30.8	18	-F	C	1141	40			
RAMY	30	1139E	1141U	1151	S07	E05	.087	14143	30.9	12D	-F	V		48		DE	
RAMY	30	1139	1142	1151	S07	E05	.087	14143	30.9	12	-F	4	C	36			
326 ZURI	30	1250	1250	1252	S08	E07	.123	14143	31.1	2	-N	C	1250	122	1.3		
GRP63327	30	1322+8	1332+3	1339	S08	E07	.123	14143	31.1	17	-F						
ZURI	30	1322	1332	1336	S08	E07	.123	14143	31.1	14	-N	C	1332	143	1.5		
BOUL	30	1329E	1334	1339	S08	E07	.123	14143	31.1	10D	-F	1	P	1334	42	.4	
LOCA	30	1330	1335	1345	S09	E06	.111	14143	31.0	15	1F	V	1335	224	2.3		

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE 1976 MAR	START	MAX PHASE	END	APPROX		CENTRAL DISTANCE	MCNATH PLAGE REGION	CMP DAY			MIN.	COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk		CORR AREA Sq. Deg
					LAT.	MER. DIST.												
GRP63328	30	2100+6	2106+5	2116	S10	E05	.104	14143	31.2	16	-N			30	.3	D		
CULG	30	2100	2106	2118	S12	E05	.127	14143	31.3	18	-N	C	2106	30	.3	DE		
PALE	30	2101	2106	2112	S06	E03	.053	14143	31.1	11	-N	3 C		21		DE		
RAYH	30	2101	2109	2115	S11	E05	.115	14143	31.3	14	-F	4 C		27		DE		
MCHA	30	2106	2109	2117	S11	E06	.128	14143	31.3	11	-N	C	2109	20	.2	O		
RAYH	30	2110E	2111U	2115	S10	E05	.104	14143	31.3	50	-F	3 V		30		DE		
GRP63329	30	2138+2	2142+1	2151	S11	00	.076	14143	30.9	13	-F			35	.4	L		
CULG	30	2128	2142	2158	S12	E00	.093	14143	30.9	30	-N	C	2142	20	.2			
MCHA	30	2138	2143	2154	S11	E00	.076	14143	30.9	16	-N	C	2143	25	.3	DL		
RAYH	30	2140	2143	2147	S10	E01	.061	14143	31.0	7	-F	2 V		45		FDE		
RAYH	30	2140	2142	2147	S10	E01	.061	14143	31.0	7	-F	3 C		36		FDE		
330 VORO	31	0104	0105	0110	S11	W02	.084	14143	30.9	6	-	V	0105	63	.6	DL		
GRP63331	31	0155>9	0158+1	0208	S09	E01	.045	14143	31.2	13	-F			60	.6	EHL		
			0206															
VORO	31	0155	01590	0203D	S08	E02	.042	14143	31.2	80	1	S	0159	314	3.2	EL		
MANI	31	0156	0158	0207	S09	E02	.054	14143	31.2	11	-F	3 V	0158	40	.4			
PALE	31	0159	0159	02080	S08	W03	.057	14143	30.9	90	-F	3 C		63		HOE		
CULG	31	0206	0206	0213	S12	E03	.107	14143	31.3	7	-F	P	0206	20	.2			
	31	0411	0416	NO FLARE PATROL														
332 MANI	31	0424E	0424U	0429D	N07	W90	1.000	14146	24.4	50	-F	2 V	0424	50	1.7			
GRP63333	31	0424E	0424	0442	S11	W04	.103	14143	30.9	18	-F			40	.4	F		
MANI	31	0424E	0424U	0429D	S11	W04	.103	14143	30.9	50	-F	2 V	0424	50	.5	F		
CULG	31	0426E	0426	0442	S12	W04	.116	14143	30.9	160	-F	P	0426	30	.3			
GRP63334	31	0453	0458+2	0527	S07	W03	.052	14143	31.0	34	-N			80	.8	EHU		
CULG	31	0453	0458	0507	S08	W04	.073	14143	30.9	14	-N	P	0458	70	.7			
ATHN	31	0456E	0458U	0527	S07	W03	.052	14143	31.0	310	-N	1 C		80		U H		
ABST	31	0457E	0500	0506D	S07	W03	.052	14143	31.0	90	-N	P	0500	174	1.8	E		
TACH	31	0506E	0540	0540	S06	W04	.070	14143	30.9	340	1N	P	0506	265	2.7	BEH		
GRP63335	31	0703+2	0704+2	0714	S09	W01	.045	14143	31.2	11	-F					EJ		
ABST	31	0703E	0704	0712	S09	W01	.045	14143	31.2	90	-F	P	0704	131	1.3	EJ		
CATA	31	0705E	0705	0715	S10	W01	.062	14143	31.2	100	-N	1	0705	56	.6			
ATHN	31	0705	0706	0709	S09	W01	.045	14143	31.2	4	-N		0706	5				
UPIC	31	0706E	0706U	0715	S09	W01	.045	14143	31.2	90	1F	P	0706	286				
336 MONT	31	0816	0819	0826	N05	W90	1.000	14146	24.6	10	-F	C	0819	20		O		
337 MONT	31	0843	0847	0903	N05	W90	1.000	14146	24.6	20	-F	C	0847	20		O		
338 MONT	31	0855	0857	0900	S10	W84	.091	14143	31.1	5	-F	C	0857	20		O		
GRP63339	31	0946+4	1002+3	1013	S12	W07	.152	14143	30.9	27	-F							
ZURI	31	0946	1002	1018	S12	W07	.152	14143	30.9	32	-F	C	1002	183	1.9			
CATA	31	0950	1005	1005D	S12	W07	.152	14143	30.9	150	-F	1	1005	112	1.2			
MONT	31	1001	1002	1007	S11	W08	.157	14143	30.8	6	-F	C	1002	40				
GRP63340	31	1053+0	1053+1	1059	S10	W03	.079	14143	31.2	6	-F			20	.2	O		
ATHN	31	1053	1054	1057	S10	W03	.079	14143	31.2	4	-F		1054	20				
MONT	31	1053	1053	1101	S10	W03	.079	14143	31.2	8	-F	C	1053	20		D		
GRP63341	31	1138+8	1200+0	1350	S07	W09	.155	14143	30.8	132	1N					AFLU		
			1225>9															
ZURI	31	1138	1142	1148	S07	W09	.155	14143	30.8	10	1F	C	1142	326	3.4			
CATA	31	1140	1200	1400D	S08	W10	.174	14143	30.7	1400	1N	2 C	1200	224	2.4			
ATHN	31	1144	1200	1347	S07	W12	.207	14143	30.6	123	-N	3 C		95		F		
MONT	31	1146	1210	1210D	S07	W10	.173	14143	30.7	240	1N	C	1210	300				
ZURI	31	1150	1235	1320	S07	W10	.173	14143	30.7	90	2B	C	1235	611	6.4			
NEUD	31	1154	1225	1310	S05	W08	.141	14143	30.9	76	1N	C	1225	350	3.5	BA		
RAYH	31	1202E	1202U	1440D	S06	W09	.156	14143	30.8	1580	1N	4 C		256		U F		
RAYH	31	1202E	1202U	12120	S06	W09	.156	14143	30.8	100	-N	4 V		192		U		
TEHR	31	1204E		12450	S06	W09	.156	14143	30.8	410	-N	3 P		190		U		
WEND	31	1218E		1545	S09	W09	.160	14143	30.8	2070	2N	V		700		LU		
ZURI	31	1339	1340	1344	S12	W07	.152	14143	31.0	5	-F	C	1340	82	.8			
GRP63342	31	1356	1357	1407	S08	W09	.157	14143	30.9	11	-F							
ZURI	31	1356	1357	1404	S12	W07	.152	14143	31.1	8	-F	C	1357	51	.5			
UPIC	31	1400E		1409	S05	W11	.192	14143	30.8	90	-N	P	1400	122				

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX		CENTRAL DISTANCE	NOMATH PLAGE REGION	CMPR DAY			COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
					LAT.	MER. DIST.											
					MAR												
GRP63343	31	1437+0	1438+0	1442	S10	W05	.104	14143	31.2	5	-N						
ZURI	31	1437	1439	1442	S10	W05	.104	14143	31.2	5	-N			1438	122	1.3	
BOUL	31	1437	1438	1445	S10	W04	.091	14143	31.3	8	-F	1	C	1438	21	.2	
UPIC	31	1438E		1442	S10	W05	.104	14143	31.2	4D	1N		P	1438	204		
GRP63344	31	1445+0	1449+0	1508	S11	W08	.157	14143	31.0	23	-F						
BOUL	31	1445	1449	1508	S11	W08	.157	14143	31.1	23	-F	1	C	1445	64	.6	
ZURI	31	1445	1449	1508	S12	W09	.180	14143	30.9	23	-N		C	1449	143	1.5	
GRP63345	31	1830	1835	1905	S10	W12	.214	14143	30.9	35	-N				45	.5	
BOUL	31	1830	1835	1905	S11	W12	.219	14143	30.9	35	-N	2	C	1835	64	.7	
RAHY	31	1840E	1840U	1845D	S10	W13	.230	14143	30.8	5D	-F	3	V		30		
GRP63346	31	2127	2134+1	2146	S06	W08	.139	14143	31.3	19	-F				35	.4	
			2141														
BOUL	31	2127	2135	2148	S09	W08	.144	14143	31.3	21	-F	*	C	2135	53	.5	
CULG	31	2134E	2134	2145	S01	W08	.169	14143	31.3	11D	-F	*	P	2134	20	.2	
RAHY	31	2140E	2141U	2146D	S07	W07	.121	14143	31.4	6D	-F	*	V		27		DE

"Remarks":

- A = Eruptive prominence whose base is less than 90° from central meridian.
- B = Probably the end of a more important flare.
- C = Invisible 10 minutes before.
- D = Brilliant point.
- E = Two or more brilliant points.
- F = Several eruptive centers.
- G = No visible spots in the neighborhood.
- H = Flare accompanied by a high speed dark filament.
- I = Active region very extended.
- J = Distinct variations of plage intensity before or after the flare.
- K = Several intensity maxima.
- L = Existing filaments show signs of sudden activity.
- M = White-light flare.

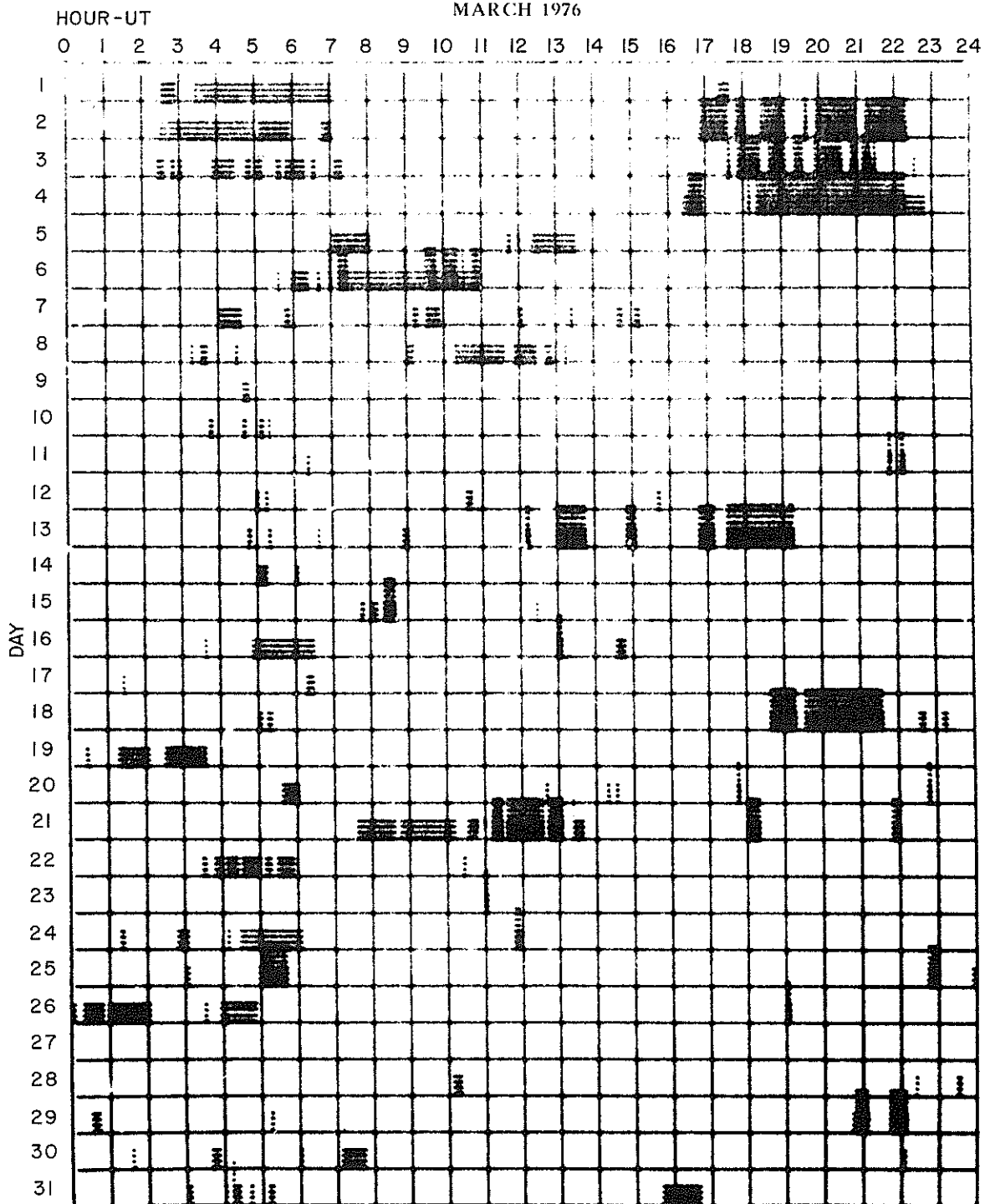
- N = Continuous spectrum shows effects of polarization.
- O = Observations have been made in the calcium II lines H and K.
- P = Flare shows helium D₃ in emission.
- Q = Flare shows the Balmer continuum in emission.
- R = Marked asymmetry in H α line suggests ejection of high velocity material.
- S = Brightness follows disappearance of filament (same position).
- T = Region active all day.
- U = Two bright branches, parallel (||) or converging (Y).
- V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
- W = Great increase in area after time of maximum intensity.
- X = Unusually wide H α line.
- Y = System of loop-type prominences.
- Z = Major sunspot umbra covered by flare.

DAILY FLARE INDICES								
Includes all Flares								
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
760302	0.00	19.9	760313	3.79	20.5	760322	18.26	24.0
760303	0.00	21.2	760314	.84	24.0	760323	8.50	23.9
760304	0.00	19.5	760315	0.00	23.6	760324	14.46	23.9
760306	0.00	22.5	760316	5.72	23.8	760325	17.96	23.0
760307	6.39	24.0	760317	25.54	24.0	760326	20.06	23.8
760308	2.74	24.0	760318	36.79	21.2	760327	40.27	24.0
760309	2.74	24.0	760319	26.39	24.0	760328	71.16	24.0
760311	3.38	23.8	760320	46.92	23.8	760329	34.52	23.2
760312	0.00	24.0	760321	89.71	21.6	760330	28.35	24.0
						760331	73.07	23.9

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

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Mar 76

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE



Observatories included in total patrol:

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

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

MARCH 1976

MAR 1976	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	$10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN		
1	9500 POTS	4	0907	0907.5	3	61	13		
	1470 POTS	45	1410	1410.6	1	5.4	1.7		
3	9240 ARCE	2	1543	1543.6	1.4				
5	9240 ARCE	1	0802.3	0803	1.4				
	9240 ARCE	4	0842.4	0842.8	1				
	9240 ARCE	1	1327.3	1327.6	1				
	9240 ARCE	1	1337.6	1337.8	0.6				
	9240 ARCE	21	1411.6	1445.4	75				
	9240 ARCE	4	1423.7	1424	0.8				
	1420 BOUL	8 S	2327.5	2328	1.5	6	2		
2695 BOUL	8 S	2329	2329.5	1.5	7	2			
7	18 MCMA	6 S	1648	1649	1			1	
	18 MCMA	42 SER	1710	1717	20			1	
	18 MCMA	41 F	1757	1759	11			1	
	18 MCMA	41 F	2030	2031	5			1	
	18 MCMA	41 F	2046	2047	4			1	
	18 MCMA	41 F	2107	2111	14			1	
	18 MCMA	41 F	2138	2143	39			1	
9	9240 ARCE	1	1340.9	1341	0.6				
10	9240 ARCE	1	1047.8	1048	0.6				
	9240 ARCE	1	1059.9	1100.1	0.5				
	9500 POTS	1	1246.9	1246.9	1.3	9.1			
11	930 BORD	8 S	1112.1	1112.1	0.1	11	1	1	
	18 MCMA	41 F	2121	2130	15				
12	18 MCMA	6 S	1343	1344	1			1	
	18 MCMA	41 F	2121	2132	11			1	
	18 MCMA	42 SER	2144	2150	54			1	
	2695 BOUL	1 S	2216.5	2217.5	1.5	2	1	1	
	18 MCMA	42 SER	2307	2330	25			1	
13	9240 ARCE	20	0854.7	0933.4	260			1	
	18 MCMA	6 S	1334	1335	2			1	
	930 BORD	8 S	1418.3	1418.3	0.1	70	1	1	
	18 MCMA	42 SER	2229	2259	34			1	
14	9500 POTS	4	0748	0748.6	4	40	11	1	
	930 BORD	8 S	1151.2	1151.2	0.2	17	2		
	1420 BOUL	3 S	1836.5	1837.5	2	2	1		
	410 SGHR	6 S	1837.2	1837.7	1.3	16.7	3.3		
	2695 SGHR	1 S	1837.2	1837.7	1.6	3.8	1.1		
	2800 OTTA	2 S/F	1837.3	1838	2	2.8	1.6		
	245 SGHR	6 S	1837.4	1837.6	.7	29.3	5.9		
	2695 BOUL	3 S	1837.5	1838.5	2	3	1		
	18 MCMA	41 F	2157	2210	15				
	18 MCMA	42 SER	2239	2335	74				
	15	18 MCMA	6 S	2058	2059	2			
16	240 KIEL	44 NS	0700 E	1247	580	70	10	1	SR
	100 GORK	2 SF	1216.2	1216.4	0.7	80			
	2800 OTTA	240 R	1440	1610	90	1	0.5		
	2800 OTTA	24P R	1610		530 D	1			
	18 MCMA	6 S	2007	2009	2				
	200 HIRA	44 NS	2050 E	0518	715 O	13	4		
	18 MCMA	41 F	2150	2155	7				
	18 MCMA	41 F	2213	2223	12				
17	200 GORK	44 NS	0500 E		480 O		10	1	SR
	240 KIEL	44 NS	0700 E	1226	580	35	10		
	260 ONDR	44 NS	0730 E		458 D	12			
	9240 ARCE	1	1227.8	1228	0.6				
	2800 OTTA	22 GRF	1515	1645	185	1.6	0.9		
	2800 OTTA	240 R	1830	1930	60	1.8	0.9		
	2800 OTTA	24PFR	1930		145	1.8			
	200 HIRA	44 NS	2050 E	0328	715 O	15	5		
	2800 OTTA	240 R	2155	2210	15	1.8	0.9		
	2695 PENT	24P R	2210		170 D	1.8			
18	200 GORK	44 NS	0500 E		480 O		15	1	
	100 GORK	43 NS	0600		420		5		
	240 KIEL	44 NS	0700 E	1303	583	90	20		
	260 ONDR	44 NS	0715 E		474 O	18			
	127 TORN	44 NS	0730 E	1130 U	440 O				
	245 SGHR	44 NS	1054 E	2016.5	714 O	74.9			
	950 GORK	1 S	0943.8	0944.4	2.2	1.6			
	2800 OTTA	1 S	1411.5	1413	3	1.2	0.6		
	2695 SGHR	1 S	1412	1412.9	1.1	2.3	.7		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MARCH 1976

MAR 1976	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					
19	2800 OTTA	20 GRF	1520	1535	55	0.8	0.6	1				
	2800 OTTA	27A RF	1710		96	1.2	1.1					
	2800 OTTA	24 R	1710	1720	10	1.2	0.6					
	18 MCHA	42 SER	1711	1721	12							
	2300 OTTA	24P R	1720		80	1.2						
	2800 OTTA	21 GRF	1740	1750	20	0.6	0.3					
	2800 OTTA	1 S	1749	1750	1.5	0.8	0.4					
	2800 OTTA	26 FAL	1840	1846	6	-1.2	-0.6					
	2800 OTTA	240 R	1915	1955	40	1.8	0.9					
	2800 OTTA	24P R	1945		300 0	1.8						
	200 HIRA	44 NS	2050 E	0241	715 0	35	20			ML		
	200 GORK	44 NS	0512 E		470 0		70					
	127 TORN	44 NS	0630 E		500 0							
	100 HIRA	27 RF	0643	0712	97 0	20	5			MR		
	240 KIEL	44 NS	0700 E	1138	590	400	40					
	260 ONDR	44 NS	0730 E		460 0	44						
	100 GORK	43 NS	0809		291		5					
	1470 POTS	1	1015.5	1016	1	4.6	1.4					
	408 TRST	45	1016.1	1016.1	0.3	34	8					
	245 SGHR	44 NS	1052 E	1138	293 0	152.5						
	2800 OTTA	20 GRF	1555	1623	105	2.4	1.2					
	18 MCHA	6 S	2025	2027	2			1				
	200 HIRA	44 NS	2050 E	2321	715 0	75	45					
	100 HIRA	27 RF	2050 E	2107	50 0	20	5					
	100 HIRA	45 C	2104	2104.6	1	250	100					
	100 HIRA	45 C	2105.5	2105.7	1	150	70					
	100 HIRA	45 C	2106.5	2108.2	2	120	30					
	100 HIRA	45 C	2110	2110.7	1	170	60					
	18 MCHA	41 F	2148	2205	43							
	20	100 HIRA	45 C	0203.3		8.5				30	2	
		100 HIRA		0203.3	0206.5		180					
		100 HIRA		0203.3	0204.5		60					
		100 HIRA		0203.3	0209.6		210					
		500 HIRA	45 C	0203.5	0204	1	30	8				
		2000 TYKW	41 F	0203.8	0204.1	4	3.3	0.5				
		3750 TYKW	45 C	0203.8	0204	1	17	3				
		1000 TYKW	41 F	0204	0204.1	3.5	5	0.4				
		9400 TYKW	5 S	0337	0340	45	4	2				
		3750 TYKW	5 S	0337	0340	50	3	1				
		2000 TYKW	5 S	0337	0339.8	4	2.2	1				
		2000 TYKW	29 PBI	0341		60	1.3	0.6				
		2695 MANI	1 S	0338.4	0339.4	4.6	4.6	1.1				
		1415 MANI	1 S	0339	0340	3.8	2.1	.5				
		4995 MANI	1 S	0339	0340	3.5	4.4	1.2				
		606 MANI	1 S	0339.2	0339.8	1.8	2.7	1.4				
1000 TYKW		45 C	0339.5	0339.9	1.5	2.6	1					
500 HIRA		45 C	0356.3	0356.7	1	47	12					
100 GORK		44 NS	0509 E		381 0		10					
500 HIRA		45 C	0516	0516.5	2	36	8					
100 HIRA		43 NS	0545	0721	180 0	25	15					
500 HIRA		24 R	0557	0720	168 0	8	4					
127 TORN		44 NS	0630 E		500 0							
240 KIEL		44 NS	0700 U	1555	600	240	50					
260 ONDR		44 NS	0734 E		412 0	27						
245 SGHR		44 NS	1050 E	2153.5	722 0	138.2						
500 HIRA		24 R	2041 E	2356	380 0	45	9					
100 HIRA		44 NS	2050 E	0238	715 0	120	33					
200 HIRA		44 NS	2050 E	0238	715 0	190	75					
536 ONDR		45 C	0748.2	0750.5	5.5	58	3					
500 HIRA		45 C	0748.4	0750.2	2	62	12					
1000 TYKW		45 C	0748.5	0750.3	6.5	19	1.5					
2000 TYKW		45 C	0748.5	0750.3	6.5	10	2					
510 POTS		40	0748.6	0750.2	2.4	160	15					
606 MANI		40 F	0748.9	0750.3	5.4	93	5.4					
650 GORK		41 F	0749	0750.5	2.7	118						
650 GORK			0749	0753.5		24						
950 GORK		4 S/F	0749	0750.5	6.7	19.6						
9100 GORK		21 GRF	0749.5	0753	13	4.9	2					
1470 POTS		4	0749.5	0750	2	11	4.7					
9500 POTS		4	0749.5	0750	7.5	13	2.5					
2695 MANI		1 S	0749.5	0750.4	2	9.7	3.4					
3000 POTS		4	0749.8	0750.2	0.9	10	3.4					
930 BORD		41 F	0749	0750.2	5.3	27	3					
9100 GORK		1 S	0750	0750.5	1.5	13	6.5					
3750 TYKW	5 S	0750	0750.2	1	13	3						
9400 TYKW	5 S	0750	0750.3	1	12	3						
1415 MANI	4 S/F	0750.2	0750.3	1.4	10.6	2.1						
8800 MANI	2 S/F	0750.3	0750.5	1.2	13.5	5.1						
4995 MANI	1 S	0750.3	0750.6	1.2	9.8	3.3						
2950 GORK	3 S	0750.3	0750.6	0.9	12.9	6.4						
808 ONDR	45 C	0750	0753.2	3.5	26	1.5						
408 TRST	42	1000.4	1003.9	4	220							
510 POTS	40	1802.7	1003.8	2.4	105	15						

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MARCH 1976

MAR 1976	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			
20	1470 POTS	3	1003.6	1004	0.9	37	17			
	808 ONDR	3 S	1003.7	1003.7	0.4	15				
	536 ONDR	3 S	1004	1004	2	27 U	7			
	930 BORD	46 C	1004	1004	0.4	24	3			
	536 ONDR	3 S	1014.5	1015	2.5	9 U	6			
	650 GORK	1 S	1015	1015.5	1.2	21	10			
	950 GORK	1 S	1015	1615.3	0.9	3.2	1.5			
	3000 POTS	4	1222.5	1223.5	2	13	3.1			
	7000 SAOP	21	1432.2	1433.8	17.6	5.5			OLOF	
	4995 BOUL	3 S	1433.5	1434.5	2	6	2			
	7000 SAOP	1	1433.6	1433.8	1.2	4.6	2.2		OLOF	
	2800 OTTA	1 S	1433	1434.4	2	5	2.5			
	2800 OTTA	30 PBI	1435	1435	8.5	1.4	0.7			
	2695 BOUL	2 SF	1434.5	1435.5	1.5	2	1			
	2800 OTTA	1 S	1439.5	1440	4	0.8	0.6			
	7000 SAOP	1	1445.2	1445.6	1.7	1.8	0.9		OLOF	
	930 BORD	46 C	1445.8	1445.9	0.9	16	3			
	2300 OTTA	1 S	1445.9	1445.9	1.5	1.2	0.6			
	18 MCMA	6 S	1709	1711	3				2	
	2800 OTTA	21 GRF	1722	1722	130	1.6	0.8			
	2695 SGMR	22 GRF	1753.6	1758.6	19.8	4.8	2.9			
	410 SGHR	6 S	1753.7	1758.5	21.3	60.6	12.1			
	4995 SGMR	22 GRF	1753.7	1811	22	10.7	6.4			
	2800 OTTA	40 F	1753	1758.5	19	2.4				
	1420 BOUL	45 C	1753	1758.5	9.5	10	3			
	2695 BOUL	45 C	1754	1759.5	10	3	1			
	7000 SAOP	21	1756.8	1811.1	15.4	3.5			OLOF	
	7000 SAOP	1	1758.3	1758.7	0.9	1.7	0.8		OLOF	
	1420 BOUL	1 S	1805	1805.5	2.5	2	1			
	7000 SAOP	1	1810.8	1811.1	0.7	2.6	1.4		OLOF	
	1420 BOUL	1 S	1810	1811	3	2	1			
	2695 PENT	21 GRF	2004	2015	25	1.2	0.6			
	2695 PENT	1 S	2013.9	2014.1	1	1.6	0.8			
	1420 BOUL	8 S	2013	2013.5	1	6	2			
	100 HIRA	45 C	2110.7	2110.8	1	440	160		WR	
	1420 BOUL	45 C	2148.5	2153.5	8	23	8			
	4995 BOUL	45 C	2150.5	2152.5	6	17	6			
	2800 OTTA	4 S/F	2150	2158	8	15	4.8			
	2800 OTTA	30 PBI	2158	2158	20	1.6	0.8			
	2695 BOUL	40 F	2150	2154	23	13	3			
	1000 TYKW	5 S	2150	2150.5	1.3	6	2		08L	
	2000 TYKW	45 C	2150	2153.7	18	16	3		OL	
	500 HIRA	45 C	2151.2	2153.3	3	40	12			
	1000 TYKW	45 C	2151.3	2153.7	4.7	53	10		12L/12R	
	410 SGMR	6 S	2151.6	2152.6	19.3	87.4	26.2			
	3750 TYKW	45 C	2151	2153	8	20	5		17L	
	2695 SGMR	1 S	2152.1	2153.7	4.7	5.8	1.7			
	9400 TYKW	5 S	2153	2153.4	1.5	5	2		OR	
	1000 TYKW	5 S	2156	2156.2	1	14	2		20L	
	1000 TYKW	45 C	2157	2205.4	10	11	3		22R	
	1420 BOUL	45 C	2159.5	2202	6.5	4	1			
	4995 BOUL	45 C	2159	2200.5	8.5	8	3			
	2800 OTTA	2 S/F	2159	2202.5	8	3.2	1.6			
	18 MCMA	42 SER	2201	2210	9				2	
	18 MCMA	6 S	2237	2239	2				1	
	500 HIRA	45 C	2238.7	2241.7	4.3	55	12			
	2695 PENT	240AR	2238.8	2304.8	16	1.6	0.8			
	2695 PENT	2 S/F	2238.8	2239.5	4	2.2	1.2			
	2695 PENT	24P R	2239.5	2239.5	120 D	1.6				
	2695 BOUL	45 C	2239.5	2240.5	4.5	2	1			
	2000 TYKW	5 S	2239	2241.5	4	2.4	0.5		OR	
	1000 TYKW	45 C	2240.3	2241.6	2	4	1		35R	
	1420 BOUL	1 S	2240.5	2241.5	1.5	4	1			
	100 HIRA	45 C	2256.5	2256.8	1.7	150	60		WL	
	1000 TYKW	5 S	2356	2356.4	1	1.6	0.4		OR	
	21	2000 TYKW	5 S	0005	0005.4	1	2.4	0.5		OR
		9400 TYKW	20 GRF	0012	0045	70	11	7		OL
		3750 TYKW	20 GRF	0020	0055	60	3	1		OL
		3750 TYKW	21 GRF	0125	0150	65	5	2		OL, 295043F
		2000 TYKW	21 GRF	0125	0149	65	3	1		OR
2000 TYKW		45 C	0136.5	0142.1	10	25	4		28R	
1000 TYKW		45 C	0137.5	0138.1	2.5	3.8	0.8		40R	
606 MANI		4 S/F	0137.9	0140.4	5.9	56	21.3			
4995 MANI		3 S	0138.8E	0141.3U	5.20	17.9U	10.20			
1415 MANI		4 S/F	0138.8E	0140.8U	5.20	51.90	17.50			
2695 MANI		4 S/F	0138.8E	0140.8U	5.20	15.4U	6.80			
500 HIRA		45 C	0139.5	0140.3	3.5	39	16			
9400 TYKW		5 S	0140	0142	5	4	2		OL	
3750 TYKW		45 C	0140	0140.8	6	14	5		OL	
1000 TYKW		45 C	0140	0142.3	3	71	28		SR	
1000 TYKW		30 PBI	0143		7	1.4	0.7			
4995 MANI		3 S	0147.6	0151.7	6.9	17.9	5.1			
1000 TYKW		45 C	0148.3	0148.5	0.8	8	2.5		05R	
2695 MANI		4 S/F	0148.4	0151.7	7.8	20.5	6.8			

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MAR 1976	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		
21	2000 TYKW	5 S	0149.5	0151.7	8	18	3		OR
	606 MANI	4 S/F	0149.6	0151.5	3.2	17.9	6.7		
	9400 TYKW	5 S	0149	0151.5	5	14	4		OL
	9400 TYKW	29 PBI	0154		45	6	3		
	1415 MANI	4 S/F	0150.4	0151.5	3.1	15.4	4.8		
	3750 TYKW	5 S	0150.5	0151.6	5.5	19	6		15L, 2950.43F
	1000 TYKW	5 S	0150	0151.8	4	41	10		SR
	500 HIRA	45 C	0151	0151.7	1.3	12	5		
	1000 TYKW	45 C	0200	0204.8	10	8	1.5		37R
	2000 TYKW	45 C	0200	0204.7	10	7	1.5		06R
	606 MANI	4 S/F	0201.5	0204.1	3.9	13.4	5		
	4995 MANI	1 S	0201.9	0204.7	5.1	5.1	1.3		
	2695 MANI	2 S/F	0201.9	0204.7	5.1	5.7	2.3		
	1415 MANI	2 S/F	0201.9	0204.7	4.1	6.4	2.7		
	3750 TYKW	5 S	0202	0204.6	7	3	1		OL, 2950.43F
	1000 TYKW	45 C	0244	0244.2	1	52	10		05R
	1000 TYKW	45 C	0245.8	0246	0.8	13	3		05R
	500 HIRA	26 FAL	0300	0313.8	300	9	4		
	3750 TYKW	20 GRF	0325	0353	70	3	1		OL, 2950.43F
	2000 TYKW	20 GRF	0345	0352	50	1.4	0.5		OL
	100 GORK	44 NS	0458		389 0		35		
	127 TORN	44 NS	0630	E	500 0				
	240 KIEL	44 NS	0700	E	592	450	100		
	260 ONDR	44 NS	0730	E	467 0	135			
	405 KIEL	44 NS	0835		173	115	55		
	245 SGHR	44 NS	1048	E	1226.7	686 0	120.5		3.5, SWF
	200 HIRA	44 NS	2050	E	2317	715 0	30	10	MR
	100 HIRA	44 NS	2050	E	2211	225 D	70	30	MR
	9400 TYKW	20 GRF	0500		60	6	3		OL
	2000 TYKW	21 GRF	0500		45	2	1		OL
	3750 TYKW	20 GRF	0500		40	2	1		OL
	2000 TYKW	5 S	0502		1	0.6	0.2		MR
	2000 TYKW	5 S	0507.5		0.6	1.4	0.5		OR
	9100 GORK	1 S	0636		3	7	3.5		
	1415 MANI	2 S/F	0636.4		1.7	9.7	2.7		
	2695 MANI	1 S	0636.5		2	4.2	1.2		
	4995 MANI	1 S	0636.7		1.5	3.8	1.3		
	8800 MANI	1 S	0636.7		2.5	6.5	1.6		
	9400 TYKW	5 S	0636		2	7	3		OL
	1000 TYKW	5 S	0636		2	5.8	1.5		OR
	2000 TYKW	5 S	0636		2	4	1		OR
	3750 TYKW	5 S	0636		2	3	1		OL
	2950 GORK	1 S	0637		0.9	4.3	2		
	100 HIRA	45 C	0738.7		1	600	200		ML
	808 ONDR	45 C	0751.4		17	115	19		
	808 ONDR		0751.4			83			
	9100 GORK	21 GRF	0754		60	18	7		
	4995 MANI	41 F	0754.2		19.3	28.8	10		3 SWF
	8800 MANI	4 S/F	0754.2		14.8	37.5	16.3		3 SPA
	510 POTS	40	0755.6		3.8	28	3		
	9500 POTS	3	0756		5	25			
	9500 POTS	21	0756		59	11			
	1470 POTS	21	0756		50	3.4			
	3000 POTS	21	0756		59	4.5			
	536 ONDR		0756.4			37			
	606 MANI	41 F	0756.4		21.4	54.9	16.1		IITG
	536 ONDR		0756.4			35			
	536 ONDR	45 C	0756.4		21.5	48	10		
	536 ONDR		0756.4			37			
	1415 MANI	41 F	0756.5		33.5	43.2	10.8		
2695 MANI	41 F	0756.5		33.5	36	10.8			
3000 POTS	45	0756.5		4.5	11				
1470 POTS	46	0756.5		4.5	26				
500 HIRA	45 EC	0756.5		1.5	40	20			
1420 KIEL	45 C	0756.5		4	60	40		SR	
1030 KIEL	45 C	0756.5		4	80	50		SR	
1000 TYKW	45 C	0756.5		4.5	41	10		SR	
1000 TYKW		0757.7			39				
2000 TYKW	45 C	0756.5		5	61	13		MR	
2000 TYKW		0759.6			51				
113 POTS	41	0756.6		5.5	500	25			
405 KIEL	45 C	0756		5	90	30		SR	
800 KIEL	45 C	0756		5	20	15		SR	
602 KIEL	45 C	0756		4	35	20		SR	
3750 TYKW	45 C	0756		6	11	3		20R	
3750 TYKW		0759.4			8				
9400 TYKW	45 C	0756		5	26	9		13L	
9400 TYKW		0759.3			6				
9100 GORK	3 S	0757		4.5	29	15			
2950 GORK	45 C	0757		6.5	15				
2950 GORK		0800			10.6				
650 GORK	41 F	0757.2		3.7	29				
650 GORK		0757.2			22				
100 GORK	41 F	0757.5		2.9	560 D				
500 HIRA	45 C	0759.6		0.5	40	23			

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MAR 1976	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		
21	1030 KIEL	45 C	0801	0810.5	15	90	50		
	800 KIEL	45 C	0801	0811.5	14	70	40		
	1000 TYKW	42 SER	0801	0804.2	6.5	3.7	0.5		50R
	1420 KIEL	45 C	0803	0811	16	70	40		
	3000 POTS	46 C	0805	0811	9	43			
	602 KIEL	45 C	0805	0808.5	10	60	30		
	405 KIEL	45 C	0805	0811	11	140	60		
	1470 POTS	46 C	0806	0811	7.5	39			
	650 GORK	46 C	0806	0808.4	7.4	65			
	650 GORK		0806	0811		40			
	2950 GORK	45 C	0806.5	0808.5	8.1	15			
	2950 GORK		0806.5	0810.3		46			
	2950 GORK		0806.5	0811.2		58			
	2000 TYKW	45 C	0806.5	0811	7	35	9		20R
	3750 TYKW	45 C	0806.5	0811.1	7	28	4		05R
	1000 TYKW	45 C	0807.5	0811.2	6	48	13		SR
	510 POTS	40	0807.5	0808.6	5.5	56	7		
	500 HIRA	45 C	0807.5	0808.5	1.2	55	23		
	9500 POTS	3	0809.5	0811	4	22			
	9100 GORK	1 S	0809.5	0811	4.5	11	5		
	500 HIRA	45 C	0810.2	0811	1.5	25	15		
	650 GORK	1 S	0821.4	0822.5	3.3	4.6	2		
	3000 POTS	3	0821.5	0822.2	2	8.1			
	1470 POTS	4	0821.5	0822	2.5	10			
	1420 KIEL	45 C	0821	0822	3	50	30		
	950 GORK	1 S	0822	0822.6	2.7	5.2	2.6		
	930 BORD	45 C	0856.4	0911.1	17.6	76	10		
	234 POTS	40	0938.8	0939	0.3	350	7		
	9100 GORK	21 GRF	0940	0953.5	26.5	4	2		
	9500 POTS	1	0946.5	0947.2	2.5	6.5			
	2950 GORK	1 S	0946.9	0947.6	1.1	6.8			
	9100 GORK	1 S	0947	0947.5	1	6.9	3		
	3000 POTS	2	0947	0947.6	1	3.3			
	3000 POTS	22	1105 U	1109.6	15 U	4.2			
	9500 POTS	22	1105	1114.2	26	12			
	9100 GORK	2 SF	1113.5	1114.5	7.5	7.5	2		
	15400 SGMR	20 GRF	1241	1257.6	57.9	16.2	9.7		
	2695 SGMR	46 C	1241.6	1250.6	29.1	35.4	10.6		
	2695 SGMR	46 C		1259.5		25.8			
	2695 SGMR	29 PBI	1310.7	1310.7	14.8	4.6	1.8		
	8800 SGMR	22 GRF	1243.5	1259.3	55.5	20.7	12.4		
	9400 HUAN	20	1245.3		38.3		8.3		
	4995 SGMR	46 C	1247.3	1250.8	21.1	17.3	9.8		
	4995 SGMR	46 C		1259.4		32.6			
	4995 SGMR	29 PBI	1308.4	1308.4	14.6	12.2	4.9		
	2800 OTTA	46F C	1247	1250.2	14.5	24	9.8		
	2800 OTTA		1247	1250.2	8	24			
	2800 OTTA		1255	1259.5	6.5	18.6			
	2800 OTTA	30 PBI	1301.5	1301.5	44	4.8			
	1470 POTS	46	1248	1252.5	26	21	5.4		
	3000 POTS	46	1248	1250.5	46	26			
	9500 POTS	22	1248	1259.4	55	23			
	7000 SAOP	28	1255.2		1.6				
	7000 SAOP	46	1257	1259.6	4.2	24.6	13		BLOF
	7000 SAOP	30	1301		15.4				
	2800 OTTA	2 S/F	1303.5	1306.5	7	6.4	3.2		
	7000 SAOP	20	1303.6		9				
	930 BORD	40 F	1349	1349.8	24	12	2		
	2800 OTTA	23 GRF	1400	1422	180	4.6	2.6		
	18 MCHA	6 S	1555	1556	2				
	2800 OTTA	1 S	1600	1600.5	1	1.2	0.6		
	2800 OTTA	22 GRF	1702	1720	80	2	1.2		
	1420 BOUL	40 F	1759	1802	11.5	20	8		
	1420 BOUL	45 C	1812.5	1814	5.5	2	1		
	2800 OTTA	24 R	1825	1835	10	1.4	0.7		
	2800 OTTA	27AFRF	1825		70	1.4	1.1		
	2800 OTTA	24P R	1835		40	1.4			
	2695 SGMR	46 C	1826.2	1844	29.8	86.6	26		
	2695 SGMR	46 C		1848.6		20.3			
	2695 SGMR	29 PBI	1856	1856	15	3.5	1.4		
	4995 SGMR	46 C	1829.1	1843.9	22.1	160.6	32.2		
	4995 SGMR	46 C		1848.6		34.7			
	4995 SGMR	29 PBI	1851.2	1851.2	14.6	6.2	2.5		
	8800 SGMR	46 C	1829.2	1843.8	20.8	186.8	37.4		
	8800 SGMR	46 C		1848.4		42.8			
	8800 SGMR	29 PBI	1850	1850	21.4	22.5	9		
	7000 SAOP	28	1834.2		7				
	2695 BOUL	45 C	1835.5	1846	24	67	15		
	15400 SGMR	4 S/F	1837.4	1842	33.2	97.2	29.2		
	2800 OTTA	45 C	1838	1845	14	80	21.4		
	9400 HUAN	45	1839	1844	37.6	134.4	23.8		10L
	410 SGMR	6 S	1840.3	1843.5	9.7	112.8	33.9		
	4995 BOUL	45 C	1840	1844.5	10.5	155	53		
	245 SGMR	6 S	1841.2	1843.3	8.6	76.4	15.3		
	7000 SAOP	46	1841.2	1843.8	6.6	190.2	118.9		BLOF

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MAR 1976	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			
21	7000 SAOP	30	1847.8	1848.5	12.4	40.4	10.1		BLOF	
	7000 SAOP	3	1847.8	1848.5	1.6	27.6	13.7		BLOF	
	2800 OTTA	2 S/F	1853.5	1854.1	5	4.8	1.6			
	2800 OTTA	26 FAL	1915	1935	20	-1.4	-0.7			
	2800 OTTA	22 GRF	1940	2020	55	1.4	0.7			
	245 SGMR	6 S	2028.2	2040.7	83.8	82.3	16.5			
	410 SGMR	6 S	2040.9	2043.7	49.3	5.6	1.7			
	200 HIRA	45 C	2050 E	2147.5	70 D	150	45		ML	
	2800 OTTA	1 S	2055	2058.2	9	1.2	0.5			
	2800 OTTA	32A ABS	2110	2225	155	-6.2	-3.1			
	2800 OTTA	46F C	2131.9	2233.7	4.5	94	24			
	2800 OTTA	29 PBI	2236.4	2236.4	40	3.4	1.7			
	4995 BOUL	23 GRF	2230.5	2233	22	24	6			
	1420 BOUL	4 SF	2231.5	2234	5	52	17			
	606 MANI	40 F	2231.5	2233.5	20.1	181	50			
	1000 TYKW	45 C	2231.5	2233.8	5	38	11		MR	
	500 HIRA	45 C	2231.7	2233.3	4.5	200	30			
	4995 MANI	3 S	2231.8	2233.8	5.7	19.2	5.1			
	8800 MANI	3 S	2231.8	2233.8	5.7	28.6	13.4			
	2695 MANI	46 C	2231.8	2233.8	5.7	104	27.9			
	2695 MANI	46 C		2232.2		47.1				
	1415 MANI	46 C	2231.8	2234.2	5.7	44.7	19.1			
	1415 MANI	46 C		2233.2		22				
	9400 HUAN	20	2231.9	2233.6	3.3	22.2	7.6		31L	
	9400 TYKW	5 S	2231	2233.7	7	26	7		14L	
	3750 TYKW	45 C	2231	2233.7	7	40	10		09R/25L	
	3750 TYKW	29 PBI	2238		40	2	1			
	2695 BOUL	45 C	2232.5	2235	5	117	35			
	2000 TYKW	45 C	2232	2233.8	4	130	30		MR	
	200 HIRA	45 C	2233.3	2233.5	1.5	480	100		MR	
	18 HCMA	6 S	2237	2239	3					
	720 SYDN	45 C	2241	2246.5	12					
	1000 TYKW	45 C	2243	2248.6	17	19	2		25L	
	1400 SYDN	45 C	2246	2248.5	6.6					
	1420 BOUL	45 C	2247.5	2248.5	2.5	3	1			
	9400 TYKW	5 S	2328	2335	21	7	3		0L	
	1400 SYDN	4 S/F	2333	2334.2	2.2					
	1000 TYKW	45 C	2333.5	2334.5	4	3	1		50R	
	2800 OTTA	2 S/F	2333.5	2334.3	3	9.4	2.4			
	3750 TYKW	5 S	2333	2334.4	5	2	1		0L	
	2000 TYKW	45 C	2334	2334.4	2	11	2		50R	
	2695 BOUL	8 S	2334	2235	2.5	7	4			
	22	720 SYDN	8 S	0049.7	0050.2	0.6				
		1415 MANI	2 S/F	0116.6	0118.4	3.2	4.6	1.2		
		2695 MANI	1 S	0116.6	0118.4	2.9	3.1	.6		
		4995 MANI	1 S	0116.8	0118.4	2.9	6.4	1.3		
		8800 MANI	1 S	0117.3	0118.4	2.5	6.7	1.7		
		720 SYDN	4 S/F	0117.5	0118.2	1.2				
		1400 SYDN	4 S/F	0117.5	0117.7	1.1				
		500 HIRA	45 C	0117.5	0117.8	1.5	10	8		
		100 HIRA	45 C	0117.5	0117.6	1	170	30		WRWL
		606 MANI	40 F	0117.6	0118.1	1	16.8	6		
		1000 TYKW	5 S	0117	0118.4	3	11	3.5		MR
		2000 TYKW	5 S	0117	0118.3	2	2.4	0.8		OR
		3750 TYKW	5 S	0117	0118.4	5	2	1		0L, 296066F
9400 TYKW		5 S	0117	0118.4	3	2	1		0L	
100 HIRA		45 C	0229	0229.7	1.5	790	300		WR	
720 SYDN		45 C	0313	0313.3	1					
1000 TYKW		5 S	0313.2	0313.4	0.8	11	2		10R	
2000 TYKW		5 S	0313.2	0313.6	0.8	1.2	0.4		OR	
3750 TYKW		5 S	0313.3	0313.5	0.7	1	0.3U		0L	
3750 TYKW		5 S	0402	0403	4	2	1		0L, 296066F	
720 SYDN		4 S/F	0403	0403.2	0.6					
500 HIRA		5 ES	0417.5	0417.5	0.3	28	20			
720 SYDN		45 C	0419.4	0421.5	2.7					
1400 SYDN		4 S/F	0419.5	0421.1	2.5					
2000 TYKW		45 C	0419.5	0421.2	4	29	6		22R	
3750 TYKW		5 S	0419.5	0421.2	4	30	7		11R, 296066F	
500 HIRA		45 C	0419.5	0421.3	2.7	80	23			
1000 TYKW		45 C	0419.5	0421.4	2.5	19	5		21R	
4995 MANI		4 S/F	0419.5	0421.4	3.3	48.1	15.6			
606 MANI		40 F	0419.5	0421.3	3.3	179	49.4			
1415 MANI		4 S/F	0419.5	0421.3	2.5	16.2	6.5			
2695 MANI		4 S/F	0419.5	0421.3	3.4	29.1	13			
8800 MANI		3 S	0419.8	0421.4	3	68	30.6			
9400 TYKW		5 S	0419	0421.2	6	70	12		05L	
100 GORK		44 NS	0503 E		450 D		10			
100 HIRA		43 NS	0548	0621	175 D	40	10		0MR	
100 HIRA		45 C	0552.5	0552.8	1	350	70		WR	
127 TORN		44 NS	0630 E	1150	500 D					
240 KIEL		44 NS	0700 E	1238	600 D	90	70			
260 ONDR		44 NS	0710 E		480 D	21				
3000 POTS	4	0806	0808.5	7	28	10				
1470 POTS	4	0806.5	0808.5	12	19	6				

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			UT	UT	MINUTES	PEAK	MEAN			
22	1415 MANI	4 S/F	0806.8	0808.9	7.2	16.2	6.5			
	606 MANI	4 S/F	0806.8	0807.7	7.2	67	8.4			
	950 GORK	4 S/F	0806.9	0808.2	3.4	14	7			
	9100 GORK	5 S	0807	0809	3.3	15.8	8			
	9100 GORK	29 PBI	0807	0810	22	5.8	2.9			
	4995 MANI	4 S/F	0807	0808.8	5.2	28.6	5.2			
	8800 MANI	4 S/F	0807	0808.2	7.3	17	3.4			
	2695 MANI	4 S/F	0807	0808.8	7.6	27.3	8.1			
	808 ONDR	4 S/F	0807.3	0808.2	2.5	32	9			
	930 BORD	46 C	0807.3	0808.2	3.4	15	6			
	650 GORK	4 S/F	0807.4	0808	1.5	49				
	536 ONDR	4 S/F	0807.4	0808	3.5	70	8			
	500 HIRA	45 C	0807.5	0807.7	2.3	120	15			
	2950 GORK	3 S	0808.5	0808.7	1.3	13	6.5			
	2800 OTTA	22 GRF	1210	1250	220	5	2.7			
	113 POTS	45	1416.2	1416.3	0.2	140	25			
	18 MCHA	6 S	1458	1501	3					
	2800 OTTA	27A RF	1705		275	2.6	2.2			
	2800 OTTA	24 R	1705	1740	35	2.6	1.3			
	2800 OTTA	24P R	1740		200	2.6				
	2800 OTTA	20 GRF	1810	1930	60	1.2	0.6			
	2800 OTTA	1 S	2057	2058	2	1	0.5			
	2800 OTTA	26 FAL	2100	2140	40	-2.2	-1.1			
	2800 OTTA	24OAR	2153	2208	15	3.2	1.6			
	1420 BOUL	40 F	2155.5	2159.5	14	11	3			
	2800 OTTA	22 GRF	2155	2159.5	13	6.6	2.6			
	2695 PENT	24P R	2208		150 0	3.2				
	500 HIRA	27 RF	2155	2220	60	5	2			
	1400 SYDN	45 C	2157.2	2159.6	7.4					
	2000 TYKW	45 C	2157	2202.4	7	11	2		65R	
	410 SGMR	6 S	2159.2	2202.4	54.80	33.4	10			
	2695 BOUL	45 C	2159.5	2200	7.5	4	1			
	1000 TYKW	45 C	2159.5	2202.4	4.5	5	0.7		30R	
	245 SGMR	6 S	2201	2202.4	53 0	50.1	15			
	500 HIRA	45 C	2202.2	2202.3	5	60	15			
	1000 TYKW	45 C	2214	2216	4	4	0.8		06R	
	1420 BOUL	1 S	2215.5	2216	1.5	1				
	2695 PENT	20 GRF	2236	2300	95	2.8	1.4			
	23	720 SYDN	45 C	0037.9	0038.1	1.7				
		720 SYDN	45 C	0048.2	0051.5	4.3				
606 MANI		4 S/F	0051.1	0051.6	4.3	32	6.2			
3750 TYKW		5 S	0112	0116.4	8	2	1		OL, 296080F	
1415 MANI		1 S	0113.5	0116.4	5.5	3.5	.6			
606 MANI		40 F	0113.5	0116.4	4.5	339	27.8			
2695 MANI		1 S	0114.3	0116.4	4.9	3.2	.6			
720 SYDN		45 C	0114.3	0116	3.7					
1400 SYDN		2 S/F	0115	0116.2	2.2					
2000 TYKW		45 C	0115	0116.2	4	3	1		OR	
9400 TYKW		5 S	0115	0116	4	3	1		OL	
1000 TYKW		45 C	0115	0116.2	2	38	5		07R	
2000 TYKW		21 GRF	0243	0248.5	90	1.4	0.5		OR	
3750 TYKW		5 S	0245	0248	9	2	1		OL, 296080F	
9400 TYKW		5 S	0245	0248	25	2	1		OL	
100 HIRA		43 NS	0300	0635	350 0	40	20		0	
200 GORK		44 NS	0454	E	486 0		5			
100 GORK		44 NS	0500	E	480 0		30			
127 TORN		44 NS	0630	E	500 0					
240 KIEL		44 NS	0630	E	1224	630	100			
260 ONDR		44 NS	0656	E		494 0	230 D	120		
405 KIEL		44 NS	0800		1047	480	90	40		
250 DNIN		44 NS	0900	E		210 0		4		
169 DNIN		44 NS	0900	E		210 0		2		
160 DNIN		44 NS	0900	E		210 0		2		
245 SGMR		44 NS	1045	E	2229.5	730 D	65.9			
410 SGMR		43 NS	1648.3	1829.4	366.70	51.1				
2000 TYKW		20 GRF	0310	0325	60	0.8	0.4		OR	
3750 TYKW		20 GRF	0310	0325	60	2	1		OL, 296080F	
500 HIRA		27 RF	0420	0428	17	6	3			
200 HIRA		27 RF	0421	0436	43	17	8		0	
2000 TYKW		20 GRF	0450	0520	70	2	1		OR	
3750 TYKW		20 GRF	0458	0520	60	4	2		OL	
9400 TYKW		5 S	0458	0505	30	4	2		OL	
650 GORK		41 S/F	0607.1	0609.1	10.9	10				
650 GORK			0607.1	0613.3		11				
950 GORK		41 F	0612.8	0613.3	4.6	1				
950 GORK			0612.8	0617.2		1.8				
950 GORK		40 F	0631.5	0637.8	8.2	2				
1470 POTS		46	0838.5	0843.2	60	409	133			
3000 POTS	46	0839	0842.6	61	325	114	U			
500 HIRA	45 C	0839.3	0842	8 0	390	150	U			
510 POTS	45	0839.4	0844.5	20	155	30				
2950 GORK	48 C	0840.2	0842.8	9.4	653					
2950 GORK	29 PBI	0840.2	0849.6	39.4	324	158				
2695 MANI	47 GB	0840.3	0843	29.2	550	150				

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			UT	UT	MINUTES	PEAK	MEAN		
23	2695 HANI	47 GB		0844.9			350		
	2695 HANI	29 PBI	0909.5	0909.5			54		SUNSET
	4995 HANI	47 GB	0840.3	0845.6	29.2		760	300	
	4995 HANI	47 GB		0847.1			950		
	4995 HANI	29 PBI	0909.5	0909.5			72		SUNSET
	536 ONDR	49 GB	0840.4	0840.4	23		130	0 78	
	9100 GORK	49 GB	0840.5	0847	14.5		921	218	
	9100 GORK	30 PBI	0840.5	0855	200 D		89	29	
	808 ONDR	49 GB	0840.6	0843.7	26		630	0 171	
	1415 HANI	46 C	0840.6	0842.9	28.9		370	86	
	1415 HANI	46 C		0845			293		
	1415 HANI	29 PBI	0909.5	0909.5			20.4		SUNSET
	234 POTS	45		0840.7	0842	35	16000	240	
	950 GORK	48 C		0840.7	0843.2	6.5	1560		
	950 GORK	29 PBI		0840.7	0847.2	42.1	170	26	
	650 GORK	47 GB		0840.7	0842.8	32	362		
	650 GORK			0840.7	0843.3		474		
	408 TRST	47		0840.8	0844.4	10.9			
	8800 HANI	47 GB		0840.8	0845.3	28.7	1350	520	
	8800 HANI	47 GB			0847.1		1400		
	8800 HANI	29 PBI	0909.5	0909.5			156		SUNSET
	606 HANI	47 GB	0840.8	0843.3	13.6		580	178	
	606 HANI	47 GB		0844.8			430		
	606 HANI	29 PBI	0854.4	0854.4			24.2		SUNSET
	800 KIEL	47 GB		0840	0843.5	40	1600	280	
	602 KIEL	47 GB		0840	0843	37	460	160	SR, MR
	405 KIEL	47 GB		0840	0854.5	26	500	180	SR, MR
	240 KIEL	47 GB		0840	0842	36	16000	500	SR, MR
	1420 KIEL	47 GB		0840	0842.5	51	710	210	SR, MR
	1030 KIEL	47 GB		0840	0842.5	51	2380	500	SR, MR
	260 ONDR	49 GB		0841.2		28	230	0 110	
	200 GORK	48 C		0841.2	0842.8	12.5	20000		
	113 POTS	45		0841.3	0842.9	59	14000	900	
	228 HARS			0841.3	0847		630		
	228 HARS			0841.3	0844.1		495		
	228 HARS			0841.3	0843.7		780		
	228 HARS			0841.3	0843.5	0.2U	810		
	228 HARS			0841.3	0843	0.4U	570		
	228 HARS			0841.3	0842.5	0.4U	490		
	228 HARS	47 GB		0841.3	0842	8.7	1000	380	
	200 HIRA	45 C		0841.5	0844.7	9 D	1000	500 U	OWL
	100 GORK	48 C		0841.6	0842.7	14.7	160000		
	127 TORN			0841.9	0858	8	200		
	127 TORN			0841.9	0847.5	2 U	3500		
	127 TORN	49 GB		0841.9	0842.5	38	1700	0 D	
	100 HIRA	45 C		0843.6		10 D	1000	0 600 D	WL
	650 GORK			0848.8	0848.8	22.6	68		
	228 HARS	1 S		0853.8	0854	1 U	72	14	
	9100 GORK	3 S		0857.5	0913.5	7	99	52	
	536 ONDR	4 S/F		0951	0951.8	2	53	3.5	
950 GORK	41 F		1022.8	1026.4	8.4U	16			
950 GORK			1022.8	1030.2		19.4			
9100 GORK	45 C		1023.5	1026	9.5	12	3.5		
9100 GORK			1023.5	1030		9.3			
650 GORK	41 F		1023.6	1023.8	10.2	28			
650 GORK			1023.6	1025.9		27			
650 GORK			1023.6	1026.5		37			
536 ONDR	4 S/F		1023	1023.6	8.5	63	4.2		
2950 GORK	21 GRF		1024.8	1027	19	6.7	2		
2950 GORK	2 SF		1025.5	1026.6	1.6	4	3		
808 ONDR	4 S/F		1025	1026.2	2	28	8.8		
808 ONDR	4 S/F		1029.2	1030	1.5	28	5		
3000 POTS	4		1029.5E	1030	2.5U	8.8	4		
1470 POTS	4		1029.5E	1030	2.5U	16	7.6		
2950 GORK	1 S		1029.7	1030.2	1	5.2	2.5		
950 GORK	41 F		1158.1	1158.8	9.2	3.9			
950 GORK			1158.1	1206		3.4			
950 GORK	1 S		1218.1	1520.3	5.9	1.9	1		
950 GORK	22 GRF		1239.8	1245.7	8.5	4			
950 GORK	1 S		1252.1	1254.7	4.5	1.5	0.7		
2800 OTTA	26 FAL		1335	1452	77	-4.6	-2.3		
7000 SAOP	40		1354.9		0.7	3.3		OROD	
18 MCMA	6 S		1356	1358	2				
930 BORD	41 F		1535.2	1535.8	0.7	9	2		
2800 OTTA	240 R		1620	1635	15	1.8	0.9		
2800 OTTA	24P R		1635		460 D	1.8			
18 MCMA	6 S		1713	1714	3				
2800 OTTA	20 GRF		1805	1812	20	0.8	0.4		
2800 OTTA	1 S		1938	1939	6	2	0.8		
2800 OTTA	20 GRF		2014	2015	12	1	0.6		
500 HIRA	45 C		2100.2	2100.3	0.5	780	150		
18 MCMA	42 SER		2146	2149	98				
2800 OTTA	1 S		2148	2148.5	2	2	1		
2800 OTTA	32A ABS		2155	2225	50	-2	-1		
4995 BOUL	1 S		2234.5	2236	3.5	6	2		

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			UT	UT	MINUTES	PEAK	MEAN		
24	720 SYDN	45 C	2234.6	2236.7	4.9				
	1400 SYDN	45 C	2234.8	2237.4	3.4				
	1000 TYKW	45 C	2235.5	2237.5	3	24	6		HR
	2000 TYKW	45 C	2235.5	2237.4	3	20	7		35R
	3750 TYKW	45 C	2235.5	2236	3	7	3		27R
	2695 BOUL	45 C	2235.5	2238	3	19	7		
	1420 BOUL	45 G	2235	2237	4.5	7	3		
	2800 OTTA	4 S/F	2235	2237	3	14.8	7		
	1420 BOUL	3 S	2306	2306.5	2	1			
	1000 TYKW	5 S	2307	2307.4	1	2	0.5		MR
	720 SYDN	45 C	0009	0013	12				
	1400 SYDN	45 C	0010	0018	11				
	9400 TYKW	5 S	0015.5	0017.4	4	52	16		06R
	9400 TYKW	29 PBI	0019.5		20	8	5		
	1420 BOUL	3 S	0015.5	0017	5.5	208	49		
	2695 BOUL	3 S	0015	0019	6.5	102	35		
	1415 MANI	4 S/F	0016.5	0017.4	14.5	210	88.5		
	606 MANI	4 S/F	0016.5	0018.7	6.5	33.6	6		
	2695 MANI	4 S/F	0016.5	0018	11.4	94	28.8		
	8800 MANI	4 S/F	0016.5	0018	8.5	38.4	16.7		
	4995 MANI	4 S/F	0016.5	0018	8.5	69	24.8		
	500 HIRA	45 C	0016.8	0017.7	4.3	95	23		
	1000 TYKW	45 C	0016	0018	5	57	15		HR/06L
	1000 TYKW	29 PBI	0021		25	1.8	0.7		
	3750 TYKW	5 S	0016	0017.6	4	78	28		20R
	3750 TYKW	29 PBI	0020		40	5	2		
	2000 TYKW	45 C	0016	0017.9	5	72	20		04L/10R/10L
	2000 TYKW	29 PBI	0021		70	4	1.3		
	4995 BOUL	8 S	0016	0017	4	51	20		
	2695 PENT	3 S	0016	0017.6	5	105	26.2		
	2695 PENT	29 PBI	0021	0021	31	5	2.5		
	500 HIRA	27 RF	0021.2	0025.5	49	6	2		
	200 HIRA	27 RF	0036	0057	75	60	10		0
	100 HIRA	27 RF	0048	0055	17	10	4		0
	100 HIRA	45 C	0056.8	0057	1	45	20		WL
	3750 TYKW	5 S	0112	0113	8	2	1		OR,296090F
	9400 TYKW	32 ABS	0210	0325	180	-9	-4		
	3750 TYKW	32 ABS	0220	0420	200	-7	-3		296090F
	2000 TYKW	32 ABS	0250	0440	190	-4	-2		
	720 SYDN	45 C	0305.6	0306	0.8				
	500 HIRA	5 S	0306	0306.3	0.6	30	20		
	1400 SYDN	2 S/F	0306.2	0306.3	0.3				
	606 MANI	8 S	0306.2	0306.6	1.1	127	28.4		
	1415 MANI	1 S	0306.5	0306.8	.8	2.2	1.1		
	2000 TYKW	5 S	0306	0306.4	1	6	1.2		50R
	500 HIRA	5 ES	0336.7	0336.7	0.5	47	20		
	606 MANI	8 S	0336.8	0337.1	.9	36.2	7.1		
	720 SYDN	45 C	0356.3	0357.2	3.3				
	1400 SYDN	1 S	0356.5	0357.3	1.3				
	3750 TYKW	5 S	0356.5	0357.1	1.5	2	1		OL,296090F
	100 HIRA	45 C	0356.5	0357	1.5	120	50		WL
	2000 TYKW	5 S	0356.5	0357.5	1.5	7	2.5		50R
	500 HIRA	45 C	0356.8	0357.5	1	70	20		
	200 HIRA	43 NS	0444	0711	246 0	20	10		SL
	100 GORK	44 NS	0500 E		490 0		20		
	200 GORK	44 NS	0500 E		240 0		20		
	250 ONDR	44 NS	0700 E		488 0	7			
	240 KIEL	44 NS	0706 E	0937	594 0	50	15		
	127 TORN	44 NS	0740 E		440 0				
	160 DHIN	44 NS	0845 E	0900	375 0	70	8		
	250 DHIN	44 NS	0845 E	0915	375 0	20	3		
	169 DHIN	44 NS	0845 E	0900	375 0	70	10		
	200 GORK	44 NS	1000		180		5		
	245 SGMR	44 NS	1043 E	1835.5	733 0	119.9			
	405 KIEL	44 NS	1300	1622	240	65	40		
	410 SGHR	43 NS	1659	1808.6	186	16.7			
	720 SYDN	45 C	0513.6	0514	1.4				
	2000 TYKW	5 S	0513.7	0513.9	0.5	2.5	0.8		50R
	1400 SYDN	2 S/F	0513.8	0514	0.3				
	650 GORK	40 F	0550.7	0552.4	5.6	5.5			
	950 GORK	4 SF	0552.4	0552.5	0.3	9.6	5		
	650 GORK	40 F	0731	0831.9	4.6	4.4	2		
	536 ONDR	2 S/F	0831.6	0831.6	3	25	6		
	9100 GORK	1 S	1059.2	1100.5	4.8	10.7	5.3		
	9240 ARCE	20	1123	1124.1	39				
	536 ONDR	8 S	1233.3	1233.3	1	12	4.2		
	2800 OTTA	21 GRF	1550	1700	110	1.2	0.7		
	7000 SAOP	1	1654.2	1654.8	2.5	9.4	4.8		0LOF
	9240 ARCE	1	1654.2	1654.8	1				
	2800 OTTA	1 S	1659	1659.2	1	0.8	0.4		
	2800 OTTA	21 GRF	1742	1803	65	1	0.5		
	18 NCMA	6 S	1754	1756	3				
	18 NCMA	6 S	1813	1814	2				
	2800 OTTA	8 S	1817.8	1817.8	0.5	0.4	0.2		

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			UT	UT	MINUTES	PEAK	MEAN		
	1420 BOUL	8 S	1834	1835	1.5	5	2		
	7000 SAOP	1	1835.1E	1835.8U	1 U	5.9	3.1		OLOF
	2695 SGMR	1 S	1835.3	1835.7	1.1	7.4	2.2		
	2800 OTTA	28 PRE	1834.3	1834.5	1	0.4			
	2800 OTTA	1 S	1835.3	1835.7	2.5	7	1.8		
	1415 SGMR	1 S	1835.4	1835.7	2.6	7.1	2.1		
	4995 SGMR	1 S	1835.5	1835.6	.8	3.9	1.2		
	8800 SGMR	1 S	1835.6	1835.8	.5	1.4	.4		
	15400 SGMR	1 S	1835.7	1835.8	.2	4.9	1.5		
	4995 BOUL	8 S	1835	1835.5	1	9	3		
	7000 SAOP	40	1836.1		2				
	2695 BOUL	8 S	1836	1836.5	1.5	6	2		
	2800 OTTA	20 GRF	1850	1908	50	1	0.5		
	500 HIRA	45 C	2042.8	2042.9U	0.5U	3900 U	780 U		
	18 HCHA	6 S	2146	2147	2				
	2000 TYKW	5 S	2217.8	2218.2	1	3	1		SR
	2800 OTTA	1 S	2217.8	2218	1	1	0.7		
	1420 BOUL	1 S	2219	2220	1.5	2	1		
	2800 OTTA	2 S/F	2220	2220.6	1	3.8	1.8		
	3750 TYKW	5 S	2220	2220.4	1	2	1		OL
	9400 TYKW	5 S	2220	2220.4	1	10	3		OL
	2000 TYKW	5 S	2220	2220.5	2	7	2		25R
	1000 TYKW	5 S	2220	2220.4	1.5	1.1	0.3		OR
25	1400 SYDN	45 C	0015.4	0018.7	6.5				
	606 HANI	4 S/F	0015.5	0018.3	6.8	59	9.1		
	720 SYDN	47 GB	0016.1	0017.8	4				
	9400 TYKW	5 S	0016	0018.6	8	54	8		OR
	2695 HANI	4 S/F	0017.7	0018.7	3.5	37.8	17.6		
	8800 HANI	4 S/F	0017.7	0018.6	2.8	37.2	16.9		
	4995 HANI	3 S	0017.8	0018.7	2.7	24.5	11.5		
	1420 BOUL	8 S	0017	0018.5	7.5	22	8		
	4995 BOUL	8 S	0017	0018	3	26	9		
	1415 HANI	4 S/F	0018	0018.7	4.1	34.7	16.8		
	606 HANI	8 S	0018.1	0018.2	.4	2600	995		
	500 HIRA	45 C	0018.1	0018.3	1	350	80		
	1000 TYKW	28 PRE	0016	0016.9	2	1.1	0.2		
	1000 TYKW	45 C	0018	0019.2	6	88	7		05R
	3750 TYKW	5 S	0018	0018.6	4	39	10		20R
	2000 TYKW	28 PRE	0016	0016.7	2	1.2	0.3		
	2000 TYKW	5 S	0018	0018.7	6	38	7		10L
	2695 PENT	28 PRE	0016.3	0016.9	1.7	1.2			
	2695 PENT	3 S	0018	0018.7	2.5	44	15		
	2695 PENT	29 PBI	0020.5	0020.5	5	3.2	1.4		
	2695 BOUL	8 S	0019	0019.5	4	43	18		
	100 HIRA	45 C	0038	0038.8	1.5	50	15		SL
	2695 PENT	2 S/F	0038.2	0039	1.5	3	1.2		
	720 SYDN	4 S/F	0038.3	0038.4	0.8				
	1400 SYDN	2 S/F	0038.7	0039	0.4				
	2000 TYKW	5 S	0038	0038.9	2	4	1		OR
	3750 TYKW	5 S	0038	0038.9	2	3	1		OL
	1000 TYKW	45 C	0038	0038.3	2	1.1	0.3		OR
	1400 SYDN	2 S/F	0057.8	0058.2	0.8				
	720 SYDN	8 S	0058.2	0058.3	0.7				
	1000 TYKW	45 C	0058	0059.2	1.5	45	6		06R
	2000 TYKW	45 C	0058	0058.4	1.5	0.8	0.3		OR
	3750 TYKW	5 S	0058	0058.5	1.5	1.5	0.5		OL
	3750 TYKW	5 S	0128	0129	10	2	1		OL, 116092F
	3750 TYKW	45 C	0222	0222.6	10	5	1.5		OL
	200 HIRA	27 RF	0222	0423	240	100	20		O
	100 HIRA	43 NS	0318	0423	332 D	250	42		WLO
	100 GORK	44 NS	0509 E		475 D		15		
	200 GORK	44 NS	0506 E		444 D		5		
	405 KIEL	44 NS	0700 E	1104	600	65	35		
	240 KIEL	44 NS	0700 E	0732	600	60	25		
	260 ONDR	44 NS	0700 E	1228.7	540 D	101	14		
	127 TORH	44 NS	0740 E		440 D				
	250 OWIN	44 NS	1020 E	1240	270 D	190	8		
	169 OWIN	44 NS	1020 E	1240	270 D	150 D	3		
	160 OWIN	44 NS	1020 E	1240	270 D	150 D	2		
	245 SGMR	44 NS	1042 E	1229.2	735 D	108.4			
	410 SGMR	44 NS	1042 E	1224.5	546 D	75.4			
	228 HARS	44 NS	1141 E	1230 U	134	105	55		
	606 SGMR	43 NS	1346.9	1429.3	346.6	46.6			
	2695 HANI	2 S/F	0357.4	0358.5	2.6	3.3	.7		
	8800 HANI	4 S/F	0357.6	0358.4	2.4	17.5	5.3		
	4995 HANI	4 S/F	0357.6	0358.6	2.4	10.4	3		
	3750 TYKW	21 GRF	0357	0440	243 D	5	2 D		116092F
	9400 TYKW	45 C	0357	0358.3	15	24	6		OL
	3750 TYKW	45 C	0357	0358.4	12	16	4		116092F
	9400 TYKW	21 GRF	0357	0500	243 D	8	5 D		OL
	2000 TYKW	5 S	0358	0401.8	8	1.3	0.6		OR
	2000 TYKW	21 GRF	0358	0540	242 D	2	1 D		OR
	500 HIRA	45 C	0359	0400.6	2	40	8		
	1000 TYKW	45 C	0425	0428.6	10	2.8	0.7		40R

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MAR 1976	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		
25	2000 TYKW	5 S	0519	0519.8	2	1	0.3		OR
	3750 TYKW	5 S	0519	0519.7	10	4	1		
	9400 TYKW	5 S	0519	0519.5	2	3	1		OL
	950 GORK		0557.8E		5.2				
	650 GORK	4 S/F	0600.9	0601.8	2.2	9.7			
	9100 GORK	1 S	0608	0608.5	2	15.8	7.9		
	650 GORK	4 S/F	0610.4	0611.6	3	56	7		
	606 MANI	40 F	0610.4	0611.7	3.7	10.9	12.5		
	950 GORK	1 S	0611.2	0611.7	2.2	2.5			
	4995 MANI	1 S	0611.6	0611.8	.9	3	1.5		
	8800 MANI	1 S	0611.6	0611.8	1.8	7	1.8		
	2695 MANI	3 S	0611.6	0611.8	1.5	11.9	5.3		
	1415 MANI	1 S	0611.6	0611.9	1	2.7	.5		
	1000 TYKW	5 S	0611	0611.7	3	4	1		OR
	9400 TYKW	5 S	0611	0611.7	3	11	3		27L
	3750 TYKW	5 S	0611	0611.7	3	12	2.5		
	9100 GORK	21 GRF	0621	0758.5	225	9.9	4.1		
	1470 POTS	4	0702	0705	8.5	25	9.2		
	808 ONDR	45 C	0702.3	0704.3	4	52	11		SUNRISE
	3000 POTS	4	0702.5	0705	5.5	22	8.4		
	9500 POTS	1	0702.5	0704	11	10	3.9		
	1415 MANI	4 S/F	0702.6	0705.2	4.6	21.2	8		
	2695 MANI	4 S/F	0702.7	0705.3	4.5	21.8	7.9		
	9100 GORK	2 SF	0703	0704.7	4	17	8.5		
	650 GORK	40 F	0703.3	0703.4	3	8			
	606 MANI	4 S/F	0703.5	0705.2	3.2	23	3.1		
	1000 TYKW	45 C	0703	0703.9	4	87	9		05R
	2000 TYKW	45 C	0703	0705.3	5	21	7		03L
	2000 TYKW	29 PBI	0708		15	2.6	1		
	3750 TYKW	45 C	0703	0705.3	5	17	6		
	3750 TYKW	29 PBI	0708		10	2	1		
	9400 TYKW	5 S	0703	0704.2	3	11	5		OL
	9400 TYKW	29 PBI	0706		15	2	1		
	950 GORK	46 C	0704.2E	0704.8	2.7	22			
	950 GORK		0704.2E	0705.6		19			
	2950 GORK	1 S	0704.9	0705.9	3.60	15			
	536 ONDR	8 S	0705.4	0705.4	1.5	20	2.8		
	1000 TYKW	45 C	0735.9	0736.2	0.7	17	4		OR
	950 GORK	1 S	0848.1	0848.3	0.4	2.7			
	100 GORK	41 F	1022.1	1023.5	11	20			
	100 GORK		1022.1	1031.6		20			
	9240 ARCE	22	1037.4U	1220.7	306 U				
	9240 ARCE		1037.4U	1220.7	151 U				
	9100 GORK	23 GRF	1051.5	1236	240 0	32.8	4.2		
	7000 SAOP	1	1109.2	1109.6	1.1	4.4	2.2		BLOF
	9500 POTS	21	1125	1251	200	17			
	510 POTS	45	1130	1316.5	146	220			
	7000 SAOP	21	1132.7	1220.4	170.6	134.4			BLOF
	3000 POTS	21	1133	1300	187	8.1			
	4995 SGMR	22 GRF	1134.9	1139.4	10.3	11.9	7.1		
	8800 SGMR	4 S/F	1135.3	1138.7	6.7	15.6	4.7		
	9500 POTS	3	1135.5	1139	5	14			
	2695 SGMR	2 S/F	1135.7	1139.4	6.4	7.3	2.2		
	1415 SGMR	1 S	1136	1139.4	5.7	.4	.1		
	3000 POTS	3	1136.5	1139.3	4	8.6			
	234 POTS	45	1136	1315	204 0	100			
	15400 SGMR	2 S/F	1137	1138.9	3.2	9	2.7		
	9100 GORK	1 S	1137	1138	3.5	14.2	7		
	7800 SAOP	2	1137.2	1138.1	3.6	12	6.4		BLOF
	950 GORK	23 GRF	1137.5	1318.7U	202 0	86			
	650 GORK	40 F	1137.5	1139.4	12.8	5.4			
	1470 POTS	1	1137	1137.8	2.5	1.5			
	536 ONDR	49 GB	1138.5	1316.3	116	306	35		
	536 ONDR			1152.3		36			
	536 ONDR			1220.8		39			
	536 ONDR	29 PBI	1334	1431	146	57	20		
	606 SGMR	3 S	1139.2	1139.3	.3	10.9	3.3		
	800 KIEL	46 C	1140	1224.5	87	70	30		MR
	602 KIEL	46 C	1140	1221	86	20	15		MR
	405 KIEL	46 C	1140	1225	86	80	65		MR
	240 KIEL	46 C	1140	1315	200	260	100		MR
	200 GORK	27 RF	1145	1220.3	64.7	250			
	160 DWIN	27 RF	1145	1240	150	150 0	100		
	250 DWIN	27 RF	1145	1240	150	190	100		
	169 DWIN	27 RF	1145	1240	150	150 0	100		
	260 ONDR	49 GB	1145	1228.7	120	101	34		
	606 SGMR	22 GRF	1147.7	1220.8	66.3	37.6	22.6		
	8800 SGMR	22 GRF	1148.7	1220.2	61.6	72.7	43.6		
	2695 SGMR	22 S/F	1149	1220.6	66.3	110	33		
	1415 SGMR	46 C	1149.1	1214.2	64.3	110	33		
	1415 SGMR	46 C		1215.5		94.2			
	1415 SGMR	46 C		1216.8		95.5			
	4995 SGMR	22 GRF	1149.4	1220.5	58.8	90.4	54.3		
	15400 SGMR	22 GRF	1150.2	1220.3	59.6	62.7	37.6		
	2950 GORK	21 GRF	1150.4	1318.5	152 U	79	32		

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			UT	UT	MINUTES	PEAK	MEAN		
25	650 GORK	23 GRF	1150.5	1214.8	189 0	14.5			
	3000 POTS	4	1150	1152.5	5.5	10			
	1470 POTS	4	1151 U	1216.5	55	83			
	113 POTS	45	1151	1350	189 0	56			
	100 GORK	6 S	1154.4	1154.6	0.9	20			
	9400 HUAN	20	1156	1157.4	4.5	16.8	5.6		0
	9100 GORK	1 S	1156.3	1157	3	11.4	5.7		
	9500 POTS	3	1156	1157	4	17			
	7000 SAOP	1	1158.9	1159.9	2.6	6.8	3.4		BLOF
	127 TORN	25 R	1159.5	1241.5	138 0	240	110		
	808 ONDR	49 GB	1200	1316	96	450	100		
	808 ONDR			1218.8		65			
	808 ONDR			1238		50			
	808 ONDR	29 PBI	1335.5		115	35	10		
	930 BORD	45 C	1200		152	130 D			
	1420 KIEL	46 C	1200	1214	48	210	90		MR
	1030 KIEL	46 C	1200	1229	60	110	60		MR
	100 GORK	27 RF	1201.3	1301	160	360	110		
	3000 POTS	4	1206.2	1220	48	86			
	9400 HUAN	22	1207.8	1220.1	35.2	72.5	19.5		28L
	9100 GORK	46 C	1208.5	1220	27.8	91			
	9100 GORK		1208.5	1224.3		61			
	7000 SAOP	21	1209	1220.4	115.2	131			BLOF
	950 GORK	46 C	1214	1228.8	40	160			
	950 GORK		1214	1232.7		129			
	950 GORK		1214	1239.5		66			
	2950 GORK	45 C	1214.4	1220.6	18.6	98	47		
	2950 GORK		1214.4	1225.6		62			
	7000 SAOP	1	1214.8		20.4	84.4	44.8		BLOF
	9500 POTS	4	1214	1220	30	60			
	650 GORK	46 C	1215.5	1220.8	11.8	25			
	650 GORK		1215.5	1223.7		27			
	7000 SAOP	3	1217.2	1220.4	5.5	43.1	25.8		BLOF
	2800 OTTA		1231		16 0	31			
	2800 OTTA	30 PBI	1247	1247	262	12.4	6.2		
	650 GORK	46 C	1235.2	1237.7	7.7	18			
	650 GORK		1235.2	1240		11			
	2695 BOUL	45 C	1256.5E	1319	46 0	88	20		
	4995 BOUL	45 C	1257.5E	1319	35 0	38	9		
	606 SGMR	47 GB	1259.5	1310.6	47.4	286.1	247.5		
	606 SGMR	47 GB		1317		825			
	245 SGMR	6 S	1301.2	1314.3	39.8	80.9	24.3		
	1420 BOUL	45 C	1301.5E	1320.5	34 0	67	19		
	410 SGMR	49 GB	1302.2	1316.7	42.5	515.2	213.6		
	410 SGMR	49 GB		1317		712.1			
	650 GORK	1 S	1302.8	1304.5	3.5	18	9		
	602 KIEL	47 GB	1307	1317	39	460	95		MR
	405 KIEL	47 GB	1307	1317	36	490	100		MR
	2695 SGMR	46 C	1308.2	1317.9	43.8	119.7	35.9		
	2695 SGMR	46 C		1320.6		84.3			
	2800 OTTA	4 S/F	1308.5	1317.5	39.5	96	29		
	950 GORK	46 C	1308.5	1316.9	24.5	388			
	950 GORK		1308.5	1327.6		140			
	950 GORK		1308.5	1320.2		182			
	650 GORK	47 GB	1308.6	1317.1	18.6	854			
4995 SGMR	22 GRF	1308.8	1319.5	36	56.1	33.7			
1030 KIEL	47 GB	1308	1317	40	140	80		MR	
800 KIEL	47 GB	1308	1317	39	480	110		MR	
1420 KIEL	47 GB	1308	1318	40	220	90		MR	
1470 POTS	4	1308	1317.5	40	118				
3000 POTS	4	1308	1317.8	42	95 U				
510 POTS	45	1308	1316.5	30	220				
9240 ARCE		1309	1320.7	155					
7000 SAOP	4	1310.1	1310.7	3.2	25.8	17.2		BLOF	
8800 SGMR	22 GRF	1310.2	1320.5	34.3	35	21			
1415 SGMR	46 C	1310.6	1317.8	37.8	74.1	22.8			
1415 SGMR	46 C		1320.5		76.2				
15400 SGMR	20 GRF	1313	1321.1	31.2	21.8	13.1			
7000 SAOP	20	1313.3		29.5	80.1	44.4		BLOF	
9400 HUAN	20	1314.7	1320.6	31.5	44	10.7		20L	
2950 GORK	4 S/F	1315	1317.8	3.5	130 D				
9100 GORK	3	1315	1320.5	17	48	21			
9500 POTS	3	1315	1320	25	40				
950 GORK	3 S	1349.2	1351	5.2	40	20			
650 GORK		1419.6	1429		22				
650 GORK	46 C	1419.6	1421.8	13.9	13.8				
2800 OTTA	23 GRF	1710	1725	80	2.2	1.1			
2800 OTTA	1 S	1714.8	1715.7	1.5	2	1			
1420 BOUL	8 S	1714	1715	2	4	1			
18 MCMA	6 S	1715	1716	1					
2695 BOUL	45 C	1716	1720.5	6.5	7	2			
1420 BOUL	8 S	1717	1718.5	2	4	1			
2800 OTTA	1 S	1718	1719.1	2	5.8	1.5			
1420 BOUL	45 C	1727.5	1729	3	6	2			
245 SGMR	6 S	1828.1	1828.2	.4	8.4	2.5			

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MAR 1976	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		
25	1415 SGMR	1 S	1828.1	1828.1	.2	1.3	.4		
	410 SGMR	6 S	1828.2	1828.3	.2	1.8	.5		
	606 SGMR	3 S	1828.2	1828.2	.1	17.6	5.3		
	2900 OTTA	20 GRF	1845	1915	85	1.6	0.8		
	18 MCMA	6 S	2014	2015	1				
	2800 OTTA	8 S	2041.7	2041.7	0.1D	1.6			
	8800 SGMR	3 S	2055	2055.2	2.1	18.2	5.5		
	15400 SGMR	3 S	2055	2055.3	3.8	56	16.8		
	18 MCMA	42 SER	2142	2204	83				
	1400 SYDN	45 C	2211.1	2211.1	2.8				
	720 SYDN	45 C	2211.2	2212.1	1.5				
	2800 OTTA	20 GRF	2211	2213	30	1.4	0.7		
	2695 PENT	240 R	2230	2305	35	2	1		
	2695 PENT	24P R	2305		150	2			
	100 HIRA	45 C	2318	2318.4	1	110	30		
	9400 TYKW	45 C	2327.5	2331.7	6	13	5		0
	100 HIRA	45 C	2327.7	2328.3	1	120	60		OL
	1420 BOUL	45 C	2328	2331	6.5	4	1		0
	1415 HANI	4 S/F	2330	2331.7	2.2	13.2	4.2		
	1000 TYKW	45 C	2330	2331.7	3	12	2		
	2000 TYKW	5 S	2330	2332	3	2	1		OR
	720 SYDN	45 C	2331.1	2331.7	1				OR
	1400 SYDN	45 C	2331.2	2331.8	0.8				
	606 HANI	2 S/F	2330.9	2331.6	2.3	5.7	1.5		
	26	2000 TYKW	45 C	0000	0001.6	4	2	0.7	
3750 TYKW		45 C	0000	0002.7	4	2	1		OL
2695 PENT		20 GRF	0000	0035	80	2	1		
1400 SYDN		45 C	0001	0001.7	1.6				
1000 TYKW		40 F	0006	0006.2	0.3	8	2		OR
9400 TYKW		5 S	0033.5	0034.4	5	20	7		4OL
8800 HANI		1 S	0034.3	0034.6	5.2	10.1	3.4		
200 HIRA		43 NS	0040	0607	490 D	40	10		HL
500 HIRA		24 R	0137	0211	440 D	10	3		
9400 TYKW		5 S	0142	0147	20	3	1		OL
3750 TYKW		5 S	0142	0147	35	1.5	0.5		OL, 116084F
720 SYDN		8 S	0157.6	0157.7	0.3				
100 HIRA		45 C	0304.5	0304.6	2	50	20		0
100 HIRA		45 C	0307.7	0308.5	2	120	40		0
100 HIRA		45 C	0314	0316.3	3	230	70		WRHL
2000 TYKW		5 S	0406	0406.4	1	0.7	0.2		OR
3750 TYKW		5 S	0406	0406.3	1	2	0.5		116084F
8800 HANI		4 S/F	0413.4	0414.3	1.8	16.1	3.6		
4995 HANI		2 S/F	0413.4	0414.3	1.8	4.8	1.2		
2695 HANI		2 S/F	0413.4	0414.3	1.7	3.8	1.3		
1415 HANI		1 S	0413.6	0414.3	1.9	.5	.3		
606 HANI		2 S/F	0413.7	0414.4	1.5	6.9	2.1		
1000 TYKW		45 C	0413.7	0414.3	1.5	1.3	0.3		OR
500 HIRA		45 C	0413.7	0414.4	1	35	12		
3750 TYKW		5 S	0413	0414.2	4	6	1		116084F
100 HIRA		45 C	0414	0414.1	1	1300 D	300 D		HL
2000 TYKW		45 C	0414	0414.3	3	1.8	0.4		OR
9400 TYKW		5 S	0416.5	0416.7	0.8	11	4		OL
200 GORK		44 NS	0451	E	489 D		10		
100 GORK		44 NS	0454	E	486 D		10		
260 ONDR		44 NS	0700	E	490 D	104	10		
240 KIEL		44 NS	0704	E	596	800	100		
405 KIEL		44 NS	0704	E	596	95	40		
127 TORN		44 NS	0740	E	440 D				
169 DWIN		44 NS	0820	E	340 D		20		
160 DWIN		44 NS	0820	E	340 D		15		
259 DWIN		44 NS	0820	E	340 D		35		
250 DWIN		44 NS	0820	E	340 D		30		
410 SGMR		44 NS	1040	E	739 D	185.8			
245 SGMR		44 NS	1040	E	739 D	135.8			
606 SGMR		43 NS	1400	E	539 D	9.4			
100 HIRA		44 NS	2040	E	730 D	800	90		SR
200 HIRA		44 NS	2040	E	730 D	110	40		SL
650 GORK		22 GRF	0515.9	0528.4	43 D	5.3	3.1		
9100 GORK		2 SF	0542.5	0543.8	4	6	3		
100 HIRA		45 C	0605.9	0606.1	1	240	100		HL
100 GORK		41 F	0628.4	0629.1U	2.6	25			
100 GORK			0628.4	0630.7		25 D			
9800 HANI		3 S	0656.1	0657.6	3.3	39.4	16.1		
2695 HANI		1 S	0656.1	0657.8	3.7	3.8	1.3		
1416 HANI		1 S	0656.1	0657.6	3.3	2.1	1.1		
9100 GORK		21 GRF	0656.3	0724.3	259	10.8	5.2		
4995 HANI		3 S	0656.4	0657.6	3.6	15.7	8.5		
606 HANI		2 S/F	0656.9	0659.3	4.2	3.2	1.1		
3750 TYKW		45 C	0656	0658.9	9	10	3		
3750 TYKW	29 PBI	0705		14	2	2			
9400 TYKW	45 C	0656	0657.6	6	18	9		20L	
9400 TYKW	29 PBI	0702		17	7	5			
9100 GORK	2 S	0657	0658.2	3.2	19.5				
2000 TYKW	45 C	0717	0720.7	7	12	3		07L	

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			UT	UT	MINUTES	PEAK	MEAN		
26	2000 TYKM	29 PBI	0724		36 D	2	2 D		
	3000 POTS	4	0718.5	0720.4	22	30 U	8.9U		
	8800 MANI	4 S/F	0719.3	0720.7	7.1	220	63		
	4995 MANI	4 S/F	0719.5	0720.7	6	85	30.3		
	9100 GORK	4 SF	0719.5	0720.3	5.8	206			
	1415 MANI	1 S	0719.6	0720.7	3.6	4.2	1.1		
	2695 MANI	4 S/F	0719.6	0720.7	4.2	27.7	9.5		
	2950 GORK	3 S	0719.8	0720.8	1.2D	18			
	1470 POTS	2	0719	0720.5	5	4.4	1.2		
	9500 POTS	4	0719	0719.8	20	147	58		
	9400 TYKM	45 C	0719	0720.7	7	200	40		20L
	9400 TYKM	29 PBI	0726		34 D	14	9 D		
	3750 TYKM	45 C	0719	0720.7	7	55	13		
	3750 TYKM	29 PBI	0726		34 D	5	4 D		
	606 MANI	2 S/F	0720.1	0721.4	2.9	1.6	.5		
	650 GORK	1 S	0721.2	0721.3	1.8	2.2	1.1		
	9100 GORK	2 SF	0757	0757.5	7.3	9.3	4.4		
	9240 ARCE	20	0819.7	0822	11.5				
	2950 GORK	20 GRF	0834.9	0836.9	10.1	7	3		
	9240 ARCE	21	0835.1	0908.1	84				
	950 GORK	20 GRF	0835.8	0836.8	16.7	5.5	2.5		
	9240 ARCE	1	0836.4	0837.6	2				
	9100 GORK	1 S	0836.5	0837.5	1.8	6.5	3.2		
	650 GORK	23 GRF	0836.7	0850.4	16.6	2.3	1.2		
	200 GORK	4 S/F	0837.2	0838.3	2.2	300			
	650 GORK	4 S/F	0838.8	0839.4	1.3	5.5	2.8		
	650 GORK	4 S/F	0846.9	0847.4	1	5.1	2.6		
	9500 POTS	1	0855.5	0856.8	5.5	6.5			
	9100 GORK	1 S	0856.3	0857	3.3	6.5	3.2		
	9240 ARCE	1	0856.7	0857.2	3.4				
	950 GORK	1 S	0914.2	0915.9	5.1	1.7			
	100 GORK	6 S	0933.1	0933.9U	1.1	350 G			
	200 GORK	8 S	0933.2	0933.3	0.4	280	140		
	113 POTS	40	0933.2	0933.2	0.8	3000	120		
	9100 GORK	1 S	0940.3	0942	5.5	6.5	3.2		
	100 GORK	41 F	1034.4	1036.3U	13.2	20 D			
	100 GORK		1034.4	1040.9U		20 D			
	100 GORK		1034.4	1046 U		20 D			
	9240 ARCE		1036.5	1041.1	9.5				
	9240 ARCE	45	1036.5	1047.3	20				
	408 TRST	42	1037.8	1039.6	2.3	48			
	808 ONDR	8 S	1038.6	1038.6	0.3	22			
	536 ONDR	4 S/F	1038.8	1038.8	2	15	3.5		
	950 GORK	3 S	1038.9	1039.1	0.4	36	18		
	650 GORK	1 S	1039	1039.1	0.4	23	8.7		
	9100 GORK	1 S	1046	1047.8	3	8.9	4.4		
	9240 ARCE		1046	1047.3	10.5				
	113 POTS	45	1047.1	1047.1	0.1	200	40		
	100 GORK	27 SF	1048.9	1100 U	48.2	350 D			
	100 GORK	41 F	1112.8	1113.2	1.5	350			
100 GORK	41 F	1141.2	1141.4	2.8	350				
100 GORK		1141.2	1143.7		320				
113 POTS	45	1146.5	1146.5	0.1	300	100			
2800 OTTA	21 GRF	1240	1340	170	1	0.5			
113 POTS	45	1241.4	1241.4	0.1	175	40			
9240 ARCE	22	1254.7U	1309.8	33.5					
113 POTS	40	1329	1329.2	0.4	2400	200			
113 POTS	40	1339.8	1340.6	1.9	6000	600			
234 POTS	40	1339	1340.6	1.9	650	3			
113 POTS	40	1351.5	1351.6	0.1	420	40			
113 POTS	45	1406.5	1406.6	0.2	200	20			
9500 POTS	4	1438.5	1443.2	14	105	25			
1420 BOUL	45 C	1438.5	1443.5	7	44	13			
1470 POTS	4	1439	1444	8	44	12			
2695 SGHR	4 S/F	1439.1	1443.6	19.3	46.1	13.8			
15400 SGHR	4 S/F	1439.2	1444	13.9	79.2	23.8			
9400 HUAN	28	1439.2	1441.2	3.7	45.3	14		23L	
7000 SAOP	28	1439.2		1.5U	7	7			
245 SGHR	6 S	1439.2	1439.8	7.5	43.5	13.1			
8800 SGHR	4 S/F	1439.3	1443.5	20.1	118.2	35.5			
606 SGHR	46 C	1439.3	1444.4	6.9	45.1	13.5			
606 SGHR	46 C		1444.7		42				
9240 ARCE		1439.3	1441.3	3.1					
9240 ARCE	46	1439.3	1443.7	9.1					
1415 SGHR	46 C	1439.5	1443.2	11.6	30.1	21.5			
1415 SGHR	46 C		1443.9		71.7				
3000 POTS	4	1440.5	1443.7	15	43 U	15 U			
2800 OTTA	4 S/F	1440.7	1443.5	12.3	45	7			
2800 OTTA	29 PBI	1453	1453	12	1.8	0.9			
7000 SAOP	46	1440.7U	1443.5	5.5U	219.3	86.6		8LOF	
4995 SGHR	4 S/F	1440.8	1443.3	28	106.9	32.1			
4995 BOUL	45 C	1440	1443	5.5	77	30			
536 ONDR	46 C	1441.5	1449.3	5	32	10.4			
2695 BOUL	45 C	1441.5	1444.5	6.5	35	12			
410 SGHR	6 S	1441.9	1444.5	4.1	17.6	5.1			

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MAR 1976	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		
	808 ONDR	45 C	1441	1444.4	5	34	6.4		
	930 BORD	45 C	1441	1444.5	5	130 D			
	9240 ARCE		1442.4	1443.7	6				
	9400 HUAN	45	1442.9	1443.7	2.5	132.1	66.9		40L
	18 MCHA	6 S	1444	1445	2				
	9400 HUAN	29	1445.4	1445.4	9.9	28.9	10.9	1	12L
	7000 SAOP	29	1446.2		12.2		9.5		8LOF
	9240 ARCE	29	1448.4		18.5				
	9240 ARCE	22	1508.6	1520	31.4				
	8800 SGHR	1 S	1518.7	1519.2	3.9	7.8	2.3		
	2695 SGHR	1 S	1519.4	1519.9	1	2.6	.8		
	1415 SGHR	2 S/F	1519.6	1521	7.6	6.3	1.9		
	4995 SGHR	1 S	1519.7	1519.8	3.2	4.8	1.4		
	606 SGHR	2 S/F	1519.7	1519.8	.5	2.8	.8		
	2800 OTTA	1 S	1519.8	1520	1	0.6	0.3		
	2800 OTTA	21 GRF	1530	1830	570	9.8	4.9		
	2800 OTTA	1 S	1704.5	1706.7	5.5	1.8	1.2		
	7000 SAOP	20	1712.6		2.4		2.8		
	2800 OTTA	1 S	1717.5	1718	1.5	1	0.5		
	7000 SAOP	20	1719.6		2.6		4.6		BLOF
	7000 SAOP	22	1722.2		13.4		4.6		
	1000 TYKW	40 F	2359.5	2359.6	1.7	25	1		OR
27	8800 MANI	3 S	0011.5	0011.7	2	16.9	6.8		
	4995 MANI	1 S	0011.5	0011.7	1.3	8.8	2.5		
	4995 MANI	3 S	0021.2	0021.5	.7	25	10		
	9400 TYKW	5 S	0102	0105	15	6	2		OL
	3750 TYKW	5 S	0103	0115	35	2	1		116071F
	3750 TYKW	5 S	0318	0321.5	20	2	1		OL, 116071F
	100 GORK	44 NS	0500	E	390 D	330			
	200 GORK	44 NS	0500	E	390		15		
	240 KIEL	44 NS	0550	E	670	400	70		
	127 TORN	44 NS	0620	E	520 D				
	260 ONDR	44 NS	0712	E	471 D	77	16.8		
	200 HIRA	44 NS	2040	E	730 D	140	50		SL
	100 HIRA	44 NS	2040	E	224 D	50	20		SR
	9100 GORK	3 S	0600.5	0601	7	23	11		
	8800 MANI	3 S	0600.7	0601.3	3.1	15.8	2		
	4995 MANI	1 S	0600.7	0601.3	3.1	7.8	1.1		
	100 GORK	2 SF	0601	0601.6	0.7	330			
	9100 GORK	3 S	0627.3	0628	6.3	14.4	7.2		
	8800 MANI	1 S	0627.5	0628.1	4.1	7.9	2		
	2695 MANI	2 S/F	0627.5	0628.1	4.3	4.4	1.2		
	4995 MANI	2 S/F	0627.5	0628.1	3	5.6	1.1		
	950 GORK	1 S	0627.6	0627.9	1.8	6.1			
	2950 GORK	1 S	0627.6	0628.1	3.3	4.8	1.9		
	3750 TYKW	5 S	0627	0628	11	2	1		OL
	9400 TYKW	5 S	0627	0629	11	9	3		OL
	650 GORK	1 S	0628.8	0629	1.5	1.5	0.8		
	100 GORK	41 F	0632.8	0634	55.2	380			
	100 GORK		0632.8	0655.4		380			
	100 GORK		0632.8	0726.5		380			
	100 HIRA	45 C	0726	0726.4	1.5	500	150		WL
	950 GORK	1 S	1012.1	1012.2	0.4	5.2	2.5		
	950 GORK	1 S	1030.8	1031.7	2.2	2			
	200 GORK	8 S	1031	1031.3	0.9	800			
	9100 GORK	1 S	1031	1031.3	2.3	3.5	1.7		
	650 GORK	1 S	1031.3	1031.5	1.1	1.3	0.6		
	9240 ARCE	22	1031.3	1032.2	16				
	100 GORK	6 S	1036.6	1031.5U	1.3	550 D			
	245 SGMR	44 NS	1038	E	1230	156.9			
	100 GORK	6 S	1054.9	1055.3	1	535			
	536 ONDR	8 S	1115.3	1115.3	0.3	20			
	2800 OTTA	21 GRF	1200	1215	255	7	1.8		
	1030 KIEL	45 C	1200	1204	10	260	90		
	405 KIEL	45 C	1200	1205	12	105	75		
	240 KIEL	45 C	1200	1204	12	300	100		
	2695 SGHR	45 C	1201.2	1203.9	69.9	20.2	10.8		
	2695 SGHR	46 C		1204.9		27			
	808 ONDR	45 C	1201.3	1204	7.5	98	21.7		
	245 SGHR	6 S	1201.3	1204.2	12.7	131.2	26.2		
	9240 ARCE		1201.4	1204	3				
	9240 ARCE	46	1201.4	1207.6	9.2				
	1470 POTS	4	1201.5	1204	21	68			
	4995 SGHR	46 C	1201.6	1204.7	96.6	45.4	18.2		
	4995 SGHR	46 C		1207.5		43.8			
	930 BORD	45 C	1201.8	1207.1	7.2	84	9		
	1415 SGHR	46 C	1201.8	1203.1	77.1	36.7	37.1		
	1415 SGHR	46 C		1203.9		92.7			
	8800 SGHR	46 C	1201.8	1203.7	31.2	41.8	18.4		
	8800 SGHR	46 C		1207.3		46.1			
	3000 POTS	46	1201	1204.9	19 U	24 U			
	9500 POTS	46	1201	1207.2	42	35	8.8		
	900 KIEL	45 C	1201	1204	9	500	95		
	510 POTS	45	1202	1207	10	56	7		

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MAR 1976	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		
27	410 SGMR	6 S	1202	1207.6	6	84	33.6		
	536 ONDR	46 C	1202.5	1207.7	10	67	15.5		
	408 TRST	45	1202.7	1204.8	9	100	15		
	606 SGMR	46 C	1202.7	1203.9	9.2	103.7	41.5		
	606 SGMR	46 C		1207.6		95			
	7000 SAOP	46	1202.7U	1204.4U	5.6U	63 U			BLOF
	1420 KIEL	45 C	1202	1203.5	8	290	140		
	602 KIEL	45 C	1202	1204	8	140	30		
	234 POTS	45	1203.8	1204.9	0.7	120	10		
	2800 OTTA	46F C	1203	1204.6	6	21.2	7.1		
	9240 ARCE			1204.4	2.4				
	9240 ARCE			1206.8	3.8				
	9240 ARCE			1210.6	29.5				
	2800 OTTA	40 F		1217	1219.1	2.5	22.4		
	536 ONDR	8 S		1225.5	1225.5	0.2	18		
	7000 SAOP	1		1325.2	1325.9	2.1	8	2.2	
	18 HCMA	6 S		1344	1345	1			1
	9240 ARCE	22		1352.1	1440.1	114			
	2800 OTTA	21 GRF		1405	1417	70	3.4	1.7	
	536 ONDR	8 S		1405	1405	0.3	22		
	1420 BOUL	8 S		1437.5	1437.5	2	2	1	
	7000 SAOP	21		1437.7	1438.8	12.3	12.6	6.8	
	7000 SAOP	1		1438.4	1438.8	0.9	8.9	4.4	BLOF
	2800 OTTA	1 S		1438.5	1439	3	2.4	0.8	BLOF
	7000 SAOP	2		1439.3	1439.9	1	5.3	2.7	BLOF
	2695 BOUL	1 S		1439	1439.5	1.5	2	1	
	2800 OTTA	27 RF		1750		115	1.2	1.1	
	2800 OTTA	24 R		1750	1800	10	1.2	0.6	
	2800 OTTA	24P R		1850		100	1.2		
	2800 OTTA	26 FAL		1940	1945	5	1.2	0.6	
	2800 OTTA	240 R		1945	2020	35	3	1.5	
	2800 OTTA	24P R		2020		160	3		
	8800 SGMR	4 S/F		2042.8	2043.5	4.2	51.5	15.5	
	4995 BOUL	45 C		2042	2043	6.5	17	4	
	606 SGMR	2 S/F		2043	2044.1	4.1	2.6	.8	
	9400 HUAN	4		2043.2	2043.8	11.1	50.3	10.9	41L
	4995 SGMR	4 S/F		2043.4	2043.6	3.6	10.2	3.1	
	2695 SGMR	2 S/F		2043.4	2043.7	3.7	4.8	1.4	
	2800 OTTA	8 S		2043.5	2043.7	0.5	3.4	0.8	
	1420 BOUL	1 S		2043.5	2044	1	3	1	
	1415 SGMR	4 S/F		2043.6	2046.5	3.7	157	47.1	
	2695 BOUL	8 S		2044.5	2045	1	6	2	
	1420 BOUL	8 S		2045	2046	1.5	84	31	
	2800 OTTA	8 S		2046.1	2046.4	0.6	1.4	0.7	
	18 HCMA	42 SER		2145	2210	26			1
	100 HIRA	45 C		2253	2253.4	1	350	100	HRWL
	2695 PENT	240AR		2300	2345	45	2.4	1.2	
	1420 BOUL	3 S		2326.5	2327.5	1.5	2	1	
	500 HIRA	45 EC		2327	2327	2	18	4	
	100 HIRA	45 C		2327	2327.2	2	850	100	HRWL
1000 TYKW	5 S		2327	2327.8	2	1.3	0.4	HR	
2000 TYKW	5 S		2327	2327.7	3	1.5	0.5	SR	
9400 TYKW	5 S		2327	2327.2	2	10	3	OL	
2695 PENT	1 S		2327	2328	3	2.6	1.3		
2695 BOUL	45 C		2328.5	2329	1	3	1		
2695 PENT	1 S		2340.2	2340.8	2	2.4	1.2		
2695 PENT	24P R		2345		60 D	2.4			
8800 HANI	1 S		2340.2	2340.5	1.3	7.6	1.9		
100 HIRA	45 C		2340.2	2340.5	1.5	1300	250	HRWL	
4995 HANI	1 S		2340.2	2340.5	1.3	7.3	2.4		
1415 HANI	2 S/F		2340.3	2340.4	1.3	5.8	1.2		
2695 HANI	1 S		2340.3	2340.5	1.3	2.5	.6		
1420 BOUL	1 S		2340	2340.5	2	3	1		
1000 TYKW	5 S		2340	2340.8	4	2.1	0.6	OR	
9400 TYKW	5 S		2340	2340.7	3	9	3	20L	
2000 TYKW	5 S		2340	2340.8	4	4	1	20R	
3750 TYKW	5 S		2340	2340.7	3	3	1	20L	
2695 BOUL	2 SF		2341.5	2342	1	3	1		
28	2000 TYKW	21 GRF	0040	0052	65	1.9	0.9		OR
	2695 PENT	20 GRF	0043	0048	40	2.4	1.2		
	3750 TYKW	21 GRF	0044	0050	65	4	1.5		25L,116057F
	9400 TYKW	20 GRF	0044	0100	45	5	2		OL
	3750 TYKW	5 S	0137	0137.5	1.5	3	1		OL,116057F
	2000 TYKW	5 S	0137	0137.5	2	1.9	0.5		
	1800 TYKW	45 C	0137	0137.4	2	2.4	0.8		20R
	9400 TYKW	5 S	0137	0137.4	1	3	1		OL
	1000 TYKW	32 ABS	0200	0320	160	-2	-0.9		
	2000 TYKW	32 ABS	0200	0315	170	-2.7	-1.3		
	3750 TYKW	32 ABS	0210	0315	170	-4	-2		116057F
	9400 TYKW	32 ABS	0215	0300	70	-3	-1		
	100 GORK	44 NS	0457	0457	213 O		10		
	200 GORK	44 NS	0457	0457	39.3		15		
	100 HIRA	43 NS	0549	0609	140 D		25		
	240 KIEL	44 NS	0552	1019	666		340		SL

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MAR 1976	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		
28	127 TORN	44 NS	0640	E	500 D				
	260 ONDR	44 NS	0740	E	440 D	118	17		
	410 SGMR	44 NS	1036	E	745 D	9.2			
	245 SGMR	44 NS	1036	E	745 D	159.5			
	200 HIRA	44 NS	2040	E	730 D	50	10		
	100 HIRA	44 NS	2040	E	730 D	700	60		SL SR
	650 GORK	41 F	0527		0527.9	8.1	5.4		
	650 GORK		0527		0532.5		6.6		
	650 GORK		0527		0534.5		11.9		
	606 MANI	2 S/F	0527.5		0534.6	9.6	9.2	1.6	
	500 HIRA	5 S	0527.8		0527.9	0.3	16	8	
	100 GORK	41 F	0528.5		0529	11.4	700		
	100 GORK		0528.5		0540		380		
	100 GORK		0528.5		0534.6		550		
	8800 MANI	1 S	0528.7		0529	7.6	8.6	2.2	
	2695 MANI	1 S	0528.7		0534.7	8.3	4.9	1.2	
	1415 MANI	1 S	0528.7		0534.7	8.3	2.6	.5	
	4995 MANI	1 S	0528.7		0534.7	8.3	6	1.2	
	200 GORK	8 S	0528.8		0529.1	0.6	1500		
	100 HIRA	45 EC	0528.8		0528.9	0.8	900	250	
	2000 TYKH	21 GRF	0530		0750	150 D	4	2 D	
	950 GORK	41 F	0531.5		0532.1	4	3.7		
	950 GORK		0531.5		0534.6		4.6		
	9100 GORK	1 S	0531.8		0532.5	3.5	8	4	
	500 HIRA	45 C	0534		0534.5	0.7	12	7	
	2950 GORK	1 S	0534.3		0534.7	1.3	3.2	1.5	
	2000 TYKH	5 S	0534.3		0534.7	1.5	1.5	0.5	
	1000 TYKH	5 S	0534		0534.6	2	3	1	
	3750 TYKH	5 S	0534		0534.6	2	5	2	
	100 HIRA	45 C	0539.5		0540	1	120	30	
	8800 MANI	46 C	0550.3		0556.3	24.7	174	43	
	8800 MANI	46 C			0602.2		58		
	4995 MANI	46 C	0550.3		0556.4	25.7	120	32.4	
	4995 MANI	46 C			0602.2		46.8		
	2695 MANI	46 C	0553.4		0556.4	22.6	48.8	18.9	
	2695 MANI	46 C			0602.2		37.8		
	1415 MANI	46 C	0553.4		0602.2	26.6	136	33.3	
	1415 MANI	46 C			0608		78.5		
	606 MANI	46 C	0554		0602.5	26	220	49.1	
	606 MANI	46 C			0608		190		
	9100 GORK	46 C	0554		0556.5	15	139		
	9100 GORK		0554		0602		30		
	9100 GORK		0554		0608		14.5		
	2950 GORK	45 C	0554.5		0556.3	17	47	17.6	
	2950 GORK		0554.5		0602.1		41		
	2950 GORK		0554.5		0608.1		18.6		
	100 GORK	41 F	0554.6		0554.9	4.3	700		
	100 GORK		0554.6		0559.5		700		
	800 KIEL	8 S	0554		0602.5	16	140	50	
	950 GORK	46 C	0555		0555.6	14	35		
950 GORK		0555		0602		273			
950 GORK		0555		0608		220			
950 GORK	29 PBI	0555		0609	12	2			
650 GORK	41 F	0555.1		0555.5	22.5	35			
650 GORK		0555.1		0602.1		187			
650 GORK		0555.1		0607.9		185			
650 GORK		0555.1		0612.9		4.2			
650 GORK		0555.1		0616.8		3.6			
2000 TYKH	45 C	0555		0602.2	17	98	10		
2000 TYKH				0556.3		28			
2000 TYKH				0608		17			
3750 TYKH	28 PRE	0534		0555	21	4	2		
3750 TYKH	45 C	0555		0556.3	17	78	13		
3750 TYKH				0602.2		48			
3750 TYKH				0608		15			
1030 KIEL	8 S	0555		0602	16	140	80		
602 KIEL	8 S	0555		0602.5	15	150	60		
405 KIEL	45 C	0555		0607	28	1000	120		
240 KIEL		0555		0607	29	820	135		
1420 KIEL	8 S	0555		0602.5	16	210	100		
9400 TYKH	45 C	0555		0556.3	15	115	15		
9400 TYKH				0602.1		29			
9400 TYKH				0608		11			
1000 TYKH	45 C	0555		0556.3	5	21	4		
200 GORK	41 F	0558		0559.1	1.8	910			
200 GORK		0558		0559.6		910			
1000 TYKH	45 C	0600		0602.4U	7	230 D	30 D		
200 GORK	41 F	0607.3		0607.5	1.1	1550			
200 GORK		0607.3		0607.9		1550			
100 GORK	3 S	0607.3		0607.3	0.4	650			
100 HIRA	45 C	0607.5		0607.6	1	1300	300		
1000 TYKH	45 C	0607		0608	2	193	35		
3750 TYKH	20 GRF	0612		0750	108 D	2	1 D		
650 GORK	40 F	0715.9		0721	37	4.4	1.9		
950 GORK	20 GRF	0717.8		0739.5	35.7	2.7			

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			UT	UT	MINUTES	PEAK	MEAN		
28	113 POTS	40	0742.6	0742.9	0.4	500	20		
	950 GORK	21 GRF	0922.7	1019.9	75.5	4.4	2.4		
	1470 POTS	22	0923	1013.6	151	5.3			
	3000 POTS	20	0924	1019.5	150	7.8U			
	950 GORK	1 S	0926.7	0926.9	0.3	6.8	3.4		
	650 GORK	23 GRF	0928.8	1014.2	64	7.8	3.7		
	950 GORK	4 S/F	0932.8	0934	2.1	87			
	930 BORD	45 C	0932.8	0934.1	2.2	77	20		
	808 ONDR	4 S/F	0932	0933.6	3	25	11.8		
	9500 POTS	20	0935	1229	152	7.8			
	100 GORK	27 RF	0936	1048.5	120 0	450 0			
	234 POTS	45	0938.1	0938.2	0.1	350	20		
	113 POTS	6	0938.2	0938.2	0.1	150	50		
	950 GORK	1 S	0938.7	0938.8	0.2	5.8	2.9		
	408 TRST	45	0940.6	0940.7	0.3	88			
	510 POTS	45	0940.6	0940.7	0.4	28	5		
	536 ONDR	8 S	0940.7	0940.7	0.2	11			
	127 TORN	25 R	0942	1040 U	318 0	400	200		
	408 TRST	27	0948	1024.7	152				
	200 GORK	4 SF	0948.8	0949.4	1.3	450			
	536 ONDR	22 GRF	0948.8	1017.3	42	13	6		
	650 GORK	2 S/F	0949.2	0949.5	0.8	5.6	2.6		
	950 GORK	3 S	0949.5	0949.9	0.8	10.6	5.3		
	930 BORD	3 S	0949	0949.6	1	11	2		
	808 ONDR	2 S/F	0949	0949.4	1	12	7		
	9240 ARCE	20	1002.8	1025.5	109				
	650 GORK	46 C	1016	1017.1	6	9.1			
	650 GORK		1016	1019.3		5.7			
	408 TRST	8	1046.1	1046.3	0.4	53	13		
	950 GORK	20 GRF	1114.8	1120.8	15.20	4			
	7000 SAOP	1	1211.3		2.5	7	3.5		BLOF
	2800 OTTA	21 GRF	1220	1240	35	1.4	0.8		
	410 SGMR	6 S	1232.4	1235.4	5.2	17	3.4		
	2695 SGMR	4 S/F	1232.4	1235.3	13.4	10.5	3.3		
	4995 SGMR	2 S/F	1232.5	1237.1	7.1	6.1	1.8		
	9240 ARCE	20	1232.8U	1235.7U	23				
	8800 SGMR	2 S/F	1232.8	1236.5	5.4	8.8	2.6		
	1415 SGMR	2 S/F	1233.2	1234.8	4.3	3.6	1.1		
	536 ONDR	2 S/F	1233.5	1234.3	5	12	2.3		
	606 SGMR	2 S/F	1233.6	1235.1	3.8	4.4	1.3		
	3000 POTS	2	1233.7	1235	3.8	5.4U	1.8		
	2800 OTTA	4 S/F	1234.2	1235	3.5	10.8	2.6		
	1470 POTS	1	1234.5	1234.9	3	2.9	0.9		
	2800 OTTA	21 GRF	1337	1343	13	1.4	0.7		
	7000 SAOP	28	1339		1.2		3.5		BLOF
	2695 SGMR	1 S	1339.4	1340.7	4.5	7.1	2.1		1,3G
	4995 BOUL	1 S	1339.5	1340	2.5	11	2		
	1415 SGMR	1 S	1340	1340.4	5.8	3.4	1		1,3G
	7000 SAOP	4	1340.2	1340.5	0.9	18.6	9.2		BLOF
	8800 SGMR	1 S	1340.3	1340.7	.9	2.9	.9		
	4995 SGMR	1 S	1340.3	1340.6	8.4	9.6	2.9		
	9240 ARCE	1	1340.5	1340.9	1.5				
	2800 OTTA	1 S	1340	1340.5	2	5.6	1.9		
	9500 POTS	1	1340	1340.5	1.5	5.1			
	1470 POTS	1	1340	1340.5	7	3.6	1.2		
	3000 POTS	3	1340	1340.5	7	7.1	2.5		
	1420 BOUL	1 S	1340	1340.5	1.5	2	1		
	7000 SAOP	29	1341.1		25.8				
	2695 BOUL	8 S	1341	1341.5	1.5	5	2		
	2800 OTTA	24 R	1440	1455	15	1.2	0.6		
	2800 OTTA	27 RF	1440		160	1.2	1.1		
	2800 OTTA	24P R	1455		125	1.2			
	1415 SGMR	1 S	1608	1608.1	.6	1.2	.4		
	410 SGMR	6 S	1608	1609.2	1.7	9.9	3		
	606 SGMR	4 S/F	1608.1	1608.2	1.6	52.8	15.8		
	2800 OTTA	26 FAL	1700	1720	20	-1.2	-0.6		
	18 MCMA	6 S	1704	1705	1				
	2800 OTTA	21 GRF	1725	1750	50	2.2	1.1		
	7000 SAOP	4	1737.2	1738	1.8	26.6	13.3		
	245 SGMR	6 S	1737.2	1737.4	.6	49.6	14.9		
	410 SGMR	8 S	1737.6	1737.7	.2	55.2	16.6		
	4995 SGMR	3 S	1737.6	1738.2	1.3	10.2	3.1		
	1415 SGMR	1 S	1737.9	1738	.9	2.9	.9		
	2695 SGMR	1 S	1738	1738.2	.9	4.3	1.3		
	8800 SGMR	1 S	1738	1738.2	.9	8.3	2.5		
	2800 OTTA	1 S	1738	1738.1	1	2.6	1		
	7000 SAOP	40	1821.1		7				
	410 SGMR	6 S	1834.7	1836.5	3.5	68.1	20.4		
	245 SGMR	6 S	1835.4	1836.6	1.6	123.3	37		
	606 SGMR	3 S	1835.5	1836.5	1.6	23.2	7		
	7000 SAOP	28	1836.7	1914.9	38.2	51.5	25.7		BLOF
	2800 OTTA	23 GRF	1840		380 0	18			
	2695 BOUL	47 GB	1842.5	1937.5	305	2164	413		
	9400 HUAN	28	1843	1916.2	33.2	49.2	9.8		48L
	1420 BOUL	47 GB	1855	1927	222	4036	105		

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			UT	UT	MINUTES	PEAK	MEAN		
28	4995 BOUL	47 GB	1900.5	1935	189.5	2888	901		
	1415 SGMR	28 PRE	1847.3	1914.2	26.9	8.8	4.4		
	1415 SGMR	47 GB	1914.2	1927.3	50.8	6174	2500		
	1415 SGMR	47 GB		1938.4		554			
	1415 SGMR	47 GB		1958		284			
	1415 SGMR	30 PBI	2005	2005	131	10.4	5.2		
	606 SGMR	28 PRE	1901.3	1914.5	13.2	10.3	5.2		
	606 SGMR	47 GB	1914.5	1917	146.8	363	730		
	606 SGMR	47 GB		1939		2448			
	606 SGMR	47 GB		1958.2		331			
	606 SGMR	47 GB		2050.5		791			
	606 SGMR	29 PBI	2141.3	2141.3	34.7	31.8	15.9		
	2695 SGMR	28 PRE	1840.8	1914.6	33.8	21.3	10.7		
	2695 SGMR	47 GB	1914.6	1929	47.4	718	570		
	2695 SGMR	47 GB		1936		1890			
	2695 SGMR	30 PBI	2002	2002	23	14.8	7.4		
	4995 SGMR	28 PRE	1842.6	1914.7	32.1	17.1	8.6		
	4995 SGMR	47 GB	1914.7	1929	45.3	1856	950		
	4995 SGMR	47 GB		1934.6		3155			
	4995 SGMR	29 PBI	2000	2000	30	29.1	14.6		
	7000 SAOP	47	1914.9	1933.9	18.1	2937.8	1338.4		BLOF
	245 SGMR	28 PRE	1904	1914.9	10.9	27.9	14		
	245 SGMR	49 GB	1914.9	1932.4	107.4	587	180 U		
	245 SGMR	49 GB		1951 U		609 D			
	245 SGMR	49 GB		2008		609			
	245 SGMR	49 GB		2052.6		32			
	245 SGMR	29 PBI	2102.3	2102.3	81.7	23.3	11.7		
	2800 OTTA	47 GB	1914	1936	59	1965	470		
	410 SGMR	28 PRE	1909.8	1915	5.2	5.5	2.8		
	410 SGMR	49 GB	1915	1921.4	118.3	351	310		
	410 SGMR	49 GB		1940.2		1024			
	410 SGMR	49 GB		1958.6		765			
	410 SGMR	49 GB		2050.9		784			
	410 SGMR	29 PBI	2113.3	2113.3	62.7	51.5	25.8		
	8800 SGMR	28 PRE	1842.8	1915.4	32.6	23	11.5		
	8800 SGMR	47 GB	1915.4	1927.5	44.6	3236	1100		
	8800 SGMR	47 GB		1934.1		3719			
	8800 SGMR	29 PBI	2000	2000	47	59.8	29.9		
	9400 HUAN	47	1916.2	1934.3	29.5	3108	1206.8		
	18 HCNA	41 F	1924	1932	26				17L
	35000 SGMR	47 GB	1927 E	1934.2	48.20	995	300 U		
	15400 SGMR	47 GB	1927 E	1934.2	31 D	2384	710 U		
	9400 HUAN	29	1945.7	1945.7	96.2	354	69.2		20L
	7000 SAOP	29	1952	1952	47.3U	102.7	57.4U		BLOF
	2800 OTTA	3 S	1954.5	1955	1	50	25		
2800 OTTA	4 S/F	1957	1957.5	3	58	22			
1415 SGMR	3 S	2006.6	2008	9.1	135	40.5			
2695 SGMR	3 S	2006.9	2008.3	3.9	16.8	5			
2800 OTTA	1 S	2007	2008	2.5	9.6	5			
2800 OTTA	30 PBI	2014	2014	110	8	4			
1415 SGMR	41 F	2018	2039.6	44.5	30.6	6.1			
2800 OTTA	20 GRF	2030	2040	18	3.8	1.9			
2800 OTTA	45 C	2057.8	2059	7	28	5			
100 HIRA	45 C	2136	2136.5	1.8	1000	600		SR	
2695 PENT	3 S	2454.5	2455	1.5	10.8	2.7			
29	720 SYDN	8 S	0050.2	0050.4	1.3				
	720 SYDN	45 C	0054.3	0054.7	1.7				
	4995 HANI	2 S/F	0054.3	0055.2	3.2	4.7	1.2		
	606 HANI	4 S/F	0054.3	0054.7	1.7	18.4	4.3		
	1415 HANI	4 S/F	0054.3	0055.2	3.2	10	3.5		
	2695 HANI	2 S/F	0054.3	0055.2	3.2	8.2	1.3		
	2000 TYKM	5 S	0054.5	0054.9	2	10	2		20R
	1000 TYKM	5 S	0054.5	0055	2	7	2		15R
	3750 TYKM	5 S	0054.5	0054.8	1	7	2		
	1400 SYDN	4 S/F	0054.5	0054.8	1				
	720 SYDN	45 C	0109.5	0110	0.8				
	3750 TYKM	20 GRF	0240	0310	80	2	1		OR, 116030F
	9400 TYKM	20 GRF	0240	0310	80	5	2		OR
	2000 TYKM	20 GRF	0240	0310	60	1	0.5		OL
	100 HIRA	45 C	0340.8	0341	0.7	950	200		MR
	606 HANI	1 S	0342.5	0343.2	1.1	5.4	1.1		
	9400 TYKM	21 GRF	0410	0425	60	4	2		OL
	3750 TYKM	20 GRF	0410	0430	60	2	1		OL, 116030F
	2000 TYKM	20 GRF	0414	0425	45	1.5	0.7		OR
	9400 TYKM	5 S	0443	0444.6	17	8	2		OL
	200 GORK	44 NS	0457 E		480 D		10		
	127 TORN	44 NS	0640 E		500 D				
	260 ONDR	44 NS	0640 E		510 D	61	8		
	240 KIEL	44 NS	0707 E	1101	623	300	40		
	169 DWIN	44 NS	1000 E		280 D		20		
160 DWIN	44 NS	1000 E		280 D		15			
259 DWIN	44 NS	1000 E		280 D		10			
250 DWIN	44 NS	1000 E		280 D		8			
245 SGMR	44 NS	1035 E	1754.2	747 D		92.5			

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			UT	UT	MINUTES	PEAK	MEAN		
29	410 SGMR	44 NS	1035 E	1754.7	747 0	30.2			
	100 HIRA	44 NS	2030 E	0513	750 0	90	30		SR
	200 HIRA	44 NS	2030 E	0750	750 0	90	30		SL
	100 GORK		0505.1	0510.1		430			
	100 GORK		0505.1	0506.8		450			
	100 GORK	4 SF	0505.1	0505.5	5.8	430			
	100 HIRA	5 S	0506.5	0506.7U	0.5	1300 D	700 0		HRWL
	1000 TYKW	45 C	0522.5	0523.7	4	27	5		35L/02R/35L
	2000 TYKW	45 C	0522.5	0523.7	3	25	7		15R
	9400 TYKW	5 S	0522.5	0523	1.5	84	20		10L
	9400 TYKW	29 PBI	0524		20	7	3		
	1400 SYDN	45 C	0522.7	0523	2				
	720 SYDN	45 C	0522.8	0523.8	2.7				
	2695 MANI	4 S/F	0522.8	0523.3	2	16.4	7.6		
	100 HIRA	45 C	0522.8		1.7	1300 D	1000 0		HRWL
	200 HIRA	45 C	0522.8	0523	3	950	230		WL
	4995 MANI	4 S/F	0522.8	0523.3	1.8	110	34.8		
	3750 TYKH	5 S	0522	0523.1	6	62	8		04L
	1415 MANI	2 S/F	0523	0523.3	2.5	9.7	2.2		
	606 MANI	40 F	0523	0523.2	3.2	174	46.1		III
	2950 GORK	4 SF	0523	0523.5	3.5	56	14		
	650 GORK	46 C	0523.1	0523.4	2.7	108	33		
	650 GORK		0523.1	0524		100			
	650 GORK		0523.1	0524.6		32			
	200 GORK	8 S	0523.2	0523.2U	2.6	150 D			
	100 GORK	6 S	0523.2	0523.2U	1.1	450			
	8800 MANI	4 S/F	0523.2	0523.4	1.2	85	32.5		
	113 POTS	40	0559.8	0600.3	0.8	200	3		
	100 GORK	6 S	0600.2	0600.3	0.4	450			
	9400 TYKH	21 GRF	0613	0620	50	6	3		OL
	9100 GORK	1 S	0634.8	0635.3	2.5	11	5.5		
	9400 TYKH	5 S	0634	0634.8	3	10	3		OL
	650 GORK	22 GRF	0717.6	0722.6	12.2	3.7	1.6		
	113 POTS	6	0720.6	0720.7	0.2	700	200		
	100 GORK	6 S	0721	0721	3.5	450			
	950 GORK	20 GRF	0721.8	0726	10.5	2.6	1.3		
	9240 ARCE	3	0750.8	0751.6	2.4				
	9500 POTS	3	0750	0751.1	5	27	6.4		
	9100 GORK	41 F	0751	0752	15.8	31			
	9100 GORK		0751	0806		6.3			
	4995 MANI	1 S	0751.2	0751.8	1.2	4.6	2.3		
	8800 MANI	3 S/F	0751.2	0751.8	2.3	32.5	10.2		
	9240 ARCE	29	0753.2		5.6				
	9240 ARCE	21	0802.2	0828.1	145				
	200 GORK	8 S	0833.8	0835.1	2.8	200			
	9500 POTS	3	0908.5	0909.1	12	52	15		
	1470 POTS	3	0908.5	0909.3	7.5	17	7.1		
	3000 POTS	3	0908.5	0909.2	9.2	31 U	14 U		
	1415 MANI	3 S	0908.8	0909.5	2.9	14	4.9		
	4995 MANI	3 S	0908.8	0909.4	2.5	38.3	11.6		
	2695 MANI	4 S/F	0908.8	0909.4	2.5	32.1	12.6		
	8800 MANI	3 S	0908.8	0909.5	2.5	46.7	16.2		
	950 GORK	4 SF	0909.2	0910 U	2.4	75			
	2950 GORK	3 S	0909.3	0910	16.5	68	23		
	2950 GORK	29	0909.3	0910	7.1	9.2	3.9		
	9100 GORK	3 S	0909.5	0909.8	3	63	30		
	9240 ARCE	3	0909	0909.5	3.3				
	930 BORD	45 C	0909	0910	2	106	6		
	9240 ARCE	29	0912.3		10.6				
	9240 ARCE	1	1024.3	1024.5	0.8				
1470 POTS	4	1040.5	1044.2	15	14	4.4			
3000 POTS	4	1040.5	1042.2	25	11 U				
950 GORK	22 GRF	1040.9	1043.1	7.5	10	3.5			
259 DWIN	45 C	1040	1047	10	160	10			
250 DWIN	45 C	1040	1047	10	200	10			
9100 GORK	21 GRF	1041.2	1047.3	11.1	7.7	3.5			
408 TRST	42	1041.8	1042.9	2.1	19				
536 ONDR	45 C	1041.8	1042.3	4.5	10	2.8			
2950 GORK	21 GRF	1042	1044.1	11.8	13.8	7			
9500 POTS	3	1042	1042.7	9 U	16				
9100 GORK	2 S/F	1042.5	1043.5	28	21				
650 GORK	4 SF	1042.6	1043.5	1.9	11.3	2.8			
9240 ARCE	40	1042	1043	10.5					
930 BORD	40 F	1042	1042.8	4	13	2			
2950 GORK	1 S	1043	1043.4	0.6	6.2	3.3			
100 GORK	6 S	1043.2	1043.2	0.3	700				
127 TORN	47 GB	1045	1048	4.5	2450	400			
127 TORN		1045	1046.5	1	1300				
113 POTS	45	1045.1	1047.8	3.1	2000	300			
100 GORK	45 C	1045.3	1046.5	3	700				
100 GORK		1045.3	1048		700				
169 DWIN	45 C	1045	1047	5	150 D	30			
160 DWIN	45 C	1045	1047	5	150 D	40			
234 POTS	45	1046.1	1046.6	0.7	100	5			
200 GORK	4 SF	1046.3	1047.9	3.9	1800				

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MAR 1976	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	$10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN			
29	113 POTS	45	1100.4	1100.5	0.2	150	15			
	930 BORD	46 C	1100.5	1100.9	0.5	35	2			
	950 GORK	4 SF	1100.8	1101.3	0.6	18	5			
	606 SGMR	2 S/F	1149	1150.1	1.8	3	.9			
	100 GORK	4 SF	1149.4	1150.4	4	700				
	100 GORK		1149.4	1151.7		300				
	1415 SGMR	2 S/F	1149.7	1150.1	.7	3.4	1			
	113 POTS	40	1149.8	1150	1	200	5			
	7000 SAOP	40	1203.8							
	7000 SAOP	25	1203.8		489.2U	17				
	113 POTS	6	1227.7	1227.7	0.1	350	120			
	113 POTS	45	1318.5	1318.5	0.1	150	25			
	15400 SGMR	20 GRF	1330.7	1334	18.4	10.1	6			
	18 MCMA	6 S	1453	1455	2				1	
	1415 SGMR	2 S/F	1538	1540.2	5.4	2.8	.8			
	2695 SGMR	20 GRF	1538.8	1539.7	11	1.5	.9			
	2800 OTTA	20 GRF	1538	1540	14	1.2	0.5			
	18 MCMA	41 F	1618	1625	9				2	
	245 SGMR	6 S	1714.7	1733.2	26.4	127.6	38.3			
	606 SGMR	22 GRF	1717.8	1733.8	25	28.2	16.9			
	410 SGMR	6 S	1718.4	1731.9	24.7	53.8	16.1			
	1415 SGMR	22 GRF	1727.9	1728.6	13.1	1.2	.7			
	18 MCMA	42 SER	1734	1804	43				3	
	2695 SGMR	22 GRF	1749.8	1755.9	11	4.4	2.7			
	1415 SGMR	22 GRF	1751.4	1801	12.9	5.5	3.3			
	2800 OTTA	1 S	1751.5	1752.2	1.5	1.6	0.6			
	2800 OTTA	26 FAL	1801	1803	2	-1.2	-0.6			
	2800 OTTA	32 ABS	1810	1825	90	-0.8	-0.4			
	15400 SGMR	4 S/F	2015.7	2016	8.1	23.4	7			
	15400 SGMR	4 S/F	2039.8	2040.1	2.6	17.2	5.1			
	4995 BOUL	3 S	2054.5	2055.5	3.5	13	4			
	2800 OTTA	1 S	2055.5	2056	5	1.6	0.6			
	2695 BOUL	3 S	2056	2056.5	2	3	1			
	500 HIRA	24 R	2100	2151	90	14	3			
	15400 SGMR	4 S/F	2132.3	2132.5	.5	29.1	8.7			
	9400 TYKW	5 S	2337	2339.5	6	48	10		ZOL	
	8800 MANI	4 S/F	2338.8	2339.7	3.7	31.3	4.8			
	4995 MANI	1 S	2339	2339.7	3	8.6	1.4			
	30	500 HIRA	27 RF	0010	0023	36	12	4		
		100 HIRA	45 C	0118.7	0118.9	0.5	800	300		WR
		500 HIRA	24 R	0305	0412	340 D	25	6		
		9400 TYKW	21 GRF	0345	0450	120	8	4		OL
		2000 TYKW	45 C	0347.5	0349.7	3.5	8	2.5		OR
		2000 TYKW	30 PBI	0351		29	1.5	1		
		606 MANI	41 F	0347.5	0359.2	27.5	90	11.2		
3750 TYKW		45 C	0347	0349.7	3	7	2		OL, 116019F	
3750 TYKW		30 PBI	0350		40	2	1			
1415 MANI		41 F	0348	0359.2	15	38.9	5.9			
4995 MANI		22 GRF	0348	0359.6	20.5	11.1	3.3			
2695 MANI		41 F	0348	0349.8	12.8	8.3	1.3			
720 SYDN		4 S/F	0348	0349.2	3.2					
1400 SYDN		4 S/F	0348	0349.3	2.5					
8800 MANI		22 GRF	0348	0359.2	15	10.6	2.7			
1000 TYKW		45 C	0348	0349.4	4	20	3		45L	
9400 TYKW		5 S	0348	0349.6	4	8	2		ZOL	
720 SYDN		45 C	0357.5	0359.1	2.7					
9400 TYKW		5 S	0357	0359	6	7	3		OL	
500 HIRA		45 C	0358	0359.1	2.5	30	15			
1400 SYDN		4 S/F	0358.2	0359.1	2.2					
1000 TYKW		45 C	0358	0358.9	3	52	10		02R	
2000 TYKW		45 C	0358	0359.1	4	23	2		OR	
3750 TYKW		5 S	0358	0359.4	7	2	1		OL, 116019F	
100 HIRA		45 C	0359	0359.3	0.5	880	300		WRWL	
1000 TYKW		45 C	0401	0408.4	18	3	1		SL	
3750 TYKW		5 S	0450	0500	30	2	1		OL	
200 GORK		44 NS	0500	E	237 D		15			
100 GORK		44 NS	0502	E	478 D		25			
127 TORN		44 NS	0640	E	500 D					
405 KIEL		44 NS	0714	E	0936	469	110	55		
240 KIEL		44 NS	0714	E	1313	469	205	75		
536 ONDR		44 NS	0725	E		460 D	45	8		
260 ONDR		44 NS	0725	E		460 D	98	11		
169 DHIN		44 NS	1005	E		265 D		35		
160 DHIN		44 NS	1005	E		265 D		35		
259 DHIN		44 NS	1005	E		265 D		35		
250 DHIN		44 NS	1005	E		265 D		35		
606 SGMR		44 NS	1033	E	1254.7	750 D	20.4			
245 SGMR		44 NS	1033	E	1822.5	750 D	161.2			
410 SGMR		44 NS	1033	E	1256.4	750 D	37.8			
200 GORK		44 NS	1136	E		84 D		15		
200 HIRA		44 NS	2030	E	2210	750 D	65	25	SL	
100 HIRA		44 NS	2030	E	2349	750 D	110	20	SR	
650 GORK		23 GRF	0502	E	0505.3	28.8	6.3	3		
2950 GORK		21 GRF	0503	E	0534.4	43	15.5	7		

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MAR 1976	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		
30	2000 TYKW	5 S	0525	0528.5	5	11	3		25L
	2000 TYKW	29 PBI	0530		55	1.7	0.8		
	720 SYDN	45 C	0526.1	0529.5	4.5				
	2695 MANI	2 S/F	0526.9	0528.6	3.5	10.2	5.1		
	1400 SYDN	45 C	0527.2	0528.6	2.5				
	606 MANI	40 F	0527.3	0528	3.1	32.5	2.2		
	1415 MANI	4 S/F	0527.3	0528.6	2.4	18.9	5.4		
	4995 MANI	4 S/F	0527.6	0528.6	2.8	15.5	5.6		
	3750 TYKW	5 S	0527	0528.6	3	16	5		OL
	3750 TYKW	29 PBI	0530		30	4	2		
	9400 TYKW	5 S	0527	0529	15	6	2		OL
	1800 TYKH	45 C	0527	0528.7	3	13	3		95L
	650 GORK	2 SF	0528	0530	2.8	5.3	1.3		
	2950 GORK	3 S	0528.1	0529.1	2.7	25	8.2		
	950 GORK	20 GRF	0605 E	0606.5	112.5	6	3		
	650 GORK	22 GRF	0609 E	0628.5	50	6.8	3		
	650 GORK	22 GRF	0704 E	0743.6	66	11	4.6		
	606 MANI	8 S	0716.5	0716.8	.5	68	28		
	650 GORK	22 GRF	0830.6	0924	88	13.8	7		
	950 GORK	20 GRF	0853.6	0932.3	97	5.7	2.2		
	228 HARS	27 RF	0900 U	0925	60 U	75	35		
	536 ONDR	8 S	1020.6	1020.6	0.2	52			
	950 GORK	22 GRF	1200.1	1237.5	60 D	6.4	4.2		
	9240 ARCE	22	1202	1213.2	34				
	9240 ARCE	21	1247.9	1251.3	25				
	9500 POTS	3	1249.5	1250.2	1.5	11			
	9240 ARCE	2	1249.8	1250.2	1.2				
	9500 POTS	1	1322.5	1323	1	9.8			
	9240 ARCE	1	1322.7	1323.1	1.4				
	15400 SGMR	3 S	1323.6	1324.1	1	31.4	9.4		1
	18 MCMA	6 S	1342	1344	2				
	2800 OTTA	20 GRF	1540	1630	95	1.2	0.6		
	18 MCMA	6 S	1733	1735	3				
	18 MCMA	42 SER	1816	1823	26				
	8800 SGMR	22 GRF	1901	1901.7	15.1	20.2	12.1		
	7000 SAQP	4	1901.1	1901.6	13	18.5	9.2		
	2695 SGHR	22 GRF	1901.3	1903.2	21.2	1.7	1		BLOD
	15400 SGMR	1 S	1901.4	1901.9	.9	7.6	2.3		
	4995 SGHR	22 GRF	1901.4	1901.8	14.9	9.3	5.6		
	500 HIRA	24 R	2027 E	0505	740 D	25	5		
	18 MCMA	6 S	2045	2047	2				
	2800 OTTA	20 GRF	2100	2105	30	1.6	0.8		
	245 SGHR	6 S	2103	2105.9	3.8	40.8	8.2		
	410 SGHR	6 S	2105.5	2105.7	.7	8.4	1.7		
	18 MCMA	6 S	2105	2108	4				
1415 SGHR	1 S	2139.5	2141.9	3	.4	.1		1	
245 SGHR	6 S	2140	2140.8	1.8	17.7	3.5		1	
410 SGHR	6 S	2140	2140.9	1.3	5	1		1	
606 SGHR	1 S	2140.5	2142.1	2	3	.9		1	
18 MCMA	41 F	2145	2212	34					
1000 TYKW	5 S	2305	2305.1	0.3	1.2	0.3		OR	
2000 TYKW	5 S	2309.6	2309.7	0.3	0.6	0.2		OR	
2000 TYKW	5 S	2312.6	2312.7	0.3	2.6	0.8		OR	
1000 TYKW	5 S	2312.6	2312.7	0.4	4	1		OR	
1800 TYKW	5 S	2324.5	2324.6	0.3	0.6	0.2		OR	
18 MCMA	6 S	2330	2331	2					
31	1400 SYDN	2 S/F	0104.2	0104.7	1				
	500 HIRA	45 C	0104.2	0104.8	1	20	8		
	720 SYDN	2 S/F	0104.7	0104.8	0.3				
	1000 TYKW	5 S	0104	0104.8	2	7	3		OR
	3750 TYKW	5 S	0104	0104.6	1	14	3		OL, 296001F
	2695 PENT	2 S/F	0104	0104.8	1	8.2	4.1		
	2800 TYKW	5 S	0104	0104.6	2	4	1		20L
	606 MANI	40 F	0154.2	0200.1	6.5	200	9.9		
	720 SYDN	45 C	0154.7	0159.9	5.7				
	1000 TYKW	45 C	0154.8	0155.2	1	3	1		20L
	1400 SYDN	45 C	0155	0158.6	6.3				
	1000 TYKW	5 S	0156	0156.1	0.3	32	10		08L
	100 HIRA	45 C	0157.4	0158.4	2.5U	900	150		WR
	8800 MANI	4 S/F	0157.7E	0159.7U	2.90	15.4U	5.10		
	2695 MANI	4 S/F	0157.7E	0158.8U	2.30	8.2U	2.50		
	4995 MANI	4 S/F	0157.7E	0159.2U	2.90	12.2U	5.60		
	1415 MANI	4 S/F	0157.7E	0158.5U	2.80	20.9U	4.60		
	1000 TYKW	45 C	0157	0158.7	3.5	44	6		COMPLEX POL
	3750 TYKW	45 C	0157	0158.7	10	4	1		20L, 296001F
	9400 TYKW	5 S	0158	0159.7	10	11	3		20L
	500 HIRA	45 C	0159	0159.5	1.5	80	15		
	8800 MANI	3 S	0304.4	0305.4	2.4	34.1	15.7		
	4995 MANI	3 S	0304.5	0305.2	1.9	12.4	6.2		
	3750 TYKW	5 S	0304	0305.2	2	4	1		OL
	3750 TYKW	29 PBI	0306		12	2	1		
	9400 TYKW	5 S	0304	0305.2	3	37	10		25L
	9400 TYKW	29 PBI	0307		15	6	2		
606 MANI	4 S/F	0420.7	0421.4	1.6	13.8	3.3			

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MAR 1976	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		
31	1415 MANI	2 S/F	0421	0421.6	1.6	5.4	2.2		
	2695 MANI	40 F	0421.3	0421.8	1.1	36.4	5.9		
	2000 TYKW	45 C	0421	0421.6	2	23	6		
	3750 TYKW	45 C	0421	0421.7	1	56	10		OR
	1000 TYKW	5 S	0421	0421.6	2	6	2		OL, 296001F
	9400 TYKW	5 S	0421	0421.6	2	5	2		OR
	4995 MANI	4 S/F	0453.3	0455.6	6.8	45.3	20.6		OL
	8800 MANI	4 S/F	0453.3	0455.6	6.9	230	91		
	2695 MANI	4 S/F	0453.3	0455.5	4.2	14.3	5.2		
	9400 TYKW	45 C	0453.5	0455.6	4.5	200	75		20L
	9400 TYKW	30 PBI	0458		70	22	7		
	3750 TYKW	45 C	0453	0455.6	5	23	8		08R
	3750 TYKW	30 PBI	0458		70	5	2		
	606 MANI	40 F	0454	0455.6	2.6	7.2	2.8		
	1415 MANI	4 S/F	0454	0456.3	3.5	11.3	4.3		
	1000 TYKW	45 C	0454.5	0456.2	2.5	8	1.5		50L
	2000 TYKW	45 C	0454	0455.6	3	20	4		40L
	2000 TYKW	29 PBI	0457		45	1.4	0.7		
	720 SYDN	45 C	0459.6	0504.7	32.5				
	1000 TYKW	45 C	0459	0504.6	9	7	2		70L
	606 MANI	4 S/F	0500.5	0504.5	6.8	17.1	9.9		
	1000 TYKW	45 C	0508	0525.2	25	5	2.5		SL
	3750 TYKW	5 S	0522	0525	20	2	1		OL
	9400 TYKW	5 S	0522	0525	20	3	1		OL
	200 HIRA	45 C	0625	0625.4	1	150	50		HL
	100 HIRA	45 C	0625.2	0625.5	0.8	120	40		HR
	808 ONDR	44 NS	0700	E	490	0	70		
	536 ONDR	44 NS	0700	E	490	0	56		
	260 ONDR	44 NS	0700	E	490	0	168		
	405 KIEL	44 NS	0703	E	0832	627	180		HR
	240 KIEL	44 NS	0703	E	1028	627	110		
	127 TORN	44 NS	0730	E	450	0			
	169 DWIN	44 NS	0855	E	325	0	150	D	5
	160 DWIN	44 NS	0855	E	325	0	150	D	5
	259 DWIN	44 NS	0855	E	325	0	300		20
	250 DWIN	44 NS	0855	E	325	0	300		20
	410 SGMR	44 NS	1031	E	1538.2	753	0	98.4	
	606 SGMR	44 NS	1031	E	1445.8	753	0	28.1	
	245 SGMR	44 NS	1031	E	2041.5	753	0	245.3	
	100 HIRA	44 NS	2030	E	2348	750	0	80	
	200 HIRA	44 NS	2030	E	0552	750	0	60	
	1470 POTS	4	0701.5	0704.2	5.5	31	8.6		
	2000 TYKW	5 S	0701	0701.7	1	3.2	0.8		OL
	9100 GORK	1 S	0702.1	0704	9.1	14.7	3		
	3000 POTS	4	0702.5	0703.6	2.5	47	13	U	
	9500 POTS	3	0702.5	0704	15	12	2.7		
	1415 MANI	4 S/F	0702.7	0704	2.6	28.1	7		
	606 MANI	4 S/F	0703.3	0704	2	19.8	5.5		
	4995 MANI	1 S	0703.5	0704	1	9.3	3.1		
	8800 MANI	1 S	0703.5	0704	1	7.8	2.6		
	2695 MANI	4 S/F	0703.5	0703.9	1	51	10.4		
	1000 TYKW	5 S	0703	0704	2	54	7		01L
	2000 TYKW	45 C	0703	0703.8	2	21	5		OL
	930 BORD	46 C	0703	0704	2	151	6		
	3750 TYKW	5 S	0703	0704	1.5	47	8		OR
	3750 TYKW	29 PBI	0704.5		20	2	1		
	9400 TYKW	5 S	0703	0704	2	13	3		15L
	9400 TYKW	29 PBI	0705		7	2	1		
	510 POTS	45	0705.3	0706.1	2	10	3		
	800 KIEL	27 RF	0858	1016	68	25	15		SR, MR
	602 KIEL	27 RF	0858	1012	348	20	10		SR, MR
	1030 KIEL	27 RF	0915		95	10	10	E	SR, MR
	930 BORD	40 F	0933	1021.8	84	19	4		
	510 POTS	45	1050.9	1051.4	7	18	3		
	113 POTS	41	1052	1052.1	2.7	550	10		
	1470 POTS	21	1132	1221.5	238	0	5.4		
	3000 POTS	21	1133	1241	237	0	11	U	
	9240 ARCE	25	1139.1						
	410 SGMR	7 C	1140	1155.3	30.7	477.7	143.3		
	9500 POTS	22	1140	1235.8	227	18			
	408 TRST	45	1141	1141.3	0.4	190	57		
	405 KIEL	46 C	1141	1304	183	1050	120		MR
	245 SGMR	7 C	1149	1314.5	117.7	316.3	94.9		
	113 POTS	45	1149	1301	221	0	700		
	234 POTS	45	1149	1301	221	0	150		
	602 KIEL	45 C	1150	1158	22	960	440		MR
	240 KIEL	46 C	1150	1315	186	1900	280		HR
	2800 OTTA	21 GRF	1150	1230	330	7.6	3.8		
	510 POTS	45	1151.5	1156.8	20	550	100		
	800 KIEL	45 C	1151	1158	19	140	80		MR
	1415 SGMR	46 C	1152	1155.1	52	53.9	16.2		
	1415 SGMR	46 C		1157.4		40.6			
	1470 POTS	46	1152	1155.6	16	48			
	606 SGMR	47 GB	1152	1156.2	18	1166	367.8		
	606 SGMR	47 GB		1158		1225.9			

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			UT	UT	MINUTES	PEAK	MEAN		
31	4995 SGMR	4 S/F	1152.2	1157.4	16.4	14.5	4.5		
	9240 ARCE	22	1152.3	1224.1	83				
	1030 KIEL	45 C	1152	1158	18	120	90		MR
	1420 KIEL	45 C	1152	1201	13	90	40		MR
	930 BORD	45 C	1152	1158	35	172	25		
	808 ONDR	49 GB	1153.2	1155	17	143	83		
	3000 POTS	46	1153.5	1157.3	9.5	22 U			
	408 TRST	47	1153.6	1155.3	46 D	280 D			
	2695 SGMR	46 C	1153.6	1158.3	14.7	25.9	8.2		
	2695 SGMR	46 C		1200.8		27.4			
	7000 SAOP	23	1153.7	1157.4	81.4	23.6	15		BLOF
	127 TORN	27 RF	1153 U	1235	140	670	350		
	536 ONDR	49 GB	1153	1156.3	17	358	202		
	9100 GORK	21 GRF	1154	1235	75 D	20			
	7000 SAOP	1	1154.9	1155.5	1.2	8.3	4.1		BLOF
	2900 OTTA	45 C	1154	1157.5	10	20.2	6.8		
	169 DWIN	24 R	1155		30		150		
	160 DWIN	24 R	1155		30		150		
	259 DWIN	24 R	1155		30		140		
	250 DWIN	24 R	1155		30		130		
	7000 SAOP	2	1156.4	1157.4	1.7	14.2	6.9		BLOF
	9100 GORK	45 C	1156.5	1157.5	5	6.8	2		
	9100 GORK		1156.5	1200		4.3			
	7000 SAOP	1	1159.2	1200	1.9	6.6	3.3		BLOF
	234 POTS	45	1223	1224.3	1.8				
	1470 POTS	46	1233.5	1238.7	6.5	520	10		
	930 BORD	45 C	1234	1238.2	11	84	15		
	3000 POTS	3	1236.5	1238.8	3.5	13 U			
	2800 OTTA	1 S	1236.5	1239	9	4.6	1.6		
	1415 SGMR	46 C	1259.5	1302.9	25.3	117.6	41.2		
	1415 SGMR	46 C		1304		205.8			
	410 SGMR	49 GB	1259.7	1304	12.3	758.5	151.7		
	2695 SGMR	4 S/F	1259.8	1304.3	33.7	29.3	8.8		
	2800 OTTA	40 F	1259.9	1310	11	25			
	606 SGMR	4 S/F	1300	1301.2	7.9	14.6	4.4		
	1470 POTS	42	1300	1302.6	14	97			
	930 BORD	40 F	1300	1304.3	11	14	2		
	8800 SGMR	22 GRF	1301.1	1304.1	18.2	9.4	2.8		
	4995 SGMR	22 GRF	1302	1304	12.5	5.9	1.8		
	3000 POTS	42	1303.5	1304	7.5	24			
	234 POTS	41	1309.6	1314.4	7.8	900	25		
	2800 OTTA	1 S	1323	1324.1	3	3	1		
	930 BORD	46 C	1324	1324	1	60	2		
	7000 SAOP	2	1330.8	1330.9	1.3	11.7	5.8		BLOF
	536 ONDR	49 GB	1340	1416.5	56	150	122		
	606 SGMR	46 C	1343	1352.5	52.5	13.2	41.2		
	606 SGMR	46 C		1357.7		205.9			
	510 POTS	45	1348	1417.6	57	245	40		
	410 SGMR	49 GB	1349	1418.3	46.8	672	201.7		
	228 HARS	48 C	1350.2	1351.4	1.9	650	90		
	2800 OTTA	1 S	1356	1356.5	1	1.8	0.9		
	1420 BOWL	8 S	1435	1436	2	12	3		
	113 POTS	41	1436.1	1446.4	12	850	9		
	15400 SGMR	1 S	1436.2	1436.8	2	8	2.4		
	2800 OTTA	45 C	1436.2	1437.9	2.8	3.2	0.8		
	2695 SGMR	2 S/F	1436.3	1437.8	2	6.1	1.8		
	1415 SGMR	4 S/F	1436.3	1436.5	1.8	32.2	9.7		
	9240 ARCE	3	1436.4	1436.9	2.4				
	9240 ARCE	21	1436.4	1446.8	25.5				
	8800 SGMR	1 S	1436.5	1437.3	2.2	9.9	3		
	606 SGMR	4 S/F	1436.5	1437.3	1.9	14.6	4.4		
	4995 SGMR	1 S	1436.6	1437.8	1.9	3.3	1		
	410 SGMR	6 S	1436.8	1437	1.7	75.9	22.8		
	3000 POTS	42	1436	1446.3	19	11 U			
	1470 POTS	42	1436	1436.6	12	22			
	930 BORD	46 C	1436	1436.8	2	18	3		
	2800 OTTA	40 F	1445.1		2	3.4			
	2800 OTTA	1A S	1445	1448.7	10	2	1		
	930 BORD	41 F	1445	1445.3	4	18	2		
	18 MCHA	6 S	1446	1448	3				1
	1415 SGMR	1 S	1608.3	1609.6	3.4	2.2	.7		
	2800 OTTA	1 S	1613.9	1614.2	3	1	0.5		
	930 BORD	46 C	1614	1614.1	1	86	2		
	2800 OTTA	1 S	1627.1	1627.5	1	1.4	0.7		
	2695 SGMR	4 S/F	1757.7	1758.7	8	34.9	10.5		
	4995 SGMR	1 S	1757.8	1758.8	1.7	5.3	1.6		
	2800 OTTA	2 S/F	1758	1758.5	2	1.6	0.8		
	2695 SGMR	1 S	1806.5	1807.8	4.1	4.8	1.4		
	4995 SGMR	1 S	1806.9	1808.6	6.8	.6	.2		
	18 MCHA	41 F	1806	1812	44				3
	2800 OTTA	2 S/F	1806	1807.7	6	2.8	0.7		
	1415 SGMR	1 S	1807.2	1807.6	4.4	1.4	.4		
	8800 SGMR	1 S	1807.5	1810	4.2	3.3	1		
	15400 SGMR	1 S	1810.1	1810.6	1	2.2	.7		
	1415 SGMR	22 GRF	1818.3	1836.6	63.6	4.6	2.9		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES
MARCH 1976

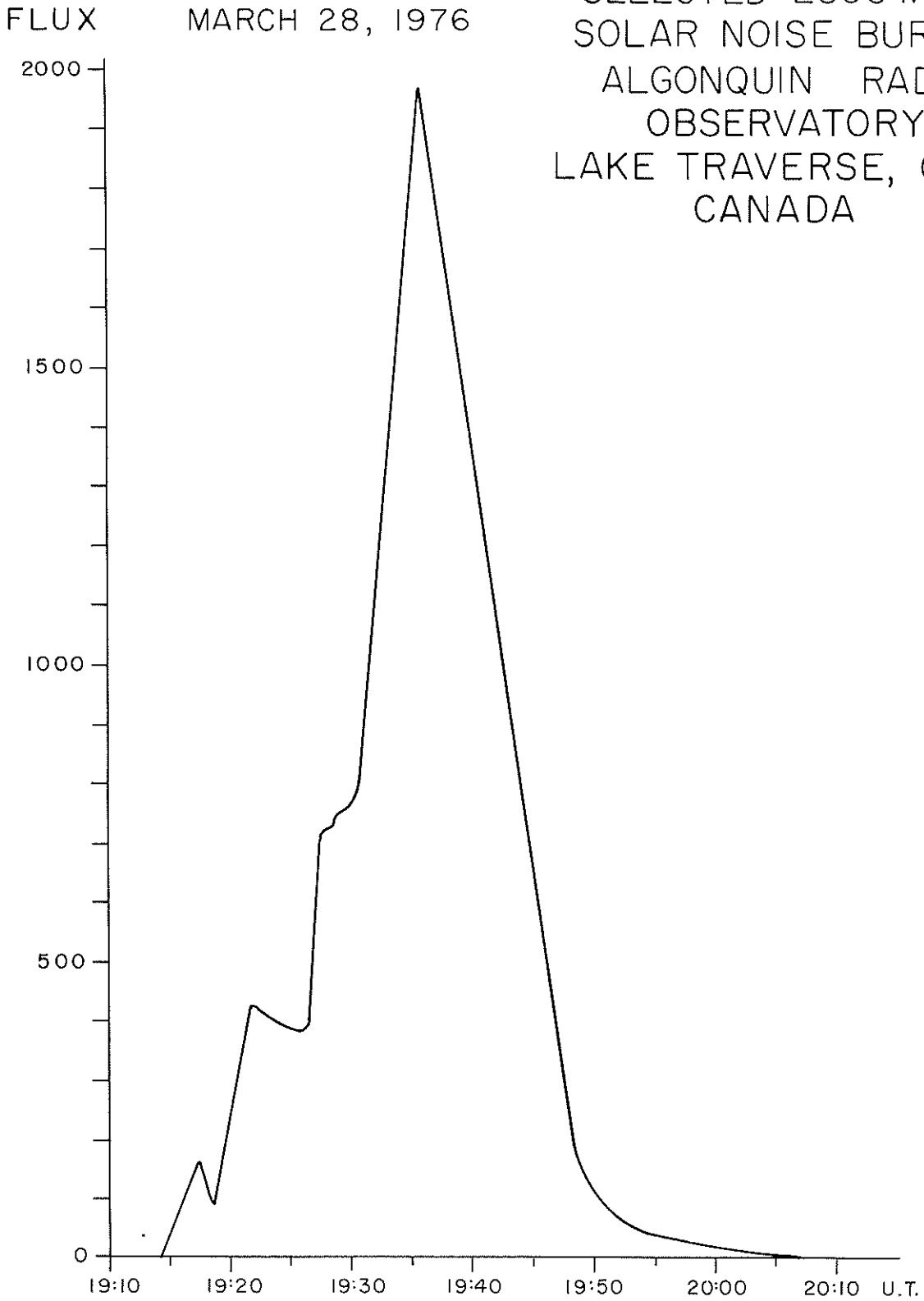
MAR 1976	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
31	606 SGMR	22 GRF	1823.4	1834.9	40.8	17.9	10.7	1	
	2695 SGMR	20 GRF	1828.7	1835	34.7	4.2	2.5		
	2800 OTTA	20 GRF	1829	1835	35	3.2	1.6		
	8800 SGMR	20 GRF	1831.6	1835.3	33.4	5.2	3.1		
	4995 SGMR	20 GRF	1831.6	1836	41.5	3.1	1.9		
	15400 SGMR	20 GRF	1831.7	1845.2	20.6	6.7	4		
	18 MCMA	42 SER	1915	1919	31				
	15400 SGMR	3 S	1959.1	1959.3	1.8	12.3	3.7		
	8800 SGHR	1 S	1959.3	1959.4	1.3	9.4	2.8		
	2800 OTTA	20 GRF	2005	2020	35	1.2	0.8		
	245 SGMR	48 C	2127.3	2127.5	2.2	620.4	62		
	410 SGHR	6 S	2127.4	2127.6	2.1	27.7	5.5		
	200 HIRA		2127.4	2127.6		500			
	200 HIRA	45 C	2127.4		1.5		200		
	200 HIRA		2127.4	2128.2		700			
	15400 SGMR	3 S	2127.4	2127.7	5.8	16.8	5		
	2800 OTTA	2 S/F	2127.5			4			
	100 HIRA	45 C	2127.5		1.5		250		
	100 HIRA		2127.5	2128.4		970 D			
	100 HIRA		2127.5	2127.7		970 D			
	606 SGMR	1 S	2127.5	2127.7	2	2.8	.8		
	2695 PENT	2 S/F	2127.5	2128.2	1	8.4	2		
	2800 OTTA	21 GRF	2127	2141	50	1	0.5		
	1415 SGHR	22 GRF	2128.1	2128.3	22.6	18.4	11		
	500 HIRA	45 C	2133.4	2134.2	1	12	4		
	18 MCMA	42 SER	2145	2213	34				

Reports received from the following observatories:

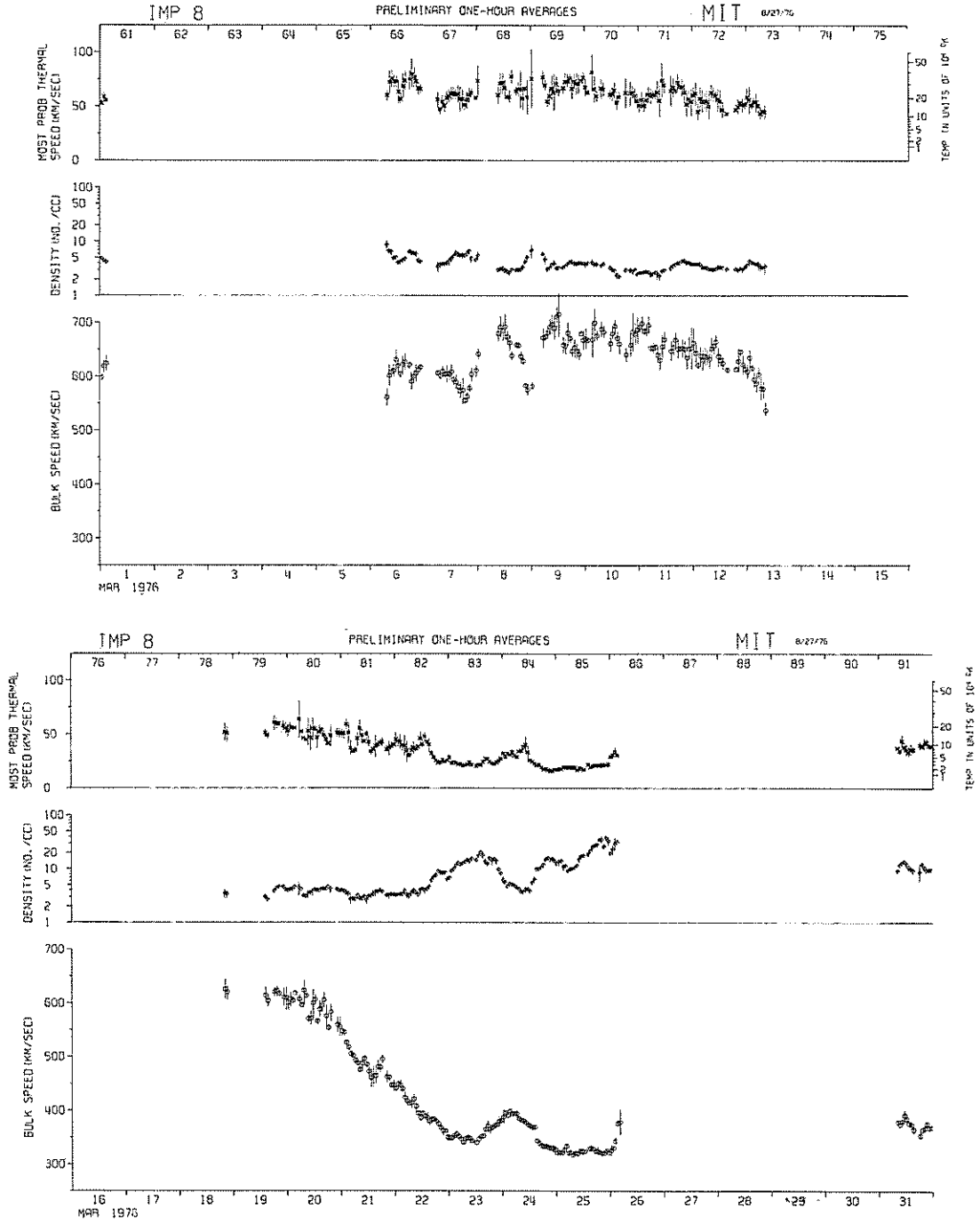
- | | | | |
|-------------------------|-----------------------|----------------------|-----------------|
| ARCE = Arcetri | DWIN = Dwingeloo | OTTA = Ottawa | SYDN = Sydney |
| BERL = Berlin-Adlershof | GORK = Gorky | PENT = Penticton | TORII = Torun |
| BORD = Bordeaux | HIRA = Hiraíso | POTS = Potsdam | TYKW = Toyokawa |
| BOUL = Boulder | HUAN = Huancayo | SAOP = Sao Paulo | TRST = Trieste |
| | MANI = Manila | SGMR = Sagamore Hill | |
| | MCMA = McMath-Hulbert | | |
| | ONDR = Ondrejov | | |

SELECTED SOLAR NOISE BURST

SELECTED 2800 MHz
SOLAR NOISE BURST
ALGONQUIN RADIO
OBSERVATORY
LAKE TRAVERSE, ONT.
CANADA

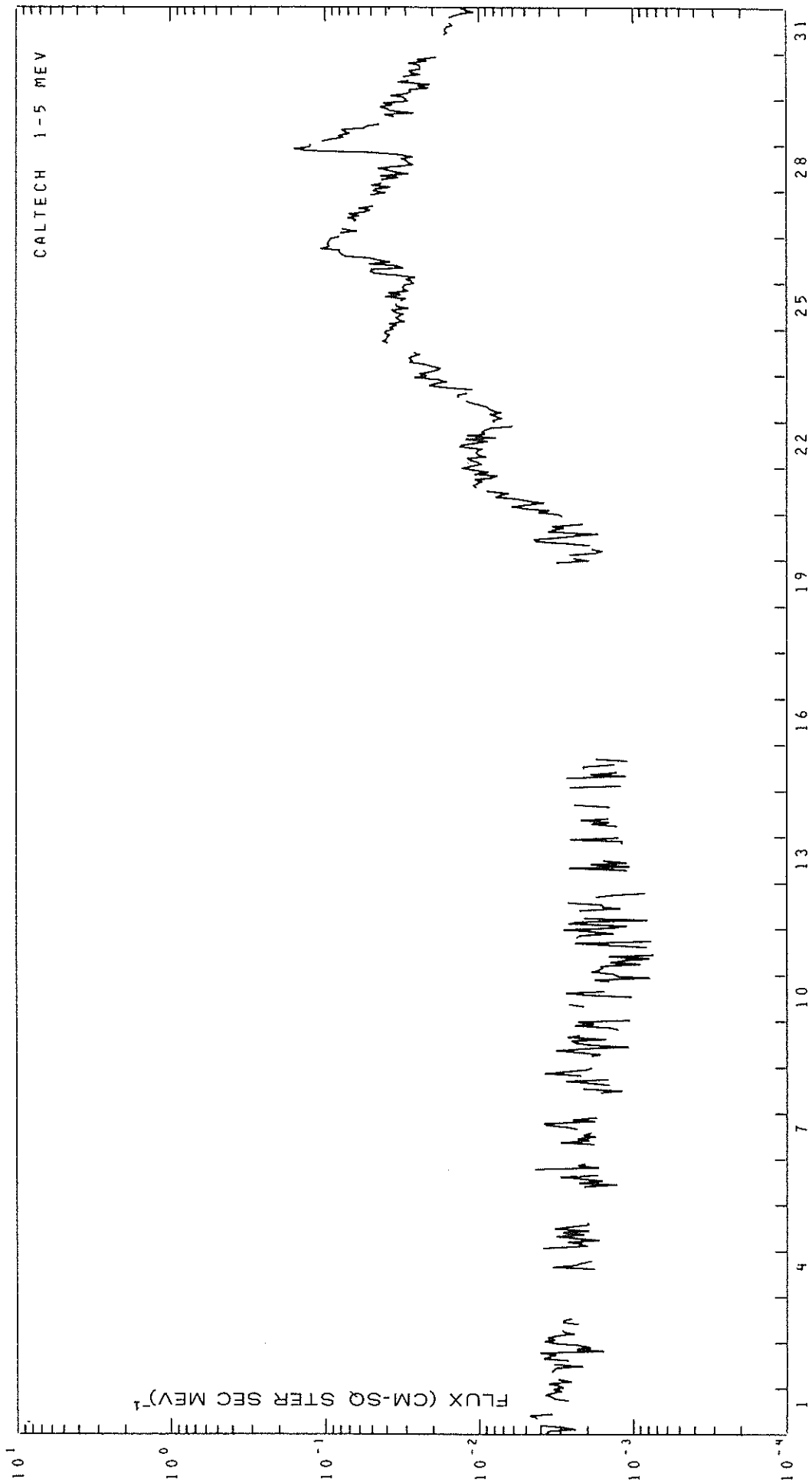


IMP 7 AND 8 SOLAR WIND PLASMA MARCH 1976



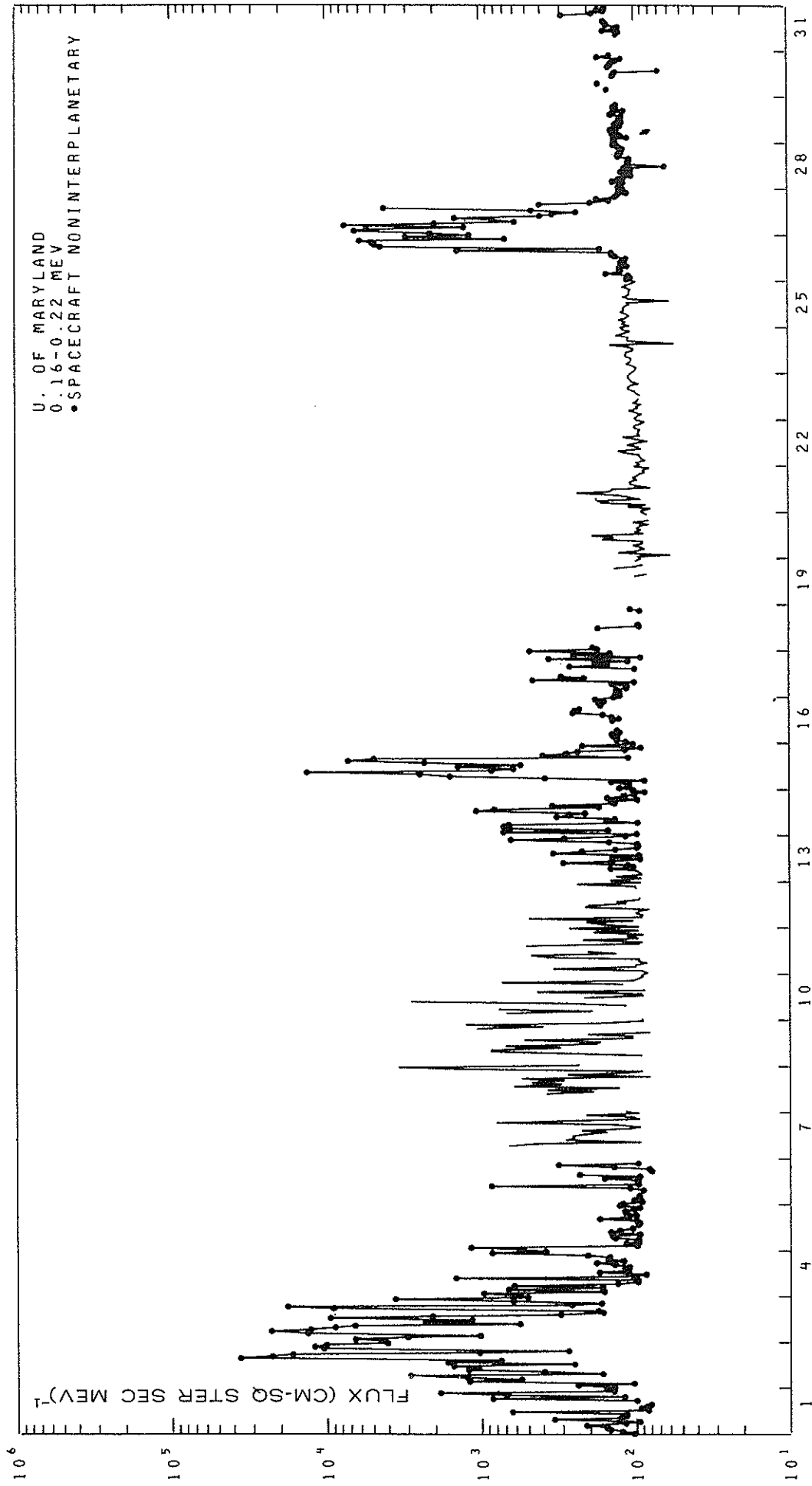
IMP 7 AND 8 ELECTRONS

MARCH 1976



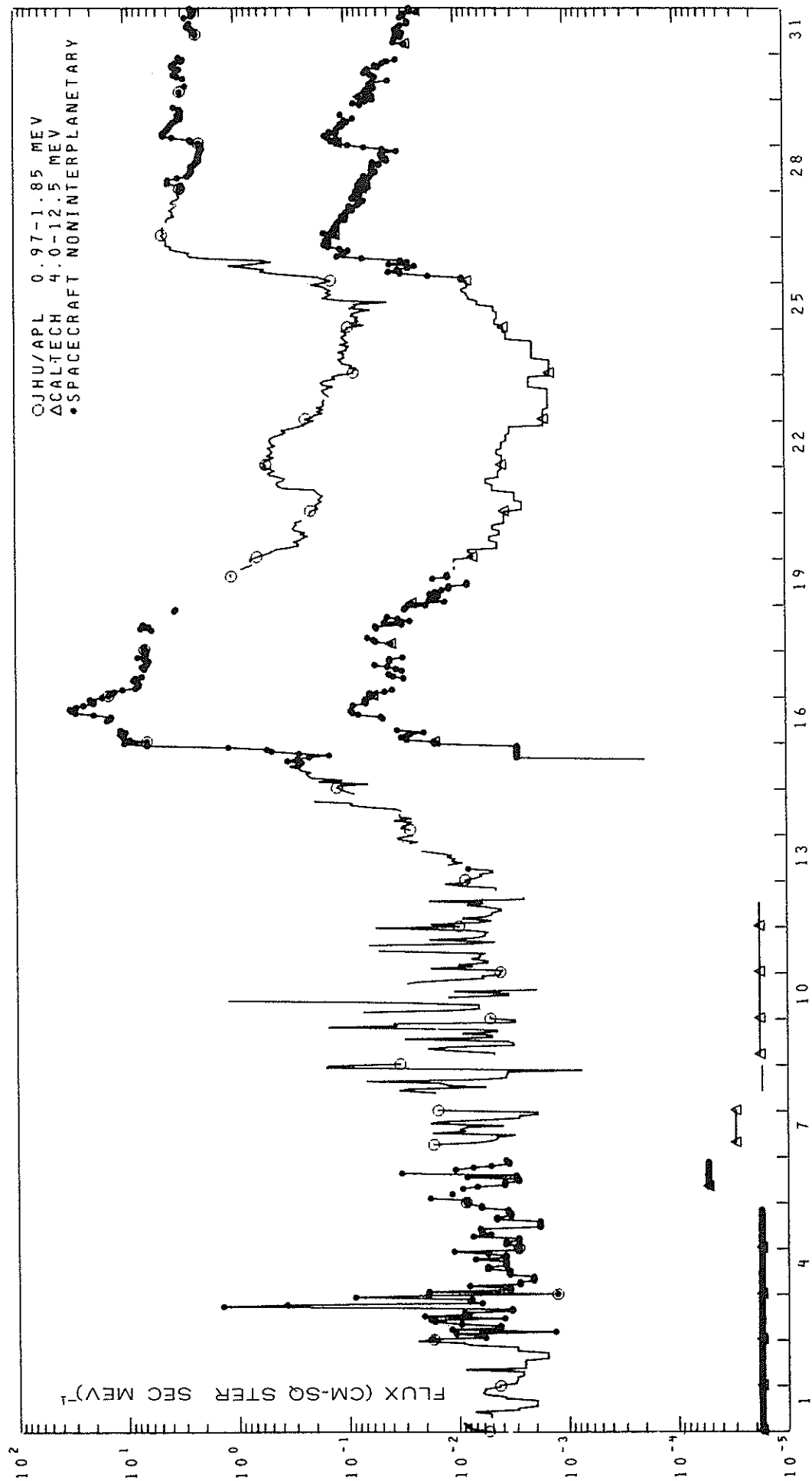
IMP 7 AND 8 LOW ENERGY PROTONS

MARCH 1976



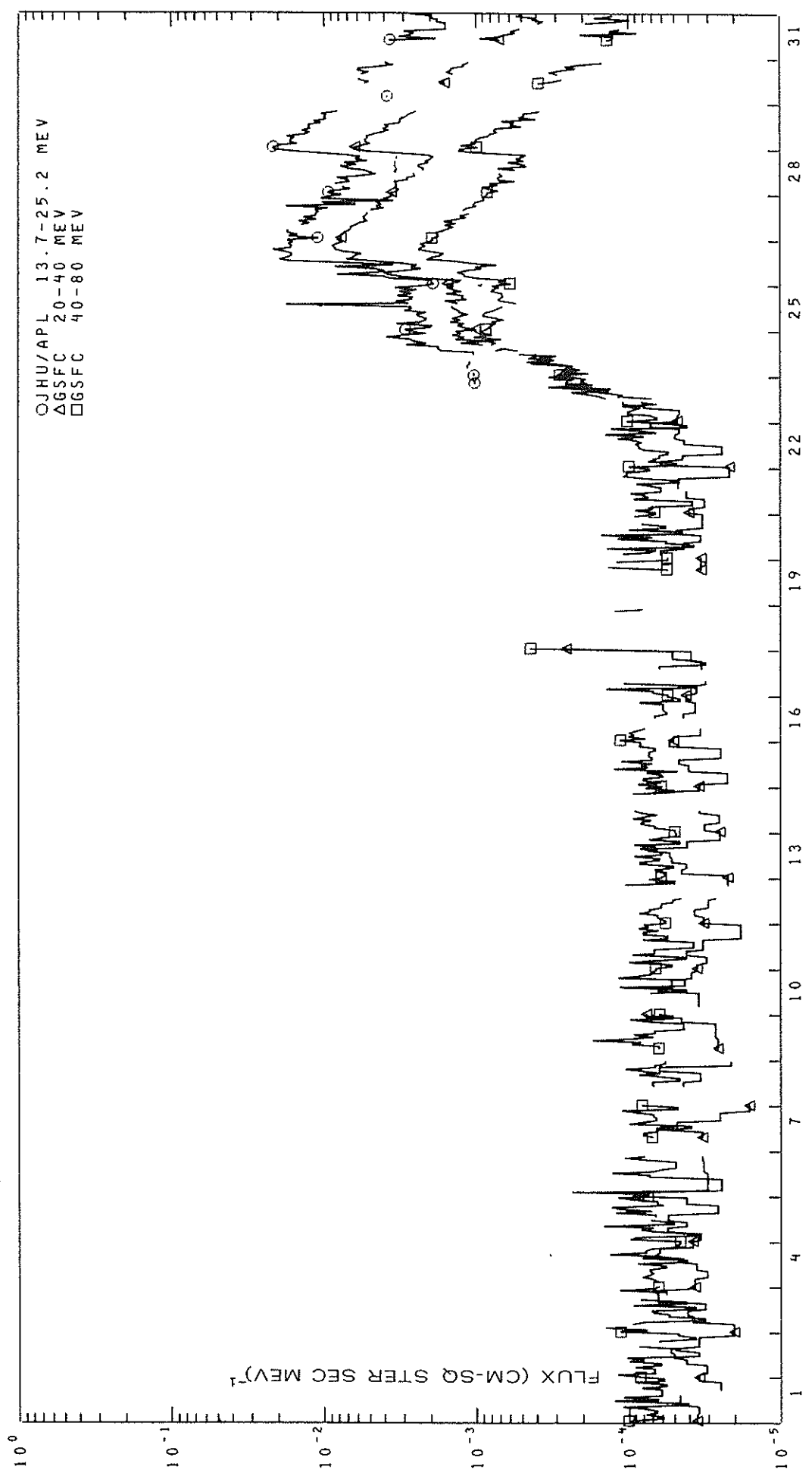
IMP 7 AND 8 INTERMEDIATE ENERGY PROTONS

MARCH 1976



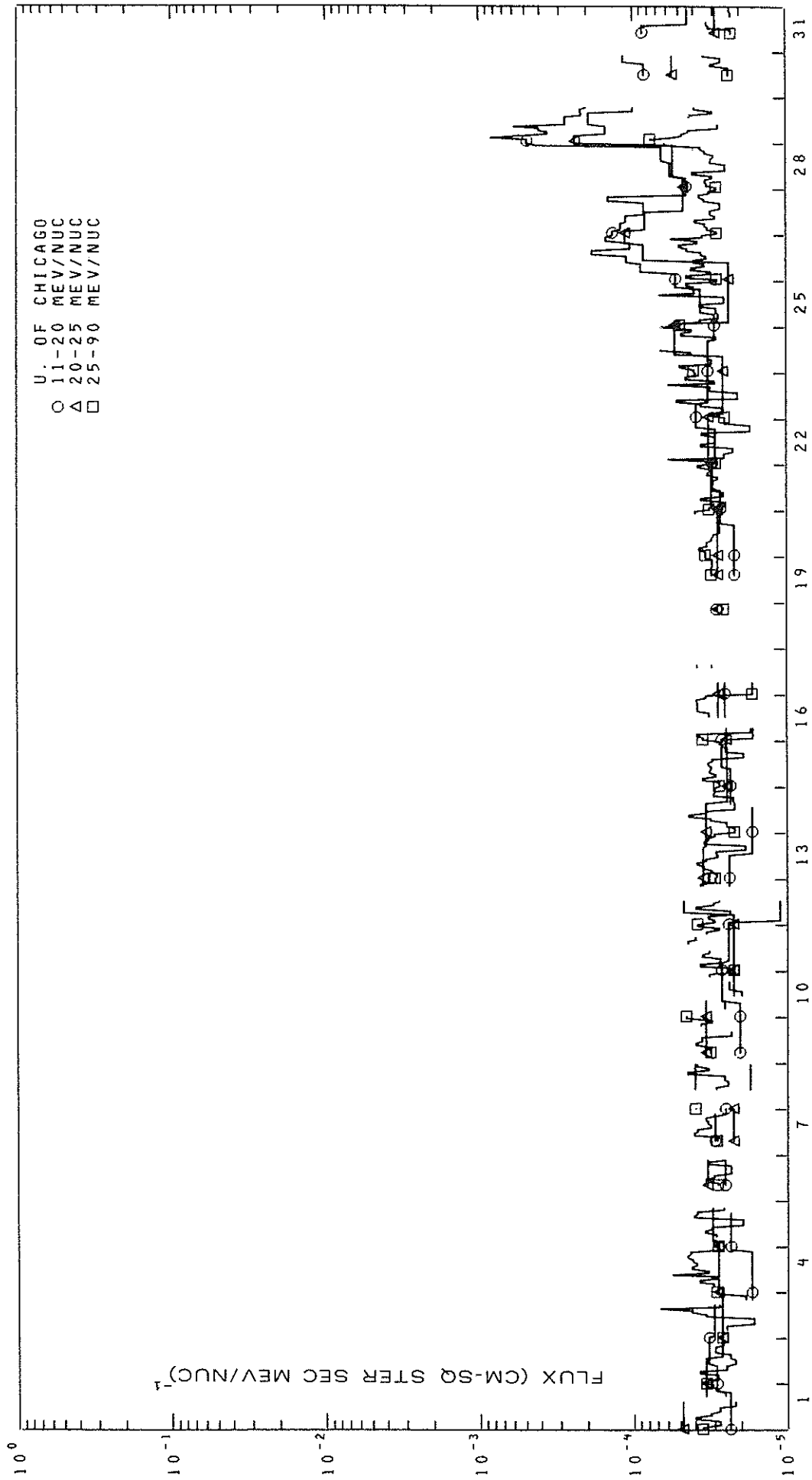
IMP 7 AND 8 HIGH ENERGY PROTONS

MARCH 1976



IMP 7 AND 8 ALPHA PARTICLES

MARCH 1976



FEBRUARY 1976 DATA

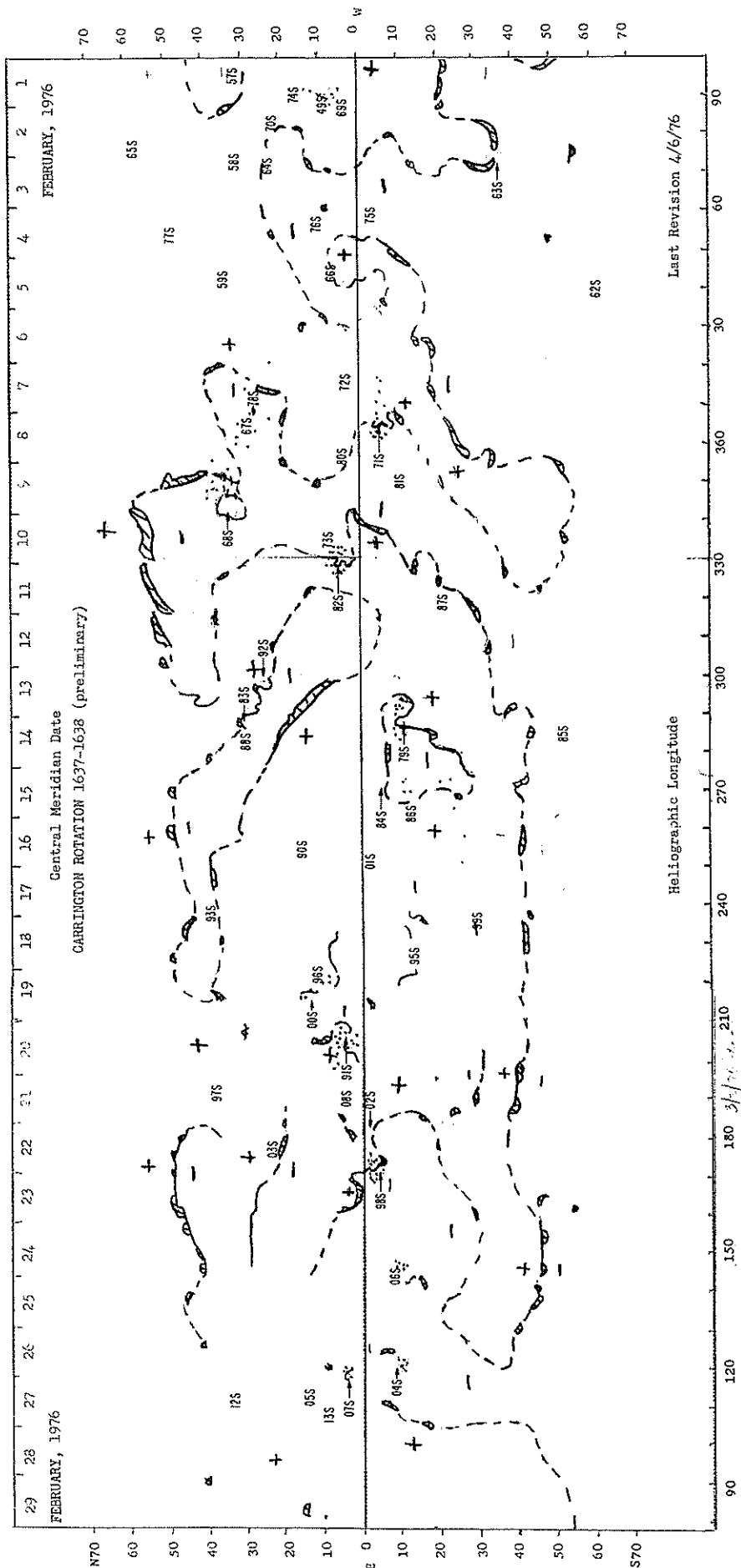
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<u>Regional Flare Index</u>	56

ABBREVIATED CALENDAR RECORD

H α SYNOPTIC CHART

FEBRUARY 1976



ABBREVIATED CALENDAR RECORD

Feb. 1, 1976		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 23	Kp	4 _o				4 ₋				3 ₋				4 ₋					4 _o				3 ₊															
	sc																																					
Aurora	USSR	φ = 59° 1800-2000 (HA1)																																				
	W.E.																																					
Cosmic Rays																																						
Green Corona	E. Limb 7 days earlier:	NE-								SE-									W. Limb 7 days later:	NW-								SW-										
Indices	Rz:	0								IO cm flux:	71								Flare:	1/17.9								Ca:	no data	Ip:	0						Ia:	5
Solar Regions		(14057) N31								(14074) N16									14049 N08																			
Sunspots		N07																																				

Feb. 2, 1976		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 20	Kp	4 ₋				3 _o				3 _o				2 ₊					3 ₊				5 ₋				4 _o					3 _o					
	sc																																				
Aurora	USSR	φ = 60° 1100-1400 and 1800-1900 (HA1); φ = 59° 1700 (HA1); φ = 49° 1900-2300 (HB1).																																			
	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:	0								IO cm flux:	71								Flare:	1/22.2								Ca:	0.7	Ip:	0					Ia:	5
Solar Regions		(14069) N03								(14070) N21									(14065) N57																		
Sunspots																																					

Feb. 3, 1976		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	4 ₋				2 ₊				4 _o				3 ₊					3 ₋				2 ₊				3 ₋					3 _o					
	sc																																				
Aurora	USSR	φ = 59° 0800-1000 (HA 1-2), 1800-1900 (R,B2); φ = 60° 1100-1200 (HA1)																																			
	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	300°					SW-	no data	220°								
Indices	Rz:	0								IO cm flux:	70								Flare:	0/23.0								Ca:	0.2	Ip:	0					Ia:	5
Solar Regions		(14058) N30								(14063) S36									(14064) N23																		
Sunspots																																					

Feb. 4, 1976		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 12Q	Kp	3 ₊				2 _o				2 _o				2 ₊					2 ₊				3 _o				3 _o					3 ₊				
	sc																																			
Aurora	USSR	φ = 59° 0000 (HB1), 1500 (R,B2)																																		
	W.E.																																			
Cosmic Rays																																				
Green Corona	E. Limb 7 days earlier:	NE-								SE									W. Limb 7 days later:	NW-							SW-									
Indices	Rz:	0								IO cm flux:	70								Flare:	0/19.1							Ca:	0.6	Ip:	1					Ia:	3
Solar Regions		(14075) S04								(14076) N10									(14077) N48																	
Sunspots																																				

Feb. 5, 1976 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 8Q	Kp	2-																													
	sc	2-																													
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	10cm flux: 70						Flare: 0/23.1						Ca: no data						Ip: 2						Ia: 4					
Solar Regions	(14066) N05						(14059) N34						(14062) S62																		
Sunspots																															

Feb. 6, 1976 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 8Q	Kp	3+																													
	sc	3-																													
Aurora	USSR																														
	W.E.																														
Cosmic Rays																															
Green Corona	E. Limb 7 days earlier: NE-						SE						W. Limb 7 days later: NW- no data 275°-355°						SW-												
Indices	Rz: 0	10cm flux: 70						Flare: 0/23.4						Ca: 1.0						Ip: 0						Ia: 0					
Solar Regions																															
Sunspots																															

Feb. 7, 1976 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 21	Kp	2-																													
	sc	2o																													
Aurora	USSR	$\phi = 54^\circ$ 1400-1600 (R1R2)																													
	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: 0	10cm flux: 71						Flare: 0/23.4						Ca: 1.5						Ip: 0						Ia: 2					
Solar Regions	(14072) N03																														
Sunspots																															

Feb. 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

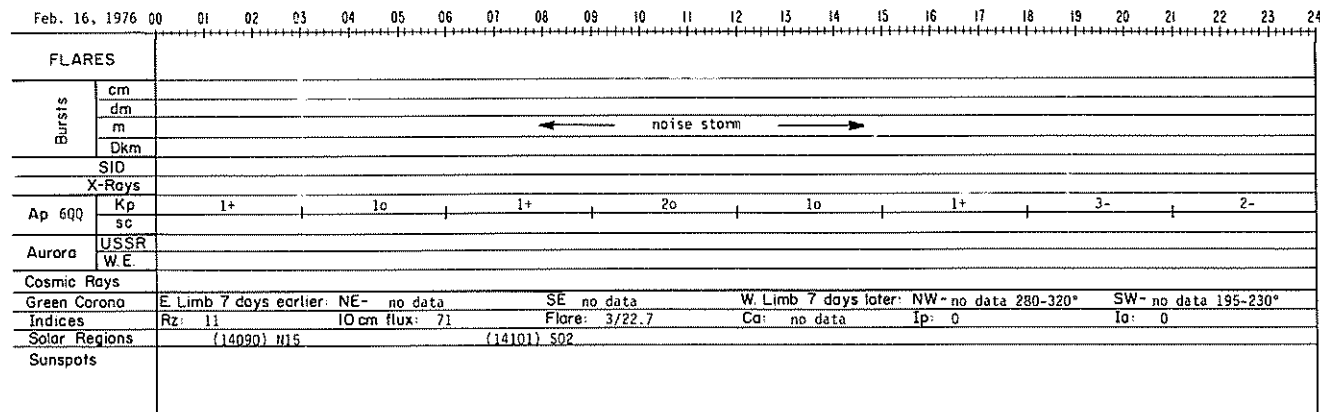
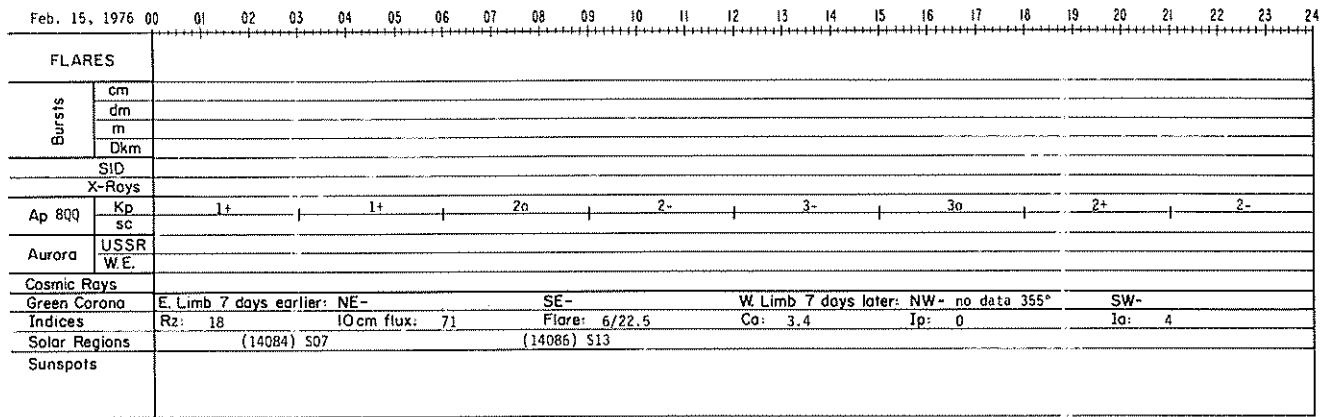
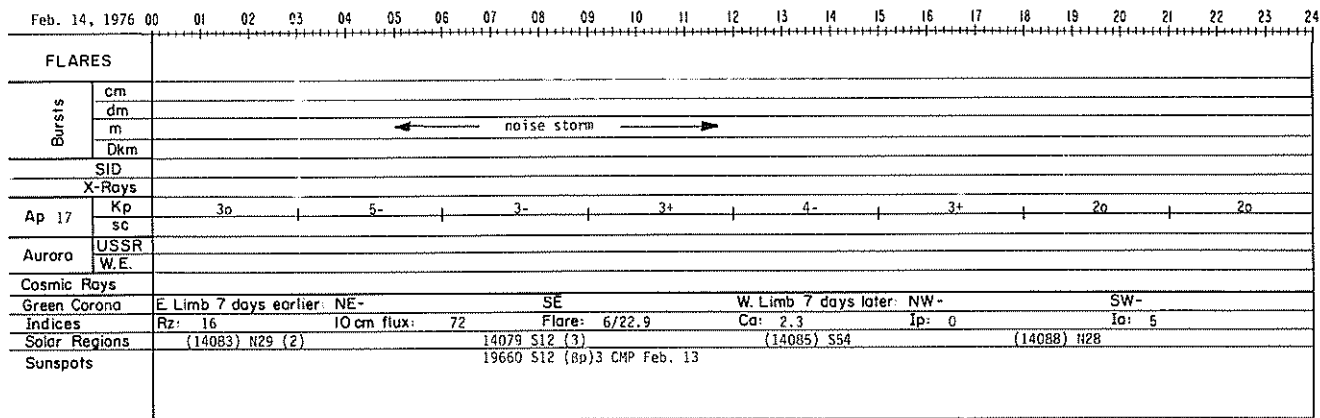
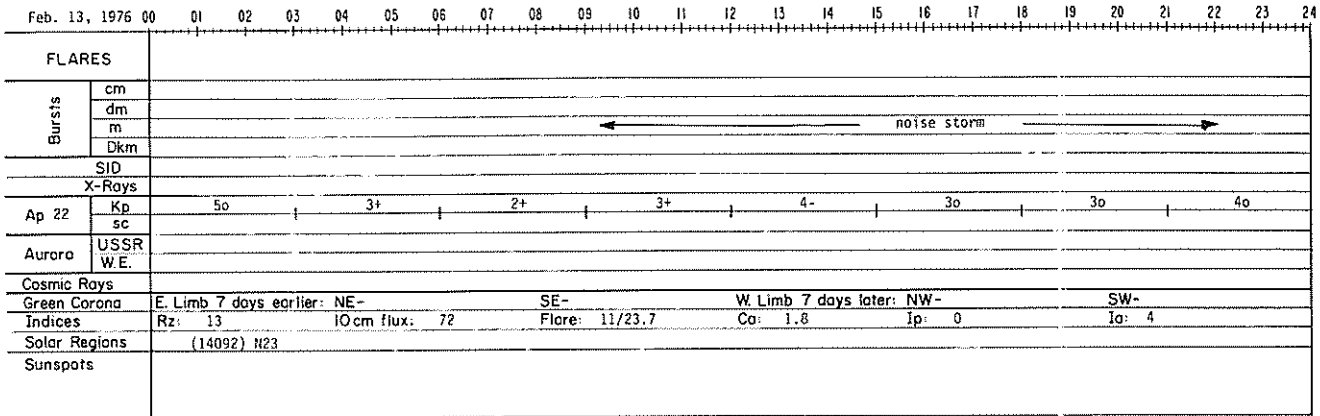
FLARES																															
Bursts	cm																														
	dm																														
	m																														
	Dkm																														
SID																															
X-Rays																															
Ap 29D	Kp	4+																													
	sc	3-																													
Aurora	USSR	$\phi = 57^\circ$ 1600-1900 (RB2), 1800-1900 (HA 1-2); $\phi = 59^\circ$ 1000-1100 (R2A2), 1200-1700 (HA1)																													
	W.E.																														
Cosmic Rays																															
Green Corona	E. Limb 7 days earlier: NE-						SE						W. Limb 7 days later: NW-						SW-												
Indices	Rz: 0	10cm flux: 70						Flare: 0/22.6						Ca: 1.8						Ip: 0						Ia: 6					
Solar Regions	14078 N27						(14067) N28						14071 S05						(14080) N04												
Sunspots																															

Feb. 9, 1976		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 24	Kp	4+		4-				3+				4-				4-				3+				4-				4+			
	sc																														
Aurora	USSR	$\phi = 60^\circ$ 1000-1300 (HA1); $\phi = 59^\circ$ 1300-1700 (HA1) and 2100 (R1B2)																													
	W.E.																														
Cosmic Rays																															
Green Corona	E. Limb 7 days earlier: NE-											SE-											W. Limb 7 days later: NW-	no data 350°				SW-			
Indices	Rz: 0	IO cm flux: 70				Flare: 0/19.2				Ca: 2.8				Ip: 0				Ia: 6													
Solar Regions	14081 S11												14068 N34 (2)																		
Sunspots																															

Feb. 10, 1976		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	4+		3+				4-				3+				3+				3+				5o				4-			
	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: 0	IO cm flux: 70				Flare: 2/21.2				Ca: 1.2				Ip: 0				Ia: 6													
Solar Regions	(14073) N06												14082 N05																		
Sunspots																															

Feb. 11, 1976		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 12Q	Kp	2o		2-				2+				3o				3o				2o				2+				4+			
	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: 0	IO cm flux: 70				Flare: 0/21.5				Ca: 1.1				Ip: 0				Ia: 4													
Solar Regions	(14087) S23																														
Sunspots																															

Feb. 12, 1976		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 17	Kp	3o		3+				3+				2+				2+				3+				3o				4+			
	sc																														
Aurora	USSR	$\phi = 57^\circ$ 0000-0200 (R1B1); $\phi = 59^\circ$ 1400-1600 (R1B2)																													
	W.E.																														
Cosmic Rays																															
Green Corona	E. Limb 7 days earlier: NE-											SE											W. Limb 7 days later: NW-	SW-							
Indices	Rz: 0	IO cm flux: 70				Flare: 6/21.3				Ca: 1.3				Ip: 0				Ia: 2													
Solar Regions																															
Sunspots																															



Feb. 17, 1976		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 14	Kp	1+				2o				2o				2+						3-																
	sc																																			
Aurora	USSR																																			
	W.E.																																			
Cosmic Rays																																				
Green Corona	E. Limb 7 days earlier: NE-											SE-											W. Limb 7 days later: NW-													
Indices	Rz: 8											IOcm flux: 72											Flare: 2/21.7							Ca: 2.4			Ip: 0			SW- Ia: 2
Solar Regions	(14093) H38																																			
Sunspots																																				

Feb. 18, 1976		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 22	Kp	5-				4-				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-							SW-no data 230°, 235°						
Indices	Rz: 15											IOcm flux: 72											Flare: 0/23.4							Ca: 2.8			Ip: 0			Ia: 4
Solar Regions	(14099) S30 (14095) S13																																			
Sunspots																																				

Feb 19, 1976		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 25D	Kp	3+				4-				4o				3+						4o																
	sc																																			
Aurora	USSR	$\phi = 59^\circ$ 1400-1900 (SB2)																																		
	W.E.																																			
Cosmic Rays																																				
Green Corona	E. Limb 7 days earlier: NE-											SE-											W. Limb 7 days later: NW-							SW-						
Indices	Rz: 10											IOcm flux: 72											Flare: 0/20.3							Ca: 2.9			Ip: 0			Ia: 6
Solar Regions	(14096) N11 (14100) N14																																			
Sunspots																																				

Feb. 20, 1976		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 19	Kp	3+				3o				4o				4o						3+																
	sc																																			
Aurora	USSR	$\phi = 60^\circ$ 1300-1400 (HB1)																																		
	W.E.																																			
Cosmic Rays																																				
Green Corona	E. Limb 7 days earlier: NE-											SE											W. Limb 7 days later: NW-							SW-						
Indices	Rz: 12											IOcm flux: 72											Flare: 10/23.7							Ca: 2.5			Ip: 0			Ia: 4
Solar Regions	14091 RQ4 (2)																																			
Sunspots																																				

Feb. 21, 1976		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 14	Kp	3+				3o				2+				4-					2+					3o												
	sc																																			
Aurora	USSR	$\phi = 59^\circ$ 2000-2100 (HA2)																																		
	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	IO cm flux: 70							Flare: 5/23.7							Ca: no data							Ip: 0							Ia: 6						
Solar Regions	(14097) H26														(14108) N03																					
Sunspots																																				

Feb. 22, 1976		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 14	Kp	4-				3+				2+				3+					3o					2o												
	sc																																			
Aurora	USSR	$\phi = 59^\circ$ 1400-1500 (HB1) and 1900 (HA1)																																		
	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: 70							Flare: 0/22.4							Ca: 3,4							Ip: 0							Ia: 1						
Solar Regions	(14102) S02														(14103) H33																					
Sunspots															14098 S03 (2) 19661 S03 (Sp)3																					

Feb. 23, 1976		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 40Q	Kp	2o				2o				1+				1+					2-				1-				0o									
	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 270°														
Indices	Rz: 0	IO cm flux: 71							Flare: 0/23.8							Ca: 2,2							Ip: 0							Ia: 3						
Solar Regions																																				
Sunspots																																				

Feb. 24, 1976		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+				0+				1-				1o					1o				1-				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: 7	IO cm flux: 71							Flare: 0/23.4							Ca: 2,0							Ip: 0							Ia: 5						
Solar Regions																																				
Sunspots																																				

Feb. 25, 1976 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 40Q	Kp	1 ₀			2 ₋				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: 0	10 cm flux: 70				Flare: 6/20.9				Ca: 1.1				Ip: 0				Ia: 3								
Solar Regions	(14106) S09																									
Sunspots																										

Feb. 26, 1976 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 9Q	Kp	1 ₀			2 ₋				2 ₊						3 ₋				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: 0	10 cm flux: 70				Flare: 2/22.7				Ca: 0.7				Ip: 0				Ia: 4								
Solar Regions	(14104) S09																									
Sunspots	(19662) S08 (ap)?																									

Feb. 27, 1976 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	3 ₀			2 ₊				2 ₊					3 ₀					5 ₋							5 ₋
	sc																									
Aurora	USSR	φ = 60° 1500-1600 and 2200 (R1B2), 2300 (R1A); φ = 59° 1700-1900 (HA2), 2000 (R1A2), 2100 (R2R1)																								
	W.E.																									
Cosmic Rays																										
Green Corona	E. Limb 7 days earlier: NE-				SE-				W. Limb 7 days later: NW-				SW-													
Indices	Rz: 7	10 cm flux: 70				Flare: 0/23.5				Ca: 0.8				Ip: 0				Ia: 3								
Solar Regions	(14107) N04				(14105) N14				(14112) N33				(14113) N08													
Sunspots																										

Feb. 28, 1976 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 20	Kp	4 ₋			3 ₊				3 ₊					3 ₋					3 ₀							4 ₀
	sc																									
Aurora	USSR	φ = 60° 0000 (HB1); φ = 59° 1300-1400, 1600-2000 (HP1), 1800-1900 (R1A2)																								
	W.E.																									
Cosmic Rays																										
Green Corona	E. Limb 7 days earlier: NE-				SE				W. Limb 7 days later: NW-				SW-													
Indices	Rz: 0	10 cm flux: 69				Flare: 0/23.0				Ca: 0.5				Ip: 0				Ia: 5								
Solar Regions																										
Sunspots																										

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Feb. 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 340	Kp	5+		60		5-		3-		2+		3-		4-		5-									
	sc																								
Aurora	USSR	$\phi = 60^\circ$ 1100-1200 (RR2); $\phi = 59^\circ$ 1700-1800 (RzA 2-3), 1800-2100 (HP1)																							
	W.E.																								
Cosmic Rays																									
Green Corona	E. Limb 7 days earlier: NE-											SE				W. Limb 7 days later: NW- no data 355°				SW-					
Indices	Rz: 0	10 cm flux: 69				Flare: 0/23.4				Ca: 0.7				Ip: 0					Id: 4						
Solar Regions																									
Sunspots																									

REGIONAL FLARE INDEX
INCLUDES ALL FLARES

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
14049	N 8	76/02/01.7	76/01/28	76/01/29	5.01	2.50	3
14078	N26	76/02/03.1	76/02/10	76/02/10	2.02	2.02	1
14079	S12	76/02/14.1	76/02/12	76/02/17	32.73	5.45	7
14098	S 3	76/02/22.9	76/02/16	76/02/21	15.41	2.57	5
14104	S 8	76/02/26.7	76/02/25	76/02/25	5.75	5.75	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

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SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JUNE 1976

JUN 1976	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE		
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND					
				START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT			
01	0000 2030	0730 2400	CULG CULG				0135								IIIB,W,U
02	0000 2030	0730 2400	CULG CULG												
03	0000 2030	0730 2400	CULG CULG												
04	0000 2030	0715 2400	CULG CULG												
05	0000 2030 2353	0730 2145 2400	CULG CULG CULG												
06	0000 2030	0730 2400	CULG CULG												
07	0000 2031	0731 2400	CULG CULG												
08	0000 2031	0731 2400	CULG CULG				2133	2136	1						IIIG
09	0000 2031	0715 2400	CULG CULG												
10	0000 2031	0731 2400	CULG CULG												
11	0000 2032	0732 2400	CULG CULG CULG				2057 2204	2205							IIIB,W,U IIIG,W,U
12	0000 2032	0732 2400	CULG CULG				2249	2250	1						IIIG
13	0000 2032	0732 2400	CULG CULG												
14	0000 2032 2205	0732 2112 2400	CULG CULG CULG												
15	0000 2037	0732 2400	CULG CULG												
16	0000 2033	0732 2400	CULG CULG CULG CULG	0517 0520.5	0513 0521	1	0517 0520.5 0608	0518 0521	1						IIIG,U,V IIIG,W IIIB,W IIIG
				0637	0637.5	1	0637	0637.5	1						
17	0000 2033	0732 2400	CULG CULG CULG CULG	0616 2100 2129	0617.5 2400 2129.5	1 1 1	0150 0616 2120	0300 0617.5 2400	1 1 1						IS IIIG,W IS FAST DRIFT
18	0000 2033	0733 2400	CULG CULG CULG CULG	0000 0314.5	0733 0315	1 1	0000 0314.5 2033 2208.5	0733 0733 0315 2400 2209	1 1 1 1						IIIN,W IS IIIG IS IIIG
19	0000 2033	0733 2230	CULG CULG CULG CULG	0539 2117	0630 2230	1	0134 0145 2117	0733 0135 0145.5 2230	1 2						IS IIIG,U IIIG,W I IS,W

SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JUNE 1976

JUN 1976	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE					
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND								
				START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT						
19	2256	2400	CULG	2256	2400		2256	2400							IS,W			
20	0000	0733	CULG	0000	0436		0000	0733							IS,W			
		2030	2400													CULG		
21	0000	0734	CULG															
		2034	2400													CULG		
22	0000	0734	CULG															
		2034	2400													CULG		
23	0000	0734	CULG															
		2034	2400													CULG		
24	0000	0720	CULG	2122	2122.5	1	2122	2123	1						IIIG			
			CULG													2124	1	IIIB
			CULG													2344	1	IIIG
			CULG													2350.5	1	IIIG
			CULG													2351	1	
25	0000	0735	CULG	0413.5	1		0023		1						IIIB			
			CULG													0132	1	IIIG
			CULG													0413.5	1	IIIB,U
			CULG															
	2035	2400	CULG															
26	0000	0735	CULG				2156	2157	1						IIIG			
		2035	2400													CULG		
27	0000	0735	CULG															
		2035	2400													CULG		
28	0000	0735	CULG				0107		1						IIIB,RS			
		2035	2400													CULG		
29	0000	0720	CULG				2120.5	2121	1						IIIG			
		2035	2400													CULG		
30	0000	0733	CULG															
		2036	2255													CULG		

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SELECTED SOLAR EVENTS

JUNE 1976

Culgoora

UT Date 1976. JUNE	HELIOGRAPH EVENT							Spectral Type	REMARKS
	Start (UT)	End (UT)	Freq. (MHz)	Positions		Polar- ization	Inten- sity (1-3)		
				Central Dist. (R _e)	Position Angle (Deg.)				
17/18	2300	0500	160	.6	50	l,r	1	I	Varying polariz- ation, weak type I from this region 17-20
19	0145	0145.5	160	.2	45	0	1	IIIG,W	

Days without Heliograph observations: ..Nil.....

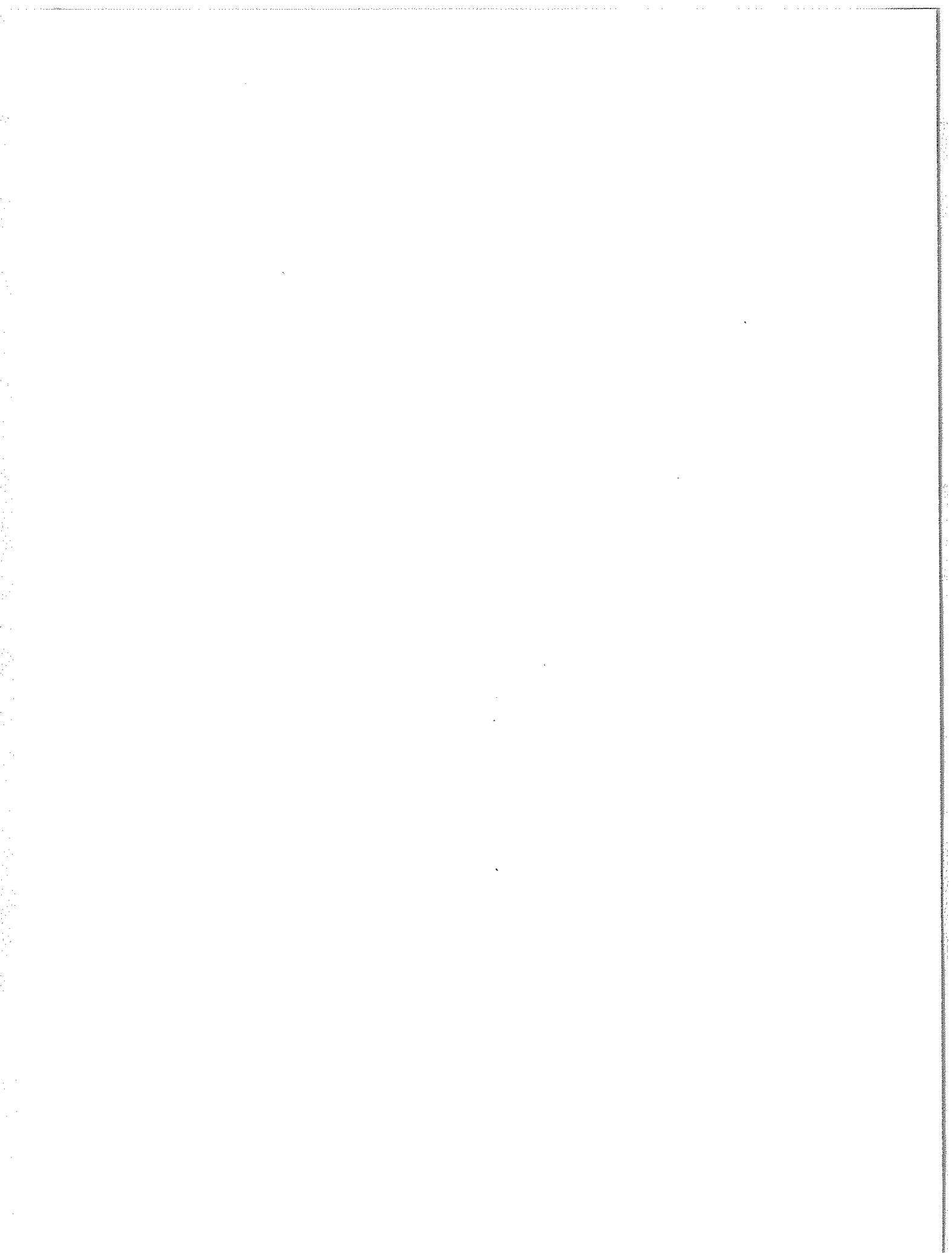
GEOMAGNETIC ACTIVITY INDICES

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JUNE 1976

Day	Three-Hourly Indices Kp								Sum	Three-Hourly Indices Km								Ap	aa				Cp
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		N	S	M		
1	1-	1	2-	1+	2-	1+	3-	2+	13-	1	1	2+	2-	2	2	3-	2+	6	17	15	12	20	0.3
2	2-	2	2+	2-	1+	2+	2-	1	14	2+	2+	3-	2	1	3-	2	1	6	17	10	13	14	0.3
3	2-	2-	1-	1+	2-	2	5-	4-	17+	2	2-	1+	2-	2	2+	4	3	12	28	14	11	32	0.7
4	0	4	5+	3-	3	4-	2-	2	25	4-	4	3-	3-	3+	2-	2	2+	20	36	24	37	25	1.0
5	0	3-	4-	3+	4	4+	3	3-	27	3	3+	3+	4-	4-	3-	2+	3	20	35	32	32	35	1.0
6		2	2	2+	2	2	2-	2+	16+	2+	2+	2+	2+	2	2+	2-	2	7	18	17	17	18	0.4
7		3-	3-	3+	3-	3-	2+	2-	22-	3-	3-	3	2+	3-	2+	1+	3+	13	29	19	24	24	0.7
8		2+	2+	2+	3	1+	2-	2+	17	2+	3-	3-	3	2	2-	2	2	8	19	17	23	15	0.5
9	00	1	2-	1+	1	0+	0+	1	7+	1	1+	2-	1+	0	0	1-	0+	4	12	6	13	5	0.1
10		1-	1+	1	1+	2-	1+	1	11	1	1+	1+	1+	2	1	1	3-	6	16	10	9	17	0.2
11	0	4+	5+	4	4-	5-	3	3-	30	4	4+	4-	4+	4+	3	3-	2	26	37	45	47	35	1.2
12		1+	1+	1+	3-	2+	3-	2-	14+	1	2-	2-	3-	3-	3-	2-	1	7	16	16	13	19	0.4
13	0	1	2-	2+	0+	1+	0+	0+	9-	1	2-	2+	0+	1+	0+	0	1+	4	12	6	11	8	0.2
14	00	1	1+	0+	0+	0+	0+	1-	5	2-	1+	1-	0+	0+	0+	0+	1-	3	9	4	7	6	0.1
15	0	0+	0	0+	0	0+	1-	2-	6+	0+	0+	1-	0+	0+	1-	2-	3-	4	14	5	7	14	0.1
16	0	2-	2	1	2-	0+	1-	1	10	2-	2	1+	2	1-	0+	1-	2-	5	14	7	13	8	0.2
17		2-	2	3-	5-	3+	2+	3-	22	2	2+	2+	4-	3+	3	2+	3-	14	26	27	26	27	0.8
18	0	4-	4-	5-	4+	3+	2+	2+	27+	3+	4-	4	4+	3	3-	3-	3-	21	34	34	45	23	1.1
19	00	1-	1+	1+	1+	1+	1	1-	8+	1-	1+	2-	2-	1	1	1-	0+	4	12	6	10	9	0.1
20		1+	1	1+	2	2-	2-	1+	11	2-	1	2-	2+	1	1+	1	1-	5	14	7	11	11	0.2
21	00	0+	1-	1-	1-	1+	1-	2-	6+	1-	0+	1-	1	1+	1-	1+	1-	3	9	4	4	9	0.1
22	00	0+	0+	1	1-	1+	1-	1-	6-	1-	0	1	1	1	0+	1	1-	3	10	5	8	8	0.1
23	0	2	1+	1	1	1	1-	1-	9-	2-	1-	1+	1-	1+	1	1-	1	4	13	6	11	9	0.1
24		1-	2-	1+	1+	1	4-	5	19+	1-	2	2	1+	1-	4-	4	4	16	32	19	11	41	0.9
25		4+	3	4-	3-	3-	3+	3-	26-	4	3	4-	3-	2+	3-	3	2+	18	37	26	32	32	1.0
26		2	1	1-	1	1	1	3+	13-	2+	1	1	1	1	1-	4-	3+	7	21	13	12	23	0.4
27		2	2	2+	1+	2	1+	1+	14-	2+	2+	3-	2	2	2-	2-	1+	6	21	13	19	16	0.3
28		2	1	2-	1-	1-	1+	2+	11+	2+	1+	2-	1	1-	1+	2+	2-	5	15	8	10	14	0.2
29	0	1	1+	1+	1+	0+	2	2	10	1+	2-	2-	1+	1-	2-	2	1-	5	16	5	9	12	0.2
30	0	2	3-	4+	7-	2+	3	4-	28+	2+	2	4+	6-	3-	3-	3-	3	29	41	37	55	23	1.3
												Mean	10	21.0	15.3	18.3	0.47						

Day	Three-Hourly Indices Kn								Three-Hourly Indices Ks							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
1	1+	1	2	2-	2	2+	3-	2+	1-	1	2+	2-	2	2-	3-	3-
2	2-	2+	3-	2	2-	3-	2-	1	3-	2	2	2-	0+	2+	2	1-
3	2-	2-	1+	2-	3-	3-	4	3	2+	1+	1+	1+	1+	2-	4	3+
4	4	4+	3-	3-	3+	2	2+	3-	4-	4	2+	3-	3+	1+	2-	2
5	3-	4	4-	4-	4-	3-	3-	3+	3	3-	3+	4-	4-	3-	2+	3
6	2	2+	2+	2+	2+	3-	2-	2+	2+	2	2+	3-	3-	2	2-	2-
7	3-	3-	3+	2+	3-	2+	2-	3+	2+	3-	3-	2	3-	2	1+	3
8	2+	3-	3-	3+	2-	2-	2+	2	2	2+	3-	3	2+	2-	2-	2
9	1+	2-	2-	1+	0+	0+	1	1-	0+	1-	2	1+	0	0	0	0
10	1+	2-	2-	2-	2	1	1+	2+	1	1+	1+	1+	2+	1	1-	3-
11	4-	5-	4-	4+	4+	3-	3-	2	4+	4+	4-	4+	5-	3	2+	2+
12	1+	2	2	3	3-	3-	2	1+	1-	1+	1+	3-	3-	2+	2-	0+
13	2-	2	3-	1-	1+	0+	0	2-	0	2-	2	0+	1+	0	0	1+
14	2	2-	1-	1	0+	0+	1-	1+	1	1+	1-	0	0	0	0	0
15	1-	1-	1	0+	1-	1	2-	3-	0	0	0+	0	0	0+	2	3-
16	2-	2-	2-	2+	1	1	1+	2-	2-	2+	1+	2-	0	0	0+	1+
17	2+	3-	3-	4	3+	3	3-	3+	2-	2+	2+	4-	3+	3-	2	2+
18	3+	4-	4	4	3	2+	3-	3-	3	3+	4	4+	3	3-	3-	3-
19	1	2-	2	2	1+	1+	1	1-	0+	1+	1+	1+	1-	1	1-	0
20	2-	1	2	3-	2-	2-	1+	1	2-	1	1+	2-	1	1+	1-	0+
21	1	1	1-	2-	2-	1+	1+	1	1-	0	0+	0	1-	0+	1-	0
22	1+	0+	1	1	1+	1	1+	1	0	0	1	1-	0+	0	1-	0
23	2	1	2-	1+	1+	1	1	1+	1+	0+	1	0	1	1	0+	1-
24	1	2-	2-	2-	1+	4-	4	4	0+	2	2	1	0+	3+	4-	4
25	4-	3-	3+	3-	3-	3-	3-	2	4+	3	4-	2+	2+	2+	3+	3-
26	2+	1+	1+	2-	1+	1	3	3-	3-	1	1	0+	1	1-	4	4-
27	2	2+	3-	2	2+	2-	2-	1+	3-	2+	2+	2-	2-	2-	2	1
28	2+	1+	2-	1+	1	2-	2	2-	2+	1	2	1	1-	0+	2+	1+
29	2-	2	2	2-	1-	2+	2+	1	1+	2-	1+	1+	1-	1	2	1-
30	2+	2+	4+	5-	2+	3-	3	3	2	2-	4+	6-	3-	2+	3-	3



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