SOLAR FLARES

MARCH 1957

Observatory	Date Mar. 1957	Time Observed Start UT	Time Observed End UT	Duration Min.	Total Area Mill.	McMath Plage Region Number	Approx. Position Lat.	Approx. Position Mer. Dist.	Time Max. Phase UT	Max. Int. Arb.	Rel. Area of Max. Tenths	Importance	Provis. Ionospheric Effect
Mitaka	02	0522	0532	10		3875	N35	E55				1	
McMath	04	1415	1435	20		3876	S22	E40				1+	
Capri-S	06	1215	1346	91	165	3868	S13	W71				1	
S.Peak	08	1940	2012	32	140	3881	S23	E38	1945	17	3	1	
Mitaka	09	b0002	0012	>10		3884	S15	E65				1	G-SWF
Mitaka	09	0414	0424	10		3884	S15	E65				1	
Capri-S	10	0903	0925	22	131	3884	S17	E39				1	
Capri-S	10	1413	1453	40	165	3888	S18	E74				1	
S.Peak	12	1710	1745	35	130	3881	S21	W08	1725	15	9	1	
McMath	12	1710	1800	50		3881	S28	W08				1+	
S.Peak	12	1825	1838	13	36	3888	S21	E39	1830	20	9	1-	
McMath	12	1827	1840	13		3888	S20	E45				1	
S.Peak	12	2155	2220	25	105	3879	S26	W24	2202	15	8	1	
Mitaka	13	b0232	0248	>16		3888	S23	E37				1	
Capri-S	13	1106	1233	90	267	3891	N05	E68				1+	
S.Peak	13	1420	1620	120	228	3888	S20	E40	1435	20	1	2-	
Capri-S	13	1425	1635	130	360	3888	S19	E37				2	
Neder.	13	1428	1523	55		3888	S21	E42				2	
Meudon	13	b1444	1555	>71		3888	S16	E44				2	
McMath	13	2030	2055	25		3881	S26	W20				1+	G-SWF
Capri-S	14	1513	1521	8	125	3892	S23	E57				1	
S.Peak	15	1452	1518	26	100	3892	S26	E41	1458	15	4	1	
Capri-S	18	1029	1040	11	100	3892	S25	E05				1	
Capri-S	20	1127	1141	14	117	3899	S12	E73				1	
Mt.Wilson	20	b2312	2322	>10		3899	S15	E75				1	
Mitaka	24	0221	0231	10		3899	S15	E25				1	
S.Peak	24	1848	1910	22	290	3897	S14	W21	1850	23	6	2	S-SWF
Mitaka	25	b0630	0650	>20		3901	S05	E25				1	
Mitaka	27	b0258	0318	>20		3909	N15	E45				1	
Mitaka	27	0415	0545	90		3909	N15	E25				2	G-SWF
Mitaka	27	b0548	0618	>30		3899	S05	W15				1	Slow S-SWF
Capri-S	27	1109	1136	27	100	3897	S12	W57				1	
S.Peak	27	1500	1530	30	87	3907	S22	E40	1510	14	9	1-	
Capri-S	27	1503	1528	25	233	3907	S16	E31				1	
S.Peak	27	2110	2128	18	165	3905	N36	E14	2115	15	2	1	
Mitaka	28	b0010	0030	>20		3898	N25	W65				1	
Capri-S	28	0725	0747	22	180	3899	S11	W21				1+	
Capri-S	28	1013	1116	63	194	3899	S15	W26				1+	S-SWF
S.Peak	28	1455	1520	25	128	3905	N36	E05	1500	20	6	1	
Capri-S	28	1456	1532	36	165	3905	N34	E08				1+	
Capri-S	28	1548	1607	19	112	3899	S17	W28				1	
S.Peak	28	1548	1608	20	74	3899	S20	W32	1555	18	8	1-	
S.Peak	28	b2307	a2357	>50	370	3907	S16	E18	2330	18	3	2	
Mitaka	29	0548	0558	10		3908	N25	W25				1	
Mitaka	29	b0643	0713	>30		3905	N45	W05				1	
Capri-S	29	0730	0744	14	272	3913	S15	E71				1+	
Capri-S	29	0808	----	--	97	3911	N18	E59				1	
Capri-S	29	1116	1304	108	476	3899	S17	W40				2+	
McMath	29	1744	1753	9		3899	S16	W48				2	
McMath	30	1810	----	--		3900	N25	W70				1	
Capri-S	31	0643	0708	25	112	3899	S08	W62				1+	
McMath	31	1335	----	--		3907	S20	W10				1	

Subflares noted as follows (Date, time (UT), coordinates):

S. Peak: unmarked Wendel: +++
Capri-S: + Mitaka: *
McMath : ++

March 01, 1950 (S16,W80)
2020 (N15,W65)
2105 (N33,E57)
02, 0706 (N30,W27)+++
March 07, 1742 (N18,E65)
1855 (S13,W62)
2107 (N20,W67)
08, 0945 (N11,E53)+
March 08, 1210 (S21,E47)+
b1510 (S26,E25)
1600 (S16,W76)
1635 (S26,E31)
March 08, b1700 (S13,E46)
1830 (S22,E79)
2147 (N18,E59)
2250 (N18,E59)

SOLAR FLARES

MARCH 1957

Subflares noted as follows (Date, time (UT), coordinates):

S. Peak:	unmarked	Wendel:	+++
Capri-S:	+	Mitaka:	*
McMath :	++		

March 09,	0951	(S15,W81)+	March 14,	1238	(N15,E24)+	March 17,	1558	(S16,E83)+	March 27,	0951	(N33,E19)+
	1835	(N12,W16)		1512	(S23,E58)		1615	(S19,W75)		1522	(S12,W12)
10,	0708	(S25,W81)+		1635	(N16,E22)		1715	(S16,E78)		1523	(S12,W12)+
11,	1442	(N19,E10)		1858	(S24,E57)		1852	(S24,E05)		2010	(S12,W62)
	1528	(S24,E90)		1905	(S22,E50)++		2210	(N34,E45)		2102	(S17,W21)
	1545	(S24,E60)	15,	1228	(S23,E09)+		2320	(N35,E63)		2142	(N31,W16)
	1600	(S12,W49)		1454	(S25,E42)+	18,	1548	(S25,E02)+		2220	(S12,W28)
	1608	(S18,E22)		1542	(N22,W80)	20,	1138	(S16,E52)+	28,	1430	(S24,E75)
	2020	(S23,E90)		1550	(S23,E41)	21,	1304	(S15,E27)+		1740	(S14,W69)
	2148	(S21,E04)		1604	(S25,E41)+		1810	(N14,W54)		1822	(N20,E68)
12,	1558	(S38,E43)		1912	(N32,E80)		1838	(N15,W55)		1848	(S21,E90)
	2020	(S22,E38)	16,	0745	(S13,W43)+		1940	(N10,W57)		2110	(S17,W40)
	2152	(S23,E80)		0825	(S18,W60)+		b2032	(S18,W80)		2332	(S15,W33)
13,	0808	(N16,E39)+		1151	(S18,W62)+		2038	(N10,E90)	30,	b1525	(N12,W05)
	0908	(S19,W04)+		1502	(N14,W59)		2215	(S17,E30)		1632	(N12,W06)
	1127	(S23,E37)+		1545	(S24,E26)	22,	1336	(N08,E80)+		1702	(N12,W04)
	1137	(S35,E36)+		1546	(S26,E28)+	23,	1221	(S23,W71)+		1740	(N12,W05)
	1442	(N15,E36)		1655	(S17,W69)	24,	1830	(S14,E73)		1800	(N30,W70)
	1449	(N15,E37)+	17,	0824	(S16,E87)+		2050	(S12,E15)	31,	1440	(N20,E34)
	1550	(N15,E36)		1025	(N33,E67)+		2255	(S20,E22)		1450	(S18,W68)
	1628	(S24,E70)		1129	(N34,E54)+	25,	1434	(S14,E13)		1520	(S21,W71)
	1648	(S24,E70)		1204	(N34,E56)+		1638	(S14,W37)		1550	(N15,W19)
	1918	(S23,W03)		1332	(S16,E84)+	26,	1625	(S18,W42)		1642	(N30,W65)
	1920	(S20,E00)++		1442	(S17,E80)		1920	(N08,E23)		1648	(S16,W26)
	1940	(N16,E35)		1555	(S16,E80)	27,	0915	(N12,E16)+		1742	(S16,W26)
										1752	(S19,E24)
										1900	(N30,W90)
										b2157	(S21,E60)

IONOSPHERIC EFFECTS OF SOLAR FLARES

(SHORT-WAVE RADIO FADEOUTS)

FEBRUARY 1957

Feb. 1957	Start UT	End UT	Type	Wide-spread Index	Impor-tance	Observation stations	Known Flare, UT CRPL-F 151B
1	1530	1740	Slow S-SWF	2	1 32W	BE, MC	1525
2	0612	0630	S-SWF	1	1-	OK	
	1720	2020	G-SWF	3	1	AN, MC, PR	
4	2007	2045	G-SWF	2	1+	AN, MC	
6	1731	1805	Slow S-SWF	5	1+	BE, HU, MC, PR, WS	1600 1755
8	1552	1602	S-SWF	5	2 35E	BE, HU, MC, PR, WS, NE*	1550
10	0815	0828	S-SWF	1	2 72W	NE*	b0819
11	1625	1720	G-SWF	4	1+	AN, BE, MC, PR, WS	
13	1539	1557	Slow S-SWF	4	1 60E	HU, MC, PR, WS	b1537
18	1528	1612	G-SWF	3	1	HU, PR	
19	1655	1713	Slow S-SWF	2	1- 90W	HU, PR, WS	b1650
	1930	2030	S-SWF	2	1	AN, PR	
23	1822	1930	G-SWF	2	1	AN, MC, WS	
24	1602	1650	Slow S-SWF	5	1- 46E	AN, HU, MC, PR, WS	1600
26	1355	1407	S-SWF	5	2 71W	BE, HU, MC, PR, NE*, SW**	1355
	1922	1955	Slow S-SWF	5	1+ 74W	AN, BE, HU, MC, PR, WS	1920
	2100	2120	S-SWF	3	1	AN, WS	
27	0115	0204	Slow S-SWF	1	2-	OK	
28	0020	0210	G-SWF	4	1+ 35W	OK, TO+	0005

NE* Nederhorst den Berg, Netherlands.
SW** Enköping, Sweden.
TO+ Hiraiso Radio Wave Observatory, Japan.

SOLAR FLARES

MARCH 1957

Observatory	Date Mar. 1957	Time Observed Start UT	Time Observed End UT	Duration Min.	Total Area Mill.	McMath Plage Region Number	Approx. Position Lat.	Approx. Position Mer. Dist.	Time Max. Phase UT	Max. Int. Arb.	Rel. Area of Max. Tenths	Importance	Provis. Ionospheric Effect
Mitaka	07	0312	0335	23	89	3872	S13	W49	0322			1	
Mitaka	09	b0002	a0008	>06	275	3884	S21	E68				1	G-SWF
Mitaka	09	0414	0421	07	184	3884	S21	E68				1	
Mitaka	13	b0232	0248	>16	135	3888	S21	E38				1	
Mitaka	16	0005	a0025	>20	367	3892	S23	E36	0010			1+	
Mitaka	21	b0204	a0211	>07	135	3892	S23	W21				1	
Mitaka	27	0415	a0611	>116	745	3906	N10	E20	0431			2	G-SWF
Mitaka	28	b2322	a2426	>64	1112	3907	S13	E10				2+	
Mitaka	29	b0643	a0711	>28	275	3905	N32	W02	0659			1	

CORRECTIONS TO SOLAR FLARES REPORTED BY SACRAMENTO PEAK

CRPL-F No.	Date	Start UT	Importance	Coordinates Should Be Lat.	Coordinates Should Be Mer. Dist.	CRPL-F No.	Date	Start UT	Importance	Coordinates Should Be Lat.	Coordinates Should Be Mer. Dist.
146	11 Sep.'56	1430	1-	S15	E88	151	9 Feb.'57	1710	1-	S27	E11
148	22 Nov.'56	1750	1-	N14	E72	151	9 Feb.'57	1830	1-	S30	E24
148	22 Nov.'56	2000	2	S19	W21	152	8 Mar.'57	b1510	1-	S26	E33
148	27 Nov.'56	1600	1-	S25	W60	152	8 Mar.'57	1600	1-	S14	W76
148	27 Nov.'56	1625	1-	S12	E82	152	8 Mar.'57	1940	1	S13	E45
148	27 Nov.'56	1750	1-	S25	W62	152	8 Mar.'57	2147	1-	N12	E48
148	27 Nov.'56	1925	1-	S22	W64	152	9 Mar.'57	1835	1-	S25	E17
148	27 Nov.'56	2100	1-	S22	W64	152	15 Mar.'57	1550	1-	S26	E42
149	16 Dec.'56	1545	1-	S26	W50						
149	16 Dec.'56	1700	1-	S22	W42						
149	16 Dec.'56	1905	1-	N22	W12						
149	17 Dec.'56	b1517	1-	S24	W65						
150	14 Jan.'57	b1945	1-	S20	W85						
151	3 Feb.'57	1530	1-	S18	E20						
151	3 Feb.'57	b1833	1-	S18	E54						

Importance 1- is a subflare report.

In earlier months many of the McMath, Capri-S, and Mitaka flares should have had start b for before or end a for after time stated. The original reports were misinterpreted. Since these reports are preliminary records on a rapid schedule, it is not felt that a detailed correction sheet needs to be furnished.