

SOLAR FLARES

JUNE 1957

Observatory	Date June 1957	Time Observed		Duration Min.	Total Area Mill.	McMath Flare Region Number	Approx. Position Lat. Mer. Dist.	Time Max. Phase UT	Max. Int. Arb.	Rel. Area of Max. Tenths	Importance	Provis. Iono- spheric Effect
		Start UT	End UT									
Mitaka	01	0243	a0300	>17		3995	S26 W26	~0245			1+	S-SWF
S. Peak	01	b1436	a1520	>44	110	3996	S21 E10	~1436	20	6	1	
S. Peak	01	2329	a2356	>27	140	3993	S25 W44	2344	32	2	2-	S-SWF
S. Peak	02	1512	1605	53	227	3996	S16 W04	1520	22	5	2-	
Capri-S	02	1513	1551	38	136	3996	S17 W04				1+	Slow S-SWF
Schaus	02	b1515	1546	>31		3996	S15 W01				2	
Mitaka	03	b0103	0110	>07		3996	S16 W11				1	S-SWF
Mitaka	03	b0318	a0321	>03		3999	N14 E66				1	
Wendel	03	b1047	1109	>22		3996	S15 W18	~1047			3	S-SWF
Ottawa	03	1318	1405	47		4002	S23 E74				1+	
Capri-S	03	b1337	a1356	>19	632	4002	S22 E66				2+	Slow S-SWF
McMath	03	b1340				4002	S20 E65				2	
S. Peak	03	b1358	1412	>14	210	4002	S23 E71	1400	14	4	1+	S-SWF
Mitaka	04	b0027	0155	>88		3996	S17 W23	~0057			2	
Mitaka	04	b0348	0418	>30		3996	S15 W20	~0350			1+	Slow S-SWF
Mitaka	04	b0550	0557	>07		3997	S19 E06				1	S-SWF
Mitaka	04	0621	a0628	>07		3997	S17 E06				1	
Mitaka	04	b0704	0709	>05		4002	S18 E62				1	S-SWF
S. Peak	04	1525	1545	20	162	3996	S23 W37	1530	15	4	1	
Mitaka	05	0205	0225	20		3996	S17 W31	~0215			1	S-SWF
Capri-S	05	b0625	a0754	>89	121	3997	S18 W13				1	
Simeiz	05	0659				4002	S17 E60				1	S-SWF
Simeiz	05	b0746				3996	S18 W27	0746			2	
Capri-S	05	b0858	a0920	>22	10	3997	S18 W14				1	S-SWF
Capri-S	05	b0912	a0947	>35	130	3996	S13 W43				1	
Meudon	05	0914				3996	S15 W45				1	Slow S-SWF
Ondrejov	05	1122				3996	S21 E41				1+	
Capri-S	05	1123	a1134	>11	131	3996	S17 E39				1	S-SWF
Ottawa	05	1127				3996	S18 E42	1133			1	
Ottawa	05	1248				4002	S19 E32				1	S-SWF
Capri-S	05	1327	1356	29	187	3996	S13 W42				1+	
S. Peak	05	1327	1400	33	235	3996	S18 W44	1330	25	6	2-	S-SWF
McMath	05	b1330	1408	>38		3996	S17 W42				2	
Ondrejov	05	1330	1450	120		3996	S20 W45				1	S-SWF
Ottawa	05	1331	1405	34		3996	S18 W43				2	
Capri-S	05	1348	a1407	>19	233	3999	N13 E22				1+	Slow S-SWF
S. Peak	05	1350	1415	25	130	3999	N07 E20	1352	20	5	1	
Ottawa	05	1354	1435	41		3999	N08 E18	1358			1+	S-SWF
Ondrejov	05	1355	1360	05		3999	N06 E21				1	
McMath	05	b1356	1420	>24		3999	N08 E18				2	S-SWF
Honolulu	05	2142	2202	20		3997	S19 W21	2148			1	
Honolulu	05	2216	2244	28			N16 E52	2220			2	S-SWF
Ondrejov	06	b0612	0616	>04		3997	S18 W27				1	
Ondrejov	06	b0744	0752	>08		3997	S15 W25				1	S-SWF
Crimea	06	1042				3997	S28 W15				2	
Ondrejov	06	b1053	1058	>05		4001	N08 W40	1056			1	S-SWF
Capri-S	06	b1130	1148	>18	146	3997	S13 W26				1	
Ondrejov	06	b1133				3997	S14 W27				1+	S-SWF
Ondrejov	06	b1219	1223	>04		4001	N07 W44				1	
S. Peak	06	1255	1340	45	108	3997	S20 W30	1312	17	4	1	S-SWF
Ondrejov	06	b1311	1320	>09		3997	S22 W27				1	
Ottawa	06	b1340				3996	S20 W59				1	S-SWF
Capri-S	06	b1341	a1434	>53	156	3996	S14 W50				1	
Ondrejov	06	b1349				3996	S20 W55				1+	S-SWF
Ondrejov	06	b1410	1417	>07		3996	S20 W55				1	

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		Start UT	End UT									
Ottawa	06	b1423				3996	S17 W59				1	
Ottawa	06	1523				3999	N12 E12				1	
Ottawa	06	1525				3997	S23 W25				1	
Ondrejov	06	b1528	1531	>03		3997	S25 W25				1	
Ondrejov	06	b1634	1643	>09		4001	N08 W44				1	Slow S-SWF
McMath	06	b1700				3996	S20 W55				1	
Ondrejov	06	1701				3996	S20 W55	1704			1+	S-SWF
S. Peak	06	2212	2227	15	245	3997	S15 W37	2217	25	4	2	
Honolulu	06	2212	2228	16		3997	S13 W37	2218			2	
Ondrejov	07	b0637	0642	>05		4001	N07 W53				1	
Ondrejov	07	0813	0820	07		4001	N08 W52	0816			1	S-SWF
Capri-S	07	1333	a1356	>23	189	4002	S20 E10				1	
S. Peak	07	1325	1410	45	200	4002	S20 E06	1340	22	3	1+	G-SWF
Capri-S	07	1440	1456	16	165	4001	N12 W57				1	S-SWF
Capri-S	08	b1010	1026	>16	244	4001	N13 W70				1	S-SWF
Ottawa	08	1100	1347	167		4001	N09 W70				2	
Capri-S	08	1514	a1549	>35	175	4001	N13 W74				1	
S. Peak	08	b2312	2340	>28	140	4002	S17 W05	2325	15	2	1	Slow S-SWF
Mitaka	10	b0436	a0443	>07	275	4002	S16 W25				1	S-SWF
Capri-S	10	b0937	a0958	>21	146	3998	S29 W38				1	S-SWF
Wendel.	10	b0944	0955	>11		3998	S31 W37				1	
Ondrejov	10	b1045	1048	>03		4010	N09 E32				1	
Ottawa	10	1239	1315	36		3998	S31 W41	1242			1	
Ondrejov	10	1256	1309	13		3998	S33 W42				1+	
Capri-S	10	1258	a1315	>17	131	3998	S30 W38				1	
S. Peak	10	1502	1530	28	155	3999	N19 W45	1507	15	2	1	
Capri-S	10	1502	a1517	>15	187	3999	N20 W35				1	
Ondrejov	10	1527	1538	11		4010	N10 E30				1	
Capri-S	11	0907	a0922	>15	175	3998	S30 W56				1	
Ondrejov	11	b1045	1052	>07		3998	S31 W50				1	Slow S-SWF
S. Peak	12	2225	2240	15	135	4012	S12 E27	2227	20	6	1	
Ondrejov	13	b0720	0731	>11		4009	S15 E08				1	S-SWF
Capri-S	13	b0810	a0845	>35	243	4012	S20 E39				2	
Ondrejov	13	b0814	0830	>16		4012	S20 E39				1+	S-SWF
Wendel.	13	b0820	0832	>12		4012	S18 E39				1	
Simeiz	13	1110	1140	30		4013	S38 E23				2	
Ondrejov	13	1512	1524	12		4002	S17 W70	1515			1	
Ondrejov	13	1635	1647	12		4018	S21 E52	1642			1	
Wendel.	13	b1638	1650	>12		4018	S18 E52				1	G-SWF
Ondrejov	14	b0513	0535	>22		4018	S23 E61				1+	
S. Peak	14	2337	~2400	~23	95	4018	S18 E38	2340	28	7	1	
Mitaka	15	b0011	a0028	>17		4021	S38 E85				1+	Slow S-SWF
Ondrejov	15	b0513	0518	>05		4021	S26 E76				1	
Wendel.	15	b0520	0602	>42		4021	S37 E75				1+	
Wendel.	15	0620	0658	38		4021	S37 E70	~0629			2+	
Capri-S	15	b0623	0639	>16	219	4021	S37 E70				1+	
Capri-S	15	0737	0814	37	486	4021	S18 E58				2+	
Ondrejov	15	0737	0813	36		4021	S19 E61				2	S-SWF
Wendel.	15	b0740	a0808	>28		4021	S18 E59				2	
NERA	15	0834	0845	11		4021	S35 E90				1	
NERA	15	0837	0840	03							1	
NERA	15	0838	0852	14		4021	S40 E80	0843			2	
Ondrejov	15	b0956	1005	>09		4012	S19 E08	1000			1	
Simeiz	15	1015	1040	25							1+	
Simeiz	15	1037	1054	17							2	

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		Start UT	End UT									
{ Ondrejov	15	b1108	1122	>14		4021	S38 E72	1112			1+	S-SWF
Wendel.	15	1109	1142	33		4021	S37 E72	~1116			1+	
Kiev	15	1113				4021	S37 E76				2	
Capri-S	15	1314	a1337	>23	107	4011	N26 W06				1	
Capri-S	15	1403	a1419	>16	233	4021	S37 E69				1+	Slow S-SWF
Capri-S	15	1458	a1510	>12	185	4021	S37 E69				1	Slow S-SWF
{ Capri-S	15	b1519	a1535	>16	233	4021	S37 E68				1+	
{ Ondrejov	15	b1519	1531	>12		4021	S37 E71	1521			1	
{ Capri-S	15	1552	1558	06	112	4018	S20 E45				1	
{ Ondrejov	15	b1552	1558	>06		4018	S20 E47	1554			1	G-SWF
Ondrejov	15	b1648	1652	>06		4021	S36 E69				1	S-SWF
Ondrejov	15	1733	1740	07		4021	S36 E69				1	
S. Peak	15	2340	a2354	>14	103	4018	S16 E27	2342	17	7	1	
Ondrejov	16	b0444	0452	>08		4021	S38 E63				1	
Ondrejov	16	b0451	0535	>44		4018	S15 E26				1+	
{ Wendel	16	b0512	0536	>24		4018	S17 E26				1+	S-SWF
{ Schaus.	16	b0512	0536	>24		4018	S17 E26				1+	
{ Wendel.	16	b0611	0626	>15		4021	S38 E60				1	
{ Schaus.	16	b0611	0626	>15		4021	S38 E60				1	
{ Ondrejov	16	0717	0724	07		4021	S38 E63	0718			1	S-SWF
{ Capri-S	16	b0718	a0726	>08	228	4021	S38 E61				1	
Ondrejov	16	b0909	0918	>09		4024	N12 E78				1	
Ondrejov	16	b1106	1112	>06		4018	S17 E19				1	
Capri-S	16	1107	1117	10	97	4018	S16 E17				1	Slow S-SWF
Ondrejov	16	b1307	1326	>19		4018	S15 E22				1	
Ondrejov	16	b1337	1343	>06		4011	N42 W32				1	
Ondrejov	16	b1415	1432	>17		4024	S15 E83				1	
{ S. Peak	16	1612	1645	33	124	4018	S15 E18	1620	17	5	1	Slow S-SWF
{ Ondrejov	16	1613	1645	32		4018	S15 E21	1615			1+	
Capri-S	16	b1614	a1651	>37	136	4018	S15 E15				1+	
{ Capri-S	16	b1625	a1651	>26	136	4011	N36 W26				1+	
{ Ondrejov	16	b1631	1649	>18		4011	N29 W25				1	G-SWF
{ Ondrejov	16	b1700	1717	>17		4021	S39 E60				1	
{ Mt. Wilson	16	b1711				4021	S35 E55				1	
Ondrejov	16	b1800	1809	>09		4011	N29 W25				1	
S. Peak	16	2030	2040	10	101	4011	N33 W25	2032	17	7	1	S-SWF
S. Peak	16	2155	~2320	~85	135	4011	N28 W25	2157	18	2	1	
Ondrejov	17	0514	0534	20		4024	N11 E62				1	
{ Simeiz	17	0623	0645	22		4021	S40 E39				1+	
{ Ondrejov	17	b0625	0634	>09		4021	S38 E50				1	S-SWF
{ Simeiz	17	0656	0713	17		4018	S10 E16				1+	
{ Capri-S	17	0658	a0724	>26	160	4018	S15 E07				1+	
Ondrejov	17	1015				4018	S15 E10	1018			1	
S. Peak	17	1355	1500	65	289	4018	S15 E06	1438	17	2	2-	
{ Capri-S	17	1416	a1520	>64	146	4018	S15 E02				1+	S-SWF
Ondrejov	17	b1437				4018	S14 E07				2	
McMath	17	b1440	a1515	>35		4018	S15 E05				2	
Ondrejov	17	1557				S01 E01		1558			1	
Ondrejov	17	1647				4022	S19 E28				1	G-SWF
S. Peak	17	1655	1717	22	130	4018	S14 E05	1705	15	3	1	
S. Peak	17	1845	1922	37	240	4018	S17 E06	1852	18	7	2-	G-SWF
S. Peak	17	2152	2202	10	123	4018	S16 E00	2155	15	8	1	
Mt. Wilson	18	b0017				4021	S35 E25				1	
Ondrejov	18	b0633	0640	>07		4024	N22 E55				1	
Ondrejov	18	b0815	0822	>07		4010	N12 W67				1	

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Capri-S	18	0814	0821	07	117	4010	N10 W75				1	
{ Capri-S	18	0914	a0925	>11	214	4024	N18 E59				1	
{ Ondrejov	18	b0917	0922	>05		4024	N23 E53				1	
{ Capri-S	18	b1036	a1105	>29	170	4017	N10 W10				1+	
{ Ondrejov	18	1038	1049	11		4017	N10 W05				1+	Slow S-SWF
{ Ottawa	18	1205	1217	12		4021	S39 E33	1208			1	
{ Ondrejov	18	b1206	1214	>08		4021	S38 E34				1	Slow S-SWF
Ondrejov	18	1330	1336	06		4024	N23 E53				1	
Ondrejov	18	1417	1421	04		4021	S38 E38				1	S-SWF
Ondrejov	18	b1436	1440	>04		4012	S05 W40				1+	Slow S-SWF
{ Capri-S	18	b1558	a1609	>11	73	4030	S17 E90				1	
{ Mt. Wilson	18	b1559				4030	S25 E85				1	Slow S-SWF
Ondrejov	18	1622	1628	06		4021	S35 E34				1	G-SWF
S. Peak	18	1812	1835	23	120	4023	N26 E42	1817	17	2	1	
{ Ondrejov	19	b0609	0713	>64		(4021)	S E				2	
{ Capri-S	19	0612	0811	119	316	4021	S35 E20				2	S-SWF
{ Simeiz	19	0612	0709	57		4021	S38 E22				2	
{ Kiev	19	0616	0710	54		4021	S37 E23	0619			2	
{ Ondrejov	19	b0749	0753	>04		4017	N12 W12				1	G-SWF
{ Ondrejov	19	b1037	1104	>27		4024	N18 E38				1+	
{ Capri-S	19	1038	1057	19	185	4024	N18 E39				1	
{ Capri-S	19	b1608	1645	>37	365	4024	N20 E46				2+	S-SWF
{ S. Peak	19	b1610	1640	>30	327	4024	N20 E46	1614	35	3	2	
Tashkent	20	b0245	0258	>13		4022	S17 W20				1	
Mitaka	20	b0258	a0315	>17	184	4021	S36 E10				1	Slow S-SWF
Tashkent	20	0416	0431	15		4021	S34 E01	0417			1	
Mitaka	20	0440	0501	20		4024	N14 E24				1	G-SWF
{ Mitaka	20	0513	0522	09		4018	S17 W19				1	
{ Tashkent	20	b0515				4018	S18 W22				2	
Tashkent	20	b0532	0610	>38		4024	N14 E23	0552			1	
Capri-S	20	0830	a0842	>12	180	4023	N22 E21				1+	Slow S-SWF
Ottawa	20	1215				4023	N36 E11	1219			1	
Ottawa	20	1235	1245	10		4024	N18 E30	1237			1	Slow S-SWF
{ S. Peak	20	1547	1600	13	135	4021	S34 W07	1549	20	5	1	
{ Capri-S	20	1548	1600	12	107	4021	S33 W10				1	
Ottawa	20	1645	1702	17		4018	S18 W28	1649			1	Slow S-SWF
{ Mt. Wilson	20	b1817	1827	>10		4024	N15 E15				1	
{ Ottawa	20	1827				4024	N15 E15	1845			1	
{ S. Peak	20	1832	1915	43	176	4024	N12 E14	1847	20	3	1+	G-SWF
{ McMath	20	b1835	a1910	>35		4024	N15 E15				1+	
Honolulu	20	1844	1902	18		4024	N11 E13				1+	
{ Honolulu	20	2036				4030	S21 E58	2038			1	G-SWF
{ McMath	20	b2040				4030	S23 E55				1	
Honolulu	20	2346	2358	12		4024	N18 E27	2348			1	
Tashkent	21	b0524	0540	>16		4018	S16 W34				1	
Capri-S	21	b1155	a1226	>31	146	4021	S36 W01				1	G-SWF
Ottawa	21	1407				4021	S44 E03	1410			1	G-SWF
Capri-S	21	1408	a1420	>12	117	4021	S34 W07				1	
McMath	21	b1410				4021	S36 W05				1	
{ S. Peak	21	1425	1500	35	280	4024	N13 E02	1435	18	6	2	
{ Capri-S	21	1426	a1457	>31	146	4024	N13 E02				1	G-SWF
{ Ottawa	21	b1430				4024	N13 E04				1	
{ McMath	21	b1440				4024	N15 E05				1	
{ S. Peak	21	1605	1630	25	135	4021	S38 W08	1612	12	5	1	G-SWF
{ Capri-S	21	b1607	1631	>24	117	4021	S34 W11				1	

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		Start UT	End UT									
{ McMath	21	b1610	a1630	>20		4021	S36 W05				1+	G-SWF
{ Mt. Wilson	21	b1615	1625	>10		4021	S35 W15				1	
{ S. Peak	21	1725	1742	17	315	4021	S34 W21	1730	18	8	2	G-SWF
{ McMath	21	b1730	a1737	>07		4021	S36 W05				1	
{ S. Peak	21	1740	1820	40	520	4024	N13 E01	1750	20	5	2	Slow S-SWF
{ McMath	21	b1742	a1814	>32		4024	N15 E05				2	
{ Honolulu	21	1742	1826	44		4024	N12 E02	1750			1+	
{ Mt. Wilson	21	b1948	1958	>10		4024	N15 E15				1	
{ Honolulu	21	1950	1962	12		4024	N19 E15	1952			1	G-SWF
{ S. Peak	21	2007	2120	73	225	4018	S16 W44	2020	10	3	1	
{ Honolulu	21	2010	2106	56		4018	S15 W46	2014			2	G-SWF
{ McMath	21	b2023	a2110	>47		4018	S16 W40				1+	
{ S. Peak	21	2210	2340	90	380	4023	N13 W02	2245	20	3	2	G-SWF
{ Mt. Wilson	21	b2230	2250	>20		4023	N15 W05				2	
{ S. Peak	21	2340	a2347	>7	250	4021	S42 W10	a2347	12	5	1+	
{ Tashkent	22	0236	0257	21		4024	N23 E12	0241			2	S-SWF
{ Capri-S	22	0636	a0642	>06	189	4021	S37 W16				1+	
{ Capri-S	22	1136	a1150	>14	97	4024	N16 W07				1	S-SWF
{ S. Peak	22	1315	1335	20	175	4024	N21 E08	1320	20	8	1	
{ Ottawa	22	1317				4024	N20 E08	1321			1	Slow S-SWF
{ Capri-S	22	b1319	a1334	>15	107	4024	N21 E08				1	
{ McMath	22	b1321	a1330	>09		4024	N25 E07				1	
{ S. Peak	22	1335	1445	70	245	4030	S20 E38	1415	12	8	2-	
{ S. Peak	22	1438	1446	08	140	4021	S39 W20	1442	15	7	1	G-SWF
{ Capri-S	22	b1447	a1502	>15	97	4011	N35 W90				1	
{ S. Peak	22	2020	2050	30	195	4030	S20 E34	2040		4	1	G-SWF
{ Honolulu	22	b2038	2050	>12		4030	S21 E35				1	
{ McMath	22	b2040				4030	S20 E35				1	Slow S-SWF
{ S. Peak	22	2052	2140	48	190	4021	S43 W17	2100	18	6	1	
{ McMath	22	b2055				4021	S35 W30				1	
{ Honolulu	22	2056	2072	16			S40 W68	2058			1	G-SWF
{ S. Peak	22	2100	2120	20	175	4030	S22 E30	2105	15	4	1	
{ McMath	22	b2102	a2110	>08		4030	S20 E35				1	
{ Honolulu	22	2104	2110	06		4030	S21 E30	2106			1	
{ S. Peak	22	2147	2335	108	250	4024	N12 W15	2335	15	9	2-	G-SWF
{ Honolulu	22	2156				4024	N15 W15				1	
{ Tashkent	23	0316	0335	19		4028	N30 E14	0317			1	S-SWF
{ Tashkent	23	0355	0412	17		4021	S35 W29	0357			1	
{ Simeiz	23	0820	0850	30		4024	N13 W20				1+	Slow S-SWF
{ Capri-S	23	b0830	0944	>74	267	4024	N13 W18				2	
{ Capri-S	23	b0905	0944	>39	136	4024	N22 W02				1	S-SWF
{ Capri-S	23	1030	1108	38	185	4021	S30 W40				1	
{ Ondrejov	23	b1031	1042	>11		4021	S34 W46				1+	Slow S-SWF
{ Capri-S	23	1131	a1207	>36	141	4024	N20 W05				1+	
{ Capri-S	23	1224	1303	39	267	4024	N22 W05				2	G-SWF
{ Ondrejov	23	b1225	1313	>48		4024	N24 W05				1+	
{ S. Peak	23	b1252	1325	>33	116	4024	N20 W04	b1252	16	3	1	S-SWF
{ S. Peak	23	1340	1500	80	113	4018	S16 W70	1355	25	5	1	
{ Capri-S	23	1341	1429	48	292	4018	S16 W64				2	S-SWF
{ Ondrejov	23	b1343	1414	>31		4018	S16 W63				1+	
{ McMath	23	b1350				4021	S35 W28				1	S-SWF
{ Tashkent	24	0333	0340	07		4024	N15 W26	0334			1	
{ Tashkent	24	0503	0523	20		4028	N28 W01				1	S-SWF
{ Tashkent	24	b0513				4024	N22 W15	0516			1+	
{ NERA	24	0735	0815	40		4024	N30 W30				2+	

SOLAR FLARES

III

JUNE 1957

Observatory	Date June 1957	Time Observed		Duration Min.	Total Area Mill.	McMath Plage Region Number	Approx. Position		Time Max. Phase UT	Max. Int. Arb.	Rel. Area of Max. Tenth	Importance	Provis. Ionospheric Effect				
		Start UT	End UT				Lat.	Mer. Dist.									
{ Capri-S Krasnaya Capri-S Krasnaya NERA	24	b0735	a0801	>26	642	4024	N22	W23				2}	S-SWF				
	24	b0743	0818	>35		4024	N28	W29									
	24	0845	0924	39		4024	N22	W14									
	24	b0850	0929	>39		4024	N21	W13									
	24	0850	0915	25		4024	N30	W30									
Capri-S Mt. Wilson S. Peak Ondrejov Ondrejov	24	0943	a0958	>15	102	4021	S39	W36	2050	14	2	1 1 1+ 1 1	G-SWF				
	24	b1415			4030	S15	E25										
	24	2040	2102	22	232	4039	N07	E73									
	25	b0557	0603	>06	4039	N12	E63										
	25	1313	1319	06	4024	N12	W42										
{ Capri-S Ondrejov Capri-S Ottawa Capri-S	25	1354	1401	07	180	4024	N21	W30				1} 1} 1 1 1	Slow S-SWF				
	25	b1358	1402	>04	4024	N15	W44										
	26	b1155	1212	>17	112	4041	S14	E60									
	26	1302			4039	N13	E48										
	26	b1306	1342	>36	204	4039	N13	E45									
S. Peak S. Peak S. Peak Honolulu Kharkov	26	1500	1527	27	113	4030	S21	W20	1515	15	9	1 1 1 1 2+	S-SWF				
	26	1600	1720	80	134	4030	S22	W22									
	26	1615	1740	85	106	4024	N20	W46									
	26	2202			4039	N15	E42										
	27	b1109	1154	>45	4024	N17	W76										
{ Capri-S Ondrejov Kharkov Capri-S S. Peak	27	b1113	a1135	>22	233	4024	N14	W76	1223			1 2 2+ 2 1	G-SWF				
	27	1155	1253	58	4024	N17	W55										
	27	~1155	1253	~58	4024	N26	W54										
	27	1208	a1247	>39	443	4024	N21	W56									
	27	b1228	1255	>27	148	4024	N21	W55									
{ S. Peak Capri-S Ottawa Capri-S Ottawa	27	1312	1350	38	204	4030	S26	W29	1317	25	2	2- 1+ 1 1 1	G-SWF				
	27	1313	a1331	>18	233	4030	S25	W27									
	27	b1317			4030	S24	W27										
	27	1346	1358	12	160	4039	N08	E34									
	27	b1353			4039	N15	E48										
Capri-S Capri-S S. Peak S. Peak Honolulu	27	1534	1546	12	175	4024	N21	W58	2335	15	7	1 1 1 1 1	G-SWF				
	27	1558	1619	21	156	4024	N21	W58									
	27	2330	2342	12	169	4039	N12	E32									
	27	2330	2345	15	148	4024	N20	W63									
	27	2332	2344	12		4024	N22	W61									
{ Krasnaya Capri-S Krasnaya Utrecht Kharkov	28	0700	0930	150	559	4039	N09	E28	0722			3 2+ 2 1+ 2	S-SWF				
	28	0706	0918	132		4039	N09	E29									
	28	b0707	1007	>180		4039	N11	E26									
	28	b0825	1015	>110		4039	N11	E29									
	28	0855	1024	89		4024	N28	W65									
{ Capri-S Capri-S Capri-S Ondrejov S. Peak	28	0857	a0918	>21	175	4024	N21	W65				1 1 2 2 1	Slow S-SWF				
	28	b0924	0934	>10	219	4041	S23	E41									
	28	1223	1302	39	321	4039	N12	E24									
	28	b1227	1312	>45	165	4039	N19	E13									
	28	b1246	1315	>29		4039	N12	E21									
Honolulu Capri-S Capri-S S. Peak McMath	28	2208	2220	12	219	4039	N11	E33	2210			1 1 1 1 1	Slow S-SWF				
	29	0847	0914	27		4043	S13	E48									
	29	1229	a1247	>18		194	4030	S17						W54			
	29	1345	1402	17	100	4044	S30	E87						1350	20	8	1 1
	29	b1345	a1352	>07	4044	S26	E68										
{ Capri-S S. Peak Capri-S McMath Capri-S	29	1346	1402	16	233	4044	S30	E73	1412	14	8	1+ 1 1 1 1	G-SWF				
	29	1400	1450	50	125	4039	N08	E08									
	29	1405	a1432	>27	121	4039	N09	E07									
	29	b1408	a1414		204	4039	N12	E07									
	29	1445	1454	09		4044	S29	E78									

SOLAR FLARES

JUNE 1957

Observatory	Date June 1957	Time Observed		Duration Min.	Total Area Mill.	McMath Plage Region Number	Approx. Position Lat. Mer. Dist.	Time Max. Phase UT	Max. Int. Arb.	Rel. Area of Max. Tenths	Importance	Provis. Ionospheric Effect
		Start UT	End UT									
{ Capri-S Schaus. Krasnaya Capri-S Kharkov	30	0821	0910	49	253	4044	S26 E57				2	S-SWF
	30	b0824	0900	>36		4044	S32 E56				1+	
	30	b0827	0847	>20		4044	S28 E64				1+	
	30	b0918	a0937	>19	126	4046	N14 E66				1	
	30	b0927				4039	N09 W01	0927			2	
{ Capri-S Andrejov Krasnaya Schaus. Schaus.	30	0926	1316	230	535	4039	N09 W03				2+	S-SWF
	30	b0927	1107	>100		4039	N08 W07				2	
	30	0928	0937	.59		4039	N08 E02				2	
	30	b0945	1332	>227		4039	N07 W02				2	
	30	b0945	1332	>227		4039	N13 W00				2	

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

S. Peak: unmarked Schaus. : a
 Capri-S: + Ottawa : b
 McMath : ++ Honolulu: c
 Mitaka : * Ondrejov: d
 Wendel.: **

June 01, b1315 (S27,W38) 1519 (S20,E37) b1533 (S27,W40) b1618 (S27,W41) b2224 (N20,E88) 2331 (S19,W02) 02, b0717 (S19,E30)** b0746 (S20,W06)** 0755 (S16,E05)a 1600 (S20,E24) 1620 (S21,E71) 2155 (S18,W08) 2155 (N19,W90) 03, 0203 (N17,E66)* 1455 (S20,E60) b1842 (S20,W22) 2000 (S20,E57) 04, 0521 (S14,E03)* 0751 (S15,E00)a 0753 (S15,W20)* 1708 (S22,W38) 2135 (N10,W23) 2212 (S24,W39) 05, b0730 (S13,W38)+ b0735 (S17,E36)+ 1259 (S14,W17)b 1300 (S23,E27)b 1315 (S20,W17) 1321 (S21,W26)b 1355 (S12,E29)b 1402 (S14,W19) 1406 (S14,W19)b 1450 (N14,E26)b 1522 (S05,W75) 2030 (S34,E14) 2142 (S20,W22) 2215 (N10,W36) 06, 0010 (N11,W37)c 0044 (S19,W24)c 1220 (S13,W51)+ b1312 (S15,W28)** 1340 (S18,W60) b1343 (S18,W60)** 1522 (N12,E12)	June 06, 1527 (S25,W26) 1528 (S24,W20)+ 1632 (N10,W45) 1633 (N10,W46)** 1635 (S21,W35) 1658 (S18,W58)** 1700 (S18,W58) 1742 (S22,W34) 1818 (S18,W60) 1840 (S15,W05) 2142 (S15,W38) 2147 (S18,W63) 2350 (S20,W38) 07, 0637 (N11,W54)+ 0813 (N12,W55)+ 0925 (S22,E10)d 0936 (S17,E18)+ b1218 (N11,W58)+ 1330 (N22,E90) 1400 (N11,W57) 1438 (N11,W58) 1520 (N10,W58) 1638 (N10,W59) 1815 (S17,W74) 1900 (S17,W74) 1912 (N02,E90) 1930 (S17,W74) 08, 0709 (N36,E90)+ 1312 (N11,W69) 1415 (N18,W16)+ 1512 (N11,W69) 1520 (N32,E88) 1602 (N12,W70) b1615 (S21,W08) 1640 (N12,W70) 1835 (N10,W73) 2222 (S15,W07) 09, b0819 (S13,W15)+ 0900 (S12,E49)+ 1307 (S18,E90) 1352 (S17,E90) b1452 (S13,W18)+ 1452 (S17,W22) 1520 (N11,W25)	June 09, 1532 (N11,W85) 1542 (S20,W25) 1620 (N11,W90) 1715 (N33,E70) 2002 (S17,W25) 10, 1154 (S33,W40)b b1245 (S32,W42) 1330 (S21,W90) 1343 (S30,W46)b 1357 (S33,W42)b 1525 (N11,E31) 1545 (S17,E74) 1705 (N34,E57) 1757 (S21,W85) 1915 (S30,W45) 1952 (S31,W46) 2038 (N31,E43) 2155 (S27,W90) 2310 (S17,W30) 11, b0726 (S32,W56)+ 1248 (S15,W90) 1258 (S18,E51) 1400 (S32,W56) 1410 (S14,W90) 1555 (S10,E18) 2148 (S18,E54) 2205 (S14,W90) 2250 (S15,W90) 12, 1322 (N37,E37) 1522 (S18,E70) 1600 (N12,E04) 1812 (S14,E72) 1825 (S18,E65) 13, b1334 (S18,E22)+ 1355 (S19,E56) 1512 (S16,W78) 1530 (N30,E16) 1530 (N26,E19)d 1535 (N30,E10)** b1543 (N32,E18)+ 1635 (S20,E53) 1702 (N14,W90) 2102 (S21,E52) 2145 (N13,E57)	June 14, 0749 (S27,W61)** ~1745 (S38,E88) 1855 (N30,E01) 1915 (N12,E90) ~2045 (S38,E88) ~2235 (S38,E88) 15, 0723 (S37,E59)a b0950 (S17,E05)+ 1305 (N36,W11) 1312 (N28,W08) 1320 (S39,E79) 1352 (S40,E80) 1455 (S40,E80) 1515 (S39,E79) 1532 (N20,E90) 1536 (S20,W90) 1547 (S22,E48) 1552 (N37,W04) 1615 (S41,E79) 1618 (S15,E72) 1625 (N10,E90) 1627 (N12,E90) 1645 (S42,E79) 1702 (S15,E72) 1710 (S41,E79) 1727 (S40,E73) 1750 (S39,E75) 1800 (N19,E88) 1827 (S40,E75) 1857 (S41,E75) 1902 (S42,E75) 2012 (S14,E63) 2055 (S39,E70) 2105 (N11,E87) 2122 (S42,E78) 2140 (S40,E73) 2142 (S22,E40) 2157 (S24,E41) 2322 (S42,E76) 2342 (N13,W16) 16, 0723 (S37,E59)** 0823 (N10,E70)+ 1248 (S16,W21) 1322 (N21,E79)
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SOLAR FLARES

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JUNE 1957

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

S. Peak: marked Schaus. : a
 Capri-S: + Ottawa : b
 McMath : ++ Honolulu: c
 Mitaka : * Ondrejov: d
 Wendel.: **

June 16, 1415 (S08,W40)	June 19, 1026 (S19,W10)d	June 23, b1252 (S25,E22)	June 26, 1948 (S20,W18)c
b1422 (S16,E36)+	1030 (S15,W75)d	b1358 (S32,W40)	b2013 (S25,E66)
1532 (N34,W25)	b1216 (N18,E38)+	1435 (S32,W41)	2130 (N14,E45)
1627 (N33,W24)	1442 (S38,E21)	b1518 (S38,W42)	2155 (N15,E44)
1700 (S40,E60)	1502 (N23,E37)	1540 (S16,W68)	2215 (S21,W24)
1757 (N34,W27)	1655 (S38,E23)	1605 (S32,W41)	2257 (S22,W25)
1857 (N33,W25)	1816 (N17,E37)	1610 (S25,E15)	2340 (S21,W25)
1920 (N11,E68)	1942 (S38,E16)	1630 (N25,W14)	27, b1129 (N13,E33)+
2122 (S20,E18)	2314 (S16,W19)	1640 (N18,W21)	1250 (S41,W89)
2142 (N10,E14)	2358 (S38,E13)	1710 (N10,E90)	1317 (N21,W64)
2242 (S40,E57)	20, b0451 (S21,E70)*	b1748 (S40,W35)	1347 (N08,E36)
2300 (S40,E57)	0827 (S33,W07)+	1755 (S33,W42)	1352 (N12,E48)+
2305 (S17,E39)	b1233 (S36,E11)+	2213 (N26,W16)	1352 (N13,E49)
17, b0935 (S35,E47)+	b1539 (S37,E03)+	24, 1424 (S18,E19)	1402 (S22,W34)
b1136 (N35,W35)+	1647 (S17,W29)	1530 (N17,W03)	1422 (N10,E34)
1251 (S20,E15)	1657 (N14,E15)b	1610 (S24,E10)	b1550 (N13,E37)
1255 (N38,W32)	1700 (N14,E15)	1640 (N25,E51)	1558 (N20,W59)
1400 (N16,E57)	1706 (S36,E05)b	1752 (N13,E74)	1650 (N14,E33)
1423 (N13,W60)+	1712 (S38,E05)	1817 (N20,W20)	1730 (N08,E36)
1425 (N32,W44)+	1722 (S38,E06)	1825 (N11,W40)	2040 (S44,W89)
1505 (S15,E05)	1742 (S38,E06)	2110 (N12,E70)	2130 (S18,W30)
1600 (N12,E06)	1822 (N19,E17)	2255 (N20,W24)	2202 (N24,W60)
1627 (N12,E06)	1831 (N19,E29)b	25, b0409 (N20,W23)*	2205 (N13,E35)
1648 (S20,E28)	1832 (N17,E28)	b0933 (N14,W43)+	2252 (N13,E35)
1652 (N10,E56)	2025 (N11,E12)	b1250 (S26,E01)	2255 (S24,W33)
1757 (N27,E57)	2025 (S20,E59)	1313 (N14,W45)	2310 (S13,E61)c
1950 (N20,E70)	2155 (S38,E05)	b1322 (N14,W45)	2312 (S13,E62)
2120 (S39,E47)	2202 (S16,W33)	1342 (N13,E62)	28, 1430 (N14,W90)
18, b0628 (N12,W71)*	21, b0800 (S21,E50)+	1354 (N18,W34)	1555 (S15,E38)
0630 (N10,W80)d	b1101 (S21,E48)+	1531 (N12,E60)	1652 (N10,E22)
1225 (S16,W07)d	1407 (S38,W02)	1721 (N22,W33)	1805 (S16,E38)
1233 (S18,W08)b	1417 (S18,E48)a	1755 (S34,W65)	29, b0750 (N12,E09)+
1415 (S38,E33)	1526 (N19,E18)	1815 (N12,W50)	b1250 (S23,W54)
1417 (S40,E34)b	1527 (N18,E19)+	1832 (S15,E75)	1445 (S32,E87)
1429 (S14,E12)b	b1530 (N15,E05)++	1910 (N18,W38)	b1450 (S26,E68)++
1430 (S15,E12)	1540 (N17,E11)	1917 (N14,W53)	1530 (S20,W47)
1430 (S37,E33)	b1543 (S36,W05)++	2040 (S20,W10)	1555 (S32,E87)
1433 (N34,W53)b	1937 (N19,E15)	2132 (N20,W34)	1630 (S32,E87)
1437 (N35,W51)	b1948 (N15,E05)++	2215 (S21,E26)	1722 (S32,E87)
1500 (N18,E45)	2242 (S33,W19)	2320 (N13,E57)	1740 (S16,E23)
1500 (N42,E42)d	2330 (N50,W70)	26, 0948 (S19,W17)+	1740 (N09,E09)
b1601 (S18,E90)	22, 0621 (S20,E42)+	b1250 (S21,W80)	1802 (S33,E88)
1605 (S10,W64)	b1226 (N16,W07)+	b1250 (S34,W78)	b1812 (S26,E68)++
1648 (S39,E30)	1433 (N18,E04)	1250 (N11,E49)	1820 (S11,E35)
1830 (N18,E44)	1445 (N35,W90)	1307 (N20,W46)	30, b0712 (N17,E68)+
2005 (S15,E10)	1930 (S39,W20)	1308 (N18,W42)b	1835 (N12,E64)
2058 (N16,E54)	1934 (S40,W12)c	1437 (S33,W80)	1850 (N10,W09)
2110 (S37,E16)	1948 (N26,W11)	1445 (N15,W60)	1902 (N12,E64)
2135 (S36,E18)	2120 (N20,E04)	1514 (S19,W19)+	1945 (N13,W12)
2257 (S38,E27)	23, 1101 (N20,W05)+	1625 (N11,W68)	2335 (N08,W11)
2302 (N15,E38)	b1155 (S16,E25)+	1705 (N13,E48)	

CORRECTIONS TO SUBFLARES REPORTED BY SACRAMENTO PEAK

CRPL-F No.	Date	Time (UT)	Coord. Should Be
	Apr.		
153	19	1742	(N27,E37)
153	26	1252	(S12,W47)
153	26	1350	(S04,E56)
153	26	1657	(N30,W47)