

SOLAR FLARES

APRIL 1959

IIIa

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH FLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
{ NIZAMIAH MITAKA ONDREJOV WENDEL	01	0455 E	0503	0457	N28	W16	5068	8 D	16	1	0457		3.07	2.00	176	Slow S-SWF
	01	0502 E	0525	0511	N26	W20	5068	23 D	2	1	0506	6.43	8.17	3.13		
	01	1147 E	1151		N23	W24	5068	4 D	1	3	1148			2.20		S-SWF
	01	1625 E	1657 D		N18	E02	5071	32 D	1			3.00				
{ SAC PEAK MCMATH SAC PEAK	01	1722	1827	1737	N15	W08	5071	65	1	2			4.50		15	
	01	1737 E	1810 D		N14	W07	5071	33 D	1	2	1737		2.40			
	01	2130	2207	2142	N13	W14	5071	37	1	2			3.95		16	
MITAKA	02	0312 E	0330	0314	N27	W18	5068	18 D	1	1	0315	.50	.64	1.51	91	
MITAKA	02	0312 E	0400	0320	N19	W15	5071	48 D	1	1	0315	1.01	1.19	2.71	134	
MITAKA	02	0558	0618	0510	N11	W16	5071	20	1	1	0558	1.01	1.09	2.58	128	
{ CAPRI-G ONDREJOV	02	0735 E	0742 D		N15	W19	5071	7 D	1	2	0737		2.00			
	02	0742 E	0749		N12	W25	5071	7 D	1	3	0745			2.80		
{ CAPRI-G ONDREJOV	02	0809 E	0827 D		N03	W23	5079	18 D	1	2			2.00			
	02	0815	0823	0818	N02	W28	5079	8	1	3	0818			3.30		
{ CAPRI-S ONDREJOV	02	0815 E	0827 D		N00	W25	5079	12 D	1	2	0817	2.50	2.80			
	02	0848	0851	0851	N25	W28	5068	3	1	3	0851			3.00		
WENDEL	02	0915	0933	0919	N03	W27	5079	18	1			4.00				
WENDEL	02	1316 E	1342 D		N16	W23	5071	26 D	1			3.00				
WENDEL	02	1556	1620 D	1601	N13	E23	5076	24 D	16			5.00				
{ CAPRI-G ONDREJOV	03	0832 E	0852 D		N16	W36	5071	20 D	1	3	0834		3.00			
	03	0834	0853	0837	N13	W39	5071	19	1	3	0837			2.60		
{ CAPRI-S ARCETRI	03	0836	0855 D		N14	W36	5071	19 D	1	3	0838	2.00	3.00			
	03	0954 E	1000 D		N12	E38	5080	6 D	1	3	0954	2.50	3.50			
{ ONDREJOV WENDEL	03	1241	1319	1255	N12	W35	5071	38	16	3	1255			2.90		
	03	1243	1318	1249	N14	W34	5071	35	2			10.00				
{ STOCKHOLM CAPRI-S	03	1244 E	1307		N16	W33	5071	23 D	1	3	1258	4.50	5.80			
	03	1244 E	1316 D		N15	W31	5071	32 D	2	3	1248	6.00	6.90			
NERA	03	1245	1258		N14	W32	5071	13	2							
WENDEL	03	1246	1320		N18	W20	5071	34	16			7.00				
{ CAPRI-G HAWAII	03	1255 E	1300 D		N16	W29	5071	5 D	2	3	1258		8.00			
	03	2210	2240	2216	N10	W38	5071	30	2	3	2216	4.70	6.20			S-SWF
{ CAPRI-G CAPRI-S	04	0645 E	0715 D		N15	W45	5071	30 D	1	3			3.00			
	04	0646	0934		N14	W44	5071	48	3	3	0806	12.00	18.60			
{ WENDEL WENDEL	04	0739	0855 D	0800	N14	W46	5071	76 D	26			12.00				
	04	0739	0859 D	0754	N14	W38	5071	81 D	2			10.00				
{ CAPRI-G KANZELHOE	04	0742 E	0945		N15	W45	5071	123 D	2	3	0747		9.00			Slow S-SWF
	04	0750	0825		N14	W54	5071	35	2							
{ ARCETRI ATHENS	04	0755 E	0930 D		N14	W43	5071	95 D	3	4	0810	10.40	16.20			
	04	0757 E	0935		N13	W44	5071	38	2							
{ ONDREJOV ARCETRI	04	0810 E	0956		N14	W44	5071	106 D	2	2	0818			3.30		
	04	0815 E	0914 D		N13	E90	5083	59 D	1	3						
{ WENDEL ONDREJOV	04	0824	0857 D	0832	N18	W59	5068	93 D	2			11.00				
	04	0828	0850		N20	W62	5068	22	16	2	0834			3.70		
{ CAPRI-S ARCETRI	04	0828 E	0852 D		N20	W60	5068	24 D	2	3	0837	3.50	8.00			
	04	0828 E	0855 D		N19	W62	5068	27 D	2	4	0830	3.30	6.80			
{ CAPRI-G SCHAUINS	04	0835 E	0850 D		N20	W58	5068	15 D	1	3	0836		4.00			
	04	0848	0905		N18	W42	5071	17	2							
WENDEL	04	0905 E	0925 D		N11	W48	5071	25 D	1			4.00				
UCCLE	04	0917 E	1000 D		N15	W47	5071	43 D		4						
UCCLE	04	0917 E	1030 D		N14	E90	5083	73 D	1	4						

SOLAR FLARES

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		START	END	MAX. PHASE	APPROX.		McMATH PLACE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %					
					LAT.	MER. DIST.														
APR 1959																				
ARCETRI WENDEL CAPRI-G ONDREJOV CAPRI-G WENDEL CAPRI-S CAPRI-G HAWAII	04	0953 E	1006 D	1205	N13	E90	5083	13 D	1	3	0953	0.80	4.00	4.00						
	04	1158 E	1216 D		N13	W51	5071	18	16											
	04	1158 E	1230 D		N14	W46	5071	32 D	1		3	1208								
	04	1159 E	1217 D		N15	W50	5071	18 D	1		2	1201								
	04	1258 E	1335 D	1308	N15	W01	5076	37 D	1	3	1259		4.00							
	04	1300 E	1341 D		N12	W01	5076	41 D	16			6.00								
	04	1302 E	1329 D		N16	E02	5076	27 D	1		3	1305	2.50			2.60				
	04	1530 E	1605 D		N12	E26	5080	35 D	1		2	1535				3.00				
	04	2300 E	2324 D	2302	N15	E19	5080	24	1	2	2302	3.70	4.20							
	CAPRI-G CAPRI-G WENDEL CAPRI-G WENDEL WENDEL CAPRI-G CAPRI-S WENDEL HAWAII SYDNEY	05	0710 E	0715 D	2326	N13	E14	5080	5 D	1	3	0712		3.00						
05		0838 E	0855 D	N12		W58	5071	17 D	1	3		0840		3.00						
05		0927 E	0947 D	N11		W55	5071	20 D	16			5.00								
05		0935 E	1025 D	N12		W58	5071	50 D	1	3		0937		3.00						
05		1005 E	1026 D	N17		W62	5071	21 D	16				6.00							
05		1142 E	1156 D	N13		W63	5071	14 D	1			4.00								
05		1145 E	1202 D	N13		W60	5071	17 D	1	3		1145		3.00						
05		1552 E	1614 D	N14		W58	5071	22 D	1			3	1605	1.00			2.30			
05		1630 E	1637 D	N15		W65	5071	7 D	1			3.00								
05		2316 E	0102 D	2326		N16	W69	5071	46	36		3	2326	32.20			101.90		S-SWF	
05	2320 E	0045 D	N15	W75	5071	85 D	3													
MITAKA MITAKA ARCETRI STOCKHOLM WENDEL WENDEL WENDEL McMATH CAPRI-G CAPRI-G CAPRI-G	06	0007 E	0047 D	0010	N15	W64	5071	40 D	3	2	0012	12.10	28.90	1.88	169					
	06	0044 E	0051 D	0045	N20	W65	5071	7	1		2	0048	1.51	3.62	1.45		115			
	06	0810 E	0813 D		N12	E68	5083	3 D	1		2									
	06	1045 E	1107 D		N17	W05	5080	22	1		2	1052	2.00	2.00						
	06	1047 E	1107 D		N18	W05	5080	20 D	16				6.00							
	06	1240 E	1310 D		S23	E46	5088	30	1				3.00							
	06	1240 E	1315 D		N12	W75	5071	35	2			12.00								
	06	1241 E	1252 D		N16	W80	5071	11 D	1		1	1242		4.50						
	06	1255 E	1325 D		N15	W76	5071	30 D	1			2	1300					4.00		
	06	1255 E	1345 D		S21	E41	5088	50 D	1		2	1300		3.00						
06	1500 E	1535 D		N12	W03	5080	35 D	1	2	1505		4.00								
NIZAMIAH CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G UCCLE CAPRI-G HAWAII	07	0404 E	0419 D	0408	N24	E49	5085	15	1	2	0408		3.20	1.70		S-SWF				
	07	1158 E	1205 D	N24	E47	5085	7 D	1	2		1201		3.00							
	07	1445 E	1535 D	N10	E80	5090	50 D	2	3		1450		7.00							
	07	1445 E	1547 D	S16	E80	5089	62 D	1	3		1448		5.00							
	07	1445 E	1555 D	N14	E31	5083	70 D	1	3		1448		4.00							
	07	1445 E	1610 D	N15	E48	5083	85 D	2	3		1450		9.00				G-SWF			
	07	1500 E	1515 D	N10	E27	5083	15 D	16	4											
	07	1528 E	1540 D		N23	E47	5085	12	1		3	1532		3.00						
	07	1814 E	1828 D	1818	S15	E90	5089	14 D	16		3	1818	1.10							
	WENDEL CAPRI-G ARCETRI CAPRI-G WENDEL WENDEL R O HERST ARCETRI CAPRI-G	08	0705 E	0729 D	0713	N12	E31	5083	24 D		1	3		4.00			9.00	2.00		
08		0903 E	0947 D	0917	N25	E80	5093	44 D	2	3	0917									
08		0905 E			N30	E90	5093		1	3	0905		0.40							
08		0905 E	0907 D		N18	W32	5080	2 D	1	3	0906			2.00						
08		0906 E	0917 D		N17	W30	5080	11 D	16				5.00							
08		0916 E	0959 D	0925	N25	E76	5093	43	3		19.00									
08		0927 E	0937 D	0927 U	N22	E90	5093	10 D	1	2						S-SWF				
08		0930 E	0938 D		N29	E90	5093	8 D	16		3		0930	2.30						
08		1052 E	1110 D		S15	E75	5089	18 D	1	3	1102			3.00						

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
WENDEL	08	1316	1331 D	1323	N11	W30	5080	15 D	1			3.00				
WENDEL	08	1422	1514 D		N09	E72	5090	52 D	16			8.00				
CAPRI-G	08	1430 E	1502 D		N10	E75	5090	32 D	1	3	1432		5.00		18	S-SWF
SAC PEAK	08	1430	1517	1447	N08	E70	5090	47	1	2			3.65			
CAPRI-S	08	1432 E	1513 D		N08	E71	5090	46 D	2	3	1435	3.00	8.40			
CAPRI-G	08	1445	1515 D		N21	E80	5093	30 D	1	3	1450		4.00			
WENDEL	08	1447 E	1502 D		N20	E73	5093	15 D	1			4.00				
WENDEL	08	1549 E	1623 D		N25	E35	5085	34 D	16			8.00				
CAPRI-G	08	1550 E	1600		N23	E35	5085	10 D	1	2	1550		3.00			
NIZAMIAH	09	0324	0337	0329	N16	W60	5080	13	1	2	0329		2.71	1.70		
STOCKHOLM	09	1325 E	1340		N09	E13	5083	15 D	1	2	1330	2.00	2.20			
SAC PEAK	09	1512	1552	1515	N11	E12	5083	40	1	2			2.40		14	
SAC PEAK	09	1645	1710	1650	N23	E65	5093	25	2	2			5.95		18	Slow S-SWF
UCCLE	09	1655 E			N26	E75	5093		16	2						
SAC PEAK	09	1900	1907	1902	N12	E10	5083	2	1	2			2.15		14	
MITAKA	10	0155 E	0203 D		N16	W73	5080	8 D	1	1	0155	.60	1.92	3.82		
MITAKA	10	0244 E	0257 D		N30	E62	5093	13 D	1	1	0253	.80	2.16	1.98	159	
MITAKA	10	0325	0332 D	0327	N16	W74	5080	7 D	16	1	0328	2.41	7.71	2.09	140	
WENDEL	10	0623 E	0711 D		N16	W72	5080	48 D	16			6.00				
CAPRI-G	10	0710 E	0830 D		N17	W75	5080	80 D	1	3	0712		6.00			
WENDEL	10	0809 E	0853 D		N25	E56	5093	44 D	16			6.00				
CAPRI-G	10	0813 E	0902 D		N24	E55	5093	49 D	1	3	0817		5.00			
CAPRI-G	10	1021 E	1103		N25	E54	5093	42 D	2	3	1022		8.00			
CAPRI-S	10	1037	1100 D		N26	E52	5093	23 D	2	3	1039	4.00	8.20			S-SWF
WENDEL	10	1044 E	1059 D		N26	E54	5093	15 D	16			6.00				
UCCLE	10	1047	1102		N27	E55	5093	15	16	4						
CAPRI-G	10	1301	1310		N25	E55	5093	9	1	3						
CAPRI-G	10	1335 E	1345 D		N17	W75	5080	10 D	2	1	1345		8.00			
CAPRI-S	11	0610	0646 D		N12	W10	5083	36 D	1	2	0623	3.00	3.20			
CAPRI-S	11	0638 E	0647 D		N08	E37	5090	9 D	1	2	0642	3.50	4.40			
CAPRI-G	11	0738 E	0820 D		N13	W11	5083	42 D	1	3	0740		5.00			
ARCETRI	11	0830 E	0851 D		N29	E44	5093	21 D	16	2						
MOSCOW	11	0833	0839		N28	E45	5093	6	2							
CAPRI-G	11	0835 E	0905	0838	N25	E45	5093	30 D	2	3	0835					S-SWF
CAPRI-S	11	0836 E	0902 D		N28	E48	5093	26 D	2	2	0838	3.00	5.40			
UCCLE	11	0855 E	0904		N28	E47	5093	9 D	1	2						
ARCETRI	11	1011 E	1019 D		N17	W90	5080	8 D	16	2						
WENDEL	11	1434	1453 D		N26	E42	5093	19 D	16			7.00				
CAPRI-G	11	1442 E	1615 D	1505	N25	E42	5093	93 D	2	2	1455		8.00			Slow S-SWF
CAPRI-S	11	1451 E	1543 D		N26	E39	5093	52 D	2	3	1517	5.50	9.10			
ONDREJOV	11	1506 E	1600	1523	N25	E40	5093	54 D	2	2	1523			4.80		
SAC PEAK	11	1622	1700	1627	N11	W12	5083	38	2	3			8.30		17	
CAPRI-S	11	1624 E	1648 D		N11	W12	5083	24 D	1	3	1628	3.00	3.10			
SAC PEAK	11	1710	1747 D	1720	N12	W18	5083	37 D	1	3			2.30		15	
SAC PEAK	11	2145	2205	2150	S16	E35	5089	20	16	3			4.90		22	
SAC PEAK	11	2325	2402 D	2334	N28	E38	5093	37 D	2	3			8.65		25	S-SWF
CAPRI-G	12	0725 E	0735 D		S15	E27	5089	10 D	1	3	0727		2.00			
CAPRI-G	12	1025 E	1140		N07	E20	5090	75 D	1	3	1026		5.00			
KANZELHOHE	12	1033 E	1051		N19	E60	5095	18 D	2							

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		START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	McMATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _o	MAX. INT. %	
KANZELHOHE	12	1114 E	1220		N29	E28	5093	66 D	26							Slow S-SWF
CAPRI-G	12	1115 E	1202 D		N26	E31	5093	47 D	2	3	1120		9.00			
CAPRI-S	12	1119 E	1222 D		N26	E29	5093	63 D	2	3	1145	6.00	7.50			
CAPRI-G	12	1210 E	1226		N13	W20	5083	16 D	1	3	1220		2.00			
MITAKA	13	0504 E	0532 D		N30	E21	5093	28 D	2	1	0504	8.04	10.90	2.21	200	S-SWF
CAPRI-G	13	0718 E	0745 D		N29	E21	5093	27 D	1	3	0720		3.00			
WENDEL	13	0831	0923	0844	N27	E17	5093	52	3			19.00				
ARCETRI	13	0832 E	0852 D		N27	E18	5093	20 D	26	2	0845	6.60	8.60			
CAPRI-S	13	0832 E	0918 D		N28	E20	5093	46 D	2	3	0841	5.50	6.80			
CAPRI-G	13	0840 E	0922		N27	E20	5093	42 D	26	3	0845		10.00			
ARCETRI	13	0845 E			N31	E38	5093		1	2	0845	2.80	4.80			
STOCKHOLM	13	0851 E	0920		N27	E16	5093	29 D	2	3	0853	4.00	5.20			
WENDEL	13	1056	1110		S16	E08	5089	14	1			3.00				
HAWAII	13	1800	1822	1806	N14	E46	5095	22	1	3	1806	3.30	5.00			
SAC PEAK	13	1800 U	1825 U	1805	N14	E47	5095	25 D	1	2			3.00		15	Slow S-SWF
HAWAII	13	1944	2012	1948	N28	E13	5093	28	16	3	1948	4.50	5.70			
SAC PEAK	13	1950 E	2012 U	1950 U	N29	E14	5093	22 D	1	1			2.85		18	
HAWAII	13	2340	2354	2342	N28	E12	5093	14	16	3	2342	3.90	4.90			S-SWF
MITAKA	13	2342 E	2358		N25	E10	5093	16 D	1	1	2342	4.02	4.78	3.40	149	
HAWAII	14	0134 E	0200 D	0136	N29	E10	5093	26 D	16	3	0136	4.50	5.70			Slow S-SWF
MITAKA	14	0135 E	0215 D		N27	E10	5093	40 D	1	1	0143	1.51	1.89	2.00	107	S-SWF
MITAKA	14	0423 E	0429		N29	E08	5093	6 D	1	1	0426	1.51	1.84	1.33	87	
MITAKA	14	0503 E	0510		N27	E07	5093	7 D	1	1	0503	3.02	3.68	3.29	137	
CAPRI-G	14	0940 E	0945 D					5 D	1	1						
ONDREJOV	14	1213	1235 D		S16	W04	5089	22 D	1	1	1222			2.40		S-SWF
WENDEL	14	1219 E	1240 D		S16	W03	5089	21 D	1			3.00				S-SWF
STOCKHOLM	14	1220	1241		N26	E05	5093	21	2	2	1226	6.00	7.20			
WENDEL	14	1220	1242 D	1223	N27	E05	5093	22 D	2			9.00				
CAPRI-S	14	1222 E	1246 D		N27	E06	5093	24 D	2	3	1225	5.00	6.00			
ONDREJOV	14	1223 E	1242		N28	E05	5093	19 D	2	2	1224			4.30		Slow S-SWF
ONDREJOV	14	1255	1318		N29	E03	5093	23	1	3	1257			2.80		
WENDEL	14	1255	1320		N28	E03	5093	25	16			6.00				
CAPRI-S	14	1258	1317 D		N25	E03	5093	19 D	1	3	1300	2.50	2.00			
WENDEL	14	1300 E	1332		S14	W01	5089	32 D	1			4.00				
ONDREJOV	14	1302 E	1319		S16	W05	5089	17 D	1	3	1304			2.30		
CAPRI-G	14	1320 E	1342 D		S17	E00	5089	22 D	1	3	1324		3.00			
CAPRI-G	14	1430 E	1452 D		S15	W04	5089	22 D	1	3	1446		4.00			
WENDEL	14	1436	1501 D		S14	W04	5089	25 D	1			4.00				
ONDREJOV	14	1446 E	1457		S15	W08	5089	11 D	1	3	1448			2.10		
CAPRI-G	14	1538 E	1605		N28	E04	5093	27 D	1	2	1542		3.00			Slow S-SWF
CAPRI-G	14	1622 E	1635 D		N14	E38	5095	13 D	1	1	1624		3.00			
McMATH	14	1823 E	2002 D	1828	N09	W14	5090	99 D	26	2	1828		6.25			
HAWAII	14	1824	1948 D	1832	N09	W13	5090	84 D	16	3	1832	4.80	5.20			
MITAKA	14	2348 E	2415 D		N25	W05	5093	27 D	1	2	2348	1.51	1.75	1.62	102	
MITAKA	14	2348 E	2419		N28	W05	5093	31 D	16	2	2348	3.02	3.65	2.15	162	
CAPRI-G	15	0810 E	0831		S16	W16	5089	21 D	1	3	0820		3.00			
SCHAUINS	15	0825 E	0835		N28	W04	5093	10 D	2							
ARCETRI	15	0832 E			N27	W06	5093		16	3	0832	4.10	4.90			S-SWF
ONDREJOV	15	0832 E	0844 D		N29	W07	5093	12 D	2	3	0835			5.20		
WENDEL	15	0833	0845	0836	N30	W06	5093	12	2			8.00				

COMMERCE - STANDARDS - BOULDER

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SOLAR FLARES

APRIL 1959

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX.		McMATH FLARE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _a	MAX. INT. %		
					LAT.	MER. DIST.											
	APR 1959																
↑ WENDEL CAPRI-S CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G ARCETRI CAPRI-G CAPRI-G ONDREJOV SAC PEAK CAPRI-S ONDREJOV WENDEL CAPRI-G STOCKHOLM ARCETRI	15	0835	0846		N30	E14	5093	11	1			4.00					
	15	0835	E 0848	D	N29	W07	5093	13	D 2	3	0836	6.00	6.90				
	15	0837	E 0858		N29	W05	5093	21	D 1	3	0843		5.00				
	15	0838	0851		N34	E16	5093	13	1	3	0843		3.00				
	15	0855	E 0944		S23	W30	5089	49	D 1	3	0900		3.00				
	15	0927	E 0947	D	N01	W35	5092	20	D 1	3	0930		3.00				
	15	1057	E 1105	D	S20	W80	5088	8	D 16	2							
	15	1057	E 1130	D	S20	W77	5088	33	D 2	3	1100		8.00				
	15	1057	E 1130	D	S16	W17	5089	33	D 1	3	1100		4.00				
	15	1148	1155	1151	N01	W40	5092	7	1	3	1151			2.30		15	
	15	1422	1455	1437	N27	W12	5093	33	1	2			2.50				
	15	1424	1455	D	N23	W14	5093	31	D 1	3	1433	4.00	4.40				
	15	1432	E 1448		N29	W10	5093	16	D 1	3	1435			2.30			
	15	1432	E 1500		N27	W12	5093	28	D 2			12.00					
	15	1435	E 1505	D	N29	W10	5093	30	D 16	3	1437		6.00				
	15	1437	E 1457	D	N24	W10	5093	20	D 1	3	1440	2.50	3.00				
	15	1442	E		N27	W07	5093		1	3							
	{ ONDREJOV WENDEL WENDEL ONDREJOV CAPRI-G CAPRI-G CAPRI-G WENDEL MCMATH WENDEL ONDREJOV	16	0611	0629	0614	N29	W19	5093	18	16	3	0614			2.10		
16		0620	E 0638		N26	W18	5093	18	D 16				7.00				
16		0649	E 0658		N28	W14	5093	9	D 1				4.00				
16		0651	E 0654		N29	W16	5093	3	D 1	3	0653			2.30			
16		0902	E 0925	D	N01	E03	5099	23	D 1	2	0905		3.00				
16		0913	E 0925	D	S11	E69	5101	12	D 1	2	0915		3.00				
16		1025	E 1127	D	S11	E69	5101	62	D 1	3			3.00				
16		1112	1224	D	S10	E71	5101	72	D 1				4.00				
16		1145	1214	1158	N27	W26	5093	29	1	1	1158		2.20				
16		1152	E 1218	D	N26	W27	5093	26	D 2				12.00				
16		1157	1208	1158	N27	W29	5093	11	1	3	1158			2.90			
MITAKA ATHENS ONDREJOV ARCETRI ONDREJOV CAPRI-G CAPRI-G CAPRI-S		17	0015	0037		N20	E81	5102	22	16	1	0015	2.02	8.08	6.24	149	S-SWF
	17	0756	0825		N07	W54	5090	20	2								
	17	0817	E 0835		N30	W48	5093	18	D 16	3	0818			3.60			
	17	0827	E		N20	E80	5102		1	3	0827	4.40	2.30				
	17	1115	E 1119	D	S10	W23	5094	4	D 1	3	1116			2.10			
	17	1352	E 1415	D	N20	E70	5102	23	D 1	2	1355		3.00				
	17	1352	E 1415	D	S08	E70	5103	23	D 1	2	1355		3.00				
	17	1620	E 1700	D	N08	W55	5090	40	D 1	3	1646	2.00	3.50				
	MITAKA NIZAMIAH CRIMEA NERA NERA CAPRI-S CAPRI-S ARCETRI MCMATH	18	0042	E 0104	D 0053	N30	W41	5093	22	D 1	1	0052	2.02	3.60	2.39	134	
		18	0545	E		S14	W56	5089	10	D 1	1	0545		2.14	1.60		
18		0731	E 0749	D	S07	W68	5089	18	D 2								
18		0806	0812		N06	E08	5098	6		26							
18		0806	0812		N28	W44	5093	6		26							
18		0808	E 0841	D	N28	W45	5093	33	D 1	1	0810	2.50	4.50				
18		0917	E 0940	D	N17	E08	5100	23	D 1	1	0925	2.00	2.10				
18		0946	E 0953	D	S00	W78	5092	7	D 2	3							
18		1856	1903	1858	N02	W82	5092	7	1	1	1858			2.10			
CAPRI-S CAPRI-G CAPRI-G CAPRI-G		19	0824	E 0858	D	N26	W60	5093	34	D 2	2	0831	3.00	6.90			
	19	1522	E 1602	D	N18	W08	5100	40	D 1	3	1527		3.00				
	19	1645	E 1652	D	N08	E13	5106	7	D 1	3	1647		2.00				
	20	1405	E 1421	D	N02	E44	5104	16	D 1	2	1408		3.00				

SOLAR FLARES

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OBSERVATORY	DATE APR 1959	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH PLACE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _o	MAX. INT. %	
					LAT.	MER. DIST.										
CAPRI-G	20	1405 E	1430 D		N18	W24	5100	25 D	1	2	1408		4.00			
{ MCMATH SAC PEAK HUANCAYO HUANCAYO	21	1449	1515 D	1459	N20	W47	5100	26 D	1	1	1459		2.30			
	21	1455	1520	1457	N17	W47	5100	25	1	3			2.20			
	21	1457	1516	1457	N18	W43	5100	19	1	2	1457	2.50	3.80	5.40	17	
	21	1910	1923	1911	N18	E53	5110	13	16	1	1911	4.30	7.70	2.00		
ARCETRI	22	1144 E	1157 D		N16	W17	5098	13 D	1	2						
WENDEL	23	0857 E	0917 D		S11	W06	5103	20 D	1				3.00			
CAPRI-G	23	1115 E	1145 D		N16	W68	5100	30 D	1	3	1117		3.00			
CAPRI-G	23	1250 E	1305 D		N16	W68	5100	15 D	1	3	1252		2.00			
CAPRI-G	23	1257	1320 D		N16	W52	5107	23 D	1	3			2.00			
{ WENDEL	23	1502 E	1522 D		S12	W09	5103	20 D	1				4.00			
{ CAPRI-G	23	1510 E	1522 D		S11	W07	5103	12 D	1	3	1512		2.00			
{ CAPRI-G	23	1520 E	1522 D		N19	E65	5117	2 D	1	3	1520		2.00			
{ WENDEL	23	1520 E	1532		N24	E57	5117	12 D	16				5.00			
{ HUANCAYO	23	1619 E	1705	1619	N18	W65	5100	46 D	16	2	1619	.40	1.10	3.00		
{ HUANCAYO	23	1619 E	1705	1646	N18	W65	5100	46 D	16	2	1646	3.80	9.60	2.30		
CAPRI-G	24	0722 E	0750 D		S07	W09	5103	28 D	1	3	0725		3.00			
ARCETRI	24	0803 E	0915 D		N12	E90	5122	72 D	2	3						
CAPRI-G	24	1133 E	1140 D		S07	W08	5103	7 D	1	3	1135		3.00			
CAPRI-G	24	1202 E	1210 D		N17	W40	5098	8 D	1	3	1205		3.00			
CAPRI-S	24	1323	1332 D		N11	E61	5120	9 D	1	3	1325	2.00	4.00			
CAPRI-S	24	1531	1553 D		N11	E60	5120	22 D	1	2	1537	1.50	3.00			
CAPRI-G	24	1540 E	1624		N12	E56	5117	44 D	1	3	1542		3.00			
MITAKA	25	0250	0302		S06	W18	5103	12	16	1	0250	2.01	2.09	2.04	180	
NIZAMIAH	25	0408 E	0417		N14	E72	5122	9 D	1	2	0408		2.25	1.70		
CAPRI-G	25	0737 E	0806		N17	W51	5098	29 D	1	3	0740		3.00			
{ WENDEL	25	0745	0807 D		N17	W54	5098	22 D	16				6.00			
{ ONDREJOV	25	0748	0758	0750	N17	W53	5098	10	16	3	0750			2.90		
{ CAPRI-S	25	0749 E	0804 D		N15	W53	5098	15 D	1	3	0751	2.50	4.50			
{ WENDEL	25	0754 E	0814		N18	W36	5098	20 D	1				4.00			
{ WENDEL	25	0754 E	0816 D		N18	E58	5120	22 D	16				8.00			
CAPRI-G	25	1101 E	1110 D		S08	W20	5103	9 D	1	2	1102		2.00			
CAPRI-G	25	1225 E	1430 D		N15	W55	5098	125 D	1	2	1237		3.00			
CAPRI-G	25	1405 E	1430 D		N07	E08	5108	25 D	1	2	1408		3.00			
{ ONDREJOV	25	1447 E	1457		N12	E67	5122	10 D	1	3	1449			4.20		
{ WENDEL	25	1658 E	1717		N05	E03	5108	19 D	1				4.00			
{ WENDEL	25	1659	1709		N07	E04	5108	10	16				5.00			
HAWAII	25	2005	2038	2010	N22	E03	5110	33	1	3	2010	4.50	5.00			
WENDEL	26	0632 E	0654		S07	E71	5124	22 D	16				6.00			
WENDEL	26	0836	0850		S12	W47	5103	14	1				3.00			
CAPRI-G	26	1020 E	1025 D		N14	E43	5120	5 D	1	3	1023		3.00			
{ WENDEL	26	1242	1258 D		N15	E43	5120	16 D	16				7.00			
{ CAPRI-G	26	1245 E	1310 D		N14	E43	5120	25 D	1	3	1247		3.00			
CAPRI-G	26	1312 E	1317 D		S13	W52	5103	5 D	1	3	1313		2.00			
HAWAII	26	1837	1846	1838	N12	E32	5117	9	1	3	1838	2.10	2.60			
CAPRI-G	27	0700 E	0722		S07	E55	5124	22 D	1	2	0703		2.00			

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH FLARE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _u	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
CAPRI-S	27	0638	0746 D		S10	W49	5103	62 D	1	2	0724	2.00	3.00			
CAPRI-G	27	0700 E	0750 D		S10	W50	5103	50 D	1	2	0702		4.00			
CAPRI-G	27	0748	0750 D		S14	W61	5103	2 D	1	1	0749		3.00			
CAPRI-G	27	0825 E	0841		S07	E55	5124	16 D	1	1	0828		3.00			
{ CAPRI-S	27	0855	0938 D		N11	E19	5117	43 D	1	3	0911	4.00	4.20			
CAPRI-G	27	0900 E	0945 D		N12	E20	5117	45 D	2	2	0902		6.00			
MITAKA	28	0124 E	0135		S08	W60	5103	15 D	1	1	0125	2.01	3.78	2.50	96	Slow S-SWF
MITAKA	28	0214	0226	0214	S08	W60	5103	12	16	1	0214	1.51	2.84	6.16	188	S-SWF
NIZAMIAH	28	0506 E	0513 D		S08	W62	5103	7 D	16	1	0506		5.12	1.80		
ONDREJOV	28	0637	0646		S08	E45	5124	9	1	3	0640		3.10			
CAPRI-G	28	0731 E	0733 D		S07	E41	5124	2 D	1	3	0732		3.00			
{ CAPRI-S	28	0729 E	0816 D		S09	W65	5103	47 D	2	2	0731	4.00	3.80			
ATHENS	28	0731	0749 D		S07	W68	5103	18 D	2							
CAPRI-G	28	0731 E	0750 D		S09	W66	5103	19 D	16	3	0732		4.00			
WENDEL	28	0859 E	0919 D		S07	W69	5103	20 D	16				7.00			
CAPRI-G	28	0909 E	0920 D		N11	E18	5120	11 D	16	3	0911		5.00			
WENDEL	28	0912 E	0922 D		S07	E45	5124	10 D	1				3.00			
{ CAPRI-G	28	0909 E	0945 D		S09	W66	5103	36 D	1	3	0911		4.00			
WENDEL	28	0913 E	0924 D		S06	W65	5103	11 D	1				3.00			
CAPRI-G	28	1159 E	1245 D		S08	W68	5103	46 D	16	3	1202		5.00			
CAPRI-G	28	1317 E	1358	1348	N14	E02	5117	41 D	1	3	1348		3.00			
SAC PEAK	28	1400	1420	1410	N25	W28	5110	20	1	3			2.20		14	
{ SAC PEAK	28	1608	1628	1616	N12	W35	5108	20	1	3			2.55		15	
CAPRI-G	28	1609 E	1635		N12	W29	5108	26 D	2	2	1616		6.00			
{ SAC PEAK	28	1628	1646	1630	N13	W00	5117	18	1	3			3.60			
CAPRI-G	28	1635 E	1702 D		N11	E05	5117	27 D	2	1	1645		6.00			
UCCLE	28	1716	1722		N13	E04	5117	6	1	4						
HAWAII	28	1942	1958	1948	N15	W11	5117	16	1	3	1948	2.60	2.80			
{ CAPRI-S	29	0800	0820		N06	W43	5108	20	1	3	0805	1.50	2.20			
WENDEL	29	0802	0822		N07	W45	5108	20	16				6.00			
CAPRI-G	29	0807 E	0825 D		N07	W44	5108	18 D	1	3	0810		3.00			
CAPRI-G	29	0917 E	0935		S05	E28	5124	18 D	1	3	0920		3.00			
ONDREJOV	29	0926	0939		N10	W04	5117	13	1	2	0932			2.20		
WENDEL	29	0927	0944		N10	W07	5117	17	1				4.00			
CAPRI-G	29	0935 E	0945		N09	W06	5117	10 D	1	2	0940		3.00			
WENDEL	29	0951	1000		S07	E26	5124	9	1				3.00			
CAPRI-G	29	1015 E	1042		N16	E35	5122	27 D	1	2	1018		4.00			
CAPRI-G	29	1028 E	1122		N11	E07	5120	54 D	1	2	1030		3.00			
{ MCMATH	29	1255 E	1511		S04	W85	5103	136 D	1	1						
CAPRI-G	29	1315 E	1322 D		S08	W77	5103	7 D	1	2	1317		3.00		16	
SAC PEAK	29	2004	2110	2034	N15	W19	5116	66	16	2			5.00			
{ SAC PEAK	30	1538	1612 D	1556	N10	E05	5122	34 D	1	2			3.53		16	
HUANCAYO	30	1546	1619	1551	N10	E03	5122	33	1	2	1551	5.00	5.10	2.10		
{ SAC PEAK	30	1900	1916	1906	N15	W30	5117	16	1	2			2.55		17	
HAWAII	30	1902	1920	1902	N16	W28	5117	18	1	3	1902	3.20	4.00			

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CAPRI G ANACAPRI - GERMAN
CAPRI S ANACAPRI - SWEDISH
GOOD HOPE ROYAL OBSERVATORY, CAPE OF GOOD HOPE
KIEV* KIEV UNIVERSITY
KODAIKNAL KODAIKANAL
KRASNAYA KRAVNAYA PAKHRA
MOSCOW NIZMIR

MOSCOW-G MOSCOW - GAISH
R O EDIN ROYAL OBSERVATORY, EDINBURGH
R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
SAC PEAK SACRAMENTO PEAK
SCHAUVINS SCHAUVINSLAND
USNRL UNITED STATES NAVAL RESEARCH LABORATORY

SAC PEAK: ALL VALUES IN MAX. INT. COLUMN ARE
ARBITRARY UNITS (0-40), NOT PERCENT
OF CONTINUOUS SPECTRUM.

E - LESS THAN & - PLUS
D - GREATER THAN - - MINUS
U - APPROXIMATE □ - NOT REPORTED

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		UNIVERSAL TIME			APPROX.		MC MATH FLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
		START	END	MAX. PHASE	LAT.	MER. DIST.										
	APR 1959															
{ TASHKENT ABASTUMANI ZURICH MOSCOW-G KIEV LOCKHEED VOROSHILOV LOCKHEED	01	0502	0520	0506	N26	W18	5068	18	2	3	0507		10.00	4.00	100	Slow S-SWF
	01	0505 E	0522 D	0509 U	N28	W18	5068	17 D	26	1	0508		28.30	3.30		
	01	1018	1021		N23	W20	5068	3	1	3	1018		1.00			
	01	1019 E	1021 D		N23	W23	5068		1							
	01	1340 E	1404	1350	N28	W29	5068	24 D	1	2	1349		.66		90	
	01	2129	2210	2134	N14	W11	5071	41	1	1	2134	3.50				
	01	2227	2301	2234	N16	W09	5071	34	16	2	2234		2.20		82	
	01	2228	2305	2233	N18	W10	5071	37	1	1		2.60				
{ SIMEIZ GOOD HOPE SCHAUINS SCHAUINS ZURICH SCHAUINS LOCARNO GOOD HOPE GOOD HOPE AROSA LOCARNO MEUDON ZURICH	02	0609 E	0640 D		N16	W14	5071	31 D	1	1	0609		2.20	2.30	80	
	02	0740	0757	0742	N16	W23	5071	17	1		0742	2.00	2.30			
	02	0800 E	0820		N13	W19	5071	20 D	1	2			2.00	1.80		
	02	0800 E	0820		N06	W24	5079	20 D	1	2			2.00	1.70		
	02	0814 E	0823 D		N03	W24	5079	9 D	1	3	0814		2.00			
	02	0815	0825		N03	W25	5079	10	1	2			3.00	1.90		
	02	0815 E	0827		N04	W24	5079	12 D	1	3	0815		1.00			
	02	0817 E	0830		N06	W26	5079	13 D	1		0817	2.50	2.80			
	02	1200	1223	1212	S08	W87	5063	23 D	1		1212	.30				
	02	1417	1430		N09	E55	5080	13	1							
	02	1550 E	1615		N13	E21	5076	25 D	1	2	1550		2.00			
	02	1553	1625	1600	N15	E30	5076	32	1				4.00			
02	1601 E	1611 D		N16	E22	5071	10 D	1	3	1601		1.00				
{ SYDNEY SCHAUINS NEDERHORST AROSA SCHAUINS LOCARNO SCHAUINS LOCARNO	03	0255	0330	0305	N14	W27	5071	35	2	2	0305	4.00	5.00			S-SWF
	03	0942 E	0955		N16	W27	5071	13 D	1	2			2.00	2.00		
	03	1245	1258 D		N14	W32	5071	13 D	2	3						
	03	1245 E	1330		N15	W36	5071	45 D	2							
	03	1252 E	1327 D		N15	W28	5071	35 D	2	2			7.00	1.90		
	03	1300 E	1320		N16	W32	5071	20 D	2	2	1300		8.00			
	03	1400 E	1520 D		N13	E37	5071	80 D	1	2			4.00	1.70		
	03	1530	1544		N31	W35	5073	14	1	2	1530		1.00			
{ SIMEIZ ZURICH MEUDON ZURICH LOCARNO AROSA LOCARNO MEUDON AROSA SIMEIZ SCHAUINS LOCARNO GOOD HOPE GOOD HOPE GOOD HOPE SCHAUINS AROSA MEUDON LOCARNO LOCARNO	04	0640 E	0800 D		N17	W45	5071	80 D	26	1	0800		25.00	3.10		S-SWF
	04	0737 E	0752		N13	E83	5083	15 D	1	3	0737		3.00			
	04	0750	0930		N13	W50	5068	100	26				15.00			
	04	0737 E	0755 D		N16	W45	5071	18 D	2	3	0742		7.00			
	04	0740 E	0915		N16	W46	5071	95 D	26	2	0740		15.00			
	04	0800 E	0900 D		N15	W44	5071	60 D	2							
	04	0827	0855	0830	N20	W63	5068	28	16	2			4.00			
	04	0827	0900	0830	N20	W60	5068	33	16				5.00			
	04	0830 E	0850		N20	W62	5068	20 D	2							
	04	0833 E	0855 D		N22	W60	5068	22 D	16	1	0833		7.40	2.70		
	04	0848 E	0905		N18	W42	5071	17 D	2	2			6.00	1.60		
	04	0910	0958	0920	N10	W50	5071	48	16	2			4.00			
	04	0939 E	1005		N13	W45	5071	26 D	2		0939	5.00	7.50			
	04	0939 E	1010	0950	N13	E90	5083	31 D	1		0950	.80				
	04	1157	1218 D	1202	N15	W53	5071	21 D	1		1202	1.20	2.10			
	04	1200 E	1215		N14	W52	5071	15 D	16	1			3.00	2.00		
	04	1205 E	1215		N13	W53	5071	10 D	1							
	04	1256	1345	1320	N17	E08	5080	49	1				3.00			
04	1255	1350	1310	N14	W02	5076	55	16	2			3.00				
04	1610 E	1625		N13	W58	5071	15 D	1	2	1610		2.00				
SYDNEY	05	0122	0138	0130	N21	W70	5068	16	1	2	0130	.50	2.00			

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MC MATH MER. DIST.	PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
	APR 1950															
SYDNEY	05	0154	0213 D	0200	N16	W55	5071	19 D	1	2	0200	1.50	3.00			S-SWF
SYDNEY	05	0205	0211	0209	N22	W75	5068	6	2	2	0209	1.00	5.00			
SYDNEY	05	0353	0425	0406	N12	W56	5071	32	2	2	0406	3.00	7.00			98
{ KRASNYA	05	0839	0852	0843	N18	W60	5071	13	1	2	0843		1.30			
{ LOCARNO	05	0840 E	0905		N11	W57	5071	25 D	1	2	0840		1.00			138
{ KRASNYA	05	0935	0945	0938 U	N19	W62	5071	10	16	2	0938		5.20			
{ LOCARNO	05	0935	0950	0938	N11	W57	5071	15	1	2			1.00			1.70
GOOD HOPE	05	1150 E	1200		N15	W61	5071	10 D	1		1150	1.60	3.60			
GOOD HOPE	05	1401	1420	1409	N15	W66	5071	19	1		1409	1.10	2.80			2.80
{ LOCARNO	05	1550 E	1616		N16	W61	5071	26 D	1	2	1550		2.00			
{ SCHAUINS	05	1602 E	1607		N18	W55	5071	5 D	1	1			3.00			118
{ SCHAUINS	05	1645 E	1657		N17	W85	5068	12 D	16	1			5.00			
{ VOROSHILOV	05	2316	0119	2325	N15	W68	5071	123	26	2	2325		23.21			S-SWF
{ SYDNEY	05	2320 E	0037 D	2330	N16	W68	5071	77 D	36	2	2330	21.00				
SYDNEY	06	0453	0458	0455	N25	W67	5071	5	1	2	0455	1.00	3.00			66
ABASTUMANI	06	0528 E	0816 D	0544 U	S25	E49	5088	168 D	2	1	0544		2.80			
ABASTUMANI	06	0649 E	0705 D	0654	N13	E61	5083	16 D	1	1	0654		4.70			70
{ ABASTUMANI	06	0531 E	0736 D	0726 U	N14	W75	5071	125 D	1	1	0726		4.50			
{ KRASNYA	06	0720	0736	0729 U	N17	W70	5071	16	1	2	0729		1.80			80
{ KRASNYA	06	0738	0752	0744 U	N18	W70	5071	14	16	2	0744		3.60			
{ GOOD HOPE	06	0738	0755	0744	N18	W72	5071	17	1		0744	1.30	4.70			135
{ ABASTUMANI	06	0742 E	0816 D	0758	N12	E67	5083	34 D	1	1	0758		4.80			
{ GOOD HOPE	06	0747	0825	0805	N12	E68	5083	38	1		0805	1.40	4.10			52
{ LOCARNO	06	0750 E	0940		N15	E63	5083	110 D	2	2	0750		5.00			
{ KRASNYA	06	0839	0948	0943 U	N21	W79	5071	9	1	2	0943		4.00			65
{ GOOD HOPE	06	0941	1000	0945	N18	W75	5071	19	1		0945	1.10	4.90			
{ LOCARNO	06	1040	1110		N18	W02	5088	30	16	2	1040		4.00			1056
{ GOOD HOPE	06	1051 E	1112		N19	W04	5080	21 D	1		1056	2.70	3.00			
{ GOOD HOPE	06	1243 E	1305 D		N17	W76	5071	22 D	2		1243	2.20	9.80			1.00
{ ZURICH	06	1250 E	1259 D		S24	E45	5088	9 D	1	2	1250		1.00			
{ LOCARNO	06	1450 E	1510		N13	W04	5080	20 D	1	3	1450					2.00
{ ZURICH	06	1454 E	1503 D		N13	W04	5080	9 D	1	2	1454		2.00			
{ SYDNEY	07	0256	0355	0311	N12	E53	5083	59	1	2	0311	2.00	3.00			S-SWF
{ SYDNEY	07	0350	0405	0352	N12	E49	5083	15	1	2	0352	2.00	3.00			
{ SYDNEY	07	0320	0333	0324	N28	W72	5071	13	1	2	0324	1.00	4.00			3.00
{ SYDNEY	07	0321	0400	0340	N13	W12	5080	39	1	2	0340	3.00	3.00			
{ SYDNEY	07	0405	0440	0408	N25	E51	5085	35	1	2	0408	2.00	4.00			4.00
{ SYDNEY	07	0426	0436	0431	N17	W88	5071	10	1	2	0431	.50				
{ SYDNEY	07	0426 E	0448	0429	N14	E51	5083	22 D	2	2	0429	3.00	5.00			3.00
{ SYDNEY	07	0426 E	0456	0433	S21	E36	5088	30 D	1	2	0433	3.00	4.00			
{ SYDNEY	07	0445	0528	0512	N10	E87	5090	43	1	2	0512	1.50				1.00
{ SYDNEY	07	0457	0512	0507	S14	E89	5089	15	1	2	0507	1.00				
{ LOCARNO	07	1355	1500		N10	E86	5090	65	26	4	1355					G-SWF
{ LOCARNO	07	1520	1530		N25	E55	5085	10	1	4	1520					
SYDNEY	08	0025 E	0038	0027	S17	E80	5089	13 D	1	2	0027	1.50				4.00
SYDNEY	08	0153 E	0205	0156	N13	E37	5083	12 D	1	2	0156	3.00				
SYDNEY	08	0213	0248	0222	S17	E79	5089	35	1	2	0222	1.50				15.30
ABASTUMANI	08	0608 E	0807 D	0616 U	S15	E88	5089	119 D	16	1	0616		15.30			
ABASTUMANI	08	0631 E	0735 D	0712	S20	E20	5088	64 D	16	1	0712		5.50			66
ABASTUMANI	08	0638 E	0750 D	0740	N14	E28	5083	72 D	1	1	0740		1.30			

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	McMATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
LOCARNO	08	0905	1000		N25	E90	5093	55	26	2	0905					S-SWF
GOOD HOPE	08	0916 E	0941 D		N27	E85	5093	25	D 3		0916	5.00				
AROSA	08	0924 E	0935		N28	E85	5093	11	D 1							
TASHKENT	08	0932 E	0934		N28	E86	5093	2	D 16	1						S-SWF
ZURICH	08	1220	1225		N12	E25	5083	5	1	2	1220		1.00			
AROSA	08	1313	1327		N12	E24	5083	14	1							
ZURICH	08	1313	1331 D		N10	E24	5083	18	D 1	2	1313		2.00			S-SWF
LOCARNO	08	1315	1330		N10	E26	5083	15	1	2	1315					
AROSA	08	1324	1330		S22	E11	5088	6	1							
ZURICH	08	1324	1333		S23	E09	5088	9	1	2	1324		1.00			S-SWF
LOCARNO	08	1325	1332		S22	E11	5088	7	1	2	1325					
ZURICH	08	1344	1354		N24	W07	5082	10	1	2	1344		1.00			
LOCARNO	08	1425	1455		N09	E71	5090	30	16	2	1425					S-SWF
AROSA	08	1445 E	1500 D		N10	E73	5090	15	D 1							
LOCKHEED	08	2040	2106	2046	N28	E78	5093	26	1	1		2.30				
SYDNEY	09	0007	0032	0024	N15	W58	5080	25	1	2	0024	1.00	2.00			S-SWF
SYDNEY	09	0106	0149	0122	N14	W60	5080	43	1	1	0122	2.00	3.00			
SYDNEY	09	0236	0242	0239	S16	E65	5089	6	1	2	0239	1.00	2.00			
SYDNEY	09	0319 E	0349	0334	N14	W61	5080	30	D 1	2	0334	2.00	3.00			S-SWF
SYDNEY	09	0444 E	0505 D		N14	W61	5080	21	D 2	2	0444	2.00	5.00			
ABASTUMANI	09	0455 E	0807	0457	N18	W62	5080	192	D 1	2	0614		4.50	2.00	83	
ABASTUMANI	09	0532	0537	0534	N01	E49	5092	5	1	2	0534		3.40		70	S-SWF
ABASTUMANI	09	0556	0807	0703	N12	E17	5083	131	1	2	0706		2.90	1.60	66	
SIMEIZ	09	0610 E	0635 D	0612	N18	W62	5080	25	D 1	3	0612		2.00		80	
ABASTUMANI	09	0621	0729	0634	N08	E57	5090	68	2	2	0634		15.90	2.10	70	S-SWF
SIMEIZ	09	0624	0725 D	0632 U	N11	E58	5090	61	D 16	3	0634		8.00	1.70	76	
GOOD HOPE	09	0641 E	0707 D		N10	E59	5090	26	D 1		0641	2.60	5.00			
SIMEIZ	09	0700	0710 D	0703	N12	E15	5083	10	D 1	3	0705		1.50	1.60	76	S-SWF
GOOD HOPE	09	0703	0707 D	0704	N12	E16	5083	4	D 1		0704	2.00	2.20			
SIMEIZ	09	0829 E	0850	0843	N19	W62	5080	21	D 1	3	0840		2.00	2.70	80	
SIMEIZ	09	0847 E	0920 D	0859	N12	E14	5083	33	D 1	3	0901		1.00	2.20	80	S-SWF
SIMEIZ	09	0858 E	0925 D	0900 U	N18	W62	5080	27	D 1	3	0859		3.00	2.40	72	
KHARKOV	09	0900 E	0934		N17	W60	5080	34	D 1	1	0905			1.70		
MEUDON	09	1315	1342		N14	E20	5083	27	1				2.00			S-SWF
LOCKHEED	09	2337	0028	2346	S11	E53	5089	51	1	1		2.10				
SYDNEY	09	2343	0009	2350	N19	E52	5090	26	2	2	2350	4.00	6.00			
SYDNEY	10	0154	0200	0156	N16	W72	5080	6	1	2	0156	.50	2.00			S-SWF
SYDNEY	10	0239	0248	0241	N12	E07	5083	9	1	2	0241	2.00	2.00			
SYDNEY	10	0236	0256	0239	N27	E61	5093	20	1	2	0239	1.50	4.00			
TASHKENT	10	0407 E	0513		N08	E45	5090	66	D 16	2	0409		11.00	1.60	60	S-SWF
ABASTUMANI	10	0511 E	0818 D	0632 U	N17	W79	5080	187	D 16	3	0805		7.00	3.10	63	
SIMEIZ	10	0617 E	0740 D	0634	N18	W79	5080	83	D 16	2	0636		7.70	4.80	88	
AROSA	10	0625 E	0653		N16	W77	5080	28	D 1							S-SWF
GOOD HOPE	10	0637 E	0740		N18	W75	5080	63	D 2		0637	1.40	6.20			
GOOD HOPE	10	0805	0816	0808	N19	W78	5080	11	1		0808	.50	2.40			
ABASTUMANI	10	0737 E	0818 D	0809	N24	E59	5093	41	D 16	3	0809			3.00	62	S-SWF
GOOD HOPE	10	0804	0830	0810	N26	E57	5093	26	1		0810	1.60	3.30			
AROSA	10	0805 E	0820		N25	E55	5093	15	D 1							
GOOD HOPE	10	1036	1110	1040	N26	E56	5093	34	26		1040	7.50	16.00			S-SWF
KRASNYA	10	1105 E	1128 D	1107 U	N18	W72	5080	23	2	2	1107		8.10		113	
KIEV	10	1249	1256	1250	N15	W89	5080	7	1	2	1250		4.75		42	

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MEER. DIST.	McMATH PLACE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %	
GOOD HOPE LOCARNO LOCARNO	10	1250	1302	1253	N18	W80	5080	12	1		1253	0.40	2.90			
	10	1630 E	1720 D		N17	W80	5080	50 D	18	3	1630					
	10	1646	1715		N24	E47	5093	29	16	3	1646					
ABASTUMANI	11	0550 E	0613 D	0814 U	N12	W13	5083	23 D	1	3	0626		3.80	3.30	90	
ABASTUMANI	11	0615 E	0653 D	0631 U	N09	E36	5090	38 D	18	3	0622		7.40	2.00	76	
KRASNYA	11	0731	0750	0736 U	N13	W14	5083	19	1	2	0736		0.90		75	
KRASNYA	11	0807	0835	0813 U	N21	W90	5080	28	1	2	0813		0.50		100	
MOSCOW-G	11	0807 E	0933 D	0838	N29	E45	5093	86 D	2	1	0838		9.60	4.80	200	
PIRCULI	11	0828 E	0900 D		N23	E50	5093	32 D	2	2	0840		9.10		64	
SIMEIZ	11	0830 E	0905 D	0845 U	N28	E47	5093	35 D	18	1	0841		5.80	3.20	128	S-SWF
MEUDON	11	0831	0856		N27	E40	5093	25	1				5.00			
KRASNYA	11	0833 E	0839 D	0837 U	N24	E48	5093	6 D	18	2	0837		3.40		86	
AROSA	11	0835 E	0852 D		N27	E44	5093	17 D	2							
LOCARNO	11	1010	1030		N16	W90	5080	20	1	2	1010					
LOCARNO	11	1446	1625 D	1610	N27	E40	5093	99 D	2				8.00			
MEUDON	11	1447	1607	1514	N20	E45	5093	80	2	2			6.00			Slow S-SWF
AROSA	11	1545 E	1600 D		N28	E37	5093	15 D	1							
MEUDON	11	1621	1640		N12	W10	5083	19	1							
LOCARNO	11	1622	1625 D		N14	W14	5083	3	18	2	1622					
LOCARNO	11	1652 E	1725 D		N14	W14	5083	33 D	18	2	1622					
TASHKENT	12	0422	0444	0428	S14	E22	5089	22	1	2	0426		3.00	1.90	60	
ABASTUMANI	12	0729 E	0744 D	0731 U	S14	E26	5089	15 D	1	1	0731		1.00			
GOOD HOPE	12	1005 E	1105	1024	N08	E18	5090	60 D	1		1024	1.60	1.70			
AROSA	12	1013	1122	1030	N08	E17	5090	69	1							
KHARKOV	12	1024	1119	1031	N07	E16	5090	55	18	2	1034		6.30	1.70		
LOCARNO	12	1040 E	1105		N06	E20	5090	25 D	1	2	1040					
KHARKOV	12	1041	1056 D	1043	N20	E52	5095	15 D	18	2	1046		11.40	1.90		
GOOD HOPE	12	1043	1053	1045	N19	E62	5095	10	1		1045	0.90	2.30			
AROSA	12	1044	1048		N20	E60	5095	4	1							
KHARKOV	12	1104	1209	1113	N28	E27	5093	65	3	2	1113		30.30	5.00		
MEUDON	12	1105	1135	1110	N28	E35	5093	30	2				10.00			
LOCARNO	12	1105	1215	1130	N26	E29	5093	70	28	2			9.00			
GOOD HOPE	12	1108	1225	1114	N28	E32	5093	77	2		1114	8.30	11.90			Slow S-SWF
AROSA	12	1110	1215		N26	E27	5093	65	2							
ZURICH	12	1118 E	1218 D		N28	E29	5093	60 D	2	2	1118		9.00			
PIRCULI	12	1120 E	1143 D		N25	E30	5093	23 D	2	2	1120		15.29		48	
ZURICH	12	1210 E	1220 D		N12	W31	5083	10 D	1	2	1210		1.00			
KHARKOV	12	1215	1219	1216	N15	W33	5083	4	1	2	1216		4.60	1.70		
AROSA	12	1329	1332		N12	W31	5083	3	1							
LOCARNO	12	1640	1653		N11	W29	5083	13	1	2	1640					
SYDNEY	13	0050 E	0054		N30	E23	5093	4 D	1	2	0050	1.50	2.00			
SYDNEY	13	0056	0109 D	0102	N30	E21	5093	13	1	2	0102	2.00	3.00			
TASHKENT	13	0503	0600 D	0506	N29	E22	5093	57 D	18	2	0506		7.00	2.80	150	
ABASTUMANI	13	0503	0614 D	0506	N27	E24	5093	71 D	18	3	0513		8.60	2.30	73	
KODAIKNL	13	0510 E	0525 D	0515	N27	E22	5093	15 D	1	2	0510	2.00	2.50	1.40	121	
GOOD HOPE	13	0724	0750	0730	N15	W46	5083	26	1		0730	2.20	3.40			
KRASNYA	13	0727	0742	0729	N17	W48	5083	15	1	2	0729		1.90		85	
ABASTUMANI	13	0725 E	0744 D	0729 U	N18	W47	5085	19 D	1	3	0733		2.70	1.40	58	
MEUDON	13	0823	0916	0836	N28	E21	5093	53	28				15.00			
MEUDON	13	0828	0850	0836	N35	E45	5093	22	1				3.00			

SOLAR FLARES

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III

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
GOOD HOPE	13	0830	0930	0840	N28	E20	5093	60	3		0841	13.00	17.00			S-SWF
KRASNYA	13	0831	0927	0839	N28	E20	5093	56	2	2	0839		2.10		240	
AROSA	13	0832	0915		N28	E17	5093	43	2							
ZURICH	13	0832	0928		N27	E17	5093	56	26	3	0832		9.00			
NEDERHORST	13	0834 E	0900 D		N28	E20	5093	26 D	2	3						
UTRECHT	13	0836	0844					8	2	2						
LOCARNO	13	0840 E	0935		N26	E18	5093	55 D	26	2	0840		6.00			
SCHAUINS	13	0842 E	0906		N25	E18	5093	24 D	2	2			9.00	4.00		
MOSCOW-G	13	0854	0931		N29	E18	5093	37 D	16	2	0901		8.90	2.40	110	
ZURICH	13	1303	1312 D		N14	W38	5083	9 D	1	3	1303		2.00			
VOROSHILOV	13	2306	2316	2313	N29	E12	5093	10	1	2	2313		2.39		75	S-SWF
LOCKHEED	13	2337	0015	2341	N29	E11	5093	38	1	2		2.60				
VOROSHILOV	13	2338	0009	2342	N28	E12	5093	31	16	2	2342		2.46		99	
VOROSHILOV	14	0133	0225 D	0135	N29	E11	5093	52 D	16	2	0135		3.24		95	
TASHKENT	14	0504	0515	0506	N28	E08	5093	11	1	2	0505		5.00	2.70	65	
AROSA	14	0603	0615 D		N28	E06	5093	12 D	1							
KRASNYA	14	0932	0943	0934 U	S21	W64	5088	11	16	1	0934		2.00		82	
AROSA	14	0933	0943		S21	W67	5088	10	1							
GOOD HOPE	14	0933	0948	0936	S20	W67	5088	15	1		0936	1.00	2.60			
ZURICH	14	1048	1103		S14	W05	5089	15	1	3	1100		1.00			
SCHAUINS	14	1222 E	1236		N27	E07	5093	14 D	2	2			6.00	3.40		S-SWF
MEUDON	14	1223 E	1245		N29	E05	5093	22 D	16				15.00			
ZURICH	14	1225 E	1300 D		N27	E01	5093	35 D	2	1	1225		6.00			
MEUDON	14	1236	1251		N15	E45	5095	15	1				4.00			
SCHAUINS	14	1257 E	1303		N28	E12	5093	6 D	1	2			5.00	1.40		
AROSA	14	1315 E	1330 D		S15	W03	5089	15 D	1				3.00			
MEUDON	14	1432	1510		S15	W10	5089	38	1				3.00			
ZURICH	14	1444	1450 D		S16	W08	5089	6 D	1	1	1444		3.00			
ZURICH	14	1438	1444		N27	E03	5093	6	1	1	1438		2.00			
ZURICH	14	1621	1624		N14	E32	5095	3	1	2	1621		3.00			
SYDNEY	15	0010	0035	0014	N16	E48	5100	25	1	2	0014	2.00	2.00			S-SWF
LOCARNO	15	0833	0847	0835	N26	W06	5093	14	2	3			6.00			
SCHAUINS	15	0835 E	0845		N28	W04	5093	10 D	2	2			6.00	2.70		
LOCARNO	15	0836	0847		N33	E15	5093	11	1	3	0836		2.00			
ZURICH	15	0926 E	0936		N00	W36	5092	10 D	1	3	0926		2.00			
AROSA	15	0929	0933		S01	W39	5092	4	1							
ZURICH	15	1050 E	1129		S18	W79	5088	39 D	16	3	1050		5.00			
GOOD HOPE	15	1053	1125	1057	S17	W76	5088	32	2		1057	1.70	8.90			
AROSA	15	1435 E	1457		N27	W11	5093	22 D	1							
GOOD HOPE	16	1153	1217	1157	N28	W27	5093	24	1		1157	2.40	3.20			
ABASTUMANI	17	0456 E	0810 D	0512 U	N18	E79	5102	194 D	16	1			11.00			S-SWF
GOOD HOPE	17	0751	0824	0801	N11	W50	5090	33	1		0801	1.50	2.40			
GOOD HOPE	17	0947	1057	0952	N11	W51	5090	70	1		0952	1.20	2.00			
KRASNYA	17	1006	1034	1008	N15	W50	5090	28	1	2	1008		2.00		60	
LOCARNO	17	1635 E	1655 D		N09	W55	5090	20 D	1	3	1635		2.00			
VOROSHILOV	18	0135	0141	0136	S10	W80	5092	6	2	3	0136		6.04		114	
ABASTUMANI	18	0528	0746 D	0741 U	N08	W74	5090	138 D	16	2			9.70		60	
ABASTUMANI	18	0546 E	0603 D	0556	S14	W57	5089	17 D	16	2			2.70		70	

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.										
APR 1959																
SIMEIZ	18	0610 E	0625 D	0610	N00	W78	5092	15 D	1	2	0619		3.30	1.80	68	S-SWF
{ KRASNYA	18	0738	0751	0741	N05	W78	5092	13	16	2	0741		5.40		85	
SIMEIZ	18	0740 E	0810 D	0744 U	N00	W78	5092	30 D	1	2	0744		3.30		80	
{ KRASNYA	18	0805	0833	0809	N31	W45	5093	28	2	2	0809		3.10		120	
SIMEIZ	18	0805	0850	0809	N28	W48	5093	45	2	2	0808		5.20	4.30	128	
UTRECHT	18	0806							26	2						
LOCARNO	18	0810 E	0830 D		N27	W44	5093	20 D	1	3	0810		2.00			
LOCARNO	18	0913	0947	0920	N21	E03	5100	34	16	3			2.00			
KRASNYA	18	0915	0933	0919	N09	E05	5098	18	1	2	0919		2.00		65	
{ KRASNYA	18	0940	0956	0945	N05	W78	5092	16	16	2	0745		10.80		75	
LOCARNO	18	0945	1004	0952	S01	W74	5092	19	1	3						S-SWF
LOCARNO	18	1445	1525		N21	E86	5105	40	1	2	1445					
VOROSHILOV	18	2328	0011	2335	N29	W55	5093	43	16	2	2335		2.44		100	
{ MOSCOW-G	19	0823 E	0858		N30	W62	5093	35 D	1	1	0829		3.00	3.60	120	
LOCARNO	19	0825	0859	0835	N30	W59	5093	34	2-	3			6.00			
GOOD HOPE	19	0830 E	0844 D		N30	W61	5093	14 D	2		0830	2.00	5.30			
LOCARNO	19	1515 E	1545		N18	W12	5100	30 D	1	3	1515					
SYDNEY	20	0303	0313	0306	N20	E61	5105	10	1	2	0306	1.00	3.00			
{ ABASTUMANI	20	0740 E	0812 D	0745 U	S13	W65	5094	32 D	1	1	0748		2.70	2.20	72	
SIMEIZ	20	0741 E	0820 D	0749 U	S10	W68	5094	39 D	1	2	0754		4.40	2.10		
LOCARNO	20	0745	0820	0750	S07	W68	5094	35	1	2			2.00			
LOCARNO	20	1005 E	1040		S01	E47	5104	35 D	1	2	1005		1.00			
LOCARNO	20	1250 E	1305		N17	W38	5095	15 D	1	2	1250		1.00			
LOCARNO	20	1448	1515		N27	W90	5093	27	1	2	1448					
{ SYDNEY	21	0006	0112	0029	N32	W21	5097	66	2	2	0029	6.00	8.00			
LOCKHEED	21	0006	0130		N32	W22	5097	84	1	2	0034	4.60				
ABASTUMANI	21	0735 E	0747 D	0737 U	N11	W45	5095	12 D	1	2			1.80			
LOCARNO	21	1020 E	1035		N16	W37	5100	15 D	1	2	1020					
{ LOCARNO	21	1225	1235		N07	W17	5106	10	1	2	1225		1.00			
ZURICH	21	1229 E	1234		N08	W18	5106	5 D	1	2	1229		2.00			
ZURICH	21	1326 E	1330 D		N09	E62	5108	4 D	1	1	1326		1.00			
{ MEUDON	21	1456	1530	1500	N20	W44	5100	34	16				7.00			
ZURICH	21	1511 E	1524 D		N20	W47	5100	13 D	1	1	1511		1.00			
{ LOCARNO	22	0727	0755		N14	E44	5108	28	1	2	0727		1.00			
ZURICH	22	0730	0801		N16	E42	5108	31	1	3	0750		2.00			
ZURICH	22	0735 E	0804 D		N17	W16	5098	29 D	16	3	0735		3.00			
ZURICH	22	0740 E	0801 D		N18	E29	5105	21 D	1	3	0740		1.00			
ZURICH	22	1248	1255		N17	W18	5098	7	16	3	1248		4.00			
{ GOOD HOPE	23	0825	0833	0829	N19	W69	5100	8	1		0829	1.70	5.00			
SIMEIZ	23	0826 E	0837 D	0828 U	N19	W69	5100	11 D	1	2	0828		2.50		92	
ZURICH	23	0828	0830		N18	W64	5100	2	1	3	0828		1.00			
{ SCHAUMS	23	0830 E	0935 D		N17	W60	5100	65 D	1	2			5.00	2.00		
MOSCOW-G	23	0832 E	0916 D		N18	W69	5100	44 D	16	1	0848		6.00	3.00	100	
GOOD HOPE	23	0842	0915	0849	N19	W69	5100	33	1		0849	1.30	3.80			
LOCARNO	23	0850 E	0910		S12	W08	5103	20 D	1	2	0850					
ZURICH	23	0855	0900		S11	W08	5103	5	1	3	0855		1.00			
GOOD HOPE	23	0957	1006	0959	N19	W70	5100	9	1		0959	.90	2.80			
GOOD HOPE	23	1112	1126	1115	N19	W69	5100	14	1		1115	.80	2.30			

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III

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hz	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
ZURICH	23	1206	1211		N16	W33	5098	5	1	3	1206		1.00			
ZURICH	23	1304	1306		N16	W33	5098	2	1	3	1304		1.00			
ZURICH	23	1315	1321		N16	W33	5098	6	1	3	1315		1.00			
ZURICH	23	1338	1340		N15	W70	5100	2	1	3	1338		1.00			
ZURICH	23	1411	1417		N15	W70	5100	6	1	3	1411		1.00			
{ SCHAUINS	23	1428 E	1455 D		N17	W62	5100	27 D	1	1			4.00	2.60		
ZURICH	23	1429	1436		N15	W70	5100	7	1	3	1429		1.00			
LOCARNO	23	1623	1655		N17	W67	5100	32	1	2	1623					
ZURICH	23	1645	1648		S06	W07	5103	3	1	3	1645		1.00			
TASHKENT	24	0508	0540	0515	N16	E95	5122	32	1	3	0515			4.60	70	
{ LOCARNO	24	0750	0830		N13	E90	5122	40	2	2	0750					
GOOD HOPE	24	0757	0841	0806	N12	E90	5122	44	2		0806	1.10				
MEUDON	24	0807 E	0908		N20	E90	5122	61 D	1							
LOCARNO	24	1125	1145		S09	W08	5103	20	1	2	1125		1.00			
LOCARNO	24	1158	1215		N17	W42	5098	17	1	2	1158					
{ LOCARNO	24	1530	1545		N11	E59	5120	15	1	2	1530					
ZURICH	24	1533	1547		N11	E58	5120	14	1	2	1533		2.00			
VOROSHILOV	24	2255	2314 D	2306	N31	E70	5119		1	2	2306		4.00		68	
TASHKENT	25	0356 E	0453	0407	N16	E85	5122	57 D	1.6	2	0409		11.00	7.30	100	
TASHKENT	25	0433 E	0456	0434	N31	E67	5119	23 D	1	2	0436		4.00	3.00	65	
{ ZURICH	25	0745	0756		N17	W55	5098	11	1	3	0745		5.00			
KRASNYA	25	0745	0758	0749	N18	W52	5098	13	1	1	0749		2.10		75	
LOCARNO	25	0745 E	0820		N16	W51	5098	35 D	1.6	2	0745		3.00			
LOCARNO	25	0756	0807		N18	W31	5098	11	1	2	0756					
ZURICH	25	0756	0803		N14	E56	5120	7	1	3	0756		1.00			
{ KRASNIA	25	0756	0800	0758	N20	W32	5102	4	1	1	0758		2.20		70	
ZURICH	25	0756	0802		N22	W35	5102	6	1	3	0756		2.00			
LOCARNO	25	0945	1330		N32	W90	5093	225	1	2	0945					
LOCARNO	25	1205	1345		N16	W54	5098	100	1	2	1205		3.00			
LOCARNO	25	1350	1450		N16	W54	5098	60	1	2	1350		2.00			
LOCARNO	25	1315	1345		N15	E71	5122	30	1	2	1315					
LOCARNO	25	1348	1415		N05	E06	5108	27	1	2	1348		2.00			
LOCARNO	25	1430	1440		S08	W23	5103	10	1	2	1430					
LOCARNO	25	1442	1500		N15	E71	5122	18	1	2	1442					
LOCARNO	25	1555	1614		N06	E05	5108	19	1	2	1555		2.00			
SYDNEY	26	0143	0155	0146	N12	E68	5122	12	1	2	0146	.75	3.00			
ZURICH	26	0843 E	0850 D		S12	W49	5103	7 D	1	1	0843		2.00			
{ ZURICH	26	0850 E	0920 D		N30	E49	5123	30 D	2	1	0850		6.00			
KRASNYA	26	0854	0920		N25	E49	5123	26	1	1	0902		1.70		70	
GOOD HOPE	26	0855	0925	0858	N27	E49	5123	30	1		0858	2.60	4.50			
SYDNEY	27	0319	0325	0321	S06	E59	5124	6	1	2	0321	.75	2.00			
{ SYDNEY	27	0354	0429	0401	N15	E31	5120	35	1	2	0401	2.00	2.00			
TASHKENT	27	0354	0429	0402	N15	E31	5120	35	1	2	0401		2.00	2.00	65	
ALMA-ATA	27	0359 E	0421 D	0406	N18	E32	5120	22 D	1	2	0406		4.00		71	
{ ALMA-ATA	27	0359 E	0421 D	0408	N16	E33	5120	22 D	1	2	0408		3.50		70	
KHARKOV	27	0855 E	0959 D		N15	E21	5117	64 D	1.6	2	0856		9.80	3.70		S-SWF
{ KHARKOV	27	0857 E	0959 D		N10	E14	5117	62 D	1	2	0900		2.40	2.40		
KIEV	27	1255	1314 D	1259	S06	W49	5103	19 D	1	2	1259		4.10		50	
ZURICH	27	1258	1307 D		S08	W51	5103	9 D	1	1	1258		2.00			

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.		McMATH PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.										
	APR 1959															
ZURICH	27	1354	1417 D		S09	E56	5124	23 D	1	1	1354		3.00			
ZURICH	27	1526	1532 D		S09	E55	5124	6 D	1	1	1526		3.00			
ZURICH	27	1635	1642 D		N06	W22	5108	7 D	1	1	1635		1.00			
{ VOROSHILOV	28	0037	0150 D	0108	S07	W60	5103	73	16	3	0108		2.55		150	Slow S-SWF
{ SYDNEY	28	0059	0123	0108	S08	W61	5103	24	1	2	0108	1.00	2.00			
{ SIMEIZ	28	0555 E	0604 D	0555 U	S08	E45	5124	9 D	1	2	0555		1.40		104	
{ SIMEIZ	28	0629 E	0650 D	0632 U	S04	W71	5103	21 D	1	2	0632		2.00		64	
{ SIMEIZ	28	0638 E	0645 D	0640 U	S08	E47	5124	7 D	1	2	0640		1.40		84	
{ SIMEIZ	28	0724 E	0825 D	0750 U	S06	W68	5103	61 D	16	2	0728		8.90	2.60	92	
{ KRASNYA	28	0728	0758 D		S05	W68	5103	30 D	1	1	0733		2.60		70	
{ ZURICH	28	0800 E	0814 D		S08	W64	5103	14 D	16	1	0800		6.00			
{ SIMEIZ	28	0855 E	0901 D	0858 U	S05	W70	5103	6 D	1	2	0858		3.00		76	
{ ZURICH	28	1545	1547		S05	W78	5103	2	1	1	1545		1.00			
SYDNEY	29	0119	0144	0123	N21	E11	5123	25	1	2	0123	2.00	2.00			
ZURICH	29	0803	0804		N10	W04	5117	1	1	1	0803		2.00			
KIEV	30	1130	1200	1146	N13	W28	5117	30	1	3	1145		4.20		50	

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These flare reports are addenda to the April 1959 flares published in CRPL-F 177B, May 1959.