

SOLAR FLARES

MARCH 1958

OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	MCNATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _o	MAX. INT. %	
WENDEL	01	0911	0938		S09	W48	4436	27	36				34.00			
SIMEIZ	01	0912	1007		S10	W46	4436	55	3							
SCHAUINS	01	0916	0950		S12	W42	4436	34	3							
ONDREJOV	01	0918 E	0922		S13	W45	4436	4 D	16		0918			4.10		S-SWF
WENDEL	01	0925	0938		S16	W80	4428	13	1				3.00			
ONDREJOV	01	0929 E	0933		S17	E78	4445	4 D	16		0929			5.00		S-SWF
WENDEL	01	1007	1036		S19	W80	4428	29	1				3.00			
ZURICH	01	1346 E	1348		S16	E77	4445	2 D	1	2	1346		2.00			
ZURICH	01	1408	1412		N15	W31	4434	4	1	2	1408		1.00			
AROSA	01	1527	1539		S12	W56	4436	12	1							
UCCLE	02	0820 E	0838 D		N32	W22	4435	18 D	1	1	0820	3.40				
CAPRI S	03	1008 E	1042 D		S14	E59	4445	34 D	26	2	1026	5.00	10.00			
NIZAMIAH	03	1013 E	1048	1018	S19	E60	4445	35 D	3	2	1018	9.72	18.93	3.60		
ARCETRI	03	1015 E	1100		S12	E58	4445	45 D	2	1						
R O HERST	03	1016 E	1115	1022	S17	E62	4445	59 D	36	3	1021	7.10	14.80	6.70	250	S-SWF
STOCKHOLM	03	1031 E	1036 D		S17	E63	4445	5 D	2							
KODAIKNL	03	1040 E			S15	E54	4445		2	1	1040			2.00		
CAPRI S	03	1206 E	1407 D		S18	E65	4445	121 D	16	3	1209	2.00	4.40			
USNRL	03	1229 E	1411		S20	E61	4445	131 D	1	1	1231	1.47	3.11		72	
CLIMAX	03	1812	1832 D	1825	S21	E70	4445	20 D	1		1825	2.50				
HAWAII	03	2340	2356	2346	S14	E40	4445	16	1	2	2346	1.90	2.40			
USNRL	04	1320	1410	1322	S25	W45	4445	50	1	2	1322	1.13	1.59	1.00	106	
USNRL	04	1724 E	1750	1725	S17	E40	4445	26 D	1	1	1725	2.60	3.30			
HUANCAYO	04	2208	2225 D	2215	S17	E33	4445	17 D	1	2						
ZURICH	05	0908 E	0923		S17	E29	4445	15 D	16	3	908		4.00			
ONDREJOV	05	0956 E	1018		S22	E28	4445	22 D	1	3	1007			2.30		
ZURICH	05	1001	1018		S19	E25	4445	17	1	3	1001		3.00			
WENDEL	05	1004 E	1135		S21	E27	4445	91 D	1				4.00			
ONDREJOV	05	1021	1037	1022	S22	E30	4445	16	1	3	1022			2.50		
AROSA	05	1024	1035		S21	E28	4445	11	1							
WENDEL	05	1307 E	1333 D		S18	E29	4445	26 D	16				6.00			
ZURICH	05	1313	1335		S17	E26	4445	22	1	3	1313		4.00			J-SWF
AROSA	05	1315 E	1330		S19	E28	4445	15 D	16							
ONDREJOV	05	1322 E	1342 D		S18	E28	4445	20 D	16	1	1327			2.20		
USNRL	05	1413 E	2019 D		S10	W54	4442	366 D	1	1	1414	1.92	3.19	1.00	71	
USNRL	05	1635	1721		S20	E28	4445	46	1	1	1642	2.94	3.40			
OTTAWA	05	1647 E	1710	1656	N24	W58	4435	23 D	1	2	1656	4.52	11.03			
USNRL	05	1649 E	1720		N32	W65	4435	31 D	2	1	1649	1.70	5.45		102	
USNRL	05	1702	1858	1703	N24	E06	4443	116	1	1	1703	2.50	2.94	1.00	63	
MT WILSON	05	1720	1728		S14	E30	4445	8	1							
USNRL	05	1721	1730	1723	S15	E28	4445	9	1	1	1723	.90	1.03		108	
OTTAWA	05	1721	1740		S13	E29	4445	19	1	1	1724	3.36	3.86			
SAC PEAK	05	1820	1842	1822	S15	E29	4445	12	1	3		3.60			18	
USNRL	05	1902	2100 D	1902	S08	W57	4442	118 D	1	1	1902	2.60	4.54	1.00	70	
USNRL	05	2047	2100 D	2051	S19	E23	4445	13 D	1	2	2051	1.13	1.22		107	
CLIMAX	05	2311 E	2341	2328	S09	E15	4445	30 D	1		2328	4.90				
ARCETRI	06	0820 E	0844 D		S20	W63	4441	24 D	1	3	0820	1.30	2.80			
ARCETRI	06	0846 E			S17	E19	4445		1	3	0846	2.50	2.70			
UCCLE	06	0931 E			N24	W05	4443		16							

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		START	END	MAX. PHASE	APPROX. LAT. MER. DIST.	MONTH REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
CAPRI S	06	1246 E	1330 D		S14 W61	4442	44 D	1	3	1246	1.00	22.0			78
AROSA	06	1511	1519		S20 E12	4445	8	1							
AROSA	06	1538	1547		S20 E12	4445	9	1							
CLIMAX	06	2018	2030 D		S22 E13	4445	12 D	1		2023	5.00				
USNRL	06	2050	2107 D		S08 W71	4442	17 D	1	1	2050	1.02	2.78	1.00		149
MITAKA	07	0525 E	0537 D		N22 E23	4446	12 D	16	1	0530	5.67	7.06	1.58		
UCCLE	07	0828	0900	0829	N11 E85	4449	32	16	2	0829	2.00	4.00			
UCCLE	07	1024			N11 E86	4449		1	2	1024	1.50	3.40			
CAPRI S	07	1030	1156		N14 E72	4449	86	2	2	1054	2.00	6.80			
R O HERST	07	1043 E	1050 D	1043 E	N10 E72	4449	7 D	1	1	1043	.60	2.40			
STOCKHOLM	07	1100 E	1140 D		N10 E70	4449	40 D	2							
NEDERHORST	07	1105 E	1200		N10 E72	4449	55 D	2							
MEUDON	07	1110 E			N12 E68	4449		1							
UCCLE	07		1140	1115	N11 E86	4449		3	2	1115	6.00	13.00			
ONDREJOV	07	1203 E	1212 D		N08 E69	4449	9 D	1	2	1208			2.50		
USNRL	07	1239 E	1319		N06 E70	4449	40 D	16	1	1242	1.59	5.71		65	103
USNRL	07	1235 E	1307		S18 E01	4445	32 D	16	1	1246	3.56	3.64		116	
USNRL	07	1326	1338	1330	S18 W01	4445	12	1	3	1330	1.57	1.61		117	
USNRL	07	1453	1536	1455	N08 E65	4449	43	1	3	1455	1.24	3.40		68	
USNRL	07	1815	1845	1815	S18 W03	4445	30	1	3	1815	1.81	1.83	1.00		
HUANCAYO	07	1947 E	2024	2001	S15 W80	4442	37 D	1	1						
HUANCAYO	07	2033	2110 D	2033	S15 W80	4442	37 D	1	1						
MITAKA	08	0530 E	0542		N25 W22	4443	12 D	1	1	0534	1.84	2.26	1.46	96	120
MITAKA	08	0557 E	0631 D		N12 E56	4449	34 D	1	1	0602	1.84	3.92	2.27		
ATHENS	08	0653	0735		S21 W31	4445	42	16	4		3.30	3.80			
ATHENS	08	0851	0858		S13 W90	4442	7	2	4		.40	5.40			
AROSA	08	0914	0922		N32 W08	4444	8	1							
AROSA	08	1051	1059		S18 W14	4445	8	1							
SAC PEAK	08	1720	1755	1727	N34 W19	4444	35	2	2		6.60			30	
MCMAH	08	1740 E			N33 W17	4444		2							
HAWAII	08	2158	2215 D	2208	N12 E52	4449	17 D	1	1	2208	1.60	3.00			
CLIMAX	08	2159	2249		N05 E54	4449	50	1		2209	2.20				
SAC PEAK	08	2200	2217	2202	N32 W20	4444	17	1	2		2.50			20	
CLIMAX	08	2336	2348 D	2340	N17 E47	4449	12 D	1		2340	2.20				183
HAWAII	08	2336	2352 D	2344	N12 E52	4449	16 D	1	1	2344	2.70	4.90			
MITAKA	08	2337 E	2358 D	2337	N09 E48	4449	21 D	26	1	2337	7.57	16.20	4.86		115
MITAKA	09	0210 E	0221	0216	N24 W35	4443	11 D	16	1	0216	7.57	11.20	1.78	122	
MITAKA	09	0443 E	0514		N32 W23	4444	31 D	1	1	0444	1.84	1.93	2.11	113	
MITAKA	09	0452 E	0505 D		S15 W19	4445	13 D	1	1	0453	1.84	2.47	1.74	100	
MITAKA	09	0621 E	0628 D		N10 E42	4449	7 D	16	1	0621	3.71	5.68	2.36		
WENDEL	09	0737 E	0804		N09 E45	4449	27 D	16							
UCCLE	09	0900	0927	0920	N32 W28	4444	27	16	2	0920	3.40	4.90			
UCCLE	09	0902	0937	0922	N14 E60	4453	35	1	2	0922	2.20	3.00			
UCCLE	09	0933	0946	0938	N22 W50	4443	13	16	1	0938	3.40	5.10			
UCCLE	09	0946	1032	0956	N14 E60	4453	46	2	4	0956	4.50	5.80			
UCCLE	09	0955	1025	1004	N34 W34	4444	30	1	4	1004	2.20	2.40			
UCCLE	09	1031	1038	1033	N12 E50	4449	7	16	4	1033	3.40	5.10			
ONDREJOV	09	1033 E	1038		N09 E44	4449	9 D	1	3	1034			2.20		2
UCCLE	09	1056		1059	N12 E45	4449		16	2	1059	4.00	4.40			
ONDREJOV	09	1057 E	1104	1059	N11 E40	4449	7 D	1	3	1059			4.70		
ONDREJOV	09	1120 E	1135	1122	N12 E51	4453	15 D	16	3	1122			3.60		

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		START	END	MAX. PHASE	APPROX. LAT. MER. DIST.	MONTH FLARE REGION					TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
NIZAMIAH	14	0442	0458	0446	N09 W11	4453	16	1		3	0446	3.04	3.22	1.60		Slow S-SWF
MITAKA	14	0456 E	0512	0500	N11 W12	4453	16 D	16		1	0502	11.40	11.80	1.84	131	
AROSA	14	0846	0910		N08 W18	4449	24	1								
AROSA	14	0920	0941		N08 W19	4449	21	2								
ZURICH	14	0948 E	1100 D		N11 W13	4453	72 D	2		1	948		7.00			
UCCLE	14	1000 E	1029	1018	N10 W25	4449	29	1		4	1018	2.20				
AROSA	14	1013	1036		N06 W26	4449	23	1								
UCCLE	14	1013	1100	1021	N10 W15	4453	47	16		3	1021	4.50				
AROSA	14	1023	1043		N08 W20	4449	20	1								
UCCLE	14	1136	1200 D	1143	N10 W15	4453	24	1		3	1143	2.20				
ZURICH	14	1301 E	1325 D		N11 W15	4453	24 D	2		1	1320		6.00			Slow S-SWF
R O HERST	14	1504 E	1530	1507	N11 W90	4446	26 D	1		2	1507	.50				
ONDREJOV	14	1518 E	1541 D		S23 W80	4445	23 D	3		1	1518			2.20		
UCCLE	15	0822	0850	0831	N12 W25	4453	28	16		4	0831	4.00	4.40			
UCCLE	15	0834	0841	0835	N37 E58	4460	7	1		4	0835	1.00	2.00			
ZURICH	15	1010 E	1028		N10 W25	4453	18 D	1		2	1010		3.00			
UCCLE	15	1030	1033	1030	N12 W25	4453	3	1		4	1030	2.00	2.00			
UCCLE	15	1208	1235	1219	N36 E65	4460	27	1		2						
UCCLE	15	1342	1347	1344	N13 W27	4453	5	1		4	1344	3.50	3.70			
ZURICH	15	1345	1346		N10 W25	4453	1	1		2	1345		1.00			
ONDREJOV	15	1541 E	1547		N11 W27	4453	6 D	1		2	1541			2.20		Slow S-SWF
UCCLE	15	1542 E	1547	1542	N13 W27	4453	5	1		2	1542	2.00	2.30			
UCCLE	16	0839	0850	0841	N13 W41	4453	11	2		4	0841	4.50	6.30			
UCCLE	16	0840	0848	0842	N14 E32	4456	8	16		4	0842	3.60	4.50			
ZURICH	16	0840 E	0905		N17 E56	4461	25 D	1		2	840		2.00			
UCCLE	16	0851	0930	0918	N15 E30	4456	39	16		4	0918	4.50	5.60			
ZURICH	16	0857	0902		N13 E29	4456	5	1		2	857		2.00			
AROSA	16	0950	0955		N27 W90	4446	5	1								
AROSA	16	1358	1412		N12 E25	4456	14	1								
NIZAMIAH	17	0438	0453	0444	N10 E18	4456	15	16		3	0444	4.86	5.34	2.00		Slow S-SWF
ZURICH	17	0804 E	0817		N15 W71	4449	13 D	1		2	804		2.00			
ZURICH	17	0804 E	0909 D		N20 E71	4465	65 D	2		2	804		6.00			
UCCLE	17	0819 E	0825		N25 E85	4465	6 D	16		3						
R O HERST	17	0938 E	0948 D	0938 E	N23 E70	4465	10 D	1		1	0938	.60	2.10			
WENDEL	17	1006 E	1116 D		N23 E77	4465	70 D	1					3.00			
WENDEL	17	1008	1054		N10 E15	4456	46	16					7.00			
AROSA	17	1008	1120		N10 E16	4456	72	2								
UCCLE	17	1011	1144	1025	N11 E15	4456	33	16		4	1025	6.00	6.00			
NIZAMIAH	17	1027 E	1043	1030	N10 E18	4456	16 D	1		3	1030	3.65	4.00	1.80		
WENDEL	17	1153 E	1220		N23 E77	4465	27 D	1					4.00			Slow S-SWF
WENDEL	17	1215	1238		N35 E32	4460	23	16					5.00			
WENDEL	17	1314	1336 D		N23 E73	4465	22 D	1					3.00			
UCCLE	17	1515 E	1535	1515	N23 E80	4465	20 D	1		3	1515	1.50	3.50			
OTTAWA	17	1516			N22 E68	4465		1		1	1517	.64	2.14			
USNRL	17	1516	1559	1518	N23 E70	4465	43	1		2	1518	.51	1.81	1.00	102	
USNRL	17	1516 E	1550		N13 E10	4456	34 D	1		1	1518	1.02	1.09	1.00	109	
UCCLE	18	0804	1125	0835	N22 E60	4465	201	2		4	0835	6.80				
UCCLE	18	0805	0824 D	0810	N18 E35	4465	19 D	16		4	0810	3.40	4.20			
UCCLE	18	0810	0834	0825	N09 W70	4453	24	1		4	0825	2.80				
UCCLE	18	0922	0930	0927	N13 W80	4453	8	1		4	0927	2.20				

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OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- FOR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MEER. DIST.	McMATH PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
UCCLE	18	1145	1201 D	1155	N22	E60	4465	16 D	16	4	1155	3.40				G-SWF
HUANCAYO	18	1905 E	1955 D	1948	N22	E53	4465	50 D	16	2						
MITAKA	19	0300 E	0332 D	0309	N23	E48	4465	32 D	16	1	0321	13.40	25.90	2.09	120	
ATHENS	19	0730 E	0750 D		N48	W60		20 D	1	3		.60	2.40			
UCCLE	19	0956 E			N24	E48	4465			1						
UCCLE	19	0956 E			N14	W13	4456			1						
MEUDON	19	1022	1140		N12	W13	4456	78	1				4.00			
UCCLE	19	1027 E	1032 D		N12	W11	4456	5 D	1	1	1028	2.10	2.10			
CAPRI S	19	1045 E	1125 D		N11	W12	4456	40 D	1	2	1050	2.40	2.50			
AROSA	19	1114 E	1120		N24	E39	4465	6 D	1							
AROSA	19	1114 E	1140		N12	W15	4456	26 D	2							S-SWF
UCCLE	19	1117 E	1135 D		N12	W11	4456	18 D	16	1	1125	4.50	4.50			
MT WILSON	19	1910	1931		N14	W18	4456	21	1							
MT WILSON	19	2137	2152		N22	E40	4465	15	1							
ONDREJOV	20	0656 E	0706		N24	E56	4469	10 D	1	2	0700			2.00		
UCCLE	20	0723	0802	0752	N22	E35	4465	39	2	4	0752	7.90				
UCCLE	20	0758	0801	0759	N21	E32	4465	3	2	3	0759	5.10	5.40			
UCCLE	20	0723	0955	0726	N25	E65	4469	152	1	4	0726	2.80	3.40			
UCCLE	20	0726	0737	0730	N13	W28	4456	11	1	4	0730	2.20				
UCCLE	20	0825	0848	0828	N40	W88	4453	23	16	3	0828	3.40	5.80			
UCCLE	20	0828	0900	0838	N22	E35	4465	32	2	4	0838	5.60				
UCCLE	20	0850	0920	0855	N20	E25	4465	30	1	4	0855	2.20				
MEUDON	20	0905	0955		N25	E25	4465	50	1							G-SWF
UCCLE	20	0907	0957	0920	N23	E35	4465	50	16	4	0920	6.20				
MEUDON	20	0959	1030		N23	E43	4469	31	16							
UCCLE	20	1127 E	1144 D		N23	E35	4465	17 D	1	2		3.40				
MEUDON	20	1259	1330		N25	E28	4465	31	2							
NEDERHORST	20	1305 E	1320		N23	E29	4465	15 D	2							
MEUDON	20	1314	1344		N18	W30	4456	30	1							
UCCLE	20	1324 E	1356		N23	E35	4465	32 D	16	3		4.50				
UCCLE	20	1324 E	1356	1325	N20	W32	4456	32 D	1	2		2.20				
SAC PEAK	20	1445	1545	1457	N22	E26	4465	60	16	2		4.10			24	
MEUDON	20	1452	1550		N25	E28	4465	58	16							S-SWF
MCMATH	20	1455 E			N24	E29	4465		2							
R O EDIN	20	1510 E	1552 D		N23	E29	4465	42 D	2	1	1517	5.00	6.70	1.71		
UCCLE	20	1535 E	1538 D		N23	E33	4465	3 D	16	2		4.50				
SAC PEAK	20	1825	1930	1915	N23	E25	4465	65	1	2		2.70			15	
SAC PEAK	20	2025	2130	2045	N22	E23	4465	65	2			5.40			24	
SAC PEAK	20	2230	2315 D	2255	N22	E22	4465	45 D	1	2		3.80			16	
UCCLE	21	1019	1050	1022	N17	E21	4465	31	2	2	1022	5.50	5.50			
KODAIKNL	21	1021 E	1040 D	1022	N20	E20	4465	19 D	16	2	1030	3.90	4.70	4.00	154	
R O EDIN	21	1027 E	1044		N22	E17	4465	17 D	2	1	1031	6.00	7.20	2.00		S-SWF
NIZAMIAH	21	1040 E			N	E	4465		1	1				1.80		
CAPRI S	21	1413	1432 D		N23	E14	4465	19 D	1	1	1415	2.00	2.20			
SAC PEAK	21	1850	1937 D	1857	N22	E12	4465	47 D	16	2		4.10			24	
HAWAII	21	1852	1920	1902	N23	E07	4465	28	16	3	1902	4.10	4.80			
MCMATH	21	1900 E	1925		N22	E12	4465	25 D	2							
UCCLE	22	0925 E	1129	0944	N18	W60	4456	124 D	1	2	0944	2.20	2.60			
UCCLE	22	1123 E	1155	1130	N22	E05	4465	32 D	16	2	1130	4.50				
MEUDON	22	1125	1150		N20	E07	4465	25	1							
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SOLAR FLARES

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OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	MATH. FLARE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
MEUDON	22	1147	1201		S20	E90	4478	14	1							
MEUDON	22	1210	1230		S12	E90	4476	20	1							
WENDEL	23	0844	0857		N13	W68	4456	13	1				3.00			
UCCLE	23	0950	1200 D	1005	S15	E80	4476	130 D	36	4	1005	29.00	64.00			
CAPRI S	23	0950	1211		S14	E75	4476	141	36	3	1028	8.00	32.00			
WENDEL	23	0950	1358 D		S14	E76	4476	248 D	36				25.00			
MOSCOW	23	0951 E	1102 D	1010	S25	E67	4476	71 D	36							
SCHAUINS	23	0957 E	1137 D		S13	E78	4476	100 D	36							S-SWF
ZURICH	23	1005	1055		S12	E76	4476	50	3	2						
MEUDON	23	1009 E	1119		S09	E80	4476	70	3							
UCCLE	23	1012	1200 D	1016	S12	E85	4476	108 D	2	4						
NIZAMIAH	23	1016 E	1027 D	1018	S18	E60	4476	11 D	2	1	1018	5.47	10.61	3.60		
WENDEL	23	1056	1329		S16	E73	4476	153	16				5.00			
AROSA	23	1105 E	1200 D		S14	E83	4476	55 D	2							
ZURICH	23	1215 E	1319 D		S14	E73	4476	64 D	26	1	1215		10.00			
USNRL	23	1216 E	1227		S13	E75	4476	11 D	2	2	1218	2.04	6.51	2.00	85	
ZURICH	23	1227	1292		N23	W12	4465	25	1	1	1227		2.00			
NEDERHORST	23	1258 E	1415		S20	E88	4478	77 D	2							
NEDERHORST	23	1258 E	1415		S12	E90	4476	77 D	2							S-SWF
HAWAII	23	1826	1838	1828	N12	W85	4456	12	1	2	1828	1.50	3.10			
HAWAII	24	0048	0052 D	0048	N23	W01	4469	4 D	1	1	0048	2.10	2.40			
AROSA	24	0655 E	0703		N17	W26	4465	8 D	1							
AROSA	24	0713	0726		N17	W26	4465	13	1							
UCCLE	24	0717	0731	0720	N20	W26	4465	14	1	4	0720	2.20				
UCCLE	24	0731	0740	0734	S17	E72	4476	9	1	4	0734	2.20	3.10			
UCCLE	24	0745	0756	0746	S17	E72	4476	11	16	4	0746	3.40	4.80			
UCCLE	24	0748	0823	0759	N21	W27	4465	35	1	4	0759	3.40				
WENDEL	24	0749	0827		N20	W25	4465	38	1				3.00			S-SWF
ZURICH	24	0758 E	0825		N20	W26	4465	27 D	16	2	758		3.00			
UCCLE	24	0756	0803	0758	S22	E88	4478	7	2	4	0758	3.40	6.80			
ZURICH	24	0758 E	0834		S16	E65	4476	36 D	1	2	758		4.00			
AROSA	24	0800 E	0817		N17	W27	4465	17 D	1							
WENDEL	24	0810	0831		S17	E66	4476	21	1				4.00			
UCCLE	24	0811	0830	0822	S17	E72	4476	19	1	4	0822	2.20	3.00			
AROSA	24	0813	0828		S16	E66	4476	15	1							
UCCLE	24	0917	0925		S17	E72	4476	8	1	4		2.20	3.00			
ZURICH	24	0953	1020		S16	E64	4476	27	1	2	953		4.00			
WENDEL	24	0954 E	1014 D		S17	E64	4476	20 D	1				3.00			
UCCLE	24	0955	1007		S17	E72	4476	12	1	4		2.20	3.00			
UCCLE	24	1045	1056	1047	S22	E88	4478	11	2	4	1047	3.40	6.80			
ONDREJOV	24	1051 E	1055		S21	E81	4478	4 D	1	2	1052			2.20		
ONDREJOV	24	1110	1119 D		S16	E57	4476	9 D	1	2	1114			2.50		
AROSA	24	1110 E	1124		S16	E55	4476	14 D	1				3.00			
WENDEL	24	1110 E	1140		S15	E57	4476	30 D	1				4.30			
UCCLE	24	1111	1122	1117	S15	E61	4476	11	16	4	1117	3.40				
UCCLE	24	1138	1200	1145	N20	W30	4465	22	1	4	1145	2.20				
WENDEL	24	1139	1157		N19	W27	4465	18	1				3.00			
AROSA	24	1238	1242 D		N17	W29	4465	4 D	1							
WENDEL	24	1311 E	1338 D		N19	W28	4465	27 D	1				2.00			
AROSA	24	1313	1322		N17	W30	4465	9	1							
UCCLE	24	1355	1404	1400	S22	E80	4478	9	1	4	1400	1.20	2.40			
WENDEL	24	1607 E	1632 D		S17	E60	4476	25 D	1				4.00			G-SWF

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SOLAR FLARES

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OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IN- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.						TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.	PLAGE REGION									
ZURICH	27	0823	0850		S19	E25	4476	27	1	2	823		2.00			
AROSA	27	0835 E	0843		N22	W67	4465	8 D	1							
ZURICH	27	0835	0846		N23	W54	4465	11	1	2	835		.20			
WENDEL	27	0905	0917	0908	S24	E43	4478	12	1				4.00			
WENDEL	27	0907	0920 D		S30	E34	4478	13 D	1				3.00			
WENDEL	27	1016 E	1026		N22	W65	4465	10 D	1				4.00			
UCCLE	27	1029 E	1040	1033	N16	W09	4474	11 D	1	4	1033	1.50	1.50			
WENDEL	27	1030	1044		N15	W07	4474	14	1				3.00			
ONDREJOV	27	1031	1035		N24	W41	4469	4	1	3	1032			2.10		
ONDREJOV	27	1037 E	1047		N15	W09	4474	10	1	3	1040			2.10		
WENDEL	27	1042	1116		N23	W69	4465	34	26				14.00			
AROSA	27	1045	1108		N22	W69	4465	23	1							
UCCLE	27	1045	1113		N25	W80	4465	28	2	4		3.00	6.40			
ONDREJOV	27	1046 E	1107	1054	N22	W62	4465	21 D	16	3	1054			3.30		
UCCLE	27	1104 E	1109		N22	W72	4465	5 D	16	3		2.20	4.40			
ONDREJOV	27	1110	1115		S14	E80	4480	5	1	3	1112		4.00		2.00	
WENDEL	27	1159	1212		S23	W56	4470	13	1							
NEDERHORST	27	1201 E	1210		N23	W57	4465	9 D	1							
ONDREJOV	27	1201	1211	1202	N24	W58	4465	10	16	3	1202			4.20		S-SWF
OTTAWA	27	1318	1335	1322	S18	E22	4476	17	16	3	1322	3.31	3.65			
ONDREJOV	27	1319	1326	1321	S18	E23	4476	7	1	3	1321			2.10		
WENDEL	27	1319	1332		S18	E21	4476	13	1				4.00			
ONDREJOV	27	1417	1428	1419	N23	W66	4465	11	1	3	1419			2.00		
ONDREJOV	27	1510 E	1515 D		S23	E38	4478	5 D	1	3						
ONDREJOV	27	1510 E	1517		S28	E29	4478	7 D	1	3	1512			1.90		
SAC PEAK	27	1535	1705	1557 U	S16	E22	4476	90	26	2		10.20			26	
OTTAWA	27	1536	1710		S17	E23	4476	94	2	3	1555	4.47	4.93			S-SWF
ONDREJOV	27	1537	1620 D	1552	S15	E23	4476	53 D	2	3	1552			3.00		
ONDREJOV	27	1545 E	1616		S19	E30	4476	31 D	2	3	1547			2.60		
OTTAWA	27	1702	1726	1705	S23	E37	4478	24	16	3	1705	2.32	3.01			S-SWF
SAC PEAK	27	1937	1945	1940	N22	W79	4465	8	1	2		2.50			16	
OTTAWA	27	1938		1941	N19	W75	4465		16	3	1941		2.32			
SAC PEAK	27	2147	2212	2157 U	N27	W78	4465	25	2	2		7.50			17	
HAWAII	27	2150	2210	2156	N28	W85	4465	20	26	1	2156	8.70				
AROSA	28	0645 E	0700		S07	W06	4476	15 D	1							
UCCLE	28	0805 E	0817	0814	S25	E31	4478	12 D	2	2	0805	5.10	5.60			
AROSA	28	0807	0819		S24	E25	4478	12	1							
ZURICH	28	0809	0832		S25	E30	4478	23	1	3	809		2.00			
WENDEL	28	0812 E	0833		S23	E27	4478	21 D	16				5.00			
ZURICH	28	0842	0903		S24	E23	4478	21	1	3	842		3.00			
ZURICH	28	0843	0906		S22	E29	4478	23	1	3	843		1.00			
AROSA	28	0845 E	0855		S24	E25	4478	10 D	1							
UCCLE	28	0916 E	0940 D	0921	N20	W88	4465	24 D	2	4	0921	3.40	6.80			
WENDEL	28	0919 E	0934 D		N22	W80	4465	15 D	16				6.00			
AROSA	28	0955 E	1015		S14	E13	4476	20 D	1							
AROSA	28	1000	1020		N22	W84	4465	20	1							S-SWF
UCCLE	28	1012 E	1035	1016	S15	E13	4476	23 D	1	2	1016	3.40				
UCCLE	28	1012 E	1100 D	1043	S25	E25	4478	48 D	2	2	1043	6.80				
AROSA	28	1032	1106		S25	E24	4478	34	2							
STOCKHOLM	28	1033	1114		S22	E28	4478	41	26							
UCCLE	28	1034 E	1052	1038	S25	E30	4478	18 D	2	2	1038	7.90				S-SWF
CAPRI S	28	1035 E	1055 D		S23	E24	4478	20 D	16	2	1052	3.80	4.60			
ZURICH	28	1045 E	1114 D		S24	E20	4478	29 D	2	3	1045		6.00			
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OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION -- MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX.						TIME -- U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.	PLACE REGION									
WENDEL	29	1218	1235		S23	E15	4478	17	1			3.00				
OTTAWA	29	1339	1405	1343	N38	E76	4484	26	16							
ONDREJOV	29	1340	E 1357	1346	N36	E73	4484	17	D 26	3	1343	2.38		11.20	S-SWF	
WENDEL	29	1340	1400		N33	E80	4484	20	16			6.00				
NEDERHORST	29	1343	E 1407		N32	E78	4484	24	D 2			5.00				
WENDEL	29	1345	1421	D	S19	E90	4483	36	D 16							
OTTAWA	29	1353	1408	1357	S17	E82	4483	15	1	3	1357	1.57				
ONDREJOV	29	1356	E 1404	1357	S16	E83	4483	8	D 16	3	1357		4.00			
SAC PEAK	29	1401	E 1420	1401	S18	E85	4483	19	D 1	1		2.50		20		
OTTAWA	29	1406	1421	1409	S14	E55	4480	15	1	3	1409	1.22	2.16			
WENDEL	29	1407	1421	D	S15	E59	4480	14	D 1			3.00				
ONDREJOV	29	1410	1416	1413	S16	E59	4480	6	1	3	1413		3.50			
ONDREJOV	29	1439	E 1444		S15	W00	4476	5	D 1	3	1440		2.20			
OTTAWA	29	1448	E 1502		N25	W67	4469	14	D 1	1	1448	1.62				
USNRL	29	1449	1507	1450	N27	W70	4469	18	1	2	1450	.79	2.83		95	
MCMATH	29	1450	E 1458		N27	W60	4469		1						S-SWF	
ONDREJOV	29	1450	E 1458		N23	W72	4469	8	D 1	3	1451		3.00			
ONDREJOV	29	1507	E 1512		S10	W09	4476	5	D 1	3	1510		2.00			
SAC PEAK	29	1547	1637	1607	S17	W11	4476	50	1	1		2.40		16		
USNRL	29	1547	1640	1557	S15	W10	4476	53	1	2	1557	2.04	2.11		98	
ONDREJOV	29	1552	E 1617	D	S15	W07	4476	25	D 1	3	1554		2.50			
SAC PEAK	29	1820	1910	1822	S23	E08	4478	50	D 16	1		3.90		30	S-SWF	
HAWAII	29	1822	1840	1822	S32	E05	4478	18	1	1	1822	2.50	2.70			
MCMATH	29	1825	E 1825		S11	W05	4476	2	2							
HAWAII	29	2132	E 2134	D 2134	N38	E87	4484	2	D 16	1	2134	2.50	5.00		S-SWF	
SAC PEAK	29	2133	E 2150	2133	N36	E85	4484	17	D 16	1		3.60		32		
MITAKA	30	0021	E 0046	0022	S08	W13	4476	25	D 1	1	0029	.97	1.00	3.47	165	
MITAKA	30	0102	E 0109	D	N36	E67	4484	7	D 2	1	0109		8.00		Slow S-SWF	
MITAKA	30	0149	E 0200	D	S08	W14	4476	11	D 1	1	0150	1.84	1.90	1.97	115	
MITAKA	30	0152	E 0203	0156	N36	E66	4484	11	D 16	1	0156	1.84	5.88	2.75	165	
MITAKA	30	0215	E 0229	0217	N36	E66	4484	14	D 16	1	0216	.89	2.85	2.87	183	
MITAKA	30	0221	E 0235	D	S06	W11	4476	14	D 1	1	0225	3.71	3.78	1.74	110	
MITAKA	30	0401	E 0415	D 0408	S08	W07	4476	14	D 16	1	0408	1.84	2.76	1.87	183	
MITAKA	30	0456	E 0509	D 0458	N36	E65	4484	13	D 16	1	0459	1.84	5.88	4.73	165	
ATHENS	30	0606	0628		N36	E62	4484	22	1	3		1.00	3.50		S-SWF	
AROSA	30	0655	0702		N34	E67	4484	7	1							
ATHENS	30	0656	0718		N36	E62	4484	22	1	3		.60	2.10			
AROSA	30	0755	E 0806		N14	W47	4474	11	D 1							
WENDEL	30	0755	E 0812		N14	W47	4474	17	D 1			4.00				
UCCLE	30	0811	E 0827	0815	S18	E43	4480	16	D 1	4	0815	2.80	3.10			
MOSCOW	30	0817	E 0846	D 0846	N30	E60	4484	29	D 26							
AROSA	30	0820	0830		S15	W10	4476	10	1							
WENDEL	30	0842	0851		N34	E69	4484	9	16			5.00				
UCCLE	30	0842	0853	0844	N35	E80	4484	11	2	4	0844	4.50	7.60		S-SWF	
AROSA	30	0843	0850		N34	E66	4484	7	1							
UCCLE	30	0850	1000	0915	S23	W12	4478	70	2	4	0915	5.60				
SCHAUINS	30	0915	E 1330		S14	W21	4476	255	D 2							
ZURICH	30	0938	E 0958		N36	E69	4484	20	D 1	3	938		4.00			
ZURICH	30	0941	0944	0941	N23	W68	4469	3	1	3	941		2.00			
WENDEL	30	0944	1106		S12	W16	4476	82	16				8.00			
WENDEL	30	0944	1230		S16	W19	4476	166	26				14.00			
ZURICH	30	0945	1042	0959	S18	W20	4476	57	1	3	959		5.00			
UCCLE	30	0945	1421	0957	S17	W22	4476	276	26	4	0957	6.80			S-SWF	
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OBSERVATORY	DATE Mar. 1958	OBSERVED UNIVERSAL TIME			LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	LAT.	MER. DIST.				M-MATH PLAGE REGION	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hc		MAX. INT. %
ZURICH	30	0952		1002	S11	W18	4476	50	1	3	1002			3.00		
AROSA	30	1007	E	1100	S18	W21	4476	60	D	2						
UCCLE	30	1007		1054	S12	W20	4476	47	2							
CAPRI S	30	1010	E	1032	S17	W19	4476	22	D	1	4	1020	5.60			
STOCKHOLM	30	1011	E	1020	S13	W15	4476	9	D	1	1	1015	2.20	2.40		
MEUDON	30	1017	E	1030	S20	W20	4476	13	D	16						
MEUDON	30	1017	E	1030	S10	W20	4476	13	D	1				2.00		
WENDEL	30	1042		1100	S13	W13	4476	18	1					6.00		
UCCLE	30	1113		1118	S25	E04	4478	5	1					3.00		
UCCLE	30	1114		1134	N36	E80	4484	20	1	4	1115	2.20				
CAPRI S	30	1120	E	1205	S18	W21	4476	45	D	1	4	1121	2.20	3.70		
MEUDON	30	1148	E	1210	S20	W20	4476	22	D	1	1	1155	2.20	2.40		
UCCLE	30	1249		1316	N23	W90	4469	27	16							
MEUDON	30	1300	E	1351	S20	W20	4476	51	D	1	4	1250	2.20	4.50		
UCCLE	30	1422		1429	S08	W16	4476	7	1							
UCCLE	30	1455		1504	S20	W07	4478	9	1	4	1425	2.20				
UCCLE	30	1533		1621	N36	E80	4484	48	D	2	4	1457	2.20			
WENDEL	30	1537		1602	N33	E61	4484	25	1	2	1544	3.40	5.80			
CAPRI S	30	1540	E	1557	N35	E65	4484	17	D	1				4.00		
WENDEL	30	1614	E	1626	N34	E65	4484	12	D	1	2	1546	.80	2.30		
OTTAWA	30	1623	E		N38	E60	4484							4.00		
SAC PEAK	30	1740		1827	S16	E37	4480	47	D	1	1	1624	.99	3.15		
SAC PEAK	30	1747		1800	N35	E64	4484	13	1	2		3.60				
SAC PEAK	30	2007		2117	N23	W51	4474	70	D	2		2.40			16	
HAWAII	30	2010		2112	N20	W50	4474	62	2	2		5.10			16	
HAWAII	30	2036	E	2040	S07	W21	4476	4	D	1	1	2016	3.50	6.40	17	
SCHAUINS	30	2114	E	0129	S15	E09	4476	255	D	1	1	2036	2.00	2.10		
HAWAII	30	2150	E	2208	N37	E60	4484	18	D	16						
HAWAII	30	2304		2320	S07	W22	4476	16	16	1	1	2158	2.60	6.40		
MITAKA	30	2347		2353	S08	W31	4476	6	16	1	1	2308	4.50	5.00		
										1	1	2351	9.43	11.40	1.83	146
SYDNEY	31	0005		0025	S15	W20	4476	20	1							
MITAKA	31	0008	E	0036	S13	W24	4476	28	D	26	1	0008	8.56	9.33	3.34	227
HAWAII	31	0014	E	0020	S16	W27	4476	6	D	2	1	0016	7.20	8.10		
HAWAII	31	0028		0032	N38	E65	4484	4	D	16	1	0032	2.70	6.70		
MITAKA	31	0028	E	0038	N35	E54	4484	10	D	16	1	0031	3.80	8.60	7.65	149
SYDNEY	31	0040		0110	S08	W22	4476	30	1							
MITAKA	31	0049	E	0113	S07	W24	4476	24	D	26	1	0052	9.43	10.00	4.32	278
MITAKA	31	0050	E	0106	S17	W25	4476	16	D	2	1	0052	6.00	6.50		
HAWAII	31	0119	E	0124	S07	W52	4476	5	D	1	1	0120	1.84	2.95		
MITAKA	31	0146	E	0200	S15	W21	4476	14	D	1	1	0149	1.86	1.99	2.99	120
MITAKA	31	0231	E	0244	N35	E53	4484	13	D	16	1	0233	3.80	8.60	2.37	149
SYDNEY	31	0314		0345	S05	W50	4476	31	1					3.00	125	
MITAKA	31	0423	E	0427	N23	W74	4469	4	D	1	1	0423	2.78	9.73	2.93	96
MITAKA	31	0535		0555	N23	W75	4469	20	D	1	1	0545	.89	3.12	2.29	
ATHENS	31	0650		0704	N25	W72	4469	14	1	3		.80	3.70			
NIZAMIAH	31	0856	E	0904	S19	E28	4480	8	D	1	3	0856	2.43	2.81	1.60	
STOCKHOLM	31	0901	E	0914	S18	E27	4480	13	D	1						
AROSA	31	1015	E	1025	N20	E61	4485	10	D	1						
AROSA	31	1026		1032	S09	W27	4476	6	1							
UCCLE	31	1119		1140	N23	W90	4469	21	1	2						
UCCLE	31	1120		1131	N22	E66	4485	11	1		2					
UCCLE	31	1143	E	1146	S18	E27	4480	3	D	1	2	1146	2.10	2.30		
UCCLE	31	1444		1448	S07	W69	4476	4	1	4	1445	2.00	4.00			
UCCLE	31	1525		1534	S14	W41	4476	9	1	4	1528	1.70	2.00			
AROSA	31	1525	E	1535	S15	W40	4476	10	D	1						
SAC PEAK	31	1710		1725	S12	W40	4476	15	1	3		3.30			20	
SAC PEAK	31	1932		1952	S12	W42	4476	20	1	3		2.50			27	
SAC PEAK	31	2305	E	2332	S21	E52	4483	27	D	1	1		2.50		18	Slow S-SWF

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

CAPRI S ANACAPRI SWEDISH
KODAIKNL KODAIKANAL
KRASNAYA KRASNAYA PAKHRA
R O EDIN ROYAL OBSERVATORY, EDINBURGH
R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
SAC PEAK SACRAMENTO PEAK
SCHAUINS SCHAUINSLAND
USNRL UNITED STATES NAVAL RESEARCH LABORATORY

E - LESS THAN.
D - GREATER THAN.
U - APPROXIMATE.
+ - PLUS.
- - MINUS.

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OBSERVATORY	DATE MAR 1958	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.										
{ SCHAUINS SIMEIZ	01	0912 E	0950	0917	S12	W42	4436	38 D	26	2	0917	28.81	25.00	5.50	80	S-SWF
	01	0912	1007		S10	W46	4436	55	3	2			47.00			
	01	0929 E	0940		S16	E76	4445	11 D	1	2			3.00			
	01	0929 E	0949 D		S16	E85	4445	20 D	1	2			20.00			
{ CAPRI-G CAPRI-G	01	1411 E	1416 D	0933	N21	W26	4435	5 D	1	1	0932	2.62	3.00	3.00	68	S-SWF
	01	1532 E	1537 D		S13	W55	4436	5 D	1	2			2.00			
TASHKENT CAPRI-G CAPRI-G CAPRI-G	02	0653 E	0705		S21	E68	4445	12 D	1	2	0654	3.54	9.00	2.70	65	
	02	0915 E	0920 D		S15	E65	4445	5 D	1	2			2.00			
	02	0922	1025		N32	W34	4435	3	1	2			4.00			
	02	0928	0935		S23	E64	4445	7	1	2			3.00			
{ CAPRI-G PIRCULI CLIMAX	03	1005 E	1250	1021 1825	S17	E63	4445	165 D	3	1	1021 1825	13.27 2.50	15.00	31.00	S-SWF	
	03	1007 E	1109		S19	E61	4445	62 D	3	3			3.00			
	03	1812	1832 D		S21	E70	4445	20 D	1							
{ ALMA-ATA ALMA-ATA PIRCULI CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	04	0514 E	0806 D	0530	S16	W38	4442	172 D	2	2	0530	2.52	7.70	81 84		
	04	0515 E	0805 D	0530	S12	W38	4442	170 D	16	2	0530	1.26	2.10			
	04	0900 E	0910 D	0903	S25	E37	4445	10 D	1	2	0903	5.31	9.10			
	04	1000 E	1007 D		S18	E32	4445	7 D	1	1		2.00				
	04	1225 E	1228		S18	E30	4445	3 D	1	1		2.00				
	04	1228	1235 D		N24	E25	4443	7 D	1	1		2.00				
	04	1302 E	1310		S26	W39	4441	8 D	1	2		3.00				
	04	1318 E	1325 D		S26	W39	4441	7 D	1	2		5.00				
	04	1610 E	1615 D		S24	E40	4445	5 D	1	2		4.00				
	{ ALMA-ATA ALMA-ATA ALMA-ATA ALMA-ATA CAPRI-G CAPRI-G KRASNIA KRASNIA KRASNIA KIEV CAPRI-G KRASNIA KRASNIA CAPRI-G CAPRI-G CLIMAX CAPRI-G CAPRI-G CAPRI-G CAPRI-G SYDNEY ABASTUMANI CAPRI-G CAPRI-G	05	0500 E	0525 D	0501	S05	E30	4445	25 D	2	3	0501	1.57			8.90

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OBSERVATORY	DATE	OBSERVED			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		UNIVERSAL TIME			APPROX.		McMATH PLACE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
		START	END	MAX. PHASE	LAT.	MER. DIST.										
	MAR 1958															
{ MOSCOW-G NEDERHORST KRASNYA CAPRI-G CAPRI-G MCMATH	07	1035 E	1224 D	1110	N08	E78	4449	109 D	26	2	1109	7.13	33.10	3.16	370	S-SWF
	07	1105	1200 D		N10	E72	4449	55 D	2	2						
	07	1130 E	1149	1135 U	N10	E71	4449	19 D	16	2	1135	2.52	5.10		96	
	07	1424 E	1427 D		N24	W16	4443	3 D	1	2			4.00			
	07	1443 E	1447 D		S12	W73	4442	4 D	1	1			6.00			
	07	1815	1835		S18	W04	4445	20	1	2	1816	2.60	2.65			
VOROSHILOV TASHKENT TASHKENT CAPRI-G MCMATH MCMATH MCMATH MCMATH MCMATH CLIMAX CLIMAX	08	0049	0052	0050	S06	W84	4442	3	16	2	0050	.70	3.50		148	Slow S-SWF S-SWF
	08	0650 E	0709 D		S18	W27	4445	19 D	16	1	0651	9.91	10.00	2.00	65	
	08	0740	0750		S18	W17	4445	10	1	1	0740	2.12	2.00	3.10	75	
	08	0835 E	0840 D		N32	W16	4444	5 D	1	1			3.00			
	08	1616	1705	1624	N10	E55	4449	49	1	2	1622	1.95	3.60			
	08	1720	1748	1725	N34	W17	4444	28	2	2	1726	5.20	7.05			
	08	1730	1830		N25	W35	4443	60	1	2	1749	1.62	2.30			
	08	1800	1812		N24	W44	4443	12	1	2	1803	1.96	3.40			
	08	1802	1840	1805	N10	E54	4449	38	1	2	1805	1.94	3.60			
	08	2159	2249		N05	E54	4449	50	1		2209	2.20				
	08	2336	2348 D	2340	N17	E47	4449	12 D	1		2340	2.20				
{ VOROSHILOV VOROSHILOV TASHKENT SIMEIZ TASHKENT	09	0116	0220	0137	N12	E47	4449	64	16	2	0137	1.57	2.50		120	S-SWF
	09	0151	0155	0152	N17	E80	4462	4	16	2	0152	.70	3.50		132	
	09	0741	0748		N16	E59	4453	7	1	3	0742	5.66	14.00	2.10	65	
	09	0748	0800 D	0749	N10	E44	4449	12 D	16	2	0750	3.05	4.60	4.50	56	
	09	0750	0800		N10	E45	4449	10	1	3	0751	4.96	8.00	3.40	85	
KHARKOV KYOTO KYOTO KYOTO TASHKENT KYOTO KYOTO KYOTO KYOTO KIEV* KIEV NEDERHORST UTRECHT NEDERHORST UTRECHT CLIMAX CLIMAX	10	0117 E	1125		N35	W37	4444	18 D	16	2	1115	2.00	3.00			G-SWF Slow S-SWF
	10	0420	0432 D		N32	W38	4444	12 D	1		0420			2.52	100	
	10	0440 E	0458 D		N32	W36	4444	18 D	1		0441			2.34	100	
	10	0451 E			N10	E35	4453		1		0451					
	10	0523	0538		S21	W36	4445	15	1	1	0525	2.48	3.00	2.40	65	
	10	0525 E	0534 D		S18	W36	4445	9 D	1		0525				100	
	10	0615 E	0628 D		N13	E48	4453	13 D	1		0617			2.00	100	
	10	0630 E	0732 D	0715	N32	W36	4444	62 D	26		0715			3.36	200	
	10	0735 E	0740		N14	E47	4453	5 D	1		0735				100	
	10	1103 E	1108 D	1105	N32	W44	4444	5 D	1	2		3.50	6.40			
	10	1104	1109	1107	N34	W45	4444	5	2	2	1107	4.28	8.50		90	
	10	1320	1331 D		N10	E30	4449	11 D	16	2						
	10	1321 E	1331		N08	E32	4449	10 D	16	2						
	10	1335 E	1345 D		N35	W37	4444	10 D	2	2						
	10	1340 E			N33	W20	4444		2	2						
ALMA-ATA KYOTO KYOTO GOOD HOPE KYOTO MCMATH MCMATH KYOTO	10	1955	2006	2001	N34	W46	4444	11	1		2001	2.10				G-SWF
	10	2024	2128	2040	S11	W50	4445	64	2		2040	7.00				
	11	0920 E	0949 D	0929	N20	E18	4453	29 D	16	1	0929	1.02	2.20		102	
	12	0140	0220 D	0152	N08	E10	4453	40 D	26		0152	18.60		2.68	150	
	12	0516 E	0557 D		N12	E90	4456		□		0526				100	
	12	1416	1512 D	1442	S18	W68	4445	56 D	2		1445	4.00	9.40			
	13	0030 E	0044 D		N11	E90	4456	14 D	1		0035				80	
	13	1814 E	1825 D		N15	W07	4453	11	1	2	1818	2.66	2.87			
	13	1854	1906	1858	N15	W07	4453	12	1	2	1857	2.86	3.09			
	13	2353	2356 D		N12	W06	4453	3 D	1		2353			2.52	120	

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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 Ha	MAX. INT. %	
					LAT.	MER. DIST.										
	MAR 1958															
KIEV	14	0850 E	1152	0927	S03	W22	4458	182 D	16	3	0927	4.28	4.80		80	Slow S-SW
KIEV	14	1012	1035	1017	S13	W31	4458	23	1	3	1017	3.42	4.10		70	
GOOD HOPE	14	1454	1539 D		S20	W85	4447	45 D	3		1508	10.00				
MCMATH	14	1815 E	1820 D		N12	W17	4453	5 D	1	1	1819	2.96	3.26			
CAPRI-G	15	0820 E	0845 D		N11	W25	4453	25 D	1	2			3.00			
CAPRI-G	16	1402 E	1407 D	1403	N12	E24	4456	5 D	1	2	1403		5.00			
CAPRI-G	16	1513 E	1518 D	1513	N14	E24	4456	5 D	1	2	1513		3.00			
TASHKENT	17	0444	0514	0447	N10	E18	4456	30	16	3	0447	6.19	7.00			
PIRCULI	17	1015 E		1015	S26	E20	4459		2	2	1045	9.20	20.00			
CAPRI-G	17	1112 E	1122 D		N11	E12	4456	10 D	1	1			5.00			
CAPRI-G	17	1112 E	1200 D		N20	E70	4465	48 D	1	1			3.00			
CAPRI-G	17	1216	1245 D		N37	E31	4460	29 D	16	1			5.00			
TASHKENT	18	0459 E	0520 D		N20	E65	4465	21 D	1	2	0501	3.19	8.00	2.00	60	
TASHKENT	19	0619 E	0722		S24	E20	4459	63 D	16	3	0621	8.50	10.00	2.00	80	
KRASNYA	19	0736 E	0748 D	0745 U	N21	E46	4465	12 D	1	1	0745	8.70	7.40		74	
MOSCOW-G	19	0945 E	1201 D	1106	N11	W17	4456	136 D	16	1	1110	7.64	8.20	2.60	150	
{ GOOD HOPE SCHAUINS CAPRI-G CAPRI-G	19	1020	1200 D	1030	N11	W10	4456	100 D	1			3.00	3.20			
	19	1032 E	1140		N20	W13	4456	8 D	1	2			5.00	2.10		
	19	1055 E	1215		N14	W14	4456	80 D	2	2			11.00			
	19	1515 E	1535 D		N22	E52	4465	20 D	1	2			3.00			
CAPRI-G	19	1718	1732 D		N22	E37	4465	14 D	1	1	1729	2.65	3.91			Slow S-SWF
MCMATH	19	1911 E	1927 D		N15	W16	4456	16 D	1	1	1915	2.90	3.26			
KYOTO	20	0202	0212		N22	E35	4465	10	1		0202				100	
KRASNYA	20	0832 E	0909 D	0832 U	N20	E31	4465	37 D	1	1	0832	4.02	2.65		78	
NEDERHORST	20	1305	1320 D		N23	E29	4465	15 D	2	2						G-SWF
{ CLIMAX MCMATH	20	1448	1540	1457	N22	E26	4465	52	1		1457	4.20				
	20	1448	1545	1457	N23	E26	4465	57	2	2	1457	5.20	6.51			
MCMATH	20	1734 E	1814		N22	E25	4465	40 D	1	2	1747	2.92	3.80			
MCMATH	20	1822 E	1835 D	1830	N22	E25	4465	13 D	1	2	1828	2.60	3.40			
CLIMAX	20	2037	2118	2047	N21	E27	4465	41	2		2047	6.50				S-SWF
VOROSHILOV	21	0010	0016	0012	N24	E18	4465	6	16	2	0012	2.70	3.40		96	
VOROSHILOV	21	0010	0045	0017	N17	W37	4456	35	16	2	0017	3.26	4.50		85	
{ KIEV KIEV KIEV CAPRI-G	21	1005	1100	1030	N22	E21	4465	55	1	2	1030	1.71	2.00		70	S-SWF
	21	1015	1046	1022	N22	E16	4465	31	16	2	1022	4.20	4.60		130	
	21	1052	1141	1054	N21	E12	4465	49	1	2	1054	.85	1.00		80	
	21	1140 E	1225		N22	E14	4465	35 D	2	1			10.00			
CAPRI-G	21	1340 E	1402 D		N26	E38	4469	12 D	2	1			8.00			S-SWF
CAPRI-G	21	1425 E	1432 D		N22	E13	4465	7 D	16	1			7.00			
CAPRI-G	21	1425 E	1432 D		N18	W44	4456	7 D	1	1			4.00			
CAPRI-G	21	1545 E	1557 D		N22	E12	4465	12 D	1	1			4.00			
CLIMAX	21	1711 E	1723		S15	E90	4476	12 D	1		1713	2.10				Slow S-SWF
MCMATH	21	1908 E	1934		N23	E14	4465	16 D	16	2	1910	3.24	3.80			
MCMATH	21	1944 E	2010		N23	E10	4465	26 D	16	2	1949	3.24	3.95			
VOROSHILOV	22	0047			N21	E07	4465		1	2	0107	2.18	2.60		72	G-SWF
CAPRI-G	22	0812 E	0820 D		N18	W63	4456	8 D	1	3			4.00			

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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. LAT.	MER. DIST.	McMATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %	
{ CAPRI-G KHARKOV	MAR 22	1125	1210	1137	N22	E05	4465	45	2	3	1137		9.00			G-SWF
	22	1127	1155	1136	N22	E04	4465	28	1	2	1134	5.50	6.00	1.80		
{ MOSCOW-G	22	1127 E	1157 D	1139	N20	E04	4465	30 D	16	1	1140	5.10	6.00	2.90	130	S-SWF
{ CAPRI-G	22	1200 E	1213		S22	E82	4478	13 D	16	3			5.00			
{ CAPRI-G	22	1208	1240 D		S13	E85	4476	32 D	1	3			3.00			G-SWF
{ KHARKOV	22	1209	1311	1219	S13	E85	4476	62	16	1	1215	6.60	34.00			
MCMATH	22	1234	1243	1238	N24	E25	4469	9	1	2	1237	1.64	2.13			S-SWF
KIEV	22	1244 E	1257 D	1252	S14	E90	4476	13 D	1	1	1052	.85	6.50		50	
MCMATH	22	1804	2119 D	1815	N24	E25	4469	195 D	1	2	1820	3.24	4.23			G-SWF
MCMATH	22	1942	2000		N22	E00	4465	18	1	2	1946	3.27	3.65			
KYOTO	22	2310 E	2321 D	2314	N25	E20	4469	11 D	16		2314	3.10		2.34	130	Slow S-SWF
{ KYOTO	22	2352 E	0000 D		S14	E90					2352				100	
{ KYOTO	22	2355 E	0026 D	0010	S11	E85	4476	31 D	1		0010	2.30		3.18	140	S-SWF
KYOTO	23	0010 E	0028 D	0014	S13	E85	4476	18 D	1		0014	4.60			110	
{ TASHKENT	23	0530 E	0543 D		N22	E53	4474	13 D	1	1	0533	3.89	7.00	2.00	65	S-SWF
{ KYOTO	23	0535 E	0546 D	0538	N22	E55	4474	11 D	1		0538	2.90		2.52	100	
TASHKENT	23	0542	0553 D	0542	S10	E75	4476	11 D	1	1	0542	1.41	5.00			S-SWF
PIRCULI	23	0752 E			S25	E80	4478		1	3	0752	5.31	27.00			
MOSCOW-G	23	0845 E	0858 D		N20	W65	4456	13 D	1	2	0848	1.01	3.10	3.10	100	S-SWF
KRASNYA	23	0947	1057	0958	S15	E80	4476	10	26	1	0958	11.19	15.02		101	
MOSCOW-G	23	0951 E	1210	1010	S25	E67	4479	139 D	36	2	1011	17.83	47.00	7.50	210	S-SWF
{ SCHAUINS	23	0958 E	1210		S14	E74	4476	132 D	36	2			30.00	16.00		
{ KHARKOV	23	1000 E	1122	1033	S17	E80	4476	82 D	26	2	1008	20.00	10.20			S-SWF
{ CAPRI-G	23	1001	1245	1003	S14	E73	4476	44	36	3	1012		30.00			
KIEV	23	1024 E	1238	1025	S13	E80	4476	14 D	3	3	1025	18.82	76.50		110	S-SWF
{ MCMATH	23	1150 E	1445		S13	E77	4476	175 D	2	2	1158	2.92	11.30			
{ CAPRI-G	23	1156 E			S20	E85	4479		1	3			3.00			S-SWF
{ NEDERHORST	23	1258	1415 D		S20	E88	4478	77 D	2	2						
{ NEDERHORST	23	1258	1415 D		S12	E90	4476	77 D	2	2						S-SWF
{ KIEV	23	1329	1424 D	1415	S11	E90	4476	55 D	16	3	1403	.86	6.50		50	
{ KIEV*	23	1405 E	1430		S11	E79	4476	25 D	2	3		2.86	11.00			S-SWF
MCMATH	23	1717	1744		N23	E05	4469	27	1	2	1722	1.62	1.86			
MCMATH	23	1717	1744		N24	W05	4469	27	1	2	1722	1.95	2.30			S-SWF
MCMATH	23	1741	1800	1746	N25	W07	4469	19	1	2	1746	1.95	2.34			
SYDNEY	24	0446 E	0525		N22	E38	4474	39 D	1	2	0455	3.00	4.00			S-SWF
{ KHARKOV	24	0953	1017 D	0957	S19	E72	4478	24 D	1	2	1008	2.20	6.00	2.20	110	
KIEV	24	1004	1129	1114	S16	E57	4476	85	1	2	1114	.90	1.50			S-SWF
{ KHARKOV	24	1042	1056	1045	S25	E85	4478	14	16	2	1049	4.40	18.00	2.40	50	
{ KIEV	24	1045 E	1054 D	1047	S21	E90	4478	9 D	2	2	1047	1.71	12.96			S-SWF
NEDERHORST	24	1045	1055 D		N11	W90	4456	10 D	1	3						
{ KHARKOV	24	1110	1122	1113	S19	E58	4476	12	1	2	1117	2.20	5.00	2.00		S-SWF
{ KHARKOV	24	1137	1155	1140	N21	W24	4465	18	1	2	1137	3.30	4.00	2.40	50	
{ KIEV	24	1138	1211	1145	N20	W30	4465	33	1	2	1145	.85	1.10			S-SWF
CAPRI-G	25	0900 E	0908 D		S24	E68	4478	8 D	1	2			2.00			
{ SCHAUINS	25	1415 E			N20	W44	4465		1	1			3.00	1.50		Slow S-SWF
{ NEDERHORST	25	1415	1430 D		N20	W42	4465	15 D	1	2						
{ MOSCOW-G	25	1416 E	1434		N21	W41	4465	18 D	1	1	1425	2.55	4.10	2.10	120	S-SWF
{ SCHAUINS	25	1457 E	1540 D		S14	E50	4476	43 D	16	1			5.00	2.10		
NEDERHORST	25	1502	1600 D		S13	E46	4476	58 D	2	2						S-SWF
{ CAPRI-G	25	1510 E	1522 D		S14	E48	4476	12 D	2	1			7.00			

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

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OBSERVATORY	DATE MAR 1958	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.										
↑MCMATH	25	1518	1610		S15	E46	4476	52	16	2	1552	2.90	4.10			
SYDNEY	26	0422	0437	0427	N38	W85	4460									
{KRASNYA	26	0738 E	0849 D	0836 U	N25	E15	4475	71 D	1	2	0427	.50				
{KHARKOV	26	0746 E	0845 D		N22	E12	4475	59 D	16	2	0836	4.35	2.63		58	
{KRASNYA	26	0849	0934 D	0910 U	S22	E51	4478	44 D	1	2	0746	1.10	1.40			
{MOSCOW-G	26	0907 E	0942 D	0919	S23	E51	4478	35 D	16	2	0910	3.48	2.12		56	
{KHARKOV	26	1027	1038 D		S08	E12	4476	11 D	16	2	0921	6.11	10.10	2.10	110	
{KHARKOV	26	1028	1038 D		S26	E53	4478	10 D	16	2	1035	1.00	1.00			
{GOOD HOPE	26	1205	1225	1210	S04	E10	4476	20	1		1035	2.00	2.00			
{KHARKOV	26	1206	1217		S08	E11	4476	11	16	2	1210	4.50	4.60			
{KIEV	26	1206 E	1218	1209	N03	E09	4476	12 D	16	3	1208	2.00	1.00	2.80		
{MCMATH	26	1206	1235	1210	S06	E10	4476	29	2	2	1209	4.28	4.50		90	
{MCMATH	26	1255	1335	1259	S16	E35	4476	40	1	2	1210	5.85	5.90			
{GOOD HOPE	26	1255	1354	1310	S14	E35	4476	59	1		1259	5.16	6.36			
{MCMATH	26	1307	1320		S14	E90	4480	13	□	2	1310	3.50	4.20			
{KIEV	26	1320 E	1338 D	1321	S17	E33	4476	18 D	16	3	1321	2.56	3.10		90	
{MCMATH	26	1327	1355		S14	E90	4480	28	□	2						
{MCMATH	26	1442	1535		S14	E90	4480		□	1						
{MCMATH	26	1724	1755		S15	E90	4480		□	2						
{MCMATH	26	1742	1805	1745	S17	E32	4476	23	1	2	1745	4.85	5.80			
{MCMATH	26	1755	1805	1758	S06	E07	4476	10	1	2	1758	2.60	2.62			
{MCMATH	26	1815	1835	1820	N15	W44	4467	10	1	2	1820	2.28	3.50			
{MCMATH	26	1815	1850	1826	S20	E30	4476	35	1	2	1825	2.92	3.44			
{MCMATH	26	1907	1920		S15	E90	4480		□	2						
{MCMATH	26	2047 E	2055 D		S06	E33	4476	8 D	1	1	2048	1.95	2.30			
{SYDNEY	26	2326	0020	2340	S21	E33	4476	54	2	2	2340	8.00	10.00			G-SWF
SCHAUINS	27	0837 E	0842		N23	W53	4465	5 D	1	1			2.00	3.20		
SCHAUINS	27	0912 E	0918		S23	E44	4478	6 D	1	1			2.00	2.00		
{NEDERHOKST	27	1201	1210 D		N23	W57	4465	9 D	1	3						
{GOOD HOPE	27	1204 E	1215		N23	W60	4465	11 D	1			1.50	3.30			S-SWF
{GOOD HOPE	27	1318	1347	1322	S15	E25	4476	29	1		1322	3.00	3.30			
{GOOD HOPE	27	1402	1422 D	1410	N28	W68	4465	20 D	1		1410	1.50	4.40			
{CLIMAX	27	1534	1701	1549	S13	E21	4476	87	2		1549	6.40				
{CLIMAX	27	1541	1706	1604	S21	E28	4476	85	1		1604	4.60				S-SWF
{CAPRI-G	27	1550 E	1610 D		S16	E26	4476	20 D	26	1			12.00			
{CLIMAX	27	1702	1720	1704	S23	E40	4478	18	1		1704	4.20				S-SWF
{CLIMAX	27	1956	2007	2001	S06	W06	4476	11	1		2001	2.20				
{CLIMAX	27	2148	2202	2157	N30	W80	4465	14	1		2157	2.50				
SYDNEY	28	0414	0428	0421	N24	W85	4465			2	0421	4.00				S-SWF
SYDNEY	28	0455	0508	0502	N26	W84	4465	13	1	2	0502	2.00	5.00			Slow S-SWF
KRASNYA	28	0629 E	0634	0632 U	S07	W08	4476	5 D	1		0632	4.44	2.30		78	
{SCHAUINS	28	0809	0818		S24	E31	4478	9	1	2			3.00	2.50		
{GOOD HOPE	28	0809	0839	0812	S25	E30	4478	30	1		0812	3.50	4.20			
{GOOD HOPE	28	0843	0933	0846	S23	E29	4478	50	1		0847	2.00	2.30			
{GOOD HOPE	28	0916	0944	0920	N23	W90	4465	28	1		0920	.50				
{SCHAUINS	28	0921 E	0928		N21	W88	4465	7 D	1	2			3.00	2.50		
{MOSCOW-G	28	0936 E	1104 D	1004	S13	E17	4476	88 D	1	1	1003	2.04	2.20	2.30	120	
{GOOD HOPE	28	1000	1015		N23	W90	4465	15	2							S-SWF
{SCHAUINS	28	1004 E	1028 D		N20	W90	4465	24 D	1	2				4.30		
{CAPRI-G	28	1030	1048 D		S22	E25	4478	18 D	2	2			10.00			

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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 FLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	MAX. INT. %	
					LAT.	MER. DIST.										
GOOD HOPE MOSCOW-G GOOD HOPE GOOD HOPE GOOD HOPE CAPRI-G CAPRI-G MCMATH MCMATH MCMATH	28 1958	1033	1152	1037	S22	E27	4478	79	2		1037	6.50	7.50			S-SWF
	28	1034 E	1130		S22	E30	4478	56 D	16	1	1059	7.64	9.30	2.40	370	
	28	1146	1200	1148	N28	W58	4469	14	1		1149	1.50	3.30			S-SWF
	28	1150	1330	1215	S13	E10	4476	100	1		1215	3.00	3.10			
	28	1316	1333	1319	N28	W90	4465	17	1							
	28	1515 E	1520 D		N22	W80	4465	5 D	1	3			5.00			
	28	1545 E	1610 D		S03	W10	4476	25 D	1	1			4.00			Slow S-SWF
	28	1551 E	1610		S06	W12	4476	19 D	1	1	1554	2.59	2.64			
	28	1703	1752 D		S15	E08	4476	41	26	1	1719	8.76	9.12			S-SWF
	28	1738 E	1752 D		N25	W25	4474	14 D	1	1	1745	3.90	4.75			
GOOD HOPE KRASNYA KRASNYA GOOD HOPE GOOD HOPE MOSCOW-G KRASNYA CAPRI-G PIRCULI CAPRI-G PIRCULI CAPRI-G MCMATH MCMATH NEDERHORST MCMATH NEDERHORST MCMATH MCMATH MCMATH MCMATH	29	0730	0755	0738	N29	W65	4469	25	2		0738	2.50	5.90			
	29	0755 E	0802	0758 U	S19	E15	4478	7 D	16		0758	.87	.48		50	
	29	0758	0805	0801	N28	W71	4469	7	1		0801	1.14	2.36		49	S-SWF
	29	0758	0820	0811	N30	W70	4469	22	1		0811	1.50	4.90			
	29	0912	1024 D	0937	N23	W30	4474	72 D	16		0937	3.50	4.60			
	29	0919 E	1039 D	0938	N22	W27	4474	80 D	1	2	0938	3.57	4.70	2.70	140	
	29	0925	1013 D	0939 U	N23	W30	4474	48 D	1		0939	5.22	2.20		57	
	29	1000 E	1025		N20	W34	4474	25 D	1	1			6.00			
	29	1030 E	1030 D		N30	W20	4475		2	2	1032	9.73	14.00			
	29	1025	1035 D		S06	W04	4476	10 D	1	1			4.00			
PIRCULI CAPRI-G PIRCULI CAPRI-G MCMATH MCMATH NEDERHORST MCMATH NEDERHORST MCMATH MCMATH MCMATH MCMATH MCMATH SYDNEY SYDNEY KYOTO SYDNEY KYOTO SYDNEY TASHKENT SYDNEY TASHKENT SYDNEY SCHAUSINS SCHAUSINS MOSCOW-G KRASNYA KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA	29	1034 E	1041 D	1036	S05	W02	4476	7 D	1	2	1036	4.42	6.00			
	29	1210 E	1217 D		S21	E13	4478	7 D	1	1			3.00			
	29	1224 E	1235 D		S23	E15	4478	11 D	1	3	1225	1.91	2.06			S-SWF
	29	1339	1400	1343	N35	E75	4484	21	2	3	1343	1.95	11.70			S-SWF
	29	1343	1407		N32	E78	4484	24	2	2						
	29	1353	1410	1357	S19	E85	4483	17	1	3	1357	1.62	9.75			
	29	1356	1407		S17	E86	4483	11	1	2						
	29	1408	1416	1410	S16	E55	4480	8	1	3	1410	1.62	2.81			S-SWF
	29	1447	1453	1449	N27	W70	4469	7	1	3	1449	1.30	6.24			
	29	1550	1650	1608	S17	W11	4476	60	1	3	1608	3.90	4.02			
MCMATH MCMATH MCMATH SYDNEY SYDNEY KYOTO SYDNEY KYOTO SYDNEY TASHKENT SYDNEY TASHKENT SYDNEY SCHAUSINS SCHAUSINS MOSCOW-G KRASNYA KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA	29	1748	1815	1800	S06	W33	4476	27	1	3	1800	2.92	3.50			S-SWF
	29	1819	1915	1824	S24	E12	4478	56	2	3	1824	6.80	7.20			
	30	0045 E	0123	0108	N34	E81	4484	38 D	2	1	0108	2.00	8.00			
	30	0130			S08	W13	4476		1	1	0156	2.00	2.00			
	30	0150	0232	0220	S07	W10	4476	42	16		0220	5.60		2.39	120	
	30	0150	0228	0155	N34	E81	4484	38	1	1	0155	.75	3.00			
	30	0159	0205 D	0159	S19	W00	4478	6 D	16		0159	2.90		2.39	150	
	30	0332	0400	0346	N34	E80	4484	28	1	1	0346	.75	3.00			
	30	0400	0420	0404	S08	W07	4476	20	1	3	0404	2.03	2.00	2.80	85	
	30	0407	0440 D	0423	N34	E80	4484	33 D	1	1	0423	.75	3.00			
TASHKENT SYDNEY TASHKENT SYDNEY SCHAUSINS SCHAUSINS MOSCOW-G KRASNYA KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA SCHAUSINS KRASNYA	30	0452	0513	0502	N33	E70	4484	21	16	3	0500	2.56	10.00	5.00	95	
	30	0454 E	0502 D	0501	N34	E79	4484	8 D	2	1	0501	3.00	12.00			S-SWF
	30	0814 E	1001		N34	E63	4484	107 D	2	2			2.00	12.00		
	30	0816	0835		S15	W14	4476	19	1	2			1.00	2.70		
	30	0817 E	1016 D	0846	N30	E60	4484	119 D	26	2	0846	3.06	8.90	7.50	130	S-SWF
	30	0843	0846 D	0844	N33	E65	4484	3 D	2		0844	2.91	5.40		110	
	30	0903	0914 D	0903	N35	E61	4484	11 D	1		0903	1.74	2.53		52	
	30	0915 E	1330		S14	W21	4476	255 D	2	2			8.00	2.90		
	30	0917 E	0935	0920	S22	W08	4478	18 D	16		0920	14.55	7.80		60	
	30	0920 E	1057		S22	W08	4478	97 D	1	2			4.00	1.70		
30	0945	1015	1008 U	S13	W16	4476	30	16		1008	2.01	1.08		73		

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OBSERVATORY	DATE	OBSERVED			LOCATION			DURATION	IM- POR-	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
		UNIVERSAL TIME			APPROX.						TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
		START	END	MAX. PHASE	LAT.	MER. DIST.	MC MATH FLARE REGION									
	MAR 1958							MINUTES								
↑ KRASNYA	30	0945	1022 D	1000	S18	W21	4476	37 D	16		1000	3.48	2.18		101	S-SWF
MOSCOW-G	30	0946 E	1034 D	1012	S25	W29	4476	48 D	1	2	1012	4.08	5.00	3.00	140	
CAPRI-G	30	1115 E	1147 D		S14	W21	4476	32 D	2	1			11.00			S-SWF
CAPRI-G	30	1537 E	1600 D		N36	E64	4484	23 D	1	2			4.00			
CAPRI-G	30	1600 E	1622 D		S07	W18	4476	22 D	1	1			2.00			
CLIMAX	30	1615	1623	1618	N36	E66	4484	8	1		1618	2.60				
MCMATH	30	1616	1626	1618	N35	E60	4484	10	1	2	1618	1.30	3.80			G-SWF
MCMATH	30	1700	1745 D	1720 U	S17	W25	4476	45 D	16	2	1720	6.50	7.15			
CLIMAX	30	1739	1820	1750	S16	E36	4480	41	1		1750	4.80				
MCMATH	30	1742	1804 D	1755	S16	E36	4480	22 D	1	2	1755	3.25	3.96			
CLIMAX	30	1748	1758	1754	N35	E64	4484	10	1		1754	2.20				
CLIMAX	30	1756	1819	1810	S08	W18	4476	23	1		1810	2.50				
MCMATH	30	1800	1804 D		S08	W19	4476	4 D	1	2	1804	3.90	4.13			
CLIMAX	30	1830	1842	1833	N37	E66	4484	12	1		1833	2.10				
CLIMAX	30	2009	2108	2016	N20	W50	4474	59	2		2016	5.80				
CLIMAX	30	2057	2101	2058	S08	W16	4476	11	1		2058	2.50				
CLIMAX	30	2153	2210	2200	N36	E61	4484	17	1		2200	2.80				
VOROSHILOV	30	2235 E	2247	2236	N36	E60	4484	12 D	1	2	2236	.87	2.30		70	
VOROSHILOV	30	2247	2249	2247	N24	W70	4469	2 D	16	2	2247	.96	3.40		88	Slow S-SWF
VOROSHILOV	30	2259	2310	2303	N37	E55	4484	11	16	2	2303	1.74	4.80		84	
VOROSHILOV	30	2300	2344	2309	S08	W22	4476	44	16	2	2309	1.84	2.10		112	
VOROSHILOV	30	2309	0037		S17	W26	4476	88	2	2	0019	4.70	6.10		123	
SYDNEY	30	2346	2353	2349	S11	W32	4476	7	1	1	2349	3.00	3.00			
VOROSHILOV	30	2348	2352 D	2349	S11	W30	4476	4 D	1	2	2349	1.74	2.10		68	
SYDNEY	31	0009	0018	0008	S19	W19	4476	9	2	1	0008	5.00	6.00			G-SWF
VOROSHILOV	31	0019 E	0035		S24	W15	4478	16 D	16	2	0019	2.61	2.80		84	
SYDNEY	31	0025	0048	0032	N37	E57	4484	23	2	1	0032	3.00	7.00			
VOROSHILOV	31	0028 E	0040	0032	N38	E59	4484	12 D	2	2	0032	2.61	7.10		113	
SYDNEY	31	0038	0130 D		S10	W23	4476	52 D	1	1	0102	4.00	5.00			S-SWF
VOROSHILOV	31	0046 E		0052	S11	W25	4476		2	2	0052	4.90	5.20		123	
KYOTO	31	0051	0110 D	0051	S07	W23	4476	19 D	2		0051				200	
SYDNEY	31	0126	0132 D		N23	W75	4469	6 D	1	1	0130	.75	2.00			
ALMA-ATA	31	0527 E	0648	0617	N15	E22	4487	81 D	1	2	0616	1.42	3.70		72	
KYOTO	31	0535	0542 D		N22	W78	4469	7 D	1		0535				100	
ALMA-ATA	31	0605	0708 D	0628	S13	W08	4478	63 D	16	2	0629	1.15	3.50		81	
KYOTO	31	0615	0632 D		N07	E23	4487	17 D	1		0615				100	
ALMA-ATA	31	0615	0652	0622	S04	W29	4476	37	2	2	0622	2.21	11.50		83	
ALMA-ATA	31	0616	0625	0623	N44	E58	4484	9	16	2	0623	1.10	2.90		97	
MOSCOW-G	31	0643 E	0733 D		N08	E20	4487	50 D	16	1	0722	2.04	5.70	1.70	110	
ALMA-ATA	31	0622	0656	0650	N36	W75	4469	34	2	1	0649	1.20	5.80		115	
MOSCOW-G	31	0702 E	0729 D		N36	E58	4484	27 D	16	1	0704	2.04	5.70	2.00	110	
MOSCOW-G	31	0707 E	0833 D		S11	W29	4476	86 D	16	1	0709	5.10	6.00	2.70	150	
MOSCOW-G	31	0744 E	0931		S20	E31	4480	107 D	1	1	0913	3.06	3.70	1.80	120	
GOOD HOPE	31	0756	0825	0800	S10	W30	4476	29	1		0800	2.50	2.90			
KRASNYA	31	0759 E	0816	0801 U	S13	W32	4476	17 D	16		0801	4.89	3.02		82	Slow S-SWF
KRASNYA	31	0826 E	0836	0836 U	N24	W80	4469	10 D	16		0836	2.01	7.50		58	
KRASNYA	31	0859	0912	0902	S22	E31	4480	13	1		0902	2.61	1.58		86	
MOSCOW-G	31	1016 E	1054 D		N17	E68	4485	38 D	1	1	1020	1.53	4.90	2.20	110	
CAPRI-G	31	1058 E	1150 D		S08	W23	4476	52 D	1	3			3.00			
GOOD HOPE	31	1101	1122	1114	S04	W27	4476	21	1		1114	2.00	2.20			
GOOD HOPE	31	1215	1232	1223	S08	W30	4476	17	1		1223	2.00	2.30			
MCMATH	31	1219	1230	1224	S10	W30	4476	11	1	2	1224	3.90	4.60			

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

MARCH 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION	IM- POR- TANCE	OBS. COND.	MEASUREMENTS					PROVISIONAL IONOSPHERIC EFFECT
					APPROX.		McMATH FLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %	
		START	END	MAX. PHASE	LAT.	MER. DIST.										
MCMATH	31 MAR 1958	1323	1435 D		S14	W32	4476	25	1	2	1335	1.97	2.31		Slow S-SWF	
MCMATH	31	1858	1920	1907	S25	W22	4478	22	1	2	1907	3.56	4.00			
MCMATH	31	1935	1958	1939	S13	W42	4476	23	1	2	1939	1.63	2.15			

COMMERCE - STANDARDS - BOULDER

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

MOSCOW-G MOSCOW - GAISH
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUINS SCHAUINSLAND
 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