

PART B
SOLAR - GEOPHYSICAL DATA

ISSUED
DECEMBER 1958

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

SOLAR - GEOPHYSICAL DATA

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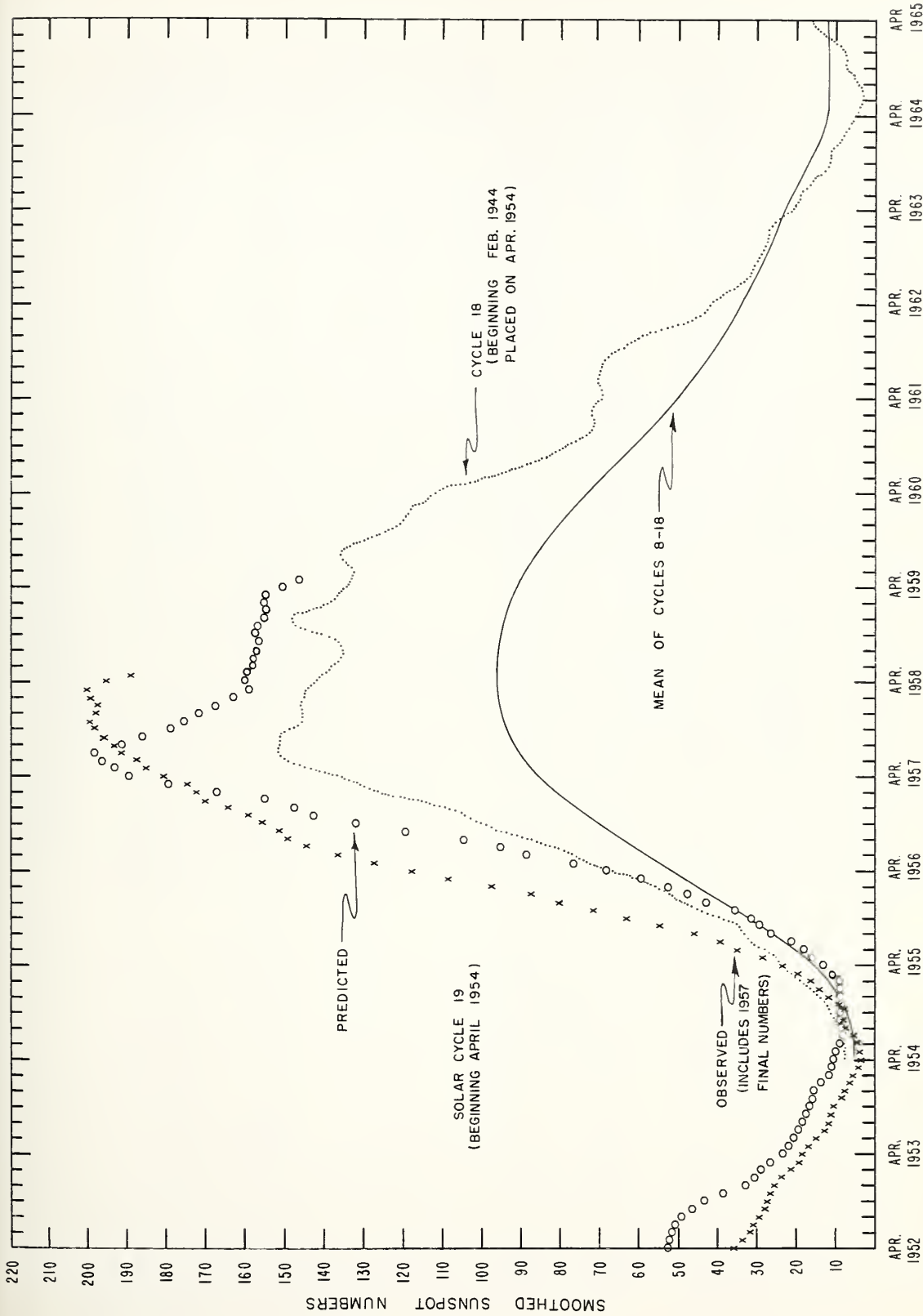
INTRODUCTION

The descriptive text is published quarterly or whenever context of the report is changed. The last issue in which the text appeared was CRPL-F170 Part B issued October 1958, with an addendum in CRPL-F171 Part B issued November 1958.

DAILY SOLAR INDICES

Oct. 1958	American Relative Sunspot Numbers R _A '
1	197
2	209
3	187
4	187
5	142
6	99
7	103
8	79
9	113
10	127
11	115
12	128
13	149
14	142
15	180
16	216
17	239
18	202
19	207
20	168
21	163
22	214
23	169
24	190
25	182
26	168
27	164
28	163
29	152
30	169
31	220
Mean:	165.9

Nov. 1958	Zürich Provisional Relative Sunspot Numbers R _Z	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	217	234
2	201	241
3	174	224
4	175	220
5	138	222
6	131	204
7	98	206
8	114	191
9	85	180
10	89	169
11	76	166
12	84	166
13	91	163
14	93	166
15	90	166
16	90	169
17	72	173
18	67	174
19	92	183
20	94	187
21	108	194
22	131	200
23	142	213
24	161	229
25	188	243
26	224	264
27	243	268
28	258	259
29	271	263
30	254	264
Mean:	141.7	206.7



PREDICTED AND OBSERVED SUNSPOT NUMBERS

CALCIUM PLAGE AND SUNSPOT REGIONS

CMP Nov 1958	Lat	McMath Plate Number	Return of Region	Calcium Plage Data			Sunspot Data			
				CMP Values Area Int.		History, Age	CMP Values Area Count		History	
00.7	S04	4855	New	1000	2	b ^ d	1			
01.0	S13	4847	4792	2500	2.5	l - l				
01.2	N37	4845	4812	2500	3.5	l / l		290	8	l - l
02.2	N14	4848	4794	700	1.5	l - l	3			
02.5	S32	4853	*	(2000)	(1.5)	l \ d	5,6	(220)	(7)	l \ d
02.5	S14	4858	4799	2000	2.5	l / l	3	320	15	l ^ l
03.2	S24	4861	New	500	2	b / l	1			
03.6	S15	4849	4817	3000	3.5	l - l	2	1330	21	l / l
03.6	N07	4851	New	2500	3.5	l ^ l	1	550	12	l - l
03.6	S07	4852	New	1000	3	l - l	1			
03.7	N21	4856	New	(300)	(1)	l \ d	1			
03.8	N38	4850	New	2300	2	l - l	1	100	3	l / l
05.0	N16	4854	4805	2000	2.5	l - l	3	90	3	l - l
06.5	S03	4859	4808	800	2	l - l	3			
06.7	N11	4857	4806	1400	3	l / l	3			
06.7	S14	4860	4808	1000	2	l - l	3			
08.8	S15	4862	4811	300	1.5	l \ d	2			
09.6	N21	4866	4810	800	2	l / l	4			
10.3	S12	4865	4821	1000	1.5	l / l	2			
10.3	N05	4878	New	500	3	b ^ d	1			
10.4	N33	4863	4828	1200	3	l - l	2	20	1	l \ d
10.9	N17	4864	4816	1400	2	l - l	4			
12.2	S14	4867	**	1000	2.5	l - l	6			
12.4	S12	4869	**	(600)	(1.5)	l \ d	6			
13.2	N21	4868	4818	500	1.5	l - l	5			
13.9	S11	4871	**	1200	2	l - l	6			
13.7	S14	4876	**	900	1.5	l \ d	6			
14.2	S27	4870	4820	3600	2.5	l - l	2	70	1	l \ d
14.4	N24	4872	4818	2100	3	l - l	5			
14.5	N10	4875	4822	400	1.5	l \ d	2			
15.9	N21	4874	New	4100	3.5	l \ l	1			
16.1	S05	4873	4826	4000	3	l / l	2	90	10	l \ d
18.2	N20	4880	New	1200	2.5	b / l	1	160	17	b ^ d
18.3	S12	4877	4829	9000	3	l - l	3	190	8	l \ d
20.4	N30	4879	4830	500	2	l \ d	6	50	2	b ^ d
20.8	S10	4885	New	1200	1.5	b / l	1			
21.4	N12	4881	+	3300	2.5	l - l	3	150	1	l - l
22.4	S05	4882	4835	3200	3	l - l	3	340	7	b ^ d
22.9	N24	4886	+	1000	1	l - l	3			
24.6	S12	4883	++	6000	4	l \ l	1	2060	18	l \ l
25.6	N22	4884	New	4000	2.5	l - l	1	540	16	l / l
25.9	N08	4887	New	300	1.5	l \ l	1			
26.6	S20	4888	4846	1500	2	l - l	6	80	2	l - l
26.9	N27	4894	New	300	2	b / l	1			
27.7	N12	4901	New	(200)	(2)	b / l	1			
28.2	S16	4889	4847	1700	3.5	l - l	4	(340)	(6)	l - l
28.4	N13	4902	New	(500)	(2)	b / l	1			
28.5	N23	4890	New	200	1.5	l \ d	1			
28.8	S07	4893	4855	(400)	(2)	l \ d	2			
29.2	N14	4892	4848	(2000)	(2.5)	l / l	4	70	2	l / l
29.3	N33	4891	4845	(1000)	(2)	l - l	2	20	2	l \ d
30.2	N08	4895	4851	2400	2.5	l - l	2	50	9	b / l
30.5	S18	4897	4849	4000	2.5	l / l	3	1420	90	l - l

* 4793, 4798 and 4802.

** 4819 and (827).

+ 4833 and (4841).

++ Mostly New in positions of 4840 and 4843.

CORONAL LINE EMISSION INDICES

NOVEMBER 1958

CMP Nov. 1958	North East Quadrant (observed 7 days earlier)			South East quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)		
	G ₆	G ₁	R ₁	G ₆	G ₁	R ₁	G ₆	G ₁	R ₁	G ₆	G ₁	R ₁
1	x	x	x	x	x	x	102	128	x	105	146	x
2	x	x	x	x	x	x	138	176	x	127	165	x
3	153	228	155	190	260	126	119	168	82	131	141	85
4	x	x	x	x	x	x	104	120	64	146	207	178
5	x	x	x	x	x	x	x	x	x	x	x	x
6	90	146	x	84	106	x	62	80	30	81	102	101
7	93	128	54	97	180	54	79	121	9	90	132	30
8	101	124	x	91	194	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x
10	157	188	x	88	156	x	x	x	x	x	x	x
11	125	188	72	101	179	42	97 ^a	135 ^a	x	70	100	x
12	153	172	66	131	204	33	110	152	40	85	128	60
13	237	373	114	240	320	90	168 ^a	198 ^a	21 ^a	131 ^a	162 ^a	48 ^a
14	175	228	108	164	184	48	x	x	x	x	x	x
15	106	144	90	106	115	18	x	x	x	x	x	x
16	99	132	x	125	161	x	>293	>300	70	x	x	15
17	88	104	21	170	230	66	173	212	66	93	132	18
18	60	78	36	161	284	89	115 ^a	160 ^a	66 ^a	71 ^a	100 ^a	21 ^a
19	x	x	x	x	x	66	x	x	x	x	x	x
20	80	96	79	89	112	58	x	x	x	x	x	x
21	115	167	31	89	129	16	114	222	39	118	136	75
22	x	x	x	x	x	x	151	227	66 ^a	126	144	66 ^a
23	x	x	x	x	x	x	117	142	41	102	132	60
24	x	x	x	x	x	x	163	210	54	161	208	48
25	72	95	x	82	131	x	161	248	55	102	164	84
26	103	118	103	118	189	78	145 [*]	221	x	86	120	x
27	129 ^a	144 ^a	60 ^a	164 ^a	192 ^a	83 ^a	x	x	x	x	x	x
28	x	x	x	x	x	x	143	176	46	124	167	78
29	x	x	x	x	x	x	124	140	34	129	157	66
30	134	232	84	129 [*]	175	55	132	164	37	132	164	55

x = no observations.

a = index computed from low weight data.

* = yellow line observed.

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA-TION — MINUTES	IN- FOR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MCMATH FLARE REGION				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _o		MAX. INT. %
{ MCMATH USNRL MCMATH MCMATH SAC PEAK SAC PEAK MCMATH	NOV 01 1958	1410	1435	S16 E30	4849	25 D	1	1	1422	2.52	3.07	1.00	60
		1421 E	1514 D	S16 E28	4849	53 D	1	1	1509	1.07	1.32		122
		1444	1455 D	S17 E26	4849	11 D	1	1	1448	2.10	2.52		65
		1503 E	1520 D	S17 E27	4849	17 D	1	1	1513	4.23	5.07		79
		1507 E	1555 D	S15 E27	4849	47 D	1	1		4.90			22
		1815	1845 E	S12 W36	4846	30 D	1	1		3.60			22
		1822 E	1833 D	S14 W37	4846	11 D	1	1	1823	2.44	3.19		75
		0852	0856	S17 E13	4849	4	1	1					
		0856	0900	S16 E23	4849	4	1	1					
		0915	0945	N02 E13	4851	30	16	2			5.00		
{ AROSA LOCARNO LOCARNO LOCARNO AROSA AROSA AROSA * LOCARNO LOCARNO CAPRI-G SAC PEAK	NOV 02 1958	0922	0925	S17 E10	4849	14	1	2		1.00			
		1330	1341	S17 E10	4849	11	16	1					
		1335	1350	N05 E07	4851	15	1	2					
		* 1335 E	1350 D	N02 E11	4851	15	D	1					
		1534 E	1540 D	S17 E09	4849	6	D	1					
		1802	2015	S15 E04	4849	133	2	1		7.20			18
		0715	0816	S16 E03	4849	61	16	4		4.00	4.20		
		0835 E	0910 D	N11 E45	4857	35	D	2	0900		2.00		
		0845	0910	S10 W45	4846	25	16	2			4.00		
		0940 E	1022	S19 W02	4849	42	D	2	1000		1.00		
{ MCMATH LOCARNO MCMATH MITAKA ATHENS CAPRI-G CAPRI-G CAPRI-G CAPRI-G USNRL HUANCAYO	NOV 03 1958	1415	1450	S19 W14	4849	35	1	2	1425	2.76	3.09		62
		1425	1455 D	S14 E02	4849	30	D	2		3.00			
		1635	1650	S16 W03	4849	15	1	1	1639	1.87	1.98		72
		0230	0242	S12 W15	4849	12	D	1	0230	1.84	1.97	1.94	102
		0822 E	0827	S22 W17	4849	5	D	1		2.30	2.70		
		1100 E	1125 D	S16 W14	4849	25	D	3			5.00		
		1115 E	1141	S11 W30	4858	16	D	1			2.00		
		1328	1410 D	S16 W15	4849	42	D	3	1400		2.00		
		2005	2020 D	S13 W19	4846	15	D	1	2019	.74	3.71		66
		2006 E	2013 D	S13 W12	4846	7	D	2	2008	2.10	6.60	6.20	
{ NIZAMIAH CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-S CAPRI-G USNRL STOCKHOLM USNRL MCMATH USNRL SAC PEAK USNRL HAWAII HAWAII MITAKA	NOV 04 1958	0256 E	0307	N32 E58	4863	11	D	3	0256	1.82	3.72	1.50	
		0815 E	0902 D	S14 W90	4846	47	D	1					
		0933 E	0946	S14 W30	4849	13	D	3			4.00		
		1017 E	1043 D	S13 W90	4846	26	D	3			5.00		
		1202 E	1300 D	N09 W29	4851	58	D	1			3.00		
		1238 E	1305 D	N09 W23	4851	27	D	2	1246	2.00	2.50		
		1215 E	1235 D	N38 W34	4850	20	D	1			3.00		
		1505	1535	S17 W85	4846	30	16	2	1508	1.75	3.00		88
		1226	1237 D	S14 W30	4849	11	D	1	1234	1.80	2.20		
		1457	1540	S14 W38	4849	43	1	3	1458	.79	1.17		115
{ MCMATH USNRL SAC PEAK USNRL USNRL HAWAII HAWAII MITAKA	NOV 06 1958	1503	1600	S16 W43	4849	27	1	3	1515	1.62	2.29		73
		1539	1539	N33 E42	4863	21	1	1	1548	1.02	1.56	1.00	122
		1922	2020	S16 W44	4849	58	1	2	1930	2.07	2.70		16
		1923	2004	S15 W42	4849	41	1	1	1938	1.13	1.63		124
		1938 E	1948	S09 W47	4849	10	D	1	1938	3.30	3.10		
		2110	2122 D	N09 W48	4851	12	D	2	2112	2.10	3.00		
		0329 E	0402	N05 W49	4851	33	D	1	0329	1.53	2.24	3.56	120
		0329 E	0402	N05 W49	4851	33	D	1	0329	1.53	2.24	3.56	120
		0329 E	0402	N05 W49	4851	33	D	1	0329	1.53	2.24	3.56	120
		0329 E	0402	N05 W49	4851	33	D	1	0329	1.53	2.24	3.56	120

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA-TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	M- MATH PLAGE REGION	MEAS. AREA Sq. Deg.				COOR. Bg. Deg.	MAX. WIDTH H _g	MAX. INT. %		
{NIZAMIAH MITAKA LOCARNO MCMATH MCMATH SAC PEAK USNRL HAWAII	07	0332 E	0338 D	N06 W49	4851	6 D	2	3	0332	3.65	5.50	2.10	107	SLOW S-SWF
	07	0512 E	0550 D	S16 W51	4849	38 D	1	1	0514	.60	.87	1.65		
	07	1225 E	1245 D	N32 E26	4863	20 D	1	2	1230	1.00	1.00			
	07	1420 E	1427 D	N05 W63	4851	7 D	1	1	1421	1.14	7.50		65	
	07	1820	1942	N05 W66	4851	22	2	1	1832	3.41	4.00		73	
	07	1820	1950	N07 W59	4851	90	1	3	3.10	3.10	2.00		20	
	07	1820	2020	N06 W61	4851	120	16	1	1827	1.58	4.10		135	
{MITAKA {NIZAMIAH {MITAKA MITAKA CAPRI-G {CAPRI-G LOCARNO {CAPRI-G {CAPRI-G DUNSTINK USNRL SAC PEAK	08	0017 E	0024	S14 W56	4849	7 D	1	1	0017	.41	.87	4.58	149	
	08	0255 E	0312	N40 W63	4850	17 D	16	3	0300	1.82	4.72	2.00		
	08	0307 E	0319	N41 W65	4850	12 D	1	1	0307	1.07	2.57	3.54	125	
	08	0420 E	0425	S14 W64	4849	5 D	1	1	0422	.41	.87	2.71	96	
	08	0804 E	0812 D	N39 W70	4850	8 D	1	3		4.00	4.00			
	08	0804 E	0825 D	N11 W64	4851	21 D	1	1		2.00	2.00			
	08	0805 E	0830 D	N09 W64	4851	25 D	1	2	0810		3.00			
	08	0804 E	0812 D	S15 W67	4849	8 D	1	1		2.70	2.70			
	08	0810 E	0826 D	S18 W53	4849	16 D	1	3	0810	1.50	2.00			
	08	1125	1141	N20 W38	4854	16	1	1		.68	2.43		62	
ATHENS UCCLE CAPRI-G CAPRI-G CAPRI-G HAWAII CAPRI-G CAPRI-G NIZAMIAH LOCARNO USNRL HAWAII LOCARNO UCCLE LOCARNO {CAPRI-S {CAPRI-G LOCARNO CAPRI-G LOCARNO CAPRI-G LOCARNO CAPRI-G LOCARNO CAPRI-G HAWAII MITAKA {WENDEL	08	1658 E	1700 D	S33 E72	4870	2 D	1	1	1658	2.10	2.00	1.80	100	SLOW S-SWF
	08	1822	1845	S16 W77	4849	22	1	3		7.80	1.90			
	09	0718 E	0730 D	S17 W81	4849	12 D	16	1		.60	4.20			
	09	0856 E	0905	N22 E30	4868	9 D	1	2		4.00	4.80			
	09	0910 E	0911 D	S11 E43	4865	1 D	1	1		5.00	5.00			
	09	0955 E	1010 D	N12 W35	4857	15 D	1	1		2.00	2.00			
	09	1506 E	1528	N25 E90	4874	22 D	16	3		2.10	4.70			
	09	1956	2000 D	N24 W61	4854	4 D	1	2	1958		3.00			
	10	0958 E	1015 D	N16 W63	4857	17 D	1	3		2.00	2.00			
	10	1040 E	1105 D	N37 W02	4863	25 D	1	2		2.13	2.21			
	12	0337 E	0348	S07 E12	4871	11 D	1	3	0337		4.00			
	LOCARNO USNRL HAWAII LOCARNO UCCLE LOCARNO {CAPRI-S {CAPRI-G LOCARNO CAPRI-G LOCARNO CAPRI-G LOCARNO CAPRI-G HAWAII MITAKA {WENDEL	13	1125 E	1150	N01 E31	4873	25 D	16	2	1130	.68	4.00		
13		1956	2101 D	S13 E55	4877	65 D	1	2	2005		1.30		100	
14		0036	0130	S23 E52	4877	54	2	2	0046	7.80	1.90			
15		0750 E	0820	S08 W29	4871	30 D	1	1	0750		1.00			
15		0853 E	0950 D	S08 W34	4871	57 D	1	1		2.00	3.00			
15		1040 E	1110	S00 E02	4873	30 D	16	3	1050		3.00			
15		1209 E	1300 D	S10 W30	4871	51 D	1	3	1228		5.00			
15		1228 E	1235 D	S08 W32	4871	7 D	1	1		3.00	3.00			
15		1420 E	1500 D	S14 E31	4877	40 D	16	1	1500		2.00			
15		1520 E	1530 D	N21 E36	4880	10 D	1	1		2.60	4.00			
16		0930 E	0950	N06 W90	4878	20 D	1	2		3.00	3.00			
16		1340 E	1455 D	N20 E26	4880	75 D	1	1	2032		4.00			
16		2032	2046	N18 E26	4880	14	1	1		1.01	1.14			
17		0031 E	0046 D	N21 E18	4880	15 D	1	2	0033		3.00			
17		1030	1102	N23 E17	4880	32	1	1		1.76	3.00		107	

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	MAGNIT. FLARE REGION				TIME — U T	MERIS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Rc	
NIZAMIAH ARCETRI CAPRI-G STOCKHOLM ARCETRI WENDEL	17	1035 E	1049 D	1038	N21 E19	4880	14	1	3	2.13	2.35	1.50			
	17	1038 E	1055 D		N21 E16	4880	17	1	3						
	17	1048 E	1049 D		□	4880	1	D							
	17	1202 E	1219 D		N14 W25	4872	17	D	2	2.70	4.00				
WENDEL	17	1203 E	1221 D		N20 W41	4872	18	D	3		19.00				
	17	1207 E	1318 D		N27 W40	4872	71	26							
ARCETRI	18	0913	0919		S05 W05	4877	6	1	3						
ARCETRI	18	0931 E	0950 D		N13 E34	4881	19	D	3						
USNRL	18	2011 E	2112 D	2033	S09 E83	4883	6	D	2	4.53			62		
SAC PEAK	18	2017	2102	2032	S09 E76	4883	45	1	2	3.70			22		
HUANCAYO	18	2035 E	2106	2038	S10 E80	4883	31	D	2	1.70	8.20	3.80		Slow S-SWF	
NIZAMIAH CAPRI-G CAPRI-G CAPRI-G	19	0450 E	0501	0453	S12 E79	4883	11	D	2	.91	4.59	2.40			
	19	0734 E	0736 D		S12 E70	4883	2	D	1		4.00				
	19	1159 E	1209 D		N10 W21	4880	10	D	3		2.00				
	19	1358 E	1435 D		N40 E90	4884	37	D	2						
WENDEL	20	0905	0927		N22 W28	4880	22	1	2	2.40	3.00				
WENDEL	20	1322	1333 D		S06 E41	4883	11	D	1		3.00			15	
SAC PEAK	20	1520	1615	1545	S08 E41	4883	55	1	2						
USNRL	21	1233 E	1320	1820	N30 W10	4879	47	D	1	12.41	2.62	1.00			
	21	1813	1952		S10 E25	4883	99	1	2	19.16	1.03				
WENDEL	22	0807 E	0832		S15 E75	4889	25	D	16		6.00				
WENDEL	22	0858	0920 D		N24 E79	4890	22	D	1		4.00				
CAPRI-S	22	0932 E	0954 D		N17 E35	4884	22	D	2	2.00	2.50				
WENDEL	22	0932	1014 D		N17 E34	4884	42	D	2		9.00				
CAPRI-G	22	0940 E	1005 D		N17 E35	4884	25	D	2		4.00				
CAPRI-G	22	1003 E	1015 D		S03 W06	4882	12	D	2		2.00				
WENDEL	22	1118	1206		N16 E33	4884	48	16	2		7.00				
CAPRI-G	22	1135 E	1202 D		N17 E35	4884	27	D	2		5.00				
CAPRI-S	22	1136 E	1155 D		N17 E33	4884	19	D	1	2.00	2.50				
WENDEL	22	1307	1319		N21 W26	4881	12	1	1		3.00				
WENDEL	22	1328	1420 D		S26 E55	4888	52	D	26		12.00				
WENDEL	22	1329	1420 D	1338	S27 E59	4888	51	D	2	13.38	3.25		62		
MCMAITH	22	1420	1524	1444	S15 E59	4888	4	2	1	14.44	3.25		63		
USNRL	22	1433 E	1530		S17 E55	4888	57	D	2						
CLIMAX	22	1459 E	1545 D		S16 E58	4888	46	D	1	15.01	2.80				
CLIMAX	22	1647 E	1801 D	1704	S14 E65	4889	74	D	2	17.24	2.92				
MCMAITH	22	1649	1750	1657	S17 E55	4889	61	16	1	17.15	3.40				
USNRL	22	1649	1808	1715	S16 E67	4889	79	1	1		3.10				
CLIMAX	22	1659 E	1820	1705	S16 E63	4889	81	D	1						
SAC PEAK	22	1659 E	1820	1705	S16 E63	4889	81	D	1						
MITAKA	23	0258	0333 D	0305	N18 E47	4892	35	D	1	03.05	.89	3.83	165		
MITAKA	23	0335 E	0355	0337	N15 E23	4884	20	D	1	03.37	1.34	2.09	159		
WENDEL	23	0752 E	0825 D		S15 E63	4889	33	D	2		11.00				
WENDEL	23	1037 E	1058		S10 E22	4883	21	D	16		5.00				
WENDEL	23	1151 E	1222	1152	S03 E01	4883	31	D	2		9.00				
SAC PEAK	23	1657	1722 U	1707	S14 E90	4897	25	D	1						
CLIMAX	23	1756	1807 D	1758	N17 E17	4884	11	D	1	17.58	3.80		14	Slow S-SWF	
WENDEL	24	0754 E	0817 D		S11 W07	4883	23	D	1		3.00				

SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED TIME		MKK. PHASE	LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — U T	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX. LAT.	APPROX. MER. DIST.	MCMATH PLACE REGION					MEAS. AREA Sq. Deg.	COBR. AREA Sq. Deg.	MAX. WIDTH Ha	
CAPRI-G WENDEL CAPRI-G CAPRI-G WENDEL SAC PEAK USNRL MCMATH	24	0756	0802 D		S12	E03	4883	6 D	1	2		5.00			
	24	0754 E	0828 D		S17	E80	4897	34 D	16			6.00			
	24	0920 D	0938 D		N34	E65	4891	18 D	1			4.00			
	24	0955 E	1003 D		N19	E21	4884	8 D	1	1		4.00			
	24	1019 E	1030 D		N19	E21	4884	11 D	1			4.00			
	24	1213 E	1215 D		S11	W13	4883	2 D	1	2		4.00			
	24	1231	1243	1235	S09	W09	4883	12	16			12.00			
	24	1233	1251		N20	E11	4884	18	26			17.00			
	24	1607 E	1900 U	1621	S11	W09	4883	172 D	3	3		1.4.12	14.75	2.00	38
	24	1651 E	2107 D		S12	W08	4883	256 D	3	1		5.50	5.79		127
24	1657 E			S12	W09	4883	130 D	2	1					73	
ATHENS WENDEL ATHENS CAPRI-S CAPRI-G WENDEL WENDEL WENDEL USNRL	25	0719	0738	0722	S11	W21	4883	19	1	3		3.30			
	25	0809	0843	0815	N20	E11	4884	34	26			12.00			
	25	0813	0840	0814	N18	E12	4884	17	2	3		5.00			
	25	0814 E	0936 D		N18	E13	4884	82 D	1	1	0.828	3.00	3.20		
	25	0823 E	0826 D		N19	E11	4884	3 D	2	1			7.00		
	25	0857	0933		N18	E10	4884	36	16			7.00			
	25	0939	1016		N19	E08	4884	37	16			6.00			
	25	1031	1104		S10	W24	4883	33	1			4.00			
	25	1302	1337	1304	N21	E08	4884	35	1	2	1304	.79	4.00		107
	25	1405	1429	1420	S16	E38	4889	14	1	3	1420	.96	1.28		109
WENDEL WENDEL WENDEL WENDEL WENDEL STOCKHOLM CAPRI-G CAPRI-G WENDEL	26	0856 E	0924 E		N20	W03	4884	28 D	16			6.00			
	26	0944	0953 D		S14	E51	4897	9 D	1			4.00			
	26	1039		1104	S15	E44	4897	1	1			4.00			
	26	1100	1116		S16	E24	4889	16	1			4.00			
	26	1148	1206		S11	W26	4883	18	16			6.00			
	26	1201	1312 D		S10	W30	4883	71 D	D			8.00			
	26	1206 E	1218 D		N19	W03	4884	12 D	1		1212	3.00	3.20		
	26	1225 E	1252 D		N19	W02	4884	27 D	2	1		6.00			
	26	1315 E	1322 D		S08	W19	4883	7 D	1	1		3.00			
	26	1400	1415 D		S12	W27	4883	15 D	16			7.00			
MITAKA MITAKA MITAKA CAPRI-G WENDEL CAPRI-S WENDEL ARCTRI CAPRI-G CAPRI-G LOCARNO WENDEL CAPRI-G WENDEL CAPRI-S CAPRI-G CAPRI-G CAPRI-G WENDEL	27	0114 E	0122 E	0116	S11	W45	4883	8 D	1	1	0117	1.07	1.50	143	
	27	0508	0516 D	0509	N14	E26	4892	8 D	1	1	0509	.67	.71	143	
	27	0552 E	0604 D		S14	W43	4883	12 D	1	1	0552	3.71	4.91	105	
	27	0812 E	0820 D		S10	W47	4883	8 D	1	3		3.00	3.00		
	27	0816 E	0831		S12	W48	4883	15 D	16			5.00			
	27	0914	0955 D		N11	E27	4892	21 D	1	3	0930	3.00	3.40		
	27	0914	0952	0918	N11	E28	4892	38	16			6.00			
	27	0915 E	0941 D		N23	E14	4890	26 D	1	2		4.00			
	27	0932 E	0943		N19	W19	4884	11 D	1	3		7.00			
	27	0932 E	0955 D		N10	E29	4892	23 D	2	3		3.00			
CAPRI-G WENDEL CAPRI-G WENDEL CAPRI-G WENDEL CAPRI-S CAPRI-G CAPRI-G CAPRI-G WENDEL	27	1020	1055	1030	S17	E12	4889	35	1	2		3.00			
	27	1040	1056 D		S16	E11	4889	16	1			3.00			
	27	1044 E	1049 D		S16	E11	4889	5 D	1	3		3.00			
	27	1116	1138		S15	W49	4883	22	16			7.00			
	27	1123	1140 D		S15	W44	4883	17 D	1	3	1129	2.00	3.20		
	27	1134 E	1156 E	1146	N13	W49	4883	22 D	16		1146	6.00	6.00		
	27	1225 E	1237 D		N32	E26	4881	12 D	1	3		4.00			
	27	1333 E	1345 D		N07	W90	4881	12 D	1	3		4.00			
	27	1344 E	1400		S18	E10	4889	16 D	1			4.00			

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	LAT.	APPROX. MER. DIST.				MCWATH PLAGE REGION	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
{ CAPRI-G	27	1347 E	1355 D	S16 E11	4889	8 D	1	3	3.00				
	27	1342 E	1345 D	S09 W33	4883	3 D	1	3	3.00				
{ WENDEL	27	1342 E	1416 D	S15 W46	4883	34 D	16						
	27	1344 E	1426 D	S12 W40	4883	42 D	2	3	3.40				
{ MCMATH	27	1345 E	1427	S14 W46	4883	42	16	1	4.06				77
	27	1347 E	1443	S14 W48	4883	56 D	1	1	1.98		1.00		90
{ USNRL	27	1348 E	1412 D	S13 W43	4883	24 D	2	3	3.00				
	27	1400 E	1420 D	S14 W41	4883	20 D	16	3	3.00				
{ LOCARNO	27	1416 E	1428 D	N42 E56	4886	12 D	1	3	2.00				
	27	1512 E	1528 D	S16 E49	4897	16 D	1	2	2.00				
{ CAPRI-G	27	1642 E	1716	S17 E42	4897	34 D	1	2	1.47				108
	27	2052 E	2100 D	S22 E37	4897	8 D	1	2	3.50				
{ HAWAII	27	2210	2228	N23 W15	4884	18	1	3	2.50				
	27	2350 E	2404 D	N18 W18	4884	14 D	16	2	2.31		4.83		176
{ HAWAII	27	2354	0010	N23 W15	4884	16	1	3	2.30				
	28	0004	0013	N15 W36	4884	8	1	2	0.84		1.81		100
{ MITAKA	28	0121 E	0136	S16 E33	4897	15 D	1	2	0.121		2.37		107
	28	0137	0144	N22 W24	4884	7	1	2	0.137		0.35		120
{ MITAKA	28	0210	0221	N18 W20	4884	11	1	1	0.210		0.66		131
	28	0433	0457	S17 E24	4897	24	1	1	0.444		3.22		146
{ NIZAMIAH	28	0435 E	0440 D	S16 E24	4897	5 D	1	2	0.435		1.82		85
	28	0523 E	0532 D	N21 W32	4884	9 D	1	1	0.63		1.63		
{ WENDEL	28	0818	0856	S08 E80	4904	38	1	2	1.34		4.00		
	28	0823 E	0857	S11 W48	4883	3	1	3					
{ CAPRI-S	28	0824	0857	S05 E80	4904	33 D	2	2	0.824		6.20		
	28	0830 E	0850	S09 E80	4904	20 D	1	3			4.00		
{ CAPRI-G	28	0920 E	0942 D	N20 W35	4884	22 D	1	3			3.00		
	28	1032 E	1051	N19 W22	4884	19 D	1	3			5.00		
{ WENDEL	28	1035	1047	N17 W24	4884	12	16				6.00		
	28	1200	1226	S16 E30	4897	26	16	2	1212		2.60		
{ CAPRI-S	28	1202	1222 D	S15 E29	4897	20 D	1	3			5.00		
	28	1203 E	1222 D	S14 E32	4897	19 D	16	2	1211		3.00		
{ STOCKHOLM	28	1205 E	1220 D	S17 E28	4897	15 D	1	2	2.50				
	28	1248 E	1440 D	N20 W26	4884	112 D	2	3			7.00		
{ WENDEL	28	1254	1326	N21 W29	4884	32	2	2			10.00		
	28	1255	1332 D	N23 W25	4884	37 D	1	2			3.60		
{ CAPRI-S	28	1258 E	1337 D	N20 W28	4884	39 D	2	2			6.00		
	28	1554	1605	N17 E51	4898	11	1	2	1557		7.20		
{ SAC PEAK	28	2122	2215 D	N21 W32	4884	52 D	26	2	7.40				32
	28	2128	2245	N18 W29	4884	77	2	2	8.60				
{ WENDEL	29	0823 E	0901	N16 W46	4884	38 D	1	1			3.00		
	29	0850 E	0925	N16 W44	4884	35 D	2	1	0900		4.00		
{ LOCARNO	29	0850 E	0912	S15 E22	4897	22 D	16	1	0850		2.00		
	29	0928	1010	N16 W36	4884	42	26	1			14.00		
{ WENDEL	29	0929	0959	N19 W40	4884	30	2	2			9.00		
	29	0932 E	0946 D	N20 W40	4884	14 D	2	3					
{ LOCARNO	29	0950 E	1005	S10 W22	4889	15 D	1	2	0950		1.00		
	29	1035	1110	S15 E02	4897	35	16	2			6.00		
{ WENDEL	29	1036	1055	S20 E05	4897	19	1	2			4.00		
	29	1314 E	1345	S10 E18	4897	31 D	2	2			10.00		
{ USNRL	29	1319	1325	S11 E16	4897	37	1	2	1325		1.98		100

SOLAR FLARES

NOVEMBER 1958

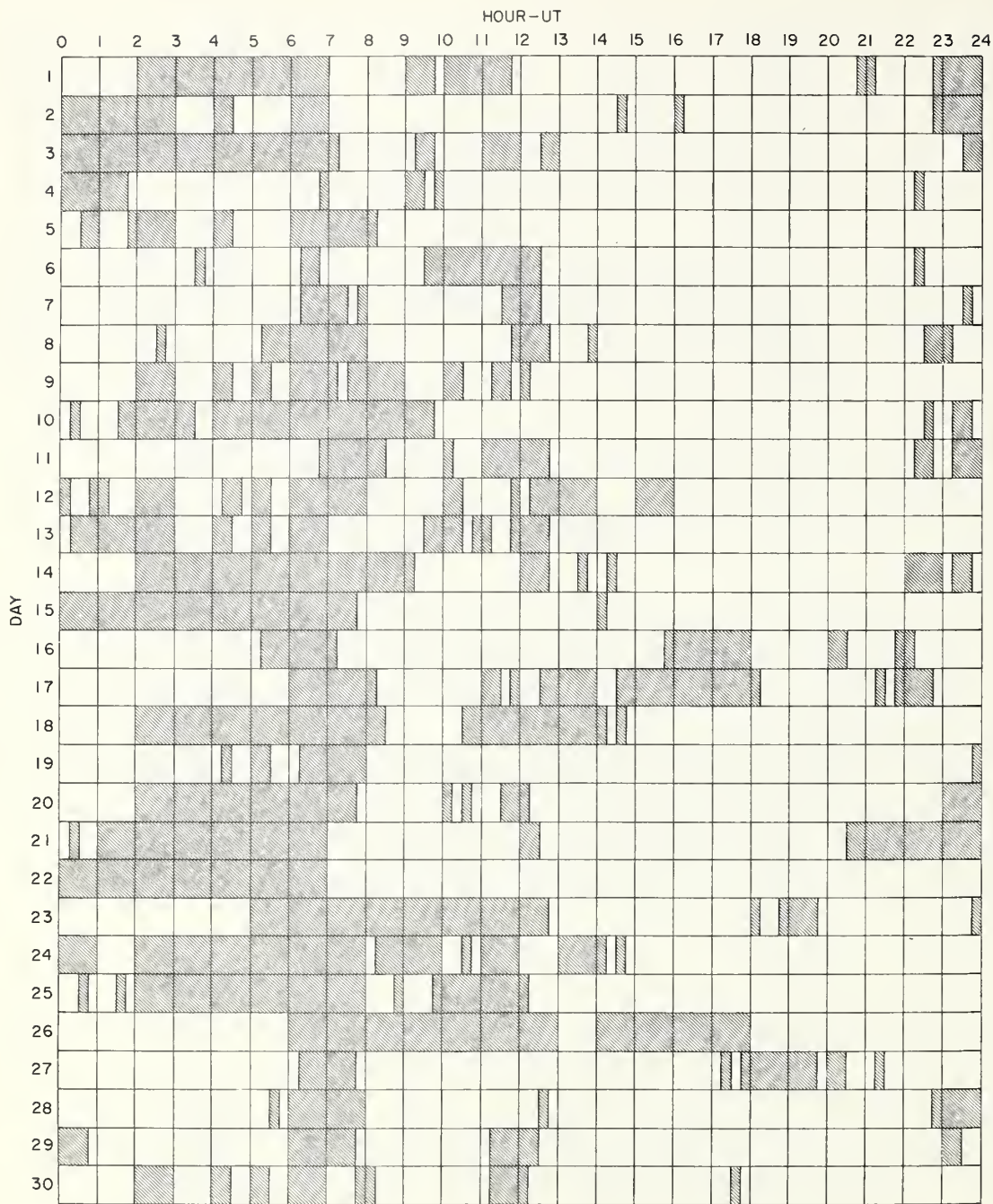
OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	M-MATH PLAGE REGION				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	
	NOV 1958											
WENDEL	29	1350	1405	N16 E35	4898	15	1	2		3.00		
{LOCARNO	29	1350 E	1409	N15 W08	4892	13	1			1.00		
{WENDEL	29	1353	1406	N15 W08	4892	13	1			3.00		
SAC PEAK	29	1827	1940	S10 E60	4904	72	1	2	2.80			18
{LOCARNO	30	0845 E	0945	S20 E80	4906	60	1	2				
{WENDEL	30	0918 E	0947	S21 E88	4906	29	1			3.00		
LOCARNO	30	0855	0910	S14 E03	4897	15	1	2		1.00		
{LOCARNO	30	0905	0925	S09 E49	4904	20	1	2		2.00		
{WENDEL	30	0918 E	0945	S10 E51	4904	27	1	2		3.00		
LOCARNO	30	0940	1010	N18 W09	4895	30	1	2		1.00		
WENDEL	30	0940	1155 D	S14 W87	4883	75	2			10.00		
{LOCARNO	30	1002	1040	N18 W50	4884	38	2	2		8.00		
{WENDEL	30	1006	1031 D	N18 W55	4884	25	16			5.00		
WENDEL	30	1024	1102 D	S09 E49	4904	38	1			4.00		
WENDEL	30	1140 E	1214 D	N16 W57	4884	34	16			7.00		
LOCARNO	30	1210 E	1230	S19 E02	4697	20	1	2	1210	1.00		
LOCARNO	30	1210 E	1240	N16 W62	4884	30	1	2	1210	1.00		
{LOCARNO	30	1240	1330	N12 E18	4898	50	16	2		3.00		
{USNRL	30	1300	1358	N15 E20	4898	58	16	2	1307	7.00		
LOCARNO	30	1345	1415	S21 E77	4906	30	1	2		4.74	1.00	109
MCMATH	30	1419 E	1558	N17 W17	4892	99	1	2	1420	1.95	3.00	
HAWAII	30	1924	1934	N08 E27	4899	10	1	2	1926	2.30	2.50	

COMMERCE - STANDARDS - BOULDER

CAPRI G ANACAPRI - GERMAN CAPRI S ANACAPRI - SWEDISH GOOD HOPE ROYAL OBSERVATORY, CAPE OF GOOD HOPE KIEV* KIEV UNIVERSITY KODAIKUN KODAIKANAL KRASNAYA KRASNAYA, PAKHRA MOSCOW NIZMIR	MOSCOW-G MOSCOW - GAISH R O EDIN ROYAL OBSERVATORY, EDINBURGH R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX SAC PEAK SACRAMENTO PEAK SCHAUTINS SCHAUTINSLAND 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 <input type="checkbox"/> - NOT REPORTED
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INTERVALS OF NO FLARE PATROL OBSERVATIONS

NOVEMBER 1958



Times indicated are accurate to the nearest 15 minutes.

Stations included:

- | | | | |
|--------------------|-----------|----------|---------------------|
| Anacapri (Swedish) | Dunsink | McMath | Sacramento Peak |
| Arcetri | Greenwich | Mitaka | Uccle |
| Arosa | Hawaii | Nizamia | U.S. Naval Research |
| Athens | Huancayo | Ondrejov | Laboratory |
| Climax | Locarno | Ottawa | Zürich. |

SUBFLARES

Noted as follows: Date-Universal Time - Coordinates

OCTOBER 1958

<p>HAWAII 01 0150 507 W16 UCCLLE 01 1949 E 509 W18 MCMATH 01 1256 507 W29 SAC PEAK 01 1400 517 E62 SAC PEAK 01 1400 E 507 E52 MCMATH 01 1444 W 108 W13 SAC PEAK 01 1452 N17 W39 MCMATH 01 1455 N17 W40 SAC PEAK 01 1542 508 W70 MCMATH 01 1823 510 W21 MCMATH 01 1902 510 W23 SAC PEAK 01 1937 N04 W26 MCMATH 01 1937 N03 W27 MCMATH 01 2007 511 E46 HUANCAYO 01 2009 E 509 E41 MCMATH 01 2028 N30 W02</p> <p>UCCLLE 02 1009 E N02 W37 * UCCLLE 02 1026 509 W31 UCCLLE 02 1028 N30 W11 * OTTAWA 02 1216 E 510 W36 * USNRL 02 1216 E 510 W31 OTTAWA 02 1217 N28 W15 MCMATH 02 1350 N17 W52 USNRL 02 1353 N27 W51 MCMATH 02 1357 N07 E38 * MCMATH J2 1804 N21 E90 * HAWAII 02 2144 504 W39</p> <p>* CAPRI-S 03 0843 507 W50 UCCLLE 03 1048 509 W49 UCCLLE 03 1127 514 E03 * UCCLLE 03 1147 N04 W50 ARCETRI 03 1317 E N01 W50 MCMATH 03 1349 N02 W38 * CAPRI-S 03 1510 N03 W50 SAC PEAK 03 1615 N01 W52 MCMATH 03 1722 501 W56 * HAWAII 03 1920 N08 W54 MCMATH 03 2007 E 508 W54 MCMATH 03 2008 N30 W32 MCMATH 03 2059 508 W55 MCMATH 03 2109 528 E19 HAWAII 03 2156 N08 W57 HAWAII 03 2314 508 W02</p> <p>OTTAWA 04 1333 514 W40 MCMATH 04 1334 512 W41 CAPRI-S 04 1336 E 513 W38 * CAPRI-S 04 1336 E N04 W62 * OTTAWA 04 1334 N01 W65 * USNRL 04 1422 E N10 E43 * MCMATH 04 1446 N29 W43 * USNRL 04 1447 E N29 W44 * CAPRI-S 04 1654 E N04 W62 * USNRL 04 1502 E N28 W41 USNRL 04 1506 512 W40 MCMATH 04 1515 N02 W66 USNRL 04 1526 E N02 W62 * SAC PEAK 04 1617 513 W42 MCMATH 04 1732 511 W66 MCMATH 04 1739 N20 E72 MCMATH 04 1804 509 E12 MCMATH 04 1804 513 E04</p> <p>CAPRI-S 05 0931 E 505 W07 * MCMATH 05 1503 506 W12 MCMATH 05 1508 516 W22 MCMATH 05 1704 515 W22 MCMATH 05 1723 516 W23 SAC PEAK 05 2210 E 509 W04</p> <p>MCMATH 06 1325 N08 W23 MCMATH 06 1430 N08 W19 SAC PEAK 06 1615 508 W90 SAC PEAK 06 1625 N03 W90 * SAC PEAK 06 1625 N17 E41 * OTTAWA 06 1629 N19 E39 * USNRL 06 1630 N28 E40 SAC PEAK 06 1647 513 E60 USNRL 06 1648 512 E59 SAC PEAK 06 1750 510 W19 USNRL 06 1755 509 W18 SAC PEAK 06 1837 508 W90 SAC PEAK 06 1920 508 W90 USNRL 06 1954 508 W90 HAWAII 06 2320 E N13 E37</p> <p>* ATHENS 07 0712 507 W34 CAPRI-S 07 0915 E 516 W44 UCCLLE 07 0916 516 W47 UCCLLE 07 0927 E N10 E48 UCCLLE 07 0949 N14 E19 USNRL 07 1302 505 W38 SAC PEAK 07 1417 514 W85 * SAC PEAK 07 1502 513 W85 * SAC PEAK 07 1510 508 W90 * USNRL 07 1512 508 W90 * MCMATH 07 1517 516 W51 MCMATH 07 1528 506 W41 SAC PEAK 07 1605 N11 E88</p>	<p>* SAC PEAK 07 1640 505 W38 * MCMATH 07 1641 506 W38 * USNRL 07 1642 505 W38 * HUANCAYO 07 1643 504 W36 SAC PEAK 07 1730 N08 W43 USNRL 07 1732 N08 W43 MCMATH 07 1734 E N08 W44 SAC PEAK 07 1750 505 W42 MCMATH 07 1751 E 505 W42 * SAC PEAK 07 1817 N10 E42 * MCMATH 07 1819 N10 E42 HAWAII 07 2106 E N17 E33</p> <p>CAPRI-S 08 1005 N07 E73 SAC PEAK 08 1437 N12 E26 LOCARNO 08 1504 N11 E25 SAC PEAK 08 1510 N12 E25 SAC PEAK 08 1620 525 E30 SAC PEAK 08 2025 N08 W49 SAC PEAK 08 2100 N08 W49 HUANCAYO 08 2102 N07 W47 SAC PEAK 08 2102 N18 E25</p> <p>WENOEL 09 0749 E N10 W58 LOCARNO 09 0755 E N09 W56 * WENOEL 09 0817 N12 E15 WENOEL 09 1000 E N13 E14 * CAPRI-S 09 1206 E N09 W56 ARCETRI 09 1404 E N08 W62 SAC PEAK 09 1409 E N08 W61 SAC PEAK 09 1452 N15 E12 USNRL 09 1454 N16 E12 SAC PEAK 09 1500 507 W67 SAC PEAK 09 1515 N23 E90 USNRL 09 1517 N12 E15 SAC PEAK 09 1627 N12 E10 USNRL 09 1639 N08 W64 MCMATH 09 1640 N08 W68 SAC PEAK 09 1732 516 E90 USNRL 09 1735 515 E90 SAC PEAK 09 1737 N28 E90 SAC PEAK 09 1900 N09 W67 USNRL 09 1901 N09 W66 USNRL 09 1904 N13 E17 SAC PEAK 09 1905 N13 E16 MCMATH -09 1910 E N12 E17 SAC PEAK 09 1920 522 W10 USNRL 09 1924 522 W10 SAC PEAK 09 2127 N04 E43</p> <p>USNRL 10 1213 526 E90 USNRL 10 1247 530 E90 USNRL 10 1315 530 E90 USNRL 10 1337 514 E88 SAC PEAK 10 1409 532 E90 * MCMATH 10 1414 509 W90 SAC PEAK 10 1452 N21 W09 * USNRL 10 1452 530 E90 MCMATH 10 1453 N21 W10 USNRL 10 1453 N21 W09 * MCMATH 10 1456 530 E90 * CLIMAX 10 1501 533 E90 SAC PEAK 10 1737 532 E90 USNRL 10 1738 530 E90 MCMATH 10 1741 530 E90 USNRL 10 1752 517 E77 SAC PEAK 10 1755 N21 E88 USNRL 10 1758 N13 W03 SAC PEAK 10 2022 N22 W12</p> <p>CAPRI-S 11 0759 E N07 W44 USNRL 11 1237 517 E80 * USNRL 11 1419 N12 W90 * CLIMAX 11 1421 N12 W90 * SAC PEAK 11 1500 E N13 W90</p> <p>ATHENS 12 0743 N12 W42 CAPRI-S 12 1119 E 511 E28 USNRL 12 1201 515 E58 USNRL 12 1256 528 E68 MCMATH 12 1439 530 E70 USNRL 12 1440 528 E68 USNRL 12 1443 N16 W40 * USNRL 12 1500 528 E68 * CAPRI-S 12 1502 E 533 E65 USNRL 12 1514 N16 W40 USNRL 12 1533 513 E56 MCMATH 12 1534 516 E61 MCMATH 12 1643 518 E52 MCMATH 12 1713 N16 W25 SAC PEAK 12 1716 E N16 W24 MCMATH 12 1753 529 E70 MCMATH 12 1755 517 E50 SAC PEAK 12 1756 E 529 E68 HAWAII 12 1824 526 E47 * SAC PEAK 12 1825 517 E47 HAWAII 12 1834 E N22 W43 SAC PEAK 12 1856 E N16 W43 SAC PEAK 12 1952 523 E49 SAC PEAK 12 2013 519 E47 SAC PEAK 12 2057 518 E45</p>	<p>SAC PEAK 12 2125 517 E46</p> <p>CAPRI-S 13 1146 E N00 E90 USNRL 13 1332 N16 W52 ATHENS 13 1333 E N15 W49 USNRL 13 1428 530 E53 MCMATH 13 1429 E 510 E08 MCMATH 13 1429 E 530 E57 MCMATH 13 1442 E 502 E90 USNRL 13 1511 502 E90 USNRL 13 1519 528 E52 USNRL 13 1722 503 E90 USNRL 13 1832 510 E05 USNRL 13 1833 503 E90 HAWAII 13 2158 E 512 E90</p> <p>HAWAII 14 0020 E 512 E90 HAWAII 14 0058 512 E90 * CAPRI-S 14 0640 E 503 E85 UCCLLE 14 1133 E 507 E40 MCMATH 14 1320 526 E36 OTTAWA 14 1321 524 E35 OTTAWA 14 1322 502 E77 MCMATH 14 1603 527 E39 MCMATH 14 1609 526 E36 MCMATH 14 1618 526 E36 USNRL 14 1907 526 E31 USNRL 14 1918 503 E77 * HAWAII 14 2040 -529 E25</p> <p>HAWAII 15 0034 507 W18 ATHENS 15 0700 E 527 E22 UCCLLE 15 0918 E 526 E25 UCCLLE 15 0958 523 E32 * LOCARNO 15 1134 514 E11 * UCCLLE 15 1154 504 E67 OTTAWA 15 1252 502 E65 USNRL 15 1305 511 E90 USNRL 15 1308 512 E90 MCMATH 15 1330 509 E90 OTTAWA 15 1332 E 508 E90 MCMATH 15 1351 510 E90 USNRL 15 1358 502 E63 OTTAWA 15 1408 502 E63 SAC PEAK 15 1422 511 E90 * CAPRI-S 15 1650 E 503 E78 OTTAWA 15 1506 524 E07 MCMATH 15 507 525 E07 USNRL 15 1507 525 E07 USNRL 15 1508 527 E20 USNRL 15 1539 502 E63 * USNRL 15 1601 506 E64 * USNRL 15 1616 506 E64 * USNRL 15 1659 503 E64 * USNRL 15 1711 E 503 E64 * USNRL 15 1750 E 502 E63 MCMATH 15 1827 502 E68 USNRL 15 1854 E 502 E63 USNRL 15 1913 502 E63 USNRL 15 1924 503 E64 USNRL 15 1940 513 E08 USNRL 15 1941 513 E08 SAC PEAK 15 1945 E 515 E07 USNRL 15 1946 502 E63 SAC PEAK 15 2000 511 W27 USNRL 15 2001 511 W28 SAC PEAK 15 2002 N11 W72 USNRL 15 2003 511 W71 SAC PEAK 15 2010 501 E63 * SAC PEAK 15 2050 503 E62 SAC PEAK 15 2145 509 W22 SAC PEAK 15 2207 502 E63 SAC PEAK 15 2215 513 W41</p> <p>UCCLLE 16 1130 N21 E26 USNRL 16 1157 E 513 W48 * USNRL 16 1157 E N22 E24 USNRL 16 1210 503 E52 USNRL 16 1233 N14 W01 USNRL 16 1244 503 E52 USNRL 16 1312 N13 E18 USNRL 16 1323 505 E53 MCMATH 16 1345 511 E85 USNRL 16 1347 N21 E23 USNRL 16 1425 N22 E22 SAC PEAK 16 1425 N22 E22 USNRL 16 1444 N23 E22 * MCMATH 16 1446 502 E53 * SAC PEAK 16 1452 503 E53 USNRL 16 1458 N21 E22 SAC PEAK 16 1550 N21 E22 SAC PEAK 16 1602 519 E80 USNRL 16 1617 N21 E22 SAC PEAK 16 1645 510 E80 USNRL 16 1647 510 E80 * USNRL 16 1706 N25 E20 * SAC PEAK 16 1815 503 E49 * USNRL 16 1900 N21 E19 SAC PEAK 16 1917 504 E50 USNRL 16 1919 503 E47 HUANCAYO 16 1928 E N20 E19</p>
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SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		MAX. PHASE	LOCATION		DURA. TION MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END		APPROX. LAT.	MATH PLAGE REGION				TIME U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH Ha
ABASTUMANI CAPRI-G CAPRI-G {GOOD HOPE CAPRI-G {GOOD HOPE {KIEV {CAPRI-G {MT WILSON MT WILSON MT WILSON MT WILSON	01	0526	E 0700	D	S18 E20	4530	94	D	1	3	1.75	2.30	2.30	S-SWF S-SWF Slow S-SWF Slow S-SWF S-SWF
	01	0617	E 0652	D	S16 E25	4530	35	D	1	3		5.00		
	01	0817	E 0907		S16 E22	4530	50	D	16	3		5.00		
	01	1000	E 1016		N24 E24	4529	30	D	1	3	2.00	2.40		
	01	1001	E 1016		N23 E25	4529	15	D	1	3		4.00		
	01	1038	E 1112		S16 E22	4530	32	D	16	3		6.00		
	01	1045	E 1058	D	S16 E20	4530	13	D	1	2	2.50	2.70	70	
	01	1047	E 1054	D	S18 E17	4530	7	D	1	2	3.18	3.30		
	01	1401	E 1455		S16 E22	4530	54	D	1	3		4.00		
	01	1412	E 1452	D	S16 E14	4530	40	D	1	3				
	01	2119	E 2241		S16 E16	4530	82	Z-						
	01	2330	E 2355		N19 E09	4529	25	1	1					
	01	2354	E 2432		S15 E15	4530	38	1	1					
	02	0145	E 0215	D	N22 W07	4529	30	D	1	2	3.00	4.00		
	SYDNEY ABASTUMANI MOSCOW-G CAPRI-G CAPRI-G {KRAASNYA CAPRI-G {GOOD HOPE CAPRI-G {KRAASNYA CAPRI-G KIEV {CAPRI-G {CAPRI-G CAPRI-G CAPRI-G CAPRI-G MT WILSON	02	0512	E 0522	D	S16 E10	4530	10	D	1	2	.87	1.20	
02		0602	E 1129	D	S15 E10	4530	327	D	16	2	4.08	4.37	150	
02		0622	E 0627	D	N16 W08	4529	5	D	1	3		3.0		
02		0657	E 0812	D	S14 E12	4530	75	D	1	3		5.00		
02		0715	E 0728		S17 E09	4530	13	1	1	3	1.75	.94	81	
02		0735	E 0801		N18 E63	4537	26	1	1	3	3.00	3.00		
02		0754	E 0812	D	S16 E08	4530	18	D	1	3	2.00	2.10		
02		0758	E 0801	D	S17 E11	4530	3	D	1	3	2.18	1.17	95	
02		0810	E 0814	D	N29 W28	4525	4	D	1	3	8.00	3.00		
02		0828	E 0902		S17 E09	4530	4	D	1	2		7.07		
02		0829	E 0845	D	S14 E12	4530	33	2	2	3	2.88	7.00		
02		0830	E 0830	U	S17 E11	4530	15	D	1	3		1.54		
02		0834	E 0904		N23 E13	4529	30	1	1	3	3.00	3.00		
02		0948	E 1055		S17 E08	4530	67	2	2	3	6.50	6.70		
02		0948	E 1132		S16 E12	4530	104	2	2	3	11.00	11.00		
02	0951	E 1013	D	S18 E06	4530	22	D	1	2	7.00	6.19	70		
02	1103	E 1123		N08 W11	4529	20	1	1	2	2.57	2.80			
02	1112	E 1138		N24 E12	4529	26	1	1	3	3.00	3.00			
02	1118	E 1132		N20 E05	4529	14	1	1	3	3.00	3.00			
02	1142	E 1155		S17 E07	4530	13	1	1	3	2.00	2.10			
02	1143	E 1201		S16 E12	4530	18	1	1	3		5.00			
02	1207	E 1219	D	S16 E06	4530	12	D	1	3	3.00	3.00			
02	1305	E 1312	D	N39 W15	4527	7	D	1	2	1.71	2.30	80		
02	1455	E 1502		N18 W05	4529	7	D	1	3		4.00			
02	1615	E 1621	D	S17 W04	4528	6	D	1	3		4.00			
02	2340	E 2358		N29 W43	4525	18	1	1	3		4.00			
03	0552	E 0605		N21 W23	4529	13	1	1	1	1.94	2.00	130		
03	0552	E 0622		N22 W22	4529	30	D	1	3		4.00			
03	0607	E 0647		N22 W21	4530	20	D	1	2	3.84	5.80	56		
03	0627	E 0715		N29 W42	4525	20	D	1	3	2.00	3.00			
03	0655	E 0715		N30 W43	4525	20	D	1	3		3.40			
03	0659	E 0840		N27 W41	4525	56	2	2	3	4.00	4.00			
03	0744	E 0831	D	N19 E49	4538	43	D	16	2	4.00	6.60	64		
03	0748	E 0830		N18 E50	4538	56	2	2	2	4.36	7.10			
03	0807	E 0830		N18 W48	4525	23	D	2	2		8.00			
03	0840	E 0940		S14 E00	4530	60	1	1	2	3.60	3.70			
03	0852	E 0924		S15 W01	4530	32	2	2	2		9.00			

SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		MAX. PHASE	LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX. LAT.	MER. DIST.				MATH. PLAGE REGION	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
{CAPRI-G CAPRI-G CAPRI-G GOOD HOPE CAPRI-G CAPRI-G KIEV* CAPRI-G CAPRI-G CAPRI-G CAPRI-G	03	1009	1022		S18 W05	4530	13	1	2	4.00		4.00	
	03	1225	1230	D	N26 E58	4538	5	D	3	3.00		3.00	
	03	1225	1232	E	S17 W05	4530	7	D	3	3.00		3.00	
	03	1302	1307	D	S15 W00	4530	5	D	1	3.10		3.10	
	03	1303	1356	D	S15 W07	4530	53	D	2	7.80		7.80	Slow S-SWF
	03	1304	1423	E	S15 W01	4530	79	D	2	9.00		9.00	
	03	1312	1407	D	S16 W02	4530	55	D	2	2.10		2.10	
	03	1444	1451	E	S16 W02	4530	7	1	3	4.00		4.00	
	03	1354	1404	E	N28 W43	4525	10	1	3	3.00		3.00	
	03	1455	1511	E	N26 E58	4538	16	1	3	6.00		6.00	
{CAPRI-G CAPRI-G ABASTUMANI CAPRI-G CAPRI-G CAPRI-G CAPRI-G MT WILSON SYDNEY	03	1608	1620	D	N29 W42	4525	12	D	1	4.00		4.00	Slow S-SWF
	03	1608	1620	D	N23 W50	4525	12	D	2	3.00		3.00	
	04	0507	0540	D	N21 W16	4529	33	D	1	2.62		2.62	
	04	0530	0600	D	N22 W18	4529	30	D	1	4.00		4.00	
{CAPRI-G ABASTUMANI CAPRI-G ABASTUMANI CAPRI-G SIMEIZ ABASTUMANI KRASNAYA CAPRI-G CAPRI-G MT WILSON SYDNEY	04	0548	0600	D	N15 W34	4529	12	D	1	2.00		2.00	
	04	0711	0742	D	N23 W36	4529	31	D	2	6.98		6.98	2.20
	04	0740	0751	E	N19 W24	4529	11	1	3	3.00		3.00	
	04	0740	0755	E	N20 W24	4529	15	1	3	3.00		3.00	
	04	0742	0749	E	N19 W23	4529	7	2	2	0.745		0.745	S-SWF
	04	0923	0925	D	S16 E18	4535	2	D	1	2.62		2.62	
	04	1354	1425	E	N22 W19	4529	31	D	1	1.13		1.13	96
	04	1643	1655	E	N19 W32	4529	12	1	2	3.00		3.00	
	04	2330	2332	E	S18 W31	4530	2	D	1	2.00		2.00	S-SWF
	05	0011	0101	E	S17 W33	4530	50	1	1	3.00		3.00	S-SWF
{MT WILSON SYDNEY TASHKENT TASHKENT SYDNEY CAPRI-G CAPRI-G ABASTUMANI CAPRI-G MOSCOW-G CAPRI-G CAPRI-G CAPRI-G MT WILSON	05	0012	0041	E	S15 W30	4530	29	1	1	2.00		2.00	Slow S-SWF
	05	0157	0214	D	S17 W32	4530	17	D	1	0.205		0.205	
	05	0305	0350	E	S15 W29	4530	45	D	1	0.315		0.315	65
	05	0356	0457	E	S17 W32	4530	61	D	3	6.37		6.37	2.00
	05	0412	0444	E	S21 W24	4530	32	3	1	17.33		17.33	21.00
	05	0600	0627	D	S14 W36	4530	27	D	1	14.00		14.00	16.00
	05	0800	0810	D	S16 W19	4530	10	D	2	3.00		3.00	
	05	0803	0820	D	S17 W23	4530	17	1	3	4.00		4.00	
	05	0902	1036	E	S16 W29	4530	94	2	3	2.50		2.50	10.00
	05	0914	0919	D	S18 W20	4530	12	1	3	1.75		1.75	100
SYDNEY SYDNEY TASHKENT SYDNEY TASHKENT CAPRI-G CAPRI-G CAPRI-G CAPRI-G MT WILSON	05	1155	1400	E	S14 W36	4530	125	1	3	5.00		5.00	G-SWF
	05	1441	1453	E	S18 W45	4530	12	1	2	3.00		3.00	
	05	1605	1620	D	N01 E15	4539	15	D	3	3.00		3.00	S-SWF
	05	2032	2109	E	S15 W36	4530	37	1	3	10.00		10.00	
	06	0127	0138	E	N15 W63	4529	11	1	2	1.50		1.50	3.00
	06	0211	0229	E	S15 W34	4530	18	D	1	0.211		0.211	3.00
	06	0335	0410	E	S17 W38	4530	35	2	3	3.00		3.00	4.00
	06	0338	0402	E	S17 W38	4530	24	3	1	7.25		7.25	10.00
	06	0448	0503	D	S15 W64	4529	15	D	1	10.00		10.00	13.00
	06	0527	0535	E	S18 W48	4530	8	1	3	2.00		2.00	4.00
CAPRI-G CAPRI-G CAPRI-G CAPRI-G VOROSHILOV CAPRI-G	06	0540	0546	E	N26 E20	4538	6	D	1	4.00		4.00	
	06	0545	0553	E	N14 W48	4529	8	1	3	4.00		4.00	
	06	0820	0838	E	N22 E21	4538	18	1	2	3.00		3.00	G-SWF
	06	1328	1345	E	N14 E55	4543	17	D	1	4.00		4.00	S-SWF
	06	2252	2302	D	S15 W53	4530	10	D	2	2.12		2.12	85
	07	0610	0632	D	N27 W77	4529	22	D	3	1.48		1.48	92

SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		MAX. PHASE	LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END		LAT.	APPROX. MCR. DIST.	MCR. PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
{ CAPRI-G MOSCOW-G CAPRI-G CAPRI-G CAPRI-G MT WILSON VOROSHILOV	07	0920 E	0939		N27 W60	4529	19 D	1	3		4.00				
	07	0924 E	0945 D		N29 W60	4529	21 D	1	3		1.02			2.20	100
	07	1217 E	1222		N25 E10	4538	5 D	1	3						
	07	1411	1447		S14 W51	4530	36	1	3						
	07	1615 E	1630		N24 E04	4538	15 D	1	2						
	07	2009	2055	2012	S14 W62	4530	46	1	2						
	07	2305	2318	2313	N25 W66	4529	13	16	2			0.70			88
CAPRI-G CAPRI-G	08	0635 E	0700 D		S14 W75	4530	25 D	16	3						S-SWF
	08	1154 E	1157		S15 W80	4530	3 D	1	2						
SIMEIZ CAPRI-G	10	0842	0915 D	0848	S18 E70	4548	33 D	16	1					3.10	60
	11	1405 E	1405		N13 E30	4550		1	3						
CAPRI-G VOROSHILOV	11	1435 E	1445		S18 E49	4548	10 D	1	2						60
	11	2215	2230	2217	N08 W34	4540	15	1	2						
VOROSHILOV ALMA-ATA ALMA-ATA CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G VOROSHILOV	12	0008	0022	0013	S19 E70	4553	14	1	2						56
	12	0420	0455	0426	S19 E46	4548	35	1	1						74
	12	0434	0518	0455	N27 W61	4538	44	16	2						63
	12	0554 E	0633		N26 W68	4538	39 D	1	3						
	12	0556 E	0636 D		S20 E36	4548	40 D	1	3						
	12	0619 E	0636 D		N07 W40	4540	17 D	1	3						
	12	0805 E	0814		S19 E43	4548	9 D	1	2						
	12	0951 E	0913		S22 E59	4553	22 D	1	2						
	12	0932 E	0941		N07 W40	4540	9 D	1	2						
	12	1002 E	1008		N28 W59	4538	6 D	1	2						
	12	1059	1114		S19 E44	4548	15	16	2						
	12	1409	1421		S17 E40	4548	13	1	2						
VOROSHILOV VOROSHILOV ALMA-ATA ALMA-ATA ALMA-ATA ALMA-ATA ABASTUMANI CAPRI-G ALMA-ATA SIMEIZ ABASTUMANI PIRCULI SIMEIZ CAPRI-G KIEV KIEV GOOD HOPE CAPRI-G	12	1546 E	1601	2353	S21 E33	4548	15 D	1	2						128
	12	2347 E	0015		S17 E35	4548	28 D	16	2						
	13	0026	0042	0032	N07 W54	4540	18	1	2						
	13	0443 E	0624	0436	N31 W80	4553	221 D	1	3						
	13	0341	0421	0354	S34 E36	4548	40	16	3						
	13	0341	0623	0519	S10 E85	4555	162	16	3						
	13	0405	0412		S20 E31	4548	29	16	3						
	13	0608	0620	0616	S21 E23	4548	12	16	3						
	13	0609 E	0644		S20 E23	4548	35 D	1	3						
	13	0612	0626	0617	S22 E32	4548	14	2	3						
	13	0613	0625	0615	S23 E23	4548	12	1	3						
	13	0715	0729	0718	S16 E21	4548	14	16	3						
ABASTUMANI PIRCULI	13	0717	0729	0721	S12 E17	4548	12	1	2						
	13	0719 E	0726	0719	S18 E21	4548	12	1	2						
CAPRI-G KIEV	13	0719 E	0726		S16 E20	4548	7 D	1	3						
	13	1144 E	1147	1145	S17 E19	4548	3 D	1	3						
KIEV GOOD HOPE	13	1228	1239	1234	S06 E90	4555	11	16	3						60
	13	1228	1245	1235	S04 E80	4555	17	1	3						60
CAPRI-G CAPRI-G	13	1641 E	1656 D		N15 E90	4558	15 D	1	2						
	14	0913	0918		N10 E42	4551	5	1	2						
KHARKOV CAPRI-G	14	0913	0920		N09 E35	4551	7	1	1						
	14	1006 E	1030		S08 E65	4555	24 D	1	2						

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		START	END	APPROX. LAT.	APPROX. MER. DIST.	McMATH PLAGE REGION				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.			
KHARKOV VOROSHILOV	14	1012 E	1036 D	S11 E66	4555	24 D	1	1	1020	1.74	2.00	1.20	60	
	14	2344	2359	S22 E12	4548	15	1	1	2347					
TASHKENT	15	0346	0452	N40 E79	4557	66 D	1	1	0353	1.15	7.00	2.50	75	
KRASNYA	15	0811 E	0827	N40 E73	4557	16 D	1	1		1.04	3.10		56	
KRASNYA	15	0920 E	1005 D	N40 E72	4557	45 D	1	1		1.65	2.90		61	
GOOD HOPE	15	1005 E	1200 D	N39 E77	4557	115 D	1	1	1010	.50	5.00			
CAPRI-G	15	1021 E	1146	N15 E71	4558	85 D	1	2		4.28	13.00		70	
KIEV	15	1103 E	1345 D	N40 E79	4557	42 D	2	1	1329					
KIEV*	15	1326 E	1334 D	N44 E68	4557	8 D	1	2						
MT. WILSON	15	1457	1524	S06 E33	4555	27	1	1						
VOROSHILOV	15	2302	0146	N42 E66	4557	104	1	1	2306	.87	3.60		60	
SYDNEY	16	0056	0108	N38 E60	4557	12	1	1	0104	.75	2.00			
SYDNEY	16	0134	0144	N35 E60	4557	10	1	1	0142	1.00	3.00			
SYDNEY	16	0305	0313	N35 E60	4557	8	1	1	0307	1.50	4.00			
{SYDNEY	16	0331	0358	N06 E16	4551	27	1	1	0333	3.00	3.00			
{TASHKENT	16	0332	0410	N09 E16	4551	38	1	3	0333	2.65	3.00		85	
CAPRI-G	16	0733 E	0736 D	N39 E57	4557	3 D	1	2						
KHARKOV	16	0836	0847	S07 W80	4554	11	1	2	0840		2.00			
CAPRI-G	16	1030 E	1040 D	N39 E55	4557	10 D	1	2			4.00			
CAPRI-G	16	1139 E	1152	S21 W08	4548	13 D	1	2			4.00			
CAPRI-G	16	1150 E	1230	N39 E54	4557	40 D	1	2			2.90		90	
{KIEV	16	1306	1321	N42 E57	4557	15	16	3	1314	1.71	5.00			
{CAPRI-G	16	1313	1340	N20 E90	4560	42 D	1	2						
CAPRI-G	16	1313 E	1355 D	N39 E63	4557	137 D	2	1			6.20		84	
ALMA-ATA	16	1358 E	1615						1525	3.15	7.00		80	
TASHKENT	17	0319	0347	N41 E49	4557	28	1	2	0323	3.18	5.10			
{ABASTUMANI	17	0630	0758 D	S20 W22	4548	88 D	16	2	0642	4.19	2.00			
{SIMEIZ	17	0636	0657	S22 W25	4548	21	1	2	0638	1.30	2.80	2.20	68	
{ABASTUMANI	17	0743	0755	S18 W32	4548	12	1	2	0746	1.92	2.80			
{KASNYA	17	0745 E	0800	S21 W27	4548	15 D	1	2	0746	.87	.50		88	
{KIEV	17	0945 E	1009 D	S21 W22	4548	24 D	2	2	0954	.86	1.00		60	
{KHARKOV	17	0948	1028	S17 W33	4548	40	1	2	0954			1.70		
KHARKOV	17	1027	1035	S20 W20	4548	8	1	2			2.50	1.20		
KHARKOV	17	1227 E	1244	S22 W15	4548	17 D	1	2	1242			1.20		
{GOOD HOPE	17	1344	1400 D	S18 W37	4548	16 D	1	2	1348	2.00	2.50			
{LOCARNO	17	1345 E	1410	S25 W14	4548	25 D	16	2						
{MOSCOW-G	17	1347 E	1409 D	S17 W34	4548	22 D	1	2	1354	1.00	4.00		80	
CAPRI-G	17	1608 E	1612 D	S17 W37	4548	4 D	16	1		2.04	2.70	1.90		
{MT. WILSON	17	2136	2212	S16 W35	4548	36	1	1	2159	4.35	5.70		71	
{VOROSHILOV	17	2159 E	2241	S21 W32	4548	51 D	16	2	2221	1.48	2.70		77	
VOROSHILOV	17	2159	2241	N42 E37	4557	42	1	2						
SYDNEY	18	0118	0153	S18 W42	4548	35	1	1	0123	2.00	3.00			
ABASTUMANI	18	0356 E	0523	S36 W19	4548	87 D	1	2	0406	1.83	5.00			
KRASNYA	18	0607	0608 D	S18 E80	4564	1 D	1	1	0608	.87	1.90		77	
CAPRI-G	18	0615 E	0627 D	S18 W28	4548	12 D	1	3			6.00			
KRASNYA	18	0646 E	0718	N42 E35	4557	22 D	1	2	0654	1.74	1.50		79	
GOOD HOPE	18	0730 E	0800	N40 E37	4557	30 D	1	2	0739	1.20	2.10			
KHARKOV	18	0948 E	1025 D	S30 E85	4557	37	1	2	0958					
KHARKOV	18	0951	1005	N40 E33	4557	14	1	2	0958			1.20		

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		START	END	MAX. PHASE	APPROX. LAT.				MER. DIST.	MONTH PLACE REGION	MEAS. AREA Sq. Deg.	
CAPRI-G	18 1059	1122	D	1336	N27 E09	4561	1	2	3.00			
{ KHARKOV	18 1254	E 1403	D		N40 E33	4557	1	1				
{ CAPRI-G	18 1404	E 1430	D		N40 E30	4557	1	2	3.00			
MT WILSON	18 2059	2115		2102	S17 W52	4548	1					
VOROSHILOV	18 2140	E 2212		2148	S13 W45	4548	16	2	2.70	1.83		86
VOROSHILOV	18 2148	E 2202		2153	S18 W77	4547	14	2	3.10	.87		78
VOROSHILOV	18 2212	2226		2213	S15 W56	4548	14	2	2.30	1.30		100
VOROSHILOV	18 2220	2225		2222	N23 E63	4560	5	2	2.40	.96		80
{ SYDNEY	19 0420	0500		0431	S15 W61	4548	40	1	4.00	2.00		
TASHKENT	19 0425	0510		0430	S17 W63	4548	45	16	5.00	2.12	3.30	90
ABASTUMANI	19 0426	E 0510		0432	S17 W64	4548	44	2	6.00	2.12		
{ SIMEIZ	19 0431	E 0449	D		S18 W60	4548	16	2	11.00	4.36	2.50	84
ABASTUMANI	19 0549	0752		0610	N41 E25	4557	123	2	4.60	1.83		
CAPRI-G	19 1027	E 1032	D		S23 E17	4565	5	1	3.00			
{ KIEV	19 1059	E 1114	D	1100	S18 W57	4548	15	1	4.70	2.57		70
LOCARNO	19 1100	1110	D		S19 W44	4548	10	3	4.00	4.00		
{ KHARKOV	19 1102	E 1132	D		S16 W55	4548	30	2				
CAPRI-G	19 1114	E 1133	D		S18 W52	4548	19	1	5.00			
{ GOOD HOPE	19 1115	E 1205	D		S18 W56	4548	50	2	3.90	2.20		
CAPRI-G	19 1411	E 1426	D		S25 W85	4566	15	2	4.00			
{ SYDNEY	20 0426	0445		0433	S16 W62	4548	19	1	4.00	2.00		
TASHKENT	20 0426	0454		0433	S17 W64	4548	28	2	6.00	2.65	2.30	75
{ LOCARNO	20 0715	E 0730			S17 W68	4548	15	3	6.00	3.00		
{ CAPRI-G	20 0722	E 0727	D		S19 W74	4548	5	1				
{ KHARKOV	20 0800	E 0847	D		N03 E85	4574	47	1	6.00		1.20	
ALMA-ATA	21 0333	0443		0408	N08 E15	4563	70	2	6.20	2.80		88
ALMA-ATA	21 0401	0458	D	0439	N24 E30	4560	57	3	3.80	2.20		70
{ ALMA-ATA	21 0612	0652		0625	N09 E13	4563	40	2	5.70	2.83		81
ABASTUMANI	21 0622	0700		0627	N09 E13	4563	38	1	2.00	1.16	2.30	
{ KHARKOV	21 0808	E 0823			N20 E25	4560	15	2				
{ CAPRI-G	21 0810	0830			N20 E28	4560	20	1	2.00			
{ LOCARNO	21 0910	E 0940			N09 E13	4563	30	3		2.00		
{ CAPRI-G	21 0920	E 0927	D		N09 E13	4563	7	1	4.00		1.60	
{ KHARKOV	21 0932	0945			N08 E12	4563	13	2	3.00			
{ CAPRI-G	21 1119	1141			N08 E12	4563	22	1	3.00			
{ CAPRI-G	21 1319	E 1330	D		N09 E55	4574	11	1	3.00			
ALMA-ATA	22 0210	0758	D	0622	N08 E01	4563	348	2	13.50	9.45		79
ABASTUMANI	22 0435	E 1004	D	1001	N18 E00	4560	329	3	10.50	8.70	2.40	76
ABASTUMANI	22 0436	0829		0439	N26 E16	4560	233	3	2.20	1.48		70
ABASTUMANI	22 0454	0502		0456	N08 E60	4574	8	3	5.00	1.75		70
KRASNYA	22 0838	0858	D	0845	N16 E90	4578	20	2	3.70	.70		57
{ GOOD HOPE	23 0758	0810		0802	N23 E80	4578	12	16	8.60	1.50		
CAPRI-G	23 0800	E 0810		0800	N23 E76	4578	10	2	4.00			
KRASNYA	23 0800	E 0821		0800	N22 E85	4578	21	2	8.00	1.74		83
{ KHARKOV	23 0801	E 0805		0838	N22 E87	4578	4	2			1.20	
{ KRASNYA	23 0833	0842		0838	S16 E90	4579	9	1	3.20	.61		77
{ KHARKOV	23 0835	0845			S10 E85	4579	10	2			1.40	
{ LOCARNO	23 1300	E 1340	D		S22 W38	4565	40	3	1.00			

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		START	END	APPROX.	MATH PLAGE REGION	MEAS. AREA Sq. Deg.					CORR. AREA Sq. Deg.	MAX. WIDTH R _s	MAX. INT. %	
				LAT.	MR. DST.									
{KIEV	23	1306	1412 D	S24 W44		4565	66 D	3	1400	1.00	1.50		80	
LOCARNO	23	1310 E	1325 D	S13 E85		4579	15 D	3		3.00				
KIEV	23	1410 E	1412 D	S23 W48		4565	2 D	3	1411	1.71	2.90		60	
CAPRI-G	23	1439 E	1447 D	S10 E85		4579	8 D	2				1.70		
KHARKOV	24	0816 E	0855 D	S22 W53		4565	39 D	1	0820	1.28	1.70		50	
KIEV	24	1027 E	1046	N10 E39		4574	19 D	1	1029	4.28	4.70		70	
KIEV	24	1206 E	1213 D	N14 W16		4561	7 D	1	1207					
CAPRI-G	24	1455 E	1525	S16 E35		4576	30 D	1						
CAPRI-G	24	1542 E	1552	N18 W12		4561	10 D	2						
CAPRI-G	24	1604 E	1615 D	N19 W12		4561	11 D	2						
CAPRI-G	25	0529 E	0540	S15 E64		4579	11 D	2						
CAPRI-G	25	0636 E	0645	S15 E64		4579	9 D	2						
CAPRI-G	25	0650 E	0705	N15 W24		4561	15 D	2						
{CAPRI-G	25	0734 E	0740	S25 W67		4565	6 D	2						
{GOOD HOPE	25	0735 E	0820	S24 W70		4565	45 D	1	0735	1.00	2.90			
CAPRI-G	25	0745	0752	S15 E63		4579	7	2						
KIEV	25	0823 E	0834 D	N25 E19		4568	11 D	3	0830	1.71	2.20		60	
KIEV	25	0827	0843	S24 W70		4565	16	3	0829	2.96	7.10		80	
{GOOD HOPE	25	1117	1150	N08 E07		4575	33	3	1123	4.60	4.70			
KIEV#	25	1118 E	1128 D	N07 E05		4575	10 D	2	1124	5.13	5.50		120	
{GOOD HOPE	25	1122 E	1129 D	N08 E03		4575	7 D	1						
{CAPRI-G	25	1143	1210	S23 W70		4565	27	2	1151	1.00	2.90			
MT WILSON	25	1150 E		S25 W70		4565		2						
	25	1823	1838	N07 E02		4575	15	1						
{TASHKENT	26	0510	0541	N12 W55		4563	31	3	0514	3.54	6.00		60	
{ABASTUMANI	26	0510	0547	N11 W57		4563	37	2	0537	1.04	2.50		2.20	
KRASNYA	26	0548	0553 D	S28 W90		4565	5 D	2	0548	1.05	5.50		55	
{KHARKOV	26	0645 E	0831	S24 W85		4565	106 D	2	0650					
{GOOD HOPE	26	0714	0804	S26 W90		4565	50	2	0721	.40				
CAPRI-G	26	0720 E	0801	W85		4565	41 D	3						
CAPRI-G	26	0742	0753	S14 E39		4579	11	3						
{GOOD HOPE	26	0811	0846 D	S26 W90		4565	35 D	1	0821	.30	3.00			
CAPRI-G	26	0812 E	0848 D	W88		4565	36 D	3						
KRASNYA	26	0835 E	0948	S28 W90		4565	73 D	1	0911	.44	2.30		47	
KHARKOV	26	0856	1010	S24 W86		4565	74	2	0918	.86				
KIEV	26	0913	0921	N11 W55		4563	8	2	0917					
CAPRI-G	26	1139 E	1146	S18 W41		4559	7 D	2						
CAPRI-G	26	1532	1610	N08 W56		4563	38	2						
CAPRI-G	26	1538	1553	N10 E09		4574	15	2						
MT WILSON	26	1739	1812	N08 W14		4575	31	2						
VOROSHILOV	26	2343	0025	S13 W52		4559	42	2	2358	1.48	2.43		84	
VOROSHILOV	27	0011	0029	S23 W51		4559	18	2	0019	1.22	2.20		80	
ALMA-ATA	27	0354	0425	S11 W51		4559	31	2	0408	1.81	8.30		66	
{KRASNYA	27	0734 E	0738	N31 E88		4583	14 D	2	0732	.81	2.80		62	
{KHARKOV	27	0730 E	0746	N30 E80		4583	16 D	2	0740					
{CAPRI-G	27	1247 E	1255	N18 E17		4578	8 D	2						
KIEV	27	1412 E	1423 D	N19 E16		4578	11 D	2	1417	1.71	1.90		70	
{CAPRI-G	27	1420 E		N18 E16		4578	11 D	2						
VOROSHILOV	28	0012	0031	N10 W77		4563	20	2	0012	.70	2.50		104	

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		START	END	APPROX. LAT.	MAGN- ITUDE REGION				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	
KRASNAYA	28	0541	0846 D	N28 E90	4587	185 D	1	1	0.63	3.50	3.50	54
	28	1035 E	1055	S14 W15	4576	20 D	3	3	1.00	5.00	5.00	
CAPRI-G	28	1507	1527	S18 E14	4579	20	3	3		2.00	2.00	84
	28	1546	1557	S10 W00		11	1	1		2.00	2.00	
VOROSHILOV	28	1640 E	1700 D	N26 E28	4578	20 D	2	2	4.35	5.00	5.00	110
	28	2150	0000	S28 W09	4580	130	2	2	4.00	2.00	2.00	
SYDNEY	29	0351	0448 D	N15 W18	4574	57 D	1	1	1.53	2.20	2.20	60
	29	0632 E	0650	N26 E51	4583	18 D	3	3	2.15	3.00	3.00	
KHARKOV	29	0812	0842	N30 E22	4578	30	2	2	2.52	4.00	4.00	92
	29	1003 E	1034	N22 E39	4583	31 D	2	2	3.00	4.00	4.00	
{ MOSCOW-G	29	1005 E	1014	N26 E32	4583	9 D	2	2	7.07	12.00	12.00	65
	29	1043 E	1049 D	S17 E04	4579	6	2	2	1.85	4.30	4.30	
CAPRI-G	29	1529	1554	N24 E03	4578	25	2	2	1.89	4.00	4.00	81
	30	0057	0127	S16 E02	4579	30	2	2	2.83	5.50	5.50	
VOROSHILOV	30	0255	0420 D	N19 W51	4568	85 D	1	1	4.36	8.50	8.50	68
	30	0258	0433	N21 W48	4568	95	3	3	0.48	2.50	2.50	
TASHKENT	30	0300 E	0338	N22 W46	4568	38 D	2	2	0.35	1.80	1.80	55
	30	0313 E	0410 D	N24 W48	4568	57 D	2	2	0.86	6.00	6.00	
ALMA-ATA	30	0313 E	0410 D	N25 W44	4568	57 D	3	3	1.71	2.00	2.00	70
	30	0350 E	0520 D	N23 W49	4568	63 D	1	1	3.42	4.20	4.20	
SIMEIZ	30	0523	0626 D	N21 E90	4591	48	2	2	3.06	3.70	3.70	110
	30	0656	0744	N21 E90	4591	48	2	2	2.50	2.50	2.50	
KRASNAYA	30	0720 E	0740	N22 E90	4591	20 D	1	1	0.80	1.80	1.80	55
	30	0731 E	0944	N20 E90	4591	133 D	3	3	0.86	6.00	6.00	
CAPRI-G	30	0854 E	0900	N22 E90	4591	6 D	1	1	1.13	6.00	6.00	55
	30	0854 E	0901	N21 E90	4591	7	2	2	1.13	6.00	6.00	
CAPRI-G	30	0921 E	0945	N22 E90	4591	24 D	1	1	1.13	6.00	6.00	70
	30	1051	1057	N20 E17	4583	6	2	2	1.71	2.00	2.00	
KIEV	30	1057	1106 D	S15 E28	4581	9 D	2	2	3.42	4.20	4.20	165
	30	1059	1118	S18 E29	4591	19	1	1	3.06	3.70	3.70	
CAPRI-G	30	1059	1118	S18 E29	4591	19	1	1	3.06	3.70	3.70	110
	30	1103 E	1114 D	S16 E27	4581	11 D	1	1	3.06	3.70	3.70	
{ MOSCOW-G	30	1514	1532	S16 W13	4579	18	1	1	3.06	3.70	3.70	110
	30	1514	1532	S16 W13	4579	18	1	1	3.06	3.70	3.70	
MT WILSON	30	2225	2243 D	S17 W16	4579	18 D	1	1	3.06	3.70	3.70	110
	31	0145	0206	N16 W26	4577	21	3	3	2.50	2.50	2.50	
TASHKENT	31	0218	0229	N23 W16	4578	11	16	16	0.80	1.00	1.00	130
	31	0415 E	0914 D	N15 W28	4577	259 D	3	3	2.56	3.00	3.00	
ABASTUMANI	31	0553 E	0613 D	N20 W28	4577	20 D	2	2	6.98	8.80	8.80	185
	31	0557 E	0620	N14 W29	4577	23 D	2	2	7.00	5.30	5.30	
CAPRI-G	31	0710 E	0730	N14 W19	4578	20 D	1	1	2.00	3.00	3.00	S-SWF
	31	0952 E	1005	S29 E02	4584	13	1	1	2.00	3.00	3.00	
CAPRI-G	31	1004 E	1021	N11 W35	4577	17 D	1	1	3.00	3.00	3.00	70
	31	1045	1115	N18 W33	4577	30	1	1	3.00	3.00	3.00	
{ GOOD HOPE	31	1046 E	1049	N19 W35	4577	3 D	1	1	2.14	2.50	2.50	70
	31	1119 E	1150	N24 E80	4596	31 D	2	2	2.14	2.50	2.50	
KIEV	31	1119 E	1150	N24 E80	4596	31 D	2	2	2.14	2.50	2.50	70
	31	2258	2319	N28 E34	4583	44	2	2	7.00	7.00	7.00	
VOROSHILOV	31	2341	0016	N21 W30	4578	35	2	2	2.40	2.40	2.40	72
	31	2341	0016	N21 W30	4578	35	2	2	2.40	2.40	2.40	

COMMENCE - STANDARDS - BOLDER

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

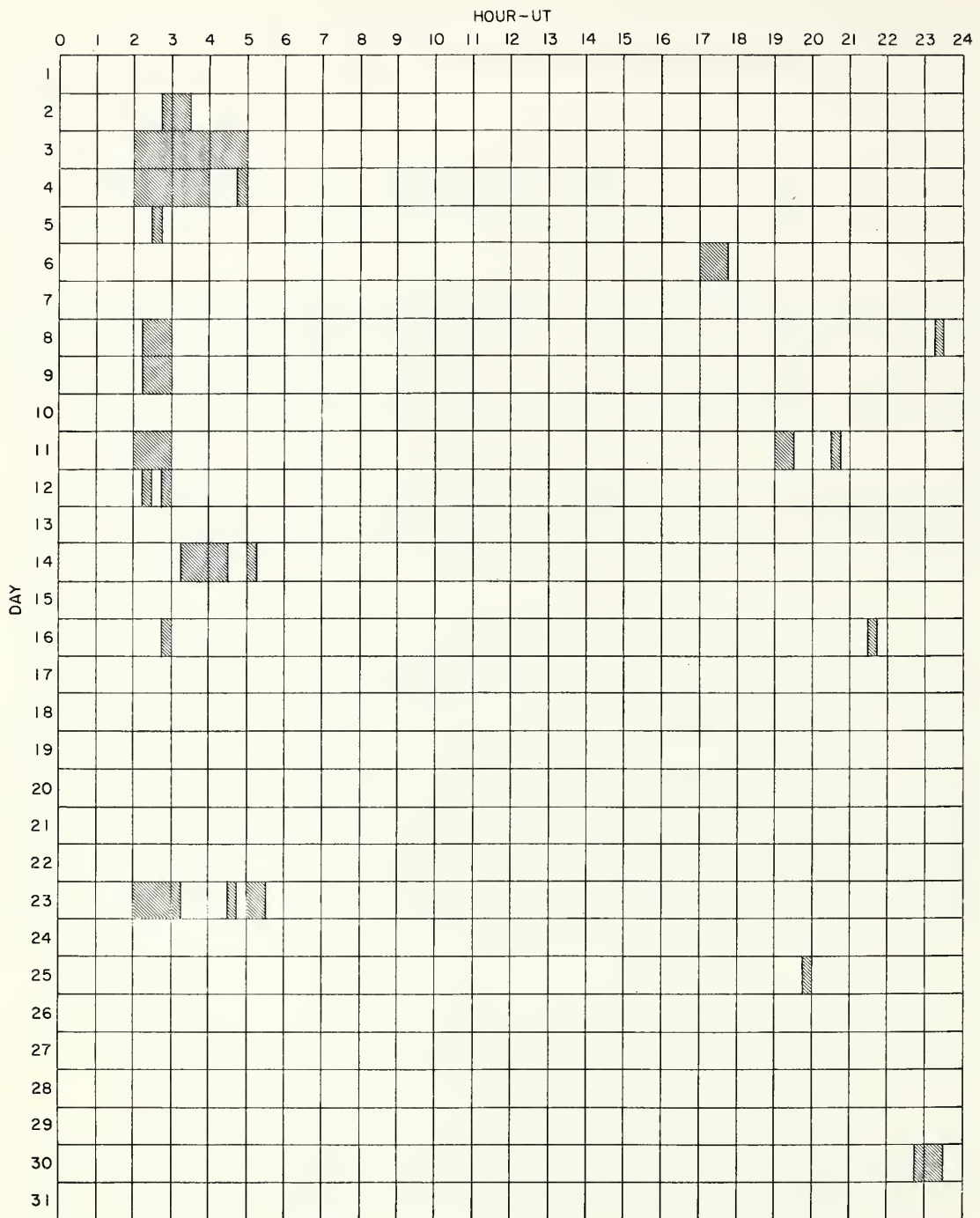
MOSCOW-G MOSCOW - GAISH
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUNIS SCHAUNISLAND
 USNRL UNITED STATES NAVAL RESEARCH LABORATORY

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

INTERVALS OF NO FLARE PATROL OBSERVATIONS

MAY 1958



Times indicated are accurate to the nearest 15 minutes.

Stations included:

Abastumani	Huancayo	Moscow University	Sacramento Peak
Alma Ata	Kharkov	Mt. Wilson	Simeis
Anacapri (Swedish)	Kiev, I, GAO	Nederhorst	Sydney
Arcetri	Kiev University	Nizamiah	Tashkent
Arosa	Kodaikanal	Ondrejov	Uccle
Athens	Krasnaya Pakhra	Ottawa	Utrecht
Capetown	Locarno	Pirculi	U.S. Naval Research
Climax	McMath	Royal Greenwich Observatory	Laboratory
Dunsink	Mitaka	Herstmonceux	Voroshilov
Hawaii	Meudon	Royal Observatory	Zürich.
		Edinburgh	

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURATION - MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MGRATH PLAGE REGION				MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.	MAX. WIDTH Ha	
ALMA-ATA TASHKENT ALMA-ATA ALMA-ATA ALMA-ATA SCHAUINS SCHAUINS SCHAUINS MOSCOW-G SCHAUINS	01	0310 E	0419 D	0410	S16 E09	4581	69 D	2	2	0410	5.80	5.80	83
	01	0259	0308	0308	N32 W24	4578	55	2	2	0309	7.00	2.60	65
	01	0310 E	0419 D	0312	N34 W25	4578	69 D	1	2	0312	4.90		74
	01	0310 E	0419 D	0313	N32 W24	4578	69 D	1	2	0313	4.30		76
	01	0310 E	0419 D	0312	N36 W21	4578	69 D	1.6	2	0312	2.10		81
	01	0752 E	0845	0816	N22 W31	4578	53 D	1	3	4.00	1.40		
	01	1040 E	1047 D	1040	S15 E03	4581	7 D	1	2	3.00	1.40		
	01	1113 E	1122 D		N15 W42	4577	9 D	1	2	4.00	1.60		
	01	1252 E	1302 D	1257	N28 W18	4578	10 D	1	3	3.00	1.50		
	01	1330 E	1346	1337	N30 E20	4587	16 D	1.6	1	1333	7.90		90
01	1712 E	1750		N19 W08	4578	38 D	1	2		3.00	1.30		
02	0254	0600 D	0339	N20 W20	4578	186 D	1	3	0339	2.70		71	
02	0307	0358	0406	S11 W40	4579	171	2	3	0406	7.70		81	
02	0331	0346	0339	S11 W44	4579	15	2	3	0339	5.90		84	
02	0714	0721 D	0719	S21 E90	4592	7 D	1	3	0719	2.30		60	
02	0930	0947		S20 E88	4592	17	1.6	3	0935	2.20			
03	0116	0204 D	0143	N03 W73	4577	48 D	1	2	0143	4.00			
03	0147	0204	0151	N12 W72	4577	17	1.6	2	0151	1.50		185	
03	0136	0248	0234	N22 W68	4578	52	1	2	0234	7.00			
03	0334	0410 D	0339	N31 W49	4577	36 D	1.6	2	0336	1.00		85	
03	0334	0437	0345	N34 W51	4578	63	2	2	0345	3.10			
03	0355 E	0502 D		N31 W49	4578	67 D	1.6	2	0402	4.50		84	
03	0451	0503	0455	N28 W45	4578	12	1	2	0455	12.50		80	
03	0847	0904		N13 W76	4577	17	1	4		1.80			
03	1040	1130	1108	N12 W76	4577	50	1.6	3	1108	2.00			
03	1320	1415 D		S22 E90	4592	55 D	2.6	2					
03	1400	1404		N30 W60	4578	4	1.6	2					
03	1510 E	1528	1511	N32 W51	4578	18 D	2	2					
03	1513	1525 D				12 D	2	2					
04	0055	0108		N46 E75	4597	13	1	2	0058	3.90		76	
04	0058	0106	0103	N47 E73	4597	8	1	2	0103	2.00			
04	0057	0125	0100	N14 W60	4578	28	1.6	2	0100	.50		120	
04	0134 E	0146		N26 W70	4578	12 D	1.6	2	0134	3.70		82	
04	0341	0350	0344	S23 E70	4598	9	1	2	0344	3.00			
04	1429 E	1433	1429	N43 E72	4597	4 D	1	2	1429	1.60			
04	1429 E	1516	1429	N17 W22	4583	47 D	1	2	1429	2.20			
04	1511 E	1519 D	1513	N14 W50	4583	8 D	1	2	1513	2.50			
04	1511 E	1519 D	1513	N43 E70	4597	8 D	1.6	2	1513	4.80			
04	2128	2133		N46 E44	4597	5	1.6	2	2128	2.70		97	
04	2150 E	2356		N14 W58	4578	126 D	2	2	2158	9.90		155	
04	2355 E	2358 D		N46 E67	4597	3 D	1.6	2	2358	2.80		120	
05	0133	0155	0136	N29 W70	4578	22	1	3	0136	2.00			
05	0159	0205 D	0203	N26 E66	4596	6 D	1	3	0203	.75			
05	0258	0307	0302	N29 E17	4587	9	2	3	0302	1.00		185	
05	0437	0452	0439	N26 E18	4587	15	1	3	0438	10.00			
05	0518	0525	0520	N45 E65	4597	7	1	3	0521	3.00		65	
05	0520 E	0530 D		N45 E68	4597	10 D	1	2	0520	2.00		70	
05	0605 E	0630 D		N17 W31	4586	25 D	1	2	0605	3.90			
05	0647 E	0937 D		N42 E57	4597	165 D	1.6	2	0605	2.50		56	

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA-TION - MINUTES	IM-POR-TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MER. DIST.	MATH. PLACE REGION				TIME - U T	MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.		MAX. WIDTH Hz
{ SIMEIZ	05 0648	0816 D	0707	N34 W79		4578	88 D	1	2	0650	5.00	5.00	1.50	72
{ SCHAUJNS	05 0712 E	0748 D		N29 W72		4578	36 D	1,6	2	0946	3.00	3.00	2.10	
MOSCOW-G	05 0718 E	1015 D		N42 E59		4597	177 D	2	1		17.50	17.50	2.50	100
SIMEIZ	05 0819	0842	0824	N28 E64		4596	23	1	2	0823	2.50	2.50	2.20	64
UCCLE	05 0828 E	0833		S20 W63		4581	5 D	1	3		3.50	3.70	4.30	
{ SIMEIZ	05 0828 E	0836		N43 E54		4597	6 D	16	3	0828	4.80	4.80	4.30	84
UCCLE	05 0834	0923 D	0844	N15 W65		4578	49 D	16	2	0844	8.80	8.80	4.00	
UCCLE	05 0836	0925		N15 W65		4578	49	26	3	0857	1.80	1.80	1.80	116
KRASNYA	05 0839 E	0927		N15 W63		4578	51	16	3	0849	7.70	7.70	4.30	67
{ KIEV	05 0839 E	0925 D		N15 W65		4578	36 D	16	2	0904	6.00	6.00	4.30	
UTRECHT	05 0847 E	0925	0847			4578	38 D	26	2					
SCHAUJNS	05 0849 E	0928 D		N16 W62		4578	49 D	2	3					
{ NEDERHORST	05 0853	0925 D		N16 W65		4578	49 D	2	2					
UCCLE	05 0905	0910		N44 E64		4597	33 D	26	3					
{ MOSCOW-G	05 0912 E	1015 D		N14 W60		4578	5	1	4	0905	3.00	3.00	2.20	110
{ PIRICULI	05 0920 E	0947 D		N23 W64		4578	63 D	2	1	0918	1.20	1.20	1.50	
{ KIEV	05 0942	0952	0944	N27 E63		4596	27 D	1	3	0920	9.04	9.04	3.00	51
{ UCCLLE	05 0942	0957	0945	N27 E62		4596	10	1	2	0944	4.00	4.00	3.00	
UCCLLE	05 0946	0948	0947	N32 E72		4596	15	16	3	0945	2.00	2.00	1.50	
UCCLLE	05 0948	0951	0949	N44 E65		4597	2	1	3	0947	1.50	1.50	3.00	
KIEV	05 1013 E	1025	1019	N18 W31		4583	12 D	1	3	1019	3.20	3.20	2.10	33
{ UCCLLE	05 1106	1110 D		N33 E60		4596	4 D	1	3	1110	1.50	1.50	2.10	
{ UCCLLE	05 1106	1120 D		N33 E60		4596	14 D	1	3					
UCCLLE	05 1109	1128 D	1128	N34 E65		4596	22 D	2	3	1128	5.00	5.00	2.10	47
{ NEDERHORST	05 1109 E	1113 D		S17 W31		4589	11 D	1	3	1110	1.70	1.70	3.40	48
{ KIEV*	05 1111 E	1114 D		N16 W26		4583	2 D	16	2					
SCHAUJNS	05 1130 E	1233 D		N17 W31		4583	3 D	1	1					
KIEV	05 1251	1259	1254	N28 E61		4596	63 D	1	2	1254	1.40	1.40	2.10	82
KIEV	05 1402 E	1416 D	1410 U	N14 W32		4583	8	1	2	1410	1.74	1.74	2.10	47
SCHAUJNS	05 1631 E	1820 D		N43 E50		4597	14 D	1	2					
VOROSHILOV	05 2257	2323 D	2304	S17 E66		4598	109 D	16	1					
TASHKENT	06 0330	0336	0332	N46 E42		4597	26 D	2	2	2304	1.85	1.85	3.40	82
ALMA-ATA	06 0357	0408	0401	N44 E49		4597	6	1	3	0332	2.00	2.00	2.30	70
TASHKENT	06 0436	0526	0439	N42 E52		4597	11	1	3	0401	2.10	2.10	2.30	79
ALMA-ATA	06 0443	0614	0508	N14 W80		4578	50	2	3	0439	6.00	6.00	3.60	110
SIMEIZ	06 0446 E	0531 D	0436 U	N17 W80		4578	91	1	3	0508	11.60	11.60	3.60	110
ABASTUMANI	06 0500	0535		N15 W78		4578	65 D	2	2	0446	6.40	6.40	4.00	112
ABASTUMANI	06 0519	0830	0624	N14 W78		4578	35	3	2	0500	32.00	32.00	4.00	84
{ ALMA-ATA	06 0524 E	0537	0529	N45 E45		4597	191	1	2	0630	4.40	4.40	2.30	65
{ SIMEIZ	06 0527 E	0545 D		N45 E52		4597	13	16	3	0529	2.50	2.50	2.60	81
SIMEIZ	06 0548	0557	0548 U	N44 E50		4597	13	1	2	0547	4.10	4.10	2.60	56
ALMA-ATA	06 0551	0604	0557	N43 E50		4597	9	1	2	0548	4.70	4.70	2.60	52
SIMEIZ	06 0617	0639	0624	N41 E53		4597	13	1	2	0557	1.90	1.90	2.30	80
{ SIMEIZ	06 0745 E	1000 D	0828	N46 E47		4597	135 D	1	3	0628	3.30	3.30	2.30	72
UCCLLE	06 0827	0844	0829	N46 E48		4597	15	16	2	0906	6.00	6.00	2.00	64
UCCLLE	06 0930	1035	0934	N45 E49		4597	65	1	3	0934	2.40	2.40	2.40	
UCCLLE	06 1036	1044	1008	N45 E49		4597	65	1	3	0934	2.20	2.20	2.20	
UCCLLE	06 1125	1136	1128	N44 E49		4597	8	1	3	1038	2.20	2.20	2.20	
UCCLLE	06 1248	1256	1252	S22 W23		4589	11	1	3	1128	2.20	2.20	2.20	
UCCLLE	06 1248	1256	1252	N43 E45		4597	8	1	3	1128	2.20	2.20	2.20	

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE JUNE 1958	OBSERVED TIME		MAX. PHASE	LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — U T	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX. LAT.	APPROX. MER. DIST.	McMATH PLACE REGION					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH He	
{ UCCLE	06 1305	1400	1307		N43 E45	4597	55	16	3	1307	3.40	3.70		G-SWF	
{ UCCLE	06 1305	1400	1337		N43 E45	4597	55	16	3	1337	4.50	5.00			
{ UCCLE	06 1510	1600	1530		N09 W25	4586	50	1	3	1530	2.20				
{ UCCLE	06 1608	1608	1600		N22 E50	4596	31	1	3	1600	2.20				
{ UCCLE	06 1605	1635	1611		N43 E45	4597	30	16	3	1611	3.40				
{ SCHAUINS	06 1614 E	1616 D			N43 E40	4597	2 D	2	1			1.80			
{ ALMA-ATA	07 0233	0301	0239		N51 E43	4596	28	1	3	0239		1.90		79	
{ ALMA-ATA	07 0237	0240	0239		N30 E39	4596	63	1	3	0239		1.70		64	
{ ALMA-ATA	07 0238	0258	0244		N27 E38	4596	20	1	3	0244		1.60		70	
{ ALMA-ATA	07 0240	0428	0305		N44 E34	4597	108	16	3	0305		7.00		73	
{ UCCLE	07 0819 E	0825			N45 E34	4597	6 D	16	1						
{ UCCLE	07 1019 E	1045 D			N28 E34	4596	26 D	1	3	1025	1.50	2.30		Slow S-SWF	
{ SCHAUINS	07 1509 E	1520 D			N43 E30	4597	11 D	1	1			2.00	3.00		
{ ALMA-ATA	08 0200 E	0500	0342		N45 E28	4597	180 D	1	3	0342		2.20		77	
{ ALMA-ATA	08 0315	0325	0318		N12 W44	4587	10	1	3	0318		3.60		63	
{ ALMA-ATA	08 0316	0324	0318		N12 W47	4587	8	16	3	0318		6.20		64	
{ ALMA-ATA	08 0338	0350	0343		N46 E23	4597	12	1	3	0343		1.60		76	
{ ALMA-ATA	08 0339	0352	0343		N44 E23	4597	13	1	3	0343		1.20		78	
{ KRASNIA	08 0751	0858	0852		N29 E26	4596	7	1	1	0852		.50		5	
{ SCHAUINS	08 0836 E	1049 D			N43 E20	4597	133 D	16	2			5.00			
{ KRASNIA	08 0850	0917	0901		N43 E19	4597	27	16	3	0901		.80		105	
{ KIEV	08 0850	0948	0855		N45 E20	4597	58	16	2	0855		4.87		72	
{ MOSCOW-G	08 0854 E	1002	0859		N45 E20	4597	68 D	2	1	0859		14.30	2.50	140	
{ MOSCOW-G	08 1018	1226 D			N26 W31	4587	8 D	1	1	1053		4.10	3.10	140	
{ SCHAUINS	08 1112 E	1640 D			N25 W53	4587	328 D	1	2			3.00	2.30		
{ SCHAUINS	08 1655 E	1713 D			N31 E30	4596	18 D	1	1			2.00	2.20		
{ MT WILSON	08 1753	1840	1758		N43 E12	4597	47	1	1					S-SWF	
{ TASHKENT	09 0557	0610	0601		N31 E21	4596	13	1	3	0601		2.00	1.60	65	
{ KRASNIA	09 0559	0608	0604		N32 E20	4596	7	1	3	0604		.30		88	
{ UCCLE	09 0603	0808			N05 W88	4583	5	1	2						
{ KRASNIA	09 0843 E	0846	0845		N46 E08	4597	2 D	1	3	0846		.60		91	
{ UCCLE	09 0843	0848	0844		N45 E06	4597	5	1	2						
{ ABASTUMANI	09 0856 E	0952 D			N40 E06	4597	56 D	16	2	0856		6.00			
{ UCCLE	09 0900	0900	0900		N32 E20	4596		1	2	0900	1.50	2.00			
{ SIMEIZ	09 0904 E				N45 E12	4597		16	2	0900		9.90			
{ KRASNIA	09 0905 E	0910 D			N41 E08	4597	5 D	16	3	0910		2.80		76	
{ MOSCOW-G	09 0907 E	0944	0914		N42 E06	4597	34 D	1	3	0910		1.20		84	
{ UCCLE	09 0913 E	0945	0914		N42 E08	4597	32 D	1	3	0914		4.30	2.70	130	
{ UCCLE	09 0941 E	0954	0944		S30 E35	4598	13	1	3	0914	3.00	3.50			
{ MOSCOW-G	09 0945 E	1004			S30 E40	4598	19 D	16	3	0947		5.60		90	
{ UCCLE	09 0950	0954	0951		N27 E13	4596	4	1	2	0951	1.50	2.30			
{ MOSCOW-G	09 0950 E	1012			N26 E14	4596	22 D	1	2	0950		3.70		130	
{ ABASTUMANI	09 0951 E	1001 D			N26 E13	4596	10 D	1	3	0951		2.60			
{ KRASNIA	09 0952 E	0954 D			N32 E19	4596	2 D	1	3	0952		.30		82	
{ UCCLE	09 1008	1052 D	1010		N44 E07	4597	46 D	1	3	1010	4.00	5.60		S-SWF	
{ MOSCOW-G	09 1012 E	1029			N45 E06	4597	17 D	16	1	1014		2.20		130	
{ SCHAUINS	09 1357 E	1423 D	1413		S16 E33	4598	26 D	1	3			3.00			
{ SCHAUINS	09 1528 E	1557 D	1541		N27 W72	4587	29 D	1	2			3.00			
{ TASHKENT	10 0304	0328			N43 W01	4597	24	16	2	0314		11.00	2.70	65	

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	DIR. POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MAGNIT. PLAGE REGION				METS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH He		MAX. INT. %
ALMA-ATA ALMA-ATA UCCLE	10 1958	0306	0327	N44 W01	4597	21	16	2	0318	1.50		84	
	10	0357	0418	N43 W06	4597	21	1	2	0407	1.20		66	
	10	1124	1146	S27 E30	4598	22	16	3	1129				
TASHKENT TASHKENT SIMEIZ {UCCLE SIMEIZ UCCLE UCCLE UCCLE {KIEV {CLIMAX CLIMAX {NEDERHORST	11	0300 E	0347 D	N42 W18	4597	47	D	3	0305	7.00	2.10	60	
	11	0553	0609 D	N42 W15	4597	16	D	1	0557	4.00	2.60	70	
	11	0951 E	0956 D	N46 W13	4597	5	D	1	0953	2.00	1.80		
	11	0956	1013	N26 W20	4596	17	1	3	1003	2.20			
	11	1002	1011	N27 W21	4596	9	D	1	1013	2.30	1.40	56	
	11	1055	1119	N09 W65	4586	24	1	3					
	11	1138	1146	N45 W14	4597	8	1	3	1140	2.20			
	11	1153	1211	N45 W14	4597	18	1	3	1158	2.10			
	11	1208	1211	S17 E08	4598	6	1	3					
	11	1234	1244 D	N44 W25	4597	10	2	1	1243	6.00		85	
ALMA-ATA {ALMA-ATA ALMA-ATA ABASTUMANI TASHKENT ABASTUMANI ABASTUMANI SCHAUINS SCHAUINS SCHAUINS MT WILSON {ABASTUMANI {SIMEIZ {MOSCOW-G {PIRCULI SCHAUINS {CLIMAX CLIMAX {MT WILSON ABASTUMANI ABASTUMANI ABASTUMANI UCCLE ABASTUMANI {SCHAUINS UCCLE CLIMAX MT WILSON MT WILSON MT WILSON MT WILSON ALMA-ATA	12	0210 E	0345	S20 W17	4598	95	D	3	0259	3.30		73	
	12	0210 E	0347	S24 W15	4598	97	D	3	0300	3.50		70	
	12	0422	0440	N44 W26	4597	18	1	3	0433	4.40		69	
	12	0504	0546	N28 W30	4596	42	1	2	0519	4.00		66	
	12	0512 E	0539	N25 W28	4596	17	D	1	0513	6.00	2.00	65	
	12	0610 E	0752	N45 W31	4597	102	D	16	0700	6.20		74	
	12	0707 E	0812 D	N14 E76	4607	65	D	2	6.00	2.40			
	12	0707 E	0735	S19 W00	4598	28	D	1	2	6.00	1.90		
	12	0707 E	0812 D	N44 W29	4597	65	D	2	2	7.00	2.30		
	12	1431 E	1550	N43 W32	4597	79	D	16					
	13	0657	0714	N27 W35	4596	17	16		0707	8.40	3.20		
	13	0659	0720	N26 W36	4596	21	16		0706	6.40	3.50	104	
13	0706 E	0715 D	N59 W39	4596	9	D	16	0712	6.60		120		
13	0713 E	0716 D	N33 W33	4596	3	D	1	0713	4.32				
13	1510	1527	N16 E54	4607	17	1	2	1511	3.00	2.90			
13	2321	2400 D	N11 E52	4607	39	D	1	2337	4.90				
13	2323 E	2358 D	N16 E56	4607	35	D	2						
14	0506	0622	S30 E62	4608	76	16		0510	6.60		64		
14	0508	0644	N15 E52	4607	96	1		0641	3.70		64		
14	0530	0851	N12 E48	4607	201	1		0535	3.60		68		
14	0925	0933	S27 E65	4608	8	16		0928	5.00				
14	0940	0944	S28 E64	4608	4	1		0943	5.60				
14	1115	1150	N14 E45	4607	35	2				4.10			
14	1119	1148	N15 E48	4607	29	26		1123	7.00				
14	1710	1742	N43 W53	4597	32	1		1725	11.00				
14	1717 E	1727	N45 W60	4597	10	D	1	1725	2.20				
14	1719 E	1800	N42 W56	4597	41	D	2			2.80			
14	2118	2134	N14 E40	4607	16	1							
14	2139	2143 D	N45 W58	4597	4	D	1						
15	0015 E	0042 D	N44 W60	4597	27	D	2						
15	0015 E	0042 D	N15 E41	4607	27	D	1						
15	0240 E	0314	N12 E40	4607	154	16		0305	6.20		76		

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MATH. MER. DIST.	PLACE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg		MAX. INT. %
{ MT WILSON KIEV CLIMAX	15	1401 E	1421 D	N15	E31	4607	20 D	1	2	1406	6.40	4.15	2.30	66	Slow S-SWF
	15	1405 E	1414 D	N13	E27	4607	9 D	1	2	2322					Slow S-SWF
	15	2320 E	2355	N12	E24	4607	35 D	2							
{ ABASTUMANI KRASNAYA PIRCULI UCCLE ABASTUMANI UCCLE UCCLE	16	0557	0918 D	N15	E19	4607	201 D	1	2	0648		2.40	2.30	70	
	16	0628 E	0700 D	N16	E22	4607	32 D	1	2	0650		11.00		84	
	16	0646	0701	N16	E14	4607	15	1	2	0651					
	16	0904	0927	N17	E13	4607	23	1	3	0913	2.20			65	
	16	0908	0918 D	N14	E16	4607	10 D	1	2	0913		2.10			
	16	0947	0953	N05	E80	4614	6	16	3	0949	2.20	3.70			
{ SCHAUNIS KRASNAYA KIEV MOSCOW-G KHARKOV UCCLE SCHAUNIS KIEV UCCLE	17	0555 E	0702 D	N30	W90	4596	7 D	1	2	0927		6.00	2.20	78	
	17	0911 E	1004	N39	W90	4597	53 D	1	2	0931		12.95		84	
	17	0921 E	0942	N39	W90	4597	21 D	2	2	0931		3.80		100	
	17	0925 E	0951 D	N39	W90	4597	44 D	1	2	0936		9.00	2.80		
	17	0929 E	1013	N40	W90	4597	4 D	1	1						
	17	0930 E	0934 D	N38	W90	4597	4 D	1	1						
	17	0932 E	1025 D	N30	W90	4597	53 D	1	2	1108		2.28	2.70	54	
	17	1055 E	1123	N06	E28	4610	28 D	1	2						
	17	1519	1533	N38	W90	4596	14	1	2						
	18	0210	0224	N25	E59	4613	14	2	2	0213	3.00	8.00		66	S-SWF
{ TASHKENT SYDNEY SYDNEY MT WILSON KIEV SCHAUNIS KIEV* MT WILSON SYDNEY	18	0553	0558	N20	E61	4613	5	1	2	0557	2.50	3.00		66	S-SWF
	18	2348	0003	N14	W14	4607	15	1	2	2359					
	19	0010	0125	N12	W17	4607	15	2	2	0036	6.00	6.50		225	S-SWF
	19	0217	0255	N11	W19	4607	38	2	2	0228	10.00	10.00		75	S-SWF
	19	0218	0245 D	N13	W19	4607	27 D	26	2	0226	8.00				
	19	0219	0240 D	N15	W17	4607	21 D	16	2						
	19	0944 E	1048 D	N10	W26	4607	64 D	2	2	1012		16.02			
	19	1001 E	1130 D	N14	W19	4607	89 D	2	2			9.00	3.40		
	19	1003 E	1053 D	N12	W24	4607	50 D	2	2			33.00			
	19	1442 E	1518	N15	W26	4607	36 D	1	2	0027	6.00	7.00			S-SWF
{ CLIMAX MT WILSON TASHKENT VOROSHILOV VOROSHILOV VOROSHILOV SYDNEY ALMA-ATA ABASTUMANI SCHAUNIS SCHAUNIS MT WILSON	19	2353 E	0052 D	N14	W29	4607	59 D	2	2	0030				64	
	20	0019 E	0050	N20	W48	4607	31 D	2			7.20				
	20	0321	0047	N15	W29	4607	26	1	3	0352		7.00	3.00	95	
	20	0340	0423	N15	W31	4607	43	16	3	0406		6.50		66	
	20	0350 E	0446	N09	W34	4607	56 D	16	3	2209		2.25		57	
	20	2209 E	2322	S26	W24	4608	73 D	1	3						
	21	0111	0140	S11	E71	4618	29	1	3	0113		2.14			
	22	0334	0350	N17	E70	4621	16	1	2	0337	.75	3.00			
	22	0445	0454	N14	E28	4616	9	1	2	0446		1.70			
	22	0456 E	0456 D	N14	E28	4616	10	1	2	0450		2.10		70	
{ ABASTUMANI SCHAUNIS SCHAUNIS MT WILSON	22	0856 E	0859 D	N19	W64	4607	3 D	1	2	0858		6.60			
	22	1655 E	1722 D	S09	E90	4624	27 D	16	1			3.70			
	22	1713 E	1722 D	S19	E90	4622	9 D	1	1			1.80			
	22	1805	1905	S14	E50	4618	60	1	1						
{ TASHKENT	23	0149	0236	S20	E80	4622	47	1	2	0211		16.00			C-SWF

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA-TION MINUTES	IM-POR-TANCE	OBS. COND.	TIME U T	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.					MGRATH PLACE REGION	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
ALMA-ATA ABASTUMANI TASHKENT SIMEIZ KRASNAYA ABASTUMANI PIRCULI MOSCOW-G PIRCULI SIMEIZ ABASTUMANI KRASNAYA MOSCOW-G	23 0206	0455	0402 U	0402	S21 E85	4622	169	2	3	0402	6.50	6.50	100	S-SWF
	23 0400 E	0832	0403 U	0403	S23 E87	4622	272 D	3	3	0400	20.00	20.00	100	
	23 0415	0850	0403 U	0403	S20 E81	4622	14	1	2	0402	17.00	17.00	100	
	23 0702	0850	0719 U	0719	N28 E55	4619	108	26	2	0712	20.00	20.00	117	
	23 0710 E	0818	0716 U	0716	N27 E55	4619	68 D	16	2	0716	3.10	3.10	117	
	23 0712 E	0829	0718 U	0718	N30 E50	4619	77 D	2	3	0715	20.00	20.00	90	
	23 0721 E	0837	0715 U	0715	N30 E50	4619	84 D	3	2	0715	33.00	33.00	90	
	23 0721 E	0838 D	0715 U	0715	N20 E50	4619	77 D	16	1	0734	11.90	11.90	90	
	23 0754	0824	0801 U	0801	S08 E40	4619	30	16	3	0800	8.00	8.00	108	
	23 0757	0841	0801 U	0801	S14 E37	4618	44	16	2	0800	5.10	5.10	98	
23 0758	0824	0802 U	0802	S13 E35	4618	31	16	3	0805	4.00	4.00	105		
23 0800	0815	0805 U	0805	S12 E36	4618	15	1	2	0805	1.50	1.50	80		
23 1302 E	1343 D	0805 U	0805	S23 E69	4622	41 D	16	1	1303	5.40	5.40	66		
24 0407	0640	0533 U	0533	S20 E63	4622	153	16	3	0533	5.80	5.80	63		
24 0415 E	0951 D	0515 U	0515	S22 E66	4622	336 D	16	2	0506	9.00	9.00	60		
24 0533	0739	0724 U	0724	S18 E68	4622	6	1	2	0536	1.50	1.50	60		
24 0710 D	0901	0853 U	0853	N11 W90	4607	29 D	1	2	0724	5.80	5.80	60		
24 0851	0901	1021 D	1021	S12 E20	4618	10	1	2	0853	2.20	2.20	70		
24 1016	1032 D	1021 D	1021	N07 E75	4623	16 D	16	2	1022	4.20	4.20	110		
24 1021 E	1033	1216 D	1216	S12 E64	4624	22 D	16	2	1022	5.60	5.60	55		
24 1154 E	1216	0440 D	0440	S10 E18	4618	22 D	1	1	1155	3.50	3.50	55		
25 0353 E	0609	0553 U	0553	N09 E60	4623	47 D	1	2	0355	12.00	12.00	65		
25 0356 E	0609	0553 U	0553	N05 E63	4623	245 D	16	2	0356	2.00	2.00	55		
25 0549	0829	0803 U	0803	N23 E90	4628	20	1	2	0533	5.50	5.50	52		
25 0800	0829	0813 U	0813	S15 E07	4618	9	16	3	0803	5.20	5.20	63		
25 0809	0828	0813 U	0813	S15 E47	4622	18	16	3	0813	4.20	4.20	58		
25 0815	2447	0242 U	0242	S22 E44	4622	92	16	1	0028	7.00	7.00	65		
26 0050	0106	0445 D	0445	S29 E40	4622	66	2	1	0028	11.00	11.00	55		
26 0245 E	0517 D	0417 U	0417	N14 E52	4623	120 D	3	2	0307	13.00	13.00	65		
26 0357 E	0720	2251 D	2251	N11 E51	4623	80 D	16	1	0418	11.00	11.00	55		
26 0718	0720	0308 U	0308	N27 E88	4628	2	1	2	0720	3.60	3.60	120		
26 2241	2251 D	0619 U	0619	N10 E40	4623	10 D	1	2	0620	6.00	6.00	76		
27 0300	0405	0810 U	0810	N10 E37	4623	65	2	2	0310	2.10	2.10	60		
27 0615	0619	0923 D	0923	S17 W16	4618	20	16	2	0620	2.30	2.30	73		
27 0802	0810	0859 U	0859	S20 W16	4618	8	1	2	0803	2.30	2.30	76		
27 0841	0923 D	0904 U	0904	S24 E25	4622	42 D	1	2	0910	2.60	2.60	76		
27 0842	0926	0904 U	0904	S24 E25	4622	54	1	2	0850	1.30	1.30	76		
27 0851	0925	0904 U	0904	S26 E24	4622	34	1	2	0905	4.00	4.00	130		
27 1120 E	1145 D	1537 D	1537	N09 E38	4623	23 D	1	1	1121	4.00	4.00	130		
27 1121 E	1132	0827 U	0827	N11 E38	4623	11 D	1	1	1125	1.40	1.40	60		
27 1243	1532 D	0910 U	0910	S23 E21	4622	19 D	16	4	1537	4.60	4.60	186		
28 0826	0837	0910 U	0910	S16 W16	4618	11	1	2	0827	2.20	2.20	76		
28 0817	0928	0904 U	0904	S16 E18	4622	71	1	3	0910	9.00	9.00	85		
28 0849	0928	0904 U	0904	S20 E14	4622	37	16	2	0908	2.42	2.42	76		
28 0845	0928	0904 U	0904	S19 E13	4622	39	1	2	0905	4.40	4.40	76		
28 0850	0930	0904 U	0904	S20 E14	4622	40	16	2	0909	2.60	2.60	76		
28 0851 E	0931	0904 U	0904	S19 E13	4622	40 D	1	2	0903	2.60	2.60	76		
28 0853	0933	0912 U	0912	S20 E12	4622	40	1	3	0912	2.00	2.00	76		

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA-TION MINUTES	IM-POR-TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	M-MATH PLACE REGION	MEAS. AREA Sq. Deg.				CORR. AREA Sq. Deg.	MAX. WIDTH Hg	MAX. INT. %	
MOSCOW-G	28	0914 E	0916 D	S18 E15	4622	2 D	1			2.30	3.00	120	
	28	0912	1004 D	N13 E23	4623	52 D	2			5.50		88	
ABASTUMANI	28	0924	0944	R11 E24	4623	20	1			1.10		80	
	28	0928	0945	N12 E25	4623	77	1			3.00	1.70		
KHMAROV	28	1100	1126	N23 E28	4630	26	1			5.00			
	28	1608	1724 D	S20 E02	4622	76 D	2			6.40			
CLIMAX	28	1705	1836	S22 E02	4622	91	1						
	28	1842	1857	S22 E08	4622	15	1						
MT WILSON	28	2033	2100	N18 E14	4623	27	16						S-SWF
	29	0309	0335	S12 W43	4618	26	1			5.00	2.60	80	
TASHKENT	29	0607 E	0624 D	N25 E82	4630	14 D	16			6.60	1.80	68	
	29	0623 E	0640 D	N19 E70	4630	17 D	1			4.00	1.80	52	
ABASTUMANI	29	0720	0752 D	S17 W08	4622	52 D	2			10.00	3.30	62	
	29	0729 E	0745	S08 E90	4633	14 D	16			5.40	1.80	56	
SIMEIZ	29	0832 E		N25 E82	4630	44 D	16			1.50		84	
	29	0849	0933 D	N11 E09	4623	26	1						
MT WILSON	29	1734	1800	S17 W19	4622	16	1						
	29	1802	1818	S18 W14	4622	16	1						
MT WILSON	29	2118	2134	S18 W22	4622	16	1						
	30	0253	0303	S12 W28	4624	10	1			2.00		184	
TASHKENT	30	0254	0304	S12 W28	4624	10	2			5.50	2.00	92	
	30	0431	0449	N10 W04	4623	18	1			2.00	2.00	75	
ALMA-ATA	30	0434 E	0447	N10 W02	4623	13 D	1			1.10		76	
	30	0434 E	0453	N09 W07	4623	19 D	1			2.00		79	
ALMA-ATA	30	0609	0622	N29 E78	4630	13	16			2.60	4.30	98	
	30	0610 E	0626	N30 E80	4630	16 D	2			10.00			S-SWF
SIMEIZ	30	0610 E	0626	N28 W37	4623	25	16			4.50			
	30	0818	0843	S12 W31	4624	6	1			5.50	2.60	68	
UCCLE	30	0932	0908	S12 W31	4624	41 D	1			2.80	2.60	90	
	30	1008	1049	S12 E04	4624	9 D	1			2.60	3.30	80	
ABASTUMANI	30	1159 E	1208 D	N25 E70	4630	12 D	1			2.18		48	
	30	1344	1356 D	N06 E70	4631	12 D	1			4.00	1.40		
MOSCOW-G	30	1650 E	1702 D	N24 E63	4630	12 D	1						
	30	2043	2049	S13 W37	4622	24	1						

COMMERCE - STANDARDS - BOLLNER

CAPRI G ANACAPPI - GERMAN
 CAPRI S ANACAPPI - SWEDISH
 GOOD HOPE ROYAL OBSERVATORY, CAPE OF GOOD HOPE
 KIEV* KIEV UNIVERSITY
 KODAIKANL KODAIKANL
 KRASNAYA KRASNAYA, PARKRA
 MOSCOW NIZMIR

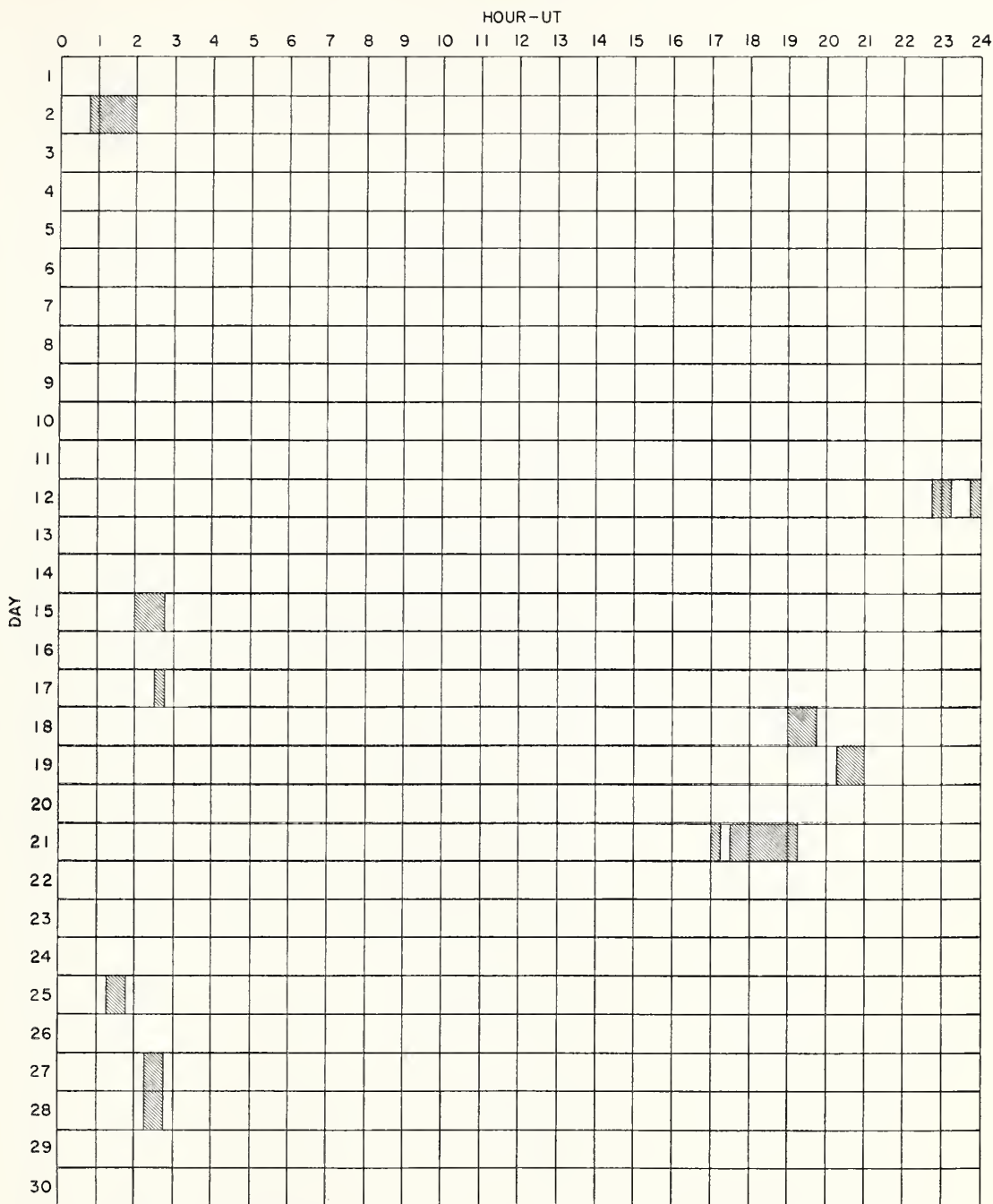
MOSCOW-G MOSCOW - GAISH
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUNSL SCHAUNSLAND
 USNRL UNITED STATES NAVAL RESEARCH LABORATORY

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

INTERVALS OF NO FLARE PATROL OBSERVATIONS

JUNE 1958



Times indicated are accurate to the nearest 15 minutes.

Stations included:

Abastumani
Alma Ata
Anacapri (Swedish)
Arcetri
Arosa
Athens
Capetown
Climax
Dunsink
Hawaii

Huancayo
Kharkov
Kiev I, GAQ
Kiev University
Kodaikanal
Krasnaya Pakhra
Locarno
McMath
Mitaka
Meudon

Moscow University
Mt. Wilson
Nederhorst
Nizamiah
Ondrejov
Ottawa
Pirculi
Royal Greenwich Observatory
Herstmonceux
Royal Observatory
Edinburgh

Sacramento Peak
Simeis
Sydney
Tashkent
Uccle
Utrecht
U.S. Naval Research
Laboratory
Voroshilov
Zürich.

IONOSPHERIC EFFECTS OF SOLAR FLARES

(SHORT-WAVE RADIO FADEOUTS)

OCTOBER 1958

Oct. 1958	Start UT	End UT	Type	Wide Spread Index	Importance	Observation Stations	Known Flare, UT CRPL-F 171B
1	1220	1255	S-SWF	4	1	JU, PR	1214E
2	0417	0549	Slow S-SWF	1	3	OK	
2	1816	1900	Slow S-SWF	5	1+	BE, HU, MC, PR, WS	1806
3	0553	0642	Slow S-SWF	5	2-	NE, OK	
3	1533	1700	Slow S-SWF	5	1+	BE, HU, MC, PR, WS	1524
3	1812	1840	G-SWF	5	1+	BE, MC, PR, WS	1811
3	1935	2000	Slow S-SWF	5	1	AD, MC, PR, WS	1926
4	1359	1419	S-SWF	5	1+	BE, HU, MC, NE, PR, PU	1357
4	1756	1823	Slow S-SWF	5	2-	AD, BE, FM, LA, MC, NE, PR, WS	1754
4	1923	1944	Slow S-SWF	4	1-	AD, BE, MC, PR	1919
5	1201	1227	Slow S-SWF	5	1+	DA, NE, PR	1206
6	1717	1738	S-SWF	5	1	BE, HU, LA, MC, PR, WS	
6	1757	1825	Slow S-SWF	5	2-	AD, BE, FM, HU, LA, MC, PR, WS	
7	0920	0943	Slow S-SWF	3	1+	NE, PU	
7	1517	1530	Slow S-SWF	3	1	HU, PR, WS	1510E
10	0200	0300	S-SWF	5	3	AD, CA, OK, TO	
10	1815	1832	Slow S-SWF	5	1	AD, AN, BE, FM, HU, LA, MC, NE, PR, WS	
11	0400	0431	Slow S-SWF	1	2	OK	
11	2238	2300	S-SWF	1	3	AD, LA	2236
12	0630	0653	Slow S-SWF	1	1+	OK	0630
13	0044	0122	Slow S-SWF	1	1+	OK	
13	0616	0656	S-SWF	5	2	KO, OK, PU, CW ⁺ , CW ^{**}	0046E
13	1103	1133	S-SWF	5	2+	BE, JU, MA, NE, ON, PR, SW, CW ^{**}	
13	1357	1413	Slow S-SWF	5	1	JU, MC, NE, PR	1347
13	1432	1500	S-SWF	5	2	BE, FM, HU, JU, MC, NE, ON, PR, WS	
13	1640	1720	S-SWF	5	2+	BE, FM, HU, LA, MC, NE, PR, WS	1601
13	1920	2005	S-SWF	5	2+	AD, AN, BE, FM, HU, LA, MC, NE, PR, WS, RCA ⁺	1912
13	2159	2230	Slow S-SWF	5	2	AD, AN, BE, HU, LA, TO, WS, RCA ⁺	
14	0103	0130	Slow S-SWF	5	2	AD, CA, HO, OK	
14	0249	0326	G-SWF	1	2+	OK	0312
14	0336	0356	S-SWF	1	1+	OK	0335
14	0502	0528	Slow S-SWF	5	1+	NE, OK	0505
14	0810	0837	S-SWF	3	2	NE, PU	
14	0922	0947	S-SWF	1	2	PU	0929E
14	1135	1155	S-SWF	5	2	BE, JU, MC, NE, PR, PU	1133E
14	1740	1835	G-SWF	5	1+	BE, FM, HU, MC, PR, WS	
14	2148	2215	S-SWF	3	1	AD, WS	2132
15	0926	1003	Slow S-SWF	3	2+	JU, PU	0921
15	1025	1050	S-SWF	5	2	JU, MA, NE, PU, CW ^{**}	1020E
15	1350	1403	S-SWF	5	1	BE, HU, LA, MC, PR, PU	
15	1450	1520	S-SWF	5	1+	AN, BE, FM, HU, JU, MC, NE, PR, PU, WS	1440E
15	1720	1740	Slow S-SWF	4	1-	BE, HU, MC, PR, WS	1702
15	2115	2132	S-SWF	5	1	AD, AN, HU, LA, MC, PR, WS	2113
16	0938	0959	Slow S-SWF	1	3	JU	0940
16	1713	1750	Slow S-SWF	5	1+	BE, FM, HU, MC, PR, WS	1705
17	1709	1853	Slow S-SWF	5	2+	BE, FM, HU, MC, NE, PR, WS	1704
18	0117	0150	Slow S-SWF	5	2+	AD, CA, OK, CW ⁺	0134E
19	0720	0750	S-SWF	5	2	JU, OK, PU, CW ^{**}	0710
19	1310	1325	S-SWF	5	2	JU, MC, NE, PR, PU	1309
20	1105	1119	S-SWF	3	1+	JU, KU, PU	1043E
20	1917	1933	S-SWF	5	1+	BE, FM, LA, MC, PR, WS	1912
21	1420	1445	Slow S-SWF	4	1	HU, MC, PR	1416
21	1550	1615	G-SWF	4	1	HU, MC, PR	1540
21	1952	2023	S-SWF	5	1+	AD, AN, BE, HU, LA, MC, PR, WS	1950
21	2328	0040	S-SWF	5	3+	AD, AN, CA, HO, LA, OK, TO, WS, RCA ⁺	2321
22	0705	0738	Slow S-SWF	5	2-	JU, OK, PU	0655
22	1423	1448	Slow S-SWF	4	1-	HU, MC, PR	1410
22	1530	1556	Slow S-SWF	4	1-	HU, MC, PR	
23	1155	1230	Slow S-SWF	1	1	NE	1149E
23	1725	1740	S-SWF	5	1	AN, BE, HU, MC, PR, WS	1655E
23	1839	1856	Slow S-SWF	3	1	HU, MC, PR	1837
24	1445	1635	Slow S-SWF	5	3+	BE, FM, HU, MA, NE, PR, SW, CW ^{**}	1438
31	0645	0653	S-SWF	1	1	NE	0643
31	0955	1034	S-SWF	3	2-	JU, NE, PU	0950E
31	1110	1129	S-SWF	3	1+	NE, PU	1110
31	1505	1520	Slow S-SWF	3	1	HU, MC, PR	1500

CA = Canberra, Australia.
CO = Cornell University, Ithaca, N.Y.
DA = Darmstadt, G.F.R.
FM = Darmstadt, G.F.R.
JU = Juhlesruh, G.D.R.
KO = Kodakkanal, India.
KU = Kuhlungsborn, G.D.R.
LA = Los Angeles, Calif.
MA = Madrid, Spain.
NE = Nederhorst den Berg, Netherlands.

PU = Prague, Czechoslovakia.
SW = Enkoping, Sweden.
TO = Hiraio Radio Wave Observatory, Japan.
CW⁺ = Cable and Wireless, Hong Kong.
CW⁺⁺ = Cable and Wireless, Singapore.
CW^{*} = Cable and Wireless, Barbadoes.
CW^{**} = Cable and Wireless, Somerton, England.
CW^{***} = Cable and Wireless, Brentwood, England.
RCA⁺ = RCA Communications Inc., Pt. Reyes, Calif.

IONOSPHERIC EFFECTS OF SOLAR FLARES

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(Sudden Cosmic Noise Absorption
Sudden Enhancements Of Atmospherics
Solar Noise Bursts At 18 Mc.)

APRIL 1958

DATE	CLASS			DEFINITENESS	TIME (UNIVERSAL TIME)			PERCENT ABSORPTION SCWA	REMARKS
	SCWA	SEA	BURST		BEGIN	MAX.	END		
01		1		5	1021	1028	1050		A1, ED
{01		1+		5	1053	1110	1158		ED, NE, PA
{01	✓	1		1	1054	1102	1127		ED
{01		2+		5	1415	1427	1502		A3, ED, NE, PA
{01		1		5	1536	1547	1602		ED, NE, PA
{01		1-		1	1541	1558U	1616U		RE
{01		1	1+	1	1541	-	-		RE
{01		1+		5	1633	1636	1637		BO, MC, RE, SP
{01		2+		5	1634	1641	1727		DU, ED, NE, PA, SP
{01		1		5	1637	1639	1657	19	BO, MC, RE, SP
01		1		4	1837	1839	1840		MC, SP
01		1-		4	1853	1854	1855		MC, SP
{01		2		5	2000	2005	2009		BO, MC, RE, SP
{01		1+		3	2005	2007	2008		BO, SP
01		1		1	2345	2400	0034		BO
02		1		1	0422		0452		HO
02		1		3	1354	1355	1358		MC, RE
02		2		3	1517	1519	1520		MC, RE
02		2		5	1544	1550	1609		BD, MC, RE
{02		2		5	1546	1554	1618		A3, BO, DU, ED, NE, PA
{02		1+		3	1552	1553	1558		MC, RE
{02		2		5	1608	1613	1615		BO, MC, RE
{02		1		1	1613	1614	1623	19	BO
{02		1		1	1614	1616	1629		BD
{02		1	2	3	1638	1640	1654		MC, RE
{02		1		4	1651	1659	1717	26	BD, RE
{02		1		5	1653	1700	1716		BD, ED, NE
02		1		4	1749	1750	1751		BD, MC
02		1		1	1755	1815	1835		SP
{02		1		4	1811	1816	1835U		RE, SP
{02		1		1	1811				RE
{02		2		5	1812	1818	1838		A1, BD, ED
02		1		1	1845	1847	1848		BO
{02		1		4	1929	1932	1946	15	BD, RE
{02		1+		4	1929	1936	1948		BD, DE
{02		2		5	1945	1948	1949		BO, RE, SP
{02		2+		5	1948	1959	2030	58	BO, RE, SP
{02		2+		5	1950	2005	2025		A3, BD, DE, PA, SP
{02		2		5	1953	1955	1956		BD, RE, SP
03		1+		5	0823	0830	0908		ED, HD, NE, TD
03		1		1	1406	1421	1442		DU, NE
{03		2		5	1442	1453	1532		DU, ED, MC, NE, PA, SP
{03		1-		1	1442	-	-		RE
{03		1		5	1444	1447	1510	15	MC, RE, SP
03		1+		1	1835	1850	1928		A3
03		2		1	1857	1901	1902		SP
04		1		5	1855	1859	1901		MC, RE, SP
05		2		1	0827	-	0829		HD
{05		1-		1	1352	1400	1414	10	MC
{05		1		5	1356	1402U	1447		DU, ED, MC
{05		1		1	1843	1847	1910	8	BD
{05		1		1	1847	1857	1910		BO
{05		1-		1	1932	1935	1945	9	BD
{05		1		1	1932	1952	2032		BO
{05		1-		1	2029	2032	2106	9	BO
{05		1-		1	2032	2036	2050		BD
06		1		1	1700	1702	1703		MC
06		1+		5	1740	1741	1742		BD, MC, SP
06		2+		5	1905	1908	1911		BD, MC, SP
06		2		5	2022	2025	2026		BO, MC, SP
06		2		4	2029	2101	2102		MC, SP
07		2+		4	0730	-	0830		HD, TD
{07		1		3	1014	1027	1200U		ED, NE
{07	✓	1		1	1015	1032	1054		ED
07		1+		4	1651	1654	1657		BO, MC
07		1		5	1706	1708	1709		BD, MC, SP
07		2		5	1713	1719	1719		BD, MC, SP
07		1+		5	1814	1817	1819		BD, MC, SP
{07		1		1	2003	2041	2117		SP
{07		1		1	2014	2038	2117	20	SP
{09		2		3	1435	1439	1444		MC, RE
{09		2+		5	1436	1503	1523		A3, ED, MC, PA, SP
{09		1		4	1439	1452	1523		MC, SP
{10		1		5	1618	1623	1637	19	BD, RE, SP
{10		1+		5	1619	1627	1730		A3, BO, DE, DU, ED, NE, SP
{10		1		4	1641	1644	1647		RE, SP
10		1+		4	1729	1731	1733		MC, SP
{10		1		5	2219	2229	2300	15	BD, MC, SP
{10		1		4	2220	2245	2315		A3, MC, SP
{11		✓		1	1149	1158	1235		ED
{11		✓		1	1151	1158	1205		ED
11		✓		1	1254	1301	-		ED
{11		1+		5	1335	1343	1358	15	BD, ED, MC, RE, SP
{11		1+		5	1335	1347	1430		A3, BO, DE, DU, ED, NE, SP
{11		1		1	1337	-	-		RE
11		1		3	1554	1557	1600		MC, RE
{11		1		1	1602	1608	1612		BO
{11		1		1	1602	1610	1621		BO

DATE	CLASS			DEPTH/FTNESS	TIME (UNIVERSAL TIME)			PERCENT ABSORPTION SCNA	REMARKS
	SCNA	SEA	Burst		BEGIN	MAX.	END		
12			2	4	1702	1704	1705		MC, SP
15		2+		5	0709	-	0730		HO, NE
15		1		3	1431	1441	1450		A2, DE
15			1+	4	1536	1537	1538		MC, SP
15			1	1	1742	1755	1812U		A2
15			1	4	1758	1801	1802		MC, SP
15		1+		4	2020	2021	2024		MC, SP
16		1		3	1018	1027	1044		ED, NE
16			1+	4	1706	1707	1709		MC, SP
16			1	4	1730	1731	1732		MC, SP
16			1	4	1803	1804	1805		MC, SP
16			1	4	2033	2034	2035		MC, SP
22			1	1	0838	-	0912		NE
24		1		1	1854	1910	1944	10	SP
24			1	1	1854	1920	-		SP
24		1-		3	1907	1914	1926	8	BO, SP
24			1-	1	1907	1922	1935		BO
26		1		1	1050	1054	1100		RE
26			1	1	1050	-	-		RE
26			3	3	1051	1057	1122		ED, NE
27			1	1	1457	1504	1622		ED
27		2+		1	1858	1917	2020	62	BO
27			2+	1	1858	1923	1940U		BO
28		3		1	0515	-	0615		RE
28			1	4	1735	1742	1745		MC, SP
28			1+	4	1750	1752	1755		MC, SP
29			1	1	1156	1201	1249		ED
29			2+	4	1440	1444	1447		MC, SP
29			2	5	1854	1928	2055		A1, ED, MC, SP
29			1	1	1856	1858	1859		MC
29		2		4	1910	1916	2100D		MC, SP
30		1		1	1545	1551	1610	12	BO
30			1+	5	1548	1600	1620		BO, ED, NE
30			1	1	1654	1700	1720		BO
30		1-		1	1658	1703	1710	5	BO
30			1-	1	1835	1836	1838		MC
30			2	5	1838	1848	1928		A1, BO, DE, ED, MC
30		1+		5	1840	1865	1915	34	BO, MC, SP
30			2+	5	1933	1936	1936		BO, MC, SP
30		1		4	1938	1941	2013	22	BO, MC
30			1+	4	1938	1949	2008		BO, MC
30			3+	1	2135	-	2215		TO



SOLAR RADIO EMISSION DAILY DATA

MAY 1958

Washington, D.C.

9530 Mc.

Day	Flux	Day	Flux	Day	Flux
May 1	278	11		21	246
2	284	12	262	22	254
3		13	260	23	
4		14	246	24	
5	295	15	248	25	
6	303	16	232	26	278
7	290	17	246	27	242
8	280	18		28	244
9	284	19	254	29	
10		20	246	30	
				31	

OUTSTANDING OCCURRENCES

May 1958	Type		Start UT	Duration Hrs.Mins	Maximum		Observing Period UT	Remarks
	IAU				Time UT	Peak Flux		
1	Simple 2	SD	1359.8	1.0	1400.0	18	Interference from radar	
	Simple 3	SD	1813.8	2 20.0	1751.3 Indet.	51		
2							1242-2030	
5	Complex f	CA	1325.1	26.1	1327.3	99	1259-2030	
	Simple 2	SD	1726.6	2.4	1329.1	102		
	Simple 3	SD	1818.3		1726.9	63		
	Simple 2	SD	1819.8	2.2	Indet.	47		
	Complex	CD	2033.6	9.4	1820.5	20		
	Post Inc		2042.0	15.0	2037.3	190		
6							1256-2030	
7			2010.0	very small rise			1256-2030	
8							1245-2043	
9							1245-2030	
12							1318-2020	
13	Simple 2	ESD	1620.4	0.3	1620.5		1242-2020	
14						21	1237-2030	
15							1300-2023	
16							1300-2030	
17							1447-2039	
19							1310-2030	
20							1250-2035	
21							1240-2030	
22							1242-1430	
26	Simple 2	ESD	1741.6	1.0	1741.9	11	1656-2115	
27							1247-2040	
28							1240-2040	

COMMENCE - STANDARDS - SQUARE

SOLAR RADIO EMISSION DAILY DATA

MAY 1958

Washington, D.C.

3200 Mc.

Day	Flux	Day	Flux	Day	Flux
May. 1	231	11		21	184
2	241	12	187	22	170
3		13	178	23	181
4		14	165	24	
5	250	15	172	25	
6	247	16	170	26	170
7	243	17	168	27	168
8	219	18		28	169
9	219	19	178	29	
10		20	175	30	
				31	

OUTSTANDING OCCURRENCES

May 1958	Type		Start UT	Duration Hrs. Mins	Maximum		Observing Period UT	Remarks
	IAU				Time UT	Peak Flux		
1	Complex	CD	1410.7	19.0	1412.6 1414.7 1705.0	16 16	1240-2035	Broad rise with radar interference. Level still up at end of period
	Simple 3A		1748.0	Indet.	Indet.	35		
	Simple 2		1750.9	2.0	1751.3	10		
	Simple 2		1812.7	7.3	1815.0	22		
2							1242-2030	
5	Complex f	CA	1326.3	21.0	1329.1	26	1259-2030	
	Simple 3A	SA	1817.0	Indet.	Indet.	22		
	Simple 2	SD	1819.5	2.4	1820.5	14		
	Complex	CD	2034.3	7.4	2036.3	651		
	Post Inc		2041.7	14.9		9		
6							1256-2030	
7	Simple 3A	CD	1412.3	14.2	1415.2	8	1256-2030	
	Simple 2	ESD	1419.2	0.6	1419.5	8		
	Simple 2	SD	2007.9	9.4	2008.9	18		
8	Complex	CD	1437.8	2.9	1438.2	12	1245-2043	
9							1245-2030	
12	Complex	CD	1405.3	6.1	1405.7	7	1318-2024	
13	Simple 2	ESD	1620.1	0.9	1620.5	20	1242-2020	
	Group (3)		1759.7					
	Simple 1	ESD	1759.7	0.3	1759.9	3		
	Simple 1	SD	1800.9	4.5	1801.1	7		
	Simple 1	SD	1807.3	1.5	1807.8	3		
14							1237-2030	
15							1300-2023	
16							1300-2030	
17	Simple 3A	SD	1853.7	10.3	Indet.	6	1447-2039	
	Simple 2	SD	1853.7	1.6	1855.1	11		
	Simple 2	ESD	1853.7	0.4	1856.3	14		
	Simple 2	ESD	1900.4	1.0	1900.8	9		
19							1310-2030	
20	Simple 1	SD	1659.3	2.2	1700.0	6	1250-2035	
21							1240-2030	
22							1242-2030	
23							1312-2040	
26	Complex	CD	1741.2	3.3	1741.9	34	1245-2115	
	Post Inc		1744.4	10.0	1744.6	4		
27							1247-2040	
28							1240-2040	

CORRECTOR - STANDAR - BUILDER

SOLAR RADIO EMISSION DAILY DATA

NOVEMBER 1958

Washington, D.C.

9530 Mc.

Day	Flux	Day	Flux	Day	Flux
1		11		21	237
2		12	234	22	
3	254	13	234	23	
4	259	14	234	24	260
5	257	15		25	259
6	252	16		26	268
7	247	17	222	27	
8		18	213	28	268
9		19	226	29	
10	236	20	233	30	
				31	

OUTSTANDING OCCURRENCES

Nov. 1958	Type		Start UT	Duration Hrs.Mins	Maximum		Observing Period UT	REMARKS
	IAU				Time UT	Peak Flux		
3	Simple 2	SD	1436.0	3.2	1435.9	27	1255-2128	Rain
	Complex Post Inc	CD	2002.3	5.2 10.5	2005.1	253 38	1238-2130	
5							1310-2107	
6	Simple 2	SD	1850.3	4.3	1851.3	45	1315-2128	
7	Simple 1	SD	1843.8	0.7	1844.1	5	1200-2102	
10							1235-2130	
12							1230-2127	
13							1235-2020	
14							1305-2123	
17							1240-2020	
18							1400-2030	
19							1830-2145	
20							1335-2125	
21							1245-2055	
24	Simple 2	SD	1555.3	5.2	1555.4	17	1235-2118	
	Simple 2f	SA	1601.0	24.3	1620.4	79		
	Post Inc		1625.3	>0220.0		53		
25							1230-2130	
26							1238-2120	
28							1314-2110	

SOLAR RADIO EMISSION DAILY DATA

NOVEMBER 1958

Washington, D.C.

3200 Mc.

Day	Flux	Day	Flux	Day	Flux
1		11		21	164
2		12	143	22	
3	186	13	139	23	
4	185	14	140	24	200
5	180	15		25	200
6	171	16		26	219
7	172	17	142	27	
8		18	149	28	220
9		19	149	29	
10	154	20	156	30	
				31	

OUTSTANDING OCCURRENCES

Nov. 1958	Type		Start UT	Duration Hrs. Mins	Maximum		Observing Period UT	Remarks
	IAU	SD			Time UT	Peak Flux		
3	Simple 2	SD	1436.2	2.6	1437.0	10	1255-2128	
4	Simple 2	SD	2003.8	15.2	2004.9	53	1238-2130	
5							1310-2107	
6	Simple 2	SD	1850.3	6.2	1851.4	71	1315-2128	
7	Simple 2	SD	1216.7	7.9	1217.8	12	1200-2102	
	Simple 2	SD	1843.7	1.6	1844.2	8		
10							1235-2130	
12							1230-2127	
13			1530.0	radar interference			1235-2020	
14							1305-2123	
17							1240-2020	Rain
18							1400-2030	
19							1245-2145	
20							1335-2125	
21	Simple 2	SD	1902.5	2.5	1903.7	11	1245-2055	
24	Simple 1	SD	1555.2	2.3	1556.0	6	1235-2118	
	Simple 2F	SA	1603.0	27.0	1620.3	258		
	Post Inc		1630.0	> 0215.0		68		
25							1230-2130	
26							1238-2120	
28							1340-2110	

COSMOS - STANDARDS - BALDER

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1958

Ottawa

2800 Mc.

Nov. 1958	Type*	Start UT	Duration Hrs:Mins	Maximum		Remarks
				Time UT	Peak Flux	
1	3 Simple 3 A	1400	4 30	1517	35	
	1 Simple 1	1659	2	1659.5	6	
	2 Simple 2	1818.5	1.5	1819.3	70	
	4 Post Increase A		5		12	
	1 Simple 1	1822.5	1.5	1823.2	6	
1	1 Simple 1	1907.5	1.5	1908	5	
2	3 Simple 3	1810	2	1850	15	
3	2 Simple 2	1436	2	1437	8	
4	2 Simple 2	2003.5	3	2004.8	50	
6	2 Simple 2	1850	3	1851.3	95	
7	2 Simple 2	1418	3	1418.8	14	
7	2 Simple 2	1843.5	2	1844	14	
8	6 Complex	1823.5	2	1823.8	5	
16	6 Complex	2031.5	2.5	2032.5	55	
18	6 Complex f	2031	16	2034	18	
20	1 Simple 1	1924.5	2	1925.5	7	
21	2 Simple 2	1903	2	1904	8	
22	3 Simple 3	1420	5 10	indet.	25	
23	6 Complex	1701.5	10	1707	11	
23	3 Simple 3 A	1920	>1 40	2005	10	
	6 Complex	1955.2	4	1956	20	
24	3 Simple 3 f A	1600	>5	indet.	35	
	2 Simple 2 f	1612.5	25	1620.2	285	
27	2 Simple 2	1346	3.5	1347.5	18	
27	3 Simple 3 A	1853	15	indet.	10	
	2 Simple f	1858.2	2.5	1859	50	
28	2 Simple 2	1255	5	1257.5	90	
	4 Post Increase		8		17	
29	1 Simple 1	1544.5	1	1545	7	
29	1 Simple 1	1830	4	1831.5	6	
30	1 Simple 1 f	1636	2	1636.7	7	

COMMERCIAL - STANDARDS - QUALITY

SOLAR RADIO EMISSION

DAILY DATA

NOVEMBER 1958

CORNELL

200 MC

Nov. 1958	Flux Density $10^{-22} \text{w m}^{-2} (\text{c/s})^{-1}$			Variability 0 to 3			Observing Periods
	Hours UT			Hours UT			Hours UT
	12 15	15 18	18 21	12 15	15 18	18 21	
1	[[20	24]		[[2	2]		1345-1705
2	[12	13]		[1	1]		1330-1700
3	[13	13	13	[0	1	0	1340-2100
4	[12	11	11	[1	0	1	1330-2040
5	[[11	12	16	[[1	1	2	1345-2115
6	[12	12	12	[0	0	1	1335-2105
7	[[12	12	12	[[1	0	0	1345-2105
8	[12	12]		[0	0]		1330-1700
9	[12	12]		[0	0]		1335-1700
10	[[12	12	12	[[0	0	0	1350-2120
11	[12	12	11	[0	0	0	1330-2100
12	[12	12	11	[0	0	0	1330-2100
13	[11	11	11	[0	0	0	1335-2105
14	[11	12	11	[0	0	0	1330-2100
15	[[11	12]		[[0	0]		1350-1700
16	[[11	12]		[[0	0]		1345-1705
17	[[11	12	11	[[0	1	0	1355-2100
18	[[11	11	11	[[1	0	0	1420-2100
19	[[12	12	13	[[1	1	2	1400-2100
20	[12	12	11]]	[1	1	1]]	1340-1915
21	[[12	12	12]]	[[0	0	1]]	1350-1900
22	[[13	13]		[[1	1]		1350-1700
23	[16	16]		[1	1]		1330-1700
24	[[16	35	33	[[1	2	2	1345-2115
25	[[18	14	12]]	[[2	1	1]]	1350-1850
26	[[13	12	12]]	[[0	0	1]]	1350-1830
27	-	-	-	-	-	-	
28	[[21	16	12]	[[2	2	2]	1350-2030
29	[[27	22]		[[2	2]		1345-1705
30	[[19	18]		[[2	2]		1400-1700

[= 1st hour missing.

[[= 1st two hours missing.

] = last hour missing.

]] = last two hours missing.

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1958

Cornell

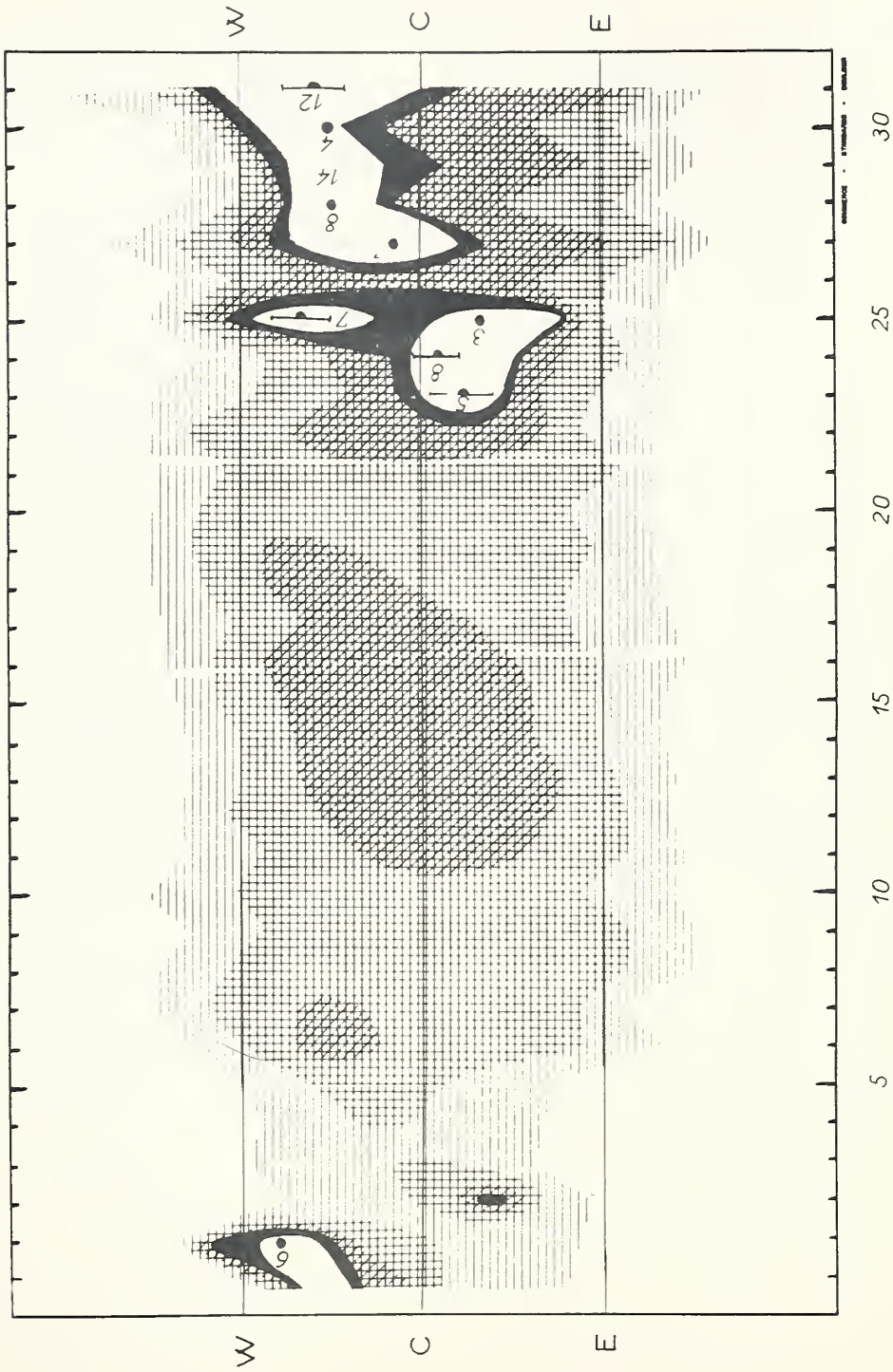
200 Mc.

Nov. 1958	Type Ap.J	Start UT	Time of Maximum	Duration Minutes	Type IAU	Max. Flux Density $10^{-22} \text{w m}^{-2} (\text{c/s})^{-1}$		Remarks
						Inst.	Smooth	
1	3	1527.5		1	CA	1700	1200	
	8	1655.5		1	CA	3200	2400	
2	3	1405		< .25	SD	210	180	
	2	1557.5	1559	2.5	CD	210	180	
	2	1621	1621	1.5	CD	91	72	
	3	1604		.25	SD	45	32	
4	2	2003.5	2003.5	3.5	CD	91	72	
	3	1853.5		.25	SA	40	28	
5	7	1923		>111	F			
	8	1850	1852	4	CD	320	260	
6	2	2007.5	2009	6	ECD	140	120	
	3	1448		< .25	SD	34	22	
	3	1702.5		< .25	CD	55	41	
	3	1850.5		< .25	SD	120	91	
10	3	1629		.5	CD	72	55	
12	2	1907.5	1907.5	2.5	CD	26	15	
17	2	1507.5	1511.5	6	F	45	27	
	3	1818		< .25	CD	210	180	
18	2	1452		.5	CD	35	24	
	3	1747		.25	CD	37	26	
19	3	1832		< .25	CD	41	26	
	2	1451	1455	5	F	45	33	
	3	1529.5		.5	CD	45	34	
	2	1540	1540	6	F	2800	2400	
	3	1703.5		1	CD	180	140	
	2	1829.5	1831.5	3.5	CD	440	380	
20	2	1908		2	CD	45	32	
	7	1935		>88	E			
	3	2051.5		.5	CA	320	260	
	3	1437	1437.5	1.5	CD	120	91	
21	3	1558.5	1559.5	1.5	CD	45	24	
	3	1510.5		< .25	SD	55	41	
	3	1827		< .25	SD	2000	1700	
22	3	1427.5		1	CD	72	55	
	3	1349.5		< .25	SD	260	210	
23	3	1352		< .25	SD	45	29	
	3	1551.5		.5	SD	180	140	
	3	1504.5	1505	1.5	CA	72	55	
	9	1608	1612	13	ECA	180	120	
24	9	1629	1642.5	>287	F	180	120	
	3	2040	2040.5	1	CA	210	140	
	0	1414		68	E			
25	2	1454	1454.5	2.5	CD	43	23	
	3	1729.5		.25	SD	45	32	
	2	1810	1810.5	2.5	CD	91	72	
28	6,5	1351		>261	E			
	8	1938	1938.5	1.5	CD	210	180	
	8	1949	1949.5	3.5	CD	530	440	
29	3	1349	1349	1	CA	120	72	
	2	1510	1511	2	CA	210	140	
30	1	1402.5	1405.5	27.5	F	210	150	

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATIONS

Nancay

169 Mc



NOVEMBER 1958

NOVEMBER

SOLAR RADIO EMISSION
DAILY DATA
AUGUST 1958

BOULDER

167 MC

Aug. 1958	Flux Density $10^{-22} \text{w m}^{-2} (\text{c/s})^{-1}$						Variability 0 to 3						Observing Periods
	Hours UT					Day	Hours UT					Day	Hours UT
	0	12	15	18	21		0	12	15	18	21		
	3	15	18	21	24		3	15	18	21	24		
1	-	30	42	22	23	29	2S	2S	2S	2S	2S	2S	12.1-01.9
2	-	21	19	25	18	21	2S	2S	1S	2S	1S	2S	12.0-01.9
3	-	18	23	22	25	22	2S	1S	2S	1S	2S	2S	12.1-01.8
4	-	26	19	22	21	22	2S	2S	2S	2S	2S	2S	12.2-01.8
5	-	17	16	17	18	17	2S	1S	0S	0S	0S	0S	12.2-01.8
6	-	25	23	24	31	26	0S	2S	2S	1S	2S	2S	12.9-20.8; 20.9-25.8
7	-	-	30	24	21	24	2S	-	2S	2S	2S	2S	12.1-13.8; 14.7-20.1; N1
8	-	18	21	21	22	21	1S	2S	2S	2S	2S	2S	12.1-01.8
9	-	23	28	41	63	41	2S	1S	1S	2S	2S	2S	12.2-01.8
10	-	41	63	164	191	124	2S	3	3	2S	2S	2S	12.2-01.8
11	-	58	55	50	47	51	2S	2S	2S	2S	2S	2S	12.2-20.2; 20.3-01.8
12	-	220	-	-	-	-	1S	2	-	-	-	-	12.2-15.9
13	-	-	-	398	81	236	-	-	-	2S	2S	2S	16.7-01.7
14	-	-	59	60	54	57	2S	-	1S	1S	2S	2S	14.2-01.7
15	-	45	211	116	83	120	1S	1S	2S	2S	2S	2S	12.2-01.7
16	-	24	24	27	33	27	2S	1S	1S	1S	2S	1S	12.3-01.5
17	-	49	42	36	-	41	0S	1S	1S	1S	-	1S	12.3-20.8
18	-	-	20	19	19	19	-	-	1S	0S	1S	1S	15.0-01.6
19	-	-	17	19	197	57	1S	1S	0S	0S	0S	0S	14.2-15.8; 16.3-01.5
20	-	-	19	-	26	22	2S	1S	1S	-	1S	1S	12.3-18.0; 21.3-01.5
21	-	85	148	109	84	106	1S	2S	2S	2S	2S	2S	12.3-01.5
22	-	91	639	403	411	407	1S	1	1	1S	1S	1S	12.3-01.5
23	-	165	123	110	89	115	1S	0S	0S	1S	1S	1S	12.3-01.4
24	-	58	43	46	34	43	1S	1S	1S	2S	2S	1S	12.3-01.4
25	-	56	59	82	46	94	1S	1S	2S	2S	1S	1S	12.3-01.4
26	-	121	58	30	26	50	1	1	1S	1S	1S	1S	12.3-01.3
27	-	-	23	22	21	22	2S	2S	1S	2S	1S	2S	12.4-01.3
28	-	-	16	16	17	16	1S	1	1S	1S	1S	1S	12.4-01.3
29	-	-	102	189	237	181	1S	2	2S	2S	1S	2S	12.4-01.3
30	-	-	171	85	119	139	0S	1S	1S	1S	2S	1S	12.4-01.3
31	-	-	68	87	130	100	1S	3	3	3	2S	3	12.5-01.3

Note: 1. August 7, Observed periods continued 20.4-01.8.

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

AUGUST 1958

Boulder

167 Mc.

Aug. 1958	Type Ap.J	Start UT	Time of Maximum	Duration Minutes	Type IAU	Max. Flux Density $10^{-22} \text{ w m}^{-2} (\text{c/s})^{-1}$		Remarks
						Inst.	Smooth	
1	6	1205 B	1510.1	325 D	CA	540	33	S
1	1	1730	2453.3	505 D	MF	260	-	S
2	1	1200 B	1228.9	132 D	MF	440	-	
2	4	1412	1448.1	78 X	CD	260	5	
2	2	1735.0	1735.5	2.3	ECD	660	180	
2	8	1842.9	1846.0	5.2	ECD	2200 D	-	
2	4	1934	2011.4	116	CD	200	15	
3	6	1530 X	2435.4	620 D	CA	290	8	S
4	1	1210 B	2113.4	820 D	MF	520	-	S
4	2	1212.7	1218.9	7.2	ECD	1700 X	-	
4	3	1228.7	1228.8	0.7	ESD	810 X	-	
4	3	1501.0	1501.1	0.3	ESD	1800 D	-	
4	2	2118.8	2119.9	2.8	CD	400	70	
6	1	1255 B	1343.5	775 D	MF	630	-	S, I 2043-2056
7	6	1205 B	1532.9	820 D	CA	1100	15	S, N2
8	1	1205 B	2140.4	820 D	MF	4200 D	-	S
8	8	1822	1822.3	3.0	ECD	5000 D	-	S
9	1	1210 B	1357.9	388 D	MF	190	-	S
9	6	1838	1940.6	427 D	CA	1300	50	S
10	6	1210 B	1437.9	815 D	CA	8200 D	180	S, N3
11	6	1210 B	1754.0	815 D	CA	1300	40	S, I 2012-2022
11	8	1903.1	1904.3	2.4	CD	7500 D	1300	S
12	6	1210 B	1407.1	223 D	CA	1200	200	N4
13	6	1638 B	1816.1	542 D	CA	3100 D	380	S, Large burst 2216.1
14	6	1410 B	2201.1	690 D	CA	3200 D	50	S
15	6	1210 B	1910.2	810 D	CA	2300 D	200	S
16	1	1215 B	2447.1	795 D	MF	120	-	S
16	2	1658.9	1659.5	1.9	ECD	84	50	S
16	9a	1706	1707.1	3.0	ECD	160	60	
16	9b	1710	1724.9	32	CD	120	30	I 1726-1729
17	1	1215 B	1422.0	515 D	MF	2300 D	-	S, N5, Large burst 1452.5
19	9	2150	2208.2	140 X	CD	500	230	
19	8	2440	2446.1	13 X	CD	1100 X	550	
20	1	1220 B	1532.7	790 D	MF	340	-	S, I 1800-2118
21	6	1220 B	1559.0	790 D	CA	480	140	S
22	6	1220 B	1432.4	144 D	CA	640	80	
22	9	1444	1508.0	121 X	CD	2000	730	S
22	6	1645 X	1816.8	525 X	CA	1700	390	S
23	6	1220 B	1814.0	785 D	CA	1400	140	S
24	6	1219 B	2022.9	786 D	CA	1800	38	S
24	3	1838.9	1839.5	0.9	ECD	1400	-	
25	6	1220 B	1632.8	716 D	CA	1100	70	Large bursts 1711.3, 1810.9
25	9	2416 X	2526.7	69 D	ECD	2400 D	-	I 2426-2429
26	6	1220 B	1355.0	780 D	CA	410	90	
27	1	1225 B	1441.8	775 D	MF	380	-	S
29	6	1225 B	2007.1	775 D	CA	1200	280	S
30	6	1225 B	1333.9	102 D	CA	1400	26	
30	9	1407 X	1516.4	143 D	CD	1500	200	
30	6	1630 X	1703.2	530 D	CA	380	120	
31	6	1230 B	1332.2	765 D	CA	1400	150	S

- Notes: 1. Interference may occasionally obscure or be mistaken for solar events.
 2. August 7, "I" times are 1350-1438, 2006-2023.
 3. August 10, Large bursts 1233.3, 1309.5.
 4. August 12, Equipment failure.
 5. August 17, Equipment failure.

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

NOVEMBER 1958

100-580 Mc.

Fort Davis

Date and Observing Times (U.T.) 1958	Type I (Noise Storms and Continuum)			Type II (Slow Drift Bursts) Unclassified				Type III (Fast Drift Bursts)			Remarks
	Bursts* or Continuum	Time	Int	II or Unclass	Act	Time	Int	Act	Time	Int	
Nov. 1 1330-2345		1337	1-					g	1431	2	
		1357-1403	1-					g	1432-33	2	
		1429-1631	1-	Uncl.	2325-26	3		b	1438	2	
		1631-41	1					g	1504	2	
		1641-1759	1-					G	1528-29	3	
		1819-27	1-					b	1604	2	
		1840-42	1-					b	1612	1-	
		1858-1927	1-					b	1654	1-	
		1943-47	1-					G	1656-57	3	
		2005	1-					b	1819	3	
		2142-57	1-					g	1821-24	2	
		2223-26	1-					b	1952	1-	
		2313-16	1-					g	2056	1-	
		2325-30	1-					g	2135	1	
								b	2214	3	
								g	2240	1	
							b	2253	1-		
Nov. 2 1330-2343		1358-1400	1-								g
		1517-19	1-					g	1406	3	
		1711	1-					g	1514-15	1	
		1719	1-					G	1558-1600	2	
	Cont.	1733	1-					g	1621-22	1-	
		1739	1					b	1643	1-	
		1824-36	1-					g	1706	1-	
		2019-35	1-					g	1730	3	
		2046-2146	1-					g	1733-34	2	
		2202-26	1-					g	2012	1-	
								g	2032	2	
							g	2142	1-		
Nov. 3 1331-2344		1415	1-					b	1517	1-	
		1531	1-					b	1646	3	
		2043-44	1-					g	2240-41	1	
		2045	1-					g	2245-46	1	
		2122-23	1-					g	2312	1	
		2135-36	1								
		2217-18									
Nov. 4 1330-2340		1408-09	1-	Uncl.	2007	2		g	1439	2	
		1434-36	1					g	2004-05	3	
		1454	1					g	2007	2	
		1652	1								
		1714	1								
	Cont.	2004	3								
		2009	1-								
Nov. 5 1331-2340		1545	1-					g	1745	2	
		1622-23	1-					b	2051	2	
		1854	1					g	2215-17	1	
		1859-1945	1-					b	2218	1	
		1945-51	1								
		1951-2006	1-								
		2006-2109	1								
		2109-2225	1-								
Nov. 6 1331-2340	Cont.	1851-52	3	Uncl.	1852	2		b	1641	2	
	Cont.	1852-53	1	Uncl.	1853	3		b	1851	2	
				Uncl.	1857	1-		G	2008-12	1-	
				Uncl.	1902-03	1-		b	2013-14	2	
								g	2018	1-	
Nov. 7 1331-2001 2046-2340								b	1449	3	
								b	1609	1	
								b	1703	3	
								g	1844	1-	
								b	1851	1-	
								g	1852	2	
								g	2203	2	
								g	2204	1	
								g	2205-06	2	
								C	2320	2	
								g	2320	2	
								b	2333	2	
Nov. 8 1331-2340		1337-39	1-					g	1815-16	1	
		1353	1-					g	1855-56	1-	
		1601-1746	1-					b	1857	3	
		1803-15	1-					b	1922	1	
		1815-23	1								
		1823-28	1-								
		1924-27	1								
		2058	1-								
	2104	1									

*Bursts unless specified otherwise.

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

NOVEMBER 1958

Fort Davis

100-580 Mc.

Date and Observing Times (U.T.) 1958	Type I (Noise Storms and Continuum)			Type II (Slow Drift Bursts) Unclassified				Type III (Fast Drift Bursts)			Remarks
	Bursts* or Continuum	Time	Int	II or Unclass	Act	Time	Int	Act	Time	Int	
Nov. 9 1331-2340		1501 1509-10	1- 1-					g	1452	2	
Nov. 10 1331-2340		2154	1-					b g	1542 1545	2 3	
Nov. 11 1330-2340											No activity observed.
Nov. 12 1330-2340				Uncl.		1914-17	1-	g g	1908-09 1910-11	1 1	
Nov. 13 1344-2340											No activity observed.
Nov. 14 1343-2340											No activity observed.
Nov. 15 1343-2340		2333-34	1-					g	2332	1	
Nov. 16 1344-2338		1631 1815 1941 2006-08 2153	1 1- 1- 1 1-					b b g g b b g g g g g g g g g g g	1800 1827 1830 1832 1902 1921 2023-24 2032-33 2116 2126 2135 2149 2151 2153-56 2254 2255 2329 2331	3 2 2 1- 1- 2 2 1- 2 1- 2 2 2 2 2 2 1 1 2	
Nov. 17 1342-2338		1514 1523-24	1- 1					G b g	1508-13 1521 1616	1 1- 1	
Nov. 18 1344-2338	Cont.	2213 2214	1 3					b g b g g g g g g g g g g g g b	1613 1747 2023 2053 2112-13 2122 2131 2211 2212 2214 2216 2217 2242 2253 2319 2327	1 1- 2 2 1 1 1- 1- 1 3 1- 1- 1 1 1 2 1- 1- 1	
Nov. 19 1344-2339		1904-2018 2018-2220 2239-2301 2310	1 1- 1- 1-					g b g b	1452 1453 1454-55 1530-31 1541 1542-44 1545-46 1704 1814 1830 1831 1832-33 1841 1907 2052 2100 2200	1- 1- 2 1 3 2 1 2 1 1- 1- 1 2 2 2 2 2 2 2 2 2 1 2	

Fort Davis

100-580 Mc.

Date and Observing Times (U.T.) 1958	Type I (Noise Storms and Continuum)			Type II (Slow Drift Bursts) Unclassified				Type III (Fast Drift Bursts)			Remarks	
	Bursts* or Continuum	Time	Int	II or Unclass	Act	Time	Int	Act	Time	Int		
Nov. 20 1345-2339	Cont.	1648-49	1					G	1437-38	2		
		1724-25	1					b	1552	1		
		1811-12	1					b	1553	1		
		1820	1-					g	1600-01	1		
		2330-31	1-					b	1625	1-		
								g	1647	1		
								g	1648	1		
								g	1708-09	1		
								b	1721	1-		
								g	1821	1		
								g	2019	1		
Nov. 21 1343-2339	Cont.	1349-56	1-					G	2318-21	2		
		2028	2									
		2319-20	1									
Nov. 22 1346-2339		1403	1-									
		1417-18	1-					g	1458-59	1		
		1501	1-					g	1540	1		
		1541-42	1					b	1541	2		
		1648-50	1									
		1705	1-									
		1714	1-									
		1726	1-									
		1912-18	1-									
		2030-31	1-									
		2051-2105	1-									
		2127	1-									
		2142	1-									
		2156-58	1-									
		2206	1-									
		2220-22	1									
		2236-41	1-									
2323-30	1-											
Nov. 23 1358-2338	Cont.	1359-2333	1-					b	1546	3		
		2010	1				g	1552	1			
								b	1703	2		
								b	1724	2		
								g	1755-56	1-		
								g	1757-58	1-		
								b	1957	1-		
								g	1958-59	1-		
Nov. 24 1358-2339	Cont.	1358-1612	1					g	1505	1		
		1607-10	3					G	1610-14	2		
		1610-19	1					G	1615-17	2		
	Cont.	1612-22	2					g	1619	2		
		1622-31	1					b	1758	2		
	Cont.	1631-42	2					g	1858	1		
		1635-53	1									
	Cont.	1653-2022	2					g	2041	2		
		1642-2106	3					g	2250	2		
		2022-2106	1									
		2106-31	2									
		2131-59	1									
		2159-2241	3									
		2241-2304	1									
		2304-08	2									
		2308-30	1									
Nov. 25 1357-2339		1359-1410	1-					b	1522	1-		
		1423-28	1-					g	2237-38	1		
		1428-49	1									
		1449-1515	1-									
		1524	1-									
		1604-06	1-									
		1956-2014	1-									
		2014-33	1									
		2033-44	1-									
		2101-04	1-									
		2115-19	1-									
		2154-2210	1-									
		2220-2222	1									
		2257	1-									
		Nov. 26 1357-2340		1653	2					b	1403	1-
				1707-10	1					g	1440	1-
				2044-45	1-							
2054-2150	1-											

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

NOVEMBER 1958

Fort Davis

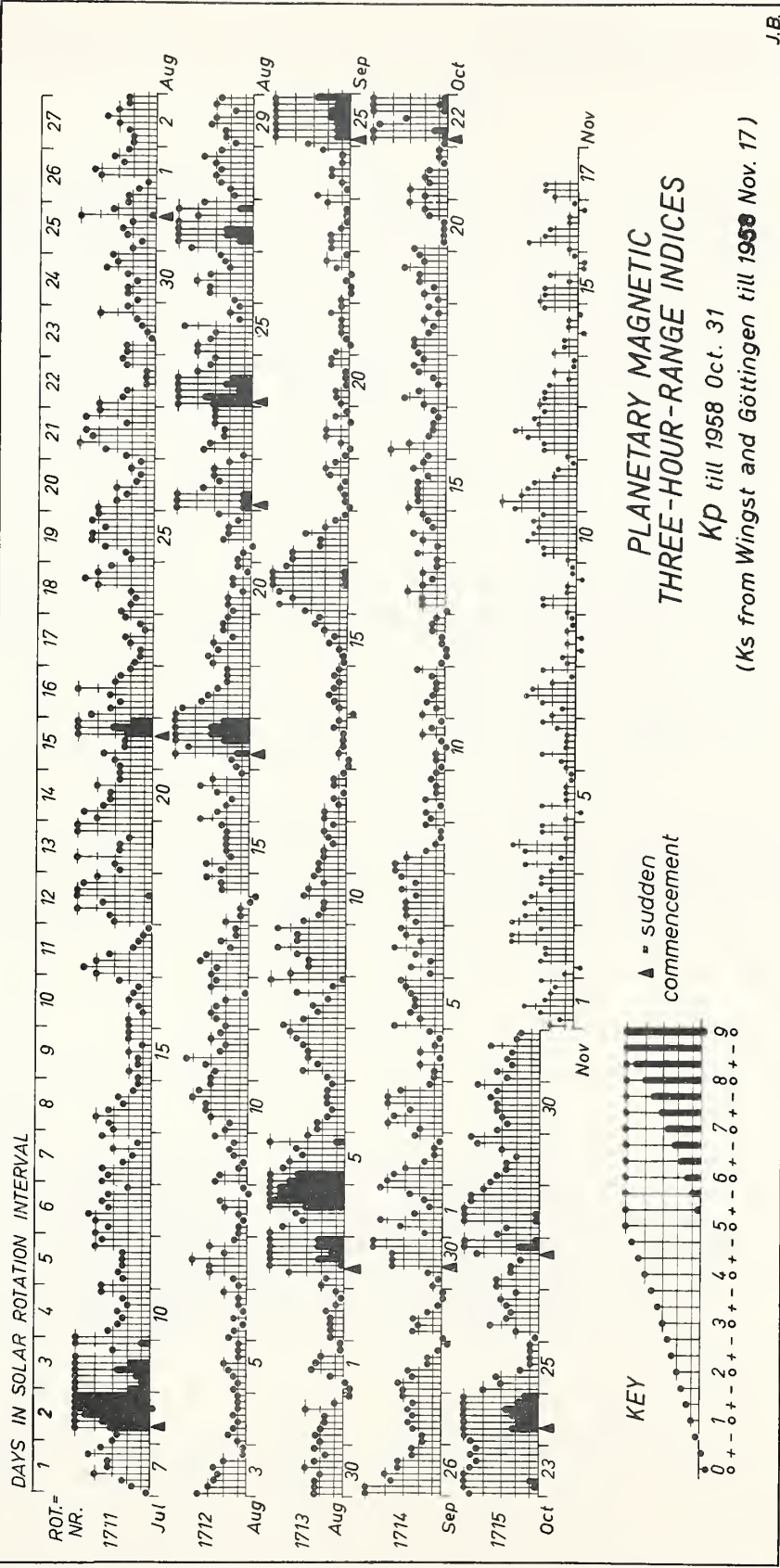
100-580 Mc.

Date and Observing Times (U.T.) 1958	Type I (Noise Storms and Continuum)			Type II (Slow Drift Bursts) Unclassified				Type III (Fast Drift Bursts)		Remarks		
	Bursts* or Continuum	Time	Int	II or Unclass	Act	Time	Int	Time	Int			
Nov. 27 1357-2338		1401	1-	II		1905.0-11	2	b	1358	1		
		1411-12	1-					G	1359-1400	2		
		1430-1501	1-					g	1416	3		
		1638	1-									
		1641	1-					g	1508-09	2		
		1701	1-					b	1515	1-		
		1705	1-					g	1559	3		
		1719-43	1-					g	1609	1		
		1743-1843	1					g	1643	3		
		1843-1906	1-					G	1655-57	2		
	Gont.	1859	3					b	1659	1		
		1919-54	1-					g	1706	1-		
		1954-2149	1					b	1707	2		
		2149-2332	2					g	1716	3		
								g	1718	2		
								b	1720	1-		
								b	1759	1-		
								G	1855-1904	3		
								b	1905	1-		
								g	2034-35	1-		
								b	2036	1-		
								g	2037-38	1-		
								g	2040	1-		
								G	2102-07	2		
								g	2118	3		
								G	2123-25			
								g	2210-11	1-		
			G	2212-14	3							
			G	2215-17	2							
			g	2218	1-							
			g	2221	2							
			b	2234	1							
			g	2300	2							
Nov. 28 1357-2340		1357-1454	1					b	1410	2		
		1454-1816	1-					g	1412-13	2		
		1843-1916	1-					g	1417	3		
		1936-38	1-					g				
		1948-51	1-					g	1445-46	1		
		2024	1-					b	1613	3		
	Gont.	2031-41	1-					b	1618	3		
		2120-21	1-					g	1907	2		
		2129-55	1-					g	1908	1-		
		2220-21	1-					g	1912-13	3		
		2241	1-					b	1931	1-		
		2316-2331	1					G	1938-39	2		
								G	1950-52	2		
								b	2002	2		
								g	2125	1-		
								g	2126	1-		
								g	2134	1		
							g	2138	2			
Nov. 29 1357-2340		1357-1515	1					g	1904	1-		
		1515-1608	1-					g	2210	2		
		1616	1-					b	2301	1-		
		1623-25	1-					g	2304	2		
		1636-1711	1-									
		1711-29	1									
		1729-1806	1-									
		1816-39	1-									
		1856-1929	1-									
		1929-42	1									
		1942-53	1-									
		2003-2318	1-									
		2318-2333	1									
	Nov. 30 1357-2340		1357-1439	1	Uncl.		2248-49	} 3	g	1359-1401	1	
			1439-1850	1-								
		1920-2055		II		2249.5-56	} 3	g	1454	1		
		2055-2140	2						b	1501	1	
		2140-2215	1					g	1502	1		
		2215-2329	1-					b	1714	1-		
								g	1715-16	1-		
								g	1749-50	1-		
								b	1751	1-		
								g	2142	1		
								b	2227	1		
								g	2229	1		
								g	2236-37	1-		
							g	2246-47	2			

*Burst unless specified otherwise.

GEOMAGNETIC ACTIVITY INDICES

Oct. 1958	C	Values Kp								Sum	Ap	Final Selected Days
		Three hour Gr. interval										
		1	2	3	4	5	6	7	8			
1	0.9	2-	3+	4+	2+	1+	2-	3-	4+	22-	15	Five Quiet
2	0.7	4o	4-	3o	2-	1o	1o	1-	2+	17+	11	
3	1.0	2o	4o	4-	3-	4o	4o	3+	1+	25o	18	
4	0.2	1o	1o	2o	1-	2o	1o	1-	1+	10-	5	
5	0.8	4-	2o	3-	2+	2+	3-	3o	3+	22o	13	
6	0.6	1+	3-	1+	2+	4-	2o	3o	3+	20-	12	
7	1.0	2+	3o	3o	3o	2+	3+	2+	3+	23-	14	
8	0.5	4-	4-	3o	2-	1o	1-	1-	2-	16o	10	
9	0.1	1+	2-	1-	2-	1o	1o	1+	1o	10-	5	
10	0.1	1-	1o	1o	0+	1-	2o	1+	1-	8-	4	
11	0.1	2o	1o	2-	1+	1o	1o	1+	2+	12-	6	Five Disturbed
12	0.0	1-	0+	0+	1-	1-	1+	1+	1o	6+	3	
13	0.3	0+	2o	2o	3o	2o	1+	2o	1o	14-	7	
14	0.4	1o	2+	1o	2o	3-	1+	2-	2o	14o	7	
15	0.7	3o	2+	2+	2+	2+	2-	3-	2o	19-	10	
16	0.4	2-	4o	3o	2-	1+	1+	1o	1+	15+	9	22
17	0.4	2o	3+	2+	1o	1+	2+	3-	2o	17o	9	23
18	0.2	2+	3-	3-	2-	1+	2o	1o	2-	15+	8	24
19	0.6	1o	2o	1+	2+	2+	3+	2o	2+	17-	8	27
20	0.3	3-	1-	1-	1-	1-	2-	2o	3o	12o	6	28
21	0.2	2o	3o	2-	2o	2-	1-	1o	1o	13o	6	Ten
22	1.5	1-	5+	6o	5-	3+	5+	6-	5+	36+	47	Quiet
23	1.4	5-	5+	6-	5o	5-	4+	5-	4+	39-	44	4
24	1.8	5-	5o	7-	6+	7-	7o	6+	6o	49-	89	9
25	0.6	4o	3o	3+	2-	1o	1o	1o	1o	16o	10	10
26	0.8	1-	2o	4-	3-	2+	3-	3o	2o	19o	11	11
27	1.4	3+	3+	2+	2+	2-	4+	6+	5+	29o	30	12
28	1.4	3+	3-	5+	5+	5o	5-	5-	4o	35o	37	13
29	1.0	4-	3+	3-	3-	2o	3o	4+	5-	26+	20	14
30	1.0	3+	3-	3o	3+	3+	4-	3+	4+	27o	19	18
31	0.8	3-	3+	2+	3-	2+	4-	2o	2-	21-	12	20
												21
Mean:	0.68									Mean:	16	



CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS
NORTH ATLANTIC
OCTOBER 1958

Oct. 1958	North Atlantic 6-hourly quality figures				Short-term forecasts issued about one hour in advance of:				Whole day index	Advance forecasts (J-reports) for whole day; issued in advance by:				Geomag- netic K _{Fr}	
	00 to 06	06 to 12	12 to 18	18 to 24	00	06	12	18		1-7 days Final Js	1-7 days SDW	1-7 days J	1-7 days	Half Day (1) (2)	
1	6+	6+	7+	7-	5	6	7	7	7-	7		7	2	2	
2	6-	7-	7+	7+	7	6	7	7	7-	7		7	3	1	
3	7-	7o	7+	7-	7	7	7	7	7o	7		7	2	3	
4	7-	7-	7+	7+	7	7	7	7	7o	7		7	2	1	
5	7-	7+	7+	7+	7	7	7	7	7o	7		7	2	3	
6	7o	7+	7+	7+	7	7	7	7	7+	7		7	2	3	
7	7-	7-	7+	7-	7	7	7	7	7-	7		7	3	3	
8	6+	6+	8-	7o	7	6	7	7	7-	7		7	3	1	
9	7o	6+	7o	7o	7	7	7	7	7o	7		7	1	1	
10	7o	7o	7+	7+	7	7	7	7	7o	7		7	1	2	
11	7+	7+	7+	7+	7	7	7	7	7+	7		7	1	1	
12	7+	7+	8-	7+	7	7	7	7	7+	7		7	0	1	
13	7+	7+	7+	7+	7	7	7	7	7+	7		7	2	2	
14	7+	7+	8-	7+	7	7	7	7	7+	7		7	1	2	
15	7o	7o	8-	7+	7	7	7	7	7+	7		7	2	2	
16	7-	7+	7+	7+	7	7	7	7	7+	7		7	2	2	
17	7o	7+	8-	8-	7	7	8	7	7+	7		7	2	2	
18	7o	8-	8-	8-	7	8	7	7	7+	7		7	2	2	
19	7+	8-	8-	8-	7	8	8	7	8-	7		7	1	2	
20	7+	7o	8-	7+	7	7	7	7	7+	7		7	1	2	
21	7+	8-	8-	7+	7	7	8	7	7+	7		7	2	1	
22	7o	5+	7o	6o	7	7	6	6	6+	7		7	3	(4)	
23	5o	4+	6-	5+	5	5	4	6	5o	4		4	(5)	3	
24	3+	3-	4+	4+	5	4	4	4	(4-)	3		3	(5)	(5)	
25	4+	5o	7o	7o	3	4	5	7	6-	5		5	3	1	
26	7+	6+	7o	7-	7	7	7	7	7o	6		6	3	2	
27	6+	7-	7+	6-	7	6	7	7	7-	6		6	3	3	
28	7-	7-	7o	5+	6	7	7	6	6+	7		7	3	3	
29	5+	6+	7o	6o	6	5	7	7	6o	7		7	2	3	
30	5+	7-	7o	6o	6	6	7	6	6+	7		7	3	3	
31	6+	7o	7+	7o	5	7	7	6	7o	7		7	3	2	
Score: Quiet Periods					P	21	20	21	22	21					
					S	8	8	7	8	9					
					U	0	1	1	0	0					
					F	0	0	1	0	0					
Disturbed Periods					P	0	0	1	1	0					
					S	1	2	0	0	1					
					U	1	0	0	0	0					
					F	0	0	0	0	0					

() represent disturbed values.

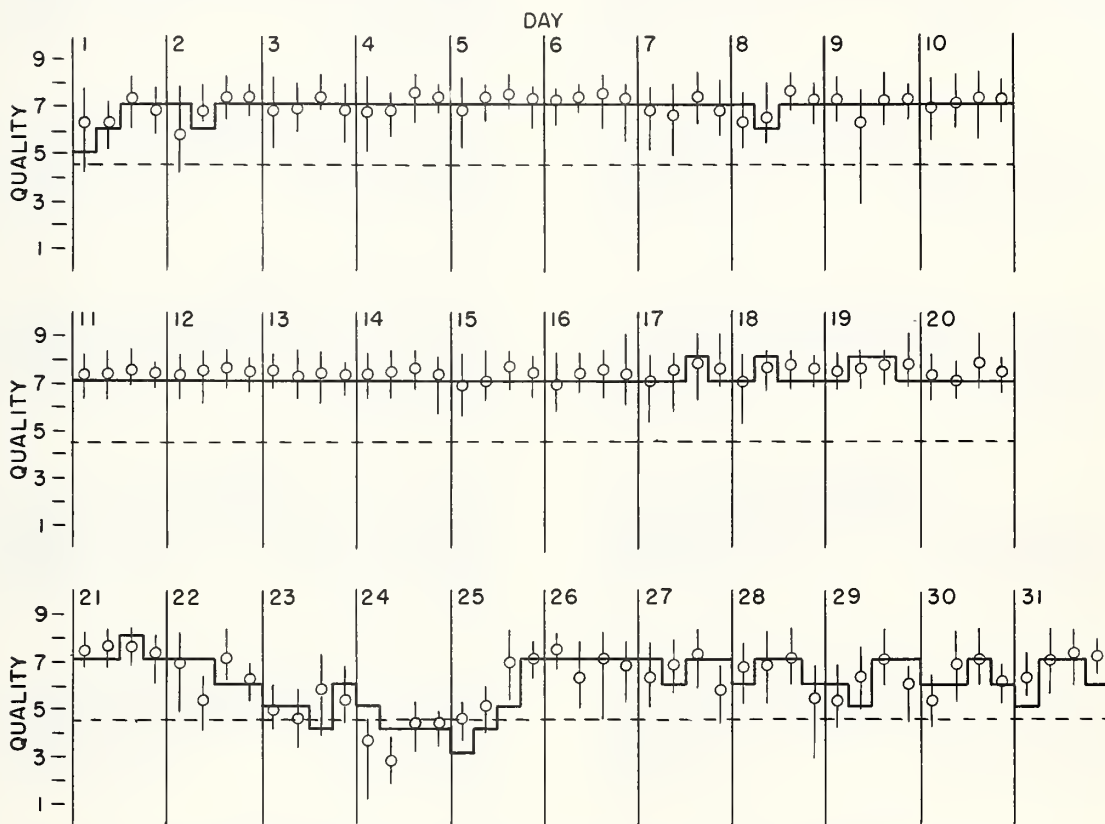
CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC

OCTOBER 1958

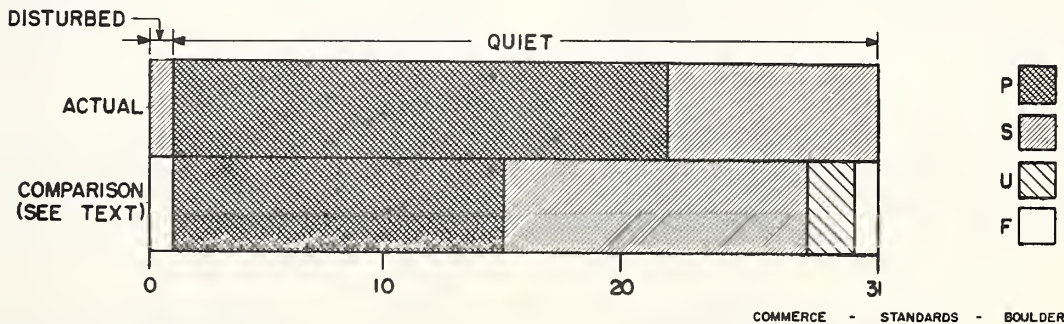
— Short-term forecast
 ○ Quality figure

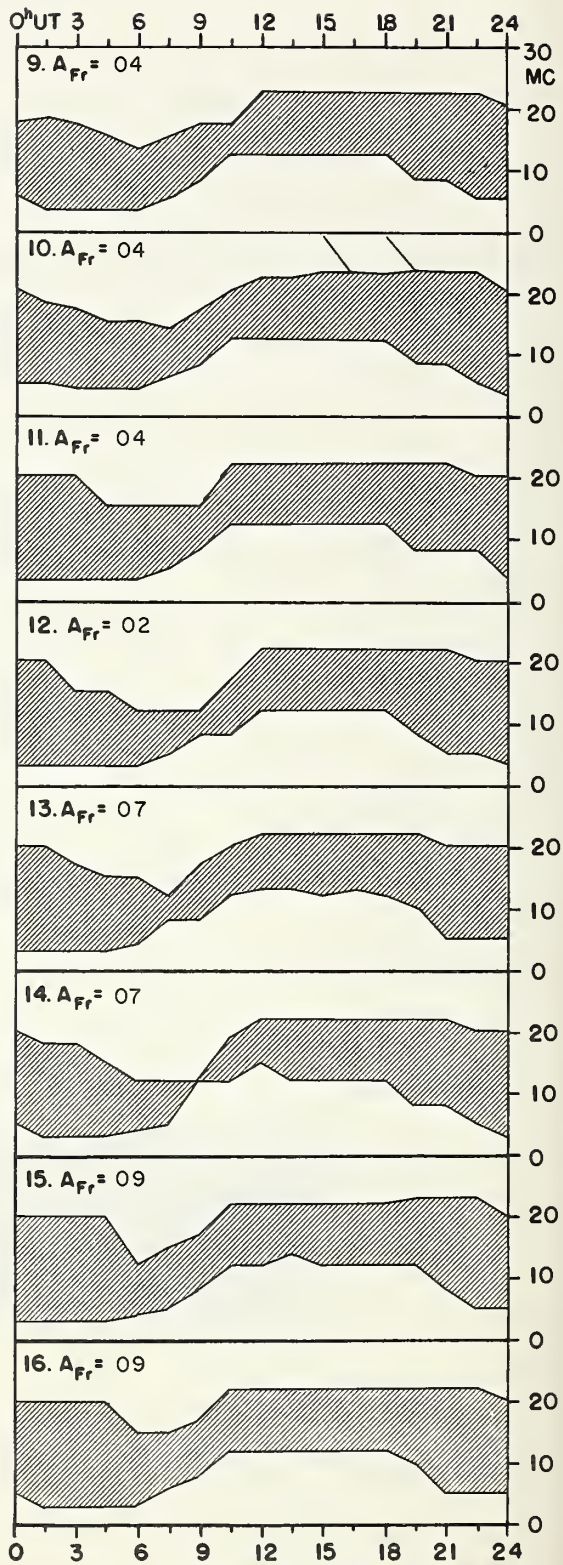
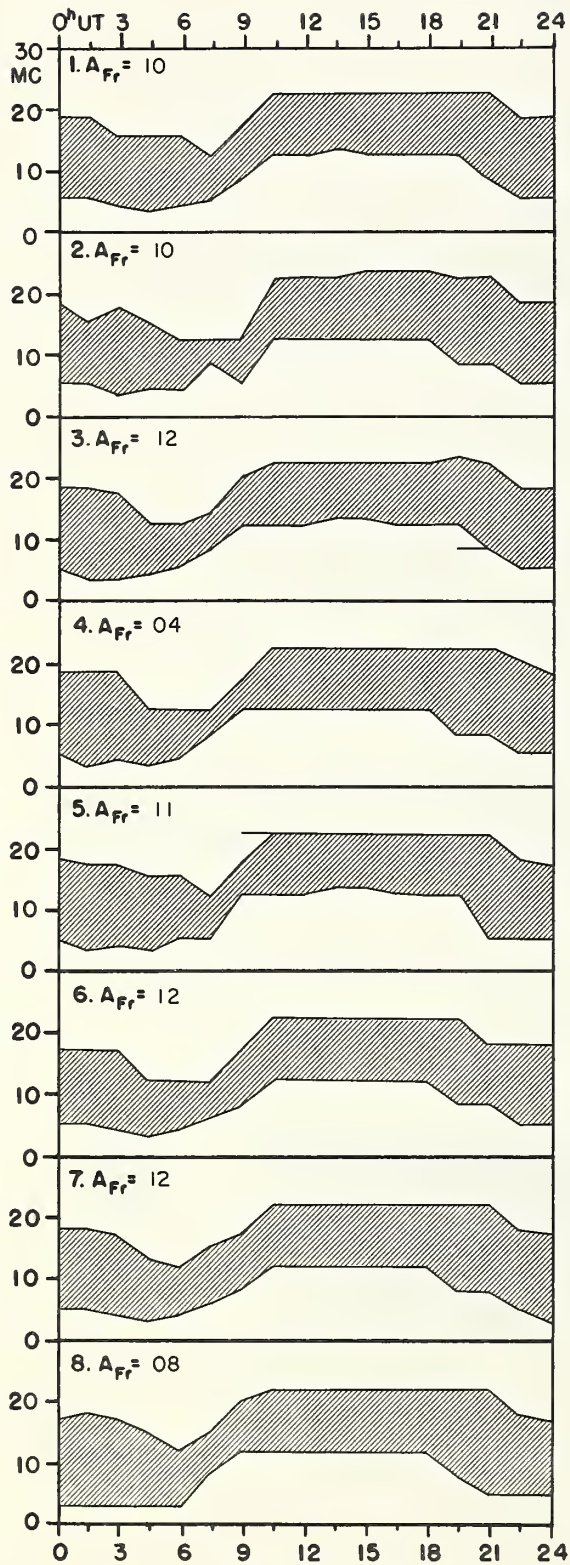
| Range of reports

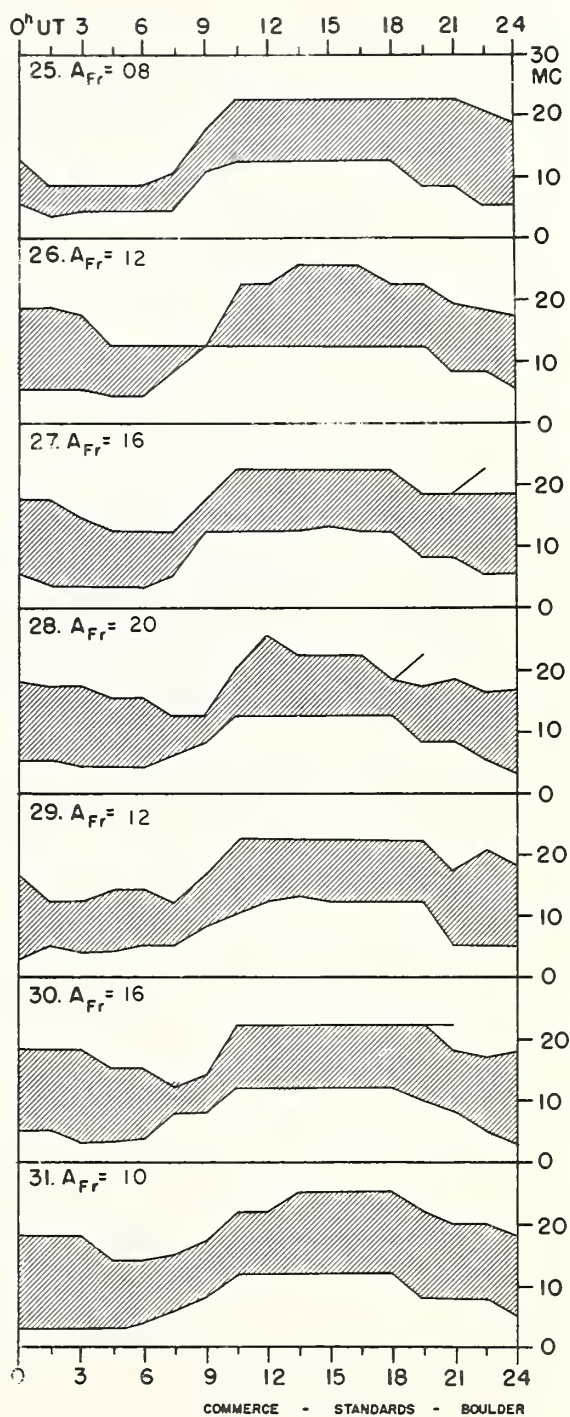
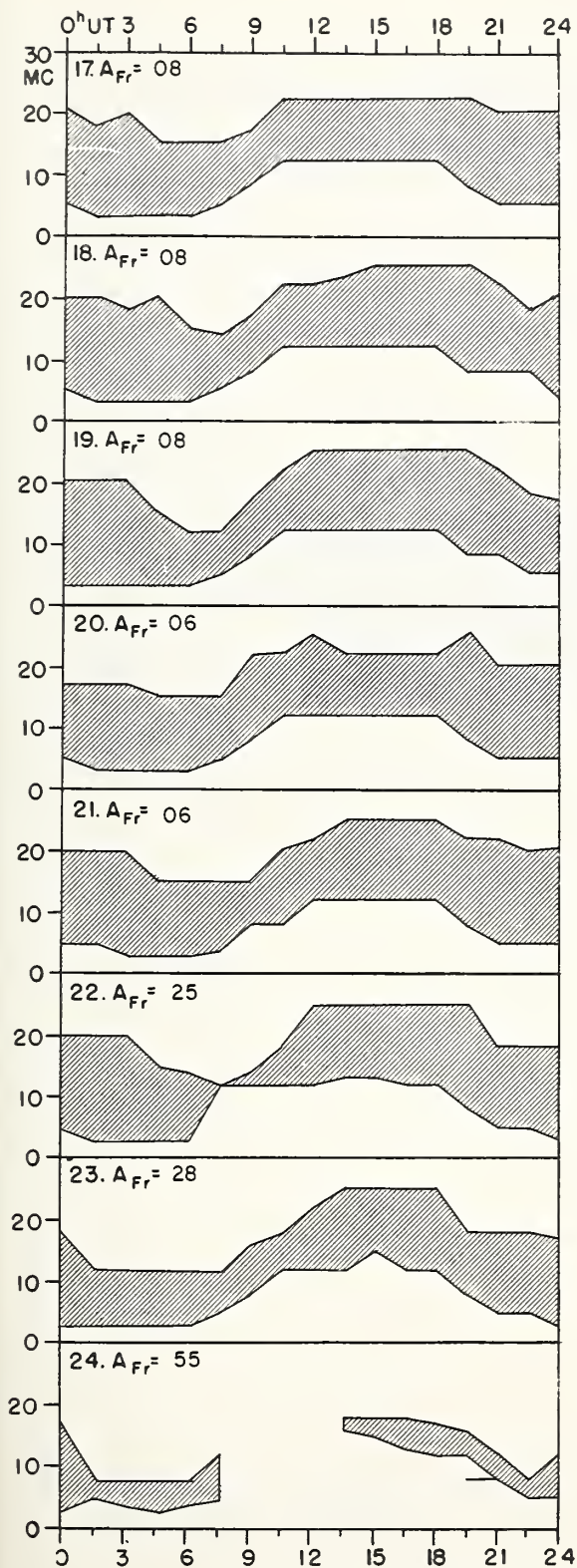


OUTCOME OF ADVANCED FORECASTS

FINAL ESTIMATE







CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH PACIFIC

OCTOBER 1958

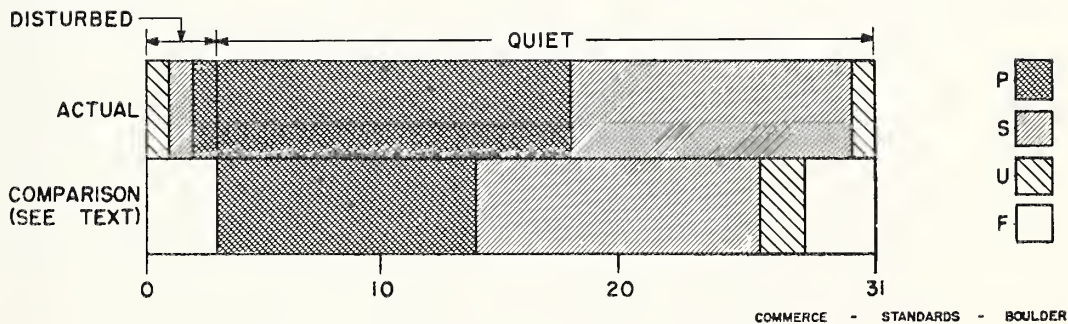
Oct. 1958	North Pacific 8-hourly quality figures			Short-term fore- casts issued at			Whole day index	Advance forecasts (Jp reports) for whole day; issued in advance by:			Geomag- netic K _{SI}	
	03 to 11	11 to 19	19 to 03	02	10	18		1-4 days	4-7 days	8-25 days	Half Day (1) (2)	
1	6	5	6	6	6	6	6	6	3		2	2
2	6	6	6	6	6	6	6	6	7		3	1
3	6	6	7	6	6	5	7	6	7		3	(4)
4	6	6	7	6	6	6	6	6	7		1	1
5	6	6	7	6	7	6	6	6	7		1	2
6	7	6	7	6	6	7	7	6	7		1	2
7	6	6	7	6	6	6	6	6	7		3	2
8	6	6	7	6	6	7	7	6	6		2	1
9	6	6	7	7	7	7	7	7	7		1	1
10	6	6	7	6	7	7	6	7	7		0	1
11	7	6	7	7	7	7	7	7	7		1	1
12	7	6	7	7	7	7	7	7	7		0	2
13	6	6	7	7	6	7	6	7	7		2	3
14	7	6	8	7	6	6	7	7	7		1	2
15	6	5	6	7	6	6	6		7		2	2
16	6	6	7	7	6	6	6	7	7		2	2
17	7	6	7	7	7	7	6	7	7		2	2
18	7	6	6	6	6	7	7	7			2	1
19	6	6	7	7	6	6	7	7			1	2
20	7	6	8	7	6	7	7	7			0	2
21	7	5	6	7	7	7	6	7			2	2
22	4	5	5	7	3	4	5	7			(5)	(4)
23	4	2	4	5	4	3	(3)	5			(6)	(6)
24	3	1	2	5	2	3	(2)	3			(6)	(7)
25	4	4	6	3	5	6	(4)	4			2	1
26	6	5	6	6	5	6	6	6			3	3
27	6	5	6	6	6	5	6	6			(4)	(5)
28	6	4	6	5	5	5	5	6			(4)	(5)
29	5	5	6	5	5	6	6	6			3	3
30	6	6	6	5	6	5	6	5			3	(4)
31	6	6	7	6	6	6	6	5			2	2
Score:	Quiet Periods			P	18	16	14		15	-		
				S	9	9	13		12	-		
				U	0	2	2		1	-		
				F	0	0	0		0	-		
	Disturbed Periods			P	0	0	0		1	-		
				S	2	3	2		1	-		
				U	1	1	0		1	-		
				F	1	0	0		0	-		

() represent disturbed values.

*Modified advance forecasting service began October 15, 1958.

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS
 NORTH PACIFIC
 OCTOBER 1958

OUTCOME OF ADVANCED FORECASTS FINAL ESTIMATE



ALERT PERIODS AND SPECIAL WORLD INTERVALS

Alert Issued Ends 1600 UT 1600 UT	SWI Starts Ends 0000 UT 2359 UT	A _{Be} On days of Alert Period (SWI Underlined)	Number of Flares of IMP ≥ 2 Reported Promptly on Days of Alert Period
1958 Nov 14 Nov 16 Nov 25 Nov 30	 Nov 26 Nov 27	 03-05-10 09- <u>07-07</u> -13-08-03	 3-0-0 1-1-0-0-2-2

