

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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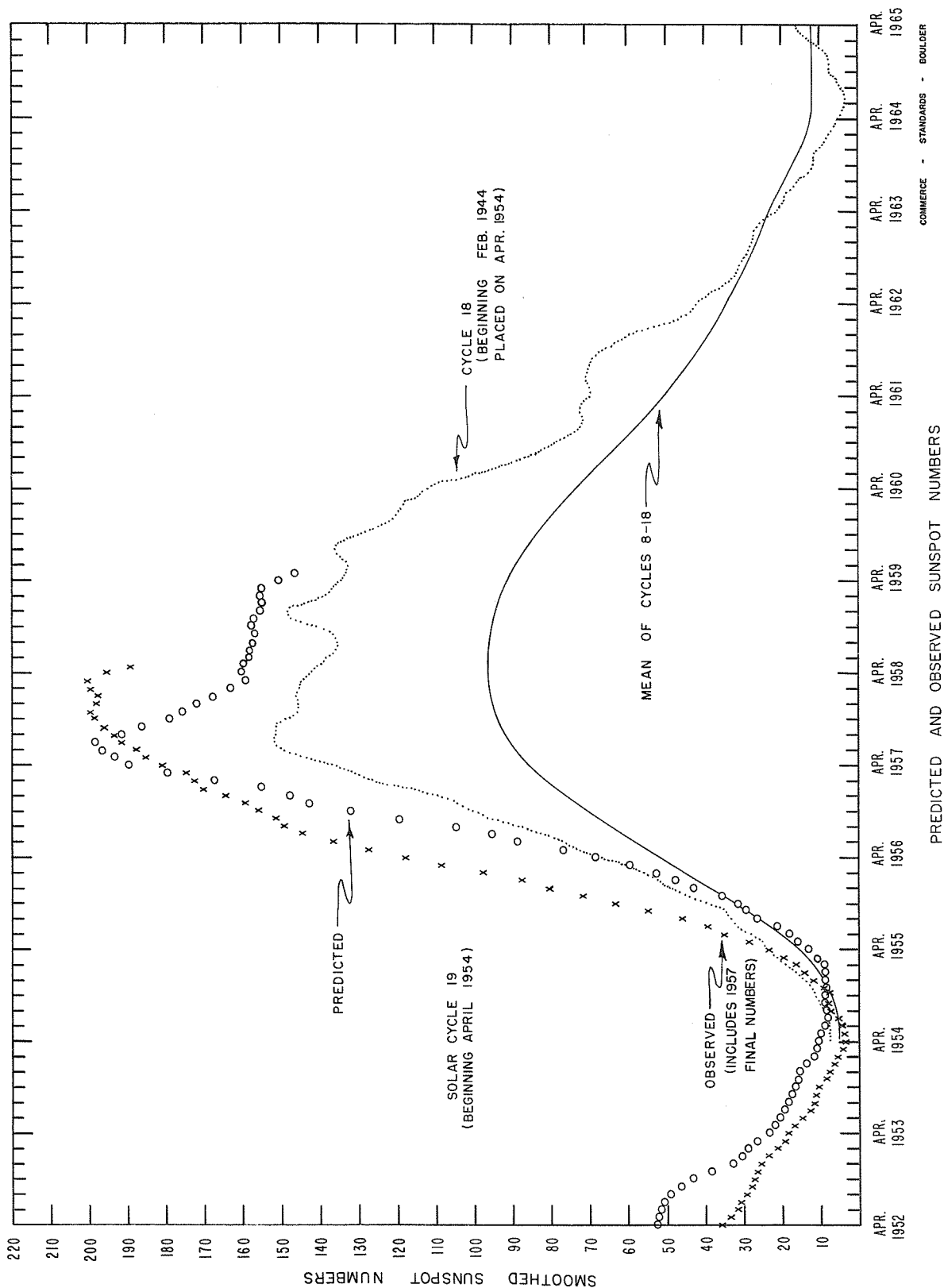
INTRODUCTION

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



CALCIUM PLAGE AND SUNSPOT REGIONS

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

* 4793, 4798 and 4802.

** 4819 and (827).

+ 4833 and (4841).

++ Mostly New in positions of 4840 and 4843.

COMMERCE - STANDARDS - BOULDER

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 ₆	R ₁	G ₆	G ₁	R ₆	R ₁	G ₆	G ₁	R ₆	R ₁	G ₆	G ₁	R ₆	R ₁
1	x	x	x	x	x	x	x	x	102	128	x	x	105	146	x	x
2	x	x	x	x	x	x	x	x	138	176	x	x	127	165	x	x
3	153	228	88	155	190	260	59	126	119	168	41	82	131	141	60	85
4	x	x	x	x	x	x	x	x	104	120	33	64	146	207	84	178
5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	90	146	x	x	84	106	x	x	62	80	23	30	81	102	52	101
7	93	128	43	54	97	180	27	54	79	121	8	9	90	132	27	30
8	101	124	x	x	91	194	x	x	x	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	157	188	x	x	88	156	x	x	x	x	x	x	x	x	x	x
11	125	188	38	72	101	179	25	42	97a	135a	x	x	70	100	x	x
12	153	172	48	66	131	204	24	33	110	152	25	40	85	128	48	60
13	237	373	62	114	240	320	34	90	168a	198a	15a	21a	131a	162a	35a	48a
14	175	228	55	108	164	184	35	48	x	x	x	x	x	x	x	x
15	106	144	48	90	106	115	15	18	x	x	x	x	x	x	x	x
16	99	132	x	x	125	161	x	x	>293	>300	35	70	x	x	15	15
17	88	104	17	21	170	230	38	66	173	212	27	66	93	132	12	18
18	60	78	28	36	161	284	54	89	115a	160a	35a	66a	71a	100a	18a	21a
19	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
20	80	96	39	79	89	112	58	66	x	x	x	x	x	x	x	x
21	115	167	16	31	89	129	16	24	114	222	39	72	118	136	30	75
22	x	x	x	x	x	x	x	x	151	227	66a	114a	126	144	36a	66a
23	x	x	x	x	x	x	x	x	117	142	41	64	102	132	42	60
24	x	x	x	x	x	x	x	x	163	210	54	94	161	208	31	48
25	72	95	x	x	82	131	x	x	161	248	55	96	102	164	55	84
26	103	118	45	103	118	189	46	78	145*	221	x	x	86	120	x	x
27	129a	144a	44a	60a	164a	192a	43a	83a	x	x	x	x	x	x	x	x
28	x	x	x	x	x	x	x	x	143	176	46	75	124	167	50	78
29	x	x	x	x	x	x	x	x	124	140	34	78	129	157	38	66
30	134	232	38	84	129*	175	32	55	132	164	37	55	132	164	37	55

x = no observations.

a = index computed from low weight data.

* = yellow line observed.

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT			
		START	END	MAX PHASE	APPROX.					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %				
					LAT.	MR. DIST.									MAG. PLAGE REGION		
{MCMATH USNRL MCMATH MCMATH {SAC PEAK {SAC PEAK {MCMATH	NOV 1958	1410	1435	1422	S16	E30	4849	25	1	1	1422	2.52	3.07	1.00	60	S-SWF	
	01	1421 E	1514 D	S16	E28	4849	53	1	1	1509	1.07	1.32		122			
	01	1444	1455 D	S17	E26	4849	11	1	1	1448	2.10	2.52		65			
	01	1503 E	1520 D	S17	E27	4849	17	16	1	1513	4.23	5.07		79			
	01	1507 E	1555 D	1507 U	S15	E27	4849	47	16	1		4.90			22	S-SWF	
	01	1815	1845 E	1822	S12	W36	4846	30	1	1		3.60			22		
	01	1822 E	1833 D		S14	W37	4846	11	1	1	1823	2.44	3.19		75		
	{AROSA AROSA LOCARNO LOCARNO AROSA AROSA {AROSA {LOCARNO CAPRI-G SAC PEAK	02	0852	0856		S17	E13	4849	4	1						G-SWF	
		02	0856	0900		S16	E23	4849	4	1							
		02	0915	0945	0922	N02	E13	4851	30	16	2		5.00				
02		0922	0936	0925	S17	E10	4849	14	1	2		1.00					
02		1330	1341		S17	E10	4849	11	16								
02		1335	1350		N05	E07	4851	15	1	2							
02		1335 E	1350		N02	E11	4851	15	1	2							
02		1534 E	1540 D		S17	E09	4849	6	1	1							
02		1802	2015	1805	S15	E04	4849	133	2	1		7.20			18		
03		0715	0816		S16	E03	4849	61	16	4		4.00					
{MITAKA ATHENS CAPRI-G CAPRI-G CAPRI-G CAPRI-G {USNRL {HUANCAYO	03	0835 E	0910 D		N11	E45	4857	35	1	2	0900	2.00				S-SWF	
	03	0845	0910	0850	S10	W45	4846	25	16	2		4.00					
	03	0940 E	1022		S19	W02	4849	42	1	2	1000	1.00					
	03	1415	1450	1425	S19	W14	4849	35	1	1	1425	3.09			62		
	03	1425	1455 D	1440	S14	E02	4849	30	16	2							
	03	1635	1650	1639	S16	W03	4849	15	1	1	1639	1.87	1.98		72		
	04	0230 E	0242		S12	W15	4849	12	1	1	0230	1.84	1.97	1.94	102	S-SWF	
	04	0822 E	0827		S22	W17	4849	5	1	2		2.30					
	04	1100 E	1125 D		S16	W14	4849	25	1	3		5.00					
	04	1115 E	1141		S11	W30	4858	16	1	3		2.00					
04	1328	1410 D		S16	W15	4849	42	1	3	1400	2.00						
04	2005	2020 D	2008	S13	W79	4846	15	1	1	2019	3.71			66			
{NIZAMIAH CAPRI-G CAPRI-G CAPRI-G {CAPRI-G {CAPRI-S CAPRI-G USNRL	04	2006 E	2013 D		S13	W72	4846	7	2	2	2008	2.10	6.60	6.20		S-SWF	
	05	0256 E	0307		N32	E58	4863	11	1	3	0256	1.82	3.72	1.50			
	05	0815 E	0902 D		S14	W90	4846	47	1	3							
	05	0933 E	0946		S14	W30	4849	13	1	3		4.00					
	05	1017 E	1043 D		S13	W90	4846	26	1	3		5.00				S-SWF	
	05	1202 E	1300 D		N09	W29	4851	58	1	2		3.00					
	05	1238 E	1305 D		N09	W23	4851	27	1	2	1246	2.00					
	05	1215 E	1235 D		N38	W34	4850	20	1	2		2.50					
	05	1505	1535	1508	S17	W85	4846	30	16	3	1508	1.75	3.00		88		
	{STOCKHOLM USNRL MCMATH USNRL {SAC PEAK {USNRL HAWAII	06	1226	1237 D		S14	W30	4849	11	1	1	1234	1.80	2.20			
06		1457	1540	1458	S14	W38	4849	43	1	3	1458	3.79			115		
06		1503	1530	1515	S16	W43	4849	27	1	1	1515	1.62	2.29		73		
06		1539	1600	1539	N33	E42	4863	21	1	3	1548	1.02	1.56	1.00	122		
06		1922	2020	1935	S16	W44	4849	58	1	2		2.70			16	Slow S-SWF	
06		1923	2004		S15	W42	4849	41	1	1	1930	1.13	1.63		124		
06		1938 E	1948		S09	W47	4849	10	1	1	1938	3.30	5.00				
06		2110	2122 D	2112	N09	W48	4851	12	1	2	2112	2.10	3.10				
07		0329 E	0402	0335	N05	W49	4851	33	1	1	0329	1.53	2.24	3.56	120		

CONVERSION - STANDARD - LOCAL

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	MAX. PHASE	APPROX.				TIME — U T	MEAS. AREA Sq. Deg.	CORR. Sq. Deg.	MAX. WIDTH H _z		MAX. INT. %	
					LAT.										DIST.
NIZAMIAH MITAKA LOCARNO MCMATH MCMATH SAC PEAK USNRL HAWAII	NOV 1958														
	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	S18 W51	4849	38 D	1	1	0514	.60	.94	1.65			
	07	1225 E	1245 D	N32 E26	4863	20 D	1	2	1230		1.00		65		
	07	1420 E	1427 D	N05 W63	4851	7 D	1	1	1421	1.14	2.13		73		
	07	1820	1942	N05 W66	4851	22	2	1	1832	3.41	7.50		20		
	07	1820	1950	N07 W59	4851	90	1	3		3.10			135		
	07	1820	2020	N06 W61	4851	120	16	1	1827	1.58	3.22	2.00			
	07	1822	1850	N17 W60	4851	28	1	2	1830	2.20	4.10				
	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	125			
MITAKA MITAKA CAPRI-G CAPRI-G LOCARNO CAPRI-G CAPRI-S DUNSINK USNRL SAC PEAK	08	0307 E	0319	N41 W65	4850	12 D	1	1	0307	1.07	2.57	3.54	96	SLOW S-SWF	
	08	0420 E	0425	S14 W64	4849	5 D	1	1	0422	.41	.87	2.71			
	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	3	0810		3.00				
	08	0805 E	0830 D	N09 W64	4851	25 D	1	2		1.50	2.70				
	08	0804 E	0812 D	S15 W67	4849	8 D	1	2	0810				62		
	08	0810 E	0826 D	S18 W53	4849	16 D	1	2		.68	2.43		20		
	08	1125	1141	N20 W38	4854	16	1	1	1658	2.10					
	08	1658 E	1700 D	S33 E72	4870	2 D	1	3							
	08	1822	1845	S16 W77	4849	22	1								
ATHENS UCCLE CAPRI-G CAPRI-G CAPRI-G CAPRI-G HAWAII	09	0718 E	0730 D	S17 W81	4849	12 D	16	1		.60	4.20			SLOW S-SWF	
	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				
	09	0955 E	1010 D	N12 W35	4857	15 D	1	1			2.00				
	09	1506 E	1528	N25 E90	4874	22 D	16	3							
	09	1956	2000 D	N24 W61	4854	4 D	1	2	1958	2.10	4.70				
	10	0958 E	1015 D	N16 W63	4857	17 D	1	3		3.00					
	10	1040 E	1105 D	N37 W02	4863	25 D	1	2		2.00					
	12	0337 E	0348	S07 E12	4871	11 D	1	3	0337	2.13	2.21	1.80	100		
	13	1125 E	1150	N01 E31	4873	25 D	16	2	1130	.68	4.00				
LOCARNO USNRL HAWAII LOCARNO UCCLE LOCARNO CAPRI-S CAPRI-G CAPRI-G CAPRI-G	13	1956	2101 D	S13 E55	4877	65 D	1	2	2005		1.30			SLOW S-SWF	
	14	0036	0130	S23 E52	4877	54	2	2	0046	7.80	14.90				
	15	0750 E	0820	S08 W29	4871	30 D	1	1	0750		1.00				
	15	0853 E	0950 D	S08 W34	4871	57 D	16	1	1050		3.00				
	15	1040 E	1110	S00 E02	4873	30 D	1	3	1228	2.00	3.00				
	15	1209 E	1300 D	S10 W30	4871	51 D	1	1			5.00				
	15	1228 E	1235 D	S08 W32	4871	7 D	1	1	1500		3.00				
	15	1420 E	1500 D	S14 E31	4877	40 D	16	1			2.00				
	15	1520 E	1530 D	N21 E36	4880	10 D	1	1							
	16	0930 E	0950	N06 W90	4878	20 D	1	2			4.00				
LOCARNO CAPRI-G HAWAII	16	1340 E	1455 D	N20 E26	4880	75 D	1	2			3.00				
	16	2032	2046	N18 E26	4880	14	1	1	2032	2.60					
	17	0031 E	0046 D	N21 E18	4880	15 D	1	2	0033	1.01	1.14	1.76	107		
MITAKA WENDEL	17	1030	1102	N23 E17	4880	32	1				3.00				

NOVEMBER 1958

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED TIME			LOCATION			DURA- TION — MINUTES	DM- POB- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	MAX. PHASE	APPROX.	MAGN- ITUDE REGION	LAT.				MER. DIST.	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _o	MAX. INT. %
NIZAMIAH ARCETRI CAPRI-G STOCKHOLM ARCETRI WENDEL	NOV 17 1958	1035	1049	1038	N21 E19	4880	14	1	3	1038	2.13	2.35	1.50	SLOW S-SWF			
	17 1038 E	1055 D		N21 E16	4880	17 D	1	3									
	17 1048 E	1049 D		□	4880	1 D	1	1									
	17 1202 E	1219 D		N14 W25	4872	17 D	1	2	1218	2.70	4.00						
	17 1203	1221 D		N20 W41	4872	18 D	1	3			19.00						
	17 1207 E	1318 D		N27 W40	4872	71	26										
	18 0913	0919		S05 W05	4877	6	1	3									
	18 0931 E	0950 D		N13 E34	4881	19 D	1	3									
	18 2011 E	2112 D	2033	S09 E83	4883	6 D	2	1	2033	4.53			62				
	18 2017	2102	2032	S09 E76	4883	45	1	2		3.70			22				
SAC PEAK HUANCAYO	18 2035 E	2106	2038	S10 E80	4883	31 D	2	2	2038	1.70	8.20	3.80					
	19 0450 E	0501	0453	S12 E79	4883	11 D	16	2	0453	.91	4.59	2.40					
	19 0734 E	0736 D		S12 E70	4883	2 D	1	1			4.00						
CAPRI-G CAPRI-G CAPRI-G	19 1159 E	1209 D		N10 W21	4880	10 D	1	3			2.00						
	19 1358 E	1435 D		N40 E90	4884	37 D	1	2									
	20 0905	0927		N22 W28	4880	22	1				3.00						
WENDEL WENDEL SAC PEAK	20 1322	1333 D		S06 E41	4883	11 D	1	2		2.40			15				
	20 1520	1615	1545	S08 E41	4883	55	1										
	21 1233 E	1320	1820	N30 W10	4879	47 D	1	1	1241	2.26	2.62	1.00	80				
USNRL USNRL	21 1813	1952		S10 E25	4883	99	1	2	1916	.90	1.03		102				
	22 0807 E	0832		S15 E75	4889	25 D	16				6.00						
WENDEL WENDEL	22 0858	0920 D		N24 E79	4890	22 D	1				4.00						
	22 0932 E	0954 D		N17 E35	4884	22 D	1	2	0935	2.00	2.50						
{CAPRI-S WENDEL	22 0932	1014 D		N17 E34	4884	42 D	2				9.00						
	22 0940 E	1005 D		N17 E35	4884	25 D	1	2			4.00						
CAPRI-G CAPRI-G	22 1003 E	1015 D		S03 W06	4882	12 D	1	2			2.00						
	22 1118	1206		N16 E33	4884	48	16				7.00						
{CAPRI-G WENDEL	22 1135 E	1202 D		N17 E35	4884	27 D	1	2			5.00						
	22 1136 E	1155 D		N17 E33	4884	19 D	1	1	1136	2.00	2.50						
WENDEL WENDEL	22 1307	1319		N21 W26	4881	12	1				3.00						
	22 1328	1420 D		S26 E55	4888	52 D	26				12.00						
{CAPRI-S MCNATH	22 1329	1420 D	1338	S27 E59	4888	51 D	2	1	1338	3.25	7.63		62				
	22 1420	1524	1444	S15 E59	4888	4	2	1	1444	3.25	6.49		63				
USNRL CLIMAX	22 1433 E	1530		S17 E55	4888	57 D	2	1									
	22 1459 E	1545 D		S16 E58	4888	46 D	1	1	1501	2.80	6.93		68				
{CAPRI-S WENDEL	22 1647 E	1801 D	1704	S14 E65	4889	74 D	2	1	1724	2.92							
	22 1649	1750	1657	S17 E55	4889	61	16	1									
{CLIMAX SAC PEAK	22 1649	1808	1715	S16 E67	4889	79	1	1	1715	3.40			20				
	22 1659 E	1820	1705	S16 E63	4889	81 D	1	1		3.10							
MITAKA MITAKA WENDEL WENDEL SAC PEAK	23 0258	0333 D	0305	N18 E47	4892	35 D	1	1	0305	.89	1.28	3.83	165				
	23 0335 E	0355 D	0337	N15 E23	4884	20 D	1	1	0337	1.34	1.52	2.09	159				
	23 0752 E	0825 D		S15 E63	4889	33 D	2				11.00						
	23 1037 E	1058		S10 E22	4883	21 D	16				5.00						
	23 1151 E	1222	1152	S03 E01	4883	31 D	2				9.00						
CLIMAX CLIMAX	23 1657	1722 U	1707	S14 E90	4897	25 D	1	1	1758	3.80	2.10		14				
	23 1756	1807 D	1758	N17 E17	4884	11 D	1										
WENDEL	24 0754 E	0817 D		S11 W07	4883	23 D	1				3.00						

COMMENTS - SPOTLIGHTS - OBSERVED

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	RM. FOR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER.	APPROX. DST.				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	MAX. INT. %
{CAPRI-G WENDEL CAPRI-G CAPRI-G CAPRI-G WENDEL WENDEL {SAC PEAK USNRL {MCMATH	NOV 1958														
	24	0756	0802 D		S12 E03			6 D	1	2			5.00		
	24	0754 E	0828 D		S17 E80	4883		34 D	16				6.00		
	24	0920	0938 D		N34 E65	4891		18 D	1				4.00		
	24	0955 E	1003		N19 E21	4884		8 D	1	1			4.00		
	24	1019 E	1030 D		N19 E21	4884		11 D	1	1			4.00		
	24	1213 E	1215 D		S11 W13	4883		2 D	1	2			4.00		
	24	1231	1243		S09 W09	4883		12	16				6.00		
	24	1233	1251	1235	N20 E11	4884		18	26				12.00		
	24	1607	1900 U	1621	S11 W09	4883		172 D	3	3	1651	17.00	14.75	2.00	38
{ATHENS WENDEL {CAPRI-S CAPRI-G WENDEL WENDEL WENDEL USNRL USNRL	24	1651 E	2107 D		S12 W08	4883		256 D	3	1	1657	14.12	5.79		127
	24	1657 E	1907		S12 W09	4883		130 D	2	1		5.50			73
	25	0719	0738	0722	S11 W21	4883		19	1	3		3.30	3.60		
	25	0809	0843	0815	N20 E11	4884		34	26			12.00			
	25	0813	0840	0814	N18 E12	4884		17	2	3		5.00	5.30		
	25	0814 E	0936 D		N18 E13	4884		82 D	1	1	0828	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						
	25	0939	1016		N19 E08	4884		37	16				6.00		
	25	1031	1104		S10 W24	4883		33	1				4.00		
{STOCKHOLM CAPRI-G CAPRI-G {CAPRI-G WENDEL	25	1302	1337	1304	N21 E08	4884		35	1	2	1304	.79	1.01		107
	25	1415	1429	1420	S16 E38	4889		14	1	3	1420	.96	1.28		109
	26	0856 E	0924		N20 W03	4884		28 D	16				6.00		
	26	0944	0953 D		S14 E51	4897		9 D	1				4.00		
	26	1039			S15 E44	4897		1	1				4.00		
	26	1100	1116	1104	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	1				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		
{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 CAPRI-G WENDEL	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		
	27	0114 E	0122	0116	S11 W45	4883		8 D	1	1	0117	1.07	1.50	2.23	143
	27	0508	0516 D	0509	N14 E26	4892		8 D	1	1	0509	.67	.71	1.81	143
	27	0552 E	0604 D		S14 W43	4883		12 D	1	1	0552	3.71	4.91	2.27	105
	27	0812 E	0820 D		S10 W47	4883		8 D	1	3			3.00		
	27	0816 E	0851		S12 W48	4883		15 D	16				5.00		
	27	0914	0935 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					
{CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	27	0932 E	0943		N19 W19	4884		11 D	1	3			4.00		
	27	0932 E	0955 D		N10 E29	4892		23 D	2	3			7.00		
	27	1020	1055	1030	S17 E12	4889		35	1	2			1.50		
	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	1146	S13 W49	4883		22 D	16	3	1146		6.00		
	27	1225 E	1237 D		N32 E26	4891		12 D	1	3			4.00		
	27	1333 E	1345 D		N07 W90	4881		12 D	1						
{CAPRI-G WENDEL	27	1344 E	1400		S18 E10	4889		16 D	1	3			4.00		
	27														

CONTINUED - SEPTEMBER - 1958

SOLAR FLARES

NOVEMBER 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT						
		START	END	MAX PHASE	APPROX.					MCARTH FLARE REGION	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _g	MAX. INT. %				
					LAT.	MER. DIST.														
{CAPRI-G CAPRI-G WENDEL CAPRI-S MCARTH USNRL CAPRI-G LOCARNO CAPRI-G CAPRI-G HAWAII HAWAII MITAKA HAWAII	NOV 1958	27	1347 E	1355 D	S16 E11	4889	8 D	1	3				3.00			S-SWF				
		27	1342 E	1345 D	S09 W33	4883	3 D	1	3				3.00							
		27	1342 E	1416 D	S15 W46	4883	34 D	16					5.00							
		27	1344 E	1426 D	S12 W40	4883	42 D	2		3	1402	3.40	4.90		77					
		27	1345 E	1427	S14 W46	4883	42	16		1	1402	2.76	4.06		90					
		27	1347 E	1443	S14 W48	4883	56 D	1		1	1349	1.98	3.11	1.00						
		27	1348 E	1412 D	S13 W43	4883	24 D	2		3	1400		8.00							
		27	1400 E	1420	S14 W41	4883	20 D	16		3			3.00							
		27	1416 E	1428 D	N42 E56	4896	12 D	1		3			2.00							
		27	1512 E	1528 D	S16 E49	4897	16 D	1		2			2.00							
		27	1642 E	1716	S17 E42	4897	34 D	1		2	1645	1.02	1.47		108					
		27	2052	2100 D	S22 E37	4897	8 D	1		2	2056	2.50	3.50							
		27	2210	2228	N23 W15	4884	18 D	1		3	2214	2.30	2.50							
		27	2350 E	2404 D	N18 W18	4884	14 D	16		3	2350	2.31	2.52							
		27	2354	0010	N23 W15	4884	16	1		3	2356	2.10	2.30							
		{MITAKA MITAKA MITAKA MITAKA MITAKA NIZAMIAH MITAKA WENDEL ARCTRI CAPRI-S CAPRI-G CAPRI-G CAPRI-G WENDEL WENDEL CAPRI-S CAPRI-G STOCKHOLM CAPRI-G WENDEL CAPRI-S STOCKHOLM CLIMAX SAC PEAK CLIMAX		28	0004	0013	N15 W36	4884	8	1	2	0004	1.84	2.35	1.81		100		S-SWF	
				28	0121 E	0136	S16 E33	4897	15 D	1	2	0121	.41	.52	2.37		107			
				28	0137	0144	N22 W24	4884	7	1	1	2	0137	.30	.35		2.10	120		
				28	0210	0221	N18 W20	4884	11	1	1	2	0210	.60	.66		1.60	131		
				28	0433	0457	S17 E24	4897	24	1	1	1	0444	2.78	3.22		2.15	146		
28	0435 E			0440 D	S16 E24	4897	5 D	1	2	2	0435	1.82	2.08	1.30						
28	0523 E			0532 D	N21 W32	4884	9 D	1	1	2	0523	1.63	1.63	1.87	85					
28	0818			0856	S08 E80	4904	38	1	1	3			4.00							
28	0823 E				S11 W48	4883		1	1	3										
28	0824 E			0857	S05 E80	4904	33 D	2	2	2	0824	1.20	6.20							
28	0830 E			0850	S09 E80	4904	20 D	1	1	2			4.00							
28	0920 E			0942 D	N20 W35	4884	22 D	1	3	3			3.00							
28	1032 E			1051	N19 W22	4884	19 D	1	3	3			5.00							
28	1035			1047	N17 W24	4884	12	16					5.00							
28	1200			1226	S16 E30	4897	26	16					6.00							
28	1202			1222 D	S15 E29	4897	20 D	1	2	2	1212	2.20	2.60							
28	1203 E			1222 D	S14 E32	4897	19 D	16		3			5.00							
28	1205 E			1220 D	S17 E28	4897	15 D	1	3	3	1211	2.50	3.00							
28	1248 E			1440 D	N20 W26	4884	112 D	2	3	3			7.00							
{WENDEL LOCARNO LOCARNO WENDEL ARCTRI LOCARNO WENDEL SAC PEAK CLIMAX				29	0823 E	0901	N16 W46	4884	38 D	1				3.00			G-SWF			
		29	0850 E	0925	S16 W44	4884	35 D	2	1	1	0900		4.00							
		29	0850 E	0912	S15 E22	4897	22 D	16	1	1	0850		2.00							
		29	0928	1010	N16 W36	4884	42	26	1	1			14.00							
		29	0929	0959	N19 W40	4884	30	2	2	3			9.00							
		29	0932 E	0946 D	N20 W40	4884	14 D	2	2	2										
		29	0932 E	0946 D	S10 W22	4889	15 D	1	2	2	0950		1.00							
		29	1035	1110	S15 E02	4897	35	16	2	2			6.00							
		29	1036	1055	S20 E05	4897	19	1	2	2			4.00							
		29	1314 E	1345	S10 E18	4897	31 D	2	2	2			10.00							
{USNRL	29	1319	1356	S11 E16	4897	37	1	2	1325	1.86	1.98		100							

COMMERCE - STANDARDS - BOLDER

SOLAR FLARES

NOVEMBER 1958

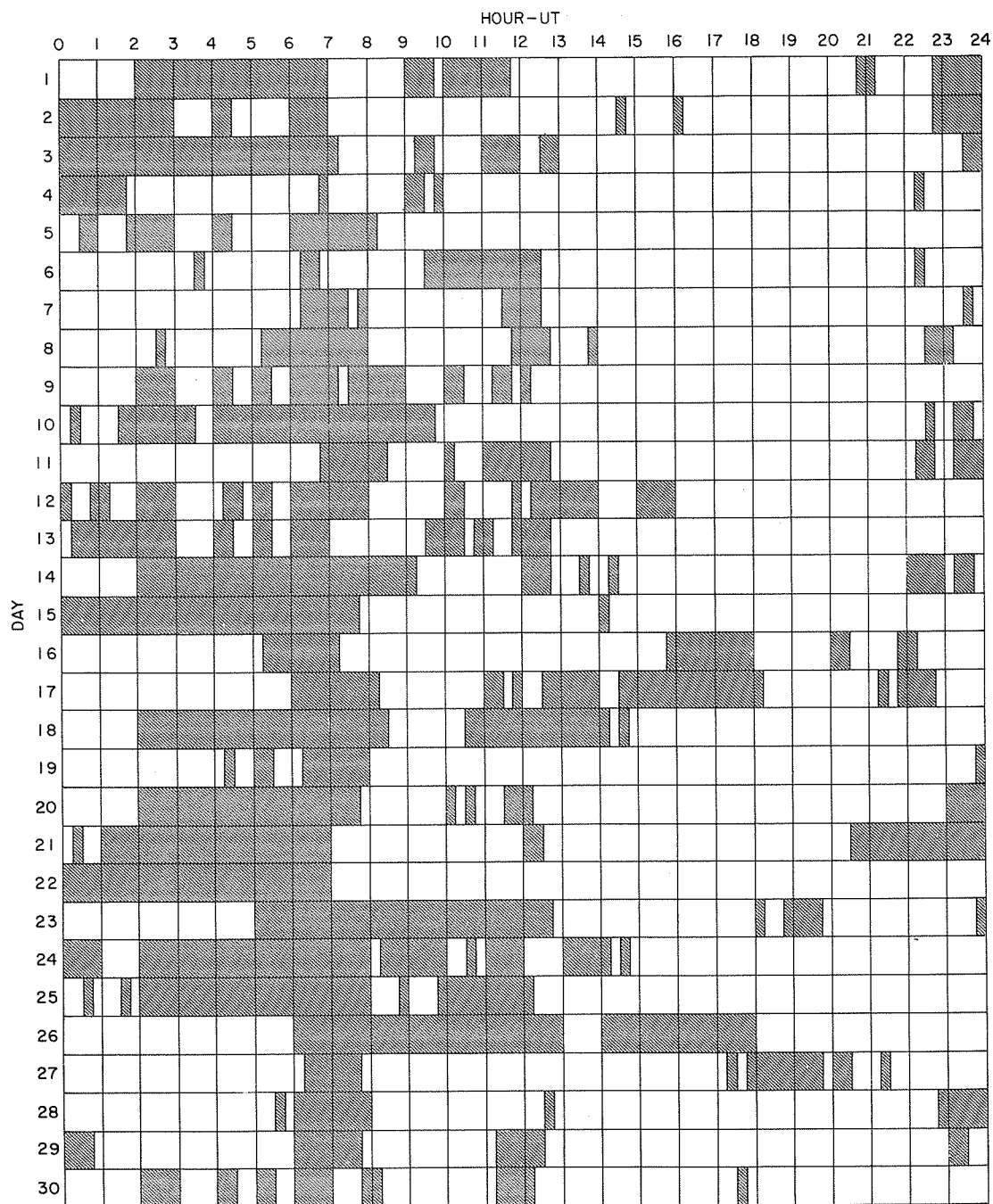
OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — UT	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. MER. DIST.					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	
WENDEL	NOV 29	1350	1405	N16 E35		15	1	2	1350		3.00		G-SWF
{LOCARNO	29	1350	1409	N15 W08		19 D	1				1.00		
{WENDEL	29	1353	1406	N15 W08		13	1				3.00		
SAC PEAK	29	1827	1940	S10 E60		72	1	2		2.80			
{LOCARNO	30	0845	0945	S20 E80		60 D	1	2	0845		3.00		
{WENDEL	30	0918	0947	S21 E88		29 D	1				3.00		
LOCARNO	30	0855	0910	S14 E03		15	1	2			1.00		
{LOCARNO	30	0905	0925	S09 E49		20	1	2			2.00		
{WENDEL	30	0918	0945	S10 E51		27 D	1				3.00		
LOCARNO	30	0940	1010	N18 W09		30	1	2			1.00		
WENDEL	30	0940	1155 D	S14 W87		75 D	2				10.00		
{LOCARNO	30	1002	1040	N18 W50		38	2	2			8.00		
{WENDEL	30	1006	1031 D	N18 W55		25 D	16				5.00		
WENDEL	30	1024	1102 D	S09 E49		38 D	1				4.00		
WENDEL	30	1140	1214 D	N16 W57		34 D	16				7.00		
LOCARNO	30	1210	1230	S19 E02		20 D	1	2	1210		1.00		
LOCARNO	30	1210	1240	N16 W62		30 D	1	2	1210		3.00		
{LOCARNO	30	1240	1330	N12 E18		50	16	2			7.00		
{USNRL	30	1300	1358	N15 E20		58	16	2	1307	4.29	4.74	1.00	
LOCARNO	30	1345	1415	S21 E77		30	1	2			3.00		
MCMAH	30	1419	1558	N17 W17		99 D	1	1	1420	1.95	2.14		
HAWAII	30	1924	1934	N08 E27		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
 KODAIKANAL KODAIKANAL
 KRASNAYA KRASNAYA, PAKHRA
 MOSCOW MOSCOW
 MOSCOW - G
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUNS SCHAUNS
 USNRL UNITED STATES NAVAL RESEARCH LABORATORY
 MOSCOW - GAISH
 ROYAL OBSERVATORY, EDINBURGH
 GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUNS SCHAUNS
 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

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

* SAC PEAK	16	1950	N24 E19	SAC PEAK	20	2135	N18 W43	SAC PEAK	27	1720	S09 W79
* SAC PEAK	16	2015	S21 E13	SAC PEAK	20	2207	S06 W04	SAC PEAK	27	1827	S10 W90
USNRL	17	0930 E	N21 E12	SAC PEAK	20	2210	S08 E19	USNRL	27	1845	S15 E37
MEUDON	17	0932	N15 E75	CAPRI-S	21	1332	S03 W14	* SAC PEAK	27	1950	S20 E90
OTTAWA	17	1238	N15 E29	CAPRI-S	21	1335 E	N22 W42	USNRL	27	2007	N07 W33
USNRL	17	1249	N20 E10	* OTTAWA	21	1406	S09 E75	USNRL	27	2013	N15 E90
USNRL	17	1312	N22 E13	SAC PEAK	21	1620	S04 W18	SAC PEAK	27	2155	N08 W33
USNRL	17	1323	N13 E14	MCNATH	21	1637 E	S02 W22	NIZAMIAH	28	0357	N07 W36
USNRL	17	1350	S16 W68	OTTAWA	21	1711	N22 W48	WENDEL	28	0731	S13 W79
* SAC PEAK	17	1450	S04 E40	SAC PEAK	21	1745	S06 W11	WENDEL	28	0731	S13 E29
* OTTAWA	17	1458	S03 E38	SAC PEAK	21	1815	N23 W49	WENDEL	28	0731	N07 W37
* MCNATH	17	1458	S04 E39	MCNATH	21	1815 E	S30 W55	MEUDON	28	1150	S15 E90
* SAC PEAK	17	1520	S04 E39	SAC PEAK	21	1915	S05 W37	MEUDON	28	1155	S17 E20
USNRL	17	1524	S04 E36	MCNATH	21	1816 E	N22 W49	WENDEL	28	1221	S16 W27
ARCETRI	17	1535 E	S05 E40	SAC PEAK	21	1905	N23 W48	MCNATH	28	1258	N08 W42
USNRL	17	1555	S03 E37	MCNATH	21	1910 E	N23 W48	USNRL	28	1335	S12 E30
SAC PEAK	17	1555	S03 E33	SAC PEAK	21	1925	S07 E07	MCNATH	28	1340	S14 E29
MCNATH	17	1601	S03 E35	SAC PEAK	21	2032	S06 W17	* MCNATH	28	1510	N07 W42
SAC PEAK	17	1730	S04 E37	SAC PEAK	21	2145	S07 W17	SAC PEAK	28	1521	S14 E27
MCNATH	17	1756	S08 W38	SAC PEAK	21	2200	S09 W04	HUANCAYO	28	1527 E	N08 W39
HAWAII	17	1802 E	N20 E12	OTTAWA	22	1302	S06 W10	* MCNATH	28	1550	S18 E09
USNRL	17	1929	S05 E37	LOCARNO	22	1310	S12 W02	* USNRL	28	1550	S18 E10
SAC PEAK	17	2002 E	S04 E36	OTTAWA	22	1314	S09 W00	SAC PEAK	28	1552	N18 E08
SAC PEAK	17	2015	S07 E39	OTTAWA	22	1323	S10 W07	MCNATH	28	1610	N08 E12
ATHENS	18	0730	S16 W23	* OTTAWA	22	1438 E	S06 W13	MCNATH	28	1709	S10 W24
USNRL	18	0943	N29 W27	OTTAWA	22	1457 E	S04 W30	MCNATH	28	1726	S07 W30
USNRL	18	0946	N26 W11	SAC PEAK	22	1528 E	N22 W58	MCNATH	28	1826	S17 E80
USNRL	18	1010	S08 W38	SAC PEAK	22	1528 E	N22 W58	USNRL	28	1827	S18 E18
USNRL	18	1058 E	S01 E28	CAPRI-S	22	1529 E	N20 W56	MCNATH	28	1838	S19 E19
* USNRL	18	1443	S04 E26	SAC PEAK	22	1557	S06 W12	MCNATH	28	1930	N06 W47
* OTTAWA	18	1444 E	S03 E24	SAC PEAK	22	1557	N22 W65	USNRL	28	1943 E	N07 W46
MCNATH	18	1518	S10 W32	SAC PEAK	22	1557	N22 W65	SAC PEAK	28	2143 E	S16 E24
USNRL	18	1523 E	S09 W51	SAC PEAK	22	1925 E	S07 W16	WENDEL	29	0725	S13 E13
MCNATH	18	1705	N26 W18	HUANCAYO	22	2016 E	S03 W71	* WENDEL	29	0725	N09 E67
MCNATH	18	1713	N19 W46	SAC PEAK	22	2047	S10 W15	WENDEL	29	0834	S10 E46
MCNATH	18	1728	N21 W02	SAC PEAK	22	2127	S07 W47	MEUDON	29	0900	N05 W58
MCNATH	18	1739	N26 W08	SAC PEAK	22	2127	S03 W71	* MEUDON	29	0923	N20 E90
MCNATH	18	1744	S10 E44	* WENDEL	23	1030 E	S10 E14	* MEUDON	29	0957	S15 E17
MCNATH	18	1805	S16 W30	WENDEL	23	1030	S12 W16	WENDEL	29	1001	N17 W61
MCNATH	18	1817	N26 W19	SAC PEAK	23	1445 E	N25 W62	* WENDEL	29	1310	N07 E65
MCNATH	18	1832	N21 W02	* USNRL	23	1848 E	S05 W32	* USNRL	29	1310	N07 E65
MCNATH	18	1858	S10 W53	SAC PEAK	23	2017	N18 E28	USNRL	29	1529	S12 E14
MCNATH	18	1901	S11 W50	CAPRI-S	24	0831 E	S32 E43	MCNATH	29	1533	N07 W58
* MEUDON	19	0710	S22 W27	* LOCARNO	24	0900 E	S31 E38	USNRL	29	1534	N08 E67
MEUDON	19	0820	N21 W27	WENDEL	24	1006 E	N07 E21	USNRL	29	1632	N41 E34
MEUDON	19	0849	N20 W13	* USNRL	24	1244	S12 W25	USNRL	29	1636	S14 E14
CAPRI-S	19	1238 E	N20 E76	MEUDON	24	1256	S12 W20	* USNRL	29	1650 E	N41 E34
* OTTAWA	19	1309	N19 E80	* MEUDON	24	1325	S12 W30	* USNRL	29	1814 E	N05 W57
* USNRL	19	1309	N19 E80	* MCNATH	24	1327	S10 W32	* USNRL	29	1833	S14 E13
CAPRI-S	19	1310 E	N22 E30	* USNRL	24	1328	S13 W31	* HAWAII	29	1834	S18 E10
SAC PEAK	19	1437	S06 E90	LOCARNO	24	1350	S05 W37	* MCNATH	29	1834	S13 E13
* SAC PEAK	19	1440	S17 W43	LOCARNO	24	1351	S08 W33	* MCNATH	29	1935	N07 W59
* MCNATH	19	1442	S17 W42	* MEUDON	24	1410	S05 W58	HAWAII	29	2008	N14 W57
* USNRL	19	1442	S17 W42	USNRL	24	1413	S08 W36	WENDEL	30	1015	S17 W20
SAC PEAK	19	1525	N23 W22	* USNRL	24	1416	S03 W58	USNRL	30	1211	S15 E51
USNRL	19	1525	N23 W22	* SAC PEAK	24	1416 E	S02 W56	USNRL	30	1430	S15 E49
MCNATH	19	1602	N25 W33	SAC PEAK	24	1417	S11 W31	* MCNATH	30	1500	S10 W57
SAC PEAK	19	1604	N23 W33	LOCARNO	24	1420	S12 W31	USNRL	30	1538	S15 E49
* SAC PEAK	19	1752	N29 W29	USNRL	24	1422	S12 W31	USNRL	30	1655	S13 E45
* SAC PEAK	19	1825	S06 E90	SAC PEAK	24	1432	S14 W30	USNRL	30	1800	N07 E71
SAC PEAK	19	1825	N19 W22	SAC PEAK	24	1642	S06 W38	USNRL	30	1852	S10 E40
SAC PEAK	19	2025	S16 W45	USNRL	24	1644	S07 W39	MCNATH	30	1904	S08 E39
SAC PEAK	19	2122	N19 E76	HUANCAYO	24	1645	S04 W37	MCNATH	30	1930	S14 E48
CAPRI-S	20	0845 E	N19 E69	USNRL	24	1825	S32 E36	USNRL	30	1945	S06 E55
USNRL	20	1026	N18 E67	SAC PEAK	24	1855	S15 W35	USNRL	30	1947	S10 E51
USNRL	20	1027	S10 E27	SAC PEAK	24	1855	S10 W03	USNRL	30	2010	N16 E68
OTTAWA	20	1243	N20 E64	USNRL	24	1855	S14 W36	USNRL	30	2040	S14 E45
OTTAWA	20	1320	N21 W30	USNRL	24	1859	S10 W02	WENDEL	31	0851	N07 W73
OTTAWA	20	1320	N22 W31	SAC PEAK	24	2006	S19 E18	WENDEL	31	1030	N38 E16
OTTAWA	20	1403	N23 W31	SAC PEAK	24	2152	S04 W45	USNRL	31	1232	N07 W90
USNRL	20	1404	N24 W31	* CAPRI-S	25	1034 E	S04 W13	USNRL	31	1249	S17 E37
OTTAWA	20	1407	S11 E25	WENDEL	25	1052 E	S12 W41	SAC PEAK	31	1435	S15 E34
USNRL	20	1408	S11 E24	* MEUDON	25	1252	N20 W90	USNRL	31	1443	S15 E33
MCNATH	20	1424 E	N22 W32	* MCNATH	25	1310	N22 W90	* MCNATH	31	1500	S13 E34
USNRL	20	1533	N19 E64	LOCARNO	25	1330	S22 E05	SAC PEAK	31	1612	S08 E42
MCNATH	20	1537	N19 E68	HAWAII	25	1916	N07 W80	USNRL	31	1612	S07 E44
MCNATH	20	1600	S15 W58	NIZAMIAH	26	0447	S08 W56	USNRL	31	1613	S08 E42
USNRL	20	1614	S10 E23	ATHENS	26	0752	S16 E58	SAC PEAK	31	1628	S17 E35
USNRL	20	1625	S04 W05	USNRL	26	1502 E	S14 E55	USNRL	31	1630	S00 E42
MCNATH	20	1626	S03 W07	SAC PEAK	26	1657 E	S14 E54	MCNATH	31	1708	S13 E33
USNRL	20	1652	S11 E23	WENDEL	27	0556	S16 W63	USNRL	31	1711	S15 E30
OTTAWA	20	1652	S10 E24	WENDEL	27	0836	S13 E41	USNRL	31	1732	N16 E59
USNRL	20	1701	S10 E26	* CAPRI-S	27	0924 E	S13 E46	USNRL	31	1825	S17 E37
MCNATH	20	1811	S10 E22	* CAPRI-S	27	1004 E	S04 W08	MCNATH	31	1833	S13 E31
MCNATH	20	1813	S16 W60	WENDEL	27	1111 E	N31 E27	USNRL	31	1920	S15 E36
USNRL	20	1816	S18 W59	USNRL	27	1346	S14 E42	USNRL	31	2014	S17 E32
USNRL	20	1824	S18 W59	LOCARNO	27	1415	S07 W76	USNRL	31	2036	S17 E36
* SAC PEAK	20	1850	S07 W02	USNRL	27	1419	S09 W77				
* MCNATH	20	1852	S07 W02	SAC PEAK	27	1420	S11 W74				
SAC PEAK	20	1855	S09 E22	* USNRL	27	1436	S09 W77				
USNRL	20	1857	S10 E22	* USNRL	27	1439	S14 W72				
MCNATH	20	1857	S11 E22	USNRL	27	1448	S09 W77				
USNRL	20	1912	S10 E16	USNRL	27	1717	S10 W79				
* SAC PEAK	20	2025	N18 E62								
* MCNATH	20	2040 E	N18 E63								
SAC PEAK	20	2125	N20 E63								

COMMENCE - STATIONED - BOLLER

SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. LONG.	PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hr	
ABASTUMANI CAPRI-G CAPRI-G {GOOD HOPE CAPRI-G 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	0637	1.75	2.30		S-SWF
	01	0617 E	0652 D	S16	E25	4530	35 D	1	3			5.00		
	01	0817	0907	S16	E22	4530	50 D	16	3			5.00		S-SWF
	01	1000	1030	N24	E24	4529	30	1		1011	2.00	2.40		
	01	1001 E	1016	N23	E25	4529	15 D	1	3			4.00		S-SWF
	01	1038	1112	S16	E22	4530	32	16	3			6.00		
	01	1045 E	1058 D	S16	E20	4530	13 D	1	2	1045	2.50	2.70		S-SWF
	01	1047 E	1054 D	S18	E17	4530	7 D	1	3	1048	3.18	3.30		
	01	1401	1455	S16	E22	4530	54	1				4.00		S-SWF
	01	1412	1452 D	S15	E14	4530	40 D	1	1					
01	2219	2241	S16	E16	4530	82	2-						S-SWF	
01	2330	2355	N19	E09	4529	25	1							S-SWF
01	2354	2432	S15	E15	4530	38	1						S-SWF	
SYDNEY {ABASTUMANI MOSCOW-G CAPRI-G {CAPRI-G KRASNIA CAPRI-G {GOOD HOPE KRASNIA CAPRI-G PIRCULI CAPRI-G CAPRI-G CAPRI-G {GOOD HOPE CAPRI-G PIRCULI KIEV {CAPRI-G CAPRI-G {GOOD HOPE CAPRI-G CAPRI-G CAPRI-G MT WILSON	02	0145	0215 D	N22	W07	4529	30 D	1	2	0152	3.00	4.00		
	02	0512 E	0519 U	S16	E10	4530	10 D	1	1	0519	.87	1.20		S-SWF
	02	0602 E	1129 D	S15	E10	4530	327 D	16	2	0835	4.08	4.37	2.60	
	02	0622	0627 D	N16	W08	4529	5 D	1	3			3.0		S-SWF
	02	0657 E	0812 D	S14	E12	4530	75 D	1	3			5.00		
	02	0715	0728	S17	E09	4530	13	1	3	0718	1.75	.94		81
	02	0735	0801	N18	E63	4537	26	1	3			3.00		S-SWF
	02	0754	0812 D	S16	E08	4530	18 D	1	3	0757	2.00	2.10		
	02	0758 E	0801 D	S17	E11	4530	3 D	1	3	0758	2.18	1.17		95
	02	0810 E	0814 D	N29	W28	4525	4 D	1	3			3.00		S-SWF
02	0828 E		S17	E09	4530		1	2	0830	8.00	7.07		84	
02	0829	0902	S14	E12	4530	33	2	3			7.00		S-SWF	
02	0830 E	0845 D	S17	E11	4530	15 D	1	3	0830	2.88	1.54			S-SWF
02	0834	0904	N23	E13	4529	30	1	3			3.00		S-SWF	
02	0948	1055	S17	E08	4530	67	2	3	0954	6.50	6.70			S-SWF
02	0948	1132	S16	E12	4530	104	2	3			11.00		S-SWF	
02	0951 E	1013 D	S18	E06	4530	22 D	1	2	0955	7.00	6.19			70
02	1103	1123	N08	W11	4529	20	1	2	1109	2.57	2.80		S-SWF	
02	1112	1138	N24	E12	4529	26	1	3			3.00			S-SWF
02	1118	1132	N20	E05	4529	14	1	3	1145	2.00	2.10		S-SWF	
02	1142	1155	S16	E12	4530	13	1	3			3.00			S-SWF
02	1143	1201	S16	E12	4530	18	1	3	1145	2.00	2.10		S-SWF	
02	1207	1219 D	S16	E06	4530	12 D	1	3			3.00			S-SWF
02	1305 E	1312 D	N39	W15	4527	7 D	1	2	1307	1.71	2.30		80	
02	1455	1502	N18	W05	4529	7	1	3			4.00		S-SWF	
02	1615	1621 D	S17	W04	4528	6 D	1	3			4.00			S-SWF
02	2340	2358	N29	W43	4525	18	1						S-SWF	
{TASHKENT CAPRI-G SIMEIZ CAPRI-G {GOOD HOPE CAPRI-G GOOD HOPE SIMEIZ CAPRI-G {GOOD HOPE CAPRI-G	03	0552	0605	N21	W23	4529	13	1	1	0552	1.94	2.00		1.80
	03	0552 E	0622	N22	W22	4529	30 D	1	3			4.00		S-SWF
	03	0607 E		N22	W21	4530	20 D	1	2	0556	3.84	5.80	2.20	
	03	0627 E	0647	N29	W42	4525	20 D	1	3			3.00		S-SWF
	03	0655 E	0715	N30	W43	4525	20 D	1	3	0655	2.00	3.40		
	03	0659 E		N27	W41	4525	56	2	3			4.00		S-SWF
	03	0744	0840	N19	E49	4538	43 D	16	2	0758	4.00	6.60		
	03	0748	0831 D	N18	E50	4538	23 D	2	2	0803	4.36	7.10	2.20	64
	03	0807 E	0830	N18	W48	4525	60	1	2			8.00		S-SWF
	03	0840	0940	S14	E00	4530	32	2	2	0855	3.60	3.70		
03	0852	0924	S15	W01	4530	32	2	2			9.00		S-SWF	
03	0852													S-SWF

COMMENTS - STANDARDS - BOLDER

SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	MAX. PHASE	APPROX.					MATH- PLAGE REGION	TIME /— U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _z	MAX. INT. %
					LAT.	MER. DIST.										
{CAPRI-G CAPRI-G CAPRI-G {GOOD HOPE {KIEV {CAPRI-G {KIEV* CAPRI-G CAPRI-G CAPRI-G {CAPRI-G	03	1009	1022	S18 W05		4530	13	1	2			4.00		SLOW S-SWF SLOW S-SWF		
	03	1225	E	N26 E58		4538	5 D	3				3.00				
	03	1225	E	S17 W05		4530	7 D	1				3.00				
	03	1302	1307 D	S15 W00		4530	5 D	1				3.00				
	03	1303	1356 D	S15 W07		4530	53 D	2	1307	3.00						
	03	1304	E	S15 W01		4530	79 D	2	1338	7.20						
	03	1312	E	S16 W02		4530	55 D	1				2.10				
	03	1444	E	S16 W02		4530	7	3				4.00				
	03	1354	E	N28 W43		4525	10	3				3.00				
	03	1455	E	N26 E58		4538	16	3				6.00				
{CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	03	1608	E	N29 W42		4525	12 D	1	3			4.00		SLOW S-SWF S-SWF 		

COMMENCE - STANDARDS - BOLDER

SOLAR FLARES

MAY 1958

OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX.	LAT.	MER. DIST.				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 D		N27 W75		19 D	1	3	0939	1.02	4.00	2.20	100
	07	0924 E	0945 D		N29 W60		21 D	1				2.52		
	07	1217 E	1222		N25 E10		5 D	1	3			4.00		
	07	1411	1447		S14 W51		36	1	3			3.00		
	07	1615 E	1630		N24 E04		15 D	1	2			6.00		
	07	2009	2055	2012	S14 W62		46	1						
	07	2305	2318	2313	N25 W66		13	16	2	2313	.70	2.10		88
CAPRI-G	08	0635 E	0700 D		S14 W75		25 D	16	3			6.00		S-SWF
CAPRI-G	08	1154 E	1157		S15 W80		3 D	1	2			3.00		
SIMEIZ	10	0842	0915 D	0848	S18 E70		33 D	16	1	0856	2.62	9.90	3.10	60
CAPRI-G	11	1405 E	1405		N13 E30			1	3			3.00		
CAPRI-G	11	1435 E	1445		S18 E49		10 D	1	2			3.00		
VOROSHILOV	11	2215	2230	2217	N08 W34		15	1	2	2217	2.96	3.70		60
VOROSHILOV	12	0008	0022	0013	S19 E70		14	1	2	0013	.87	2.30		56
ALMA-ATA	12	0420	0455	0426	S19 E46		35	1	2	0428	2.20	4.40		74
ALMA-ATA	12	0434	0518	0455	N27 W61		44	16	1	0457	2.90	10.30		63
CAPRI-G	12	0554 E	0633		N26 W68		39 D	1	3			5.00		
CAPRI-G	12	0556 E	0636 D		S20 E36		40 D	1	3			3.00		
CAPRI-G	12	0619 E	0636 D		N07 W40		17 D	1	3			3.00		
CAPRI-G	12	0805 E	0814		S19 E43		9 D	1	2			3.00		
CAPRI-G	12	0851 E	0913		S22 E59		22 D	1	2			3.00		
CAPRI-G	12	0932 E	0941		N07 W40		9 D	1	2			3.00		
CAPRI-G	12	1002 E	1008		N28 W59		6 D	1	2			3.00		
CAPRI-G	12	1059	1114		S19 E44		15	16	2			5.00		
CAPRI-G	12	1409	1421		S17 E40		13	1	2			5.00		
CAPRI-G	12	1546 E	1601		S21 E33		15 D	1	2			4.00		
VOROSHILOV	12	2347 E	0015	2353	S17 E35		28 D	16	2	2353	1.74	2.20		128
VOROSHILOV	13	0026	0042		N07 W54		18	1	2	0032	2.35	4.10		60
ALMA-ATA	13	0243 E	0624	0436	N31 W80		221 D	1	3	0435	1.89	3.10		69
ALMA-ATA	13	0341	0421	0354	S34 E36		40	16	3	0355	1.10	2.70		81
ALMA-ATA	13	0341	0623	0519	S10 E85		162	16	3	0519	2.20	5.60		67
ALMA-ATA	13	0405	0434	0412	S20 E31		29	16	3	0412	1.26	2.60		83
ABASTUMANI	13	0608	0620	0616	S21 E23		12	16	3	0616	1.92	2.50		
CAPRI-G	13	0609 E	0644		S20 E23		35 D	1	3			5.00		
ALMA-ATA	13	0612	0626	0617	S22 E32		14	2	3	0617	1.87	5.40		145
SIMEIZ	13	0613	0625	0615	S23 E23		12	1	2	0615	1.75	2.60	3.30	72
ABASTUMANI	13	0715	0729	0718	S18 E21		14	16	3	0718	1.75	2.30		
PIRCULI	13	0717	0729	0721	S12 E17		12	1	2	0721	9.00	7.14		
SIMEIZ	13	0717	0729	0719	S12 E17		12	1	2	0719	.87	1.20	3.40	68
CAPRI-G	13	0719 E	0726		S16 E20		7 D	1	3			3.00		
KIEV	13	1144 E	1147	1145	S17 E19		3 D	1	3	1145	1.20	1.30		60
{KIEV GOOD HOPE CAPRI-G	13	1228	1239	1234	S06 E90		11	16	3	1234	1.20	8.60		60
	13	1228	1245	1235	S04 E80		17	1		1235	.60	3.50		
	13	1641 E	1656 D		N15 E90		15 D	1	2					
{CAPRI-G KHARKOV CAPRI-G	14	0913	0918		N10 E42		5	1	2	0917		4.00	1.60	
	14	0913	0920		N09 E36		7	1	1					
	14	1006 E	1030		S08 E65		24 D	1	2			4.00		

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		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.				MCNATH PLACE REGION	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _g	MAX. INT. %
{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		2347					
{TASHKENT KRASNYA	15	0346	0452		N40 E79		4557	66	1	3	0353	1.15	7.00	2.50	75	
	15	0811 E	0827		N40 E73		4557	16 D	1			1.04	2.10		56	
{KRASNYA GOOD HOPE	15	0920 E	1005 D		N40 E72		4557	45 D	1			1.65	3.10		61	
	15	1005	1200 D		N39 E77		4557	115 D	1		1010	.50	2.90			
{CAPRI-G KIEV	15	1021 E	1146		N15 E71		4558	85 D	1	2			5.00		70	
	15	1103 E	1345 D		N40 E79		4557	42 D	2	1	1329	4.28	14.90			
{KIEV* MT WILSON	15	1326 E	1334 D		N44 E68		4557	8 D	1	2			13.00			
	15	1457	1524		S06 E33		4555	27	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			
	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	2	0333	3.00	3.00		
{TASHKENT	16	0332	0410		N09 E16		4551	38	1	3	0333	2.65	3.00		85	
	16	0733 E	0736 D		N39 E57		4557	3 D	1	2			3.00			
{CAPRI-G KHARKOV	16	0836	0847		S07 E80		4554	11	1	2	0840		2.00			
	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			
	16	1150 E	1230		N39 E54		4557	40 D	1	2			4.00			
{CAPRI-G	16	1306	1321		N42 E57		4557	15	16	3	1314	1.71	2.90		90	
	16	1313	1340		N39 E54		4557	27	1	2			5.00			
{CAPRI-G	16	1313 E	1355 D		N20 E90		4560	42 D	1	2						
	16	1358 E	1615		N39 E63		4557	137 D	2	1	1525	3.15	6.20		84	
{TASHKENT	17	0319	0347		N41 E49		4557	28	1	2	0323	3.18	7.00		80	
	17	0630	0758 D		S20 W22		4548	88 D	16	2	0642	4.19	5.10			
{SIMEIZ ABASTUMANI	17	0636	0657		S22 W25		4548	21	1	2	0638	1.30	2.00	2.20	68	
	17	0743	0755		S18 W32		4548	12	1	2	0746	1.92	2.80			
{KRASNYA	17	0745 E	0800		S21 W27		4548	15 D	1	2	0746	.87	.50		88	
	17	0945 E	1009 D		S21 W22		4548	24 D	2	2	0954	.86	1.00		60	
{KIEV KHARKOV	17	0948	1028		S17 W33		4548	40	1	2	0954			1.70		
	17	1027	1035		S20 W20		4548	8	1	2	1034			1.20		
{KHARKOV	17	1227 E	1244		S22 W15		4548	17 D	1	2	1242			1.20		
	17	1344	1400 D		S18 W37		4548	16 D	1	2	1348	2.00	2.50			
{GOOD HOPE	17	1345 E	1410		S25 W14		4548	25 D	16	2	1354	1.00	2.70	1.90	80	
	17	1347	1409 D		S17 W34		4548	22 D	1	2		2.04	4.00			
{MOSCOW-G CAPRI-G	17	1608 E	1612 D		S17 W37		4548	4 D	16	1						
	17	2136	2212		S16 W35		4548	36	1	2	2159	4.35	5.70		71	
{MT WILSON VOROSHILOV	17	2150 E	2241		S21 W32		4548	51 D	16	2	2221	1.48	2.70		77	
	17	2159	2241		N42 E37		4557	42	1	2						
{VOROSHILOV	18	0118	0153		S18 W42		4548	35	1	1	0123	2.00	3.00			
	18	0356 E	0523		S36 W19		4548	87 D	1	2	0406	1.83	5.00			
{ABASTUMANI	18	0607	0608 D		N21 E80		4564	1 D	1	2	0608	.87	1.90		77	
	18	0615 E	0627 D		S18 W28		4548	12 D	1	3			6.00			
{CAPRI-G	18	0646 E	0718		N42 E35		4557	22 D	1	2	0654	1.74	1.50		79	
	18	0730 E	0800		N40 E37		4557	30 D	1	2	0739	1.20	2.10			
{GOOD HOPE	18	0948 E	1025 D		S30 E85		4557	37	1	2	0958					
	18	0951	1005		N40 E33		4557	14	1	2				1.20		

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OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IN- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MER. DIST.	MAGNITUDE BLAZE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z		MAX. INT. %
{ CAPRI-G KHARKOV CAPRI-G MT WILSON VOROSHILOV VOROSHILOV VOROSHILOV VOROSHILOV VOROSHILOV	18	1059	1122	N27 E09	4561	23	1	2	1300		3.00			Slow S-SWF	
	18	1254 E	1403 D	N40 E33	4557	69 D	1	1							
	18	1404 E	1430 D	N40 E30	4557	26 D	1	2			3.00				
	18	2059	2115	S17 W52	4548	16	1								
	18	2140 E	2212	S13 W45	4548	32 D	16	2	2148	1.83	2.70				
	18	2148 E	2202	S18 W77	4547	14 D	1	2	2153	.87	3.10				
	18	2212	2226	S15 W56	4548	14	16	2	2213	1.30	2.30				
	18	2220	2225	N23 E63	4560	5	16	2	2222	.96	2.40				
	19	0420	0500	S15 W61	4548	40	1	1	0431	2.00	4.00				
{ TASHKENT ABASTUMANI SIMEIZ ABASTUMANI CAPRI-G KIEV LOCARNO KHARKOV CAPRI-G GOOD HOPE CAPRI-G	19	0425	0510	S17 W63	4548	45	16	2	0434	2.12	5.00	3.30	90		
	19	0426 E	0510	S17 W64	4548	44 D	16	2	0432	2.12	6.00				
	19	0431 E	0449 D	S18 W60	4548	16	16	2	0431	4.36	11.00	2.50	84		
	19	0549	0752	N41 E25	4557	123	1	2	0610	1.83	4.60				
	19	1027 E	1032 D	S23 E17	4565	5 D	1	2			3.00				
	19	1059 E	1114 D	S18 W57	4548	15 D	1	1	1100	2.57	4.70		70		
	19	1100	1110 D	S19 W44	4548	10 D	16	3		4.00					
	19	1102 E	1132 D	S16 W55	4548	30 D	2	1	1104						
	19	1114 E	1133 D	S18 W52	4548	19 D	1	2							
{ SYDNEY TASHKENT LOCARNO CAPRI-G KHARKOV CAPRI-G GOOD HOPE CAPRI-G	19	1115 E	1205 D	S18 W56	4548	50 D	1	1	1115	2.20	3.90				
	19	1411 E	1426 D	S25 W85	4566	15 D	1	2			4.00				
	20	0426	0445	S16 W62	4548	19	1	2	0433	2.00	4.00				
	20	0426	0454	S17 W64	4548	28	1	2	0431	2.65	6.00	2.30	75		
	20	0715 E	0730	S17 W68	4548	15 D	1	3		3.00					
	20	0722 E	0727 D	S19 W74	4548	5 D	16	2			6.00				
	20	0800 E	0847 D	N03 E85	4574	47 D	1	1	0828			1.20			
	21	0333	0443	N08 E15	4563	70	2	3	0408	2.80	6.20		88		
	21	0401	0458 D	N24 E30	4560	57 D	1	3	1439	2.20	3.80		70		
{ ALMA-ATA ALMA-ATA ALMA-ATA ABASTUMANI KHARKOV CAPRI-G LOCARNO CAPRI-G KHARKOV CAPRI-G CAPRI-G	21	0612	0652	N09 E13	4563	40	2	3	0625	2.83	5.70		81		
	21	0622	0700	N09 E13	4563	38	1	2	0627	1.16	2.00				
	21	0808 E	0823	N20 E25	4560	15 D	1	2	0810			2.30			
	21	0810	0830	N20 E28	4560	20	1	3			2.00				
	21	0910 E	0940	N09 E13	4563	30 D	1	3		2.00					
	21	0920 E	0927 D	N09 E13	4563	7 D	1	2		4.00					
	21	0932	0945	N08 E12	4563	13	1	2	0934			1.60			
	21	1119	1141	N08 E12	4563	22	1	2		3.00					
	21	1319 E	1330 D	N09 E55	4574	11 D	1	2		3.00					
{ ALMA-ATA ABASTUMANI ABASTUMANI ABASTUMANI KRASNYA GOOD HOPE CAPRI-G KRASNYA KHARKOV KRASNYA KHARKOV LOCARNO	22	0210	0758 D	N08 E01	4563	348 D	2	2	0622	9.45	13.50		79		
	22	0435 E	1004 D	N18 E00	4560	329 D	16	3	0945	8.70	10.50	2.40	76		
	22	0436	0829	N26 E16	4560	233	1	3	0439	1.48	2.20		70		
	22	0454	0502	N08 E60	4574	8	1	3	0456	1.75	5.00		70		
	22	0838	0858 D	N16 E90	4578	20 D	1	2	0845	.70	3.70		57		
	23	0758	0810	N23 E80	4578	12	16	2	0802	1.50	8.60				
	23	0800 E	0810	N23 E76	4578	10 D	16	2		4.00					
	23	0800 E	0821	N22 E85	4578	21 D	16	2	0800	1.74	8.00		83		
	23	0801 E	0805	N22 E87	4578	4 D	1	2	0802			1.20			
{ KRASNYA KRASNYA KHARKOV LOCARNO	23	0833	0842	S16 E90	4579	9	1	2	0838	.61	3.20		77		
	23	0835	0845	S10 E85	4579	10	1	2	0840			1.40			
	23	1300 E	1340 D	S22 W38	4565	40 D	16	3		1.00					

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		START	END	MAX. PHASE	APPROX.	LAT.	MER. DIST.				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %
KIEV	23	1306	1412 D	1400 U	S24 W44	S24 W44	4565	66 D	1	3	1400	1.00	1.50		80
LOCARNO	23	1310 E	1325 D		S13 E85	S13 E85	4579	15 D	1	3		3.00			
KIEV	23	1410 E	1412 D	1411 U	S23 W48	S23 W48	4565	2 D	1	3	1411	1.071	2.90		60
CAPRI-G	23	1439 E	1447 D		S10 E85	S10 E85	4579	8 D	1	2					
KHARKOV	24	0816 E	0855 D		S22 W53	S22 W53	4565	39 D	1	1	0820			1.70	50
KIEV	24	1027 E	1046	1029 U	N10 E39	N10 E39	4574	19 D	1	1	1029	1.28	1.70		70
KIEV	24	1206 E	1213 D	1207 U	N14 W16	N14 W16	4561	7 D	1	1	1207	4.28			
CAPRI-G	24	1455 E	1525		S16 E35	S16 E35	4576	30 D	1	2		5.00			
CAPRI-G	24	1542 E	1552		N18 W12	N18 W12	4561	10 D	16	2		6.00			
CAPRI-G	24	1604 E	1615 D		N19 W12	N19 W12	4561	11 D	16	2					
CAPRI-G	25	0529 E	0540		S15 E64	S15 E64	4579	11 D	1	2					
CAPRI-G	25	0636 E	0645		S15 E64	S15 E64	4579	9 D	1	2					
CAPRI-G	25	0650 E	0705		N15 W24	N15 W24	4561	15 D	1	2					
CAPRI-G	25	0734 E	0740		S25 W67	S25 W67	4565	6 D	1	2					
GOOD HOPE	25	0735 E	0820		S24 W70	S24 W70	4565	45 D	1	2	0735	1.00	2.90		
CAPRI-G	25	0745	0752		S15 E63	S15 E63	4579	7	1	2					
KIEV	25	0823 E	0834 D	0830 U	N25 E19	N25 E19	4568	11 D	1	3	0830	1.71	2.20		60
KIEV	25	0827	0843	0829	S24 W70	S24 W70	4565	16	2	3	0829	2.96	7.10		80
GOOD HOPE	25	1117	1150	1123	N08 E07	N08 E07	4575	33	1	3	1123	4.60	4.70		
KIEV*	25	1118 E	1128 D	1124 U	N07 E05	N07 E05	4575	10 D	2	3	1124	5.13	5.50		120
GOOD HOPE	25	1122 E	1129 D		N08 E03	N08 E03	4575	7 D	1	2					
GOOD HOPE	25	1143	1210	1151	S23 W70	S23 W70	4565	27	1	2	1151	1.00	2.90		
CAPRI-G	25	1150 E			S25 W70	S25 W70	4565		1	2					
MT WILSON	25	1823	1838	1827	N07 E02	N07 E02	4575	15	1						
TASHKENT	26	0510	0541	0524	N12 W55	N12 W55	4563	31	1	3	0514	3.54	6.00	2.20	60
ABASTUMANI	26	0510	0547	0523	N11 W57	N11 W57	4563	37	1	2	0537	1.04	2.50	2.20	
KRASNYA	26	0548	0553 D		S28 W90	S28 W90	4565	5 D	1	2	0548	1.05	5.50		55
KHARKOV	26	0645 E	0831		S24 W85	S24 W85	4565	106 D	1	2	0650			2.90	
GOOD HOPE	26	0714	0804	0721	S26 W90	S26 W90	4565	50	1	2	0721	.40			
CAPRI-G	26	0720 E	0801		S14 E39	S14 E39	4579	11 D	1	3					
CAPRI-G	26	0742	0753		S26 W90	S26 W90	4565	35 D	1	3	0821	.30			
GOOD HOPE	26	0811 E	0846 D	0821	S28 W90	S28 W90	4565	36 D	1	3					
CAPRI-G	26	0835 E	0948	0911 U	S24 W86	S24 W86	4565	73 D	1	2	0911	.44	2.30		47
KHARKOV	26	0856	1010		N11 W55	N11 W55	4563	74	1	2	0918	.86			70
KIEV	26	0913	0921	0917	S18 W41	S18 W41	4559	8	1	2	0917				
CAPRI-G	26	1139 E	1146		N08 W56	N08 W56	4563	38	1	2					
CAPRI-G	26	1532	1610		N10 E09	N10 E09	4574	15	1	2					
CAPRI-G	26	1538	1553		N08 W14	N08 W14	4575	31	1	2					
MT WILSON	26	1739	1812	1743	S13 W52	S13 W52	4559	42	16	2	2358	1.48	2.43		84
VOROSHILOV	26	2343	0025	2358	S23 W51	S23 W51	4559	18	1	2	0019	1.22	2.20		80
VOROSHILOV	27	0011	0029	0019	S11 W51	S11 W51	4559	31	16	2	0408	1.81	8.50		66
ALMA-ATA	27	0354	0425	0408	N31 E88	N31 E88	4583	14 D	1	2	0732	.81	2.80		62
KRASNYA	27	0724 E	0738	0732 U	N30 E80	N30 E80	4583	16 D	1	2	0740			1.20	
KHARKOV	27	0730 E	0746	0735	N18 E17	N18 E17	4578	8 D	1	2					
CAPRI-G	27	1247 E	1255		N19 E16	N19 E16	4578	11 D	1	1	1417	1.71	2.00		70
KIEV	27	1412 E	1423 D	1417 U	N18 E16	N18 E16	4578		1	2					
CAPRI-G	27	1420 E			N10 W77	N10 W77	4563	20	16	2	0012	.70	2.50		104
VOROSHILOV	28	0012	0031	0012											

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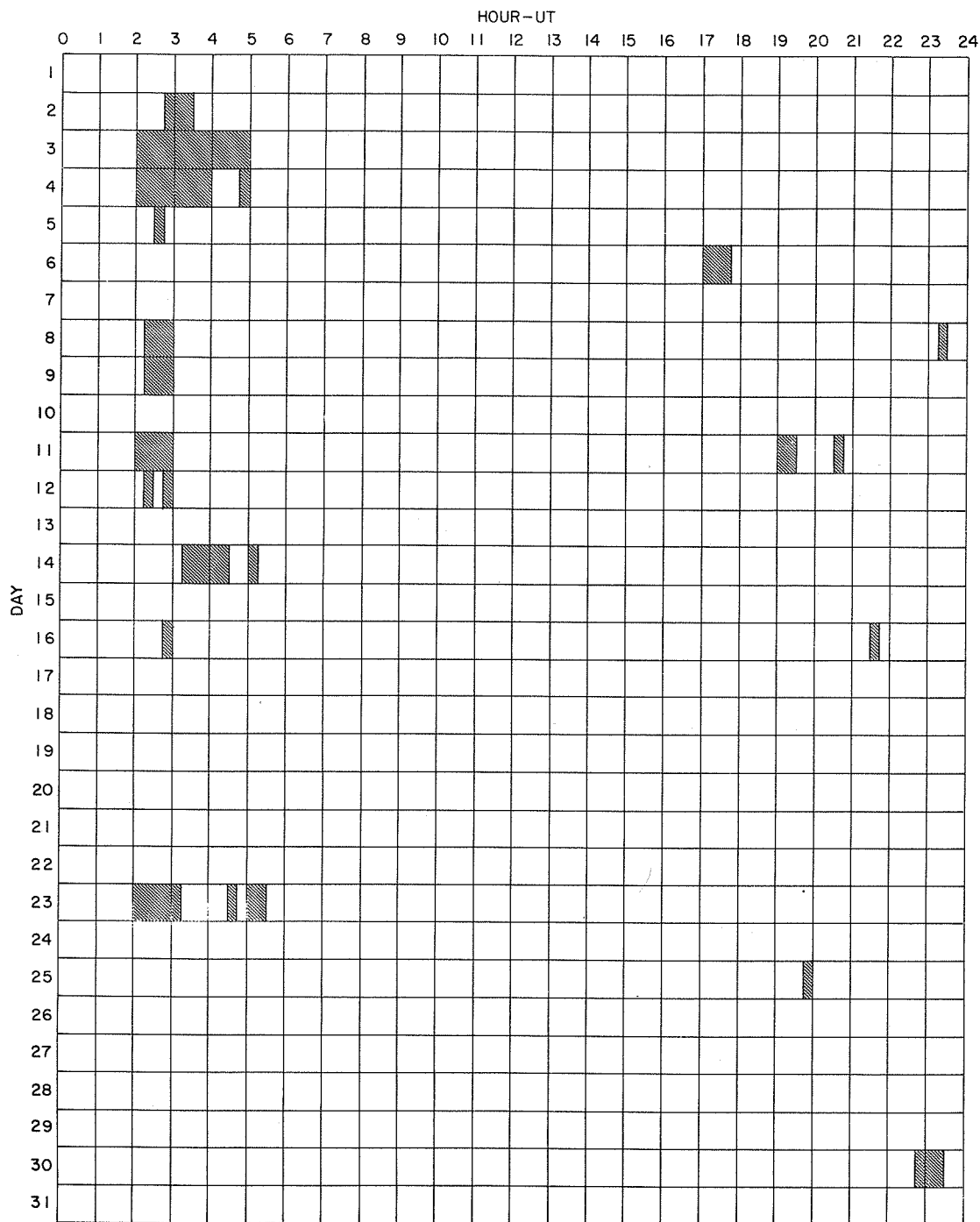
OBSERVATORY	DATE MAY 1958	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IN- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	MAX. PHASE	APPROX.		MAGNITUDE — PLATE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha		MAX. INT. %	
					LAT.	MER. DIST.	McMATH FLARE REGION										
KRASNYA LOCARNO CAPRI-G CAPRI-G CAPRI-G VOROSHILOV	28	0541	0846 D	0543	N28 E90		4587	185 D	1	1	0543	.63	3.50		54		
	28	1035 E	1055		S14 W15		4576	20 D	1	3		1.00					
	28	1507	1527		S18 E14		4579	20 D	1	3			5.00				
	28	1546	1557		S10 W00			11	1	1			2.00				
	28	1640 E	1700 D		N26 E28		4578	20 D	1	2			2.00				
	28	2150	0000	2231	S28 W09		4580	130	16	2	2231	4.35	5.00		84		
SYDNEY CAPRI-G KHARKOV { MOSCOW-G CAPRI-G KIEV CAPRI-G	29	0351	0448 D	0422	N15 W18		4574	57 D	1	2	0422	4.00	5.00				
	29	0632 E	0650		N26 E51		4583	18 D	1	3			2.00				
	29	0812	0842	0828	N30 E22		4578	30	1	2	0821			1.50			
	29	1003 E	1034		N22 E39		4583	31 D	1	2	1010	1.53	2.20		110		
	29	1005 E	1014		N26 E32		4583	9 D	1	2			2.00				
	29	1043 E	1049 D	1044 U	S17 E04		4579	6	1	2	1444	2.15	2.30		60		
VOROSHILOV { SYDNEY TASHKENT ALMA-ATA ALMA-ATA ALMA-ATA { SIMEIZ KRASNYA CAPRI-G CAPRI-G KIEV { CAPRI-G CAPRI-G CAPRI-G CAPRI-G MT WILSON	30	0057	0127	0103	S16 E02		4579	30	16	2	0103	2.52	2.70		92		
	30	0255	0420 D	0316	N19 W51		4568	85 D	1	2	0316	3.00	4.00				
	30	0258	0433	0325	N21 W48		4568	95	16	3	0335	7.07	12.00		65		
	30	0300 E	0338	0313	N22 W46		4568	38 D	1	2	0313	1.85	4.30		63		
	30	0313 E	0410 D	0350	N24 W48		4568	57 D	16	2	0350	1.89	4.00		81		
	30	0313 E	0410 D	0351	N25 W44		4568	57 D	2	3	0351	2.83	5.50		83		
KRASNYA CAPRI-G CAPRI-G KIEV { CAPRI-G																	

COMMERCE - STANDARDS - BOULDER

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 - GAIISH
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUTINS SCHAUTINS
 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
Alma Ata
Anacapri (Swedish)
Arcetri
Arosa
Athens
Capetown
Climax
Dunsink
Hawaii

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

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

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

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX.					TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g		MAX. INT. %
					LAT.	LONG.									
ALMA-ATA {TASHKENT ALMA-ATA ALMA-ATA ALMA-ATA SCHAUVINS SCHAUVINS SCHAUVINS MOSCOW-G SCHAUVINS	01	0310 E	0419 D	0410	S16	E09	4581	69 D	2	2	0410	5.80		83	S-SWF
	01	0259	0354	0308	N32	W24	4578	55	1	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	16	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	1122	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	16	1	1333	7.90	2.20	90	
ALMA-ATA {ALMA-ATA ALMA-ATA KRASNAYA UCCLE	01	1712 E	1750		N19	W08	4578	38 D	1	2		3.00	1.30		S-SWF
	02	0254	0600 D	0339	N20	W20	4578	186 D	1	3	0339	2.70		71	
	02	0307	0558	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	16	3	0935	4.00			
	03	0116	0204 D	0143	N03	W73	4577	48 D	1	2	0143	4.00			
	03	0147	0204	0151	N12	W72	4577	17	16	2	0151	7.00		185	
	03	0156	0248	0234	N22	W68	4577	52	1	2	0234	3.00			
	03	0334	0410 D	0339	N31	W49	4578	36 D	16	2	0336	9.00	3.10	85	
SYDNEY {SYDNEY SIMEIZ SIMEIZ UCCLE UCCLE NEDERHORST UTRECHT {MT WILSON {NEDERHORST	03	0334	0437	0345	N34	W51	4578	63	2	2	0345	4.50			G-SWF S-SWF
	03	0355 E	0502 D	0455	N31	W49	4578	67 D	16	2	0402	12.50	1.70	84	
	03	0451	0503		N28	W45	4578	12	1	2	0455	1.80	2.90	80	
	03	0847	0904		N13	W76	4577	17	1	4					
	03	1040	1130	1108	N12	W76	4577	50	16	3	1108	5.00			
	03	1320	1415 D		S22	E90	4592	55 D	26	2					
	03	1400	1404		N			4	16	2					
	03	1510 E	1528	1511	N30	W60	4578	18 D	2-	2					
	03	1513	1525 D		N32	W51	4578	12 D	2	2					
	{VOROSHILOV SYDNEY VOROSHILOV VOROSHILOV SYDNEY UCCLE UCCLE UCCLE UCCLE VOROSHILOV VOROSHILOV VOROSHILOV	04	0055	0108		N46	E75	4597	13	1	2	0058	3.90		
04		0058	0106	0103	N47	E73	4597	8	1	2	0103	2.00			
04		0057	0125	0100	N14	W60	4578	28	16	2	0100	2.60		120	
04		0134 E	0146		N26	W70	4578	12 D	16	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	2.20			
04		1511 E	1519 D	1513	N43	E70	4597	8 D	16	2	1513	3.40			
04		2128	2133		N46	E44	4597	5	16	2	2128	2.70		97	
VOROSHILOV VOROSHILOV VOROSHILOV SYDNEY SYDNEY TASHKENT {TASHKENT SIMEIZ SIMEIZ SCHAUVINS	04	2150 E	2356		N14	W58	4578	126 D	2	2	2158	9.90		155	Slow S-SWF
	04	2355 E	2358 D		N46	E67	4597	3 D	16	2	2358	2.80		120	
	05	0133	0155	0136	N29	W70	4578	22	1	3	0136	.75			
	05	0159	0205 D	0203	N26	E66	4596	6 D	1	3	0203	3.00		185	
	05	0258	0307	0302	N29	E17	4587	9	2	3	0302	10.00			
	05	0437	0452	0439	N26	E18	4587	15	1	3	0438	3.00	2.10	65	
	05	0518	0525	0520	N45	E65	4597	7	1	3	0521	2.00	2.80	70	
	05	0520	0530 D		N45	E68	4597	10 D	1	2	0520	3.90			
	05	0605 E	0630 D		N17	W31	4586	25 D	1	2	0605	2.50	1.80	56	
	05	0647 E	0937 D		N42	E57	4597	165 D	16	2		4.00	2.80		

COMMERCE - STANDARDS - BOULDER

JUNE 1958

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		IM- POR- TANCE	OR. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MATH- FLAGE REGION	DURA- TION — MINUTES		MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	
	JUNE 1958							TIME — UT		MAX. INT. %	
{ UCCLE	06	1305	1400	N43 E45	4597	55	3	1307	3.70		G-SWF
{ UCCLE	06	1305	1400	N43 E45	4597	55	3	1337	5.00		
{ UCCLE	06	1510	1600	N09 W25	4586	50	3	1530	2.20		
{ UCCLE	06	1537	1608	N22 E50	4596	31	3	1600	2.20		
{ UCCLE	06	1605	1635	N43 E45	4597	30	3	1611	3.40		
{ SCHAUNINS	06	1614 E	1616 D	N43 E40	4597	2 D	1		7.00	1.80	
{ ALMA-ATA	07	0233	0301	N31 E43	4596	28	3	0239	1.90		79
{ ALMA-ATA	07	0237	0240	N30 E39	4596	63	3	0239	1.70		64
{ ALMA-ATA	07	0238	0258	N27 E38	4596	20	3	0244	1.60		70
{ ALMA-ATA	07	0240	0428	N44 E34	4597	108	3	0305	7.00		73
{ UCCLE	07	0819 E	0825 D	N45 E34	4597	6 D	1				
{ UCCLE	07	1019 E	1045 D	N28 E34	4596	26 D	1				
{ SCHAUNINS	07	1309 E	1520 D	N43 E30	4597	11 D	1	1025	2.30	3.00	slow S-SWF
{ ALMA-ATA	08	0200 E	0500	N45 E28	4597	180 D	3	0342	2.20		77
{ ALMA-ATA	08	0315	0325	N12 W44	4587	10	3	0318	3.60		63
{ ALMA-ATA	08	0316	0324	N12 W47	4587	8	3	0318	6.20		64
{ ALMA-ATA	08	0338	0350	N46 E23	4597	12	3	0343	1.60		76
{ ALMA-ATA	08	0339	0352	N44 E23	4597	13	3	0343	1.20		78
{ KRASNAYA	08	0751	0858	N29 E26	4596	7	3	0852	.50		5
{ SCHAUNINS	08	0836 E	1049 D	N43 E20	4597	133 D	2		5.00	4.60	
{ SCHAUNINS	08	0850	0917	N43 E19	4597	27	3	0901	.80		105
{ KIEV	08	0850	0948	N45 E20	4597	58 D	2	0855	4.87		72
{ MOSCOW-G	08	0854 E	1002 D	N45 E20	4597	68 D	2	0859	14.30	2.50	140
{ MOSCOW-G	08	1018	1226 D	N26 W31	4587	8 D	1	1053	4.10	3.10	140
{ SCHAUNINS	08	1112 E	1640 D	N25 W53	4587	328 D	2		3.00	2.30	
{ SCHAUNINS	08	1655 E	1713 D	N31 E30	4596	18 D	1		2.00	2.20	
{ MT WILSON	08	1753	1840	N43 E12	4597	47	1				S-SWF
{ TASHKENT	09	0557	0610	N31 E21	4596	13	3	0601	2.00	1.60	65
{ KRASNAYA	09	0559	0608	N32 E20	4596	7	3	0604	.30		88
{ UCCLE	09	0803	0808	N05 W88	4583	5	2				
{ KRASNAYA	09	0843 E	0846	N46 E08	4597	2 D	3	0846	.60		91
{ UCCLE	09	0843	0848	N45 E06	4597	5	2				
{ ABASTUMANI	09	0856 E	0952 D	N40 E06	4597	56 D	2	0856	6.00		
{ UCCLE	09	0900	0900	N32 E20	4596	1	2	0900	2.00		
{ SIMEIZ	09	0904 E		N45 E12	4597		2				
{ KRASNAYA	09	0905 E	0910 D	N41 E08	4597		2				
{ MOSCOW-G	09	0907 E	0944	N42 E06	4597	5 D	3	0908	9.90	2.80	76
{ UCCLE	09	0913 E	0945	N42 E08	4597	34 D	1	0914	1.20		84
{ UCCLE	09	0941	0954	S30 E35	4598	32 D	3	0914	4.30	2.70	130
{ UCCLE	09	0941	0954	S30 E35	4598	13	3		3.50		
{ MOSCOW-G	09	0945 E	1004	S30 E40	4598	19 D	3				
{ UCCLE	09	0950	0954	N27 E13	4596	4	2	0947	5.60	2.30	90
{ MOSCOW-G	09	0950 E	1012	N26 E14	4596	22 D	1	0951	3.70	3.40	130
{ ABASTUMANI	09	0951 E	1001 D	N26 E13	4596	10 D	2		2.60		
{ KRASNAYA	09	0952 E	0954 D	N32 E19	4596	2 D	3	0952	.30		82
{ UCCLE	09	1008	1052 D	N44 E07	4597	46 D	1	1010	5.60		130
{ MOSCOW-G	09	1012 E	1029	N45 E06	4597	17 D	1	1014	2.20	4.70	
{ SCHAUNINS	09	1357 E	1423 D	S16 E33	4598	26 D	3		3.00	1.50	
{ SCHAUNINS	09	1528 E	1557 D	N27 W72	4587	29 D	2		3.00	2.00	
{ TASHKENT	10	0304	0328	N43 W01	4597	24	2	0314	11.00	2.70	65

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	MAX. PHASE	APPROX.					MCARTHUR PLAGE REGION	TIME	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _z	MAX. INT. %
					LAT.	MER. DIST.										
ALMA-ATA ALMA-ATA UCCLE	10 10 10	0306 0357 1124	0327 0418 1146	0318 0407 1129	N44 W01 N43 W06 S27 E30	4597 4597 4598	21 21 22	16 1 16	2 2 3	0318 0407 1129	1.50 1.20 4.50		84 66			
	11 11															

COMMERCE - STANDARDS - BOULDER

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.				MER. DIST.	MONTH PLACE REGION	TIME — U T	MEAS. AREA Sq. Deg.		CORR. AREA Sq. Deg.
{ MT WILSON KIEV CLIMAX	15	1401 E	1421 D	N15 E31		4607	20 D	1	1406	6.40	4.15		66	Slow S-SWF
	15	1405 E	1414 D	N13 E27		4607	9 D	1	2322			2.30	70	Slow S-SWF
	15	2320 E	2355	N12 E24		4607	35 D	2					84	
{ ABASTUMANI KRASNYA PIRCULI	16	0557 E	0918 D	N15 E19		4607	201 D	1	0648		2.40		65	
	16	0628 E	0700 D	N18 E22		4607	32 D	1	0650		1.20		70	
	16	0646	0701	N18 E14		4607	15	1	0651		11.00		84	
{ UCCLE ABASTUMANI UCCLE	16	0904	0927	N17 E13		4607	23	1	0913	2.20			65	
	16	0908	0918 D	N14 E16		4607	10 D	1	0913		2.10			
	16	0947	0953	N05 E80		4614	6	16	0949	2.20	3.70			
{ UCCLE SCHAUINS KRASNYA	16	1038	1102	N17 E14		4607	24	1	1051	2.20				
	17	0655 E	0702 D	N30 W90		4596	7 D	1			2.20		78	
	17	0911 E	1004	N39 W90		4597	53 D	1	0927		6.00		84	
{ KIEV MOSCOW-G KHARKOV	17	0921 E	0942	N39 W90		4597	21 D	2	0931		12.95		100	
	17	0925 E	0951 D	N39 W90		4597	44 D	1	0946		3.80			
	17	0929 E	1013	N40 W90		4597	44 D	1	0936		9.00	2.80		
{ UCCLE SCHAUINS KIEV	17	0930 E	0934 D	N38 W90		4597	4 D	1						
	17	0932 E	1025 D	N30 W90		4597	53 D	1						
	17	1055 E	1123	N06 E28		4610	28 D	1	1108		2.28	2.70	54	
{ UCCLE SYDNEY KRASNYA	17	1519	1533	N38 W90		4596	14	1						
	18	0210	0224	N25 E59		4613	14	2	0213	3.00	8.00		66	S-SWF
	18	0553	0558	N20 E61		4613	5	1	0557	2.50	1.90			
{ SYDNEY TASHKENT SYDNEY	18	2348	0003	N14 W14		4607	15	1	2359	6.00	3.00			
	19	0010	0125	N12 W17		4607	15	2	0036	6.00	6.50		225	S-SWF
	19	0217	0255	N13 W19		4607	38	2	0228	8.00	10.00			
{ MT WILSON KIEV SCHAUINS	19	0218	0245 D	N13 W19		4607	27 D	26	0226		9.00			
	19	0219	0240 D	N15 W17		4607	21 D	16						
	19	0944 E	1048 D	N10 W26		4607	64 D	2	1012		16.02	3.40	75	S-SWF
{ KIEV* MT WILSON SYDNEY	19	1001 E	1130 D	N14 W19		4607	89 D	2			9.00			
	19	1003 E	1053 D	N12 W24		4607	50 D	2			33.00			S-SWF
	19	1442 E	1518	N15 W26		4607	36 D	1	0027	6.00	7.00			S-SWF
{ CLIMAX MT WILSON TASHKENT	19	2353 E	0052 D	N14 W29		4607	59 D	2						
	20	0019 E	0050	N20 W48		4607	31 D	2	0030	7.20				
	20	0021	0047	N15 W29		4607	26	1						
{ VOROSHILOV VOROSHILOV VOROSHILOV	20	0340	0423	N15 W31		4607	43	16	0352		7.00	3.00	95	
	20	0350 E	0446	N09 W34		4607	56 D	16	0406		6.50		66	
	20	2209 E	2322	S26 W24		4608	73 D	1	2209		2.25		57	
{ VOROSHILOV SYDNEY ABASTUMANI	21	0111	0140	S11 E71		4618	29	1	0113		2.14		64	
	22	0334	0350	N17 E70		4621	16	1	0337	0.75	3.00			
	22	0445	0454	N14 E28		4616	9	1	0446		1.70			
{ ALMA-ATA ABASTUMANI SCHAUINS	22	0446 E	0456 D	N14 E28		4616	10	1	0450		2.10		70	
	22	0856 E	0859 D	N19 W64		4607	3 D	1	0858		6.60			
	22	1655 E	1722 D	S09 E90		4624	27 D	16						
{ SCHAUINS MT WILSON TASHKENT	22	1713 E	1722 D	S19 E90		4622	9 D	1				3.70		
	22	1805	1905	S14 E50		4618	60	1				1.80		G-SWF
	23	0149	0236	S20 E80		4622	47	1	0211		16.00			

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.	MATH					TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g		MAX. INT. %	
					LAT.	MER. DIST.										PLAGE REGION
{ ALMA-ATA ABASTUMANI TASHKENT SIMEIZ KRASNAYA ABASTUMANI PIRCULI MOSCOW-G PIRCULI SIMEIZ ABASTUMANI KRASNAYA MOSCOW-G	23	0206	0455	0402	S21 E85	4622	169	2	3	0402		6.50		100	S-SWF	
	23	0400 E	0832	0403 U	S23 E87	4622	272 D	1	3	0400		20.00	3.40			
	23	0401	0415	0403	S20 E81	4619	14	1	2	0402		17.00	3.80	100		
	23	0702	0850	0719	N28 E55	4619	108	26	2	0712		20.00		117		
	23	0710 E	0818	0716	N27 E55	4619	68 D	16	2	0716		3.10				
	23	0712 E	0829	0718 U	N24 E55	4619	77 D	2	3	0715		20.00	2.70			
	23	0713 E	0837	0715	N30 E50	4619	84 D	3	3	0715		33.00				
	23	0721 E	0838 D		N20 E50	4619	77 D	16	1	0734		11.90	2.80	90		
	23	0754	0824	0801	S08 E40	4618	30	16	3	0801		8.00				
	23	0757	0841	0801	S14 E37	4618	44	16	2	0800		5.10	3.90	S-SWF		
{ ABASTUMANI SIMEIZ KRASNAYA MOSCOW-G MOSCOW-G	23	0758	0829	0802 U	S13 E35	4618	31	16	2	0805		4.00	3.20	98	S-SWF	
	23	0800	0815	0805	S12 E36	4618	15	1	3	0805		1.50		105		
	23	1302 E	1343 D		S23 E69	4622	41 D	16	1	1303		5.40	2.40	80		S-SWF
	24	0407	0640	0533	S20 E63	4622	153	16	3	0533		5.80		66		
	24	0415 E	0951 D	0515 U	S22 E66	4622	336 D	16	2	0506		9.00	2.40			
	24	0533	0539		S18 E68	4622	6	1	2	0536		1.50		63		
	24	0710 D	0739	0724	N11 W90	4607	29 D	1	2	0724		5.80		60		
	24	0851	0901	0853	S12 E20	4618	10	1	2	0853	2.20					
	24	1016	1032 D	1021	N07 E75	4623	16 D	16	2	1021	2.80					
	24	1021 E	1053		S12 E64	4624	22 D	16	2	1022		4.20		70		
24	1154 E	1216		S10 E18	4618	22 D	1	1	1155		5.60	2.60	110	S-SWF		
25	0353 E	0440 D	0353	N09 E60	4623	47 D	1	1	0355		12.00	2.20	55			
25	0356 E	1001 D	0356 U	N05 E63	4623	245 D	1	2	0356		2.00	2.20				
25	0549	0609	0553 U	N23 E90	4628	20	1	2	0553		5.50		52			
25	0800	0829	0803	S15 E07	4618	9	16	3	0803		5.20		63			
25	0809	0828	0813	S15 E47	4622	18	1	3	0813		4.20		58		S-SWF Slow S-SWF Slow S-SWF	
25	2315	2447	2412	S22 E44	4622	92	16	3								
26	0000	0106	0028	S29 E40	4622	66	2	1	0028	7.00	11.00					
26	0245 E	0445 D	0307	N14 E52	4623	120 D	3	2	0307	8.00	13.00					
26	0357 E	0517 D	0417 U	N11 E51	4623	80 D	16	1	0418		11.00		65			
26	0718	0720		N27 E88	4628	2	1	2	0720		3.60		55	S-SWF		
26	2241	2251 D	2251	N10 E40	4623	10 D	1									
27	0300	0405	0308	N10 E37	4623	65	2	2	0310		6.00	2.90	120			
27	0615	0635	0619	S17 W16	4618	20	16	2	0620		2.10	2.20	76			
27	0802	0810	0804	S20 W16	4618	8	1	2	0803		2.30		60			
27	0841	0923 D		S24 E25	4622	42 D	1	2	0910		2.30	2.60	73			
27	0842	0936	0859 U	S24 E25	4622	54	1	2	0910		1.30	1.80	76			
27	0851	0925		S26 E24	4622	34	1	2	0905		4.00	1.70				
27	1120 E	1143 D		N09 E38	4623	23 D	1	1	1121		4.00	2.00				
27	1121 E	1132		N11 E38	4623	11 D	1	1	1125	4.00	1.40	4.50	130		S-SWF	
27	1533	1552 D	1537	S23 E21	4622	19 D	16	4	1537		4.80					
28	0826	0837	0827 U	S16 W16	4618	11	1	2	0827		2.20	2.00	60			
28	0817	0928	0910	S16 E18	4622	71	1	3	0910		9.00					
28	0849	0926	0910	S20 E14	4622	37	16	2	0908		1.20		186			
28	0845	0928	0908	S19 E13	4622	39	1	2	0905		4.40	2.70	76			
28	0850	0930	0910	S20 E14	4622	40	16	2	0909		2.42		85			
28	0851 E	0931	0904 U	S19 E13	4622	40 D	1	2	0903		2.60	2.60	76			
28	0853	0933	0912	S20 E12	4622	40	1	3	0912		2.00	2.30				
28														S-SWF		

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

JUNE 1958

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. MER. DIST.				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	MAX. INT. %
MOSCOW-G	28 JUNE 1958	0914 E	0916 D	S18 E15	4622	2 D	1	1	0930		2.30	3.00	120
ABASTUMANI	28	0912	1004 D	N13 E23	4623	52 D	2	2	0929		5.50		88
KRASNYA	28	0924	0945	N11 E24	4623	20	1	1	0929		1.10		80
KHARKOV	28	0928	0945	N22 E25	4623	77	1	1	0932		3.00	1.70	
CLIMAX	28	1100	1126	N23 E88	4630	26	1	1	1118		5.00		
MT WILSON	28	1608	1724 D	S20 E02	4622	76 D	2	2	1706	6.40			
MT WILSON	28	1705	1836	S22 E02	4622	91	1	1					
MT WILSON	28	1842	1857	S22 E08	4622	15	1	1					
MT WILSON	28	2033	2100	N18 E14	4623	27	16						
TASHKENT	29	0309	0335	S12 W43	4618	26	1	2	0315		5.00	2.60	80
SIMEIZ	29	0607 E	0624 D	N25 E82	4630	14 D	16	1	0610		6.60	1.80	68
SIMEIZ	29	0623 E	0640 D	N19 E70	4630	17 D	1	1	0627		4.00	1.80	52
ABASTUMANI	29	0720	0752 D	S17 W08	4622	32 D	1	2	0724		3.10		62
SIMEIZ	29	0729 E	0745	S08 E90	4633	14 D	16	1	0734		10.00	3.30	56
SIMEIZ	29	0832 E		N25 E82	4630		1	1	0735		5.40	1.80	
ABASTUMANI	29	0849	0933 D	N11 E09	4623	44 D	16	2	0919		1.50		84
MT WILSON	29	1734	1800	S17 W19	4622	26	1						
MT WILSON	29	1802	1818	S18 W14	4622	16	1						
MT WILSON	29	2118	2134	S18 W22	4622	16	1						
TASHKENT	30	0253	0303	S12 W28	4624	10	1	3	0256		2.00		184
ALMA-ATA	30	0254	0304	S12 W28	4624	10	2	2	0258		5.50		92
TASHKENT	30	0431	0449	N10 W04	4623	18	1	3	0436		2.00	2.00	75
ALMA-ATA	30	0434 E	0447	N10 W02	4623	13 D	1	2	0438		1.10		76
ALMA-ATA	30	0434 E	0453	N08 W07	4623	19 D	1	2	0438		2.00		79
KRASNYA	30	0609	0622	N29 E78	4630	13	16	2	0614		2.60		98
SIMEIZ	30	0610 E	0626	N30 E80	4630	16 D	2	1	0614		10.00	4.30	
UCCLE	30	0818	0843	N28 W37	4623	25	16	2	0825	4.50			
ABASTUMANI	30	0902	0908	S12 W31	4624	6	1	2			5.50		68
MOSCOW-G	30	1008 E	1049	S12 E04	4624	41 D	1	2	1021		2.80	2.60	90
MOSCOW-G	30	1159 E	1208 D	N25 E70	4630	9 D	1	2	1200		2.60	3.30	80
KIEV	30	1344	1356 D	N06 E70	4631	12 D	1	2	1352		2.18		48
SCHAUINS	30	1650 E	1702 D	N24 E63	4630	12 D	1	2			4.00	1.40	
MT WILSON	30	2043	2427	S13 W37	4622	224	1	2					

COMMENCE - STANDARDS - BOULDER

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

MOSCOW-G
R O EDIN
R O HERST
SAC PEAK
SCHAUINS
USNRL

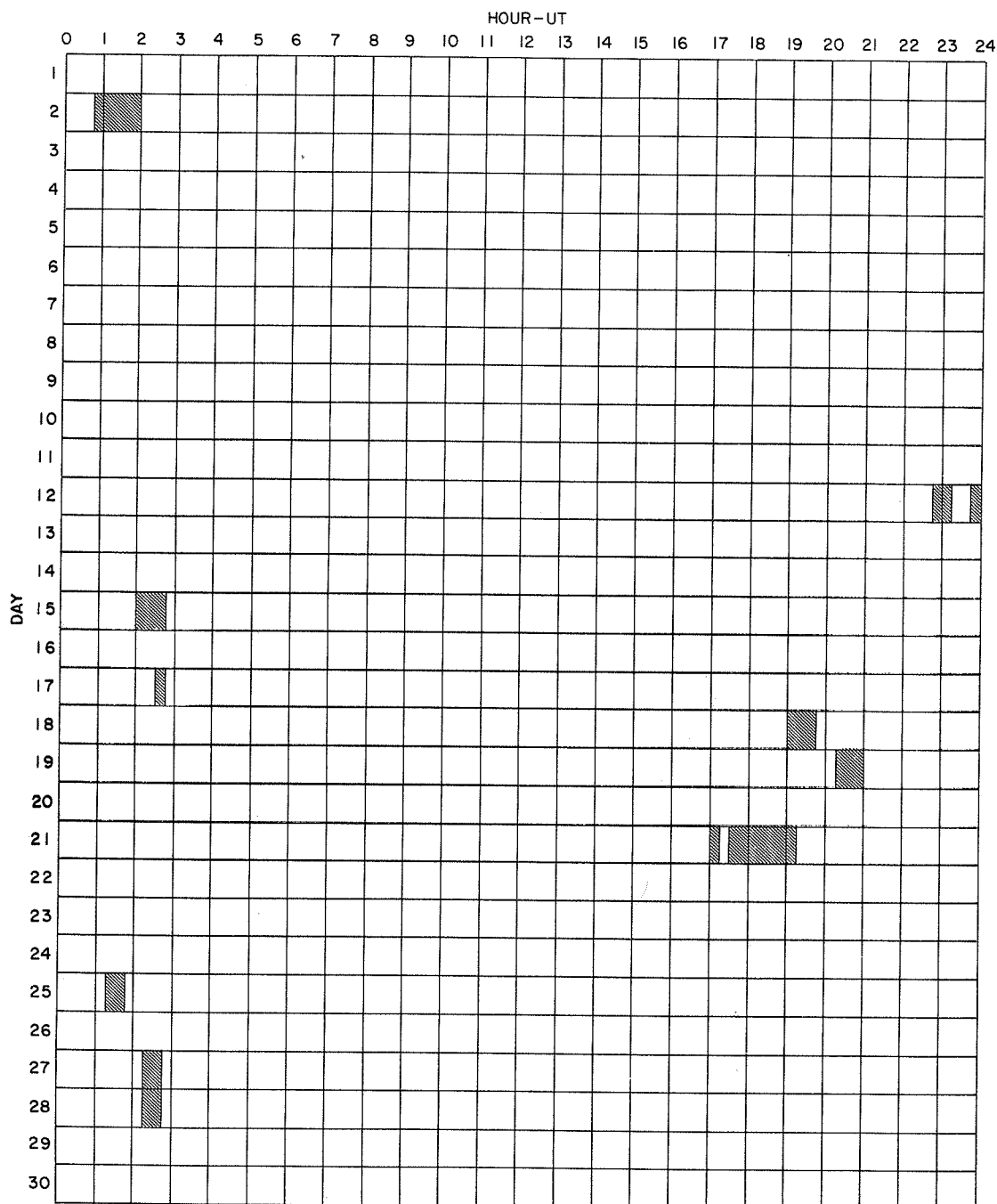
MOSCOW - GAISH
ROYAL OBSERVATORY, EDINBURGH
GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
SAC PEAK
SACRAMENTO PEAK
SCHAUINSLAND
UNITED STATES NAVAL RESEARCH LABORATORY

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, GAO
Kiev University
Kodaikanal
Krasnaya Pakhra
Locarno
McMath
Mitaka
Meudon

Moscow University
Mt. Wilson
Nederhorst
Nizamia
Ondrejov
Ottawa
Pirauli
Royal Greenwich Observatory
Herstmonceux
Royal Observatory
Edinburgh

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

COMMERCE - STANDARDS - BOULDER

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	0046E
13	0616	0656	S-SWF	5	2	KO, OK, PU, CW+, CW***	
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 = Jülich, G.D.R.
 KO = Kodaikanal, India.
 KU = Kuhlungsborn, G.D.R.
 LA = Los Angeles, Calif.
 MA = Madrid, Spain.
 NE = Nederhorst den Berg, Netherlands.

PU = Prague, Czechoslovakia.
 SW = Enköping, Sweden.
 TO = Hiraio Radio Wave Observatory, Japan.
 CW+ = Cable and Wireless, Hong Kong.
 CW++ = Cable and Wireless, Singapore.
 CW* = Cable and Wireless, Barbados.
 CW** = Cable and Wireless, Somerton, England.
 CW*** = Cable and Wireless, Brentwood, England.
 RCA+ = RCA Communications Inc., Ft. Reyes, Calif.

IONOSPHERIC EFFECTS OF SOLAR FLARES

(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			2+	1	1054	1102	1127		ED
{01				5	1415	1427	1502		A3, ED, NE, PA
{01			1	5	1536	1547	1602		ED, NE, PA
{01	1-		1	1	1541	1558U	1616U		RE
{01			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	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		BO, 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	1	1613	1614	1623	19	BO
{02			1	1	1614	1616	1629		BO
{02			2	3	1638	1640	1654		MC, RE
{02	1		4	4	1651	1659	1717	26	BO, RE
{02			1	5	1653	1700	1716		BO, ED, NE
02			1	4	1749	1750	1751		BO, MC
02			1	1	1755	1815	1835		SP
{02	1		4	4	1811	1816	1835U		RE, SP
{02			1	1	1811				RE
{02			2	5	1812	1818	1838		A1, BO, ED
02			1	1	1845	1847	1848		BO
{02	1		4	4	1929	1932	1946	15	BO, RE
{02			1+	4	1929	1936	1948		BO, DE
{02			2	5	1945	1948	1949		BO, RE, SP
02	2+		5	5	1948	1959	2030	58	BO, RE, SP
02			2+	5	1950	2005	2025		A3, BO, DE, PA, SP
02			2	5	1953	1955	1956		BO, RE, SP
03			1+	5	0823	0830	0908		ED, HO, NE, TO
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	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		HO
{05	1-		1	1	1352	1400	1414	10	MC
05			1	5	1356	1402U	1447		DU, ED, MC
{05	1		1	1	1843	1847	1910	8	BO
{05			1	1	1847	1857	1910		BO
{05	1-		1	1	1932	1935	1945	9	BO
{05			1	1	1932	1952	2032		BO
{05	1-		1	1	2029	2032	2106	9	BO
{05			1-	1	2032	2036	2050		BO
06			1	1	1700	1702	1703		MC
06			1+	5	1740	1741	1742		BO, MC, SP
06			2+	5	1905	1908	1911		BO, MC, SP
06			2	5	2022	2025	2026		BO, MC, SP
06			2	4	2029	2101	2102		MC, SP
07			2+	4	0730	-	0830		HO, TO
{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		BO, MC, SP
07			2	5	1713	1719	1719		BO, MC, SP
07			1+	5	1814	1817	1819		BO, MC, SP
{07			1	1	2003	2041	2117		SP
{07	1		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	4	1439	1452	1523		MC, SP
{10			1+	5	1618	1623	1637	19	BO, RE, SP
{10			1	5	1619	1627	1730		A3, BO, DE, DU, ED, NE, SP
{10			4	4	1641	1644	1647		RE, SP
10			1+	4	1729	1731	1733		MC, SP
{10	1+		5	5	2219	2229	2300	15	BO, 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	5	1335	1343	1358	15	BO, 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	1	1602	1608	1612		BO
{11			1	1	1602	1610	1621		BO

DATE	CLASS			DEFINITENESS	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	1	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	1845	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	262	21	246
2	284	12	260	22	254
3		13	246	23	
4		14	248	24	
5	295	15	232	25	
6	303	16	246	26	278
7	290	17	254	27	242
8	280	18	246	28	244
9	284	19		29	
10		20		30	
				31	

OUTSTANDING OCCURRENCES

May 1958	Type	IAU	Start UT	Duration Hrs.Mins	Maximum Time UT	Peak Flux	Observing Period UT	Remarks
1	Simple 2	SD	1359.8	1.0	1400.0	18	1240-2035	Interference from radar
	Simple 3	SD	1813.8	2 20.0	1751.3	51	1242-2030	
2					Indet.			
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		
						35		
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	21	1242-2020	
14							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	

COMMERCE - STANDARDS - BOULDER

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	IAU	Start UT	Duration Hrs.Mins	Maximum Time UT	Peak Flux	Observing Period UT	Remarks
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 Group (3)	ESD	1620.1 1759.7	0.9	1620.5	20	1242-2020	
	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 Post Inc	CD	1741.2 1744.4	3.3 10.0	1741.9 1744.6	34 4	1245-2115	
27							1247-2040	
28							1240-2040	

COMMENCE - STANDARD - SOLAR

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 Time UT	Peak Flux	Observing Period UT	Remarks
		IAU						
3	Simple 2	SD	1436.0	3.2	1435.9	27	1255-2128	
	Complex	CD	2002.3	5.2	2005.1	253	1238-2130	
	Post Inc			10.5		38		
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	

COMMERCE - STANDARDS - BOULDER

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	IAU	Start UT	Duration Hrs.Mins	Maximum Time UT	Peak Flux	Observing Period UT	Remarks
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	

COMMERCE - STANDARDS - BOULDER

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	

CONJUGATE - STANDARDS - DOUBLED

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.

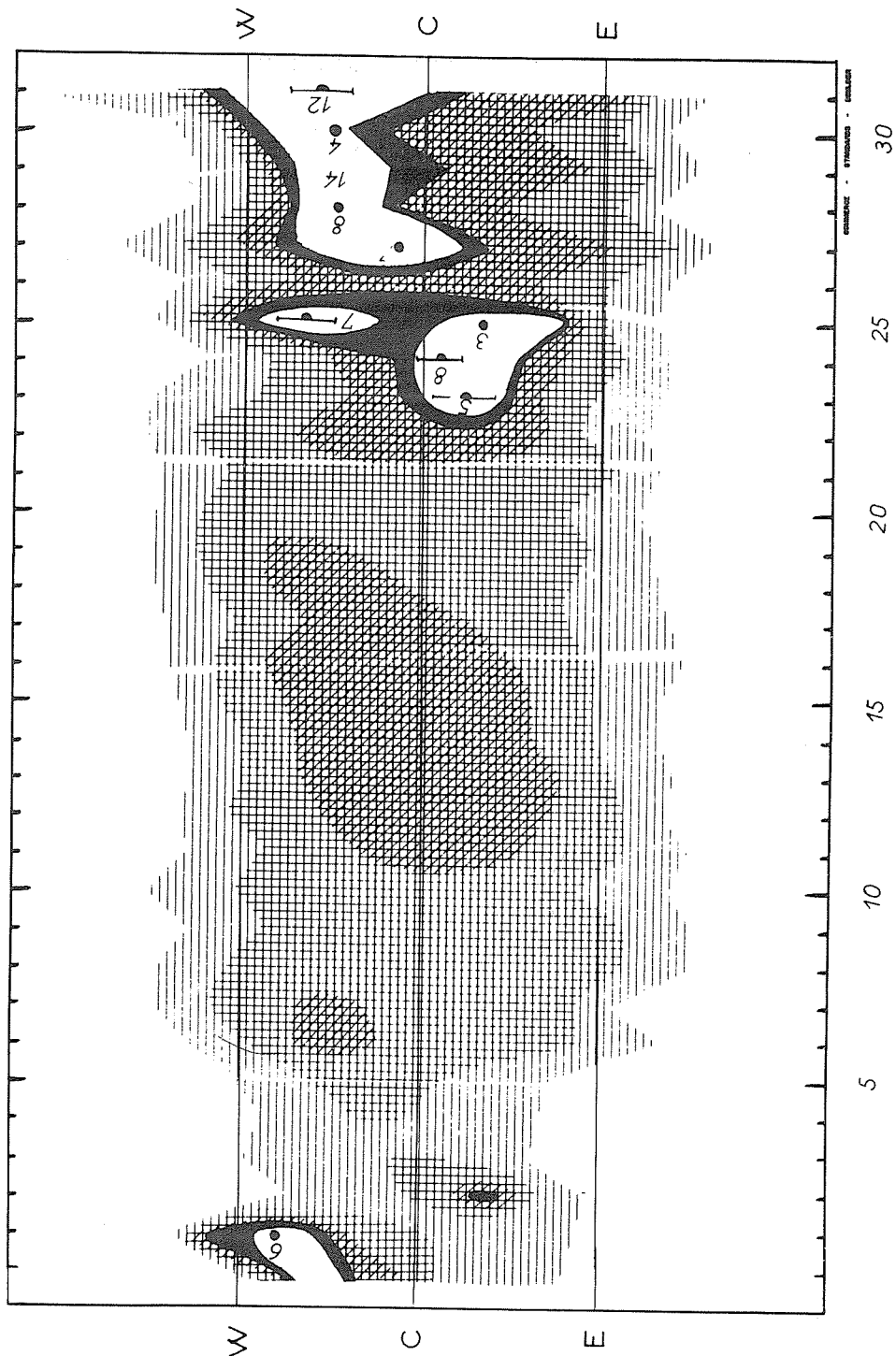
Nov. 1958	Type Ap.J	Start UT	Time of Maximum	Duration Minutes	Type IAU	Max. Flux Density $10^{-22} \text{ w m}^{-2} (\text{c/s})^{-1}$		Remarks
						Inst.	Smooth	
1	3	1527.5		1	CA	1700	1200	
	8	1655.5		1	CA	3200	2400	
	2	1405		< .25	SD	210	180	
2	2	1557.5	1559	2.5	CD	210	180	
	2	1621	1621	1.5	CD	91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

COMMERCE - STANDARDS - BOULDER

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 3	12 15	15 18	18 21	21 24		0 3	12 15	15 18	18 21	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.

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

Boulder

AUGUST 1958

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, 1509.5.
 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-	Uncl.	2325-26	3		g	1431	2	
		1357-1403	1-					g	1432-33	2	
		1429-1631	1-					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	
Nov. 2 1330-2343		1358-1400	1-					g	1335	2	1406 Inverted U burst.
		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					b	1851	2	
								G	2008-12	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	
								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.

COMMENCE - STANDARDS - BOULDER

Fort Davis

100-580 Mc.

COMMERCE - STANDARDS - BOLDER

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								
		1724-25	1					G	1437-38	2	
		1811-12	1					b	1552	1	
		1820	1-					b	1553	1	
		2330-31	1-					g	1600-01	1	
								b	1625	1-	
								b	1647	1	
								g	1648	1	
								g	1708-09	1	
								g	1721	1-	
								b	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	
		1631-42	2					g	1858	1	
	Cont.	1635-53	1								
	Cont.	1653-2022	2					g	2041	2	
								g	2250	2	
	Cont.	1642-2106	3								
		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.

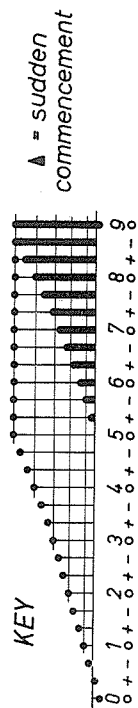
Date and Observing Times (U.T.) 1958	Type I (Noise Storms and Continuum)			Type II (Slow Drift Bursts) Unclassified				Type III (Fast Drift Bursts)		Remarks
	Bursts* or Continuum	Time	Int	II or Unclass	Act	Time	Int	Time	Int	
Nov. 27 1357-2338	Cont.	1401	1-	II	1905.0-11	2		b 1358	1	
		1411-12	1-					G 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	
		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	Cont.	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	
		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	Unc1.	2248-49	3		g 1359-1401	1	
		1439-1850	1-							
		1920-2055	1	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.

COMMERCE - STANDARD - BOULDER

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		4
5	0.8	4-	2o	3-	2+	2+	3-	3o	3+	22o	13		9
												10	
6	0.6	1+	3-	1+	2+	4-	2o	3o	3+	20-	12	11	
7	1.0	2+	3o	3o	3o	2+	3+	2+	3+	23-	14	12	
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		22
15	0.7	3o	2+	2+	2+	2+	2-	3-	2o	19-	10		23
												24	
16	0.4	2-	4o	3o	2-	1+	1+	1o	1+	15+	9	27	
17	0.4	2o	3+	2+	1o	1+	2+	3-	2o	17o	9	28	
18	0.2	2+	3-	3-	2-	1+	2o	1o	2-	15+	8		
19	0.6	1o	2o	1+	2+	2+	3+	2o	2+	17-	8		
20	0.3	3-	1-	1-	1-	1-	2-	2o	3o	12o	6		
21	0.2	2o	3o	2-	2o	2-	1-	1o	1o	13o	6	Ten Quiet	
22	1.5	1-	5+	6o	5-	3+	5+	6-	5+	36+	47		
23	1.4	5-	5+	6-	5o	5-	4+	5-	4+	39-	44		
24	1.8	5-	5o	7-	6+	7-	7o	6+	6o	49-	89		4
25	0.6	4o	3o	3+	2-	1o	1o	1o	1o	16o	10		9
												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		



PLANETARY MAGNETIC THREE-HOUR-RANGE INDICES

Kp till 1958 Oct. 31
(Ks from Wingst and Göttingen till 1958 Nov. 17)

COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC

OCTOBER 1958

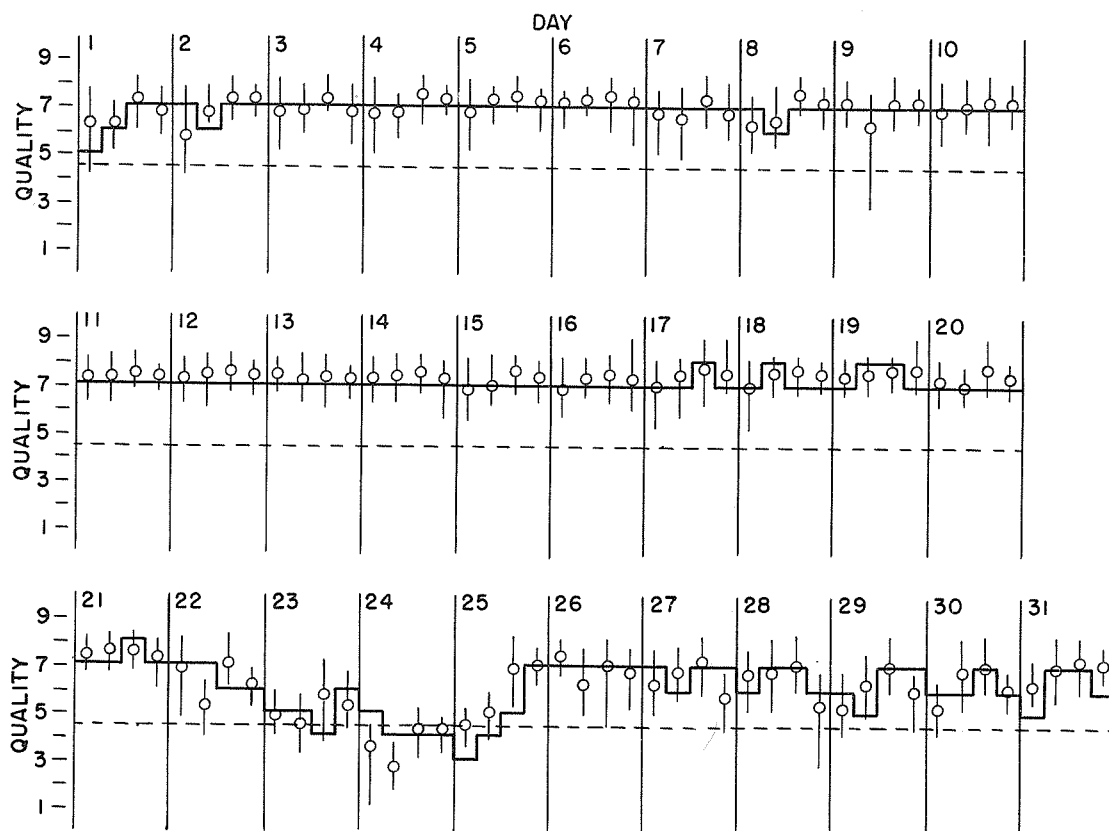
Oct. 1958	North Atlantic 6-hourly quality figures				Short-term forecasts issued about one hour in advance of:				Whole day index	Advance forecasts (J-reports) for whole day; issued in advance by:				Geomag- netic K _{Fr}	
	00 to 06	06 to 12	12 to 18	18 to 24	00	06	12	18		1-7 days Final	1-7 days Js	1-7 days SDW	1-7 days J	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

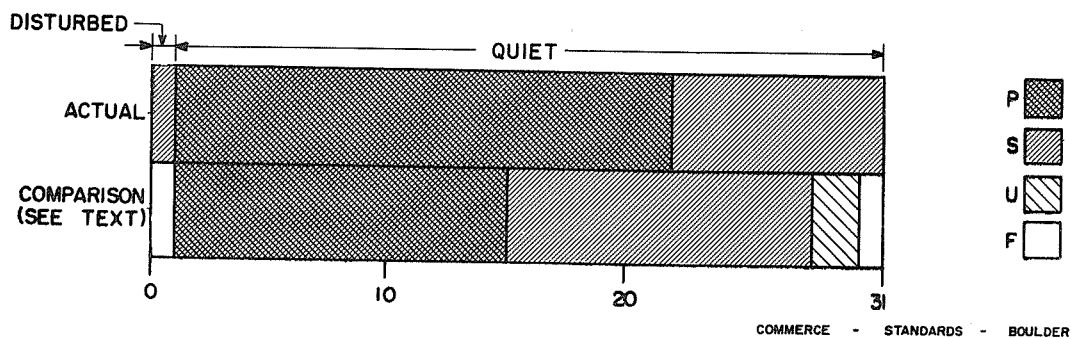
— Short-term forecast
o Quality figure

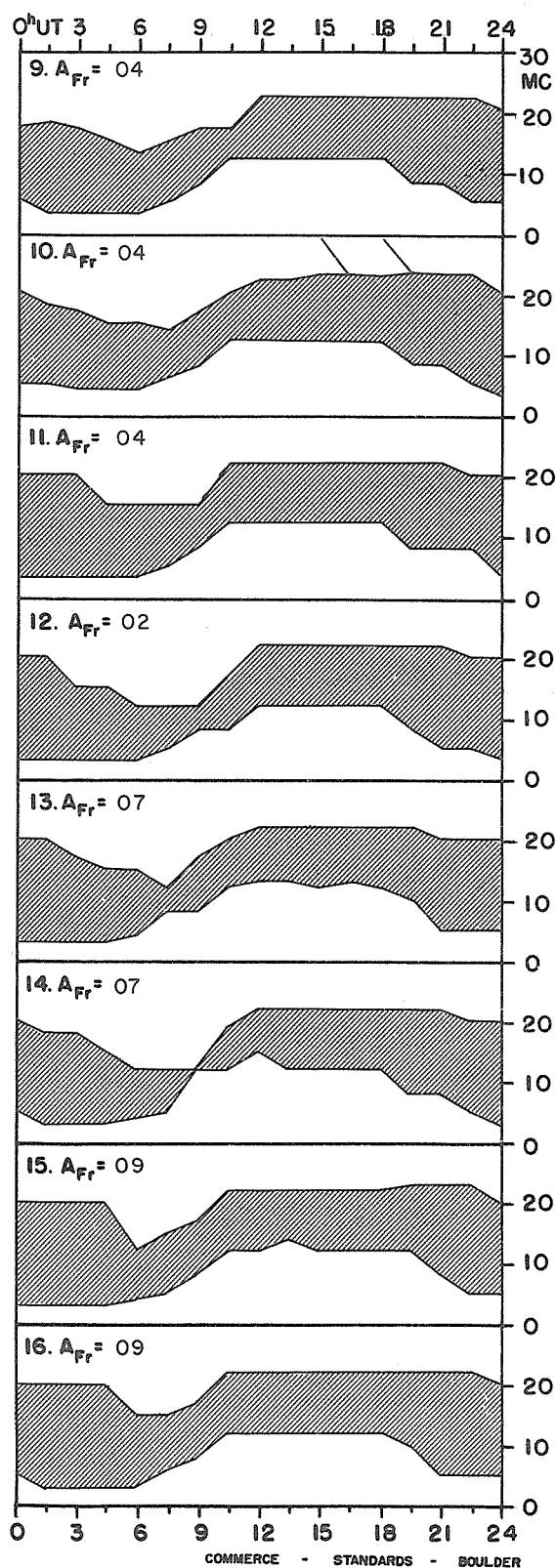
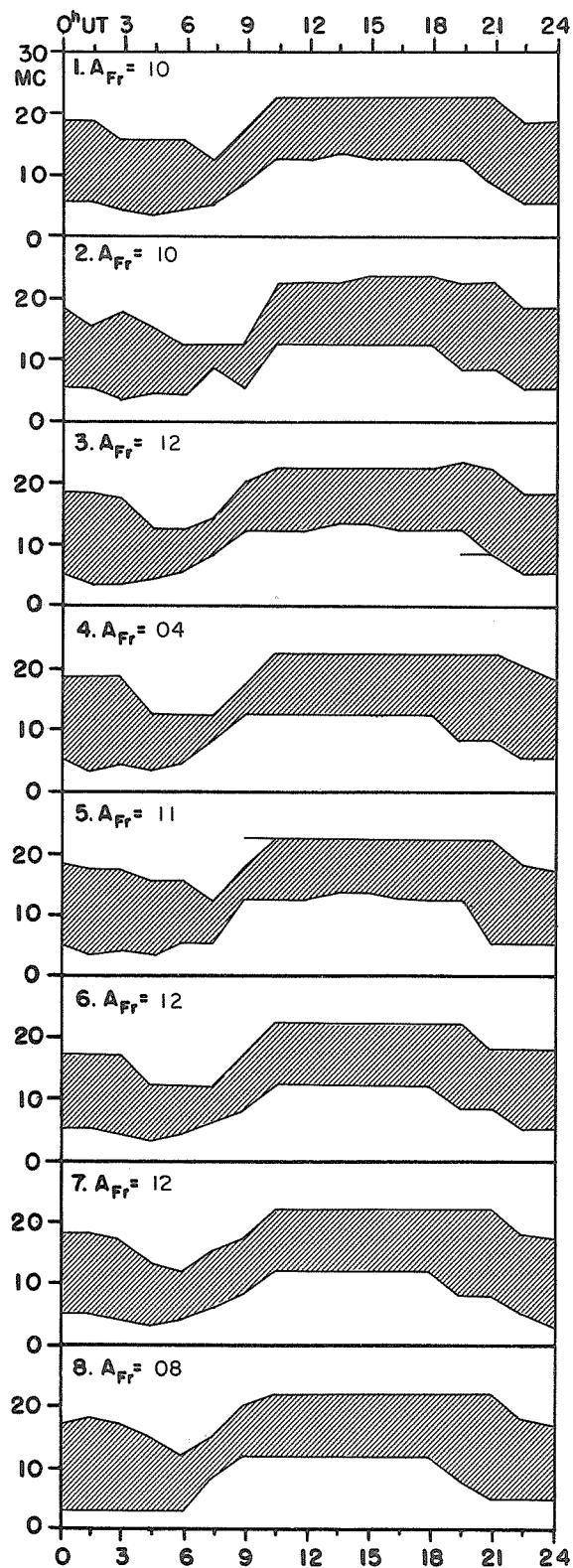
| Range of reports



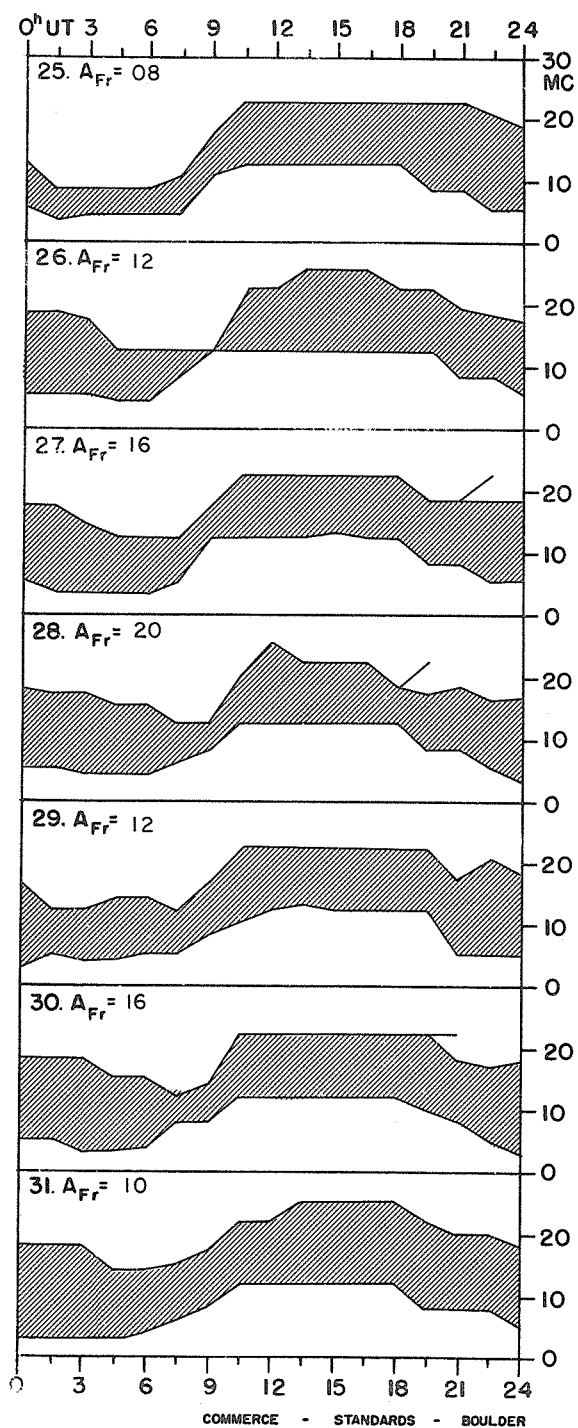
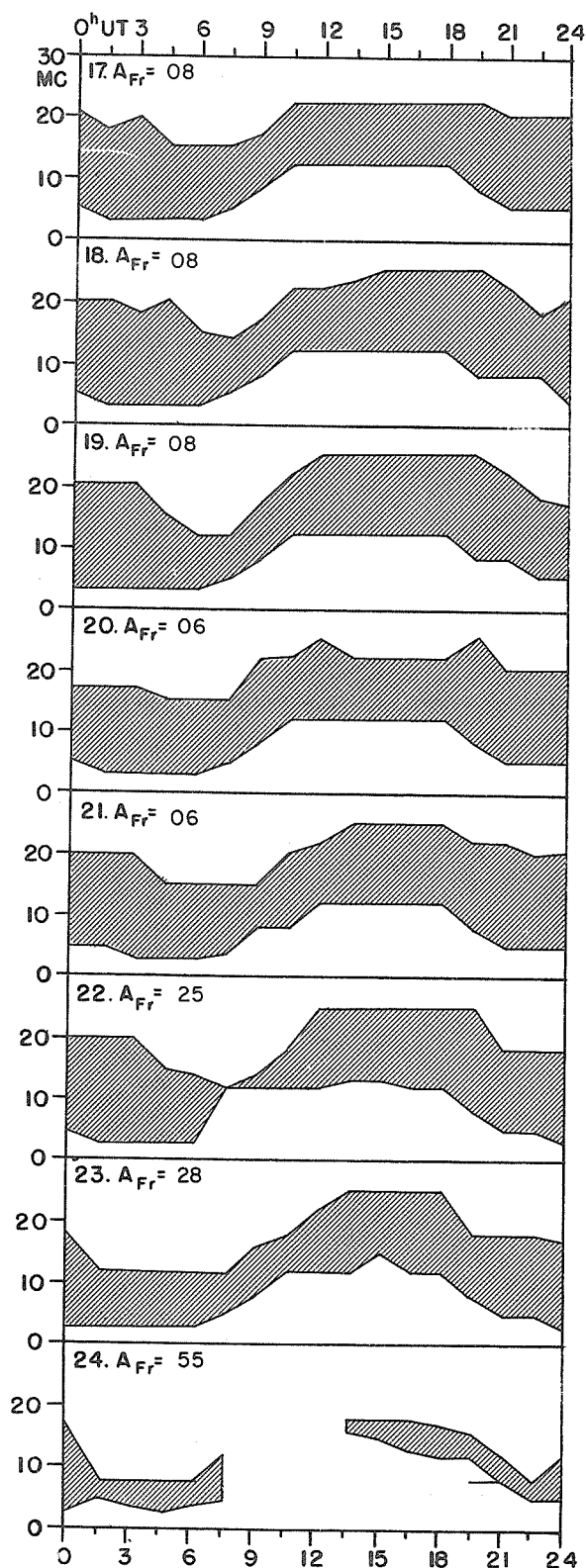
OUTCOME OF ADVANCED FORECASTS

FINAL ESTIMATE





OCTOBER 1958



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 -										

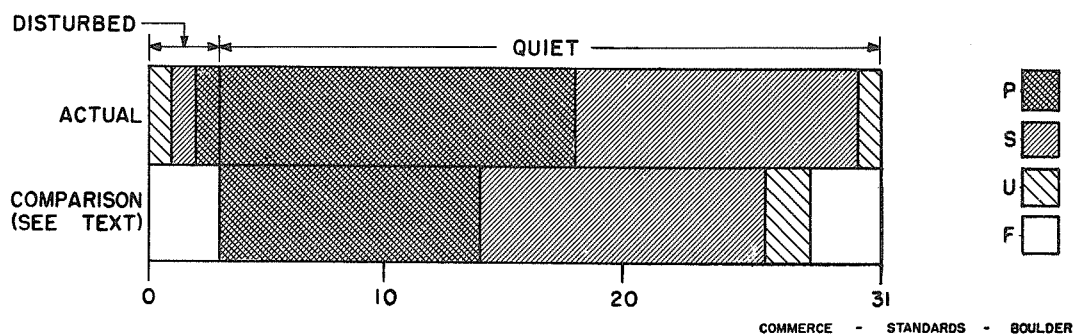
() represent disturbed values.

*Modified advance forecasting service began October 15, 1958.

COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS
NORTH PACIFIC
OCTOBER 1958

OUTCOME OF ADVANCED FORECASTS FINAL ESTIMATE



VIIa

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 $\geq$ 2 Reported Promptly on Days of Alert Period
1958			
Nov 14 Nov 16	Nov 26 Nov 27	03-05-10	3-0-0
Nov 25 Nov 30		09- <u>07-07</u> -13-08-03	1-1-0-0-2-2

COMMERCE - STANDARDS - BOULDER