

PART B
SOLAR - GEOPHYSICAL DATA

ISSUED
SEPTEMBER 1958

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

SOLAR - GEOPHYSICAL DATA

CONTENTS

INTRODUCTION

Description of Tables and Graphs

I DAILY SOLAR INDICES

- (a) Relative Sunspot Numbers and 2800 Mc Solar Flux
- (b) Graph of Sunspot Cycle

II SOLAR CENTERS OF ACTIVITY

- (a) Calcium Plage and Sunspot Regions
- (b) Coronal Line Emission Indices - August 1958

III SOLAR FLARES

- (a-n) Optical Observations - August 1958
- (o) Flare Patrol Observations - August 1958
- (p-r) Subflares - July 1958
- (s-x) Optical Observations - Addenda to November 1957
- (y) Final Flare Patrol Observations - November 1957
- (z-c') Optical Observations - Addenda to December 1957
- (d') Final Flare Patrol Observations - December 1957
- (e') Errata - Optical Observations - July 1957
- (f',g') Ionospheric Effects - July 1958

IV SOLAR RADIO WAVES

- (a,b) 2800 Mc -- Outstanding Occurrences (Ottawa) August 1958
- (c) 200 Mc -- Daily Data (Cornell) August 1958
- (d) 200 Mc -- Outstanding Occurrences (Cornell) August 1958
- (e) 167 Mc -- Outstanding Occurrences (Boulder) May 1958
- (f) 167 Mc -- Daily Data (Boulder) June 1958
- (g) 167 Mc -- Outstanding Occurrences (Boulder) June 1958
- (h-o) 100-580 Mc -- Spectrum Observations (Fort Davis) August 1958

V GEOMAGNETIC ACTIVITY INDICES

- (a) C, Kp, Ap, and Selected Quiet and Disturbed Days
- (b) Charts of Kp by Solar Rotations

VI RADIO PROPAGATION QUALITY INDICES

North Atlantic:

- (a) CRPL Quality Figures and Forecasts
- (b) Graphs Comparing Forecast and Observed Quality
- (c,d) Graphs of Useful Frequency Ranges

North Pacific:

- (e) CRPL Quality Figures and Forecasts
- (f) Graphs Comparing Forecast and Observed Quality

VII ALERT PERIODS AND SPECIAL WORLD INTERVALS

- (a) IGY World Warning Agency Decisions for Alerts and SWI

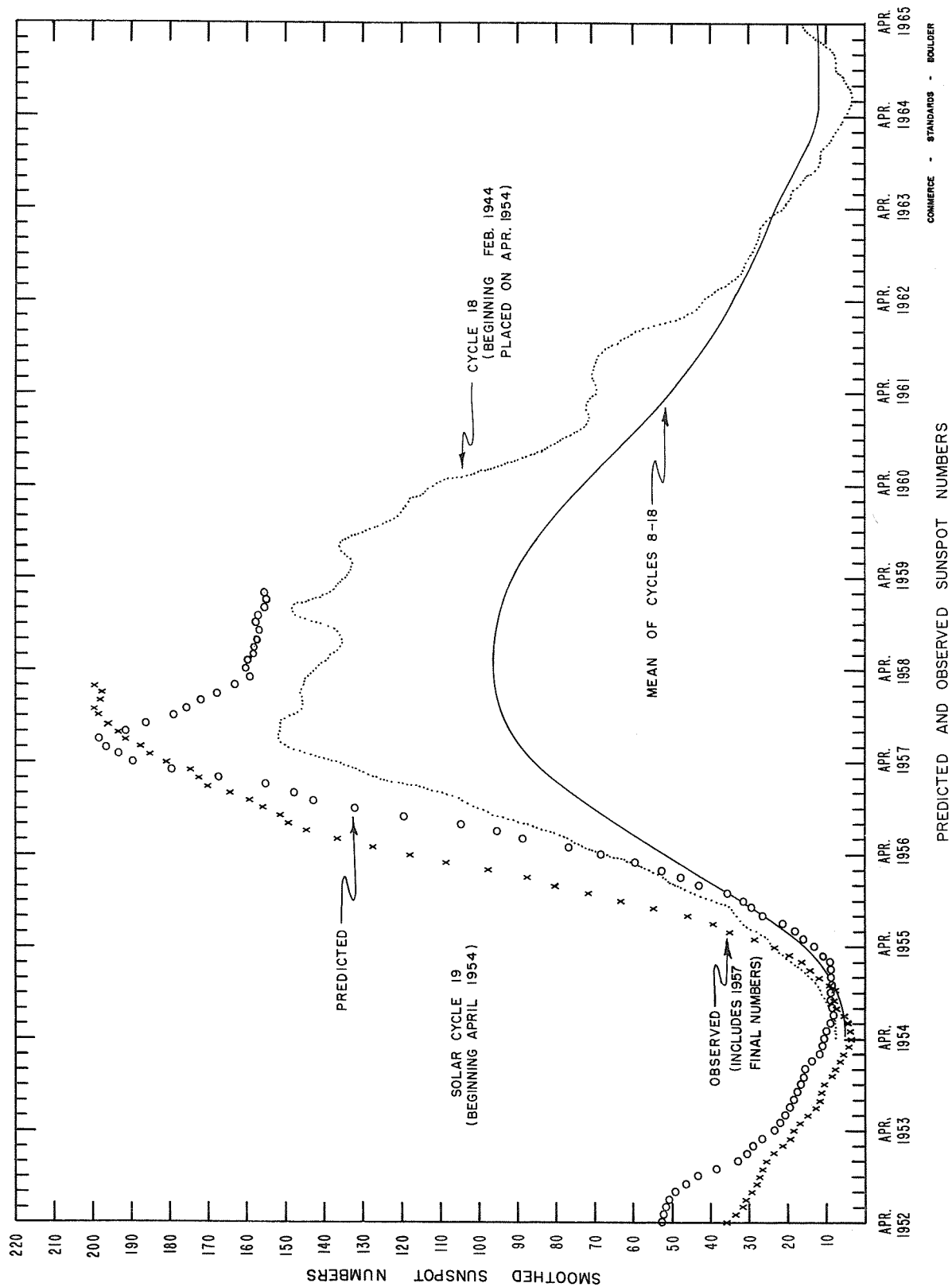
INTRODUCTION

The descriptive text is published quarterly or whenever context of the report is changed. The last issue in which the text appeared was CRPL-F167 Part B issued July 1958

DAILY SOLAR INDICES

July 1958	American Relative Sunspot Numbers R_A
1	180
2	168
3	192
4	206
5	225
6	223
7	185
8	162
9	185
10	175
11	149
12	120
13	135
14	104
15	132
16	127
17	147
18	142
19	176
20	187
21	204
22	158
23	185
24	198
25	162
26	188
27	181
28	189
29	206
30	250
31	283
Mean:	178.2

Aug. 1958	Zürich Provisional Relative Sunspot Numbers R_Z	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	279	274
2	250	254
3	210	237
4	177	216
5	198	221
6	209	239
7	223	235
8	230	236
9	265	225
10	255	222
11	271	225
12	228	222
13	220	236
14	202	235
15	190	231
16	177	215
17	163	211
18	152	218
19	128	219
20	131	220
21	145	231
22	160	239
23	200	243
24	177	253
25	207	263
26	180	264
27	196	252
28	202	244
29	238	252
30	238	249
31	220	259
Mean:	203.9	236.8



CALCIUM PLAGE AND SUNSPOT REGIONS

AUGUST 1958

CMP Aug. 1958	Lat	McMath Plage Number	Return of Region	Calcium Plage Data				Sunspot Data			
				CMP Values		History, Age		CMP Values		History	
				Area	Int.			Area	Count		
29.7*	S09	4672	New	300	3	b - d	1	20	3	b - d	
00.9	N19	4681	New	(800)	(1.5)	b - l	1				
01.9	S10	4676	New	2000	3	b / l	1	300	7	b / l	
02.0	N15	4669	New	3000	3.5	l / l	1	640	38	l / l	
02.2	N35	4673	New	1000	1.5	l - l	1				
02.2	N27	4667	4630	10000	3.5	l - l	2	630	33	l / l	
03.5	N26	4675	4634	1200	3	l / l	3	200	10	b / l	
03.8	S08	4670	4633	3300	3.5	l / l	3	540	25	l - l	
04.2	S27	4674	4634	4000	2.5	l - l	4	60	1	l \ d	
05.7	N33	4678	4635	5300	2.5	l - l	2	210	12	b \ l	
06.0	S10	4689	New	400	2.5	b / l	1	70	5	b - d	
06.1	N08	4677	New	800	2.5	l \ l	1	(10)	(2)	l \ d	
06.8	N20	4693	New	(500)	(3)	b / l	1	(20)	(4)	b - d	
07.3	S20	4694	New	(500)	(3.5)	b / l	1	(70)	(4)	b / l	
07.6	S13	4690	New	600	3	b / l	1	120	2	b \ l	
07.9	S05	4695	New	500	3.5	b / l	1	70	9	b - d	
08.0	N21	4680	New	4000	3	l / l	1	750	3	l \ l	
09.4	S18	4682	New	3000	3	l \ l	1	190	6	l \ l	
10.4	N13	4683	4643	600	2	l \ l	5				
11.7	S23	4684	4650	6000	3.5	l / l	3	340	37	l \ l	
11.7	N18	4700	New	900	2	b - l	1				
12.4	S13	4686	4653	6000	3	l / l	2	2140	30	l / l	
12.4	N08	4705	New	(700)	(2)	b - l	1				
12.9	N19	4685	New	1000	3	l \ l	1	60	2	l \ d	
14.2	N44	4691	New	1500	3.5	l \ l	1	170	2	l \ d	
14.3	N11	4692	4646	3000	3	l \ l	2				
14.6	S15	4702	New	500	1.5	b / l	1				
15.6	S10	4706	New	200	2	b - l	1	(80)	(2)	b - d	
16.0	N17	4697	4651, 56	3000	3	l - l	2	120	9	l \ d	
16.2	N05	4698	New	500	2.5	l \ l	1	50	2	b - d	
18.6	N28	4701	New	3500	2.5	l - l	1	110	2	b \ d	
18.7	S14	4703	4655	2600	3	l - l	5	280	6	b / l	
19.6	S33	4714	New	300	2.5	b / l	1	20	1	b - d	
19.7	N09	4707	New	1000	3	l - l	1	90	3	b \ d	
20.4	N30	4704	New	700	2.5	l \ d	1				
21.6	N18	4708	New	7000	3.5	l / l	1	1540	13	l / l	
21.8	N08	4709	New	1500	3	l - l	1	50	2	l \ d	
22.0	S12	4710	4659	6000	3	l / l	3	390	7	l - l	
24.1	N20	4711	4668	5000	3.5	l - l	2	50	2	l \ d	
24.1	S17	4712	4659	6000	3.5	l / l	3	120	14	l - l	
24.5	N08	4713	4664	400	1.5	l \ l	5	50	3	b - d	
26.7	N08	4715	4665	8500	3	l / l	3	120	2	l \ l	
		4717**									
26.7	N19	4716	4664	1200	2	l - l	5				
27.7	S08	4718	4687	3000	3	l / l	2	50	1	l \ d	
28.7	S06	4723	4676	600	2.5	l - d	2	110	3	b - d	
28.9	S42	4720	New	300	1.5	l - d	1				
29.1	N28	4719	4667	3000	3	l - l	3				
30.8	N28	4721	4675, 78	8000	3.5	l \ l	3, 4	580	24	l \ l	
31.4	S09	4722	4670	8000	3.5	l - l	2	2030	36	l / l	
31.9	S34	4724	4674	800	1.5	l \ l	5				
31.9	N13	4725	New	2500	3.5	l - l	1	610	19	l / l	

* 29.7 July

** Merged with 4715.

COMMERCE - STANDARDS - BOULDER

CORONAL LINE EMISSION INDICES

AUGUST 1958

GMP Aug. 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	161	210	x	x	102	147	x	x	117a	184a	x	x	185a	250a	x	x
2	x	x	x	x	x	x	x	x	123a	175a	32a	53a	*223a	275a	48a	72a
3	205	345	x	x	102	161	x	x	x	x	x	x	x	x	x	x
4	210	400	31	54	219	300	x	x	198a	x	30	60	x	x	36	47
5	x	x	x	x	x	x	x	x	135	189	42	66	170	232	54	72
6	x	x	x	x	x	x	x	x	114a	153a	48a	60a	x	x	18a	21a
7	126a	182a	47a	84a	57a	60a	31a	48a	112	149	x	x	206	300	x	x
8	105	166	19	30	83	125	167	42	106	166	44	74	190	248	46	86
9	109	120	22	36	123	172	29	36	102a	144a	x	x	141a	225a	x	x
10	165a	223a	42a	121a	207a	250a	57a	107a	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	x	x	x	x	x	x	x	x	156	192	31	41	109	156	61	85
13	130a	236a	x	x	*138a	244a	x	x	*126	163	19	30	150	210	41	60
14	183a	300a	x	x	105a	132a	x	x	98	169	x	x	135	210	x	x
15	102a	118a	x	x	73a	114a	x	x	x	x	x	x	x	x	x	x
16	149a	184a	37a	54a	95a	115a	27a	41a	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	120a	263a	43	90	64a	98a	34	65	x	x	27	32	x	x	20	24
19	111	210	53a	175a	72	94	41a	60a	94	144	28	40	111	138	16	26
20	x	x	29a	60a	95a	148a	x	x	*165	204	73	105	147	197	56	108
21	x	x	x	x	133	188	x	x	*160a	311a	x	x	97a	136a	x	x
22	134	174	47	104	119	214	69	144	x	x	x	x	x	x	x	x
23	169a	x	x	x	180a	x	x	x	120	182	67	115	155	196	64	156
24	x	x	x	x	x	x	x	x	90	150	24	41	150	184	49	93
25	x	x	x	x	x	x	x	x	92	115	22	33	194	236	45	98
26	129	181	40	72	143	212	35	54	103	200	31	78	181	220	65	84
27	*186	266	50	82	197	289	37	104	x	x	x	x	x	x	x	x
28	201	262	x	x	121	200	x	x	x	x	x	x	x	x	x	x
29	x	x	x	x	x	x	x	x	118	187	30	36	216	288	77	102
30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
31	x	x	x	x	x	x	x	x	*164	289	39	76	265	362	51	93

x = no observations

a = index computed from low weight data

* = yellow line observed

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 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.	MER. DIST.								
{MITAKA MITAKA {ONDREJOV CAPRI-G CAPRI-G CAPRI-G {ONDREJOV ATHENS {CAPRI-S CAPRI-G WENDEL {ONDREJOV {CAPRI-G WENDEL WENDEL CAPRI-G {STOCKHOLM WENDEL {ONDREJOV ONDREJOV ONDREJOV ONDREJOV {WENDEL {CAPRI-G {CLIMAX HAWAII	01 01													

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION — MINUTES	IM- POP- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. LONG. DIST.				TIME U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %
{ MITAKA CAPRI-G ONDREJOV ONDREJOV CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	03	0515 E	0518 D	N28 W22	4667	3 D	16	1	0515	5.67	6.56	3.20	S-SWF
	03	0525 E	0531	N27 W18	4667	26 D	1	3	0528		4.00	2.30	18
	03	0527 E	0540	N28 W23	4667	13 D	1	3	0512				
	03	0612 E	0615	S11 E10	4670	3 D	1	2					
	03	0706 E	0713	S09 E05	4670	7	1	3					
	03	0730 E	0734 D	S10 W00	4670	4 D	1	2	0730		3.00	2.60	
	03	0732	0748	S08 E00	4670	16	1	2			3.00		
	03	0826	0838	N26 E03	4675	12	1	3			3.00		
	03	0831	0905 D	N29 W25	4667	34 D	26	2	0839			4.90	
	03	0832	0902	N28 W25	4667	30	16	3	0842	1.80	2.30		S-SWF
{ CAPRI-S CAPRI-G LOCARNO CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	03	0834	0902 D	N29 W20	4667	28 D	1	3			7.00		
	03	0834	0907	N28 W25	4667	33	16	3					
	03	0840	0940 D	N29 W24	4667	60 D	16	3					
	03	0902	0913	N35 E24	4678	11	1	3			3.00		S-SWF
	03	0935	1002	S08 W02	4670	27	1	3			3.00		
	03	0945	1010	S18 W01	4670	25	1	3					
	03	1055	1105	N27 W22	4667	10	1	3					
	03	1112	1126	N14 W20	4669	14	1	3			4.00	2.80	
	03	1114 E	1120 D	N15 W18	4669	6 D	1	1	1114	2.09	2.26		
	03	1319	1345	N11 W21	4669	26	1	4	1322				
{ MT WILSON CLIMAX SAC PEAK MT WILSON HAWAII MT WILSON	03	1504	1508	S10 W00	4670	4	1	2	1653	3.70	5.20		18
	03	1645	1700	N03 W28	4667	15	1	2					
	03	2142	2232 D	N04 W52	4665	50	2	2	2154	9.30	14.00		
	03	2145	2237	N08 W52	4665	52	16	2					
	03	2146	2240	N08 W49	4665	54	26	2					
	03	2205	2259	N08 W47	4665	54	1	2					
	04	0154	0200	N27 W30	4667	6	1	3					
	04	0421	0529	N28 W27	4667	68	3	3					
	04	0515 E	0610	N30 W37	4667	55 D	2	3			10.00		G-SWF
	04	0823	0635	N27 W38	4667	12	1	3			3.00		
{ CAPRI-S ATHENS CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G CAPRI-G	04	0723 E	0745 D	S10 W11	4670	22 D	1	2	0725	2.00	2.30		G-SWF
	04	0724	0745	S11 W12	4670	21	1	2					
	04	0724	0805 D	S10 W10	4670	41 D	2	2					
	04	0741	0822	N27 W34	4667	41	2	3			8.00		
	04	0743	0757	N27 W35	4667	14	1	2			2.50		S-SWF
	04	0750 E	0758	N27 W31	4667	8 D	1	2	0753	2.00		2.30	
	04	1220	1234	S08 W08	4670	14 D	1	3			2.00		
	04	1220 E	1324	S06 W06	4670	14 D	1	3	1220		3.00		
	04	1310 E	1322	N26 W36	4667	14 D	1	3	1310				
	04	1311	1322	N28 W37	4667	11	1	3	1313			2.30	
{ WENDEL USNRL MT WILSON MT WILSON HAWAII HAWAII MT WILSON CAPRI-G ATHENS ONDREJOV CAPRI-G ONDREJOV	04	1745 E	1756 D	N33 E05	4678	11 D	1	3	1920	1.24	1.85	1.00	115
	04	1917	1945	N29 W45	4667	28	1	3					
	04	1919	1931	N26 W45	4667	12	16	3	1922	2.40	3.40		
	04	1920	1932	N28 W44	4667	12	1	3	2114	2.50	2.60		
	04	2112	2120	S07 W12	4670	8	1	2					
	04	2112	2127	S07 W09	4670	15	1	2					
	05	0510 E	0526	N26 W47	4667	16 D	1	3			4.00		
	05	0556	0605	S11 E57	4682	9	16	4	0600	2.70	5.00	2.70	
	05	0600 E	0605	S13 E60	4682	5 D	1	3					
	05	0604	0614	S15 E55	4682	10	1	2			5.00	2.90	

COMMERCE - STANDARDS - BOLDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.	MC-MATH PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
{ ZURICH WENDEL CAPRI-S WENDEL CAPRI-G SCHAUBINS UCCLE ONDREJOV CAPRI-G UCCLE OND														

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED TIME		UNIVERSAL TIME		APPROX.		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — UT	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	MAX. PHASE	LAT.	LON.	APPROX.	APPROX.					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %
{ UCCLE ATHENS CAPRI-G CLIMAX SAC PEAK OTTAWA USNRL CAPRI-G R O EDIN MCMATH CAPRI-S USNRL ZURICH UCCLE OTTAWA	07 0642	0710	0710	0653	0653	N28 W62	4667	N28 W62	4667	28	1	3	0653	4.00	8.00		G-SWF
	07 0650	0710	0710			N24 W63	4667	N24 W63	4667	20	2			2.30	4.70		
	07 0653	0713 D	0713 D			N22 W58	4667	N22 W58	4667	20	16	3		4.00	4.00		
	07 0655 E	0712	0712			N23 W65	4667	N23 W65	4667	17 D	1	3					
	07 1457	1638	1638	1511	1511	S16 E75	4686	S16 E75	4686	101	2		1511	6.40		20	
	07 1457	1700 D	1700 D			S17 E73	4686	S17 E73	4686	123	26	2		9.40			
	07 1458	1537 D	1537 D	1508	1508	S13 E71	4686	S13 E71	4686	39 D	26	3	1508	6.03	21.55	80	
	07 1459	1536	1536	1505	1505	S17 E75	4686	S17 E75	4686	37	3	2	1505	4.08	14.60		
	07 1459	1615	1615			S14 E68	4686	S14 E68	4686	16	26	3		14.00			
	07 1500	1606 D	1606 D	1509	1509	S14 E67	4686	S14 E67	4686	66 D	3	2	1509	9.00	26.30	10.31	
{ ONDREJOV CAPRI-G CAPRI-S ZURICH UCCLE OTTAWA	08 0733	0745	0745	0734	0734	S11 E52	4686	S11 E52	4686	12	1	3	0734			2.80	G-SWF
	08 0735 E	0749	0749			S12 E50	4686	S12 E50	4686	14 D	16	3		1.80	5.00		
	08 0735 E	0750	0750			S12 E52	4686	S12 E52	4686	15 D	1	3	0738	3.10	3.10		
	08 0737 E	0748	0748			S11 E50	4686	S11 E50	4686	11 D	1	1	0737	2.00	2.00		
	08 0859 E	0905 D	0905 D			S12 E52	4686	S12 E52	4686	6 D	1	2	0901			3.20	
	08 0859	0907 D	0907 D			S13 E51	4686	S13 E51	4686	8	1	1	0900	1.10	1.90		
	08 0901 E	0902 D	0902 D			S12 E52	4686	S12 E52	4686	1 D	1	1	0901	1.80	3.10		
	08 0940 E	0945	0945			S12 E51	4686	S12 E51	4686	5 D	1	2		4.20		16	
	08 1330	1445	1445	1350	1350	S27 W59	4674	S27 W59	4674	75	1	2	1355	2.20	2.20		
	08 1331	1410	1410	1355	1355	S20 W55	4674	S20 W55	4674	39	1	3	1345	4.00	9.00		
{ TASHKENT ATHENS CAPRI-S CAPRI-G SIMEIZ CAPRI-G USNRL USNRL USNRL MT WILSON	08 1344 E	1347 D	1347 D	1445	1445	S24 W53	4674	S24 W53	4674	3 D	1	1	1347	1.91	3.91		G-SWF
	08 1435	1535	1535			S12 W18	4690	S12 W18	4690	60	1	2	1440	2.70	2.70	18	
	08 1437	1525	1525			S13 W16	4690	S13 W16	4690	48	1	2	1440	2.20	2.40		
	08 1440	1520 D	1520 D			S12 W18	4690	S12 W18	4690	10 D	1	1	1440	3.00	3.00		
	08 1455 E	1520 D	1520 D			S14 W20	4690	S14 W20	4690	25 D	16	2	1709	1.35	6.00	80	
	08 1701	1728	1728			S16 E46	4678	S16 E46	4678	27	1	2	1709	2.12	2.12	90	
	08 1851	1930	1930	1859	1859	N34 W48	4678	N34 W48	4678	39	1	2	1859	1.81	2.94	73	
	08 1952	2010 D	2010 D	1958	1958	N30 W90	4667	N30 W90	4667	18 D	1	2	1958	.90			
	08 1953	2008	2008			N27 W88	4667	N27 W88	4667	15	1						
	09 0342	0400	0400	0351	0351	S16 E42	4686	S16 E42	4686	18	26	3		2.30	2.40		
{ TASHKENT ATHENS CAPRI-S CAPRI-G SIMEIZ CAPRI-G USNRL USNRL USNRL LOCARNO USNRL ONDREJOV MCMATH ONDREJOV SAC PEAK USNRL	09 0616 E	0637 D	0637 D	0628	0628	S24 E17	4684	S24 E17	4684	21 D	1	3	0633	3.50	4.10		S-SWF
	09 0618 E	0702	0702			S23 E20	4684	S23 E20	4684	46 D	1	3		7.00	7.00		
	09 0618 E	0700	0700	0640	0640	S25 E18	4684	S25 E18	4684	42 D	2	3					
	09 0628 E	0843 D	0843 D			S26 E19	4684	S26 E19	4684	15	16						
	09 0820 E	0844	0844			S09 W35	4690	S09 W35	4690	24 D	1	2		4.00	4.00		
	09 1123	1135	1135			S11 E32	4686	S11 E32	4686	12	1	3		4.00	4.00		
	09 1403	1422	1422	1407	1407	N15 E85	4692	N15 E85	4692	19	1	3	1407	.68	4.84	58	
	09 1410 E	1445 D	1445 D			S14 E37	4686	S14 E37	4686	35 D	16	3	1425	2.26	3.20	91	
	09 1418 E	1605	1605	1425	1425	S15 E41	4686	S15 E41	4686	107	1	3	1422				
	09 1420 E	1520 D	1520 D			S16 E44	4686	S16 E44	4686	60 D	16	1					
{ TASHKENT ATHENS CAPRI-S CAPRI-G SIMEIZ CAPRI-G USNRL USNRL USNRL LOCARNO USNRL ONDREJOV MCMATH ONDREJOV SAC PEAK USNRL	09 1536 D	1536 D	1536 D	1610	1610	S08 W78	4670	S08 W78	4670	10 D	1	3	1526	2.30	2.30	20	G-SWF
	09 1600	1625	1625			S26 E13	4684	S26 E13	4684	25	1	2		1.47	1.92		
	09 1602	1628 D	1628 D	1608	1608	S26 E15	4684	S26 E15	4684	26 D	1	3	1608			102	
	09 1616 E	0702	0702			S23 E20	4684	S23 E20	4684	46 D	1	3		7.00	7.00		
	09 0618 E	0700	0700	0640	0640	S25 E18	4684	S25 E18	4684	42 D	2	3					
	09 0628 E	0843 D	0843 D			S26 E19	4684	S26 E19	4684	15	16						
	09 0820 E	0844	0844			S09 W35	4690	S09 W35	4690	24 D	1	2		4.00	4.00		
	09 1123	1135	1135			S11 E32	4686	S11 E32	4686	12	1	3		4.00	4.00		
	09 1403	1422	1422	1407	1407	N15 E85	4692	N15 E85	4692	19	1	3	1407	.68	4.84	58	
	09 1410 E	1445 D	1445 D			S14 E37	4686	S14 E37	4686	35 D	16	3	1425	2.26	3.20	91	

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURATION MINUTES	MAX. DIST.	APPROX. LAT.	APPROX. LONG.	OBS. COND.	TIME UT	MEASUREMENTS		PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	MAX. PHASE							MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
CLIMAX	09	1603	1630	1617		27		S24	E12		1617	2.20		
MCMAH	09	1606						S24	E15					
CAPRI-G	09	1610	E			15		S25	E11			5.00		
USNRL	09	1613	1626	1618		13		N44	E56		1618	1.13		68
CAPRI-G	09	1617	1625			8		N44	E54					
WENDEL	09	1617	E			19		N45	E52			3.00		
ONDREJOV	09	1659	E			5		S13	W08		1700			
MITAKA	10	0407	E			11		S14	E32		0407	1.84		
MITAKA	10	0530	E			10		S17	E36		0530	.89		
UCCLE	10	0942	1013			31		N27	W77					
WENDEL	10	1124	E			32		S15	E24					
LOCARNO	10	1325	E			35		S21	E14					
LOCARNO	10	1435	1455			20		N20	W36					
AROSA	10	1436	1455			19		N19	W37					
CAPRI-G	10	1438	1458			20		N19	W38			3.00		
WENDEL	10	1444	E			26		N18	W40			2.00		
MT WILSON	10	1918	1934			16		S12	E23					
MITAKA	11	0006	E			9		N22	W80		0006			
MITAKA	11	0351	0355			4		S15	E15			2.78		
MITAKA	11	0416	0430			14		S20	W54		0416	7.57		96
MITAKA	11	0511	E			7		S22	W56			.89		134
MITAKA	11	0538	E			4		S20	W55		0515	1.78		115
ONDREJOV	11	0546	E			5		S13	E20		0541	7.57		96
ONDREJOV	11	0633	E			11		S21	W54		0635			
ONDREJOV	11	0729	0747			18		S23	W56			3.80		
WENDEL	11	0845	E			22		N22	W45			4.00		
UCCLE	11	0846	0856			10		N22	W47		0847	3.00		
AROSA	11	0847	0900			13		N23	W46			4.50		S-SWF
ONDREJOV	11	0848	E			21		N22	W45					
STOCKHOLM	11	0910	0939			29		S15	E09		0851	3.50		
ZURICH	11	0926	0930			4		S10	E15		0918	1.00		
ONDREJOV	11	0932	E			13		S12	E17		0926			
CAPRI-G	11	1009	1030			21		S15	E10		0933	5.00		
UCCLE	11	1010	1028			18		S15	E10			.50		
ONDREJOV	11	1011	E			28		S16	E10		1014			
STOCKHOLM	11	1012	1030			18		S14	E10		1016	2.70		
CAPRI-S	11	1012	E			32		S16	E13		1017	3.50		
NERA	11	1015	E			10		S15	E12		1029			
AROSA	11	1020	E			5		S12	E11					
CAPRI-G	11	1025	1030			5		S15	E15			3.00		
ONDREJOV	11	1029	1048			19		S12	E17		1030	4.00		
WENDEL	11	1101	1120			19		S15	E12					
ONDREJOV	11	1211	1215			4		S18	E18		1211	3.00		
WENDEL	11	1223	E			12		N22	W48					
ONDREJOV	11	1412	1424			42		N20	W48		1414			
SAC PEAK	11	1450	1532			33		S13	W33			4.40		
CLIMAX	11	1451	1524			26		S11	W34		1513	2.90		
OTTAWA	11	1452	1518			15		S14	W31		1505	3.02		
WENDEL	11	1454	1509			20		N21	W46			3.78		
OTTAWA	11	1454	1514			7		N22	W49		1501	2.44		
AROSA	11	1455	E			7		N23	W50					

COMMERCE - STANDARDS - BOULDER

AUGUST 1958

AUGUST 1958

COMMERCE	-	STANDARDS	-	BOLLINGER
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SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS		MAX. WIDTH H α	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. MER. DIST.	PLATE REGION			TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		
SAC PEAK	13	1625	1705	N17 W80		4680	16	2	4.20			15	
SAC PEAK	13	1802	1835	S15 W22		4686	40	2	2.50			17	
SAC PEAK	13	1927	2047	S14 W24		4686	33 D	2	2.10			18	
{HAWAII	13	2132	2200	S14 W22		4686	28	1	2142	8.50		28	Slow S-SWF
{SAC PEAK	13	2142	2202	S15 W25		4686	20 D	1	2316	3.50			
HAWAII	13	2314	2324	S13 W23		4686	10	1					
HAWAII	14	0006	0028	S13 W24		4686	22 D	1	0008	3.80	4.40		
AROSA	14	0545	0558	S14 W25		4686	13 D	1					
CAPRI-G	14	0645	0705	N21 W90		4680	20 D	2			2.70		
ONDREJOV	14	0708	0737	N17 W90		4680	29 D	2	0712				
{AROSA	14	0730	0738	S24 W29		4684	8	1					
{WENDEL	14	0730	0743	S25 W26		4684	13 D	1		2.00			
{LOCARNO	14	0750	0815	S14 W26		4686	25 D	2		6.00			
{WENDEL	14	0800	0830	S12 W28		4686	30 D	1		2.00			
{CAPRI-G	14	1220	1330	S13 W31		4686	70 D	2		5.00			
{OTTAWA	14	1233	1312	S14 W31		4686	39	1	1247	1.80			S-SWF
{ZURICH	14	1236	1314	S12 W29		4686	38 D	2	1236	4.00			
{SAC PEAK	14	1420	1457	S14 W34		4686	37	1		3.10	4.00	18	
{LOCARNO	14	1422	1440	S13 W27		4686	18 D	2					
{SAC PEAK	14	1605	1700	S15 W25		4686	55	2		5.80		20	Slow S-SWF
{AROSA	14	1622	1635	S14 W24		4686	13 D	2	1631	2.76			
{OTTAWA	14	1625	1659	S15 W27		4686	34 D	1	1921	2.26	2.76	103	Slow S-SWF
{USNRL	14	1839	1959	S15 W23		4686	80 D	2		3.10	4.03	16	Slow S-SWF
{SAC PEAK	14	1955		S15 W30		4686	1	2		2.80			
MT WILSON	15	0012	0027	S13 W34		4686	15	1					
{CAPRI-G	15	0600	0619	S14 W42		4686	19 D	3	0610	1.80	3.00		
{CAPRI-S	15	0600	0645	S13 W40		4686	45 D	3		2.50			
{AROSA	15	0608	0615	S13 W44		4686	7 D	1					
{CAPRI-G	15	0904	0920	S13 W33		4686	16	2		3.00			
{LOCARNO	15	0905	0920	S13 W40		4686	15 D	2		3.00			
{AROSA	15	0950	1000	N45 W14		4691	10 D	1					
{STOCKHOLM	15	0950	1005	N46 W15		4691	15 D	1					
{CAPRI-S	15	0957	1030	N45 W17		4691	33 D	3	0957	1.80	2.70		
{CAPRI-G	15	0957	1033	N44 W15		4691	36	16	1002	1.80	2.60		
{ZURICH	15	1000	1028	N45 W14		4691	28 D	2	1000	5.00	5.00		
{LOCARNO	15	1006	1027	N45 W17		4691	21	2		4.00	4.00		S-SWF
{WENDEL	15	1316	1404	N16 E82		4708	48 D	2		3.00	14.00		
{CAPRI-G	15	1320	1339	S14 E90		4710	19 D	1		4.00			
{WENDEL	15	1330	1352	S21 W69		4684	22	1		3.00	3.00		
{WENDEL	15	1530	1546	S14 W49		4686	16 D	2		6.00			
{LOCARNO	15	1530	1550	S13 W43		4686	20	2		3.00			
{ONDREJOV	15	1532	1545	S13 W48		4686	13 D	2					
{USNRL	15	1739	1912	S15 W43		4686	93	1	1533	1.58	2.40	87	
{USNRL	15	1800	1906	S08 W65		4695	66	2	1758	1.47	3.74	77	
{USNRL	15	1917	1938	S17 E86		4710	21	2	1808	1.00	3.62	62	
								2	1920	0.50			
MITAKA	16	0218	0224	S19 W71		4686	6 D	1	0218	3.71	11.90	100	
{MITAKA	16	0432	0610	S14 W53		4686	98 D	1	0439	19.10	32.50	278	
{CAPRI-G	16	0517	0652	S14 W49		4686	95 D	3		10.00			
{ATHENS	16	0524	0705	S15 W49		4686	101 D	3		5.40	8.90		S-SWF

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURATION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.				MAGNITUDE PLACE REGION	TIME — U T	MEAS. AREA Sq. Deg.	
{ WENDEL CAPRI-S CAPRI-S CAPRI-G UCCLE UCCLE UCCLE UCCLE UCCLE WENDEL CAPRI-S OTTAWA CAPRI-G OTTAWA CAPRI-S CAPRI-S CAPRI-G	AUG 1956	16 0527 E		S15 W49		4686	2	3	0612	3.70	16.00	S-SWF
	16 0600 E	0831	S14 W50		4686	151 D	2	3	0702	1.70	6.30	
	16 0659 E	0725	N15 E68		4708	26 D	16	3	0702	1.70	4.40	
	16 0700 E	0718	N15 E73		4708	18	1	2	0851	.60	4.00	G-SWF
	16 0844 E	0854	S18 E77		4710	10 D	1	3	0851	2.20	1.80	
	16 0915 E	0923	N19 E79		4708	8	16	4	0916	2.50	6.00	
	16 0918 E	0929	S07 W41		4686	11	1	4	0920	1.50	3.70	G-SWF
	16 1059 E	1103	N20 E80		4708	4 D	1	2				
	16 1111 E	1120	N15 E73		4708	9	1	2				
	16 1203 E	1217 D	S15 W51		4686	14 D	16	3	1210	1.70	7.00	G-SWF
	16 1204 E	1245	S13 W58		4686	41	1	3	1209	3.36	3.90	
	16 1204 E	1318	S14 W59		4686	74	2	3	1221	2.49	4.19	
	16 1206 E	1251	S13 W57		4686	45	1	3	1230	2.50	4.20	G-SWF
	16 1213 E	1335	N29 E51		4704	82	16	3	1230	1.39	2.34	
	16 1217 E	1240	N26 E57		4704	23	1	3	1319		2.60	
	16 1223 E	1307	N30 E45		4704	44	1	1	2	1410		G-SWF
16 1317 E	1328	S14 W49		4686	11	1	3					
16 1410 E	1425 D	S21 W77		4684	15 D	1	2					
16 1448 E	1501	N23 E27		4701	13	1	2				G-SWF	
17 0543 E	0614	S14 W74		4686	31	1	3					
17 0550 E	0600 D	S14 W71		4686	10 D	1	3					
17 0555 E	0602	S15 W67		4686	7 D	1	3				S-SWF	
17 0602 E	0636	S14 W70		4686	34 D	1	2	0605	.80	2.30		
17 1402 E	1408	S24 W72		4684	6 D	1	2	1405	1.00	3.40		
17 1405 E	1410	S23 W67		4684	5 D	1	3	1405	1.50	5.00	S-SWF	
17 1452 E	1507	S25 W70		4684	15	1	3					
17 1602 E	1620 D	N10 E27		4707	18 D	1	3			2.30		
{ WENDEL AROSA CAPRI-G CAPRI-S ONDREJOV CAPRI-G CAPRI-G AROSA WENDEL AROSA CAPRI-G CAPRI-S CAPRI-S ONDREJOV UCCLE UCCLE MT WILSON UCCLE	18 0747 E	1008	N17 E44		4708	141	16			8.00	S-SWF	
	18 0755 E	1020 D	N17 E41		4708	145 D	2	2				
	18 0758 E	0925	N17 E47		4708	87	2	3	0817	2.10		6.00
	18 0759 E	1003	N18 E48		4708	124	16	3	0818		3.40	S-SWF
	18 0802 E	0840	N19 E49		4708	38	2	3			2.90	
	18 0820 E	0850	N20 E50		4708	30 D	2	1	0855	5.00	7.50	
	18 0845 E	0900	N17 E51		4708	15	1	1	0843	2.50	4.20	S-SWF
	18 0845 E	1030	S19 E51		4710	107 D	2	2	0934	1.50	4.50	
	18 0932 E	0937	N46 W50		4691	5	16	2				
	18 1254 E	1644	S08 W74		4686	12	1	3				S-SWF
	18 1632 E		N23 E83		4711	1						
	19 0413 E	0434	N20 E37		4708	21	1	1	0414	2.78	3.56	
	19 0558 E	0605	S08 W76		4686	7 D	16	3	0600	1.80	2.30	S-SWF
	19 0626 E	0655	N18 E36		4708	29 D	1	3	0630	1.84	6.00	
	19 0628 E	0634	N20 E36		4708	6 D	1	2				
	19 0629 E	1020 D	N20 E46		4708	231 D	16					S-SWF
19 0701 E	0730 D	S11 W12		4703	29 D	1						
19 0806 E	0814	S08 W77		4686	8 D	1	3	0807	1.70	2.20		
19 0810 E	0902 D	N18 E35		4708	52 D	1	3	0838			S-SWF	
19 0811 E	0829	N18 E37		4708	18 D	1	3	0816				
19 0820 E	0900	N17 E34		4708	40	1	1					
19 0830 E	0900 D	N18 E34		4708	30 D	1					S-SWF	
19 0845 E	0900	N18 E34		4708	15 D	16	3			6.00		

COMMERCE - STANDARDS - BOULDER

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT		
		START	END	APPROX. LAT.	MER. DIST.				McMATH PLACE REGION	TIME — U T	MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.		MAX. WIDTH H _c	MAX. INT. %
WENDEL	AUG 1958	0825 E	0829 D			4 D	16			6.00			S-SWF		
{WENDEL	23	1006 E	1120 D	N14 W24	4708	74 D	16			7.00					
{LOCARNO	23	1013 E	1105	N11 E38	4715	52 D	16	2		4.00					
{UCCLE	23	1007 E		S09 E37	4718	16	3	2		7.50	6.00				
{UCCLE	23	1013 E		S10 W73	4703		3	1	1013	15.00	8.00				
{LOCARNO	23	1013	1035	S12 W68	4703	22	1	2		15.00	5.00				
{WENDEL	23	1014 E	1048 D	S12 W68	4703	34 D	2	2		2.40	4.00				
{LOCARNO	23	1019	1037	N18 W18	4708	18	16	2							
{CAPRI-S	23	1022 E	1035	N18 W22	4708	13 D	1	2	1026						
{WENDEL	23	1023 E	1040 D	N17 W18	4708	17 D	1								
{WENDEL	23	1023 E	1043 D	N24 W22	4708	20 D	1								
{ONDREJOV	23	1023 E	1054 D	N08 E38	4715	24 D	1	1	1044		2.50				
{CAPRI-G	23	1030 E		N08 E34	4715	15 D	1			4.00					
{CAPRI-G	23	1244 E	1330 D	N18 W26	4708	46 D	16	1		5.00					
{USNRL	23	1403	1444	N19 W21	4708	41	1	2	1415	1.36	1.48	1.00	115		
{OTTAWA	23	1403	1446	N18 W22	4708	43	1	3	1420	2.32	2.57	3.00			
{ONDREJOV	23	1405 E	1426 D	N18 E21	4711	21 D	16	1	1420				S-SWF		
{SAC PEAK	23	1406 E	1450 D	N19 W22	4708	44 D	16	2		3.60	7.00				
{WENDEL	23	1414 E	1442 D	N19 W20	4708	28 D	16								
{MCMATH	23	1420 E		N18 W23	4708		16								
MT WILSON	23	2018	2201	S12 W72	4703	103	1								
CAPRI-G	24	0624	0643	N16 W38	4708	19	1	3		3.00					
{ATHENS	24	0650	0654	S17 W85	4703	4	16	3		4.10					
{SIMFEROPOL	24	0650		S17 W85	4703	4	16			80					
{CAPRI-G	24	0650	0715	S10 W80	4703	25	1	3		3.00					
{UCCLE	24	1123 E	1215 D	S19 W27	4710	52 D	1	2		3.50	4.00				
{UCCLE	24	1138 E	1215 D	S15 E77	4722	37 D	1	2							
{CAPRI-G	24	1147	1215	N18 W34	4708	28	1	1		3.00					
{CAPRI-G	24	1206	1216	S13 E70	4722	10	1	1		3.00					
{CAPRI-G	24	1219	1225	N16 E90	4721	6	1	1							
{ONDREJOV	24	1345 E	1348	S11 W85	4703	3 D	1	3	1346		4.10				
{CAPRI-G	24	1345	1408	S10 W90	4703	23	1	1							
{CAPRI-G	24	1355	1413	S14 E75	4722	18	1	1		3.00					
MT WILSON	24	1451	2404	S25 W80	4703	553	1								
CAPRI-G	25	0550	0622	S18 W19	4712	32	1	3		3.00					
CAPRI-G	25	0925 E	0939	S30 W85	4714	14 D	1	1		3.00					
{CAPRI-G	25	0950	1032	N15 W49	4708	42	2	1		12.00					
{CAPRI-S	25	0956	1042	N18 W44	4708	46	2	3	1002	8.00	12.00				
{KHARKOV	25	1000 E	1045	N17 W45	4708	45	2	1							
{CAPRI-G	25	1029	1041	N08 E08	4715	12	1	1		4.00					
{SCHAUINS	25	1029 E	1042	N07 E05	4715	13	1								
{MCMATH	25	1307 E	1330 D	N08 E20	4715	23 D	16	2		3.60			17		
{SAC PEAK	25	1317 E	1352	N08 E24	4715	35 D	16	2		7.00					
{CAPRI-G	25	1318	1354	N08 E20	4715	36	2	1		4.80					
{CLIMAX	25	1328 E	1352	N08 E24	4715	24 D	1		1339	4.20	4.60				
{CAPRI-S	25	1331 E	1352	N06 E23	4715	21 D	1	3	1335	10.00					
{WENDEL	25	1337 E	1353 D	N08 E23	4715	16 D	2								
{ONDREJOV	25	1347 E	1354	N07 E24	4715	7 D	1	1	1352		2.00				
{WENDEL	25	1347 E	1418 D	S17 W50	4708	31 D	1			3.00					
{WENDEL	25	1418 E	1440	N16 W51	4708	22 D	16			5.00					
CAPRI-G	25	1519	1528	S10 W90	4703	9	1	2							

CONVERSION - STANDARDS - BOULDER

SOLAR FLARES

AUGUST 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 _c	MAX. INT. %		
					LAT.	MER. DIST.									
MT WILSON SAC PEAK	25	2312	2439	2324 E	S18 N06	W30 E20	4712 4715	87 8 D	1	1	3.10			13	
	25	2324 E	2332 U												
	26	0005	0124	0027	N20	W54	4708	79	3	1	17.20	4.10			
	26	0052	0108	0052	S14	W46	4710	16 D	1	3	2.50	3.00			
	26	0557	0621		N19	W56	4708	24	1	1	0607	2.69	2.32	98	
	26	0607	0624 D		N17	W49	4708	17 D	1	1	0607	1.84	1.88	110	
	26	0644	0655		N19	W55	4708	11 D	2	1	0649	9.39	16.00		
	26	0805 E	0816		N24	E71	4721	11	1	2		7.00			
	26	0805 E	0827		N26	E65	4721	22 D	16	3		4.00			
	26	0827 E	0840		N18	W63	4708	13 D	1	3	2.00	3.70			
	26	1136	1230	1138	N06	E11	4715	54	3	3	3.00	3.20			
	26	1140	1146	1207	N06	E11	4715	54	2	3	1227	8.00			
	26	1144	1155	1141	N06	W04	4715	6	1	1	1141	4.00	4.00		
	26	1144	1155		N10	E14	4715	11	1	2					
	26	1144	1227 D		N07	E13	4715	43 D	1	3	1209	4.20	4.40		
	26	1145 E	1218 E		N09	E15	4715	33 D	2	2		8.00			
	26	1145 E	1225 U		N08	E11	4715	40 D	2	1	1202	5.80	5.96		
	26	1200 E	1240		N07	E07	4715	40 D	2	3		9.00			
	26	1215	1220	1216	S12	E65	4722	5	1	2	1216	1.50	3.00		
	26	1237	1241	1238	N23	E67	4721	4	1	3	1238				
	26	1313	1335		S18	W34	4712	22	1	1		4.00			
	26	1408 E	1448		S42	E30	4720	39	1	2		4.00			
	26	1409	1620	1611	S43	E34	4720	12	16	2	1611	1.50	4.00	4.40	
	26	1608	1713	1702	N19	W61	4708	11 D	1	2	1706	1.00	2.30	3.60	
	26	1702 E			S08	E62	4722	11 D	1	2					
	MITAKA	27	0045	0116	0052	S18	W39	4712	31	26	1	0050	11.40	16.20	2.74
27		0125 E	0143 D		S10	E45	4722	18 D	16	1	0127	7.57	11.60	1.89	107
27		0550 E	0630		S09	E52	4722	40 D	1	1					
27		0551 E	0637		S09	E53	4722	46	1	3		4.00			
27		0553 E	0635		S08	E59	4722	42 D	1	3	2.30	4.00			
27		0555 E	0630		S08	E54	4722	35 D	1	1		4.00			
27		0632	0705		S12	E70	4727	33	1	3		5.00			
27		0633	0712		S07	E75	4727	32	16	3	0646	0.90	4.00		
27		0633	0712	0644	S12	E75	4727	39	1	3		4.00			
27		0635	0724	0640	S13	E80	4727	49	2	2	0640		9.00	3.00	
27		0638	0702	0640	S11	E77	4727	24	16	3		1.20	4.20		
27		0640 E	0705		S07	E80	4727	25 D	16	3	0859	1.20	2.00		
27		0855	0909	0859	S10	E55	4722	14	1	4		3.00	3.00		
27		0856	0908 D		S09	E53	4722	12 D	1	1		3.00	3.00		
27		1047	1100		S09	E48	4722	13	1	1		3.00	3.00		
27		1048	1057		S09	E50	4722	9	1	1		3.00	3.00		
27		1049	1059	1051	S13	E49	4722	10	1	4		4.20	3.00		
27		1055	1130		N26	E54	4721	35	1	2		3.00	3.00		
27		1243	1310		N09	W38	4715	27	1	1		4.00	4.00		
27		1243	1320 D		N08	W36	4715	37 D	1	1		3.00	3.00		
27		1243	1321		N06	W18	4715	9	1	1					
27		1312	1440 E		S08	E42	4722	35	1	2		2.70	5.00		15
27		1440	1515	1455	S11	E49	4722	29	16	2					
27		1441	1510		S09	E49	4722	10 D	1	1					
27		1450 E	1500 D		S09	E47	4722	10 D	1	1					
27		1450 E	1500 D		N24	E52	4721	11 D	1	1			2.00		
27	1529														

COMMERCE

- ST

- STANDARDS - BOLDER

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT		
		START	END	APPROX. LAT.	APPROX. MER. DIST.				McMATH FLAME REGION	TIME — UT	MEAS. AREA Sq. Deg.		CORR. AREA Sq. Deg.	MAX. WIDTH Ha
HUANCAYO WENDEL MT WILSON	AUG 1958													
	27	1620 E	1630	N15 E90		10 D	1	2	1621	1.50	3.00	4.80		
	27	1650 2206	1712 2309	S18 W61 N09 W11		22 63	1							
MITAKA WENDEL	28	0435	0445 D	N21 W80		10 D	1	1	0440	1.84	6.44	1.98	102	
	28	0719 E	0735 D	N10 W33		16 D	1				3.00			
	28	0820	0830 D	N10 W23		10 D	1							
{ AROSA WENDEL	28	0820	0840 D	N09 W33		20 D	1				4.00			
	28	0825 E	0836	N09 W29		11 D	1	3			3.00			
	28	0825 E	0844	S12 W90		19 D	1	2						
{ CAPRI-G WENDEL	28	0848	0920	S08 W37		32	1	2			3.00			
	28	1027 E	1033	S17 W65		6 D	2							
	28	1027	1035	S17 W67		8	26	3	1030	8.00	15.00			
{ CAPRI-S WENDEL	28	1028	1045	S18 W68		7	1	3	1032	1.50	3.90			
	28	1028 E	1045	S21 W56		17 D	16				5.00			
	28	1029 E	1037	S19 W63		8 D	16	3	1030	3.00	3.50	4.10		
{ ONDREJOV WENDEL	28	1028	1040	S10 E36		12	1	3	1030	3.00	3.00			
	28	1032 E	1047	S09 E40		15 D	1							
	28	1032	1200	S11 W90		88	26							
{ NERA WENDEL	28	1032	1120 D	S16 W90		45 D	16	1						
	28	1035 E	1155 D	S14 W90		80 D	2							
	28	1035	1155 D	S11 W90		89	16	3						
{ AROSA WENDEL	28	1041	1210	N16 W84		18 D	16							
	28	1154	1212 D	N07 W16		55 D	16							
	28	1223 E	1318 D	S10 E33		6 D	1	3	1424		7.00	2.30		
{ ONDREJOV WENDEL	28	1423 E	1431	S08 E33		8	1				4.00			
	28	1423	1431	S08 E33		4722	8				3.00			
	28	1540	1550 D	S08 E32		10 D	1							
{ ONDREJOV WENDEL	28	1605 E	1611	S06 E32		6 D	1	3	1605		3.00	2.10		
	28	1713 E	1721	S08 E32		8 D	1			2.70			18	
	28	1800	1840	S16 W73		40	1	2						
{ SAC PEAK MT WILSON	28	1800	2003	S15 W68		123	1							
	28	1813 E		S15 W65		4712	2							
	28	1845	1910	N07 W22		25	1	2		2.30			15	
{ AROSA WENDEL	29	0809	0825 D	S09 E26		16 D	1							
	29	0819	0841	S08 E32		22	1				3.00			
	29	0905	0917	S14 W85		12	1	2						
{ UCCLE WENDEL	29	0905	0930	S09 E24		25	1							
	29	0910	0923	S09 E25		13	1	3	0915	2.00	2.20	2.30		
	29	0912	0947 D	S08 E25		35 D	16				7.00			
{ CAPRI-G WENDEL	29	0917	0932	S09 E25		15	1	2			3.00			
	29	0917	0932	N18 E80		4729	5	2						
	29	1049	1054	N19 E74		4	1							
{ AROSA WENDEL	29	1051 E	1055	N19 E74		4	1							
	29	1051 E	1105	N19 E74		14 D	1				3.00			
	29	1124 E	1137 D	S09 E34		13 D	16				6.00			
{ WENDEL	29	1140	1152	S09 E23		12	1				4.00			
	29	1142 E	1147	S09 E24		5 D	1	3	0943			2.80		
	29	1142	1150	S10 E26		8	1	1			3.00			
{ CAPRI-G WENDEL	29	1217	1250 D	S08 W24		33 D	1				4.00			
	29	1222 E	1258 D	S17 W80		36 D	1				4.00			
	29	1222 E	1258 D	S11 E34		6 D	1							
{ ONDREJOV WENDEL	29	1239 E	1245	N08 W35		36 D	16	3	1241		5.00	3.20		
	29	1253	1329 D											
	29	1426 E	1440 D			14 D	1				4.00			

CONMERCE - STANDARDS - BOLDER

AUGUST 1958

[illegible]

COMMERCE	-	STANDARDS	-	POLL DEF

SOLAR FLARES

AUGUST 1958

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURATION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MAGNETH PLACE REGION	TIME — U T				MEAS. AREA Sq. Deg.	CORR. Sq. Deg.	MAX. WIDTH H _z	MAX. INT. %	
{ WENDEL ONDREJOV MT WILSON HAWAII MT WILSON	31	1544	1602	S10 W05		4722	18	1				3.00		
	31	1548 E	1553	S10 E01		4722	5 D	1	3	1549			2.30	
	31	1653		S09 E10		4722		1						
	31	1820	1900	S03 W12		4722	40	1	3	1830	2.10	2.20		
	31	2246	2301	S09 E09		4722	15	1						

CAPRI G A/CAPRI - GERMAN
 CAPRI S A/CAPRI - SWEDISH
 GOOD HOPE ROYAL OBSERVATORY, CAPE OF GOOD HOPE
 KIEV* KIEV UNIVERSITY
 KODAIKAL KODAIKAL
 KRASNIA KRASNIA PAKHRA
 MOSCOW MIZMIR
 MOSCOW G MOSCOW - GAISH
 R O EDIN ROYAL OBSERVATORY, EDI BURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAULIN SCHAULIN ISLAND
 USNRL UNITED STATES NAVAL RESEARCH LABORATORY

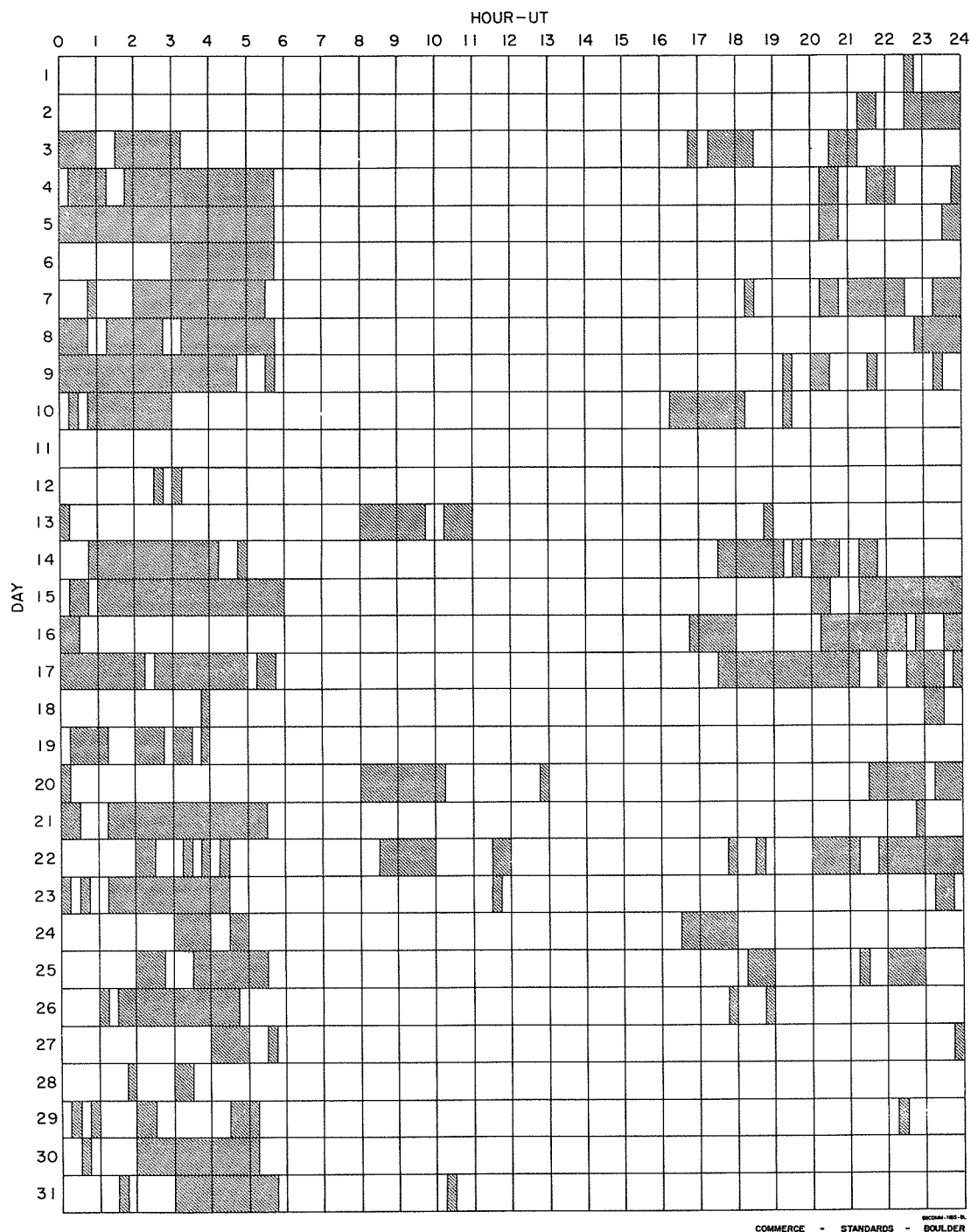
SAG PEAK: ALL VALUES IN MAX. INT. COLUMN ARE
 ARBITRARY UNITS (0-40), NOT PERCENT
 OF CONTINUOUS SPECTRUM.

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

COMMERCE - STANDARDS - BOLDER

INTERVALS OF NO FLARE PATROL OBSERVATIONS

AUGUST 1958



Times indicated are accurate to the nearest 15 minutes.

Stations Included:

Anacapri (Swedish)
Arosa
Athens (1-15)
Climax
Hawaii
Huancayo
Kodaikanal

Locarno
Meudon
Mitaka
Nizamia
Ondrejov
Ottawa

Royal Observatory,
Edinburgh
Royal Greenwich Observatory,
Herstmonceux
Sacramento Peak
Uccle
U. S. Naval Research Laboratory

SUBFLARES

Noted as follows: Date-Universal Time - Coordinates

JULY 1958

UCCLE	01	0855 E	S20 W34	USNRL	03	1644	S22 E62	SAC PEAK	07	1322	N26 E02
UCCLE	01	0927 E	N10 E08	USNRL	03	1704	N04 E11	SAC PEAK	07	1347	N25 E02
UCCLE	01	0941	.507 W31	USNRL	03	1745	N28 E38	GOOD HOPE	07	1349	N27 E03
USNRL	01	1206	S07 W33	WENDEL	03	1748 E	N31 E31	SAC PEAK	07	1407	N18 W41
USNRL	01	1223	S15 W48	SAC PEAK	03	1825	S12 W44	SAC PEAK	07	1410	N29 W22
USNRL	01	1232	N10 E06	USNRL	03	1832 E	S12 W42	SAC PEAK	07	1420	N13 W60
USNRL	01	1252	N30 E58	SAC PEAK	03	1847	N22 E26	SAC PEAK	07	1435	N26 E00
CLIMAX	01	1336	N11 E51	USNRL	03	1849	N22 E27	SAC PEAK	07	1505	N26 E00
* USNRL	01	1336	N27 E58	SAC PEAK	03	1902 U	N26 E49	* SAC PEAK	07	1512	S22 E01
USNRL	01	1505	N28 E60	USNRL	03	1905 E	N26 E48	* CAPRI S	07	1515	S25 E02
* MCMATH	01	1604	N16 E90	USNRL	03	1911	N04 E10	USNRL	07	1615	N32 E45
USNRL	01	1615	S21 W29	USNRL	03	1920	N24 E26	USNRL	07	1624	N16 E05
HUANCAYO	01	1616	S19 W27	USNRL	03	1937	N26 E49	USNRL	07	1747	N34 E44
MCMATH	01	1616	S20 W29	USNRL	03	1937	N04 E10	USNRL	07	1750	S19 W97
USNRL	01	1619	N12 E03	SAC PEAK	03	1950	N04 E08	SAC PEAK	07	1750 U	N35 E45
MCMATH	01	1622	N12 E04	USNRL	03	1957 E	N26 E50	SAC PEAK	07	1751	S19 W90
SAC PEAK	01	1720	N28 E58	USNRL	03	2115	N05 E07	MCMATH	07	1806 E	S21 E70
SAC PEAK	01	1820	N27 E59	USNRL	03	2123	N26 E50	SAC PEAK	07	1827	N31 E01
USNRL	01	1821	S21 W30	USNRL	03	2132	N16 W54	HUANCAYO	07	2044	S19 E06
USNRL	01	1821	N26 E58	USNRL	03	2140	N22 E25	HAWAII	07	2216	N30 E01
USNRL	01	1853	N26 E58	HAWAII	03	2142	N13 W50	SAC PEAK	07	2305 E	N05 W48
USNRL	01	1859	N17 E90	USNRL	03	2150	N28 E31				
MCMATH	01	1905 E	N28 E55	HUANCAYO	03	2152	N26 E31				
MCMATH	01	1912	S07 W35	USNRL	03	2152	N37 E46				
USNRL	01	1912	S08 W35	USNRL	03	2201	N03 E07				
HAWAII	01	1916 E	S08 W35								
* CLIMAX	01	1945	N23 E56	ARCETRI	04	0832 E	N05 E01	* ATHENS	08	0553	N29 W31
* USNRL	01	1948	N30 E57	ARCETRI	04	0842 E	N27 E40	UCCLE	08	0905	N30 W10
MCMATH	01	2109	N11 E01	UCCLE	04	0854	N05 E00	MEUDON	08	0907	N30 W10
				GOOD HOPE	04	0947	N06 E00	UCCLE	08	1029	S21 E65
GOOD HOPE	02	0801	S08 E47	UCCLE	04	1000	N03 W01	UCCLE	08	1049	N34 E36
UCCLE	02	1145	N25 E60	UCCLE	04	1111	S23 E34	UCCLE	08	1225	N05 W55
USNRL	02	1159 E	N16 W36	* CAPRI S	04	1128 E	N19 E04	* SAC PEAK	08	1317	N30 E32
USNRL	02	1159 E	N21 E25	UCCLE	04	1141 E	S21 E51	* MCMATH	08	1318	N29 E32
MCMATH	02	1215	N23 E33	GOOD HOPE	04	1141 E	S17 E25	* USNRL	08	1322	N30 E32
GOOD HOPE	02	1215	N23 E33	UCCLE	04	1141 E	S17 E26	USNRL	08	1440	N31 W09
USNRL	02	1216	N24 E33	USNRL	04	1251	S24 E34	USNRL	08	1501	N31 W09
GOOD HOPE	02	1246	S19 W51	CLIMAX	04	1325	N28 E23	USNRL	08	1505	S21 W12
USNRL	02	1328	N04 W36	SAC PEAK	04	1325	N28 E22	SAC PEAK	08	1510	N32 W06
GOOD HOPE	02	1329	S19 W43	USNRL	04	1326	N29 E22	ZURICH	08	1517 E	N32 W11
SAC PEAK	02	1330	N04 W36	USNRL	04	1427	N28 E21	SAC PEAK	08	1527	N25 W10
SAC PEAK	02	1330 E	S19 W43	* SAC PEAK	04	1427	N29 E21	USNRL	08	1534	N30 E30
USNRL	02	1330	S20 W43	SAC PEAK	04	1450	S07 E17	SAC PEAK	08	1612	S22 W14
SAC PEAK	02	1430 E	N24 E45	SAC PEAK	04	1452	N24 E08	UCCLE	08	1648	N30 W10
MCMATH	02	1443	N22 E44	SAC PEAK	04	1452	N31 E86	SAC PEAK	08	1650	S08 W36
USNRL	02	1450	N24 E44	SAC PEAK	04	1545	N03 W03	SAC PEAK	08	1652	N31 W08
SAC PEAK	02	1452 E	N24 E42	SAC PEAK	04	1550	N13 W63	USNRL	08	1654 E	S07 W37
USNRL	02	1542 E	S05 E42	SAC PEAK	04	1630	N29 E21	USNRL	08	1658 E	N31 W09
MCMATH	02	1604	N04 E24	HUANCAYO	04	1631 E	N29 E21	USNRL	08	1655	S34 W01
USNRL	02	1604	N04 E24	SAC PEAK	04	1712 E	N29 E19	SAC PEAK	08	1657	S23 W14
SAC PEAK	02	1712	N09 W37	SAC PEAK	04	1712	S23 E32	USNRL	08	1700	S21 W12
MCMATH	02	1714	N10 W37	SAC PEAK	04	1747	S23 E32	USNRL	08	1717	S22 W13
USNRL	02	1714	N08 W37	SAC PEAK	04	1750	N04 W06	USNRL	08	1903	N31 W09
SAC PEAK	02	1725	N27 E47	SAC PEAK	04	1810	N25 E07	USNRL	08	1905	N33 E27
USNRL	02	1728	N27 E46	HAWAII	04	1828	N26 E08	USNRL	08	1912	N35 W03
USNRL	02	1728	N12 E11	SAC PEAK	04	2220	N24 E04	USNRL	08	1932	S23 W12
USNRL	02	1740	N29 E39	SAC PEAK	04	2227	S24 E30	MCMATH	08	2031	N45 E10
USNRL	02	1816	N33 E74	SAC PEAK	04	2300	N04 W08	MCMATH	08	2055	S23 W17
USNRL	02	1816	N24 E30	SAC PEAK	04	2325	N26 E10	SAC PEAK	08	2230 E	N28 W05
USNRL	02	1819	N27 E38	SAC PEAK	04	2337	S23 E27	SAC PEAK	08	2230 E	S22 W19
SAC PEAK	02	1832	S13 W64								
USNRL	02	1833 E	S06 E41	UCCLE	05	0830 E	N06 W16	WENDEL	09	0631 E	S17 W41
USNRL	02	1834	N28 E39	UCCLE	05	0958	N37 E40	UCCLE	09	0700	S21 W23
USNRL	02	1836 E	S13 W62	* GOOD HOPE	05	1011	S22 E20	UCCLE	09	0706 E	N33 E21
USNRL	02	1846	N12 E10	UCCLE	05	1049	S22 E22	* WENDEL	09	0713	N32 E23
USNRL	02	1857	N28 E39	UCCLE	05	1104	N22 W09	UCCLE	09	0809	N04 W70
* SAC PEAK	02	1902	N30 E42	MCMATH	05	1240	N27 E16	UCCLE	09	0810	S23 W20
USNRL	02	1926	S15 W62	MCMATH	05	1255	N29 E69	* WENDEL	09	0837 E	N31 W07
SAC PEAK	02	2212	N24 W13	SAC PEAK	05	1302	N25 W07	UCCLE	09	0955	S21 E51
SAC PEAK	02	2237	S05 E37	SAC PEAK	05	1302	N04 W17	MEUDON	09	0957	S20 E50
SAC PEAK	02	2320	S25 E64	MCMATH	05	1304	N02 W16	UCCLE	09	1012	N03 W71
				MCMATH	05	1310	N23 W07	MCMATH	09	1128	N31 W21
ATHENS	03	0619	N26 E32	SAC PEAK	05	1317	S14 W09	UCCLE	09	1151	S21 E50
GOOD HOPE	03	0730	N25 E22	* CAPRI S	05	1346 E	N24 W39	UCCLE	09	1157	N04 W70
UCCLE	03	0829	N05 E15	SAC PEAK	05	1430	S27 E32	* MCMATH	09	1207	N28 E11
UCCLE	03	0834	S22 E58	SAC PEAK	05	1435	N12 W30	MCMATH	09	1222	N33 E21
UCCLE	03	0843	S21 W54	USNRL	05	1439	S26 E32	* MCMATH	09	1300	S23 E18
UCCLE	03	0851	N19 W56	MCMATH	05	1440	N12 W28	SAC PEAK	09	1355	N31 W22
* MEUDON	03	0909	N22 E30	USNRL	05	1441	N12 W30	WENDEL	09	1410 E	S20 E47
* GOOD HOPE	03	0909	N22 E31	* USNRL	05	1524	N03 W18	SAC PEAK	09	1522	N30 W22
MEUDON	03	1031	N25 E27	MCMATH	05	1525	N25 E25	MCMATH	09	1524	N30 W22
UCCLE	03	1032 E	N27 E30	SAC PEAK	05	1627	N13 W30	* SAC PEAK	09	1547	S22 W22
UCCLE	03	1032 E	S09 W59	MCMATH	05	1633	N11 W30	SAC PEAK	09	1557	S22 W26
* MEUDON	03	1053	N25 E35	MCMATH	05	1635	N23 W02	SAC PEAK	09	1610	S21 E45
UCCLE	03	1055	N26 E55	SAC PEAK	05	1635	N23 W03	UCCLE	09	1627	N38 E18
UCCLE	03	1130	S06 E31	SAC PEAK	05	1727	N27 E19	SAC PEAK	09	1627	N34 E18
* MEUDON	03	1217	N06 E15	MCMATH	05	1730	N02 W08	SAC PEAK	09	1635	N14 E75
* CAPRI S	03	1218	N05 E12	MCMATH	05	1731	N26 E20	* SAC PEAK	09	1840	N04 W78
USNRL	03	1236	N04 E13	SAC PEAK	05	1807	N03 W19	SAC PEAK	09	2032	S22 W28
GOOD HOPE	03	1237	N05 E13	MCMATH	05	1810	N11 W47	SAC PEAK	09	2232	S21 E42
USNRL	03	1256	N26 E52	MCMATH	05	1915	N27 E18	MCMATH	09	2234	S21 E42
USNRL	03	1306	N04 E13	HAWAII	05	1918	N26 E18	MCMATH	09	2303	N28 E06
USNRL	03	1312	N28 E35	SAC PEAK	05	1957 E	N31 E18	HAWAII	09	2304	S22 W25
* SAC PEAK	03	1320	N28 E35	SAC PEAK	05	2020	S29 E17	SAC PEAK	09	2350	S25 W27
ZURICH	03	1323	N11 W03	SAC PEAK	05	2020 E	N03 W20	SAC PEAK	09	2350	S29 E48
MEUDON	03	1323	N25 E35	SAC PEAK	05	2020 E	N12 W34				
CAPRI S	03	1324 E	N28 E33								
USNRL	03	1330	N38 E51	CAPRI S	06	0845	N12 W39	HAWAII	10	0148	S22 W32
USNRL	03	1333	N04 E13	CAPRI S	06	1149 E	N12 W40	* ATHENS	10	0613 E	S23 W40
ZURICH	03	1336	N40 E44	USNRL	06	1207	S25 E10	* ATHENS	10	0650 E	N30 E04
USNRL	03	1344	N28 E28	* USNRL	06	1252	N25 E15	ATHENS	10	0731 E	N23 E05
MEUDON	03	1345	N25 E30	* MEUDON	06	1258	N25 E20	MEUDON	10	0803	S22 W50
CAPRI S	03	1347 E	N26 E25	CLIMAX	06	1256 E	N23 E18	UCCLE	10	0847	S22 E38
USNRL	03	1356	N22 E29	USNRL	06	1317	N11 W43	UCCLE	10	1018	S22 W38
USNRL	03	1358	N24 E18	MCMATH	06	1318	N12 W43	MEUDON	10	1018	S18 W40
ARCETRI	03	1436 E	N27 E25	USNRL	06	1344	N04 W28	* MEUDON	10	1025	N18 W65
ARCETRI	03	1436 E	N05 E11	USNRL	06	1350	N30 E59	UCCLE	10	1030	S23 W37
SAC PEAK	03	1525	N04 E11	USNRL	06	1408	N30 W08	UCCLE	10	1106	S22 W36
USNRL	03	1606	N04 E11	MCMATH	06	1721	S21 E02	UCCLE	10	1137	S22 W36
SAC PEAK	03	1607	N11 W03					UCCLE	10	1156	S22 W32
SAC PEAK	03	1610	N04 E11	* ATHENS	07	0554	N29 E07	* MEUDON	10	1207	N25 W40
USNRL	03	1635	N26 E50	* CAPRI S	07	0602 E	N27 E07	* MCMATH	10	1207	N26 W40
* SAC PEAK	03	1637	N28 E35	CAPRI S	07	1019 E	S26 E78	MCMATH	10	1235	S22 W39
* WENDEL	03	1642 E	N31 E32	CAPRI S	07	1118 E	S25 E04	USNRL	10	1251 E	N25 W62
								USNRL	10	1311 E	S21 E33
								USNRL	10		

SUBFLARES

III

Noted as follows: Date-Universal Time- Coordinates

JULY 1958

* CLIMAX	10	1333	S21 W46	SAC PEAK	14	2125	N08 E45	MCMATH	20	1648	N11 W29
* MCMATH	10	1334	S22 W38	MCMATH	14	2143	S26 E11	MCMATH	20	1650	N21 W09
* SAC PEAK	10	1335	S22 W37	SAC PEAK	14	2152	S20 E52	SAC PEAK	20	1650	N19 W08
SAC PEAK	10	1350	N25 W64	MCMATH	14	2153	S21 E52	MCMATH	20	1652	N09 W10
USNRL	10	1413	E N31 E01	SAC PEAK	14	2300	N09 E44	MCMATH	20	1705	S14 E35
USNRL	10	1434	N40 E85	CAPRI S	15	0711	E N07 E90	SAC PEAK	20	1707	S13 E90
* SAC PEAK	10	1445	S22 W38	* MEUDON	15	0807	N10 E40	MCMATH	20	1707	S20 E90
* MCMATH	10	1446	E S21 W40	* WENDEL	15	0808	E N08 E35	SAC PEAK	20	1710	S16 E37
MCMATH	10	1505	S21 W40	UCCLE	15	0939	N07 E42	MCMATH	20	1748	N21 W09
USNRL	10	1514	E S21 W38	WENDEL	15	1108	E N19 E34	MCMATH	20	1754	N12 W29
SAC PEAK	10	1532	N21 W66	* USNRL	15	1230	N09 E35	SAC PEAK	20	1945	N10 W30
SAC PEAK	10	1535	S21 E32	* CAPRI S	15	1237	E N08 E38	SAC PEAK	20	2037	N21 E00
* SAC PEAK	10	1609	S20 E33	USNRL	15	1316	N09 E33	* SAC PEAK	20	2147	N07 W32
* HUANCAYO	10	1607	S18 E34	WENDEL	15	1319	E N08 E32	SAC PEAK	20	2335	N07 W43
* MCMATH	10	1607	S21 E33	WENDEL	15	1323	E N08 E38	SAC PEAK	20	2335	S14 E90
* CLIMAX	10	1607	S16 E31	USNRL	15	1419	N08 E34				
* USNRL	10	1613	E S20 E31	SAC PEAK	15	1540	S24 W02	* CAPRI S	21	0600	S12 E16
SAC PEAK	10	1617	N25 W67	MCMATH	15	1541	E S25 W03	MCMATH	21	1123	E N08 W50
SAC PEAK	10	1625	S27 W47	USNRL	15	1542	S24 W02	MCMATH	21	1201	S17 E90
* SAC PEAK	10	1647	S23 W40	USNRL	15	1553	N09 E34	* MCMATH	21	1205	S22 W82
* MCMATH	10	1649	E S22 W41	SAC PEAK	15	1617	N08 E36	SAC PEAK	21	1312	S22 W86
* USNRL	10	1651	E S23 W40	USNRL	15	1622	N08 E37	MCMATH	21	1349	S22 W83
WENDEL	10	1721	E S23 W37	USNRL	15	1633	S23 E39	* CLIMAX	21	1412	N23 W07
WENDEL	10	1732	E S23 W37	SAC PEAK	15	1635	S24 E40	* SAC PEAK	21	1412	N23 W08
USNRL	10	1745	S22 W38	USNRL	15	1640	N05 E30	* CAPRI S	21	1412	N22 W15
USNRL	10	1811	E S22 W38	USNRL	15	1817	S13 E12	* STOCKHOLM	21	1413	N20 W10
SAC PEAK	10	1812	S23 W39	SAC PEAK	15	1837	N07 E35	MCMATH	21	1445	S12 E23
MCMATH	10	1813	S22 W40	SAC PEAK	15	1922	N08 E34	SAC PEAK	21	1715	S23 W85
USNRL	10	1838	S22 W38	MCMATH	15	1926	E S14 W38	* SAC PEAK	21	1717	N14 E61
USNRL	10	1859	N14 W50	* SAC PEAK	15	2232	E S21 W40	* MEUDON	21	1721	N18 E60
SAC PEAK	10	1857	N04 W90	HAWAII	15	2350	S21 W38	SAC PEAK	21	1730	N23 W09
SAC PEAK	10	1907	N45 W22					SAC PEAK	21	1730	S15 E80
USNRL	10	1907	N42 W21	WENDEL	16	1026	N08 E20	MCMATH	21	1731	N25 W06
SAC PEAK	10	1940	S26 E34	* CAPRI S	16	1110	E N08 E24	* SAC PEAK	21	1928	E N21 W13
USNRL	10	1950	E S22 W38	MCMATH	16	1145	S25 W15	MCMATH	21	1930	N16 W53
* SAC PEAK	10	2022	N15 E59	USNRL	16	1155	E N09 E26	SAC PEAK	21	2157	N18 W11
SAC PEAK	10	2050	N04 W90	USNRL	16	1203	S23 W46	SAC PEAK	21	2235	N15 E58
SAC PEAK	10	2240	N04 W90	WENDEL	16	1204	E S23 W43	SAC PEAK	21	2312	N23 W13
SAC PEAK	10	2245	S22 W45	MCMATH	16	1204	S23 W47				
				USNRL	16	1209	N08 E26	CLIMAX	22	1406	S13 W71
WENDEL	11	0558	E S23 W50	USNRL	16	1214	N07 E18	SAC PEAK	22	1410	S17 W71
* CAPRI S	11	0724	S24 W53	USNRL	16	1220	S20 W46	* CLIMAX	22	1436	S11 E06
* WENDEL	11	0742	E S23 W50	WENDEL	16	1227	E S23 W12	* R O HEARST	22	1439	S13 E90
ZURICH	11	0750	S21 W55	USNRL	16	1320	N10 E19	SAC PEAK	22	1502	S17 W71
UCCLE	11	1042	N27 W50	USNRL	16	1348	N08 E26	* SAC PEAK	22	1607	S17 W72
UCCLE	11	1124	S23 W52	MCMATH	16	1349	S23 W16	SAC PEAK	22	1642	S10 W05
USNRL	11	1253	S21 W60	USNRL	16	1406	S20 W46	HAWAII	22	1745	E S11 W03
CAPRI S	11	1254	S24 W56	MCMATH	16	1416	S20 W49	SAC PEAK	22	1745	S10 W05
SAC PEAK	11	1305	S26 E26	USNRL	16	1439	N11 E18	USNRL	22	1756	E S11 W05
MCMATH	11	1313	E S22 W55	SAC PEAK	16	1750	N10 E15	SAC PEAK	22	1830	S12 W06
USNRL	11	1317	S27 E24	USNRL	16	1757	E S24 W17	* HAWAII	22	2000	S11 W03
SAC PEAK	11	1317	N08 E90	USNRL	16	1903	N08 E26	* HUANCAYO	22	2001	S10 W04
SAC PEAK	11	1350	S23 W57	SAC PEAK	16	1905	N07 E23	* USNRL	22	2004	E S11 W07
* USNRL	11	1412	S21 W53	SAC PEAK	16	1915	N18 E47	HAWAII	22	2221	E N18 W27
* CLIMAX	11	1412	S23 W56	* CLIMAX	16	2049	S23 E23				
* CAPRI S	11	1414	E S25 W51	MCMATH	16	2140	N08 E22	MEUDON	23	0811	E N20 W02
* MCMATH	11	1430	E S20 W55					* MEUDON	23	1017	E N20 W38
WENDEL	11	1445	E S21 W50	* SAC PEAK	17	1357	N21 E41	* CAPRI S	23	1022	N24 W35
* CLIMAX	11	1640	N28 W85	* CLIMAX	17	1359	N22 E42	MEUDON	23	1031	S12 E36
* MCMATH	11	1641	N25 W85	* CAPRI S	17	1404	E N23 E35	USNRL	23	1507	S10 W16
SAC PEAK	11	1652	S28 E24	* R O EDIN	17	1406	E N23 E46	MCMATH	23	1552	E N27 W34
SAC PEAK	11	1737	S21 W58	MCMATH	17	1436	N09 E11	MCMATH	23	1628	N27 W34
SAC PEAK	11	1957	N08 E90	MCMATH	17	1459	N12 E00	USNRL	23	1630	E N27 W36
CLIMAX	11	2015	E N08 E84	SAC PEAK	17	1537	N21 E41	MCMATH	23	1728	S13 E33
SAC PEAK	11	2122	S22 W66	MCMATH	17	1544	S21 W29	USNRL	23	1731	S14 E35
HAWAII	11	2136	S25 W56	* SAC PEAK	17	1630	N21 E41	MCMATH	23	1855	S10 W20
HUANCAYO	11	2140	E S21 W60	* MEUDON	17	1633	N20 E45	MCMATH	23	1911	S13 E32
				* USNRL	17	1949	N09 E08	MCMATH	23	1947	S22 E92
				* MT WILSON	17	2001	N09 E07	* USNRL	23	1952	E S14 W24
				* HUANCAYO	17	2002	E N09 E07				
UCCLE	12	0828	S22 W63					CAPRI S	24	0958	E S15 E25
UCCLE	12	0842	N29 W59					UCCLE	24	1058	S14 E21
WENDEL	12	0844	E N30 W57					UCCLE	24	1148	S17 E40
UCCLE	12	0954	S25 W68	* WENDEL	18	0548	E N06 W02	* USNRL	24	1320	E S15 E23
MCMATH	12	1259	S20 W68	MEUDON	18	0633	E N25 E28	MCMATH	24	1413	N26 W44
MCMATH	12	1335	E S25 W80	UCCLE	18	0917	S02 E08	SAC PEAK	24	1415	N26 W45
USNRL	12	1338	S27 W70	MEUDON	18	1010	N20 W20	* SAC PEAK	24	1417	S16 E23
* MCMATH	12	1456	S25 W83	UCCLE	18	1138	S02 E08	* USNRL	24	1536	S15 E22
* USNRL	12	1456	S27 W82	UCCLE	18	1146	N06 W03	* CAPRI S	24	1548	E S15 E22
USNRL	12	1513	S27 E82	MCMATH	18	1149	N06 W05	* CLIMAX	24	1548	E S16 E22
MCMATH	12	1658	N06 W55	USNRL	18	1212	E N05 W05	* SAC PEAK	24	1727	N09 E90
SAC PEAK	12	1750	S21 W67	* MCMATH	18	1232	S15 E68	MCMATH	24	1737	N26 W46
MCMATH	12	1753	S20 W71	MCMATH	18	1318	S21 W40	MCMATH	24	1836	S13 E20
SAC PEAK	12	1855	S22 W71	WENDEL	18	1353	E N16 W42	* SAC PEAK	24	1930	E S15 E21
SAC PEAK	12	1950	N07 E75	WENDEL	18	1703	E N22 E27	* USNRL	24	1942	E S14 E21
SAC PEAK	12	2040	S26 W80	WENDEL	18	1732	E N15 E58	SAC PEAK	24	2015	E N05 E90
MCMATH	12	2049	S25 W88	MCMATH	18	1808	S17 E65				
				SAC PEAK	18	2044	E S03 E02				
WENDEL	13	0548	E S23 W03					ATHENS	25	0707	E S16 E09
WENDEL	13	0548	E S13 E01	WENDEL	19	0615	E S18 W53	UCCLE	25	1104	N29 W62
WENDEL	13	0628	E N07 E65	UCCLE	19	0800	E N21 E21	USNRL	25	1205	S16 E05
SAC PEAK	13	1330	S23 W88	UCCLE	19	0826	S12 E54	USNRL	25	1221	N17 E03
SAC PEAK	13	1355	N16 E22	* MEUDON	19	0951	N22 E20	USNRL	25	1323	E S17 E03
* SAC PEAK	13	1405	S21 W05	UCCLE	19	1000	S21 W52	WENDEL	25	1358	E S18 E12
* SAC PEAK	13	1430	N07 E64	UCCLE	19	1017	N21 E20	USNRL	25	1519	S16 E11
* MCMATH	13	1533	N07 E66	MCMATH	19	1121	E S12 W38	USNRL	25	1525	N24 E67
USNRL	13	1534	N08 W63	UCCLE	19	1150	S22 W52	UCCLE	25	1545	N01 E75
* SAC PEAK	13	1615	S21 W07	WENDEL	19	1215	E N22 E60	* HUANCAYO	25	1548	S13 E10
* SAC PEAK	13	1617	N07 E64	MCMATH	19	1222	S21 W52	USNRL	25	1718	E S16 E07
* MCMATH	13	1619	N07 E66	USNRL	19	1230	S17 E53	* USNRL	25	1927	S17 W02
SAC PEAK	13	1627	S21 E64	* USNRL	19	1240	S22 W54	MCMATH	25	1935	N27 W63
MCMATH	13	1642	N07 E66	USNRL	19	1241	S21 W55	MCMATH	25	2035	N08 E76
SAC PEAK	13	1647	N31 W75	MCMATH	19	1401	S18 E52	* CLIMAX	25	2052	S15 W02
SAC PEAK	13	1657	N18 E90	MCMATH	19	1420	S22 E55	MCMATH	25	2134	E N26 W64
MCMATH	13	1707	N07 E66	USNRL	19	1421	S20 E53	MCMATH	25	2134	E S14 E00
SAC PEAK	13	1722	S23 W78	MCMATH	19	1448	E S10 E51	MCMATH	25	2206	E N26 W64
SAC PEAK	13	1825	N09 E58	* USNRL	19	1515	S22 W55				
SAC PEAK	13	1845	S20 W10	MCMATH	19	1605	E S22 W13	WENDEL	26	0646	E N07 E58
* SAC PEAK	13	1955	N07 E60	USNRL	19	1608	S22 W14	* WENDEL	26	1015	E N06 E63
SAC PEAK	13	2120	S23 E61	WENDEL	19	1615	E S22 W21	* CAPRI S	26	1253	S15 W05
SAC PEAK	13	2127	S21 W11	MCMATH	19	1759	N21 E14	WENDEL	26	1313	E S17 W54
SAC PEAK	13	2315	E S22 E61	USNRL	19	1801	N23 E14	USNRL	26	1314	S18 W54
								USNRL	26	1331	S17 W01
ARCTETRI	14	0832	E N08 E52	WENDEL	20	0738	E N12 W23	* USNRL	26	1332	N17 W74
UCCLE	14	0857	N08 E53	WENDEL	20	0744	D S13 E30	MCMATH	26	1334	E S12 W10
WENDEL	14	1311	E S25 E17	CAPRI S	20	0926	S14 E37	* MCMATH	26	1334	E N17 W76

SUBFLARES

Noted as follows: Date-Universal Time- Coordinates

JULY 1958									
MCMATH	27	1445	E	S15	W25	ATHENS	29	0711	E N04 E32
MCMATH	27	1658	E	S15	W16	USNRL	29	1248	E S18 W35
MCMATH	27	1734	E	S15	W16	USNRL	29	1250	N15 W02
MCMATH	27	1757	E	S15	W16	USNRL	29	1252	N15 W48
* HAWAII	27	2018	S13	W32		USNRL	29	1311	N29 E48
* HAWAII	27	2212	S13	W32		USNRL	29	1313	N16 W46
						USNRL	29	1315	N26 E45
HAWAII	28	0030	S13	W24		USNRL	29	1325	N16 W46
CAPRI S	28	0859	S19	W21		CLIMAX	29	1408	S11 E72
* CAPRI S	28	0903	S16	W35		USNRL	29	1411	E S08 E72
UCCLE	28	1047	S15	W40		USNRL	29	1455	S18 W35
CAPRI S	28	1107	E	S16	W10	USNRL	29	1508	N17 E43
* USNRL	28	1313	E	N19	W02	USNRL	29	1529	S08 E70
* CLIMAX	28	1314	S11	W31		USNRL	29	1529	E N28 E47
* UCCLE	28	1322	S18	W66		USNRL	29	1601	N08 E20
USNRL	28	1401	N19	W03		USNRL	29	1636	N28 E48
* CAPRI S	28	1415	E	S15	W41	USNRL	29	1655	S10 E23
* CLIMAX	28	1426	E	S13	W39	USNRL	29	1739	N16 W55
USNRL	28	1431	S08	E90		USNRL	29	1755	S07 E68
USNRL	28	1523	N05	E35		USNRL	29	1818	N06 E23
USNRL	28	1545	N04	E34		USNRL	29	1950	S18 W38
* USNRL	28	1558	S15	W40		USNRL	29	1954	S08 E67
MCMATH	28	1624	E	S13	W20	MCMATH	29	2044	S16 W40
USNRL	28	1726	N21	W05		MCMATH	29	2116	N06 E17
USNRL	28	1728	N21	W04		SAC PEAK	29	2205	E S09 E85
USNRL	28	1738	S25	W44					
* USNRL	28	1746	S17	W14		UCCLE	30	0911	E N06 E08
* USNRL	28	1817	S16	W43		UCCLE	30	1003	S16 W57
USNRL	28	1831	S16	W42		OTTAWA	30	1138	S17 W46
USNRL	28	1917	N29	E58		USNRL	30	1257	S18 W48
USNRL	28	1930	S17	W44		* USNRL	30	1315	S14 W60
CLIMAX	28	1944	S11	E86		USNRL	30	1338	S08 E59
HAWAII	28	1948	S15	W41		MCMATH	30	1341	E S10 E60
USNRL	28	1948	S05	E32		SAC PEAK	30	1415	S16 W61
HAWAII	28	2242	S15	W41		* SAC PEAK	30	1432	S09 E58
						CLIMAX	30	1435	N08 E61
ATHENS	29	0631	E	N18	W46	* CLIMAX	30	1524	S11 W66
ATHENS	29	0650	E	N28	E50	* MCMATH	30	1544	E S12 W58
						SAC PEAK	30	1550	N05 E12
USNRL	30	1550	N06	E12					
SAC PEAK	30	1625	S20	E60					
SAC PEAK	30	1637	S16	W48					
UCCLE	30	1639	S16	W50					
SAC PEAK	30	1712	S09	E58					
USNRL	30	1714	S09	E58					
SAC PEAK	30	1737	N19	W70					
USNRL	30	1754	N05	E12					
SAC PEAK	30	1755	N05	E11					
SAC PEAK	30	1831	S08	E58					
USNRL	30	1835	S07	E55					
SAC PEAK	30	2255	E	N05	E08				
ATHENS	31	0626	S17	W58					
ATHENS	31	0634	N13	W22					
UCCLE	31	0744	N10	E01					
ATHENS	31	0744	N04	E02					
UCCLE	31	0818	S18	W60					
UCCLE	31	0825	S13	W62					
UCCLE	31	0938	N10	E01					
USNRL	31	1229	N17	W43					
SAC PEAK	31	1327	S13	W90					
SAC PEAK	31	1332	S20	E45					
SAC PEAK	31	1405	S08	E44					
SAC PEAK	31	1412	N13	W25					
USNRL	31	1414	N13	W26					
SAC PEAK	31	1515	U	N14	E19				
SAC PEAK	31	1517	S08	E20					
UCCLE	31	1518	N14	E18					
UCCLE	31	1523	N13	W32					
SAC PEAK	31	1527	S19	W59					
SAC PEAK	31	1635	E	S08	E19				
USNRL	31	1654	N27	E18					
USNRL	31	1738	S18	W54					
USNRL	31	1819	E	N12	W10				
USNRL	31	1905	E	N11	W26				
USNRL	31	1920	S07	E18					
USNRL	31	1936	S18	W60					
CLIMAX	31	2152	N21	W86					

COMMENCE - STANDARDS - END

*Related as flare of importance ≥ 1 by other observatories (See CRPL-F 168 Part B).

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE NOV 1957	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.				MONTH PLACE REGION	TIME — U T	MENS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _z
SYDNEY CAPRI G { CAPRI G NEDERHORST	01	0523	0531	0527	N39 E90	4221	8	D	3	0527	5.50				
	01	1200 E	1210 D	1335 U	N25 W90	4197	10 D	16	1			5.00			
	01	1310 E	1350 D	1335 U	N37 E90	4221	40 D	1	2	1335		2.00			
	01	1324 E	1340 D		N20 E90	4221	16 D	1	2						
TASHKENT ALMA-ATA { ALMA-ATA TASHKENT CAPRI G MOSCOW-G { NIZMIR MEUDON NIZMIR MOSCOW-G CAPRI G	02	0722 E	0746 E		N38 W17	4206	24 D	1	2	0734	8.00		2.20	70	
	02	0904 E	0953 D	0920 U	S18 W14	4207	49 D	1			1.50	1.70		60	
	02	0904 E	0954 D	0918 U	S22 W17	4207	50 D	1			5.00	8.00		50	
	02	0906 E	0948 D	0918 U	S20 W16	4207	42 D	1			1.00	1.00		60	
	02	0907 E	0954 D	0917	S20 W16	4207	47 D	2	2	0916	7.30	8.50	4.10	150	S-SWF
	02	0930 E	0951 D		S20 W19	4207	21 D	2	1		10.00				
	02	0932 E	0945 D	0941 U	S24 W25	4207	13 D	2	2		7.64	9.40	2.07	150	
	02	0934 E	0955		S21 W17	4207	21 D	16	2	0939	9.30	10.70		76	
	02	0940 E			S23 W16	4207		1							
	02	0936 E	1018 D		S16 W55	4214	42 D	16	2	0948	7.70	14.20		68	
ABASTUMANI ABASTUMANI CAPRI G CAPRI G	02	1236 E	1313 D	1237 U	N16 W73	4213	37 D	1			2.55	8.86	2.55	130	
	02	1409 E	1433 D		S24 W17	4207	24 D	1	1		5.00				
	03	0427 E	0917 D	0619	S14 W70	4214	290 D	16		0805	8.40	12.00	2.20		
	03	0618	0626		S17 E27	4218	8	1	1	0620	3.60	2.20	2.50		
SYDNEY SIMEIZ CAPRI G { KHARKOV CAPRI G UTRECHT CAPRI G SYDNEY	04	1058 E	1124		S25 W40	4207	26 D	1	2			4.00			
	04	1140	1206		N15 W90		26	1	2						
	05	0203 E	0236	0208	N38 W63	4208	33 D	2	2	0208	3.00	6.00	1.90	60	S-SWF
	05	0743 E	0820 D	0744 U	S23 W51	4207	37 D	16	2	0750	4.60	7.80			
ABASTUMANI KIEV* SIMEIZ TASHKENT KIEV UTRECHT CAPRI G MOSCOW-G	05	0937	1030	1207 U	S25 W53	4207	53	1	3		4.00				
	05	1206 E	1236		S22 W53	4207	30 D	3	2	1207	11.00	21.00			S-SWF
	05	1215 E	1228		S25 W53	4207	13 D	2	1		1.00				
	05	1221			H		15 D	16	2			4.00			
	05	1235 E	1250	2327	S25 W53	4207	32	1	1	2327	2.00	5.00			
	05	2317	2349		N26 W66	4208		1	3						
	06	0042	0055	0048	N26 W67	4208	13	1	3	0048	1.00	2.00			
	06	0118	0135	0122	N26 W67	4208	17	1	3	0122	1.00	2.00			
	06	0133	0224	0148	N20 E90	4230	51	H	3	0148	5.50				
	06	0834	0856	0840	S28 W72	4207	22	2	1	0840			3.70		
ABASTUMANI KIEV* SIMEIZ TASHKENT KIEV UTRECHT CAPRI G MOSCOW-G	06	0837	0848	0839	S31 W66	4207	11	26	2		5.32	5.50			
	06	0837 E	0850 D		S27 W62	4207	13 D	16	2	0838	4.10	9.30	3.40	120	S-SWF
	06	0838	0850		S26 W66	4207	12	26	2	0842	4.70	12.80	5.90	240	
	06	0839	0851	0841	S27 W67	4207	12	26	2		4.20			240	
	06	0842	0845		H		3	1	2						
	06	0940 E	0956		N28 W90	4208	16 D	1	2		1.02	4.14	3.02	110	
	06	0949 E	1026 D	1013 U	S32 W75	4207	37 D	1							
	07	0126	0144	0130	S28 W81	4207	18	1	3	0130	1.00	4.00	2.10	65	
ABASTUMANI KIEV	07	0718	0852		N19 E67	4230	34	1	1	0719	5.10	13.40			
	07	0721 E	0737 D	1055	N21 E72	4230	16 D	1	1		2.40	4.00		87	
	07	1047	1055 D		S35 E35	4225	8 D	16			5.30				
ABASTUMANI ABASTUMANI	08	0618 E	0643 D	0621 U	N36 W13	4220	25 D	1	1		2.40	3.00			
	08	0647	1137	1015	S26 E83	4237	290	16			4.80	8.00			
ABASTUMANI	08	0705	0716		S16 W34	4218	11	1			6.00	5.00			

COMMENCE - STANDARDS - BOULDER

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE	OBSERVED		LOCATION		DURATION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. LONG. DIST.				MEAS. AREA Sq. Deg.	COBR. AREA Sq. Deg.	MAX. WIDTH H _g	
{ ABASTUMANI NIZMIR { CAPRI G ABASTUMANI { NIZMIR MOSCOW-G ABASTUMANI KYOTO	NOV 1957	0958	1049	U	1009	51	1	2	3.60	2.50	64	S-SWF
	08	0959	1017	U	1005	18	1	2	2.40	1.70	75	
	08	1013	1017	U	1015	4	1	2	.90	4.90		
	08	1018	1028	D	1049	10	1	1	4.80	6.00	3.70	
	08	1018	1024	D	1049	136	1	2	2.30	7.70	62	
	08	1048	1109	U	1059	21	1	2	3.06	8.51	110	
	08	1050	1112	U	1059	22	16	2	2.40	2.00	120	
	08	1108	1218	U	1141	70	1	2	3.80	2.00		
	08	2346	2356	D	0543	10	1	2	4.30	2.00	61	S-SWF
	10	0534	0553	U	0552	19	1	2	6.00	3.00	52	
{ ABASTUMANI ABASTUMANI { TASHKENT ALMA-ATA { TASHKENT ALMA-ATA CAPRI G	10	0606	0732	U	0655	86	3	3	26.40	50.00	206	S-SWF
	10	0607	0624	U	0608	17	2	3	4.40	10.10	130	
	10	0612	0645	D	0621	33	16	1	3.00	7.00	60	
	10	0657	0723	U	0659	26	2	1	6.60	15.20	140	S-SWF
	10	0700	0735	U	0702	35	2	1	6.50	4.00	90	
	10	1445	1510	D	0737	25	1	1	2.00	4.00		
	11	0239	0302	U	0312	23	1	1	3.00	4.00		
	11	0256	0357	U	0325	16	1	3	2.00	2.00	85	
	11	0322	0338	U	0325	60	16	2	10.60	12.80	180	Slow S-SWF
	11	0400	0500	D	0630	25	26	3	6.00	5.00	100	
{ SYDNEY SYDNEY TASHKENT ALMA-ATA { SYDNEY TASHKENT SIMEIZ ALMA-ATA ABASTUMANI SIMEIZ	11	0624	0649	D	0639	13	1	2	3.00	7.00	60	
	11	0626	0639	U	0628	7	16	1	4.20	5.00	2.80	
	11	0633	0640	U	0734	18	16	1	4.60	6.10	1.60	
	11	0732	0750	D	0827	31	1	1	2.50	.30	50	
	11	0820	0851	D	1156	190	16	1	10.80	6.00	60	
	11	0846	1156	U	1023	48	16	1	3.60	2.20	60	
	11	1021	1109	D	1023	21	1	3	4.00	5.00		
	12	0124	0145	U	0140	39	1	3	.50	2.00	150	
	12	0126	0205	D	0130	8	1	2	3.00	3.00		
	12	0139	0147	U	0141	9	1	2	2.90	7.20		
{ SYDNEY SYDNEY ABASTUMANI ABASTUMANI CAPRI G CAPRI G CAPRI G CAPRI G CAPRI G CAPRI G KYOTO	12	0342	0351	U	0347	15	1	1	3.00	3.00		
	12	0519	0534	U	0523	17	1	1	2.90	3.50		
	12	0625	0642	D	0621	17	1	2	4.00	5.00		
	12	0625	0642	D	0621	22	1	2	4.00	5.00		
	12	0735	0757	U	0734	18	1	2	4.00	5.00		
	12	0832	0950	U	0828	7	1	3	4.00	4.00		
	12	0842	0849	U	0842	53	1	3	4.00	4.00		
	12	1035	1128	D	1128	11	1	3	4.00	4.00		
	12	1122	1133	D	1122	75	2	3	8.00	2.00		
	12	1211	1326	D	1211	12	1	3	2.00	2.00	120	
{ SYDNEY SYDNEY SYDNEY CAPRI G MEUDON	12	1325	1337	D	1325	50	1	3	0020			
	12	2340	0030	U	0020	9	D	3	.25			
	13	0247	0256	D	0252	8	D	3	.25			
	13	0323	0331	U	0325	14	D	3	.50			
	13	0350	0352	U	0351	2	D	3	3.00	4.00		
	13	0457	0511	U	0458	14	1	3	0458			
	13	0830	0925	U	0830	55	D	2				
	13	0842	0848	D	0842	6	D	2				
	13	0842	0848	D	0842	6	D	2				
	13	0842	0848	D	0842	6	D	2				

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE	OBSERVED		LOCATION			DURATION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	LAT.	APPROX. MER. DIST.	NAME PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
{ CAPRI G MEUDON CAPRI G	13	0842	0902	S21 E03	4236	20	16	2			5.00			
	13	0844	0848 D	S19 E02	4236	4 D	1							
	13	1505 E	1512 D	S17 W04	4236	7 D	1	2			4.00			
SYDNEY	14	0516	0537	S26 E10	4237	21	1	3	0519	2.00				
	14	1155	1204	S20 W10	4236	9	1	2						
	14	1420 E	1438 D	N30 E68	4246	18 D	1	1						
CAPRI G	14	1427 E	1458 D	S08 E51	4243	31 D	1	1			4.00			
SYDNEY	15	0003	0025	N17 W47	4230	22	1	3	0015	3.00				
	15	0517 E	0636	N17 W47	4230	79 D	3	2	0543	14.00				
	15	0530 E	0604 D	N20 W42	4230	34 D	16	2	0532	14.60				
TASHKENT	15	0535	0615 D	N20 W38	4230	40 D	2		0540					
{ CAPRI G	15	0735	0750	N08 W22	4233	15	1	1						
{ TASHKENT	15	0736	0747	N08 W21	4233	11	1	2	0738	3.30				
{ CAPRI G	15	0858	0906	S21 W09	4237	8	1	2						
{ KHARKOV	15	0908 E	0913	S22 W09	4237	5 D	1	3			2.50			
{ MEUDON	15	0903	0922 D	N22 W45	4230	19 D	2							
{ KHARKOV	15	0905 E	0933	N21 W47	4230	28 D	1	3	0923	9.20				
{ KHARKOV	15	0905 E	0933	N22 W40	4230	28 D	1	3	0923	12.50				
{ CAPRI G	15	0912 E	1002	N16 W46	4230	50 D	2	2						
{ CAPRI G	15	1020 E	1043	N07 W18	4233	23 D	1	1						
CAPRI G	15	1318 E	1322 D	N08 W18	4233	4 D	1	1						
SIMEIZ	16	0720	0735 D	S07 E30	4243	15 D	1	2	0721	2.70				
	16	0723	0755 D	N08 W34	4233	32 D	16	2	0724	2.70				
	16	0807 E	0816	N08 W33	4233	9 D	1	1						
{ CAPRI G	16	0807	0820 D	N08 W34	4233	13 D	16	2	0808	2.70				
CAPRI G	16	1000	1035	N08 W33	4233	35	1	2						
ABASTUMANI	16	1015 E	1032 D	N18 W36	4230	17 D	1	1						
ABASTUMANI	16	1015 E	1032 D	N13 E19	4242	17 D	1	1						
CAPRI G	16	1155 E	1211	N08 W33	4233	16 D	1	2						
CAPRI G	16	1420 E	1427	N13 E18	4242	7 D	1	1						
CAPRI G	16	1424	1433 D	S08 E20	4243	9 D	1	1						
ALMA-ATA	17	0535 F	0604 D	N28 E34	4246	29 D	16							
	17	0620 E	0645 D	N27 F43	4246	25 D	1							
	17	0620 E	0750 D	N27 E39	4246	90 D	1							
{ ALMA-ATA	17	0744 E	0800 D	S20 W55	4236	16 D	1							
CAPRI G	17	0847 E	0920	N27 E32	4246	23 D	1	1						
MOSCOW-G	17	0948 E	1002	S20 W70	4236	14 D	1	1						
CAPRI G	17	1036 E	1106	N12 F07	4242	30 D	1	2						
CAPRI G	17	1039	1043	N23 W68	4230	4	1	2						
CAPRI G	17	1055 E	1106	N28 E32	4246	11 D	1	2						
CAPRI G	17	1135	1200	N29 E30	4246	25	1	2						
CAPRI G	17	1238 E	1250	N15 E05	4242	12 D	1	2						
CAPRI G	17	1335 E	1407	N07 W44	4233	32 D	1	2						
CAPRI G	17	1335 E	1407	N30 E28	4246	45 D	1	1						
CAPRI G	17	1357 F	1442	N13 E05	4242	8 D	1	1						
CAPRI G	17	1445 E	1453 D	N13 E05	4242	8 D	1	1						
CAPRI G	17	1505 E	1530 D	N28 E32	4246	25 D	16	2						
CAPRI G	17	1505 E	1530 D	N28 E32	4246	25 D	16	2						
SYDNEY	17	2224	2232	N27 E25	4246	8	1	1	2228	1.50				
SYDNEY	17	2338	2345	S22 W72	4236	7	1	3	2341	1.00				
SYDNEY	17	2348	2354	S22 W72	4236	6	1	3	2349	0.75				

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE NOV 1957	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. MER. DIST.	McARTHUR PLACE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	
SYDNEY	18	0120 E	0230	N05 W50	4233	4233	70 D	1	3	0210	1.50	2.00	100	S-SWF
	18	0220 E	0224	S23 W73	4236	4236	4 D	1	3	0221	1.00	3.00		
SYDNEY	19	0156	0223	N29 E17	4246	4246	27	1	3	0210	2.00	2.00	94	S-SWF
	19	2315	2338	S15 E51	4255	4255	23	1	3	2319	2.00	3.00		
SYDNEY	20	0257	0303	S15 E49	4255	4255	6	1	3	0259	1.50	2.00		
SYDNEY	21	0045	0134	N16 W04	4247	4247	49	1	2	0105	2.00	3.00	100	S-SWF
	21	0056	0150	N26 W10	4246	4246	54	1	2	0113	2.00	2.00		
SYDNEY	21	0237	0310	N26 W17	4246	4246	33	1	2	0251	2.00	2.00	100	S-SWF
	21	0301 E	0346	N15 W09	4247	4247	45 D	1	2	0310	3.00	3.00		
KYOTO	21	0406	0408 D	N17 W03	4247	4247	2 D	1	3	0406	1.50	2.00	94	S-SWF
	21	0455	0532	N14 W44	4242	4242	37	1	2	0506	1.00	1.00		
SYDNEY	21	0935	0938 D	N17 W08	4247	4247	3 D	1	2	0937	2.00	3.00	100	S-SWF
	21	2205 E	2244	S10 E19	4255	4255	39 D	1	3	2206	2.54	10.00		
KYOTO	22	0055 E	0105 D	S25 E90			10 D	16	3	0055	8.00	10.00	200	S-SWF
	22	0147 E	0200	N26 W30	4246	4246	13 D	16	3	0147	11.60	2.50		
{SYDNEY	22	0404	0440	N32 W26	4246	4246	4	2	3	0409	2.30	2.00	80	S-SWF
	22	0409	0440 D	N28 W30	4246	4246	31 D	2	1	0409	1.80	2.00		
{KYOTO	22	0658 E	0714 D	N17 W15	4247	4247	16 D	1	1	0704	2.50	2.00	100	S-SWF
	22	0658 E	0750 D	N20 W20	4247	4247	52 D	1	1	0658	3.10	2.00		
{SIMEIZ	22	0823 E	0855 D	N20 W20	4247	4247	32 D	1	1	0824	1.80	2.00	80	S-SWF
	22	0826	0850	N19 W19	4247	4247	24	1	2	0826	2.97	5.58		
{NIZMIR	23	0752 E	0823	N27 W54	4246	4246	31 D	2	2	0805	7.50	10.60	70	S-SWF
	23	0752 E	0845 D	N27 W56	4246	4246	53 D	26	1	0801	9.20	18.40		
{MOSCOW-G	23	0752 E	0912	N25 W55	4246	4246	80 D	3	2		12.00	10.00	136	S-SWF
	23	0753 E	0925	N26 W54	4246	4246	94 D	2	2	0810	9.00	18.00		
{ABASTUMANI	23	0756 E	0925 D	N27 W54	4246	4246	73 D	2	1		3.70	1.80	70	S-SWF
	23	0812 F	0928 D	N27 W55	4246	4246	67 D	1	1		2.20	2.00		
{MOSCOW-G	23	0821	0928 D	N20 W34	4247	4247	67	1	2		1.50	2.20	120	S-SWF
	23	0826	0933	N20 W34	4247	4247	10	1	2	0837	.72	.90		
{NIZMIR	23	0832	0842	N20 W33	4247	4247	10	1	2		4.00	3.00	70	S-SWF
	23	0834 E	0847	N17 W32	4247	4247	13 D	1	1		1.80	2.30		
{CAPRI G	23	0901	0925 D	N17 W32	4247	4247	24 D	1	1	0909	1.80	2.00	70	S-SWF
	23	0904	0928	N20 W34	4247	4247	24	1	2		2.20	2.00		
{UTRECHT	23	0930		N23 W57			2	2	2		1.80	2.20	73	S-SWF
	23	1112	1122	S14 E27	4257	4257	10	1	2	1113	1.80	2.00		
{MOSCOW-G	23	1112 E	1124	S15 E25	4257	4257	12	1	2		1.50	3.00	130	S-SWF
	23	1213 E	1221 D	S11 W01	4255	4255	8 D	1	1		3.00	2.00		
{CAPRI G	23	1213 E	1221 D	S12 W37	4243	4243	8 D	1	1				40	S-SWF
	23	1213 E	1221 D	N28 E59	4268	4268	67 D	3	2	0926	34.00	33.90		
{SIMEIZ	24	0743 E		S13 E36	4263	4263	94 D	3	1	0923	26.50	33.90	146	S-SWF
	24	0917 E		S15 E35	4263	4263			1	0952		2.80		
{ABASTUMANI	24	0949 E	1123 D	N18 W48	4247	4247	32	1	3	0108	2.00	3.00	40	S-SWF
	24	0917 E		S12 W23	4255	4255	11 D	1	3		3.00	3.00		
SYDNEY	25	0051	0123	N17 W58	4247	4247	41	1	3				70	S-SWF
	25	1029 E	1040	S16 E18	4263	4263	8 D	1	2					
{CAPRI G	25	1034	1115											
{CAPRI G	25	1157 E	1205											

COMMENCE - STANDARDS - BOULDER

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.	PLAGE REGION				TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
CAPRI G	25	1217 E	1228 D	S17 E58	4269	11 D	1	2			3.00			
CAPRI G	25	1406 E	1410 D	S12 W28	4255	4 D	1	2			4.00			
SYDNEY	26	0332	0402	S27 E35	4265	30	1	3	0341	1.50				
{ SYDNEY	26	0336	0356	S18 E08	4263	20	1	3	0341	2.00				
{ KODAIKUNL	26	0337 E	0343 D	S13 W07	4263	6 D	1	2	0338		2.00			
{ SYDNEY	26	0520	0558	S16 W05	4257	38	1	3	0338	3.00				
{ TASHKENT	26	0532 E	0545	S13 W08	4257	13 D	1	1	0534	3.60				
CAPRI G	26	0800 E	0812 D	S18 E04	4263	12 D	1	2						
CAPRI G	26	0920 E	0937	S20 E90	4272	17 D	1	1						
CAPRI G	26	0920 E	0942 D	S27 E27	4265	22 D	1	1						
CAPRI G	26	0923	0942 D	S18 E05	4263	19 D	1	1						
CAPRI G	26	1117 E	1130	N28 W90	4246	13 D	1	3						
CAPRI G	26	1120 F	1138	S08 E90	4272	18 D	1	3						
CAPRI G	26	1133	1225	S17 E07	4263	52	16	3						
CAPRI G	26	1148	1205	S14 W18	4257	17	1	3						
CAPRI G	26	1248 E	1257	S18 E02	4263	9 D	1	3						
CAPRI G	26	1441 E	1450 D	S09 W40	4255	9 D	1	2						
CAPRI G	26	1441 E	1450 D	S20 E90	4272	9 D	1	2						
CAPRI G	26	1512 E	1520 D	S17 W14	4257	8 D	2	2						
CAPRI G	26	2251	2310	S17 W01	4257	19	1	2	2255	3.00				
KYOTO	27	0438 E		S15 W06	4263		1							
CAPRI G	27	0858 E	0920 D	S15 W06	4263	22 D	1	2	0438	4.50				
CAPRI G	27	0933 E	0940 D	S31 E19	4265	7 D	1	3						
CAPRI G	27	1100 E	1112 D	S14 W12	4263	12 D	1	3						
CAPRI G	27	1123 E	1135	S22 W42	4257	12 D	1	3						
CAPRI G	27	1245 E	1310	S16 W25	4257	25 D	2	3						
CAPRI G	27	1250 E	1310	S19 E33	4269	20 D	1	3						
CAPRI G	27	1250 E	1325	S14 W14	4263	35 D	1	3						
SYDNEY	27	2304	2318	S06 E68	4278	14	1	3	2307	1.50				
SYDNEY	28	0026	0034	S16 W15	4263	8	1	3						
SYDNEY	28	0116	0128	S06 E68	4278	12	1	2	0029	2.00				
SYDNEY	28	0200	0220	S26 E59	4272	20	1	2	0122	1.00				
SYDNEY	28	0204	0236	S13 W19	4263	32	2	2	0205	1.50				
SYDNEY	28	0331	0346	S15 E65	4272	15	1	2	0212	6.00				
ALMA-ATA	28	0529 E	0549 D	S46 W53		20 D	16	2	0338	1.00				
CAPRI G	28	0803 E	0817	S13 W23	4263	14 D	1	2		2.00				50
CAPRI G	28	0813	0825	S07 E64	4278	12	1	2						
NIZMIR	28	0905 E	0919 D	S13 W40	4257	14 D	1	2						
{ NIZMIR	28	0919 E	0920 D	S04 E64	4278	1 D	1	2	0915	3.60				70
{ CAPRI G	28	0932 E	0950 D	S07 E67	4278	18 D	16	3	0920	.90				84
CAPRI G	28	1016	1025 D	S30 E06	4265	9 D	1	3						
CAPRI G	28	1118 E	1132 D	S17 E18	4269	14 D	16	3						
{ KHARKOV	28	1200 E	1213 D	S20 E15	4269	13 D	1	2						
{ MOSCOW-G	28	1200 E	1222 D	S12 W20	4263	10 D	1	3						
CAPRI G	28	1222 E	1232 D	S12 W22	4263	12 D	2	3						
CAPRI G	28	1440 E	1452 D											
SYDNEY	29	0012	0042	S05 E57	4278	30	1	1						
SYDNEY	29	0045	0600 D	N41 E63	4281	375 D	36	1	0023	1.50				
KYOTO	29	0115	0124	N42 W75	4254	9	1	1	0713	12.00				
									0116	12.40				

COMMERCE - STANDARDS - BOULDER

Slow S-SWF

S-SWF

SOLAR FLARES

NOVEMBER 1957

OBSERVATORY	DATE NOV 1957	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.	MGATH FLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
KYOTO	29	0115	0124	N38 W80		4254	9	1	3	0116	13.70	3.00		
SYDNEY	29	0215	0228	S21 E64		4272	13	1		0221	1.50			655
ALMA-ATA	29	0500	0800	N05 E36		4276	180 D	2			6.00	16.50		
SYDNEY	29	0517	0550	S24 W09		4265	33	1	1	0522	2.00	2.00		
TASHKENT	29	0715	0746	S15 W35		4263	31	16		0718	6.90	8.50	2.30	100
ABASTUMANI	29	0734	0857	S13 E33		4272	83 D	1	1		7.20	4.50		56
CAPRI G	29	0812	0824	N19 E45		4274	12 D	1	2			4.00		
CAPRI G	29	0812	0835	S14 E52		4272	23 D	1	2			5.00		
CAPRI G	29	1025	1032	N19 E44		4274	7 D	1	1			3.00		
ONDREJOV	29	1027		N14 E17		4271		1	1			5.00		
CAPRI G	29	1330	1340	S04 E48		4272	10 D	1	2			5.00		
CAPRI G	29	1435	1442	S13 E49		4272	7 D	1	2			4.00		
CAPRI G	29	1450	1500	S30 W10		4265	10 D	1	1					
CAPRI G	30	0810	0838	S26 E28		4272	28 D	1	3			4.00		
CAPRI G	30	0838	0844	S24 W22		4263	6 D	1	2			3.00		
ONDREJOV	30	0848	0855	S17 E49		4288	7 D	1	3	0849			2.40	
ABASTUMANI	30	0854	0917	S27 E85		4285	23 D	1	1		2.50	10.00		
ONDREJOV	30	1316	1341	S12 E48		4288	25 D	1	1	1317			3.00	57

COMMENCE - STANDARDS - BOLDER

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

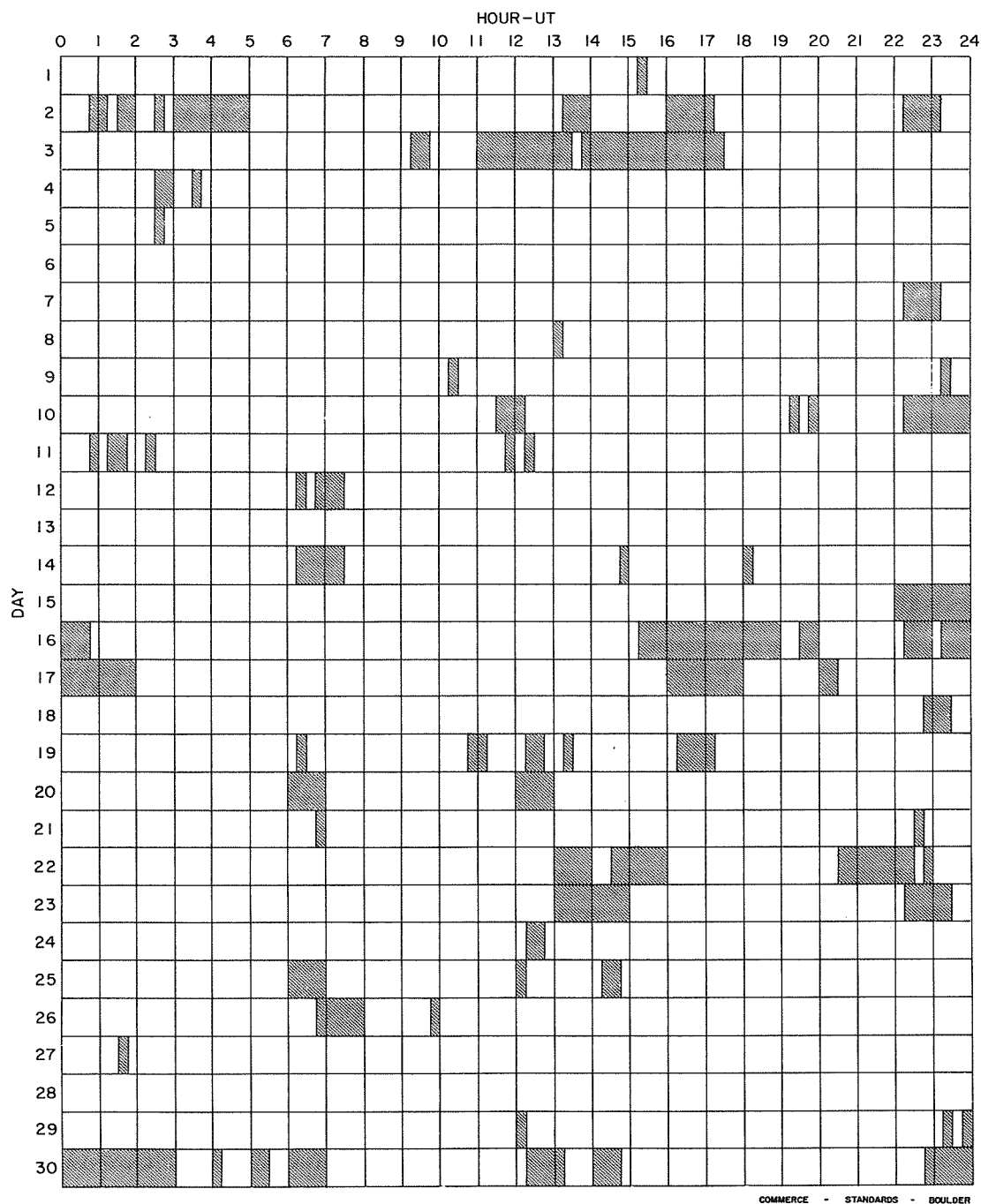
MOSCOW-G MOSCOW - GAISH
 R O EDIN ROYAL OBSERVATORY, EDINBURGH
 R O HERST GREENWICH ROYAL OBSERVATORY, HERSTMONCEUX
 SAC PEAK SACRAMENTO PEAK
 SCHAUTINS SCHAUTINSLAND
 USNRL UNITED STATES NAVAL RESEARCH LABORATORY

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

E - LESS THAN 6 - PLUS
 D - GREATER THAN - MINUS
 U - APPROXIMATE □ - NOT REPORTED

INTERVALS OF NO FLARE PATROL OBSERVATIONS

NOVEMBER 1957



Times indicated are accurate to the nearest 15 minutes.

Stations included:

Abastumani
Alma-Ata
Anacapri (Swedish)
Arcetri
Athens
Climax
Dunsink
Hawaii
Huancayo
Ikomasan
Kharkov

Kiev GAO
Kiev University
Kodaikanal
Krasnaya Pakhra
Mitaka
Meudon
Moscow University
Nederhorst den Berg
Nizamiyah
Ondrejov
Ottawa

Royal Greenwich Observatory,
Herstmonceux
Royal Observatory,
Edinburgh
Sacramento Peak
Simeis
Sydney
Tashkent
Uccle
Utrecht
U. S. Naval Research Laboratory
Zurich

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	MATH- PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g		MAX. INT. %
{ALMA-ATA ALMA-ATA ALMA-ATA ALMA-ATA ALMA-ATA ABASTUMANI ABASTUMANI ABASTUMANI	DEC 1957	0515 E	0800 D	0515 U	S10 W58	4263	38 D	1			6.00	6.00	6.00	50	S-SWF	
	01	0523 E	0601 D	0536 U	S14 E26	4288					4.00	3.50	60			
	01	0525 U	0559 D	0535 U	S16 E25	4288	34 D	1			2.00	3.00	50			
	01	0553 E	0651 D	0626 U	S09 W14	4279	58 D	1			4.00	4.00	50			
	01	0815 E	0639 D	0627 U	N14 W06	4271	24 D	16			3.00	1.40	46			
	01	0804	0827	0810 U	S28 E30	4288	23		1		6.00	3.50	70			
	01	0804	0924 D	0828	S17 W20	4269	80 D	1			5.20	2.20	65			
	01	0901	0924 D	0901 U	S12 W60	4263	23 D	16			12.00	11.00	73			
	02	0148 E	0220 D	0153	S18 E14	4288	32 D	2			9.10	2.00	140			
	02	0150	0204 D	0308	S18 E28	4288	14 D	1			2.00	3.00				
{ALMA-ATA KRASNAYA KRASNAYA CAPRI G CAPRI G SYDNEY		02	0303	0334 D	S31 E57	4269	19 D	1			1.00	5.30	60			
	02	0743 E	0802 D	0754 U	S18 W31	4269	10 D	2			5.00	5.30	155			
	02	0752 E	0802	1135	S18 W34	4269	28 D	2			5.31	4.25	115			
	02	1107 E	1135	1111	S18 W34	4269	28 D	2			6.84	5.47				
	02	1140 E	1150 D		S17 W30	4269	10 D	16			4.00	4.00				
	02	1219 E	1233 D		S21 E19	4288	4 D	1			2.00	3.00				
	02	2316	2335	2317	S24 E07	4288	19	1			2.00	3.00				
	02	2331	0006	2344	S16 W40	4269	35	1			1.50	2.00				
	03	0133 E	0200 D		S16 W40	4269	27 D	1			3.00	5.00	61			
	03	0648 E	0915 D	0835	S18 W47	4269	147 D	1			7.90	5.30				
{NEDERHORST NEDERHORST UTRECHT NEDERHORST NEDERHORST SYDNEY SYDNEY SYDNEY SYDNEY SYDNEY CAPRI G CAPRI G CAPRI G NEDERHORST		03	1303 E	1430 D	S17 W49	4269	87 D	26						Slow S-SWF		
	03	1342	1350 D		S21 E02	4288	8 D	16								
	03	1344	1351				7	1								
	03	1352 E	1425 D		N14 W36	4271	33 D	2								
	03	1400 E	1420 D		S15 W02	4288	20 D	1								
	04	0057	0148	0110	N24 E67	4294	51	2			3.00	8.00			Slow S-SWF	
	04	0107	0122	0113	S16 W57	4269	15	1			1.00	2.00				
	04	0237	0319	0243	N17 W44	4271	46	1			3.00	2.00				
	04	0320	0348	0330	N28 W71	4268	28	1			1.50	2.00				
	04	0403	0435	0405	S22 W09	4288	32	1			3.00	4.00				
04	0518	0530	0520	S21 W59	4269	12	1			4.00	4.00					
04	0840	0947 D		S20 E80	4297	67 D	16			2.00	2.00					
04	0853 E	0902 D		S21 W08	4288	9 D	1			5.00	5.00					
04	0938 E	0947 D		S18 W48	4269	9 D	1			5.00	5.00					
04	1242	1312 D		N18 E71	4295	20 D	26			4.00	4.00					
{TASHKENT ALMA-ATA ALMA-ATA ALMA-ATA CAPRI G CAPRI G CAPRI G CAPRI G CAPRI G CAPRI G SYDNEY SYDNEY KYOTO		05	0548	0800	S21 W19	4288	132	26			18.20	20.60	145	Slow S-SWF		
	05	0625 E		0658 U	S19 W23	4288	16	16			7.00	8.00	75			
	05	0626 E		0657 U	S18 W18	4288					4.00	4.00	67			
	05	0715 E		0715 U	S16 W12	4288	16				11.60	11.60	50			
	05	0730 E	0812 D		S19 W23	4288	42 D	2			9.00	9.00				
	05	0837 E	0852 D		S19 W74	4269	15 D	2			4.00	4.00				
	05	0932 E	0942 D		S19 W36	4272	10 D	1			4.00	4.00				
	05	1020 E	1108		N27 E42	4294	48 D	2			10.00	10.00				
	05	1111 E	1131		S33 E75	4297	20 D	1			2.00	2.00				
	05	1447 E	1452 D		N14 W68	4271	5 D	1			2.00	2.00				
{SYDNEY SYDNEY KYOTO		06	0017	0032	S33 E68	4301	15	1			.50	2.00	2.00	Slow S-SWF		
	06	0347	0443	0353	N17 E44	4296	56	2			7.00	10.00	130			
	06	0352	0423 D		N17 E46		31 D	16			2.70		2.86		STANDARDS - BOULDER COMMERCE	

SOLAR FLARES

DECEMBER 1957

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 — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _g	MAX. INT. %
					LAT.	MER. DIST.										
TASHKENT SYDNEY ALMA-ATA ALMA-ATA CAPRI G KRASNYA KRASNYA {KRASNYA CAPRI G CAPRI G CAPRI G	06	0401 E	0438		N16 E46	4296	37 D	16	3	0403	6.60	9.70	3.00	120		
	06	0428 E	0438	0430 U	S21 W32	4288	10 D	1	3	0430	2.00	2.00		48		
	06	0556 E	0701 D	0620 U	S32 E70	4297	65 D	1			4.00	6.20		51		
	06	0559 E	0805 D	0702 U	S16 W75	4269	126 D	1			5.00	5.00				
	06	0806 E	0823 D		S21 E50	4297	17 D	1	2		3.00	3.00				
	06	0853 E	0901 D	0856	N16 E45	4296	8 D	1	2	0856	4.59	3.40		74		
	06	0853	0911		S17 W72	4269	18	16	2	0857	2.16	4.86		95		
	06	0915	0922	0916	N08 E03	4287	7	16	2	0916	6.03	3.08		122		
	06	0916 E	0928 D		N06 E04	4287	12 D	1	3		3.00	3.00				
	06	1155 E	1159		S31 W29	4288	4 D	1	2		2.00	2.00				
06	1400 E	1405 D		S34 W02	4285	5 D	1	2		3.00	3.00					
KYOTO KRASNYA {KRASNYA CAPRI G CAPRI G MOSCOW-G {KRASNYA MOSCOW-G CAPRI G CAPRI G CAPRI G CAPRI G CAPRI G	07	0000	0044 D		S23 W53	4288	44 D	16					2.18	130		
	07	0805	0824	0811	S17 E31	4297	19	16	2	0811	4.68	2.90		88		
	07	0837 E	1004	0844	N18 E28	4296	87 D	1	2	0844	4.68	2.90		50		
	07	0837 E	1005 D	0914	N16 E28	4296	88 D	2	3	0847	8.00	8.00				
	07	0906	1004		N15 E28	4296	58	1	2	0918	2.60	3.10	3.00	140		
	07	1015	1036 D	1021	S16 W56	4288	21 D	16	2	1021	3.78	3.44		97		
	07	1023 E	1048		S21 W60	4288	20 D	1	1	1025	9.10	9.10	2.00	100		
	07	1030 E	1045		S18 E29	4297	15 D	1	3		4.00	4.00				
	07	1158 E	1214		S18 E29	4297	16 D	1	1		2.00	2.00				
	07	1325 E	1347		S18 E28	4297	22 D	1	3		2.00	2.00				
KRASNYA CAPRI G KRASNYA KRASNYA SYDNEY KYOTO TASHKENT ABASTUMANI ABASTUMANI ABASTUMANI KRASNYA UTRECHT SYDNEY	07	1343 E	1351		S30 W13	4285	8 D	1	3		6.00	6.00				
	07	1343 E	1355 D		N06 E02	4290	12 D	1	3		2.00	2.00				
	08	0824 E	0858	0834	N32 E23	4298	34 D	2	2	0834	8.37	5.61		88		
	08	0837 E	0850		N06 E31	4290	13 D	1	2		2.00	2.00				
	08	0840	0912 D	0854	N18 E14	4296	32 D	2	2	0854	11.43	6.17		147		
	08	0844	0912 D		N20 E05	4296	28 D	1	2	0854	2.16	1.16		70		
	09	0016	0027	0020	N15 E61	4305	11	1	3	0020	1.00	3.00	1.66	120		
	09	0200 E	0207	0203	S17 E07	4297	7 D	1	1	0203			5.00	155		
	09	0542 E	0550		S14 W84	4288	8 D	16	1	0545	2.90	13.30		68		
	09	0559 E	0907 D	0559 U	S12 E56	4303	188 D	1	2		3.60	3.00		61		
SYDNEY KYOTO ALMA-ATA ALMA-ATA CAPRI G SYDNEY KYOTO ALMA-ATA ALMA-ATA CAPRI G SYDNEY	09	0559 E	0907 D	0707 U	S12 W68	4288	188 D	1	2		4.80	5.00		61		
	09	0838	0902	0846	S31 W38	4285	24	1	2		7.20	5.40		58		
	10	0910 E	0916		N19 E76	4309	6 D	1	2	0910	2.52	5.67		63		
	10	1327	1330				3	2	2							
	10	2343 E	2359	2350	N24 E66	4304	16 D	1	2	2350	1.50	4.00				
	11	0210	0259	0223	S17 W12	4297	49	2	2	0223	5.00	5.00		52		
	11	0950	1009	1000 U	N07 E07	4296	19	1	3	1000	.90	.90		63		
	11	1021	1039	1021 U	N11 W04	4296	18	1	3	1022	2.60	2.70		63		
	11	1058	1102	1100 U	N12 W03	4296	4	1	3	1100	.90	.90		63		
	12	0249	0407	0314	S32 W08	4302	78	3	2		14.00	17.00				
{KYOTO ALMA-ATA ALMA-ATA CAPRI G SYDNEY KYOTO ALMA-ATA ALMA-ATA CAPRI G SYDNEY	12	0303 E	0335 D		S32 W10	4302	32 D	1		0314	14.00	17.00	2.34	120		
	12	0540 E	0558 D	0554 U	N06 W64	4290	18 D	1		0315	10.00	4.20		54		
	12	0542 E	0630 D	0556 U	N10 W17	4296	48 D	16			4.00	4.20		48		
	12	0958 E	1012 D		N11 W14	4296	14 D	1	1		5.00	7.10		48		
	13	0227 E	0346	0234	N15 E90	4316	79 D		3	0234	2.00	2.00				

SOLAR FLARES

DECEMBER 1957

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS		MAX. WIDTH H _z	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT. — LONG.	APPROX. LAT. — LONG.				TIME — U T	MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.		
SYDNEY SYDNEY {TASHKENT SYDNEY {ALMA-ATA SYDNEY {ALMA-ATA ALMA-ATA SYDNEY	13	0246	0300	0253	N06 W18	14	1	2	0253	2.00	2.00		
	13	0432	0502	0440	N06 W19	30	1	2	0441	2.00	3.00		
	13	0450	0523 D	0455	N28 W52	33 D	16	3	0455	13.90	25.70	70	
	13	0451	0540	0458	N28 W58	49	2	3	0458	6.00	12.00		
	13	0530 E	0801 D	0555 U	S15 E80	151 D	16	2		5.00	11.00	70	
	13	0542	0615	0548	S17 E80	33	2	3	0548	1.00	5.00		
	13	0541 E	0657 D	0607 U	N11 W31	76 D	1			4.00	4.20	58	
	13	0553 E	0640 D	0610 U	N10 W27	47 D	1	1		3.00	3.50	53	
	13	0554	0630 D	0600	N10 W30	36 D	1	1	0600	2.00	2.00		
	14	0845	0925 D	0849	N10 W45	40 D	2	3		21.60	15.30	73	
	16	0857 E	0902	0802 U	S26 E21	5 D	1	3	0859	.90	1.04	45	
	16	0908	0928	0924	S26 E21	20	1	3	0924	.90	1.04	59	
{KIEV KIEV KIEV KIEV KIEV KIEV* {KHARKOV KIEV {MOSCOW-G NEDERHORST {MOSCOW-G MOSCOW-G {MOSCOW-G	16	0937	0947	0941	S26 E21	10	1	3	0941	.90	1.04	73	
	16	0949	0956	0952	S26 E21	7	1	3	0952	.90	1.04	63	
	16	1043	1055	1046	S26 E21	12	1	3	1046	.90	1.04	66	
	16	1104	1111	1105	S26 E21	7	1	3	1105	.90	1.04	63	
	16	1127 E	1202 D	1138	S16 E29	35 D	16			5.00	6.00		
	16	1127 E	1232 D	1155 U	N14 E51	65 D	3	3	1143	17.10	28.20	2.60	
	16	1134	1212 D	1140 U	N14 E50	38 D	2	3	1157	19.30	20.20	180	Slow S-SWF
	16	1137 E	1209 D	1142	N18 E54	32 D	16	1	1141	6.30	11.50	3.50	
	16	1140	1225 D		N16 E50	45 D	26	3					
	16	1142	1150		N20 E47	8	2	3					
	16	1150	1212 D	1207	N20 E47	22 D	16	1	1207	3.20	5.00	400	
	16	1150	1213	1155	N23 E45	23 D	1	1	1157	2.10	3.20	180	Slow S-SWF
	16	1150	1220 D	1159	N23 E51	30 D	1	1	1202	1.60	2.80	180	
{KIEV KHARKOV KIEV	17	0858 E	1004	0907 U	N18 E42	66 D	16	2	0907	2.40	3.60	105	
	17	0905 E	0955 D		N21 E38	50 D	1	3	0927	2.00	3.00	56	
	17	1057	1122	1107	S22 W08	25	1	2	1107	2.60	2.80		
{SYDNEY TASHKENT {SYDNEY SYDNEY {ABASTUMANI SYDNEY	18	0241	0314	0245	S14 E10	33	2	3	0245	7.00	7.00		G-SWF
	18	0408 E	0531	0509	N18 E26	83 D	2	2	0500	11.30	13.40	130	
	18	0427	0550	0624	N17 E26	83	2	3	0509	6.00	8.00		S-SWF
	18	0605	0658	0624	N18 E19	53	3	3	0624	13.00	14.00		
	18	0620 E	0712	0625	N17 E22	52 D	2	2		16.80	7.80		
SYDNEY	18	2259	2309 D	2303	S25 E72	10 D	1	3	2303	.75	3.00		
	19	0152	0204 D	0200	N22 E55	12 D	1	3	0200	2.00	3.00		
	19	0310	0340	0316	N15 E54	30	1	3	0316	1.00	2.00		
	19	2338	0001	2346	S27 E59	23	1	3	2346	1.00	2.00		
	19	2350	0007	2355	N27 E65	17	1	3	2355	.75	3.00		
SYDNEY	20	0017	0029	0020	N17 E64	22	1	3	0020	1.00	3.00		
	20	0030	0046	0032	S14 E44	16	1	3	0032	1.50	2.00		
	20	0245	0313	0248	N24 E70	28	2	3	0248	1.50	5.00		
	20	0253	0327	0319	N17 W03	34	2	3	0319	6.00	6.00		
	20	0257	0330 D	0312	N14 W63	33	1	3	0312	1.00	3.00		
SYDNEY KIEV	20	0551 E	0557 D	0557 D	N17 W02	6 D	1	1	0551	4.00	4.00	59	S-SWF
	20	1117	1138	1128	S26 E62	21	1	1	1121	4.40	9.90		
	21	0127 E	0147 D		S25 E50	20 D	1	1	0127			100	STANDARD - BOULDER

SOLAR FLARES

DECEMBER 1957

OBSERVATORY	DATE	OBSERVED TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — UT	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.	PLACE REGION					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g	
SYDNEY SYDNEY SYDNEY SYDNEY SYDNEY SYDNEY { ABASTUMANI { KRASNYA { KRASNYA { MOSCOW-G KRASNYA MOSCOW-G	21	0431	0450	N23 E40		4321	19	1	2	0437	2.00	3.00	S-SWF	
	21	2312 E	0000	N25 E46		4321	48 D	2	1	2312	7.00	13.00		
	22	0057	0105	S22 E74		4327	8	1	3	0101	.75	3.00		
	22	0237 E	0301	S27 E30		4322	24 D	1	3	0239	2.00	3.00		
	22	0329	0346	S19 E65		4323	17	1	1	0330	2.00	4.00		
	22	0350	0400	N26 E44		4321	10	1	1	0351	1.50	2.00		
	22	0859 E	0926 D	N17 W25	U	4314	27 D	1	3	0910	7.00	3.60		
	22	0900	0914	N17 W26		4314	14	1	2	2.11	1.27	98		
	22	1031	1039	N18 W26		4314	8	1	2	1031	1.48	.93		130
	22	1031	1047 D	N21 W29		4314	16 D	16	2	1033	1.68	101.00		175
SYDNEY	22	1032 E	1101	N19 W31		4314	29 D	1	2	1036	2.60	3.20	3.70	
	22	1032	1037	N27 E42		4321	5	1	2	1033	1.35	1.04	81	
	22	1102 E	1121	N30 E43		4324	19 D	16	2	1106	6.80	10.70	250	
	23	0025 E	0032 D	N16 W38		4314	7 D	1	2	0025	2.00	2.00	Slow S-SWF	
KYOTO TASHKENT	25	0205	0220 D	S17 E00		4322	15 D	16		0205	8.40	9.30	1.66	120
	25	0634 E	0705	S26 W12		4319	31 D	16	2	0635			2.90	70
ABASTUMANI	26	0626 E	0649	N28 W17		4328	23 D	1	2		2.40	1.20		
	28	0225 E		S23 E28		4333		1		0225	2.90			
ABASTUMANI { ABASTUMANI { KIEV KIEV KIEV	29	0803 E	0831 D	N24 W52		4328	28 D	1	2		4.30	3.80		
	29	0835 E	0903 D	S23 W34		4323	28 D	1			4.00	2.40		
	29	0902 E	0914	S24 W34	U	4323	12 D	1	2	0902	1.00	1.30	66	
	29	1019	1042	N23 W49		4328	23	1	2	1022	1.00	1.60	27	
	29	1128	1159 D	N25 W50	U	4328	31 D	1	2	1146	.88	1.70	45	
KIEV KIEV KIEV { KIEV*	31	1020	1029	S10 E60		4339	9	1	2	1022	.88	1.40	63	
	31	1028	1032	N22 W90		4328	4	16	2	1029	1.80	14.00	52	
	31	1113	1116	S23 W17		4333	27	1	2	1116	4.00	4.40	70	
	31	1116 E	1132	S27 W19		4333	16 D	1	1		3.20	3.70		

COMMERCE - STANDARDS - BOLDER

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

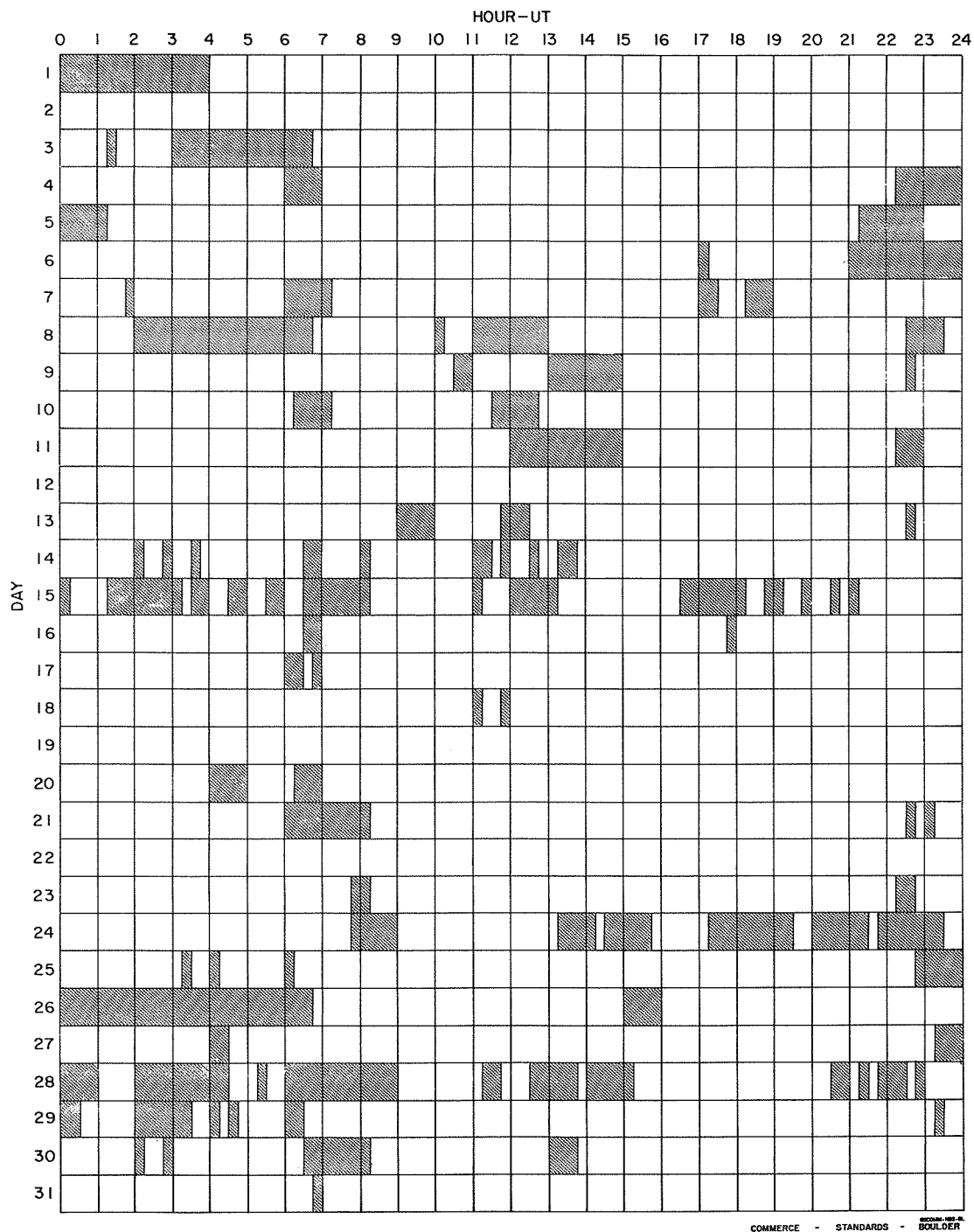
E - LESS THAN
D - GREATER THAN
U - APPROXIMATE
□ - NOT REPORTED

MOSCOW - GAISH
ROYAL OBSERVATORY, EDINBURGH
GREENWICH ROYAL OBSERVATORY, HERSTONCEUX
SAC PEAK
SCHAUMSLAND
UNITED STATES NAVAL RESEARCH LABORATORY

CAPRI G ANACAPRI - GERMAN
CAPRI S ANACAPRI - SWEDISH
GOOD HOPE ROYAL OBSERVATORY, CAPE OF GOOD HOPE
KIEV* KIEV UNIVERSITY
KODAIKAL KODAIKAL
KRASNYA KRASTNYA
MOSCOW MOSCOW

INTERVALS OF NO FLARE PATROL OBSERVATIONS

DECEMBER 1957



Times indicated are accurate to the nearest 15 minutes.

Stations included:

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

Hawaii
Huancayo
Ikomasan
Kharkov
Kiev GAO
Kiev University
Kodaikanal
Krasnaya Pakhra

Meudon
Mitaka
Moscow University
Nederhorst den Berg
Nizamiah
Ondrejov
Ottawa
Royal Observatory,
Edinburgh

Royal Greenwich Observatory,
Herstmonceux
Sacramento Peak
Simeis
Sydney
Tashkent
Uccle
Utrecht
U. S. Naval Research Laboratory

SOLAR FLARES

ERRATA TO JULY 1957

It has been discovered that in CRPL-F156B, the Simeiz flares published were those for the month of June 1957, therefore, the following corrections to July 1957 flare listings are necessary.

Delete - In CRPL-F156B, issued August 1957, all July 1957 flares reported by Simeiz and Crimea.
Note - Simeiz and Crimea are the same.

Delete - In CRPL-F166B, issued June 1958, under addenda to July 1957 flares, Simeiz flare of July 22 at 0717 U.T.

Add - The following Simeiz flares for July 1957.

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — U T	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX.		MAGNATH PLACE REGION					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H _g		MAX. INT. %
					LAT.	MER. DIST.										
SIMEIZ	01	0621	0624	0623	S23	W85	4030	3	1			1.75			240	
SIMEIZ	03	0725	0830	0731	N14	W38	4039	65	26			15.00		1.80	280	
SIMEIZ	03	0832	0940	0841	N11	W44	4039	68	2			6.11		3.80	350	
SIMEIZ	16	0715 E	0719 D	0716	N30	E69	4065	4	1			2.62		2.00	180	
SIMEIZ	22	0617	0702	0625	N30	E03	4065	45	16			5.24		2.50	190	
SIMEIZ	27	0655	0810	0703	S37	W67	4070	75	2			7.86		3.00	190	
														PAGE	1	

COMMENCE - STANDARD - END

IONOSPHERIC EFFECTS OF SOLAR FLARES

(SHORT-WAVE RADIO FADEOUTS)

JULY 1958

July 1958	Start UT	End UT	Type	Wide Spread Index	Importance	Observation Stations	Known Flare, UT CRPL-F 168B
1	1651	1752	G-SWF	5	1	BE, CO, HU, LA, PR, WS	1647
2	0826	0905	S-SWF	5	1+	DA, <u>KO</u> , <u>OK</u> , <u>PU</u>	0822
3	2008	2105	Slow S-SWF	4	1+	BE, HU, MC, <u>PR</u>	2006
4	0517	0528	S-SWF	5	1	NE, <u>OK</u>	*
4	1730	2000	Slow S-SWF	3	3	<u>BE</u> , CO, MC	
4	2017	2138	Slow S-SWF	3	2	BE, CO, <u>MC</u>	
5	0337	0416	S-SWF	1	1	<u>OK</u>	0341E
6	2118	2155	G-SWF	5	2	AD, LA, <u>MC</u> , PR, WS	2121
7	0000	0020	S-SWF	5	1	AD, LA, <u>OK</u> , TO	
7	0025	0230	Slow S-SWF	5	3	AD, CA, <u>HA</u> , LA, <u>OK</u> , TO	0022
7	0659	0720	S-SWF	5	2-	<u>JU</u> , <u>OK</u>	0655
7	0847	0903	S-SWF	1	2	<u>JU</u>	0857
7	1632	1703	S-SWF	5	1+	BE, CO, HU, <u>MC</u> , PR, WS	1628
7	1734	1805	S-SWF	5	2	BE, CO, <u>HU</u> , <u>MC</u> , PR, PU, WS	1716
8	1337	1357	S-SWF	1	2	<u>JU</u>	1332
9	0902	0922	S-SWF	3	1+	<u>KU</u> , <u>PU</u>	0845
11	0810	0909	G-SWF	4	2	<u>JU</u> , <u>OK</u>	0741
12	0757	0813	S-SWF	5	1	NE, <u>OK</u>	0753
13	1740	1835	G-SWF	3	1	HU, LA, <u>MC</u>	1750
15	0919	1005	S-SWF	1	2	<u>PU</u>	0914
15	1235	1255	Slow S-SWF	1	1	<u>NE</u>	1235
15	2037	2105	G-SWF	3	1	HU, <u>MC</u> , PR	2025
17	2005	2020	Slow S-SWF	5	1	AD, <u>BE</u> , CO, MC, PR, WS	1959
19	1223	1247	S-SWF	4	1	PR, <u>PU</u>	1230
19	1330	1415	S-SWF	5	2	BE, CO, HU, <u>MC</u> , NE, PR, PU	1315
19	1904	1940	S-SWF	5	3	AD, AN, BE, CO, HU, LA, MC, NE, <u>PR</u> , TO, WS, RCA+	1905E
20	0244	0315	S-SWF	4	1	AD, <u>OK</u>	*
20	0450	0513	S-SWF	1	2-	<u>OK</u>	*
20	0540	0600	S-SWF	4	1	<u>KO</u> , <u>OK</u>	0540E
20	0638	0728	Slow S-SWF	5	2+	KU, <u>OK</u> , PU, TO	0636
20	1208	1240	S-SWF	5	2+	BE, HU, JU, KU, MA, <u>MC</u> , NE, PM, PR, CW**	1203
20	1525	1540	S-SWF	4	1-	HU, <u>MC</u> , PR	1522
21	0212	0233	Slow S-SWF	4	1	CA, <u>OK</u>	*
21	0603	0620	S-SWF	1	1	<u>OK</u>	0559
23	0828	0848	S-SWF	1	2	<u>PU</u>	0823
23	1315	1355	Slow S-SWF	5	2	BE, MC, PR, <u>TO</u>	1259
24	1007	1030	S-SWF	3	2	<u>JU</u> , <u>PU</u>	
24	1318	1330	S-SWF	4	2-	HU, <u>PU</u>	1313
24	1550	1605	Slow S-SWF	5	1-	BE, HU, <u>MC</u> , PU, PR	1540
24	1723	1755	S-SWF	5	1	BE, CO, HU, <u>MC</u> , PR	1725
25	0044	0140	G-SWF	5	2	AD, CA, <u>OK</u> , TO	0040
25	1333	1405	S-SWF	5	2	BE, HU, KU, <u>MC</u> , NE, PR, PU	1332
26	0205	0249	Slow S-SWF	4	2+	AD, <u>OK</u>	*
26	0300	0330	S-SWF	4	2	AD, <u>OK</u>	0301E
26	0628	0653	S-SWF	5	2	NE, OK, <u>PU</u>	0627
26	0858	0925	S-SWF	5	2+	JU, LI, NE, OK, <u>PU</u>	0856
26	1358	1426	G-SWF	5	1	LI, MC, PR, <u>PU</u>	1353
26	1830	1930	G-SWF	5	2	AD, BE, CO, <u>HU</u> , LA, <u>MC</u> , PR	1842
26	1951	2025	S-SWF	5	2	AD, <u>BE</u> , CO, HU, LA, MC, PR, WS	1952
27	0648	0705	S-SWF	5	1+	DA, <u>OK</u> , <u>PU</u>	0650

IONOSPHERIC EFFECTS OF SOLAR FLARES
(SHORT-WAVE RADIO FADEOUTS)
JULY 1958

July 1958	Start UT	End UT	Type	Wide Spread Index	Importance	Observation Stations	Known Flare, UT CRPL-F 168B
27	0858	0913	S-SWF	1	2	PU	0858
27	1324	1340	Slow S-SWF	4	2-	HU, PU	1318E
27	1350	1417	S-SWF	5	1	BE, DA, HU, MC, PR, PU	1350
27	1803	1815	Slow S-SWF	3	1-	HU, MC	1804
27	1850	1900	S-SWF	3	1	CO, HU, MC	1848
28	0526	0550	S-SWF	1	2	OK	*
28	0808	0826	S-SWF	5	2	KU, OK, PU	0810
28	0900	0920	Slow S-SWF	3	1	DA, KU	0904E
28	1015	1051	G-SWF	3	1+	JU, KU	1000
28	1430	1458	S-SWF	5	1	BE, CO, HU, JU, KU, MC, PR	1412
29	0240	0440	Slow S-SWF	5	3+	AD, AN, CA, HO, KO, LA, OK, TO, RCA+, CW+, CW**	0303E
29	1418	1525	Slow S-SWF	5	2+	BE, CO, HU, JU, KU, MC, NE, PR, CW*	1414
29	1642	1740	G-SWF	4	1	CO, HU, MC, PR	1647
29	1800	1820	Slow S-SWF	4	1	HU, MC, PR	1752
30	1433	1450	S-SWF	5	1+	HU, JU, MA, MC, PR, PU	1432
30	1525	1720	S-SWF	5	3+	BE, CO, DA, HU, JU, MC, NE, PM, PR, PU, SW, WS, CW**	1523
30	2130	2240	S-SWF	5	3-	AD, AN, BE, CA, CO, HU, LA, MC, OK, PR, TO, WS, RCA+	2138
31	1115	1200	Slow S-SWF	5	3	DA, HU, JU, MC, NE, PR, SW, CW**	1102

COMMERCE - STANDARDS - BOULDER

* No known flare patrol.

CA = Canberra, Australia
 CO = Cornell University, Ithaca, New York
 DA = Darmstadt, G.F.R.
 HO = Hollandia, New Guinea
 JU = Juhlesruh, G.D.R.
 KO = Kodaikanal, India
 KU = Kuhlungsborn, G.D.R.
 LA = Los Angeles, California
 LI = Lindau, G.F.R.

MA = Madrid, Spain
 NE = Nederhorst den Berg, Netherlands
 PM = Paramaribo, Dutch New Guiana
 PU = Prague, Czechoslovakia
 TO = Hiraio Radio Wave Observatory, Japan
 CW* = Cable and Wireless, Barbadoes
 CW** = Cable and Wireless, Somerton, England
 CW+ = Cable and Wireless, Hong Kong
 RCA+ = RCA Communications Inc., Pt. Reyes, Calif.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES
AUGUST 1958

OTTAWA

2800 MC

Aug. 1958	Type*	Start UT	Duration Hrs:Mins	Maximum		Remarks
				Time UT	Peak Flux	
1	1 Simple 1	1104.5	1.5	1105	7	
1	2 Simple 2	1327.2	3	1328.5	13	
2	2 Simple 2	1208.5	1	1208.8	23	
2	1 Simple 1	1220	6	1223	7	
2	8 Group (2)	1526.8	6.7			
	2 Simple 2 f	1526.8	2	1527.8	42	
	1 Simple 1	1530.5	3	1531.2	5	
2	3 Simple 3 A	1840	>5	indet.	30	
	2 Simple 2	1840	25	1842.1	2050	
	1 Simple 1	2139	1.5	2139.5	6	
3	2 Simple 2	1108	3	1109.5	15	
3	1 Simple 1	1754.5	3	1755.8	7	
3	1 Simple 1	2020	6	2022	3	
3	2 Simple 2	2034.5	3	2035.5	33	
3	6 Complex f	2143.5	10	2145.2	110	
	4 Post increase A		40		10	
	1 Simple 1	2202.8	1.5	2203.5	4	
4	1 Simple 1	1622.5	4	1624.5	4	
4	2 Simple 2	2112.7	3.5	2114	45	
5	2 Simple 2	1628.4	1	1628.9	15	
6	1 Simple 1	1537	1	1537.5	6	
7	3 Simple 3 A	1458	3 40	indet.	25	
	8 Group (2)	1500	28			
	6 Complex f	1500	15.5	1503	95	
	6 Complex f	1515.5	12.5	1521.8	180	
	2 Simple 2	1547	2	1547.6	12	
7	1 Simple 1	1920.5	3	1922	5	
8	8 Group (2)	1631.3	5.7			
	2 Simple 2	1631.3	1.7	1631.8	10	
	6 Complex	1633	4	1636	7	
8	3 Simple 3	1656	12	1700	4	
9	2 Simple 2	1121	3	1121.5	40	
9	1 Simple 1	1345	2	1346	5	
9	2 Simple 2	1605	4	1606	40	
9	3 Simple 3	2010	1 30	2028	7	
10	1 Simple 1	1309.5	2	1310.5	6	
10	2 Simple 2	1436.3	5	1437.5	36	
10	2 Simple 2 f	1801	6	1803.7	105	
	4 Post increase f		55		8	
10	6 Complex	1916	6	1918	7	
11	6 Complex	1451.5	21	1456	50	
	4 Post increase		1 30		7	
11	8 Group (2)	1904.3	3.7			
	1 Simple 1	1904.3	2	1905	6	
	1 Simple 1	1906.3	1.7	1907.3	6	
11	8 Group (2)	2210.5	4			
	1 Simple 1	2210.5	1.5	2211	6	
	2 Simple 2	2213.8	0.7	2214	13	
12	1 Simple 1	1642	5	1644.5	6	
12	1 Simple 1	1933	3	1934.6	5	
13	6 Complex f	1206.5	11.5	1210	115	
	4 Post increase		1 50		20	
13	2 Simple 2	1530.4	7	1532.6	50	
13	2 Simple 2	2137.5	4	2139	16	
14	3 Simple 3	1605	1 10	1630	13	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES
AUGUST 1958

OTTAWA

2800 MC

Aug. 1958	Type*	Start UT	Duration Hrs:Mins	Maximum		Remarks
				Time UT	Peak Flux	
14	3 Simple 3 f	1758	2 10	indet.	13	
14	2 Simple 2	2151	6	2153.5	55	
15	8 Group (2)	1321	10			
	1 Simple 1	1321	2	1321.5	4	
	2 Simple 2	1328	3	1329	9	
15	3 Simple 3 A	1737	1 30	1820	10	
	1 Simple 1	1757	5	1759.5	6	
16	2 Simple 2 f	1206	10	1209.5	20	
16	8 Group (2)	1317.5	10			
	1 Simple 1	1317.5	3	1318.5	6	
	1 Simple 1	1324.5	3	1325.5	3	
16	3 Simple 3	1423	1	1433	4	
17	3 Simple 3	1545	10	1550	3	
17	2 Simple 2	1852.5	1	1853	18	
18	3 Simple 3 A	b1030	>2	indet.	20	
	2 Simple 2	1045	5	1046.5	14	
	6 Complex	1139.5	11	1141	7	
18	1 Simple 1	1624	1.5	1624.5	3	
18	1 Simple 1	2050	2	2051	4	
19	3 Simple 3 f A	2030	>3	2225*	90	*Approx.
	2 Simple 2	2203.5	17	2210	335	
	2 Simple 2	2303	27	2311	65	
20	3 Simple 3 f	2017	2 40	2045	10	
21	6 Complex	1925	3	1927	7	
22	3 Simple 3 A	1305	6 30	indet.	45	
	6 Complex	1320	8	1322.7	13	
	2 Simple 2 f	1430	2	1506.3	1500	
	1 Simple 1	1818	1	1818.4	7	
	1 Simple 1	1851.5	2.5	1853	3	
22	3 Simple 3 f	2215	>1 20	indet.	15	
23	3 Simple 3 A	1414.5	13	indet.	3	
	8 Group (2)	1414.5	6.3			
	1 Simple 1	1414.5	2	1415.5	7	
	2 Simple 2 f	1418.8	2	1420	20	
23	1 Simple 1	1551	4	1552.5	4	
23	2 Simple 2	1653	5	1655.5	24	
24	1 Simple 1	1341.5	1	1342	5	
24	1 Simple 1	2042.7	1	2043	7	
25	3 Simple 3 f	1850	1 30	indet.	14	
25	2 Simple 2 f	2301	3	2302	16	
26	3 Simple 3 A	1200	1 40	1230	15	
	6 Complex	1200.5	2	1201.8	16	
26	3 Simple 3 A	1847	10	1853	3	
	2 Simple 2	1847.8	2.2	1848.3	10	
26	3 Simple 3	2035	12	2039	7	
27	1 Simple 1	1508	5	1510	6	
28	6 Complex	b1028	>20	1039.5	350*	*Approx.
	4 Post increase		40		20	In sunrise osc.
28	2 Simple 2	1152	2	1153	8	
28	3 Simple 3 A	1802	2 48	indet.	15	
	6 Complex f	1802	12	1805	42	
29	2 Simple 2 f	1755.9	3	1756.2	55	
30	3 Simple 3 f	1413	2 10	indet.	15	
30	1 Simple 1	1905	2	1906	7	
30	3 Simple 3 A	1940	3	2025	18	
	1 Simple 1	2034.8	2.5	2035.3	7	
31	1 Simple 1	1545	1	1545.5	3	
31	2 Simple 2	1817	3.5	1818.3	9	
31	2 Simple 2	1908.2	4	1909.3	32	

SOLAR RADIO EMISSION

DAILY DATA

AUGUST 1958

CORNELL.

200 MC

Aug. 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	15	14	13]	2	2	2]	*
2	[15	13]]		[3	2]]		1250-1540
3							
4	[14	[11		[1	[1		**
5	[11]	[[11		[0]	[[0		1245-1330, 1650-1800
6	[12]	[11	12]	[2]	[1	2]	1245-1410, 1600-1925
7	14]	[17	[15]	2]	[3	[2]	+
8	[12	12	12]	[2	1	1]	1245-2005
9	[13	13]		[2	2]		1245-1630
10	21	28]]		3	3]]		1235-1600
11	[[18	[17	16]	[[2	2	2]	1430-1515, 1555-2005
12	[31	30	25]	[2	2	2]	1255-2000
13	[27	50	57]	[3	[3	3]	1250-1435, 1600-2015
14	[14	16	15]]	[1	2	2]]	1250-1910
15		39	30]]		2	1]]	1445-1840
16	[13	12]]		[1	1]]		1245-1600
17	[13	12]]		[2	2]]		1245-1600
18	[14	13	12]	[1	1	1]	1245-2000
19	[12	10	10]	[2	0	1]	1255-2005
20	[10]	[10	10]]	[0]	[1	0]]	1255-1405, 1545-1820
21	[20	28	20]]	[2	2	2]]	1245-2000
22	[26	130	79]	[2	1	1]	1250-2000
23	[48	35	31	[1	1	1	1305-2030
24	[20	18]]		[1	1]]		1250-1605
25		21	25]]		1	1]]	1455-1840
26	[[32	22	14]	[[1	1	2]	1345-1950
27	15]	11		2]	1		++
28	[10]	[10	10]	[0]	[1	1]	1300-1355, 1620-2005
29	13	54	30]	3	3	3]	1240-2010
30	[44	64]]		[3	2]]		1245-1605
31	15	18]]		2	3]]		1240-1600

[= 1st hour missing.
 [[= 1st two hours missing.
] = last hour missing.
]] = last two hours missing.

* 1240-1325, 1420-1530, 1540-1920
 ** 1250-1350, 1410-1500, 1545-1800
 + 1240-1400, 1410-1420, 1625-1800, 1845-2015
 ++ 1235-1410, 1455-1545, 1555-1800

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES
AUGUST 1958

CORNELL

200 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	1	b1421		>69	F			
	3	1843.5	1843.5	2	CA	47	29	
	3	1916	1916.5	1	CA	47	29	
4	0	1305.5		43	CD			
	3	1313.5		.5	CD	50	30	
6	2	1401.5	1406	5.5	F	140	91	
	2	1817.5		19	F			
7	6	1624.5		>232	F			
8	2	1408.5		8.5	F	50	35	
	3	1428.5		1	CA	72	41	
	3	1515		.5	CA	530	440	
	3	1516.5		1	CA	140	91	
	3	1631		1	CA	140	91	
	8	1821.5	1822.5	3	CD	1700	1200	
	3	1344.5	1345.5	2	CD	180	140	
10	3	1627		.5	CD	170	130	
	7	1431		>90	EF			
11	2	1435	1437	7	CA	4400	4200	
	3	1717		1	CA	180	120	
	8	1753	1753.5	3	ECD	320	210	
	8	1902	1903.5	5	CD	1200	880	
	3	1927		1	CD	1500	1000	
	0	1349		59	E	72	41	
	0	1516		48	F	72	41	
	8	1631	1632	2	CA	140	72	
	3	1654		.5	CA	140	72	
	3	1741		.25	CA	1700	1000	
	8	1848	1950	4	CD	3800	2800	
	8	1954.5		1	CA	210	140	
	3	1404.5		.25	CA	110	82	
	6	1601		>253	F			
	3	1811.5		1	CA	4100	2800	
14	3	1538		.5	CA	~ 65		
15	2	1457		5	ECA	~ 65		
	3	1626		<.25	CA	630	320	
17	3	1452		.5	CD	180	140	
	2	1537.5		20	F			
18	2	1624.5		35.5	F			
	3	1711.5		.5	SA	47	32	
19	1	1317.5		54	EF			
21	3	1313.5		1	CA	55	29	
	2	1535.5	1538	3.5	CA	72	41	
	3	1721.5		.5	CA	120	72	
	3	1837.5		.5	CA	55	32	
	9	1438.5		.5	SD	180	120	
	9	1440	1506	>320	E	630	72	
	3	1643		<.25	SD	260	72	
	3	1822.5	1823.5	2	CD	150	45	
	3	1847.5		.5	CD	160	50	
	8	1311.5		1	CD	3800	1700	
23	3	1318.5		.25	CD	440	210	
	3	1719		<.25	CD	140	72	
	3	1813.5		.5	CD	260	140	
	3	1919		.5	CD	380	210	
	8	1353.5	1354	1.5	CD	140	72	
	8	1356.5		.5	SD	630	380	
	2	1743.5		3	CA	55	32	
	3	1823		1.5	CA	91	55	
27	3	1255		.25	SD	440	320	
	8	1256		1	CD	440	320	
	3	1601.5		.25	SD	91	72	
	1	1949.5		>15	F			
28	3	1254.5		.5	SA	55	38	
29	3	1418.5		.5	SA	39	26	
	3	1420.5		1	CA	55	38	
30	7	1557		>253	E			
	6	b1245		>198	F			
31	8	1316.5		1	SA	380	200	
	6	b1240		>200	F			
	8	1337.5		1	CA	280	200	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES
MAY 1958

BOULDER

167 MC

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	1400 B	1903.1	695 D	CD	1200	12	S
1	2	1750	1751.1	2	ECD	870	280	
1	2	2337	2339.4	4	ECD	800	250	N2
2	6	1200 B	1346.1	125 X	CD	250	52	
2	9	1405	1603.0	119	CD	1600	4	
2	8	1615	1617.5	8	CD	2000	470	
2	6	1623	2331.5	552 X	CD	1000	50	
3	6	1200 B	1539.4	815 D	CD	1000	10	N3
3	8	2050	2055.4	8	ECD	890	300	
4	1	1200	1346.1	585 X	MF	320	-	Burst 1301.9
4	6	2145	2525.1	230 X	CD	300	8	
5	6	1600	2101.6	575 X	CD	1200	140	N4
10	2	1824.9	1825.7	1.3	ECD	1900 D	400	I 1826-1829
10	2	2034.4	2036.2	2.8	ECD	470	190	Large burst 2137.0
10	2	2322.2	2322.9	1.7	ECD	760	250	
11	3	1830.7	1831.6	1.2	ESD	410	120	
12	3	1340.7	1341.0	1.0	ESD	2100 D	-	
12	2	1546	1549.0	5	CD	420	88	
13	8	1619	1620.5	5	ECD	2200 D	610	
13	3	1809.8	1810.3	1.0	ESD	670	-	
16	1	1730	1900.7	495 X	MF	540	-	S
16	3	2453	2454.9	3	ECD	920	180	
17	6	1150 B	1450.8	835 D	CD	420	28	
17	8	1350	1350.9	2.7	ECD	2100 D	590	
17	8	1353.9	1354.1	1.9	ECD	720	170	
17	8	1854	1900.4	10	CD	530	150	Large bursts 2522.2, 2542.7
18	6	1145 B	1225.9	105 X	CD	360	-	Large burst 1211.5
18	1	1330 X	1605.1	600 X	MF	140	-	S
18	2	1923.9	1924.9	1.2	ECD	980	130	S
19	1	1145 B	2422.0	845 D	MF	530	-	S, Burst 1518.2
19	8	1829.9	1830.6	2.5	ECD	1800 D	460	I 1826-1829
19	2	1854.9	1855.1	1.0	ECD	140	-	
20	8	1841.7	1845.2	4.6	CD	190	100	
21	3	2017.5	2017.8	0.6	ESD	2200 D	-	S
23	1	1400 B	1941.0	710 D	MF	200	-	S
23	3	2251.4	2251.5	1.0	ESD	2100 D	-	S, N5
27	1	1140 B	1538.3	850 D	MF	710	-	S, N6
27	3	2251.8	2252.1	1.5	ECD	2500 D	-	S
27	3	2425.3	2425.8	0.8	ESD	980	-	
28	1	1345 B	1932.0	730 D	MF	650	-	S
28	2	1506.9	1507.9	3.8	ECD	430	130	N7
29	3	1818.7	1818.8	1	ESD	2700 D	-	
30	1	1140 B	1513.5	855 D	MF	500	-	N8
30	3	2213.0	2213.9	1.4	ECD	390	120	
30	2	2222.7	2223.8	1.8	ECD	980	170	
31	3	1809.4	1809.5	1.3	ESD	730	-	
31	3	1910.6	1910.7	1.0	ESD	1600 D	-	

COMMERCE - STANDARDS - BOULDER

- Notes:
- Interference may sometimes obscure or be mistaken for solar events.
 - May 1, Large bursts 2357.2, 2445.3, 2535.0.
 - May 3, Large bursts 1217.8, 2358.1, 2534.9. Burst 1943.9.
 - May 5, Large bursts 1840.8, 1851.8, 1912.1, 1924.0, 2052.8, 2241.9, 2452.1.
 - May 26, Large burst 2522.3.
 - May 27, Large burst 1649.6. Bursts 1200.9, 1909.1.
 - May 28, Large burst 1824.8. Burst 1906.1.
 - May 30, Large burst 2400.9. Burst 1518.9.

Daily data for May 1958, on 167 Mc (Boulder),
appeared in CRPL-F168B issued August 1958.

SOLAR RADIO EMISSION

DAILY DATA

JUNE 1958

167 MC

BOULDER

June 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	-	13	14	12	11	12	-	2	2S	1S	2S	2S	11.8-02.0
2	-	14	13	16	-	14	1S	2	1S	1S	-	1S	11.8-20.8; 22.8-02.0
3	-	12	13	14	12	13	0S	0S	0S	0S	0S	0S	11.8-15.5; 16.5-02.0
4	-	-	15	18	19	17	2S	1S	1S	2S	2S	2S	13.8-02.0
5	-	-	16	19	16	17	1S	0S	2S	1S	2S	2S	11.8-13.0; 14.8-02.0
6	-	19	-	-	-	-	2S	1S	-	-	-	1S	11.8-16.0; 24.5-02.1
7	-	-	-	-	15	16	-	-	-	-	0S	0S	19.3-02.1
8	-	20	17	16	17	17	0S	2S	2S	0S	0S	1S	11.8-02.1
9	-	17	-	17	19	18	0S	2S	-	1S	2S	2S	11.8-15.7; 18.6-02.1
10	-	15	16	16	17	16	1S	1S	1S	0S	1S	1S	11.8-23.1; 23.8-02.1
11	-	-	15	16	20	17	1S	-	0S	1S	0S	1S	13.6-16.3; 17.0-02.1
12	-	17	16	15	15	16	0S	1S	0S	0S	0S	0S	11.7-02.1
13	-	13	14	16	13	14	0S	2S	0S	0S	0S	0S	11.7-02.1
14	-	14	14	15	14	14	0S	1S	2S	0S	2S	1S	11.7-02.1
15	-	15	16	16	16	15	0S	1S	0S	2S	0S	1S	11.7-15.7; 16.8-02.1
16	-	14	15	15	15	15	0S	1S	0S	1S	0S	1S	12.1-02.1
17	-	-	15	16	15	15	0S	-	0S	0S	0S	0S	11.6-02.1
18	-	-	15	16	-	16	0S	-	1S	0S	-	0S	13.6-21.0; 23.5-02.1
19	-	18	16	16	16	17	0S	0S	0S	0S	0S	0S	11.6-02.1
20	-	15	14	14	13	14	0S	0S	0S	0S	1S	0S	11.6-02.1
21	-	15	15	15	16	15	0S	0S	0S	0S	2S	0S	11.6-20.4; 20.8-02.1
22	-	15	15	15	15	15	0S	1S	1S	0S	0S	1S	12.9-02.1
23	-	18	15	15	15	16	0S	0S	0S	1S	0S	0S	11.6-19.8; 20.8-02.2
24	-	-	-	14	19	16	0S	-	-	0S	0S	0S	13.7-02.2
25	-	44	35	47	43	42	0S	2S	2S	3	2S	2S	12.5-02.2
26	-	35	27	30	52	36	2S	2S	2S	2S	2S	2S	11.6-02.2
27	-	30	27	24	22	25	2S	2S	1S	2S	2S	2S	11.6-02.2
28	-	19	27	51	57	40	1S	1S	2S	2S	3	2S	11.6-02.2
29	-	19	18	18	18	18	2S	2S	1S	1S	1S	1S	11.6-02.2
30	-	16	17	17	18	17	1S	1S	1S	1S	1S	1S	11.7-23.8

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1958

BOULDER

167 MC

June 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	1	1145 B	1204.5	245 D	MF	85X	-	
1	3	1212.6	1213.1	1.2	ECD	170X	-	
1	8	1329.2I	1330.6	4.3	CD	170	28	I
1	2	1948.1	1951.4	3.9	CD	170	63	
1	3	2420.4	2420.6	0.5	ESD	100	-	
1	2	2444.6	2445.6	2.1	ECD	180	-	S
1	3	2534.8	2535.9	1.5	ECD	110X	-	S
2	3	1418.3	1418.4	0.6	ESD	770	-	S, Burst 1550.0
3	8	2450	2454.7	10	CD	120X	26X	S
3	8	2504.3	2505.0	4.7	CD	60X	19X	S
4	6	1345 B	1734.1	474 D	CA	130	7	
4	9a	2139.4	2143.0	6.6	CD	440X	120X	S
4	9b	2146	2148.0	40 I	CD	810X	85X	S, I
4	6	2229	2544.9	211 D	CA	130	8	S
5	8	1618	1623.0 I	19	ECD	270	52	S, I
5	9	1703	1718.8	29 I	ECD	310	84	S, I
5	6	1732	2452.1	508 D	CA	420	7	S, I
5	2	2530.3	2531.8	2.1	CD	580	-	
8	1	1145 B	1232.3	860 D	MF	960	-	S
8	3	1649.1	1649.5 X	1.9	ECD	1000	-	S
9	1	1145 B	1310.9	255 D	MF	390	-	S, N2
9	6	1835 B	2403.3 X	450 D	CA	320	7	S
10	1	1145 B	1543.0 X	860 D	MF	160X	-	S
12	1	1140 B	1333.2 X	865 D	MF	110X	-	S
13	3	1447.8	1448.3	1.5	ECD	790	-	
14	2	1732	1743.7	12	CD	380	96	Bursts 1421.9, 1431.0
14	2	2119.9	2121.0	3.0	ECD	610	160	
15	2	2046.7	2047.4	2.3	ECD	1300	300	S
17	3	1718.3	1718.5	0.4	ESD	92	-	Burst 1657.0
20	2	2320 X	2321.2	3.8X	ESD	140X	-	S
21	3	2319.9	2320.8	2.0	ECD	500	130	S
24	1	2000 X	2153.2 X	370 D	MF	640	-	S
25	6	1230 B	2018.7 X	820 D	CA	890	35	S
26	6	1135 B	1209.2 X	875 D	CA	2300D	38	S, N3
27	6	1135 B	1302.3	875 D	CA	260X	15	S
28	1	1135 B	1535.0	295 D	MF	280	-	S
28	6	1630	2325.6	580 D	CA	1200	45	S, N4
29	1	1135 B	1448.6	875 D	MF	170X	-	S
30	1	1140 B	1436.4	725 D	MF	210X	-	S

- Notes: 1. Severe sferics and man-made interference may sometimes obscure or be mistaken for solar events. Relatively small events are not reported.
2. June 9, large burst 1258.5, burst 1306.8.
3. June 26, large bursts 1215.2, 1240.0, 1459.8, burst 1710.
4. June 28, large bursts 1820.6, 2411.7.

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 1 0000-0145 1246-2400	← 0140	2						b	0024	1	
	1306-1401	1						G	0028-30	3	
	1401-1528	2						g	0115	2	
	1528-1639	3						b	1336	1-	
	1639-54	2		Uncl.	g	2053	1	g	1432	3	
	1654-2027	1						g	1505	3	
	2118-2212	1-						g	1508	2	
	2242-2335	1-						b	1537	3	
	2335-56	2						g	1541-42	3	
	2356 →	1						g	1636-37	2	
								b	1657	3	
								b	1705	2	
								b	1946	3	
								g	2148-49	2	
								b	2341	3	
Aug. 2 0000-0145 1245-2400	← 0138	1						g	1334	3	
	1250-1552	1						g	1528	3	
	Cont. 1615-16	3		II		1842.5-51	3+	g	1615-16	3	
	1620-2105	1-						g	1735	2	
	2314 →	1						g	1737	2	
				Uncl.		1855-57	1-	b	1824	3	
								g	1934	1-	
				Uncl.	b	2254	3	g	1937-38	1-	
								g	1944	1	
								g	1952	3	
								b	1954	1	
								g	2023	1-	
Aug. 3 0000-0140 1246-2400	← 0134	1						b	0127	1	
	1253 →	1-						b	1559	1-	
								g	1647	2	
								g	1648-49	3	
								b	1650	1-	
								g	1651	1-	
								b	1754	3	
								g	2219	1-	
Aug. 4 0000-0140 1247-2400	← 0137	1		Uncl.	b	0023	1-	g	0010	1-	
	1315-54	1-						b	1314	1	
	1532-39	1-		II		2119.0-24	3	g	1501	3	
	1620-52	1-						g	1503-04	1	
	1920-2229	1-						g	1622-23	1-	
	Cont. 2113-14	3		Uncl.	g	2310	3	b	1545	1	
	2310 →	1						G	2112-14	2	
								b	2156		2112 Inverted U burst.
Aug. 5 0000-0144 1247-2400	← 0133	1		Uncl.	b	0001	1	b	1826	1	
	1820-46	1-						b	1831	1-	
				Uncl.		2227	1-	g	1952-53	1	
								b	2224	1-	
Aug. 6 0000-0145 1247-2400	1254-2202	1						g	1406-07	2	
	2202-2313	2						b	1706	1	
	2313 →	1						g	1714	1-	
								b	2105	3	

100-580 Mc.

COMMERCE - STANDARDS - BOLDER

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 9 0000-0140 1247-2400			b 1935 3 g 1939 3 g 2252-53 2 b 2304 1-	
Aug. 10 0000-0140 1247-2400	0000-0021 2 0021-0129 1 1250-1430 1 1430-1502 2 Cont. 1438-39 3 1502-56 3 1556-1607 1 1607-41 3 1641-54 2 1654-1724 1 1724 → 2		g 0012 1 g 0014 1 g 0055 1 g 0131 1- b 1249 2 g 1301 2 G 1309-10 2 b 1341 3 g 1400 1- G 1436-38 2 g 1440 2 b 1538 1 g 1551 3 g 1653-55 1 G 1658-1700 2 b 1741 3 G 1802-04 3 b 1806 1- g 1816 1- b 2038 1 g 2043-44 2 g 2100 1 b 2205 3 g 2223 1 g 2246 1 b 2247 1 b 2248 1- g 2302 1- b 2330 1 g 2354 1	
Aug. 11 0000-0140 1248-2400	← 0131 2 1259-1338 1- 1409-1549 1 1549-1612 2 1612-2107 1 2107-42 2 2142-2313 1 2313-2323 2 2323 → 1	Uncl. 1905 2	g 0002 1 g 0018-19 2 b 0023 3 g 0056-57 3 g 0122 3 g 1350 1 g 1357 3 b 1407 1- g 1413-14 2 b 1417 1- G 1454-56 3 g 1457 2 g 1514 2 b 1528 1- g 1654-55 1 b 1745 1- G 1749-50 2 g 1754 2 g 1755 2 b 1802 3 b 1831 1- G 1903-05 2 g 1907 1- g 1914 1- g 1928-29 3 g 1948 1-	

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 11 0000-0140 1247-2400								G	2029-31	2	
								g	2036	2	
								g	2046	1-	
								g	2210-11	2	
								g	2212-14	1-	
								g	2216-17	1-	
								g	2232	1-	
Aug. 12 0000-0135 1245-2400		← 0128	1					g	0001	2	
		1251-1411	1					g	0038-39	2	
		1411-55	2					b	0101	1	
		1455-1845	1					G	1632-33	3	
		1845-57	2					g	1654-55	2	
		1857-2121	1					b	1700	1-	
0000-0135 1245-2400		2153 →	1					g	1742	2	
								g	1850-51	3	1850 Inverted U burst.
								g	1955-56	2	
								g	2152-53	3	
								g	2249	2	
								G	2318-19	2	
Aug. 13 0000-0135 1247-2400		← 0127	1					g	0037-39	2	
		1247-1530	2					g	0115-16	2	
	Cont.	1247-1516	1					g	1510	2	
	Cont.	1516-31	2					g	1531	1-	
		1530-1712	3					g	1532-33	1	
	Cont.	1531-2029	3					g	1547	2	
		1712-1823	2					g	1737	1-	
		1823-2001	3					g	1754	1-	
		2001-2120	2					g	1805	1-	
	Cont.	2029-2114	2					g	1816	2	
	Cont.	2114-2336	1					g	1925	1	
		2120-2343	1					b	2128	2	
		2343 →	2					g	2238	3	
								g	2240	2	
								b	2253	1-	
								b	2354	3	
Aug. 14 0000-0135 1245-2400		← 0126	2					g	1539	3	
		1247-1749	1					b	2153	1	
		1749-1809	2	II		2158.2-2205	3	g	2154	2	
		1809 →	1								
Aug. 15 0000-0135 1247-2400		← 0124	1					g	0107	3	
		1248-1512	1					g	1327-28	1	
	Cont.	1434-1458	1					b	2148	3	
	Cont.	1458-1703	2								
		1512-1616	2								
		1616-1707	3								
	Cont.	1703-1911	1								
		1707-1913	2								
		1913 →	1								
Aug. 16 0000-0135 1246-2400		← 0123	1					b	1325	1	
		1250-1423	1					g	1659-1700	1	
		1441-43	1	Unc1.		1716-17	3	g	1706	1	
		1555-1623	1					g	1707-08	2	
		1659-1723	1					g	1716	2	
		1738	1					g	2344-45	3	
		1802	1								

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 16 0000-0130 1245-2400		1927-44 2218-48 2327 →	1 1 1								
Aug. 17 0000-0130 1245-2400		← 0002 0057 0112 1248-1334 1352 1407 1445-52 1528-1712 1752 1959-2004 2024 2117-2127 2146-2319	1 3 1 1 1 1 1 1 2 1 1 1 1					b b g g g b b b g g g g	0103 1254 1422 1445-46 1452-53 1635 1717 1821 2004 2012 2047 2308 2333-34 2355 2357	1- 3 2 1 2 2 1- 1 1 1- 1 2 3 1 1	
0000-0130 1245-2400								b b	2355 2357	1 1	
Aug. 18 0000-0130 1300-2400		0041-56 1300-1434 1450-1506 1626 1632 1721-22 2041-42	1 1 1 1- 1 1 1					b g g b	0041 1546 1658 1713	3 1 3 1	
Aug. 19 0000-0130 1300-2400		0052 1327-1402 1420-21 1503 1511 1543-1752 1829-50 1911 1944-52 2005-07 2021-2204 2204 →	1 1- 1- 1 1- 1- 1- 1 1- 1 1 2					g g b g g g g g G g b g	1412 1419 1447 1615 1752 2030-31 2111 2113 2200-03 2204-06 2207 2238	1 1 1 1- 1 1 2 2 3 2 2	
	Cont. IV	2207-15	1	Uncl.	2211		3				
	Cont. IV	2215-2240	2								
	Cont. IV	2240-45	3								
	Cont. IV	2245-2301	2								
	Cont. IV	2301-11	3								
	Cont. IV	2311-16	2								
	Cont. IV	2316-2354	3								
	Cont. IV	2354 →	2								
Aug. 20 0000-0130 1353-2400	Cont. IV	← 0001 ← 0011 0011-0113 1526-43 1618-27 1705-31 1755-1815 1836-2018 2018-24 2024 →	2 2 1 1 1- 1- 1 1 2 1	II	0045.9-51		3	G g g b b b b g g b b	0040-46 0054 1538 1540 1705 1729 2005 2013 2211 2225 2318	2 1- 2 1- 1- 1- 1 1- 1 2 2 1	1538 Inverted U Burst.

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 20 0000-0130 1353-2400								g	2321	1	
								G	2327-28	2	
								g	2349	1	
Aug. 21 0000-0125 1258-2400		← 0112	1					g	0011	1	
		1258-1724	2					g	0016	1	
	Cont.	1637 →	1					g	0028-29	3	
		1724-1958	1					b	0030	3	
		1958-2146	2					g	0031	1-	
		2146 →	1					b	0040	1	
								b	0111	1-	
								g	1448	3	
								g	1502	3	
								g	1908	1	
Aug. 22 0000-0125 1540-1610 1816-2400		← 0119	1					g	2035	3	
	Cont.	1540-1610	2					g	2338	2	
	Cont.	1816 →	2					b	2340	3	
		1817-30	1								
Aug. 23 0000-0125 1300-2019 2055-2400		← 0117	2					G	0036	3	
	Cont.	1312	3					g	1312	3	
		1410	1					g	1319	1-	
		1535-2005	1-					g	1637	1-	
		2103-2207	1-					g	1655	1-	
		2228-2310	1-					g	1719	2	
		2345 →	1-					b	1720	1	
								g	1721	1	
								g	1757	1	
								g	1814	3	
								b	1920	3	
								b	2119	1	
								b	2127	3	
								b	2200	3	
Aug. 24 0000-0100 1318-2400		← 0054	1					g	0015	2	
		1320	1-					b	0023	1	
	Cont.	1342-43	1					b	1342	1	
		1344	1					g	1344	1-	
		1412-35	1-					b	1524	1	
		1457	1					b	1543	1-	
		1511-2129	1					g	1608	2	
	Cont.	2023	3					g	2023	3+	
		2155-2247	1					b	2039	2	
		2312-24	1					b	2040	1-	
								b	2230	2	
								b	2249	2	
								b	2251	3	
								g	2321-22	1	
								g	2332-33	3	

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

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	
Aug. 25 0000-0120 1300-2100 2108-2137 2139-2221 2224-2400		0029 0055-0112 1300-1551 1618-2042 2314	1 1 1 1 1					g g g b b	1332-33 1432 1441 2136 2339	1 1 1 1 2	
Aug. 26 0000-0120 1300-2400		0016-24	2					g	0023-24	3	
	Cont. IV	0020-0025	2					g	0034-35	3	
	Cont. IV	0025-0115	3+					g	0038	3	
		1400	1-					b	0040	3	
		1522-40	1					g	0042	3	
		1601	1					g	0043	3	
		1700-25	1					b	1332	1-	
		1740-1815	1					g	1354-55	3	
		1835-1906	1					g	1357	3	
		1931	2					b	1554	1	
		1948	1					b	1711	1	
		2159-2203	1					b	1720	1-	
		2218-26	1					g	1744	2	
		2325	1-					g	1824	2	
		2342-44	1					b	2032	1-	
								b	2221	3	
Aug. 27 0000-0120 1302-2400		0013-0110	1					b	0027	1	
		1442-51	1					b	1557	1	
		2007-11	1-					G	1601	3	
								g	1602	3	
								g	1620	1-	
								b	1725	2	
								g	1923-24	2	
								b	1946	1	
								g	2029-30	1	
								g	2034	3	
Aug. 28 0000-0120 1300-2400								g	0027	2	
								g	0100-0101	2	
								g	1805	2	
								g	1910	2	
								b	2255	1	
								g	2256-57	1	
								g	2343-44	1	

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

Fort Davis

AUGUST 1958

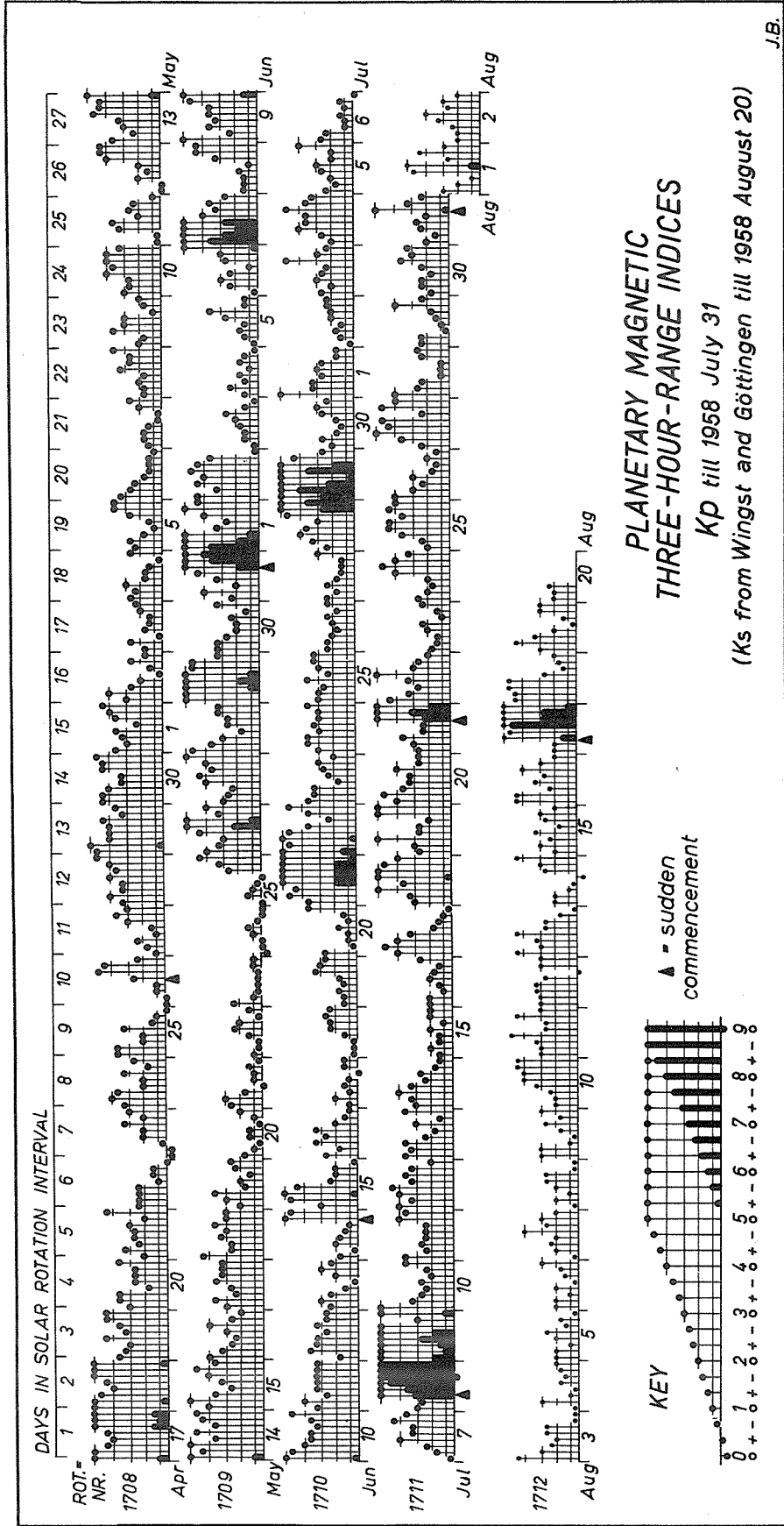
100-580 Mc.

Date and Observing Times (U.T.) 1 58	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	
Aug. 29 0000-0115 1300-2400		1329	1					g	1421	2	
		1349-51	1					g	1755-56	2	
		1500 →	1					g	1801-02	1	
Aug. 30 0000-0110 1301-2400								b	2020	1	
		← 0104	1					b	1451	1	
		1301-1410	2					g	1458	1	
		1410-1611	1	Uncl.	1520		3	g	1509	2	
		1649-1704	1					g	1519	1	
		1724-1803	1	Uncl.	1606-07		3	g	2328	3	
		1855-1900	1					b	2356	3	
		1942-50	1								
		2016-38	1								
		2106-49	1								
		2206-16	1								
		2239-42	1								
		2305 →	1								
Aug. 31 0000-0110 1301-2400		← 0105	1					b	0007	1	
		1303-1458	1					g	0021	1	
		1458-1511	2					b	1308	1	
		1511-35	1					G	1332-33	2	
		1535-1651	2					g	1338-39	2	
		1651-1705	3					b	1701	1-	
		1705-1835	2					g	1807	1-	
		1835-1901	3					g	1816	3	
		1901-2139	2					g	2141	2	
		2139-2238	1					b	2145	1-	
		2238-2344	2					b	2159	1-	
		2344 →	1					G	2200-02	2	
								g	2212-13	2	
								g	2219	2	
								G	2252-54	2	
								G	2255-56	1	
								b	2358	1	

GEOMAGNETIC ACTIVITY INDICES

JULY 1958

July 1958	C	Values Kp								Sum	Ap	Final Selected Days	
		Three hour Gr. interval											
		1	2	3	4	5	6	7	8				
1	0.8	5o	3+	3+	3-	3o	3-	2-	2-	23+	17	Five Quiet	
2	0.2	1-	1+	2-	1+	2o	2o	2+	2+	14-	6		
3	0.8	3-	2o	3o	3-	2+	5-	3o	2+	23-	15		
4	1.0	2o	3-	4o	4-	4-	5-	4-	3+	28-	21		2
5	0.7	2+	2-	2o	3-	3o	2o	2o	4o	20-	11		6
6	0.1	3-	2+	1o	1o	1+	1o	1+	0+	11o	6	15	
7	0.9	1-	2-	2+	4o	3+	3+	4+	4-	23+	17	16	
8	2.0	3o	3-	7+	8-	8+	9o	9-	9-	55+	200	23	
9	1.7	6+	6-	6o	7o	6+	5o	3o	6-	45o	75		
10	1.0	5o	3+	3-	2+	3-	2o	2+	4-	24o	17		
11	0.9	4-	2+	3-	2+	2+	2+	4o	4-	23+	15	Five Disturbed	
12	1.1	4o	3+	4o	4+	3+	4-	3+	2o	28o	21		
13	0.8	4-	3+	4-	2+	2-	3o	1+	4-	23-	15		
14	0.7	3o	3+	4o	3+	2+	3-	3-	2-	22-	14		8
15	0.2	1+	2o	1+	1+	2o	1o	2o	2o	13o	6		9
16	0.2	2o	2o	1o	1+	2o	2-	1+	3-	14o	7	18	
17	0.8	4o	5-	4o	3+	2-	1+	1o	1-	21-	16	21	
18	1.3	3o	3+	5o	4-	5+	5o	5-	4o	34o	34	27	
19	1.1	3-	3o	5o	3-	3-	2o	5o	5o	28o	25		
20	1.0	4o	5-	4-	3+	3+	4o	3-	3-	28+	22		
21	1.5	3-	3o	4-	2+	2+	7-	7+	6+	34+	53	Ten Quiet	
22	1.0	4+	3+	3-	3+	5o	3o	3-	2o	26+	20		
23	0.2	2-	1+	1+	2o	2+	1o	1+	2+	13+	6		
24	0.9	3-	2o	2-	2o	4o	5-	4o	3+	24+	18		2
25	1.0	2o	2+	4-	4+	4+	4-	4+	4o	29-	23		5
26	0.6	4o	3o	2+	3o	2-	1+	2o	1+	19-	11	6	
27	1.2	2+	4-	5o	4+	5-	2+	5-	4o	31o	28	15	
28	0.6	4o	3-	2+	1o	1o	1o	2+	3-	17o	10	16	
29	0.5	2+	2+	1-	1o	1+	2-	4o	2+	16-	9	23	
30	0.6	2-	2+	2+	2-	2+	4-	3o	3+	20+	12	26	
31	0.8	2o	1+	2+	3-	2o	5+	3+	2+	21+	15	28	
												29	
												30	
Mean:	0.85									Mean:	25		



COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC

JULY 1958

July 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		1-4 days	4-7 days	8-25 days	Half Day (1) (2)	
1	6-	5-	6o	6+	6	5	6	6	6-	6	6		(4)	2
2	6+	6+	7-	7-	5	7	7	7	7-	6	6		1	2
3	7-	6-	7-	7-	7	7	7	7	6+	6	6		3	3
4	7-	6-	6+	7-	6	6	7	6	6+	6	6		3	3
5	7-	6-	6+	6+	6	6	7	6	6+	6	6		3	3
6	7-	6-	7-	7-	7	6	7	7	6+	5	5		2	1
7	7o	7-	7-	6o	7	6	7	6	7-	5	5		3	(4)
8	6+	5o	2+	1+	4	6	4	2	(3o)	4	6		(5)	(8)
9	1+	1+	3-	5-	1	2	2	3	(2o)	3	7		(5)	(4)
10	4o	4+	6o	6o	3	4	5	5	5-	4	7		3	2
11	6o	5o	7-	6+	6	5	6	6	6o	5	6		3	3
12	6o	5+	7-	6o	6	6	6	6	6o	6	6		(4)	3
13	6o	5+	6+	7o	6	6	7	6	6+	6	7		3	3
14	7-	6-	7-	7-	6	6	7	7	6+	6	7		(4)	2
15	7o	6o	7-	7-	7	6	7	7	7-	7	7		2	2
16	7-	6o	6+	7-	7	6	7	6	6+	7	7		2	2
17	6+	5-	7-	7-	6	6	6	6	6o	7	7		(4)	1
18	7-	5-	6+	7-	6	6	6	6	6o	6	7		(4)	(4)
19	6o	5+	7-	6+	6	5	7	6	6o	6	7		3	3
20	5+	5+	7-	7-	6	5	7	7	6o	7	7		3	3
21	6+	6+	7-	6-	6	6	7	5	6+	7	7		3	(5)
22	5-	5o	6+	6+	3	4	6	6	6-	3	7		3	3
23	7-	6o	7o	7-	6	6	7	7	7-	5	7		2	2
24	7-	7-	7o	7o	7	6	7	7	7-	6	7		2	(4)
25	7-	6-	6+	7-	7	7	6	6	6+	6	6		3	3
26	6+	5+	6o	7-	6	6	6	6	6o	5	6		3	2
27	7-	5o	6+	6o	7	6	5	5	6o	6	6		(4)	3
28	4+	5-	6o	7-	5	4	6	6	5+	7	6		2	2
29	7-	6o	6+	7-	6	5	6	6	6+	6	7		2	2
30	7-	5o	6-	6+	5	5	6	5	6o	6	7		2	3
31	6+	5-	6+	7-	5	6	6	6	6o	6	7		2	3
Score: Quiet Periods					P	16	13	20	15		15	12		
					S	9	16	9	14		10	15		
					U	2	0	0	1		3	2		
					F	1	0	0	0		1	0		
Disturbed Periods					P	1	1	0	0		0	0		
					S	2	1	1	1		2	0		
					U	0	0	1	0		0	0		
					F	0	0	0	0		0	2		

() represent disturbed values.

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

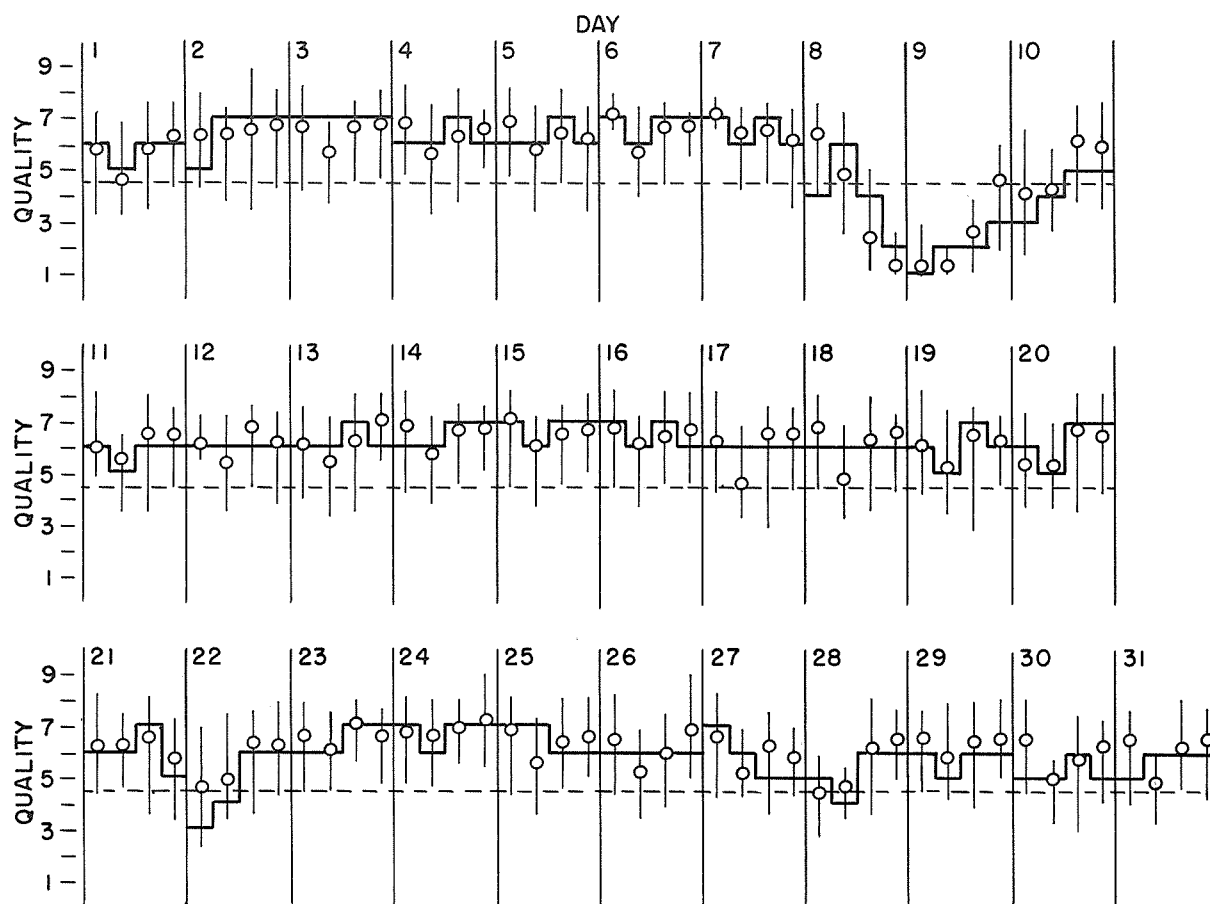
NORTH ATLANTIC

JULY 1958

— Short-term forecast

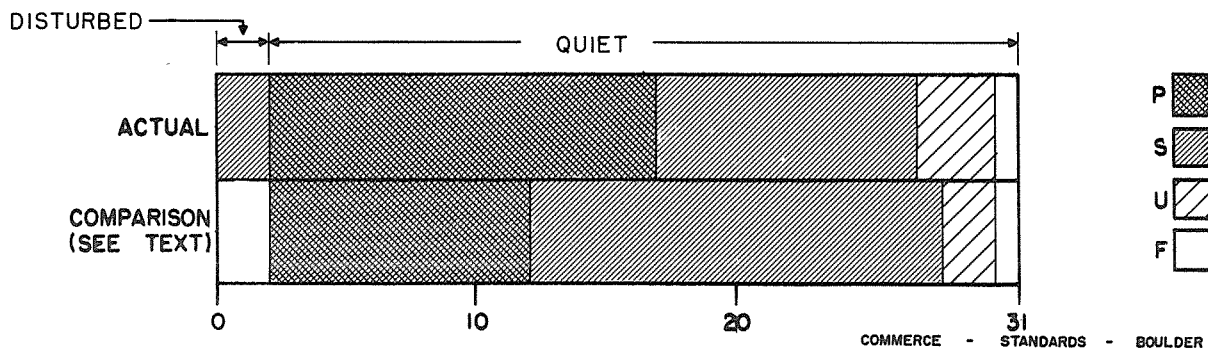
o Quality figure

| Range of reports



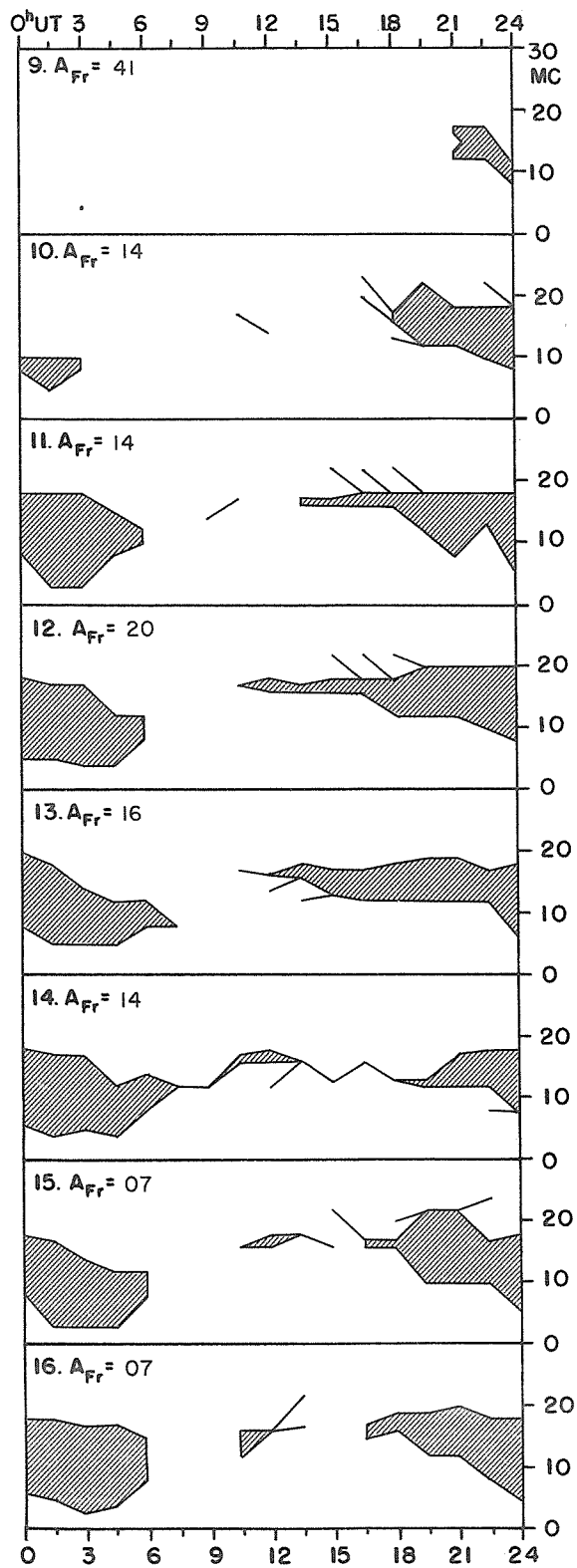
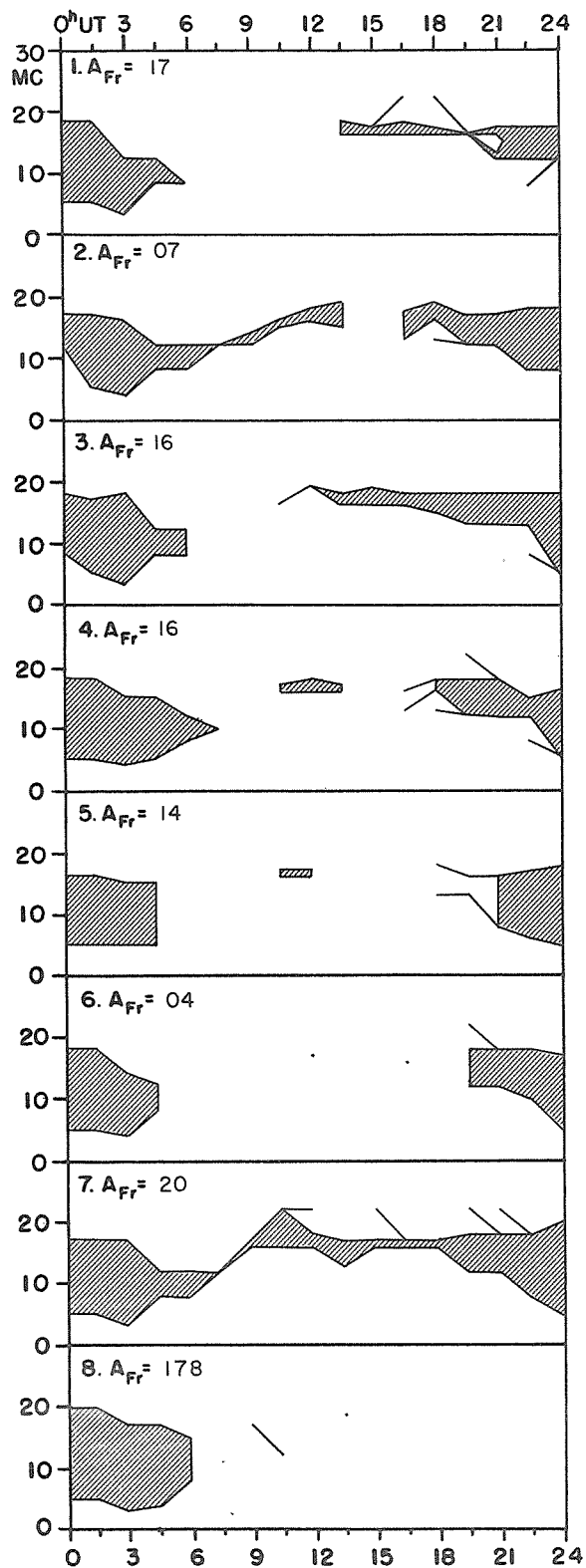
OUTCOME OF ADVANCED FORECASTS

1 TO 4 DAYS AHEAD



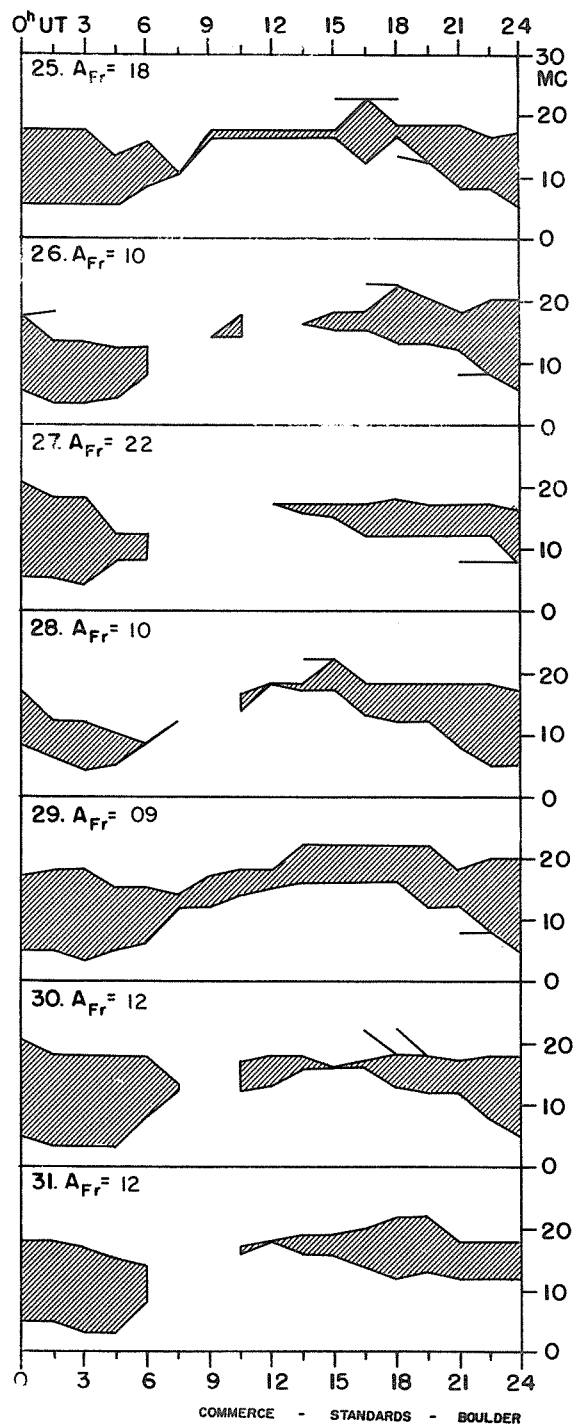
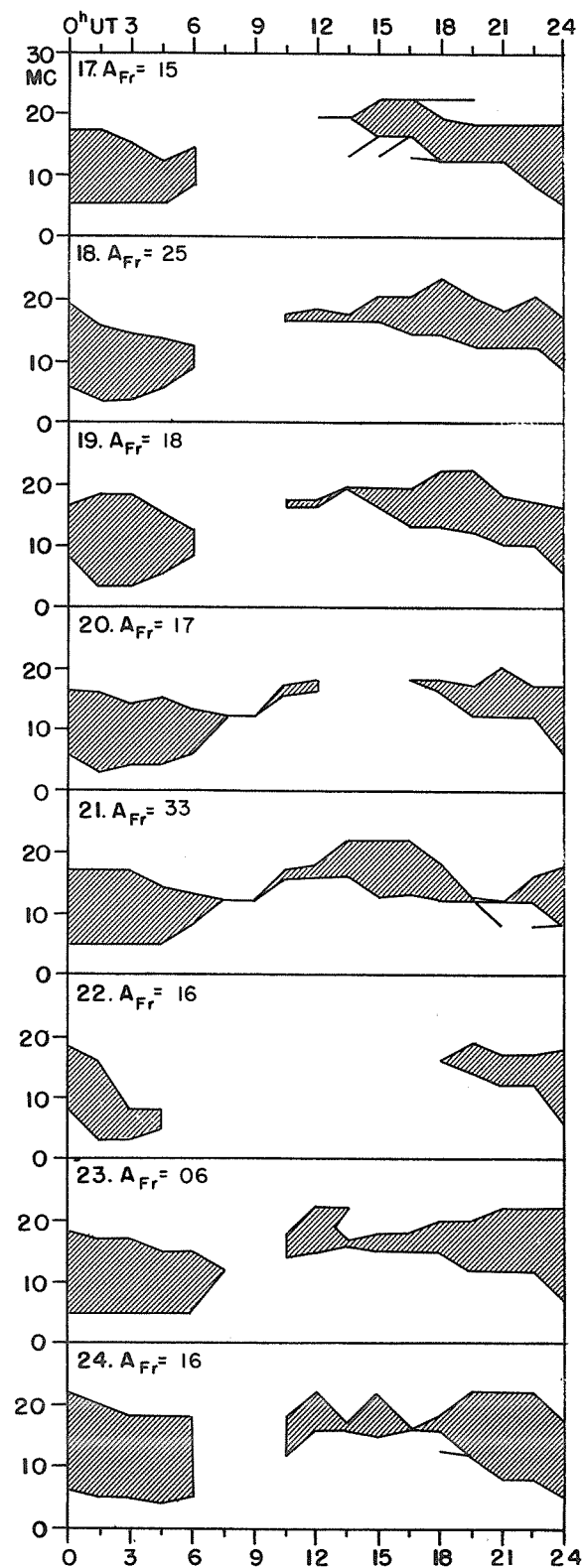
USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

JULY 1958



COMMERCE - STANDARDS - BOULDER

JULY 1958



CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH PACIFIC

JULY 1958

July 1958	North Pacific 8-hourly quality figures			Short-term forecasts issued at	Whole day index	Advance forecasts (Jp reports) for whole day; issued in advance by:			Geomagnetic K_{S1}	
	03 to 11	11 to 19	19 to 03	02 10 18		1-4 days	4-7 days	8-25 days	Half Day (1)	Day (2)
1	6	5	5	6 6 6	5	6	6		(4)	(4)
2	6	6	6	6 6 6	6	5	7		2	2
3	6	6	6	6 7 6	6	5	7		2	3
4	6	6	6	6 6 5	6	5	7		(4)	3
5	5	6	6	5 5 6	5	5	6		2	3
6	6	6	6	6 6 6	6	5	6		2	1
7	6	6	5	5 6 6	6	5	6		2	3
8	4	1	1	4 4 2	(2)	6	6		(5)	(9)
9	1	1	4	2 3 2	(2)	2	6		(7)	(6)
10	4	5	5	4 4 5	(4)	4	6		(4)	3
11	5	6	6	6 6 6	6	5	6		3	3
12	6	6	6	5 5 6	6	5	5		(4)	3
13	6	6	6	5 6 6	6	5	6		3	2
14	5	6	6	6 6 6	6	4	6		(4)	2
15	6	6	6	6 6 6	6	4	6		2	2
16	7	6	7	6 7 6	7	6	5		2	2
17	6	6	7	6 6 6	6	6	5		(4)	2
18	6	5	6	6 5 6	6	6	6		(4)	(4)
19	5	6	5	6 6 7	5	5	5		3	(4)
20	5	6	6	6 6 6	5	6	5		(4)	3
21	6	6	6	5 6 4	6	6	6		(4)	(4)
22	6	6	7	6 7 6	6	6	6		(4)	3
23	6	6	7	6 7 6	6	6	7		2	2
24	7	6	7	6 7 6	7	6	7		2	3
25	6	5	6	7 4 5	6	6	6		(4)	(4)
26	6	6	7	6 5 5	6	5	5		(4)	2
27	5	5	6	6 5 5	5	6	5		(5)	(4)
28	6	6	6	6 6 7	6	6	6		2	1
29	6	6	6	6 5 5	6	5	6		2	2
30	6	6	6	6 6 6	6	3	5		2	2
31	6	6	6	6 6 5	6	3	6		2	3
Score: Quiet Periods P 16 17 13 9 19										
S 12 12 13 15 8										
U 0 0 2 0 1										
F 0 0 1 4 0										
Disturbed Periods P 2 0 0 2 0										
S 1 0 1 0 0										
U 0 1 1 0 0										
F 0 1 0 1 3										

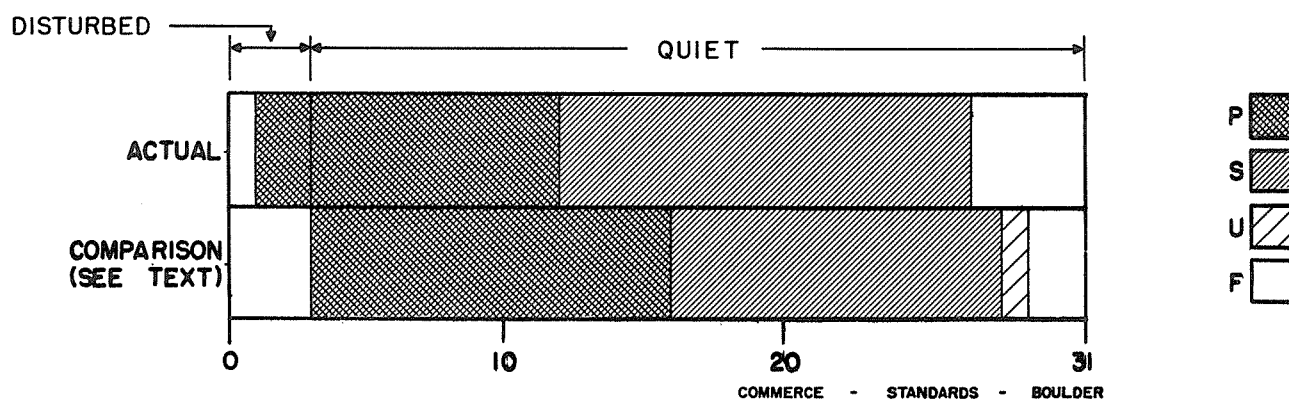
() represent disturbed values.

COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS NORTH PACIFIC JULY 1958

OUTCOME OF ADVANCED FORECASTS

1 TO 4 DAYS AHEAD



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			
Aug 11 Aug 15		10-10-10-06-11	4-1-3-2-1
Aug 16 Aug 25	Aug 17 Aug 18	08- <u>63</u> - <u>14</u> -08-05-	2-0- <u>1</u> -1-1-
	Aug 24 Aug 24	-07-29-10- <u>40</u> -17	-0-1-2-0-2
Aug 26 Aug 29	Aug 27 Aug 28	11- <u>34</u> - <u>09</u> -10	3-2- <u>3</u> -0

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