

CRPL-F 218 PART B

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PART B  
SOLAR - GEOPHYSICAL DATA

ISSUED  
OCTOBER 1962

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



## SOLAR - GEOPHYSICAL DATA

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The descriptive text was republished November 1961.  
Addenda to the text were published February 1962.

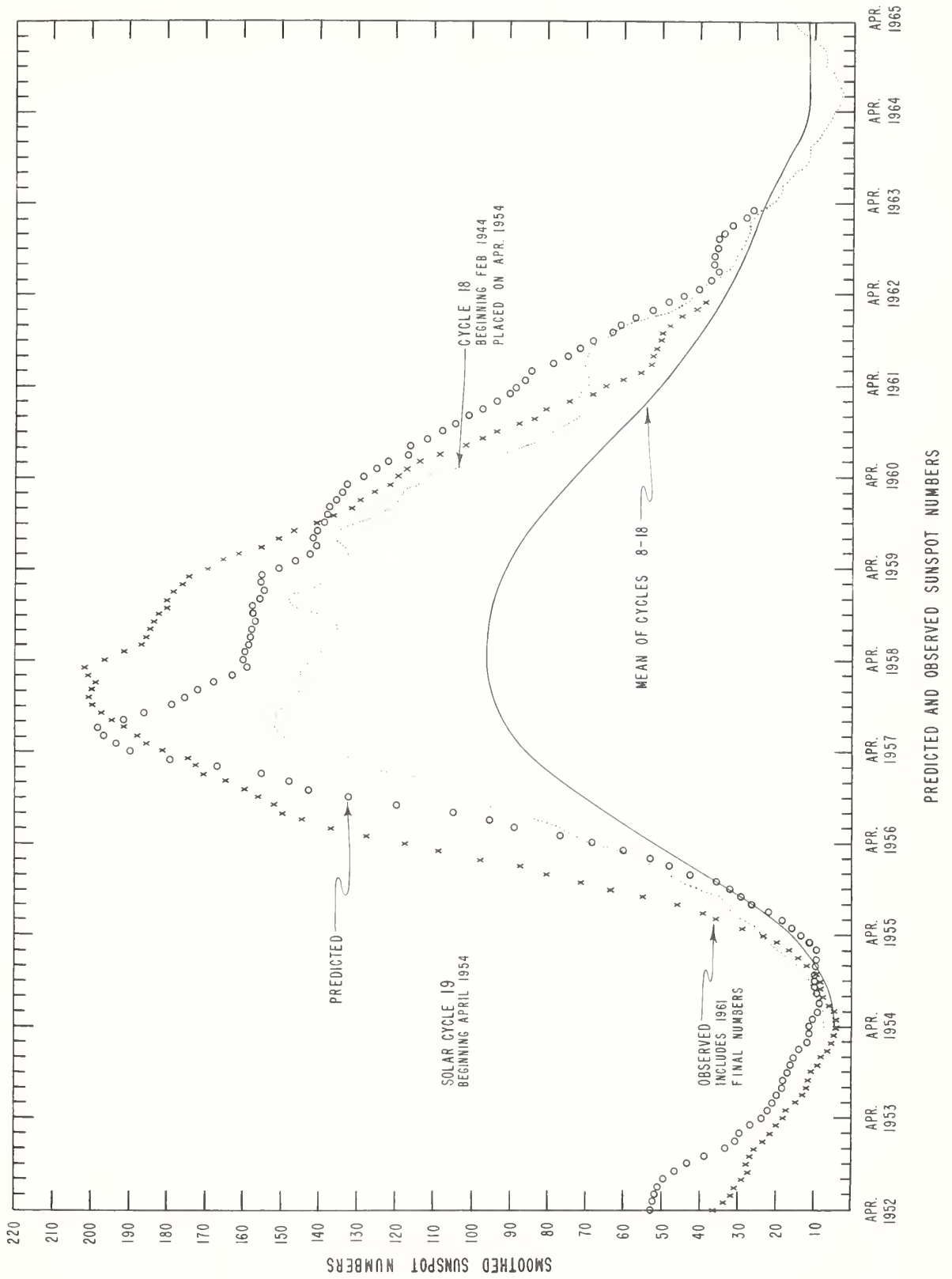
## DAILY SOLAR INDICES

Aug. 1962	American Relative Sunspot Numbers $R_A$
1	0
2	0
3	5
4	8
5	3
6	5
7	2
8	1
9	0
10	0
11	1
12	12
13	22
14	40
15	43
16	45
17	42
18	40
19	34
20	25
21	28
22	23
23	19
24	12
25	6
26	0
27	0
28	1
29	2
30	14
31	27
Mean:	14.8

Sept. 1962	Zürich Provisional Relative Sunspot Numbers $R_Z$	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	48	84
2	57	93
3	81	98
4	88	99
5	90	98
6	82	100
7	71	100
8	59	97
9	58	94
10	44	91
11	51	90
12	62	93
13	59	92
14	53	95
15	60	93
16	42	91
17	33	78*
18	35	86
19	24	84
20	24	84
21	32	83
22	32	81
23	41	82
24	54	82
25	53	84
26	55	84
27	51	84
28	47	83
29	36	86
30	46	90
31		
Mean:	52.3	89.3

\* = Doubtful,  
Receiver  
Trouble

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## CALCIUM PLAGE AND SUNSPOT REGIONS

SEPTEMBER 1962

CMP Sept. 1962	Lat	McMath Plage Number	Return of Region	Calcium Plage Data				Sunspot Data			
				CMP Values Area Int.		History, Age		CMP Values Area Count		History	
02.0	N10	6536	6504	500	3	l — l	2				
02.4	S07	6538	New	1,400	2	l ^ l	1	110	3	l \ l	
02.6	N09	6542	New	1,500	3.5	b ^ l	1	410	28	b / l	
04.5	N17	6544	6507	500	1.5	b — d	4				
05.8	N17	6547	6511	600	2	b — d	2	10	1	b — d	
08.6	N05	6546	*	2,700	3	l \ l	1,2	390	7	l — l	
09.5	S12	6548	New	(1,800)	(3)	l ^ l	1	320	7	b \ l	
10.0	S08	6549	New	700	2.5	b — l	1				
12.6	S09	6554	New	600	3	b — d	1	20	2	b — d	
14.7	N23	6551	**	600	3	l — d	1	30	3	b — d	
14.8	S14	6550	6529	1,300	2.5	l ^ l	2				
15.6	N01	6552	***	1,200	3	l \ l	2				
17.0	N23	6553	New	3,300	3.5	l / l	1	390	6	l ^ l	
18.2	N14	6556	New	400	2.5	l — d	1				
19.0	N02	6557	6524	400	2	b — d	4				
20.6	N00	6563a	+	(500)	(2)	b / l	1				
20.8	S18	6558	6540	700	3	b / l	2	60	2	b — d	
21.8	N19	6561	New	(200)	(2)	b / l	1				
22.6	S17	6563b	+	(400)	(2.5)	b / l	1				
24.6	N14	6559a	++	300	3.5	b \ d	1				
26.6	N09	6560	New	2,000	3.5	b / l	1	280	4	b — d	
29.6	N14	6559b	New	(800)	(3)	b ^ l	1	40	3	b — d	
29.6	N12	6562	+++	4,100	3	l \ l	2,3				

\* Partly 6514 and partly new

\*\* New in position of 6518

\*\*\* 6516 and 6522

+ The numbers 6559 and 6563 were each used inadvertently for two different regions, these separate regions are now being designated as 6559a and 6559b, and 6563a and 6563b

++ New and ephemeral

+++ 6536 and 6542

# MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

11b

SEPTEMBER 1962

Sept. 1962	Time Meas.	Lat.	Mer. Dist.	Type		Sept. 1962	Time Meas.	Lat.	Mer. Dist.	Type
1	1710	S07 N10 N06	E07 E13 E81	$\beta\gamma$ $\beta$ ap		10	1910	N06 S13 N22	W40 W18 E55	ap $\beta p$ af
2		S07 N10 N05	W06 W02 E68	$\beta\gamma$ $\beta$ ap		11	1655	N06 S14 N23 N21	W52 W30 E41 E71	ap $\beta p$ $\beta f$ $\beta\gamma$
3	1700	S07 N10 N06 S14	W20 W15 E55 E79	$\beta$ $\beta\gamma$ ap $\beta p$		13	0105	N06 S14 S10 N21	W70 W50 W03 E51	ap ap $\beta p$ $\beta p$
5	1655	S08 N10 N13 N05	W45 W40 E04 E28	af $\beta p$ af ap		14	1955	N21 N12	E28 E45	$\beta\gamma$ ap
6	1625	N10 S07 N14 N05 N05 S14 S08	W54 W58 W10 E15 E26 E36 E44	$\beta p$ af af ap ap $\beta p$ ap		16	0035	N21	E12	$\beta f$
						17	0035 1705	N22 N21	W00 W09	$\beta$ $\beta$
						27	2240	N14 N09	W53 W18	af $\beta p$
7	1635	N11 N14 N05 S14	W68 W24 E01 E23	$\beta p$ ap $\beta p$ $\beta p$		28	2355	N08 N13	W33 W03	$\beta p$ ap
						29	1645	N08 N11 S10 N10 N08	W42 W13 E40 E68 E70	$\beta p$ $\beta f^*$ ap $\beta$ ap
8	2340	N06 S13 N23	W16 E06 E74	ap $\beta$ $\beta$						
9	1645	N06 S13 N24	W25 W03 E67	ap $\beta$ $\beta$		30	1830	N09 S12 N10 N07	W60 E24 E54 E57	ap ap $\beta f$ ap

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\* Normal for Southern Hemisphere (Reversed).

# PROVISIONAL CORONAL LINE EMISSION INDICES

SEPTEMBER 1962

OMF Ref. 1962	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 <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	33	81	24a	43a	14	25	26a	45a	20	40	X	X	17	23	X	X
2	13	22	26	35	15	22	24	25	24	84	20	61	45	64	16	20
3	22	76	11	15	20	46	21	20	20	31	14	20	29	73	16	26
4	20	70	11	15	15	22	17	20	10	11	28a	25a	36	39	18a	25a
5	76	79	23	15	17	20	23	20	11	22	22a	34a	27	53	11a	21a
6	48a	60	25a	30a	21a	25a	20a	24a	16	22	X	X	26	36	X	X
7	38	67	27a	60a	14	22	17a	20a	X	X	X	X	X	X	X	X
8	50	120	34	64	21	48	20	25	45	67	15	10	20	62	17	25
9	41	92	24	40	25	70	21	26	49	80	14	22	23	35	15	25
10	17	22	X	X	27	64	X	X	22	34	20a	22a	16	20	13a	15a
11	X	X	X	X	X	X	X	X	16	36	22a	29a	20	31	15a	18a
12	X	X	15	20	X	X	26	34	20	40	20	27	26	31	9	11
13	25	70	16a	27a	11	25	10a	21a	29	44	21	25	20	25	12	14
14	41	78	13	20	40	78	11	18	X	X	X	X	X	X	X	X
15	25	48	X	X	22	47	X	X	21	56	X	X	39	50	X	X
16	28	52	76	88	22	39	41	60	X	X	X	X	X	X	X	X
17	12	17	21	38	10	20	21	24	X	X	X	X	X	X	X	X
18	14	22	36	58	10	17	24	31	8	20	20	23	36	64	27	42
19	19	31	22a	35a	13	17	16a	24a	20	39	14	22	9	11	22	30
20	13a	25a	X	X	24a	24a	X	X	18	48	X	X	9	11	X	X
21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	6	8	11	14	8	20	11	15	X	13	12	15	11	16	19	22
23	10	12	13	15	9	10	12	15	9	8	12	15	19	36	22	27
24	11	17	16	24	7	8	7	8	11	17	14	16	22	76	28	42
25	8	14	15a	20a	8	11	14a	16a	2	6	X	X	42	73	X	X
26	17	21	16	20	11	12	11	12	13	20	15	18	58	126	75	92
27	19	28	13	17	9	15	13	18	21	42	20	27	44	92	45	87
28	X	X	X	X	X	X	X	X	15	40	X	X	51	102	X	X
29	53	76	X	X	16	45	X	X	24	58	10	12	57	114	22	50
30	X	X	X	X	X	X	X	X	19	24	30	40	36	45	22	77

X = no observations

\* = yellow line

a = index computed from low weight data

coronal - STANDARD

BOULDER

# SOLAR FLARES

AUGUST 1962

OBSERVATORY	DATE	OBSERVED		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER DIST	M-MATH PLAGE REGION				TIME U.T.	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ho	
LOCKHEED	SEP 1 1962													
	01	0119	0134	0125	S05 E14			1-	1	0125	•20	•20		20
	01	0205	0210	NO FLARE	PATROL									
	01	0220	0240	NO FLARE	PATROL									
	01	0250	0315	NO FLARE	PATROL									
	01	0330	0335	NO FLARE	PATROL									
	01	0400	0525	NO FLARE	PATROL									
	01	0530	0555	NO FLARE	PATROL									
	01	0638	0702	D	N09 E20	6542	24 D	1						
	01	0818	0844	D	N09 E19	6542	26 D	1+						
WENDEL	01	0820	0837	0824	N09 E22	6542	17 D	1	3	0830	2•00	3•00 5•00 2•20		
	01	0917	0926	D	S07 E11			1-						
	01	1035	1044	D	S07 E09			1-						
	01	1055	1121	D	N09 E19			1-						
	01	1058	1118	D	N08 E16			1-						
	01	1150	1210	D	N09 E22	6542	20 D	1	3	1202	1•90	2•20		
	01	1301	1313	D	S07 E10			1-						
	01	1322	1402		S07 E10	6538	40	1				4•00		
	01	1341	1400		S05 E03	6538	19 D	1	3	1351	2•10	2•20		
	01	1353	1415	D	S07 E09	6538	22 D	1	3	1354	2•30	3•40		
MCMATH	01	1358	1415	D	N09 E16	6542		1-	2	1400	•30	•38		
	01	1558	1608		S07 E09	6538		1-	2	1559	•20	•20		10
	01	1614	1623		N08 E12			1-	2	1618	•40	•40		
	01	1614	1636		N09 E14	6542	22	1	4•00					
	01	1615	1628		N09 E16	6542		1-	2	1618	•20	•20		
	01	1702	1710		S08 E08	6538		1-	2	1703	•20	•20		
	01	1702	1721	D	S07 E08			1-	2					
	01	1732	1754	D	N09 E14			1-	2	1737	•50	•50		10
	01	1734	1746	D	N09 E13			1-	2					
	01	2040	2045		N09 E09	6536		1-	2	2043	•30	•30		20
LOCKHEED	01	2040	2048		N09 E09			1-	2	2043	•20	•20		10
	01	2142	2157		N09 E11			1-	2	2146	•90	•90		10
	02	0143	0202		S07 E04	6538	19	1		0143	•62		110	
	02	0235	0600	NO FLARE	PATROL			1-						
	02	0651	0705	D	N09 E02			1-						
	02	0718	E		S07 W02	6538		1						
	02	0719	0746	D	S07 W31	6538	27 D	2	3	0728	4•00	10•00		
	02	0721	0741	D	S05 E02	6538	20 D	1+				4•00		
	02	0834	0851	D	N09 E02			1-						
	02	1242	1313	1252	S06 W05	6538	31	1+				6•00		
WENDEL	02	1242	1319	1246	S07 W04	6538	43	1-	3	1246	1•60	1•70		
	02	1435	1515		S06 W06	6538		1+	2	1443	1•50	5•00		
	02	1439	1515	1443	S07 W05	6538		1-	3	1450	1•40	1•60		
	02	1440	1500	D	S05 W04			1-	3			1•40		
	02	1500	1508	D	N09 W01			1-	2	1554	•20	•20		
	02	1551	1600	1554	N09 W03	6542		1-	2					
	02	1552	1603	D	N09 W02			1-	2	1624	2•00	2•10		
	02	1619	1730	1624	S08 W07	6538	71	1	2	1624	2•00	7•00		
	02	1620	1656	D	S07 W05	6538	36 D	1+	2	1636	1•40	1•40		20
	02	1622	1712	1636	S05 W06			1-	2			•30		
LOCKHEED	02	1647	1658		N09 W03	6542		1-	2	1652	•30	•30		
	02	1647	1658		N09 W03	6542		1-	2					

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				MAX. INT °	PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX.	MATH PLAGE REGION	MEAS. AREA Sq. Deg				CORR. AREA Sq. Deg	MAX WIDTH Ha				
MCMATH MCMATH LOCKHEED	SEP 1 1962														
	02	1824	1845	1828	N09 W02	6542	1-	1-	2	1828	•30	•30	10		
	02	1846	1940	1852	S08 W08	6538	1-	1-	2	1852	•40	•40			
02	2117	2131	2123	N19 W11			1-	1-	2	2123	•30	•30			
ISTANBUL ARCETRI WENDEL WENDEL WENDEL WENDEL MCMATH WENDEL MCMATH MCMATH WENDEL	03	0145	0200	NO FLARE	PATROL										
	03	0205	0215	NO FLARE	PATROL										
	03	0235	0300	NO FLARE	PATROL										
	03	0310	0315	NO FLARE	PATROL										
	03	0330	0345	NO FLARE	PATROL										
	03	0350	0600	NO FLARE	PATROL										
	03	0700	0900		S13 E85	6548	1+	1+							
	03	0800	1000		S14 E85	6548	2	2	3	0850					
	03	1204	1216		S06 W16		1-	1-							
	03	1206	1212		N10 W13		1-	1-							
	03	1234	1244		S08 W11		1-	1-							
	03	1240	1245		N08 W12		1-	1-							
03	1240	1245		S06 W18	6548	1-	1-	2	1254	•20	1•50				
03	1250	1305	1254	S14 E88	6548	1-	1-	2	1254	•20	1•50				
03	1258	1312	1259	S06 W18	6538	1-	1-	2	1259	•20	•20				
03	1302	1314		S06 W18		1-	1-								
03	1304	1332	1318	S14 E85	6548	1-	1-	3	1319	•29	•50	15			
03	1316	1323	1319	S14 E88	6538	1-	1-	2	1350	•10	•10				
03	1348	1402	1350	S06 W19		1-	1-	2		•40	•40				
03	1348	1404	1354	S06 W17		1-	1-	3		•29	•29	16			
03	1421	1432	1422	N09 W14	6542	1-	1-	3	1422	•50	•50				
03	1447	1500	1448	S14 E85	6548	1-	1-	3	1448	•40	1•50				
03	1513	1527	1518	S09 W18	6538	1-	1-	2	1518	•20	•30				
03	1552	1604	1556	S14 E85		1-	1-	3		•14	•14	16			
03	1553	1600	1555	S14 E85	6548	1-	1-	3	1555	•20	7•00				
03	1554	1612	1604	S06 W18		1-	1-	3		•72	•72	16			
03	1557	1615	1615	S06 W20	6538	1-	1-	3		•40	•40				
03	1600	1609	1605	S05 W19		1-	1-	2	1605	•30	•30	10			
03	1718	1729	1723	S11 E80		1-	1-	2	1605	•20	•60	10			
03	1804	1815	1807	N07 W22		1-	1-	2	1723	•10	•10	10			
03	1830	1921	1837	N09 W24	6536	1	1	2	1837	4•70	4•70	20			
03	1833	1919	1840	N10 W23	6536	46 D	2	2	1840	4•50	5•10	18			
03	1834	1918	1834	N08 W24	6536	44 D	2	2		5•49	5•49				
03	1854	1906	1854	N09 W29			1-	1-	2	1854	•80	•90			
03	1900	1930		N11 W22	6536	30 D	1	1	1900	4•12	4•12				
03	1937	1953		S08 W21	6538		1-	1-	2		•50	•60			
03	2127	2134	2128	S06 W24	6538		1-	1-	2	2128	•20	•30			
03	2239	2320	2245	S08 W22			1-	1-	2	2245	•20	•20	20		
03	2239	2344	2314	S07 W22			1-	1-	1	2245	1•16	1•18	16		
03	2239	2344	2248	S07 W22			1-	1-	2						
03	2352	0125	0011	S05 W20			1-	1-	2	0011	1•60	1•60	20		
03	2352	0125	0104	S05 W20			1-	1-							
03	2353	0047	0023	S06 W24	6538		1	1	3	0023	3•30	3•40			
04	0125	0255	NO FLARE	PATROL											
04	0305	0325	NO FLARE	PATROL											

[illegible]

# SOLAR FLARES

SEPTEMBER 1962

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.	CORR AREA Sq Deg.	MAX WIDTH H <sub>g</sub>	
CAPRI S SAC PEAK CAPRI S MCMATH HUANCAYO MCMATH SAC PEAK MCMATH SAC PEAK HONOLULU SAC PEAK LOCKHEED SAC PEAK	SEPT 1962													
	07	0950	1004	S07 E35		6548	143 U	1-	3	0956	1.30	1.90		
	07	1507	1730 U	S15 E24			52 D	2	3		8.77	9.34		22
	07	1508 E	1600 D	S13 E24		6548		1	3	1527	1.80	2.20		
	07	1508	1730	S15 E24		6548	142	1+	3	1530	3.00	3.50		
	07	1515	1556	S12 E27				1-	2	1521	1.70	1.90	2.40	
	07	1742	1807	S14 E22		6548		1-	2	1749	.80	.90		
	07	2021 E	2030	N12 W70				1-	2		.58	1.03		15
	07	2021	2035	N13 W70		6536		1-	1	2025	.20	.60		
	07	2152	2215 D	N07 E02		6546		1-	2	2156	1.50	1.50		
SAC PEAK LOCKHEED HONOLULU SAC PEAK SAC PEAK LOCKHEED SAC PEAK	07	2152	2223	N08 E02		6546	31	1	2	3.01	3.01		19	
	07	2153	2222	N07 E03				1-	1	2157	1.30	1.30	20	
	07	2154	2208	N08 W01				1-	3	2200	1.03	1.03		
	07	2231	2244	N09 W75				1-	2		.29	.62	16	
	07	2231	2248	N12 W67				1-	1	2235	.30	.50	20	
	07	2304	2317	S09 E27				1-	2		.43	.45	16	
	08	0150	0315	PATROL										
	08	0325	0355	NO FLARE										
	08	0400	0425	NO FLARE										
	08	0635	0645	NO FLARE										
MCMATH SAC PEAK SAC PEAK	08	1257	1305	S13 E11		6548		1-	3	1259	.50	.60		
	08	1408	1415	S16 E10				1-	3		.33	.35	16	
	08	1432	1445	N09 W14				1-	3		.19	.17	17	
	09	0220	0240	PATROL										
	09	0315	0320	NO FLARE										
	09	0400	0410	NO FLARE										
	09	0420	0430	NO FLARE										
	09	0435	0445	NO FLARE										
	09	0450	0605	PATROL										
	09	1453	1554 D	N24 E69		6551	61 D	1			4.00	4.00		
SAC PEAK SAC PEAK HUANCAYO SAC PEAK SAC PEAK	09	1456	1542	N24 E20				1-	3		.58	1.03	17	
	09	1501	1506	N07 W23				1-	3		.12	.10	15	
	09	1505 E	1546 D	N16 E55				1-	2					
	09	1913	1922	N04 W23				1-	3		1.13	1.16	17	
	09	2115	2120	N04 W25				1-	3		.17	.17	17	
	10	0135	0145	PATROL										
	10	0220	0230	NO FLARE										
	10	2312	2406	N10 W38				1-	2	2321	1.10	1.20	20	
	10	2313	2355	N09 W39				1-	3		1.44	1.59	16	
	10	2313	2355	N09 W39				1-						
SAC PEAK KOMASAN HONOLULU HONOLULU CAPRI S ARCETRI SALTSJOBAD	10	2313 E	2358 D	N07 W41		6546	45 D	1	2	2316	1.13	1.25	.86	120
	10	2314	2350 D	N10 W38				1-		2324	1.13	1.25		
	11	0056	0130 D	N19 E90		6553	34 D	1	1	0120	.72	2.09		
	11	0200	0305	NO FLARE										
	11	0350	0355	NO FLARE										
	11	0603 E	0633 D	N17 E80		6553	30 D	1	3	0628	1.00	3.50		
	11	0814 E	0845 D	N29 E72		6553	31 D	1	3	0845				
	11	0912 E	1000 D	N22 E70		6553	48 D	1	2		1.30	3.60		

# SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURATION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	AFFIX LAT.	MER. DIST.	MC MATH PLACE REGION				TIME U T	MEAS AREA Sq Deg	CORR. AREA Sq Deg	MAX WIDTH H <sub>o</sub>	
SAC PEAK	11 SEPT 1962	1652 E	1701 D	N23 U	E43			1-	3		.43	.50		16
	11	1730	1755	NO FLARE	PATROL									
	12	0200	0605	NO FLARE	PATROL									
	12	1206 E	1250			N21 E60 6553		1-	2	1212	.60	1.20		
	12	1335	1400			N21 E60 6553		1-	2	1340	.70	1.50		
	12	1435	1450			N21 E60 6553		1-	2	1440	.20	.40		
	12	1455 E	1534	1459		S18 W42 6553		1-	2		.58	.70		17
	12	1522	1539	1530		N21 E59 6553	17	1-	2	1528	1.16	1.65		16
	12	1522	1540	1528		N21 E58 6553		1-	2		.70	1.50		16
	12	1635 E	1645	1636		N21 E57 6553		1-	2		.72	1.03		16
	12	1814	1821	1817		N21 E57 6553		1-	2	1817	.10	.20		
	12	1943	2050			N21 E57 6553		1-	2	1955	.50	1.00		
CAPRI S	13	0150	0210	NO FLARE	PATROL									
	13	0220	0255	NO FLARE	PATROL									
	13	0305	0315	NO FLARE	PATROL									
	13	0325	0340	NO FLARE	PATROL									
	13	0420	0455	NO FLARE	PATROL									
	13	0515	0635	NO FLARE	PATROL									
	13	0919 E	0935			N24 E48 6553	16 D	1+	3	0928	1.40	2.30		
	13	0925 E	0940 D	0930		N22 E55 6553	15 D	1	3		2.50	4.50		
	13	0952 E	1030 D	0955		S17 W52 6553		1-	3	1008	1.00	1.80		
	13	1010 E	1010 D			S15 W53 6553		1-	3	1019	1.00	1.80		
	13	1014 E	1041 D			S15 W53 6553		1-	3	1100	.70	1.20		
	13	1054	1113 D			N21 E49 6553		1-	3		2.00	3.60		
SALTSJOBAD	13	1100 E	1111 D	1105		N22 E55 6553	11 D	1	2		.20	.40		
	13	1213	1235 D			N23 E52 6553		1-	3	1220	1.00	1.60		
	13	1236	1315	1245		N22 E50 6553		1-	3	1245	.90	1.40		
	13	1356	1425	1358		N22 E49 6553		1-	2	1358	.20	.30		
	13	1440	1447	1442		N23 E49 6553		1-	1	1442	.20	.30		
	13	1520	1530	1522		N22 E49 6553		1-	2	1522	.30	.40		
	13	1641	1656 D	1643		N22 E48 6553		1-	2	1643	.20	.30		
	13	1645	1650	1648		N30 E40 6553		1-	2	1649	.20	.30		
	13	1705 E	1736	1707		S09 W14 6553		1-	2	1707	1.20	1.20	1.80	20
	13	1729	1739	1733		N22 E43 6553		1-	2	1733	.30	.40		10
	13	1758	1810	1806		N22 E47 6553		1-	2	1806	.30	.40		
	13	2107 E	2126 U	2110 D		N23 E44 6553		1-	2		.41	.47		16
WENDEL	14	0145	0155	NO FLARE	PATROL									
	14	0205	0605	NO FLARE	PATROL									
	14	0643 E	0651 D			N24 E37 6553		1-						
	14	0951 E	0959 D			N23 E36 6553		1-						
	14	1105 E	1109 D			N23 E35 6553		1-						
	14	1344	1350	1345		N22 E36 6553		1-	3	1345	.10	.10		
	14	1356 E	1447	1414		N23 E33 6553	51 D	1-	3	1414	.20	.20		
	14	1504 E	1555 D	1509		N24 E31 6553		1-	2	1509	.20	.20		
	14	1507	1515 D	1509		N23 E32 6553		1-	2	1538	.30	.30		
	14	1535	1555	1538		N23 E32 6553		1-	2	1538	.58	.62		16
	14	1536	1548 D	1538		N23 E33 6553		1-	1		.50	.50		10
	14	1721	1739	1728		N22 E32 6553		1-	2	1728	.50	.50		
LOCKHEED	14	0155	0155	NO FLARE	PATROL									
	14	0205	0605	NO FLARE	PATROL									
	14	0643 E	0651 D			N24 E37 6553		1-						
	14	0951 E	0959 D			N23 E36 6553		1-						
	14	1105 E	1109 D			N23 E35 6553		1-						
	14	1344	1350	1345		N22 E36 6553		1-	3	1345	.10	.10		
	14	1356 E	1447	1414		N23 E33 6553	51 D	1-	3	1414	.20	.20		
	14	1504 E	1555 D	1509		N24 E31 6553		1-	2	1509	.20	.20		
	14	1507	1515 D	1509		N23 E32 6553		1-	2	1538	.30	.30		
	14	1535	1555	1538		N23 E32 6553		1-	2	1538	.58	.62		16
	14	1536	1548 D	1538		N23 E33 6553		1-	1		.50	.50		10
	14	1721	1739	1728		N22 E32 6553		1-	2	1728	.50	.50		

SOLAR FLARES  
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# SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MCMATH PLACE REGION							
LOCKHEED	18	1824	1850	1828	N21 W19		1-	2	1828	.30		10
	19	0130	0240	NO FLARE	PATROL							
	19	0250	0315	NO FLARE	PATROL							
	19	0325	0345	NO FLARE	PATROL							
	19	0350	0355	NO FLARE	PATROL							
	19	0450	0555	NO FLARE	PATROL							
	19	1900	1935	1915	N24 W36							
	19	1907	1911	1907 U	N24 W36		1-	2	1915	.40		10
	19	1907	1927	1927 D	N25 W37		1-	1	1913	.78		16
	19	2135	2200	2145	N12 E78	6553	1-	2	2145	.80		10
LOCKHEED	19	2225	2245	2231	N12 E78		1-	2	2231	.50		10
	20	0510	0530	0517	N21 W38	6553	1	2	0517	1.13		
	20	0520	0530	0530 D	N23 W44		1-		0520		1.40	
	20	0850	0945	NO FLARE	PATROL							
	20	1000	1045	NO FLARE	PATROL							
	20	1050	1215	NO FLARE	PATROL							
	20	1506	1510	1507	N22 W47		1-	3	1811	.14		16
	20	1809	1825	1811	N22 W48		1-	2		.60		10
	20	1809	1829	1812	N23 W47		1-	3		.78		16
	21	0030	0040	NO FLARE	PATROL							
MCMATH SAC PEAK MCMATH	21	0050	0135	NO FLARE	PATROL							
	21	0155	0255	NO FLARE	PATROL							
	21	0335	0350	NO FLARE	PATROL							
	21	0430	0555	NO FLARE	PATROL							
	21	0605	0650	NO FLARE	PATROL							
	21	0715	0725	NO FLARE	PATROL							
	21	0730	0800	NO FLARE	PATROL							
	21	0840	0905	NO FLARE	PATROL							
	21	1010	1020	NO FLARE	PATROL							
	21	1025	1040	NO FLARE	PATROL							
MCMATH SAC PEAK MCMATH	21	1045	1145	NO FLARE	PATROL							
	21	1314	1321	1314	N22 W65	6553	1-	2	1314	.70	1.50	15
	21	1611	1617	1612	N07 E70		1-	2		.19	.33	
	21	1838	1846	1840	N07 E69	6560	1-	2	1840	.20	.50	
	22	0045	0050	NO FLARE	PATROL							
	22	0135	0150	NO FLARE	PATROL							
	22	0530	0820	NO FLARE	PATROL							
	22	0825	0840	NO FLARE	PATROL							
	22	0845	0915	NO FLARE	PATROL							
	22	1005	1350	NO FLARE	PATROL							
LOCKHEED HONOLULU LOCKHEED	22	1405	1540	NO FLARE	PATROL							
	22	1833	1853	1842	N06 W23		1-	2	1842	.10	.10	10
	22	2055	2117	2101	N24 W81	6553	1	2	2101	1.00	2.90	10
	22	2058	2114	2104	N14 W90	6552	1	2	2104	1.13	3.29	10
	22	2312	2330	2319	N07 E90		1-	2	2319	.20	1.00	20
	23	0610	0625	NO FLARE	PATROL							

# SOLAR FLARES

## SEPTEMBER 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURATION — MINUTES	IM-PORTANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT	MATH. PLACE REGION				MEAS. AREA Sq Deg.	COBL. AREA Sq Deg.	MAX. WIDTH R <sub>g</sub>	MAX. INT. I <sub>g</sub>
LOCKHEED	23 1962	0750	0820		NO FLARE							
	23	1005	1220		PATROL		1-	2	.20	1.00		10
	23	1620	1645		N23 W90		1-	2	.30	.30		10
	23	1940	2015		N09 E41		1-	2	.20	.20		10
MCMATH	24	0125	0135		NO FLARE							
	24	0415	0855		PATROL							
	24	0900	0925		NO FLARE							
	24	1005	1110		PATROL							
LOCKHEED	24	1130	1320		NO FLARE							
	24	1522	1545		N10 E61	6562	1-	3	.60	1.20		10
	24	1724	1755		N17 W08		1-	2	.30	.30		10
	24	1843	1903		N17 W08		1-	2	.20	.20		10
LOCKHEED	24	1934	2030		N17 W08		1-	2	.20	.20		10
	24	2030	2030		N17 W08		1-	2	.30	.30		10
	24	2230	2325		N17 W08		1-	2	.30	.30		10
	24	2330	2335		N17 W08		1-	2	.30	.30		10
WENDEL	25	0300	0620		NO FLARE							
	25	0618	0725		PATROL		2	3	5.00	12.00		10
	25	0620	0720		N13 E48	6562	2	3	2.10	8.50		10
	25	0712	0741		N14 W14	6559	1+	3	2.10	2.10		10
LOCKHEED	25	0713	0748		N15 W14	6559	1+			6.00		
	25	1610	1624		N16 W20		1-					
	25	1645	1725		NO FLARE							
	25	1800	1905		N16 W25		1-	2	.20	.20		10
LOCKHEED	25	1800	1905		N16 W25		1-	2	.20	.20		10
	25	2114	2132		N09 E11		1-	2	.20	.20		10
	25	2207	2230		N21 W57		1-	2	.43	.60		16
	25	2208	2242		N19 W56		1-	2	.20	.20		10
WENDEL	26	0020	0045		NO FLARE							
	26	0230	0400		PATROL							
	26	0520	0620		NO FLARE							
	26	1645	1835		NO FLARE							
SAC PEAK	26	2015	2025		NO FLARE							
	26	2225	2240		NO FLARE							
	27	0055	0120		NO FLARE							
	27	0245	0320		NO FLARE							
WENDEL	27	0340	0400		NO FLARE							
	27	0530	0625		NO FLARE							
	27	0711	0717		N12 E29		1-					
	27	1508	1523		N09 W10		1-					
WENDEL	27	1735	1755		NO FLARE							
	27	2045	2110		NO FLARE							
	27	2115	2135		NO FLARE							
	28	0210	0345		NO FLARE							

# SOLAR FLARES

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OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURATION -- MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX.	MAX PHASE				LAT.	MER DIST	McMATH FLARE REGION	TIME		MEAS AREA Sq. Deg.
WENDEL	SEP 1962													
	28	0530	0600	NO FLARE		PATROL	1-							
	28	1510 E	1522 D	N15 W58										
	28	1720	1725	NO FLARE		PATROL								
	28	1735	1740	NO FLARE		PATROL								
	28	1810	1815	NO FLARE		PATROL								
	28	1830	1915	NO FLARE		PATROL								
	28	2025	2045	NO FLARE		PATROL								
	28	2100	2105	NO FLARE		PATROL								
	28	2115	2150	NO FLARE		PATROL								
LOCKHEED	29	0025	0140	NO FLARE		PATROL								
	29	0550	0600	NO FLARE		PATROL								
	29	0735	0740	NO FLARE		PATROL								
	29	1035	1405	NO FLARE		PATROL								
	29	1620	1638	1626		N09 E68	1-		1626	.60	1.10		10	
	29	1621	1634	1628		N09 E71	1-			.43	.78		17	
	29	1622	1633	1627		N09 E70	1-		1627	.20	.60		10	
	29	1647	1730	1700		N09 E68	1-		1700	.50	.90		10	
	29	1750	1845	1715		N09 E68	1-			.50	.90		10	
	29	1750	1845	1820		N09 E68	1-		1803	.29	.52		16	
SAC PEAK	29	1810	1830	1824		N10 E70	1-			.29	.52		16	
	29	1818	1825	1821		N09 E69	1-		1821	.20	.60		20	
	29	1753	1810	1757		N09 W45	1-		1757	.60	.70		20	
	29	1753	1825	1804		N10 W42	1-			.87	.99		19	
	29	1754	1808	1756		N08 W45	1-		1756	.40	.60		10	
	29	1915	2100	1945		N09 E68	1-		1945	.80	1.40		10	
	29	1915	2100	2005		N09 E68	1-			.29	.66		16	
	29	1956	2022	2015		N11 E78	1-			.30	.80		10	
	29	2006 E	2014 D			N09 E68	1-		2010	.29	.66		16	
	29	2039 E	2053	2041		N09 E68	1-		2041	.30	.80		10	
WENDEL	29	2238	2335	2248		N09 E67	1-		2248	.50	.90		10	
	29	2238	2335	2320		N09 E67	1-							
	30	0014	0055	0018		N10 E68	1		0018	1.20	.21		10	
	30	0016	0028 D			N08 E65	1		0016	1.03		1.42	100	
	30	0105	0440	NO FLARE		PATROL								
	30	0616 E	0649			N10 E59	1			4.00				
	30	1032 E	1051 D			S08 E32	1			3.00				
	30	1122	1143			S08 E30	1			3.00				
	30	1124	1135			S15 E25	1-		1128	1.00	1.20			
	30	1208	1224			N10 E56	1			3.00				
CAPRI S	30	1208 E	1228	1213		N10 E59	1-		1213	.50	1.00			
	30	1209	1225 D			N10 E59	1-		1215	.20	.40		15	
	30	1543	1551	1547		N08 E60	1-			.14	.21		16	
	30	1553	1620	1600		N10 E58	1			.72	1.01		16	
	30	1555	1608			N10 E57	1-		1558	.20	.40		10	
	30	1555 E	1615	1555 U		N10 E55	1-		1555	.80	1.10		10	
	30	1745	1800	1800		N10 E55	1		1800	1.90	2.60		10	
	30	1745	1830	1830		N10 E55	1							
	30	1800	1850 D	1803		N10 E57	1-		1803	.20	.40			

# SOLAR FLARES

## SEPTEMBER 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURATION MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. MER DIST				TIME U.T.	MEAS AREA Sq. Deg.	CORR AREA Sq. Deg.	MAX WIDTH He	
MCMATH	30	1800	1850 D	N10 E57			1-	2	1815	.20	.20		10
	30	1808	1840	S13 E24			1-	3		.21	.23		16
SAC PEAK	30	1810	1824	S13 E26			1-	2	1815	.10	.10		17
	30	1812	1825	S12 E25	6564		1-	3		1.49	.70		20
MCMATH	30	1815	1829	N08 W60			1-	2	1821	.50	.40		20
	30	1815	1832	N06 W59			1-	2	1821	.40	.80		20
MCMATH	30	1818	1827	N07 W60	6560		1-	2	1930	1.20	1.60		20
	30	1924	2037	N10 E54			1-	1	1932	.40	.80		
LOCKHEED	30	1924	2037	N10 E54			1-	1	1935	.50	.90		16
	30	1930	2010	N10 E56	6566		1-	3	2040	.30	.30		10
MCMATH	30	1933 E	1937 D	N11 E60			1-	2	2229	.30	.40		10
	30	2002	2019	N10 E57			1-	2	2254	.20	.30		10
SAC PEAK	30	2035	2052	S13 E24			1-	2	2305	1.13	.20		110
	30	2215	2245	N10 E54			1-	2	2314	.20	.20		10
LOCKHEED	30	2247	2300	N08 E53			1-	2					
	30	2255	2312	S10 E22			1-	2					
IKOMASAN	30	2310	2316				1-	2					
	30						1-	2					

ATHENS	ATHENS, GREECE	HTE-PROVEN	HAUTE-PROVENCE	NEW SCHAUM	FREIBURG, GFR
BAKOU	PIRCULI, USSR	HONOLULU	HAWAII, USA	NERA	NEDERHORST den BERGH,
CAPETOWN	ROYAL OBSERVATORY,	IKOMASAN	KYOTO, JAPAN		NETHERLANDS
	CAPE OF GOOD HOPE	KIEV KO	KIEV GAO, USSR	NIZMIR	KRASNAYA PAKHRA, USSR
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV KY	KIEV UNIVERSITY, USSR	SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
CAPRI S	CAPRI, ITALY (SWEDISH)	LOCKHEED	LOS ANGELES, CALIF., USA	SALTSJÖBÄDEN	STOCKHOLM, SWEDEN
CRIMEE	SIMEIZ, USSR	MCMATH	MCMATH-HULBERT	SCHAUTINS	SCHAUTINSLAND, GFR
HERSTIMONCEU	ROYAL GREENWICH OBSERVATORY,	MOSCOU	PONTIAC, MICH., USA	TACHKENT	TASHKENT, USSR
	HERSTIMONCEUX, ENGLAND		MOSCOW-GAISH, USSR	WENDEL	WENDELSTEIN, GFR

ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

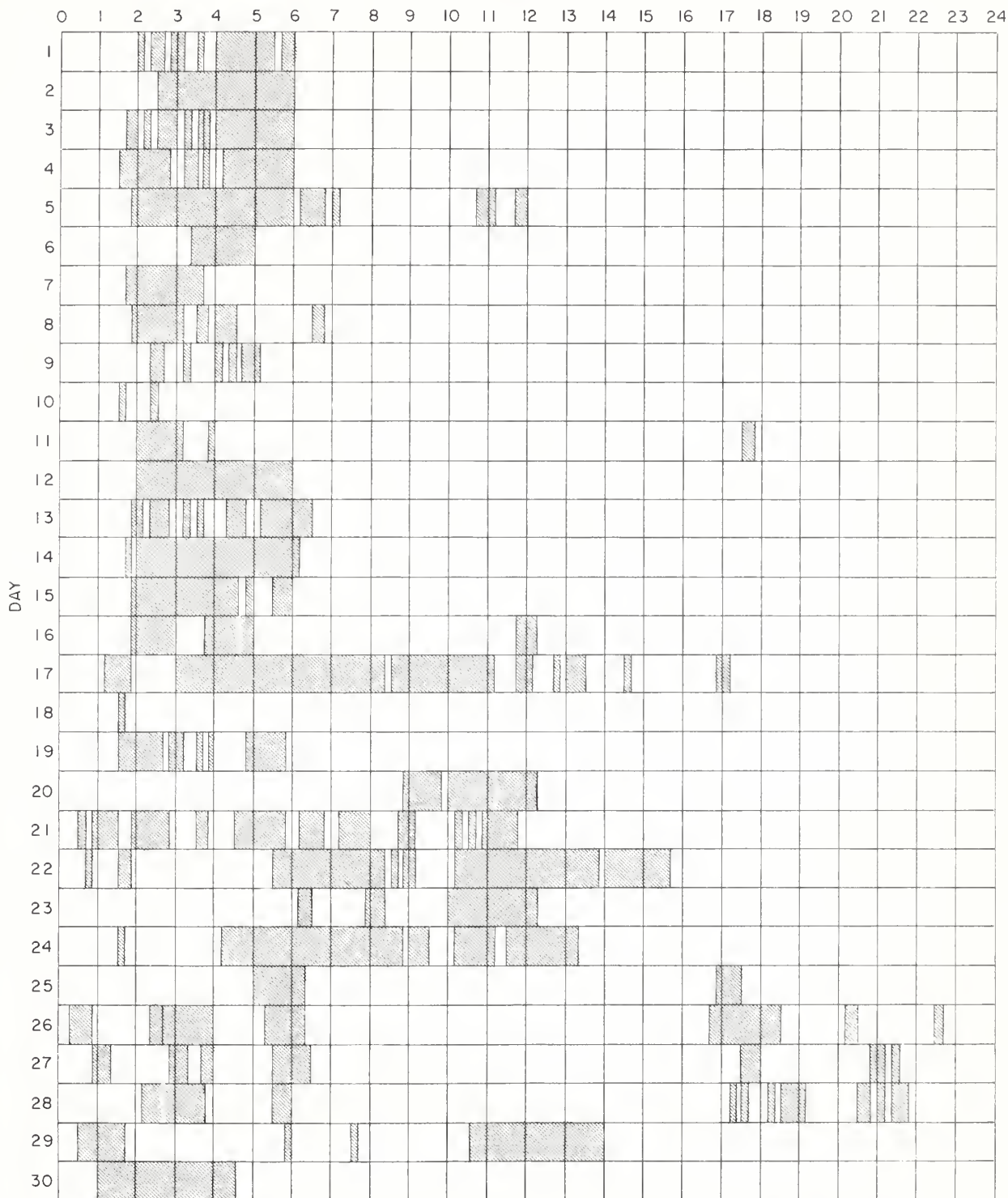
E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

# INTERVALS OF NO FLARE PATROL OBSERVATIONS

IIIk

SEPTEMBER 1962

HOUR-UT



Stations include:

Arcetri	Honolulu	Kodaikanal	Sacramento Peak
Capri (Swedish)	Ikomasan	Lockheed	Wendelstein
Herstmonceux	Istanbul	McMath-Hulbert	

COMMERCE - STANDARDS - BOULDER

# SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT
										TIME	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H <sub>g</sub>	MAX INT I <sub>g</sub>
ATHENES UCCLE UCCLE UCCLE UCCLE UCCLE UCCLE CAPETOWN	JUNE 1962	START	END	LAT.	MER. DIST.	MC-MATH PLACE REGION				U. T.				
	01	0552	0622	N12	E67			1-	2		.30	.80		
	01	0907 E	0923	S10	W65			1-	3					
	01	0930	0940	S05	W66			1-	3					
	01	0948	0951	N12	W73			1-	3					
	01	1012 E	1016 D	N12	W76			1-	3					
	01	1014 E	1016	S10	W66			1-	3					
	01	1034 E	1038	S07	W66			1-	3					
	01	1125 E	1158	S07	W65			1-	3					
	01	1203	1238	N16	W85	6426	35	1		1213	.60			
CAPETOWN CAPETOWN	02	0055	0135	PATROL										
	02	0145	0150	PATROL										
	02	0750	0826	N16	W90	6426	36	1		0800	.50			
	02	1142	1206	N09	W85	6426	24	1		1146	.60			
UCCLE UCCLE UCCLE UCCLE	03	0110	0150	PATROL										
	03	0240	0300	PATROL										
	03	0445	0515	PATROL										
	04	0000	0015	PATROL										
	04	0040	0105	PATROL										
	04	0115	0150	PATROL										
	04	0913	0929	S06	E88			1-	3	0919				
	04	1144	1206 D	N10	E20			1-	2					
	04	1436 E	1441	N10	E20			1-	3					
	04	1734	1741	S06	E88			1-	3					
ATHENES NEW SCAUTIN SCHAUTINS UCCLE UCCLE UCCLE HTE-PROVEN	05	0120	0145	PATROL										
	05	0740	0820	S08	E23			1-	1		1.30	1.40		
	05	0748 E	0810 D				22 D	1	2					
	05	0800 E	0808	S06	E30			1-	2		3.00			
	05	0843 E	0912	S10	E88			1-	2	0848				
	05	0843 E	0912	S07	E25			1-	2					
	05	0852	0945	S10	E75			1-	3					
	05	0924	1039	N08	E08	6436	75	1	3	0931				
	05	0930	1100	N08	E05			1-	3					
	05	1008	1038	S11	E75			1-	3	1011				
CLIMAX UCCLE UCCLE UCCLE UCCLE UCCLE UCCLE UCCLE	05	1039	1056	S08	E75			1-	3					
	05	1228	1237	S08	E73			1-	3		.30	.70		
	05	1234	1245	S10	E80			1-	3					
	05	1300	1311	S10	E74			1-	3					
	05	1315	1343	S10	E74			1-	3					
	05	1436	1443	S10	E78			1-	3					
	05	1520	1538	S10	E78			1-	3					
	05	1616	1630	S08	E74			1-	3					
	05	1723	1735	S08	E74			1-	3					
	05	1724	1735	S08	E76			1-	3					
UCCLE	05	1739	1757 D	S10	E76			1-	3					
	06	0000	0040	PATROL										
UCCLE	06	0055	0415	PATROL										



# SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS COND.	MEASUREMENTS				MAX INT °	PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX PHASE	APPROX LAT	MER DIST				MC-MATH FLAGE REGION	MEAS AREA Sq. Deg	CORR AREA Sq. Deg	MAX WIDTH He		
UCCLE	14	1408	1418		S11 E04		6445	10	1	3					
UCCLE	14	1630	1638		S10 E06		6445	20	1	3					
UCCLE	14	1648	1708		S10 E06		6445								
ATHENES	15	0850 E	0908 D		S12 W05		6445	5	1-	3		1.30	1.40		
UCCLE	15	1134	1139		S15 W10		6445		1	3					
UCCLE	15	1353	1356		N08 E13		6445		1-	3					
UCCLE	15	1413	1425		N07 E08		6445		1-	3					
UCCLE	15	1532	1551		S15 E20		6445		1-	3					
UCCLE	15	1631	1641		S13 W15		6445		1-	3					
UCCLE	15	1710 E	1733 D	1724	S13 W15		6445		1-	3					
CLIMAX	15	2244	2319 D	2256	S12 W17		6445	20	1-	2		1.60	1.60	68	
VOROSHILOV	15	2245	2305	2247	S11 W16		6445		1			1.97			
	16	0155	2000	NO FLARE	PATROL										
	16	1050	1055	NO FLARE	PATROL										
CLIMAX	17	0113 E	0119 D		S05 W90				1-			.40	2.00		
ATHENES	17	0548 E	0602		S11 W33				1-			1.20	1.40		
ATHENES	18	0546 E	0557		S12 W49				1-						
ATHENES	18	0635 E	0646		S12 W50				1-			.80	1.20		
UCCLE	18	0823 E	0838 D	0834	S10 E80				1-			.10	.20		
UCCLE	18	0823 E	0841 D	0834	N15 E67	6459		18 D	1	2					
UCCLE	18	0912 E	0918 D		S10 E80				1-						
UCCLE	18	0912 E	0918 D		N15 E67				1-						
UCCLE	18	0923	0946	0932	S10 E80				1-						
UCCLE	18	0923	0951		N15 E67				1-						
UCCLE	18	0935	0946		S14 W52				1-						
UCCLE	18	0959 E	1017 D		S10 E79				1-						
UCCLE	18	0959 E	1048 D	1005	N15 E67				1-						
UCCLE	18	1106	1128		N15 E67				1-						
UCCLE	18	1206	1218 D		S12 W52				1-						
UCCLE	18	1300			N15 E65				1-						
UCCLE	18	1346	1356		S14 W53				1-						
UCCLE	18	1347	1356		N14 E65				1-						
UCCLE	18	1409	1428		S14 W53				1-						
UCCLE	18	1411	1435		N14 E66				1-						
UCCLE	18	1411	1438		S10 E78				1-						
UCCLE	18	1435	1512		S14 W51	6459		7	1-						
UCCLE	18	1441	1448		N14 E65				1-						
UCCLE	18	1519	1610		S14 W53				1-						

# SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE	OBSERVED TIME		LOCATION			DURATION MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX.	LAT.	MER DIST				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH H <sub>fo</sub>	
	JUNE 1962									TIME U T			
ATHENES	20	0730 E	0738 D	S08 W76			8 D	1+	2		4.40	4.60	G-SWF
KHARKOV	20	1130 E	1146	S12 W75			16 D	1+		5.70	5.70	2.00	
ATHENES	20	1156 E	1207	S10 W83			11 D	1+	3	.60	4.00		
CLIMAX	20	1536	1545	S15 E49				1-		.40	.50		
CLIMAX	20	2037 E	2047 D	N16 E34			10 D	1		3.10	3.40		
CRIMEE	21	0620 E	0735 D	N19 E25			75 D	2	2	9.00	19.50		
ABASTUMANI	21	0622 E	0755 D	N18 E26			93 D	2	2	16.20	1.50		
ATHENES	21	0625	0642	N17 E24				1-	1	1.30	3.70		
HTE-PROVEN	21	0635 E	0730	N17 E25			55 D	1		3.20			
BAKOU	21	0647 E	0744 D	N20 E29			57 D	1	3	.93			
NIZMIR	21	0708 E	0737	N21 E27				1-	2	.90			G-SWF
CRIMEE	21	0745	0754	N18 E24				1-	1	.60			
ATHENES	21	0745	0755	N17 E25				1-	1				
ATHENES	21	2210	2215	PATROL									
ALMA ATA	22	0246	0254	N16 E10				1-		.62			
BAKOU	22	0732 E	0808 D	N15 E08				1-	2	1.37			
HTE-PROVEN	22	0825	0836	N16 E07				1-		1.80	1.90		
ATHENES	22	0828	0840	N15 E03				1-		1.20	4.60		
ATHENES	22	0845	0909	N16 W75			24	1+	2	3.60			
CRIMEE	22	0850 E	0910	N10 W80			20 D	1	1	.90			
CRIMEE	22	0900 E	0912 D	N14 E02			12 D	1	1				G-SWF
HT-PROVEN	22	0900 E	0932 D	N16 E00				1-	2	4.56	3.70		
BAKOU	22	0901 E	0930 D	N16 E03			29 D	1	2	3.60	3.20		
ATHENES	22	0901	0935 D	N16 E03			34 D	1+	2	3.10			
CAPETOWN	22	0933 E	0936 D	N15 E02			3 D	1		1.55			
KIEV KO	22	1215 E	1225 D	N18 E07			10 D	1	1				
	23	0220	0230	PATROL									
	23	0335	0340	NO FLARE									
	23	0350	0400	NO FLARE									
	23	0537	0607	NO FLARE									
HTE-PROVEN	23	0550	0600 D	N16 W03				1-	2	1.00	1.90		G-SWF
TACHKENT	23	0554	0613 D	N15 W01				1-	2	1.34			
CRIMEE	23	0554 E	0619	N15 E01				1-	2	1.80			
ATHENES	23	0804	0830	S07 E08			26	1	2	1.80			
ATHENES	23	0805	0818	S09 E04				1-	3	.30			
ATHENES	23	0841	0849	N07 E16				1-	3	.30			
ALMA ATA	24	0508	0516	N18 W12				1-		1.03			
ARCETRI	24	0800 E	0820 D	S02 E78			20 D	1	2				
ARCETRI	24	0845 E	0930 D	S02 E78			45 D	1	2				
ATHENES	25	0200	0205	NO FLARE									G-SWF
ATHENES	25	0751 E	0825	PATROL				1-	2	1.30	1.60		
ARCETRI	25	0815 E	1020 D	N01 E33			125 D	2	2				
UCCLE	25	0848 E	1215 D	S01 E68			207 D	1	4				
ATHENES	25	0830 E	0853	N00 E70				1-	2	.20	.60		
ARCETRI	25	0830 E	0935 D	N06 W69			65 D	1	2				
UCCLE	25	0848 E	1010 D	N08 W70				1-	4				
	25	0848 E	1010 D	N08 W70									
	25	0848 E	1010 D	N08 W70									
	25	0848 E	1010 D	N08 W70									

# SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION MINUTES	IM- POR- TANCE	OBS COND	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX	MAX PHASE				MEAS AREA Sq Deg	COOR AREA Sq Deg	MAX WIDTH Ha	
	JUNE 1962											
SCHAUMS	25	0955 E	1044 D			49 D	1	1	2.50			
SCHAUMS	25	0955 E	1113 D			6465	1+	1	2.70			
UCCLE	25	0848 E	1530 D			6466	2	4				
UCCLE	25	1040 E	1100				1-	4				
UCCLE	25	1120 E	1140				1-	4				
UCCLE	25	1242 E	1530 D			168 D	1	4				
SCHAUMS	25	1500 E	1523			23 D	1	2	2.50			
SCHAUMS	26	0220	0230		NO FLARE		1-	2	3.00			
	26	1030 E	1034									
ALMA ATA	27	0205	0220 D		0210	15 D	1		.93			55
	27	0305	0310		NO FLARE							
	27	0320	0420		NO FLARE							
ATHENES	27	0751	0825				1-	2	.90	1.00		
CRIMEE	27	0752 E	0844 D				1-	2	.90			
CLIMAX	27	1617	1629				1-		.40			
CLIMAX	27	2038	2051		2042		1-		.60	.70		
HTE-PROVEN	28	0530	0535				1-					
HTE-PROVEN	28	0624	0630				1-					
HTE-PROVEN	29	0205	0300		NO FLARE		1-					
CRIMEE	29	0610	0630				1	2	2.70			
ABASTUMANI	29	0618 E	0700 D		0626	42 D	1	3	3.69	3.90		68
ATHENES	29	0619 E	0641		0623	22 D	1	3	3.80	3.90		
	29	0620 E	0635			15 D	1+	3				
ALMA ATA	30	0235	0240		NO FLARE	14	1		1.24			65
	30	0252	0306		0254							

These flare reports are addenda to the June 1962 flares published in CRPL-215 July 1962.

ATHENES	ATHENS, GREECE	HTE-PROVEN	HAUTE-PROVENCE	NEW SCHAUMS	FRETBURG, GFR
BAKOU	PIRCULI, USSR	HONOLULU	HAWAII, USA	NERA	NEDERHORST den BERGH,
CAPETOWN	ROYAL OBSERVATORY,	IKOMASAN	KYOTO, JAPAN		NETHERLANDS
	CAPE OF GOOD HOPE	KIEV KO	KIEV GAO, USSR	NIZMIR	KRASNOYAKHRA, USSR
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV KY	KIEV UNIVERSITY, USSR	SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
CAPRI S	CAPRI, ITALY (SWEDISH)	LOCKHEED	LOS ANGELES, CALIF., USA	SALTSJÖBADEN	STOCKHOLM, SWEDEN
CRIMEE	SIMEIZ, USSR	MCWATH	MCWATH-HULBERT	SCHAUMS	SCHAUMS, GFR
HERSTHONCEU	ROYAL GREENWICH OBSERVATORY,	MOSCOW	PONTIAC, MICH., USA	TACHKENT	TASHKENT, USSR
	HERSTHONCEUX, ENGLAND		MOSCOW-GAISH, USSR	WENDEL	WENDELSTEIN, GFR

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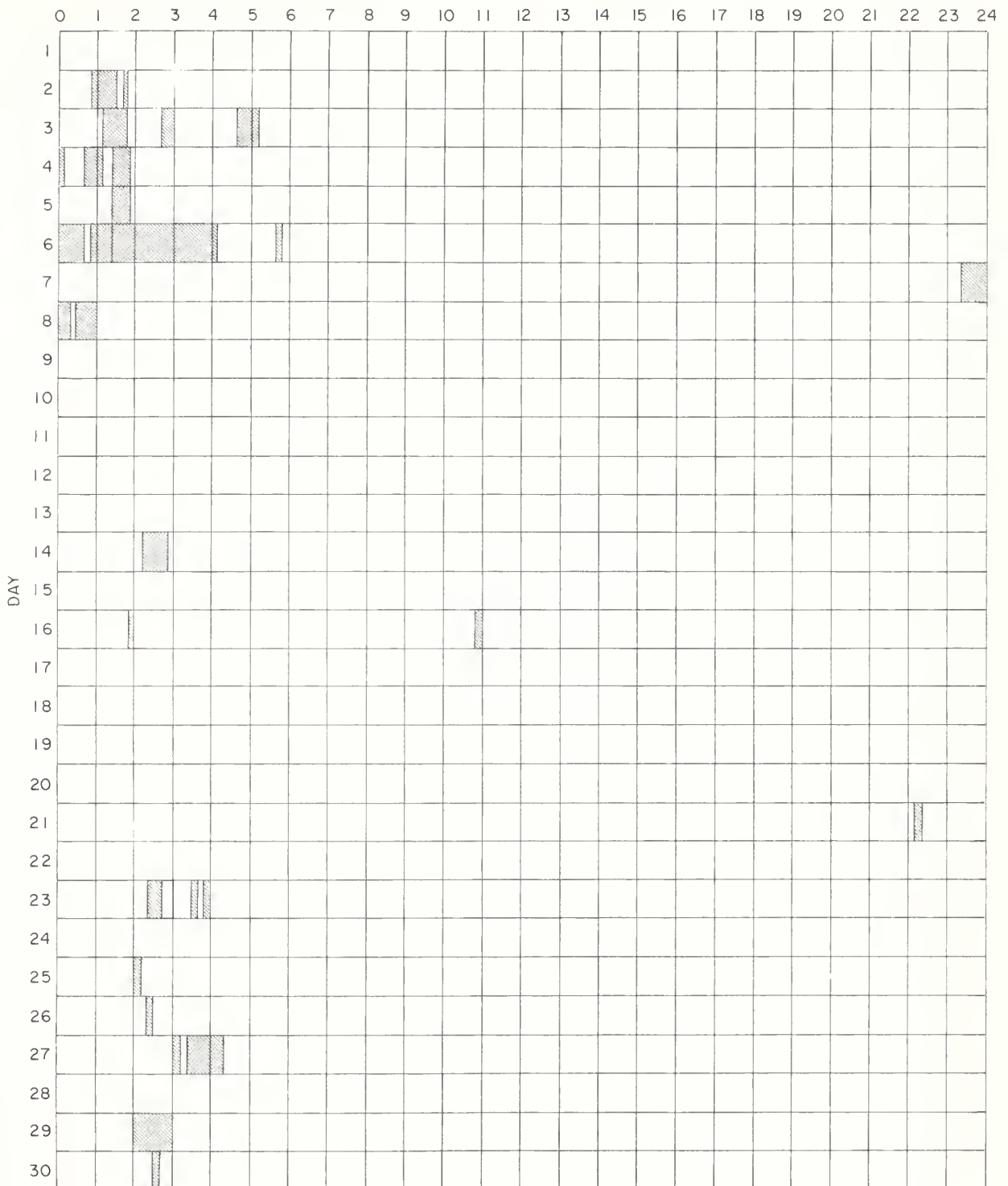
E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

# INTERVALS OF NO FLARE PATROL OBSERVATIONS

IIIq

JUNE 1962

HOUR-UT



Stations include:

Alma-Ata	Capetown	Haute-Provence	Kharkov	Mitaka	Sacramento Peak
Arcetri	Capri-F (German)	Herstmonceux	Kodaikanal	Moscou	Schauinsland
Athenes	Capri-S (Swedish)	Honolulu	Lockheed	Nizamiah	Tashkent
Bakou	Climax	Huancayo	McMath-Hulbert	Nizmir	Uccle
Bucharest	Crimée	Ikomasan	Meudon	Ondrejov	Voroshilov
					Wendelstein

## IONOSPHERIC EFFECTS OF SOLAR FLARES

SHORT WAVE RADIO FADEOUTS  
SUDDEN COSMIC NOISE ABSORPTION  
SUDDEN ENHANCEMENTS OF ATMOSPHERICS  
SUDDEN PHASE ANOMALIES  
SOLAR NOISE BURSTS AT 18 Mc

AUGUST 1962

Because of unforeseen difficulties in collection of some of the basic data,  
the table for August 1962 Ionospheric Effects of Solar Flares will not be published  
until a later date.

# SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

IVa

SEPTEMBER 1962

ARO - OTTAWA

2800 Mc.

Sept. 1962	Type	Start UT	Duration UT:mins	Maximum			Remarks
				Time UT	Peak Flux	Mean Flux	
1	1 Simple 1	2143	5	2144	4	2.5	
2	3 Simple 3	1618	1 10	1637	5	3.5	
3	1 Simple 1	1258.5	2	1259.2	7	2	
3	3 Simple 3 f	1825	2 05	1846	8	3.5	
4	2 Simple 2	1239	5	1240	19	7	
4	4 Post Increase		1 45		2	1.5	
4	3 Simple 3 A	1705	3 40	1808	4	2	
	2 Simple 2 f	1755.3	1	1755.8	3	2.5	
5	3 Simple 3	2035	1 15	2050	4	2	
6	3 Simple 3 A	1500	4 00	Indet.	3	2	
	1 Simple 1 f	1525.2	1	1525.6	5	3	
7	6 Complex f	1503	47.2	1529	140	44	
	4 Post Increase		3 19.8		13	4	
7	2 Simple 2 f	1644.5	27.5	1646.7	105	35	
	4 Post Increase		33		9	3	
7	1 Simple 1	2119	1	2119.5	6	3	
7	3 Simple 3 A	2149	>1 11	Indet.	6	-	
	2 Simple 2 f	2155.2	3.7	2156	8	3.3	
8	2 Simple 2 f	1136	1.5	1136.5	12	5	
	4 Post Increase		5.5		2	1	
8	1 Simple 1 f	1856	3	1857	1.5	0.6	
9	1 Simple 1	1912.7	2	1913.4	3.5	1.2	
15	1 Simple 1	1257	3	1259	6	3	
	4 Post Increase		10		3	1.5	
18	1 Simple 1	1357	4	1359	2	1	
18	1 Simple 1	1825	4	1826	1	0.5	
20	1 Simple 1	1809.5	2.5	1810.3	7	3.5	
	4 Post Increase		15		2	1	

HOURS OF OBSERVATION: JULY, AUGUST, SEPTEMBER 1962

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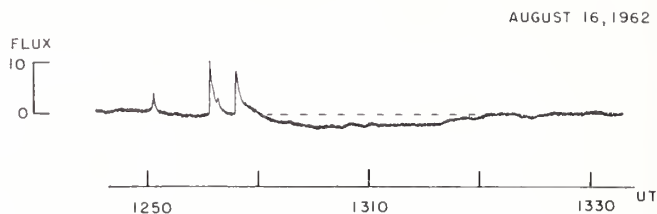
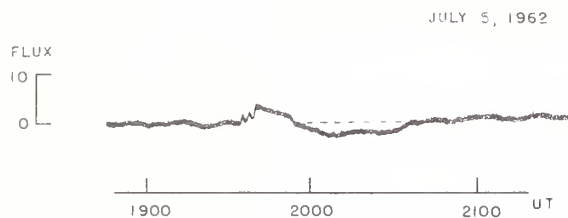
OBSERVING PERIOD:

July 10:50 UT - 24:30 UT (approx)  
 August 11:00 UT - 23:50 UT (approx)  
 September 11:40 UT - 23:00 UT (approx)

With the following exceptions:

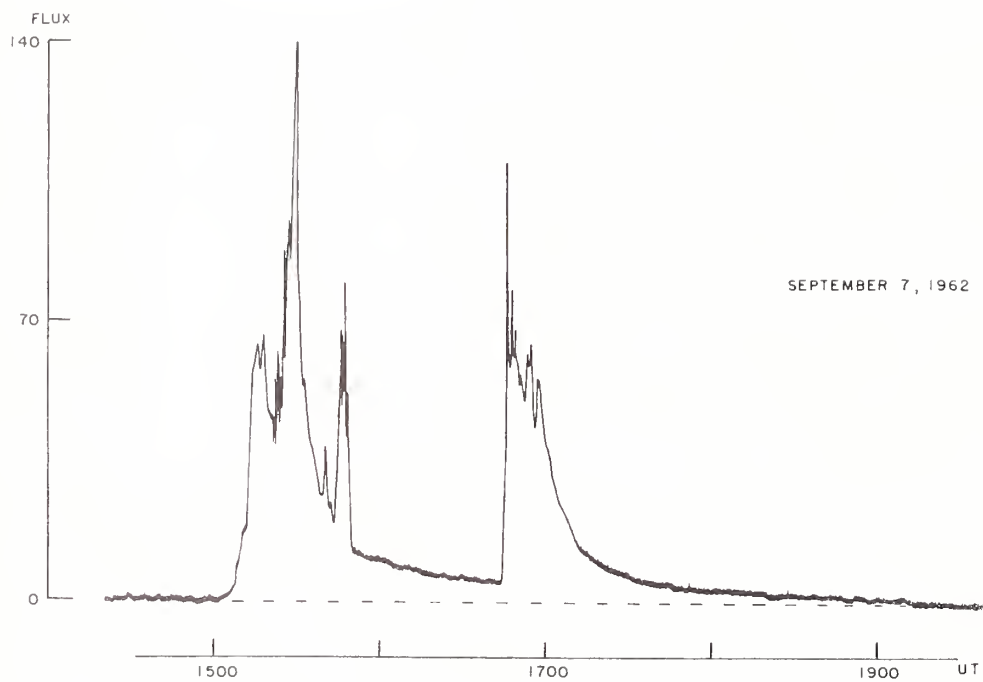
- (1) Observations commenced: July 4 at 13:00 UT  
 July 5 at 13:00 UT  
 July 13 at 12:50 UT
- (2) Observations ended: July 12 at 23:35 UT
- (3) No Observations: July 1 All day  
 July 2 All day  
 July 3 All day  
 September 2 20:30 - 22:30 UT  
 September 27 16:30 - 18:20 UT

IVb      SELECTED 2800 MC/S SOLAR NOISE BURST  
OTTAWA, CANADA



NOTE

The diminutions of flux which follow the small bursts shown above were recorded at both the Goth Hill Radio Observatory, near Ottawa and the Algonquin Radio Observatory, 150 miles from Ottawa.



SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES  
SEPTEMBER 1962

IVc

BOULDER

108 Mc.

Sept. 1962	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity		Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
3	6	1234E	-	756D	2	13	3	1929.7	1929.6	2.2	2
3	8	1629	1530.9	07	3	16	6	1247D	2045.6E	726D	2
4	6	1235E	2324.0	755D	2	18	3	1346.2	1347.0	0.9	2
4	2	1716.1	1716.0	3.0	2	23	6	1917	2124.9	324D	2
7	6	1507	1520	48	2	24	6	1254E	-	201D	2
7	3	1408.2	1409.0	1.1	3	26	6	1256E	1441.3	700D	2
8	3	1502.9	1503.6	1.0	2	26	8	1437.1	1438.1	2.4	3
	2	1655.9	1656.9	2.0	3	29	3	1712.6	1718.6	1.3	2
						30	3	1555.9	1556.1	0.9	2

COMMERCE - STANDARDS - BOULDER

NOMINAL TIMES OF OBSERVATION  
OUTSTANDING OCCURRENCES  
SEPTEMBER 1962

BOULDER

108 Mc.

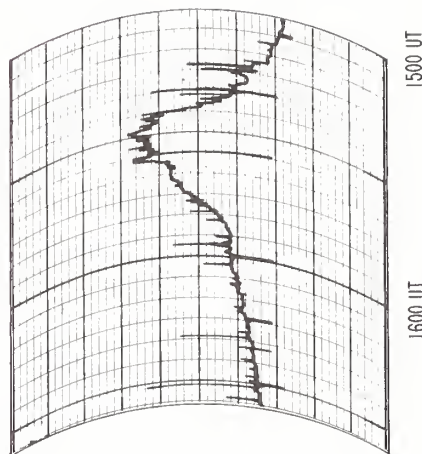
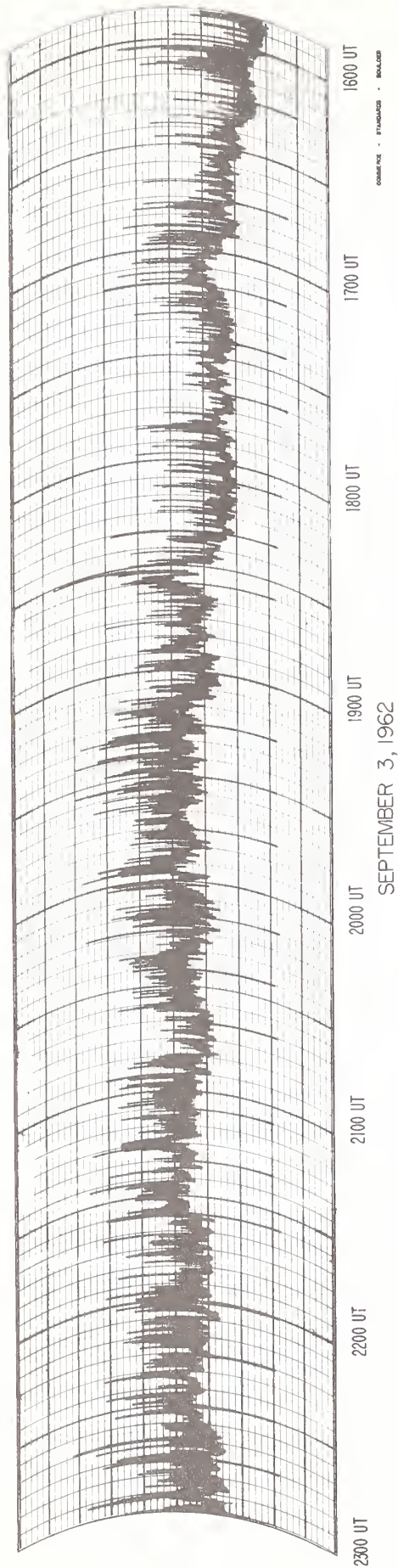
Sept. 1962	U.T.		Sept. 1962	U. T.
1	1232-0116		16	1247-0053 I 2200-2237
2	1233-0114		17	1247-0051
3	1234-0112		18	1248-0049
4	1235-0110		19	1249-0048 I 0005-0048D
5	1236-0110		20	1250-0046 I 2130-2253
6	1237-0108		21	1251-2255; I 2005-2255
7	1238-0106			2300-0044
8	1239-0105 I 1816-2050; 2136-2143		22	1252-0043
9	1240-0104		23	1253-0041 I 1918-2200
10	1241-0103		24	1254-0039 I 2357-0039E
			25	1255-0038 I 2006-2108
11	1242-0101		26	1256-0036
12	1243-0059		27	1257-0034
13	1244-0058		28	1258-0033
14	1245-0056 I 1945-2235		29	1259-0015
15	1246-0054		30	1300-0030

COMMERCE - STANDARDS - BOULDER

# SOLAR NOISE BURSTS

IVd  
108 Mc.

BOULDER



SEPTEMBER 7, 1962

# SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

IVc

SEPTEMBER 1962

HAO BOULDER

7.6 - 41 Mc.

Date 1962	Bursts			Frequency Range (mc)	Date 1962	Bursts			Frequency Range (mc)
	Type	Time (U.T.)	Intensity			Type	Time (U.T.)	Intensity	
1 Sep	III	1858.45-1859.15	1+	17-41	12 Sep	III	1605.30-1606	1-	20-40
	continuum	1859.15-1930.30	1	21-41	13	III	1411.15-1411.45	1	17.5-41
	III	1904-1907	1+	11-41		III	1925.45-1930.15	1	25-41
	III	1933.15-1933.45	1-	22-41		continuum	1932-1941.30	2	20-41
	III	1938.15-1938.45	1-	21-38		III	1950.45-1951.15	1-	27-35
2 c	III	2039.15-2039.30	1-	23-37	15	continuum	1725-a2433	1-	24-41
	III	2250.30-2250.45	1-	27-39	16	continuum	b1407-a2425	1+	20-41
	continuum	1627-2454	1-	21-41		III	2407.30-2409.30	2	20-41
	III	1759.45-1800.15	2	24-39	17	continuum	b1411-2020	1-	21-41
	III	1956.00-1957	1	8-41	18	III	1552.45-1553	1-	20-40
3	III	1958-1958.30	1	8-41	23	III	1559.30-1559.45	1	23-35
	III	2055.45-2056.30	1	8-41		III	1625-1626.15	1	21-41
	continuum	b1354-1829	1	16-41		continuum	1633-2150	1	21-41
	III	1616.45-1617.45	2	7.6-41		III	1820.45-1822.15	1	8-41
	continuum	1829-1925	3	7.6-41		III	1907-1908	1	8-41
4	continuum	1925-2400	1	12-41	24	III	2214.45-2215	1-	23-39
	continuum	2400-a2455	1	21-41		continuum	1645-1715	1-	27-41
	continuum	b1357-2000	2	7.6-41		III	1704.15-1704.30	1-	26-41
	continuum	2000-2400	1	15-41		III	2055-2055.15	1-	23-41
	continuum	2400-a2451	1-	21-41		III	2102-2102.15	1	16-39
5	continuum	b1350-2255	1-	21-41	25	III	2416-2416.15	1	21-41
	III	1414.35-1450.15	1	16-41		continuum	b1359-2400	1-	20-41
	III	1514.15-1514.45	1	16-41		III	1746.15-1746.45	1	9.5-41
	III	1515.15-1515.45	1	21-41		III	1748-1748.30	1	9.5-41
6	III	1419-1419.15	1-	21-41		III	1749.15-1749.45	1	9.5-41
7	III	1528.15-1528.30	1	21-41	26	continuum	b1414-2100	1-	22-41
	III	1846-1846.15	2	16.5-41		III	2115.30-2116.15	1	20-41
	II	1514-1535	3	18-41		III	2116.30-2117.30	2	19-41
	IV	1535-1740	3	20-41		continuum	2235-2350	1-	27-41
	III	2116.30-2117	1	16-41		III	1455.15-1455.30	1-	27-41
8	III	2117.30-2117.45	1-	20-37	28	III	1840.30-1840.45	1-	24-36
	III	2119.30-2120	1	16-41		III	2322.45-2323.30	1	16-41
	III	2155.45-2156.45	1+	12-41		III	1845-1845.15	1-	25-41
	III	2157-2157.45	1-	16-32		continuum	1940-2135	1-	22-41
	III	1856.15-1856.45	1-	24-41		III	2241.15-2241.30	1-	22-41
9	III	1640.30-1641.45	3	17-41	29	III	2322.15-2323	1+	15-41
	III	1737.15-1738	1	12-41		III	2339.15-2339.45	1-	22-41
	III	2113.30-2113.45	1-	18-40		III	1926-1926.15	1-	21-41
	III	1738.15-1740.45	1+	9-41		III	2154.15-2154.45	1+	12.5-41
10	III	2318.15-2320	1	22-41	30	III	2217.45-2218	1	24-41
11	III	1801.30-1802.30	1+	16-41					
	III	1424.45-1425	1-	21-35					
	III	1431.15-1431.45	1-	23-35					
	continuum	1520-1630	1-	28-41					
12	* III	1543.30-1544	1	23-38					

c = Many faint III's, 1415-1627

\* Position shifted relative to continuum

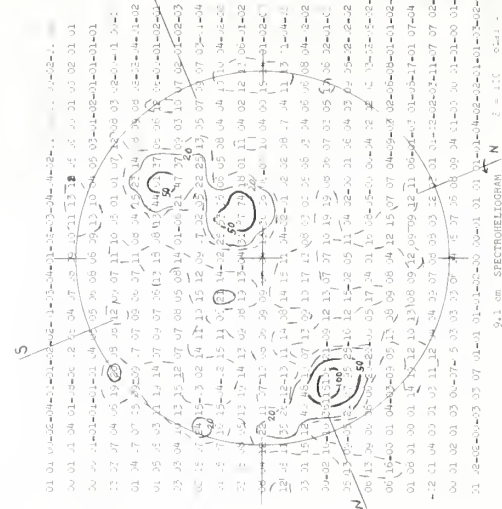
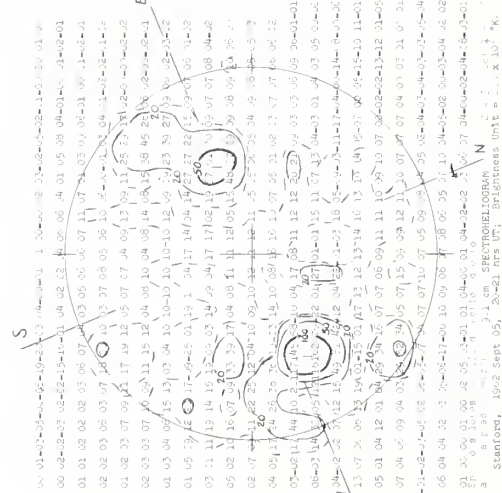
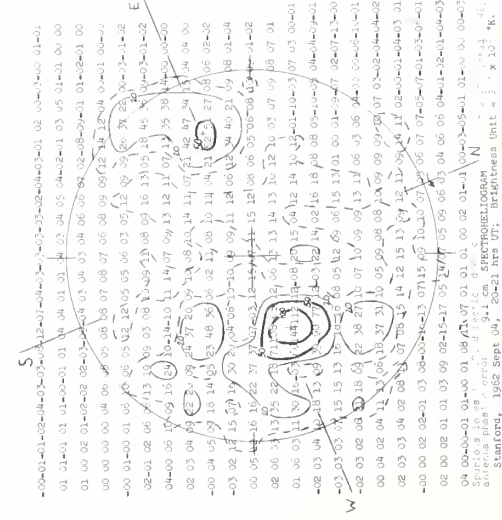
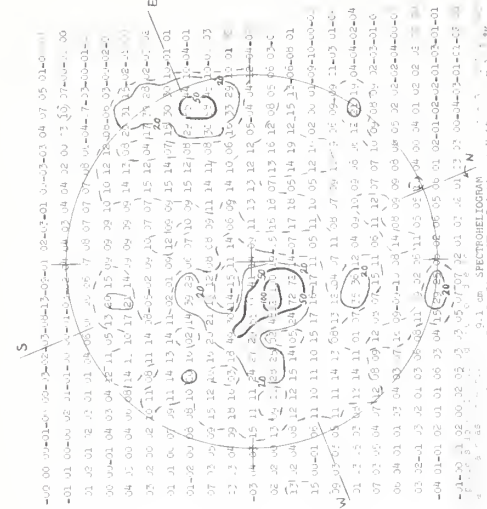
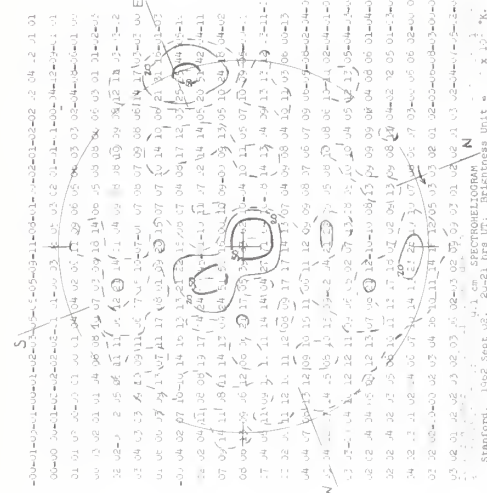
CORRECTION - STANDARD - BOULDER

# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD

SEPTEMBER 1962

9.1 cm

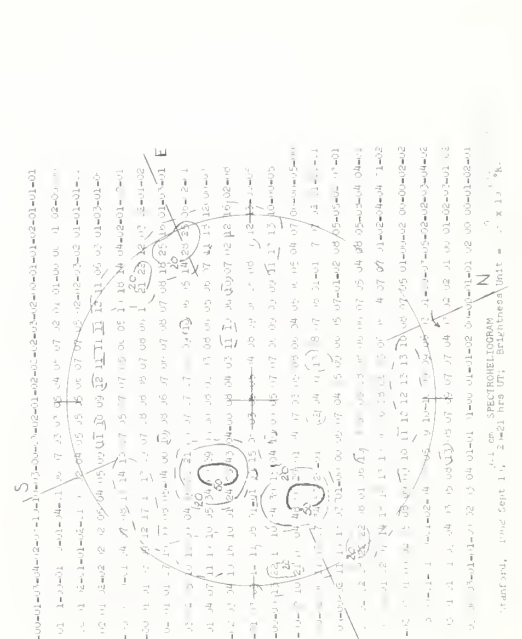
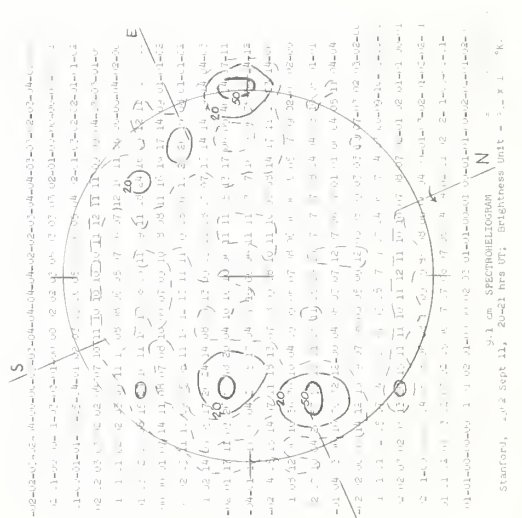
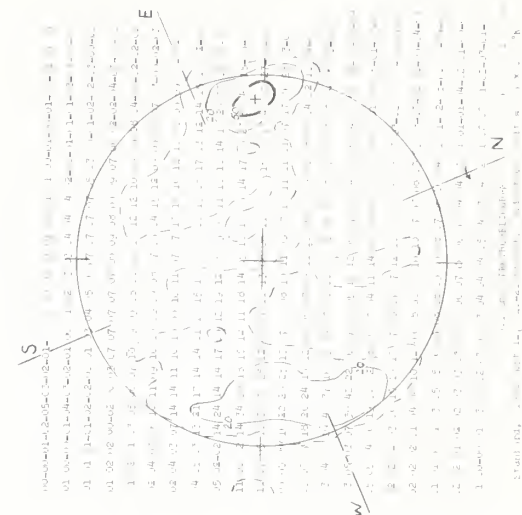
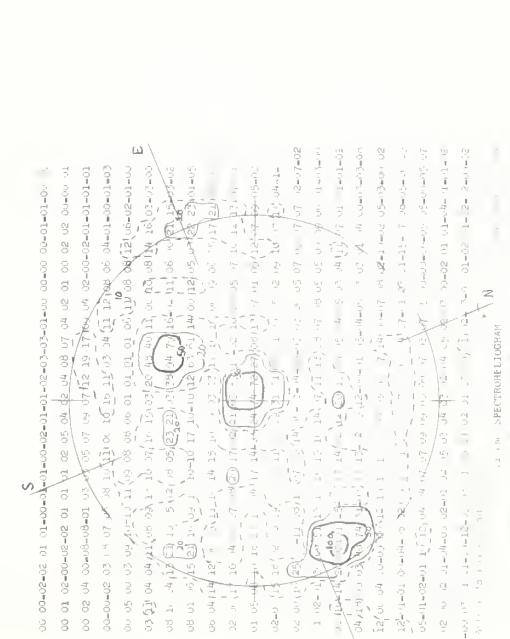
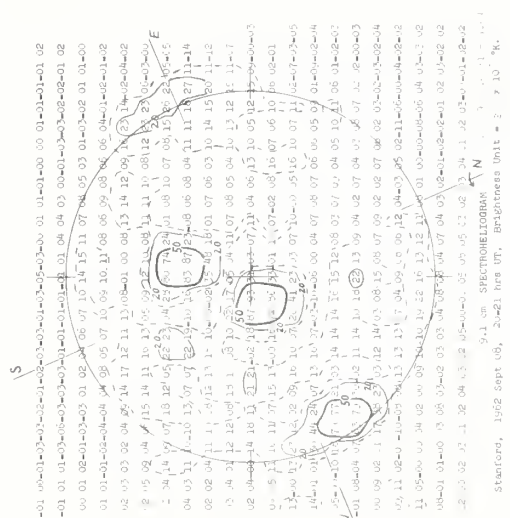
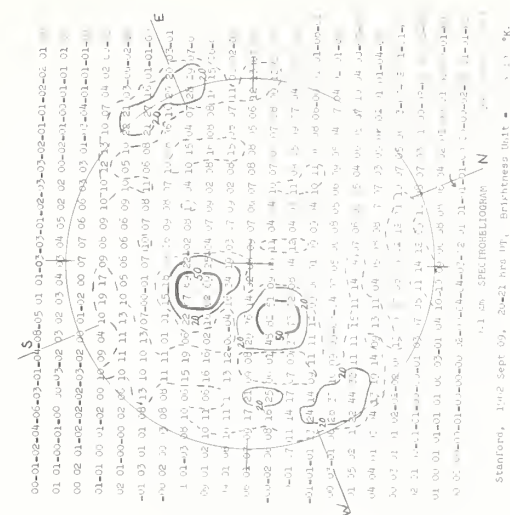


## SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD

SEPTEMBER 1962

9.1 cm



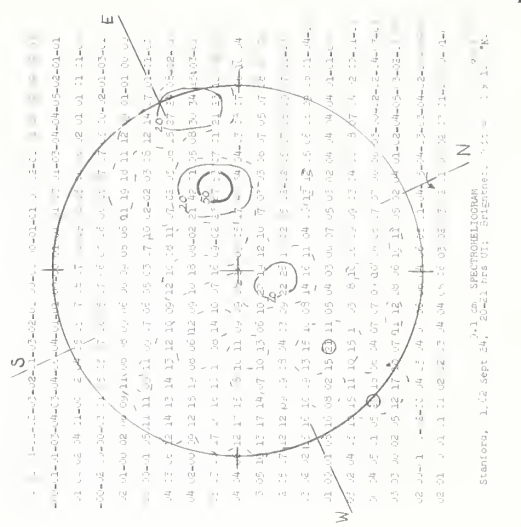
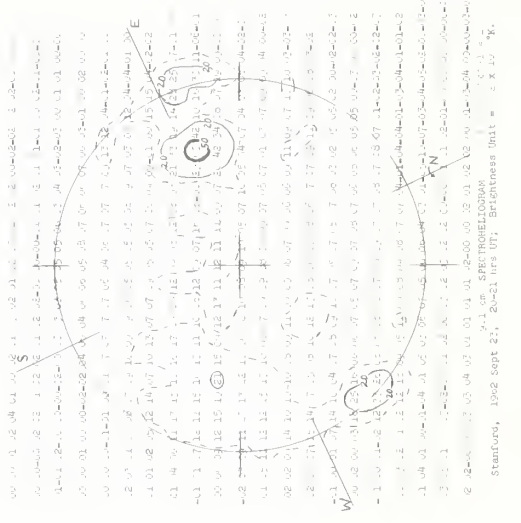
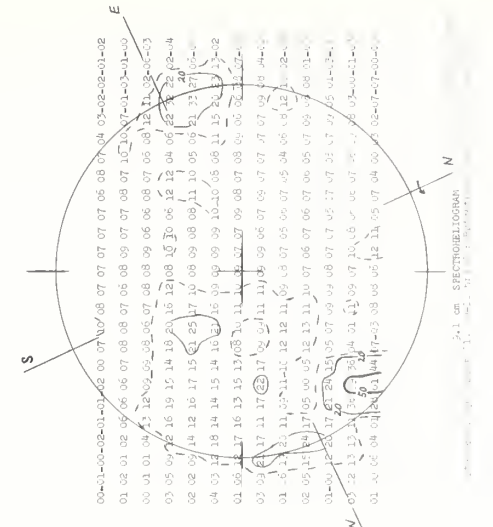
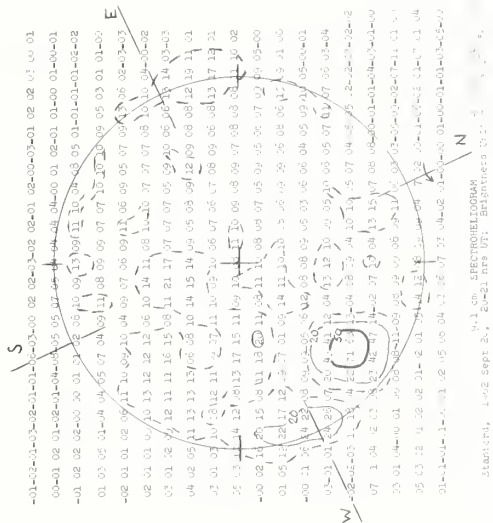
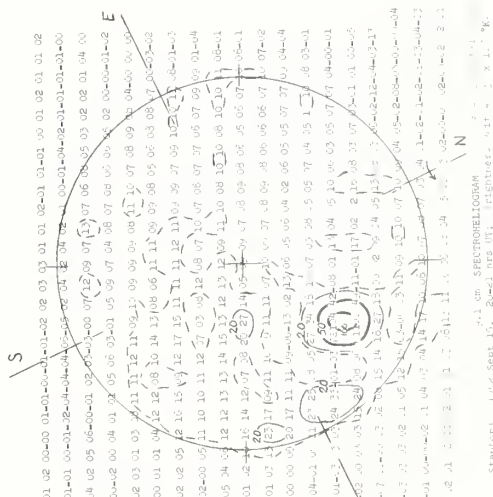


# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

SEPTEMBER 1962

STANFORD

9.1 cm

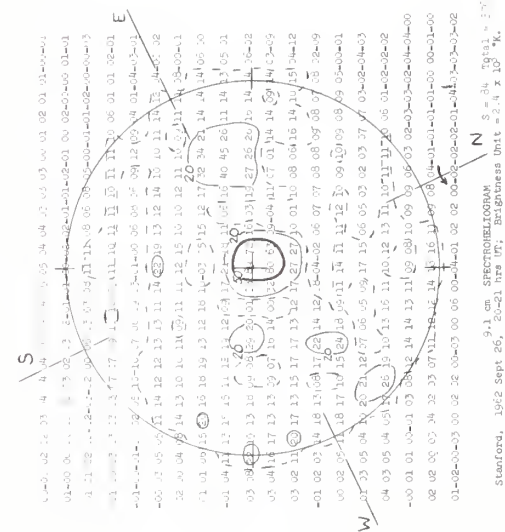


## SOLAR RADIC EMISSION SPECTROHELIOGRAMS

STANFORD

SEPTEMBER 1962

9.1 cm

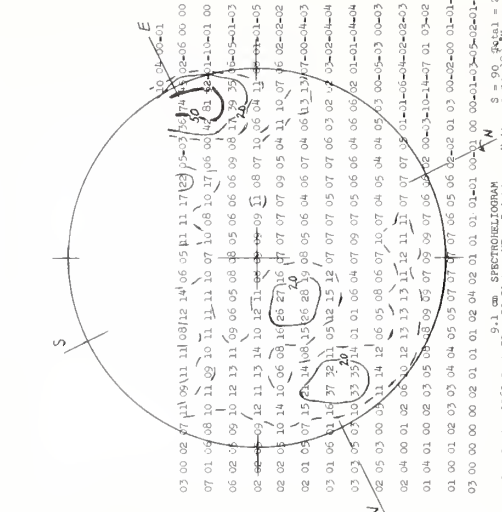
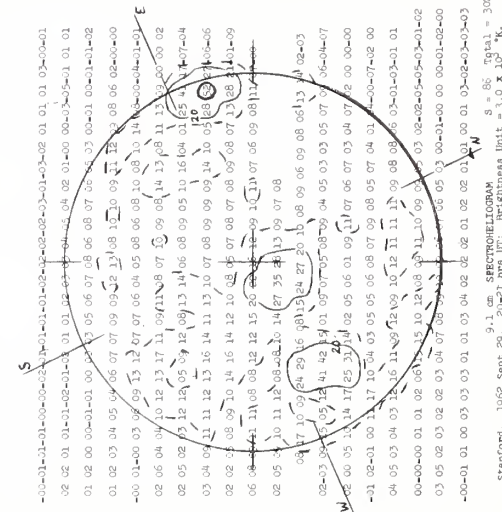
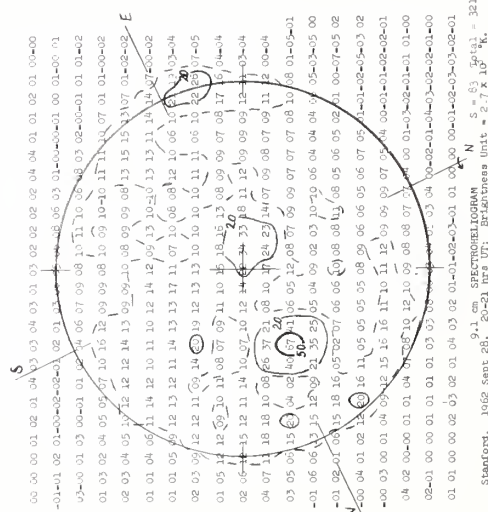


1962 SEPT 25

9.1 cm SPECTROHELIOGRAM

Stanford, 1962 Sept 26, 20-21 hrs UT; Brightness Unit =  $2.4 \times 10^{-5}$  W.

9.1 cm SPECTROHELIOGRAM

Stanford, 1962 Sept 27, 20-21 hrs UT; Brightness Unit =  $3.2 \times 10^{-5}$  W.Stanford, 1962 Sept 26, 20-21 hrs UT; Brightness Unit =  $2.7 \times 10^{-5}$  W.Stanford, 1962 Sept 29, 20-21 hrs UT; Brightness Unit =  $3.0 \times 10^{-5}$  W.Stanford, 1962 Sept 30, 20-21 hrs UT; Brightness Unit =  $3.2 \times 10^{-5}$  W.



## COSMIC RAY INDICES

Climax Neutron Monitor

IGC STATION B 305

AUGUST 1962

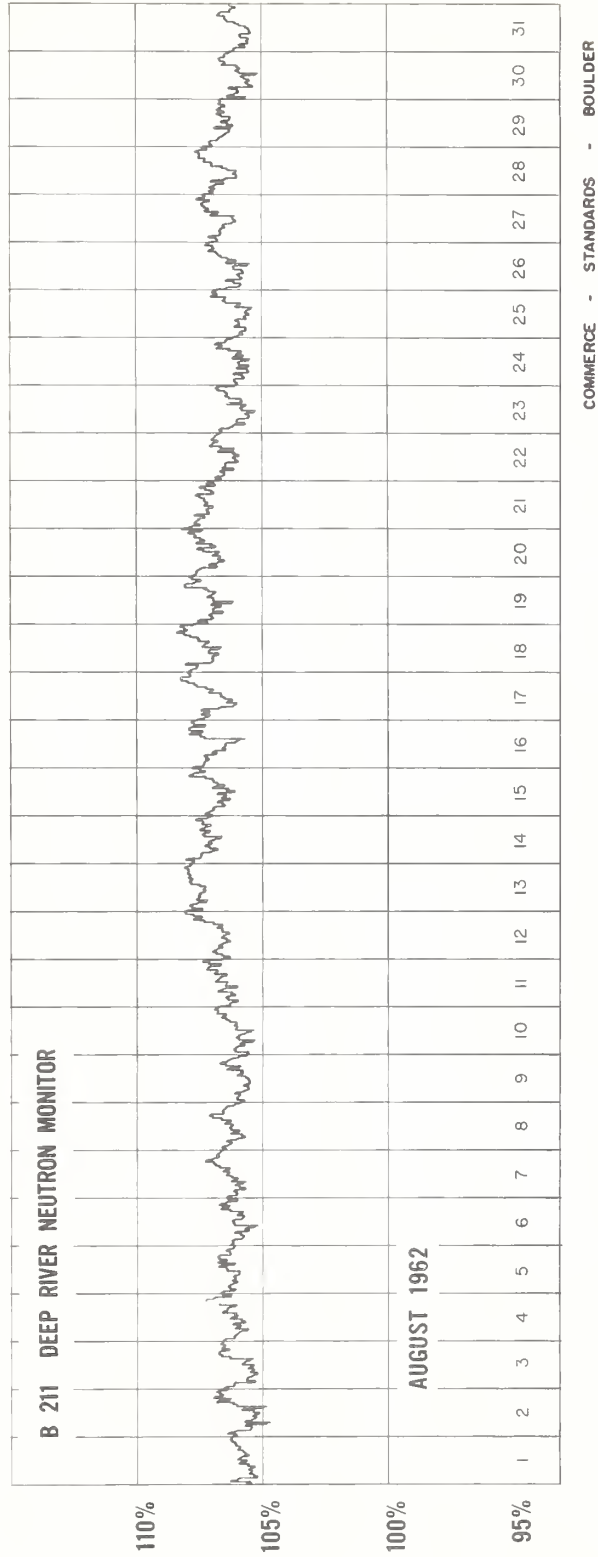
Aug. 1962	Daily Average Counts/hr*	Aug. 1962	Daily Average Counts/hr*
1	3066.9	16	3107.5 + 27
2	3069.3	17	3107.6 + 29
3	3077.3	18	3107.6
4	3073.8	19	3109.0
5	3079.1	20	3104.8
6	3080.0 + 32	21	3094.7
7	3091.2 + 10	22	3058.1
8	3076.5	23	3039.5
9	3062.2	24	3035.0
10	3073.1	25	3032.2
11	3032.7	26	3035.2
12	3039.5	27	3093.9
13	3106.9	28	3096.5
14	3099.2 + 38	29	3094.0
15	3100.0	30	3100.3
		31	3093.8

COMMERCE - STANDARDS - BOULDER

\* Scaling Factor 128

+ Number of Section Hours

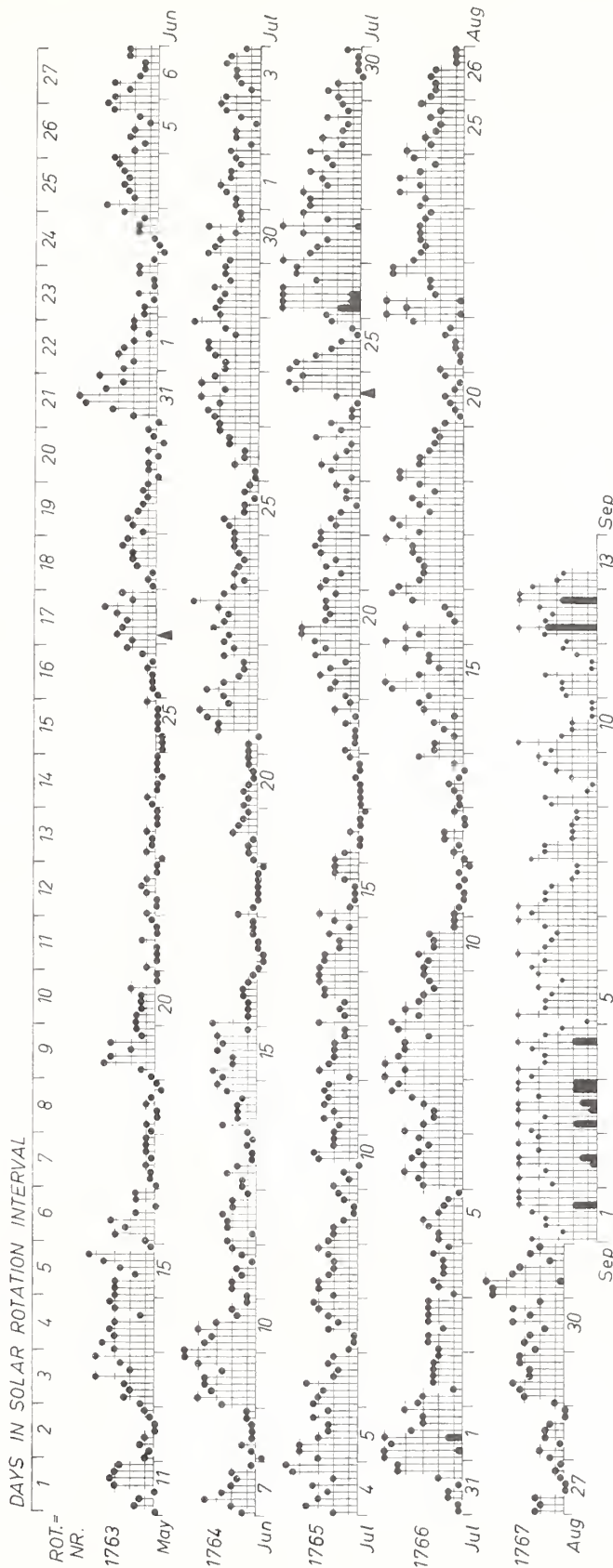
COSMIC RAY INDICES  
(Pressure Corrected Hourly Totals)



## GEOMAGNETIC ACTIVITY INDICES

AUGUST 1962

Aug. 1962	C	Values Kp								Sum	Ap	Final Selected Days
		Three hour Gr. interval										
		1	2	3	4	5	6	7	8			
1	1.5	5o	5+	5-	6o	4-	3o	3o	4o	35-	38	Five Quiet
2	0.8	3+	3o	1o	2+	2+	2+	2+	2o	19-	10	
3	0.8	2o	3-	3-	2-	3-	3-	3-	3-	20-	11	
4	0.4	1o	2o	2+	2-	2-	2-	2+	1+	14o	6	
5	0.5	2o	2o	3-	3o	2o	2-	1+	1-	15+	8	
6	1.0	3o	3+	4o	3o	4-	3+	3-	3+	26+	18	20 28
7	1.1	4o	3o	2+	2+	3o	4-	5-	4+	27+	21	
8	1.3	5o	4o	5o	4+	4o	4o	3-	4+	33+	32	
9	1.1	5-	3+	4o	3+	3o	2+	3-	3o	26+	19	
10	0.7	3o	3-	3+	2+	2+	3-	1o	1o	18+	10	
11	0.0	1o	1-	0+	0+	1-	0+	1-	0o	4o	2	Five Disturbed
12	0.1	0+	1o	1-	2-	2-	0+	0+	1o	7o	4	
13	0.3	1-	1-	1o	1+	1-	0+	1o	3+	9o	5	
14	0.7	2+	2+	1o	2-	2+	1o	3o	3+	17o	9	
15	1.1	3-	5-	5o	3+	2o	3-	3-	4o	27o	22	
16	1.1	5o	3+	4o	1o	1+	2-	4-	5-	25-	21	22 31
17	1.2	4+	3+	3o	3o	3+	4-	4-	5o	29+	24	
18	1.1	3+	4+	5-	3-	3+	4-	2+	3+	28-	21	
19	1.0	4+	4+	3+	3+	3-	2+	2o	2+	25-	17	
20	0.2	2-	1-	1o	1+	2-	1o	1-	2-	10-	5	
21	0.4	2o	1-	1-	1o	1o	2-	1+	4-	12o	7	Ten Quiet
22	1.4	5+	4o	5+	2+	3-	3-	5-	5-	32-	31	
23	1.0	4-	3+	3o	3+	3+	3+	3o	3-	26-	17	
24	1.1	3+	3o	4+	3+	4+	3+	2+	4-	28-	20	
25	0.9	4o	3-	3o	2+	2o	3-	2o	3+	22o	13	
26	0.4	3-	2+	2+	3-	2+	1o	1o	1o	15+	8	12 13 20 21 26
27	0.1	2+	2o	2+	0+	0+	1-	1o	1-	10-	5	
28	0.2	1+	2o	1-	2-	2-	1+	0+	0+	9+	4	
29	1.1	1o	3o	3+	4-	3-	3-	3+	3+	23o	15	
30	1.0	2+	3o	3-	2-	4-	3-	4-	2o	22-	13	
31	1.2	5-	5-	5+	4-	3+	1+	3-	2o	28-	25	28
Mean:	0.80									Mean:	15	

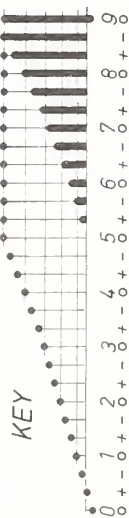


# PLANETARY MAGNETIC THREE-HOUR-RANGE INDICES

Kp till 1962 August 31  
 (Ks from Wingst and Göttingen till Sept. 13)

J.B

▲ = sudden  
 commencement



## CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

AUGUST 1962

## NORTH ATLANTIC

## NORTH PACIFIC

AUG 1962	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				WHOLE DAY INDEX				ADVANCE FORECASTS 1-7 REPORTS FOR WHOLE DAY, ISSUED IN ADVANCE BY				GEOMAGNETIC Kp				NORTH PACIFIC 12-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED AT				WHOLE DAY INDEX				ADVANCE FORECASTS (6 REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY				GEOMAGNETIC Kp																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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( ) Represent disturbed values  
All times are Universal Time (U.T.)

COMMENCE - STANDARDS - BOULDER

# CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

VIIb

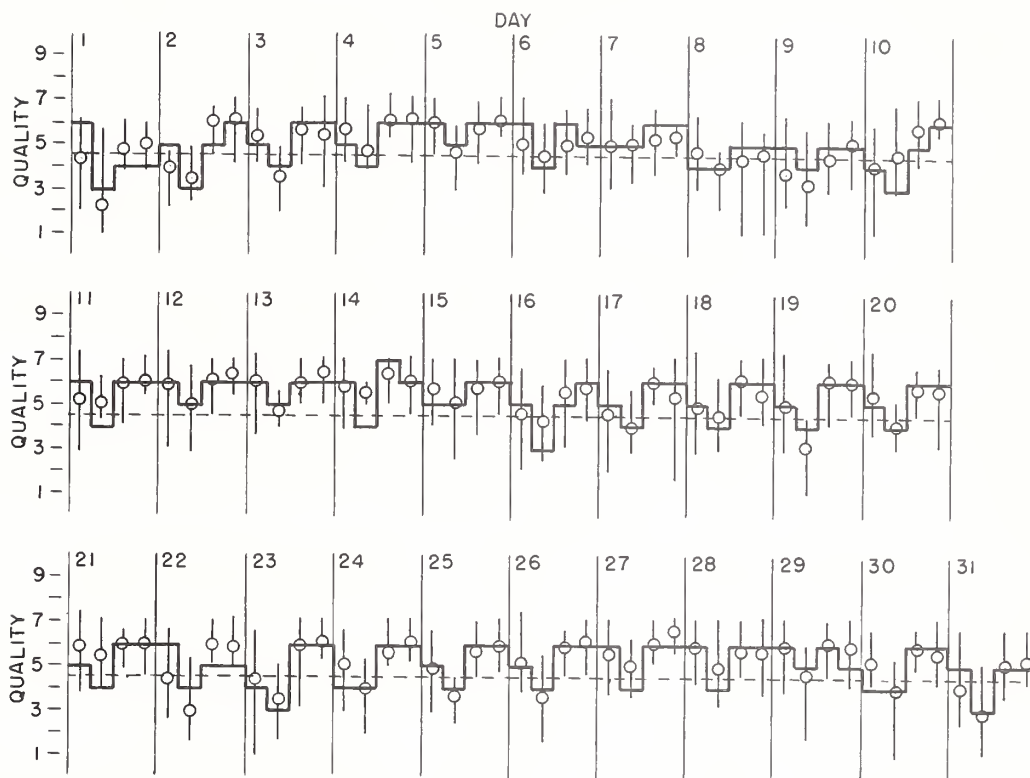
## NORTH ATLANTIC

SEPTEMBER 1962

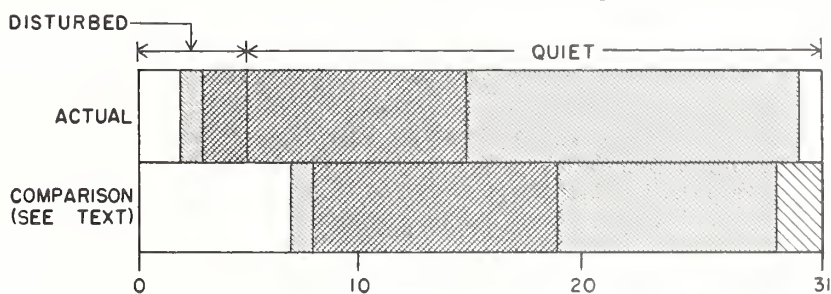
— Short-term forecast

o Quality figure

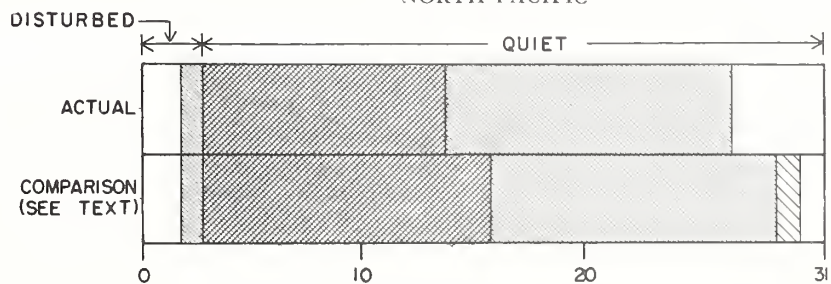
| Range of reports



## NORTH ATLANTIC

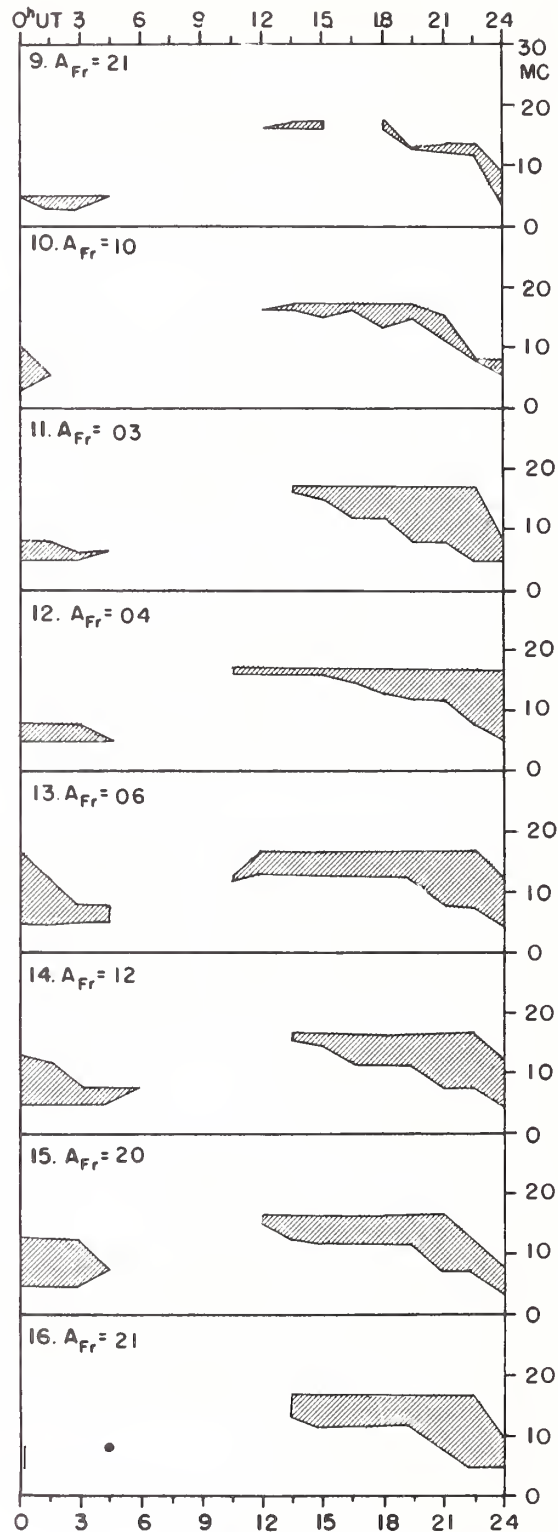
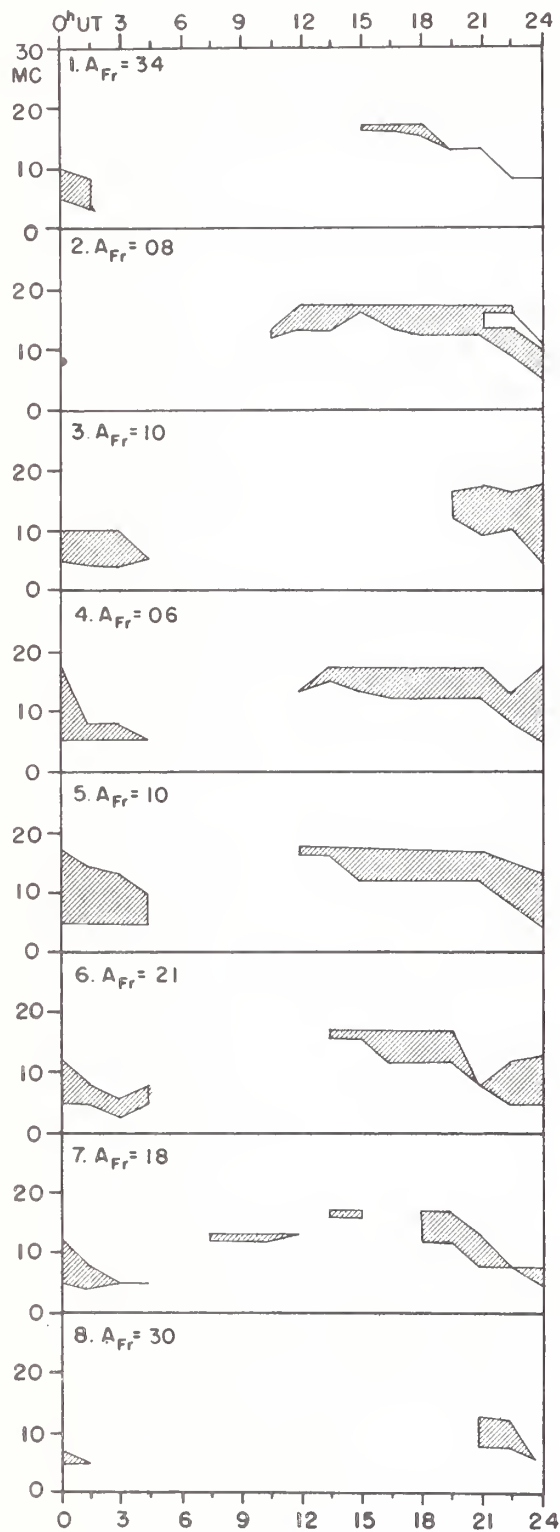


## NORTH PACIFIC



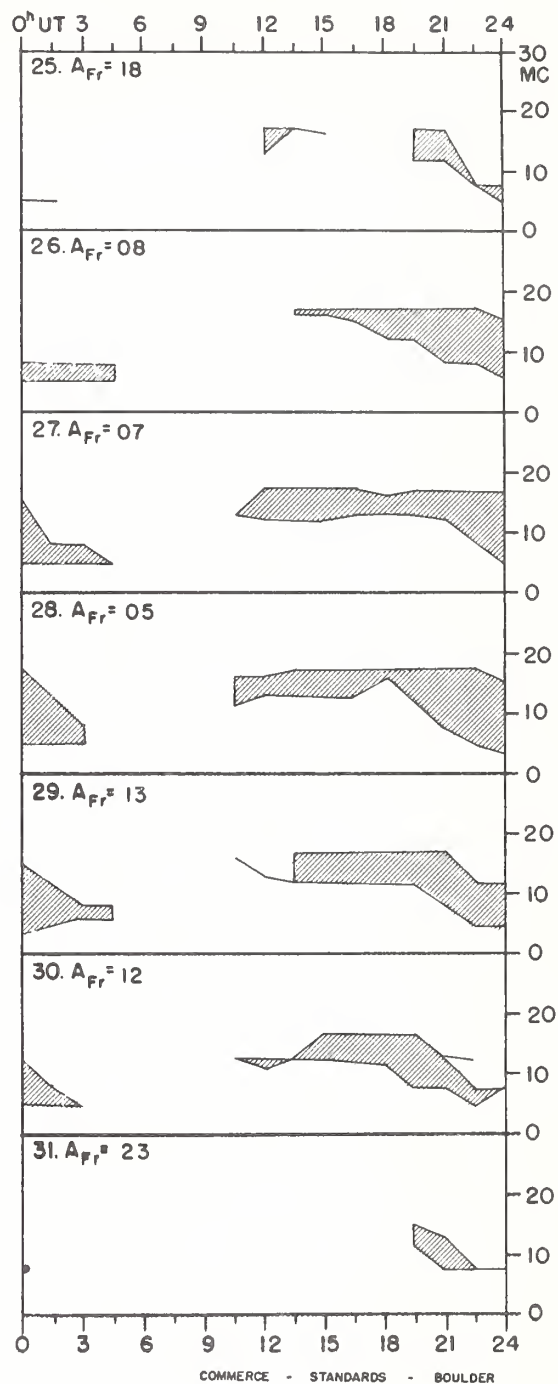
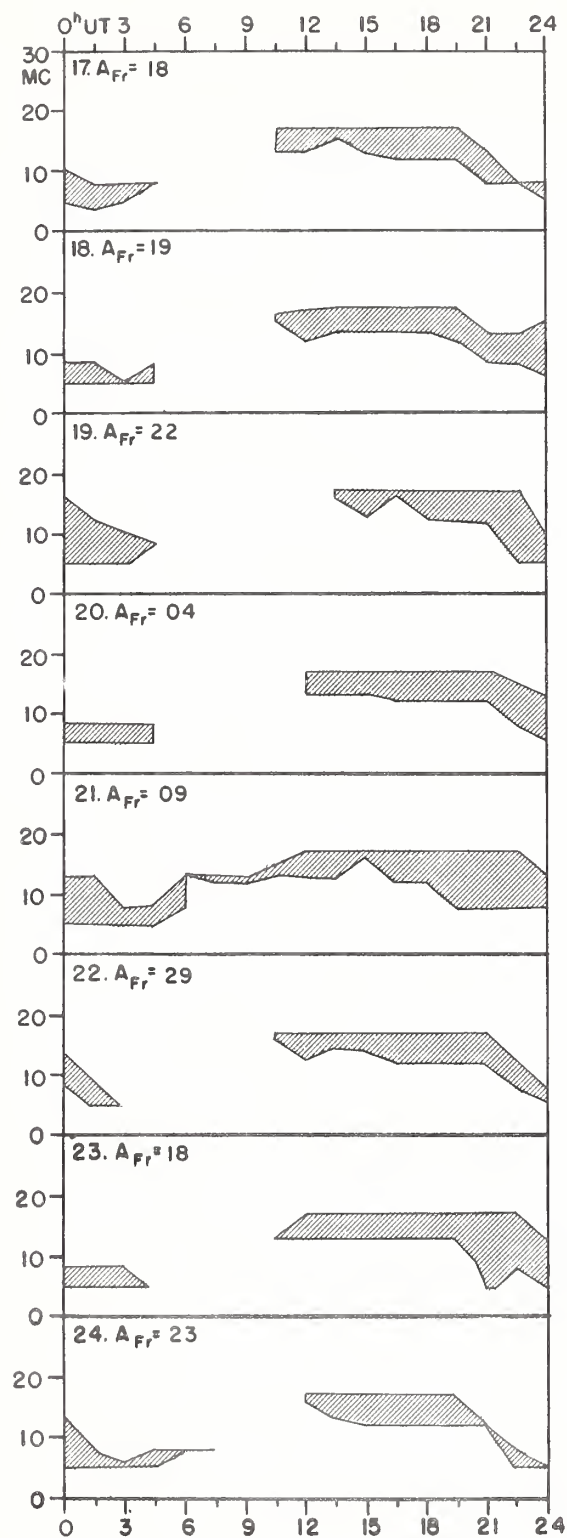
## USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

AUGUST 1962



COMMERCE - STANDARDS - BOULDER

AUGUST 1962



## Errata:

In CRPL - F217B, September 1962  
 page VIId,  $A_{FR} = 04$  was omitted  
 for July 18, 1962.

## ALERT PERIODS AND SPECIAL WORLD INTERVALS

## INTERNATIONAL WORLD DAY SERVICE

SEPTEMBER 1962

Issued September 1962 Day/Time U. S.	Advance Geophysical Alert	No.	World-Wide Geophysical Alert	Special World Interval
01/1603	McMath. Solar Flare. One Plus 01/1349Z			
02/1700	Lockheed. Solar Flare. One Plus 02/1617Z			
03/2345	McMath. Solar Flare. Two 03/1832Z			
04/2315	Lockheed. Solar Flare. One Plus 04/2135Z			
07/1615	Sac Peak. Solar Flare. Two 07/1525Z			
12/1225	Ft. Belvoir. Magnetic Storm 12/0520Z			
12/1600		174	Magnetic Storm. Aurora Probable 12/0520Z	Start
13/1600		179		Finish
29/1850	Lockheed. Solar Flare. One Plus 29/1815Z			
30/1600		180	Magnetic Storm. 29/19XXZ	
30/1850	Lockheed. Solar Flare. One Plus 30/1815Z			



