

PART B
SOLAR - GEOPHYSICAL DATA

ISSUED

March 1962

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

SOLAR - GEOPHYSICAL DATA

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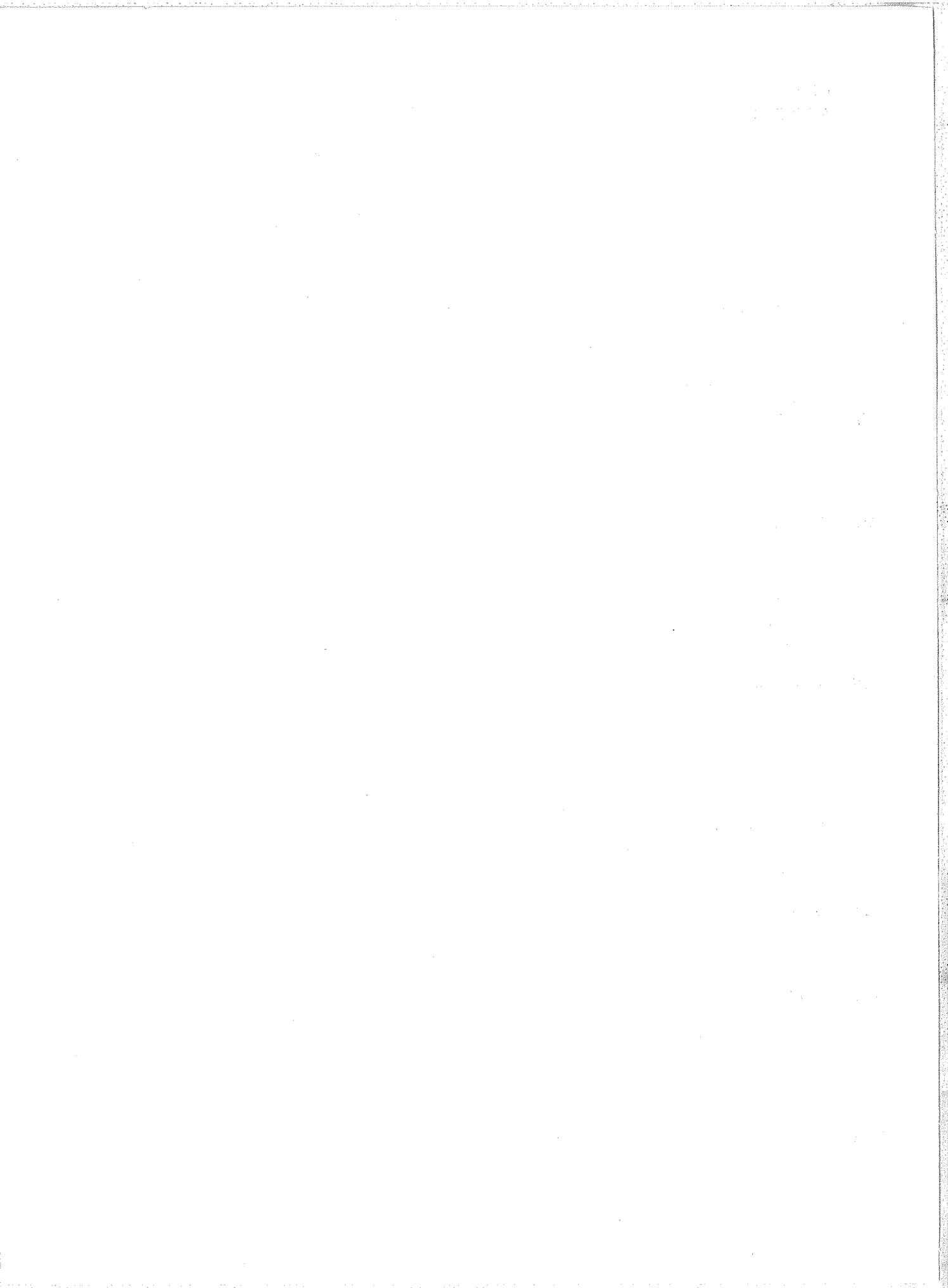
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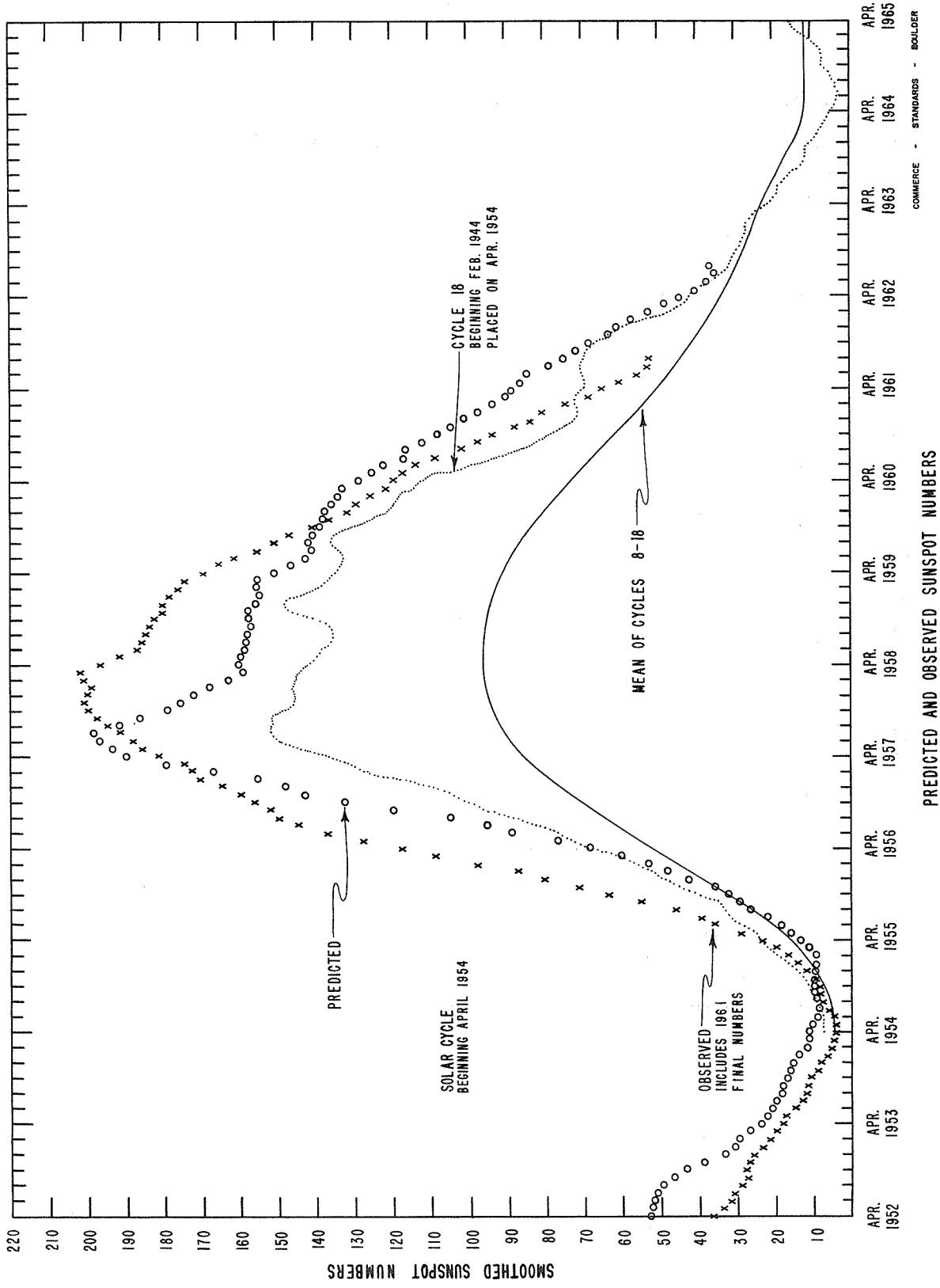


The descriptive text was republished November 1961.
Addenda to the text were published February 1962.

DAILY SOLAR INDICES

Jan. 1962	American Relative Sunspot Numbers R _A '
1	19
2	13
3	17
4	14
5	12
6	12
7	12
8	3
9	2
10	0
11	0
12	0
13	12
14	28
15	21
16	13
17	3
18	17
19	24
20	24
21	31
22	47
23	61
24	84
25	61
26	70
27	69
28	67
29	61
30	57
31	67
Mean:	29.7

Feb. 1962	Zürich Provisional Relative Sunspot Numbers R _Z	Daily Values Solar Flux at 2800 Mc, ARO-Ottawa, Canada Flux
1	73	110
2	59	103
3	57	101
4	43	104
5	39	92
6	36	86
7	30	82
8	23	82
9	15	83
10	12	81
11	10	82
12	7	81
13	7	84
14	16	83
15	18	83
16	12	86
17	20	87
18	26	91
19	28	108
20	53	107
21	65	114
22	72	121
23	108	136
24	124	134
25	103	129
26	95	129
27	108	136
28	95	122
Mean:	48.4	101.3



ZURICH FINAL RELATIVE SUNSPOT NUMBERS

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	145	58	17	87	102	30	60	39	51	45	0	82
2	133	55	33	60	84	42	65	17	53	47	0	80
3	109	59	49	55	72	48	68	24	54	58	0	77
4	84	75	46	73	55	62	63	23	55	55	10	67
5	78	65	34	86	42	55	44	14	55	48	19	55
6	69	56	41	82	39	49	55	11	57	45	25	38
7	63	52	38	64	37	40	57	14	51	43	48	31
8	58	55	49	66	31	45	60	37	33	46	54	31
9	61	68	49	49	44	58	65	59	45	47	76	31
10	53	61	33	48	46	77	73	84	57	53	67	14
11	43	50	34	47	45	82	85	109	54	58	53	0
12	35	35	15	42	56	72	96	103	62	76	50	0
13	28	30	27	40	52	75	86	103	82	47	49	0
14	25	26	46	41	46	80	113	104	109	44	48	10
15	27	26	42	53	38	123	107	108	114	53	47	8
16	43	24	52	60	31	128	99	98	102	46	31	7
17	53	39	66	78	23	128	92	85	84	39	11	7
18	51	30	51	72	44	128	82	71	73	44	17	10
19	50	26	45	65	47	112	86	72	70	52	10	12
20	45	30	39	56	59	116	85	52	46	38	15	21
21	50	44	46	52	66	128	85	45	41	47	26	21
22	44	49	60	38	71	123	75	39	40	33	24	47
23	35	48	61	36	74	96	81	33	43	16	12	56
24	23	58	76	36	78	87	78	37	74	17	18	77
25	27	53	64	48	72	70	63	49	83	16	29	94
26	43	52	63	60	47	56	62	45	74	13	36	80
27	47	42	88	82	41	51	53	54	67	8	37	70
28	62	25	95	74	38	38	42	36	69	8	38	74
29	81		95	92	36	59	32	54	58	9	53	55
30	65		97	99	41	63	30	58	52	9	75	45
31	66		93		24		34	54		8		38
Mean	57.9	46.1	53.0	61.4	51.0	77.4	70.2	55.8	63.6	37.7	32.6	39.9

CALCIUM PLAGE AND SUNSPOT REGIONS

IIa

FEBRUARY 1962

CMP Feb. 1962	Lat	McMath Plage Number	Return of Region	Calcium Plage Data				Sunspot Data		
				CMP Values Area Int.		History, Age		CMP Values Area Count		History
01.2	N17	6332	New	400	2	b / l	1			
01.4	S05	6330	New	1200	2	l - l	1			
02.8	N09	6331	6315	700	2.5	l - l	2			
03.4	N26	6333	New	300	1	l - l	1			
05.1	N07	6334	6310	3000	3.5	l - l	2	110	2	l - l
05.7	N17	6336	New	300	2	b / l	1			
06.4	N08	6335	*	1800	3	l - l	2	100	4	l - l
08.0	N14	6339	New	500	3	b / l	1			
10.1	N10	6340	**	300	2	b ^ d	(1)			
12.2	N01	6345	New	(300)	(2)	b / l	1			
12.3	N04	6341	**	(600)	(2.5)	l \ d	(1)			
15.5	N15	6342	6319	1800	2.5	l - l	6			
17.7	N15	6344	New	800	2.5	l - l	1			
19.0	S04	6349	6321	(1400)	(2)	l \ l	3			
20.3	N10	6348	6324	3100	3	l - l	6	160	2	l - l
23.2	S11	6350	***	600	2.5	l - l	1?			
25.4	N11	6352	6326	5500	3	l - l	4	390	1	l - l
26.1	S12	6351	****	6400	3	l - l	1	1160	11	l - l
28.2	N17	6353	6332	800	2	l \ l	2			

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* Return of Region 6312 of last rotation. In last report 6312 was indicated as return of 6291 and therefore in its 5th rotation, perhaps a better identification would have been "primarily new or a resurgence of 6291."

** New and Ephemeral

*** New (?) near old 6328

**** Primarily new, or resurgence of 6327.

Regions with age indicated as (1) are small and were observed on only a few days.

MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

FEBRUARY 1962

Feb. 1962	Time Meas.	Lat.	Mer. Dist.	Type
1	1735	N10	W41	$\beta\gamma$
		S10	W38	αf
		N08	E44	β
		N10	E57	αp
2	2230	N10	W57	$\beta\gamma$
		N07	E28	β
		N10	E40	αp
3	1730	N10	W66	$\beta\gamma$
		N07	E17	βp
		N10	E30	αp
4	2230	N07	W01	βp
		N10	E14	αp

Feb. 1962	Time Meas.	Lat.	Mer. Dist.	Type
5	1700	N06	W10	$\beta\gamma$
		N03	W03	β
		N07	E04	β
		N10	E04	βp
6	1750	N07	W22	βp
		N02	W17	αp
		N06	W12	βp
		N09	W10	αp
14	2005	N12	E65	αp
		N05	E68	αp

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PROVISIONAL CORONAL LINE EMISSION INDICES

FEBRUARY, 1962

CMP Feb 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 ₆	G ₁	R ₆	R ₁	G ₆	G ₁	R ₆	R ₁	G ₆	G ₁	R ₆	R ₁	G ₆	G ₁	R ₆	R ₁
1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2	36	64	29a	52a	17	17a	27a	56a	6	8	20	25	10	12	19	25
3	44	30	20	49	8	11	15	15	9	20	15	35	14	92	x	x
4	40	64	40	64	7	22	25	25	9	28	15	x	55	17	27	x
5	29	65	18	42	8	13	15	15	x	x	x	x	x	x	x	x
6	24	51	29	70	6	25	35	35	x	x	x	x	x	x	x	x
7	21	31	22a	32a	8	27a	37a	37a	x	x	x	x	x	x	x	x
8	8	11	24	25	20	16	22	22	8	11	9	12	10	14	11	15
9	6	8	28	32	6	28	37	37	x	x	x	x	x	x	x	x
10	5	6	12	15	4	12	15	15	x	x	x	x	x	x	x	x
11	16	20	24	32	22	18	27	27	x	x	x	x	x	x	x	x
12	11	14	x	x	14	x	x	x	x	x	x	x	x	x	x	x
13	13	17	x	x	11	x	x	x	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
16	18	56	15	27	8	14	20	20	6	8	12	15	13	24	11	20
17	72	113	x	x	56	x	x	x	x	x	x	x	x	x	x	x
18	47	76	13	22	50	10	12	12	x	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x	x	6	15	9	13	28	48	5	7
20	x	x	x	x	x	x	x	x	6	16	10	20	12	16	6	10
21	x	x	x	x	x	x	x	x	10	15	x	x	20	32	x	x
22	55	64	x	10	39	8	10	10	16	32	5	5	30	40	7	10
23	x	x	x	x	x	x	x	x	30	60	13	20	30	58	8	10
24	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
25	x	x	x	x	x	x	x	x	85	115	42	89	67	104	33	108
26	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
27	x	x	x	x	x	x	x	x	39	56	x	x	36	76	x	x
28	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

COMMERCE - STANDARDS - BOULDER

x = no observations

a = index computed from low weight data

* = yellow line observed

SOLAR FLARES
FEBRUARY 1962

OBSERVATORY	DATE FEB 1962	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IN- POR- TANCE	OBS. CORD.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.				MCMATH PLACE REGION	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
MITAKA	01	0333	E	0355		0339	1+	1	4.42	5.36	5.49	125
	01	0334	E	0351	D	0337	1	2	2.30	2.70	1.60	114
KODAIKANL	01	0454	E	0511	D	0456	1	1	1.96	2.37	2.03	110
MITAKA	01	0550	E	0600	D	0552	1	3	2.30	2.80	2.08	122
KODAIKANL	01	0647	E	0652	D	0648	1	2	2.30	2.80	1.20	114
KODAIKANL	01	0830	E				1	2	1.10	1.40	3.10	
ONDREJOV	01	0900	E	1042		0906	1+	3	6.50	8.10		
WENDEL	01	0901	E	0923	D	0919	1	1	1.10	1.40		
CAPRI S	01	0902	E	0946	D		2	2				
KODAIKANL	01	0912	E				1	1				
KODAIKANL	01	0925	E	1045	D		2	2				
LOCARNO	01	0925	E	1005	D		2	2				
ARCTRI	01	0925	E	1150	D		1	1				
SALTSJOBADN	01	0945	E	1150	D		1+	1	7.00	9.10		
WENDEL	01	0946	E	1036	D	1004	1	1	8.00	8.00		
LOCARNO	01	1230	E	1246			1	1				
MCMATH	01	1430	E	1500		1432	1-	2	.40	.50		
MCMATH	01	1508	E	1518		1510	1-	2	.20	.30		
SAC PEAK	01	1552	E	1618	U	1554	1-	3	1.88	2.08	19	
MCMATH	01	1552	E	1622		1555	1-	2	1.10	1.50		
MCMATH	01	1555	E	1615		1557	1-	2	2.80	3.50	2.70	20
HUANCAYC	01	1555	E	1625		1608	1-	1	.60	.70	20	
LOCKHEED	01	1555	E	1625		1608	1-	1	3.47	4.02	25	
SAC PEAK	01	1634	E	1738		1644	1	3	2.00	2.50		S-SWF
SAC PEAK	01	1634	E	1738		1702	1	2				
MCMATH	01	1635	E	1730		1645	1+	2				
MCMATH	01	1635	E	1730		1659	1+	2				
HUANCAYC	01	1636	E	1730		1644	1	2	2.90	3.70	3.10	
HUANCAYC	01	1636	E	1730		1659	1	2	2.70	3.30	3.30	
HUANCAYC	01	1635	E	1706	D	1659	1	3	1.63	1.90	17	
SAC PEAK	01	1818	E	1832		1824	1-	2	.40	.60		
SAC PEAK	01	1820	E	1827		1821	1-	2	1.80	2.10		S-SWF
MCMATH	01	1824	E	1936	D	1824	1-	3	.54	.60	16	
HONOLULU	01	1840	E	1852		1846	1-	2	.40	.50		
SAC PEAK	01	1840	E	1852		1846	1-	2	1.00	1.20		
MCMATH	01	1842	E	1910		1910	1-	3	.72	.85	17	
HONOLULU	01	1858	E	1930	D	1910	1-	3	1.00	1.20		
SAC PEAK	01	1940	E	1952		1946	1-	3	1.00	1.20		
HONOLULU	01	1940	E	2006	D	1944	1-	3	.80	.90	20	
LOCKHEED	01	1940	E	2036		1945	1-	2	.30	.40		
LOCKHEED	01	1942	E	2025	D	1945	1-	2	.40	.50	20	
MCMATH	01	2154	E	2200		2155	1-	2	.10	.10	20	
LOCKHEED	01	2307	E	2313		2309	1-	2	.40	.50	20	
LOCKHEED	01	2332	E	2343		2338	1-	2	.40	.50	20	
SAC PEAK	02	2208	E	2212		2210	1-	3	1.07	1.07	17	
LOCKHEED	02	2215	E	2300		2220	2	3	4.30	7.00	20	
HONOLULU	02	2219	E	2240	D	2222	1	3	3.10	4.80		
LOCKHEED	03	0056	E	0107		0101	1-	1	.20	.30	30	
CAPRI S	03	1231	E	1340	D	1241	1+	3	.90	1.20		
WENDEL	03	1320	E	1345	D	1345	1+	3	6.00	6.00		
SCHAUNS	03	1336	E	1413	D	1336	1	2	5.00	5.00	1.60	19
SAC PEAK	03	2126	E	2138	U	2130	1-	3	.99	.99		
LOCKHEED	03	2126	E	2141		2130	1	1	.80	2.00	20	

SOLAR FLARES

FEBRUARY 1962

OBSERVATORY	DATE FEB 1962	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT.	MATH PLAGE REGION				TIME U T	MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.		MAX. WIDTH Hq
[] HONOLULU	03	2346 E	2358 D	N14 W80	6326	12 D	1	3	2350	1.00	2.50	2.50	20
[] LOCKHEED	03	2347	0008	N13 W78	6326	21	2	1	2352	2.50	6.50	1.67	120
[] IKOWASAN	03	2353	2358 D	N09 W72	6326	5 D	1	1	2353	2.06		2.70	
[] MITAKA	03	2355 E	0010	N10 W77	6326	15 D	1	1	2355	1.97			
[] KDAIKANL	04	0158 E	0235 D	N11 W80	6326	37 D	2+	3	0222	1.90	1.00	4.00	135
[] SAC PEAK	04	0315 E	0317 D	N11 W80	6326	2 D	1-	3	0315	.60	3.70	1.36	114
[] SAC PEAK	04	1508	1618	N10 W80	6326		1-	3	1.59	1.59			18
[] SAC PEAK	04	1726	1746	N10 W80	6326		1-	3	.37				19
[] LOCKHEED	04	1726	1753	N10 W80	6326		1-	1	1731	.30	.90		10
[] MCMATH	04	1728	1751	N10 W81	6326		1-	2	1732	.80	.80		
[] HONOLULU	04	1828 E	1840 D	N05 E01	6326		1-	3	1830	.01	.01		
[] LOCKHEED	04	1920	1942	N09 E09	6326		1-	1	1930	.30	.30		20
[] LOCKHEED	04	2015	2025	N10 W80	6326		1-	1	2018	.40	1.20		20
[] LOCKHEED	04	2053 U	2105	N14 W90	6326	12 U	1	1	2056	.70	3.50		20
[] HONOLULU	05	0150 E	0208 D	N09 W01	6326		1-	3	0152	.50	.50		
[] MITAKA	05	0506	0529	N07 W88	6326	23	1	1	0509	.49		2.28	18
[] SAC PEAK	05	1610	1618	N08 W90	6326	8	1	3	.62	3.09			14
[] SAC PEAK	05	2206	2218	N07 W11	6326		1-	3	.72	.72			14
[] SAC PEAK	06	1624	1634	N09 W10	6326		1-	3	.64	.64			16
[] HUANCAYO	06	1625	1630	N09 W09	6326		1-	2	1625	.80	.80	2.40	
[] MITAKA	07	0005	0019	N07 W90	6326	14	1	1	0013	2.45		4.93	
[] MITAKA	07	0038	0114	N07 W90	6326	36	1	1	0038	2.76		4.67	
[] SAC PEAK	07	1834	1842	N04 W39	6326		1-	2	.21	.23			14
[] SAC PEAK	07	2058	2110	N04 W39	6326		1-	2	.29	.33			14
[] SAC PEAK	07	2136	2210	NC4 W40	6326		1-	2	1.07	1.20			17
[] SAC PEAK	07	2136	2210	N04 W40	6326		1-	2					
[] SAC PEAK	08	1714 E	1720	N03 W42	6326		1-	3	.52	.66			16
[] SAC PEAK	08	1908	1918	N07 W41	6326		1-	3	.43	.56			14
[] SAC PEAK	10	1638	1652	N06 W78	6326		1-	3	.72	1.93			17
[] SAC PEAK	10	1916	1940	N07 W79	6326		1-	3	.58	1.32			17
[] SAC PEAK	10	2124	2154	N06 W80	6326		1	3	.89	2.25			19
[] LOCKHEED	16	0024	0030 U	N15 E09	6326		1-	2	0026	.30	.30		20
[] MCMATH	17	1319 E	1327	N09 E40	6348		1-	1	1319	.90	1.30		22
[] SAC PEAK	17	2104	2116	N12 E25	6348		1-	3	.23	.23			
[] BUCHAREST	19	0911 E	0915 D	S05 E90	6351	4	1-	2	0913		2.00		
[] ZURICH	19	0913	0917	S11 E80	6351	146 D	1	2	1304		4.00		
[] ZURICH	19	1304 E	1330 D	N11 E73	6352	56 D	2	3	1315		8.40		
[] CAPRI S	19	1305 E	1401 D	N16 E80	6352		2	2		2.10			
[] LOCARNO	19	1315 E	1430	N08 E74	6352	127 D	2	2	1342		9.90		
[] HUANCAYO	19	1333 E	1540 U	N04 E60	6352		2	2		2.00			
[] ARCTRI	19	1335 E	1451 D	S10 E80	6351	76 D	2	3		.43	1.53		
[] SAC PEAK	19	1810	1824	S09 E88	6351		1-	2				3.10	20

COMMERCE - STANDARDS - BOULDER

SLOW S-SWF

SOLAR FLARES

FEBRUARY 1962

OBSERVATORY	DATE FEB 1962	OBSERVED TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — UT	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	APPROX. LAT. MER. DIST.	McMATH FLARE REGION					MAX. PHASE	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H _g
[HONOLULU	19	2134 E	2202 D	S10 E90	2144 U	28 D	2	3	2144	1.60	5.40	6.90	15	S-SWF
[SAC PEAK	19	2145 E	2154 U	S09 E85	2148 U	9 D	1	2	0001	1.44	3.90			
[MITAKA	19	2342 E	0015 U	N15 E	0031 U	33	1	1		3.93				
[MITAKA	20	0240 E	0246 E	S10 E80		6 D	1	1	0246	1.01		2.40	100	
[MITAKA	20	0444 E	0506 E	S10 E79	0456 E	22	1	1	0456	2.36		2.06	102	
[MITAKA	20	0550 E	0625 E	S10 E78	0557 E	35	2	1	0557	5.70		5.10	180	
[WENDEL	20	0745 E	0825 D	S10 E70		40 D	1				4.00			
[WENDEL	20	0812 E	0830 D	N07 E75		18 D	1				3.00			
[WENDEL	20	1152 E	1202 D	S11 E65		11	1				1.20			
[WENDEL	20	1204 E	1235 D	S12 E73		31 D	1	3	1409	.40				
[CAPRI S	20	1405 E	1421 D	S08 E64	1706 U	1	1	2	1706	.20	.70			
[MCMATH	20	1701 E	1718 D	S10 E70	1827 U	39 D	1	2	1827	1.50	2.50			
[MCMATH	20	1821 E	1900 D	S10 E72			1	2						
[CAPRI S	21	0731 E	0739 D	N12 E63		1	1	3	0731	.60	1.10			
[CAPRI S	21	0731 E	0756 D	S10 E58		25 D	1	3	0740	2.50	4.70			
[CAPRI S	21	0759 E	0808 D	S09 E55		1	1	3	0801	1.10	2.00			
[CAPRI S	21	0816 E	0845 D	S09 E60		29 D	2	3	0824	2.60	5.20			
[BUCHAREST	21	0820 E	0838 D	S03 E57	0828 U	18 D	2	2		5.05	5.05			
[KODAIKANL	21	0821 E	0833 D	S10 E60	0822 U	12 D	1	1		1.75	3.50			
[KODAIKANL	21	0917 E	0922 D	S10 E60	0918 U	8 D	1	1	0917	.87	1.73	1.76		
[BUCHAREST	21	0917 E	0925 D	S03 E57		17 D	1	1			4.04			
[BUCHAREST	21	0940 E	0957 D	S03 E57		17 D	1	1			3.03			
[CAPRI S	21	0944 E	0958 D	S09 E54		1	1	3	0953	.50	1.00			
[CAPRI S	21	1005 E	1009 D	N12 E62		1	1	3	1007	.40	1.00			
[LOCKHEED	21	1835 E	1855 U	N12 E56	1835 U	1	1	3	1835	1.00	1.50	10	10	
[LOCKHEED	21	1836 E	1854 U	S09 E53	1845 U	1	1	1	1845	.40	.60	10	10	
[LOCKHEED	21	1910 E	1922 U	S08 E21	1916 U	1	1	1	1916	.20	.20	10	10	
[SAC PEAK	21	2158 E	2224 U	N12 E55	2206 U	26 D	1	2		2.31	3.16	20	20	
[LOCKHEED	21	2200 U	2217 U	N11 E55	2210 U	17 U	1	1	2210	2.00	2.90	10	10	
[KODAIKANL	22	0210 E	0222 D	S09 E47	0216 U	10 D	1	2	0216	.58	.85	1.36	114	
[KODAIKANL	22	0230 E	0240 D	S10 E48	0231 U	10 D	1	2	0231	1.15	1.73	1.60	122	
[KODAIKANL	22	0413 E	0429 D	S10 E48	0423 U	1	1	1		.58	.86			
[KODAIKANL	22	0612 E	0631 D	S10 E50	0612 U	19 D	1	2		1.75	2.73			
[LOCKHEED	22	1904 U	1910 U	N10 E44	1905 U	1	1	1	1905	.30	.40	10	10	
[LOCKHEED	22	1940 U	1952 U	S10 E37	1944 U	1	1	1	1944	.50	.50	10	10	
[LOCKHEED	22	2013 U	2033 U	S10 E37	2015 U	1	1	2	2015	1.00	1.10	20	20	
[LOCKHEED	22	2032 U	2040 U	N08 E43	2035 U	1	1	2	2035	.30	.40	10	10	
[LOCKHEED	22	2150 U	2202 U	S12 E02	2154 U	1	1	2	2154	.20	.20	10	10	
[LOCKHEED	22	2155 U	2225 U	S08 E45	2201 U	1	1	2	2201	.30	.40	10	10	
[LOCKHEED	22	2159 U	2209 U	N13 E43	2203 U	1	1	2	2203	.40	.50	10	10	
[WENDEL	23	0743 E	0755 D	S09 E31	0755 D	12 D	1	1			3.00	3.00		
[WENDEL	23	0938 E	1011 D	S10 E34	0931 U	33 D	1	3			6.00	6.00		
[SAC PEAK	23	1534 U	1548 U	N11 E32	1544 U	14	1	3		2.31	2.35	16	16	
[SAC PEAK	23	1546 U	1616 U	S11 E30	1604 U	1	1	3		.87	.89	17	17	
[SAC PEAK	23	1654 U	1700 U	S12 E29	1656 U	1	1	3		1.16	1.18	18	18	
[SAC PEAK	23	1746 U	2228 U	S11 E27	1839 U	282 D	2	3		9.80	9.92	35	35	
[SAC PEAK	23	1746 U	2228 U	S11 E27	1848 U	2	2	3						

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

FEBRUARY 1962

OBSERVATORY	DATE FEB 1962	OBSERVED UNIVERSAL TIME			LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	LAT.	MER. DIST.	MAGNITUDE PLAGE REGION				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
[] HONOLULU	23	1818 E	1844 D	1835	S07 E25	6351	26 D	1	3	1835	2.40	2.40	2.40	Slow S-SWF
[] HUANCAYO	23	1823 E	1902	1848	S09 E29	6351	39 D	1+	2	1841	3.70	4.20	3.90	
[] SAC PEAK	23	2202	2209 U	2205	N11 E28		1-	1-	3		.33	.35	20	
[] ARCTERI	24	0820 E	0855 D		S10 E15	6351	35 D	1	3			3.00		
[] WENDEL	24	0918 E	1000 D		S13 E21	6351	42 D	1						
[] ARCTERI	24	0930 E	1005 D		S10 E16	6351	5 D	1	3					
[] WENDEL	24	1029 E	1054 D		S12 E19	6351	25 D	1						
[] MCMATH	24	1341	1349	1342	N14 E25	6352		1-	1	1342	.25	.30		
[] MCMATH	24	1358	1408 D	1400	S12 E16	6351		1-	1	1400	.80	.80		
[] SCHAUINS	24	1430 E	1506 D		S11 W12	6350	36 D	1+	1			4.00		
[] HUANCAYO	24	1452 E	1456	1454	S13 E12	6351	4 D	1-	1	1453	1.10	1.20	5.80	
[] SAC PEAK	24	1910	1920	1914	N07 W68			1-	2		.62	1.11		16
[] SAC PEAK	24	1940	2000	1950	N18 E45			1-	2	1947	.76	.93		17
[] SAC PEAK	24	1945	1954	1947	N18 E45	6353		1-	2		.30	.50		20
[] MCMATH	24	2128	2146	2134	S08 E10			1-	1	2135	.78	.76		20
[] LOCKHEED	24	2130	2144	2135	S07 E10			1-	1		.40	.40		20
[] SAC PEAK	25	1544	1558	1548	N14 E10			1-	3		.97	.97		15
[] SAC PEAK	25	1612	1620	1614	S08 W03			1-	3		1.65	1.63		16
[] LOCKHEED	25	1814	1831	1817	S11 W16			1-	1	1824	.50	.50		20
[] LOCKHEED	25	1814	1831	1824	S11 W16			1-	1					10
[] LOCKHEED	25	1825	1836	1828	S11 W00			1-	1	1828	.60	.60		20
[] LOCKHEED	25	1912	1935	1920	S14 W15			1-	2	1920	.60	.60		20
[] MCMATH	25	1914	1927	1918	S14 W04	6351		1-	2	1918	.30	.30		20
[] LOCKHEED	25	1924	1933	1927	S11 W16			1-	1	1927	.40	.40		20
[] SAC PEAK	25	1927 E	1958	1952	S14 W06			1	2			2.56		24
[] SAC PEAK	25	1927 E	1958	1927	S14 W06	6351	31 D	1	1	1943	2.60	2.56		20
[] SAC PEAK	25	1927 E	1958	1944	S14 W06			1	1		.50	.50		20
[] LOCKHEED	25	1940	1955	1943	S11 W16			1-	1					26
[] SAC PEAK	26	1630	1642	1636	S15 W17			1-	3		.72	.72		19
[] SAC PEAK	26	1652	1658	1654	S17 W18			1-	3		.93	.93		20
[] SAC PEAK	26	1908	2036	1934	S12 W13			1-	3		2.02	1.98		20
[] SAC PEAK	26	2134	2144	2138	S10 W24			1-	2		.33	.33		20
[] WENDEL	27	1016 E	1027 D		S13 W27			1-	1					
[] WENDEL	27	1052 E	1100 D		S09 W25			1-	1					
[] WENDEL	27	1101 E	1112 D		S13 W24			1-	1					
[] WENDEL	27	1121 E	1130 D		S12 W23			1-	1					
[] WENDEL	27	1124 E	1133 D		S10 W30			1-	1					
[] WENDEL	27	1314 E	1323 D		S10 W18			1-	1					
[] CAPRI S	27	1408 E	1422 D		S13 W22			1-	2	1412	1.60	1.60		19
[] MCMATH	27	1413 E	1420 D		S10 W17	6351		1-	1	1413	.50	.50		10
[] CAPRI S	27	1422 E	1435 D		S13 W30			1-	3	1433	1.00	1.00		20
[] MCMATH	27	1514 E	1720 D		S12 W30	6351	126 D	1-	1	1547	1.50	2.00		20
[] CAPRI S	27	1527 E	1536 D		S14 W28			1-	1	1532	1.00	1.10		19
[] SAC PEAK	27	1534	1616	1550	S16 W40			1-	2		.68	.76		18
[] WENDEL	27	1537 E	1605 D		S09 W36	6351	28 D	1	2		.93	3.00		10
[] WENDEL	27	1550	1808	1628	S07 W41			1-	1					10
[] WENDEL	27	1555 E	1637 D		S16 W39	6351	42 D	1-	1	1645	.30	.30		10
[] LOCKHEED	27	1645 E	1653	1645 E	S13 W31			1-	1	1707	.20	.20		10
[] LOCKHEED	27	1700	1730	1707	S09 W29			1-	1					10

COMMERCIAL - STANDARDS - BOULDER

SOLAR FLARES

FEBRUARY 1962

OBSERVATORY	DATE FEB 1962	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX.	MATH FLARE REGION				TIME — UT	MEAS. AREA Sq. Deg.	COOR. AREA Sq. Deg.	
[] SAC PEAK	27	1710	1756	S15 W32	6351	46	1-	2	4.33	4.54	4.54	21
[] LOCKHEED	27	1715	1750	S13 W31			1-	2	1.40	1.50		20
[] LOCKHEED	27	1715	1725	S13 W31			1-					
[] LOCKHEED	27	1715	1750	S13 W31			1-					
[] MCMATH	27	1717	1723	S14 W30	6351		1-	1	60	70		10
[] LOCKHEED	27	1731	1740	S10 W20			1-	2	1734	40		20
[] LOCKHEED	27	1731	1749	S12 W31			1-	2	1749	30		20
[] LOCKHEED	27	1746	1753	S12 W31			1-	2	1810	40		20
[] LOCKHEED	27	1807	1820	S09 W36			1-	2	1828	60		20
[] LOCKHEED	27	1824	1836	S09 W36			1-	2	76	78		19
[] SAC PEAK	27	1826	1830	S10 W36			1-	2	1839	50		10
[] LOCKHEED	27	1835	1848	S15 W21			1-	2	1905	40		10
[] LOCKHEED	27	1854	1918	S13 W32			1-	2	1952	30		10
[] LOCKHEED	27	1949	1959	S12 W29			1-	1				
[] LOCKHEED	27	1959	2045	S13 W33			1-	2	2037	60		20
[] LOCKHEED	27	1959	2045	S13 W33			1-	2				
[] LOCKHEED	27	1959	2045	S13 W33			1-	2	2.60	2.70		20
[] LOCKHEED	27	2050	2120	S12 W29	6351	30	1	2	2.74	2.83		21
[] SAC PEAK	27	2059	2120	S13 W27	6351	21	D	2	1.40	1.50		20
[] LOCKHEED	27	2119	2158	S13 W34			1-	2	2137			
[] LOCKHEED	27	2119	2158	S13 W34			1-	2	1.24	1.30		20
[] SAC PEAK	27	2134	2136	S15 W33			1-	2	1.00	1.10		30
[] LOCKHEED	27	2200	2217	S08 W38			1-	2	1.59	1.73		22
[] SAC PEAK	27	2202	2202	S09 W38			1-	1	1.50	1.60		20
[] SAC PEAK	27	2202	2202	S09 W38			1-	2	2301	1.60		20
[] LOCKHEED	27	2300	2315	S12 W34			1-	2	40	40		20
[] LOCKHEED	27	2358	0015	S12 W35			1-	2	0002	80		20
[] LOCKHEED	28	0015	0032	S12 W30			1-	2	0021	40		10
[] LOCKHEED	28	0026	0040	S13 W35			1-	2	0031	50		10
[] LOCKHEED	28	0027	0050	S10 W28			1-	2	0031	50		20
[] KODAIKANL	28	0650	0713	S14 W33	6351	23	D	2	2.91	3.55	2.24	135
[] WENDEL	28	0654	0730	S13 W39	6351	36	D	2	8.00	8.00		
[] CAPRI S	28	0822	0830	S11 W37			1-	2	0824	1.00		
[] WENDEL	28	0906	0912	S09 W38			1-					
[] WENDEL	28	1105	1112	S09 W40			1-					
[] WENDEL	28	1141	1152	S10 W32			1-					
[] WENDEL	28	1148	1226	S13 W37	6351	38	2					
[] CAPRI S	28	1152	1206	S11 W33	6351	14	D	1	1157	2.50		10
[] SALTSJOBADN	28	1154	1213	S13 W32	6351	19	D	2	1154	4.20		20
[] WENDEL	28	1211	1213	S12 W35			1-	1				
[] WENDEL	28	1228	1302	S12 W39			1-	1				
[] LOCKHEED	28	1714	1735	S08 W26			1-	1	1725	40		10
[] LOCKHEED	28	1741	1756	S08 W26			1-	1	1748	30		20
[] LOCKHEED	28	1806	1915	S15 W45	6351	69	1	2	1810	2.50		20
[] SAC PEAK	28	1806	1930	S15 W44	6351	84	1	3	3.75	4.35		26
[] MCMATH	28	1807	1900	S14 W43	6351	53	D	1	1.50	2.00		

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

FEBRUARY 1962

OBSERVATORY	DATE FEB. 1962	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — UT	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT. — MER. DIST.	MEMPH PLAGE REGION	MEAS. AREA Sq. Deg.					COBR. AREA Sq. Deg.	MAX. WIDTH He	MAX. INT. %	
[LOCKHEED	28	1934	2028	S15 W44	6351	54	1	2	1941	2.50	2.90	2.90	20	
[SAC PEAK	28	1936	2032	S15 W41	6351	56	1	3		3.82	4.31	4.31	23	
[SAC PEAK	28	2012	2016	S16 W41			1-	3		.58	.66	.66	17	
[SAC PEAK	28	2202	2242	S07 W28			1-	3		1.69	1.73	1.73	22	
[LOCKHEED	28	2206	2228	S08 W28			1-	2	2215	1.10	1.10	1.10	10	
[LOCKHEED	28	2339	0004	N09 E39			1-	2	2345	.50	.60	.60	10	

COMMENCE - STANDARDS - BOLDER

Note: Beginning with this issue of the CRPL-F Part B both flares and subflares have been listed chronologically in the above table. No separate listing of subflares will be made hereafter. Rather than just selected information all available data on the subflares are published. Normally McMath plage region designations and durations will not be computed for the subflare entries which will tend to set them apart from the flare entries.

ATHENS, GREECE PIRCULI, USSR ROYAL OBSERVATORY, CAPE OF GOOD HOPE CAPRI, ITALY (GERMAN) CAPRI S CRINEE HERSTMONCEU	HONOLULU IKOMASAN KIEV KO KIEV KY LOCKHEED MCMATH MOSSOU HERSTMONCEUX, ENGLAND	HAWAII, USA KYOTO, JAPAN KIEV GAO, USSR KIEV UNIVERSITY, USSR LOS ANGELES, CALIF., USA MCMATH-HULBERT PONTIAC, MICH., USA MOSCOW-GAISH, USSR
NERA NIZMIR SAC PEAK SALTSJOBADEN SCHAUTINSLAND, GFR TASHKENT, USSR WENDEL	NEDERHORST den BERCH, NETHERLANDS KRASNAYA PAKHRA, USSR SACRAMENTO PEAK, N.MEX. USA STOCKHOLM, SWEDEN SCHAUTINSLAND, GFR TASHKENT, USSR 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.

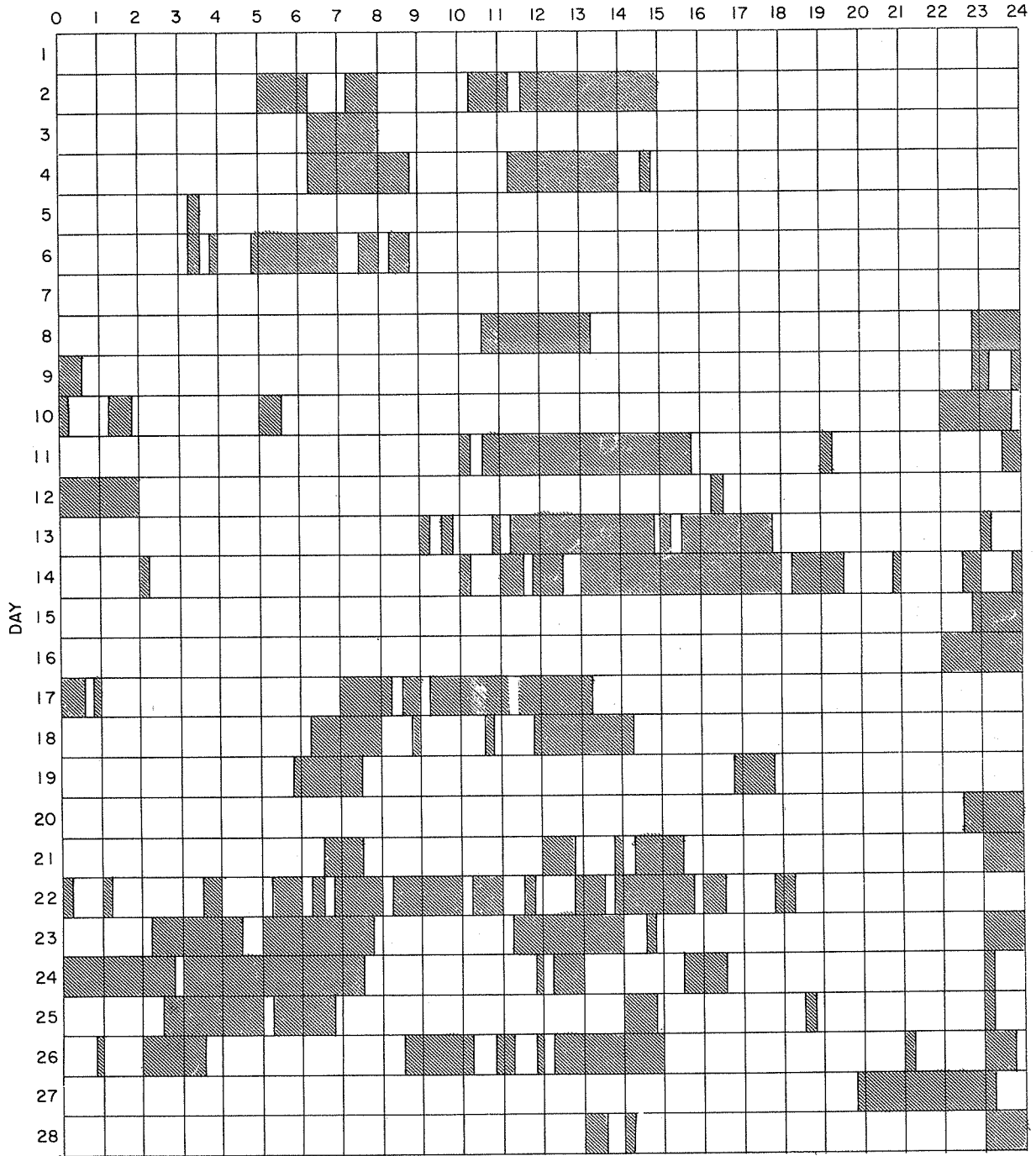
SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

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

INTERVALS OF NO FLARE PATROL OBSERVATIONS

FEBRUARY 1962

HOUR-UT



Stations Include:

- | | | | | |
|-----------------|--------------|----------------|-----------------|--------------|
| Arcetri | Herstmonceux | Ikomasan | Mitaka | Schauinsland |
| Bucharest | Honolulu | Kodaikanal | Ondrejov | Wendelstein |
| Capri (Swedish) | Huancayo | McMath-Hulbert | Sacramento Peak | |

SUBFLARES

Noted as follows: Date-Universal Time - Coordinates

IIIh

JANUARY 1962

LOCKHEED	02	2006	N12 W70	LOCKHEED	26	2001	N20 W28
LOCKHEED	02	2303	N12 W80	SAC PEAK	26	2042	N22 W30
LOCKHEED	03	1639	S01 E71	LOCKHEED	26	2042	N20 W28
SAC PEAK	07	1604	N15 E05	LOCKHEED	26	2243	N20 W28
LOCKHEED	08	2215	S13 W21	LOCKHEED	26	2326	N11 E39
LOCKHEED	09	1811	N05 W39	CAPRI S	27	1017	N21 W33
LOCKHEED	11	1645 E	N17 E90	UCCLE	27	1029 E	N20 W35
WENDEL	12	1053 E	N06 W47	UCCLE	27	1033	S15 E42
ONDREJOV	12	1158 E	N10 W25	UCCLE	27	1038	N12 E38
* SAC PEAK	13	1616	N14 E90	UCCLE	27	1058	N12 E38
MCMATH	13	1859	N14 E87	UCCLE	27	1125	N10 E24
LOCKHEED	13	2100	N02 W64	MCMATH	27	1430	N11 E21
LOCKHEED	14	1805	N06 W72	MCMATH	27	1457	N21 W38
LOCKHEED	15	1648 E	S14 W65	SAC PEAK	27	1516	N11 E22
* KODAIKANL	16	0920 E	N14 E45	SAC PEAK	27	1612	N11 E22
MCMATH	16	1555	N18 E24	SAC PEAK	27	1654	S07 E63
LOCKHEED	17	1929	N06 E90	LOCKHEED	27	2039	N04 W40
HONOLULU	17	1952 E	N08 E26	SAC PEAK	27	2042	N05 W40
LOCKHEED	17	2007	N10 E31	LOCKHEED	27	2102	N04 W40
LOCKHEED	17	2055	N06 E90	LOCKHEED	27	2135	N10 E26
* MCMATH	18	1404 E	N06 E82	LOCKHEED	27	2328	N11 E16
SAC PEAK	18	1626	N07 E74	MCMATH	28	1533 E	N10 E14
MCMATH	18	1826	N04 E76	LOCKHEED	28	1600 E	S28 E32
SAC PEAK	18	1838 E	N04 E72	LOCKHEED	28	1600 E	N10 E12
LOCKHEED	18	2027	N06 E72	LOCKHEED	28	1611	N05 W49
SAC PEAK	18	2100	N04 E72	* MCMATH	28	1614	N04 W52
LOCKHEED	18	2102	N05 E72	LOCKHEED	28	1752	N11 E06
SAC PEAK	18	2156	N04 E70	HUANCAYO	28	1915 E	N09 E12
LOCKHEED	18	2307	N06 E72	* LOCKHEED	28	1919	N11 E11
SALTSJOBADN	19	1357 E	N07 E65	* MCMATH	28	1929	N10 E10
CAPRI S	19	1437 E	N04 E65	SAC PEAK	28	2048	N05 W51
SAC PEAK	19	1650	N08 E60	LOCKHEED	28	2048	N05 W52
KODAIKANL	20	0327 E	N07 E50	LOCKHEED	28	2048	N05 W52
MCMATH	20	1531	N05 E50	LOCKHEED	28	2214	N10 E10
SAC PEAK	20	1534	N08 E50	LOCKHEED	28	2300	N10 E10
MCMATH	20	1616	N05 E50	LOCKHEED	28	2355	N10 E10
MCMATH	20	1625	N06 E50	UCCLE	29	0933	N10 E05
MCMATH	20	1711	N05 E49	UCCLE	29	0951	N10 E07
SAC PEAK	20	2216	N07 E46	UCCLE	29	1028	N10 E07
UCCLE	22	1006	N18 E23	UCCLE	29	1046	N09 E06
UCCLE	22	1435	N03 E18	UCCLE	29	1048	N06 E00
SAC PEAK	22	2026	N05 E18	SALTSJOBADN	29	1048 E	N09 E08
HONOLULU	23	0148 E	N02 E08	UCCLE	29	1058	N09 E03
UCCLE	23	0917	N20 E20	UCCLE	29	1107	N09 E06
UCCLE	23	0942	N13 E87	SALTSJOBADN	29	1110 E	N09 E08
UCCLE	23	0956	N20 W46	SALTSJOBADN	29	1134 E	N09 E08
UCCLE	23	1026	N10 E85	UCCLE	29	1155	N08 E06
UCCLE	23	1033	N05 E10	UCCLE	29	1252	N09 E05
UCCLE	23	1041	N22 E22	UCCLE	29	1351	N08 E06
MCMATH	23	1938	N08 E02	UCCLE	29	1401	N07 E05
MCMATH	24	1712	N11 E66	LOCKHEED	29	1650	N06 E90
LOCKHEED	24	2006	N04 W15	LOCKHEED	29	1656	N04 W65
LOCKHEED	24	2006	N04 W15	LOCKHEED	29	1909	S11 E09
SALTSJOBADN	25	1329 E	N20 W13	LOCKHEED	29	1930	N10 W80
LOCKHEED	25	2336	N05 W31	SAC PEAK	29	1932	N10 W82
LOCKHEED	25	2337	N06 W25	LOCKHEED	29	2225	N09 W06
SALTSJOBADN	26	1146 E	N08 E33	LOCKHEED	29	2345	N10 W02
SALTSJOBADN	26	1146 E	N08 E46	LOCKHEED	30	0016	N10 W04
SALTSJOBADN	26	1344 E	N10 E45	LOCKHEED	30	0016	N10 W04
LOCKHEED	26	1659	S17 E04	LOCKHEED	30	0034	S13 E06
LOCKHEED	26	1734	N06 E29	UCCLE	30	0835 E	S12 W01
LOCKHEED	26	1841	N19 W27	* CAPRI S	30	0951 E	N09 W05
HONOLULU	26	1950 E	N28 W18	UCCLE	30	0953	N08 W14
				UCCLE	30	1012	S12 W01
				UCCLE	30	1054	N09 W10
				UCCLE	30	1103	N09 W10
				UCCLE	30	1113	N10 W06
				SALTSJOBADN	30	1116 E	N09 W06
				UCCLE	30	1134	N10 W06
				UCCLE	30	1150	S10 W05
				UCCLE	30	1156	N10 W07
				UCCLE	30	1226	S18 W22
				UCCLE	30	1247	N10 W07
				SALTSJOBADN	30	1313 E	N09 W06
				UCCLE	30	1331	N10 W07
				SALTSJOBADN	30	1339 E	N09 W06
				UCCLE	30	1355	N10 W20
				SAC PEAK	30	1512	N10 W09

SUBFLARES

Noted as follows: Date-Universal Time - Coordinates

JANUARY 1962

UCCLE	30	1513	N10	W10		UCCLE	31	1005	N11	W30
MCMATH	30	1515	N10	W09		* WENDEL	31	1133 E	N11	W23
UCCLE	30	1519	N10	W17		UCCLE	31	1321	N12	W25
UCCLE	30	1532	N10	W14		UCCLE	31	1338	N11	W26
SAC PEAK	30	1710	N11	W21		UCCLE	31	1340	N13	W22
SAC PEAK	30	1738	N11	W11		WENDEL	31	1349 E	N10	W24
LOCKHEED	30	1739	N11	W14		UCCLE	31	1356	N12	W25
MCMATH	30	1742	N10	W11		* UCCLE	31	1440	N12	W35
LOCKHEED	30	1817	N09	W11		* MEUDON	31	1442	N11	W30
SAC PEAK	30	1818	N10	W12		LOCKHEED	31	1625	N10	W33
MCMATH	30	1819	N10	W12		SAC PEAK	31	1628	N11	W34
LOCKHEED	30	1904	N10	W18		LOCKHEED	31	1655	N10	W26
SAC PEAK	30	2225	N10	W13		LOCKHEED	31	1833	N10	W21
LOCKHEED	30	2225	N10	W16		* LOCKHEED	31	1900	N10	W35
LOCKHEED	30	2226	S09	W09		LOCKHEED	31	1916	N12	W25
LOCKHEED	30	2316	N09	W15		SAC PEAK	31	1920	N13	W23
						LOCKHEED	31	2033	N10	W30
LOCKHEED	31	0011	S04	W02		SAC PEAK	31	2036	N10	W30
LOCKHEED	31	0036	N10	W15		LOCKHEED	31	2110	N14	W35
HONOLULU	31	0038 E	N10	W14		SAC PEAK	31	2154	N08	W30
HONOLULU	31	0126 E	N10	W14		SAC PEAK	31	2154	N08	W30
KODAIKANL	31	0333 E	N07	W27						

COMMERCE - STANDARDS - BOULDER

*Rated as flare of importance ≥ 1 by other observatories (See CRPL-F 210 Part B for February 1962).

SOLAR FLARES

NOVEMBER 1961

OBSERVATORY	DATE NOV 1961	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION MINUTES	IM- POR- TANCE	CAT. COND.	MEASUREMENTS		MAX. WIDTH H _e	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	APPROX. LONG. DIST.				TIME U.T.	AREA Sq. Deg.			
CAPETOWN	05	1311	1350	N09 W25	6264	39	1		1318	1.90	2.10		S-SWF
BUCHAREST	09	0955	1014	N09 W80	6264	19	1	2	1052	.30			
CAPETOWN	09	1047	1114	N09 W83	6264	27	1					100	
IKOMASAN	10	0032 E	0212 D	N18 E02	6270	100 D	1		0035	4.54			
CAPETOWN	10	1121	1146	N09 W90	6265	25	1		1136	.60			
CAPETOWN	10	1328	1405	N09 W90	6265	37	1		1332	.40			
VOROSHILOV	11	0402	0430 D	N18 W12	6270	28 D	1+	1		2.60			93
CAPETOWN	11	0827	0849	N18 W15	6270	22	1		0834	2.00	2.10		Slow S-SWF
CAPETOWN	11	0949	1005	N18 W16	6270	16	1		0953	2.00	2.10		
CAPETOWN	11	1230	1249	N06 E49	6271	19	1		1237	1.60	2.40		
VOROSHILOV	12	0216 E	0302	N05 E41	6271	46 D	1+	1	0242	2.42			
CAPETOWN	12	1236	1303	N18 W26	6270	27	1		1247	3.90	3.80		
MITAKA	15	0400	0406	N18 W65	6270	6	1	1	0400	1.18	2.51	2.13	93
CAPETOWN	20	1306	1339	N09 W80	6271	33	1		1310	.90			
CAPETOWN	21	0636 E	0656	N10 W56	6273	20 D	1		0637	1.50	2.80		
CAPETOWN	21	0714	0734	N10 W56	6273	20	1		0921	1.40	2.60		
CAPETOWN	21	1311	1353	N09 W58	6273	18	1		1113	1.40	2.70		
CAPETOWN	21	1326	1353	N09 W60	6273	29	1		1331	1.80	3.60		
CAPETOWN	22	0635 E	0825	N10 W70	6273	110 D	2		0635	2.20	7.10		
CAPETOWN	22	0840	0909	N10 W70	6273	29	1		0848	.80	2.60		
CAPETOWN	22	0915	1015	N10 W70	6273	60	1		0930	.90	2.90		
CAPETOWN	22	0915	1015	N10 W70	6273	60	1						
NIZAMIYAH	22	0920 E	0951 D	N09 W77	6273	31 D	1+	2	0927	1.52	6.84	2.17	
CAPETOWN	22	1029	1057	N10 W72	6273	28	1		1033	.90	2.90		
CAPETOWN	22	1135	1206	N10 W72	6273	31	1		1142	1.20	4.70		
ZURICH	22	1146 E	1159 D	N09 W72	6273	13 D	1	2	1146	1.00	3.90		
CAPETOWN	22	1309	1328	N10 W72	6273	19	1		1312	1.00			
ALMA-ATA	23	0550	0556	N19 W82	6273	6	1		0552	1.03		62	
TACHKENT	23	0744	0755	N13 W80	6273	15	1	3	0748	1.15		115	
CAPETOWN	23	0744	0759	N10 W89	6273	15	1		0746	.30			
ALMA-ATA	23	0746	0756	N19 W82	6273	10	1		0750	1.24		59	
BUCHAREST	23	0752 E	0759	N10 W90	6273	7 D	1	3					
CAPETOWN	23	1012 E	1028	N10 W89	6273	16 D	1		1014	1.00			
MITAKA	25	0443	0506	N06 E58	6280	23	1	1	0448	.98		100	
IKOMASAN	30	0043	0058	N09 E10	6280	15	1		0045	3.92		120	
IKONASAN	30	0417	0428	N09 E09	6280	11	1		0423	2.06		110	
ZURICH	30	1300 E	1303	S08 E34	6282	3 D	1	2	1300	3.00			

These flare reports are addenda to the November 1961 flares published in CRPL-F 208 Part B, December 1961.

ATHENS	ATHENS, GREECE	HONOLULU	HAWAII, USA	NERA	NEFERHORST den BERGH, NETHERLANDS
BAKOU	PIRCULI, USSR	IKOMASAN	KYOTO, JAPAN	NIZMER	KRASNAYA PAKHRA, USSR
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE	KIEV CO	KIEV, USSR	SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV U	KIEV UNIVERSITY, USSR	SALTEJBRADEN	STOCKHOLM, SWEDEN
CAPRI S	CAPRI, ITALY (SWEDISH)	LOCKHEED	LOS ANGELES, CALIF., USA	SCHALINS	SCHWABENLAND, GFR
GRINEE	SIMBEL, USSR	HOVAITH	HOVAITH-HUB, USSR	TACHKENT	TASHKENT, USSR
HERSTONCEU	ROYAL GREENWICH OBSERVATORY, HERSTONCEU, ENGLAND	HOSCOU	HOSCOM-GAISH, USSR	WENDEL	WENDELSTEIN, GFR

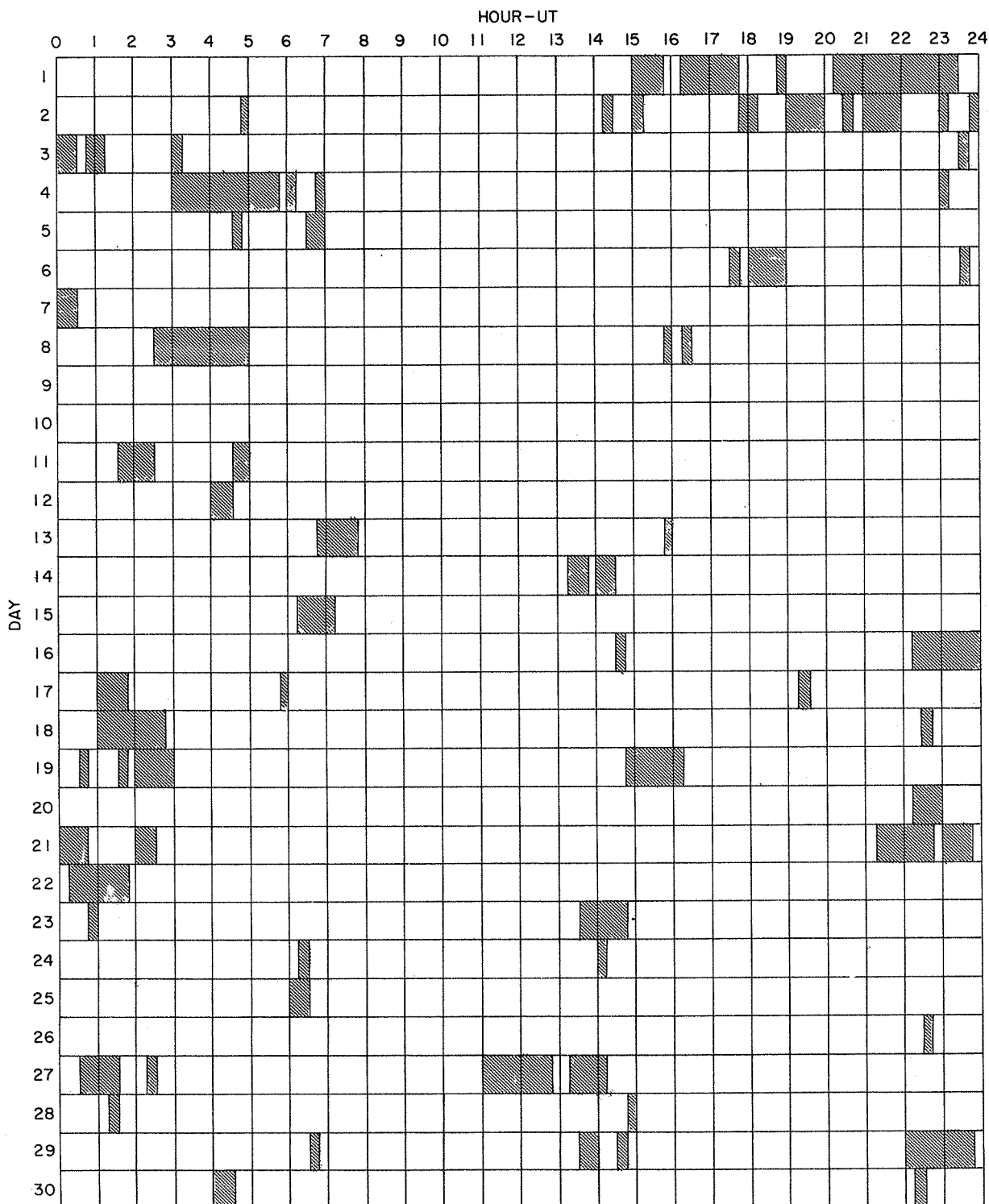
ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

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

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

INTERVALS OF NO FLARE PATROL OBSERVATIONS

NOVEMBER 1961



Stations include:

COMMERCE - STANDARDS - BOULDER

- | | | | | |
|-----------------|--------------|----------------|----------|-----------------|
| Alma-Ata | Crimee | Kiev KO | Mitaka | Sacramento Peak |
| Arcetri | Herstmonceux | Kodaikanal | Moscou | Tachkent |
| Bucharest | Honolulu | Lockheed | Nizamiah | Uccle |
| Capetown | Huancayo | McMath-Hulbert | Nizmir | Voroshilov |
| Capri (Swedish) | Ikomasan | Meudon | Ondrejov | Wendelstein |
| Climax | Istanbul | | | |

IONOSPHERIC EFFECTS OF SOLAR FLARES

III

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

JANUARY 1962

JANUARY 1962	UNIVERSAL TIME			SWF TYPE	IMPORTANCE					WIDE SPREAD INDEX	STATIONS	KNOWN FLARE
	START	END	MAX		IMP	ABS	SCHA	SEA	SPA			
31	1859	1948	1912				1			5	A9 A1 A5	1902

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

FEBRUARY 1962

ARO-OTTAWA

2800 MC.

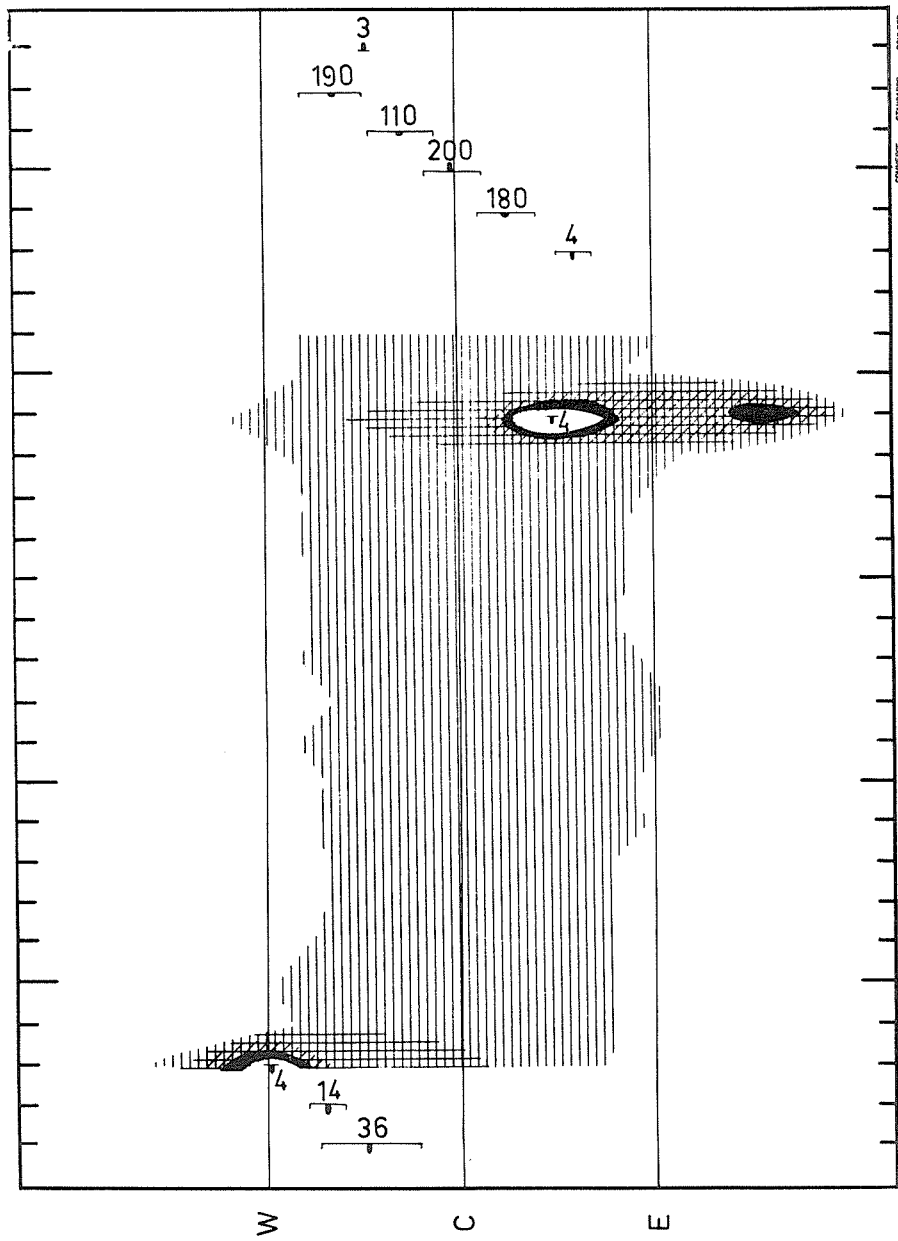
FEBRUARY 1962	TYPE	START UT	DURATION HRS: MINS	MAXIMUM			REMARKS
				TIME UT MAX	PEAK FLUX	MEAN FLUX	
1	3 Simple 3 A	1550	20	1554	3	1.5	
	1 Simple 1	1552	1	1552.3	1.5	0.8	
1	2 Simple 2	1636	5	1640	8	4	
1	3 Simple 3 A	1654	50	1723	3	2	
	2 Simple 2 f	1654	11	1657	7	2.3	
2	1 Simple 1	1925.3	6.3	1926.5	4	1.5	
3	- Record Incomplete	b 1245	> 6 45	1322	58*	-	*Max. reached in this period
4	3 Simple 3 f	1400	4 45	1550	8	4	
4	3 Simple 3	1927	44	1945	3	2.5	
19	- Record Incomplete	b 1230	> 7 55	1319	39*	-	*Max. reached in this period
21	3 Simple 3	1320	18	1326.5	3	1.5	
21	3 Simple 3 A f	1805	1 23	1841.5	3	1.5	
	1 Simple 1 f	1831.8	3.3	1833.2	3	1.5	
22	1 Simple 1	1411	4	1412.3	1	0.7	
22	1 Simple 1	1441	1.2	1441.5	2	1	
	4 Post Increase		5		1	0.8	
22	3 Simple 3 f	1637	1 33	1657	6	4	
22	3 Simple 3	2000	55	2030	4	2	
23	1 Simple 1	1524.3	0.7	1524.8	1	0.4	
23	1 Simple 1 f	1527.2	1	1527.8	5	2	
23	1 Simple 1	1529	1	1529.4	1	0.5	
23	3 Simple 3 A f	1750	> 4 10	1913	28	-	
	6 Complex f	1814	27	1831.3	36	10	
24	3 Simple 3	1631	9	1632	2	1.6	
25	3 Simple 3 A f	1415	6 15	1513	5	3	
	1 Simple 1 f	1429	1	1429.5	5	3	
	1 Simple 1 f	1918	2.3	1918.5	3	1.5	
26	3 Simple 3	1914	1 00	1926	5	2.5	
27	3 Simple 3	1426	16	1434.2	2	1	
27	3 Simple 3 A f	1517	4 00	1625	8	5.5	
	1 Simple 1	1532.5	1.2	1533	2	1	
27	3 Simple 3 A	2050	1 10	2058	8	4	
	2 Simple 2	2050	3	2051.8	14	6	
28	1 Simple 1	1229	5	1232	6	3	
28	6 Complex f	1245	7	1249	10	6	
28	3 Simple 3	1655	45	1720	3	2	
28	6 Complex f	1804	21	1815	29	13	
	4 Post Increase		34		5	3	
28	2 Simple 2	1937	3	1938.5	10	3	
	4 Post Increase		18		2	1.8	

SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATIONS

169 Mc

FEBRUARY 1962

Nançay



POSITION OF ACTIVE CENTERS

FEBRUARY 1962

FEB.	POSITION EW	POSITION NS
1	W 0.50 R	N 0.60 R
2	W 0.70 R	N 0.10 R
3	W 1.00 R	N 0.50 R
19	E 1.65 R	—
19	E 0.50 R	N 1.00 R
23	E 0.45 R	N 1.00 R
24	E 0.25 R	N 0.10 R
25	W 0.00 R	S 0.30 R
26	W 0.30 R	N 0.10 R
27	W 0.60 R	N 0.30 R
28	W 0.45 R	S 0.60 R

SOLAR RADIO EMISSION

FEBRUARY 1962

BOULDER

108 Mc.

Feb. 1962	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
1	6	1414 E	1509	589 D	2
3	6	1412 E	1525	298 D	2
6	9a	2156.0	2157	8.0	2
6	9b	2204.0	2229	86	2
13	3	2310.9	2311.5	01.2	2
14	3	2120.5	2120.6	01.5	2
18	3	2033.9	2034.7	1.7	2
22	2	1643	1708	44	1
23	6	1348 E	1424	146 D	1
23	9	1949	-	280 D	3
24	6	1346 E	-	644 D	3
25	6	1345 E	-	646 D	3
26	6	1343 E	-	292 D	2
27	6	1342 E	1552	446 D	2
27	3	2146.5	2146.9	1.3	3
27	3	2257.0	2257.8	1.2	2
28	3	1810.1	1811.6	1.6	2

COMMERCE - STANDARDS - BOULDER

NOMINAL TIMES OF OBSERVATION

FEBRUARY 1962

BOULDER

108 Mc.

Feb. 1962	U. T.	Feb. 1962	U. T.
1	1414-0003	16	1357-0021
2	1413-0004	17	1356-0022
3	1412-0005	18	1354-0023
4	1411-0007	19	1353-0024
5	1410-0008	20	1352-2220; 2310-0025
6	1409-0009		
7	1408-0010	21	1717-0027
8	1407-0011	22	1349-0028
9	1406-0013	23	1348-0029
10	1404-0014	24	1346-0030
		25	1345-0031
11	1403-0015		
12	1402-1755; 2050-0016	26	1343-0032
13	1401-0017	27	1342-0033
14	1400-0018	28	1340-0035
15	1358-0020		

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

IVd

FEBRUARY 1962

HAO BOULDER

7.6-41 MC

Date 1962	Bursts			Frequency Range (mc)	Date 1962	Bursts			Frequency Range (mc)
	Type	Time (U.T.)	Inten- sity			Type	Time (U.T.)	Inten- sity	
1 Feb	continuum	1410-2320	1-	21 - 41	18 ^c Feb	III	1457.45-1459.30	1+	19 - 41
	III	1829-1829.30	1+	19 - 41		III	1509.15-1508	1-	28 - 41
2	III	1551.45-1552.30	1	24 - 41	III	1709.30-1710	1	18 - 40	
	III	1818-1818.15	1-	24 - 38	III	1749.30-1749.45	1-	24 - 32	
	III	1903-1903.45	1	22 - 35	III	1756-1756.30	1-	21 - 41	
	III	2027.45-2028.30	1-	21 - 33	continuum	1805.30-1820	1-	25 - 41	
	III	2254-2254.45	1-	23 - 41	III	1805.30-1806.15	1-	21 - 40	
	continuum	1402-1601.30	1+	22 - 41	III	1814.15-1814.30	1-	21 - 38	
3	continuum	1601.30-1740	1-	22 - 41	III	1818.15-1819.30	1	20 - 34	
	III	1644-1645	1+	21 - 41	III	1827.30-1828	1-	20 - 38	
	III	1729-1729.45	1+	20 - 41	III	1939.15-1940	1-	16 - 37	
	III	1753.30-1753.45	1-	23 - 35	III	2058.30-2059.15	1	20 - 36	
	III	1801.15-1801.45	1	22 - 41	III	2336.30-2337.15	1	21 - 38	
	III	1834.15-1835	1	22 - 41	continuum	1420-1555	1-	25 - 41	
	III	1949.45-1950	1	23 - 38	III	1842-1842.15	1-	22 - 41	
	III	2022.30-2024.30	1-	24 - 41	III	2355.15-2355.30	1	22 - 41	
	III	2028.15-2028.30	1-	27 - 38	III	2355.45-2356	1	22 - 41	
	III	2035.45-2036	1-	22 - 36	III	2116-2116.30	1-	23 - 41	
	III	2221-2221.30	1-	23 - 34	continuum	2115-2225	1-	23 - 41	
	III	2330-2330.30	1-	21 - 38	III	2116.30-2117.15	1	21 - 41	
4	III	1444.30-1445.15	1-	22 - 41	III	2117.45-2118	1-	21 - 34	
5	III	1452.30-1453	1	21 - 41	III	2126-2127.45	1-	22 - 41	
	III	1912.45-1913.15	1-	24 - 36	III	2133-2133.45	1+	15 - 41	
	III	2023.45-2024	1-	22 - 36	III	2208-2208.45	1-	19 - 41	
	III	2203-2204.30	1	21 - 41	III	2215.45-2216.15	1-	24 - 41	
	III	2257-2257.30	1	20 - 41 ^d	III	2238-2238.45	1+	23 - 41	
	III	2302.15-2302.45	1+	19 - 41 ^d	III	2256-2256.45	1	23 - 41	
6	III	1827.30-1828	1-	22 - 32	III	2257-2258	1	24 - 41	
	III	1833.45-1834.30	1+	21 - 32	III	2304.15-2306.45	1+	22 - 41	
	II	2203-2223	3	16 - 41	III	1434.30-1435	1-	24 - 37	
	IV	2223-2326	1+	24 - 41	III	1534.45-1535	1-	26 - 38	
12	III	2135.45-2136	1-	24 - 41	III	1644-1645	1-	22 - 41	
	III	2137.30-2137.45	1-	25 - 41	III	1648.30-1649	1-	25 - 37	
13	III	2311.30-2313.30	1+	22 - 41	III	1653.30-1654.30	1	22 - 41	
	III	2313.45-2314.15	1+	22 - 41	III	1655.45-1656.30	1	23 - 41	
14	III	2314.45-2315.15	1	28 - 41	III	1746.15-1747	1	21 - 41	
	III	2050.15-2051.15	1	23 - 41	III	1806-1806.30	1	23 - 41	
	III	2055-2056	1+	21 - 41	III	1832-1833	1+	16 - 41	
	III	2105.30-2106	1-	30 - 41	III	1833-1834	1+	16 - 41	
	III	2121.30-2123	2	21 - 41	III	1845-1845.30	1	23 - 41	
	III	2124.30-2125	1-	31 - 41	III	1920.30-1922.45	1+	21 - 41	
16	continuum	2225-2325	1-	26 - 41	continuum	2040-2300	1-	24 - 41	
	III	1806.15-1807.15	1	21 - 41	III	2048-2048.30	1+	21 - 41	
17	III	2310.30-2311.15	1-	23 - 41	III	2134.30-2135	1+	22 - 41	
	III	1545.30-1546	1-	23 - 34	III	2139.45-2140.30	1	23 - 35	
	III	1609-1609.30	1-	23 - 41	III	2200-2201.45	2	21 - 41	
	III	1639.45-1640	1-	21 - 41	III	2207.30-2209	2	16 - 41	
	III	1835.45-1836	1-	21 - 31	III	2209-2210.30	1+	22 - 41	
	III	2012.30-2013	1-	21 - 35	III	2219.15-2219.45	1	24 - 41	
	III	2017-2017.30	1+	16 - 41 ^d	III	2221.30-2222	1+	24 - 41	
	III	2028.15-2028.45	1	21 - 38	III	2237.45-2238.15	1	22 - 37	
	III	2106-2106.30	1	19 - 40 ^d	III	2401.45-2402.30	1-	27 - 41	
	III	2208.15-2209	1	22 - 41	III	1647.45-1648.15	1-	21 - 41	
	III	2345.45-2346.45	1-	19 - 41	III	1903.30-1905	1+	15 - 41	
	III	2349.30-2350.30	1-	23 - 36	III	1928-1929.45	2	7.6 - 41	

COMMERCIAL - STANDARDS - BOULDER

^d = harmonic structure

^c = many faint type III's not reported

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

FEBRUARY 1962

HAO BOULDER

7.6-41 MC

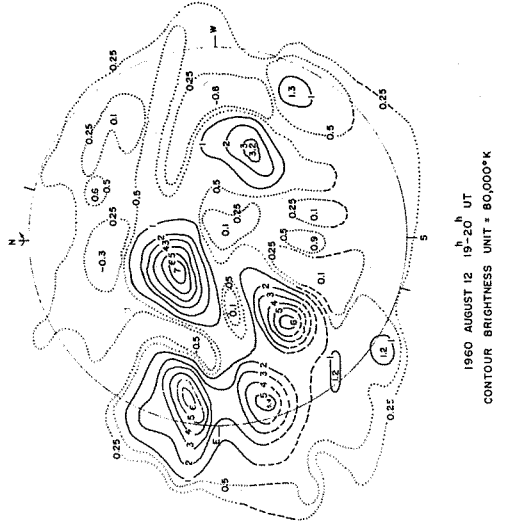
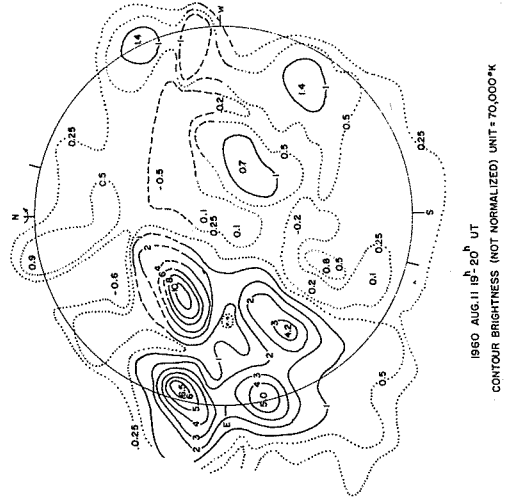
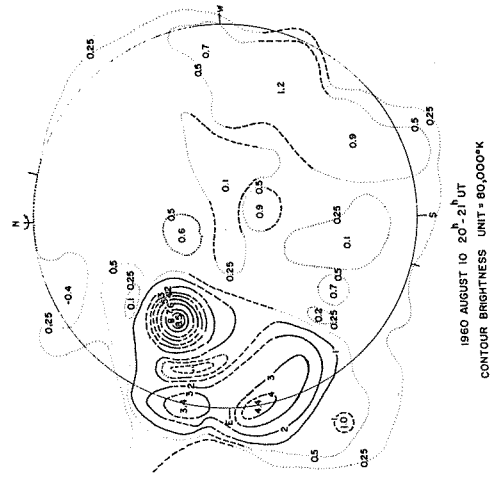
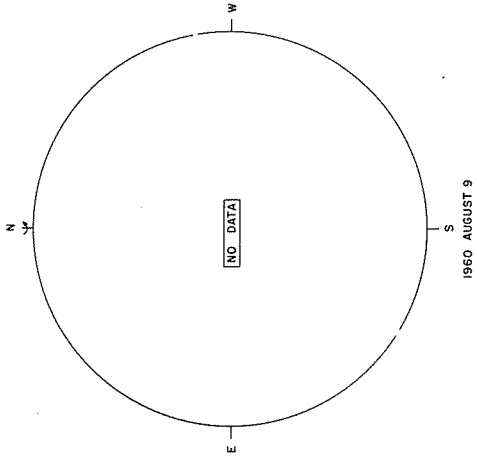
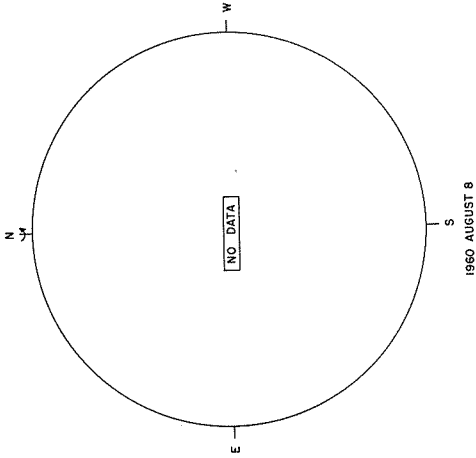
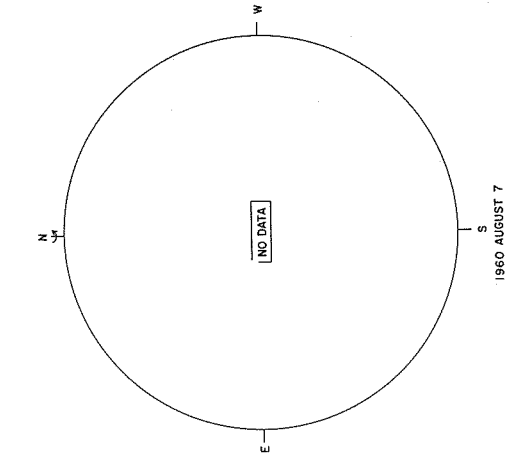
Date		Bursts			Frequency Range (mc)	Date		Bursts			Frequency Range (mc)
1962	Type	Time (U.T.)	Intensity	1962		Type	Time (U.T.)	Intensity			
22 Feb	III	1937.30-1938	1	15 - 41	25 Feb	III	1640.15-1641.45	1+	22 - 41		
	III	2001.15-2002	1+	16 - 41		III	1646.30-1647.15	1+	23 - 41		
	III	2002-2003.30	1	23 - 41		III	1911-1914.15	2	16 - 41		
	III	2033-2034.30	1+	21 - 41		III	1918.15-1920	2	16 - 41		
	III	2049.15-2050	1+	21 - 41		III	1942.15-1943	1+	21 - 41		
	continuum	2115-2400	1-	26 - 41		III	2208-2208.45	1+	23 - 41		
	III	2123.30-2125.30	1+	16 - 41		III	2312.45-2313.30	1+	23 - 41		
	III	2200-2200.30	1+	23 - 41		continuum	2400-a2435	1-	25 - 41		
	III	2201-2204.30	1	23 - 41		continuum	b1450-a2400	1-	23 - 41		
	III	2214.30-2217	1	22 - 41		III	1718-1718.30	1+	16 - 41		
	III	2245-2246.30	1	24 - 41		III	1914-1914.45	1+	16 - 41		
	III	2254.15-2254.30	1	23 - 40		III	2405-2406	1	30 - 41		
	III	2316-2316.45	1	22 - 41		continuum	b1356-2400	1-	23 - 41		
	III	2332-2333	1+	24 - 41		III	1450-1453.30	2	21 - 41		
	III	2333-2334	1+	23 - 41		III	1503-1503.45	1+	24 - 41		
23	III	2354.45-2355	1	24 - 41	28	III	1537.30-1540.15	1+	23 - 41		
	III	2357.30-2358.30	1	23 - 41		continuum	2400-a2423	1-	25 - 41		
	III	1422-1422.30	1	23 - 41		continuum	b1352-1855	1-	24 - 41		
	III	1433.45-1434.30	1-	22 - 41		III	1457-1457.45	2	22 - 41		
	III	1441.15-1441.45	1-	24 - 34		III	1507.45-1508.30	1+	23 - 41		
	III	1657-1659.15	1-	24 - 41		III	1511.15-1514	2	16 - 41		
	III	1746.45-1747.30	1-	20 - 36		III	1542-1542.45	1+	22 - 41		
	continuum	2015-2105	1-	23 - 41		III	1737-1737.45	1+	22 - 41		
	continuum	2105-a2435	2	22 - 41		III	1816-1817	1	12 - 41		
	continuum	b1400-1800	1-	22 - 41		III	1819-1820	1	12 - 41		
24	III	1550.15-1551	1+	21 - 41	28	III	1848-1849	1+	11 - 41		
	III	1617-1617.30	1+	22 - 41		continuum	1855-2000	1	24 - 41		
	III	1626.30-1627.15	1+	16 - 41		III	1948.45-1949.30	1	12 - 41		
	III	1706.30-1707	1+	23 - 41		continuum	2000-2345	1-	24 - 41		
	III	1718.30-1722	1+	16 - 41		III	2211.30-2212	1+	22 - 41		
	continuum	1800-2400	1	21 - 41		III	2212.15-2213	2	22 - 41		
	III	2022.30-2023.15	1+	21 - 41		III	2235.30-2236	1+	25 - 41		
	continuum	2400-a2420	1-	28 - 41		III	2247.15-2247.45	1+	22 - 41		
	III	2405.45-2406.15	1	24 - 41		III	2256-2256.30	1+	21 - 41		
	continuum	b1400-2400	1-	21 - 41		III	2300.30-2301.30	2	21 - 41		
25	III				28	III	2356-2356.30	2	21 - 41		
	III					III	2356-2356.30	2	21 - 41		
	III					III	2408.30-2409	1+	23 - 31		
	III										
	III										

COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION SPECTROHELIOGRAMS
AUGUST 1960

9.1 cm

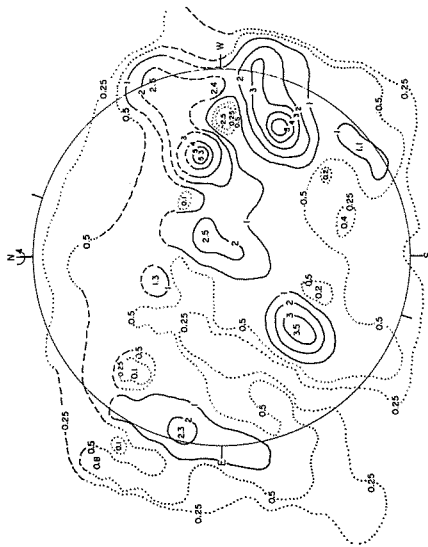
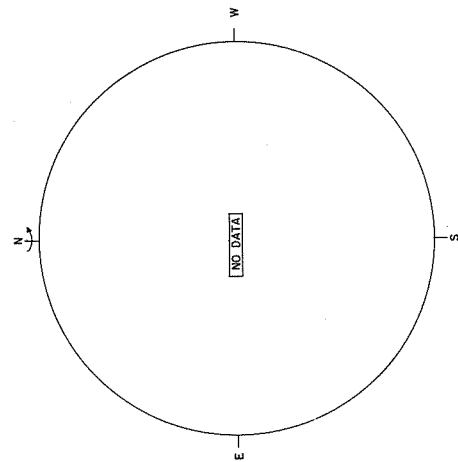
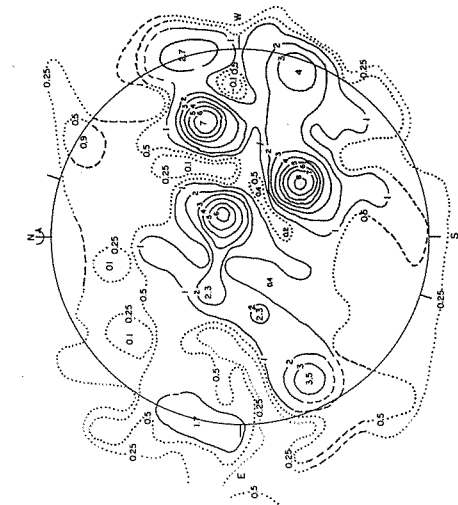
STANFORD



SOLAR RADIO EMISSION SPECTROHELIOGRAMS
AUGUST 1960

9.1 cm

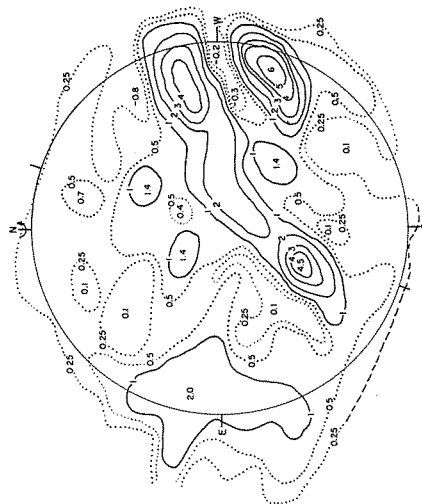
STANFORD



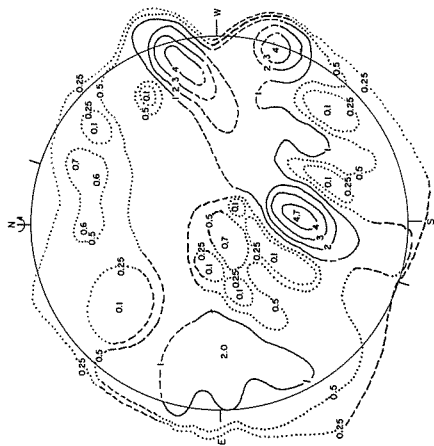
1960 AUGUST 19^d 19^h20^m UT
CONTOUR BRIGHTNESS UNIT = 80,000°K

1960 AUGUST 20

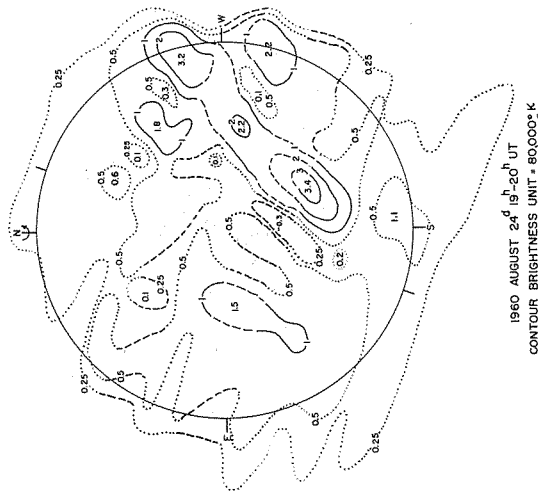
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CONTOUR BRIGHTNESS UNIT = 80,000°K



1960 AUGUST 22^d 19^h20^m UT
CONTOUR BRIGHTNESS UNIT = 80,000°K



1960 AUGUST 23^d 19^h20^m UT
CONTOUR BRIGHTNESS UNIT = 80,000°K

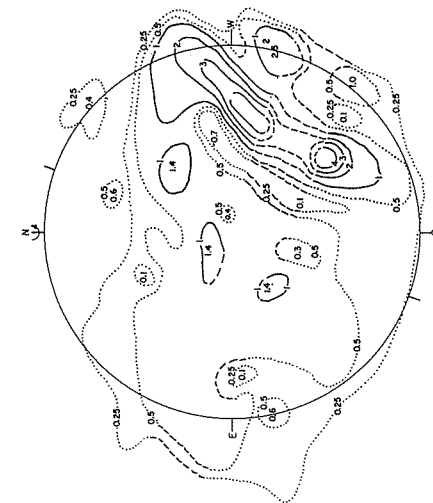


1960 AUGUST 24^d 19^h20^m UT
CONTOUR BRIGHTNESS UNIT = 80,000°K

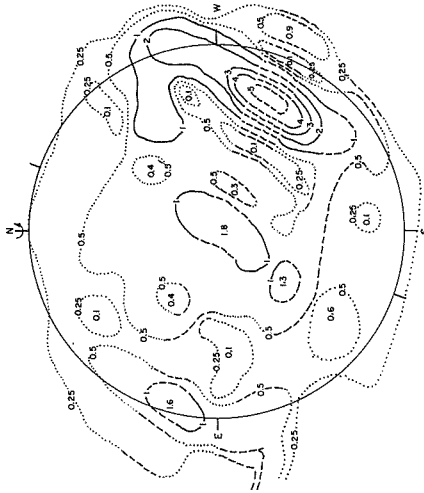
SOLAR RADIO EMISSION SPECTROHELIOGRAMS
AUGUST 1960

STANFORD

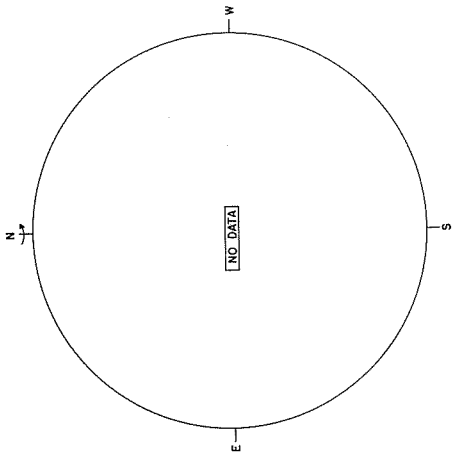
9.1 cm



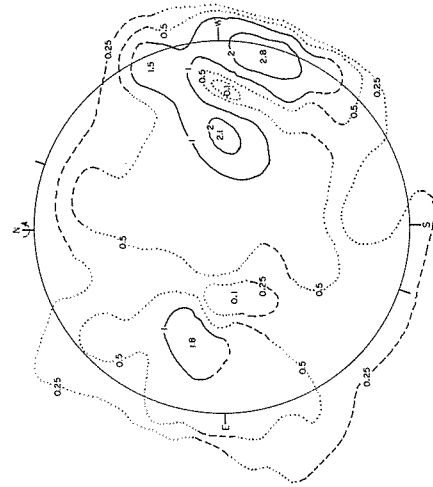
1960 AUGUST 25^d 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 80,000°K



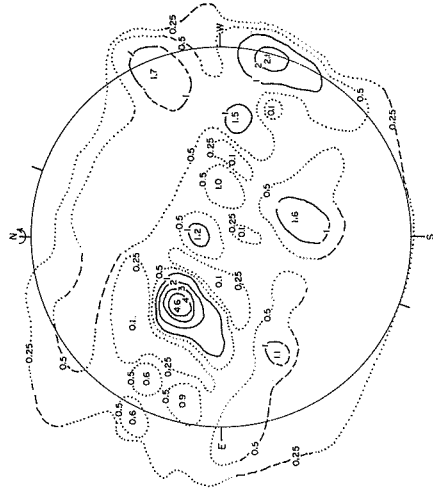
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CONTOUR BRIGHTNESS UNIT = 80,000°K



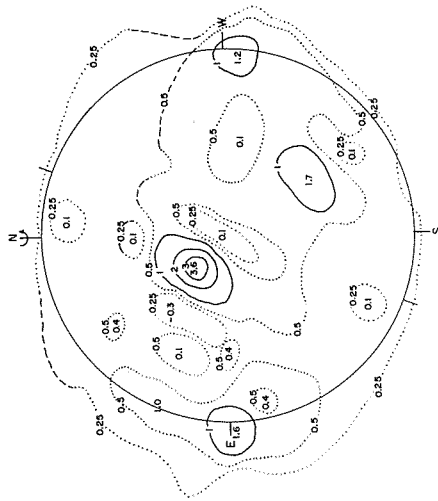
1960 AUGUST 27



1960 AUGUST 28^d 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 80,000°K



1960 AUGUST 29^d 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 80,000°K



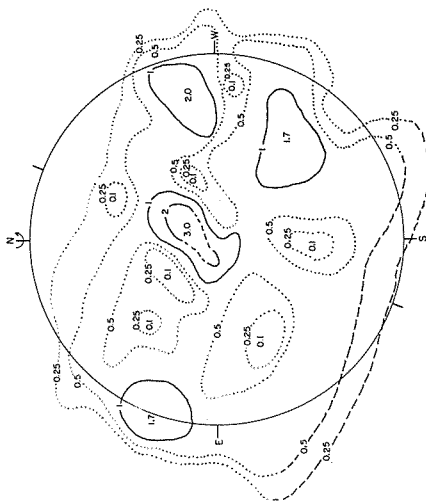
1960 AUGUST 30^d 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT 84,000°K

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

AUGUST 1960

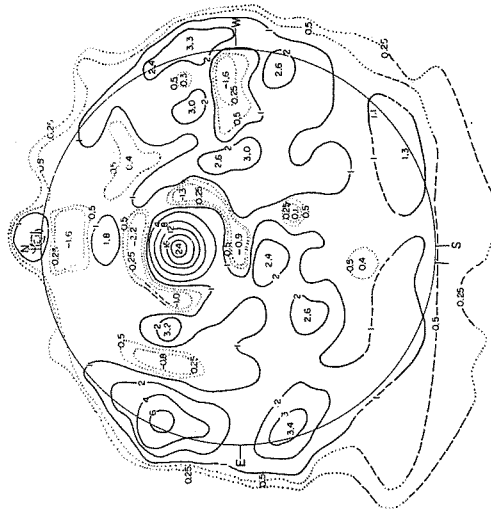
9.1 cm

STANFORD

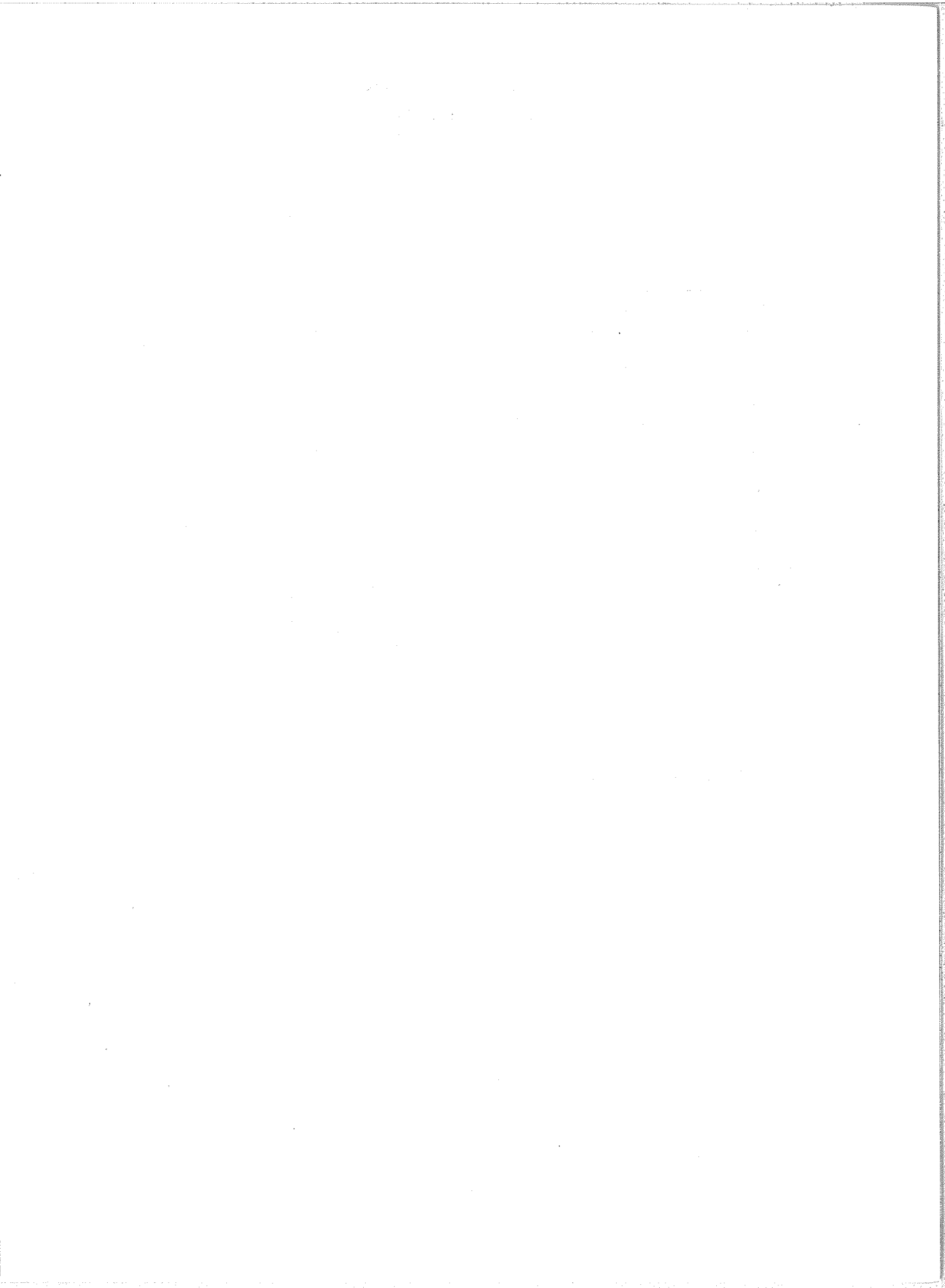


1960 AUGUST 3^d 19^h 20^m UT
CONTOUR BRIGHTNESS UNIT = 80,000° K

ERRATUM: JULY 1960



1960 JULY 16, 20^h - 21^h UT
ERRATUM: CONTOUR BRIGHTNESS UNIT = 37,000° K



COSMIC RAY INDICES

Climax Neutron Monitor

IGC STATION B 305

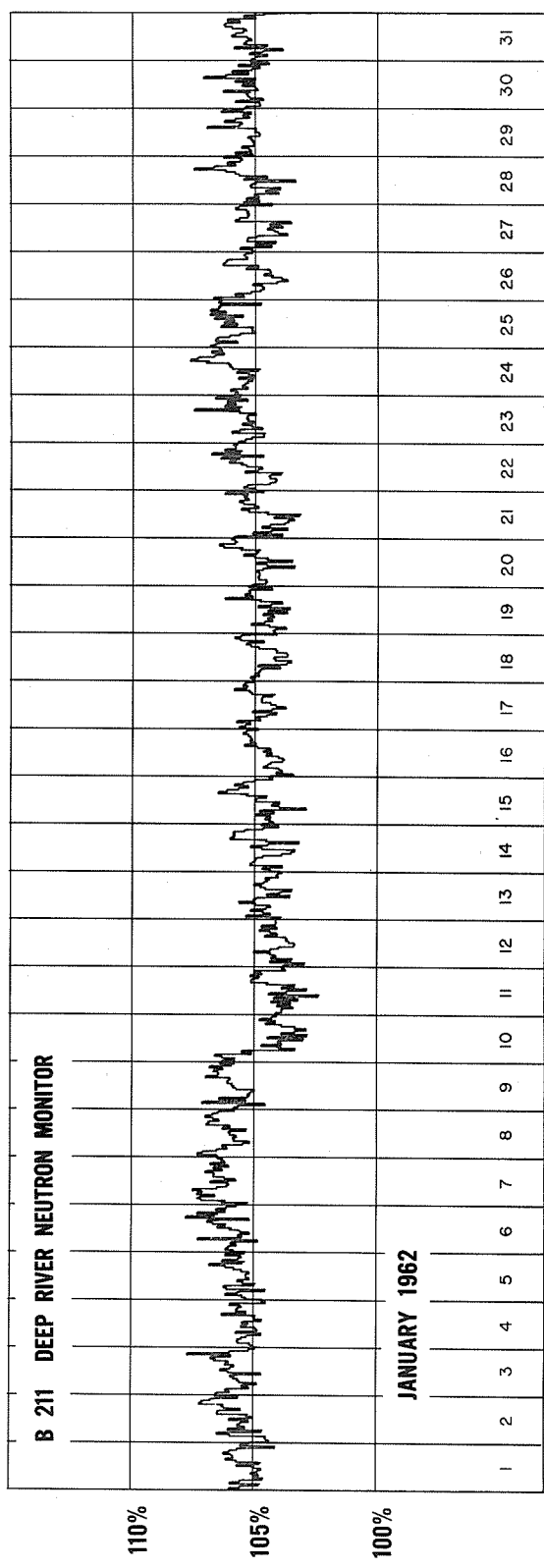
JANUARY 1962

Jan. 1962	Daily average counts/hr.*	Jan. 1962	Daily average counts/hr.*
1	3073.0	17	3094.6
2	3080.8	18	3109.4
3	3089.9	19	3110.7
4	3099.2	20	3123.1
5	3108.6	21	3129.6
6	3125.9	22	3120.0
7	3117.3	23	3130.1
8	3111.9	24	3130.1
9	3121.9 (32 hrs.)	25	3137.3
10	3110.0	26	3114.5
11	3085.5	27	3105.1
12	3092.0	28	3109.8
13	3117.5	29	3105.6
14	3105.1	30	3093.0
15	3094.6 (36 hrs.)	31	3096.0
16	3089.1		

COMMERCE - STANDARDS - BOULDER

*Scaling Factor 128

COSMIC RAY INDICES
(Pressure Corrected Hourly Totals)

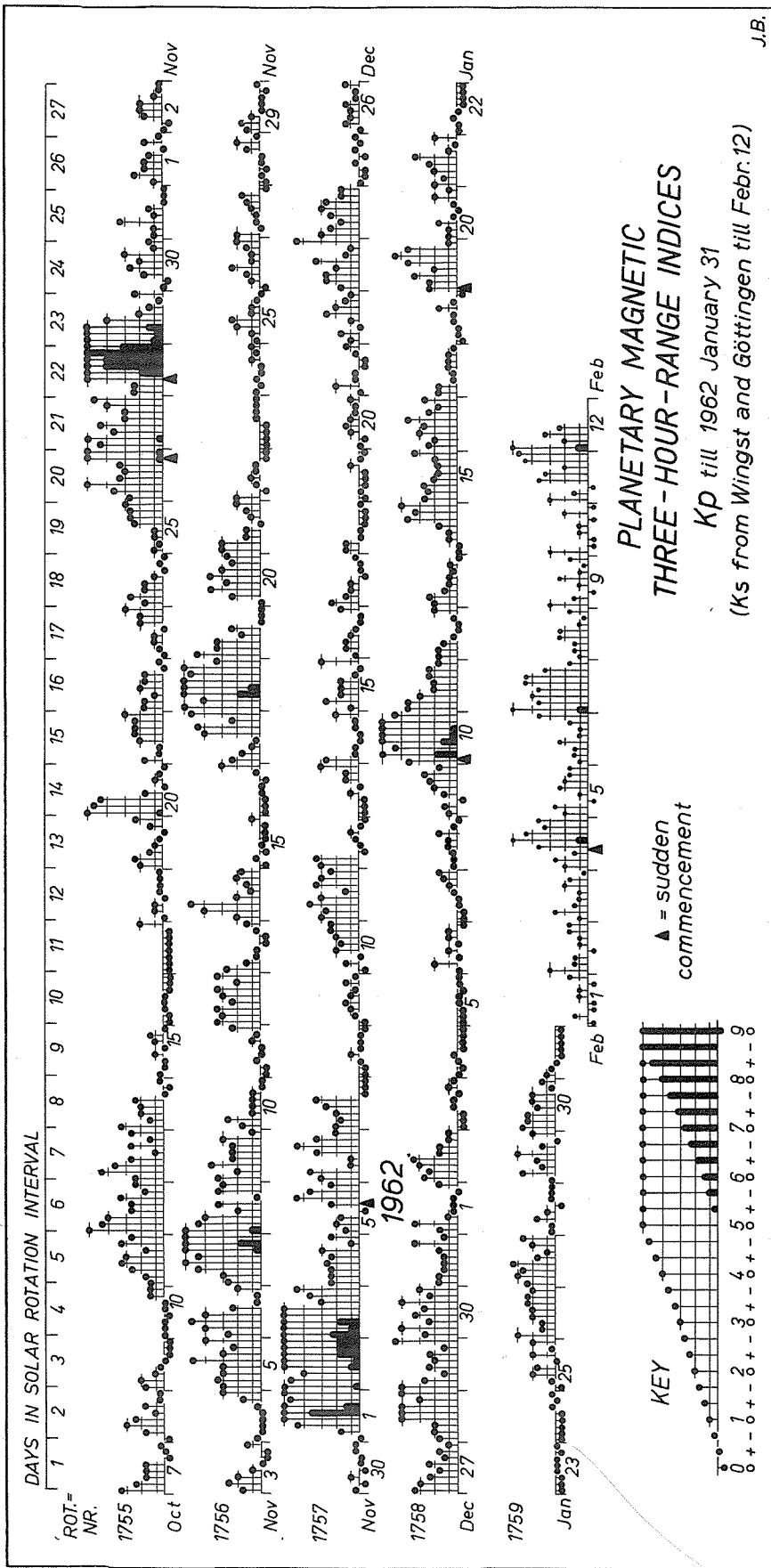


COMMERCE - STANDARDS - BOULDER

GEOMAGNETIC ACTIVITY INDICES

JANUARY 1962

Jan. 1962	C	Values Kp								Sum	Ap	Final Selected Days	
		Three hour Gr. interval											
		1	2	3	4	5	6	7	8				
1	0.2	2-	3+	1o	1-	1-	1-	0+	2-	10o	6	Five Quiet	
2	0.5	3-	2+	3o	3+	2-	2-	1o	1o	17-	9		
3	0.0	0o	0o	0o	1-	1-	0+	1o	1-	3+	2		
4	0.0	0+	0o	0+	1-	0o	0o	0o	0o	1+	1		4
5	0.0	0o	0o	0o	0+	0+	0o	0+	0+	1+	1		5
6	0.0	0+	2o	0+	1o	0+	1o	1o	0o	6o	3	22	
7	0.2	0o	0o	0+	0+	1-	1o	1+	2-	5+	3	23	
8	0.1	1-	1-	1-	1o	1o	2-	1-	0+	7-	4	24	
9	0.4	1o	1+	0o	1+	2o	2+	3-	2-	12+	6		
10	1.8	4-	6+	4+	6o	5+	5+	5o	4+	40+	52		
11	0.7	4-	4-	3o	2o	2o	2+	2+	2-	21-	12	Five Disturbed	
12	0.1	2-	2-	1+	1-	0+	0+	1-	2o	9-	4		
13	0.1	2o	2+	1+	1o	1o	1-	1o	0+	10-	5		
14	0.9	0+	0+	1o	1o	2-	4-	3+	4o	15+	11		10
15	0.6	3-	2+	3-	2o	2-	2-	3o	3+	18+	10		11
16	0.6	2+	2o	3o	3-	4-	2+	2-	3-	20+	12	16	
17	0.1	2-	2-	1-	1-	1o	1o	1o	1-	8+	4	19	
18	0.1	0o	0+	0+	1-	1-	2-	1-	0o	4+	2	27	
19	1.1	2+	2+	3+	2o	4-	4+	4-	1o	23-	15		
20	0.1	1o	1o	2-	1-	0+	1-	2o	1o	8+	4		
21	0.5	2o	1+	2o	2+	3+	1o	0+	2o	14+	7	Ten Quiet	
22	0.0	0+	0+	1-	0+	0o	0o	0o	0o	2-	1		
23	0.0	0o	0o	0o	0+	0+	0+	0o	0+	1+	1		
24	0.0	0o	0o	0o	0o	0o	1-	0+	1-	2-	1	3	
25	0.2	0o	1-	2o	2-	0+	2o	1-	2o	9+	4	4	
26	0.4	3o	1+	1+	2o	2o	2+	2+	2o	16+	8	5	
27	0.6	2+	3o	3-	3+	2-	1o	2o	3-	19-	10	7	
28	0.0	1-	1-	2-	1o	0o	1-	1-	1-	6o	3	18	
29	0.2	1-	3-	1+	2-	3o	1+	0+	2o	13o	7	22	
30	0.4	3-	2+	2+	2-	2o	2o	1-	1+	15o	7	23	
31	0.0	1o	1-	0+	0o	0o	0o	0o	0o	2o	1	24	
												28	
												31	
Mean:	0.32									Mean:	7		



COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

JANUARY 1962

NORTH PACIFIC

NORTH ATLANTIC

DATE JANUARY 1962	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF:		WHOLE DAY INDEX	ADVANCE FORECAST: (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY:		GEOMAGNETIC K _{FR}	NORTH PACIFIC 12-HOURLY QUALITY FIGURES		SHORT-TERM FORECASTS ISSUED AT:		WHOLE DAY INDEX	ADVANCE FORECASTS (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY:		GEOMAGNETIC K _{SI}	
	00 TO	06 TO	12 TO	18 TO	00 TO	06 TO		1-7 1-3 DAYS FINAL JFS, SWP J	1-7 1-3 DAYS FINAL JFS, SWP J		0700 TO 1900	1900 TO 0700	0600 TO 1800	1800 TO 0600		1-7 1-3 DAYS FINAL JFS, SWP J	1-7 1-3 DAYS FINAL JFS, SWP J		HALF DAY (1)
01	5-	5-	6+	6+	5	4	6	5	5	1	7	7	6	6	7	5	5	0	0
02	5+	4+	6+	5-	5	4	6	6	5	3	7	6	6	6	7	5	5	2	1
03	5-	4+	6-	5-	5	4	5	5	6	0	6	6	6	6	5	6	6	0	0
04	5	5	5-	6-	5	4	7	5	5	0	6	6	6	5	6	6	6	0	0
05	4+	4+	6	6	5	4	5	5	5	0	6	6	5	5	6	6	6	0	0
06	6-	5-	6	6+	5	4	6	6	6	1	6	6	6	6	6	6	6	0	1
07	5	0	4	6	5	4	6	6	6	0	6	6	6	6	6	6	6	0	0
08	5	0	5	6+	5	5	7	6	6	0	6	6	6	6	6	6	6	0	0
09	5-	4+	6+	6-	5	5	6	5	5	1	6	6	6	6	6	6	6	0	2
10	5-	4-	4-	4-	5	4	5	4	6	(4)	(4)	4	4	3	(4)	6	6	(5)	(6)
11	3+	3+	6-	5	4	3	4	5	4	3	2	5	2	5	3	3	3	3	1
12	3	3	6-	4+	4	3	3	5	4	1	1	4	4	5	(2)	3	3	1	0
13	3+	4-	6-	5-	3	3	6	4	4	2	1	6	5	5	(2)	4	4	2	0
14	5-	3+	6	6-	4	4	6	4	5	2	3	5	5	5	(2)	4	4	1	2
15	5	0	3+	6+	5	5	4	6	5	2	2	5	5	6	6	5	5	1	1
16	4+	4	6	5-	5	4	6	6	6	2	2	6	5	5	5	5	5	2	2
17	4	0	4+	6	5-	4	4	5	5	1	1	5	5	5	5	5	5	0	0
18	5	0	5-	6+	5	5	4	6	5	0	3	6	6	6	6	5	5	0	0
19	5	0	4+	6+	5	5	4	6	5	5	2	5	5	5	5	5	5	2	3
20	5+	4+	6	6	5	5	6	6	6	1	1	5	5	6	5	5	5	1	0
21	5	0	5-	6+	6+	6	4	6	6	2	2	5	5	5	5	6	6	1	1
22	5-	4+	6+	6-	5	4	6	6	6	0	0	5	5	5	5	6	6	0	0
23	5+	4	6+	6	5	5	6	6	6	0	0	5	5	5	5	6	6	0	0
24	5	0	4+	6	5	5	4	6	6	0	0	6	6	6	5	5	5	0	0
25	5	0	4+	7-	6-	5	4	6	6	1	1	7	6	6	6	5	5	1	0
26	6	0	4	6+	7-	5	5	6	6	2	2	6	6	6	5	5	5	1	2
27	6+	5	0	7-	7-	6	4	6	6	3	2	7	5	6	6	5	5	2	1
28	5	0	5-	6+	6	5	4	6	5	1	0	6	6	6	5	5	5	1	0
29	5	0	5	6	6	5	4	6	6	1	2	6	7	6	6	5	5	1	1
30	5+	5-	6+	6+	5	5	5	6	6	3	1	6	6	6	6	5	5	2	1
31	5+	4+	6+	6+	5	5	6	6	6	0	0	7	6	6	6	5	5	0	0
Score:					19	2	24	16		14	14				12	16			
Quiet Periods	P	S	S	S	6	8	4	12		13	13				13	12			
	U	U	U	U	0	0	0	0		0	0				2	0			
	F	F	F	F	0	0	2	1		0	0				0	0			
Disturbed Periods	P	P	P	P	2	13	0	2		3	3				2	0			
	S	S	S	S	4	8	1	0		0	0				0	3			
	U	U	U	U	0	0	0	0		0	0				0	0			
	F	F	F	F	0	0	0	0		1	1				0	0			

COMMERCE - STANDARDS - BOULDER

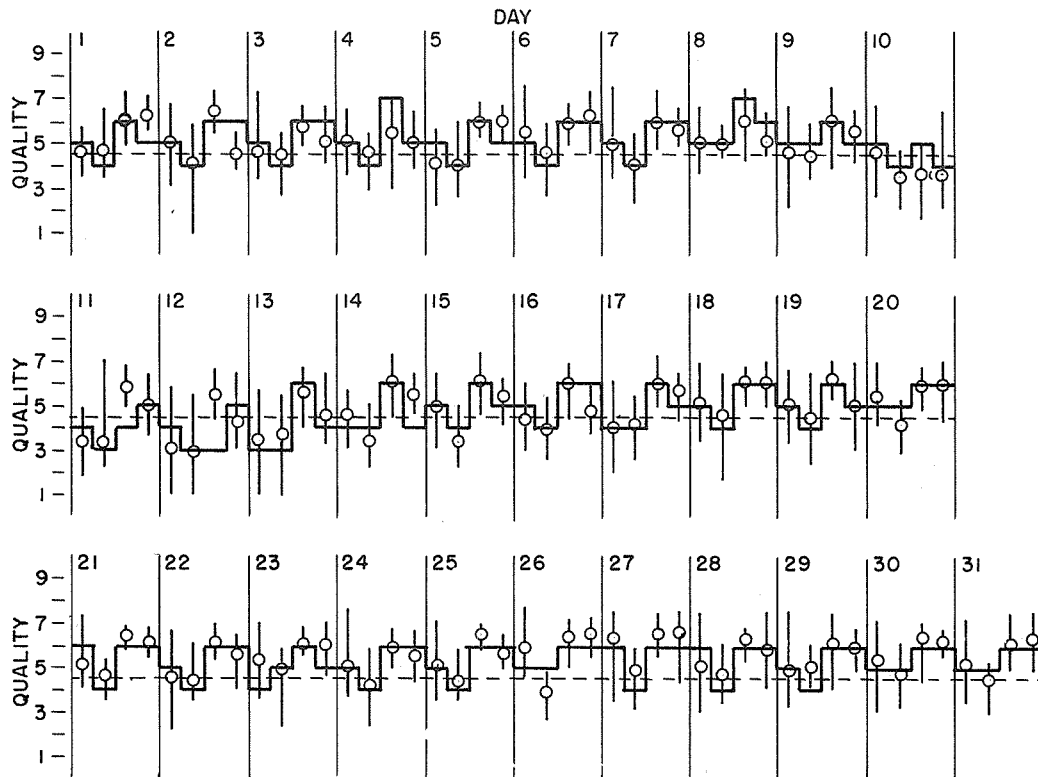
() Represent disturbed values
All times are Universal Time (U.T.)

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS
NORTH ATLANTIC

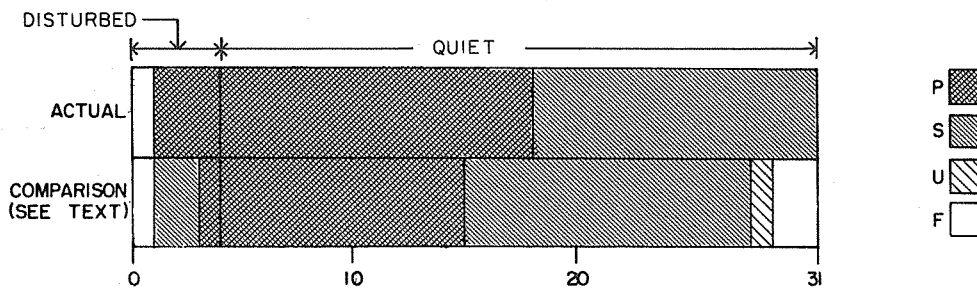
VII b

JANUARY 1962

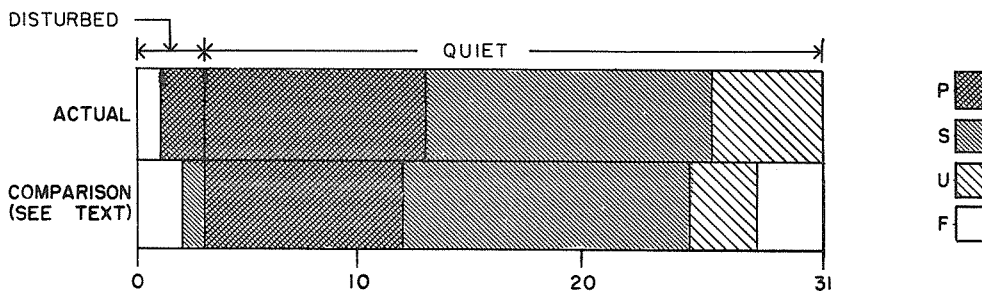
— Short-term forecast | Range of reports
○ Quality figure



OUTCOME OF ADVANCED FORECASTS FINAL ESTIMATE
NORTH ATLANTIC

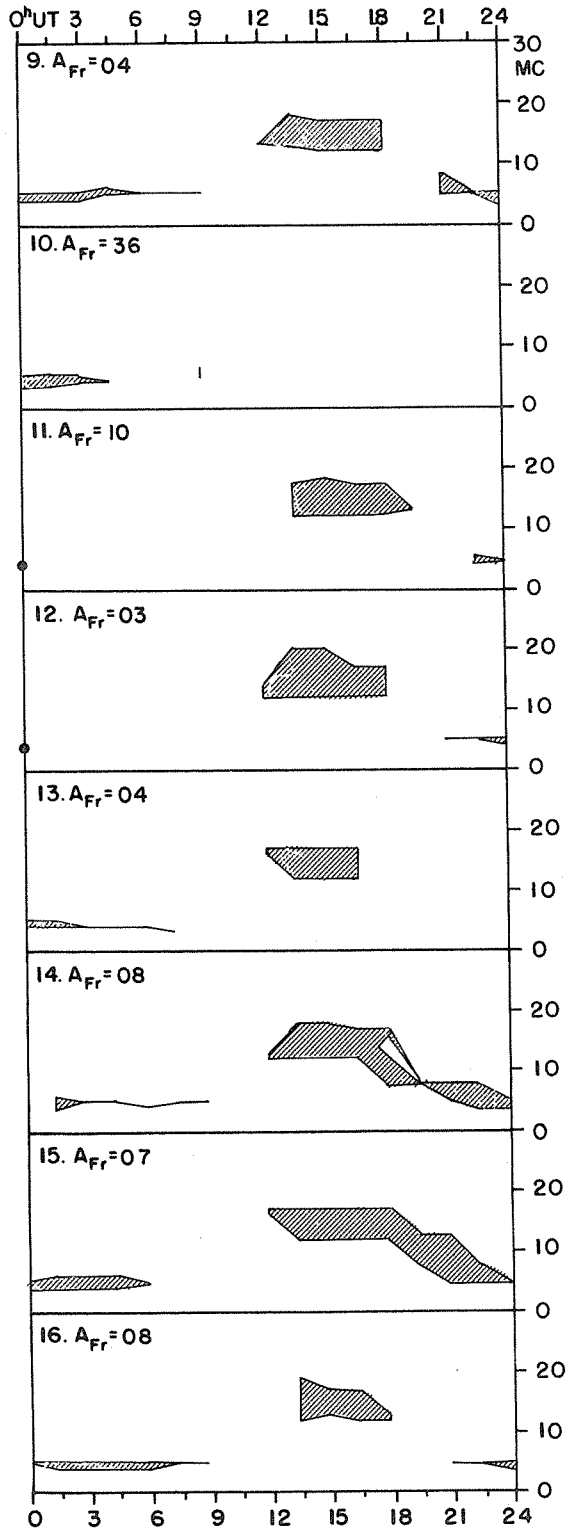
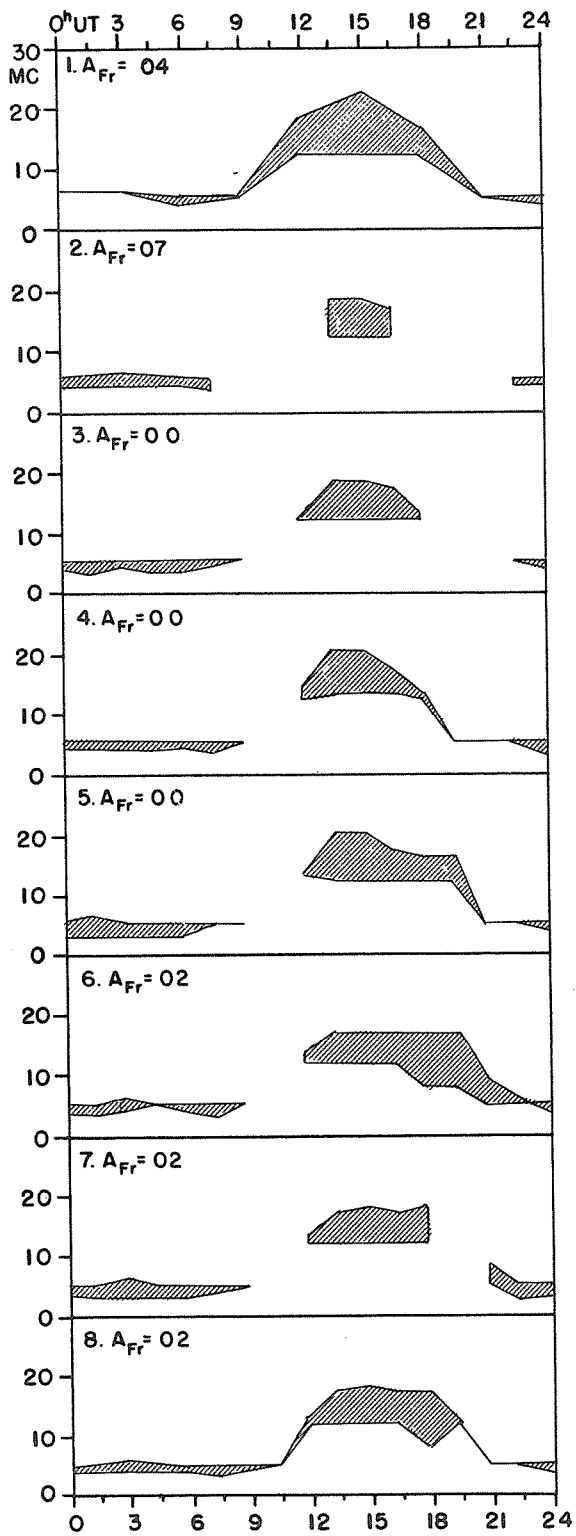


NORTH PACIFIC



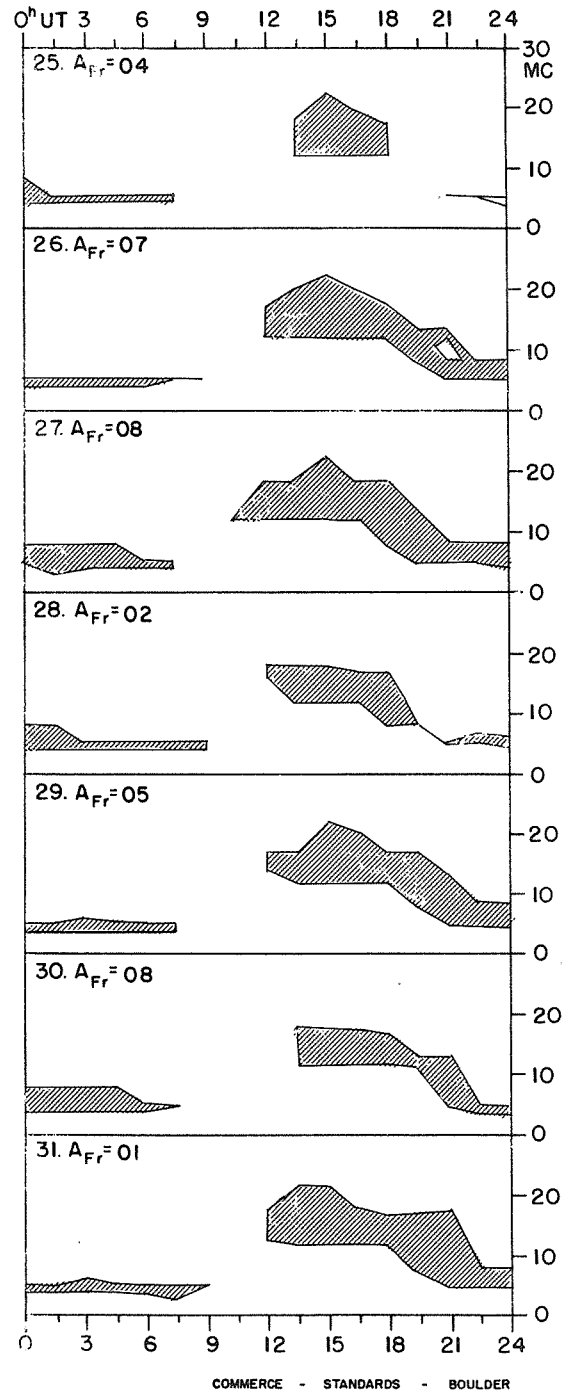
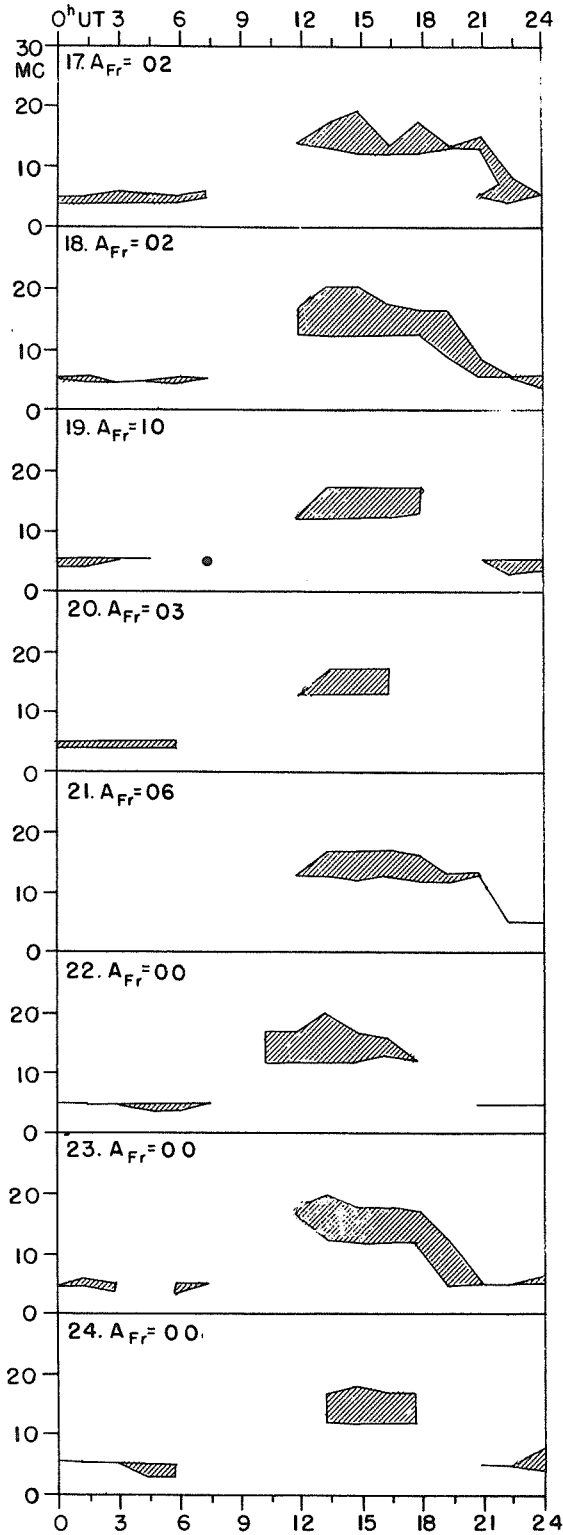
USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

JANUARY 1962



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

JANUARY 1962



COMMERCE - STANDARDS - BOULDER

Adapted from Observations by Deutsches Bundespost

ALERT PERIODS AND SPECIAL WORLD INTERVALS

INTERNATIONAL WORLD DAY SERVICE

FEBRUARY 1962

Issued February 1962 Day/Time UT	Advance Geophysical Alert	No.	World-Wide Geophysical Alert	Special World Interval
01/1815	McMath, Solar Flare 01/1636Z			
03/0340	Climax, Solar Flare One Plus 02/2215Z			
04/0120	Lockheed, Solar Flare, Two 03/2357Z			
16/1330	Ft. Belvoir, Magnetic Storm 16/0100Z			
16/1600		160	Magnetic Storm, 16/01XXZ	Start
17/1600				Finish
20/0240	Huancayo, Solar Flare, Two 19/1333Z			
22/1853	Climax, Solar Flare, One Plus 22/1730Z			
23/1955	Sac Peak, Solar Flare, Two 23/1800Z			