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SOLAR-GEOPHYSICAL DATA

Number 626

(Issued in Two Parts)

Editor: Helen E. Coffey

Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Christine D. Hanchett
Edward H. Erwin

Computer Consultant:
Daniel C. Wilkinson

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DATA FOR APRIL 1996

APRIL 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		01	0031		0036	No Flare Patrol														
		01	0126		0133	No Flare Patrol														
		01	0341		0347	No Flare Patrol														
		01	0732		0750	No Flare Patrol														
		01	1316		1339	No Flare Patrol														
		02	0440		0513	No Flare Patrol														
		02	2216		2239	No Flare Patrol														
		03	0908		0921	No Flare Patrol														
		03	0933		1050	No Flare Patrol														
0001	MEUD	04	1246E	1251	1304D	S02	W78	7955	03	29.8	18D	SF								D
		04	1349		1352	No Flare Patrol														
		04	1358		1513	No Flare Patrol														
		04	1629		1717	No Flare Patrol														
		04	1801		1900	No Flare Patrol														
		04	1913		1929	No Flare Patrol														
		04	1941		2003	No Flare Patrol														
		04	2018		2024	No Flare Patrol														
		04	2040		2144	No Flare Patrol														
		04	2236		2255	No Flare Patrol														
		05	0700		0703	No Flare Patrol														
		06	0541		0546	No Flare Patrol														
		08	0951		1020	No Flare Patrol														
		08	1041		1042	No Flare Patrol														
		08	1951		2041	No Flare Patrol														
		08	2110		2229	No Flare Patrol														
		09	0423		0524	No Flare Patrol														
		09	0607		0614	No Flare Patrol														
		10	0122		0246	No Flare Patrol														
		10	0252		0609	No Flare Patrol														
		10	0937		0940	No Flare Patrol														
		10	1612		1621	No Flare Patrol														
		10	1643		1655	No Flare Patrol														
		10	2024		2038	No Flare Patrol														
		10	2056		2310	No Flare Patrol														
		11	0051		0207	No Flare Patrol														
		11	0241		0248	No Flare Patrol														
		11	0321		0402	No Flare Patrol														
		11	0417		0424	No Flare Patrol														
		11	0449		0454	No Flare Patrol														
		11	0516		0519	No Flare Patrol														
		11	0539		0548	No Flare Patrol														
		16	0430		0539	No Flare Patrol														
		17	0507		0516	No Flare Patrol														
		17	0524		0532	No Flare Patrol														
0002	KANZ	17	1601	1601	1609	N05	W29	7956	04	15.5	8	SF			2	C				
		17	1828		1850	No Flare Patrol														
		17	1858		1945	No Flare Patrol														
		17	2009		2016	No Flare Patrol														
		17	2041		2209	No Flare Patrol														
		17	2345		2400	No Flare Patrol														
		18	0000		0006	No Flare Patrol														
		18	0039		0444	No Flare Patrol														
		19	0305		0330	No Flare Patrol														
		19	0336		0447	No Flare Patrol														
		20	0327		0449	No Flare Patrol														
0003		20	06572	07055	0727	N04	W68	7956	04	15.2	30	SF	B	2.9				33		
	KANZ	20	0657	0705	0725	N03	W66	7956	04	15.3	28	SF			2	C				
	SVTO	20	0659	0706	0729	N04	W68	7956	04	15.2	30	SF	B	2.9	3	E		33		
	MEUD	20	0707E	0710	0718D	N04	W69	7956	04	15.1	11D	SF								
0004	HOLL	20	1552	1553	1555	S05	W52	7958	04	16.8	3	SF			3	E		16		
0005	HOLL	21	0017	0020	0023	S05	W57	7958	04	16.7	6	SF			3	E		21		
		21	0408		0414	No Flare Patrol														

Hα SOLAR FLARES

APRIL 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0006	MEUD	21	0643E	0647	0700	S07	W60	7958	04	16.8	17D	SF							ET
0007	MEUD	21	0710	0715	0717	S06	W60	7958	04	16.8	7	SF							DT
0008	MEUD	21	0746	0756	0825	S06	W60	7958	04	16.8	39	SF							DKT
0009	MEUD	21	0746	0806	0825	S06	W60	7958	04	16.8	39	SF							DKT
0010	MEUD	21	0746	0816	0825	S06	W60	7958	04	16.8	39	SF							KT
0011	MEUD	21	0821	0823	0831	N05	W80	7956	04	15.4	10	SF							
0012	MEUD	21	0827	0845	0912	S06	W60	7958	04	16.9	45	SF							T
0013	MEUD	21	1010	1023	1038	N05	W85	7956	04	15.1	28	SF							
0014	RAMY	21	1050	1054	1109	S09	W61	7958	04	16.9	19	SF		3	E		19		
0015	MEUD	21	1332	1345	1350	S06	W60	7958	04	17.1	18	SF							DT
0016		21	1410*	1451*	1510	S06	W62	7958	04	16.9	60	SF					20		T
	MEUD	21	1410	1451	1556D	S07	W62	7958	04	16.9	106D	SF							T
	HOLL	21	1500	1503	1509	S04	W60	7958	04	17.1	9	SF		3	E		24		
	SVTO	21	1503	1504	1510	S07	W65	7958	04	16.7	7	SF		3	E		16		
0017		21	18011	18023	1807	S05	W63	7958	04	17.0	6	SF	B 1.8				17		
	HOLL	21	1801	1802	1807	S04	W63	7958	04	17.0	6	SF		3	E		20		
	PALE	21	1802	1805	1807	S04	W63	7958	04	17.0	5	SF	B 1.8	3	E		15		
	RAMY	21	1802	1805	1807	S06	W63	7958	04	17.0	5	SF		3	E		17		
0018		21	19383	19421	1949	S06	W67	7958	04	16.8	11	SF	B 1.6				44		
	HOLL	21	1938	1942	1949	S04	W67	7958	04	16.8	11	SF		3	E		66		
	PALE	21	1941	1943	1949	S06	W66	7958	04	16.9	8	SF		3	E		28		
	RAMY	21	1941	1943	1950	S07	W67	7958	04	16.8	9	SF	B 1.6	3	E		39		
0019	PALE	22	0009	0010	0011	S06	W68	7958	04	16.9	2	SF		3	E		15		
0020	PALE	22	0233	0234	0241	S06	W70	7958	04	16.9	8	SF	C 1.6	3	E		17		
0021	PALE	22	0327	0340	0351	S06	W70	7958	04	16.9	24	SF	C 6.1	3	E		50		
		22	0401		0425	No Flare Patrol													
0022	SVTO	22	0442	0443	0450	S13	W76	7958	04	16.5	8	SF	M 3.6	2	E		35		H
0023		22	0653*	07091	0722	S06	W72	7958	04	16.9	29	SN	B 6.1				72		FH
	SVTO	22	0653	0709	0721	S05	W73	7958	04	16.8	28	SN	B 6.1	3	E		72		FH
	KANZ	22	0710	0710	0722	S06	W72	7958	04	16.9	12	SF		2	C				
0024	KANZ	22	0846	0846	0850	S06	W69	7958	04	17.2	4	SF		2	C				
0025	MEUD	22	0942	0948	1002	S07	W75	7958	04	16.8	20	SN							T
0026	MEUD	22	1027	1054	1057	S07	W75	7958	04	16.8	30	SN							T
0027	MEUD	22	1111	1118	1354D	S07	W75	7958	04	16.8	163D	SN							KT
0028		22	1111*	11491	1152	S06	W76	7958	04	16.8	41	SN					11		KT
	MEUD	22	1111	1150	1354D	S07	W75	7958	04	16.8	163D	SN							KT
	SVTO	22	1148	1149	1152	S05	W76	7958	04	16.8	4	SF		3	E		11		
0029	MEUD	22	1111	1251	1354D	S07	W75	7958	04	16.8	163D	SN							KT
0030		22	15444	1552	1557	S04	W76	7958	04	17.0	13	SF	B 7.0				56		
	SVTO	22	1544	1552	1558	S05	W76	7958	04	17.0	14	SF		3	E		59		
	HOLL	22	1548	1552	1556	S04	W77	7958	04	16.9	8	SF	B 7.0	3	E		54		
0031		22	1705	17051	1712	S06	W80	7958	04	16.7	7	SF	B 6.8				24		
	RAMY	22	1705	1705	1713	S07	W79	7958	04	16.8	8	SF		3	E		27		
	PALE	22	1705	1706	1710	S04	W80	7958	04	16.7	5	SF	B 6.8	3	E		21		

Hα SOLAR FLARES

APRIL 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0032		22	1756*	1813	1826	S05	W81	7958	04	16.7	30	SF	C	1.8				35		
	RAMY	22	1756	1813	1836	S07	W80	7958	04	16.7	40	SF			3	E		57		
	PALE	22	1809	1813	1822	S03	W81	7958	04	16.7	13	SF			3	E		29		
	HOLL	22	1812	1813	1819	S04	W82	7958	04	16.6	7	SF	C	1.8	3	E		18		
		23	0752		0814	No Flare Patrol														
		23	0841		0917	No Flare Patrol														
		23	0949		0952	No Flare Patrol														
0033	KANZ	23	0953E	0953U	1017	S07	W85	7958	04	17.0	24D	SF			2	C				
		24	1412		1417	No Flare Patrol														
		25	2046		2112	No Flare Patrol														
		25	2118		2156	No Flare Patrol														
		25	2203		2248	No Flare Patrol														
		25	2340		2354	No Flare Patrol														
		26	0038		0112	No Flare Patrol														
		26	0609		0626	No Flare Patrol														
		26	0631		0657	No Flare Patrol														
		26	0701		0709	No Flare Patrol														
0034	MEUD	26	1403E	1419	1504D	S04	W10		04	25.8	61D	SN					1419	120	1.2	
		27	0607		0834	No Flare Patrol														
		27	2225		2306	No Flare Patrol														
		28	0721		0737	No Flare Patrol														
		29	0218		0249	No Flare Patrol														
		29	2251		2300	No Flare Patrol														
		30	0426		0824	No Flare Patrol														

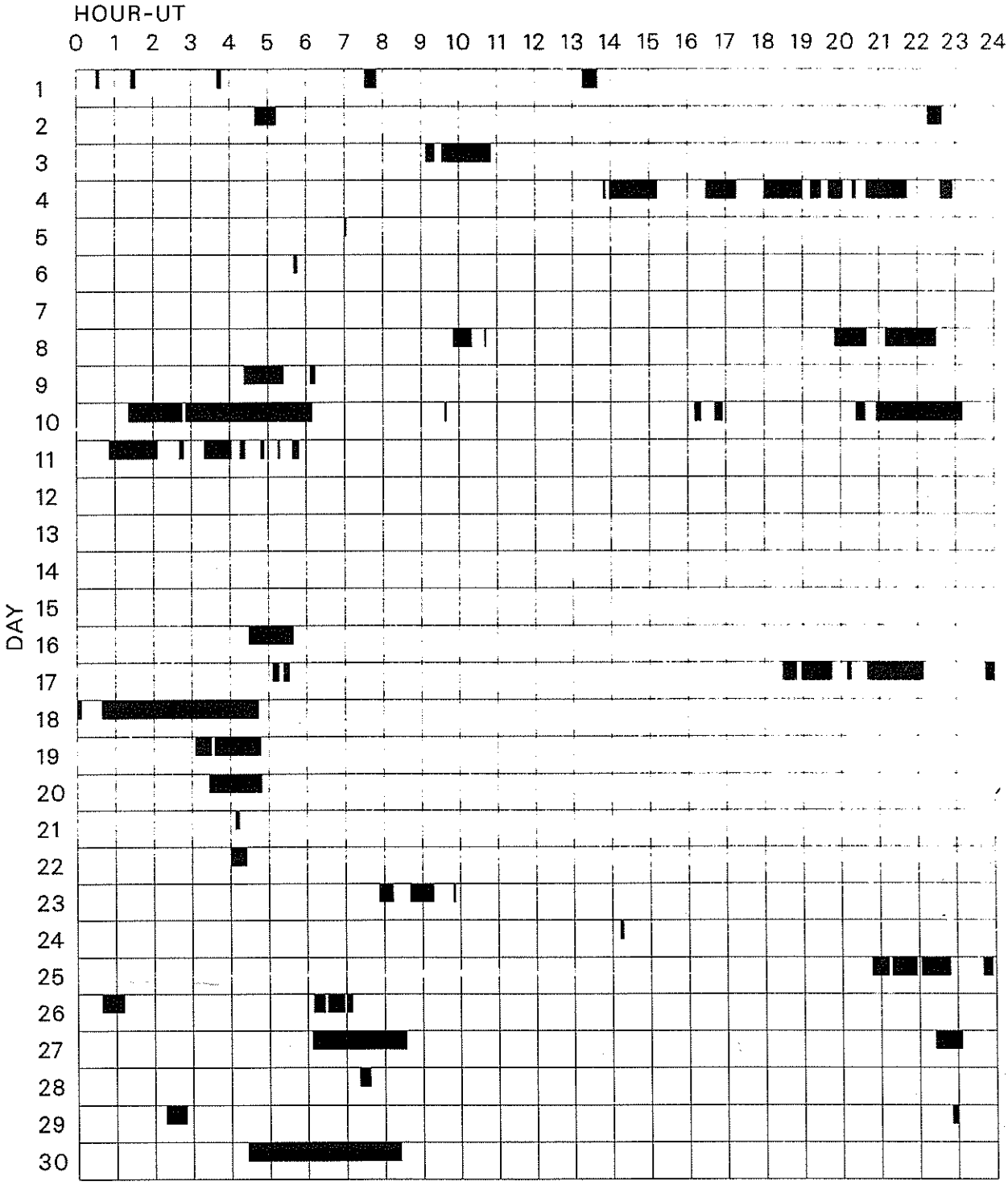
"Remarks"

A = Eruptive prominence whose base is less than 90 degrees from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of Ca II.
P = Flare shows Helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

Observation Type: C=Cinematographic, E=Electronic, P=Photographic, V=Visual

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

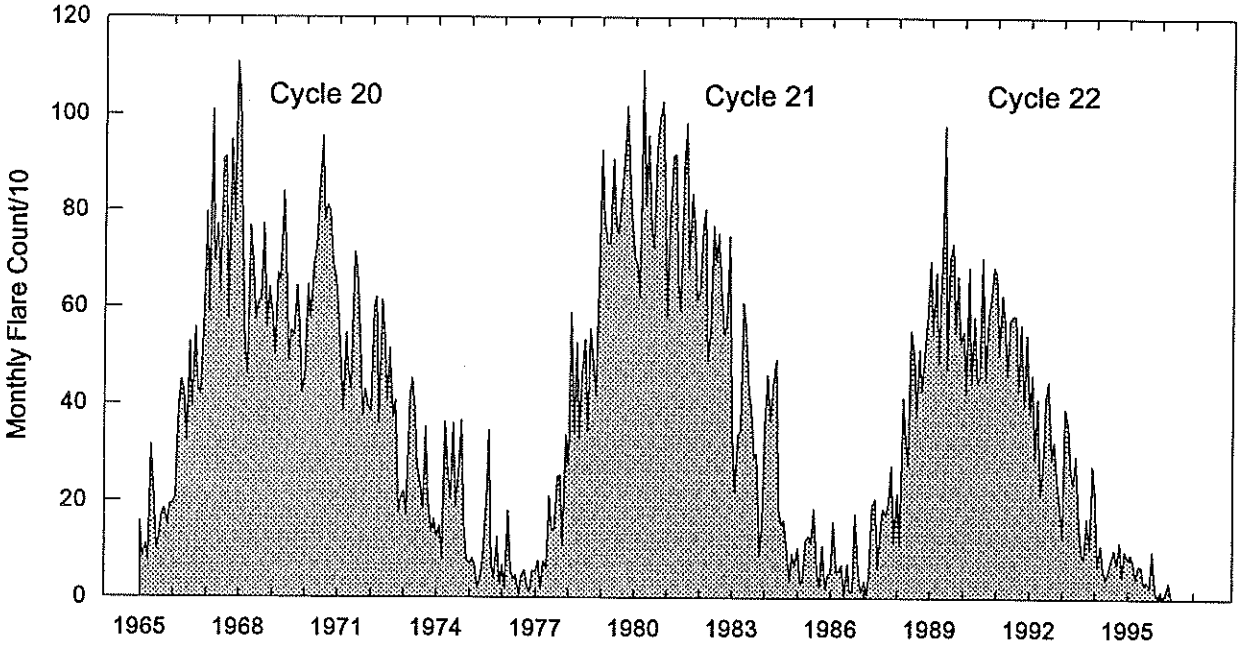
APRIL 1996



Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual nor cinematographic); portions of a panel with only the bottom half shaded mark times of only visual patrol.

Catania	Kankelhoehe	Meudon	Ramey
Holloman	Kharkov	Mitaka	San Vito
Hurbanovo	Learmonth	Palehua	

Monthly Counts of Grouped Solar Flares
Jan 1965 - Apr 1996



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34									66

The term 'grouped' means observations of the same event by different sites were lumped together and counted as one.

S O L A R R A D I O E M I S S I O N

Selected Fixed Frequency Events

APRIL 1996

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	204	IZMI	7	C	0611.0	0611.5	1.0	25.0			
	204	IZMI	41	F	1136.0	1136.0	1.0	27.0			
03	3000	IZMI	7	C	1141.5	1141.8	3.0	40.0			
	3000	IZMI	41	F	1149.5	1151.0	2.0	4.0			
	200	HIRA	8	S	2313.4	2313.4	0.8	10.0			O
04	204	IZMI	42	SER	0942.5	0942.7	3.5	61.0			
06	33	UPIC	45	C	0537.7	0537.8	1.0				
08	204	IZMI	42	SER	0734.0	0749.5	18.0	55.0			
09	200	HIRA	42	SER	0745.9	0746.2	3.0	8.0			WL
13	204	IZMI	7	C	0809.0	0809.5	1.0	57.0			
	204	IZMI	7	C	0826.5	0827.0	1.0	69.0			
14	33	UPIC	45	C	0629.2	0629.3	0.8				
18	3000	IZMI	1	S	0856.5	0856.7	0.3	4.0	2.0		
	3000	IZMI	1	S	0903.2	0903.3	0.2	3.0	2.0		
19	610	SGMR	20	GRF	1142.0	1201.0	40.0	44.0			QL=4 ST=3 TYP=2
	610	SGMR	20	GRF	1147.0	1201.0	35.0	44.0			QL=4 ST=2 TYP=2
	33	UPIC	3	S	1148.0	1148.2	0.4				
21	204	IZMI	43	NS	0700.0		300.0D		5.0		
	245	SGMR	43	NS	1411.0	1411.0	32.0	100.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1546.0	1547.0	86.0	91.0			QL=4 ST=3 TYP=1
	200	HIRA	8	S	0154.0	0154.3	0.4	100.0			O
	245	SGMR	8	S	1357.0	1357.0	U	60.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1646.0	1647.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1646.0	1647.0	1.0	160.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1647.0	1647.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1647.0	1647.0	U	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2333.0	2334.0	1.0	53.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2333.0	2334.0	1.0	55.0			QL=4 ST=2 TYP=3
22	200	HIRA	43	NS	0221.0	0244.7	112.0	15.0	4.0		WR
	204	IZMI	43	NS	0600.0		60.0		5.0		
	280	CUBA	44	NS	1345.0E		485.0D		18.0		
	235	CUBA	44	NS	1345.0E		485.0D		8.0		
	245	LEAR	8	S	0034.0	0034.0	U	44.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0034.0	0034.0	1.0	56.0			QL=4 ST=2 TYP=3
	2800	HIRA	42	SER	0208.0	0210.6	3.0	4.0			O
	245	LEAR	8	S	0210.0	0210.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0210.0	0210.0	U	100.0			QL=4 ST=2 TYP=3
	200	HIRA	8	S	0210.3	0210.6	0.5	9.0			O
	500	HIRA	42	SER	0226.4	0226.9	8.0	20.0			O
	2840	PEKG	5	S	0232.0	0234.0	3.0		8.6		
	2700	PURP	1	S	0232.4	0233.4	2.6	10.0			
	2800	HIRA	8	S	0233.2	0233.8	0.7	6.0			O
	245	PALE	4	S/F	0235.0	0237.0	3.0	65.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0300.0	0300.0	1.0	54.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0300.0	0300.0	1.0	56.0			QL=4 ST=2 TYP=3
	500	HIRA	6	S	0300.2	0301.0	1.0	9.0	6.0		O
	2800	HIRA	8	S	0300.2	0300.5	0.3	18.0			O
	200	HIRA	8	S	0300.4	0300.5	0.5	43.0			O
	610	LEAR	8	S	0301.0	0301.0	U	32.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0332.0	0334.0	11.0		17.1		
	4995	LEAR	4	S/F	0333.0	0336.0	4.0	30.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0333.0	0336.0	4.0	18.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0333.0	0334.0	4.0	130.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0333.0	0334.0	3.0	47.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0333.0	0334.0	2.0	100.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0333.0	0336.0	4.0	46.0			QL=4 ST=2 TYP=3
	2800	HIRA	3	S	0333.7	0336.0	7.5	16.0	11.0		O
	500	HIRA	46	C	0333.7	0334.8	4.5	193.0	90.0		O

S O L A R R A D I O E M I S S I O N
Selected Fixed Frequency Events

APRIL 1996

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
22	8800	LEAR	4	S/F	0334.0	0336.0	3.0	41.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0334.0	0334.0	2.0	78.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0334.0	0336.0	3.0	30.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0334.0	0336.0	3.0	42.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0334.0	0334.0	1.0	130.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0334.0	0334.0	3.0	60.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0334.0	0334.0	U	60.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0334.0	0334.0	1.0	41.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0334.0	0334.0	2.0	19.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0335.0	0336.0	1.0	44.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0444.0	0446.0	14.0		72.8		
	610	LEAR	49	GB	0445.0	0446.0	2.0	7600.0			QL=4 ST=2 TYP=6
	8800	LEAR	8	S	0445.0	0445.0	1.0	57.0			QL=2 ST=2 TYP=3
	410	LEAR	49	GB	0445.0	0446.0	2.0	3900.0			QL=4 ST=2 TYP=6
	4995	LEAR	8	S	0445.0	0445.0	1.0	72.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0445.0	0445.0	1.0	86.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0445.0	0445.0	3.0	27.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0445.0	0446.0	3.0	880.0			QL=4 ST=3 TYP=7
	1415	LEAR	4	S/F	0445.0	0445.0	3.0	90.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0445.0	0445.0	1.0	51.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	0445.0	0445.0	1.0	78.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0445.0	0445.0	1.0	42.0			QL=2 ST=3 TYP=3
	1415	SVTO	4	S/F	0445.0	0445.0	3.0	81.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	0445.0	0446.0	2.0	4700.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0445.0	0446.0	4.0	870.0			QL=4 ST=3 TYP=7
	610	SVTO	49	GB	0445.0	0446.0	2.0	6200.0			QL=2 ST=2 TYP=6
	200	HIRA	45	C	0445.3	0449.0	4.5	532.0	110.0		O
	500	HIRA	48	C	0445.3	0445.8	3.0	3780.0	1150.0		WR
	2800	HIRA	42	SER	0445.3	0445.8	8.0	45.0			O
23	235	CUBA	44	NS	1300.0E		470.0D		7.0		
	280	CUBA	44	NS	1300.0E		470.0D		14.0		
	500	HIRA	8	S	0041.5	0041.9	0.5	8.0			O
	3000	IZMI	41	F	1105.0	1108.0	6.0	7.0			
24	280	CUBA	44	NS	1300.0E		470.0D		15.0		
	235	CUBA	44	NS	1300.0E		470.0D		6.0		
	3000	IZMI	41	F	0601.5	0602.0	4.0	5.0			
	3000	IZMI	8	S	1012.0	1012.3	0.4	25.0	25.0		
25	3000	IZMI	1	S	0621.5	0622.0	4.0	4.0			
	3000	IZMI	22	GRF	0627.0	0634.0	12.0	46.0			

Reports are received routinely from the following observatories:
LEAR = Learmonth PALE = Palehua SGMR = Sagamore Hill SVTO = San Vito

Explanation of Type Code:

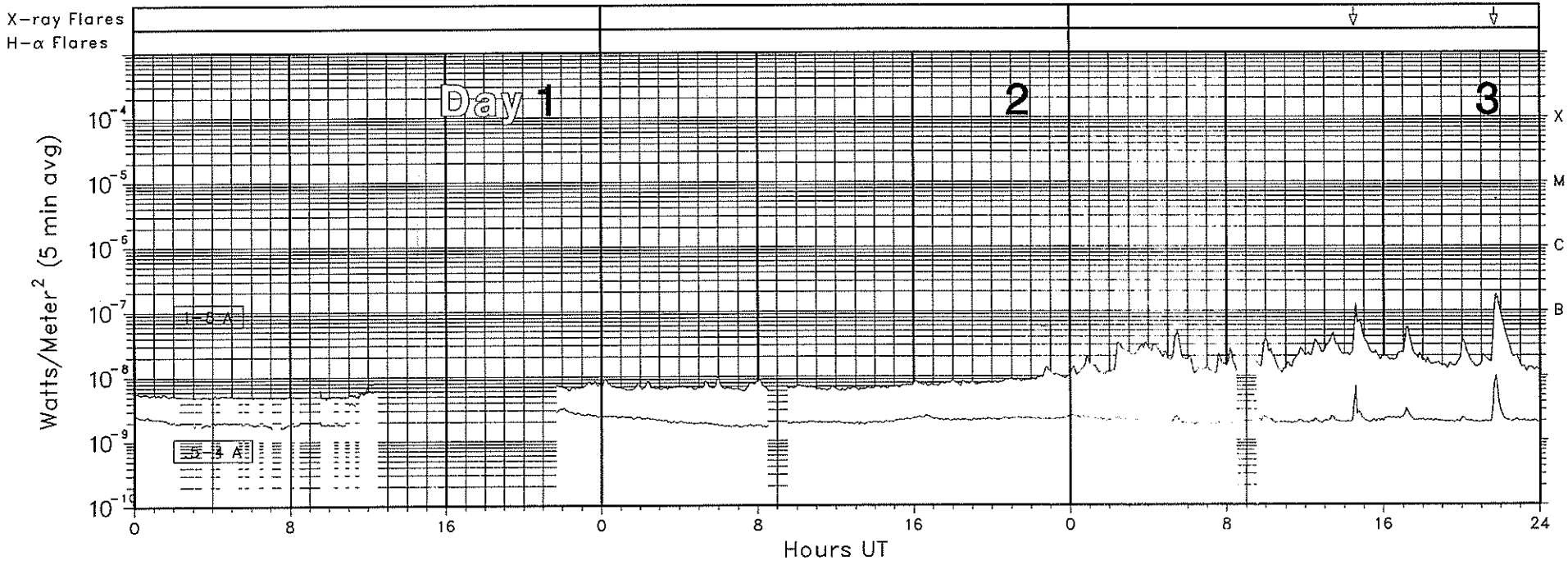
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precusor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major

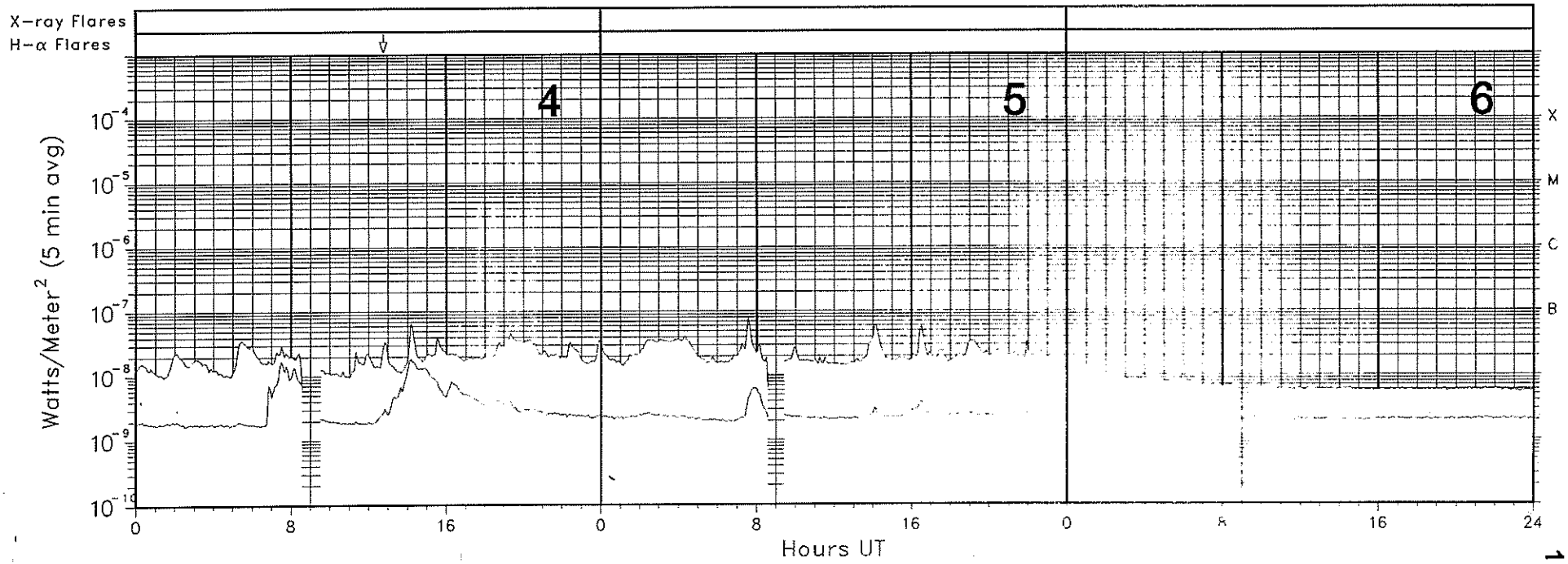
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

GOES-7 X-RAY DETECTOR

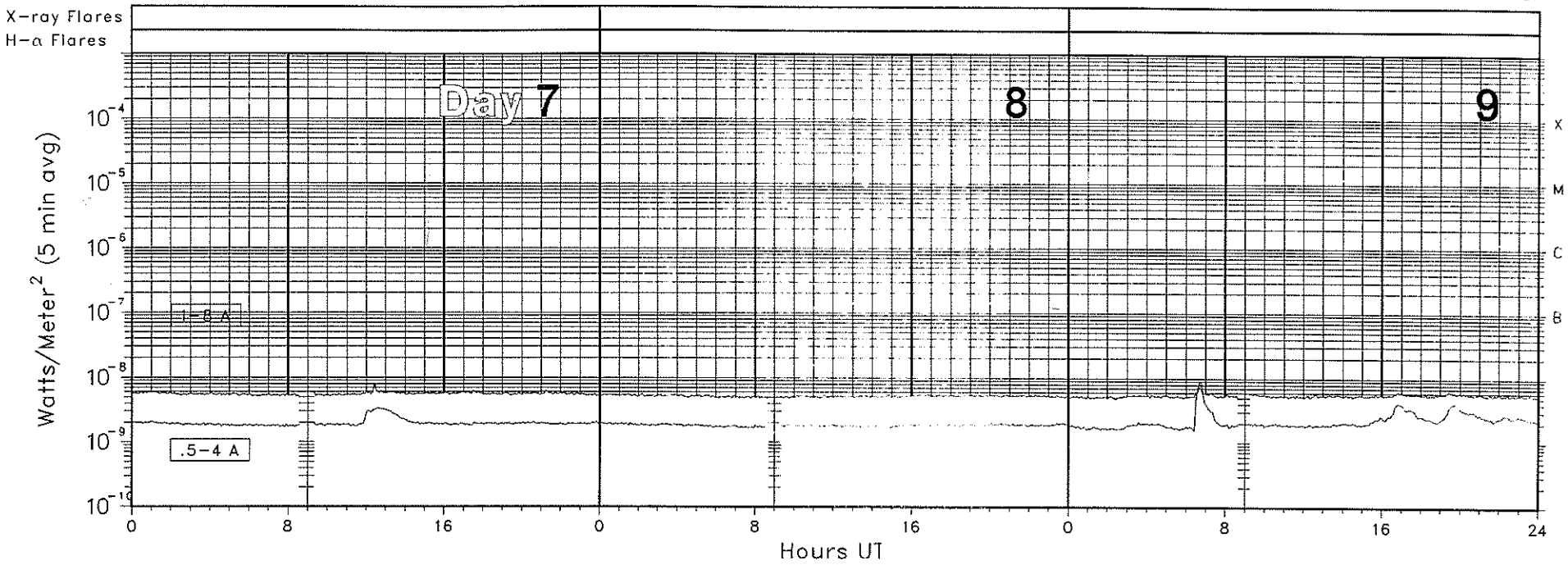
April 1996

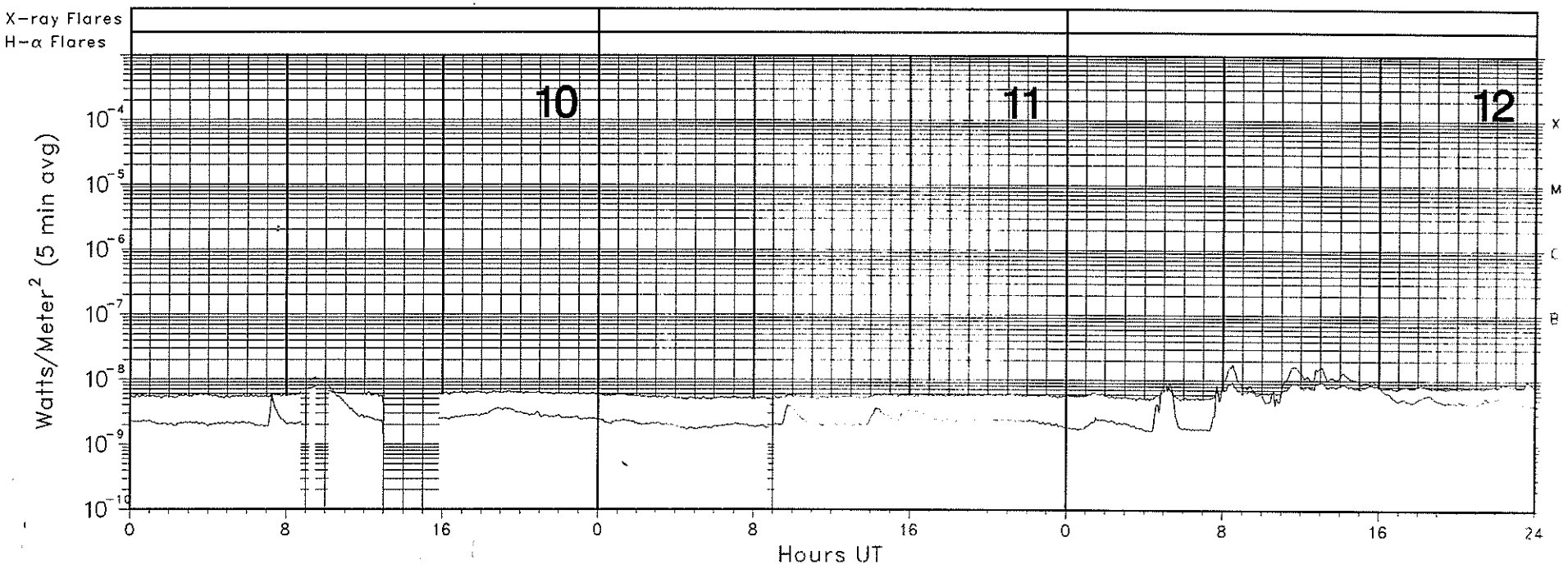




GOES-7 X-RAY DETECTOR

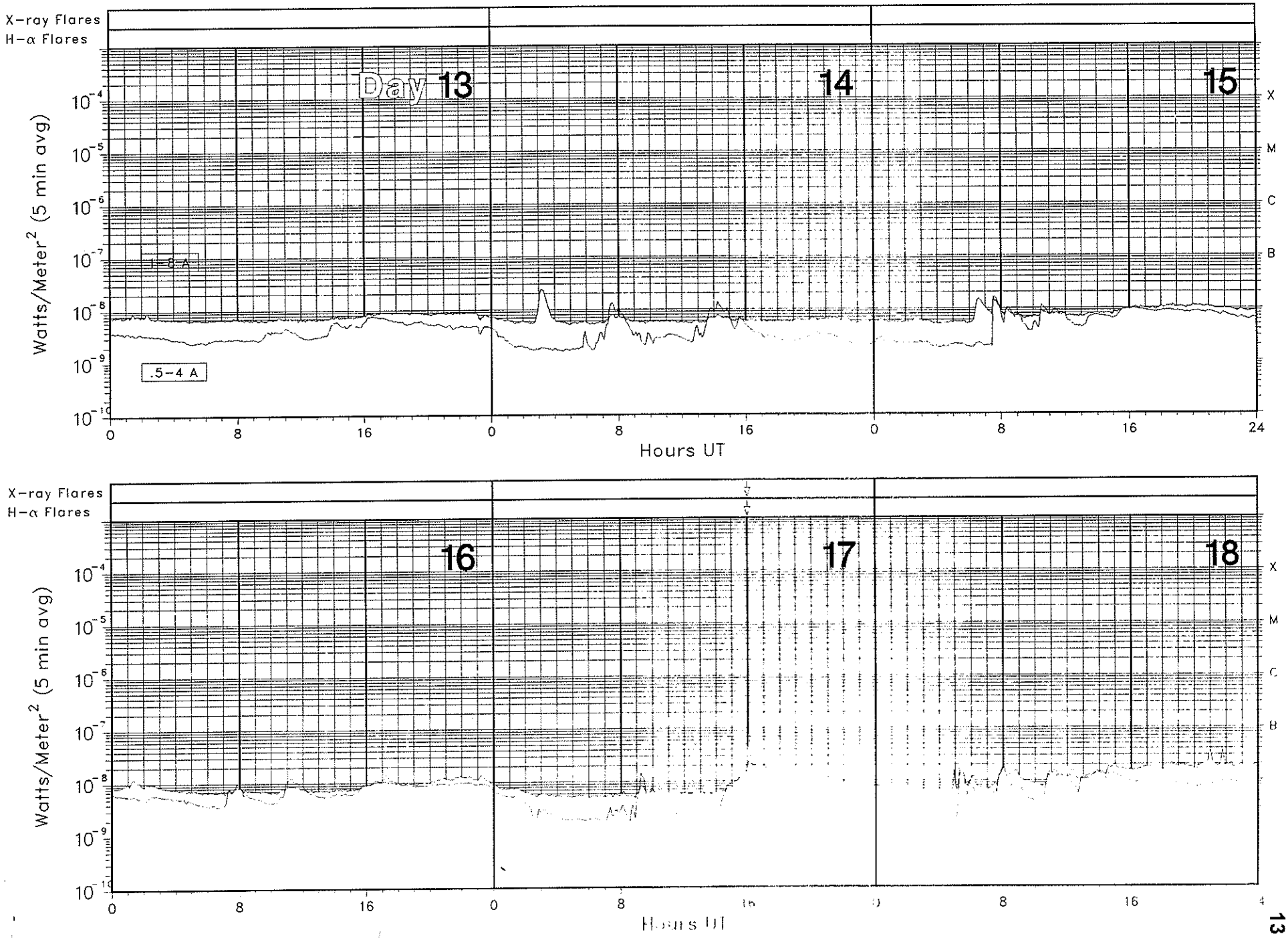
April 1996





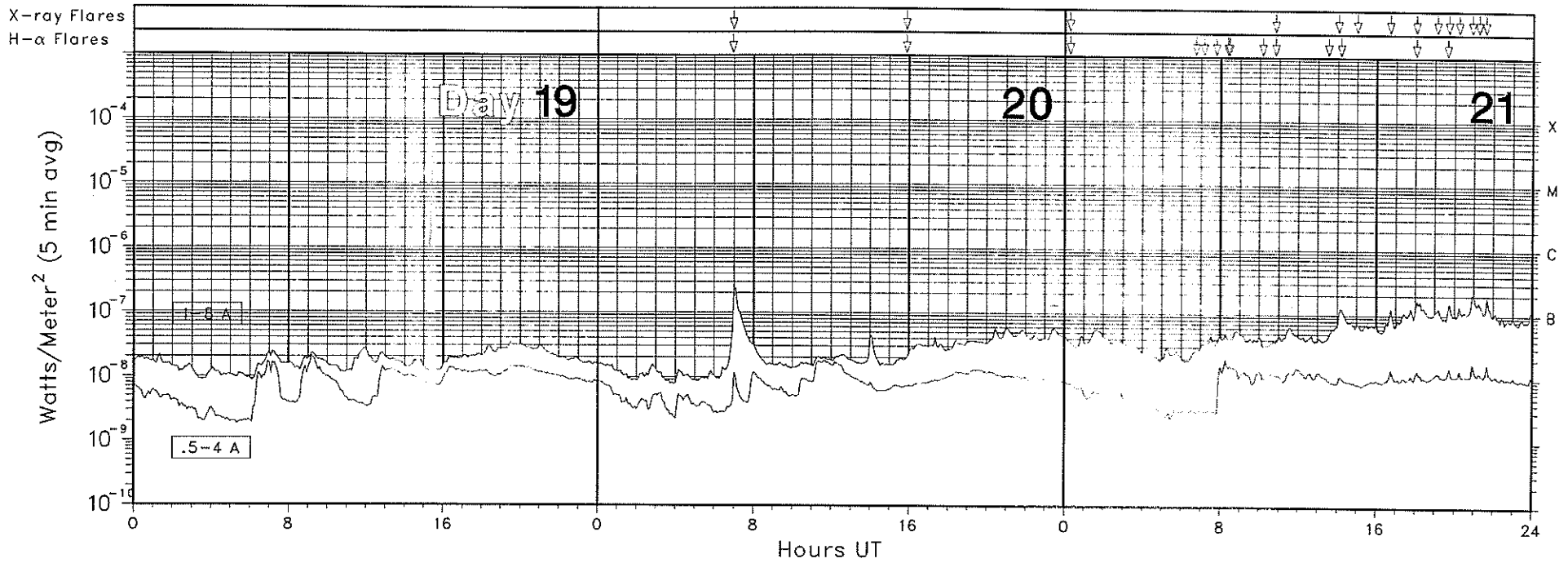
GOES-7 X-RAY DETECTOR

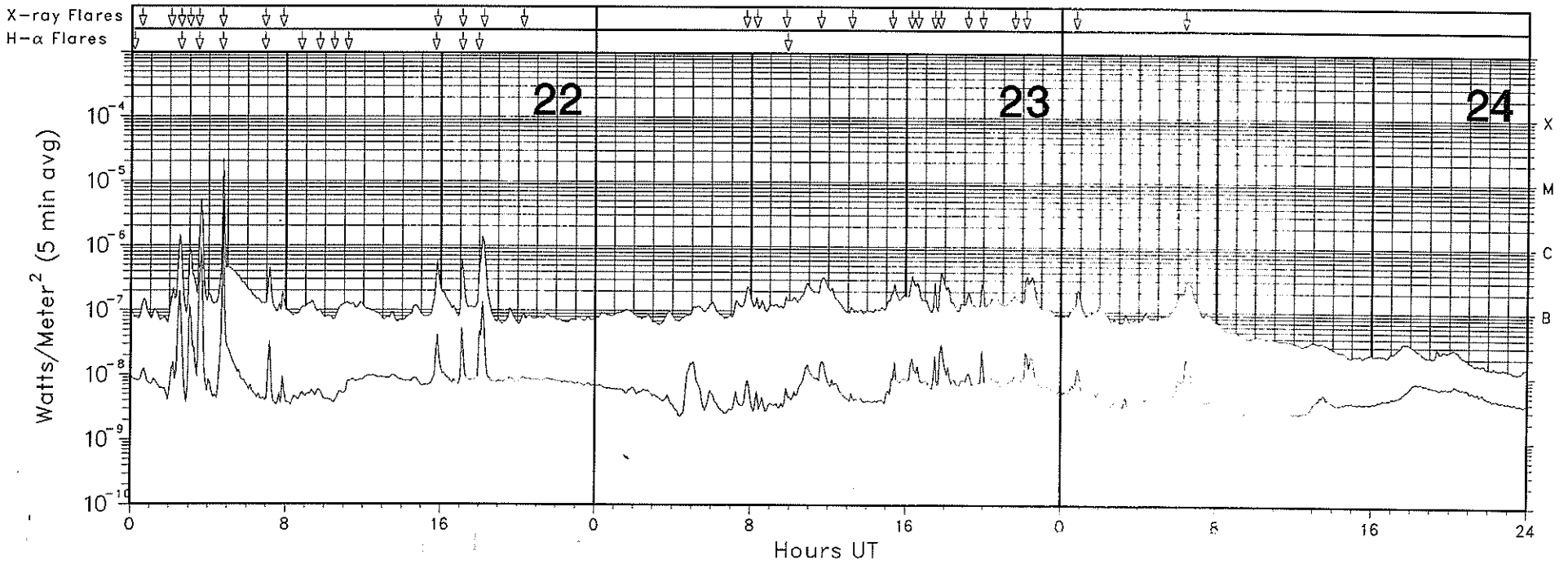
April 1996



GOES-7 X-RAY DETECTOR

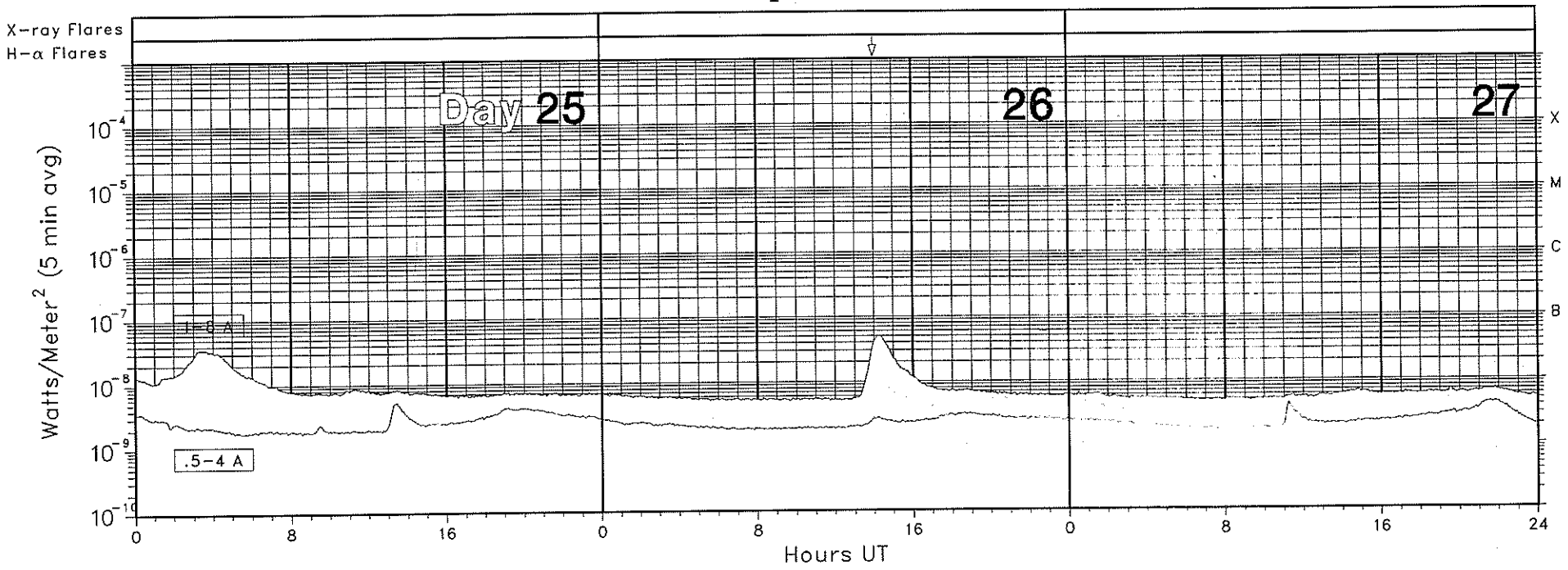
April 1996

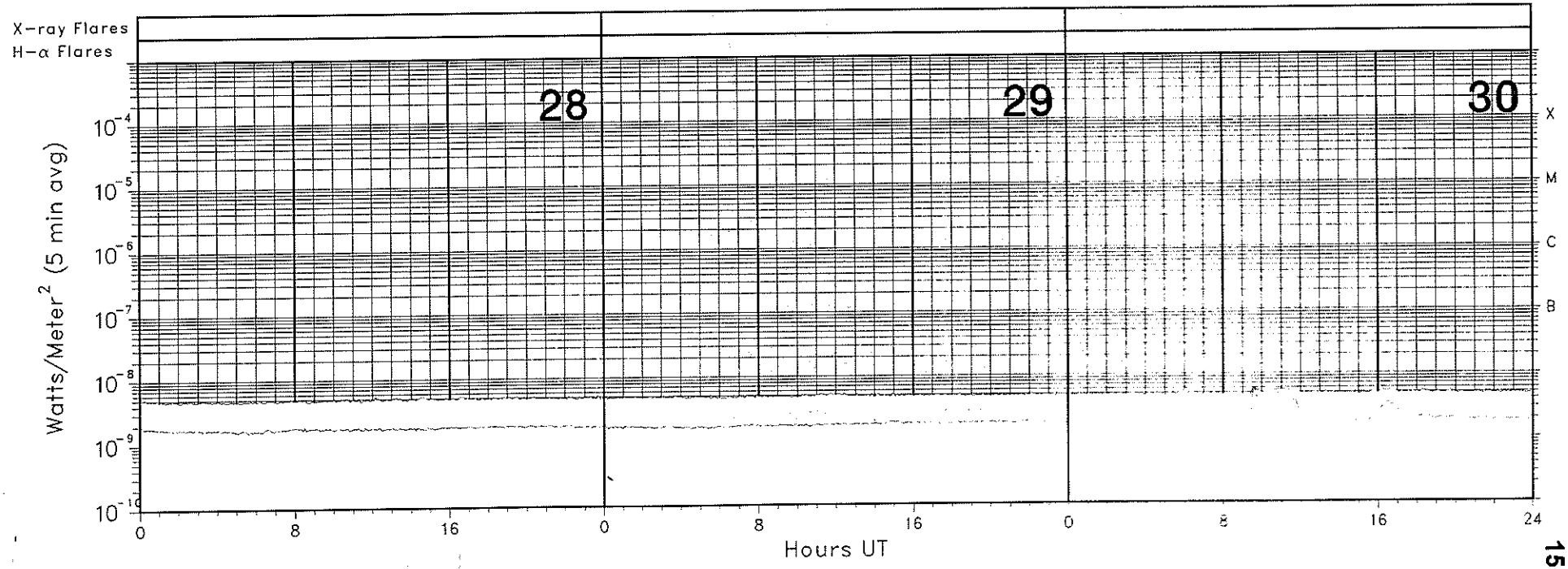




GOES-7 X-RAY DETECTOR

April 1996





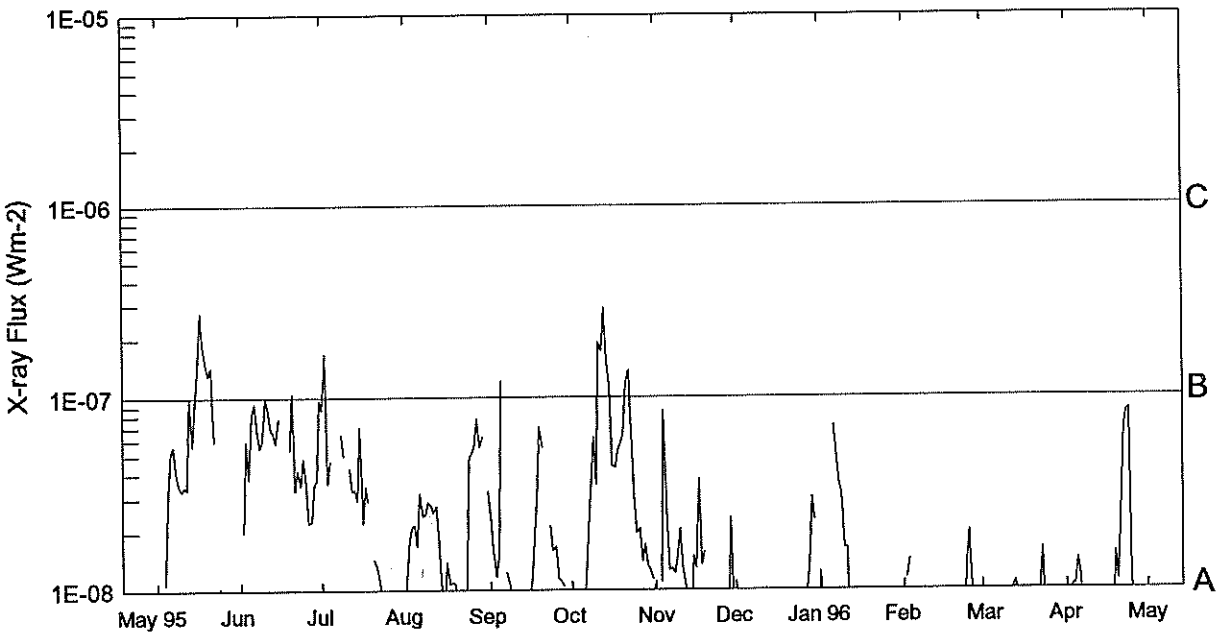
GOES S O L A R X-RAY F L A R E S
Preliminary Listing

April 1996

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region
03	1431	1435	1438				B1.7	
03	2142	2148	2154				B1.8	
17	1600	1602	1607	N05	W29	SF	B4.3	7956
20	0659	0706	0729	N04	W68	SF	B2.9	7956
20	1552	1553	1555	S05	W52	SF		7958
21	0017	0020	0023	S05	W57	SF		7958
21	1050	1054	1109	S09	W61	SF		7958
21	1403	1421	1423				B1.3	
21	1500	1503	1509	S04	W60	SF		7958
21	1641	1647	1651				B1.3	
21	1802	1805	1807	S04	W63	SF	B1.8	7958
21	1906	1909	1914				B1.0	
21	1941	1943	1950	S07	W67	SF	B1.6	7958
21	2013	2018	2021				B1.2	
21	2053	2057	2103				B2.3	
21	2115	2118	2120				B1.9	
21	2136	2143	2146				B1.9	
22	0032	0043	0050				B1.5	
22	0202	0211	0216				B2.3	
22	0233	0234	0241	S06	W70	SF	C1.6	7958
22	0301	0301	0316	S06	W70	SF	C1.2	7958
22	0327	0340	0351	S06	W70	SF	C6.1	7958
22	0442	0443	0450	S13	W76	SF	M3.6	7958
22	0653	0709	0721	S05	W73	SN	B6.1	7958
22	0749	0752	0754				B2.4	
22	1548	1552	1556	S04	W77	SF	B7.0	7958
22	1705	1706	1710	S04	W80	SF	B6.8	7958
22	1812	1813	1819	S04	W82	SF	C1.8	7958
22	2016	2019	2022				B1.3	
23	0745	0750	0800				B2.4	
23	0817	0820	0823				B1.9	
23	0948	0952	0954				B1.8	
23	1133	1146	1156				B3.1	
23	1310	1313	1315				B1.1	
23	1515	1518	1523				B2.2	
23	1615	1620	1624				B4.4	
23	1635	1638	1641				B3.4	
23	1727	1730	1733				B3.8	
23	1744	1753	1803				B4.1	
23	1910	1915	1920				B2.1	
23	1955	1959	2001				B4.8	
23	2135	2138	2142				B1.8	
23	2209	2214	2220				B4.4	
24	0046	0053	0101				B2.4	
24	0623	0632	0645				B3.1	

EDITOR's NOTE: Please note that whenever optical flares are given, the times given are times of the optical flares and not the times of the X-ray flares. These data are taken directly from the NOAA SEC "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

Preliminary GOES Satellite Daily X-Ray Background
May 95 - Apr 96



Day	May 95	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96	Feb	Mar	Apr
1	<A1.0	---	A8.6	A1.5	A2.4	---	---	<A1.0	A1.0	---	<A1.0	<A1.0
2	<A1.0	A1.9	B1.6	A2.9	A1.6	<A1.0	---	---	<A1.0	A1.1	<A1.0	<A1.0
3	---	A5.9	A3.6	A2.7	A1.1	<A1.0	A .0	---	<A1.0	A1.4	<A1.0	A1.0
4	A1.0	A3.8	A4.7	A2.4	A1.5	<A1.0	A8.5	<A1.0	---	---	<A1.0	A1.0
5	A3.2	A8.2	---	A3.4	B1.2	<A1.0	A2.6	<A1.0	---	---	<A1.0	A1.4
6	A5.2	A9.3	---	A3.4	--	<A1.0	A1.2	<A1.0	A7.1	---	<A1.0	A1.1
7	A5.6	A6.7	---	A1.9	A1.2	A1.8	A1.2	<A1.0	A5.0	<A1.0	---	<A1.0
8	A4.1	A5.5	A6.4	A1.8	A1.0	A3.6	A1.2	<A1.0	A3.6	<A1.0	<A1.0	<A1.0
9	A3.5	A5.9	A4.9	A2.2	<A1.0	A6.2	A1.5	<A1.0	A3.1	<A1.0	<A1.0	<A1.0
10	A3.2	A9.8	---	A3.7	--	A3.5	A2.0	<A1.0	A1.6	<A1.0	<A1.0	<A1.0
11	A3.4	A8.8	A4.3	A3.0	--	B1.9	A1.2	<A1.0	A1.6	<A1.0	<A1.0	<A1.0
12	A3.3	A6.9	A3.2	A6.9	<A1.0	B1.7	A1.0	A1.0	<A1.0	<A1.0	A1.0	<A1.0
13	A9.9	A6.5	A3.3	B1.3	<A1.0	B2.9	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	<A1.0
14	A5.6	A5.8	A2.9	A8.6	<A1.0	B1.5	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
15	A9.3	A7.8	A7.0	A7.1	<A1.0	B1.1	A1.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
16	B1.3	---	A2.2	A4.8	A1.0	A4.3	A1.2	<A1.0	---	<A1.0	<A1.0	<A1.0
17	B2.7	---	A3.4	A4.0	A1.7	A4.3	A3.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
18	B1.8	---	A2.8	A4.9	A2.9	A5.3	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
19	B1.4	A5.4	---	A5.6	A7.0	A5.7	A1.5	---	<A1.0	<A1.0	<A1.0	A1.5
20	B1.2	B1.0	A1.4	A3.0	A5.4	A6.4	---	<A1.0	<A1.0	---	<A1.0	A1.1
21	B1.4	A3.2	A1.3	A2.0	--	B1.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.0
22	A5.9	A4.2	A1.1	A1.0	--	B1.3	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	A6.8
23	---	A3.4	<A1.0	<A1.0	A2.1	A6.4	<A1.0	---	<A1.0	<A1.0	A1.6	A8.3
24	A1.0	A4.8	<A1.0	A1.1	A1.5	A3.1	<A1.0	<A1.0	<A1.0	A1.3	<A1.0	A8.5
25	<A1.0	A3.6	<A1.0	<A1.0	A1.6	A1.9	<A1.0	<A1.0	<A1.0	A2.0	<A1.0	A1.0
26	<A1.0	A2.2	<A1.0	<A1.0	A1.1	A2.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
27	---	A2.2	<A1.0	<A1.0	A1.1	A1.4	<A1.0	<A1.0	<A1.0	---	<A1.0	<A1.0
28	<A1.0	A3.5	<A1.0	A1.2	A1.0	A1.7	<A1.0	A1.3	<A1.0	<A1.0	<A1.0	<A1.0
29	<A1.0	A3.7	<A1.0	B1.7	--	A1.3	A2.3	A3.0	<A1.0	<A1.0	<A1.0	<A1.0
30	<A1.0	A9.6	---	B4.3	--	A1.2	<A1.0	A2.2	<A1.0	---	<A1.0	<A1.0
31	<A1.0		<A1.0	B1.9		A1.1		---	---		<A1.0	

NOTE: Background levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	AFS	1250E	1500D	N01	W37	03	29.9		02	9	9	E	SVTO		
01	DSD	1345E	0118	N03	W40	03	29.7		03	9	9	E	HOLL	7955	
01	DSD	1350E	1430D	N01	W39	03	29.8		02	7	7	E	SVTO		
01	DSD	1431E	2206	N00	W38	03	29.9		03	9	9	E	RAMY	7955	
01	AFS	1611E	2112D	N01	W40	03	29.8		01	9	9	E	RAMY	7955	
01	DSD	1822E	0103	N00	W40	03	29.9		02	9	9	E	PALE	7955	
02	AFS	0845E	1000	N02	W48	03	29.9		01	9	9	E	LEAR	7955	
02	DSD	2011E	2123	N00	W53	03	30.0		03	9	9	E	HOLL	7955	
02	AFS	2330E	0907	N02	W57	03	29.8		02	5	4	E	LEAR	7955	
03	BSL	1135	1145	N68	E90	04	11.6	1-				C	CATA		
03	BSL	1145	1145D	S82	W90	03	26.2	1-				C	CATA		
03	DSD	1241E	2019	N01	W63	03	29.9		02	6	6	E	RAMY	7955	
03	DSD	1627E	1910D	N01	W67	03	29.8		03	8	9	E	HOLL	7955	
04	BSL	0919E	0926D	S47	W90	03	27.9	1-				C	CATA		
04	BSL	1032E	1037	N83	W90	03	27.1	1-				C	CATA		
04	ASR	2331	0017D	S03	W90	03	29.3			9	9	E	LEAR	7955	
05	ASR	0309E	0930D	S03	W90	03	29.5			8	9	E	LEAR	7955	
05	BSL	0635E	0636D	S33	W90	03	29.2	1-				C	CATA		
05	BSL	0635E	0636D	S42	W90	03	29.0	1-				C	CATA		
05	ASR	0720E	1446D	N01	W90	03	29.7			9	9	E	SVTO	7955	
05	BSL	0901E	0912	S86	E90	04	13.8	1-				C	CATA		
05	ADF	0903E	1630	N09	E60	04	9.9	1	04	9	9	E	SVTO		
05	BSL	0907	0912	S74	W90	03	28.2	1-				C	CATA		
05	BSL	1005E	1013	N09	W90	03	29.8	1-				C	CATA		
05	ASR	1314E	1330D	N01	W90	03	29.9			9	9	E	RAMY	7955	
05	AFS	1742E	1835D	N05	E00	04	5.7		02	6	8	E	RAMY		
06	BSL	0827E	0837D	N48	E90	04	13.9	1-				C	CATA		
06	BSL	0944	0951	S62	W90	03	29.5	1-				C	CATA		
07	BSL	0710	0740	S57	W90	03	30.6	1-				C	CATA		
07	DSD	1225E	1240D	N11	E28	04	9.6		03	9	9	E	SVTO		
07	ADF	1228E	1435D	N12	E28	04	9.6	1	02	6	9	E	RAMY		
08	BSL	0731	0737D	N37	E90	04	15.6	1-				C	CATA		
09	DSF	0948U	0852U	N46	E29	04	11.8	1				C	CATA		
10	BSL	0950	0955	S14	E90	04	17.2	1-				C	CATA		
10	DSD	1035E	1110D	S16	E26	04	12.4		02	9	9	E	SVTO		
11	BSL	1009E	1009D	S01	E90	04	18.1	1-				C	CATA		
12	AFS	0729E	1530D	N07	E44	04	15.6		02	9	9	E	SVTO	7956	
12	BSL	0941E	0945	S84	W90	04	4.0	1-				C	CATA		
12	DSD	1340E	1400D	N11	W40	04	9.6		02	9	9	E	SVTO		
12	AFS	1410	0108	N05	E40	04	15.6		01	5	9	E	HOLL	7956	
12	DSD	1745E	1818D	N05	E39	04	15.6		02	0	0	E	HOLL	7956	
13	AFS	0005E	0425D	N05	E34	04	15.5		01	5	6	E	LEAR	7956	
13	BSL	0615	0630	N46	E90	04	20.8	1-				C	CATA		
13	BSL	0636	0640	S32	W90	04	6.1	1-				C	CATA		
13	AFS	0705E	1356D	N07	E30	04	15.5		01	5	6	E	SVTO	7956	
13	BSL	0710	0810D	N49	E90	04	20.9	1-				C	CATA		
13	BSL	0746	0800	S83	E90	04	21.7	1-				C	CATA		
13	BSL	0844E	0904D	N49	E90	04	20.9	1-				C	CATA		
13	BSL	0917E	0949	N49	E90	04	21.0	1-				C	CATA		
13	BSL	0949	0955	N77	E90	04	21.7	1-				C	CATA		
13	BSL	1107	1115	N84	W90	04	5.1	1-				C	CATA		
13	BSL	1136	1136D	N66	E90	04	21.6	1-				C	CATA		
13	AFS	2200E	2358	N04	E22	04	15.6		01	9	9	E	HOLL	7956	
14	BSL	0640E	0656	S80	W90	04	5.9	1-				C	CATA		
14	BSL	0910	0916	N68	E90	04	22.5	1-				C	CATA		
14	BSL	0916	0935	N48	E90	04	21.9	1-				C	CATA		
14	DSF	1137U	0637U	S20	W36	04	11.7	1				C	CATA		

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
15	ADF	1652E	2005D	N06	E54	04	19.7	1	04	5	5	E	PALE		
15	ADF	2010E	0255D	N05	W05	04	15.5	1	04	9	9	E	PALE	7956	
16	AFS	1645E	0432	N06	W18	04	15.3		02	9	9	E	PALE	7956	
16	DSD	1700E	1820D	N06	W16	04	15.5		03	9	9	E	RAMY	7956	
16	ADF	1929E	2025	N07	W17	04	15.5	1	04	5	6	E	HOLL	7956	
16	AFS	1938E	2230	N05	W19	04	15.4		01	7	9	E	RAMY	7956	
16	DSD	1948E	2114D	N07	E38	04	19.7		01	6	9	E	RAMY		
16	ADF	2017E	2230	N12	W18	04	15.5	1	03	9	9	E	RAMY	7956	
16	DSF	2025U	2138U	N07	W17	04	15.6	2	04	0	0	E	HOLL	7956	
16	ADF	2130E	2300	N05	W20	04	15.4	1	04	9	9	E	PALE	7956	
16	AFS	2138E	0115	N05	W20	04	15.4		02	6	8	E	HOLL	7956	
16	DSF	2300U	2308U	N05	W21	04	15.4	2	04	9	9	E	PALE	7956	
16	DSF	2330U	0030U	N05	W21	04	15.4	2	04	9	9	E	PALE	7956	
17	AFS	0918E	1710	N04	W27	04	15.4		02	9	9	E	SVTO	7956	
17	DSD	1040E	1255D	N05	W28	04	15.3		02	9	9	E	RAMY	7956	
17	AFS	1300E	2040	N04	W28	04	15.4		02	9	9	E	RAMY	7956	
17	AFS	1345E	2210D	N05	W30	04	15.3		01	7	8	E	HOLL	7956	
17	ADF	1414E	1851D	N02	W28	04	15.5		03	5	4	E	RAMY	7956	
17	DSD	1530E	1555D	N07	W34	04	15.1		02	6	6	E	SVTO	7956	
17	DSD	1704E	1851D	N07	E28	04	19.8		01	8	9	E	RAMY		
18	AFS	0515E	1710	S16	W41	04	15.1		02	9	9	E	SVTO	7957	
18	AFS	1040E	1818	S12	W38	04	15.6		01	8	8	E	RAMY	7957	
18	AFS	1100E	1710	N07	W41	04	15.4		02	9	9	E	SVTO	7956	
18	AFS	1155E	1524D	N09	E18	04	19.8		01	9	9	E	RAMY		
18	AFS	1320E	1818	N04	W42	04	15.4		01	9	9	E	RAMY	7956	
18	AFS	1350E	0129	N07	W44	04	15.3		01	9	9	E	HOLL	7956	
18	AFS	1350E	1740D	S08	W44	04	15.3		01	7	9	E	HOLL	7957	
18	AFS	1828E	0335	N04	W45	04	15.4		02	7	7	E	PALE	7956	
19	AFS	0016E	0335	S10	W50	04	15.2		03	9	9	E	PALE	7957	
20	AFS	0505E	0630D	N04	W66	04	15.3		01	7	7	E	SVTO	7956	
20	AFS	0505E	1715	S05	W45	04	16.8		02	9	9	E	SVTO	7958	
20	ADF	0700E	1520D	N03	W66	04	15.3	1	02	9	9	E	SVTO	7956	
20	AFS	1039E	2218	S07	W46	04	17.0		02	9	9	E	RAMY	7958	
20	DSD	1123E	1632D	S06	W46	04	17.0		01	9	9	E	RAMY	7958	
20	AFS	1342E	0105	S05	W49	04	16.9		02	9	9	E	HOLL	7958	
20	AFS	1722E	0336	S04	W52	04	16.8		02	9	9	E	PALE	7958	
20	DSD	2308E	0105	S03	W54	04	16.9		04	9	9	E	HOLL	7958	
21	DSD	0301E	0336	S05	W60	04	16.6	1	04	9	9	E	PALE	7958	
21	AFS	0502E	1710	S06	W60	04	16.7		01	9	9	E	SVTO	7958	
21	ADF	0610E	1710	N01	E57	04	25.5	1	12	9	9	E	SVTO		
21	ADF	0810E	1710	S05	W60	04	16.8	1	03	9	9	E	SVTO	7958	
21	ASR	1022E	1206D	N05	W89	04	14.8			8	8	E	SVTO	7956	
21	AFS	1035E	2218	S06	W59	04	17.0		02	9	9	E	RAMY	7958	
21	DSD	1100E	1206D	S08	W60	04	16.9		03	9	9	E	SVTO	7958	
21	ASR	1120E	1206D	S11	W90	04	14.7			7	7	E	SVTO	7957	
21	AFS	1315E	0129	S04	W63	04	16.8		02	9	9	E	HOLL	7958	
21	DSD	1354E	1953D	S07	W60	04	17.1		03	9	9	E	RAMY	7958	
21	DSD	1435E	1710	S08	W60	04	17.1		04	9	9	E	SVTO	7958	
21	DSD	1455E	1955	S04	W61	04	17.1		03	9	9	E	HOLL	7958	
21	BSD	1541E	1800D	S07	W61	04	17.1		04	9	9	E	RAMY	7958	
21	DSF	1617U	0524U	N09	W40	04	18.7		09	0	0	E	SVTO		
21	AFS	1723E	0400	S05	W67	04	16.7		02	9	9	E	PALE	7958	
21	DSD	1723E	2157	S04	W64	04	16.9		04	9	9	E	PALE	7958	
22	ASR	0443	0510D	S13	W76	04	16.5			9	9	E	SVTO	7958	Flare Associated
22	DSD	0450E	0559D	S13	W76	04	16.5		17	9	9	E	SVTO	7958	Flare Associated
22	DSD	0455E	1148D	S13	W76	04	16.5		03	9	9	E	SVTO	7958	
22	AFS	0500E	1703	S12	W79	04	16.2		02	9	9	E	SVTO	7958	
22	ASR	0710E	0730	S13	W76	04	16.6			9	9	E	SVTO	7958	Flare Associated
22	ADF	0825E	1239D	N03	E43	04	25.6	1	06	9	9	E	SVTO		
22	DSD	1046E	1957	S06	W70	04	17.2		04	9	9	E	RAMY	7958	
22	AFS	1055E	1920D	S06	W73	04	17.0		01	9	9	E	RAMY	7958	
22	DSD	1157E	1539D	S05	W71	04	17.2		06	9	9	E	SVTO	7958	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
22	BSD	1203E	1224D	S04	W73	04	17.0		07	9	9	E	SVTO	7958	
22	BSD	1258E	1957	S07	W76	04	16.8		03	9	9	E	RAMY	7958	
22	DSD	1540E	1641	S03	W76	04	17.0		02	9	9	E	HOLL	7958	
22	ASR	2251	0041	S02	W90	04	16.2			9	9	E	HOLL	7958	
23	ASR	0500E	1608	S07	W89	04	16.5			9	9	E	SVTO	7958	
23	ASR	1131E	1857	S06	W90	04	16.7			9	9	E	RAMY	7958	
23	ASR	1448E	2140	S05	W90	04	16.9			5	9	E	HOLL	7958	
23	ASR	1630E	1726D	S09	W90	04	16.9			9	9	E	RAMY	7958	
23	ADF	1900E	0423	N02	E24	04	25.6	1	06	9	9	E	PALE		
24	ADF	1740E	0211	S03	E11	04	25.5	1	10	7	7	E	PALE		
25	ADF	0702E	1705	N01	E00	04	25.3	2	10	9	9	E	SVTO		
25	ADF	1251E	1940D	N02	W02	04	25.4	1	04	9	9	E	RAMY		
25	DSF	1609U	0813U	S48	W20	04	24.0		12	0	0	E	SVTO		
25	DSF	1752U	1200U	S49	W20	04	24.0	2	12	0	0	E	RAMY		
27	ADF	1230E	1700D	N03	W30	04	25.3	1	04	9	9	E	RAMY		
27	ADF	1230E	1700D	S02	W29	04	25.3	1	04	9	9	E	RAMY		
28	AFS	0805E	1359	N05	E45	05	1.7		01	9	9	E	SVTO		
28	ADF	1040E	1359	S04	W38	04	25.6	2	06	7	8	E	SVTO		
28	AFS	1214E	2225	N03	E43	05	1.7		01	7	6	E	RAMY	7960	
28	AFS	1320E	0120	N04	E43	05	1.8		01	9	9	E	HOLL	7960	
28	AFS	1641E	2225	S01	W06	04	28.2		01	7	9	E	RAMY		
28	AFS	1648E	0138	N03	E39	05	1.6		02	6	7	E	PALE		
28	AFS	1700E	0120	S01	W06	04	28.3		01	6	7	E	HOLL		
28	DSD	1723E	1911D	N03	E40	05	1.7		02	5	9	E	RAMY	7960	
28	ADF	1906E	2225	N03	W46	04	25.3	1	03	9	9	E	RAMY		
29	ADF	0938E	1540	N00	W01	04	29.3	1	02	9	9	E	SVTO		
29	ADF	1212E	2101	S01	W03	04	29.3	1	03	9	9	E	RAMY		

ADF = Active Dark Filament
AFS = Arch Filament System
APR = Active Prominence
ASR = Active Surge Region
BSD = Bright Surge on Disk
BSL = Bright Surge on Limb
CAP = CAP Prominence (Tandberg-Hanssen)
CRN = Coronal Rain
DSD = Dark Surge on Disk
DSF = Disappearing Solar Filament
EPL = Eruptive Prominence on Limb
LPS = Loops
MDP = Mound Prominence
SDF/DSF = Sudden Disappearing Filament
SPY = Spray
SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

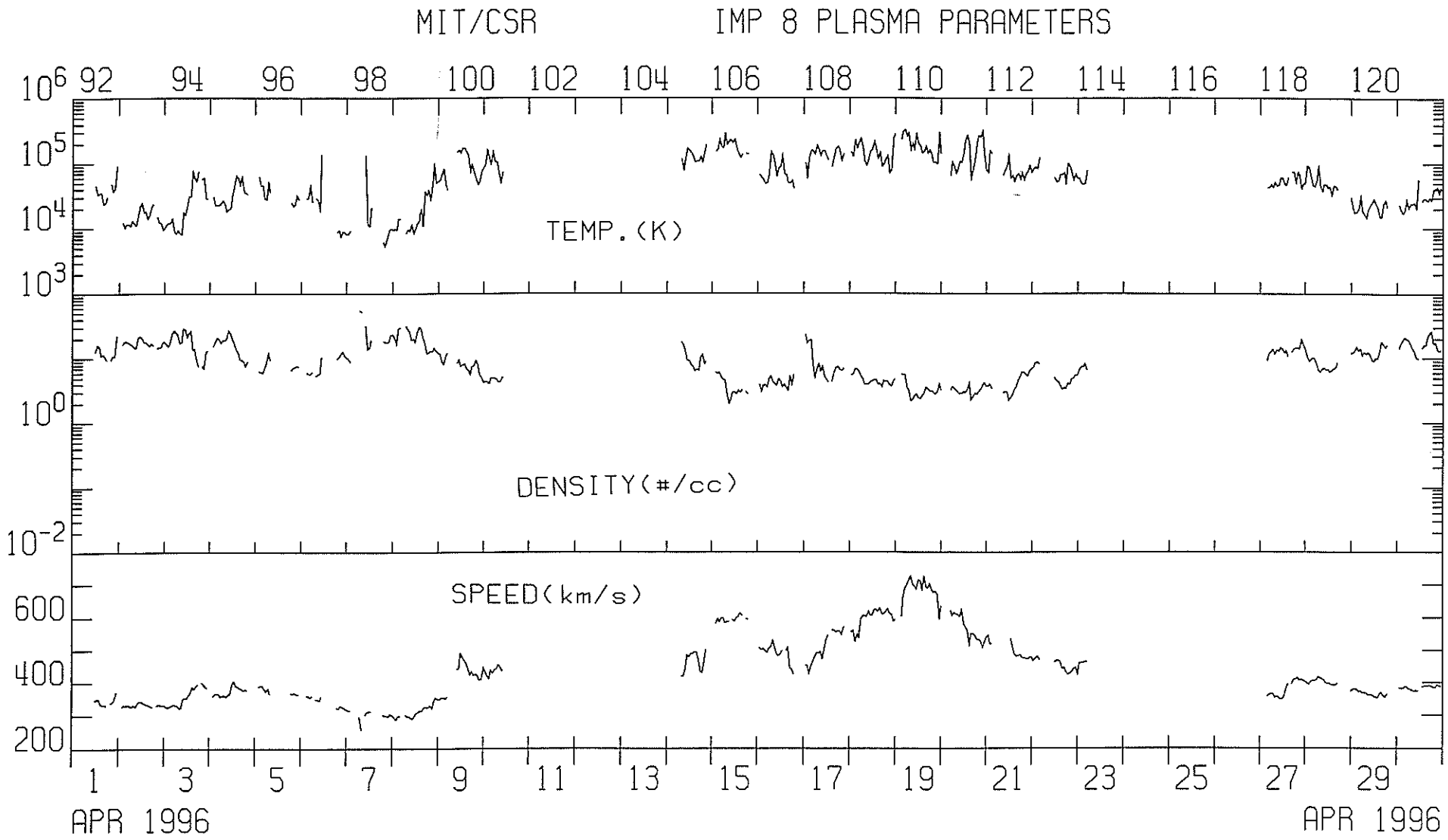
The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

Observation Type: C= Cinematographic, E= Electronic, P= Photographic, V= Visual.

ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania
HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici

IMP 8 SOLAR WIND PLASMA
APRIL 1996

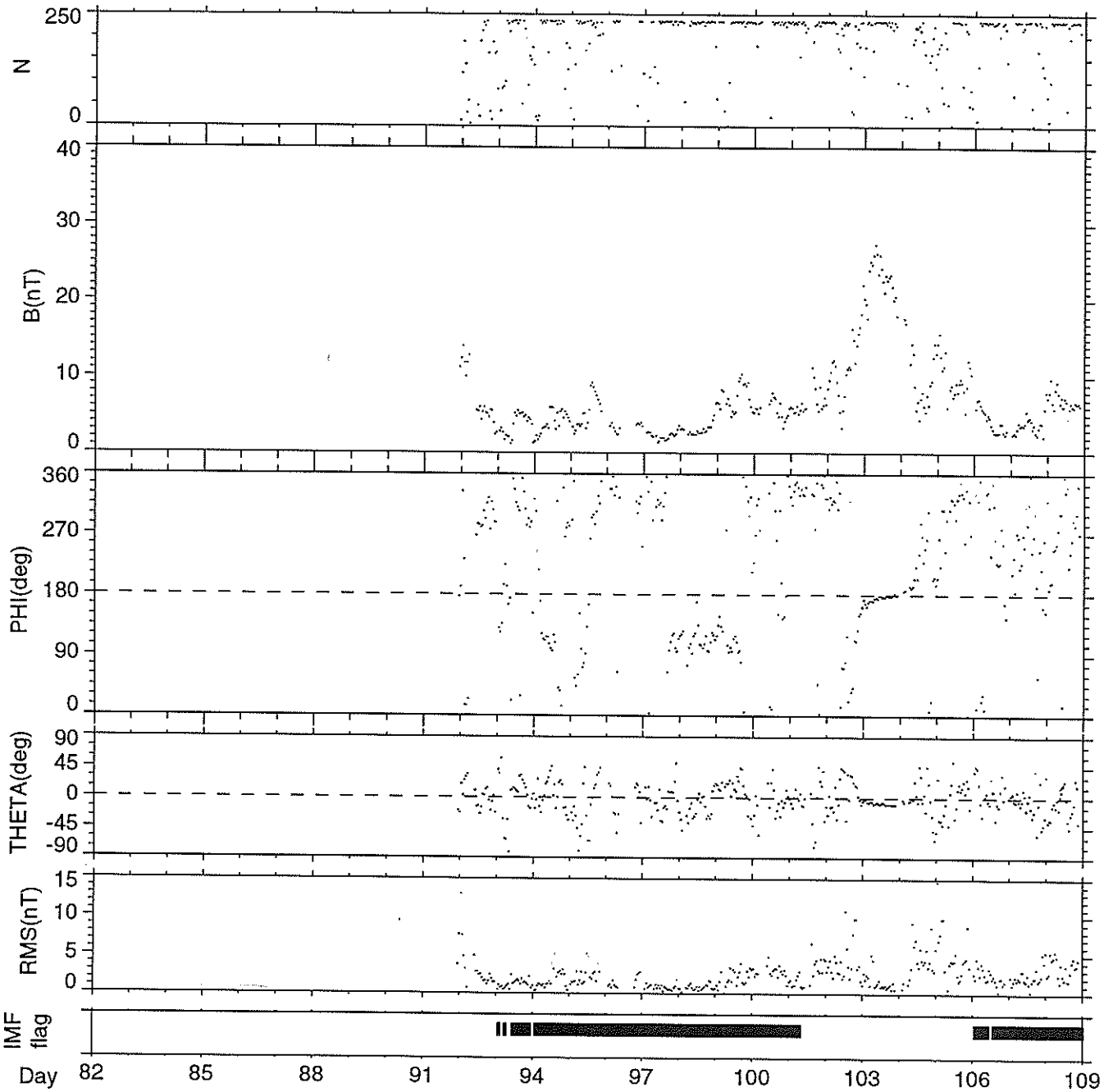


IMP 8 MIT ONE-HOUR AVERAGES

22
Apr 96

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 91 - 109 March 31 1996 - April 18 1996

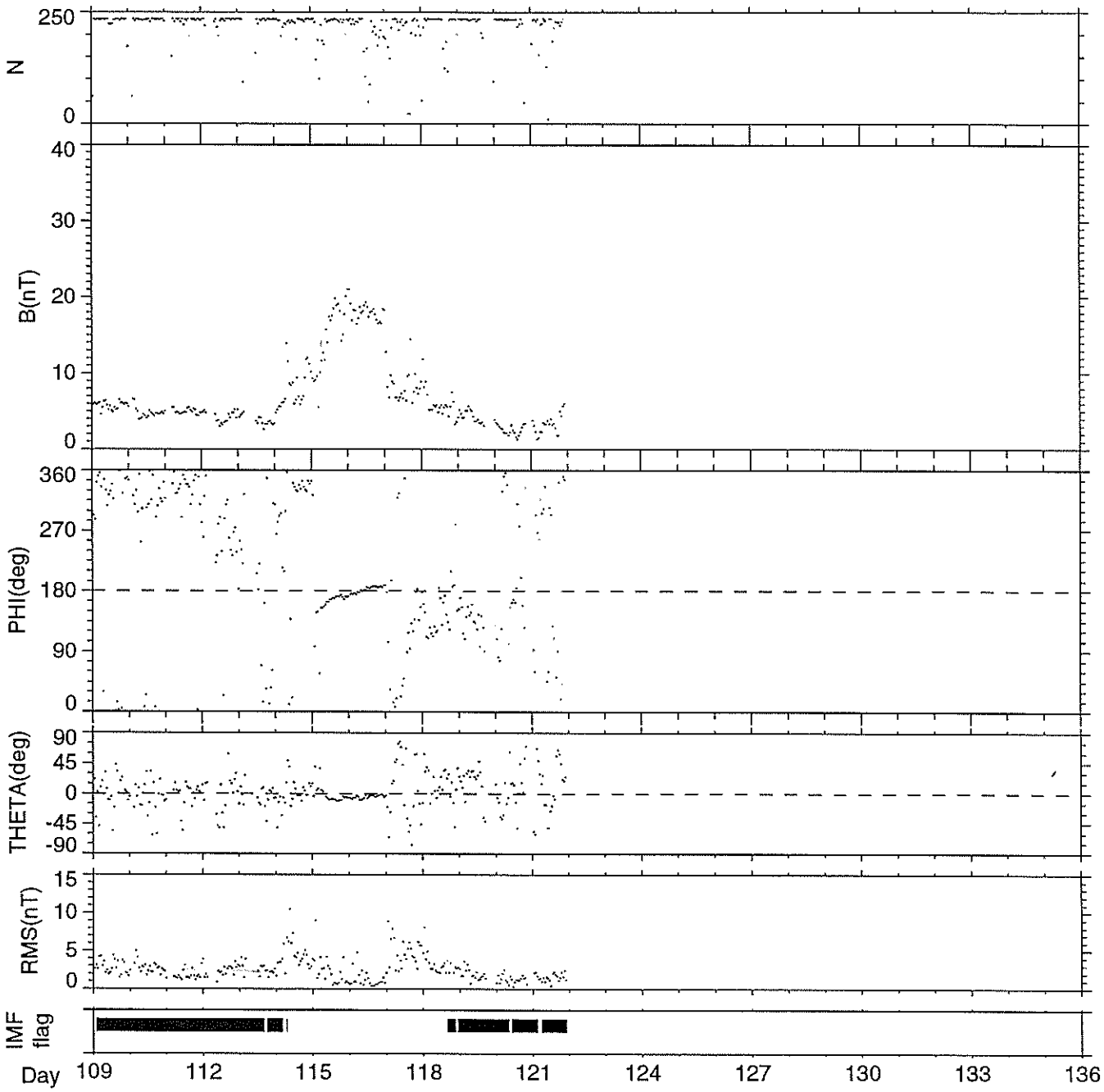


Generation Date : Mon Oct 21 08:14:12 1996

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 109 - 121 April 18 1996 - April 30 1996



Generation Date : Mon Oct 21 08:14:41 1996

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

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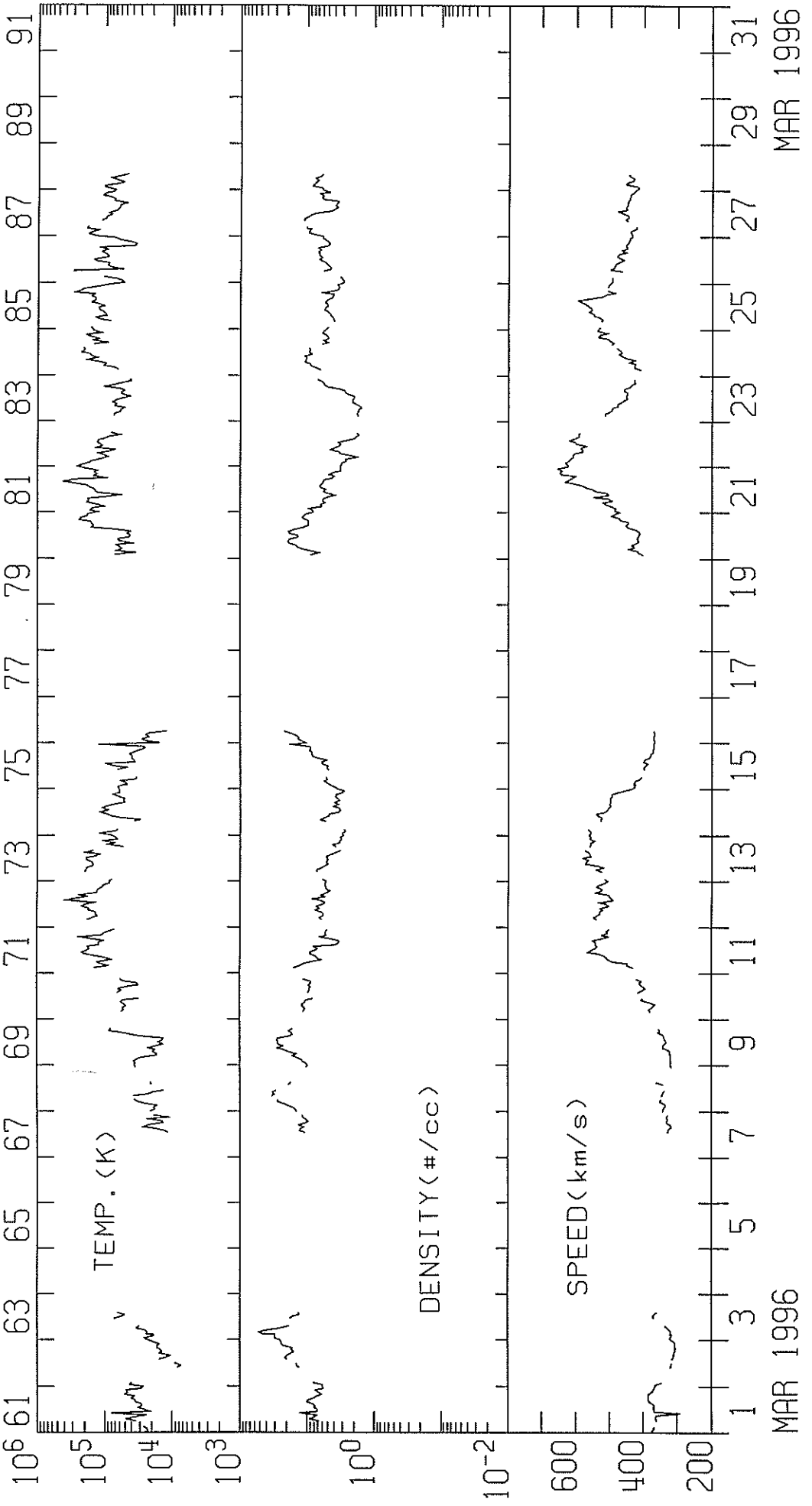
Comprehensive Reports Number 626 Part II

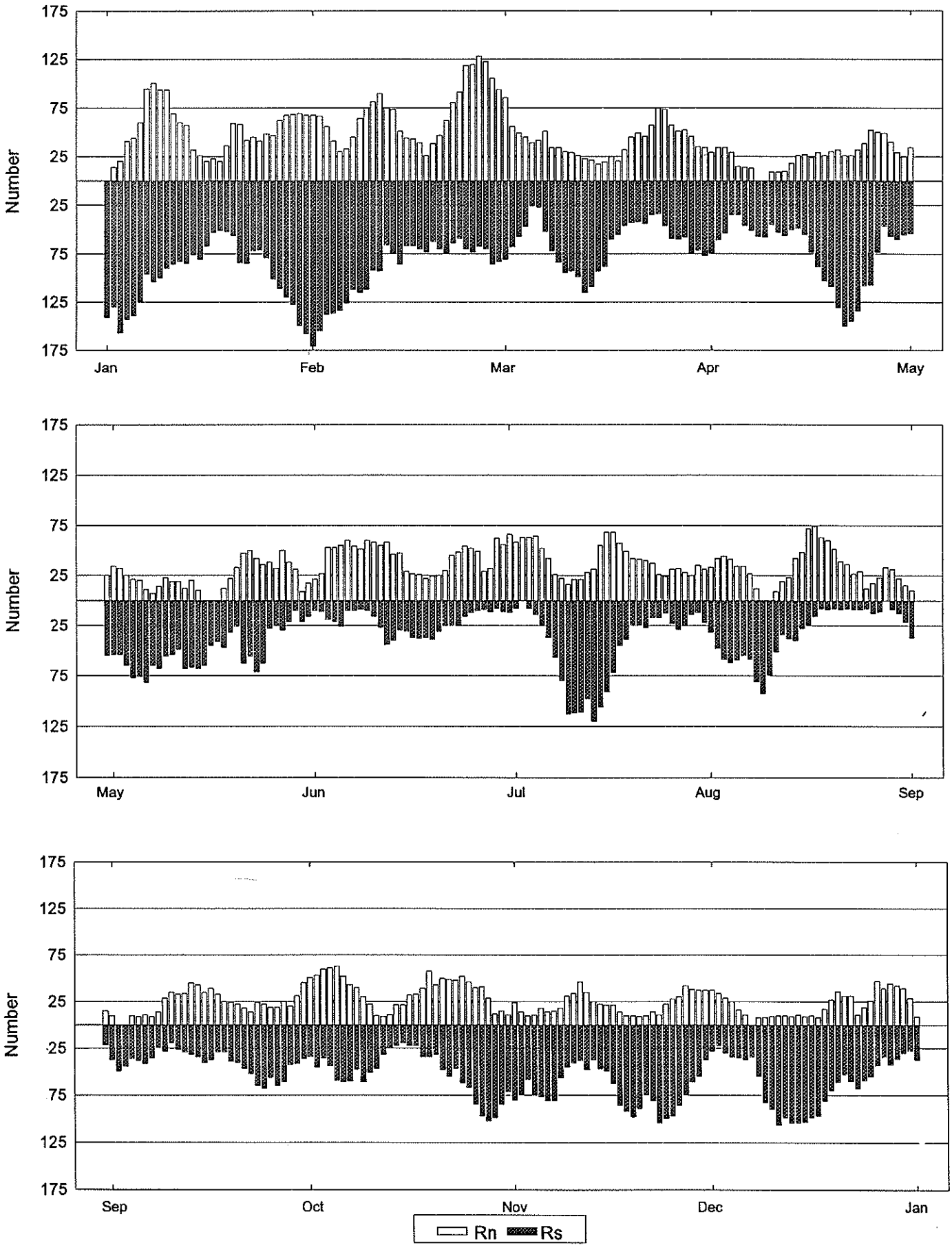
MISCELLANEOUS DATA

26
Late
Mar 96

IMP 8 SOLAR WIND PLASMA
MARCH 1996



1992 International Rn and Rs Sunspot Numbers
Sunspot Index Data Center, Brussels



International Sunspot Numbers

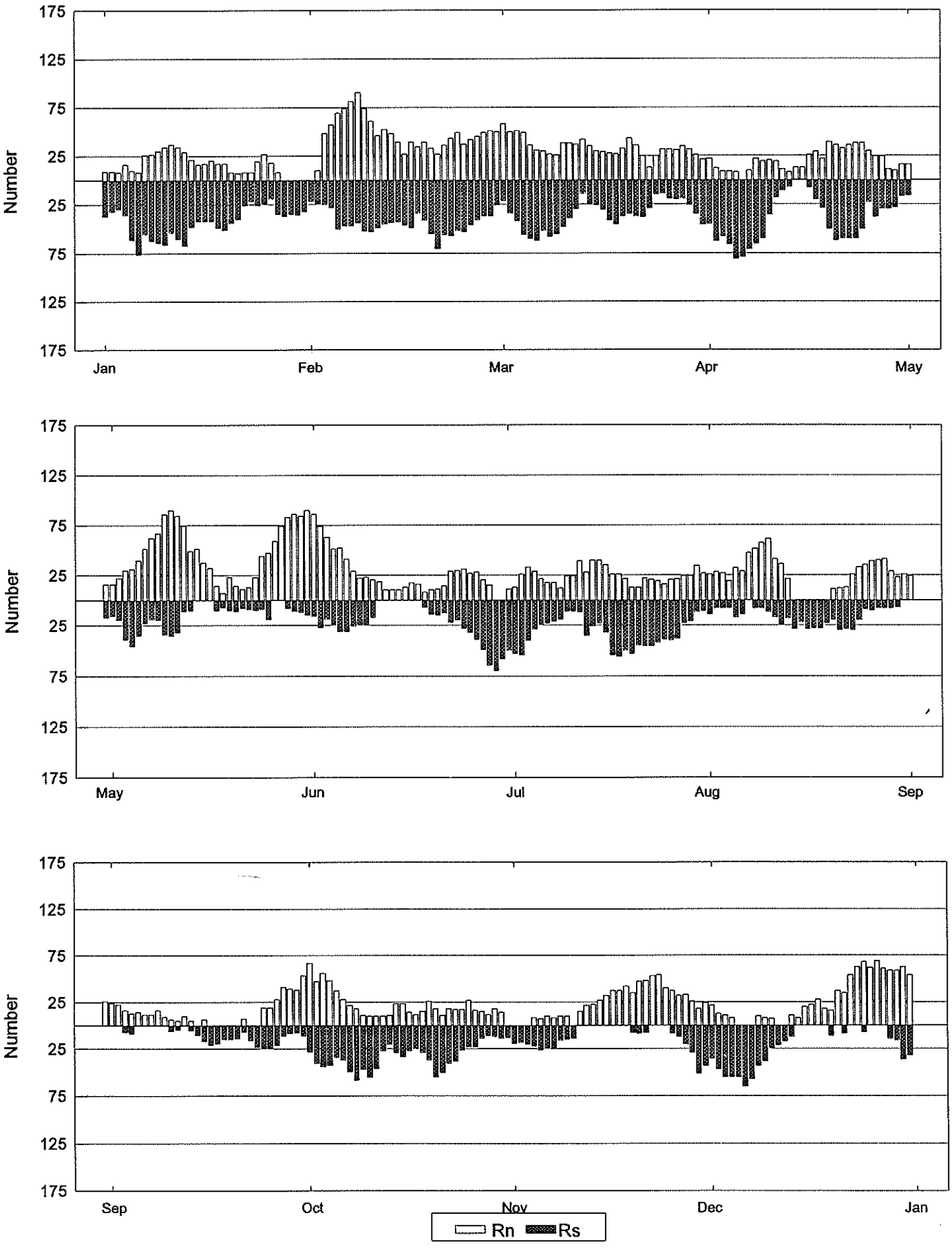
Rn 1992

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	67	85	29	34	21	66	33	10	51	24	37
2	14	66	56	34	32	27	58	42	0	53	14	34
3	20	56	49	34	25	53	63	44	0	60	10	29
4	41	41	45	29	21	53	63	41	10	61	11	25
5	44	30	39	15	20	55	64	34	9	63	18	16
6	60	33	42	14	11	60	52	34	11	52	14	11
7	94	45	51	13	7	54	42	27	9	43	15	0
8	100	64	34	0	14	51	26	12	14	40	18	8
9	93	75	34	0	23	60	22	0	29	30	31	8
10	93	81	30	9	19	58	16	0	35	22	34	9
11	69	89	29	9	19	55	21	9	33	10	46	10
12	60	75	26	10	12	58	21	19	34	9	35	10
13	57	73	23	18	20	46	28	23	45	11	25	9
14	32	51	21	26	10	47	31	42	43	21	22	11
15	26	44	17	27	0	29	55	48	35	21	21	9
16	20	43	19	24	0	27	68	72	39	32	21	10
17	23	39	25	29	0	26	68	74	33	33	14	8
18	20	26	20	26	12	22	57	63	25	39	10	17
19	36	38	32	30	22	24	49	60	24	58	10	27
20	59	47	45	32	33	25	42	51	22	43	9	36
21	58	62	49	26	47	30	41	39	18	50	10	31
22	42	80	46	26	50	45	40	36	14	49	14	31
23	45	91	57	32	42	48	37	27	24	48	11	11
24	41	118	75	38	36	54	26	29	22	52	22	19
25	48	119	73	52	38	52	24	12	19	46	28	26
26	47	128	57	50	32	49	31	17	19	40	30	47
27	62	122	51	49	50	29	32	23	25	41	42	39
28	67	105	52	40	38	32	28	33	20	29	38	44
29	68	93	46	29	31	62	25	31	31	12	37	42
30	69		35	25	9	56	35	22	45	15	37	39
31	67		34		17		31	15		11		29
Mean	50.8	69.0	41.8	25.8	23.4	43.6	40.7	32.6	23.2	36.9	22.4	22.0

Rs 1992

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	141	171	81	74	54	10	12	32	37	34	80	28
2	130	155	68	61	54	11	8	48	49	45	74	22
3	157	138	57	54	65	19	0	59	44	35	58	30
4	143	137	47	35	77	21	8	62	36	44	75	34
5	139	134	26	35	76	26	14	60	38	59	77	35
6	125	126	27	46	82	10	25	55	41	61	81	37
7	96	112	52	51	65	10	37	59	35	60	81	34
8	104	115	72	57	68	9	57	81	24	48	56	55
9	100	112	84	58	56	10	80	93	28	61	45	83
10	90	92	95	45	54	16	113	74	19	51	40	90
11	86	93	93	53	49	27	112	51	26	47	38	106
12	83	66	99	56	68	44	111	34	29	32	48	99
13	85	75	115	50	67	40	98	38	32	25	37	104
14	76	86	109	49	68	30	120	40	34	22	47	104
15	81	67	93	55	65	31	106	28	40	19	49	103
16	67	67	88	73	45	37	91	24	37	22	63	99
17	53	70	60	88	41	38	72	16	29	22	86	97
18	51	73	55	103	47	37	45	8	29	34	92	81
19	52	63	46	109	32	39	39	9	39	34	98	70
20	56	70	43	131	26	31	24	8	40	32	89	61
21	84	75	42	150	63	25	24	9	47	48	75	53
22	85	64	44	145	56	24	27	8	52	55	81	60
23	72	59	35	134	71	25	17	9	65	47	104	68
24	71	70	34	108	63	16	17	9	68	62	100	59
25	79	73	46	107	28	12	13	8	56	67	97	55
26	101	68	59	73	25	10	23	13	65	85	86	43
27	111	70	60	47	30	9	29	11	61	97	74	34
28	120	86	58	57	21	11	25	0	42	102	61	42
29	128	83	75	60	10	8	14	9	41	99	55	36
30	150		72	55	21	11	12	13	36	85	37	30
31	158		77		16		22	21		71		27
Mean	99.2	92.1	64.9	74.0	50.4	21.6	45.0	31.9	40.7	51.8	69.4	60.6

1993 International Rn and Rs Sunspot Numbers
Sunspot Index Data Center, Brussels



International Sunspot Numbers

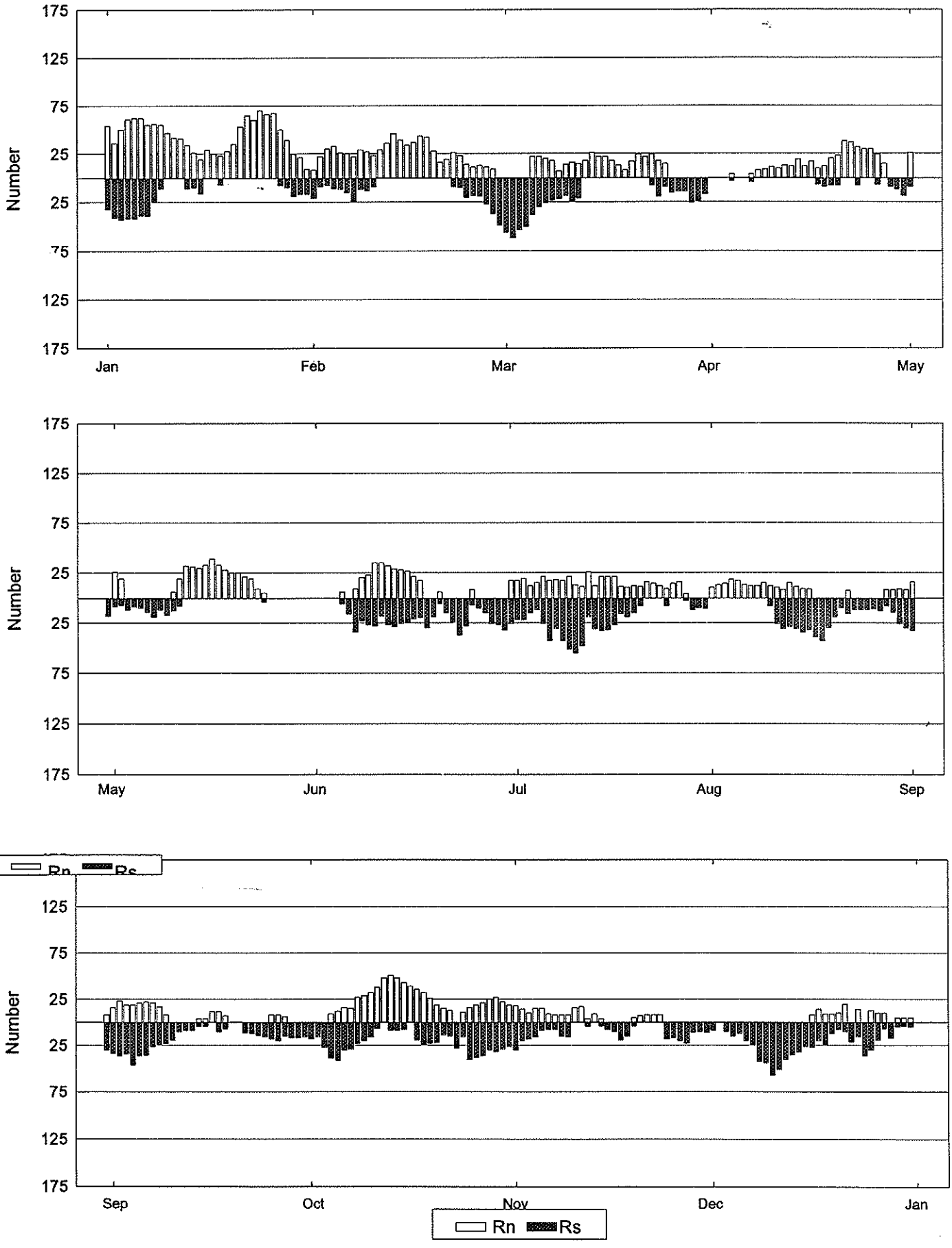
Rn 1993

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	9	0	50	21	16	90	0	27	26	53	0	24
2	9	10	58	22	16	86	11	26	24	67	0	21
3	8	48	50	12	22	74	13	28	22	47	0	13
4	16	57	51	9	30	63	26	27	16	56	0	11
5	10	69	49	9	31	51	33	19	13	48	8	8
6	8	74	36	8	40	52	29	32	14	37	7	0
7	26	81	31	0	51	41	21	29	12	28	10	0
8	27	90	30	10	62	29	17	47	12	21	8	0
9	30	74	27	22	67	22	17	51	16	18	10	10
10	34	61	26	19	86	23	12	57	9	11	10	8
11	37	46	38	20	90	20	24	61	6	10	0	7
12	34	52	38	19	84	18	24	41	5	10	15	0
13	29	48	37	11	74	10	39	36	10	10	21	0
14	21	39	42	8	49	10	28	21	5	11	22	11
15	16	27	35	13	51	10	40	0	0	23	27	8
16	17	39	30	13	37	13	40	0	6	23	32	20
17	20	34	29	26	32	17	35	0	0	14	37	22
18	17	39	28	29	14	16	26	0	0	12	37	28
19	17	33	27	22	7	8	26	0	0	15	42	18
20	8	27	33	39	23	10	21	0	0	26	35	16
21	7	36	43	36	14	11	13	11	0	18	47	37
22	8	43	36	33	11	14	13	12	7	11	48	35
23	8	49	25	36	13	29	22	13	0	18	53	54
24	19	37	13	38	23	30	20	26	0	17	54	63
25	27	42	25	38	44	31	19	33	19	17	40	68
26	18	45	32	30	47	27	16	35	19	27	37	62
27	8	49	32	24	59	28	20	39	28	16	32	69
28	0	51	31	24	74	20	21	40	41	15	33	61
29	0		35	11	83	15	24	41	39	12	26	59
30	0		32	10	86	0	24	29	38	18	18	59
31	0		26		84		34	23		14		63
Mean	15.7	46.4	34.7	20.4	45.8	28.9	22.8	25.9	12.9	23.3	23.6	27.6

Rs 1993

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	37	22	26	46	17	15	58	11	0	11	13	43
2	32	24	22	45	16	16	50	14	0	28	19	35
3	30	25	34	63	20	27	53	8	0	40	18	47
4	36	28	42	58	39	19	54	8	7	44	20	55
5	61	50	56	66	46	24	40	8	9	42	22	55
6	76	47	60	81	35	31	29	17	0	34	26	55
7	55	47	62	79	23	31	24	14	0	37	24	65
8	62	44	52	71	19	26	23	0	0	49	25	57
9	64	52	58	65	20	24	21	8	0	58	16	43
10	66	53	55	60	34	24	19	8	0	47	15	38
11	54	49	48	36	35	17	11	12	6	55	14	24
12	60	45	39	18	32	0	11	17	4	46	0	21
13	67	44	30	11	11	0	12	24	0	27	0	17
14	48	43	14	7	10	0	35	18	5	20	0	12
15	42	46	25	0	0	0	26	29	10	29	0	0
16	42	49	26	0	0	0	23	22	17	33	0	0
17	42	34	31	8	0	0	32	29	21	27	0	0
18	49	41	41	20	10	0	54	28	19	25	0	0
19	51	55	45	29	7	7	56	28	15	29	0	0
20	44	70	37	50	10	14	50	23	15	37	8	11
21	40	56	35	62	11	15	53	20	14	55	9	0
22	26	57	37	60	8	13	45	30	7	50	8	9
23	22	52	38	60	9	22	46	29	16	40	0	0
24	26	53	29	60	10	20	46	30	23	38	0	0
25	24	46	15	50	9	28	42	20	24	26	0	7
26	19	41	14	23	19	32	39	9	24	23	9	0
27	35	37	19	38	0	39	40	10	21	23	12	0
28	37	37	20	30	0	49	38	8	11	14	20	0
29	35		19	30	8	64	23	8	9	11	29	14
30	36		26	28	11	70	21	8	8	12	51	16
31	32		35		12		12	7		14		36
Mean	43.6	44.6	35.1	41.8	15.5	20.9	35.1	16.3	9.5	33.1	12.0	21.3

1994 International Rn and Rs Sunspot Numbers
Sunspot Index Data Center, Brussels



International Sunspot Numbers

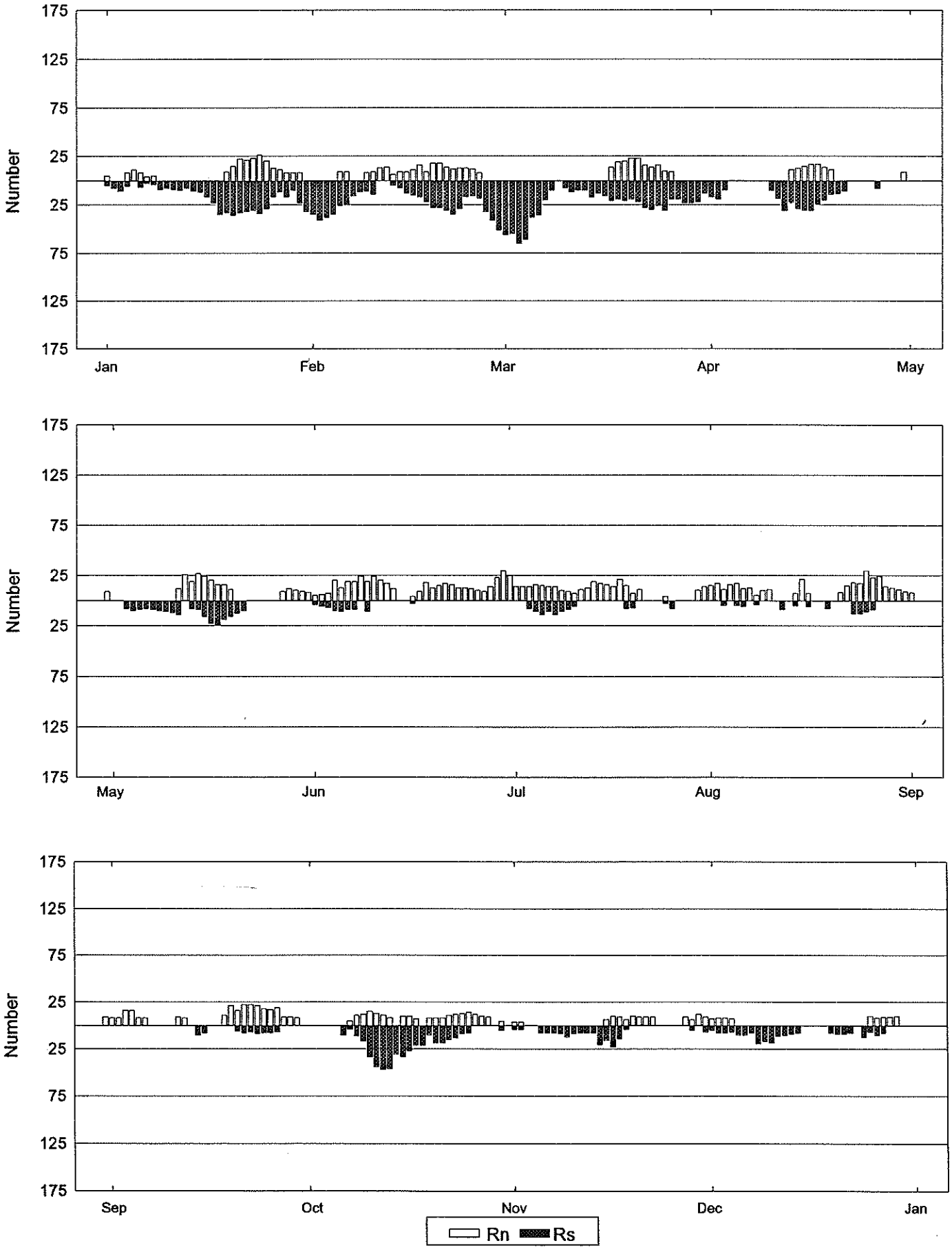
Rn 1994

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	54	8	0	0	0	0	0	0	8	0	19	0
2	36	22	0	0	26	0	17	10	16	0	18	0
3	50	30	0	0	19	0	17	13	23	0	14	0
4	61	33	0	0	0	0	19	14	19	0	10	0
5	62	26	0	4	0	0	12	18	19	9	15	0
6	62	25	22	0	0	6	15	17	21	12	15	0
7	55	22	22	0	0	0	21	13	22	16	9	0
8	56	29	20	4	0	9	17	12	21	15	8	0
9	55	27	18	8	0	20	18	12	17	27	8	0
10	47	23	7	9	0	23	17	15	8	29	8	0
11	42	29	14	11	6	35	21	12	0	32	16	0
12	41	36	16	10	19	35	13	10	0	38	17	0
13	34	46	15	13	32	32	11	8	0	48	4	0
14	26	39	18	12	31	29	26	15	0	51	9	0
15	19	34	26	19	30	28	12	11	4	48	4	0
16	29	37	22	12	33	27	21	9	4	43	0	0
17	25	43	22	17	39	21	21	9	12	39	0	8
18	23	42	18	10	33	17	21	0	12	36	0	14
19	28	28	13	12	28	0	11	0	7	32	0	9
20	35	16	8	20	25	0	10	0	0	26	5	9
21	53	19	17	23	25	6	12	0	0	19	7	10
22	65	26	24	38	21	0	11	0	0	15	8	20
23	60	23	22	37	19	0	16	7	0	13	8	0
24	70	14	24	32	9	0	14	0	0	0	8	14
25	66	11	18	30	5	0	12	0	0	11	0	0
26	67	13	15	30	0	8	9	0	8	16	0	13
27	50	11	0	24	0	0	14	0	8	19	0	10
28	39	9	0	15	0	0	16	0	6	21	0	10
29	24		0	0	0	0	4	8	0	25	0	0
30	21		0	0	0	0	0	8	0	27	0	5
31	9		0		0		0	9		22		5
Mean	44.0	25.8	12.3	13.0	12.9	9.9	13.8	7.4	7.8	22.2	7.0	4.1

Rs 1994

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	32	21	49	17	18	0	32	11	30	16	26	11
2	41	9	56	0	9	0	26	0	33	18	30	9
3	43	8	62	0	7	0	22	0	36	16	20	0
4	42	11	54	0	12	0	22	0	34	27	18	10
5	42	12	50	3	9	0	15	0	46	39	16	15
6	39	15	38	0	10	6	12	0	36	41	9	12
7	39	24	30	0	14	16	26	0	35	30	8	20
8	25	12	26	4	19	34	43	0	26	29	8	25
9	11	13	23	0	12	23	31	0	24	23	15	42
10	0	9	22	0	17	27	43	0	23	20	16	44
11	0	0	18	0	13	28	51	8	19	16	0	57
12	0	0	24	0	8	18	55	26	10	7	0	51
13	11	0	21	0	0	27	48	31	9	0	4	40
14	10	0	0	0	0	29	19	29	9	9	0	35
15	16	0	0	0	0	26	31	31	4	9	4	32
16	0	0	0	0	0	25	33	34	4	8	8	26
17	0	0	0	0	0	21	32	32	0	0	10	27
18	7	0	0	7	0	20	27	39	10	19	19	20
19	0	0	0	9	0	30	16	43	7	24	15	24
20	0	0	0	8	0	19	19	30	0	23	4	12
21	0	0	0	8	0	6	15	19	0	22	0	8
22	0	9	0	0	0	15	8	10	11	14	0	10
23	0	10	0	0	0	24	0	16	12	15	0	21
24	0	20	8	8	0	37	0	12	14	28	0	16
25	0	18	19	0	4	28	0	12	16	16	18	36
26	0	19	9	0	0	7	8	12	18	40	17	30
27	8	27	15	7	0	10	0	11	20	38	20	19
28	10	37	14	0	0	15	0	13	15	36	23	7
29	19		14	9	0	26	3	8	17	30	11	17
30	17		26	12	0	27	12	14	17	32	10	5
31	17		24		0		10	26		29		4
Mean	13.8	9.7	19.4	3.1	4.9	18.1	21.3	15.1	17.9	21.8	11.0	22.1

1995 International Rn and Rs Sunspot Numbers
Sunspot Index Data Center, Brussels



International Sunspot Numbers

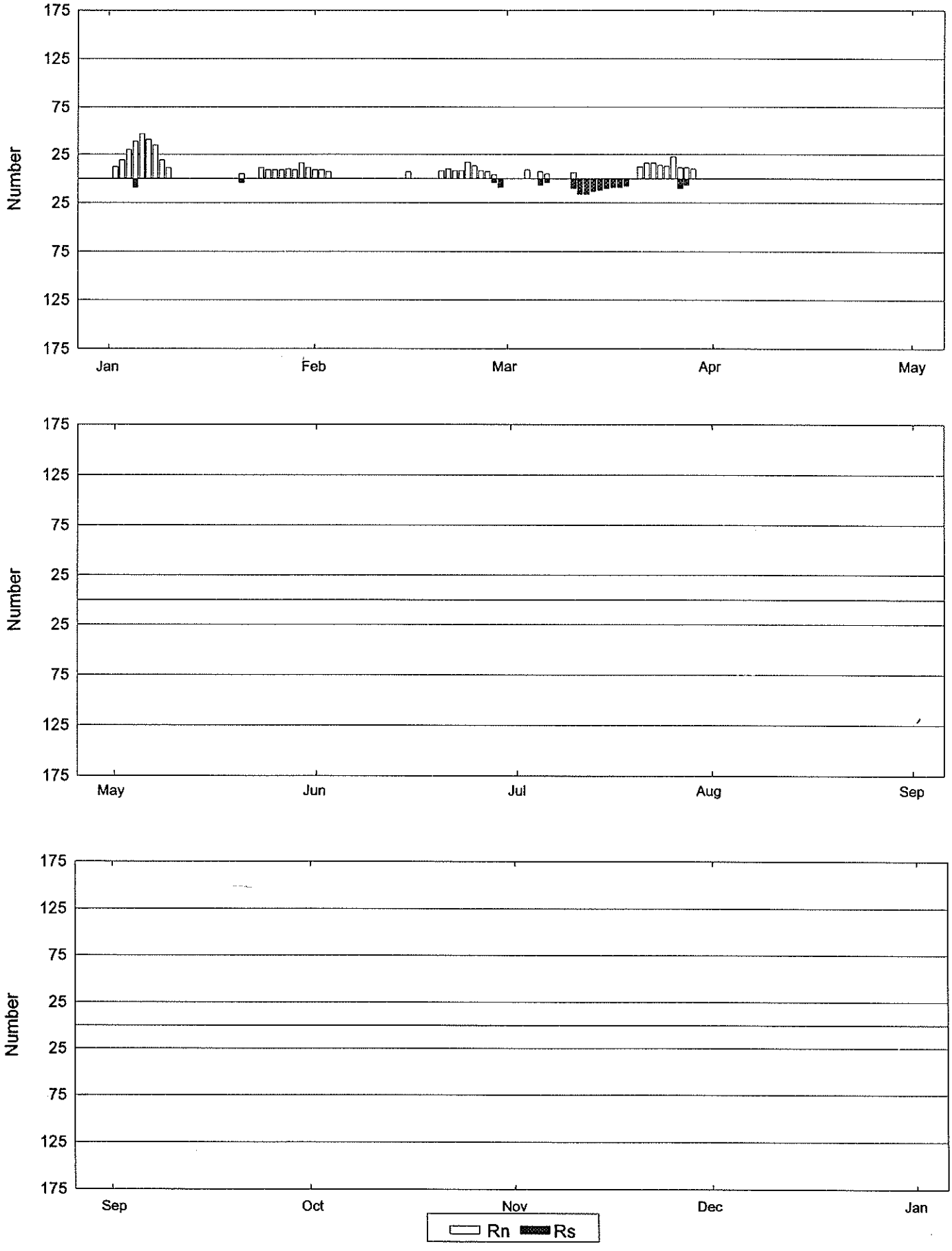
Rn 1995

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5	0	0	0	9	8	30	14	9	0	0	9
2	0	0	0	0	0	5	25	15	8	0	4	7
3	0	0	0	0	0	6	14	17	8	0	4	8
4	8	0	0	0	0	7	14	11	16	0	0	8
5	11	9	0	0	0	20	14	16	16	0	0	7
6	8	9	0	0	0	13	16	17	8	0	0	0
7	4	0	0	0	0	19	15	12	8	0	0	0
8	5	0	0	0	0	19	14	13	0	5	0	0
9	0	8	0	0	0	24	14	5	0	11	0	0
10	0	9	0	0	0	19	10	10	0	12	0	0
11	0	13	0	0	0	24	9	11	0	15	0	0
12	0	14	0	0	12	20	7	0	9	13	0	0
13	0	6	0	0	26	17	11	0	8	11	0	0
14	0	9	0	11	19	12	13	0	0	8	0	0
15	0	9	0	13	27	0	19	7	0	0	0	0
16	0	11	0	15	24	0	17	21	0	10	6	0
17	0	16	0	17	20	4	16	7	0	10	10	0
18	0	9	14	17	16	9	14	0	0	7	9	0
19	9	18	19	14	16	18	21	0	11	0	6	0
20	15	18	20	11	11	13	15	0	21	8	10	0
21	22	14	23	0	0	15	7	0	16	8	9	0
22	21	12	23	0	0	17	11	8	22	8	9	0
23	23	13	16	0	0	16	0	15	22	11	9	0
24	26	13	14	0	0	13	0	18	21	12	0	0
25	20	12	16	0	0	13	0	17	18	13	0	0
26	13	8	10	0	0	12	4	30	17	14	0	10
27	11	0	9	0	0	10	0	23	19	12	0	8
28	8	0	0	0	9	9	0	24	9	10	9	9
29	8		0	0	12	14	0	14	9	9	6	9
30	8		0	0	10	23	0	13	8	0	12	10
31	0		0		9		10	11		5		0
Mean	7.3	8.2	5.3	3.3	7.1	13.3	11.0	11.3	9.4	6.8	3.4	2.7

Rs 1995

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5	35	51	13	0	0	0	0	0	0	0	7
2	8	41	56	17	0	4	0	0	0	0	4	5
3	11	38	55	19	0	6	0	0	0	0	4	8
4	6	35	65	10	8	7	0	5	0	0	0	8
5	0	26	61	0	10	10	8	0	0	0	0	7
6	7	25	38	0	9	11	11	5	0	0	8	10
7	3	16	36	0	8	9	14	6	0	10	8	10
8	4	12	20	0	9	9	11	0	0	4	8	8
9	9	11	10	0	10	0	14	4	0	11	9	19
10	8	14	0	0	11	11	11	0	0	17	12	17
11	9	0	8	10	12	0	9	0	0	33	9	18
12	10	0	12	18	14	0	6	0	0	44	8	11
13	8	5	10	31	0	0	0	9	0	47	8	10
14	11	8	10	23	8	0	0	0	0	46	8	9
15	12	13	17	29	9	0	0	5	10	31	20	8
16	17	15	13	31	16	0	0	0	8	33	16	0
17	23	17	16	31	23	3	0	6	0	27	23	0
18	35	22	21	24	24	0	0	0	0	21	14	0
19	33	28	19	20	19	0	0	0	0	21	4	0
20	36	28	21	14	16	0	8	8	0	10	0	8
21	33	31	19	13	13	0	7	0	6	18	0	9
22	32	35	22	11	10	0	0	0	8	18	0	9
23	31	29	28	0	0	0	0	0	7	15	0	8
24	34	17	30	0	0	0	0	13	9	13	0	0
25	29	16	26	0	0	0	0	13	8	9	0	12
26	17	18	31	0	0	0	3	11	8	8	0	7
27	12	32	19	8	0	0	8	9	7	0	0	10
28	17	41	19	0	0	0	0	0	0	0	0	8
29	10		23	0	0	0	0	0	0	0	5	0
30	23		23	0	0	0	0	0	0	0	0	0
31	32		22		0		0	0		5		0
Mean	16.9	21.7	25.8	10.7	7.4	2.3	3.5	3.0	2.4	14.3	5.6	7.3

1996 International Rn and Rs Sunspot Numbers
Sunspot Index Data Center, Brussels



International Sunspot Numbers

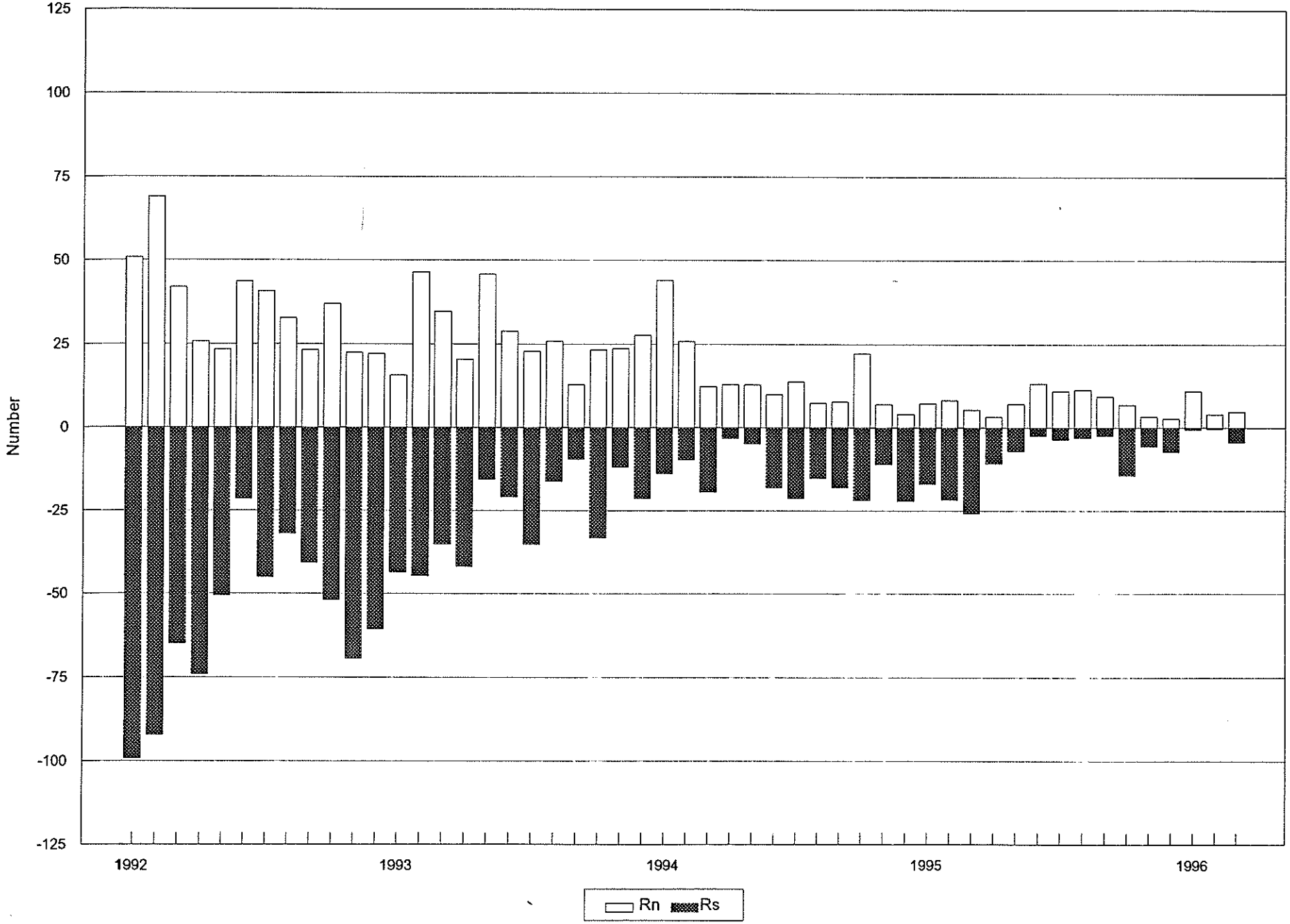
Rn 1996

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	9	0									
2	12	9	0									
3	19	7	0									
4	30	0	9									
5	39	0	0									
6	47	0	7									
7	41	0	5									
8	35	0	0									
9	19	0	0									
10	11	0	0									
11	0	0	6									
12	0	0	0									
13	0	0	0									
14	0	0	0									
15	0	7	0									
16	0	0	0									
17	0	0	0									
18	0	0	0									
19	0	0	0									
20	0	8	0									
21	5	10	12									
22	0	8	16									
23	0	8	16									
24	11	17	14									
25	9	13	13									
26	9	8	23									
27	9	7	11									
28	10	4	11									
29	9	0	10									
30	16		0									
31	11		0									
Mean	11.0	4.0	4.9									

Rs 1996

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0									
2	0	0	0									
3	0	0	0									
4	0	0	0									
5	9	0	0									
6	0	0	7									
7	0	0	4									
8	0	0	0									
9	0	0	0									
10	0	0	0									
11	0	0	10									
12	0	0	16									
13	0	0	16									
14	0	0	13									
15	0	0	12									
16	0	0	10									
17	0	0	9									
18	0	0	9									
19	0	0	8									
20	0	0	0									
21	4	0	0									
22	0	0	0									
23	0	0	0									
24	0	0	0									
25	0	0	0									
26	0	0	0									
27	0	0	10									
28	0	4	7									
29	0	9	0									
30	0		0									
31	0		0									
Mean	0.5	0.4	4.3									

International Rn and Rs Sunspot Numbers
Monthly Means



WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS

The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."