JUNE 2008 NUMBER 766 - Part I

Solar-Geophysical Data prompt reports

Data for April and May 2008
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

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JUNE 2008 NUMBER 766 - Part I

Solar-Geophysical Data prompt reports

Data for April and May 2008

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NATIONAL GEOPHYSICAL DATA CENTER
Christopher G. Fox, Director
Boulder, Colorado

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

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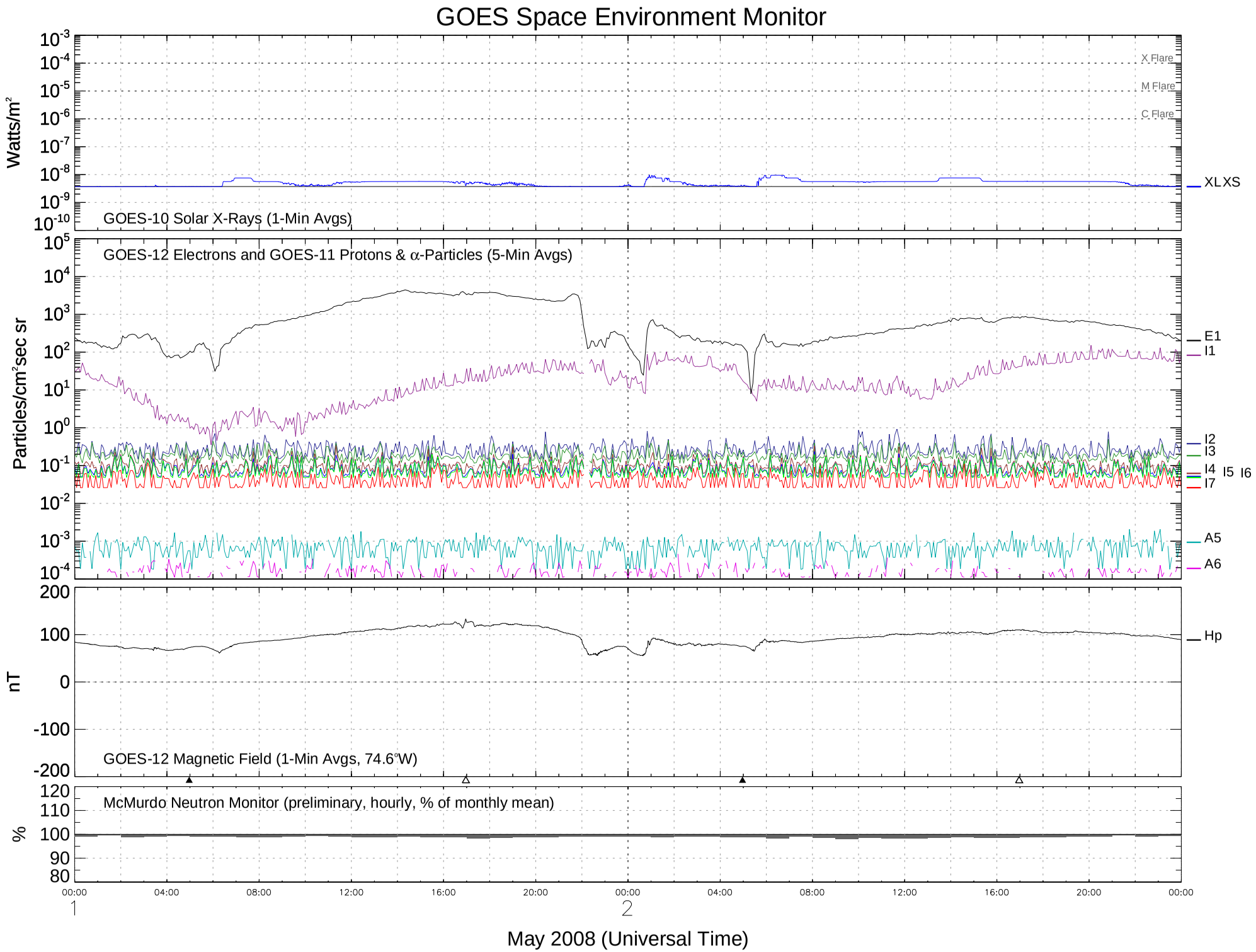
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M Flare
C Flare
XL XS
GOES-10 Solar X-Rays (1-Min Avgs)
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
Particles/cm²sec sr
E1
I1
I2
I3
I4 I5 I6
I7
A5
A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 74.6°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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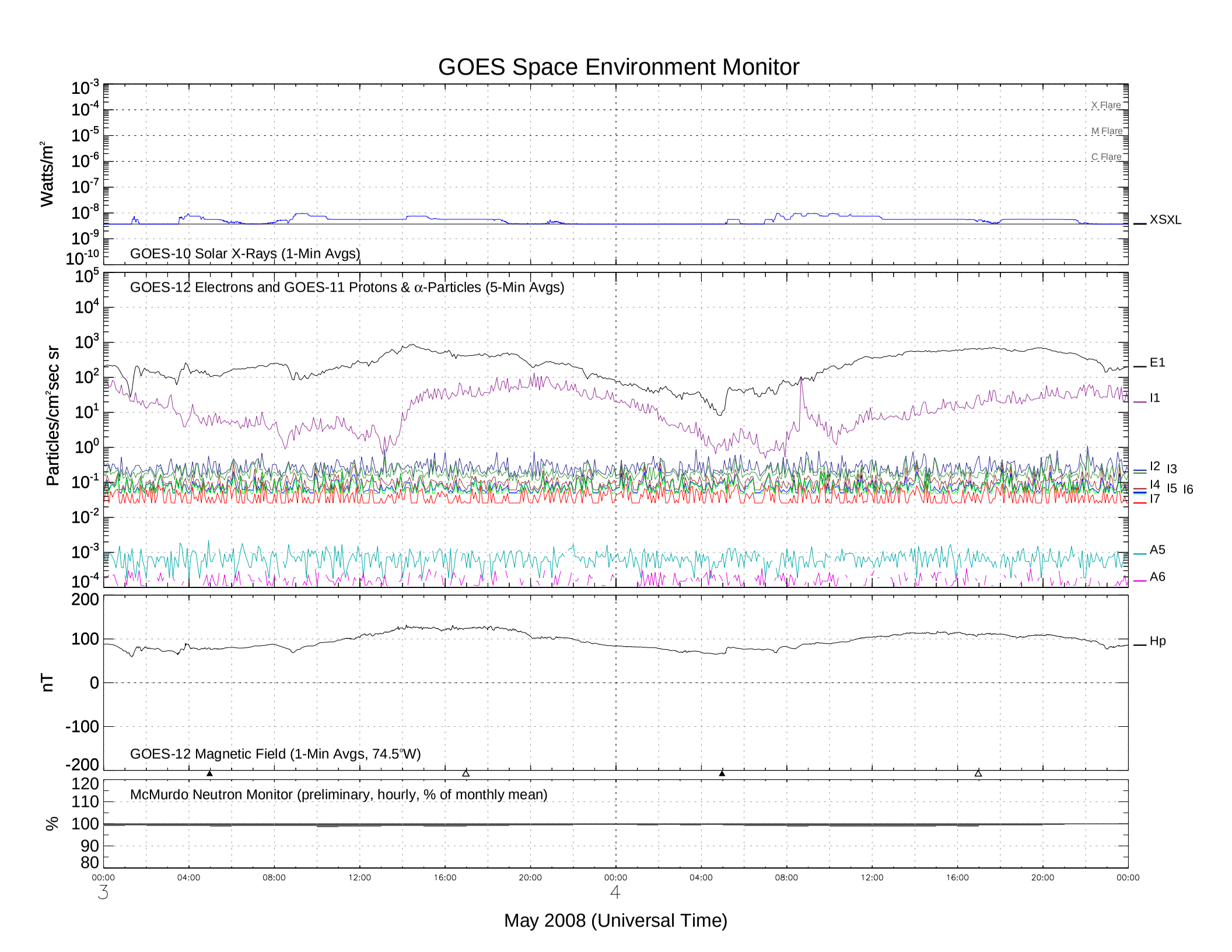
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Particles/cm²sec sr
E1
I1
I2 I3
I4 I5 I6
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Hp
GOES-12 Magnetic Field (1-Min Avgs, 74.5°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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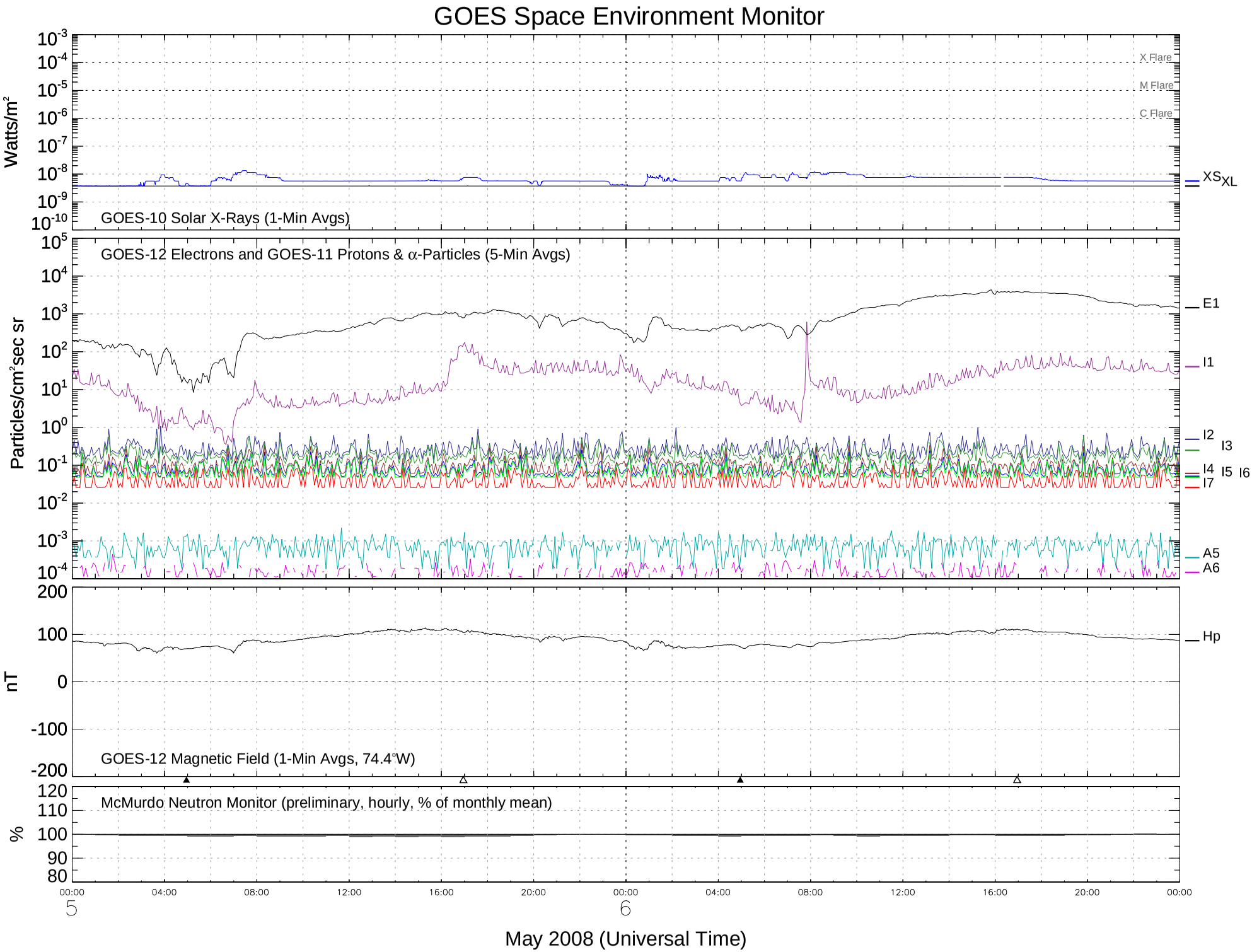
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M Flare
C Flare
XS
XL
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Particles/cm²sec sr
E1
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GOES-12 Magnetic Field (1-Min Avgs, 74.4°W)
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McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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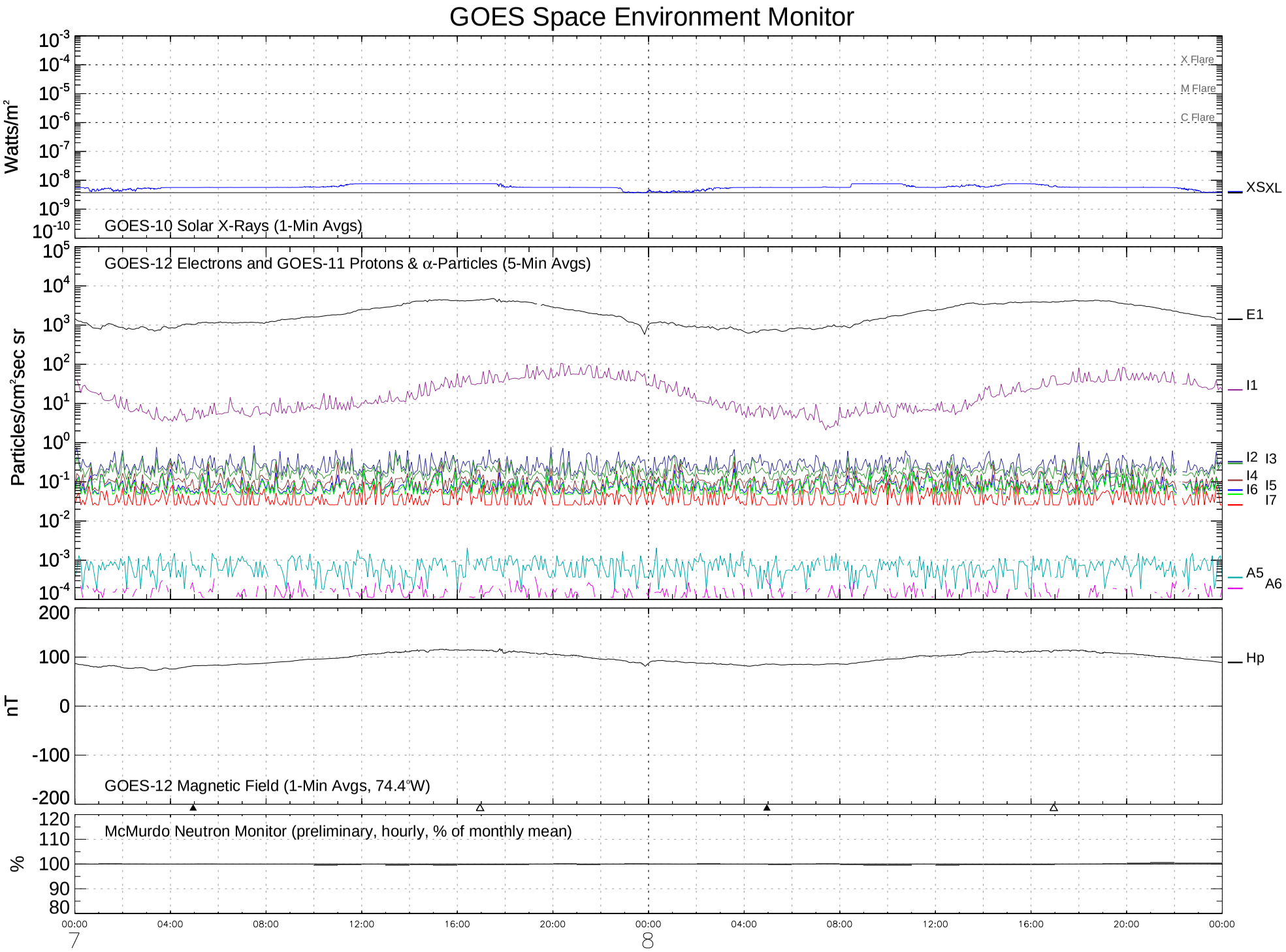
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X Flare
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C Flare
XSXL
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Particles/cm²sec sr
E1
I1
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Hp
GOES-12 Magnetic Field (1-Min Avgs, 74.4°W)
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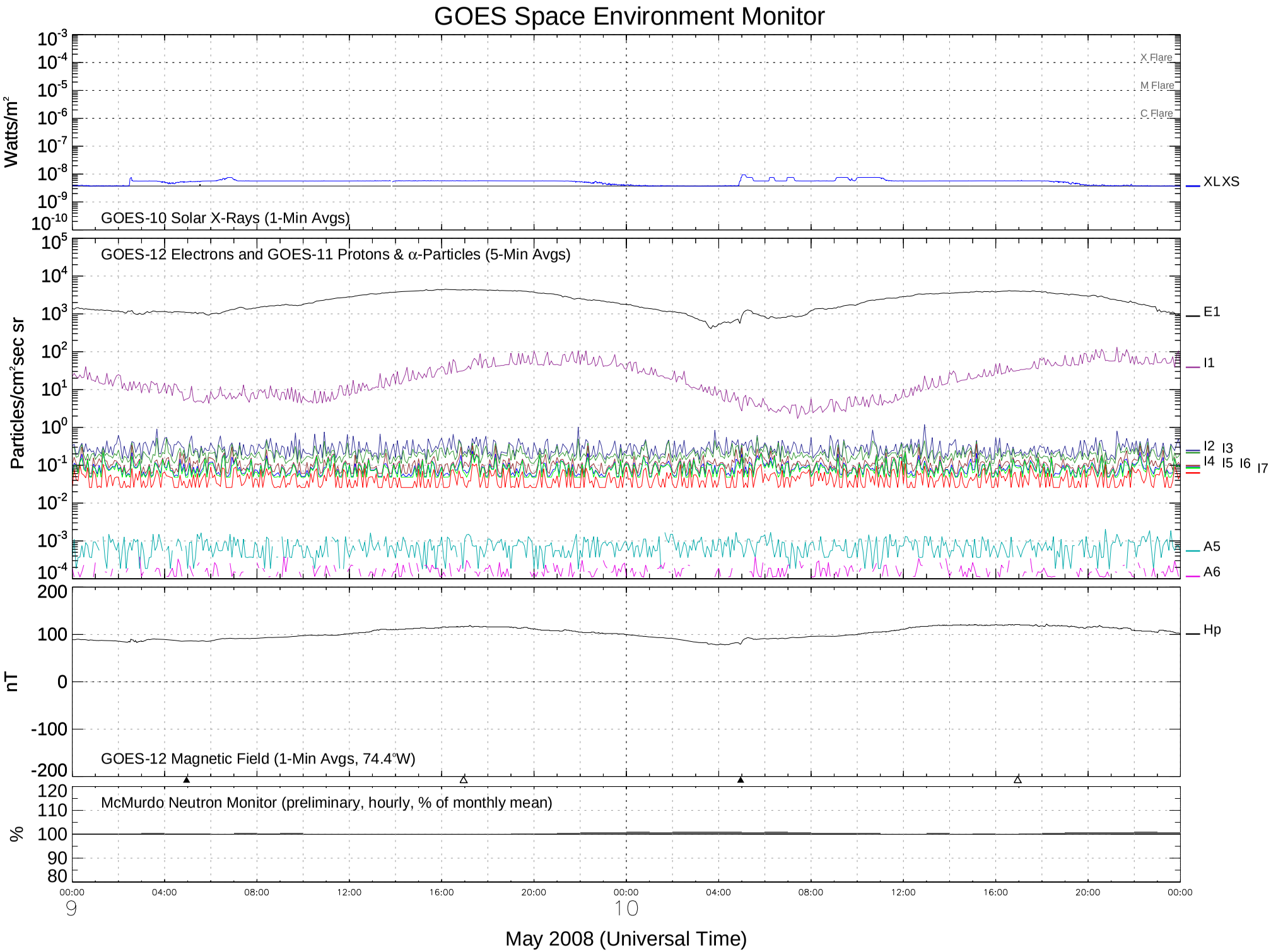
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X Flare
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C Flare
GOES-10 Solar X-Rays (1-Min Avgs)
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E1
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McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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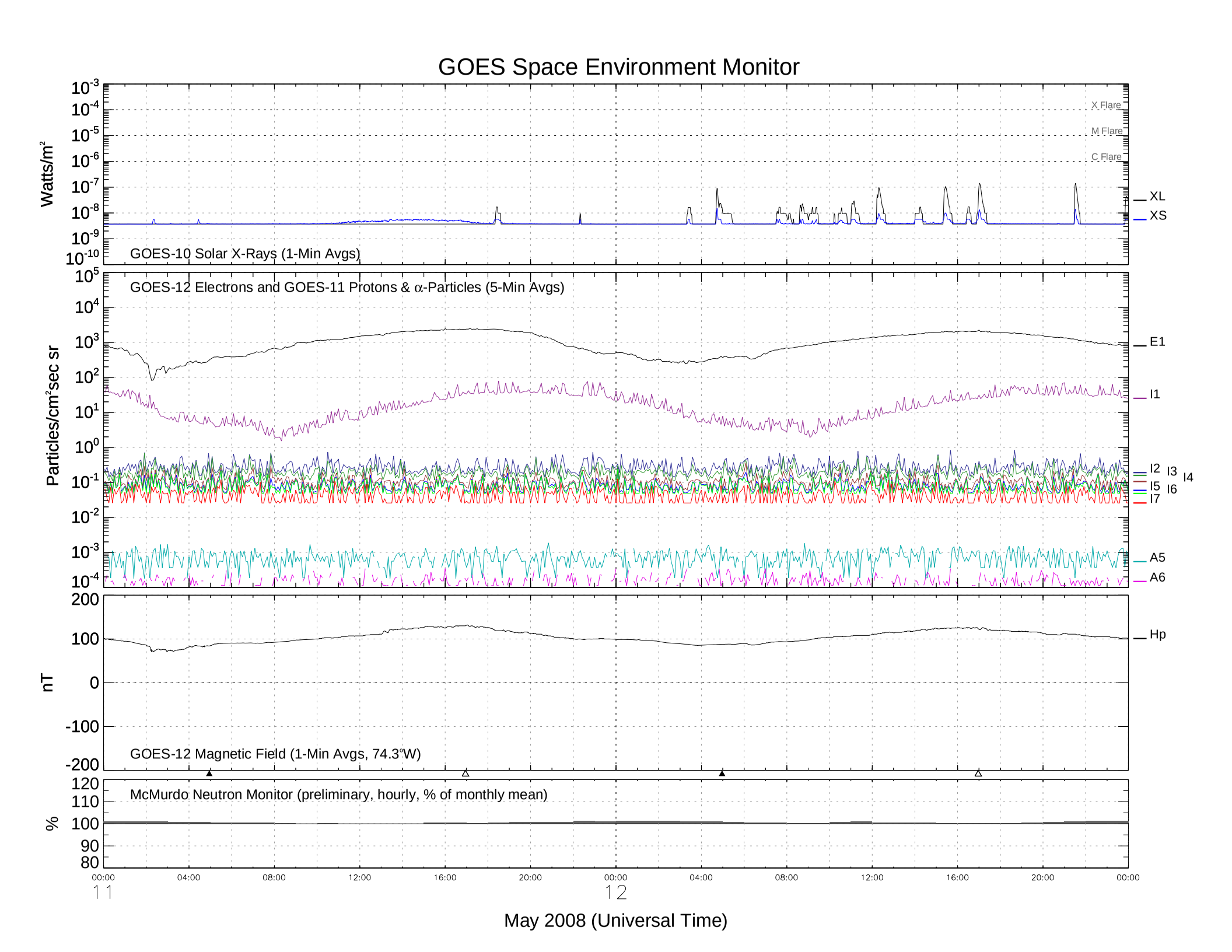
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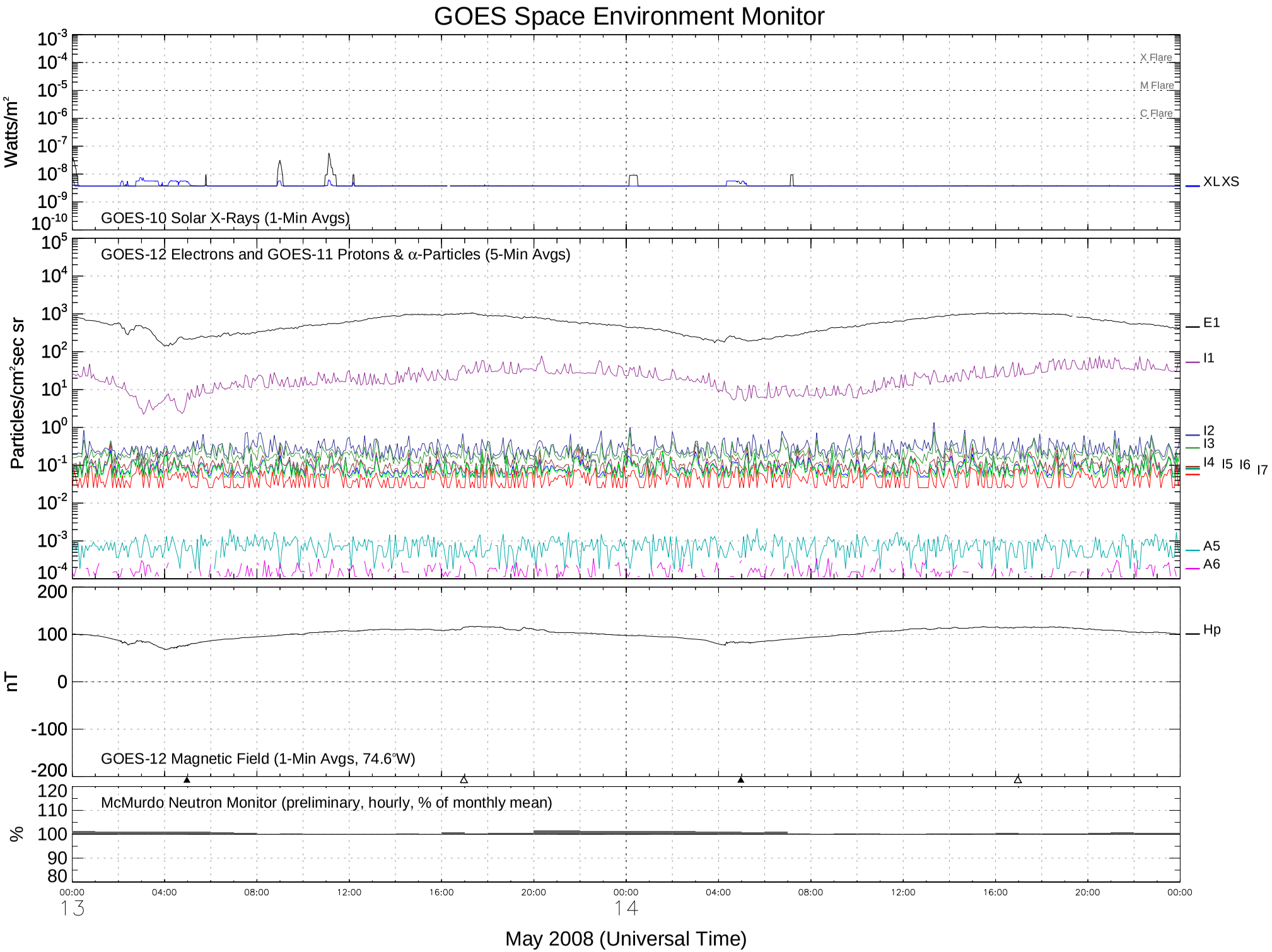
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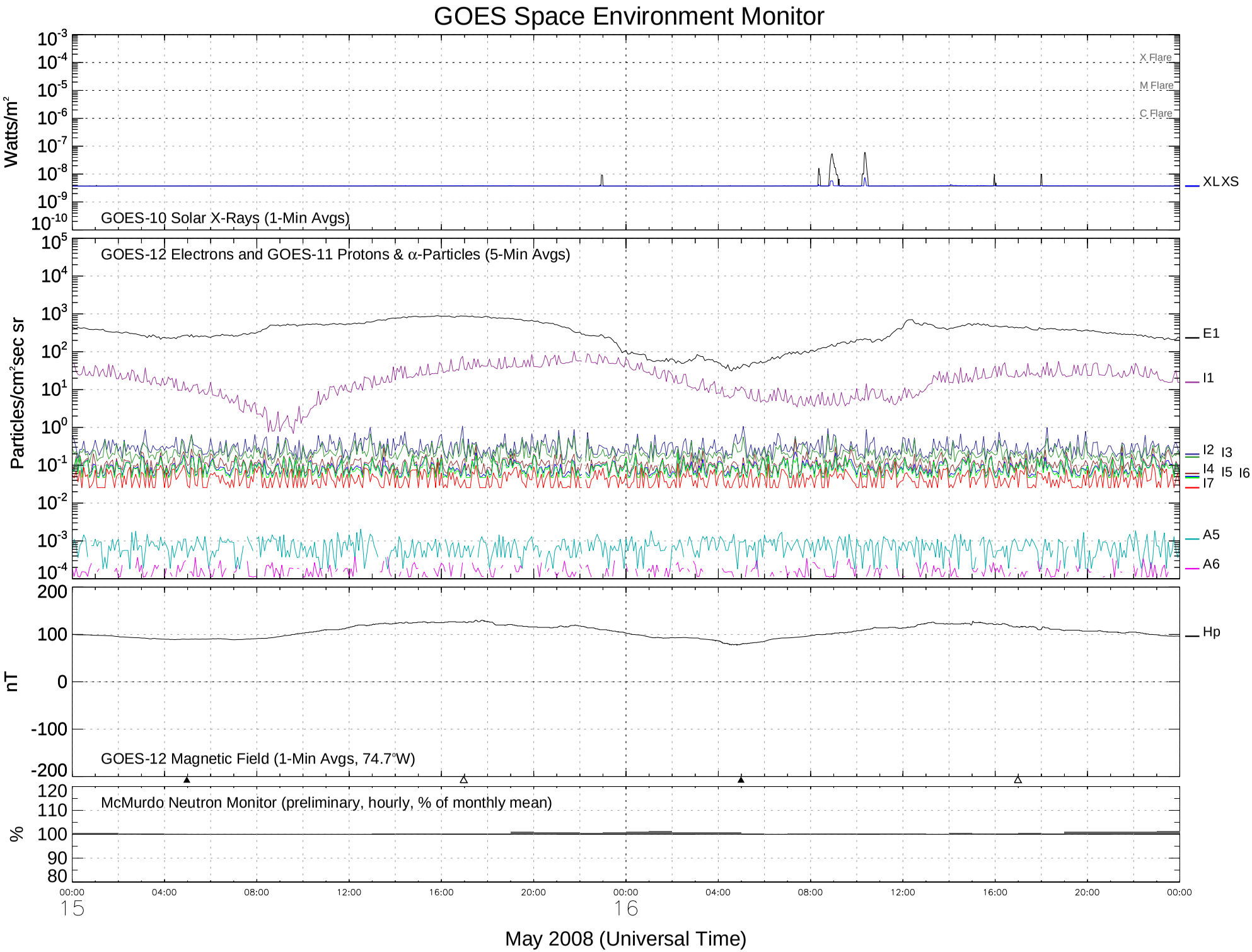
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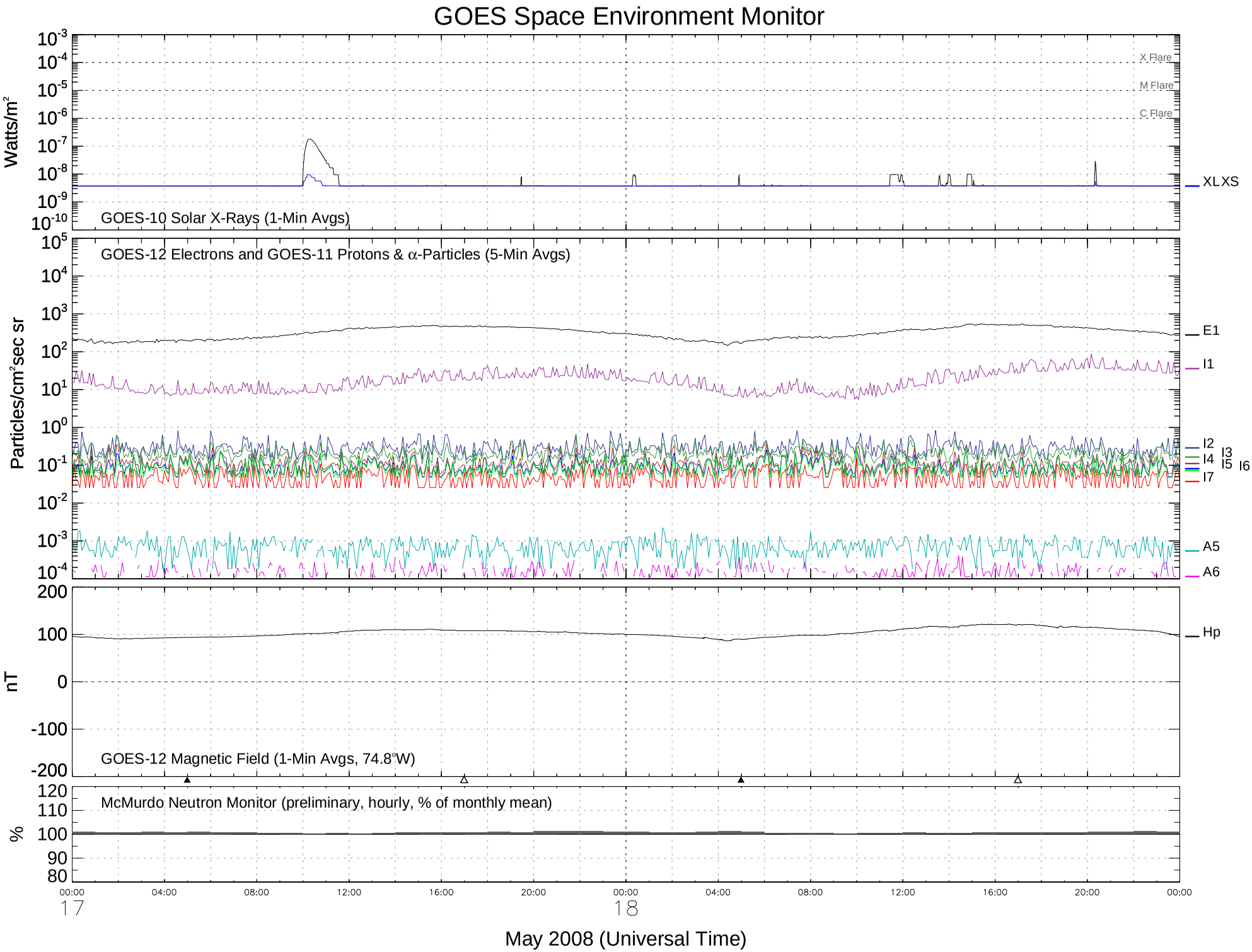
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GOES-12 Magnetic Field (1-Min Avgs, 74.8°W)
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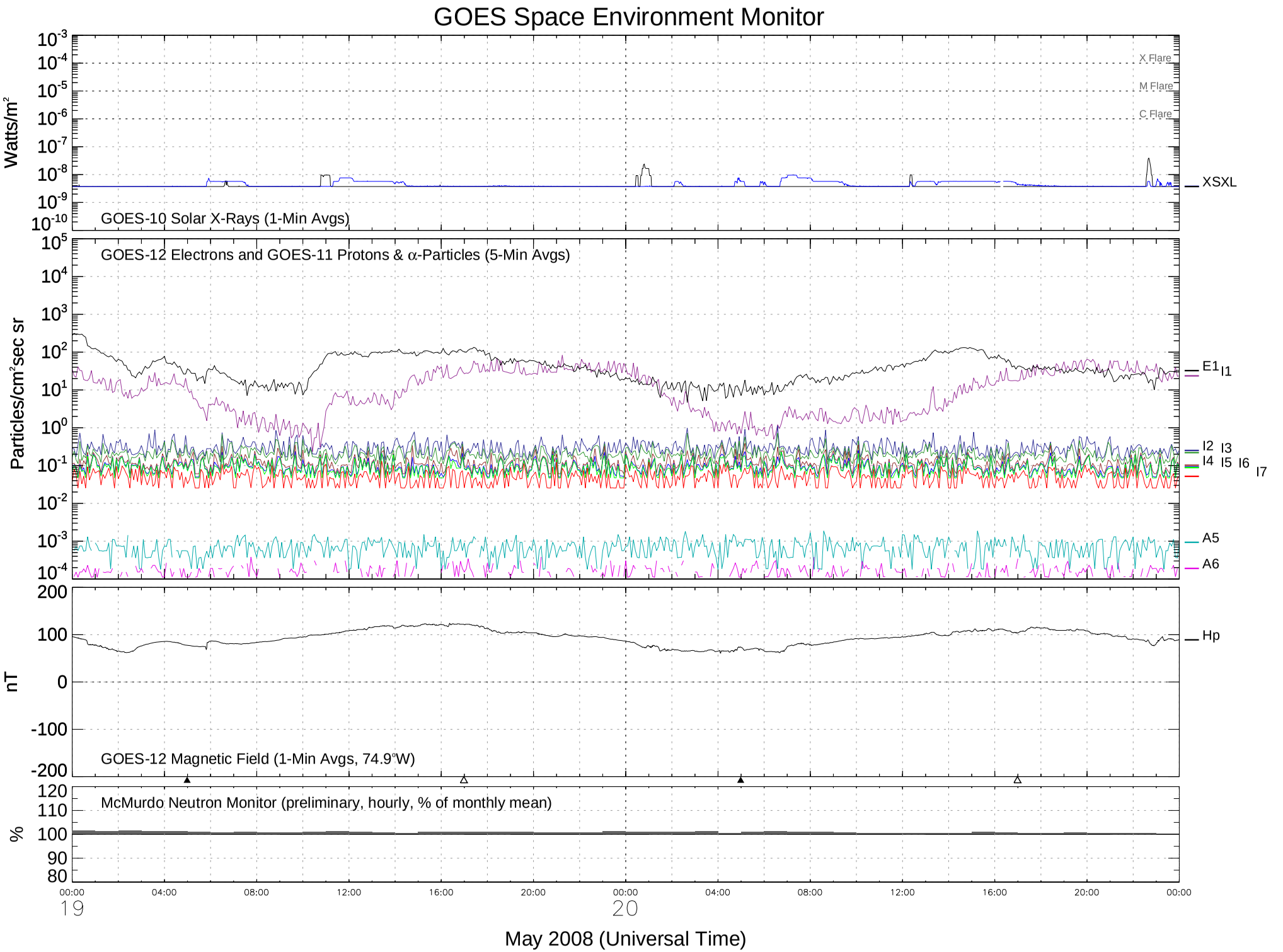
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GOES-12 Magnetic Field (1-Min Avgs, 74.9°W)
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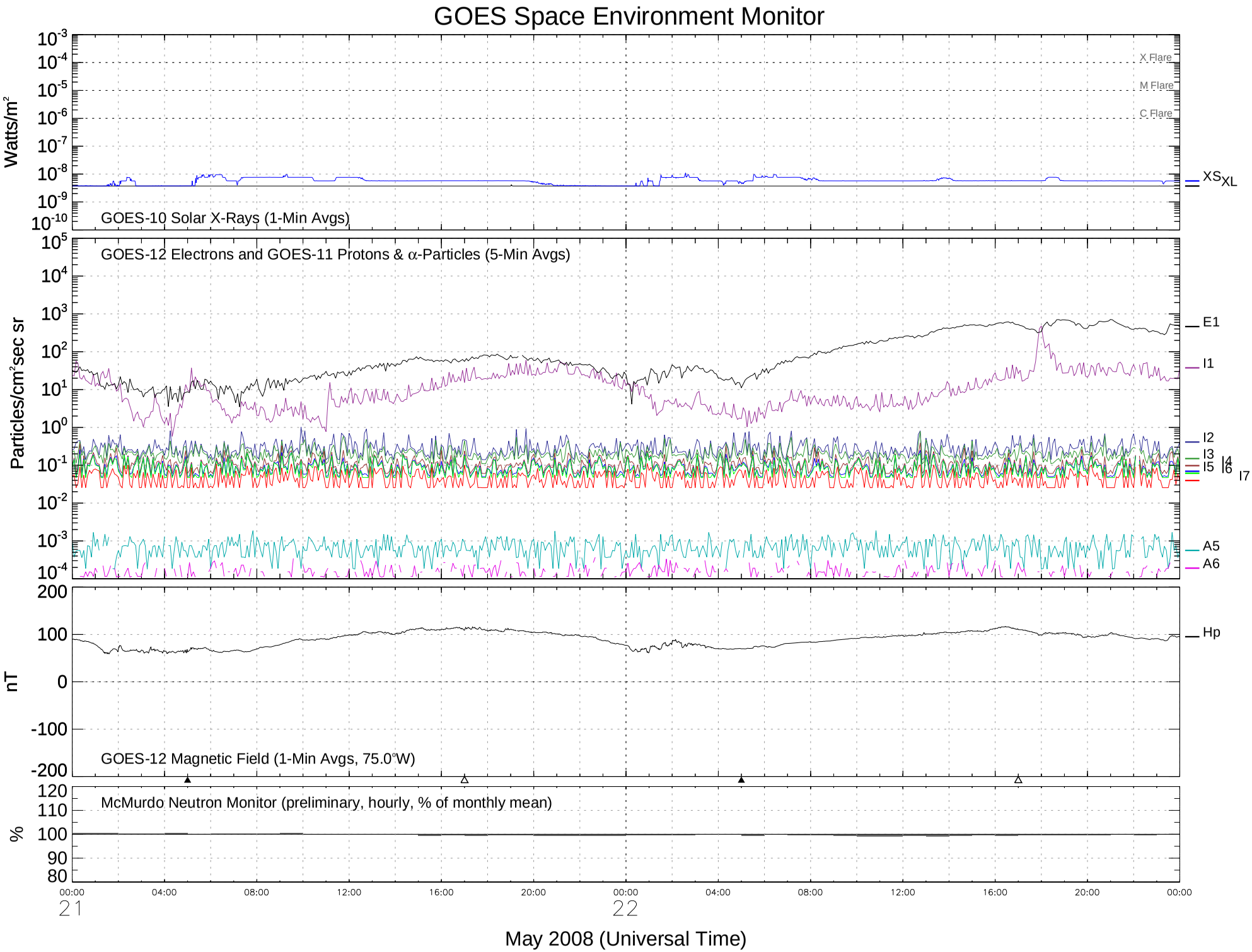
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GOES-12 Magnetic Field (1-Min Avgs, 75.0°W)
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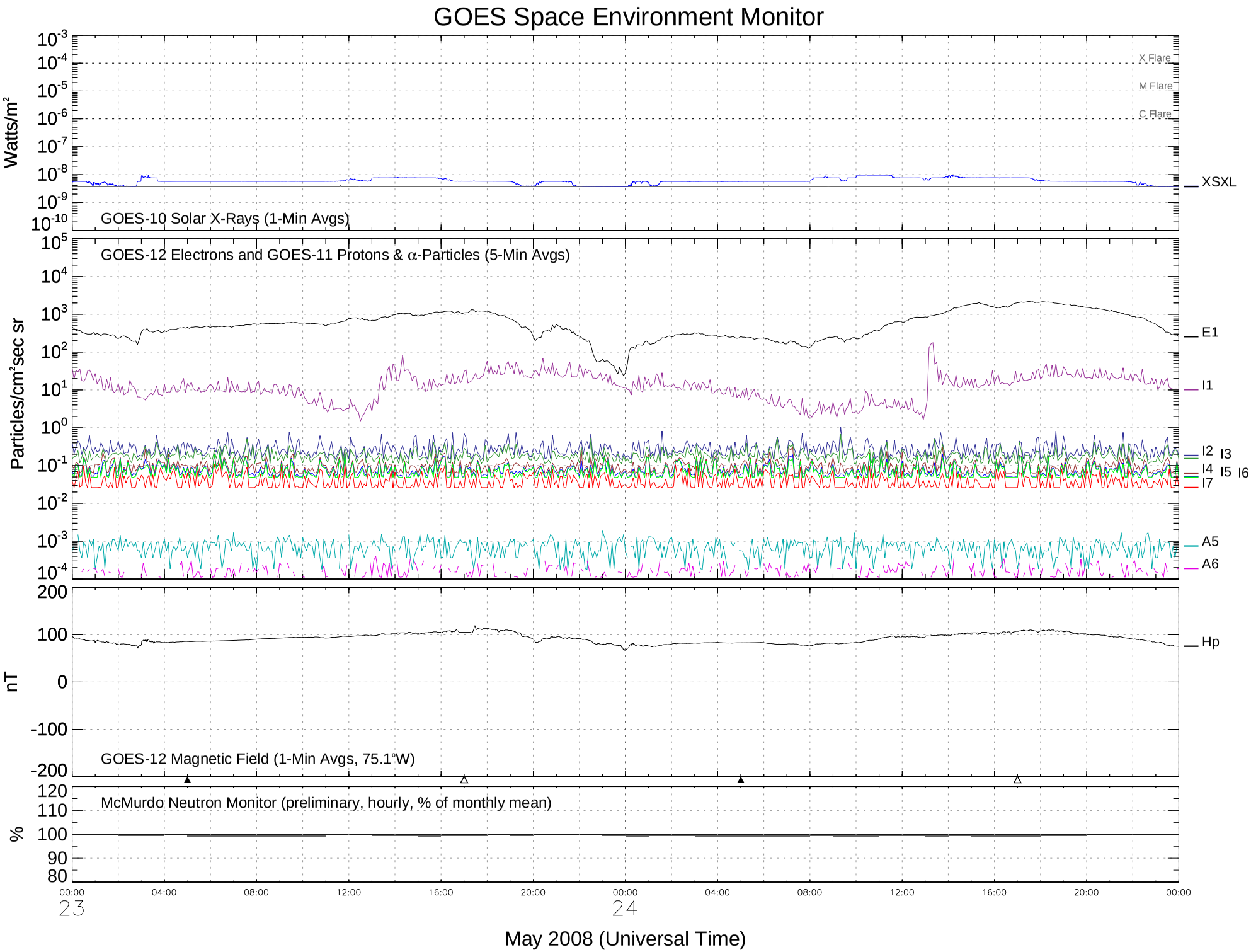
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C Flare
XSXL
GOES-10 Solar X-Rays (1-Min Avgs)
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
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E1
I1
I2 I3
I4 I5 I6
I7
A5
A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 75.1°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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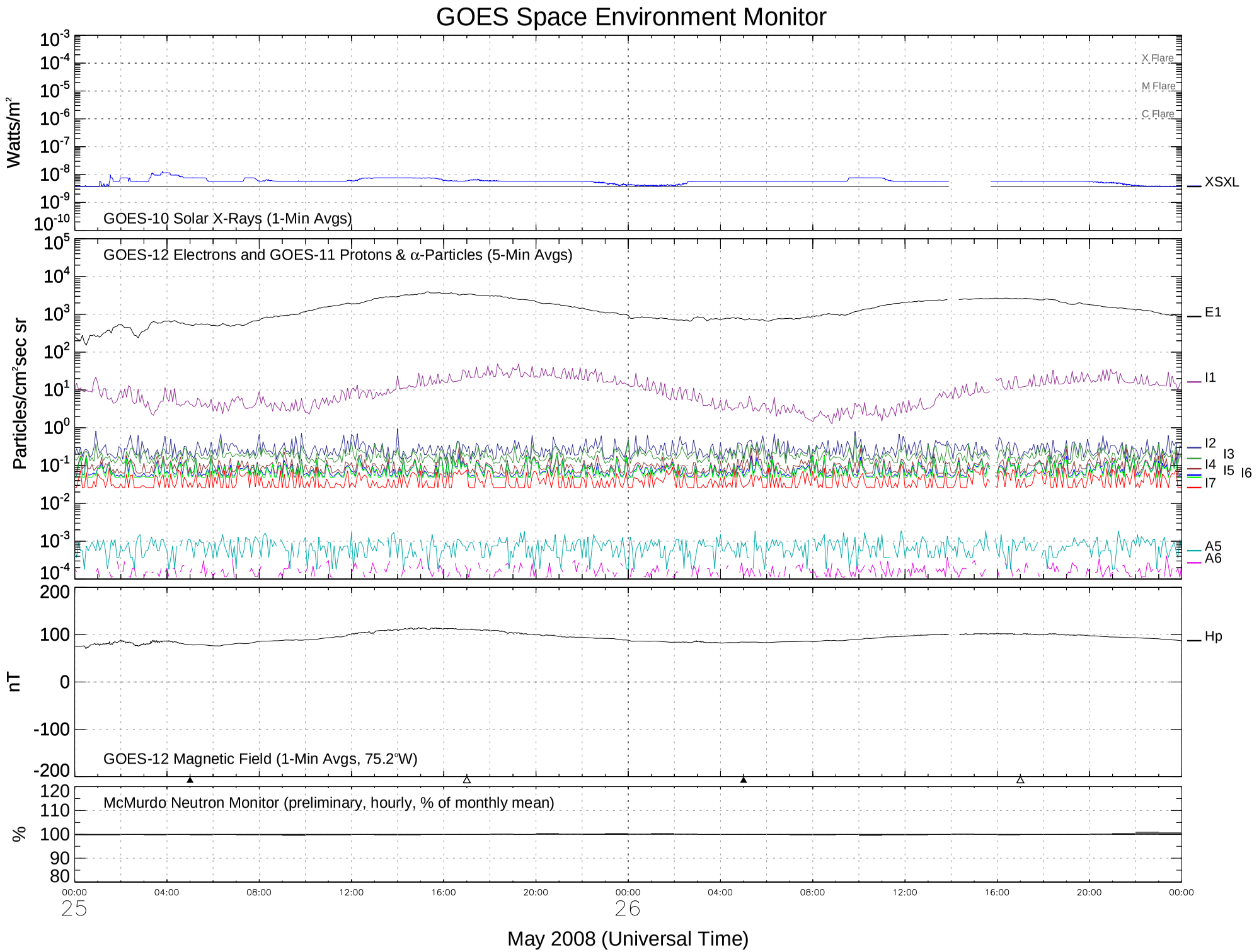
May 2008 (Universal Time)


GOES Space Environment Monitor
Watts/m²
X Flare
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XSXL
GOES-10 Solar X-Rays (1-Min Avgs)
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
Particles/cm²sec sr
E1
I1
I2
I3
I4
I5
I6
I7
A5
A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 75.2°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
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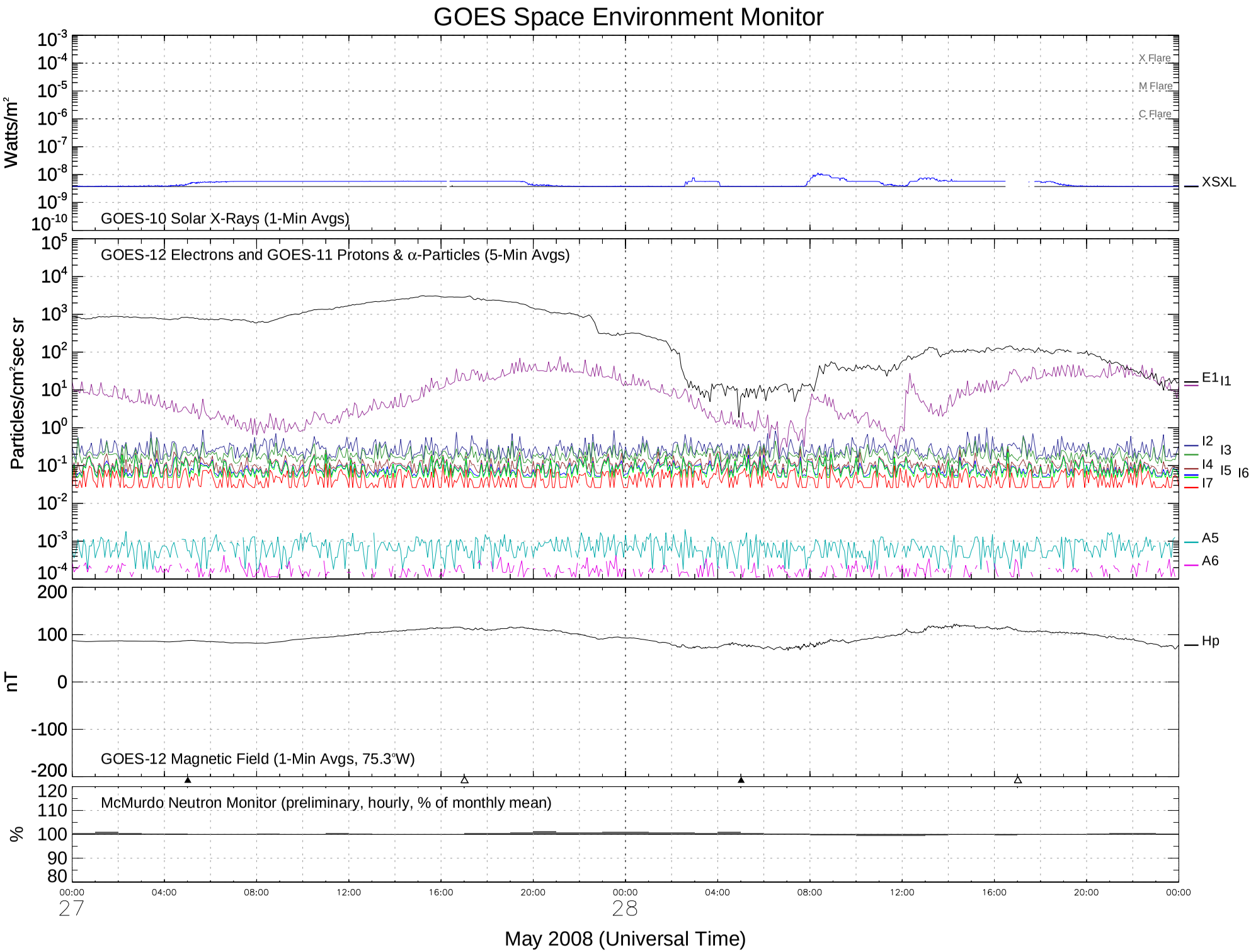
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C Flare
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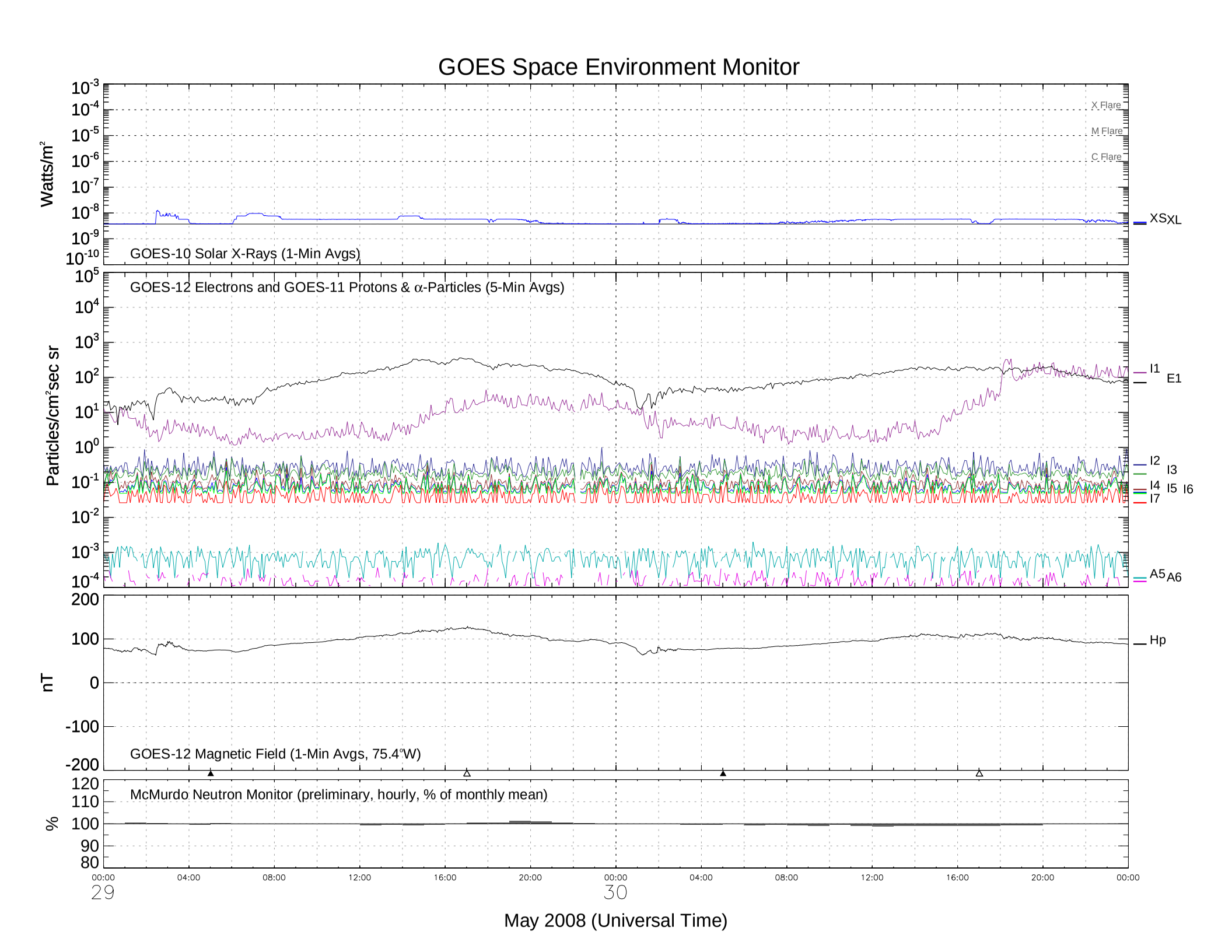
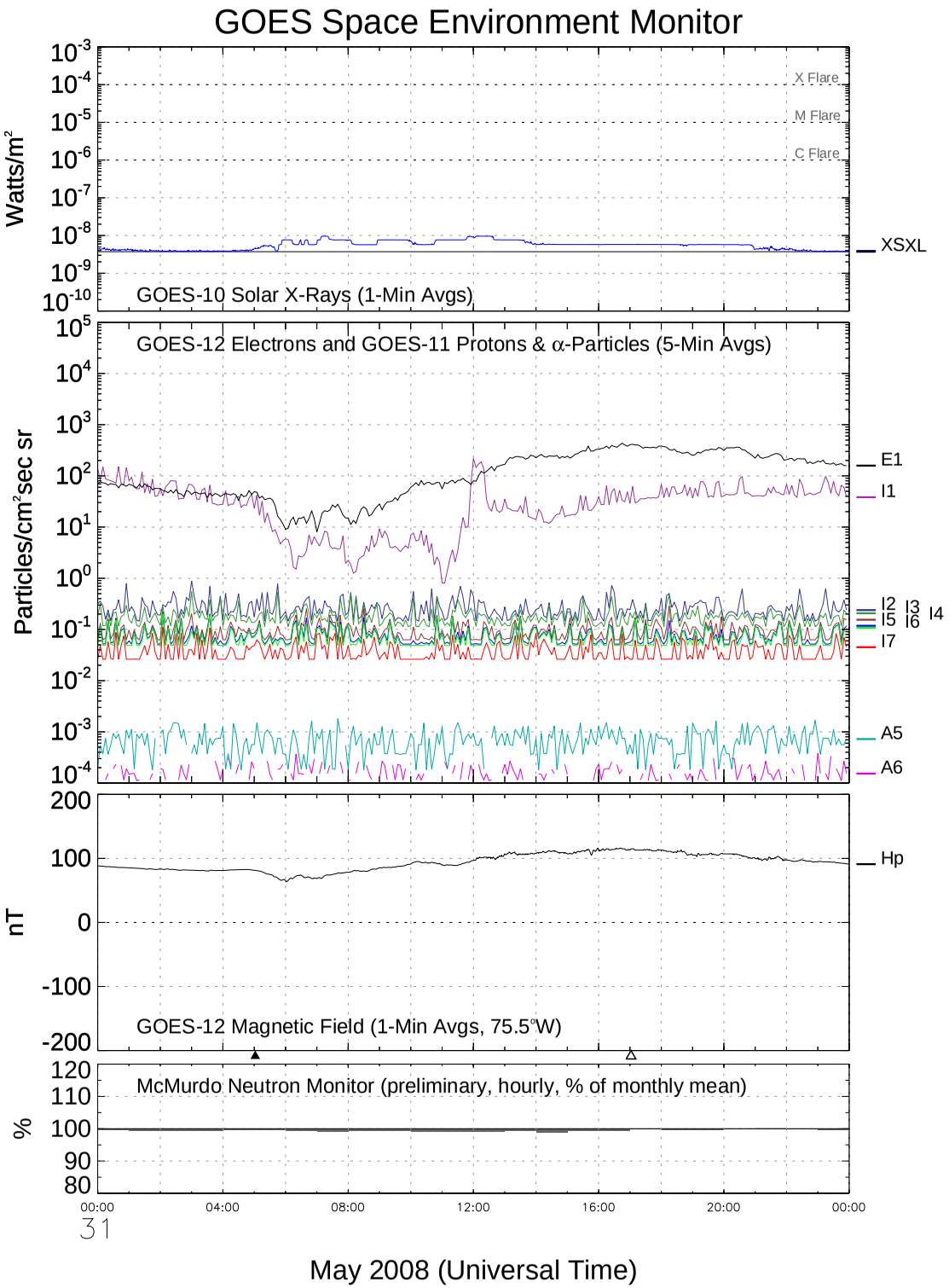
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
Particles/cm²sec sr
E1
I1
I2
I3
I4
I5
I6
I7
A5
A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 75.3°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
27
28
May 2008 (Universal Time)


GOES Space Environment Monitor
Watts/m²
X Flare
M Flare
C Flare
XS XL
GOES-10 Solar X-Rays (1-Min Avgs)
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
Particles/cm²sec sr
I1 E1
I2 I3
I4 I5 I6
I7
A5 A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 75.4°W)
%
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
00:00 04:00 08:00 12:00 16:00 20:00 00:00 04:00 08:00 12:00 16:00 20:00 00:00
29
30
May 2008 (Universal Time)


GOES Space Environment Monitor
Watts/m²
X Flare
M Flare
C Flare
XSXL
GOES-10 Solar X-Rays (1-Min Avgs)
GOES-12 Electrons and GOES-11 Protons & α-Particles (5-Min Avgs)
Particles/cm²sec sr
E1
I1
I2 I3 I4
I5 I6
I7
A5
A6
nT
Hp
GOES-12 Magnetic Field (1-Min Avgs, 75.5°W)
McMurdo Neutron Monitor (preliminary, hourly, % of monthly mean)
%
00:00
04:00
08:00
12:00
16:00
20:00
00:00
31
May 2008 (Universal Time)

A L E R T P E R I O D S
The International Space Environment Service

MAY 2008

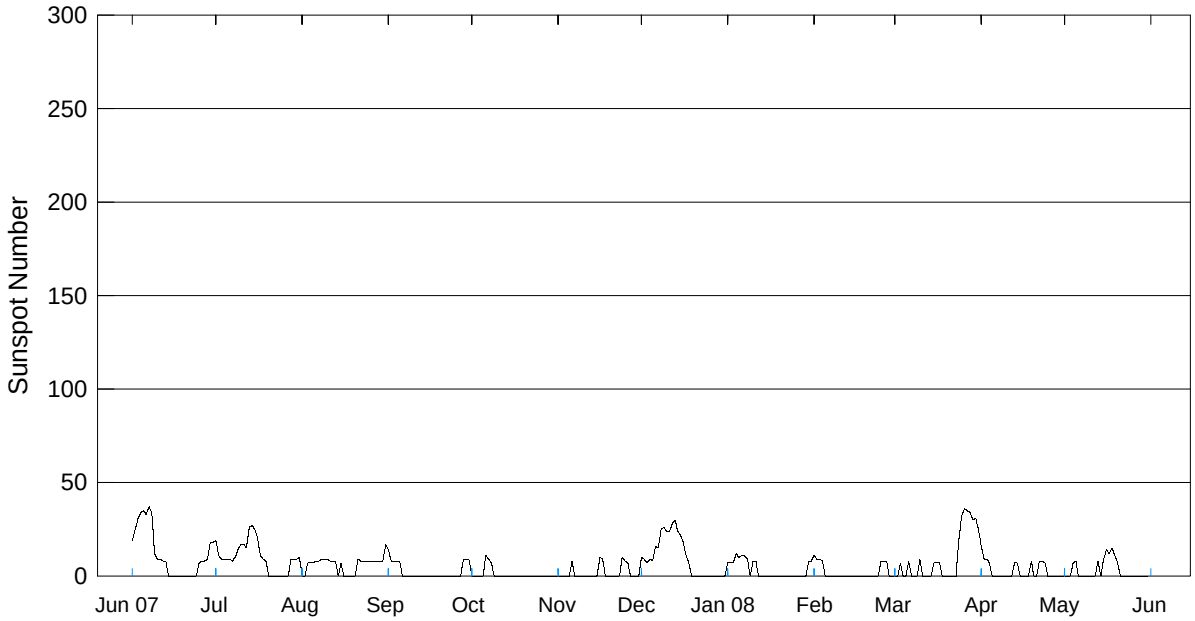
Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
122	01	30	0	67	6				0	0	0	01		SOL: Quiet
									0	0	0	01		MAG: Quiet
									0	0	0	01		PRO: Quiet
123	02	01	0	69	9				0	0	0	02		SOL: Quiet
									0	0	0	02		MAG: Quiet
									0	0	0	02		PRO: Quiet
124	03	02	0	68	12				0	0	0	03		SOL: Quiet
									0	0	0	03		MAG: Quiet
									0	0	0	03		PRO: Quiet
125	04	03	0	67	10				0	0	0	04		SOL: Quiet
									0	0	0	04		MAG: Quiet
									0	0	0	04		PRO: Quiet
126	05	04	13	68	7	10993	S29	E27	0	0	0	05	Q	SOL: Quiet
									0	0	0	05		MAG: Quiet
									0	0	0	05		PRO: Quiet
127	06	05	15	68	12	10993	S31	E14	0	0	0	06	Q	SOL: Quiet
									0	0	0	06		MAG: Quiet
									0	0	0	06		PRO: Quiet
128	07	06	0	67	12				0	0	0	07		SOL: Quiet
									0	0	0	07		MAG: Quiet
									0	0	0	07		PRO: Quiet
129	08	07	0	67	4				0	0	0	08		SOL: Quiet
									0	0	0	08		MAG: Quiet
									0	0	0	08		PRO: Quiet
130	09	08	0	66	4				0	0	0	09		SOL: Quiet
									0	0	0	09		MAG: Quiet
									0	0	0	09		PRO: Quiet
131	10	09	0	67	3				0	0	0	10		SOL: Quiet
									0	0	0	10		MAG: Quiet
									0	0	0	10		PRO: Quiet
132	11	10	0	67	4				0	0	0	11		SOL: Quiet
									0	0	0	11		MAG: Quiet
									0	0	0	11		PRO: Quiet
133	12	11	0	68	3				0	0	0	12		SOL: Quiet
									0	0	0	12		MAG: Quiet
									0	0	0	12		PRO: Quiet
134	13	12	0	68	5				0	0	0	13		SOL: Quiet
									0	0	0	13		MAG: Quiet
									0	0	0	13		PRO: Quiet
135	14	13	0	68	7				0	0	0	14		SOL: Quiet
									0	0	0	14		MAG: Quiet
									0	0	0	14		PRO: Quiet
136	15	14	0	69	3				0	0	0	15		SOL: Quiet
									0	0	0	15		MAG: Quiet
									0	0	0	15		PRO: Quiet
137	16	15	0	71	3				0	0	0	16		SOL: Quiet
									0	0	0	16		MAG: Quiet
									0	0	0	16		PRO: Quiet
138	17	16	34	72	4	10994	S11	E04	0	0	0	17	Q	SOL: Quiet
						10995	N12	E22	0	0	0	17	Q	MAG: Quiet
						10996	N13	E59	0	0	0	17	Q	PRO: Quiet

A L E R T P E R I O D S
The International Space Environment Service

MAY 2008

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
139	18	17	23	71	2	10995	N11	E09	0	0	0	18	Q	SOL: Quiet
						10996	N10	E46	0	0	0	18	Q	MAG: Quiet
									0	0	0	18		PRO: Quiet
140	19	18	30	72	3	10994	S12	W22	0	0	0	19	Q	SOL: Quiet
						10996	N10	E32	0	0	0	19	Q	MAG: Quiet
									0	0	0	19		PRO: Quiet
141	20	19	28	69	9	10994	S12	W36	0	0	0	20	Q	SOL: Quiet
						10996	N09	E18	0	0	0	20	Q	MAG: Quiet
									0	0	0	20		PRO: Quiet
142	21	20	23	69	11	10994	S12	W50	0	0	0	21	Q	SOL: Quiet
						10996	N10	E05	0	0	0	21	Q	MAG: Quiet
									0	0	0	21		PRO: Quiet
143	22	21	0	69	15				0	0	0	22		SOL: Quiet
									0	0	0	22		MAG: Quiet
									0	0	0	22		PRO: Quiet
144	23	22	0	69	10				0	0	0	23		SOL: Quiet
									0	0	0	23		MAG: Quiet
									0	0	0	23		PRO: Quiet
145	24	23	0	68	10				0	0	0	24		SOL: Quiet
									0	0	0	24		MAG: Quiet
									0	0	0	24		PRO: Quiet
146	25	24	0	69	7				0	0	0	25		SOL: Quiet
									0	0	0	25		MAG: Quiet
									0	0	0	25		PRO: Quiet
147	26	25	0	68	8				0	0	0	26		SOL: Quiet
									0	0	0	26		MAG: Quiet
									0	0	0	26		PRO: Quiet
148	27	26	12	68	7	10997	S08	W01	0	0	0	27	Q	SOL: Quiet
									0	0	0	27		MAG: Quiet
									0	0	0	27		PRO: Quiet
149	28	27	0	68	6				0	0	0	28		SOL: Quiet
									0	0	0	28		MAG: Quiet
									0	0	0	28		PRO: Quiet
150	29	28	0	68	12				0	0	0	29		SOL: Quiet
									0	0	0	29		MAG: Quiet
									0	0	0	29		PRO: Quiet
151	30	29	0	68	8				0	0	0	30		SOL: Quiet
									0	0	0	30		MAG: Quiet
									0	0	0	30		PRO: Quiet
152	31	30	0	67	10				0	0	0	31		SOL: Quiet
									0	0	0	31		MAG: Quiet
									0	0	0	31		PRO: Quiet

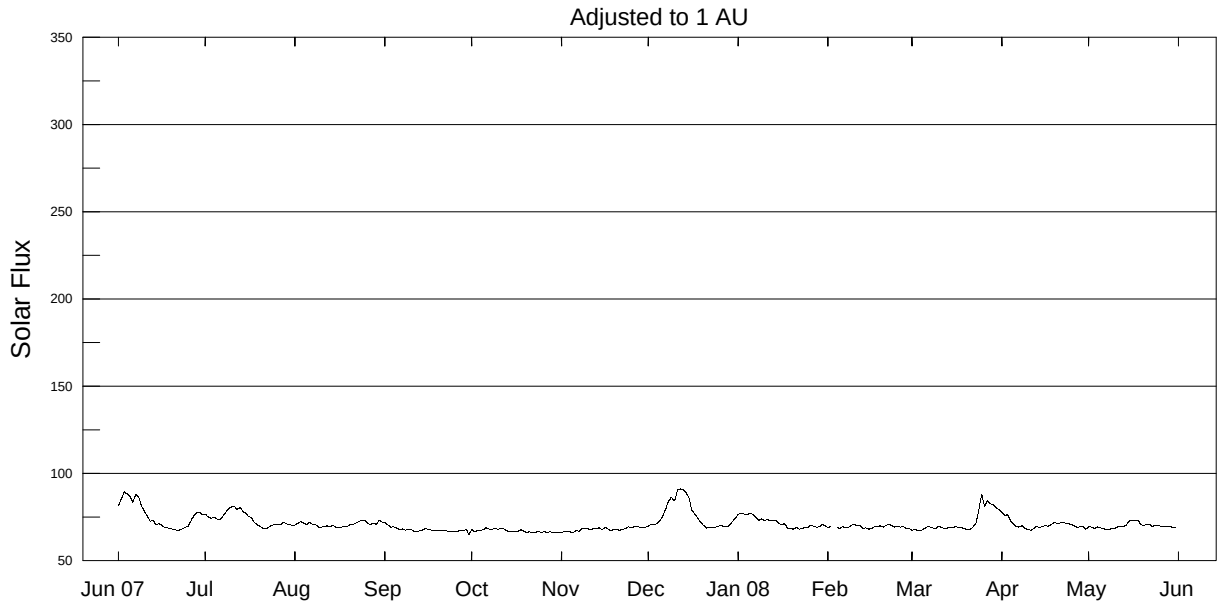
International Relative Sunspot Numbers
Jun 2007 - May 2008



Day	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08*	Feb*	Mar*	Apr*	May*
1	19	19	0	14	0	0	10	7	11	0	16	0
2	25	11	0	8	0	0	9	7	9	0	9	0
3	31	9	7	8	0	0	7	7	9	7	9	0
4	34	9	7	8	0	0	9	12	8	0	7	7
5	35	9	7	8	0	0	8	10	0	0	0	8
6	33	9	8	0	11	8	16	11	0	8	0	0
7	37	8	8	0	9	0	15	11	0	0	0	0
8	34	10	9	0	7	0	25	9	0	0	0	0
9	12	14	9	0	0	0	26	0	0	0	0	0
10	9	17	9	0	0	0	24	8	0	9	0	0
11	9	17	8	0	0	0	24	8	0	0	0	0
12	8	15	8	0	0	0	28	0	0	0	0	0
13	8	26	8	0	0	0	30	0	0	0	7	8
14	0	27	0	0	0	0	24	0	0	0	7	0
15	0	25	0	0	0	0	22	0	0	7	0	9
16	0	20	0	0	0	10	18	0	0	7	0	14
17	0	11	0	0	0	9	11	0	0	7	0	12
18	0	9	0	0	0	0	7	0	0	0	0	15
19	0	8	0	0	0	0	0	0	0	0	8	11
20	0	0	0	0	0	0	0	0	0	0	0	7
21	0	0	9	0	0	0	0	0	0	0	0	0
22	0	0	8	0	0	0	0	0	0	0	8	0
23	0	0	8	0	0	0	0	0	0	0	8	0
24	0	0	8	0	0	10	0	0	0	19	7	0
25	7	0	8	0	0	8	0	0	8	32	0	0
26	8	0	8	0	0	7	0	0	8	36	0	0
27	8	0	8	0	0	0	0	0	8	35	0	0
28	9	9	8	9	0	0	0	0	0	34	0	0
29	18	9	8	9	0	0	0	0	0	30	0	0
30	18	9	8	9	0	0	0	8		31	0	0
31		0	17		0		0	8		25		0
Mean	12.1	9.7	6.0	2.4	0.9	1.7	10.1	3.4	2.1	9.3	2.9	2.9

* = Provisional.

Penticton 2800 MHz (10.7cm) Solar Flux
Jun 2007 - May 2008



Day	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May
1	81.6	76.8	70.4	72.1	67.8	66.3	69.9	76.7	69.0	67.4	77.7	69.6
2	85.6	75.1	71.5	70.6	66.5	66.8	71.0	77.0	69.8	68.0	75.9	69.2
3	89.5	74.2	72.4	69.1	67.3	66.5	70.5	76.7	*	67.3	76.4	68.5
4	88.2	74.9	71.4	69.4	67.4	66.5	71.5	76.4	69.3	67.2	73.1	69.5
5	87.1	73.9	70.9	68.8	67.8	66.2	73.1	77.1	68.5	68.2	71.1	68.8
6	83.6	73.5	72.0	67.8	68.9	67.3	75.9	76.6	69.6	69.3	69.5	68.4
7	88.1	75.5	71.0	68.2	68.1	66.9	79.8	75.2	68.9	69.5	69.3	67.8
8	86.8	77.6	71.0	67.6	67.9	68.4	84.4	73.0	69.0	68.8	70.0	67.7
9	81.0	79.7	69.3	67.7	68.6	68.2	86.2	74.0	70.3	68.5	68.2	68.6
10	78.2	80.8	69.3	67.9	67.9	68.4	84.3	73.2	70.7	69.4	68.1	68.7
11	75.6	81.1	69.5	67.0	68.6	67.7	90.5	73.5	70.2	69.3	67.4	69.4
12	72.6	79.5	70.0	66.7	68.3	68.3	91.1	73.2	70.3	68.5	68.5	69.5
13	73.1	80.6	69.5	67.2	67.3	68.4	90.9	72.9	68.7	68.7	69.7	69.7
14	70.6	78.2	70.3	67.6	66.7	68.9	89.0	73.1	68.8	69.1	69.0	70.5
15	71.3	77.1	69.3	68.5	66.8	67.7	86.1	71.3	68.0	68.8	69.7	72.7
16	70.2	75.3	69.0	67.8	66.7	69.1	79.1	70.6	68.6	69.6	70.0	73.2
17	68.9	74.7	69.3	67.6	67.0	68.2	76.9	71.3	69.4	69.1	69.8	72.8
18	68.8	71.8	69.6	67.1	67.7	67.2	74.4	68.8	69.5	69.0	70.8	73.3
19	68.5	70.5	69.4	67.4	66.8	67.9	72.1	68.6	70.0	68.4	71.7	70.5
20	67.8	69.5	70.7	67.4	66.3	68.0	70.2	68.0	69.3	67.9	71.5	70.2
21	67.6	68.6	70.9	67.4	66.6	67.4	68.7	69.3	70.3	67.7	71.6	70.8
22	67.5	68.3	71.6	67.2	66.0	68.0	69.1	68.1	70.8	69.1	72.1	71.0
23	68.1	69.3	72.4	66.8	66.4	68.3	69.1	68.4	70.1	71.5	71.5	69.6
24	69.1	70.2	73.2	66.5	66.8	69.5	69.1	69.1	69.3	79.0	71.2	70.3
25	69.8	70.8	73.1	66.6	66.3	68.8	69.7	68.9	69.9	88.2	70.7	70.1
26	72.8	70.6	71.6	66.8	66.7	69.6	70.2	70.3	69.3	81.2	69.9	69.8
27	75.7	70.9	70.7	67.4	66.2	69.6	69.7	69.8	69.4	84.5	69.0	69.7
28	77.4	72.1	71.6	67.4	66.6	69.3	69.5	69.2	68.7	82.6	69.4	69.6
29	77.8	71.1	71.0	67.8	66.2	69.3	70.3	69.5	68.5	82.4	69.6	69.9
30	76.4	71.0	73.0	65.1	66.3	69.2	72.5	70.6		80.4	68.0	69.0
31		70.1	72.2		66.1		74.2	69.9		79.1		68.8
Mean	76.0	74.0	70.9	67.8	67.1	68.1	76.1	71.9	69.4	72.2	70.7	69.9

* = No data available.

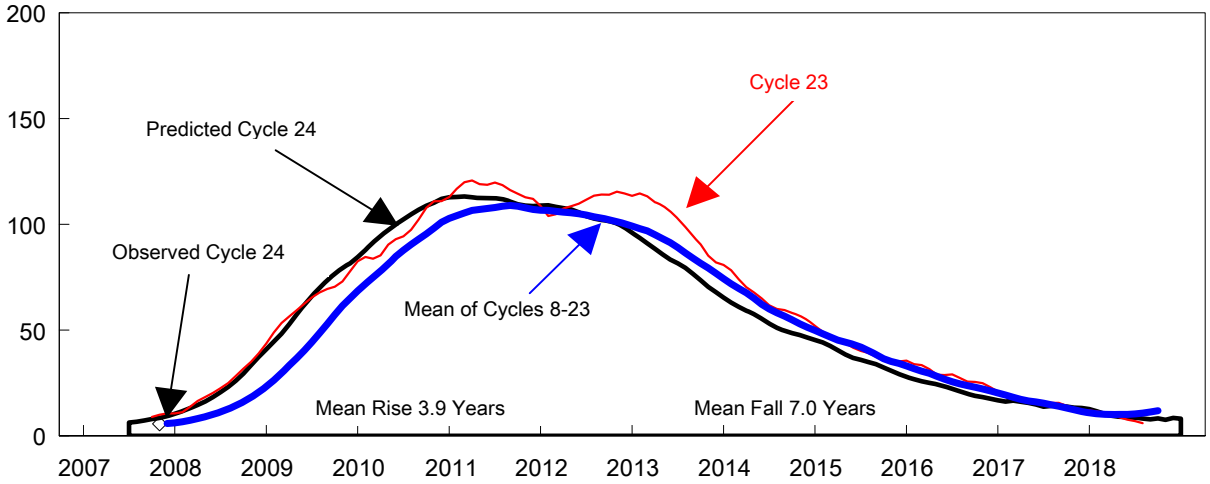
DAILY SOLAR INDICES

May 2008

	Day	Bartels	Sunspot		Obs Flux		-----Solar Flux Adjusted to 1 Astronomical Unit--------							
	of	Cycle	Numbers		Penticton	SGMR	SGMR	SGMR	Penticton	SGMR	SGMR	SGMR	SGMR	SGMR
Day	Year	Day	Int	Amer	(2800)	(15400)	(8800)	(4995)	(2800)	(2695)	(1415)	(610)	(410)	(245)
1	122	26	0	1	68.5	484	214	118	69.6	64	54	35	23	12
2	123	27	0	0	68.1	480	211	118	69.2	63	55	35	21	11
3	124	1	0	0	67.3	481	211	116	68.5	65	53	35	18	12
4	125	2	7	5	68.3	484	213	118	69.5	64	55	36	24	12
5	126	3	8	3	67.6	487	214	118	68.8	64	54	35	24	12
6	127	4	0	0	67.2	487	214	118	68.4	63	53	36	26	11
7	128	5	0	0	66.5	482	214	118	67.8	63	53	35	26	10
8	129	6	0	0	66.4	487	215	118	67.7	63	53	35	24	11
9	130	7	0	0	67.3	485	215	118	68.6	64	54	37	26	12
10	131	8	0	0	67.4	485	215	120	68.7	64	55	36	25	11
11	132	9	0	0	68.0	489	217	120	69.4	65	54	37	25	11
12	133	10	0	0	68.0	486	223	118	69.5	65	54	35	26	11
13	134	11	8	2	68.3	486	223	118	69.7	65	54	34	25	13
14	135	12	0	0	69.0	482	223	118	70.5	67	56	36	23	11
15	136	13	9	7	71.1	490	212	120	72.7	67	58	37	26	11
16	137	14	14	12	71.6	488	210	119	73.2	67	58	36	26	11
17	138	15	12	11	71.2	482	212	118	72.8	68	58	36	27	11
18	139	16	15	12	71.6	481	211	117	73.3	67	58	37	28	12
19	140	17	11	15	68.9	455	207	117	70.5	66	56	34	26	11
20	141	18	7	6	68.6	484	211	117	70.2	67	56	37	27	12
21	142	19	0	2	69.1	465	213	117	70.8	63	55	35	24	11
22	143	20	0	0	69.3	445	215	118	71.0	65	56	36	26	10
23	144	21	0	0	67.8	484	220	118	69.6	64	56	36	28	12
24	145	22	0	0	68.5	491	210	117	70.3	66	56	37	28	12
25	146	23	0	1	68.3	487	213	117	70.1	66	57	37	27	11
26	147	24	0	0	68.0	482	210	117	69.8	64	56	36	27	12
27	148	25	0	0	67.9	---	---	---	69.7	---	---	---	---	---
28	149	26	0	0	67.8	476	210	116	69.6	64	55	37	26	11
29	150	27	0	0	68.1	484	211	116	69.9	65	56	36	22	11
30	151	1	0	0	67.1	---	---	---	69.0	---	---	---	---	---
	152	2	0	0	66.9	479	214	116	68.8	64	54	35	26	11
MEAN			2.9	2.5	68.4	481	213	117	69.9	64	55	35	25	11

NOTE: This month's radio flux data are from PALEHUA.

Cycle 24 Smoothed Sunspot Numbers: Observed and Predicted
PRELIMINARY Based on November 2007 Smoothed Data



Smoothed Sunspot Numbers (Observed and Predicted) for Parts of Solar Cycles 23 and 24

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1996	10	10	10	9	8*	9	8	8	8	9**	10	10	8
1997	11	11	14	17	18	20	23	25	28	32	35	39	23
1998	44	49	53	57	59	63	65	68	69	71	73	78	62
1999	83	85	84	85	90	93	94	98	102	108	111	111	95
2000	113	117	120	120.8+	119	119	120	119	116	115	113	112	107
2001	109	104	105	108	109	110	112	114	114	114	115	115	111
2002	114	115	113	111	109	106	103	99	95	91	85	82	102
2003	81	79	74	70	68	65	62	60	60	58	57	57	66
2004	53	49	47	46	46	42	40	39	38	36	35	35	42
2005	35	34	34	32	29	29	29	27	26	26	25	23	29
2006	21	19	17	17	17	16	15	16	16	14	13	13	16
2007	12	12	11	10	9	8	7	6	6	6	6	6	8
												(0)	(0)
2008	6	7	7	8	9	10	11	13	14	16	18	21	12
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(12)	(14)	(16)	(7)
2009	23	26	30	33	37	40	44	49	53	57	62	65	43
	(18)	(21)	(23)	(26)	(29)	(32)	(35)	(39)	(43)	(47)	(50)	(53)	(35)

Solar Cycle 22 | Solar Cycle 23 | Min, Max, and Predictions | ediction.

*** May 1996 marks Cycle 22's mathematical minimum.** **** October 1996 marks the consensus minimum.**

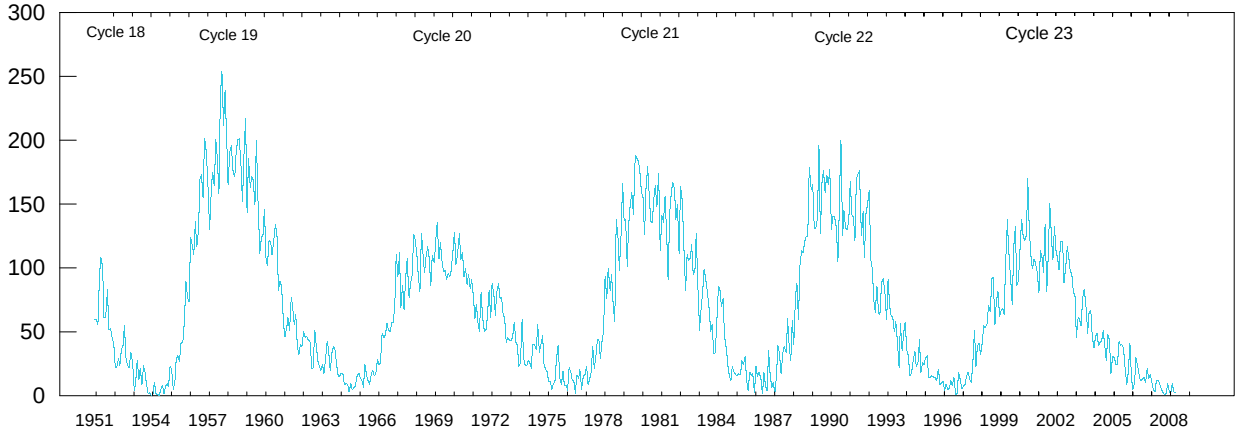
+ April 2000 marks Cycle 23 maximum. ## - Preliminary Cycle 24 Minumum

NOTE: This is a preliminary prediction using November 2007 as solar minimum.

OBSERVED AND PREDICTED NUMBERS: For the end of Cycle 23, and the rise and decline of Cycle 24, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Dec 2007 and on provisional numbers thereafter. Table entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. See page 9 in the Jul 1987 supplement to Solar-Geophysical Data. Adding the number in parentheses to the predicted value generates the upper limit of the 90% confidence interval. Subtracting the number from the predicted value generates the lower limit. Consider, for example, the November 2008 prediction. There exists a 90% chance that in November 2008, the actual smoothed sunspot will fall somewhere between 4 and 32.

POINTS TO PONDER: The McNish-Lincoln prediction method generates useful estimates of smoothed, monthly mean sunspot numbers for no more than 12 months ahead. Beyond 12 months, the predictions regress toward the mean of all 16 cycles of observations used in the computation. Moreover, the method remains very sensitive to the date defining the onset of the current cycle, that is, to the date of the most recent sunspot minimum. The new cycle predictions tabulated above are based on a PRELIMINARY minimum of November, 2007. This will be updated monthly until the actual minimum is reached.

Mean Monthly Sunspot Numbers
Jan 1951 - May 2008



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
1951	59.9	59.9	55.9	92.9	108.5	100.6	61.5	61.0	83.1	51.6	52.4	45.8	69.4	
1952	40.7	22.7	22.0	29.1	23.4	36.4	39.3	54.9	28.2	23.8	22.1	34.3	31.5	
1953	26.5	3.9	10.0	27.8	12.5	21.8	8.6	23.5	19.3	8.2	1.6	2.5	13.9	
1954	0.2	0.5	10.9	1.8	0.8	0.2	4.8	8.4	1.5	7.0	9.2	7.6	4.4	m
1955	23.1	20.8	4.9	11.3	28.9	31.7	26.7	40.7	42.7	58.5	89.2	76.9	38.0	
1956	73.6	124.0	118.4	110.7	136.6	116.6	129.1	169.6	173.2	155.3	201.3	192.1	141.7	
1957	165.0	130.2	157.4	175.2	164.6	200.7	187.2	158.0	235.8	253.8	210.9	239.4	190.2	M
1958	202.5	164.9	190.7	196.0	175.3	171.5	191.4	200.2	201.2	181.5	152.3	187.6	184.8	
1959	217.4	143.1	185.7	163.3	172.0	168.7	149.6	199.6	145.2	111.4	124.0	125.0	159.0	
1960	146.3	106.0	102.2	122.0	119.6	110.2	121.7	134.1	127.2	82.8	89.6	85.6	122.3	
1961	57.9	46.1	53.0	61.4	51.0	77.4	70.2	55.8	63.6	37.7	32.6	39.9	53.9	
1962	38.7	50.3	45.6	46.4	43.7	42.0	21.8	21.8	51.3	39.5	26.9	23.2	37.6	
1963	19.8	24.4	17.1	29.3	43.0	35.9	19.6	33.2	38.8	35.3	23.4	14.9	27.9	
1964	15.3	17.7	16.5	8.6	9.5	9.1	3.1	9.3	4.7	6.1	7.4	15.1	10.2	m
1965	17.5	14.2	11.7	6.8	24.1	15.9	11.9	8.9	16.8	20.1	15.8	17.0	15.1	
1966	28.2	24.4	25.3	48.7	45.3	47.7	56.7	51.2	50.2	57.2	57.2	70.4	47.0	
1967	110.9	93.6	111.8	69.5	86.5	67.3	91.5	107.2	76.8	88.2	94.3	126.4	93.8	
1968	121.8	111.9	92.2	81.2	127.2	110.3	96.1	109.3	117.2	107.7	86.0	109.8	105.9	M
1969	104.4	120.5	135.8	106.8	120.0	106.0	96.8	98.0	91.3	95.7	93.5	97.9	105.5	
1970	111.5	127.8	102.9	109.5	127.5	106.8	112.5	93.0	99.5	86.6	95.2	83.5	104.5	
1971	91.3	79.0	60.7	71.8	57.5	49.8	81.0	61.4	50.2	51.7	63.2	82.2	66.6	
1972	61.5	88.4	80.1	63.2	80.5	88.0	76.5	76.8	64.0	61.3	41.6	45.3	68.9	
1973	43.4	42.9	46.0	57.7	42.4	39.5	23.1	25.6	59.3	30.7	23.9	23.3	38.0	
1974	27.6	26.0	21.3	40.3	39.5	36.0	55.8	33.6	40.2	47.1	25.0	20.5	34.5	
1975	18.9	11.5	11.5	5.1	9.0	11.4	28.2	39.7	13.9	9.1	19.4	7.8	15.5	
1976	8.1	4.3	21.9	18.8	12.4	12.2	1.9	16.4	13.5	20.6	5.2	15.3	12.6	m
1977	16.4	23.1	8.7	12.9	18.6	38.5	21.4	30.1	44.0	43.8	29.1	43.2	27.5	
1978	51.9	93.6	76.5	99.7	82.7	95.1	70.4	58.1	138.2	125.1	97.9	122.7	92.5	
1979	166.6	137.5	138.0	101.5	134.4	149.5	159.4	142.2	188.4	186.2	183.3	176.3	155.4	M
1980	159.6	155.0	126.2	164.1	179.9	157.3	136.3	135.4	155.0	164.7	147.9	174.4	154.6	
1981	114.0	141.3	135.5	156.4	127.5	90.9	143.8	158.7	167.3	162.4	137.5	150.1	140.4	
1982	111.2	163.6	153.8	122.0	82.2	110.4	106.1	107.6	118.8	94.7	98.1	127.0	115.9	
1983	84.3	51.0	66.5	80.7	99.2	91.1	82.2	71.8	50.3	55.8	33.3	33.4	66.6	
1984	57.0	85.4	83.5	69.7	76.4	46.1	37.4	25.5	15.7	12.0	22.8	18.7	45.9	
1985	16.5	15.9	17.2	16.2	27.5	24.2	30.7	11.1	3.9	18.6	16.2	17.3	17.9	
1986	2.5	23.2	15.1	18.5	13.7	1.1	18.1	7.4	3.8	35.4	15.2	6.8	13.4	m
1987	10.4	2.4	14.7	39.6	33.0	17.4	33.0	38.7	33.9	60.6	39.9	27.1	29.4	
1988	59.0	40.0	76.2	88.0	60.1	101.8	113.8	111.6	120.1	125.1	125.1	179.2	100.2	
1989	161.3	165.1	131.4	130.6	138.5	196.2	126.9	168.9	176.7	159.4	173.0	165.5	157.6	M
1990	177.3	130.5	140.3	140.3	132.2	105.4	149.4	200.3	125.2	145.5	131.4	129.7	142.6	
1991	136.9	167.5	141.9	140.0	121.3	169.7	173.7	176.3	125.3	144.1	108.2	144.4	145.7	
1992	150.0	161.1	106.7	99.8	73.8	65.2	85.7	64.5	63.9	88.7	91.8	82.6	94.3	
1993	59.3	91.0	69.8	62.2	61.3	49.8	57.9	42.2	22.4	56.4	35.6	48.9	54.6	
1994	57.8	35.5	31.7	16.1	17.8	28.0	35.1	22.5	25.7	44.0	18.0	26.2	29.9	
1995	24.2	29.9	31.1	14.0	14.5	15.6	14.5	14.3	11.8	21.1	9.0	10.0	17.5	
1996	11.5	4.4	9.2	4.8	5.5	11.8	8.2	14.4	1.6	0.9	17.9	13.3	8.6	m
1997	5.7	7.6	8.7	15.5	18.5	12.7	10.4	24.4	51.3	22.8	39.0	41.2	21.5	
1998	31.9	40.3	54.8	53.4	56.3	70.7	66.6	92.2	92.9	55.5	74.0	81.9	64.3	
1999	62.0	66.3	68.8	63.7	106.4	137.7	113.5	93.7	71.5	116.7	133.2	84.6	93.2	
2000	90.1	112.9	138.5	125.5	121.6	124.9	170.1	130.5	109.7	99.4	106.8	104.4	119.6	M
2001	95.6	80.6	113.5	107.7	96.6	134.0	81.8	106.4	150.7	125.5	106.5	132.2	111.0	
2002	114.1	107.4	98.4	120.7	120.8	88.3	99.9	116.4	109.3	97.5	95.5	80.8	104.0	
2003	79.7	46.0	61.1	60.0	54.6	77.4	83.3	72.7	48.7	65.5	67.3	46.5	63.9	
2004	37.7	45.8	49.1	39.3	41.5	43.2	51.0	40.9	27.7	48.0	43.5	17.9	40.4	
2005	31.3	29.1	24.8	24.2	42.7	39.3	40.1	36.4	21.9	8.7	18.0	41.1	29.8	
2006	15.4	4.7	10.8	30.2	22.2	13.9	12.2	12.9	14.4	10.5	21.4	13.6	15.2	
2007	16.8	10.7	4.5	3.4	11.7	12.1	9.7	6.0	2.4	0.9	1.7	10.1	7.5	
2008	3.4	2.1	9.3	2.9	2.9								4.1	

Values are preliminary after Dec 07. For the yearly means, each 'M' marks a sunspot cycle maximum and each 'm' a minimum.

Hà S O L A R F L A R E S
May 2008

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

NO REPORTS

"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

X - R A Y S O L A R F L A R E S
MAY 2008

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES 12		1657	1702	1706						9	B 1.4	5.3E-05		
GOES		2127	2131	2135						8	B 1.4	4.2E-05		
GOES 17		1005	1016	1032						27	B 1.7	2.4E-04		

Note 1: Total integrated flux computed from the event start time to end if available (units=J/m*2).
Note 2: Total area is derived from SXI imagery in units of squared arc seconds of the largest flaring area.
Note 3: Total intensity is derived from SXI imagery in units of data numbers/second of the largest flaring area.

TABLE FORMAT CHANGE: Data are from the GOES full disk xray monitor supplemented with Solar Xray Imager (SXI) from January, 2004, to April 12, 2007. Positions, areas, and intensities are taken from SXI imagery using the largest flare event on the disk. Only the largest event is selected during multiple flares on the disk.

IMPORTANT NOTE: The xray sensor on GOES 12 was turned off on April 12, 2007, at 2250UT. The GOES SXI instrument is also inoperative. GOES 11 is now primary with GOES 10 backup for xray data. Effective April 13, 2007, xray flare locations will be determined by optical flare reports. Xray event times will still be from the xray data.

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

Selected Fixed Frequency Events

MAY 2008

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
18	410	LEAR	48 C	0604.0	0608.0	4.0	740.0			QL=4 ST=2 TYP=8
28	4995	PALE	49 GB	2057.0	2058.0	2.0	52000.0			QL=4 ST=2 TYP=6

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

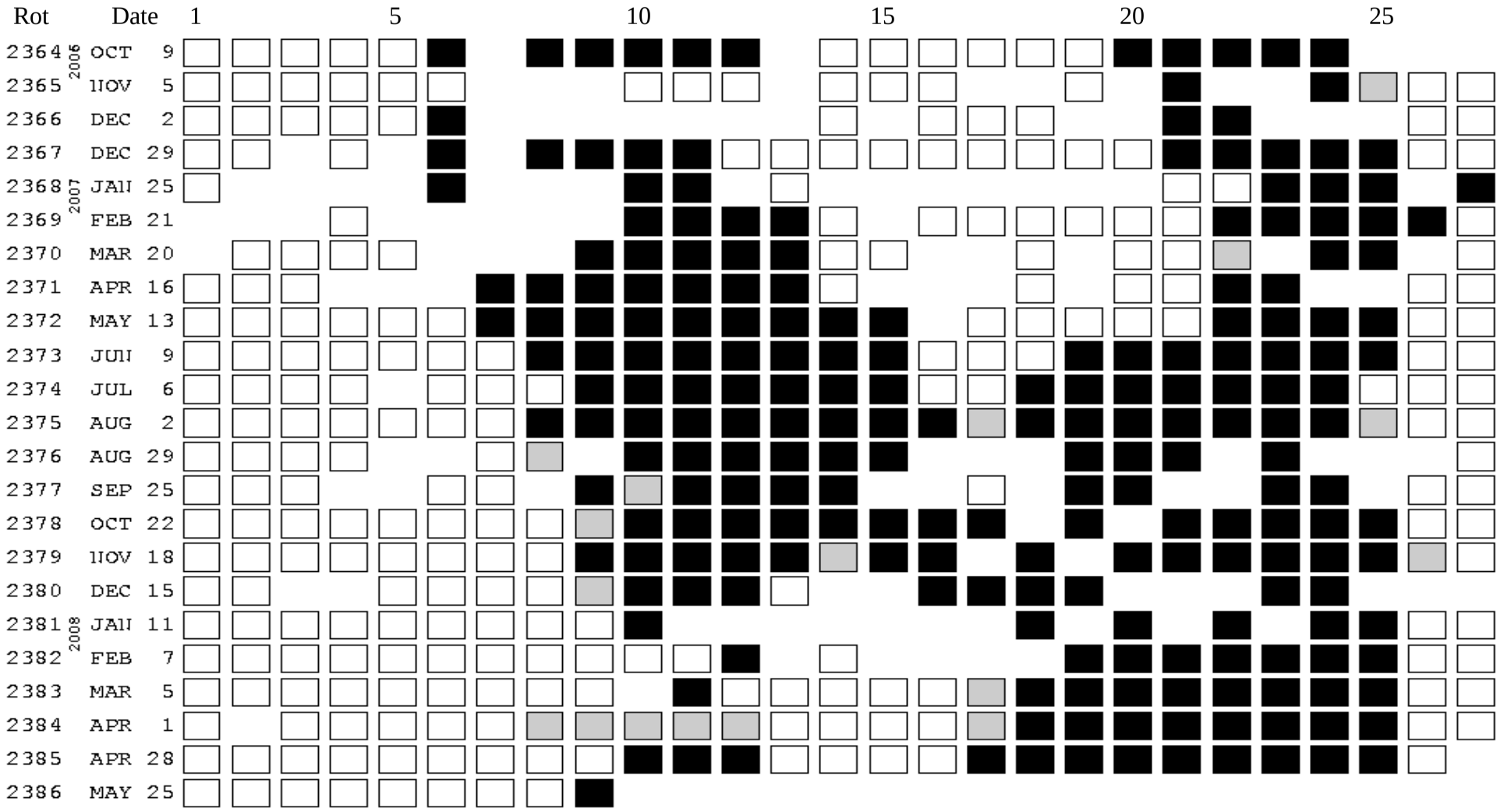
Explanation of Type Code:

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	4O Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	4OF Rise Only F	26O 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; and Hiraiso, Japan 500 and 200 MHz.

STANFORD MEAN SOLAR MAGNETIC FIELD



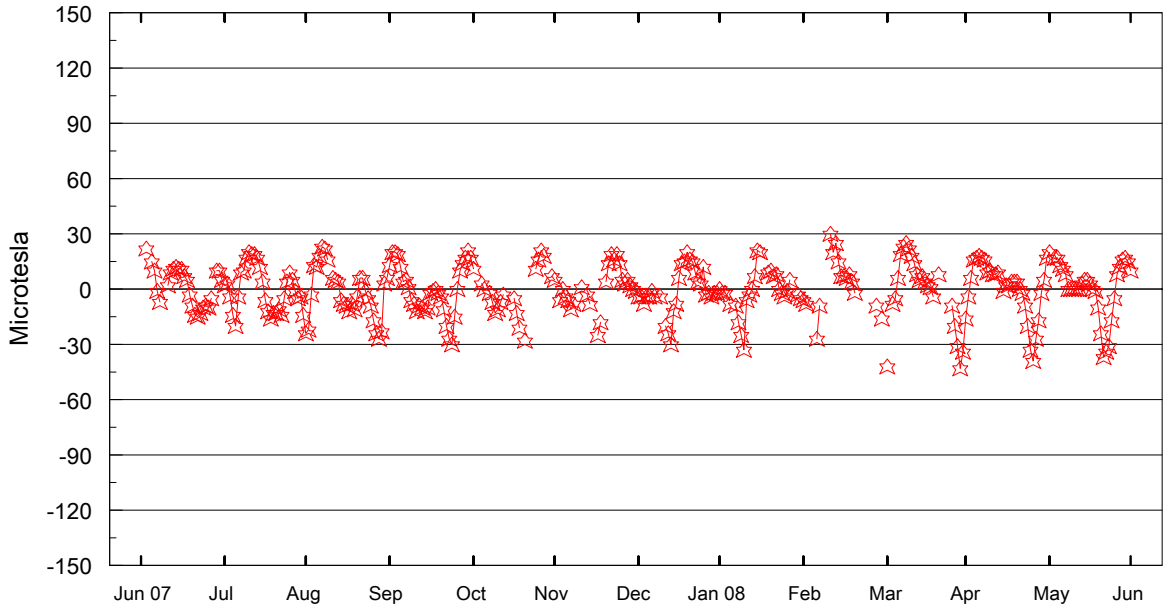
Mean Solar Magnetic Field Polarity: □ = field > 2 microT; ▒ = -2 microT ≤ field ≤ 2 microT

■ = field < -2 microT; No box = no data available

Observations are taken at 2000 UT. Rotation numbers given are the Bartels series, but the dates are not; these dates are five days earlier, to mark times of occurrence of phenomena on the Sun that affect the Earth during the given Bartels Rotation.

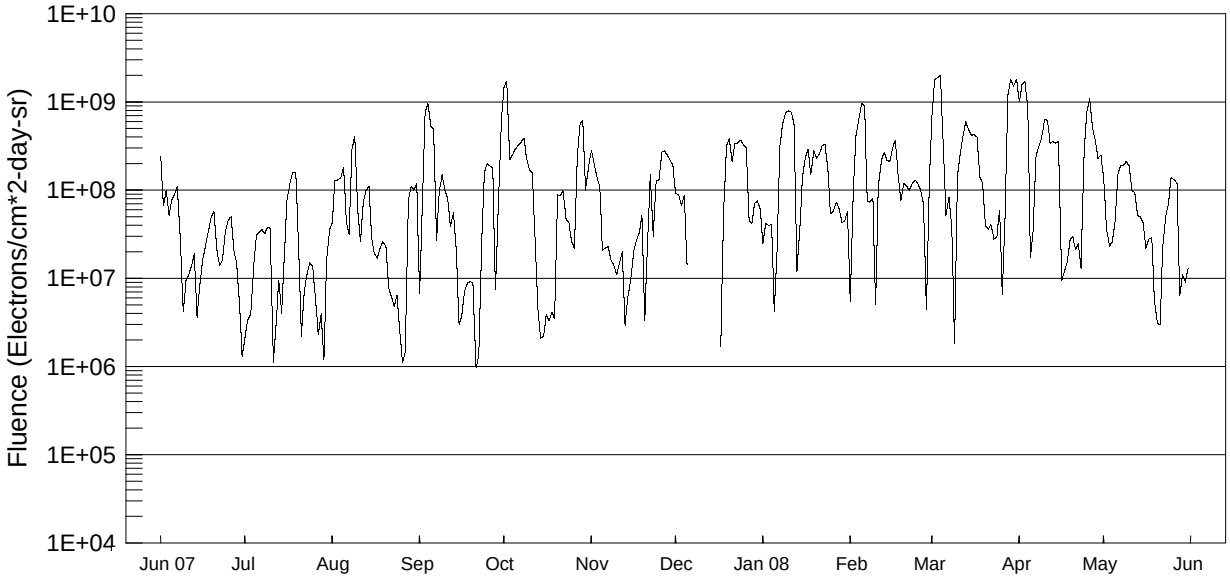
Stanford Mean Solar Magnetic Field (Microtesla)
"Sun-As-A-Star"

31
May 08



Day	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May
1	2	-24	13	11	5	-4	0	-6	-42	-16	20	10
2	3	-22	20	---	---	-4	-2	-8	---	-4	---	9
3	-4	-3	20	---	-6	-8	-2	---	-8	6	17	8
4	-14	13	19	3	0	-4	---	---	-5	16	17	7
5	-20	12	12	0	-4	-4	-8	---	6	17	13	4
6	-4	18	4	---	-6	-1	---	-27	19	18	11	1
7	9	23	5	-2	-11	-4	-9	-9	23	17	8	-4
8	10	22	1	-7	-8	---	-18	---	25	16	0	-4
9	17	16	-6	-13	---	-4	-25	---	22	9	0	-1
10	20	---	-8	-11	---	---	-33	---	18	10	0	3
11	19	6	-12	-7	1	-20	-6	30	14	8	0	2
12	19	5	-9	-3	---	-24	-3	20	8	8	0	5
13	17	4	-10	---	-3	-30	0	25	5	9	3	4
14	12	-6	-12	---	-8	-12	7	15	7	---	5	-1
15	4	-8	-10	---	---	-8	21	7	4	-1	5	-3
16	-6	-9	-2	-5	---	6	20	7	2	2	3	-12
17	-12	-12	-1	-13	-25	14	---	6	1	2	0	-22
18	-16	-8	0	-21	-18	15	---	8	-4	4	-1	-30
19	-13	-11	-2	---	---	20	9	4	---	4	-10	-28
20	-13	-4	-4	-28	4	16	10	-2	8	4	-24	-23
21	-11	6	-11	---	14	15	7	---	---	0	-37	-11
22	-14	6	-20	---	19	9	8	---	---	-2	-34	-1
23	-5	-1	-27	---	16	4	0	---	---	-9	-31	4
24	4	-5	-30	11	19	3	-2	---	---	-20	-17	---
25	9	-9	-15	16	14	12	-4	---	-9	-33	-5	16
26	5	-17	0	21	5	-3	-1	---	-20	-39	8	12
27	-1	-24	10	18	3	-2	5	---	-31	-27	12	12
28	-5	-27	14	---	5	-4	---	-9	-43	-17	16	12
29	-4	-23	17	---	2	-2	---	---	-34	-2	17	7
30	-14	3	21	7	0	-2	-3	-16		5	15	8
31		6	17		-1		-5	---		17		7

GOES Daily Electron Fluence
Jun 2007 - May 2008



Day	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May
1	2.4E+08	2.1E+06	4.3E+07	6.8E+06	1.5E+09	2.8E+08	9.3E+07	2.5E+07	5.5E+06	7.5E+08	1.0E+09	1.4E+08
2	6.7E+07	3.4E+06	1.3E+08	6.3E+07	1.7E+09	2.0E+08	8.8E+07	4.2E+07	8.0E+07	1.8E+09	1.6E+09	3.6E+07
3	1.0E+08	3.9E+06	1.3E+08	7.5E+08	2.2E+08	1.4E+08	6.7E+07	4.0E+07	4.1E+08	1.9E+09	1.7E+09	2.3E+07
4	5.1E+07	1.3E+07	1.4E+08	9.6E+08	2.5E+08	1.1E+08	8.6E+07	4.1E+07	6.5E+08	2.0E+09	8.9E+08	2.6E+07
5	7.7E+07	3.1E+07	1.8E+08	5.3E+08	2.9E+08	2.1E+07	1.4E+07	4.2E+06	9.7E+08	3.6E+08	1.7E+07	4.2E+07
6	9.0E+07	3.3E+07	4.3E+07	4.9E+08	3.2E+08	2.2E+07	---	2.3E+07	9.1E+08	5.1E+07	3.6E+07	1.5E+08
7	1.1E+08	3.6E+07	3.1E+07	2.7E+07	3.5E+08	2.3E+07	---	3.2E+08	7.6E+07	8.4E+07	2.5E+08	1.9E+08
8	3.1E+07	3.2E+07	2.9E+08	9.6E+07	3.9E+08	1.6E+07	---	5.6E+08	7.3E+07	3.8E+07	3.2E+08	1.9E+08
9	4.2E+06	3.8E+07	4.1E+08	1.5E+08	2.3E+08	1.4E+07	---	7.5E+08	8.1E+07	1.8E+06	4.0E+08	2.1E+08
10	9.4E+06	3.7E+07	6.6E+07	1.0E+08	1.7E+08	1.1E+07	---	7.9E+08	5.0E+06	1.4E+08	6.4E+08	1.9E+08
11	1.1E+07	1.1E+06	2.6E+07	8.2E+07	1.6E+08	1.5E+07	---	7.7E+08	1.1E+08	2.5E+08	6.2E+08	1.0E+08
12	1.4E+07	3.0E+06	7.5E+07	3.9E+07	3.1E+07	2.0E+07	---	5.5E+08	2.2E+08	4.1E+08	3.4E+08	9.4E+07
13	1.9E+07	9.6E+06	1.0E+08	5.6E+07	5.0E+06	2.9E+06	---	1.2E+07	2.7E+08	6.0E+08	3.6E+08	5.2E+07
14	3.6E+06	4.0E+06	1.1E+08	2.1E+07	2.1E+06	6.1E+06	---	3.5E+07	2.2E+08	4.9E+08	3.4E+08	5.0E+07
15	8.6E+06	1.9E+07	2.8E+07	3.0E+06	2.2E+06	9.4E+06	---	1.4E+08	2.1E+08	4.2E+08	3.6E+08	4.3E+07
16	1.6E+07	8.1E+07	1.9E+07	3.8E+06	3.9E+06	2.0E+07	---	2.3E+08	3.0E+08	4.3E+08	9.4E+06	2.2E+07
17	2.4E+07	1.2E+08	1.7E+07	7.2E+06	3.3E+06	2.7E+07	1.7E+06	2.9E+08	3.7E+08	4.0E+08	1.2E+07	2.8E+07
18	3.5E+07	1.6E+08	2.2E+07	8.8E+06	4.1E+06	3.3E+07	6.4E+07	1.5E+08	1.5E+08	1.4E+08	1.5E+07	2.9E+07
19	5.0E+07	1.6E+08	2.6E+07	9.3E+06	3.5E+06	5.2E+07	3.2E+08	2.8E+08	7.6E+07	1.2E+08	2.7E+07	5.6E+06
20	5.7E+07	2.3E+07	2.3E+07	8.8E+06	8.9E+07	3.3E+06	3.9E+08	2.3E+08	1.2E+08	4.0E+07	3.0E+07	3.1E+06
21	2.1E+07	2.2E+06	7.7E+06	9.8E+05	8.7E+07	2.6E+07	2.1E+08	2.6E+08	1.1E+08	3.6E+07	2.1E+07	3.0E+06
22	1.4E+07	7.0E+06	6.2E+06	1.3E+06	9.9E+07	1.5E+08	3.4E+08	3.2E+08	1.0E+08	4.1E+07	2.5E+07	2.3E+07
23	1.6E+07	1.1E+07	4.8E+06	2.2E+07	4.7E+07	3.0E+07	3.4E+08	3.3E+08	1.2E+08	2.8E+07	1.3E+07	5.0E+07
24	3.3E+07	1.5E+07	6.5E+06	1.6E+08	4.3E+07	1.3E+08	3.7E+08	1.8E+08	1.3E+08	3.0E+07	3.0E+08	7.0E+07
25	4.6E+07	1.4E+07	2.5E+06	2.0E+08	2.6E+07	1.3E+08	3.3E+08	5.4E+07	1.2E+08	6.0E+07	7.8E+08	1.4E+08
26	5.0E+07	6.3E+06	1.1E+06	1.9E+08	2.2E+07	2.7E+08	3.0E+08	5.8E+07	1.0E+08	6.6E+06	1.1E+09	1.3E+08
27	2.1E+07	2.3E+06	1.5E+06	1.8E+08	2.3E+08	2.8E+08	4.6E+07	7.3E+07	7.1E+07	5.7E+07	5.0E+08	1.2E+08
28	1.5E+07	4.0E+06	7.9E+07	7.5E+06	5.7E+08	2.5E+08	4.2E+07	6.2E+07	4.4E+06	1.2E+09	3.7E+08	6.4E+06
29	5.4E+06	1.2E+06	1.1E+08	7.1E+07	6.2E+08	2.2E+08	7.1E+07	4.3E+07	1.1E+08	1.8E+09	2.3E+08	1.1E+07
30	1.3E+06	1.6E+07	1.0E+08	6.1E+08	1.0E+08	1.9E+08	7.6E+07	4.5E+07		1.5E+09	2.5E+08	9.1E+06
31		3.5E+07	1.2E+08		1.9E+08		6.1E+07	5.7E+07		1.8E+09		1.3E+07

NOTE: The electron detector responds significantly to protons above 32 MeV; therefore, electron data are contaminated when a proton event is in progress. These days are indicated with '-999' in the table and are not plotted. '--' indicates data not available.
NOTE: GOES9 data began April, 1996 and ended on 26 July, 1998. GOES12 is primary satellite as of 15 May 2003.

CONTENTS

Prompt Reports Number 766 Part I

DATA FOR **APRIL 2008**

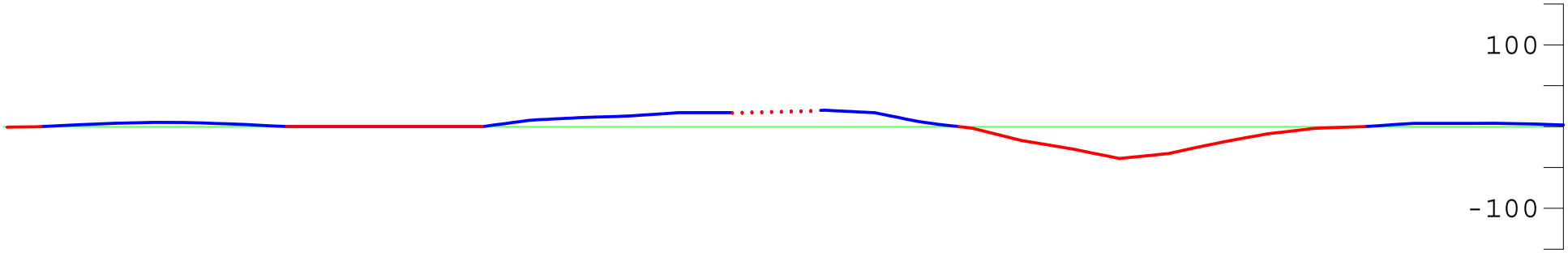
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 2068

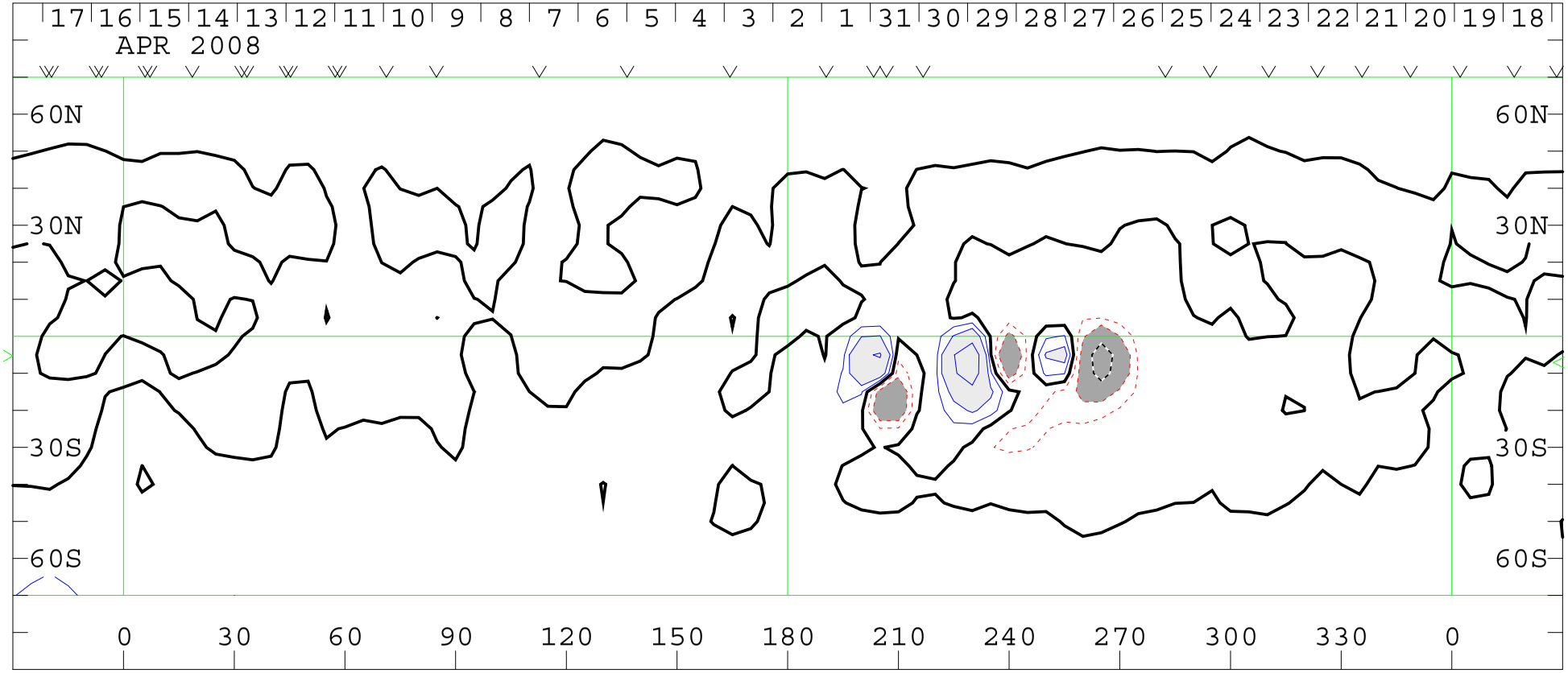
(20 Mar 2008 to 16 Apr 2008)

Wilcox Solar Observatory

Mean Field



WSO - Photospheric Magnetic Field 0, ±100, 200, 500, 1000, 2000 MicroTesla

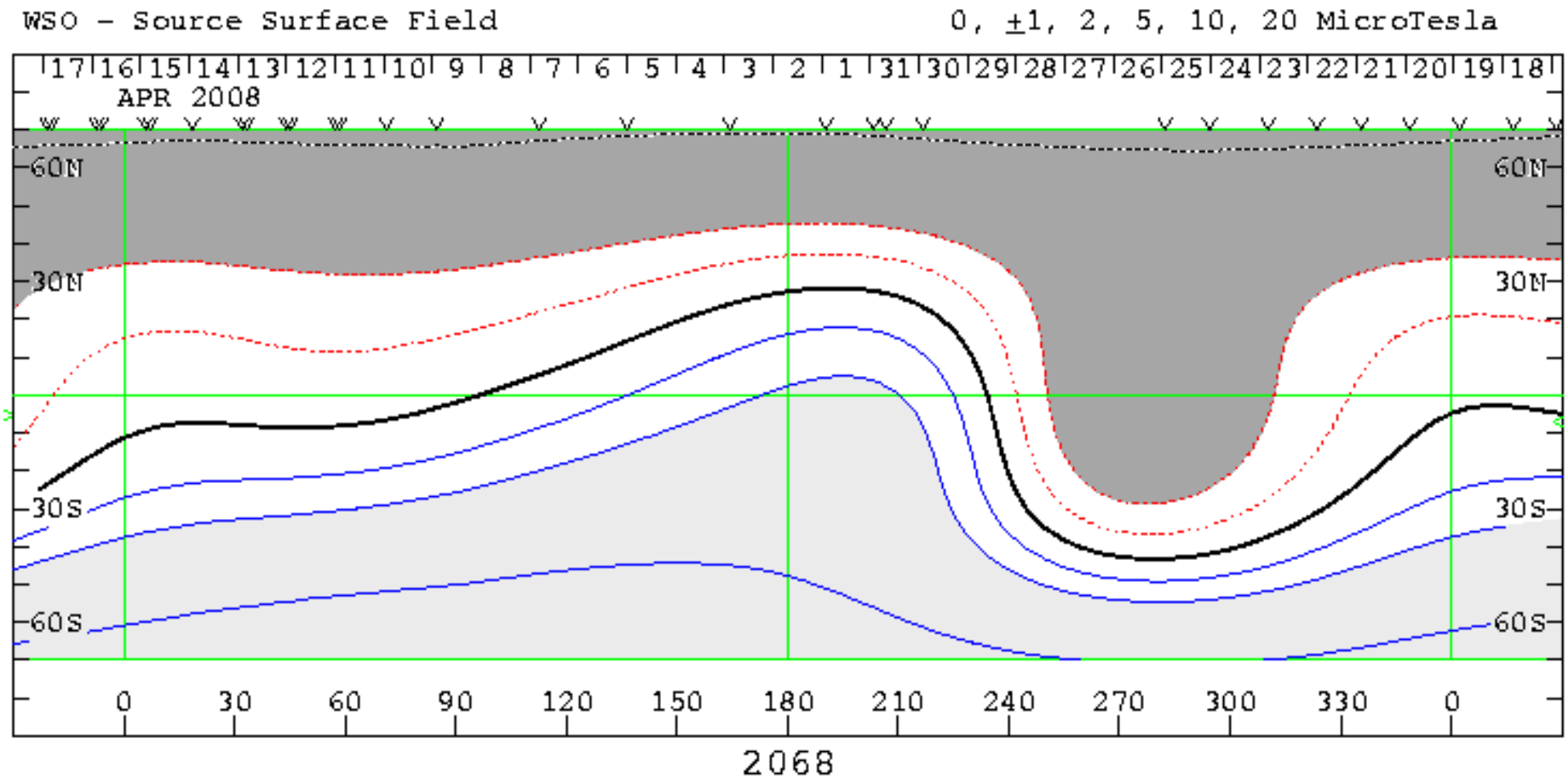


S O L A R M A G N E T I C F I E L D S Y N O P T I C C H A R T

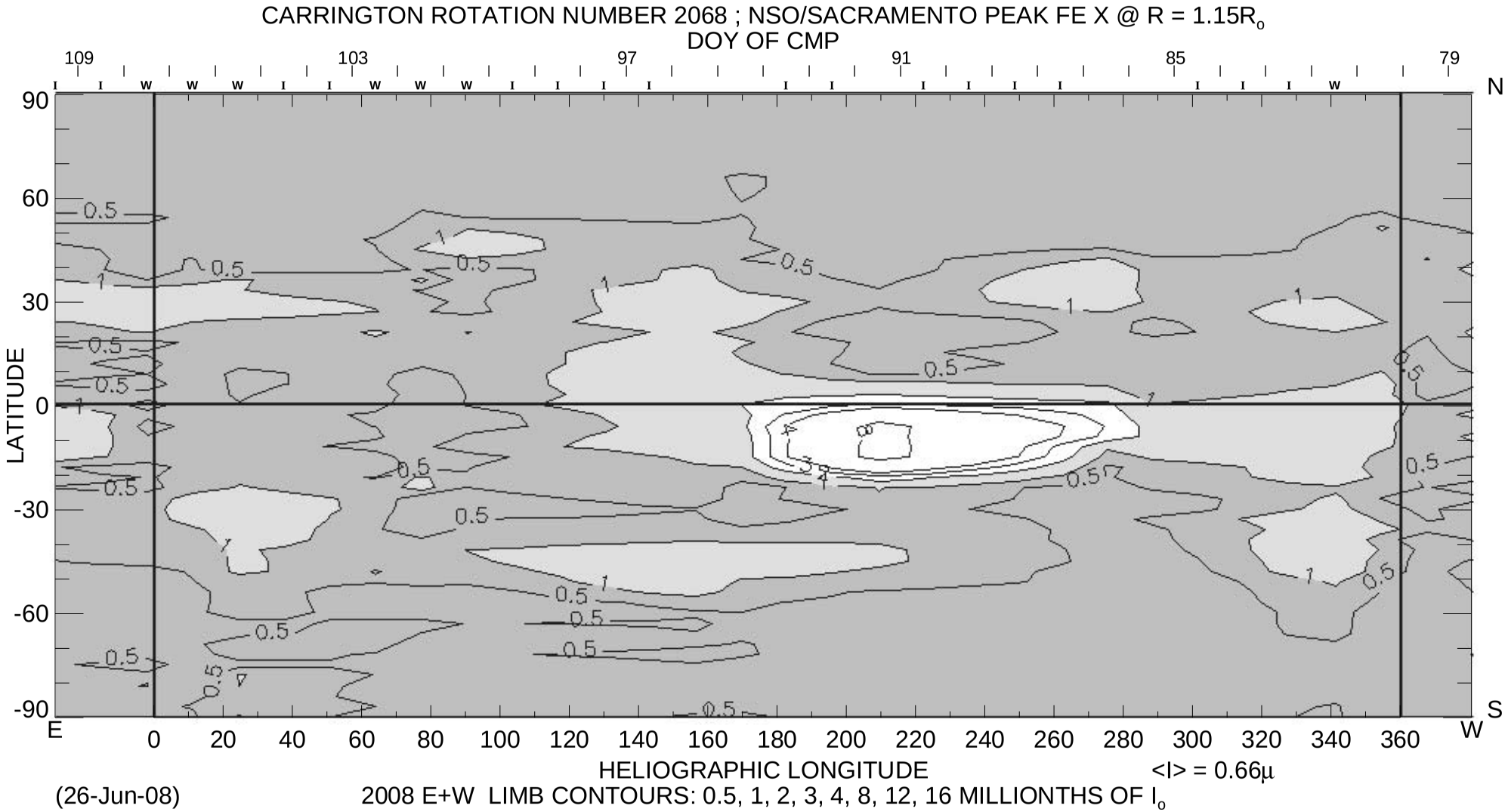
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 2068

(20 Mar 2008 to 16 Apr 2008)

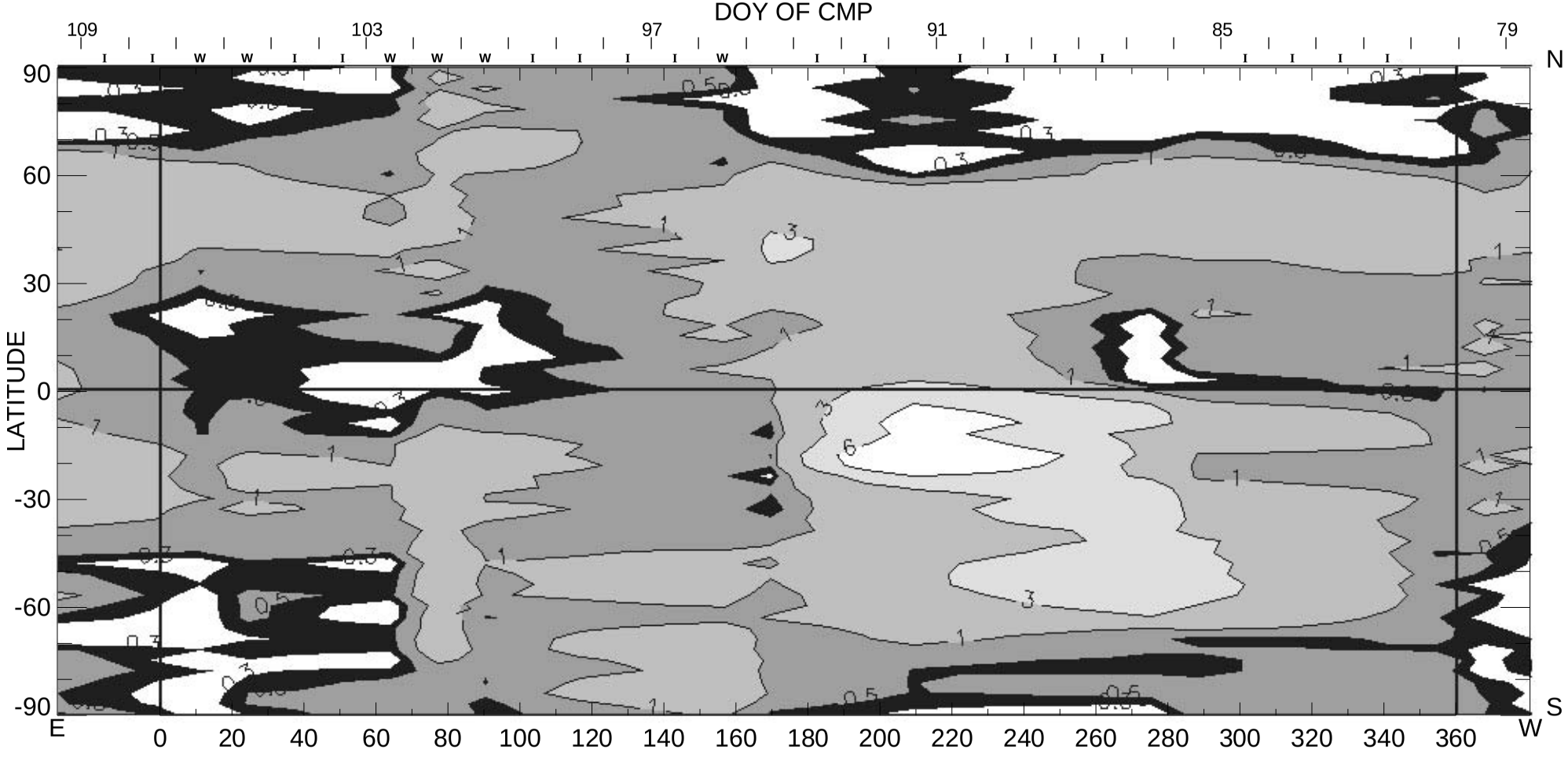


Heliographic Longitude



tex Thu Jun 26 11:45:19 2008

CARRINGTON ROTATION NUMBER 2068 ; NSO/SACRAMENTO PEAK FE XIV @ R = 1.15R_o

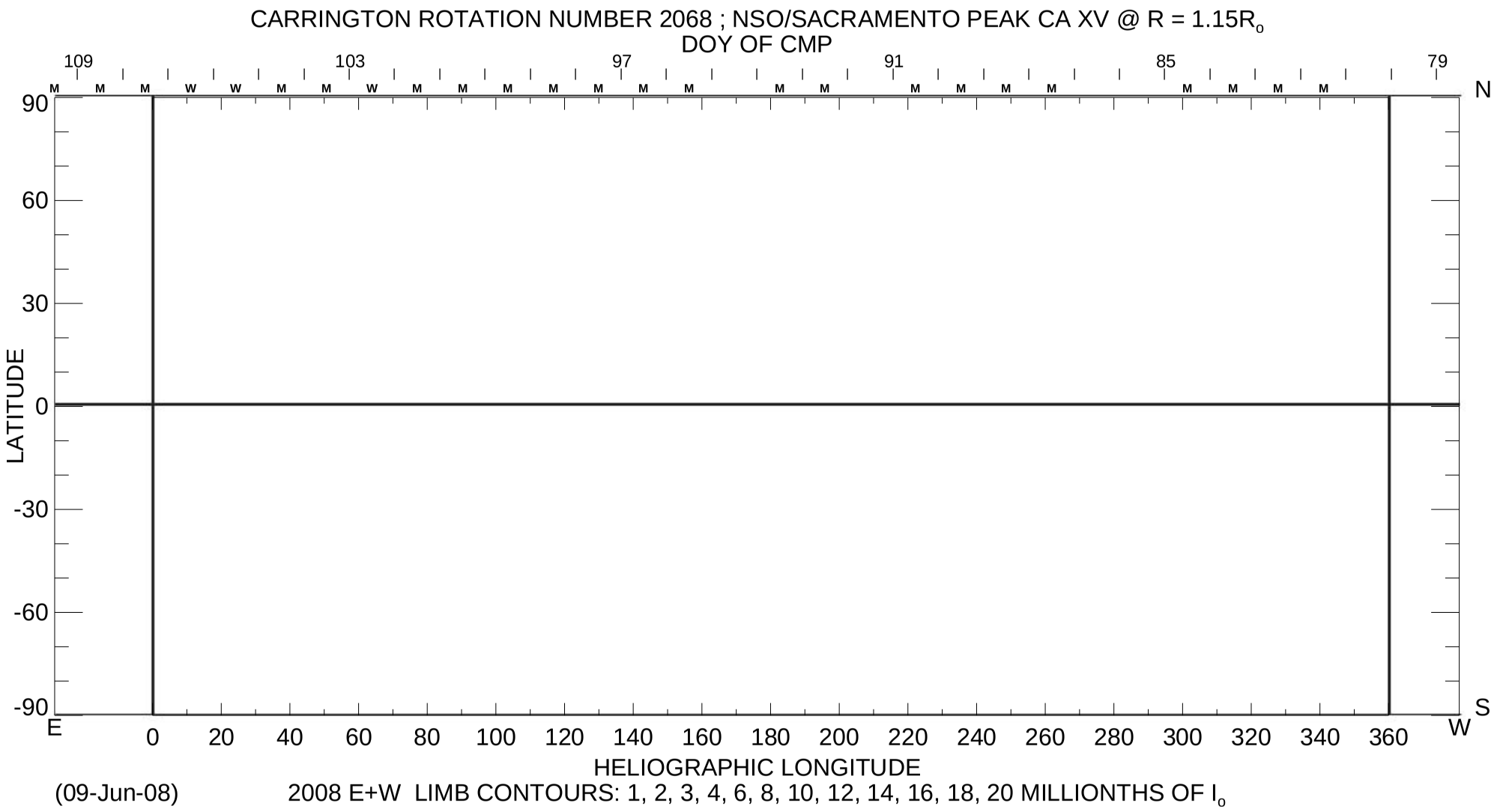


<I> = 1.14μ

(09-Jun-08) 2008 E+W LIMB CONTOURS: 0.3, 0.5, 1, 3, 6, 50, 60, 80, 120, 140, 160 MILLIONTHS OF I_o

CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

tex Mon Jun 9 15:12:25 2008



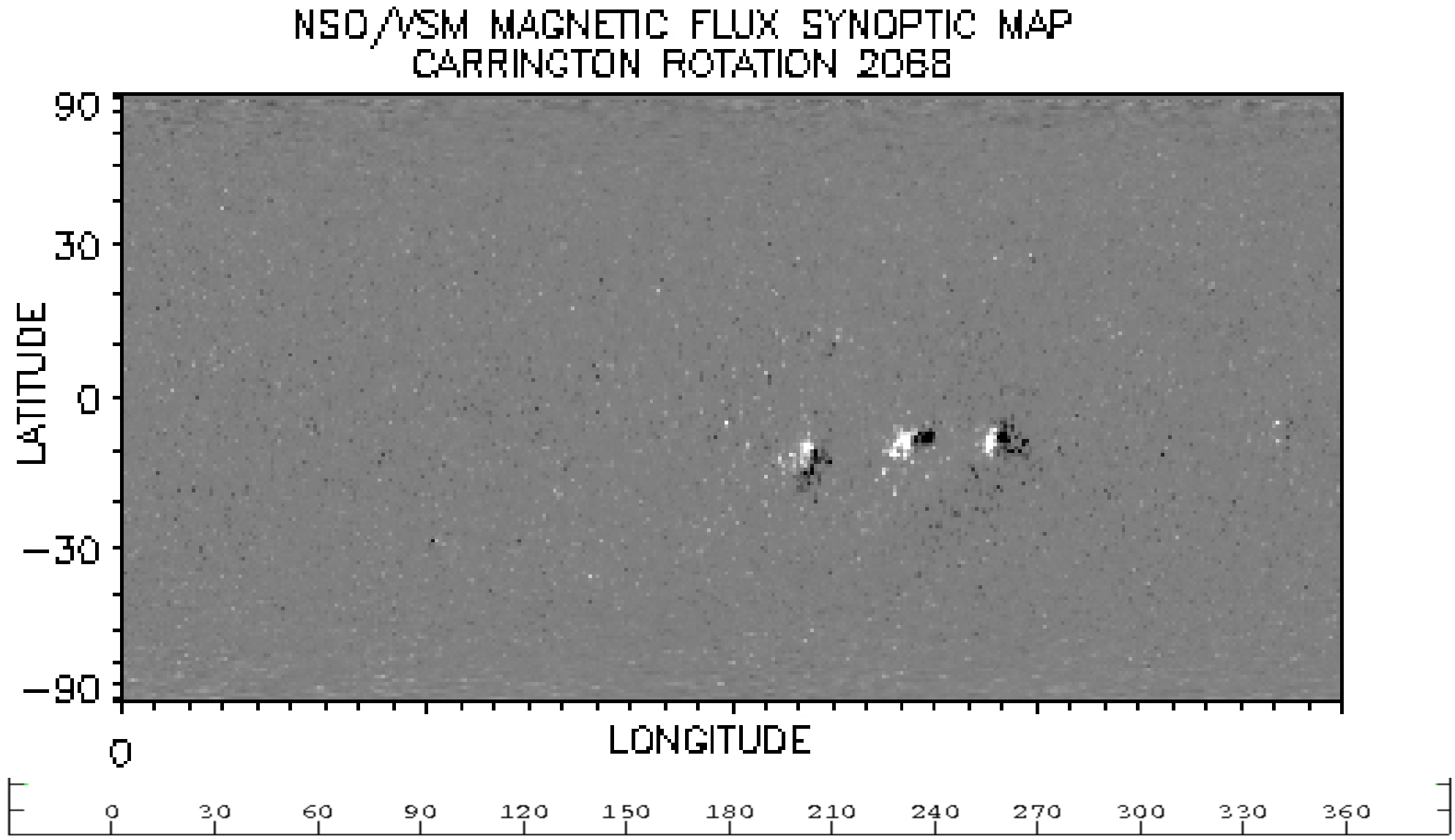
tex Mon Jun 9 15:12:59 2008

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 2068

(20 Mar 2008 to 16 Apr 2008)

National Solar Observatory/Kitt Peak



Heliographic Longitude

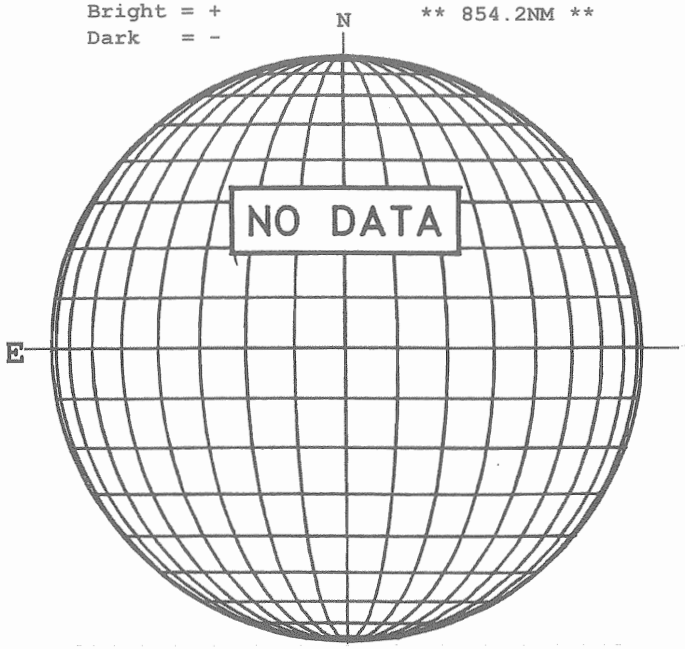
April 01, 2008 (P=-26.17, Bo=-6.53, Lo= 202.44)

Apr 08 40

KITT PEAK MAGNETOGRAM -- SOLIS

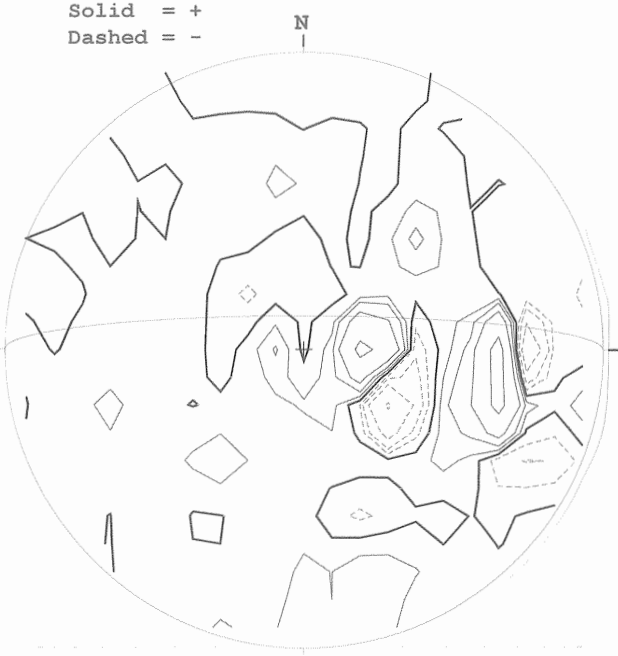
Bright = +
Dark = -

** 854.2NM **



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

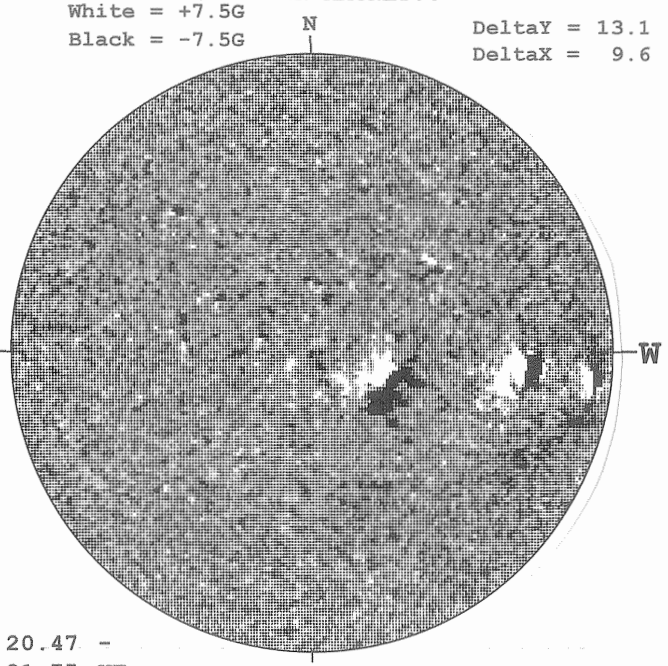


2142 UT

MT. WILSON MAGNETOGRAM

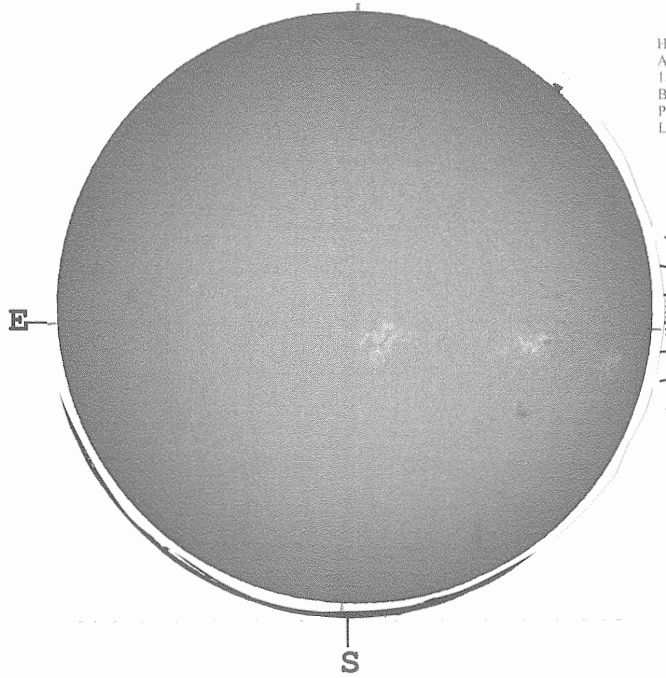
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



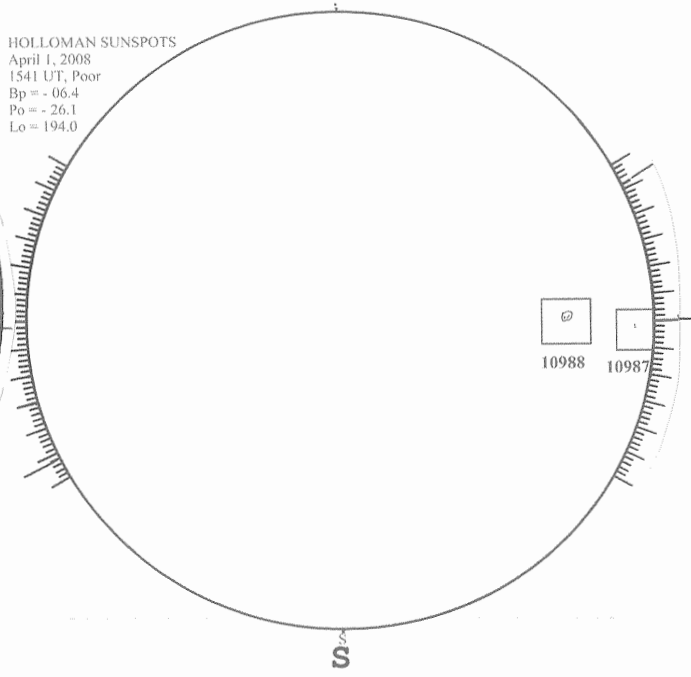
20.47 -
21.75 UT

--- YUNNAN H-ALPHA



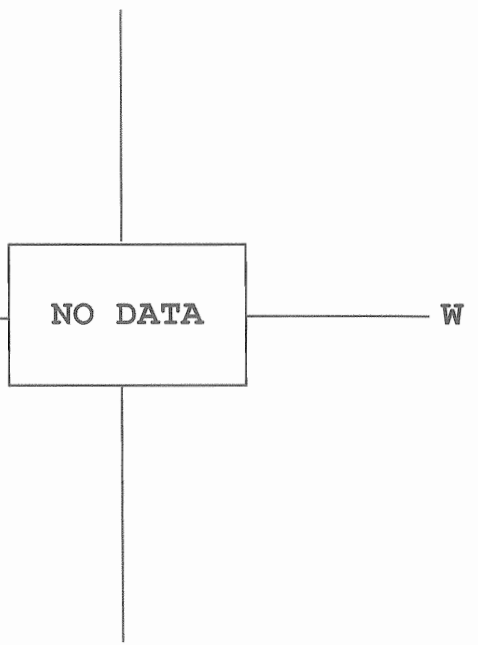
0623 UT

HOLLOMAN SUNSPOTS



1541 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----

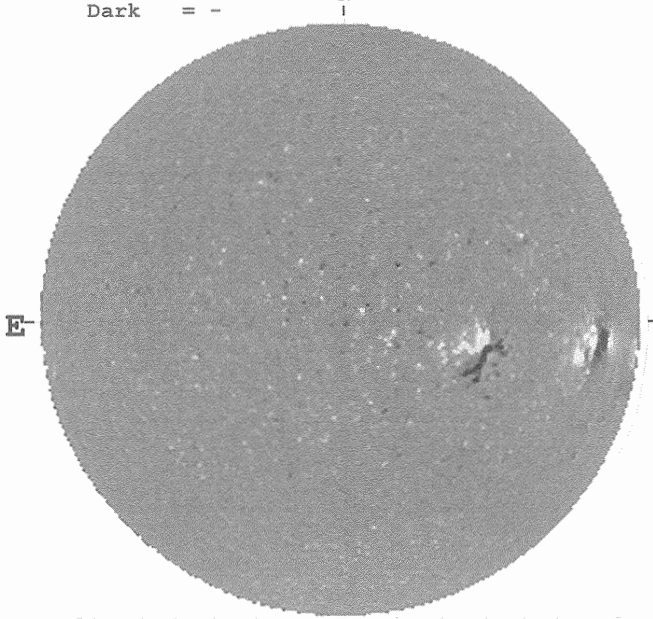


April 02, 2008 (P=-26.21, Bo=-6.47, Lo= 189.24)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

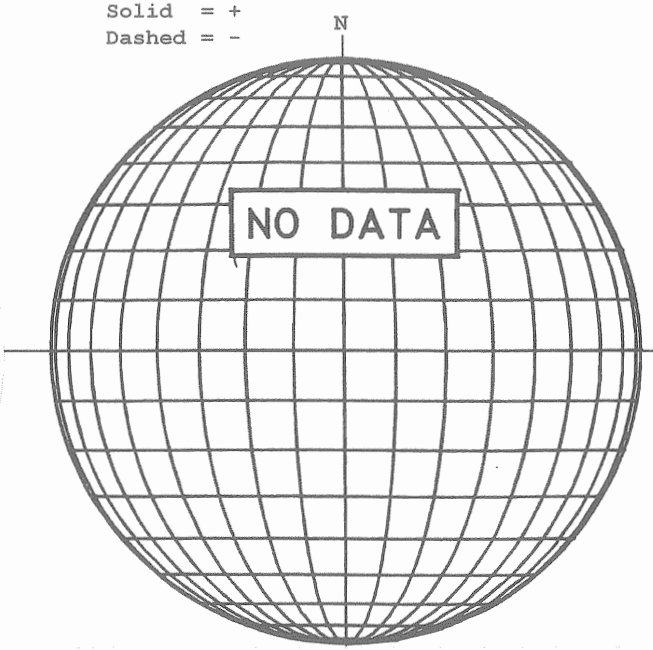
** 854.2NM **



2200 UT

STANFORD MAGNETOGRAM

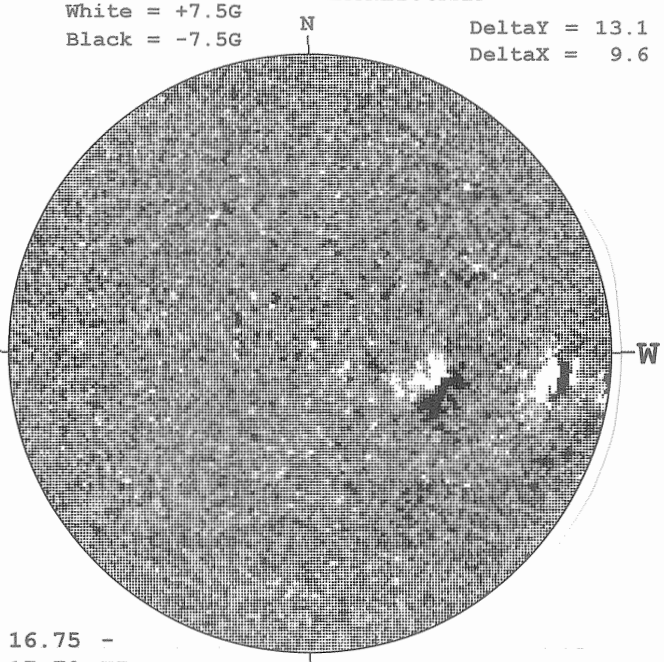
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

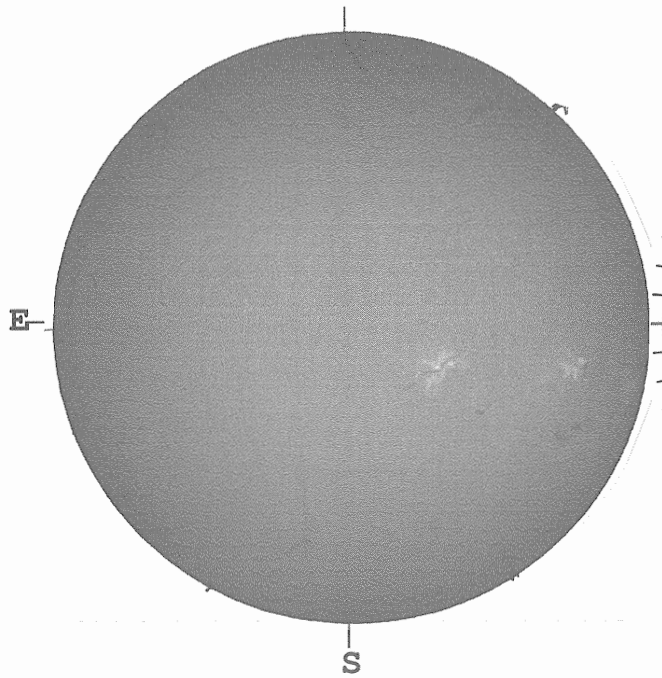
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



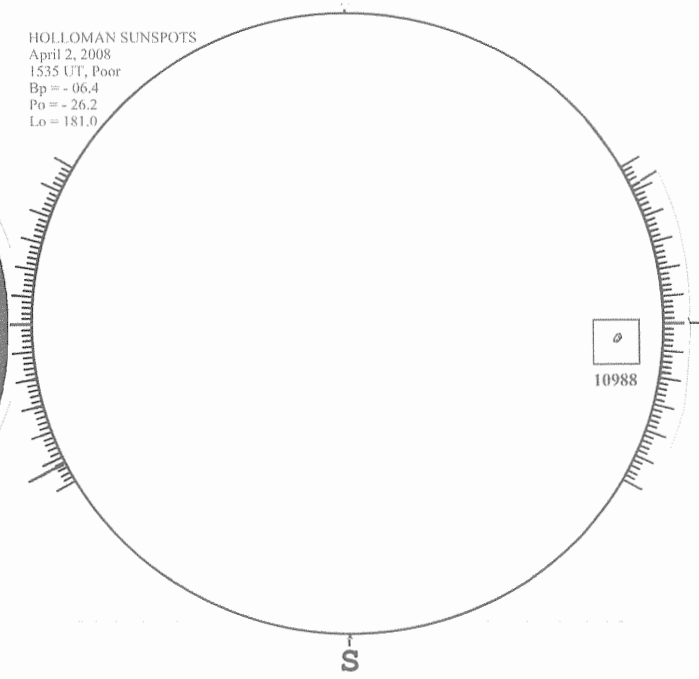
16.75 -
17.70 UT

--- YUNNAN H-ALPHA



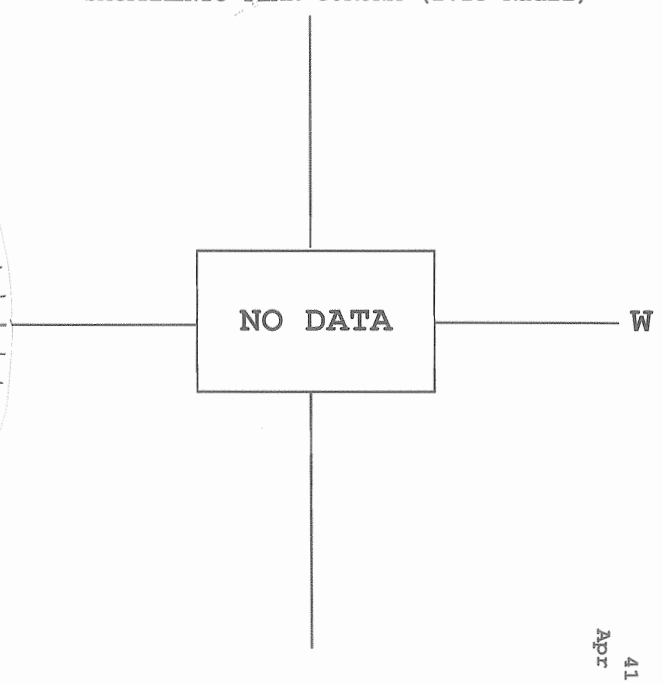
0354 UT

HOLLOMAN SUNSPOTS



1535 UT

SACRAMENTO PEAK CORONA (1.15 Radii) -----

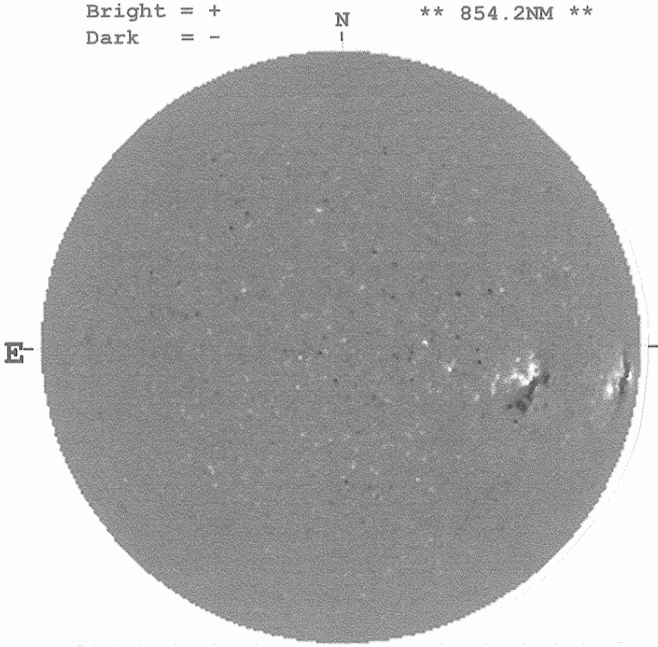


41
Apr 08

April 03, 2008 (P=-26.24, Bo=-6.41, Lo= 176.05)

Apr 08 42

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
** 854.2NM **

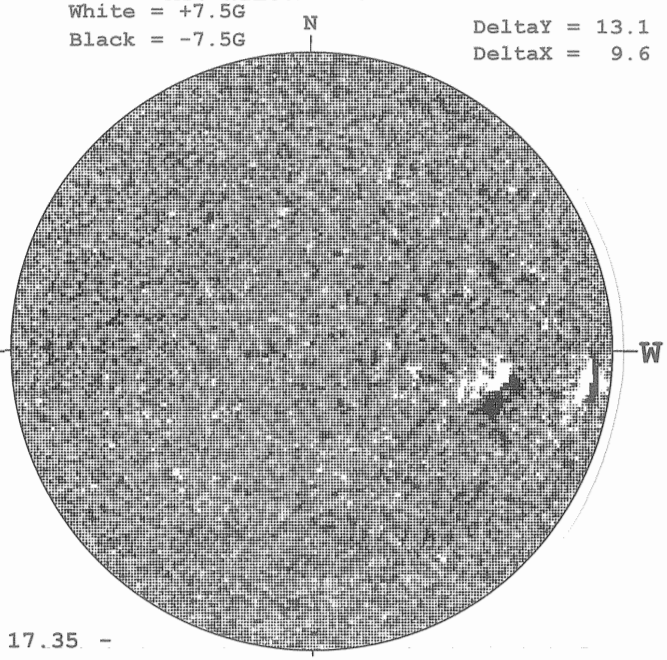


1859 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

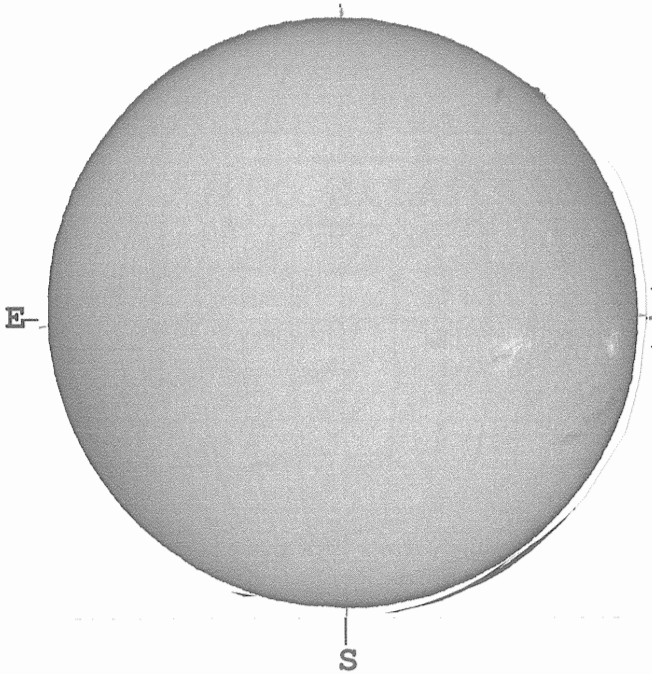
2108 UT

MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



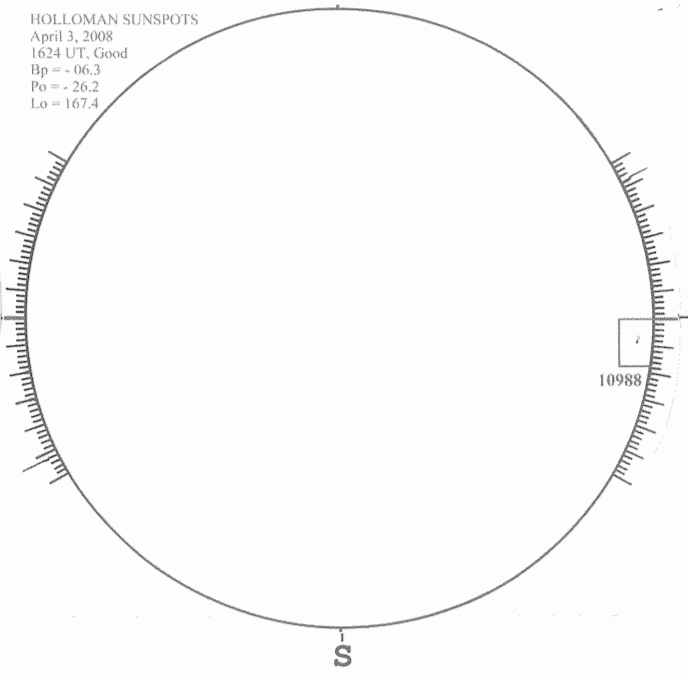
17.35 -
18.29 UT

MEUDON H-ALPHA



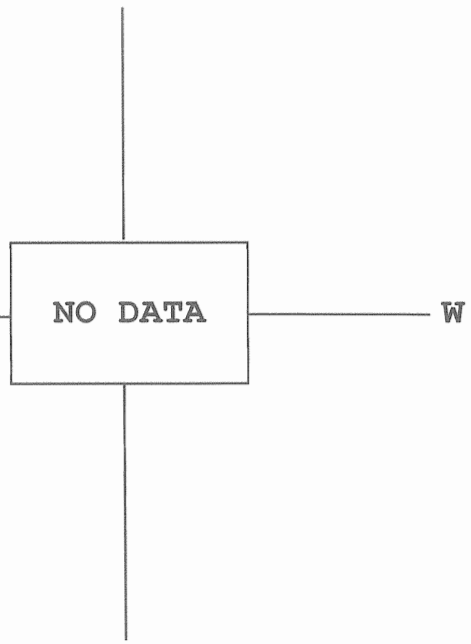
1201 UT

HOLLOMAN SUNSPOTS



1624 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----

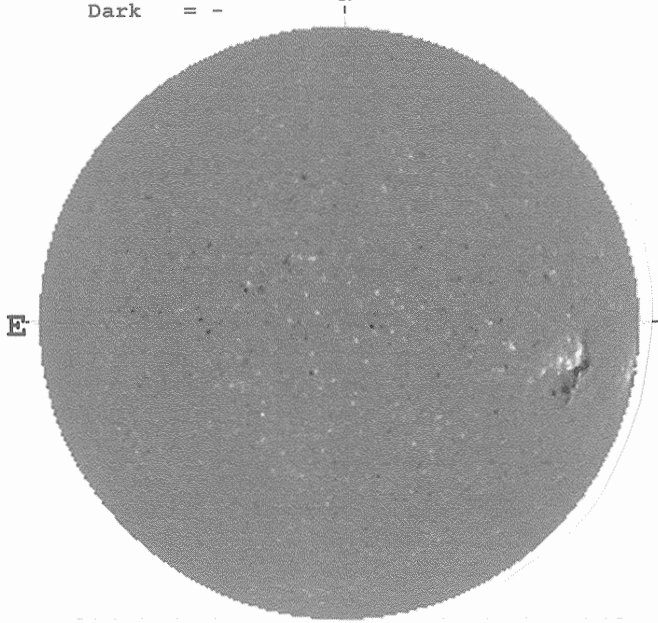


April 04, 2008 (P=-26.26, Bo=-6.36, Lo= 162.86)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

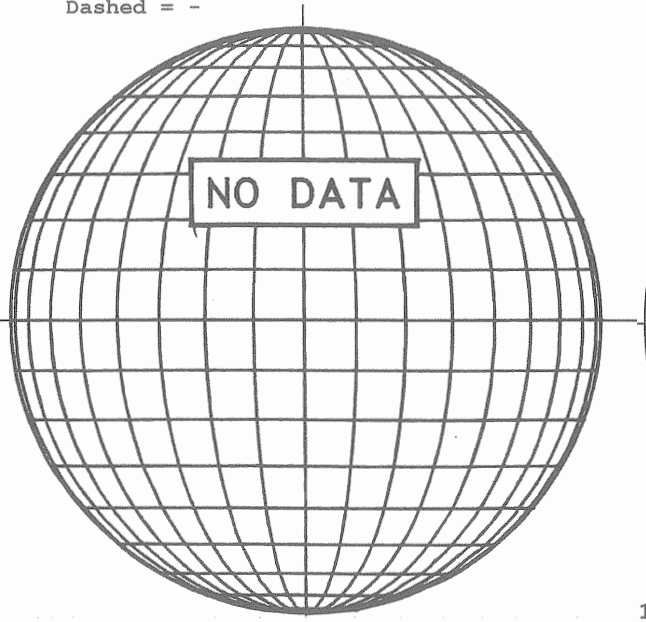
** 854.2NM **



1921 UT

STANFORD MAGNETOGRAM

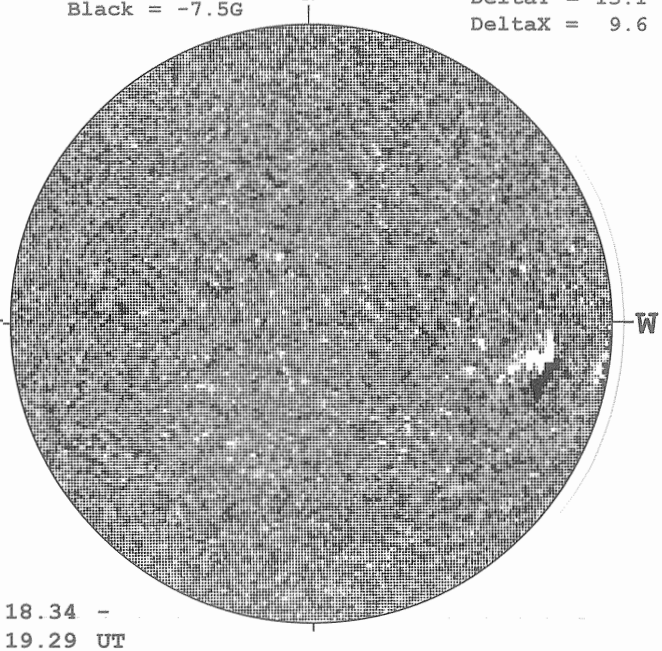
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

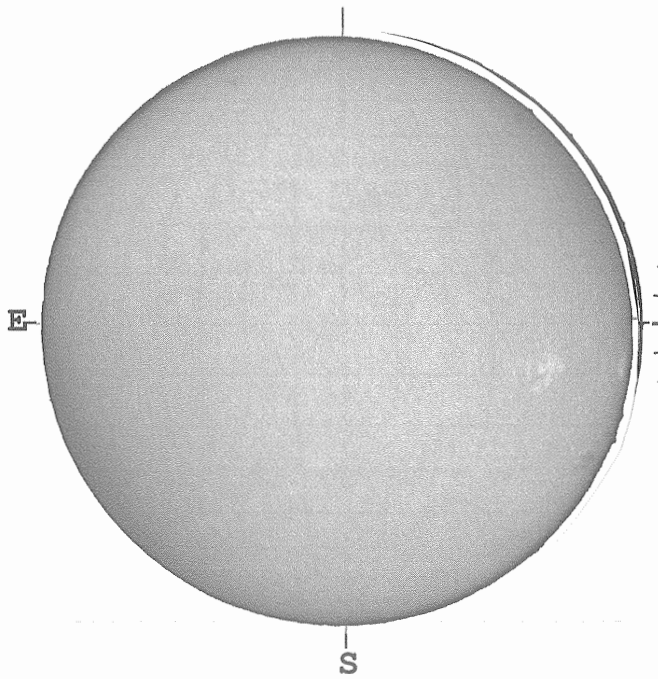
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



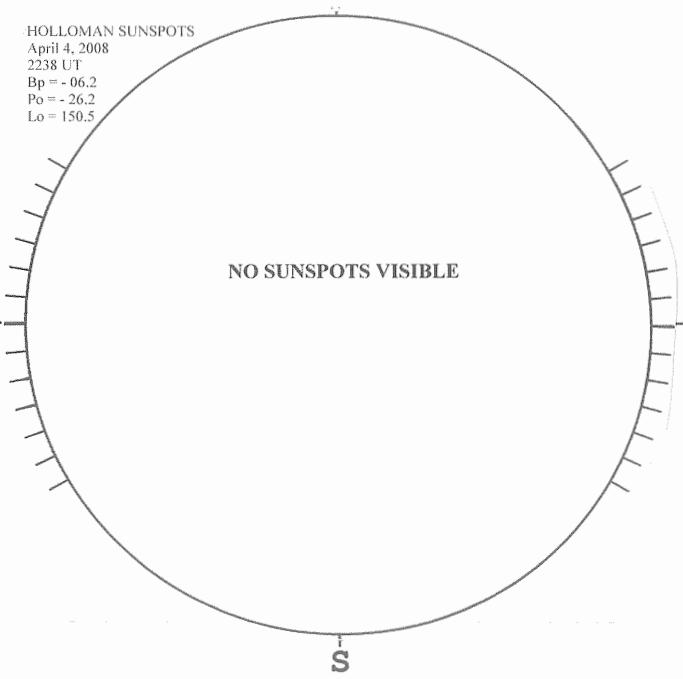
18.34 -
19.29 UT

--- MEUDON H-ALPHA



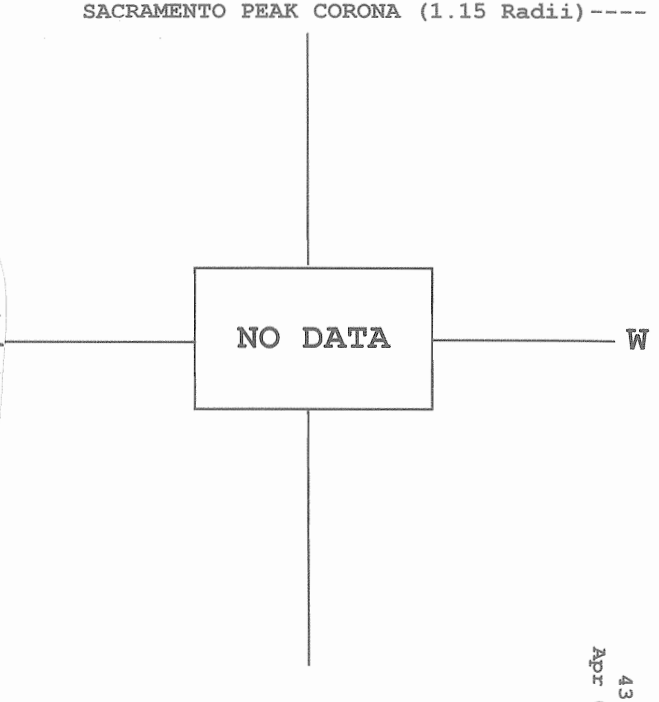
0735 UT

HOLLOMAN SUNSPOTS



2238 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



43
Apr 08

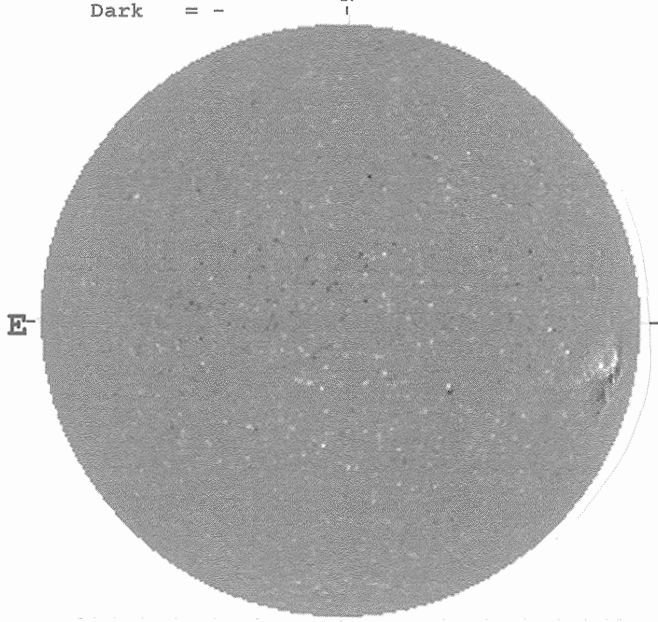
April 05, 2008 (P=-26.27, Bo=-6.29, Lo= 149.66)

Apr 08 44

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

** 854.2NM **



2002 UT

STANFORD MAGNETOGRAM

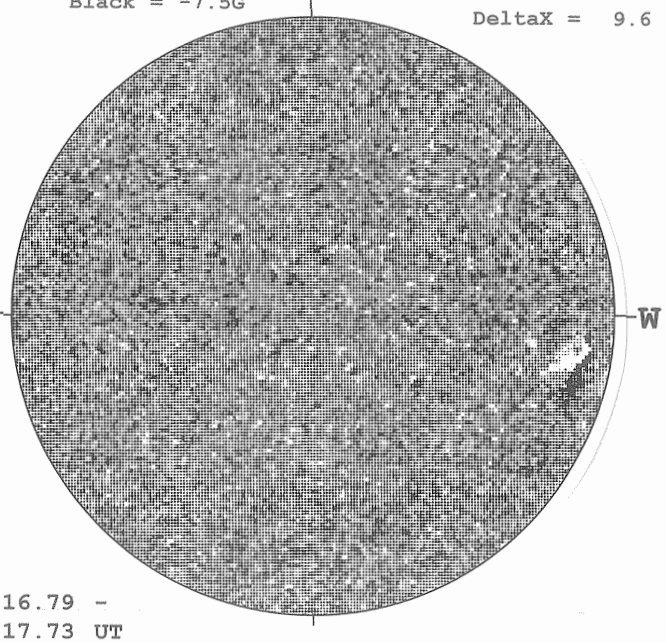
Solid = +
Dashed = -

2351 UT

MT. WILSON MAGNETOGRAM

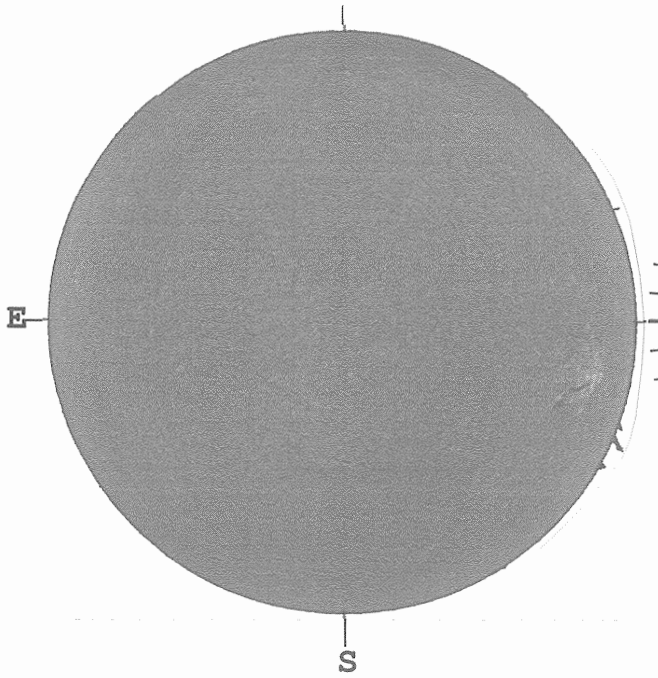
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



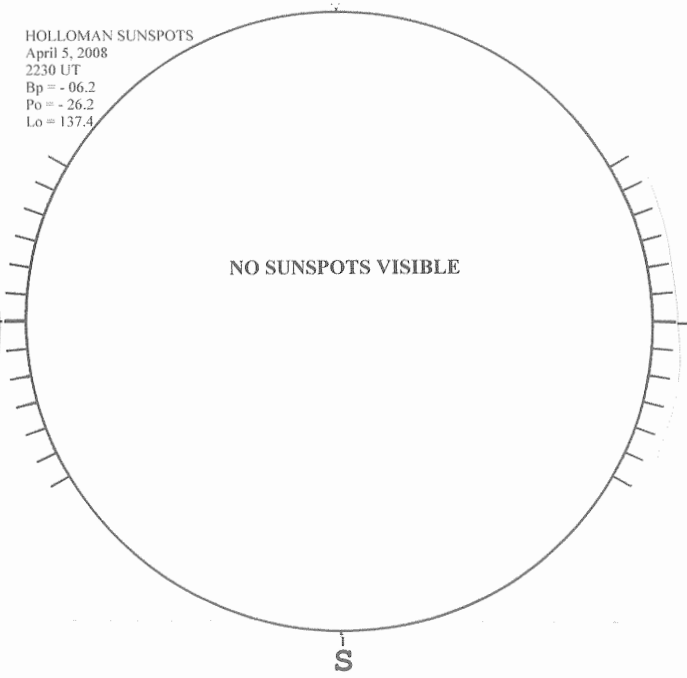
16.79 -
17.73 UT

CATANIA H-ALPHA



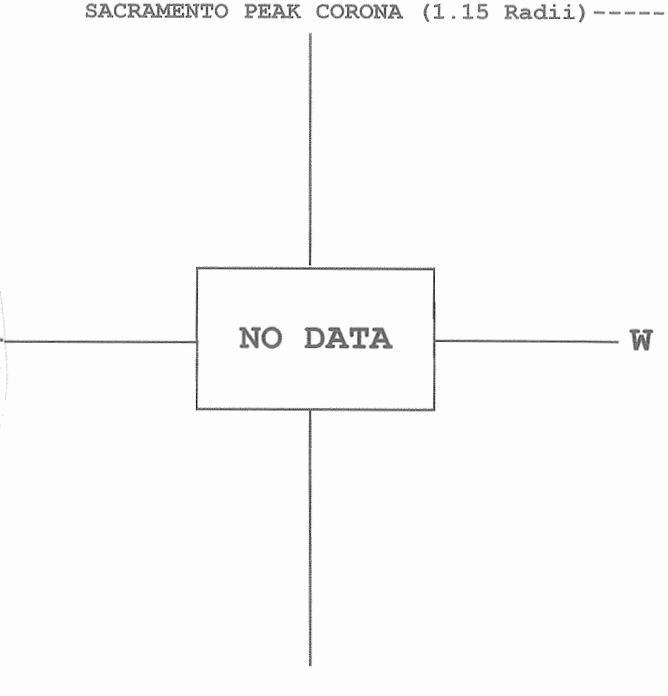
0842 UT

HOLLOMAN SUNSPOTS



2230 UT

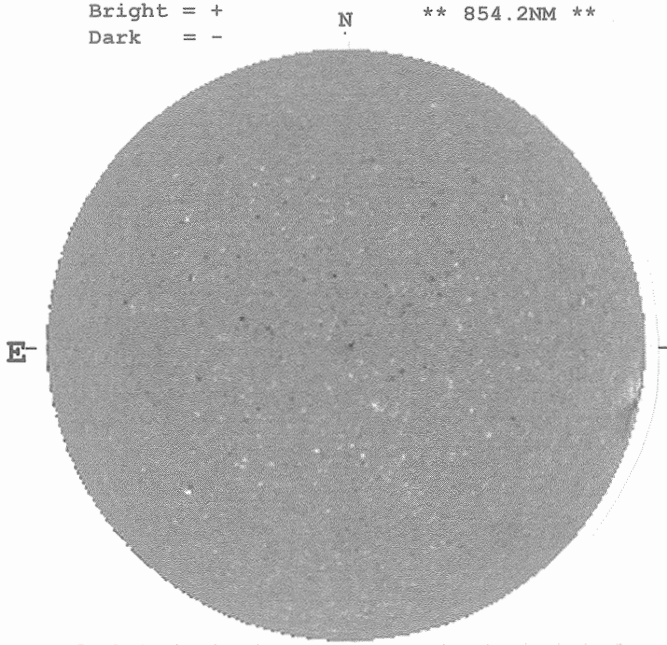
SACRAMENTO PEAK CORONA (1.15 Radii)-----



April 06, 2008 (P=-26.28, Bo=-6.23, Lo= 136.47)

KITT PEAK MAGNETOGRAM -- SOLIS

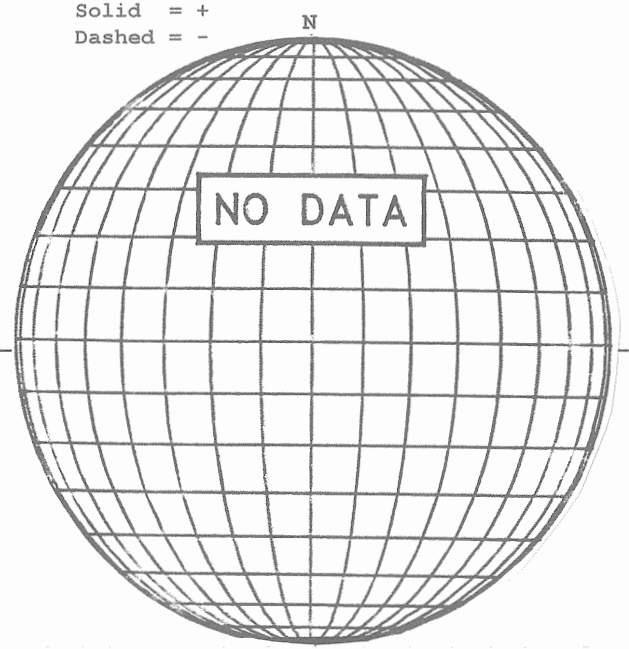
Bright = +
Dark = -



2031 UT

STANFORD MAGNETOGRAM

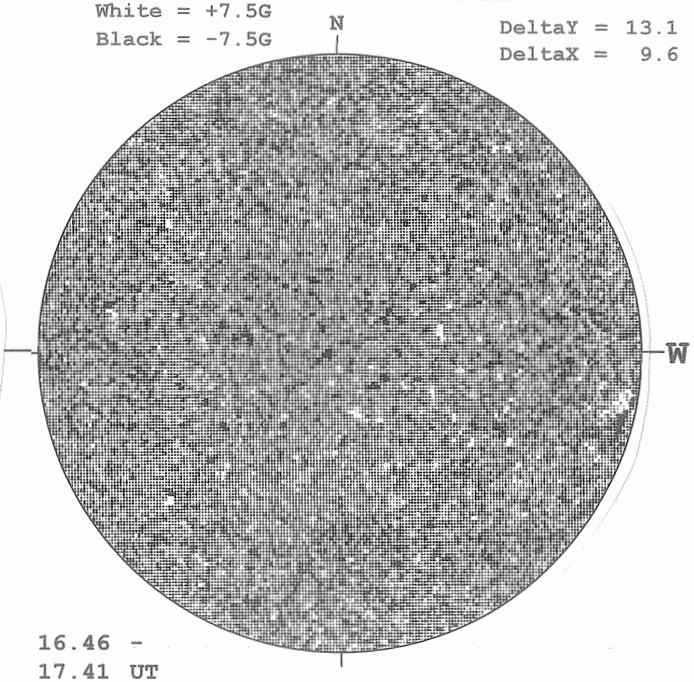
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

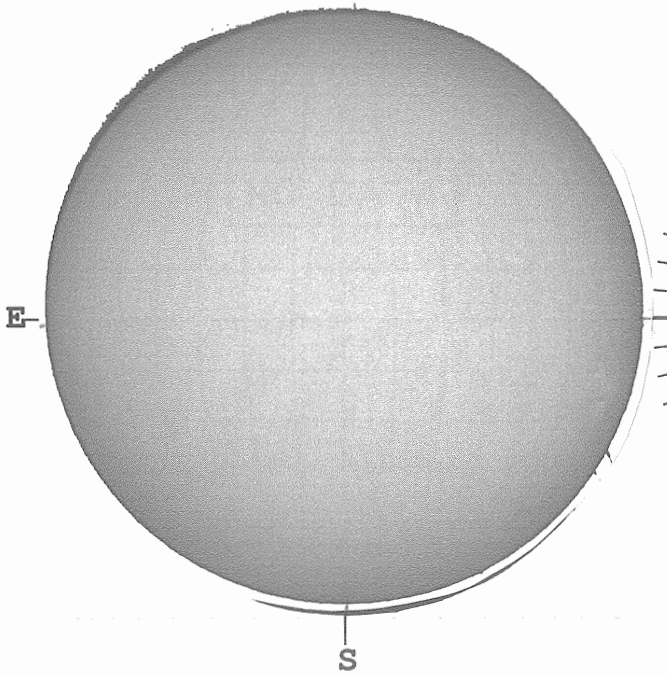
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



16.46 -
17.41 UT

YUNNAN H-ALPHA

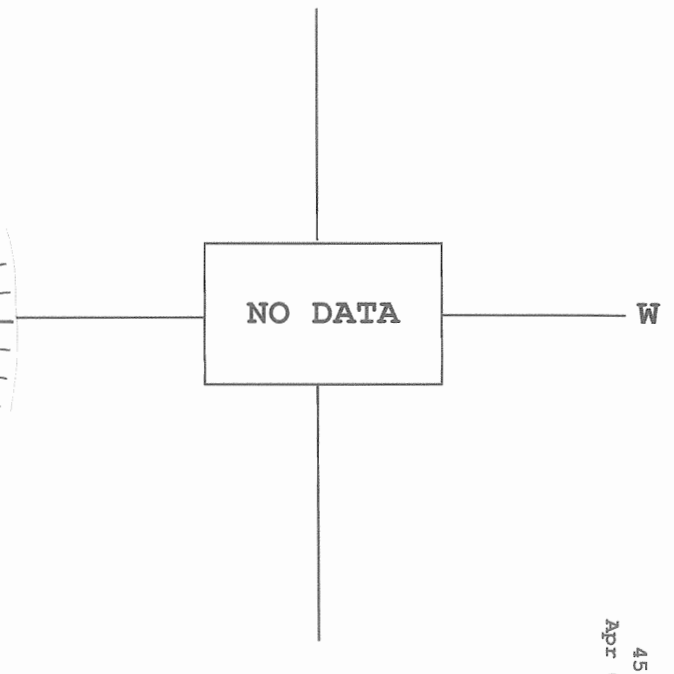


0244 UT

HOLLOMAN SUNSPOTS

2245 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----



45
Apr 08

April 07, 2008 (P=-26.28, Bo=-6.17, Lo= 123.27)

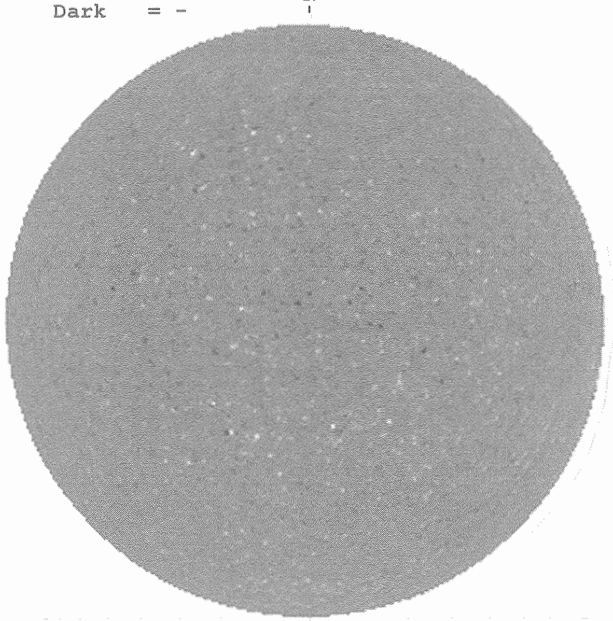
Apr 08 46

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

N

** 854.2NM **

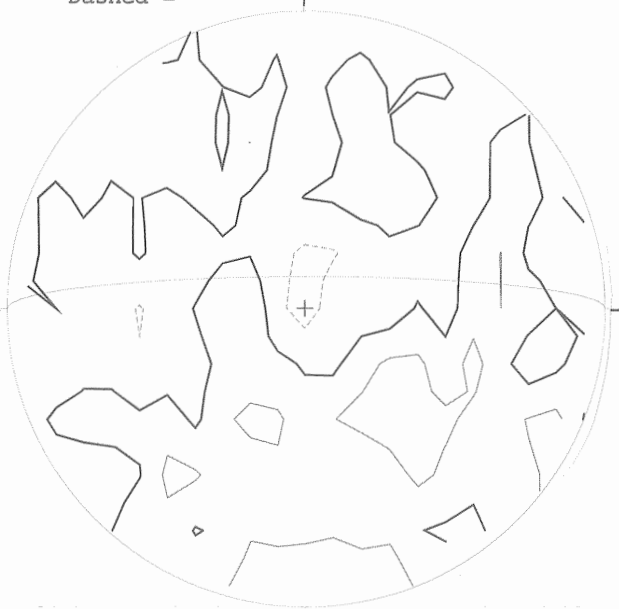


2006 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

N



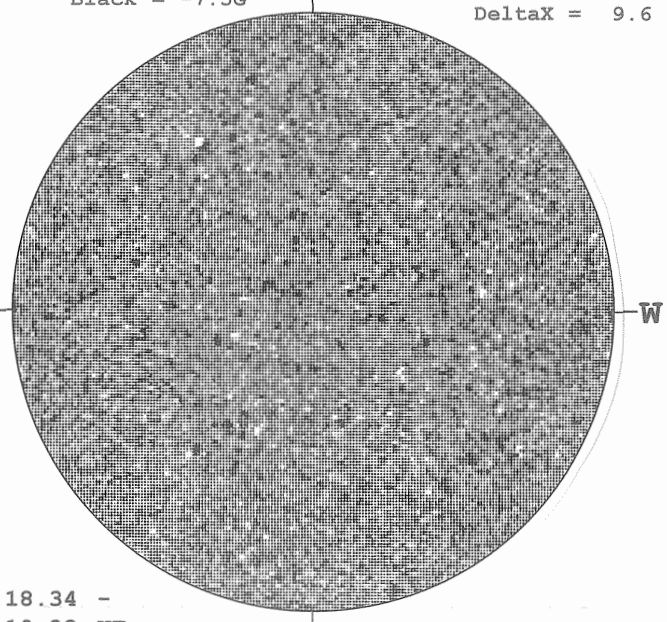
1908 UT

MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

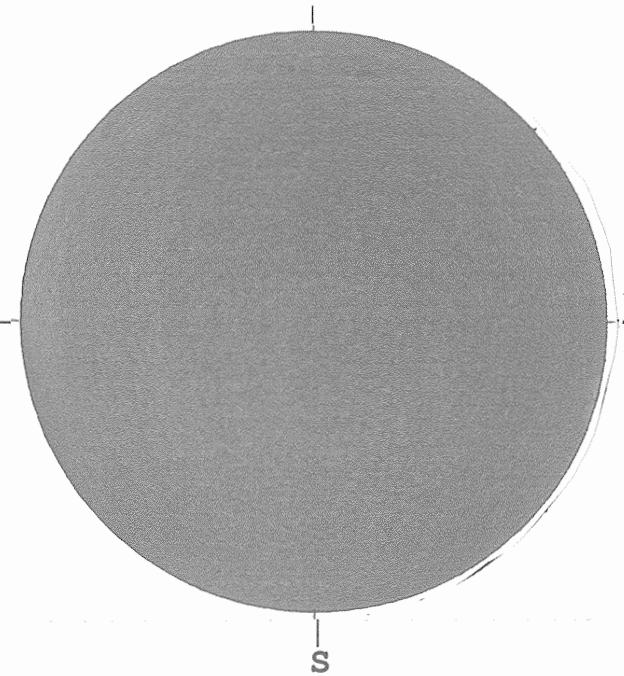
N

DeltaY = 13.1
DeltaX = 9.6



18.34 -
19.28 UT

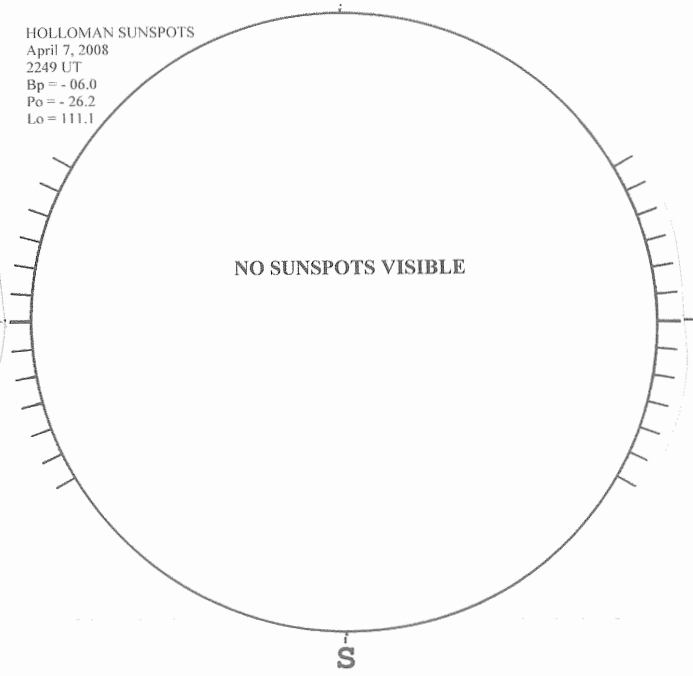
CATANIA H-ALPHA



0801 UT

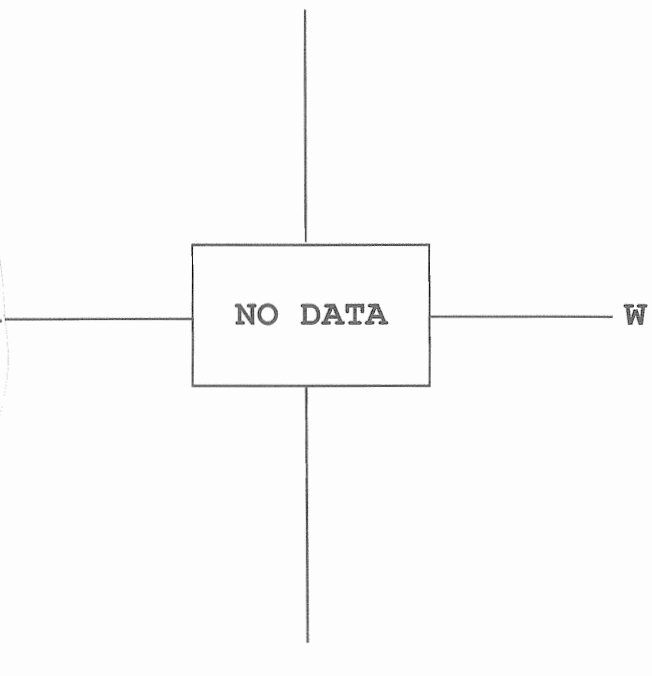
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 7, 2008
2249 UT
Bp = - 06.0
Po = - 26.2
Lo = 111.1



2249 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

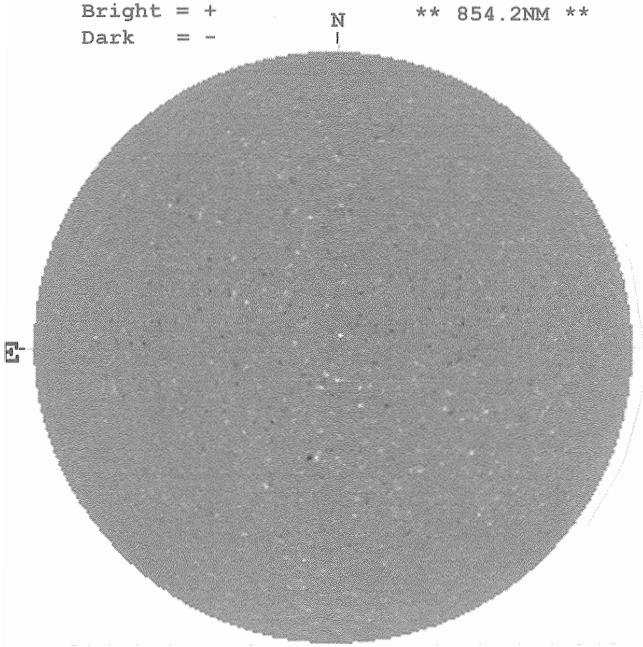


April 08, 2008 (P=-26.27, Bo=-6.10, Lo= 110.07)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

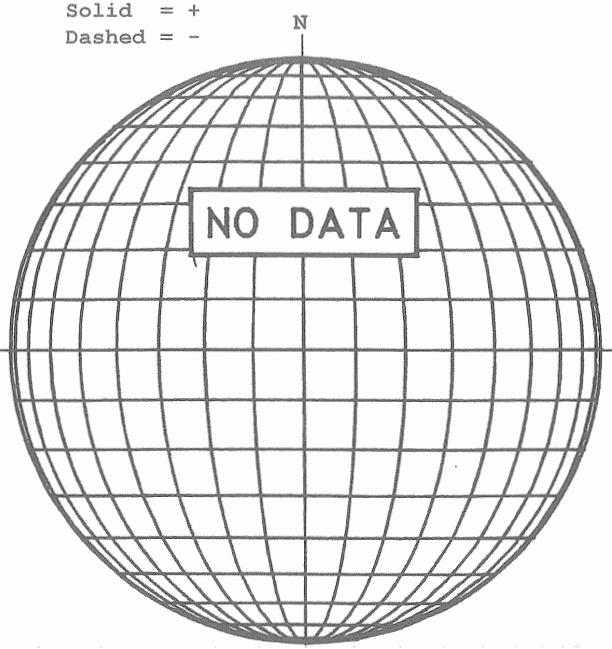
** 854.2NM **



1947 UT

STANFORD MAGNETOGRAM

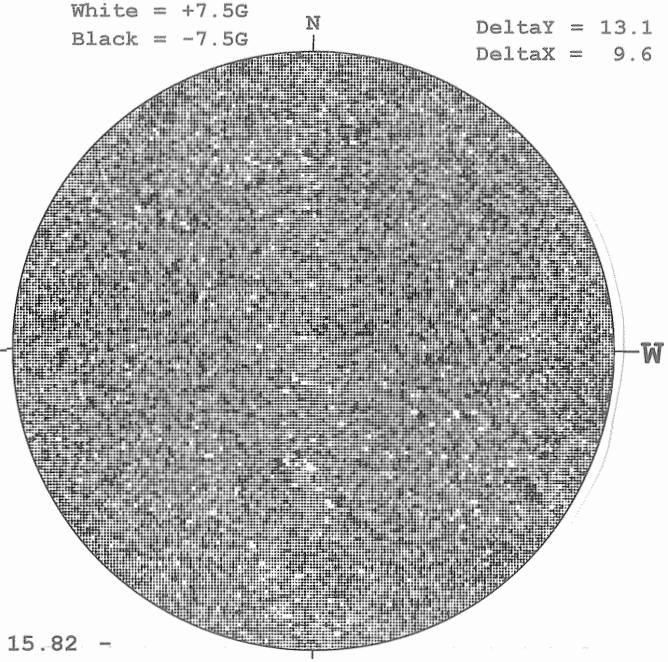
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

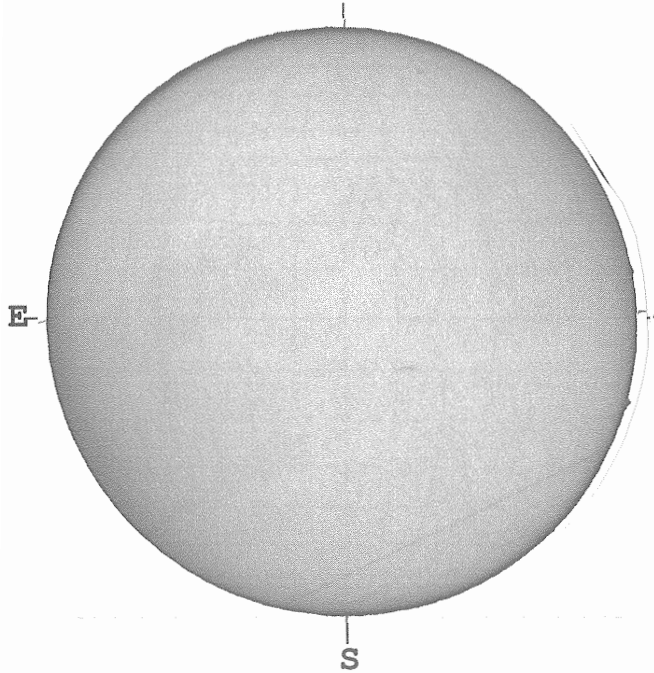
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



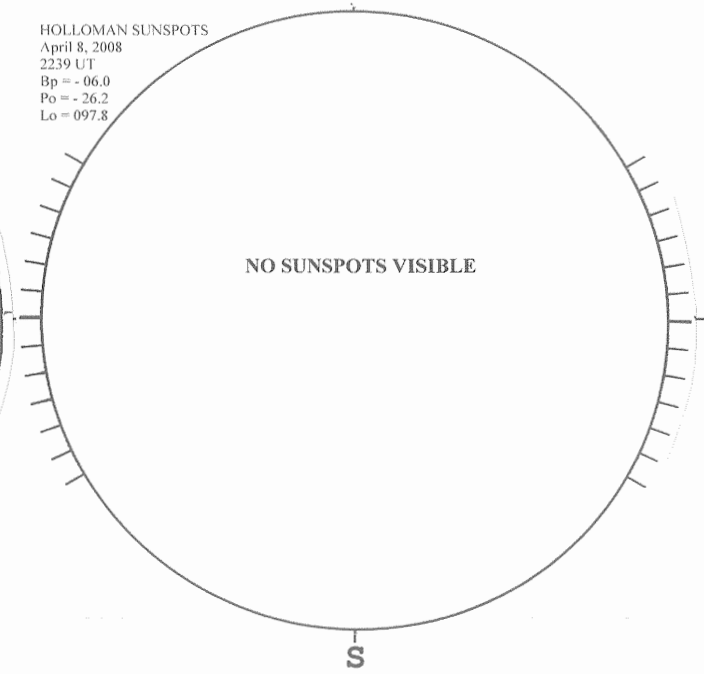
15.82 -
16.77 UT

--- MEUDON H-ALPHA



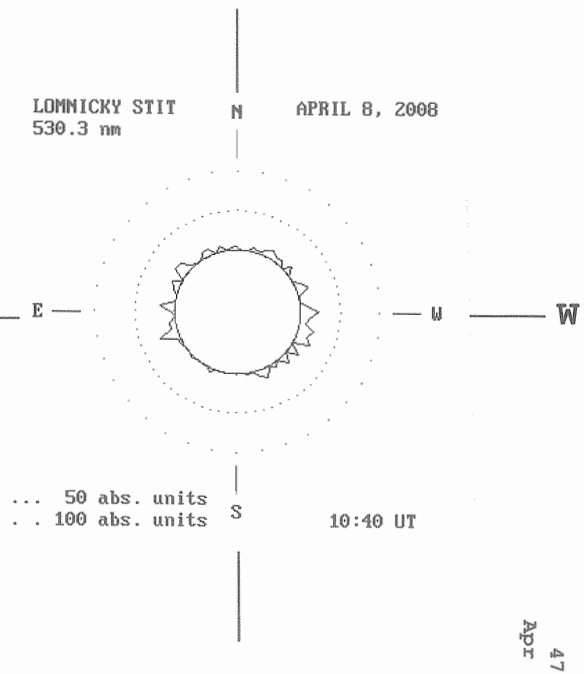
0806 UT

HOLLOMAN SUNSPOTS



2239 UT

LOMNICKY PEAK CORONA (1.04 Radii)------



47
Apr 08

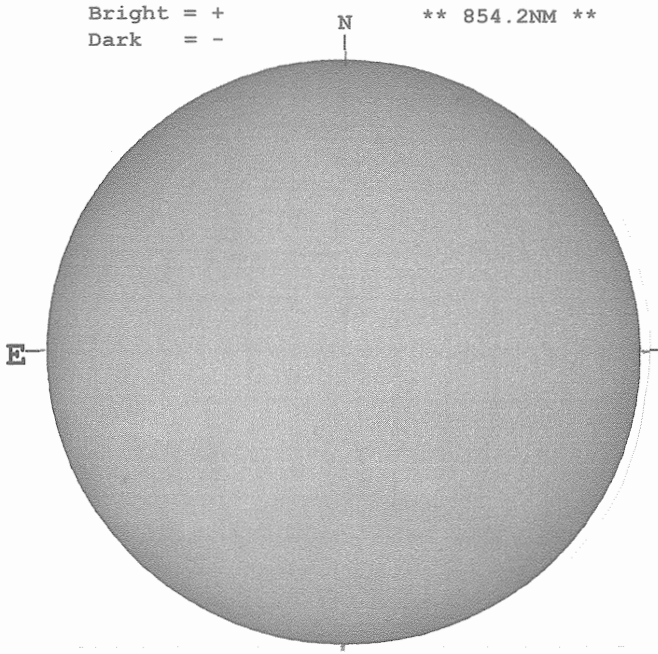
April 09, 2008 (P=-26.26, Bo=-6.03, Lo= 96.87)

Apr 08 48

KITT PEAK MAGNETOGRAM -- SOLIS

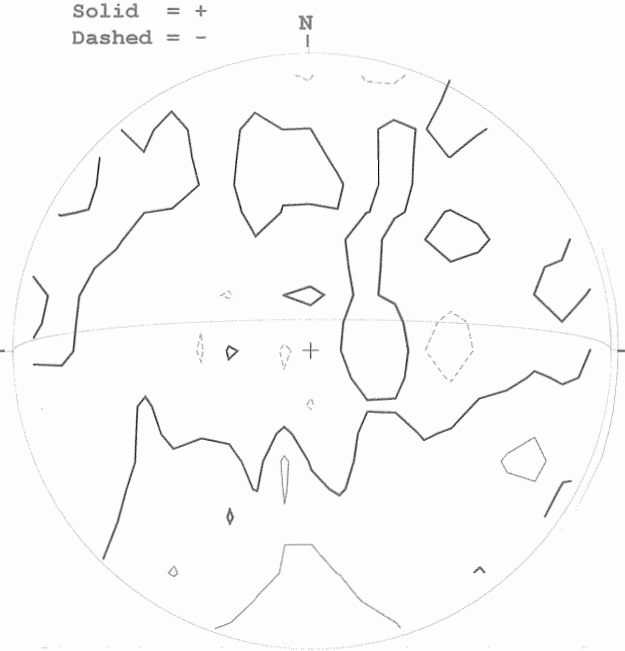
Bright = +
Dark = -

** 854.2NM **



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

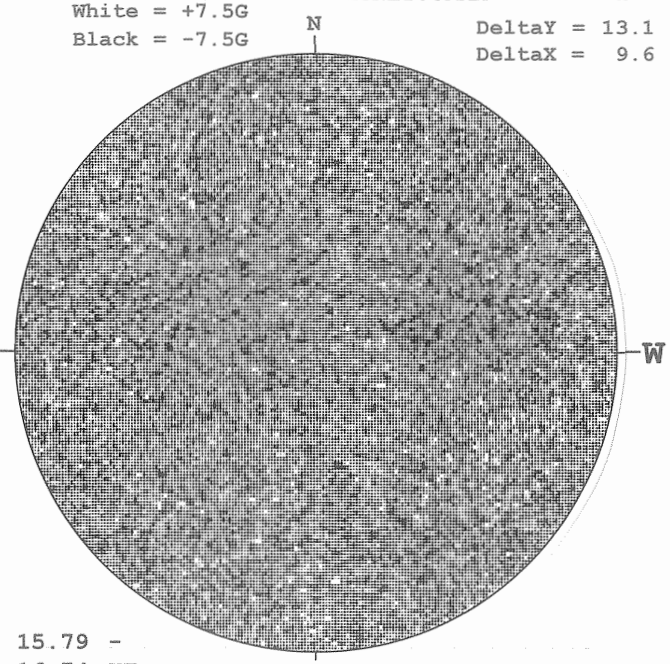


2151 UT

MT. WILSON MAGNETOGRAM

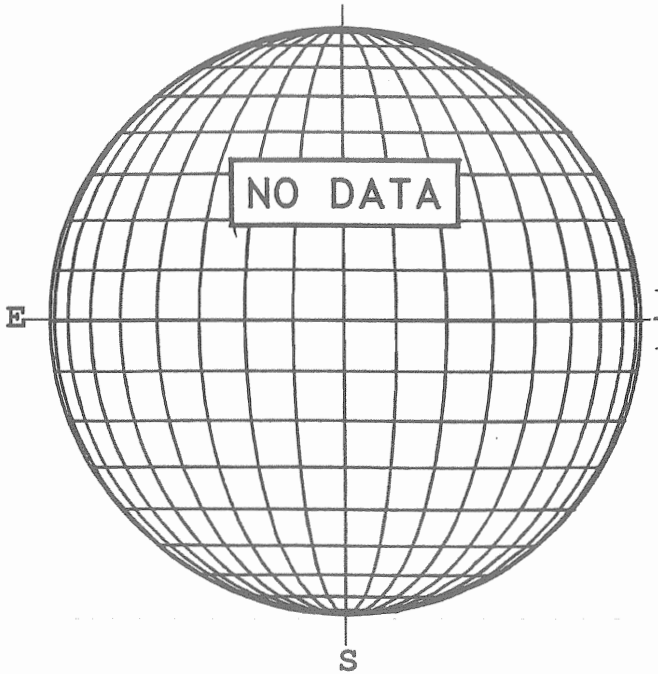
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



15.79 -
16.74 UT

BIG BEAR H-ALPHA

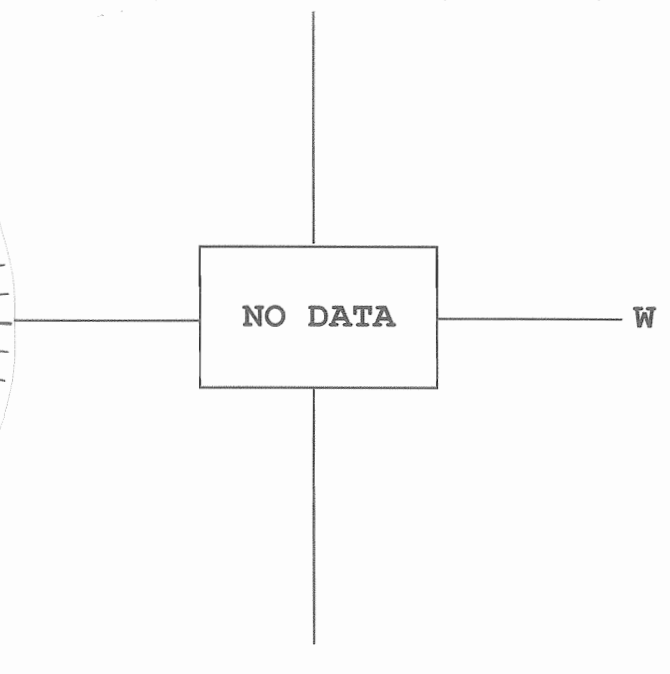


1559 UT

HOLLOMAN SUNSPOTS

2259 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



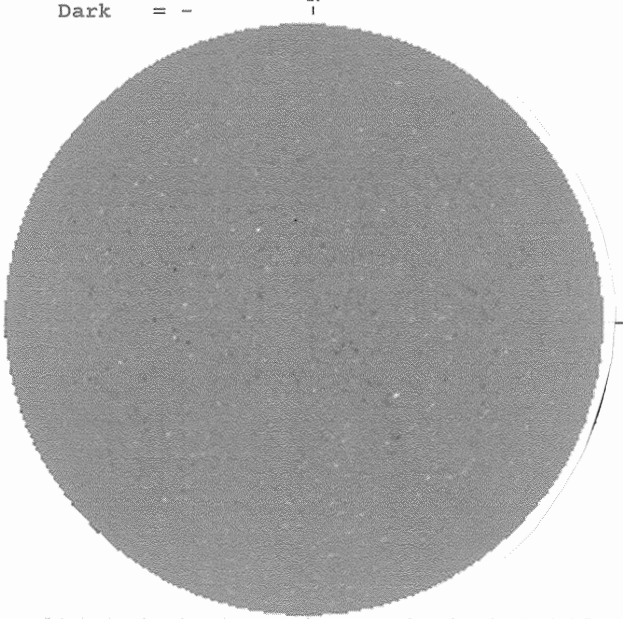
April 10, 2008 (P=-26.24, Bo=-5.96, Lo= 83.67)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

N

** 854.2NM **



2121 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

N

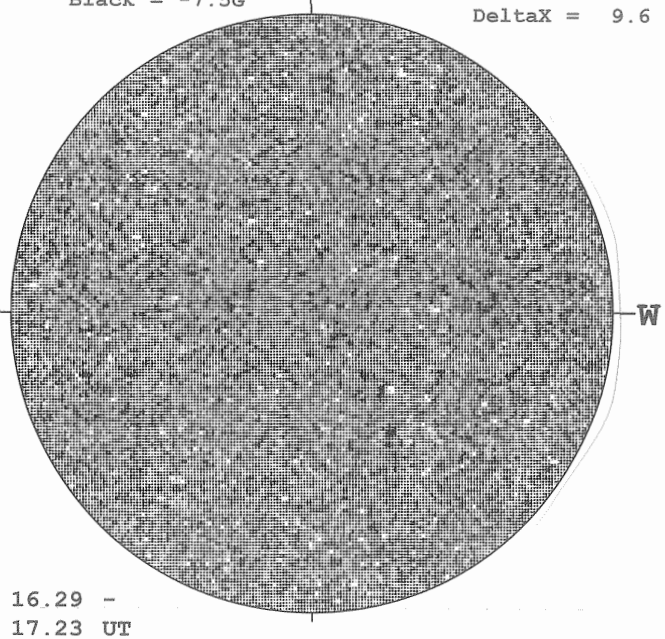
2232 UT

MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

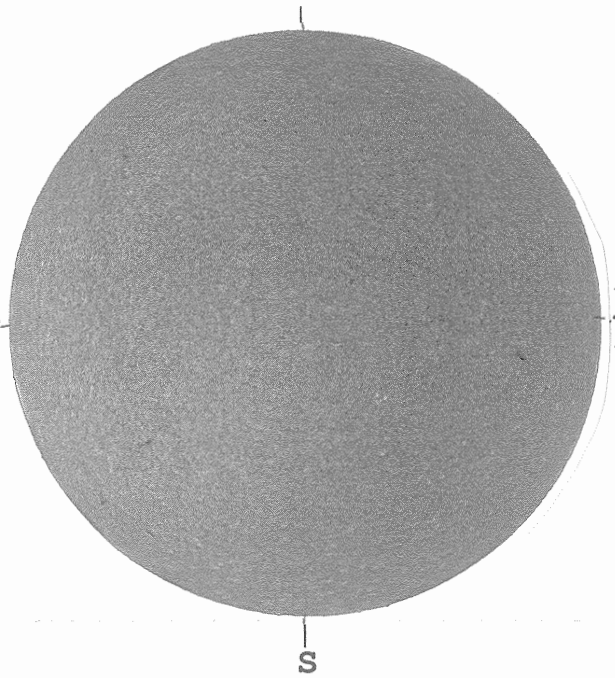
N

DeltaY = 13.1
DeltaX = 9.6



16.29 -
17.23 UT

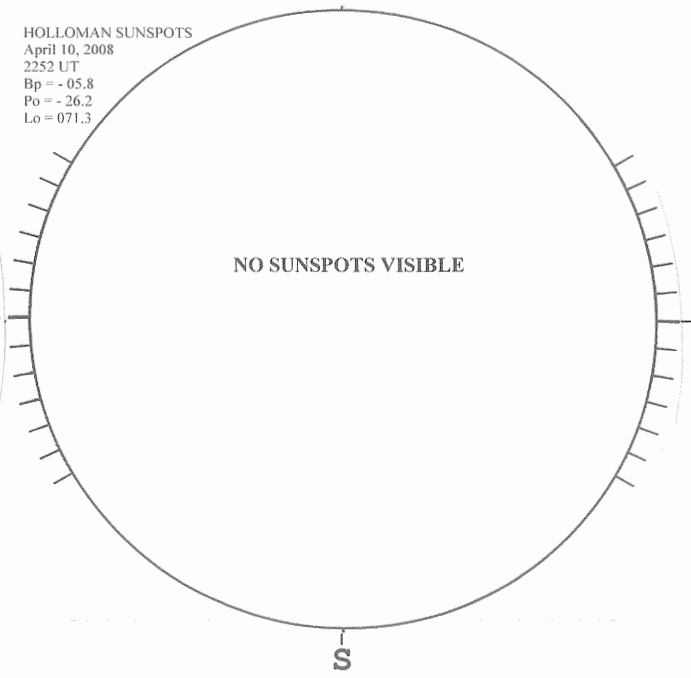
BIG BEAR H-ALPHA



1651 UT

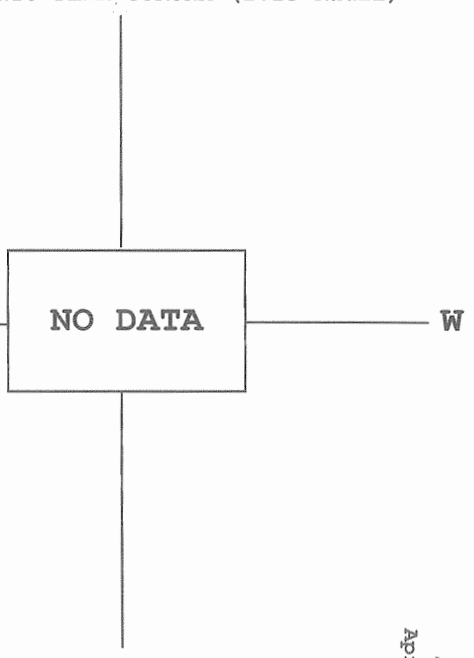
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 10, 2008
2252 UT
Bp = - 05.8
Po = - 26.2
Lo = 071.3



2252 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



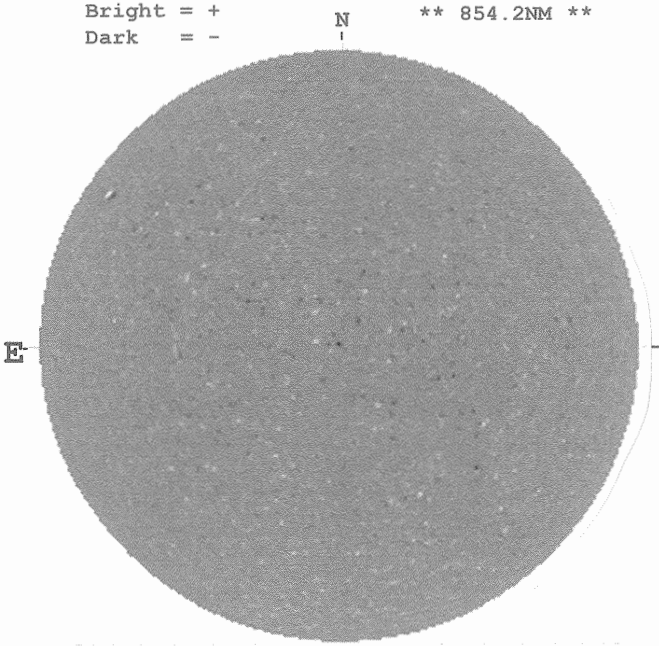
April 11, 2008 (P=-26.21, Bo=-5.89, Lo= 70.47)

Apr 08 50

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

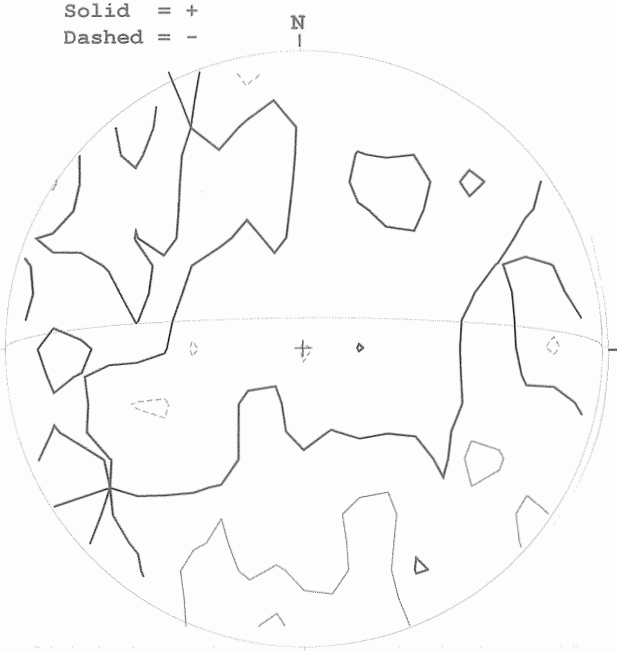
** 854.2NM **



1915 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

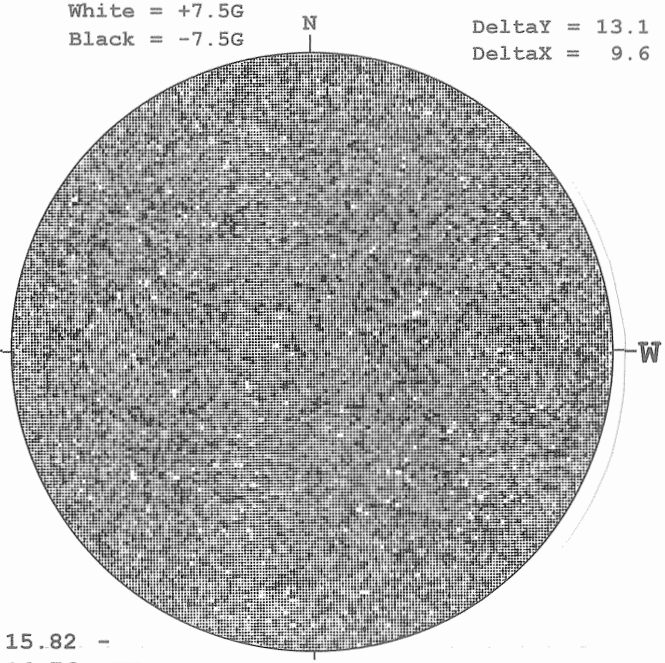


2135 UT

MT. WILSON MAGNETOGRAM

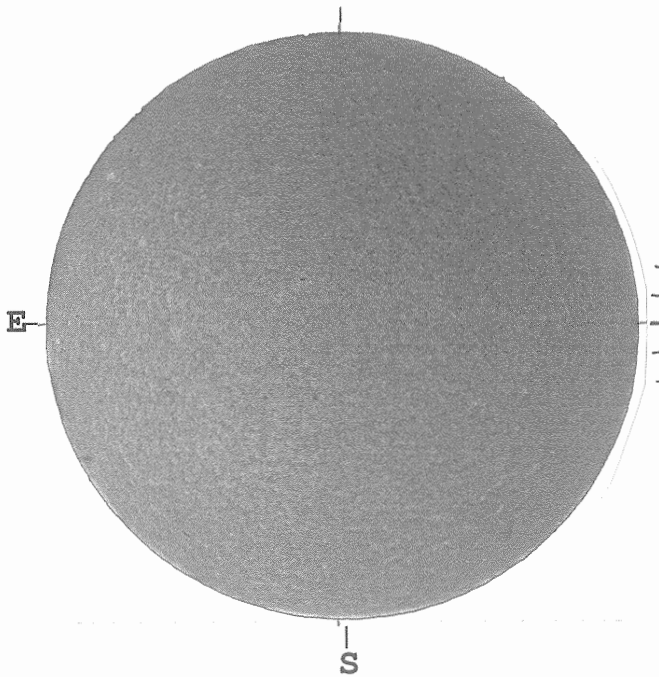
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



15.82 -
16.76 UT

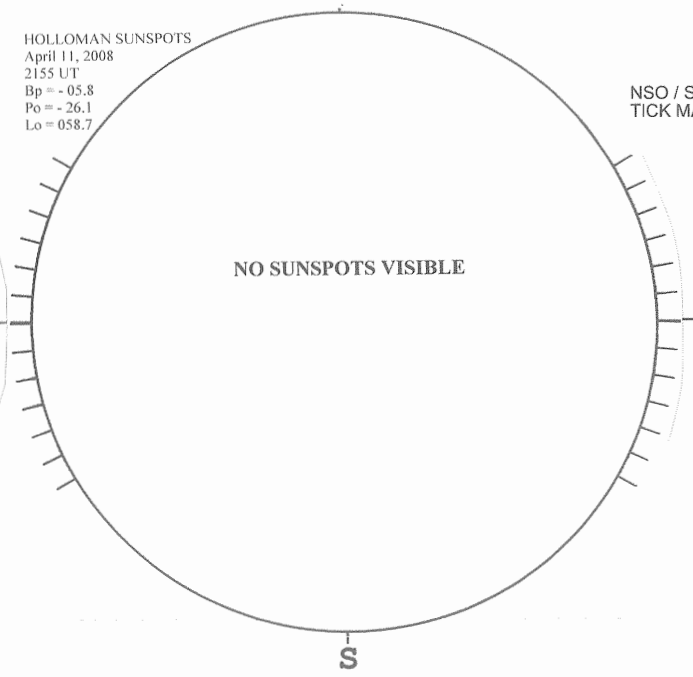
BIG BEAR H-ALPHA



1607 UT

HOLLOMAN SUNSPOTS

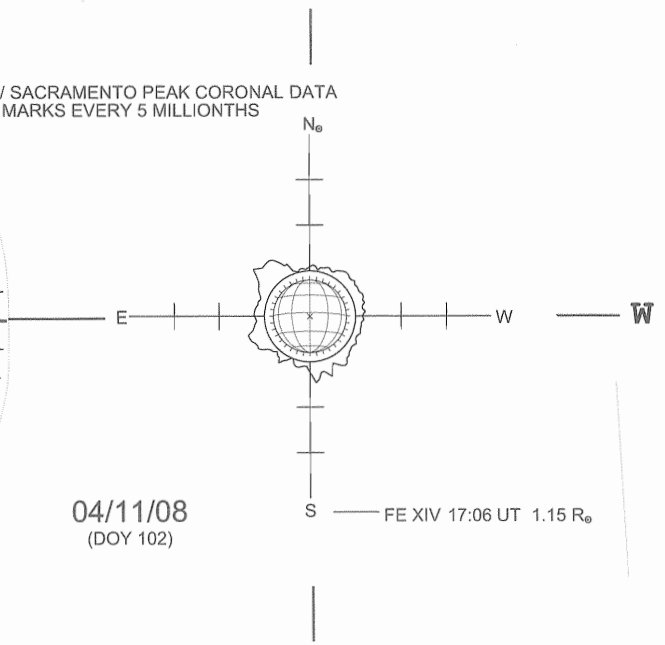
HOLLOMAN SUNSPOTS
April 11, 2008
2155 UT
Bp = - 05.8
Po = - 26.1
Lo = 058.7



2155 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



04/11/08
(DOY 102)

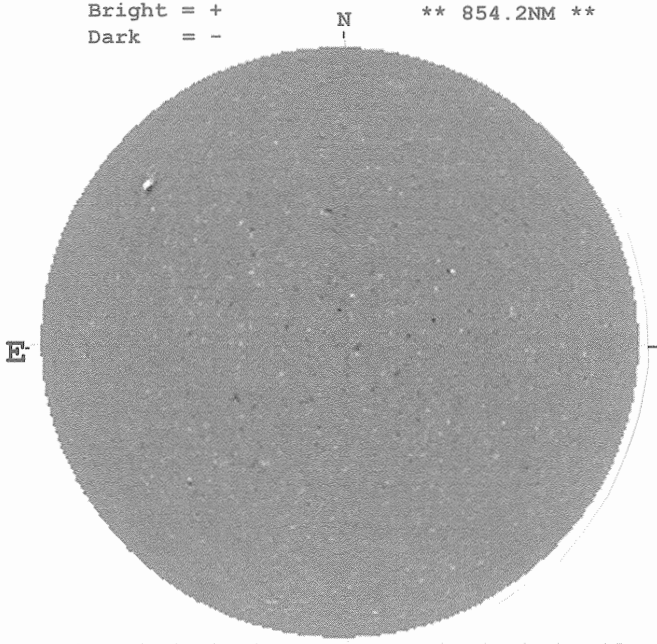
FE XIV 17:06 UT 1.15 R⊙

April 12, 2008 (P=-26.17, Bo=-5.82, Lo= 57.27)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

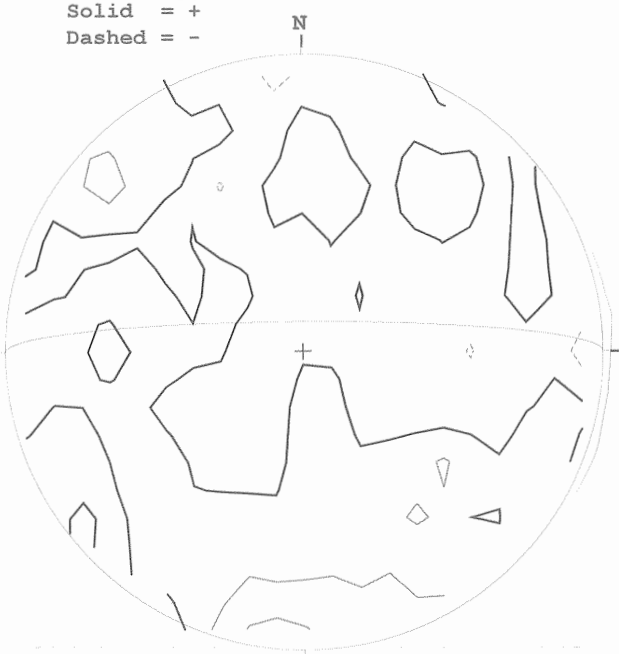
** 854.2NM **



2107 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

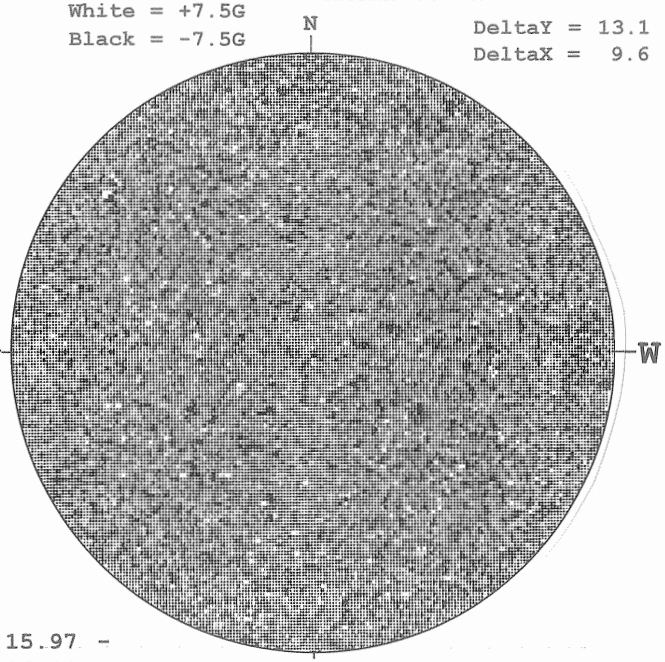


2147 UT

MT. WILSON MAGNETOGRAM

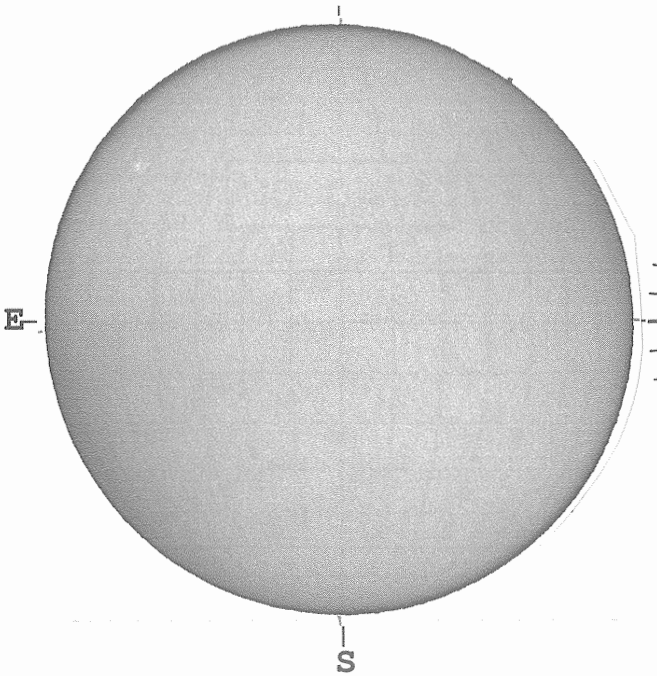
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



15.97 -
16.91 UT

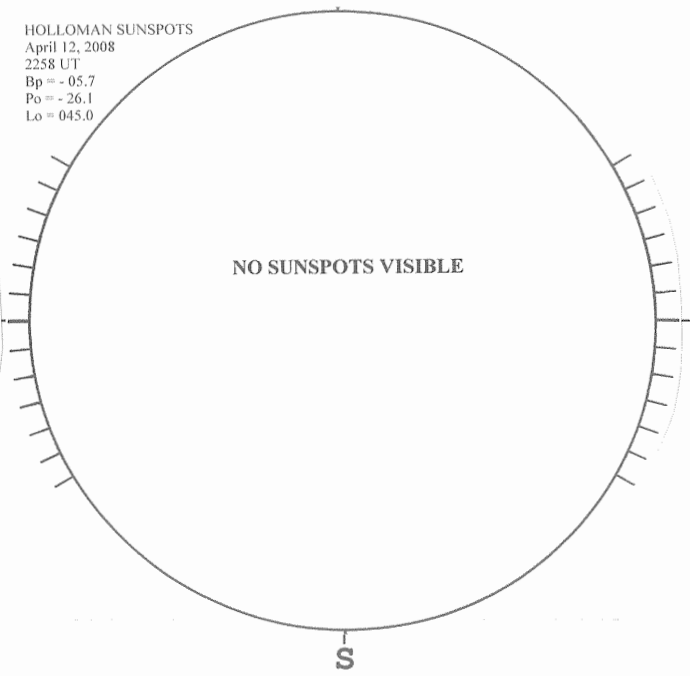
MEUDON H-ALPHA



1317 UT

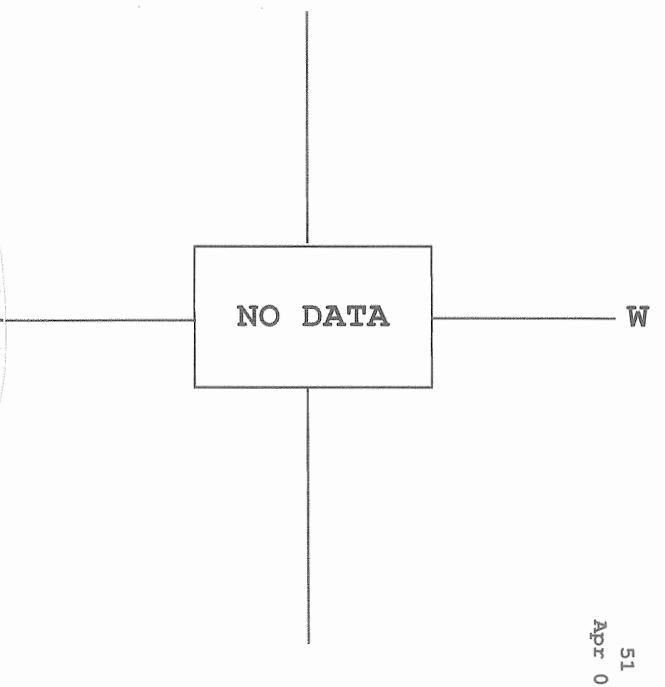
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 12, 2008
2258 UT
Bp = - 05.7
Po = - 26.1
Lo = 045.0



2258 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----



51
Apr 08

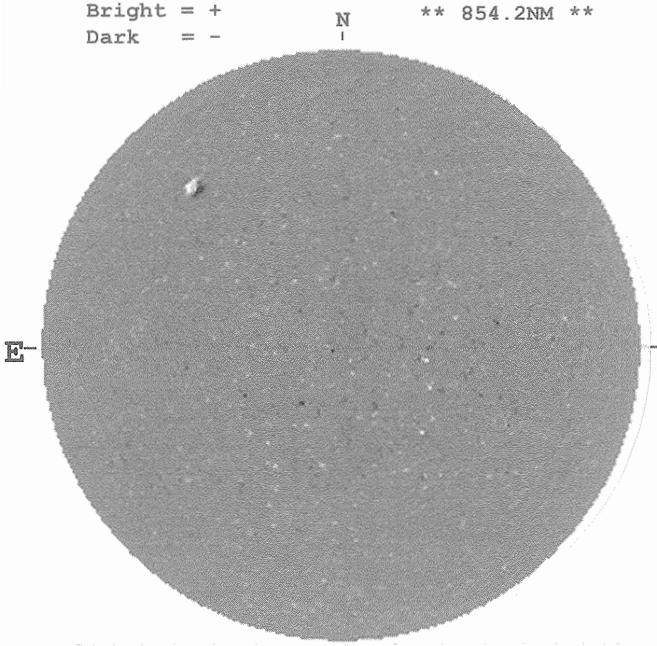
April 13, 2008 (P=-26.13, Bo=-5.74, Lo= 44.07)

Apr 08 52

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

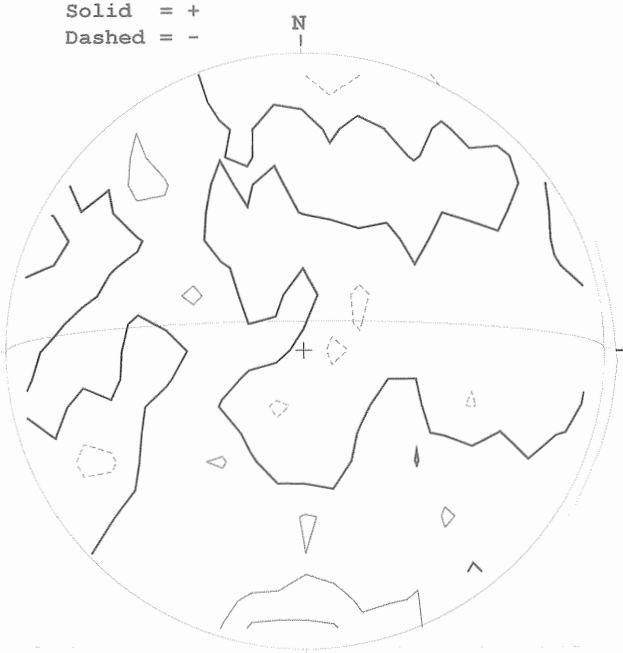
** 854.2NM **



2101 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

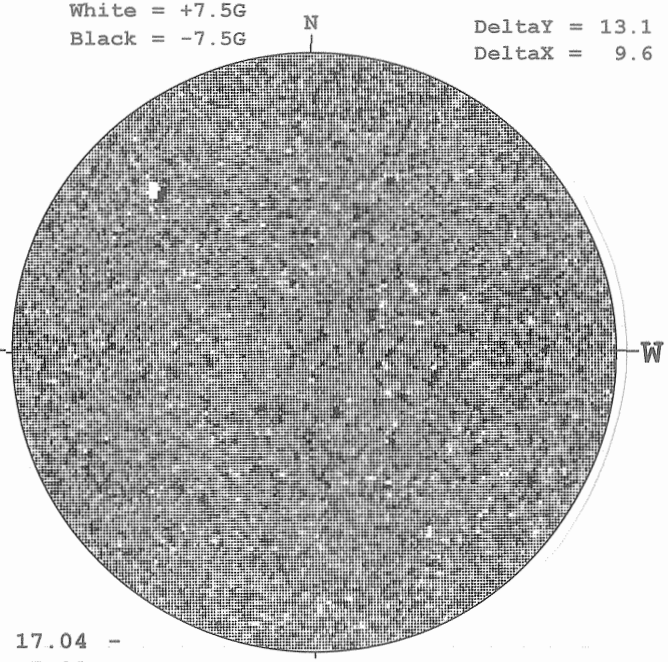


2151 UT

MT. WILSON MAGNETOGRAM

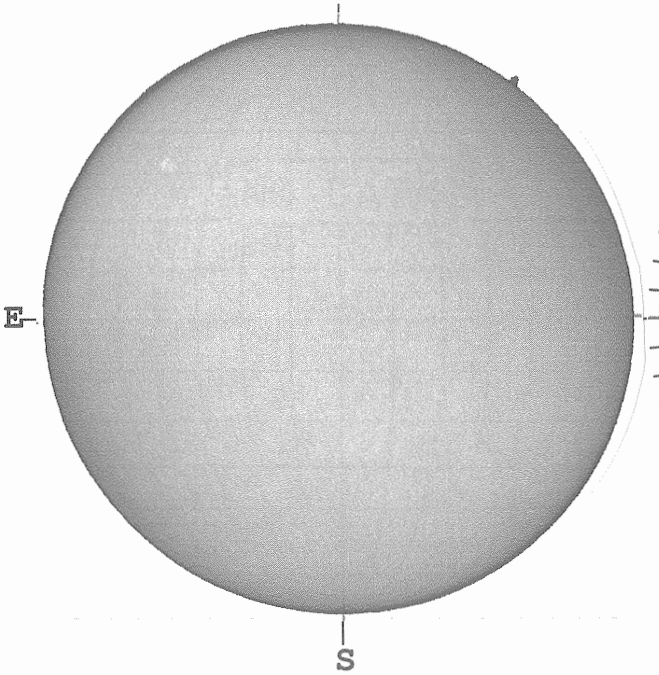
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



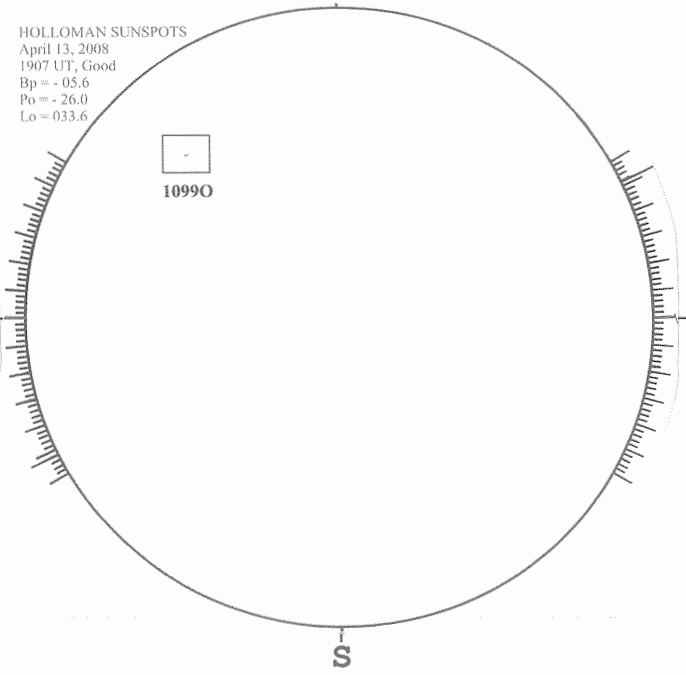
17.04 -
17.98 UT

--- MEUDON H-ALPHA



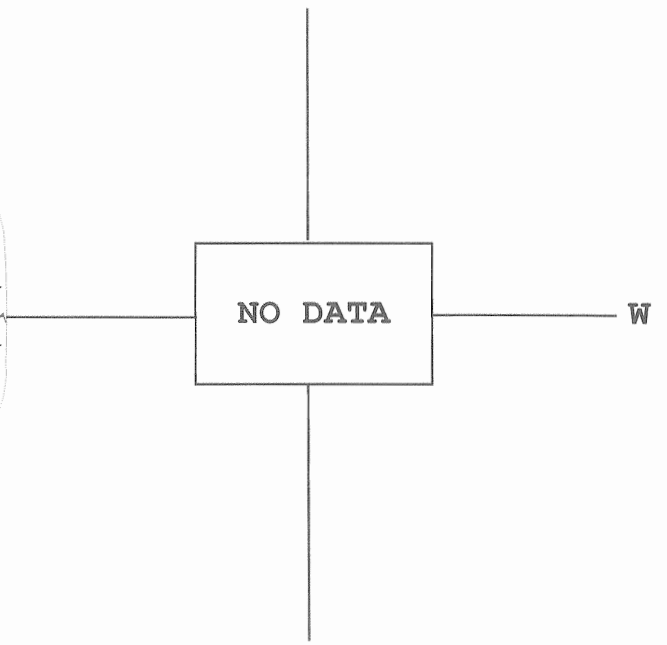
0729 UT

HOLLOMAN SUNSPOTS



1907 UT

SACRAMENTO PEAK CORONA (1.15 Radii) -----

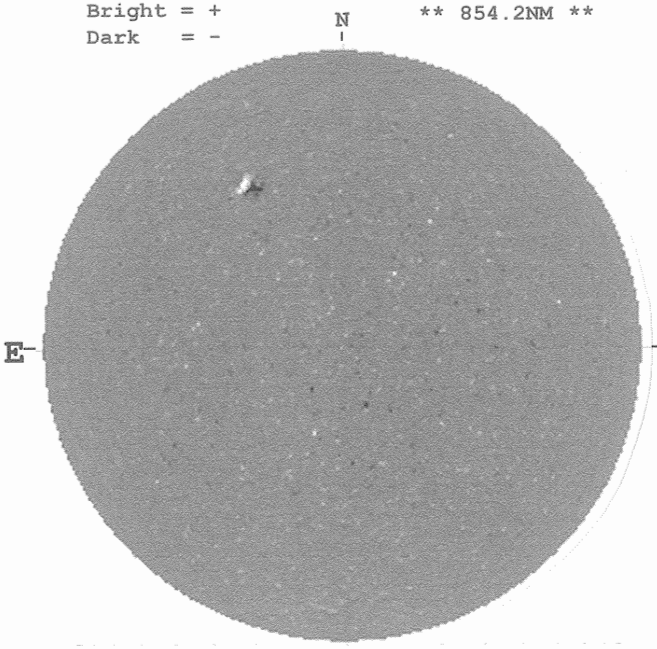


April 14, 2008 (P=-26.07, Bo=-5.67, Lo= 30.87)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

** 854.2NM **



2116 UT

STANFORD MAGNETOGRAM

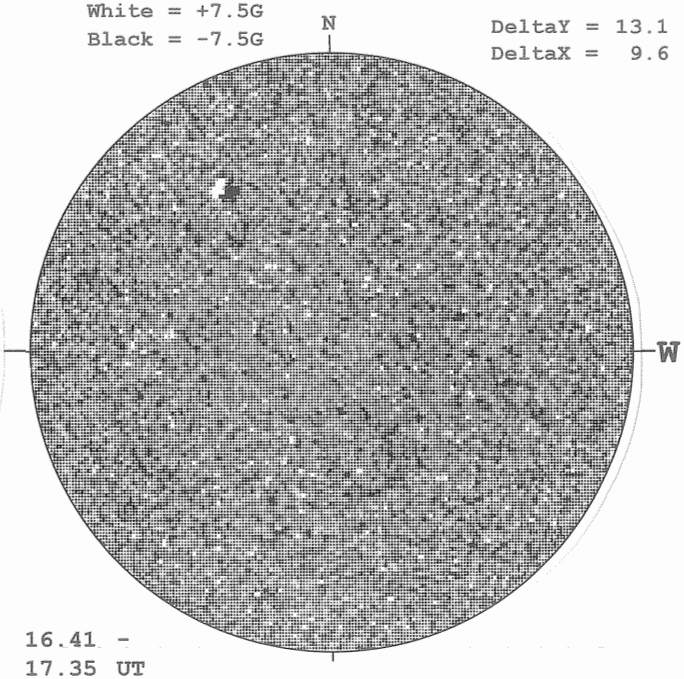
Solid = +
Dashed = -

2213 UT

MT. WILSON MAGNETOGRAM

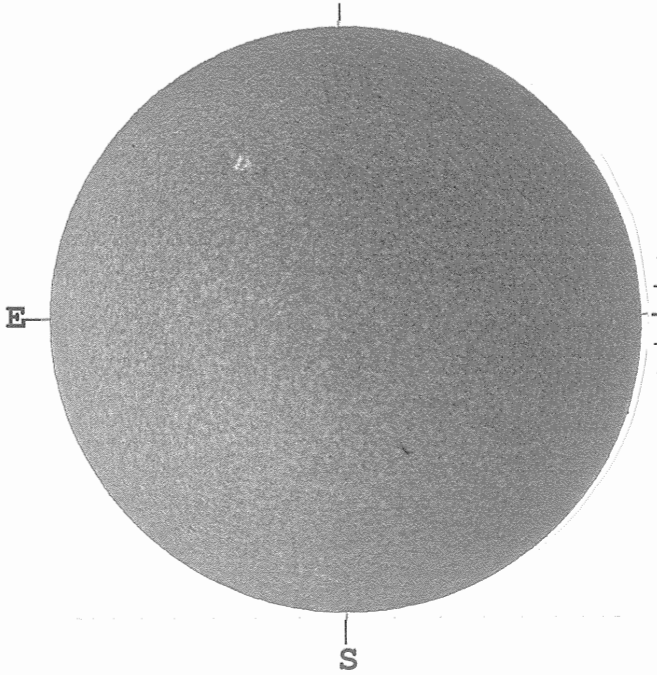
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



16.41 -
17.35 UT

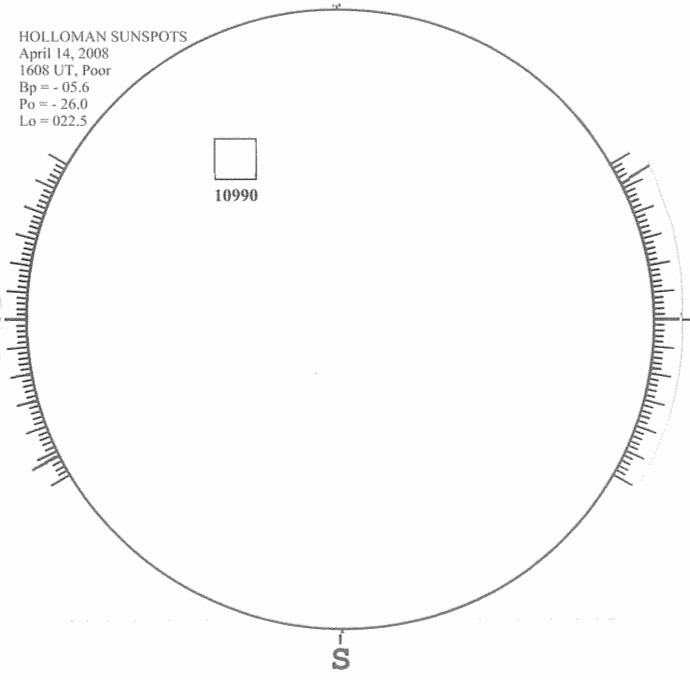
--- BIG BEAR H-ALPHA



1817 UT

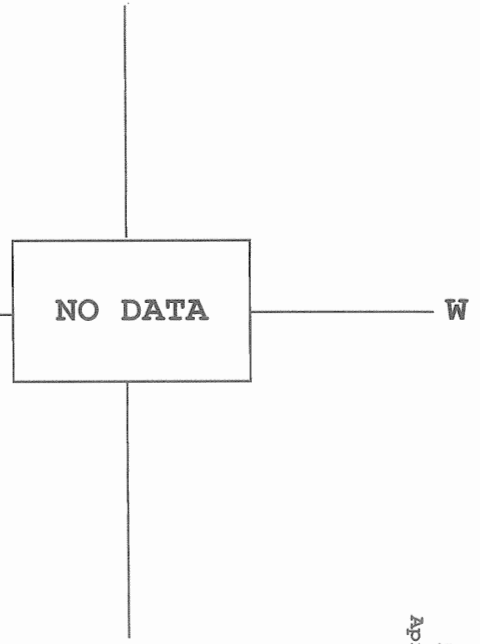
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 14, 2008
1608 UT, Poor
Bp = - 05.6
Po = - 26.0
Lo = 022.5



1608 UT

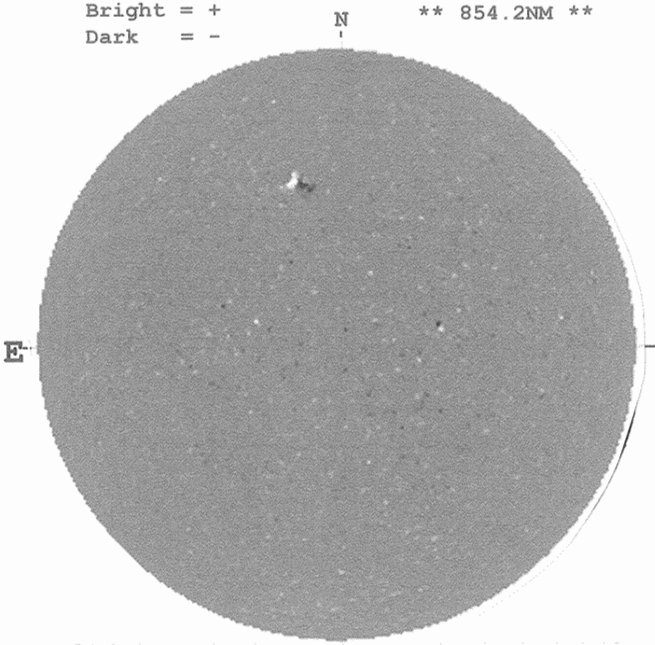
SACRAMENTO PEAK CORONA (1.15 Radii)----



53
Apr 08

April 15, 2008 (P=-26.02, Bo=-5.59, Lo= 17.66)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
** 854.2NM **

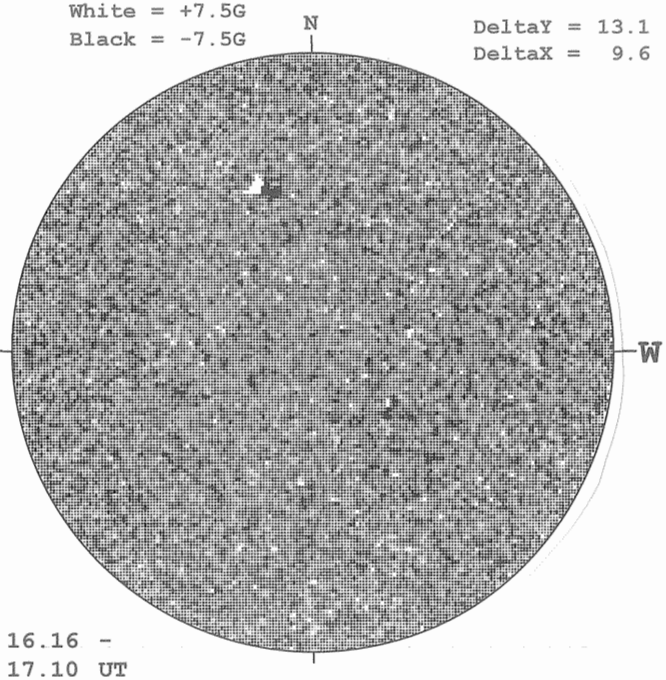


1922 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

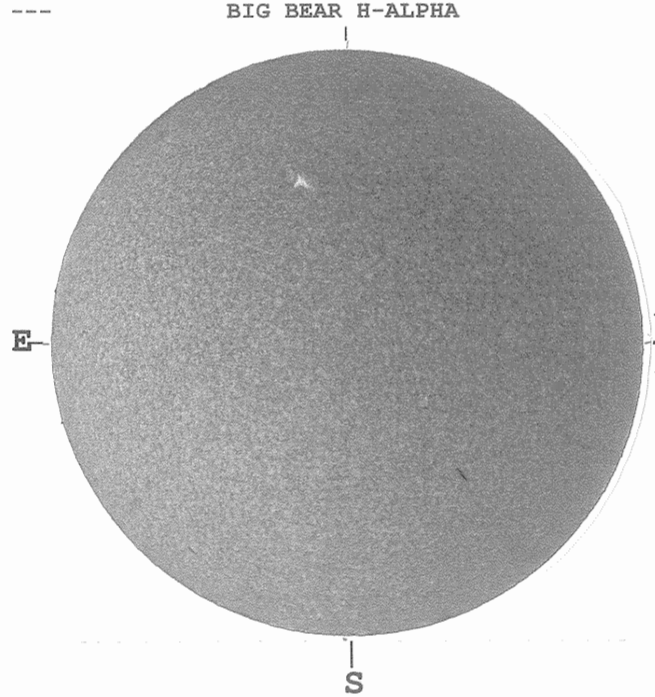
1904 UT

MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



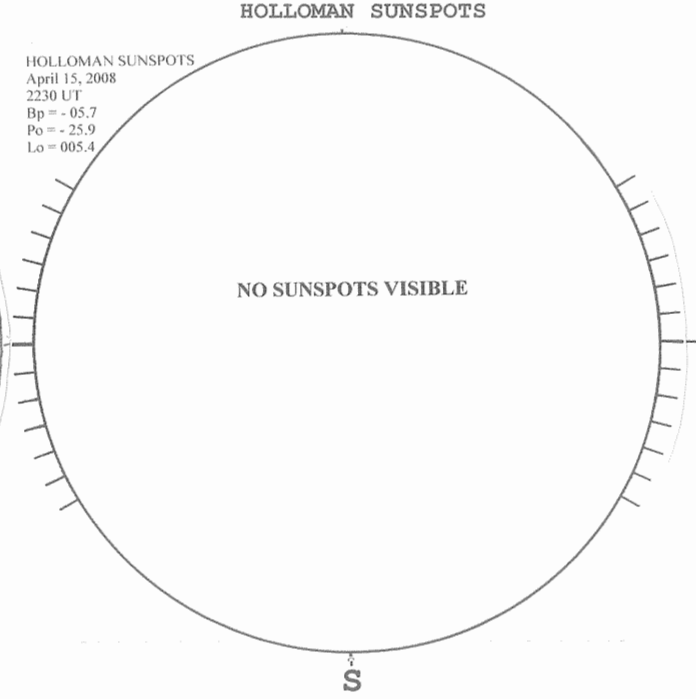
16.16 -
17.10 UT

BIG BEAR H-ALPHA



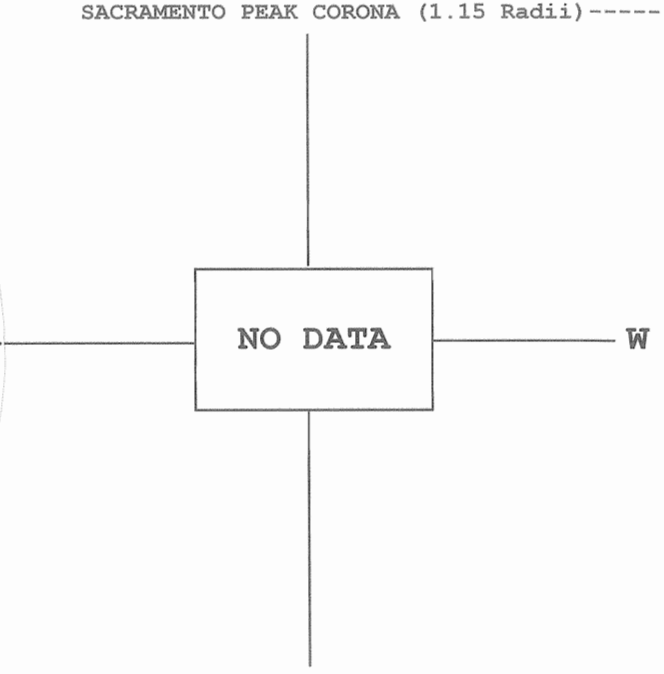
1723 UT

HOLLOMAN SUNSPOTS



2230 UT

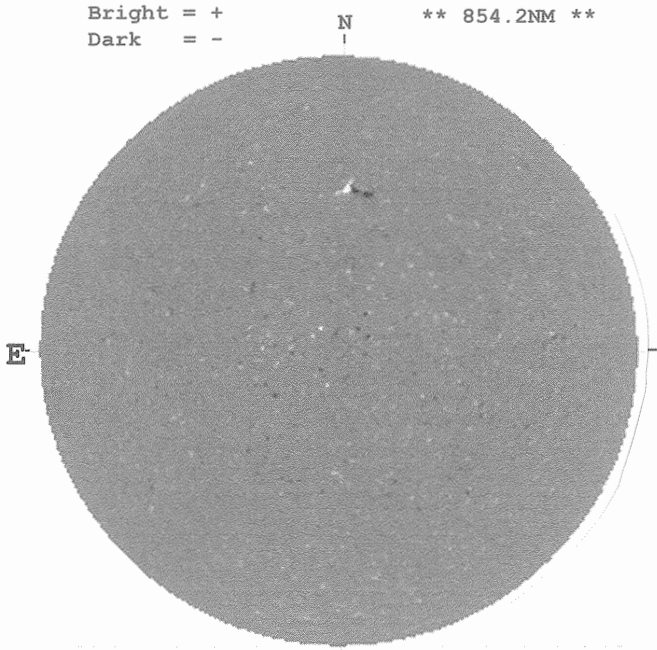
SACRAMENTO PEAK CORONA (1.15 Radii)-----



April 16, 2008 (P=-25.95, Bo=-5.51, Lo= 4.46)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -



** 854.2NM **

1700 UT

STANFORD MAGNETOGRAM

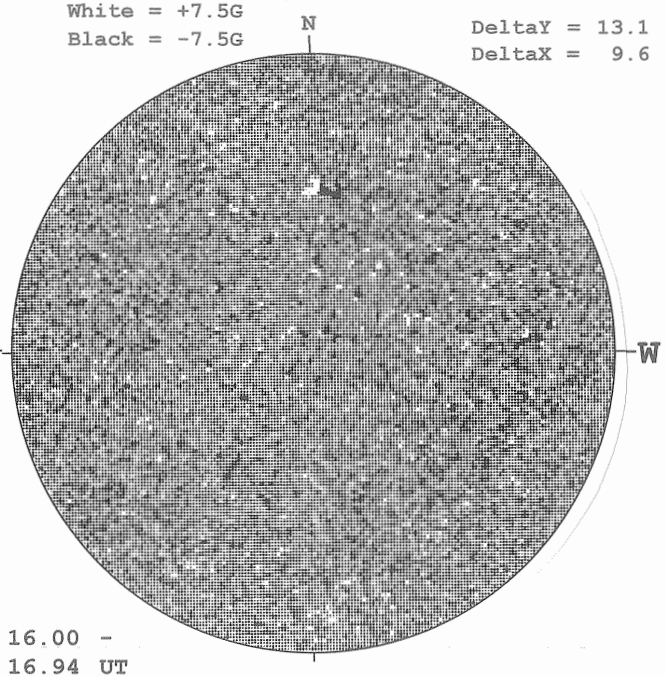
Solid = +
Dashed = -

2139 UT

MT. WILSON MAGNETOGRAM

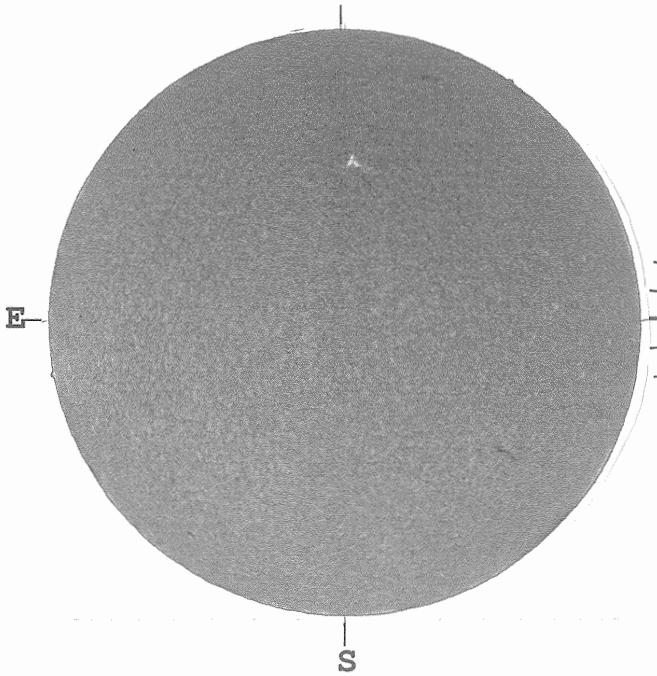
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



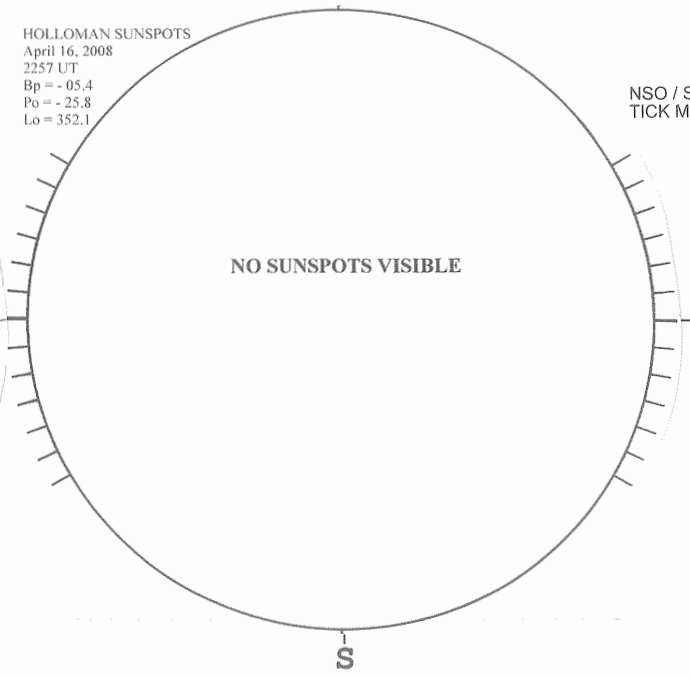
16.00 -
16.94 UT

BIG BEAR H-ALPHA



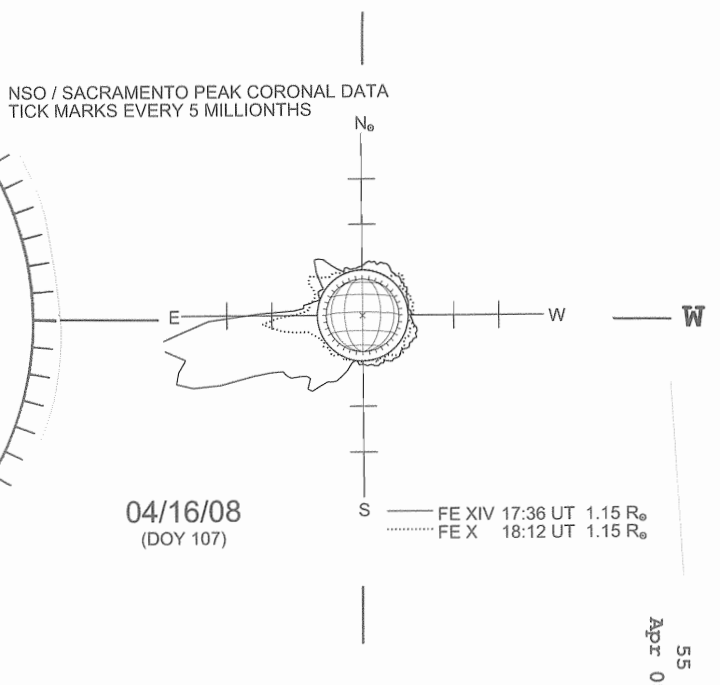
1659 UT

HOLLOMAN SUNSPOTS



2257 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----



55
Apr 08

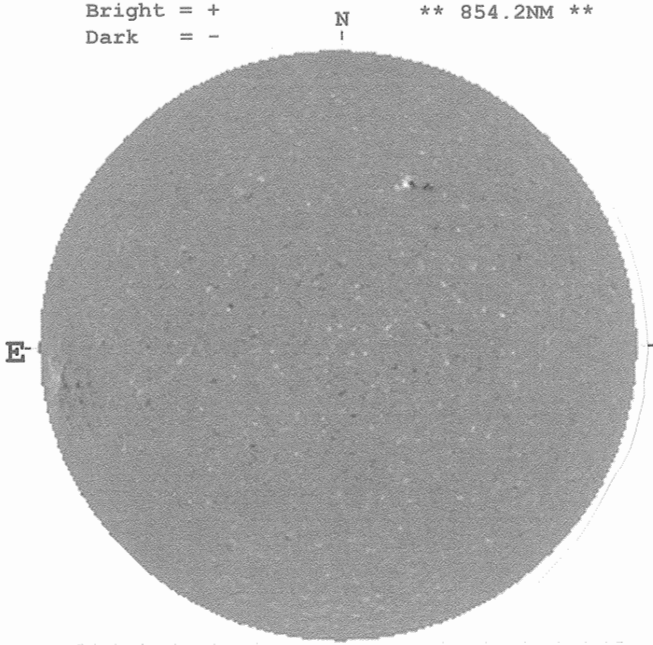
April 17, 2008 (P=-25.88, Bo=-5.43, Lo= 351.25)

Apr 08 56

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

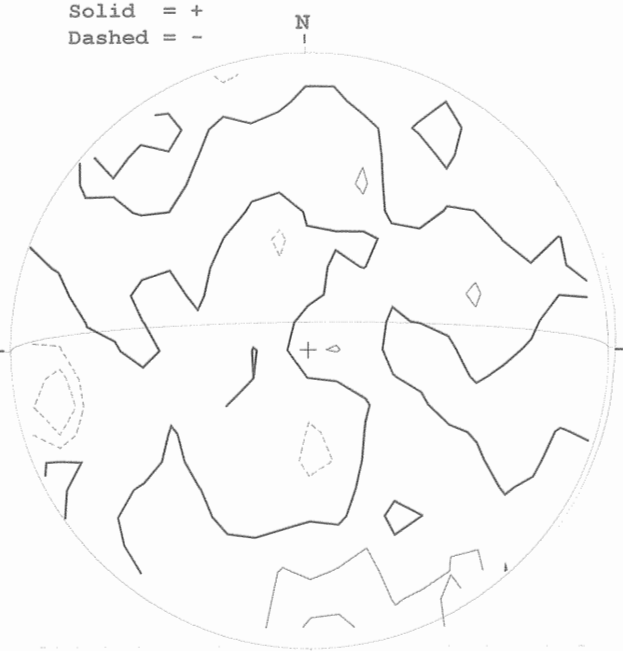
** 854.2NM **



1746 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

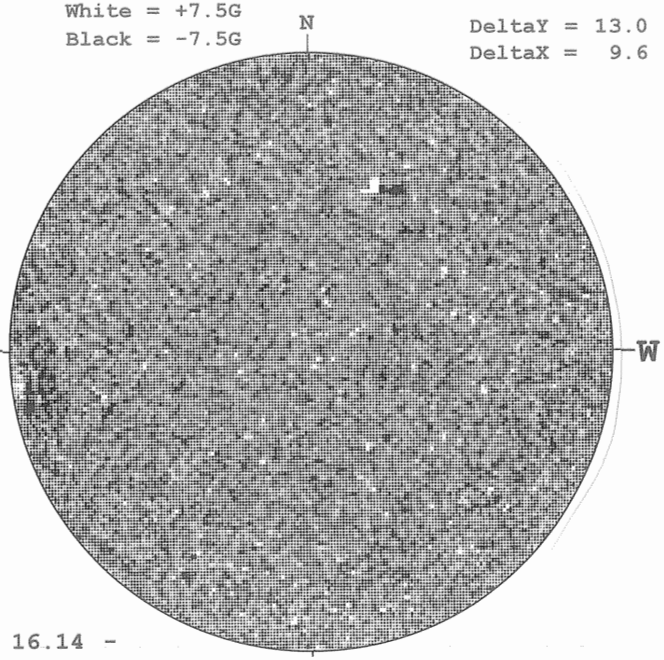


1939 UT

MT. WILSON MAGNETOGRAM

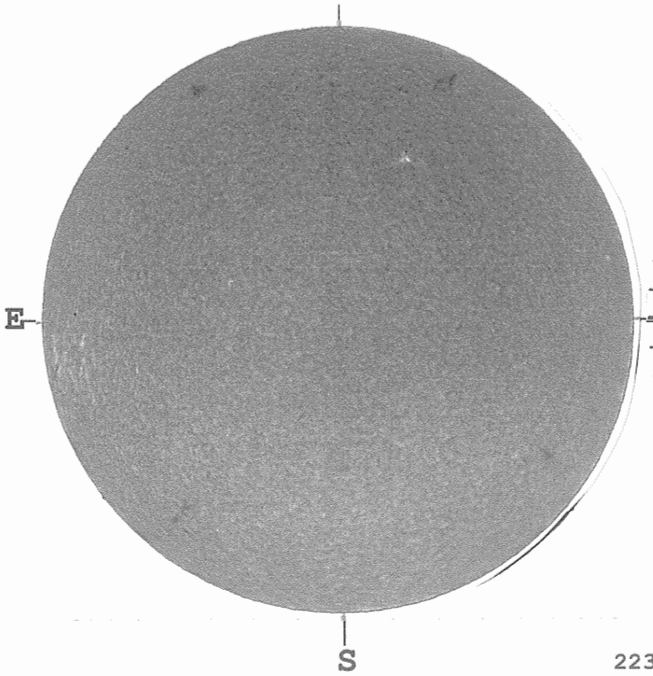
White = +7.5G
Black = -7.5G

DeltaY = 13.0
DeltaX = 9.6



16.14 -
17.07 UT

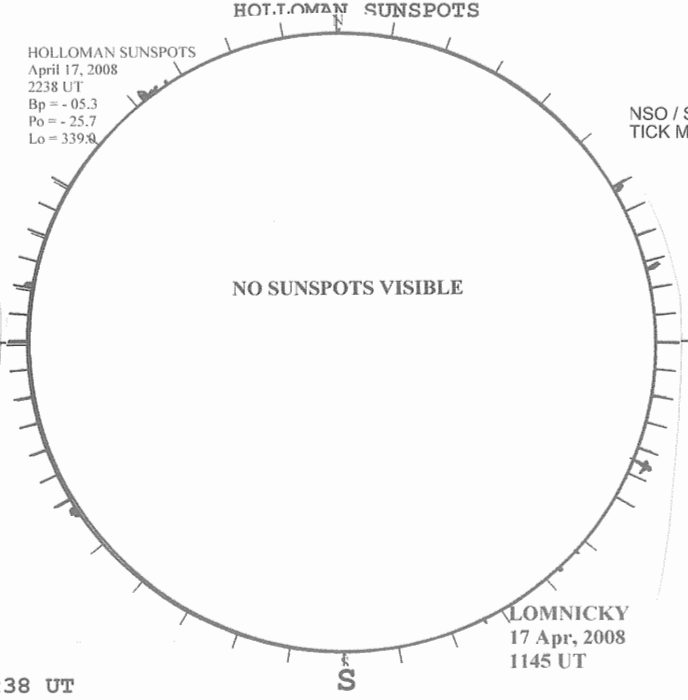
--- BIG BEAR H-ALPHA



1813 UT

HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 17, 2008
2238 UT
Bp = - 05.3
Po = - 25.7
Lo = 339.9

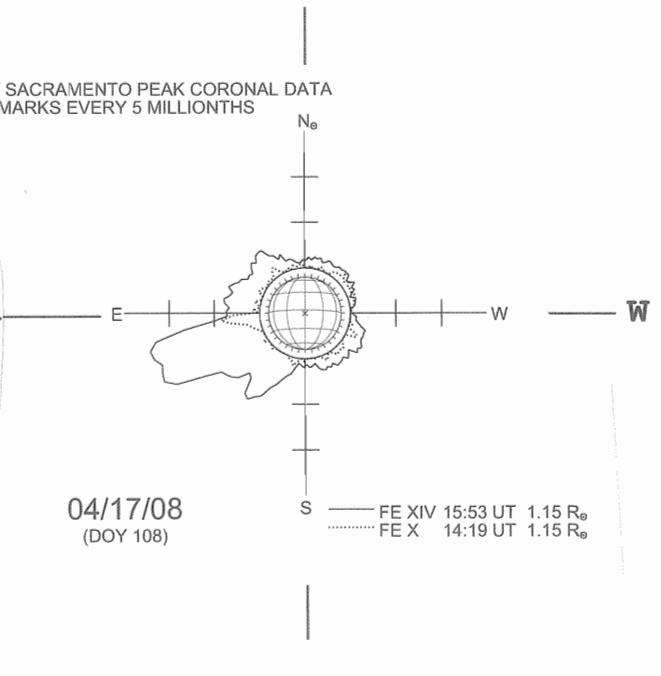


LOMNICKY
17 Apr, 2008
1145 UT

2238 UT
1145 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii)-----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



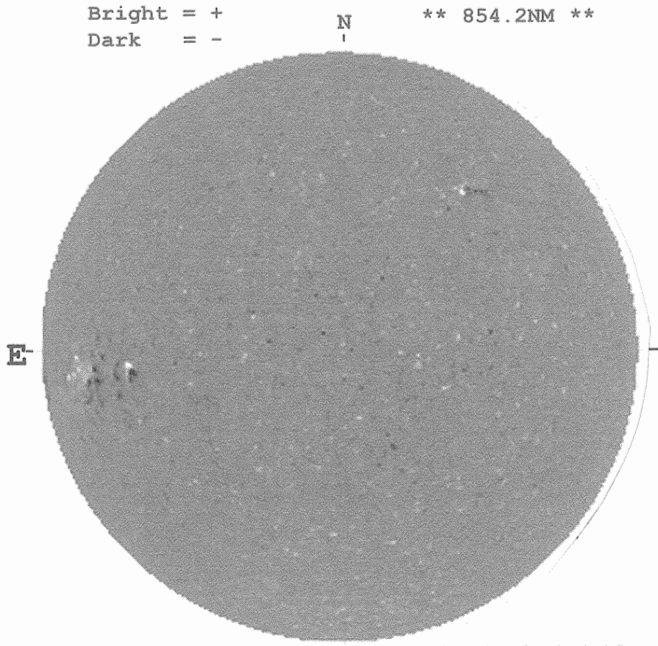
04/17/08
(DOY 108)

FE XIV 15:53 UT 1.15 R⊙
FE X 14:19 UT 1.15 R⊙

April 18, 2008 (P=-25.80, Bo=-5.34, Lo= 338.05)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

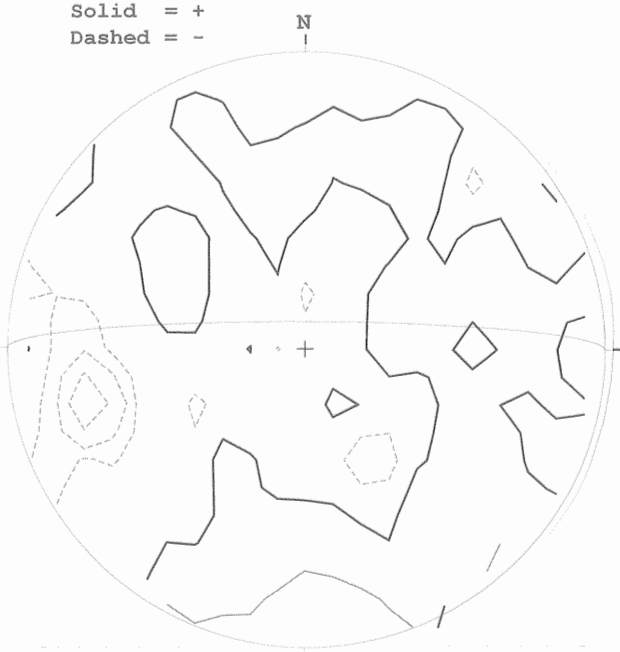


** 854.2NM **

1654 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

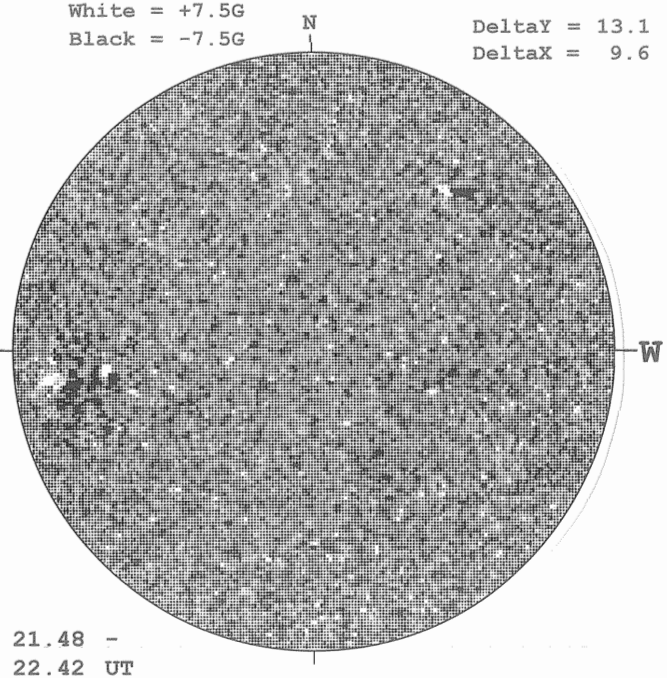


2227 UT

MT. WILSON MAGNETOGRAM

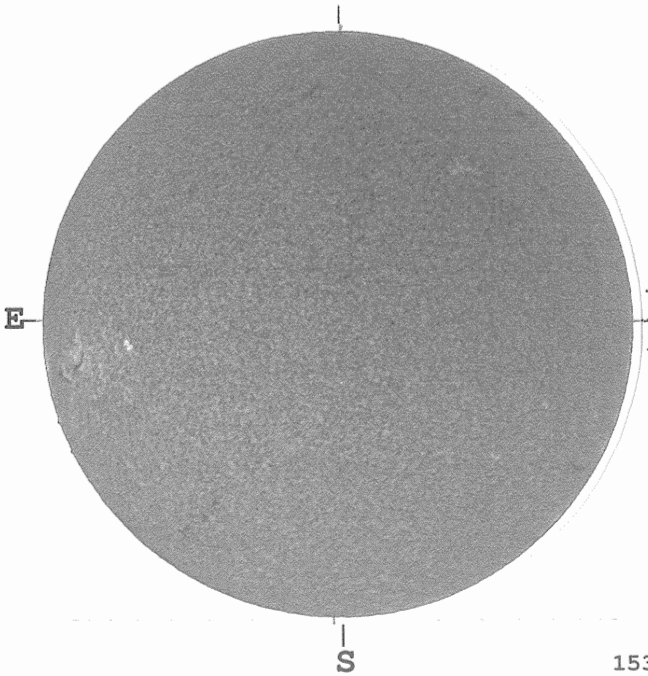
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



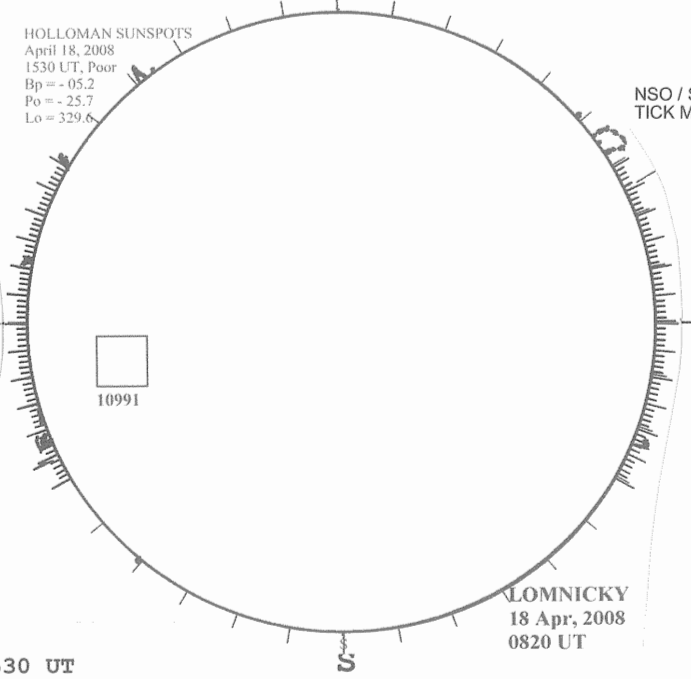
21.48 -
22.42 UT

--- BIG BEAR H-ALPHA



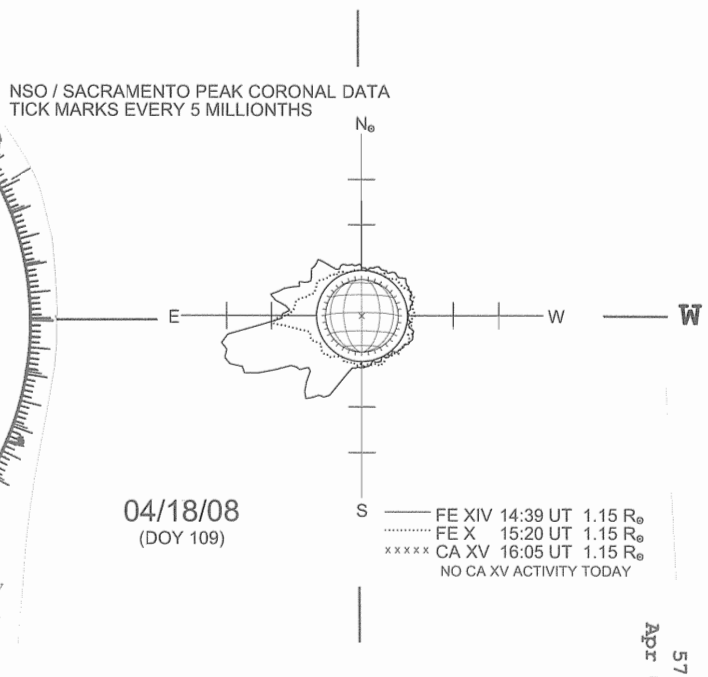
1615 UT

HOLLOMAN SUNSPOTS



1530 UT
0820 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii) -----



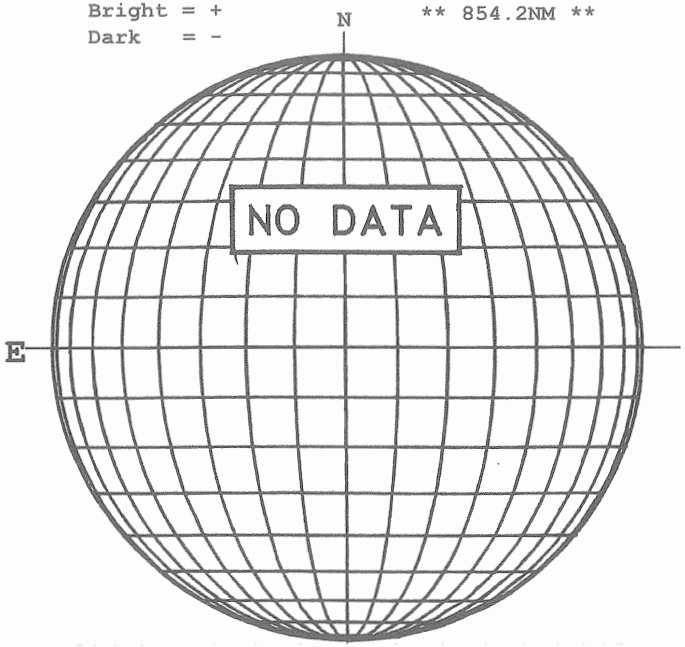
57
Apr 08

April 19, 2008 (P=-25.71, Bo=-5.26, Lo= 324.84)

KITT PEAK MAGNETOGRAM -- SOLIS

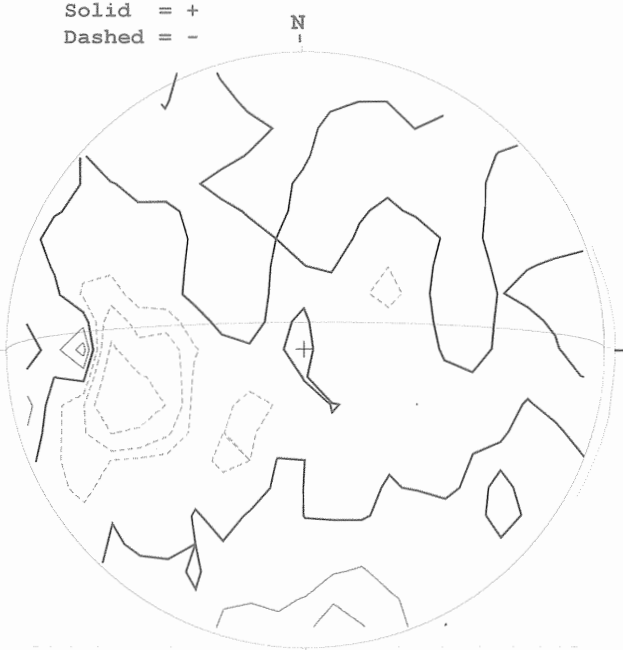
Bright = +
Dark = -

** 854.2NM **



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

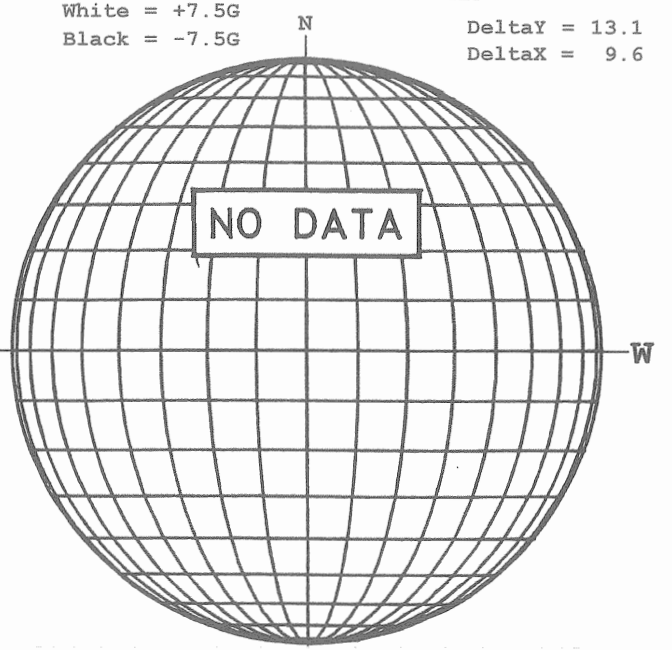


2104 UT

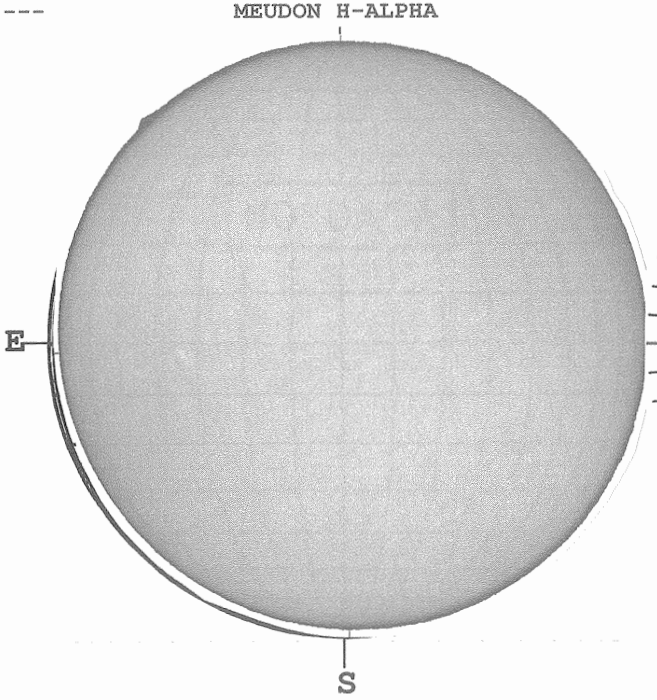
MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6

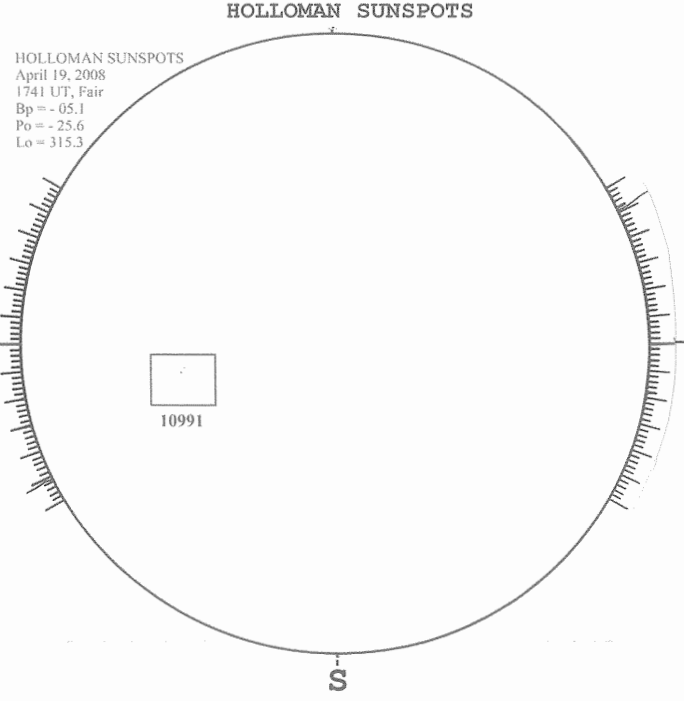


MEUDON H-ALPHA



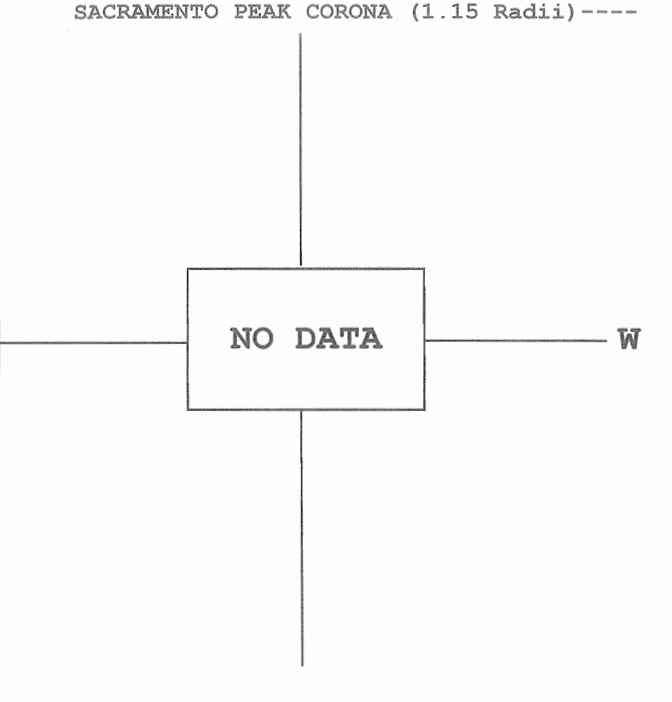
1111 UT

HOLLOMAN SUNSPOTS



1741 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

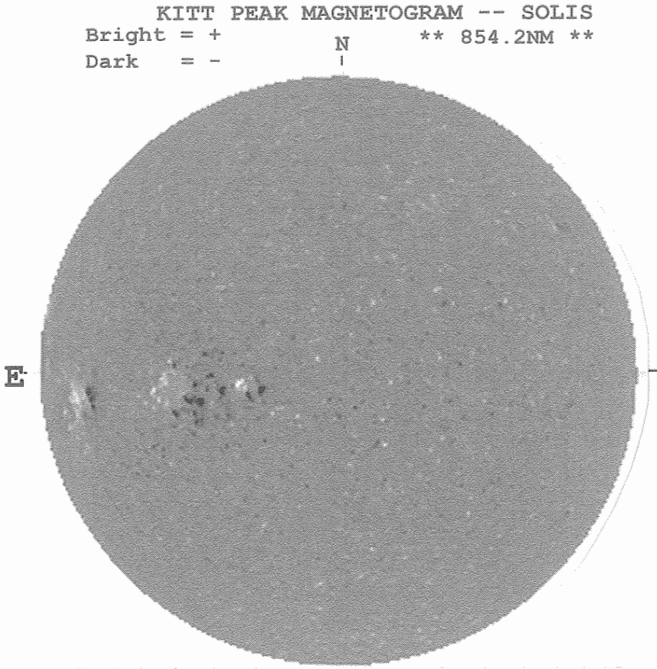


April 20, 2008 (P=-25.61, Bo=-5.17, Lo= 311.63)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

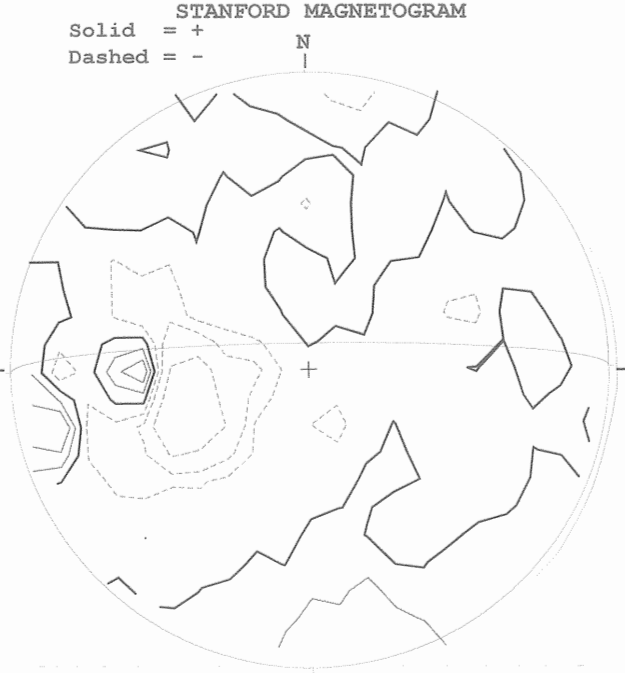
** 854.2NM **



1753 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

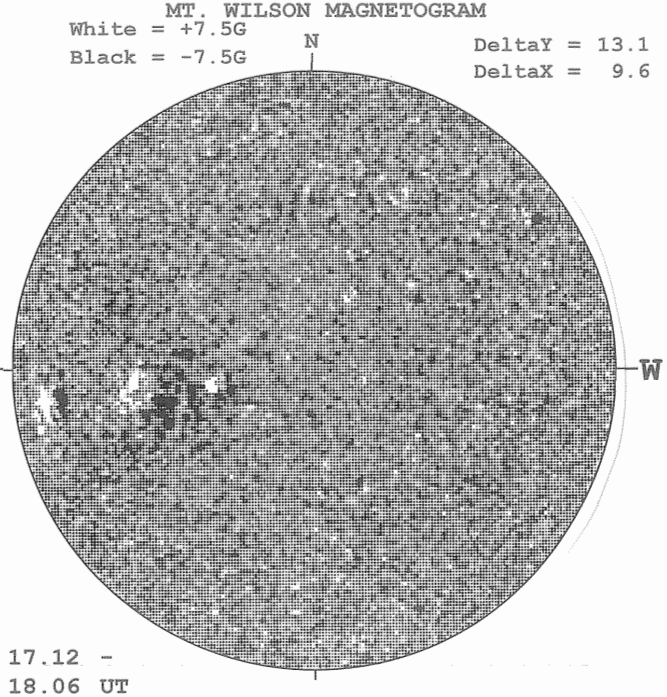


2157 UT

MT. WILSON MAGNETOGRAM

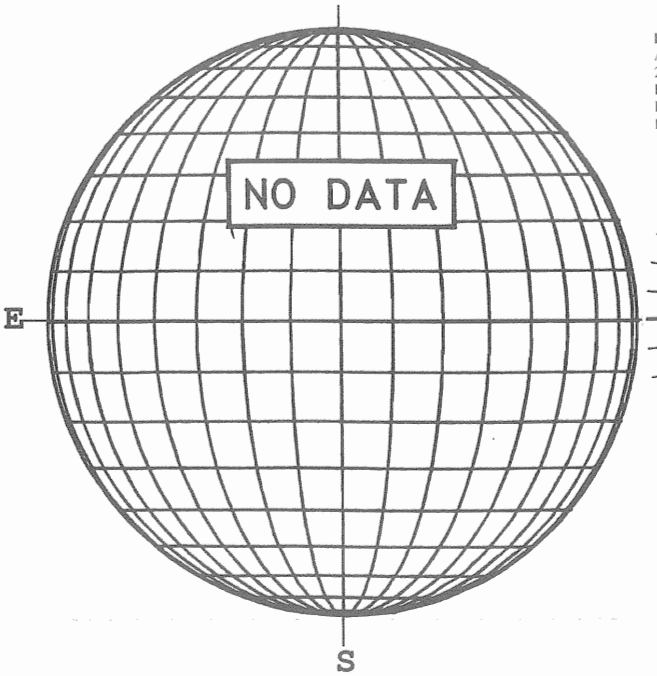
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6

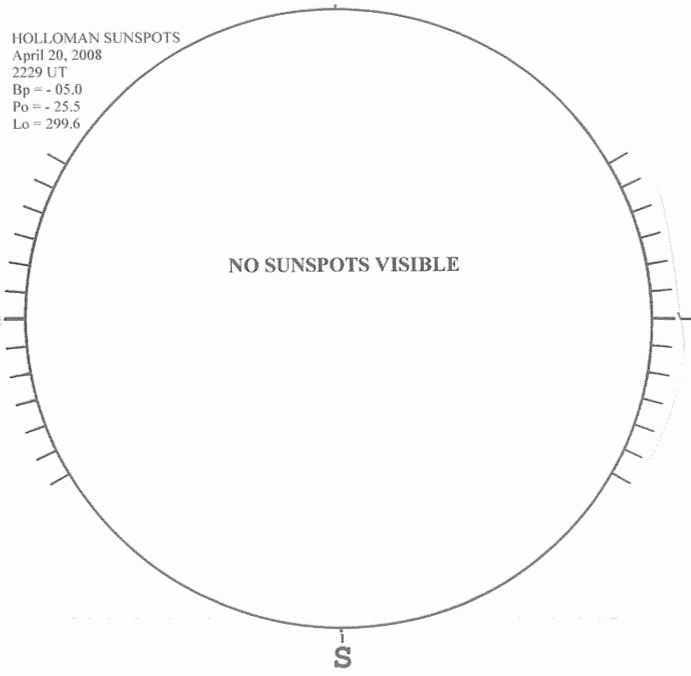


17.12 -
18.06 UT

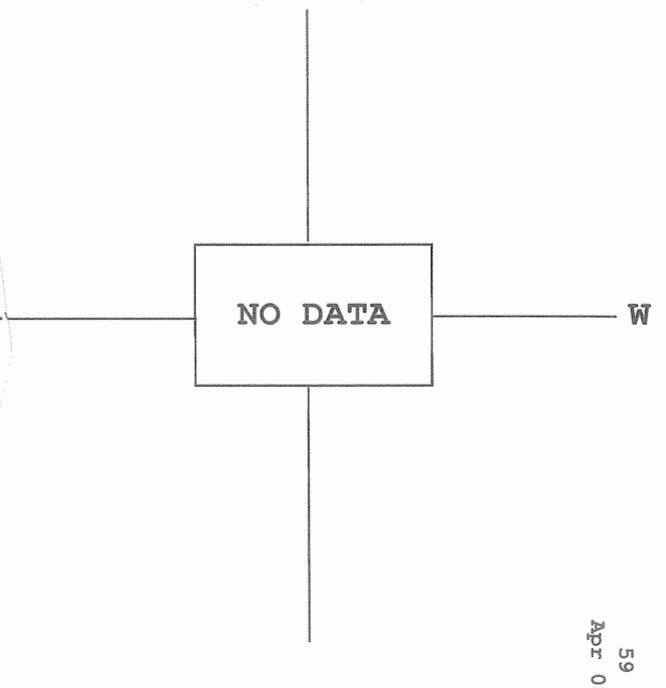
BIG BEAR H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)-----



2229 UT

59
Apr 08

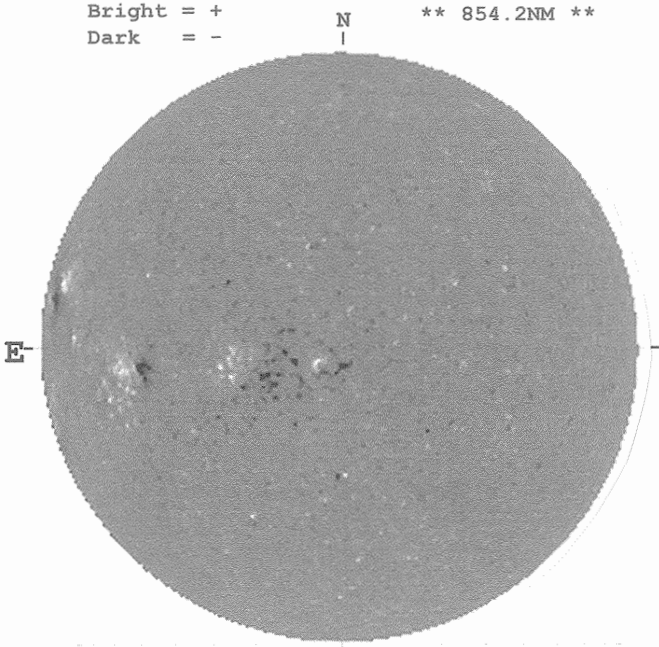
April 21, 2008 (P=-25.51, Bo=-5.09, Lo= 298.42)

Apr 08 09

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

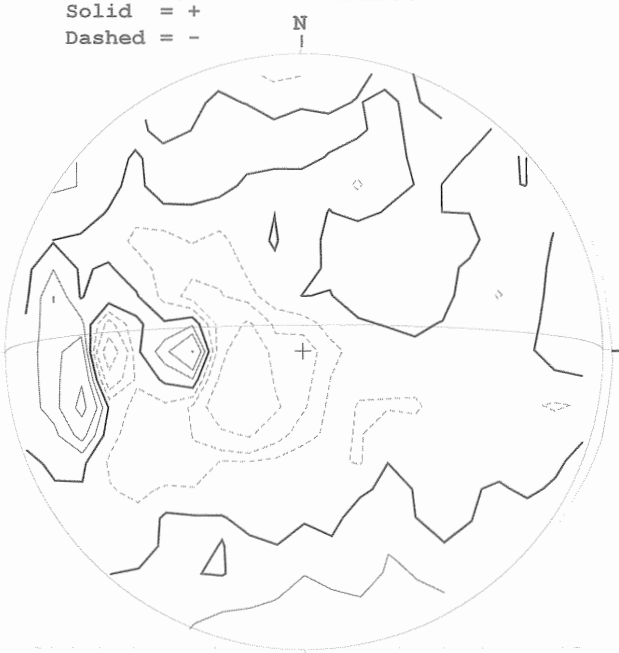
** 854.2NM **



2057 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

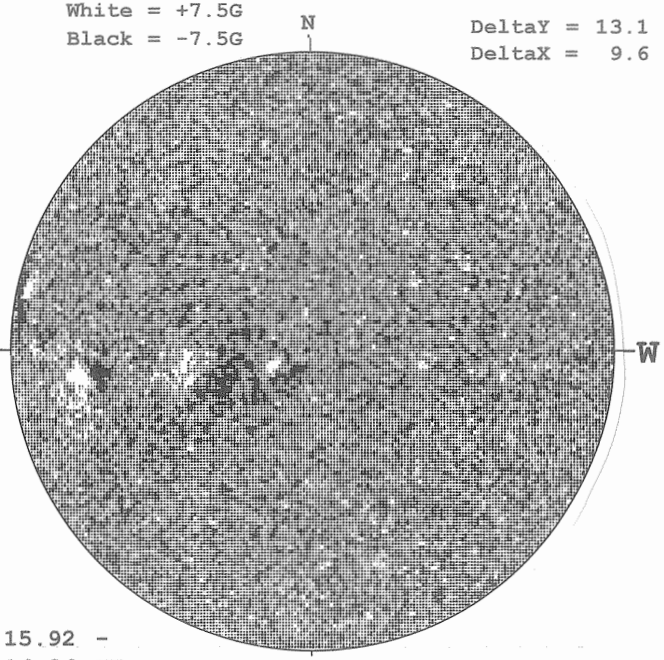


2152 UT

MT. WILSON MAGNETOGRAM

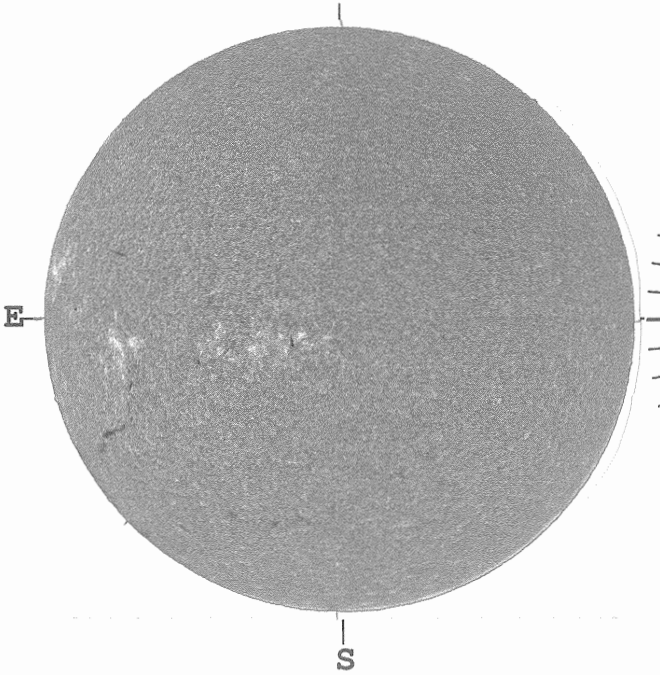
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



15.92 -
16.86 UT

BIG BEAR H-ALPHA

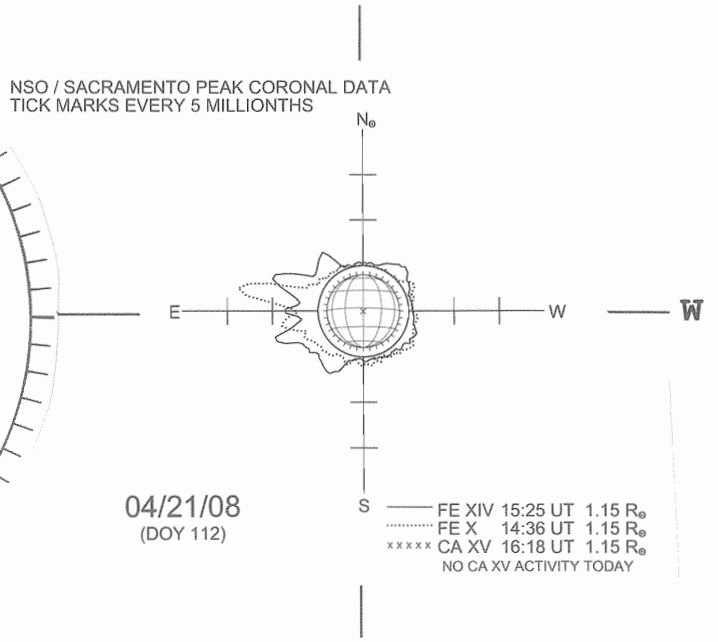


1549 UT

HOLLOMAN SUNSPOTS

2230 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

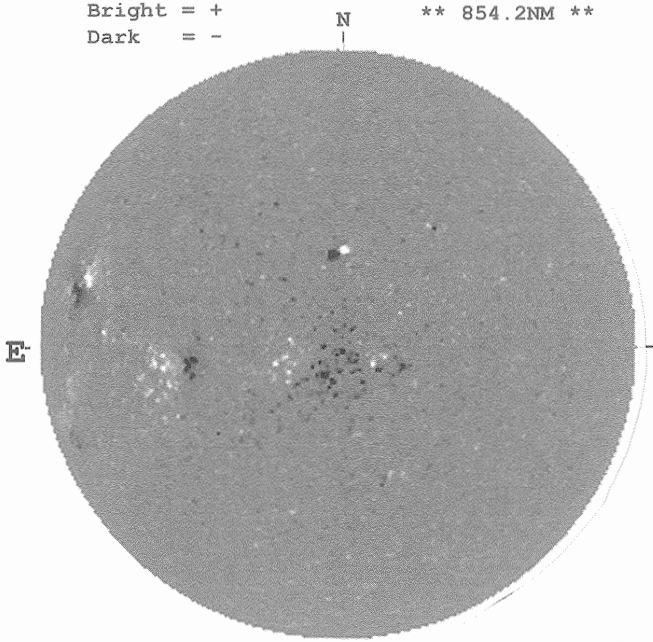


April 22, 2008 (P=-25.40, Bo=-5.00, Lo= 285.22)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

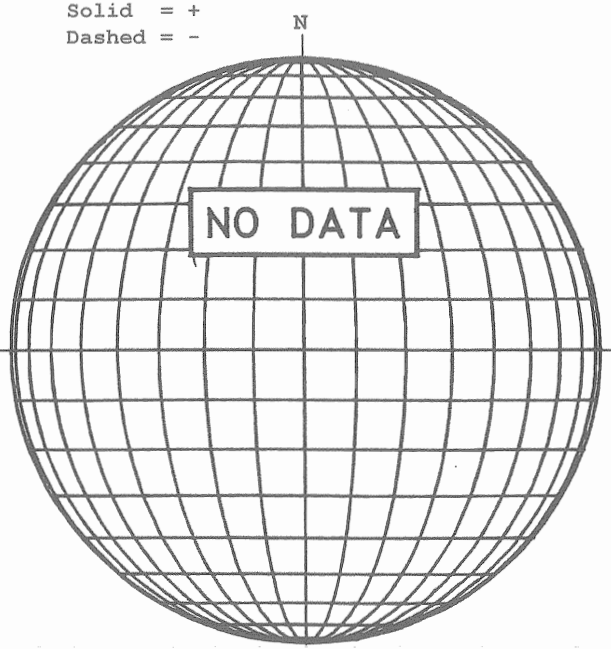
** 854.2NM **



1804 UT

STANFORD MAGNETOGRAM

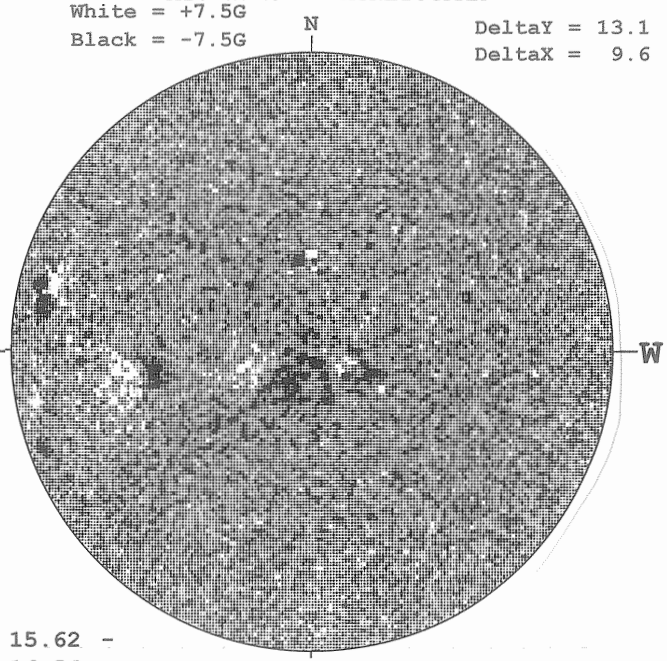
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

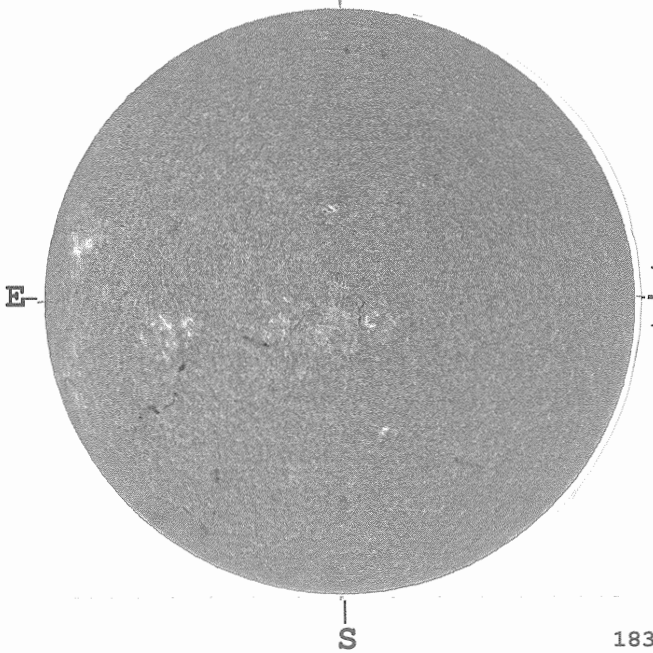
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



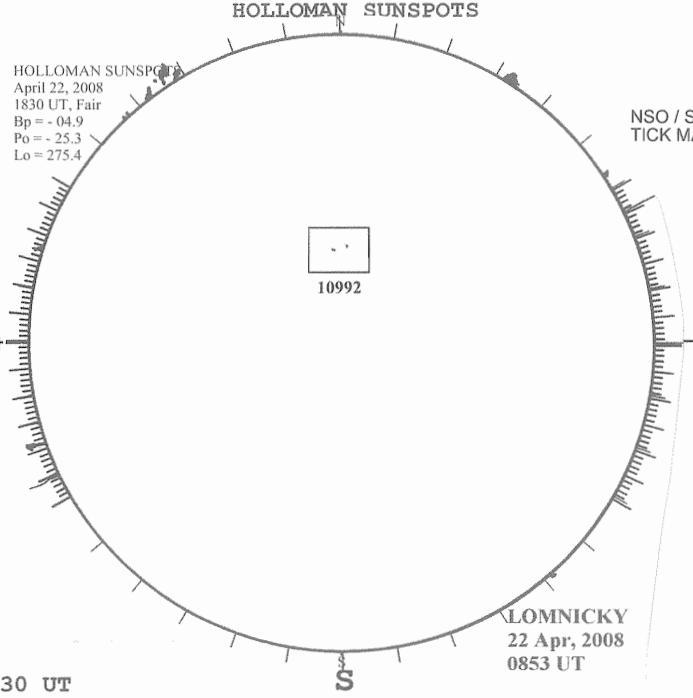
15.62 -
16.56 UT

--- BIG BEAR H-ALPHA



1527 UT

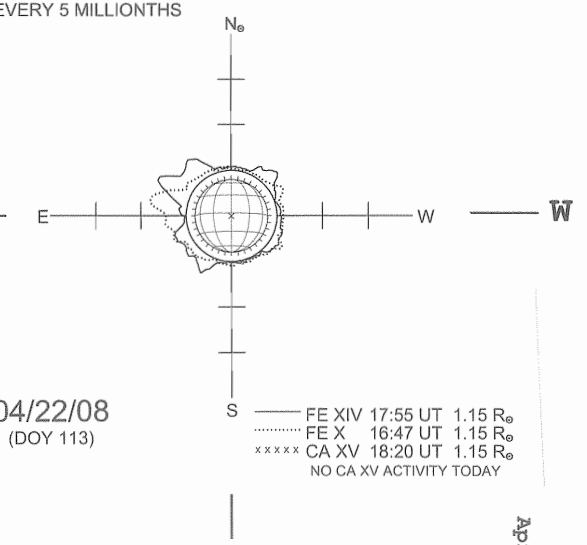
HOLLOMAN SUNSPOTS



1830 UT
0853 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii)-----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



04/22/08
(DOY 113)

FE XIV 17:55 UT 1.15 R☉
FE X 16:47 UT 1.15 R☉
xxxxx CA XV 18:20 UT 1.15 R☉
NO CA XV ACTIVITY TODAY

61
Apr 08

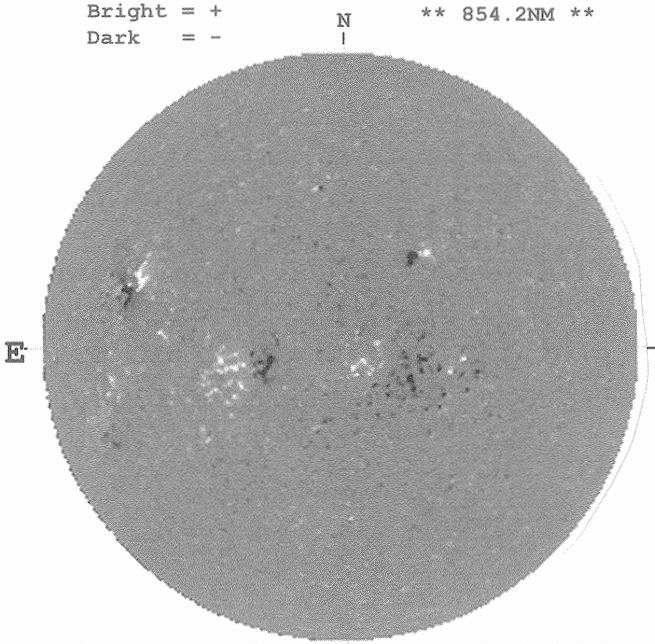
April 23, 2008 (P=-25.28, Bo=-4.91, Lo= 272.00)

Apr 08 62

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

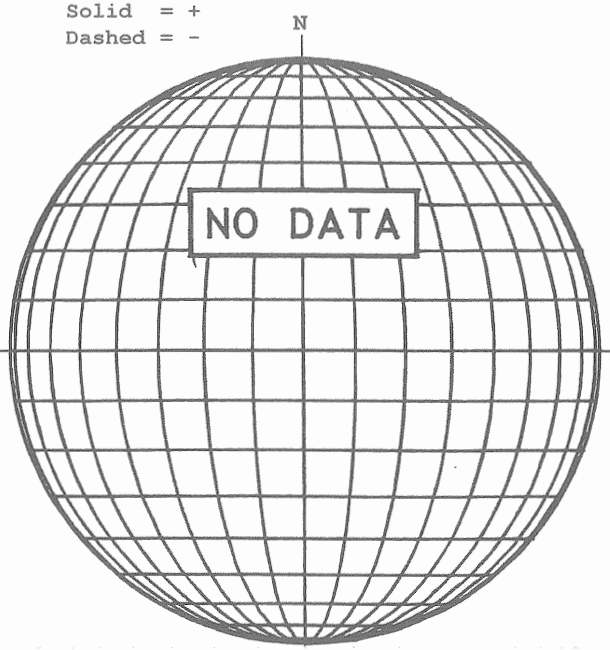
** 854.2NM **



2125 UT

STANFORD MAGNETOGRAM

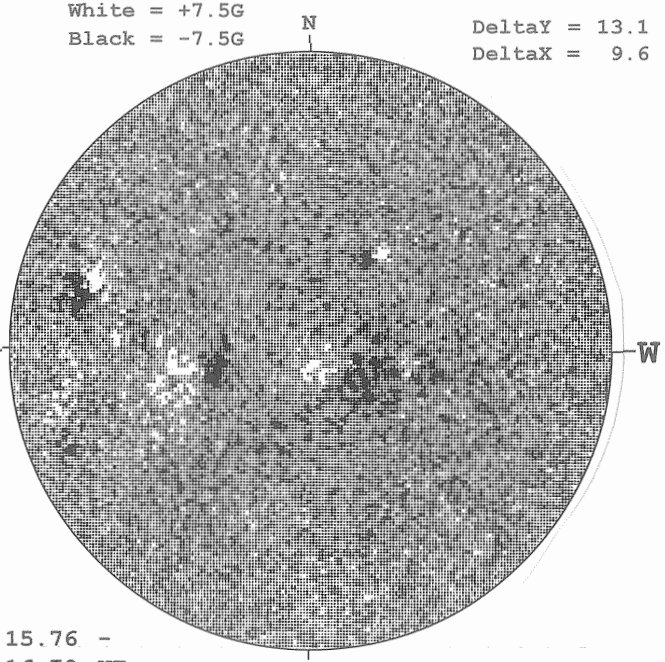
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

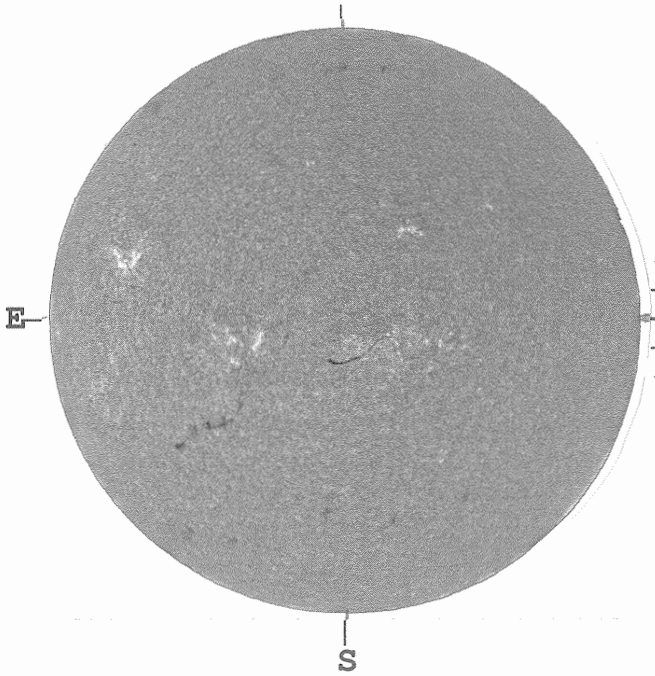
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



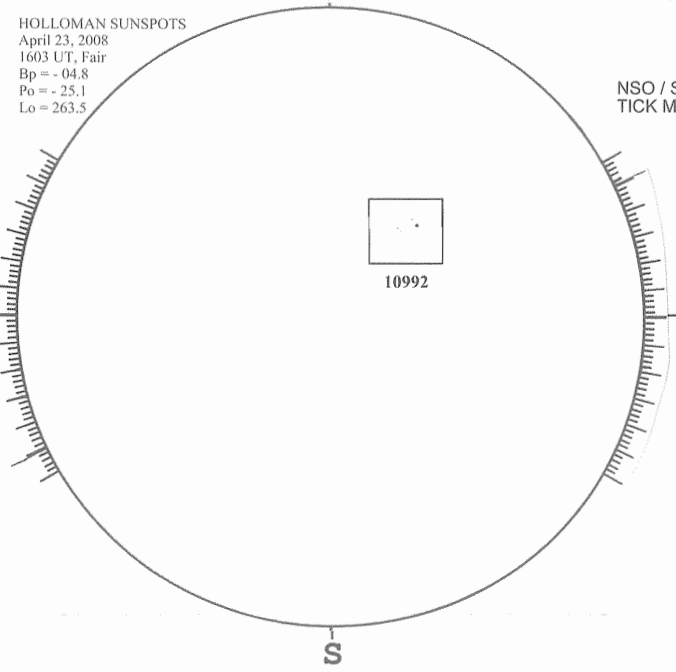
15.76 -
16.70 UT

--- BIG BEAR H-ALPHA



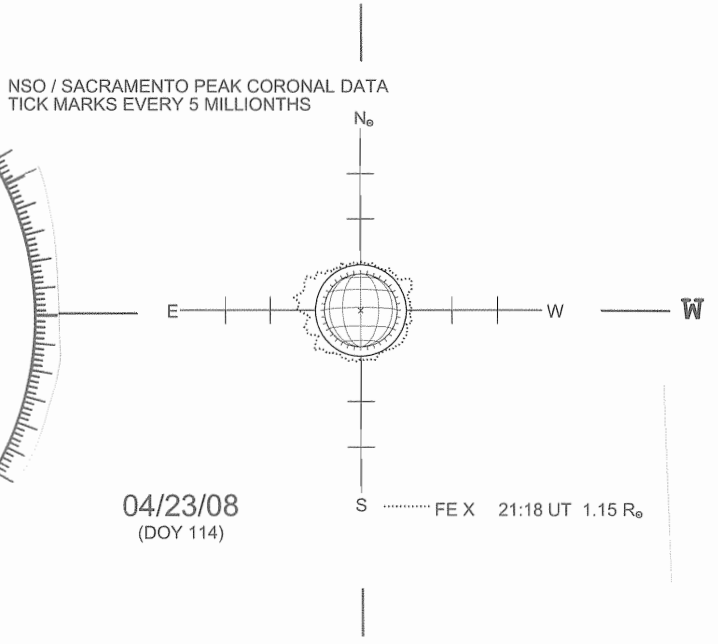
1635 UT

HOLLOMAN SUNSPOTS



1603 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----



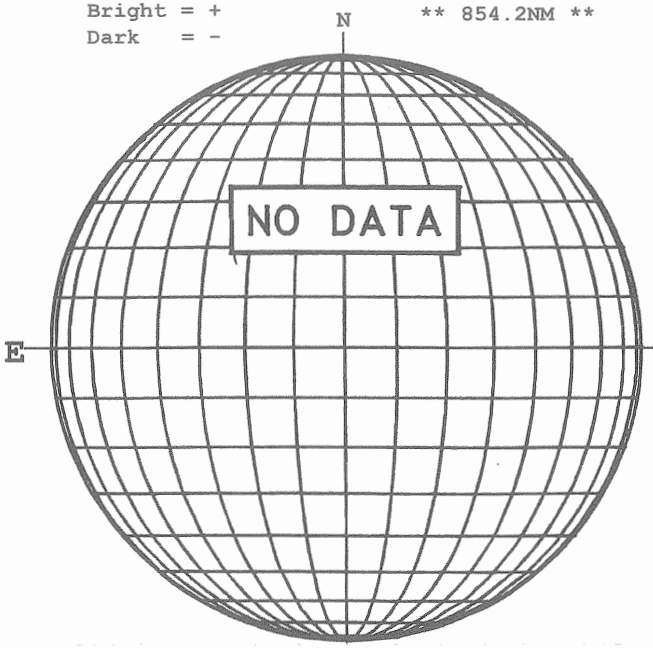
04/23/08
(DOY 114)

April 24, 2008 (P=-25.16, Bo=-4.82, Lo= 258.79)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

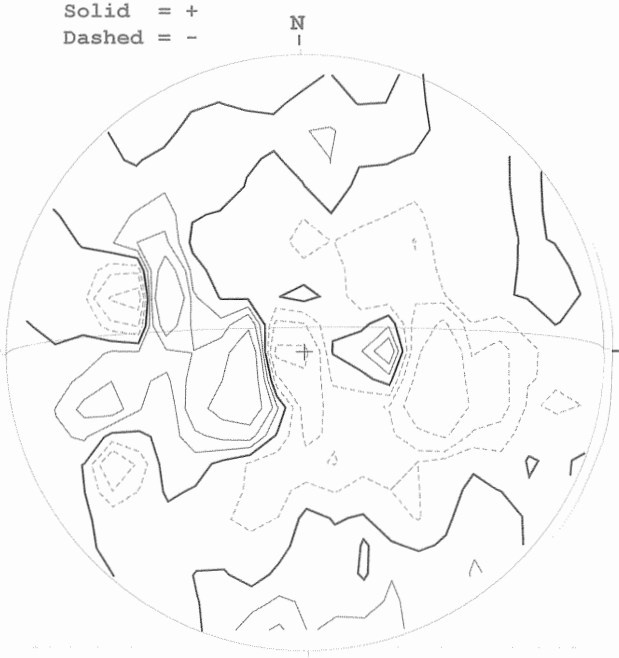
** 854.2NM **



2100 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

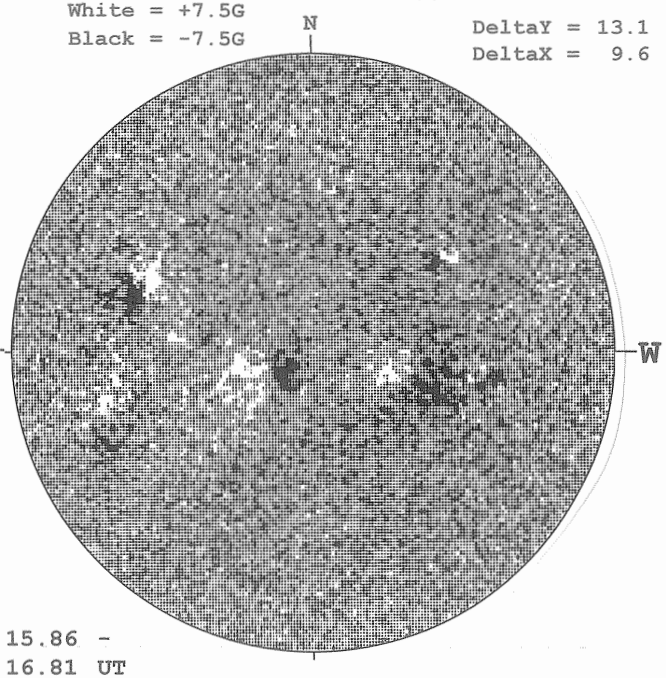


1919 UT

MT. WILSON MAGNETOGRAM

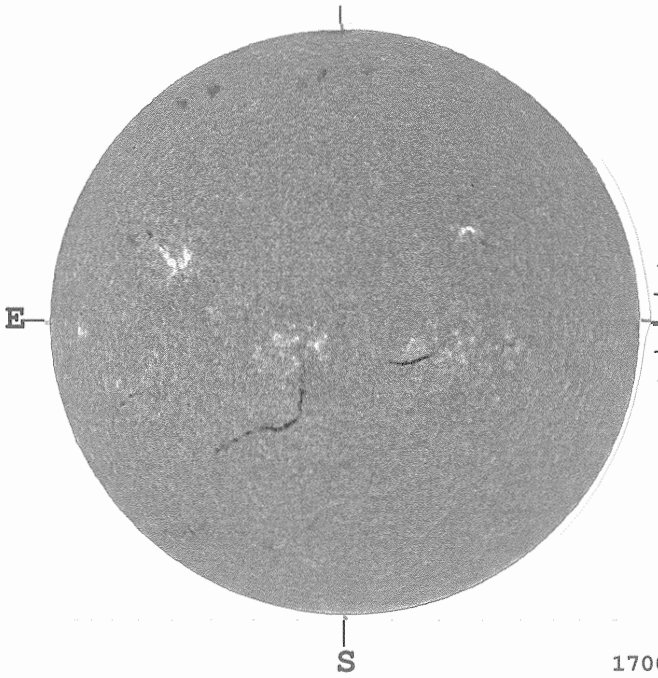
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



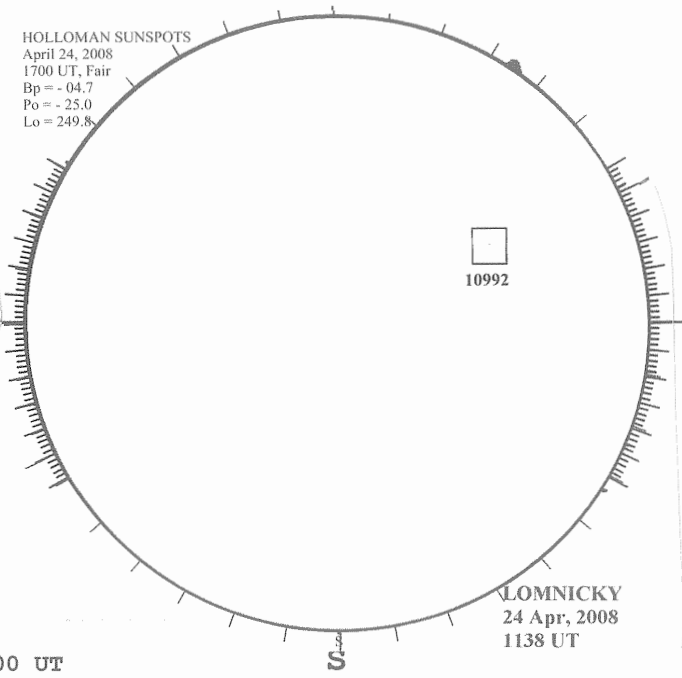
15.86 -
16.81 UT

BIG BEAR H-ALPHA



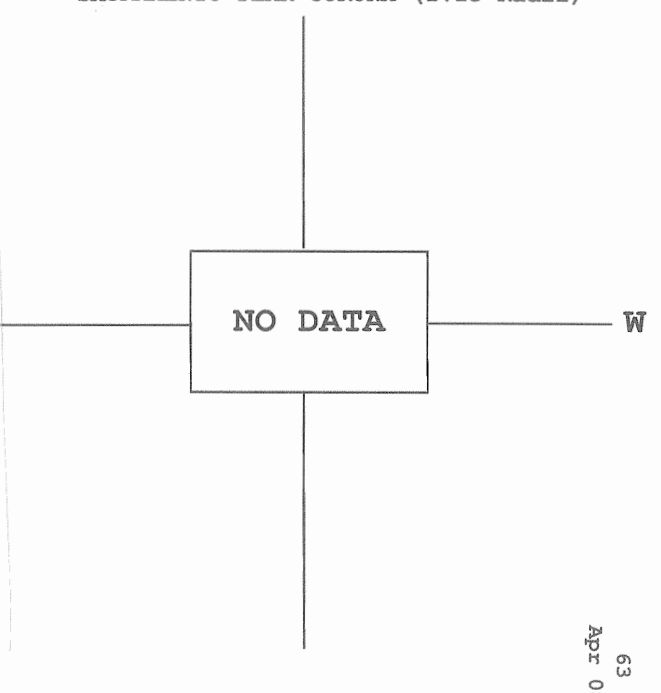
1531 UT

HOLLOMAN SUNSPOTS



1700 UT
1138 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii)-----



63
Apr 08

April 25, 2008 (P=-25.02, Bo=-4.72, Lo= 245.58)

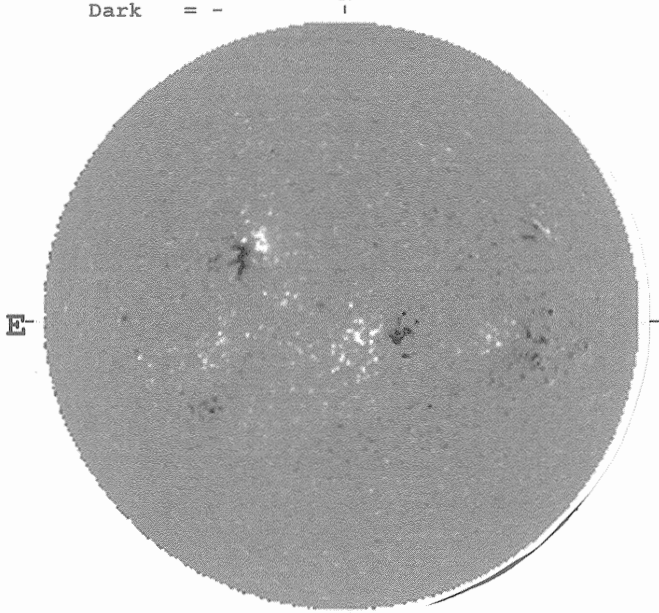
Apr 08 64

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

N

** 854.2NM **

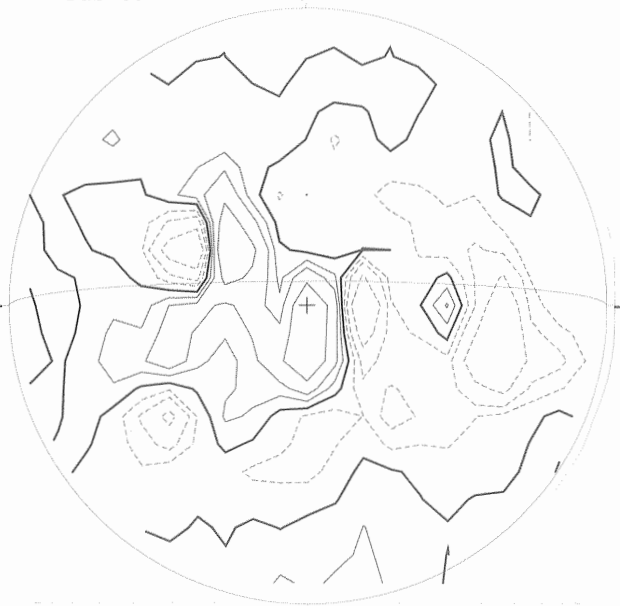


2136 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

N



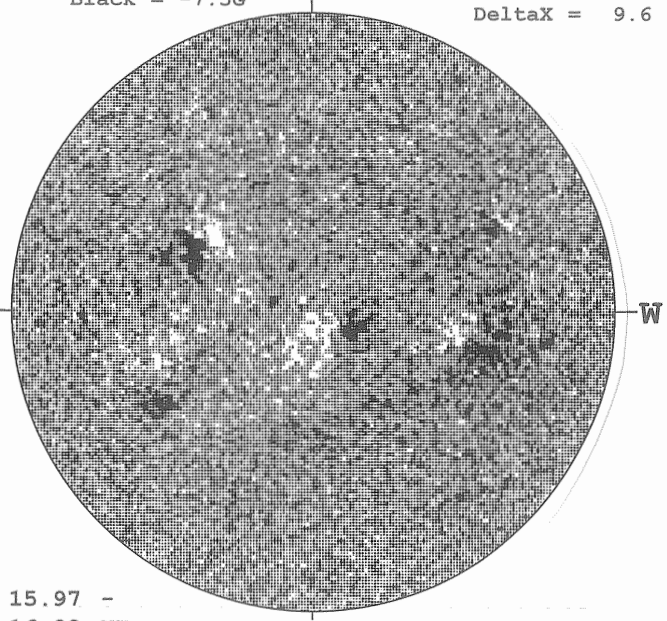
1940 UT

MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

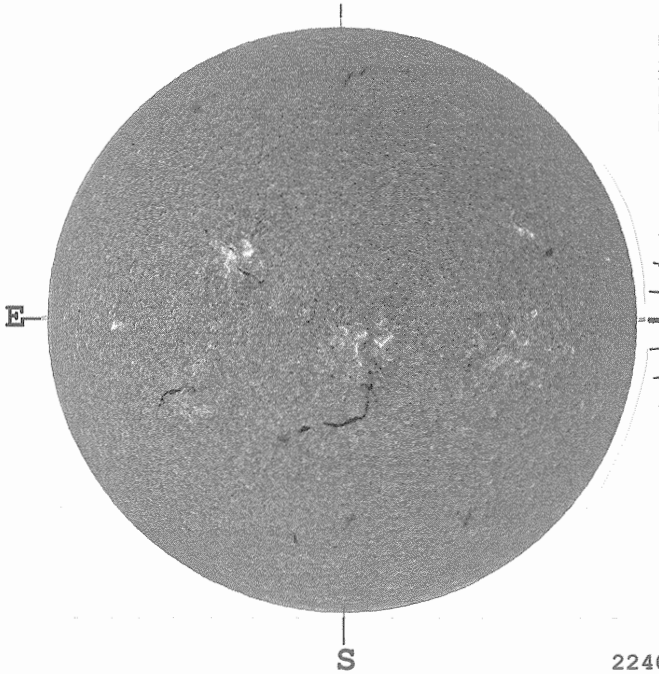
N

DeltaY = 13.1
DeltaX = 9.6



15.97 -
16.92 UT

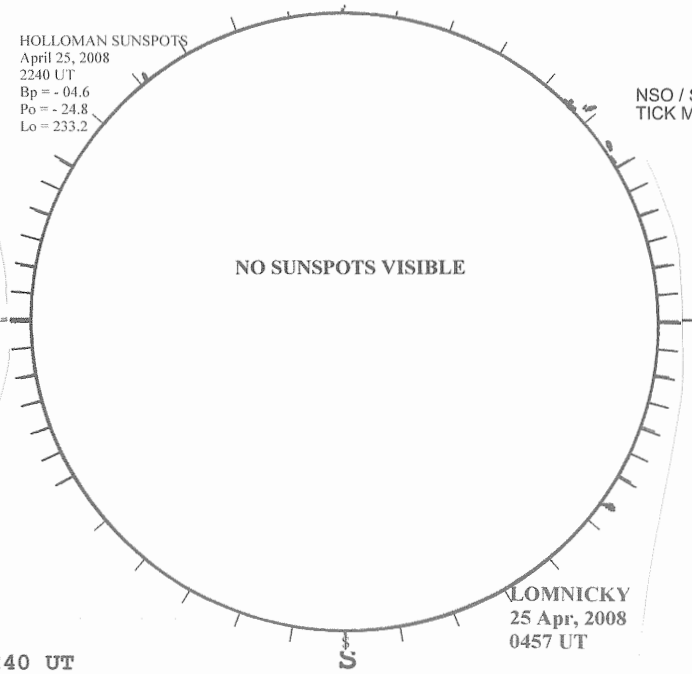
BIG BEAR H-ALPHA



1609 UT

HOLLOMAN SUNSPOTS

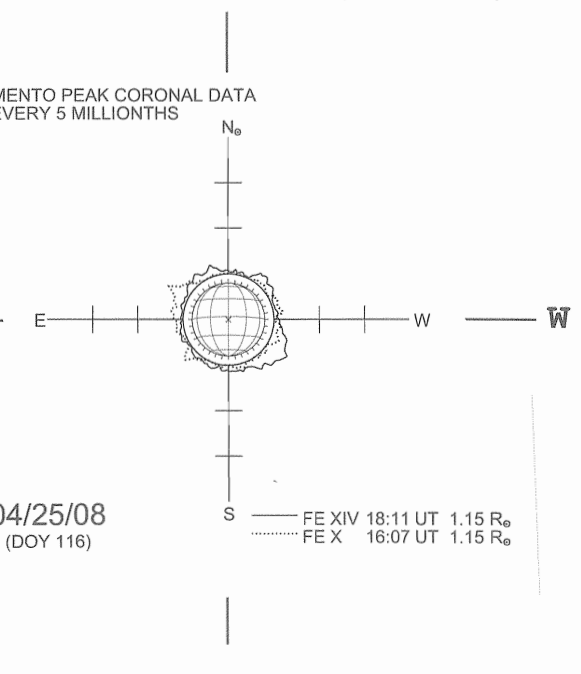
HOLLOMAN SUNSPOTS
April 25, 2008
2240 UT
Bp = - 04.6
Po = - 24.8
Lo = 233.2



2240 UT
0457 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



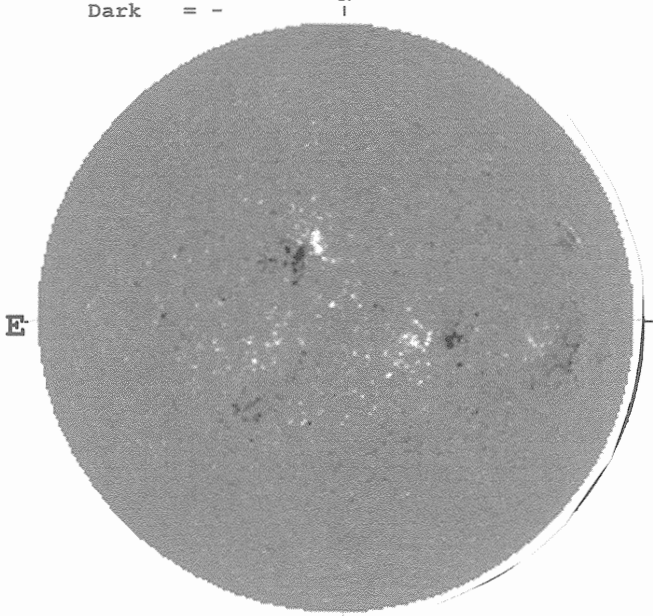
04/25/08
(DOY 116)

April 26, 2008 (P=-24.88, Bo=-4.63, Lo= 232.37)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

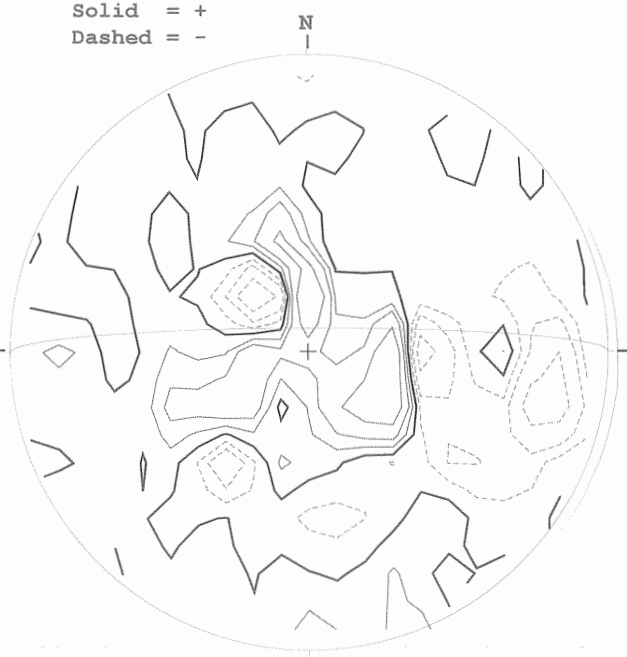
** 854.2NM **



1858 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

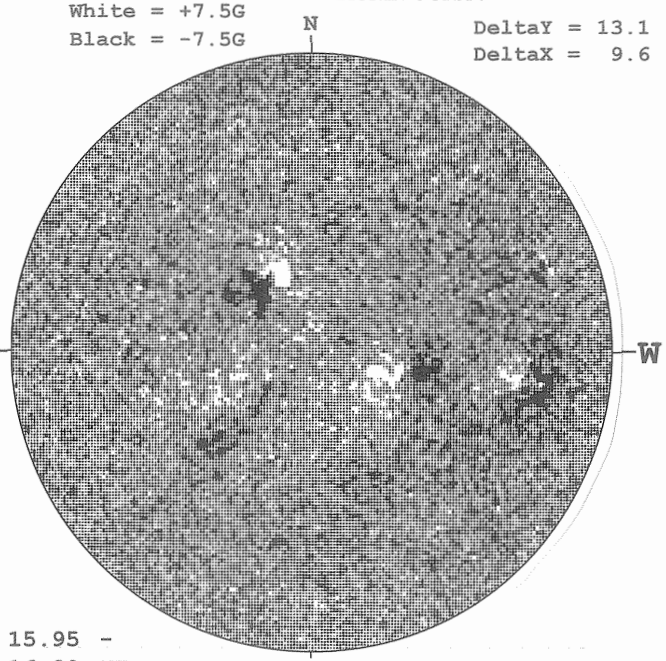


1929 UT

MT. WILSON MAGNETOGRAM

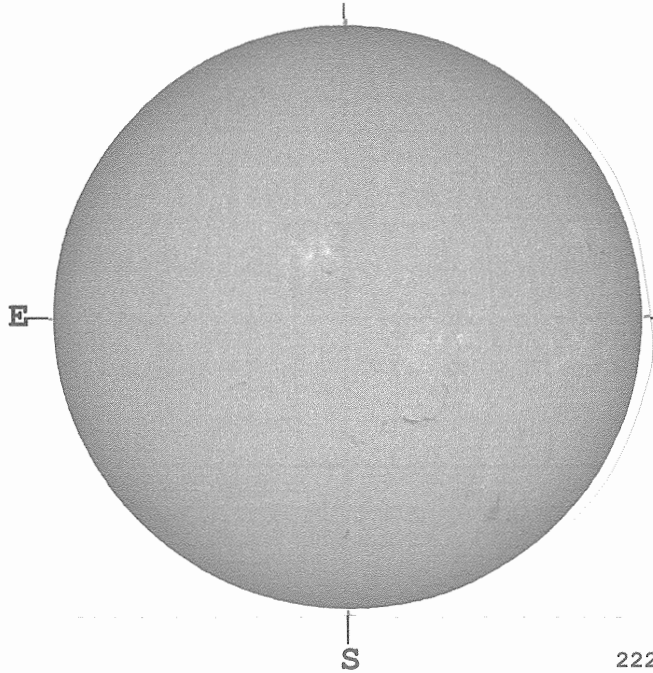
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



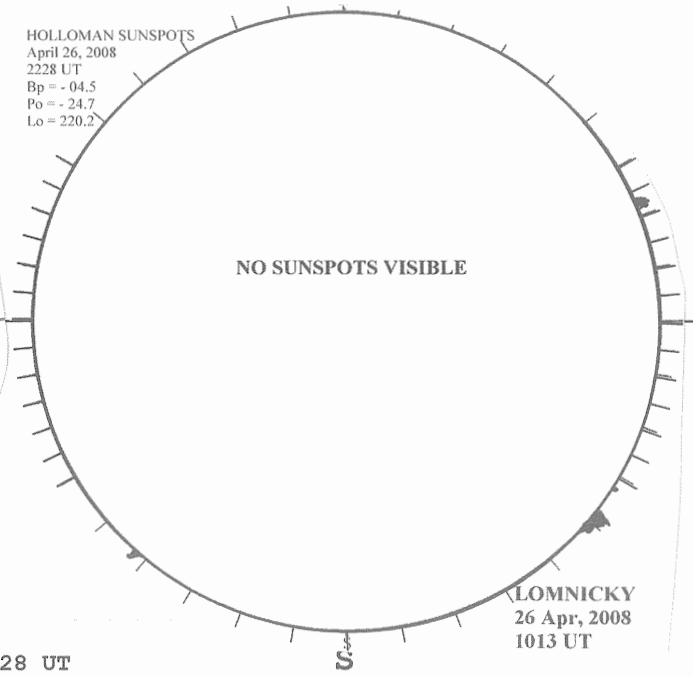
15.95 -
16.89 UT

--- BIG BEAR H-ALPHA



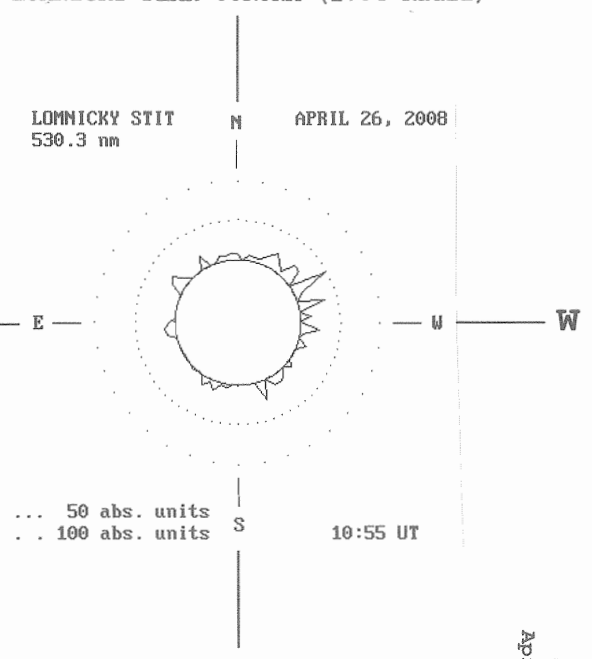
1935 UT

HOLLOMAN SUNSPOTS



2228 UT
1013 UT LOMN PROM

LOMNICKY PEAK CORONA (1.04 Radii)------



65
Apr 08

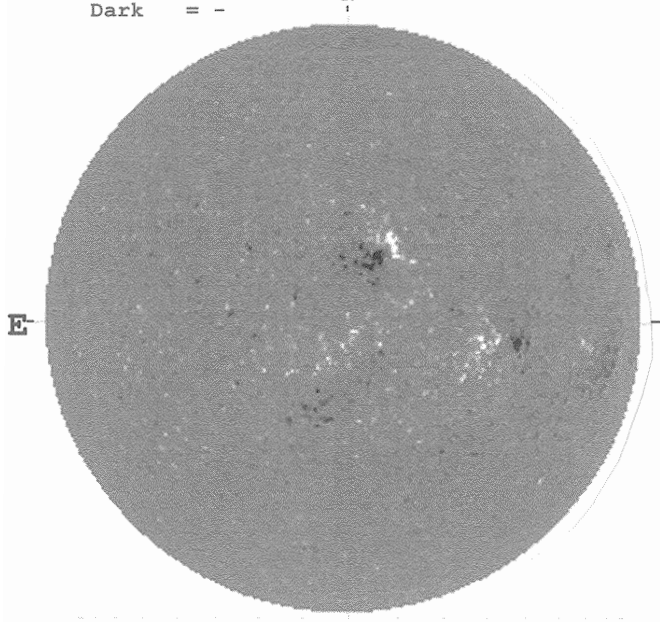
April 27, 2008 (P=-24.74, Bo=-4.53, Lo= 219.16)

Apr 08 99

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

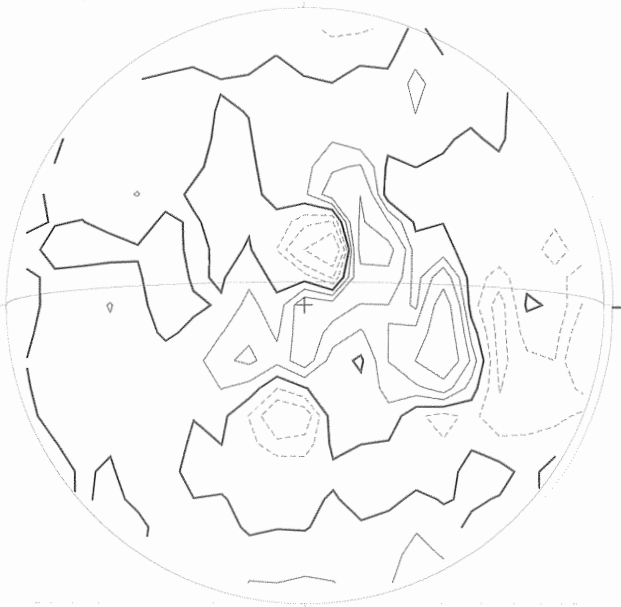
** 854.2NM **



1853 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

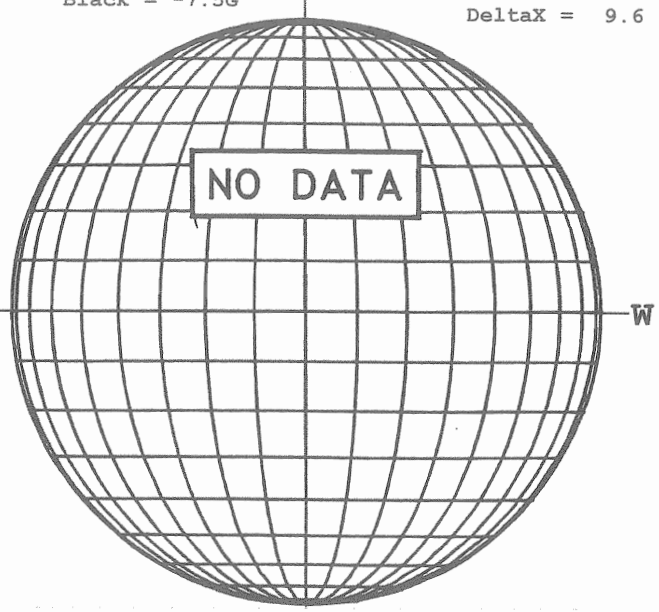


2017 UT

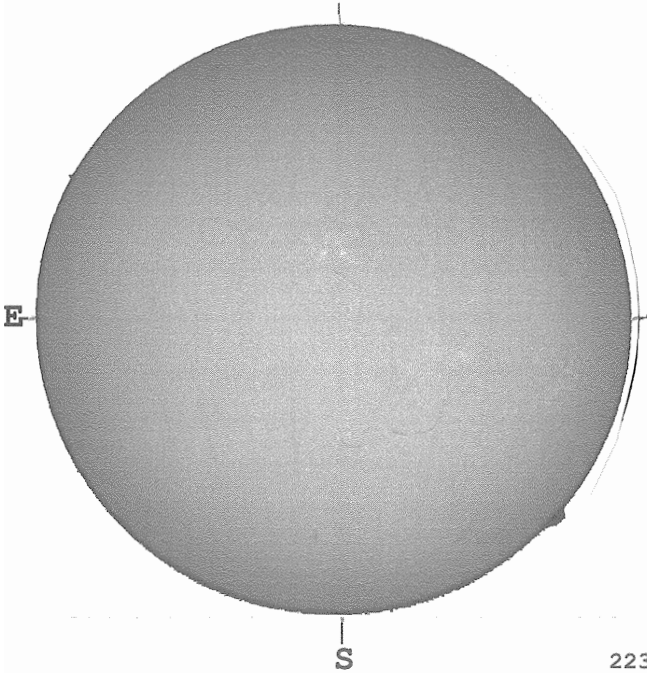
MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6

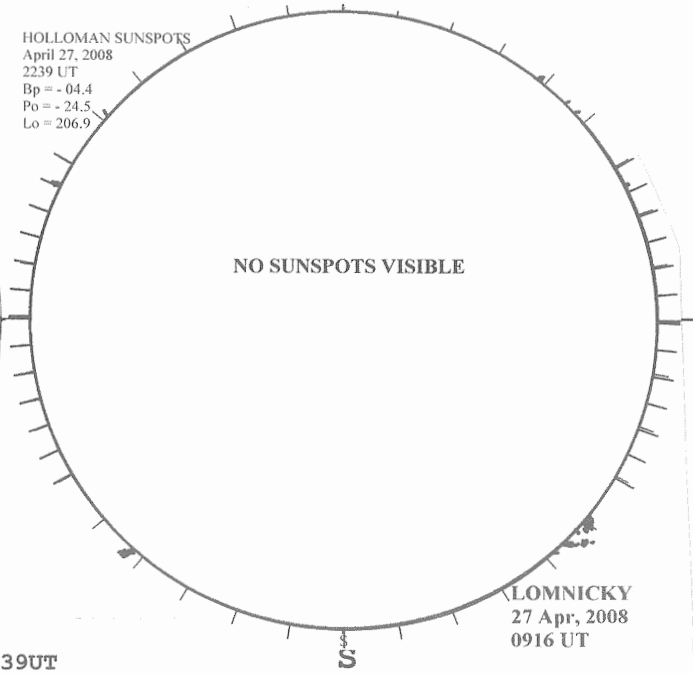


--- YUNNAN H-ALPHA



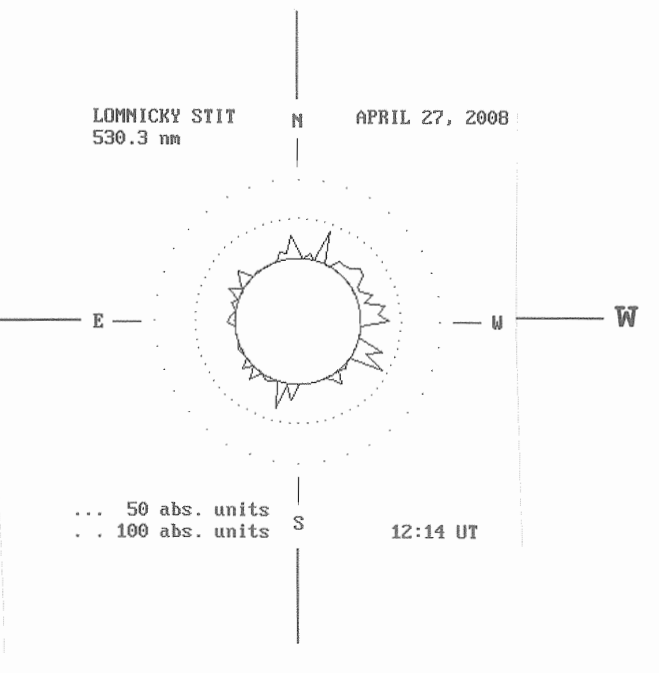
0236 UT

HOLLOMAN SUNSPOTS



2239UT
0915 UT LOMN PROM

LOMNICKY PEAK CORONA (1.04 Radii)------



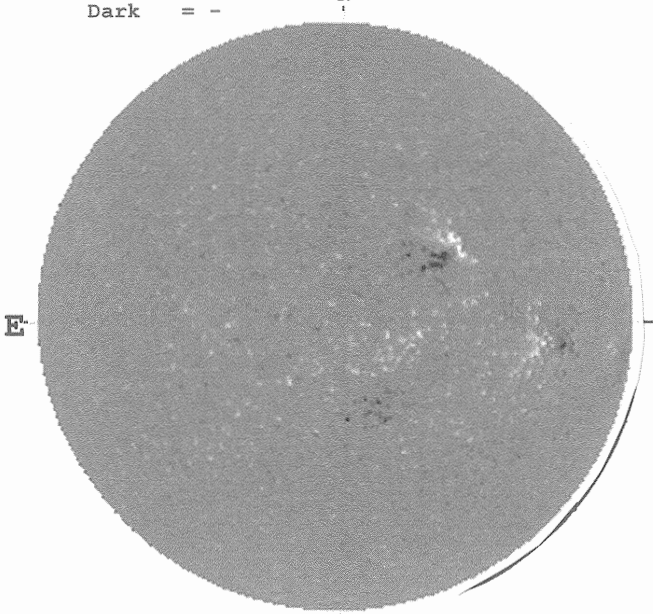
April 28, 2008 (P=-24.58, Bo=-4.44, Lo= 205.94)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

N

** 854.2NM **

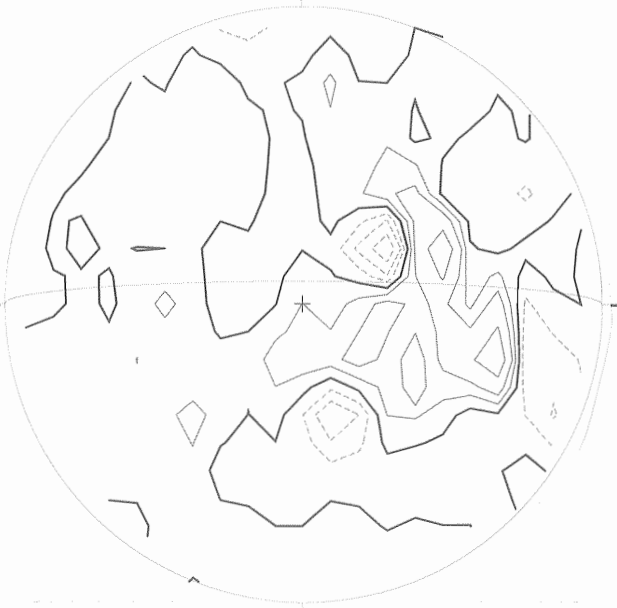


2024 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

N



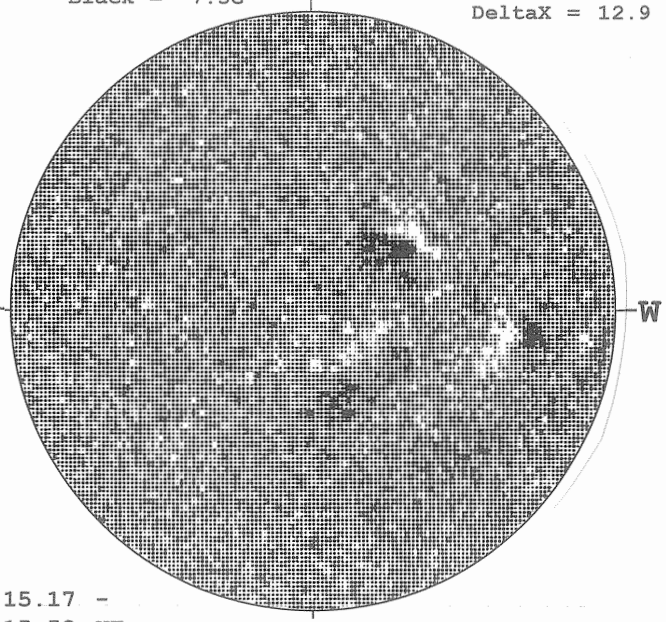
1846 UT

MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

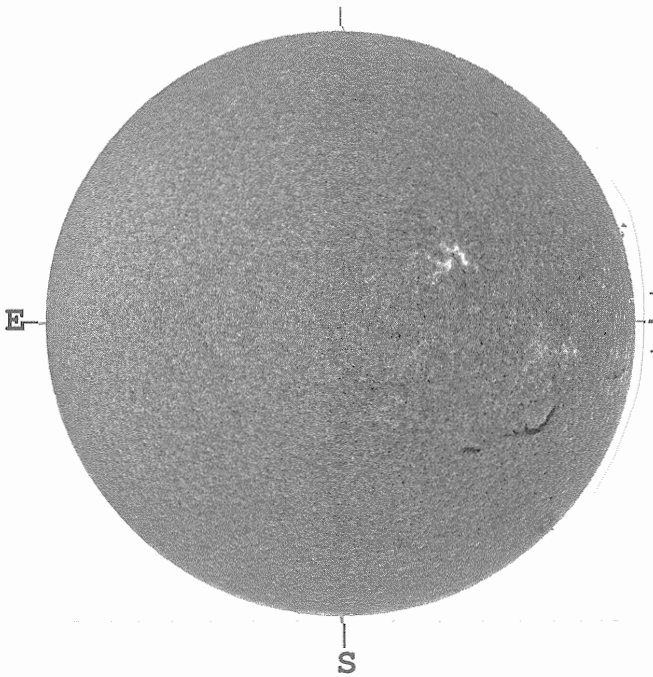
N

DeltaY = 20.1
DeltaX = 12.9



15.17 -
15.58 UT

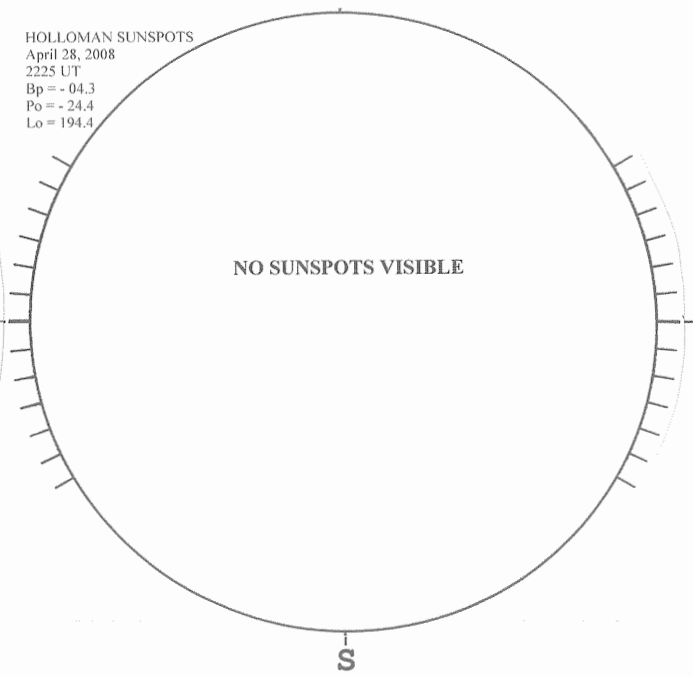
BIG BEAR H-ALPHA



2147 UT

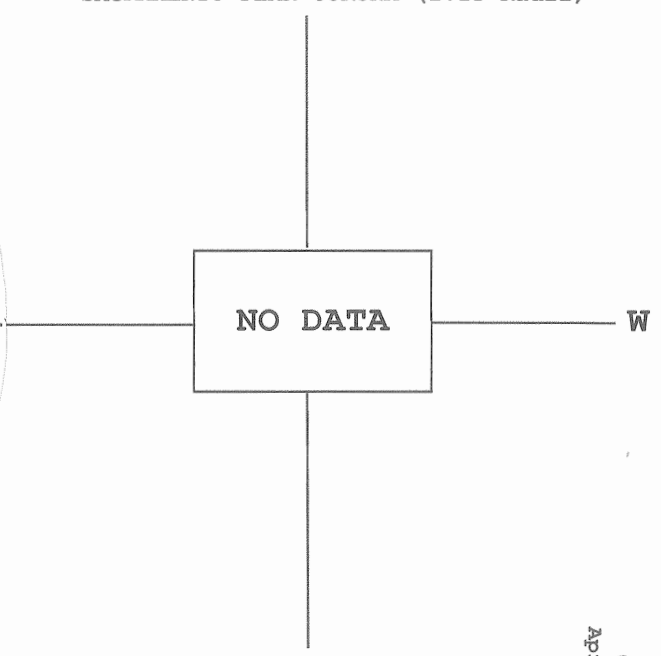
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
April 28, 2008
2225 UT
Bp = - 04.3
Po = - 24.4
Lo = 194.4



2225 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



67 Apr 08

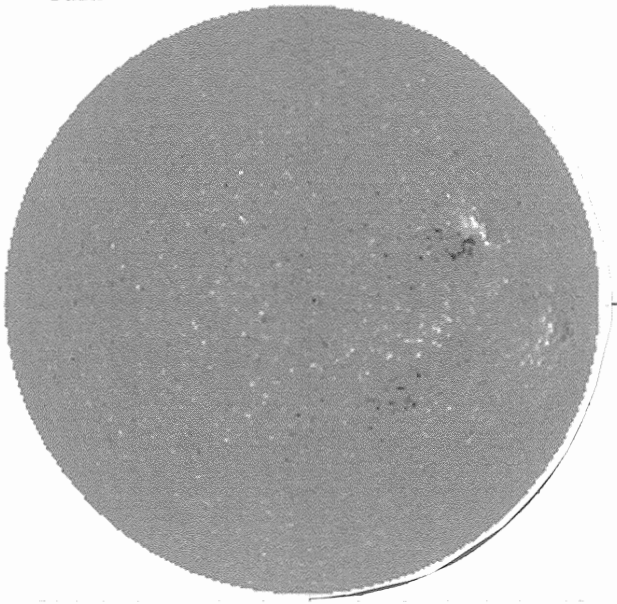
April 29, 2008 (P=-24.42, Bo=-4.34, Lo= 192.73)

Apr 08 68

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

** 854.2NM **



1955 UT

STANFORD MAGNETOGRAM

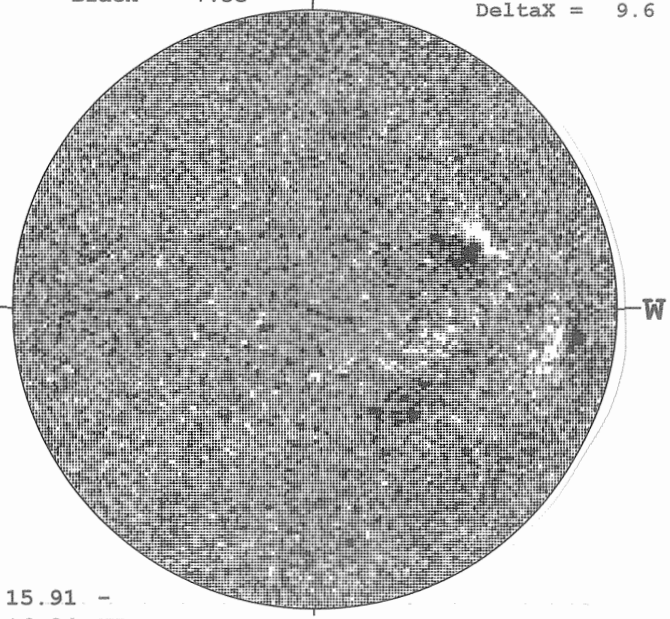
Solid = +
Dashed = -

30/0109 UT

MT. WILSON MAGNETOGRAM

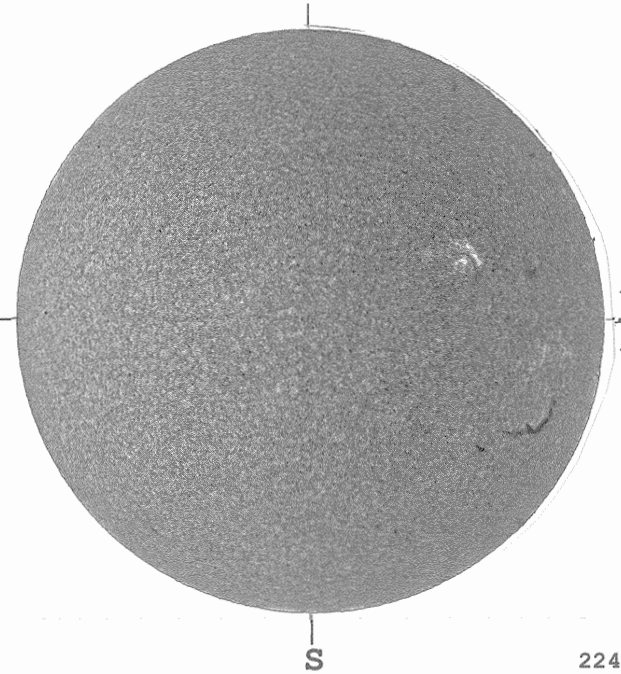
White = +7.5G
Black = -7.5G

DeltaY = 13.1
DeltaX = 9.6



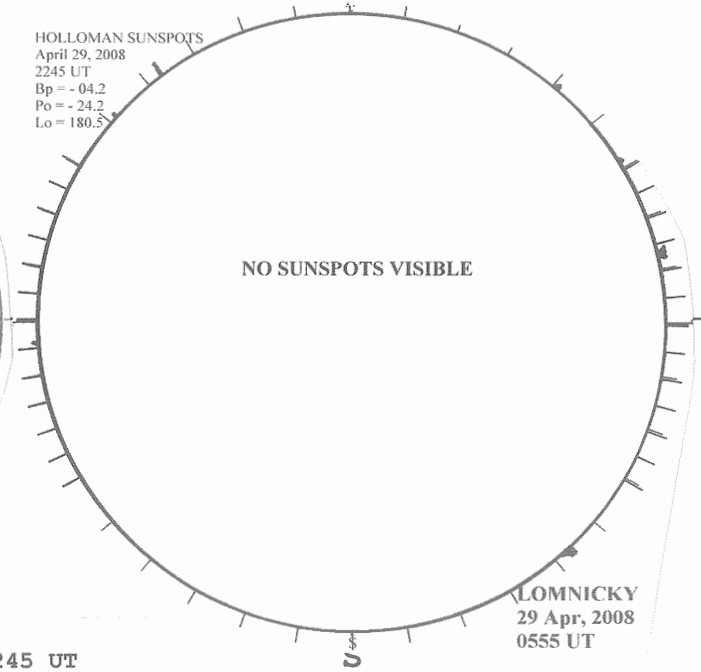
15.91 -
16.84 UT

--- BIG BEAR H-ALPHA



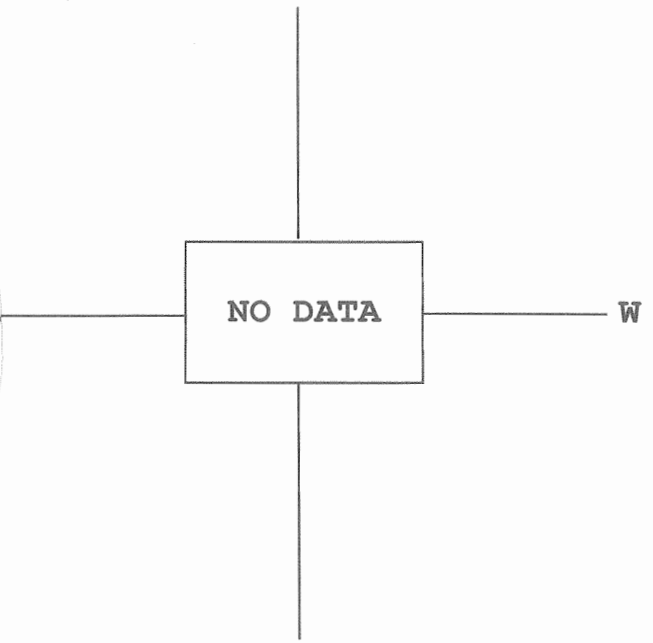
1525 UT

HOLLOMAN SUNSPOTS



2245 UT
0555 UT LOMN PROM

SACRAMENTO PEAK CORONA (1.15 Radii)-----



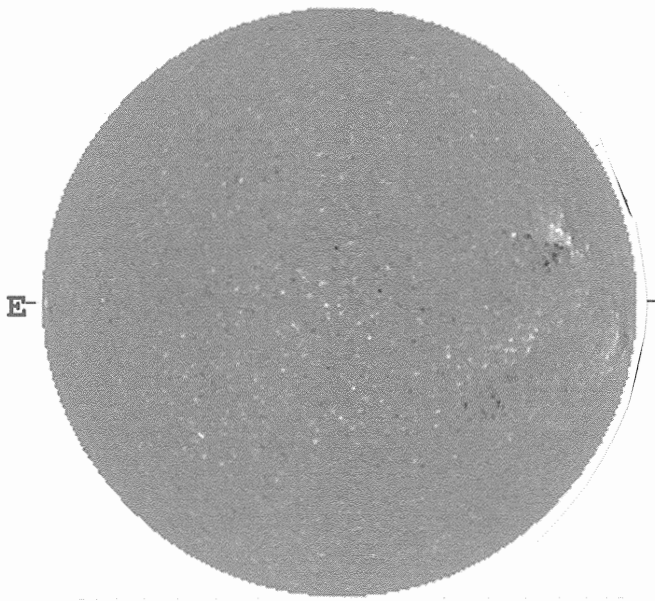
April 30, 2008 (P=-24.25, Bo=-4.24, Lo= 179.51)

KITT PEAK MAGNETOGRAM -- SOLIS

Bright = +
Dark = -

N

** 854.2NM **

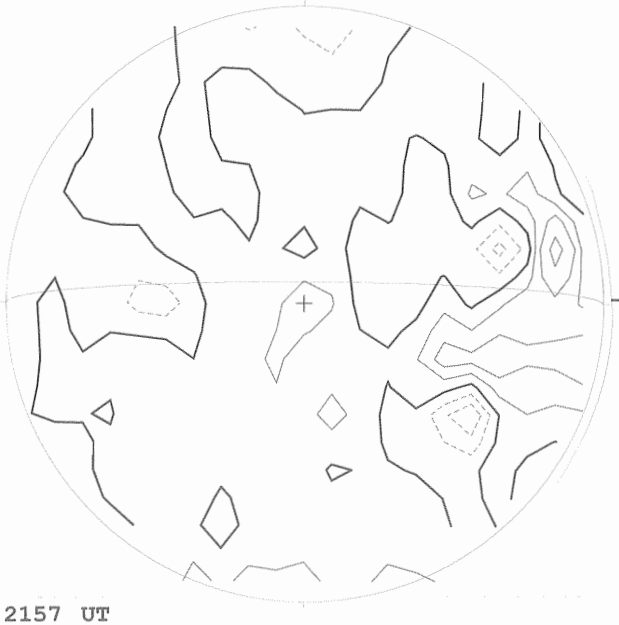


1919 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

N



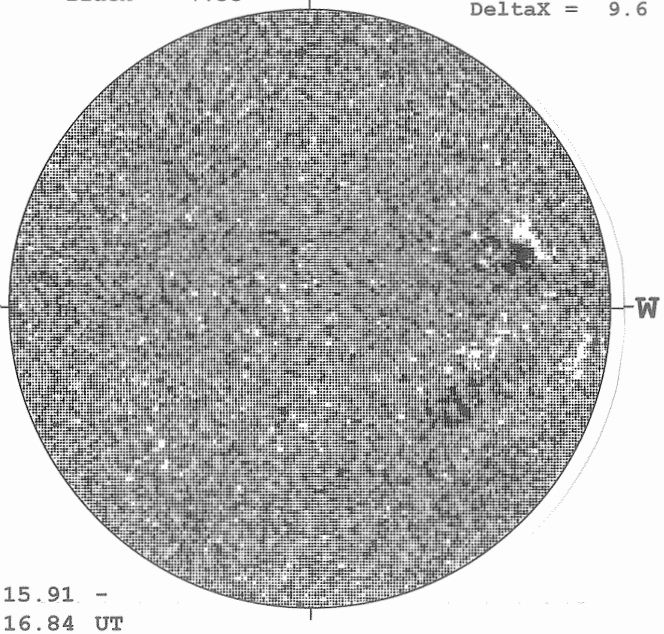
2157 UT

MT. WILSON MAGNETOGRAM

White = +7.5G
Black = -7.5G

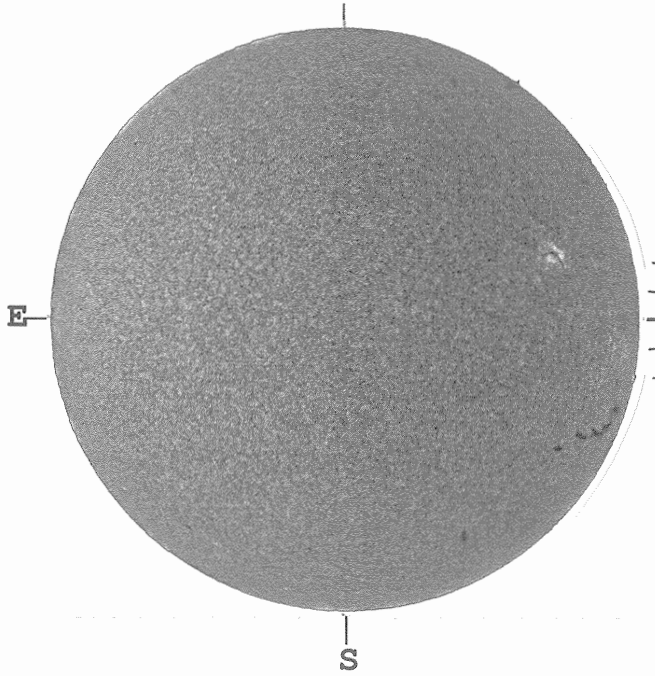
N

DeltaY = 13.1
DeltaX = 9.6



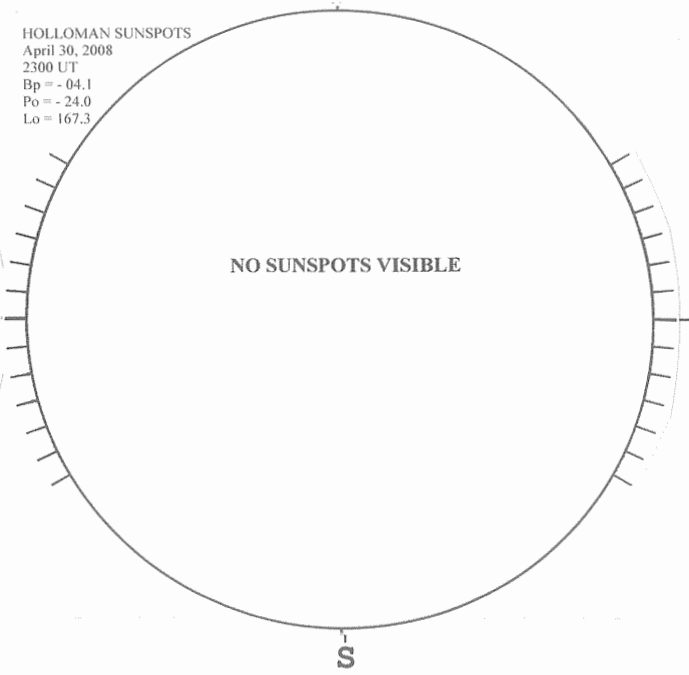
15.91 -
16.84 UT

BIG BEAR H-ALPHA



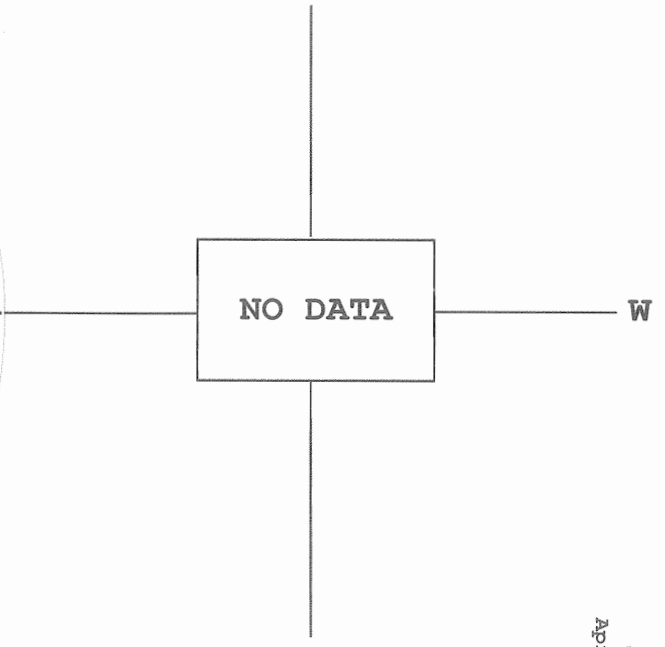
1539 UT

HOLLOMAN SUNSPOTS



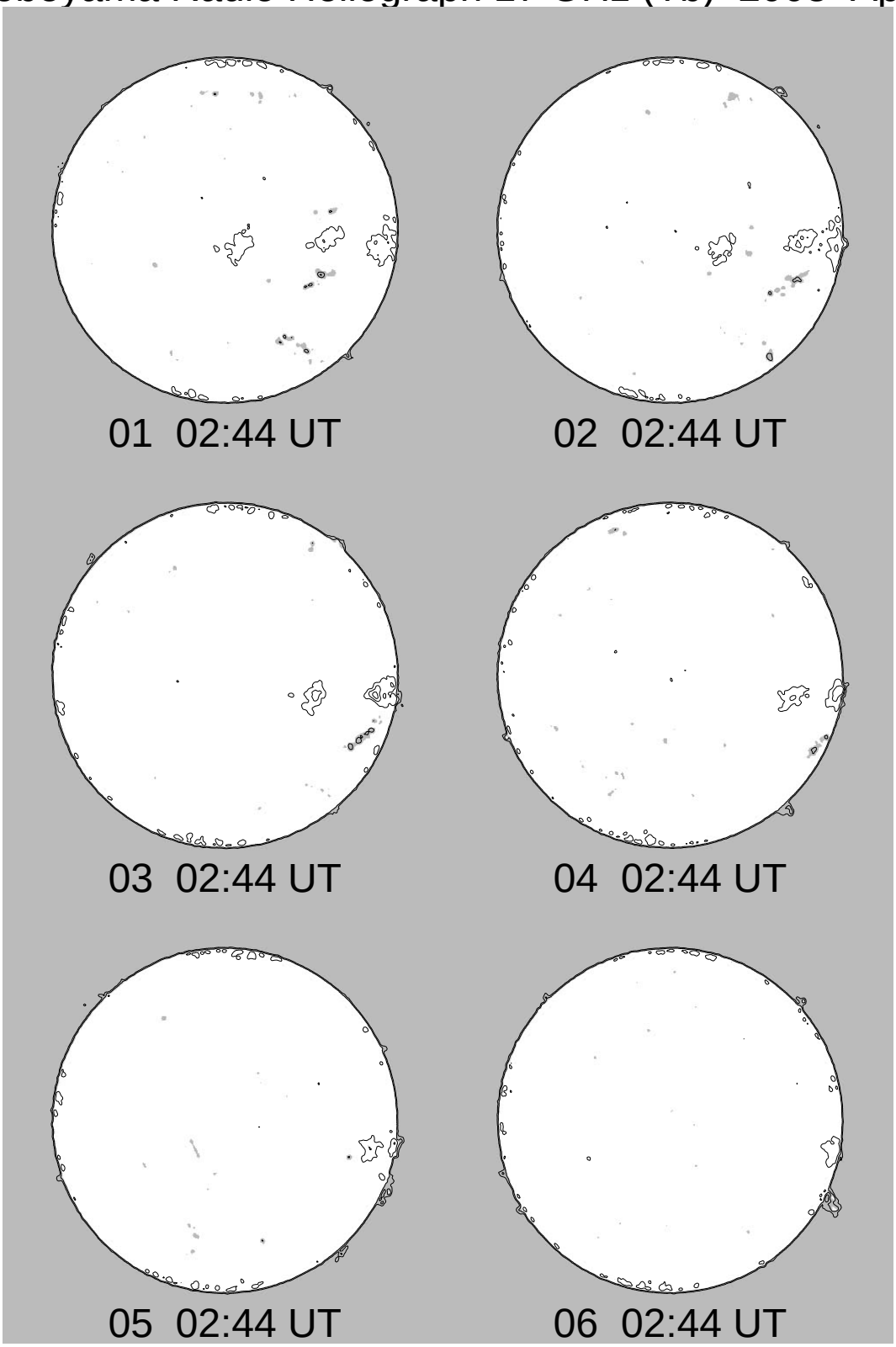
2300 UT

SACRAMENTO PEAK CORONA (1.15 Radii)-----



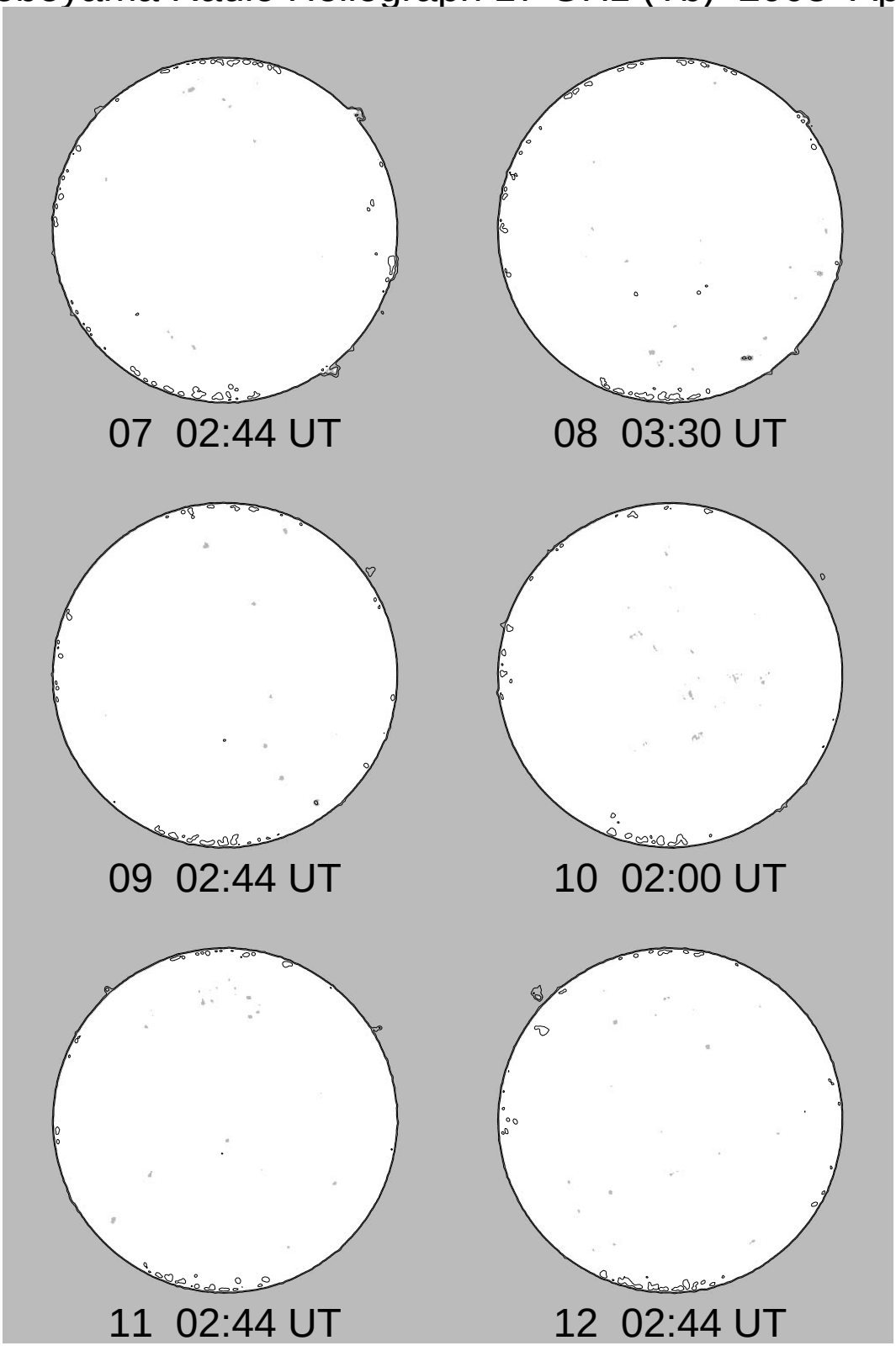
Apr 08 69

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 April



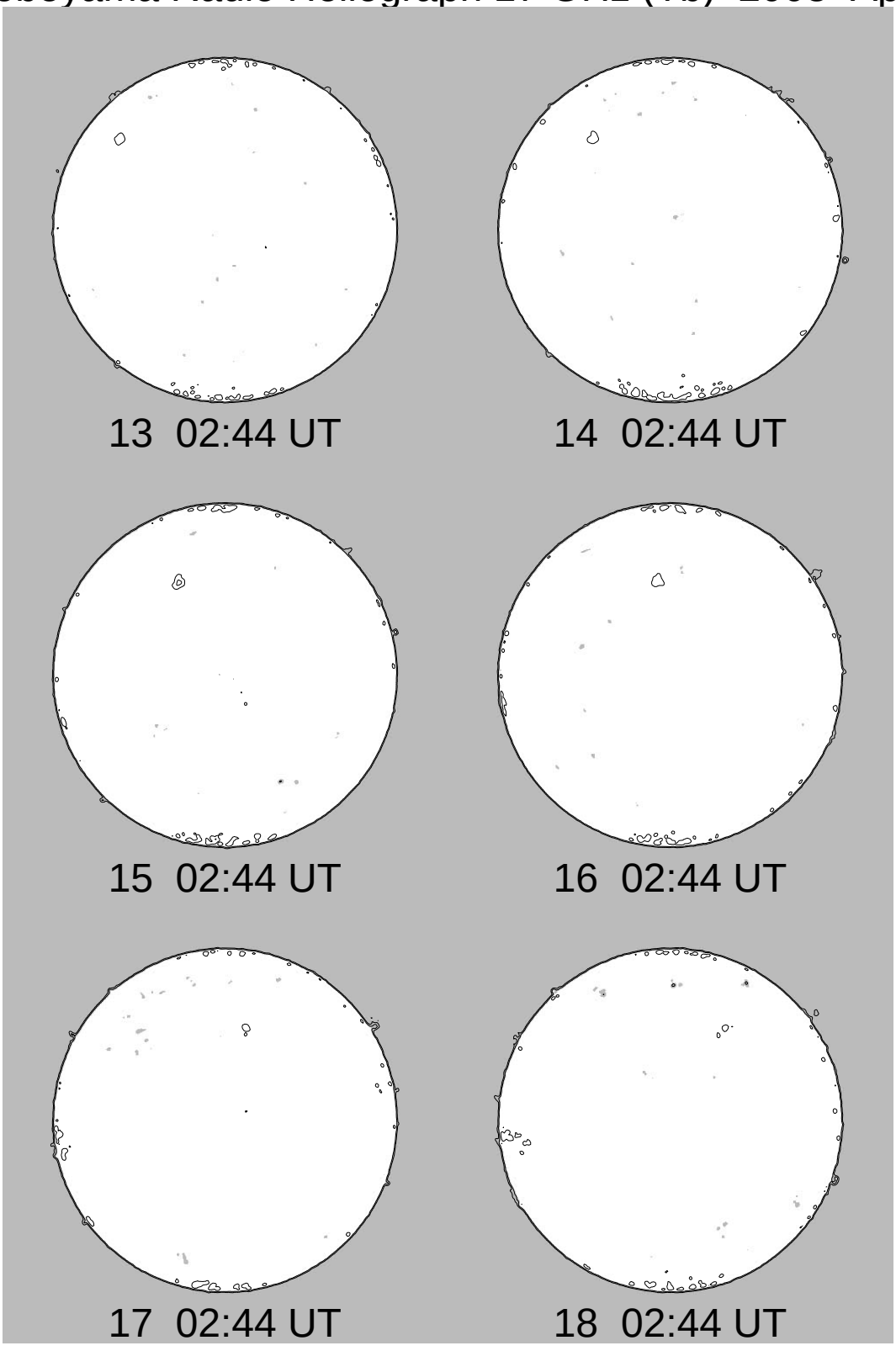
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 April



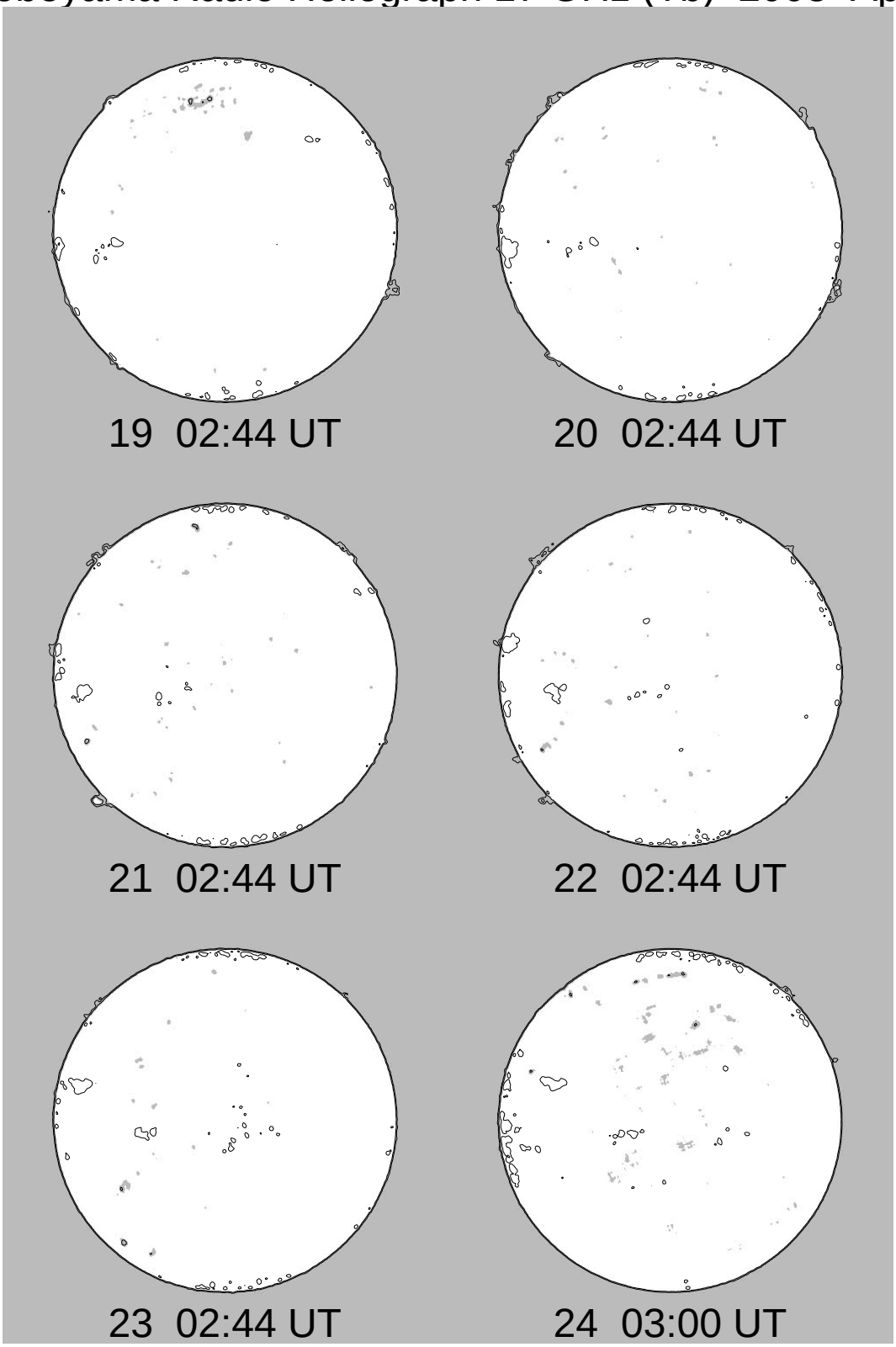
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 April



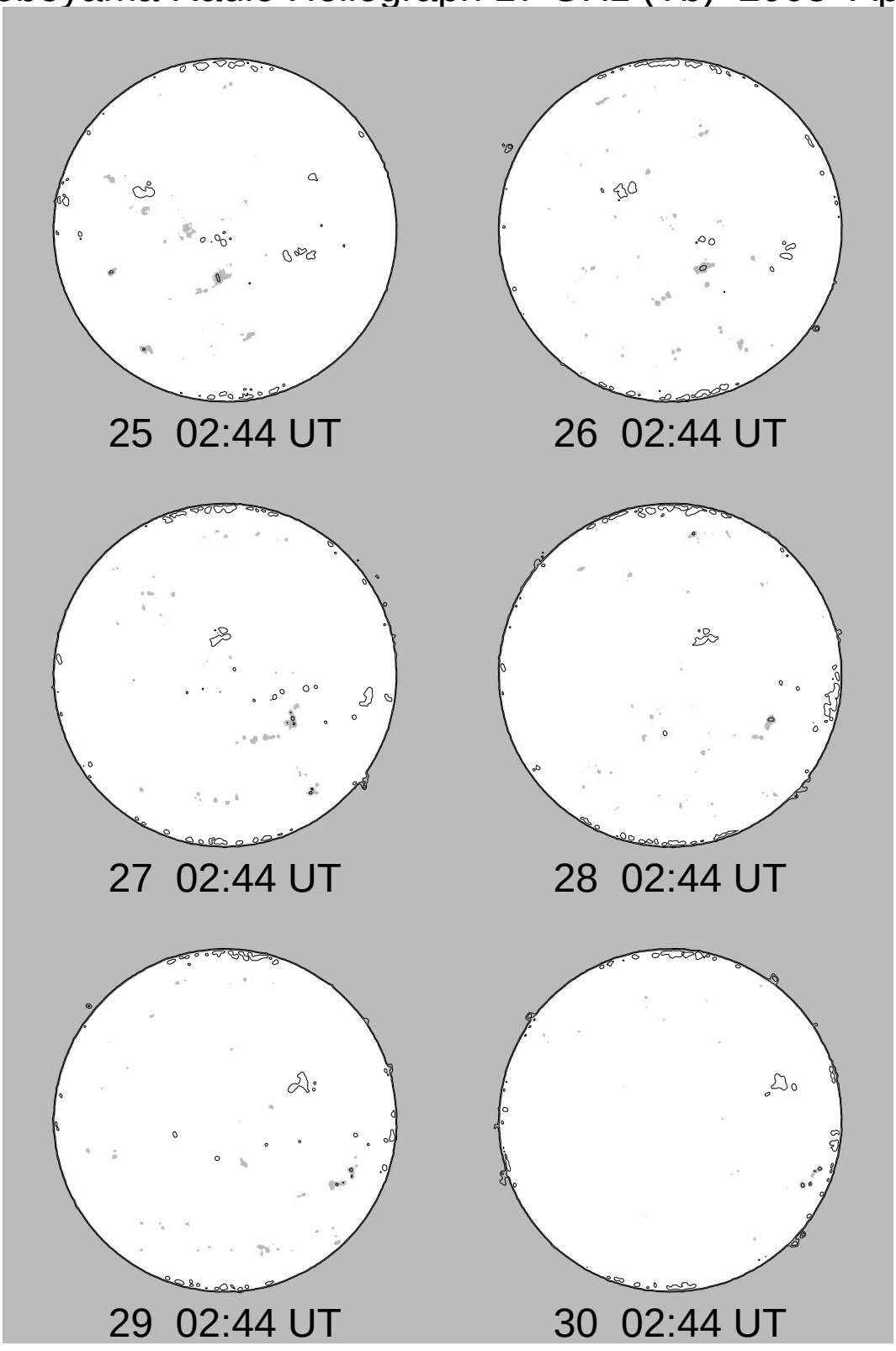
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 April



Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 April



Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

S U N S P O T G R O U P S

(Ordered by Central Meridian Passage Date)

APRIL 2008

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10990		HOLL	04	13	1907	N27	E33	04	16.4		A	AXX	10	2	1	4
10990		LEAR	04	14	0045	N27	E29	04	16.3		A	AXX	10	1	1	3
10990		PURP	04	14	0105	N27	E30	04	16.4			AXX	3		1	4
10990		SVTO	04	14	0635	N26	E29	04	16.5		A	AXX	10	1	1	3
10990		LEAR	04	14	0845	N27	E29	04	16.6		A	AXX	10	1	1	3
10990		HOLL	04	14	1608	N26	E22	04	16.4		A	AXX	10	1	1	2
10990		LEAR	04	15	0303	N27	E16	04	16.4		B	BXO	10	2	3	2
10991		HOLL	04	18	1530	S10	E55	04	22.8		A	AXX	10	1	1	2
10991		LEAR	04	19	0038	S09	E41	04	22.1		A	AXX	10	1	1	2
10991		KAND	04	19	0905	S09	E36	04	22.1			AX		2	1	4
10991		HOLL	04	19	1741	S09	E32	04	22.1		B	BXO	30	3	2	3
10991		LEAR	04	20	0100	S10	E27	04	22.1		A	AXX	20	2	1	2
10992		VORO	04	24	0323	N13	W20	04	22.6			BXO	6	4		3
10992		LEAR	04	22	0640	N13	E07	04	22.8		B	BXO	20	2	3	2
10992		KAND	04	22	0725	N13	E06	04	22.8			BXO		3	2	4
10992		SVTO	04	22	0820	N14	E06	04	22.8		B	DSO	30	2	3	2
10992		HOLL	04	22	1830	N12	E03	04	23.0		B	CSO	50	4	4	3
10992		LEAR	04	23	0053	N11	W04	04	22.7		B	CAO	20	2	3	2
10992		PURP	04	23	0305	N13	W03	04	22.9			DSO	26	3	4	2
10992		SVTO	04	23	0645	N16	W07	04	22.7		B	BXO	20	2	4	3
10992		TACH	04	23	0716	N12	W07	04	22.8			BXO	11	2	4	3
10992		KAND	04	23	1200	N13	W09	04	22.8			BXO		2	4	2
10992		HOLL	04	23	1603	N14	W15	04	22.5		B	CSO	70	5	5	3
10992		PURP	04	24	0048	N14	W19	04	22.6			CR0	7	2	3	4
10992		LEAR	04	24	0054	N13	W26	04	22.1		A	AXX	10	1	1	2
10992		SVTO	04	24	0658	N17	W22	04	22.6		A	AXX	10	1	1	2
10992		TACH	04	24	0721	N12	W23	04	22.6			AXX	6	1	1	3
10992		HOLL	04	24	1700	N10	W30	04	22.4		A	AXX	10	1	1	3
10992		PURP	04	25	0057	N14	W32	04	22.6			AXX	3	1	1	3

Stations reporting:

HOLL = Holloman LEAR = Learmonth PURP = Purple Mountain TACH = Tashkent
KAND = Kandilli PALE = Palehua SVTO = San Vito VORO = Voroshilov

SUDDEN IONOSPHERIC DISTURBANCES
APRIL 2008

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	Number of Station Reports by Type SWF	SEA	SPA	LF-SPA	SES	Flare (UT)	X-ray Class	NOAA Region
04	0806	0811	0909	1	1						No flare		
06	0901	0919U	0939	1	1						No flare		
16	0702	0703	0856	1	1						No flare		
17	1044	1056	1201	1	1						No flare		
24	1201	1214	1248	1	1						No flare		
25	0637	0645	0712	1	1						No flare		

OBSERVATORIES REPORTING FOR APRIL 2008

Upice, Czech Republic SEA

Observations are not necessarily continuous.
* = No Flare Patrol

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

Spectral Observations

APRIL 2008

OBSERVATION			EVENT				FREQUENCY			
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	Lower (MHz)	Upper (MHz)	Remarks
01	0000	0800	CULG								
	0000	0905	HIRA								
	0547	1625	ONDR								
	0600	1615	BLEN								
	2010	2400	CULG								
	2016	2400	HIRA								
02	0000	0800	CULG								
	0000	0906	HIRA								
	0555	1615	BLEN								
	0556	1627	ONDR								
	2010	2400	CULG								
	2015	2400	HIRA								
03	0000	0800	CULG								
	0000	0907	HIRA								
	0543	1628	ONDR								
	0555	1630	BLEN								
	2010	2400	CULG								
	2014	2400	HIRA								
04	0000	0750	CULG								
	0000	0908	HIRA								
	0541	1630	ONDR								
	0555	1630	BLEN								
	2013	2400	HIRA								
	2020	2400	CULG								
05	0000	0750	CULG								
	0000	0909	HIRA								
	0539	1631	ONDR								
	0555	1630	BLEN								
	2011	2400	HIRA								
	2020	2400	CULG								
06	0000	0750	CULG								
	0000	0910	HIRA								
	0537	1633	ONDR								
	0550	1630	BLEN								
	2009	2400	HIRA								
	2020	2400	CULG								
07	0000	0750	CULG								
	0000	0911	HIRA								
	0535	1634	ONDR								
	0550	1630	BLEN								
	2008	2400	HIRA								
	2020	2400	CULG								
08	0000	0750	CULG								
	0000	0912	HIRA								
	0533	1636	ONDR								
	0550	1630	BLEN								
	2007	2400	HIRA								
	2020	2400	CULG								
09	0000	0750	CULG								
	0000	0913	HIRA								
	0531	1637	ONDR								
	0545	1630	BLEN								
	2005	2400	HIRA								
	2020	2400	CULG								
10	0000	0750	CULG								
	0000	0914	HIRA								
	0529	1639	ONDR								
	0545	1715	BLEN								
	2004	2400	HIRA								
	2020	2400	CULG								

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

Spectral Observations

APRIL 2008

OBSERVATION			EVENT				FREQUENCY			
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	Lower (MHz)	Upper (MHz)	Remarks
11	0000	0750	CULG								
	0000	0914	HIRA								
	0527	1640	ONDR								
	0545	1715	BLEN								
	2003	2400	HIRA								
	2020	2400	CULG								
12	0000	0740	CULG								
	0000	0915	HIRA								
	0525	1642	ONDR								
	0540	1715	BLEN								
	2002	2400	HIRA								
	2020	2400	CULG								
13	0000	0740	CULG								
	0000	0916	HIRA								
	0523	1643	ONDR								
	0540	1720	BLEN								
	2000	2400	HIRA								
	2020	2400	CULG								
14	0000	0740	CULG								
	0000	0917	HIRA								
	0521	1645	ONDR								
	0540	1720	BLEN								
	1959	2400	HIRA								
	2020	2400	CULG								
15	0000	0740	CULG								
	0000	0917	HIRA								
	0519	1646	ONDR								
	0530	1720	BLEN								
	1957	2400	HIRA								
	2020	2400	CULG								
16	0000	0740	CULG								
	0000	0918	HIRA								
	0517	1647	ONDR								
	0530	1720	BLEN								
	1956	2400	HIRA								
	2020	2400	CULG								
17	0000	0740	CULG								
	0000	0919	HIRA								
	0515	1649	ONDR								
	0530	1720	BLEN								
	1954	2400	HIRA								
	2020	2400	CULG								
18	0000	0740	CULG								
	0000	0919	HIRA								
	0513	1650	ONDR								
	0530	1720	BLEN								
	1953	2400	HIRA								
	2030	2400	CULG								
19	0000	0730	CULG								
	0000	0920	HIRA								
	0511	1639	ONDR								
	0530	1720	BLEN								
	1952	2400	HIRA								
	2030	2400	CULG								
20	0000	0922	HIRA								
	0000	0730	CULG	0052.0	0052.0	III	B	1	20	40	
	0510	1653	ONDR								
	0530	1720	BLEN								
	1950	2400	HIRA								
	2030	2400	CULG								

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

Spectral Observations

APRIL 2008

OBSERVATION			EVENT				FREQUENCY			
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	Lower (MHz)	Upper (MHz)	Remarks
21	0000	0730	CULG								
	0000	0923	HIRA								
	0508	1654	ONDR								
	0525	1720	BLEN								
	1949	2400	HIRA								
	2030	2400	CULG								
22	0000	0730	CULG								
	0000	0923	HIRA								
	0506	1656	ONDR								
	0525	1315	BLEN								
	1948	2400	HIRA								
	2030	2400	CULG								
23	0000	0730	CULG								
	0000	0924	HIRA								
	0504	1657	ONDR								
	0815	1715	BLEN								
	1947	2400	HIRA								
	2030	2400	CULG								
24	0000	0730	CULG								
	0000	0925	HIRA								
	0503	1659	ONDR								
	0730	1720	BLEN								
	1945	2400	HIRA								
	2030	2400	CULG	2249.0	2251.0	III	G	1	20	90	
25	0000	0730	CULG								
	0000	0926	HIRA								
	0501	1700	ONDR								
	0520	1725	BLEN								
	1944	2400	HIRA								
	2030	2400	CULG								
26	0000	0730	CULG								
	0000	0927	HIRA								
	0500	1701	ONDR								
	0520	1730	BLEN								
			SGMR	1404.0	1411.0	III		1	30	74	
			SVTO	1404.0	1410.0	III		1	25	143	
			SGMR	1412.0	1419.0	II		1	30	45	ESS 0536
			SVTO	1416.0	1422.0	II		2	25	45	ESS 0608
	1943	2400	HIRA								
	2030	2400	CULG								
27	0000	0730	CULG								
	0000	0928	HIRA								
	0500	1703	ONDR								
	0515	1730	BLEN								
	1942	2400	HIRA								
	2030	2400	CULG								
28	0000	0730	CULG								
	0000	0929	HIRA								
	0500	1704	ONDR								
	0515	1730	BLEN								
	1941	2400	HIRA								
	2030	2400	CULG								
29	0000	0730	CULG								
	0000	0929	HIRA								
	0500	1705	ONDR								
	0515	1735	BLEN								
	1940	2400	HIRA								
	2030	2400	CULG								
30	0000	0730	CULG								
	0000	0930	HIRA								

S O L A R R A D I O E M I S S I O N
Spectral Observations
APRIL 2008

OBSERVATION			EVENT				FREQUENCY			
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	Lower (MHz)	Upper (MHz)	Remarks
30	0500	1707	ONDR								
	0515	1740	BLEN								
	1938	2400	HIRA								
	2030	2400	CULG								

Event Remarks:

B = Single burst	N = Intermittent activity in this period
C = Underlyling continuum (particularly with Type I)	MOV = Moving (Type IV)
DC = Drifting chains	MWB = Meter wave burst
DP = Drifting pairs	RS = Reverse slope burst
F = Fundamental emission (Type II)	S = Storm in the sense of intermittent but apparently connected actively
FS = Fine structures (Type IV)	SH = Secondary harmonic emission
G = Small group of bursts (<10)	STA = Stationary (Type IV)
GG = Large group of bursts (>10)	U = U-shaped burst of Type III
H = Herringbone	UE = Uncertain emission (Type II)
HARM = Harmonic	W = Weak

Frequency qualifiers:

X = Extends beyond instrument range	U = Uncertain frequency

Remarks:
SWF = Associated short wave fade observed
ESS = Estimated shock speed in km/s (Type II)
FLA = Associated flare observed (class optional)

Stations Reporting:

CULG = Culgoora	IZMI = Izmiran	LEAR = Learmonth	ONDR = Ondrejov	BLEN = Bleien
PALE = Palehua	POTS = Potsdam	SGMR = Sagamore Hill	SVTO = San Vito	

NOTE 1: Beginning June 26, 2001, the Bleien observatory changed to higher frequencies (1-4Ghz).
NOTE 2: Potsdam has reduced sensitivity in the 400-800 MHz range.

SOLAR RADIO NOISE STORM AT 150.9 MHZ

FROM NANÇAY RADIOHELIOGRAPH

APRIL 2008

	HELIOGRAPHICS POSITIONS MEAN VALUES[1]		IMP[2]	OBSERVING TIME[3]	
DAY	E-W	S-N		START(UT)	END(UT)
01/04/08	+0.98	+0.07	II	8H29 E	13H08
03/04/08	+1.22	+0.02	I	8H29 E	11H30
19/04/08	-0.56	+0.03	I	8H25 E	15H20 D
22/04/08	-0.15	+0.41	I	11H01	15H19 D

SOLAR RADIO NOISE STORM AT 327 MHZ

FROM NANÇAY RADIOHELIOGRAPH

APRIL 2008

	HELIOGRAPHICS POSITIONS MEAN VALUES[1]		IMP[2]	OBSERVING TIME[3]	
DAY	E-W	S-N		START(UT)	END(UT)
01/04/08	+0.85	-0.04	I	8H29 E	15H24 D
02/04/08	+0.92	-0.24	I	10H20 E	15H25 D
02/04/08	+0.97	-0.06	I	10H20 E	15H25 D
03/04/08	+1.06	-0.21	I	8H29 E	15H24 D
22/04/08	-0.08	+0.34	I	8H25 E	15H19 D

17 April 2008 : NO DATA

OTHERS DAYS: NO DETECTABLE NOISE STORM

- For the days marked by an asterisk, intense ionospheric gravity waves are observed during the whole day. Without a mode detailed analysis leading to increase uncertainties in the deviation , the positions which are indicated are estimated within 0.2 R

** Following a large burst

*** importance not well determined due to the proximity off the very strong other source

**** no flux measurements available

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[1] POSITIVE E-W AND S-N COORDINATES CORRESPOND TO THE N-W QUADRANT

[2] IMP1: FLUX< 5 SFU IMP2: 5< FLUX < 20 SFU IMP3: 20< FLUX <100 SFU
IMP4: 100< FLUX <300 SFU IMP5> 300 SFU

[3] E NOISE STORM IN PROGRESS AT THE BEGINNING OF THE NANÇAY OBSERVATIONS
D NOISE STORM IN PROGRESS AT THE END OF THE NANCAY OBSERVATIONS

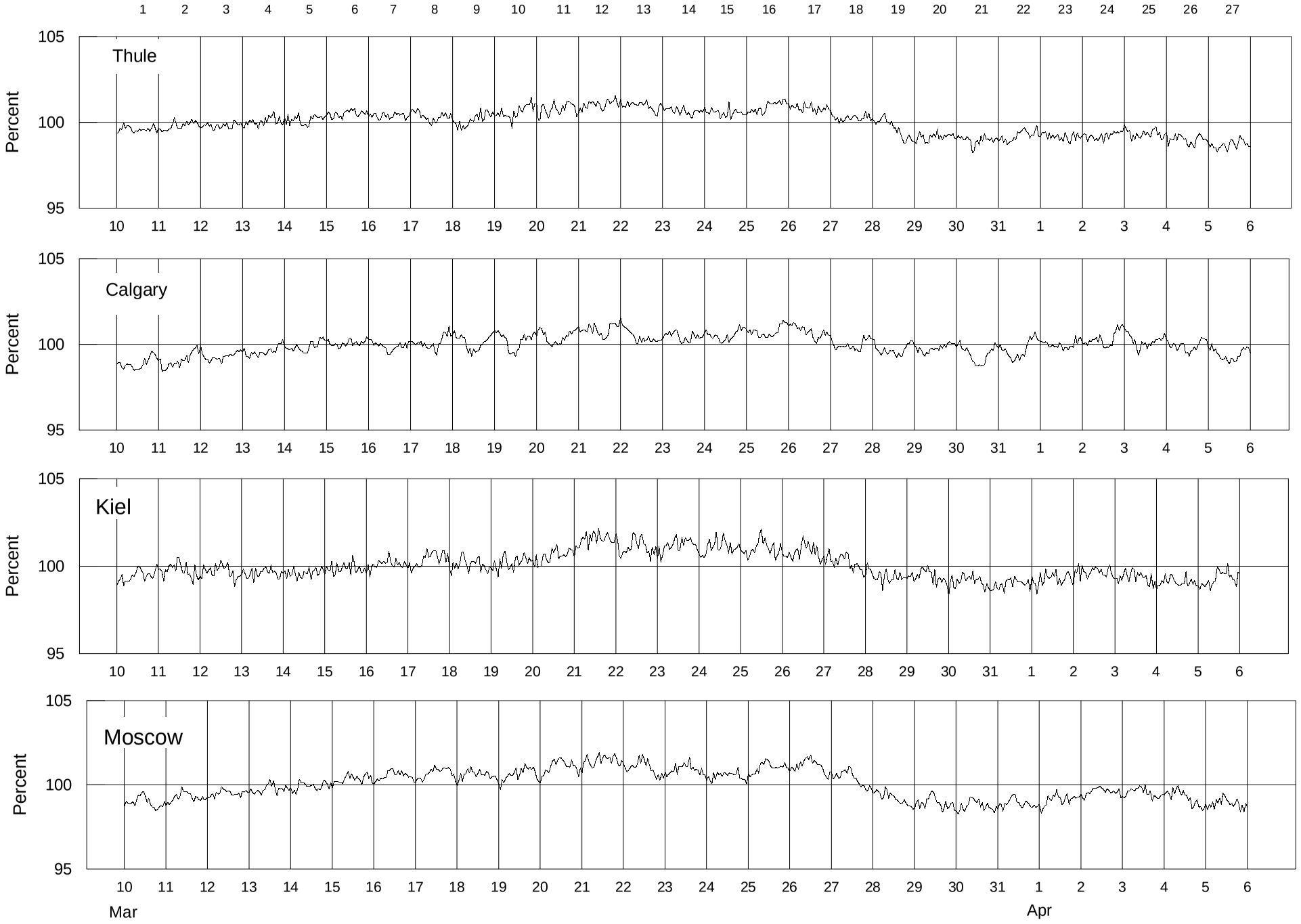
COSMIC RAY INDICES
(Neutron Monitor)
APRIL 2008

Day	THULE Average (cts/h)/100	CALGARY Average (cts/h)/300	KIEL Average (cts/h)/100	MOSCOW Average (cts/h)/64	CLIMAX Average (cts/h)/100	BEIJING Average (cts/h)/256	HALEAKALA Average (cts/h)/1000
1	4498.2	3998.7	6291.9	9406.9		2076.0	
2	4500.8	4011.0	6315.9	9453.3		2082.8	
3	4505.6	4007.5	6297.5	9446.7		2079.0	
4	4491.0	3996.2	6280.8	9418.8		2072.4	
5	4476.7	3975.8	6291.5	9386.5		2066.8	
6	4477.3	3969.7	6325.1	9373.0		2064.8	
7	4506.7	3978.7	6315.2	9364.1	data	2055.0	data
8	4518.8	3977.2	6303.0	9376.1	not	2054.4	not
9	4524.9	3985.3	6315.3	9388.9	available	2054.6	available
10	4534.7	3989.8(10)	6311.1	9376.0		2055.8	
11	4537.3	----	6306.1	9374.5		2060.5	
12	4548.1	3976.2	6311.7	9369.8		2069.2	
13	4554.6	3990.0	6323.4(23)	9390.5		2068.1	
14	4574.5	4007.0	6333.5	9458.4		2062.3	
15	4595.7	4019.0	6340.7	9445.7		2052.1	
16	4561.6	4019.8	6332.4	9455.7		2054.3	
17	4556.3	4009.7	6338.7	9462.7		2050.6	
18	4569.7	4014.8	6350.8	9500.3		2044.9	
19	4573.2	3997.8	6346.2	9485.8		2045.6	
20	4582.5	3995.8	6350.3	9473.5		2048.6	
21	4589.7	4010.3	6349.1	9494.7		2054.9	
22	4604.7	4017.2	6353.0	9531.4		2070.6	
23	4577.9	3998.7	6331.0	9491.0		2079.5	
24	4543.1	3961.7	6293.0	9440.7		2071.8	
25	4535.0	3959.3	6267.8	9388.2		2069.0	
26	4544.3	3976.3	6266.4	9379.7		2066.6	
27	4549.4	3986.7	6280.3	9369.2		2062.5	
28	4550.7	3988.5	6297.6	9353.9		2049.5	
29	4546.0	3989.5	6304.2	9367.1		2048.0	
30	4541.7	4000.2	6304.6	9369.0		2042.0	
31							
Mean	4542.0	3993.4	6314.3	9419.7		2061.1	

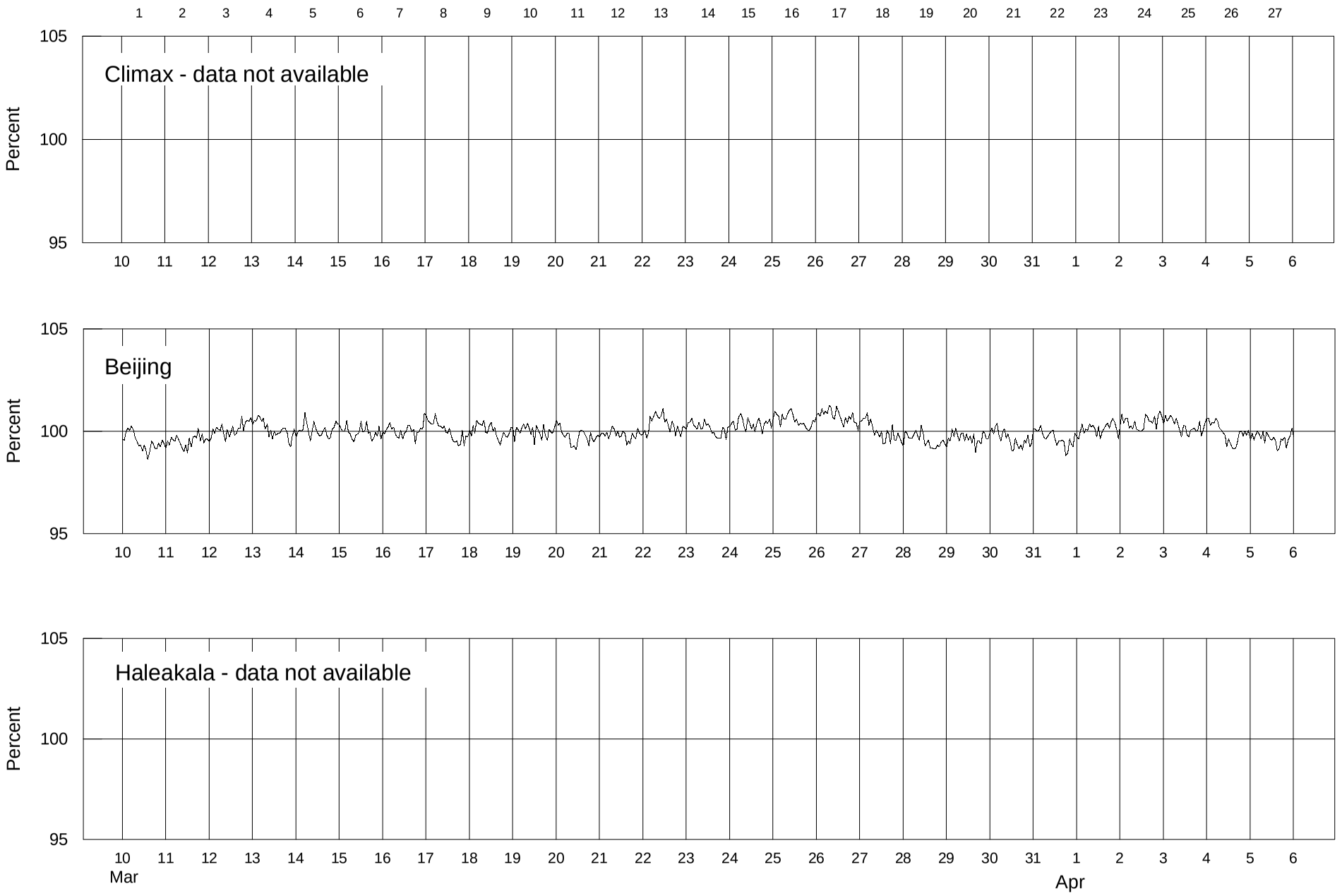
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours, and for Haleakala, whenever the sum of all three sections falls below 60 hours.

COSMIC RAY INDICES
(Neutron Monitor)

Bartels Rotation 2383 - Beginning 10 Mar 2008

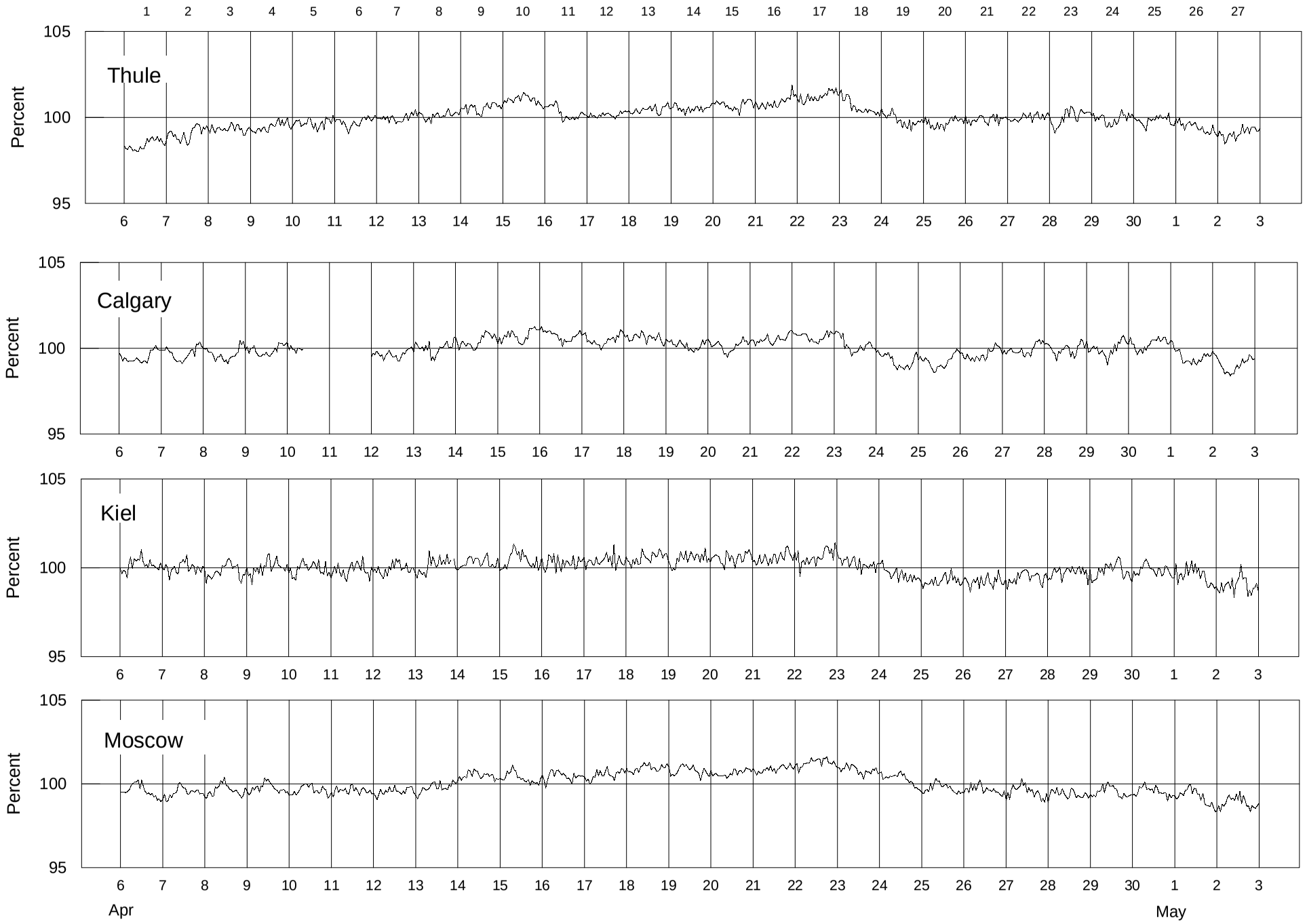


COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2383 - Beginning 10 Mar 2008

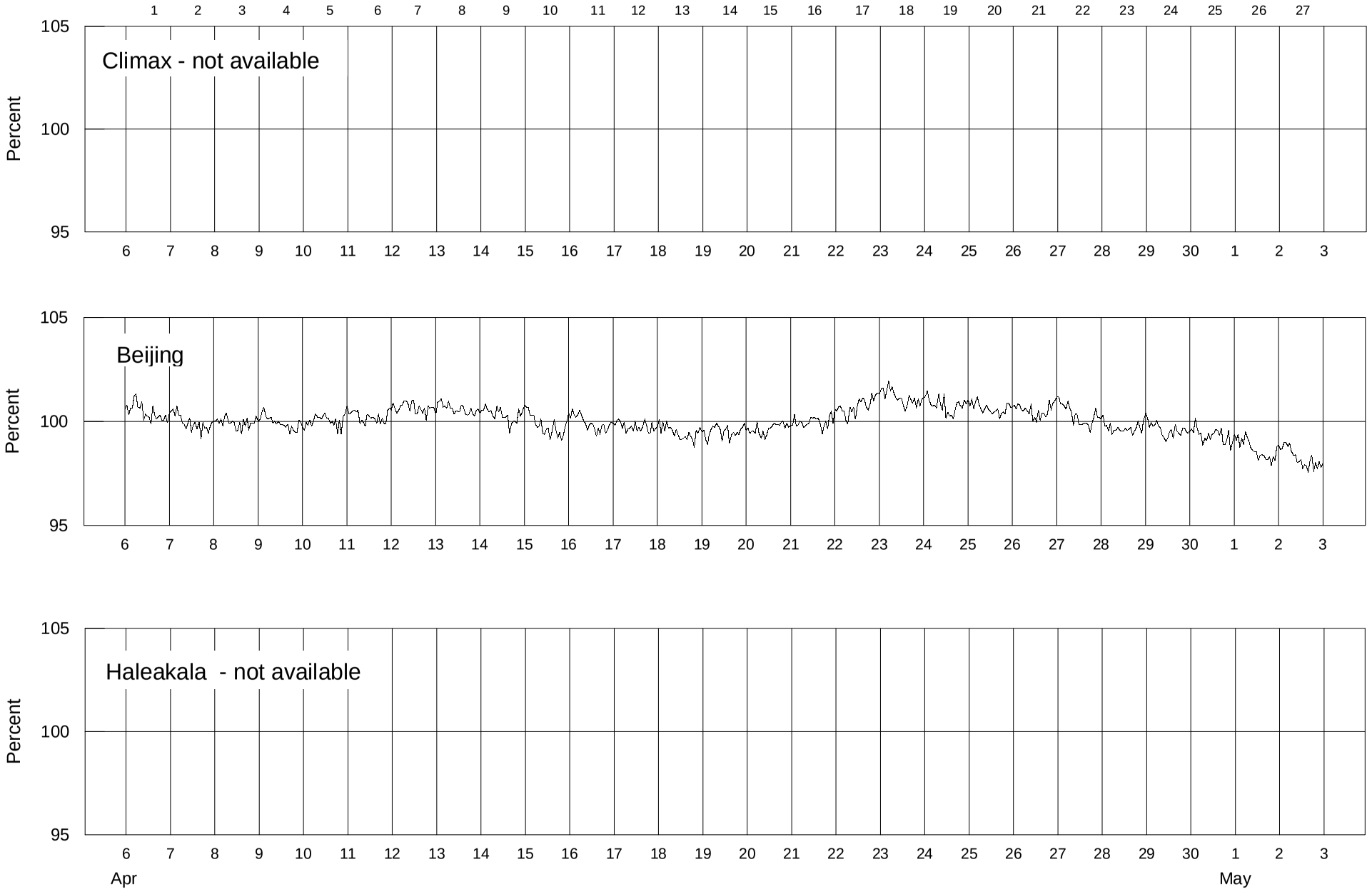


COSMIC RAY INDICES
(Neutron Monitor)

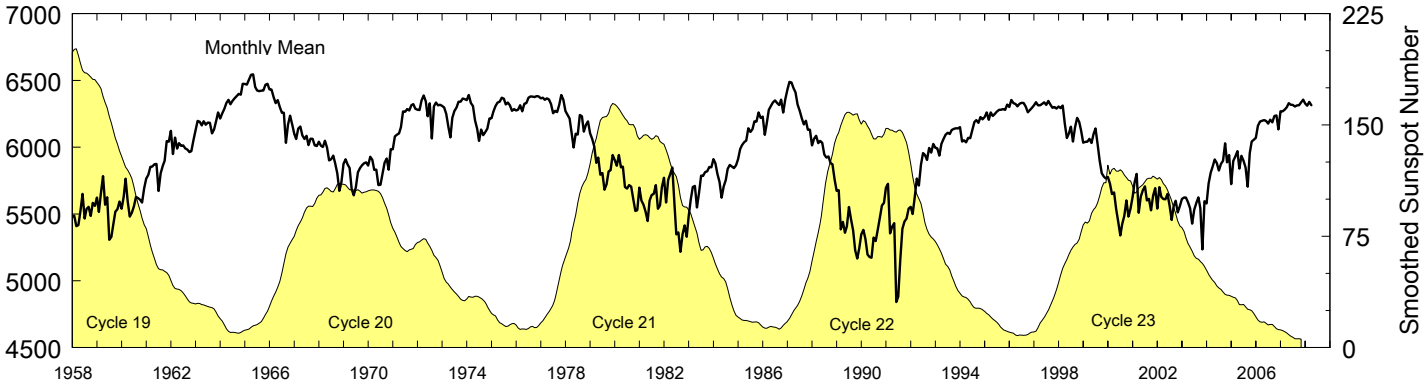
Bartels Rotation 2384 - Beginning 6 Apr 2008



COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2384 - Beginning 6 Apr 2008



Kiel Neutron Monitor Pressure-Corrected Values
Jan 1958 - Apr 2008



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1958	5481	5488	5409	5417	5523	5651	5466	5538	5553	5485	5584	5561	5513
1959	5623	5515	5659	5783	5569	5625	5307	5328	5420	5518	5536	5593	5540
1960	5539	5628	5764	5596	5480	5509	5557	5628	5620	5607	5586	5692	5601
1961	5766	5793	5853	5856	5872	5874	5672	5804	5859	5898	6046	6041	5861
1962	6122	5949	6072	5989	6030	6010	6013	5991	5982	5963	5971	6052	6012
1963	6125	6197	6191	6163	6194	6168	6185	6182	6103	6133	6197	6260	6175
1964	6215	6253	6287	6331	6355	6321	6347	6366	6383	6399	6393	6475	6344
1965	6474	6469	6506	6542	6545	6451	6424	6420	6423	6424	6467	6475	6468
1966	6433	6432	6375	6330	6353	6300	6258	6258	6033	6168	6236	6172	6279
1967	6101	6061	6139	6155	6088	6061	6086	6016	6064	6063	6014	6009	6071
1968	6041	6011	6001	6048	5997	5901	5910	5937	5878	5805	5673	5739	5912
1969	5876	5909	5872	5845	5686	5640	5700	5812	5843	5864	5879	5887	5818
1970	5863	5928	5906	5830	5831	5716	5719	5803	5885	5915	5832	5985	5851
1971	5985	6081	6094	6103	6151	6268	6265	6286	6275	6314	6322	6288	6203
1972	6281	6278	6351	6387	6344	6232	6328	6065	6306	6334	6313	6318	6295
1973	6309	6298	6250	6155	6074	6220	6271	6296	6341	6340	6365	6360	6273
1974	6353	6391	6331	6308	6201	6139	6047	6132	6090	6113	6139	6215	6205
1975	6217	6267	6308	6334	6341	6370	6363	6320	6334	6313	6272	6286	6310
1976	6275	6281	6314	6269	6325	6331	6370	6380	6379	6375	6383	6380	6339
1977	6366	6371	6355	6366	6357	6322	6254	6272	6263	6317	6391	6355	6332
1978	6271	6242	6215	6113	5998	6101	6095	6241	6232	6117	6167	6193	6165
1979	6104	6063	6006	5883	5923	5794	5806	5682	5723	5820	5827	5942	5881
1980	5905	5862	5942	5850	5854	5702	5690	5717	5704	5611	5522	5528	5741
1981	5697	5600	5569	5517	5447	5600	5642	5650	5717	5539	5564	5702	5604
1982	5772	5586	5755	5799	5848	5582	5347	5362	5217	5349	5414	5329	5530
1983	5481	5606	5702	5711	5549	5659	5787	5785	5814	5820	5852	5849	5718
1984	5911	5880	5799	5740	5622	5706	5753	5837	5867	5856	5844	5864	5807
1985	5911	5986	6016	6038	6049	6142	6114	6135	6193	6192	6260	6220	6105
1986	6229	6093	6176	6280	6308	6336	6350	6331	6315	6356	6259	6359	6283
1987	6429	6489	6484	6443	6410	6319	6273	6217	6171	6198	6131	6131	6308
1988	6013	6064	6085	6030	6047	6033	5945	5922	5931	5880	5872	5761	5965
1989	5673	5678	5385	5441	5360	5407	5552	5460	5378	5228	5167	5241	5414
1990	5348	5381	5313	5197	5177	5173	5324	5297	5382	5471	5563	5584	5351
1991	5696	5726	5355	5405	5431	4841	4882	5162	5390	5443	5466	5540	5361
1992	5553	5500	5624	5766	5713	5869	5956	5942	5905	5994	5960	6024	5817
1993	5996	5992	5937	6026	6061	6094	6108	6099	6129	6137	6142	6141	6072
1994	6150	6042	6052	6067	6070	6068	6129	6189	6203	6183	6226	6209	6132
1995	6225	6260	6205	6260	6234	6250	6267	6279	6281	6285	6279	6319	6262
1996	6301	6354	6330	6324	6306	6325	6332	6331	6303	6262	6277	6294	6312
1997	6313	6337	6313	6314	6324	6336	6317	6347	6319	6295	6301	6289	6317
1998	6305	6293	6312	6177	6069	6101	6154	6042	6149	6220	6190	6124	6178
1999	6034	6040	6041	6062	6032	6100	6140	6023	5898	5805	5780	5765	5977
2000	5778	5729	5650	5661	5537	5441	5339	5425	5487	5602	5481	5542	5556
2001	5629	5736	5800	5509	5631	5678	5707	5602	5614	5527	5637	5694	5647
2002	5540	5701	5628	5613	5610	5651	5562	5455	5556	5599	5512	5558	5582
2003	5613	5624	5624	5588	5543	5428	5532	5582	5624	5544	5235	5595	5544
2004	5579	5730	5810	5854	5908	5882	5856	5874	5898	6029	5887	5941	5854
2005	5723	5898	5931	5970	5840	5936	5899	5847	5705	5956	6042	6056	5900
2006	6070	6161	6192	6198	6202	6197	6176	6206	6186	6234	6238	6133	6183
2007	6270	6268	6281	6298	6330	6317	6316	6304	6313	6314	6336	6357	6309
2008	6327	6311	6339	6314									6323

Multiply table entries by 100 to obtain hourly counting rate. Kiel, Germany: N54, E10, Alt= 54 m, Cutoff Rigidity= 2.32GV.

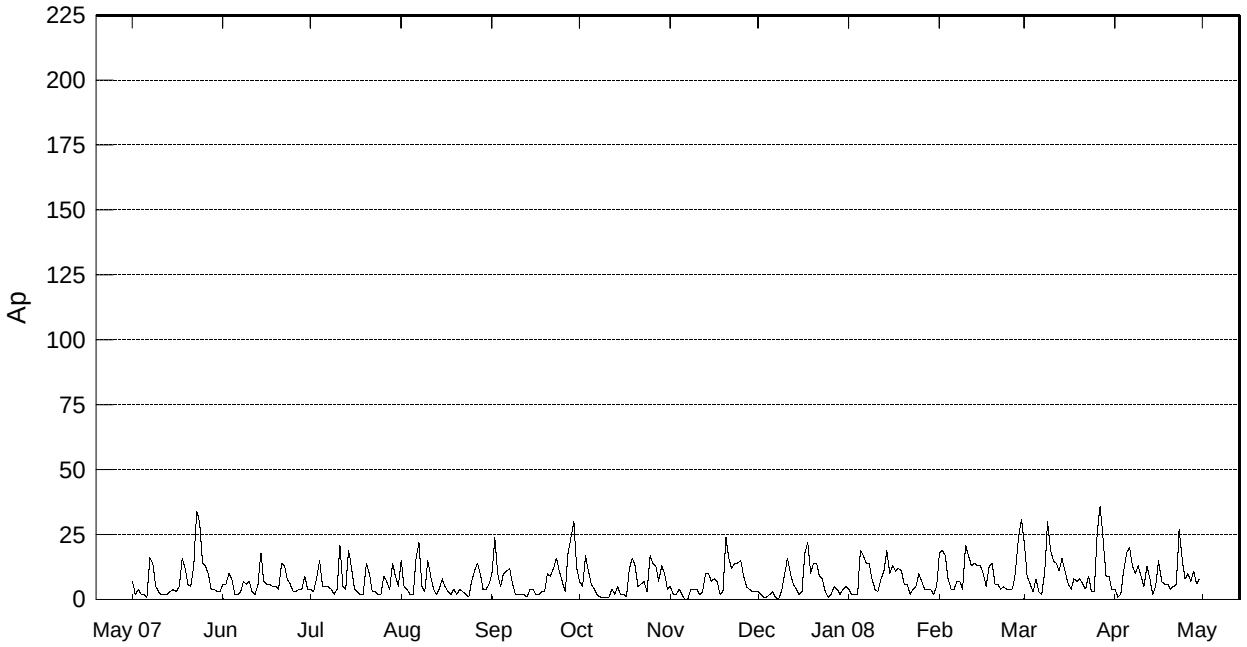
Geomagnetic Activity Indices

Apr 08 **APRIL 2008**

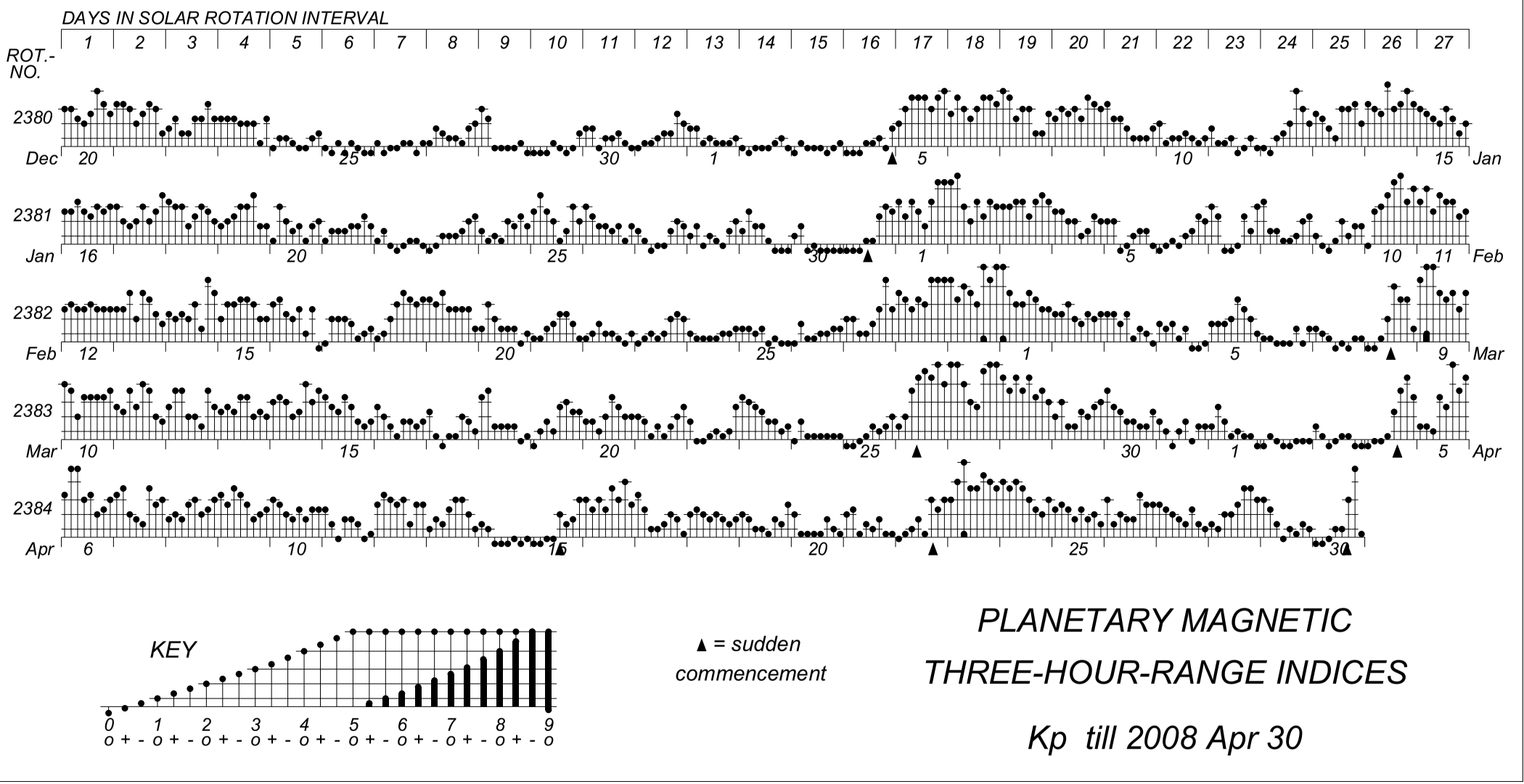
Day		Kp Three-Hourly Indices 1	2	3	4	5	6	7	8	Sum	Ap	Cp	Km Three-Hourly Indices 1	2	3	4	5	6	7	8	Am	aa Provisional N	S	M	
1	Q5	1+	3-	2-	1-	1	1-	1-	0	9-	4	0.2	1o	2+	2-	1+	1+	1-	1-	0o	8	7	10	11	6	CC
2	Q1	0	1-	0+	0	0	0+	0+	0+	2	1	0.0	0o	0+	0o	0o	0o	0o	0+	0+	1	3	2	2	3	CC
3	Q3	1+	1-	0	0+	1-	1-	0	0	4-	2	0.0	1o	1-	0o	0+	0+	0+	0o	0o	3	4	5	4	4	CC
4		0	0+	0+	1-	2+	4-	4+	3+	15	11	0.6	0o	0o	0o	1-	2+	3-	4-	3o	16	22	13	4	31	
5	D3*	1+	1+	1	3+	3-	5	4-	4+	23-	18	1.0	1+	1o	1o	3o	3-	4+	3+	4-	28	36	28	19	45	
6	D2	3+	5-	5-	3	3+	2	2+	3	26+	20	1.0	3-	3+	4-	3o	3o	2-	2+	3o	28	36	24	37	24	
7		3+	4-	2	2-	1+	4-	3-	3	21+	13	0.8	3o	3o	2-	2-	2-	3+	3-	3-	22	28	19	21	26	
8		2-	2	2-	3-	3	2	2+	3	18+	10	0.5	1+	1+	2-	3-	3o	2-	3-	3o	18	27	17	14	31	
9		3+	3-	4-	3+	3-	2-	2	2+	22-	13	0.7	3-	2+	3+	3o	3-	1+	2-	2+	21	23	20	26	17	
10		3	3-	2	2-	2+	2-	2+	2+	18	9	0.5	3o	2o	2o	2o	3-	2-	2o	2+	17	20	16	16	20	
11	Q6	2+	1+	0+	2-	2-	1+	0+	1-	10-	5	0.2	2-	1o	0+	2o	2-	2o	0+	1-	9	10	10	11	10	C
12		3-	3+	3	3-	3	1+	3-	3-	21+	13	0.7	2+	3-	3-	2+	3o	1+	2+	3-	21	25	20	23	22	
13		1	2-	1+	2+	3	3	2	1	15+	8	0.4	1o	1+	2-	2+	3-	3+	2o	1+	16	18	22	13	27	
14	Q2	1+	1	0	0	0	0+	0	0+	3	2	0.0	1o	1+	0o	0+	0o	0o	0o	0+	3	3	4	4	2	CK
15	Q8K	0	0	0+	0+	2	1+	2-	3	9-	5	0.2	0+	0+	0o	0o	2-	1+	1+	3o	8	12	8	4	16	CK
16	D5*	3	2+	3	2+	3+	3-	4	3-	23+	15	0.8	3-	2o	3o	2+	3+	3o	3+	3-	26	29	27	20	36	
17		3+	3-	1	1	1+	2-	2-	1-	13+	7	0.4	3o	3-	1o	1+	1+	2-	1+	1-	12	16	11	14	13	K
18		2	2+	2	2-	2-	1+	1+	1+	14-	6	0.3	2-	2+	2+	2-	1+	2+	1+	1+	13	12	9	13	8	CC
19	Q9	2	2-	1	1	1-	1+	1+	3-	12-	6	0.3	2-	1+	1o	1o	0+	1o	1+	3-	10	14	7	9	12	CC
20	Q4	2	0+	0+	1-	1-	2-	1	1-	7+	4	0.1	2-	0+	1-	1-	0+	2o	2-	1-	7	9	9	9	9	CC
21	Q7	2	2+	1-	1+	1	2-	1-	1-	10+	5	0.2	2o	3-	1+	2-	1+	2o	1+	2o	13	7	7	8	6	CC
22		0+	1-	1-	1+	1-	3-	2+	3	12-	6	0.3	1o	1+	1+	2-	1o	2+	2+	3-	13	12	7	4	15	C
23	D1	3	4	5+	3+	4-	4+	4	4-	31+	27	1.2	3o	4-	5o	3+	4-	4o	4-	4-	50	48	46	48	47	
24	D4*	4-	4-	4-	3+	3+	2	2	3-	24+	16	0.9	3+	3o	4-	3o	3+	2-	2o	3o	31	32	37	39	30	
25		2+	3-	2+	2-	2	2-	2-	1+	16-	8	0.4	2+	2+	2+	2o	2o	1+	2o	1+	15	16	17	18	15	
26		3	1+	2	2	2-	3+	2+	3-	18+	10	0.6	3-	2-	2+	2+	2-	3-	3-	3-	20	26	26	21	31	
27		3-	2+	2	2-	1+	2	1+	1	14+	7	0.3	2-	2+	2+	2o	1+	3-	1+	1o	14	14	19	20	13	
28		1+	1-	2	2	3-	4-	3+	3	19-	11	0.6	1+	1o	3-	3-	3o	3+	3o	3-	23	28	24	16	37	
29	Q10K	3	2+	1+	0+	1	1-	1+	1	11	6	0.3	3-	2+	1+	0+	1o	1-	1+	1o	10	13	7	11	9	C
30		0	0+	0+	1	1	3	4+	1	11	8	0.4	0+	0+	0o	1+	1o	3+	3+	1o	12	15	15	4	27	K
Mean											9	0.46									16.3	18.9	16.3	17.5		

Day	Kn Three-Hourly Indices 1	2	3	4	5	6	7	8	An	Ks Three-Hourly Indices 1	2	3	4	5	6	7	8	As	Sa	Prov Ri	Ra	Rs	IMF
1	1-	2o	2-	1+	1+	1-	1-	0o	8	1o	2+	2o	1+	1+	0+	0+	0o	8	77.7	16	18	22	
2	0o	0+	0o	0o	0o	0+	0+	1-	2	0o	0+	0o	0o	0o	0o	0o	0o	1	75.9	9	11	20	
3	1o	1-	0o	1-	1o	1-	0+	0+	4	1o	1-	0o	0+	0o	0o	0o	0o	2	76.4	9	9	21	
4	0o	0o	0o	1o	3-	3o	4o	3+	19	0o	0+	0+	0+	2o	2o	3+	3-	12	73.1	7	3	17	
5	1+	1o	1-	3+	3o	5-	4-	4-	31	1+	1+	1o	3o	2+	4o	3o	4-	25	71.1	0	0	15	
6	3-	3+	4-	4-	3+	2o	3-	3-	31	2+	3+	3+	2+	2+	2-	2o	3+	25	69.5	0	0	13	
7	3-	3o	2-	2o	2-	4-	3-	3-	24	3o	3-	1+	1+	1+	3+	2+	3-	20	69.3	0	0	13	
8	1+	1+	2-	3o	3+	2+	3-	3-	21	1o	1+	1+	2+	3-	1+	2o	3+	16	70.0	0	0	14	
9	3-	2+	3+	3o	3-	1+	2-	2+	23	3o	2o	3+	3-	2+	1+	2-	2o	20	68.2	0	0	12	
10	3-	2+	2-	2o	3-	2o	2+	2o	18	3o	2-	2o	2-	2+	1+	1+	3-	16	68.1	0	0	12	
11	2-	1+	0o	2+	2o	2+	1-	1o	10	2-	1o	0+	2-	2-	2-	0o	1-	8	67.4	0	0	11	
12	2o	3o	3-	2+	3+	1+	3-	2+	21	3-	3-	3-	2+	3o	1+	2+	3-	21	68.5	0	0	12	
13	1o	1+	2-	3-	3o	3+	2o	1+	17	1o	1+	2o	2o	2+	3o	2-	1+	15	69.7	7	1	13	
14	1o	1o	0o	0+	0o	0+	0+	1-	3	1+	1+	0o	0+	0o	0o	0o	0o	3	69.0	7	3	13	
15	0o	0+	0o	0+	2o	2-	2-	3-	9	1-	0+	0o	0o	1+	1-	1o	3o	7	69.7	0	0	13	
16	2+	2-	3o	3-	4-	3o	4-	3o	29	3-	2o	3o	2o	3o	3-	3o	2+	23	70.0	0	0	14	
17	3-	3o	1+	1+	1+	2o	2-	1o	14	3o	3-	1o	1o	1o	1+	1o	0+	11	69.8	0	0	13	
18	2-	3-	2+	2-	2-	1+	1+	1+	14	2-	2o	2o	1+	1+	3o	1+	1+	14	70.8	0	0	14	
19	2o	2-	1+	1+	0+	1+	2-	3-	11	2-	1+	1o	1o	0+	1-	1o	2+	8	71.7	8	1	15	
20	2-	0o	1-	1o	1-	2+	2o	1o	9	2-	0+	0+	0+	0+	1+	1+	1-	6	71.5	0	0	15	
21	1+	2-	1-	1+	1-	1+	0+	0+	7	2+	3+	2-	2+	2o	2+	2-	3-	20	71.6	0	0	15	
22	0o	0+	0+	1o	0o	2+	2-	3o	9	2-	2o	2o	2o	2-	3-	3o	3-	18	72.1	8	8	16	
23	3o	4-	5-	4-	4-	4+	4-	3+	49	3+	3+	5+	3o	4-	4-	4-	4o	52	71.5	8	9	15	
24	3o	3+	4-	3o	3+	2-	2+	3-	29	4-	3-	4-	3+	3+	2-	2o	3+	32	71.2	7	2	15	
25	2+	2+	2+	2o	2o	2-	2o	1+	15	2+	3-	2+	2o	2o	1+	2o	1+	16	70.7	0	0	14	
26	3-	1+	2+	3-	2-	3o	3-	3-	20	3-	2-	2+	2o	2-	3-	3o	3o	20	69.9	0	0	13	
27	2o	2+	2+	2o	2-	3-	2-	1o	15	2-	3-	3-	2o	1o	2+	1o	1o	13	69.0	0	0	13	
28	1+	1o	3-	3o	3+	3+	3o	3-	25	2-	1o	2+	3-	3-	3o	3o	3-	21	69.4	0	0	13	
29	3-	2+	1+	1-	1+	0+	1+	1o	10	3o	2+	1o	0+	1-	1-	1+	1o	10	69.6	0	0	13	
30	0o	0o	0o	1+	1+	4-	4-	1+	15	0+	0+	0+	1o	1-	3-	3o	1-	9	68.0	0	0	11	
Mean									17.1									15.7	70.7	2.9	2.2	14.4	

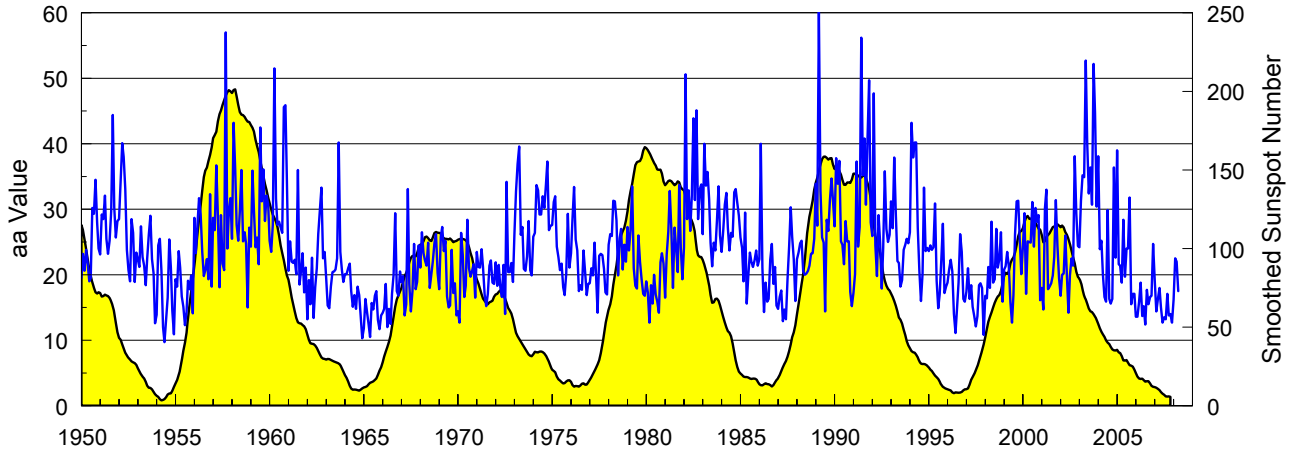
Daily Average Indices Ap
May 2007 - Apr 2008



Day	May 07	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr
1	7	6	4	15	10	7	5	3	4	18	22	4
2	2	6	3	5	24	8	2	2	2	19	9	1
3	4	10	8	4	10	9	2	1	2	17	6	2
4	2	8	15	2	5	10	4	1	2	8	3	11
5	2	2	5	2	10	11	2	2	19	4	8	18
6	1	2	5	16	11	4	0	3	17	4	3	20
7	16	3	5	22	12	2	0	1	14	7	2	13
8	14	7	4	5	6	1	4	0	14	7	10	10
9	5	6	2	3	2	1	4	3	8	4	30	13
10	3	7	4	15	2	1	4	9	4	21	19	9
11	2	3	21	9	2	1	2	16	3	17	15	5
12	2	2	5	4	2	4	3	10	8	13	14	13
13	2	6	4	2	1	2	10	6	11	14	11	8
14	3	18	19	4	4	5	10	4	19	13	16	2
15	4	7	12	8	4	2	7	2	10	13	11	5
16	3	6	4	5	2	2	8	3	13	10	6	15
17	5	6	3	3	2	1	7	18	11	5	4	7
18	16	5	2	2	3	12	2	22	12	13	8	6
19	12	5	2	4	3	16	3	10	11	14	7	6
20	6	4	14	2	10	13	24	14	6	6	8	4
21	5	14	10	4	9	5	16	14	6	6	6	5
22	13	13	3	3	12	6	12	9	2	4	4	6
23	34	8	3	2	16	7	14	8	4	5	9	27
24	30	6	2	1	11	3	14	3	5	4	3	16
25	14	3	2	7	7	17	15	1	10	4	3	8
26	13	3	9	11	3	14	9	2	7	4	26	10
27	10	4	7	14	18	13	5	5	4	10	36	7
28	4	4	4	10	24	7	4	4	4	23	24	11
29	4	9	14	4	30	13	3	2	4	31	9	6
30	3	4	9	4	12	10	3	4	2		9	8
31	3		5	6		4		5	5		4	
Mean	8	6	7	6	9	7	7	6	8	11	11	9


DAYS IN SOLAR ROTATION INTERVAL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ROT.-NO.
2380
Dec 20 25 30 1 5 10 15 Jan
2381
Jan 16 20 25 30 1 5 10 11 Feb
2382
Feb 12 15 20 25 1 5 9 Mar
2383
Mar 10 15 20 25 30 1 5 Apr
2384
Apr 6 10 15 20 25 30
KEY
0 1 2 3 4 5 6 7 8 9
o + - o + - o + - o + - o + - o + - o + - o + - o + - o
▲ = sudden commencement
PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES
Kp till 2008 Apr 30

Monthly Mean aa Index Jan 1950 - Apr 2008



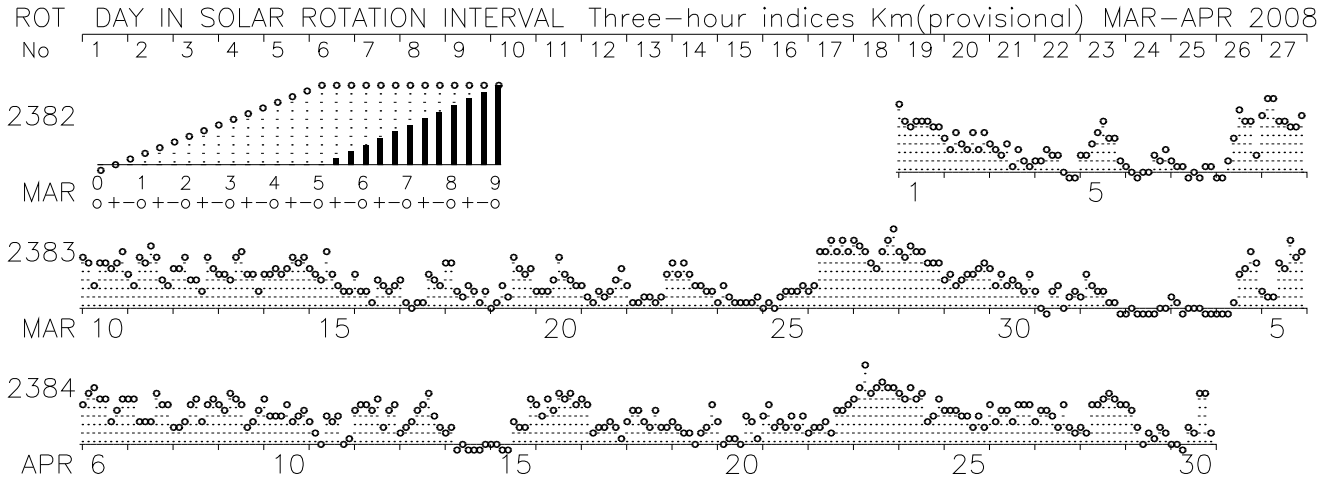
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	22.5	26.1	29.0	22.4	20.2	12.6	22.2
1954	13.9	24.5	25.5	20.6	12.0	9.7	13.1	16.5	25.4	21.1	14.5	10.9	17.3
1955	19.3	18.2	23.6	21.1	16.7	15.1	12.3	14.3	19.1	17.8	19.9	14.1	17.6
1956	28.7	23.3	27.6	31.7	29.3	23.5	19.8	20.7	22.4	19.3	32.3	18.2	24.7
1957	28.7	26.8	36.7	28.8	18.1	29.1	21.7	20.7	57.0	24.0	29.5	31.7	29.4
1958	25.5	43.2	36.1	27.6	25.2	29.7	36.0	25.1	26.5	24.7	15.0	27.2	28.5
1959	24.3	35.9	29.9	24.2	25.7	21.6	42.5	31.2	36.1	28.2	32.1	30.8	30.2
1960	25.2	23.5	27.6	51.5	31.6	27.6	28.1	27.2	26.4	45.6	45.9	34.5	32.9
1961	20.6	25.1	22.0	21.8	22.3	20.1	36.0	18.5	20.7	23.3	17.3	21.1	22.4
1962	13.2	19.2	15.5	22.6	13.4	18.1	21.0	26.2	29.8	33.3	22.5	23.5	21.5
1963	19.3	15.3	14.9	18.2	20.4	20.5	20.8	22.5	40.2	23.5	20.7	18.9	21.3
1964	20.1	20.1	21.0	21.7	17.5	15.1	16.9	14.8	18.2	16.9	13.8	10.3	17.2
1965	11.8	16.3	14.3	12.6	10.5	15.7	14.7	16.8	17.5	13.1	11.7	13.8	14.1
1966	14.2	14.8	18.6	12.0	14.8	12.5	17.1	20.0	29.4	17.5	16.8	20.5	17.3
1967	18.9	19.8	13.8	15.5	33.1	18.6	14.4	17.5	24.7	17.8	18.9	24.5	19.8
1968	21.1	26.5	23.3	22.2	21.4	24.9	18.0	20.1	22.0	24.8	26.2	20.3	22.6
1969	17.8	25.8	27.3	23.6	25.2	16.7	15.0	15.3	23.8	17.2	18.7	13.8	20.0
1970	14.4	12.7	26.4	23.1	16.6	18.3	28.4	21.0	19.7	20.6	21.6	16.5	19.9
1971	23.5	21.2	21.1	23.9	21.1	17.0	15.2	17.1	21.4	22.2	18.8	18.6	20.1
1972	21.9	18.3	21.5	18.1	16.6	21.5	14.0	34.2	20.4	20.4	21.8	18.9	20.6
1973	26.1	32.7	36.9	39.6	26.1	27.3	20.9	20.6	22.8	28.2	20.7	19.9	26.8
1974	25.8	26.4	33.7	32.9	29.2	29.2	32.0	30.2	33.7	37.3	26.8	27.5	30.4
1975	27.6	31.1	32.0	24.3	22.7	20.7	21.7	18.1	16.9	20.2	29.3	21.1	23.8
1976	23.3	28.5	33.4	25.4	23.7	17.5	18.4	17.7	23.7	20.4	16.9	18.6	22.3
1977	18.7	21.0	19.9	24.9	20.1	14.2	22.9	23.2	23.0	20.9	17.3	17.0	20.3
1978	24.6	26.2	25.9	31.3	31.2	28.3	19.9	25.6	27.0	20.8	24.6	22.0	25.6
1979	27.3	23.7	26.9	33.5	21.0	18.3	17.9	26.0	22.0	19.3	17.1	16.8	22.5
1980	19.0	17.3	12.7	18.4	15.6	20.0	17.0	15.9	14.2	21.9	23.3	21.7	18.1
1981	16.5	23.1	26.6	32.8	26.9	18.0	27.2	24.0	20.4	33.7	24.1	19.3	24.4
1982	24.2	50.6	28.5	32.9	26.7	32.1	43.9	31.4	45.1	28.5	33.0	33.8	34.2
1983	26.2	40.0	33.6	35.7	31.6	24.9	21.3	24.9	23.7	28.3	33.5	26.0	29.1
1984	23.5	26.7	30.7	32.5	27.2	23.7	26.4	25.8	32.6	33.1	31.0	29.0	28.5
1985	25.7	24.1	19.0	29.5	15.6	19.9	23.4	22.0	21.2	22.2	23.7	21.4	22.3
1986	22.4	40.0	21.1	14.3	18.8	15.9	16.3	22.3	24.7	18.6	21.2	15.3	20.9
1987	14.8	16.6	17.6	12.9	14.7	13.2	19.3	24.3	30.3	25.8	22.4	16.0	19.0
1988	22.4	23.4	24.8	25.2	20.5	20.0	20.2	20.6	21.4	23.2	23.3	25.5	22.5
1989	33.9	27.5	60.1	32.8	25.7	24.9	14.4	28.4	26.7	31.4	34.7	31.4	31.0
1990	27.4	37.8	33.9	37.4	25.1	24.6	21.6	28.2	25.1	25.1	17.4	15.2	26.6
1991	17.2	20.1	37.3	24.3	27.3	56.2	35.2	40.8	30.7	44.1	49.7	28.0	34.2
1992	25.9	47.7	24.5	19.8	29.1	24.8	17.9	24.1	35.8	27.0	25.0	26.1	27.3
1993	31.2	27.1	37.9	29.2	22.1	21.8	18.2	19.2	23.8	24.6	25.5	24.8	25.5
1994	26.5	43.2	37.9	40.2	40.2	27.2	20.6	16.0	20.2	33.3	23.6	24.1	29.4
1995	23.6	24.5	23.8	24.2	30.9	19.1	14.9	17.0	22.2	27.9	17.2	18.2	22.0
1996	18.8	20.8	22.3	20.5	14.0	11.1	14.7	18.8	26.2	23.5	16.3	15.9	18.6
1997	17.4	21.0	16.3	18.4	15.1	13.7	12.1	13.7	18.4	18.7	18.0	10.8	16.1
1998	16.8	16.4	21.2	18.0	28.1	18.8	19.3	27.0	21.1	22.4	26.5	15.9	21.0
1999	20.8	21.3	23.5	21.3	15.8	12.7	16.9	26.2	31.2	31.3	25.1	20.1	22.2
2000	24.2	29.4	17.1	25.1	25.0	24.9	31.1	24.3	30.2	28.1	29.1	16.1	25.4
2001	18.0	14.7	30.2	33.0	17.8	18.2	18.7	19.9	22.7	31.4	24.4	19.5	22.4
2002	16.8	20.0	20.2	26.0	19.9	14.2	19.9	22.5	21.4	38.1	29.3	24.4	22.7
2003	24.2	31.3	35.2	34.9	52.7	40.2	32.4	36.4	30.7	52.2	44.7	30.4	37.1
2004	38.1	23.9	25.2	20.1	16.6	15.9	29.9	16.3	15.6	16.3	36.4	22.6	23.1
2005	39.0	21.6	21.4	18.8	28.4	19.7	24.0	24.0	31.8	15.5	17.1	17.1	23.2
2006	13.6	13.6	15.8	18.8	13.7	15.2	12.4	17.7	15.5	16.6	16.8	24.7	16.2
2007	19.2	14.4	16.3	18.0	15.0	12.7	13.5	13.2	17.1	13.8	14.0	12.7	15.0
2008	16.2	22.5	22.0	17.5									19.6

PLANETARY GEOMAGNETIC ACTIVITY

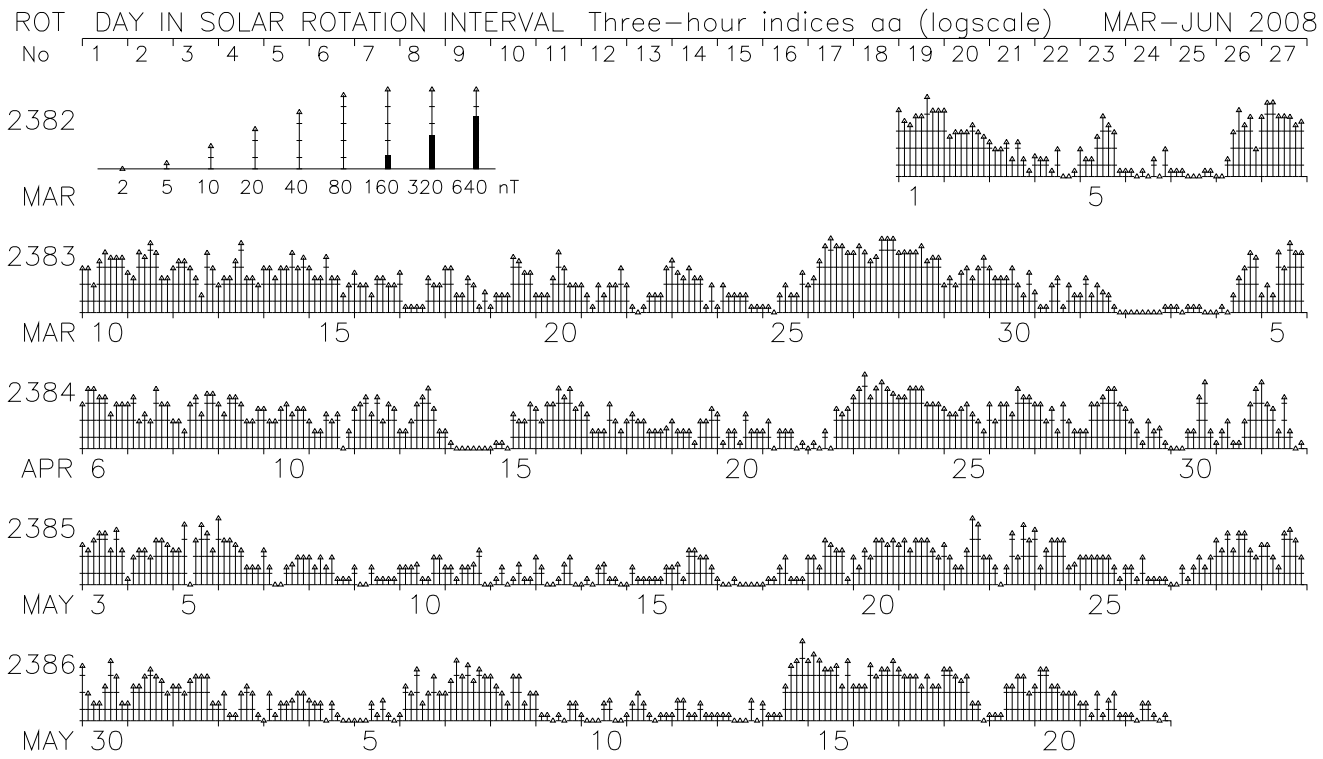
3-HOUR-RANGE INDICES Km AND aa BY 27-DAY SOLAR ROTATION INTERVAL

ISGI PUBLICATION OFFICE - EMail : ISGI.PUBOFF@cetp.ipsl.fr

CETP, 4 Avenue de Neptune, F-94107 Saint Maur des Fosses CEDEX - FRANCE



Indices Derivation at C.E.T.P.; Graph Prepared at ISGI Publication Office.

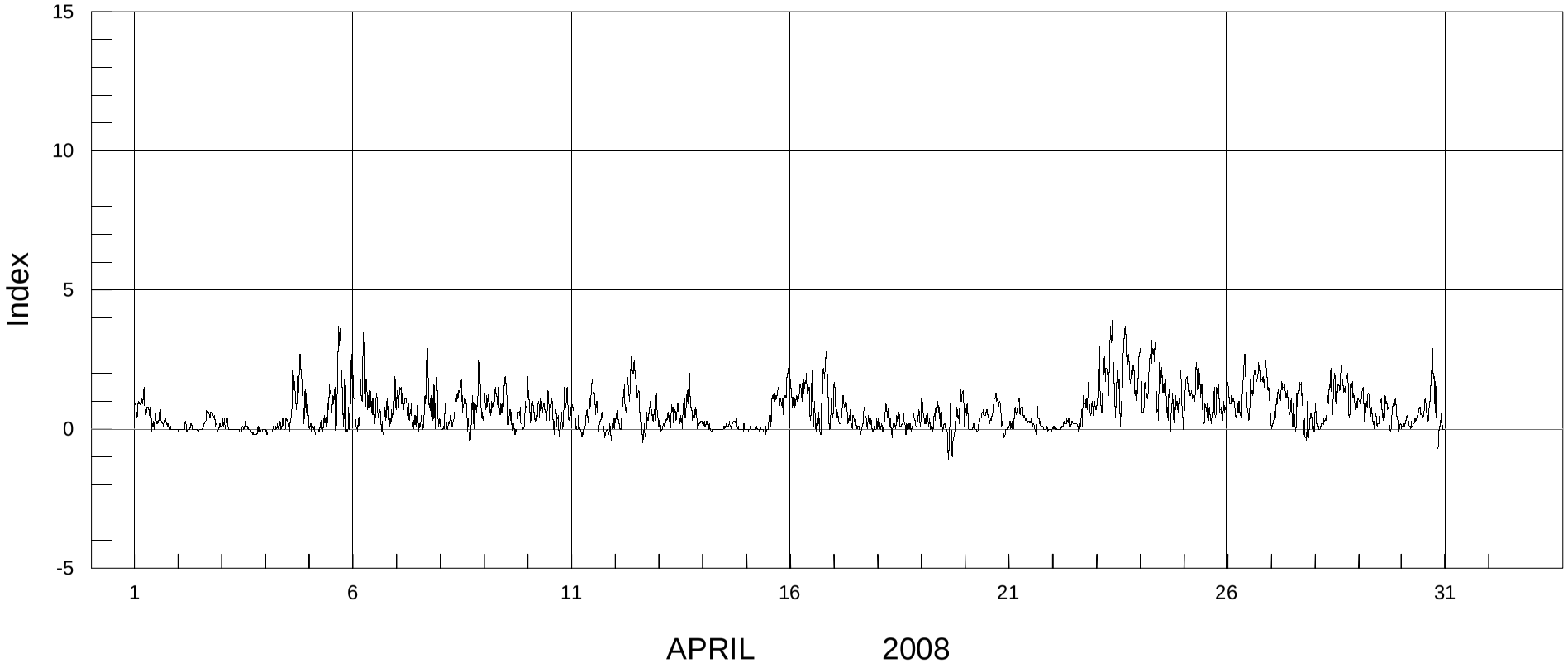


Indices Derivation at C.E.T.P.; Graph Prepared at ISGI Publication Office.

Polar Cap Index

Qaanaaq - Thule

WDC C1 for Geomagnetism, Copenhagen



Data Source: Geomagnetism and Space Physics
Danish Meteorological Institute

P R I N C I P A L M A G N E T I C S T O R M S
APRIL 2008

		Commencement			SC Amplitudes					Ranges			End	
	Geomag	Time			D	H	Z	Maximum 3-Hour K Index		D	H	Z	Hour	
Sta	Lat	Day	(UT)	Type	(Min)	(Gamma)	(Gamma)	Day(3-Hour Periods)	K	(Min)	(Gamma)	(Gamma)	Day	(UT)
JAI	17.4N	04	0930	..	..	..	..		-	6	54	35	07	23
NGP	11.3N	04	0930	..	..	..	..		-	4	64	23	07	23
ABG	09.4N	04	0930	..	..	..	..	5(6)	5	5	75	34	07	23
HYB	07.6N	04	1300	..	..	..	..	4(7) 5(6) 6(2) 7(6)	4	4	73	21	07	23
PND	02.0N	04	0930	..	..	..	..		-	3	77	47	07	23
TIR	00.6S	04	0930	..	..	..	..		-	3	145	52	07	23
JAI	17.4N	12	0330	..	..	..	..		-	4	58	29	13	22
NGP	11.3N	12	0330	..	..	..	..		-	4	72	22	13	22
ABG	09.4N	12	0330	..	..	..	..	12(3) 13(3,6)	4	4	75	27	13	22
PND	02.0N	12	0330	..	..	..	..		-	3	89	43	13	22
TIR	00.6S	12	0330	..	..	..	..		-	3	135	50	13	22
JAI	17.4N	15	1300	..	..	..	..		-	5	42	30	17	02
NGP	11.3N	15	1300	..	..	..	..		-	4	43	21	17	02
ABG	09.4N	15	1300	..	..	..	..	16(2,7)	4	4	---	27	17	02
HYB	07.6N	15	1200	..	..	..	..	16(1)	4	4	51	19	16	24
PND	02.0N	15	1300	..	..	..	..		-	3	59	40	17	02
TIR	00.6S	15	1300	..	..	..	..		-	3	106	53	17	02
JAI	17.4N	22	0300	..	..	..	..		-	6	88	49	24	18
NGP	11.3N	22	0300	..	..	..	..		-	6	107	47	24	18
ABG	09.4N	22	0300	..	..	..	..	23(30) 30(7)	5	5	---	60	24	18
HYB	07.6N	22	1300	..	..	..	..	26(4)	6	4	128	28	24	23
PND	02.0N	22	0300	..	..	..	..		-	4	136	67	24	18
TIR	00.6S	22	0300	..	..	..	..		-	4	196	90	24	18

MAGNETIC STORM SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS
(PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS)

APRIL 2008

Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	**Time**	**Quality: Station Group***	**Day**	**Begin-End**	**Station(s)**
04	1503	B: LER* ESK* HAD* C: NGK* DOU BDV* CLF*	10	1340-1353	NAG GUI
15	1340	A: DOU C: NGK* BDV* CLF* NAG*			
30	1557	A: LER* ESK* HAD* DOU B: CLF* NAG* C: NGK* BDV* SPT*			

REPORTING OBSERVATORIES (up to 02-06-2008):
NUR LER ESK NGK VAL HAD DOU BDV CLF NAG GCK MMB EBR SPT KAK KNY GUI HYB GNA CNB

Three-letter codes identify each observatory. Reporting stations have been grouped by the character of the observed event. The letter A means very remarkable; B means fair, but unmistakable; C means very poor, doubtful; and - means no quality figure given. The * means that the SSC, at least in one component, was preceded by a small reversed impulse. SSCs are given only when five or more stations report the event. SFEs include all reports. If an SFE is confirmed by solar or ionospheric events, the name of the station is identified with a plus sign (+).

Note that we have included data of the Antartic Station LIVINGSTONE (62º 39' 44" S, 60º23' 41" W) -- Luis F.

Criterion on Provisional SSC data

From December 2002, we are giving as provisional SSC only the SSC reported by more than 4 observatories. This is a change with respect to the previous criterion according to which we used to give the SSC reported by more than 5 observatories. The change, pending IAGA confirmation, has been provisionally taken because of the decreasing number of reporting observatories in order to keep the homogeneity of the data. The idea is to keep the same minimum percentage of the observatories reporting an SSC, relative to the total number of reporting observatories, to be considered as a probable SSC.