



Solar-Geophysical Data prompt reports

Data for August and September 2007

Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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OCTOBER 2007 NUMBER 758 - Part I

Solar-Geophysical Data prompt reports

Data for August and September 2007

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NATIONAL GEOPHYSICAL DATA CENTER

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SOLAR-GEOPHYSICAL DATA

Number 758

(Issued in Two Parts)

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Solar-Terrestrial Physics Division

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INCLUDING:

ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES

-- MONTHLY PLOTS

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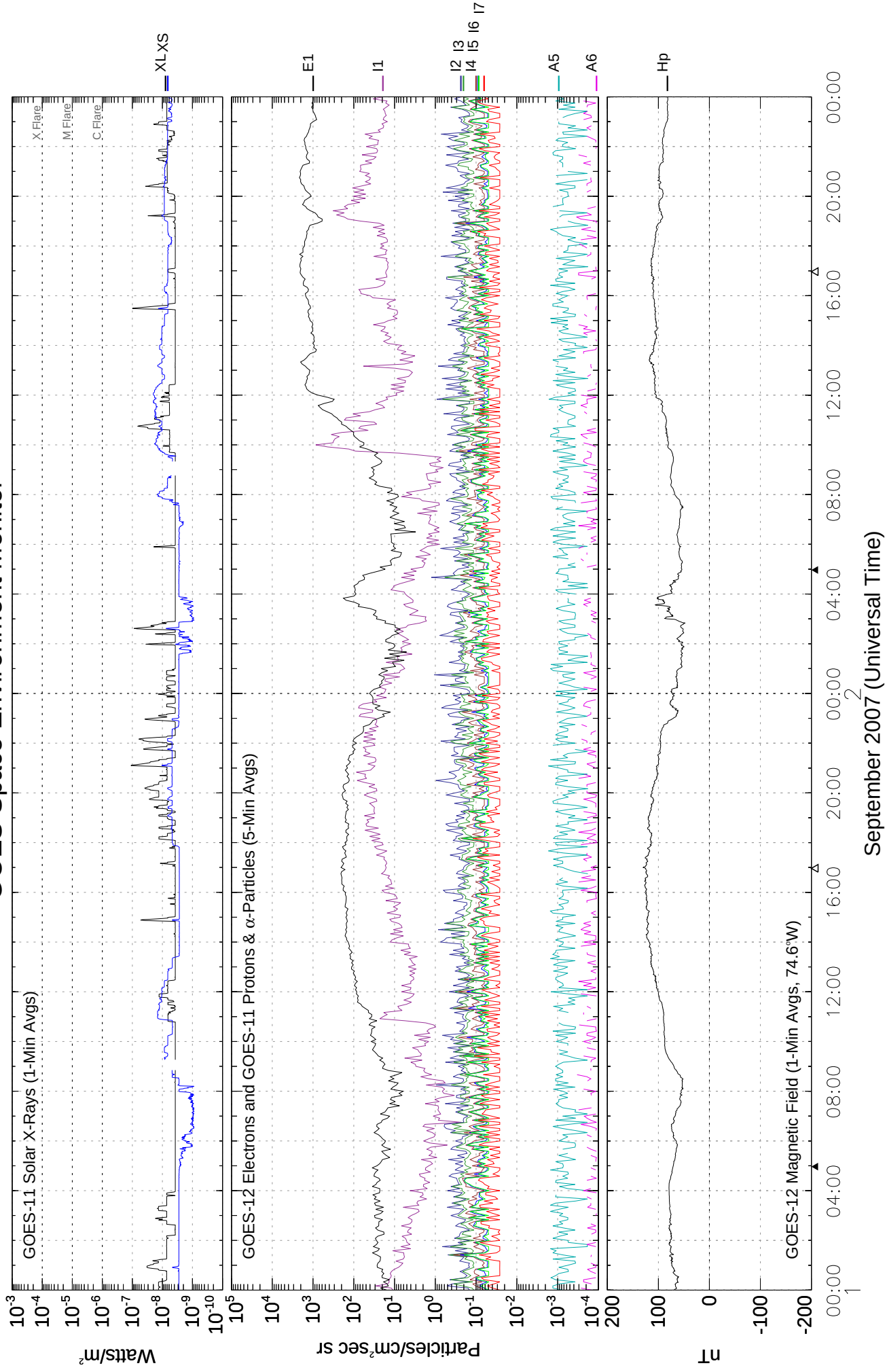
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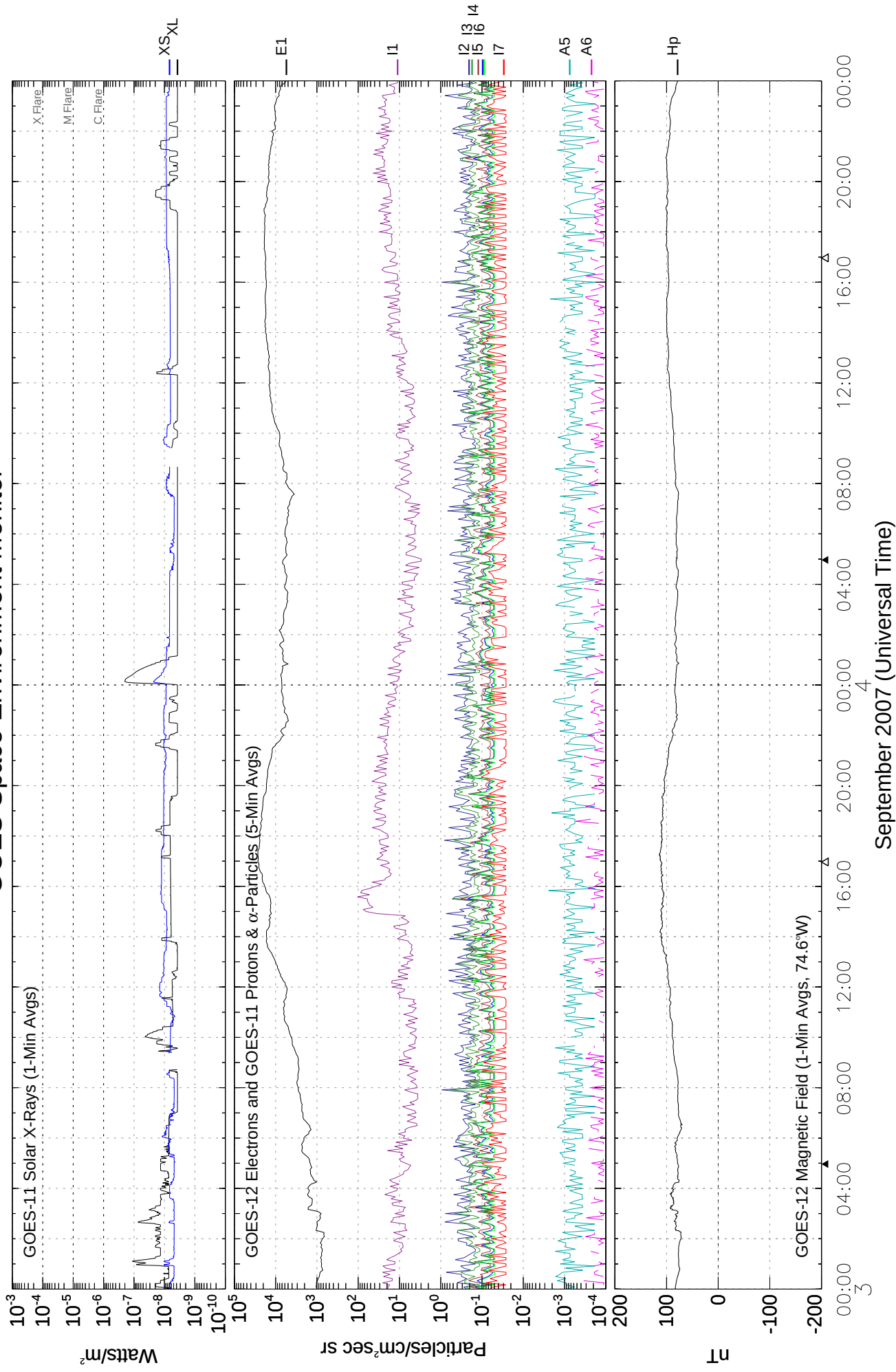
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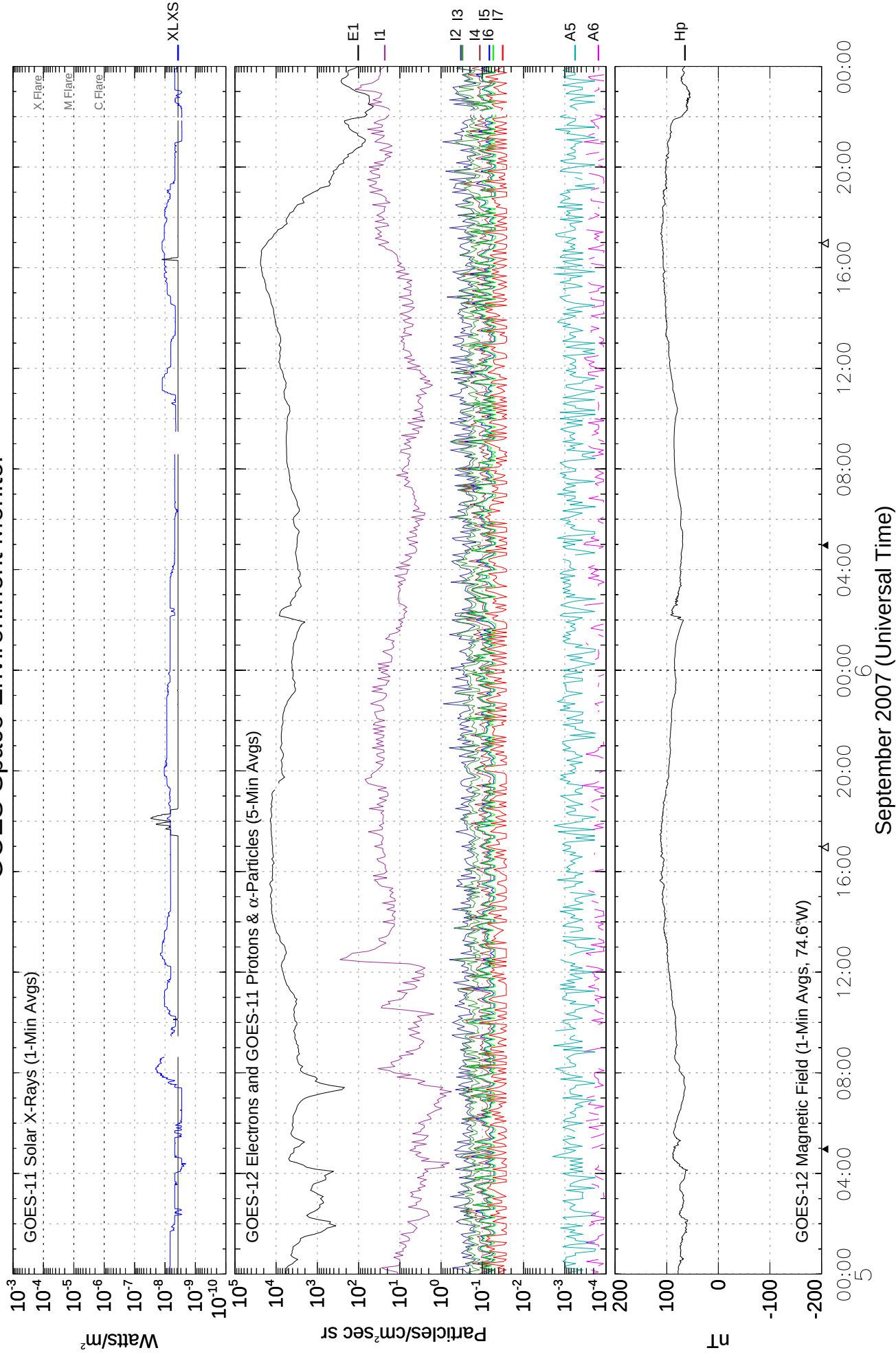
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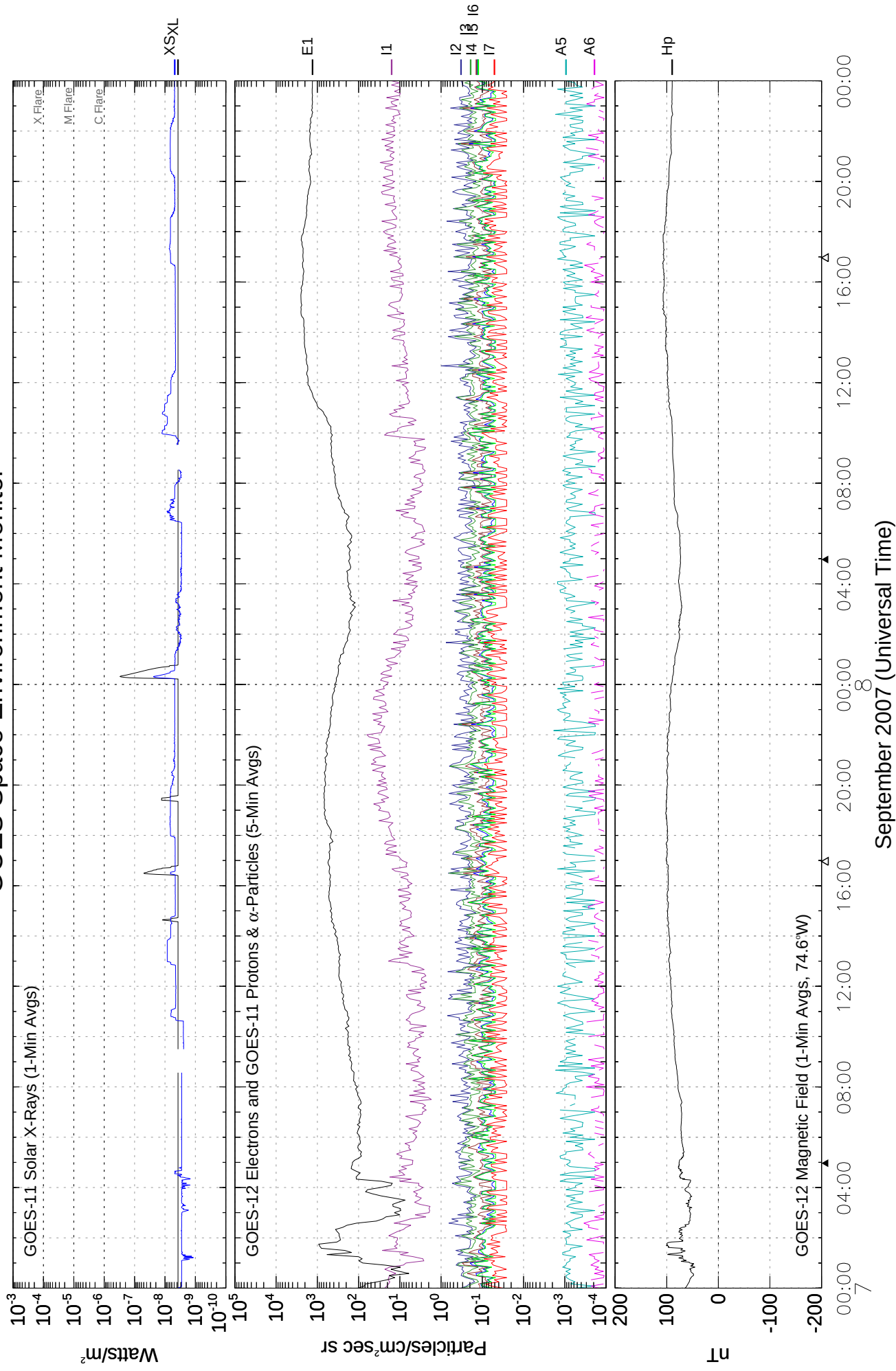
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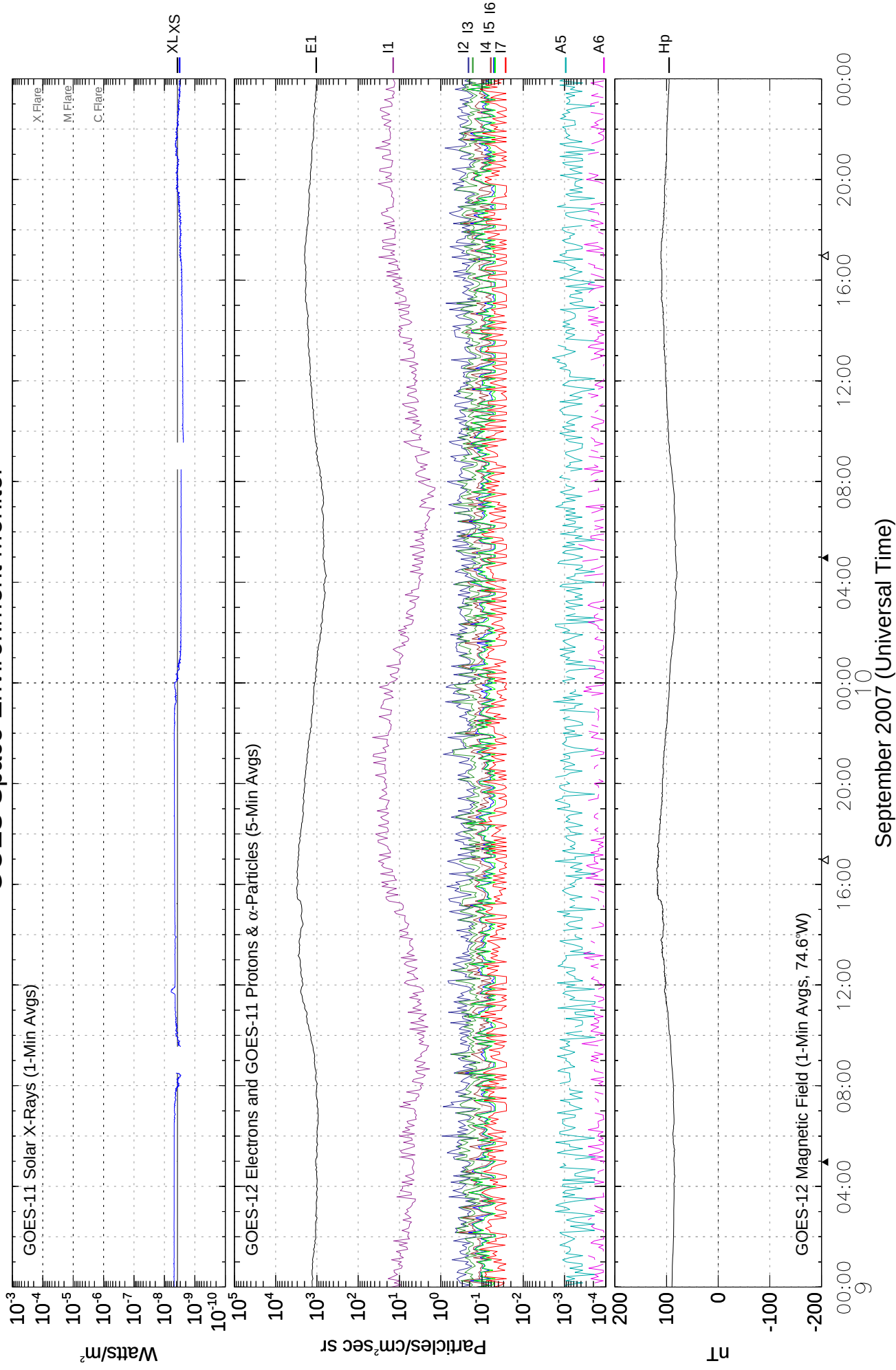
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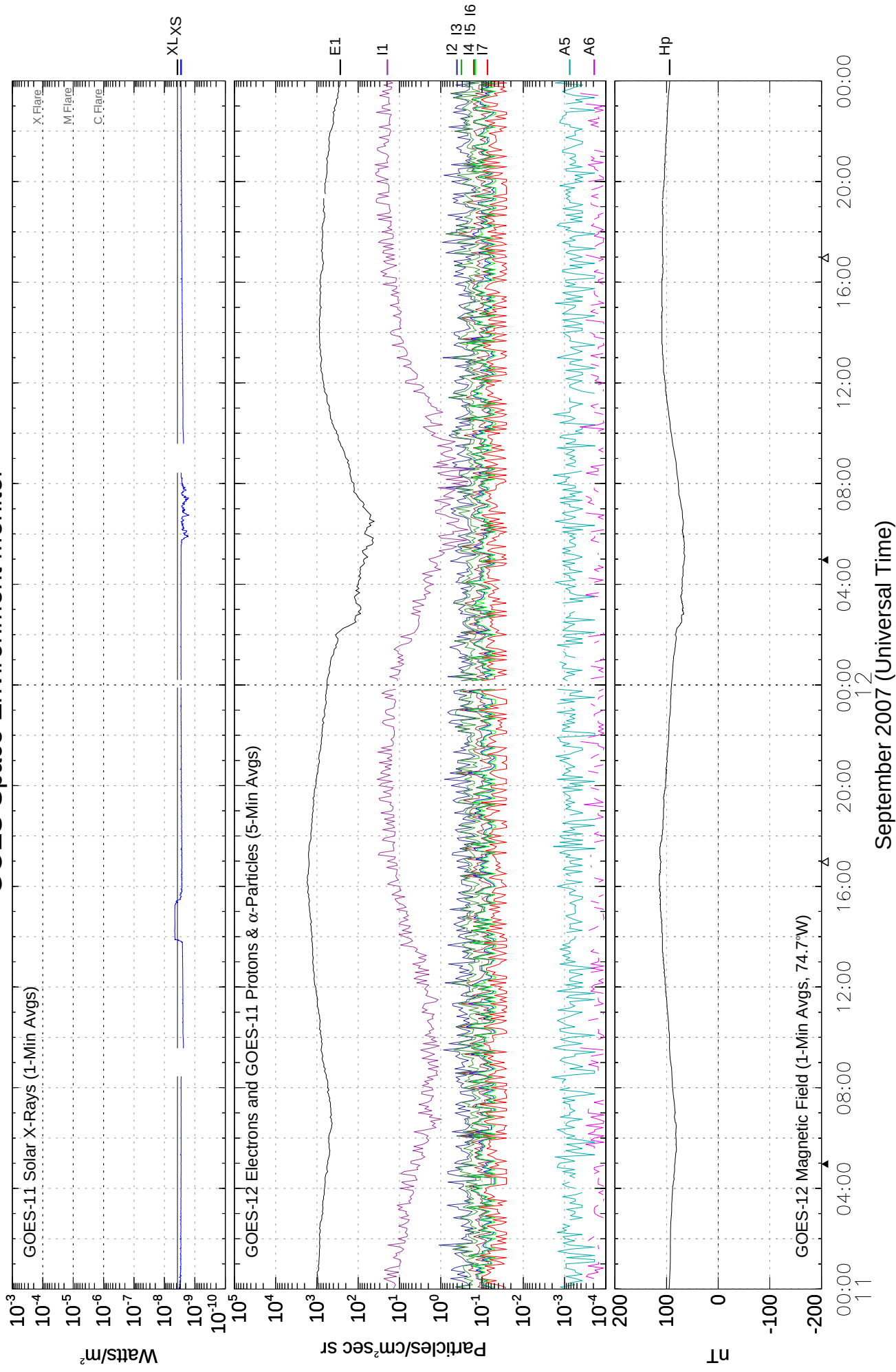
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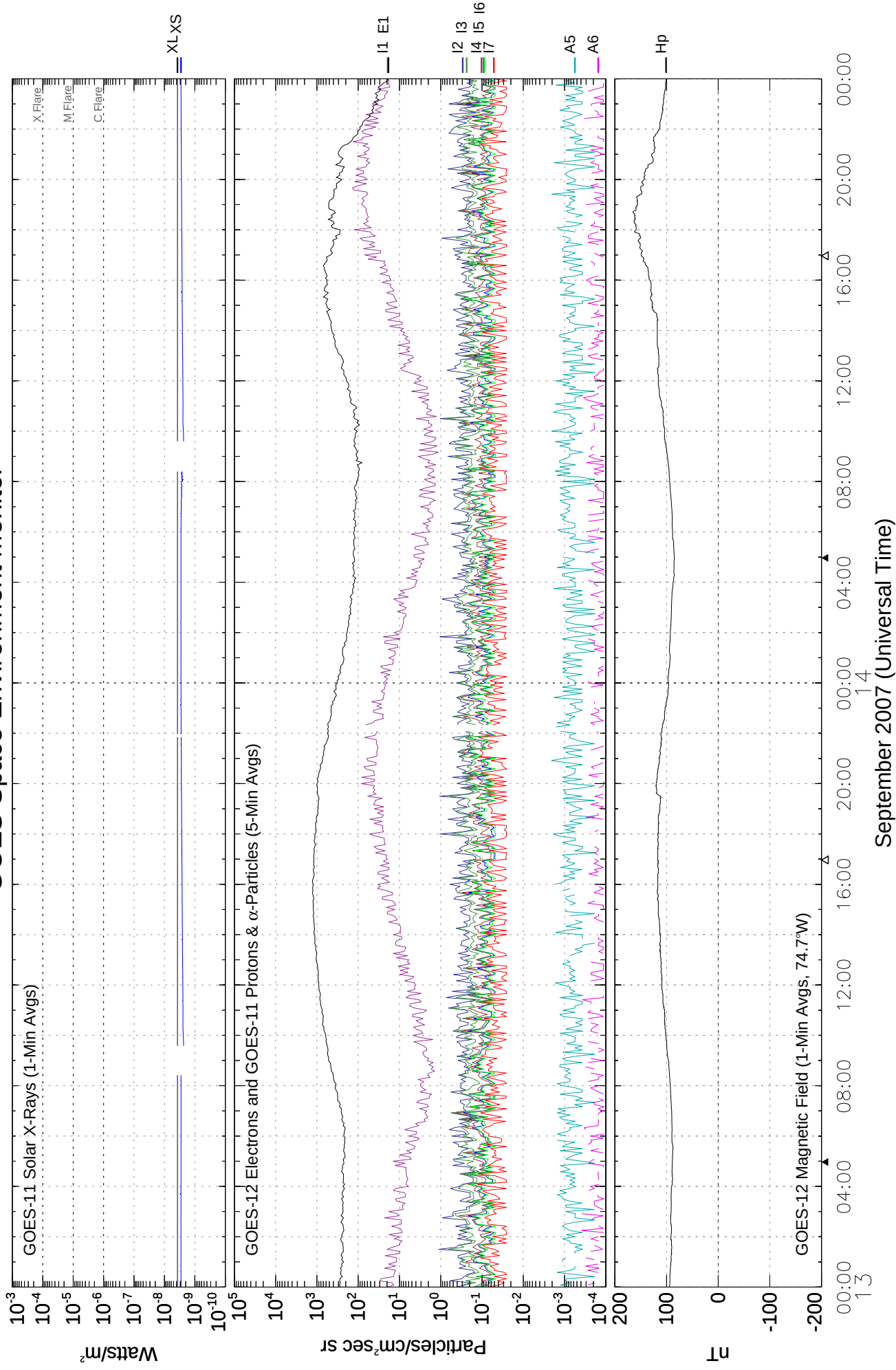
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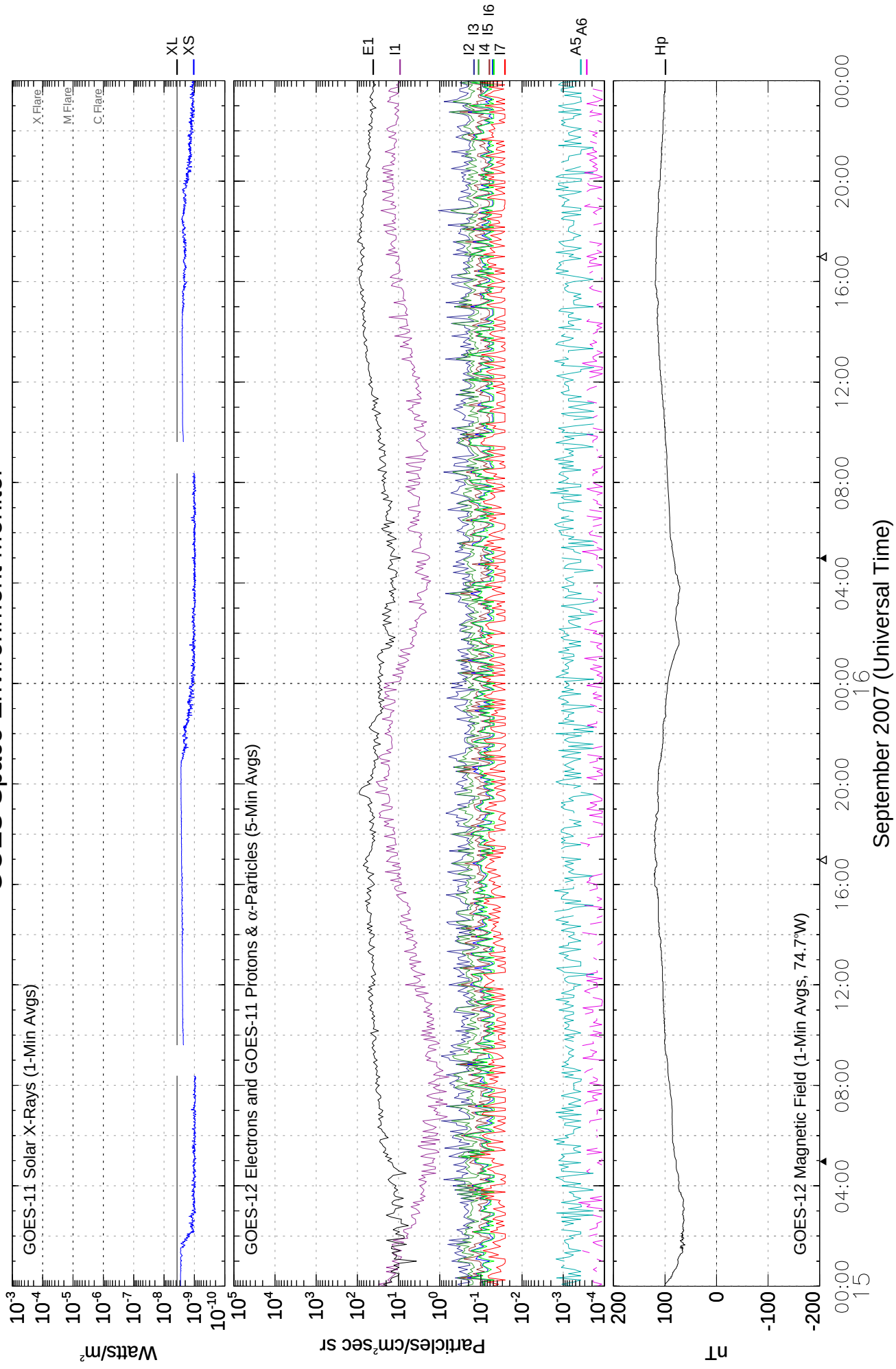
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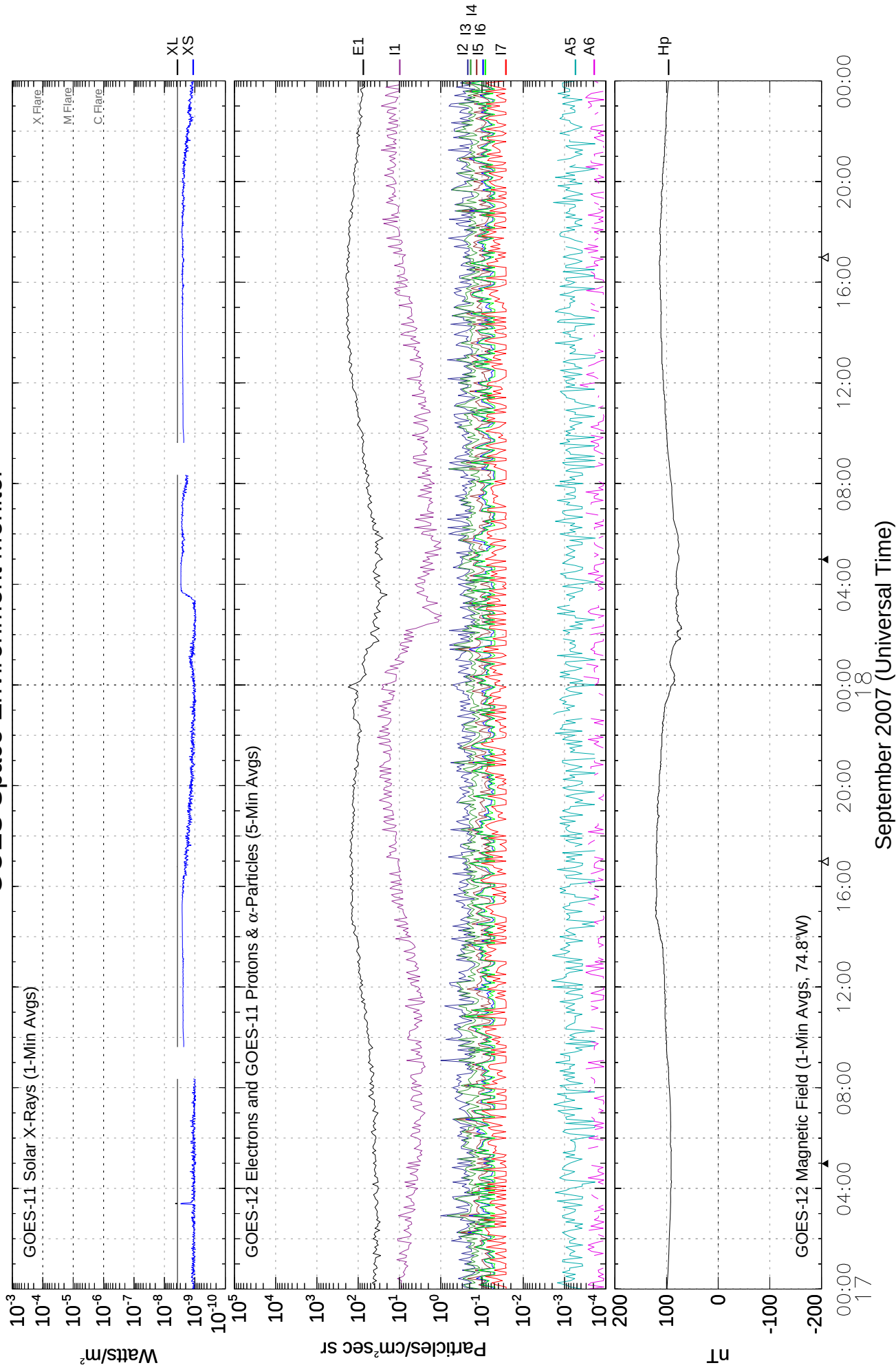
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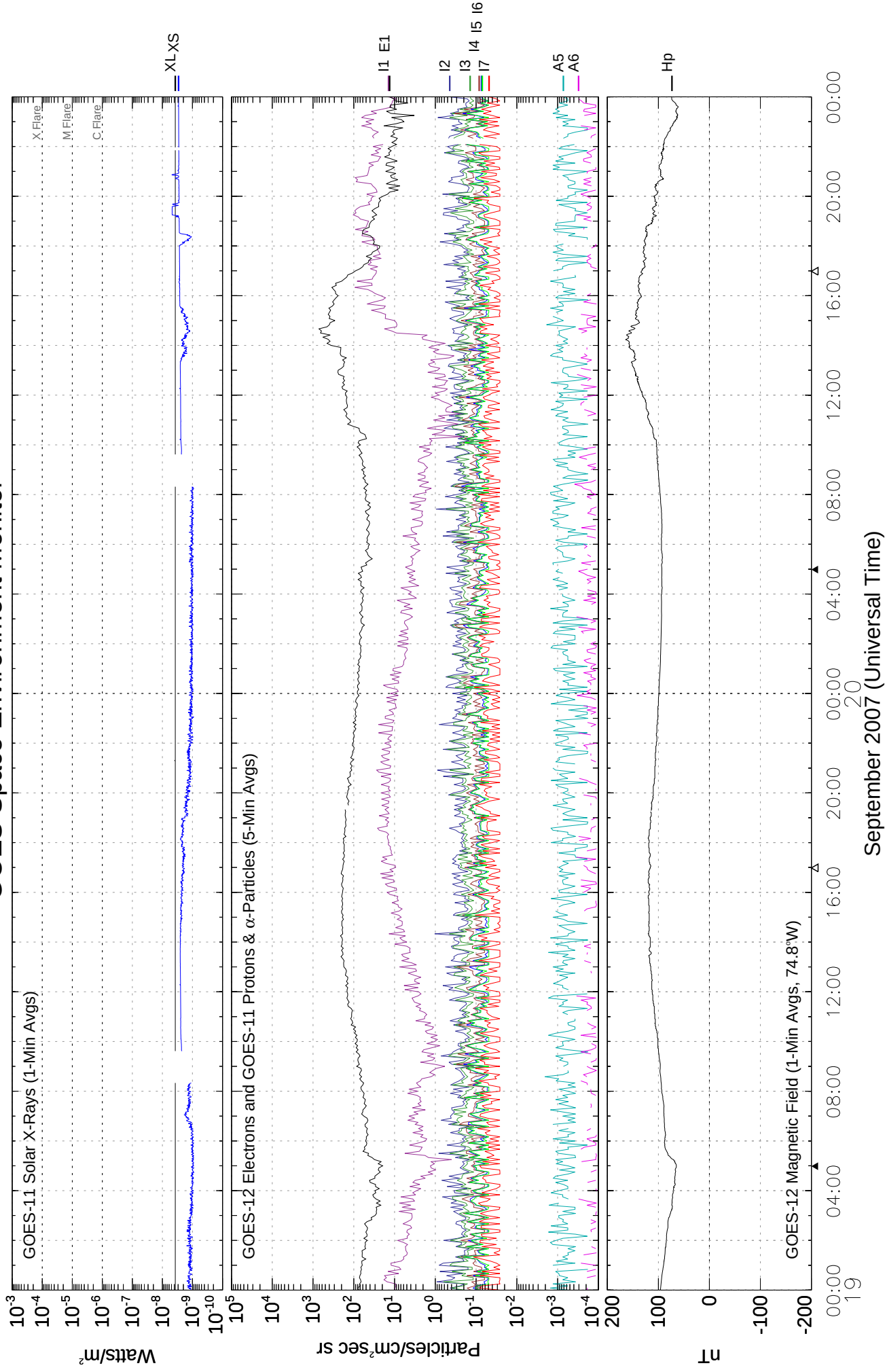
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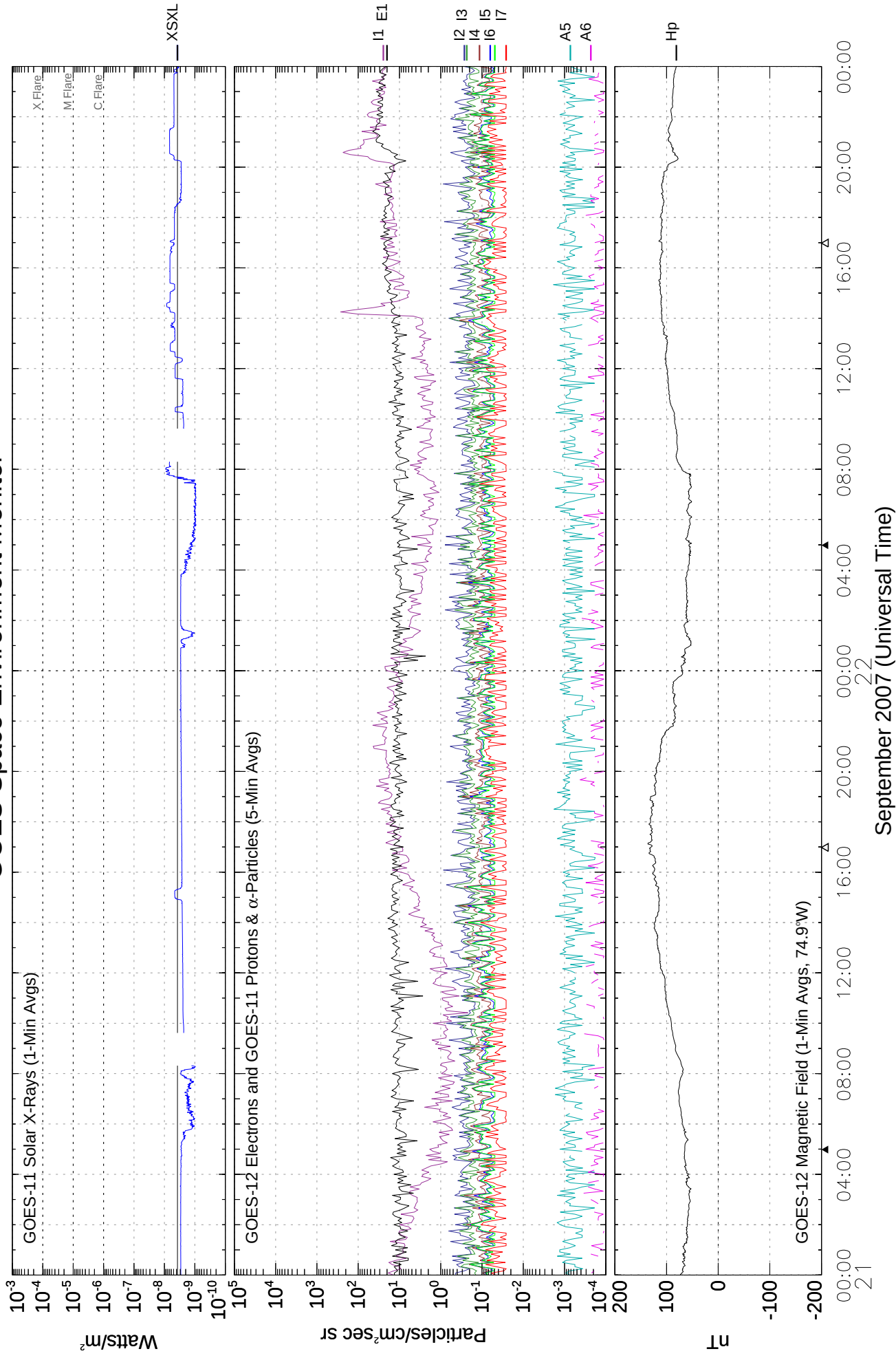
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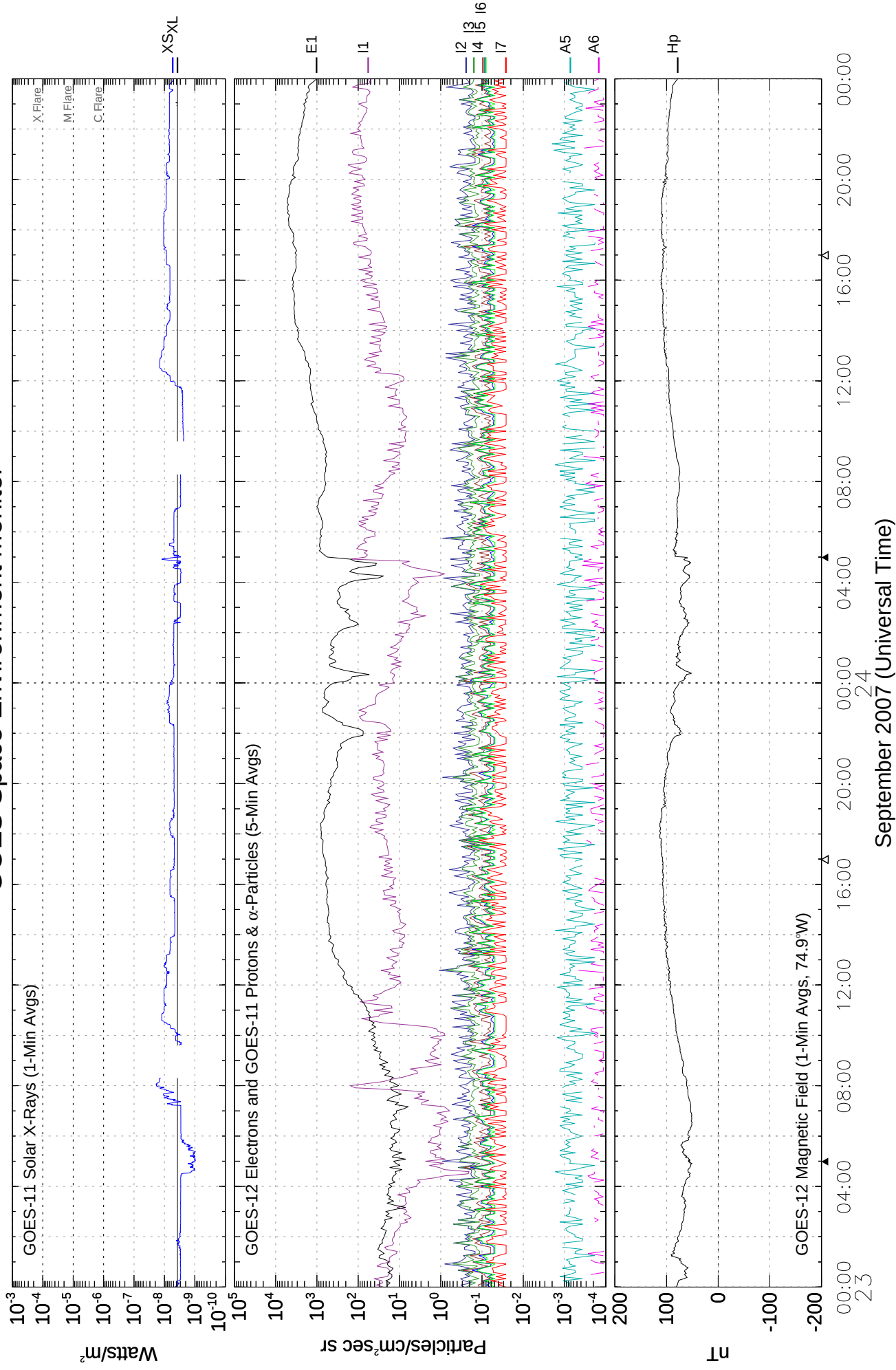
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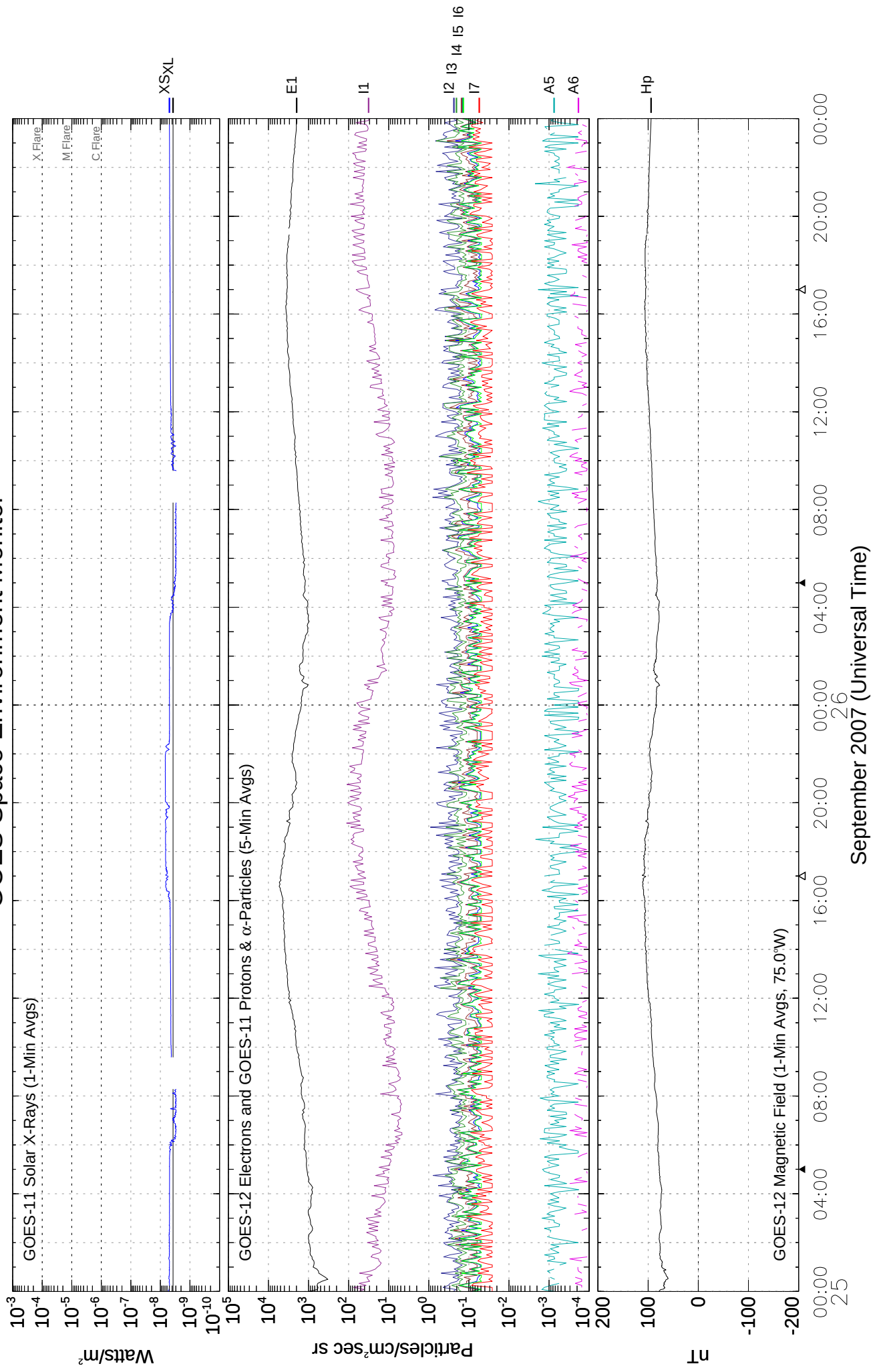
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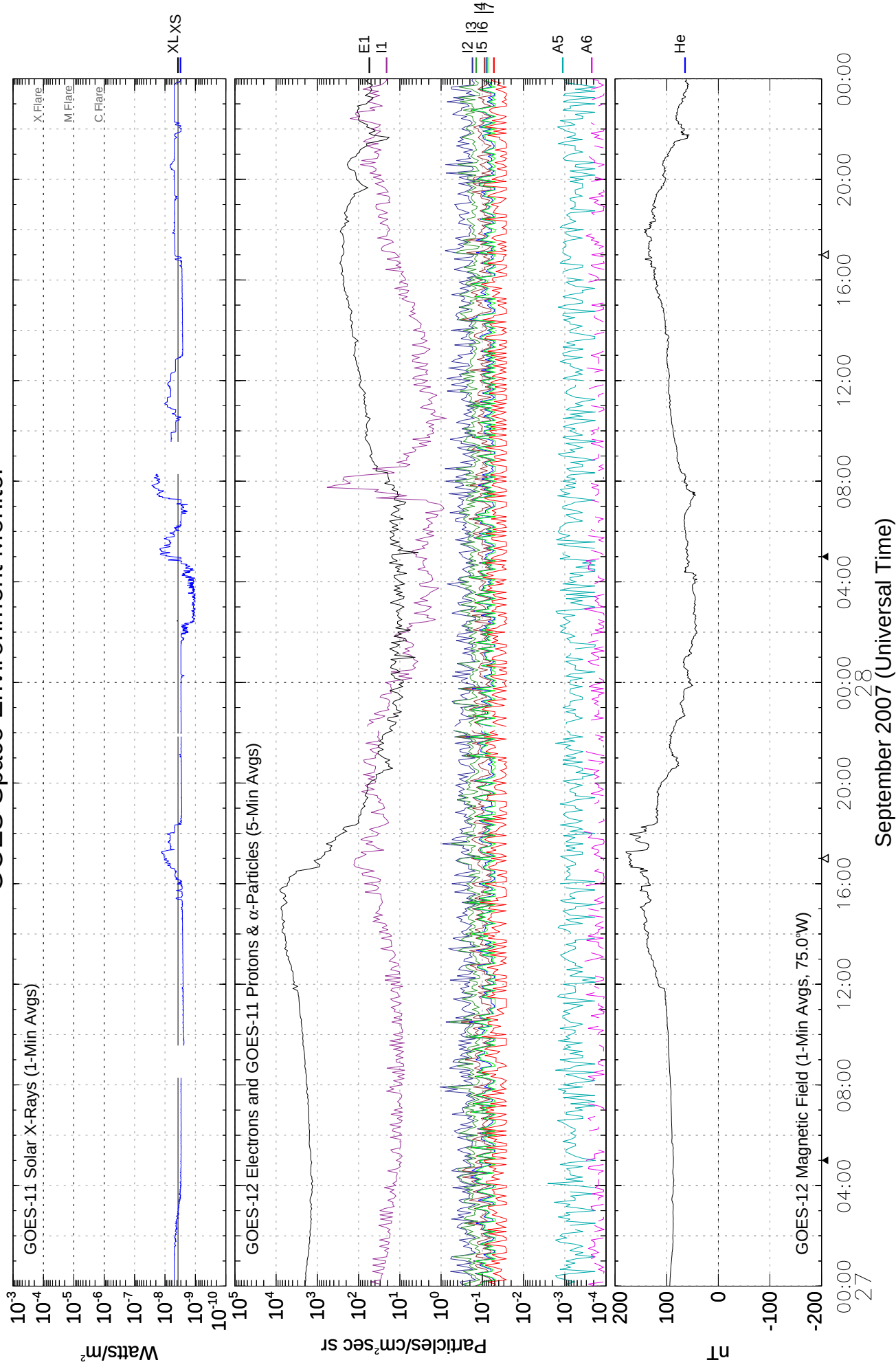
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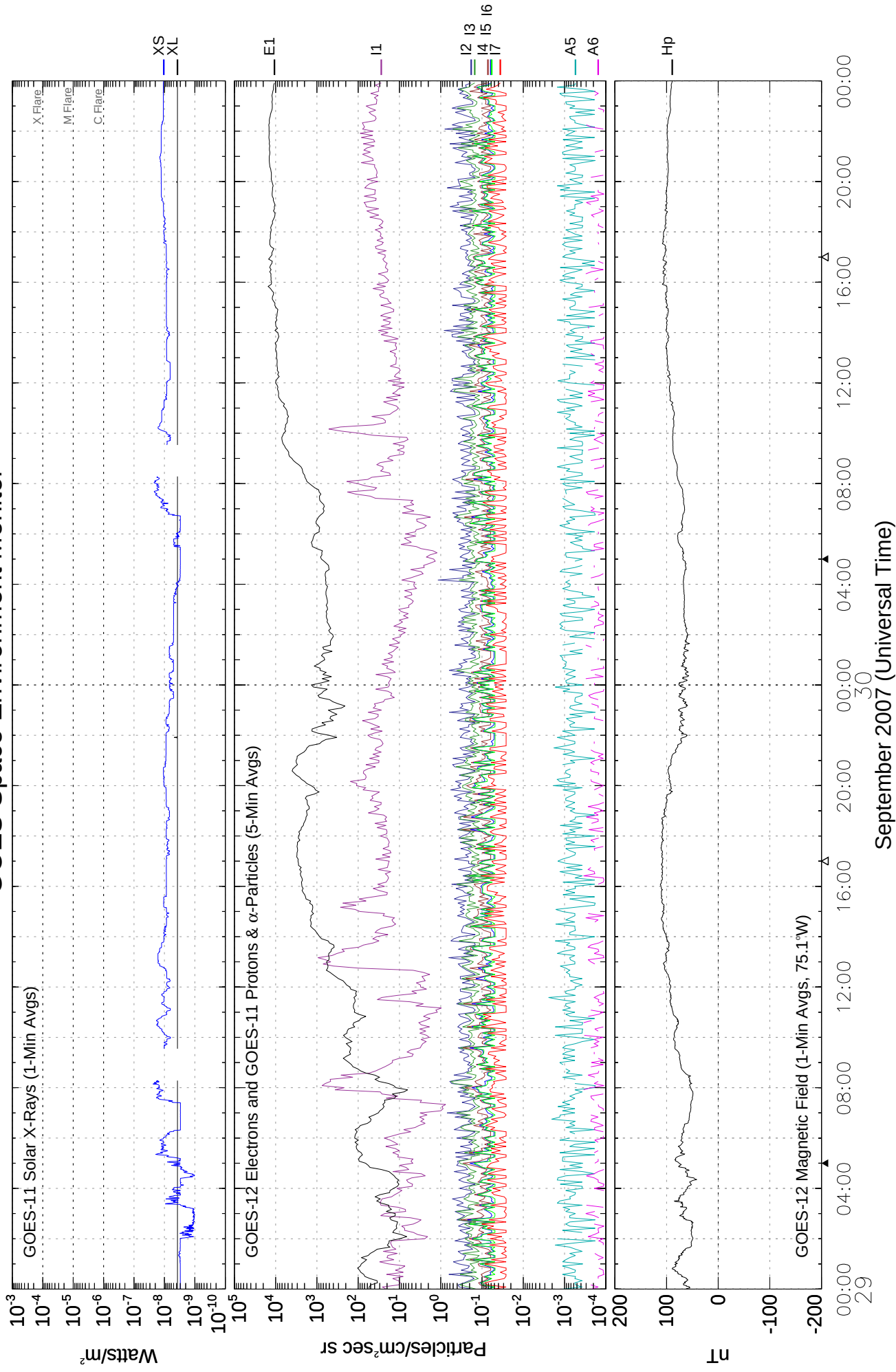
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GOES Space Environment Monitor



GOES Space Environment Monitor



A L E R T P E R I O D S

The International Space Environment Service

SEPTEMBER 2007

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A- index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
244	01	31	14	71	8	10969	S08	W58	1	0	0	01	Q	SOL: Quiet
									0	0	0	01		MAG: Quiet
									0	0	0	01		PRO: Quiet
245	02	01	26	71	14	10969	S06	W72	0	0	0	02	Q	SOL: Quiet
						10970	S06	W07	0	0	0	02	Q	MAG: Quiet
									0	0	0	02		PRO: Quiet
246	03	02	14	69	23	10970	S07	W21	0	0	0	03	Q	SOL: Quiet
									0	0	0	03		MAG: Quiet
									0	0	0	03		PRO: Quiet
247	04	03	15	68	13	10970	S07	W34	0	0	0	04	Q	SOL: Quiet
									0	0	0	04		MAG: Quiet
									0	0	0	04		PRO: Quiet
248	05	04	14	68	8	10970	S07	W44	0	0	0	05	Q	SOL: Quiet
									0	0	0	05		MAG: Quiet
									0	0	0	05		PRO: Quiet
249	06	05	15	68	13	10970	S09	W63	0	0	0	06	Q	SOL: Quiet
									0	0	0	06		MAG: Quiet
									0	0	0	06		PRO: Quiet
250	07	06	12	67	12	10970	S07	W75	0	0	0	07	Q	SOL: Quiet
									0	0	0	07		MAG: Active
									0	0	0	07		PRO: Quiet
251	08	07	0	67	14				0	0	0	08		SOL: Quiet
									0	0	0	08		MAG: Quiet
									0	0	0	08		PRO: Quiet
252	09	08	0	67	7				0	0	0	09		SOL: Quiet
									0	0	0	09		MAG: Quiet
									0	0	0	09		PRO: Quiet
253	10	09	0	67	2				0	0	0	10		SOL: Quiet
									0	0	0	10		MAG: Quiet
									0	0	0	10		PRO: Quiet
254	11	10	0	67	2				0	0	0	11		SOL: Quiet
									0	0	0	11		MAG: Quiet
									0	0	0	11		PRO: Quiet
255	12	11	0	66	2				0	0	0	12		SOL: Quiet
									0	0	0	12		MAG: Quiet
									0	0	0	12		PRO: Quiet
256	13	12	0	66	2				0	0	0	13		SOL: Quiet
									0	0	0	13		MAG: Quiet
									0	0	0	13		PRO: Quiet
257	14	13	0	66	1				0	0	0	14		SOL: Quiet
									0	0	0	14		MAG: Quiet
									0	0	0	14		PRO: Quiet
258	15	14	0	67	5				0	0	0	15		SOL: Quiet
									0	0	0	15		MAG: Quiet
									0	0	0	15		PRO: Quiet
259	16	15	0	68	4				0	0	0	16		SOL: Quiet
									0	0	0	16		MAG: Quiet
									0	0	0	16		PRO: Quiet
260	17	16	0	67	2				0	0	0	17		SOL: Quiet
									0	0	0	17		MAG: Quiet
									0	0	0	17		PRO: Quiet

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Sep 07

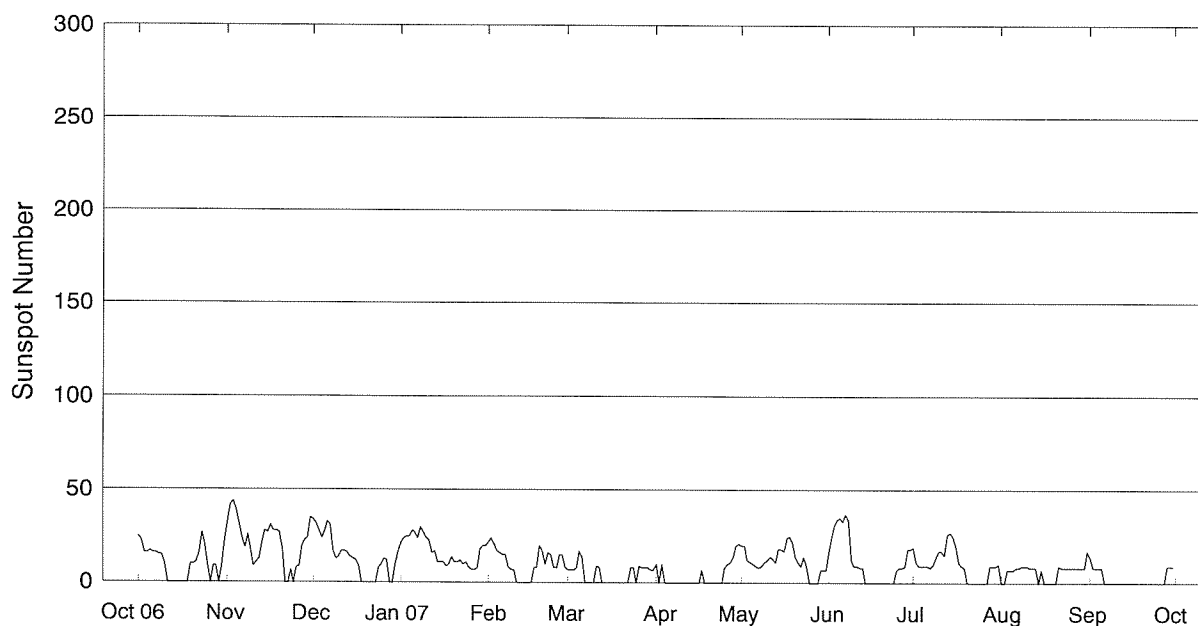
A L E R T P E R I O D S The International Space Environment Service

SEPTEMBER 2007

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A- index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
261	18	17	0	67	1				0	0	0	18		SOL: Quiet
									0	0	0	18		MAG: Quiet
									0	0	0	18		PRO: Quiet
262	19	18	0	67	2				0	0	0	19		SOL: Quiet
									0	0	0	19		MAG: Quiet
									0	0	0	19		PRO: Quiet
263	20	19	0	67	4				0	0	0	20		SOL: Quiet
									0	0	0	20		MAG: Quiet
									0	0	0	20		PRO: Quiet
264	21	20	0	67	10				0	0	0	21		SOL: Quiet
									0	0	0	21		MAG: Quiet
									0	0	0	21		PRO: Quiet
265	22	21	0	67	9				0	0	0	22		SOL: Quiet
									0	0	0	22		MAG: Active
									0	0	0	22		PRO: Quiet
266	23	22	0	67	12				0	0	0	23		SOL: Quiet
									0	0	0	23		MAG: Quiet
									0	0	0	23		PRO: Quiet
267	24	23	0	66	14				0	0	0	24		SOL: Quiet
									0	0	0	24		MAG: Quiet
									0	0	0	24		PRO: Quiet
268	25	24	0	66	14				0	0	0	25		SOL: Quiet
									0	0	0	25		MAG: Quiet
									0	0	0	25		PRO: Quiet
269	26	25	0	66	5				0	0	0	26		SOL: Quiet
									0	0	0	26		MAG: Quiet
									0	0	0	26		PRO: Quiet
270	27	26	0	67	3				0	0	0	27		SOL: Quiet
									0	0	0	27		MAG: Quiet
									0	0	0	27		PRO: Quiet
271	28	27	0	67	13				0	0	0	28		SOL: Quiet
									0	0	0	28		MAG: Active
									0	0	0	28		PRO: Quiet
272	29	28	15	67	17	10971	N03	E07	0	0	0	29	Q	SOL: Quiet
									0	0	0	29		MAG: Active
									0	0	0	29		PRO: Quiet
273	30	29	16	68	26	10971	N03	W06	0	0	0	30	Q	SOL: Quiet
									0	0	0	30		MAG: Quiet
									0	0	0	30		PRO: Quiet

International Relative Sunspot Numbers Oct 2006 - Sep 2007

21
Sep 07



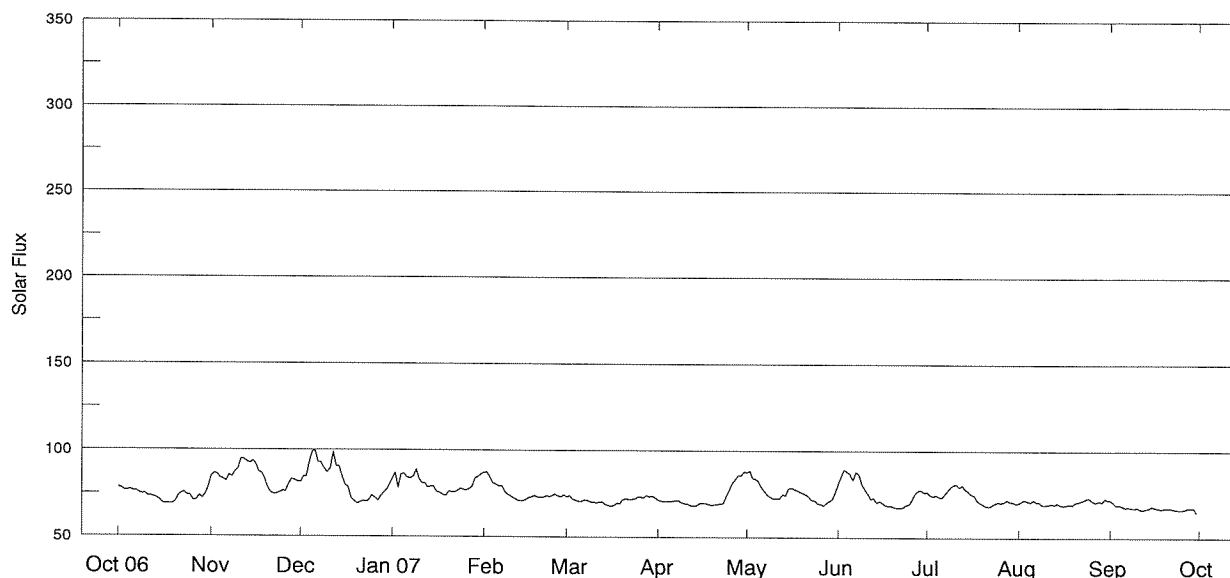
Day	Oct 06	Nov	Dec	Jan 07	Feb	Mar	Apr*	May*	Jun*	Jul*	Aug*	Sep *
1	25	32	34	22	22	7	10	20	17	19	0	14
2	23	42	32	24	24	7	0	20	25	11	0	8
3	16	44	28	25	21	7	10	12	31	9	7	8
4	16	39	24	25	17	8	0	11	34	9	7	8
5	17	32	28	28	16	17	0	10	35	9	7	8
6	16	24	33	27	15	14	0	9	33	9	8	0
7	16	19	31	24	15	0	0	8	37	8	8	0
8	15	26	17	30	8	0	0	9	34	10	9	0
9	15	18	13	27	7	0	0	11	12	14	9	0
10	10	9	14	24	7	0	0	12	9	17	9	0
11	0	11	17	23	0	9	0	14	9	17	8	0
12	0	13	17	16	0	8	0	13	8	15	8	0
13	0	21	16	17	0	0	0	11	8	26	8	0
14	0	28	14	11	0	0	0	18	0	27	0	0
15	0	27	13	11	0	0	0	18	0	25	7	0
16	0	31	12	11	0	0	0	17	0	20	0	0
17	0	28	9	9	8	0	7	24	0	11	0	0
18	0	28	0	10	8	0	0	25	0	9	0	0
19	10	27	11	14	20	0	0	22	0	8	0	0
20	10	18	0	18	17	0	0	14	0	0	0	0
21	11	0	0	11	10	0	0	11	0	0	9	0
22	16	0	0	12	16	0	0	9	0	0	8	0
23	27	7	0	10	15	8	0	14	0	0	8	0
24	21	0	8	11	8	8	0	9	0	0	8	0
25	10	8	10	8	8	0	8	0	7	0	8	0
26	0	9	13	7	15	9	10	0	8	0	8	0
27	9	20	12	7	15	8	11	0	8	0	8	0
28	9	23	0	8	8	8	14	0	9	9	8	9
29	0	24	0	18		8	20	7	18	9	8	9
30	9	35	10	20		7	21	7	18	9	8	9
31	23		17	20						10	17	
Mean	10.5	21.4	13.6	16.8	10.7	4.5	3.7	11.7	12.0	10.0	6.2	2.4

* = Provisional.

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Sep 07

Penticton 2800 MHz (10.7cm) Solar Flux Oct 2006 - Sep 2007

Adjusted to 1 AU



Day	Oct 06	Nov	Dec	Jan 07	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	78.6	85.3	81.8	84.1	87.3	73.4	71.6	87.6	81.6	76.8	70.4	72.1
2	78.0	86.8	84.8	87.0	87.7	74.2	71.1	88.8	85.6	75.1	71.5	70.6
3	76.7	86.0	84.6*	78.6	84.8	72.0	70.8	84.4	89.5	74.2	72.4	69.1
4	76.7	84.0	93.6#	86.4	81.3	71.3	70.8	83.9	88.2	74.9	71.4	69.4
5	77.3	83.2	99.4	86.5	80.7	70.8	71.0	82.4	87.1	73.9	70.9	68.8
6	76.3	82.1	99.7*	84.4	79.6	70.8	71.1	79.4	83.6	73.5	72.0	67.8
7	76.4	85.6	92.9*	83.9	79.8	71.8	71.4	77.1	88.1	75.5	71.0	68.2
8	75.1	84.8	93.1	85.1	76.3	71.4	71.3	74.7	86.8	77.6	71.0	67.6
9	74.8	87.7	89.6	89.1	74.6	70.6	70.2	73.5	81.0	79.7	69.3	67.7
10	75.0	89.3	87.3	83.3	73.9	70.2	69.7	72.6	78.2	80.8	69.3	67.9
11	73.3	95.0	89.4	81.2	72.8	70.1	69.5	72.9	75.6	81.1	69.5	67.0
12	73.3	94.7	98.9+	81.0	71.8	70.3	68.6	72.9	72.6	79.5	70.0	66.7
13	72.9	93.2	90.7	78.7	70.9	70.6	68.6	75.0	73.1	80.6	69.5	67.2
14	72.0	92.5	90.5	79.4	70.9	69.2	68.6	74.4	70.6	78.2	70.3	67.6
15	70.7	94.0	84.4	79.3	71.8	68.5	69.8	78.5	71.3	77.1	69.3	68.5
16	69.1	92.0	79.7	76.1	72.9	68.0	69.8	78.9	70.2	75.3	69.0	67.8
17	69.1	87.4	78.7	75.6	73.5	68.6	69.8	78.3	68.9	74.7	69.3	67.6
18	69.0	86.8	72.3	74.4	74.1	69.8	69.3	77.6	68.8	71.8	69.6	67.1
19	69.0	82.9	70.6	73.9	73.2	69.5	68.9	76.6	68.5	70.5	69.4	67.4
20	70.4	78.6	69.2	76.3	73.1	72.0	69.1	75.9	67.8	69.5	70.7	67.4
21	74.0	75.6	70.0	76.1	73.2	72.3	69.4	75.0	67.6	68.6	70.9	67.4
22	75.1	74.6	70.8	76.0	73.9	72.0	69.7	73.7	67.5	68.3	71.6	67.2
23	75.7	74.9	70.3	76.8	73.6	72.0	69.8	71.9	68.1	69.3	72.4	66.8
24	74.0	75.5	71.1	77.9	73.9	72.4	74.0	71.7	69.1	70.2	73.2	66.5
25	73.9	76.5	73.9	77.5	75.1	73.3	77.4	69.9	69.8	70.8	73.1	66.6
26	71.0	76.2	72.5	77.3	73.9	73.5	81.5	69.5	72.8	70.6	71.6	66.8
27	71.1	80.2	70.9	78.0	73.4	73.0	83.8	68.8	75.7	70.9	70.7	67.4
28	73.7	83.2	73.8	79.3	74.4	74.3	86.1	70.5	77.4	72.1	71.6	67.4
29	72.3	82.7	75.8	84.1		73.6	86.0	71.5	77.8	71.1	71.0	67.8
30	74.6	81.8	77.4	84.9		73.9	88.2	72.6	76.4	71.0	73.0	65.1
31	78.9		80.5	86.6		73.1		76.7		70.1	72.2	
Mean	73.8	84.4	81.9	80.8	75.8	71.5	72.9	76.0	76.0	74.0	70.9	67.8

NOTE: # - 2200UT reading. * - 1800UT reading, + = Burst in progress.

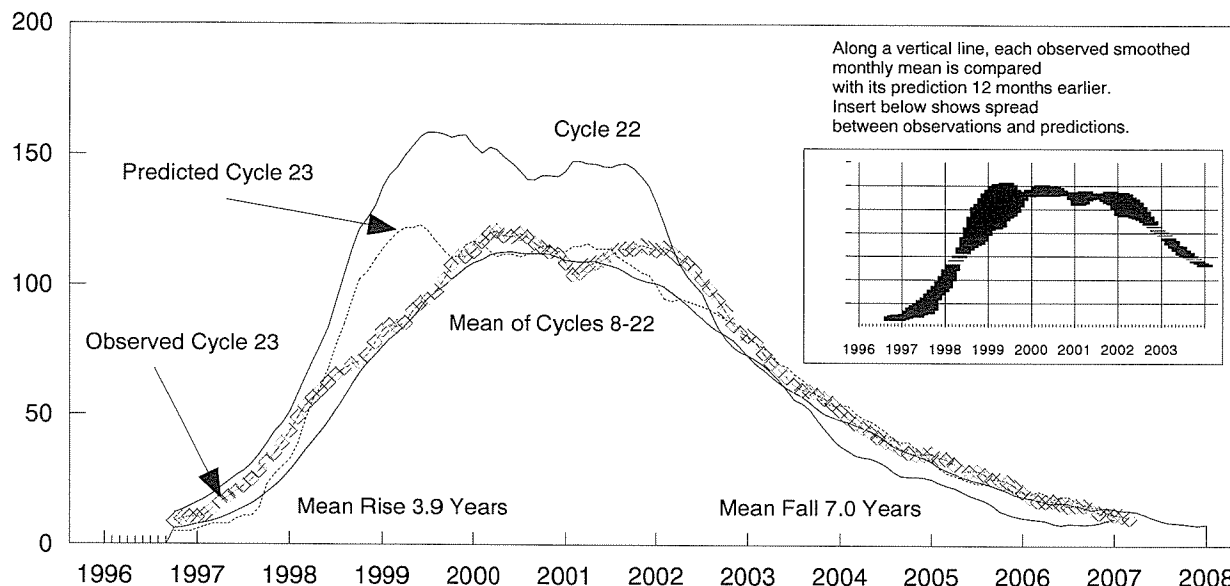
DAILY SOLAR INDICES

September 2007

Day	Day of Year	Bartels Cycle Day	Sunspot Numbers		Obs Flux		-----Solar Flux Adjusted to 1 Astronomical Unit-----							
			Int	Amer	Penticton (2800)	SGMR (15400)	SGMR (8800)	SGMR (4995)	Penticton (2800)	SGMR (2695)	SGMR (1415)	SGMR (610)	SGMR (410)	SGMR (245)
1	244	27	14	16	70.8	---	---	---	72.1	---	---	---	---	---
2	245	1	8	11	69.4	462	---	126	70.6	68	42	26	21	13
3	246	2	8	8	68.0	464	---	126	69.1	64	41	27	21	14
4	247	3	8	7	68.2	451	---	126	69.4	63	40	28	22	17
5	248	4	8	7	67.6	455	---	125	68.8	65	38	26	22	17
6	249	5	0	2	66.7	445	---	122	67.8	68	42	27	22	15
7	250	6	0	0	67.1	460	---	123	68.2	63	40	26	22	15
8	251	7	0	0	66.6	458	---	124	67.6	65	38	27	21	14
9	252	8	0	0	66.7	441	---	125	67.7	66	39	27	21	16
10	253	9	0	0	66.9	433	---	122	67.9	66	39	26	22	14
11	254	10	0	0	66.1	---	243	97	67.0	64	38	26	21	13
12	255	11	0	0	65.9	456	---	124	66.7	60	38	26	21	17
13	256	12	0	0	66.4	451	239	125	67.2	65	39	26	21	15
14	257	13	0	0	66.8	451	254	121	67.6	62	39	26	21	15
15	258	14	0	0	67.7	444	248	126	68.5	69	39	27	22	19
16	259	15	0	0	67.0	459	264	125	67.8	66	38	28	22	14
17	260	16	0	0	66.9	456	253	122	67.6	64	42	28	22	14
18	261	17	0	0	66.5	450	240	123	67.1	63	38	26	21	14
19	262	18	0	0	66.8	455	248	125	67.4	62	39	26	21	14
20	263	19	0	0	66.8	462	243	123	67.4	63	39	27	21	15
21	264	20	0	0	66.9	447	253	123	67.4	68	40	28	21	17
22	265	21	0	0	66.7	444	259	125	67.2	63	39	26	21	15
23	266	22	0	0	66.3	458	257	123	66.8	64	38	25	20	14
24	267	23	0	0	66.1	454	256	122	66.5	68	38	27	21	13
25	268	24	0	0	66.2	461	263	124	66.6	62	38	26	21	13
26	269	25	0	0	66.5	453	250	122	66.8	62	38	26	20	14
27	270	26	0	2	67.1	445	220	122	67.4	64	38	28	20	13
28	271	27	9	11	67.2	445	249	124	67.4	63	39	28	24	13
29	272	1	9	10	67.6	455	254	124	67.8	64	39	27	22	14
30	273	2	9	11	65.0	448	244	122	65.1	67	40	27	23	18
MEAN			2.4	2.8	67.0	452	249	122	67.8	64	39	26	21	14

NOTE: Radio flux values are from Sagamore Hill, Massachusetts, USA.

Cycle 23 Smoothed Sunspot Numbers: Observed and Predicted



Smoothed Sunspot Numbers (Observed and Predicted) for Parts of Solar Cycles 22 and 23

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1994	37	35	34	34	33	31	29	27	27	27	26	26	31
1995	24	23	22	21	19	18	17	15	13	12	11	11	17
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	11	11	11	12	13	14	14	15	16	13
				(2)	(5)	(7)	(9)	(11)	(13)	(15)	(17)	(20)	(8)
	Solar Cycle 22			Solar Cycle 23			Min, Max, and Pre prediction.						

* May 1996 marks Cycle 22's mathematical minimum. ** October 1996 marks the consensus minimum NGDC is now using.

+ April 2000 marks Cycle 23 maximum.

NOTE: Predictions beyond 2007 will not be determined until solar minimum is reached.

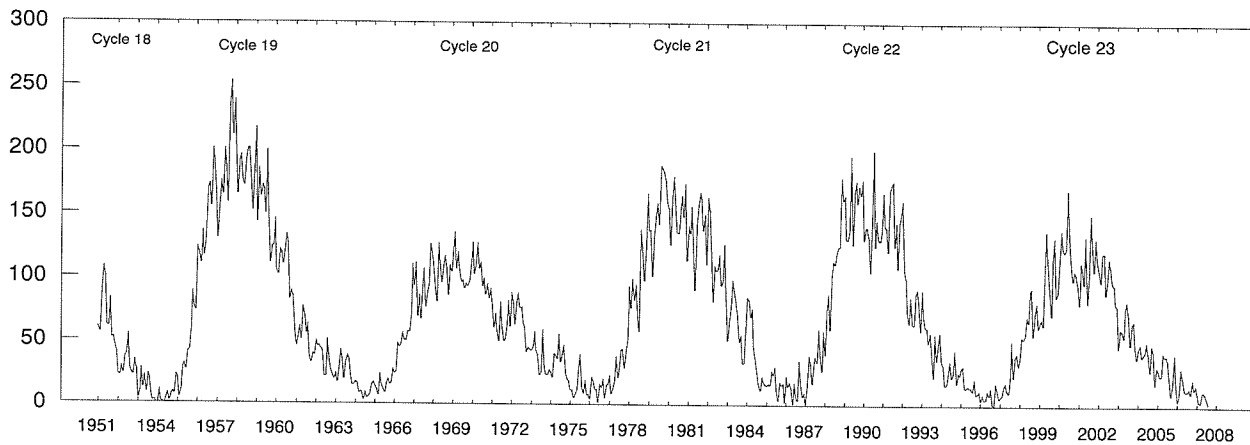
Observed and Predicted Numbers. For the end of Cycle 22 and the rise and decline of Cycle 23, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Mar 2007 and on provisional numbers 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 December 2007 prediction. There exists a 90% chance that in December 2007, the actual smoothed number will fall somewhere between 0 and 36.

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 15 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 the consensus minimum value of 8.8 that occurred in October 1996.

Note: Please visit <http://www.sec.noaa.gov> for solar minimum and Cycle 23 discussions.

Mean Monthly Sunspot Numbers Jan 1951 - Sep 2007

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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	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	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	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	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	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	3.7	11.7	12.0	10.0	6.2	2.4				8.7

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

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H α SOLAR FLARES

SEPTEMBER 2007

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
							USAF	CMP						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	

NO REPORTS

"Remarks"

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

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

SEPTEMBER 2007

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES	01	2103	2106	2109					6	B 1.1	2.5E-05		
GOES	02	0234	0237	0239					5	B 1.1	2.4E-05		
GOES		1526	1529	1532					6	B 1.2	2.7E-05		
GOES	03	0103	0106	0109					6	B 1.1	3.2E-05		
GOES	04	0003	0009	0025					22	B 2.0	2.1E-04		
GOES	08	0013	0019	0024					11	B 3.0	1.2E-04		

Note 1: Total integrated flux computed from the event start time to end if available (units=J/m²).

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.

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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.

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Sep 07

SOLAR RADIO EMISSION Selected Fixed Frequency Events

SEPTEMBER 2007

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		

NO REPORTS

Reports are received routinely from the following observatories:

LEAR = Learmonth

PALE = Palehua

SGMR = Sagamore Hill

SVTO = San Vito

Explanation of Type Code:

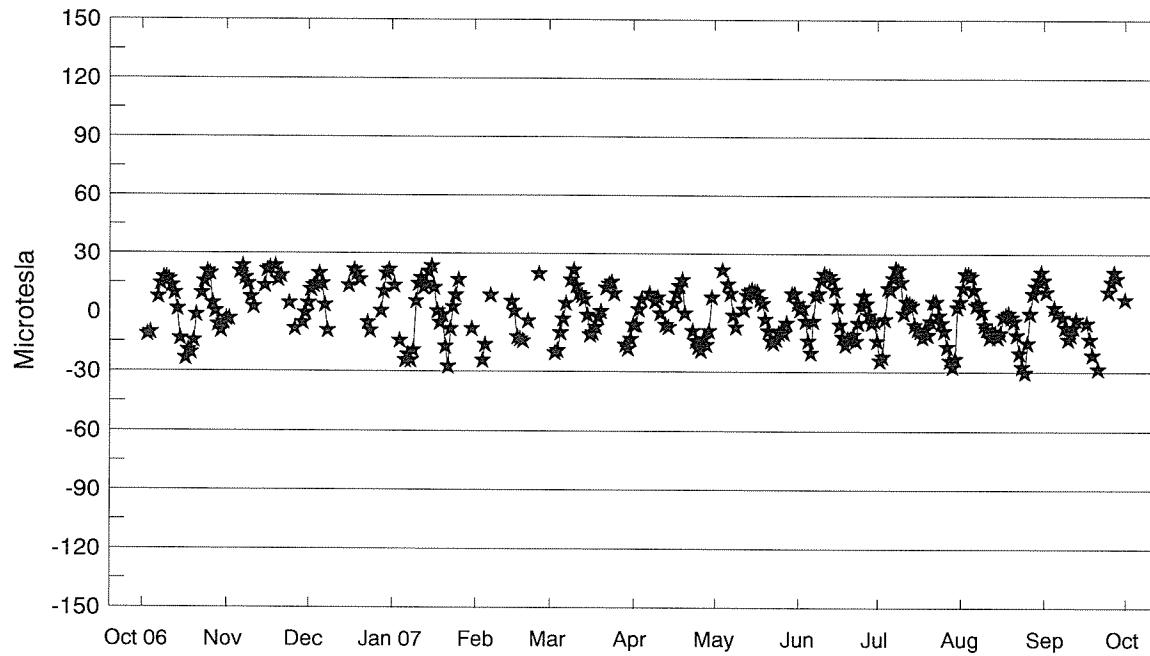
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	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 (Microtesla)

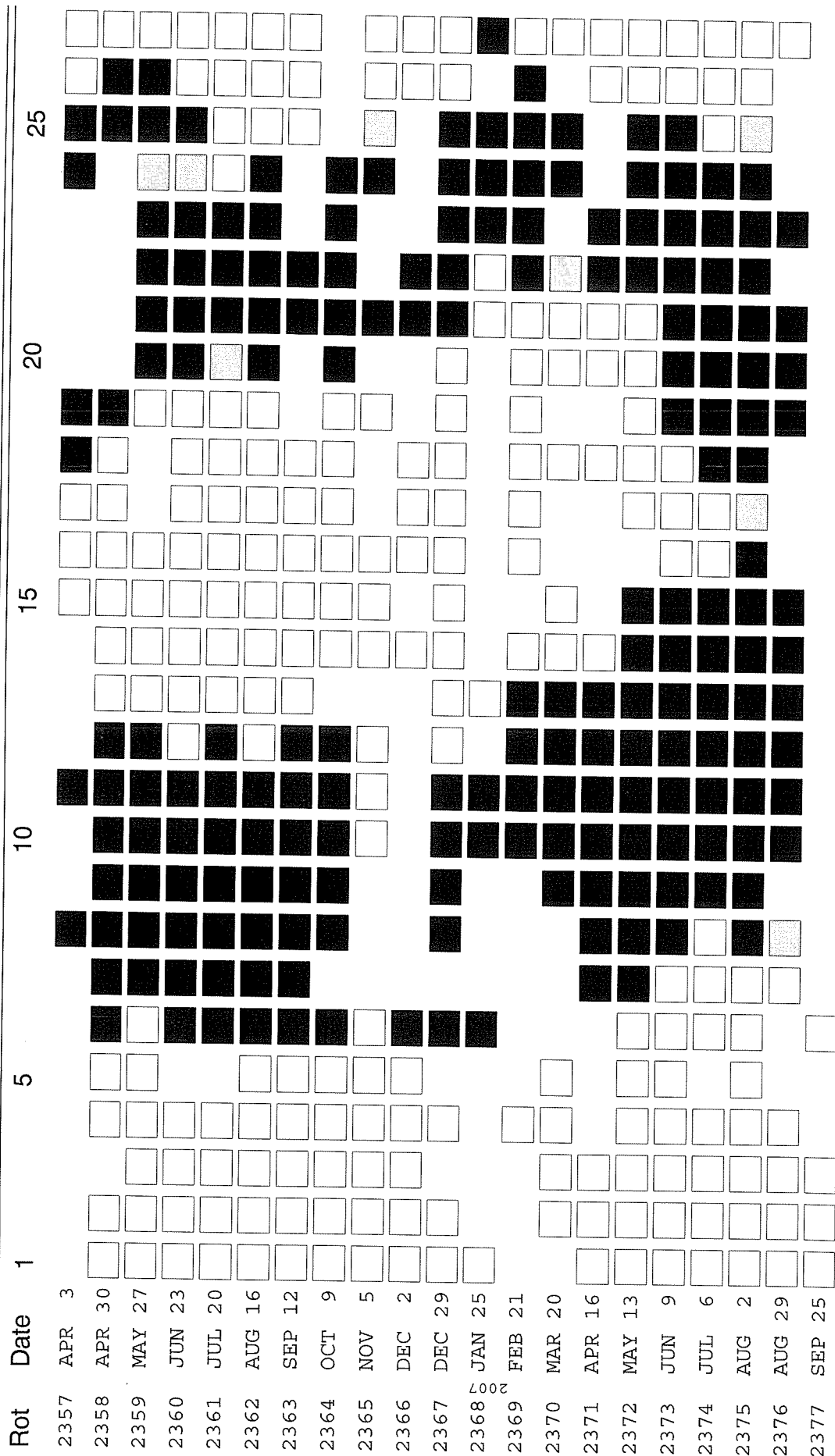
"Sun-As-A-Star"

29
Sep 07



Day	Oct 06	Nov	Dec	Jan 07	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	-3	12	14	---	---	-6	---	2	-24	13	11
2	-11	---	14	---	---	-20	2	---	3	-22	20	---
3	-10	---	15	-14	-24	-19	7	22	-4	-3	20	---
4	---	---	20	---	-16	-10	---	---	-14	13	19	3
5	---	21	15	-24	---	-3	---	15	-20	12	12	0
6	8	24	4	-21	9	5	10	10	-4	18	4	---
7	15	18	-9	-24	---	---	---	-1	9	23	5	-2
8	18	15	---	-19	---	17	6	-7	10	22	1	-7
9	18	8	---	6	---	22	8	---	17	16	-6	-13
10	17	3	---	15	---	14	0	---	20	---	-8	-11
11	14	---	---	18	---	10	---	2	19	6	-12	-7
12	10	---	---	13	---	9	-6	9	19	5	-9	-3
13	2	---	---	15	---	7	-7	11	17	4	-10	---
14	-13	14	---	21	6	-1	---	12	12	-6	-12	---
15	---	22	14	24	1	-11	5	11	4	-8	-10	---
16	-23	23	---	13	-12	-10	10	11	-6	-9	-2	-5
17	-19	---	22	1	-13	-7	14	7	-12	-12	-1	-13
18	-20	24	20	-5	-14	-2	17	5	-16	-8	0	-21
19	-14	17	17	-1	---	1	---	-3	-13	-11	-2	---
20	-1	19	---	-17	-4	---	---	-9	-13	-4	-4	-28
21	---	---	---	-27	---	13	---	-14	-11	6	-11	---
22	10	---	-5	-8	---	15	-9	-15	-14	6	-20	---
23	16	5	-9	3	---	16	-14	-13	-5	-1	-27	---
24	21	---	---	9	20	10	-17	-10	4	-5	-30	11
25	20	-8	---	17	---	---	-19	-9	9	-9	-15	16
26	5	---	---	---	---	---	-13	-10	5	-17	0	21
27	1	---	1	---	---	---	-16	-5	-1	-24	10	18
28	-6	-5	11	---	---	-16	-9	---	-5	-27	14	---
29	-9	0	20	---	---	-18	8	10	-4	-23	17	---
30	-5	5	22	-8	---	-13	---	10	-14	3	21	7
31	-3	---	---	---	---	-6	---	5	---	6	17	---

STANFORD MEAN SOLAR MAGNETIC FIELD

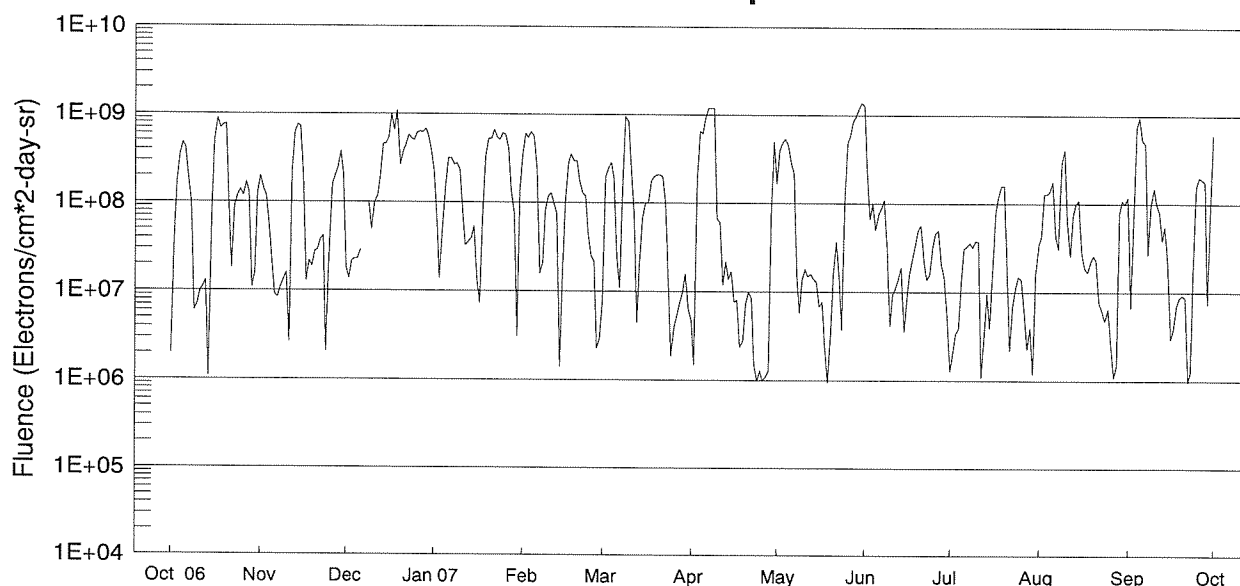


Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT ≤ field ≤ 2 microT
 = field < -2 microT; No box = no data available

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.

GOES Daily Electron Fluence Oct 2006 - Sep 2007

31
Sep 07



Day	Oct 06	Nov	Dec	Jan 07	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.9E+07	1.4E+08	1.4E+07	7.0E+07	6.1E+08	2.0E+08	1.5E+06	4.0E+08	2.4E+08	2.1E+06	4.3E+07	6.8E+06
2	1.7E+08	1.2E+08	2.2E+07	1.4E+07	5.5E+08	2.5E+08	1.9E+08	4.9E+08	6.7E+07	3.4E+06	1.3E+08	6.3E+07
3	3.5E+08	5.7E+07	2.3E+07	4.9E+07	6.4E+08	2.9E+08	6.6E+08	5.4E+08	1.0E+08	3.9E+06	1.3E+08	7.5E+08
4	4.8E+08	2.1E+07	2.3E+07	1.6E+08	5.6E+08	1.9E+08	6.2E+08	4.6E+08	5.1E+07	1.3E+07	1.4E+08	9.6E+08
5	4.2E+08	9.2E+06	2.9E+07	3.2E+08	2.4E+08	2.5E+07	9.6E+08	2.9E+08	7.7E+07	3.1E+07	1.8E+08	5.3E+08
6	1.9E+08	8.5E+06	-999	3.2E+08	1.6E+07	1.1E+07	1.2E+09	2.2E+08	9.0E+07	3.3E+07	4.3E+07	4.9E+08
7	1.0E+08	1.1E+07	-999	2.7E+08	2.1E+07	1.4E+08	1.2E+09	1.6E+07	1.1E+08	3.6E+07	3.1E+07	2.7E+07
8	6.0E+06	1.3E+07	1.0E+08	2.8E+08	8.3E+07	9.6E+08	1.2E+09	5.9E+06	3.1E+07	3.2E+07	2.9E+08	9.6E+07
9	7.1E+06	1.6E+07	5.0E+07	2.4E+08	1.2E+08	8.4E+08	6.7E+07	1.4E+07	4.2E+06	3.8E+07	4.1E+08	1.5E+08
10	1.0E+07	2.7E+06	1.0E+08	7.9E+07	1.3E+08	2.5E+08	6.2E+07	1.8E+07	9.4E+06	3.7E+07	6.6E+07	1.0E+08
11	1.1E+07	2.2E+08	1.2E+08	3.3E+07	1.0E+08	8.0E+07	1.2E+07	1.5E+07	1.1E+07	1.1E+06	2.6E+07	8.2E+07
12	1.3E+07	6.3E+08	2.0E+08	3.6E+07	7.6E+07	4.5E+06	2.2E+07	1.6E+07	1.4E+07	3.0E+06	7.5E+07	3.9E+07
13	1.1E+06	7.6E+08	4.6E+08	4.0E+07	1.4E+06	2.2E+07	1.4E+07	1.4E+07	1.9E+07	9.6E+06	1.0E+08	5.6E+07
14	6.5E+07	7.3E+08	4.7E+08	5.4E+07	1.6E+07	6.8E+07	1.7E+07	1.3E+07	3.6E+06	4.0E+06	1.1E+08	2.1E+07
15	5.0E+08	2.0E+08	5.4E+08	1.4E+07	1.1E+08	1.0E+08	7.7E+06	6.9E+06	8.6E+06	1.9E+07	2.8E+07	3.0E+06
16	9.0E+08	1.3E+07	1.0E+09	7.4E+06	2.9E+08	1.0E+08	8.2E+06	7.8E+06	1.6E+07	8.1E+07	1.9E+07	3.8E+06
17	7.0E+08	2.2E+07	6.7E+08	6.3E+07	3.6E+08	1.8E+08	2.4E+06	2.5E+06	2.4E+07	1.2E+08	1.7E+07	7.2E+06
18	7.5E+08	1.9E+07	1.1E+09	3.3E+08	3.0E+08	2.0E+08	2.8E+06	9.6E+05	3.5E+07	1.6E+08	2.2E+07	8.8E+06
19	7.7E+08	2.8E+07	2.7E+08	5.3E+08	3.0E+08	2.1E+08	7.3E+06	3.1E+06	5.0E+07	1.6E+08	2.6E+07	9.3E+06
20	9.1E+07	2.9E+07	3.8E+08	5.3E+08	1.8E+08	2.1E+08	1.0E+07	1.6E+07	5.7E+07	2.3E+07	2.3E+07	8.8E+06
21	1.8E+07	3.8E+07	4.5E+08	6.7E+08	1.3E+08	2.0E+08	8.5E+06	3.7E+07	2.1E+07	2.2E+06	7.7E+06	9.8E+05
22	9.0E+07	4.2E+07	5.8E+08	5.5E+08	1.2E+08	1.0E+08	1.5E+06	1.5E+07	1.4E+07	7.0E+06	6.2E+06	1.3E+06
23	1.2E+08	2.1E+06	5.3E+08	5.2E+08	4.4E+07	1.6E+07	9.9E+05	3.8E+06	1.6E+07	1.1E+07	4.8E+06	2.2E+07
24	1.4E+08	2.4E+07	5.1E+08	6.1E+08	2.5E+07	1.9E+06	1.3E+06	1.0E+08	3.3E+07	1.5E+07	6.5E+06	1.6E+08
25	1.2E+08	1.6E+08	6.2E+08	5.9E+08	2.2E+07	4.0E+06	1.0E+06	4.9E+08	4.6E+07	1.4E+07	2.5E+06	2.0E+08
26	1.7E+08	2.0E+08	6.4E+08	4.1E+08	2.3E+06	5.4E+06	1.1E+06	5.8E+08	5.0E+07	6.3E+06	1.1E+06	1.9E+08
27	1.3E+08	2.5E+08	6.3E+08	1.4E+08	2.9E+06	7.6E+06	1.3E+06	8.6E+08	2.1E+07	2.3E+06	1.5E+06	1.8E+08
28	1.1E+07	3.8E+08	6.9E+08	7.6E+07	7.9E+06	9.9E+06	7.0E+07	9.9E+08	1.5E+07	4.0E+06	7.9E+07	7.5E+06
29	1.6E+07	2.1E+08	5.5E+08	3.1E+06		1.6E+07	5.0E+08	1.2E+09	5.4E+06	1.2E+06	1.1E+08	7.1E+07
30	1.3E+08	1.8E+07	3.9E+08	1.4E+08		6.3E+06	1.7E+08	1.4E+09	1.3E+06	1.6E+07	1.0E+08	6.1E+08
31	2.0E+08		2.3E+08	3.6E+08		4.8E+06		1.3E+09		3.5E+07	1.2E+08	

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.

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Number 758 Part I

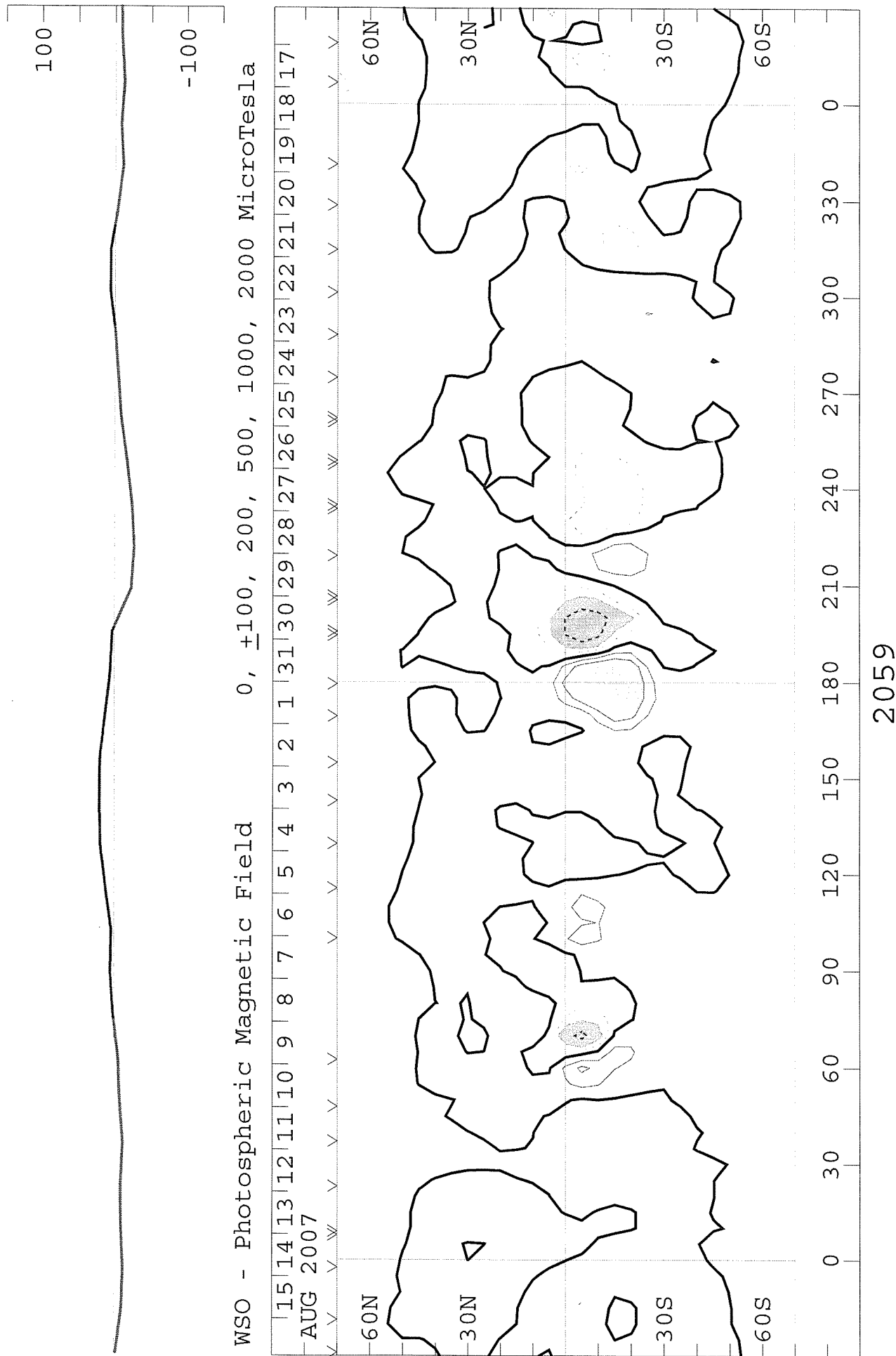
DATA FOR AUGUST 2007

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SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 2059
(18 Jul 2007 to 14 Aug 2007)

Wilcox Solar Observatory

Mean Field



SOLAR MAGNETIC FIELD SYNOPTIC CHART

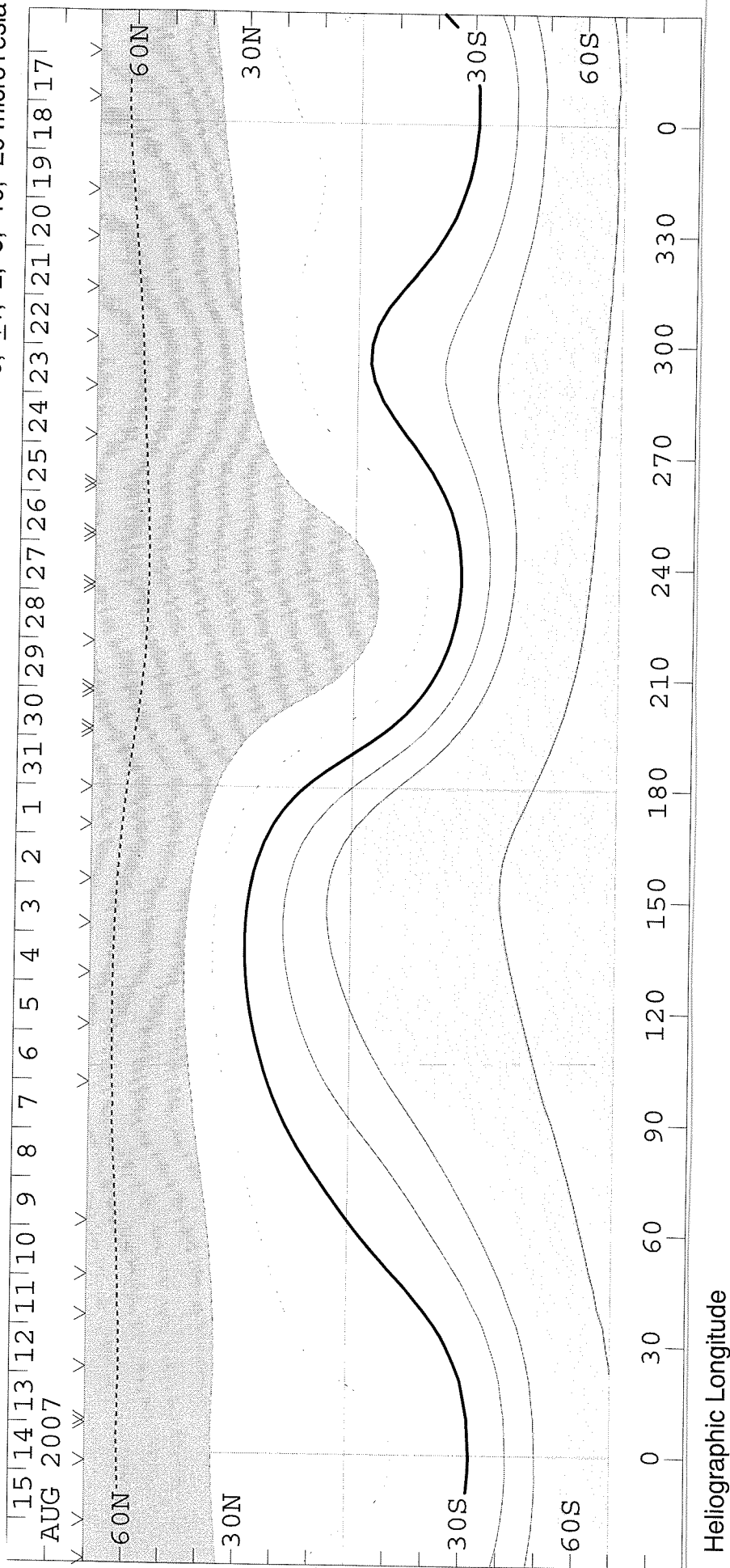
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 2059

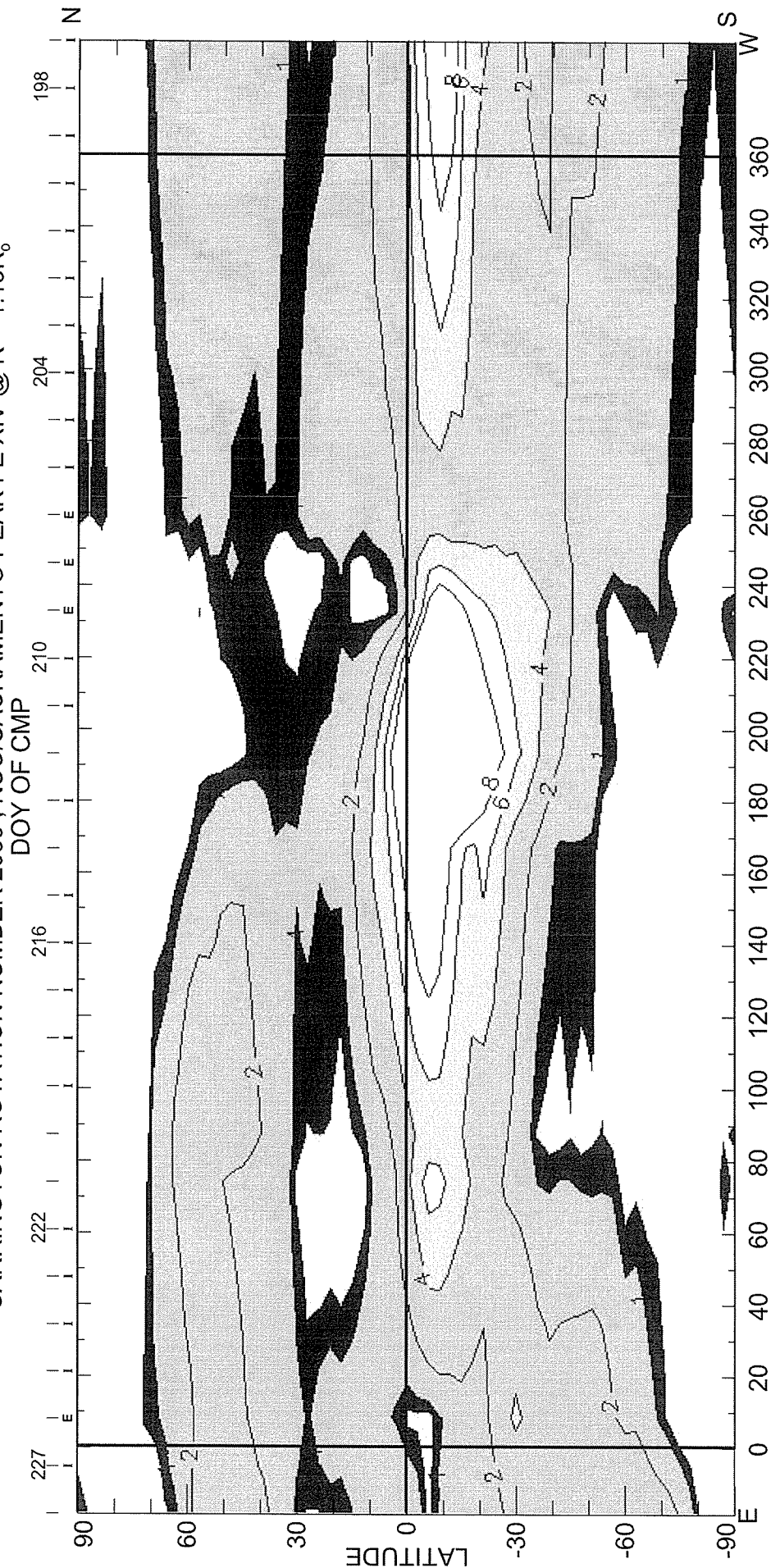
(18 Jul 2007 to 14 Aug 2007)

Wilcox Solar Observatory

0, ± 1 , 2, 5, 10, 20 microTesla



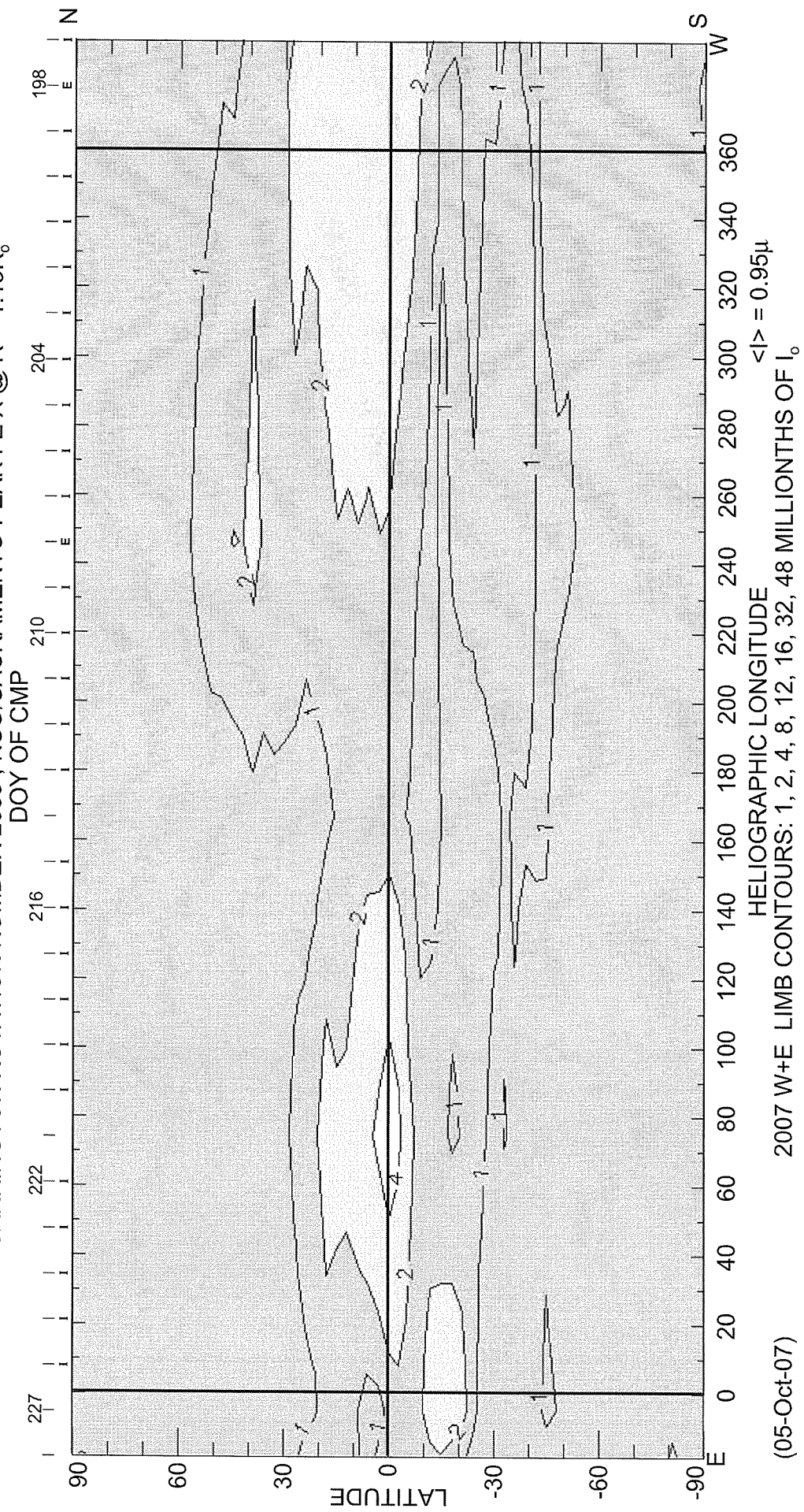
CARRINGTON ROTATION NUMBER 2059 ; NSO/SACRAMENTO PEAK FE XIV @ $R = 1.15R_{\odot}$



(09-Oct-07) 2007 W+E LIMB CONTOURS: 0.7, 1, 2, 4, 6, 8, 50, 60, 80, 120, 140, 160,000 MILLIONTHS OF I_0
 HELIOGRAPHIC LONGITUDE
 $\langle I \rangle = 1.96\mu$
 CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

Use caution when using these data. There are many missing days due to bad weather.

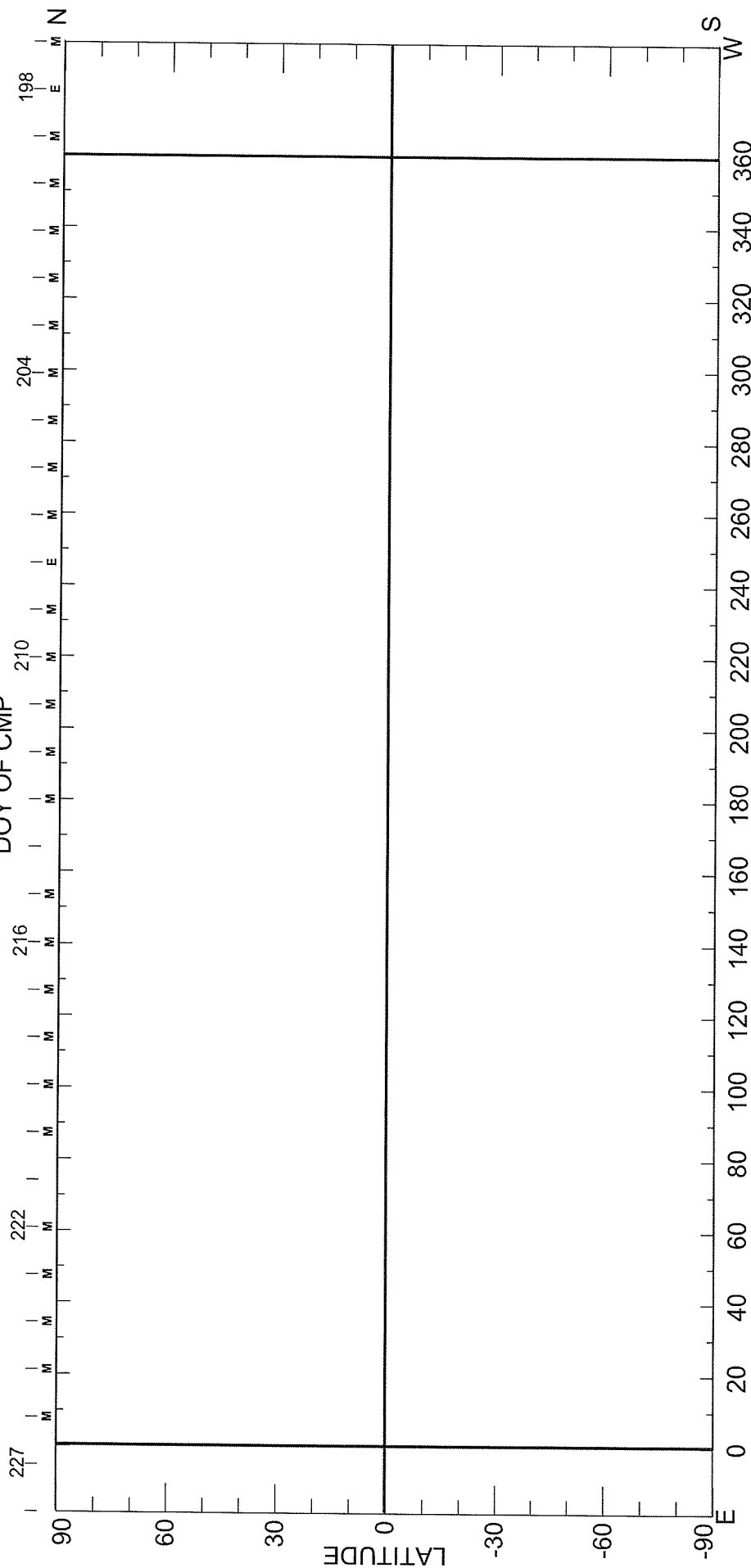
CARRINGTON ROTATION NUMBER 2059 ; NSO/SACRAMENTO PEAK FE X @ R = 1.15R_o



Use caution when using these data. There are many missing days due to bad weather.

CARRINGTON ROTATION NUMBER 2059 ; NSO/SACRAMENTO PEAK CA XV @ $R = 1.15R_{\odot}$

DOY OF CMP



HELIOGRAPHIC LONGITUDE

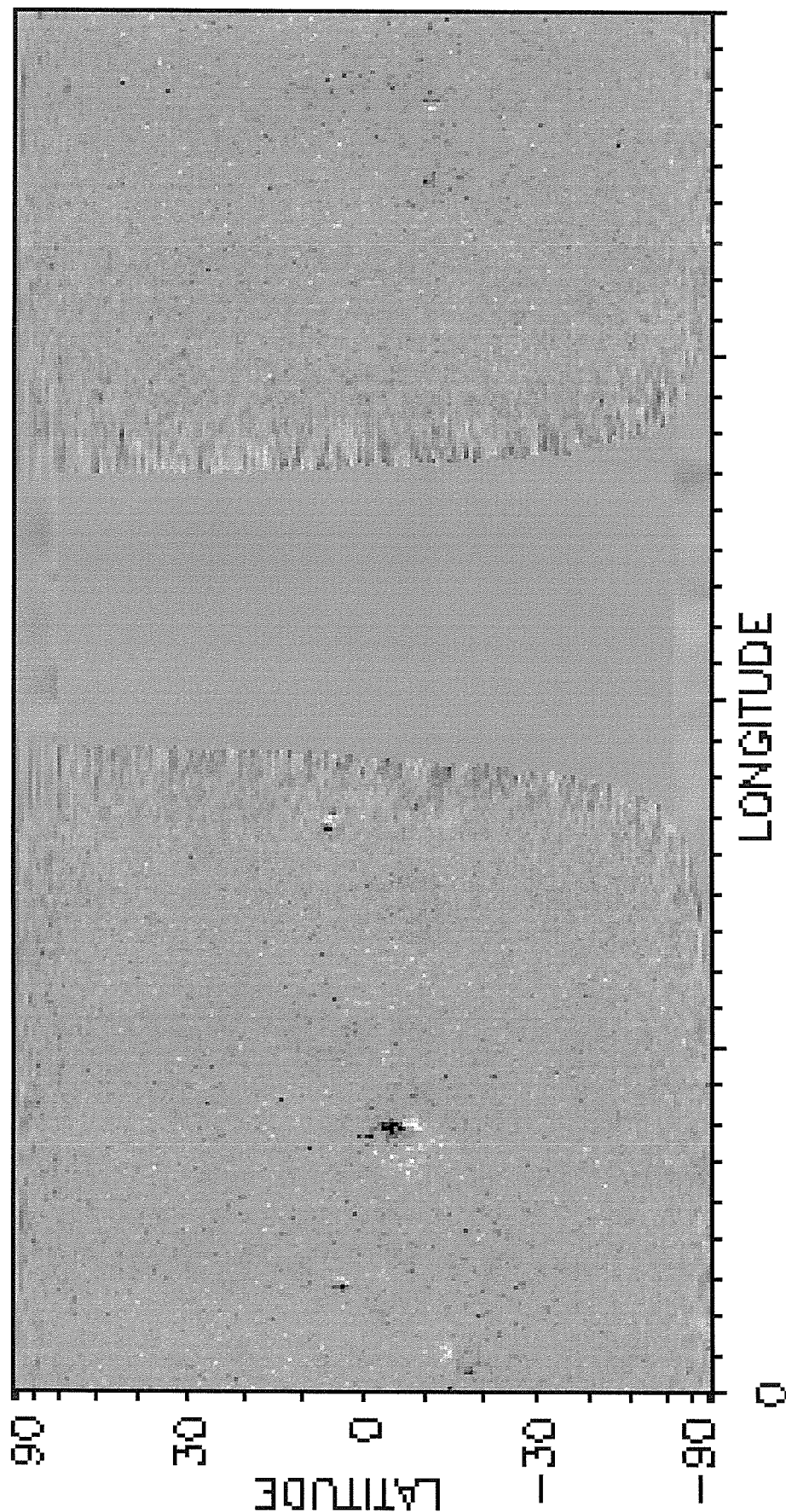
(05-Oct-07) 2007 W+E LIMB CONTOURS: 1, 2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20 MILLIONTHS OF I_0

Use caution when using these data. There are many missing days due to bad weather.

SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 2059
(18 Jul 2007 to 14 Aug 2007)

National Solar Observatory/Kitt Peak

NSO/VSM MAGNETIC FLUX SYNOPTIC MAP
CARRINGTON ROTATION 2059



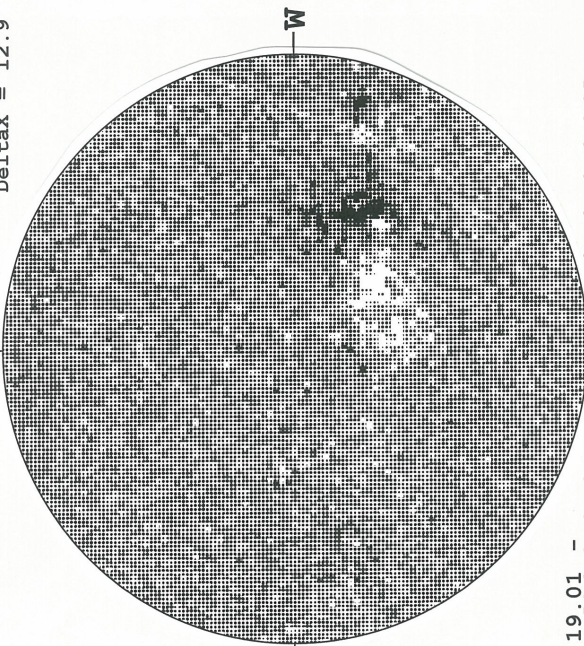
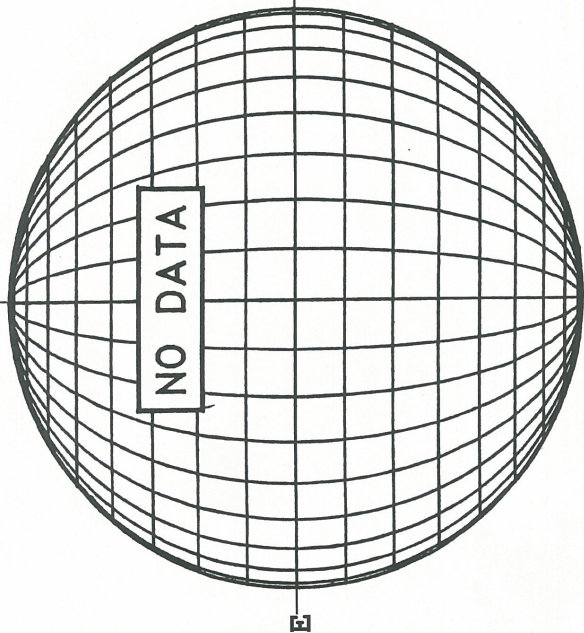
40
Aug07

AUGUST 01, 2007 (P= 10.65, Bo= 5.75, Lo= 179.80)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 20.1
DeltaX = 12.9



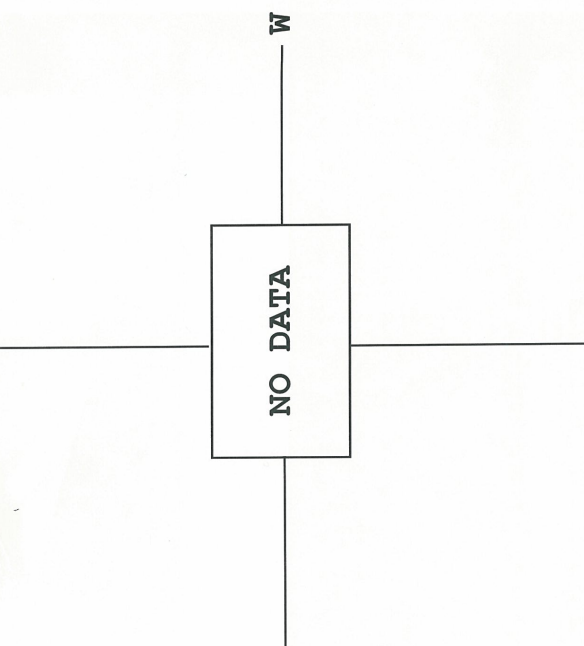
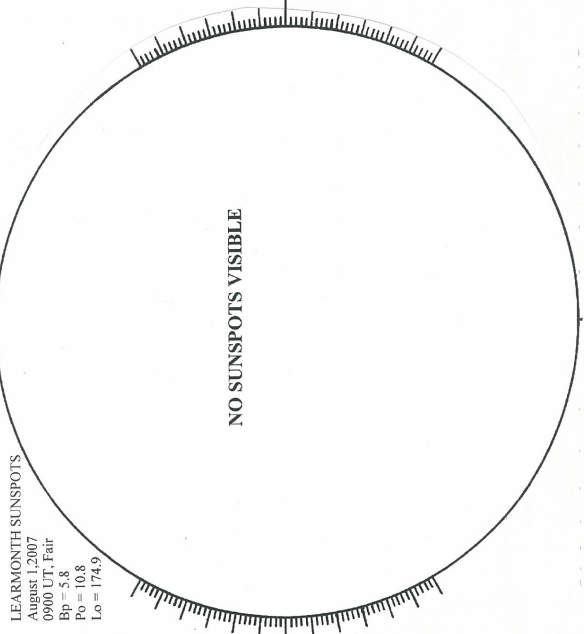
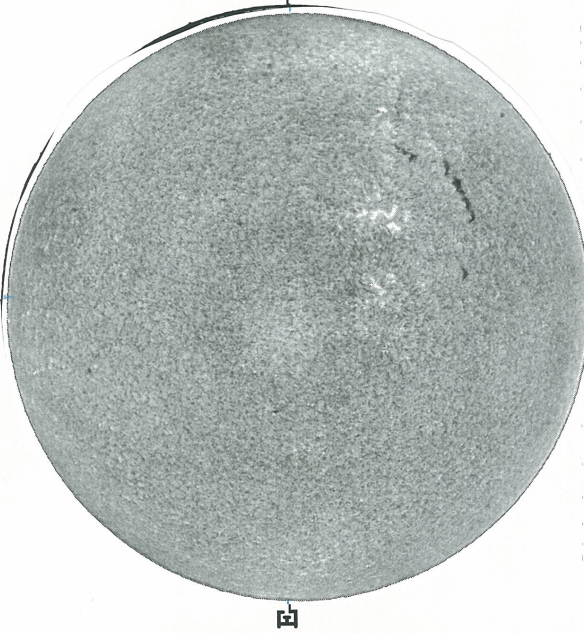
19.01 -
19.41 UT

1907 UT

KANZELHOHE H-ALPHA

LEARMONTH SUNSPOTS

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

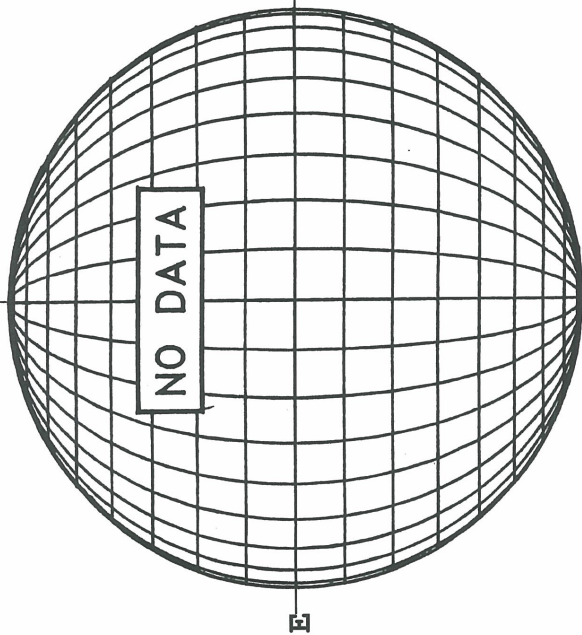


0554 UT

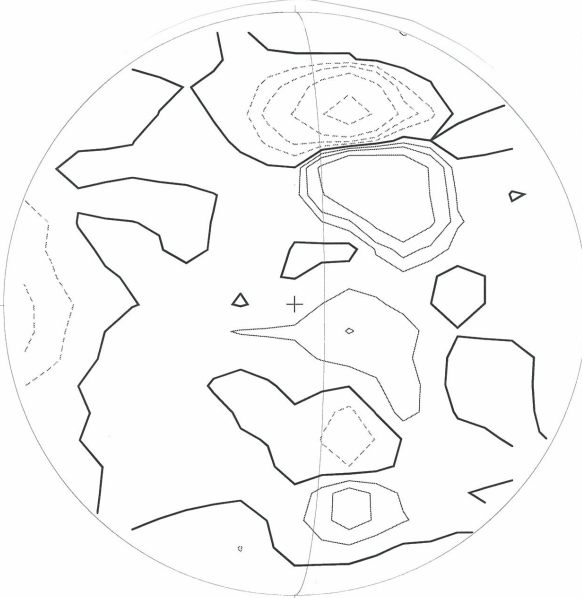
0900 UT

AUGUST 02, 2007 (P= 11.04, Bo= 5.82, Lo= 166.57)

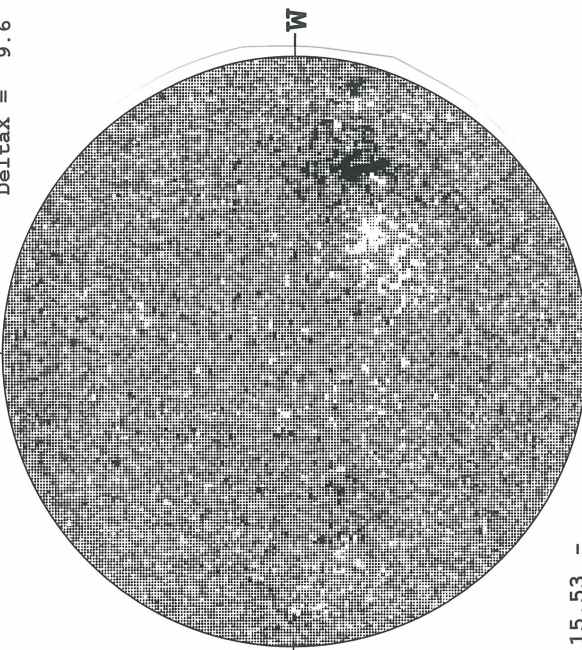
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + N ** 854.2NM **
Dark = -



STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



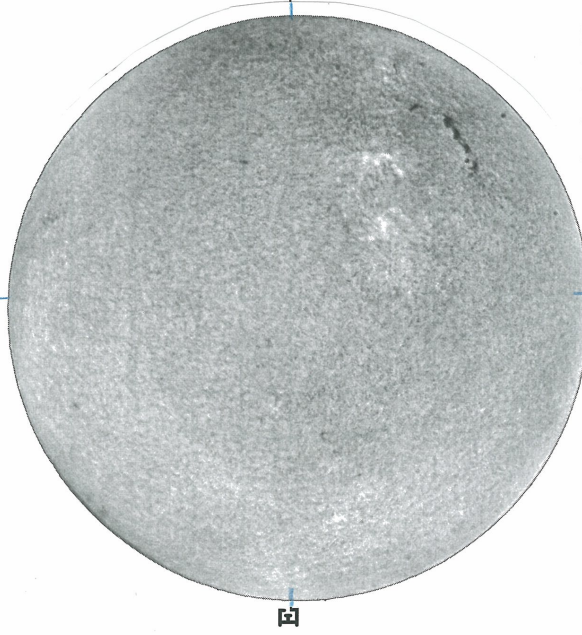
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



15.53 -
16.46 UT

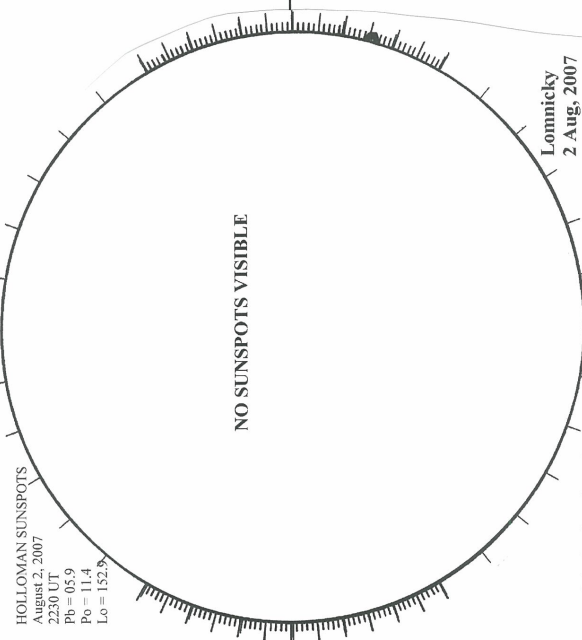
2133 UT

KANZELHOHE H-ALPHA



0605 UT

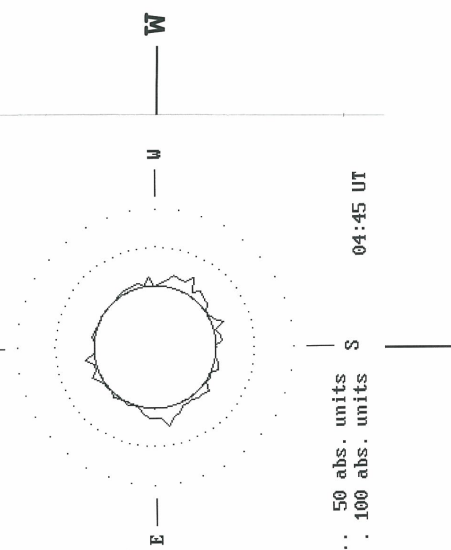
HOLLOMAN SUNSPOTS



2230 UT
0532 UT LOMN PROM

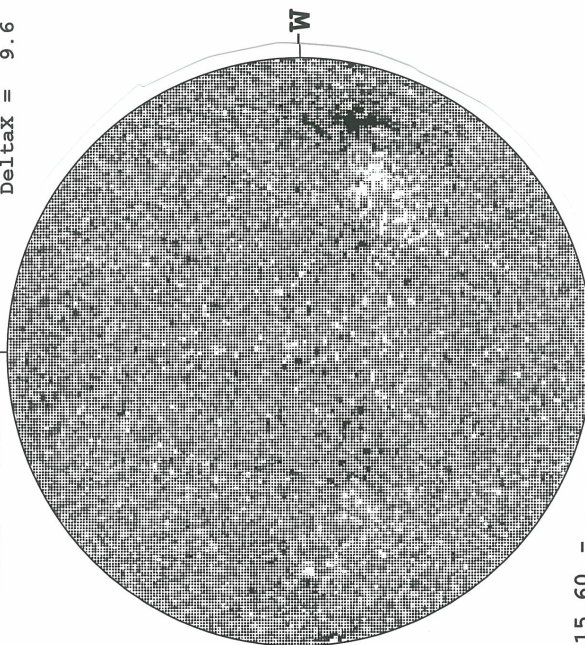
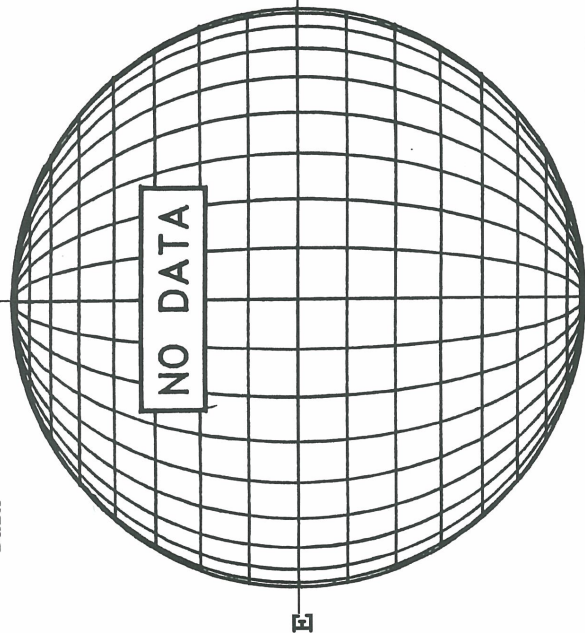
LOMNICKY PEAK CORONA (1.04 Radii) -----

LOMNICKY STIT
530.3 nm
AUGUST 2, 2007



04:45 UT

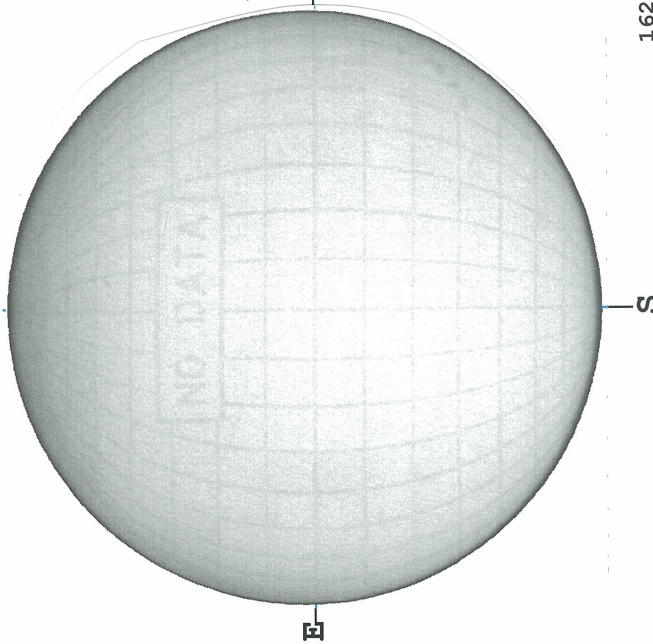
AUGUST 03, 2007 (P= 11.44, Bo= 5.89, Lo= 153.34)



15.60 -
16.53 UT

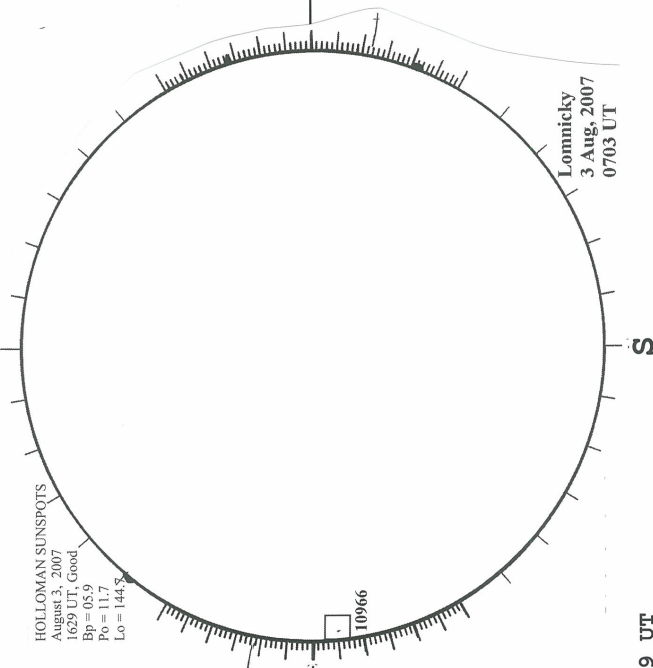
1900 UT

MEUDON H-ALPHA



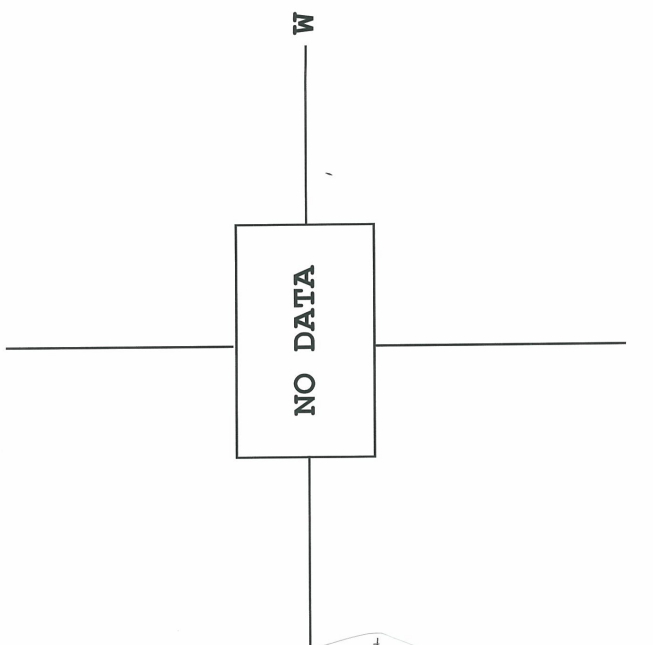
0638 UT

HOLLOMAN SUNSPOTS



1629 UT LOMN PROM

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

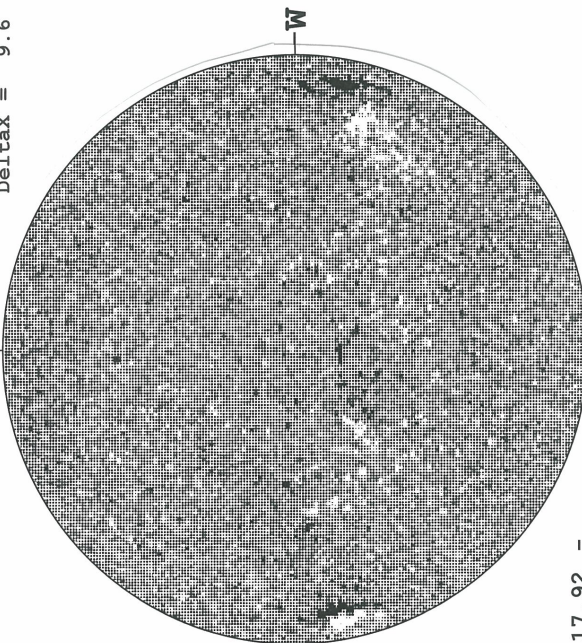
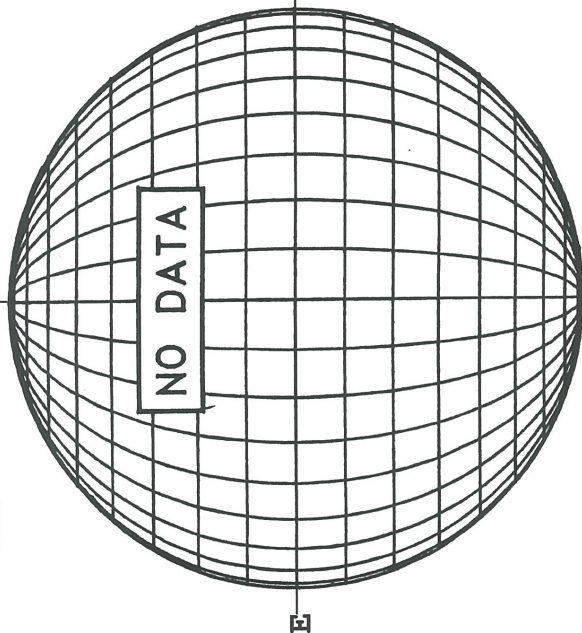


AUGUST 04, 2007 (P= 11.83, Bo= 5.96, Lo= 140.12)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

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



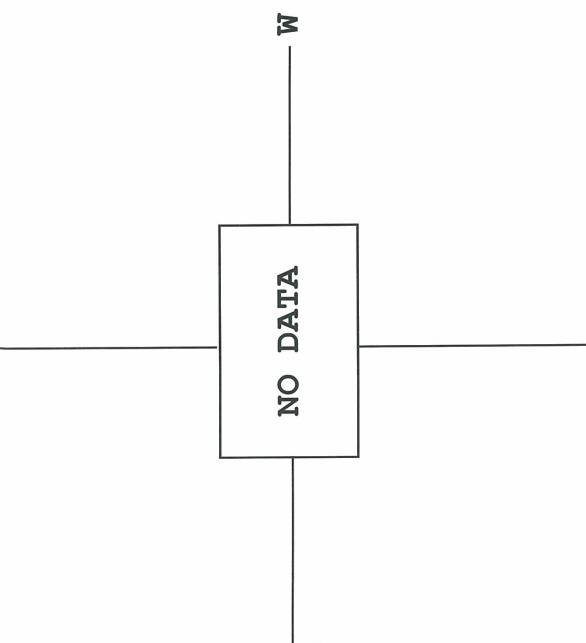
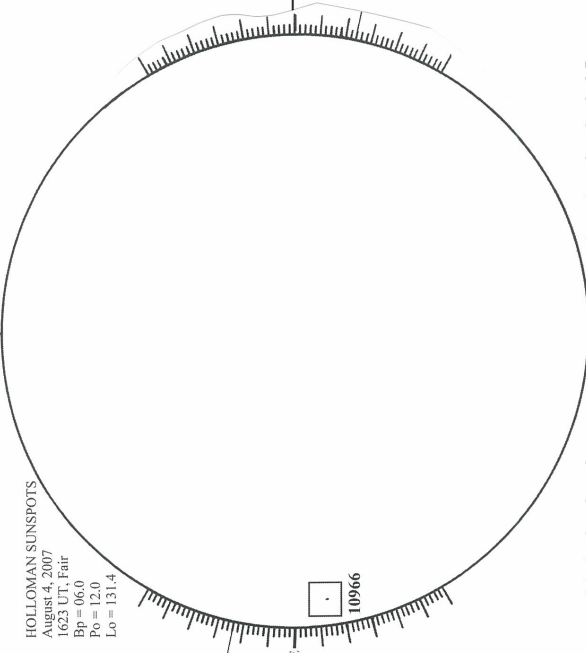
17.92 -
18.85 UT

1913 UT

KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

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



0541 UT

1623 UT

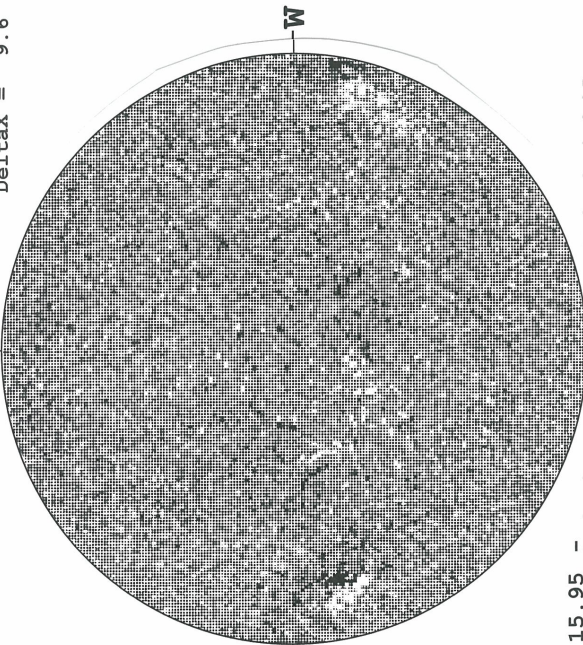
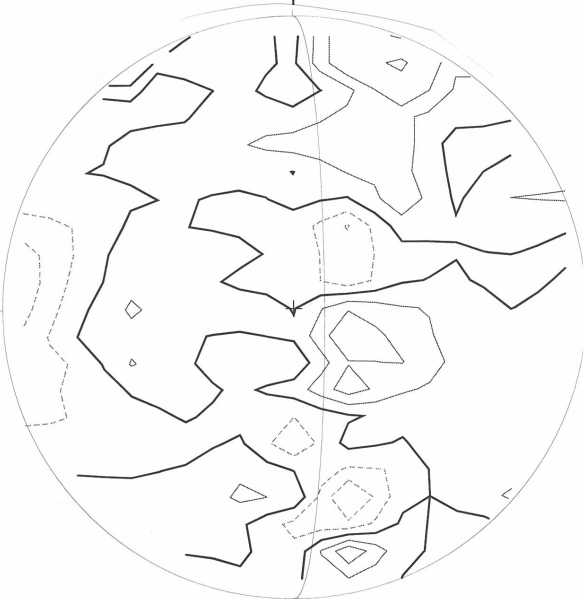
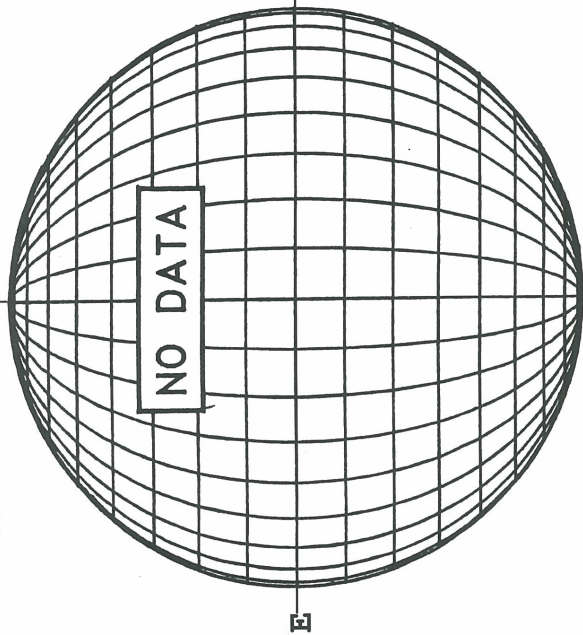
44
Aug 07

AUGUST 05, 2007 (P= 12.21, Bo= 6.03, Lo= 126.90)

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

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



15.95 -
16.88 UT

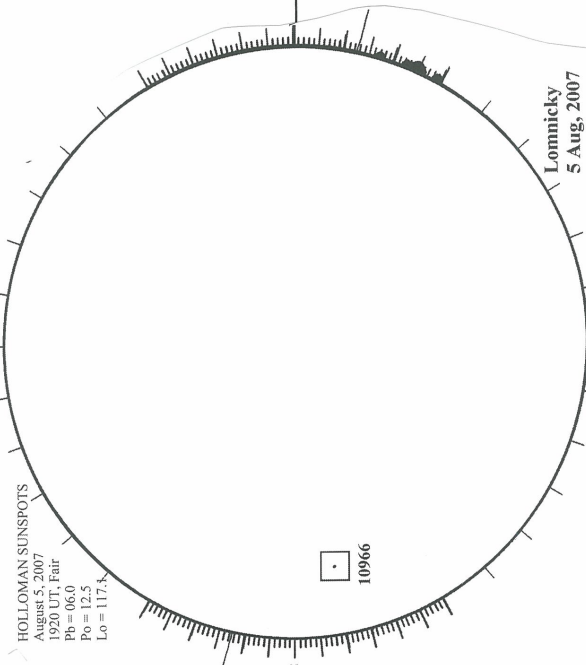
2027 UT

KANZELHOHE H-ALPHA



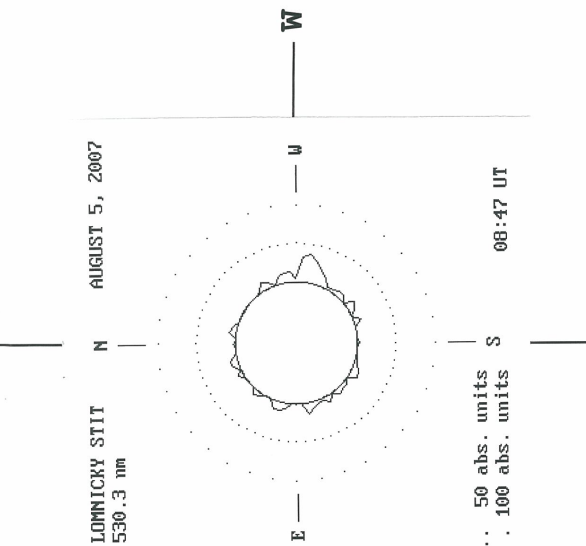
0545 UT

HOLLOMAN SUNSPOTS



1920 UT
0818 UT LOMN PROM

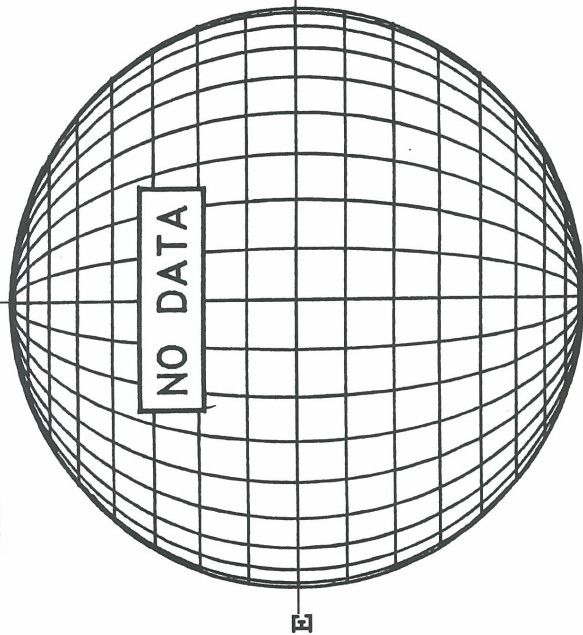
LOMNICKY PEAK CORONA (1.04 Radii) -----



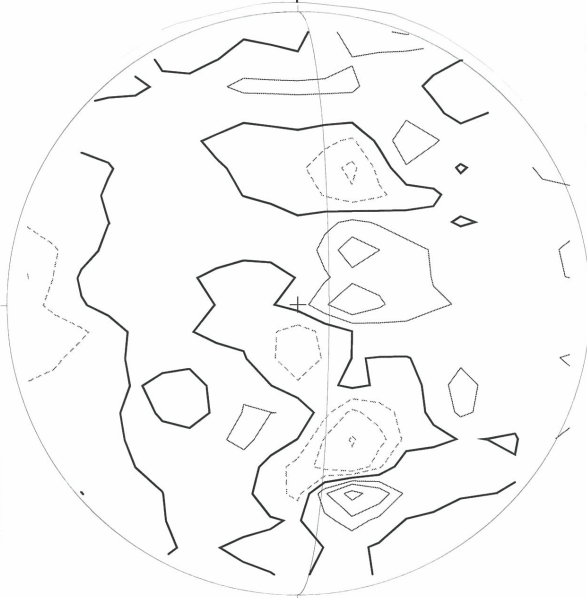
08:47 UT

AUGUST 06, 2007 (P= 12.60, Bo= 6.10, Lo= 113.67)

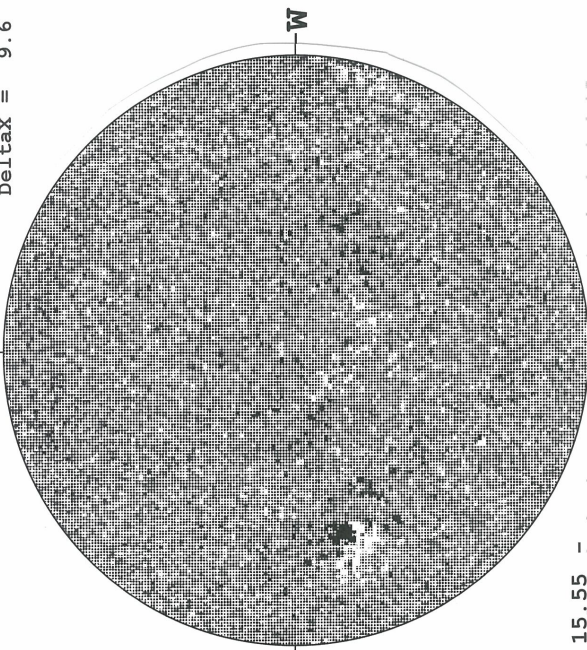
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + N ** 854.2NM **
Dark = -



STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



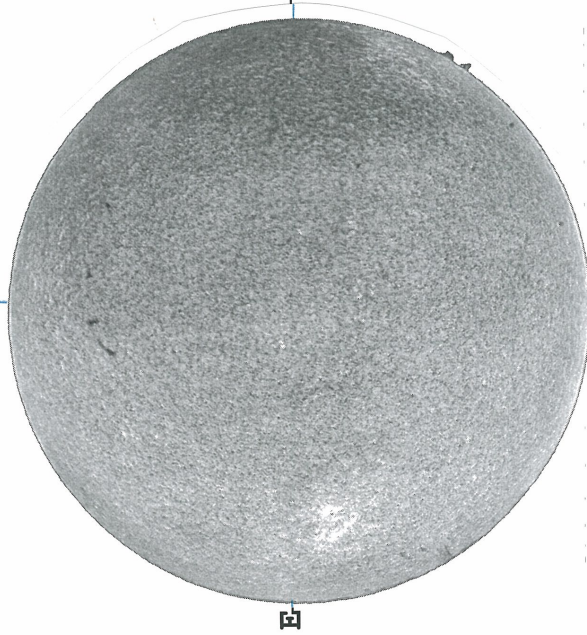
MT. WILSON MAGNETOGRAM
White = +7.5G N DeltaY = 13.1
Black = -7.5G DeltaX = 9.6



15.55 -
16.48 UT

07/0042 UT

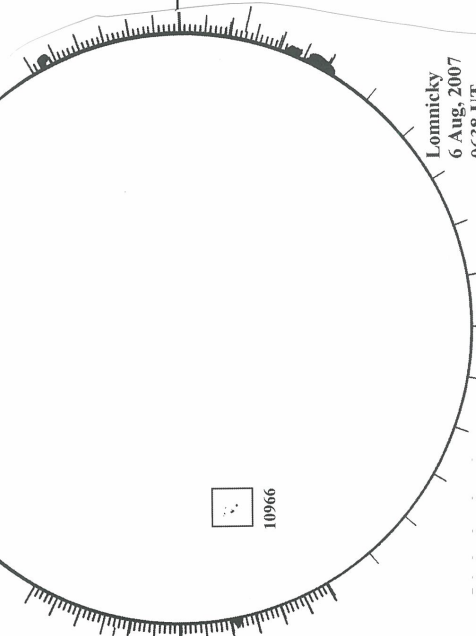
KANZELHOHE H-ALPHA



0521 UT

HOLLOMAN SUNSPOTS

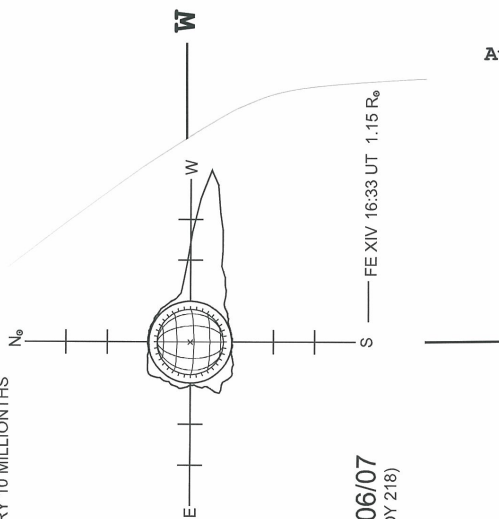
HOLLOMAN SUNSPOTS
August 6, 2007
1416 UT, Good
Bp = 06.1
Po = 12.8
Lo = 106.4



Lonnick
6 Aug, 2007
0638 UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



08/06/07
(DOY 218)

FE XIV 16:33 UT 1.15 R_o

45
Aug 07

1416 UT
0638 UT LOWN PROM

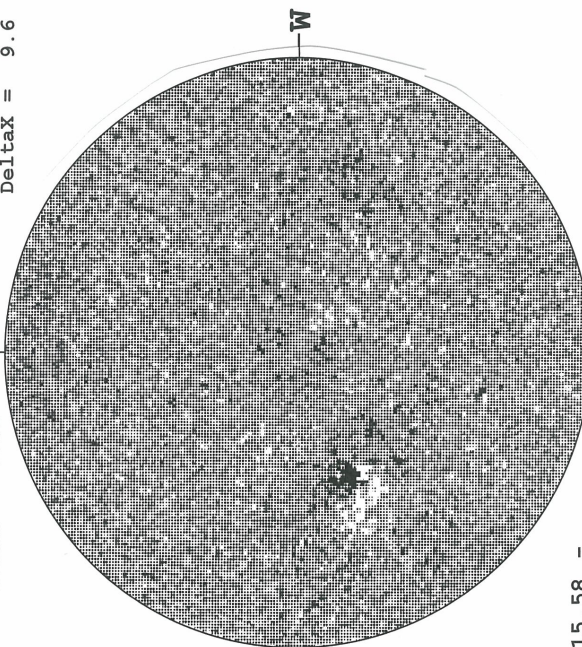
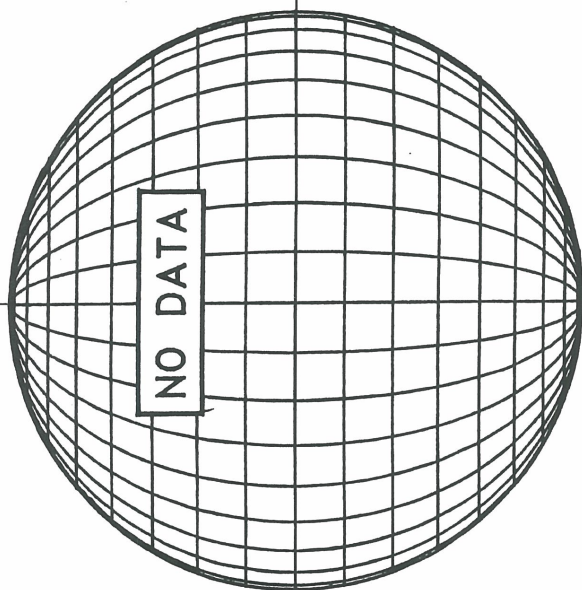
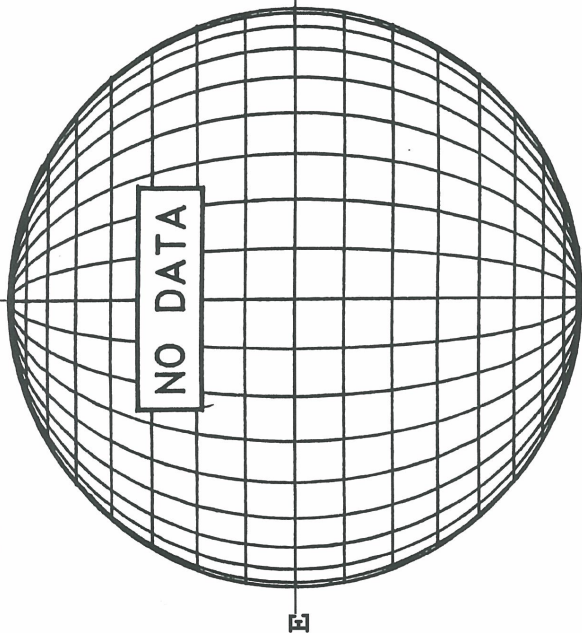
46
Aug 07

AUGUST 07, 2007 (P= 12.97, Bo= 6.16, Lo= 100.45)

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

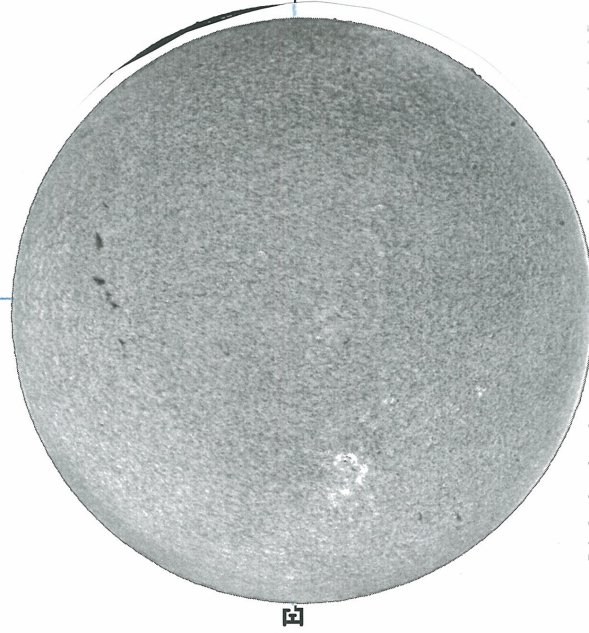
STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
N
DeltaY = 13.0
DeltaX = 9.6

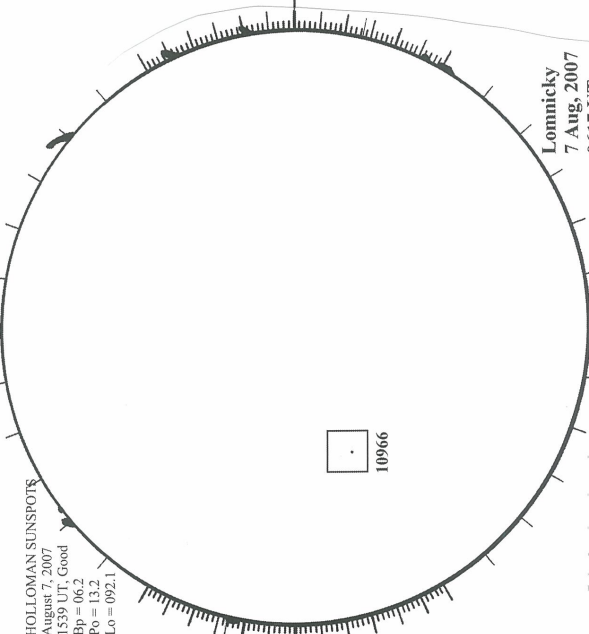


15.58 -
16.50 UT

KANZELHOHE H-ALPHA

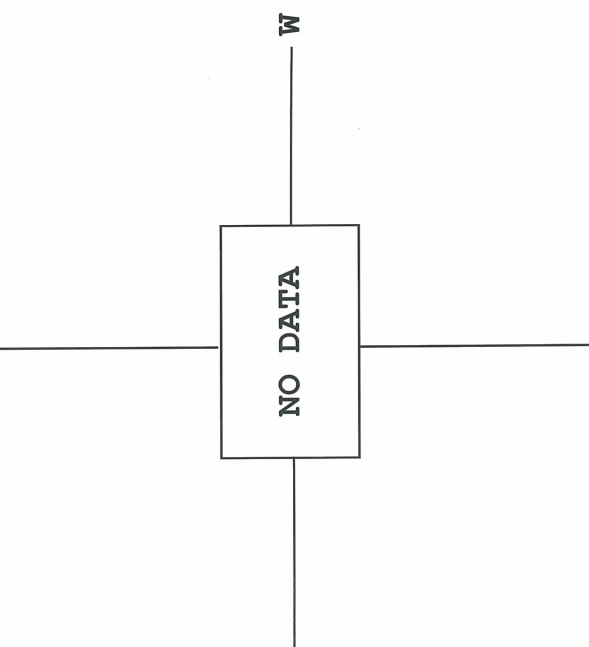


HOLLOMAN SUNSPOTS



HOLLOMAN SUNSPOTS
August 7, 2007
1539 UT: Good
Bp = 06.2
Pg = 13.2
Lo = 092.1

SACRAMENTO PEAK CORONA (1.15 Radii) ----



1539 UT
0617 UT LOMN FROM

0530 UT

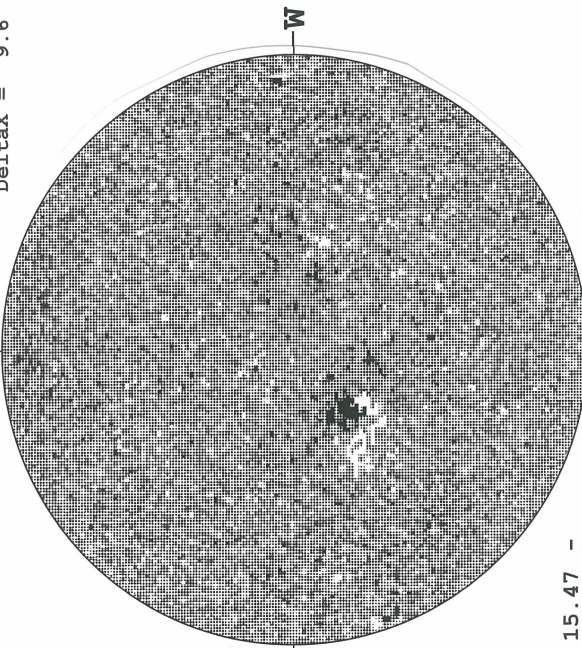
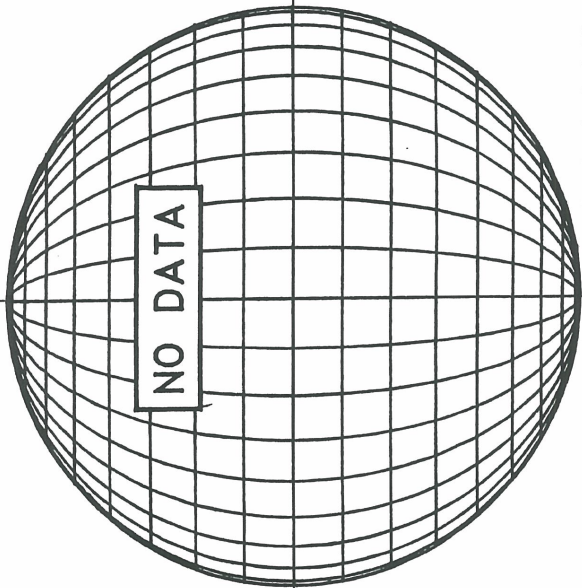
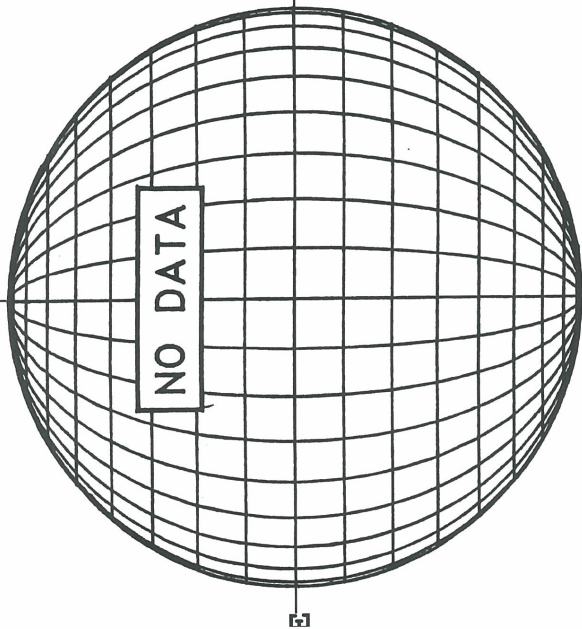
Lonmicky
7 Aug, 2007
0617 UT

AUGUST 08, 2007 (P= 13.35, Bo= 6.23, Io= 87.23)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N

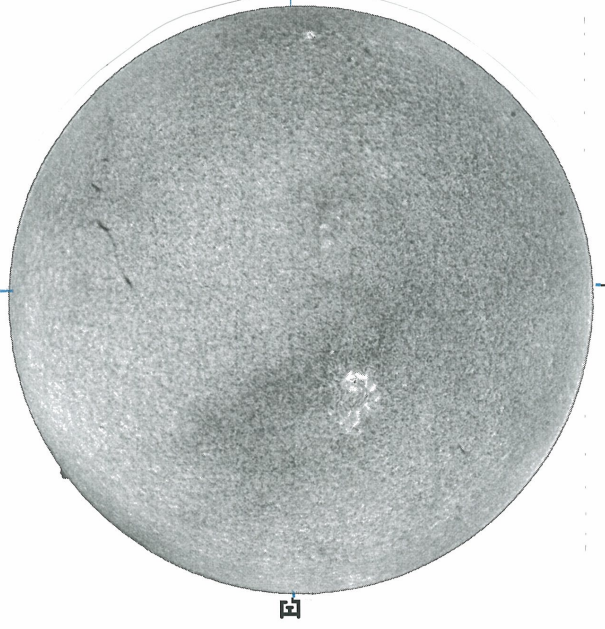
STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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

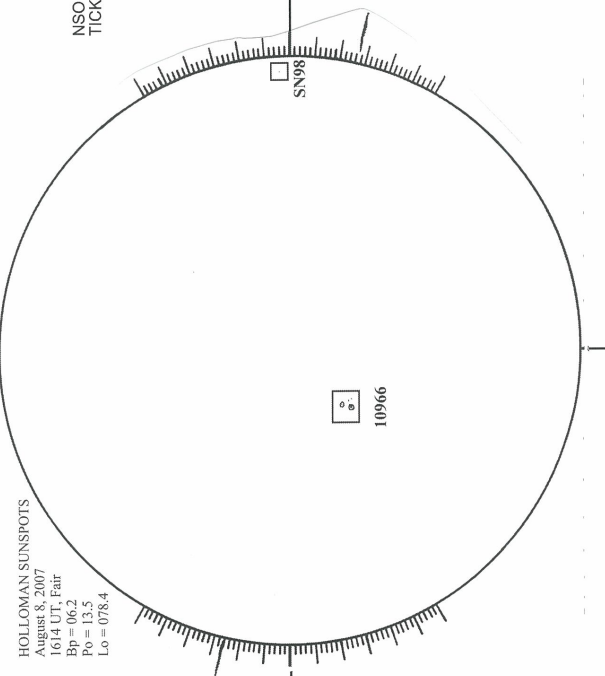


15.47 -
16.39 UT

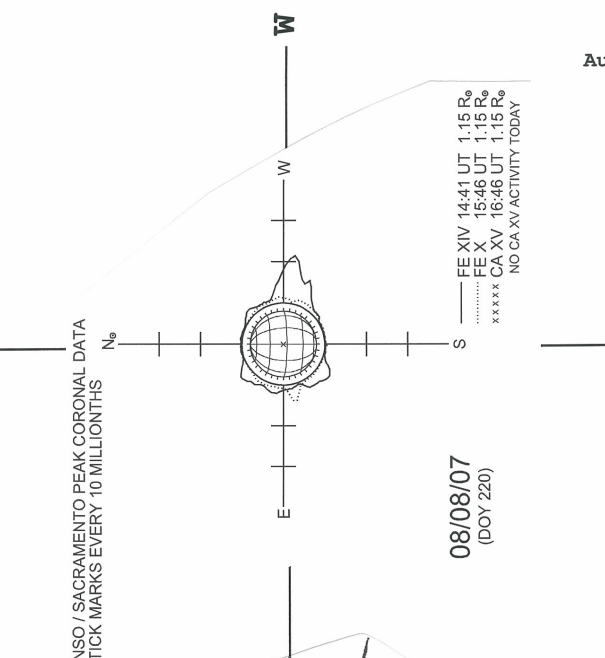
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS



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



0833 UT

1614 UT

47
Aug 07

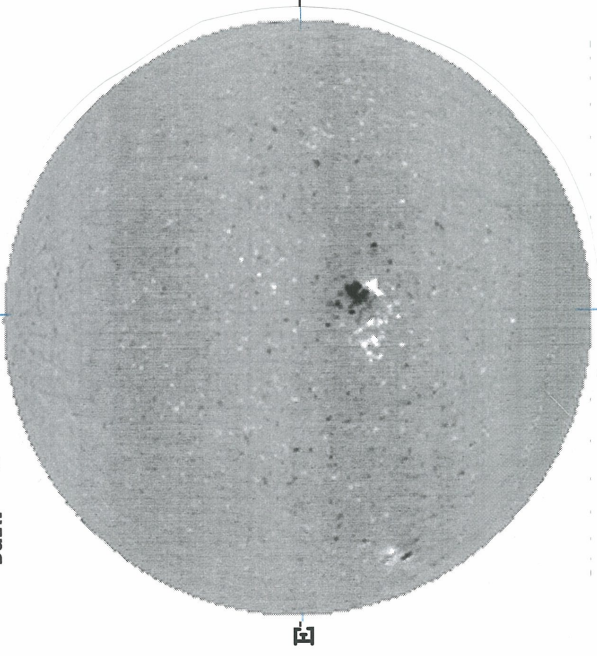
48
Aug 07

AUGUST 09, 2007 (P= 13.72, Bo= 6.29, Lo= 74.00)

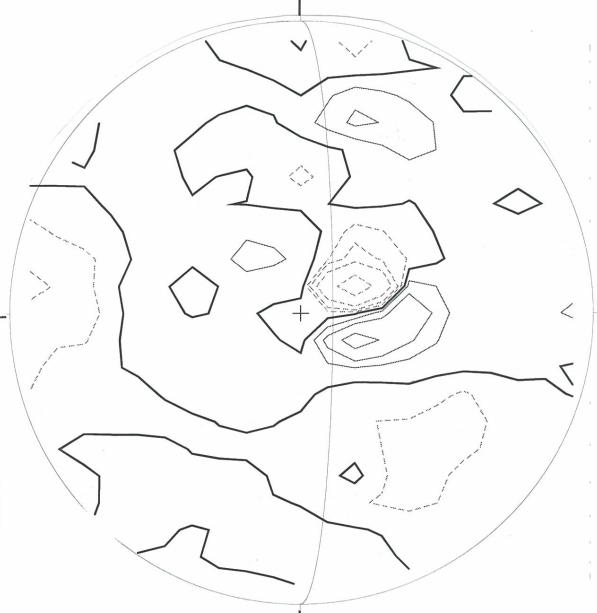
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + N
Dark = -

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

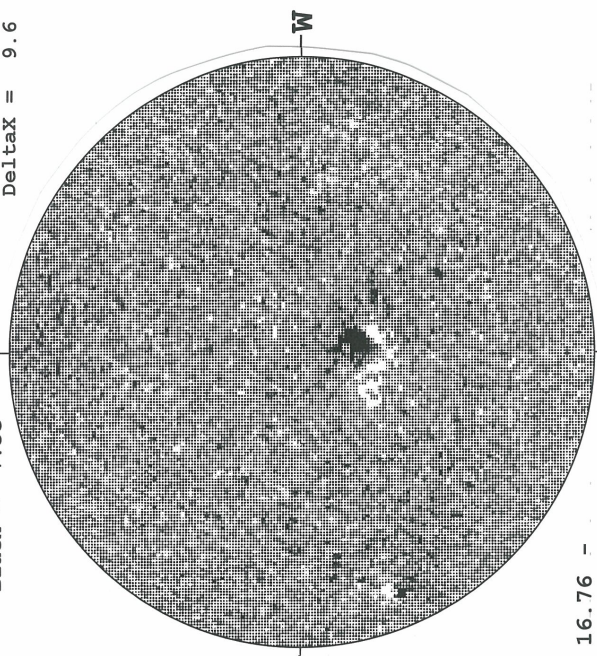
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G DeltaY = 13.1
DeltaX = 9.6



1952 UT

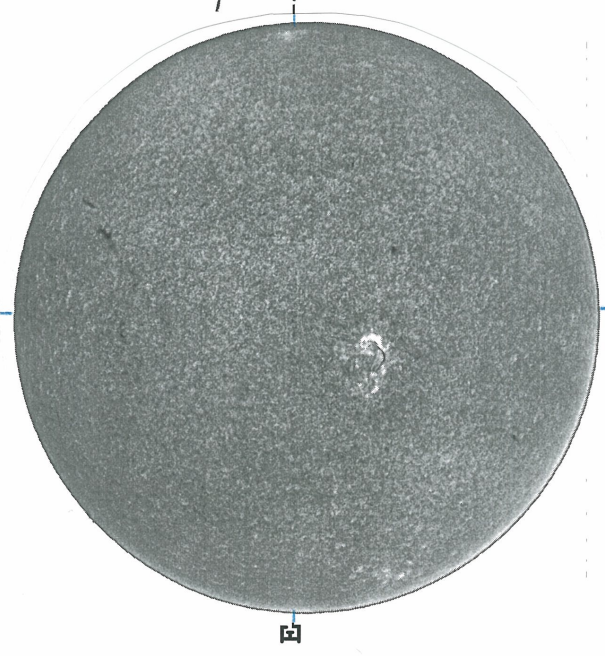


2056 UT



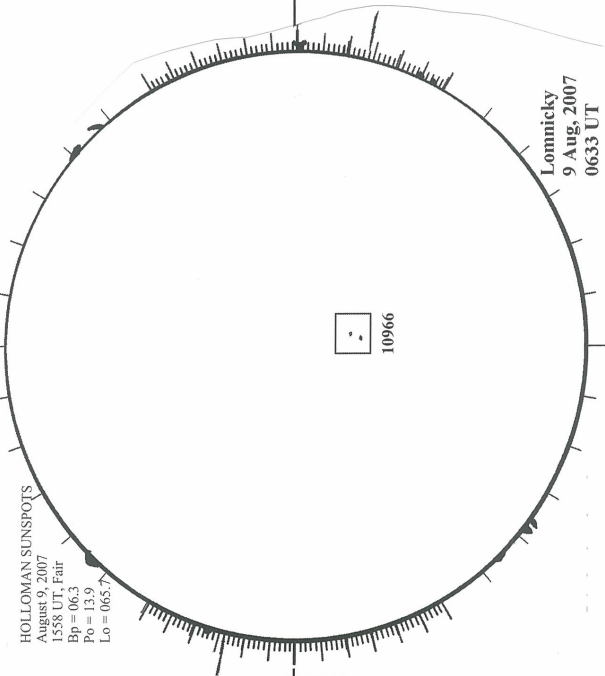
16.76 -
17.69 UT

HUAIROU H-ALPHA



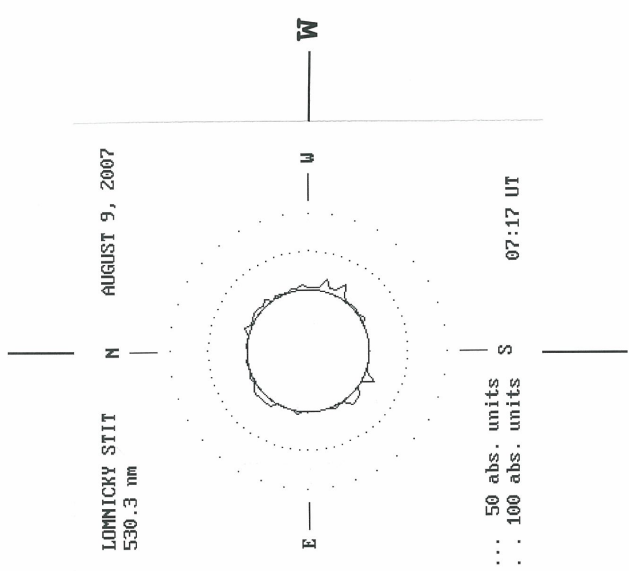
0227 UT

HOLLOMAN SUNSPOTS



1558 UT
0633 UT LOWN PROM

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



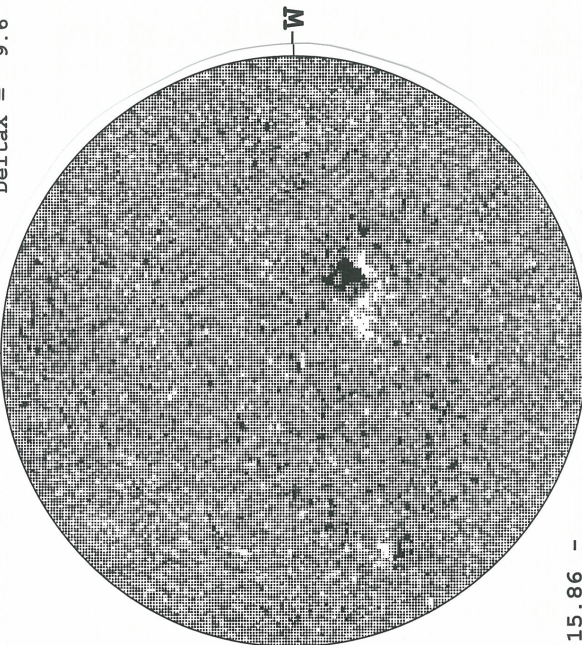
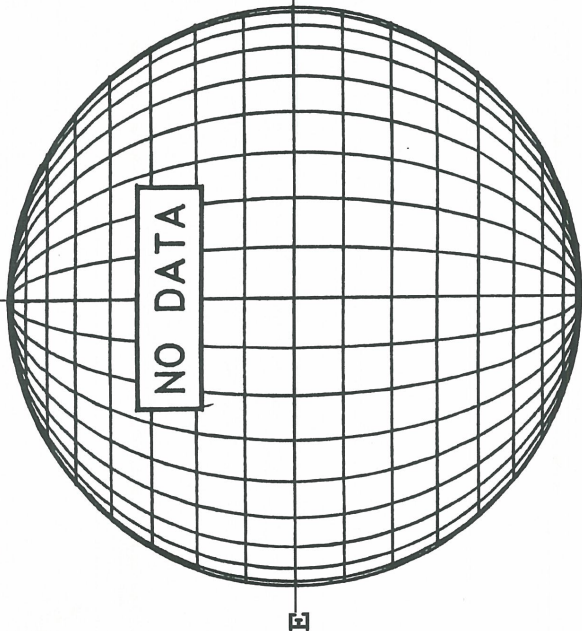
... 50 abs. units
.. 100 abs. units
07:17 UT

AUGUST 10, 2007 (P= 14.08, Bo= 6.35, Lo= 60.78)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

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



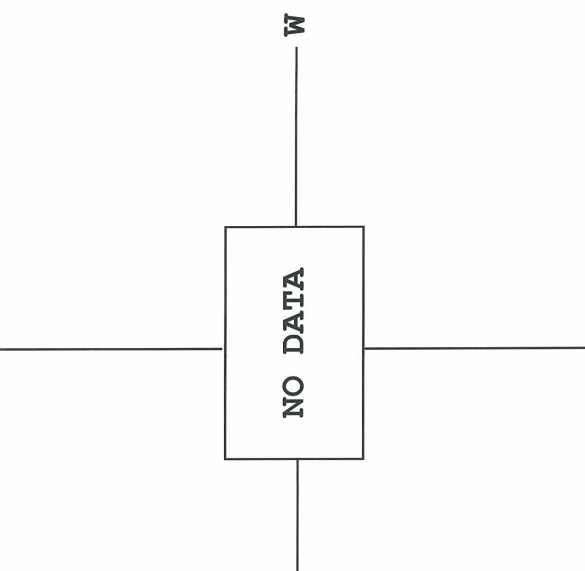
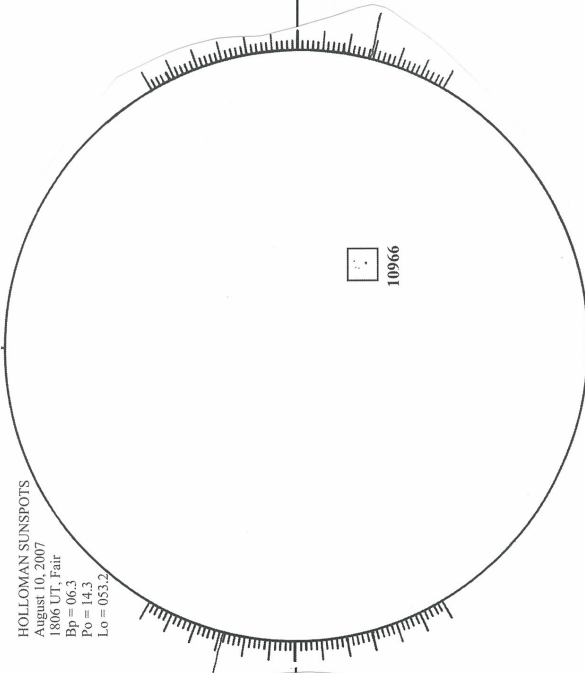
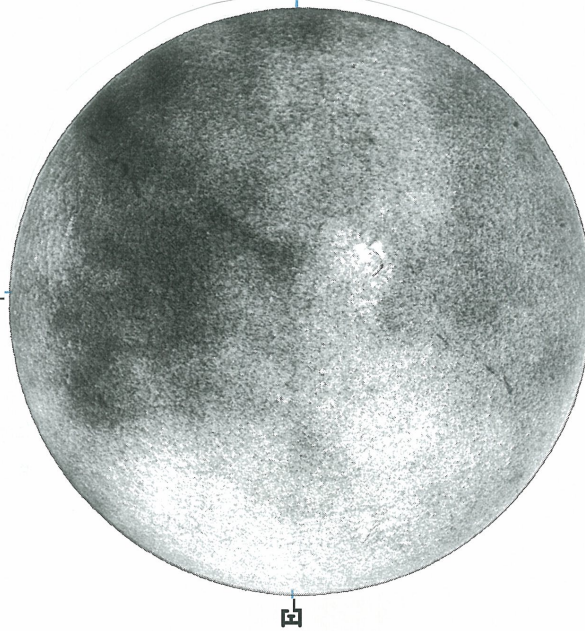
15.86 -
16.78 UT

2323 UT

KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii) ----



NO DATA

0732 UT

1806 UT

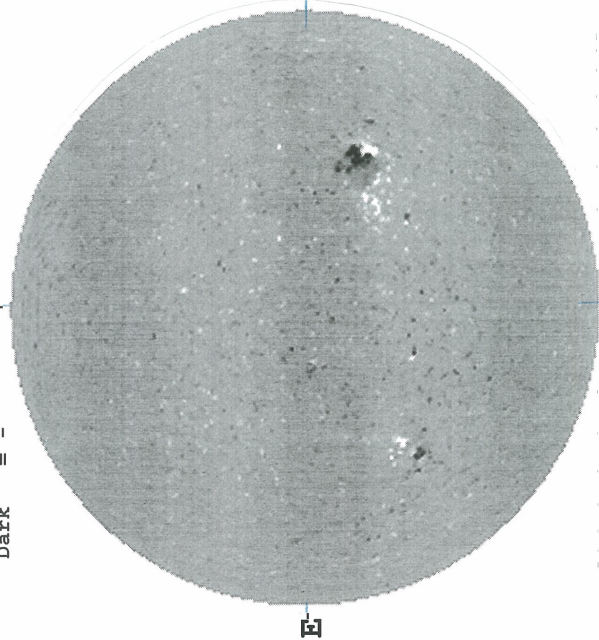
50
Aug 07

AUGUST 11, 2007 (P= 14.45, Bo= 6.41, Lo= 47.56)

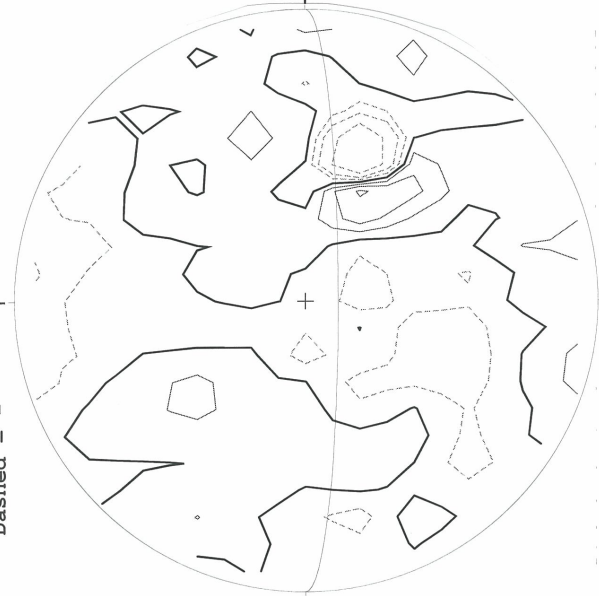
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + N ** 854.2NM **
Dark = -

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

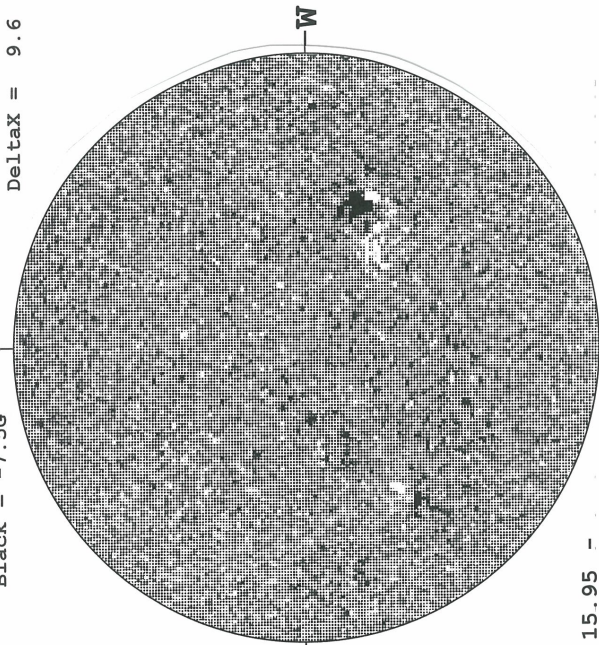
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



1755 UT



1901 UT

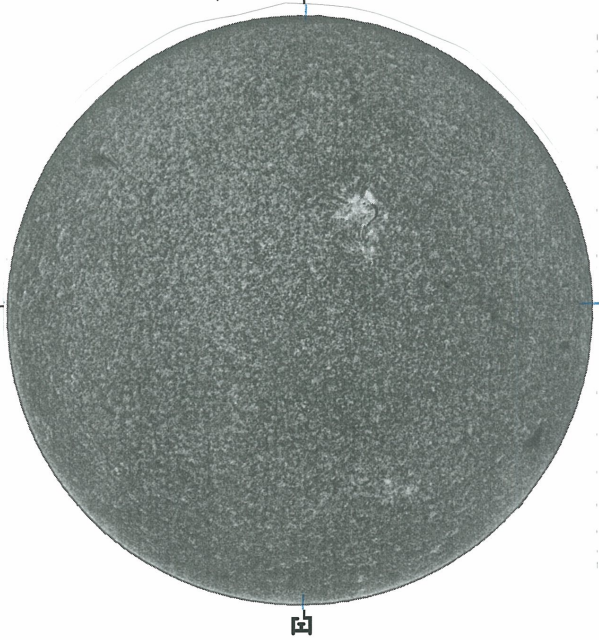


15.95 -
16.87 UT

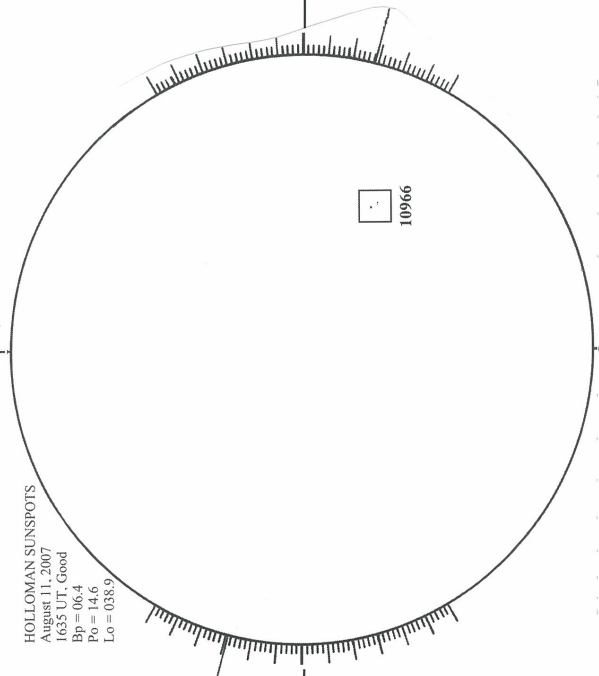
HUAIROU H-ALPHA

HOLLOMAN SUNSPOTS

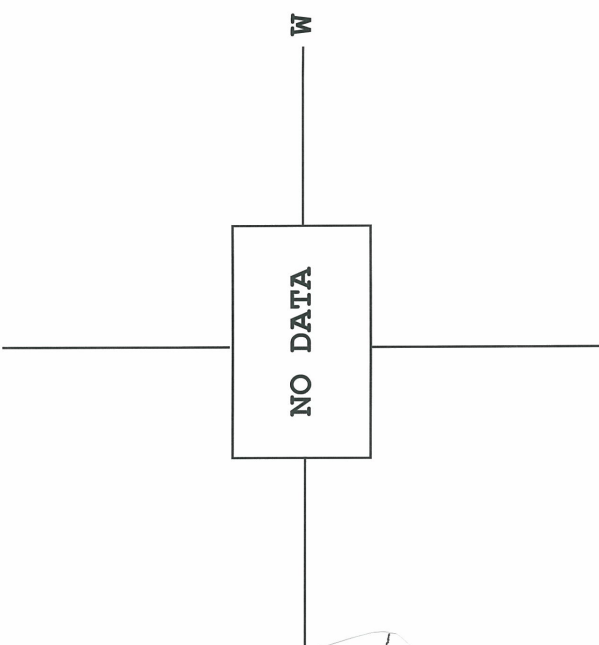
SACRAMENTO PEAK CORONA (1.15 Radii) -----



0227 UT



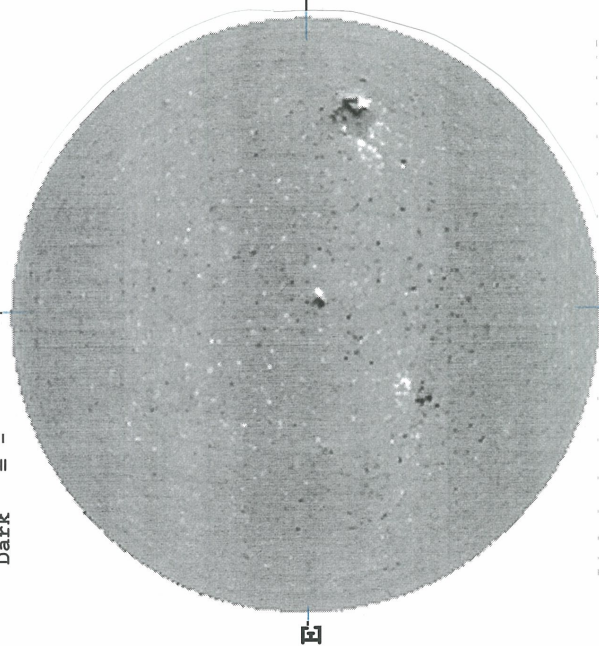
1635 UT



NO DATA

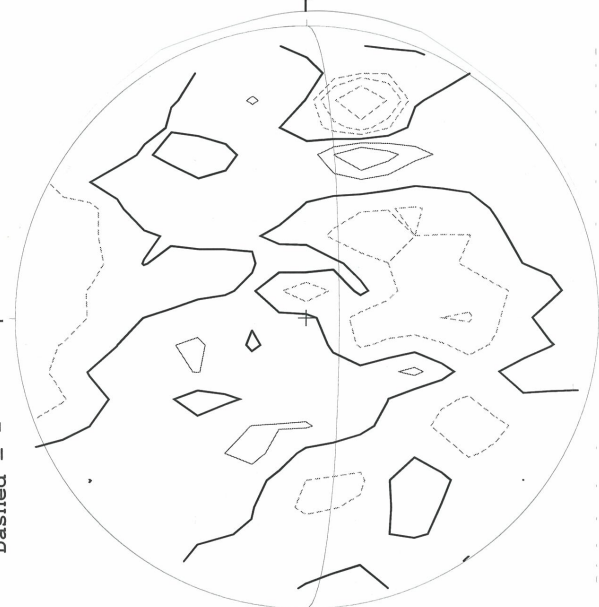
AUGUST 12, 2007 (P= 14.80, Bo= 6.46, Lo= 34.34)

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



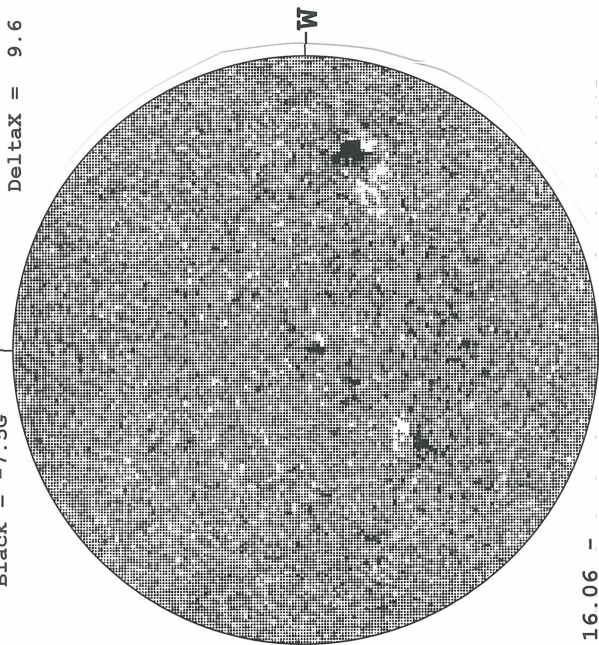
1851 UT

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



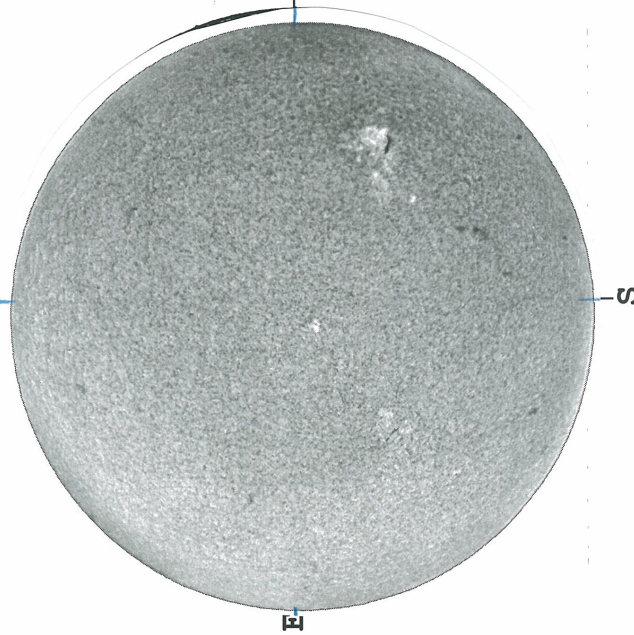
2037 UT

MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
Deltay = 13.1
Deltax = 9.6



16.06 -
16.98 UT

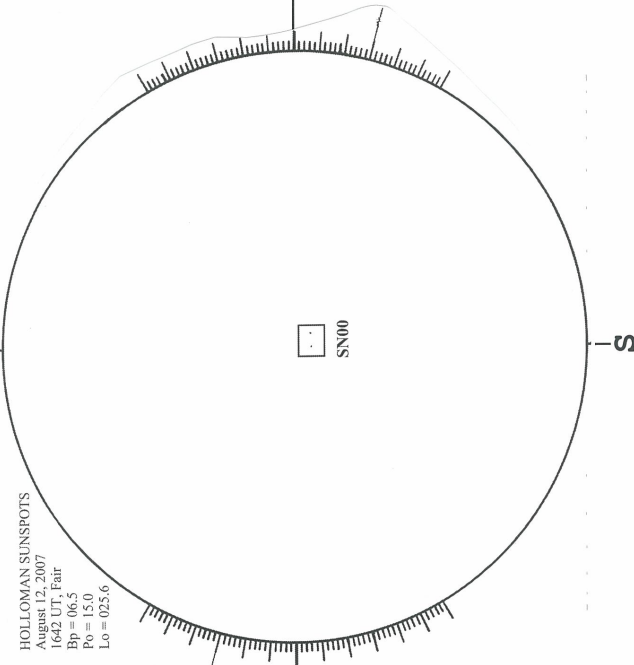
KANZELHOHE H-ALPHA



1106 UT

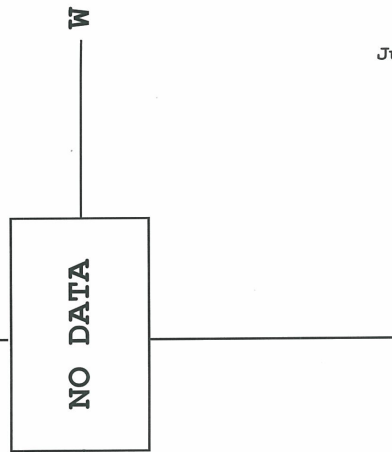
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 12, 2007
1642 UT, Fair
Bp = 06.5
Po = 15.0
Lo = 025.6



1642 UT

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



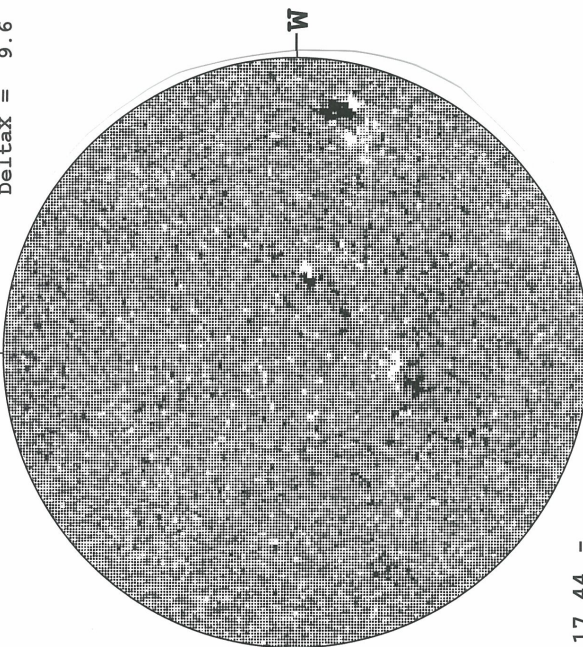
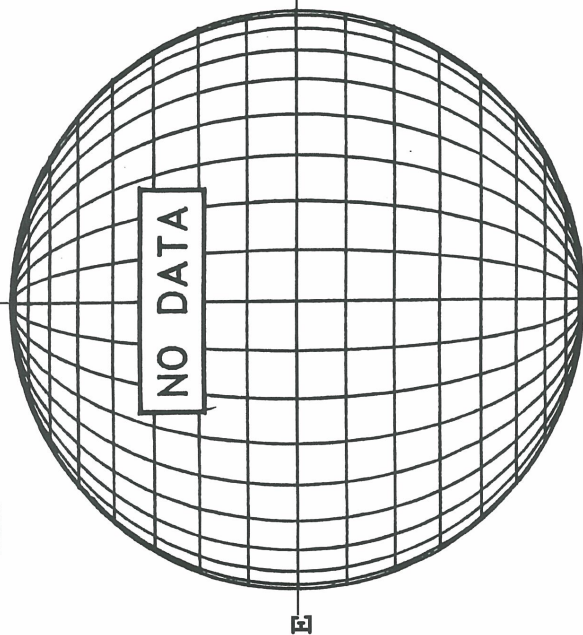
52
Aug 07

AUGUST 13, 2007 (P= 15.16, Bo= 6.52, Lo= 21.12)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

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



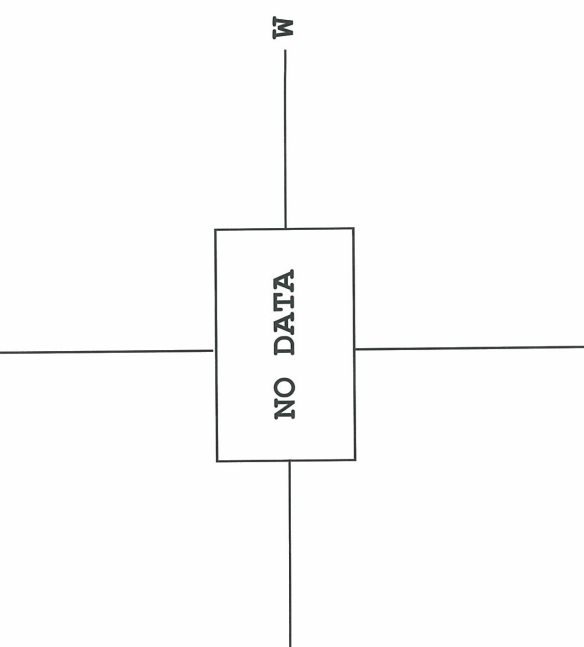
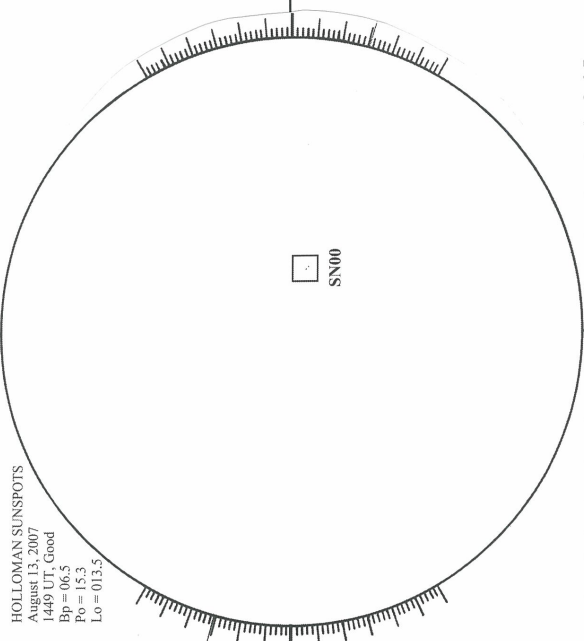
17.44 -
18.37 UT

2211 UT

KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

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



HOLLOMAN SUNSPOTS
August 13, 2007
1449 UT, Good
Bo = 06.5
Po = 15.3
Lo = 013.5

0649 UT

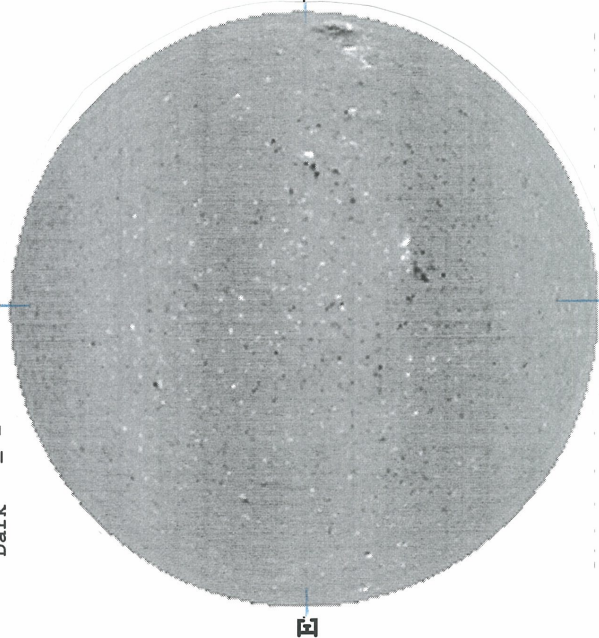
1449 UT

AUGUST 14, 2007 (P= 15.51, Bo= 6.57, Lo= 7.90)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

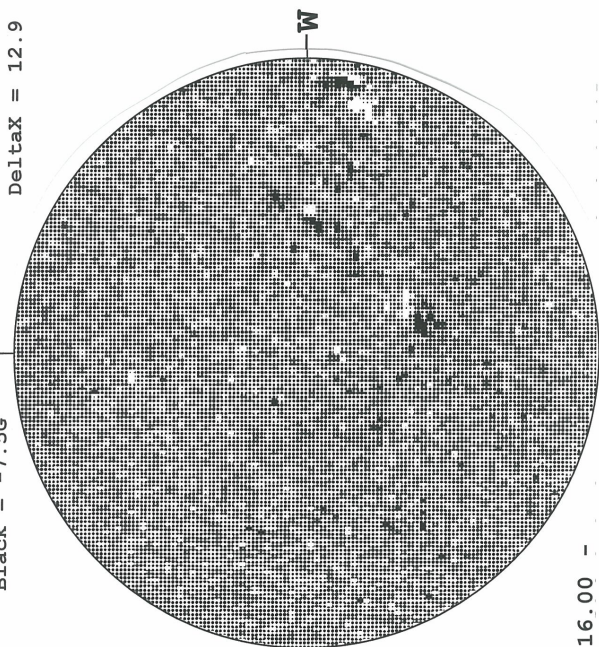
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 20.2
DeltaX = 12.9



1747 UT

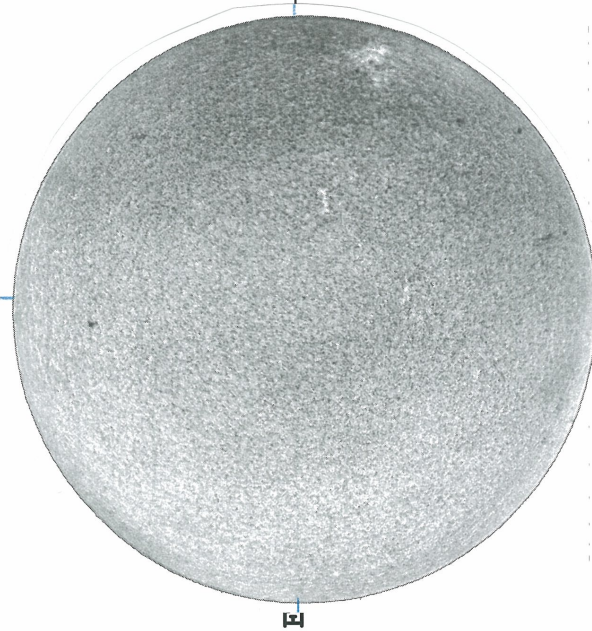


1839 UT



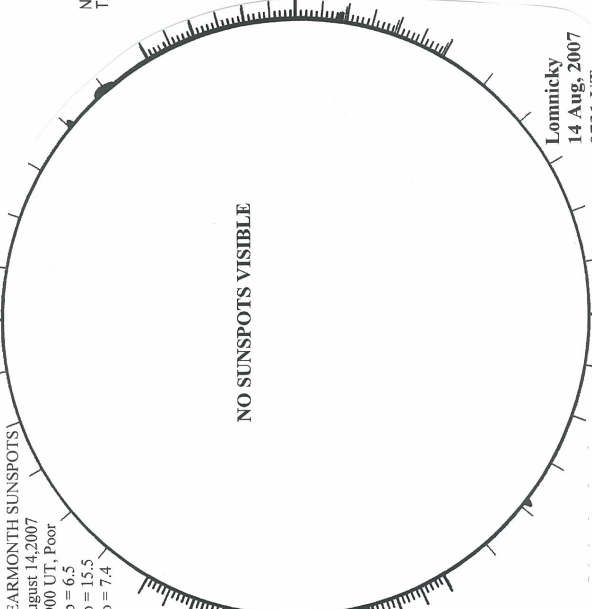
16.00 -
16.41 UT

KANZELHOHE H-ALPHA



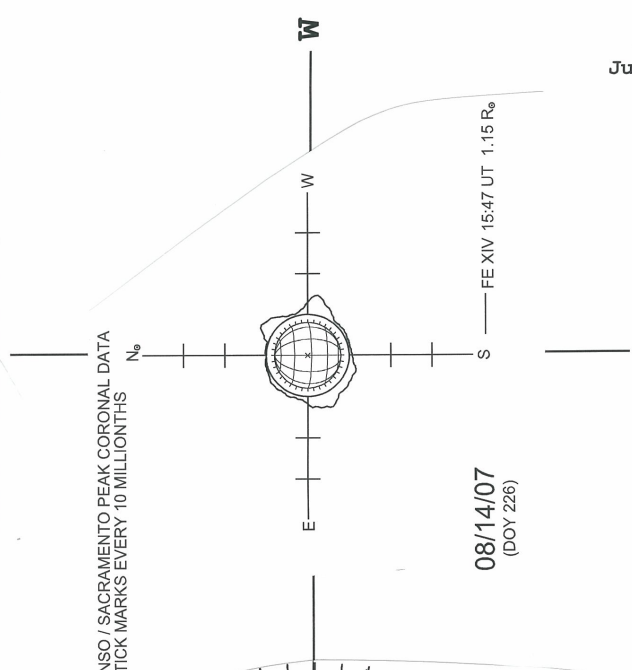
0611 UT

LEARNMOUTH SUNSPOTS



0900 UT
0731 UT LOMN FROM

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



08/14/07
(DOY 226)

53
Jul 07

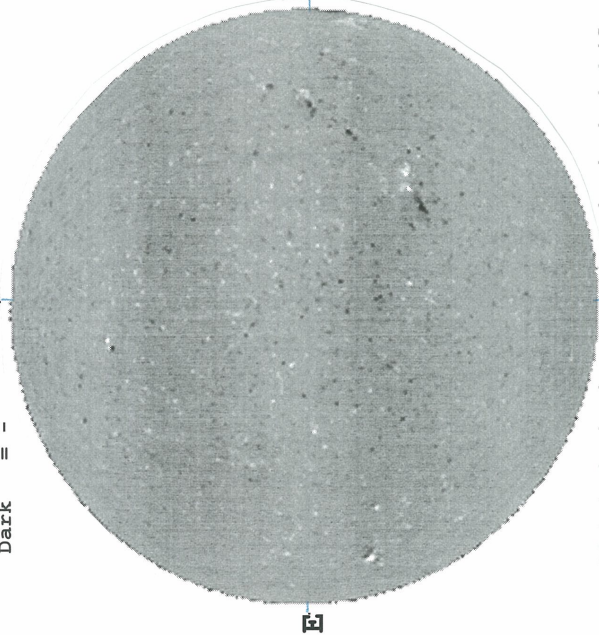
54
Aug 07

AUGUST 15, 2007 (P= 15.85, Bo= 6.62, Io= 354.68)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

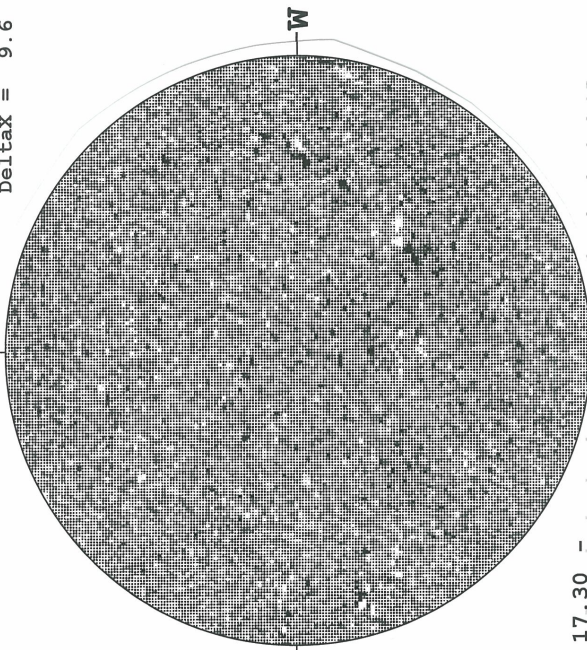
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



1912 UT



16/0014 UT



17.30 -
18.23 UT

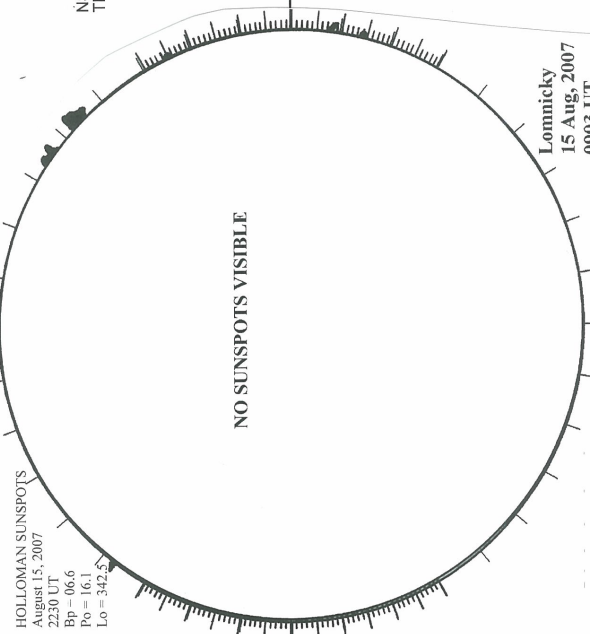
----- KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

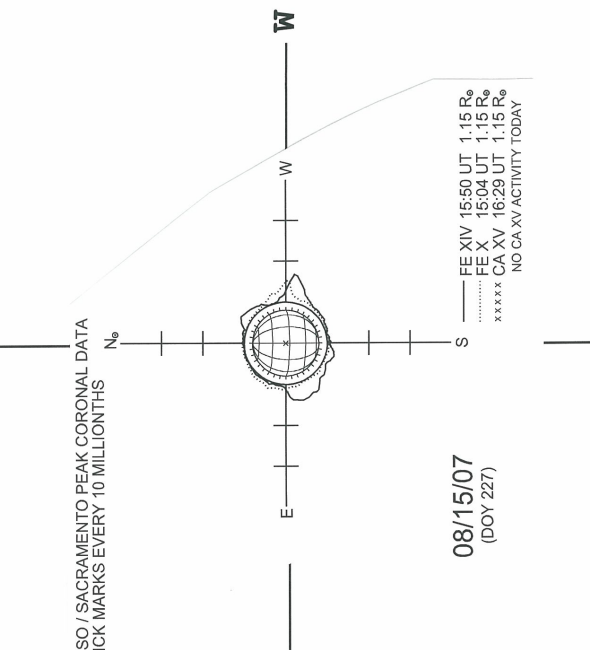
SACRAMENTO PEAK CORONA (1.15 Radii) -----



0634 UT



2230 UT
0903 UT IOMN PROM



08/15/07
(DOY 227)

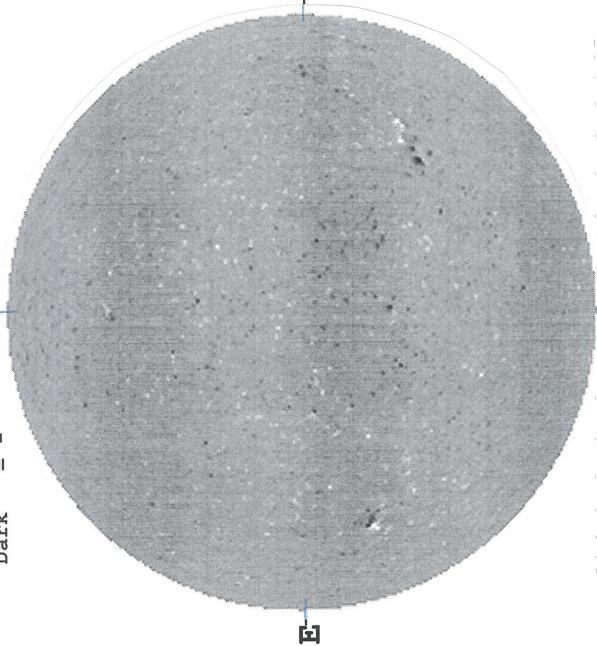
----- FE XIV 1550 UT 1.15 R_o
..... FE X 1504 UT 1.15 R_o
xxxxxx CA XV 1629 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

AUGUST 16, 2007 (P= 16.19, Bo= 6.67, Lo= 341.46)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

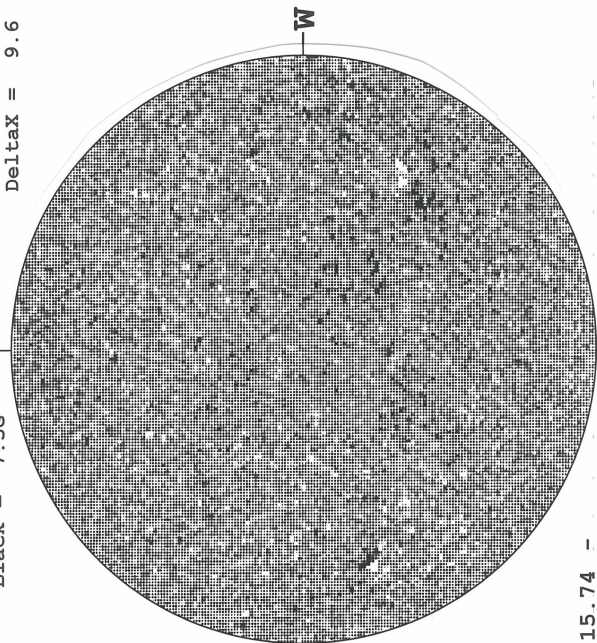
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



1710UT

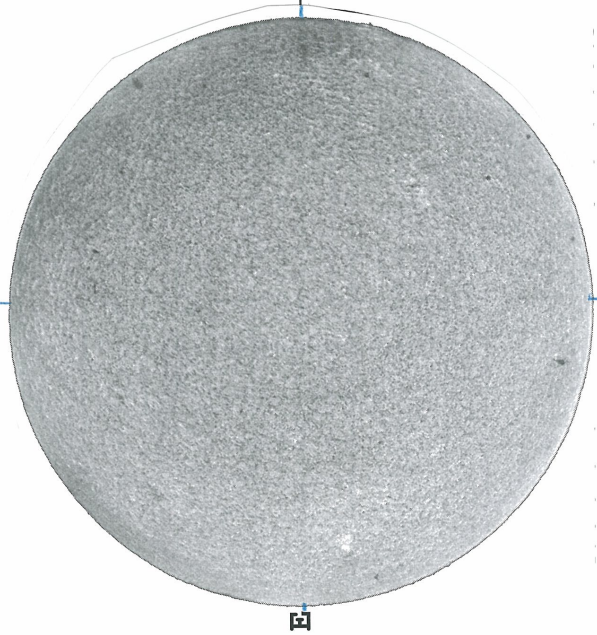


1851 UT



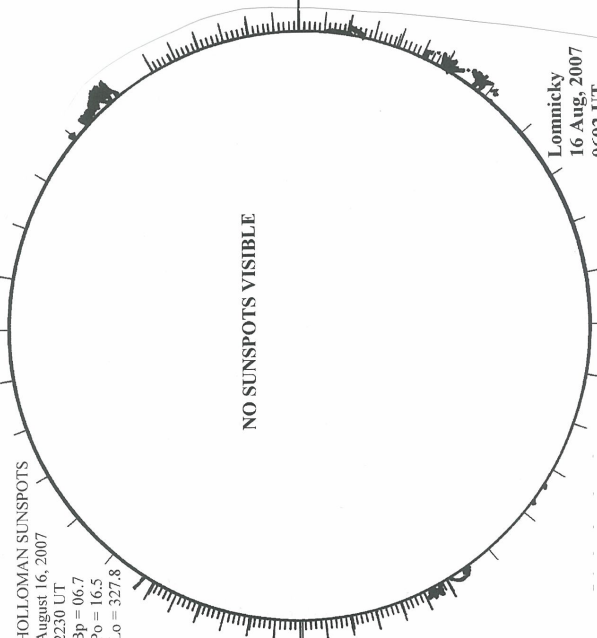
15.74 -
16.67 UT

--- KANZELHOHE H-ALPHA



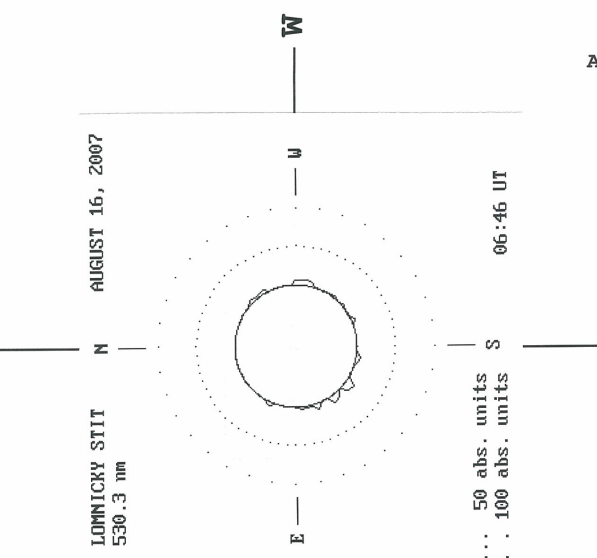
0602 UT

HOLLOMAN SUNSPOTS



2230 UT
0602 UT LOMN PROM

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

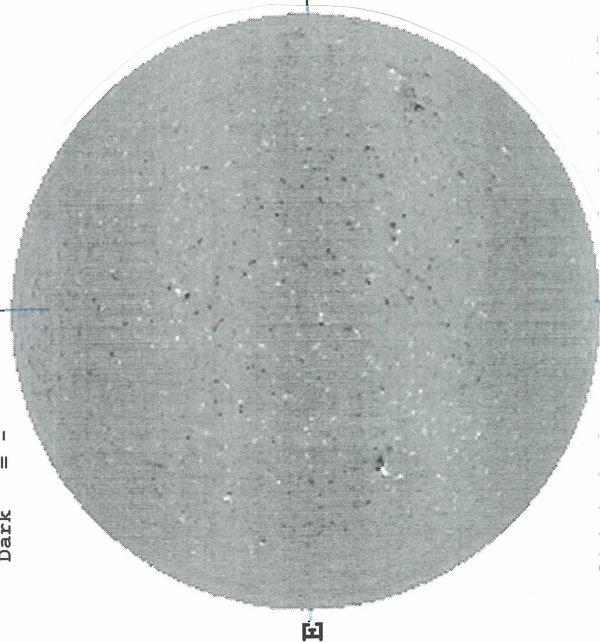


LOMNICKY STIT
530.3 nm
AUGUST 16, 2007
06:46 UT
... 50 abs. units
... 100 abs. units

56
Aug 07

AUGUST 17, 2007 (P= 16.53, Bo= 6.72, Io= 328.25)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N



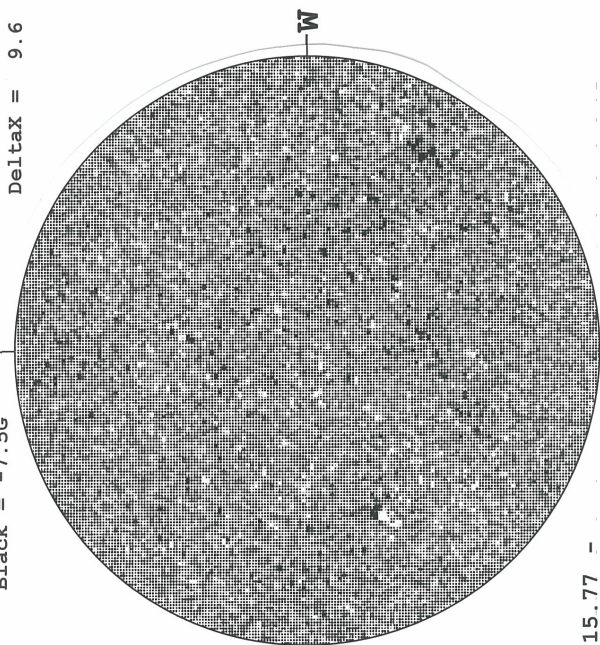
1833 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



2354 UT

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



15.77 -
16.70 UT

KANZELHOHE H-ALPHA

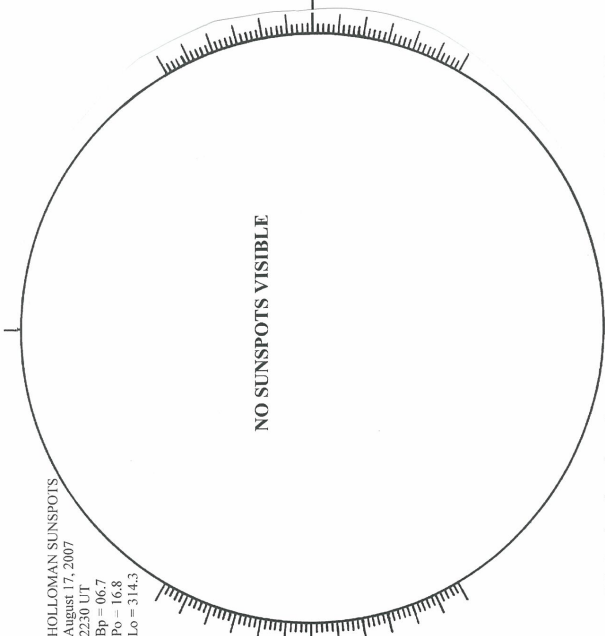


0732 UT

HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 17, 2007
2230 UT
Bp = 06.7
Po = 16.8
Lo = 314.3

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



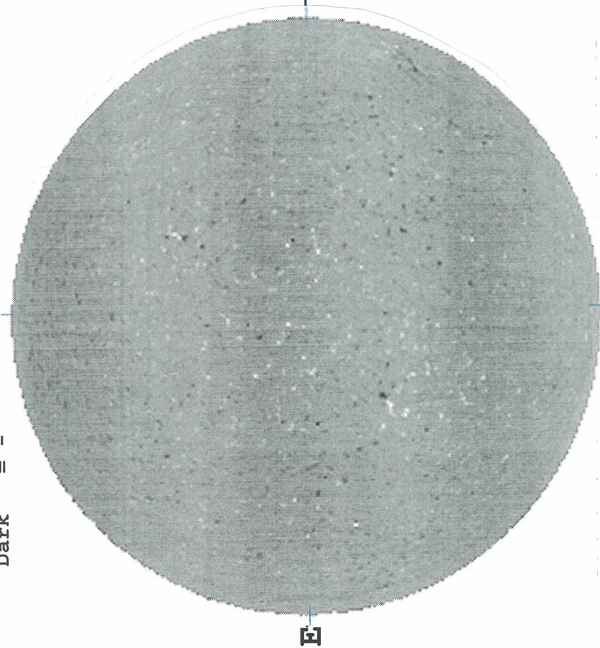
2230 UT

NO DATA

NO SUNSPOTS VISIBLE

AUGUST 18, 2007 (P= 16.86, Bo= 6.76, Io= 315.03)

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



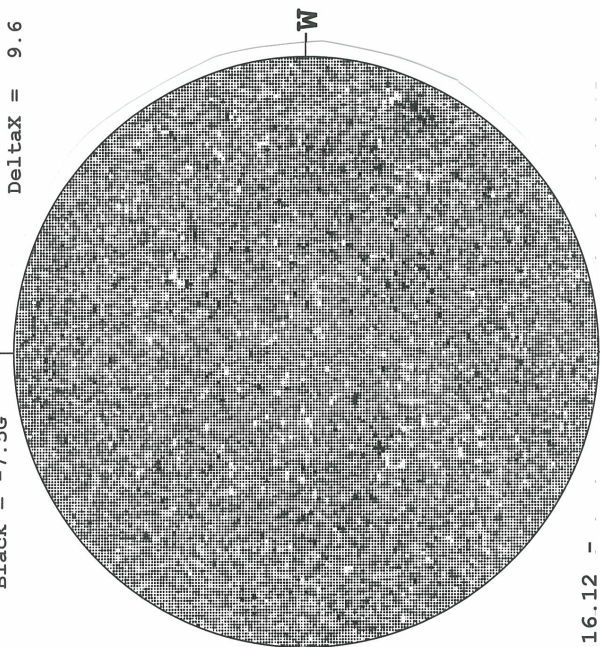
2104 UT

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



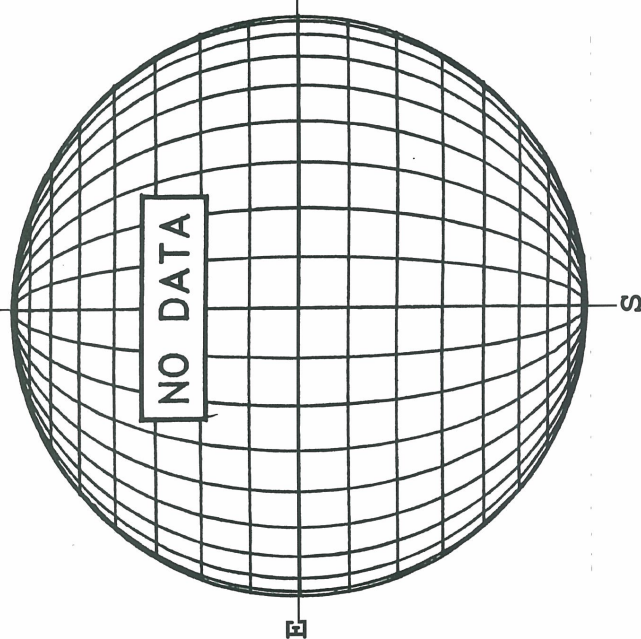
1925 UT

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



16.12 -
17.05 UT

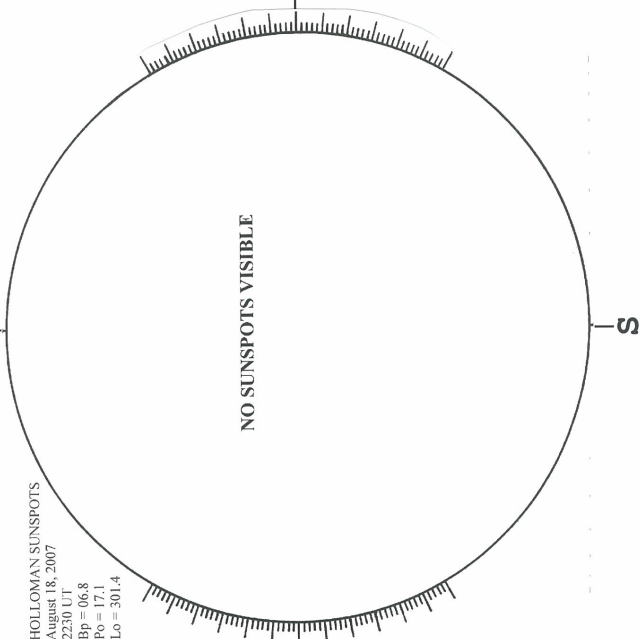
--- KANZELHOHE H-ALPHA



E

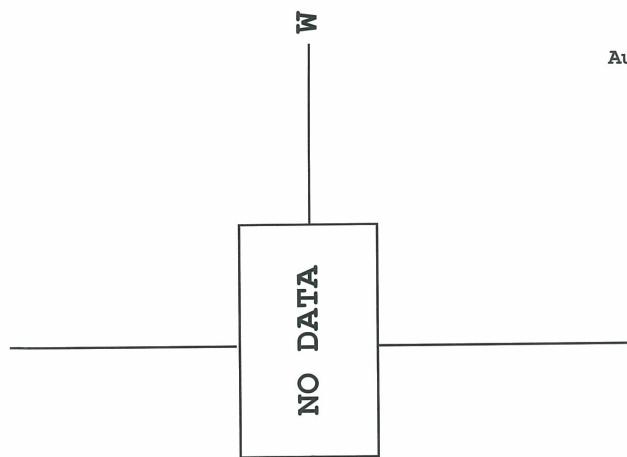
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 18, 2007
2230 UT
Bp = 06.8
Po = 17.1
Lo = 301.4



2230 UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----



W

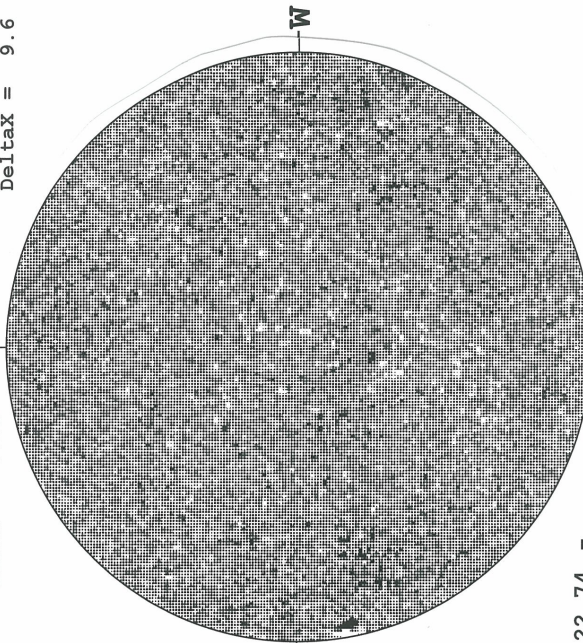
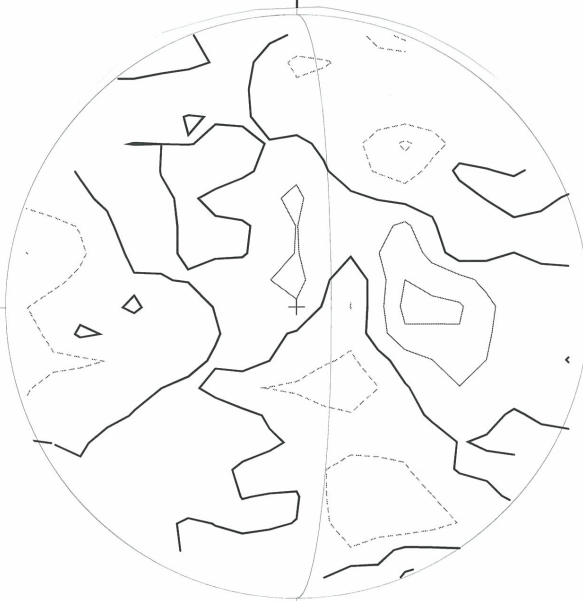
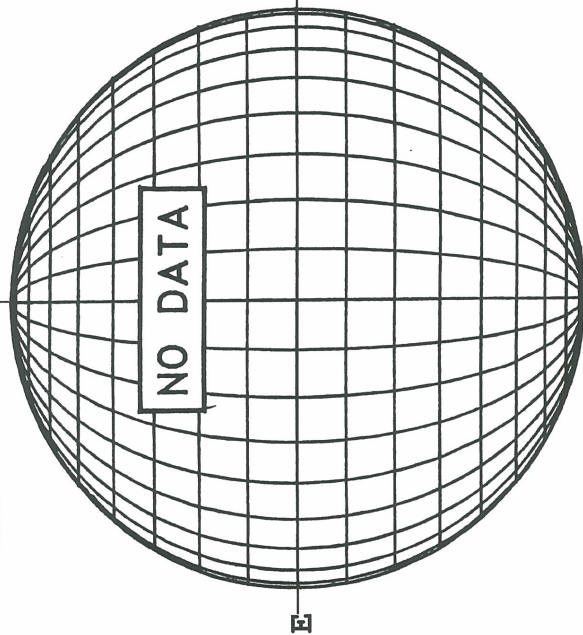
58
Aug 07

AUGUST 19, 2007 (P= 17.18, Bo= 6.80, Lo= 301.81)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

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



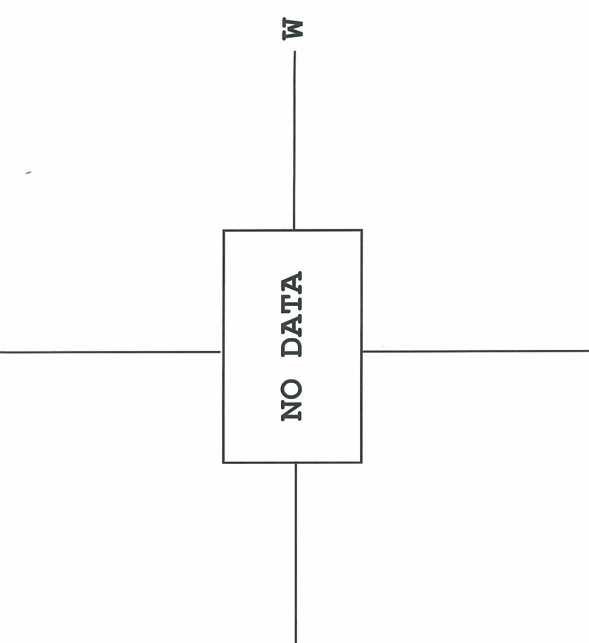
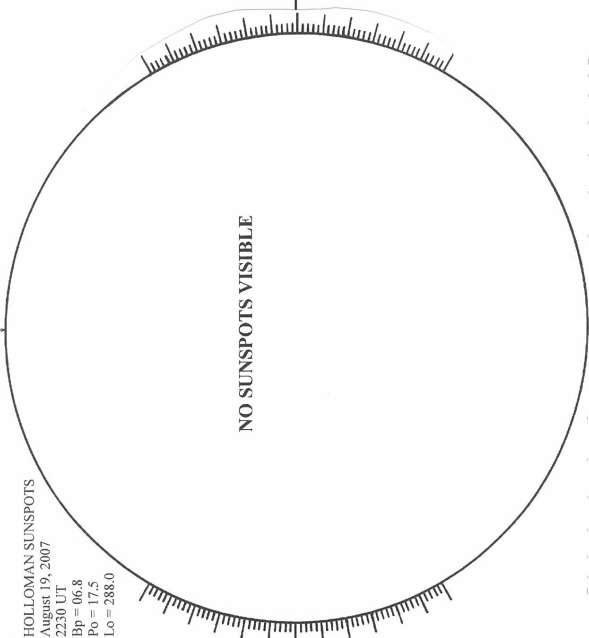
22.74 -
23.67 UT

20/0128 UT

--- KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii) ----



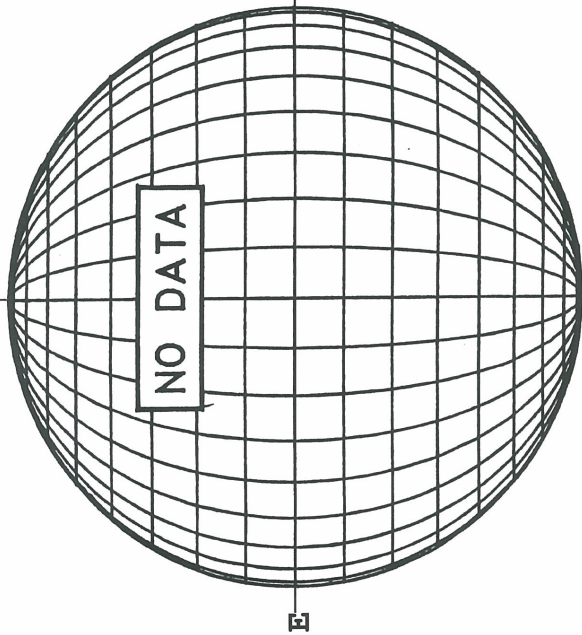
HOLLOMAN SUNSPOTS
August 19, 2007
2230 UT
Bp = 06.8
Po = 17.5
Lo = 288.0

0549 UT

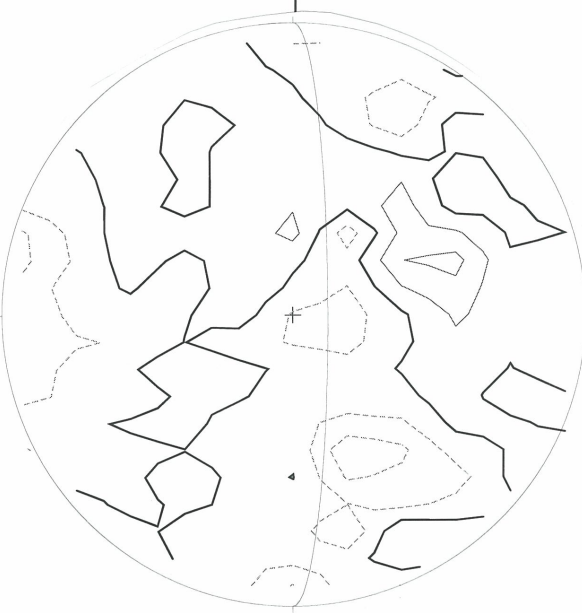
2230 UT

AUGUST 20, 2007 (P= 17.50, Bo= 6.85, Lo= 288.60)

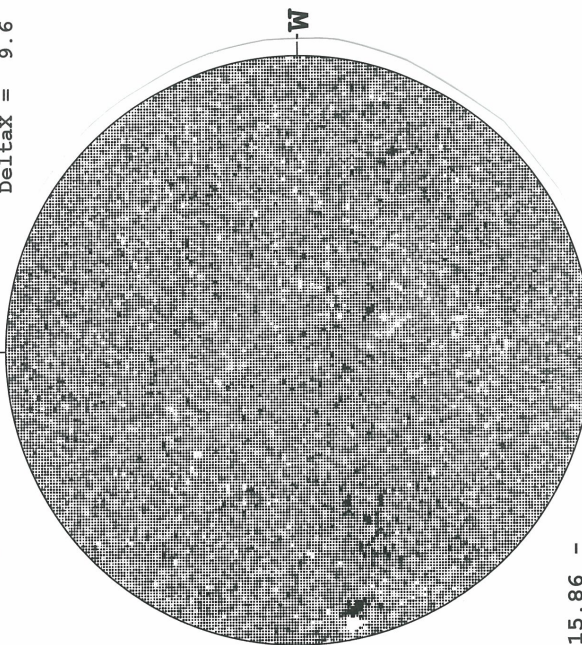
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = +
 Dark = -



STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -



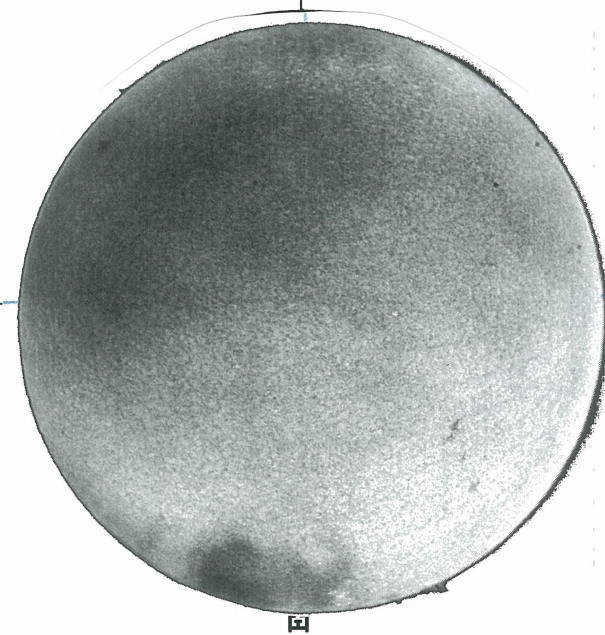
MT. WILSON MAGNETOGRAM
 White = +7.5G
 Black = -7.5G
 DeltaY = 13.1
 DeltaX = 9.6



15.86 -
 16.78 UT

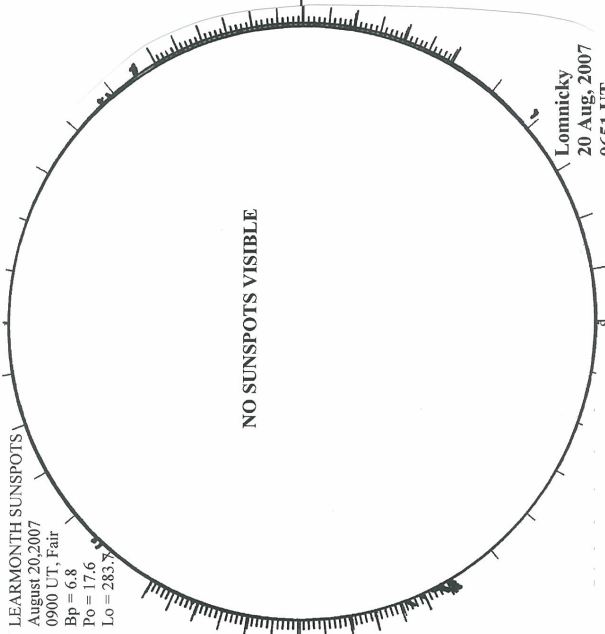
21/0036 UT

KANZELHOHE H-ALPHA



0855 UT

LEARMONTH SUNSPOTS



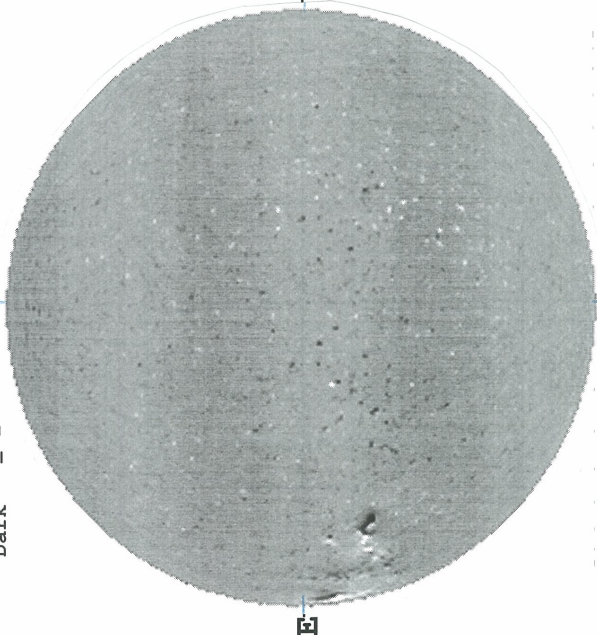
SACRAMENTO PEAK CORONA (1.15 Radii) -----

NO DATA

60
Aug 07

AUGUST 21, 2007 (P= 17.82, Bo= 6.88, Lo= 275.38)

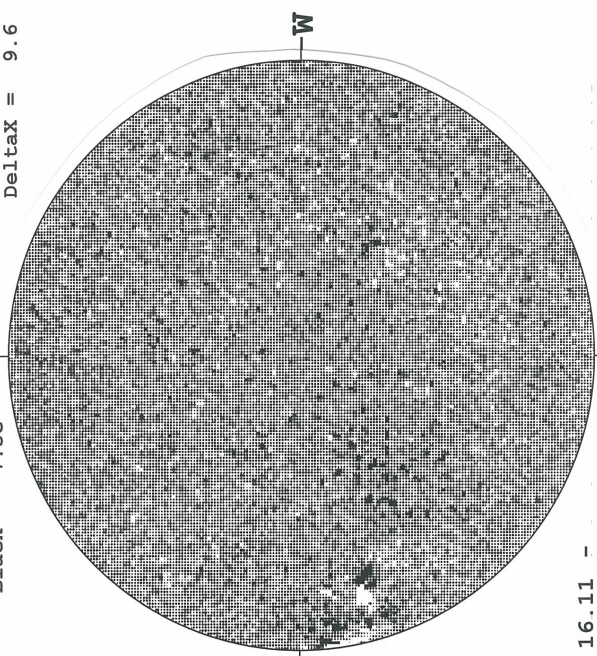
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N



STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



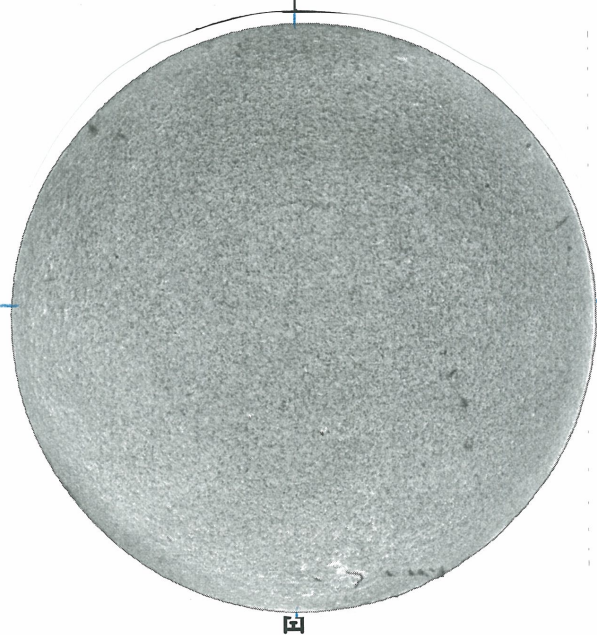
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
N
DeltaY = 13.1
DeltaX = 9.6



16.11 -
17.03 UT

22/0124 UT

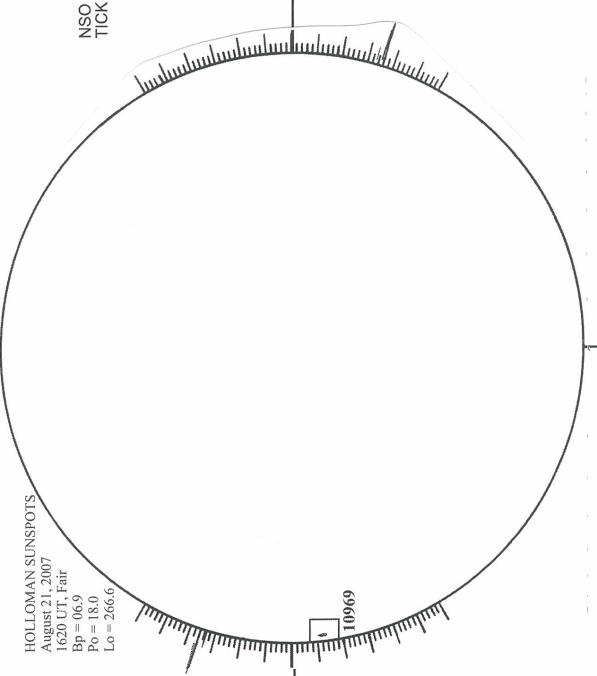
KANZELHOHE H-ALPHA



0557 UT

HOLLOMAN SUNSPOTS

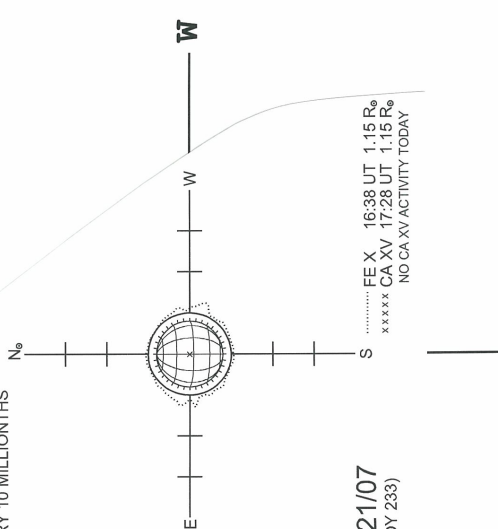
HOLLOMAN SUNSPOTS
August 21, 2007
1620 UT, Fair
Bo = 06.9
Po = 18.0
Lo = 266.6



1620 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

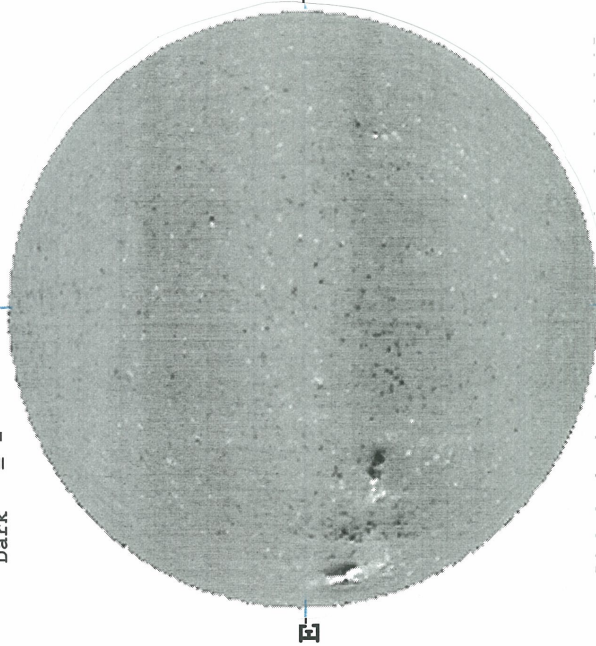


08/21/07
(DOY 233)

..... FE X 16:38 UT 1.15 R_o
xxxxx CA XV 17:28 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

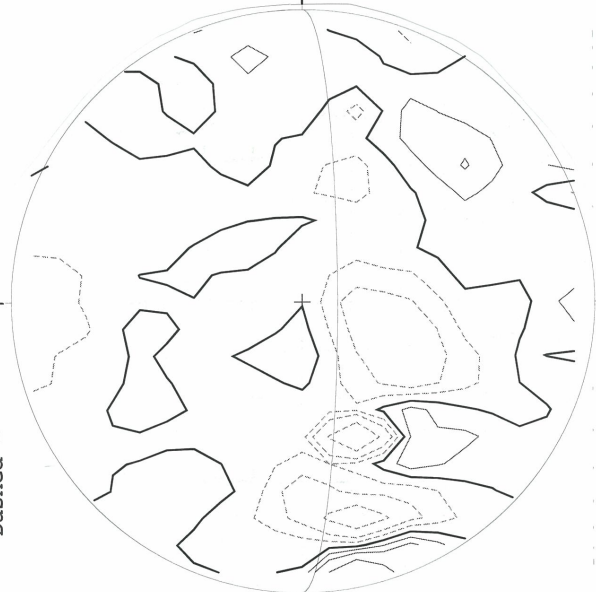
AUGUST 22, 2007 (P= 18.13, Bo= 6.92, Lo= 262.17)

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



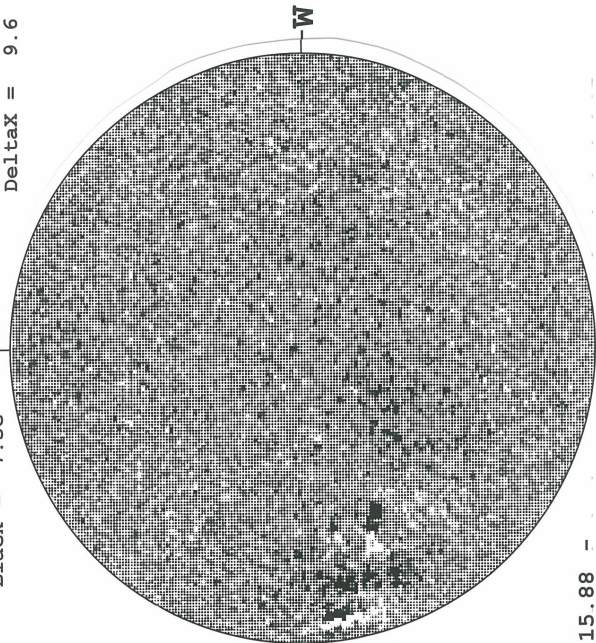
2207 UT

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



23/0114 UT

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



15.88 -
16.81 UT

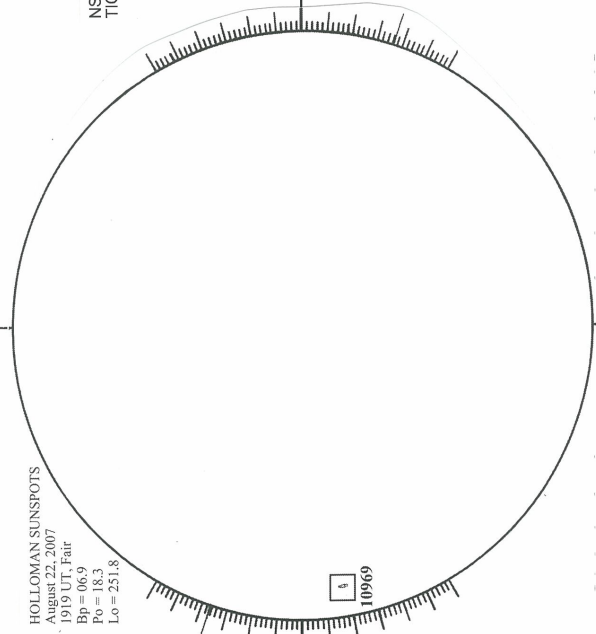
KANZELHOHE H-ALPHA



0753 UT

HOLLOMAN SUNSPOTS

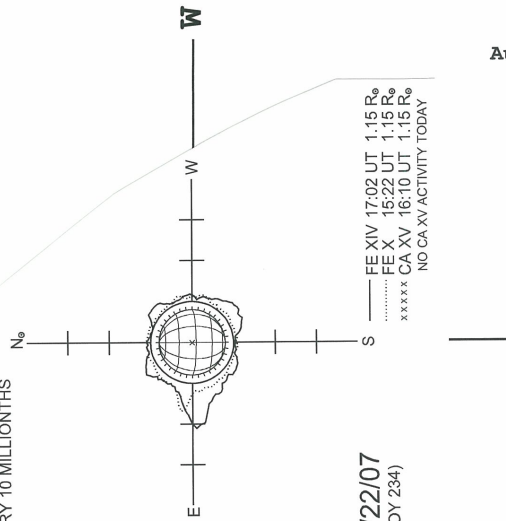
HOLLOMAN SUNSPOTS
August 22, 2007
1919 UT Fair
Bp = 06.9
Po = 18.3
Lo = 251.8



1919 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



08/22/07
(DOY 234)

FE XIV 17:02 UT 1.15 R_o
FE X 15:22 UT 1.15 R_o
xxxxx CA XV 16:10 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

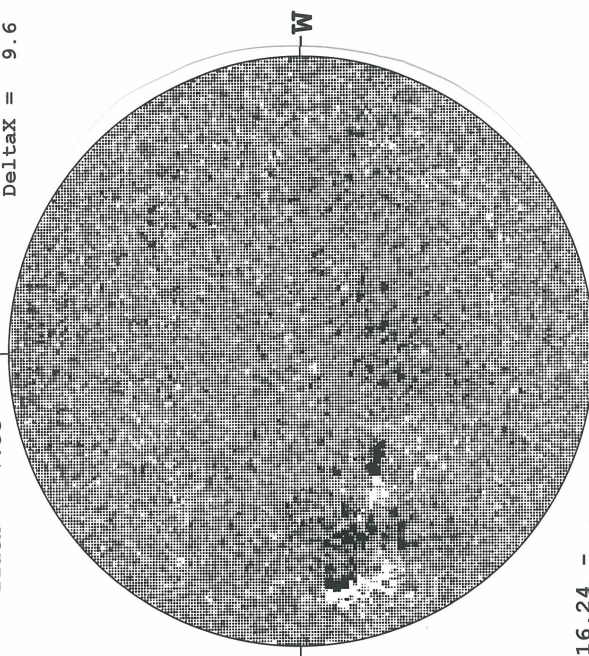
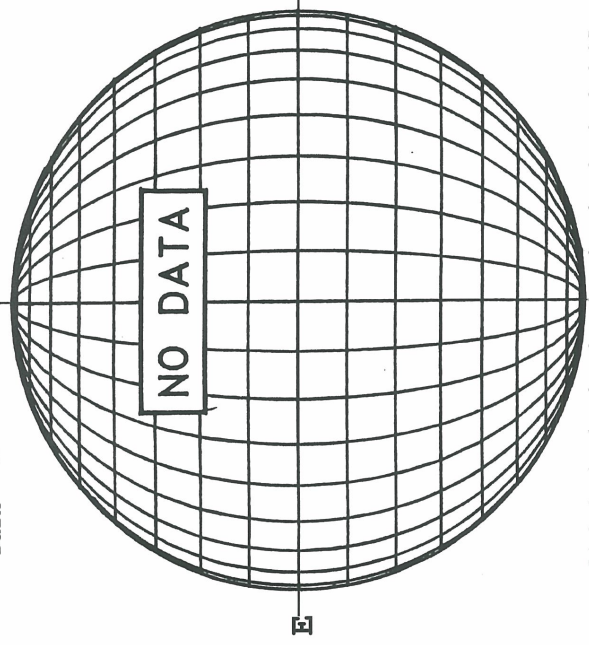
62
Aug 07

AUGUST 23, 2007 (P= 18.43, Bo= 6.96, Io= 248.95)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

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



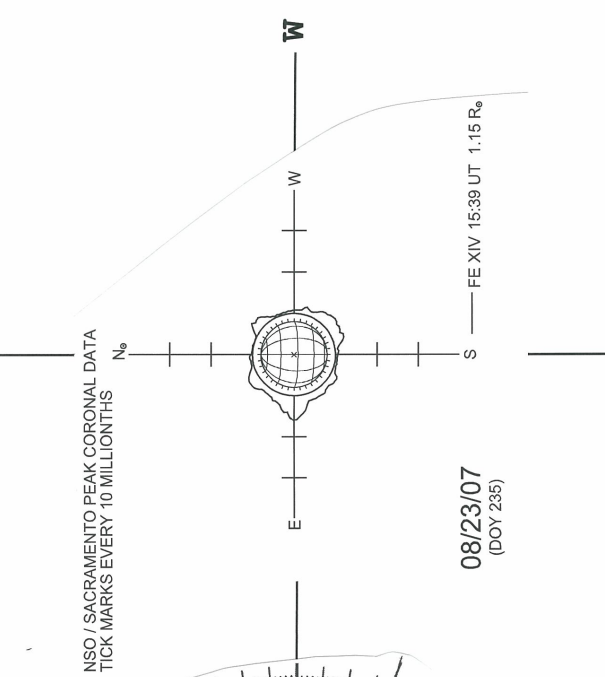
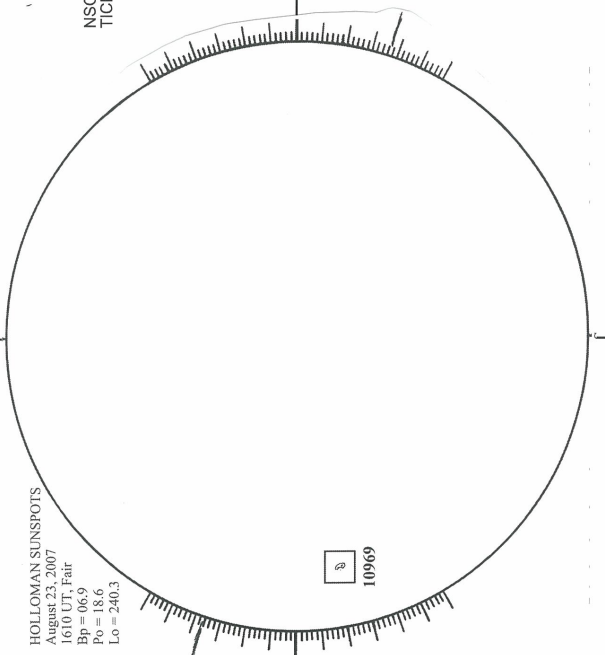
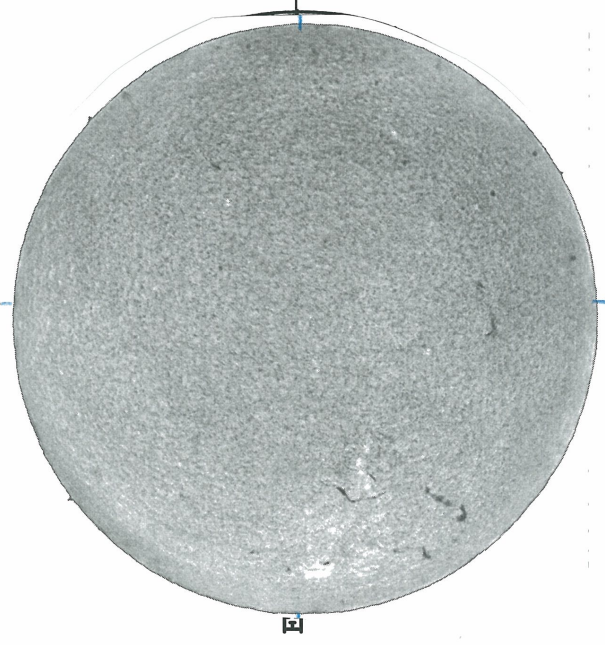
16.24 -
17.17 UT

2211UT

KANZELHOHE H-ALPHA

HOLLOMAN SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii)----



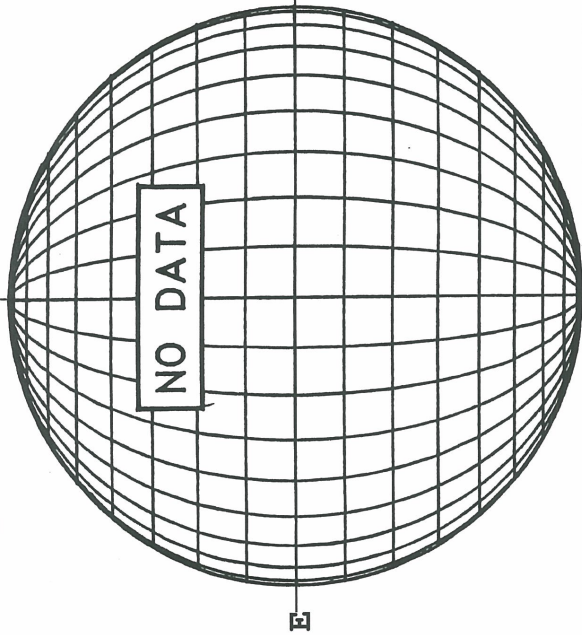
08/23/07
(DOY 235)

0752 UT

1610 UT

AUGUST 24, 2007 (P= 18.74, Bo= 6.99, Lo= 235.74)

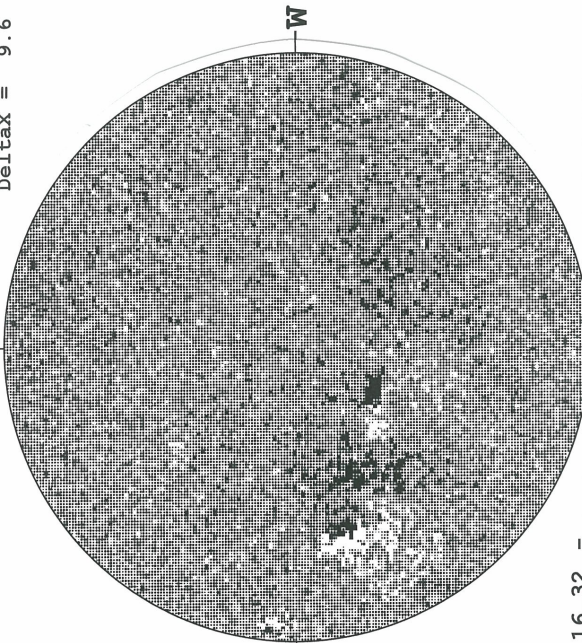
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -



STANFORD MAGNETOGRAM
Solid = +
Dashed = -



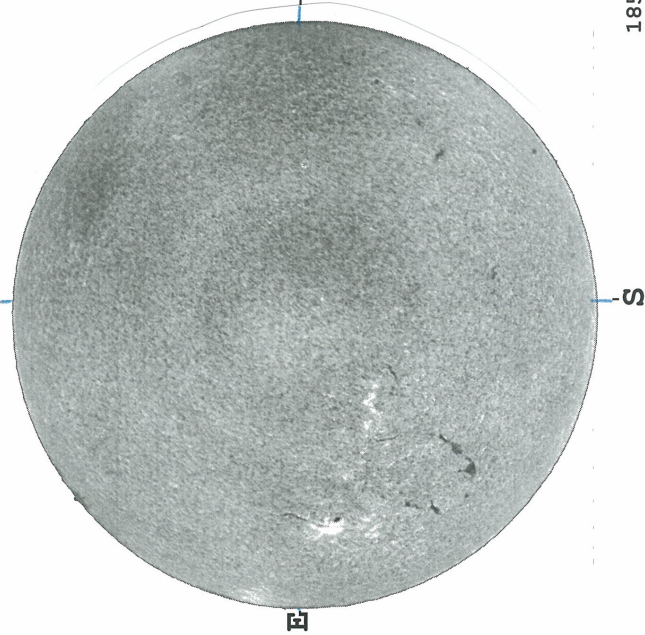
MT, WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



16.32 -
17.25 UT

25/0010 UT

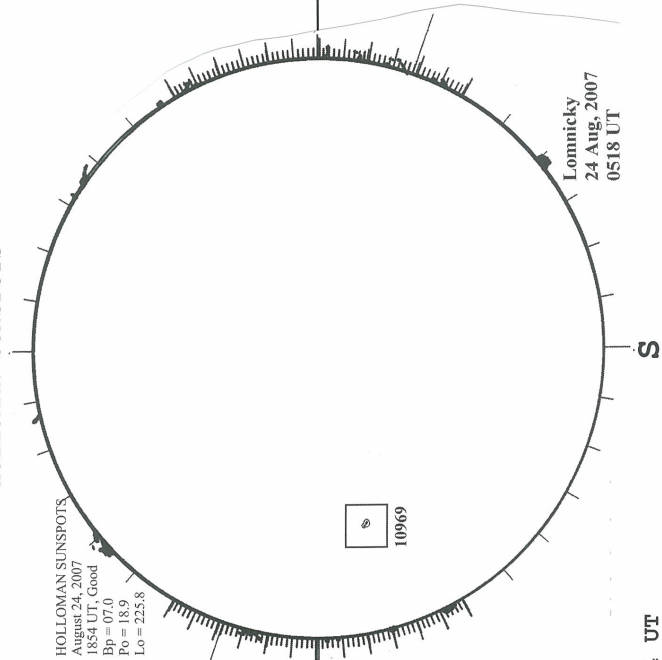
KANZELHOHE H-ALPHA



0603 UT

HOLLOMAN SUNSPOTS

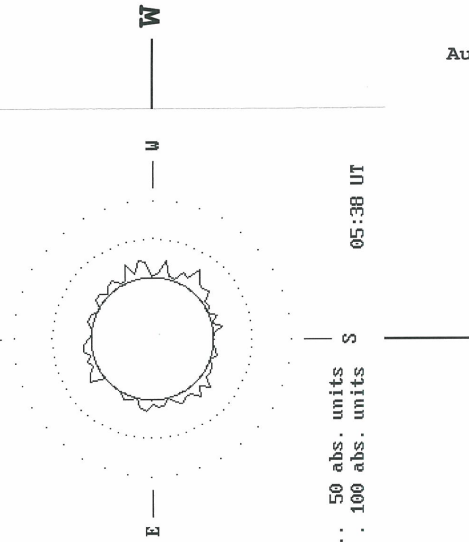
HOLLOMAN SUNSPOTS
August 24, 2007
1854 UT, Good
Bp = 07.0
Po = 18.9
Lo = 225.8



1854 UT
0518 UT LOMN PROM

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

LOMNICKY STIT
530.3 nm



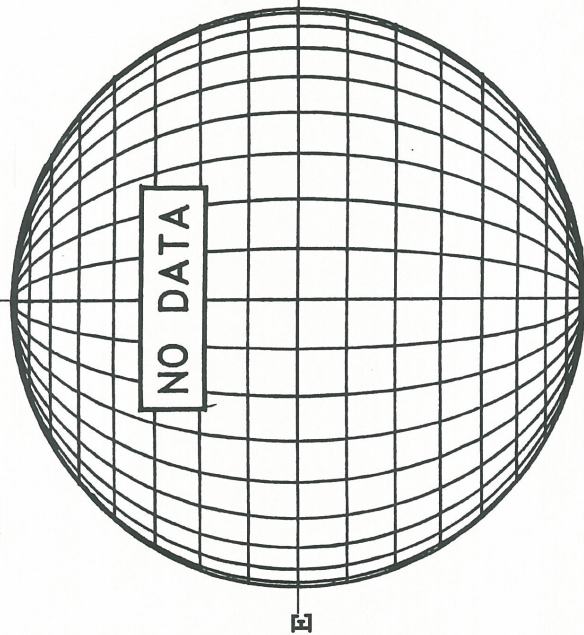
... 50 abs. units
... 100 abs. units

05:38 UT

64
Aug 07

AUGUST 25, 2007 (P= 19.03, Bo= 7.02, Lo= 222.52)

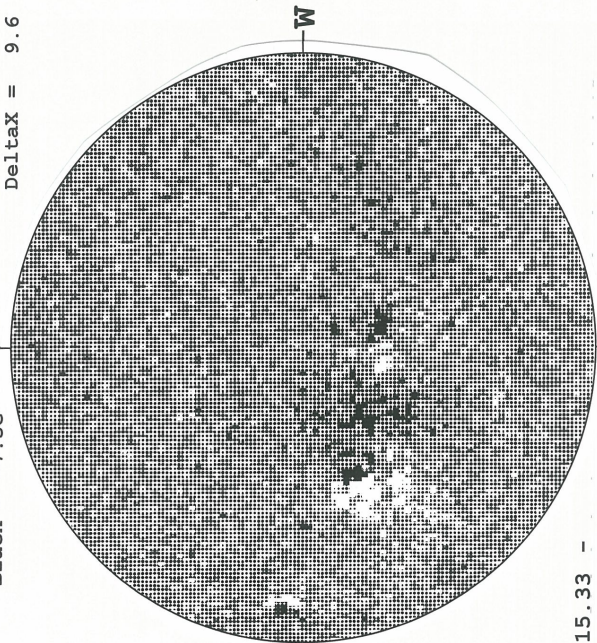
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + ** 854.2nm **
Dark = -



STANFORD MAGNETOGRAM
Solid = + N
Dashed = -



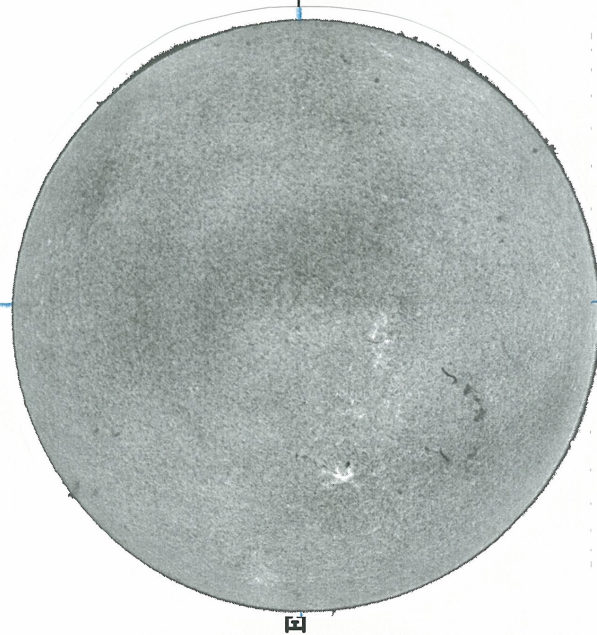
MT, WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



15.33 -
15.74 UT

1930 UT

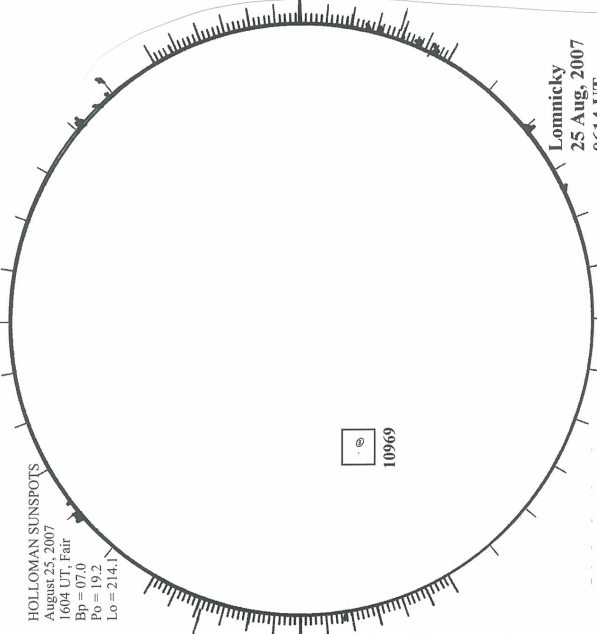
--- KANZELHOHE H-ALPHA



0729 UT

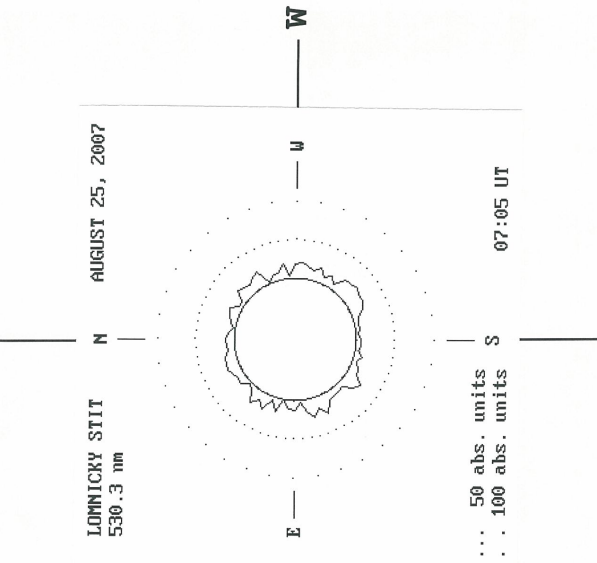
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 25, 2007
1604 UT, Fair
Bp = 07.0
Po = 19.2
Lo = 214.1



1604 UT
0614 UT LOMN FROM

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



... 50 abs. units
... 100 abs. units

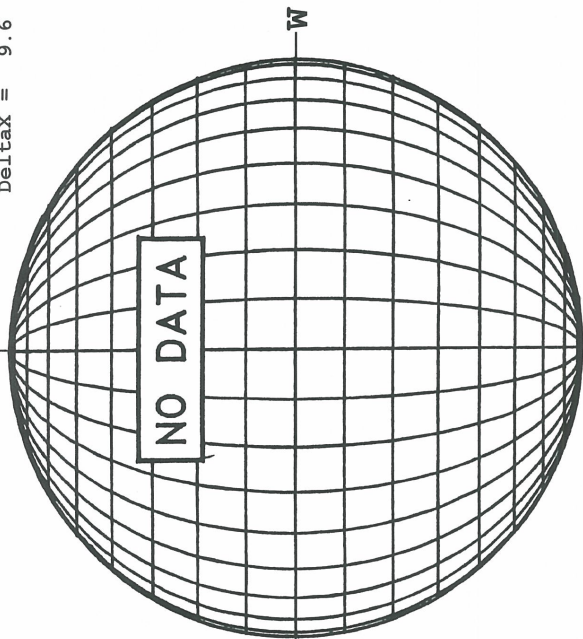
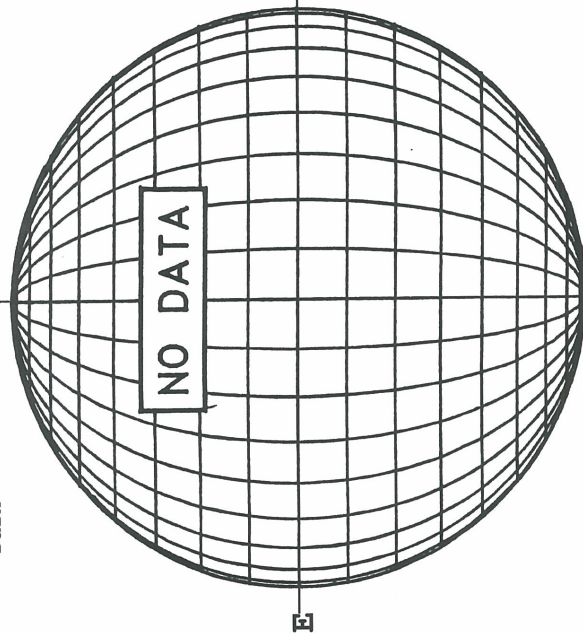
07:05 UT

AUGUST 26, 2007 (P= 19.32, Bo= 7.05, Io= 209.31)

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

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



2111 UT

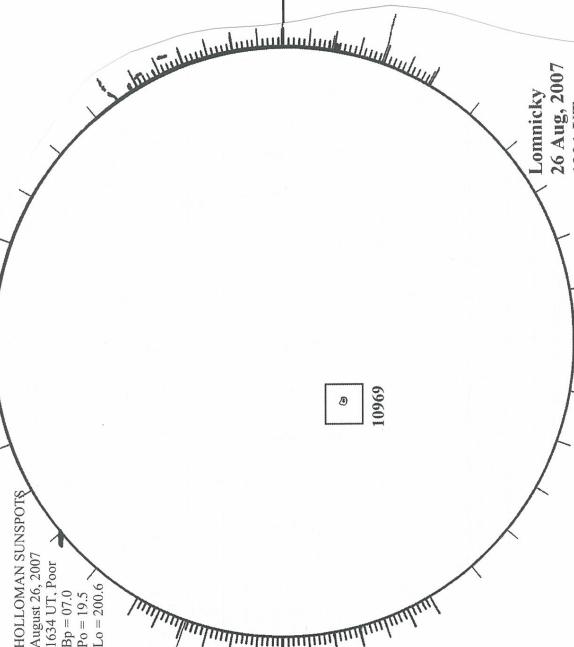
KANZELHOHE H-ALPHA



0627 UT

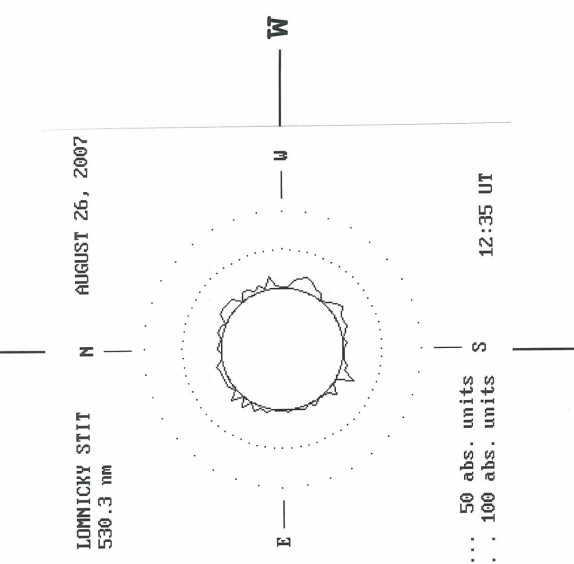
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 26, 2007
1634 UT, Poor
Bp = 07.0
Po = 19.5
Lo = 200.6



1634 UT
1221 UT LOMN PROM

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



12:35 UT

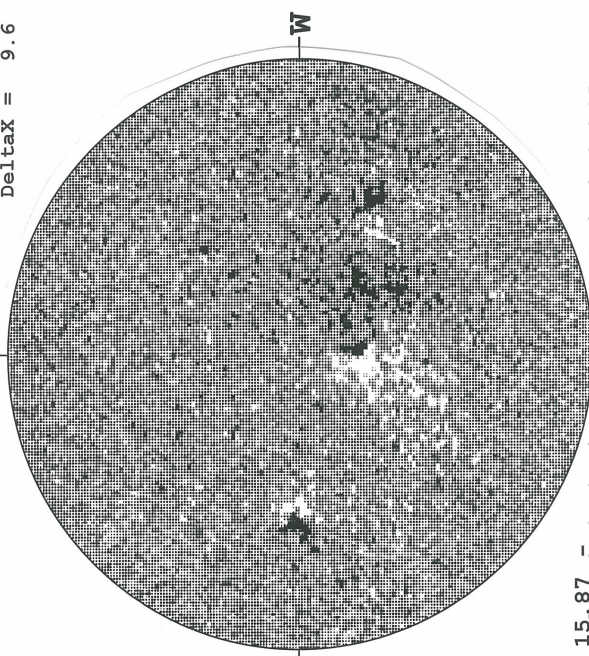
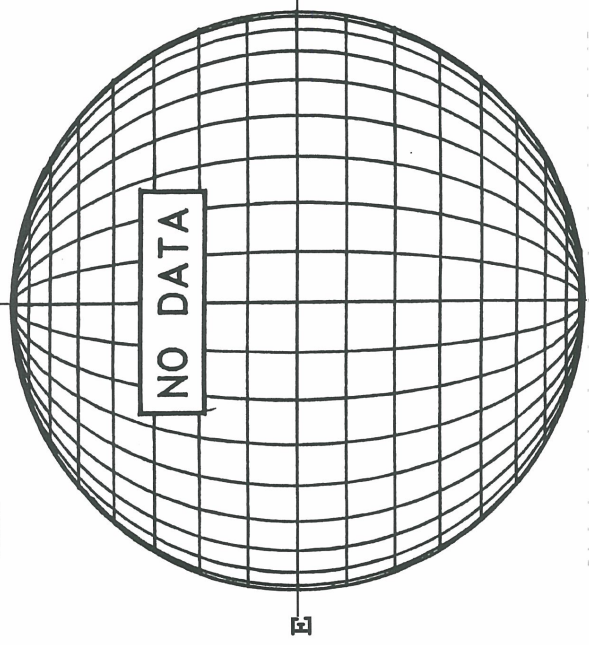
66
Aug 07

AUGUST 27, 2007 (P= 19.61, Bo= 7.08, Io= 196.10)

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

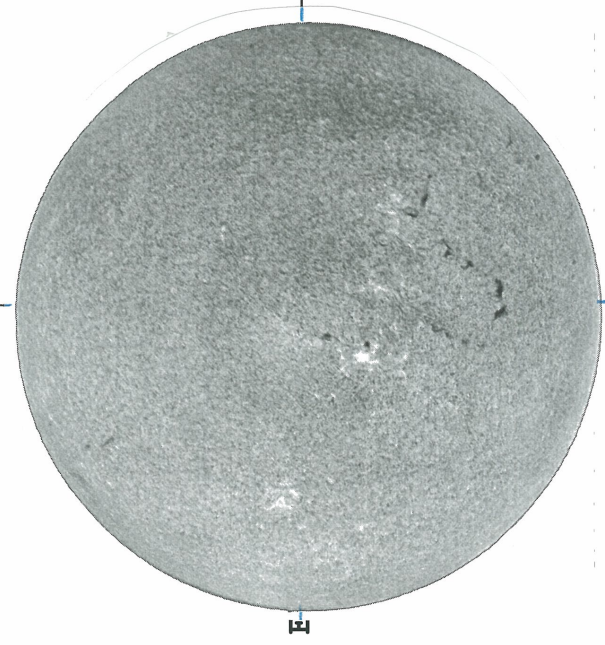
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
N
DeltaY = 13.1
DeltaX = 9.6



15.87 -
16.80 UT

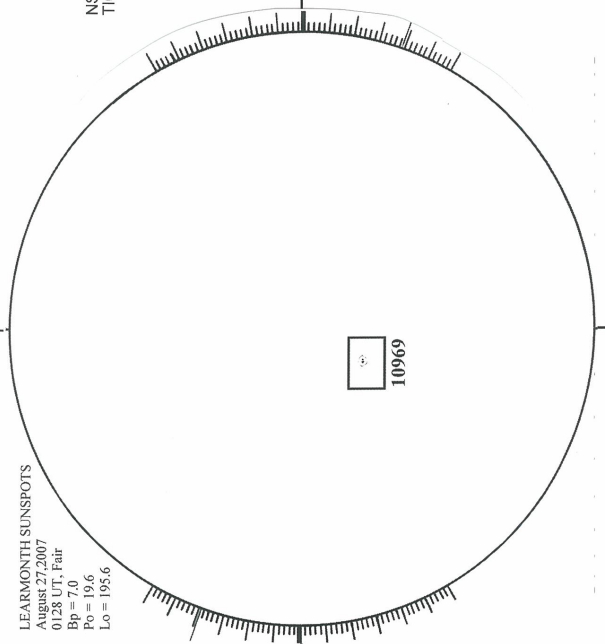
1941 UT

KANZELHOHE H-ALPHA



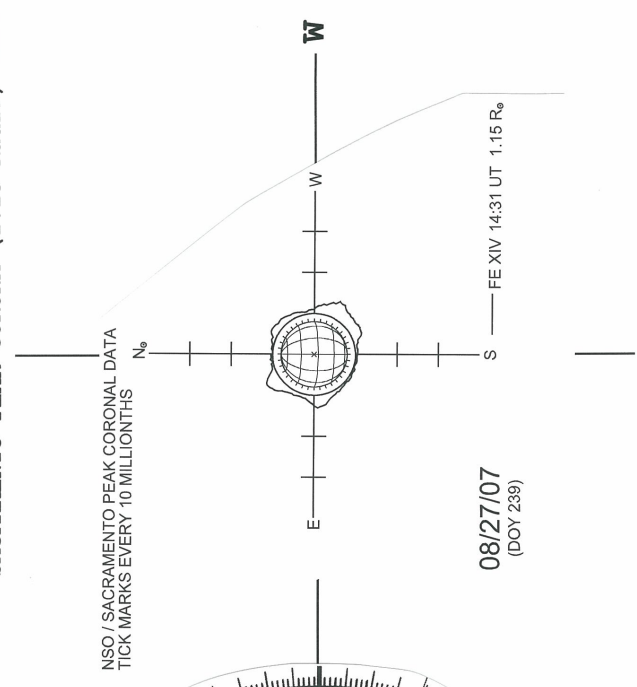
0601 UT

LEARNMOUTH SUNSPOTS



0128 UT

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



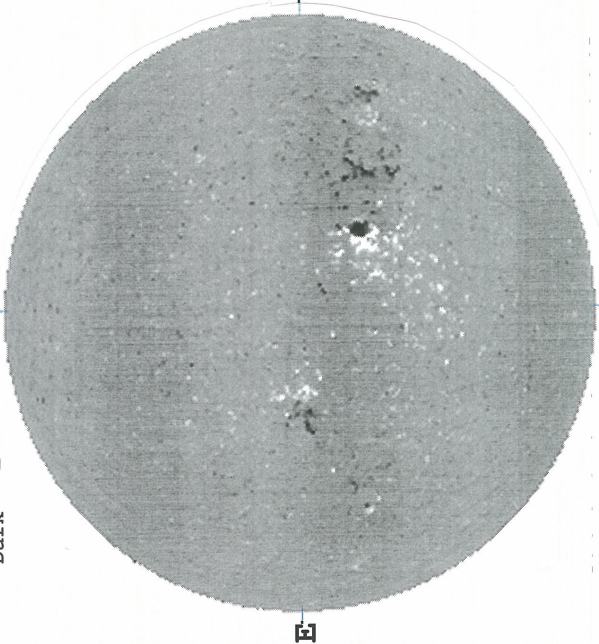
08/27/07
(DOY 239)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

FE XIV 14:31 UT 1.15 R_o

AUGUST 28, 2007 (P= 19.89, Bo= 7.10, Lo= 182.88)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N



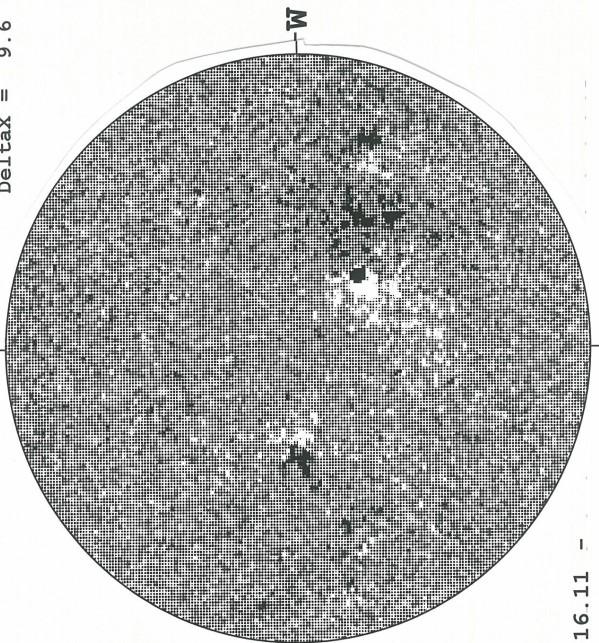
1843 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



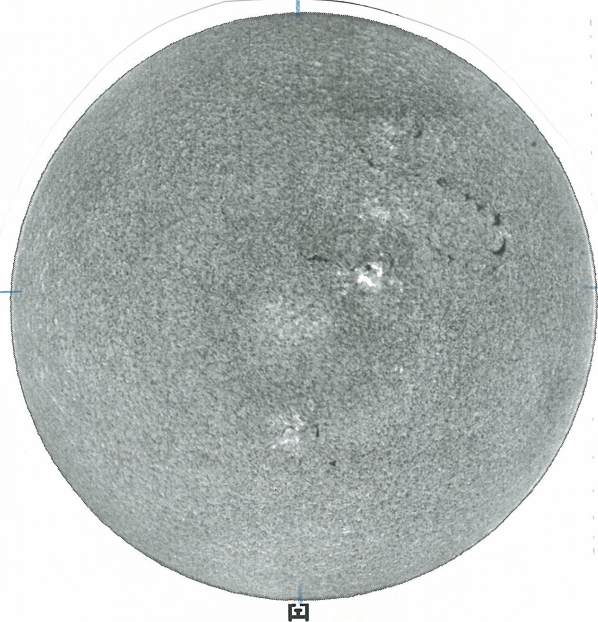
2231 UT

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



16.11 -
17.04 UT

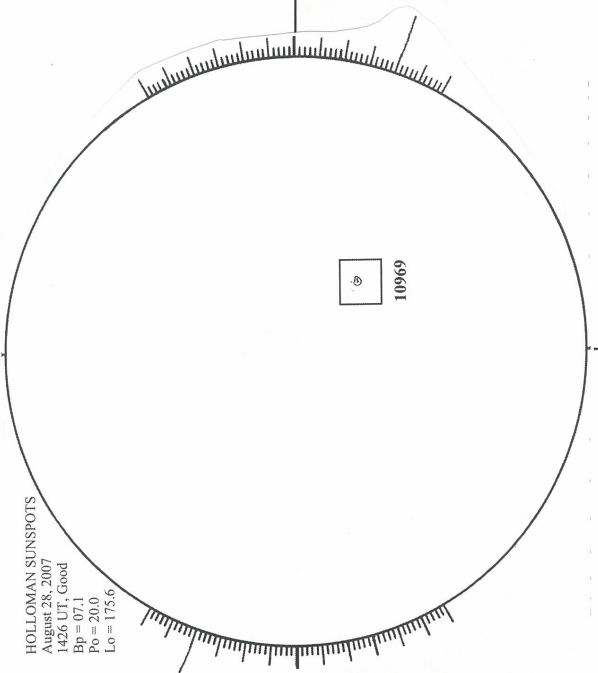
KANZELHOHE H-ALPHA



0559UT

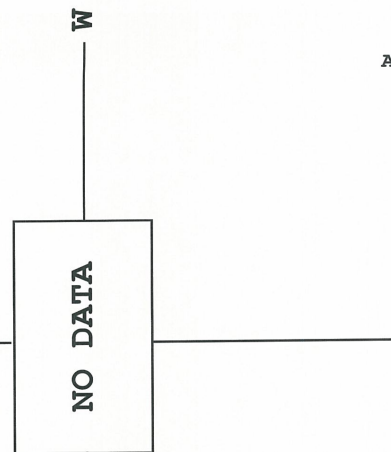
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 28, 2007
1426 UT, Good
Bp = 07.1
Pe = 20.0
Le = 175.6



1426 UT

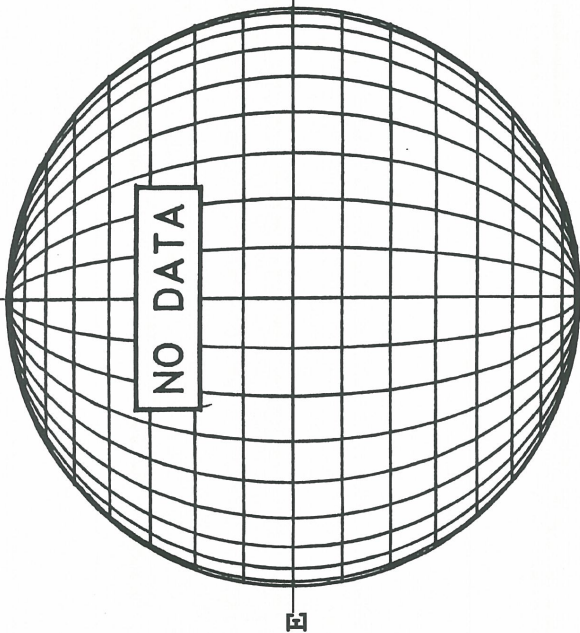
SACRAMENTO PEAK CORONA (1.15 Radii) ----



68
Aug 07

AUGUST 29, 2007 (P= 20.16, Bo= 7.13, Lo= 169.67)

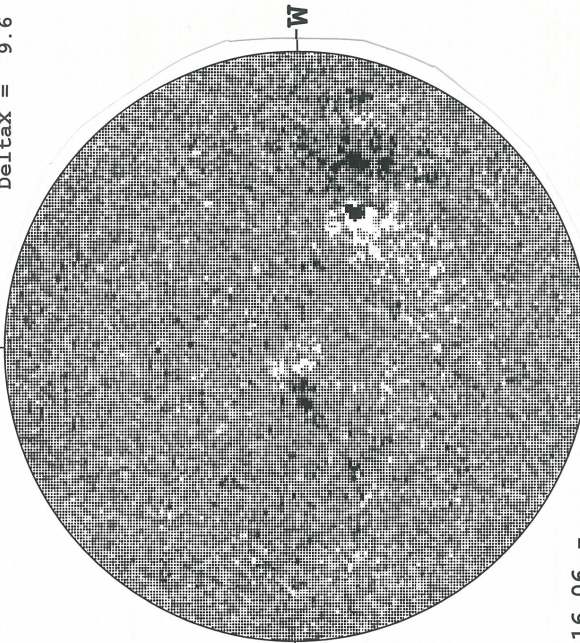
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N ** 854.2NM **



STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



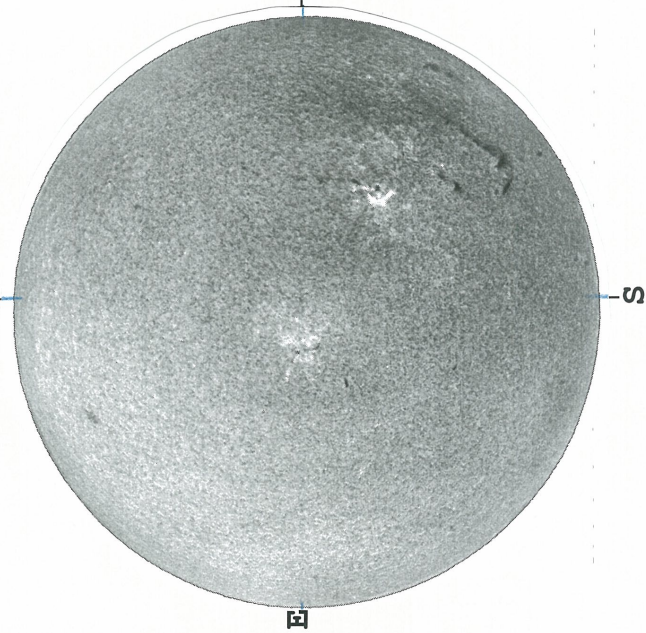
MTL WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
N
DeltaY = 13.1
DeltaX = 9.6



16.06 -
16.99 UT

2100 UT

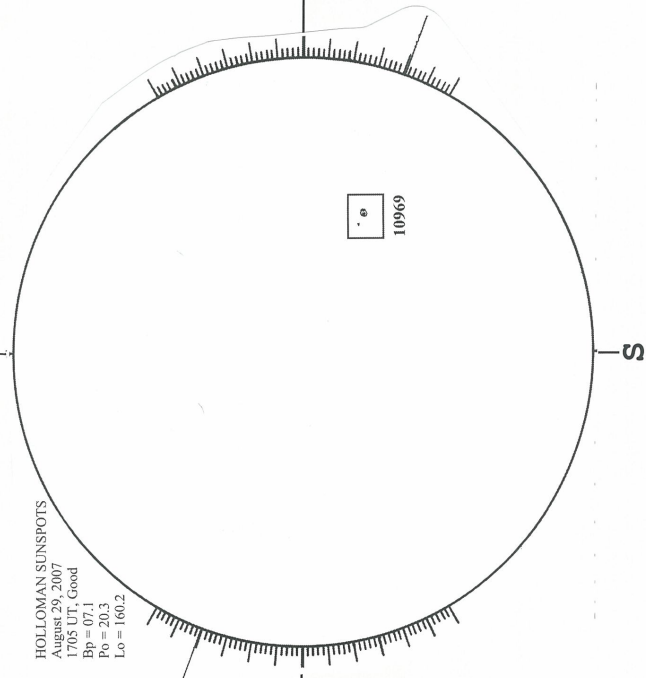
KANZELHOHE H-ALPHA



1315 UT

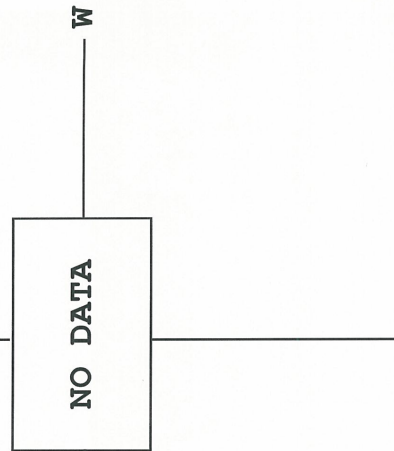
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 29, 2007
1705 UT, Good
Bp = 07.1
Po = 20.3
Lo = 160.2



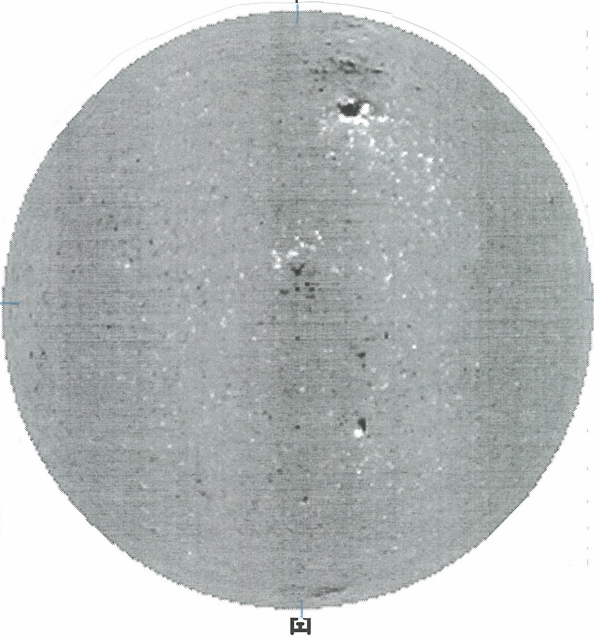
1705UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----



AUGUST 30, 2007 (P= 20.43, Bo= 7.15, Lo= 156.46)

KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -



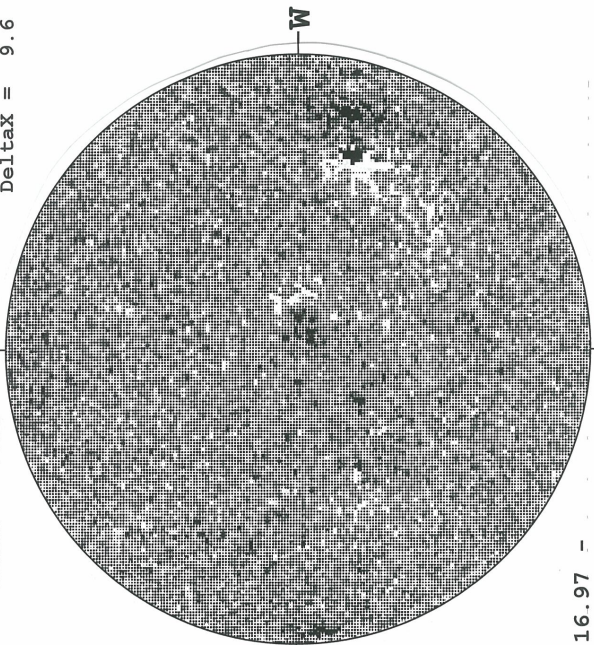
1817 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -



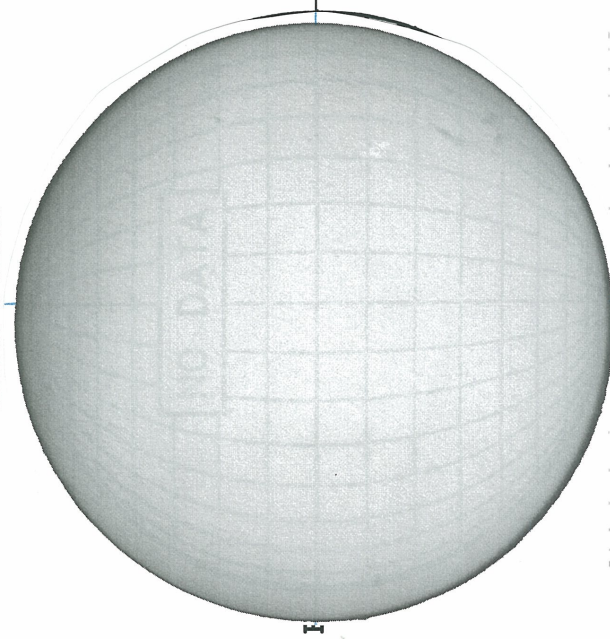
2051 UT

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



16.97 -
17.90 UT

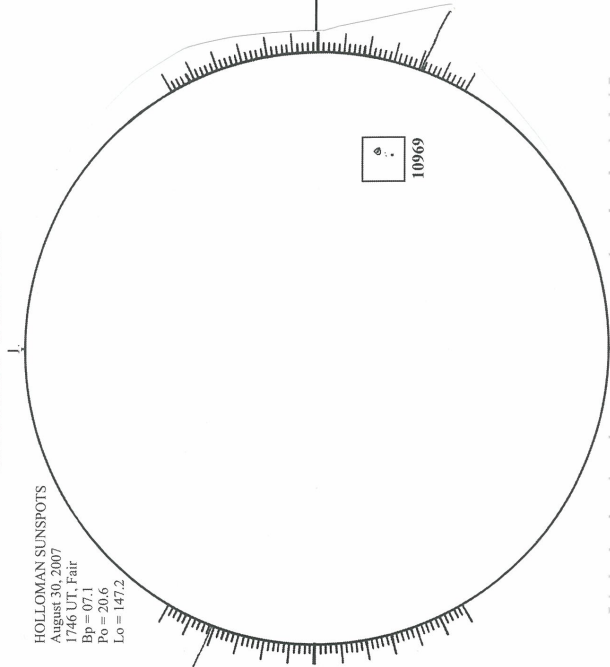
MEUDON H-ALPHA



0813 UT

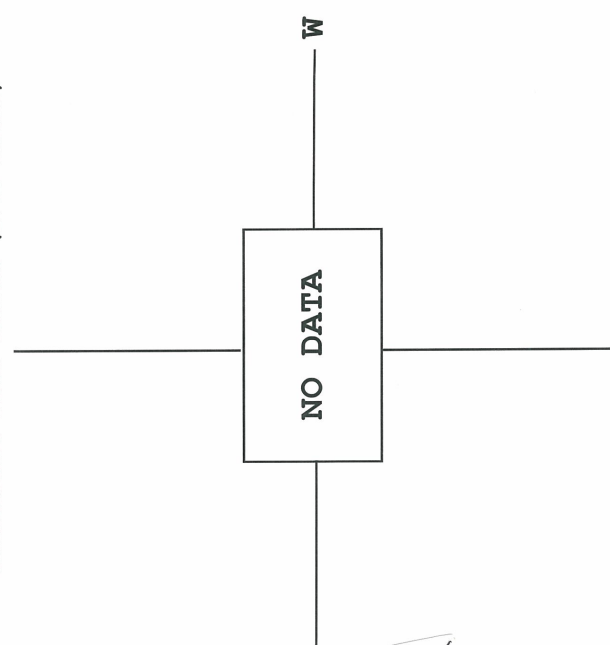
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
August 30, 2007
1746 UT: Fair
Bp = 07.1
Po = 20.6
Lo = 147.2



1746 UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----



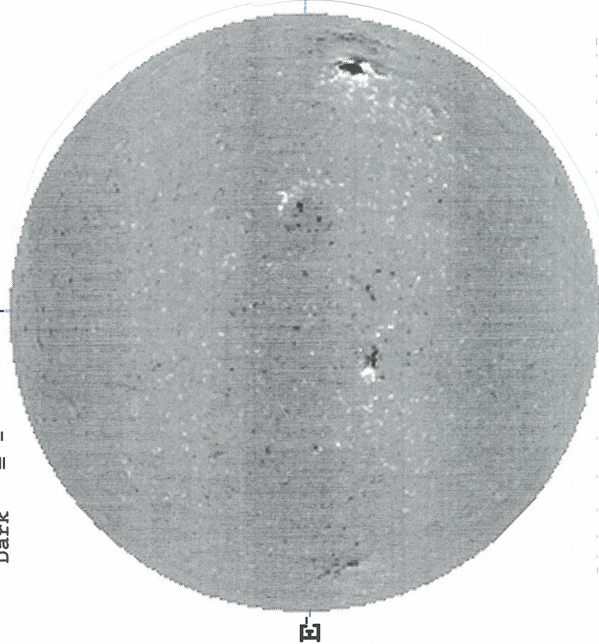
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AUGUST 31, 2007 (P= 20.70, Bo= 7.17, Io= 143.25)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

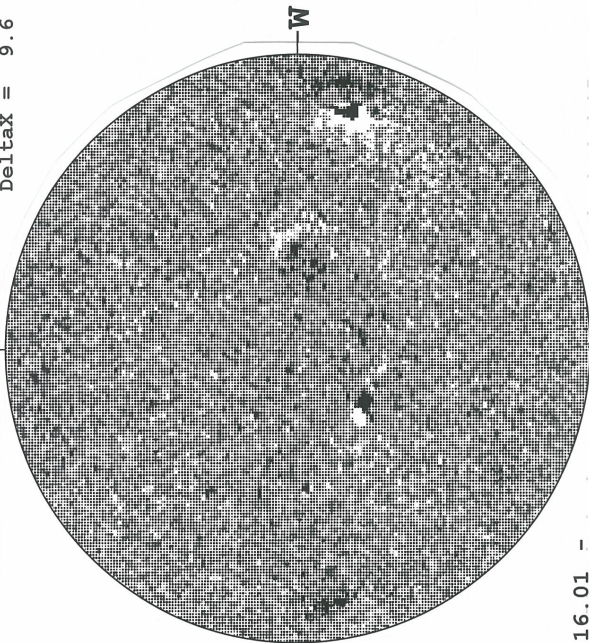
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



1735 UT

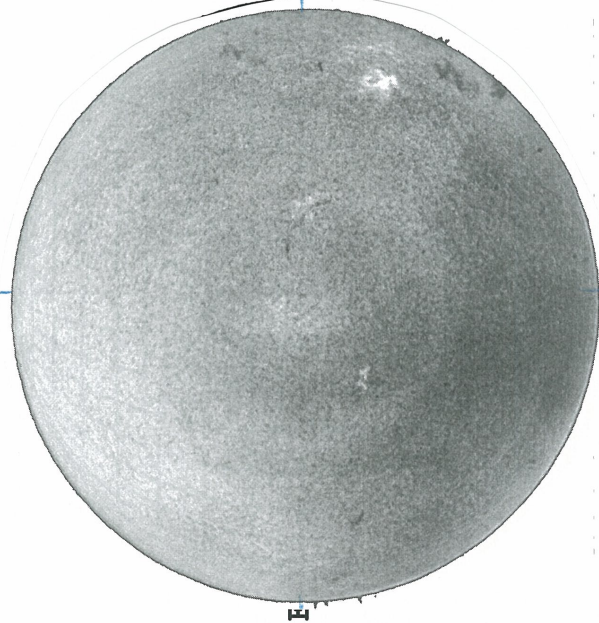


1819 UT



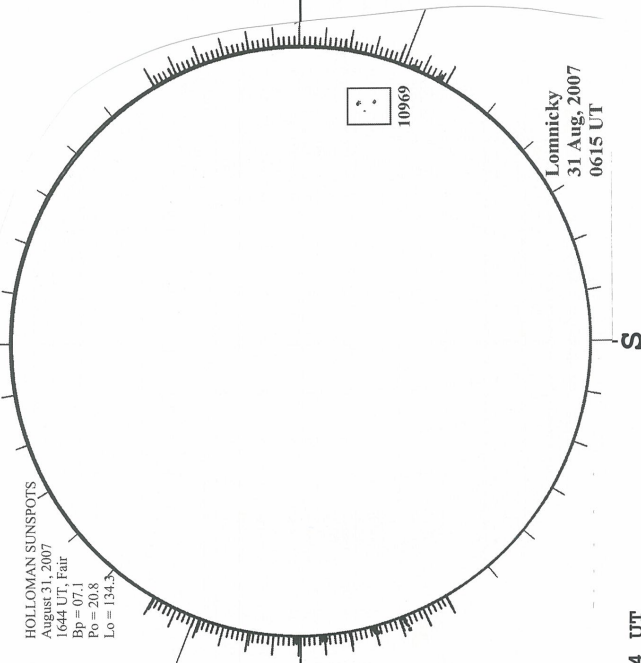
16.01 -
16.94 UT

--- KANZELHOHE H-ALPHA



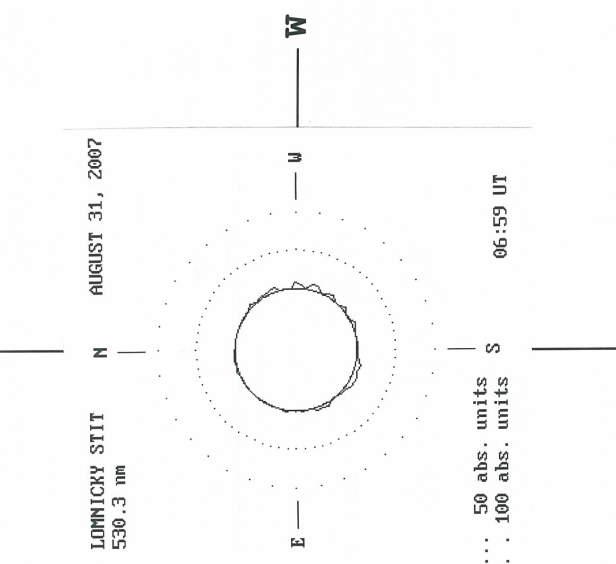
1308UT

HOLLOMAN SUNSPOTS



1644 UT
0615 UT LOMN PROM

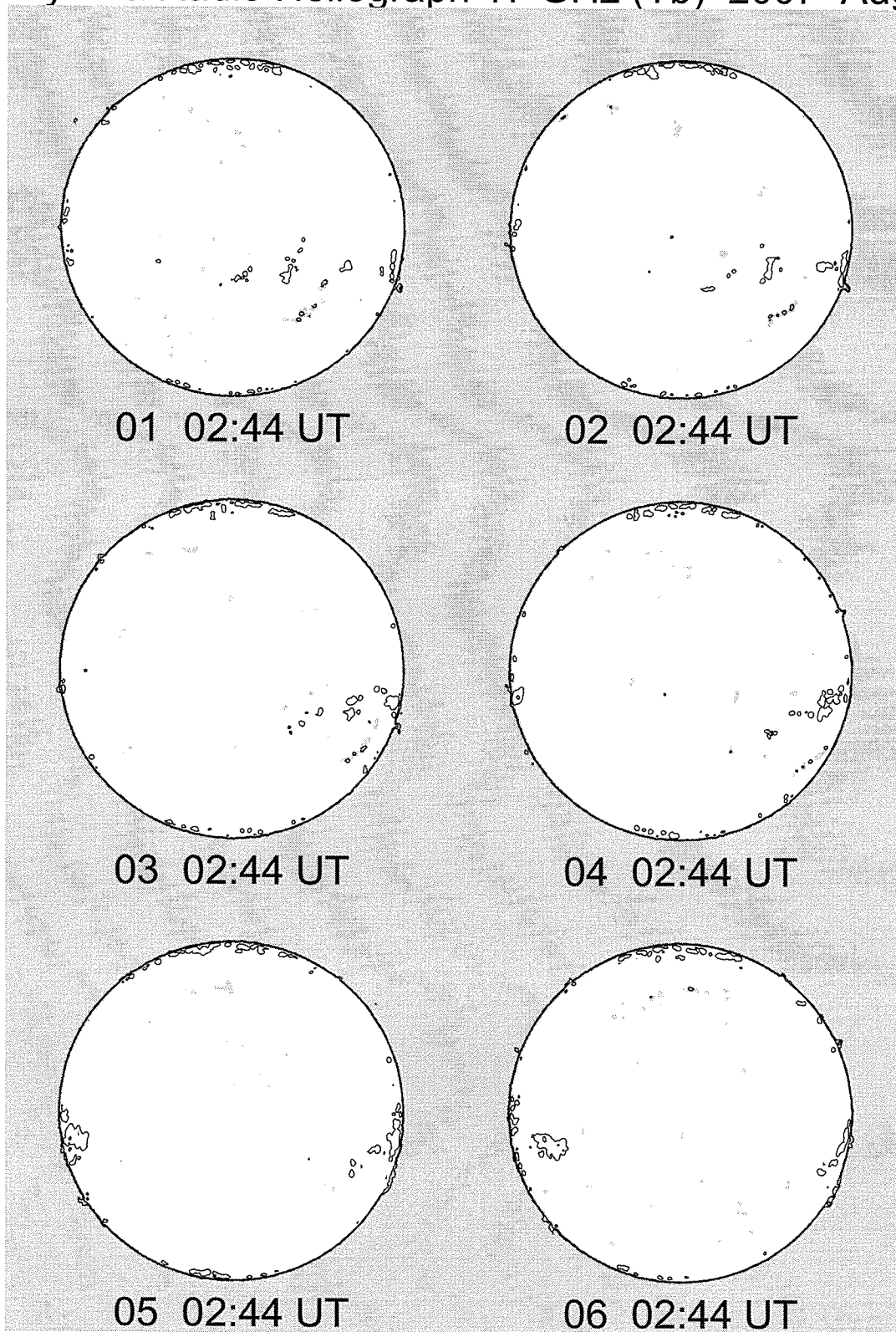
LOMNICKY PEAK CORONA (1.04 Radii) -----



06:59 UT

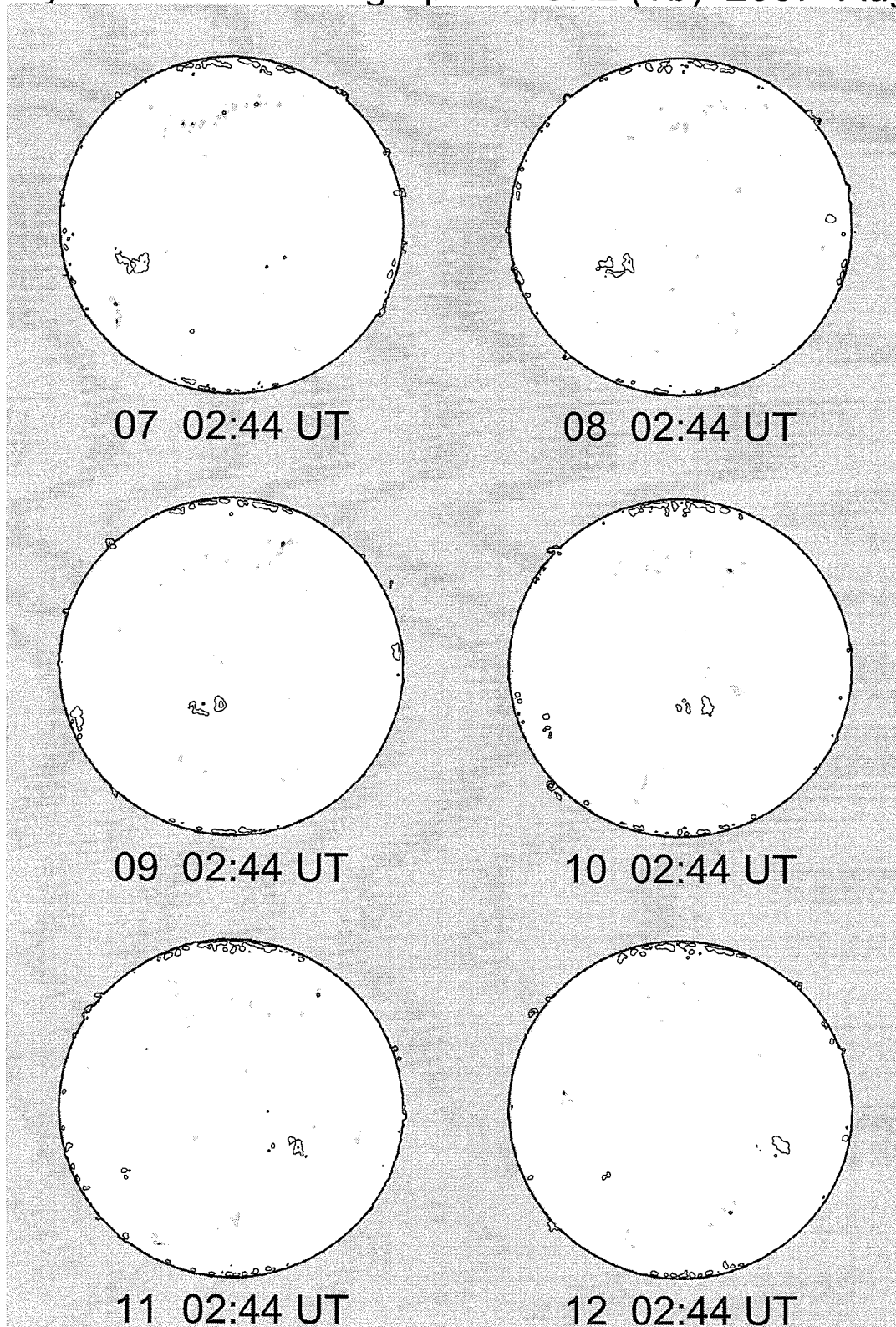
LOMNICKY STIT
530.3 nm
AUGUST 31, 2007

Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



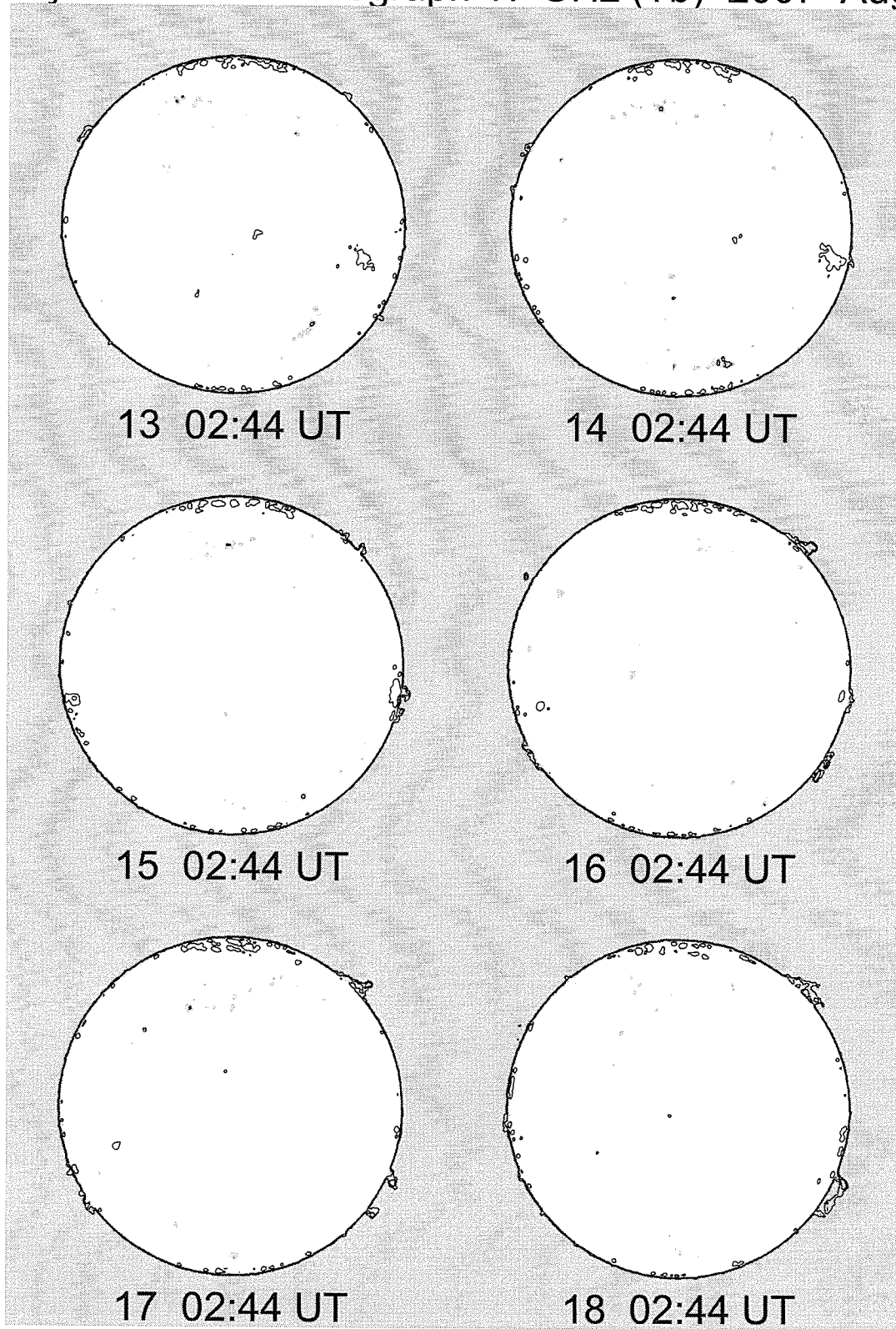
Contour Levels Tb=[5,8,12,20,50,100] x 10³ K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



Contour Levels Tb=[5,8,12,20,50,100] x 10³ K
Grey level Tb ≤ 9,500 K

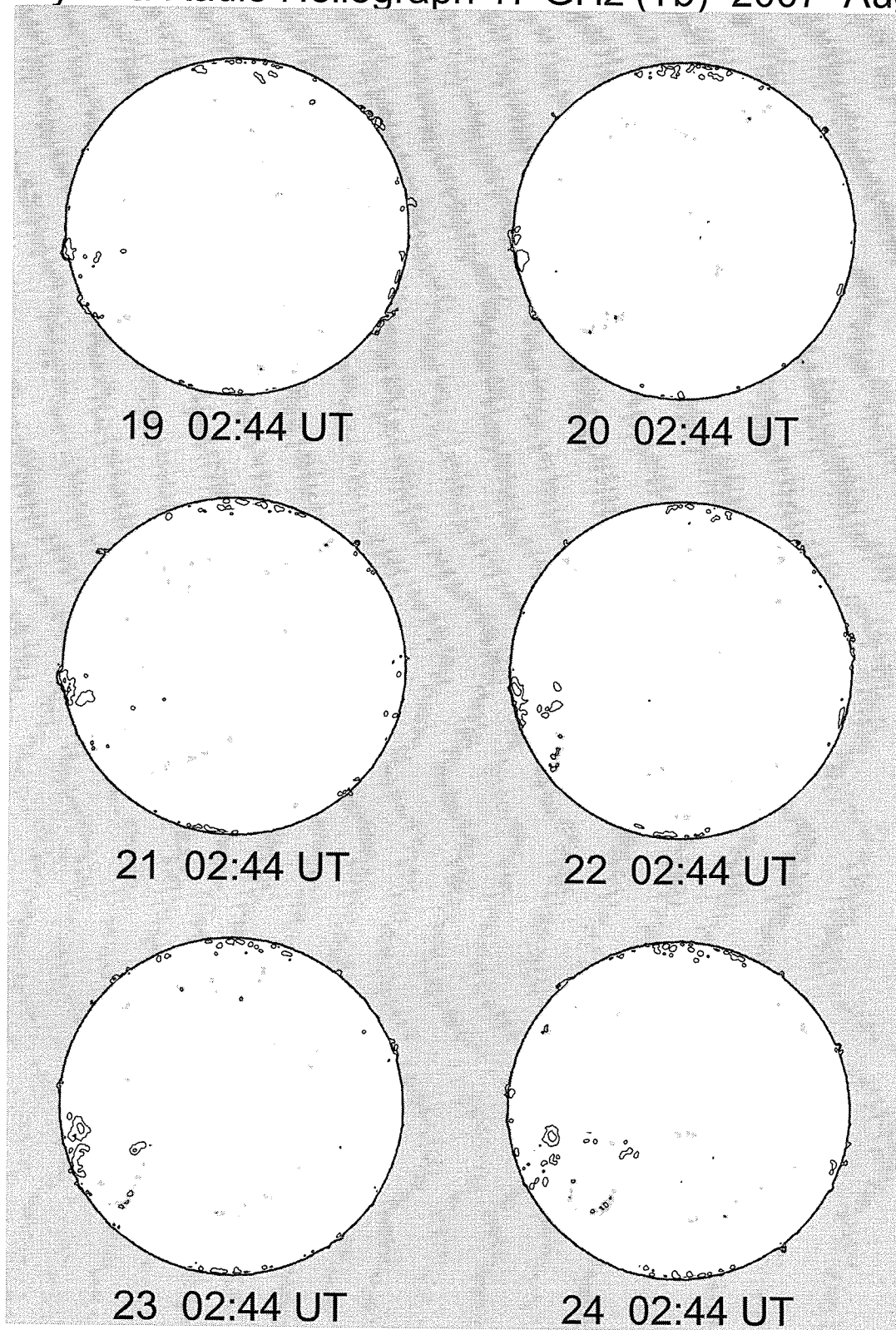
Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



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

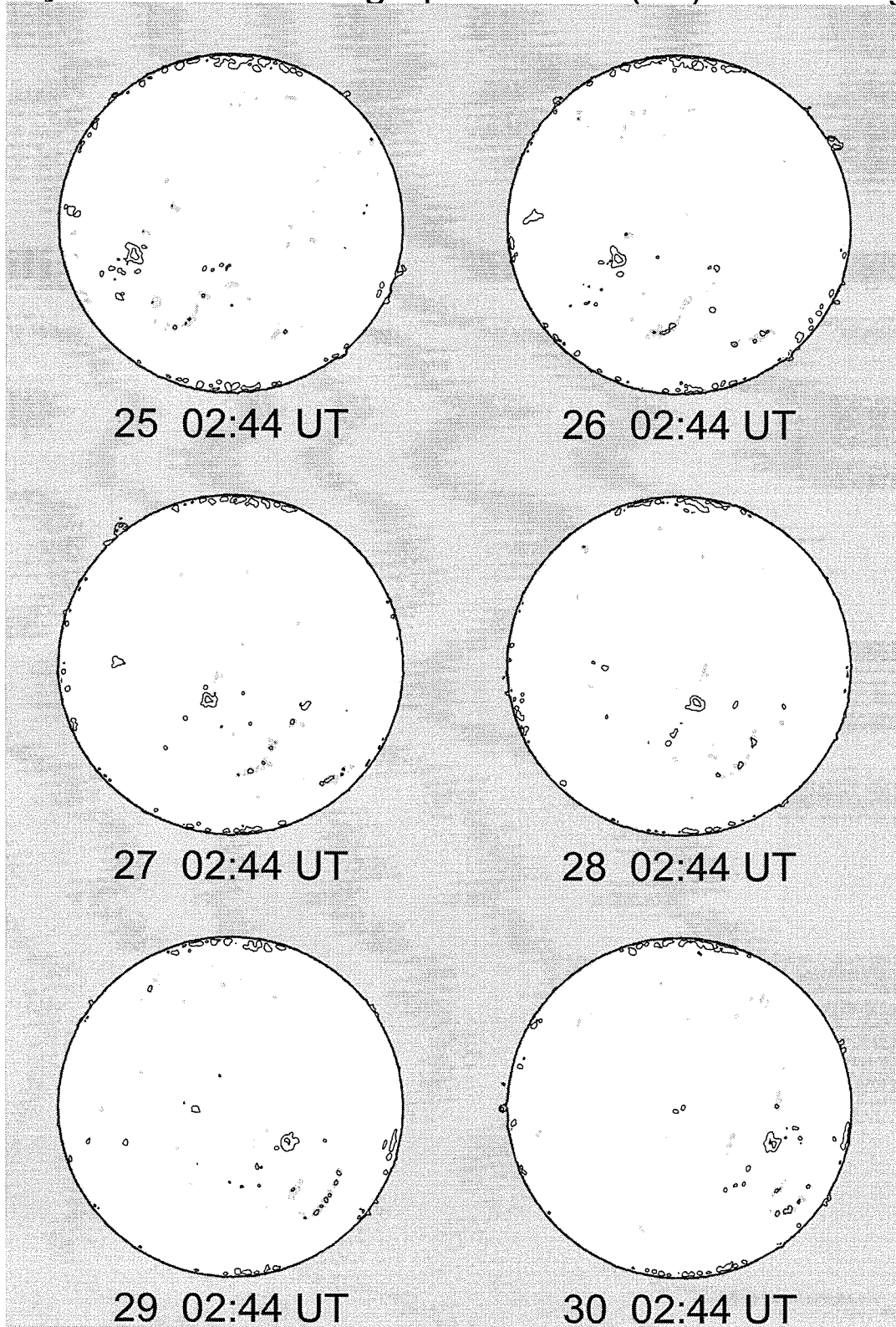
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Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



Contour Levels Tb=[5,8,12,20,50,100] x 10³ K
Grey level Tb ≤ 9,500 K

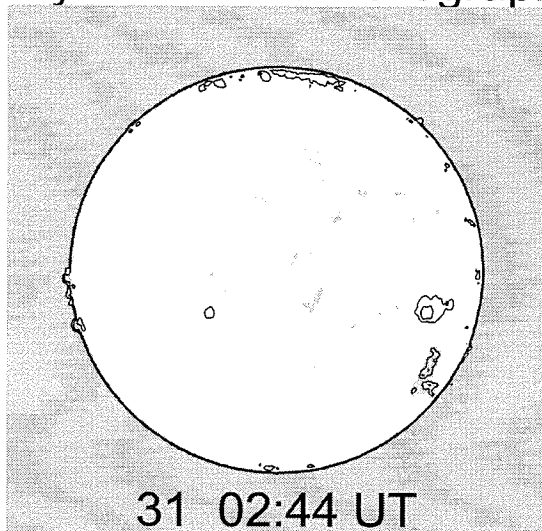
Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



Contour Levels Tb=[5,8,12,20,50,100] x 10³ K
Grey level Tb ≤ 9,500 K

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Nobeyama Radio Heliograph 17 GHz (Tb) 2007 August



Contour Levels Tb=[5,8,12,20,50,100] x 10³ 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)

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AUGUST 2007

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time		Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10966		HOLL	08	03	1629	S04 E78	08	9.5		A	HSX	10	1	1	4
10966		LEAR	08	04	0138	S07 E73	08	9.5		A	AXX	50	1	2	2
10966		TACH	08	04	0606	S05 E70	08	9.5			AXX	15	1	1	4
10966		KAND	08	04	0805	S06 E71	08	9.6			HS		1	2	2
10966		HOLL	08	04	1623	S04 E66	08	9.6		A	HSX	20	1	2	3
10966		PURP	08	05	0038	S06 E60	08	9.5			HSX	13	1	1	3
10966		LEAR	08	05	0121	S07 E57	08	9.3		A	AXX	20	1	2	3
10966		VORO	08	05	0211	S07 E58	08	9.4			AXX	22	1		3
10966		TACH	08	05	0520	S04 E55	08	9.3			AXX	18	1	1	4
10966		SVTO	08	05	0630	S06 E56	08	9.5		A	HSX	20	1	2	2
10966		KAND	08	05	1205	S06 E54	08	9.5			AX		2	1	2
10966		HOLL	08	05	1920	S04 E49	08	9.5		A	HSX	20	1	2	3
10966		VORO	08	05	2312	S05 E46	08	9.4			AXX	14	1		3
10966		LEAR	08	06	0123	S07 E46	08	9.5		A	HRX	30	1	1	2
10966		PURP	08	06	0600	S06 E44	08	9.5			HRX	6	1	1	3
10966		SVTO	08	06	0620	S05 E44	08	9.5		A	HSX	20	1	2	2
10966		TACH	08	06	0725	S04 E41	08	9.4			AR	21	2	2	3
10966		KAND	08	06	0730	S07 E42	08	9.4			CSI		6	3	4
10966		HOLL	08	06	1416	S06 E38	08	9.4		B	DAO	40	6	4	4
10966		VORO	08	06	2342	S06 E33	08	9.4			AXX	16	1		3
10966		PURP	08	07	0036	S06 E33	08	9.5			CSO	10	2	2	3
10966		LEAR	08	07	0315	S06 E32	08	9.5		B	CAO	20	2	2	2
10966		TACH	08	07	0510	S04 E30	08	9.4			AXX	21	1	1	3
10966		SVTO	08	07	0621	S07 E29	08	9.4		A	HSX	10	1	1	3
10966		KAND	08	07	1055	S06 E27	08	9.5			CSO		5	3	4
10966		HOLL	08	07	1539	S06 E25	08	9.5		A	HSX	20	4	3	4
10966		VORO	08	08	0008	S06 E20	08	9.5			AXX	13	1		3
10966		PURP	08	08	0046	S06 E20	08	9.5			HSX	11	2	1	3
10966		LEAR	08	08	0204	S05 E19	08	9.5		B	CSO	30	4	3	3
10966		TACH	08	08	0613	S04 E16	08	9.4			AR	11	3	2	4
10966		KAND	08	08	0650	S05 E16	08	9.5			BXO		4	2	2
10966		SVTO	08	08	0715	S07 E15	08	9.4		B	DSO	30	5	4	3
10966		HOLL	08	08	1614	S05 E11	08	9.5		B	DSO	60	4	3	3
10966		VORO	08	08	2204	S06 E07	08	9.4			BAO	24	3	1	3
10966		LEAR	08	09	0110	S06 E05	08	9.4		B	BXO	20	3	2	3
10966		PURP	08	09	0231	N05 W76	08	3.4			AXX	8	1	1	3
10966		PURP	08	09	0231	S06 E06	08	9.5			DSO	9	2	1	3
10966		TACH	08	09	0537	S04 E04	08	9.5			BXO	11	2	1	5
10966		SVTO	08	09	0710	S06 E03	08	9.5		B	BXO	30	4	4	2
10966		KAND	08	09	0715	S05 E02	08	9.4			CAO		6	2	3
10966		HOLL	08	09	1558	S06 W03	08	9.4		B	DSO	60	4	4	3
10966		VORO	08	09	2212	S05 W06	08	9.5			BAO	20	3	1	3
10966		LEAR	08	10	0040	S06 W08	08	9.4		B	BXO	30	3	3	3
10966		PURP	08	10	0240	S06 W08	08	9.5			CSO	9	3	1	3
10966		TACH	08	10	0605	S04 W10	08	9.5			BXO	13	2	2	5
10966		SVTO	08	10	0655	S07 W12	08	9.4		B	BXO	30	3	4	2
10966		KAND	08	10	0755	S06 W12	08	9.4			CRO		5	3	2
10966		HOLL	08	10	1806	S05 W16	08	9.5		B	CRO	20	4	3	3
10966		PURP	08	11	0235	S06 W21	08	9.5			CSO	7	2	3	3
10966		LEAR	08	11	0235	S06 W21	08	9.5		B	BXO	30	3	3	3
10966		KAND	08	11	0733	S07 W25	08	9.4			HR		1		3
10966		SVTO	08	11	0819	S08 W26	08	9.4		A	HSX	10	1	1	3
10966		HOLL	08	11	1635	S09 W30	08	9.4		B	BXO	20	3	3	4
10966		VORO	08	12	0052	S07 W34	08	9.5			AXX	4	1		3
10966		LEAR	08	12	0150	S06 W35	08	9.4		A	AXX	10	1	1	3
10966		PURP	08	12	0423	S06 W36	08	9.5			AXX	3	1	1	2
10966		PURP	08	13	0055	S06 W47	08	9.5			BXO	3	1	1	3
10968		SVTO	08	12	0832	N04 E03	08	12.6		A	HSX	10	1	1	3
10968		KAND	08	12	1152	N02 E00	08	12.5			AX		1		4
10968		HOLL	08	12	1642	N03 W02	08	12.5		B	BXO	20	2	4	3
10968		LEAR	08	13	0155	N04 W07	08	12.5		B	BXO	20	3	3	3
10968		SVTO	08	13	0705	N02 W12	08	12.4		B	DSO	30	3	4	3
10968		KAND	08	13	0730	N03 W09	08	12.6			AX		1		3
10968		HOLL	08	13	1449	N04 W12	08	12.7		A	AXX	10	2	1	4
10968		PURP	08	14	0125	N03 W19	08	12.6			BXO	2	2	3	3
10968		SVTO	08	14	0716	N05 W19	08	12.9		B	DRO	40	4	6	3
10968B		PURP	08	16	0048	S10 W26	08	14.1			BXO	2	2	2	3

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S U N S P O T G R O U P S
(Ordered by Central Meridian Passage Date)

AUGUST 2007

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time			Lat	CMP	Max	Mag	Spot	Corrected Area	Spot	Long. Extent	Qual	
			Mo	Day	(UT)	CMD	Mo	Day	H	Class	(10-6 Hemi)	Count	(Deg)		
10968A		LEAR	08	15	0130	S10 E67	08	20.1		A	AXX	30	1	1	3
10969		PURP	08	21	0235	S06 E85	08	27.5			HSX	97	1	2	3
10969		SVTO	08	21	0735	S07 E82	08	27.4		B	DAO	60	2	9	3
10969		KAND	08	21	0755	S06 E85	08	27.7			HS		1	4	3
10969		HOLL	08	21	1620	S04 E77	08	27.4		A	HHX	120	1	7	3
10969		VORO	08	21	2207	S05 E74	08	27.4			HAX	144	1		3
10969		LEAR	08	22	0153	S05 E71	08	27.4		A	HHX	140	1	3	3
10969		PURP	08	22	0235	S06 E72	08	27.5			HSX	90	1	2	3
10969		KAND	08	22	0825	S06 E69	08	27.5			HA		2	2	4
10969		SVTO	08	22	1045	S06 E69	08	27.6		A	HSX	100	2	3	3
10969		HOLL	08	22	1919	S06 E64	08	27.6		A	HAX	80	2	2	3
10969		VORO	08	22	2211	S05 E61	08	27.5			HKX	196	2		3
10969		LEAR	08	23	0147	S05 E58	08	27.4		A	HAX	110	2	2	3
10969		PURP	08	23	0300	S06 E59	08	27.5			HSX	100	2	2	2
10969		SVTO	08	23	0723	S05 E56	08	27.5		A	HSX	70	2	3	2
10969		KAND	08	23	1245	S06 E54	08	27.6			HA		2	2	5
10969		HOLL	08	23	1610	S04 E51	08	27.5		B	CKO	100	4	4	3
10969		VORO	08	23	2256	S05 E47	08	27.5			HAX	163	4		3
10969		PURP	08	24	0122	S05 E48	08	27.6			CAO	98	3	3	4
10969		LEAR	08	24	0152	S06 E46	08	27.5		A	HAX	90	3	2	3
10969		KAND	08	24	0620	S06 E43	08	27.5			HA		2	2	4
10969		TACH	08	24	0906	S04 E42	08	27.5			HA	77	2	1	5
10969		SVTO	08	24	0907	S05 E43	08	27.6		A	HSX	50	2	3	2
10969		HOLL	08	24	1854	S05 E37	08	27.5		B	CKO	120	3	3	4
10969		VORO	08	24	2214	S05 E34	08	27.5			HAX	152	5		3
10969		PURP	08	25	0055	S05 E34	08	27.6			HSX	95	2	2	3
10969		LEAR	08	25	0114	S05 E33	08	27.5		B	CKO	110	4	4	3
10969		KAND	08	25	0715	S05 E31	08	27.6			HA		2	2	3
10969		SVTO	08	25	0745	S05 E30	08	27.6		A	HSX	120	3	3	2
10969		TACH	08	25	0750	S04 E30	08	27.6			HA	85	2	2	4
10969		HOLL	08	25	1604	S05 E26	08	27.6		B	CSO	90	4	4	3
10969		VORO	08	25	2152	S05 E21	08	27.5			HAX	138	2		3
10969		LEAR	08	26	0115	S05 E21	08	27.6		B	CSO	90	6	4	3
10969		TACH	08	26	0513	S04 E19	08	27.6			CAO	81	3	2	4
10969		SVTO	08	26	0649	S05 E16	08	27.5		A	HSX	80	3	4	2
10969		KAND	08	26	1030	S06 E15	08	27.6			HA		2	2	5
10969		HOLL	08	26	1634	S05 E12	08	27.6		A	HHX	80	2	3	2
10969		VORO	08	26	2254	S05 E08	08	27.5			HAX	119	2		3
10969		LEAR	08	27	0128	S05 E07	08	27.6		A	HAX	100	2	2	3
10969		TACH	08	27	0614	S05 E07	08	27.8			CSO	95	2	3	4
10969		SVTO	08	27	0620	S05 E04	08	27.6		A	HSX	100	1	3	3
10969		KAND	08	27	0710	S06 E04	08	27.6			HA		2	2	3
10969		VORO	08	27	2244	S05 W05	08	27.6			HAX	125	1		3
10969		LEAR	08	28	0127	S05 W07	08	27.5		A	HSX	90	1	2	3
10969		TACH	08	28	0545	S04 W07	08	27.7			CSO	82	2	3	4
10969		KAND	08	28	1105	S05 W12	08	27.6			CAO		5	4	2
10969		HOLL	08	28	1426	S05 W14	08	27.5		B	CHO	120	6	4	4
10969		VORO	08	28	2256	S05 W18	08	27.6			HAX	106	2		3
10969		LEAR	08	29	0111	S05 W19	08	27.6		B	CSO	90	3	3	3
10969		TACH	08	29	0405	S05 W20	08	27.7			HA	109	2	2	5
10969		SVTO	08	29	0740	S04 W22	08	27.7		A	HSX	100	2	3	3
10969		KAND	08	29	0755	S06 W22	08	27.7			HA		2	3	4
10969		HOLL	08	29	1705	S05 W27	08	27.7		B	CHO	100	3	4	4
10969		VORO	08	29	2219	S05 W31	08	27.6			HAX	73	2		3
10969		LEAR	08	30	0041	S05 W33	08	27.6		A	HSX	50	2	2	3
10969		SVTO	08	30	0715	S06 W36	08	27.6		A	HSX	100	2	2	3
10969		TACH	08	30	0900	S05 W36	08	27.7			HA	115	1	2	4
10969		KAND	08	30	1010	S05 W37	08	27.6			HA		2	2	4
10969		HOLL	08	30	1746	S05 W42	08	27.6		B	DHO	120	5	6	3
10969		VORO	08	30	2358	S07 W45	08	27.6			DSO	99	3	0	3
10969		KAND	08	31	0630	S06 W50	08	27.5			CAO		3	2	4
10969		SVTO	08	31	0807	S08 W51	08	27.5		B	CSO	100	3	5	3
10969		TACH	08	31	0955	S06 W49	08	27.7			BRI	19	4	4	4
10969		LEAR	08	31	1238	S06 W47	08	28.0		B	DSO	140	3	3	3
10969		HOLL	08	31	1644	S09 W55	08	27.6		B	DAO	120	6	7	3
10969		VORO	09	01	0024	S06 W58	08	27.8			BRI	29	4	4	3

SUDDEN IONOSPHERIC DISTURBANCES AUGUST 2007

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Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	Number of Station Reports by Type					Flare (UT)	X-ray Class	NOAA Region
						SWF	SEA	SPA	LF- SPA	SES			
05	1653	1710	1750	1	1		1				No flare		
06	0907	0918	0929	1-	3	1				3	0905	C1.5	10966
06	1030	1033	1110	1	1		1				No flare		
06	1529	1540	1602	1+	3					3	1524	C1.1	10966
14	1000	1011	1058	1	1		1				No flare		
17	0543	0613U	0715	1	1		1				No flare		
18	0808	0812	0826	1	1		1				No flare		
20	0510	0524	0550	1	1		1				No flare		
24	0752	0756	0829	2-	3					2	0749	C2.0	10969
24	0754	0815	0852	1	1		1				No flare		
24	0908	0920	0946	1	1		1				No flare		
24	1149	1155	1215	1	1					1	1148	B3.4	10969
27	0715	0734	0752	1	1		1				No flare		
29	1129	1138	1155	1-	1	1					No flare		
30	1500	1505	1553	1	1		1				No flare		
31	0717	0727	0753	1	1		1				No flare		
31	1534	1546U	1632	1	1		1				No flare		

OBSERVATORIES REPORTING FOR AUGUST 2007

Beauvais, France	SES	Panska Ves, Czech Republic	SES, SEA, SWF
Malboro, Massachusetts, USA	SES	Southern France	SES
Milan, Italy	SES	Upice, Czech Republic	SEA

Observations are not necessarily continuous.

* = No Flare Patrol

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Aug 07

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

AUGUST 2007

OBSERVATION			Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
Day	Start (UT)	End (UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
01	0000	0730	CULG								
	0000	0949	HIRA								
	0459	1730	ONDR								
	1938	2400	HIRA								
	2050	2400	CULG								
02	0000	0730	CULG								
	0000	0948	HIRA								
	0500	1716	ONDR								
	1939	2400	HIRA								
	2050	2400	CULG								
03	0000	0730	CULG								
	0000	0947	HIRA								
	0459	1728	ONDR								
	1940	2400	HIRA								
	2050	2400	CULG								
04	0000	0730	CULG								
	0000	0947	HIRA								
	0500	1726	ONDR								
	1941	2400	HIRA								
	2050	2400	CULG								
05	0000	0730	CULG								
	0000	0946	HIRA								
	0500	1725	ONDR								
			LEAR	0851.0	0853.0	III		1	68	90	
			LEAR	0907.0	0907.0	III		1	75	92	
			SGMR	1402.0	1403.0	III		1	30	180	
			SVTO	1402.0	1403.0	III		2	25	180	
			SGMR	1438.0	1438.0	III		1	30	127	
			SVTO	1438.0	1438.0	III		1	39U	156U	
			SGMR	1800.0	1807.0	III		1	30	180	
			PALE	1801.0	1802.0	III		1	25	138	
	1942	2400	HIRA								
	2050	2400	CULG								
06			LEAR	0002.0	0002.0	III		1	25	105	
			PALE	0002.0	0002.0	III		1	25	138	
	0000	0730	CULG	0002.0	0002.0	III	B	1	20	90	
	0000	0945	HIRA	0002.0	0002.5	III	B	1	50	170	
			LEAR	0037.0	0037.0	III		1	25	46	
			SVTO	0908.0	0911.0	III		1	28	63	
	0500	1723	ONDR	0909.3	0909.7	DCIM		2	800x	1200	
			ONDR	0911.2	0913.9	DCIM		1	800x	2000	
			LEAR	0915.0	0915.0	III		1	25	92	
			HIRA	0916.0	0921.0	II		1	50	90	
			LEAR	0916.0	0921.0	II		1	25	94	ESS 0670
			SVTO	0916.0	0921.0	II		1	28	83	ESS 0603
			ONDR	1529.6	1532.0	DCIM		1	800x	2000	
			SGMR	1536.0	1547.0	III		1	30	57	
			SVTO	1536.0	1536.0	III		1	25	78	
			ONDR	1536.1	1539.0	DCIM		1	800x	2000	
			SVTO	1602.0	1603.0	III		1	25	167	
	1943	2400	HIRA								
	2040	2400	CULG								
07	0000	0730	CULG								
	0000	0944	HIRA								
	0500	1722	ONDR								
			SVTO	0606.0	0606.0	III		1	25	62	
	1943	2400	HIRA								
	2040	2400	CULG								
08	0000	0943	HIRA								
	0000	0730	CULG	0309.0	0309.0	III	B	1	20	40	
	0500	1720	ONDR								
	1944	2400	HIRA								

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

Spectral Observations

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AUGUST 2007

OBSERVATION			Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
Day	Start (UT)	End (UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
08	2040	2400	CULG								
09	0000	0730	CULG								
	0000	0942	HIRA								
	0500	1719	ONDR								
	1945	2400	HIRA								
10	0000	0941	HIRA								
	0500	1717	ONDR								
	1945	2400	HIRA								
11	0000	0939	HIRA								
	0500	1700	ONDR								
	1946	2400	HIRA								
12	0000	0730	CULG								
	0000	0938	HIRA								
	0500	1700	ONDR								
	1947	2400	HIRA								
	2040	2400	CULG								
13	0000	0730	CULG								
	0000	0937	HIRA								
	0501	1713	ONDR								
	1948	2400	HIRA								
	2040	2400	CULG								
14	0000	0730	CULG								
	0000	0936	HIRA								
	0502	1711	ONDR								
			SGMR	1436.0	1436.0	III		1	30	46	
			SVTO	1436.0	1436.0	III		1	25	57	
	1948	2400	HIRA								
	2040	2400	CULG								
15	0000	0730	CULG								
	0504	1709	ONDR								
			SVTO	0627.0	0627.0	III		1	30	74	
	0000	0934	HIRA	0627.0	0627.5	III	B	1	25X	40	
	1949	2400	HIRA								
	2040	2400	CULG								
16	0000	0933	HIRA								
			LEAR	0210.0	0210.0	III		1	25	66	
	0000	0730	CULG	0211.0	0211.0	III	B	1	20	50	
			CULG	0238.0	0238.0	III	B	1	30	70	
			LEAR	0238.0	0238.0	III		1	25	52	
			LEAR	0245.0	0254.0	III		1	25	44	
			CULG	0246.0	0246.0	III	B	1	20	70	
			CULG	0254.0	0254.0	III	B	1	20	50	
	0505	1707	ONDR								
	1950	2400	HIRA								
	2040	2400	CULG								
17	0000	0730	CULG								
	0000	0932	HIRA								
	0506	1706	ONDR								
			LEAR	0851.0	0851.0	III		1	27	177	
			SVTO	0948.0	0949.0	III		1	25	57	
	1951	2400	HIRA								
			LEAR	2305.0	2305.0	III		1	25	70	
			PALE	2305.0	2305.0	III		1	25	62	
	2040	2400	CULG	2305.0	2306.0	III	G	1	20	75	
18	0000	0730	CULG								
	0000	0931	HIRA								
	0508	1704	ONDR								
	1952	2400	HIRA								
	2040	2400	CULG								

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

AUGUST 2007

Day	OBSERVATION		Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
	Start (UT)	End (UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
19	0000	0740	CULG								
	0000	0930	HIRA								
	0509	1702	ONDR								
	1953	2400	HIRA								
	2030	2400	CULG								
20	0000	0740	CULG								
	0000	0929	HIRA								
	0510	1700	ONDR								
	1954	2400	HIRA								
	2030	2400	CULG								
21	0000	0740	CULG								
	0000	0928	HIRA								
	0511	1659	ONDR								
	1358	1720	POTS								
	1955	2400	HIRA								
	2030	2400	CULG								
22	0000	0740	CULG								
	0000	0927	HIRA								
	0513	1657	ONDR								
	0508	1720	POTS	1332.3	1333.3	III	GG	2	200U	380	
			SGMR	1418.0	1418.0	III		1	30	57	
			POTS	1625.5	1625.8	III	G	1	200U	320	
	1956	2400	HIRA								
	2030	2400	CULG								
23	0000	0740	CULG								
	0000	0925	HIRA								
	0508	1720	POTS								
	0514	1655	ONDR								
	1957	2400	HIRA								
	2030	2400	CULG								
24	0000	0924	HIRA								
		LEAR	0001.0	0001.0	III			1	25	101	
	0000	0740	CULG	0002.0	0002.0	III	B	1	18	90	
		LEAR	0326.0	0326.0	III			1	35	75	
	0508	1720	POTS								
	0515	1653	ONDR								
	1958	2400	HIRA								
	2030	2400	CULG								
25	0000	0740	CULG								
	0000	0922	HIRA								
	0517	1651	ONDR								
	0508	1720	POTS	0528.4	0528.6	III	B	2	240	380	
	1958	2400	HIRA								
	2030	2400	CULG								
26	0000	0740	CULG								
	0000	0920	HIRA								
	0515	1708	POTS								
	0518	1649	ONDR								
	1959	2400	HIRA								
	2020	2400	CULG								
27	0000	0740	CULG								
	0000	0918	HIRA								
	0518	0948	POTS								
	0520	1647	ONDR								
	1317	1755	POTS								
	2000	2400	HIRA								
	2020	2400	CULG								
28	0000	0740	CULG								
	0000	0917	HIRA								
	0420	1752	POTS								

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

Spectral Observations

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AUGUST 2007

OBSERVATION				EVENT			FREQUENCY			Remarks
Start	End	Sta	Start	End	Spectral	Event	Int	Lower	Upper	
Day	(UT)		(UT)	(UT)	(UT)	Class	Remarks	(1-3)	(MHz)	(MHz)
28	0521	1645	ONDR							
	2000	2400	HIRA							
	2020	2400	CULG							
29	0000	0740	CULG							
	0000	0916	HIRA							
	0423	1749	POTS							
	0522	1643	ONDR							
	2001	2400	HIRA							
	2210	2400	CULG							
30	0000	0740	CULG							
	0000	0915	HIRA							
	0423	1746	POTS							
	0524	1642	ONDR							
	2002	2400	HIRA							
	2020	2400	CULG							
31	0000	0740	CULG							
	0000	0914	HIRA							
	0423	1743	POTS							
	0525	1639	ONDR							
			SVTO	0635.0	0647.0	III	N	1	25	118
	2003	2400	HIRA							
	2020	2400	CULG							

Event Remarks:

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

AUGUST 2007

	HELIOGRAPHICS POSITIONS MEAN VALUES ¹		IMP ²	OBSERVING TIME ³	
DAY	E-W	S-N		START(UT)	END(UT)
06/08/07	-0.79	-0.19	I	9H08	14H15

SOLAR RADIO NOISE STORM AT 327 MHZ

FROM NANÇAY RADIOHELIOGRAPH

AUGUST 2007

	HELIOGRAPHICS POSITIONS MEAN VALUES ¹		IMP ²	OBSERVING TIME ³	
DAY	E-W	S-N		START(UT)	END(UT)

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 more 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 of the very strong other source

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 NANÇAY OBSERVATIONS

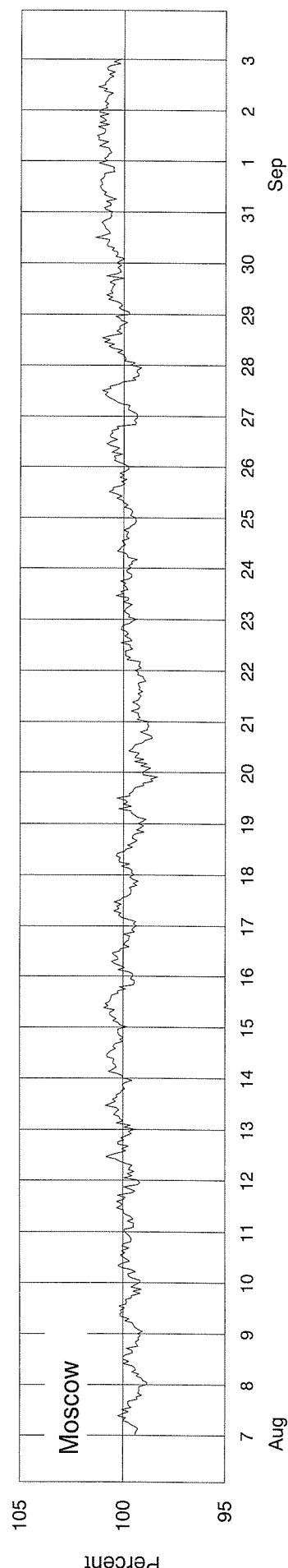
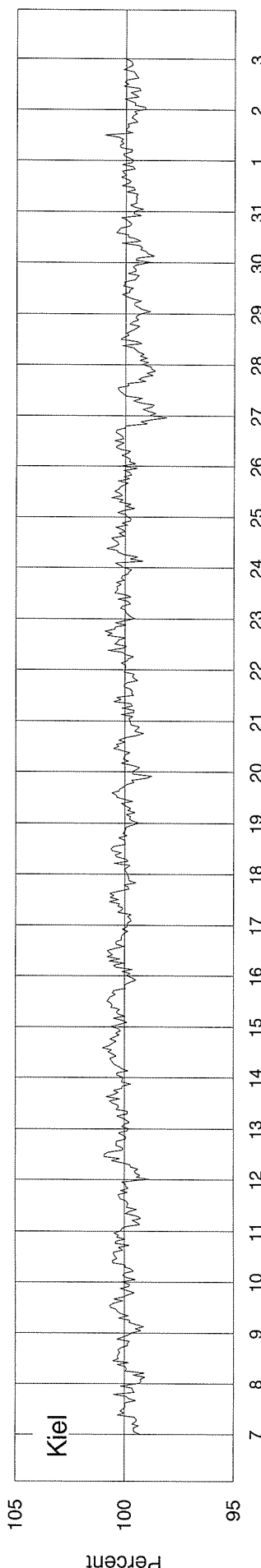
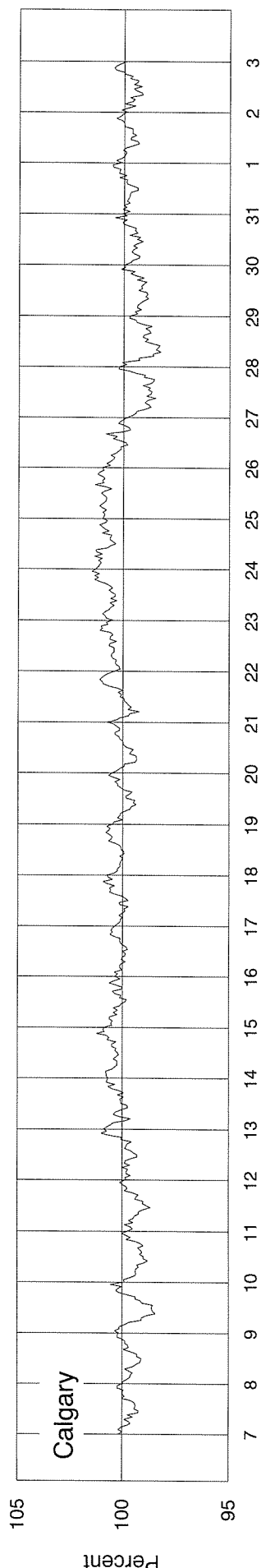
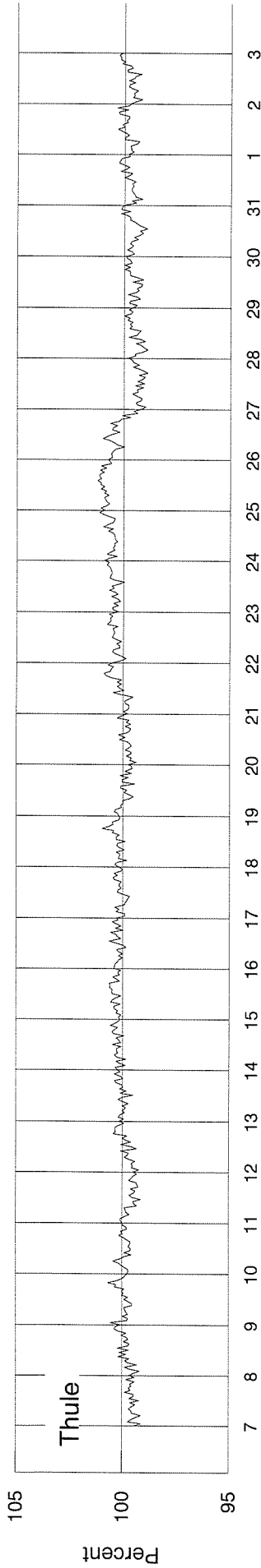
COSMIC RAY INDICES
(Neutron Monitor)
August 2007

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	4549.3	3969.0	6285.7	9461.1		2001.5	
2	4551.1	3983.7	6297.5	9456.0		2003.3	
3	4540.9	3984.7	6284.1	9461.5		1993.9	
4	4550.0	3989.5	6285.5	9489.2		2007.5	
5	4560.3	3996.8	6299.1	9496.5		2008.8	
6	4566.0	4004.2	6317.0	9488.5		2004.0	
7	4539.5	3977.0	6296.3	9429.7	data not available	1996.0	data not available
8	4553.6	3972.5	6303.5	9417.7		2006.9	
9	4559.5	3966.3	6307.5	9438.1		2002.1	
10	4555.3	3960.5	6319.8	9448.9		2008.0	
11	4542.7	3964.2	6301.0	9451.2		2003.2	
12	4552.9	3980.7	6311.3	9464.2		2000.8	
13	4562.6	3996.0	6322.3	9483.7		2007.3	
14	4572.3	4007.7	6337.7	9504.6		2006.5	
15	4576.3	3998.5	6327.4	9497.2		2002.0	
16	4572.0	3991.7	6325.5	9467.0		2000.0	
17	4566.2	3995.8	6314.7	9454.5		1997.3	
18	4574.0	3999.2	6316.4	9440.9		1993.5	
19	4558.1	3986.0	6299.7	9413.7		1982.5	
20	4551.9	3984.2	6299.3	9382.7		1999.0	
21	4569.0	3995.3	6300.0	9396.2		1998.0	
22	4578.7	4008.0	6324.0	9441.8		1995.2	
23	4581.9	4017.5	6312.9	9455.2		1997.7	
24	4588.0	4023.2	6319.3	9449.7		2001.5	
25	4603.5	4024.3	6313.4	9471.2		1997.4	
26	4576.8	3997.3	6303.2	9492.5		2002.3	
27	4528.5	3948.5	6267.8	9467.2		2002.8	
28	4538.0	3947.5	6282.0	9493.9		2005.7	
29	4541.3	3958.0	6287.6	9503.5		1990.0	
30	4543.3	3970.2	6286.5	9534.1		1996.0	
31	4550.4	3982.7	6295.6	9552.1		2010.5	
Mean	4559.0	3986.5	6304.6	9464.7		2000.7	

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.

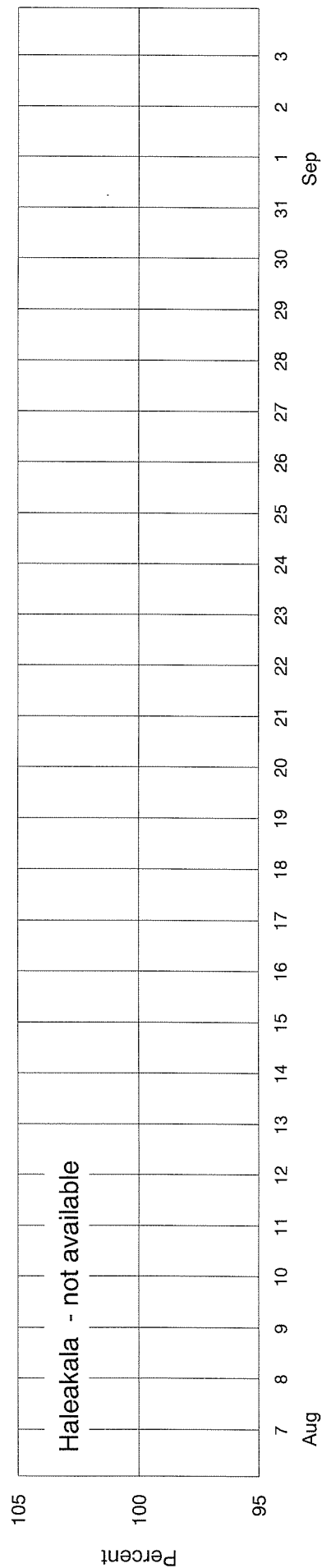
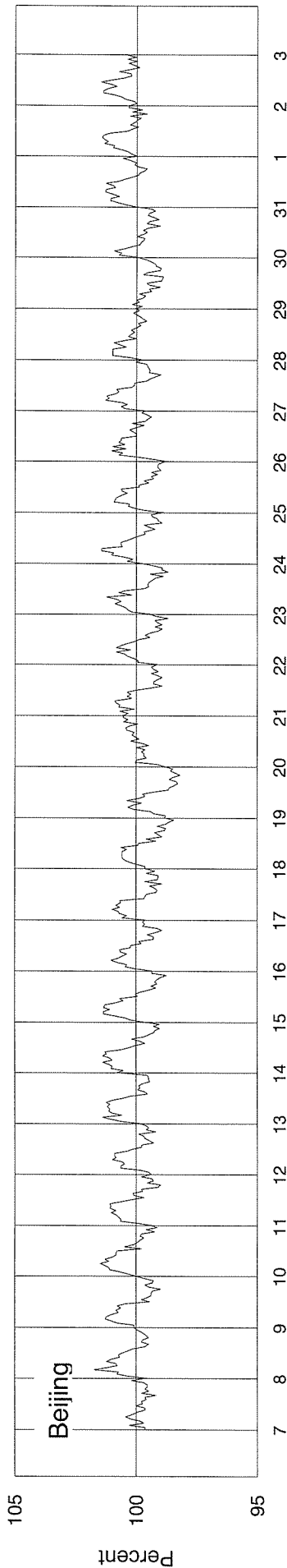
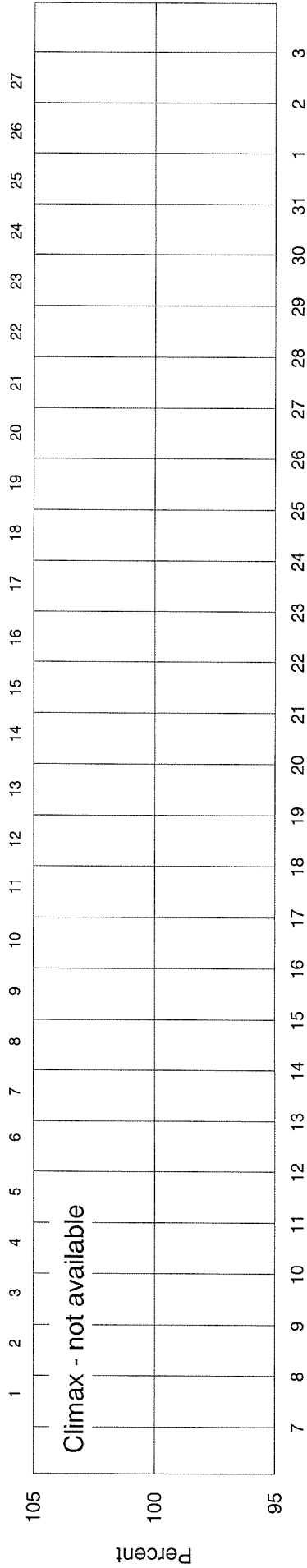
COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2375 - Beginning 7 Aug 2007

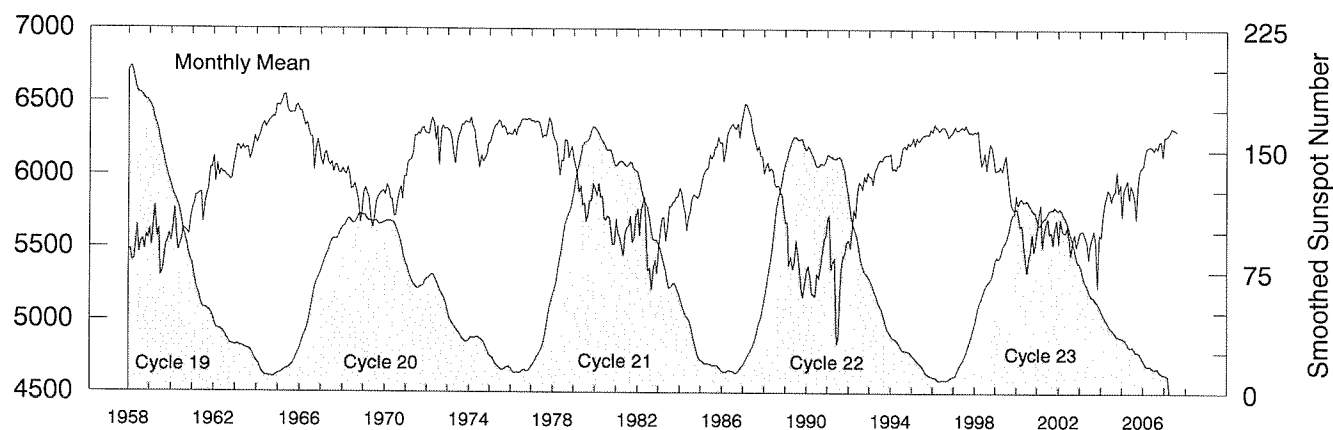


COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2375 - Beginning 7 Aug 2007



Kiel Neutron Monitor Pressure-Corrected Values Jan 1958 - Aug 2007



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					6298

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

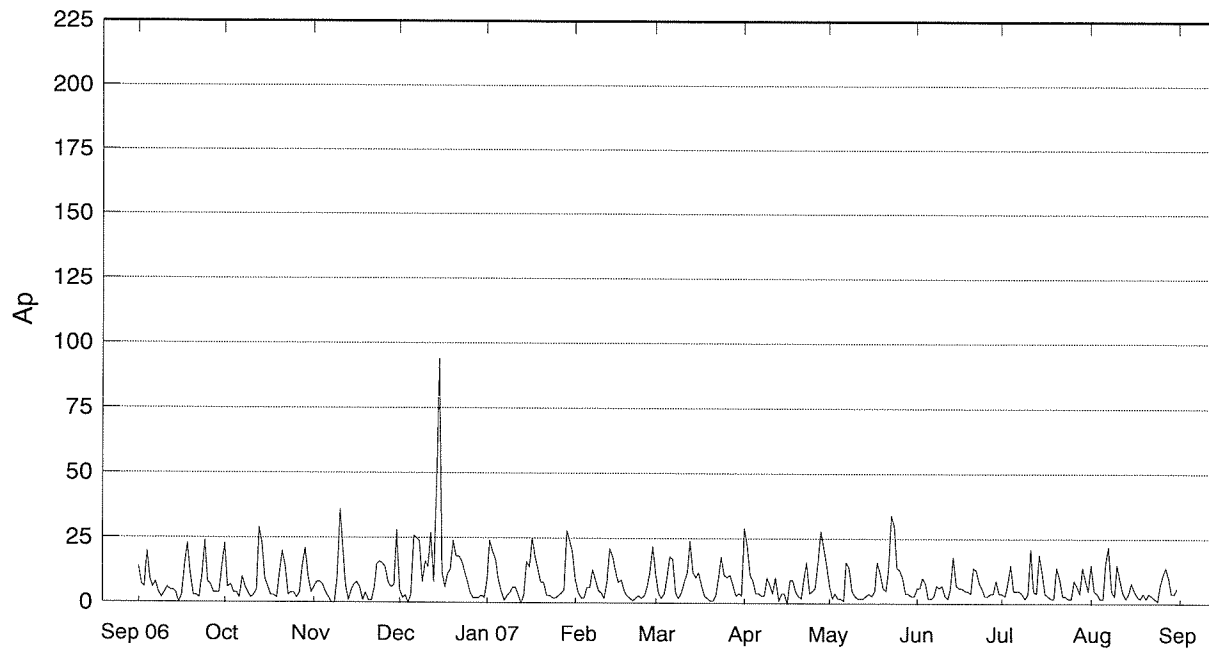
Geomagnetic Activity Indices

August 2007

89
Aug 07

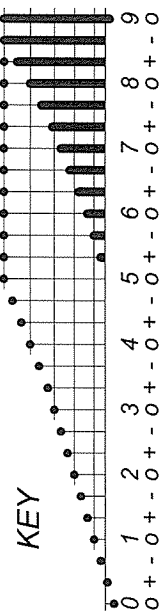
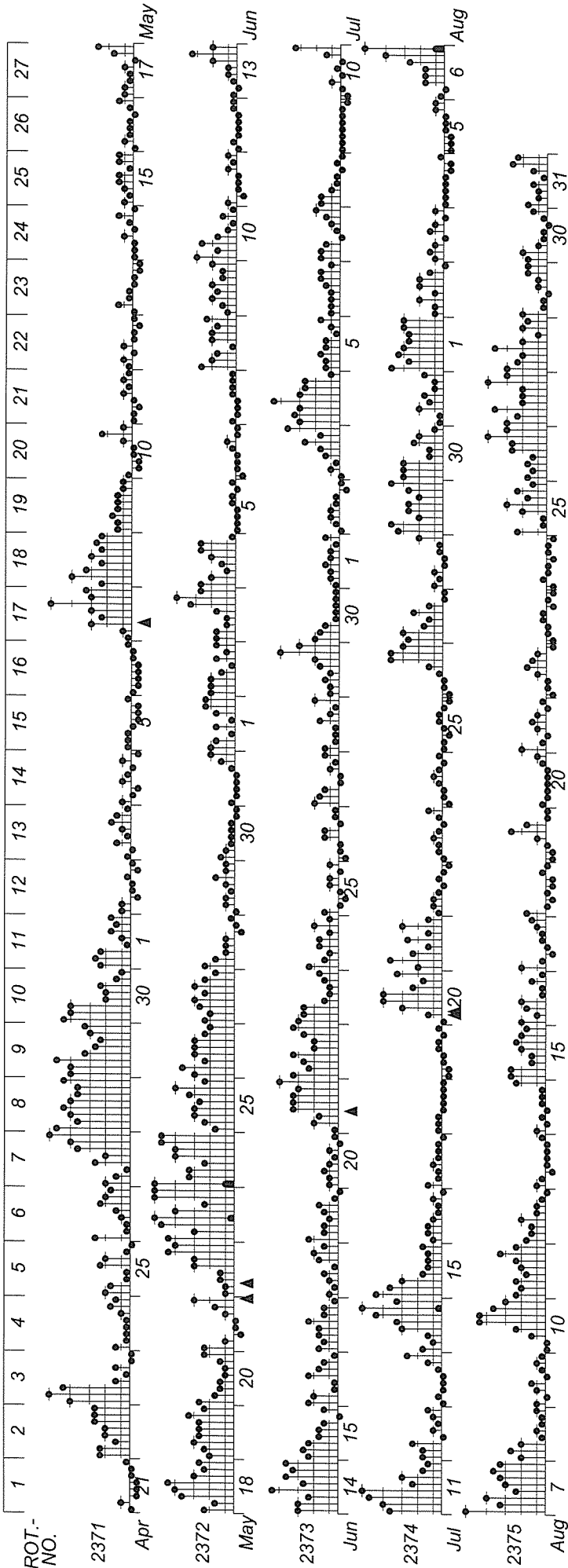
=====																										
Day		Kp Three-Hourly Indices								Sum	Ap	Cp	Km Three-Hourly Indices								Am	aa Provisional				
		1	2	3	4	5	6	7	8				1	2	3	4	5	6	7	8		N	S	M		
1	D2*	4-	3-	3+	3	3-	3-	3	3	24	15	0.9	4-	3o	4-	3o	3o	3-	3o	3o	31	36	39	37	39	
2		1	1	2	1	2	2	1+	0+	11-	5	0.2	1+	1+	2o	1+	2-	2o	1+	1-	11	15	10	9	16 K	
3	Q0	1	1+	1	0+	1+	1	0+	1	7+	4	0.1	1o	1+	1+	1-	1+	1+	0+	1o	7	9	7	7	10 CC	
4	Q2	0+	0+	0+	0+	0+	0	0	1-	2+	2	0.0	1-	0+	1-	0+	0o	0o	0o	1-	2	5	3	4	4 CC	
5	Q4	0	0	0	0+	0+	0+	1	1	3	2	0.0	0o	0o	0o	0o	0o	0o	1o	1o	2	4	3	2	5 CC	
6	D4*	1-	0+	2-	2-	2-	3-	4-	6-	18+	16	0.9	1-	0+	2-	2o	2-	3o	3o	5-	23	30	21	9	41	
7	D1	5	3+	4	2+	3	3+	4-	3+	28	22	1.1	4+	3+	4-	3o	3+	3+	3o	3o	38	46	46	47	45	
8		2	3-	2	1-	1	1-	1-	1	11-	5	0.2	2o	3-	2o	1o	1o	1-	1-	1-	10	10	11	14	7 C	
9	Q8	1	0+	1	1+	0+	1-	1	1-	6+	3	0.1	1o	0+	1+	2o	1-	0+	1-	1-	6	8	6	8	7 CC	
10	D3*	0+	0+	1+	2+	4+	4+	4-	3	20-	15	0.8	1-	0+	1+	3-	4-	4o	4-	3-	26	37	20	13	44	
11		2+	2	2+	2-	2	2+	3+	2+	18+	9	0.5	3-	2o	3-	2o	2+	2+	3o	2+	20	22	19	17	24	
12		2-	1+	1+	2	1	1	1-	0+	9+	4	0.2	1+	2-	2-	3o	1+	1o	1o	0+	11	6	17	17	7 KK	
13	Q5	1	1-	0	0+	0+	0+	0+	1-	4-	2	0.0	1-	1-	0o	0+	0o	0+	0o	1o	3	5	4	5	4 CC	
14		1	0+	1-	0+	1-	1-	1-	2+	7-	4	0.1	1+	0+	1-	1-	1o	0+	1-	2+	6	7	6	4	9 CC	
15		3-	3-	1+	1+	2	2+	2	2-	16	8	0.4	3-	3-	1+	2-	2o	2+	2-	2-	16	20	15	17	18	
16		2	1	2-	2	1-	1-	1+	1-	10	5	0.2	2-	1+	2o	3-	1-	0+	2-	1o	10	11	11	14	8 CK	
17		2	1-	0	0+	1-	1-	1	1+	7-	3	0.1	2-	1-	0+	1-	0+	0+	1+	1+	6	7	5	5	6 CC	
18	Q7	2-	0+	0	0+	0	0	1-	0+	3+	2	0.0	2-	0+	0o	0+	0o	0o	0+	0+	3	5	2	4	3 CC	
19		0	0	0+	1	3-	2-	0+	0+	6+	4	0.1	0o	0o	0o	1o	2+	2-	0+	0+	6	8	7	4	11 CC	
20	Q6	1-	0+	0+	0+	0+	0+	1-	1	4	2	0.0	1-	0+	0+	0o	0o	0o	0+	1o	3	5	3	4	4 CC	
21		2	1-	0+	1	1+	1	0+	1-	7+	4	0.1	2-	1-	0+	1o	1+	1o	0+	1o	6	12	7	9	10 CC	
22	Q9	0	0+	0+	1	2-	1+	1	0	6-	3	0.1	0o	1o	1-	1+	2o	1+	1+	0+	7	7	9	5	10 CC	
23	Q3	0	0+	0+	1-	1-	0	0+	0	2+	2	0.0	0o	0+	0o	1o	1-	0o	0+	0o	2	4	4	3	5 CC	
24	Q1	0	1-	0+	0+	0	0+	0+	0	2	1	0.0	0o	1-	0+	0o	0o	0o	0+	0o	2	3	2	3	2 CC	
25		2+	1-	1-	2	3	2-	2+	1+	14	7	0.4	2o	0+	1o	3-	3-	2-	3-	1+	15	15	15	13	17 K	
26		2-	1+	2-	1+	3-	3-	4	3	18+	11	0.6	1+	1+	2-	1+	2+	3-	3o	3o	18	24	17	10	31	
27	D5*	3	2+	4-	2	2	2	4	3	22	14	0.8	3-	2o	3+	2o	2-	1+	4-	3o	23	29	20	24	25	
28		3	2+	2	4-	2	1	2	2-	18-	10	0.5	3-	2o	2+	4-	3-	1o	2o	1+	20	20	24	28	16	
29		2	1-	1-	0+	1	1	2-	2-	9	4	0.2	2-	1-	1o	0+	1+	1o	2-	1+	8	9	8	7	10 CC	
30		2-	2	1	1-	1-	0+	1-	1+	8+	4	0.1	1+	2o	1+	1-	1-	0o	1o	1+	8	6	10	11	6 CC	
31		2-	1	1	1+	1-	1+	3-	2+	12	6	0.3	1o	1+	1+	2-	1o	2-	2+	3-	12	14	11	10	15 CK	
Mean										6	0.29	11.6										14.3	12.4	13.2		
=====																										
Day		Kn Three-Hourly Indices								An	Ks Three-Hourly Indices								As	Sa	Prov				Rs	IMF
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			Ri	Ra				
1		4-	3o	4-	3o	3o	3o	3-	3-	30	4-	3-	4-	3o	3o	3-	3o	3o	32	70.4	0	0			14	
2		1+	2-	2o	1+	2o	2o	2o	1o	12	1+	1+	2-	1o	2-	2o	1o	0o	9	71.5	0	0			15	
3		1+	2-	2-	1o	2-	1+	1o	1o	9	1-	1+	1o	0+	1+	1o	0o	1-	5	72.4	7	2			16	
4		1-	1-	1o	1-	0o	0o	0o	1-	3	1-	0o	0o	0o	0o	0o	0o	1-	1	71.4	7	7			15	
5		0o	0o	0+	0+	0o	0+	1+	1+	3	0o	0o	0o	0o	0o	0o	1-	1-	2	70.9	7	8			15	
6		1o	0+	2o	2+	2o	3o	3+	5-	26	0+	0+	1+	2-	1+	3-	3-	5-	21	72.0	8	10			16	
7		5-	3+	4o	3+	3+	3o	3o	3o	42	4-	3+	3+	3-	3o	3+	3+	3o	34	71.0	8	9			15	
8		2+	3-	2+	1+	1+	1o	1o	1o	12	1+	3-	2-	1o	1-	1-	0+	1-	8	71.0	9	12			15	
9		1o	1-	2-	2+	0+	0+	1+	1o	8	1+	0+	1+	1+	1-	0o	0o	0+	5	69.3	9	11			13	
10		1o	1o	2-	3o	4o	4+	3+	3o	28	0+	0o	1+	2o	3o	4o	4-	2+	23	69.3	9	10			13	
11		3-	2+	3-	2+	2+	3-	3+	2+	23	2+	2-	2+	2-	2o	2+	3o	2o	17	69.5	8	8			13	
12		2-	2-	2-	3o	2-	1o	1-	0+	11	1+	1+	2-	3o	1+	1o	1+	0o	10	70.0	8	5			14	
13		1o	1o	0+	0+	0+	1-	0+	1+	5	1-	0+	0o	0o	0o	0o	0o	0o	1	69.5	8	4			13	
14		1o	0+	1-	1-	1o	0+	1o	3-	8	1+	0+	0+	0+	1o	0o	0+	1+	4	70.3	0	1			14	
15		3-	3o	1+	2o	2o	2+	2+	2-	18	2+	3-	1+	2-	2o	2o	1+	2-	14	69.3	7	1			13	
16		2o	1o	2+	3-	1o	1o	2-	1+	12	2-	1+	2o	2+	1-	0o	1+	1-	9	69.0	0	0			13	
17		2-	1o	0+	0+	1-	1o	1+	2-	7	1+	1-	0o	1-	0o	0o	1+	1o	4	69.3	0	0			13	
18		2o	0+	0o	0+	0+	0o	1-	0+	4	1+	0o	0o	0o	0o	0o	0o	0o	2	69.6	0	0			13	
19		0+	0+	0o	1+	3-	2-	0+	1o	8	0o	0o	0o	1-	2-	2-	0o	0o	4	69.4	0	0			13	
20		1o	0+	0o	0+	0+	0+	1-	1+	4	1-	0+	0+	0o	0o	0o	0o	1-	2	70.7	0	0			14	
21		2o	1-	1-	1+	2o	1+	1-	1+	9	1+	1-	0o	1-	1o	0+	0o	0+	4	70.9	9	7			15	
22		0+	1o	1-	1+	2+	2-	1+	0+	8	0o	1-	0+	1+	1+	1+	1+	0o	6	71.6	8	9			15	
23		0o	0+	0o	1+	1o	0+	0+	0+	3	0o	0o	0o	1o	1-	0o	0o	0o	2	72.4	8	9			16	
24		0+	1-	0+	0o	0o	0o	0+	0+	2	0o	1-	0o	0o	0+	0o	0o	0o	1	73.2	8	10			17	
25		2o	1-	1o	3-	3o	2o	3-	2o	17	2o	0o	1o	3-	3-	2-	3-	1o	13	73.1	8	10			17	
26		2-	1+	2-	2-	3-	3-	3+	3o	20	1+	1+	2-	1+	1+	3-	3o	3o	16	71.6	8	10			15	
27		3-	2o	3+	2o	2o	2o	3+	3o	23	3-	2o	3+	2o	1+	1o	4-	3o	23	70.7	8	9			14	
28		3-	2o	2+	4o	3-	1+	2o	1+	21	3-	2o	2+	4-	3-	1-	2-	2-	19	71.6	8	10			15	
29		2-	1-	1+	1-	2-	1+	2-	1+	9	2-	1-	1o	0o	1+	1-	1+	1o	7	71.0	8	9			15	
30		2-	2o	2-	1o	1o	0o	1o	2-	9	1+	2o	1+	1-	0+	0o	1-	1o	6	73.0	8	14			17	
31	</																									

Daily Average Indices Ap Sep 2006 - Aug 2007



Day	Sep 06	Oct	Nov	Dec	Jan 07	Feb	Mar	Apr	May	Jun	Jul	Jul
1	14	23	6	5	9	9	11	29	7	6	4	15
2	7	6	8	2	24	4	4	22	2	6	3	5
3	6	7	8	3	20	2	2	11	4	10	8	4
4	20	4	7	0	17	2	4	9	2	8	15	2
5	9	4	4	3	9	6	10	4	2	2	5	2
6	6	2	2	26	5	6	18	4	1	2	5	16
7	8	10	0	25	1	13	17	3	16	3	5	22
8	4	6	0	24	3	9	4	3	14	7	4	5
9	2	4	10	8	4	5	2	10	5	6	2	3
10	4	2	36	16	6	4	4	7	3	7	4	15
11	6	3	21	14	6	2	8	4	2	3	21	9
12	5	5	7	27	3	8	12	10	2	2	5	4
13	5	29	1	8	0	21	24	1	2	6	4	2
14	4	23	5	47	3	18	12	4	3	18	19	4
15	0	9	7	94	16	13	10	4	4	7	12	8
16	3	6	8	12	14	8	12	0	3	6	4	5
17	14	3	6	6	25	9	7	9	5	6	3	3
18	23	3	1	11	18	5	3	9	16	5	2	2
19	11	2	4	13	13	3	2	5	12	5	2	4
20	3	11	1	24	8	2	1	3	6	4	14	2
21	3	20	1	18	8	1	1	2	5	14	10	4
22	2	14	6	18	3	2	3	9	13	13	3	3
23	11	3	15	16	3	3	10	16	34	8	3	2
24	24	4	16	12	2	2	18	4	30	6	2	1
25	8	4	15	8	2	3	11	5	14	3	2	7
26	7	2	14	4	3	6	10	6	13	3	9	11
27	4	4	8	2	4	12	11	16	10	4	7	14
28	4	14	6	2	5	22	7	28	4	4	4	10
29	4	21	7	2	28		3	21	4	9	14	4
30	14	10	28	3	24		4	15	3	4	9	4
31		4		2	20		3		3		5	6
Mean	8	9	9	15	10	7	8	9	8	6	7	6

DAYS IN SOLAR ROTATION INTERVAL

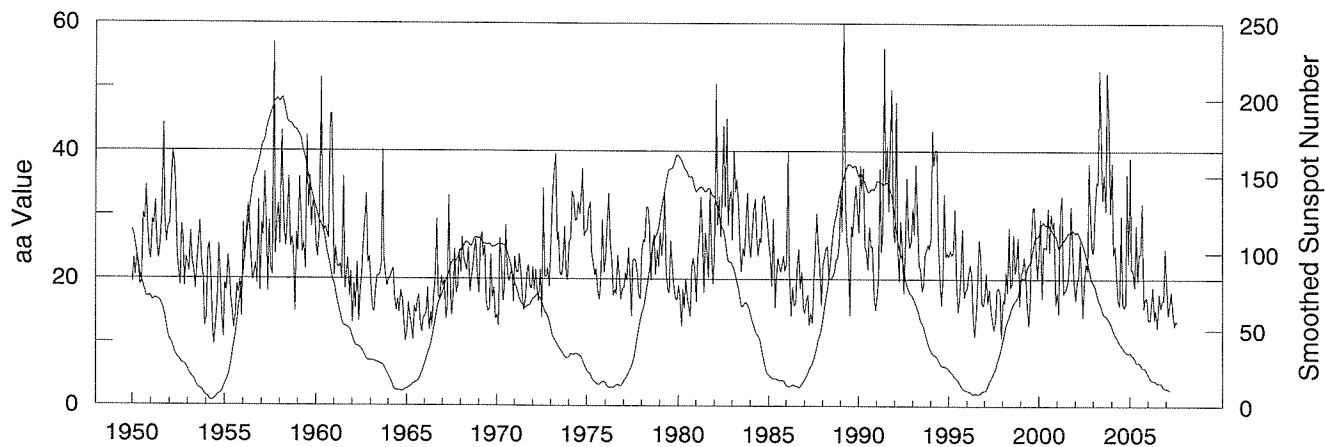


▲ = sudden
commencement

PLANETARY MAGNETIC THREE-HOUR-RANGE INDICES

Kp till 2007 Aug 31

Monthly Mean aa Index Jan 1950 - Jul 2007



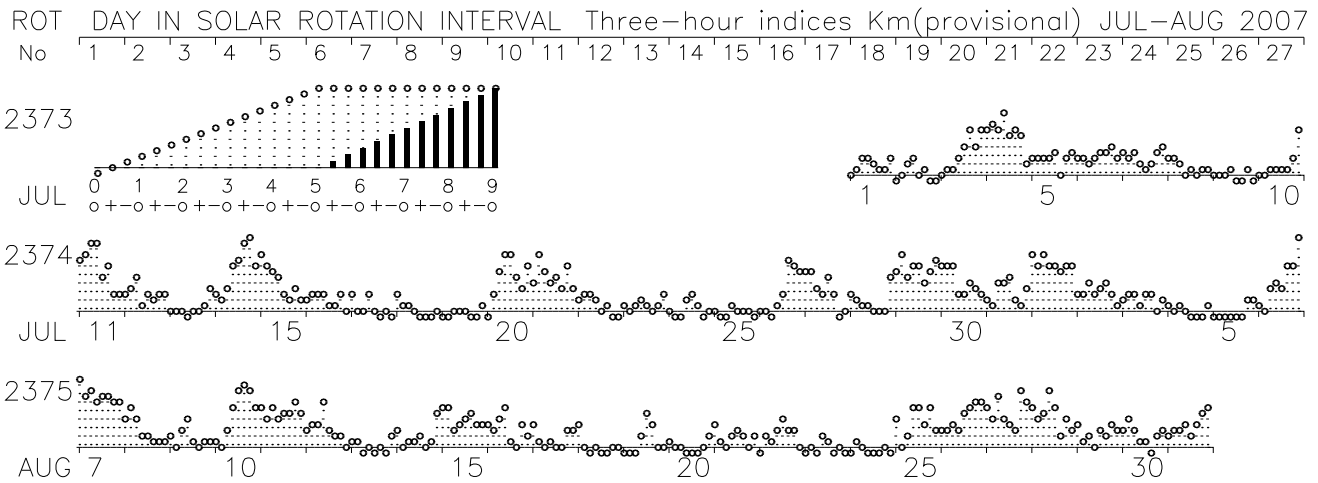
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	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					15.3

PLANETARY GEOMAGNETIC ACTIVITY

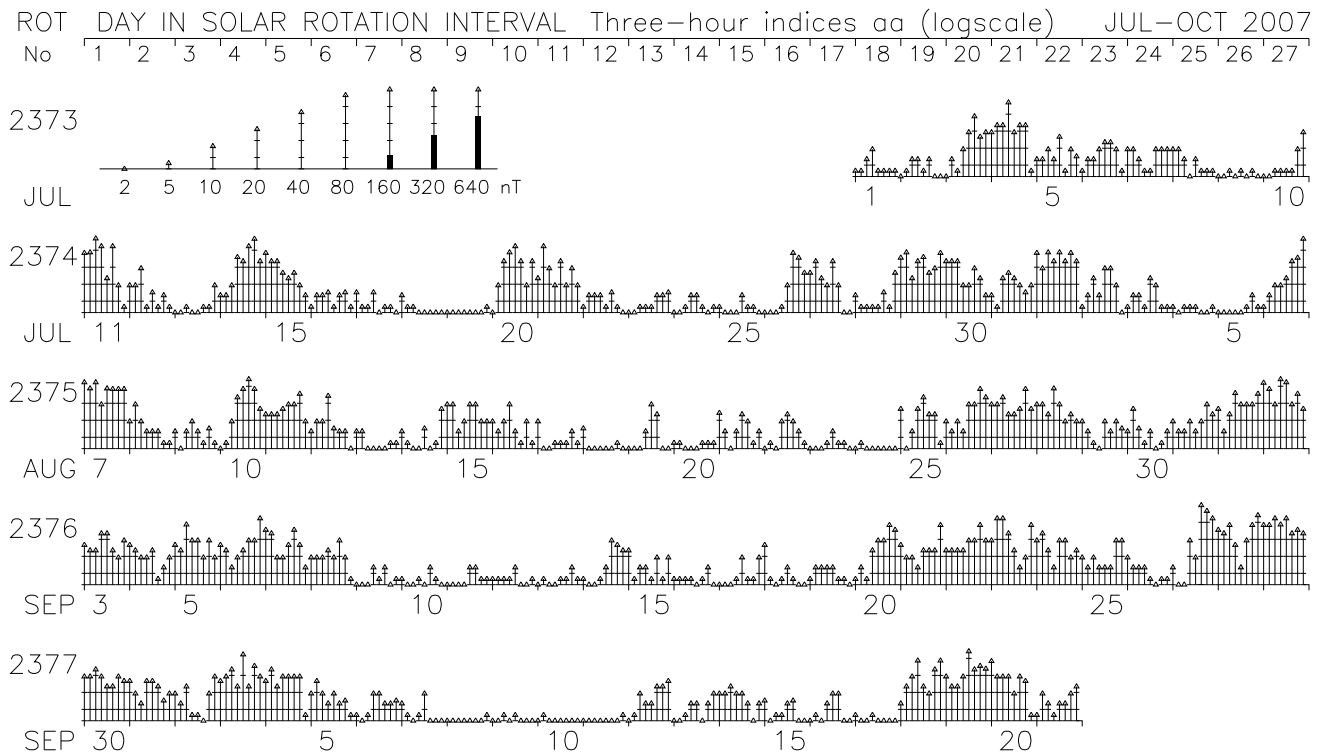
3-HOUR-RANGE INDICES Km AND aa BY 27-DAY SOLAR ROTATION INTERVAL

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Aug 07

PRINCIPAL MAGNETIC STORMS

AUGUST 2007

Sta	Geomag Lat	Commencement			SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	Ranges			End	
		Day	Time (UT)	Type	D (Min)	H (Gamma)	Z (Gamma)		D (Min)	H (Gamma)	Z (Gamma)	Day	Hour (UT)
HYB	07.6N	01	0000	..	..	..	..	1(3)	4	4	61	17	01 24
JAI	17.4N	06	0600	..	..	..	..	6(8),7(1,3)	-	5	56	31	07 01
KRC	16.4N	06	1400	..	..	..	..		5	3	70	20	07 23
NGP	11.3N	06	0600	..	..	..	..	6(8)	-	4	69	14	07 01
ABG	09.4N	06	0600	..	..	..	..		5	4	71	29	07 01
HYB	07.6N	06	0600	..	..	..	..	6(8)	5	5	77	26	08 12
PND	02.0N	06	0600	..	..	..	..	-	-	3	83	35	07 01
TIR	00.6S	06	0600	..	..	..	..		-	3	103	45	07 01
JAI	17.4N	10	0800	..	..	..	..	10(6)	-	7	84	27	11 22
KRC	16.4N	10	1004	..	..	..	..		6	3	90	20	11 20
NGP	11.3N	10	0800	..	..	..	..	10(5,6)	-	7	89	28	11 22
ABG	09.4N	10	0800	..	..	..	..		5	6	87	30	11 22
HYB	07.6N	10	0900	..	..	..	..	10(6)	5	5	72	21	11 24
PND	02.0N	10	0800	..	..	..	..	-	-	5	90	45	11 22
TIR	00.6S	10	0800	..	..	..	..		-	5	126	62	11 22
JAI	17.4N	26	0600	..	..	..	..	26(7)27(3,7)28(4)	-	7	64	33	28 21
NGP	11.3N	26	0600	..	..	..	..		-	5	62	25	28 21
ABG	09.4N	26	0600	..	..	..	..	27(7)	4	6	63	34	28 21
HYB	07.6N	26	0500	..	..	..	..	-	4	5	58	27	28 15
PND	02.0N	26	0600	..	..	..	..		-	5	63	55	28 21
TIR	00.6S	26	0600	..	..	..	..	-	-	5	111	64	28 21

Stations:

ABG = ALIBAG
AMS = MARTIN DE VIVIES
ANN = ANNAMALAINAGAR
BJI = BEIJING
CAN = CANBERRA
CMO = COLLEGE

CZT = PORT ALFRED
DRV = DUMONT D'URVILLE
ETT = ETAIYAPURAM
GNA = GNANGARA
GUA = GUAM
HER = HERMANUS

HON = HONOLULU
HYB = HYDERABAD
JAI = JAIPUR
KRC = KARACHI
NGP = NAGPUR
PAF = PORT AUX FRANCAIS

PMG = PORT MORESBY
PND = PONDICHERRY
SHL = SHILLONG
SIT = SITKA
TIR = TIRUNELVELI
UJJ = UJJAIN

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

AUGUST 2007

Storm Sudden Commencements (SSC)				Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*		Day	Begin-End	Station(s)
21	1040	C: LER*	ESK* HAD DOU	19	1231-1242	GUI

REPORTING OBSERVATORIES (up to 28/09/07):

NUR LER ESK NGK VAL HAD DOU BDV CLF HRB NAG GCK MMB EBR SPT KAK KNYGUI 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 Antarctic Station LIVINGSTONE (62° 39' 44" S, 60°23' 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.