



Solar-Geophysical Data prompt reports

Data for February and March 2008

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

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NATIONAL OCEANIC AND
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NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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Solar-Geophysical Data prompt reports

Data for February and March 2008

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NATIONAL GEOPHYSICAL DATA CENTER

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SOLAR-GEOPHYSICAL DATA

Number 764

(Issued in Two Parts)

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Solar-Terrestrial Physics Division

CONTENTS

PART I (PROMPT REPORTS)	Page
DETAILED INDEX FOR 2007-2008	2
DATA FOR MARCH 2008	3- 32
DATA FOR FEBRUARY 2008	33- 104

PART II (COMPREHENSIVE REPORTS)	Page
DETAILED INDEX FOR 2007-2008	2
DATA FOR OCTOBER 2007	3- 23

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	AUG	SEP	OCT	NOV	DEC	Jan 08	FEB	MAR
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.2aa	International Sunspot Numbers	757A 24	758A 23	759A 24	760A 23	761A 24	762A 24	763A 23	764A 22
A.2c	American Sunspot Numbers	757A 24	758A 23	759A 24	760A 23	761A 24	762A 24	763A 23	764A 22
A.3a	Mt. Wilson Magnetograms	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.3b	Sunspot Mag Class and Regions	758A 77	759A 75	760A 77	761A 79	762A 77	763A 77	764A 80	
A.3c	Kitt Peak Magnetograms	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.3d	Mean Solar Mag Field (Stanford)	757A 31	758A 29	759A 31	760A 30	761A 34	762A 31	763A 30	764A 31
A.3e	Stanford Magnetograms	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.4	H-alpha Filtergrams	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.5d	PhotometricCa FaculaeSanFernando	Jan 92-Dec 96-631B 22; 1997-1998 663B 66							
A.6c	Stanford Solar Mag Field Map	758A 34	759A 34	760A 34	761A 38	762A 34	763A 34	764A 34	
A.6d	Kitt Peak Mag Field Synoptic Map	758A 39	759A 39	760A 39	761A 43	762A 39	763A 39	764A 45	
A.6f	Active Prominences and Filaments	762B 16	763B 15	764B 16					
A.6g	Sac Peak Coronal Line Maps	758A 36	759A 36	760A 36	761A 40	762A 37	763A 37	764A 38	
A.6h	Photometric WL SanFernando	Jul-Dec 96 630B 32; 1997-1998 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	758A 40	759A 40	760A 40	761A 44	762A 40	763A 40	764A 46	
A.7j	Coronal Hole Daily Maps (NSO/KP)								
A.7k	Coronal Index (Slovak Academy)	1939-1996 - 644B 28							
A.7m	Coronal Mass Ejections (CSPSW)	762B 21	763B 20	764B 21					
A.8aa	2800 MHz- Solar Flux (Penticton)	757A 24	758A 23	759A 24	760A 23	761A 24	762A 24	763A 23	764A 22
A.8ac	2800 MHz Adj Solar Flux (Pent.)	757A 24	758A 23	759A 24	760A 23	761A 24	762A 24	763A 23	764A 22
A.8g	Adjusted Daily Solar Flux SGMR	757A 24	758A 23	759A 24	760A 23	761A 24	762A 24	763A 23	764A 22
A.10g	Nancay Radioheliolo 164&327MHz	758A 84	759A 81	760A 83	761A 85	762A 84	763A 83	764A 86	
A.10h	Nobeyama Radioheliogr 17 GHz	758A 71	759A 70	760A 71	761A 74	762A 71	763A 71	764A 75	
A.11g	Solar X-ray GOES (graphs)	762B 9	763B 9	764B 8					
A.11g	Solar X-ray GOES (event table)	757A 28	758A 27	759A 28	760A 27	761A 29	762A 28	763A 27	764A 28
A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Oct84 in 542B 82							
A.11m	Solar UV SOLSTICE (UARS)	Oct 91-Sep 94 in 607B 46							
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
A.11p	Solar UV Mg II Daily Index	762B 17	763B 16	764B 17					
A.12g	Solar Particles (GOES)	757A 4	758A 4	759A 4	760A 4	761A 4	762A 4	763A 4	764A 4
A.12i	Solar Energetic Particles (ACE)	762B 20	763B 19	764B 20					
A.13g	Solar Plasma (ACE)	762B 19	763B 18	764B 19					
A.16c	ERBS	NOAA-9 & Oct 84-Jun 00 in 671B 36							
A.16d	UARS Solar Irradiance	Oct 91-May 2001 684B 26 - Complete Mission							
A.16e	VIRGO/SOHO Solar Irradiance	Jan 96-Sep 00 in 678B 46							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan94 in 611A118							
A.17d	ACE Interplanetary Mag Field	762B 18	763B 17	764B 18					
C. SOLAR FLARE-ASSOCIATED EVENT									
C.1a	H-alpha Flares	757A 27	758A 26	759A 27	760A 26	761A 27	762A 27	763A 26	764A 27
C.1ba	H-alpha Flare Groups	762B 4	763B 4	764B 4					
C.1d	Flare Patrol Observations	762B 6	763B 6	764B 6					
C.1h	H-alpha Flare Index (ImpxDur)	Jan 76-Dec 85 in 639B 26; Jan 86-Oct 96 in 635B 24; Jan 96-Dec 98 in 665B 63							
C.3	Radio Bursts Fixed Frequency	762B 8	763B 8	764B 8					
C.3	Radio Bursts Fixed Freq Selected	757A 29	758A 28	759A 29	760A 28	761A 32	762A 29	763A 28	764A 29
C.4	Radio Bursts Spectral	758A 80	759A 77	760A 79	761A 81	762A 80	763A 79	764A 82	
C.6	Sudden Ionospheric Disturbances	758A 79	759A 76	760A 78	761A 80	762A79	763A 78	764A 81	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	758A 89	759A 86	760A 88	761A 92	762A 91	763A 90	764A 93	
D.1ba	27-day Chart of Kp Indices	758A 91	759A 88	760A 90	761A 94	762A 93	763A 92	764A 95	
D.1cb	Monthly Mean aa Indices	758A 92	759A 89	760A 91	761A 95	762A 94	763A 93	764A 97	
D.1d	Principal Magnetic Storms	758A 96	759A 93	760A 95	761A 99	762A 98	763A 97	764A103	
D.1f	Sudden Commencements	758A 97	759A 94	760A 96	761A100	762A 99	763A 98	764A104	
D.1g	Equatorial Indices Dst	758A 94	759A 91	760A 93	761A 97	762A 96	763A 95	764A101	
D.1l	Polar Cap (PC) Index	758A 95	759A 92	760A 94	761A 98	762A 97	763A 96	764A102	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1h	Cosmic Ray Neutron Cts (Thule)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1l	Cosmic Ray Neutron Cts (Kiel)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1n	Cosmic Ray Neutron Cts (Beijing)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1m	Cosmic Ray Neutron (Haleakala)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1o	Cosmic Ray Neutron (Moscow)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
F.1p	Cosmic Ray Neutron Cts (Calgary)	758A 85	759A 82	760A 84	761A 87	762A 86	763A 85	764A 87	
H. MISCELLANEOUS									
H.60	ISES Alert Periods	757A 20	758A 19	759A 20	760A 19	761A 20	762A 20	763A 19	764A 20

The entry "748A 48" under Oct, for example, means the sunspot drawings for Oct appear in SOLAR-GEOPHYSICAL DATA No 748, Part I, and that they begin on page 48, "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

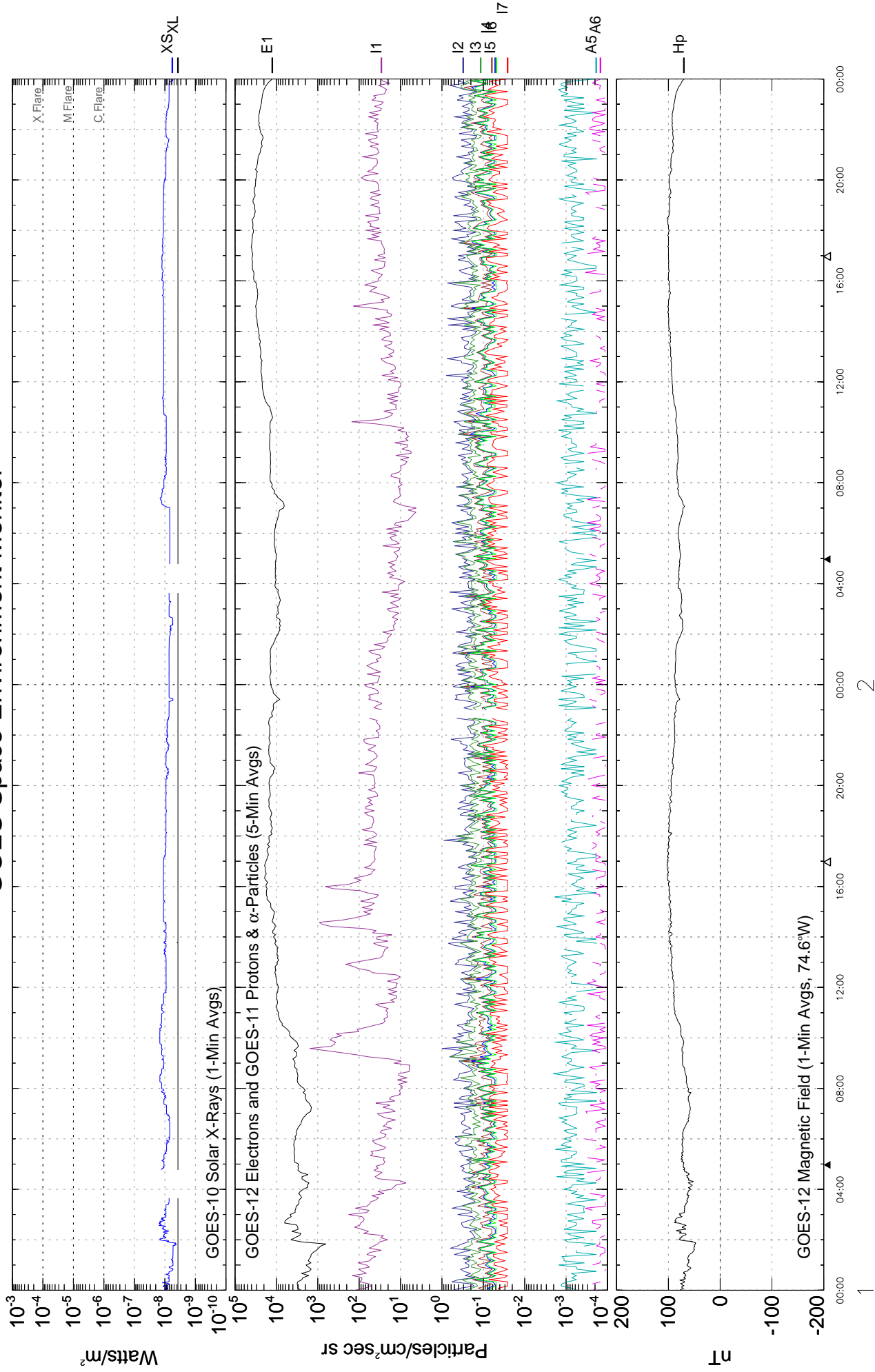
Prompt Reports

Number 764 Part I

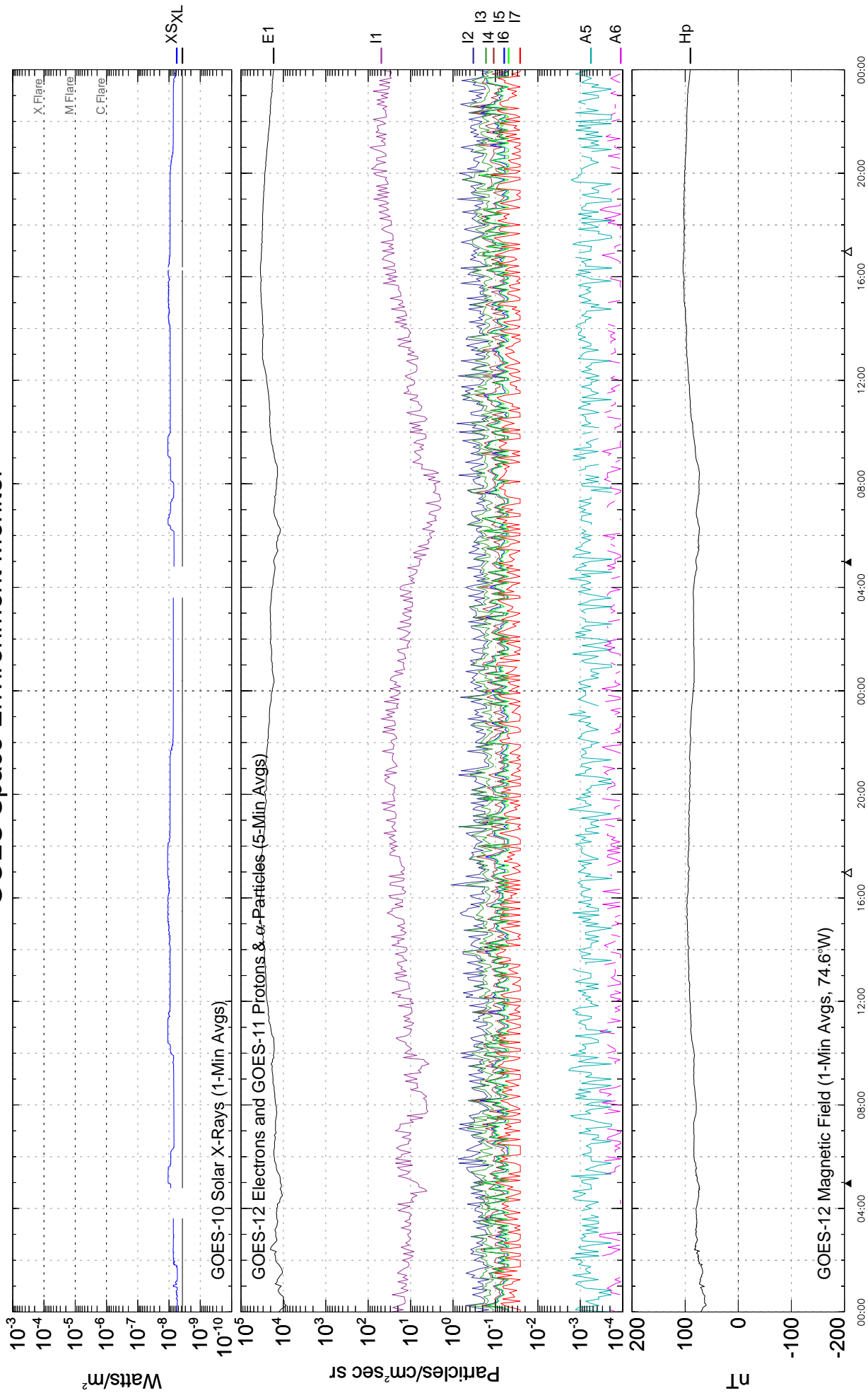
DATA FOR MARCH 2008

	Page
SOLAR-TERRESTRIAL ENVIRONMENT	4-19
Plots of GOES Satellite X-rays, Particles and Magnetometer Data with ground-based McMurdo Neutron Monitor Cosmic Rays	
ISES ALERT PERIODS (Advance and Worldwide)	20-21
SOLAR ACTIVITY INDICES	
Daily Sunspot Numbers (12 Months)	22
Daily 2800 MHz Solar Flux (12 Months)	23
Daily Solar Indices (Sunspot Numbers and Solar Flux)	24
Smoothed Observed and Predicted Sunspot Numbers	25
Graph and Table of Monthly Mean Sunspot Numbers 1951-present	26
SOLAR FLARES	
H-alpha Solar Flares	27
X-ray Solar Flares (GOES Full Disk Monitor)	28
Intervals of No Flare Patrol (See 6-month late chart in Comprehensive Reports.)	
SOLAR RADIO EMISSION	
Selected Fixed Frequency Events	29
STANFORD MEAN SOLAR MAGNETIC FIELD	
Graph	30
Table	31
GOES Daily Electron Fluence	32

GOES Space Environment Monitor



GOES Space Environment Monitor

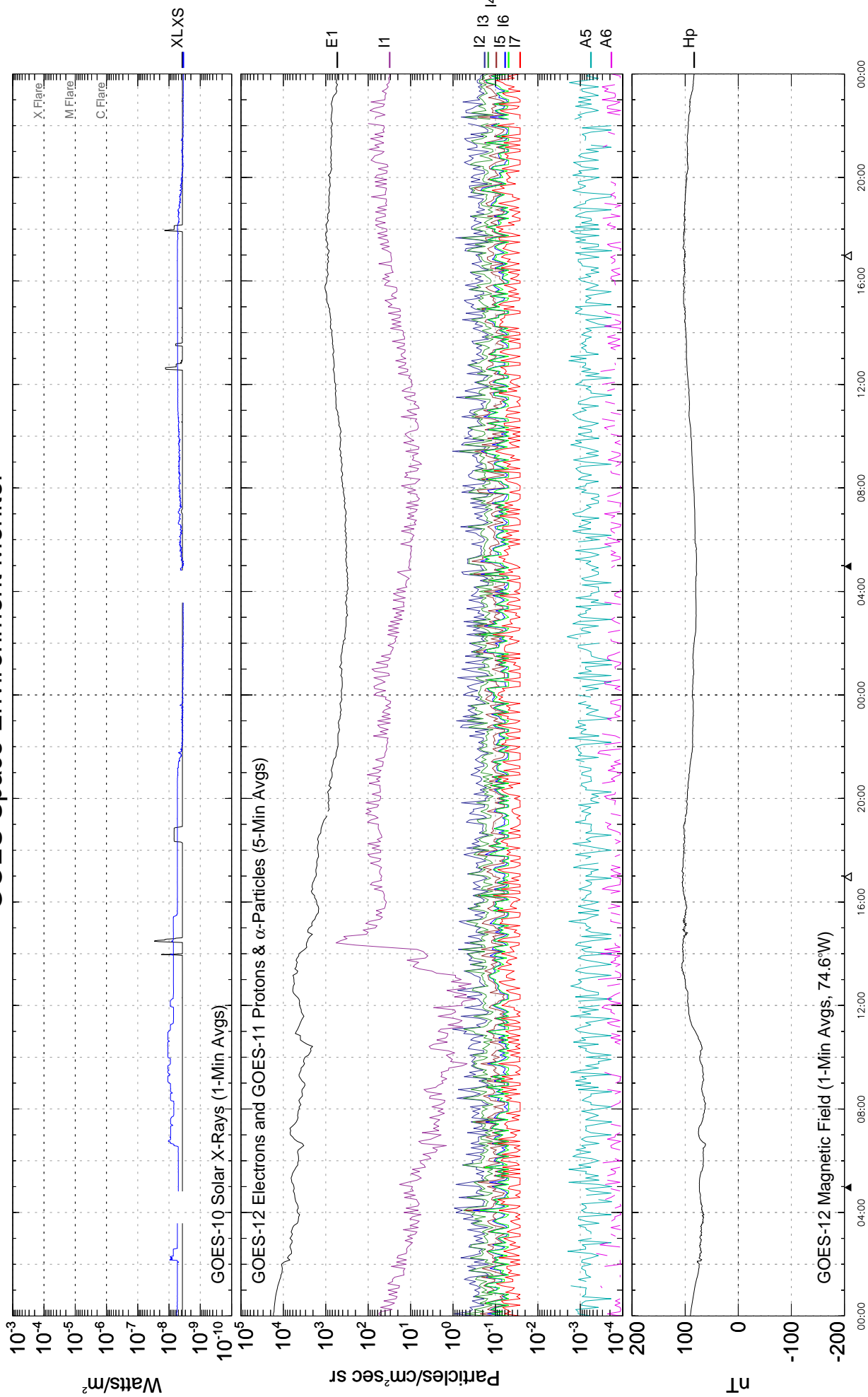


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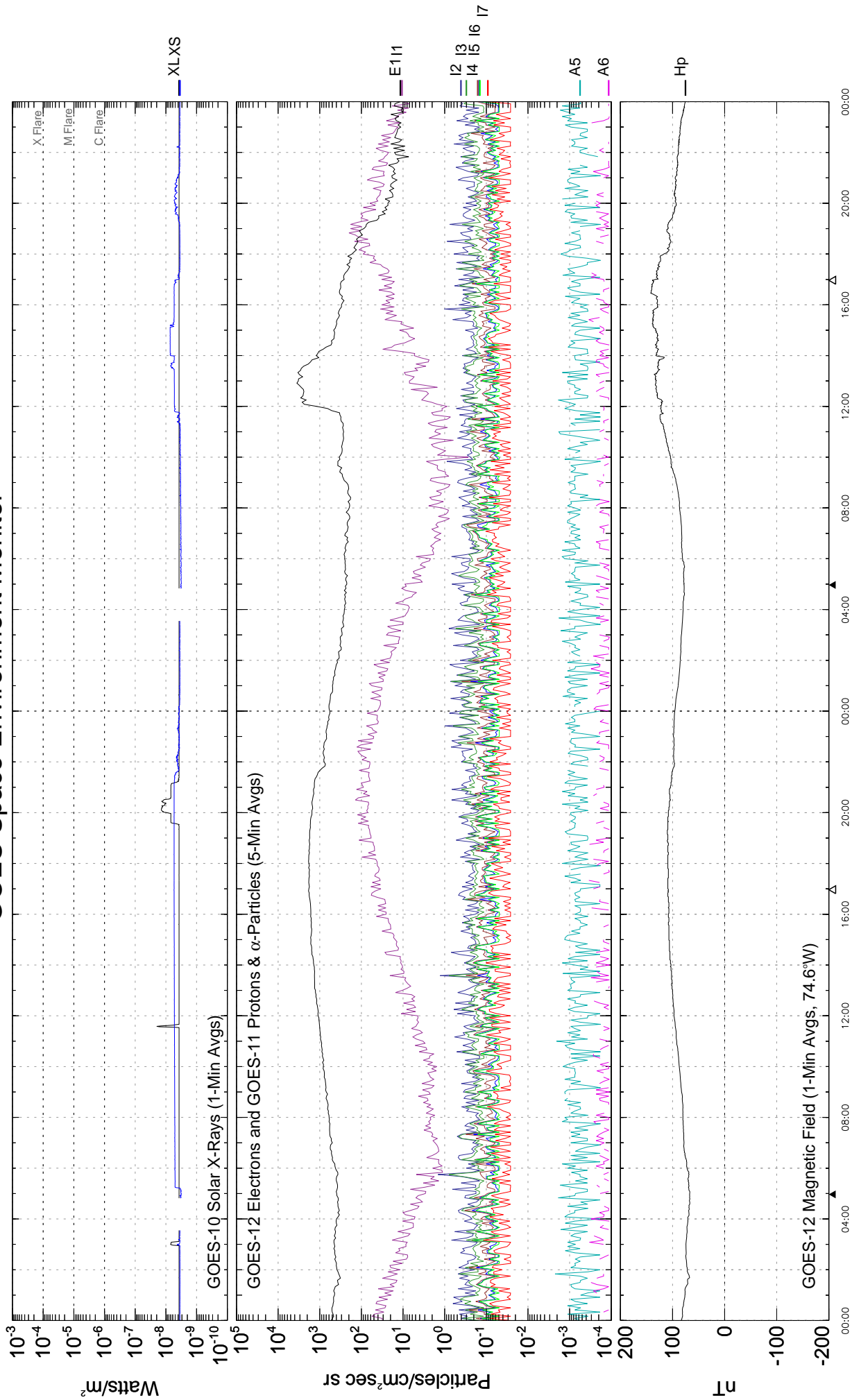
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March 2008 (Universal Time)

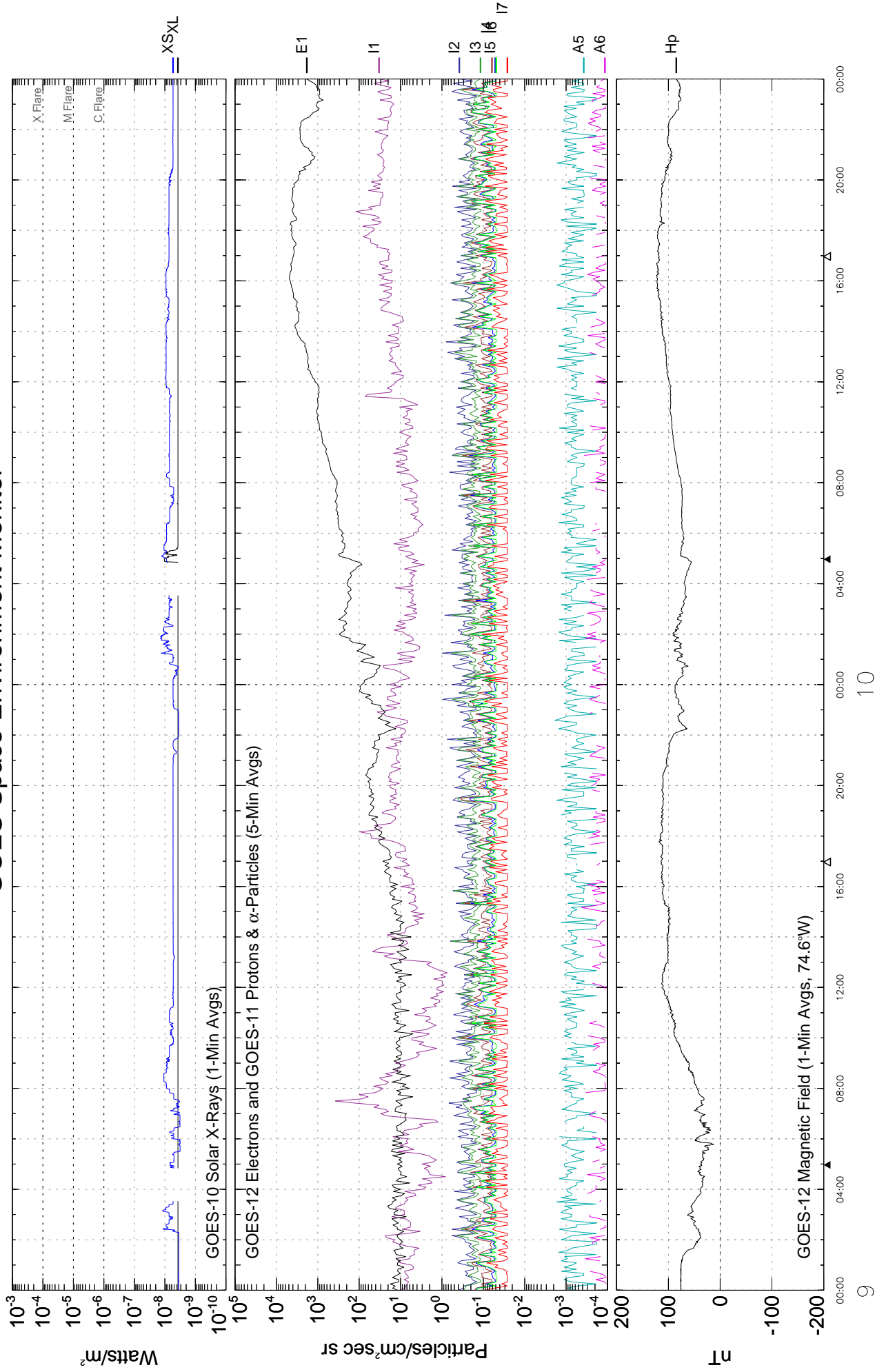
GOES Space Environment Monitor



GOES Space Environment Monitor

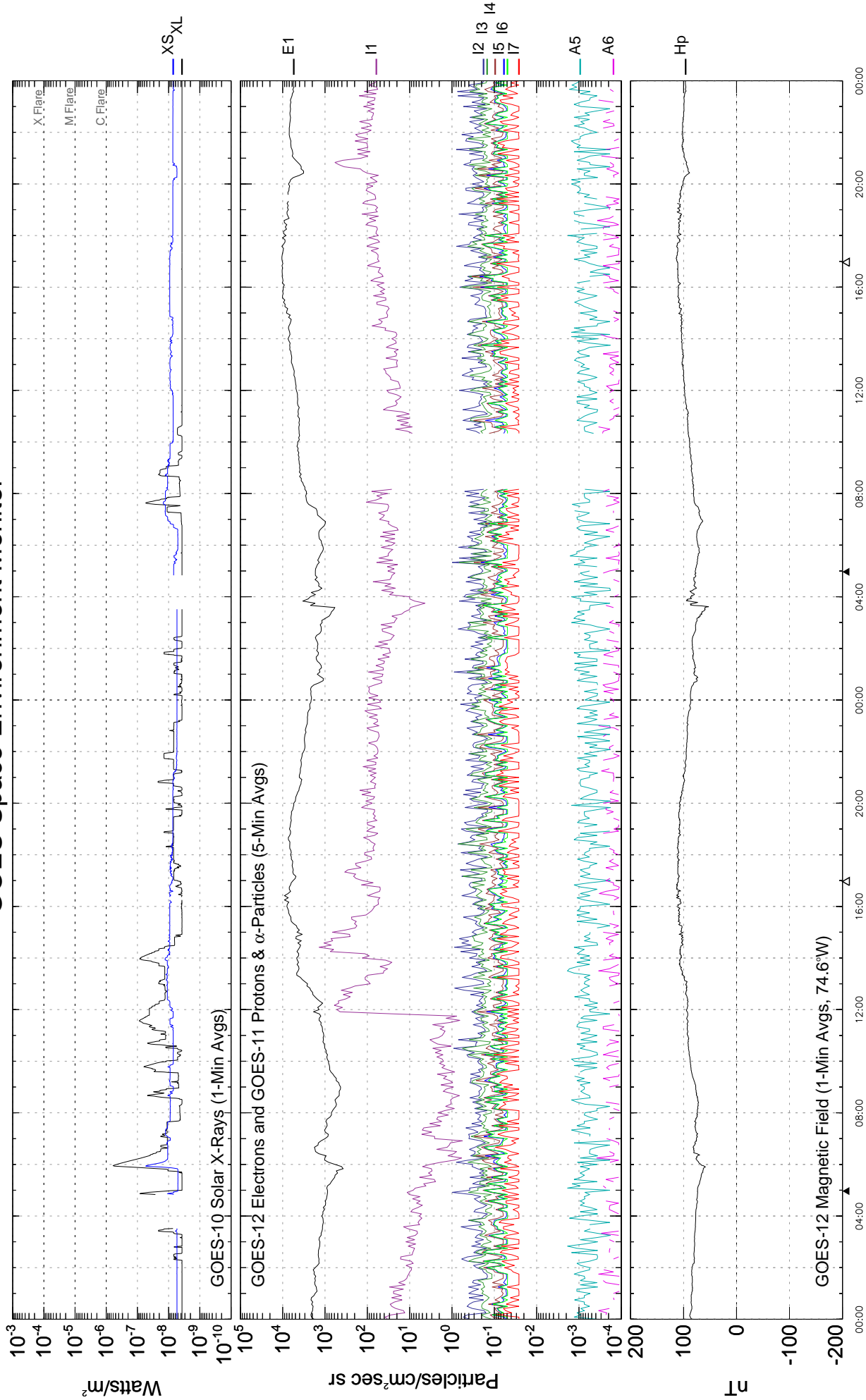


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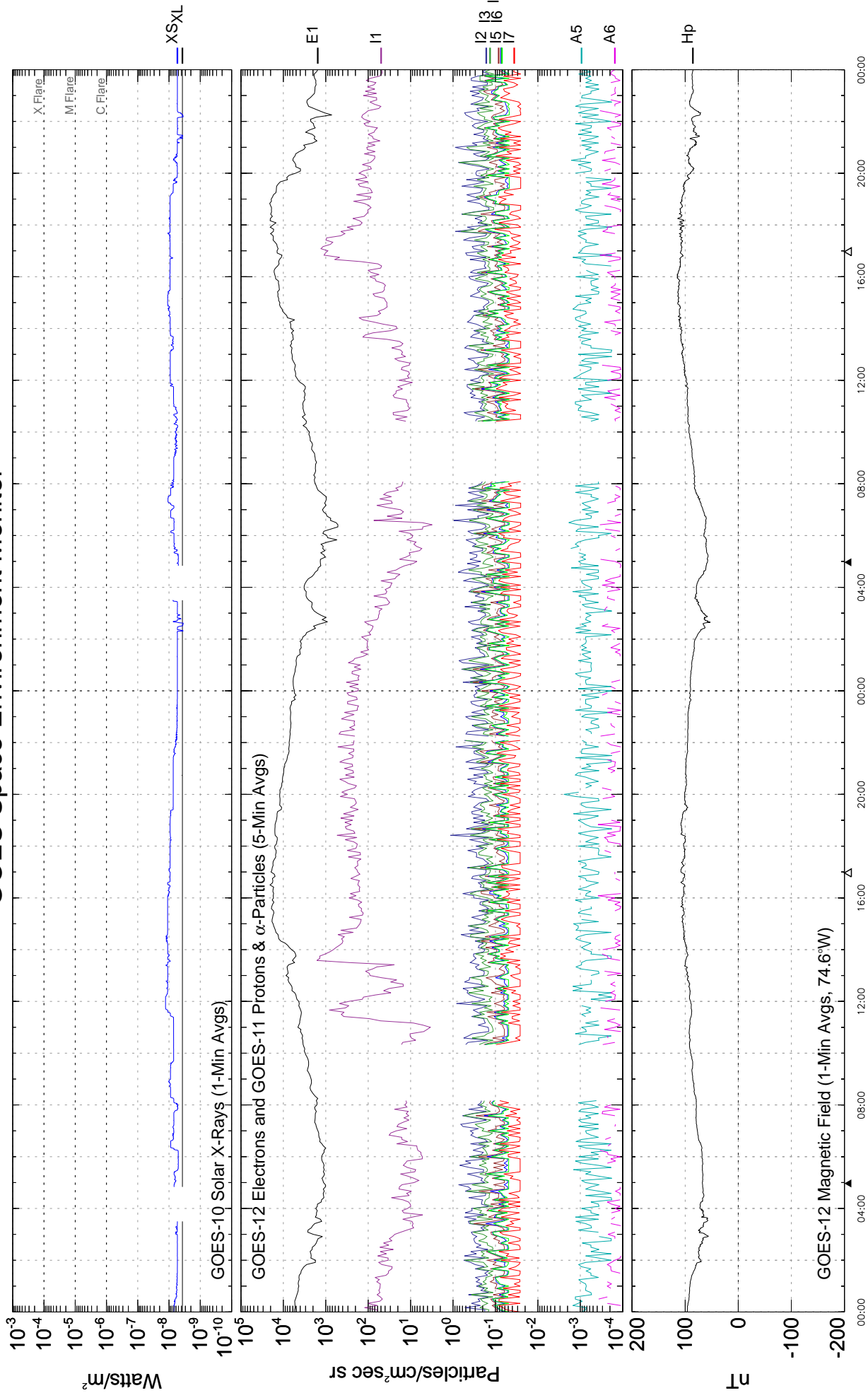
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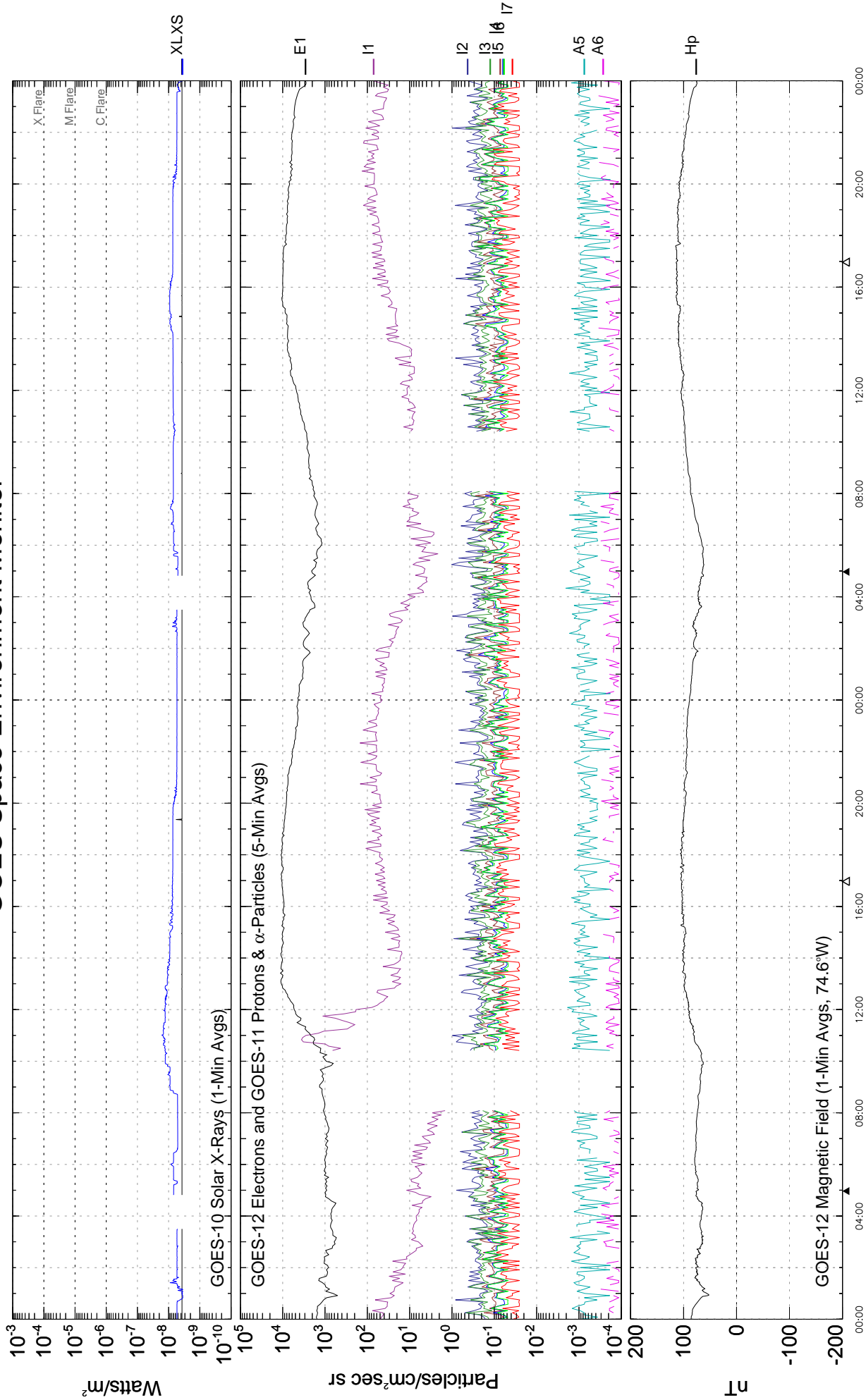
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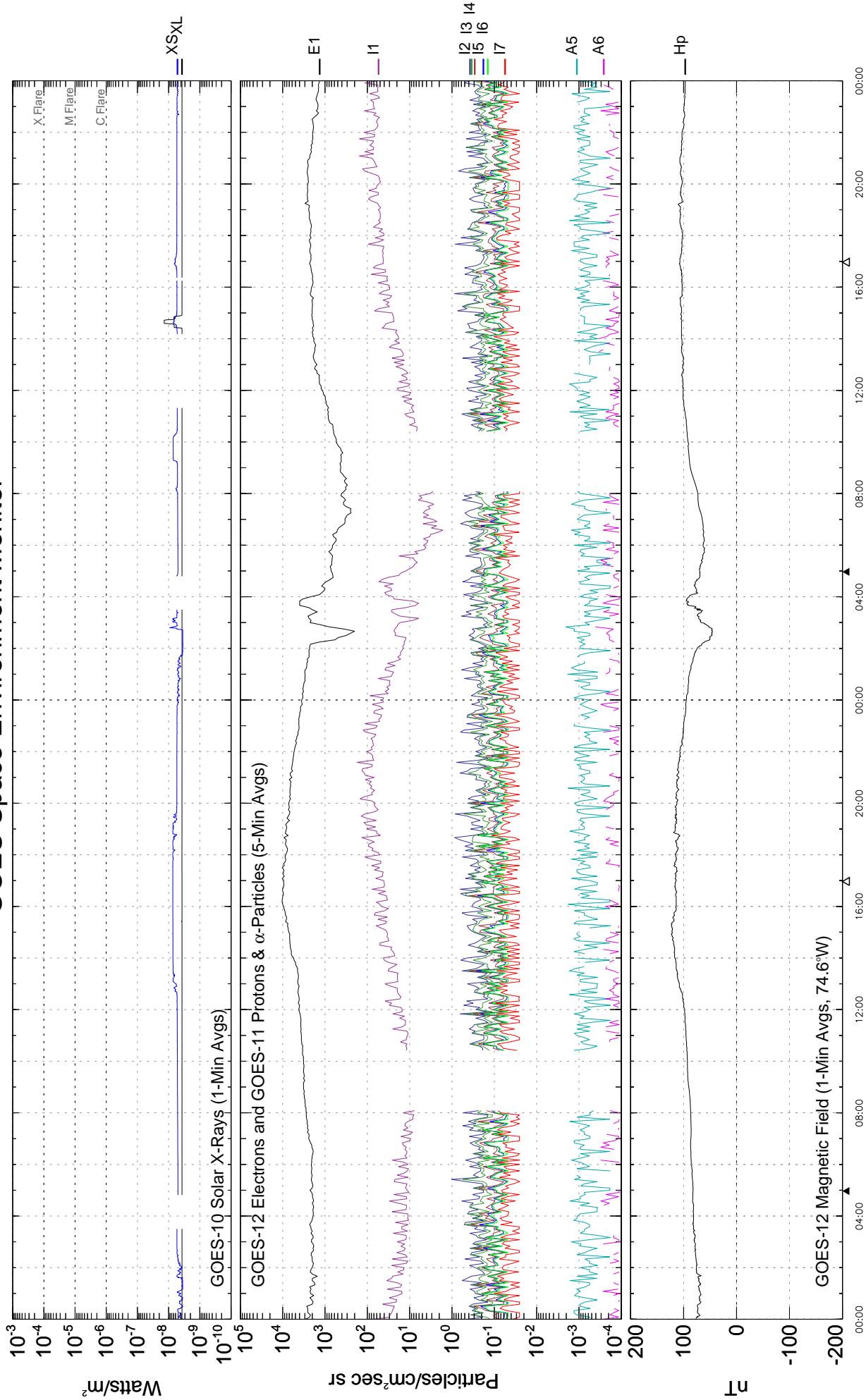


14
March 2008 (Universal Time)

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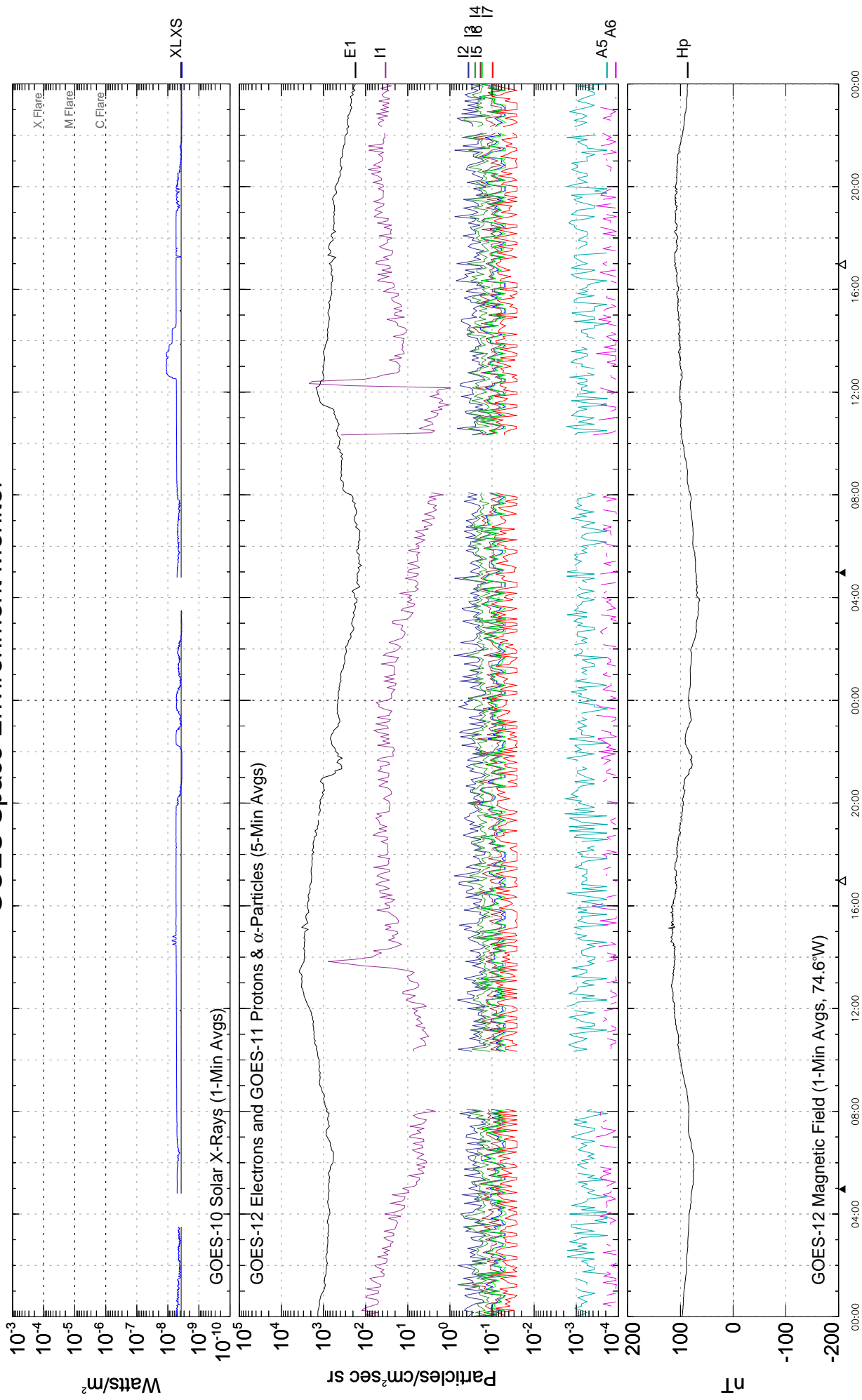
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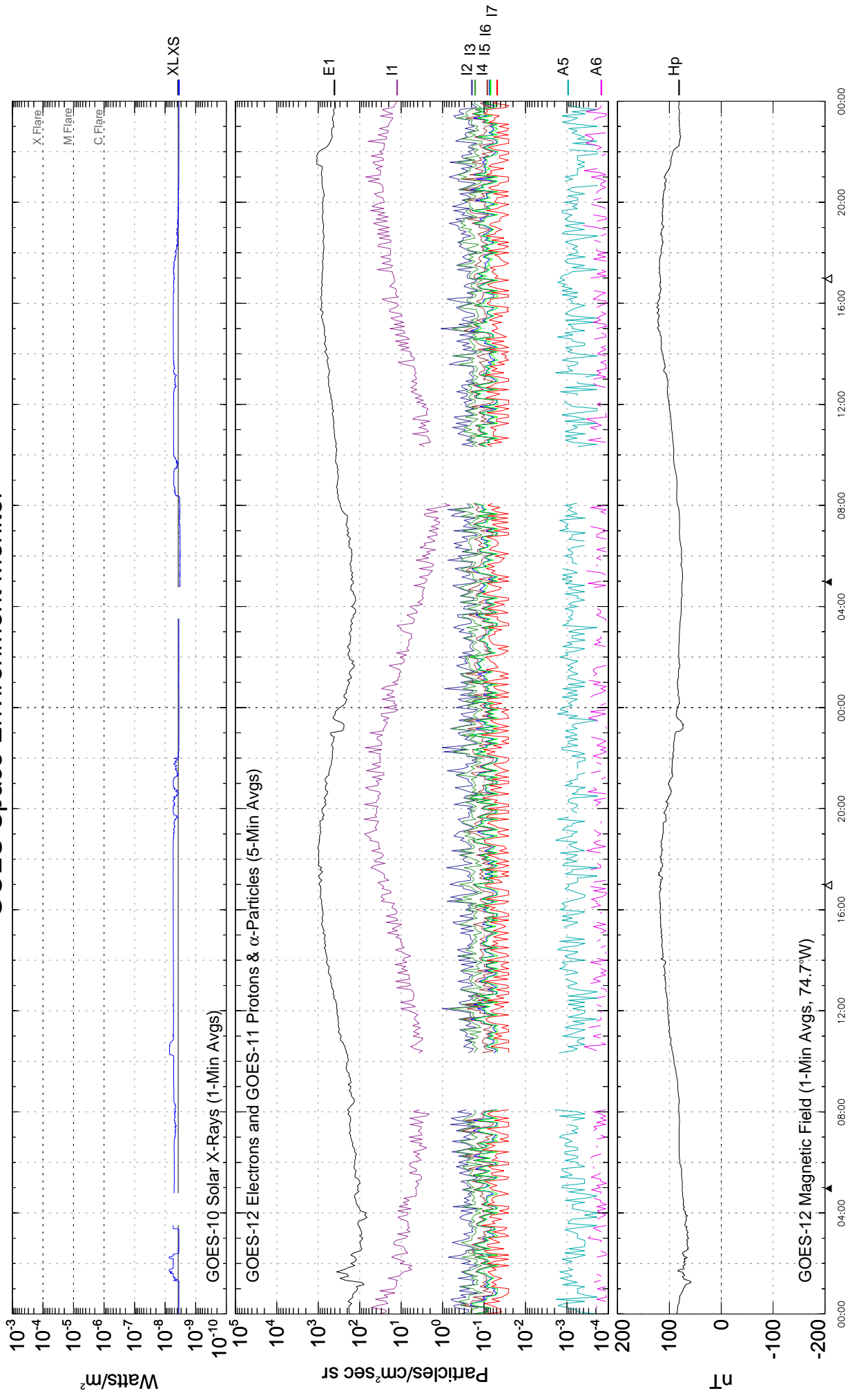
18
March 2008 (Universal Time)

17

GOES Space Environment Monitor

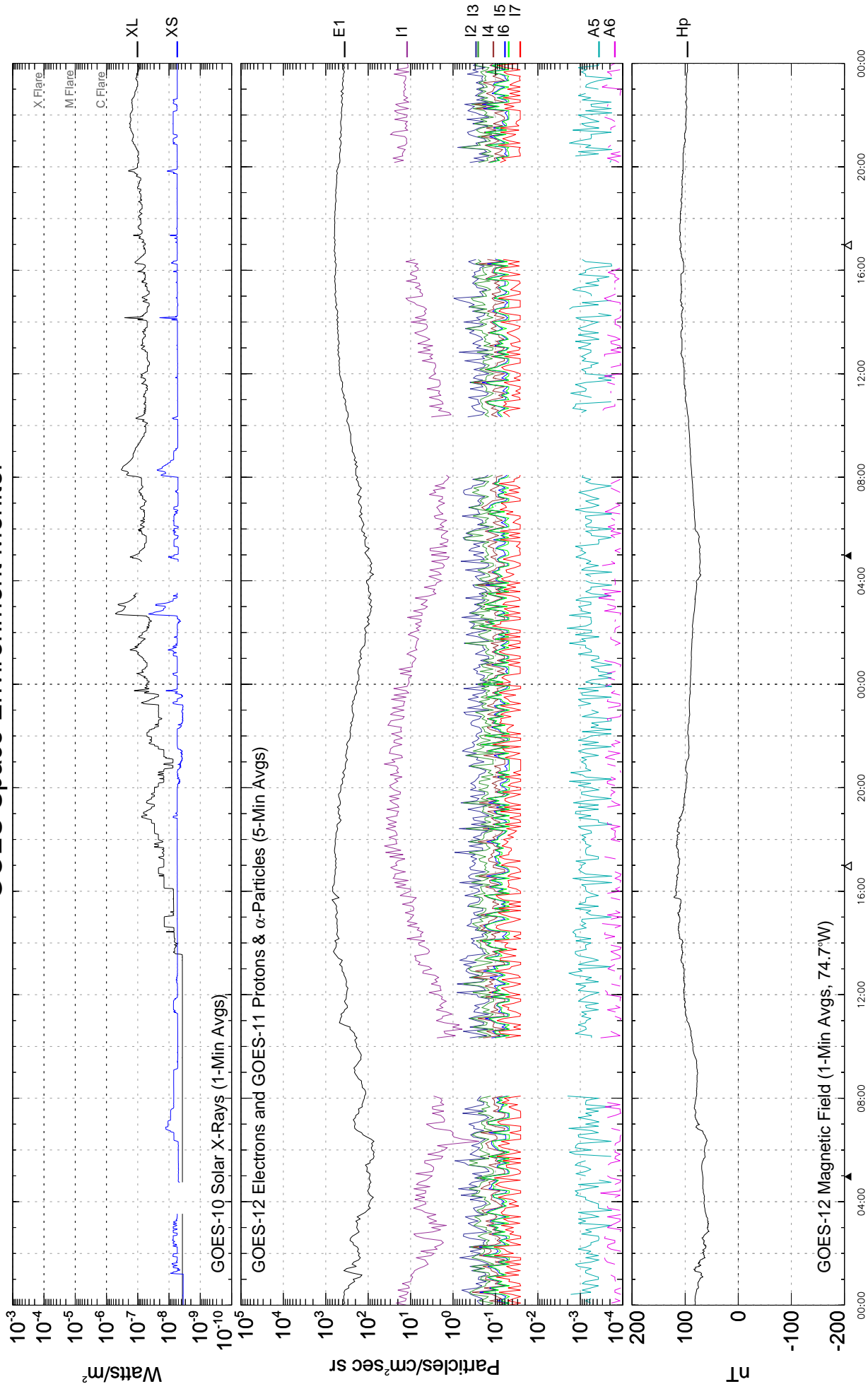


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22
March 2008 (Universal Time)

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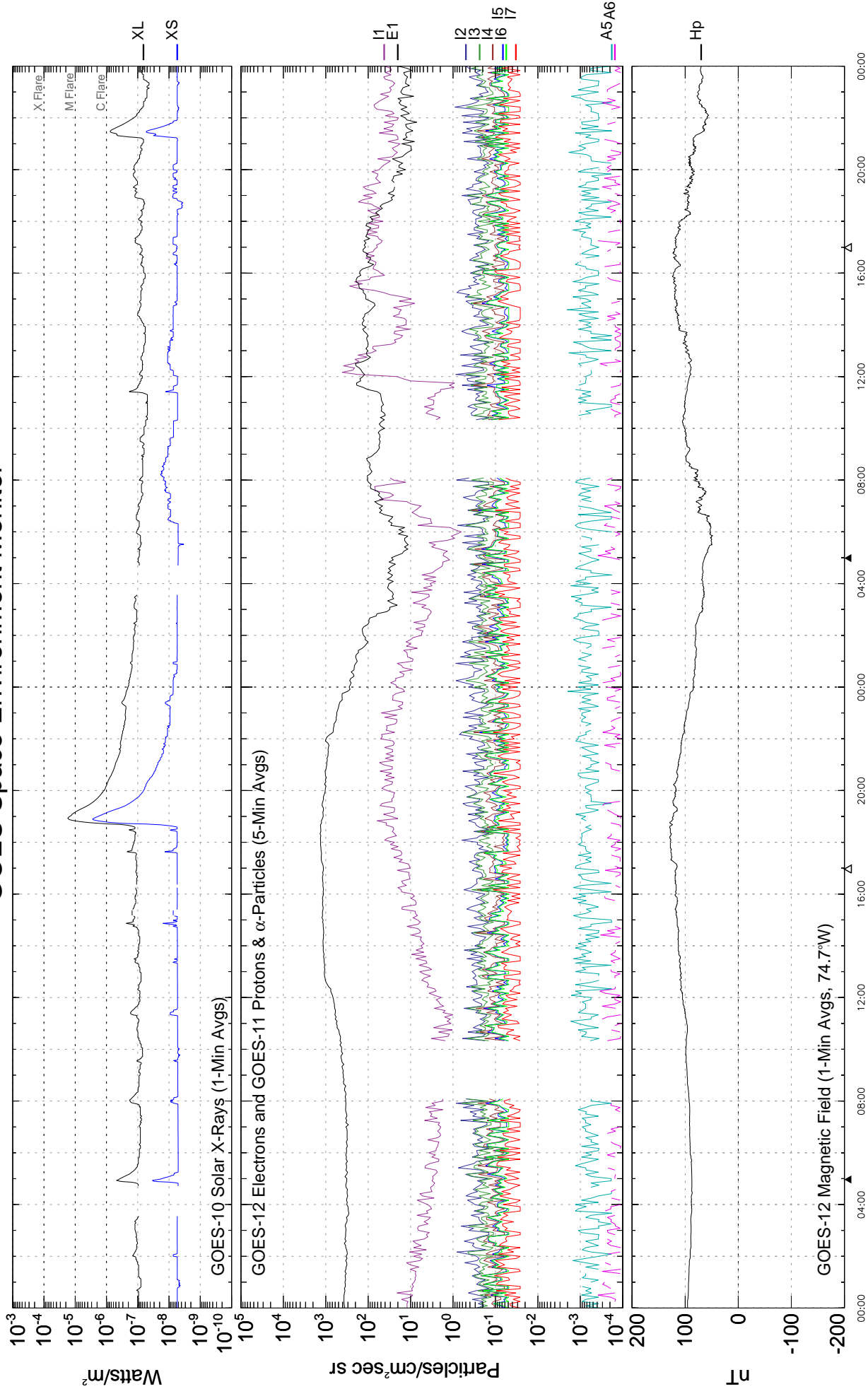


23

24

March 2008 (Universal Time)

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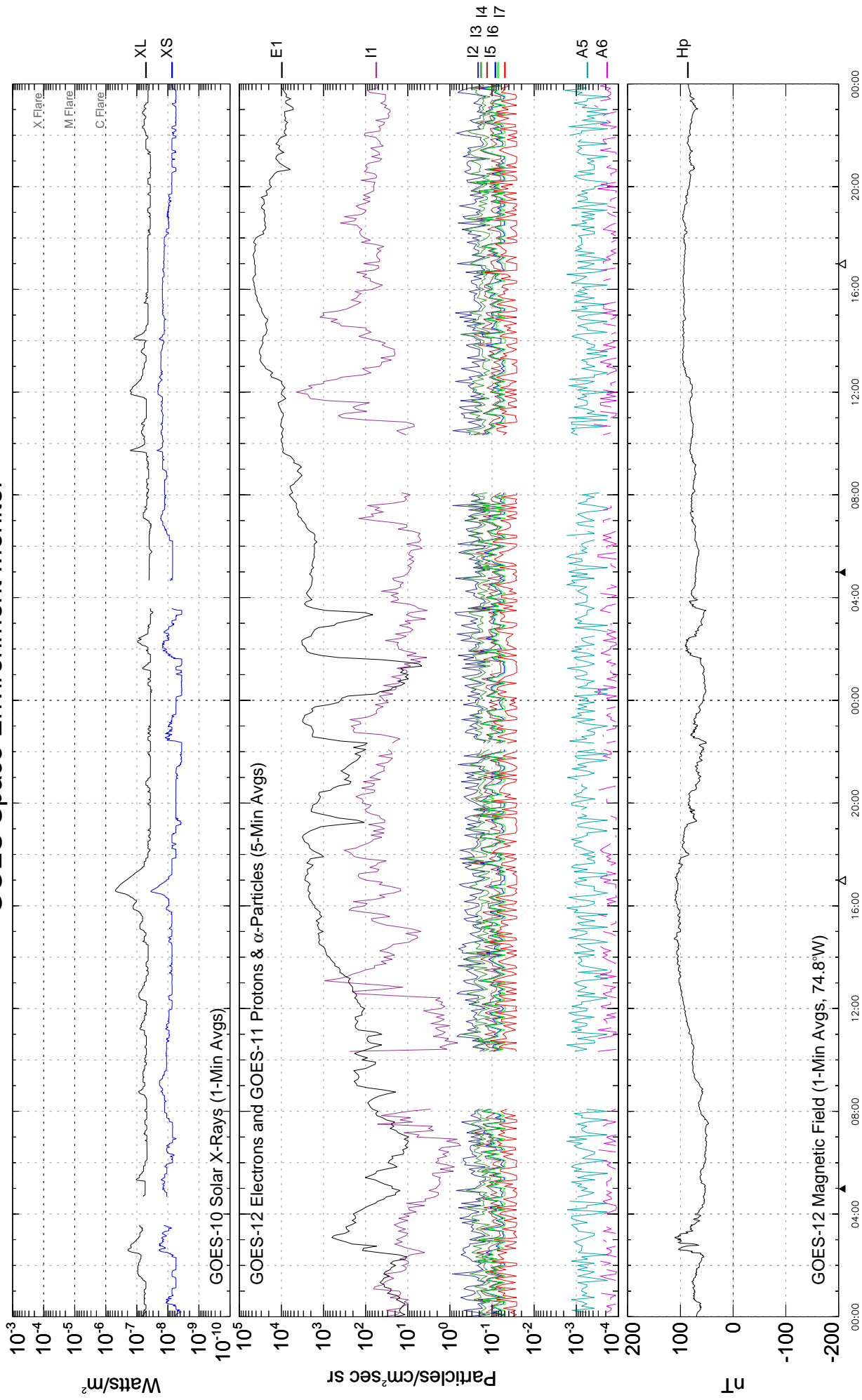


25

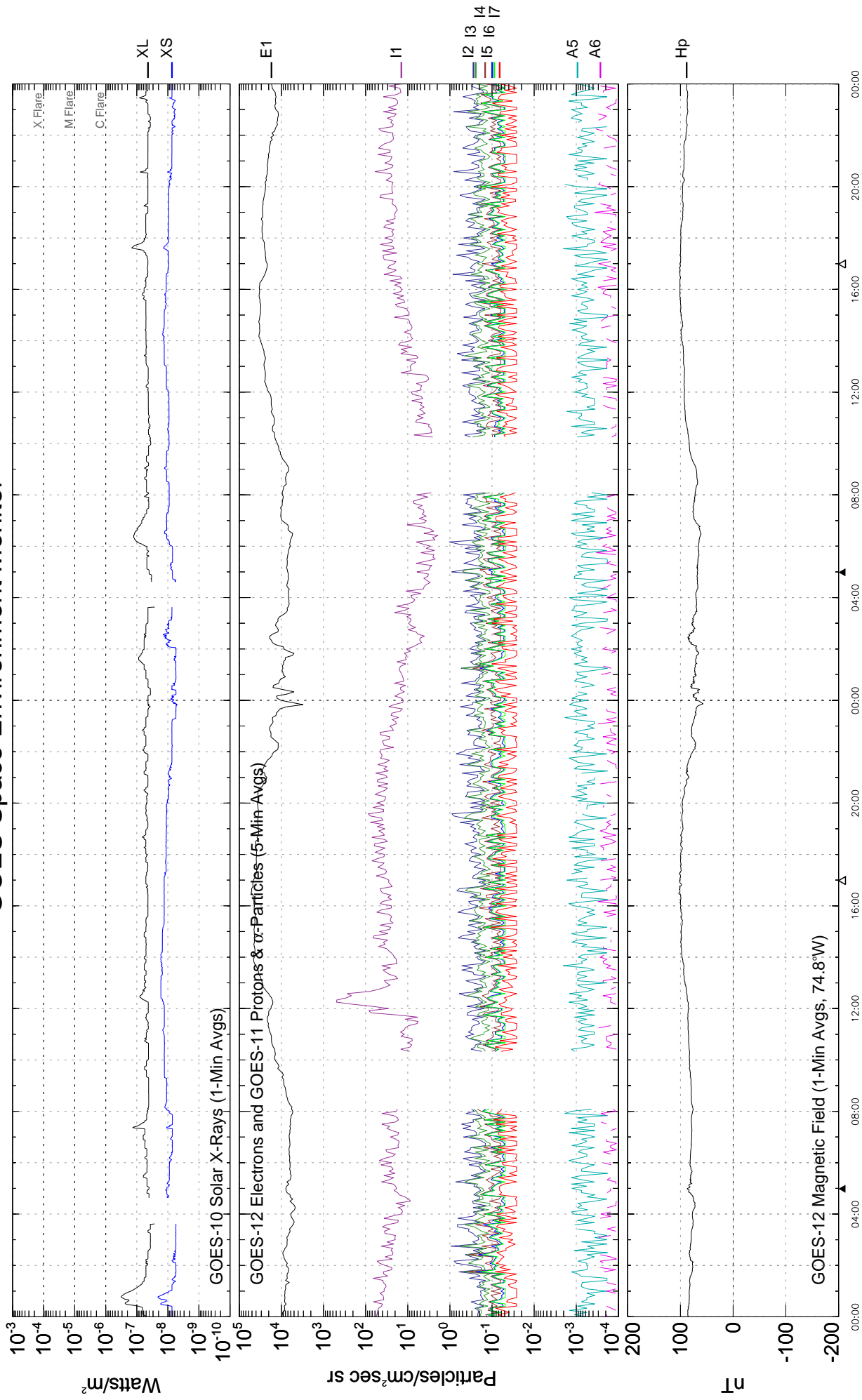
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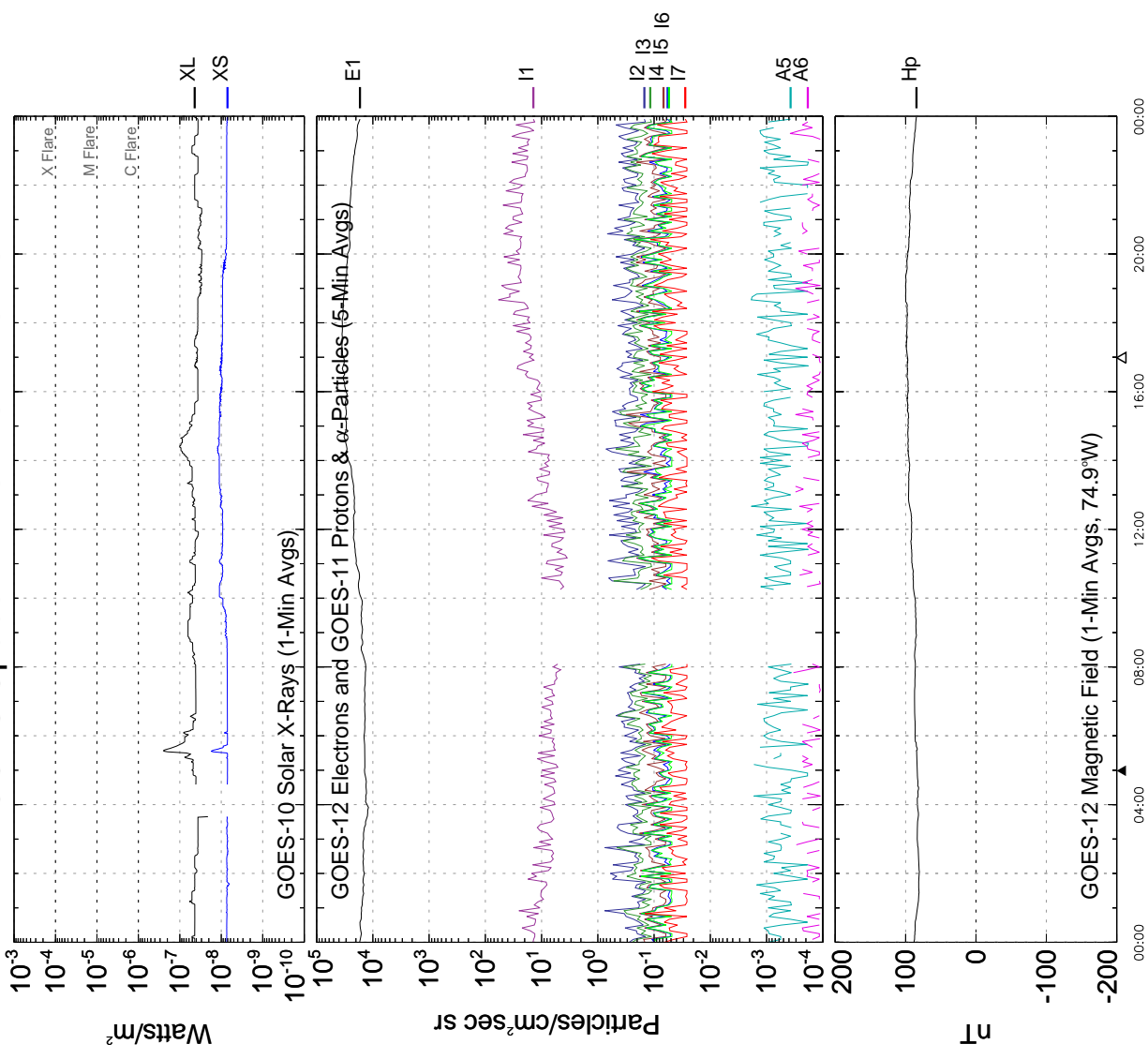
GOES Space Environment Monitor



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20
Mar 08

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

MARCH 2008

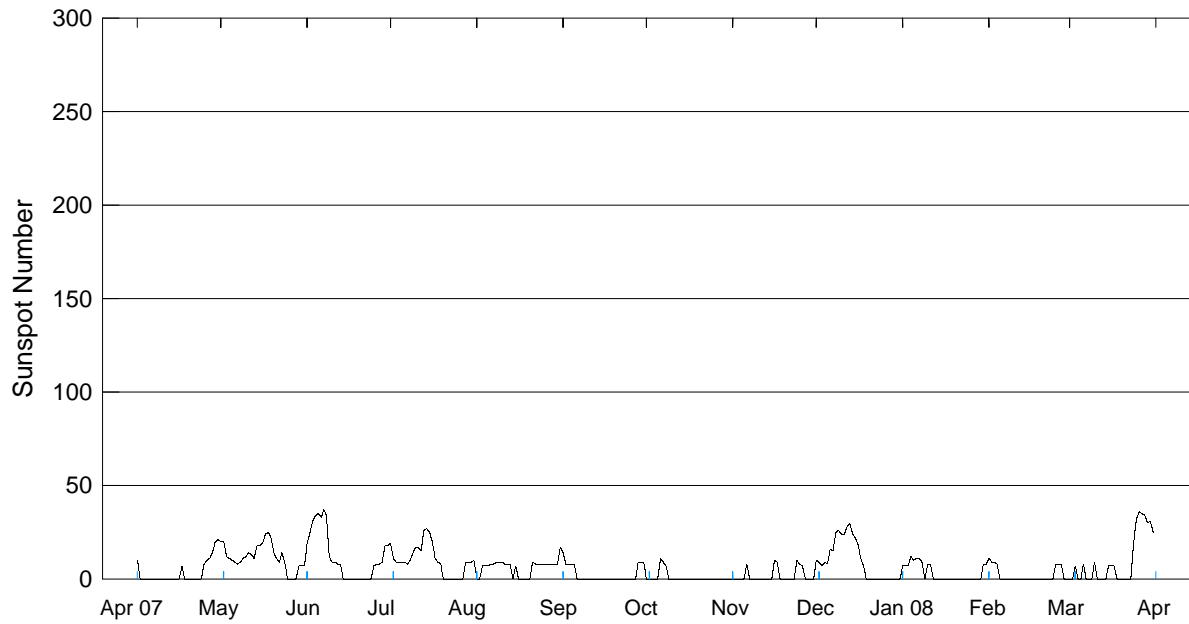
Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst (1)	Geoadvice (1)
							Lat	Lon	Opt	M	X			
061	01	29	0	70	29				0	0	0	01		SOL: Quiet MAG: Quiet PRO: Quiet
									0	0	0	01		
									0	0	0	01		
062	02	01	0	69	19				0	0	0	02		SOL: Quiet MAG: Active PRO: Quiet
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									0	0	0	02		
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066	06	05	13	69	10	10984	S05	W69	0	0	0	06	Q	SOL: Quiet MAG: Quiet PRO: Quiet
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075	15	14	0	70	12				0	0	0	15		SOL: Quiet MAG: Quiet PRO: Quiet
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076	16	15	12	70	10	10986	S04	W41	0	0	0	16	Q	SOL: Quiet MAG: Quiet PRO: Quiet
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077	17	16	12	70	6	10986	S04	W56	0	0	0	17	Q	SOL: Quiet MAG: Quiet PRO: Quiet
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									0	0	0	17		

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

MARCH 2008

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			
078	18	17	11	70	4	10986	S04	W71	0	0	0	18	Q	SOL: Quiet
									0	0	0	18		MAG: Quiet
									0	0	0	18		PRO: Quiet
079	19	18	0	70	9				0	0	0	19		SOL: Quiet
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International Relative Sunspot Numbers Apr 2007 - Mar 2008

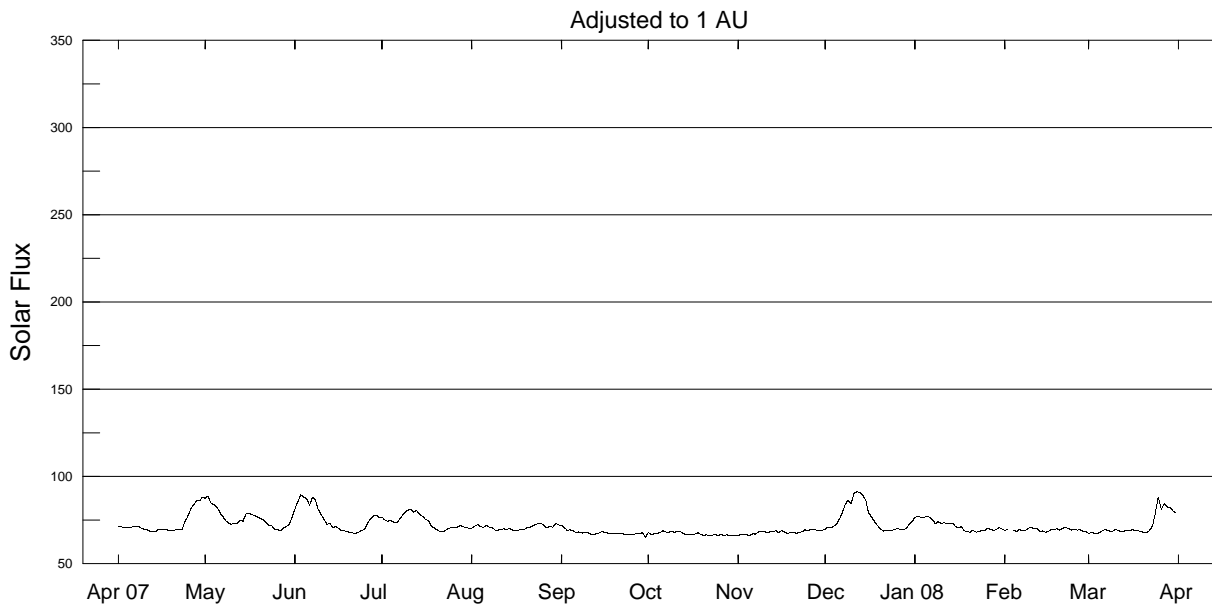


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19	0	22	0	8	0	0	0	0	0	0	0	0
20	0	14	0	0	0	0	0	0	0	0	0	0
21	0	11	0	0	9	0	0	0	0	0	0	0
22	0	9	0	0	8	0	0	0	0	0	0	0
23	0	14	0	0	8	0	0	0	0	0	0	0
24	0	9	0	0	8	0	0	10	0	0	0	19
25	8	0	7	0	8	0	0	8	0	0	8	32
26	10	0	8	0	8	0	0	7	0	0	8	36
27	11	0	8	0	8	0	0	0	0	0	8	35
28	14	0	9	9	8	9	0	0	0	0	0	34
29	20	7	18	9	8	9	0	0	0	0	0	30
30	21	7	18	9	8	9	0	0	0	8		31
31		7		0	17		0		0	8		25
Mean	3.4	11.7	12.1	9.7	6.0	2.4	0.9	1.7	10.1	3.4	2.1	9.3

* = Provisional.

Penticton 2800 MHz (10.7cm) Solar Flux Apr 2007 - Mar 2008

23
Mar 08



Day	Apr 07	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar
1	71.6	87.6	81.6	76.8	70.4	72.1	67.8	66.3	69.9	76.7	69.0	67.4
2	71.1	88.8	85.6	75.1	71.5	70.6	66.5	66.8	71.0	77.0	69.8	68.0
3	70.8	84.4	89.5	74.2	72.4	69.1	67.3	66.5	70.5	76.7	*	67.3
4	70.8	83.9	88.2	74.9	71.4	69.4	67.4	66.5	71.5	76.4	69.3	67.2
5	71.0	82.4	87.1	73.9	70.9	68.8	67.8	66.2	73.1	77.1	68.5	68.2
6	71.1	79.4	83.6	73.5	72.0	67.8	68.9	67.3	75.9	76.6	69.6	69.3
7	71.4	77.1	88.1	75.5	71.0	68.2	68.1	66.9	79.8	75.2	68.9	69.5
8	71.3	74.7	86.8	77.6	71.0	67.6	67.9	68.4	84.4	73.0	69.0	68.8
9	70.2	73.5	81.0	79.7	69.3	67.7	68.6	68.2	86.2	74.0	70.3	68.5
10	69.7	72.6	78.2	80.8	69.3	67.9	67.9	68.4	84.3	73.2	70.7	69.4
11	69.5	72.9	75.6	81.1	69.5	67.0	68.6	67.7	90.5	73.5	70.2	69.3
12	68.6	72.9	72.6	79.5	70.0	66.7	68.3	68.3	91.1	73.2	70.3	68.5
13	68.6	75.0	73.1	80.6	69.5	67.2	67.3	68.4	90.9	72.9	68.7	68.7
14	68.6	74.4	70.6	78.2	70.3	67.6	66.7	68.9	89.0	73.1	68.8	69.1
15	69.8	78.5	71.3	77.1	69.3	68.5	66.8	67.7	86.1	71.3	68.0	68.8
16	69.8	78.9	70.2	75.3	69.0	67.8	66.7	69.1	79.1	70.6	68.6	69.6
17	69.8	78.3	68.9	74.7	69.3	67.6	67.0	68.2	76.9	71.3	69.4	69.1
18	69.3	77.6	68.8	71.8	69.6	67.1	67.7	67.2	74.4	68.8	69.5	69.0
19	68.9	76.6	68.5	70.5	69.4	67.4	66.8	67.9	72.1	68.6	70.0	68.4
20	69.1	75.9	67.8	69.5	70.7	67.4	66.3	68.0	70.2	68.0	69.3	67.9
21	69.4	75.0	67.6	68.6	70.9	67.4	66.6	67.4	68.7	69.3	70.3	67.7
22	69.7	73.7	67.5	68.3	71.6	67.2	66.0	68.0	69.1	68.1	70.8	69.1
23	69.8	71.9	68.1	69.3	72.4	66.8	66.4	68.3	69.1	68.4	70.1	71.5
24	74.0	71.7	69.1	70.2	73.2	66.5	66.8	69.5	69.1	69.1	69.3	79.0
25	77.4	69.9	69.8	70.8	73.1	66.6	66.3	68.8	69.7	68.9	69.9	88.2
26	81.5	69.5	72.8	70.6	71.6	66.8	66.7	69.6	70.2	70.3	69.3	81.2
27	83.8	68.8	75.7	70.9	70.7	67.4	66.2	69.6	69.7	69.8	69.4	84.5
28	86.1	70.5	77.4	72.1	71.6	67.4	66.6	69.3	69.5	69.2	68.7	82.6
29	86.0	71.5	77.8	71.1	71.0	67.8	66.2	69.3	70.3	69.5	68.5	82.4
30	88.2	72.6	76.4	71.0	73.0	65.1	66.3	69.2	72.5	70.6		80.4
31		76.7		70.1	72.2		66.1		74.2	69.9		79.1
Mean	72.9	76.0	76.0	74.0	70.9	67.8	67.1	68.1	76.1	71.9	69.4	72.2

* = No data available.

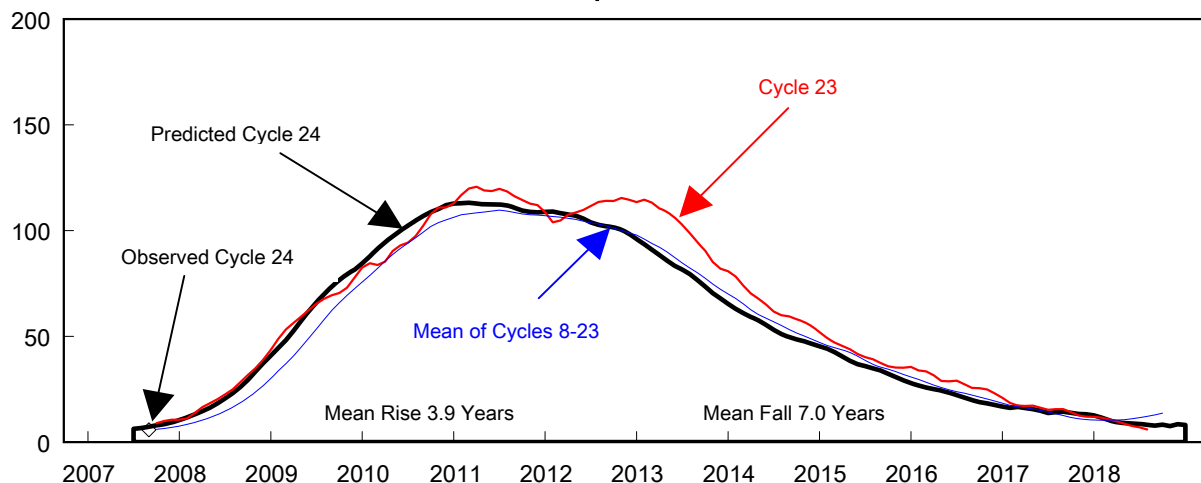
DAILY SOLAR INDICES
March 2008

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	61	19	0	0	68.6	414	167	121	67.4	63	48	31	22	10
2	62	20	0	0	69.2	449	178	125	68.0	61	48	35	22	10
3	63	21	7	3	68.4	432	168	120	67.3	60	48	35	21	12
4	64	22	0	1	68.3	432	174	133	67.2	60	49	33	19	11
5	65	23	0	1	69.3	391	175	117	68.2	59	50	33	21	10
6	66	24	8	4	70.3	450	177	151	69.3	63	49	30	21	11
7	67	25	0	0	70.5	446	181	130	69.5	62	49	34	22	11
8	68	26	0	0	69.8	401	173	121	68.8	66	49	34	21	10
9	69	27	0	0	69.5	445	174	125	68.5	60	48	35	22	11
10	70	1	9	4	70.3	444	179	127	69.4	63	49	34	22	12
11	71	2	0	1	70.2	449	178	127	69.3	64	50	34	21	11
12	72	3	0	0	69.4	417	168	120	68.5	62	49	32	20	11
13	73	4	0	0	69.5	452	178	127	68.7	62	49	34	21	11
14	74	5	0	0	69.9	448	179	132	69.1	65	50	34	21	9
15	75	6	7	4	69.5	399	167	111	68.8	57	46	33	20	10
16	76	7	7	3	70.3	428	172	126	69.6	65	49	35	22	10
17	77	8	7	2	69.8	451	181	127	69.1	65	50	36	21	10
18	78	9	0	1	69.6	453	180	128	69.0	67	51	35	21	10
19	79	10	0	0	69.0	328	109	115	68.4	62	48	33	21	13
20	80	11	0	0	68.4	366	176	127	67.9	65	49	35	22	11
21	81	12	0	0	68.2	448	177	126	67.7	64	49	32	21	12
22	82	13	0	0	69.6	451	174	126	69.1	62	50	34	18	10
23	83	14	0	5	72.0	453	179	129	71.5	67	51	32	21	10
24	84	15	19	25	79.4	455	186	137	79.0	73	54	37	24	14
25	85	16	32	38	88.6	449	191	145	88.2	83	60	40	26	16
26	86	17	36	42	81.6	453	179	149	81.2	82	62	33	23	17
27	87	18	35	39	84.8	456	185	154	84.5	83	63	43	27	23
28	88	19	34	37	82.9	329	167	131	82.6	78	61	36	21	8
29	89	20	30	36	82.6	450	182	137	82.4	79	62	40	23	12
30	90	21	31	33	80.5	450	182	137	80.4	78	61	40	24	12
31	91	22	25	24	79.2	425	183	134	79.1	74	59	33	22	12
MEAN			9.3	9.8	72.9	429	174	129	72.2	66	51	34	21	11

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

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

25
Mar 08



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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1996	10	10	10	9	8*	9	8	8	8	9**	10	10	8
1997	11	11	14	17	18	20	23	25	28	32	35	39	23
1998	44	49	53	57	59	63	65	68	69	71	73	78	62
1999	83	85	84	85	90	93	94	98	102	108	111	111	95
2000	113	117	120	120.8+	119	119	120	119	116	115	113	112	107
2001	109	104	105	108	109	110	112	114	114	114	115	115	111
2002	114	115	113	111	109	106	103	99	95	91	85	82	102
2003	81	79	74	70	68	65	62	60	60	58	57	57	66
2004	53	49	47	46	46	42	40	39	38	36	35	35	42
2005	35	34	34	32	29	29	29	27	26	26	25	23	29
2006	21	19	17	17	17	16	15	16	16	14	13	13	16
2007	12	12	11	10	9	8	7	6	6##	6	7	7	8
										(0)	(1)	(2)	(0)
2008	8	8	9	11	12	13	15	17	19	21	24	27	15
	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(12)	(14)	(16)	(18)	(21)	(10)
2009	30	34	37	41	45	49	54	58	62	66	69	73	52
	(23)	(26)	(29)	(32)	(35)	(39)	(43)	(47)	(50)	(53)	(55)	(58)	(41)
	Solar Cycle 22				Solar Cycle 23								

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

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

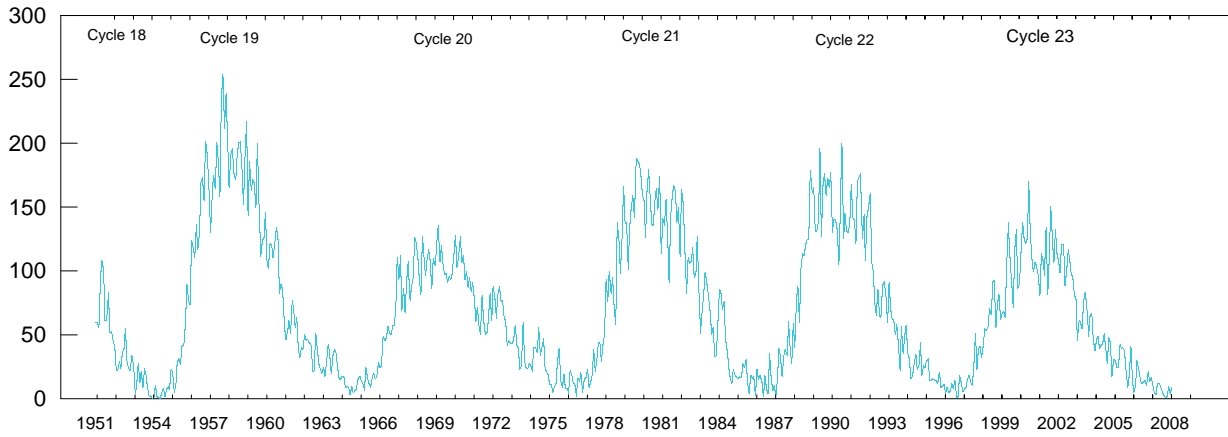
NOTE: This is a preliminary prediction using September 2007 as solar minimum.

OBSERVED AND PREDICTED NUMBERS: For the end of Cycle 23, and the rise and decline of Cycle 24, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Sep 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 September 2008 prediction. There exists a 90% chance that in September 2008, the actual smoothed number will fall somewhere between 5 and 33.

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

Mean Monthly Sunspot Numbers Jan 1951 - Mar 2008



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

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

HÀ S O L A R F L A R E S
MARCH 2008

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
							Region	Mo Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
LEAR	11	0334	0341	0352	S10	W83	10985	03	4.9	18	SF	3	E		49		
LEAR		0446	0453	0459	S10	W84	10985	03	4.9	13	SF	3	E		67		F
LEAR		0553	0558	0614	S10	W85	10985	03	4.8	21	SF	3	E		50		
LEAR	23	2345	2346	2350	S09	E50	10987	03	27.7	5	SF	3	E		11		
LEAR	24	0108	0109	0110	S08	E49	10987	03	27.7	2	SF	3	E		18		
LEAR		0241	0248	0257	S08	E46	10987	03	27.6	16	SF	4	E		20		F
LEAR		0344	0345	0351	S11	E72		03	29.6	7	SF	3	E		11		
HOLL		1410E	1411	1435	S11	E66		03	29.5	25D	SF	3	E		36		
HOLL	25	1846	1855	1922	S13	E78	10989	03	31.7	36	1F	3	E		117		F
HOLL	26	2118	2126	2138	S09	E32	10988	03	29.3	20	SF	3	E		30		FH
HOLL	27	1634	1635	1641	S10	E01	10987	03	27.8	7	SF	3	E		10		
LEAR	31	0532	0532	0542	S11	W22	10988	03	29.6	10	SF	3	E		22		

"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
MARCH 2008

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES	11	0550	0557	0604	S10	W85	10985			14	B 5.9	2.9E-04		
GOES	24	0117	0120	0123						6	B 1.7	5.4E-05		
GOES		0237	0244	0253	S08	E46	10987			16	B 5.1	3.2E-04		
GOES		0300	0305	0307						7	B 4.2	1.5E-04		
GOES		0450	0455	0459						9	B 1.7	7.5E-05		
GOES		0759	0818	0834						35	B 3.3	5.0E-04		
GOES		1013	1017	1021						8	B 1.1	4.6E-05		
GOES		1403	1410	1412	S11	E66	10988			9	B 2.6	6.4E-05		
GOES		1613	1618	1627						14	B 1.2	8.7E-05		
GOES		1718	1721	1723						5	B 1.3	3.0E-05		
GOES		1947	1951	1953						6	B 1.9	6.0E-05		
GOES	25	0449	0456	0504						15	B 4.7	2.9E-04		
GOES		0752	0802	0811						19	B 1.8	1.8E-04		
GOES		1118	1125	1132						14	B 1.7	1.3E-04		
GOES		1449	1452	1454						5	B 2.3	5.7E-05		
GOES		1734	1738	1741						7	B 2.1	7.0E-05		
GOES		1826	1829	1831			10988			5	B 1.8	4.8E-05		
GOES		1836	1856	1913	S13	E78	10989			37	M 1.7	2.1E-02		
GOES	26	1121	1125	1130						9	B 1.8	7.2E-05		
GOES		1851	1919	1926						35	B 1.3	2.4E-04		
GOES		2112	2129	2140	S09	E32	10988			28	B 7.6	8.3E-04		
GOES	27	0227	0236	0252						25	B 1.9	2.3E-04		
GOES		0517	0520	0532						15	B 1.0	7.9E-05		
GOES		1627	1636	1649	S10	E01	10987			22	B 4.8	5.3E-04		
GOES	28	0939	0944	0948						9	B 1.6	6.5E-05		
GOES		1149	1203	1216						27	B 1.6	2.3E-04		
GOES		1400	1406	1412						12	B 1.2	7.4E-05		
GOES	29	0023	0047	0058						35	B 3.1	4.7E-04		
GOES		0718	0722	0726						8	B 1.3	4.9E-05		
GOES	30	0600	0625	0648						48	B 1.2	2.9E-04		
GOES		1732	1737	1744						12	B 1.4	8.6E-05		
GOES	31	0528	0534	0540	S11	W22	10988			12	B 2.4	1.2E-04		

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

=====

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

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

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

MARCH 2008

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
24	245 LEAR	20 GRF	0901.0	0902.0	3.0	100.0			QL=4 ST=2 TYP=2
25	2695 SGMR	48 C	1849.0	1851.0	6.0	290.0			QL=4 ST=2 TYP=8
	2695 PALE	48 C	1850.0	1851.0	4.0	290.0			QL=4 ST=2 TYP=8
	1415 PALE	8 S	1850.0	1851.0	1.0	450.0			QL=4 ST=2 TYP=3
	610 SGMR	8 S	1850.0	1850.0	U	48.0			QL=4 ST=2 TYP=3
	1415 SGMR	8 S	1850.0	1851.0	2.0	400.0			QL=4 ST=2 TYP=3
	4995 SGMR	4 S/F	1850.0	1851.0	5.0	160.0			QL=4 ST=2 TYP=3
	1415 PALE	8 S	1850.0E	1851.0U	1.0D	450.0			QL=4 ST=2 TYP=3
	4995 PALE	8 S	1851.0	1851.0	1.0	130.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1851.0	1852.0	2.0	99.0			QL=4 ST=2 TYP=3
	8800 SGMR	8 S	1851.0	1851.0	2.0	74.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	1852.0	1852.0	U	100.0			QL=4 ST=2 TYP=3
26	245 SVTO	8 S	1625.0	1625.0	U	100.0			QL=2 ST=2 TYP=3
27	8800 SGMR	8 S	1757.0	1758.0	1.0	220.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:

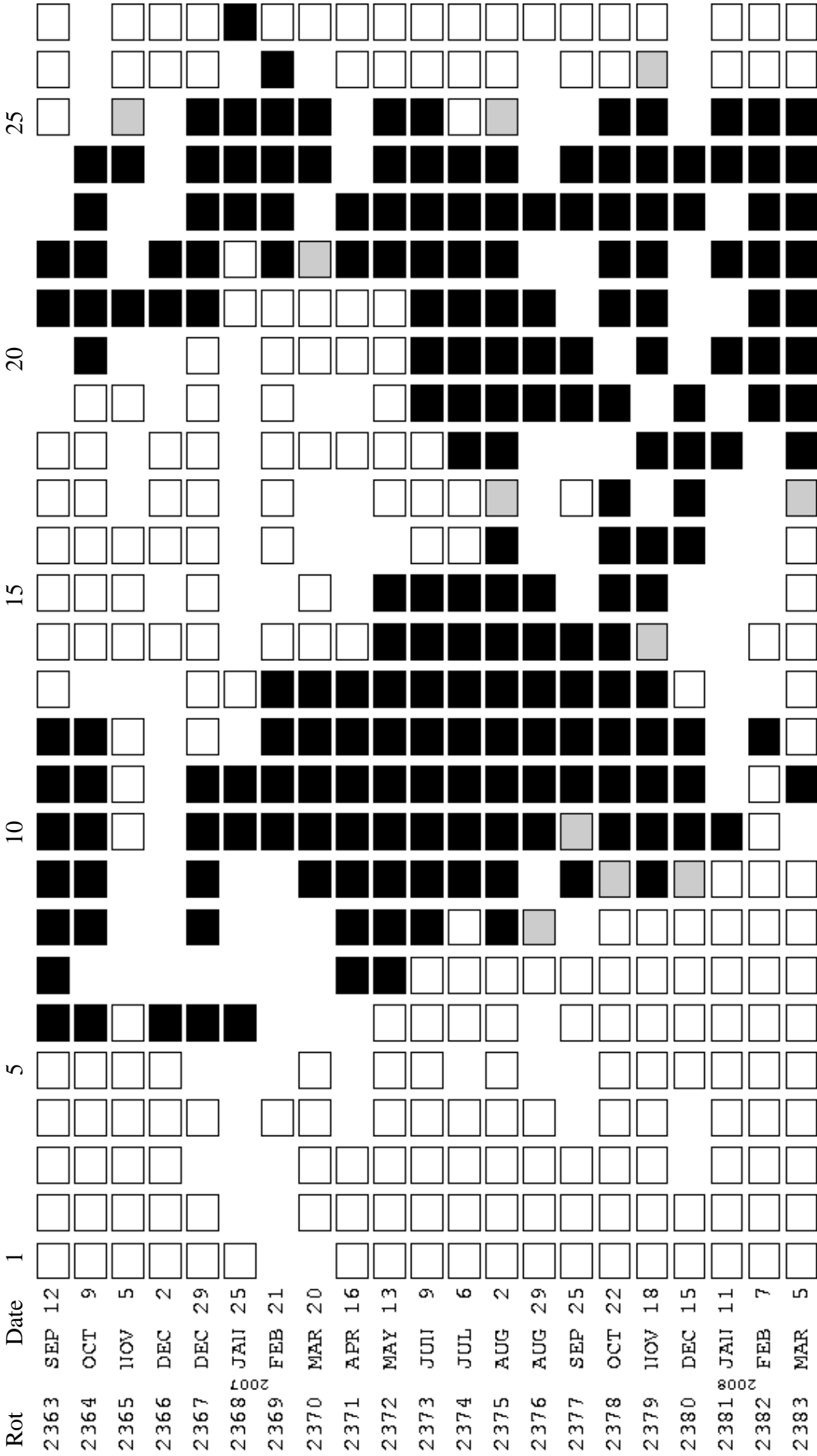
LEAR = Learmonth SGMR = Sagamore Hill SVTO = San Vito

Explanation of Type Code:

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

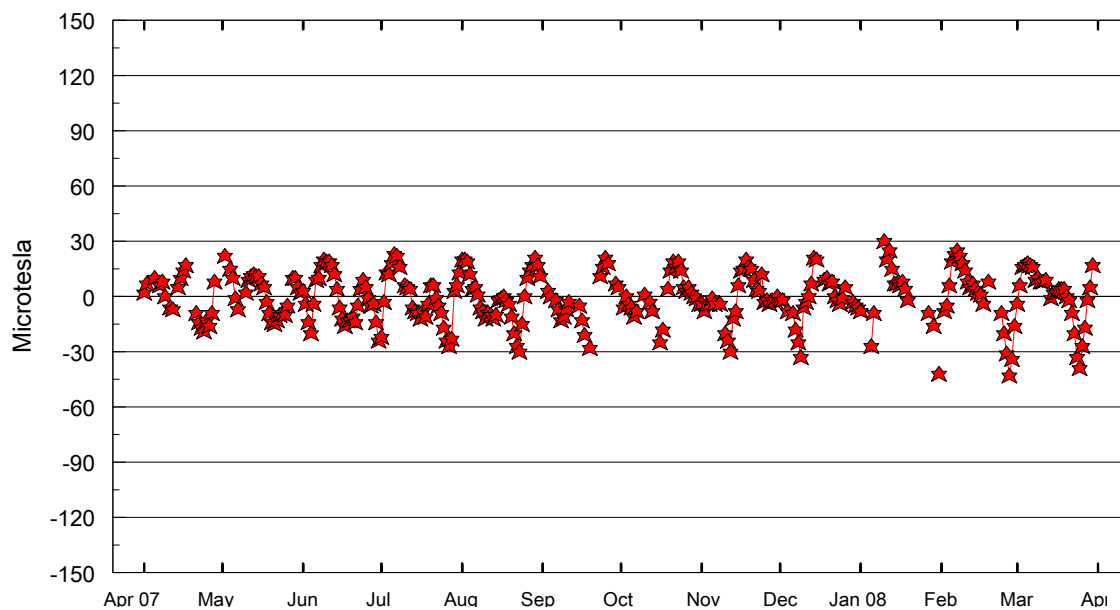


Mean Solar Magnetic Field Polarity:

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

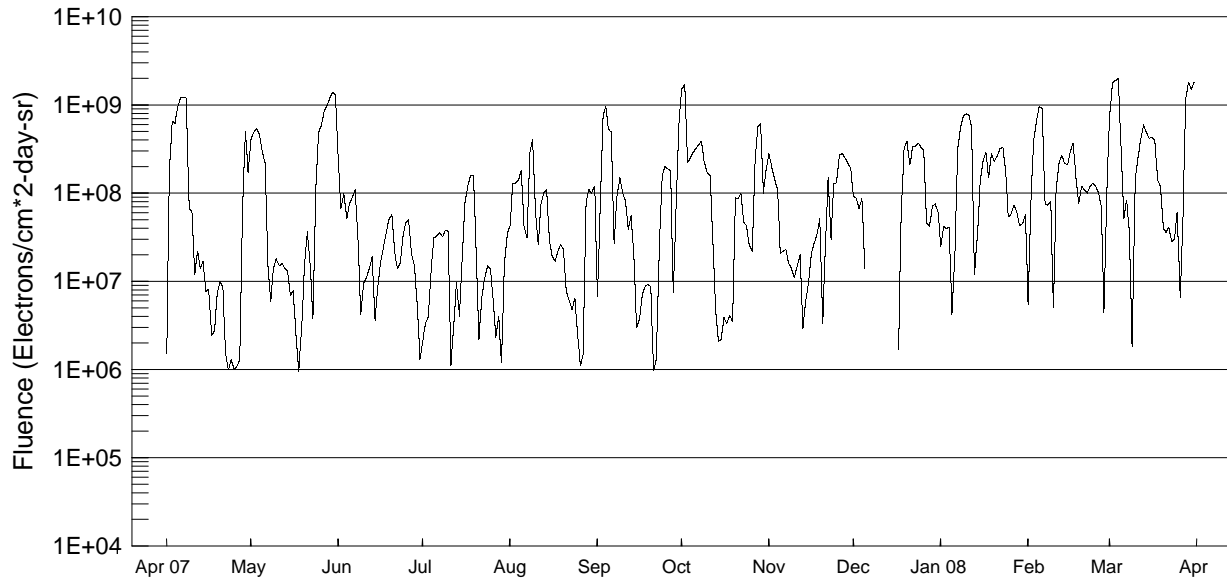
Observations are taken at 2000 UT. Rotation numbers given are the Bartels series, but the dates are not; these dates are five days earlier, to mark times of occurrence of phenomena on the Sun that affect the Earth during the given Bartels Rotation.

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



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

GOES Daily Electron Fluence Apr 2007 - Mar 2008



Day	Apr 07	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar
1	1.5E+06	4.0E+08	2.4E+08	2.1E+06	4.3E+07	6.8E+06	1.5E+09	2.8E+08	9.3E+07	2.5E+07	5.5E+06	7.5E+08
2	1.9E+08	4.9E+08	6.7E+07	3.4E+06	1.3E+08	6.3E+07	1.7E+09	2.0E+08	8.8E+07	4.2E+07	8.0E+07	1.8E+09
3	6.6E+08	5.4E+08	1.0E+08	3.9E+06	1.3E+08	7.5E+08	2.2E+08	1.4E+08	6.7E+07	4.0E+07	4.1E+08	1.9E+09
4	6.2E+08	4.6E+08	5.1E+07	1.3E+07	1.4E+08	9.6E+08	2.5E+08	1.1E+08	8.6E+07	4.1E+07	6.5E+08	2.0E+09
5	9.6E+08	2.9E+08	7.7E+07	3.1E+07	1.8E+08	5.3E+08	2.9E+08	2.1E+07	1.4E+07	4.2E+06	9.7E+08	3.6E+08
6	1.2E+09	2.2E+08	9.0E+07	3.3E+07	4.3E+07	4.9E+08	3.2E+08	2.2E+07	---	2.3E+07	9.1E+08	5.1E+07
7	1.2E+09	1.6E+07	1.1E+08	3.6E+07	3.1E+07	2.7E+07	3.5E+08	2.3E+07	---	3.2E+08	7.6E+07	8.4E+07
8	1.2E+09	5.9E+06	3.1E+07	3.2E+07	2.9E+08	9.6E+07	3.9E+08	1.6E+07	---	5.6E+08	7.3E+07	3.8E+07
9	6.7E+07	1.4E+07	4.2E+06	3.8E+07	4.1E+08	1.5E+08	2.3E+08	1.4E+07	---	7.5E+08	8.1E+07	1.8E+06
10	6.2E+07	1.8E+07	9.4E+06	3.7E+07	6.6E+07	1.0E+08	1.7E+08	1.1E+07	---	7.9E+08	5.0E+06	1.4E+08
11	1.2E+07	1.5E+07	1.1E+07	1.1E+06	2.6E+07	8.2E+07	1.6E+08	1.5E+07	---	7.7E+08	1.1E+08	2.5E+08
12	2.2E+07	1.6E+07	1.4E+07	3.0E+06	7.5E+07	3.9E+07	3.1E+07	2.0E+07	---	5.5E+08	2.2E+08	4.1E+08
13	1.4E+07	1.4E+07	1.9E+07	9.6E+06	1.0E+08	5.6E+07	5.0E+06	2.9E+06	---	1.2E+07	2.7E+08	6.0E+08
14	1.7E+07	1.3E+07	3.6E+06	4.0E+06	1.1E+08	2.1E+07	2.1E+06	6.1E+06	---	3.5E+07	2.2E+08	4.9E+08
15	7.7E+06	6.9E+06	8.6E+06	1.9E+07	2.8E+07	3.0E+06	2.2E+06	9.4E+06	---	1.4E+08	2.1E+08	4.2E+08
16	8.2E+06	7.8E+06	1.6E+07	8.1E+07	1.9E+07	3.8E+06	3.9E+06	2.0E+07	---	2.3E+08	3.0E+08	4.3E+08
17	2.4E+06	2.5E+06	2.4E+07	1.2E+08	1.7E+07	7.2E+06	3.3E+06	2.7E+07	1.7E+06	2.9E+08	3.7E+08	4.0E+08
18	2.8E+06	9.6E+05	3.5E+07	1.6E+08	2.2E+07	8.8E+06	4.1E+06	3.3E+07	6.4E+07	1.5E+08	1.5E+08	1.4E+08
19	7.3E+06	3.1E+06	5.0E+07	1.6E+08	2.6E+07	9.3E+06	3.5E+06	5.2E+07	3.2E+08	2.8E+08	7.6E+07	1.2E+08
20	1.0E+07	1.6E+07	5.7E+07	2.3E+07	2.3E+07	8.8E+06	8.9E+07	3.3E+06	3.9E+08	2.3E+08	1.2E+08	4.0E+07
21	8.5E+06	3.7E+07	2.1E+07	2.2E+06	7.7E+06	9.8E+05	8.7E+07	2.6E+07	2.1E+08	2.6E+08	1.1E+08	3.6E+07
22	1.5E+06	1.5E+07	1.4E+07	7.0E+06	6.2E+06	1.3E+06	9.9E+07	1.5E+08	3.4E+08	3.2E+08	1.0E+08	4.1E+07
23	9.9E+05	3.8E+06	1.6E+07	1.1E+07	4.8E+06	2.2E+07	4.7E+07	3.0E+07	3.4E+08	3.3E+08	1.2E+08	2.8E+07
24	1.3E+06	1.0E+08	3.3E+07	1.5E+07	6.5E+06	1.6E+08	4.3E+07	1.3E+08	3.7E+08	1.8E+08	1.3E+08	3.0E+07
25	1.0E+06	4.9E+08	4.6E+07	1.4E+07	2.5E+06	2.0E+08	2.6E+07	1.3E+08	3.3E+08	5.4E+07	1.2E+08	6.0E+07
26	1.1E+06	5.8E+08	5.0E+07	6.3E+06	1.1E+06	1.9E+08	2.2E+07	2.7E+08	3.0E+08	5.8E+07	1.0E+08	6.6E+06
27	1.3E+06	8.6E+08	2.1E+07	2.3E+06	1.5E+06	1.8E+08	2.3E+08	2.8E+08	4.6E+07	7.3E+07	7.1E+07	5.7E+07
28	7.0E+07	9.9E+08	1.5E+07	4.0E+06	7.9E+07	7.5E+06	5.7E+08	2.5E+08	4.2E+07	6.2E+07	4.4E+06	1.2E+09
29	5.0E+08	1.2E+09	5.4E+06	1.2E+06	1.1E+08	7.1E+07	6.2E+08	2.2E+08	7.1E+07	4.3E+07	1.1E+08	1.8E+09
30	1.7E+08	1.4E+09	1.3E+06	1.6E+07	1.0E+08	6.1E+08	1.0E+08	1.9E+08	7.6E+07	4.5E+07		1.5E+09
31		1.3E+09		3.5E+07	1.2E+08		1.9E+08		6.1E+07	5.7E+07		1.8E+09

NOTE: The electron detector responds significantly to protons above 32 MeV; therefore, electron data are contaminated when a proton event is in progress. These days are indicated with '-999' in the table and are not plotted. '-' indicates data not available.

NOTE: GOES9 data began April, 1996 and ended on 26 July, 1998. GOES12 is primary satellite as of 15 May 2003.

CONTENTS

Prompt Reports

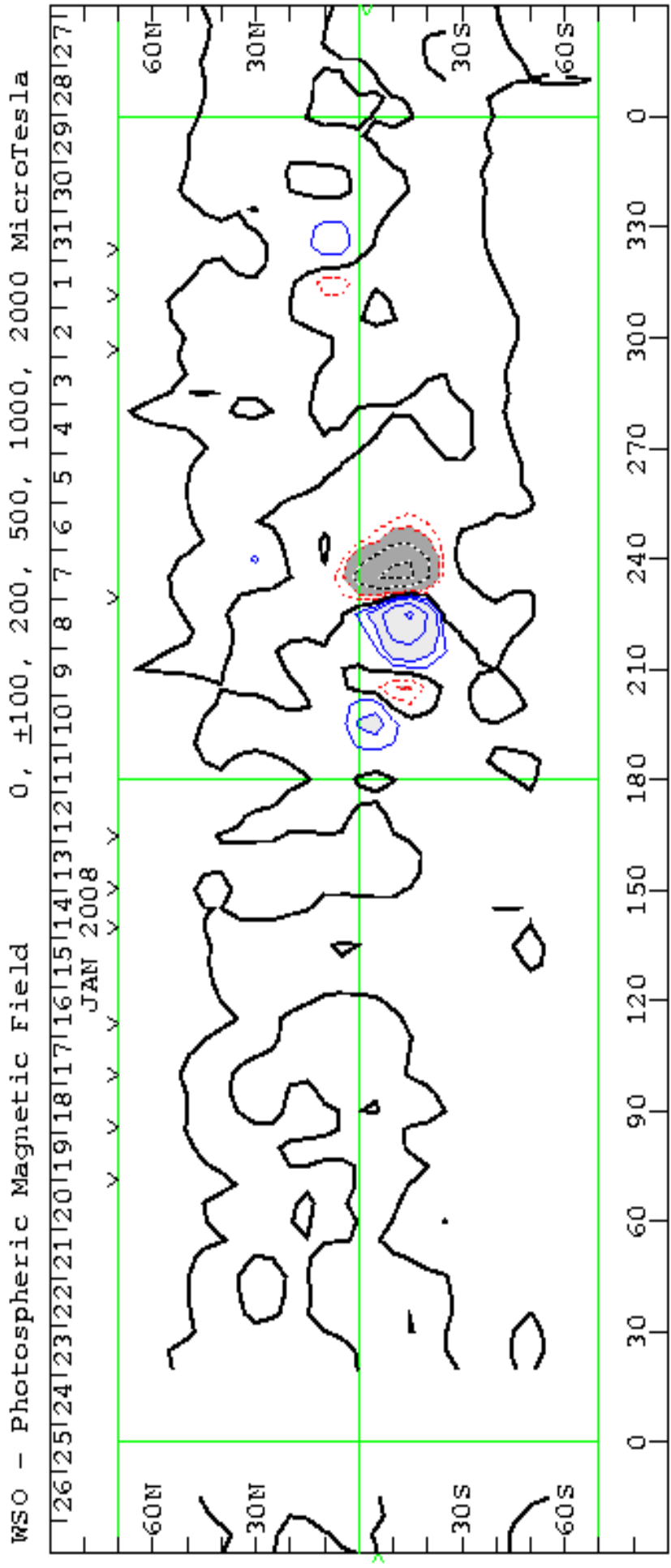
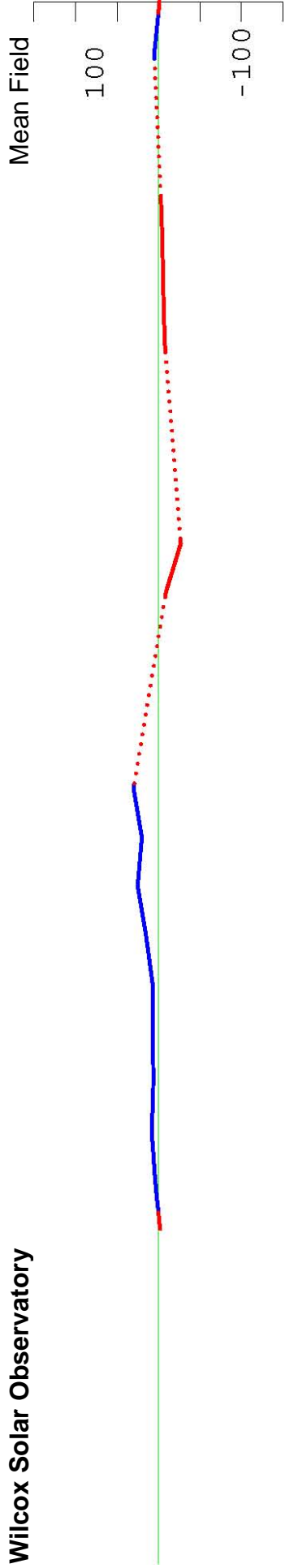
Number 764 Part I

DATA FOR FEBRUARY 2008

	Page
SOLAR ACTIVE REGIONS	
Solar Synoptic Charts	34- 45
Daily Activity Solar Maps	46- 74
Preliminary NSO/KP Coronal Hole Daily Maps -- none available	
Nobeyama Daily Radioheliograph Images at 17 GHz	75- 79
Sunspot Groups	80
 SUDDEN IONOSPHERIC DISTURBANCES	 81
 SOLAR RADIO SPECTRAL OBSERVATIONS	 82- 85
 SOLAR RADIOHELIOGRAPH – 150.9 AND 327 MHz - NANCAY	 86
COSMIC RAY MEASUREMENTS BY NEUTRON MONITOR	
Daily Counting Rates	87
Chart of Variations	88- 91
Graph and Table of Monthly Mean Kiel 1958 - Feb 2008	92
GEOMAGNETIC INDICES	
Geomagnetic Activity Indices	93
Daily Average Ap	94
Chart of Kp by 27-day Rotation	95
2007 Chart of Kp by 27-day Rotation	96
Table of Monthly aa Index (1950 to present)	97
Chart of 3-hourly Km and aa by 27-day Rotation	98
2007 Chart of 3-hourly Km by 27-day Rotation	99
2007 Chart of 3-hourly aa by 27-day Rotation	100
 Provisional Values of Hourly Equatorial Dst	 101
Polar Cap (PC) Geomagnetic Index Plot of 15-min values – Thule	102
-- Plot of 1-min values – Vostok -- No data – Antarctic station inaccessible.	
 Principal Magnetic Storms	 103
Sudden Commencements/Solar Flare Effects	104

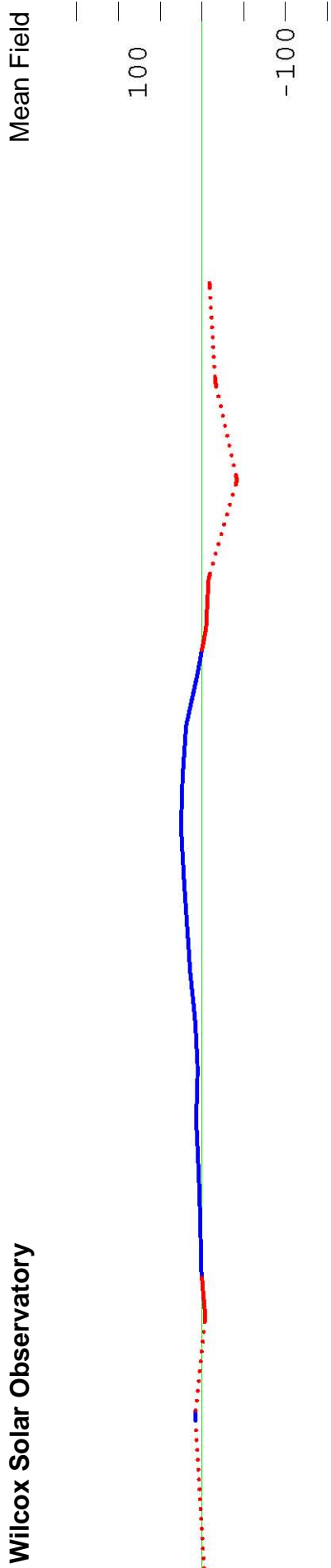
SOLAR MAGNETIC FIELD SYNOPSIS CHART
 CARRINGTON ROTATION NUMBER 2065
 (29 Dec 2007 to 25 Jan 2008)

Wilcox Solar Observatory

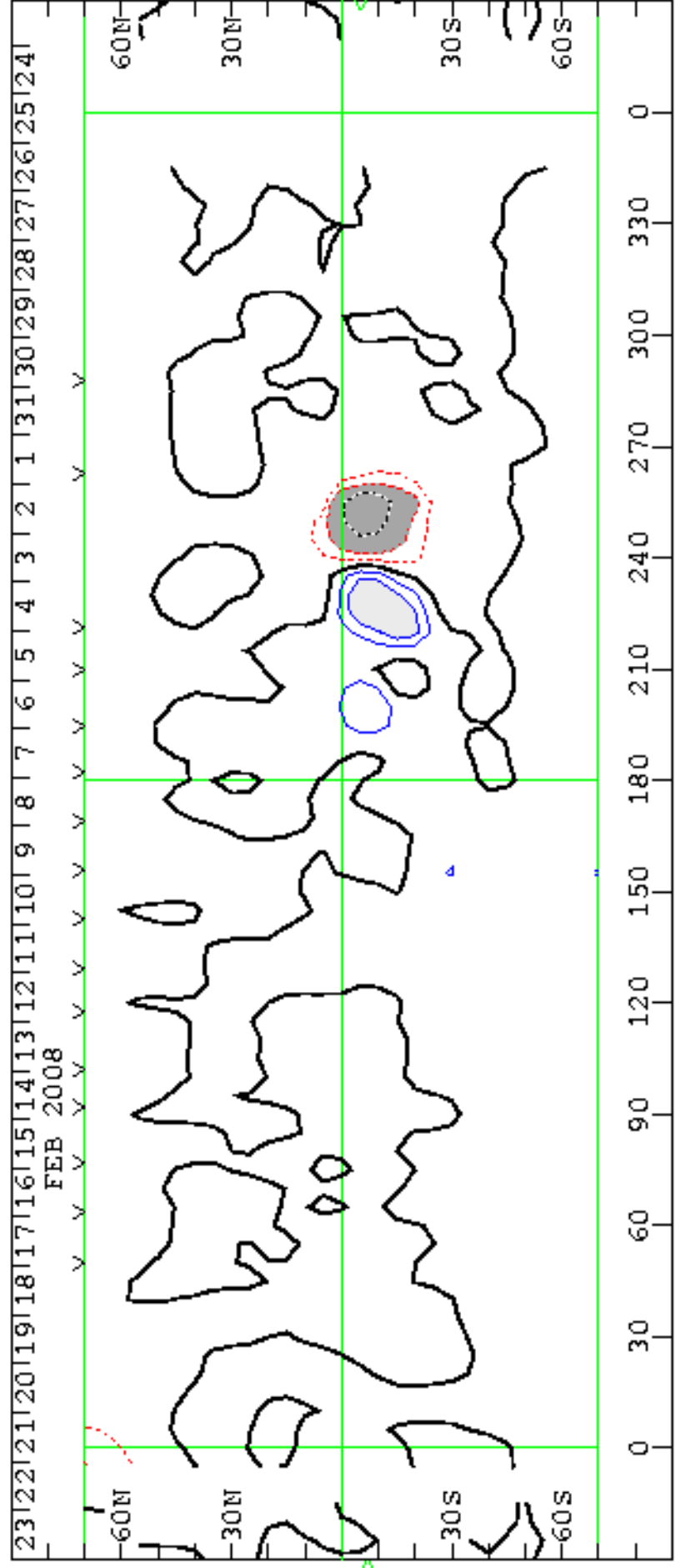


SOLAR MAGNETIC FIELD SYNOPTIC CHART
 CARRINGTON ROTATION NUMBER 2066
 (25 Jan 2008 to 21 Feb 2008)

Wilcox Solar Observatory



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



SOLAR MAGNETIC FIELD SYNOPSIS CHART

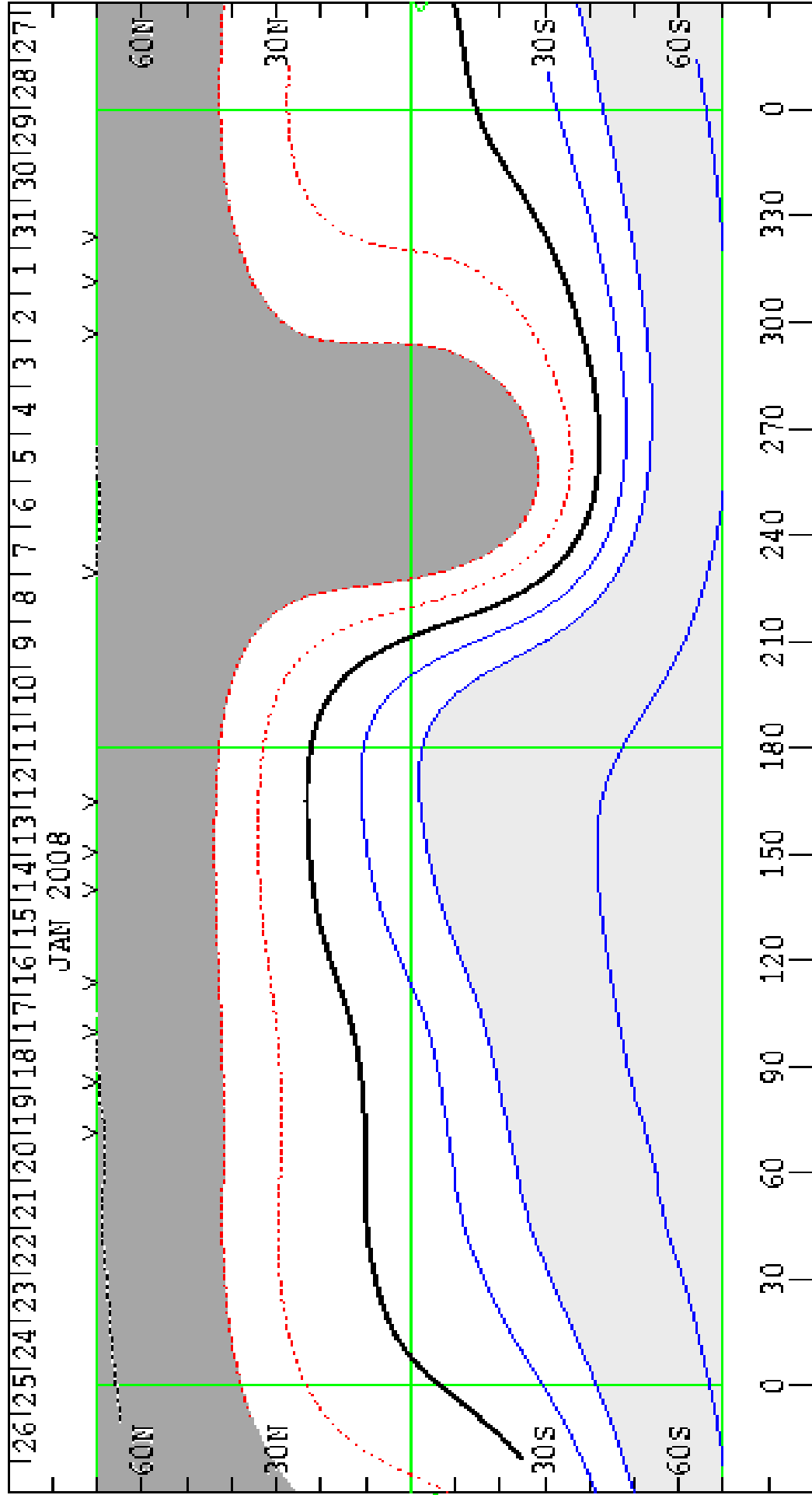
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 2065

(29 Dec 2007 to 25 Jan 2008)

WSO - Source Surface Field

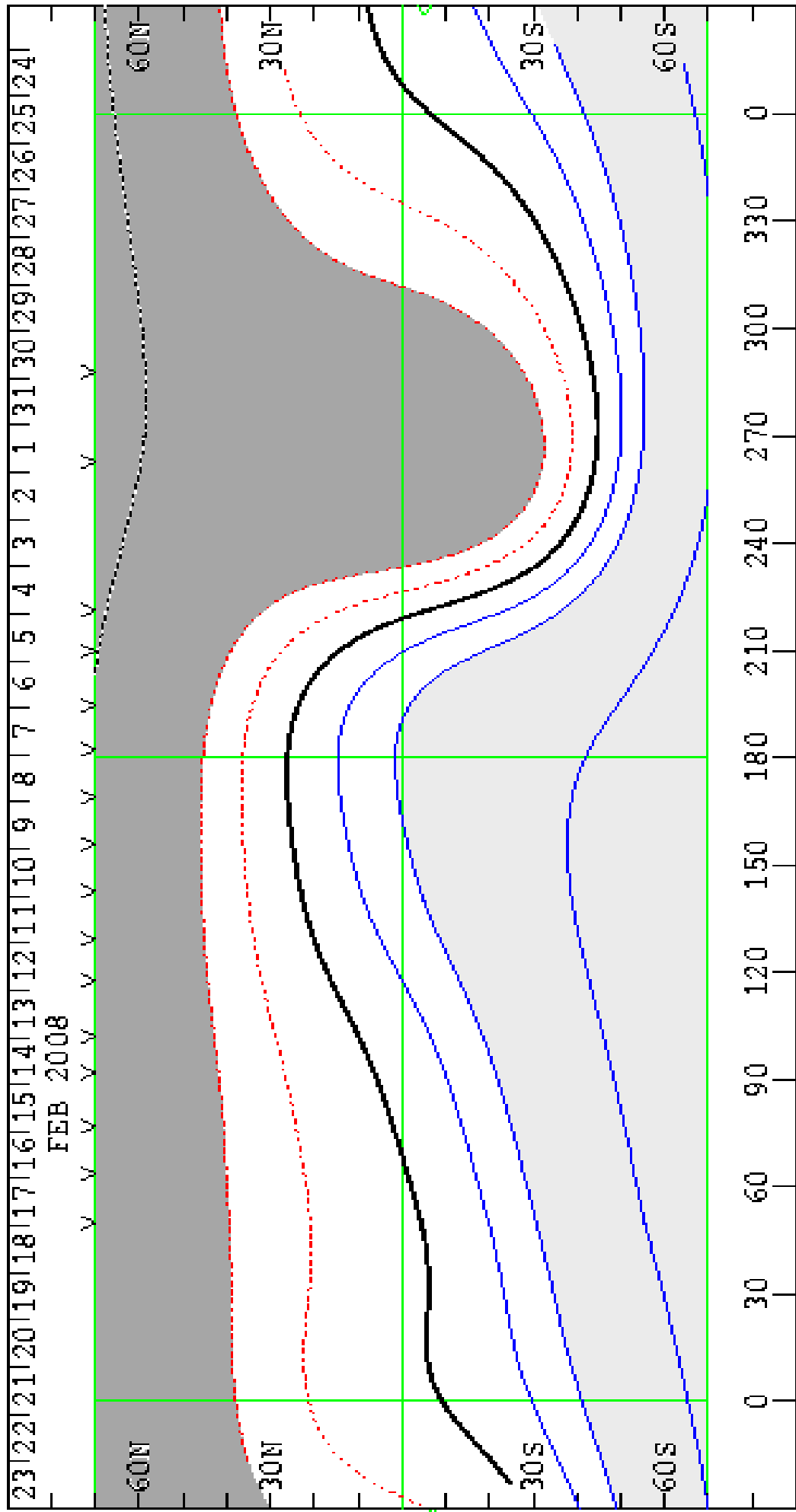
0, ±1, 2, 5, 10, 20 MicroTesla



Heliographic Longitude

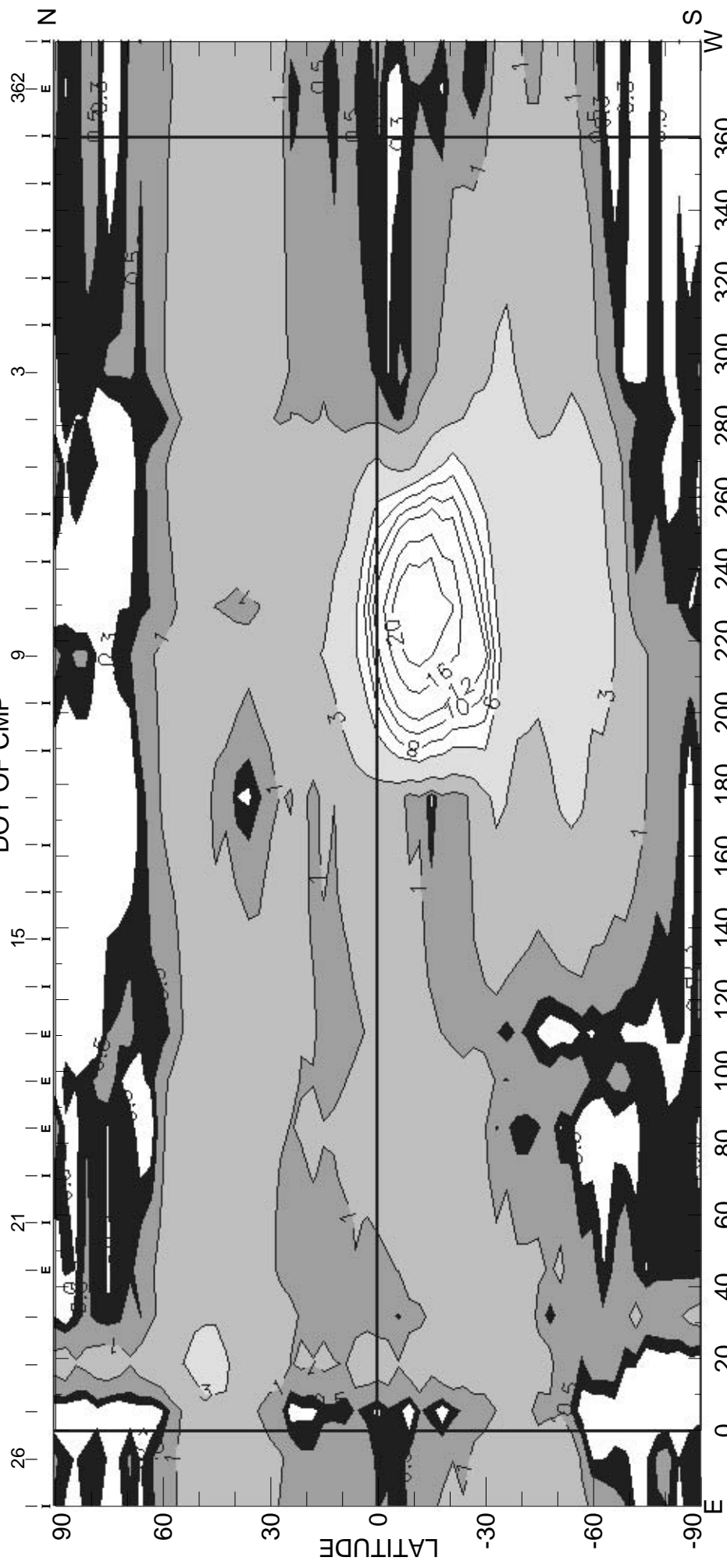
SOLAR MAGNETIC FIELD SYNOPSIS CHART
SOURCE SURFACE FIELD
 CARRINGTON ROTATION NUMBER 2066
 (25 Jan 2008 to 21 Feb 2008)

WSO - Source Surface Field 0, ±1, 2, 5, 10, 20 MicroTesla



Heliographic Longitude

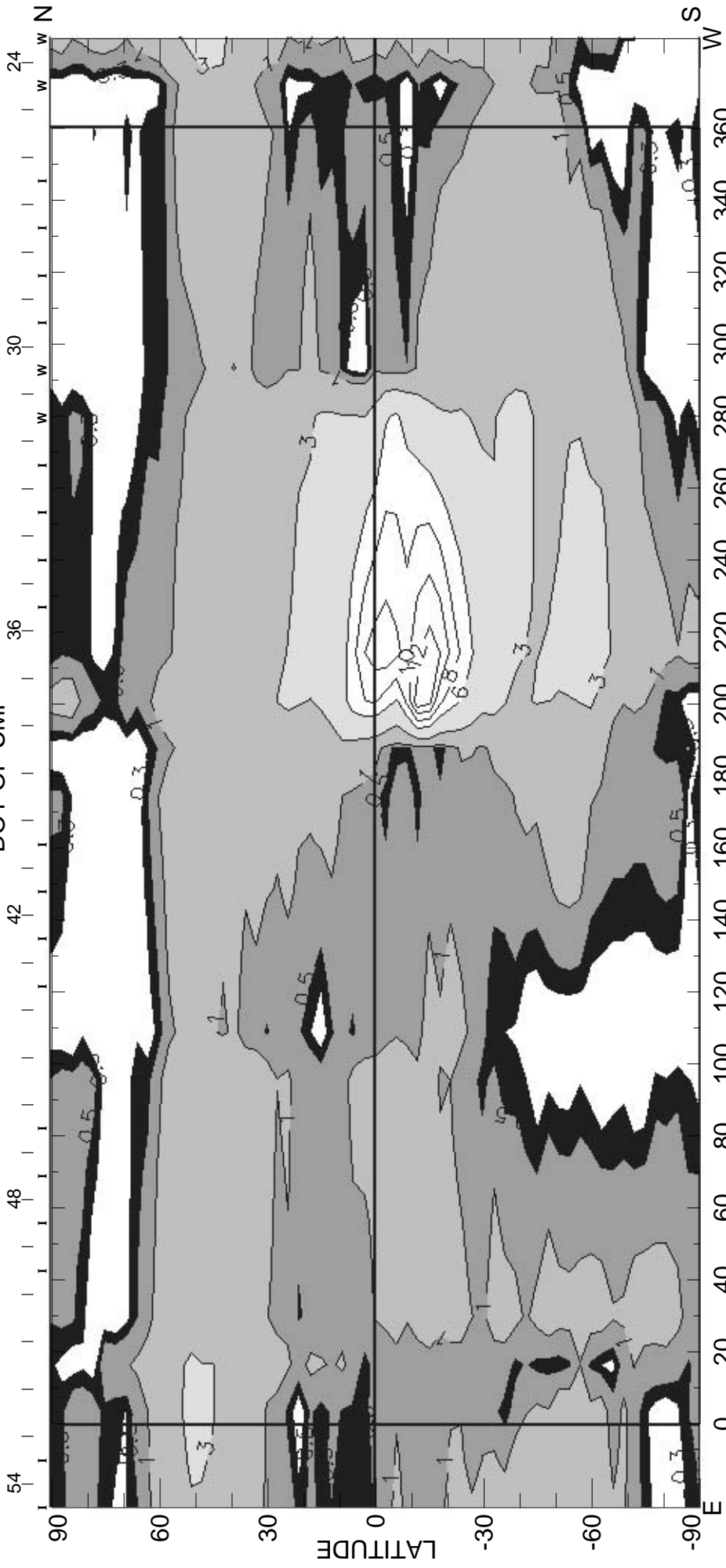
CARRINGTON ROTATION NUMBER 2065 ; NSO/SACRAMENTO PEAK FE XIV @ R = 1.15R_o



HELIOGRAPHIC LONGITUDE
 2008 W+E LIMB CONTOURS: 0.3, 0.5, 1, 3, 6, 8, 10, 12, 16, 20 MILLIONTHS OF I_o
 $\langle I \rangle = 1.58\mu$
 CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

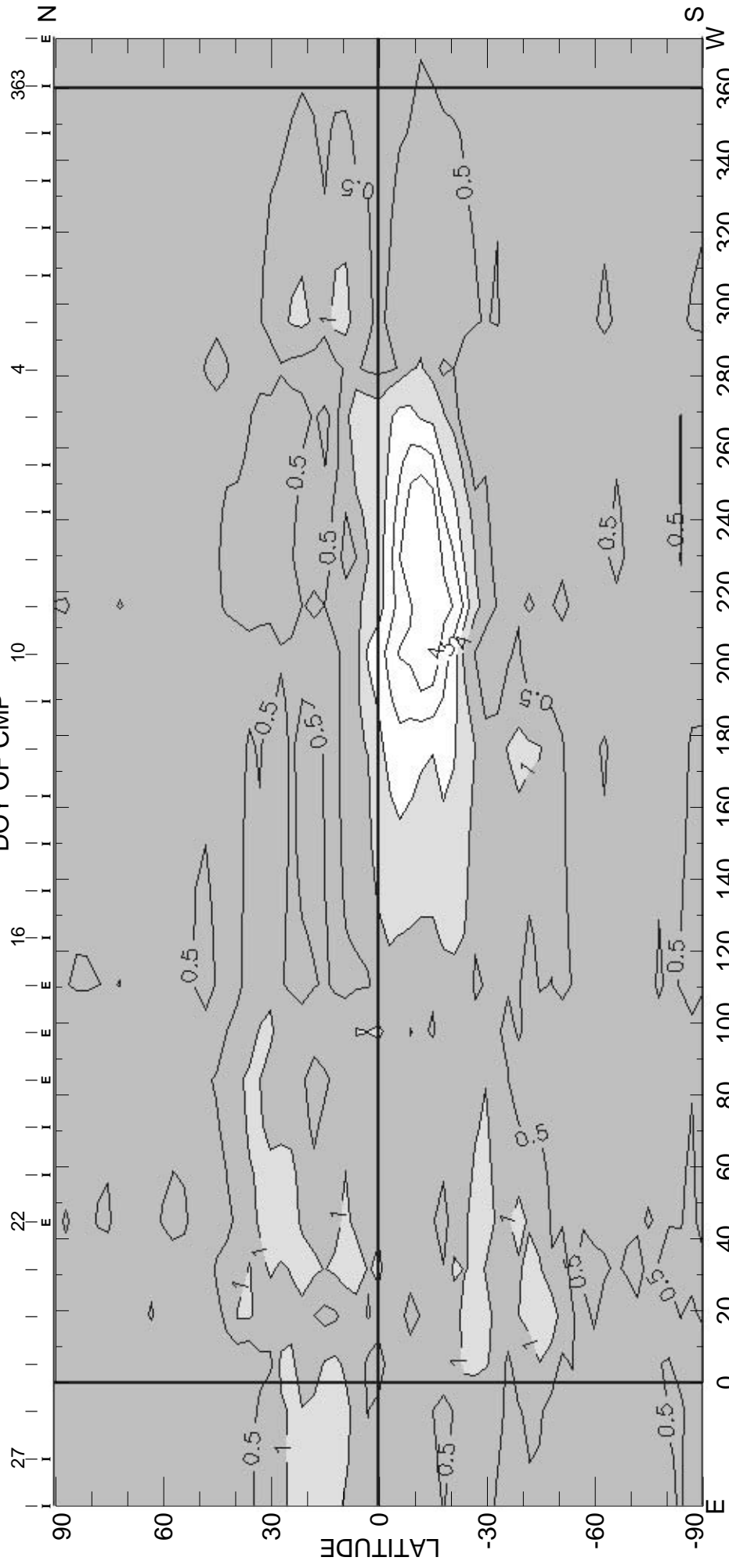
(16-Apr-08)

CARRINGTON ROTATION NUMBER 2066 ; NSO/SACRAMENTO PEAK FE XIV @ R = 1.15R_o
DOY OF CMP



(16-Apr-08) 2008 E+W LIMB CONTOURS: 0.3, 0.5, 1, 3, 6, 8, 10, 12, 16, 20 MILLIONTHS OF I₀
<I> = 1.34μ
CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

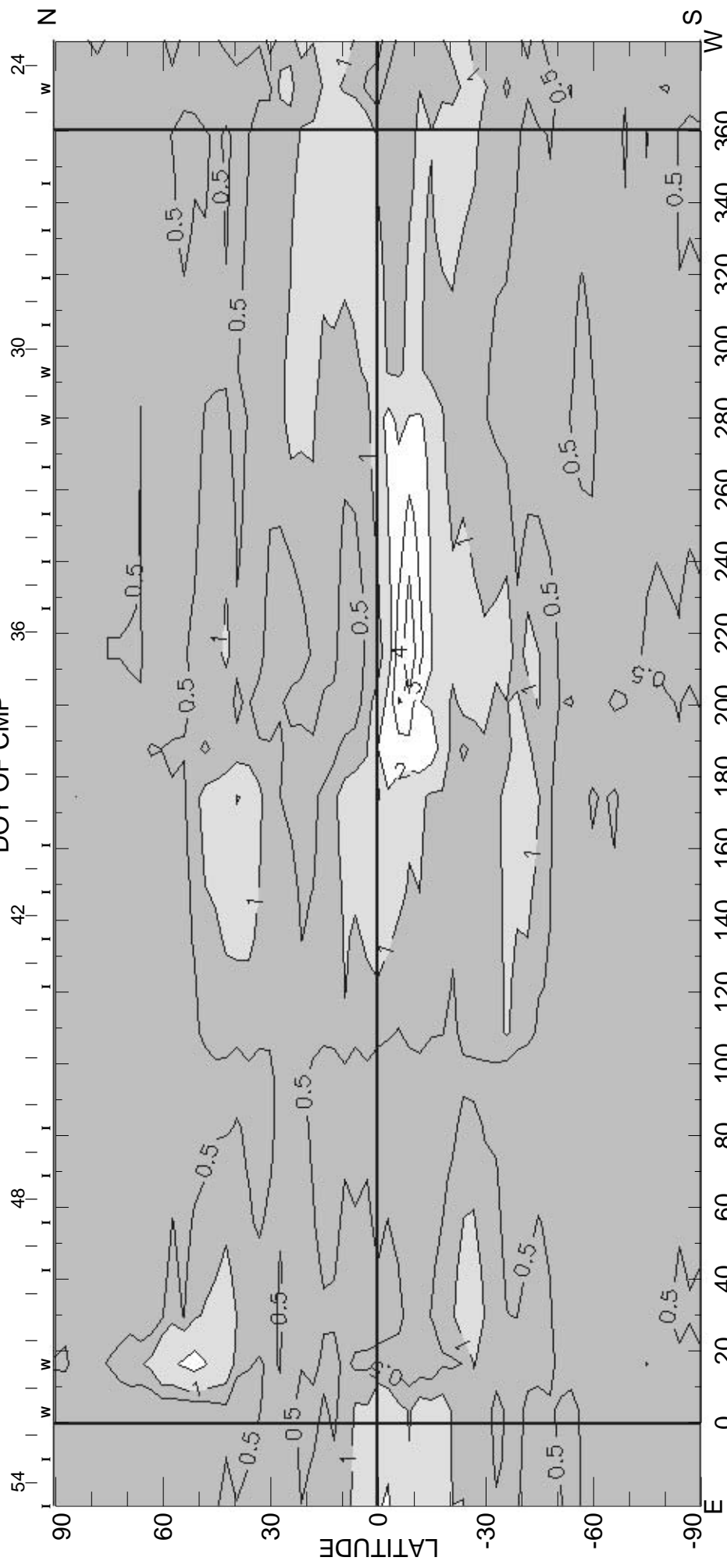
CARRINGTON ROTATION NUMBER 2065 ; NSO/SACRAMENTO PEAK FE X @ R = 1.15R_o



HELIOGRAPHIC LONGITUDE
2008 W+E LIMB CONTOURS: 0.5, 1, 2, 3, 4, 8, 12, 16 MILLIONTHS OF I_o $\langle I \rangle = 0.52\mu$

(11-Apr-08)

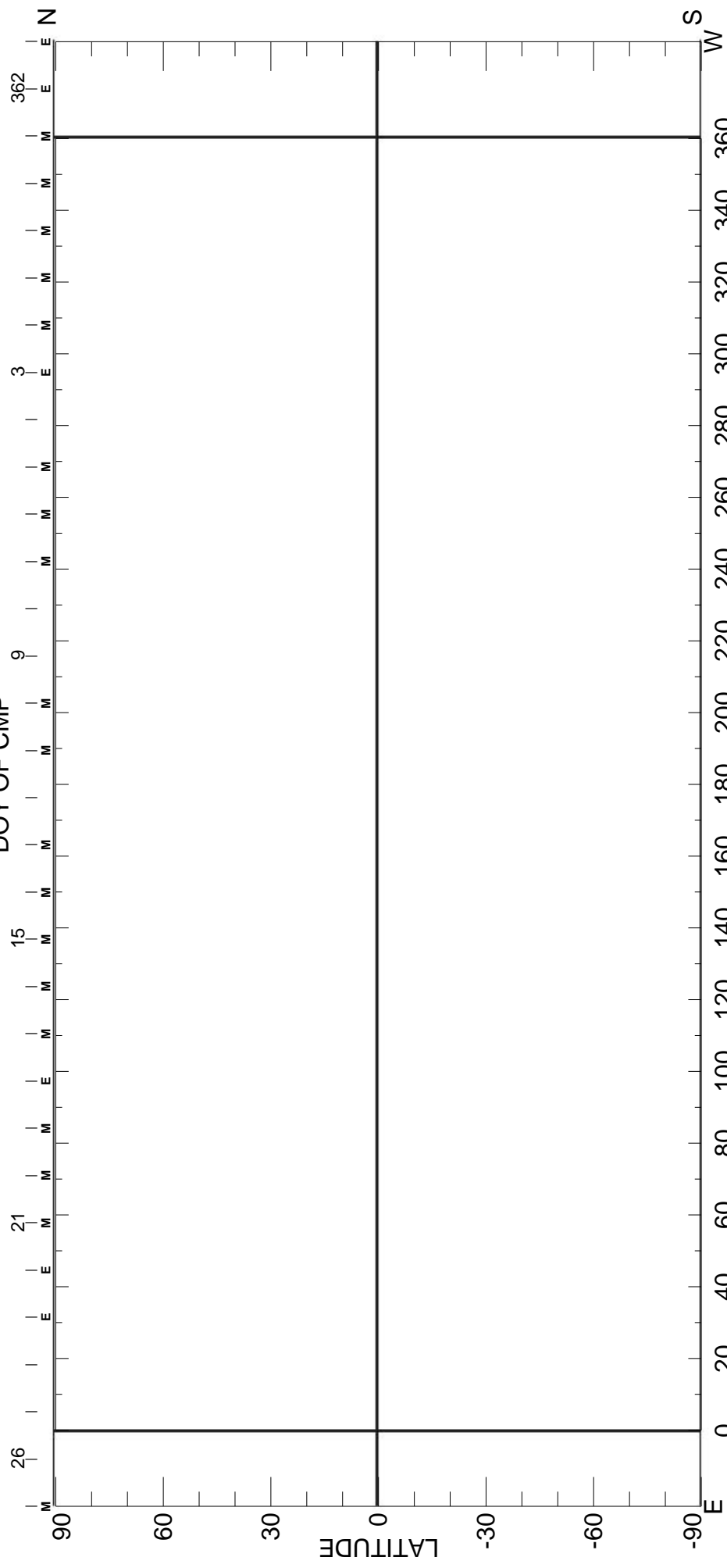
CARRINGTON ROTATION NUMBER 2066 ; NSO/SACRAMENTO PEAK FEX @ R = 1.15R_o
DOY OF CMP



HELIOGRAPHIC LONGITUDE
2008 E+W LIMB CONTOURS: 0.5, 1, 2, 3, 4, 8, 12, 16 MILLIONTHS OF I_o
<I> = 0.56μ

(17-Apr-08)

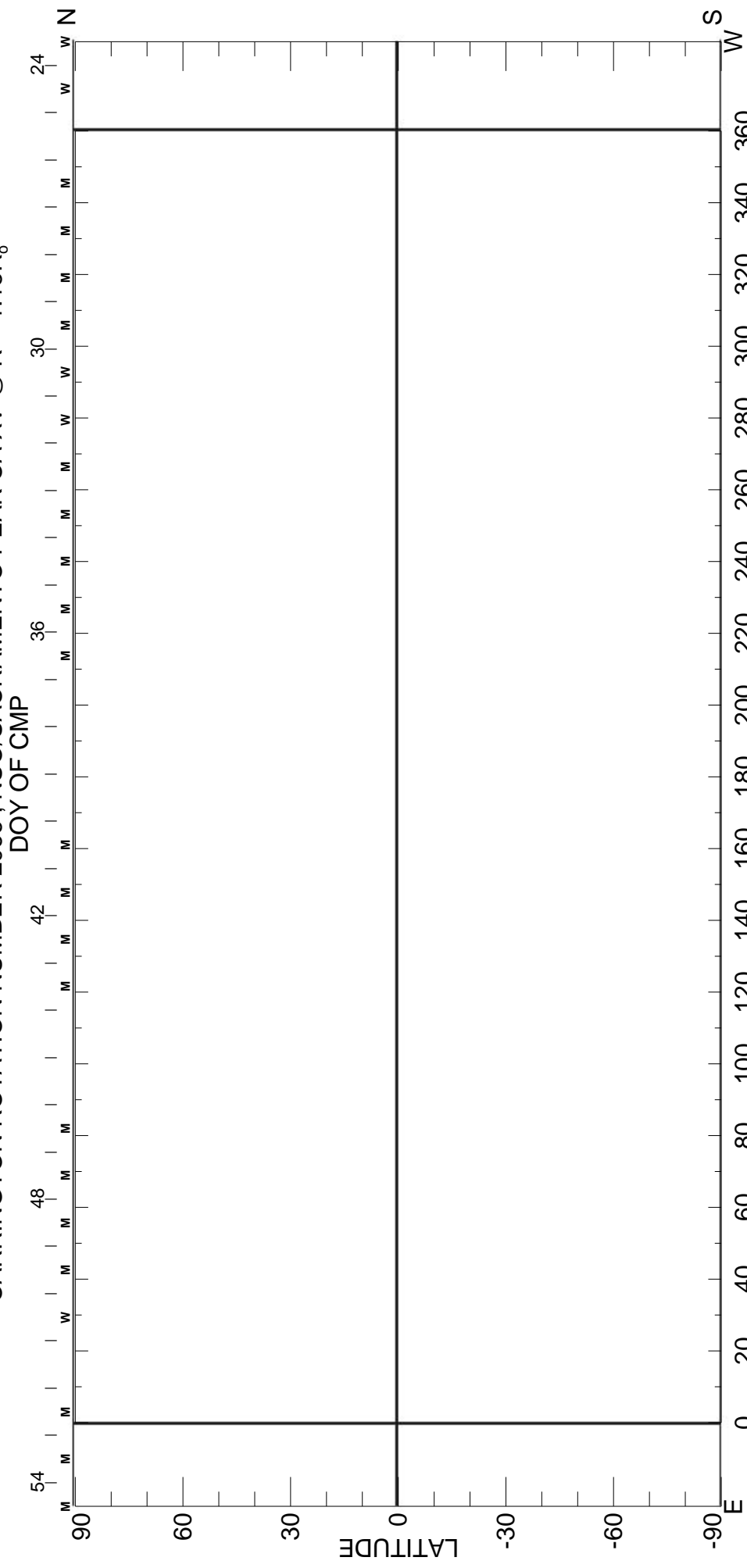
CARRINGTON ROTATION NUMBER 2065 ; NSO/SACRAMENTO PEAK CA XV @ R = 1.15R_o



HELIOGRAPHIC LONGITUDE

(11-Apr-08) 2008 W+E LIMB CONTOURS: YELMIN, 1, 2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20 MILLIONTHS OF I_o

CARRINGTON ROTATION NUMBER 2066 ; NSO/SACRAMENTO PEAK CA XV @ R = 1.15R_o



HELIOGRAPHIC LONGITUDE

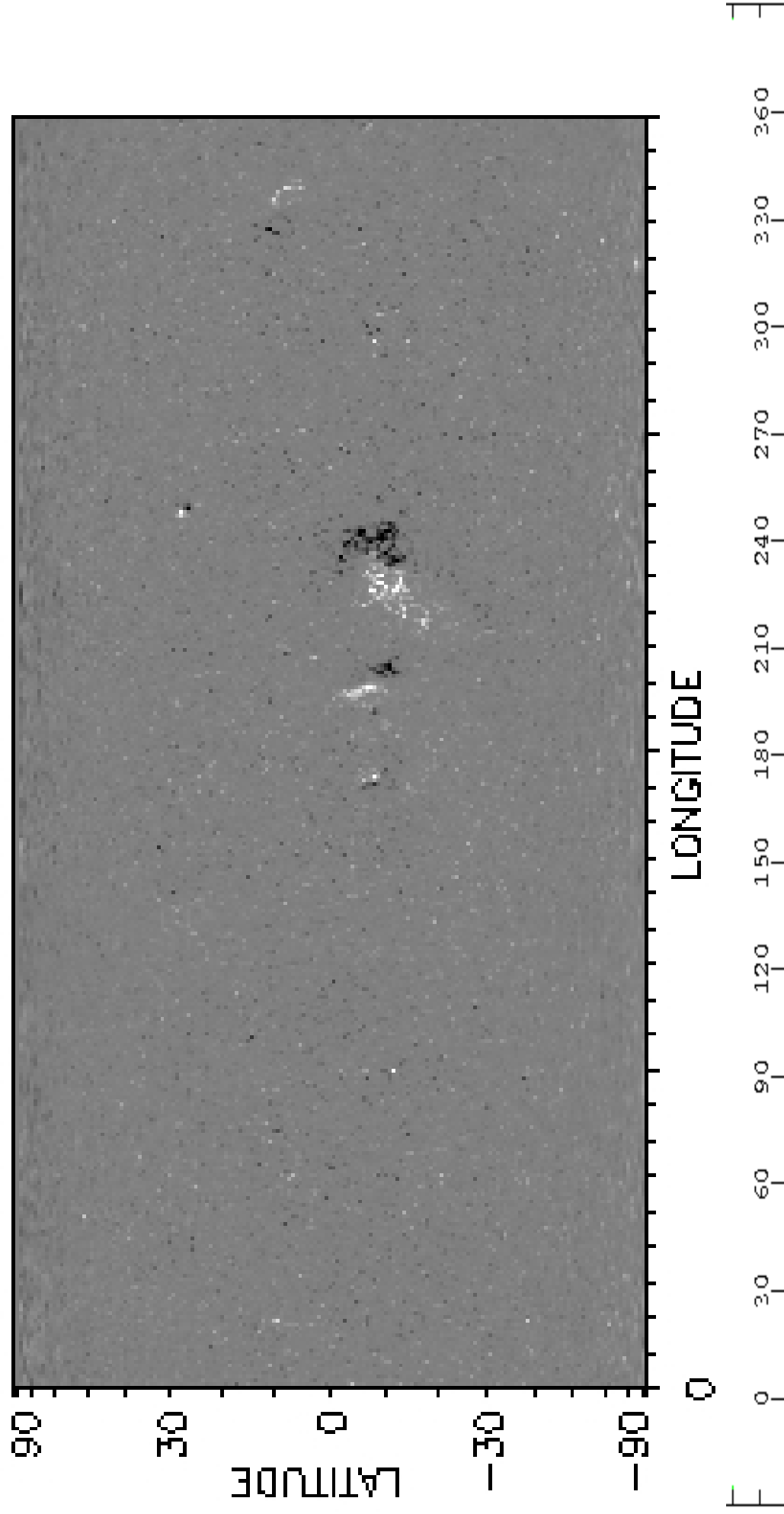
2008 E+W LIMB CONTOURS: 1, 2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20 MILLIONTHS OF I_o

(11-Apr-08)

SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 2065
(29 Dec 2007 to 25 Jan 2008)

National Solar Observatory/Kitt Peak

NSO/VSM MAGNETIC FLUX SYNOPTIC MAP
CARRINGTON ROTATION 2065

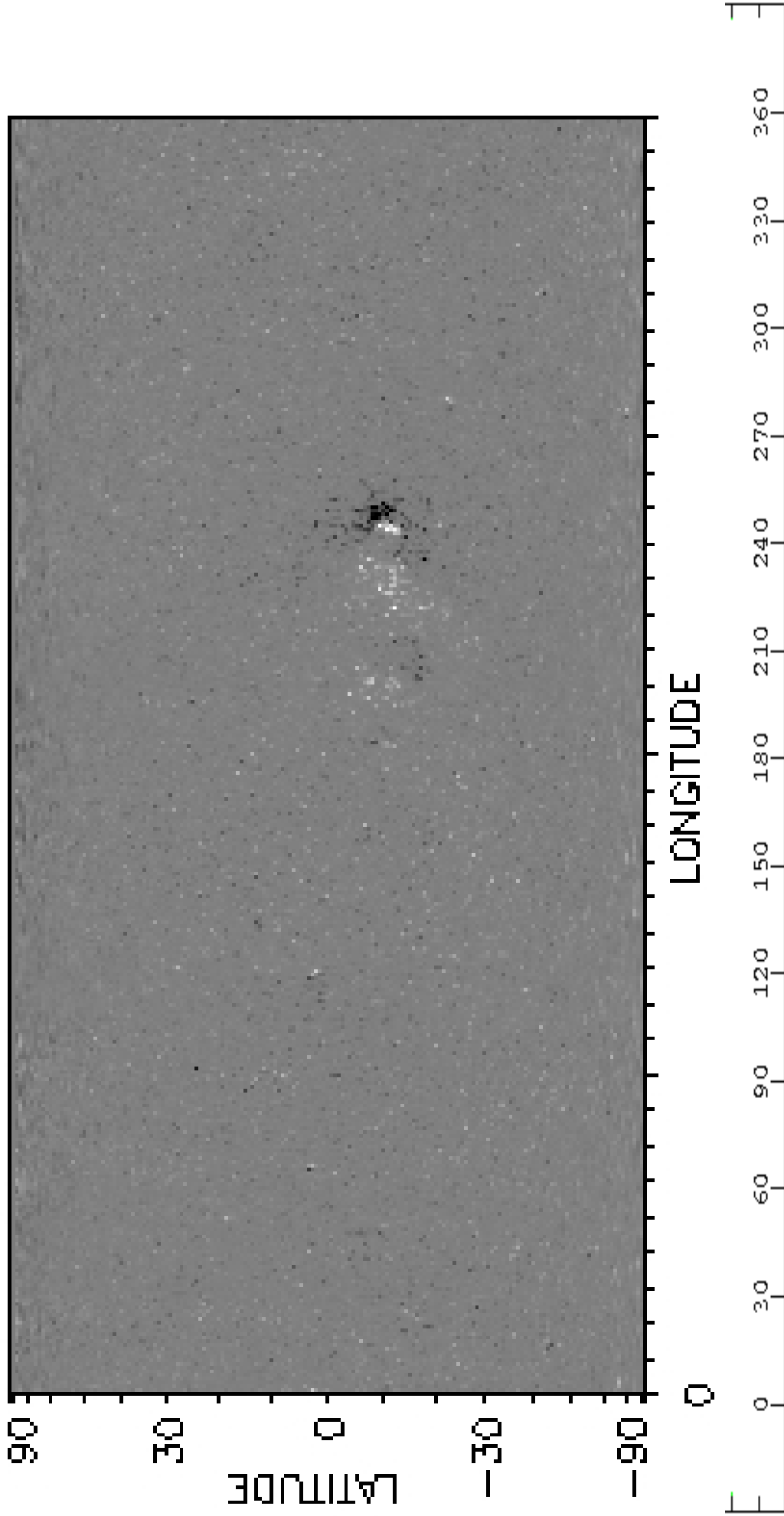


Heliographic Longitude

SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 2066
(25 Jan 2008 to 21 Feb 2008)

National Solar Observatory/Kitt Peak

NSO/VSM MAGNETIC FLUX SYNOPTIC MAP
CARRINGTON ROTATION 2066



Heliographic Longitude

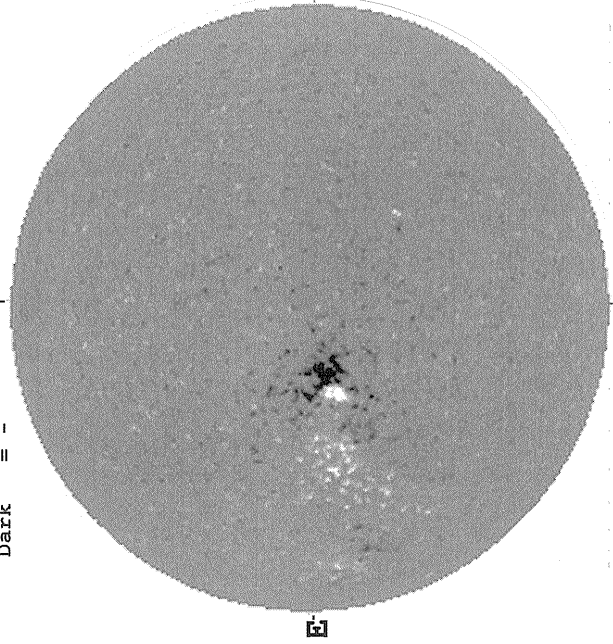
February 01, 2008 (P=-11.92, Bo=-5.98, Lo= 272.96)

46
Feb 08

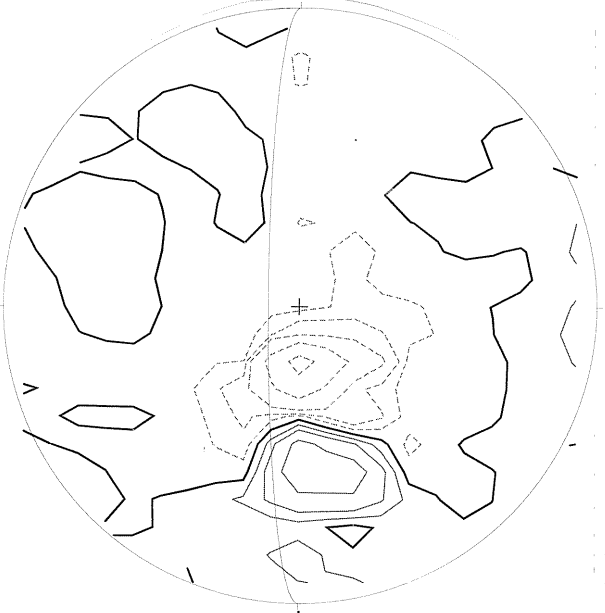
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

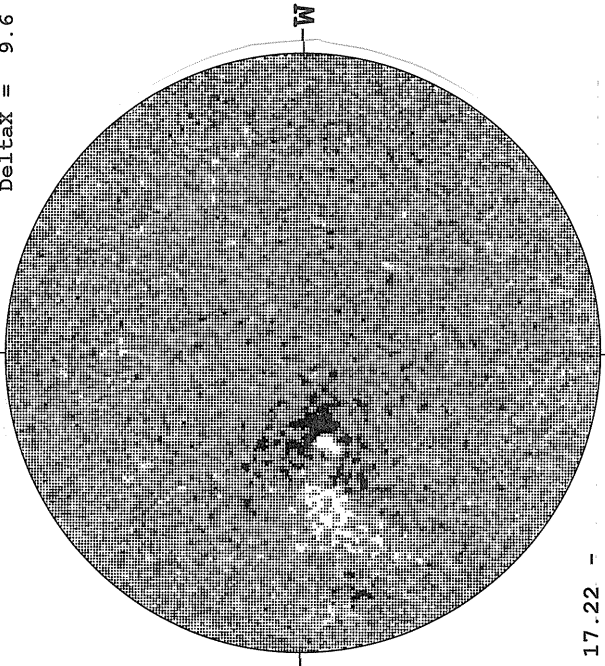
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.0
DeltaX = 9.6



1908 UT

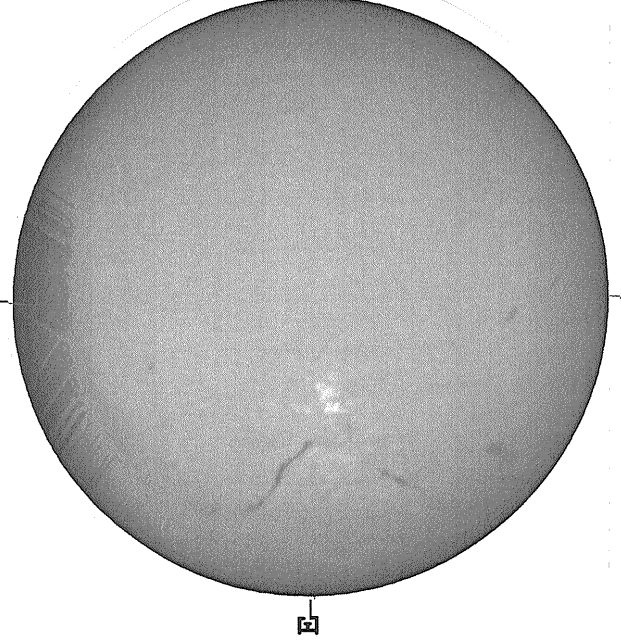


1840 UT



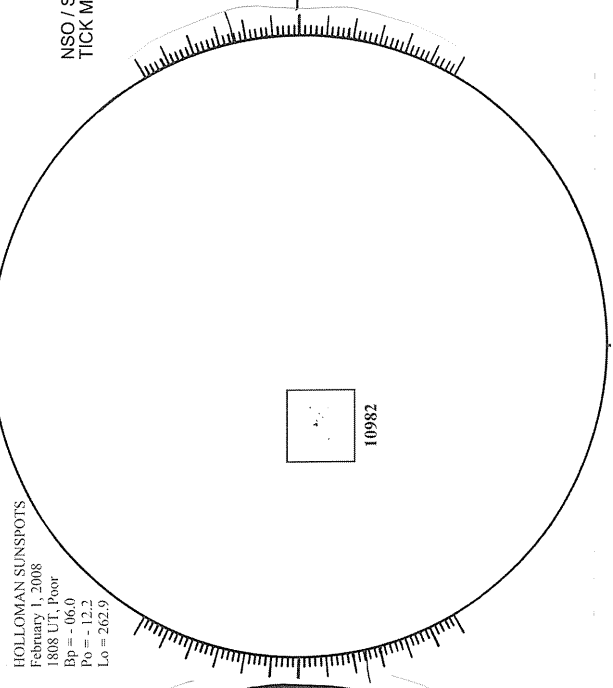
17:22 -
18:20 UT

CATANIA H-ALPHA



0922 UT

HOLLoman SUNSPOTS

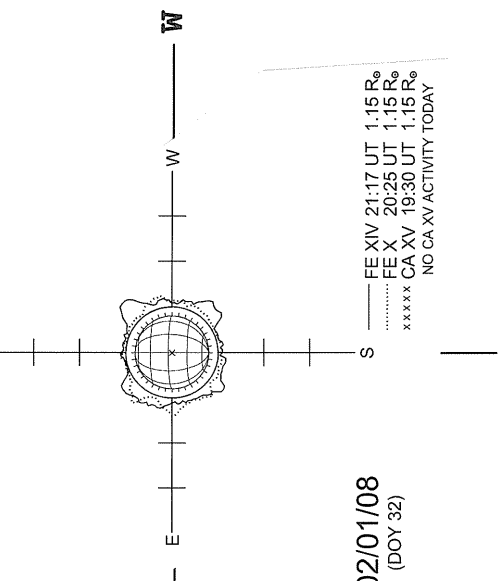


1808 UT

HOLLoman SUNSPOTS
February 1, 2008
1808 UT, Poor
Bp = -06.0
Pb = -12.2
Lo = 262.9

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



02/01/08
(DOY 32)

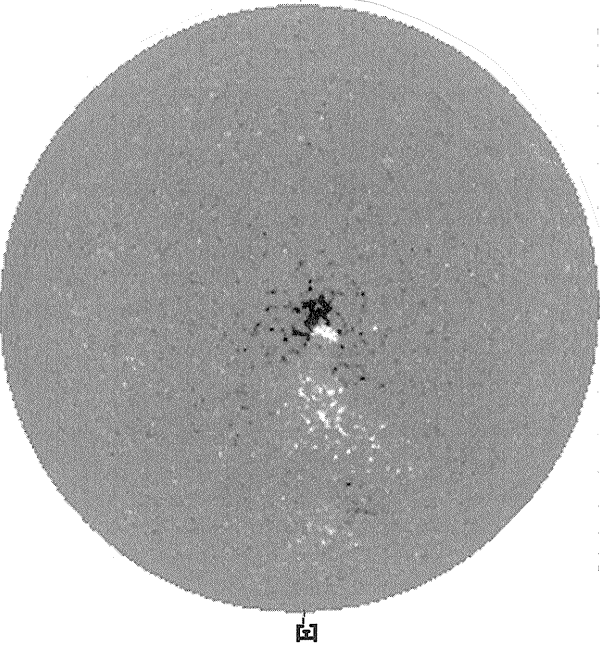
--- FE XIV 21:17 UT 1.15 R_o
..... FE X 20:25 UT 1.15 R_o
xxxxx CA XV 19:30 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

February 02, 2008 (P=-12.32, Bo=-6.05, Lo= 259.79)

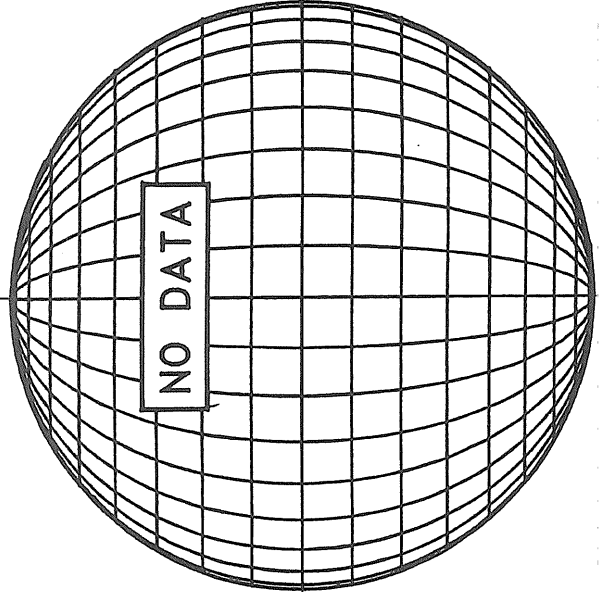
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

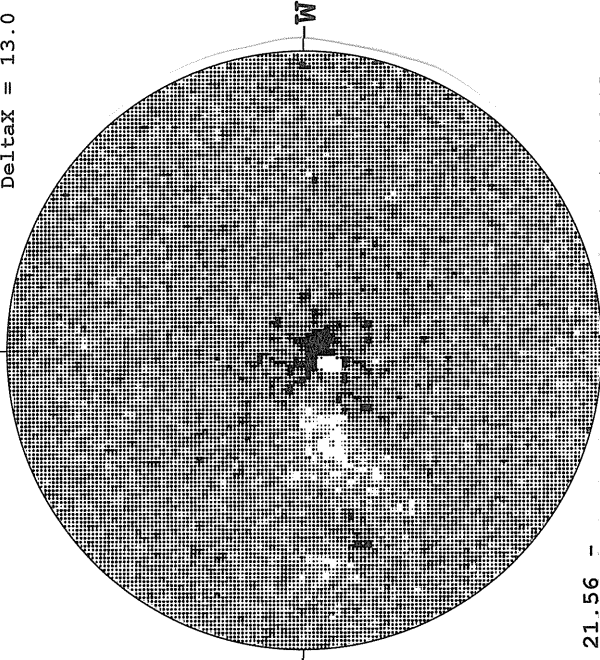
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 19.9
DeltaX = 13.0
N



1643 UT



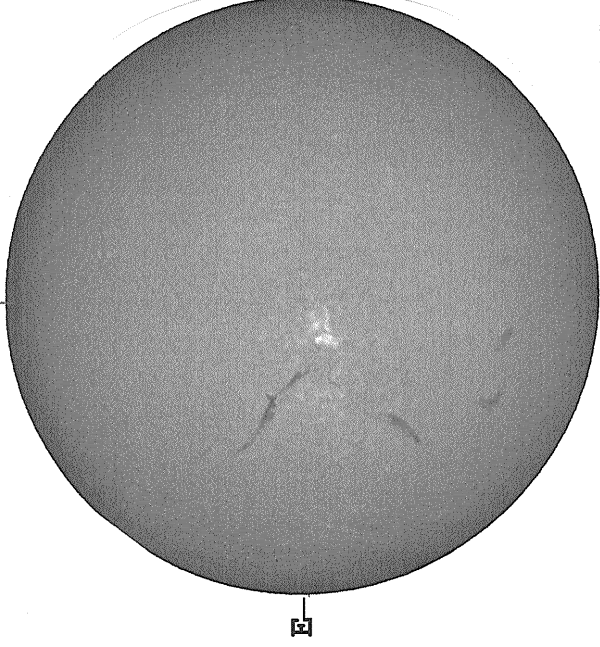
21.56 -
21.99 UT



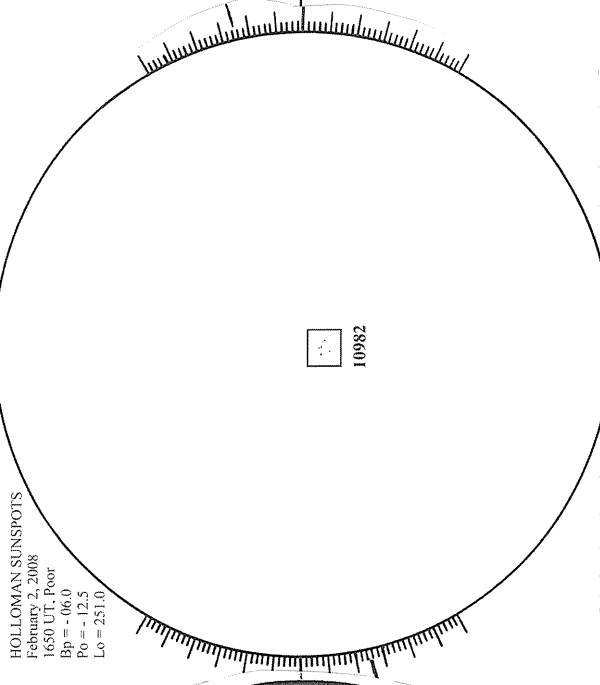
CATANIA H-ALPHA

HOLLOMAN SUNSPOTS

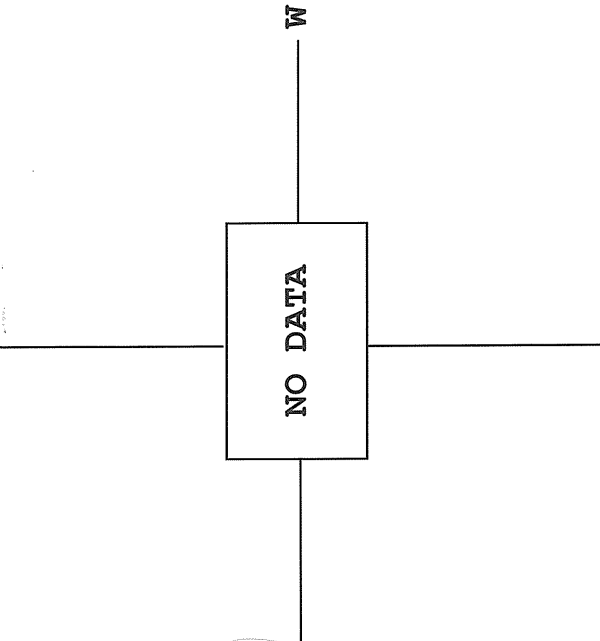
SACRAMENTO PEAK CORONA (1.15 Radii) -----



0947 UT



1650 UT



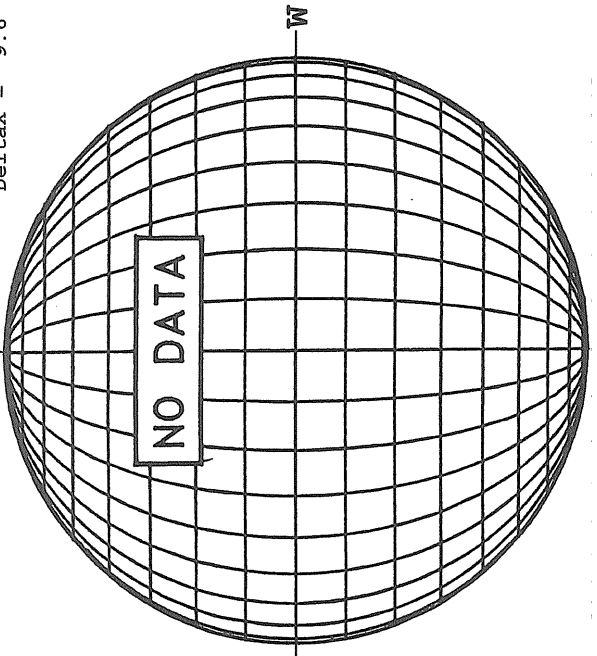
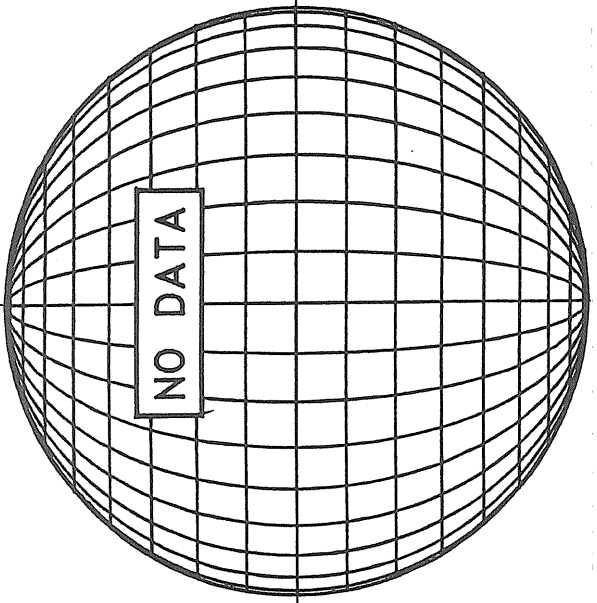
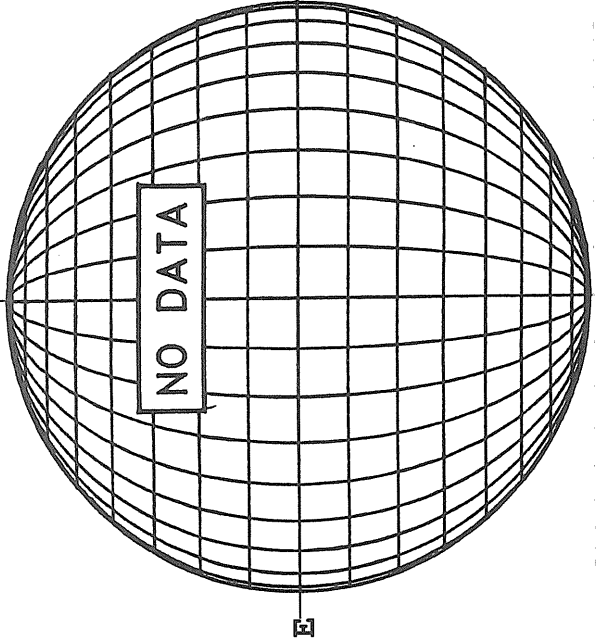
Feb 08 48

February 03, 2008 (P=-12.73, Bo=-6.12, Lo= 246.63)

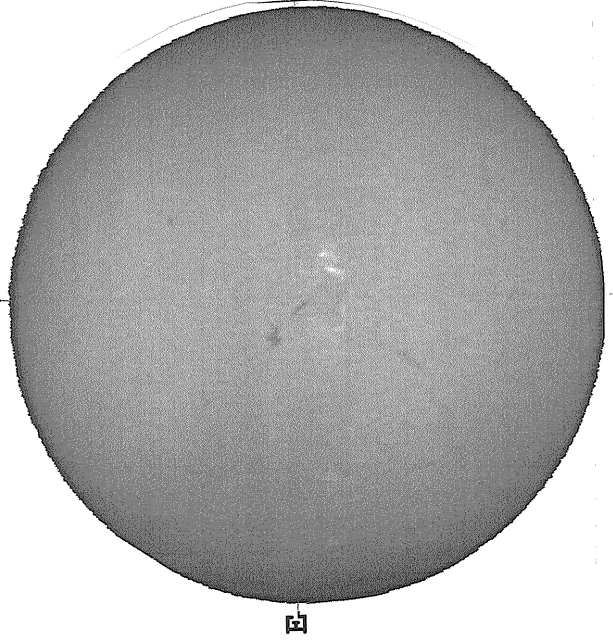
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = +
 Dark = -

STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -

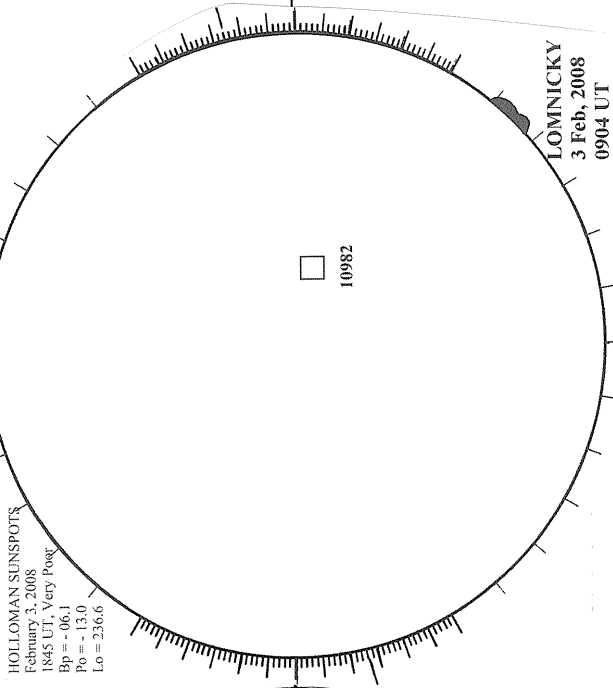
MT. WILSON MAGNETOGRAM
 White = +7.5G
 Black = -7.5G
 DeltaY = 13.1
 DeltaX = 9.6



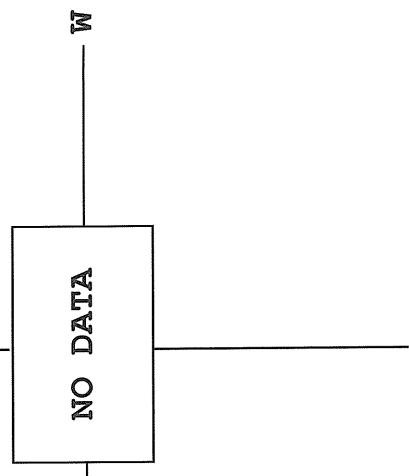
MEUDON H-ALPHA



HOLLOMAN SUNSPOTS



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

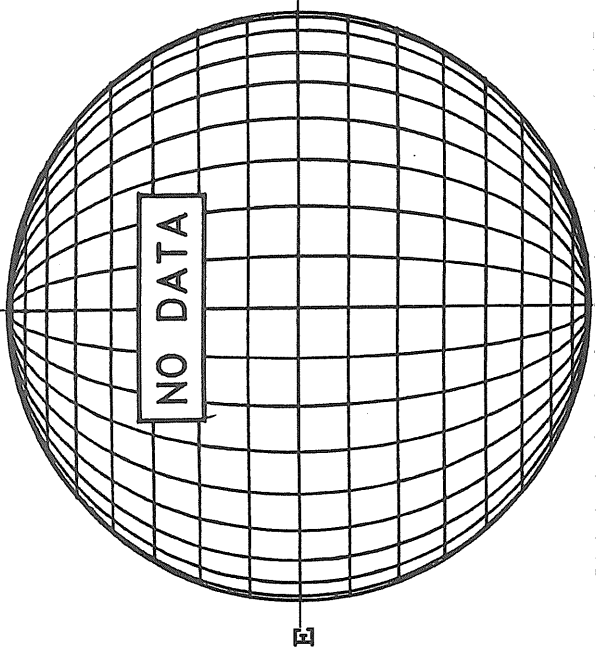


1321 UT

1845 UT
 0904 UT LOMN FROM

February 04, 2008 (P=-13.13, Bo=-6.19, Lo= 233.46)

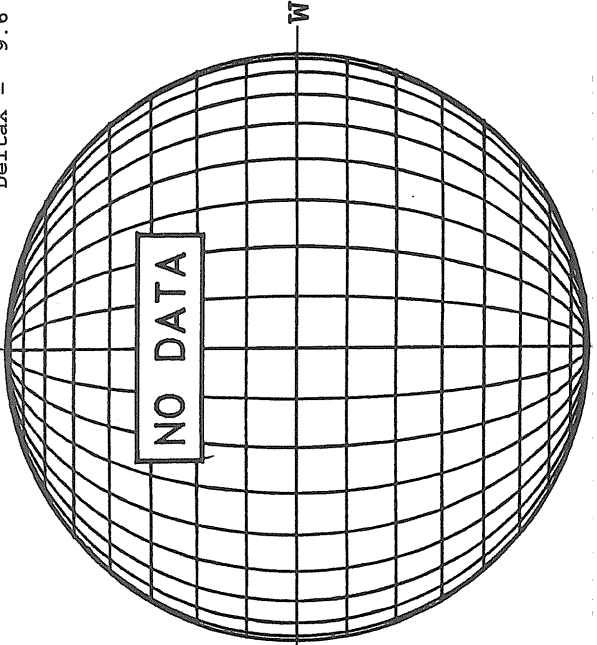
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + ** 854.2NM **
Dark = -



STANFORD MAGNETOGRAM
Solid = +
Dashed = -

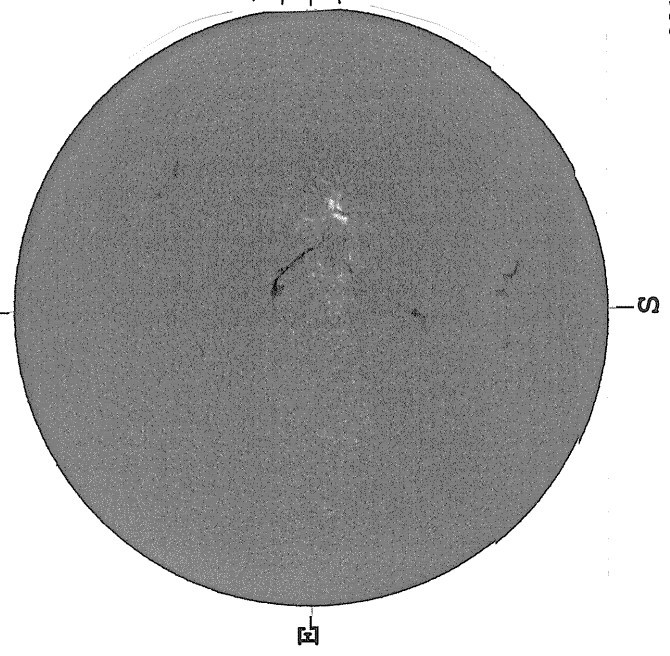


MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



2213 UT

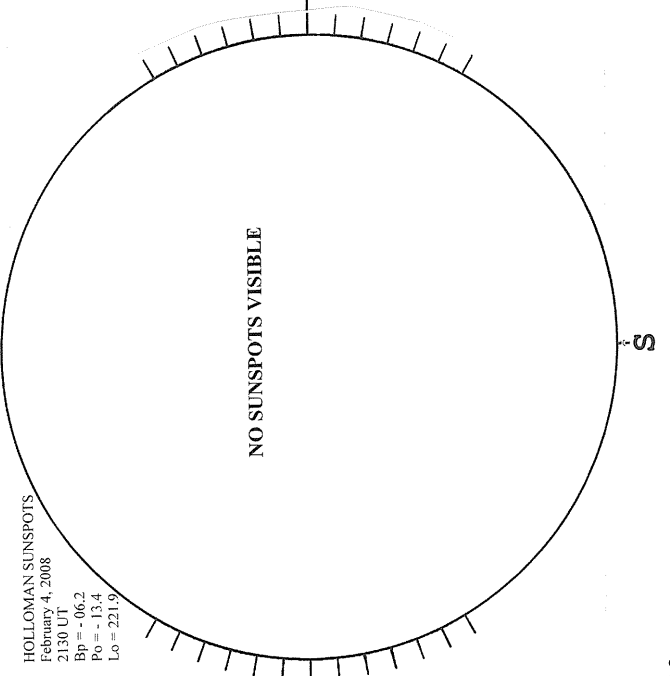
CATANIA H-ALPHA



0842 UT

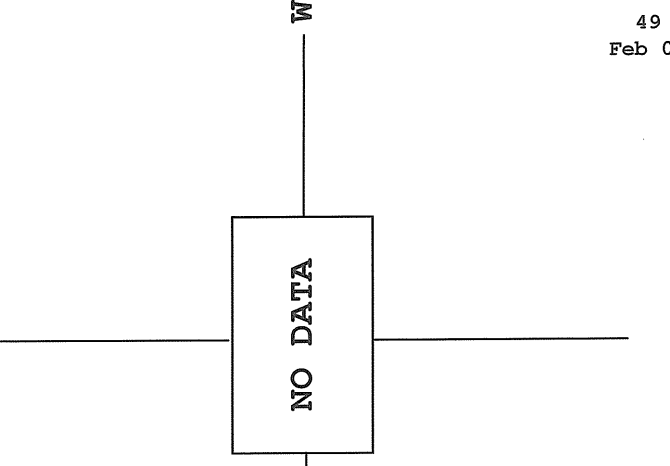
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 4, 2008
2130 UT
Bp = -06.2
Po = -13.4
Lo = 221.9



2310 UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----



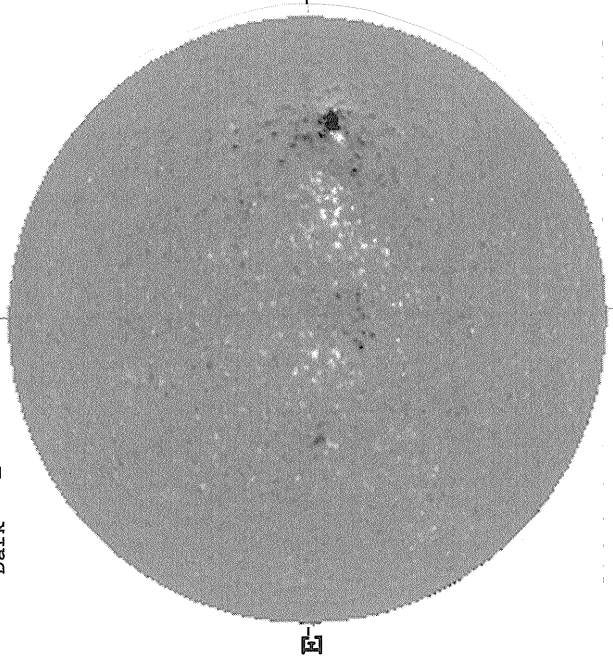
50
Feb 08

February 05, 2008 (P=-13.52, Bc=-6.26, Lo= 220.29)

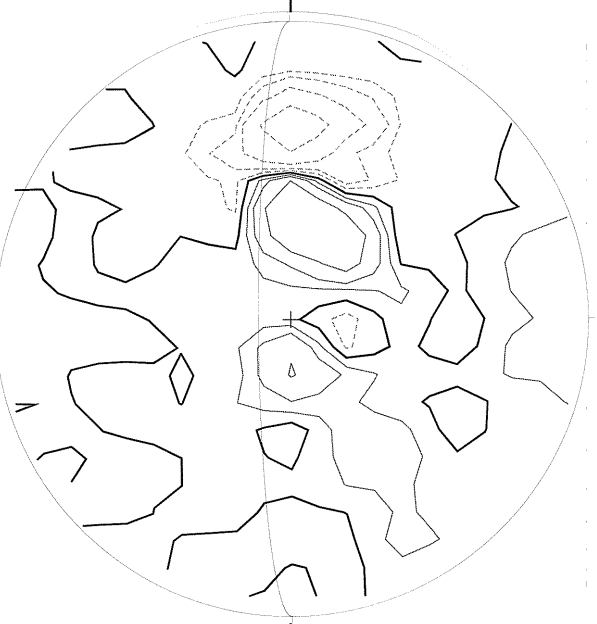
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

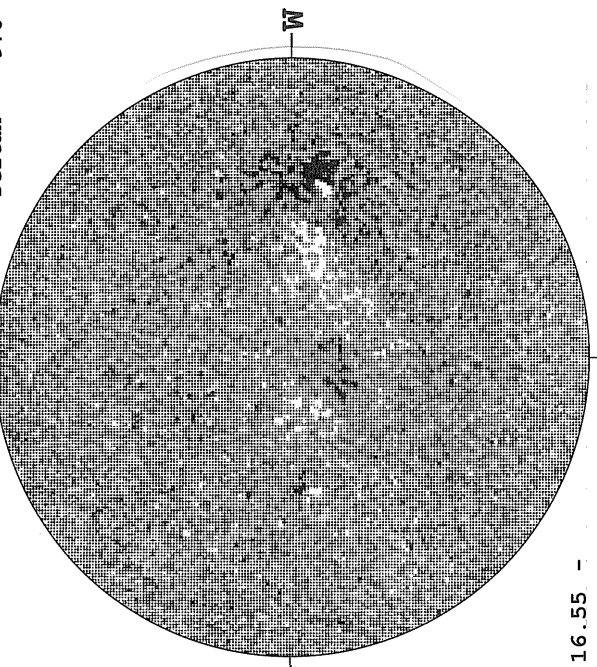
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.0
DeltaX = 9.6



2036 UT

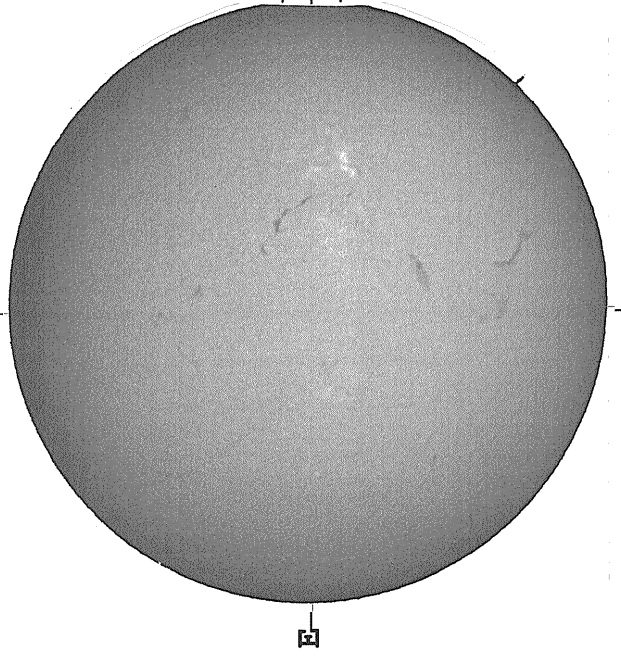


1907 UT



16.55 -
17.53 UT

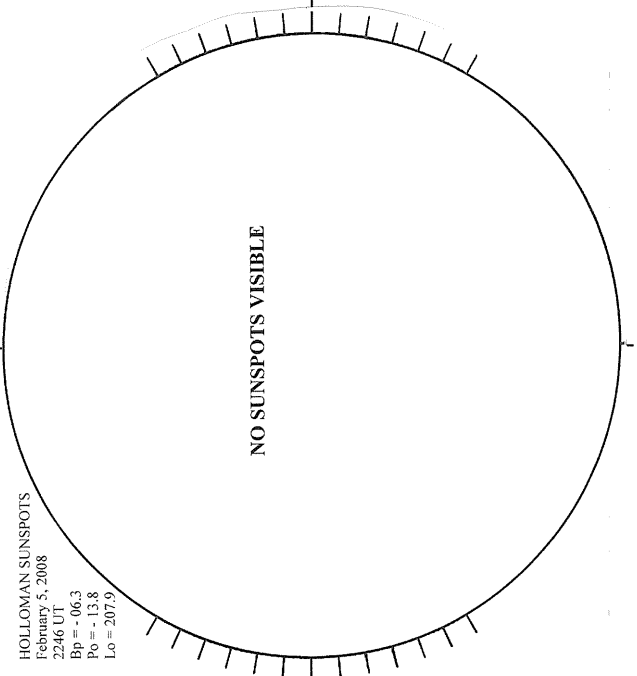
YUNNAN H-ALPHA



0131 UT

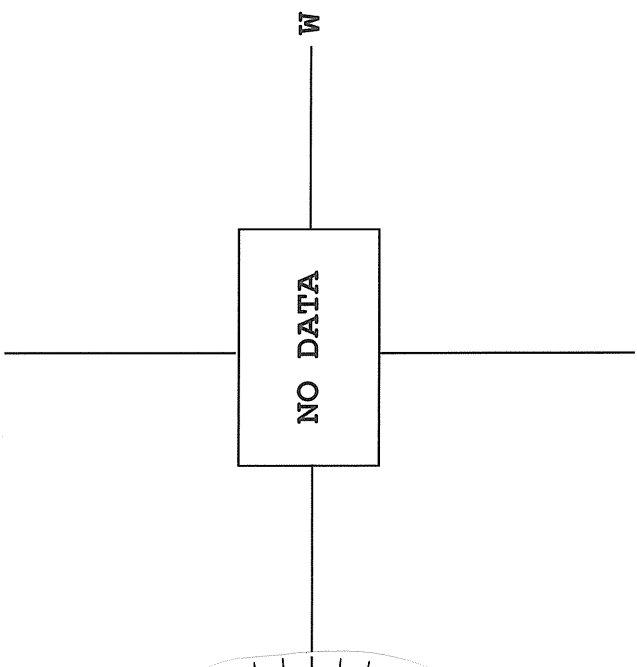
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 5, 2008
2246 UT
Bp = -06.3
Po = -13.8
Lo = 207.9



2246 UT

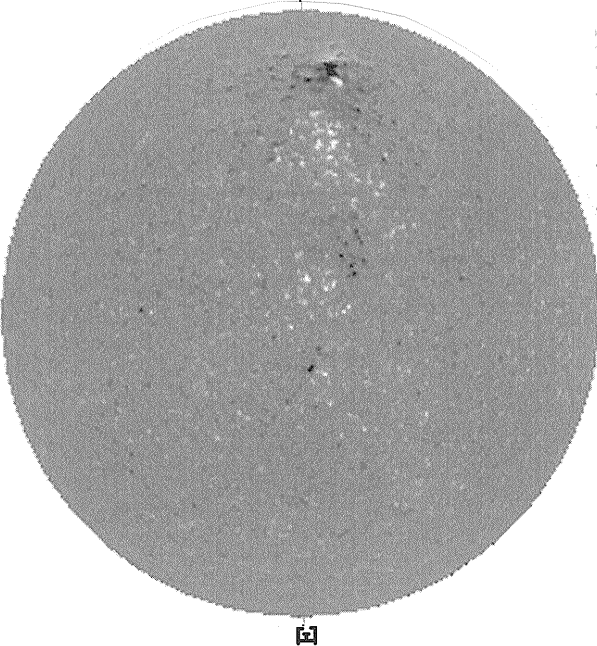
SACRAMENTO PEAK CORONA (1.15 Radii) -----



NO DATA

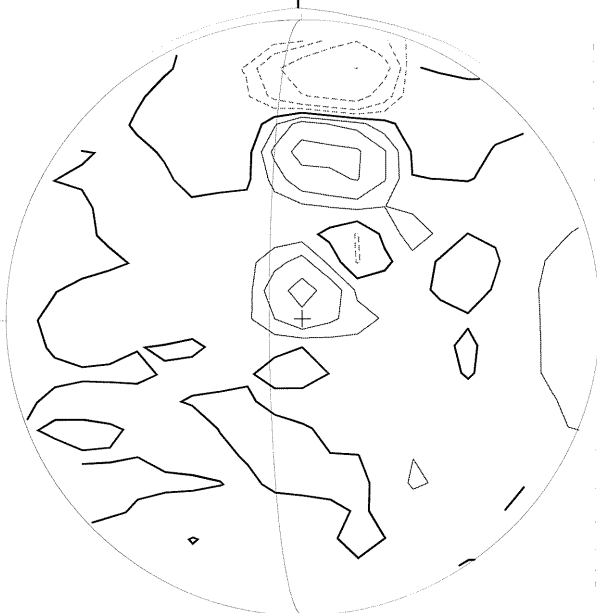
February 06, 2008 (P=-13.91, Bo=-6.32, Lo= 207.13)

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



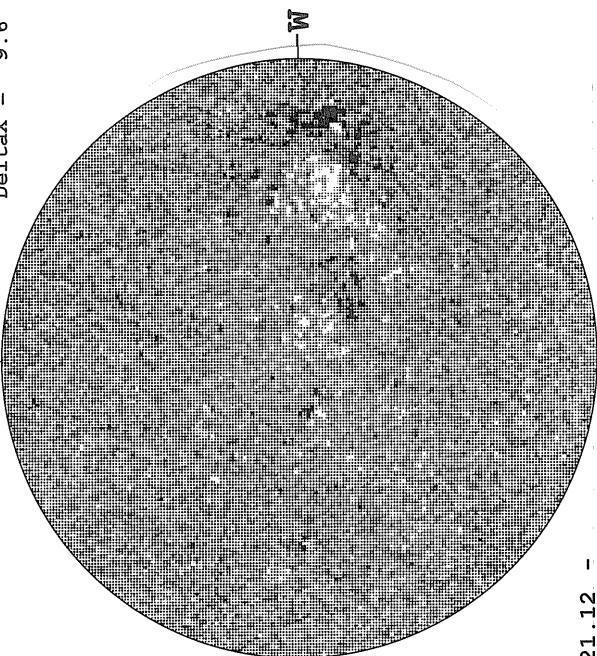
2035 UT

STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -
 N



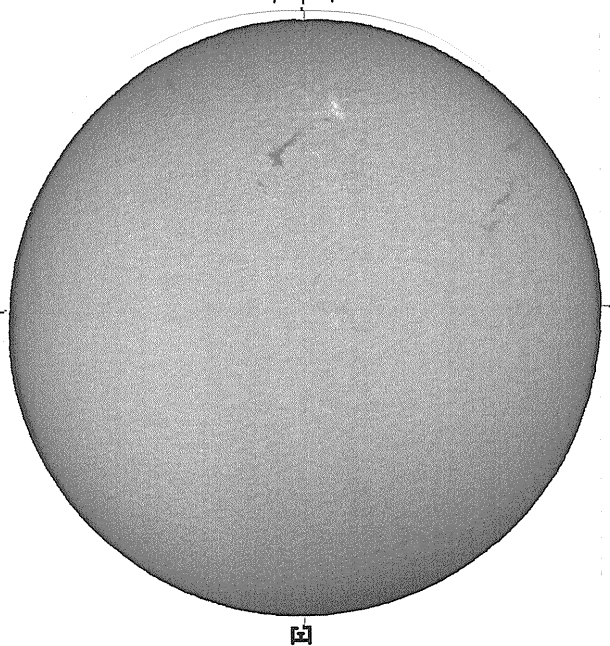
2249 UT

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



21.12 -
 23.10 UT

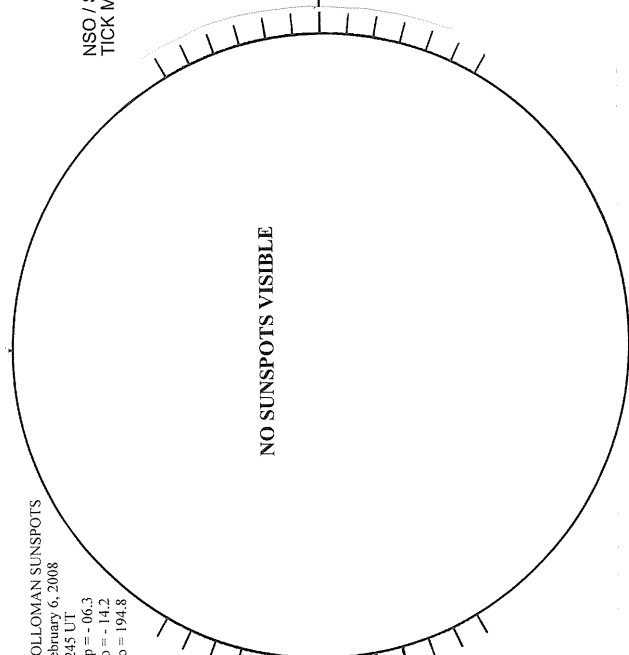
MEUDON H-ALPHA



0829 UT

HOLLOMAN SUNSPOTS

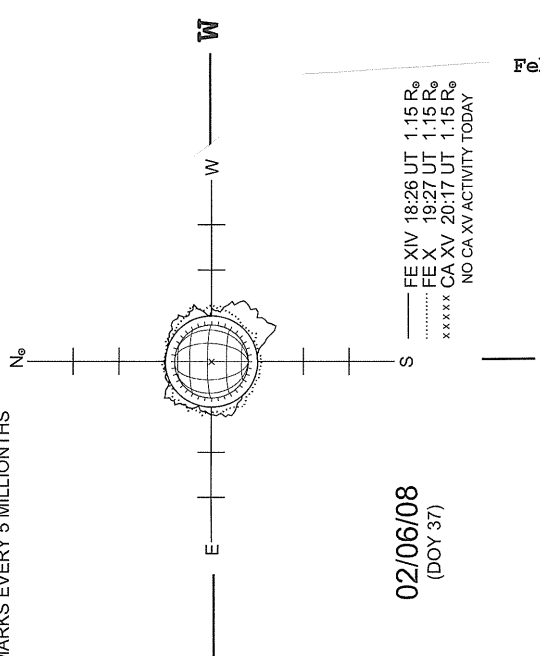
HOLLOMAN SUNSPOTS
 February 6, 2008
 2245 UT
 Bp = -06.3
 P0 = -14.2
 Lo = 194.8



2245 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
 TICK MARKS EVERY 5 MILLIONTHS



02/06/08
 (DOY 37)

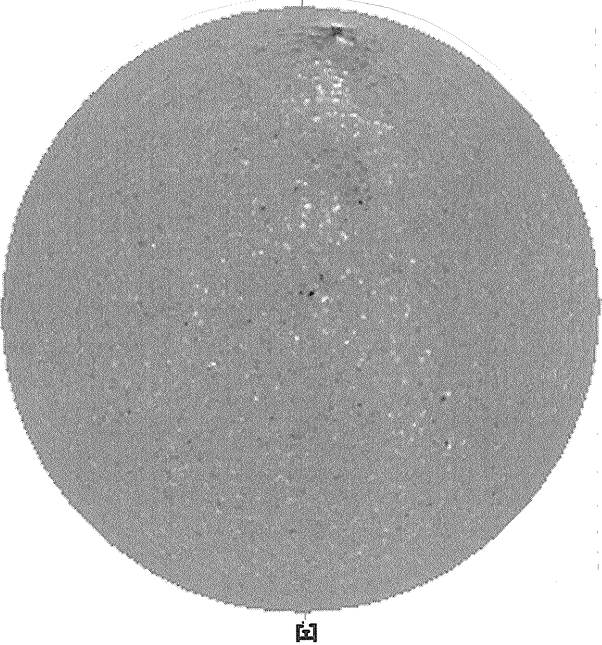
FE XIV 18:26 UT 1.15 R₀
 FE X 19:27 UT 1.15 R₀
 ***** CA XV 20:17 UT 1.15 R₀
 NO CA XV ACTIVITY TODAY

February 07, 2008 (P=-14.30, Bo=-6.38, Lo= 193.96)

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

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

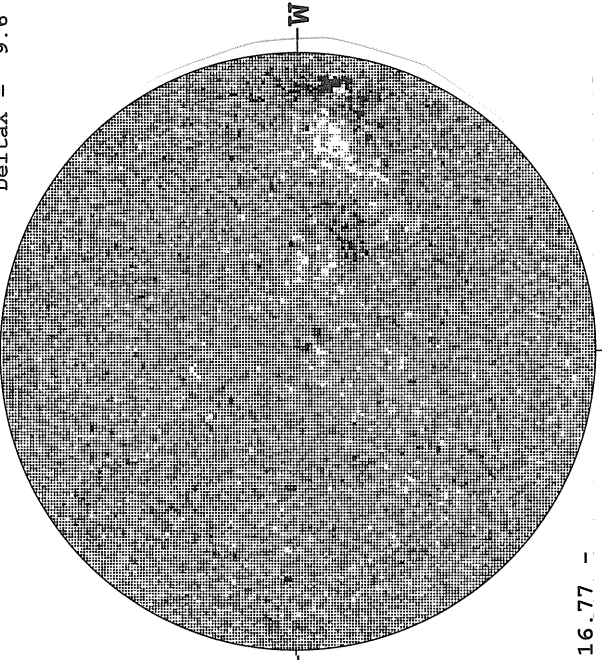
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaX = 13.0
DeltaY = 9.6



2041 UT

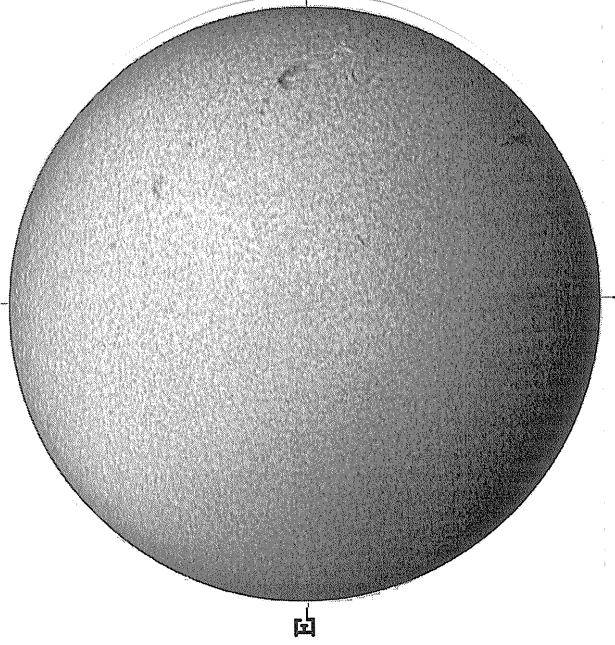


2123 UT



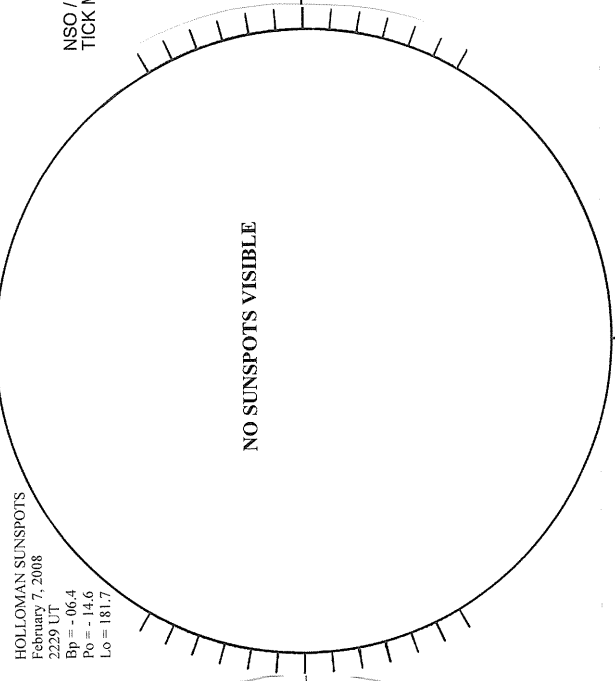
16.77 -
17.74 UT

PIC DU MIDI H-ALPHA



1249 UT

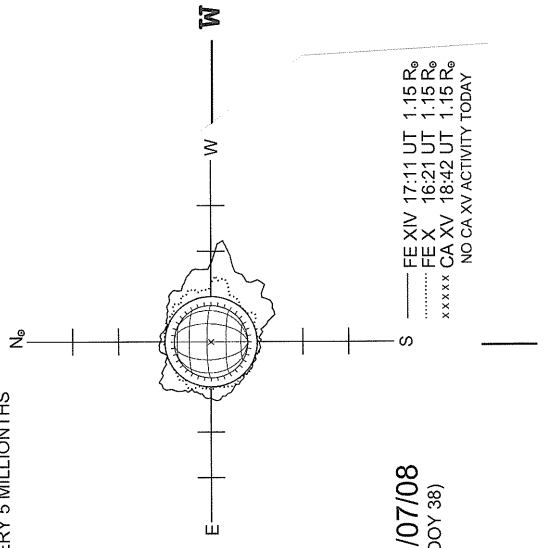
HOLLOMAN SUNSPOTS



2229 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

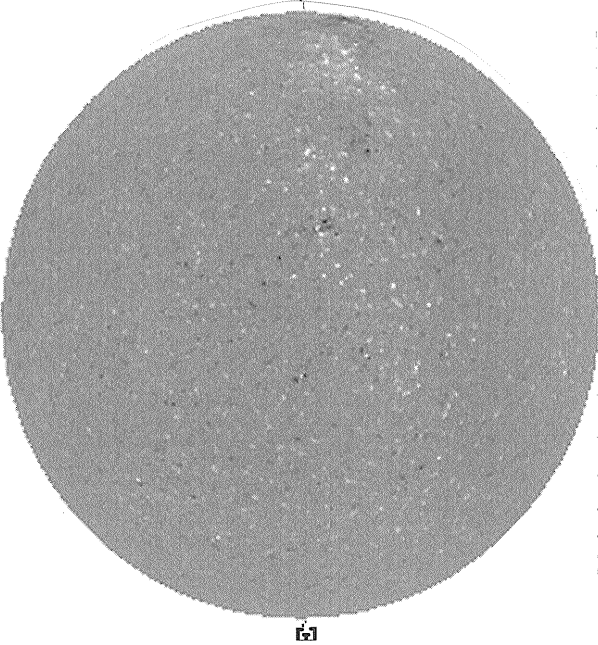


02/07/08
(DOY 38)

--- FE XIV 17:11 UT 1.15 R_o
..... FE X 16:21 UT 1.15 R_o
xxxxx CA XV 18:42 UT 1.15 R_o
NO CA.XV ACTIVITY TODAY

February 08, 2008 (P=-14.67, Bo=-6.44, Lo= 180.80)

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



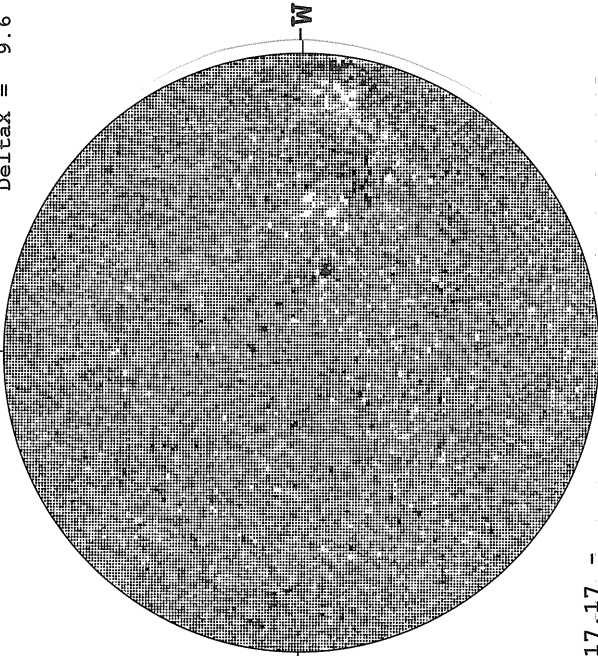
1929 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -



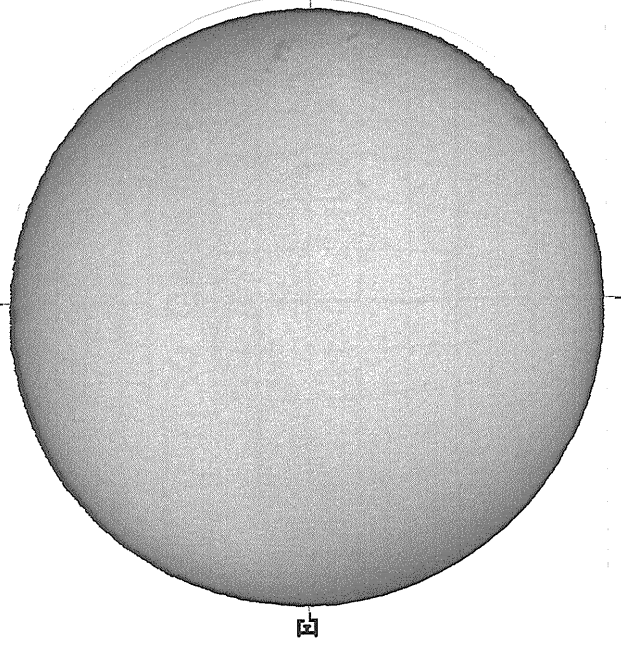
2126 UT

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



17.17 -
18.14 UT

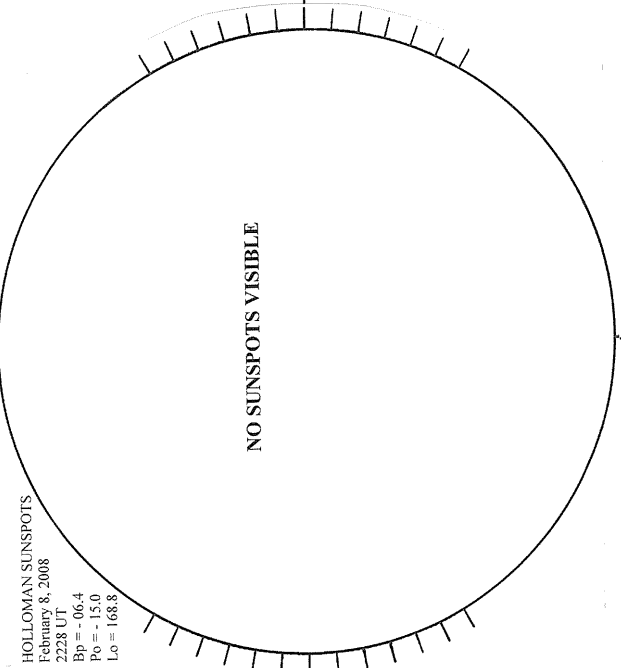
MEUDON H-ALPHA



0922 UT

HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 8, 2008
2228 UT
Bp = -06.4
Pp = -15.0
Lo = 168.8



2228 UT

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

NO DATA

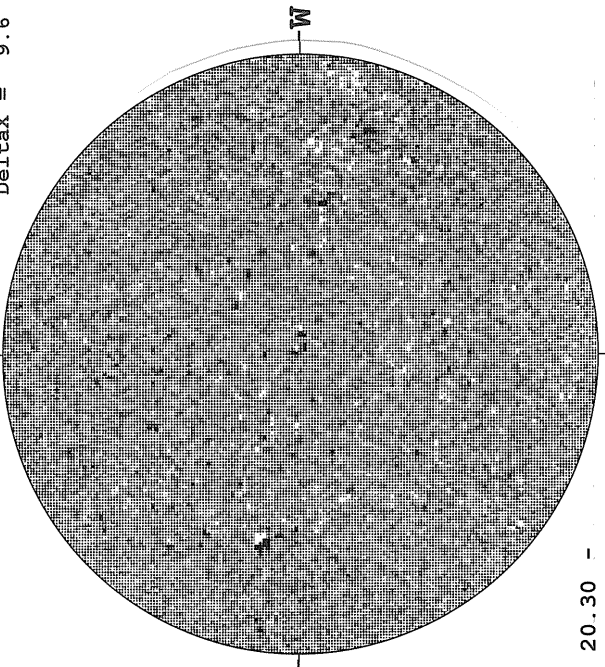
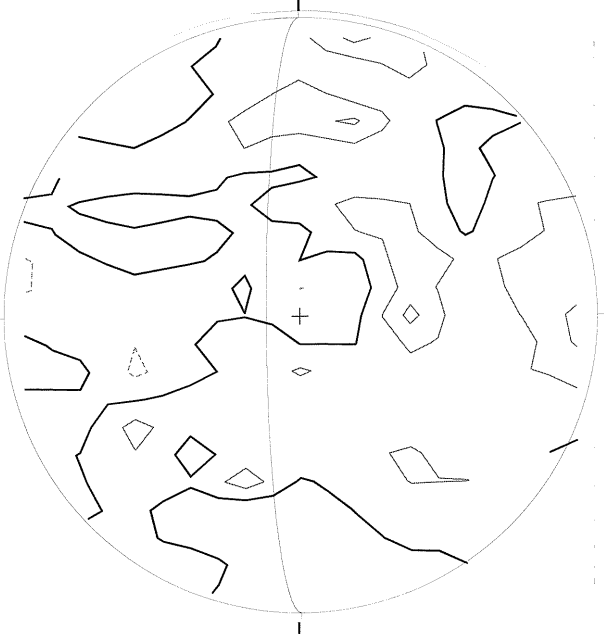
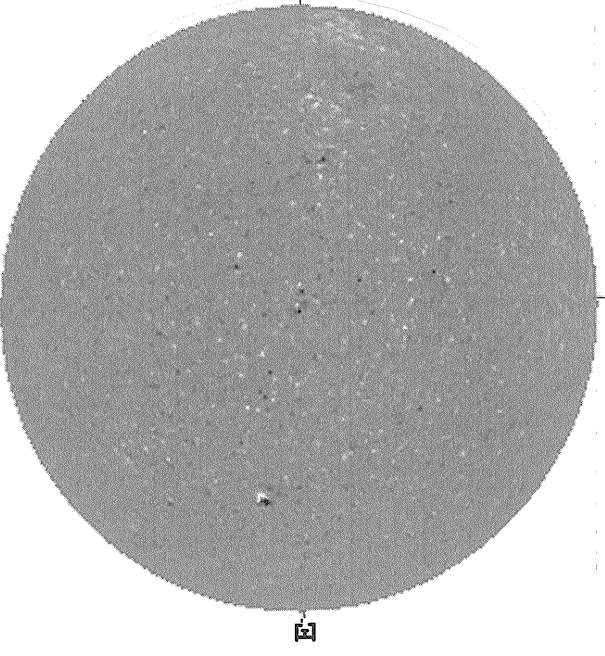
February 09, 2008 (P=-15.05, Bo=-6.50, Lo= 167.63)

Feb 08 54

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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

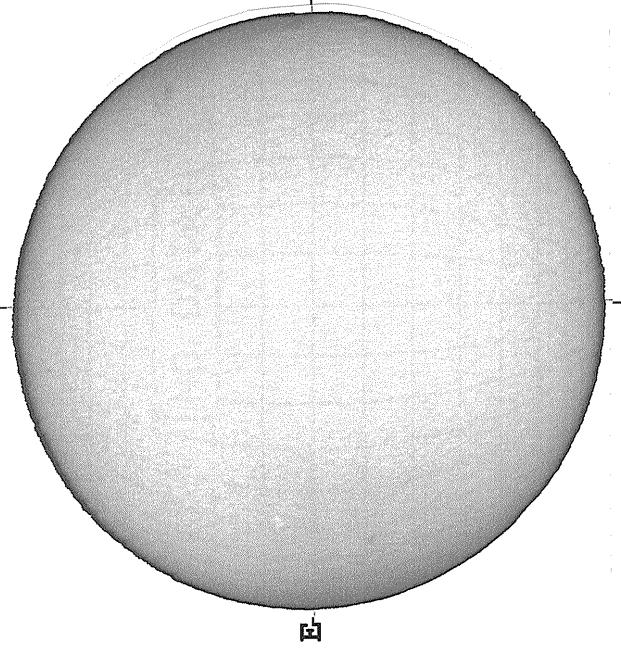


1800 UT

2129 UT

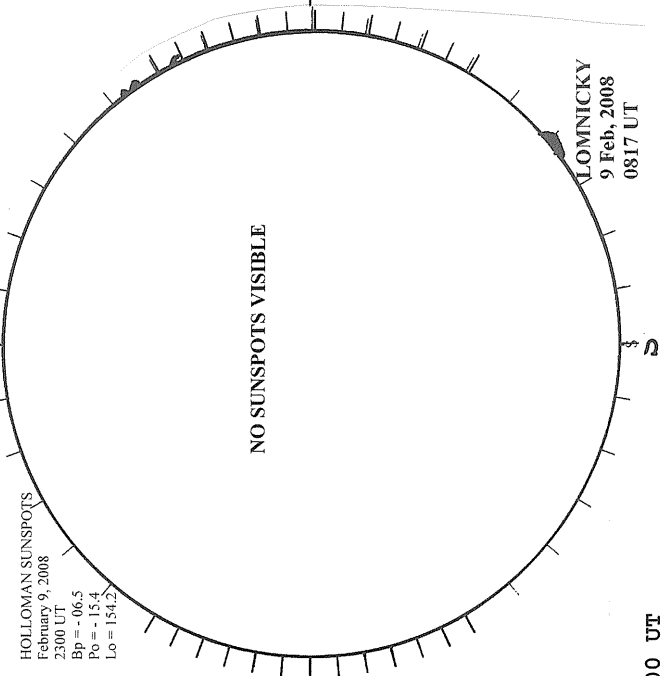
20.30 -
21.27 UT

MEUDON H-ALPHA



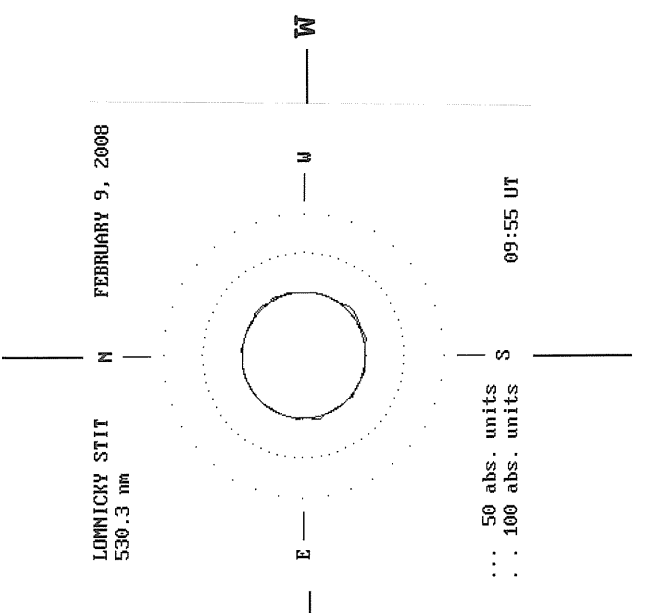
0806 UT

HOLLOMAN SUNSPOTS



2300 UT
0817 UT LOMN FROM

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



... 50 abs. units S
... 100 abs. units S
09:55 UT

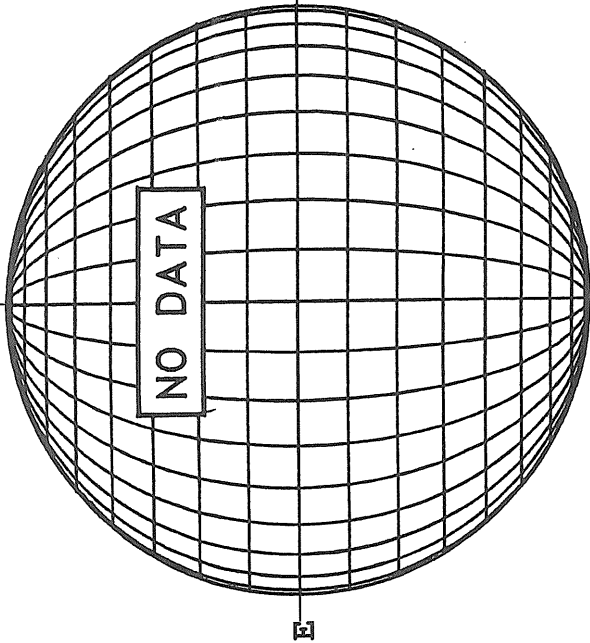
HOLLOMAN SUNSPOTS
February 9, 2008
2300 UT
Bp = -06.5
Po = -15.4
Lo = 154.2

LOMNICKY STIT
530.3 mm
FEBRUARY 9, 2008

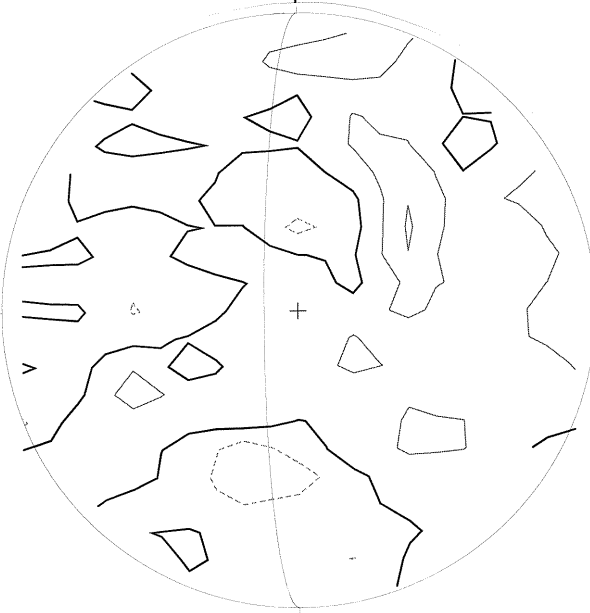
LOMNICKY
9 Feb, 2008
0817 UT

February 10, 2008 (P=-15.42, Bo=-6.56, Lo= 154.46)

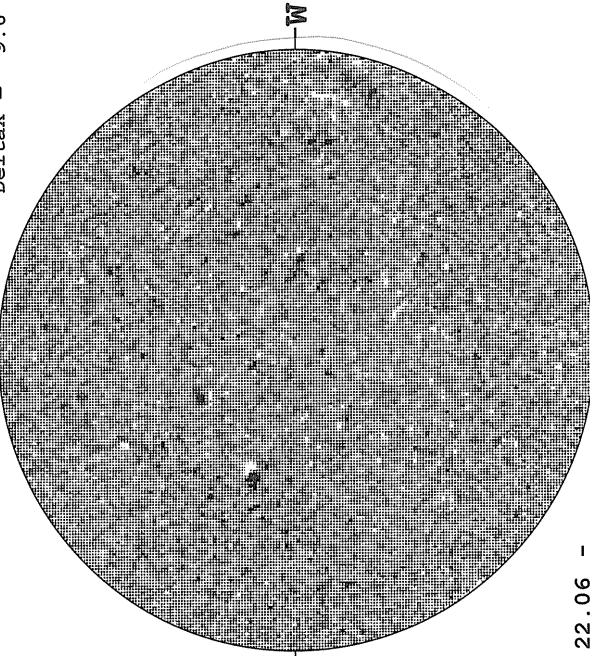
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = + ** 854.2NM **
 Dark = -



STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -



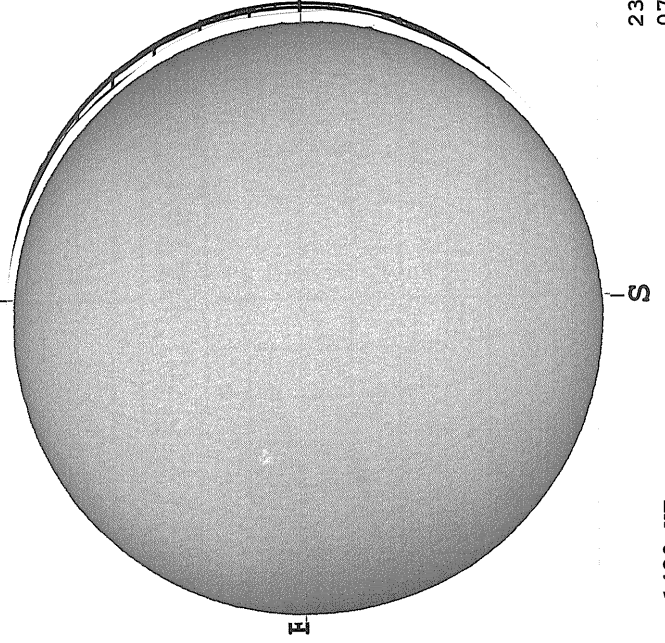
MT. WILSON MAGNETOGRAM
 White = +7.5G
 Black = -7.5G
 DeltaY = 13.1
 DeltaX = 9.6



22.06 -
 23.03 UT

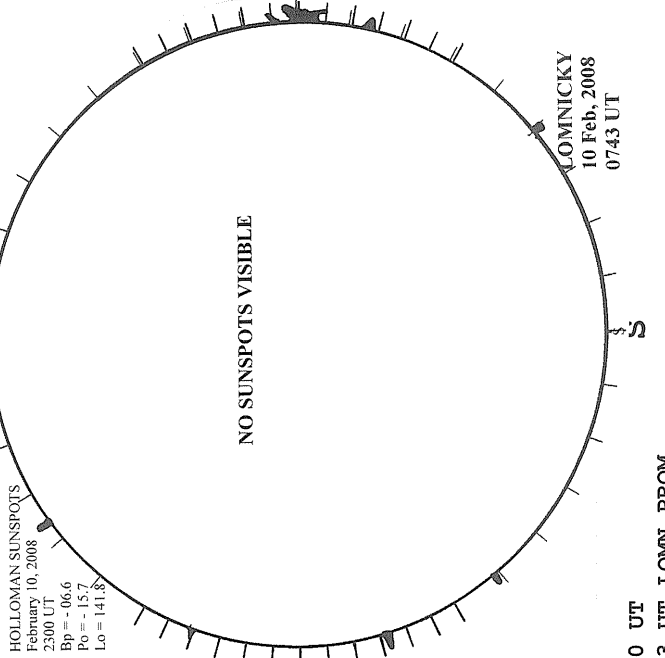
2125 UT

MEUDON H-ALPHA



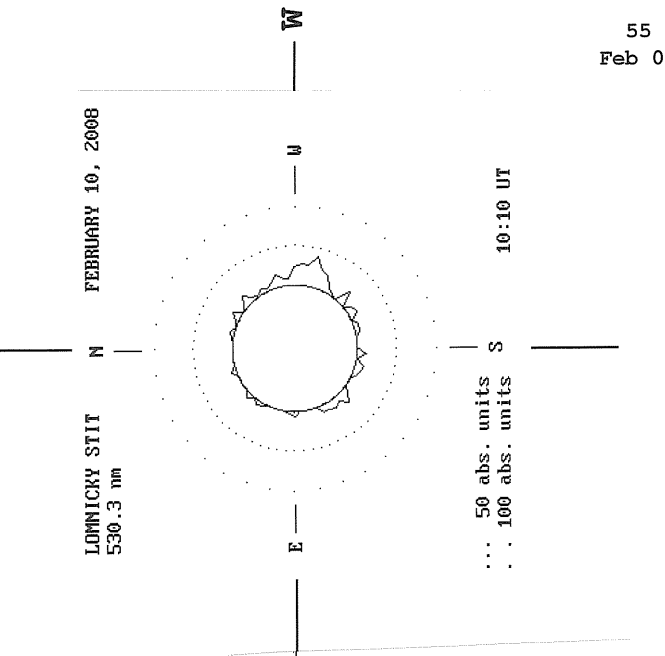
1429 UT

HOLLOMAN SUNSPOTS



2300 UT
 0743 UT LOMN PROM

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



LOMNICKY STIT
 530.3 nm
 FEBRUARY 10, 2008
 ... 50 abs. units
 . . . 100 abs. units
 10:10 UT

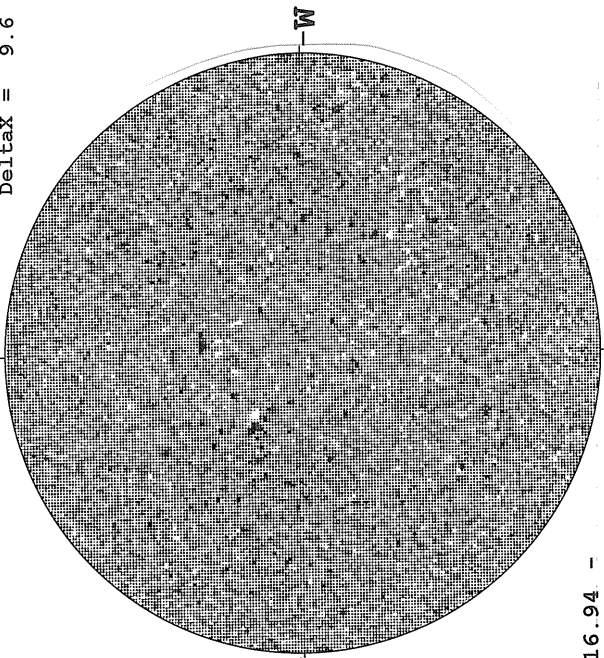
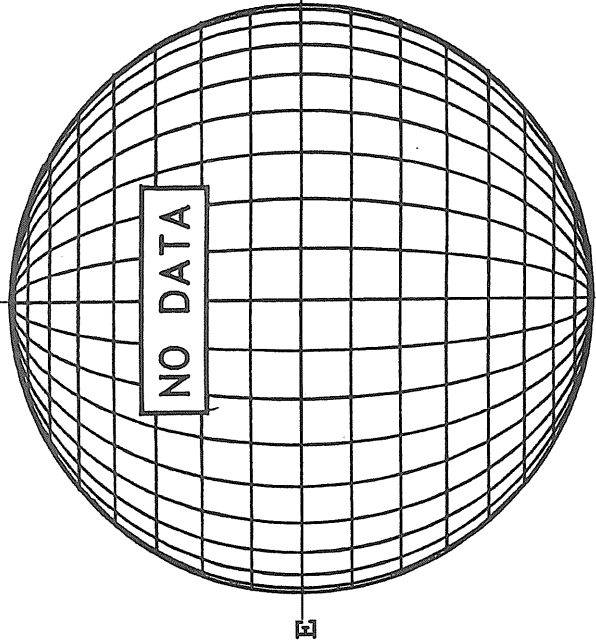
February 11, 2008 (P=-15.78, Bo=-6.61, Lo= 141.30)

56
08

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

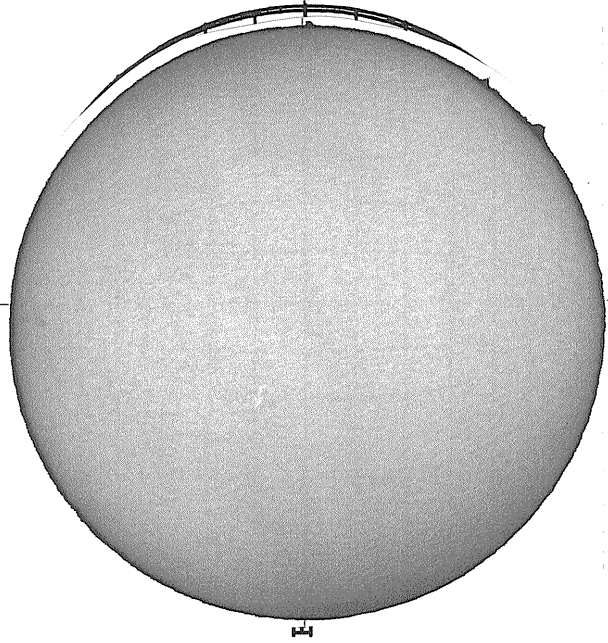
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



16.94 -
17.91 UT

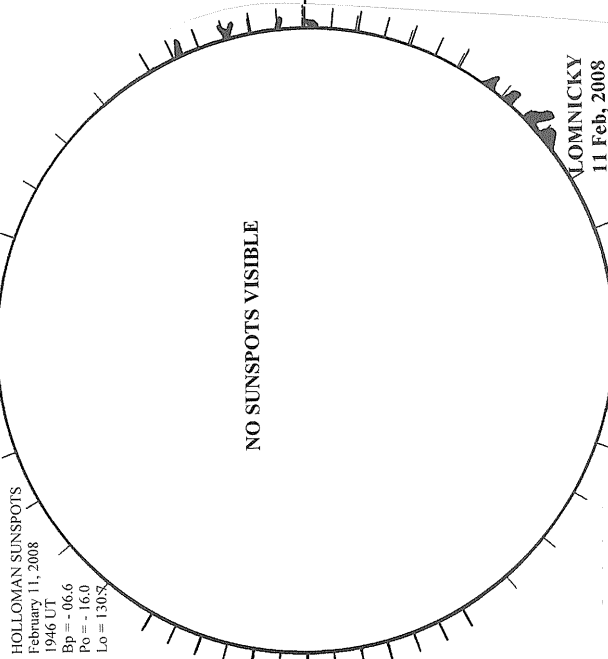
2128 UT

MEUDON H-ALPHA



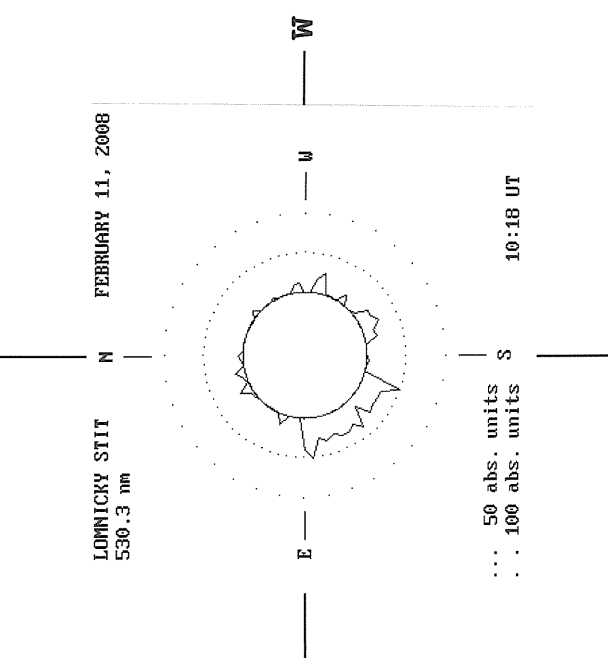
1443 UT

HOLLOMAN SUNSPOTS



1946 UT
0937 UT LOMN PROM

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



... 50 abs. units
... 100 abs. units
10:18 UT

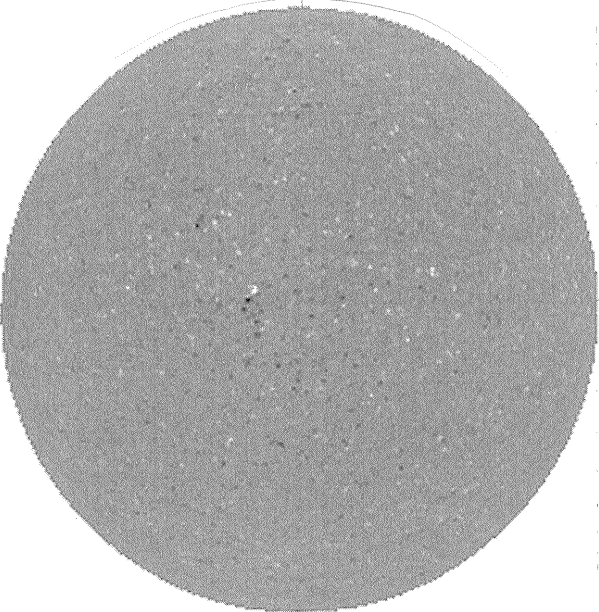
LOMNICKY
11 Feb, 2008
0937 UT

February 12, 2008 (P=-16.14, Bo=-6.66, Lo= 128.13)

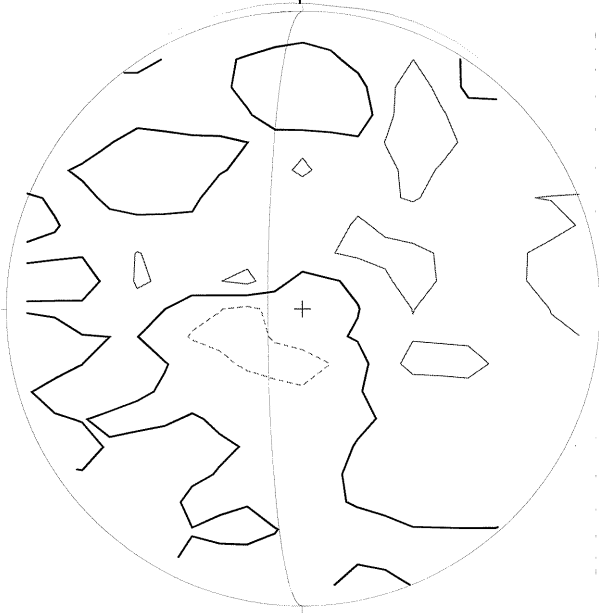
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = +
 Dark = -

STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -

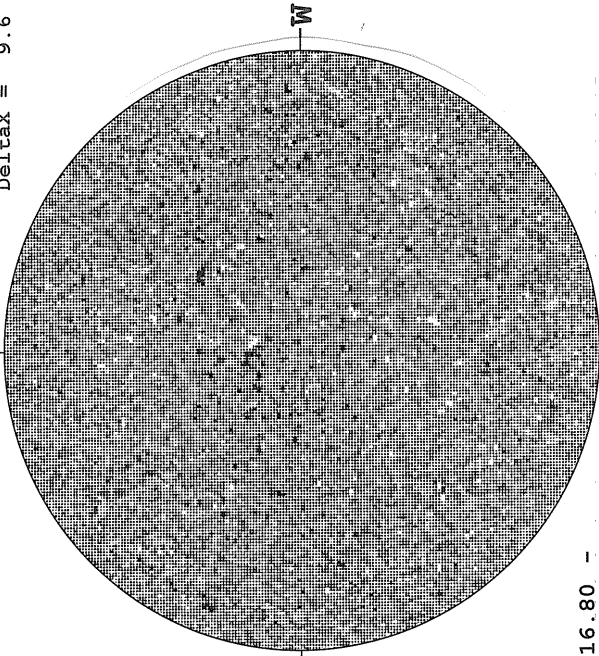
MT. WILSON MAGNETOGRAM
 White = +7.5G
 Black = -7.5G
 DeltaY = 13.1
 DeltaX = 9.6



2032 UT

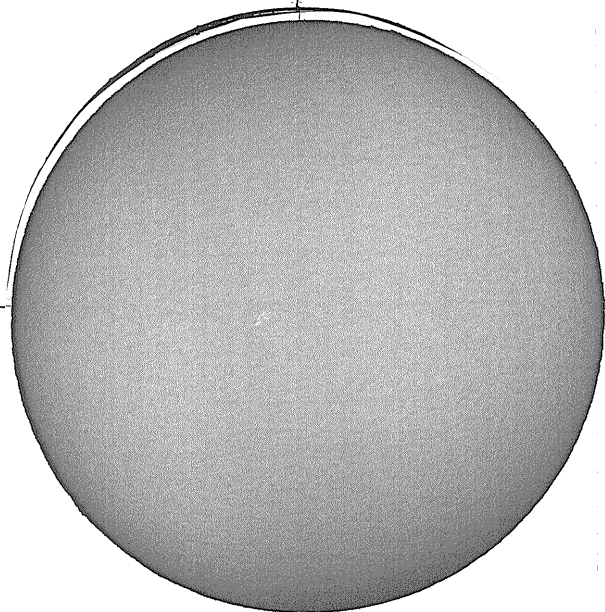


1858 UT



16.80 -
 17.77 UT

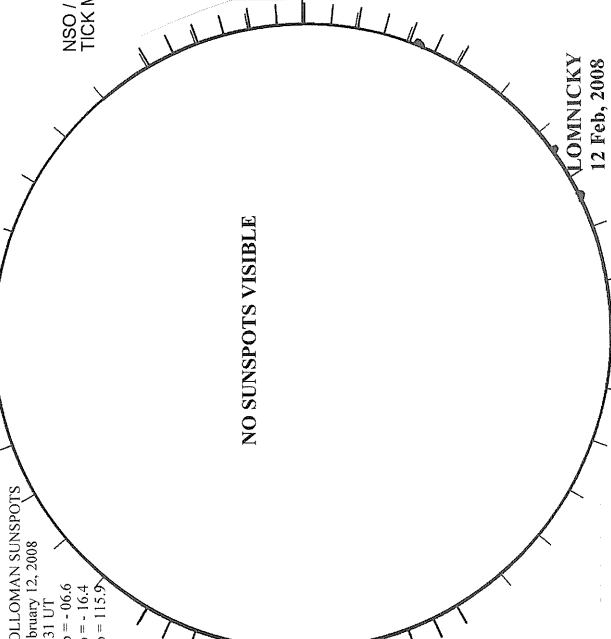
MEUDON H-ALPHA



1459 UT

HOLLOMAN SUNSPOTS

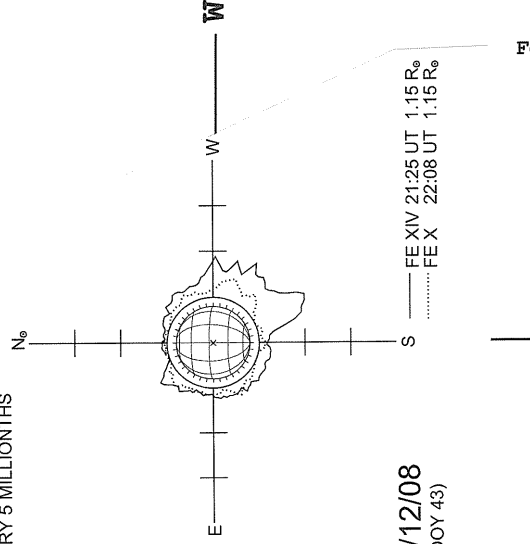
HOLLOMAN SUNSPOTS
 February 12, 2008
 2231 UT
 Bp = -06.6
 Pp = -16.4
 Lo = 115.9



2231 UT
 0737 UT LOMN PROM

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

NSO / SACRAMENTO PEAK CORONAL DATA
 TICK MARKS EVERY 5 MILLIONTHS



02/12/08
 (DOY 43)

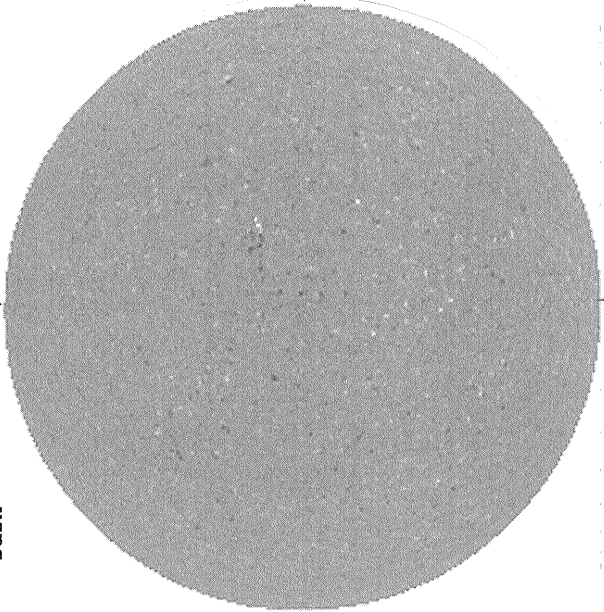
----- FE XIV 21:25 UT 1.15 R_o
 FE X 22:08 UT 1.15 R_o

February 13, 2008 (P=-16.49, Bo=-6.71, Lo= 114.96)

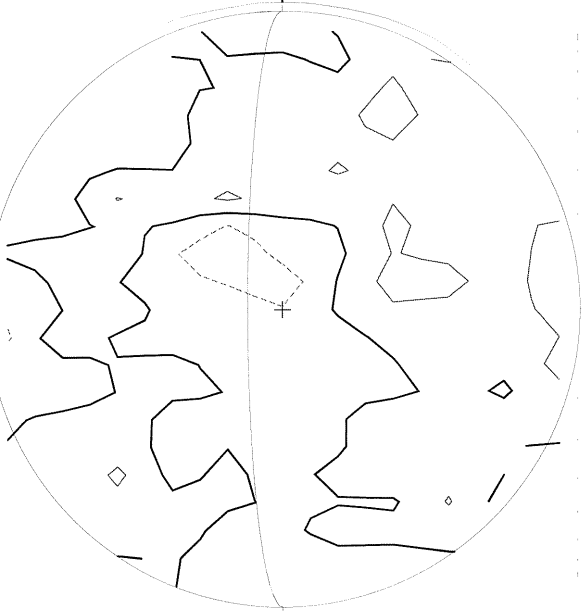
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -

STANFORD MAGNETOGRAM
Solid = +
Dashed = -

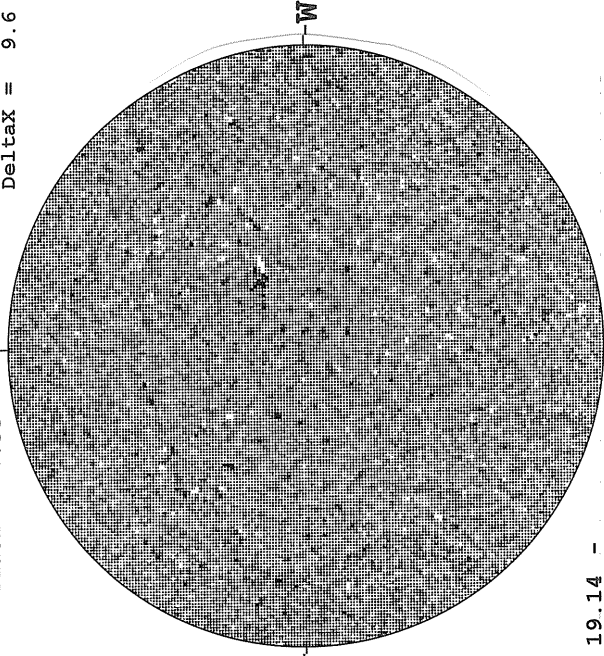
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
Delta α = 13.1
Delta α = 9.6



1827 UT

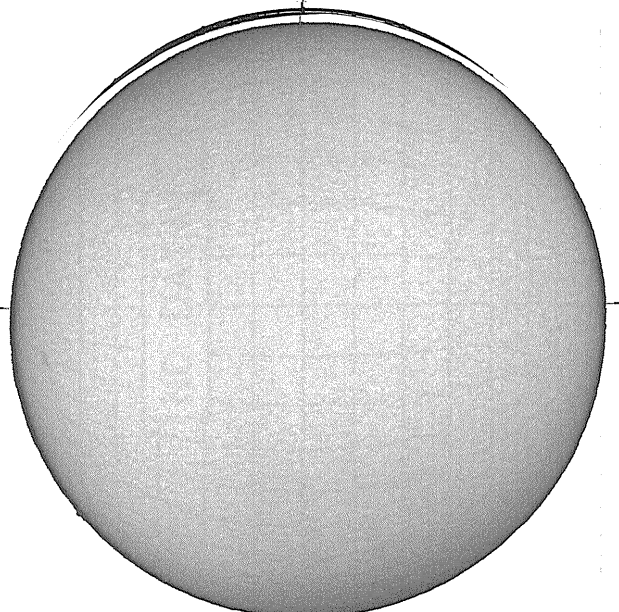


2326 UT



19.14 -
20.11 UT

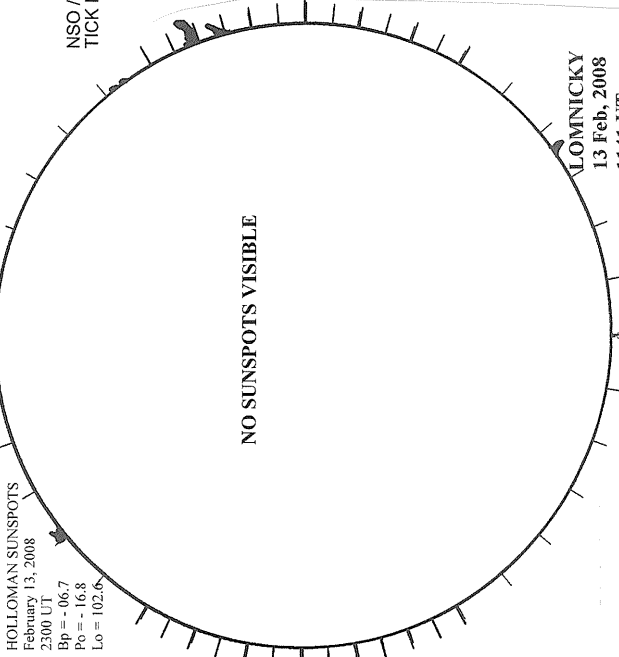
MEUDON H-ALPHA



1423 UT

HOLLOMAN SUNSPOTS

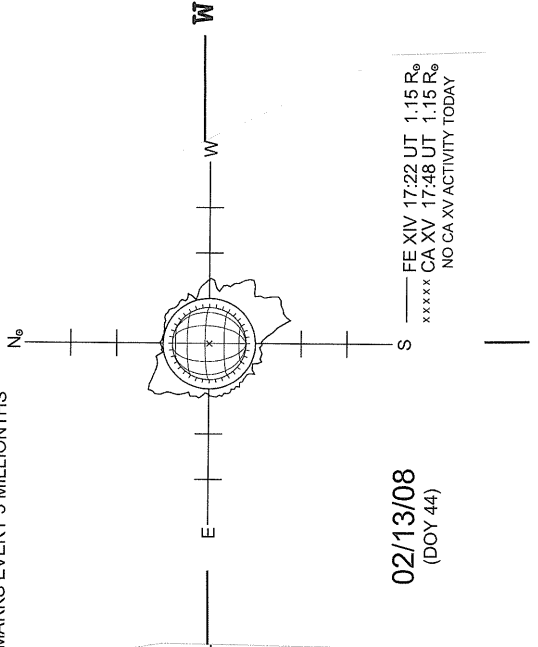
HOLLOMAN SUNSPOTS
February 13, 2008
2300 UT
Bp = -06.7
Po = -16.8
Lo = 102.6



2300 UT
1141 UT LOMN FROM

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



02/13/08
(DOY 44)

FE XIV 17:22 UT 1.15 R $_o$
CA XV 17:48 UT 1.15 R $_o$
NO CA XV ACTIVITY TODAY

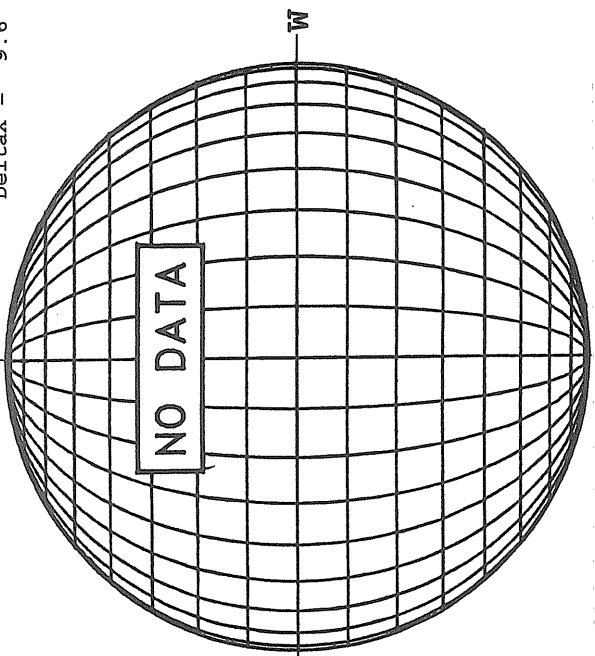
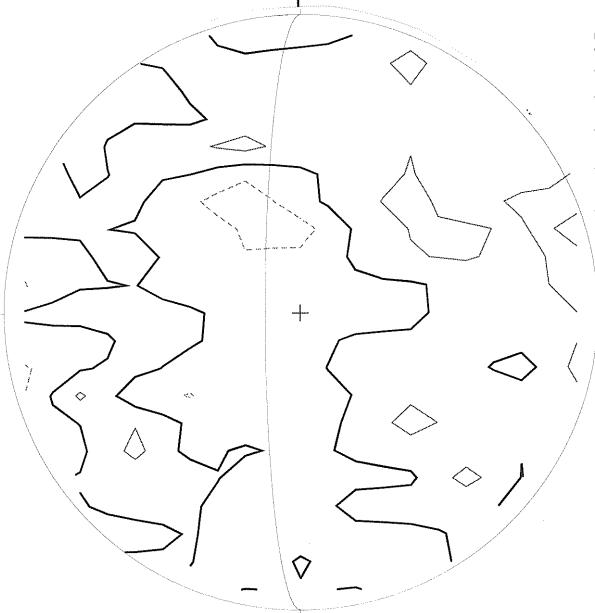
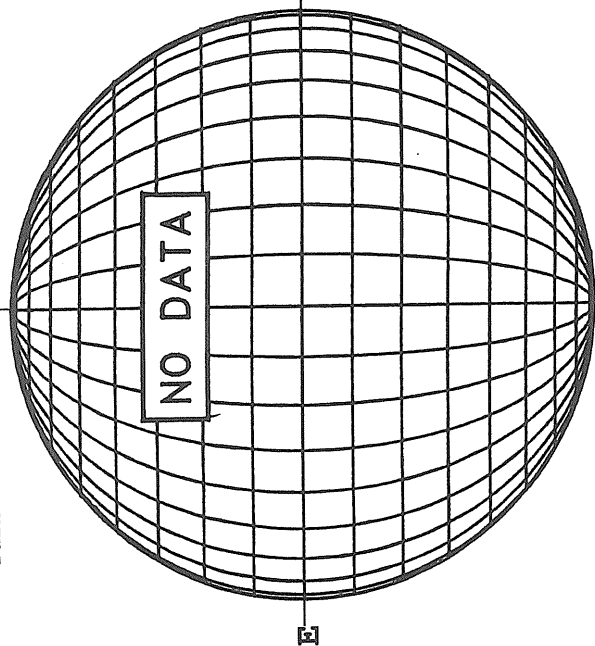
Feb 08

February 14, 2008 (P=-16.84, Bo=-6.76, Lo= 101.79)

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

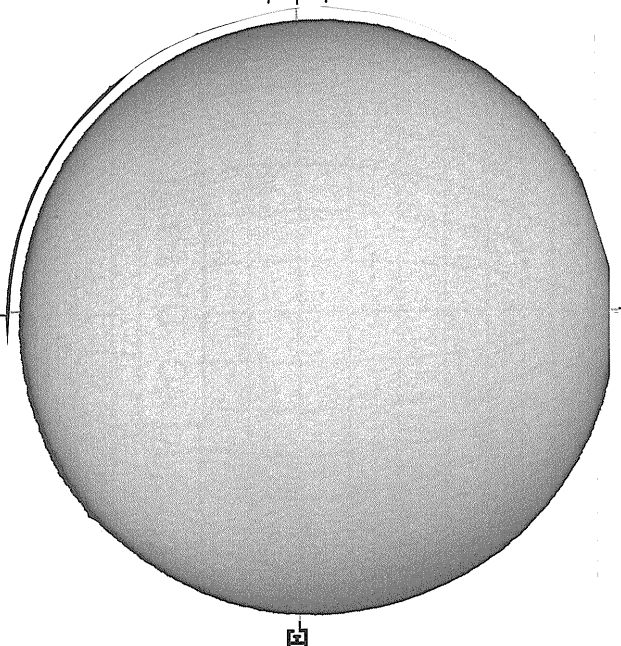
STANFORD MAGNETOGRAM
 Solid = + N
 Dashed = -

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



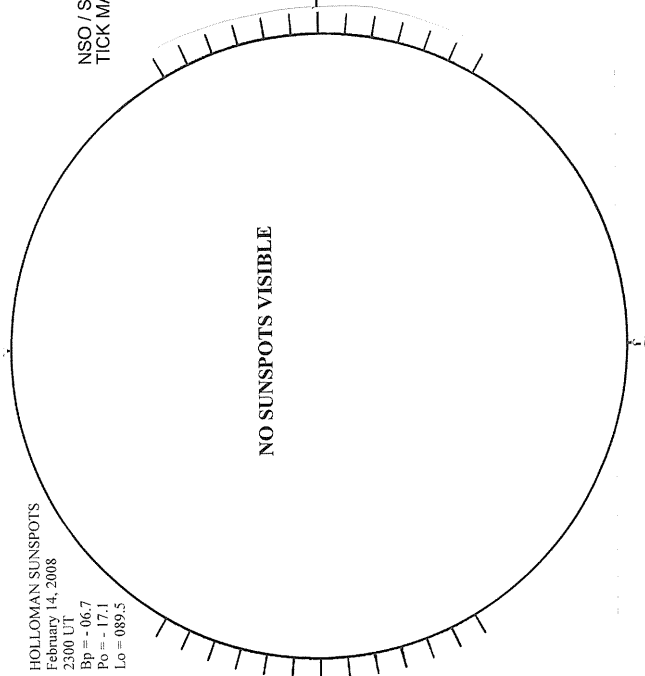
1800 UT

MEUDON H-ALPHA



HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
 February 14, 2008
 2300 UT
 Bp = -06.7
 Po = -17.1
 Lo = 089.5

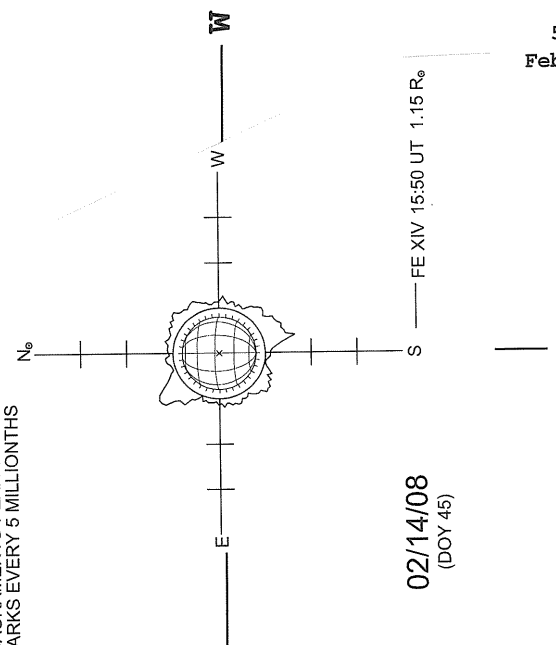


1439 UT

2300 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
 TICK MARKS EVERY 5 MILLIONTHS

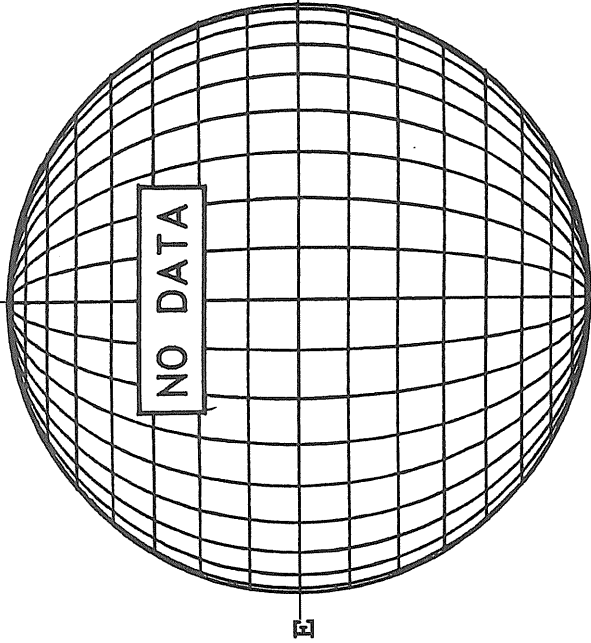


02/14/08
 (DOY 45)

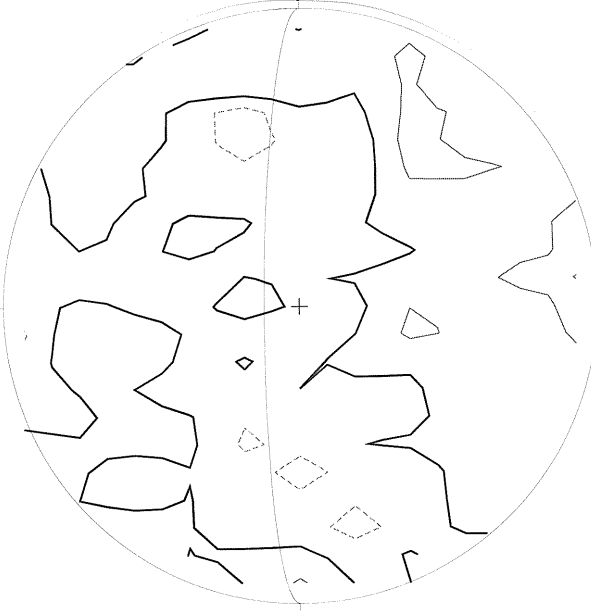
FE XIV 15:50 UT 1.15 R_o

February 15, 2008 (P=-17.18, Bo=-6.80, Lo= 88.63)

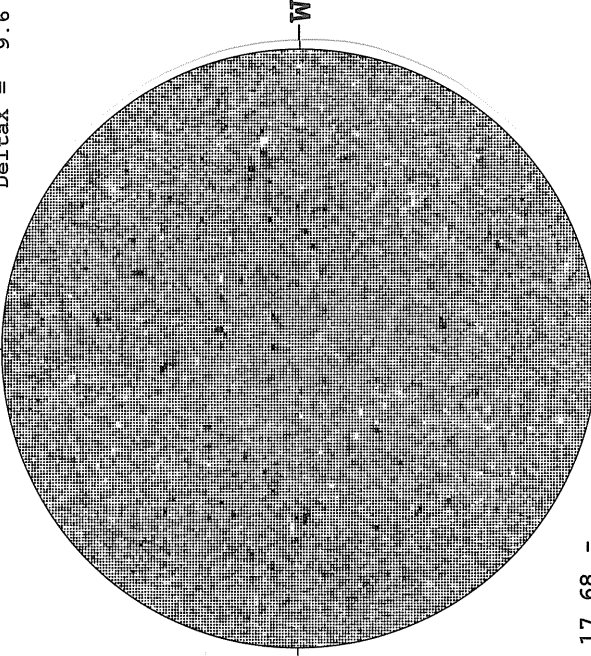
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -



STANFORD MAGNETOGRAM
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G



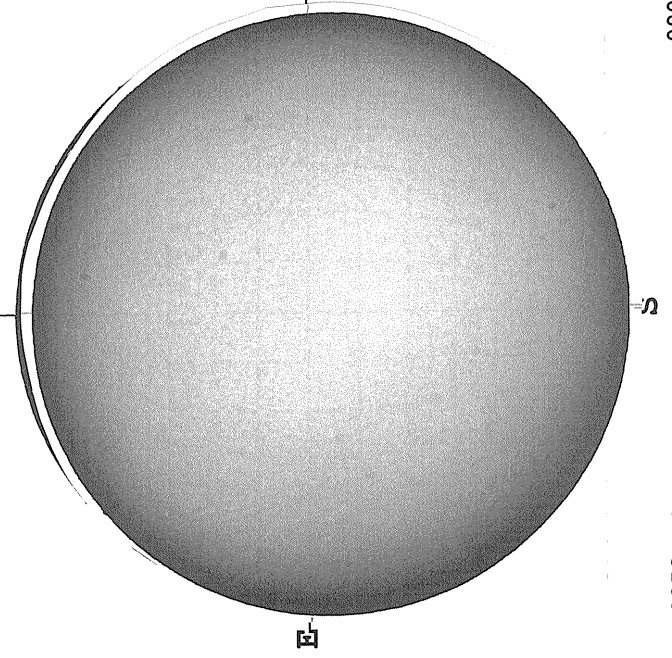
DeltaY = 13.1
DeltaX = 9.6

0000

17.68 -
18.65 UT

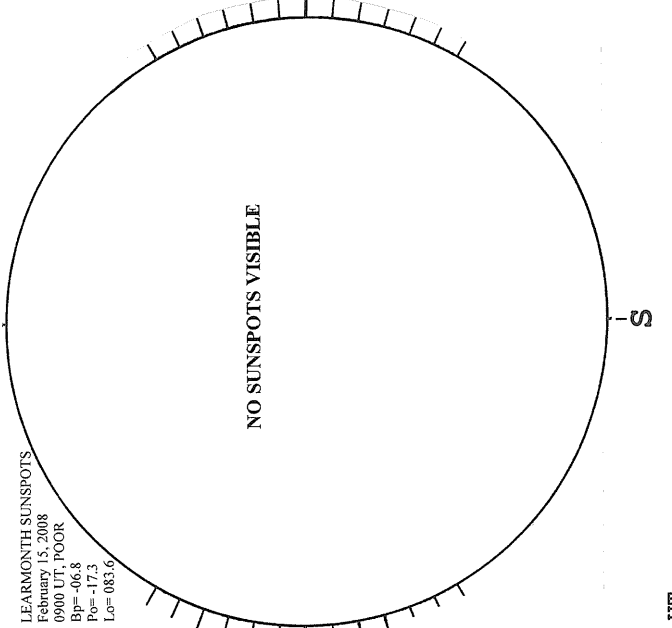
2124 UT

HUAIROU H-ALPHA



0353 UT

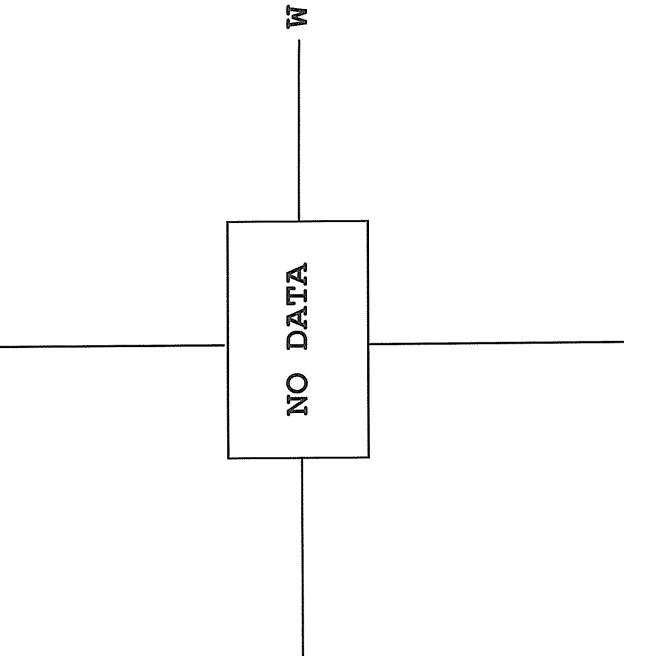
LEARMONTH SUNSPOTS



0900 UT

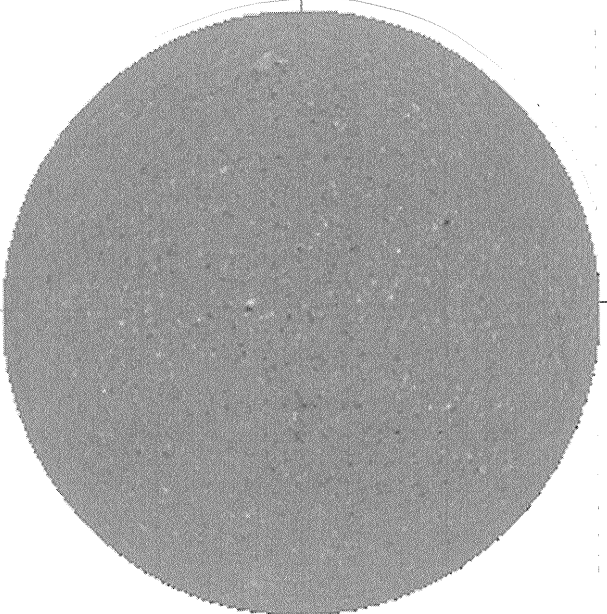
SACRAMENTO PEAK CORONA (1.15 Radii) -----

NO DATA



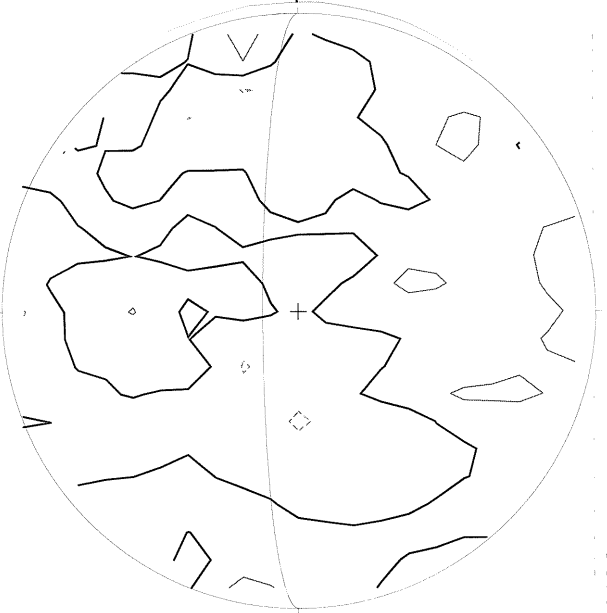
February 16, 2008 (P=-17.52, Bo=-6.85, Lo= 75.46)

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



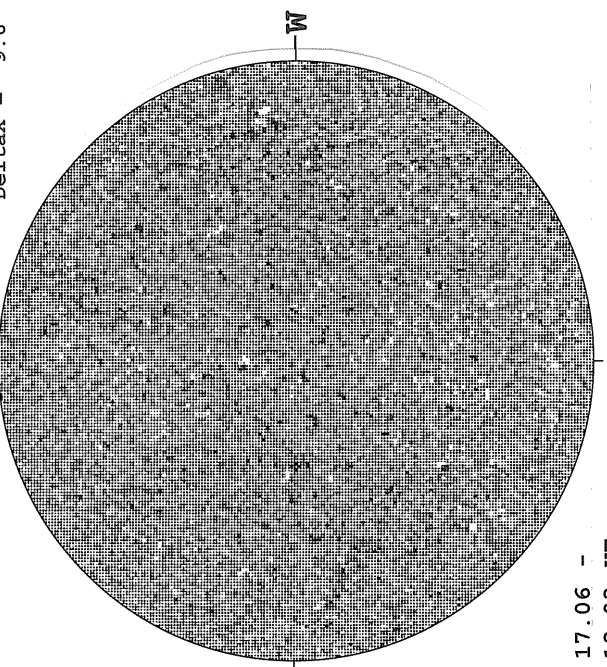
2058 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



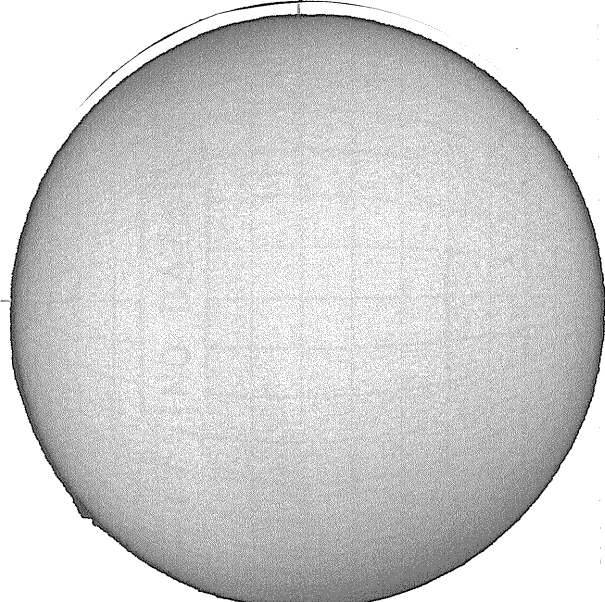
2126 UT

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



17.06 -
18.03 UT

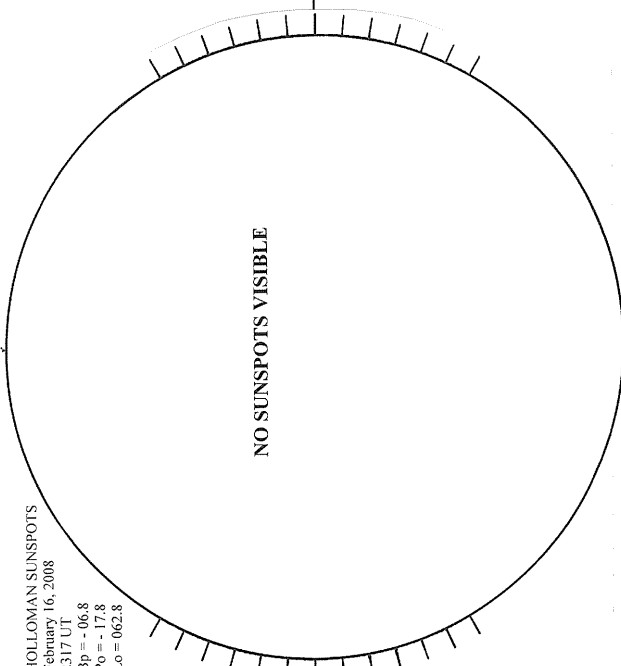
MEUDON H-ALPHA



1501 UT

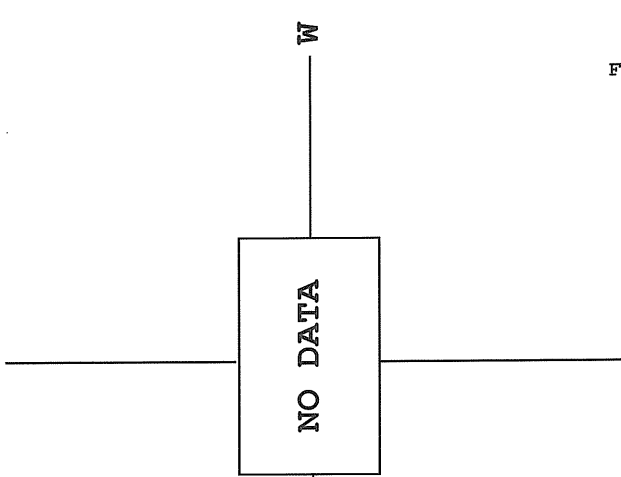
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 16, 2008
2317 UT
Bp = -06.8
Po = -17.8
Lo = 062.8



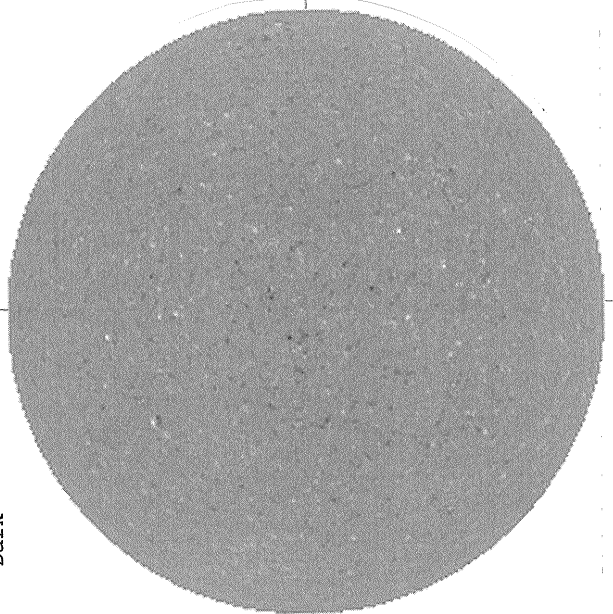
2317 UT

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



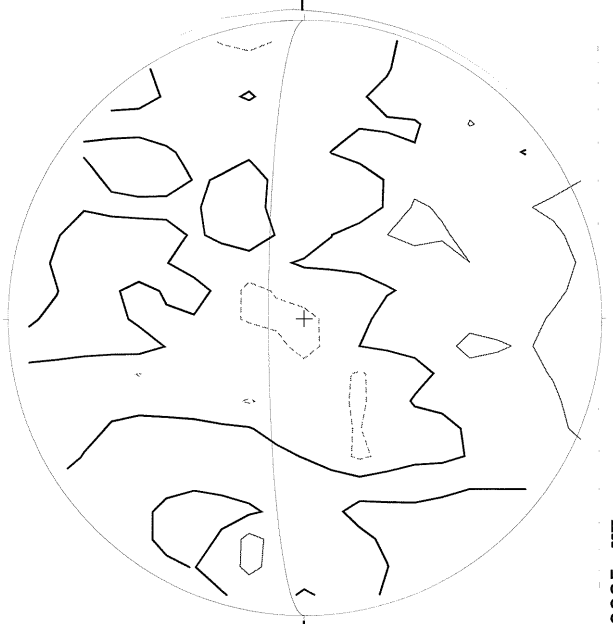
February 17, 2008 (P=-17.85, Bo=-6.89, Lo= 62.29)

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



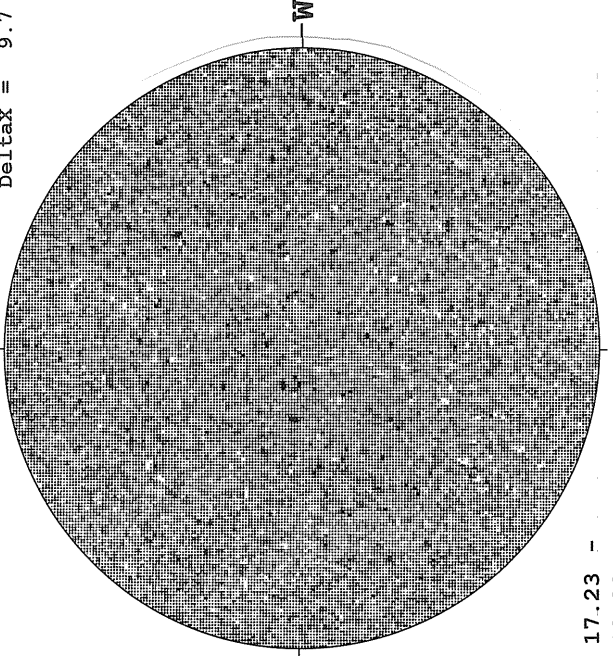
2025 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



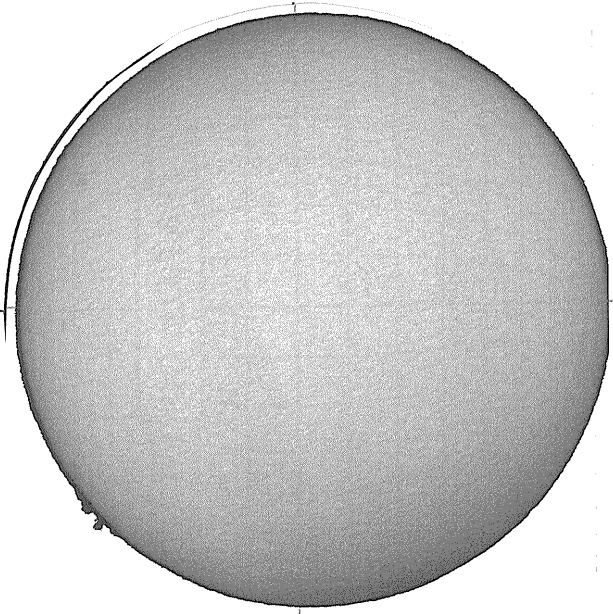
2235 UT

MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
N
DeltaY = 13.1
DeltaX = 9.7



17.23 -
18.20 UT

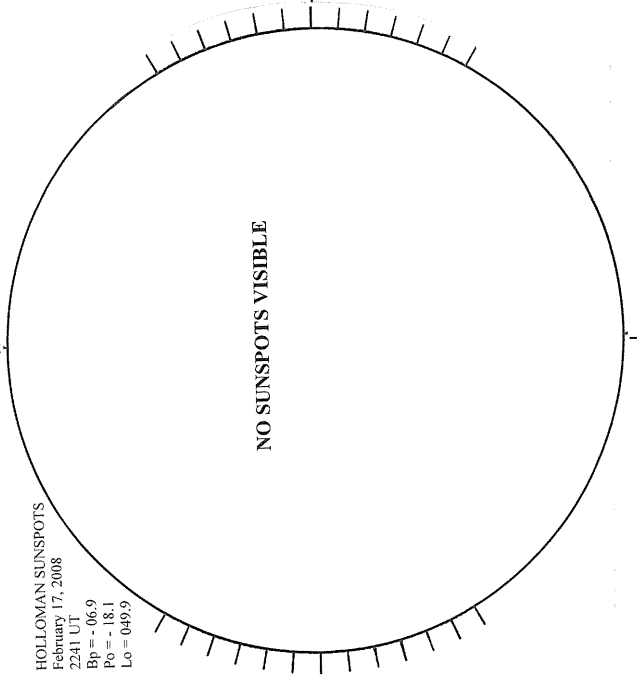
MEUDON H-ALPHA



1453 UT

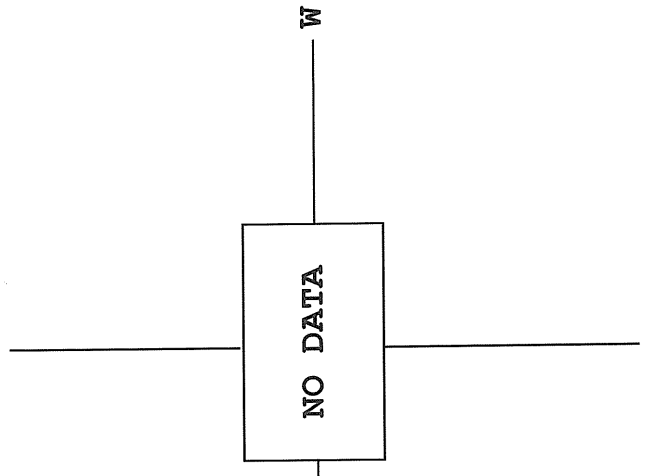
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 17, 2008
2241 UT
Bp = -06.9
Po = -18.1
Lo = 049.9



2241 UT

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



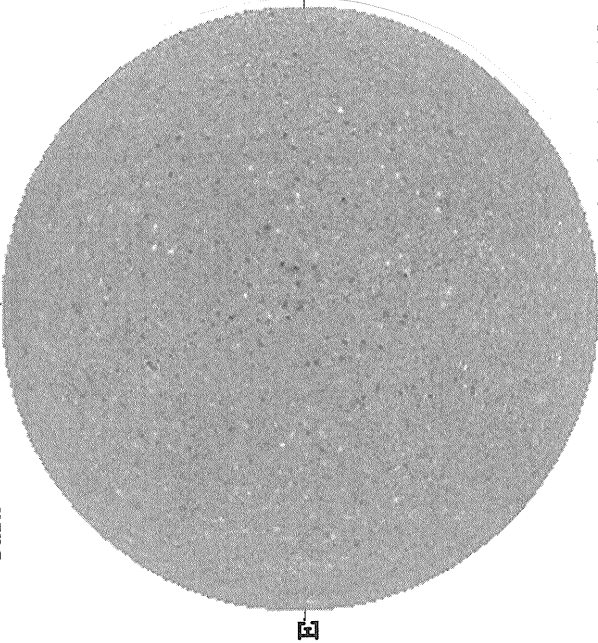
2241 UT

February 18, 2008 (P=-18.18, Bo=-6.93, Lo= 49.12)

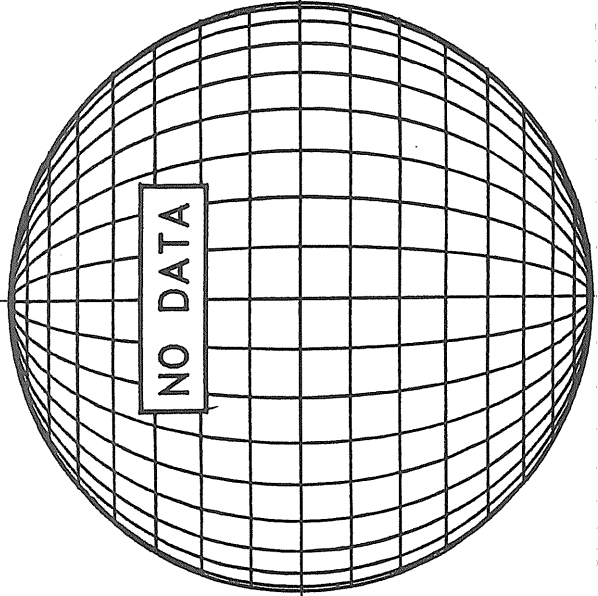
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = + N
Dark = -

STANFORD MAGNETOGRAM
Solid = + N
Dashed = -

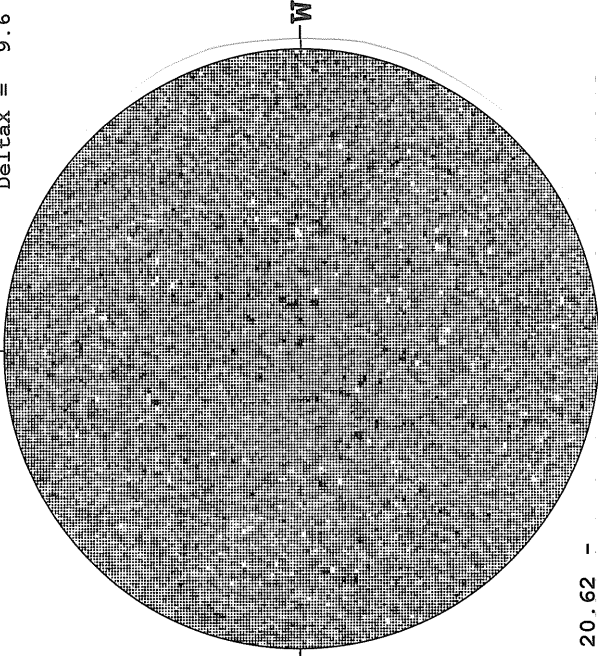
MT. WILSON MAGNETOGRAM
White = +7.5G N
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6



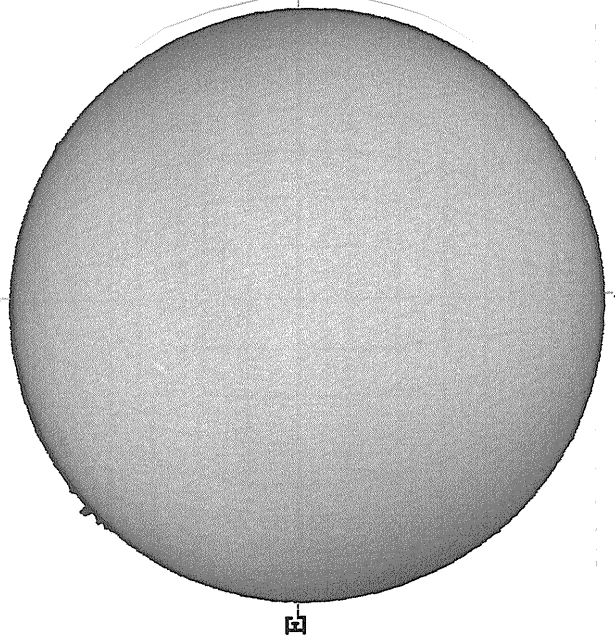
1805 UT



20.62 -
21.59 UT



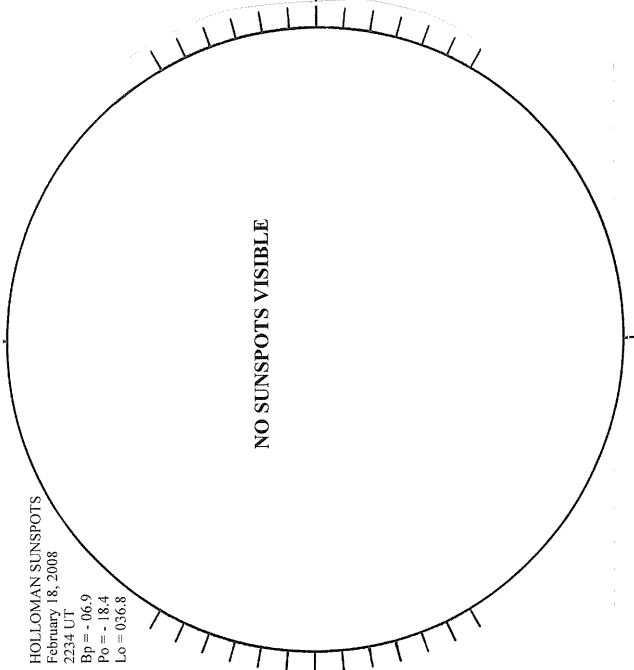
MEUDON H-ALPHA



1500 UT

HOLLOMAN SUNSPOTS

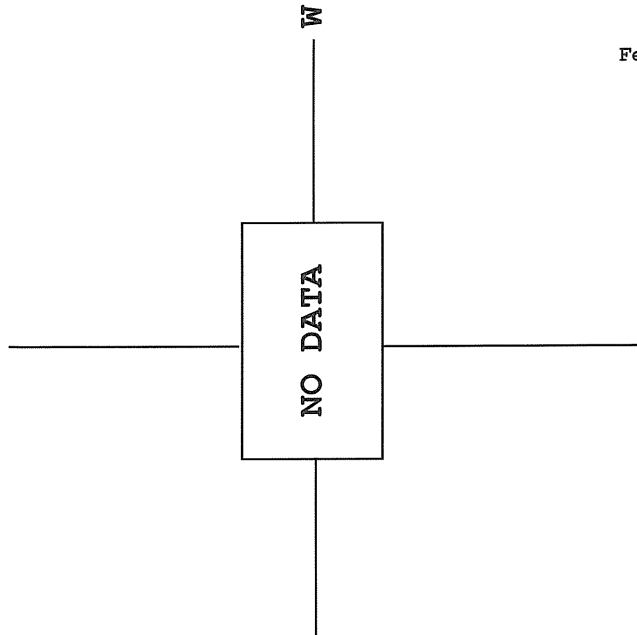
HOLLOMAN SUNSPOTS
February 18, 2008
2234 UT
Bp = -06.9
Po = -18.4
Lo = 036.8



2234 UT

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

NO DATA



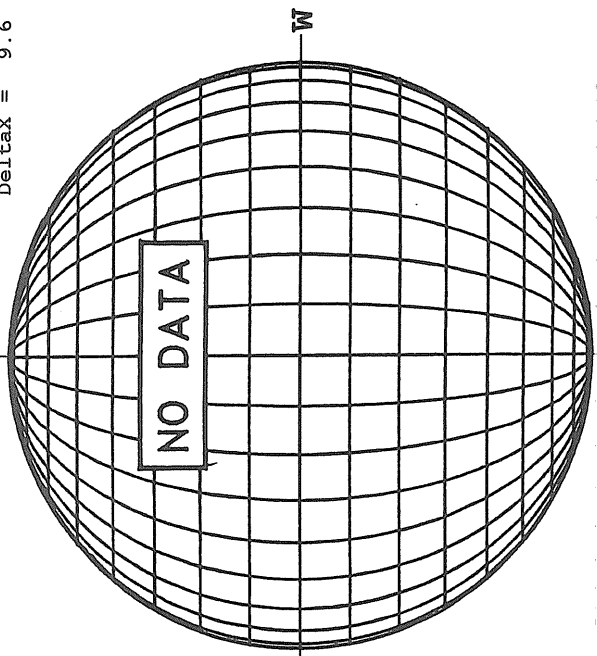
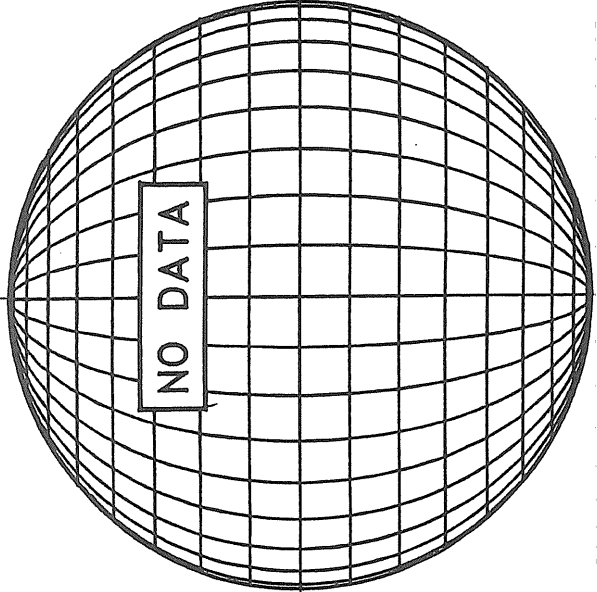
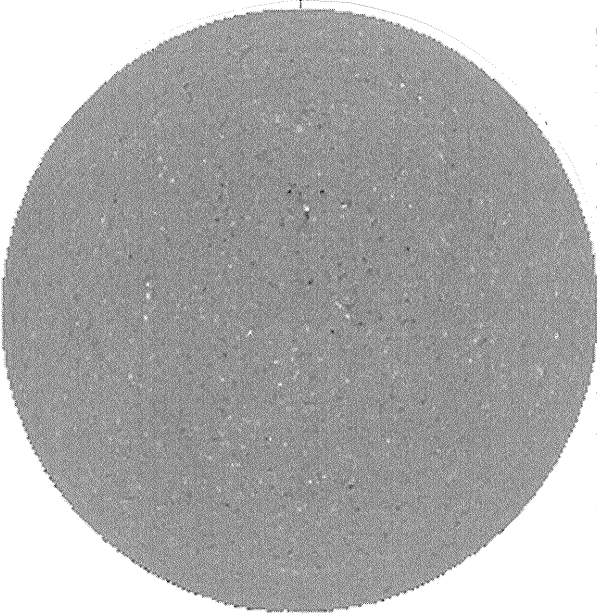
F0 64
b 08

February 19, 2008 (P=-18.50, Bo=-6.96, Lo= 35.95)

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

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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



E

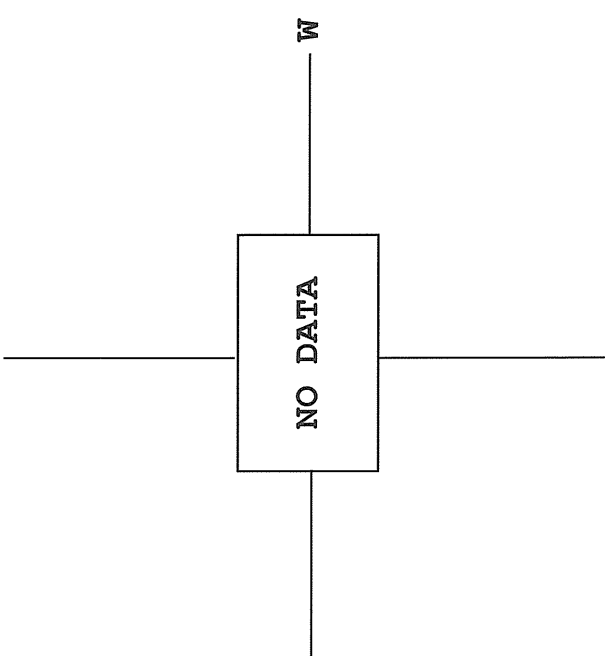
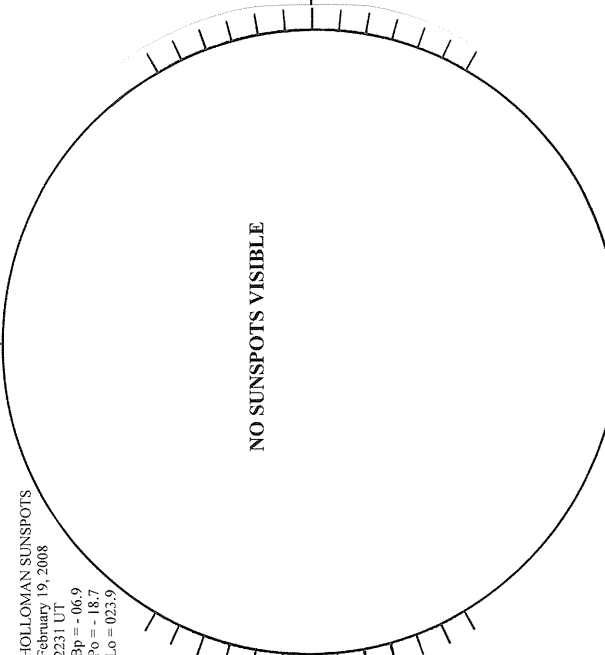
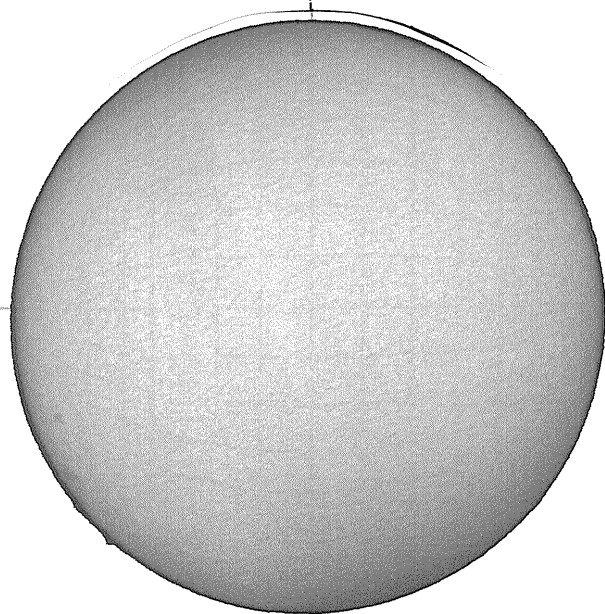
W

2229 UT

MEUDON H-ALPHA

HOLLOMAN SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii) ----



HOLLOMAN SUNSPOTS
February 19, 2008
2231 UT
Bp = -06.9
Po = -18.7
Lo = 023.9

E

W

1505 UT

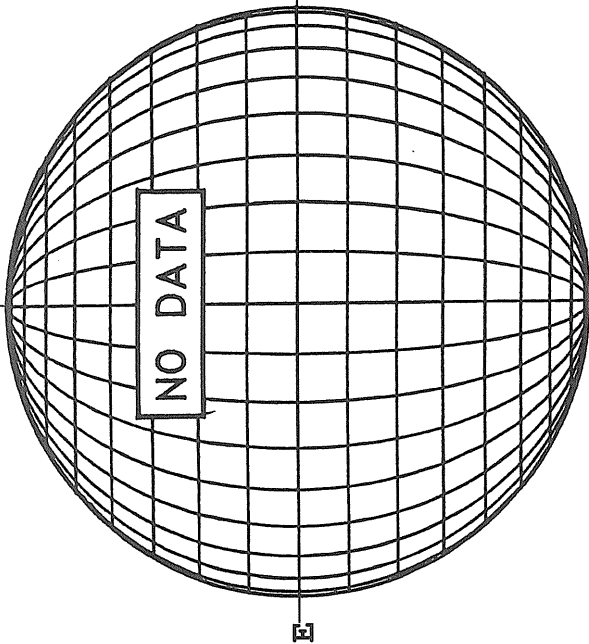
2231 UT

S

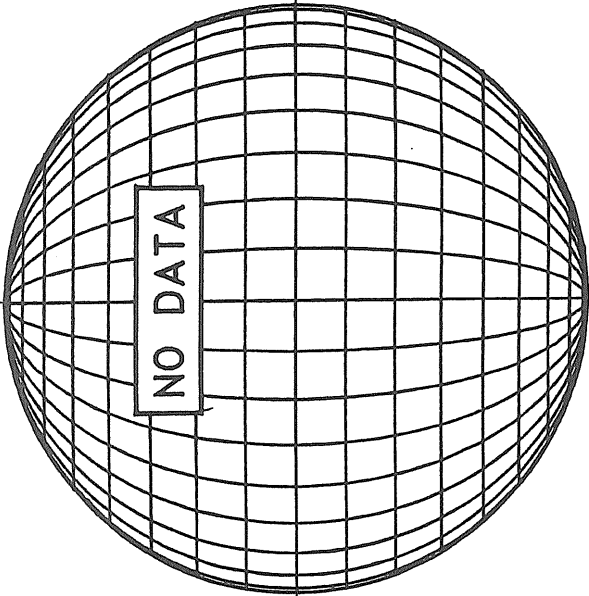
S

February 20, 2008 (P=-18.81, Bo=-7.00, Lo= 22.78)

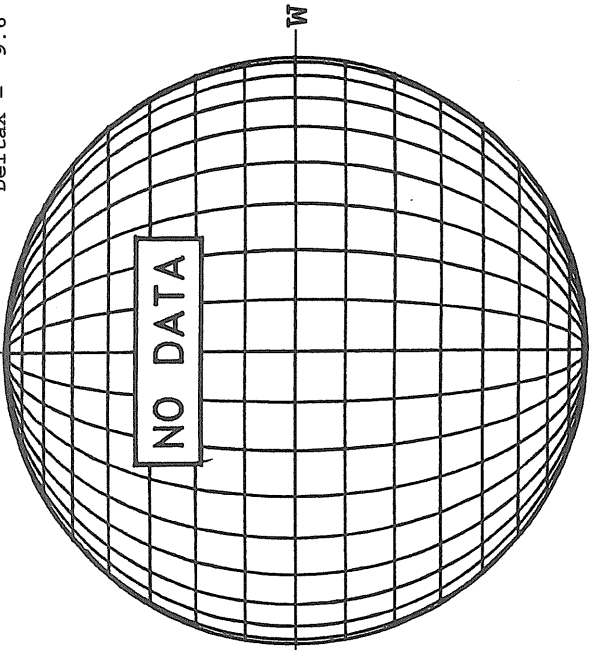
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = +
 Dark = -



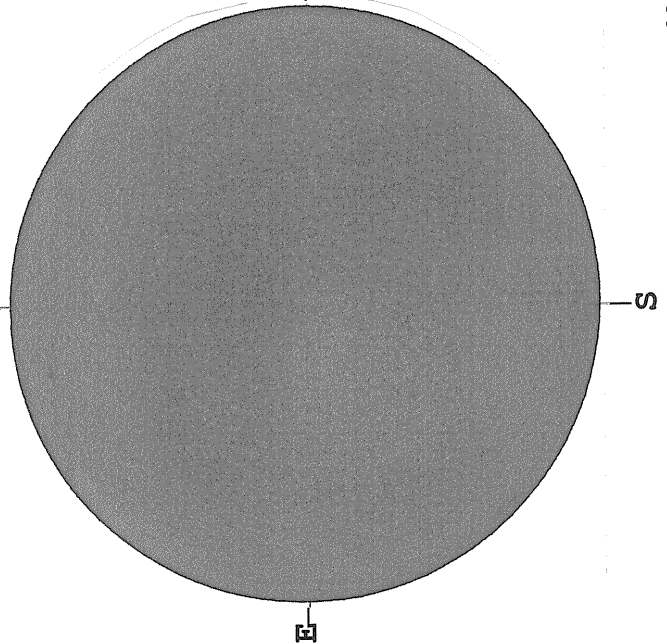
STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -



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

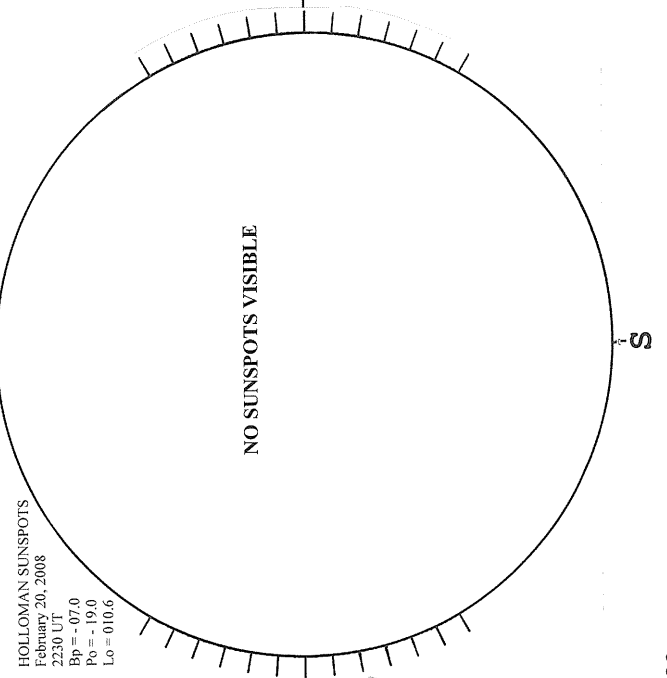


CATANIA H-ALPHA



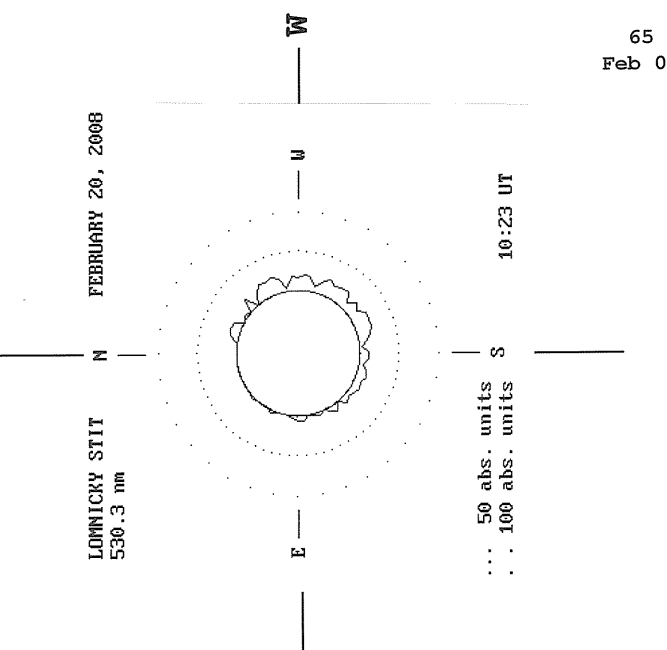
0808 UT

HOLLOMAN SUNSPOTS



2230 UT

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



65
 Feb 08

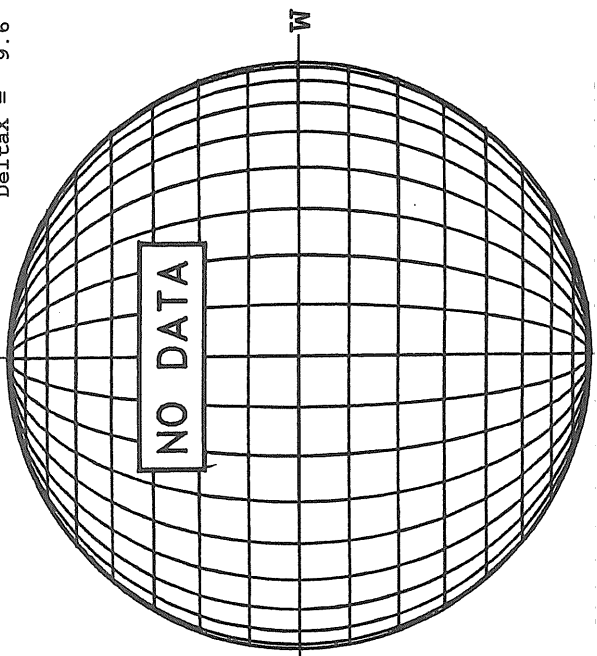
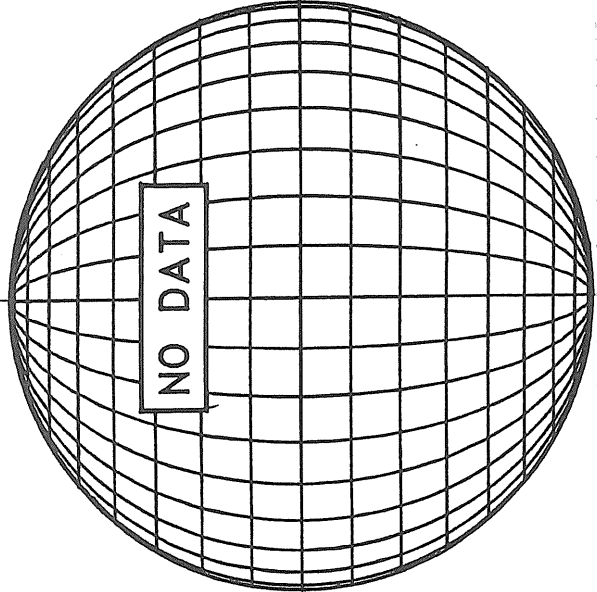
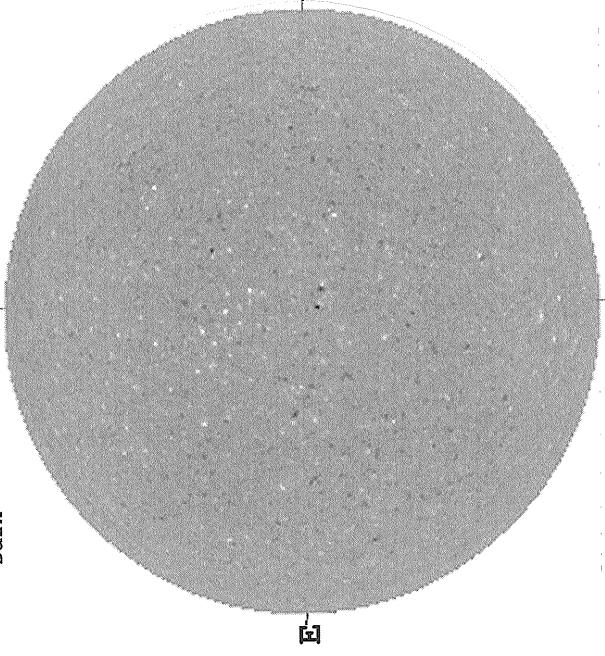
Feb 08 66
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6

February 21, 2008 (P=-19.12, Bo=-7.03, Lo= 9.61)

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

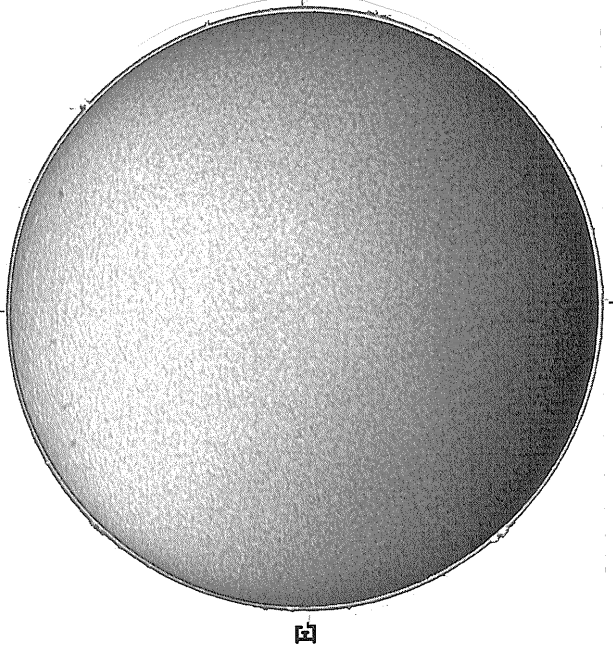
STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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

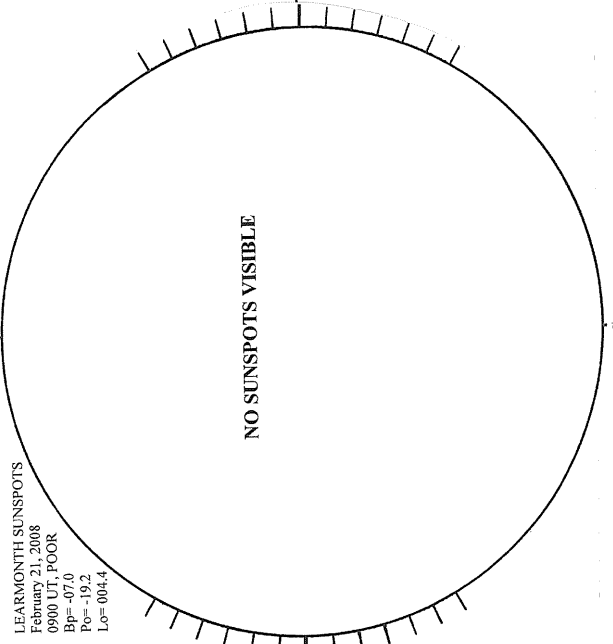


1925 UT

PIC DU MIDI H-ALPHA

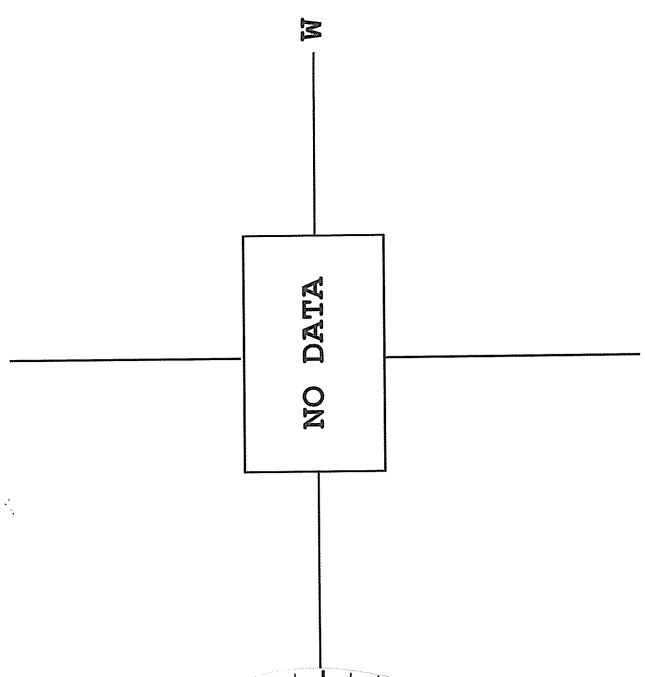


LEARMONTH SUNSPOTS



LEARMONTH SUNSPOTS
February 21, 2008
0900 UT, POOR
Bp = -07.0
Po = -19.2
Lo = -004.4

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



1124 UT

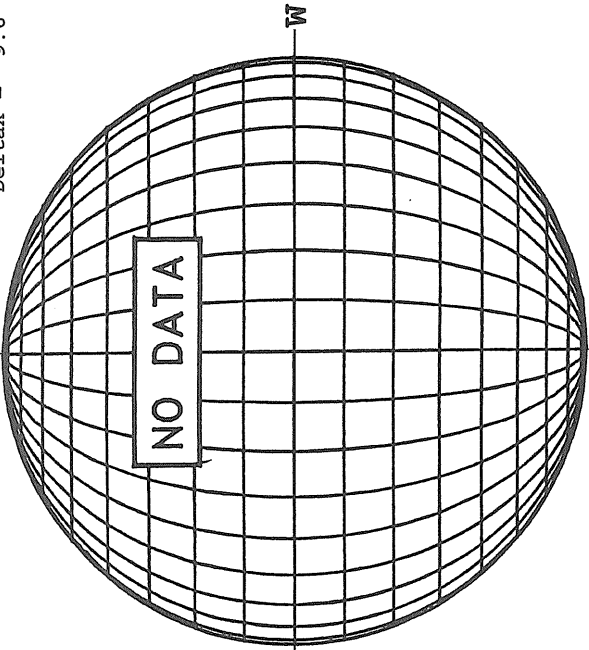
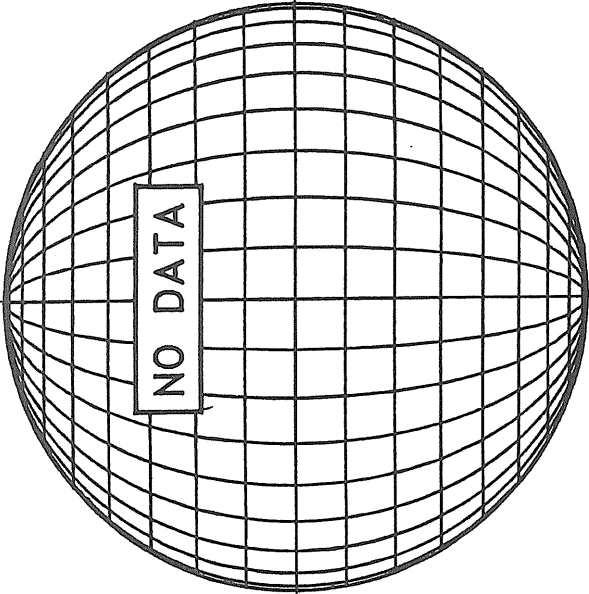
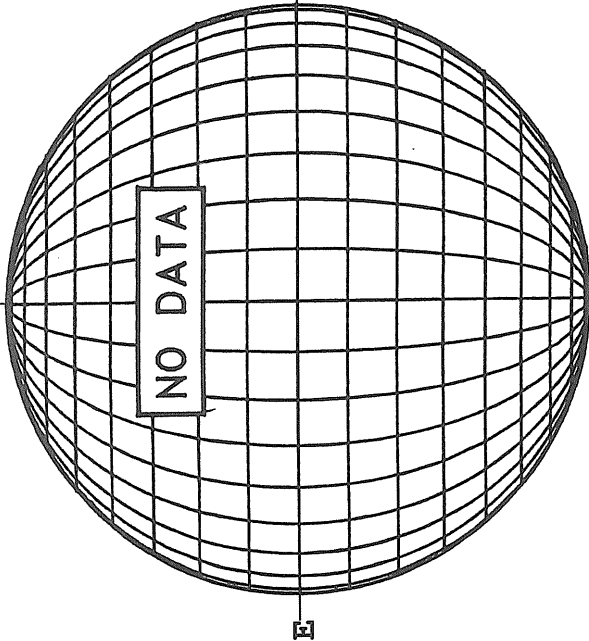
0900 UT

February 22, 2008 (P=-19.42, Bo=-7.06, Lo= 356.44)

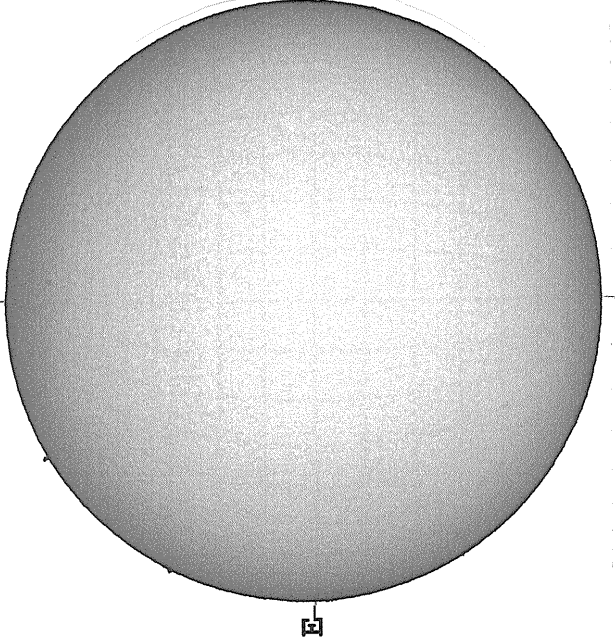
KITT PEAK MAGNETOGRAM -- SOLIS
Bright = +
Dark = -
N

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

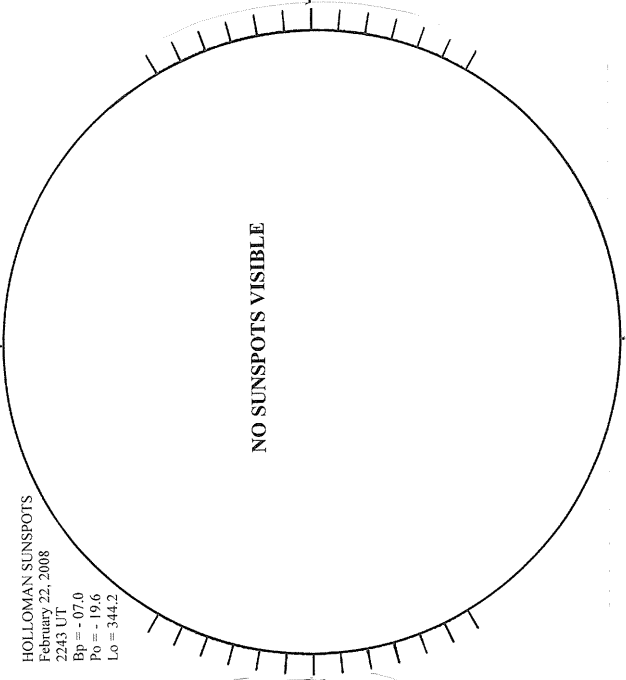
MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 13.1
DeltaX = 9.6
N



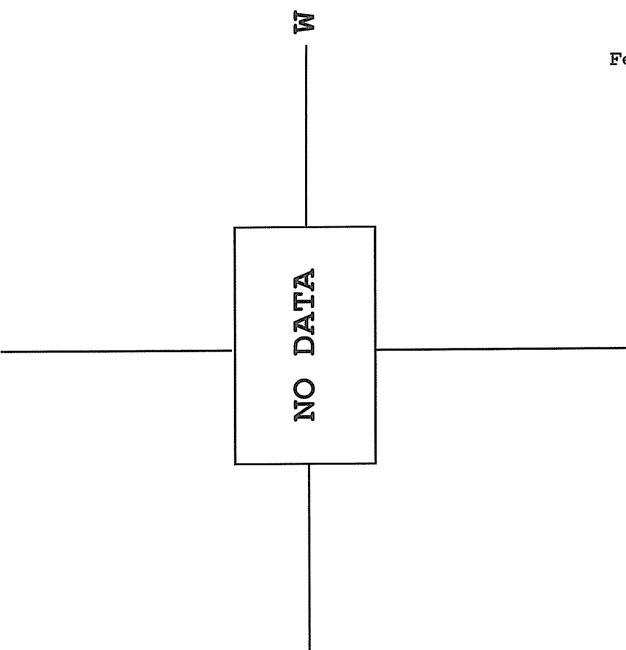
YUNNAN H-ALPHA



HOLLOMAN SUNSPOTS



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



0310 UT

2243 UT

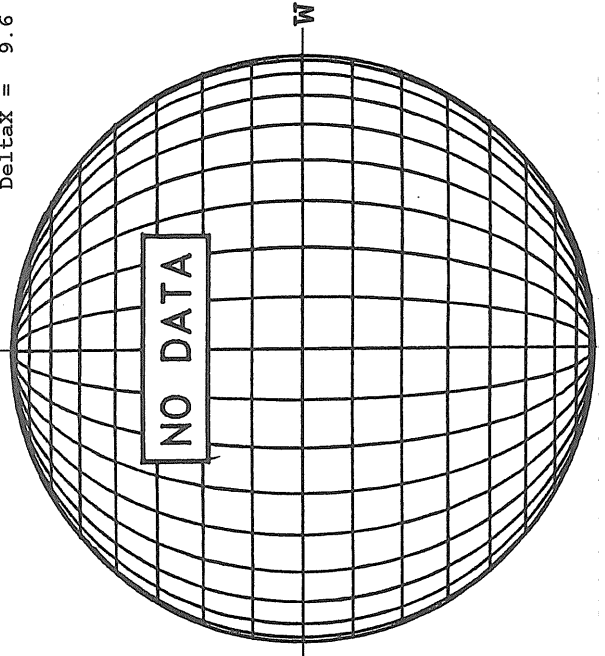
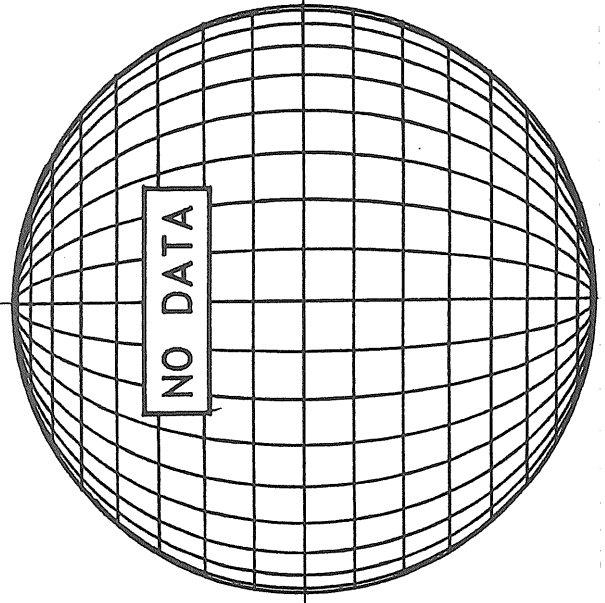
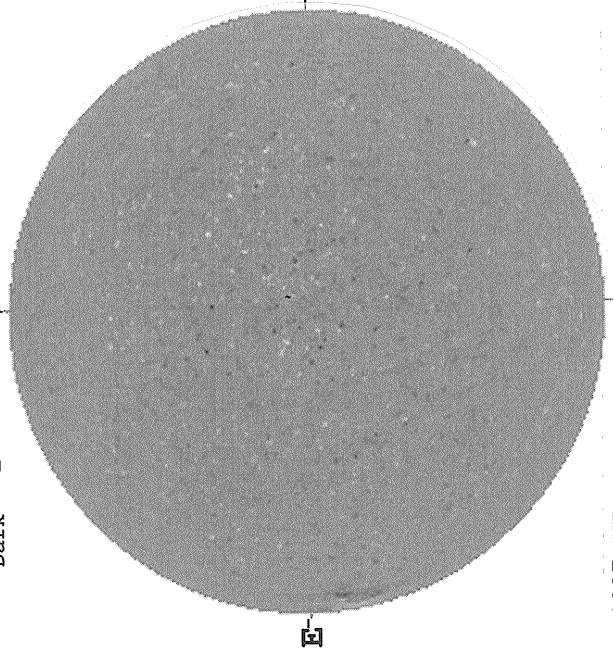
Feb 08

February 23, 2008 (P=-19.72, Bo=-7.09, Lo= 343.27)

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

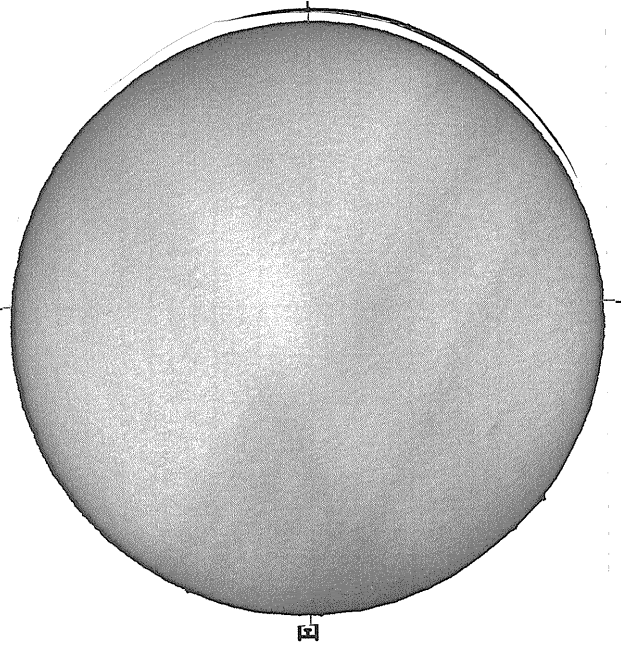
STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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

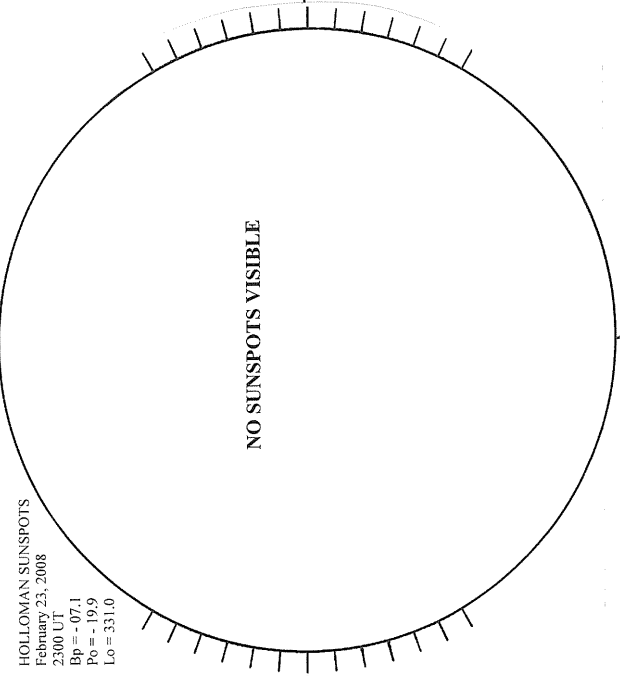


1927 UT

MEUDON H-ALPHA

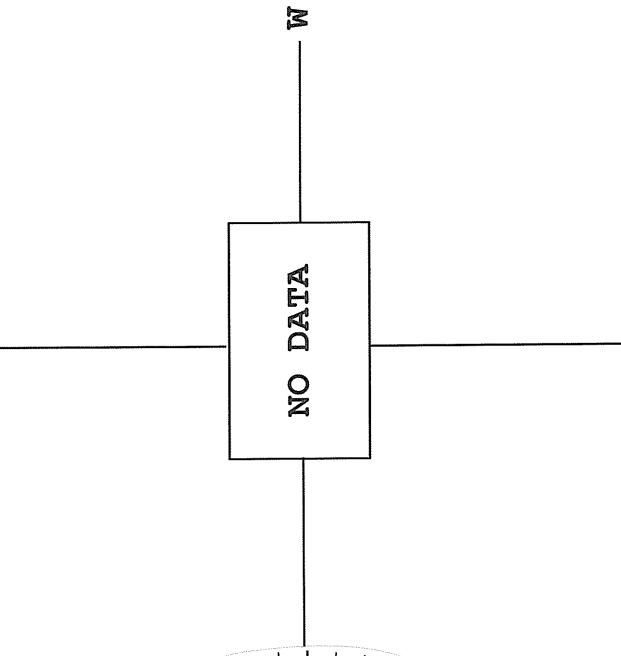


HOLLOMAN SUNSPOTS



HOLLOMAN SUNSPOTS
February 23, 2008
2300 UT
Bp = -07.1
Po = -19.9
Lo = 331.0

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



1508 UT

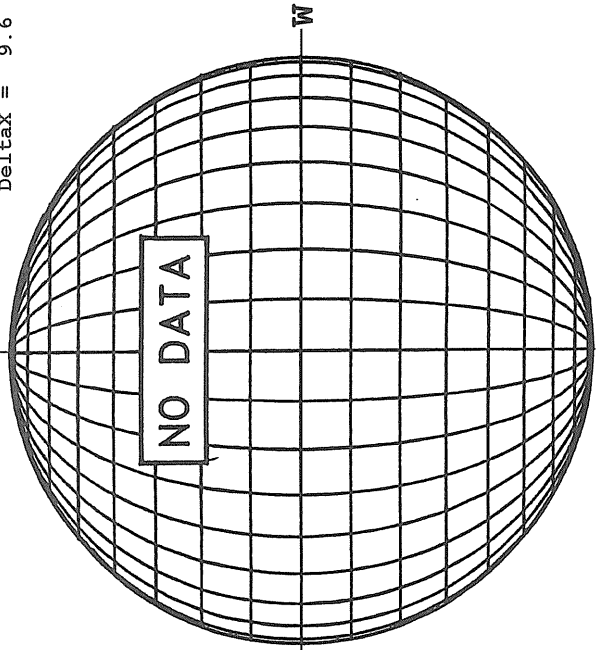
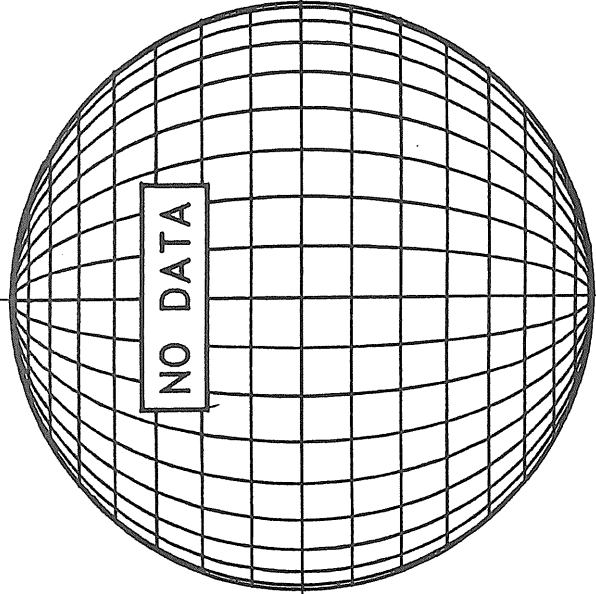
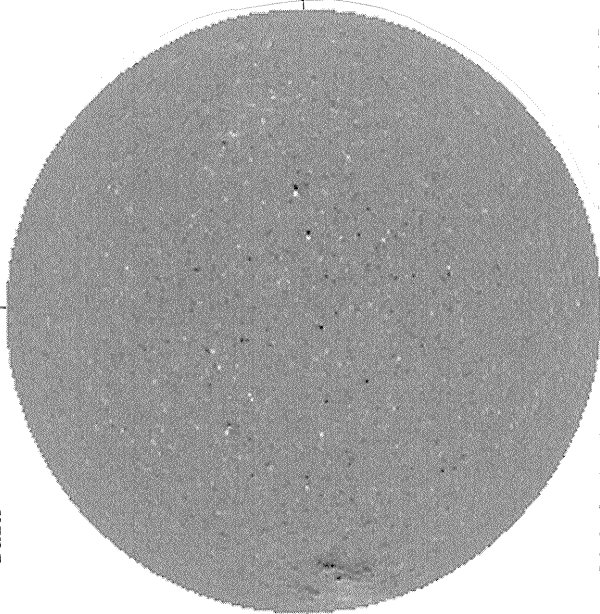
2300 UT

February 24, 2008 (P=-20.01, Bo=-7.11, Lo= 330.10)

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

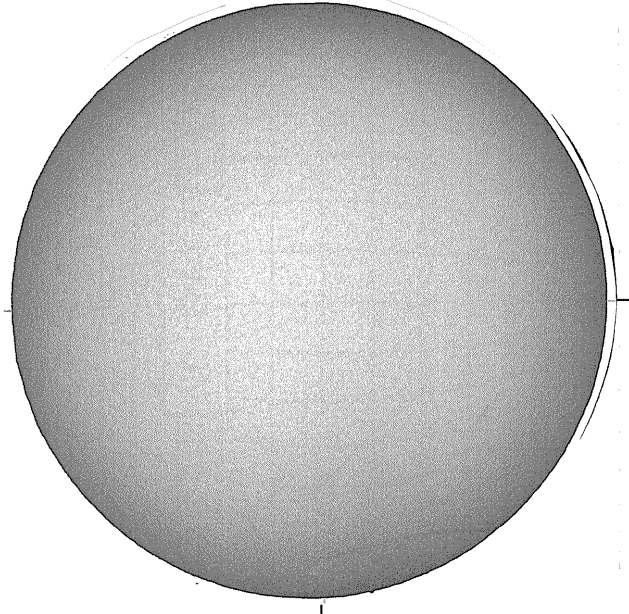
STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N

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



1919 UT

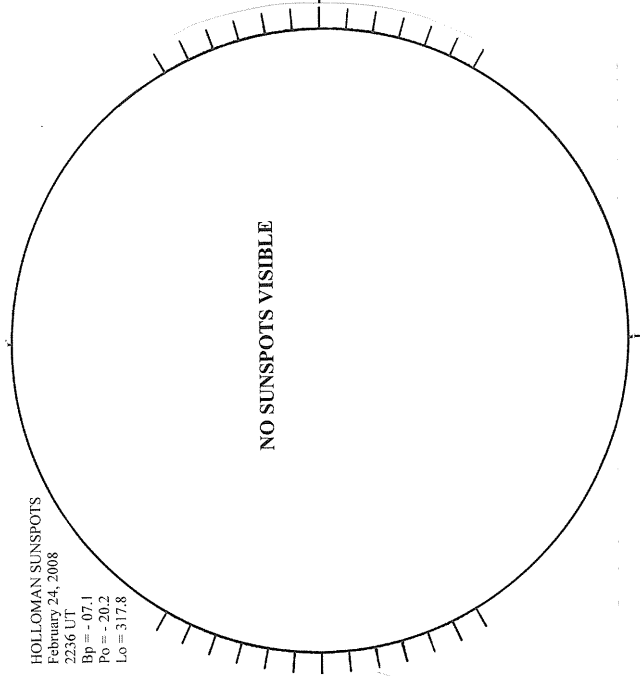
YUNNAN H-ALPHA



0213 UT

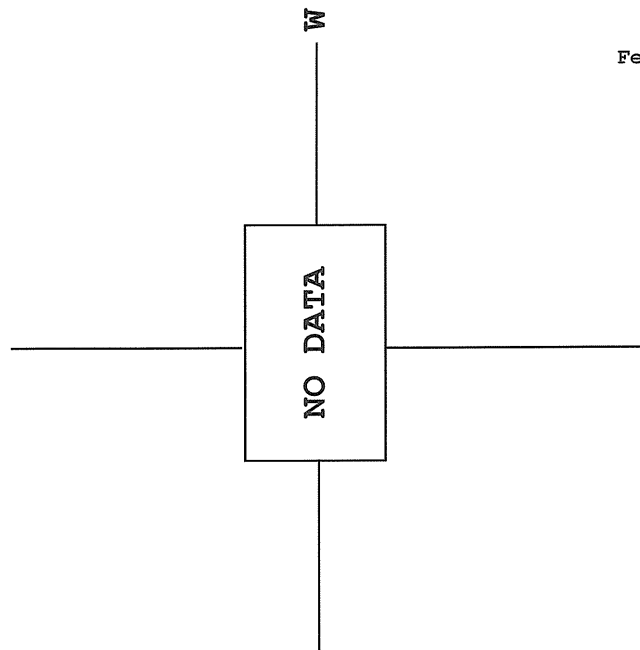
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 24, 2008
2236 UT
Bp = -07.1
Pa = -20.2
Lo = 317.8



2236 UT

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



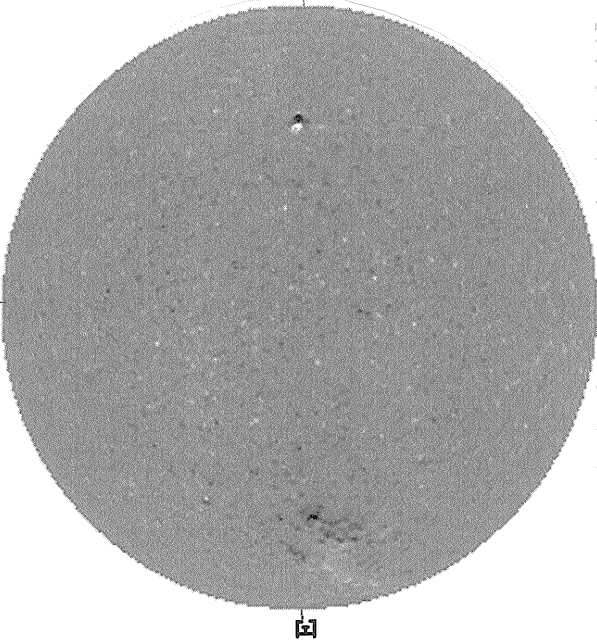
February 25, 2008 (P=-20.29, Bo=-7.14, Io= 316.93)

Feb 08 70

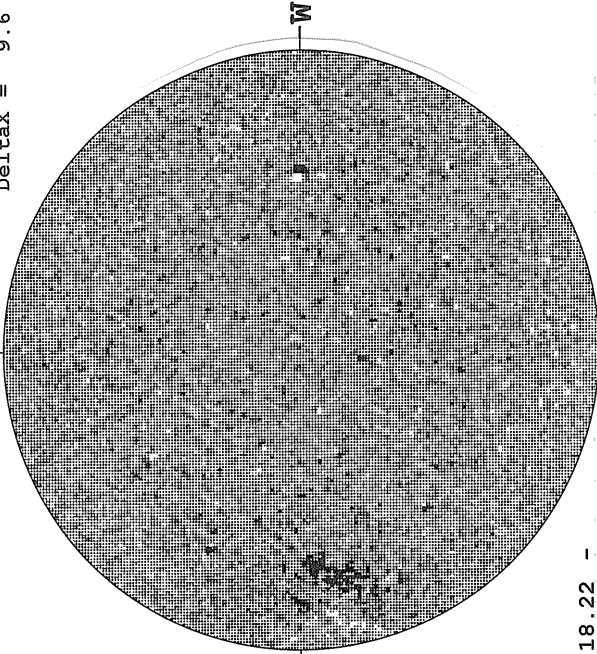
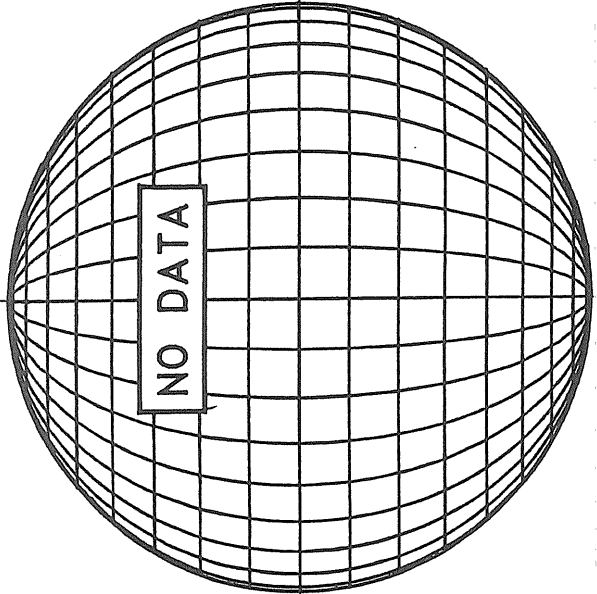
KITT PEAK MAGNETOGRAM -- SOLIS
 Bright = +
 Dark = -
 N

STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -
 N

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

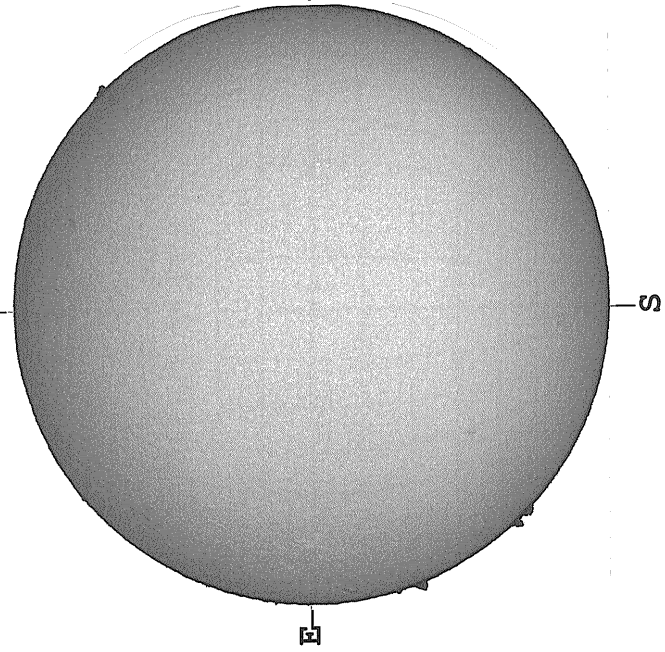


1936 UT



18.22 -
 19.19 UT

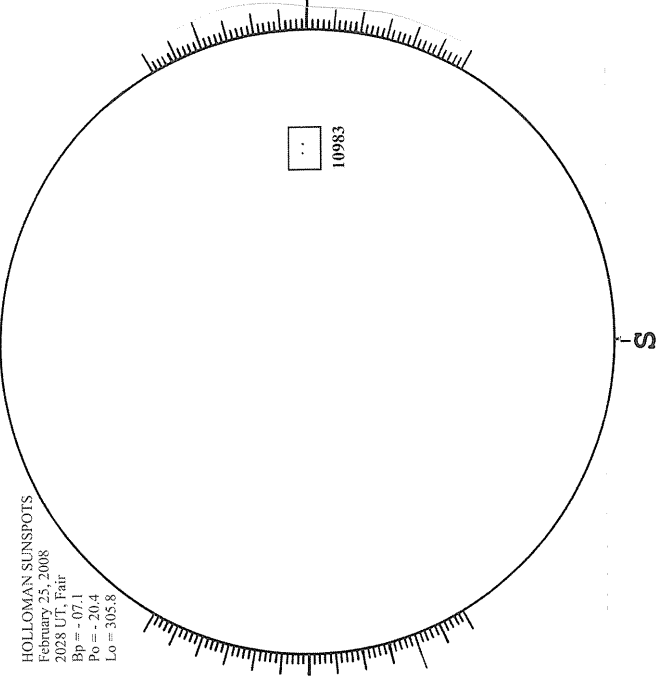
YUNNAN H-ALPHA



0149 UT

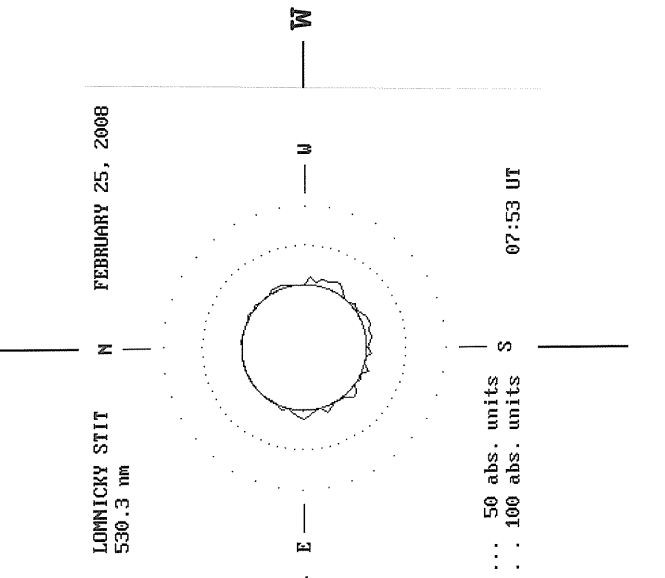
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
 February 25, 2008
 2028 UT, Pair
 Bp = -07.1
 P0 = -20.4
 Lo = 305.8



2028 UT

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



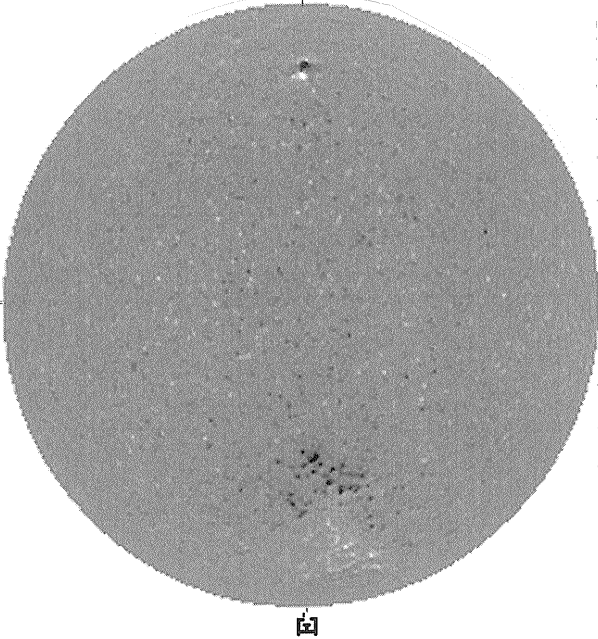
LOMNICKY STIT
 530.3 nm
 N
 FEBRUARY 25, 2008
 E
 U
 W
 S
 07:53 UT
 ... 50 abs. units
 . . . 100 abs. units

February 26, 2008 (P=-20.57, Bc=-7.16, Lo= 303.76)

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

STANFORD MAGNETOGRAM
 Solid = +
 Dashed = -

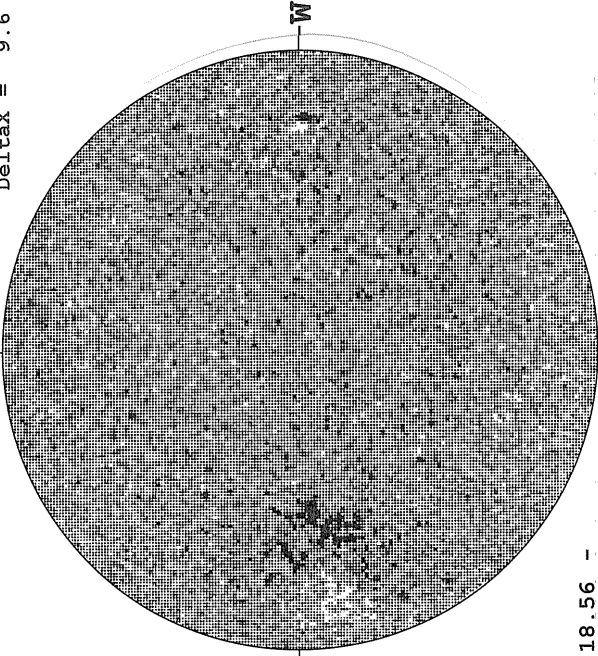
MT. WILSON MAGNETOGRAM
 White = +7.5G
 Black = -7.5G
 DeltaY = 13.1
 DeltaX = 9.6



2004 UT

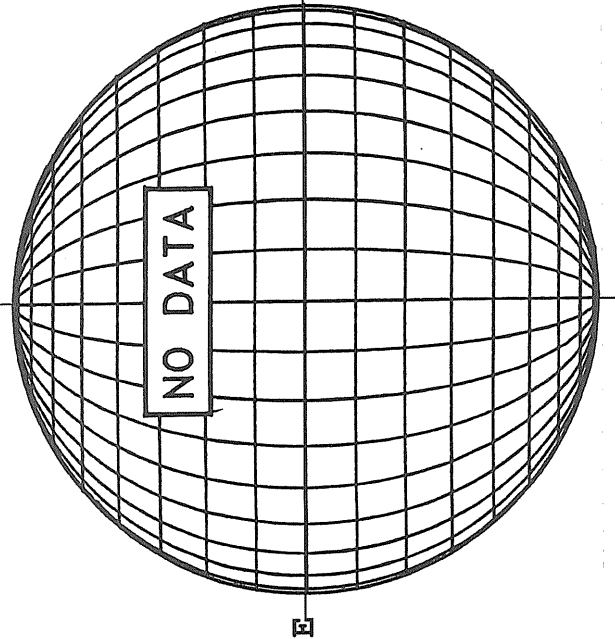


2131 UT



18.56 -
 19.53 UT

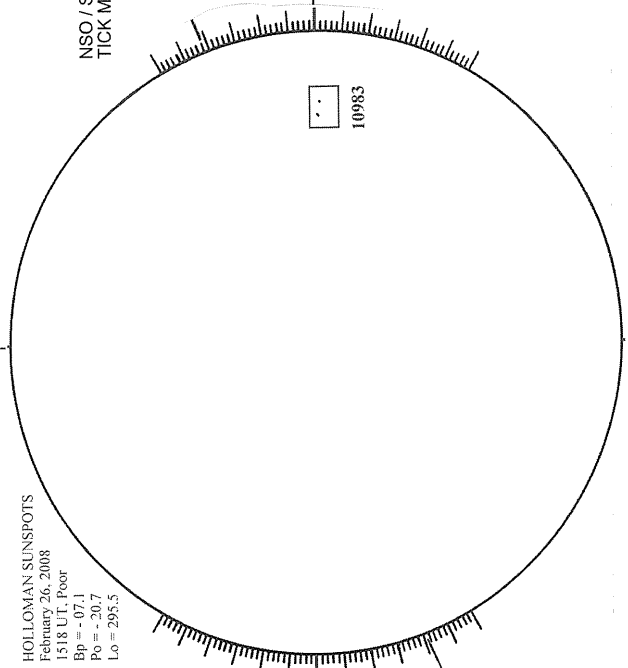
MEUDON H-ALPHA



S

HOLLOMAN SUNSPOTS

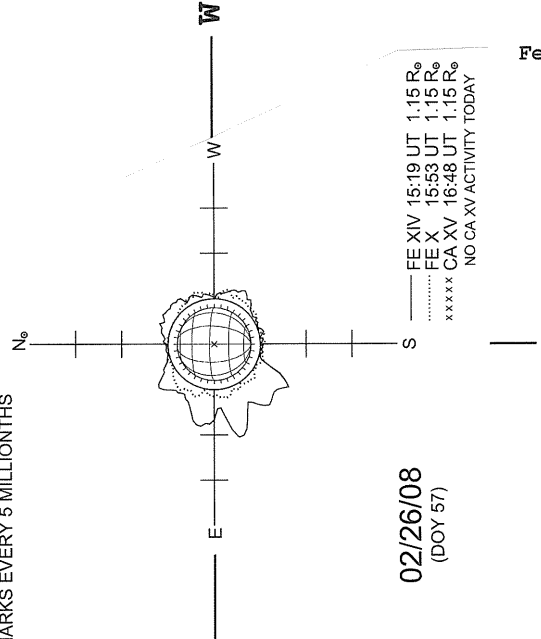
HOLLOMAN SUNSPOTS
 February 26, 2008
 1518 UT, Poor
 Bp = -07.1
 Po = -20.7
 Lo = 295.5



1518 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
 TICK MARKS EVERY 5 MILLIONTHS

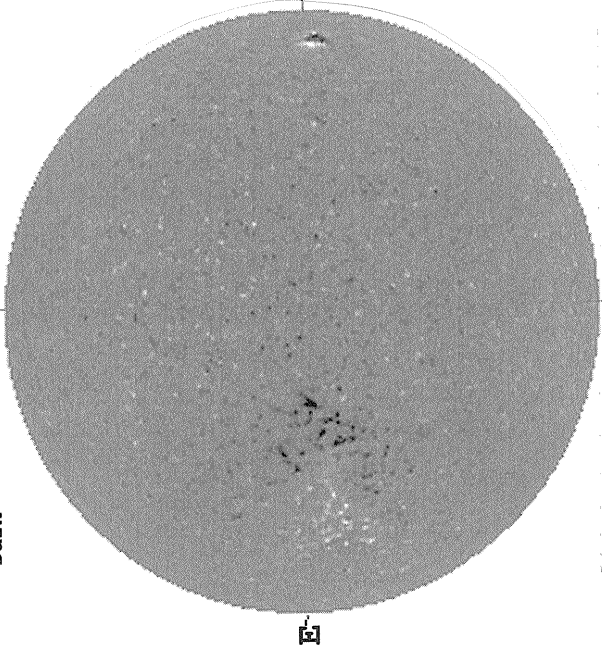


02/26/08
 (DOY 57)

----- FE XIV 15:19 UT 1.15 R_o
 FE X 15:53 UT 1.15 R_o
 ***** CA XV 16:48 UT 1.15 R_o
 NO CA XV ACTIVITY TODAY

February 27, 2008 (P=-20.84, Bo=-7.18, Lo= 290.59)

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



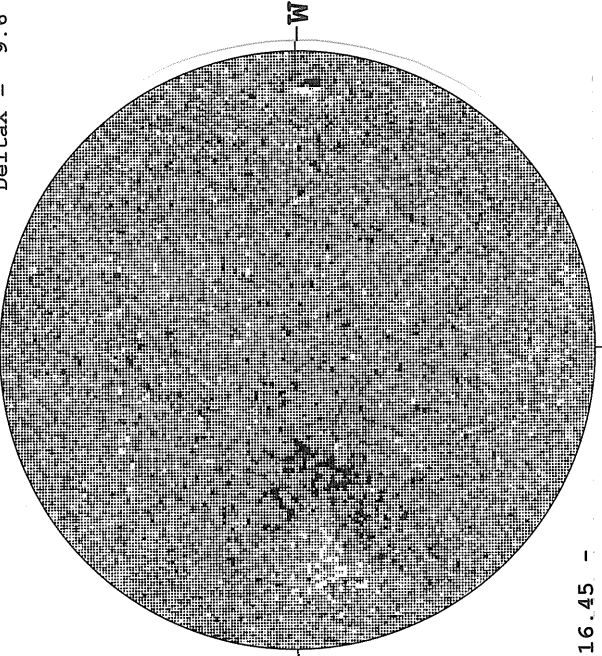
1852 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -



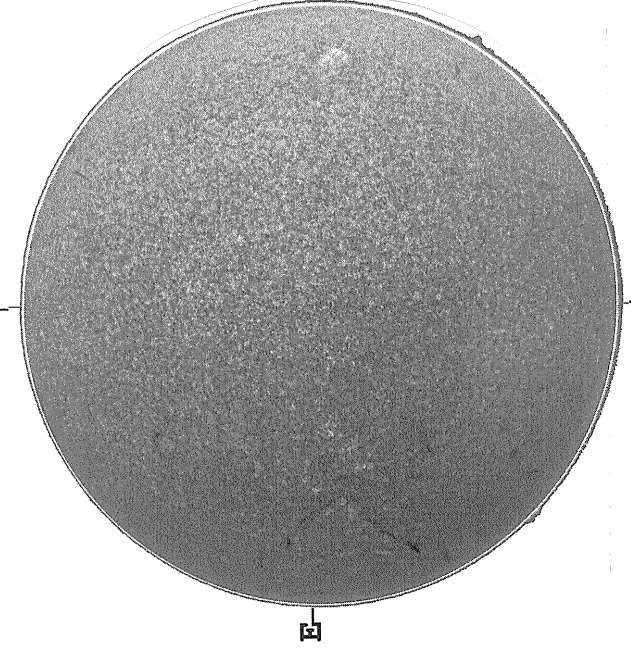
2214 UT

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



16.45 -
17.42 UT

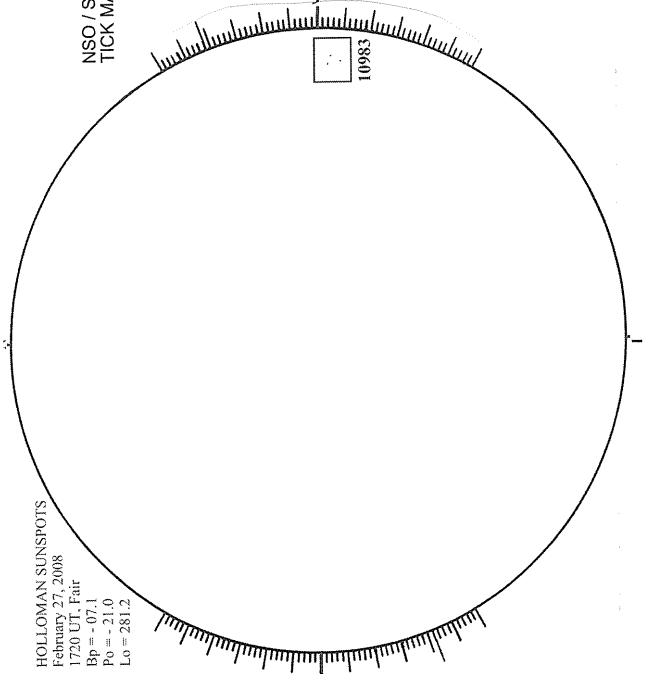
HUAIROU H-ALPHA



0506 UT

HOLLOMAN SUNSPOTS

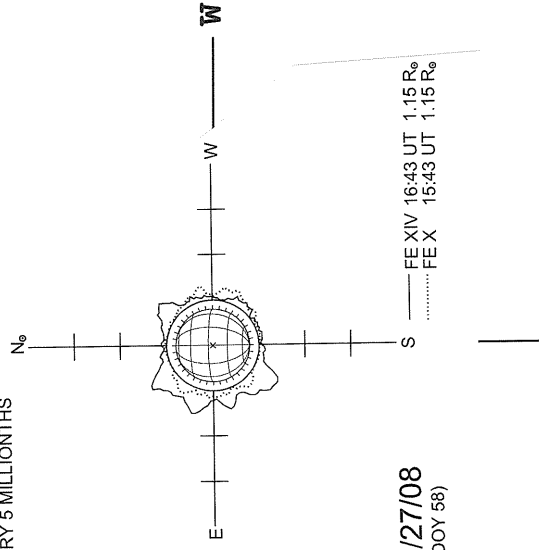
HOLLOMAN SUNSPOTS
February 27, 2008
17:20 UT, Fair
Bp = -07.1
Po = -21.0
Lo = 281.2



1720 UT

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

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

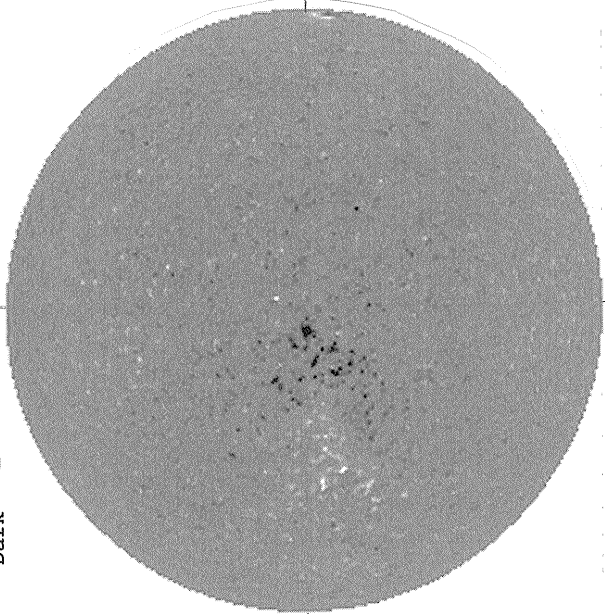


02/27/08
(DOY 58)

----- FE XIV 16:43 UT 1.15 R_o
..... FE X 15:43 UT 1.15 R_o

February 28, 2008 (P=-21.10, Bo=-7.20, Lo= 277.42)

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



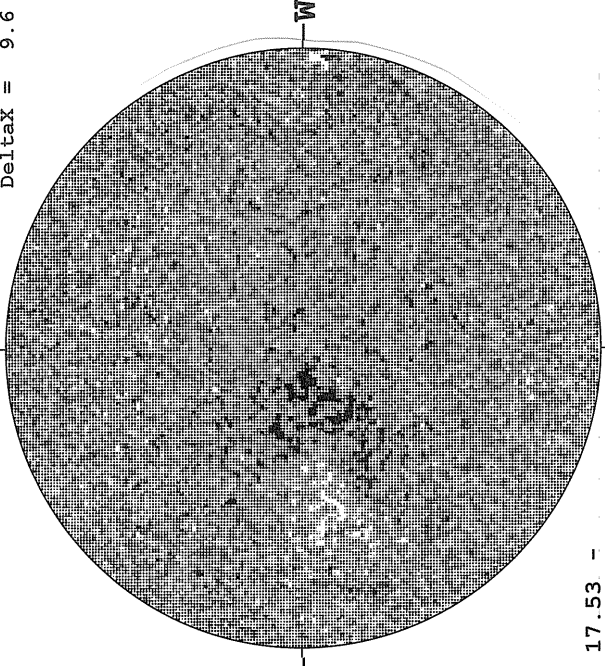
2039 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



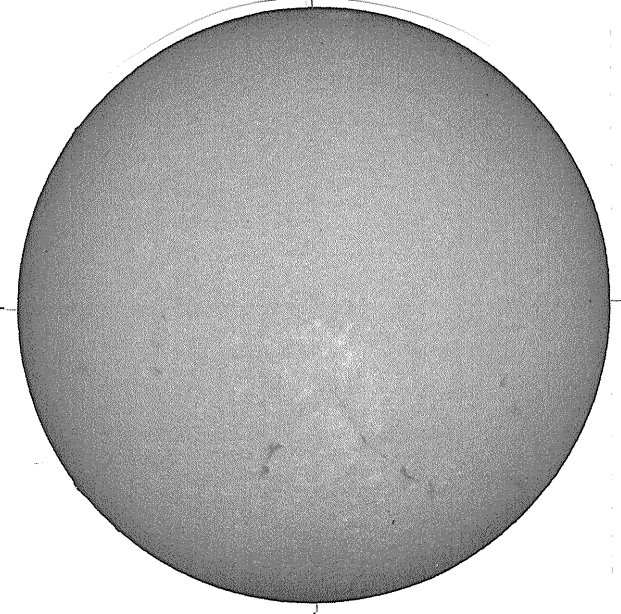
2145 UT

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



17.53 -
18.49 UT

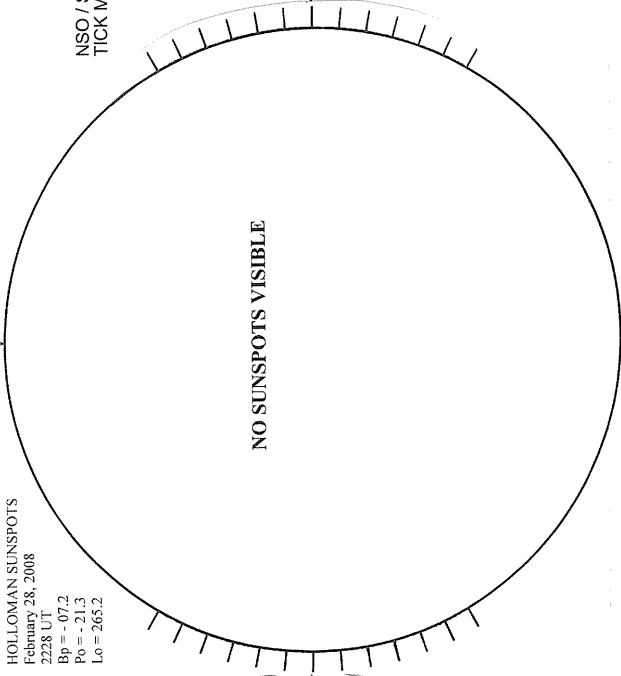
--- BIG BEAR H-ALPHA



2120 UT

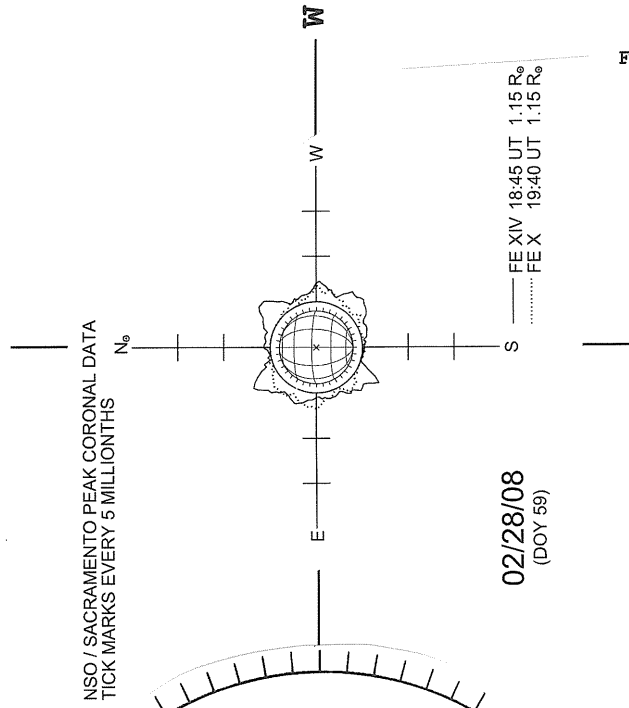
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 28, 2008
2228 UT
By = -07.2
Po = -21.3
Lo = 265.2



2228 UT

SACRAMENTO PEAK CORONA (1.15 Radii) ----

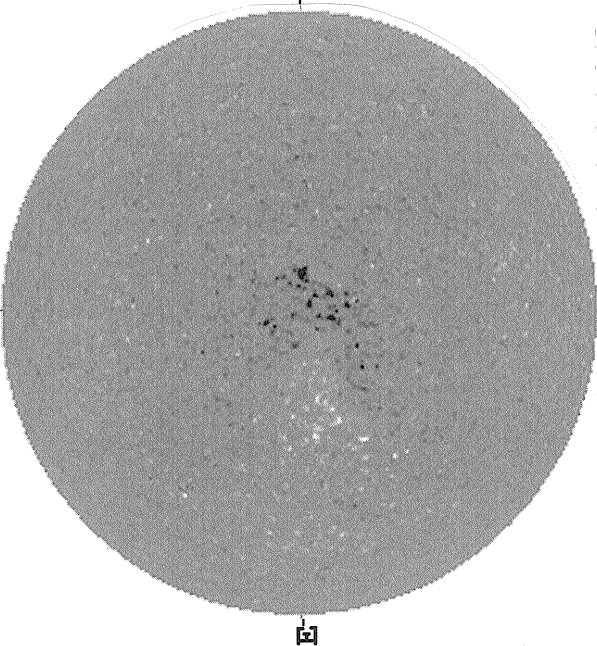


02/28/08
(DOY 59)

--- FE XIV 18:45 UT 1.15 R_o
..... FE X 19:40 UT 1.15 R_o

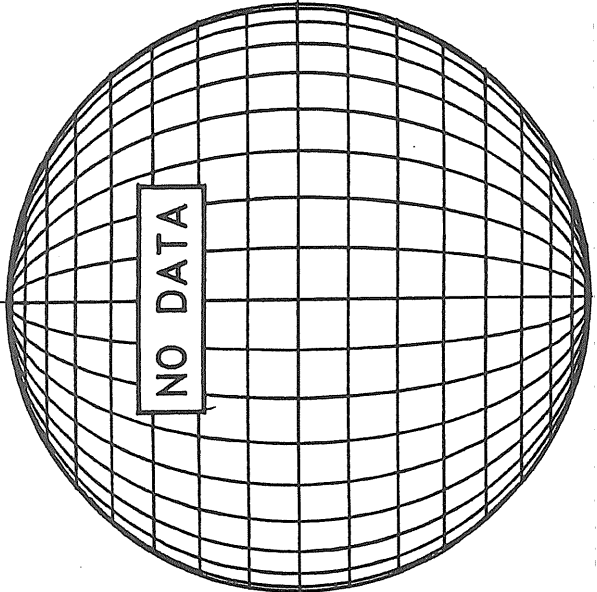
February 29, 2008 (P=-21.36, Bo=-7.21, Lo= 264.25)

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



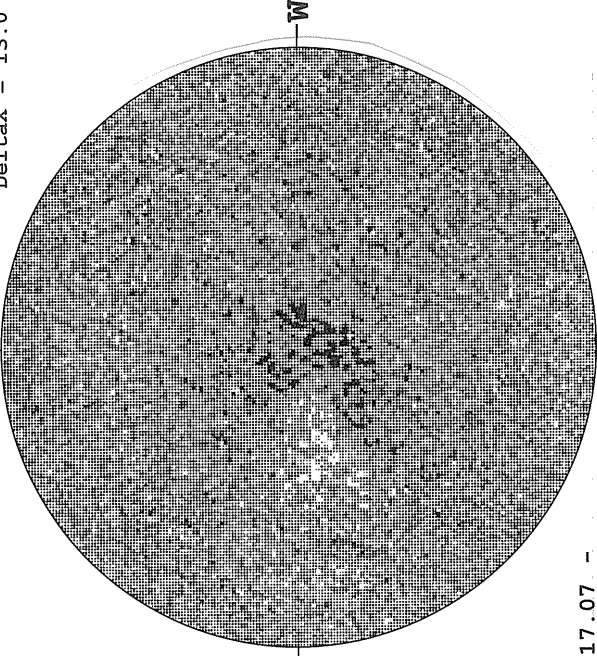
1734 UT

STANFORD MAGNETOGRAM
Solid = +
Dashed = -
N



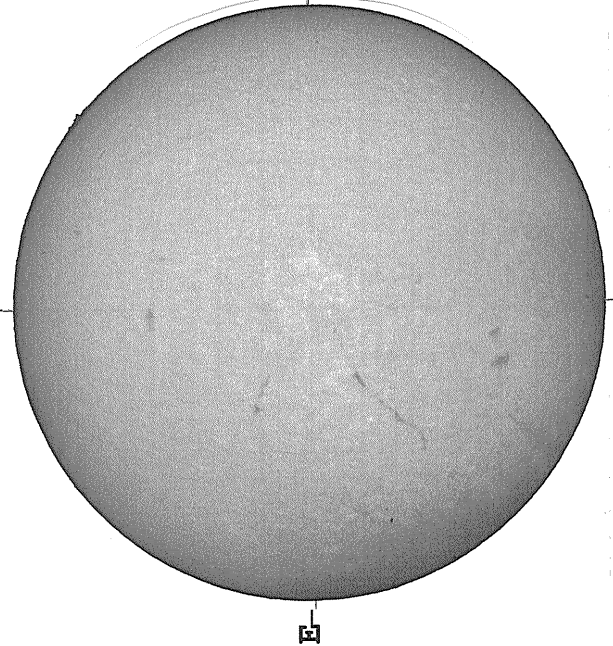
NO DATA

MT. WILSON MAGNETOGRAM
White = +7.5G
Black = -7.5G
DeltaY = 20.0
DeltaX = 13.0
N



17.07 -
18.03 UT

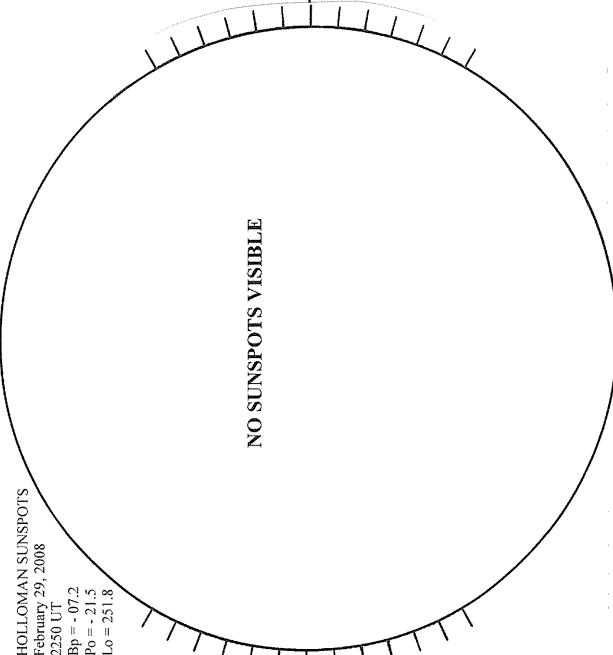
--- BIG BEAR H-ALPHA



2007 UT

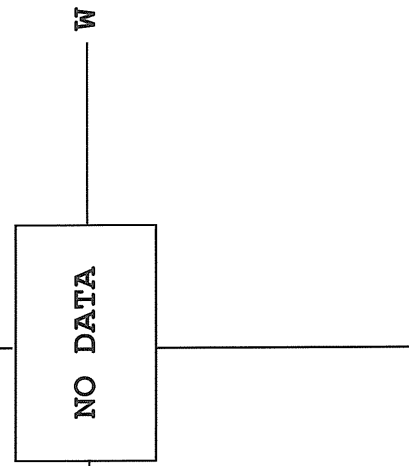
HOLLOMAN SUNSPOTS

HOLLOMAN SUNSPOTS
February 29, 2008
2250 UT
Bp = -07.2
Po = -21.5
Lo = 251.8



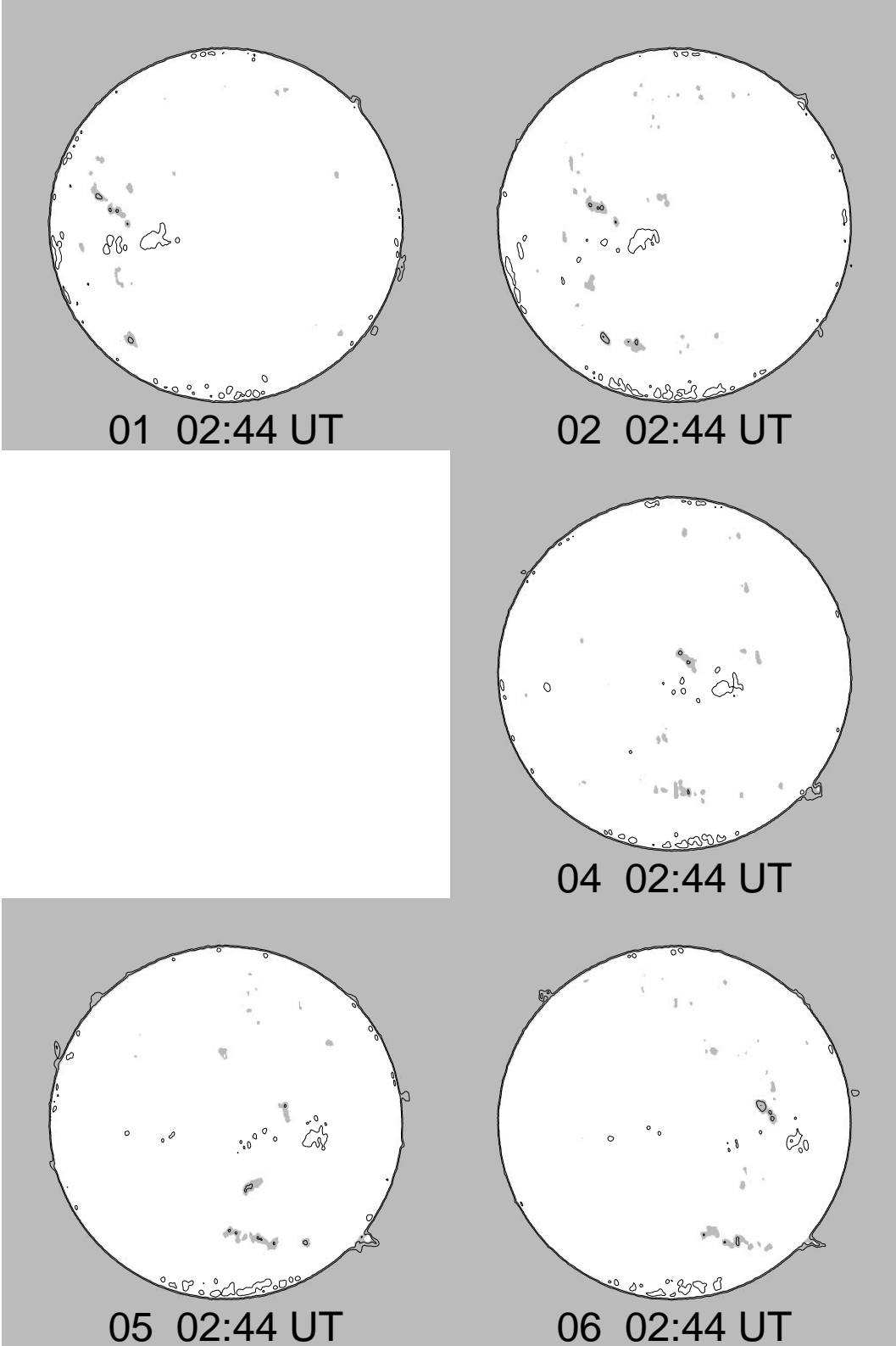
2250 UT

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



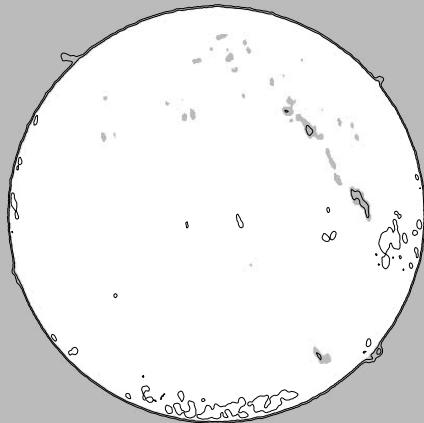
NO DATA

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 February

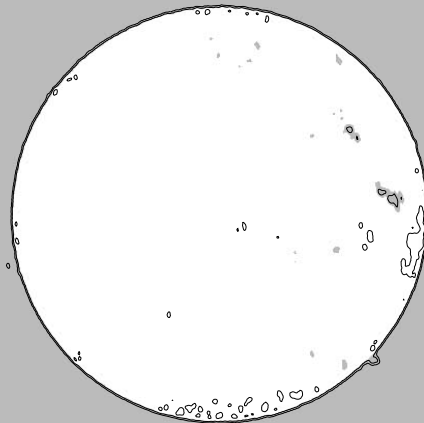


Contour Levels $T_b = [5, 8, 12, 20, 50, 100] \times 10^3$ K
Grey level $T_b \leq 9,500$ K

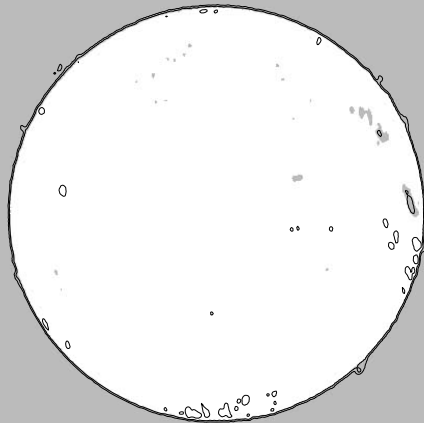
Nobeyama Radio Heliograph 17 GHz (Tb) 2008 February



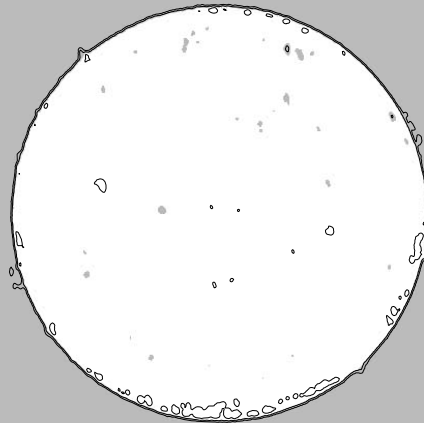
07 02:44 UT



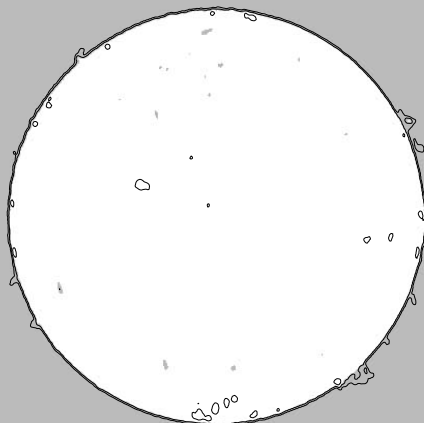
08 02:44 UT



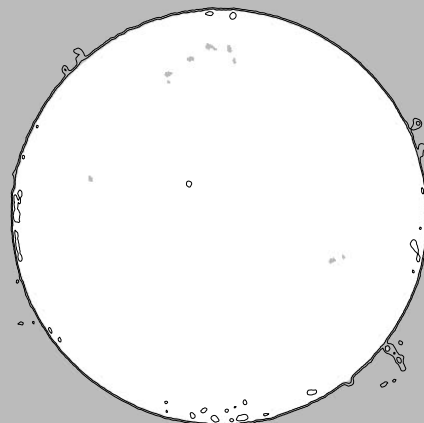
09 02:44 UT



10 02:44 UT



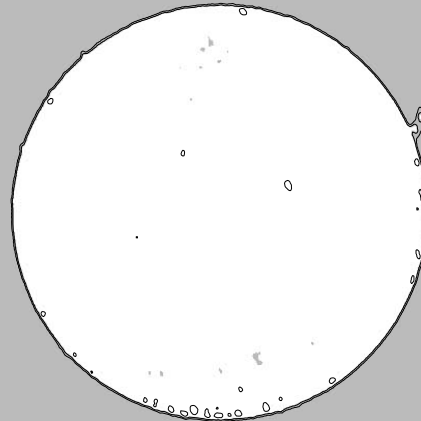
11 02:44 UT



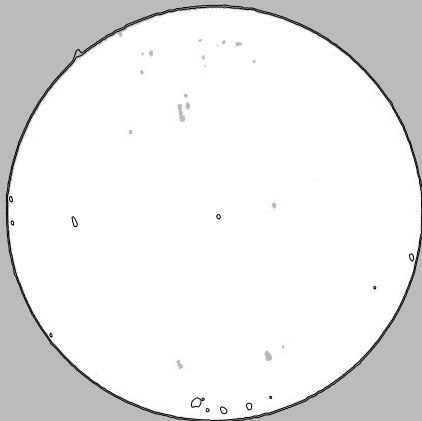
12 02:44 UT

Contour Levels $T_b = [5, 8, 12, 20, 50, 100] \times 10^3 \text{ K}$
Grey level $T_b \leq 9,500 \text{ K}$

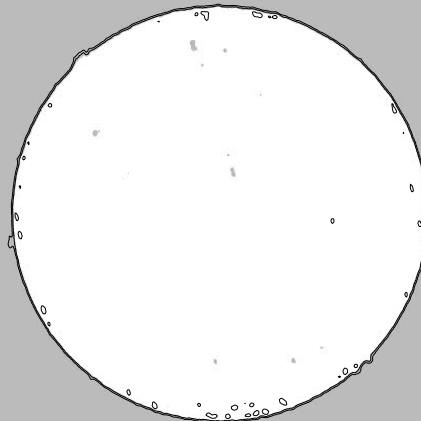
Nobeyama Radio Heliograph 17 GHz (Tb) 2008 February



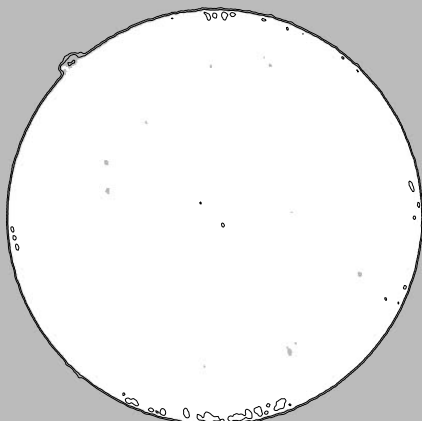
14 02:44 UT



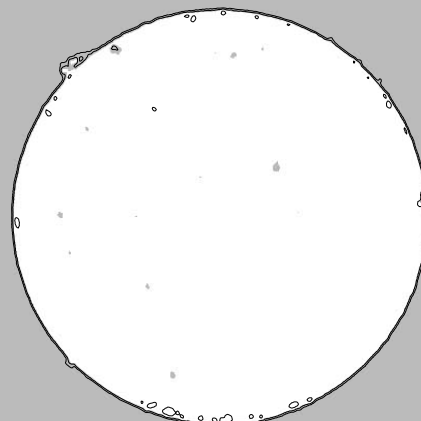
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16 02:44 UT



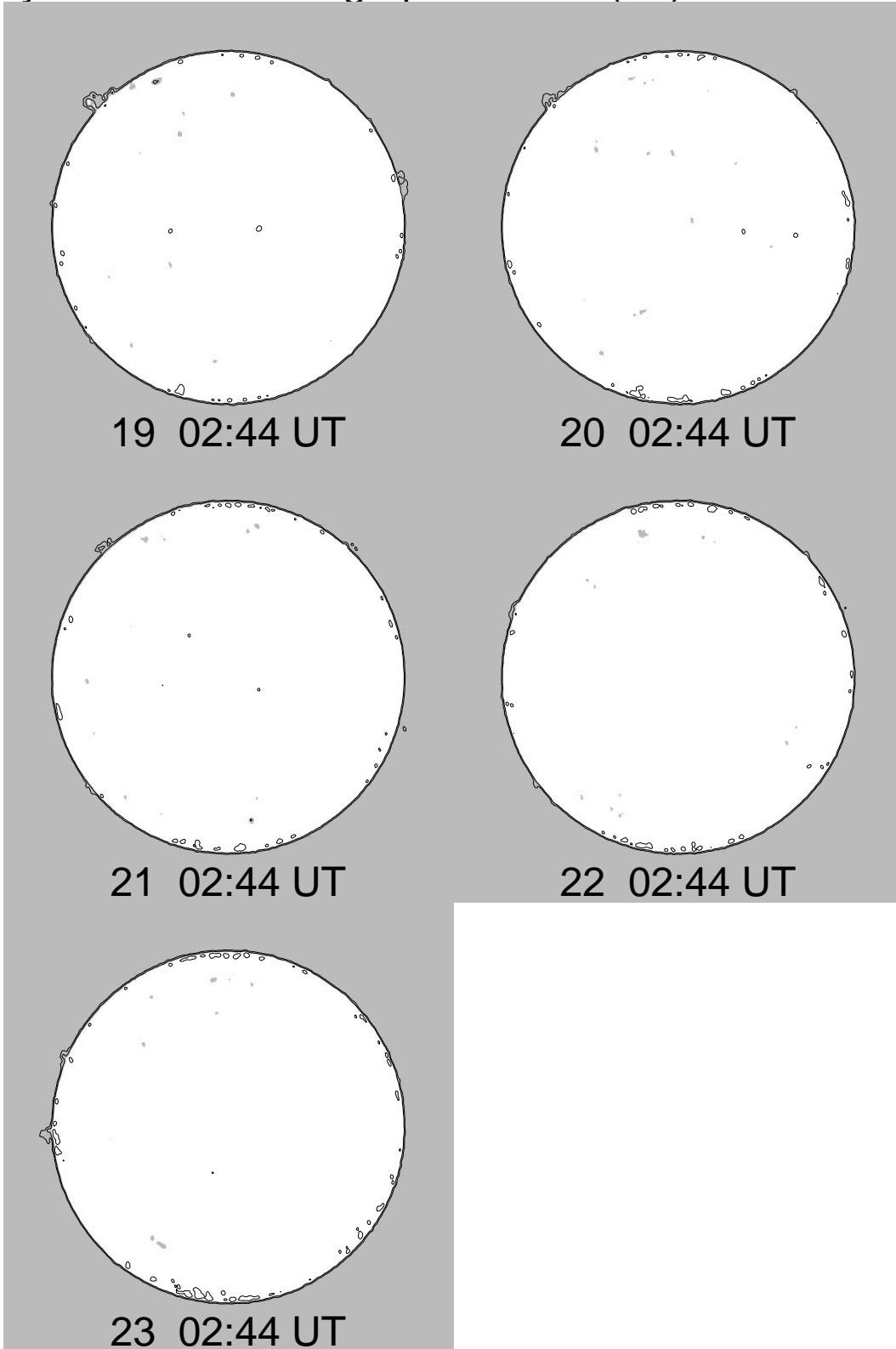
17 02:44 UT



18 02:44 UT

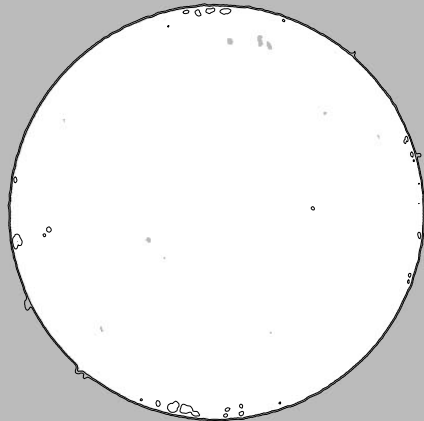
Contour Levels Tb=[5,8,12,20,50,100] x 10³ K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2008 February

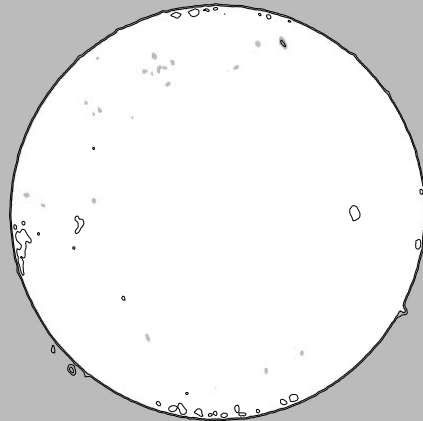


Contour Levels $T_b = [5, 8, 12, 20, 50, 100] \times 10^3$ K
Grey level $T_b \leq 9,500$ K

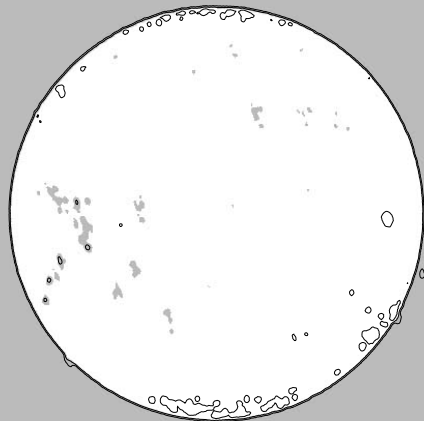
Nobeyama Radio Heliograph 17 GHz (Tb) 2008 February



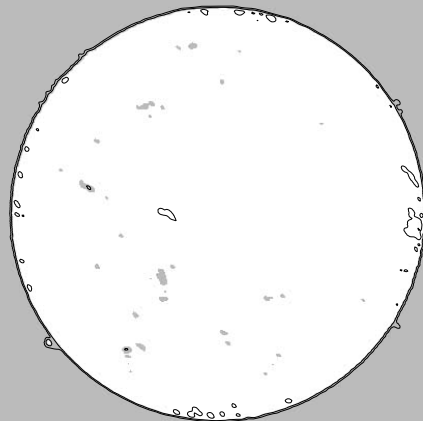
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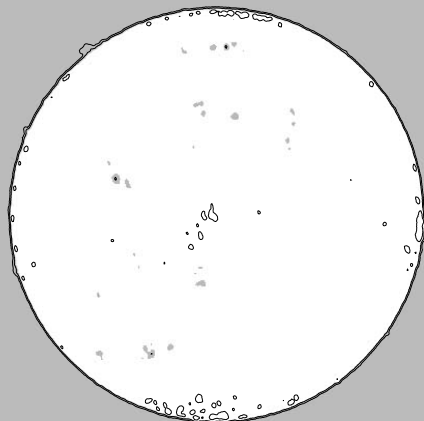
26 02:44 UT



27 02:44 UT



28 04:44 UT



29 02:44 UT

Contour Levels $T_b = [5, 8, 12, 20, 50, 100] \times 10^3 \text{ K}$
Grey level $T_b \leq 9,500 \text{ K}$

80
Feb 08

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)
FEBRUARY 2008

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10982		HOLL	01 29 1616	S09 E57	02 2.9		B	BXO	20	3	4	3
10982		LEAR	01 30 0043	S10 E52	02 2.9		B	BXO	50	4	4	3
10982		VORO	01 30 0052	S09 E52	02 2.9			BRO	32	5	3	3
10982		SVTO	01 30 0815	S08 E48	02 2.9		B	BXO	60	4	6	3
10982		KAND	01 30 0830	S10 E48	02 3.0			BXO		4	5	4
10982		TACH	01 30 0926	S10 E48	02 3.0			BRI	8	4	5	4
10982		VORO	01 31 0031	S09 E38	02 2.9			BRO	46	5	4	3
10982		LEAR	01 31 0115	S10 E37	02 2.8		B	CAO	30	7	4	3
10982		PURP	01 31 0250	S09 E38	02 3.0			DSO	32	4	5	3
10982		TACH	01 31 0525	S11 E35	02 2.8			BRO	6	4	4	3
10982		SVTO	01 31 0825	S09 E34	02 2.9		B	BXO	60	3	5	2
10982		KAND	01 31 0830	S10 E35	02 3.0			BXO		3	6	4
10982		HOLL	01 31 1640	S02 E28	02 2.8		B	DSO	80	5	6	2
10982		VORO	02 01 0057	S10 E25	02 2.9			CAI	51	6	5	3
10982		VORO	02 02 0117	S09 E11	02 2.9			AXX	9	2		3
10982		VORO	02 03 0247	S09 W05	02 2.7			AXX	7	3	1	3
10982		KAND	01 30 0830	S10 E48	02 3.0			BXO		4	5	4
10982		KAND	01 31 0830	S10 E35	02 3.0			BXO		3	6	4
10982		LEAR	02 01 0110	S10 E25	02 2.9		B	BXO	20	12	6	3
10982		TACH	02 01 0541	S10 E22	02 2.9			BRI	8	4	5	3
10982		KAND	02 01 0815	S09 E20	02 2.8			DAO		7	6	3
10982		SVTO	02 01 1000	S11 E22	02 3.1		B	DRO	20	6	7	3
10982		HOLL	02 01 1808	S09 E15	02 2.9		B	CSO	70	8	7	2
10982		LEAR	02 02 0137	S08 W09	02 2.7		B	BXO	20	8	4	3
10982		SVTO	02 02 1005	S08 E06	02 2.9		B	BXO	50	4	3	3
10982		HOLL	02 02 1650	S09 E01	02 2.8		B	BXO	30	6	3	2
10982		LEAR	02 03 0119	S09 W04	02 2.7		B	BXO	10	4	2	2
10982		SVTO	02 03 0945	S08 W08	02 2.8		A	AXX	40	3	2	2
10982		KAND	02 03 1120	S09 W11	02 2.6			BXO		2	2	2
10982		HOLL	02 03 1845	S08 W14	02 2.7		B	BXO	20	3	3	1
10982		LEAR	02 04 0127	S10 W19	02 2.6		B	BXO	10	4	4	3
10982		SVTO	02 04 1020	S07 W18	02 3.1		A	AXX	10	2	2	2
10983		KAND	02 25 0845	S06 W33	02 22.9			AX		1		4
10983		SVTO	02 25 0930	S01 W32	02 23.0		A	AXX	10	1	1	3
10983		HOLL	02 25 2028	S03 W37	02 23.1		A	AXX	20	2	4	3
10983		VORO	02 26 0030	S06 W40	02 23.0			BXO	8	2	3	3
10983		LEAR	02 26 0156	S06 W43	02 22.9		B	BXO	20	4	3	4
10983		LEAR	02 26 0156	S06 W43	02 22.9		B	BXO	200	4	3	4
10983		TACH	02 26 0736	S06 W43	02 23.1			BRO	9	3	3	4
10983		KAND	02 26 0845	S06 W46	02 22.9			BXO		3	5	4
10983		SVTO	02 26 1136	S05 W48	02 22.9		B	BXO	50	3	5	2
10983		HOLL	02 26 1518	S05 W49	02 23.0		B	DSO	30	2	5	2
10983		VORO	02 26 2354	S06 W53	02 23.0			BRO	24	2	4	3
10983		LEAR	02 27 0005	S05 W53	02 23.0		B	BXO	20	2	4	3
10983		TACH	02 27 0811	S05 W57	02 23.1			BXO	6	2	4	3
10983		KAND	02 27 0945	S05 W59	02 23.0			AX		1		2
10983		SVTO	02 27 1150	S05 W62	02 22.8		B	BXO	20	2	5	2
10983		HOLL	02 27 1720	S06 W65	02 22.8		B	BXO	40	3	7	3
10983		SVTO	02 28 0915	S06 W77	02 22.6		B	BXO	30	2	6	2
10984		HOLL	03 05 1509	S05 W65	02 29.8		A	AXX	20	3	3	3
10984		VORO	03 05 2350	S08 W69	02 29.8			CAO	25	3	3	4
10984		LEAR	03 06 0110	S08 W68	02 29.9		B	BXO	30	2	1	2
10984		HOLL	03 06 1855	S05 W75	03 1.2		A	AXX	20	1	1	2
10984		VORO	03 06 2320	S09 W82	02 29.8			AXX	11	2		3

Stations reporting:

HOLL = Holloman
KAND = Kandilli

LEAR = Learmonth
PALE = Palehua

PURP = Purple Mountain
SVTO = San Vito

TACH = Tashkent
VORO = Voroshilov

SUDDEN IONOSPHERIC DISTURBANCES
FEBRUARY 2008

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			
03	1013	1018	1039	1							No flare		
07	0714	0725	0800	1	1						No flare		
11	1439	1448	1522	1	1						No flare		
24	0920	0940	0956	1	1						No flare		

OBSERVATORIES REPORTING FOR FEBRUARY 2008

Panska Ves, Czech Republic	SES, SEA, SWF
Upice, Czech Republic	SEA

Observations are not necessarily continuous.
 * = No Flare Patrol

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

Day	OBSERVATION			Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
	Start (UT)	End (UT)	Sta			Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
25	0730	1600	BLEN	1045.0	1045.0	III		1	74	156	
	2000	2400	SVTO								
	2107	2400	HIRA								
26	0000	0800	CULG	1846.0	1846.0	III		1	30	180	
	0000	0834	HIRA								
	0706	1525	ONDR								
	0725	1600	BLEN								
	2000	2400	SGMR								
	2106	2400	HIRA								
27	0000	0800	CULG								
	0000	0834	HIRA								
	0704	1527	ONDR								
	0725	1600	BLEN								
	2000	2400	CULG								
	2105	2400	HIRA								
28	0000	0800	CULG								
	0000	0835	HIRA								
	0702	1518	ONDR								
	2000	2400	CULG								
	2104	2400	HIRA								
29	0000	0800	CULG								
	0000	0836	HIRA								
	0659	1531	ONDR								
	2000	2400	CULG								
	2103	2400	HIRA								

Event Remarks:

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

Frequency qualifiers:

X = Extends beyond instrument range U = Uncertain frequency

Remarks:

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

Stations Reporting:

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

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

SOLAR RADIO NOISE STORM AT 150.9 MHZ

FROM NANÇAY RADIOHELIOGRAPH

FEBRUARY 2008

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

SOLAR RADIO NOISE STORM AT 327 MHZ

FROM NANÇAY RADIOHELIOGRAPH

FEBRUARY 2008

DAY	HELIOGRAPHICS POSITIONS MEAN VALUES ¹		IMP ²	OBSERVING TIME ³	
	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 mode detailed analysis leading to increase uncertainties in the deviation, the positions which are indicated are estimated within 0.2 R

** Following a large burst

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

**** no flux measurements available

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

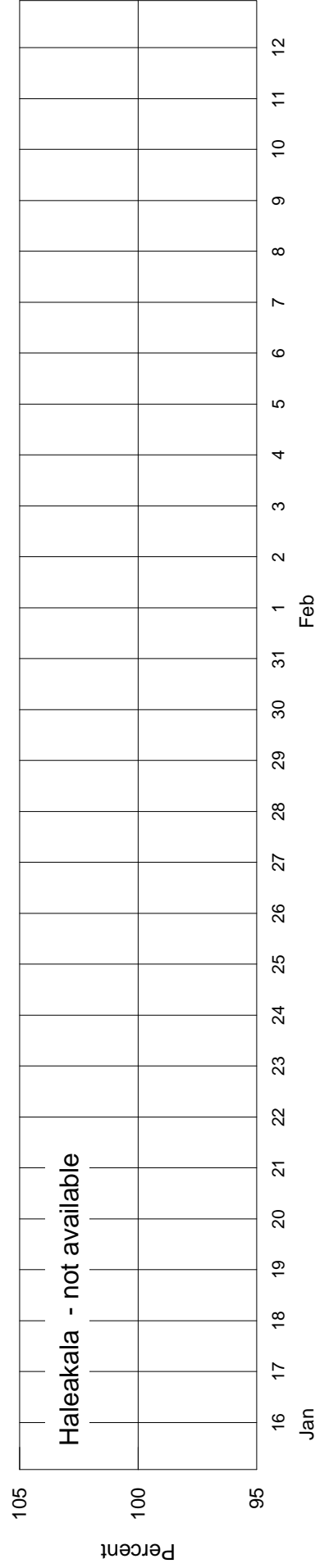
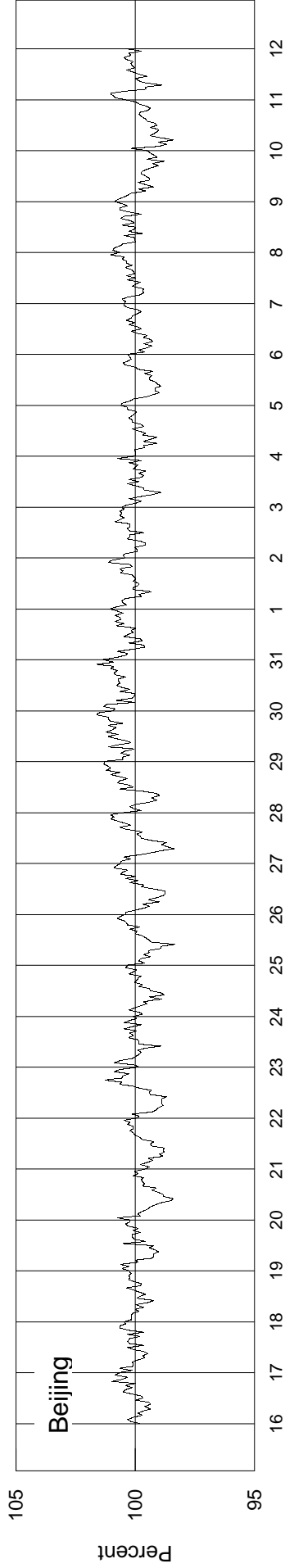
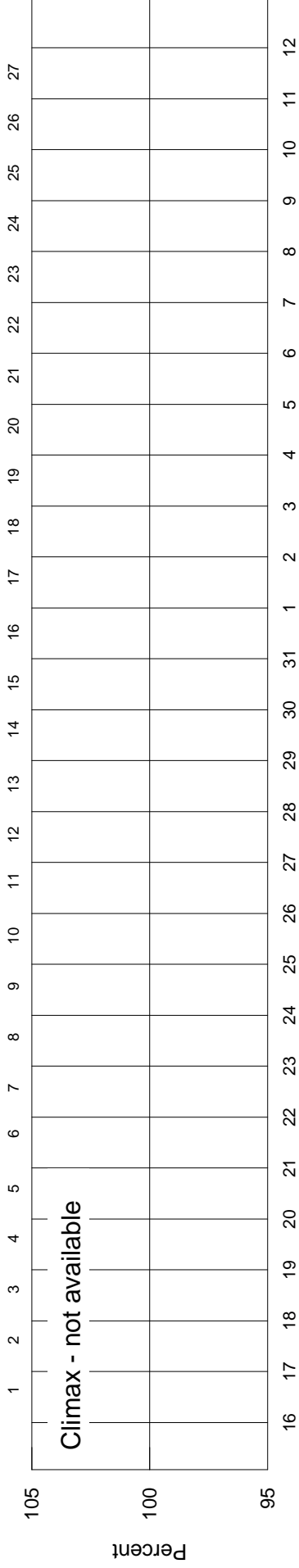
COSMIC RAY INDICES
(Neutron Monitor)
February 2008

Day	THULE Average (cts/h)/100	CALGARY Average (cts/h)/300	KIEL Average (cts/h)/100	MOSCOW Average (cts/h)/64	CLIMAX Average (cts/h)/100	BEIJING Average (cts/h)/256	HALEAKALA Average (cts/h)/1000
1	4565.4	4025.7	6407.4	9509.4		2098.4	
2	4557.4	4010.2	6388.5	9492.9		2097.5	
3	4550.5	4000.8	6351.0	9438.9		2090.7	
4	4563.7	3995.2	6349.7	9400.1		2089.1	
5	4556.0	3973.3	6316.2	9377.7		2086.5	
6	4549.9	3977.3	6287.6	9370.7		2089.8	
7	4561.8	3989.5	6283.1	9369.0	data	2096.5	data
8	4559.5	3997.5	6286.6	9373.5	not	2099.4	not
9	4546.6	3981.3	6253.9	9305.2	available	2085.1	available
10	4536.0	3954.5	6241.3	9298.5		2078.9	
11	4538.5	3960.0	6239.2	9298.4		2094.3	
12	4536.3	3952.0	6242.4	9325.3		2090.2	
13	4530.0	3958.5	6252.2	9380.7		2087.5	
14	4539.8	3966.8	6263.2	9477.1		2085.5	
15	4550.3	3972.5	6289.1	9508.0		2088.0	
16	4553.7	3982.8	6299.0	9495.5		2086.1	
17	4555.1	3989.7	6298.3	9517.1		2086.1	
18	4548.7	3988.3	6303.3	9561.4		2081.3	
19	4550.0	3985.8	6312.0	9570.0		2064.8	
20	4566.5	4000.0	6319.2	9546.3		2067.6	
21	4579.5	4012.8	6330.4	9543.8		2077.3	
22	4595.8	4017.0	6324.3	9564.6		2085.7	
23	4590.7	4026.3	6334.2	9624.9		2085.9	
24	4596.6	4032.5	6337.1	9571.6		2096.5	
25	4576.7	4031.3	6339.6	9553.1		2096.3	
26	4585.1	4023.2	6349.3	9558.9		2094.7	
27	4602.8	4023.3	6360.0	9570.8		2089.3	
28	4578.1	3999.5	6336.6	9553.1		2093.8	
29	4551.8	3978.8	6311.8	9518.5		2083.0	
30							
31							
Mean	4561.0	3993.3	6310.6	9471.6		2087.8	

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.

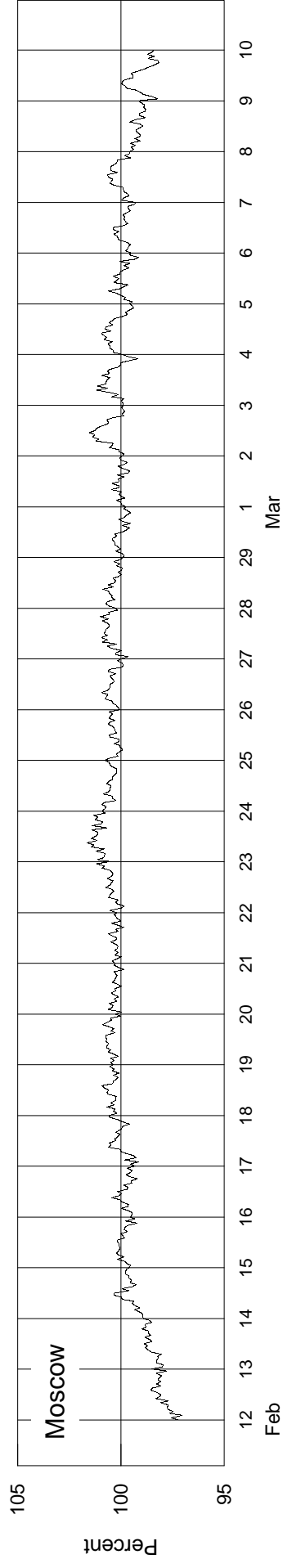
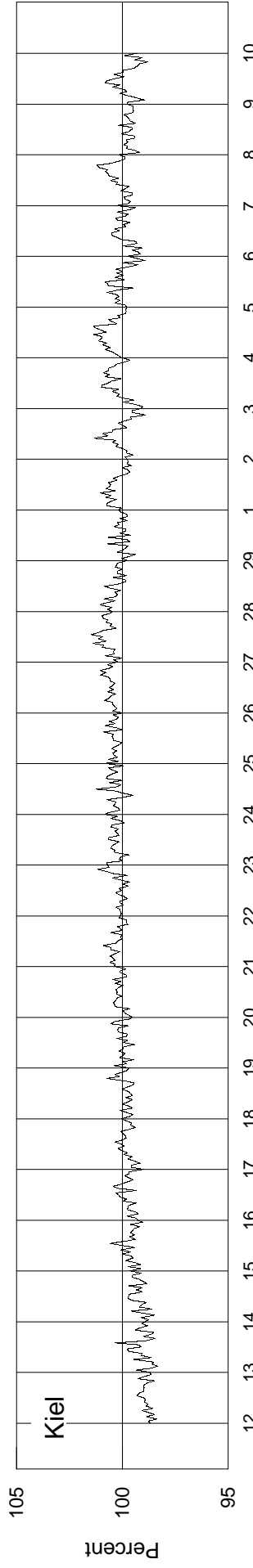
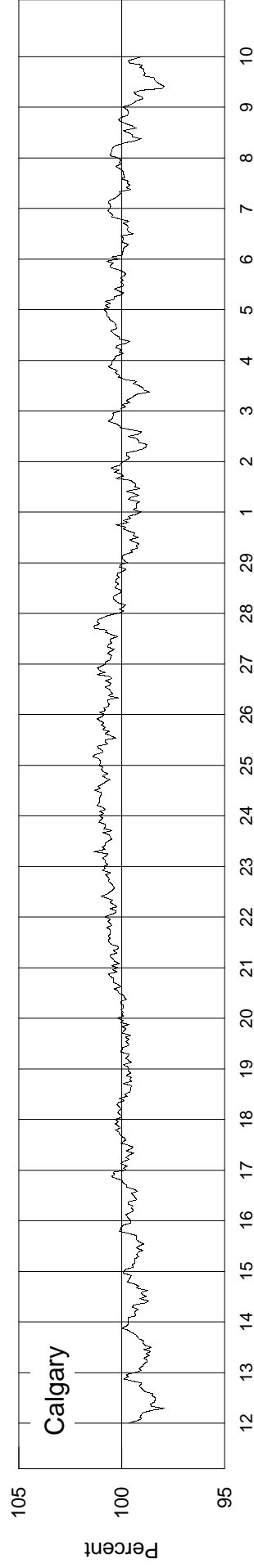
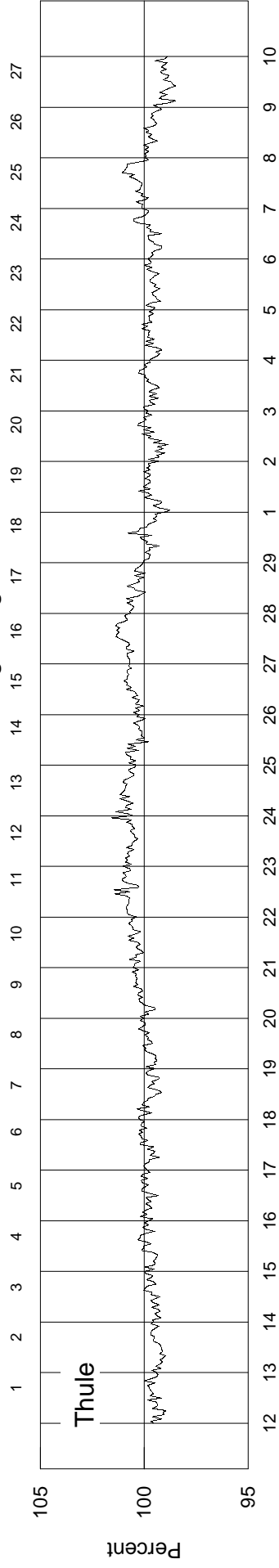
COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2381 - Beginning 16 Jan 2008



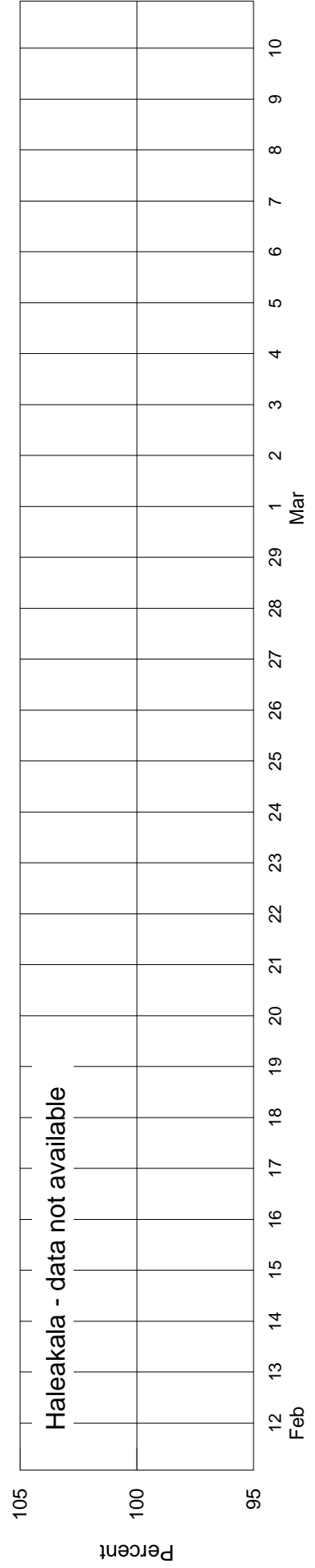
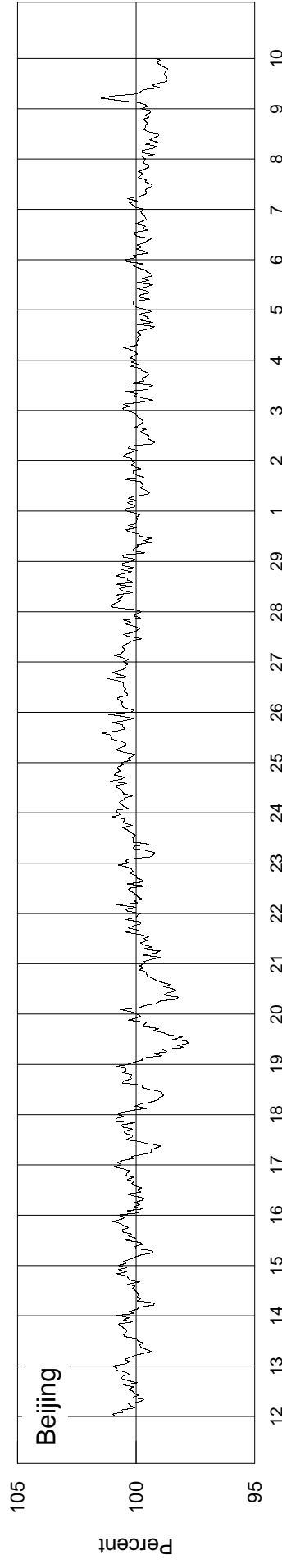
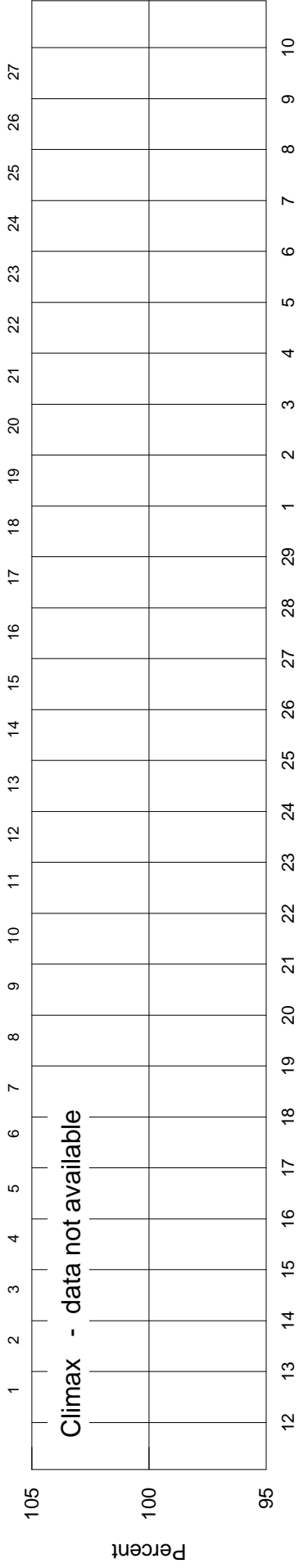
COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2382 - Beginning 12 Feb 2008

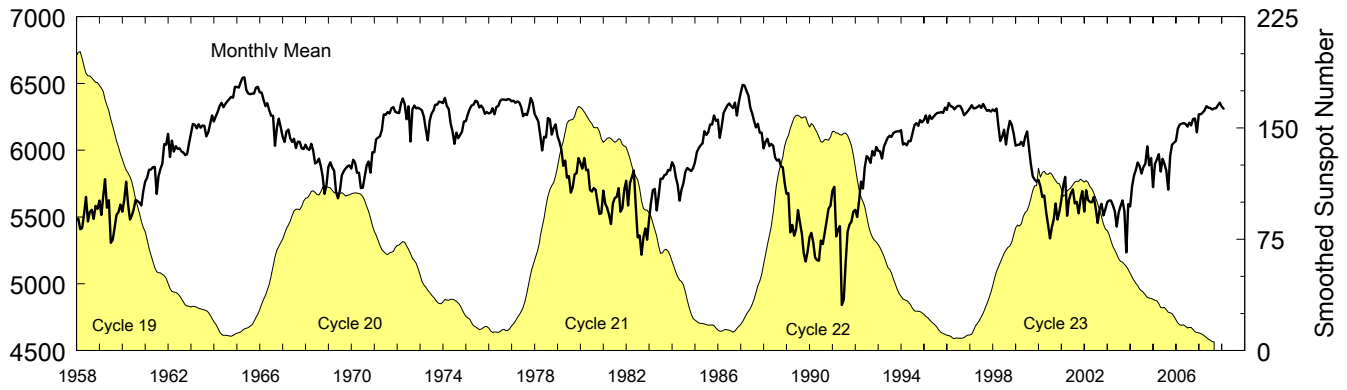


COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2382 - Beginning 12 Feb 2008



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



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

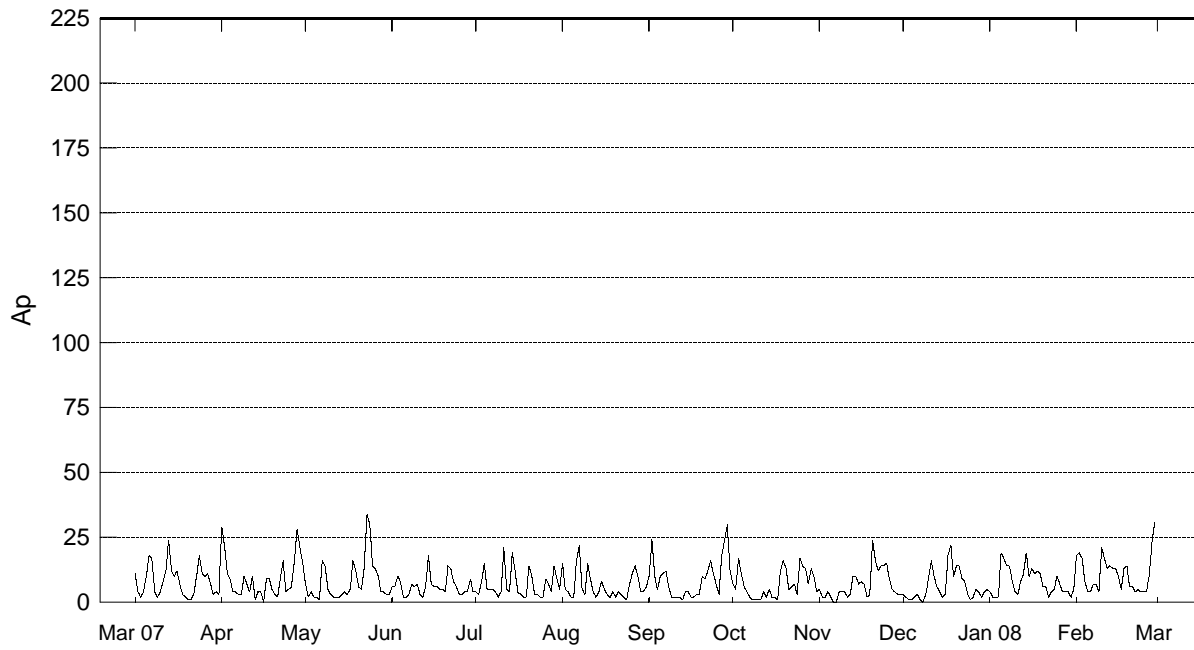
Multiply table entries by 100 to obtain hourly counting rate. Kiel, Germany: N54, E10, Alt= 54 m, Cutoff Rigidity= 2.32GV.

Geomagnetic Activity Indices FEBRUARY 2008

93
Feb 08

Kp Three-Hourly Indices										Km Three-Hourly Indices								aa Provisional							
Day	1	2	3	4	5	6	7	8	Sum	Ap	Cp	1	2	3	4	5	6	7	8	Am	N	S	M		
1	D5*	3+	2+	3+	3-	2-	3+	4+	4+	25+	18	1.0	3-	2o	3o	3o	2-	3+	4+	4o	33	46	28	31	43
2	D4*	4+	5-	3	2	3+	2+	3+	3	26	19	1.0	3+	4o	2+	2-	3+	2+	3o	3o	30	36	26	31	31
3		3	3	3+	3+	2+	3+	4-	3+	25+	17	0.9	3-	3-	3-	3+	2+	3+	3+	3o	28	34	35	30	40
4		3-	3-	2	2	1	1+	2+	2	16	8	0.4	2+	2-	1+	3-	2-	2-	2+	2o	16	19	18	18	19
5	Q6	2	2	0	0+	1	1+	1+	0+	8+	4	0.1	1+	1o	0+	0+	2-	2-	1+	0+	7	7	11	8	11 CC
6	Q7	0	0+	1-	0+	1	1+	2+	2	8	4	0.1	0o	0+	1-	0+	1+	2-	2+	2o	8	13	9	5	17 CC
7		3	2+	0	0	0+	2+	1+	3	12+	7	0.3	2+	2o	0+	0+	0+	2+	1+	3o	12	14	13	10	17 K
8		3+	1+	1+	1-	1-	1	2	2+	13-	7	0.3	2+	1o	1o	1+	1+	1+	2o	2o	11	14	9	12	11 CK
9	Q5	1	0+	0	1-	2	1	2-	2-	8+	4	0.1	1+	0+	0o	1o	2+	1+	2-	2-	8	9	11	6	14 C
10	D3	0+	3-	3	4-	4+	5-	3+	4	26	21	1.1	1-	2+	3-	3o	4+	4+	3+	4-	36	45	41	28	59
11		3+	4	3-	4-	3+	3+	2+	3-	25+	17	0.9	3+	3o	2+	4-	3+	3o	3-	2+	29	33	27	32	28
12		3-	3	3-	3-	3	3-	3-	3-	22	13	0.7	2+	3-	2+	3-	3+	3-	3o	2+	23	33	21	23	31
13		3-	3-	4-	2	4-	3+	2+	2-	22	14	0.8	2+	2+	3o	2+	4-	3-	2+	1+	23	27	21	22	26
14		2+	2	2+	2	3	1+	4+	4-	21	13	0.8	2-	1+	2o	2o	3o	1+	4-	3o	22	32	19	15	36
15		2	3	3	3+	3+	3	2	2	22-	13	0.7	2o	2+	3-	3o	3+	3-	2+	2-	22	26	25	24	27
16		3	3+	2+	2	3-	1	3-	0	17	10	0.5	2+	3-	2o	2+	2+	1+	2+	0+	16	21	15	20	16
17	Q9	0+	2	2	2	2-	1-	1	1+	11	5	0.2	1-	2-	2-	2o	2-	0+	1o	1o	9	10	10	10	10 CK
18		1-	1	2	3	4-	3+	3	3+	20	13	0.7	1o	1o	2-	3-	4-	3o	3-	3+	23	24	20	14	30
19		3+	3	4-	3-	3-	3-	3-	1+	22	14	0.8	3o	2+	3o	2+	3-	3-	2+	2-	22	29	21	26	24
20		1+	3	2	1+	1+	1+	0+	1	12-	6	0.3	1+	2o	2o	2-	1+	2-	0+	1o	10	11	13	15	10 C
21	Q10	1-	1-	1+	2-	2+	2+	2-	1-	11+	6	0.2	1-	1-	1o	2o	3-	3-	2-	1-	12	11	15	8	18 KC
22	Q3	1-	1	2-	1	1	1-	0+	1	7+	4	0.1	1-	1o	2o	1+	2-	1-	0+	1+	8	6	8	8	7 CC
23	Q8	0+	1-	1	1-	1	2	2+	2	10	5	0.2	1-	1-	1o	1o	2-	2+	2+	2-	10	11	13	7	18 CC
24	Q1	1	1-	1-	1-	1-	1	1	1+	7	4	0.1	1o	1-	1-	1+	1o	1+	1+	1+	7	8	7	7	8 C
25	Q2	1+	1+	1	1+	0+	1-	0+	0+	7-	4	0.1	1o	1+	1o	2o	0+	1-	1-	1-	6	6	37	21	22
26	Q4	0+	2-	1-	1-	1	1	1+	1+	8	4	0.1	1-	1+	1-	1o	1+	1+	2-	1+	8	8	37	20	26
27		2	2	1	1	2-	3-	4+	3-	17+	10	0.6	2-	2-	1-	1o	2o	3-	4-	3-	18	25	37	23	40
28	D2	4-	3+	3-	3+	3	4+	4+	4+	29	23	1.1	3+	3o	3-	3+	3-	4+	4+	4+	43	50	37	32	56
29	D1	4+	3+	4	4-	3	5+	4+	5	33	31	1.3	4-	3o	3+	4-	3o	5o	4-	5o	51	68	41	35	74
Mean										11	0.53									19.0	23.4	21.7	22.5		
Kn Three-Hourly Indices										Ks Three-Hourly Indices								Prov							
Day	1	2	3	4	5	6	7	8	An	1	2	3	4	5	6	7	8	As	Sa	Ri	Ra	Rs	IMF		
1	3o	2-	3o	3o	2-	4-	4+	4-	33	2+	2+	3-	3o	2-	3+	4o	4o	32	69.0	11	10	13			
2	3+	4-	3-	2o	3+	3+	3o	3-	30	3+	4o	2o	1+	3+	2+	3-	3+	29	69.8	9	4	13			
3	3-	2+	3o	3+	3-	3+	3+	3-	28	3-	3-	3-	3o	2+	3+	3+	3o	28	---	9	7	---			
4	2+	2o	1+	3-	2-	2-	2+	2o	15	3-	2-	1+	3-	1+	2-	3-	2o	16	69.3	8	3	13			
5	1+	1+	0+	0+	2o	2-	1+	0+	8	1+	1o	1-	0+	2-	2-	1o	0+	7	68.5	0	1	12			
6	0o	0+	0+	0o	1o	2-	3-	2o	8	0+	0+	1o	1-	1+	2-	2+	2o	9	69.6	0	0	13			
7	2+	2-	0o	0o	0+	3-	1+	3-	11	2+	2+	0+	0+	0+	2+	1+	3+	13	68.9	0	0	12			
8	2+	1-	1-	1+	1o	1o	2-	2-	10	2+	1+	1+	1+	1+	1+	2o	2o	12	69.0	0	0	13			
9	1-	0o	0o	1o	3-	1+	2-	1+	9	1+	0+	0+	1o	2-	1o	2-	2-	8	70.3	0	2	14			
10	0+	2o	3-	3o	4+	5-	4-	3+	37	1o	3-	3o	3+	4o	4-	3o	4-	34	70.7	0	1	14			
11	3+	3+	2+	4o	4-	3o	3-	2+	33	3+	3-	2o	3+	3-	3-	2+	2o	24	70.2	0	0	14			
12	2o	3-	3-	3o	4-	3-	3o	3-	26	3-	3-	2o	2+	3o	2+	3-	2o	20	70.3	0	0	14			
13	2+	2o	3+	2+	4o	3o	2+	1+	26	3-	2+	3-	2o	3+	2+	2o	2-	20	68.7	0	0	12			
14	2-	1+	2+	2o	3+	2-	4o	3o	24	2o	2-	2o	2-	3-	1+	4-	3-	19	68.8	0	0	12			
15	2o	3-	3-	3+	4-	3-	2+	1+	23	2o	2o	3-	3o	3+	2+	2+	2o	21	68.0	0	0	11			
16	3-	3-	2+	3-	3-	1+	3-	0+	19	2+	2-	2-	2o	2o	1+	2o	1-	14	68.6	0	0	12			
17	0o	2-	2o	2+	2o	1-	1-	1o	10	1+	2-	2-	2-	2-	0+	1+	1+	9	69.4	0	0	13			
18	0+	1-	2-	3o	4o	3o	3-	3+	25	2-	1o	1+	3-	3o	3-	3-	3+	21	69.5	0	0	13			
19	3o	2+	3o	2o	3o	3-	2+	1+	22	3o	2o	3+	3-	2+	2+	3-	2-	22	70.0	0	0	14			
20	1o	2+	2o	2-	1+	2o	0+	1-	11	2-	2o	2o	1+	1+	1+	0+	1o	10	69.3	0	0	13			
21	0o	1-	1+	2o	3-	3-	2o	1-	12	1o	1o	1o	2-	2+	2+	2-	1o	11	70.3	0	0	14			
22	1-	1-	2+	2-	2-	1o	0+	1o	8	1o	1+	2o	1+	2-	0+	0+	2o	9	70.8	0	0	14			
23	0+	0+	1+	1-	1+	3-	2o	2-	9	1o	1o	1o	1o	2-	2o	3-	2o	11	70.1	0	0	14			
24	1o	1-	1-	1o	1o	1+	1+	1o	7	1o	1o	0+	1+	1o	1o	2-	1+	8	69.3	0	0	13			
25	1o	1-	1+	2o	0+	1-	0o	0o	5	1+	1+	1o	2o	0+	1-	1o	1o	8	69.9	8	5	13			
26	0o	1o	0o	0+	1+	1+	1+	1+	6	1o	1+	1o	1+	1+	1+	2-	1+	9	69.3	8	8	13			
27	2-	1+	1-	1o	2o	3o	4o	3-	19	2-	2o	1-	1o	2-	3-	4-	3-	18	69.4	8	5	13			
28	3+	3o	3-	4-	3o	4+	4o	4+	43	3+	3-	2+	3+	3-	4o	5-	5-	44	68.7	0	0	12			
29	4-	3o	3+	4-	3o	5+	4o	5-	55	4-	3-	3+	3+	3-	4+	3+	5+	47	68.5	0	0	12			
Mean										19.7									18.4	69.4	2.1	1.6	13.0		

Daily Average Indices Ap Mar 2007 - Feb 2008



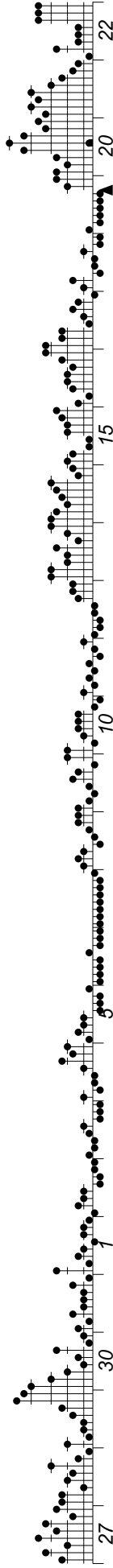
Day	Mar 07	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb
1	11	29	7	6	4	15	10	7	5	3	4	18
2	4	22	2	6	3	5	24	8	2	2	2	19
3	2	11	4	10	8	4	10	9	2	1	2	17
4	4	9	2	8	15	2	5	10	4	1	2	8
5	10	4	2	2	5	2	10	11	2	2	19	4
6	18	4	1	2	5	16	11	4	0	3	17	4
7	17	3	16	3	5	22	12	2	0	1	14	7
8	4	3	14	7	4	5	6	1	4	0	14	7
9	2	10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

DAYS IN SOLAR ROTATION INTERVAL

ROT.-
NO.

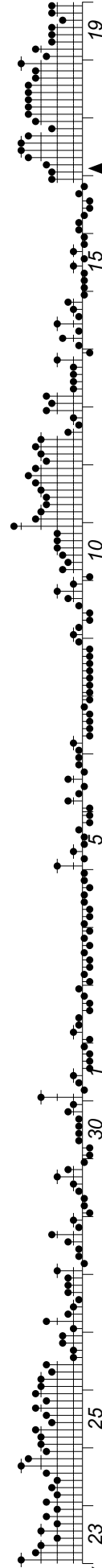
2378

Oct 27



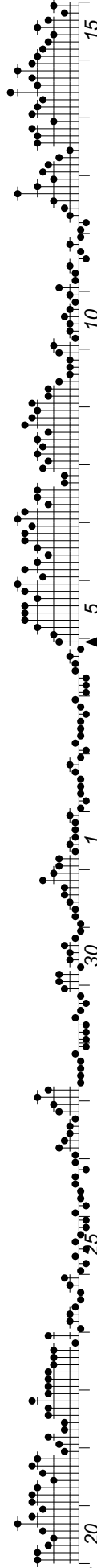
2379

Nov 23



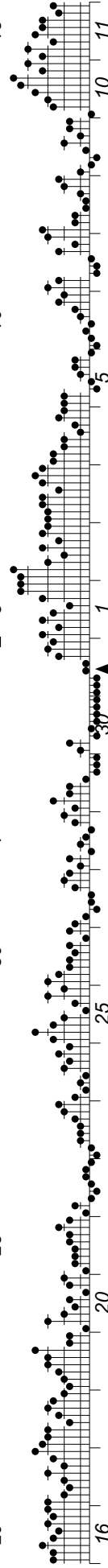
2380

Dec 20



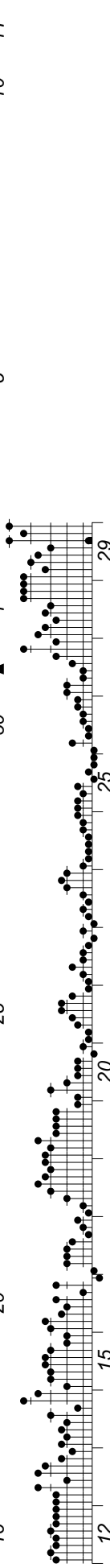
2381

Jan 16

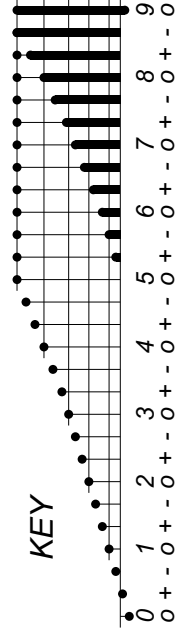


2382

Feb 12



KEY

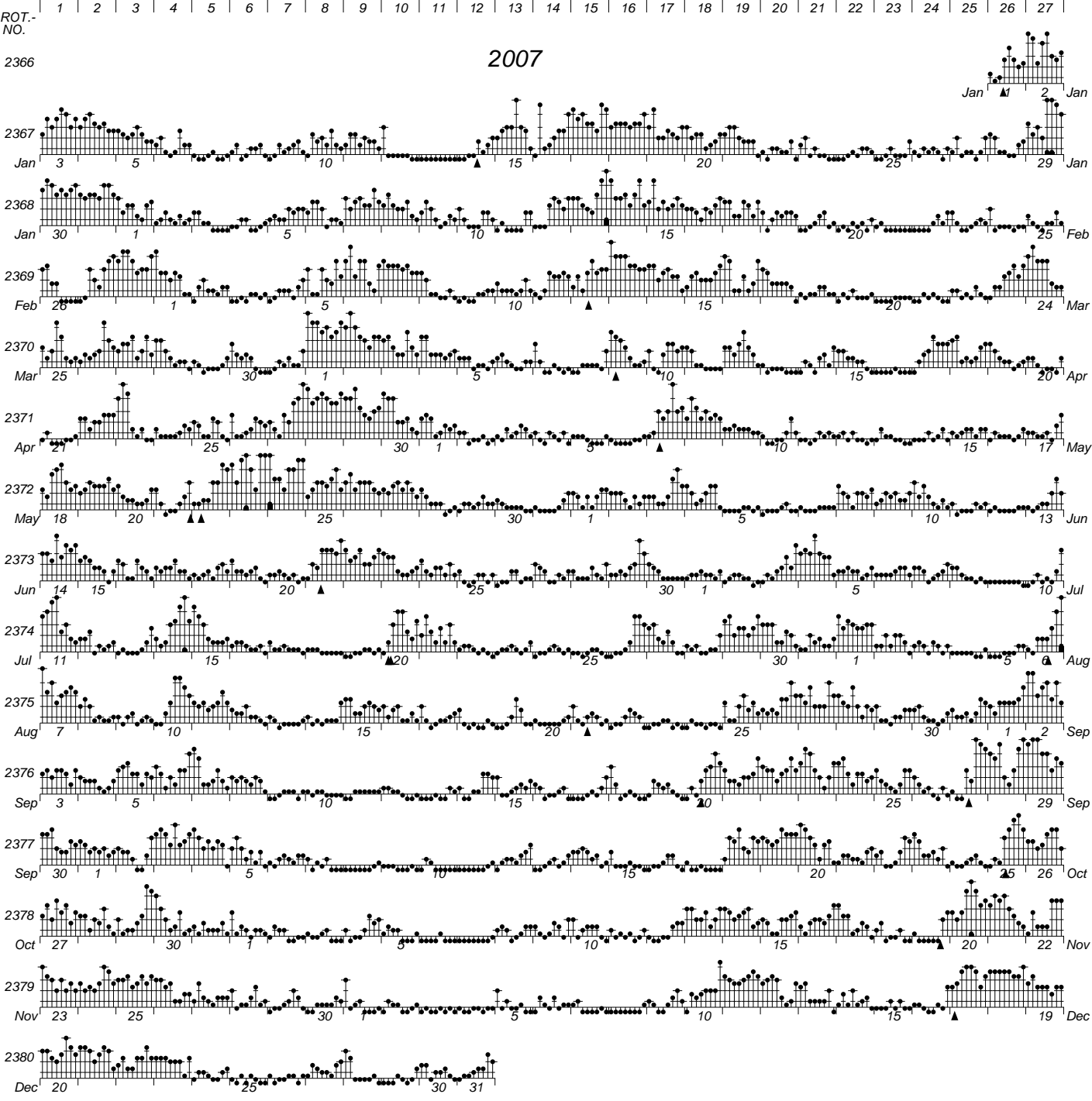


▲ = sudden
commencement

PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES

Kp till 2008 Feb 29

DAYS IN SOLAR ROTATION INTERVAL



ROT.-NO.

2007

2366

Jan 1 Jan 2

2367

Jan 3 5 10 15 20 25 29

2368

Jan 30 1 5 10 15 20 25

2369

Feb 26 1 5 10 15 20 24

2370

Mar 25 30 1 5 10 15 20

2371

Apr 24 25 30 1 5 10 15 17

2372

May 18 20 25 30 1 5 10 13

2373

Jun 14 15 20 25 30 1 5 10

2374

Jul 11 15 20 25 30 1 5

2375

Aug 7 10 15 20 25 30 1 2

2376

Sep 3 5 10 15 20 25 29

2377

Sep 30 1 5 10 15 20 25 26

2378

Oct 27 30 1 5 10 15 20 22

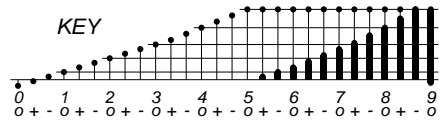
2379

Nov 23 25 30 5 10 15 19

2380

Dec 20 25 30 31

KEY



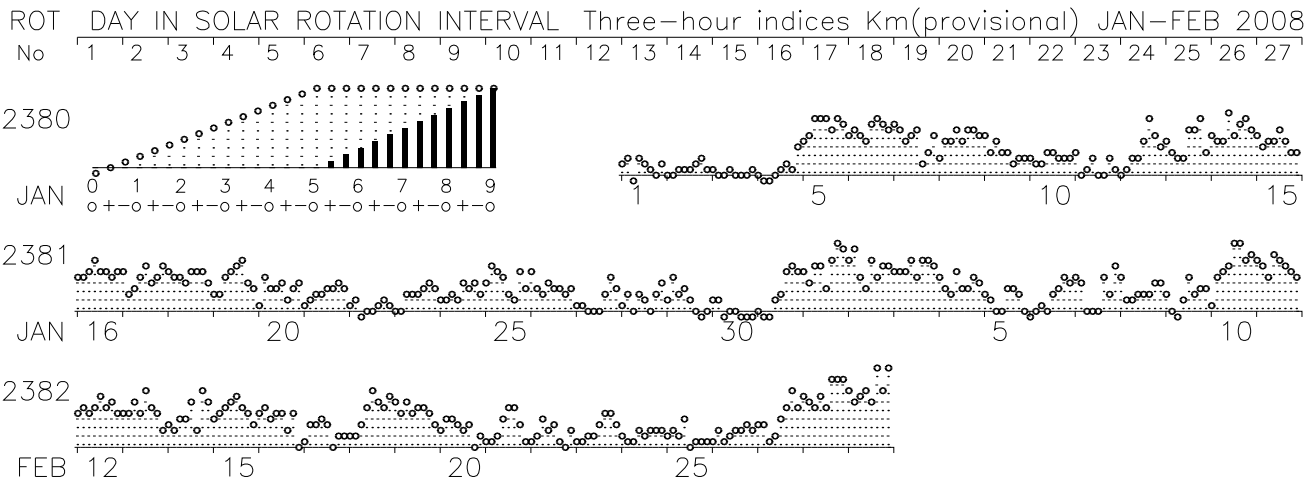
▲ = sudden commencement

PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES

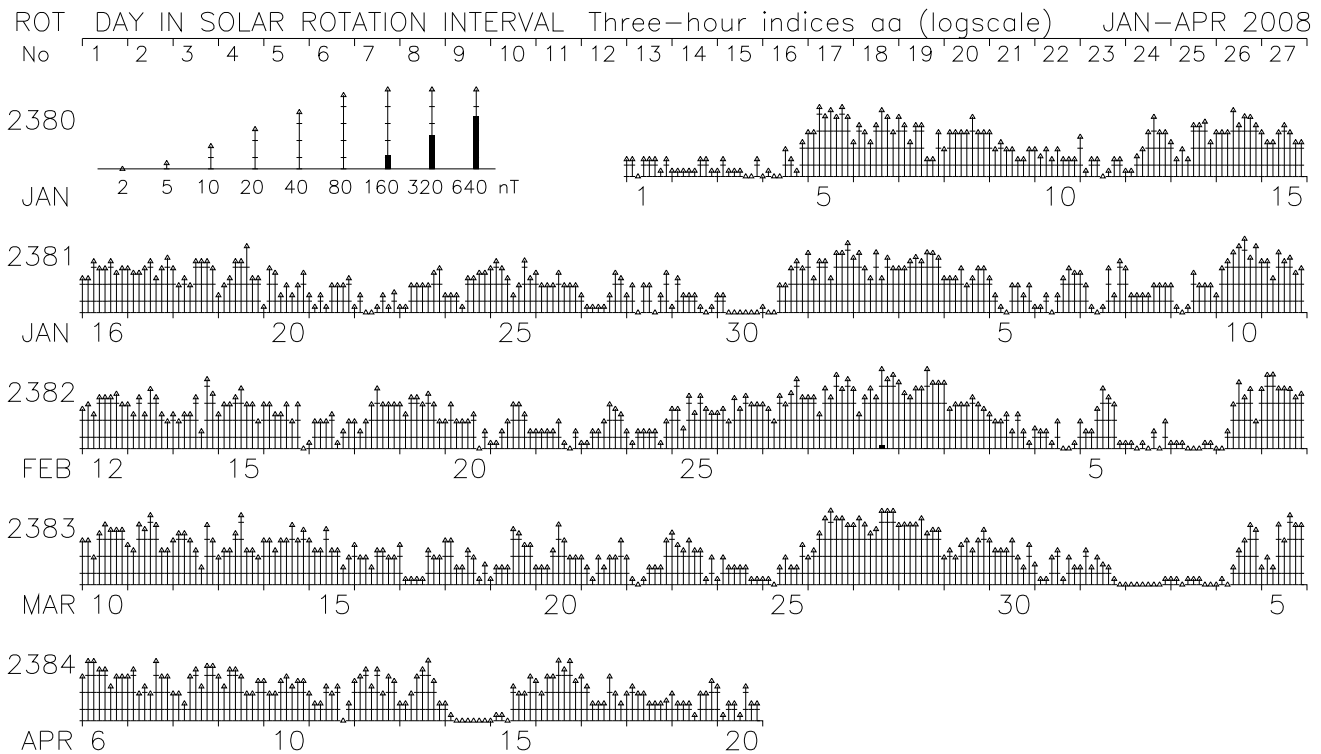
Kp 2007

PLANETARY GEOMAGNETIC ACTIVITY

3-HOUR-RANGE INDICES K_m AND a_a BY 27-DAY SOLAR ROTATION INTERVAL
 ISGI PUBLICATION OFFICE – EMAIL : ISGI.PUBOFF@cetp.ipsl.fr
 CETP, 4 Avenue de Neptune, F-94107 Saint Maur des Fosses CEDEX – FRANCE



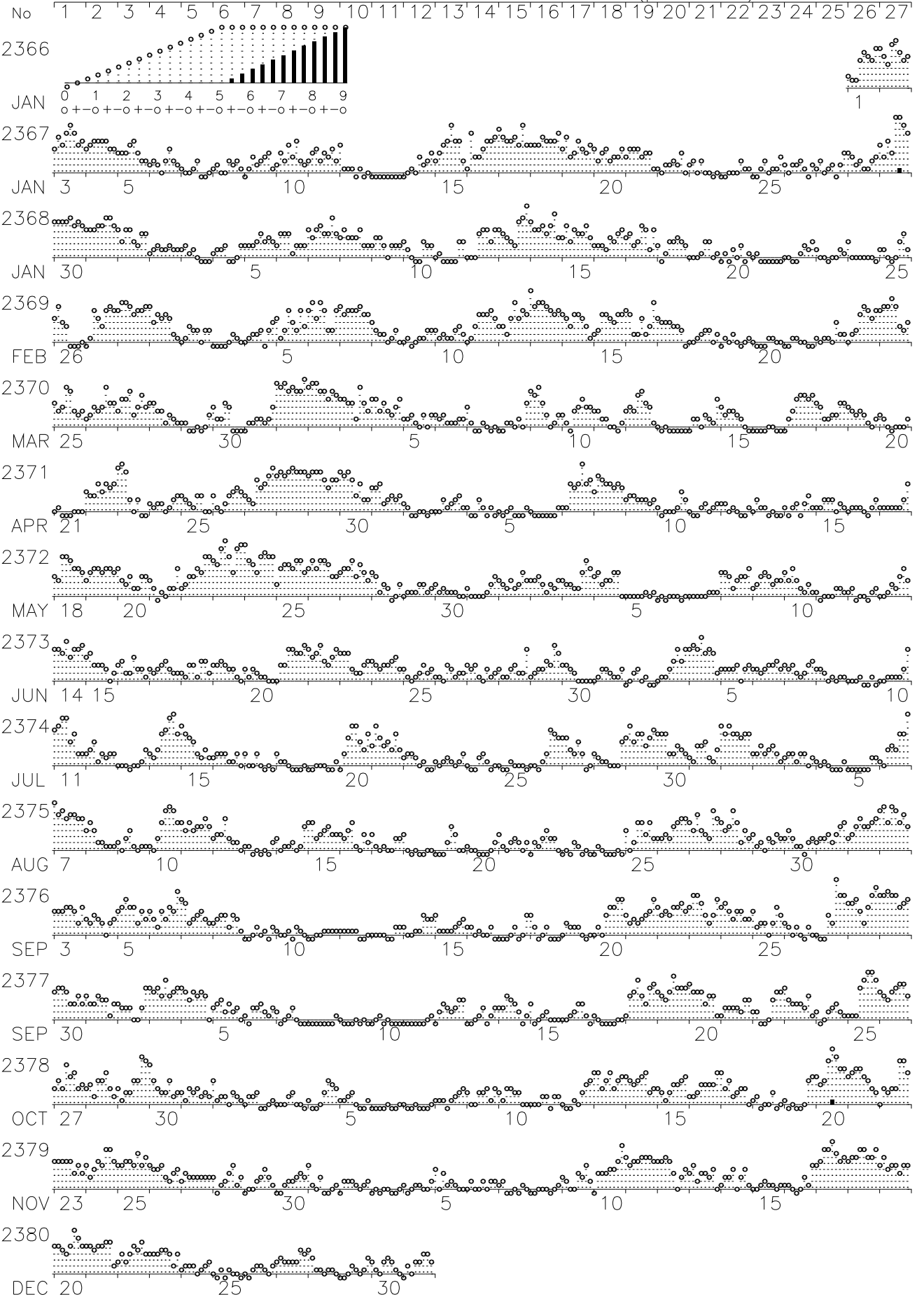
Indices Derivation at C.E.T.P.; Graph Prepared at ISGI Publication Office.



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

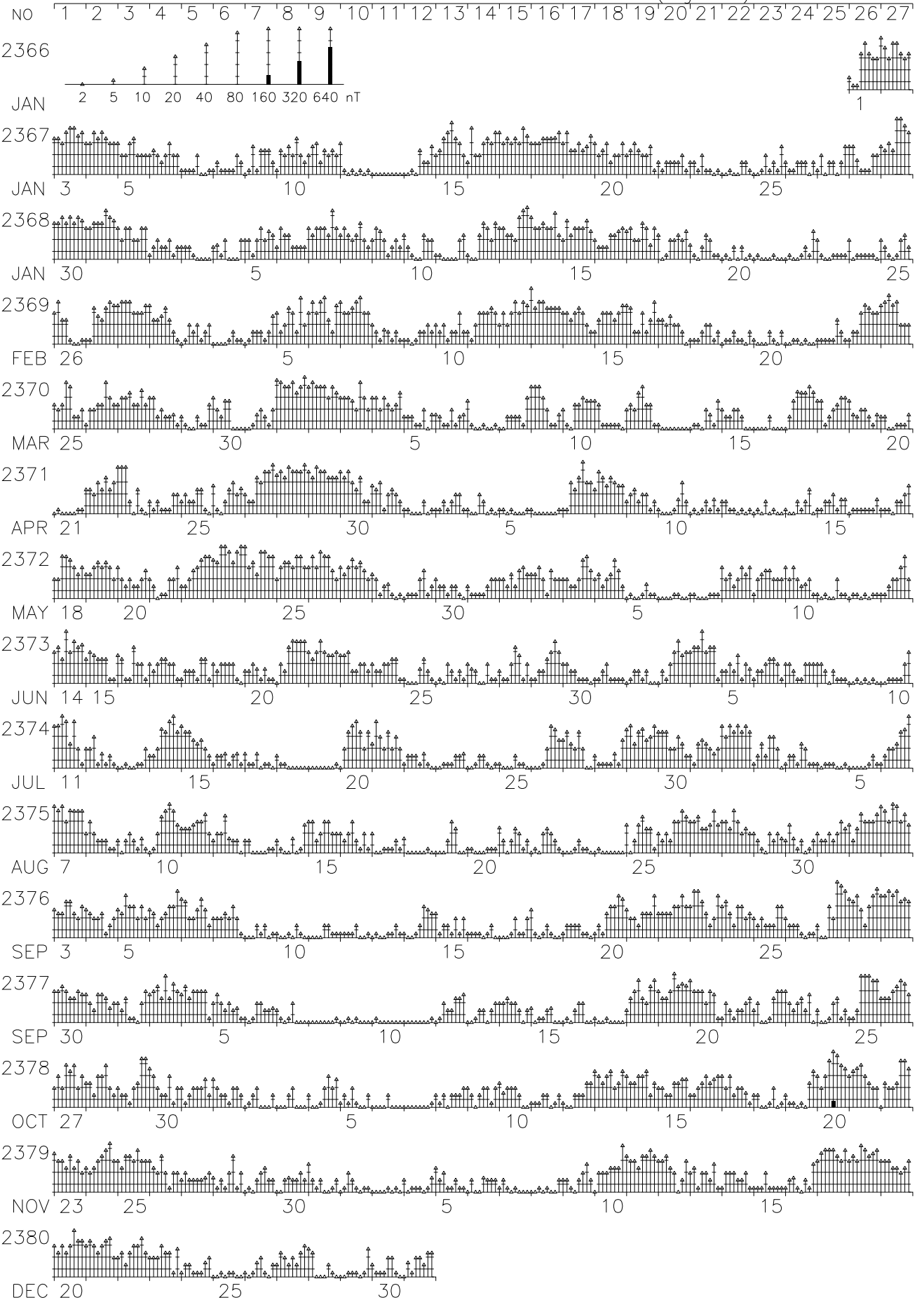
PLANETARY GEOMAGNETIC ACTIVITY – MUSICAL DIAGRAM OF Km 2007

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices Km (provisional) JAN–DEC 2007



PLANETARY GEOMAGNETIC ACTIVITY – MUSICAL DIAGRAM OF aa 2007

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices aa (logscale) JAN–DEC 2007

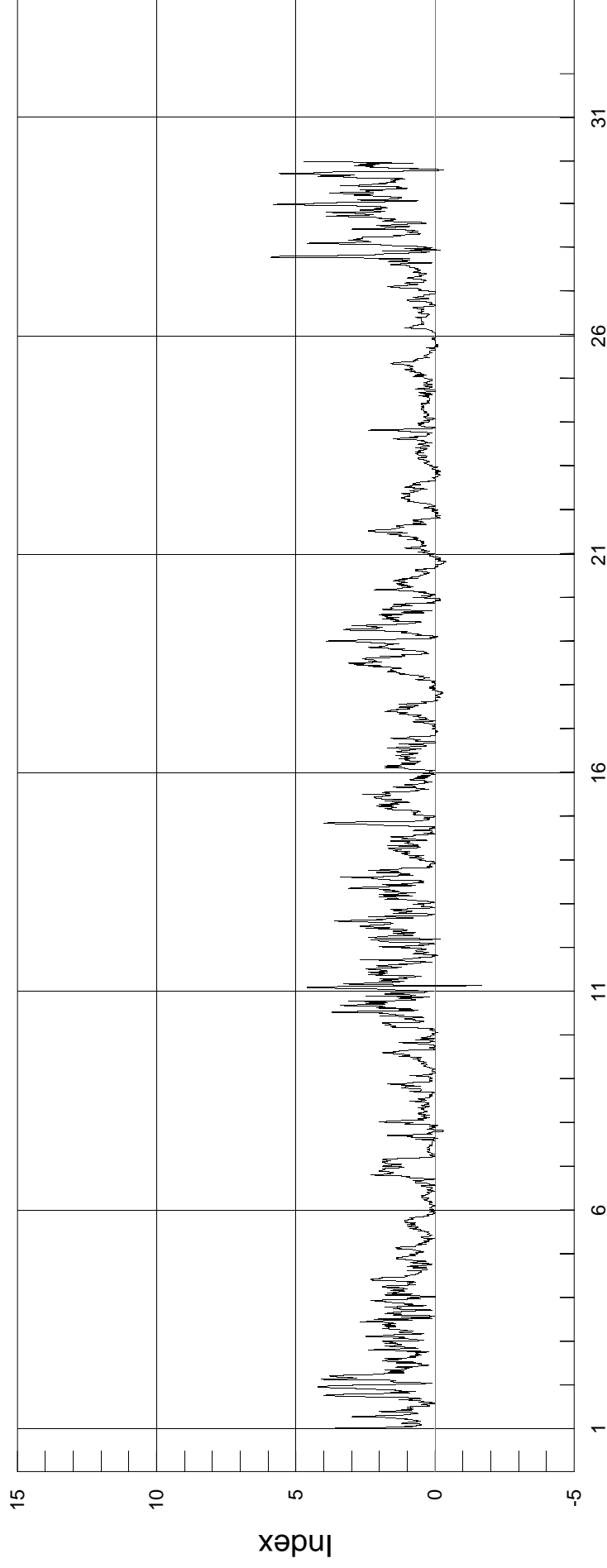


Indices Derivation at C.E.T.P.; Graph Prepared at ISGI Publication Office.

Polar Cap Index

Qaanaaq - Thule

WDC C1 for Geomagnetism, Copenhagen



FEBRUARY 2008

Data Source: Geomagnetism and Space Physics
Danish Meteorological Institute

P R I N C I P A L M A G N E T I C S T O R M S
F E B R U A R Y 2 0 0 7

Sta	Geomag		Commencement		SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges			End	
	Lat	Day	Time (UT)	Type	D (Min)	H (Gamma)	Z (Gamma)			D (Min)	H (Gamma)	Z (Gamma)	Day	Hour (UT)
JAI 17.4N	01	0300	..	..	..	..	..	-	4	68	21	03	23
NGP 11.3N	01	0300	..	..	..	..	..	-	3	71	20	03	23
ABG 09.4N	01	0300	..	..	..	..	1 (6)	5	3	74	27	11	22
HYB 07.6N	01	1200	..	..	..	..	2 (5)	4	2	54	13	03	24
PND 02.0N	01	0300	..	..	..	..	..	-	3	83	41	03	23
TIR 00.6S	01	0300	..	..	..	..	..	-	3	104	50	03	23
JAI 17.4N	10	0300	..	..	..	..	..	-	5	119	14	11	22
NGP 11.3N	10	0300	..	..	..	..	..	-	4	116	15	11	22
ABG 09.4N	10	0300	..	..	..	..	10 (4)	5	4	120	24	19	23
HYB 07.6N	10	0300	..	..	..	..	10 (4)	5	4	121	17	11	23
PND 02.0N	10	0300	..	..	..	..	..	-	3	107	47	11	22
TIR 00.6S	10	0300	..	..	..	..	..	-	5	123	53	11	22
HYB 07.6N	12	1000	..	..	..	..	13 (5)	4	3	77	11	13	22
HYB 07.6N	14	0600	..	..	..	..	14 (7)	4	2	54	12	15	22
JAI 17.4N	18	0700	..	..	..	..	..	-	3	68	18	19	23
NGP 11.3N	18	0700	..	..	..	..	..	-	3	70	17	19	23
ABG 09.4N	18	0700	..	..	..	..	18 (5,6,7,8)	4	3	69	23	01	02
HYB 07.6N	18	0700	..	..	..	..	19 (6)	4	3	66	17	19	23
PND 02.0N	18	0700	..	..	..	..	..	-	2	70	34	19	23
TIR 00.6S	18	0700	..	..	..	..	..	-	3	106	32	19	23
JAI 17.4N	27	1430	..	..	..	..	..	-	4	72	19	01	02
NGP 11.3N	27	1430	..	..	..	..	..	-	3	87	19	01	02
ABG 09.4N	27	1430	..	..	..	..	28 (6,7,8)	5	3	84	23	14	23
HYB 07.6N	27	1150	SC	-	0.2	-	9	-	5	3	96	13	01	24
PND 02.0N	27	1430	..	..	..	..	28 (6) 29 (6)	5	3	89	81	03	23
TIR 00.6S	27	1430	..	..	..	..	..	-	4	101	64	01	02

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

FEBRUARY 2008

Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
			07	1817-1832	GUI
			16	0601-0611	GUI
			23	1106-1116	NAG

REPORTING OBSERVATORIES up to 03/04/2008):

NUR LER ESK NGK VAL HAD DOU BDV CLF HRB NAG MMB EBR SPT KAK KNY GUI HYB GNA CNB

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

Note that we have included data of the 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.