DECEMBER 2005 NUMBER 736 - Part I

Solar-Geophysical Data prompt reports

Data for October and November 2005
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

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DECEMBER 2005 NUMBER 736 - Part I

Solar-Geophysical Data prompt reports

Data for October and November 2005

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NATIONAL GEOPHYSICAL DATA CENTER
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SOLAR-GEOPHYSICAL DATA

Number 736
(Issued in Two Parts)

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-- MONTHLY PLOTS

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DATA FOR NOVEMBER 2005

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

NOVEMBER 2005

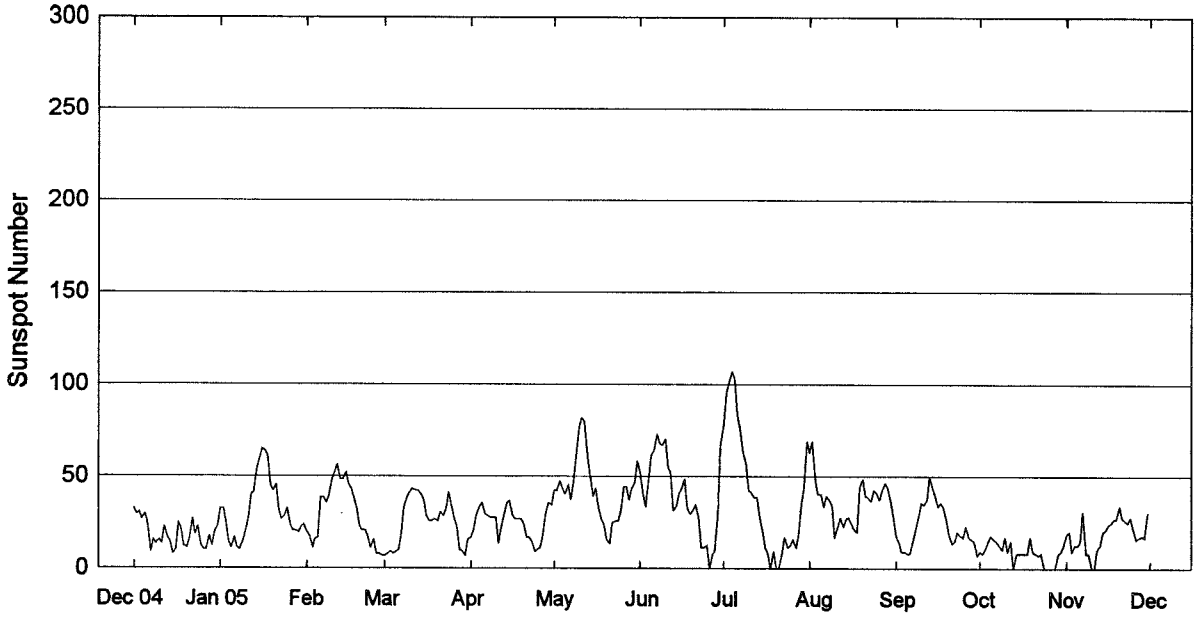
Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
305	01	31	29	78	11	10819	S08	E32	0	0	0	01	Q	SOL: Quiet
						10819	S09	E26	0	0	0	01	Q	MAG: Quiet
									0	0	0	01		PRO: Quiet
306	02	01	33	77	9	10819	S08	E19	0	0	0	02	Q	SOL: Quiet
						10819	S09	E12	0	0	0	02	Q	MAG: Quiet
									0	0	0	02		PRO: Quiet
307	03	02	36	78	6	10819	S08	E06	0	0	0	03	Q	SOL: Quiet
						10819	S09	W01	0	0	0	03	Q	MAG: Quiet
									0	0	0	03		PRO: Quiet
308	04	03	24	77	25	10819	S08	W08	0	0	0	04	Q	SOL: Quiet
						10819	S09	W14	1	0	0	04	Q	MAG: Active
									0	0	0	04		PRO: Quiet
309	05	04	22	77	26	10819	S08	W21	0	0	0	05	Q	SOL: Quiet
						10819	S07	W28	0	0	0	05	Q	MAG: Active
									0	0	0	05		PRO: Quiet
310	06	05	18	79	12	10820	S16	W27	0	0	0	06	E	SOL: Eruptive
									0	0	0	06		MAG: Active
									0	0	0	06		PRO: Quiet
311	07	06	34	82	12	10820	S11	W57	0	0	0	07	Q	SOL: Quiet
						10820	S17	W41	0	0	0	07	Q	MAG: Quiet
									0	0	0	07		PRO: Quiet
312	08	07	31	79	7	10820	S12	W72	0	0	0	08	Q	SOL: Quiet
						10820	S16	W54	0	0	0	08	Q	MAG: Quiet
									0	0	0	08		PRO: Quiet
313	09	08	38	79	3	10819	S09	W86	0	0	0	09	Q	SOL: Quiet
						10820	S17	W69	0	0	0	09	Q	MAG: Quiet
						10821	S14	W19	0	0	0	09	Q	PRO: Quiet
314	10	09	13	78	3	10820	S16	W81	0	0	0	10	Q	SOL: Quiet
									0	0	0	10		MAG: Quiet
									0	0	0	10		PRO: Quiet
315	11	10	0	78	3				0	0	0	11		SOL: Eruptive
									0	0	0	11		MAG: Quiet
									0	0	0	11		PRO: Quiet
316	12	11	0	79	3				0	0	0	12		SOL: Quiet
									0	0	0	12		MAG: Quiet
									0	0	0	12		PRO: Quiet
317	13	12	11	83	10	10822	S04	E81	0	0	0	13	Q	SOL: Eruptive
									0	0	0	13		MAG: Quiet
									0	0	0	13		PRO: Quiet
318	14	13	16	88	16	10822	S06	E66	3	1	0	14	E	SOL: Eruptive
									0	0	0	14		MAG: Quiet
									0	0	0	14		PRO: Quiet
319	15	14	26	92	11	10822	S06	E55	6	3	0	15	A	SOL: Active
									0	0	0	15		MAG: Quiet
									0	0	0	15		PRO: Quiet
320	16	15	32	100	9	10822	S08	E41	1	1	0	16	A	SOL: Active
									0	0	0	16		MAG: Quiet
									0	0	0	16		PRO: Quiet
321	17	16	58	94	2	10822	S08	E28	0	0	0	17	A	SOL: Active
									0	0	0	17		MAG: Quiet
									0	0	0	17		PRO: Quiet

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

NOVEMBER 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
322	18	17	62	101	2	10822	S07	E15	1	0	0	18	E	SOL: Active
									0	0	0	18		MAG: Quiet
									0	0	0	18		PRO: Quiet
323	19	18	51	101	3	10822	S07	E02	2	1	0	19	A	SOL: Active
									0	0	0	19		MAG: Quiet
									0	0	0	19		PRO: Quiet
324	20	19	52	102	10	10823	S08	W12	1	0	0	20	A	SOL: Active
						10823	S18	W37	0	0	0	20	A	MAG: Quiet
									0	0	0	20		PRO: Quiet
325	21	20	56	96	6	10822	S08	W25	0	0	0	21	E	SOL: Eruptive
						10823	S17	W50	0	0	0	21	Q	MAG: Active
						10824	S13	E68	0	0	0	21	Q	PRO: Quiet
326	22	21	45	95	4	10822	S08	W37	0	0	0	22	E	SOL: Eruptive
						10823	S15	W63	0	0	0	22	Q	MAG: Quiet
						10824	S12	E57	0	0	0	22	Q	PRO: Quiet
327	23	22	36	93	6	10824	S07	W51	0	0	0	23	Q	SOL: Eruptive
						10824	S12	E46	0	0	0	23	Q	MAG: Quiet
									0	0	0	23		PRO: Quiet
328	24	23	35	90	8	10824	S07	W63	0	0	0	24	Q	SOL: Eruptive
						10824	S14	E32	0	0	0	24	Q	MAG: Quiet
									0	0	0	24		PRO: Quiet
329	25	24	30	87	11	10824	S09	W81	0	0	0	25	Q	SOL: Eruptive
						10824	S13	E19	0	0	0	25	Q	MAG: Quiet
									0	0	0	25		PRO: Quiet
330	26	25	39	80	13	10822	S09	W97	0	0	0	26	Q	SOL: Quiet
						10824	S12	E05	0	0	0	26	Q	MAG: Quiet
						10825	S06	E12	0	0	0	26	Q	PRO: Quiet
331	27	26	30	81	5	10825	S14	W06	0	0	0	27	Q	SOL: Quiet
						10825	S06	E00	0	0	0	27	Q	MAG: Quiet
									0	0	0	27		PRO: Quiet
332	28	27	26	81	3	10825	S14	W20	0	0	0	28	Q	SOL: Quiet
						10825	S03	W10	0	0	0	28	Q	MAG: Quiet
									0	0	0	28		PRO: Quiet
333	29	28	27	82	10	10826	S14	W35	0	0	0	29	Q	SOL: Quiet
						10826	S02	E62	0	0	0	29	Q	MAG: Quiet
									0	0	0	29		PRO: Quiet
334	30	29	27	85	5	10826	S14	W48	1	0	0	30	Q	SOL: Quiet
						10826	S02	E49	0	0	0	30	Q	MAG: Active
									0	0	0	30		PRO: Quiet

International Relative Sunspot Numbers
Dec 2004 - Nov 2005

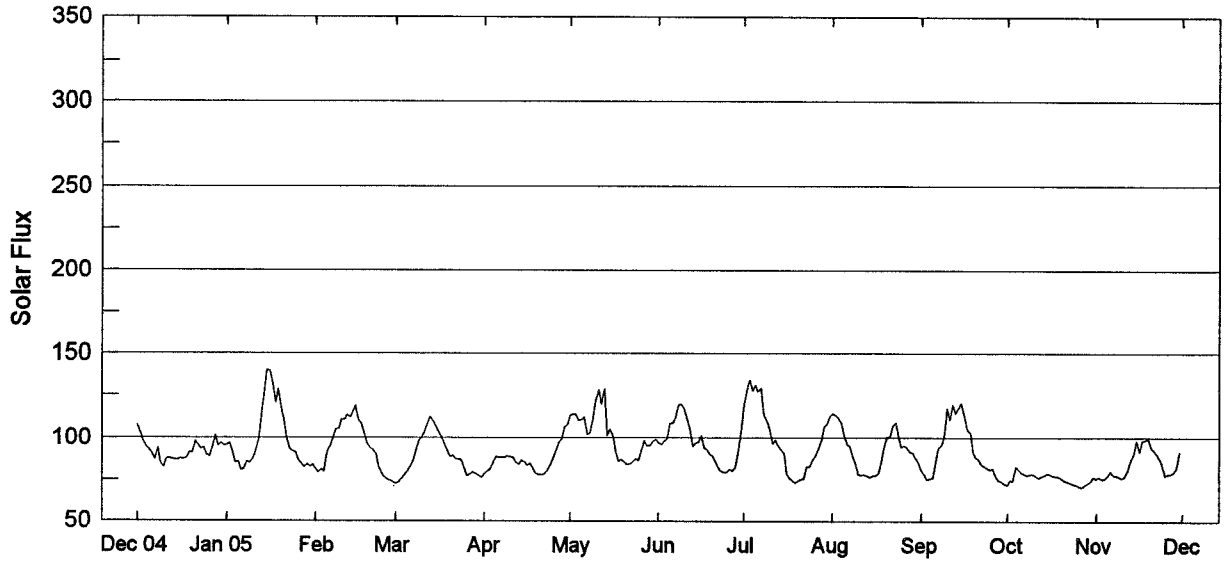


Day	Dec 04	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct*	Nov*
1	32	32	19	0	16	42	53	78	63	17	9	18
2	29	32	17	8	20	42	40	95	69	14	8	19
3	30	24	11	9	28	47	33	101	48	9	10	9
4	26	14	15	8	33	43	49	107	40	9	14	12
5	29	11	16	9	35	40	62	103	40	8	17	12
6	22	12	38	10	29	45	64	84	33	8	15	14
7	9	11	38	18	28	37	73	75	39	14	14	30
8	15	10	35	33	27	46	68	64	37	20	12	8
9	13	14	39	38	27	63	67	57	34	28	10	8
10	15	19	48	41	27	77	70	42	16	35	16	0
11	13	27	52	43	13	82	55	41	22	34	9	0
12	22	40	56	42	21	80	52	38	27	37	14	10
13	16	41	48	42	29	62	31	41	22	50	0	12
14	12	54	48	40	35	51	33	30	26	44	8	19
15	8	59	52	37	36	39	40	21	27	39	8	20
16	10	65	45	28	28	43	43	11	24	33	8	23
17	24	64	43	25	26	33	48	8	20	35	8	24
18	21	61	37	25	26	26	32	0	19	33	8	26
19	12	45	31	26	26	23	29	9	44	26	16	26
20	11	42	27	25	24	15	31	0	48	14	9	33
21	15	45	20	30	16	13	34	0	39	13	8	27
22	26	31	20	28	16	24	27	8	38	14	7	25
23	18	26	16	32	14	25	11	16	36	19	8	24
24	22	28	11	41	9	25	11	11	42	17	0	27
25	12	32	8	34	10	30	12	12	41	16	0	20
26	10	23	12	26	11	44	0	15	37	22	0	15
27	10	20	8	22	17	44	8	11	42	16	0	16
28	17	20	7	10	30	37	9	18	46	15	0	17
29	12	19		9	35	43	28	34	43	14	8	16
30	20	22		7	34	46	67	43	37	7	9	30
31	22	26		15		58		69	29		12	
Mean	17.9	31.3	29.2	24.8	24.2	42.7	39.3	40.1	36.4	21.9	8.5	18.0

* = Provisional.

Penticton 2800 MHz (10.7cm) Solar Flux
Dec 2004 - Nov 2005

Adjusted to 1 AU



Day	Dec 04	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	107.8	95.6	81.3	72.4	78.2	113.4	96.9	118.5	114.6	80.6	72.3	76.1
2	102.6	96.7	79.4	73.4	80.2	114.0	96.0	128.0	113.5	78.5	75.0	76.8
3	97.9	91.0	80.7	75.7	81.1	114.2	98.0	134.1	112.2	75.4	74.4	75.5
4	94.6	85.1	79.8	77.7	84.9	110.6	99.8	127.8	109.2	75.8	82.7	76.1
5	93.1	85.3	92.0	79.9	88.5	111.0	108.6	131.0	101.7	76.2	81.3	77.9
6	90.4	80.4	94.3	82.3	88.2	112.4	109.2	127.2	96.1	84.7	79.4	80.3
7	87.1	80.7	100.3	85.7	88.0	101.8	112.4	129.1	94.9	93.6#	78.7	78.0
8	93.6	85.6	105.4	92.2	87.9	103.2	119.3	114.2	88.9	95.5	78.0	77.9
9	84.7	84.6	105.8	98.5	88.8	112.2	119.7	110.2	84.7	100.6#	78.7	76.6
10	82.3	87.1	111.1	100.3	88.6	121.6	117.9	105.2	78.3	117.6	78.8	76.4
11	87.1	91.1	111.2	103.6	87.9	127.9	111.4	96.4	77.9	111.1	77.3	77.0
12	87.7	98.8	113.5	108.8	85.3	119.9	106.3	98.5	78.3	119.5	76.5	81.4
13	87.0	111.9	112.7	112.5	84.0	128.6	94.7	94.8	77.4	115.0#	77.6	86.0
14	86.5	125.6	115.2	110.3	86.0	101.7	96.8	92.9	76.7	117.9	78.0	90.4
15	86.5	140.2	118.7	107.0	85.5	105.2	97.5	90.1	77.7	120.6	79.1	97.8
16	87.2	139.8	110.2	103.6	83.6	101.4	101.3	78.8	77.7	112.9#	78.7	91.8
17	87.1	133.1	108.8	100.4	84.2	92.0	93.7	76.5	78.9	104.9	77.5	98.2
18	87.7	120.3	101.8	95.7	82.0	85.8	92.9	74.4	84.7	103.2	77.7	98.8
19	90.9	128.3	96.3	92.2	78.9	86.7	89.8	73.5	95.3	91.9	77.2	99.6
20	90.9	118.8	93.6	88.3	77.8	85.6	88.9	74.4	100.4	88.5	76.0	94.1
21	97.7	109.9	92.5	89.1	77.9	83.9	85.5	75.2	100.8	86.7	74.6	92.4
22	95.6	99.1	90.4	86.7	78.1	84.2	82.1	75.9	107.2*	84.3	74.0	90.3
23	93.2	92.8	82.8	87.1	80.2	85.5	80.1	82.7	109.3*	83.3	73.4	87.5
24	94.0	91.7	78.6	86.6	83.2	87.4	79.2	82.8	100.7	81.9	72.5	84.4
25	90.0	91.2	76.7	81.7	87.1	86.0	79.3	86.5	94.4	81.4	72.1	77.9
26	88.7	86.6	75.1	77.4	92.1	92.8	81.3	89.2	95.2	81.7	71.2	78.7
27	93.7	84.3	74.4	78.1	96.6	98.1	80.0	93.4	94.0	77.2	70.7	78.6
28	101.7	82.4	73.6	79.4	99.4	95.1	82.6	98.7	91.6	74.9	72.1	79.7
29	95.3	83.9		78.6	106.5	95.3	91.9	106.9	90.9	74	73.1	82.4
30	96.7	82.9		77.5	108.0	97.5	105.9	108.2	87.6	72.4	74.5	92.0
31	95.2	83.6		76.5		99.0		113.1	85.6		76.7	
Mean	92.1	99.0	94.9	89.0	86.6	101.7	96.6	99.6	92.8	92.1	76.1	84.4

NOTE: # - 1700 or 1800UT reading, burst in progress at 2000UT. *-2300UT reading, burst in progress.
+ - 1700UT Reading, no data available at 2000UT.

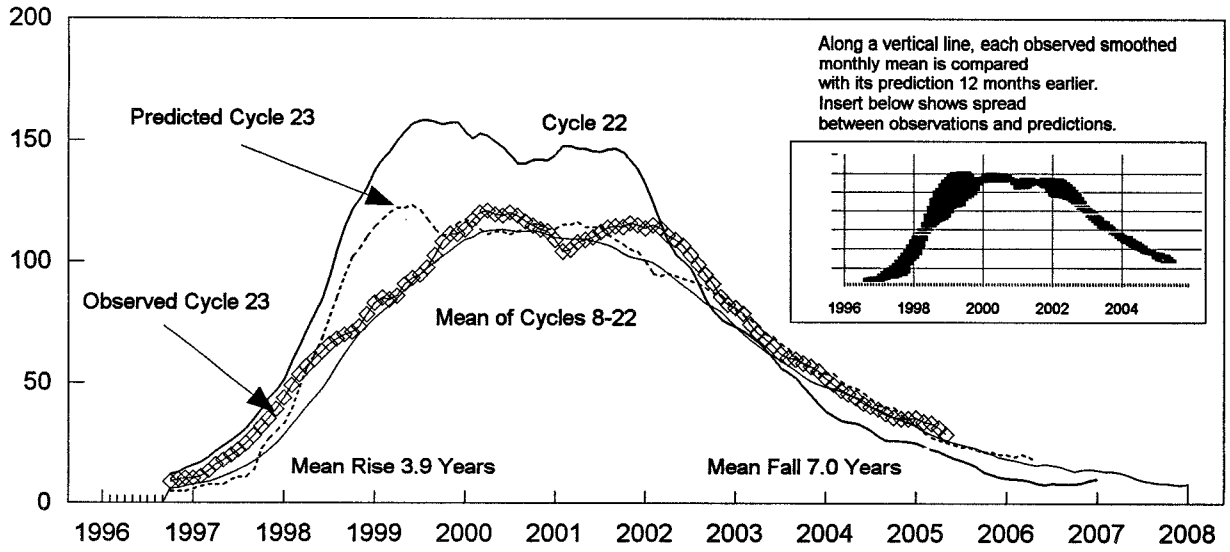
DAILY SOLAR INDICES

November 2005

	Day	Bartels	Sunspot		Obs Flux		----Solar Flux Adjusted to 1 Astronomical Unit----							
	of	Cycle	Numbers		Penticton	SGMR	SGMR	SGMR	Penticton	SGMR	SGMR	SGMR	SGMR	SGMR
Day	Year	Day	Int	Amer	(2800)	(15400)	(8800)	(4995)	(2800)	(2695)	(1415)	(610)	(410)	(245)
1	305	5	18	21	77.3	529	211	137	76.1	78	46	31	24	10
2	306	6	19	19	78.0	529	210	132	76.8	83	47	32	25	11
3	307	7	9	9	76.8	523	212	131	75.5	83	46	32	25	10
4	308	8	12	5	77.4	521	214	133	76.1	80	46	32	25	10
5	309	9	12	15	79.3	521	205	131	77.9	82	47	34	26	13
6	310	10	14	19	81.7	509	220	133	80.3	82	48	33	27	11
7	311	11	30	24	79.4	455	206	133	78.0	82	47	33	27	11
8	312	12	8	10	79.4	530	217	133	77.9	84	46	35	26	12
9	313	13	8	3	78.1	521	216	133	76.6	80	46	34	27	9
10	314	14	0	0	77.9	525	222	133	76.4	80	47	34	27	13
11	315	15	0	0	78.6	531	220	134	77.0	78	46	33	27	12
12	316	16	10	6	83.1	508	210	132	81.4	87	48	35	32	17
13	317	17	12	14	87.8	526	218	145	86.0	90	50	34	28	15
14	318	18	19	23	92.4	535	232	157	90.4	94	53	36	32	—
15	319	19	20	23	100.0	469	218	151	97.8	95	50	37	34	—
16	320	20	23	29	94.0	463	227	155	91.8	94	49	35	28	16
17	321	21	24	28	100.5	539	232	156	98.2	98	52	36	28	16
18	322	22	26	26	101.1	537	225	154	98.8	102	52	39	40	—
19	323	23	26	33	102.0	543	236	159	99.6	100	53	40	42	—
20	324	24	33	35	96.4	533	221	152	94.1	99	53	35	39	—
21	325	25	27	31	94.7	514	232	149	92.4	93	51	34	31	12
22	326	26	25	28	92.6	485	217	140	90.3	92	51	31	32	15
23	327	27	24	27	89.7	526	217	139	87.5	95	50	35	49	13
24	328	1	27	25	86.6	475	221	137	84.4	88	49	30	31	12
25	329	2	20	20	79.9	525	227	135	77.9	85	48	32	26	11
26	330	3	15	13	80.8	525	225	134	78.7	82	47	34	27	20
27	331	4	16	13	80.7	525	167	83	78.6	37	31	32	27	9
28	332	5	17	15	81.9	525	220	134	79.7	82	47	32	27	9
29	333	6	16	15	84.7	512	215	134	82.4	85	49	33	25	11
30	334	7	30	33	94.7	481	221	145	92.0	91	52	31	25	11
MEAN			18.0	18.7	86.4	514	217	138	84.5	86	48	33	29	12

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

Cycle 23 Smoothed Sunspot Numbers: Observed and Predicted



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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
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	28	27	26	25	24	23	22	28
						(2)	(4)	(5)	(6)	(6)	(7)	(7)	(3)
2006	21	20	19	19	18	18	17	16	15	14	13	13	(17)
	(7)	(8)	(9)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
2007	12	12	12	12	12	12	13	13	14	15	16	17	13
	(10)	(10)	(10)	(10)	(10)	(11)	(12)	(14)	(16)	(17)	(19)	(21)	(13)

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

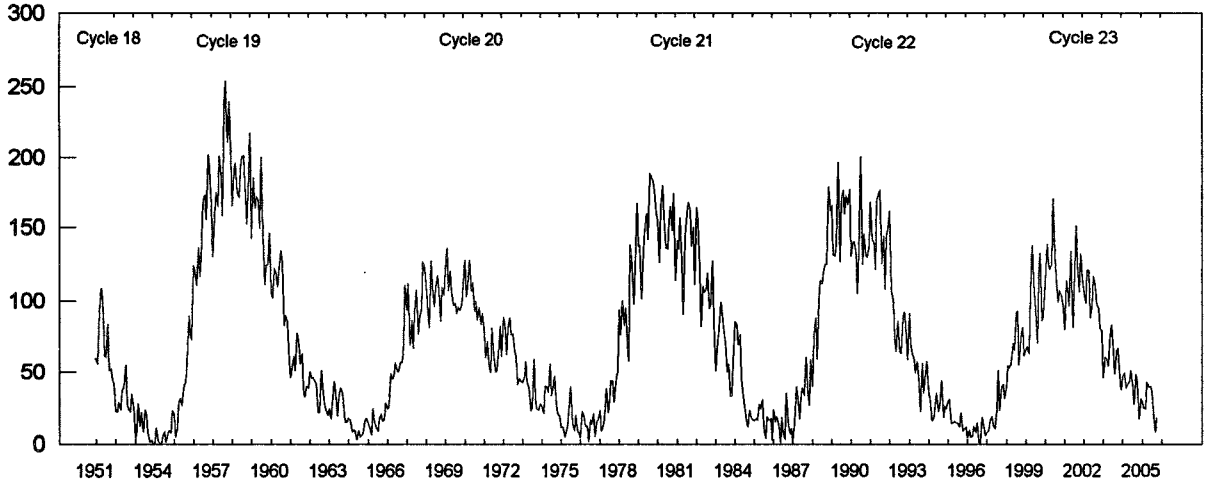
*** May 1996 marks Cycle 22's mathematical minimum. ** October 1996 marks the consensus minimum NGDC is now using.**

+ April 2000 marks Cycle 23 maximum.

Observed and Predicted Numbers. For the end of Cycle 22, and the rise and decline of Cycle 23, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Sep 2005 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 May 2006 prediction. There exists a 90% chance that in May, the actual smoothed number will fall somewhere between 8 and 28.

Points to Ponder. The McNish-Lincoln prediction method generates useful estimates of smoothed, monthly mean sunspot numbers for no more than 12 months ahead. Beyond 12 months, the predictions regress toward the mean of all 15 cycles of observations used in the computation. Moreover, the method remains very sensitive to the date defining the onset of the current cycle, that is, to the date of the most recent sunspot minimum. The new cycle predictions tabulated above are based on the consensus minimum value of 8.8 that occurred in October 1996.
Note: Please visit http://www.sec.noaa.gov for solar minimum and Cycle 23 discussions.

Mean Monthly Sunspot Numbers
Jan 1951 - Nov 2005



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	8.5	18.0		28.8	

Values are preliminary after Sept, 2005. For the yearly means, each 'M' marks a sunspot cycle maximum and each 'm' a minimum.

Hα SOLAR FLARES

NOVEMBER 2005

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
LEAR	03	0448	0449	0455	S10	W03	10819	11	3.0	7	SF		3	E		10		
LEAR	13	0520	0522	0523	S09	E77	10822	11	19.0	3	SF		3	E		18		F
LEAR		0602	0603	0607	S09	E82	10822	11	19.4	5	SF		3	E		35		
LEAR		0717	0717	0722	S09	E82	10822	11	19.4	5	SF		3	E		17		
LEAR	14	0358	0401	0406	S08	E64	10822	11	19.0	8	1F		3	E		152		FH
LEAR		0420	0421	0424	S07	E68	10822	11	19.3	4	SF		3	E		15		FH
LEAR		0653	0658	0704	S08	E62	10822	11	18.9	11	SF		3	E		52		H
LEAR		0836	0837	0842	S08	E60	10822	11	18.8	6	SF		3	E		17		H
LEAR		0954	0956	1000	S08	E59	10822	11	18.8	6	SF		3	E		29		
LEAR	15	0300	0302	0314	S10	E51	10822	11	18.9	14	SF		3	E		17		FH
LEAR	17	0135	0136	0143	S09	E27	10822	11	19.1	8	SF		3	E		13		F
LEAR		2334	2334	2350	S09	E15	10822	11	19.1	16	SF		3	E		15		F
LEAR	18	0028	0032	0050	S09	E14	10822	11	19.1	22	SF		3	E		86		F
LEAR		2354	2357	2407	S09	E01	10822	11	19.1	13	SF		3	E		51		FE
HOLL	19	2015	2016	2029	S07	W08	10822	11	19.2	14	SF		3	E		22		F
HOLL	29	1643	1655	1739	S12	W45	10824	11	26.3	56	SF		3	E		50		FH

"Remarks"

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

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

NOTE: Beginning with the February 2005 data, only H-alpha flares are included in this table. Because the number of H-alpha patrols are dwindling and emphasis is now on the X-ray flare reports, a separate table of solar X-ray flares is now produced.

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

NOVEMBER 2005

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES	02	1352	1406	1416	S81	E90				24	B 1.7	1.9E-04	7.5E+01	2.2E+02
GOES		1443	1448	1452	S07	E09	10818			9	B 2.0	9.4E-05	2.3E+02	4.2E+02
GOES	03	0426	0446	0501	S08	W06	10819			35	B 9.1	1.1E-03	1.7E+03	6.0E+03
GOES		0708	0720	0736	S10	W07	10819			28	B 3.0	3.7E-04	5.3E+02	1.2E+03
GOES	05	1614	1619	1630	S15	W26	10820			16	B 1.2	1.0E-04	1.0E+02	1.7E+02
GOES		1724	1728	1733	S15	W26	10820			9	B 1.2	5.8E-05	1.8E+02	3.1E+02
GOES		1817	1823	1831						14	B 2.0	1.3E-04		
GOES		2055	2103	2108	S15	W28	10820			13	B 6.4	3.1E-04	9.0E+02	3.1E+03
GOES		2150	2154	2158	S16	W29	10820			8	B 3.0	9.7E-05	6.5E+02	1.5E+03
GOES		2249	2303	2310	S16	W29	10820			21	B 3.2	3.0E-04	7.0E+02	1.6E+03
GOES	06	0049	0054	0101						12	B 1.4	8.2E-05		
GOES		0152	0202	0211	S15	W31	10820			19	B 3.5	2.7E-04	8.0E+02	1.7E+03
GOES		0533	0544	0553	S15	W33	10820			20	B 4.5	3.5E-04	1.0E+03	2.3E+03
GOES		0706	0710	0713						7	B 1.2	3.8E-05		
GOES		1438	1443	1446	S15	W38	10820			8	C 1.1	2.9E-04	1.0E+03	4.3E+03
GOES		2314	2320	2327	S14	W43	10820			13	B 4.4	2.1E-04	6.5E+02	2.0E+03
GOES	07	0232	0235	0239			10820			7	B 1.0	3.9E-05		
GOES		0356	0400	0410			10820			14	B 1.0	8.2E-05		
GOES		0740	0805	0821	N62	E51	10820			41	B 2.2	4.9E-04	5.0E+01	1.3E+02
GOES		1648	1655	1707						19	B 1.6	1.5E-04		
GOES		1934	1938	1940			10819			6	B 1.6	4.0E-05		
GOES		2052	2059	2107	S16	W55	10820			15	B 4.3	2.7E-04	9.3E+02	1.9E+03
GOES		2229	2234	2237	S10	W78	10819			8	B 3.4	1.1E-04	4.5E+02	1.0E+03
GOES	08	0225	0237	0254	S49	E90	10820			29	B 2.4	3.1E-04	1.8E+02	1.3E+03
GOES	09	0200	0205	0209	S15	W74	10820			9	B 2.5	1.0E-04	4.5E+02	8.5E+02
GOES		0241	0301	0306	S16	W77	10820			25	C 1.2	8.8E-04	1.9E+03	7.3E+03
GOES	12	0311	0317	0342	S06	E80				31	B 3.4	4.7E-04	6.2E+03	2.2E+04
GOES		0414	0424	0439	S06	E80	10822			25	B 3.3	4.3E-04	7.0E+03	2.8E+04
GOES		0736	0739	0741	S06	E80	10822			5	B 3.2	8.7E-05	7.8E+03	3.4E+04
GOES		0941	1006	1018	S06	E82	10822			37	B 9.9	1.6E-03	9.4E+03	5.4E+04
GOES		1332	1340	1349	S06	E80	10822			17	B 5.0	4.1E-04	8.3E+03	3.6E+04
GOES		1418	1458	1603	S07	E81	10822			105	C 2.5	9.9E-03	1.3E+04	8.3E+04
GOES		1817	1828	1837	S07	E81	10822			20	B 3.8	3.8E-04	1.1E+04	4.0E+04
GOES		1843	1846	1850	S06	E80	10822			7	B 4.6	1.7E-04	1.0E+04	4.1E+04
GOES		1917	1921	1923	S06	E80	10822			6	B 5.6	1.4E-04	8.7E+03	3.8E+04
GOES		1925	1933	1937	S06	E82	10822			12	C 9.5	3.2E-03	1.6E+04	1.3E+05
GOES		1958	2003	2007	S06	E79	10822			9	B 6.9	2.7E-04	9.4E+03	5.2E+04
GOES	13	0013	0036	0045	S06	E86	10822			32	C 9.5	9.1E-03	2.1E+04	2.0E+05
GOES		0205	0225	0240	S07	E78	10822			35	B 7.6	1.1E-03	1.0E+04	5.1E+04
GOES		0309	0406	0413	S07	E79	10822			64	C 1.9	5.5E-03	1.3E+04	8.7E+04
GOES		0428	0525	0535	S07	E80	10822			67	C 6.7	1.7E-02	2.2E+04	1.7E+05
GOES		0600	0603	0611	S07	E78	10822			11	C 2.7	1.5E-03	1.8E+04	1.1E+05
GOES		1241	1249	1257	S07	E74	10822			16	C 2.7	1.7E-03	1.3E+04	7.6E+04
GOES		1414	1417	1419						5	B 3.8	1.0E-04		
GOES		1429	1451	1456	S07	E77	10822			27	M 2.5	1.6E-02	3.2E+04	3.0E+05
GOES		1923	1926	1928						5	B 3.9	9.8E-05		
GOES		2001	2009	2020	S07	E70	10822			19	B 7.4	6.8E-04	1.4E+04	5.9E+04
GOES		2119	2158	2216	S07	E70	10822			57	C 2.8	4.6E-03	1.5E+04	9.4E+04
GOES	14	0019	0049	0108	S08	E67	10822			49	C 2.0	4.3E-03	1.9E+04	1.0E+05
GOES		0149	0205	0218	S07	E67	10822			29	C 1.4	2.0E-03	1.5E+04	7.5E+04
GOES		0355	0402	0405	S07	E63	10822			10	C 7.3	2.5E-03	2.0E+04	1.4E+05
GOES		0416	0421	0427	S07	E68	10822			11	M 2.6	1.0E-02	3.3E+04	2.8E+05
GOES		0547	0553	0559	S08	E65	10822			12	C 1.0	5.8E-04	1.7E+04	6.4E+04
GOES		0630	0658	0705	S07	E63	10822			35	B 8.4	1.3E-03	1.4E+04	6.2E+04
GOES		0830	0837	0841	S07	E61	10822			11	C 2.8	1.0E-03	1.5E+04	8.1E+04
GOES		0900	0903	0909	S06	E62	10822			9	B 4.4	2.2E-04	1.0E+04	3.9E+04
GOES		0948	0955	0958	S07	E61	10822			10	B 8.7	4.0E-04	1.2E+04	5.6E+04
GOES		1144	1149	1154	S07	E61	10822			10	C 1.0	5.2E-04	1.6E+04	6.7E+04
GOES		1217	1234	1313						56	C 1.4	4.2E-03		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES	14	1416	1421	1423	S06	E60	10822			7	M 3.9	5.9E-03	4.8E+04	3.8E+05
GOES		2153	2200	2204	S07	E54	10822			11	M 1.0	3.7E-03	2.2E+04	1.7E+05
GOES		2231	2235	2243	S07	E56	10822			12	B 9.6	6.2E-04	1.5E+04	6.7E+04
GOES	15	0014	0022	0029	S07	E55	10822			15	B 8.4	6.1E-04	1.6E+04	6.7E+04
GOES		0045	0054	0101	S07	E53	10822			16	C 1.4	1.2E-03	1.5E+04	7.7E+04
GOES		0134	0138	0142	S07	E55	10822			8	B 6.8	2.7E-04	1.4E+04	5.6E+04
GOES		0250	0305	0312	S07	E51	10822			22	C 5.2	3.6E-03	1.8E+04	1.3E+05
GOES		0420	0423	0431	S08	E53	10822			11	B 8.0	4.6E-04	1.8E+04	6.9E+04
GOES		0540	0545	0550	S07	E52	10822			10	B 7.6	3.4E-04	1.8E+04	6.9E+04
GOES		0624	0646	0654	S07	E50	10822			30	B 9.3	1.1E-03	1.6E+04	6.8E+04
GOES		0736	0739	0742	S07	E50	10822			6	B 5.7	1.7E-04	1.4E+04	5.7E+04
GOES		0748	0754	0801	S07	E51	10822			13	B 8.6	5.0E-04	1.3E+04	6.0E+04
GOES		0805	0818	0823	S07	E51	10822			18	C 2.3	1.6E-03	1.4E+04	8.2E+04
GOES		0828	0832	0834	S07	E51	10822			6	C 1.3	3.9E-04	1.4E+04	7.5E+04
GOES		1042	1045	1051	S07	E48	10822			9	B 4.1	2.0E-04	1.1E+04	3.8E+04
GOES		1105	1117	1125	S07	E48	10822			20	B 8.1	8.4E-04	1.3E+04	5.5E+04
GOES		1157	1205	1208	S07	E49	10822			11	C 2.3	9.4E-04	1.5E+04	8.8E+04
GOES		1237	1243	1248	S07	E48	10822			11	C 1.0	5.5E-04	1.4E+04	7.3E+04
GOES		1257	1300	1302	S07	E48	10822			5	B 6.1	1.5E-04	1.4E+04	6.6E+04
GOES		1309	1312	1314						5	B 6.8	1.8E-04		
GOES		1335	1338	1340	S07	E47	10822			5	B 6.1	1.5E-04	1.4E+04	6.1E+04
GOES		1519	1523	1525	S07	E47	10822			6	B 4.1	1.2E-04	1.1E+04	4.5E+04
GOES		1528	1532	1535	S07	E47	10822			7	C 2.0	5.1E-04	1.2E+04	6.8E+04
GOES		1537	1540	1542						5	C 2.1	4.8E-04		
GOES		1553	1557	1559	S07	E47	10822			6	C 1.2	2.9E-04	1.2E+04	5.9E+04
GOES		1618	1622	1624	S07	E46	10822			6	B 8.8	1.9E-04	1.1E+04	5.1E+04
GOES		1722	1751	1804	S06	E48	10822			42	M 1.4	1.5E-02	2.7E+04	2.5E+05
GOES		2050	2110	2112	S07	E43	10822			22	C 2.3	9.4E-04	1.9E+04	9.1E+04
GOES		2307	2310	2314	S07	E41	10822			7	B 1.9	7.2E-05	1.0E+04	3.6E+04
GOES		2319	2325	2327	S07	E41	10822			8	B 3.2	1.1E-04	1.0E+04	3.7E+04
GOES	16	0005	0011	0020	S07	E40	10822			15	B 5.1	4.0E-04	1.1E+04	5.0E+04
GOES		0109	0113	0116	S07	E41	10822			7	B 4.5	1.3E-04	1.0E+04	4.1E+04
GOES		0455	0458	0501	S07	E37	10822			6	B 2.7	8.6E-05	1.1E+04	4.0E+04
GOES		0932	0937	0941	S07	E35	10822			9	B 7.2	3.4E-04	1.4E+04	5.3E+04
GOES		1141	1213	1248	S07	E36	10822			67	C 5.9	1.1E-02	1.8E+04	1.3E+05
GOES		1401	1405	1407	S08	E34	10822			6	B 6.3	2.0E-04	1.7E+04	7.6E+04
GOES		2031	2034	2036	S07	E30	10822			5	B 2.1	5.4E-05	8.3E+03	2.9E+04
GOES		2202	2211	2219	S06	E28	10822			17	B 3.4	2.8E-04	8.8E+03	3.2E+04
GOES		2251	2254	2256	S07	E29	10822			5	B 2.0	4.7E-05	7.6E+03	2.6E+04
GOES	17	0016	0022	0031	S07	E29	10822			15	B 2.2	1.7E-04	8.1E+03	2.8E+04
GOES		0131	0143	0214	S07	E27	10822			43	B 5.8	1.2E-03	1.1E+04	4.3E+04
GOES		0311	0314	0316	S07	E27	10822			5	B 6.6	1.3E-04	1.1E+04	4.8E+04
GOES		0324	0327	0334						10	B 2.7	1.5E-04		
GOES		0414	0417	0419	S07	E26	10822			5	B 2.0	4.9E-05	1.0E+04	3.5E+04
GOES		0545	0554	0602	S07	E24	10822			17	B 2.4	2.1E-04	9.4E+03	3.3E+04
GOES		0651	0713	0746	S07	E24	10822			55	B 3.4	9.7E-04	9.5E+03	3.3E+04
GOES		1350	1408	1424						34	B 2.5	4.7E-04		
GOES		2045	2149	2157	S07	E16	10822			72	C 1.8	3.8E-03	1.4E+04	7.3E+04
GOES		2327	2338	2402	S07	E15	10822			35	C 4.1	5.4E-03	1.6E+04	9.9E+04
GOES	18	0024	0034	0046	S07	E16	10822			22	M 1.2	1.0E-02	2.4E+04	2.0E+05
GOES		0631	0649	0736	N10	W90				65	B 8.0	2.5E-03	6.4E+03	3.8E+04
GOES		0739	0744	0752						13	B 7.3	5.1E-04		
GOES		0802	0808	0817	N10	W90				15	C 1.6	1.1E-03	7.6E+03	5.2E+04
GOES		0919	0922	0925	N10	W90				6	B 7.0	2.0E-04	7.2E+03	4.2E+04
GOES		1030	1035	1041	N11	W90				11	B 7.4	3.8E-04	7.5E+03	4.3E+04
GOES		1119	1126	1133	N10	W90				14	B 7.2	5.6E-04	7.3E+03	4.7E+04
GOES		1217	1221	1230	S07	E08	10822			13	B 6.4	4.2E-04	9.1E+03	3.3E+04
GOES		1308	1311	1314	N10	W90				6	C 1.1	3.2E-04	6.6E+03	4.0E+04
GOES		1320	1324	1335	N10	W90				15	B 8.0	6.4E-04	6.6E+03	4.1E+04
GOES		1442	1453	1501	N10	W90				19	B 9.8	8.5E-04	7.7E+03	5.0E+04
GOES		1515	1527	1534	S07	E06	10822			19	C 1.2	1.1E-03	1.1E+04	4.9E+04
GOES		1902	1906	1911						9	B 6.4	3.2E-04		
GOES		2036	2039	2043	N11	W90				7	B 8.7	2.9E-04	8.1E+03	3.9E+04
GOES		2349	2357	2403	S07	E02	10822			14	C 5.8	2.6E-03	1.6E+04	1.1E+05

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NOVEMBER 2005

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Xray	Total Integrated Flux(1)	Total Area(2)	Total(3) Intensity
GOES	19	0409	0416	0424	S07	W02	10822			15	B 6.0	4.0E-04	7.0E+03	1.9E+04
GOES		0927	0947	1008	S07	W05	10822			41	B 8.2	1.6E-03	1.1E+04	4.4E+04
GOES		2010	2019	2043	S07	W10	10822			33	C 1.5	2.0E-03	1.0E+04	4.7E+04
GOES	20	0009	0013	0016	S07	W13	10822			7	B 3.4	1.1E-04	7.9E+03	2.6E+04
GOES		0723	0736	0749	S09	W17	10822			26	C 2.5	2.8E-03	1.8E+04	1.0E+05
GOES		1059	1104	1108						9	B 1.9	9.2E-05		
GOES		1506	1520	1530	S08	W22	10822			24	C 1.5	1.5E-03	1.1E+04	5.5E+04
GOES		2151	2155	2201	S07	W26	10822			10	B 2.8	1.5E-04	7.0E+03	2.2E+04
GOES		2347	2355	2401	S06	W29	10822			14	B 7.5	4.3E-04	6.1E+03	3.1E+04
GOES	21	0024	0030	0038	S13	E69	10824			14	B 4.6	3.1E-04	5.7E+03	2.5E+04
GOES		0334	0338	0340	S06	W30	10822			6	B 2.1	6.5E-05	5.5E+03	1.5E+04
GOES		0816	0847	0859	S06	W33	10822			43	B 2.6	6.0E-04	6.7E+03	1.9E+04
GOES		0945	0956	1002	S15	E66	10824			17	B 8.2	6.0E-04	6.8E+03	3.8E+04
GOES		1159	1204	1207	S06	W35	10822			8	B 4.1	1.4E-04	6.2E+03	2.3E+04
GOES		1243	1250	1254	S14	E64	10824			11	B 4.0	1.9E-04	4.7E+03	2.0E+04
GOES		1602	1605	1609	S13	E62	10824			7	B 1.6	6.1E-05	3.6E+03	1.2E+04
GOES	22	0112	0119	0126	S14	E57	10824			14	B 2.9	1.9E-04	4.6E+03	1.9E+04
GOES		0200	0213	0222	S14	E57	10824			22	B 3.6	3.9E-04	5.3E+03	2.6E+04
GOES		0414	0417	0423	S13	E55	10824			9	B 1.4	6.9E-05	4.0E+03	1.3E+04
GOES		1509	1516	1519	S08	W50	10822			10	B 7.7	2.2E-04	7.6E+03	2.7E+04
GOES		1901	1906	1911	S13	E48	10824			10	B 1.5	7.5E-05	3.4E+03	1.1E+04
GOES		2145	2150	2155	S13	E47	10824			10	B 1.5	7.6E-05	3.4E+03	1.1E+04
GOES	23	0320	0328	0338	S07	W58	10822			18	B 3.9	3.1E-04	7.3E+03	2.3E+04
GOES		0645	0650	0657	S07	W60	10822			12	B 1.9	1.1E-04	5.7E+03	1.6E+04
GOES		1607	1611	1614	S09	W66	10822			7	B 1.9	6.2E-05	5.3E+03	1.7E+04
GOES		1851	1858	1904	S07	W68	10822			13	B 1.3	8.9E-05	4.8E+03	1.3E+04
GOES		2049	2052	2054						5	B 1.2	3.0E-05		
GOES	24	0346	0356	0404	S08	W79	10822			18	B 4.9	3.4E-04	8.3E+03	3.2E+04
GOES		0547	0550	0552	S08	W77	10822			5	B 1.3	3.5E-05	4.8E+03	1.4E+04
GOES		1111	1118	1124	S08	W84	10822			13	B 1.9	1.3E-04	5.0E+03	1.3E+04
GOES		1606	1611	1621	S08	W90	10822			15	B 1.5	1.2E-04	5.7E+03	1.9E+04
GOES	25	0406	0410	0412	S07	W90	10822			6	B 1.9	4.9E-05	5.0E+03	1.8E+04
GOES		1354	1407	1423						29	B 1.6	2.5E-04		
GOES		1600	1604	1606	S07	W90	10822			6	B 1.6	5.0E-05	3.9E+03	1.1E+04
GOES		1723	1727	1729	S07	W90	10822			6	B 1.1	3.5E-05	4.0E+03	1.1E+04
GOES		2351	2355	0000	S07	W90				9	B 1.8	7.5E-05	3.5E+03	1.0E+04
GOES	26	0331	0409	0423			10822			52	C 1.0	2.2E-03		
GOES		0631	0705	0749			10824			78	B 8.9	2.8E-03		
GOES		1653	1658	1701	S14	W03	10824			8	B 1.7	7.1E-05	2.3E+03	6.4E+03
GOES	28	0823	0944	1033						130	B 2.4	1.6E-03		
GOES	29	1638	1709	1733	S14	W45	10824			55	C 4.0	8.2E-03	1.2E+04	1.0E+05
GOES		2322	2327	2335	S03	E47	10826			13	B 2.6	1.8E-04	3.5E+03	1.3E+04
GOES	30	0154	0157	0204						10	B 1.3	7.4E-05		
GOES		0610	0616	0630	S03	E42	10826			20	B 9.3	8.8E-04	8.0E+03	4.0E+04
GOES		1019	1026	1047	S04	E38	10826			28	B 8.8	1.0E-03	6.8E+03	3.3E+04
GOES		1104	1108	1111	S03	E39	10826			7	B 7.4	2.7E-04	8.1E+03	4.4E+04
GOES		1732	1739	1745	S03	E34	10826			13	B 4.0	2.5E-04	7.4E+03	3.1E+04
GOES		1746	1752	1755	S03	E35	10826			9	M 1.4	5.0E-03	1.9E+04	1.9E+05

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) data since January, 2004. 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.

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

NOVEMBER 2005

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	8800	SGMR	8 S	1449.0	1449.0	2.0	72.0			QL=4 ST=2 TYP=3
14	2695	LEAR	8 S	0359.0	0359.0	1.0	72.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0359.0	0359.0	1.0	120.0			QL=4 ST=2 TYP=3
	8800	LEAR	49 GB	0419.0	0419.0	3.0	880.0			QL=4 ST=2 TYP=6
	2695	LEAR	8 S	0419.0	0420.0	2.0	180.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1419.0	1420.0	4.0	240.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1420.0	1420.0	1.0	170.0			QL=4 ST=1 TYP=3
	2695	SVTO	4 S/F	1420.0	1422.0	4.0	85.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1422.0	1422.0	1.0	90.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1422.0	1422.0	U	64.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2157.0	2158.0	1.0	100.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2158.0	2158.0	U	64.0			QL=4 ST=2 TYP=3

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

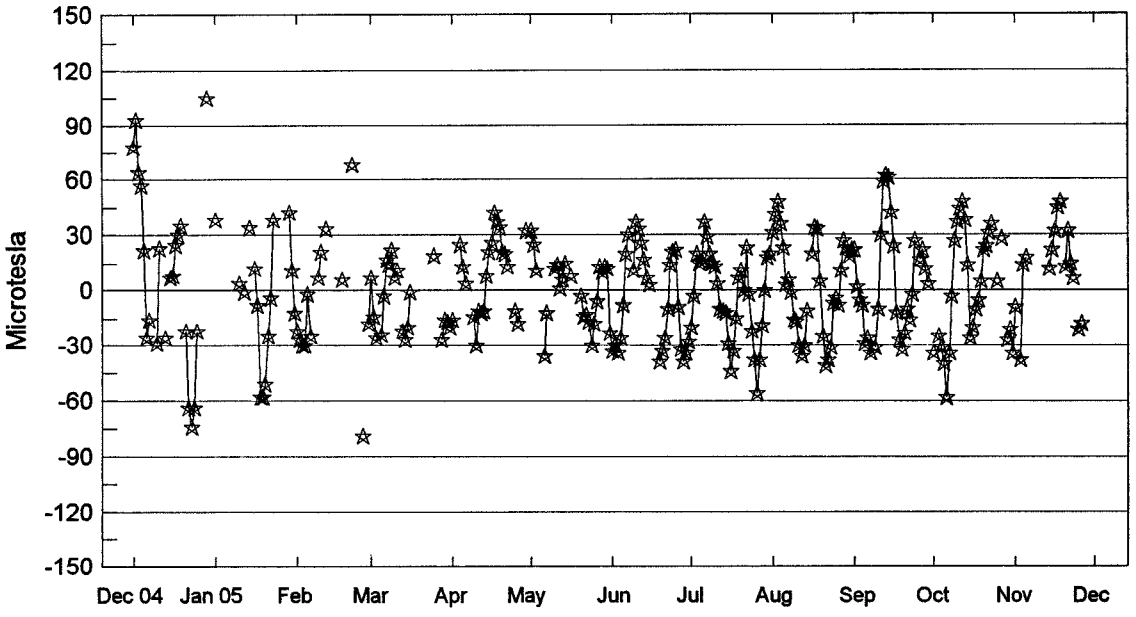
Explanation of Type Code:

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

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

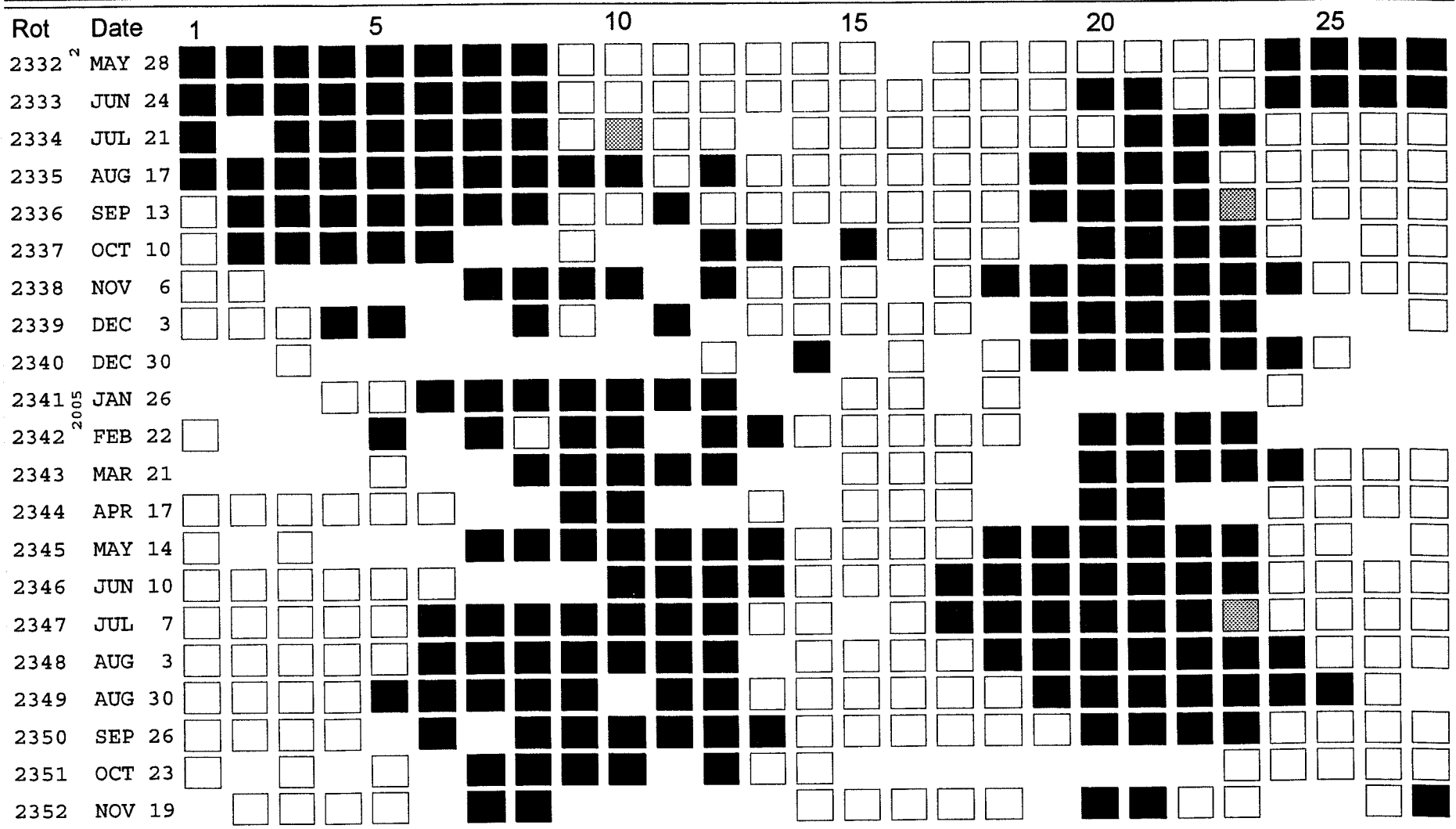
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

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



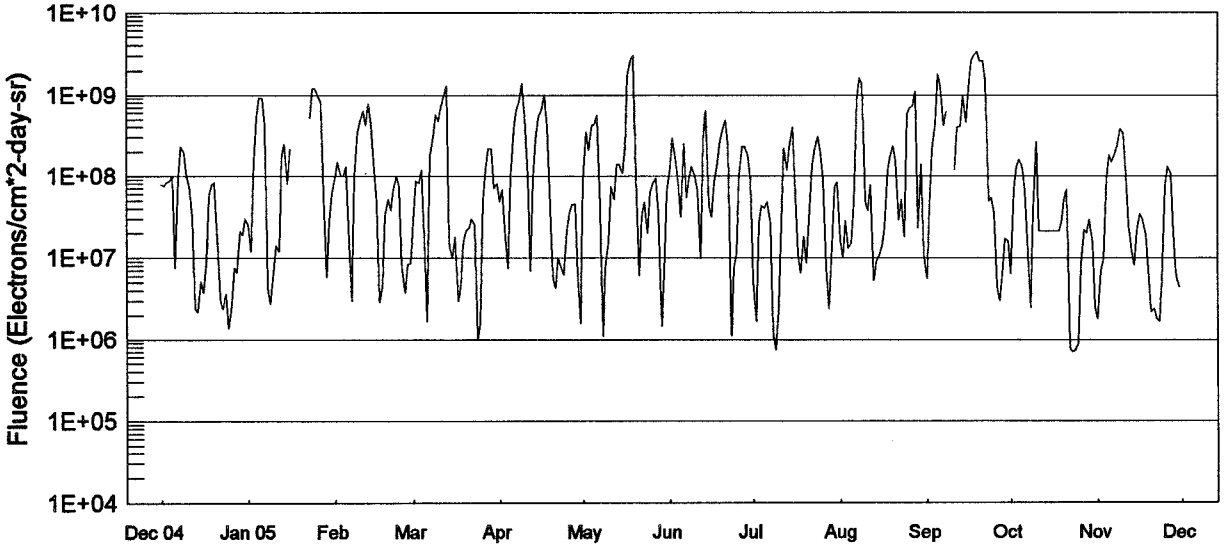
Day	Dec 04	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	78	38	-22	7	-16	32	-33	-20	31	22	-34	-9
2	93	---	-27	-14	---	25	-30	-3	41	2	---	---
3	64	---	-30	-26	---	11	-34	20	48	-5	-25	-38
4	57	---	-30	---	25	---	-26	15	36	-8	-31	14
5	22	---	-2	-24	13	---	-8	16	23	-29	-40	18
6	-26	---	-25	-3	4	-36	20	37	3	-26	-58	---
7	-16	---	---	17	---	-12	30	29	6	-34	-34	---
8	---	---	---	14	---	---	---	20	-1	---	-3	---
9	---	---	7	22	-14	---	11	15	-16	-31	27	---
10	-29	4	21	7	-30	12	37	13	-17	-10	37	---
11	23	---	---	11	-11	14	33	4	-30	30	44	---
12	---	-1	33	---	-12	1	26	-10	-36	59	48	---
13	-26	---	---	-22	-11	6	17	-11	-30	62	38	---
14	---	34	---	-27	8	15	7	-12	-11	61	14	12
15	7	---	---	-20	21	---	3	-29	---	42	-26	22
16	8	12	---	-1	26	8	---	-44	20	24	-20	32
17	25	-8	---	---	42	---	---	-33	34	-12	-10	45
18	30	-58	6	---	37	---	---	-15	33	-27	-5	48
19	35	-58	---	---	34	---	-39	7	5	-32	5	---
20	---	-51	---	---	21	-3	-33	11	-25	-23	22	13
21	-22	-25	---	---	20	-14	-26	---	-41	-10	24	32
22	-64	-4	68	---	13	-13	-10	23	-38	-16	31	15
23	-74	38	---	---	---	-17	14	-2	-31	-2	36	7
24	-64	---	---	---	---	-30	21	-22	-7	27	---	---
25	-22	---	---	19	-11	-18	22	-38	-4	---	5	-21
26	---	---	-79	---	-18	-6	-9	-56	-8	17	---	-18
27	---	---	---	---	---	13	-32	-38	11	22	28	---
28	---	---	-18	-27	---	10	-39	-19	27	12	---	---
29	105	42		-16	32	13	-34	0	23	4	-27	---
30	---	11		-17	---	12	-28	18	19	---	-21	---
31	---	-12		-20		-23		20	22		-34	

STANFORD MEAN SOLAR MAGNETIC FIELD



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

GOES Daily Electron Fluence
Dec 2004 - Nov 2005



Day	Dec 04	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	7.8E+07	2.5E+07	9.5E+07	2.9E+07	4.9E+07	8.8E+07	1.2E+08	5.2E+06	1.6E+07	5.7E+06	6.5E+06	1.8E+06
2	7.5E+07	1.2E+07	1.5E+08	8.6E+07	6.7E+07	3.5E+08	2.9E+08	1.7E+06	1.0E+07	4.3E+07	6.7E+07	7.1E+06
3	8.4E+07	1.6E+08	1.0E+08	8.2E+07	1.7E+07	2.1E+08	1.6E+08	2.6E+07	2.8E+07	2.1E+08	1.3E+08	9.4E+06
4	8.7E+07	5.3E+08	1.0E+08	1.2E+08	7.6E+06	4.2E+08	8.4E+07	4.3E+07	1.3E+07	4.3E+08	1.6E+08	9.3E+07
5	1.0E+08	9.2E+08	1.3E+08	1.7E+07	9.8E+07	4.3E+08	3.2E+07	4.1E+07	1.5E+07	1.8E+09	1.3E+08	1.8E+08
6	7.5E+06	9.1E+08	1.5E+07	1.7E+06	3.6E+08	5.5E+08	2.5E+08	4.8E+07	4.6E+07	1.3E+09	6.8E+07	1.5E+08
7	9.3E+07	4.1E+08	3.0E+06	1.8E+08	6.4E+08	4.1E+07	5.5E+07	2.8E+07	8.8E+08	4.2E+08	1.6E+07	1.8E+08
8	2.3E+08	4.3E+06	9.8E+07	2.6E+08	8.6E+08	1.1E+06	9.5E+07	1.2E+06	1.6E+09	6.3E+08	2.5E+06	2.4E+08
9	2.0E+08	2.8E+06	3.4E+08	5.6E+08	1.4E+09	7.7E+06	1.3E+08	7.4E+05	1.4E+09	-999	3.8E+07	3.8E+08
10	1.0E+08	6.5E+06	4.7E+08	4.8E+08	5.5E+08	1.6E+07	1.0E+08	2.7E+06	4.9E+07	-999	2.6E+08	3.4E+08
11	7.6E+07	1.4E+07	6.3E+08	6.9E+08	1.0E+08	7.3E+07	6.9E+07	2.6E+07	3.8E+07	1.2E+08	2.1E+07	1.1E+08
12	3.2E+07	1.2E+07	4.2E+08	1.0E+09	7.0E+06	5.3E+07	9.9E+06	2.2E+08	7.8E+07	4.0E+08	2.1E+07	2.6E+07
13	2.4E+06	1.8E+08	7.8E+08	1.3E+09	9.1E+07	1.4E+08	2.8E+08	1.2E+08	5.4E+06	4.1E+08	2.1E+07	1.2E+07
14	2.2E+06	2.5E+08	4.5E+08	1.4E+07	2.7E+08	1.4E+08	6.4E+08	2.4E+08	9.0E+06	9.8E+08	2.1E+07	8.3E+06
15	5.2E+06	8.1E+07	1.2E+08	1.0E+07	5.5E+08	1.1E+08	4.5E+07	4.0E+08	1.1E+07	4.6E+08	2.1E+07	2.1E+07
16	3.8E+06	2.2E+08	4.7E+07	1.8E+07	6.2E+08	2.2E+08	3.2E+07	5.9E+07	1.4E+07	1.2E+09	2.1E+07	3.4E+07
17	9.5E+06	-999	2.9E+06	3.0E+06	1.0E+09	1.8E+09	8.0E+07	1.1E+07	2.4E+07	2.6E+09	2.1E+07	2.9E+07
18	5.7E+07	-999	4.7E+06	4.6E+06	4.2E+08	2.7E+09	1.4E+08	6.6E+06	1.2E+08	3.1E+09	2.1E+07	1.9E+07
19	7.8E+07	-999	3.4E+07	1.6E+07	6.8E+07	3.0E+09	2.6E+08	1.8E+07	1.8E+08	3.3E+09	2.7E+07	7.1E+06
20	8.2E+07	-999	5.2E+07	2.2E+07	5.8E+06	1.0E+08	3.9E+08	8.7E+06	2.3E+08	2.6E+09	5.4E+07	2.2E+06
21	1.6E+07	-999	3.9E+07	2.3E+07	4.3E+06	6.2E+06	4.8E+08	3.9E+07	1.6E+08	2.6E+09	6.8E+07	2.4E+06
22	3.2E+06	-999	6.9E+07	3.0E+07	1.0E+07	3.2E+07	2.4E+08	1.3E+08	2.9E+07	1.5E+09	7.6E+05	1.8E+06
23	2.4E+06	5.2E+08	9.9E+07	2.5E+07	7.6E+06	4.8E+07	1.1E+06	2.1E+08	5.2E+07	5.0E+07	7.1E+05	1.7E+06
24	3.6E+06	1.2E+09	7.3E+07	1.0E+06	6.3E+06	2.0E+07	7.7E+06	3.0E+08	1.8E+07	5.5E+07	7.3E+05	5.4E+06
25	1.4E+06	1.2E+09	7.5E+06	1.6E+06	2.2E+07	6.3E+07	1.1E+07	2.0E+08	5.7E+08	3.7E+07	9.0E+05	7.3E+07
26	2.7E+06	9.6E+08	3.8E+06	5.2E+07	3.6E+07	8.3E+07	9.7E+07	9.2E+07	6.8E+08	4.3E+06	8.0E+06	1.3E+08
27	7.6E+06	8.2E+08	8.3E+06	1.2E+08	4.5E+07	9.3E+07	2.3E+08	7.6E+06	7.3E+08	3.0E+06	2.2E+07	1.1E+08
28	6.6E+06	5.9E+07	8.7E+06	2.2E+08	4.6E+07	3.6E+07	2.3E+08	2.4E+06	1.1E+09	6.5E+06	2.0E+07	1.9E+07
29	2.1E+07	5.9E+06		2.2E+08	5.8E+06	1.5E+06	1.8E+08	1.4E+07	2.3E+07	1.7E+07	2.9E+07	6.2E+06
30	1.9E+07	2.8E+07		7.1E+07	1.6E+06	6.8E+06	9.1E+07	7.2E+07	1.4E+08	1.6E+07	1.6E+07	4.4E+06
31	3.0E+07	6.0E+07		8.0E+07		6.2E+07		8.4E+07	1.1E+07		2.5E+06	

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

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

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CONTENTS

Prompt Reports — Number 736 Part I

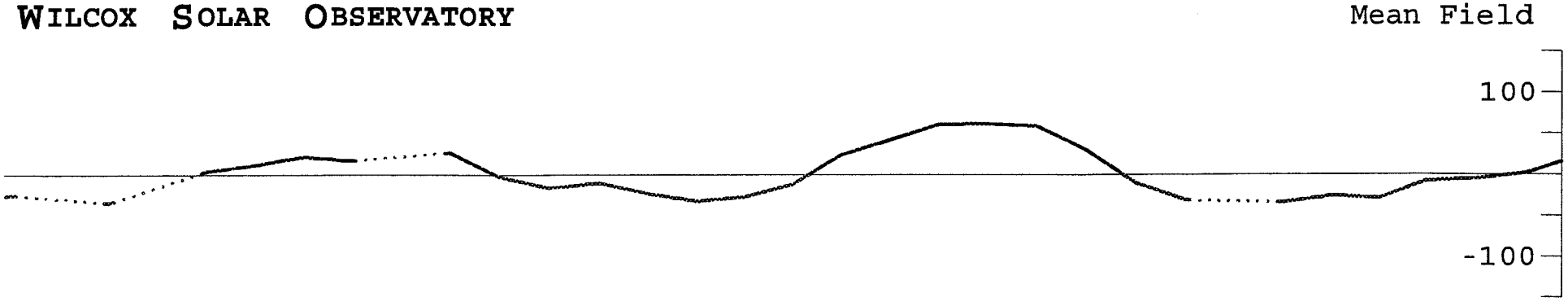
DATA FOR OCTOBER 2005

SOLAR MAGNETIC FIELD SYNOPTIC CHART

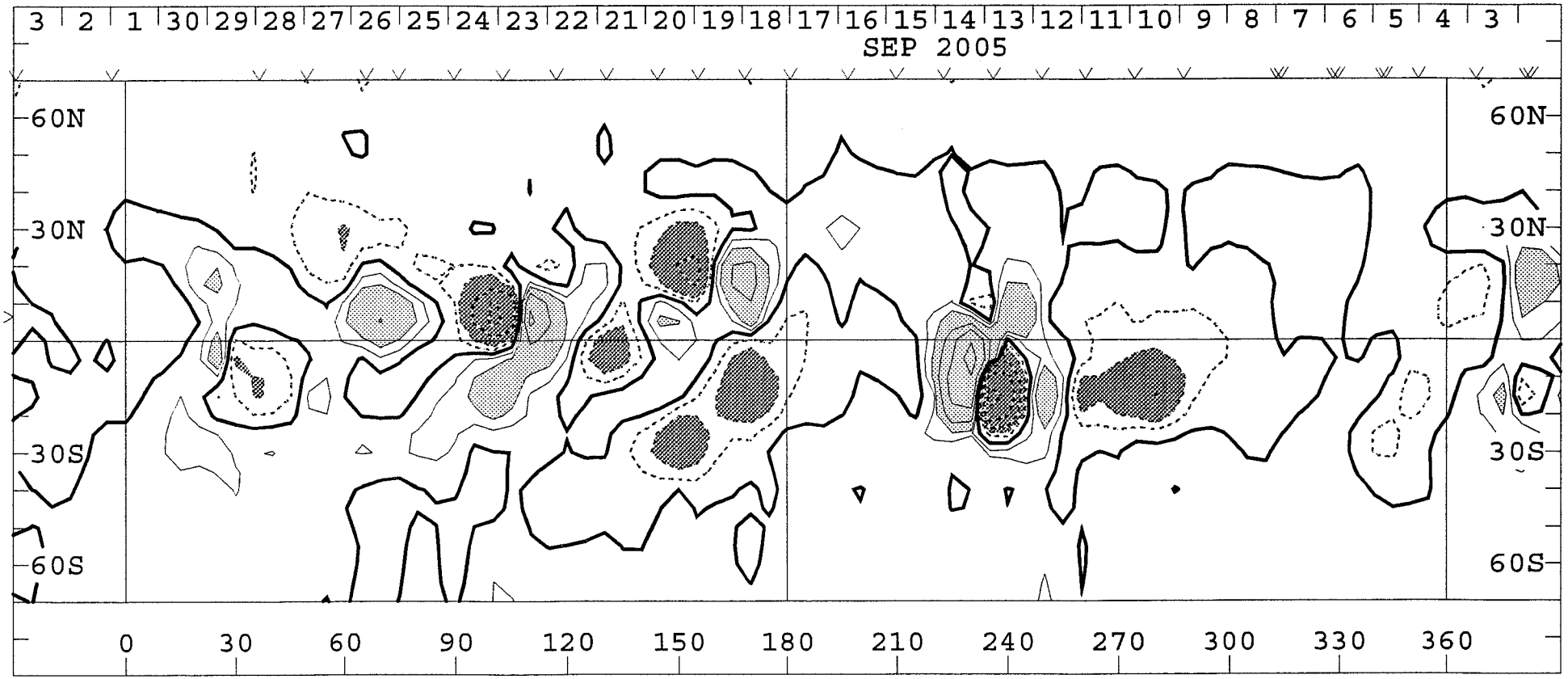
CARRINGTON ROTATION NUMBER 2034

(4 September to 1 October 2005)

WILCOX SOLAR OBSERVATORY



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



Heliographic Longitude

SOLAR MAGNETIC FIELD SYNOPTIC CHART

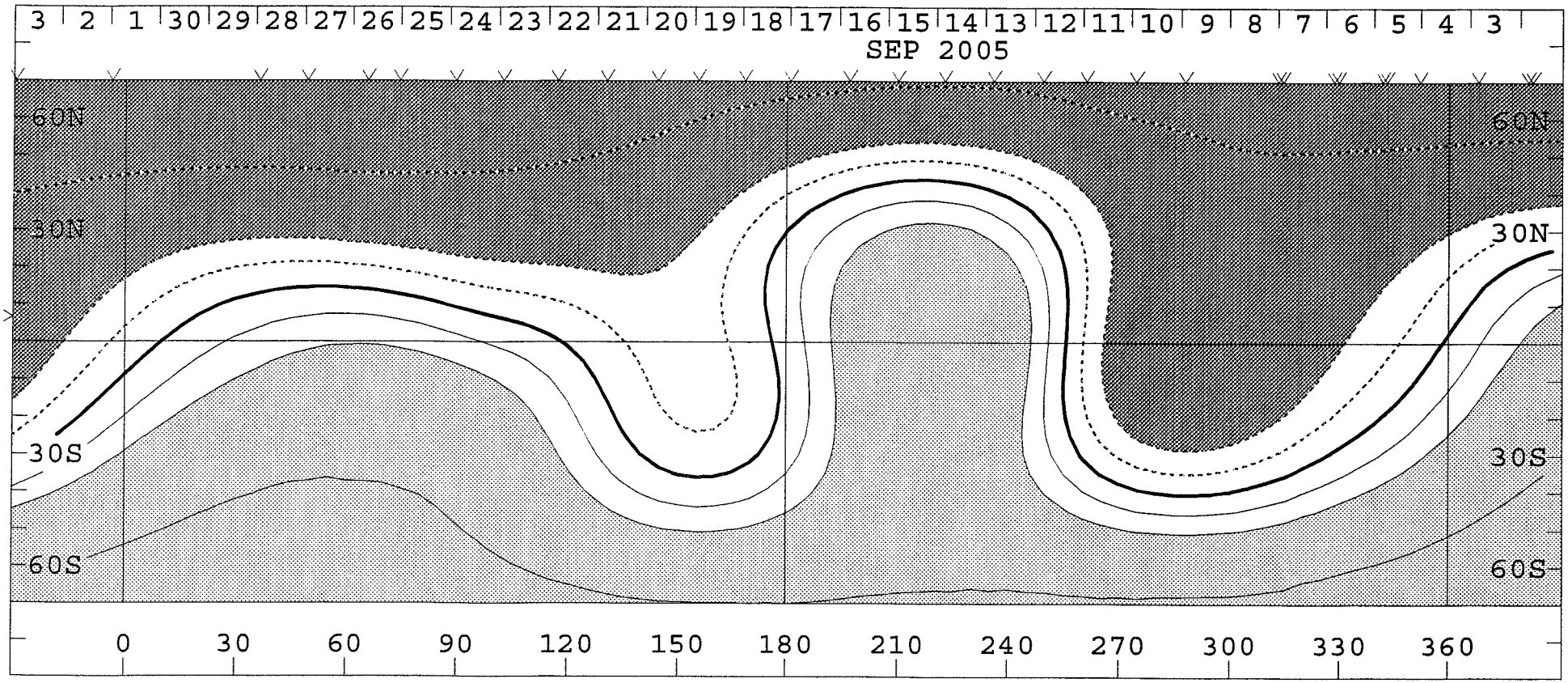
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 2034

(4 September to 1 October 2005)

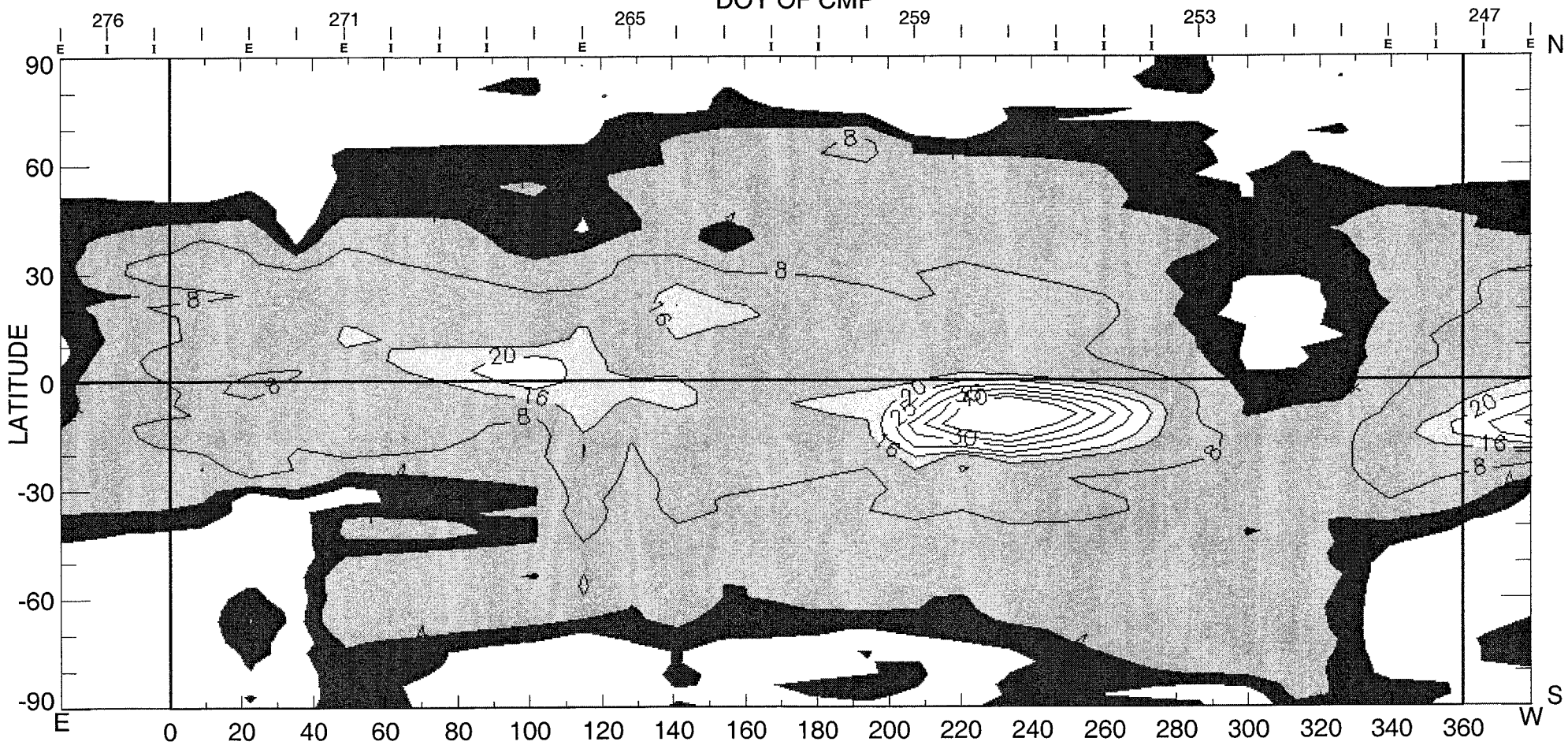
Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla



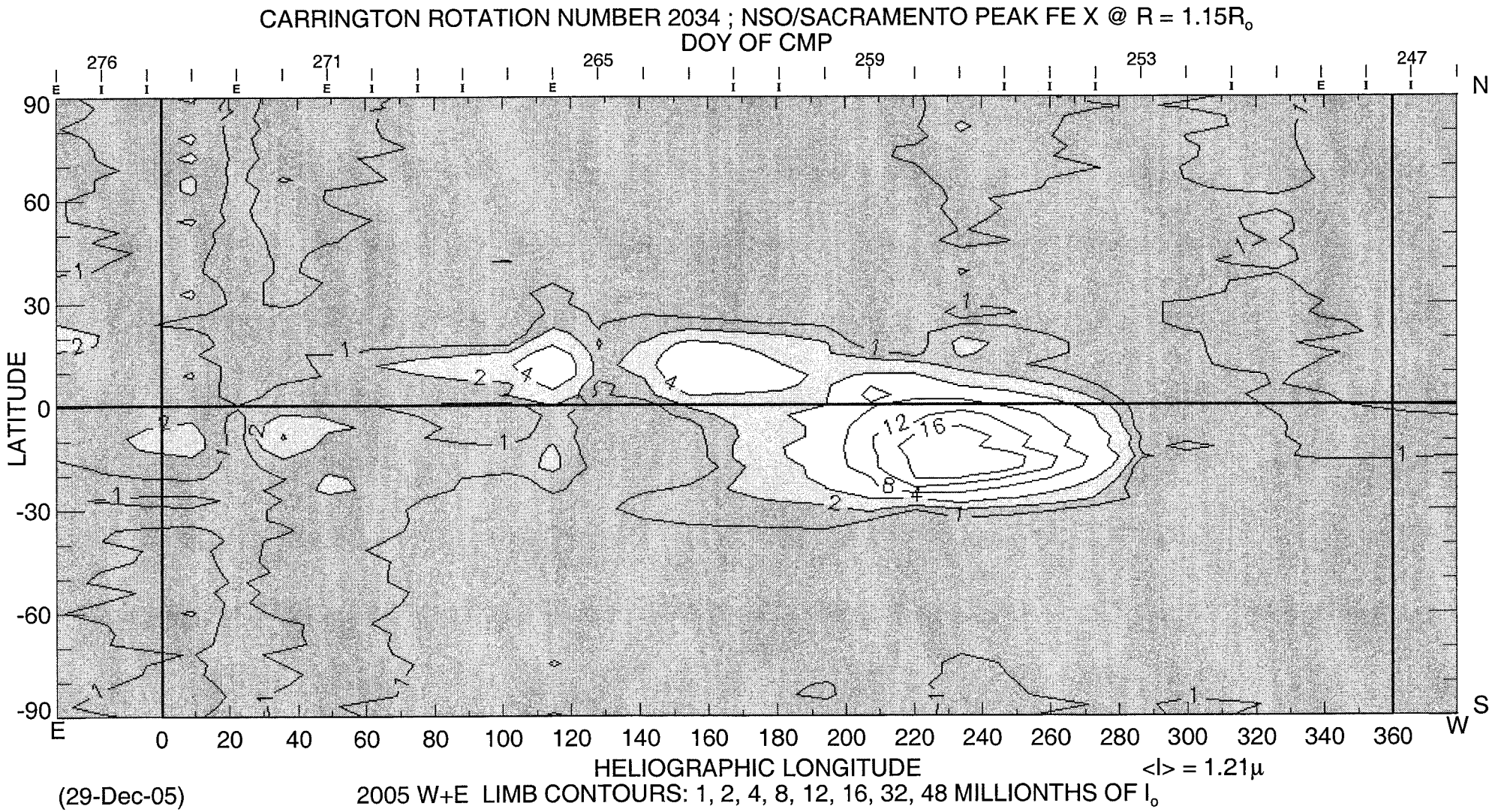
37
Oct 05

CARRINGTON ROTATION NUMBER 2034 ; NSO/SACRAMENTO PEAK FE XIV @ R = 1.15R_o

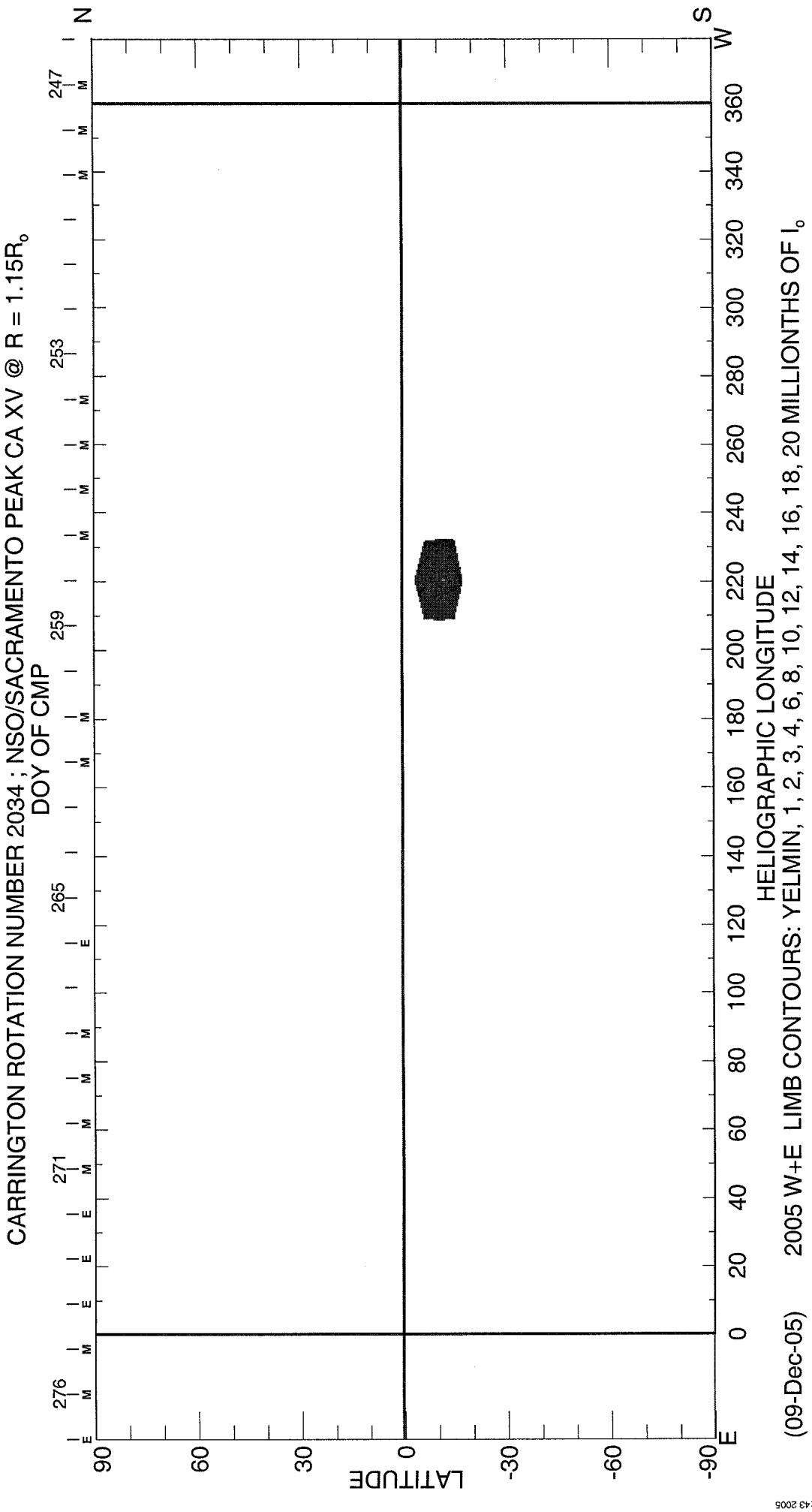


(09-Dec-05)

2005 W+E LIMB CONTOURS: 2, 4, 8, 16, 20, 25, 30, 35, 40, 100, 120 MILLIONTHS OF I_o
CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK



tex Thu Dec 29 08:33:47 2005

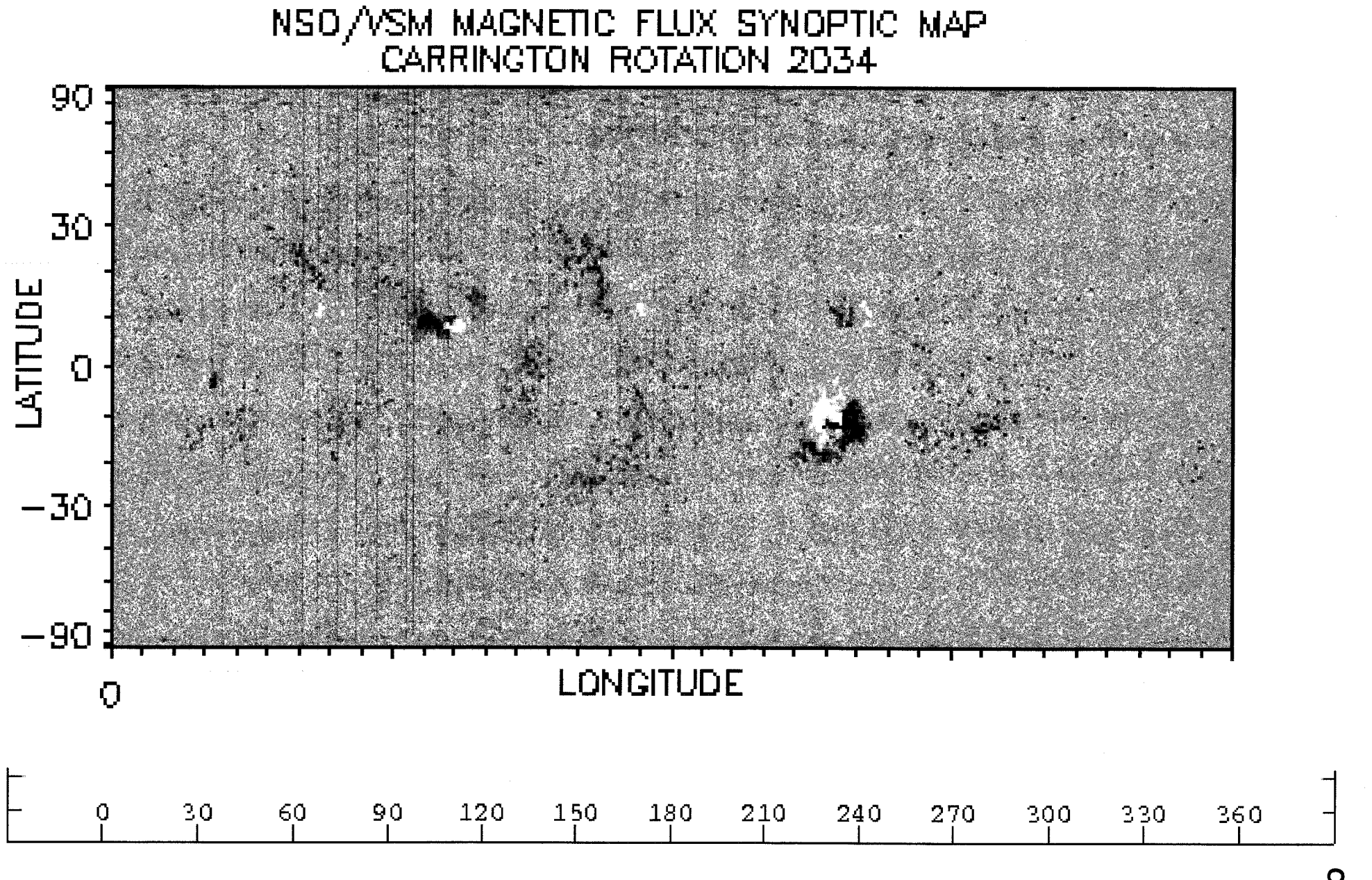


SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 2034

(4 September to 1 October 2005)

National Solar Observatory/Kitt Peak



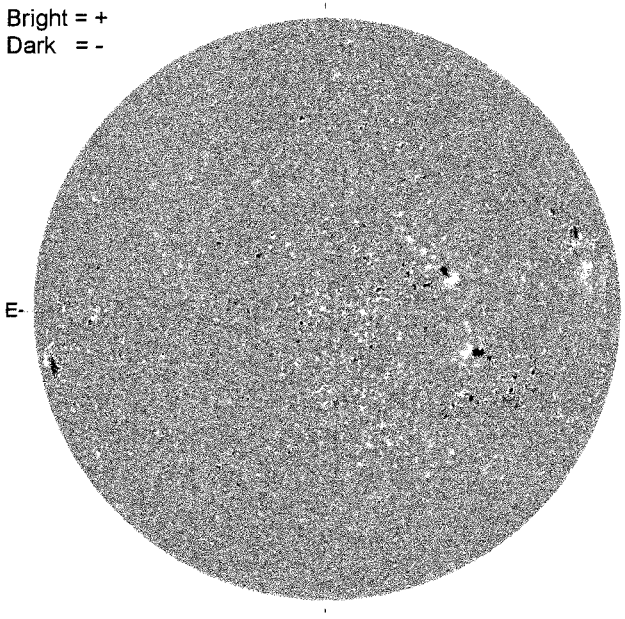
41
Oct 05

OCTOBER 1, 2005 (P= 25.98, Bo = 6.72, Lo = 9.09)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

Bright = +
Dark = -



1709 UT

STANFORD MAGNETOGRAM

N

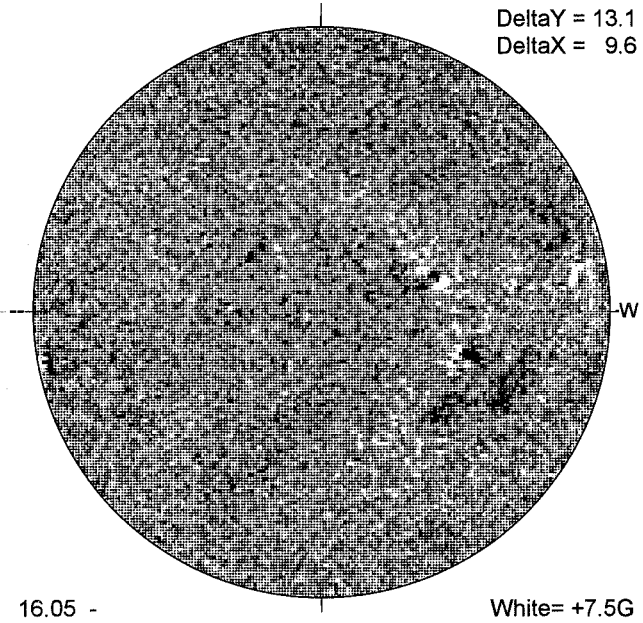
Solid = +
Dashed = -

2305 UT

MT. WILSON MAGNETOGRAM

N

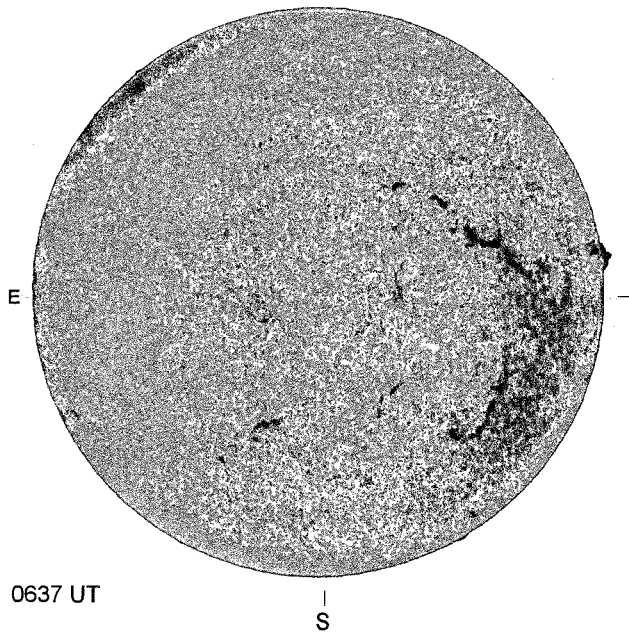
DeltaY = 13.1
DeltaX = 9.6



16.05 -
16.99 UT

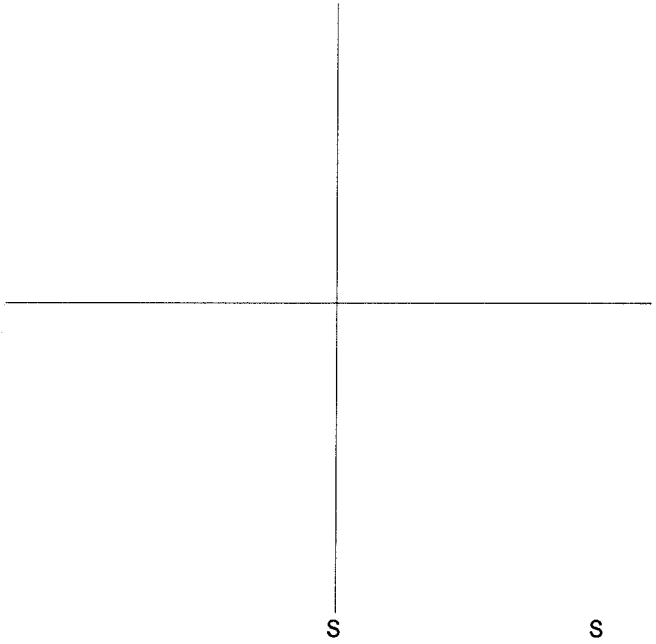
White= +7.5G
Black = -7.5G

KANZELHOHE H-ALPHA

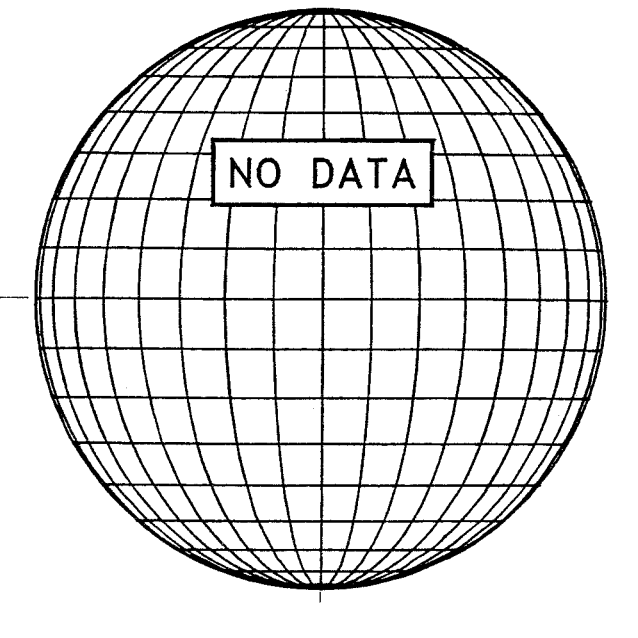


0637 UT

SAN VITO SUNSPOTS



LOMNICKY PEAK CORONA (1.04 Radii)----

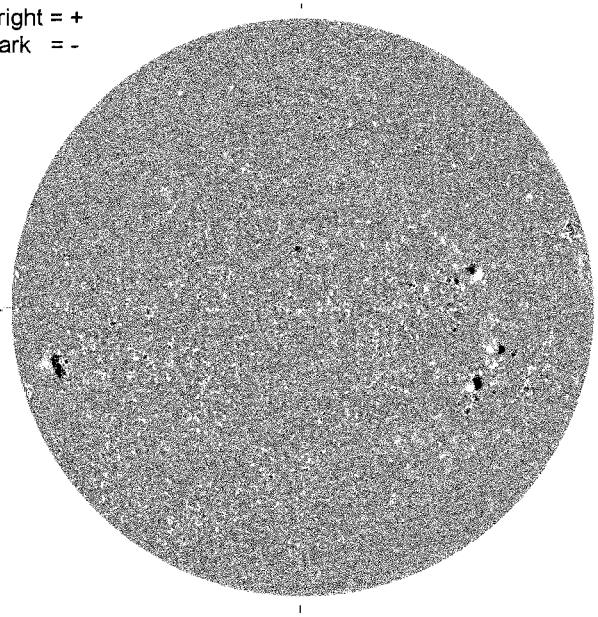


OCTOBER 2, 2005 (P= 26.04, Bo = 6.67, Lo = 355.89)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

Bright = +
Dark = -



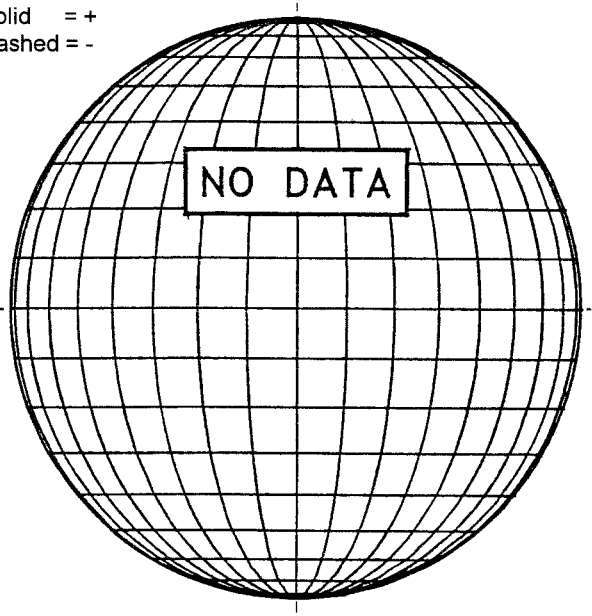
E-

1523 UT

STANFORD MAGNETOGRAM

N

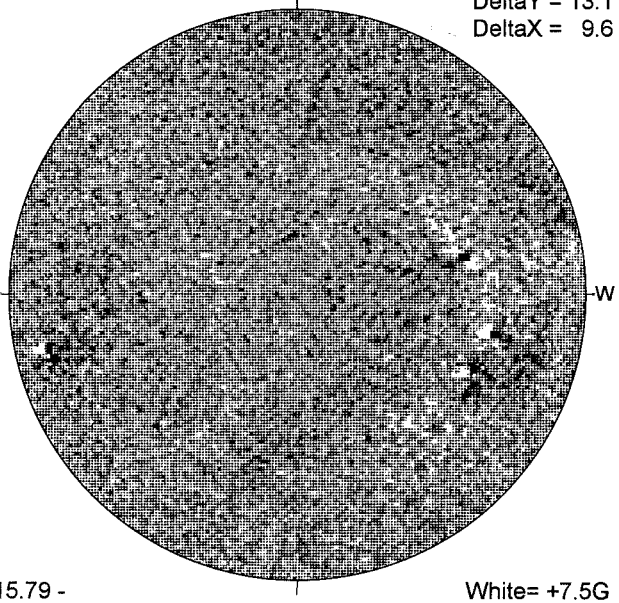
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

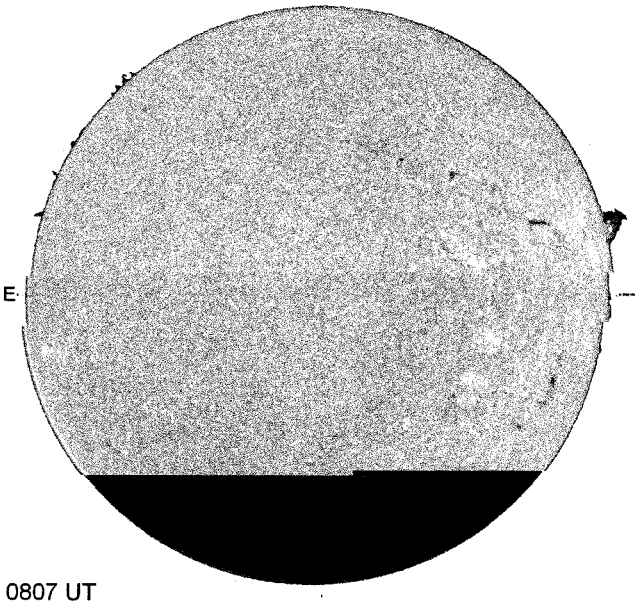


-W

15.79 -
16.73 UT

White= +7.5G
Black = -7.5G

CATANIA H-ALPHA



E-

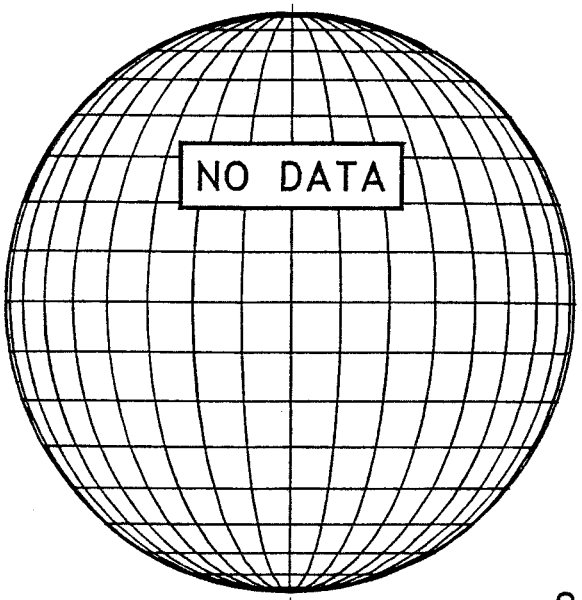
0807 UT

S

HOLLOMAN SUNSPOTS

S

LOMNICKY PEAK CORONA (1.04 Radii)----

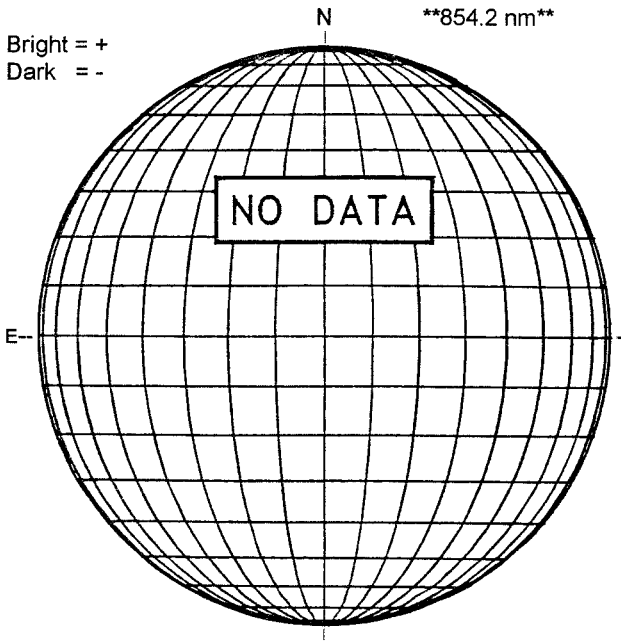


S

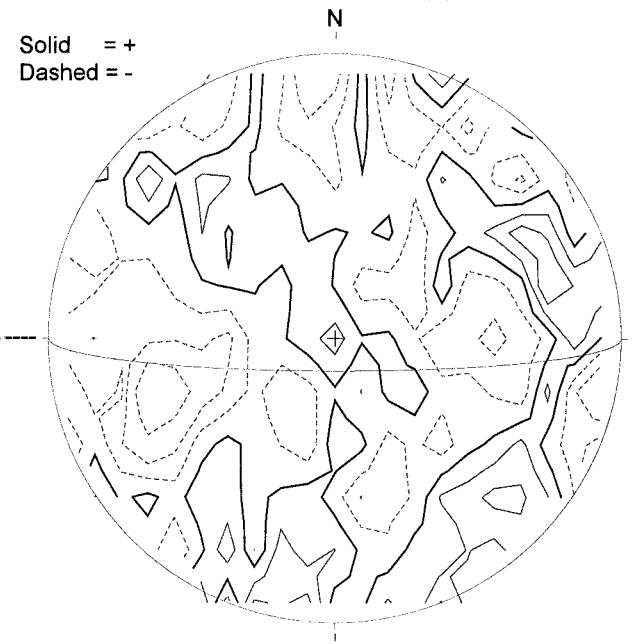
43
Oct 05

OCTOBER 3, 2005 (P= 26.10, Bo = 6.62, Lo = 342.70)

KITT PEAK MAGNETOGRAM--SOLIS

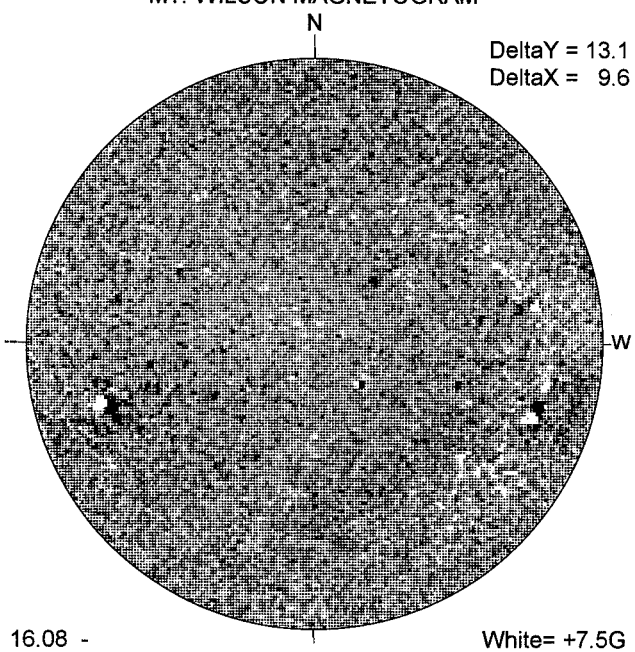


STANFORD MAGNETOGRAM



2213 UT

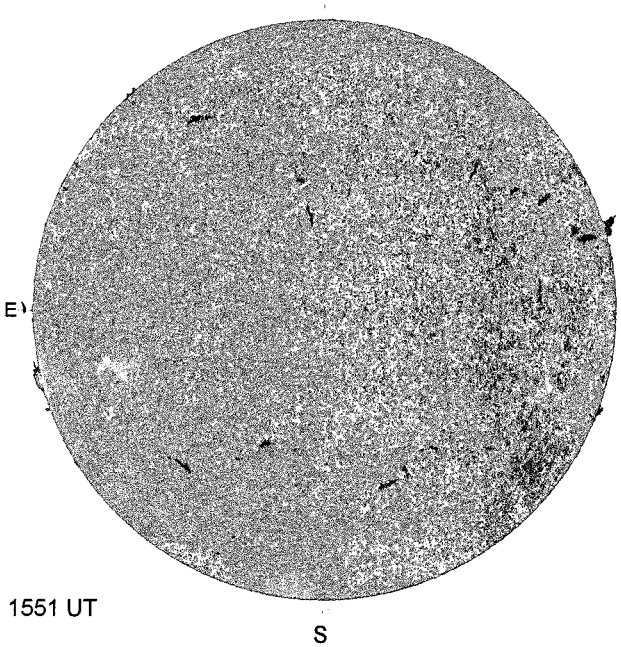
MT. WILSON MAGNETOGRAM



16.08 -
17.02 UT

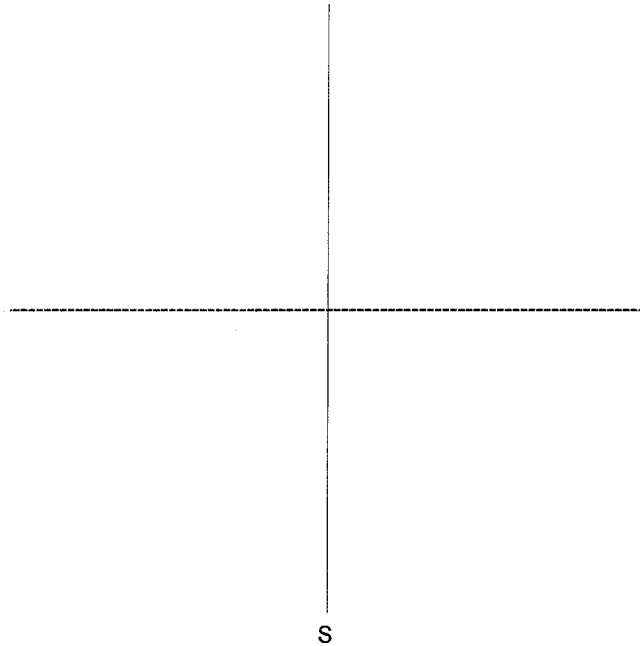
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

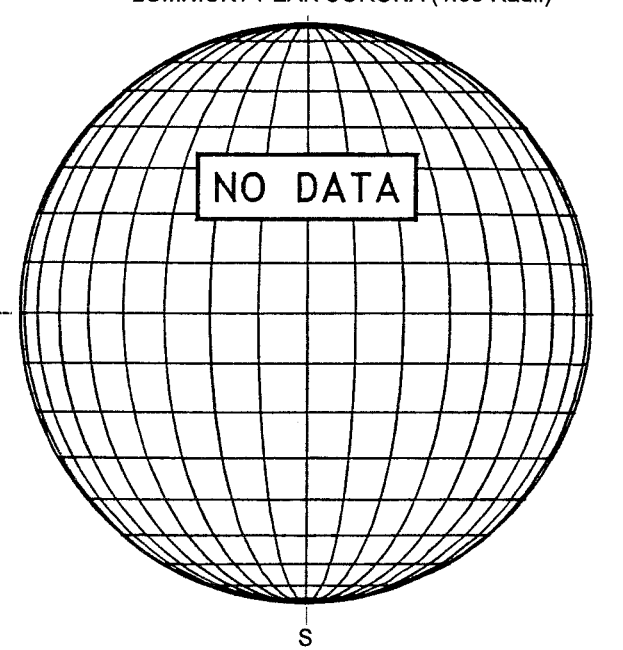


1551 UT

HOLLOMAN SUNSPOTS

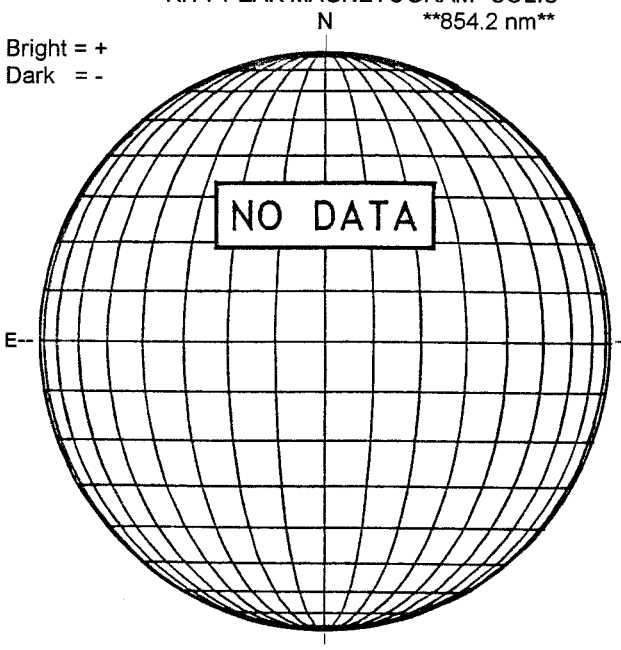


LOMNICKY PEAK CORONA (1.05 Radii)----

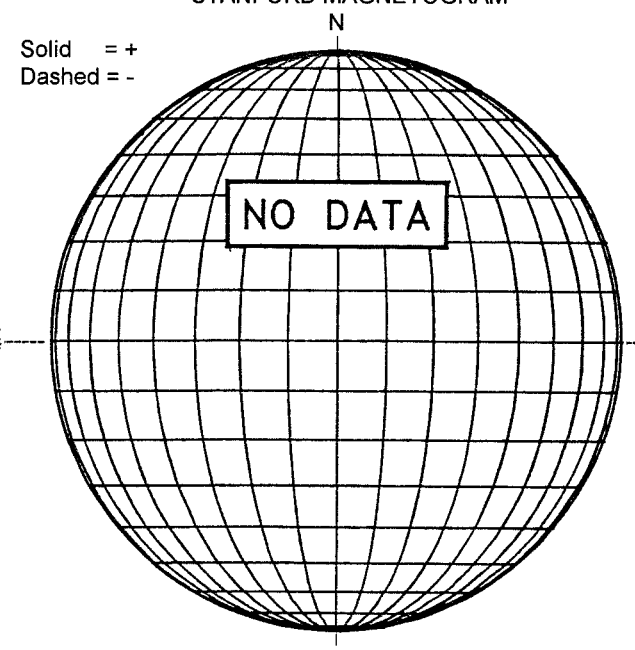


OCTOBER 4, 2005 (P= 26.15, Bo = 6.57, Lo = 329.50)

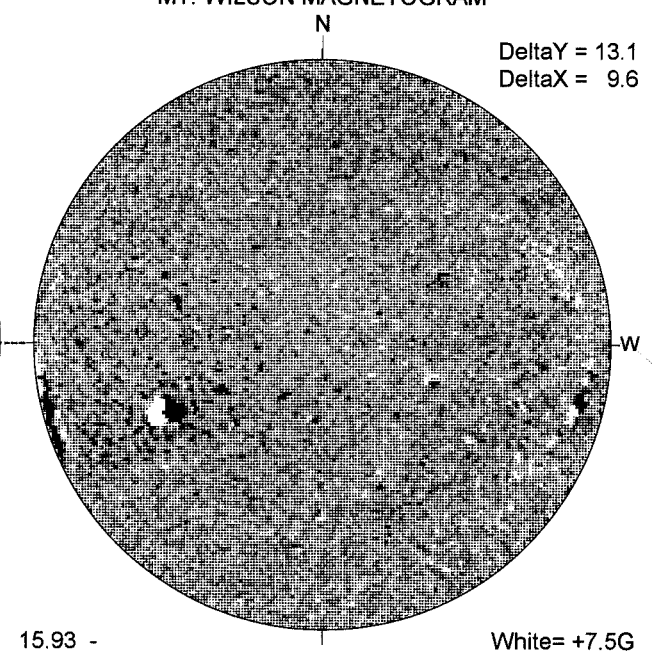
KITT PEAK MAGNETOGRAM--SOLIS



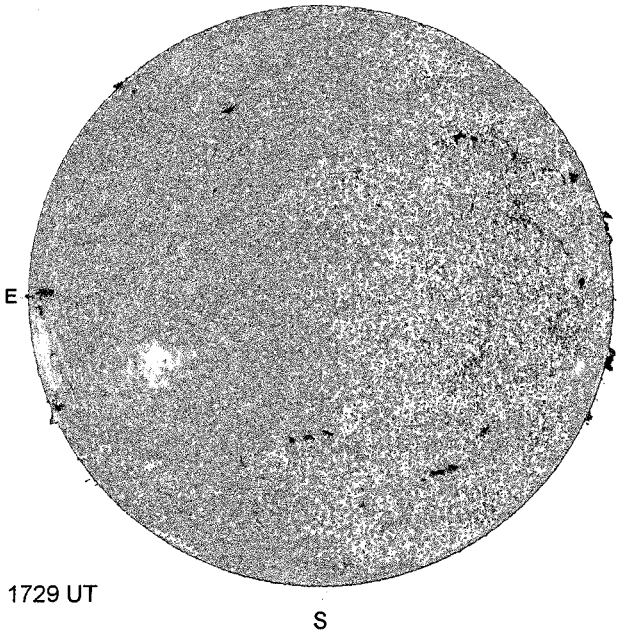
STANFORD MAGNETOGRAM



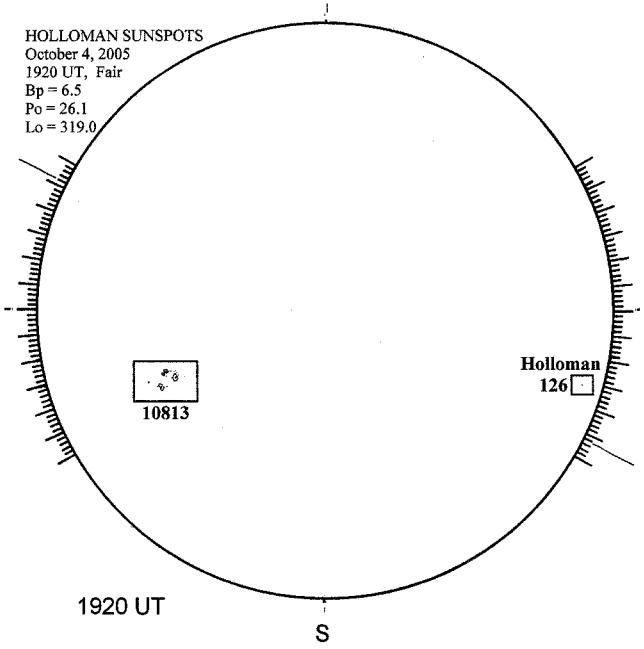
MT. WILSON MAGNETOGRAM



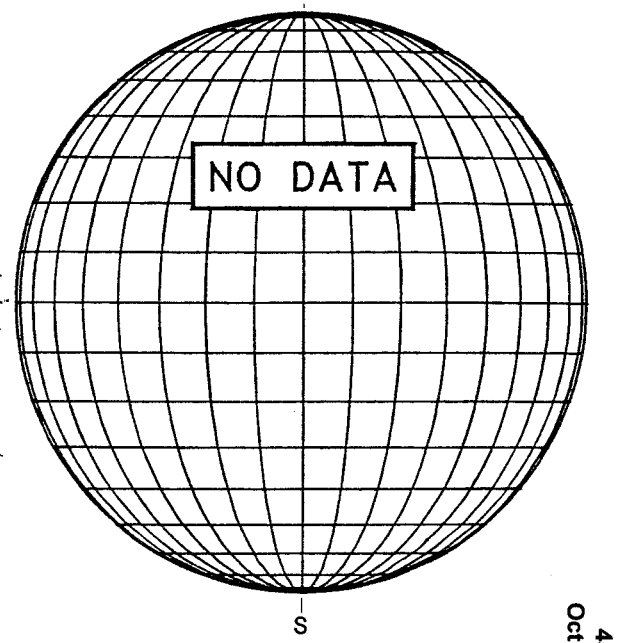
BIG BEAR H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)----



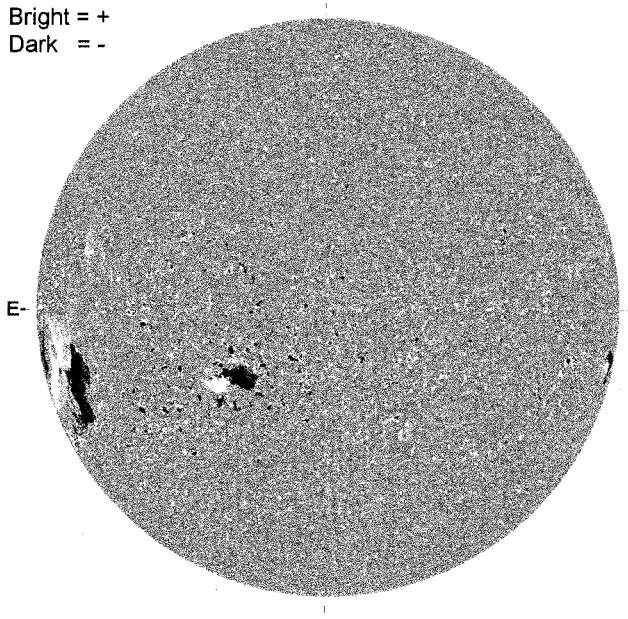
45
Oct 05

OCTOBER 5, 2005 (P= 26.19, Bo = 6.51, Lo = 316.31)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

Bright = +
Dark = -

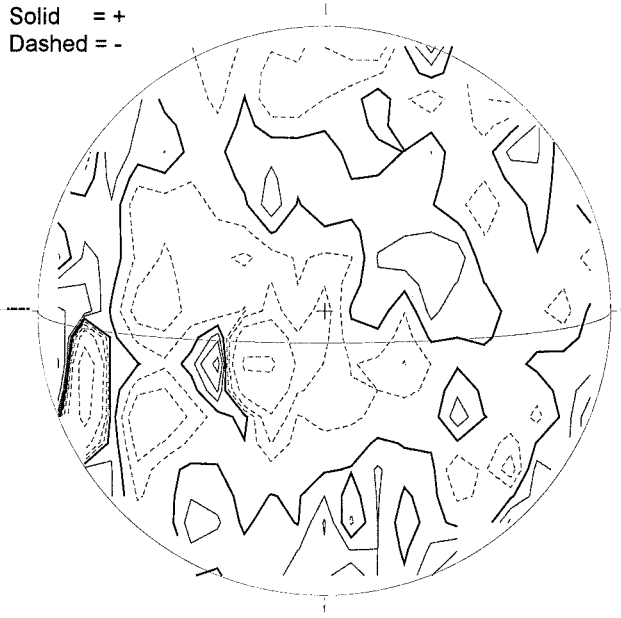


1648 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

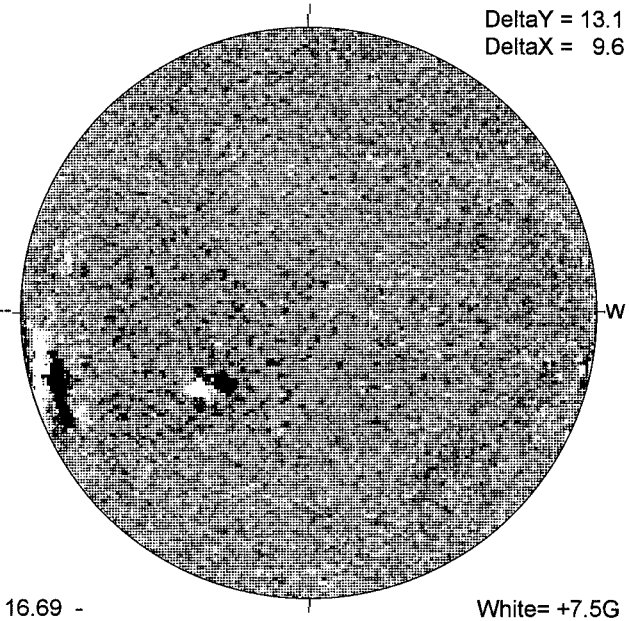


2107 UT

MT. WILSON MAGNETOGRAM

N

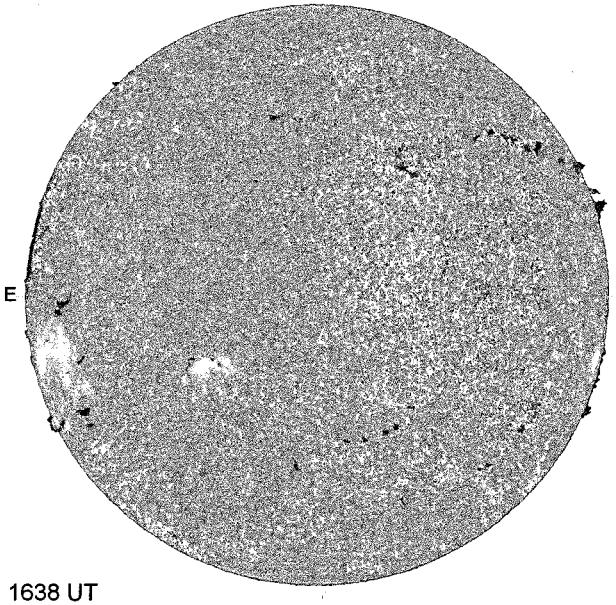
DeltaY = 13.1
DeltaX = 9.6



16.69 -
17.64 UT

White= +7.5G
Black = -7.5G

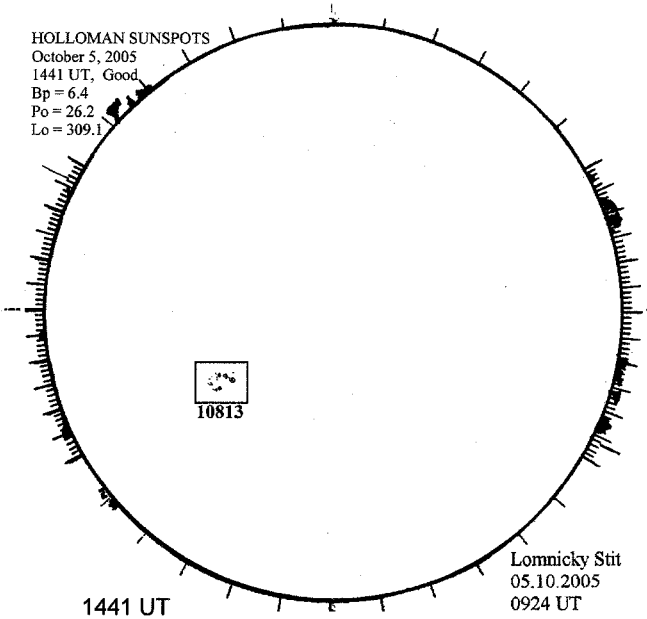
BIG BEAR H-ALPHA



1638 UT

S

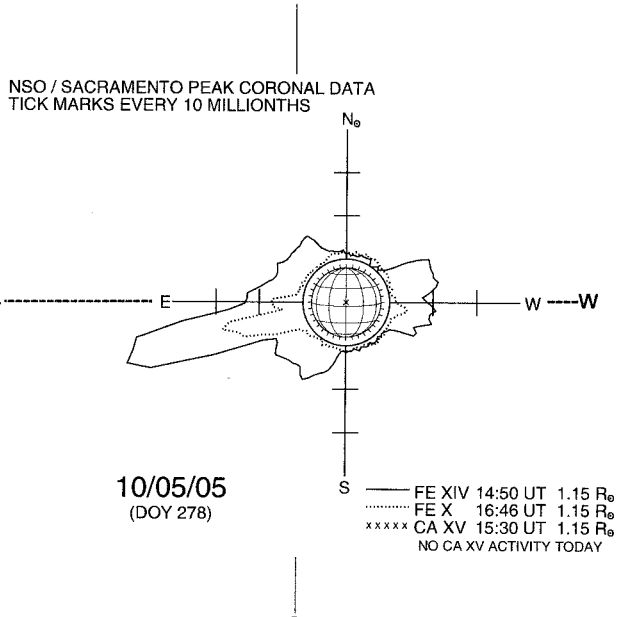
HOLLOMAN SUNSPOTS



1441 UT
0924 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



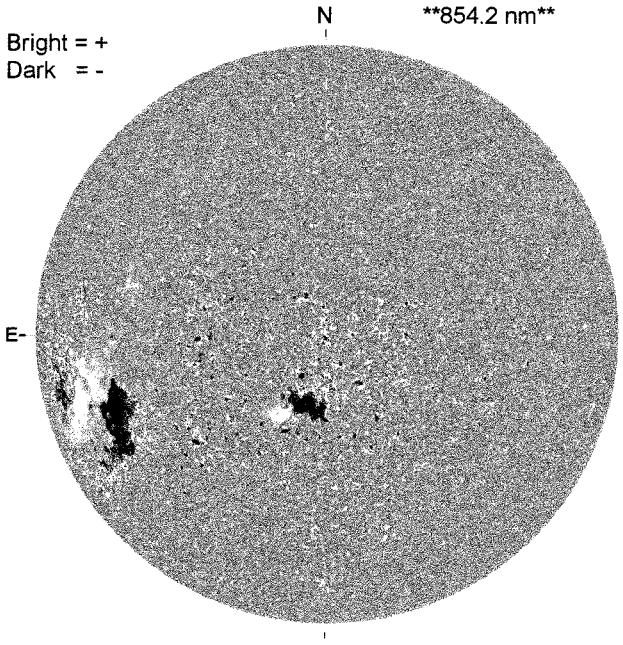
10/05/05
(DOY 278)

FE XIV 14:50 UT 1.15 R⊙
FE X 16:46 UT 1.15 R⊙
xxxxx CA XV 15:30 UT 1.15 R⊙
NO CA XV ACTIVITY TODAY

S

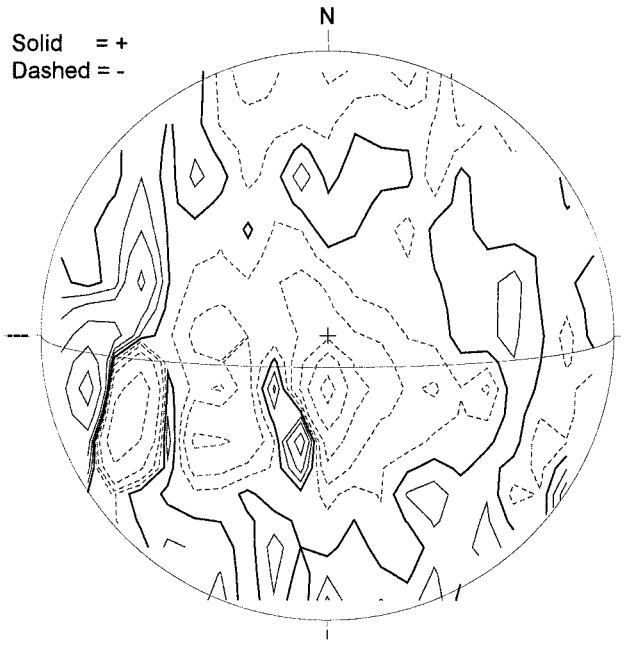
OCTOBER 6, 2005 (P= 26.22, Bo = 6.46, Lo = 303.12)

KITT PEAK MAGNETOGRAM--SOLIS



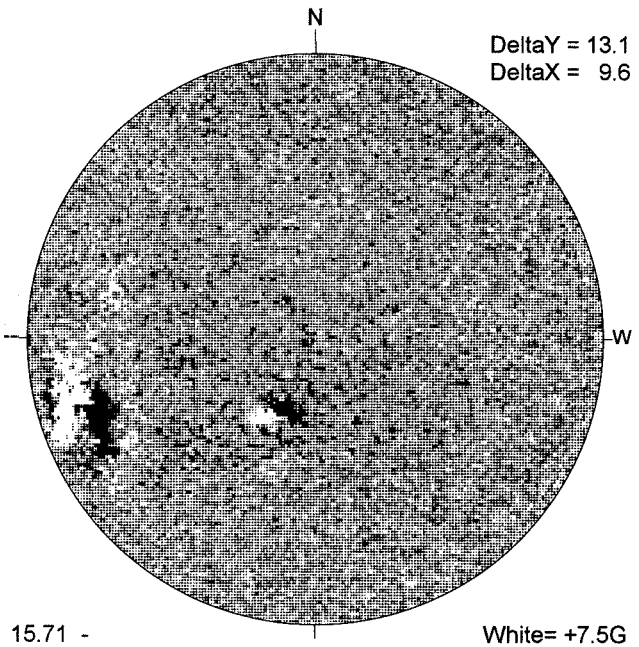
1754 UT

STANFORD MAGNETOGRAM



2227 UT

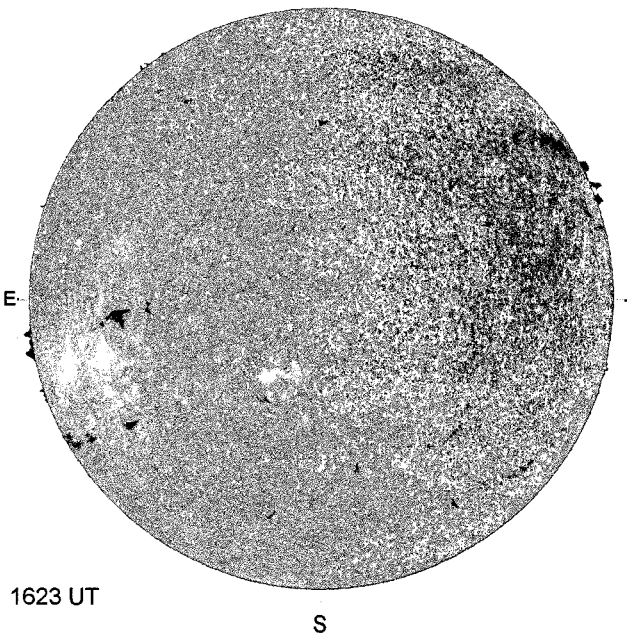
MT. WILSON MAGNETOGRAM



15.71 -
16.66 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

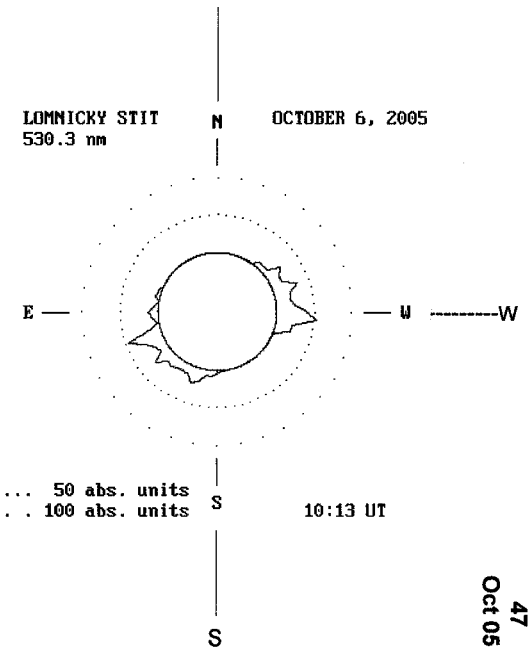


1623 UT

SAN VITO SUNSPOTS

0640 UT LOMN Prom S

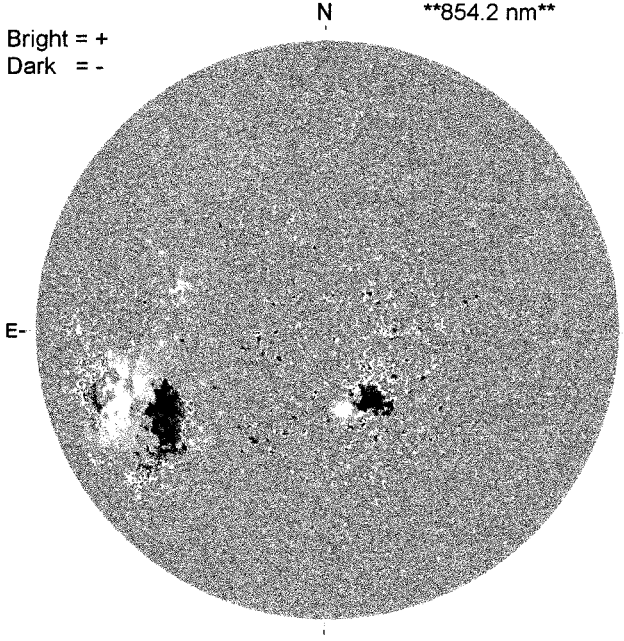
LOMNICKY PEAK CORONA (1.04 Radii)----



47
Oct 05

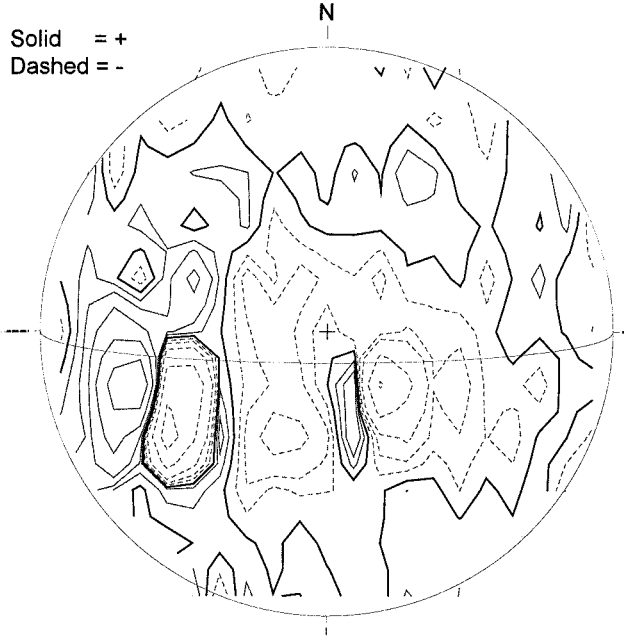
OCTOBER 7, 2005 (P= 26.25, Bo = 6.40, Lo = 289.92)

KITT PEAK MAGNETOGRAM--SOLIS



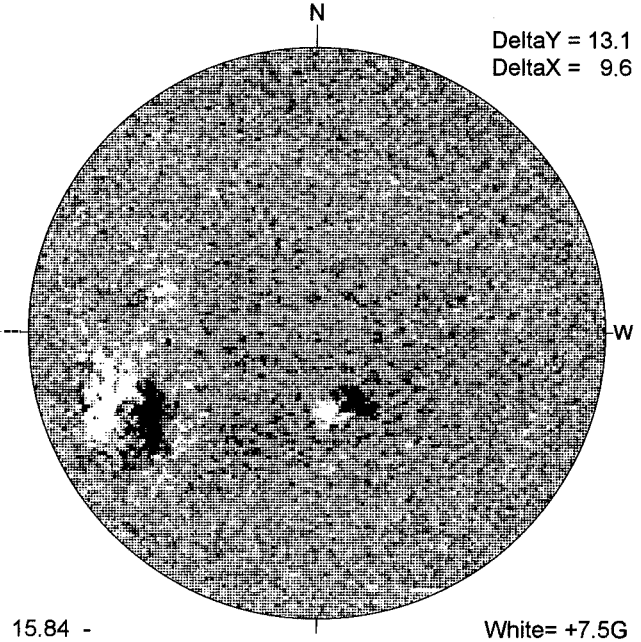
1727 UT

STANFORD MAGNETOGRAM



2235 UT

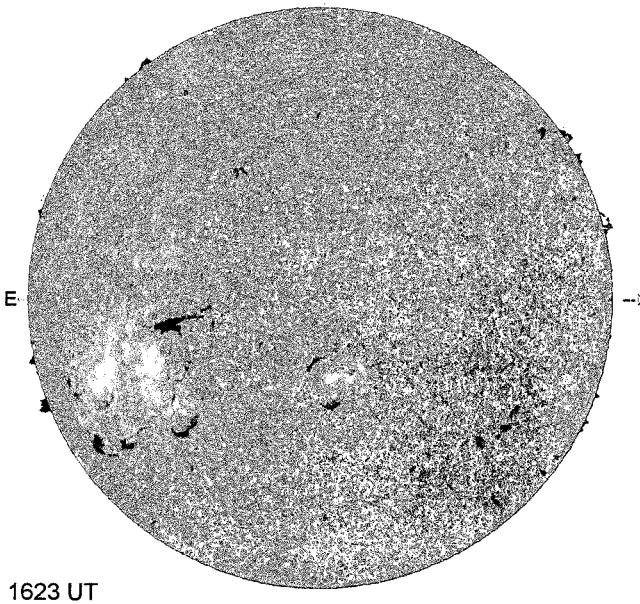
MT. WILSON MAGNETOGRAM



15.84 -
16.79 UT

White= +7.5G
Black = -7.5G

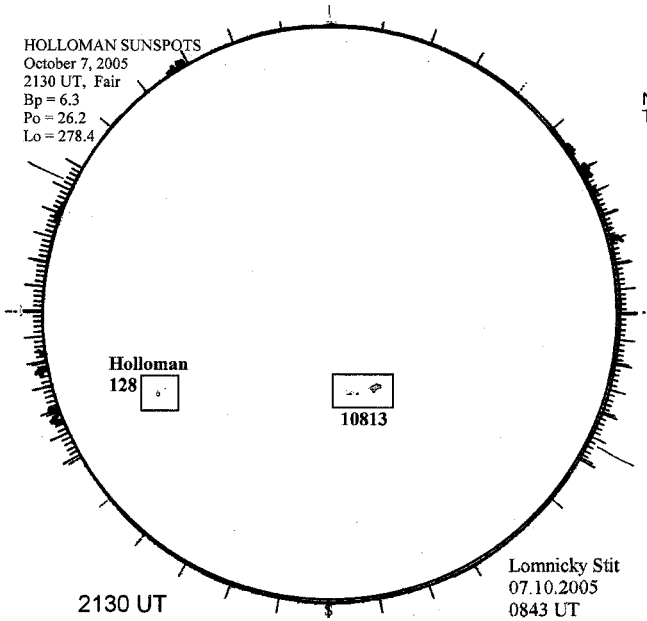
BIG BEAR H-ALPHA



1623 UT

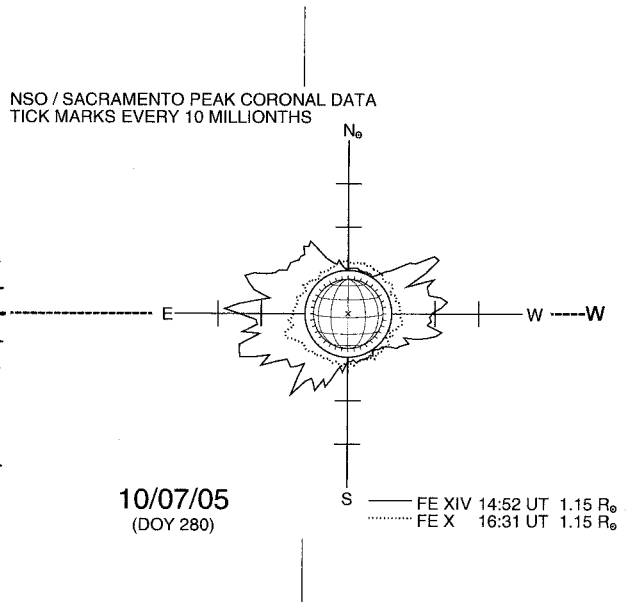
S

HOLLOMAN SUNSPOTS



2130 UT
0843 UT LOMN Prom S

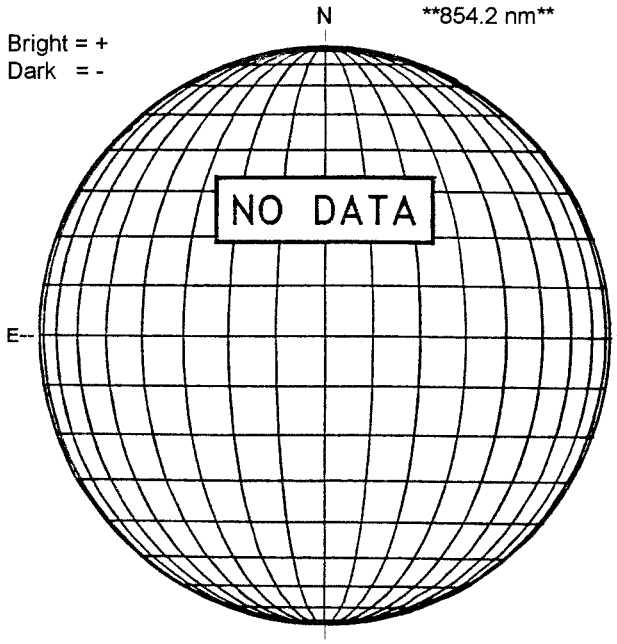
SACRAMENTO PEAK CORONA (1.15 Radii)



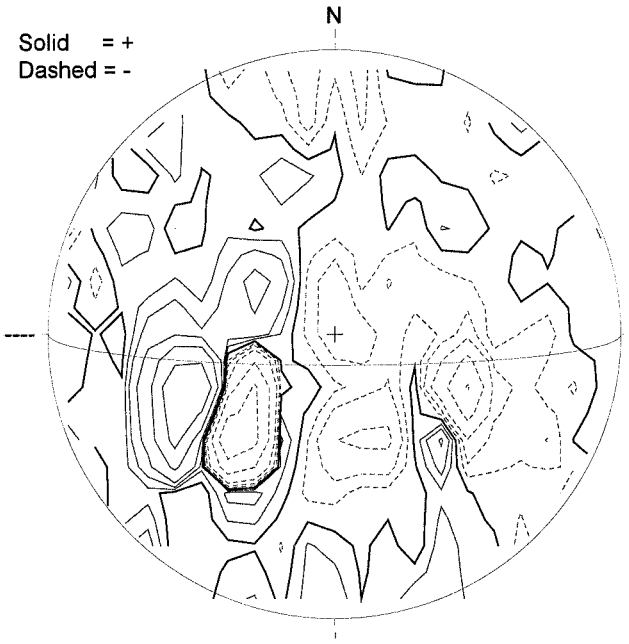
S

OCTOBER 8, 2005 (P= 26.27, Bo = 6.34, Lo = 276.73)

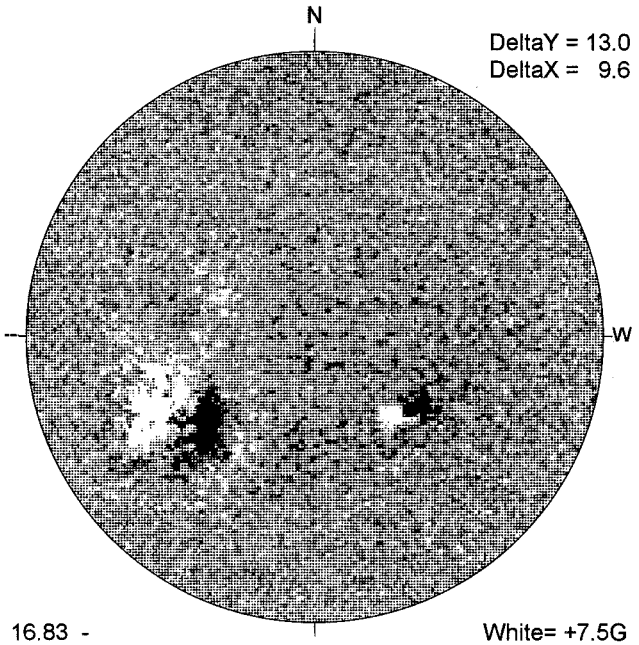
KITT PEAK MAGNETOGRAM--SOLIS



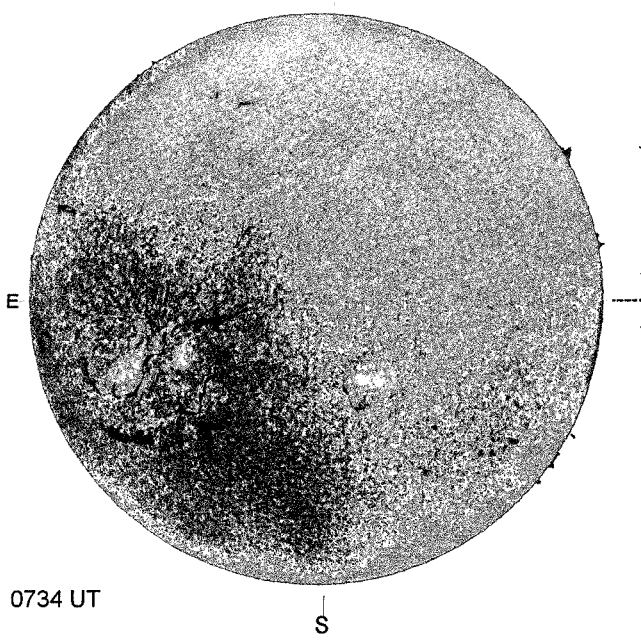
STANFORD MAGNETOGRAM



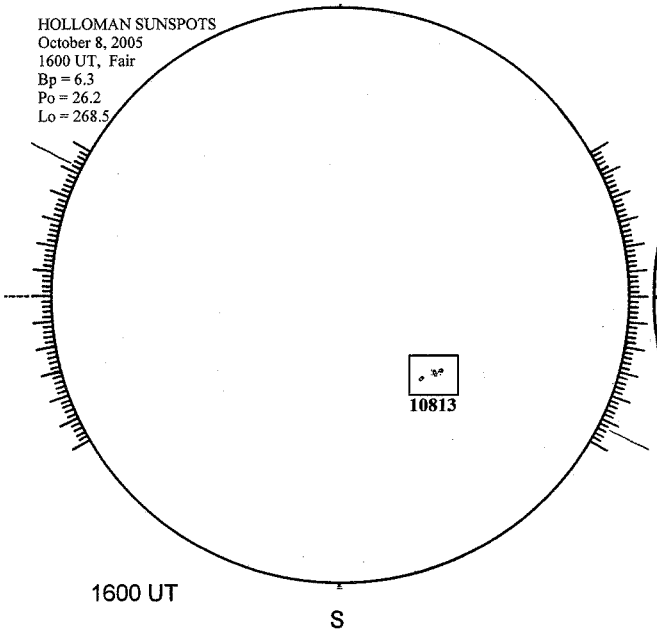
MT. WILSON MAGNETOGRAM



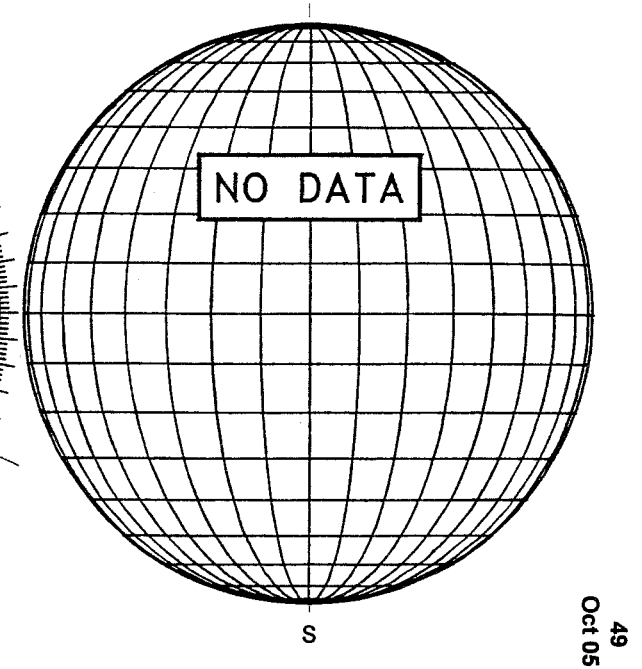
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS



LOMNICKY PEAK CORONA (1.04 Radii)----

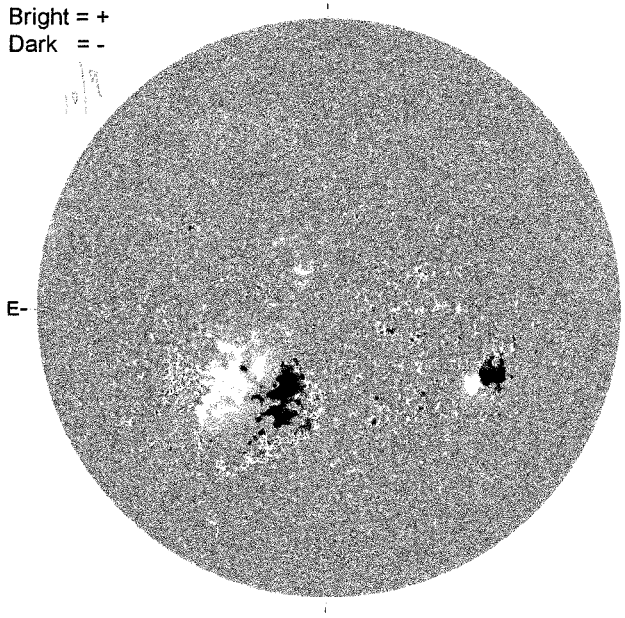


OCTOBER 9, 2005 (P= 26.28, Bo = 6.28, Lo = 263.54)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm

Bright = +
Dark = -

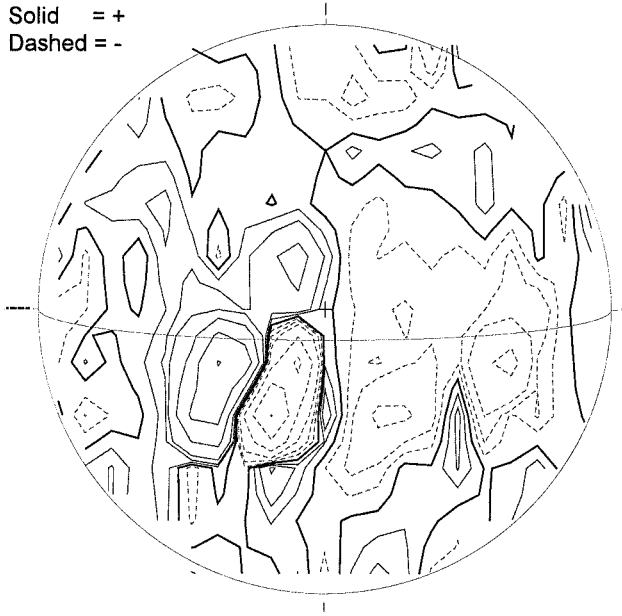


1732 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

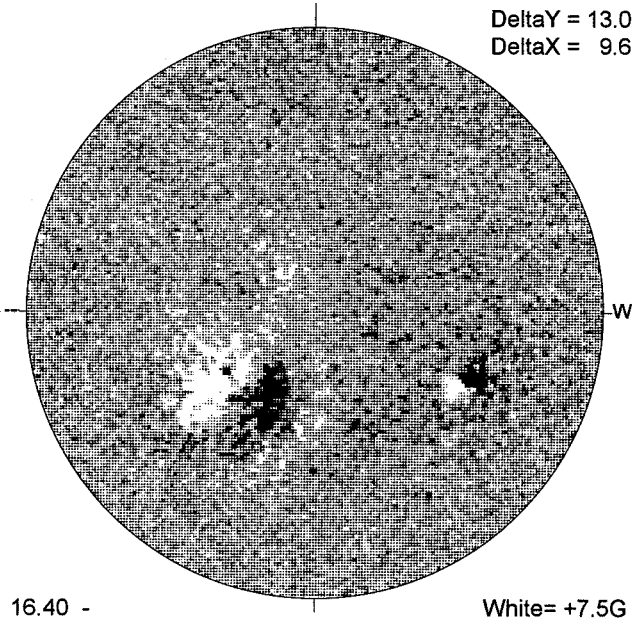


1623 UT

MT. WILSON MAGNETOGRAM

N

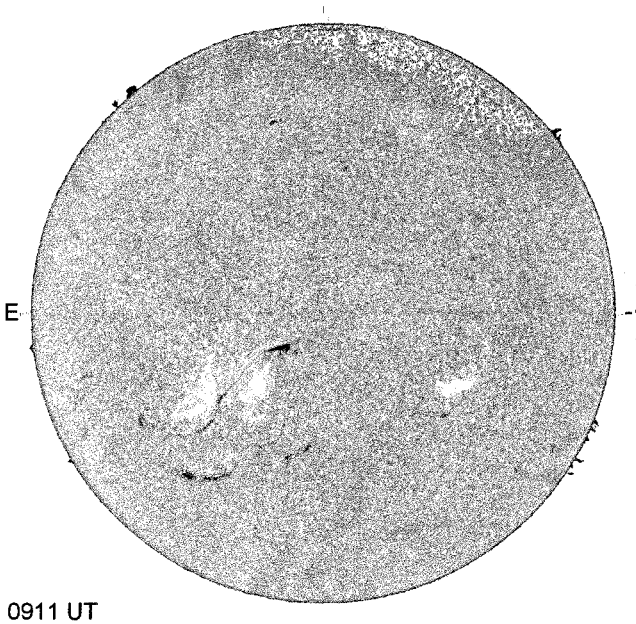
DeltaY = 13.0
DeltaX = 9.6



16.40 -
17.35 UT

White= +7.5G
Black = -7.5G

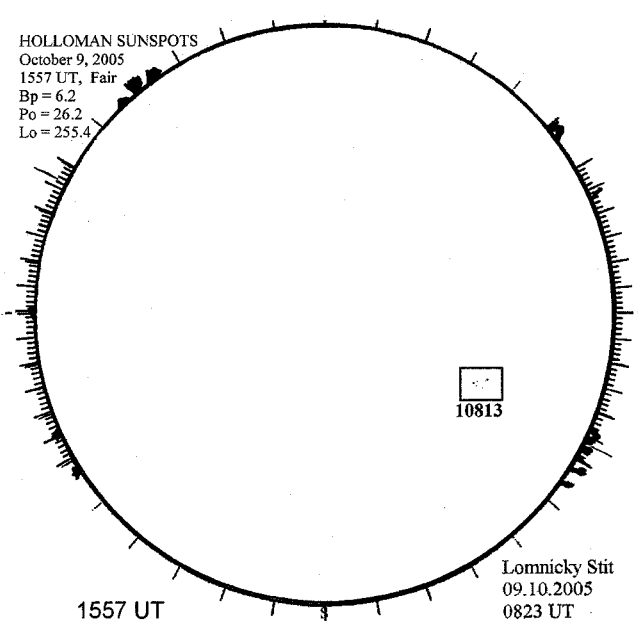
CATANIA H-ALPHA



0911 UT

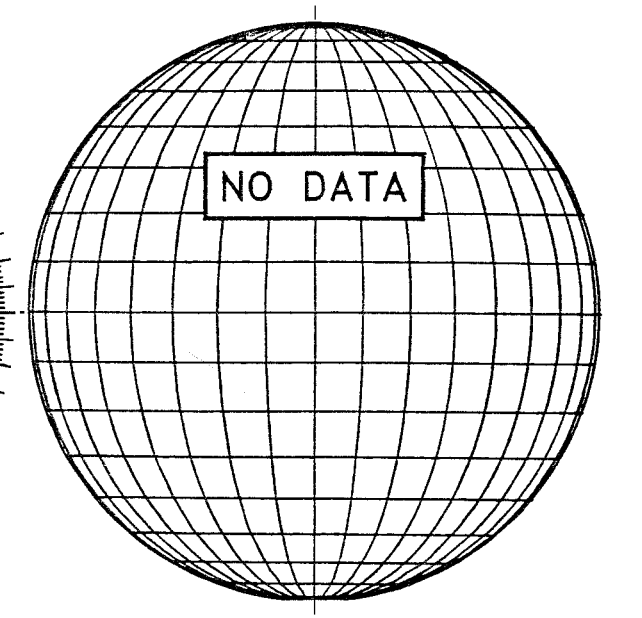
S

HOLLOMAN SUNSPOTS



1557 UT
0823 UT LOMN Prom S

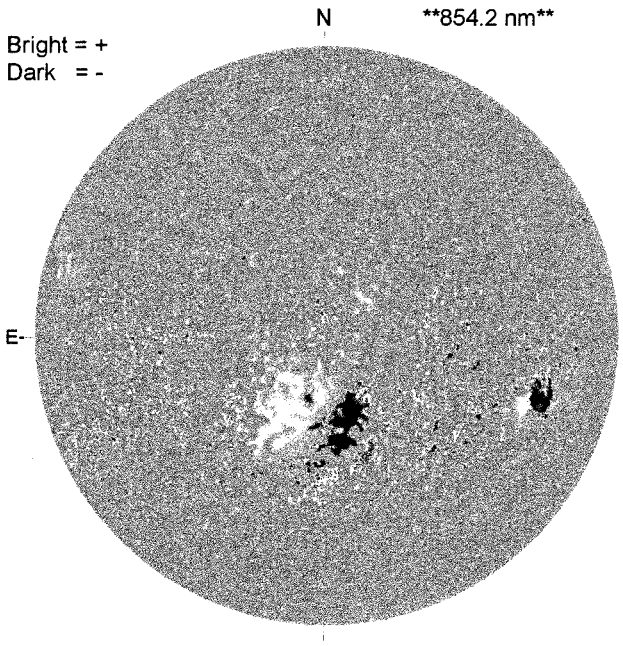
SACRAMENTO PEAK CORONA (1.15 Radii)----



S

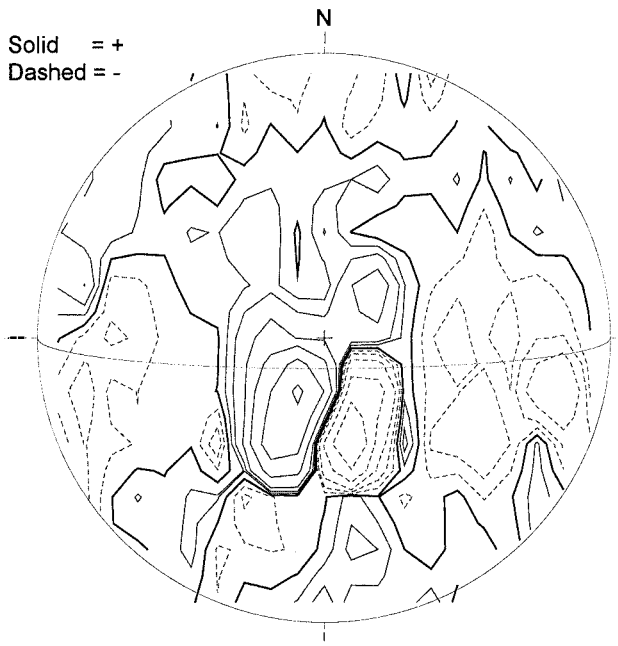
OCTOBER 10, 2005 (P= 26.29, Bo = 6.21 Lo = 250.34)

KITT PEAK MAGNETOGRAM--SOLIS



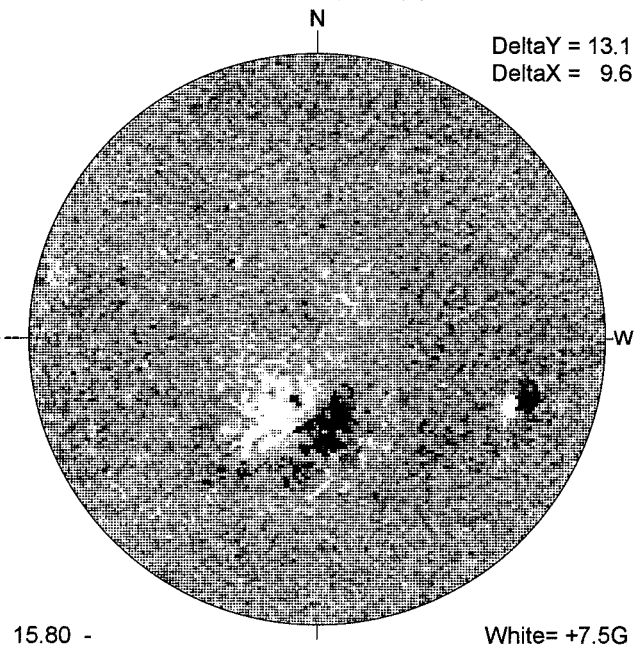
1713 UT

STANFORD MAGNETOGRAM



2116 UT

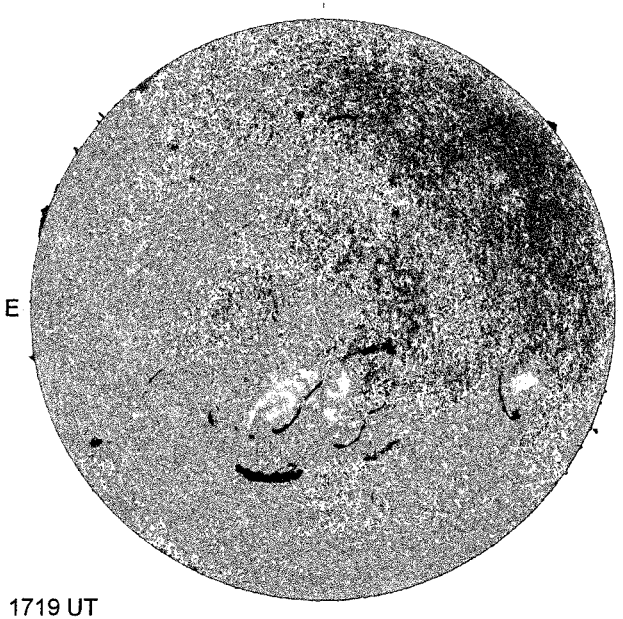
MT. WILSON MAGNETOGRAM



15.80 -
16.74 UT

White= +7.5G
Black = -7.5G

----- BIG BEAR H-ALPHA



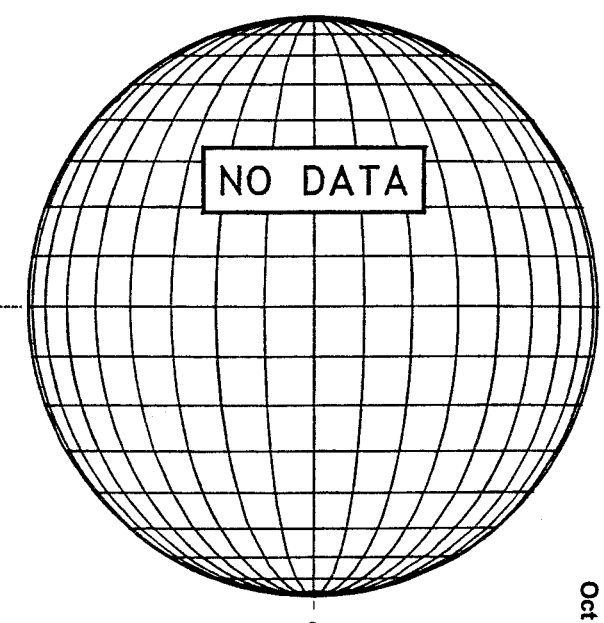
1719 UT

S

SAN VITO SUNSPOTS

0852 UT LOMN Prom S

LOMNICKY PEAK CORONA (1.04 Radii)----

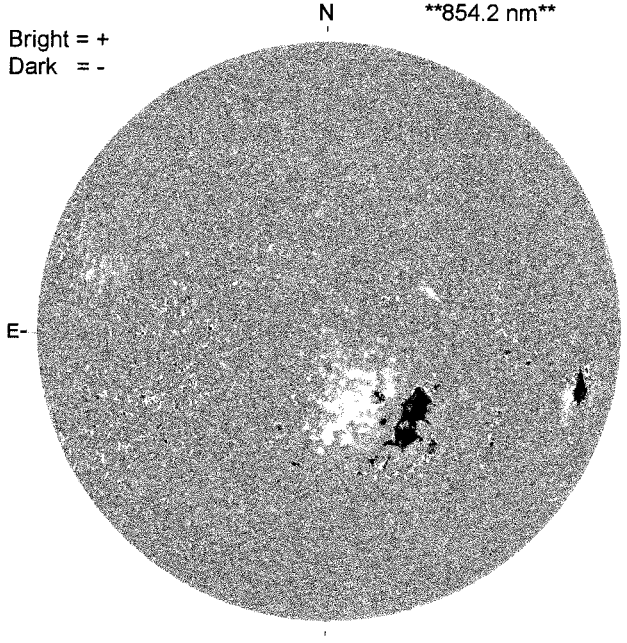


S

51
Oct 05

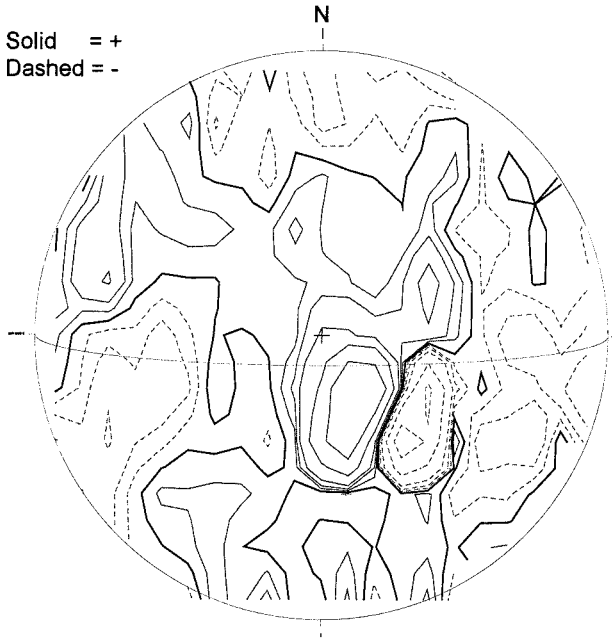
OCTOBER 11, 2005 (P= 26.29, Bo = 6.15, Lo = 237.15)

KITT PEAK MAGNETOGRAM--SOLIS



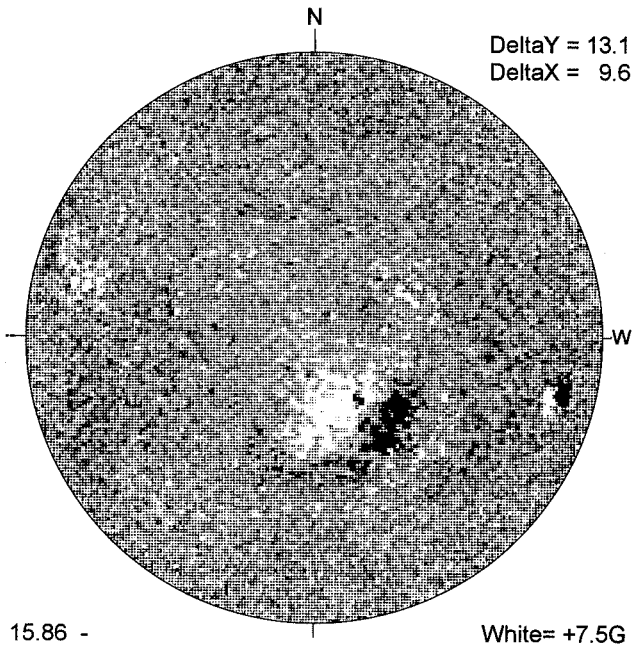
1718 UT

STANFORD MAGNETOGRAM



2217 UT

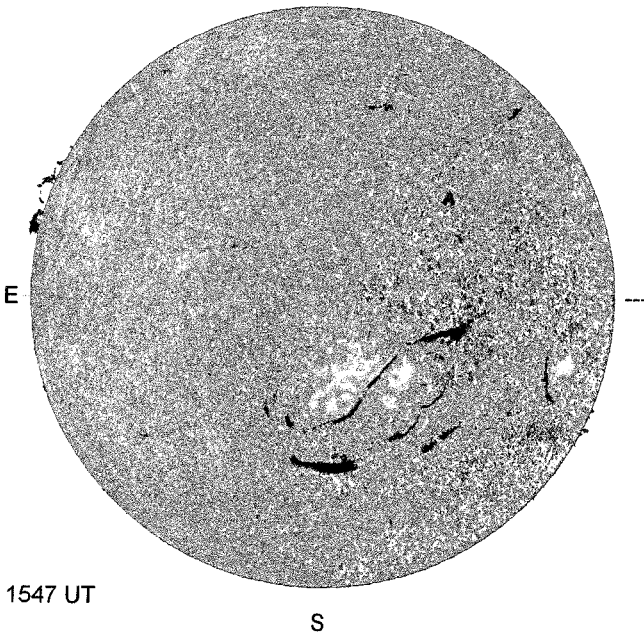
MT. WILSON MAGNETOGRAM



15.86 -
16.81 UT

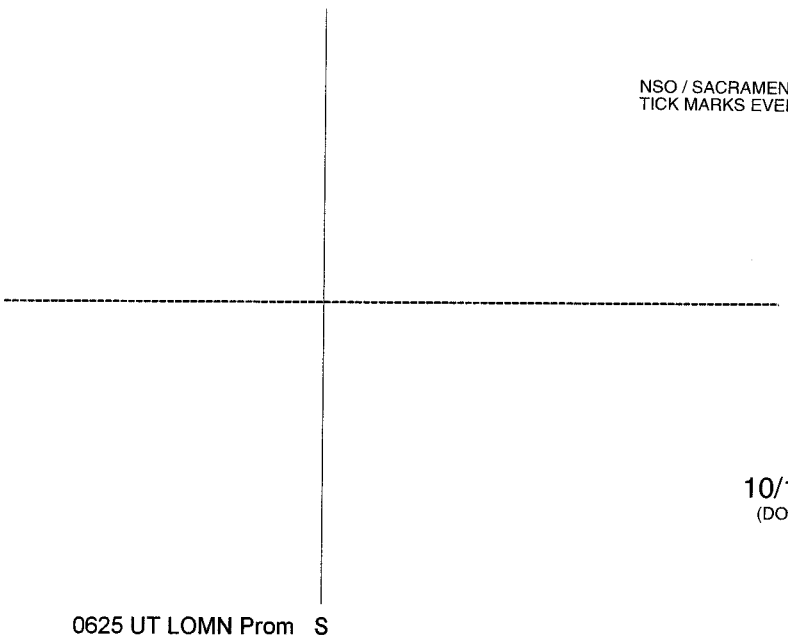
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



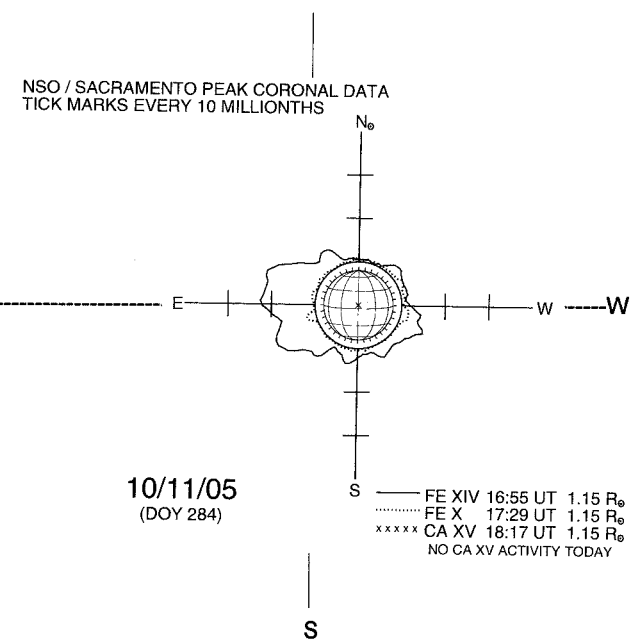
1547 UT

SAN VITO SUNSPOTS



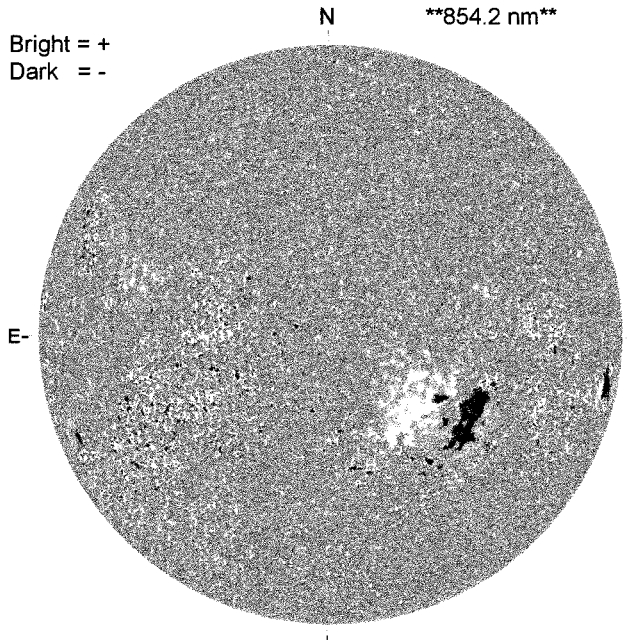
0625 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



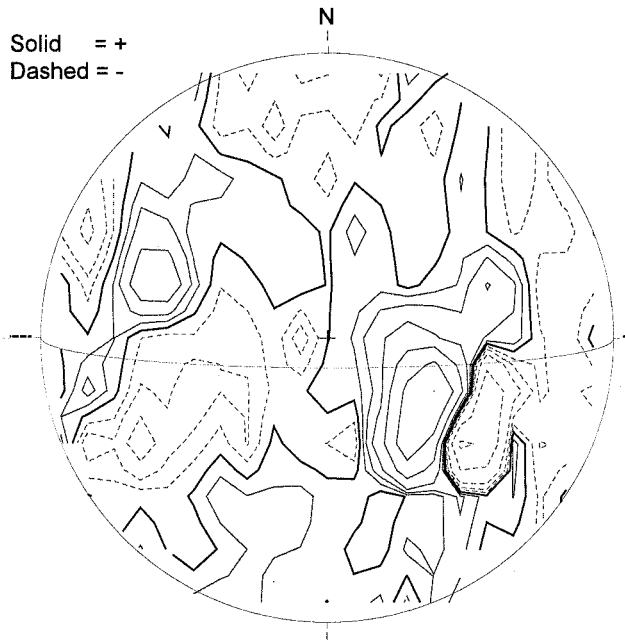
OCTOBER 12, 2005 (P= 26.28, Bo = 6.08, Lo = 223.96)

KITT PEAK MAGNETOGRAM--SOLIS



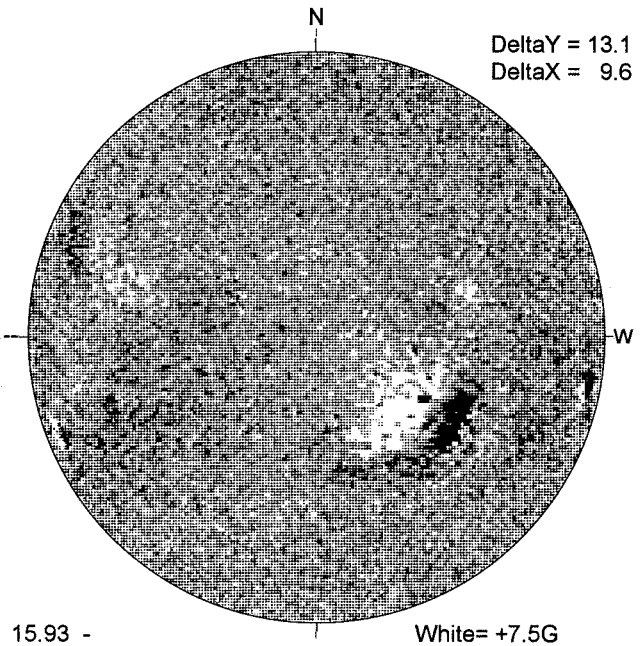
1540 UT

STANFORD MAGNETOGRAM



2258 UT

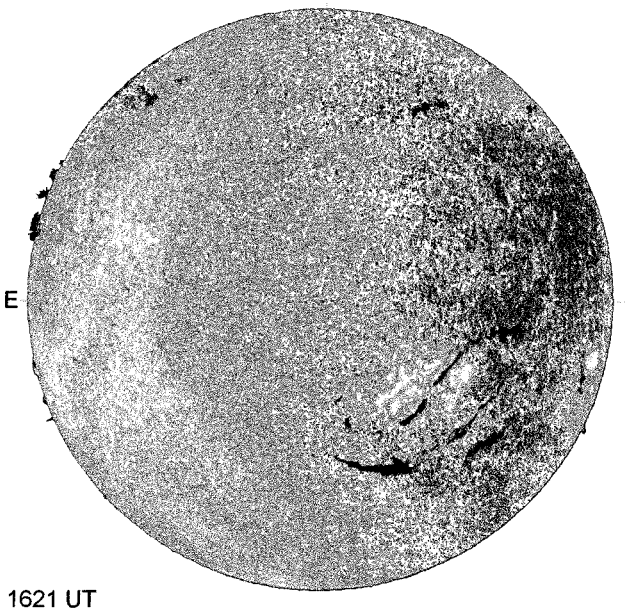
MT. WILSON MAGNETOGRAM



15.93 - 16.88 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



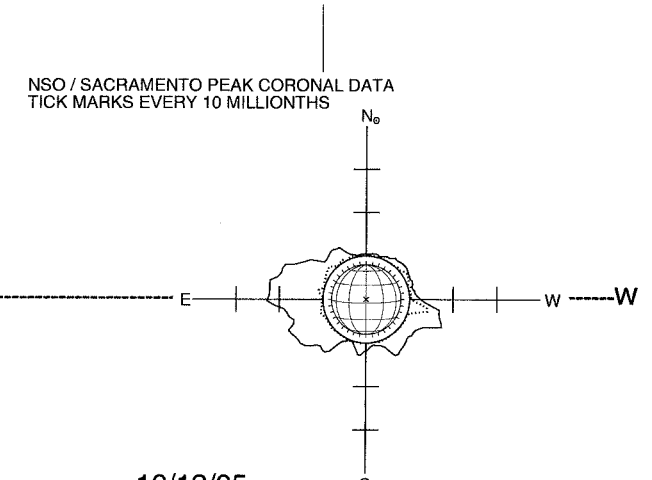
1621 UT

S

SAN VITO SUNSPOTS

0619 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)



S

53
Oct 05

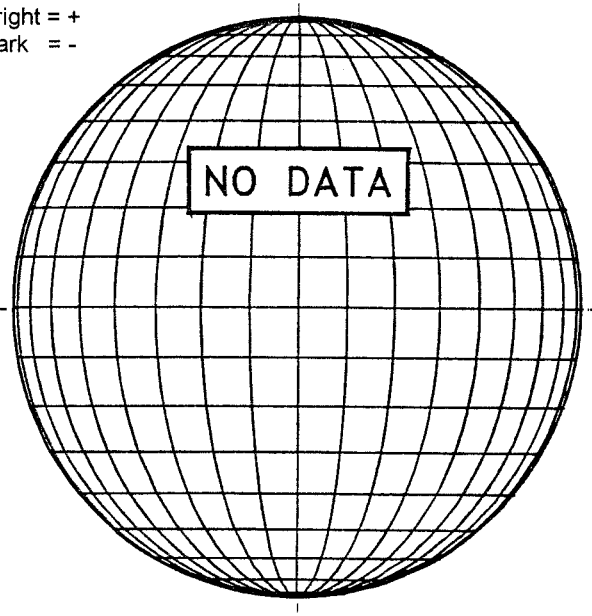
OCTOBER 13, 2005 (P= 26.26, Bo = 6.01, Lo = 210.77)

KITT PEAK MAGNETOGRAM--SOLIS

N

854.2 nm

Bright = +
Dark = -

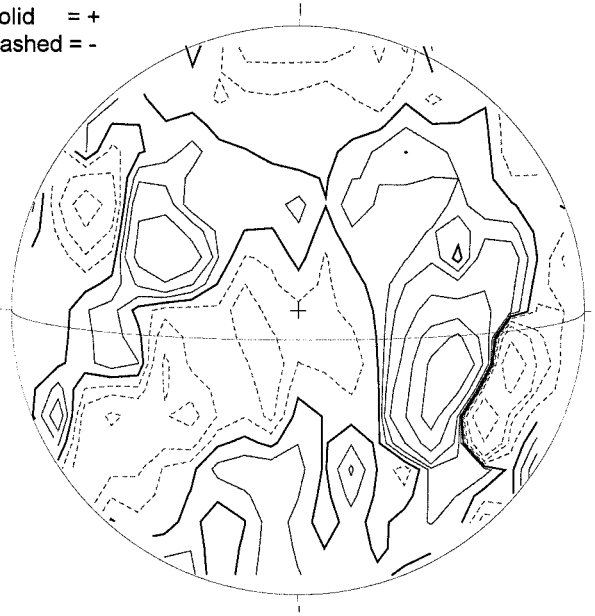


E--

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

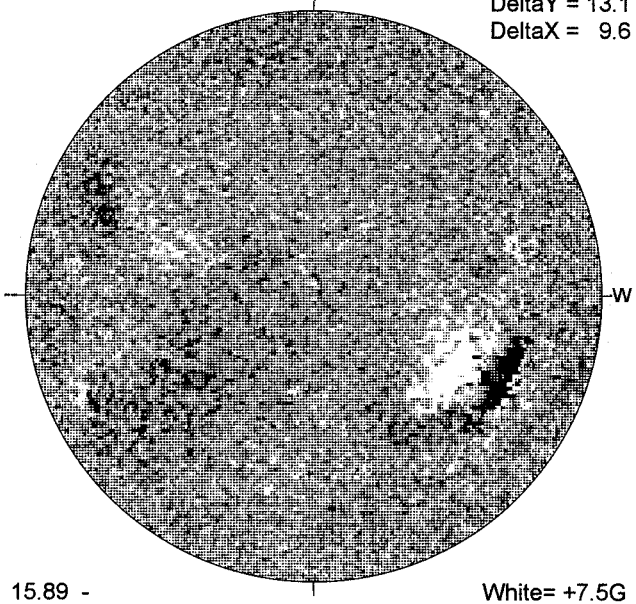


1801 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

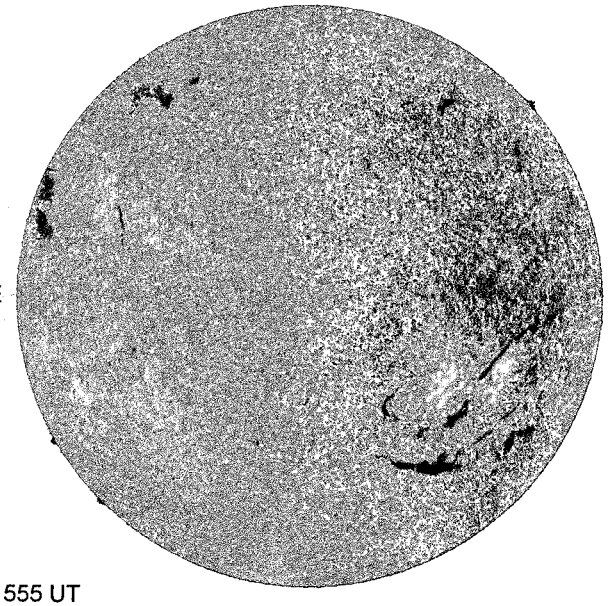


-W

15.89 -
16.83 UT

White= +7.5G
Black = -7.5G

---- BIG BEAR H-ALPHA



E

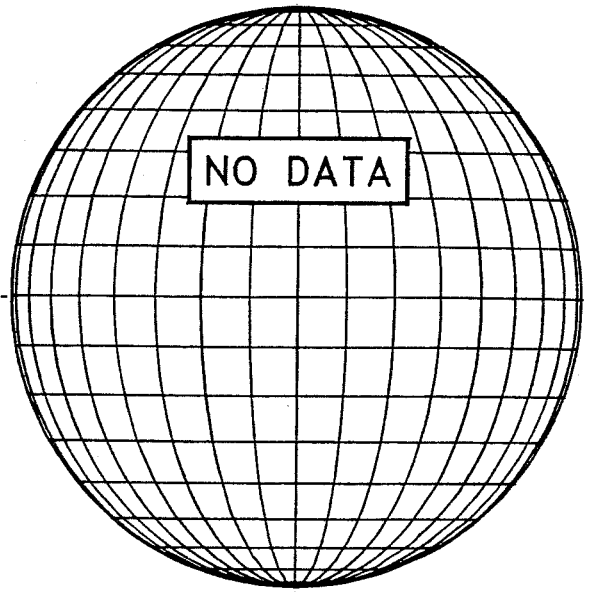
1555 UT

S

SAN VITO SUNSPOTS

S

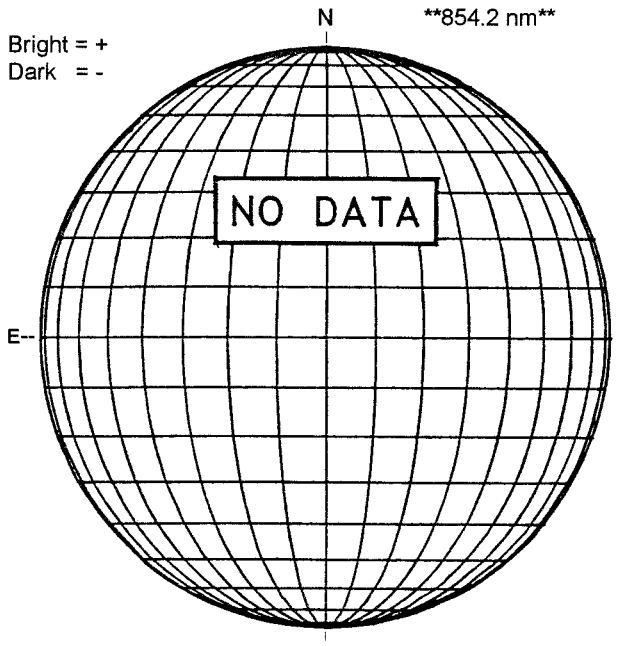
SACRAMENTO PEAK CORONA (1.15 Radii)----



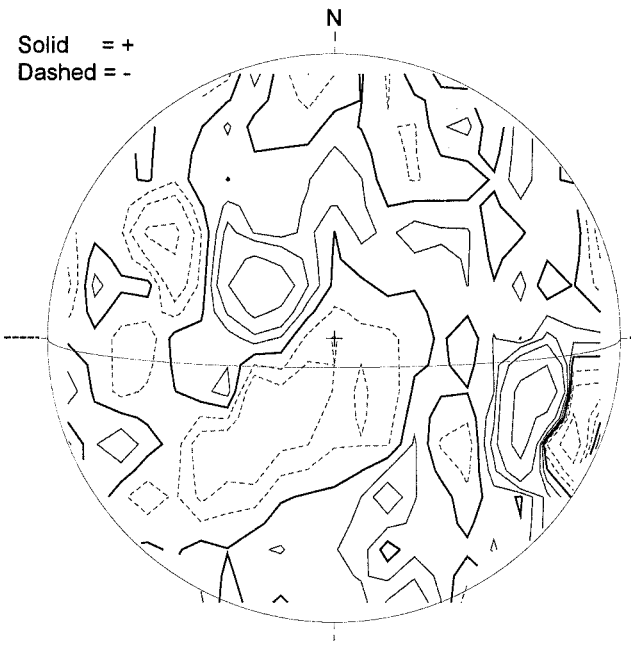
S

OCTOBER 14, 2005 (P= 26.24, Bo = 5.94, Lo = 197.58)

KITT PEAK MAGNETOGRAM--SOLIS

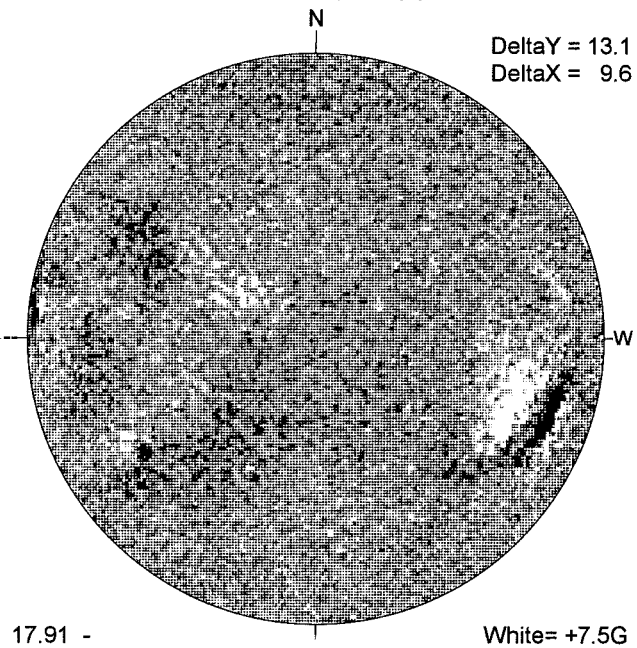


STANFORD MAGNETOGRAM



2053 UT

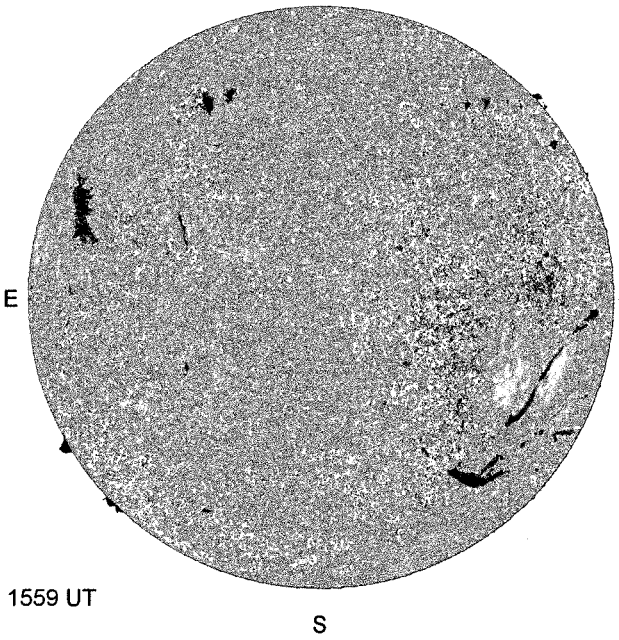
MT. WILSON MAGNETOGRAM



17.91 -
18.86 UT

White= +7.5G
Black = -7.5G

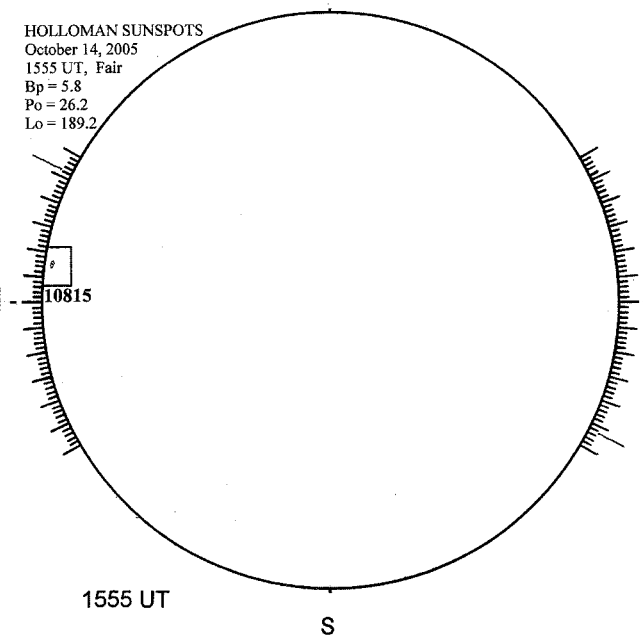
BIG BEAR H-ALPHA



1559 UT

S

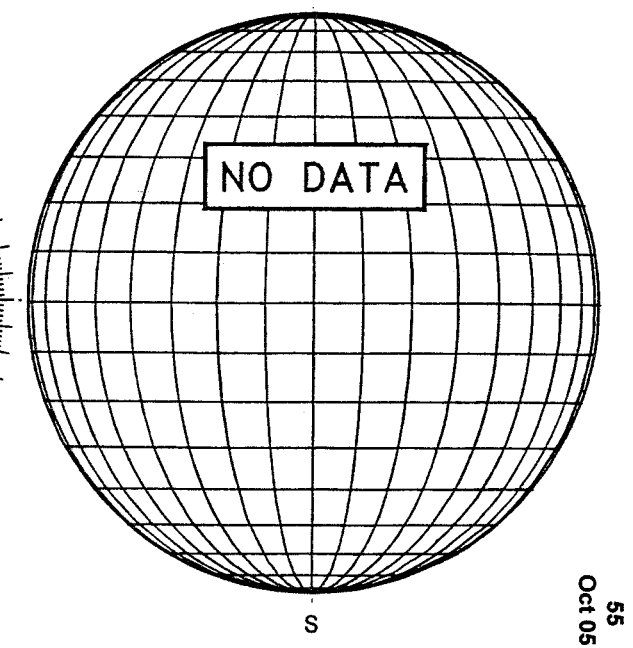
HOLLOMAN SUNSPOTS



1555 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

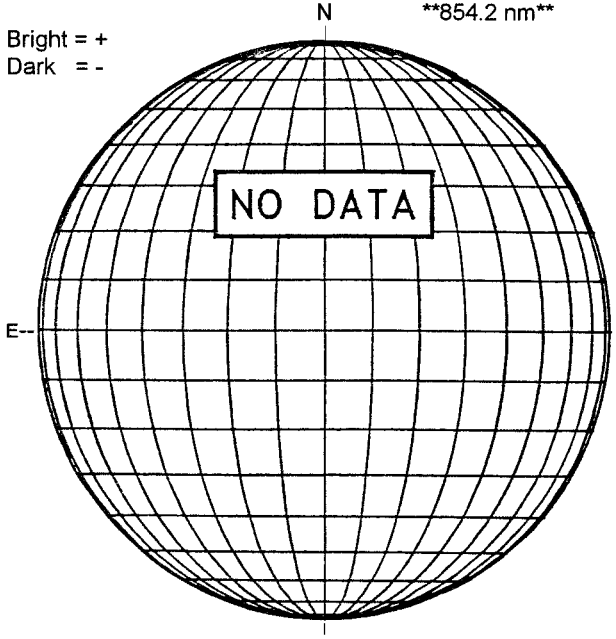


S

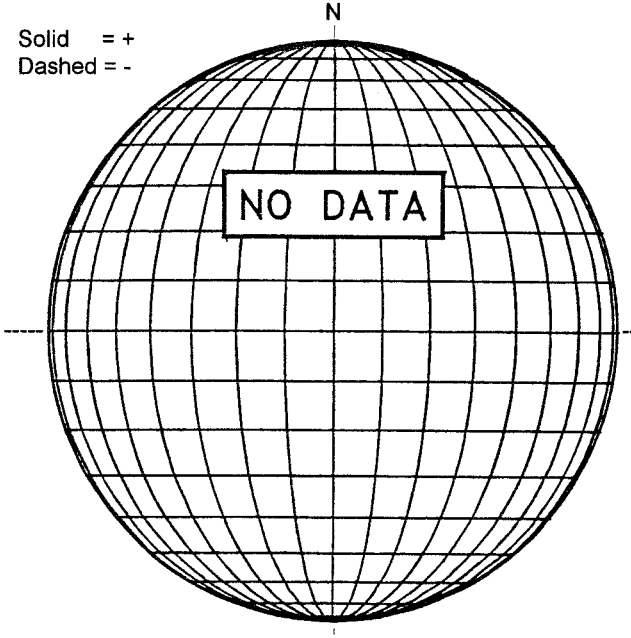
55
Oct 05

OCTOBER 15, 2005 (P= 26.20, Bo = 5.87, Lo = 184.39)

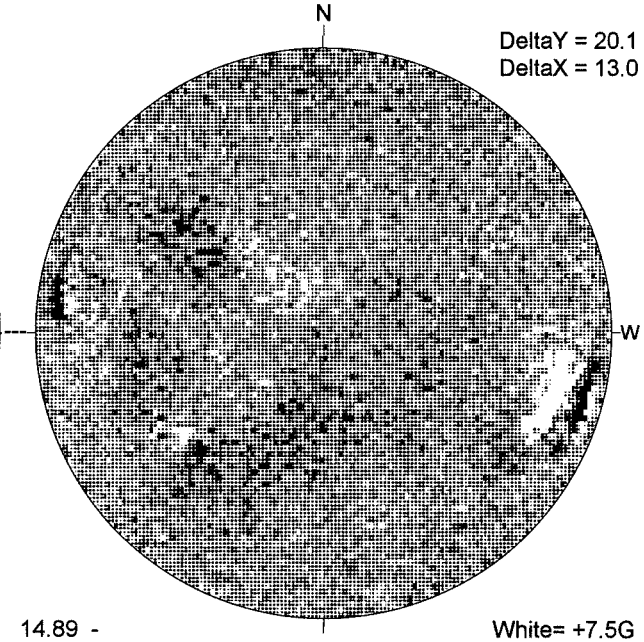
KITT PEAK MAGNETOGRAM--SOLIS



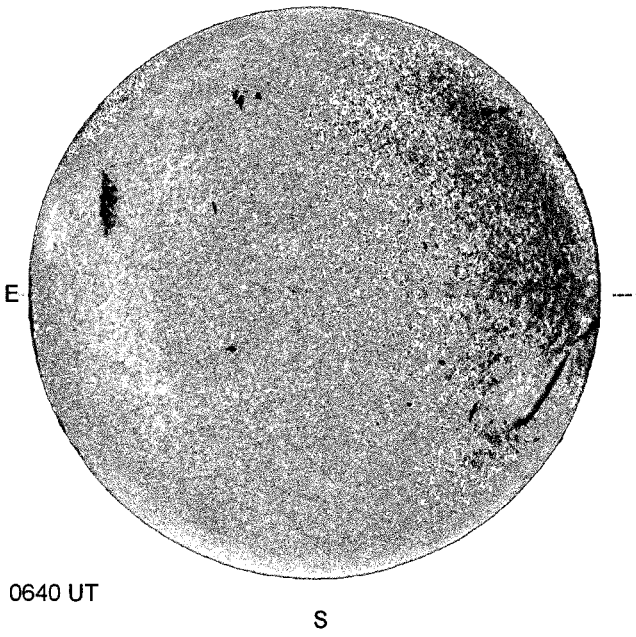
STANFORD MAGNETOGRAM



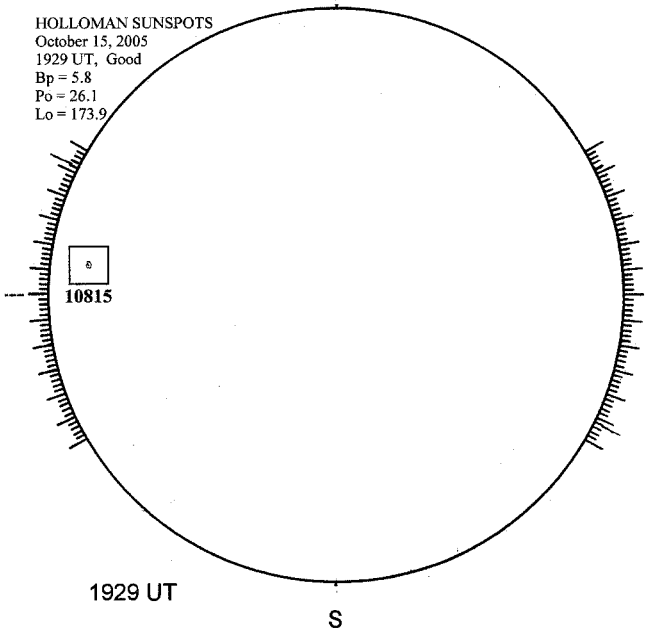
MT. WILSON MAGNETOGRAM



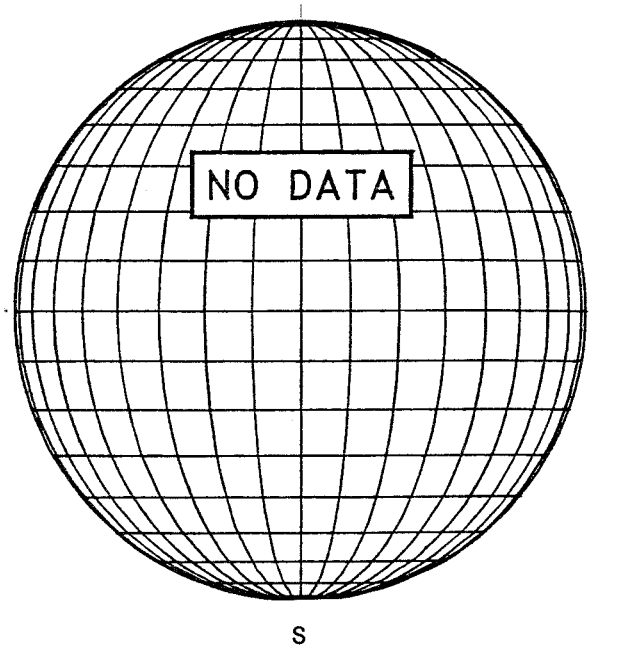
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS

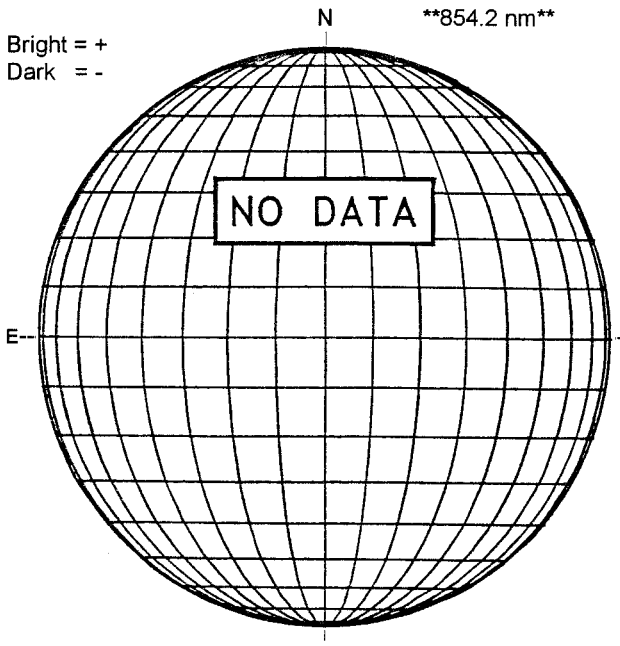


SACRAMENTO PEAK CORONA (1.15 Radii)

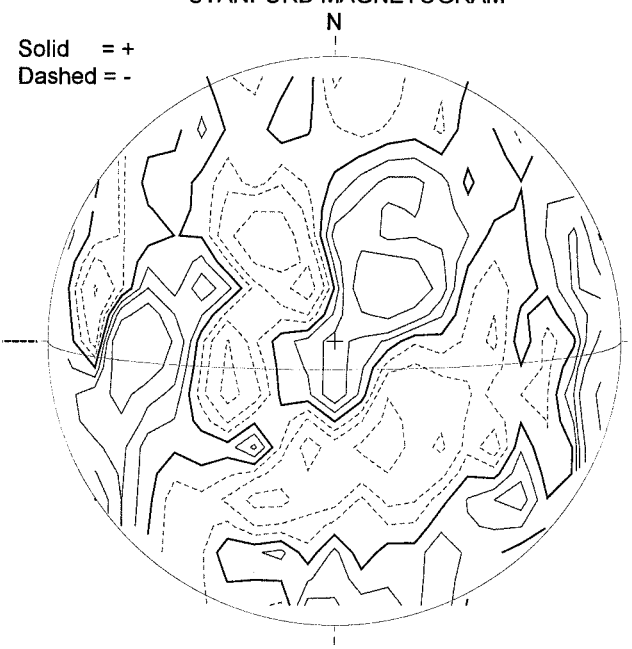


OCTOBER 16, 2005 (P= 26.17, Bo = 5.79, Lo = 171.19)

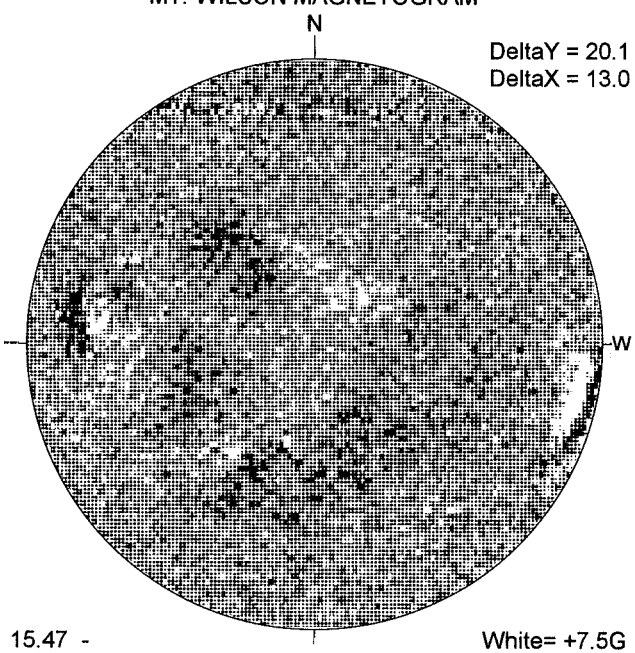
KITT PEAK MAGNETOGRAM--SOLIS



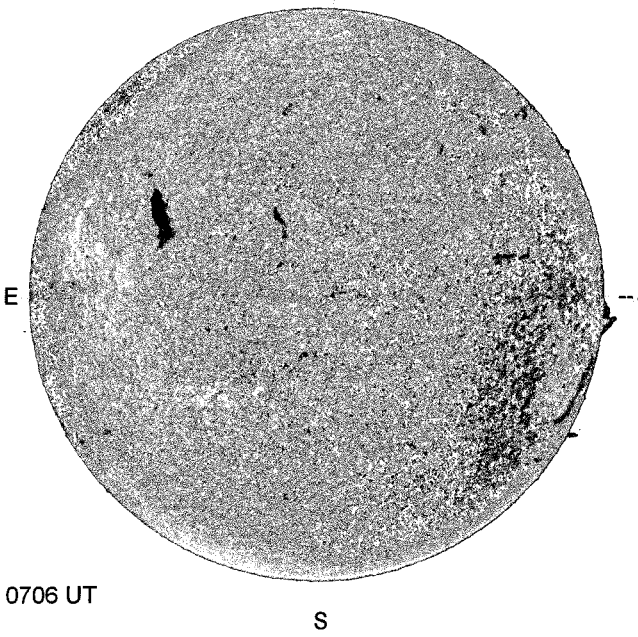
STANFORD MAGNETOGRAM



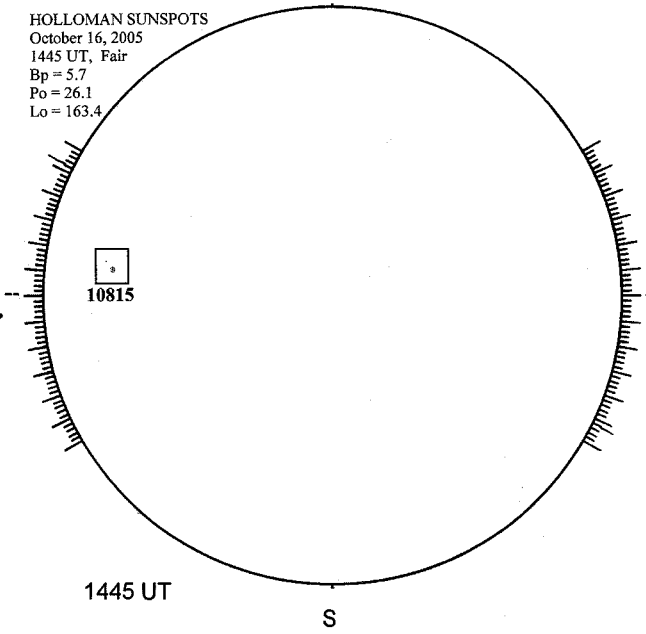
MT. WILSON MAGNETOGRAM



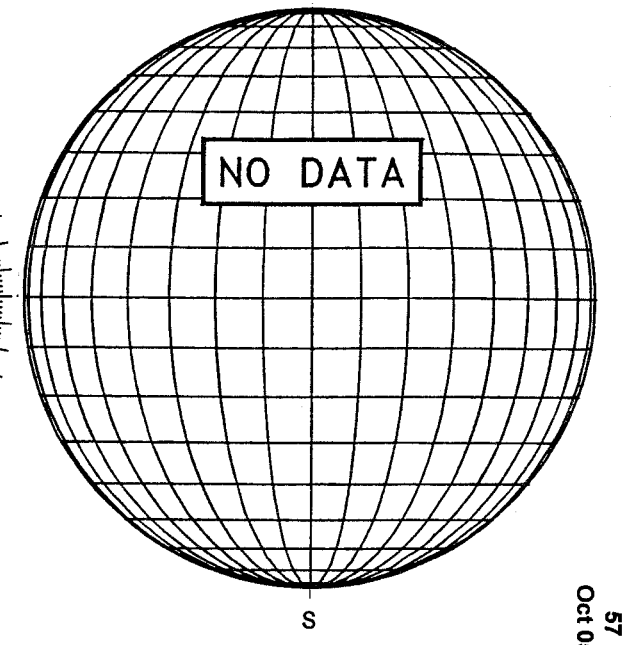
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



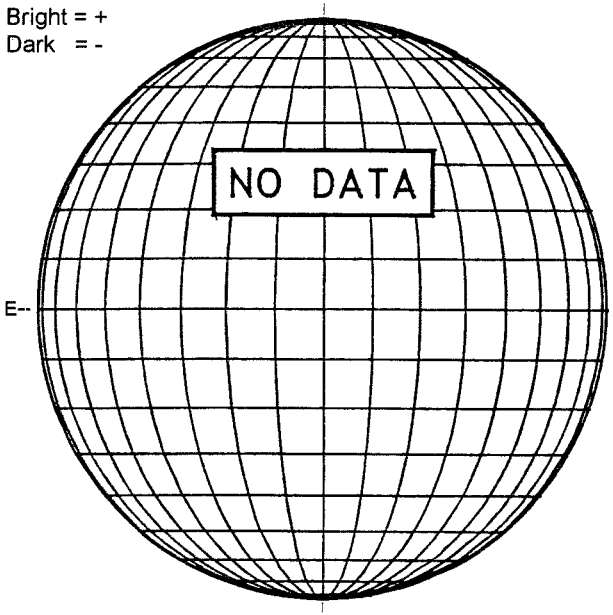
57
Oct 05

OCTOBER 17, 2005 (P= 26.12, Bo = 5.72, Lo = 158.00)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

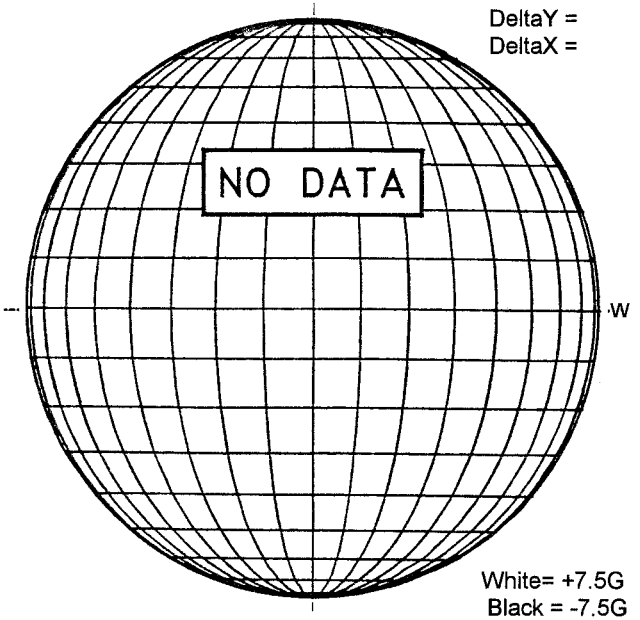
Solid = +
Dashed = -

2129 UT

MT. WILSON MAGNETOGRAM

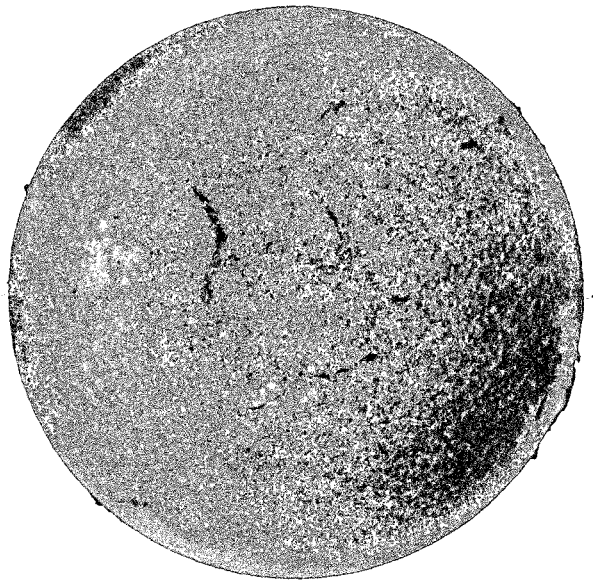
N

DeltaY =
DeltaX =



White= +7.5G
Black = -7.5G

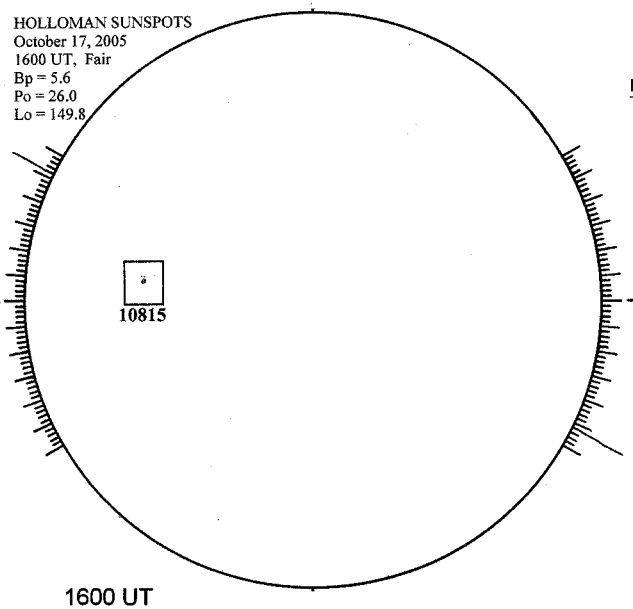
KANZELHOHE H-ALPHA



1209 UT

S

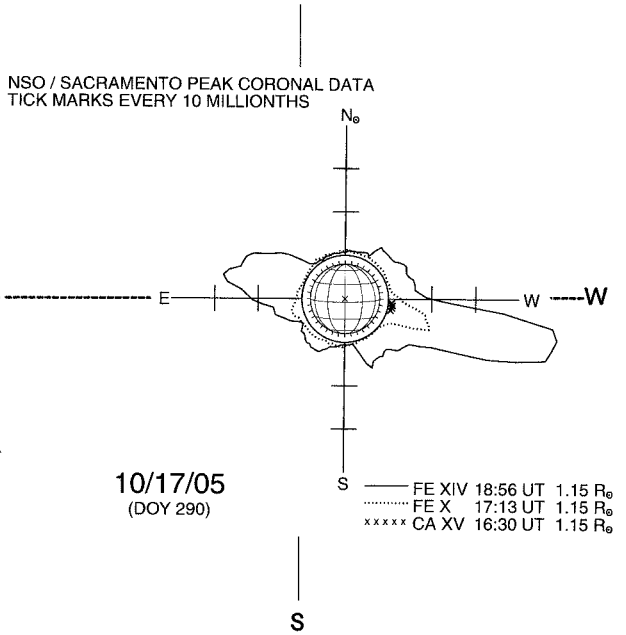
HOLLOMAN SUNSPOTS



1600 UT

S

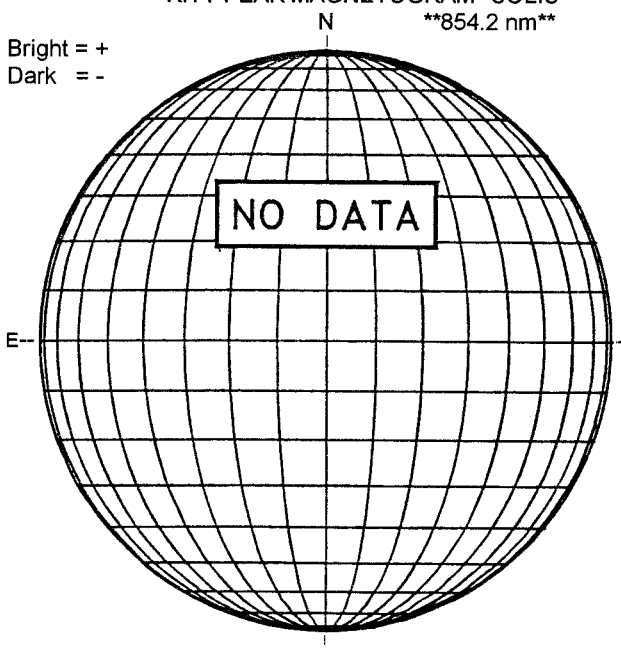
SACRAMENTO PEAK CORONA (1.15 Radii)



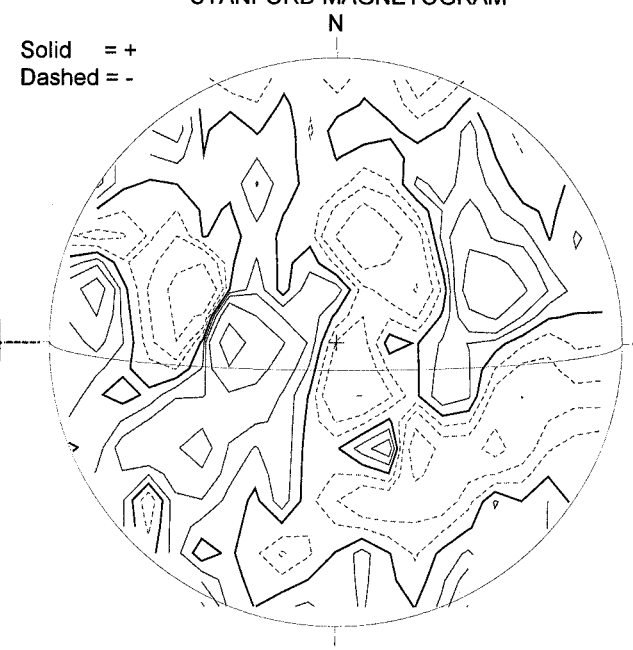
S

OCTOBER 18, 2005 (P= 26.06, Bo = 5.64, Lo = 144.81)

KITT PEAK MAGNETOGRAM--SOLIS

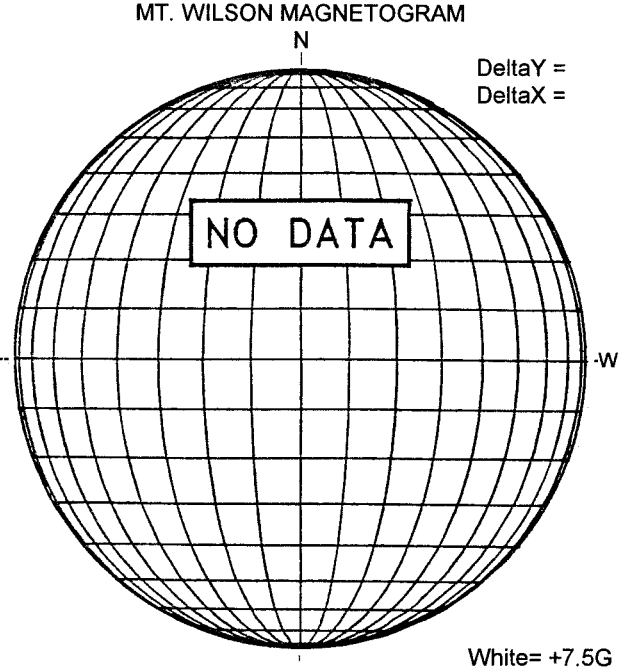


STANFORD MAGNETOGRAM



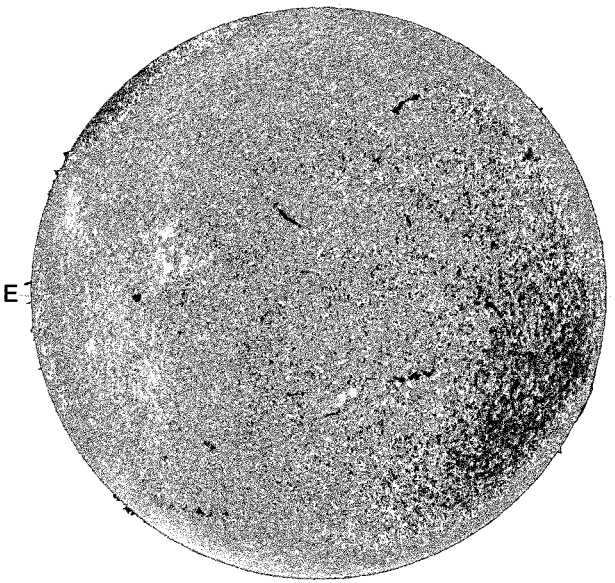
1929 UT

MT. WILSON MAGNETOGRAM



White= +7.5G
Black = -7.5G

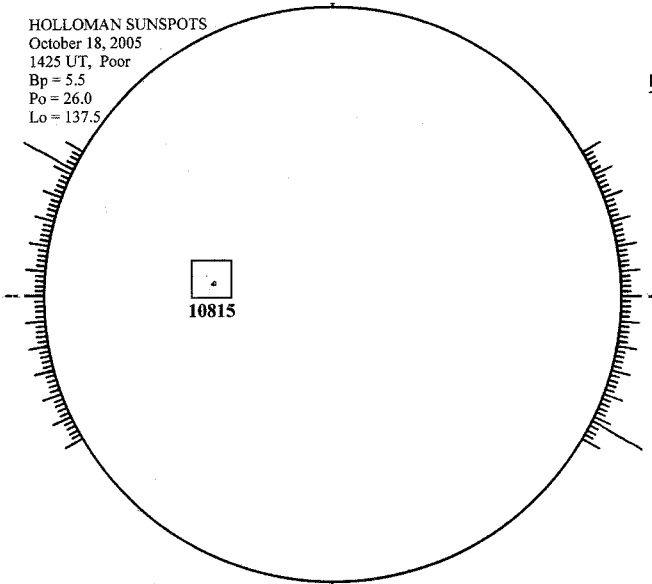
----- KANZELHOHE H-ALPHA



0844 UT

S

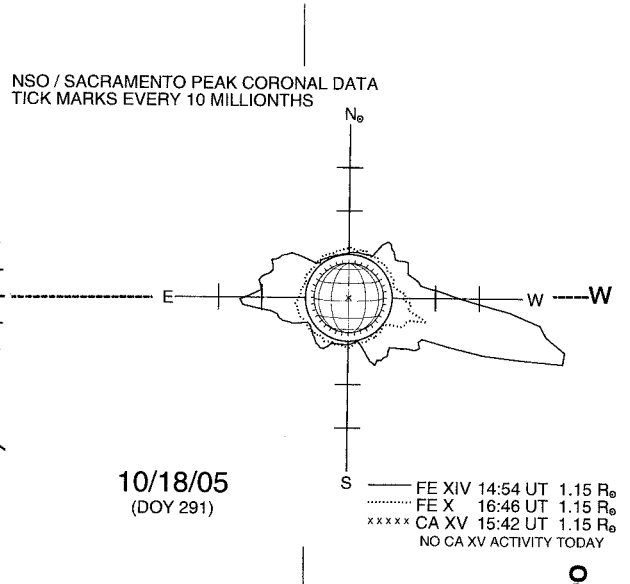
HOLLOMAN SUNSPOTS



1425 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

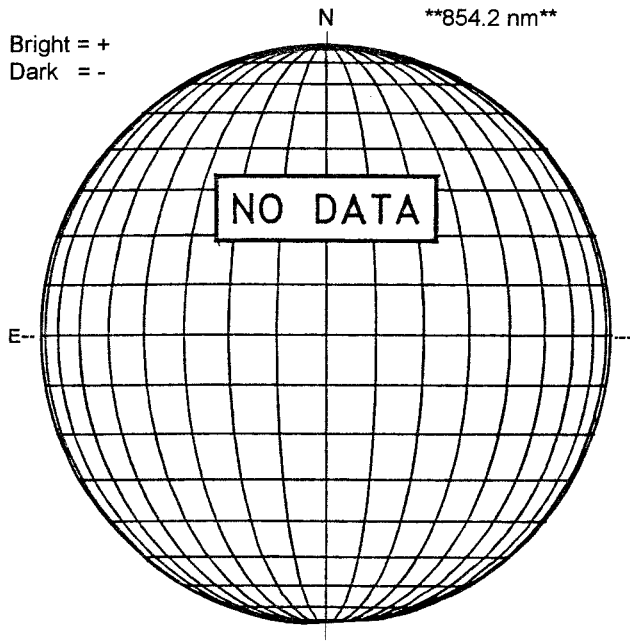


S

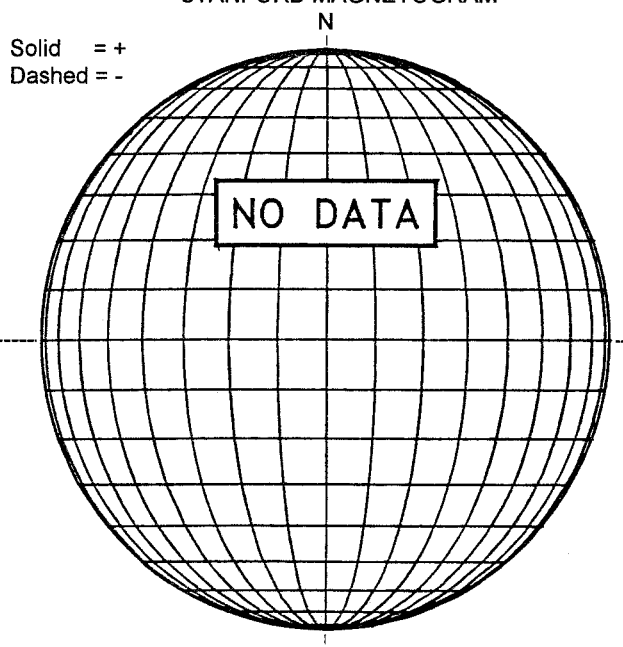
59
Oct 05

OCTOBER 19, 2005 (P= 26.00, Bo = 5.56, Lo = 131.62)

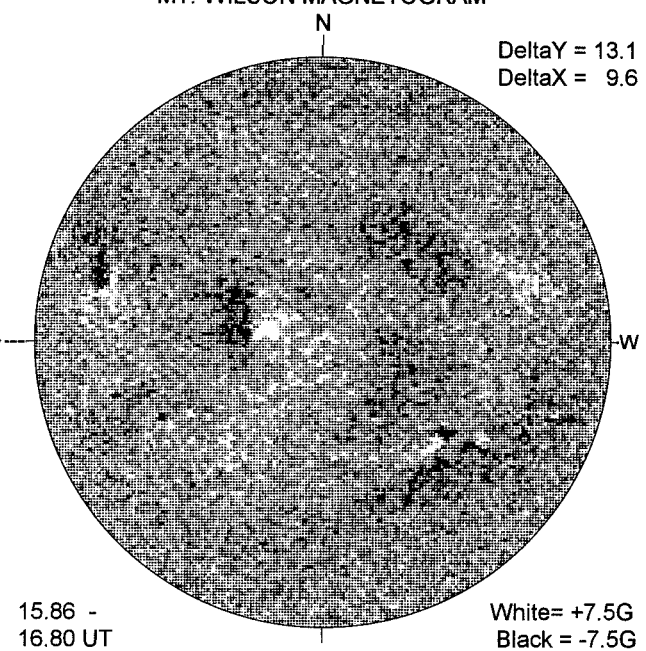
KITT PEAK MAGNETOGRAM--SOLIS



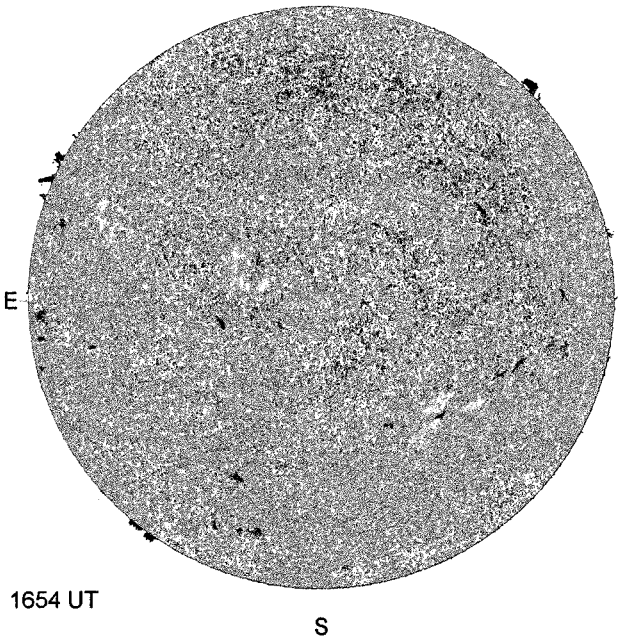
STANFORD MAGNETOGRAM



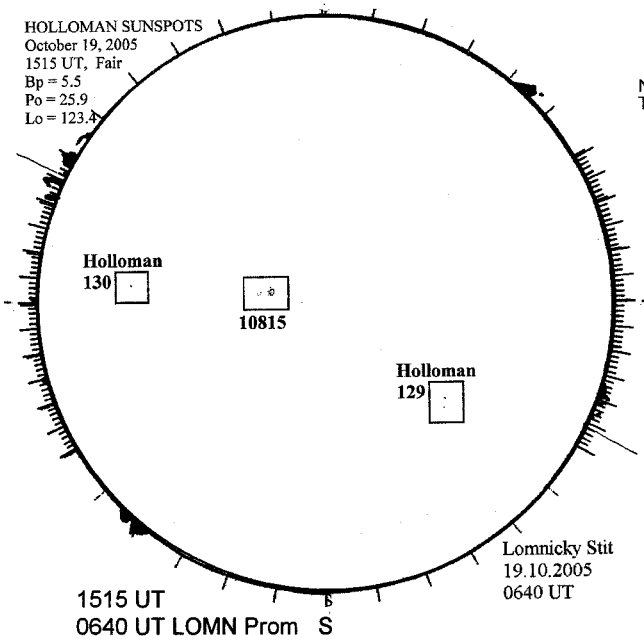
MT. WILSON MAGNETOGRAM



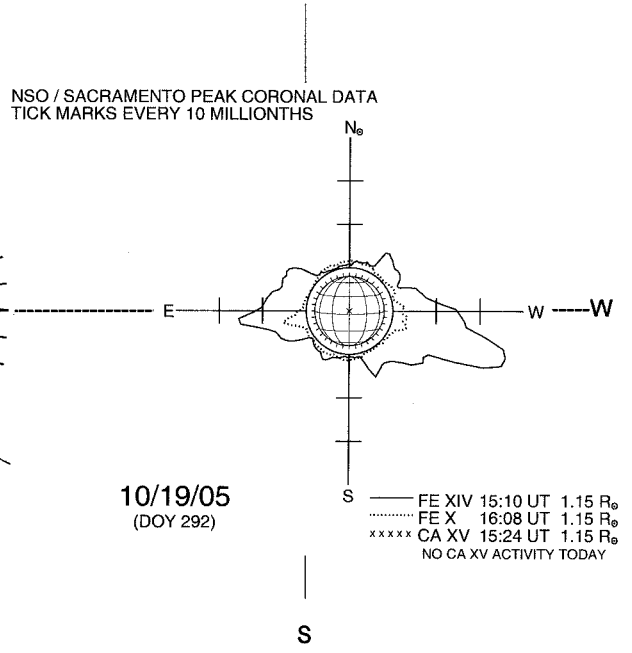
BIG BEAR H-ALPHA



HOLLOMAN SUNSPOTS

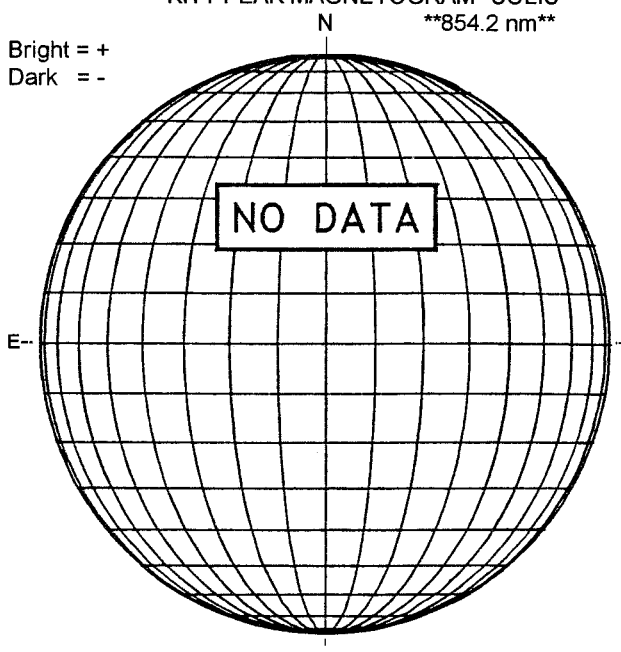


SACRAMENTO PEAK CORONA (1.15 Radii)----

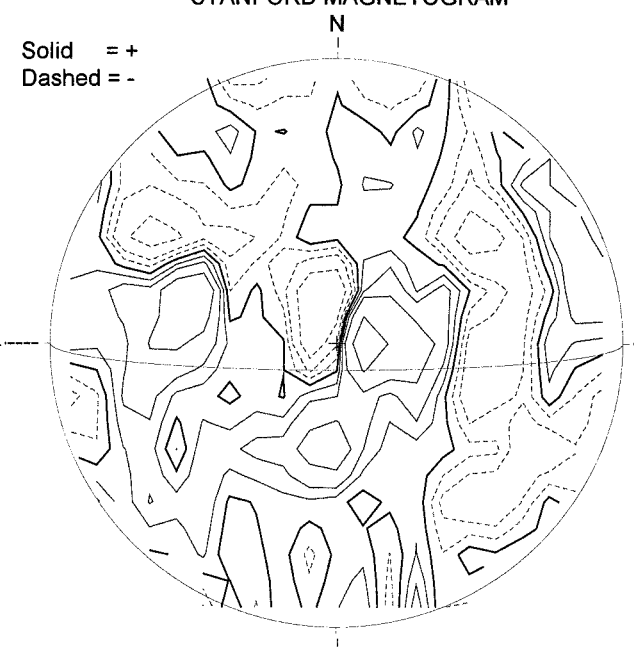


OCTOBER 20, 2005 (P= 25.93, Bo = 5.48, Lo = 118.43)

KITT PEAK MAGNETOGRAM--SOLIS

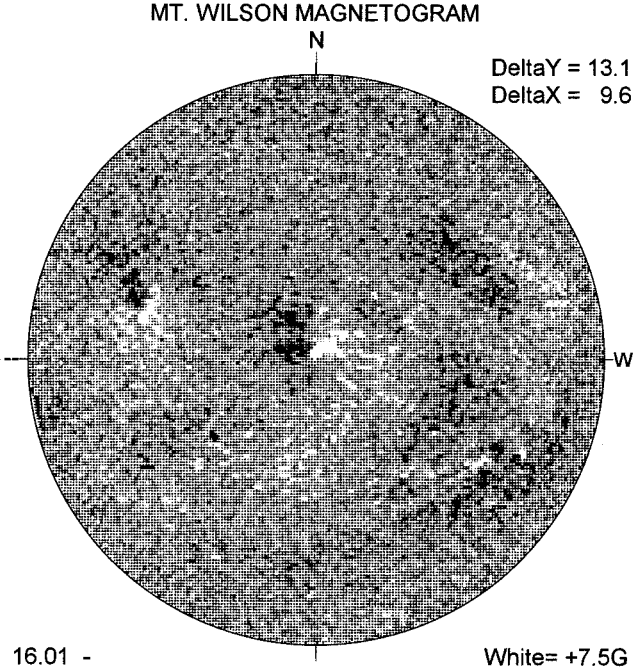


STANFORD MAGNETOGRAM



2052 UT

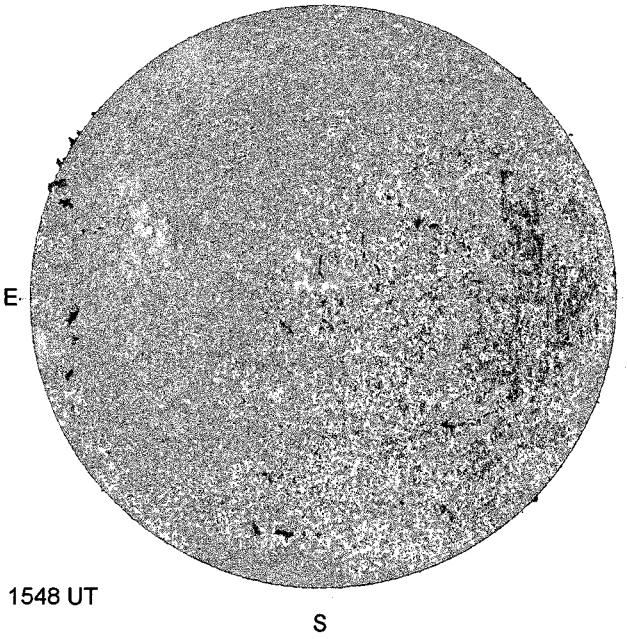
MT. WILSON MAGNETOGRAM



16.01 - 16.95 UT

White= +7.5G
Black = -7.5G

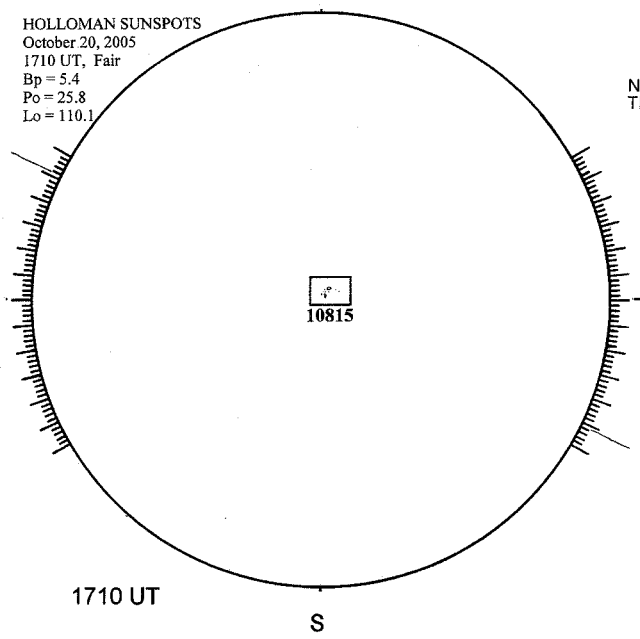
---- BIG BEAR H-ALPHA



1548 UT

S

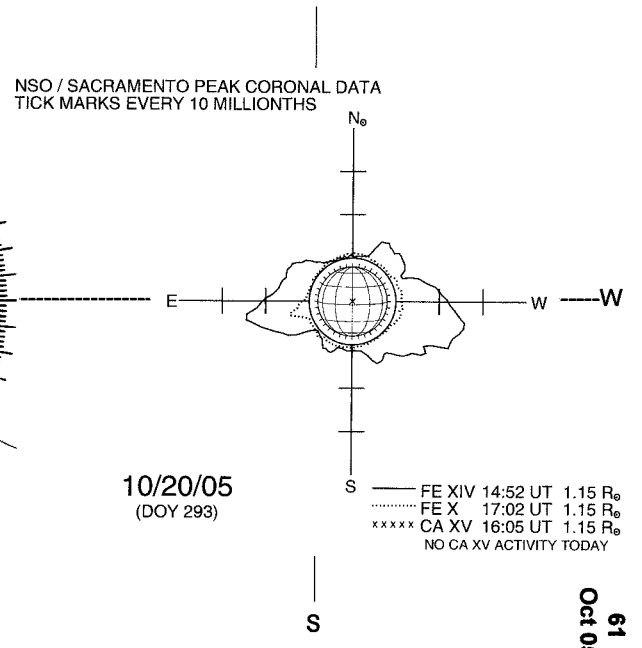
HOLLOMAN SUNSPOTS



1710 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

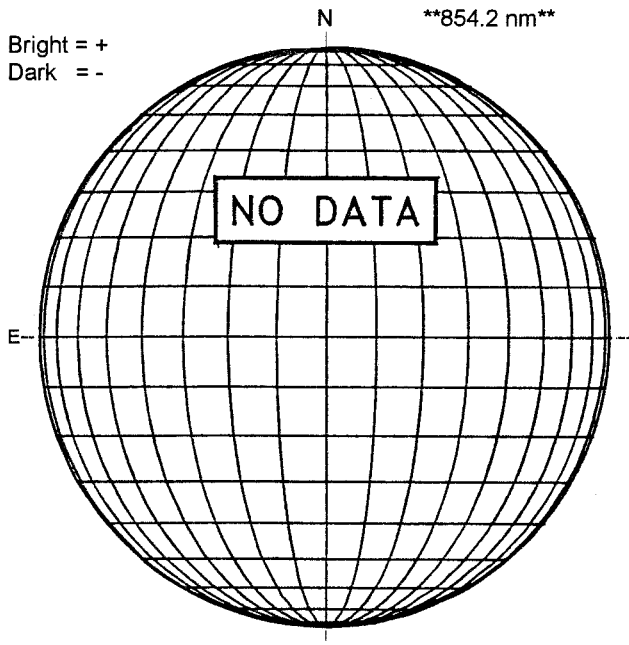


S

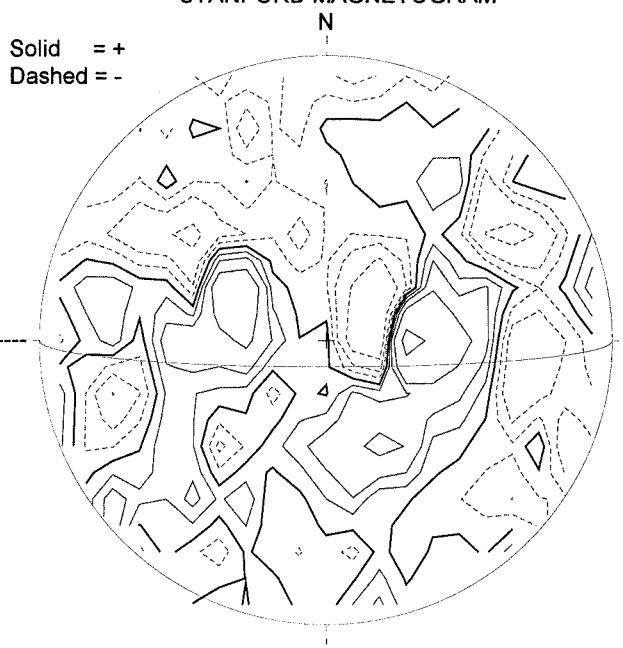
61
Oct 05

OCTOBER 21, 2005 (P= 25.86, Bo = 5.39, Lo = 105.24)

KITT PEAK MAGNETOGRAM--SOLIS

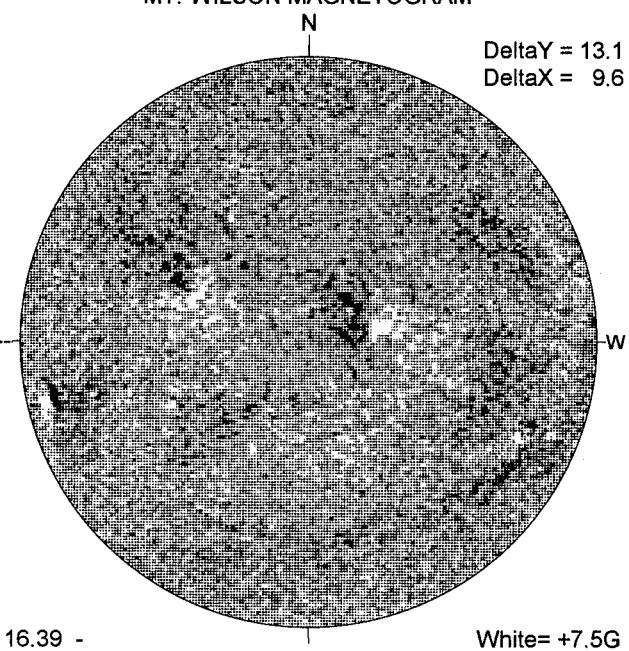


STANFORD MAGNETOGRAM



1946 UT

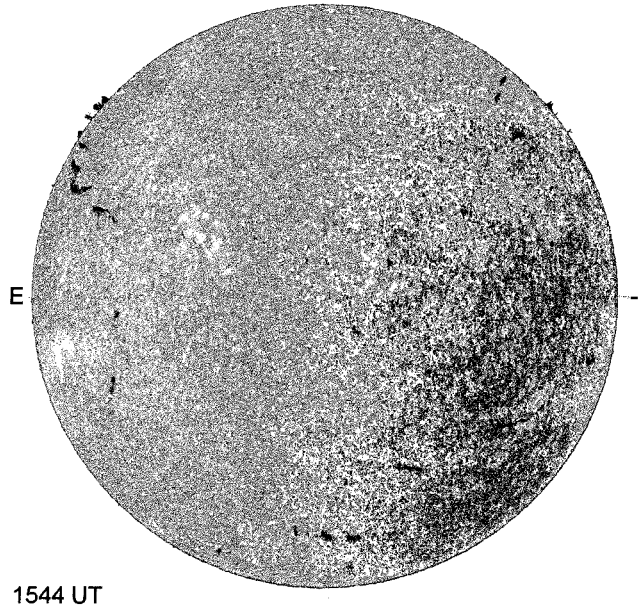
MT. WILSON MAGNETOGRAM



16.39 -
17.33 UT

White= +7.5G
Black = -7.5G

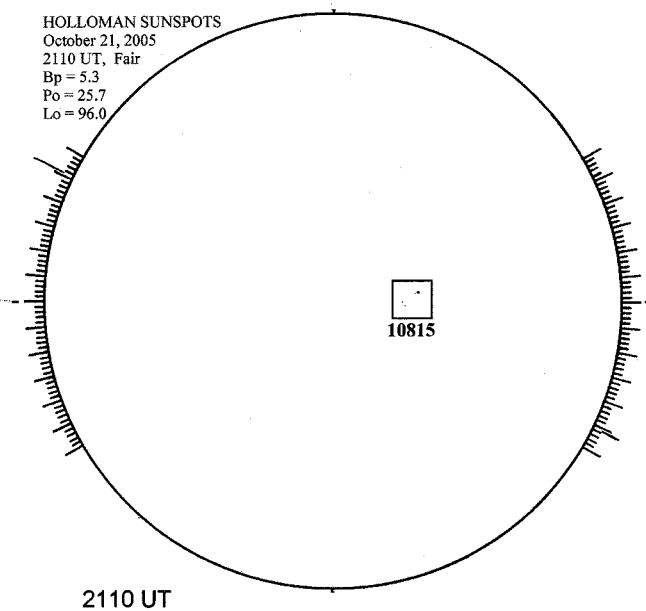
BIG BEAR H-ALPHA



1544 UT

S

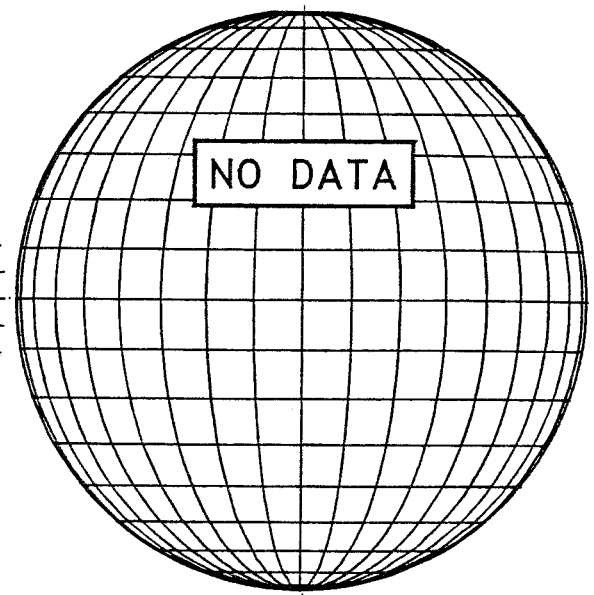
HOLLOMAN SUNSPOTS



2110 UT

S

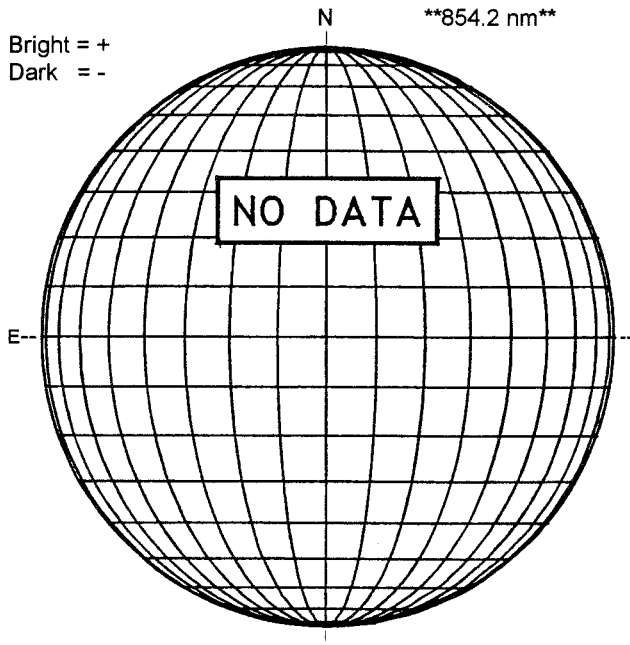
SACRAMENTO PEAK CORONA (1.15 Radii)



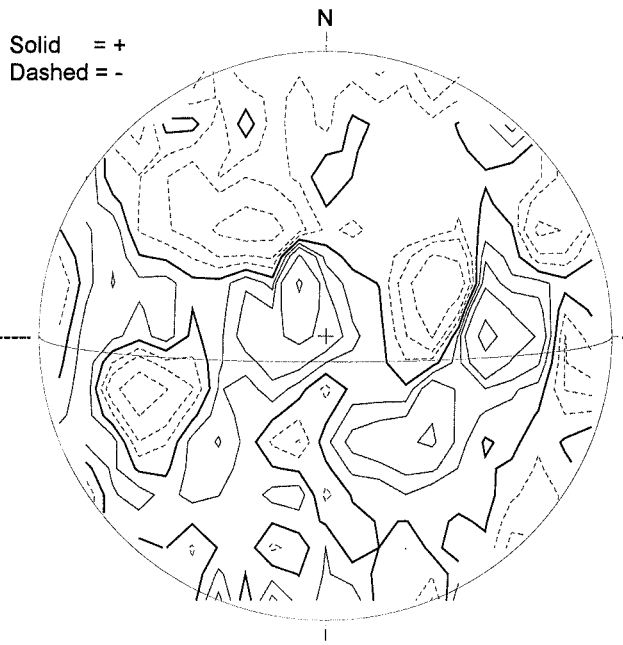
S

OCTOBER 22, 2005 (P= 25.77, Bo = 5.31, Lo = 92.05)

KITT PEAK MAGNETOGRAM--SOLIS

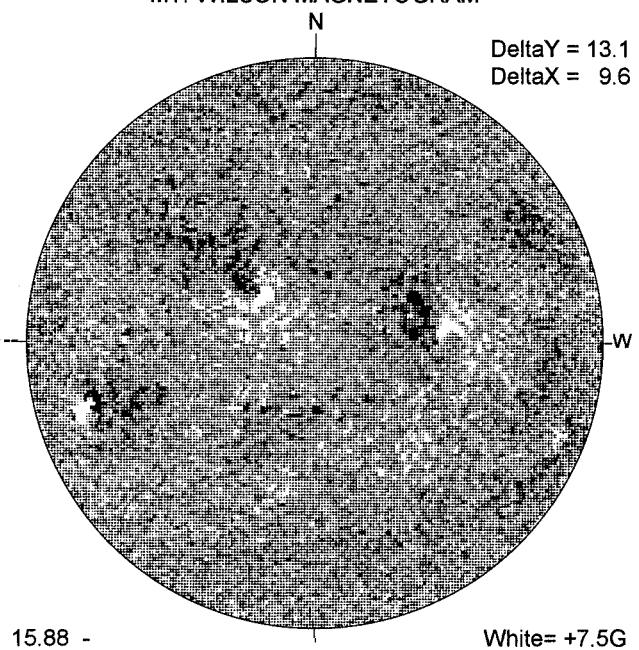


STANFORD MAGNETOGRAM



2204 UT

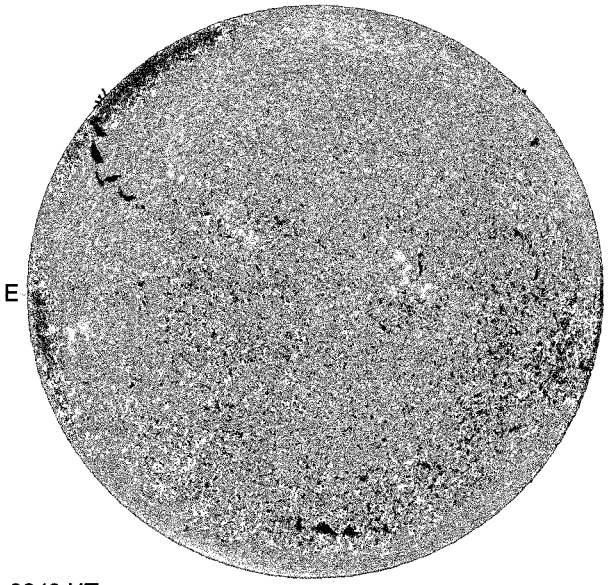
MT. WILSON MAGNETOGRAM



15.88 -
16.82 UT

White= +7.5G
Black = -7.5G

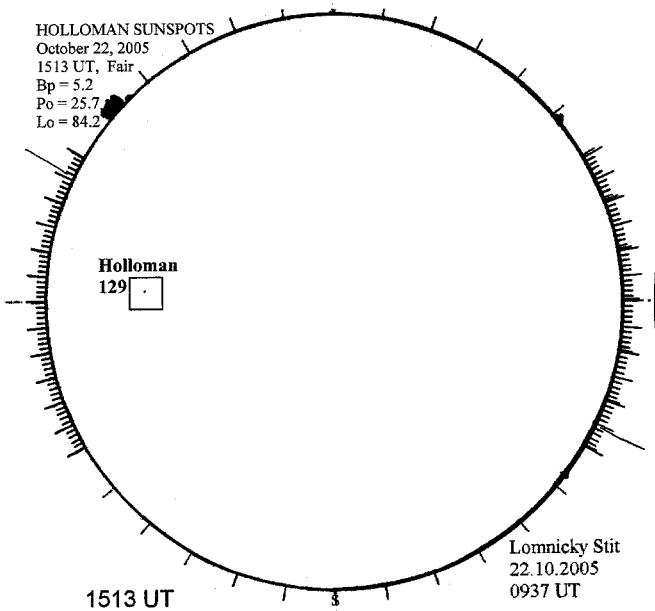
KANZELHOHE H-ALPHA



0843 UT

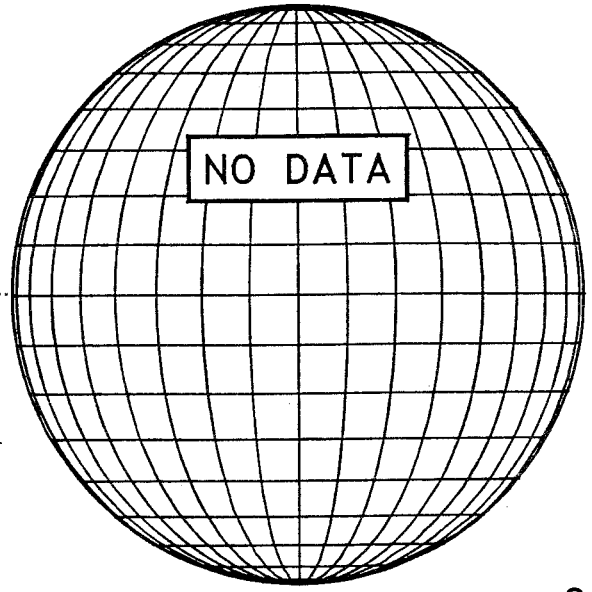
S

HOLLOMAN SUNSPOTS



1513 UT
0937 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

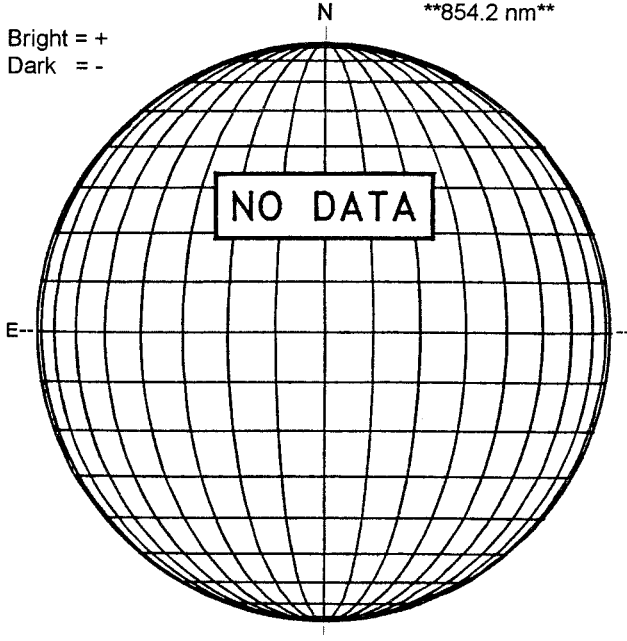


S

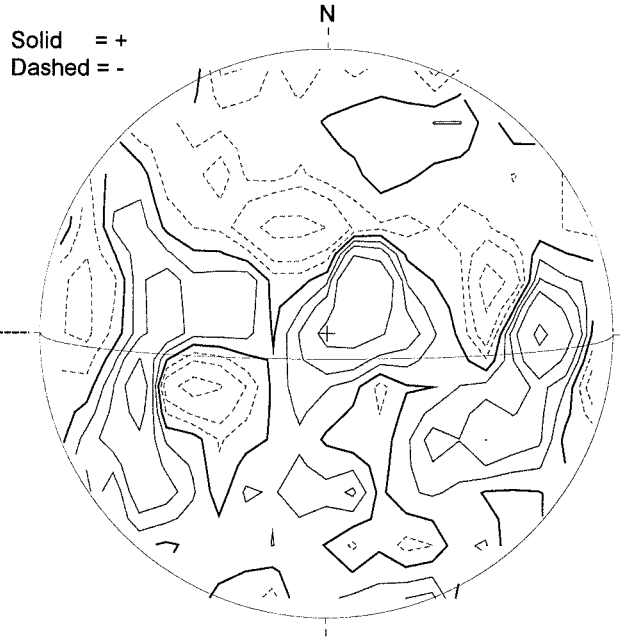
63
Oct 05

OCTOBER 23, 2005 (P= 25.68, Bo = 5.22, Lo = 78.87)

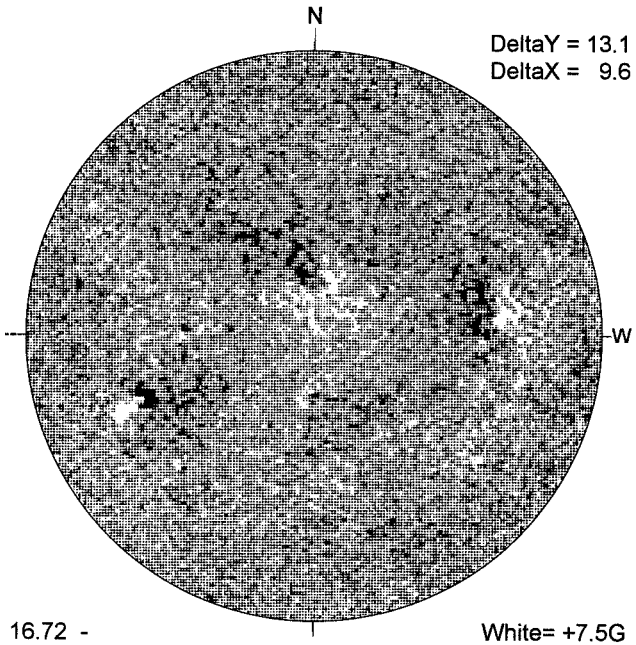
KITT PEAK MAGNETOGRAM--SOLIS



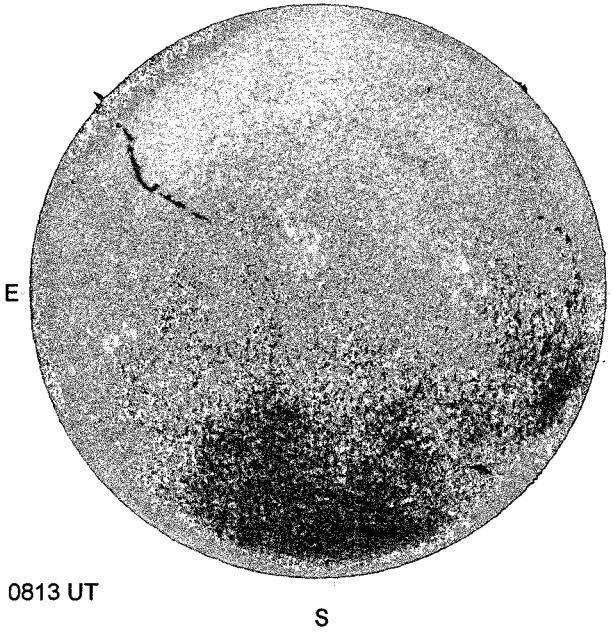
STANFORD MAGNETOGRAM



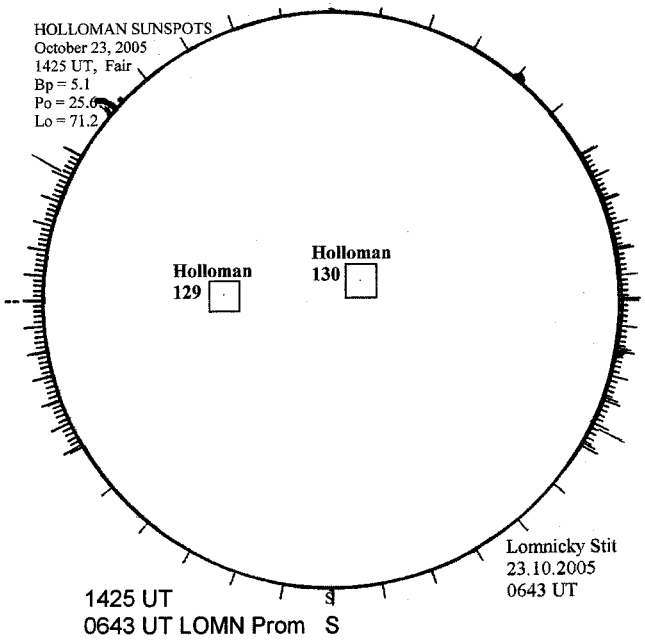
MT. WILSON MAGNETOGRAM



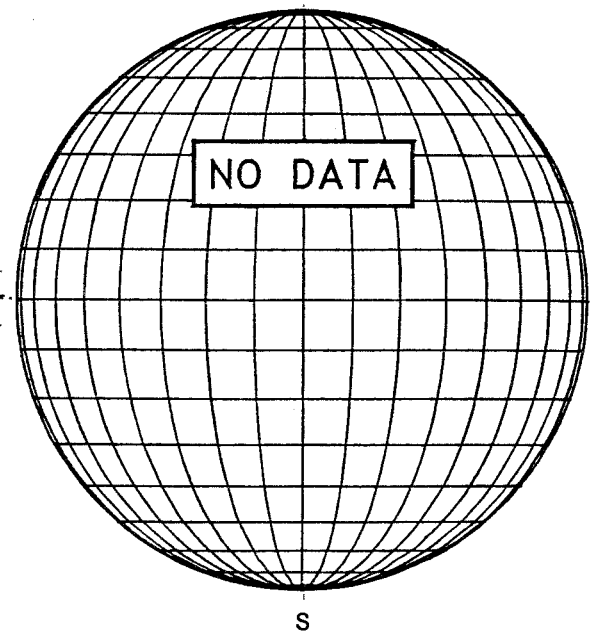
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS

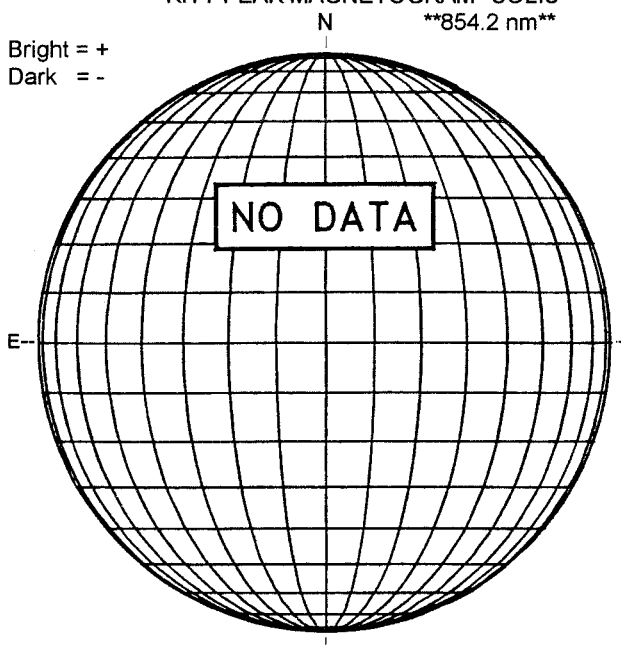


SACRAMENTO PEAK CORONA (1.15 Radii)----

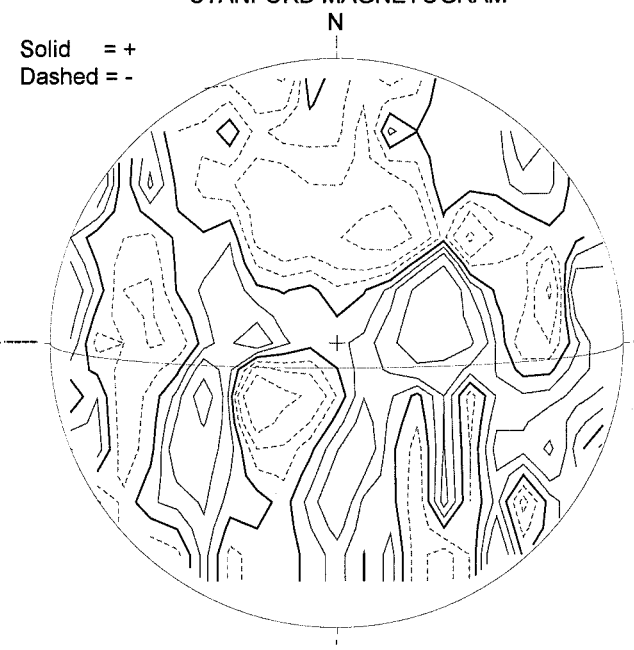


OCTOBER 24, 2005 (P= 25.58, Bo = 5.14, Lo = 65.68)

KITT PEAK MAGNETOGRAM--SOLIS

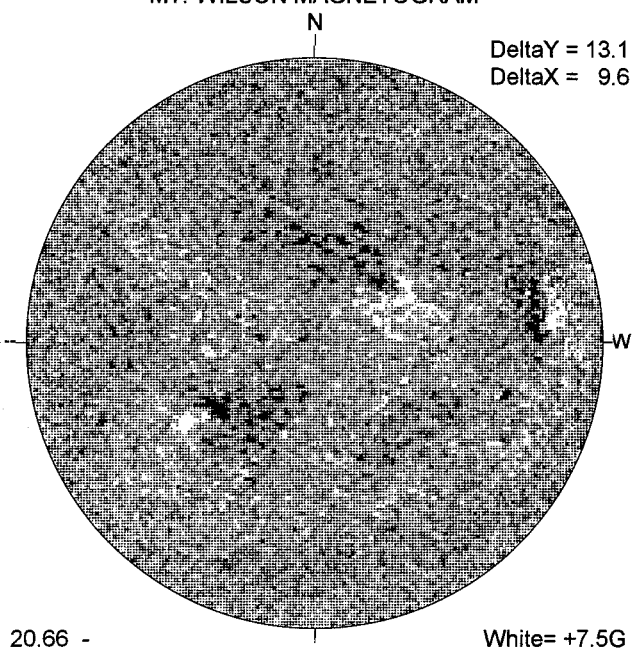


STANFORD MAGNETOGRAM



2358 UT

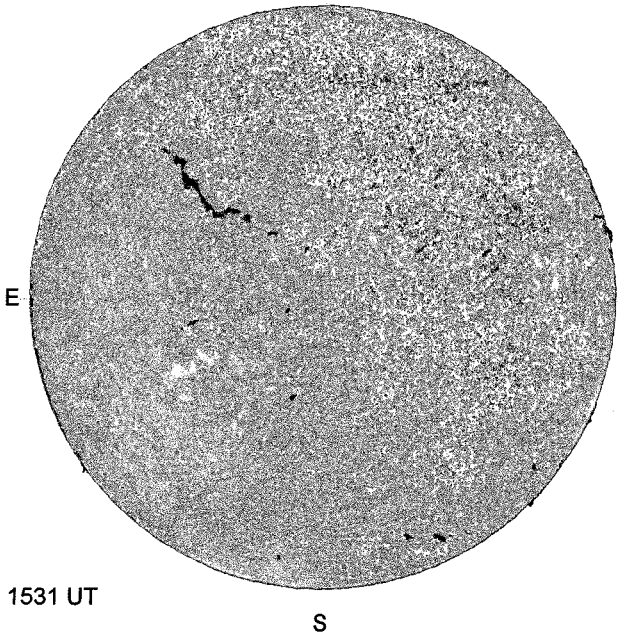
MT. WILSON MAGNETOGRAM



20.66 -
21.62 UT

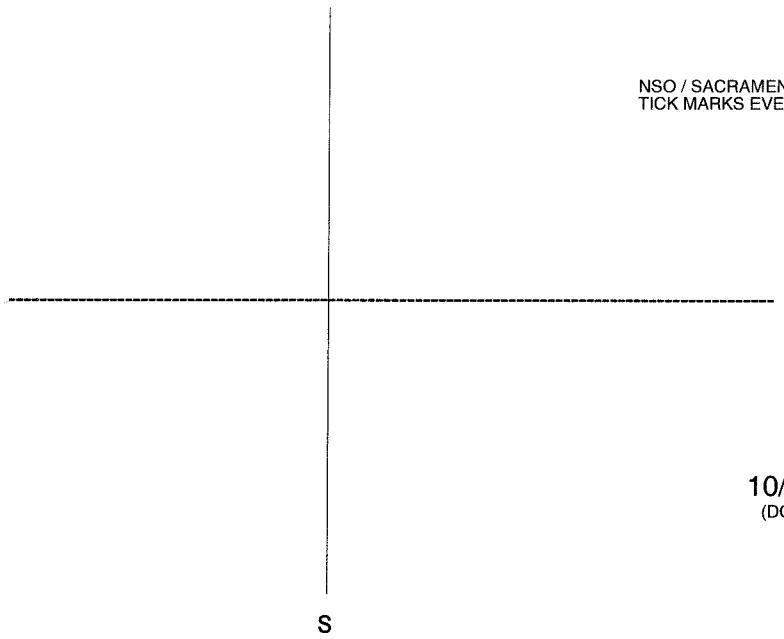
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

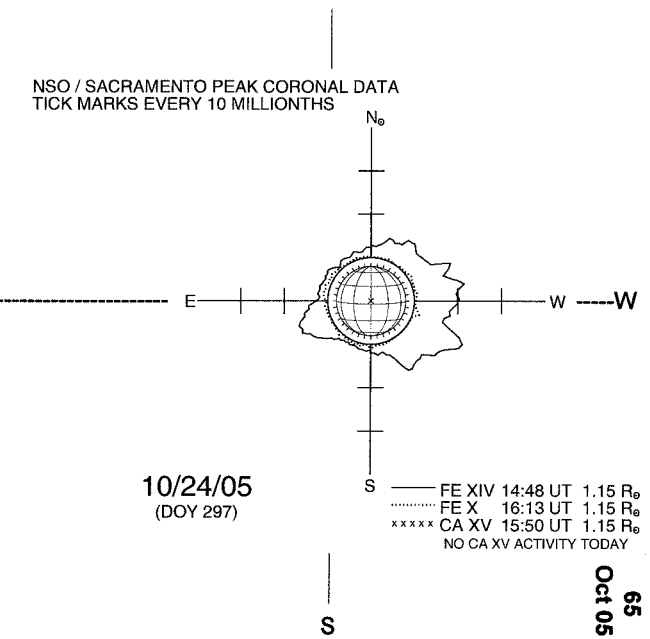


1531 UT

SAN VITO SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)----

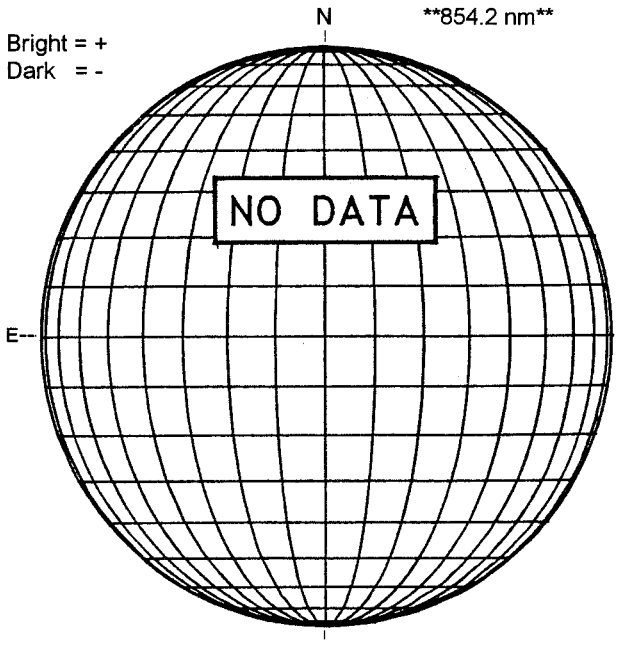


10/24/05
(DOY 297)

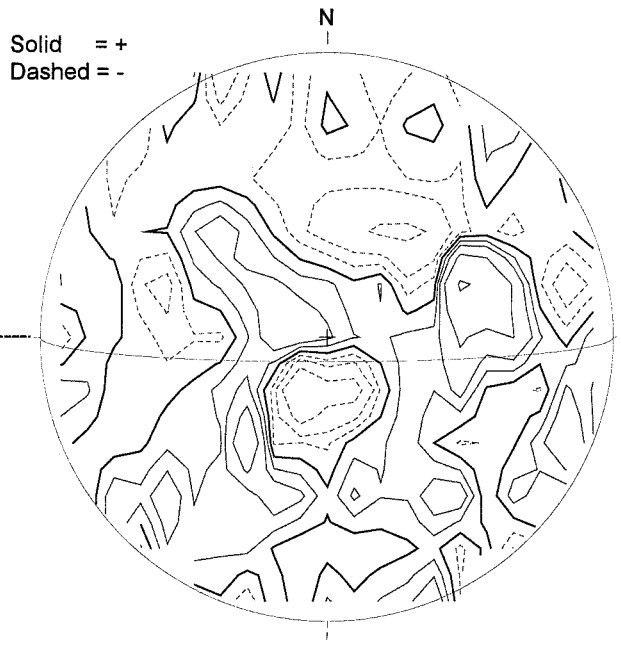
65
Oct 05

OCTOBER 25, 2005 (P= 25.47, Bo = 5.05, Lo = 52.49)

KITT PEAK MAGNETOGRAM--SOLIS

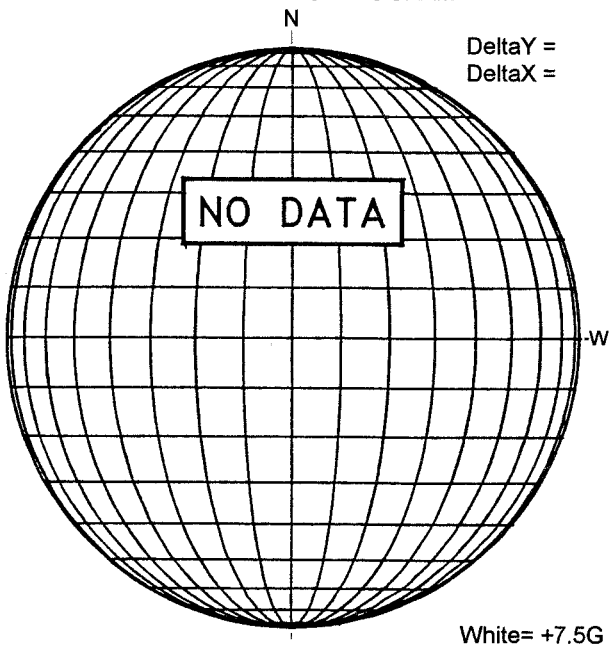


STANFORD MAGNETOGRAM



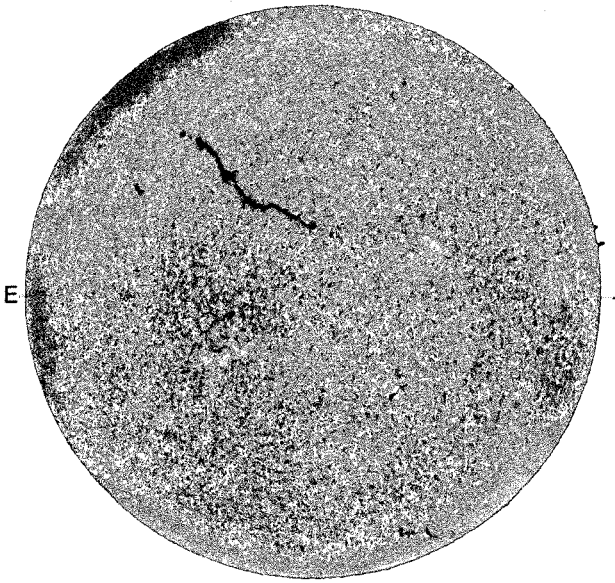
1751 UT

MT. WILSON MAGNETOGRAM



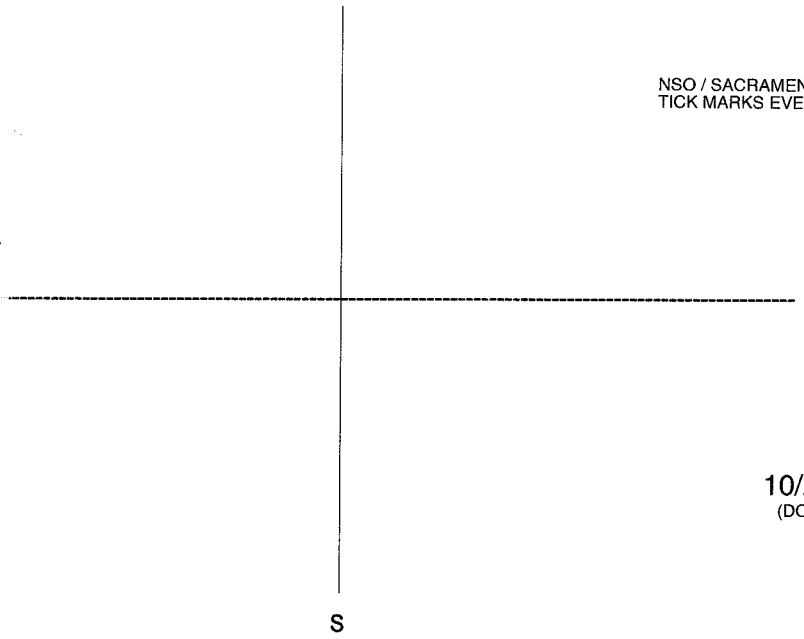
White= +7.5G
Black = -7.5G

KANZELHOHE H-ALPHA

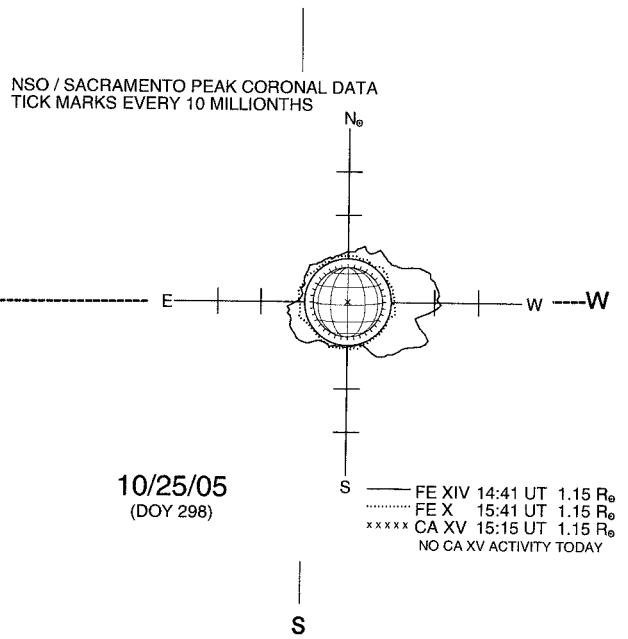


0753 UT

SAN VITO SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)----



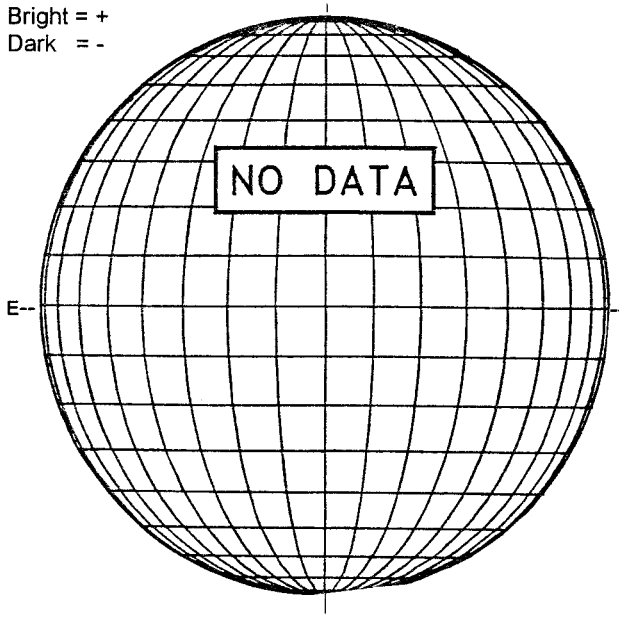
OCTOBER 26, 2005 (P= 25.35, Bo = 4.95, Lo = 39.30)

KITT PEAK MAGNETOGRAM--SOLIS

N

854.2 nm

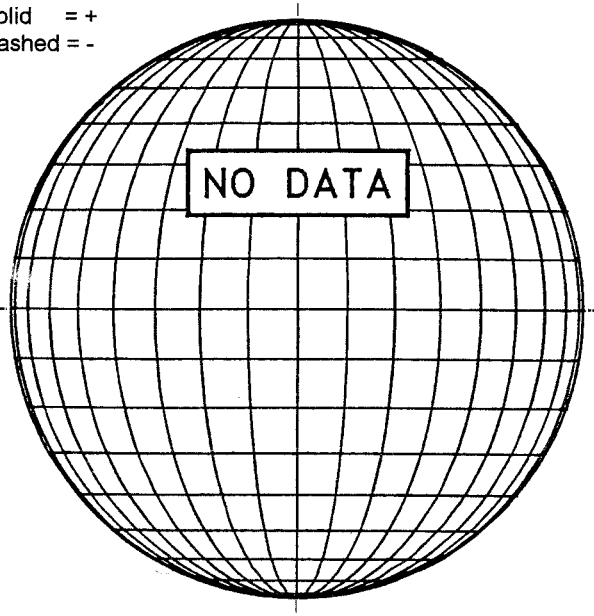
Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

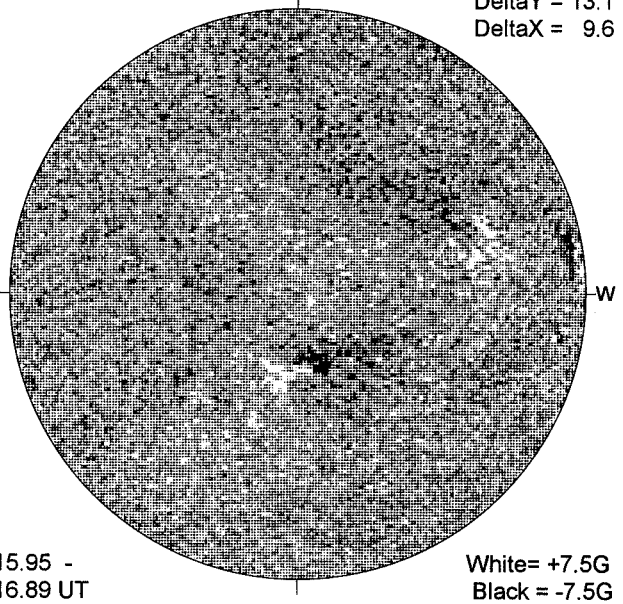
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

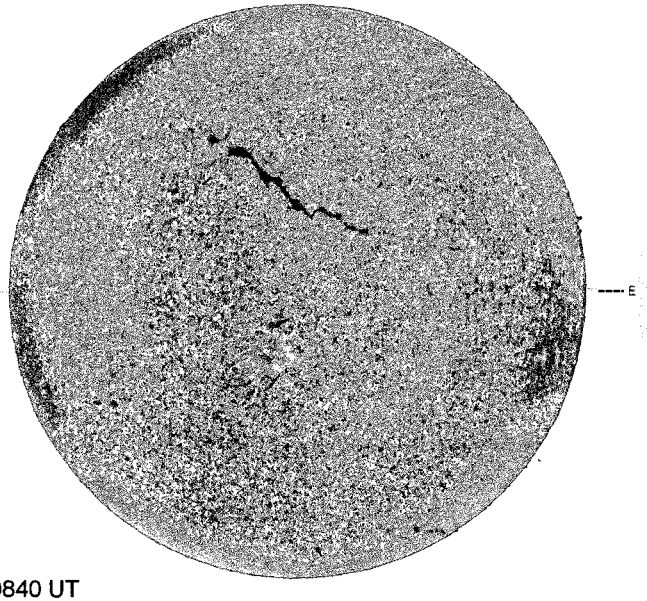
DeltaY = 13.1
DeltaX = 9.6



15.95 -
16.89 UT

White= +7.5G
Black = -7.5G

KANZELHOHE H-ALPHA



0840 UT

S

SAN VITO SUNSPOTS

N_o

ISOON SUNSPOTS
October 26, 2005
1550 UT, Exc

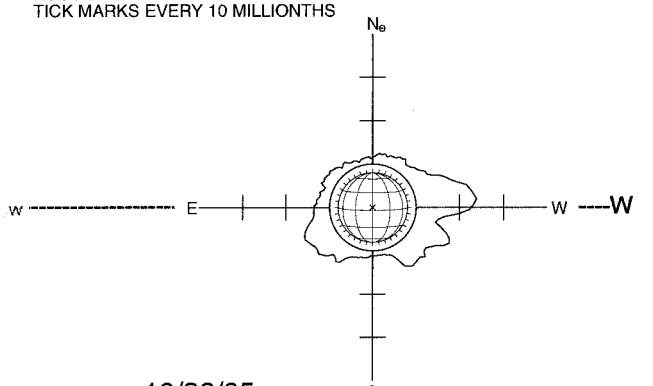
NO SPOTS OBSERVED

S

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



10/26/05
(DOY 299)

FE XIV 14:45 UT 1.15 R_e
xxxxx CA XV 15:34 UT 1.15 R_e
NO CA XV ACTIVITY TODAY

S

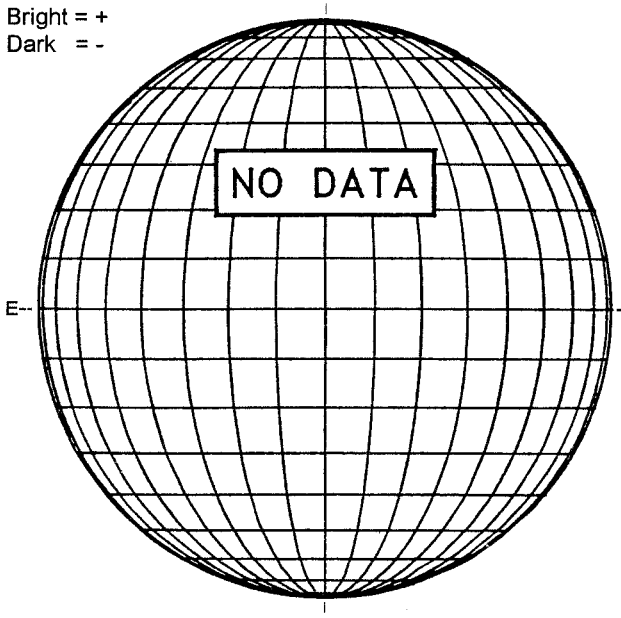
67
Oct 05

OCTOBER 27, 2005 (P= 25.23, Bo = 4.86, Lo = 26.11)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

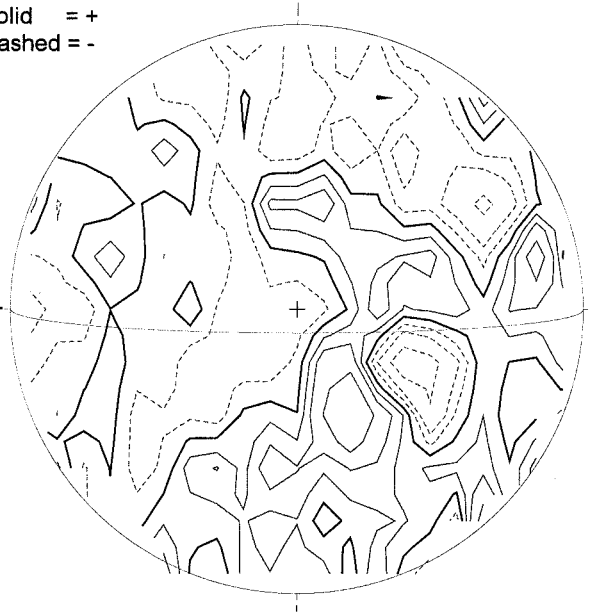
Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

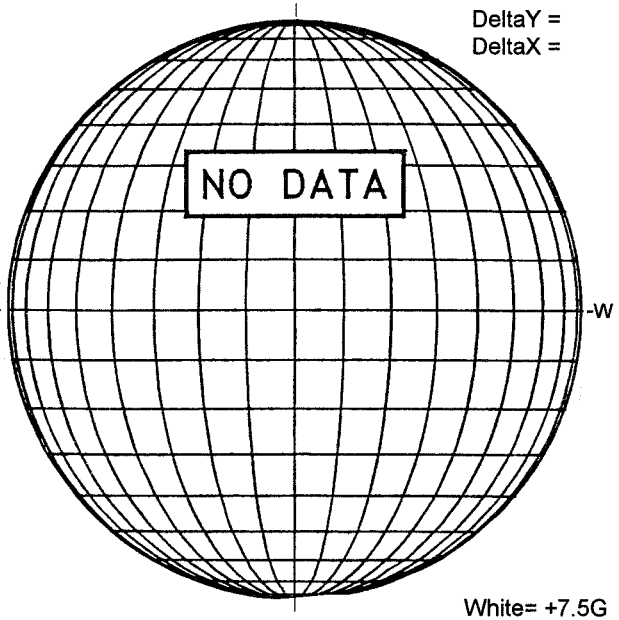


2041 UT

MT. WILSON MAGNETOGRAM

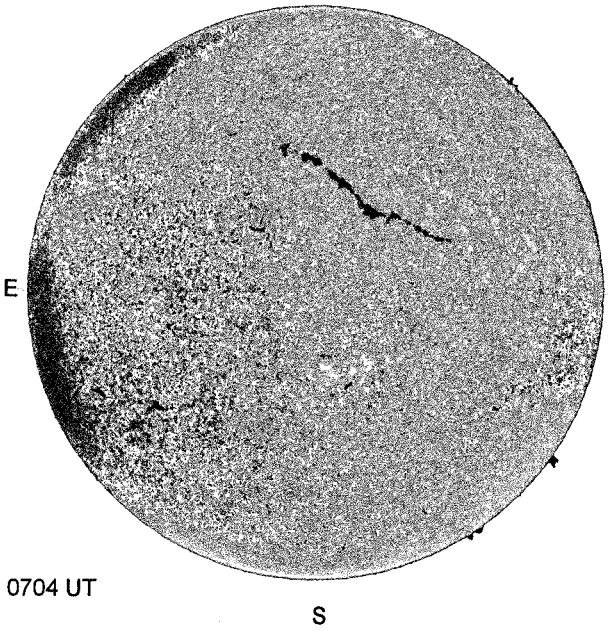
N

DeltaY =
DeltaX =



White= +7.5G
Black = -7.5G

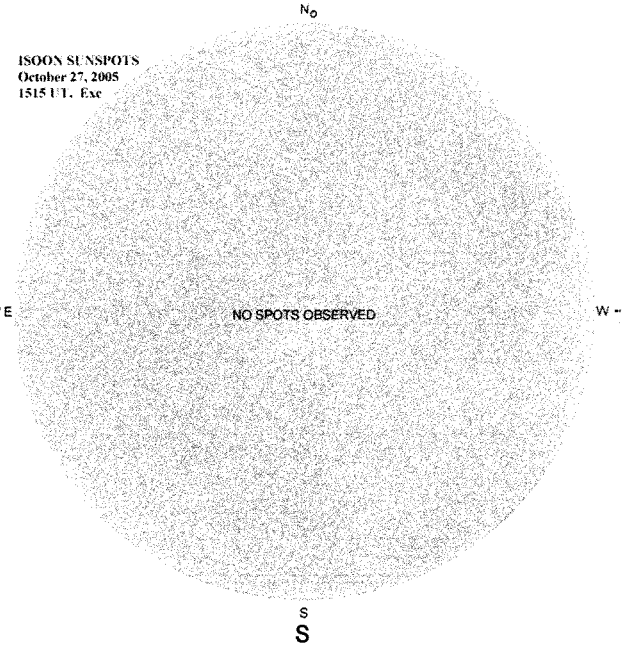
KANZELHOHE H-ALPHA



0704 UT

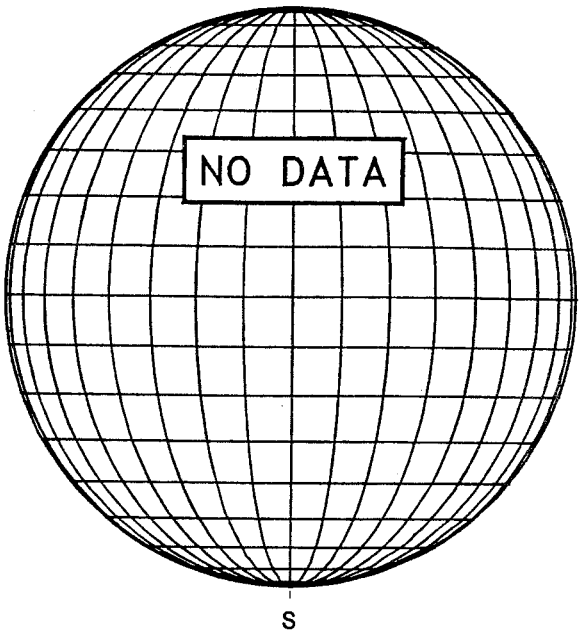
S

SAN VITO SUNSPOTS



S

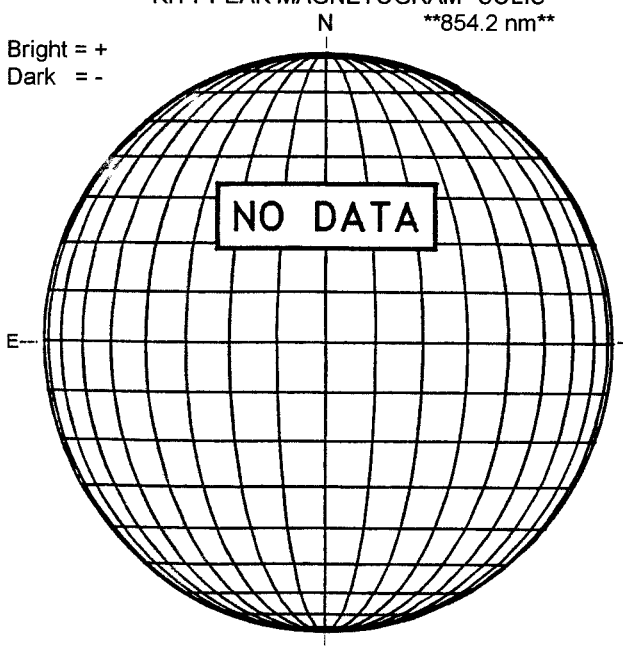
SACRAMENTO PEAK CORONA (1.15 Radii)----



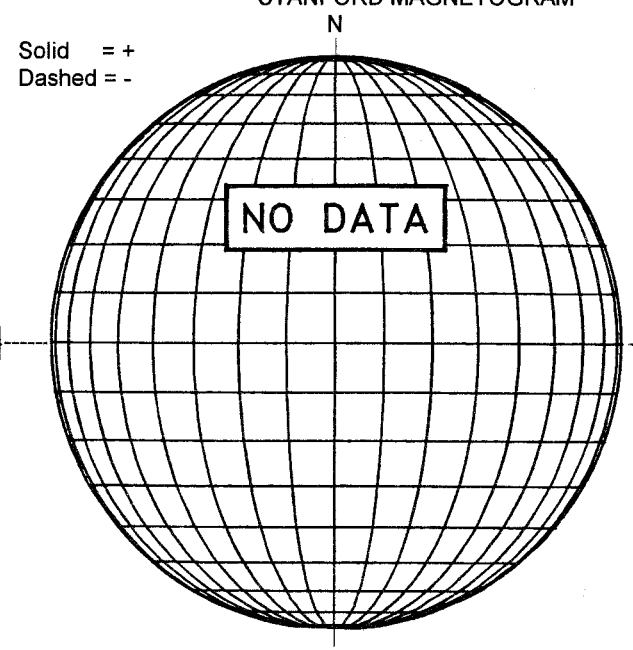
S

OCTOBER 28, 2005 (P= 25.10, Bo = 4.77, Lo = 12.93)

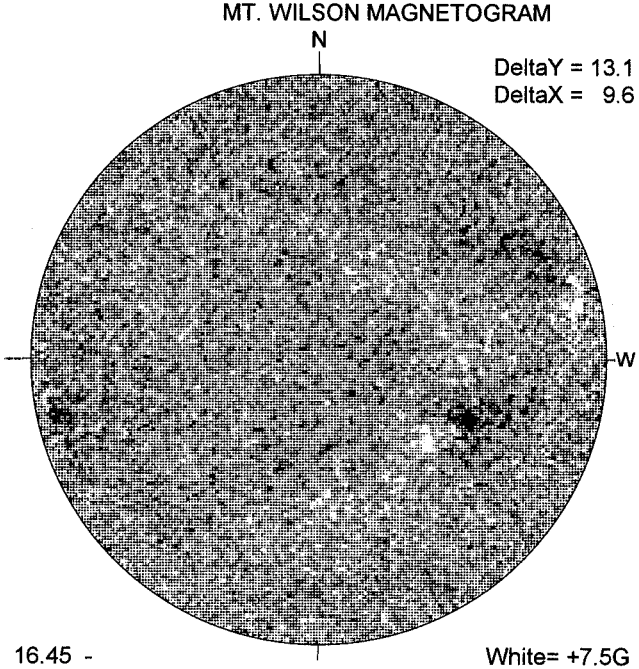
KITT PEAK MAGNETOGRAM--SOLIS



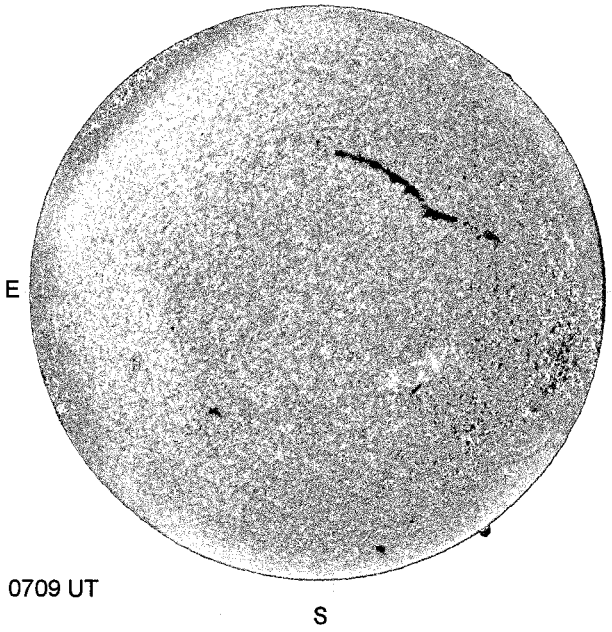
STANFORD MAGNETOGRAM



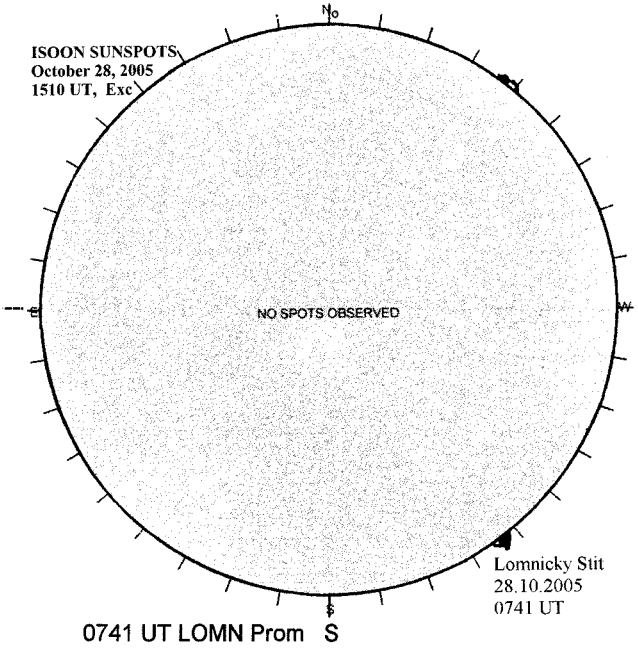
MT. WILSON MAGNETOGRAM



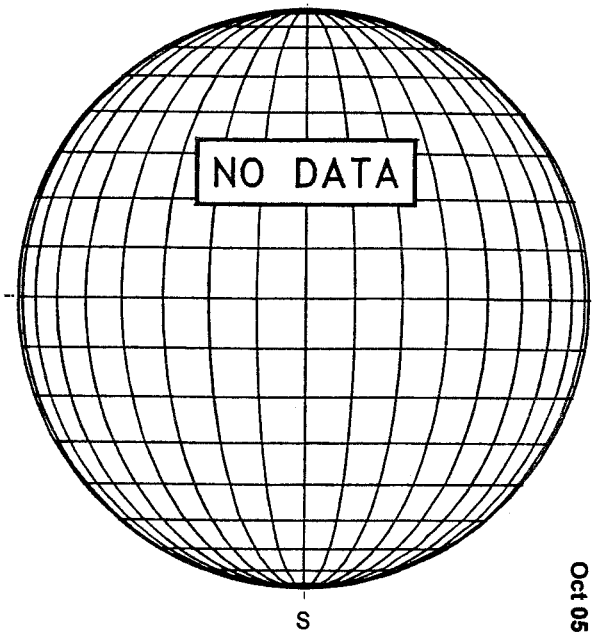
KANZELHOHE H-ALPHA



SAN VITO SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)----



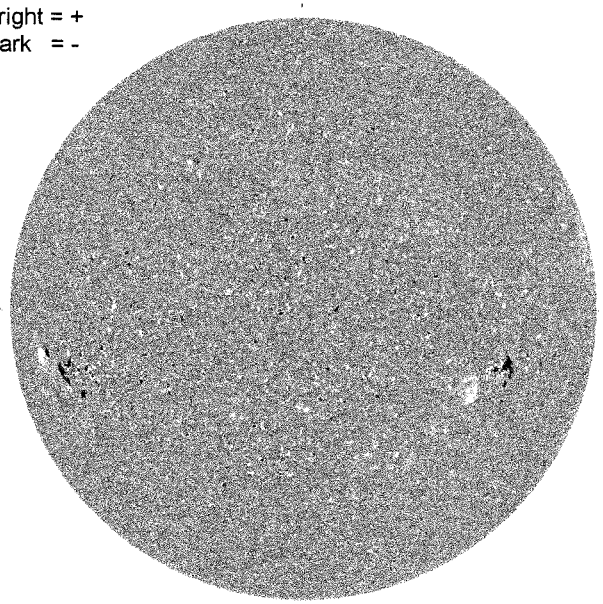
69
Oct 05

OCTOBER 29, 2005 (P= 24.96, Bo = 4.67, Lo = 359.74)

KITT PEAK MAGNETOGRAM--SOLIS

N **854.2 nm**

Bright = +
Dark = -



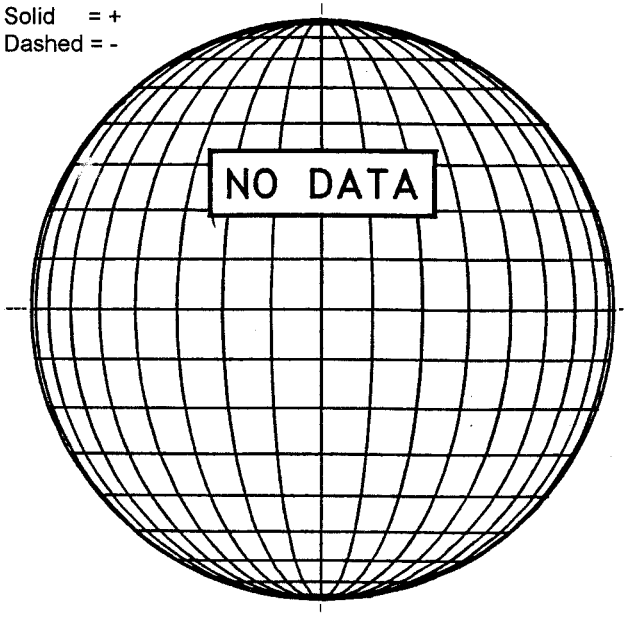
E-

1638 UT

STANFORD MAGNETOGRAM

N

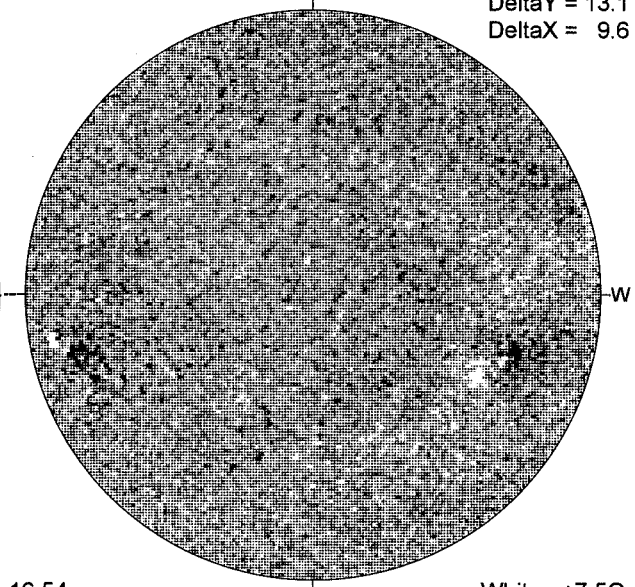
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

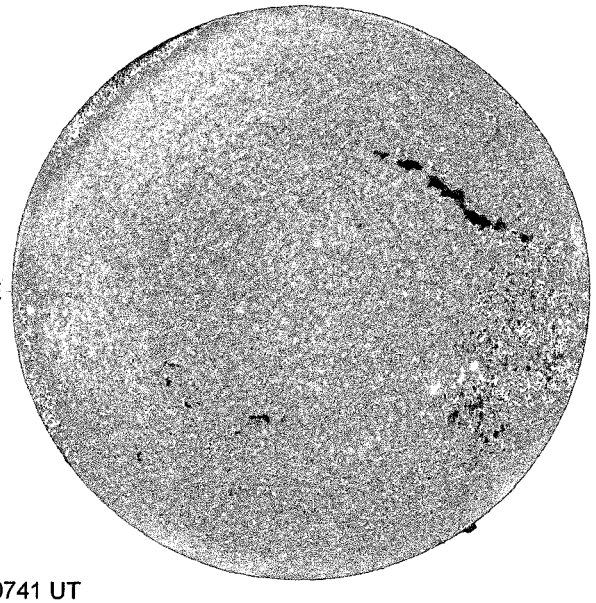


-W

16.54 -
17.49 UT

White= +7.5G
Black = -7.5G

KANZELHOHE H-ALPHA



E

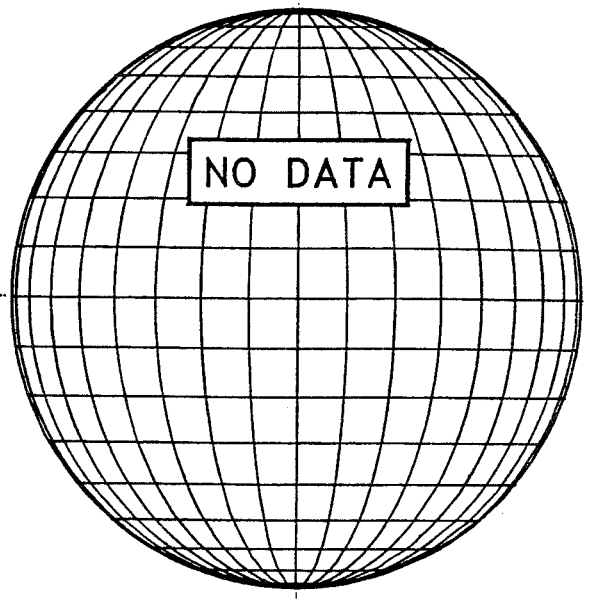
0741 UT

S

SAN VITO SUNSPOTS

0730 UT LOMN Prom S

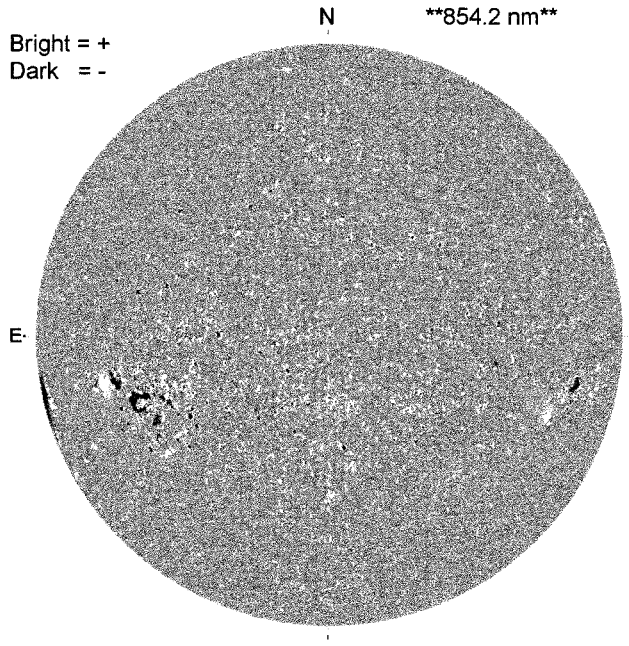
SACRAMENTO PEAK CORONA (1.15 Radii)----



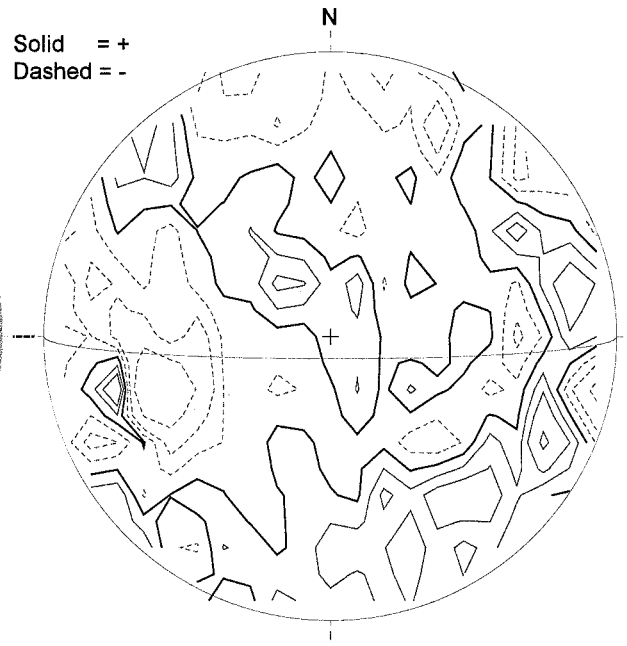
S

OCTOBER 30, 2005 (P= 24.81, Bo = 4.57, Lo = 346.55)

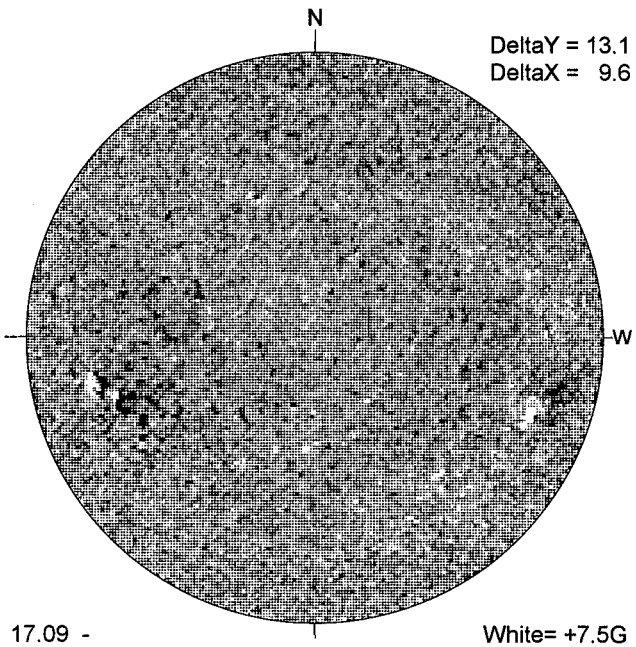
KITT PEAK MAGNETOGRAM—SOLIS



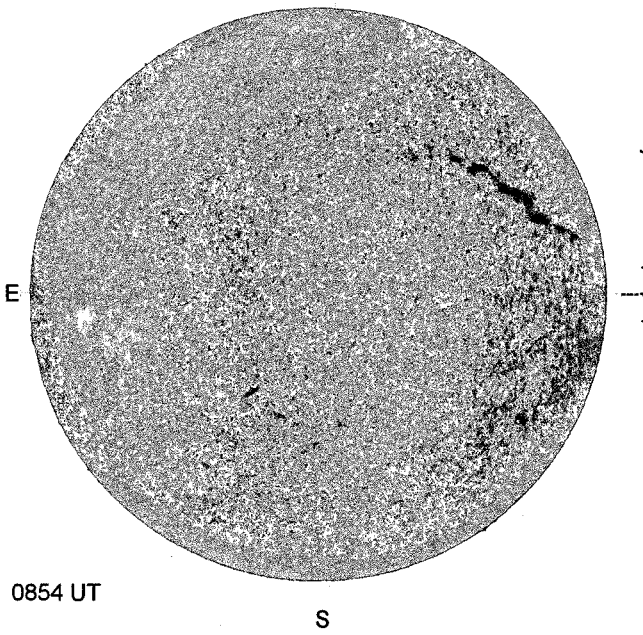
STANFORD MAGNETOGRAM



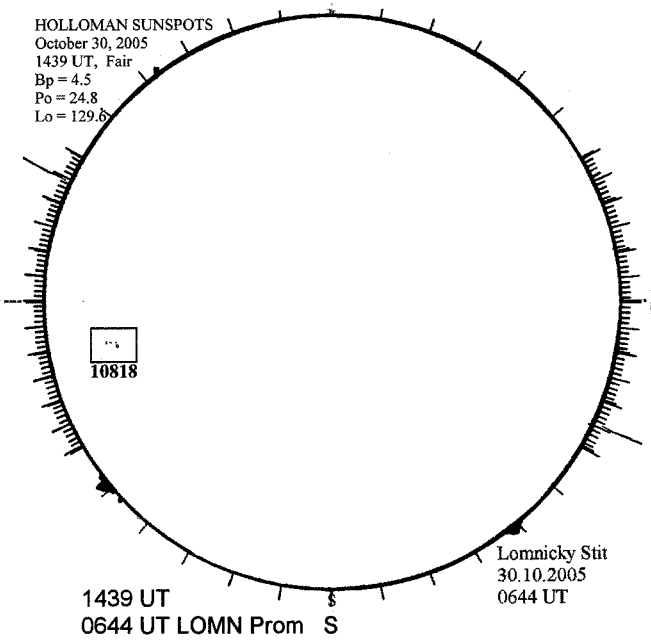
MT. WILSON MAGNETOGRAM



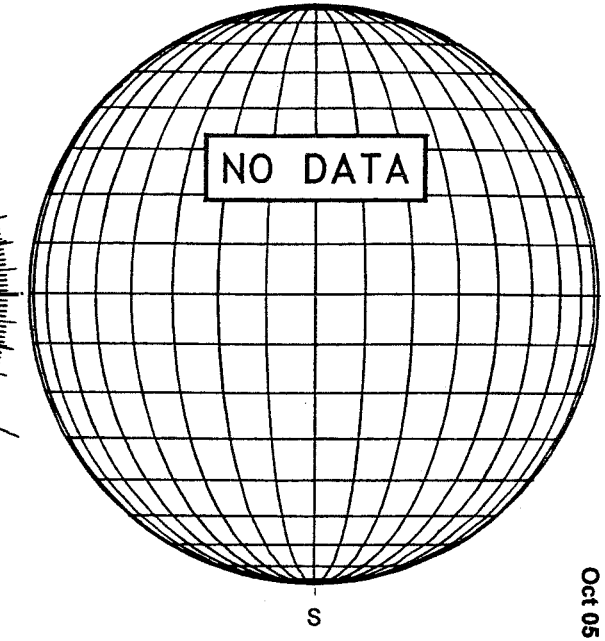
KANZELHOHE H-ALPHA



HOLLOMAN SUNSPOTS



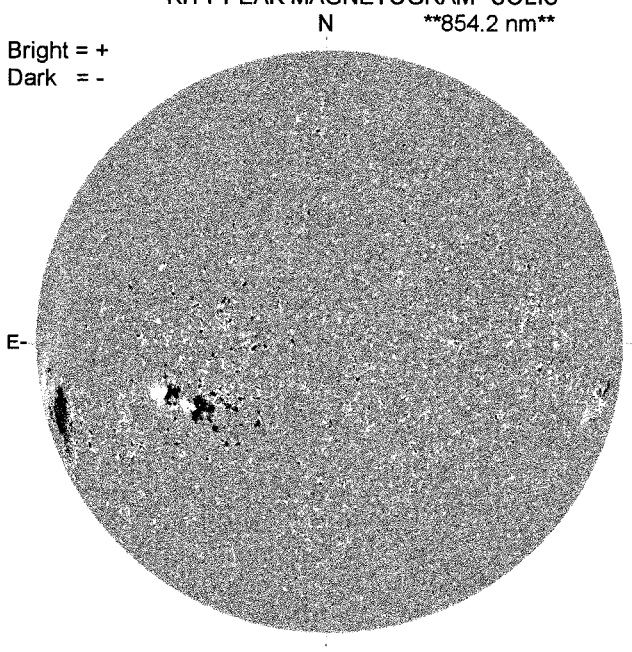
SACRAMENTO PEAK CORONA (1.15 Radii)



71
Oct 05

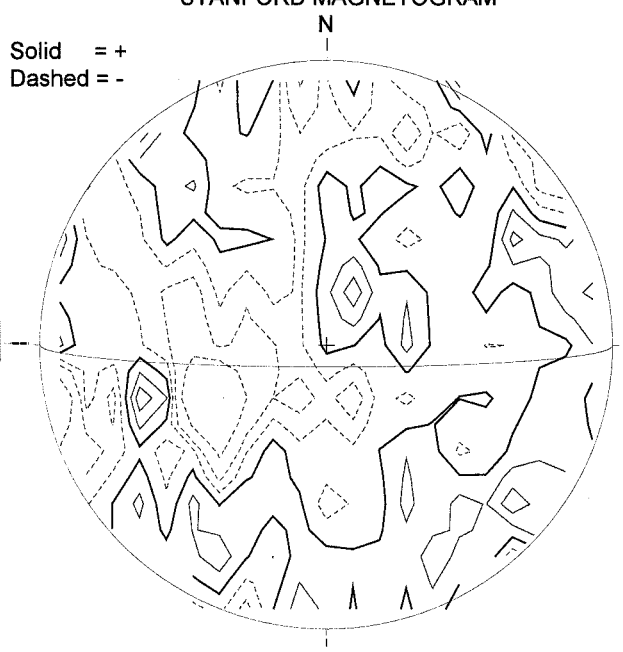
OCTOBER 31, 2005 (P= 24.66, Bo = 4.47, Lo = 333.37)

KITT PEAK MAGNETOGRAM--SOLIS



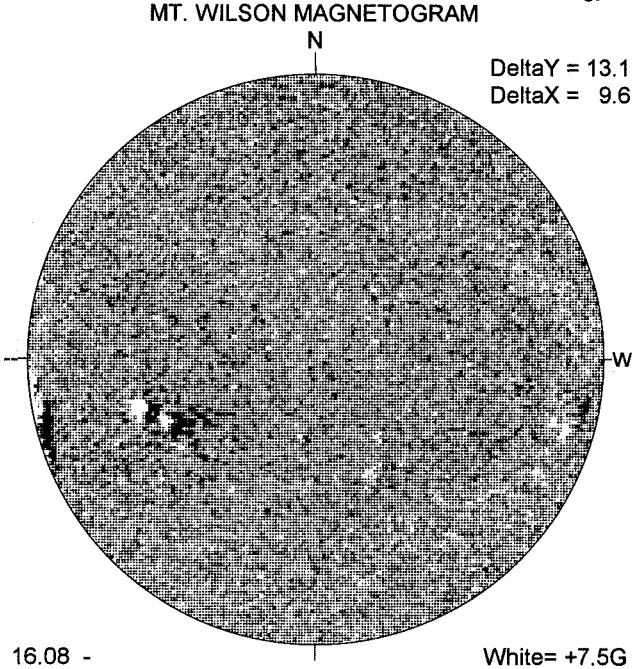
1859 UT

STANFORD MAGNETOGRAM



2058 UT

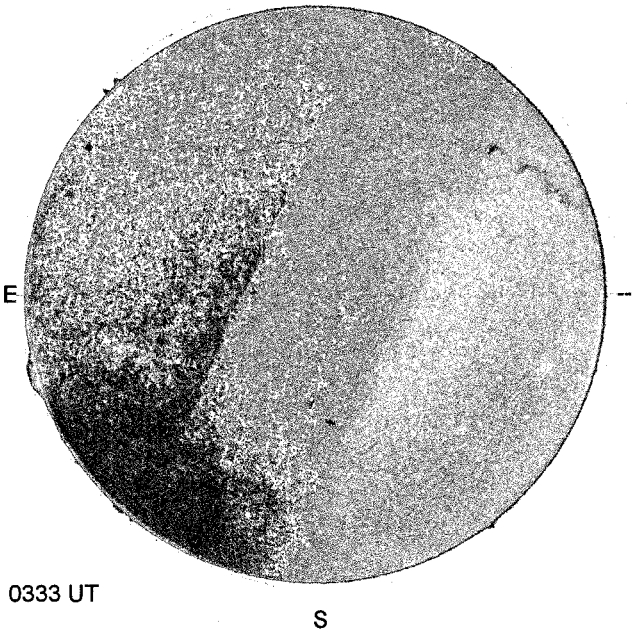
MT. WILSON MAGNETOGRAM



16.08 -
17.04 UT

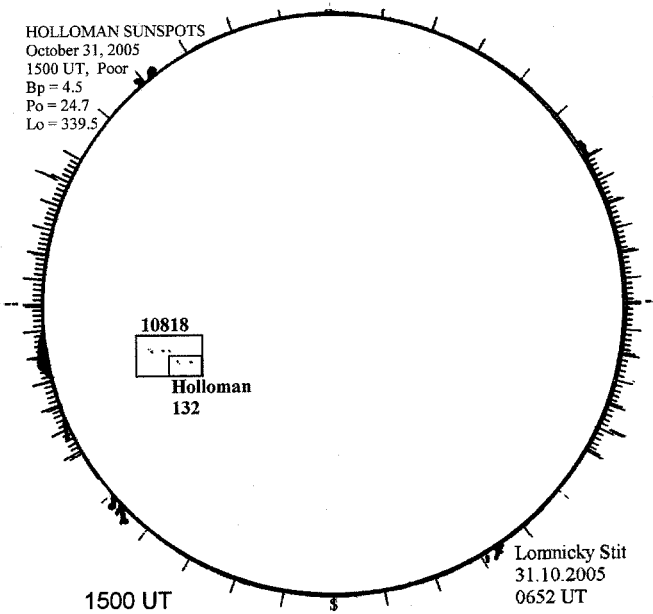
White= +7.5G
Black = -7.5G

HUAIROU H-ALPHA



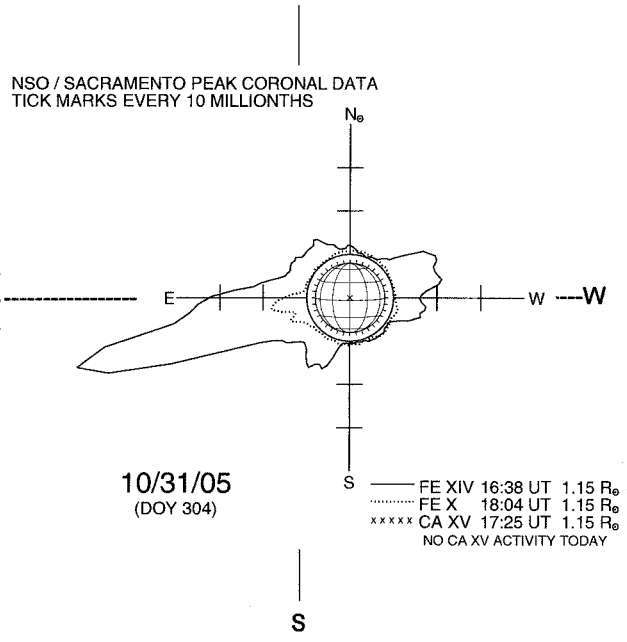
0333 UT

HOLLOMAN SUNSPOTS



1500 UT
0652 UT LOMN Prom S

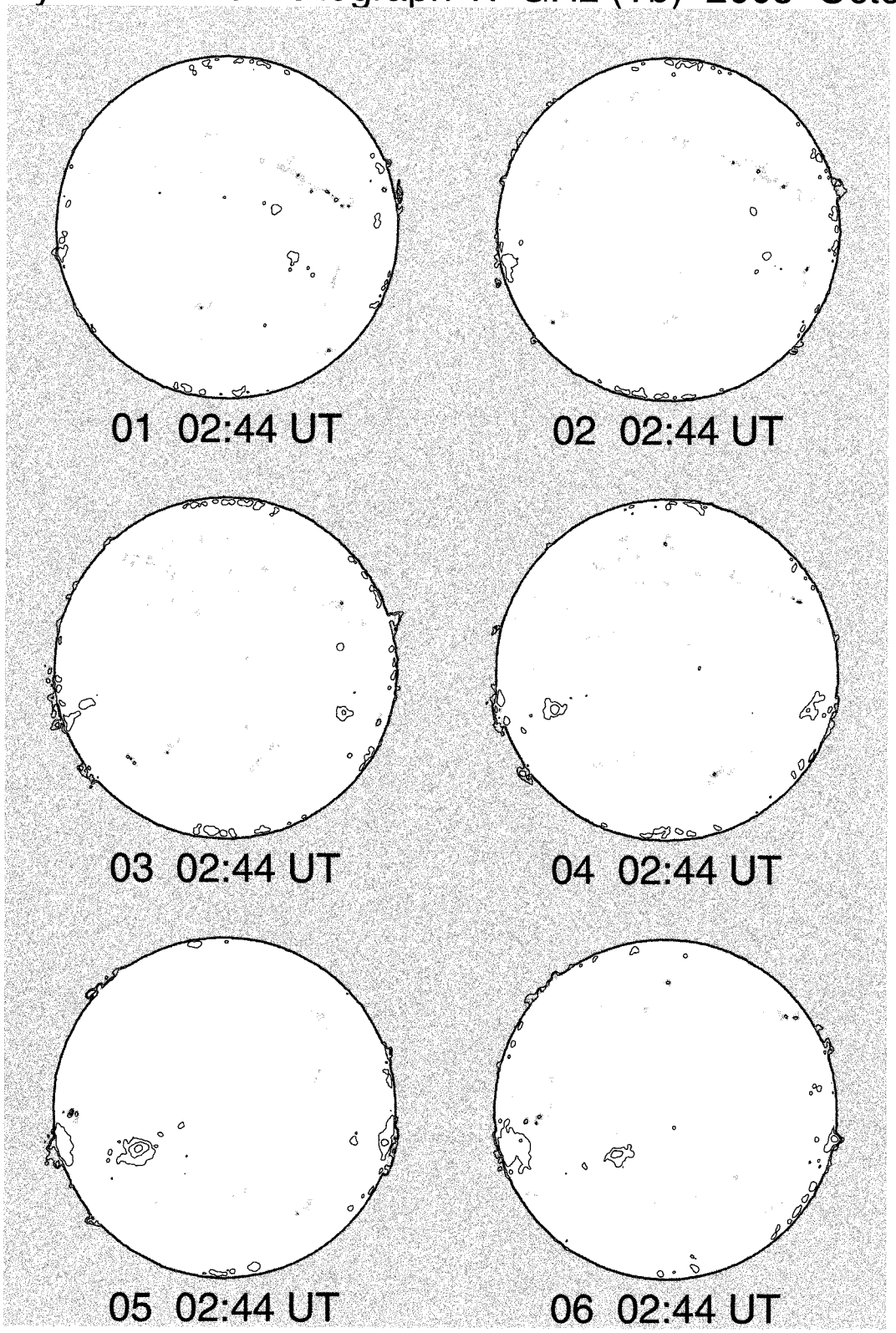
SACRAMENTO PEAK CORONA (1.15 Radii)----



10/31/05
(DOY 304)

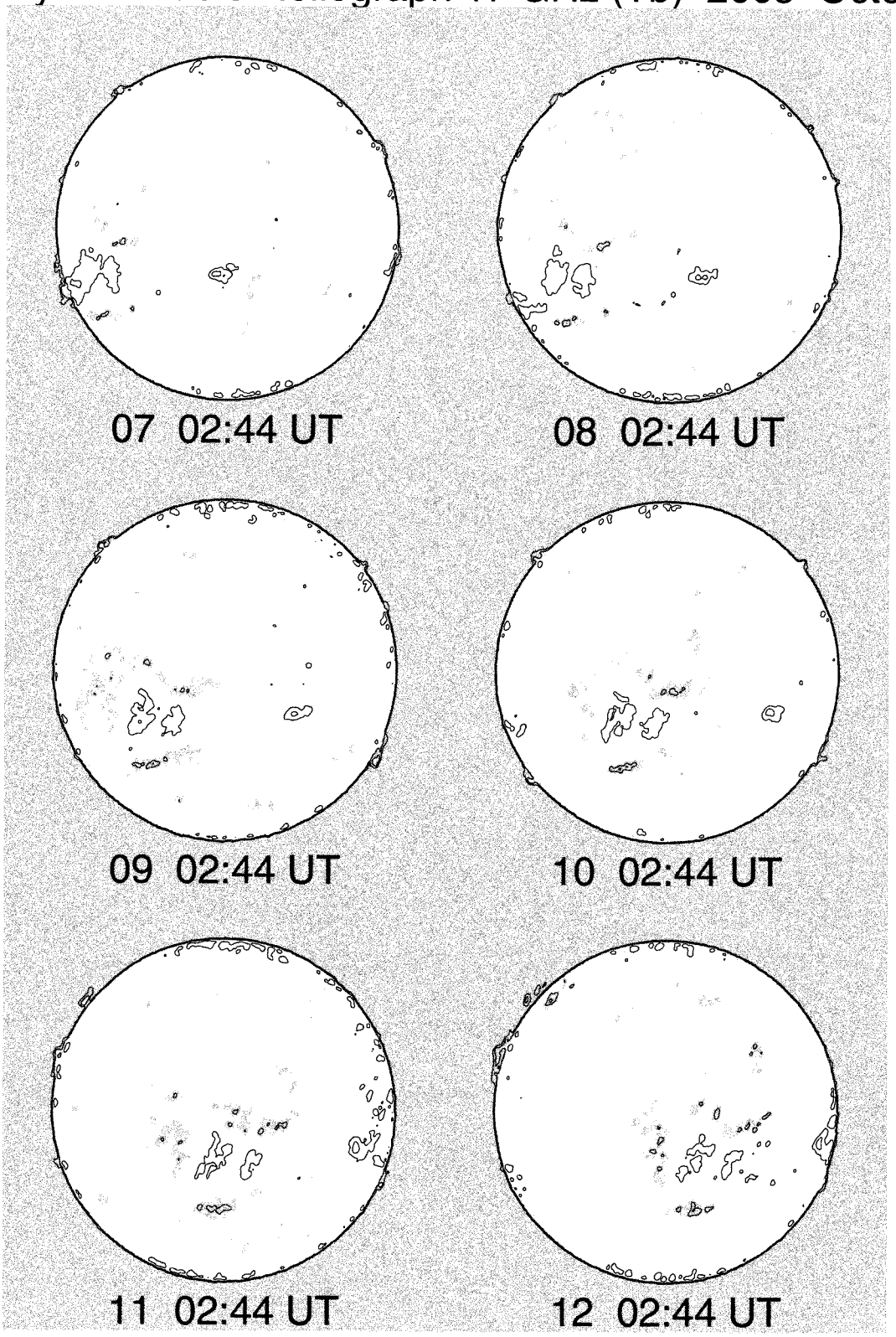
S

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



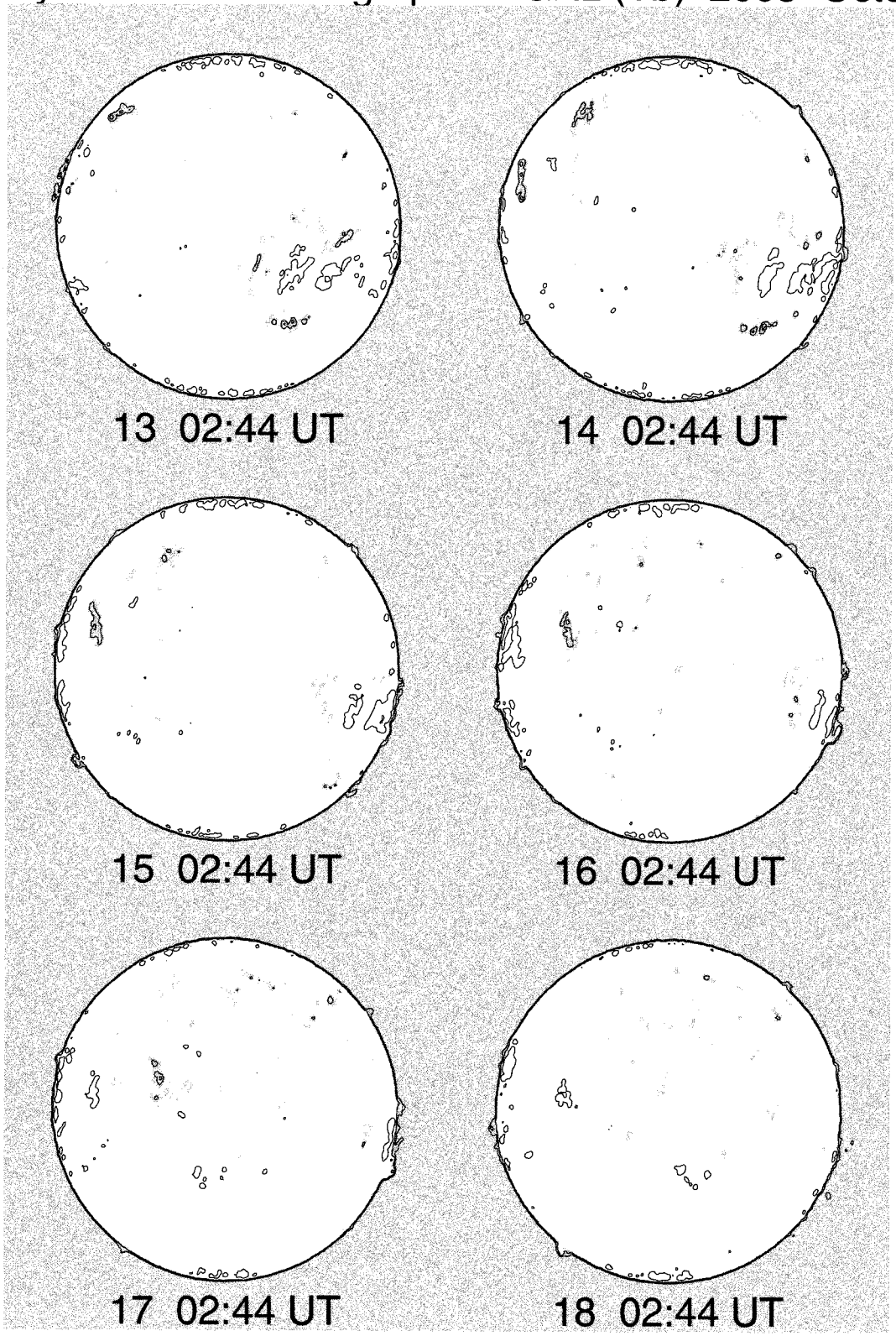
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



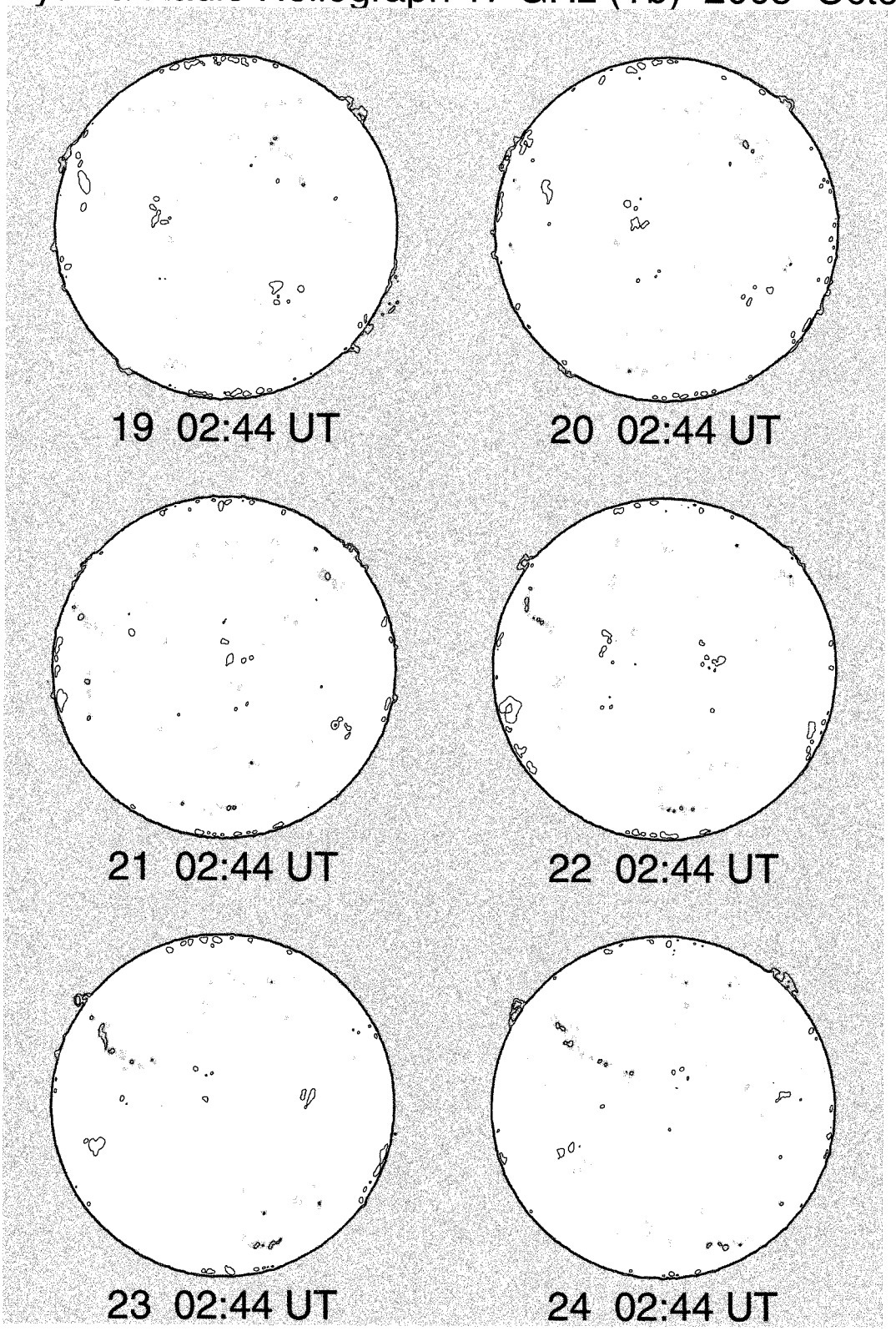
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



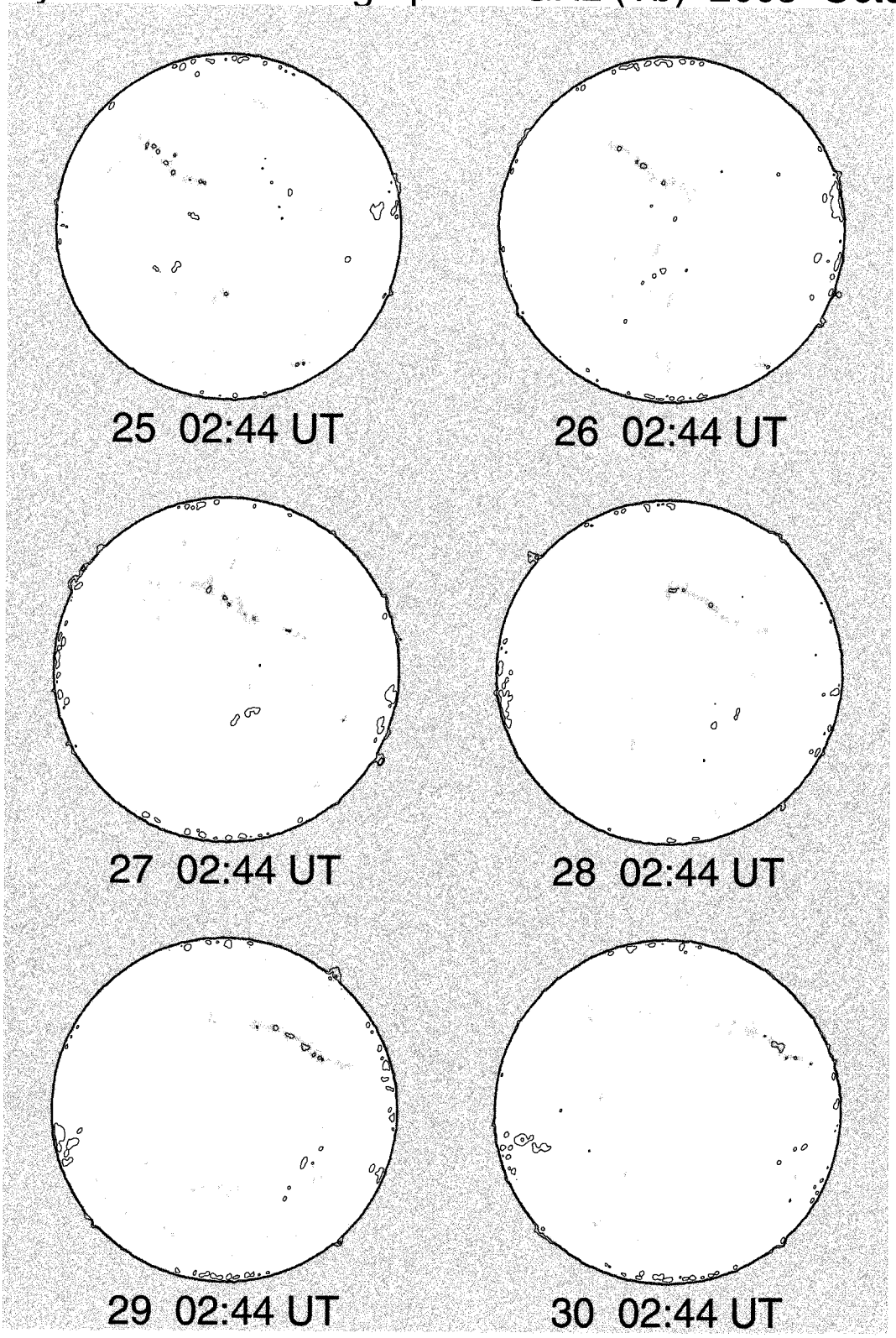
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



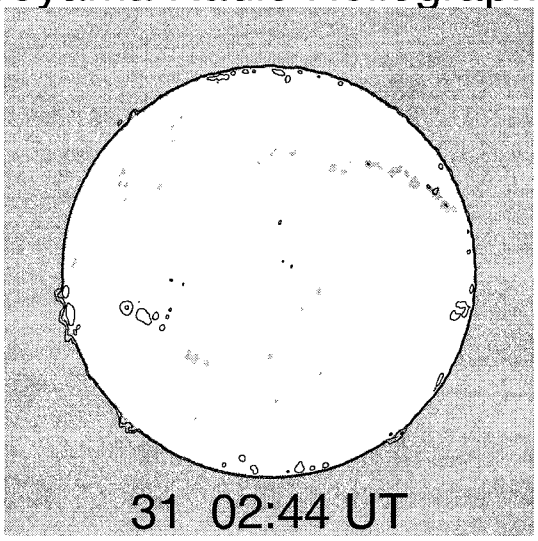
Contour Levels Tb=[5,8,12,20,50,100] x 10^3 K
Grey level Tb <= 9,500 K

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



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

Nobeyama Radio Heliograph 17 GHz (Tb) 2005 October



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

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

OCTOBER 2005

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10813		VORO	10	03	2228	S07	E42	10	7.1			BXI	32	4	3	3
10813		LEAR	10	04	0121	S07	E41	10	7.1		B	DSO	50	5	3	2
10813		TACH	10	04	0506	S08	E40	10	7.2			CAI	48	7	3	4
10813		SVTO	10	04	0746	S06	E38	10	7.2		B	DSO	60	5	5	2
10813		KAND	10	04	0755	S08	E40	10	7.3			CAO		11	6	3
10813		HOLL	10	04	1920	S08	E33	10	7.3		BG	DAI	140	17	7	3
10813		VORO	10	04	2307	S08	E31	10	7.3			DAI	170	21	4	4
10813		LEAR	10	05	0143	S08	E27	10	7.1		BG	DAC	160	21	7	2
10813		TACH	10	05	0510	S08	E27	10	7.2			DAI	101	11	5	4
10813		KAND	10	05	0705	S08	E27	10	7.3			DAO		6	6	2
10813		SVTO	10	05	1353	S08	E23	10	7.3		B	DAC	120	9	6	2
10813		HOLL	10	05	1441	S08	E24	10	7.4		BG	DAC	150	27	8	4
10813		VORO	10	05	2229	S09	E18	10	7.3			DAI	137	16	4	3
10813		LEAR	10	06	0210	S10	E15	10	7.2		B	DAI	130	13	7	1
10813		TACH	10	06	0439	S10	E14	10	7.2			CAI	67	9	5	5
10813		KAND	10	06	0725	S09	E14	10	7.3			DAO		9	6	4
10813		SVTO	10	06	0907	S09	E14	10	7.4		B	DAO	110	20	6	2
10813		LEAR	10	07	0015	S10	E05	10	7.4		BG	CAI	150	21	6	2
10813		TACH	10	07	0517	S10	E02	10	7.4			CAI	120	7	5	3
10813		KAND	10	07	0617	S08	E01	10	7.3			DAO		7	6	2
10813		HOLL	10	07	2130	S10	W08	10	7.3		B	DAI	100	16	7	3
10813		VORO	10	07	2358	S08	W11	10	7.2			HAX	86	6		3
10813		LEAR	10	08	0040	S08	W11	10	7.2		BG	CAI	100	15	7	3
10813		TACH	10	08	0606	S08	W12	10	7.3			BRI	22	5	4	3
10813		KAND	10	08	0740	S09	W13	10	7.3			CAO		10	6	3
10813		HOLL	10	08	1600	S10	W19	10	7.2		B	DAI	60	12	6	3
10813		VORO	10	08	2235	S08	W23	10	7.2			HRX	28	3		4
10813		LEAR	10	09	0018	S08	W24	10	7.2		B	CAI	40	7	5	1
10813		HOLL	10	09	1557	S09	W32	10	7.3		B	DSO	30	6	4	3
10813		LEAR	10	10	0042	S07	W35	10	7.4		B	BXO	10	2	3	2
10813		TACH	10	10	0607	S06	W40	10	7.3			AR	3	2	1	3
10813		SVTO	10	10	0630	S07	W40	10	7.3		A	HSX	30	1	2	3
10813		LEAR	10	11	0150	S08	W50	10	7.3		B	BXO	30	2	4	2
10813C		VORO	10	09	2358	S09	W08	10	9.4			BXX	10	3	0	3
10813A		SVTO	10	12	0940	N12	W34	10	9.8		A	AXX	10	2	1	3
10813D		VORO	10	08	2358	S08	E16	10	10.2			BXX	9	9	1	3
10813D		VORO	10	09	2358	S05	E03	10	10.2			AXX	15	3		3
10813D		LEAR	10	10	0042	S11	E04	10	10.3		B	CAO	20	6	2	2
10813D		LEAR	10	11	0150	S08	W10	10	10.3		A	AXX	10	2	1	2
10813B		HOLL	10	07	2130	S12	E37	10	10.7		B	CAO	30	3	3	3
10813B		LEAR	10	08	0040	S12	E36	10	10.7		A	AXX	10	2	1	3
10813B		VORO	10	09	2302	S06	E12	10	10.8			BXX	4	3	0	3
10813B		KAND	10	10	0656	S10	E02	10	10.4			AX		1		2
10813B		VORO	10	10	2215	S14	W06	10	10.5			BXX	17	7	3	2
10813B		LEAR	10	11	0150	S15	W10	10	10.3		A	AXX	10	3	2	2
10813B		VORO	10	11	2309	S15	W19	10	10.5			BXX	8	2	3	3
10813B		LEAR	10	12	0123	S15	W25	10	10.2		A	HAX	10	2	5	2
10813B		TACH	10	12	0507	S14	W25	10	10.3			AXX	2	1	1	3
10813B		KAND	10	12	1000	S16	W26	10	10.4			AX		1		2
10814		LEAR	10	10	0042	S07	E12	10	10.9		BG	DAI	30	11	8	2
10814		LEAR	10	11	0150	S07	E02	10	11.2		B	BXO	10	4	7	2
10814		TACH	10	11	0638	S06	W02	10	11.1			BXO	8	2	1	3
10814		SVTO	10	11	0705	S05	W03	10	11.1		A	BXO	20	2	2	3
10814		LEAR	10	12	0123	S07	W11	10	11.2		A	HAX	40	7	10	2
10814		TACH	10	12	0507	S09	W12	10	11.3			BRO	7	3	3	3
10814		TACH	10	12	0507	S15	W08	10	11.6			AXX	3	1	1	3
10814		KAND	10	12	1000	S10	W15	10	11.3			AX		1		2
10814		LEAR	10	13	0016	S13	W18	10	11.6		A	AXX	10	1	1	3
10814		VORO	10	13	0034	S14	W17	10	11.7			BXX	9	4	2	2
10814A		KAND	10	17	0700	S14	E07	10	17.8			AX		1		2
10814A		LEAR	10	19	0022	S13	W17	10	17.7		B	BXO	10	3	2	3
10814A		KAND	10	19	0710	S15	W20	10	17.8			BXO		2	1	2
10814A		SVTO	10	19	0747	S15	W21	10	17.7		B	BXO	20	2	3	3

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

OCTOBER 2005

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10814A		HOLL	10	19	1515	S15	W26	10	17.7		A	AXX	20	2	2	3
10815		VORO	10	14	0004	N06	E84	10	20.3			HAX	108	2		3
10815		KAND	10	14	0655	N07	E85	10	20.6			HA		1	3	3
10815		SVTO	10	14	0835	N08	E83	10	20.6		A	HSX	30	1	3	3
10815		HOLL	10	14	1555	N08	E78	10	20.5		A	HAX	60	1	2	3
10815		VORO	10	14	2316	N07	E72	10	20.4			HAX	126	6		3
10815		LEAR	10	15	0013	N07	E74	10	20.5		A	HAX	60	1	2	2
10815		TACH	10	15	0506	N08	E70	10	20.5			HSX	49	1	2	4
10815		SVTO	10	15	0900	N08	E68	10	20.5		A	HSX	50	1	2	3
10815		HOLL	10	15	1929	N09	E61	10	20.4		A	HSX	100	1	2	4
10815		VORO	10	15	2329	N07	E58	10	20.3			HAX	77	3		4
10815		LEAR	10	16	0414	N07	E56	10	20.4		A	HAX	50	1	2	1
10815		SVTO	10	16	0733	N06	E55	10	20.4		A	HAX	30	1	2	3
10815		TACH	10	16	0905	N07	E52	10	20.3			HSX	41	1	1	3
10815		HOLL	10	16	1445	N10	E53	10	20.6		B	CRO	60	2	5	3
10815		VORO	10	16	2241	N07	E45	10	20.3			HAX	40	1		3
10815		LEAR	10	17	0118	N07	E45	10	20.4		A	HAX	40	1	1	2
10815		TACH	10	17	0535	N09	E41	10	20.3			HSX	54	1	1	4
10815		SVTO	10	17	0620	N08	E42	10	20.4		A	HSX	30	1	2	3
10815		KAND	10	17	0700	N08	E42	10	20.4			HA		1	2	2
10815		HOLL	10	17	1600	N09	E38	10	20.5		B	CSO	60	4	4	3
10815		VORO	10	17	2249	N07	E32	10	20.3			HAX	25	1		3
10815		LEAR	10	18	0115	N08	E31	10	20.4		A	HAX	30	1	1	3
10815		TACH	10	18	0626	N08	E28	10	20.4			HSX	28	1	1	3
10815		KAND	10	18	0811	N08	E28	10	20.4			HS		1	1	4
10815		SVTO	10	18	0923	N08	E28	10	20.5		A	HSX	20	1	1	3
10815		HOLL	10	18	1425	N08	E25	10	20.5		B	CAO	30	3	3	2
10815		VORO	10	18	2341	N07	E19	10	20.4			HAX	18	1		3
10815		LEAR	10	19	0022	N07	E21	10	20.6		B	DAO	30	4	3	3
10815		TACH	10	19	0537	N08	E16	10	20.4			CSO	24	2	3	3
10815		KAND	10	19	0710	N07	E16	10	20.5			CSO		2	2	2
10815		SVTO	10	19	0747	N08	E15	10	20.4		A	HSX	20	1	1	3
10815		HOLL	10	19	1515	N08	E12	10	20.5		B	CAO	40	9	4	3
10815		VORO	10	20	0016	N08	E07	10	20.5			CRO	10	2	3	3
10815		LEAR	10	20	0022	N07	E05	10	20.4		B	CSI	20	3	3	3
10815		TACH	10	20	0505	N08	E03	10	20.4			BRO	11	3	3	3
10815		KAND	10	20	0706	N07	E03	10	20.5			CRO		9	4	4
10815		SVTO	10	20	0902	N07	E02	10	20.5		B	CSO	10	2	3	2
10815		HOLL	10	20	1710	N08	W02	10	20.6		B	DAO	30	9	5	3
10815		LEAR	10	21	0035	N08	W06	10	20.6		B	CAO	30	5	3	2
10815		KAND	10	21	0630	N07	W08	10	20.7			HS		1	1	2
10815		SVTO	10	21	0932	N07	W12	10	20.5		A	HSX	10	2	1	2
10815		HOLL	10	21	2110	N07	W17	10	20.6		B	CSO	10	4	5	3
10815		LEAR	10	22	0014	N08	W18	10	20.7		B	CAO	20	3	2	2
10815A		LEAR	10	26	0001	S06	W57	10	21.7		A	AXX	20	1	1	3
10815B		HOLL	10	19	1515	N08	E42	10	22.8		A	AXX	10	1	1	3
10815B		KAND	10	23	0825	N09	E00	10	23.3			BXO		2	4	4
10815B		HOLL	10	23	1425	N09	W06	10	23.1		A	AXX		1	1	3
10815C		LEAR	10	29	0105	S07	W71	10	23.7		A	AXX	10	1	1	3
10815D		HOLL	10	22	1513	N06	E42	10	25.8		A	AXX	10	1	2	3
10815D		LEAR	10	23	0005	N03	E36	10	25.7		A	AXX	10	1	1	5
10815D		HOLL	10	23	1425	N06	E22	10	25.2		A	AXX		1	1	3

Stations reporting:

HOLL = Holloman
KAND = Kandilli
LEAR = Learmonth
MWIL = Mt. Wilson
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
TACH = Tashkent
VORO = Voroshilov

SUDDEN IONOSPHERIC DISTURBANCES
OCTOBER 2005

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	Number of Station Reports by Type SWF	SEA	SPA	LF-SPA	SES	Flare (UT)	X-ray Class	NOAA Region
02	1520	1541	1612	1	1		1				No flare		
04	1336	1357	1418	1	1		1				*		
05	0820	0824	0840	1	1					1	0813	C1.4	10813
07	1422	1438	1542	1	1		1				*		
08	0812	0820	0845	1	1		1				0807	B1.1	
08	1100	1116	1205	1	1		1				*		
12	0540	0544	0600	1	1					1	0532	C1.2	10814
20	0914	0935	1024	2	1		1				*		

* = no flare patrol.

OBSERVATORIES REPORTING FOR OCTOBER 2005

Upice, Czech Republic	SEA	Villiersdorp, South Africa	SES

Observations are not necessarily continuous.

SOLAR RADIO EMISSION
Spectral Observations

OCTOBER 2005

Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
01	0000	0750	CULG								
	0000	0822	HIRA								
	0612	1530	ONDR								
	2033	2400	HIRA								
	2000	2400	CULG	2316.0	2317.0	III	G	1	20	57X	
02	0000	0750	CULG								
	0000	0821	HIRA								
	0614	1528	ONDR								
	2000	2400	CULG								
	2034	2400	HIRA								
03	0000	0750	CULG								
	0000	0819	HIRA								
			LEAR	0011.0	0222.0	III	N	1	84	119	
	0616	1525	ONDR								
	2000	2400	CULG								
	2034	2400	HIRA								
04			PALE	0046.0	0046.0	III		1	25	54	
	0000	0750	CULG	0046.0	0048.0	III	G	1	20	57X	
			LEAR	0047.0	0048.0	III		1	25	112	
	0000	0817	HIRA	0047.5	0048.0	III	G	1	40	120	
	0617	1523	ONDR								
	2000	2400	CULG								
	2035	2400	HIRA								
05			LEAR	0306.0	0307.0	III		2	25	180	
			PALE	0306.0	0306.0	III		1	25	180	
	0000	0750	CULG	0306.0	0307.0	III	G	3	18X	57X	
	0000	0816	HIRA	0306.0	0307.0	III	G	2	25X	200	
			LEAR	0816.0	0817.0	III		1	25	109	
			SVTO	0816.0	0817.0	III		1	25U	81U	
			ONDR	0817.1	0818.2	DCIM	G	2	800X	2000X	
	0619	1521	ONDR	0817.4	0818.2	DCIM	G	1	2000X	4500X	
			LEAR	0841.0	0843.0	III		2	25	180	
			SVTO	0841.0	0843.0	III		2	25	180	
			SVTO	1040.0	1043.0	III		1	25	116	
			SVTO	1118.0	1119.0	III		1	25	158	
			SVTO	1232.0	1320.0	III		1	25	43	
			SVTO	1232.0	1320.0	III	N	1	25	43	
			SGMR	1244.0	1245.0	III		1	30	76	
			SVTO	1244.0	1244.0	III		2	25	133	
			SGMR	1409.0	1410.0	III		1	30	54	
			SVTO	1409.0	1410.0	III		1	25	126	
	2036	2400	HIRA								
	2000	2400	CULG	2320.0	2320.0	III	B	1	23	57X	
06	0000	0750	CULG	0328.0	0342.0	III	GG	1	23	50	
			CULG	0404.0	0405.0	III	G	3	18X	57X	
			LEAR	0404.0	0405.0	III		2	25	180	
	0000	0815	HIRA	0404.0	0405.5	III	G	2	25X	420	
			LEAR	0453.0	0454.0	III		2	25	151	
			HIRA	0453.5	0454.0	III	B	1	25X	170	
			CULG	0454.0	0454.0	III	B	3	18	57	
	0621	1519	ONDR								
			SGMR	1317.0	1540.0	III	N	1	30	170	
			SVTO	1321.0	1514.0	CONT		1	25	180	
	2000	2400	CULG								
	2037	2400	HIRA								
07			LEAR	0110.0	0116.0	III		1	75	119	
			LEAR	0126.0	0127.0	III		1	25	103	
	0000	0814	HIRA	0127.0	0127.5	III	B	1	60	100	
			LEAR	0406.0	0408.0	III		1	75	99	
			LEAR	0418.0	0812.0	III	N	1	25	170	
	0000	0750	CULG	0436.0	0655.0	III	S	1	23	57X	
	0622	1516	ONDR								
			SVTO	0811.0	0811.0	III		1	25U	68U	

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

OCTOBER 2005

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	FREQUENCY Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
07			SGMR	1225.0	1225.0	III		1	30	68	
			SVTO	1225.0	1225.0	III		1	25	150	
			SGMR	1500.0	1502.0	III		1	30	180	
			SVTO	1500.0	1502.0	III		1	25	180	
	2000	2400	CULG								
	2038	2400	HIRA								
08			LEAR	0008.0	0410.0	CONT		1	75	180	
			LEAR	0031.0	0031.0	III		1	32	135	
	0000	0750	CULG	0031.0	0031.0	III	B	1	23	57	
	0000	0813	HIRA	0031.0	0031.5	III	B	1	50	180	
			CULG	0052.0	0052.0	III	B	2	18	57X	
			LEAR	0052.0	0053.0	III		2	25	180	
			HIRA	0053.0	0053.5	III	B	2	25X	200	
			PALE	0053.0	0053.0	III		1	25	180	
			CULG	0236.0	0238.0	III	G	1	20	57X	
			LEAR	0236.0	0238.0	III		1	25	169	
			HIRA	0237.5	0238.0	III	B	1	25X	210	
			LEAR	0334.0	0343.0	III		1	25	180	
			HIRA	0334.5	0343.5	III	G	1	25X	180	
			CULG	0335.0	0344.0	III	G	1	20	57	
			PALE	0336.0	0337.0	III		1	25	180	
			LEAR	0548.0	0548.0	III		1	25	57	
	0624	1514	ONDR								
			CULG	0727.0	0727.0	III	B	1	18	57X	
			HIRA	0727.0	0727.5	III	B	1	30	120	
			LEAR	0727.0	0728.0	III		1	25	180	
			SVTO	0727.0	0727.0	III		1	25	72	
			LEAR	0854.0	0855.0	III		1	25	124	
			SVTO	0854.0	0855.0	III		1	25	95	
			SVTO	1028.0	1029.0	III		2	25	125	
			SVTO	1104.0	1104.0	III		1	25	45	
			SGMR	1245.0	1245.0	III		1	30	65	
			SVTO	1245.0	1245.0	III		1	25	86	
	2000	2400	CULG								
	2039	2400	HIRA								
09			LEAR	0251.0	0252.0	III		1	25	165	
			PALE	0251.0	0252.0	III		1	25	180	
	0000	0811	HIRA	0251.5	0252.0	III	B	1	25X	160	
	0000	0750	CULG	0252.0	0252.0	III	B	2	18	57X	
	0633	1512	ONDR								
			PALE	1753.0	1756.0	III		2	25	180	
	2000	2400	CULG								
	2039	2400	HIRA								
10	0634	1509	ONDR								
			LEAR	0736.0	0737.0	III		2	25	180	
			SVTO	0736.0	0737.0	III		1	25	158	
	0000	0750	CULG	0736.0	0737.0	III	G	1	20	57X	
	0000	0810	HIRA	0736.5	0737.5	III	G	1	80	130	
			LEAR	0952.0	0953.0	III		1	25	127	
			SVTO	0952.0	0953.0	III		1	28U	126U	
	2040	2400	HIRA								
	2000	2400	CULG	2134.0	2134.0	III	B	1	30	57X	
11	0000	0750	CULG								
	0000	0808	HIRA								
	0629	1507	ONDR								
			SGMR	1713.0	1714.0	III		1	30	53	
			SGMR	1721.0	1725.0	III		1	30	180	
			PALE	1723.0	1725.0	III		1	25	180	
			PALE	1734.0	1744.0	II		1	25	65	ESS 0597
			SGMR	1735.0	1744.0	II		2	30	66	ESS 0437
			PALE	2210.0	2211.0	III		1	25	85	
	2000	2400	CULG	2210.0	2212.0	III	G	1	20	57X	
	2041	2400	HIRA	2210.5	2212.0	III	G	1	25X	110	
			CULG	2341.0	2341.0	III	B	1	20	57X	
			HIRA	2341.0	2341.5	III	B	1	25X	50	

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Spectral Observations

OCTOBER 2005

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
11			LEAR	2341.0	2341.0	III		1	25	110	
			LEAR	2351.0	2352.0	III		1	25	98	
			HIRA	2351.5	2352.0	III	B	1	25X	120	
			CULG	2352.0	2352.0	III	B	1	20	57X	
12			LEAR	0046.0	0047.0	III		1	25	92	
			PALE	0046.0	0047.0	III		1	30	64	
	0000	0750	CULG	0047.0	0047.0	III	B	1	23	57X	
	0000	0806	HIRA	0047.0	0047.5	III	B	1	30	80	
			CULG	0531.0	0533.0	III	G	1	20	57X	
			HIRA	0531.0	0532.5	III	G	1	25X	200	
			LEAR	0531.0	0604.0	III	N	2	25	180	
			SVTO	0531.0	0542.0	III	N	1	25	180	
			CULG	0537.0	0537.0	III	B	1	20	57X	
			HIRA	0537.0	0537.5	III	B	1	25X	110	
			HIRA	0539.5	0540.0	III	B	1	70	120	
			SVTO	0549.0	0601.0	II		1	25	61	ESS 0574
			CULG	0550.0	0555.0	II	FN	3	20	30	
			CULG	0550.0	0555.0	II	SH	1	40	57X	FLA ESS 500
			CULG	0554.0	0608.0	II	UE	2	23	35	
			LEAR	0558.0	0601.0	II		2	25	79	ESS 0486
	0633	1505	ONDR								
			SGMR	1219.0	1219.0	III		1	30	180	
			SVTO	1219.0	1219.0	III		1	25	138	
			PALE	1755.0	1810.0	III		1	25	180	
			SGMR	1755.0	1811.0	III		1	30	180	
	2000	2400	CULG								
	2042	2400	HIRA								
13	0000	0800	CULG								
			LEAR	0253.0	0253.0	III		1	25	180	
	0000	0805	HIRA	0253.5	0254.0	III	B	1	80	220	
	0640	1502	ONDR								
			HIRA	0644.0	0644.5	III	B	1	70	110	
			LEAR	0644.0	0645.0	III		1	68	116	
			SVTO	0644.0	0645.0	III		1	25	117	
			SVTO	0705.0	0722.0	III	N	1	25	117	
			LEAR	0716.0	1010.0	III	N	1	38	123	
			SVTO	0920.0	1257.0	III	N	1	25	120	
			PALE	1815.0	1815.0	III		1	25	64	
			SGMR	1815.0	1816.0	III		1	30	66	
	2000	2400	CULG								
14	0000	0800	CULG								
	0015	0803	HIRA								
	0635	1458	ONDR								
	2000	2400	CULG								
	2043	2400	HIRA								
15	0000	0800	CULG								
	0000	0802	HIRA								
	0637	1458	ONDR								
	2000	2400	CULG								
	2045	2400	HIRA								
16	0000	0800	CULG								
	0000	0800	HIRA								
	0646	1455	ONDR								
	2000	2400	CULG								
	2046	2400	HIRA								
17	0000	0759	HIRA								
	0000	0800	CULG								
	0648	1453	ONDR								
	2000	2400	CULG								
	2047	2400	HIRA								
18	0000	0758	HIRA								
	0000	0800	CULG								

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Spectral Observations

OCTOBER 2005

Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	FREQUENCY Int (1-3)	Lower (MHz)	Upper (MHz)	Remarks
18	0642	1451	ONDR								
	2000	2400	CULG								
	2048	2400	HIRA								
19	0000	0757	HIRA								
	0000	0800	CULG								
	0644	1449	ONDR								
	2000	2400	CULG								
	2049	2400	HIRA								
20	0000	0756	HIRA								
	0000	0800	CULG								
	0646	1446	ONDR								
	2000	2400	CULG								
	2049	2400	HIRA								
21	0000	0601	HIRA								
	0000	0800	CULG								
	0648	1444	ONDR								
	0723	0755	HIRA								
	2000	2400	CULG								
	2100	2400	HIRA								
22	0000	0754	HIRA								
	0000	0800	CULG								
	0656	1442	ONDR								
	2000	2400	CULG								
	2051	2400	HIRA								
23	0000	0753	HIRA								
	0000	0800	CULG								
	0656	1439	ONDR								
	2000	2400	CULG								
	2052	2400	HIRA								
24	0000	0751	HIRA								
	0000	0800	CULG								
	0654	1437	ONDR								
	2000	2400	CULG								
	2052	2400	HIRA								
25	0000	0750	HIRA								
	0000	0800	CULG								
	0656	1434	ONDR								
	2000	2400	CULG								
	2053	2400	HIRA								
26	0000	0749	HIRA								
	0000	0800	CULG								
	0658	1433	ONDR								
	2000	2400	CULG								
	2054	2400	HIRA								
27	0000	0748	HIRA								
	0000	0800	CULG								
	0700	1430	ONDR								
	2000	2400	CULG								
	2055	2400	HIRA								
28	0000	0747	HIRA								
	0000	0800	CULG								
	0702	1428	ONDR								
	2000	2400	CULG								
	2056	2400	HIRA								
29	0000	0745	HIRA								
	0000	0800	CULG								
	0705	1426	ONDR								
	2000	2400	CULG								

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

OCTOBER 2005

OBSERVATION Day	Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
29	2057	2400	HIRA								
30			LEAR	0405.0	0405.0	III		2	25	129	
	0000	0744	HIRA	0405.5	0406.0	III	B	1	30	120	
	0000	0800	CULG	0406.0	0406.0	III	B	1	20	57	
	0713	1424	ONDR								
	2000	2400	CULG	2038.0	2038.0	III	B	1	20	50	
			CULG	2042.0	2042.0	III	B	1	20	50	
	2058	2400	HIRA								
31	0000	0742	HIRA								
	0000	0800	CULG								
	0709	1422	ONDR								
	2000	2400	CULG								
	2059	2400	HIRA								

Event Remarks:

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

Frequency qualifiers:

X = Extends beyond instrument range	U = Uncertain frequency

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

Stations Reporting:

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

NOTE 1: Beginning June 26, 2001, the Bleien observatory changed to higher frequencies (1-4Ghz).

SOLAR RADIO NOISE STORM AT 164 MHZ

FROM NANÇAY RADIOHELIOGRAPH

OCTOBER 2005

	HELIOGRAPHICS POSITIONS MEAN VALUES[1]		IMP[2]	OBSERVING TIME[3]	
	E-W	S-N		START(UT)	END(UT)
05/10/05 *	-0.68	-0.45	I	8H08 E	15H09 D
06/10/05	-0.45	-0.39	II	9H22	15H09 D
07/10/05	-0.12	-0.47	II	8H26 E	15H10 D

SOLAR RADIO NOISE STORM AT 327 MHZ

FROM NANÇAY RADIOHELIOGRAPH

OCTOBER 2005

	HELIOGRAPHICS POSITIONS MEAN VALUES[1]		IMP[2]	OBSERVING TIME[3]	
DAY	E-W	S-N		START(UT)	END(UT)
06/10/05	-0.28	-0.25	I	11H40	15H09 D

NO DATA

OTHERS DAYS: NO DETECTABLE NOISE STORM

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

** Following a large burst

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

**** no flux measurements available

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

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

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

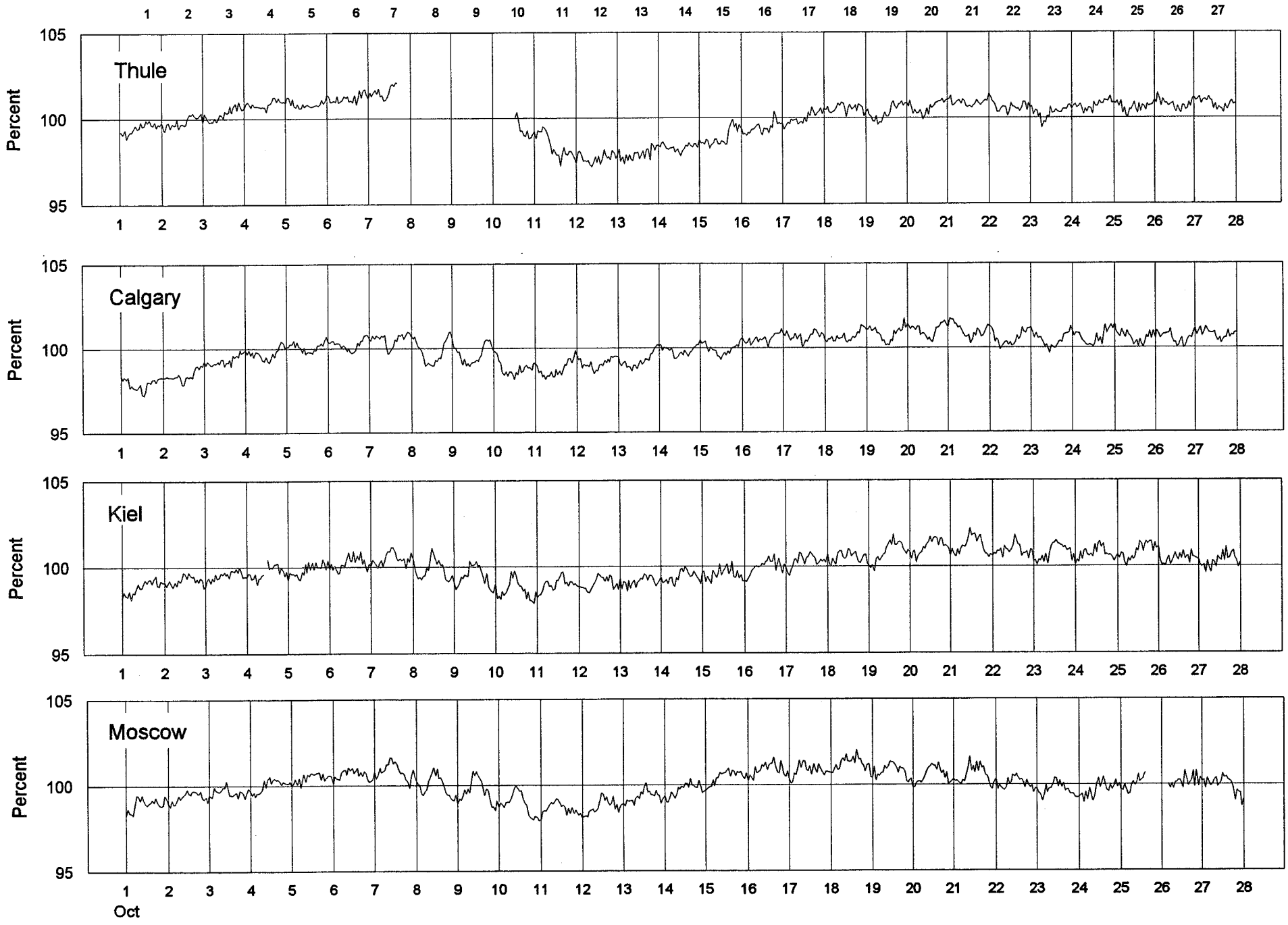
COSMIC RAY INDICES
(Neutron Monitor)
October 2005

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	4246.0	3647.8	5884.4	8710.2	3987.1	1953.3	3555.7
2	4261.2	3666.2	5907.2	8743.9	4003.5	1971.6	3561.8
3	4280.2	3698.3	5924.0	8768.5	4026.8	1969.6	3570.7
4	4304.6	3713.7	5934.9(23)	8803.0	4044.3	1973.2	3579.1
5	4304.2	3727.7	5943.5	8841.0	4050.2	1973.9	3584.1
6	4319.0	3733.2	5965.0	8856.2	4062.4	1986.3	3583.3
7	4334.1(18)	3744.0	5980.3	8874.8	4069.4	1992.0	3590.5
8	—	3718.7	5943.7	8798.0	4049.9	1986.4	3564.7
9	—	3711.8	5918.4	8771.6	4029.4	1977.0	3555.3
10	4239.7(11)	3680.3	5873.4	8704.7	3973.2	1967.5	3543.8
11	4200.6	3677.8	5890.4	8682.2	3984.2	1968.5	3544.4
12	4167.9	3690.8	5893.4	8690.8	3990.9	1971.6	3542.8
13	4178.2	3695.7	5900.4	8742.0	3993.2	1981.6	3555.3
14	4195.1	3717.8	5915.3	8775.0	4004.2	1989.9	3562.5
15	4219.0	3721.3	5927.0	8841.7	4020.2	1994.8	3563.0
16	4243.5	3744.2	5950.5	8878.4	4053.8	1999.2	3564.1
17	4266.7	3749.0	5969.5	8873.6	4061.6	2006.6	3560.7
18	4291.8	3748.0	5983.0	8907.7	4063.5	2005.5	3559.7
19	4282.1	3755.3	6001.2	8869.2	4075.0	2007.0	3565.2
20	4293.8	3762.8	6018.8	8849.0	4073.6	2008.9	3567.2
21	4305.6	3762.0	6021.6	8850.8	4066.7	2018.7	3572.3
22	4296.0	3745.2	6006.7	8806.2	4058.8	2019.5	3563.4
23	4280.8	3741.7	5998.2	8775.0	4059.4	2020.2	3549.2(39)
24	4298.2	3746.7	5994.3	8774.7	4059.1	2018.5	3545.0(3)
25	4293.8	3746.8	6001.5	8801.0(15)	4061.5	2021.3	3559.4
26	4300.5	3744.7	5978.7	8815.2(20)	4066.6	2016.3	3565.1
27	4303.1	3753.0	5969.3	8799.1	4065.2	2018.8	3566.2
28	4306.7	3758.5	5981.3	8752.6	4071.9	2029.3	3563.1
29	4326.7	3771.3	5990.2	8734.4	4084.9	2035.3	3565.1
30	4334.0	3781.3	5997.7	8742.5	4086.2	2035.5	3574.2
31	4296.5	3748.5	5984.2	8735.9	4063.0	2033.1	3573.1
Mean	4274.0	3729.2	5956.4	8792.6	4043.9	1998.4	3564.3

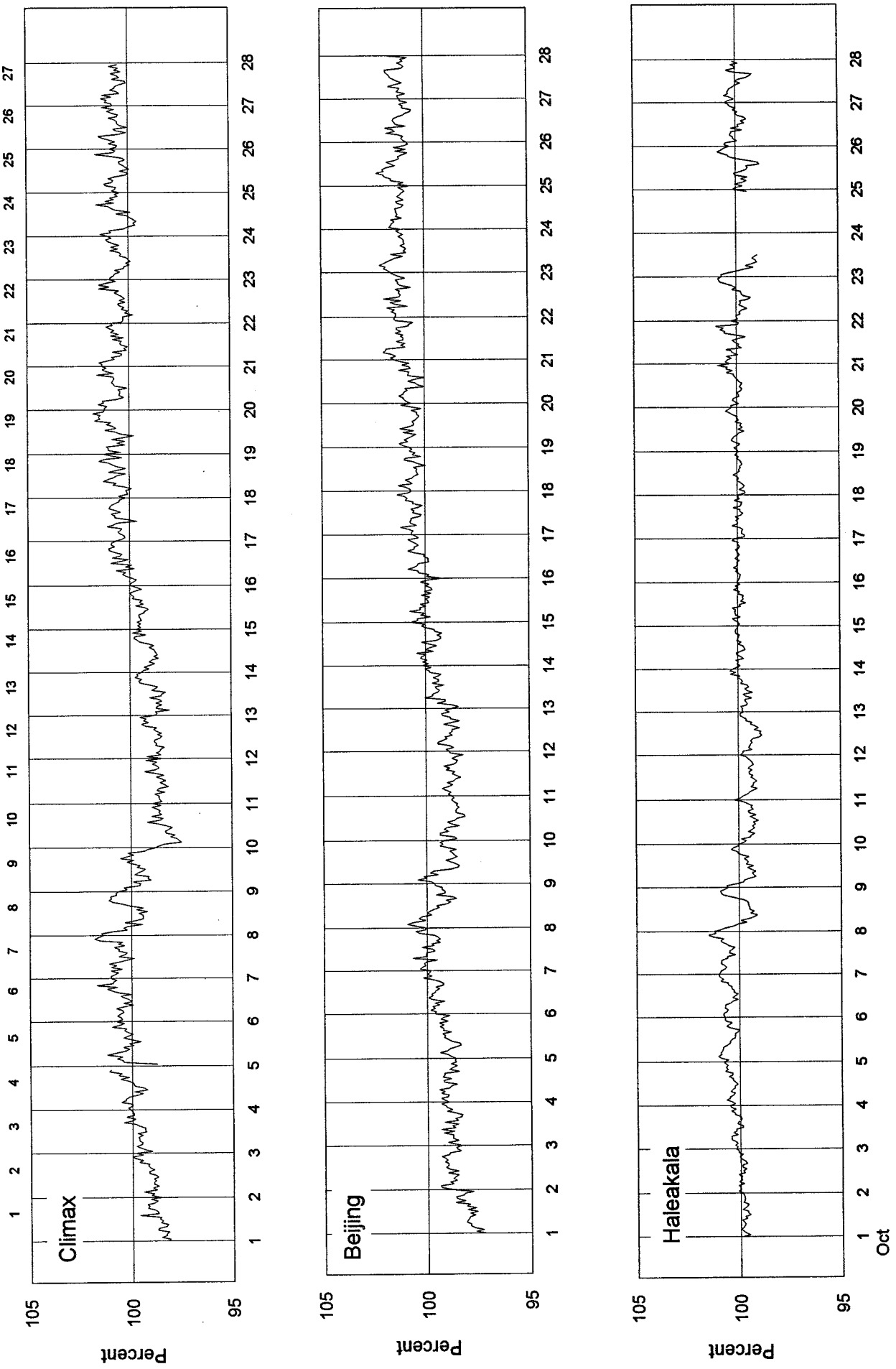
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours, and for Haleakala, whenever the sum of all three sections falls below 60 hours.

COSMIC RAY INDICES
(Neutron Monitor)

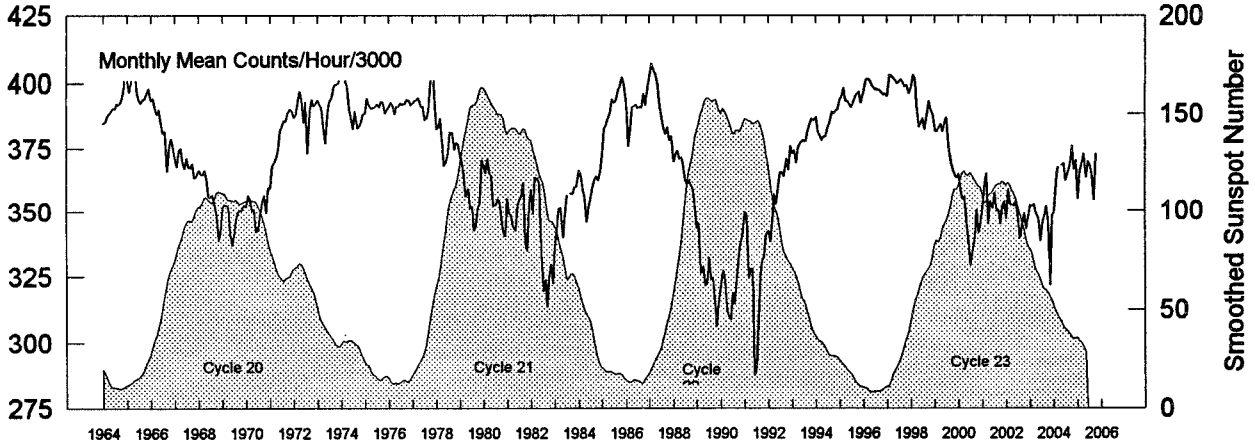
Bartels Rotation 2350 - Beginning 1 Oct 2005



COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2350 - Beginning 1 Oct 2005



Calgary Neutron Monitor Pressure-Corrected Values
Jan 1964 - Oct 2005



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1964	3847	3852	3872	3883	3892	3905	3905	3921	3920	3926	3966	4064	3913
1965	4006	3968	4007	4040	4040	3967	3935	3923	3938	3942	3960	3980	3976
1966	3935	3943	3906	3881	3899	3844	3807	3814	3663	3758	3785	3750	3832
1967	3710	3678	3741	3750	3697	3671	3713	3679	3675	3691	3638	3639	3690
1968	3663	3653	3647	3665	3632	3561	3556	3567	3529	3482	3386	3420	3563
1969	3515	3531	3529	3520	3417	3370	3408	3464	3500	3507	3506	3524	3483
1970	3523	3565	3548	3505	3512	3424	3426	3477	3543	3564	3497	3596	3515
1971	3593	3678	3693	3712	3737	3813	3832	3853	3851	3883	3899	3893	3786
1972	3865	3875	3924	3969	3942	3847	3926	3731	3895	3935	3912	3920	3895
1973	3935	3919	3903	3819	3768	3875	3926	3944	3986	3995	3997	4008	3923
1974	4036	4043	4005	3988	3906	3861	3822	3890	3827	3831	3850	3881	3912
1975	3883	3943	3914	3905	3904	3910	3918	3907	3929	3927	3884	3897	3910
1976	3908	3923	3915	3881	387	3909	3921	3918	3920	3936	3935	3916	3916
1977	3919	3933	3933	3943	3911	3911	3857	3865	3895	4010	4055	3961	3933
1978	3823	3826	3860	3773	3681	3697	3730	3811	3808	3744	3772	3764	3774
1979	3726	3696	3647	3559	3592	3516	3521	3427	3447	3519	3528	3705	3573
1980	3681	3652	3711	3649	3643	3527	3525	3550	3540	3471	3414	3403	3564
1981	3550	3491	3483	3440	3426	3522	3546	3560	3615	3374	3348	3520	3490
1982	3586	3492	3634	3632	3608	3344	3196	3239	3137	3257	3296	3225	3387
1983	3364	3421	3510	3515	3399	3487	3563	No Data	3571	3569	3597	3599	3509
1984	3661	3646	3586	3551	3460	3515	3551	3593	3623	3641	3623	3652	3592
1985	3723	3821	3834	3858	3888	3936	3921	3929	3971	3987	4017	3997	3907
1986	3923	3755	3814	3905	3906	3915	3902	3907	3902	3958	3912	3974	3898
1987	4025	4068	4047	4028	3993	3914	3866	3822	3802	3827	3779	3796	3914
1988	3698	3729	3739	3709	3714	3682	3621	3608	3624	3603	3590	3520	3653
1989	3436	3454	3263	3290	3216	3222	3321	3224	3246	3164	3063	3152	3254
1990	3227	3272	3232	3129	3099	3089	3188	3147	3237	3317	3375	3401	3226
1991	3496	3489	3244	3279	3280	2873	2896	3078	3253	3311	3330	3412	3245
1992	3425	3382	3463	3566	3528	3593	3655	3655	3636	3711	3665	3758	3586
1993	3730	3741	3693	3753	3765	3775	3780	3775	3815	3836	3859	3852	3781
1994	3864	3807	3798	3779	3793	3793	3822	3841	3885	3878	3891	3896	3837
1995	3929	3945	3919	3929	3927	3917	3902	3919	3940	3956	3963	3920	3931
1996	3960	4008	4012	4010	3993	3983	3976	3976	3970	3960	3953	3955	3980
1997	3947	4023	4024	4014	4007	3998	4001	4010	3999	3985	3990	3955	3996
1998	3982	4025	4013	3910	3827	3839	3857	3817	3876	3925	3890	3875	3903
1999	3816	3811	3823	3836	3810	3843	3861	3760	3699	3664	3644	3631	3767
2000	3646	3586	3544	3554	3465	3386	3293	3337	3395	3503	3417	3447	3464
2001	3510	3599	3646	3449	3537	3511	3570	3501	3504	3449	3521	3537	3528
2002	3469	3585	3527	3526	3517	3541	3479	3393	3455	3493	3431	3474	3491
2003	3523	3517	3524	3488	3473	3384	3450	3480	3517	3460	3216	3485	3460
2004	3492	3604	3676	—	3680	3689	3612	3645	3683	3756	3665	3702	3350
2005	3546	3658	3668	3729	3633	3698	3684	3640	3541	3729			3653

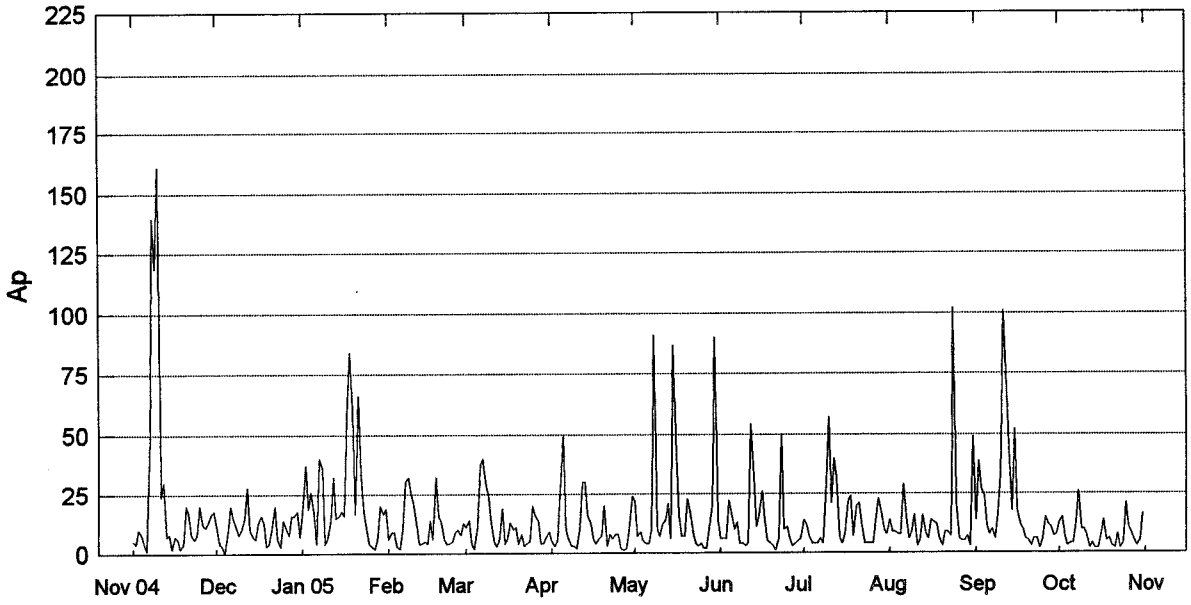
Multiply table entries by 300 to obtain hourly counting rate. Calgary, Canada: N51 W114, Alt=1128m, Cutoff Rigidity=1.09GV.

Geomagnetic Activity Indices
October 2005

Day		Kp Three-Hourly Indices 1	2	3	4	5	6	7	8	Sum	Ap	Cp	Km Three-Hourly Indices 1	2	3	4	5	6	7	8	Am	aa Provisional N	S	M	
1		3	3+	3+	2+	2-	2-	3	3+	22-	13	0.8	3-	3-	3o	2+	2+	2o	3-	3-	23	30	22	24	29	
2	D4*	4-	4-	4-	2+	2	3+	2-	3-	23	15	0.8	3o	3-	3+	3-	3-	3-	2-	3-	25	36	21	32	25	
3		3-	3-	2	2-	1	1-	1+	1+	13+	7	0.3	2-	2+	2-	2-	1+	1-	1+	2-	11	15	9	15	9	C
4	Q8	1+	1+	0+	1	1	0+	1-	0+	6+	3	0.1	1+	1o	0+	1+	1+	1-	1+	0+	6	7	8	8	7	CC
5	Q7	1-	1	1-	1-	1	1-	1+	1-	7-	4	0.1	1-	0+	1o	1o	1+	1o	2-	1o	7	8	5	5	8	CC
6	Q10	1	1+	1-	1-	1+	1+	1+	0+	8	4	0.1	1o	1o	1-	1o	1+	1+	2-	1-	8	9	7	6	10	CC
7		2-	2	2-	2	2	2	3	5-	19	12	0.7	2-	1+	2-	2+	2o	2+	3o	4o	22	25	22	13	34	
8	D1	4+	4+	4+	4	3	2	5-	4-	30+	26	1.2	4+	4o	4o	4-	3-	3-	4o	4-	46	52	33	47	38	
9		3	2	2-	2	2	1	3	3+	18	10	0.6	3o	2-	1+	2+	2o	1+	3o	3o	19	25	18	17	27	
10		3	3-	3-	3	2-	1-	1-	3-	17	10	0.5	2+	2o	3-	3+	2-	1o	1o	3-	18	22	14	23	13	
11		3+	2-	1-	1-	2-	2	2-	2-	13+	7	0.3	3-	1+	0+	1o	2o	2o	2-	2-	12	15	10	11	14	CC
12	Q2	0+	1-	0+	0	1-	0	0	1	3	2	0.0	0o	0+	0o	0o	1o	0o	0+	1+	3	4	5	3	5	CC
13		1-	1	1	1	1-	1-	2	1-	8-	4	0.1	1-	1o	1+	1o	1o	1+	2+	1-	8	11	7	8	10	CC
14	Q5	1-	2	0+	0+	0+	0	0	0+	4	2	0.0	1o	1+	0+	0+	0o	0o	0+	1-	4	5	4	6	3	CC
15	Q1	0+	1-	1-	0+	0+	0	1-	1-	4-	2	0.0	1-	1o	1-	1-	1-	0o	1o	1+	5	4	5	4	5	CC
16		0+	2-	2	1+	1+	2	2	3+	14	7	0.4	1-	1+	2o	2-	2-	2+	2o	3o	14	17	13	10	20	
17	D5*	3+	4+	3+	3-	3-	3-	1	0+	20+	14	0.8	2+	3+	3o	3-	3o	3-	1+	1-	22	28	22	30	21	
18		1-	2+	1	1	2	2-	2-	1-	11	5	0.2	1-	2-	1+	1+	2+	2+	2-	1+	12	12	9	8	13	CK
19		2	3-	1+	1+	2	2	1	1+	14-	6	0.3	2-	2-	2-	1+	3-	2+	1+	1+	13	14	16	12	18	C
20	Q4	1+	0+	1	1-	0	0+	0+	1-	5-	3	0.0	1o	0o	1+	1+	0o	0+	0+	1o	5	7	5	9	3	CC
21	Q6	0	0	0	0+	0	0	0+	2+	3	2	0.0	0o	0o	0o	0o	0o	0o	0o	3-	4	6	4	2	8	CK
22		4	3-	1	0+	1	0+	1+	1	12-	8	0.4	4-	2+	1o	1-	1+	0+	2-	1+	13	15	10	18	8	KK
23	Q3	1	0+	0+	0+	1-	1-	1-	0	4	2	0.0	1o	0+	0+	0+	1o	1o	1o	0o	5	5	8	5	8	CC
24		1	0+	0	0+	1+	2	2	1+	8+	4	0.1	1o	0+	0o	1o	2+	2+	2o	2o	10	9	11	4	16	C
25	D2	4	4+	4-	4	2-	3+	3	4-	28-	21	1.1	3+	3+	4-	3+	2o	3+	3o	4-	35	45	29	42	32	
26		2	2	3	2	2	4-	3	2-	19+	11	0.6	2-	2-	3o	2+	2o	3o	3o	2-	20	29	14	16	28	
27		3	1	0+	2	3-	3+	2	0+	15-	8	0.5	3o	1o	0+	2-	3-	3+	2+	1-	17	23	15	12	27	
28		0+	1-	1+	2	2	1+	2	1+	11	5	0.2	0+	0+	1+	2+	2+	2-	2o	1+	11	12	13	10	16	K
29	Q9	0+	0	1+	0+	0	1+	2-	0+	5+	3	0.0	0+	0o	1+	0+	0o	1+	2-	1-	5	7	5	5	7	CC
30		1	2	0+	1	1	1	2	2	10+	5	0.2	1-	1+	0+	1+	1+	1+	2+	2o	10	14	11	9	16	CC
31	D3*	1	2	1+	2-	3	4	5	4	22	17	0.9	1-	2-	1+	2+	3+	4-	5-	4-	31	35	38	12	61	
Mean											8	0.36									14.3	17.7	13.4	15.5	

Day	Kn Three-Hourly Indices 1	2	3	4	5	6	7	8	An	Ks Three-Hourly Indices 1	2	3	4	5	6	7	8	As	Sa	Prov Ri	Ra	Rs	IMF
1	3-	3o	3o	2+	3-	2+	3o	3o	25	3-	3-	3-	2o	2+	2o	3-	3-	20	72.3	9	7	16	
2	3+	3o	3+	3-	3-	3o	1+	3-	26	3o	2+	3o	3-	2+	3-	2-	3-	22	75.0	8	8	19	
3	2o	3-	2-	2o	2-	1o	2-	1+	13	2-	2+	2o	1+	1-	1-	1o	2-	10	74.4	10	8	18	
4	1o	1o	0+	1+	1+	1o	2-	0+	7	1+	1o	0+	1+	1o	1-	1o	0o	6	82.7	14	18	27	
5	1-	1-	1o	1o	1+	1o	2-	1o	7	1-	0+	1-	1o	1o	1o	1+	1o	6	81.3	17	21	26	
6	1-	1o	1-	1o	1+	2o	2o	1-	8	1o	1-	1-	1o	1+	1-	2-	0+	6	79.4	15	19	24	
7	1+	1+	2-	2+	2+	3-	3o	4o	22	2-	1+	1+	2+	2o	2+	3o	4o	21	78.7	14	16	23	
8	4o	4-	4o	4o	3-	3-	4o	3+	43	5-	4o	4+	3+	3-	3-	4o	4o	50	78.0	12	14	22	
9	2+	2-	2-	2+	2-	1+	3+	3o	19	3+	1+	1+	2+	2o	1+	3o	3+	20	78.7	10	9	23	
10	2+	2+	3o	4-	2o	1o	1+	3-	21	2+	2-	3-	3-	1+	1o	1o	3-	16	78.8	16	11	23	
11	3-	2-	0+	1o	2-	2+	2-	2-	12	3-	1+	0o	1o	2o	2-	2-	2-	12	77.3	9	10	21	
12	0o	0+	0+	0o	1o	0o	0+	1+	3	0o	0+	0o	0o	1o	0+	0+	1+	3	76.5	14	12	21	
13	0+	1-	1+	1o	1o	2-	3-	1o	9	1o	1+	1+	1o	1o	1+	2o	1-	8	77.6	0	5	22	
14	1-	1+	1-	0+	0+	0+	0+	1-	4	1o	2-	0+	0+	0o	0o	0+	0+	3	78.0	8	10	22	
15	0+	1-	1o	1-	0+	0+	1-	1o	4	1-	1o	0+	1o	1-	0o	1o	1+	5	79.1	8	11	23	
16	1-	1+	2o	2-	2+	2+	2o	3+	16	1o	2-	2+	1+	1+	2-	2o	3-	13	78.7	8	9	23	
17	3-	4-	3o	3-	4-	3o	1+	1-	26	2-	3+	3o	2+	3-	2+	1+	0+	18	77.5	8	11	22	
18	1-	2o	1o	1+	3-	2+	2o	1+	12	1-	2-	1+	2-	2o	2o	2-	1o	11	77.7	8	10	22	
19	2-	2o	2o	2-	3-	2+	1+	1+	14	2-	2-	1+	1+	2+	2o	1+	1o	12	77.2	16	12	21	
20	1+	0o	1+	1+	0+	1o	0+	1+	6	1-	0o	1o	1o	0o	0o	0o	1-	3	76.0	9	8	20	
21	0+	0o	0o	0o	0o	0+	0+	3-	4	0o	0o	0o	0o	0o	0o	0o	3-	3	74.6	8	8	19	
22	3+	2o	1o	1-	1+	1-	2-	1+	12	4+	2+	1o	1-	1o	0o	2-	1+	15	74.0	7	4	18	
23	1o	0+	0+	0+	1o	1o	1o	0+	4	1o	1-	1-	1-	1o	1o	1o	0o	5	73.4	8	1	17	
24	1-	0+	0o	1-	3-	2+	2o	2o	10	1o	1-	0+	1o	2-	2+	2o	2+	11	72.5	0	0	16	
25	3+	4-	4-	3+	2+	3+	3o	4-	37	3+	3+	3+	3+	2o	3o	3-	4-	33	72.1	0	0	16	
26	2-	2-	3o	2+	2+	3+	3o	2-	22	2-	1+	3o	2+	2o	3-	3o	1+	18	71.2	0	1	15	
27	3o	1-	1-	2-	3o	3+	2+	0+	18	3o	1o	0+	2-	2+	3o	2o	1o	16	70.7	0	1	14	
28	0+	0+	2-	2+	3-	2o	2+	1+	12	0o	1-	1o	2o	2+	1+	2o	2-	10	72.1	0	1	16	
29	0o	0o	1+	1-	0+	2-	2o	1-	6	0+	0o	1o	0+	0o	1o	1+	1-	4	73.1	8	5	17	
30	1-	2-	0+	1o	2-	1+	2+	2o	10	1-	1+	0+	2-	1+	1+	2+	2o	10	74.5	9	8	18	
31	1o	1+	1+	2+	3+	4o	4+	4o	32	0+	2o	2-	2+	3o	4-	5-	4-	30	76.7	12	17	21	
Mean									15.0									13.5	76.1	8.5	8.9	20.2	

Daily Average Indices Ap
Nov 2004 - Oct 2005

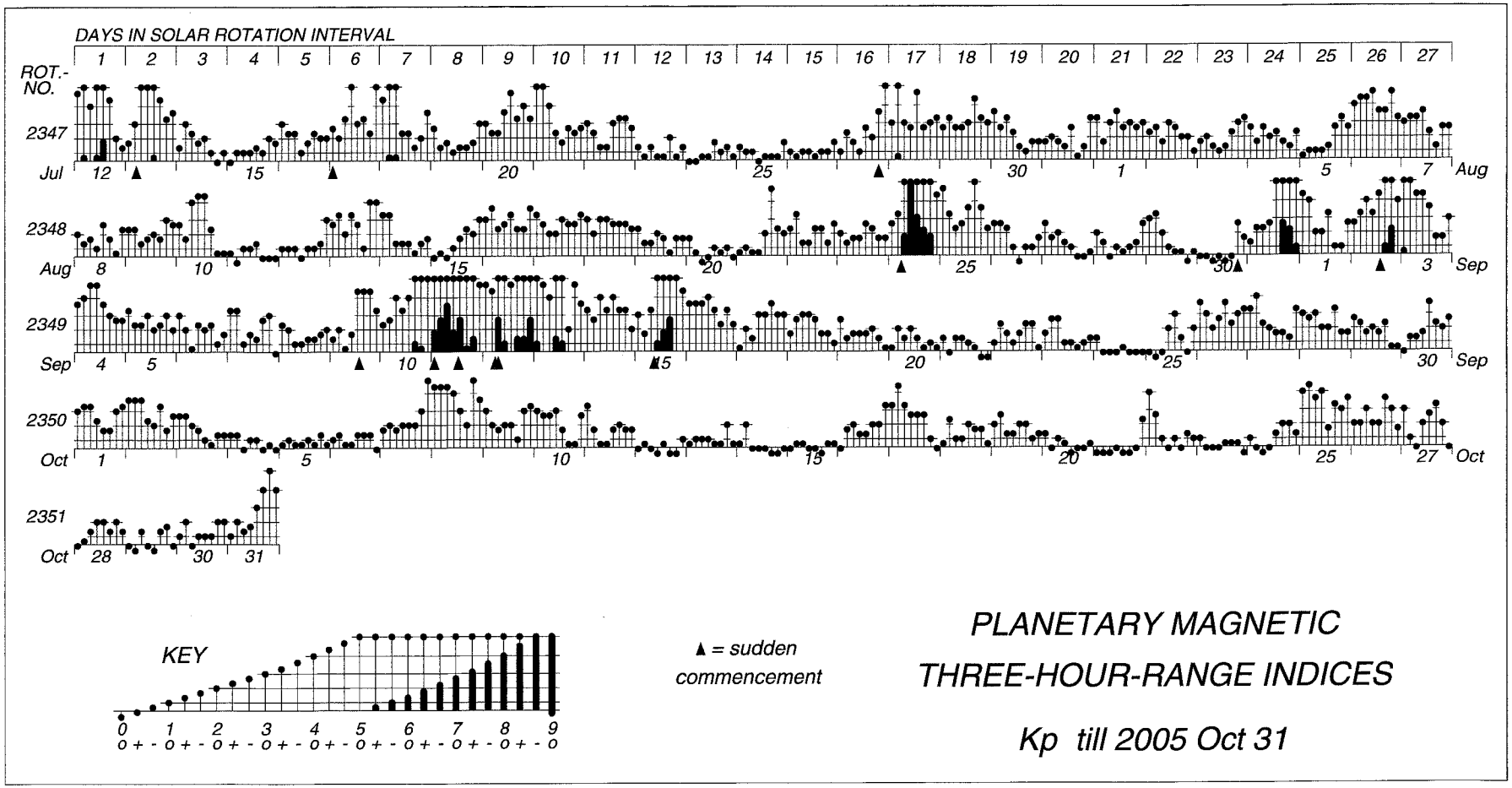


Day	Nov 04	Dec	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	5	12	18	6	11	5	22	6	14	14	14	13
2	4	4	37	9	14	3	7	6	12	9	39	15
3	10	3	19	9	4	5	9	6	7	9	27	7
4	8	0	26	3	2	26	5	22	4	8	24	3
5	4	9	17	2	11	50	4	17	4	8	11	4
6	1	20	4	10	37	10	4	10	4	29	8	4
7	50	15	40	30	40	6	10	13	6	14	10	12
8	140	11	36	32	29	3	91	4	4	6	6	26
9	119	8	4	25	25	3	10	4	24	9	17	10
10	161	10	6	21	14	2	7	3	57	16	33	10
11	24	15	14	12	5	11	12	4	21	3	101	7
12	30	28	32	4	3	30	14	54	40	5	75	2
13	7	10	15	4	5	30	21	32	31	16	44	4
14	8	7	16	5	19	16	6	11	6	8	18	2
15	2	6	18	4	4	13	87	16	4	6	52	2
16	7	13	16	14	6	6	41	26	8	14	18	7
17	6	16	58	6	13	4	16	14	22	13	12	14
18	2	13	84	32	10	6	7	5	24	12	10	5
19	4	3	60	16	11	7	7	4	7	6	6	6
20	20	4	17	14	4	20	23	3	20	3	5	3
21	17	12	66	6	8	3	18	1	21	9	3	2
22	8	20	33	4	3	8	9	6	12	9	6	8
23	6	6	19	4	4	6	4	50	4	7	6	2
24	8	3	10	5	5	8	3	10	4	102	2	4
25	20	14	4	9	20	8	4	11	4	22	5	21
26	12	11	3	10	16	2	2	6	4	6	15	11
27	11	8	2	8	14	1	2	3	14	5	12	8
28	13	16	6	13	4	2	12	4	23	5	11	5
29	17	16	20		4	10	20	5	17	7	7	3
30	18	18	17		7	24	90	6	10	3	8	5
31		7	19		9		14		8	49		17
Mean	25	11	24	11	12	11	19	12	14	14	20	8

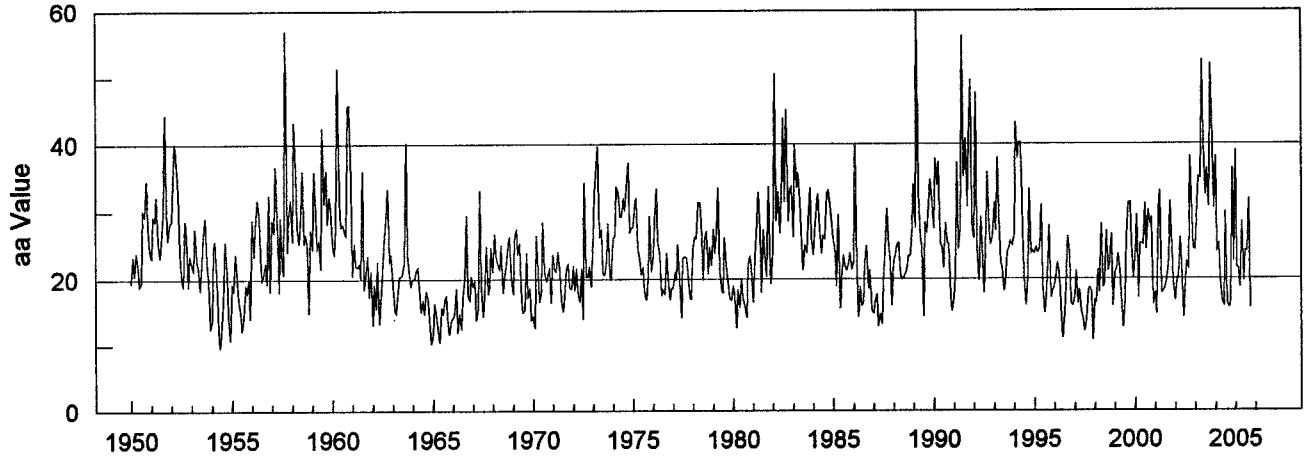
PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

GeoForschungsZentraum Potsdam

Kp through Oct 31, 2005



Monthly Mean aa Index Jan 1950 - Oct 2005

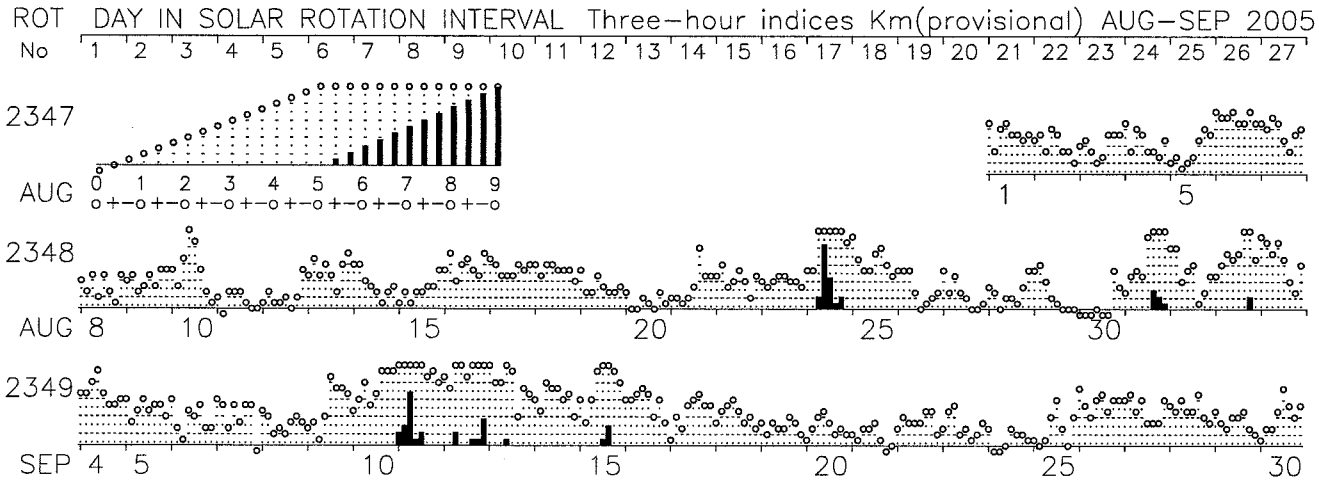


Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4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

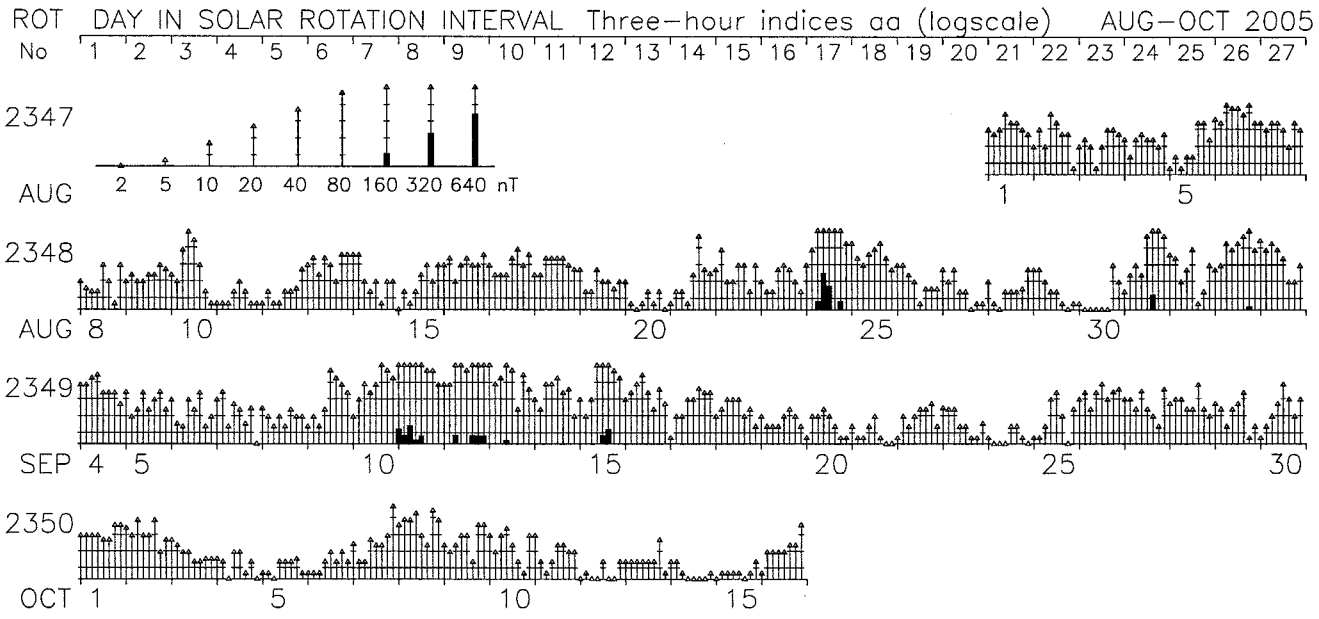
PLANETARY GEOMAGNETIC ACTIVITY

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

ISGI PUBLICATION OFFICE - EMail : ISGI.PUBOFF@cetp.ipsl.fr
CETP, 4 Avenue de Neptune, F-94107 Saint Maur des Fosses CEDEX - FRANCE

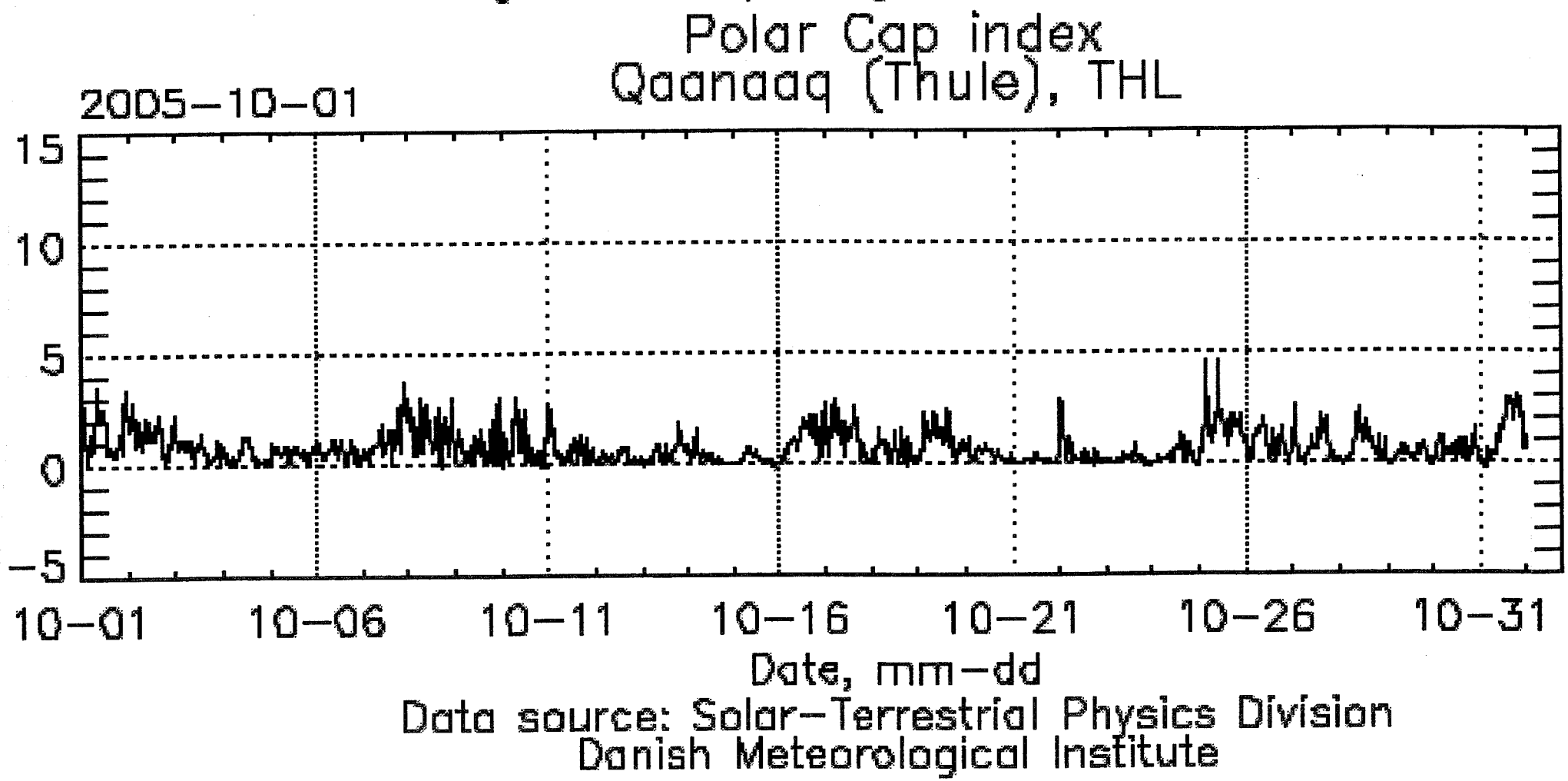


Indices Derivation at C.E.T.P.; Graph Prepared at ISGI Publication Office.



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

WDC C1 for Geomagnetism, Copenhagen



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

OCTOBER 2005

Sta	Geomag Lat	Commencement Time Day	(UT)	Type	SC Amplitudes D (Min)	H (Gamma)	Z (Gamma)	Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges D (Min)	H (Gamma)	Z (Gamma)	End Hour Day	(UT)
HYB	07.6N	01	0300	..	..	..	..	02(6)	4	5	77	21	02	24
JAI	17.4N	07	1800	..	..	..	..		-	5	68	26	08	23
NGP	11.3N	07	1800	..	..	..	..		-	3	76	23	08	23
ABG	09.4N	07	1800	..	..	..	..	07(7) 08(4,7) 17(4)	5	3	79	31	08	23
HYB	07.6N	07	0500	..	..	..	..	08(3)	5	4	105	25	09	24
PND	02.0N	07	1800	..	..	..	..		-	2	102	46	08	23
TIR	00.6S	07	1800	..	..	..	..		-	3	126	84	08	23
JAI	17.4N	24	2230	..	..	..	..		-	4	112	13	26	22
NGP	11.3N	24	2230	..	..	..	..		-	3	108	16	26	22
ABG	09.4N	24	2230	..	..	..	..	24(5)25(2)27(6)28(4)	5	3	103	26	26	22
HYB	07.6N	24	0900	..	..	..	..	25(2,6)	4	4	104	15	26	22
PND	02.0N	24	2230	..	..	..	..		-	3	105	58	26	22
TIR	00.6S	24	2230	..	..	..	..		-	4	123	66	26	22
HYB	07.6N	30	0500	..	..	..	..	31(6,7)	5	4	158	19	31	24
JAI	17.4N	31	0330	..	..	..	..		-	4	134	31	31	24
NGP	11.3N	31	0330	..	..	..	..		-	3	149	19	31	24
ABG	09.4N	31	0330	..	..	..	..	31(4,7)	5	2	158	28	31	24
PND	02.0N	31	0330	..	..	..	..		-	3	164	36	31	24
TIR	00.6S	31	0330	..	..	..	..		-	3	194	65	31	24

Stations:

ABG = ALIBAG
AMS = MARTIN DE VIVIES
ANN = ANNAMALAINAGAR
BJI = BEIJING
CAN = CANBERRA
CMO = COLLEGE
CZT = PORT ALFRED
DRV = DUMONT D'URVILLE
ETT = ETAIYAPURAM
GNA = GNANGARA
GUA = GUAM
HER = HERMANUS
HON = HONOLULU
HYB = HYDERABAD
JAI = JAIPUR
KRC = KARACHI
NGP = NAGPUR
PAF = PORT AUX FRANCAIS
PMG = PORT MORESBY
PND = PONDICHERRY
SHL = SHILLONG
SIT = SITKA
TIR = TIRUNELVELI
UJJ = UJJAIN

Stations reporting no storms observed: CAN GNA

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

October 2005

Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
27	1156	B: LER ESK HAD*	14	0927-0935	NAG
		C: CLF	21	1013-1022	NAG
			31	1304-1318	GUI

REPORTING OBSERVATORIES (up to the 2nd of December 2005):
SOD NUR LER ESK VAL HAD BDV CLF HRB NAG GCK MMB EBR COI SPT KAK KNY GUI HYB GNA CNB

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

Note that we have included data of the Antartic Station LIVINGSTONE (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.