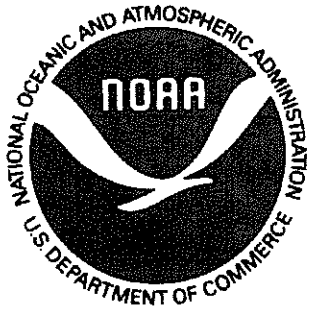




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Number 619

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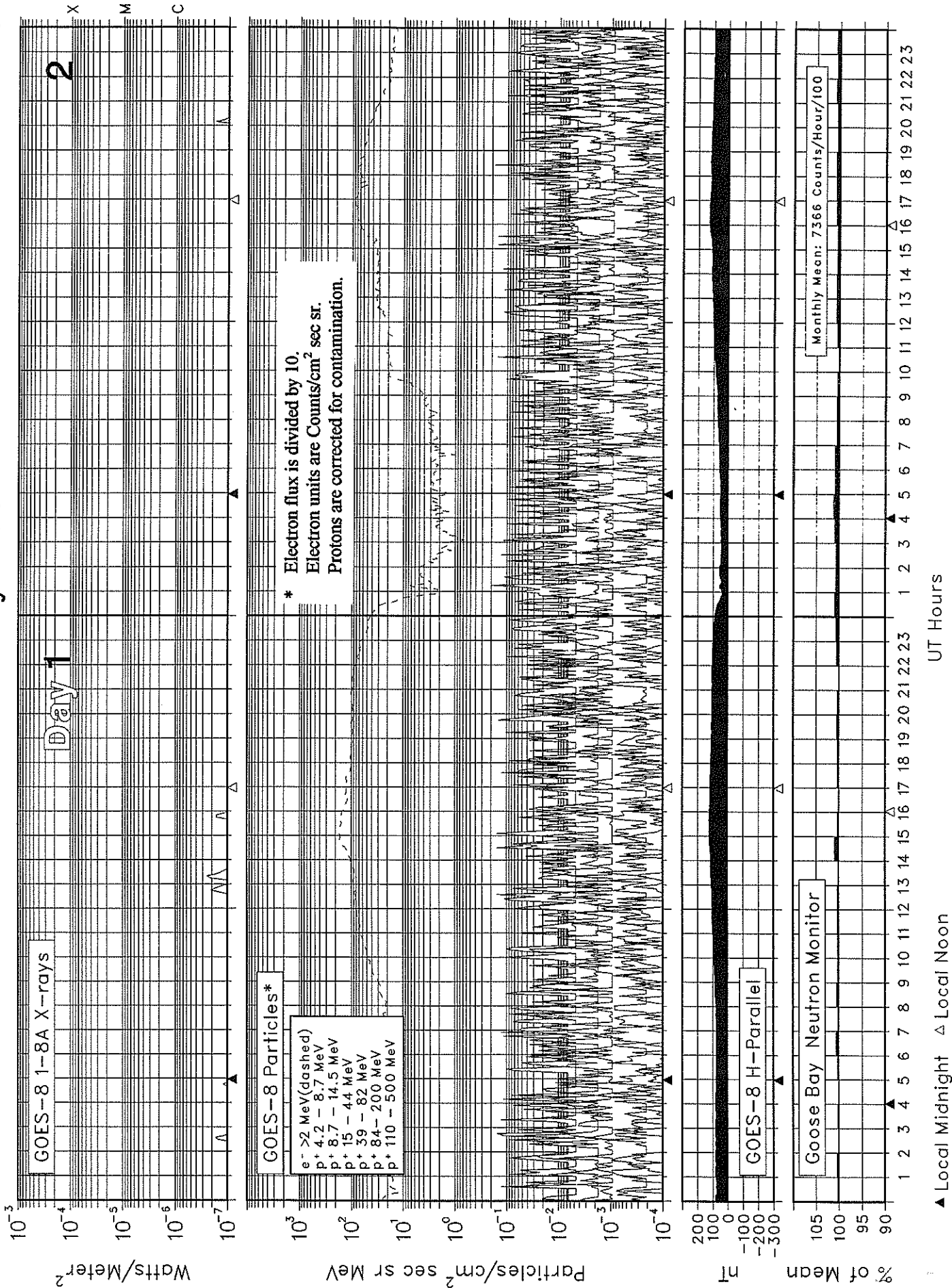
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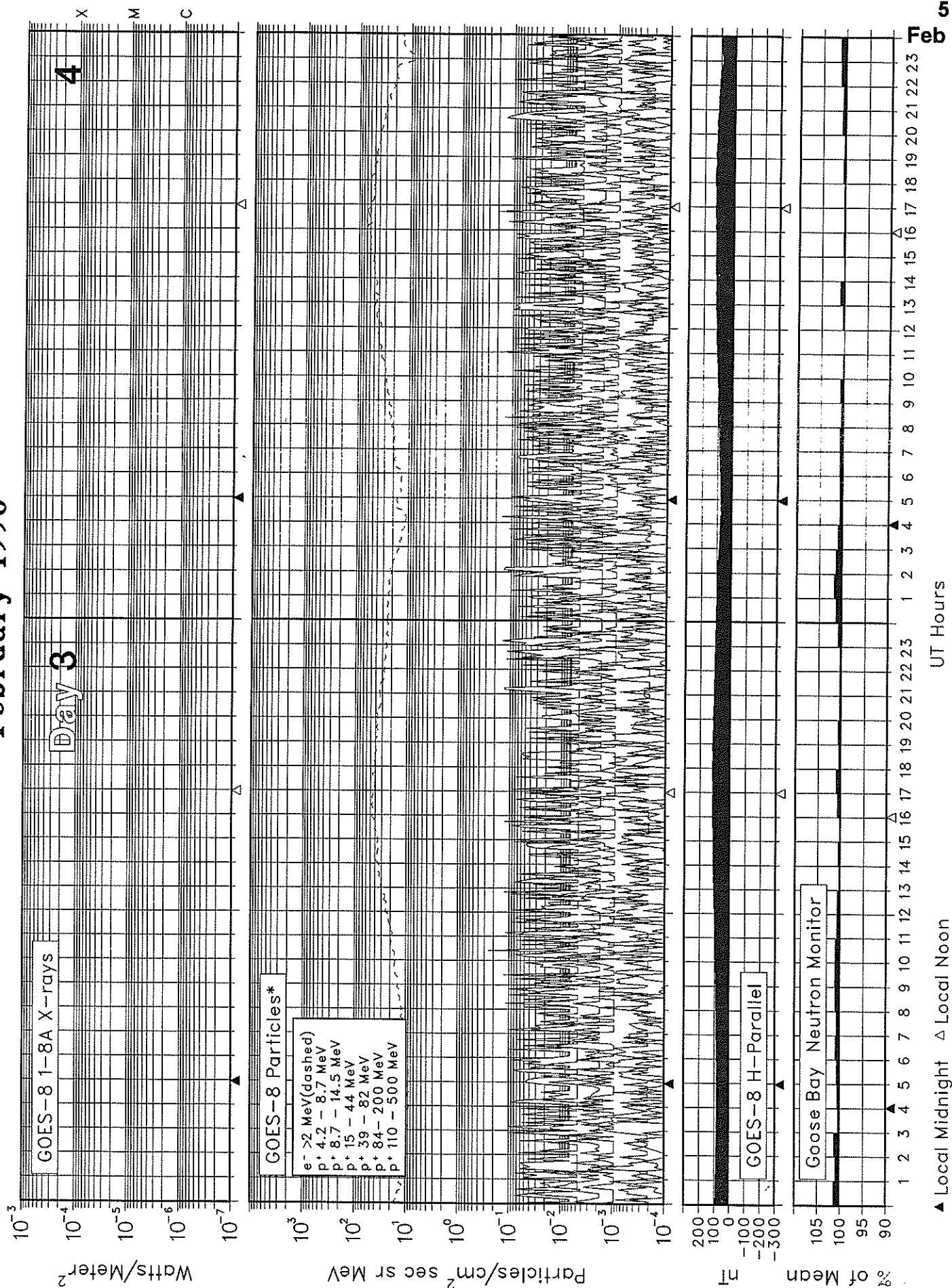
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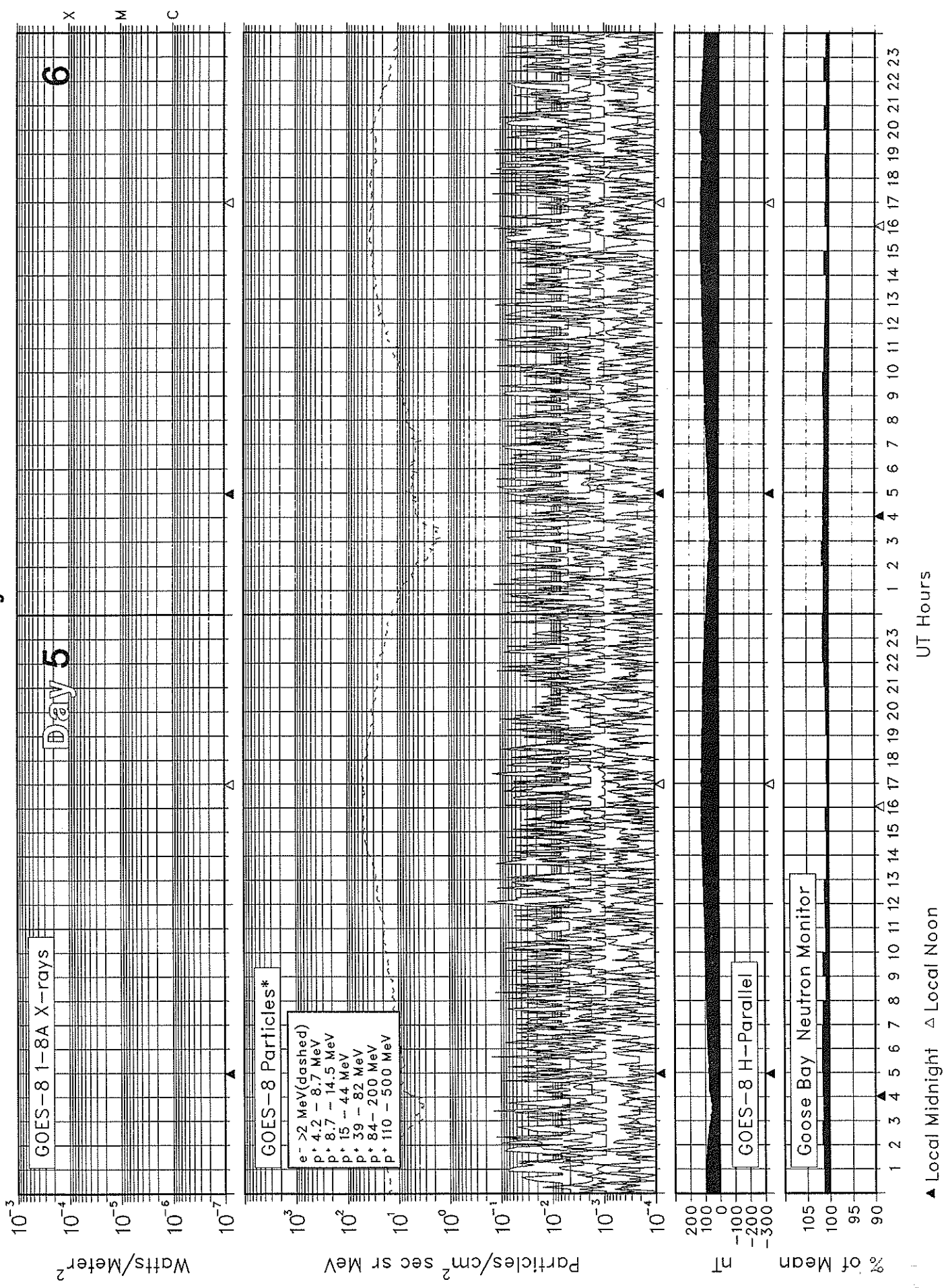


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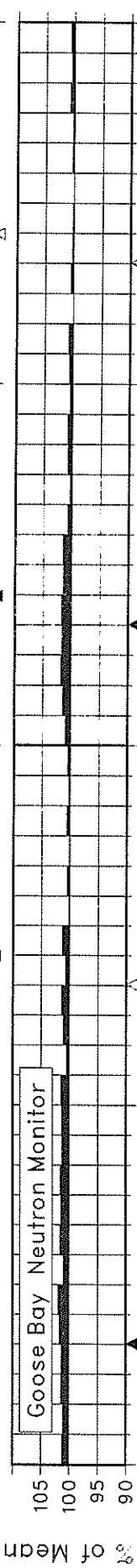
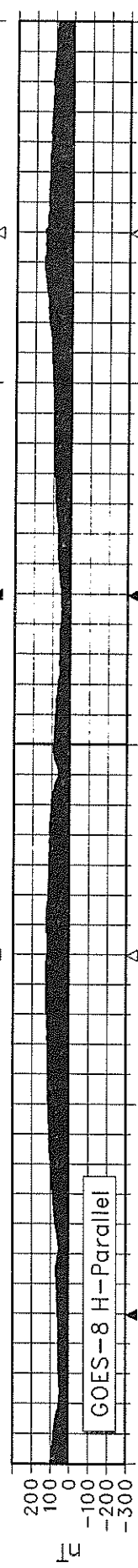
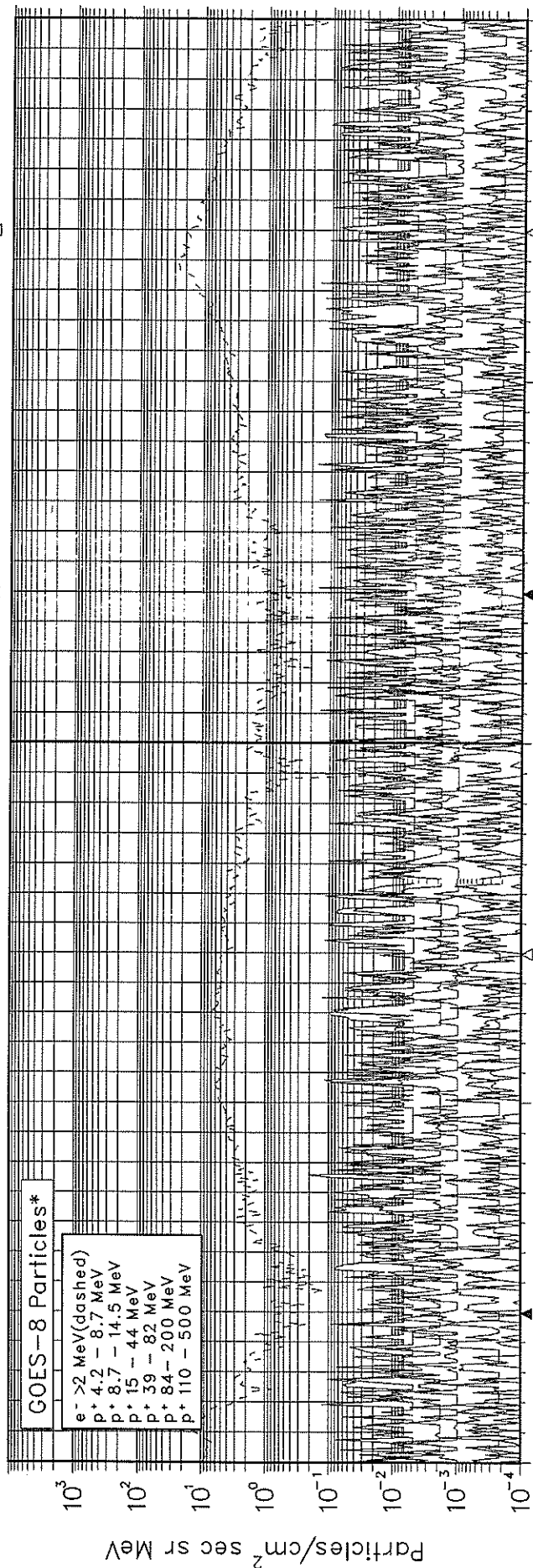
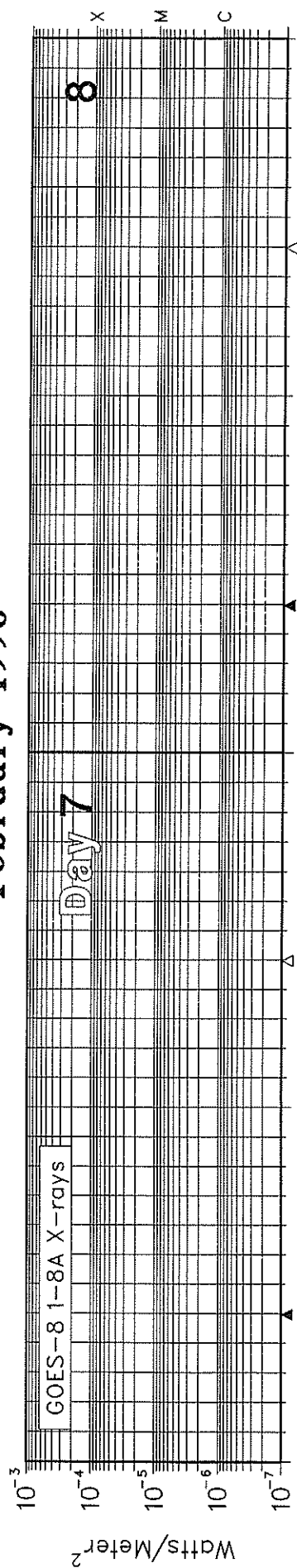
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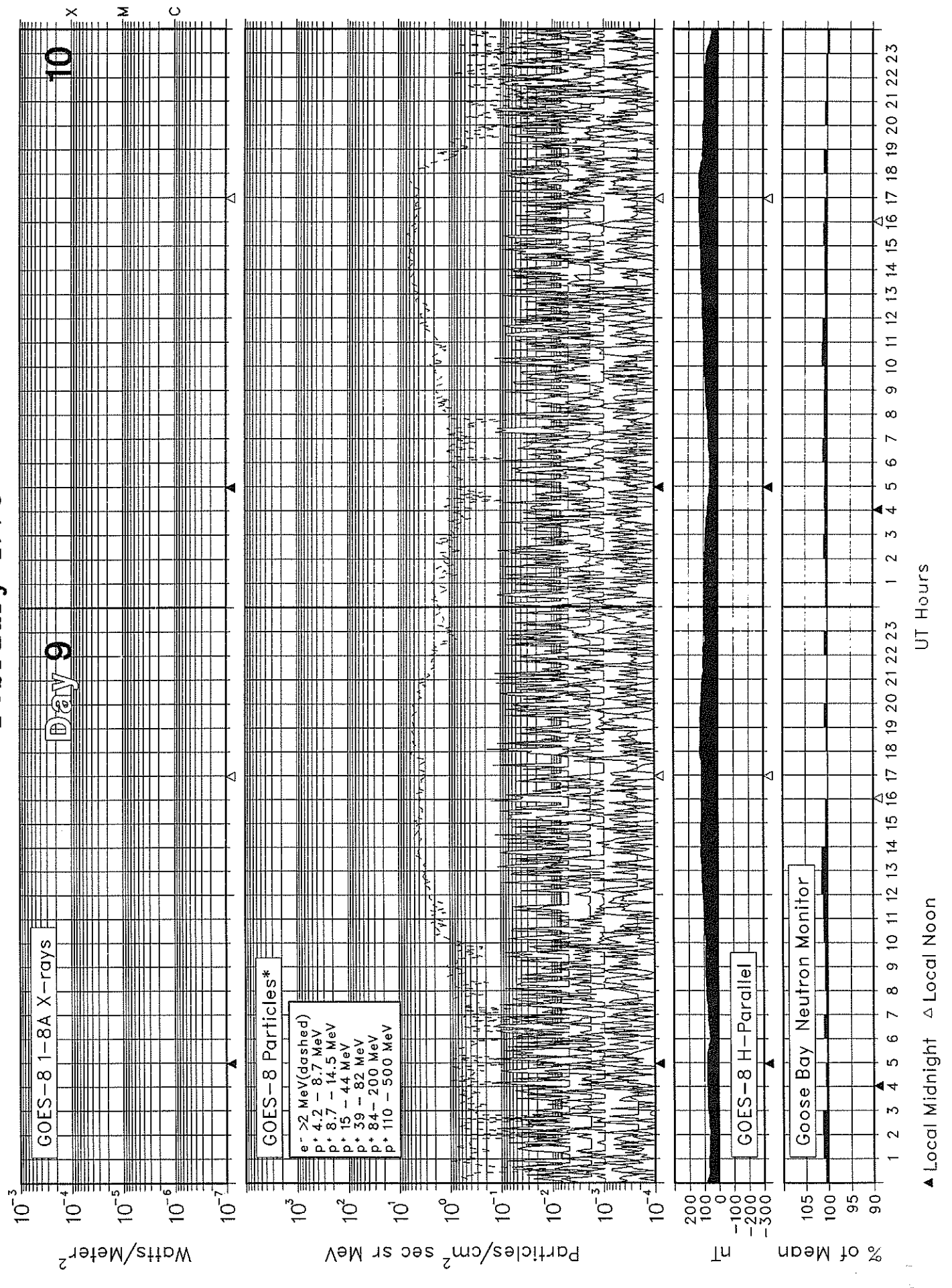


UT Hours

▲ Local Midnight △ Local Noon

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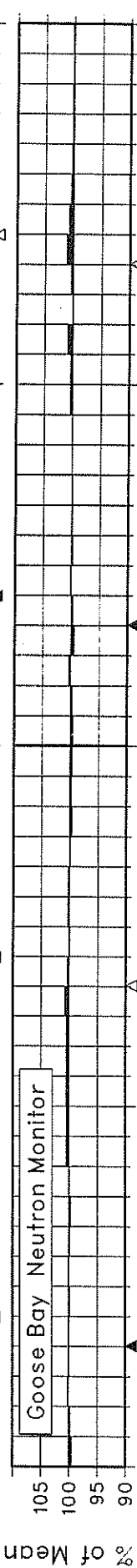
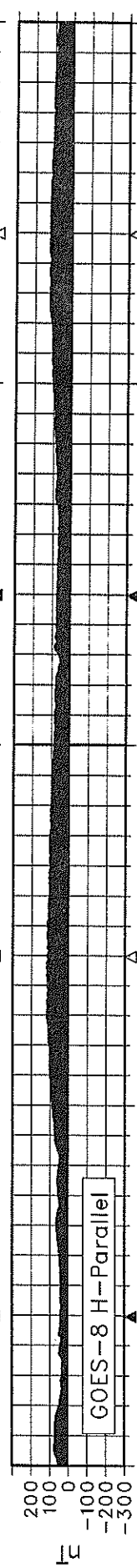
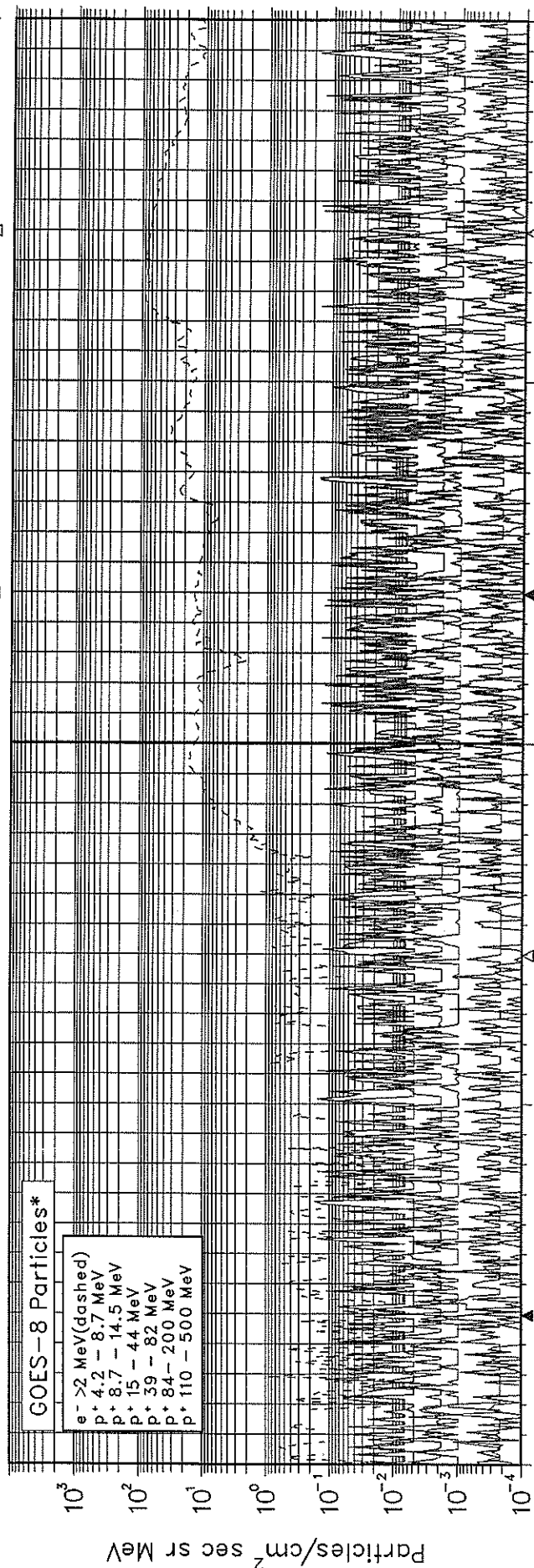
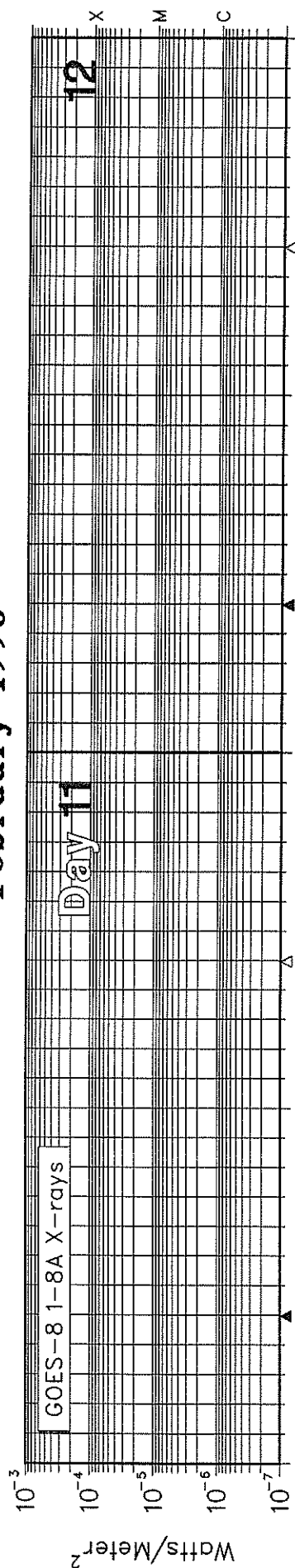
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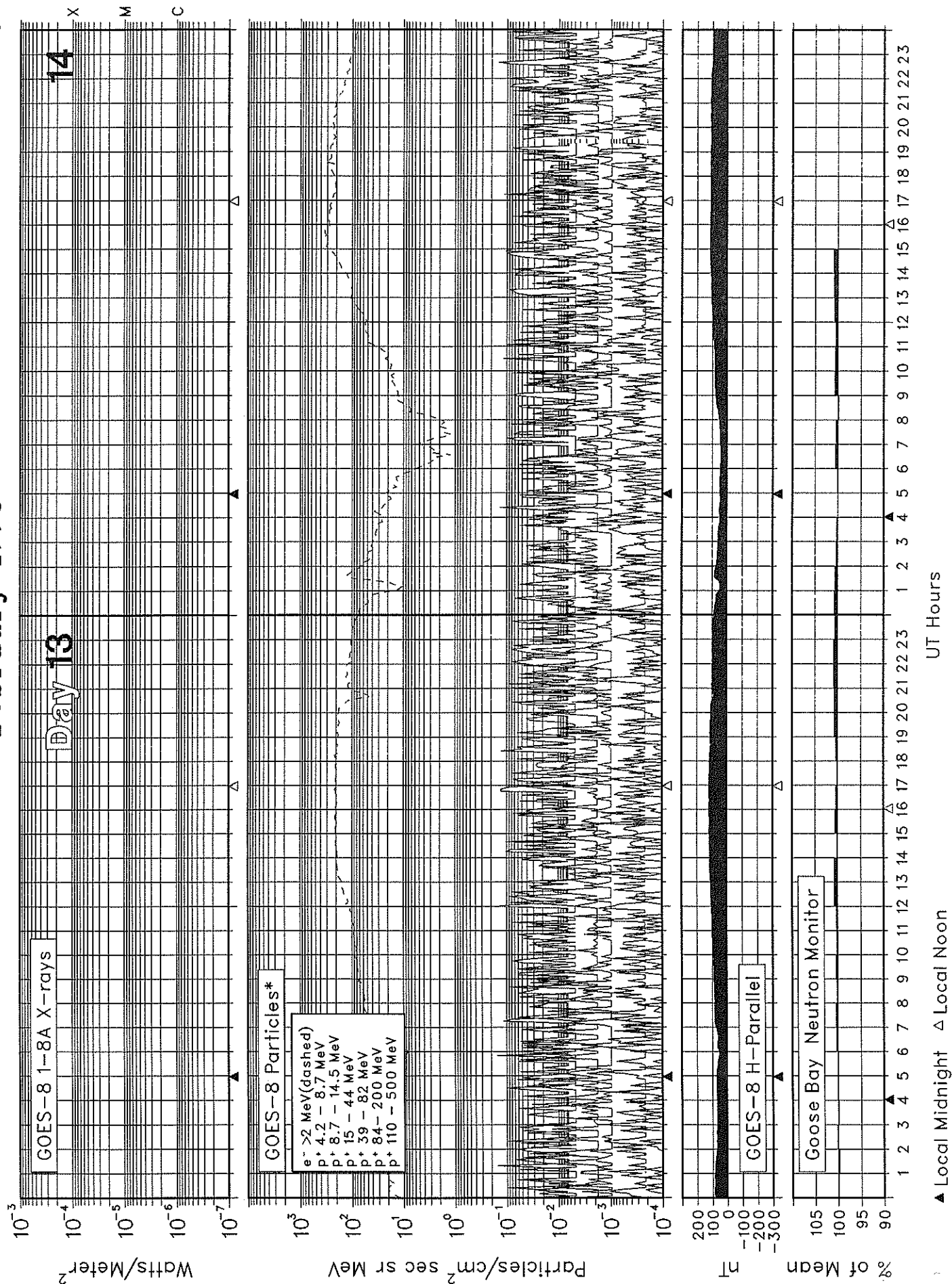
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UT Hours

▲ Local Midnight ▲ Local Noon

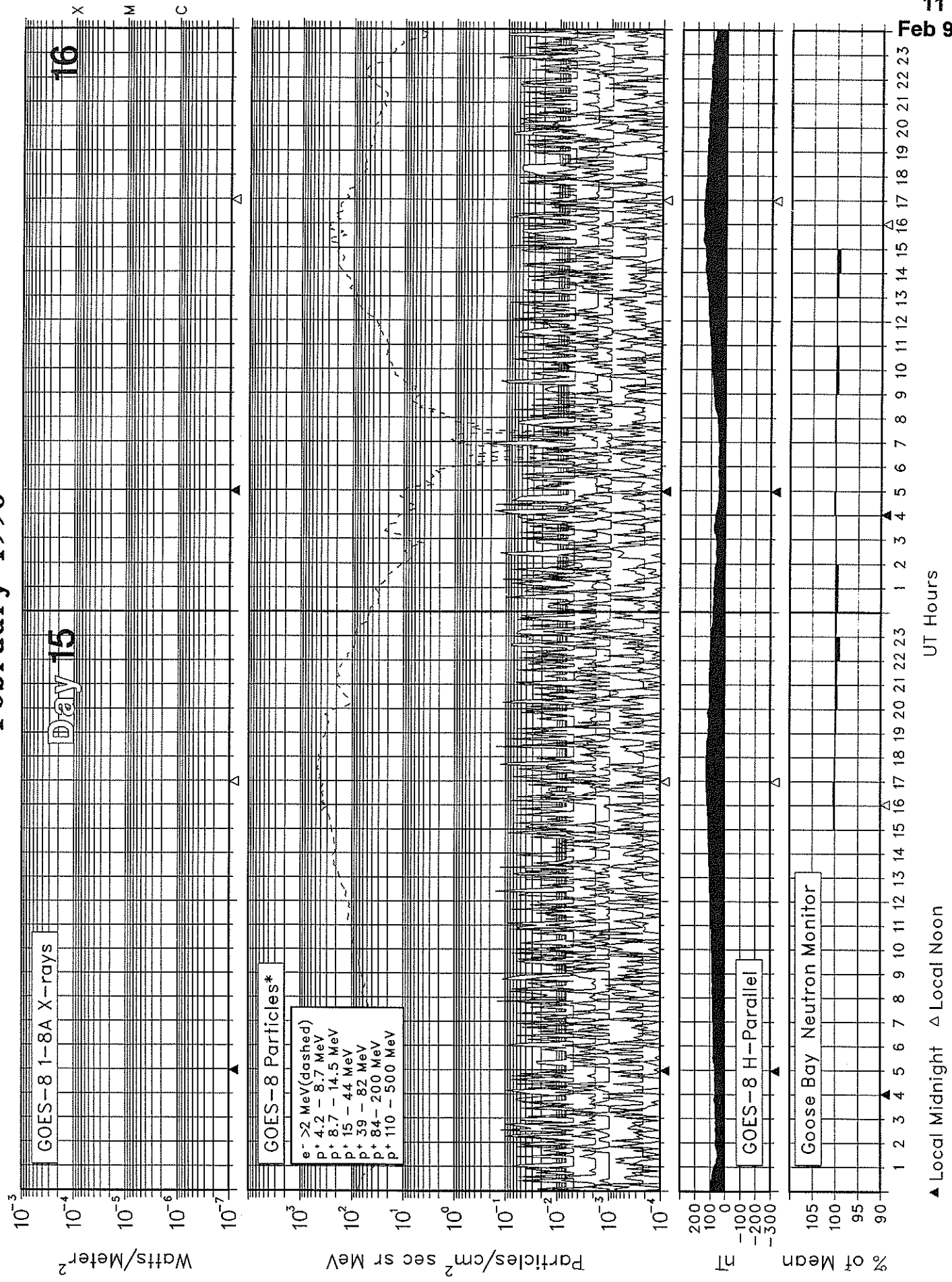
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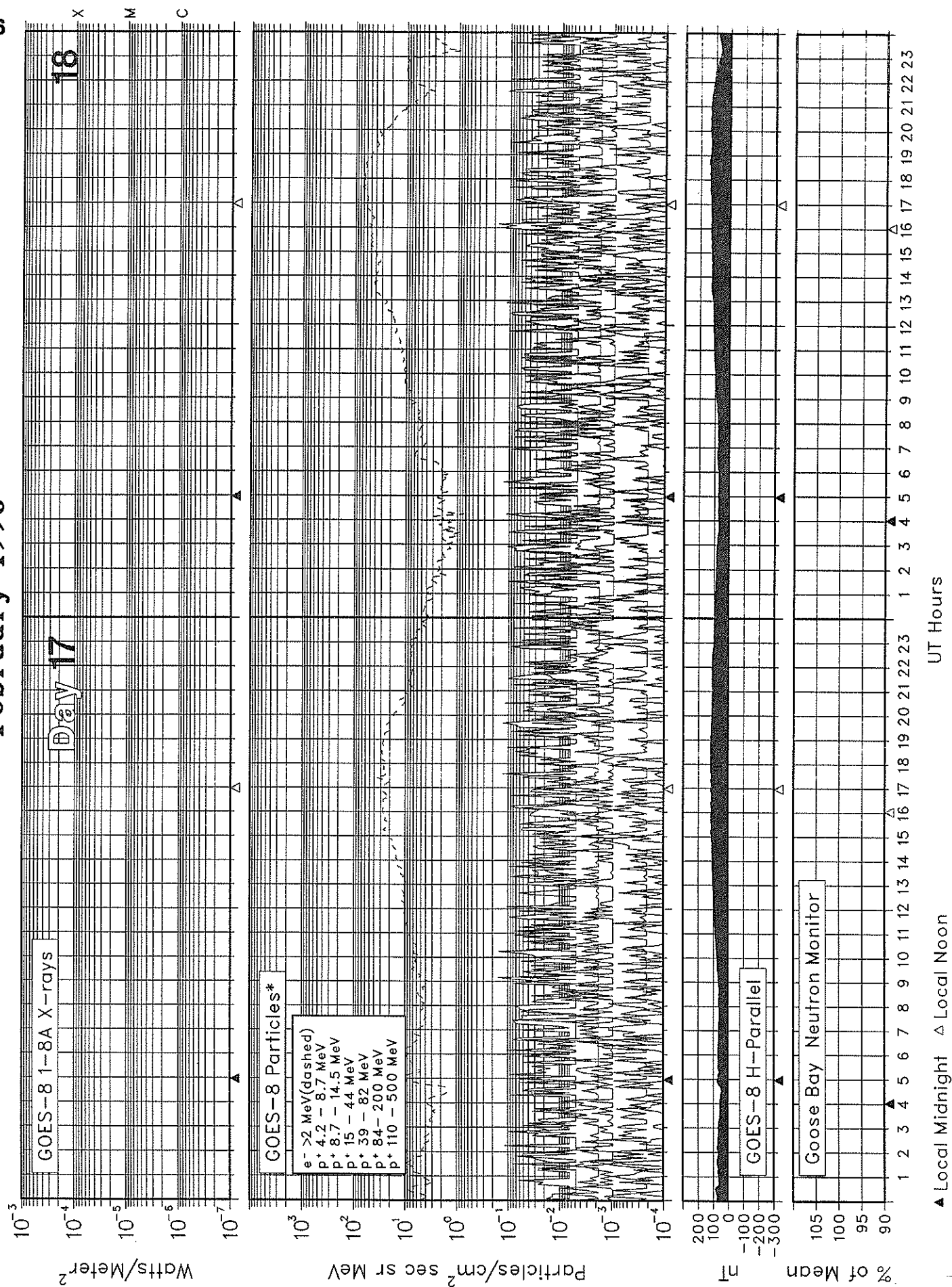
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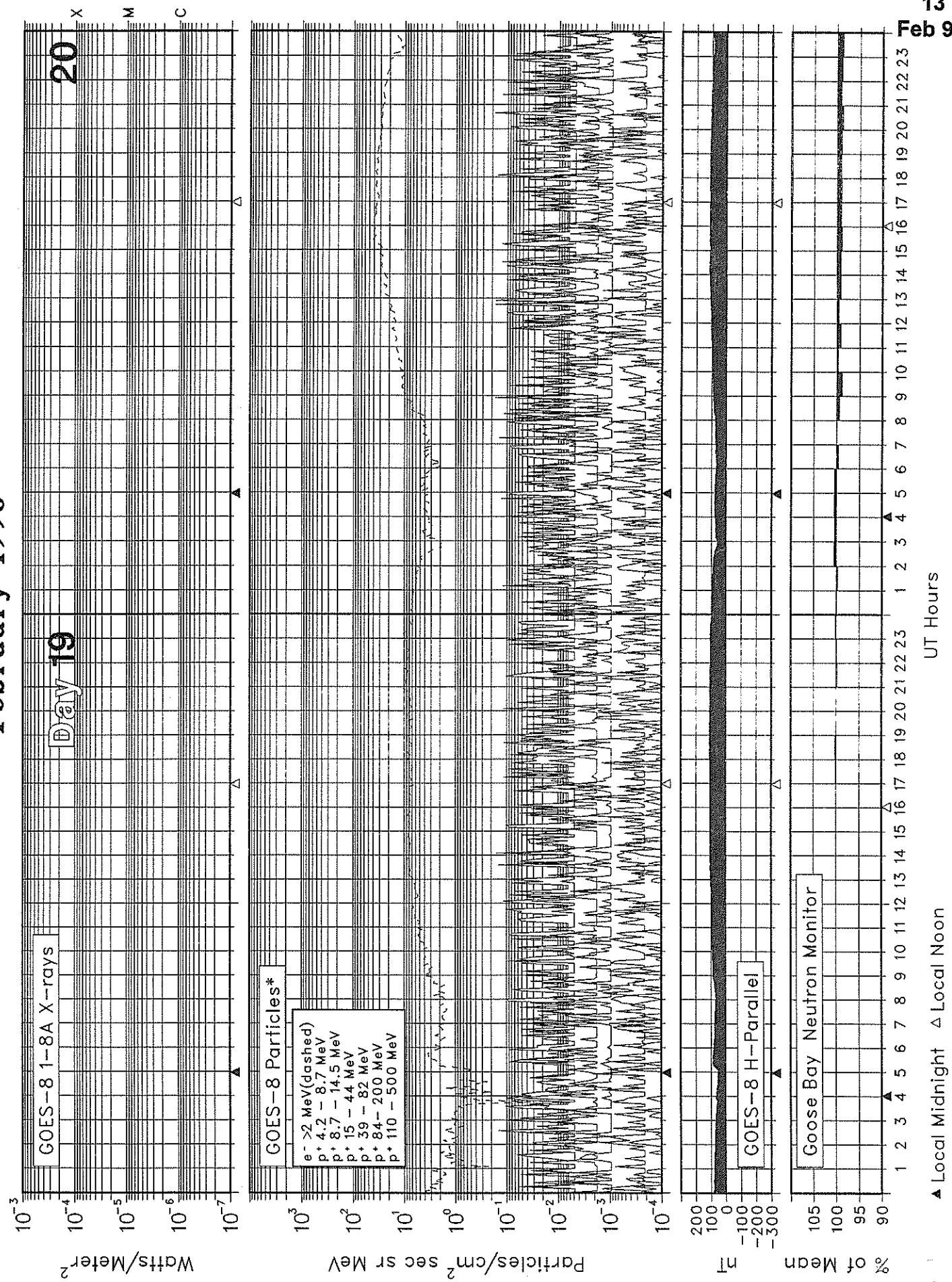
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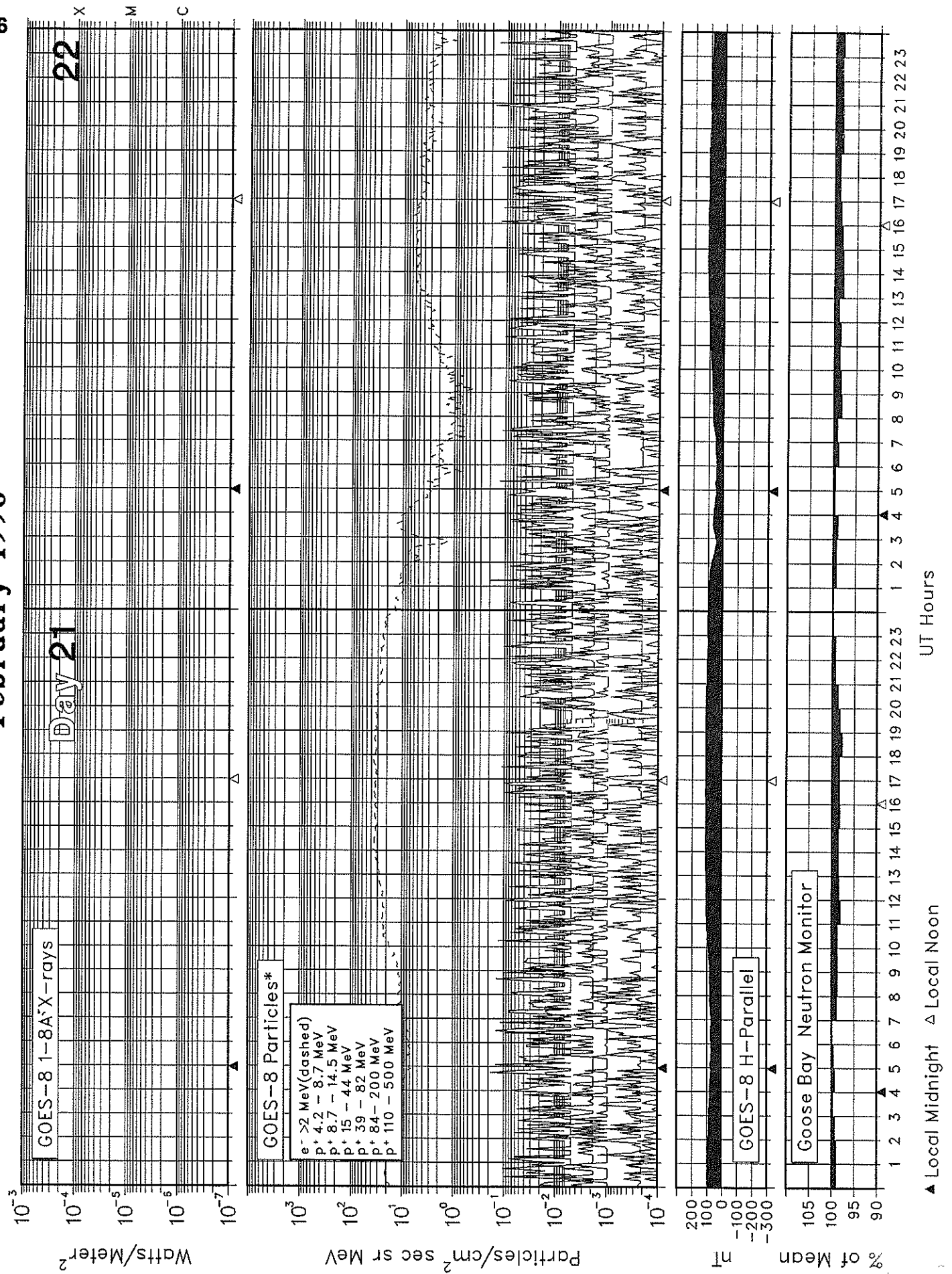
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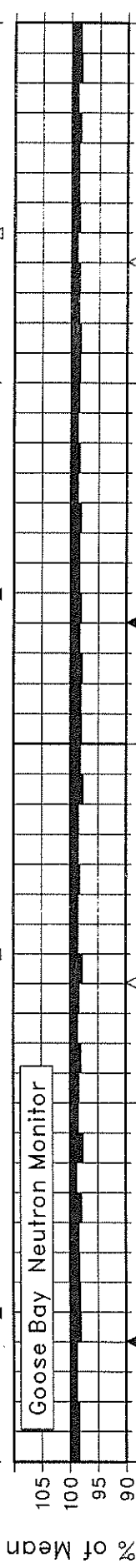
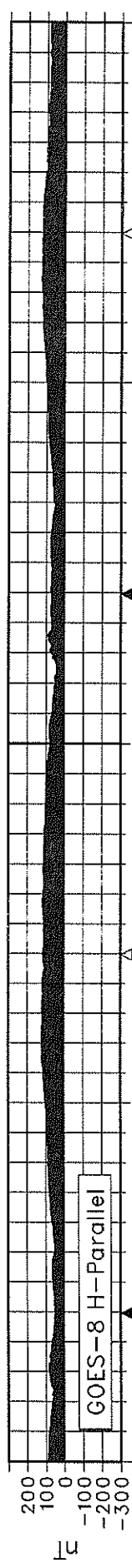
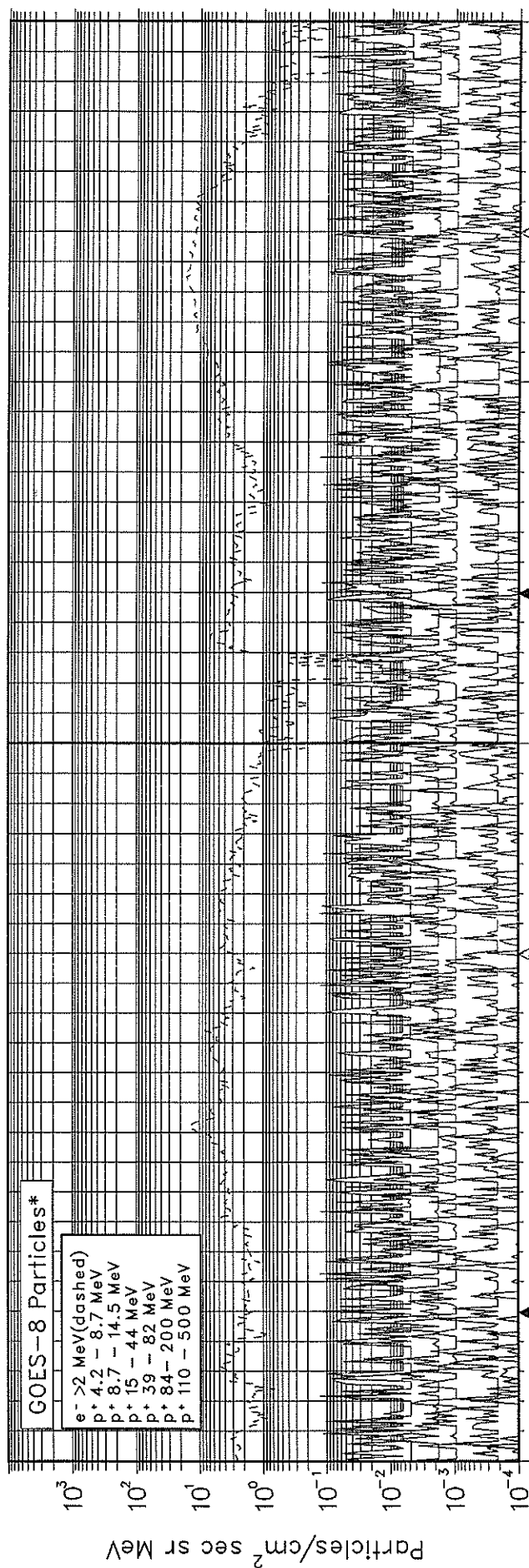
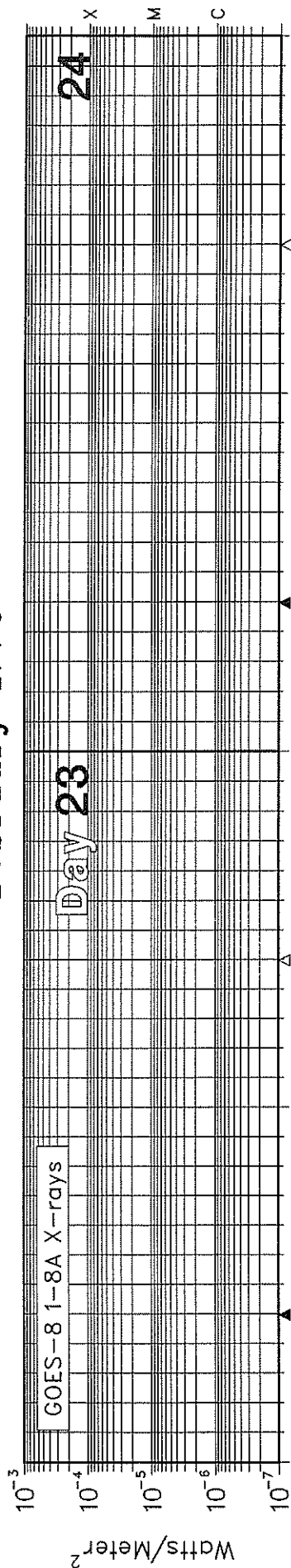


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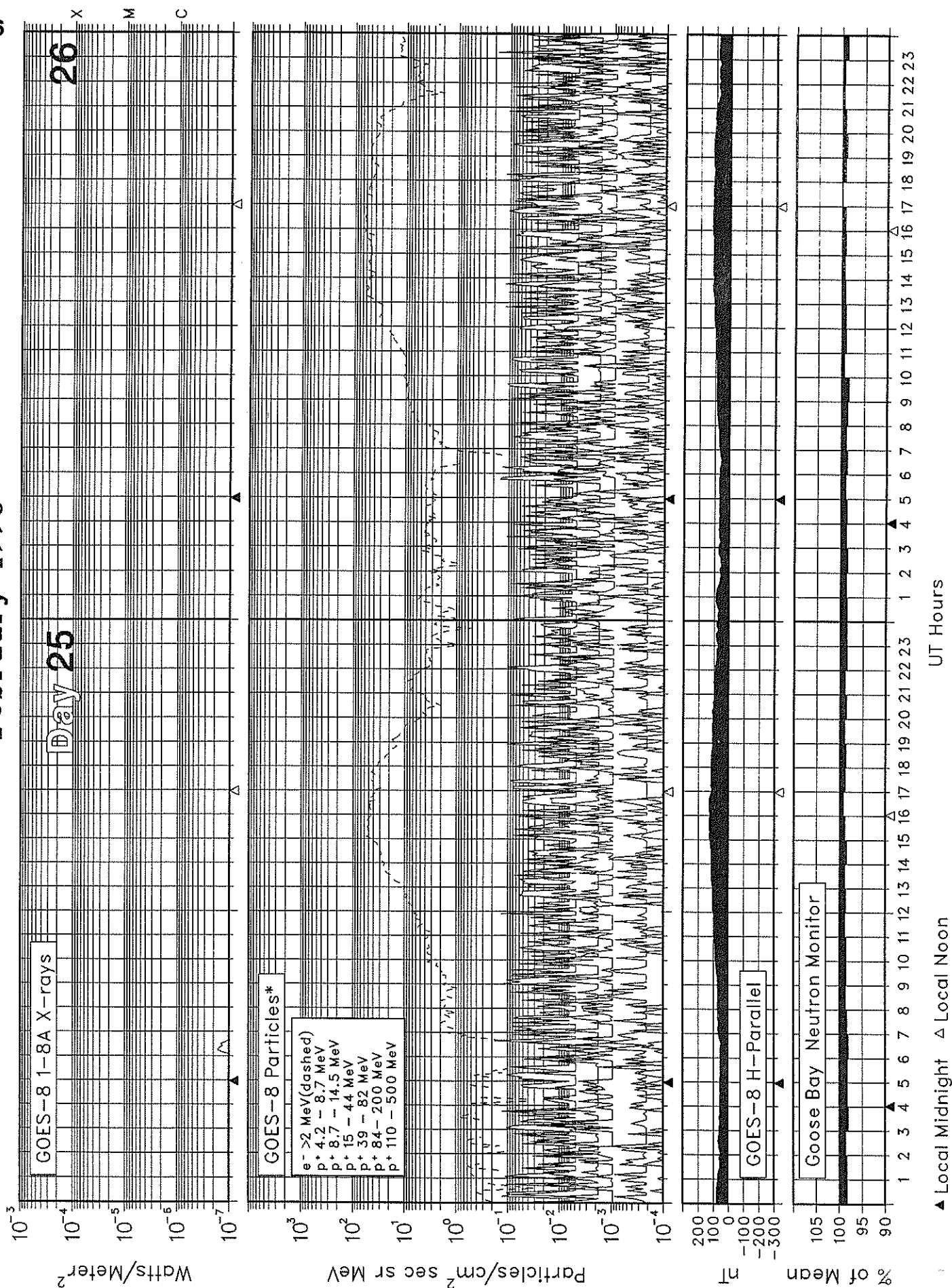
UT Hours

▲ Local Midnight Δ Local Noon

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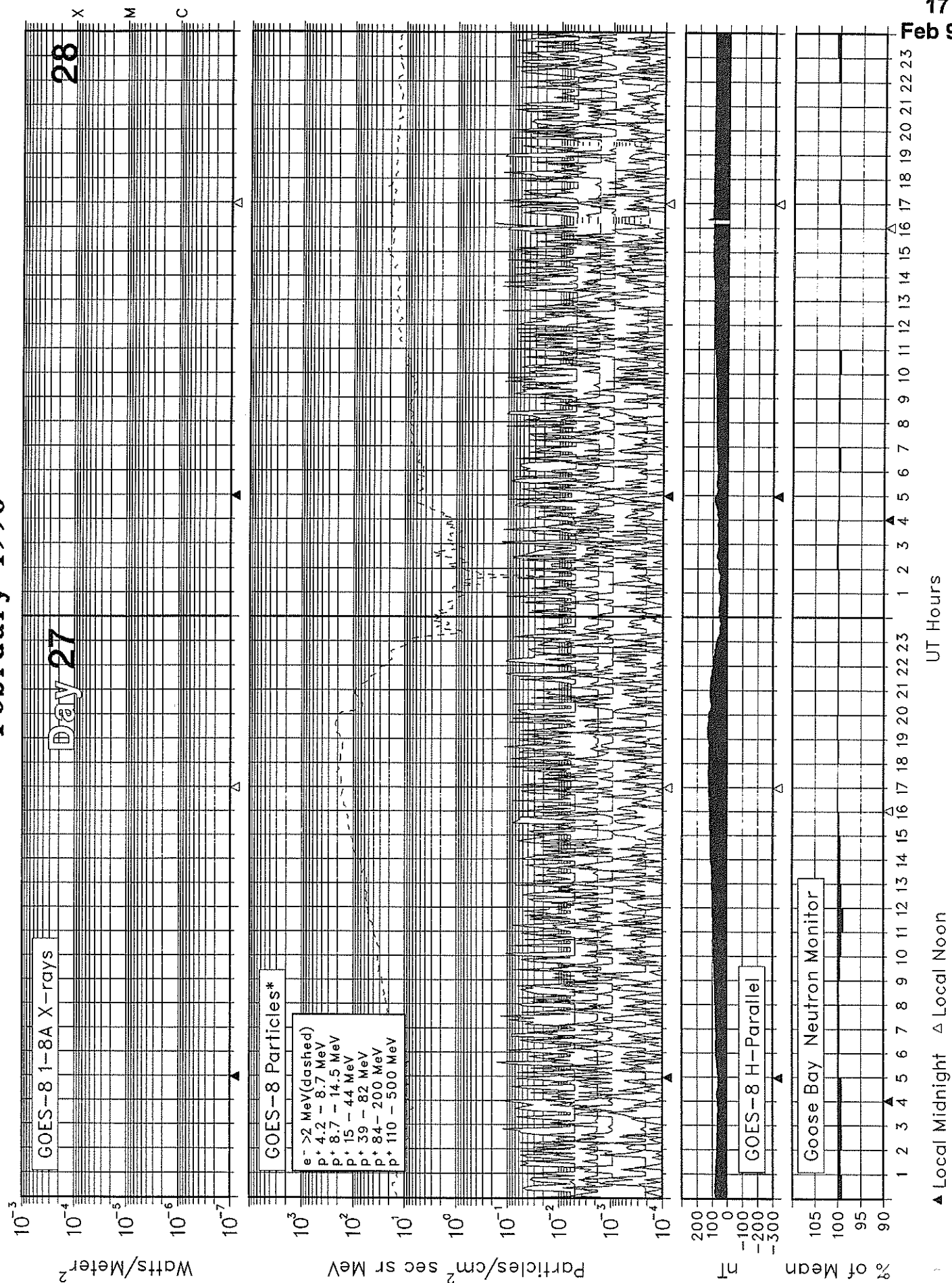


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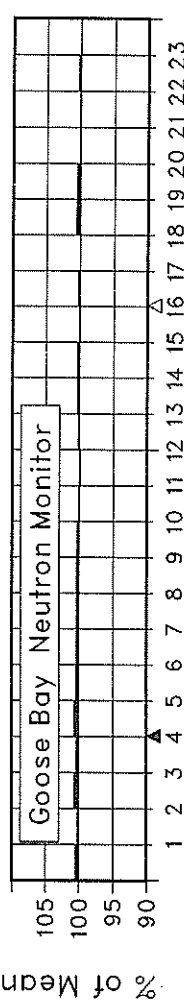
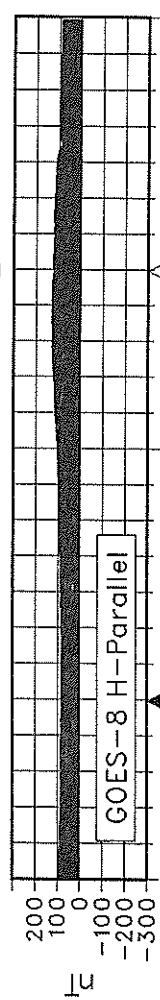
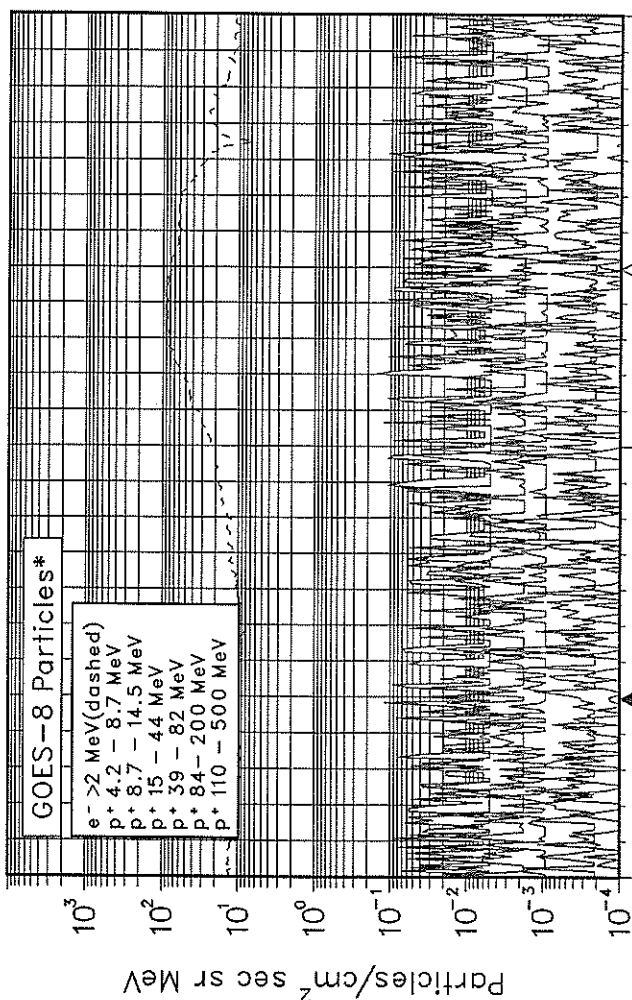
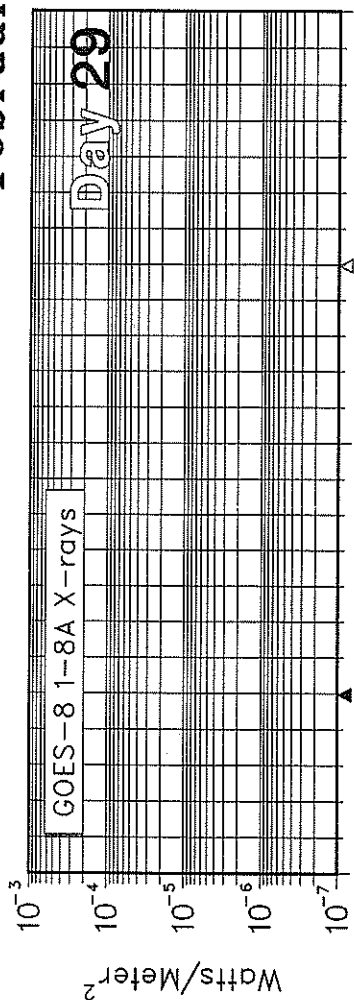
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SOLAR-TERRESTRIAL ENVIRONMENT

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▲ Local Midnight ▲ Local Noon

UT Hours

* Electron flux is divided by 10.
Electron units are Counts/cm² sec sr.
Protons are corrected for contamination.

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

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FEB 96

Summary of the Geoalert Messages

FEBRUARY 1996

Julian Day	Date of Issue	Date of Observation	Wolf No.	10-cm Solar Flux	A- index	Location		Flares			Date of Forecast	Region Forecast 1	Geoadvicel
						°Lat	°Long	Total	M	X			
032	01	31	014	077	9	N08	W58	1	0	0	01	Q	SOL: Quiet
							0	0	0	0	01	Q	MAG: Quiet
							0	0	0	0	01	Q	PROTON: Quiet
033	02	01	015	075	3	N08	W70	2	0	0	02	Q	SOL: Quiet
							0	0	0	0	02	Q	MAG: Quiet
							0	0	0	0	02	Q	PROTON: Quiet
034	03	02	015	076	9	N85	W09	0	0	0	03	Q	SOL: Quiet
							0	0	0	0	03	Q	MAG: Quiet
							0	0	0	0	03	Q	PROTON: Quiet
035	04	03	000	074	3	N85	W09	0	0	0	04	Q	SOL: Quiet
							0	0	0	0	04	Q	MAG: Quiet
							0	0	0	0	04	Q	PROTON: Quiet
036	05	04	000	074	4	N85	W09	0	0	0	05	Q	SOL: Quiet
							0	0	0	0	05	Q	MAG: Quiet
							0	0	0	0	05	Q	PROTON: Quiet
037	06	05	000	071	3	N85	W09	0	0	0	06	Q	SOL: Quiet
							0	0	0	0	06	Q	MAG: Quiet
							0	0	0	0	06	Q	PROTON: Quiet
038	07	06	000	071	2	N85	W09	0	0	0	07	Q	SOL: Quiet
							0	0	0	0	07	Q	MAG: Quiet
							0	0	0	0	07	Q	PROTON: Quiet
039	08	07	000	070	7	N85	W09	0	0	0	08	Q	SOL: Quiet
							0	0	0	0	08	Q	MAG: Quiet
							0	0	0	0	08	Q	PROTON: Quiet
040	09	08	000	068	4	N85	W09	0	0	0	09	Q	SOL: Quiet
							0	0	0	0	09	Q	MAG: Quiet
							0	0	0	0	09	Q	PROTON: Quiet
041	10	09	000	070	5	N85	W09	0	0	0	10	Q	SOL: Quiet
							0	0	0	0	10	Q	MAG: Quiet
							0	0	0	0	10	Q	PROTON: Quiet
042	11	10	000	070	9	N85	W09	0	0	0	11	Q	SOL: Quiet
							0	0	0	0	11	Q	MAG: Quiet
							0	0	0	0	11	Q	PROTON: Quiet
043	12	11	000	070	16	N85	W09	0	0	0	12	Q	SOL: Quiet
							0	0	0	0	12	Q	MAG: Active
							0	0	0	0	12	Q	PROTON: Quiet
044	13	12	000	069	12	N85	W09	0	0	0	13	Q	SOL: Quiet
							0	0	0	0	13	Q	MAG: Quiet
							0	0	0	0	13	Q	PROTON: Quiet
045	14	13	000	069	12	N85	W09	0	0	0	14	Q	SOL: Quiet
							0	0	0	0	14	Q	MAG: Quiet
							0	0	0	0	14	Q	PROTON: Quiet

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages

FEBRUARY 1996

Julian Day	Date of Issue	Date of Observation	Wolf No.	10-cm Solar Flux	A- index	Location		Flares			Date of Forecast	Region Forecast 1	Geoalert ¹
						° Lat	° Long	Total	M	X			
046	15	14	000	069	12	N85	W09	0	0	0	15	Q	SOL: Quiet
							0	0	0	0	15	Q	MAG: Quiet
							0	0	0	0	15	Q	PROTON: Quiet
047	16	15	011	069	8	N06	W05	0	0	0	16	Q	SOL: Quiet
							0	0	0	0	16	Q	MAG: Active
							0	0	0	0	16	Q	PROTON: Quiet
048	17	16	000	070	10	N06	W05	0	0	0	17	Q	SOL: Quiet
							0	0	0	0	17	Q	MAG: Quiet
							0	0	0	0	17	Q	PROTON: Quiet
049	18	17	000	071	7	N06	W05	0	0	0	18	Q	SOL: Quiet
							0	0	0	0	18	Q	MAG: Quiet
							0	0	0	0	18	Q	PROTON: Quiet
050	19	18	000	070	7	N06	W05	0	0	0	19	Q	SOL: Quiet
							0	0	0	0	19	Q	MAG: Quiet
							0	0	0	0	19	Q	PROTON: Quiet
051	20	19	012	071	8	N09	E71	0	0	0	20	Q	SOL: Quiet
							0	0	0	0	20	Q	MAG: Quiet
							0	0	0	0	20	Q	PROTON: Quiet
052	21	20	014	072	6	N09	E57	0	0	0	21	Q	SOL: Quiet
							0	0	0	0	21	Q	MAG: Quiet
							0	0	0	0	21	Q	PROTON: Quiet
053	22	21	026	072	6	N08	E44	0	0	0	22	Q	SOL: Quiet
						S14	W41	0	0	0	22	Q	MAG: Quiet
							0	0	0	0	22	Q	PROTON: Quiet
054	23	22	026	072	6	N08	E30	0	0	0	23	Q	SOL: Quiet
						S13	W56	0	0	0	23	Q	MAG: Quiet
							0	0	0	0	23	Q	PROTON: Quiet
055	24	23	012	074	13	N10	E18	0	0	0	24	Q	SOL: Quiet
						S13	W56	0	0	0	24	Q	MAG: Quiet
							0	0	0	0	24	Q	PROTON: Quiet
056	25	24	029	076	13	N12	W00	0	0	0	25	Q	SOL: Quiet
						N09	W27	0	0	0	25	Q	MAG: Quiet
							0	0	0	0	25	Q	PROTON: Quiet
057	26	25	029	073	12	N12	W15	0	0	0	26	Q	SOL: Quiet
						N09	W40	0	0	0	26	Q	MAG: Quiet
							0	0	0	0	26	Q	PROTON: Quiet
058	27	26	026	072	12	N13	W25	0	0	0	27	Q	SOL: Quiet
						N10	W54	0	0	0	27	Q	MAG: Quiet
							0	0	0	0	27	Q	PROTON: Quiet
059	29	28	011	072	7	N10	W67	0	0	0	29	Q	SOL: Quiet
						N13	W38	0	0	0	29	Q	MAG: Quiet
							0	0	0	0	29	Q	PROTON: Quiet

¹Region Forecast and Flare Geoadvice

Q =Quiet (<50% probability of C-class flares)
 E =Eruptive (C-class flares expected, probability >=50%)
 A =Active (M-class flares expected, probability >=50%)
 M =Major (X-class flares expected, probability >=50%)
 P =Proton (Proton flares expected, probability >=50%)
 Warning condition (activity levels expected to increase, but no
 numeric forecast given)
 Nil (end of Alert period)
 No forecast

Magnetic Geoadvice

Quiet
 Active conditions expected (A>=20 or K=4)
 Minor storm expected (A>=30 or K=5)
 Major magstorm expected (A>=50 or K>=6)
 Severe magstorm expected (A>=100 or K>=7)
 Magstorm in progress (A>=30 or K>=4)
 Warning condition (activity levels expected
 to increase, but no numeric forecast given)
 Nil (end of Alert period)
 No forecast

Proton Geoadvice

Quiet
 Proton event expected (10 pfu at >10 MeV)
 Major proton event expected (100 pfu at >100 MeV)
 Proton event in progress (>10 MeV)
 Warning condition (activity levels expected to increase, but no
 numeric forecast given)
 Nil (end of Alert period)
 No forecast

STRATWARM ALERTS

02/01/96 03:30:00

GEOALERT WWA032 STRATWARM ALERT/THU/STRATWARM EXISTS. MINOR WARMING OVER CENTRAL AND EASTERN SIBERIA AND THE SIBERIAN AND CANADIAN ARCTIC CONTINUES, WARM AIR SLOWLY SPREADING NORTHEASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THE POLE AT 10HPA AND UPWARDS INTO THE UPPER STRATOSPHERE

02/02/96 03:30:00

GEOALERT WWA033 STRATWARM ALERT/THU/STRATWARM EXISTS. MINOR WARMING OVER CENTRAL AND EASTERN SIBERIA AND THE SIBERIAN AND CANADIAN ARCTIC CONTINUES, WARM AIR SLOWLY SPREADING NORTHEASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THEPOLE AT 10HPA AND UPWARDS INTO THE UPPER STRATOSPHERE.

02/03/96 03:30:00

GEOALERT WWA034 STRATWARM ALERT/FRI/STRATWARM EXISTS. MINOR WARMING OVER CENTRAL AND EASTERN SIBERIA AND THE SIBERIAN AND CANADIAN ARCTIC CONTINUES. TEMPERATURE GRADIENT REVERSED BETWEEN 60 N AND THE POLE AT 10 HPA AND UPWARDS INTO THE UPPER STRATOSPHERE.

02/04/96 03:30:00

GEOALERT WWA035 STRATWARM ALERT/SAT/STRATWARM EXISTS. MINOR WARMING OVER CENTRAL AND EASTERN SIBERIA AND THE SIBERIAN AND CANADIAN ARCTIC CONTINUES. TEMPERATURE GRADIENT BETWEEN 60 N AND THE POLE IS NEARLY ZERO IN 10 HPA AND REVERSED IN THE UPPERMOST CHANNEL (MAX. WEIGHT AROUND 1.4 HPA).

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FEB 96

02/05/96 03:30:00

GEOALERT WWA036 STRATWARM ALERT/SUN/STRATWARM EXISTS. MINOR WARMING OVER CENTRAL AND EASTERN SIBERIA AND THE SIBERIAN AND CANADIAN ARCTIC CONTINUES, WARM AIR SPREADING EASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN THE POLE AND 60 N.

02/06/96 03:30:00

GEOALERT WWA037 STRATWARM ALERT/MON/STRATWARM EXISTS. MINOR WARMING OVER EASTERN SIBERIA AND THE ALEUTIAN AREA CONTINUES, BUT WEAKENING. TEMPERATURE GRADIENT NO LONGER REVERSED BETWEEN 60N AND THE POLE.

02/08/96 03:30:00

GEOALERT WWA039 STRATWARM ALERT/TUE/STRATWARM ENDS. TEMPERATURE GRADIENT NO LONGER REVERSED BETWEEN 60N AND THE POLE. END OF THIS GEOALERT.

02/20/96 03:30:00

GEOALERT WWA051 STRATWARM ALERT/MON/STRATWARM EXISTS. AN INTENSE WARMING EXISTS OVER THE SIBERIAN-CANADIAN ARCTIC WITH TEMPERATURE INCREASE OF MORE THAN 40 DGSC SINCE THE LAST WEEK. WARM AIR SPREADING NORTHEASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THE POLE AT 10HPA AND UPWARDS IN THE WHOLE UPPER STRATOSPHERE.

02/21/96 03:30:00

GEOALERT WWA052 STRATWARM ALERT/TUE/STRATWARM EXISTS. THE INTENSE WARMING OVER SOUTHEASTERN EUROPE, SIBERIA, ALASKA AND THE ADJACENT ARCTIC CONTINUES. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THE POLE AT 10HPA AND UPWARDS IN THE WHOLE UPPER STRATOSPHERE AND IN 1HPA THE MEAN ZONAL WIND AT 60N HAS REACHED EASTERLY DIRECTION.

02/22/96 03:30:00

GEOALERT WWA053 STRATWARM ALERT/WED/STRATWARM EXISTS. THE INTENSE WARMING CONTINUES FROM SOUTHEASTERN EUROPE ACROSS SIBERIA TO THE SIBERIAN-CANADIAN ARCTIC AND ALASKA. TEMPERATURE GRADIENT NO LONGER REVERSED BETWEEN 60N AND THE POLE AT 10HPA, BUT ABOVE IN THE UPPER STRATOSPHERE. IN 1 HPA THE MEAN ZONAL WIND AT 60N IS AGAIN FROM WEST.

02/23/96 03:30:00

GEOALERT WWA054 STRATWARM ALERT/THU/STRATWARM EXISTS. MINOR WARMING OVER EASTERN EUROPE, SIBERIA, THE SIBERIAN/CANADIAN ARCTIC AND ALASKA CONTINUES. WARM AIR SPREADING NORTH-AND NORTHEASTWARDS.

02/24/96 03:30:00

GEOALERT WWA055 STRATWARM ALERT/FRI/STRATWARM EXISTS. MINOR WARMING OVER SIBERIA CONTINUES, STRENGTHENING TODAY AND INFLUENCING NORTHWESTERN AMERICA AS WELL AS CENTRAL EUROPE.

02/25/96 03:30:00

GEOALERT WWA056 STRATWARM ALERT/SAT/STRATWARM EXISTS. MINOR WARMING OVER SIBERIA CONTINUES, SLIGHTLY STRENGTHENING WHILE THE COLD AIR STAYS OVER THE NORTHERN ATLANTIC/EUROPEAN REGION.

02/26/96 03:30:00

GEOALERT WWA057 STRATWARM ALERT/SUN/STRATWARM EXISTS. STRONG MINOR WARMING OVER SIBERIA CONTINUES, TILTING POLEWARDS WITH INCREASING HEIGHT AND ALSO PENETRATING TO LOWER LEVELS.

02/27/96 03:30:00

GEOALERT WWA058 STRATWARM ALERT/MON/STRATWARM EXISTS. STRONG MINOR WARMING OVER SIBERIA CONTINUES, TILTING POLEWARDS WITH INCREASING HEIGHT AND ALSO PENETRATING TO LOWER LEVELS.

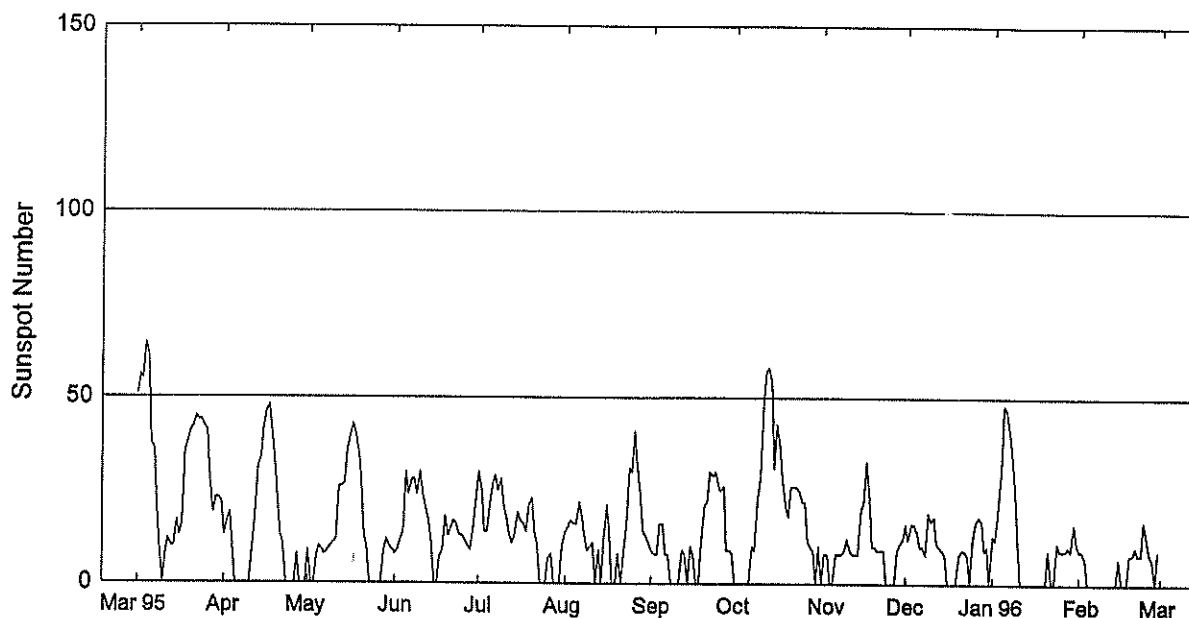
02/28/96 03:30:00

GEOALERT WWA059 STRATWARM ALERT/TUES/STRATWARM EXISTS. STRONG MINOR WARMING OVER SIBERIA, ALASKA AND THE ADJACENT ARCTIC CONTINUES, TILTING POLEWARDS WITH INCREASING HEIGHT AND ALSO PENETRATING TO LOWER LEVELS. WARM AIR SPREADING NORTH-ANDNORTHEASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THE POLE AT 10 HPA AND ABOVE IN THE UPPER STRATOSPHERE.

02/29/96 03:30:00

GEOALERT WWA060 STRATWARM ALERT/WED/STRATWARM EXISTS. STRONG MINOR WARMING OVER SIBERIA,ALASKA AND THE ADJACENT ARCTIC CONTINUES,TILTING POLEWARDS WITH INCREASING HEIGHT. WARM AIR SPREADING NORTH-AND NORTHEASTWARDS. TEMPERATURE GRADIENT REVERSED BETWEEN 60N AND THE POLE AT 10HPA AND ABOVE IN THE UPPER STRATOSPHERE.

International Relative Sunspot Numbers Mar 1995 - Feb 1996



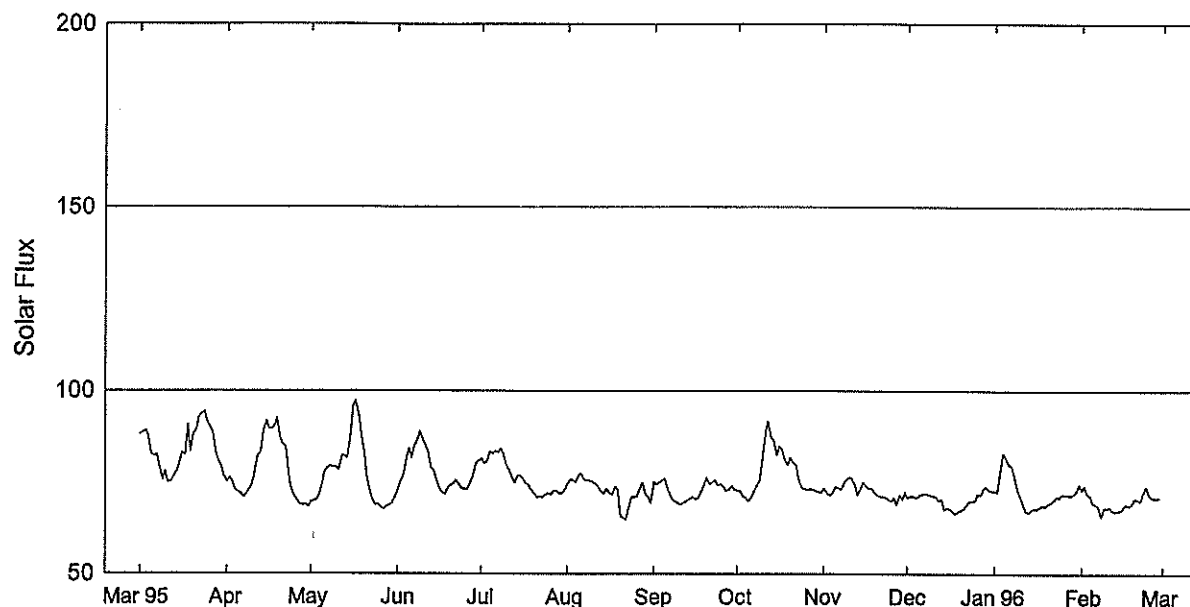
Day	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96*	Feb 96*
1	51	13	9	8	30	14	9	0	0	16	13	9
2	56	17	0	9	25	15	8	0	8	12	12	9
3	55	19	0	12	14	17	8	0	8	16	19	7
4	65	10	8	14	14	16	16	0	0	16	30	0
5	61	0	10	30	22	16	16	0	0	14	48	0
6	38	0	9	24	27	22	8	0	8	10	47	0
7	36	0	8	28	29	18	8	10	8	10	41	0
8	20	0	9	28	25	13	0	9	8	8	35	0
9	10	0	10	24	28	9	0	22	9	19	24	0
10	0	0	11	30	21	10	0	29	12	17	11	0
11	8	10	12	24	18	11	0	48	9	18	0	0
12	12	18	26	20	13	0	9	57	8	11	0	0
13	10	31	26	17	11	9	8	58	8	10	0	0
14	10	34	27	12	13	0	0	54	8	9	0	0
15	17	42	36	0	19	12	10	31	20	8	0	7
16	13	46	40	0	17	21	8	43	22	0	0	0
17	16	48	43	7	16	13	0	37	33	0	0	0
18	35	41	40	9	14	0	0	28	23	0	0	0
19	38	34	35	18	21	0	11	21	10	0	0	8
20	41	25	27	13	23	8	21	18	10	8	0	8
21	42	13	13	15	14	0	22	26	9	9	9	10
22	45	11	10	17	11	8	30	26	9	9	0	8
23	44	0	0	16	0	15	29	26	9	8	0	8
24	44	0	0	13	0	31	30	25	0	0	11	17
25	42	0	0	13	0	30	26	22	0	12	9	13
26	41	0	0	12	7	41	25	22	0	17	9	8
27	28	8	0	10	8	32	26	12	0	18	9	7
28	19	0	9	9	0	24	9	10	9	17	10	0
29	23	0	12	14	0	14	9	9	11	9	9	9
30	23	0	10	23	0	13	8	0	12	10	16	
31	22		9		10	11		10		0	11	
Mean	31.1	14.0	14.5	15.6	14.5	14.3	11.8	21.1	9.0	10.0	12.0	4.4

* = Provisional.

Penticton 2800 MHz (10.7cm) Solar Flux Mar 1995 - Feb 1996

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Feb 95

Adjusted to 1 AU



Day	Mar 95	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96	Feb
1	88.3	75.3	69.7	72.5	81.5	74.8	75.0	72.8	73.3	70.7	72.6	72.9
2	88.7	76.2	69.9	75.4	80.3	75.7	74.6	72.7	72.1	71.2	72.3	74.2
3	89.4	75.2	70.2	76.8	80.7	75.5	74.9	71.1	71.4	71.2	78.2	71.9
4	87.6	73.1	71.8	81.4	83.5	75.1	75.6	70.8	72.0	70.7	83.1	71.4
5	82.9	72.2	74.2	84.2	82.9	77.2	75.9	69.8	73.9	71.4	82.1	69.4
6	82.2	71.9	77.8	81.8	83.6	77.3	73.0	70.9	73.5	71.8	79.9	69.2
7	82.7	70.7	79.0	85.0	83.3	75.8	71.2	72.8	73.2*	71.9	79.8	68.2
8	79.6	72.0	79.4	86.8	84.2	75.6	70.1	74.1	74.8	71.8	76.7	65.7
9	75.8	72.9	79.2	89.0	82.9	75.5	69.7	76.0	75.7	71.6	73.4	68.1
10	78.1	74.8	79.3	87.0	79.9	75.0	68.9	82.1	76.5	71.3	71.4	68.0
11	75.1	78.0	78.4	85.1	78.6	74.9	68.9	89.1	75.9	71.1	69.1	68.2
12	75.3	82.3	82.4	83.3	76.7	73.8	69.5	91.8	74.6	70.0	67.2	67.3
13	76.6	83.3	82.2	79.2	74.9	72.7	70.1	87.5	71.5	70.4	66.7	67.0
14	78.1	88.9	81.6	78.1	76.8	71.9	70.3	86.7	73.4	67.6	67.4	67.2
15	80.2	92.0	87.8	75.6	76.8	73.2	70.9	82.5	75.0	68.0	67.9	67.4
16	83.3	89.7	95.9	73.1	75.9	72.3	70.4	85.0	74.2	67.7	67.6	68.5
17	82.5	89.6	97.3	72.1	74.7	71.5	70.5	84.1	73.4	67.1	68.2	69.0
18	90.9	90.7	93.4	71.8	74.4	73.6	72.3	80.9	73.4	66.4	68.7	68.6
19	83.4	92.6	88.3	73.7	72.8	73.4	74.3	79.8	72.2	67.0	68.5	69.4
20	88.3	87.2	82.8	74.2	72.0	73.0	76.2	81.8	71.5	67.3	69.1	70.6
21	89.3	85.5	77.0	74.7	70.8	72.7	74.5	80.3	71.1	67.8	69.5	70.4
22	92.9	84.8	72.6	75.5	71.1	71.9	75.1	79.7	71.0	68.9	70.0	70.1
23	93.6	77.6	70.4	74.3	70.7	75.9	75.5	75.9	70.9	69.9	71.0	72.3
24	94.4	73.4	68.8	73.4	71.5	78.8	74.2	73.5	70.4	69.9	70.7	74.1
25	91.8	71.3	68.9	73.2	72.0	78.8	74.5	73.1	69.9	70.1	71.7	71.8
26	89.9	70.2	68.1	73.2	71.6	78.9	73.9	73.0	70.8	71.7	71.5	70.9
27	88.6	69.1	67.5	74.7	72.7	81.6	72.6	73.1	68.9	71.5	71.6	70.7
28	83.4	68.6	68.4	77.0	72.6	83.2	73.0	72.9	71.5	73.4	71.4	70.8
29	80.7	69.0	68.7	80.1	72.0	79.7	74.0	72.8	70.4	73.9	71.8	70.9
30	79.5	68.2	69.4	80.8	71.9	78.9	73.0	72.3	72.3	72.8	72.5	
31	76.7		70.9		72.9	77.0		72.2		72.7	74.5	
Mean	84.2	78.2	77.1	78.1	76.3	75.7	72.8	77.5	72.6	70.3	72.1	69.8

* = Average of the 1800 and 2200UT readings. 2000UT reading not available.

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Feb 96

DAILY SOLAR INDICES

February 1996

Day	Day of Year	Bartels Cycle Day	Sunspot Numbers		Obs Flux Penticton (2800)	Solar Flux Adjusted to 1 Astronomical Unit								
			Int	Amer		LEAR (15400)	LEAR (8800)	LEAR (4995)	Pentic (2800)	LEAR (2695)	LEAR (1415)	LEAR (610)	LEAR (410)	LEAR (245)
1	32	8	9	12	75.1	536	205	125	72.9	70	52	34	25	12
2	33	9	9	11	76.4	546	200	122	74.2	69	52	37	25	11
3	34	10	7	0	74.0	523	210	123	71.9	67	51	36	25	12
4	35	11	0	0	73.5	509	205	121	71.4	68	50	35	24	11
5	36	12	0	0	71.4	--	--	--	69.4	--	--	--	--	--
6	37	13	0	0	71.2	492	281	120	69.2	65	49	27	20	11
7	38	14	0	0	70.1	506	203	119	68.2	64	48	31	21	10
8	39	15	0	0	67.5	524	183	118	65.7	64	47	33	23	11
9	40	16	0	0	70.0	518	204	119	68.1	64	46	31	21	11
10	41	17	0	0	69.8	526	212	118	68.0	65	46	34	23	12
11	42	18	0	0	70.0	525	193	119	68.2	64	46	33	22	11
12	43	19	0	0	69.1	528	197	118	67.3	64	46	32	21	11
13	44	20	0	0	68.7	526	181	118	67.0	64	47	33	22	11
14	45	21	0	0	68.9	541	205	117	67.2	64	46	32	22	11
15	46	22	7	9	69.0	518	208	119	67.4	65	46	32	22	10
16	47	23	0	2	70.1	516	188	115	68.5	65	46	28	47	8
17	48	24	0	0	70.7	540	218	119	69.0	65	47	32	23	11
18	49	25	0	0	70.2	521	202	121	68.6	67	48	32	22	11
19	50	26	8	8	71.0	512	200	119	69.4	64	47	33	22	10
20	51	27	8	11	72.2	526	195	122	70.6	67	49	34	23	11
21	52	1	10	15	71.9	533	191	120	70.4	65	49	33	23	11
22	53	2	8	14	71.6	540	178	121	70.1	67	49	34	23	11
23	54	3	8	9	73.9	535	186	121	72.3	67	49	34	22	11
24	55	4	17	21	75.7	548	185	122	74.1	70	51	35	23	12
25	56	5	13	15	73.3	549	191	123	71.8	69	51	34	22	11
26	57	6	8	12	72.4	536	190	121	70.9	68	49	33	23	10
27	58	7	7	9	72.1	537	190	118	70.7	64	49	34	10	11
28	59	8	0	8	72.2	544	186	122	70.8	67	49	33	23	11
29	60	9	9	14	72.2	523	193	121	70.9	63	49	28	19	9
MEAN			4.4	5.9	71.5	527	199	120	69.8	65	48	32	22	10

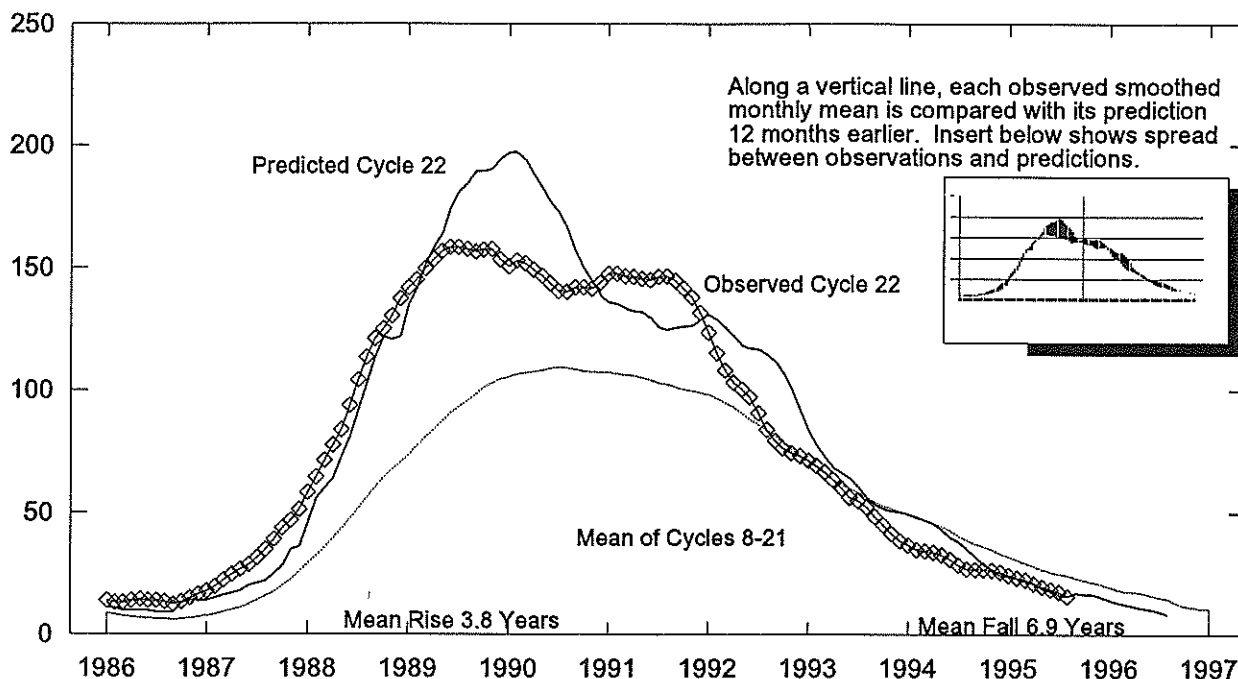
The International numbers shown above are preliminary values; the American numbers are final.

The observed and the adjusted Penticton fluxes tabulated here are the "Series C" daily values reported by the Dominion Radio Astrophysical Observatory, Penticton, British Columbia, Canada. Numbers in parentheses in the column headings denote frequencies in MHz.

Equipment problems produced any gaps in the Air Weather Service's Learmonth (LEAR) observations.

Cycle 22 Smoothed Sunspot Numbers: Observed and Predicted

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Feb 96



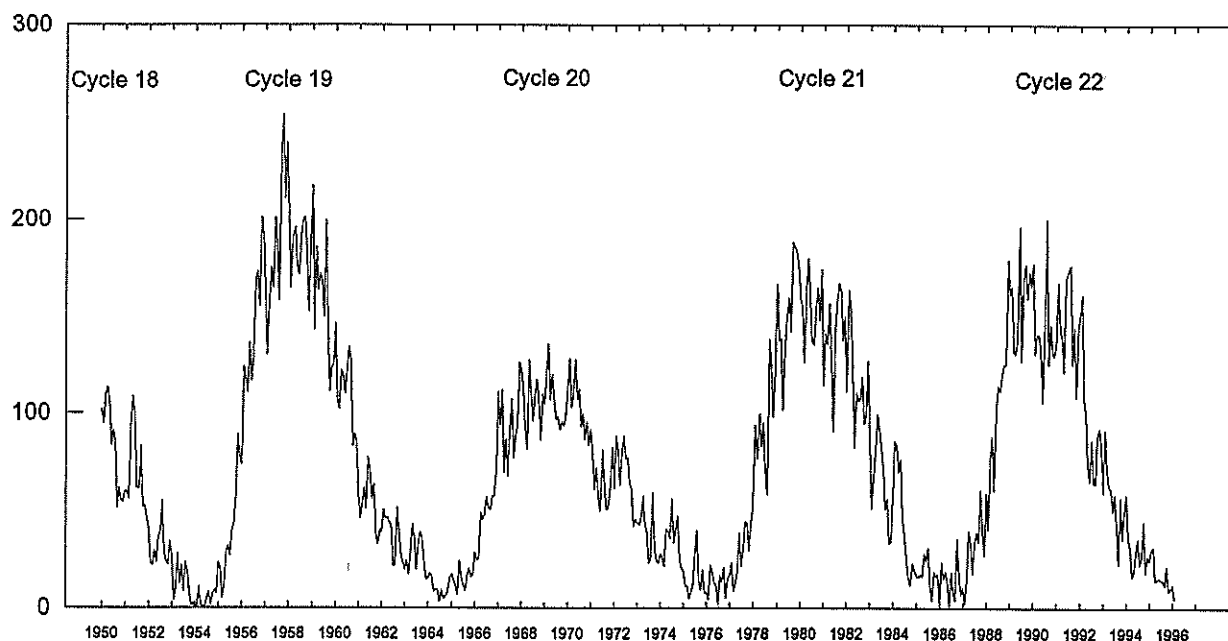
Smoothed Sunspot Numbers (observed and Predicted) for Parts of Solar Cycles 22 and 23

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1989	142	145	150	154	157	158	158	158	157	157	158	154	154
1990	151	153	152	149	147	144	141	140	142	142	142	144	146
1991	148	148	147	146	146	145	146	147	145	142	138	132	144
1992	124	115	108	103	100	97	91	84	80	76	74	73	94
1993	71	69	67	64	60	56	55	52	48	45	41	38	56
1994	37	35	34	34	33	31	29	27	27	27	26	26	31
1995	24	23	22	21	19	18	17	16	15	15	14	13	18
()									(1)	(2)	(3)	(4)	(1)
1996	12	11	10	10	10	9	9	8	8	7	7	7	9
()	(6)	(7)	(7)	(7)	(8)	(9)	(9)	(10)	(10)	(10)	(10)	(9)	(9)
1997	7	7	8	8	9	10	11	12	12	13	14	16	11
()	(9)	(9)	(9)	(9)	(10)	(12)	(13)	(15)	(16)	(18)	(19)	(22)	(14)
Solar Cycle 22									Min, Max, and Predictions				

September 1986 marks the minimum of Solar Cycle 21 and the onset of Cycle 22, which in turn, reached a maximum in July 1989.

Observed and Predicted Numbers. For the end of Cycle 21, and the rise and decline of Cycle 22, 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 Jun 1995 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 Aug 1996 prediction. There exists a 90% chance that in Aug 1996, the actual smoothed number will fall somewhere between 0 and 18.

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 14 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 minimum value of 12.3 that occurred in Sep 1986.

Mean Monthly Sunspot Numbers
Jan 1950 - Feb 1996

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	101.6	94.8	109.7	113.4	106.2	83.6	91.0	85.2	51.3	61.4	54.8	54.1	83.9
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	21.2	9.0	10.0	17.5
1996	12.0	4.4											8.2

Values are preliminary after Dec 1995. For the yearly means, each 'M' marks a sunspot cycle maximum and each 'm' a minimum.

H α SOLAR FLARES

FEBRUARY 1996

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
GOES	01	0228	0233	0241						13		B	2.2					
GOES		0345	0349	0359						14		B	1.1					
GOES		0443	0448	0451						8		B	1.4					
GOES		1238	1247	1258						20		B	2.0					
RAMY		1317	1319	1330	N08	W65	7944	01	27.8	13	SF	B	3.7	3	E		57	
SVTO		1322E	1322U	1337	N07	W66	7944	01	27.7	15D	SF			3	E		22	
RAMY		1547	1549	1552	N08	W67	7944	01	27.7	5	SF	B	2.3	3	E		18	
GOES	02	2005	2012	2017						12		B	1.8					
GOES	05	0552	0555	0558						6		B	1.0					
GOES	25	0115	0119	0123						8		B	1.0					
GOES		0604	0617	0641						37		B	1.6					

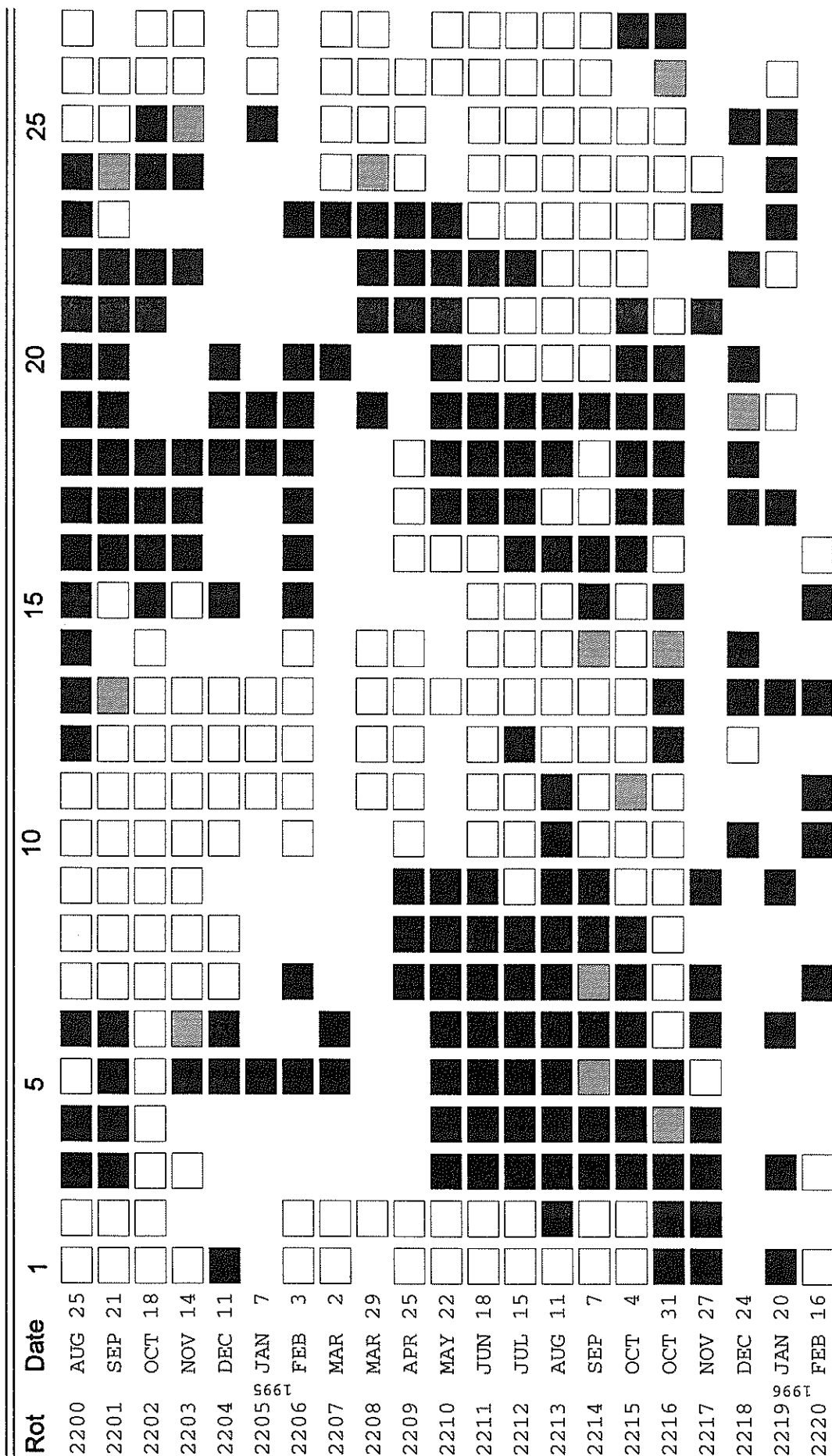
"Remarks"

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

STANFORD MEAN SOLAR MAGNETIC FIELD



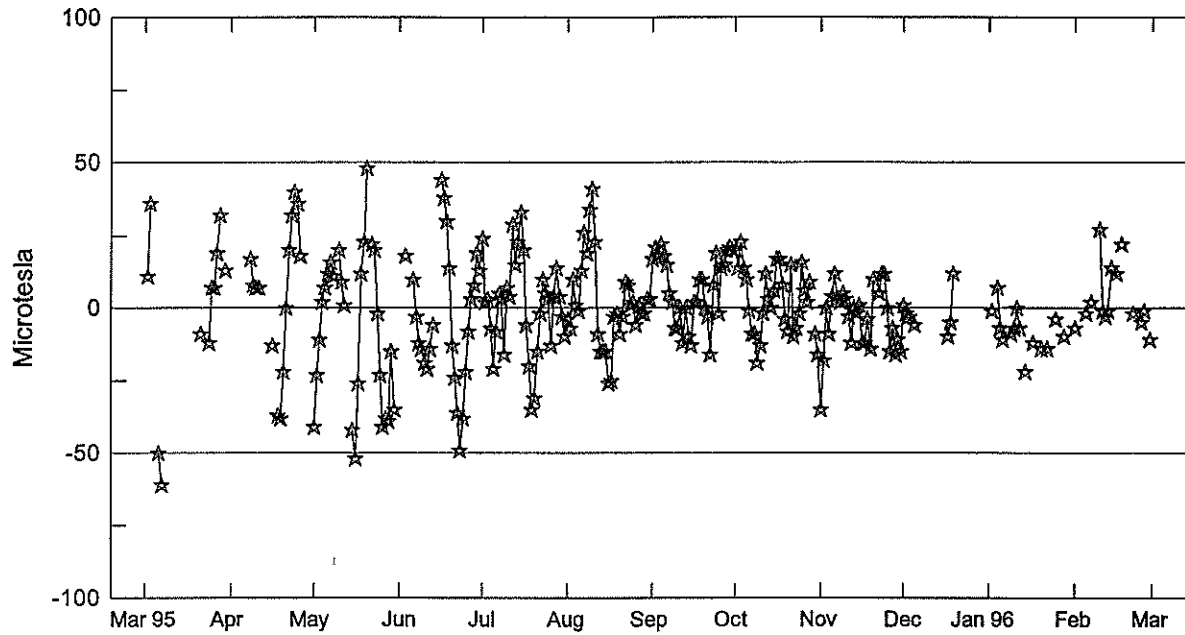
Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT ≤ field ≤ 2 microT

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

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

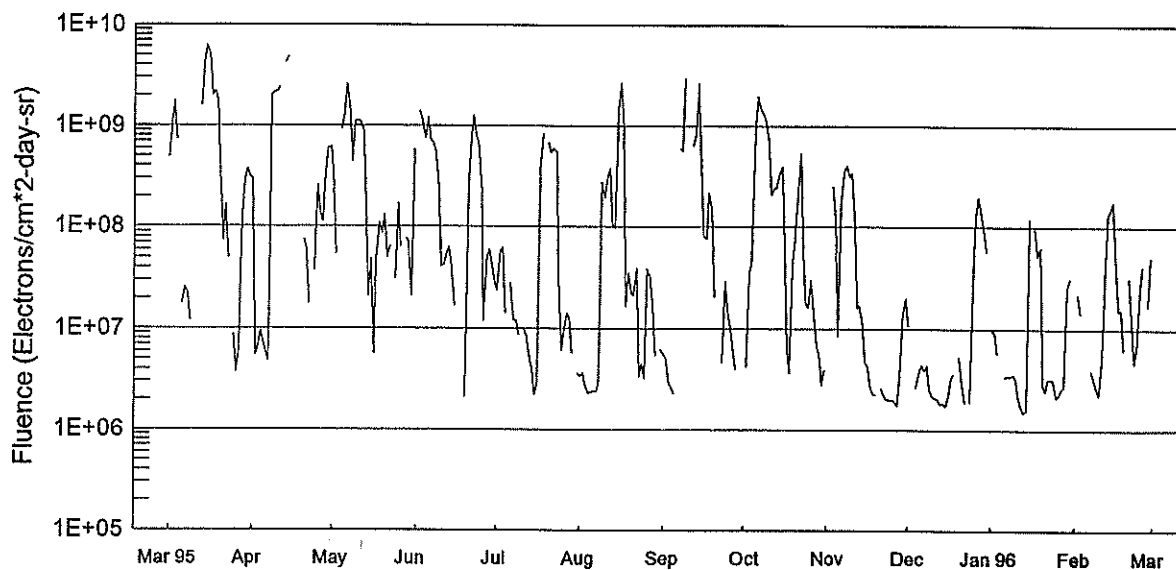
Stanford Mean Solar Magnetic Field (Microtesla) "Sun-As-A-Star"

31
Feb 96



Day	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96	Feb
1	---	---	-41	---	24	-4	17	20	-35	1	---	-7
2	11	---	-23	---	2	-7	21	14	-18	-2	-1	---
3	36	---	-11	18	3	10	18	23	0	-3	---	---
4	---	---	2	---	-7	1	22	14	-9	---	7	---
5	---	---	7	---	-21	-1	18	10	4	6	-7	-2
6	-50	---	12	10	-8	13	15	-1	12	---	-11	---
7	-61	---	16	-3	5	26	5	-9	3	---	---	2
8	---	17	11	-12	3	19	2	-9	2	---	---	---
9	---	8	---	-14	-16	34	-7	-19	5	---	-9	---
10	---	7	20	-19	7	41	-7	-13	3	---	-7	27
11	---	7	9	-21	4	23	0	-2	-3	---	0	-1
12	---	---	1	-14	29	-9	-12	12	-12	---	-7	-3
13	---	---	---	-6	15	-15	0	3	0	---	---	-1
14	---	---	---	---	23	-15	-10	0	-2	---	-22	14
15	---	---	-42	---	33	-15	-13	6	1	---	---	---
16	---	-13	-52	44	20	-26	2	17	-12	---	---	12
17	---	---	-26	38	-6	-25	2	17	-12	-10	-12	---
18	---	-37	12	30	-20	-3	10	8	-4	---	---	22
19	---	-38	23	14	-35	-2	10	-4	-14	-5	---	---
20	---	-22	48	-13	-31	-9	0	-8	10	12	-14	---
21	-9	0	---	-24	-15	-3	-3	15	---	---	---	---
22	---	20	22	-36	-2	9	-16	-10	5	---	-14	-2
23	---	32	20	-49	10	8	8	-7	12	---	---	---
24	-12	40	-2	-38	5	1	19	-2	12	---	---	---
25	7	36	-23	-22	3	2	-2	16	0	---	-4	-5
26	7	18	-41	-8	-13	-6	14	6	-15	---	---	-1
27	19	---	-38	3	4	1	15	2	-7	---	---	---
28	32	---	-39	8	14	-2	20	9	-16	---	-10	-11
29	---	---	-15	19	4	-2	21	---	-11	---	---	---
30	13	---	-35	13	-3	3	20	-9	-15	---	---	---
31	---	---	---	---	-10	3	---	-16	---	---	---	---

Note: --- Indicates no data available for the day.

GOES7 Daily Electron Fluence
Mar 95 - Feb 96

Day	Mar 95	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96	Feb
1	4.9E+08	3.0E+08	3.6E+08	--	2.4E+07	3.3E+06	5.5E+06	--	--	1.0E+07	9.7E+06	--
2	1.0E+09	5.4E+06	5.3E+07	1.3E+09	5.8E+07	3.6E+06	5.1E+06	4.2E+06	--	--	9.4E+06	2.1E+07
3	1.7E+09	6.2E+06	--	1.1E+09	6.3E+07	2.7E+06	2.9E+06	3.4E+07	2.4E+08	--	5.6E+06	1.4E+07
4	7.2E+08	9.5E+06	9.2E+08	7.5E+08	1.4E+07	2.2E+06	2.6E+06	4.5E+07	1.1E+08	2.6E+06	--	--
5	--	7.3E+06	1.3E+09	1.2E+09	--	2.3E+06	2.2E+06	8.6E+08	8.3E+06	3.7E+06	--	--
6	1.7E+07	5.7E+06	2.6E+09	7.2E+08	2.8E+07	2.3E+06	--	1.9E+09	1.7E+08	4.4E+06	3.3E+06	--
7	2.5E+07	4.8E+06	1.4E+09	6.8E+08	1.2E+07	2.3E+06	5.9E+08	1.4E+09	3.5E+08	3.8E+06	3.4E+06	3.8E+06
8	2.2E+07	2.0E+09	4.4E+08	5.5E+08	1.2E+07	2.8E+06	5.6E+08	1.3E+09	4.0E+08	4.3E+06	3.3E+06	3.1E+06
9	1.1E+07	2.1E+09	1.1E+09	2.4E+08	8.6E+06	2.7E+08	2.9E+09	1.1E+09	3.1E+08	2.5E+06	3.5E+06	2.6E+06
10	--	2.1E+09	1.1E+09	4.1E+07	--	1.9E+08	--	7.2E+08	3.3E+08	2.1E+06	3.2E+06	2.2E+06
11	1.5E+08	2.4E+09	1.1E+09	4.2E+07	1.0E+07	3.1E+08	--	2.0E+08	1.3E+08	2.1E+06	2.0E+06	5.3E+06
12	--	--	9.0E+08	5.3E+07	8.6E+06	3.7E+08	6.4E+08	2.3E+08	1.5E+07	2.0E+06	1.7E+06	3.0E+07
13	1.5E+09	4.2E+09	1.7E+08	6.3E+07	5.2E+06	1.0E+08	8.3E+08	2.4E+08	1.6E+07	1.7E+06	1.4E+06	1.3E+08
14	4.2E+09	4.9E+09	2.1E+07	4.1E+07	3.9E+06	9.8E+07	2.6E+09	3.1E+08	1.1E+07	1.8E+06	1.5E+06	1.4E+08
15	6.2E+09	--	4.9E+07	1.6E+07	2.2E+06	1.4E+09	3.9E+08	3.8E+08	4.6E+06	1.6E+06	1.2E+08	1.7E+08
16	4.9E+09	--	5.6E+06	--	2.9E+06	2.6E+09	8.0E+07	1.1E+08	4.2E+06	2.0E+06	--	3.9E+07
17	1.9E+09	--	4.9E+07	--	3.9E+08	9.6E+08	7.6E+07	6.6E+06	2.7E+06	3.3E+06	9.6E+07	1.5E+07
18	2.2E+09	--	1.1E+08	--	8.5E+08	1.6E+07	2.1E+08	3.6E+06	2.2E+06	3.6E+06	5.2E+07	1.5E+07
19	1.7E+09	--	8.6E+07	2.0E+06	--	3.6E+07	1.4E+08	4.0E+07	2.2E+06	--	6.3E+07	6.1E+06
20	3.3E+08	7.5E+07	1.3E+08	2.1E+08	6.7E+08	2.1E+07	2.0E+07	7.4E+07	--	5.2E+06	2.8E+06	--
21	7.2E+07	6.0E+07	5.0E+07	7.2E+08	5.4E+08	2.1E+07	--	1.9E+08	2.5E+06	3.1E+06	2.4E+06	3.1E+07
22	1.6E+08	1.7E+07	6.5E+07	1.2E+09	6.0E+08	3.9E+07	--	5.3E+08	2.2E+06	1.8E+06	3.1E+06	1.0E+07
23	4.8E+07	--	--	7.8E+08	5.4E+08	3.3E+06	4.6E+06	5.4E+07	2.0E+06	--	3.1E+06	4.5E+06
24	--	3.7E+07	3.1E+07	6.6E+08	3.2E+07	4.5E+06	2.9E+07	1.7E+07	1.9E+06	1.8E+06	3.1E+06	6.8E+06
25	8.7E+06	2.5E+08	1.7E+08	2.2E+08	6.1E+06	3.1E+06	1.4E+07	1.6E+07	1.9E+06	2.4E+07	2.0E+06	2.2E+07
26	3.6E+06	1.3E+08	6.3E+07	1.1E+07	1.0E+07	3.8E+07	1.0E+07	3.0E+07	1.8E+06	1.2E+08	2.2E+06	4.2E+07
27	5.9E+06	1.1E+08	--	4.9E+07	1.4E+07	3.1E+07	6.1E+06	1.2E+07	1.7E+06	1.9E+08	2.5E+06	--
28	1.2E+08	3.3E+08	7.6E+07	6.0E+07	1.3E+07	1.6E+07	3.8E+06	6.8E+06	3.4E+06	1.3E+08	2.7E+06	1.6E+07
29	2.9E+08	5.9E+08	7.1E+07	4.2E+07	5.6E+06	5.3E+06	--	5.5E+06	1.2E+07	9.2E+07	2.5E+07	5.1E+07
30	3.7E+08	6.1E+08	2.1E+07	3.0E+07	--	--	--	2.7E+06	2.0E+07	5.7E+07	3.1E+07	--
31	3.1E+08	5.9E+08	--	--	3.6E+06	6.2E+06	--	3.9E+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.

SOLAR CORONAL HOLE DATA FEBRUARY 1996

33
Feb 96

Date	CH	Polarity	Heliographic Latitude	Carrington Longitude	Extension LAT	LONG	Shape	Rotations Visible	Uncertainty	Remarks
960201	P264	-	S57	239	5	36	E	2	1	
	E800	+	N50	208	3	7	E	2	1	
	E790	+	S34	164	10	21	I	1	1	
	E796	+	N26	160	8	7	I	1	1	
	P256	+	N38	151	43	40	I	2	1	
	E797	+	N38	129	3	7	E	1	1	
	E782	+	N34	128	8	7	E	1	1	
	E801	+	S33	119	5	6	E	1	1	
	E802	+	S28	115	5	4	E	1	1	
960202										NO DATA
960203	E803	?	S31	189	2	9	E	1	1	
	E804	?	S34	177	3	7	E	1	1	
	E790	+	S34	169	5	6	I	1	1	
	E805	?	S31	154	6	8	E	1	1	
	E796	+	N22	154	15	20	I	1	1	
	P256	+	N49	158	22	37	R	2	1	
	E806	?	S35	144	2	8	E	1	1	
	E807	?	S17	138	8	9	I	1	1	
	E782	+	N29	137	22	20	I	1	1	
	E808	?	S35	136	9	7	I	1	1	
	E809	?	N03	133	6	2	E	1	1	
	E810	?	S33	129	7	3	E	1	1	
	E811	?	S18	129	13	11	I	1	1	
	E812	?	S08	124	4	8	E	1	1	
	E813	?	N40	122	5	5	E	1	1	
	E814	?	N36	117	7	6	I	1	1	
	E815	?	N20	116	7	5	E	1	1	
	E816	?	N13	115	10	5	E	1	1	
	E817	?	S15	114	6	4	E	1	1	
	P249	+	N55	109	10	41	I	7	1	
	E818	?	N13	110	4	5	I	1	1	
	E819	?	N31	108	10	9	I	1	1	
	E820	?	S22	92	4	7	E	1	1	

D566

SOLAR CORONAL HOLE DATA FEBRUARY 1996

Date	CH	Polarity	Heliographic Carrington Extension			LONG	Shape	Rotations		Uncertainty	Remarks
			Latitude	Longitude	LAT			Visible	Uncertainty		
960203	E821	?	S15	86	27	32	I	1	1		
	E822	?	N05	81	4	6	I	1	1		
	E823	?	S11	72	5	6	E	1	1		
	E824	?	S23	59	3	11	I	1	1		
960204											NO DATA
960205	E782	+	N28	139	11	8	I	1	1		
	P249	+	N53	112	13	23	R	1	1		
	E821	?	S06	91	11	12	I	1	1		
	E820	?	S24	89	8	3	I	1	1		
	E825	?	S40	88	3	6	D	1	1		
	P258	-	S57	74	6	21	I	3	1		
	E826	?	S23	75	7	20	E	1	1		
	E827	?	S19	78	5	2	E	1	1		
	E828	?	N02	76	5	7	I	1	1		
	E829	?	S01	74	4	6	I	1	1		
	E830	?	S03	72	2	5	D	1	1		
	E831	?	S19	66	9	13	I	1	1		
	E832	?	S23	53	6	8	I	1	1		
960206	E833	+	N54	114	8	10	E	1	1		D249
	E834	-	S09	97	4	5	I	1	1		D821
	E821	-	S00	90	4	4	E	1	1		R834
	E835	+	S01	85	5	3	I	1	1		
	E836	+	S08	85	6	5	E	1	1		
	E837	-	S20	80	3	6	E	1	1		
	E838	+	S09	79	4	10	E	1	1		
	E826	+	S26	74	3	6	E	1	1		
	E828	+	S00	79	3	4	C	1	1		
	E831	-	S19	60	6	9	E	1	1		
960207	P249	+	N57	146	5	30	P	7	1		
	E839	-	N06	88	3	9	E	1	1		
	E840	-	S40	89	9	10	I	1	1		
	P258	-	S58	89	4	5	P	3	1		
	E841	-	S00	83	4	4	E	1	1		
	E842	-	N00	70	5	4	I	1	1		
	E837	-	S20	77	5	4	I	1	1		

SOLAR CORONAL HOLE DATA FEBRUARY 1996

Date	CH	Polarity	Heliographic Latitude	Carrington Longitude	Extension LAT	LONG	Shape	Rotations Visible	Uncertainty	Remarks
960212	E865	+	N07	7	10	11	I	1	1	
	P261	-	S56	343	8	13	E	2	1	
	E859	+	N24	342	34	30	I	2	1	
960213										NO DATA
960214										NO DATA
960215										NO DATA
960216										NO DATA
960217										NO DATA
960218										NO DATA
960219										NO DATA
960220										NO DATA
960221										NO DATA
960222										NO DATA
960223										NO DATA
960224	P260	-	S55	268	10	45	I	3	1	
	E868	+	N42	195	7	7	E	1	1	
	P255	+	N55	173	9	28	E	3	1	
960225										NO DATA
960226	P260	-	S57	272	6	30	E	3	1	
	E869	-	S12	245	2	5	E	1	1	
	E870	-	S19	221	3	5	I	1	1	
	E871	+	S32	221	12	12	I	1	1	
	E872	+	S22	211	4	6	I	1	1	
	E873	+	N32	214	4	5	E	1	1	
	E874	+	N41	212	4	5	E	1	1	
	E875	+	S24	197	5	6	E	1	1	
	P255	+	N49	199	22	23	I	3	1	
	E876	+	S26	191	9	9	I	1	1	R264
	E877	+	S57	172	3	10	E	1	1	
	E878	+	S02	177	5	6	I	1	1	
	E879	-	N28	175	5	4	I	1	1	
	P266	+	N50	156	20	57	I	1	1	
	E880	-	N42	159	5	5	C	1	1	R880
	E881	+	S34	154	4	10	E	1	1	
	E882	+	N28	156	13	8	I	1	1	

SOLAR CORONAL HOLE DATA FEBRUARY 1996

Date	CH	Polarity	Heliographic Carrington Extension				Rotations			Remarks	
			Latitude	Longitude	LAT	LONG	Shape	Visible	Uncertainty		
960226	E883	+	N25	155	6	8	I	1	1		
	E884	-	N38	151	3	5	E	1	1		
	E885	+	S27	144	2	6	E	1	1		
	E886	+	S05	129	5	5	E	1	1		
	E887	+	N10	125	4	12	E	1	1		
	P264	-	S56	117	7	67	I	2	1		
	E888	+	N14	106	2	18	D	1	1		
	960227	E889	+	N42	198	8	13	I	1	1	D255
P264		-	S58	183	3	5	I	2	1	R891	
P255		+	N55	178	10	11	I	3	1	R889	
E890		-	S34	178	2	5	E	1	1		
E891		-	S58	157	3	6	D	1	1	D264	
E882		+	N21	156	7	8	I	1	1		
P266		+	N48	147	24	49	I	1	1	R893	
E892		+	N21	141	3	6	I	1	1		
E893		+	N46	137	4	5	I	1	1	D266	
E894		+	N24	130	3	5	D	1	1		
E895		-	N39	127	2	5	D	1	1		
960228		E896	+	S25	197	2	6	E	1	1	
	P255	+	N56	180	8	7	I	3	1		
	P266	+	N50	157	19	42	I	1	1		
	E882	+	N22	160	8	4	I	1	1		
	E891	-	S56	156	5	4	I	1	1		
	E897	+	S30	149	9	8	I	1	1		
	E898	-	N22	149	4	5	E	1	1		
	E899	-	N16	147	3	6	E	1	1		
	E893	+	N53	142	6	5	I	1	1		
	E900	+	O	132	6	4	I	1	1		
	E901	+	S22	130	4	5	I	1	1		
	E902	+	N47	119	5	9	I	1	1		
	E903	-	N55	110	10	18	I	1	1		
	960229	P266	+	N50	176	19	40	I	1	1	
		P264	-	S53	153	14	37	I	1	1	
E904		-	N27	152	5	8	I	1	1		
P267		+	N53	134	14	36	I	1	1	R912	

SOLAR CORONAL HOLE DATA FEBRUARY 1996

Date	CH	Polarity	Heliographic Latitude	Carrington Longitude	Extension LAT	LONG	Shape	Rotations Visible	Uncertainty	Remarks
960229	E905	+	N20	146	7	5	I	1	1	
	E906	+	N01	140	5	12	I	1	1	
	E907	+	S05	138	7	3	I	1	1	
	E908	-	S22	130	5	8	I	1	1	
	E909	+	N00	133	9	15	I	1	1	
	E910	-	N29	131	5	11	I	1	1	
	E911	+	N40	127	6	7	I	1	1	
	E912	+	N59	103	33	34	I	1	1	
	E913	-	N23	118	13	16	I	1	1	
	E914	+	N36	109	10	8	E	1	1	
	E915	-	S29	99	7	7	I	1	1	
	E916	-	N06	82	4	9	I	1	1	D267

SOLAR CORONAL HOLE DATA LEGEND

CH: Coronal Hole identification number and type (E=equatorial, P=polar).
SHAPE: Polar coronal hole shapes are divided into several classifications:
 B=booted, C=conic, D=dumbell, E=elongated, I=irregular, P=pointed, R=ramified, S=square.
 Equatorial coronal holes are classified as: C=circular, D=elliptic, E=elongated, I=irregular, R=ramified.
UNCERTAINTY: Certainty in measurements: 1=high, 2=medium, 3=poor.
REMARKS: C=connected, D=disconnected, PI=provisional identification, R=related to (hole identification number).

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Prompt Reports

Number 619 Part I

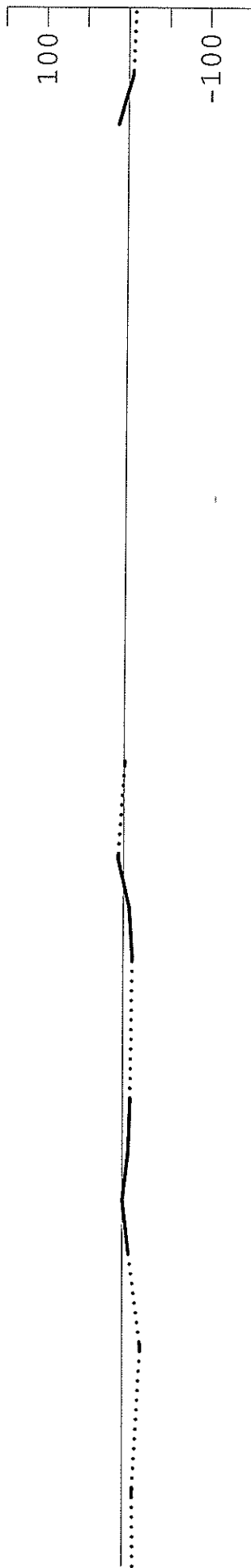
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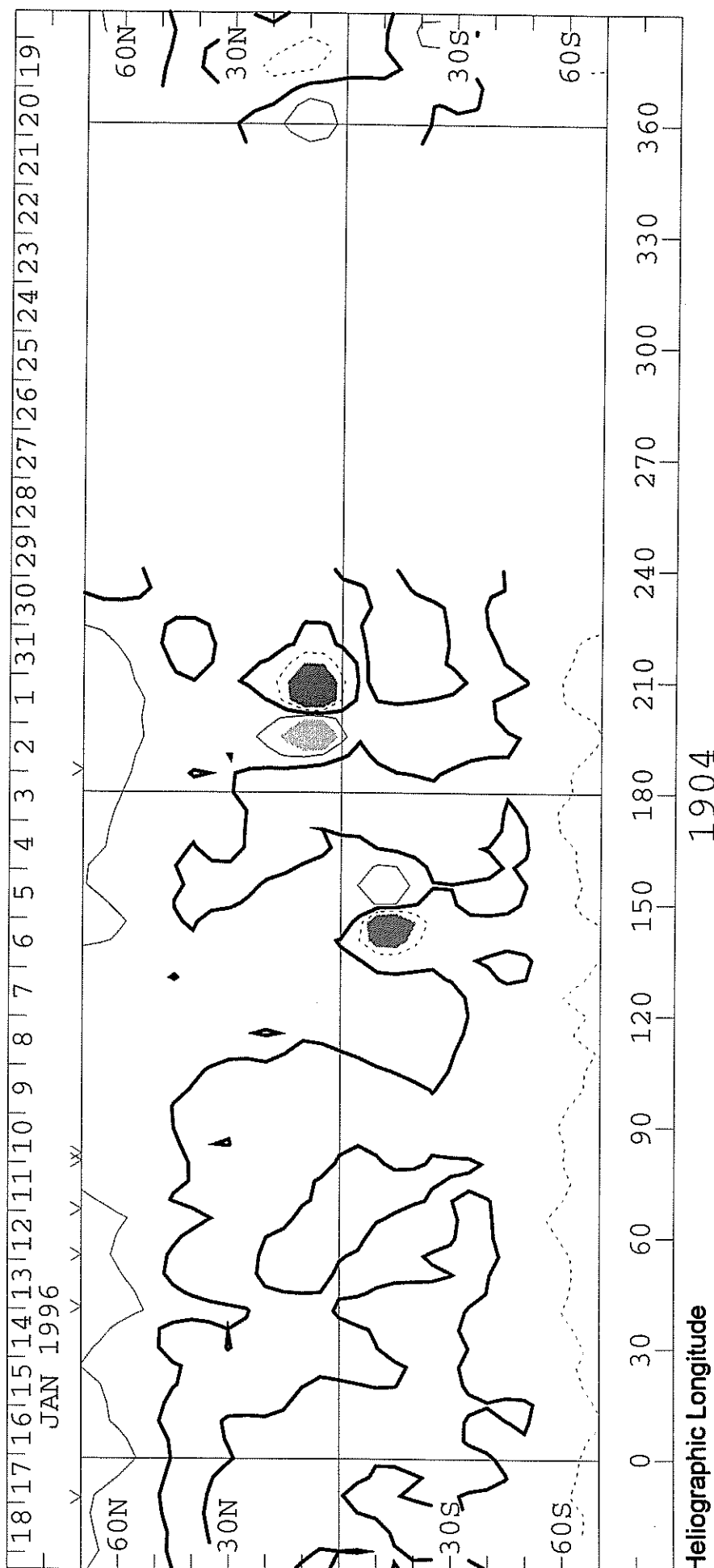
SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 1904
(20 December 1995 to 17 January 1996)

WILCOX SOLAR OBSERVATORY

Mean Field



Photospheric Magnetic Field 0, ± 100 , 500, 1000, 2000 MicroTesla

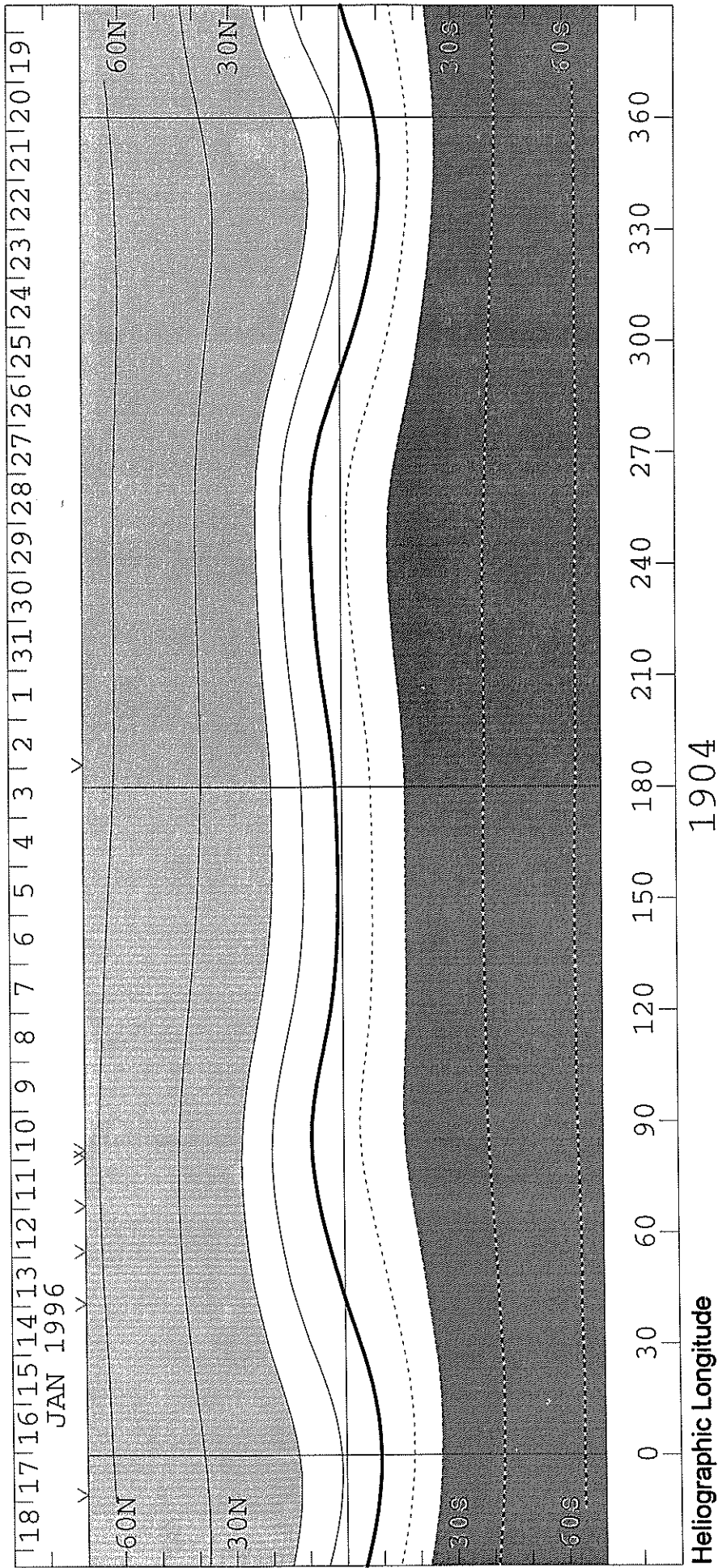


SOLAR MAGNETIC FIELD SYNOPSIS CHART

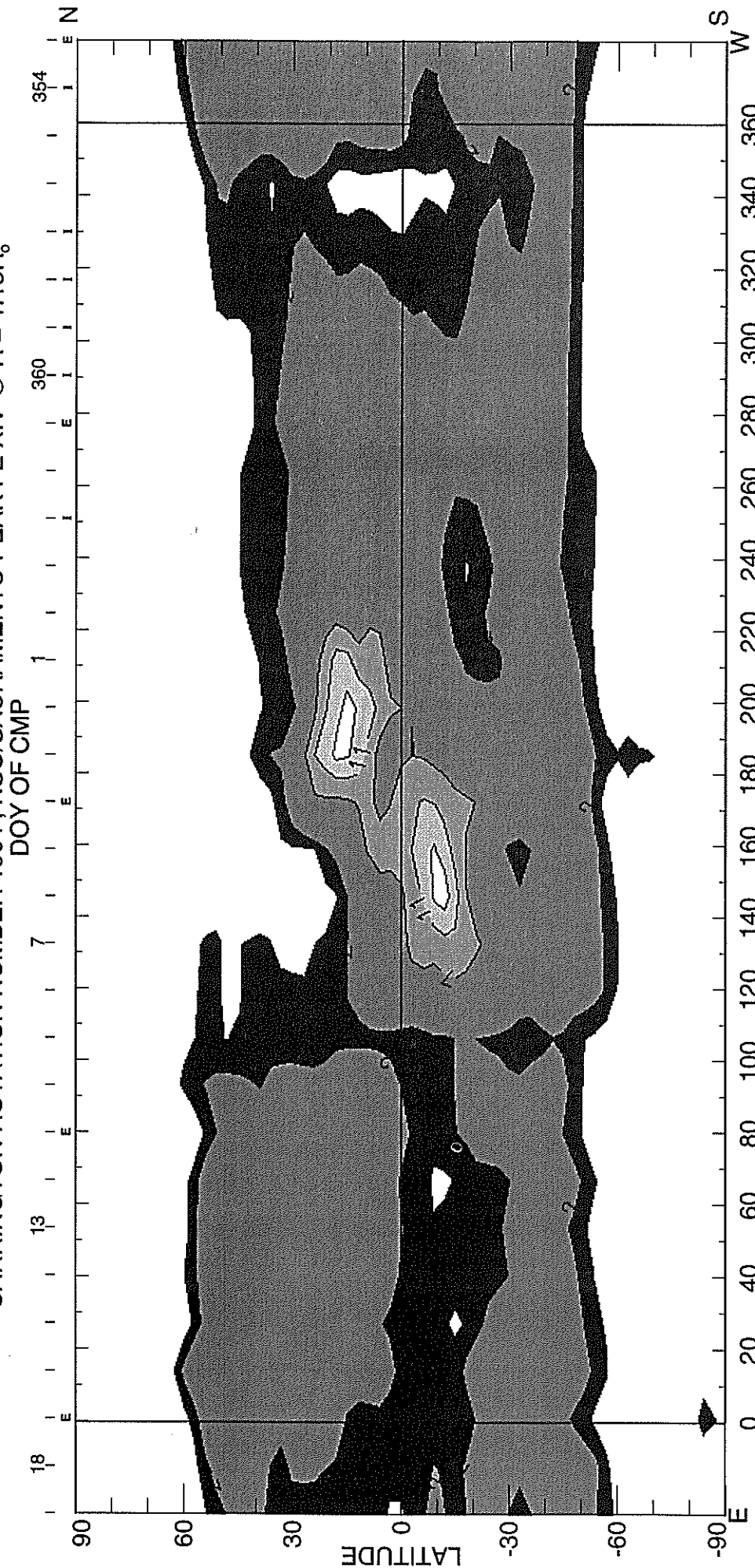
SOURCE SURFACE FIELD
CARRINGTON ROTATION NUMBER 1904
(20 December 1995 to 17 January 1996)

Wilcox Solar Observatory

0, ± 1 , 2, 5, 10, 20 microTesla



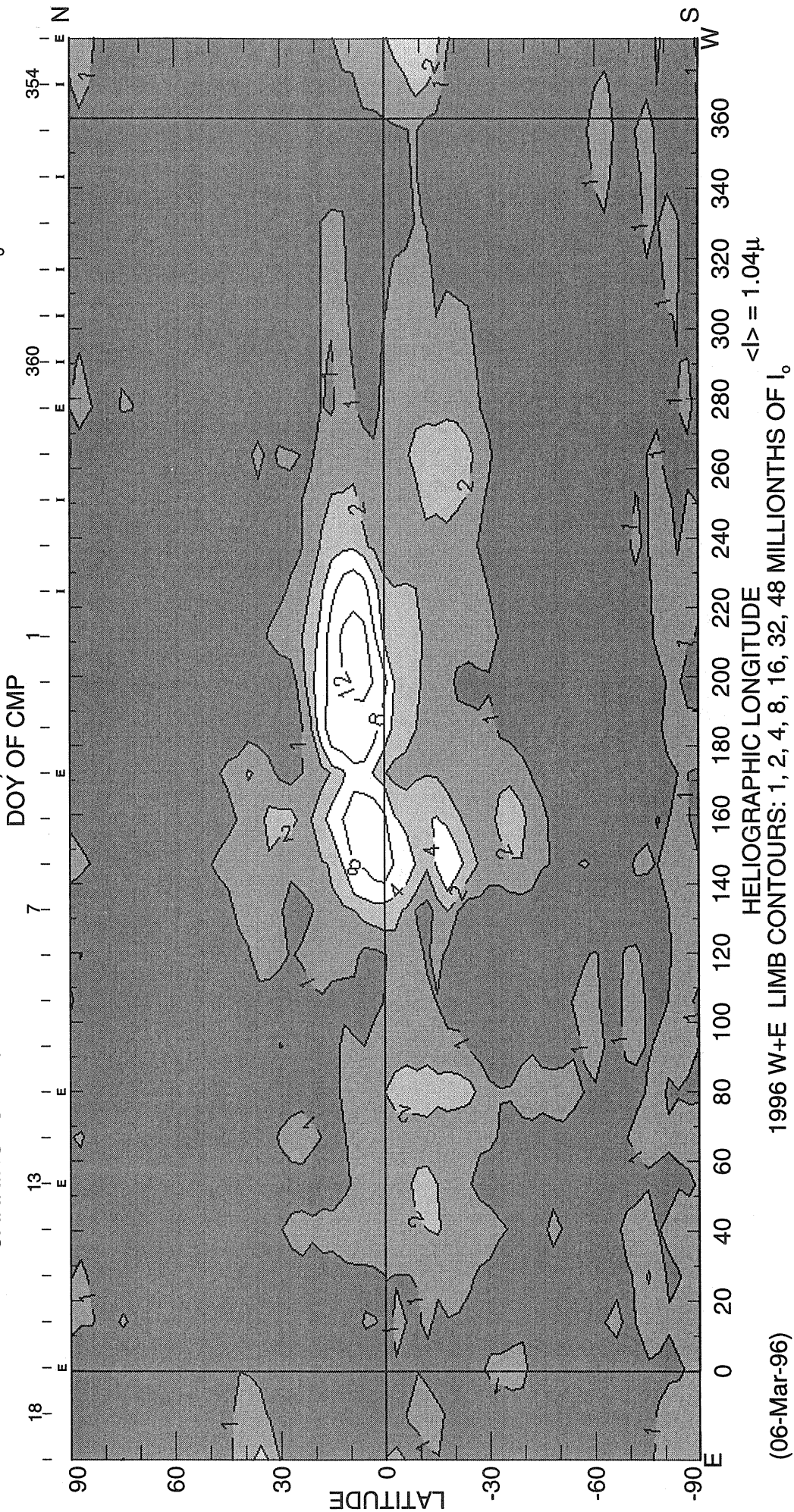
CARRINGTON ROTATION NUMBER 1904 ; NSO/SACRAMENTO PEAK FE XIV @ $R = 1.15R_{\odot}$



HELIOGRAPHIC LONGITUDE
1996 W+E LIMB CONTOURS: 1, 2, 7, 11, 15, 25, 35, 45 MILLIONTHS OF I_0
CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

(06-Mar-96)

CARRINGTON ROTATION NUMBER 1904 ; NSO/SACRAMENTO PEAK FE X @ $R = 1.15R_{\odot}$

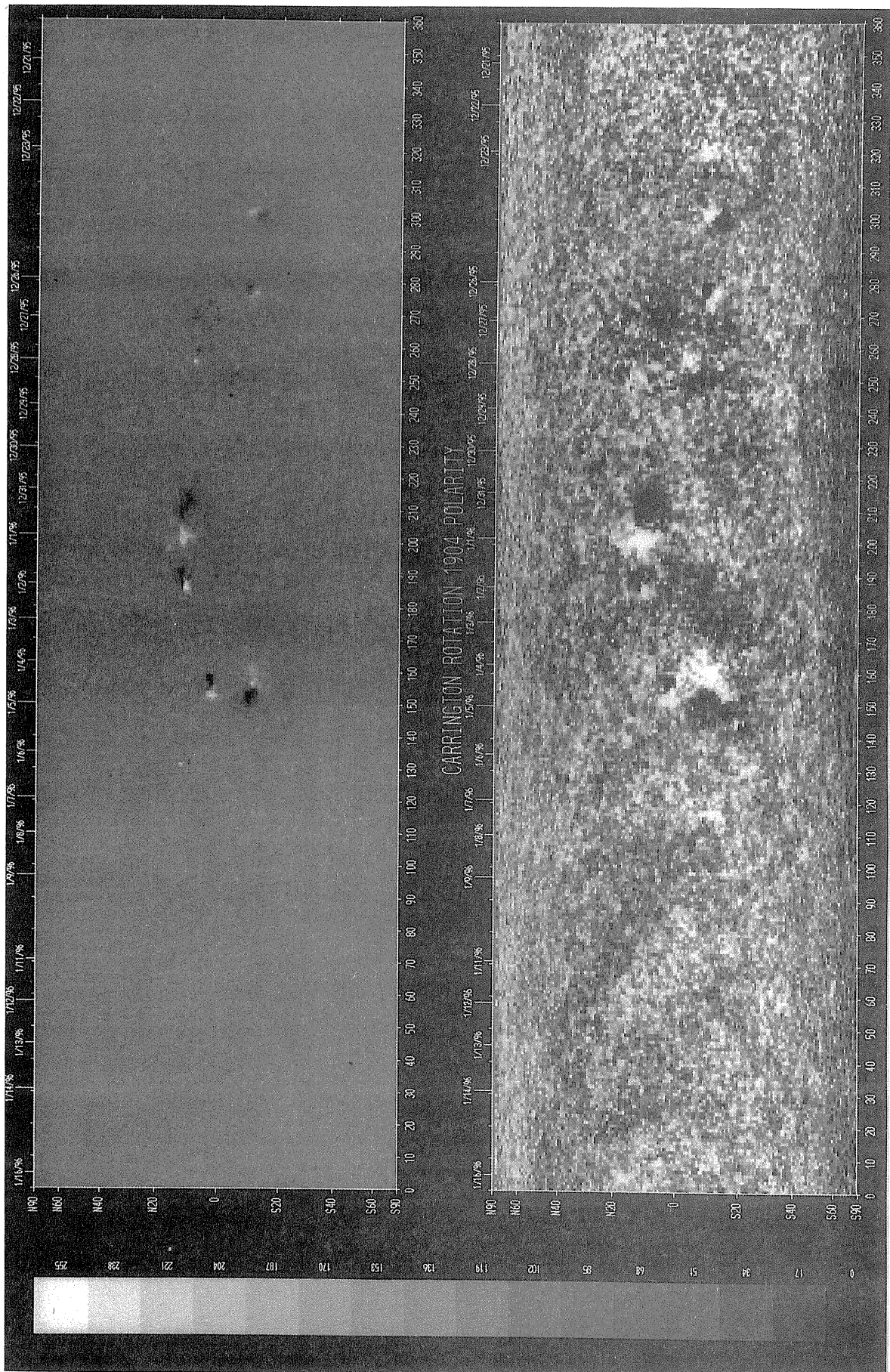


NOTE: No Ca XV emission observed at Sacramento Peak for rotation 1904.

SOLAR MAGNETIC FIELD SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 1904
(20 December 1995 to 17 January 1996)

National Solar Observatory/Kitt Peak

Dates of Observation



Heliographic Longitude

KITT PEAK MAGNETOGRAM

***868.8 nm**

Bright = +
Dark = -

Solid = +
Dashed = -

STANFORD MAGNETOGRAM

MT. WILSON MAGNETOGRAM

DeltaY = 13.1
DeltaX = 9.6

White= +7.5G
Black = -7.5G

22.29 -
23.27 UT

SACRAMENTO PEAK H-ALPHA

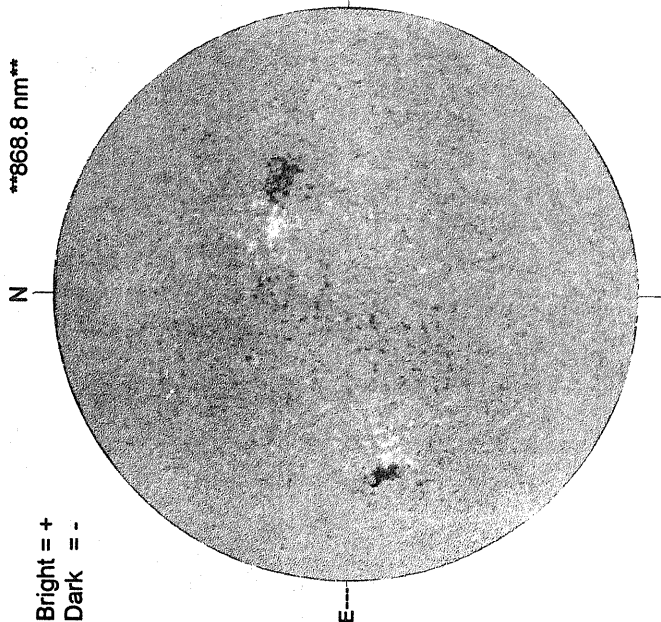
RAMEY SUNSPOT

SACRAMENTO PEAK CORONA (1.15 Radii)----

KITT PEAK MAGNETOGRAM

868.8 nm

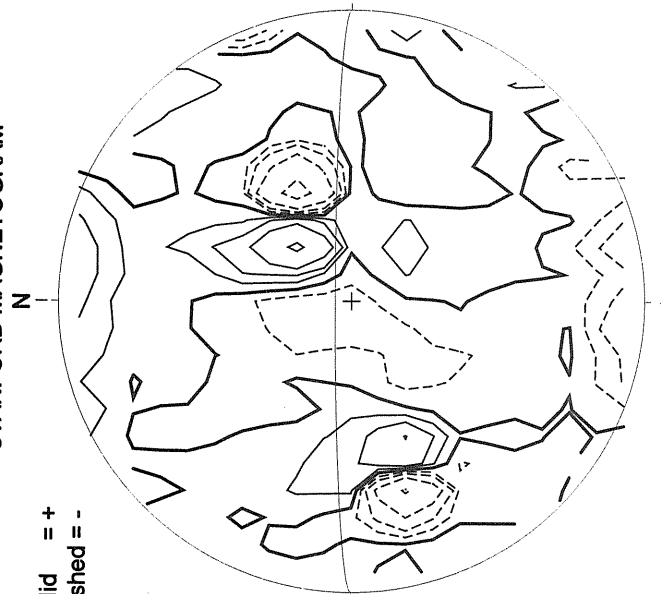
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Dark = -



2013 UT

STANFORD MAGNETOGRAM

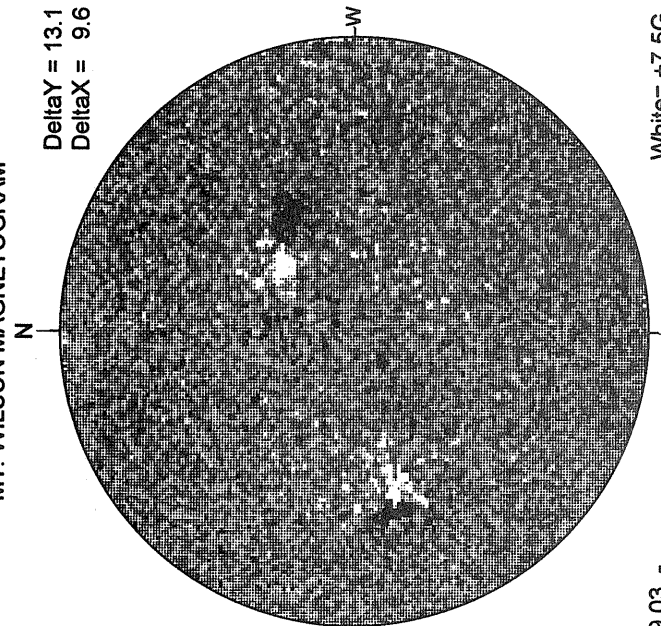
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Dashed = -



2236 UT

MT. WILSON MAGNETOGRAM

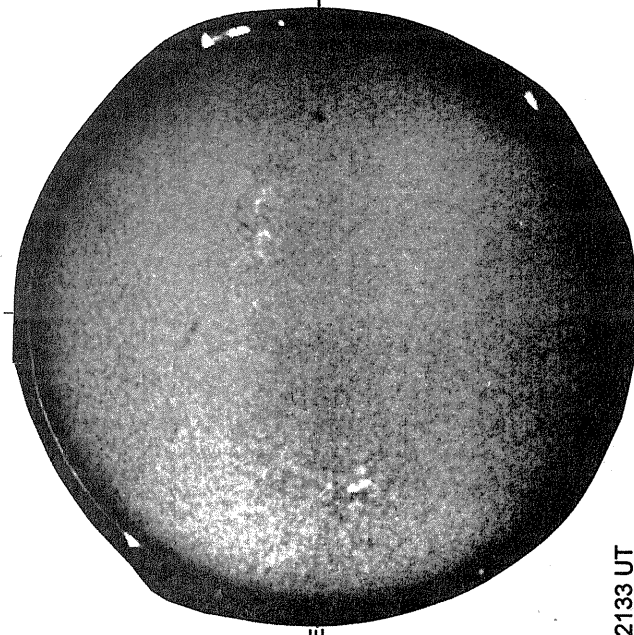
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DeltaX = 9.6



19.03 -
20.01 UT

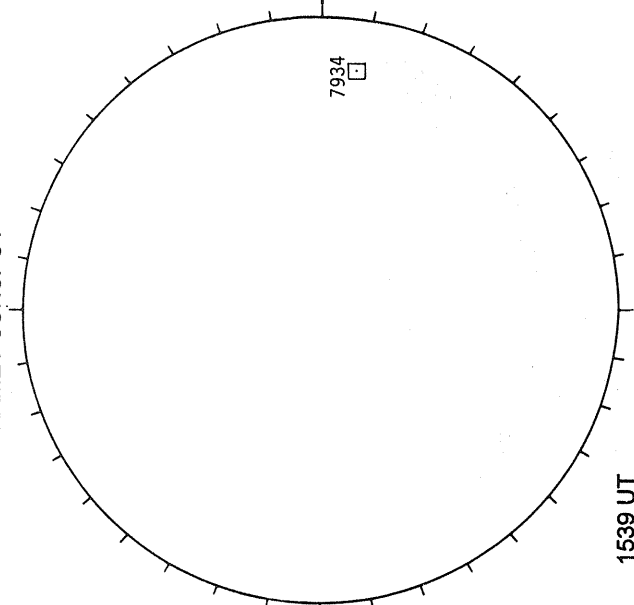
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MAUNA LOA H-ALPHA



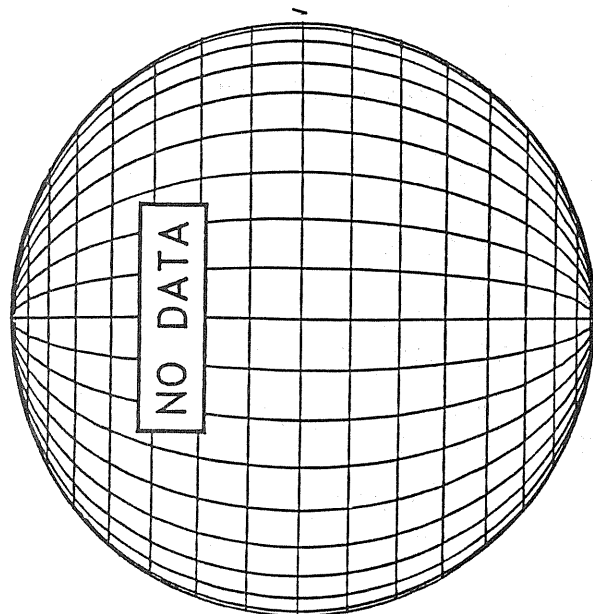
2133 UT
2045 UT Prom

RAMEY SUNSPOT



1539 UT

SACRAMENTO PEAK CORONA (1.15 Radii)---



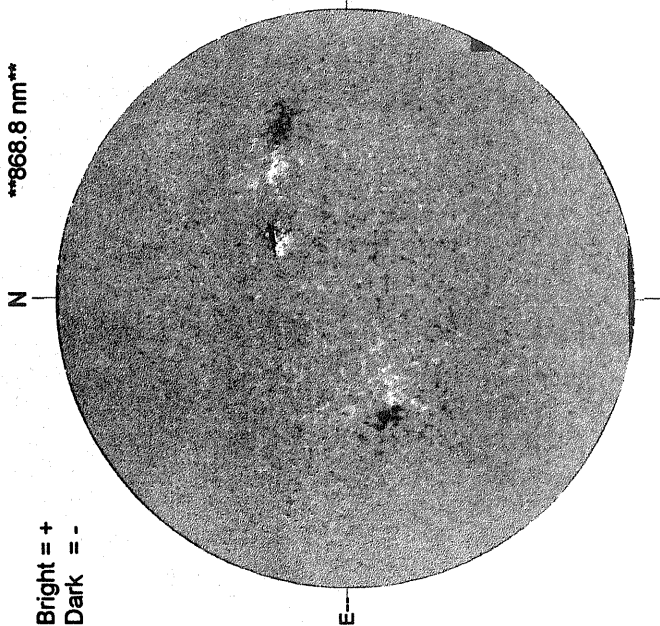
S

JANUARY 3, 1996 (P = 1.40, B0 = -3.18, L0 = 185.14)

KITT PEAK MAGNETOGRAM

868.8 nm

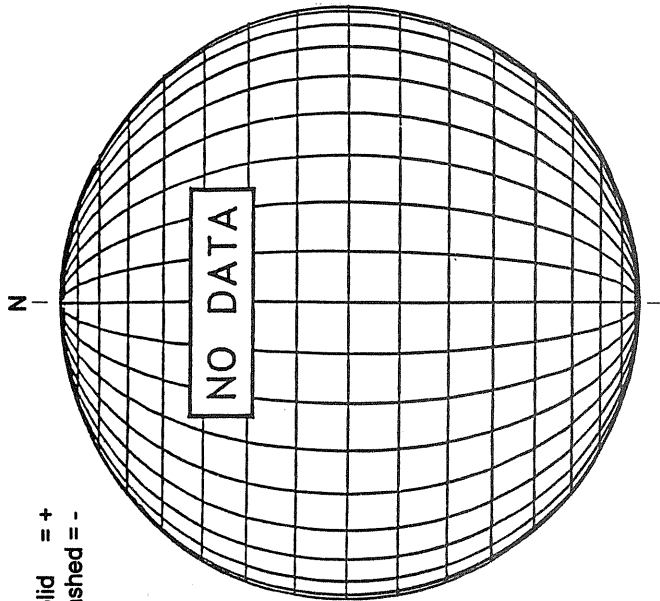
Bright = +
Dark = -



1727 UT

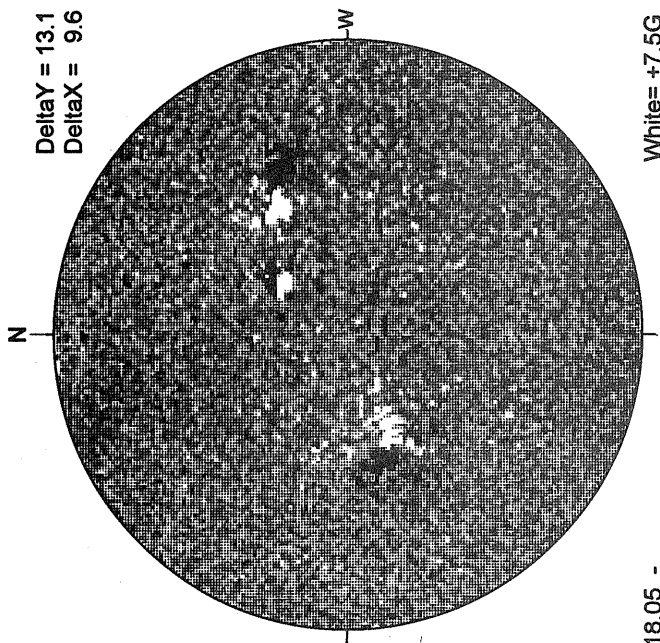
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

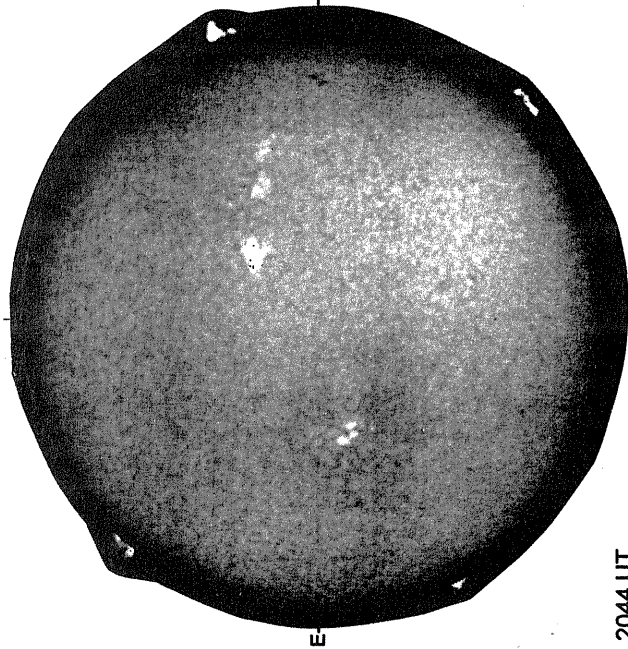
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DeltaX = 9.6



18.05 -
19.02 UT

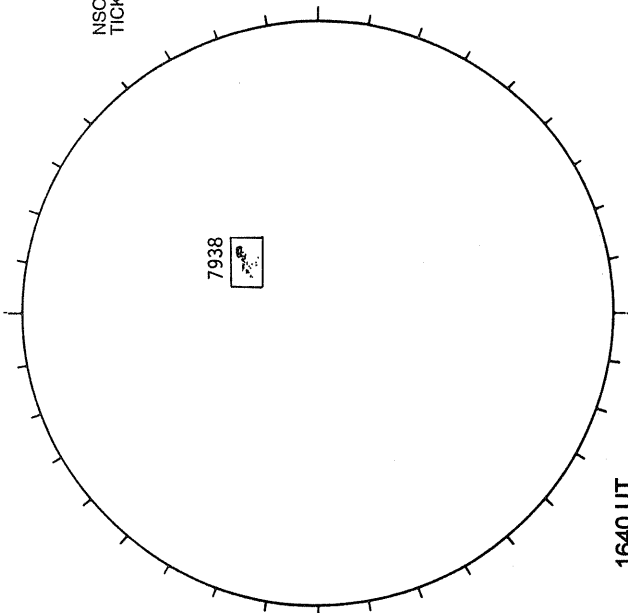
White = +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



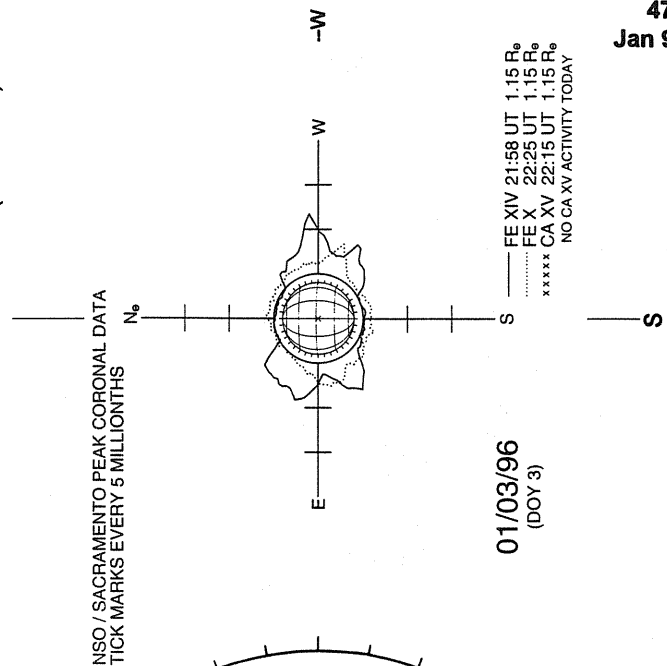
2044 UT
1944 UT Prom

RAMEY SUNSPOT



1640 UT

SACRAMENTO PEAK CORONA (1.15 Radii)---



NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

01/03/96
(DOY 3)

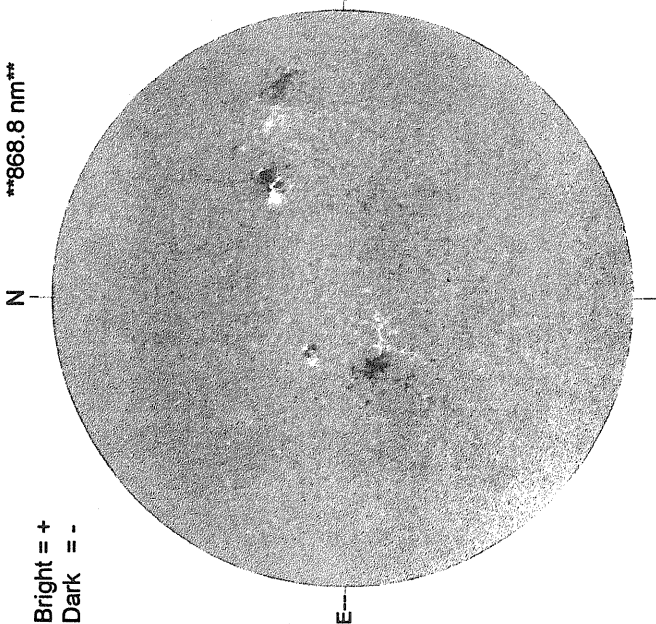
--- FE XIV 21:58 UT 1.15 R₀
..... FE X 22:25 UT 1.15 R₀
xxxxx CA XV 22:15 UT 1.15 R₀
NO CA XV ACTIVITY TODAY

JANUARY 4, 1996 (P= 0.92, Bo = -3.30, Lo = 171.97)

KITT PEAK MAGNETOGRAM

868.8 nm

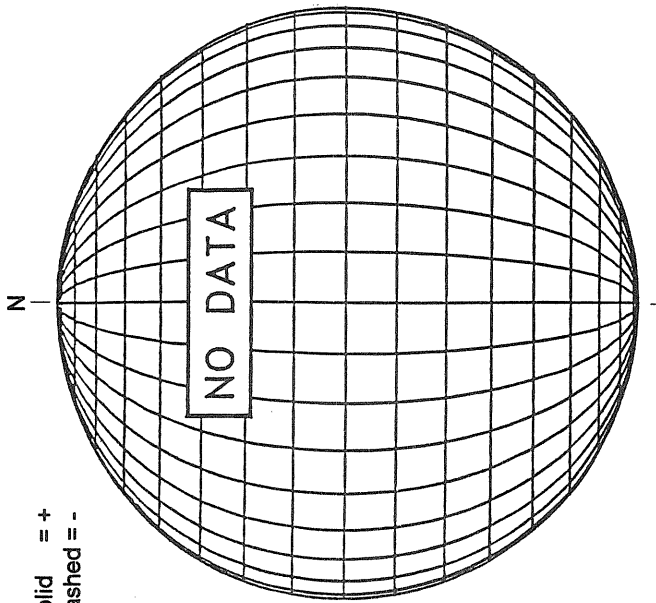
Bright = +
Dark = -



1636 UT

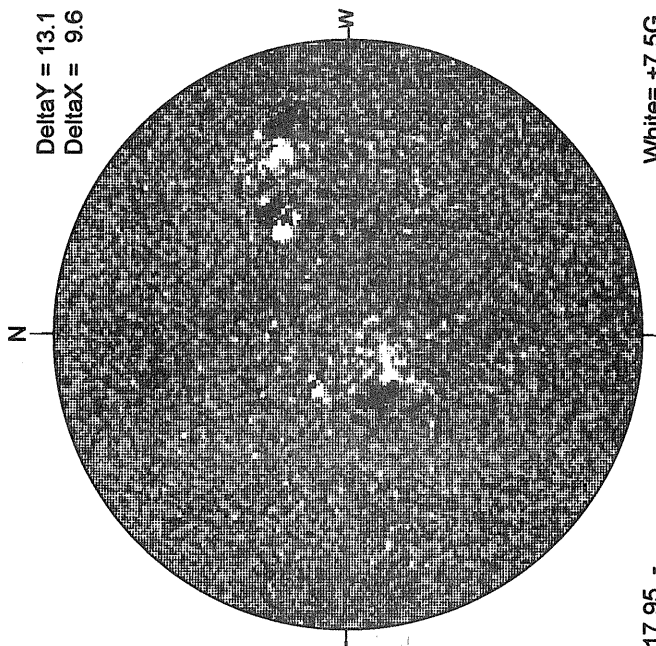
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

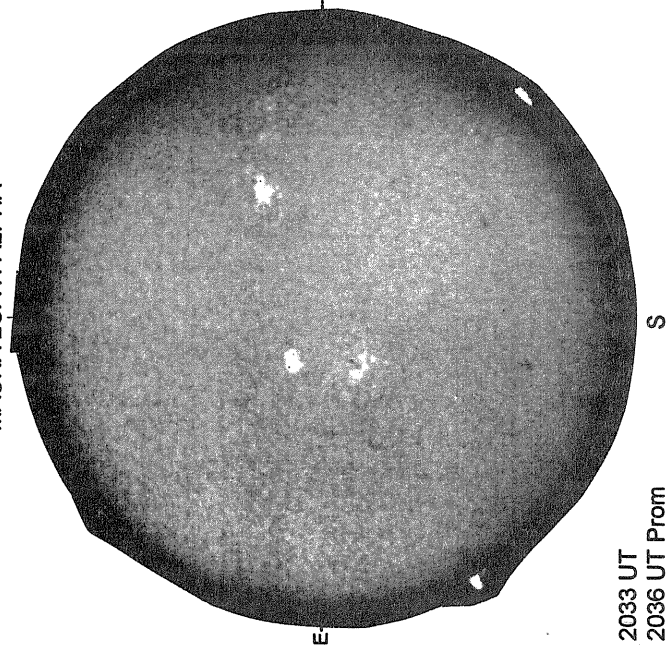
DeltaY = 13.1
DeltaX = 9.6



17.95 -
18.92 UT

White= +7.5G
Black = -7.5G

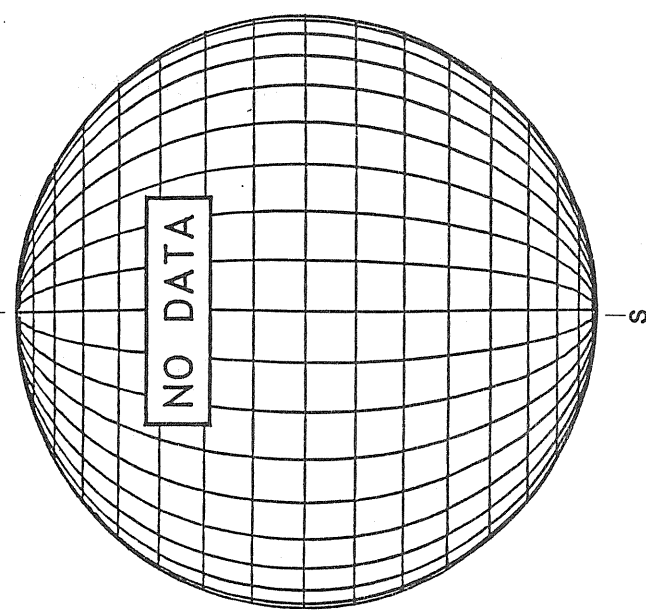
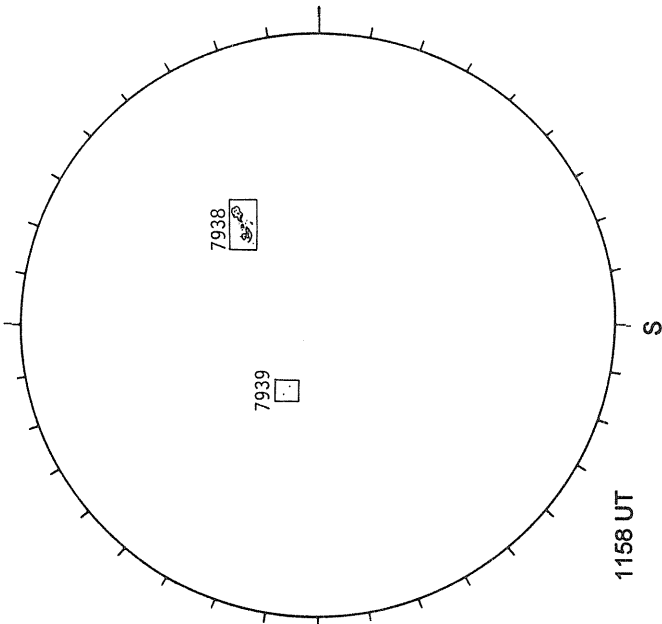
MAUNA LOA H-ALPHA



2033 UT
2036 UT Prom

RAMEY SUNSPOT

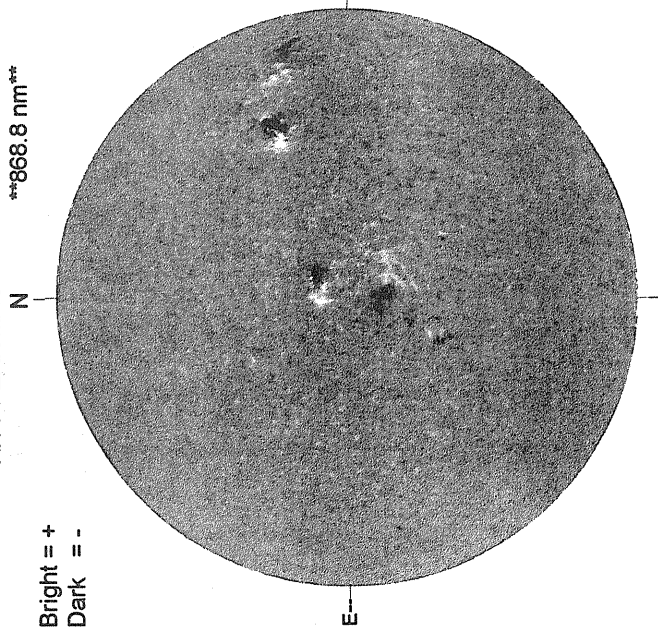
SACRAMENTO PEAK CORONA (1.15 Radii) ----



KITT PEAK MAGNETOGRAM

868.8 nm

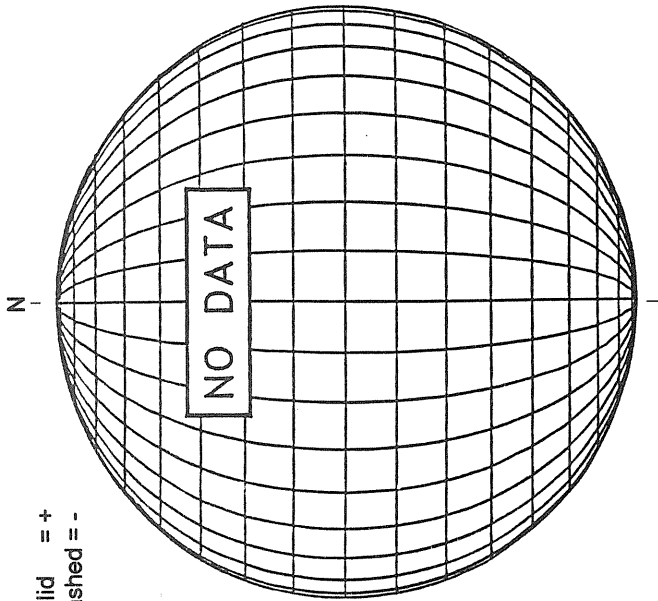
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1636 UT

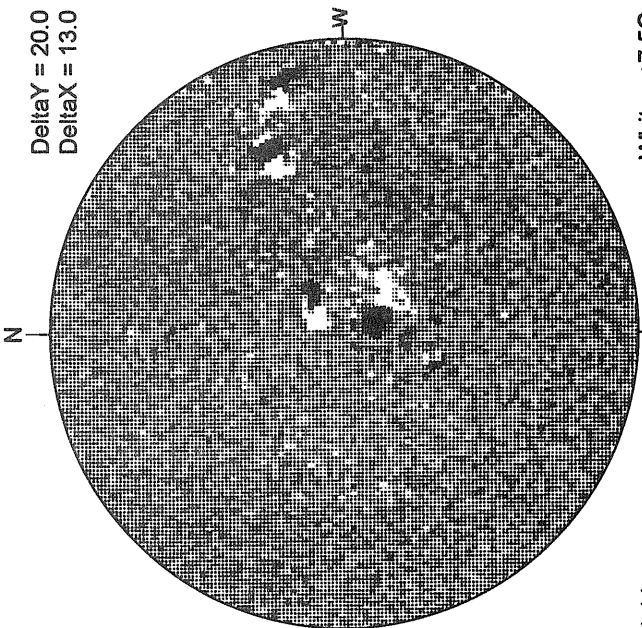
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

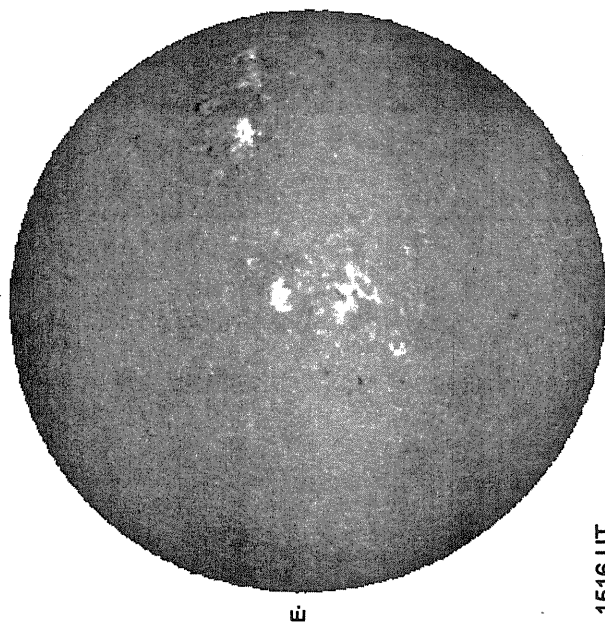
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21.11 -
21.54 UT

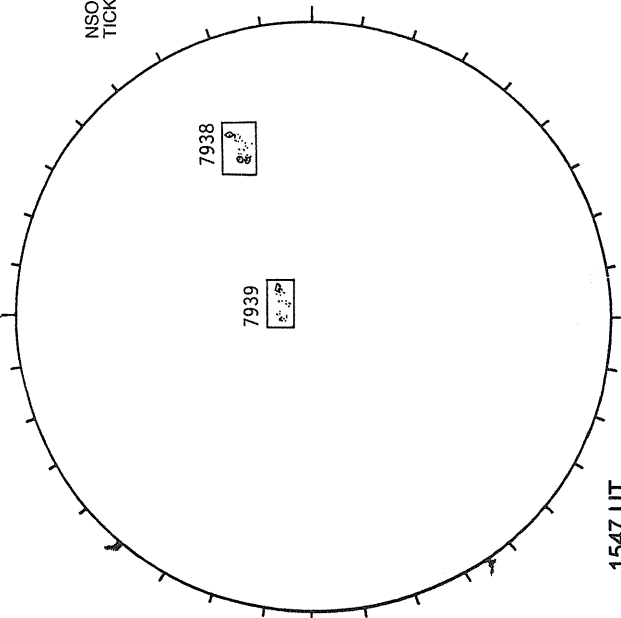
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Black = -7.5G

SACRAMENTO PEAK H-ALPHA



1516 UT

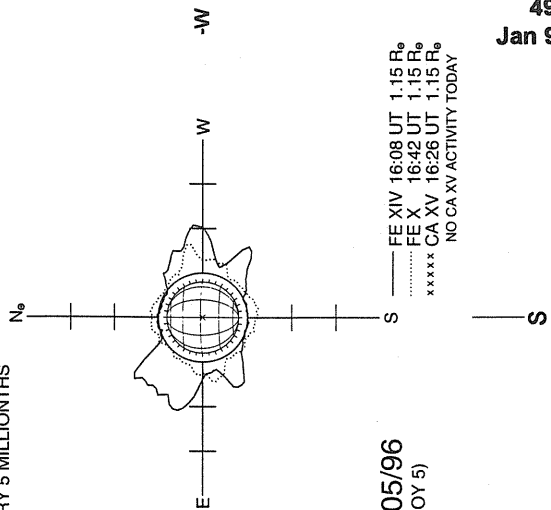
HOLLOMAN SUNSPOT



1547 UT
0938 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)---

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



01/05/96
(DOY 5)

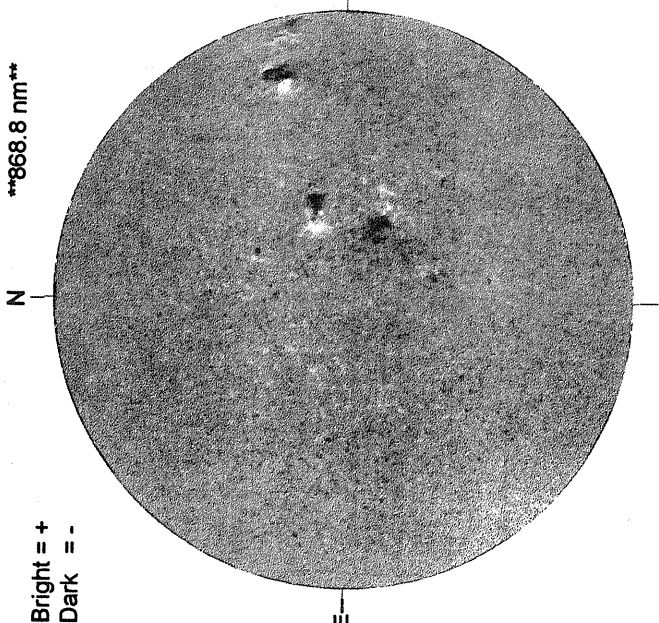
--- FE XIV 16:08 UT 1.15 R_o
..... FE X 16:42 UT 1.15 R_o
xxxxx CA XV 16:26 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

JANUARY 6, 1996 (P= -0.05, Bo = -3.52 Lo = 145.63)

KITT PEAK MAGNETOGRAM

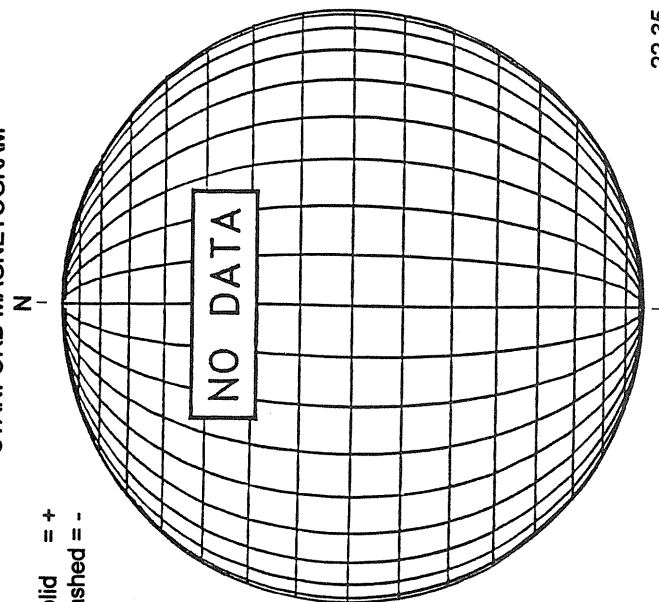
868.8 nm

Bright = +
Dark = -



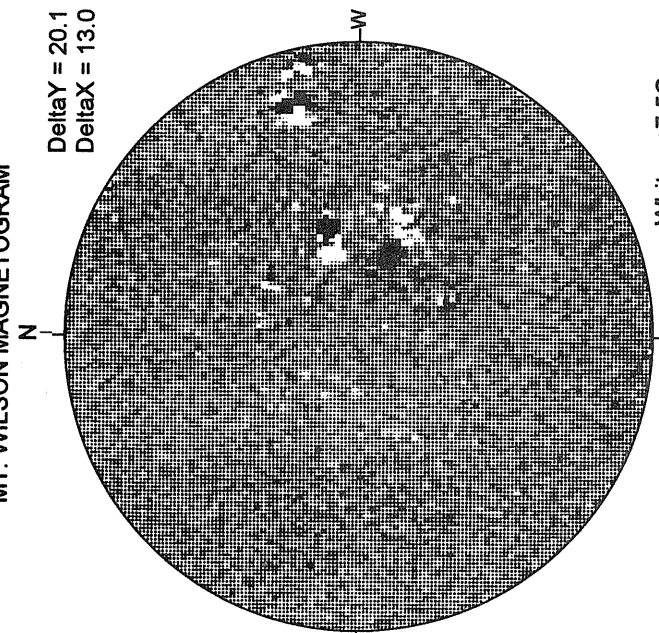
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



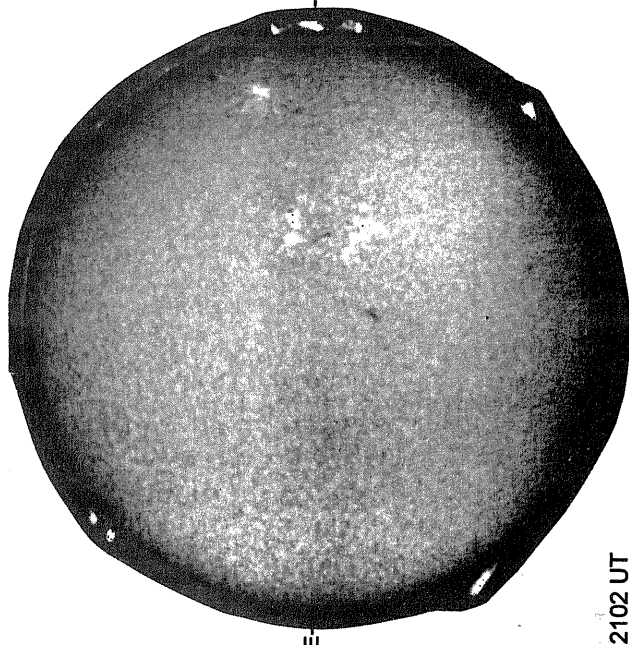
MT. WILSON MAGNETOGRAM

Delta Y = 20.1
Delta X = 13.0

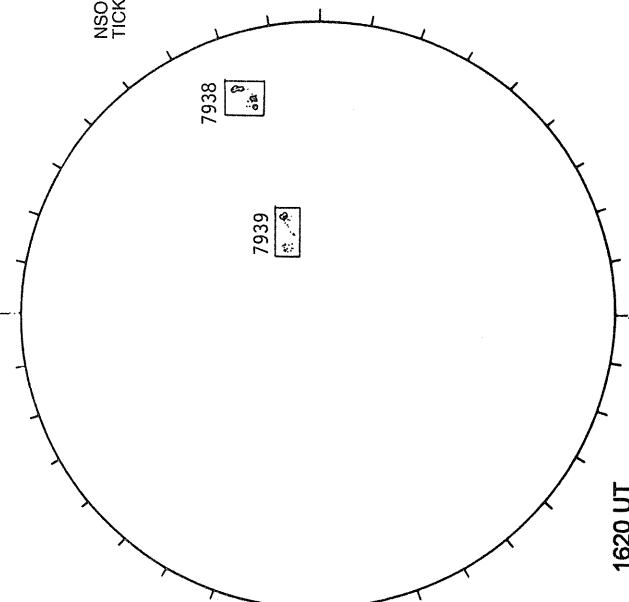


White = +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA

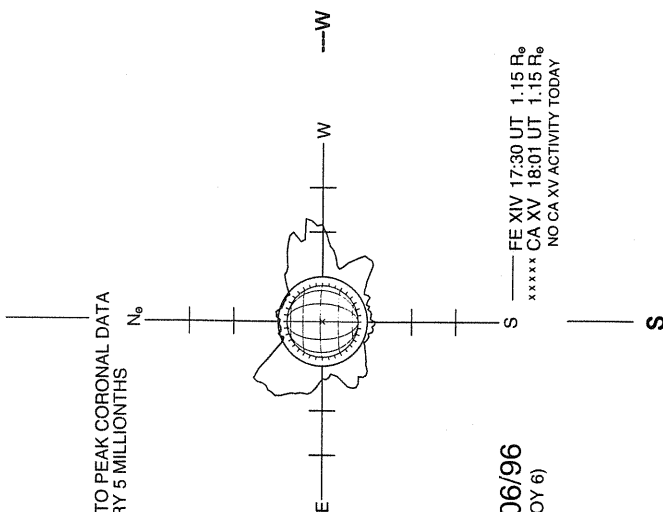


HOLLOMAN SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



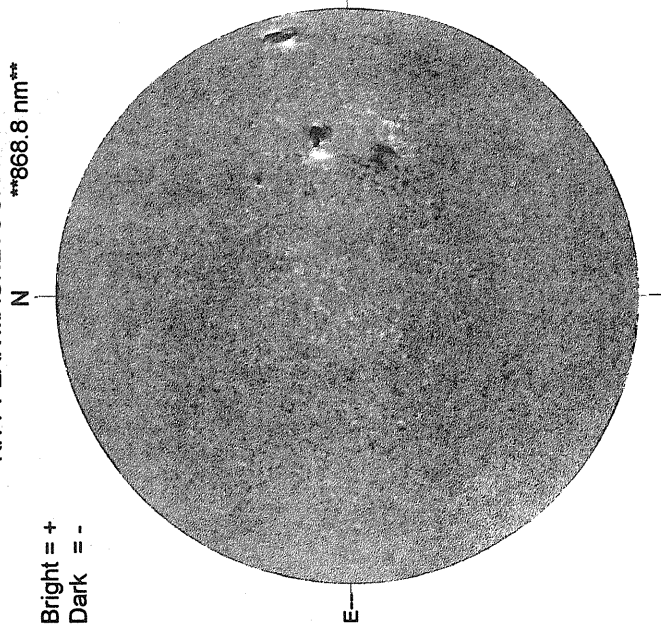
01/06/96
(DOY 6)

----- FE XIV 17:30 UT 1.15 R_o
***** CA XV 18:01 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

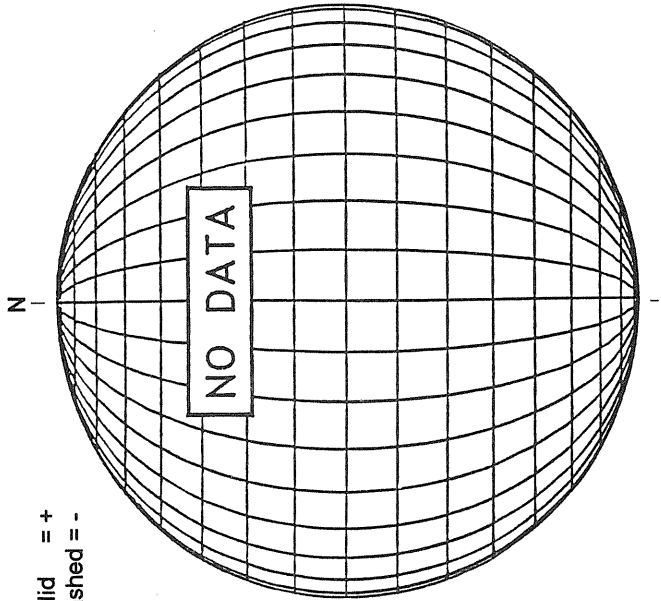
***868.8 nm**

Bright = +
Dark = -



STANFORD MAGNETOGRAM

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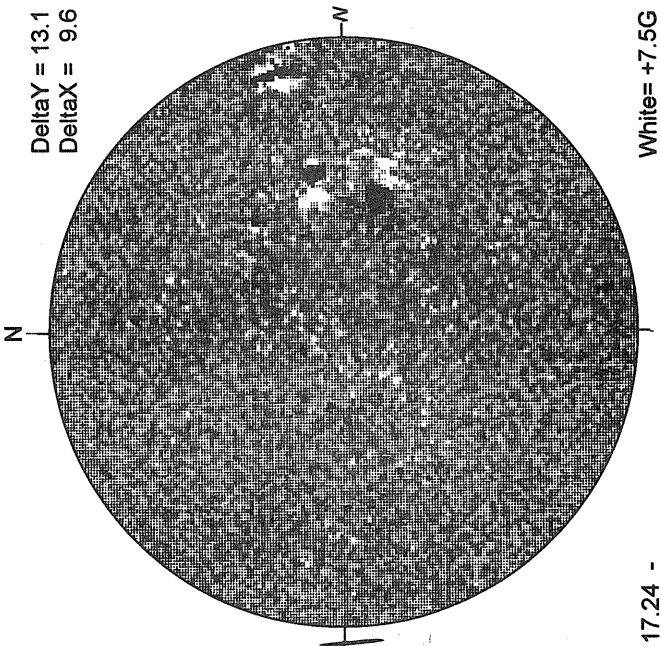


MT. WILSON MAGNETOGRAM

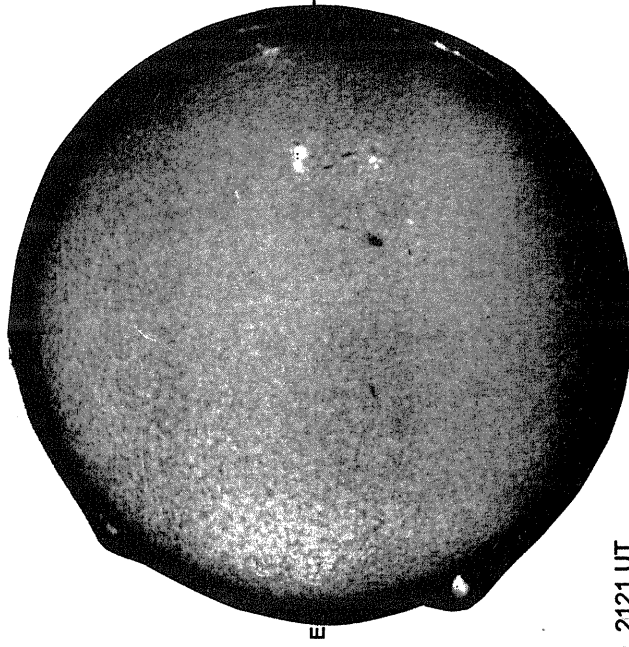
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17:24 -
18:21 UT

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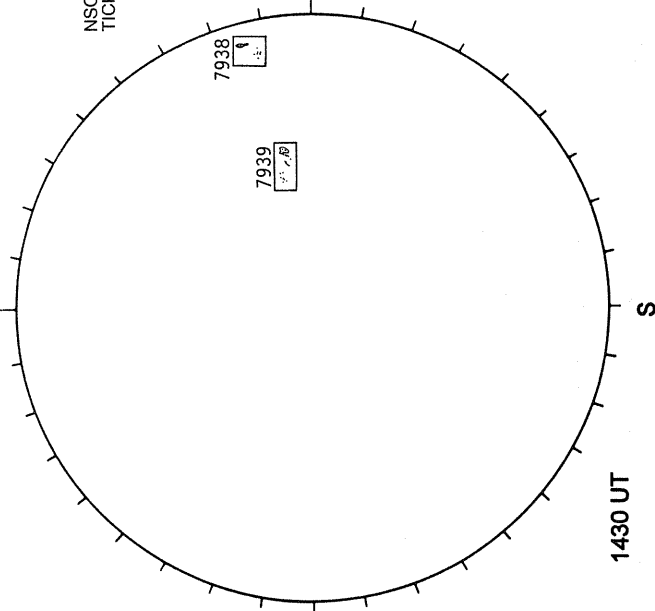


MAUNA LOA H-ALPHA



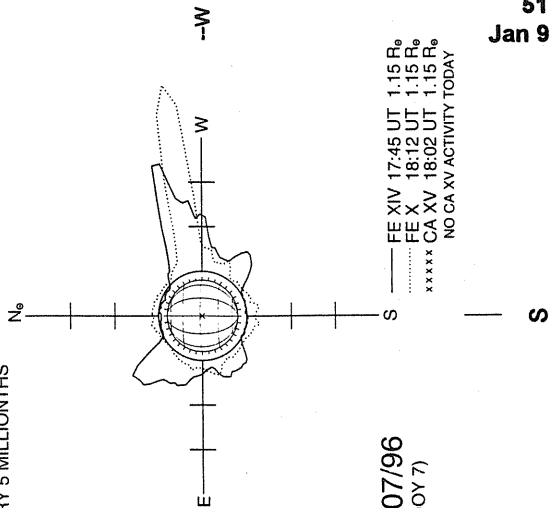
2121 UT
2036 UT Prom

RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)---

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



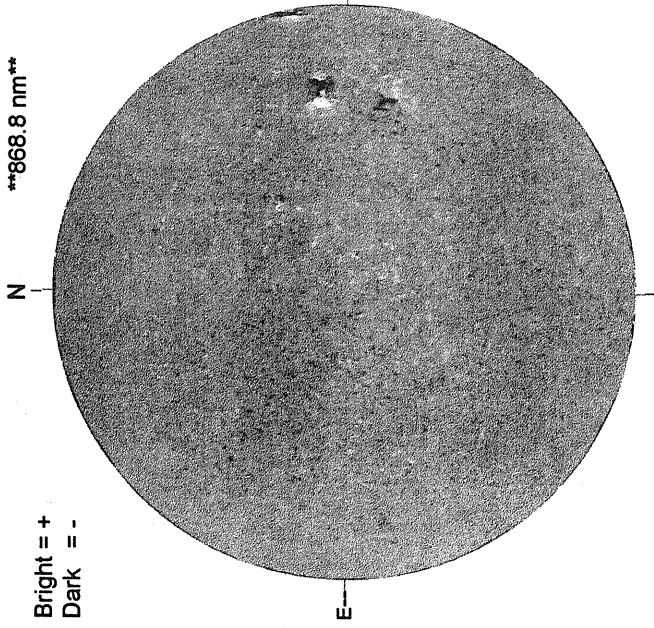
01/07/96
(DOY 7)

--- FE XIV 17:45 UT 1.15 R_o
..... FE X 18:12 UT 1.15 R_o
xxxxx CA XV 18:02 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

868.8 nm

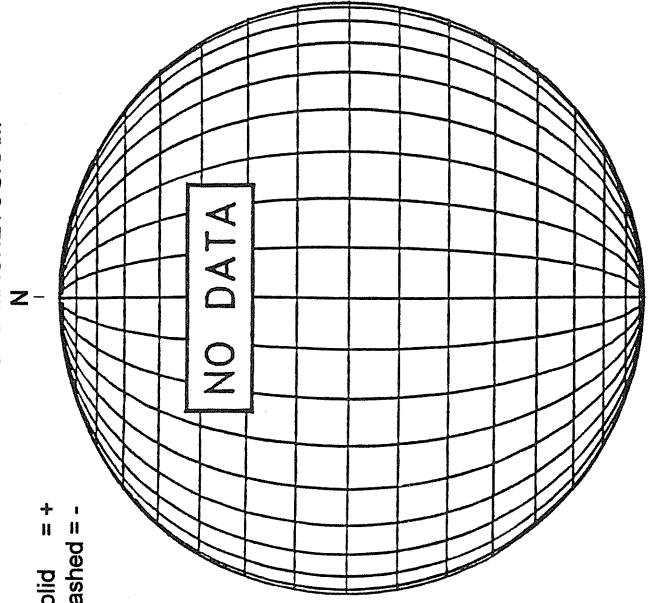
Bright = +
Dark = -



1649 UT

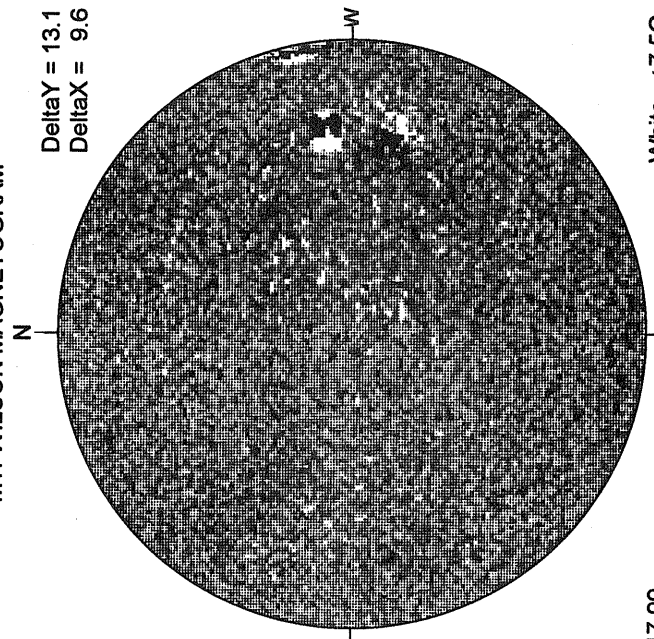
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

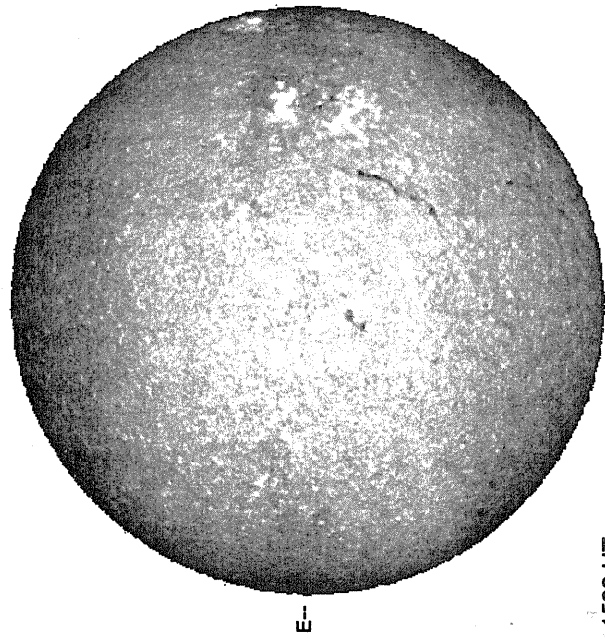
Delta Y = 13.1
Delta X = 9.6



17.99 -
18.97 UT

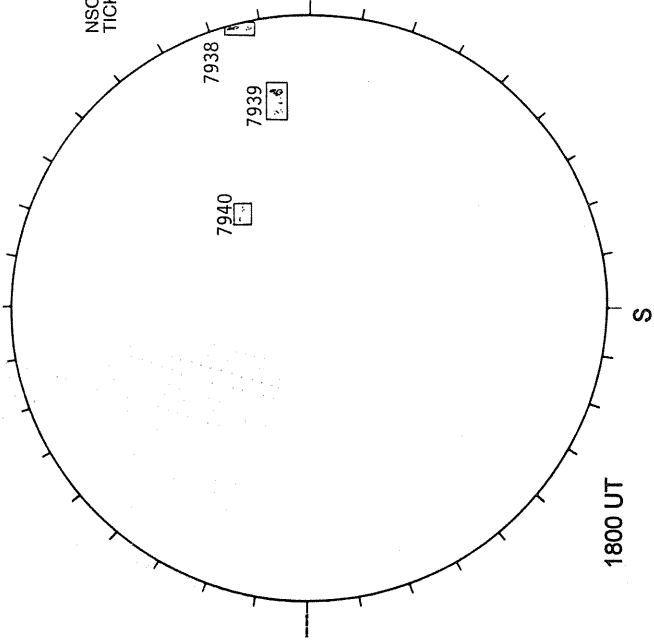
White = +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



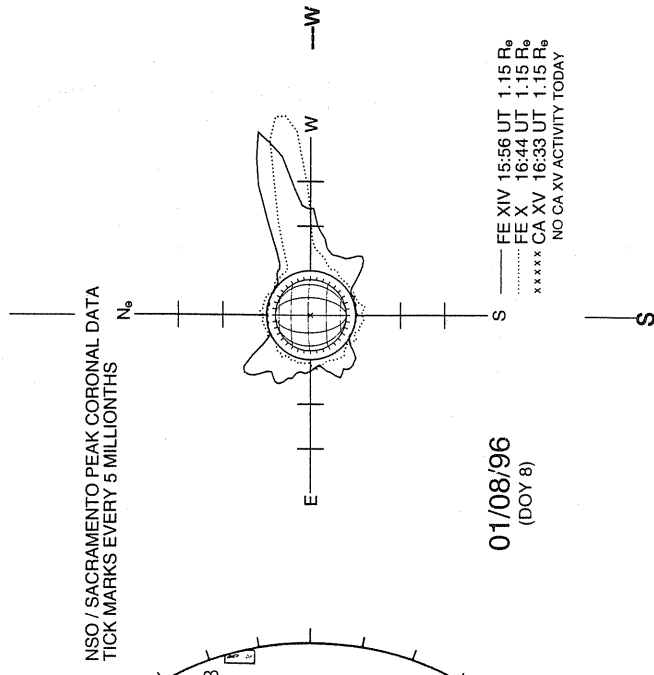
1522 UT

HOLLOMAN SUNSPOT



1800 UT

SACRAMENTO PEAK CORONA (1.15 Radii)---



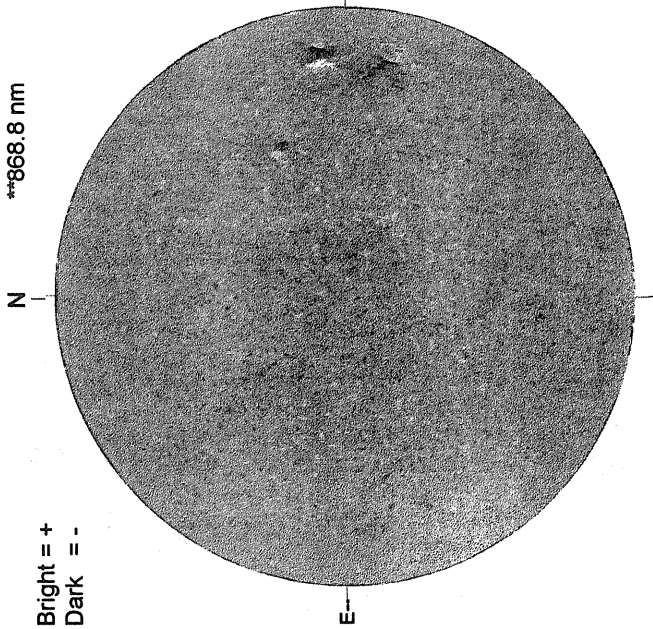
01/08/96
(DOY 8)

FE XIV 15:56 UT 1.15 R_o
FE X 16:44 UT 1.15 R_o
xxxx CA XV 16:33 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

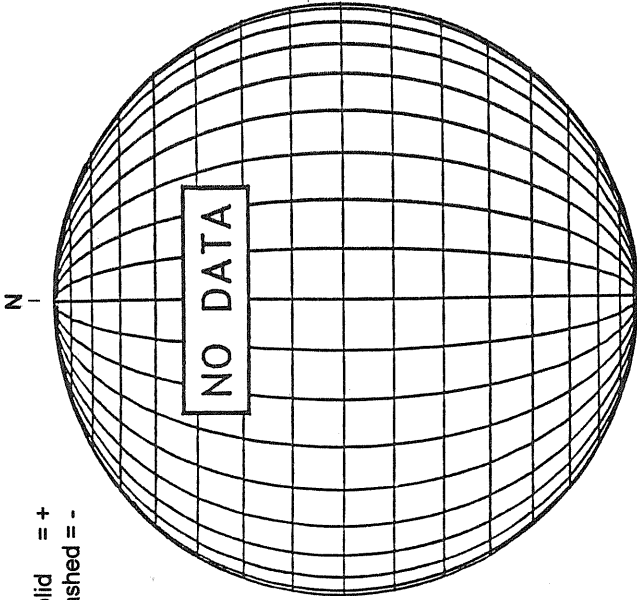
**868.8 nm

Bright = +
Dark = -



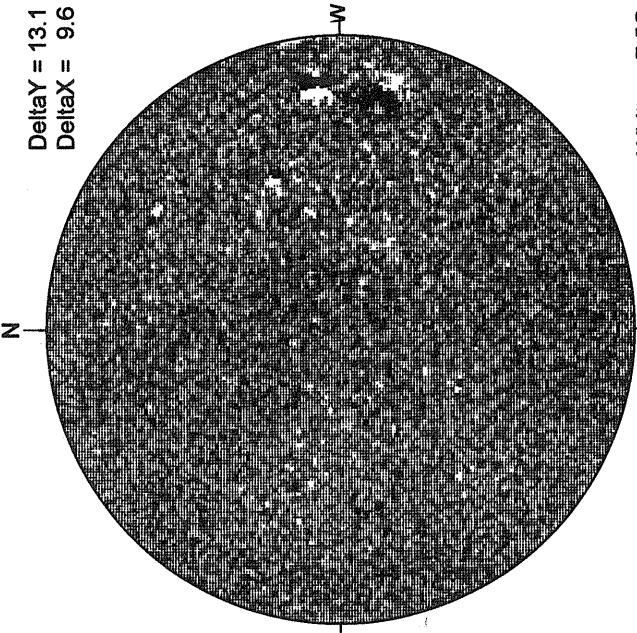
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

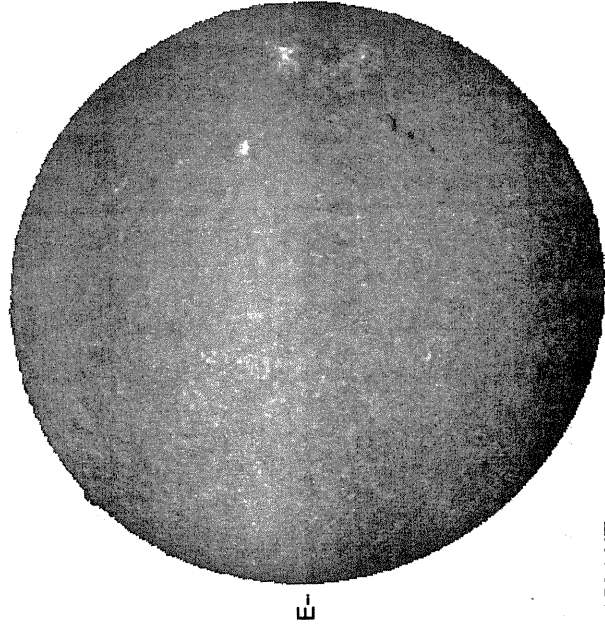
DeltaY = 13.1
DeltaX = 9.6



White = +7.5G
Black = -7.5G

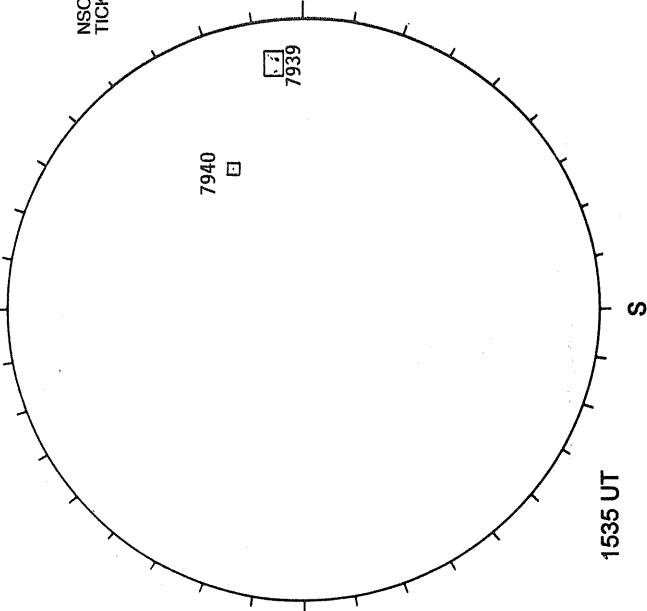
16.86 -
17.83 UT

SACRAMENTO PEAK H-ALPHA



1504 UT

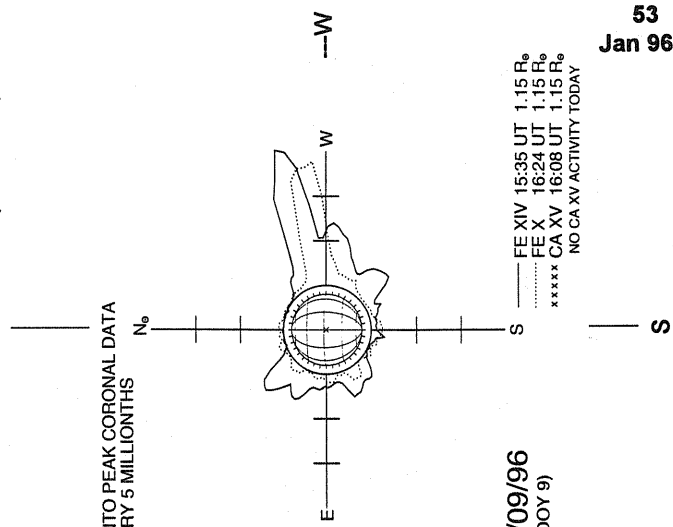
HOLLOMAN SUNSPOT



1535 UT

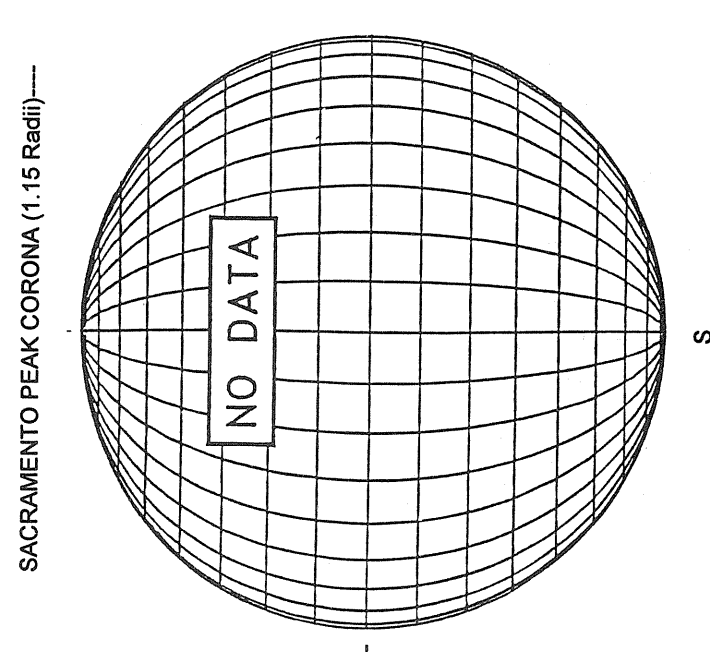
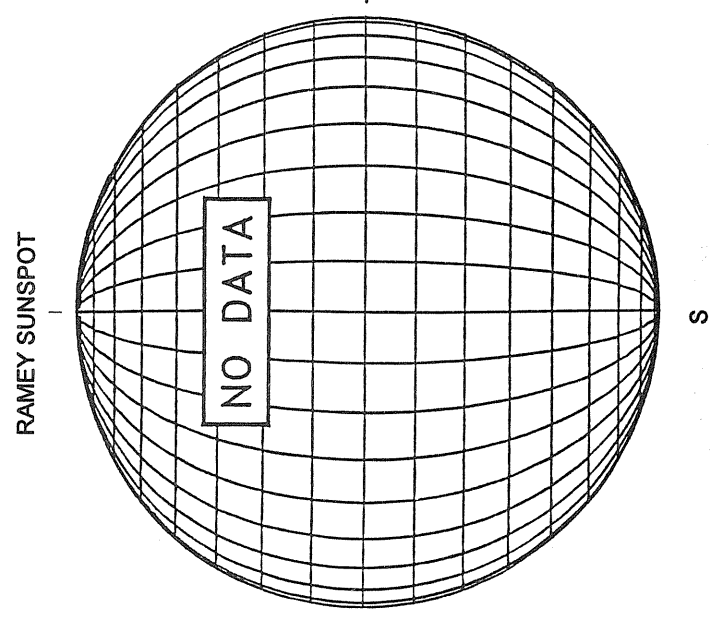
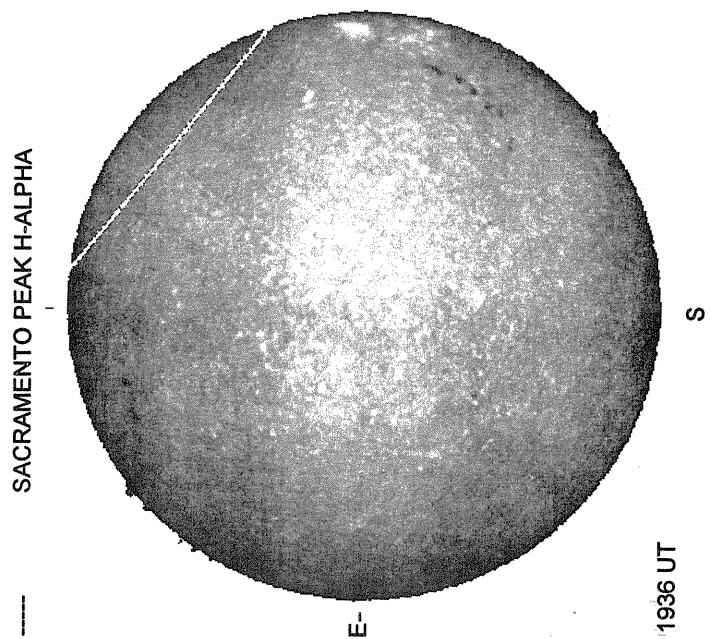
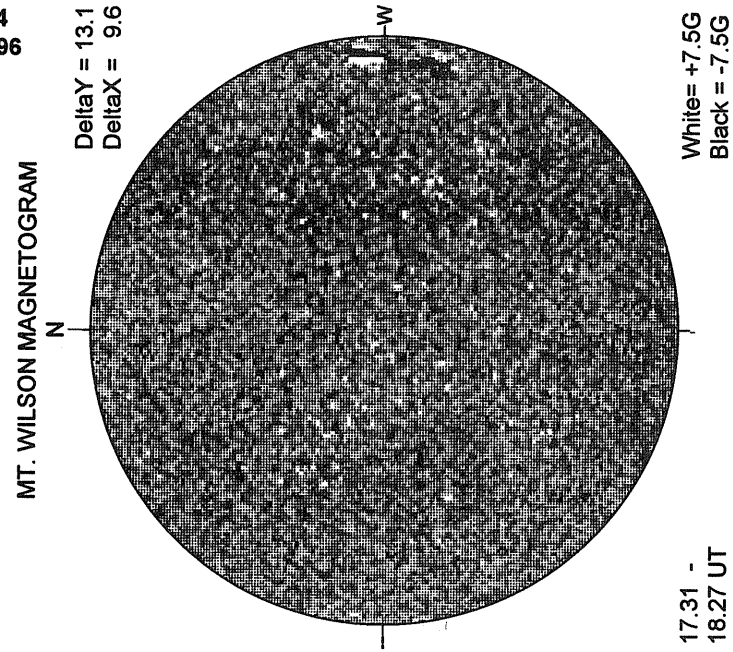
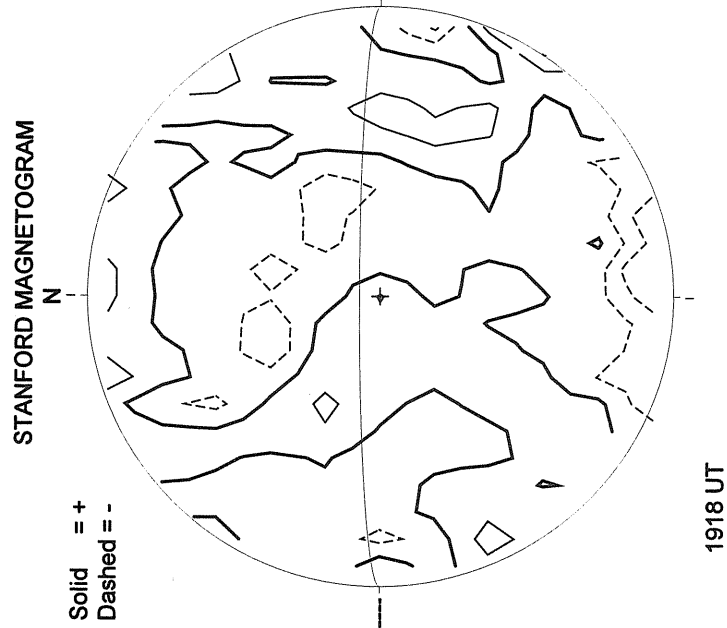
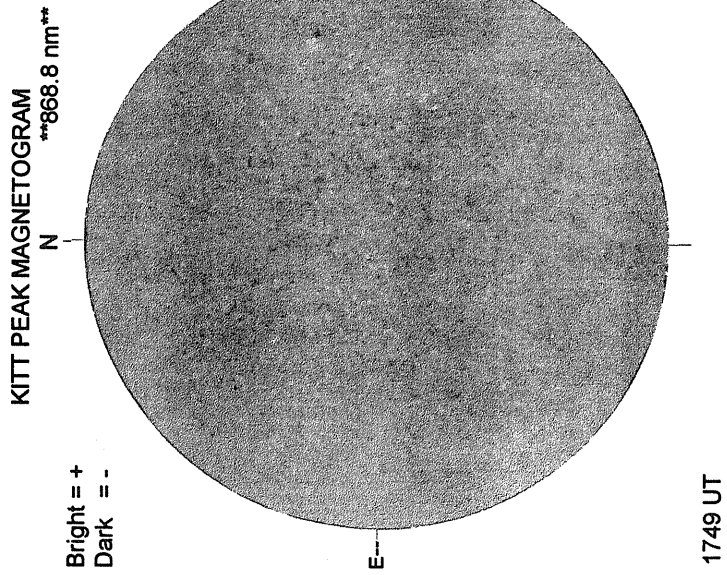
SACRAMENTO PEAK CORONA (1.15 Radii)---

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



01/09/96
(DOY 9)

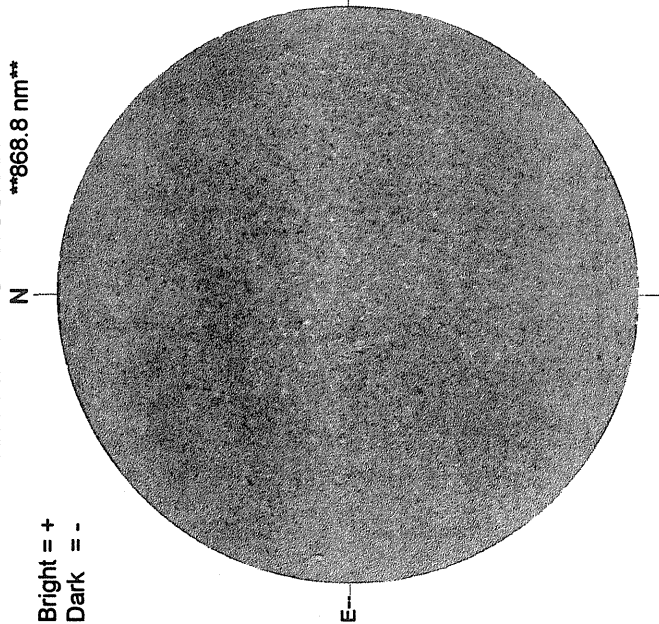
FE XIV 15:35 UT 1.15 R_o
FE X 16:24 UT 1.15 R_o
CA XV 16:08 UT 1.15 R_o
NO CA XV ACTIVITY TODAY



KITT PEAK MAGNETOGRAM

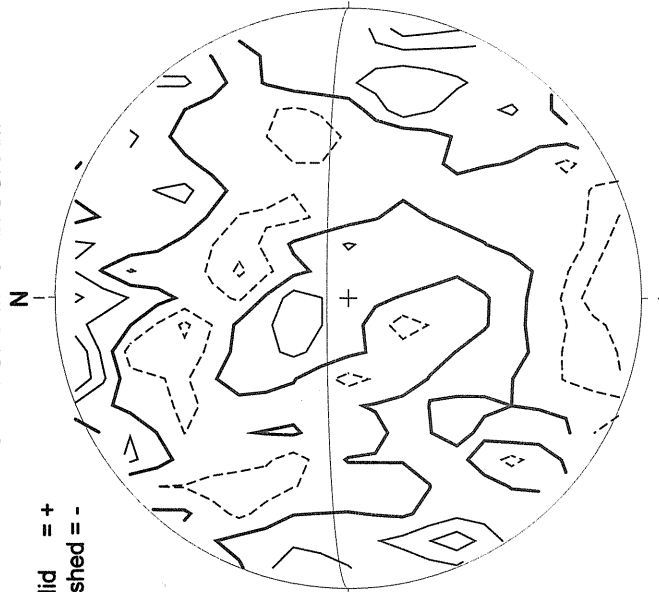
868.8 nm

Bright = +
Dark = -



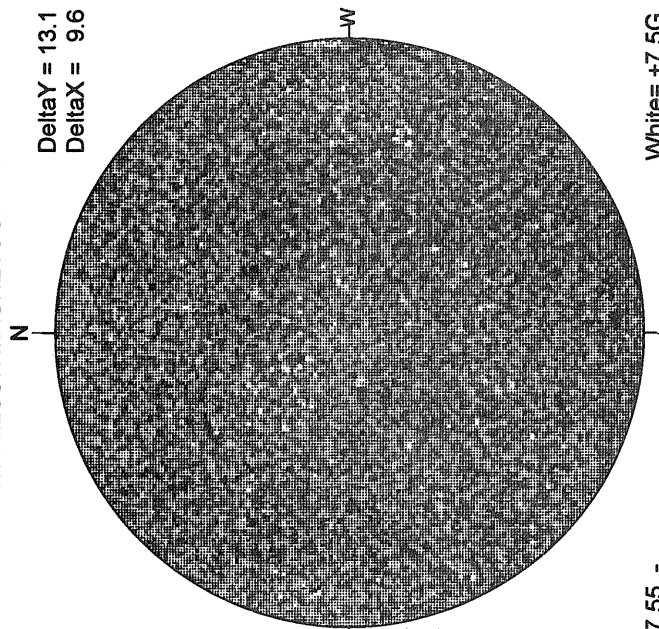
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



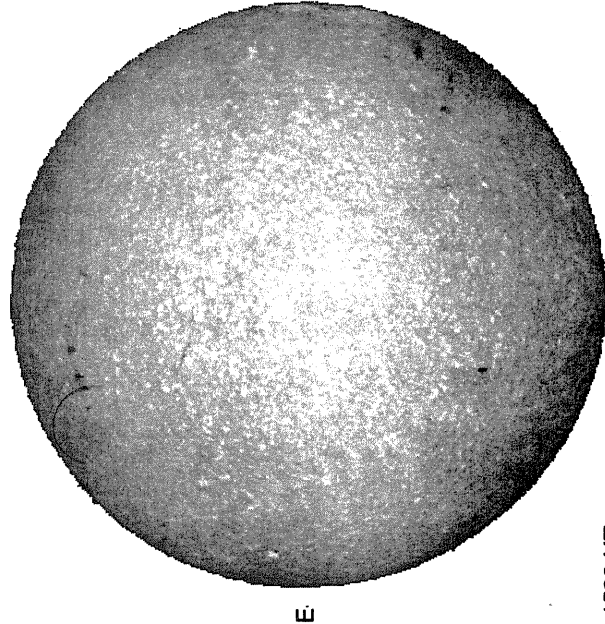
MT. WILSON MAGNETOGRAM

Delta Y = 13.1
Delta X = 9.6

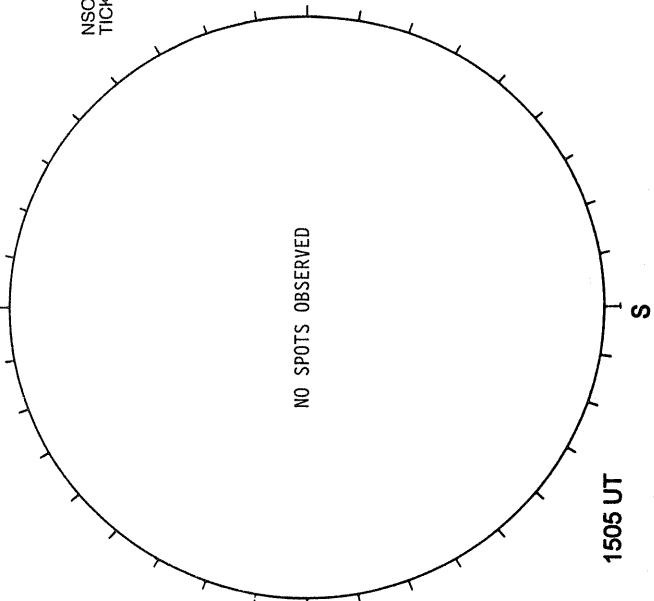


White = +7.5G
Black = -7.5G

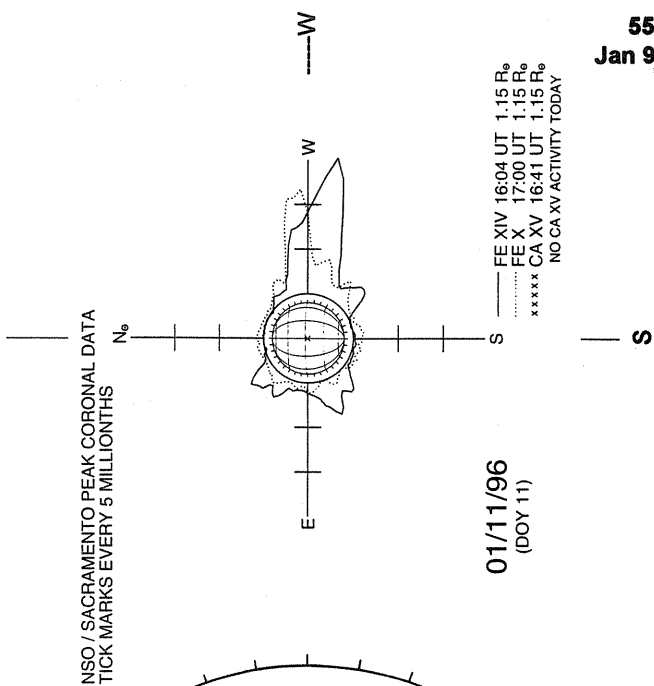
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



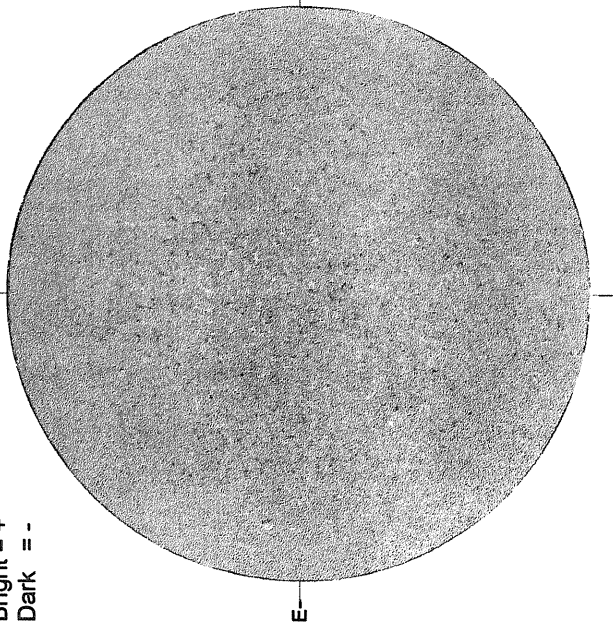
SACRAMENTO PEAK CORONA (1.15 Radii)---



KITT PEAK MAGNETOGRAM

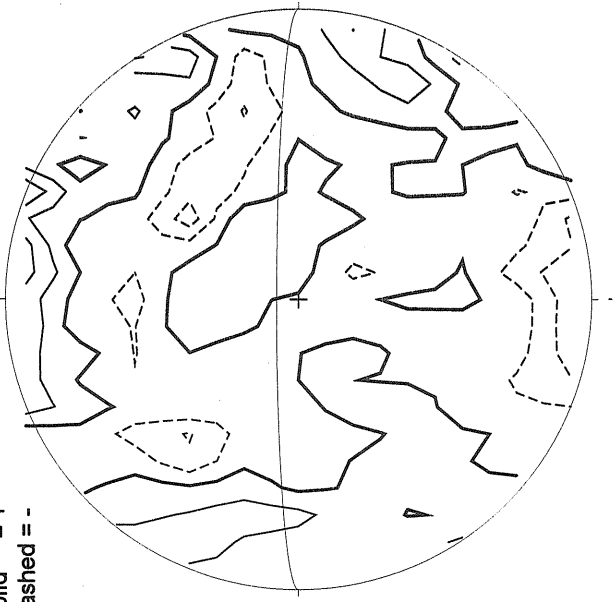
868.8 nm

Bright = +
Dark = -



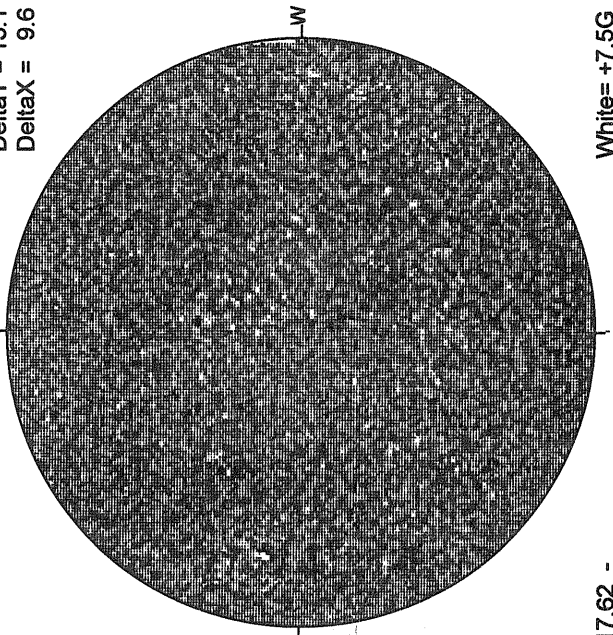
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



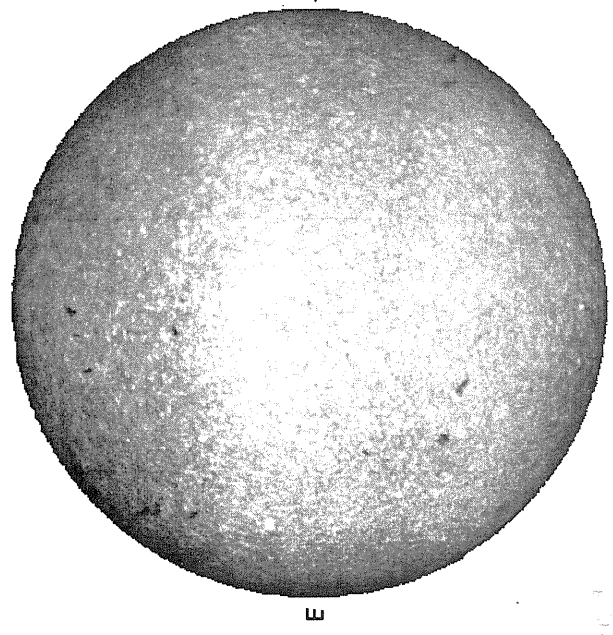
MT. WILSON MAGNETOGRAM

Delta Y = 13.1
Delta X = 9.6

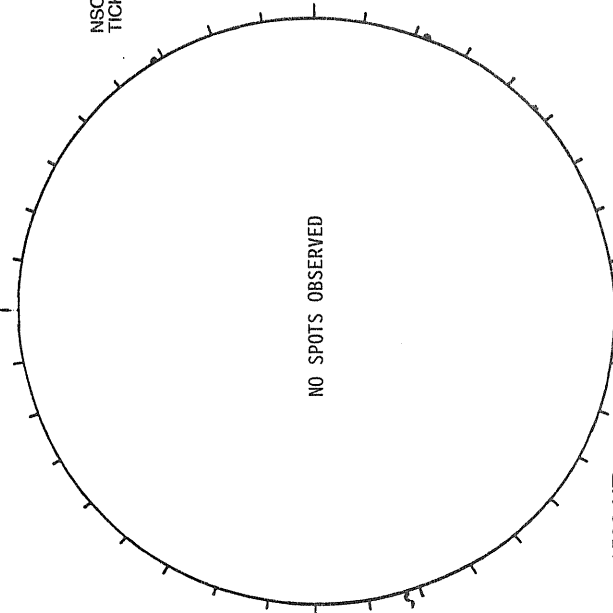


White = +7.5G
Black = -7.5G

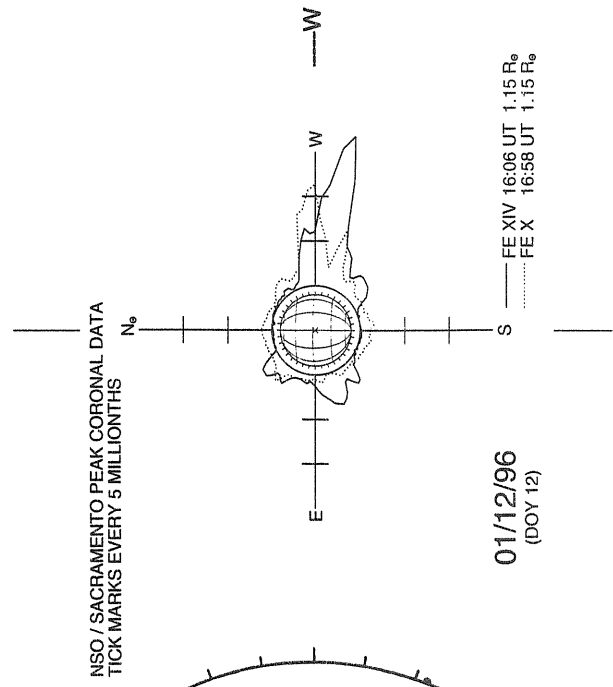
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)---

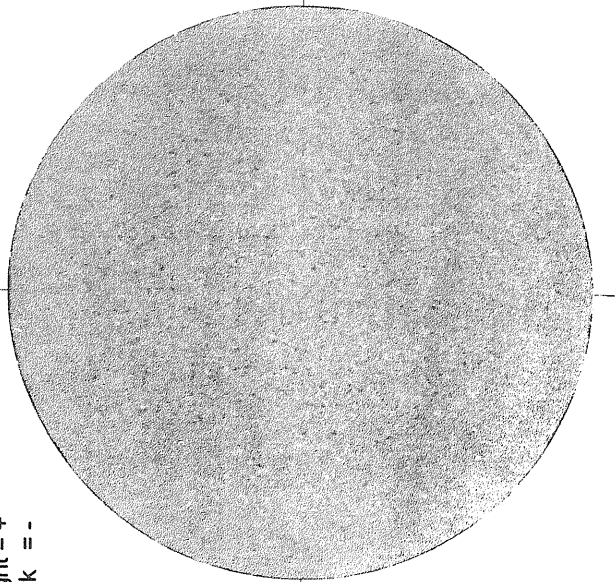


KITT PEAK MAGNETOGRAM

868.8 nm

Bright = +
Dark = -

N

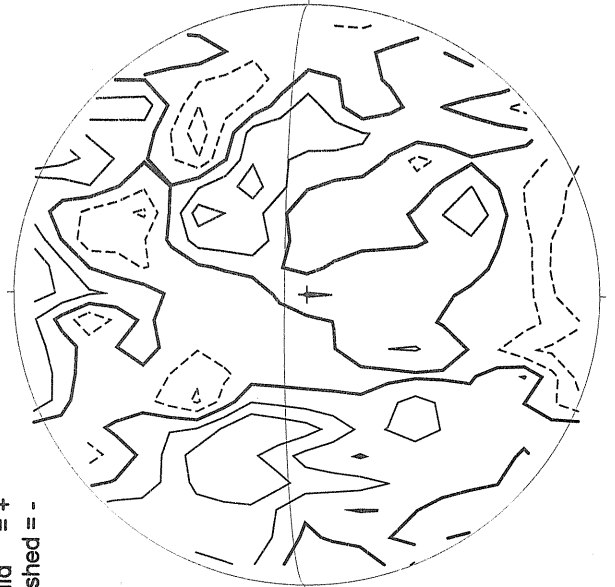


1618 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

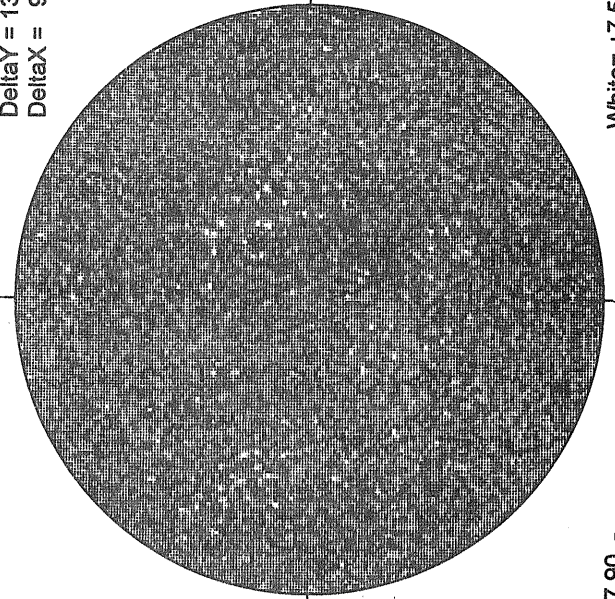


2257 UT

MT. WILSON MAGNETOGRAM

N

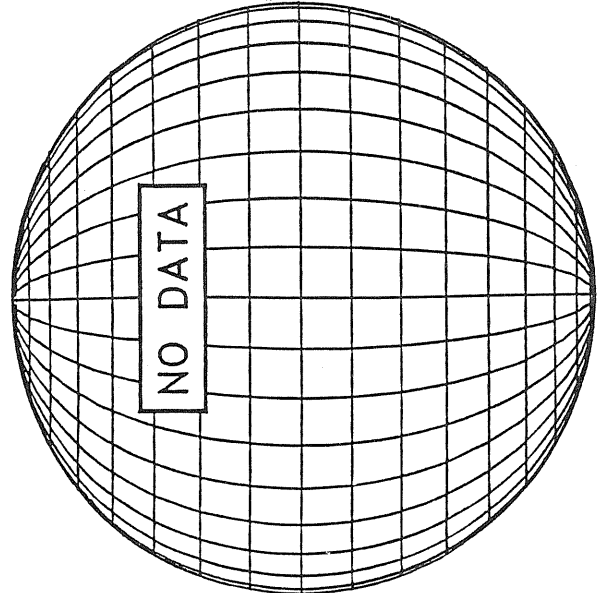
DeltaY = 13.1
DeltaX = 9.6



17.90 -
18.87 UT

White = +7.5G
Black = -7.5G

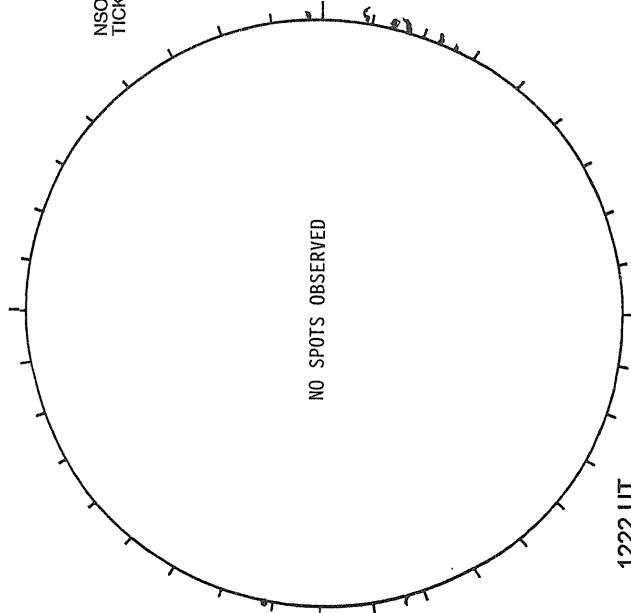
SACRAMENTO PEAK H-ALPHA



E

S

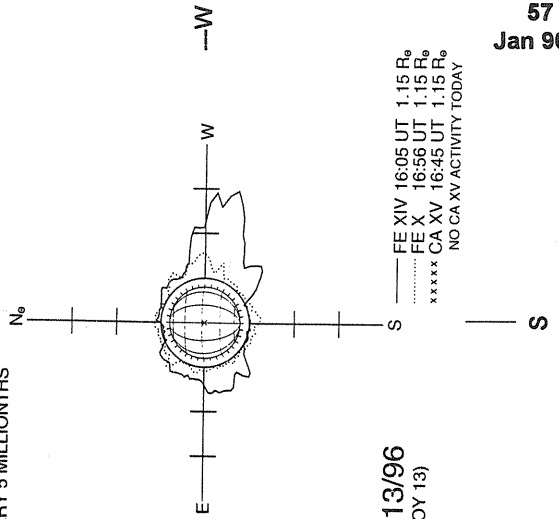
RAMEY SUNSPOT



1222 UT
0757 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)---

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



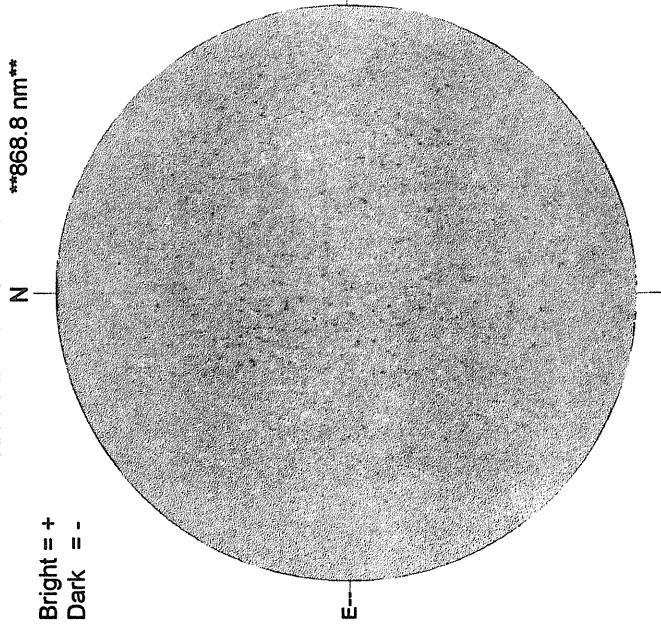
01/13/96
(DOY 13)

--- FE XIV 16:05 UT 1.15 R_g
..... FE X 16:56 UT 1.15 R_g
xxxxx CA XV 16:45 UT 1.15 R_g
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

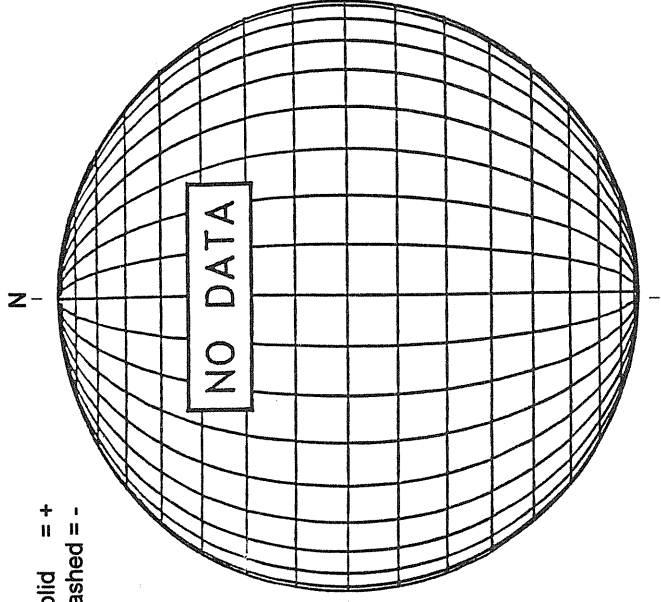
868.8 nm

Bright = +
Dark = -



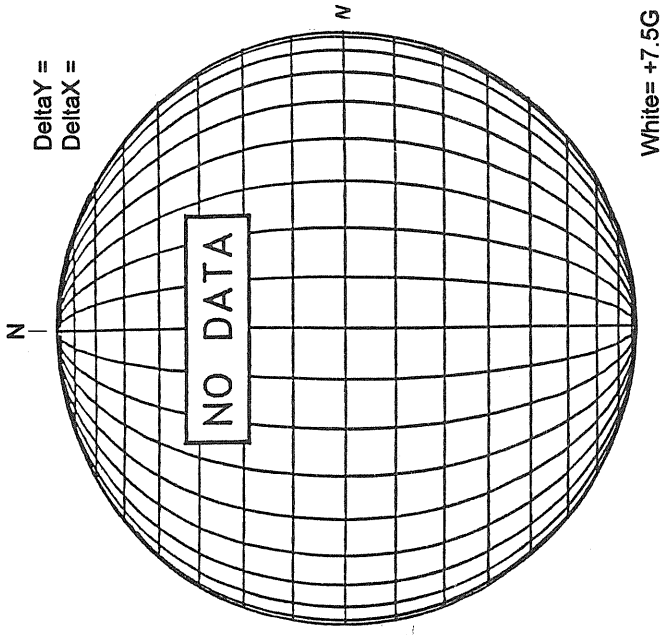
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



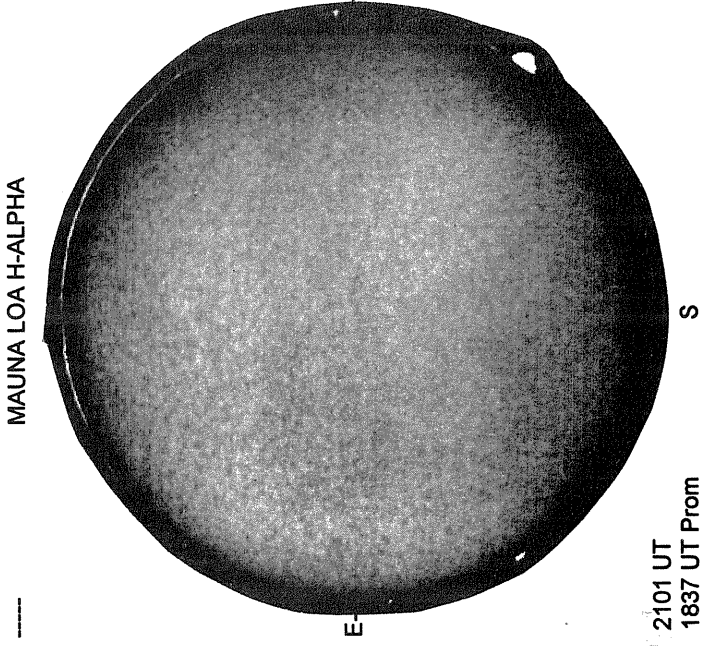
MT. WILSON MAGNETOGRAM

Delta Y =
Delta X =

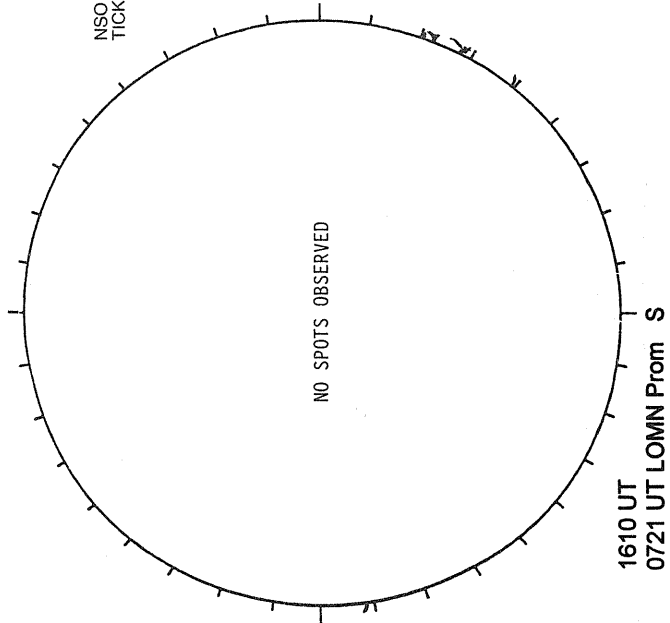


White = +7.5G
Black = -7.5G

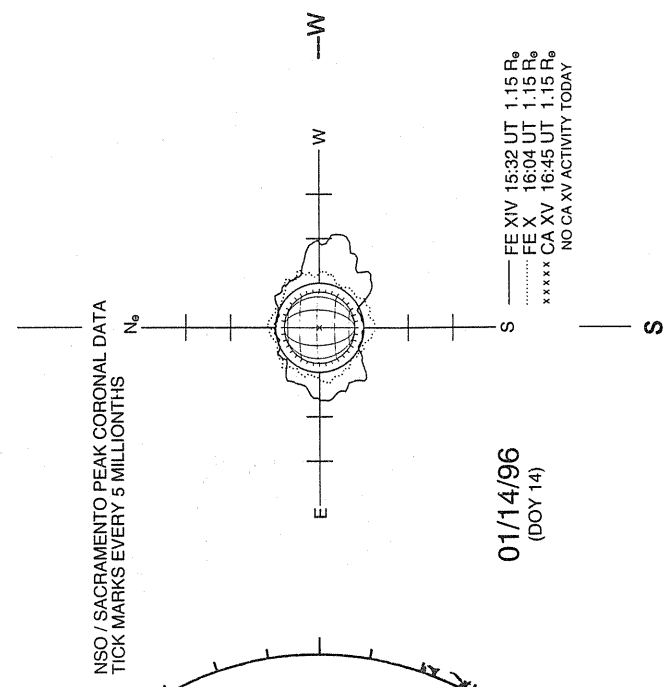
MAUNA LOA H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)---



01/14/96
(DOY 14)

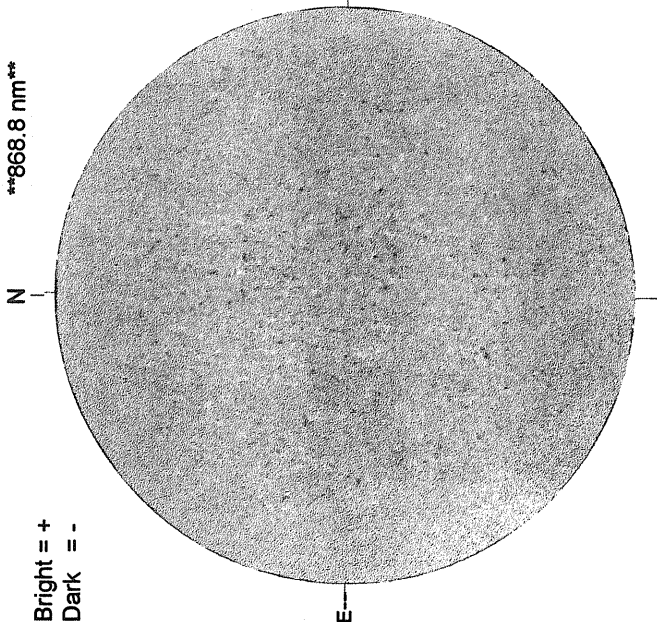
FE XIV 15:32 UT 1.15 R_o
FE X 16:04 UT 1.15 R_o
CA XV 16:45 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

JANUARY 19, 1996 (P = -4.36, B0 = -4.48, L0 = 21.11)

KITT PEAK MAGNETOGRAM

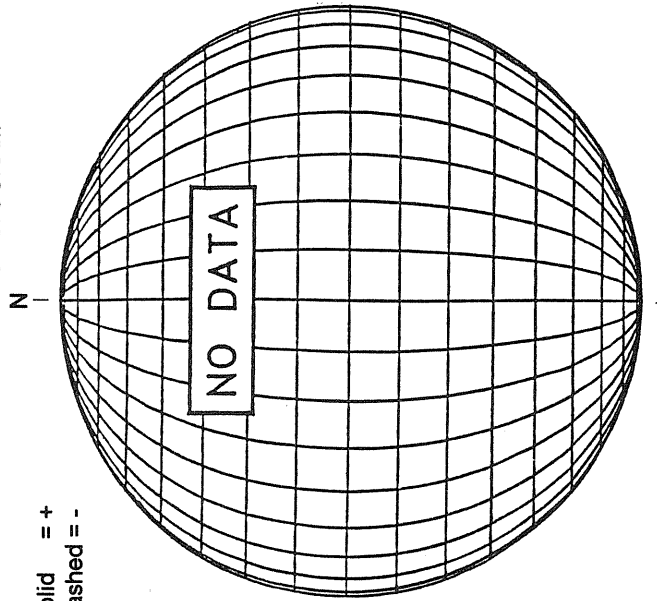
868.8 nm

Bright = +
Dark = -



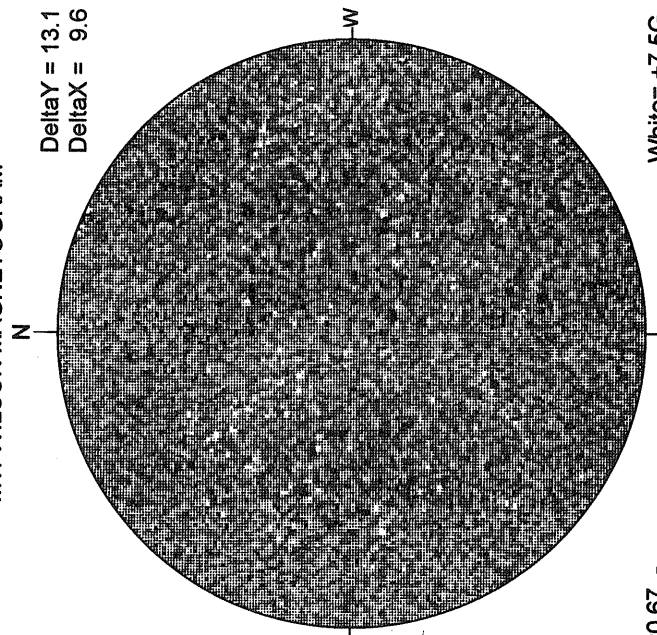
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

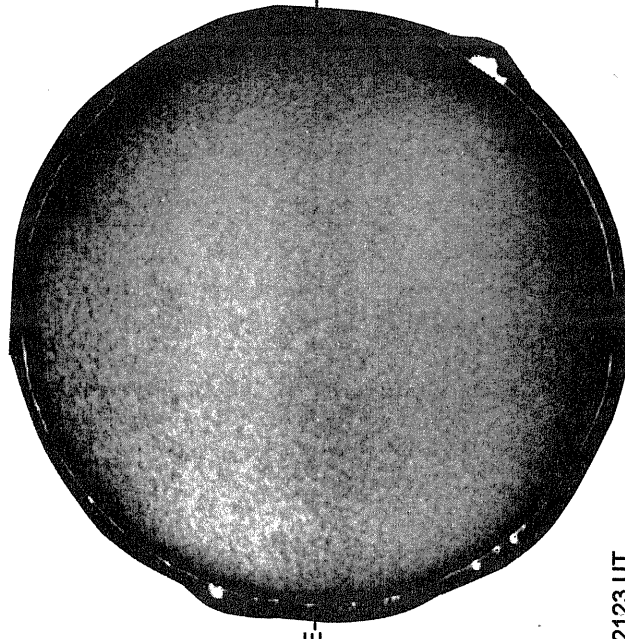
DeltaY = 13.1
DeltaX = 9.6



1712 UT

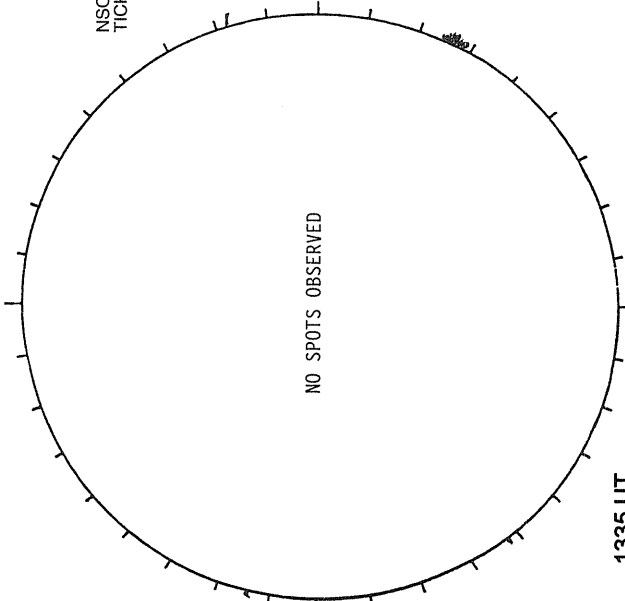
20.67 -
21.65 UT

MAUNA LOA H-ALPHA



2123 UT
2026 UT Prom

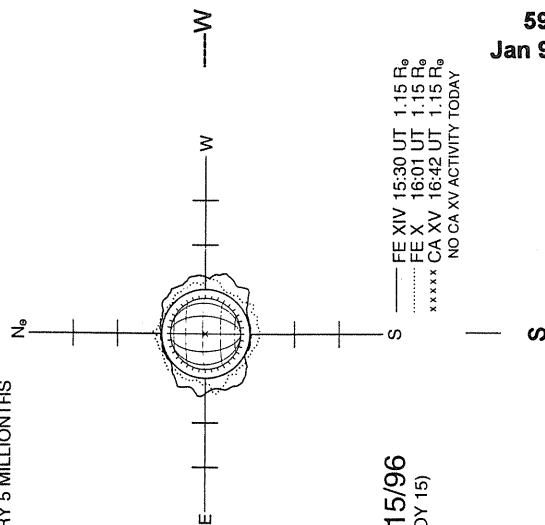
RAMEY SUNSPOT



1335 UT
0739 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)---

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

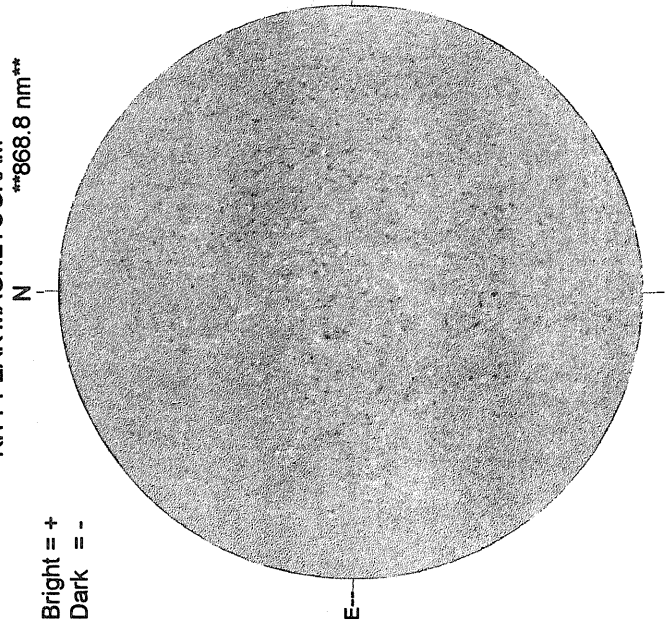


01/15/96
(DOY 15)

KITT PEAK MAGNETOGRAM

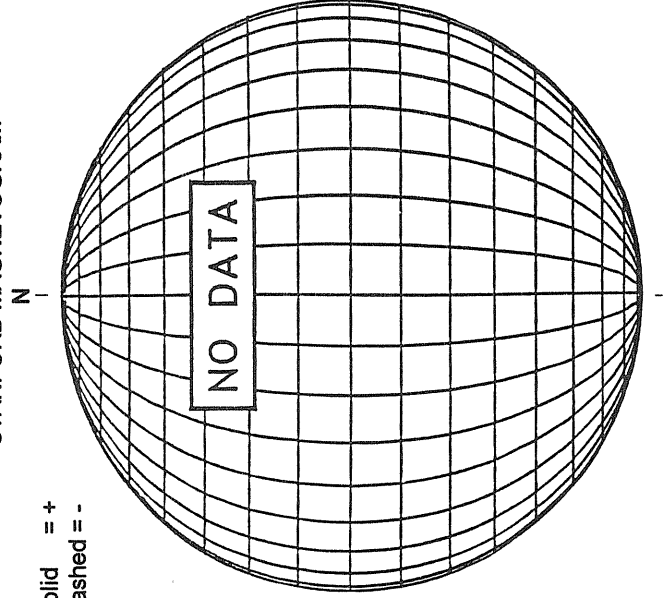
868.8 nm

Bright = +
Dark = -



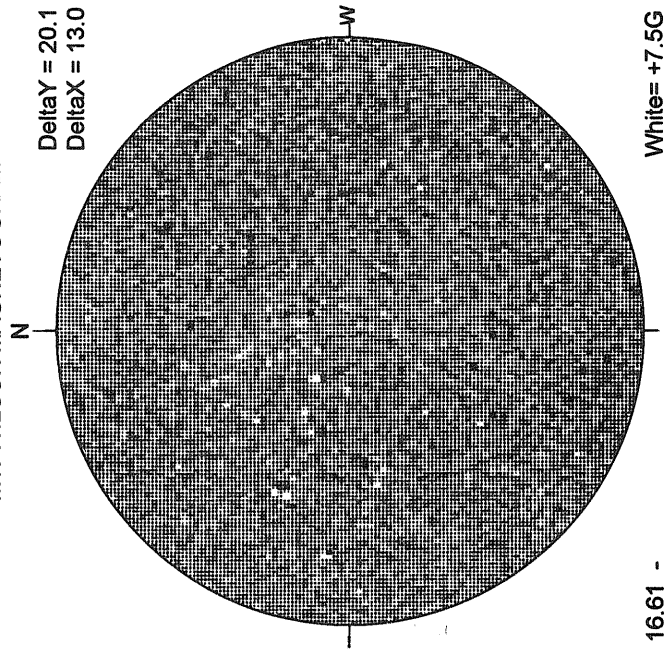
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



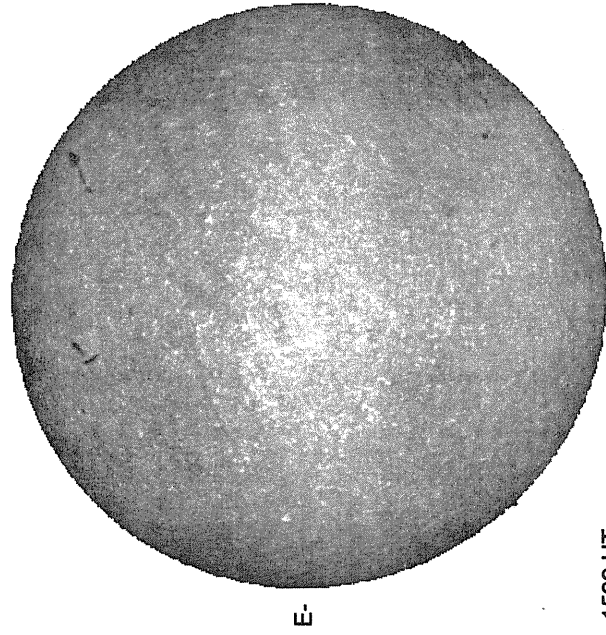
MT. WILSON MAGNETOGRAM

Delta Y = 20.1
Delta X = 13.0

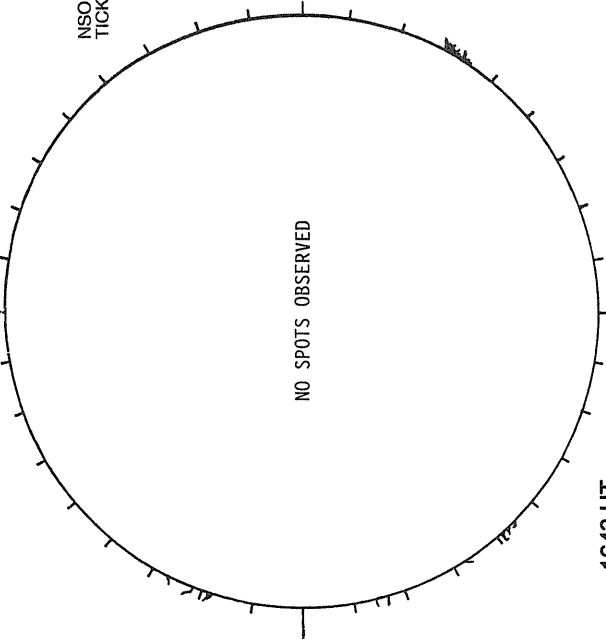


White = +7.5G
Black = -7.5G

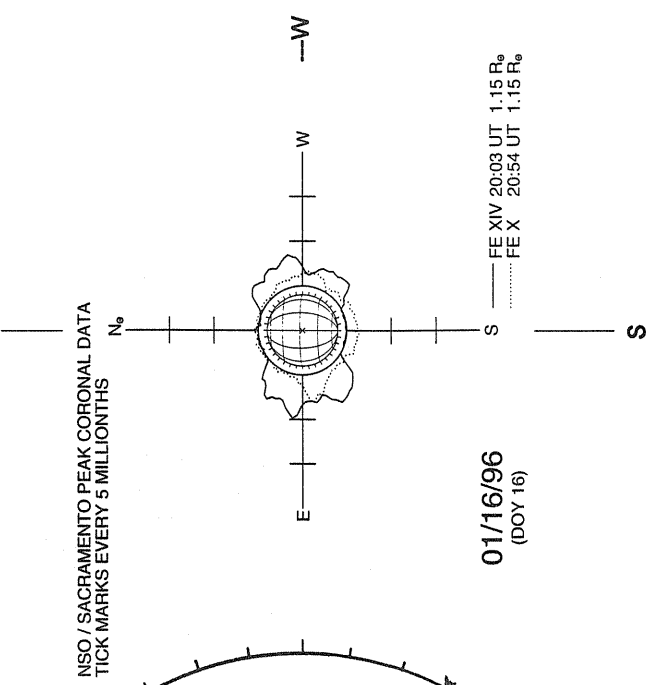
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----



NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

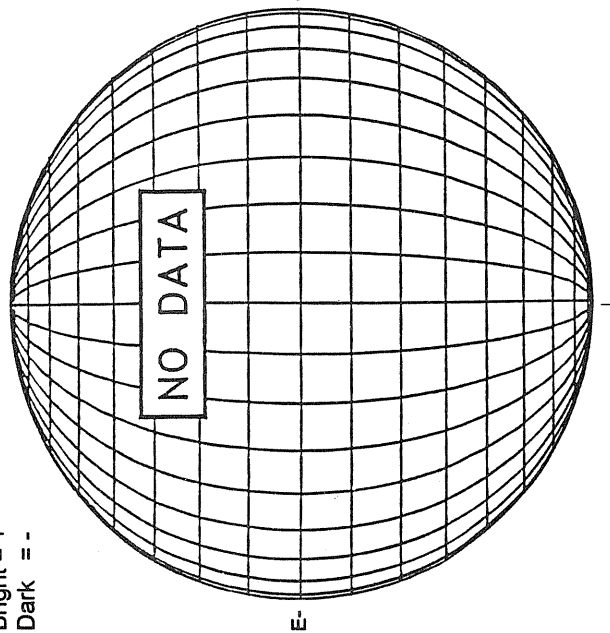
01/16/96
(DOY 16)

FE XIV 20:03 UT 1.15 R_o
FE X 20:54 UT 1.15 R_o

KITT PEAK MAGNETOGRAM

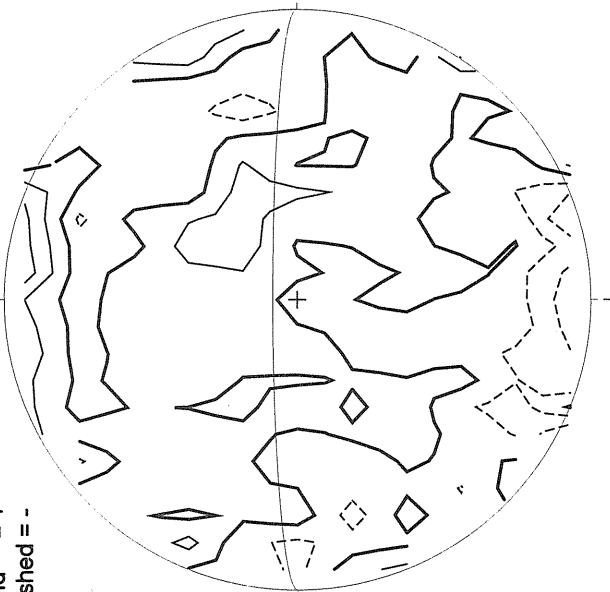
***868.8 nm**

Bright = +
Dark = -



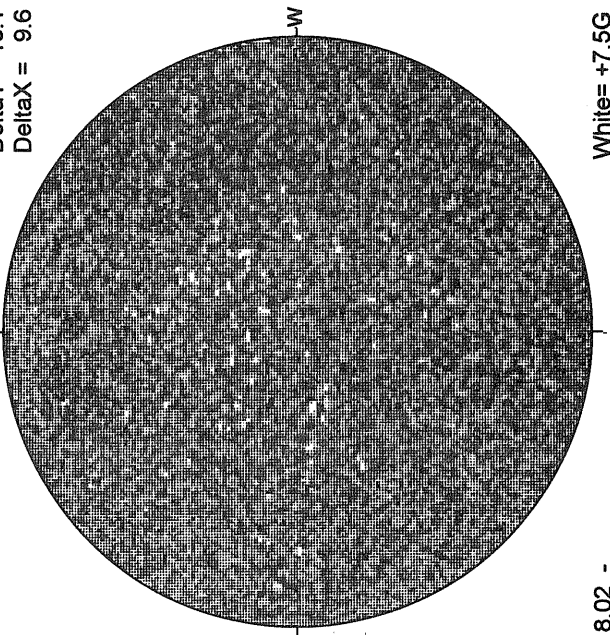
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

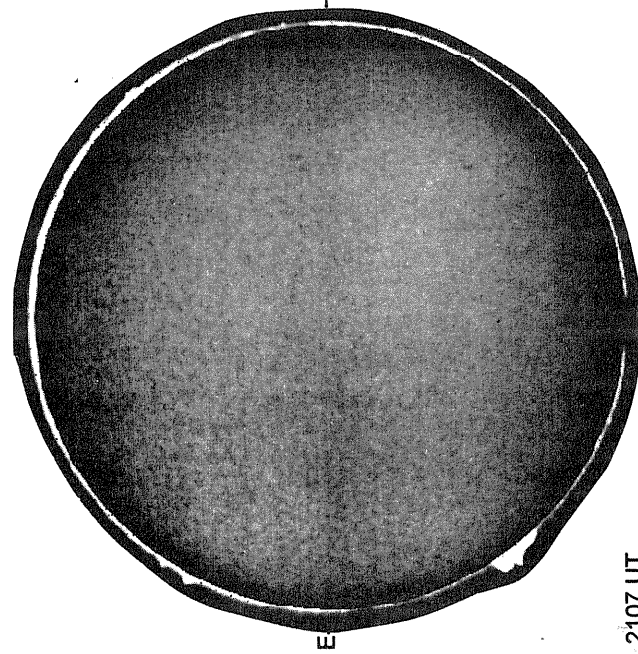
DeltaY = 13.1
DeltaX = 9.6



White = +7.5G
Black = -7.5G

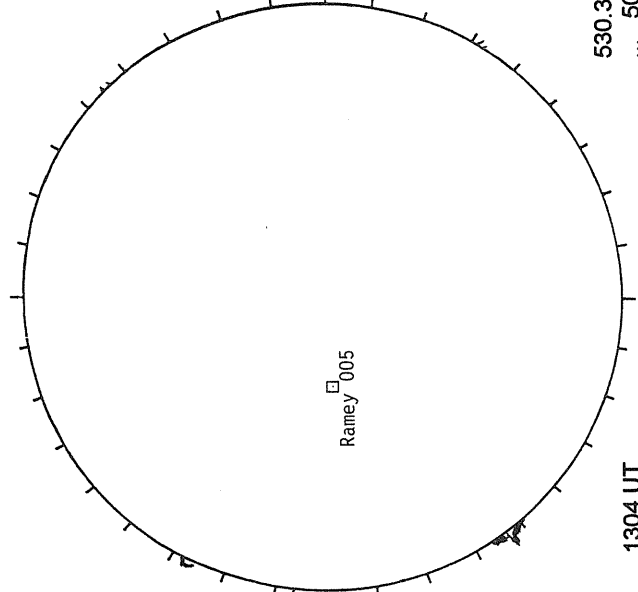
18.02 -
18.99 UT

MAUNA LOA H-ALPHA



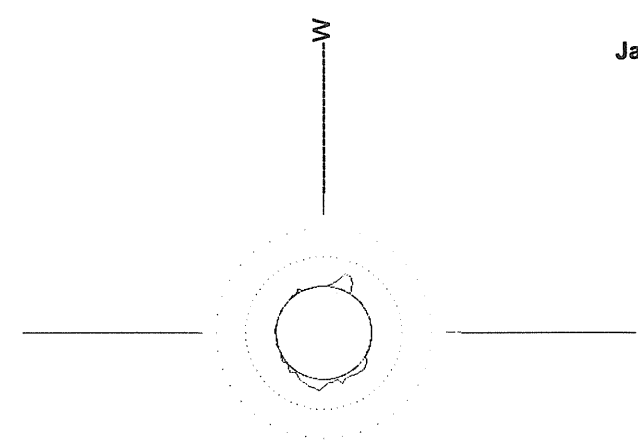
2107 UT
2116 UT Prom

RAMEY SUNSPOT



1304 UT
0927 UT LOMN Prom

LOMNICKY PEAK CORONA (1.04 Radii)---

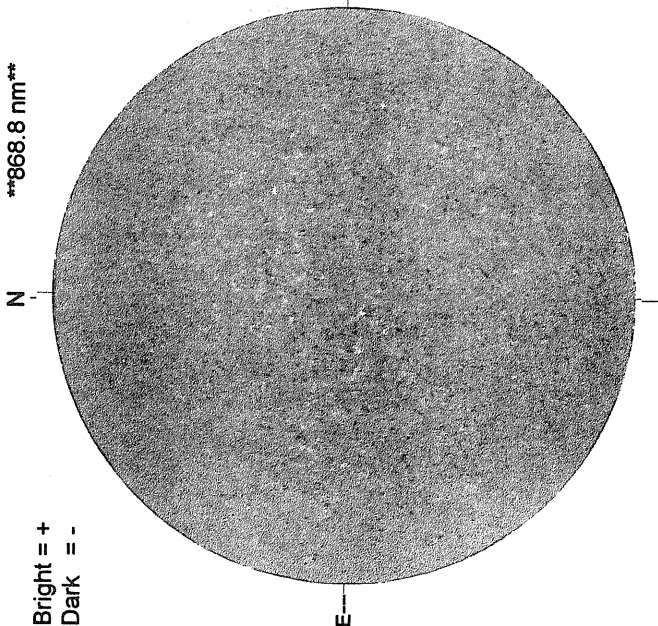


530.3 nm, 1101 UT
... 50 abs. units
.. 100 abs. units

KITT PEAK MAGNETOGRAM

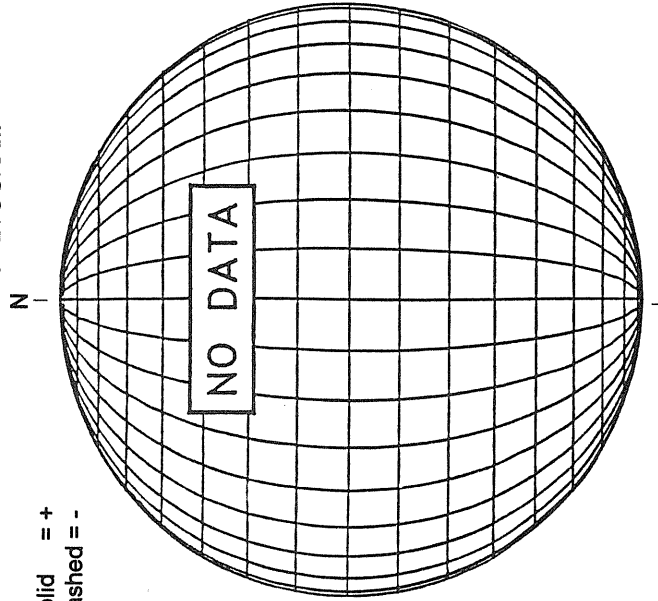
868.8 nm

Bright = +
Dark = -



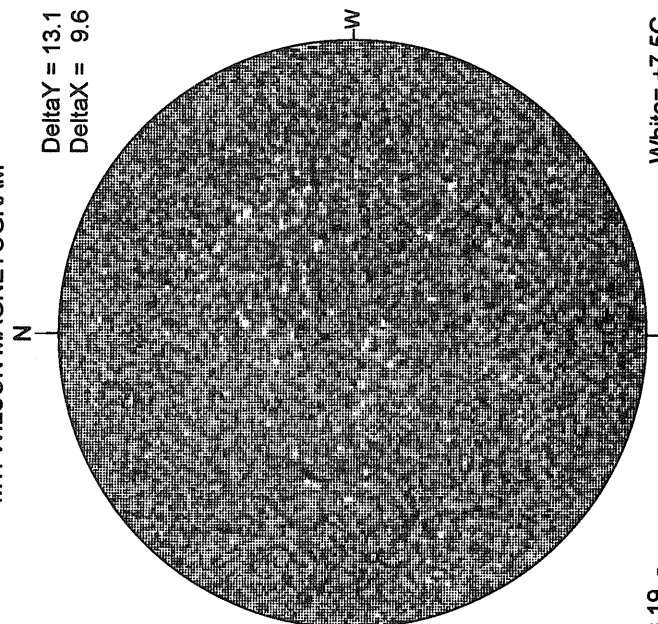
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



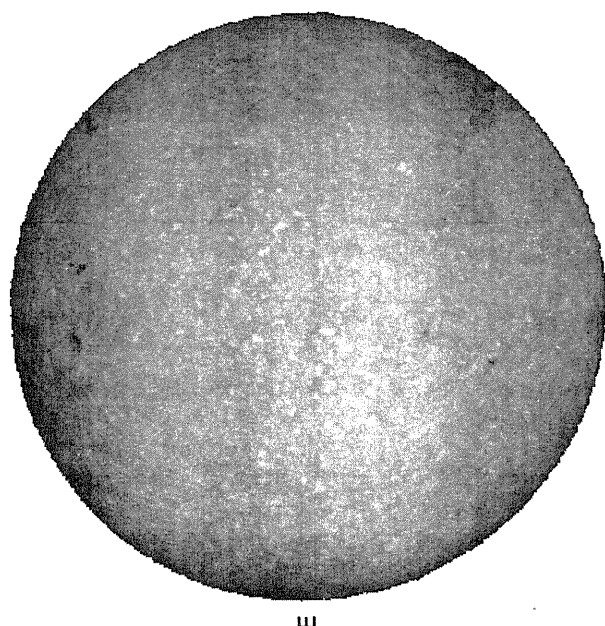
MT. WILSON MAGNETOGRAM

DeltaY = 13.1
DeltaX = 9.6

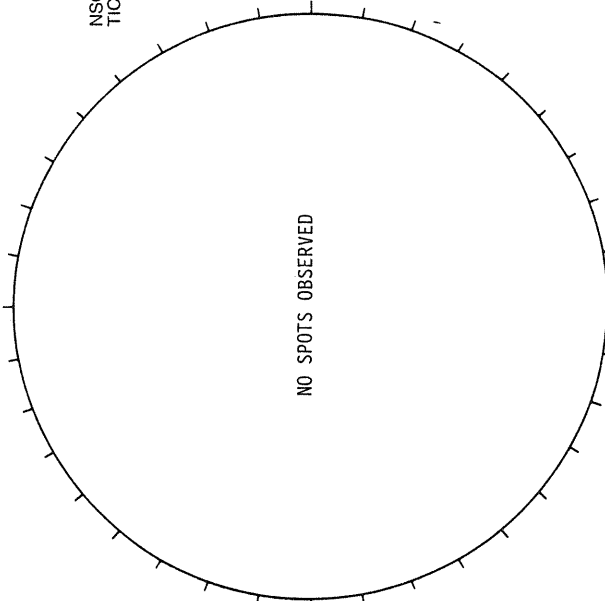


White = +7.5G
Black = -7.5G

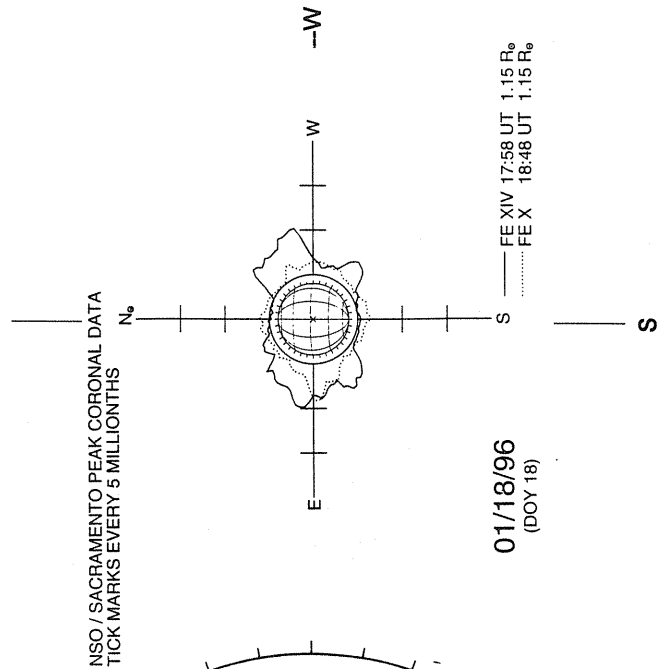
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----



NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

01/18/96
(DOY 18)

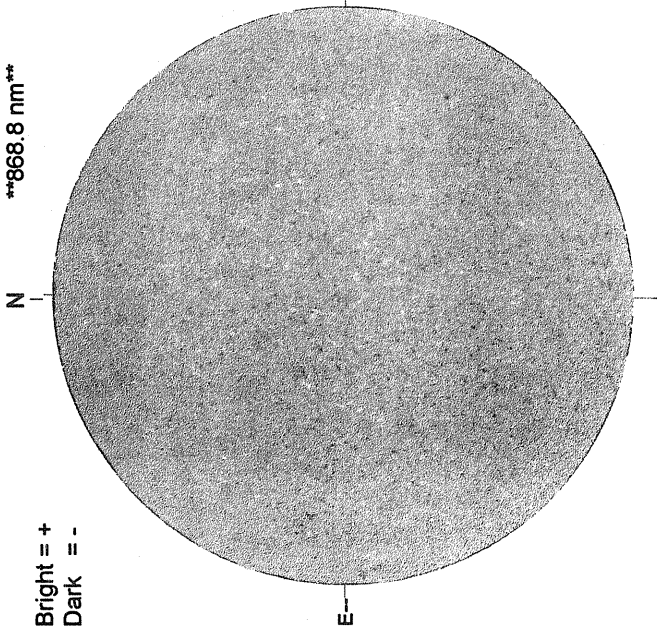
FE XIV 17:58 UT 1.15 R_o
FE X 18:48 UT 1.15 R_o

DATE: JAN 19, 1996 (1996-01-19, DOY = 19, 1996-01-19)

KITT PEAK MAGNETOGRAM

868.8 nm

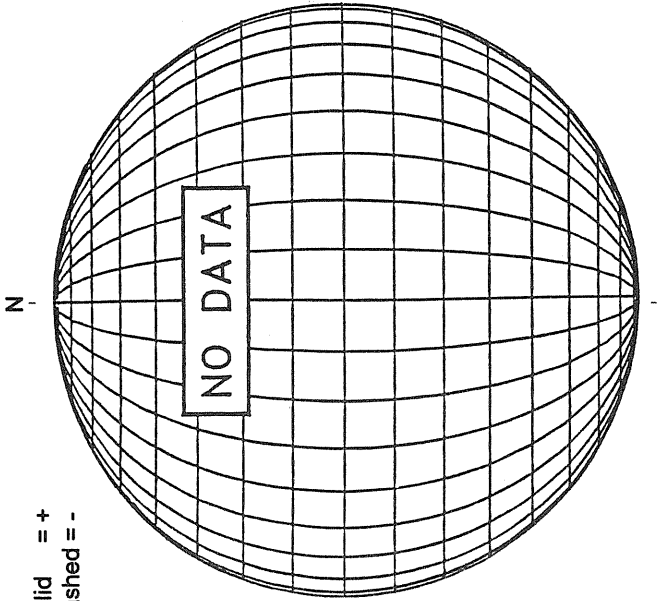
Bright = +
Dark = -



1625 UT

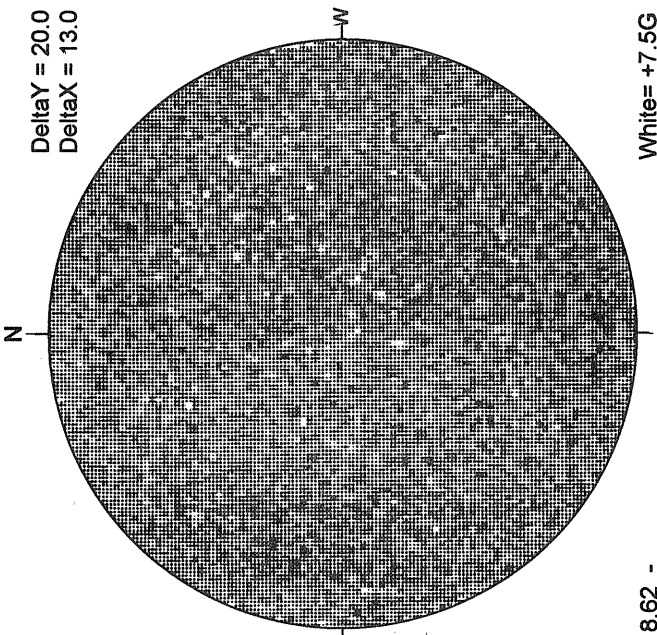
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

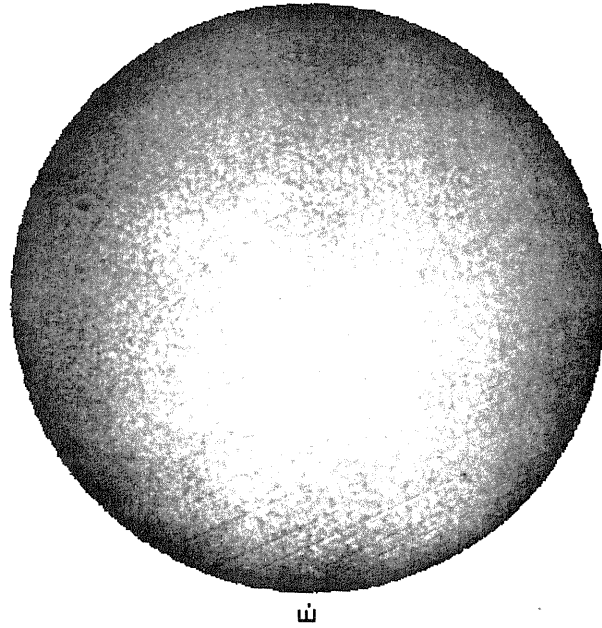
DeltaY = 20.0
DeltaX = 13.0



18.62 -
19.05 UT

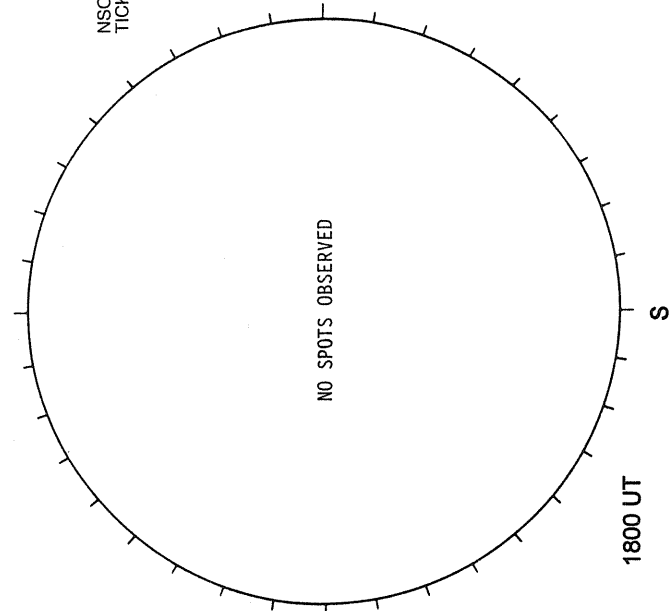
White = +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



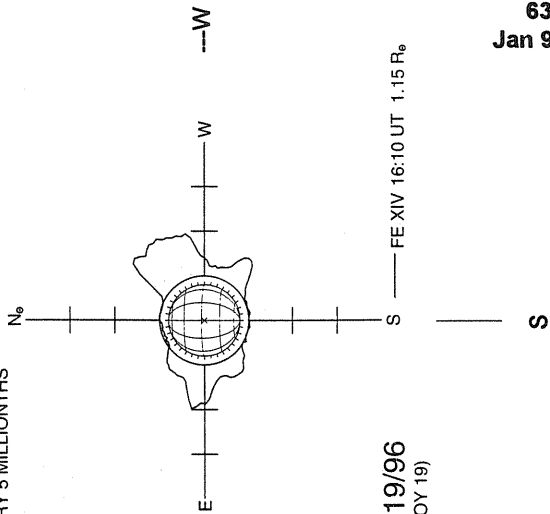
1537 UT

RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



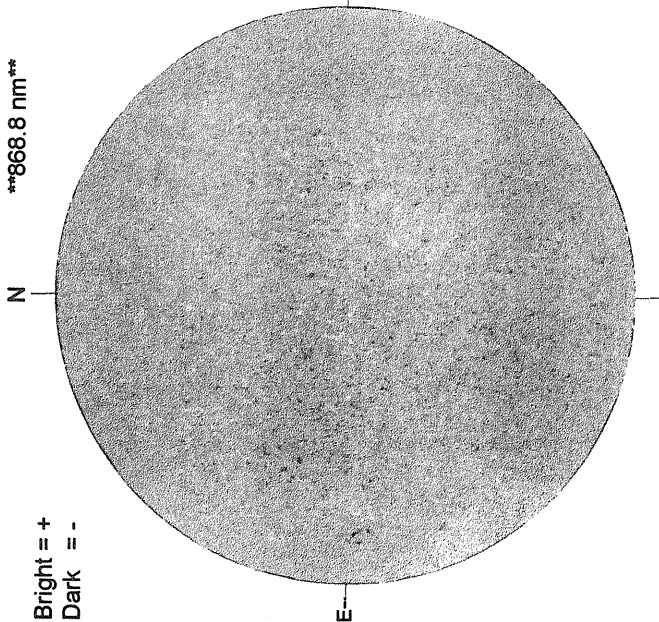
01/19/96
(DOY 19)

FE XIV 16:10 UT 1.15 R_o

KITT PEAK MAGNETOGRAM

***868.8 nm**

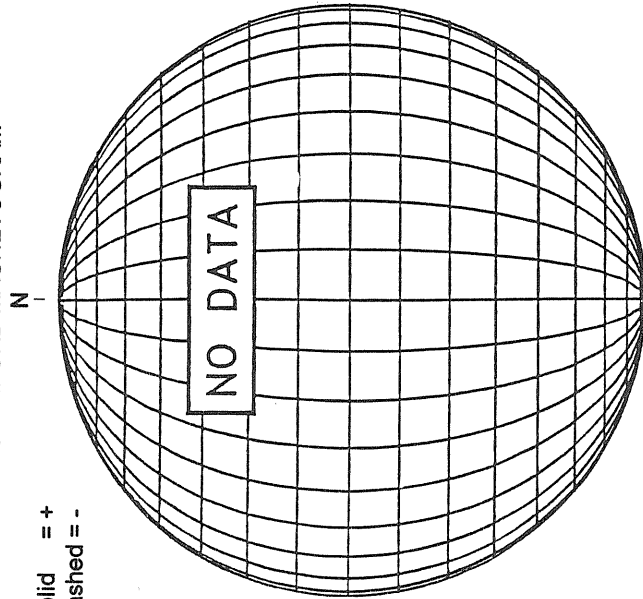
Bright = +
Dark = -



1617 UT

STANFORD MAGNETOGRAM

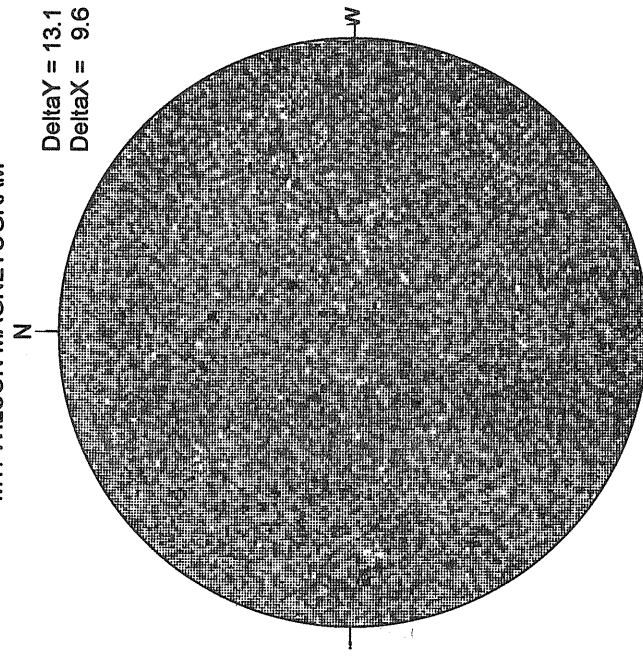
Solid = +
Dashed = -



NO DATA

MT. WILSON MAGNETOGRAM

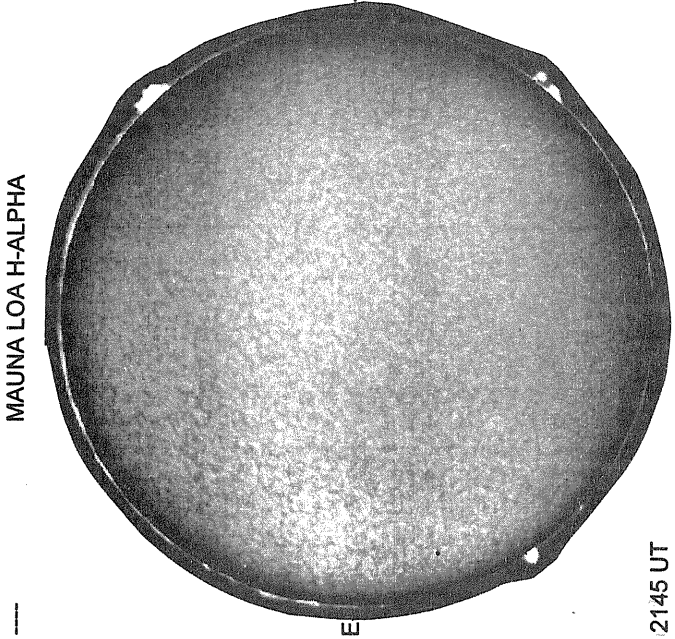
DeltaY = 13.1
DeltaX = 9.6



17.42 -
18.39 UT

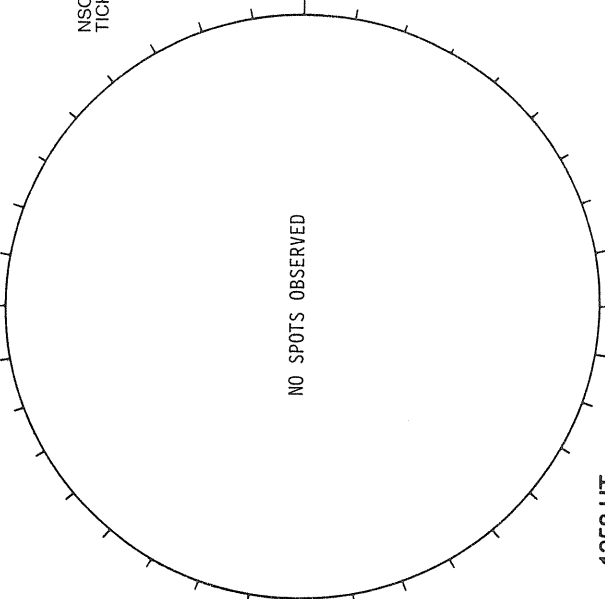
White = +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



2145 UT
2133 UT Prom

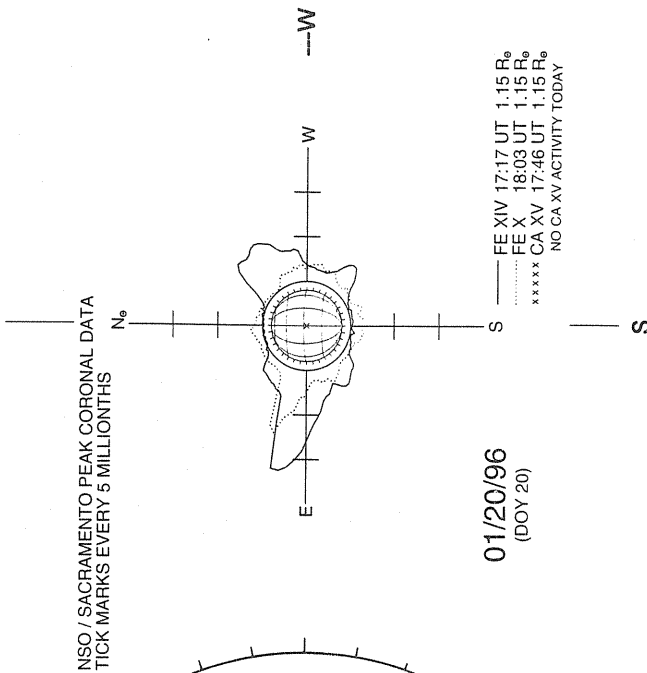
RAMEY SUNSPOT



NO SPOTS OBSERVED

1258 UT

SACRAMENTO PEAK CORONA (1.15 Radii)---



NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS

01/20/96
(DOY 20)

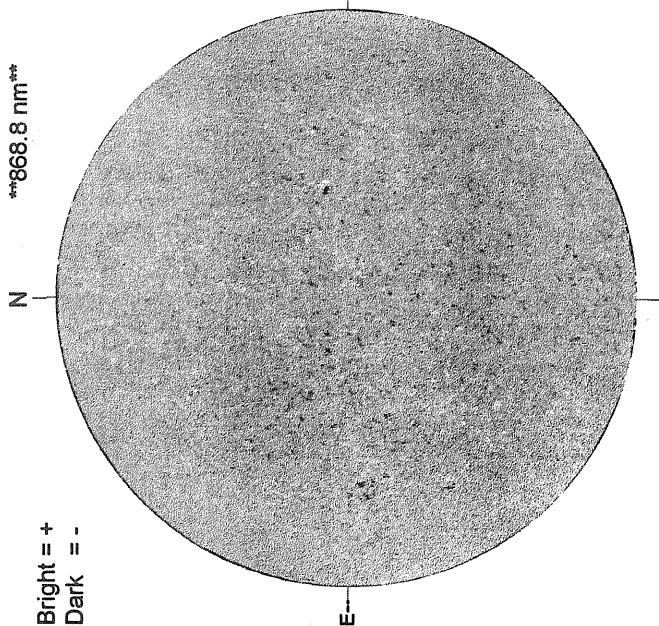
--- FE XIV 17:17 UT 1.15 R_o
--- FE X 18:03 UT 1.15 R_o
***** CA XV 17:46 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

SAWCACT 21, 1996 (14:16, E0 = 5.00, E0 = 306.11)

KITT PEAK MAGNETOGRAM

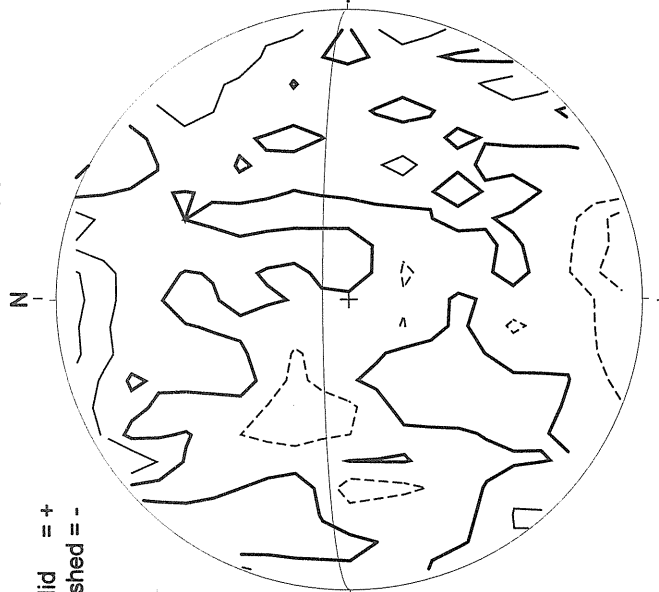
868.8 nm^{FeI}

Bright = +
Dark = -



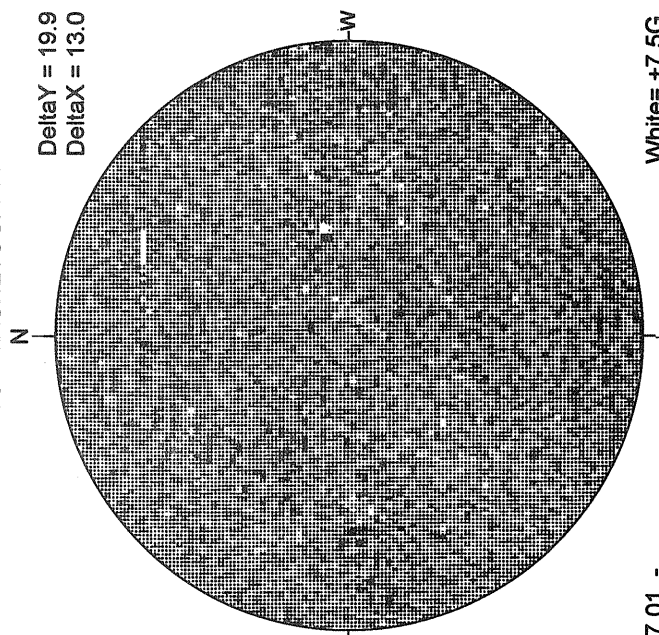
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



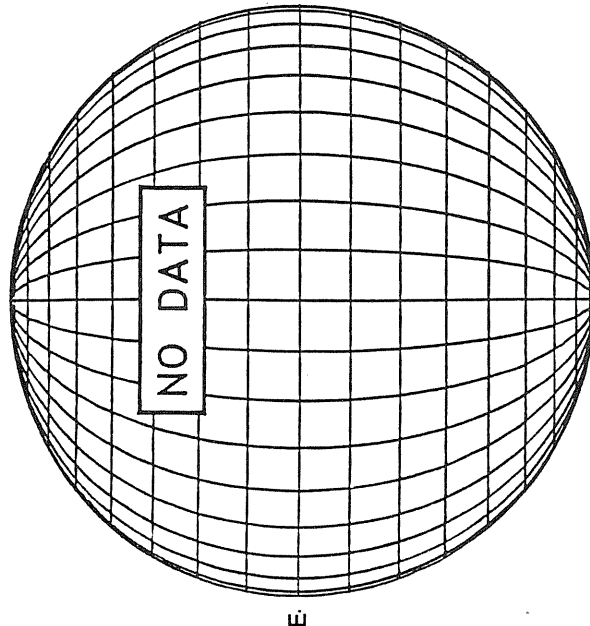
MT. WILSON MAGNETOGRAM

Delta Y = 19.9
Delta X = 13.0

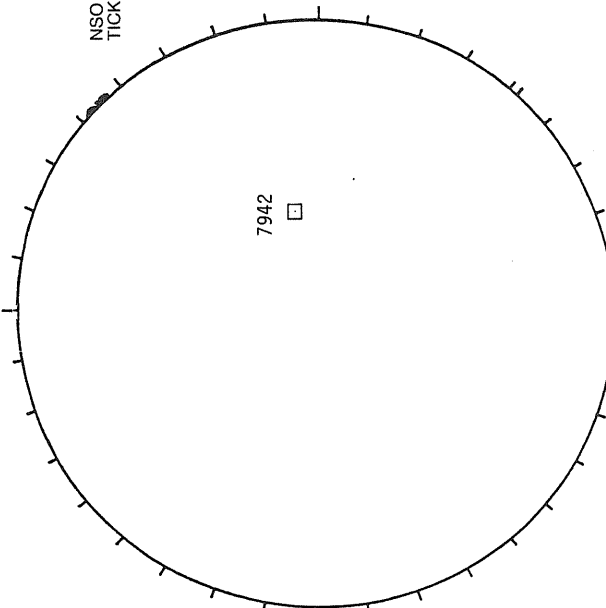


White = +7.5G
Black = -7.5G

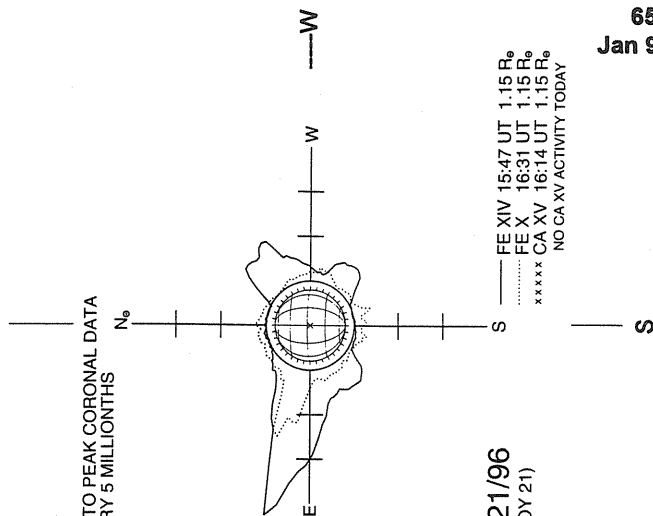
MAUNA LOA H-ALPHA



RAMEY SUNSPOT



NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



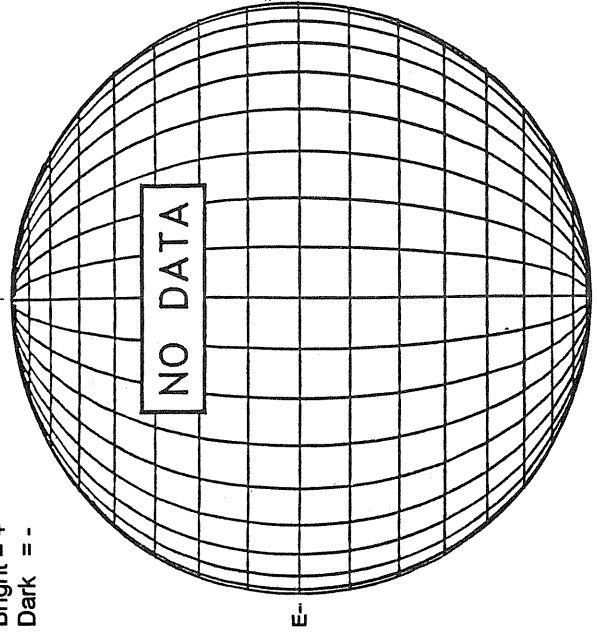
01/21/96
(DOY 21)

— FE XIV 15:47 UT 1.15 R_o
... FE X 16:31 UT 1.15 R_o
xxxxx CA XV 16:14 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

868.8 nm

Bright = +
Dark = -



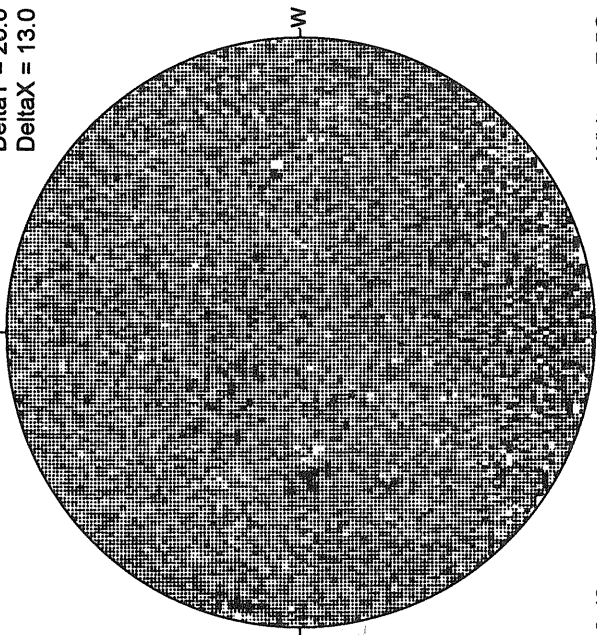
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

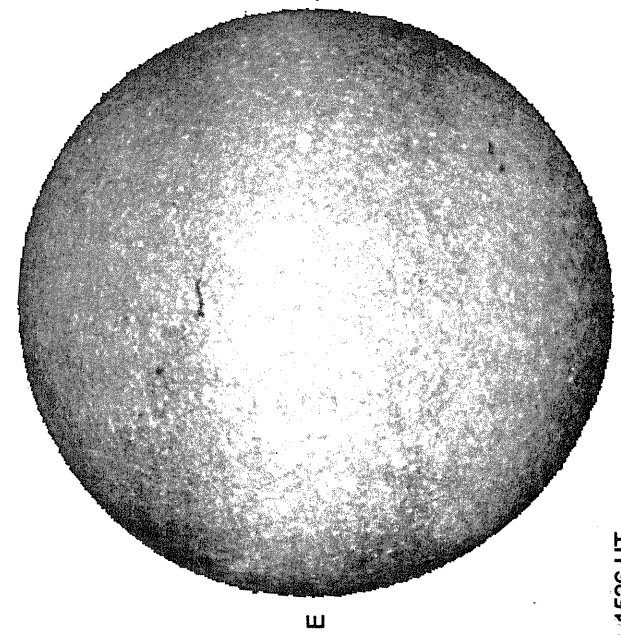
Delta Y = 20.0
Delta X = 13.0



16.43 -
16.85 UT

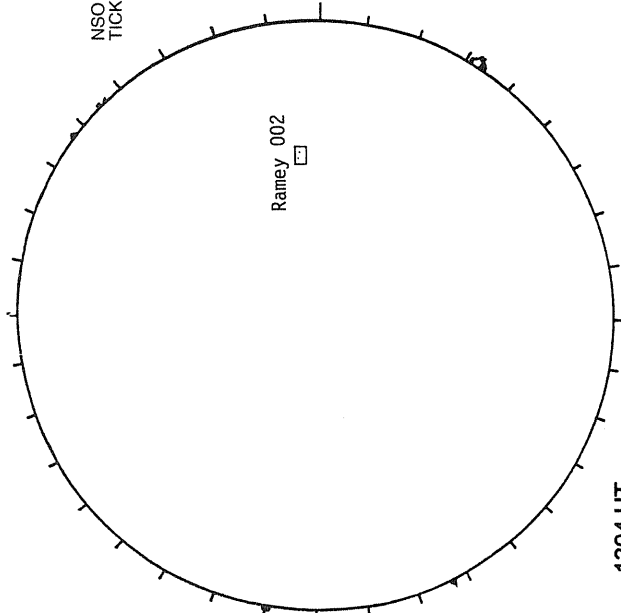
White = +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



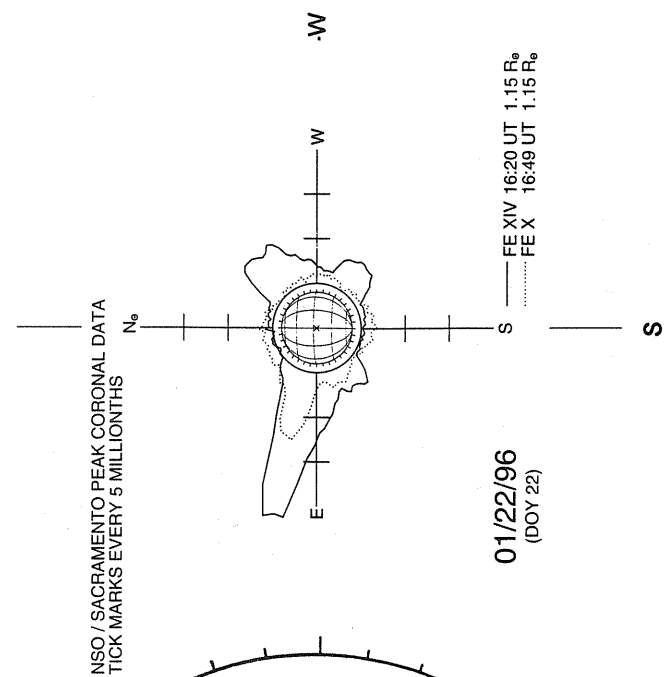
1526 UT

RAMEY SUNSPOT



1304 UT
0741 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)---



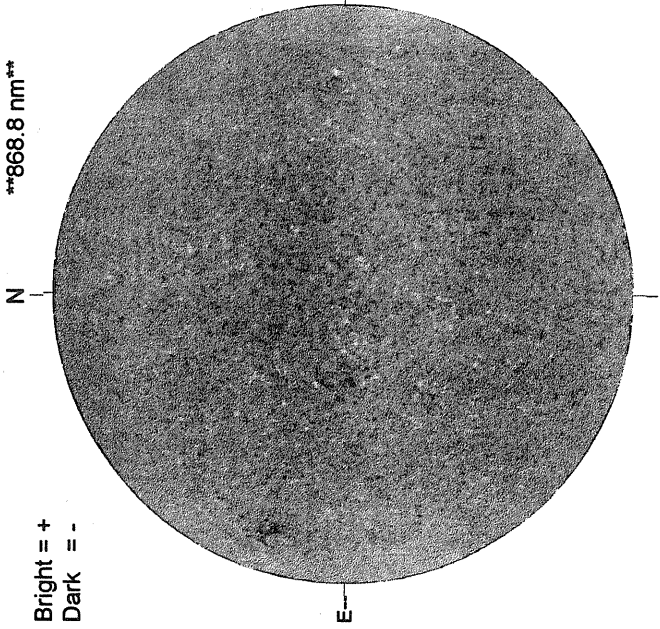
01/22/96
(DOY 22)

FE XIV 16:20 UT 1.15 R_o
FE X 16:49 UT 1.15 R_o

KITT PEAK MAGNETOGRAM

868.8 nm

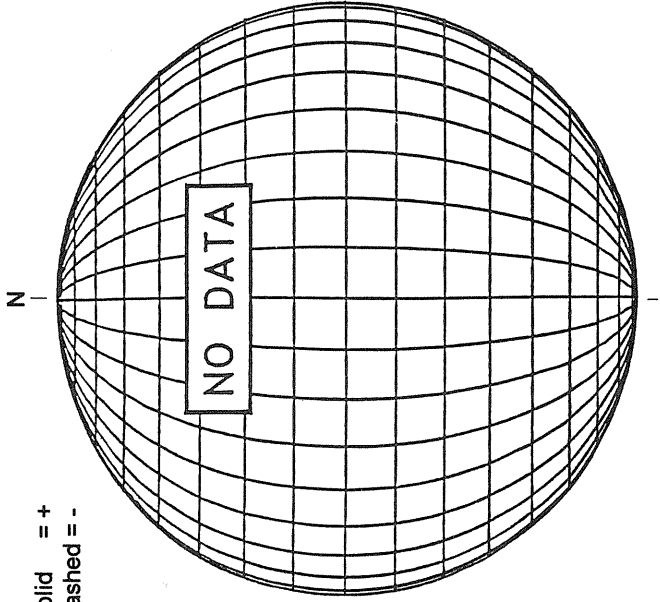
Bright = +
Dark = -



1658 UT

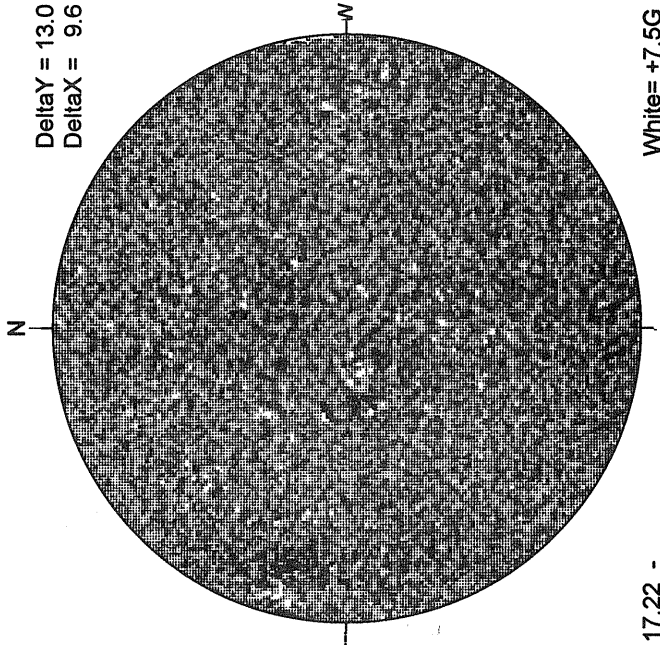
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

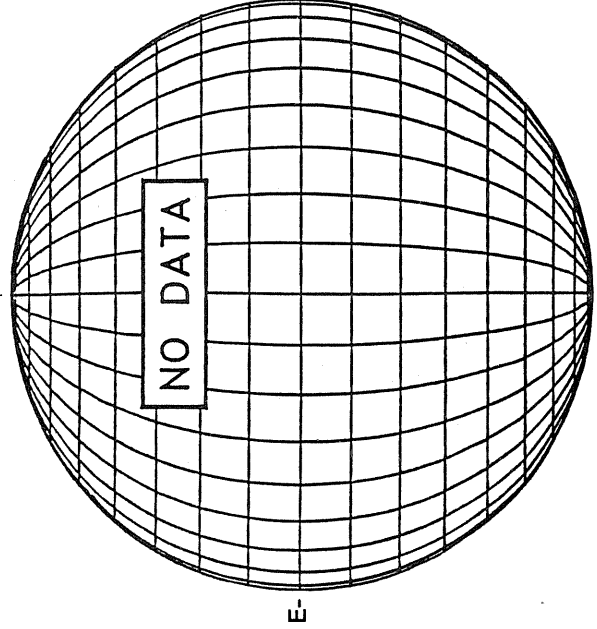
DeltaY = 13.0
DeltaX = 9.6



17.22 -
18.19 UT

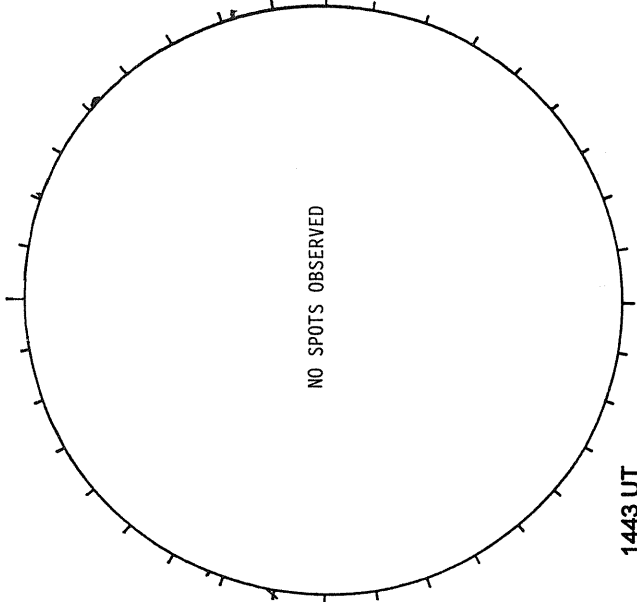
White = +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



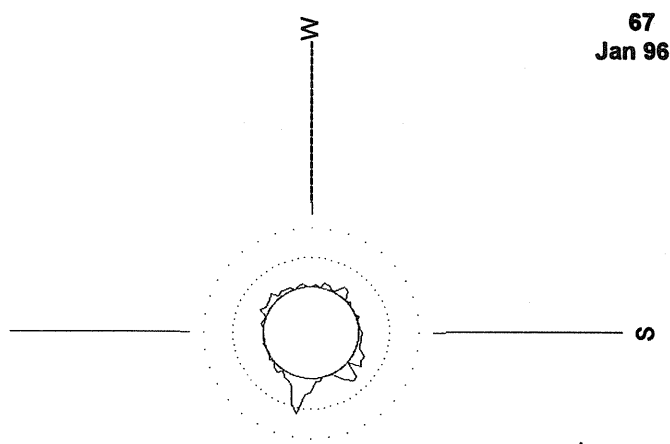
S

RAMEY SUNSPOT



1443 UT
0751 UT LOMN Prom S

LOMNICKY PEAK CORONA (1.04 Radii)----



530.3 nm, 0808 UT
... 50 abs. units
.. 100 abs. units

JANUARY 24, 1996 (P= -8.48, Bo = -5.33, Lo = 268.61)

68
Jan 96

KITT PEAK MAGNETOGRAM

***868.8 nm**

Bright = +
Dark = -

Solid = +
Dashed = -

STANFORD MAGNETOGRAM

NO DATA

MT. WILSON MAGNETOGRAM

Delta Y = 13.0
Delta X = 9.6

1728 UT

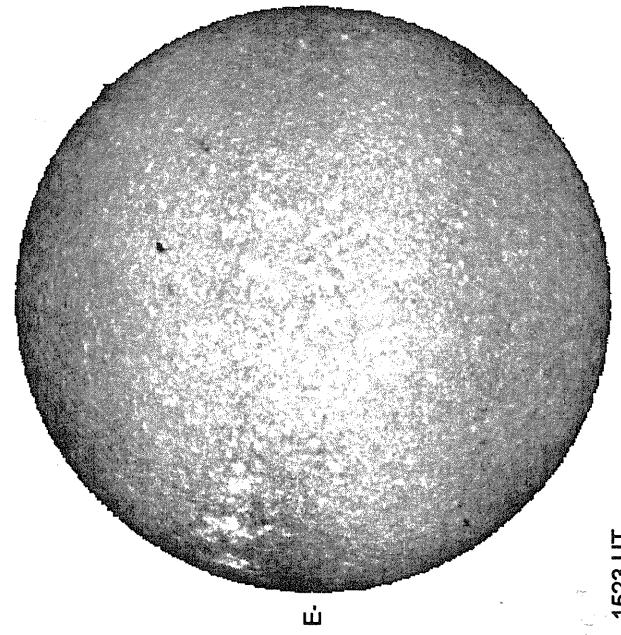
19.09 -
20.06 UT

White = +7.5G
Black = -7.5G

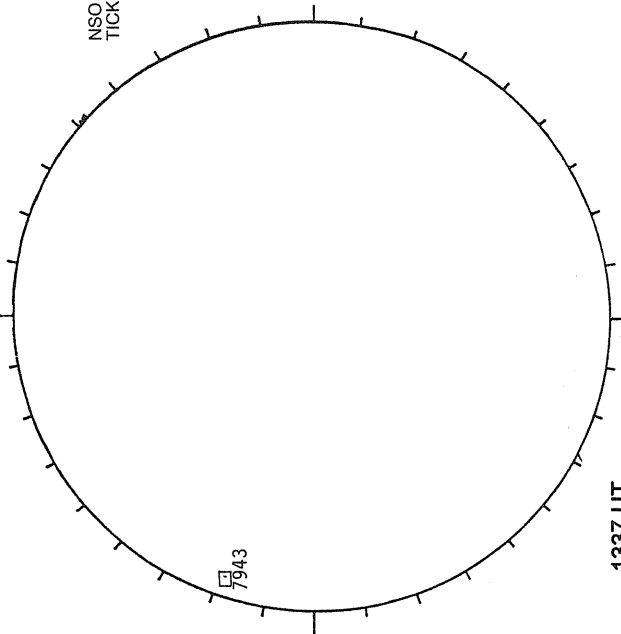
SACRAMENTO PEAK H-ALPHA

RAMEY SUNSPOT

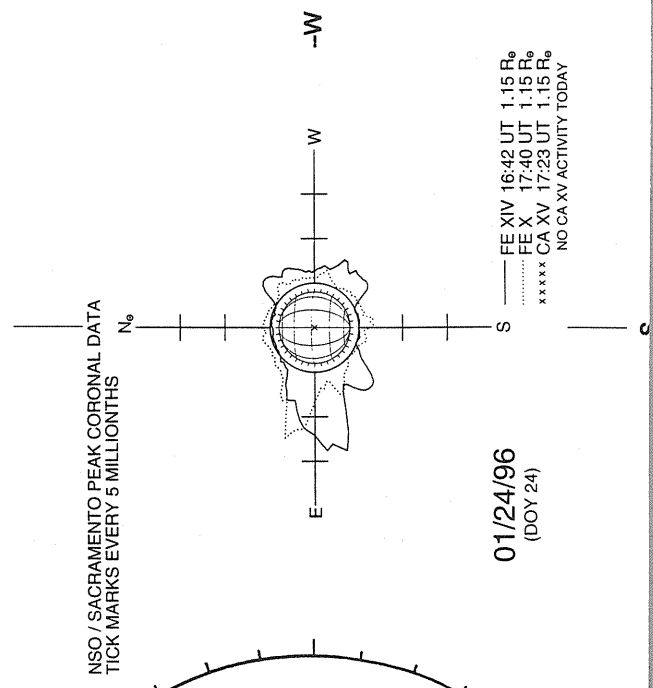
SACRAMENTO PEAK CORONA (1.15 Radii)---



1523 UT



1337 UT

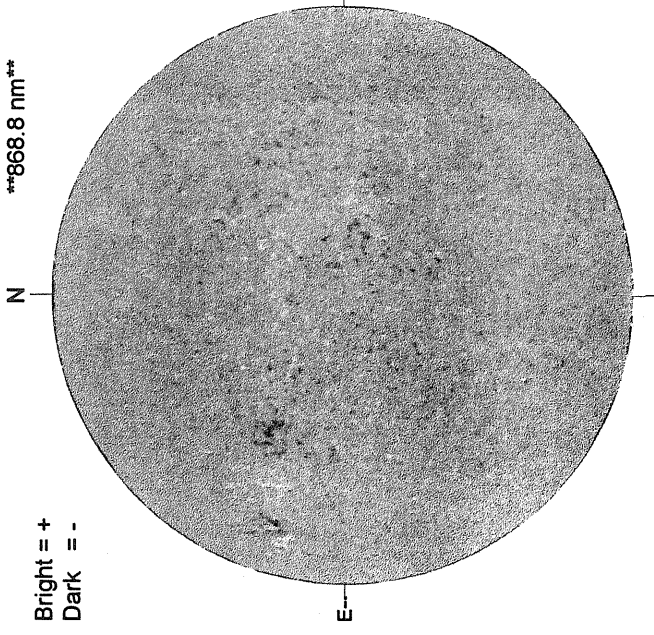


01/24/96
(DOY 24)

KITT PEAK MAGNETOGRAM

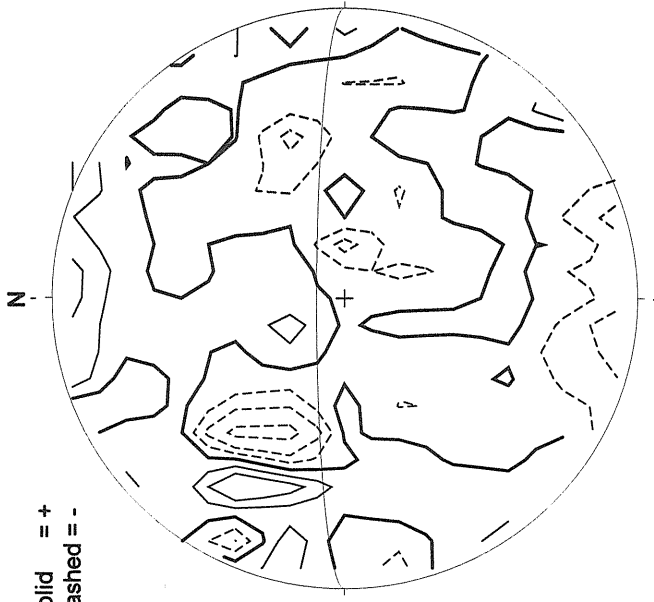
868.8 nm

Bright = +
Dark = -



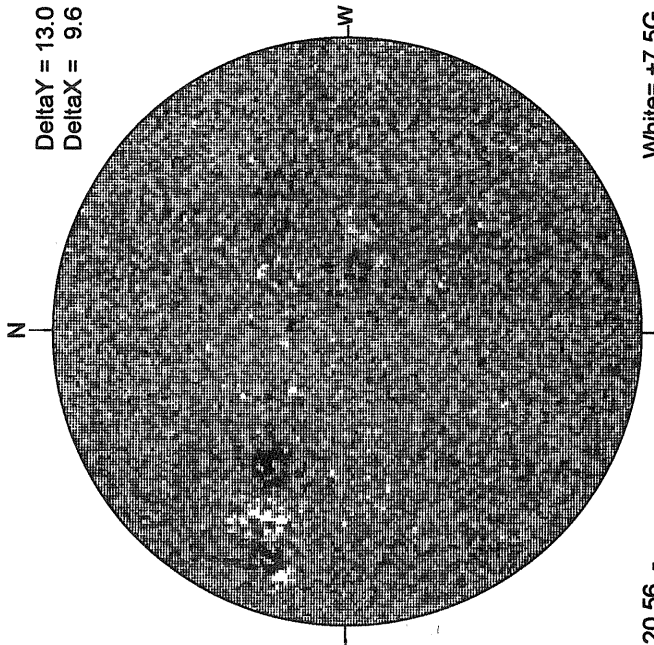
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



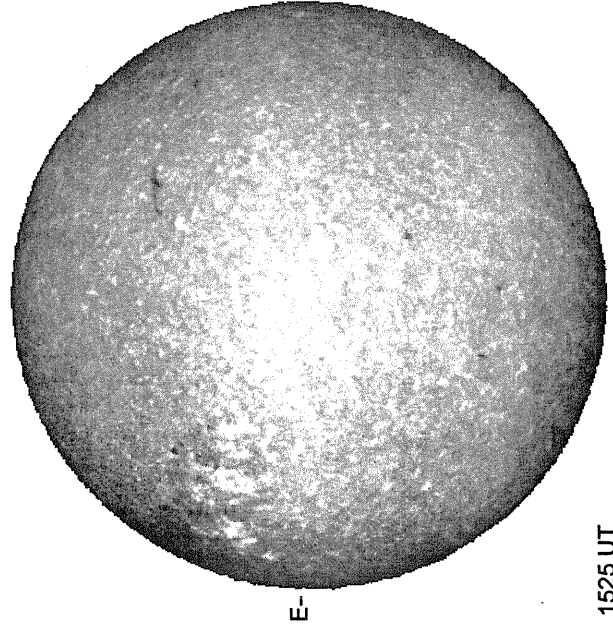
MT. WILSON MAGNETOGRAM

Delta Y = 13.0
Delta X = 9.6

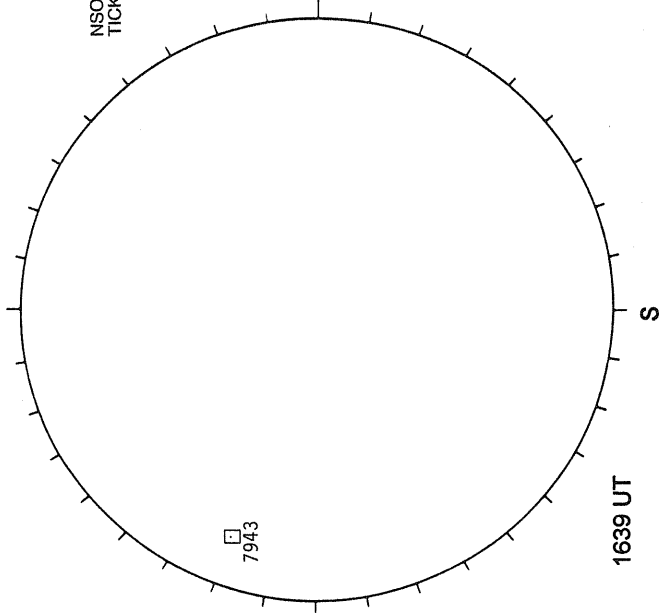


White = +7.5G
Black = -7.5G

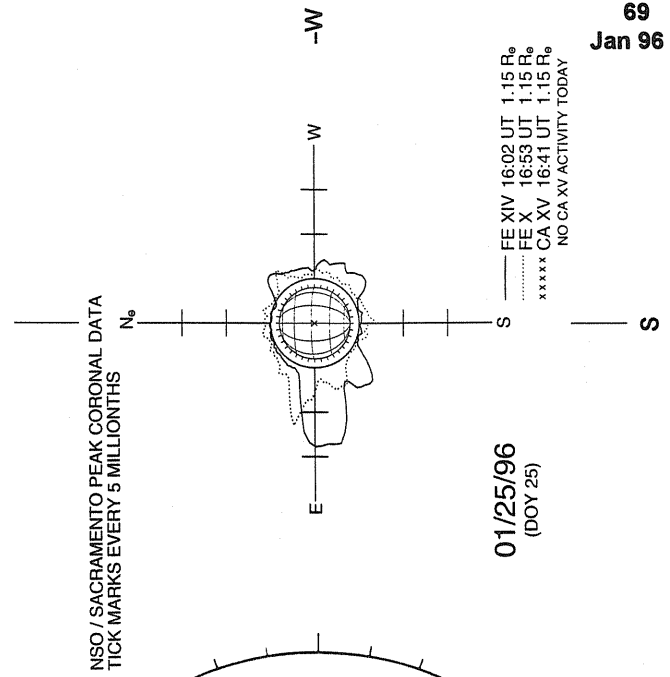
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)---



FE XIV 16:02 UT 1.15 R_o
FE X 16:53 UT 1.15 R_o
***** CA XV 16:41 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

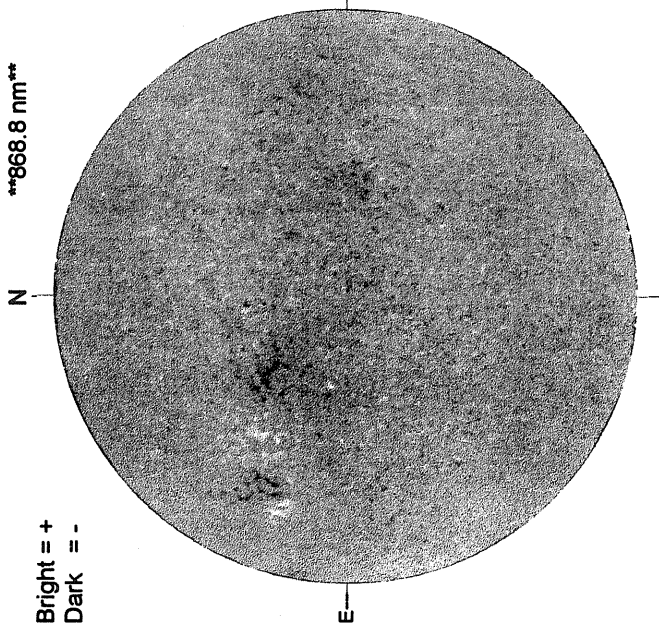
JANUARY 26, 1996 (P= -9.36, Bo = -5.50, Lo = 242.28)

70
Jan 96

KITT PEAK MAGNETOGRAM

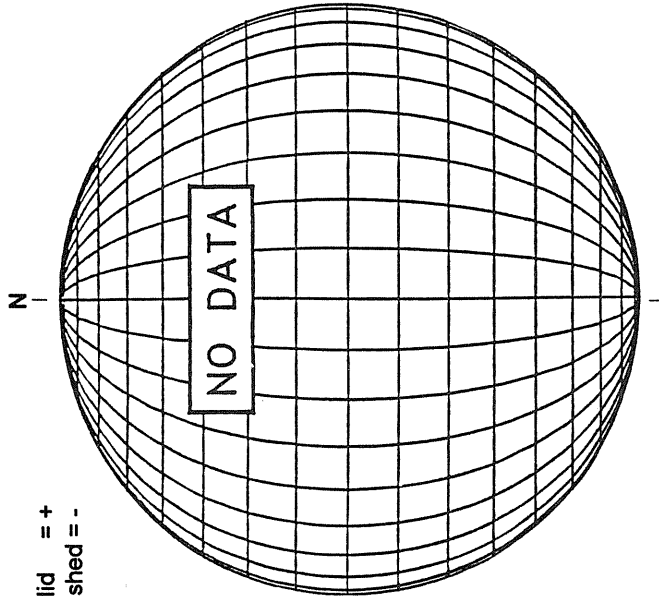
868.8 nm

Bright = +
Dark = -



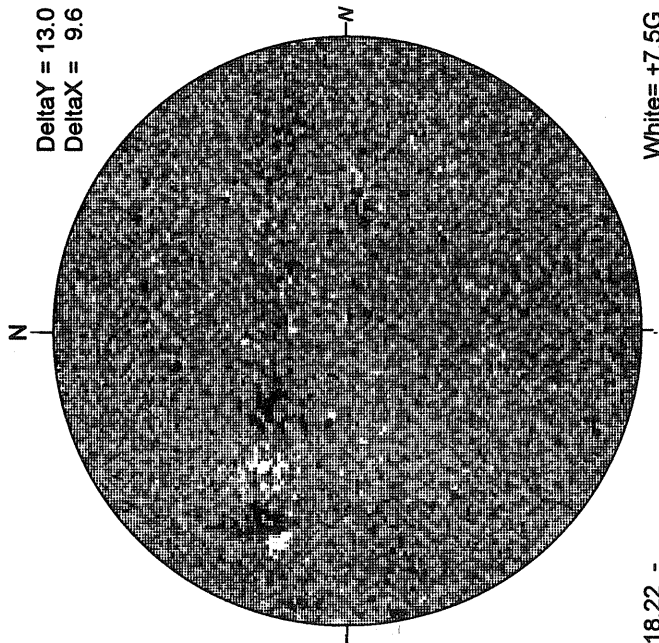
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

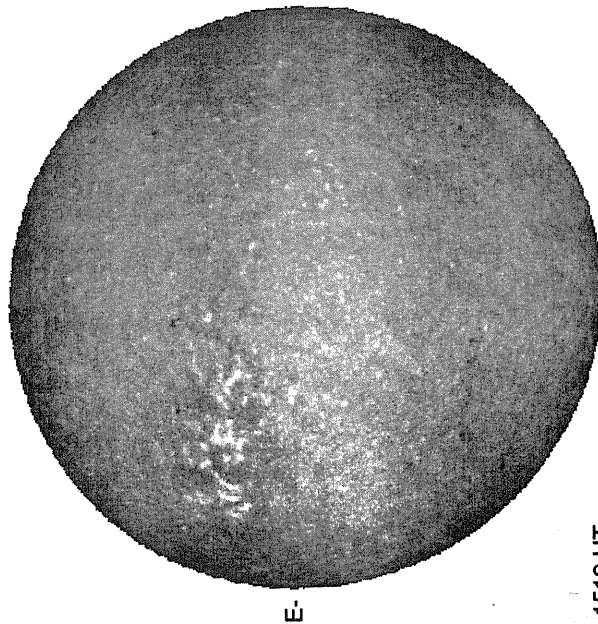
DeltaY = 13.0
DeltaX = 9.6



White= +7.5G
Black = -7.5G

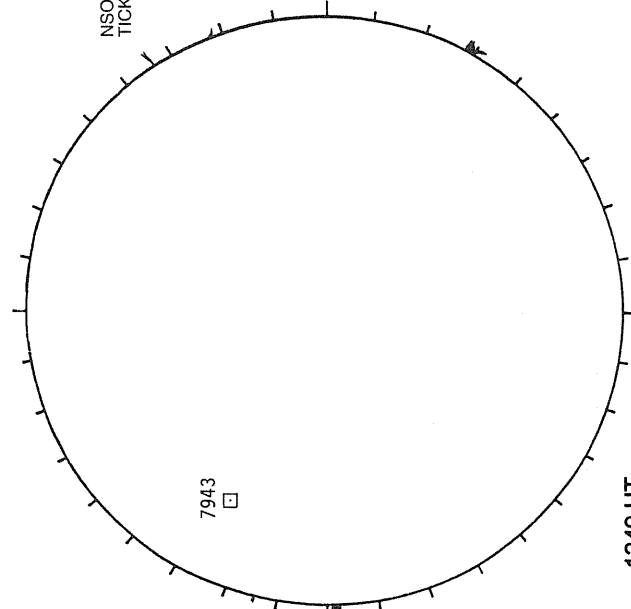
18.22 -
19.19 UT

SACRAMENTO PEAK H-ALPHA



1519 UT

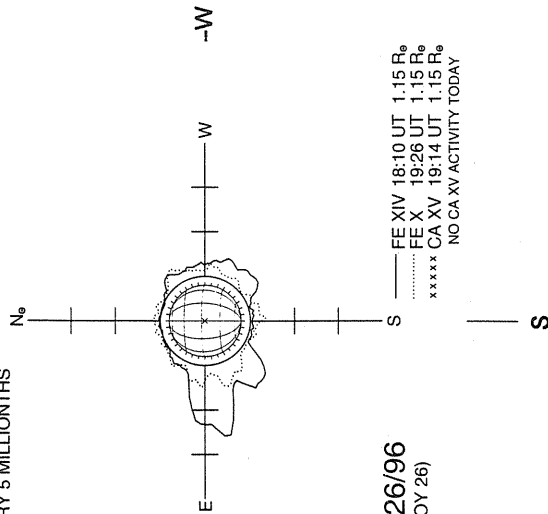
RAMEY SUNSPOT



1249 UT
1149 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



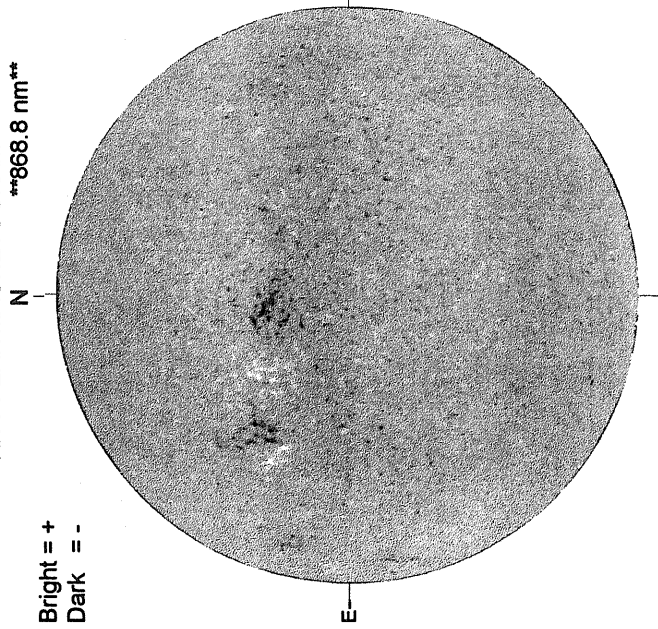
01/26/96
(DOY 26)

FE XIV 18:10 UT 1.15 R_o
FE X 19:26 UT 1.15 R_o
CA XV 19:14 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

KITT PEAK MAGNETOGRAM

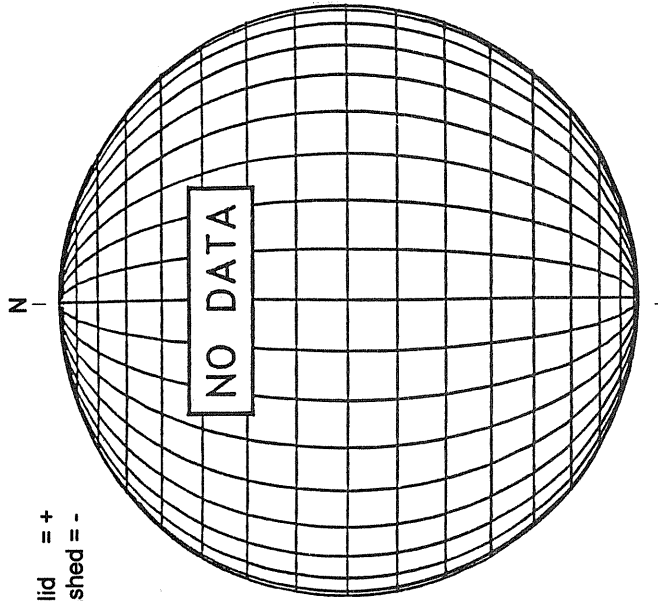
868.8 nm

Bright = +
Dark = -



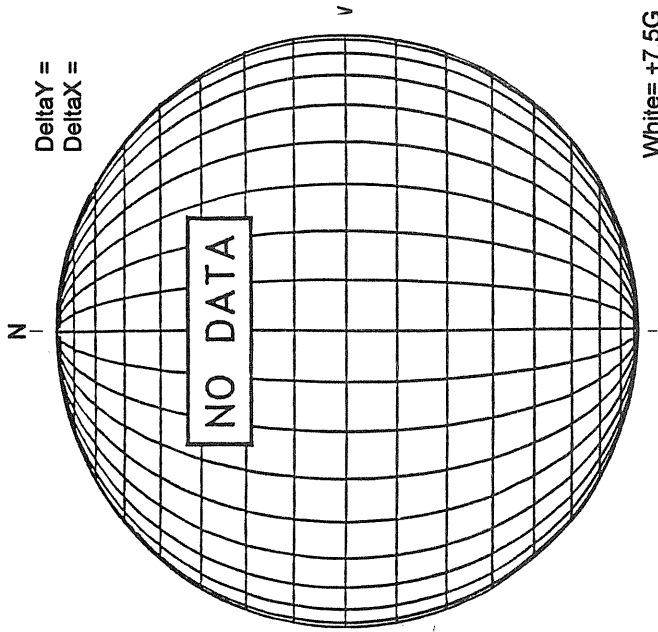
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



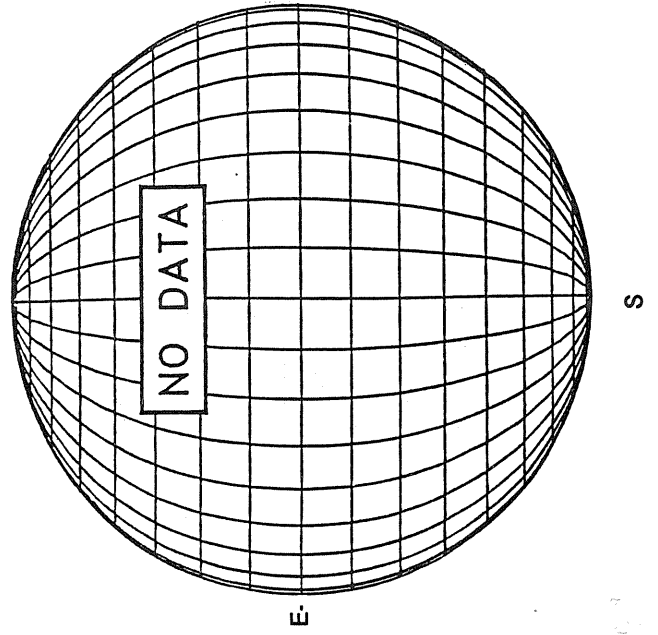
MT. WILSON MAGNETOGRAM

Delta Y =
Delta X =

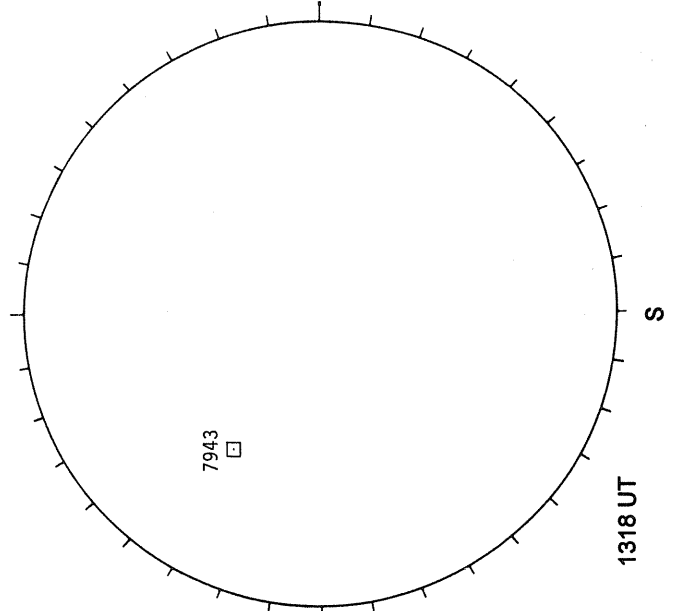


White = +7.5G
Black = -7.5G

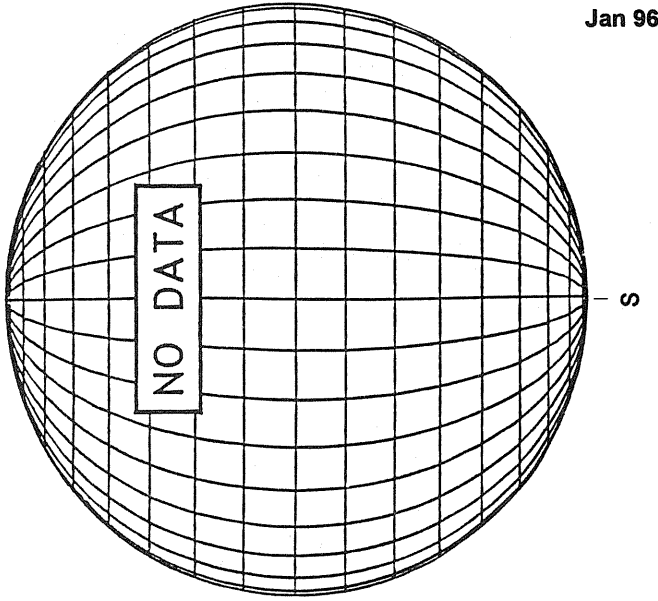
SACRAMENTO PEAK H-ALPHA

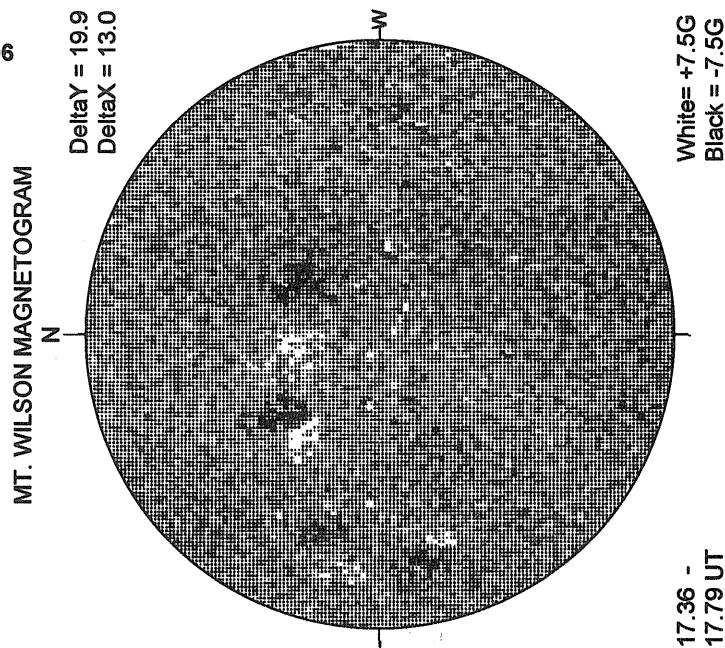
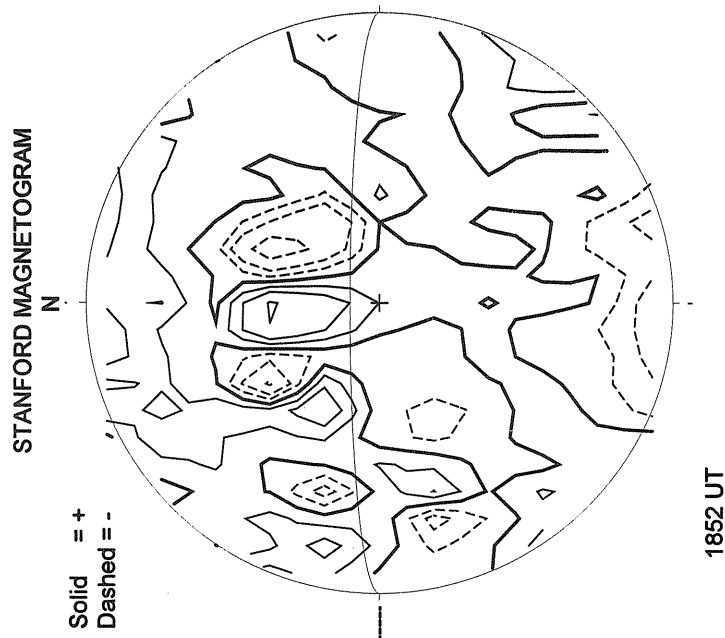
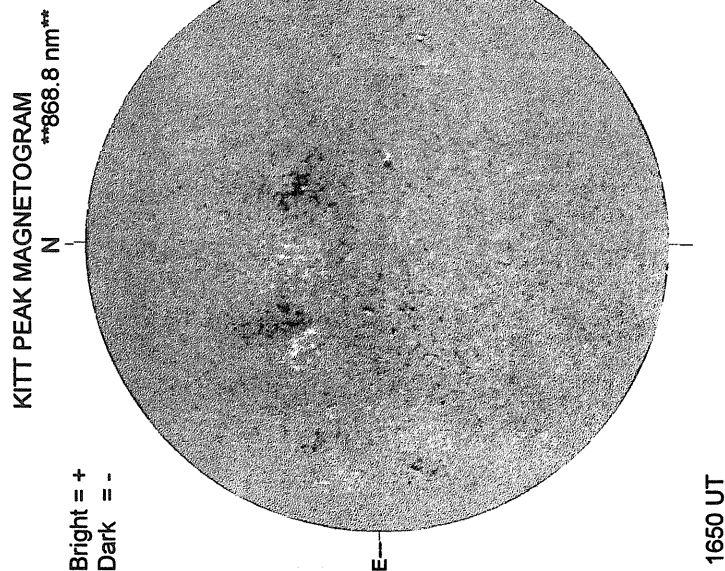


RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)---

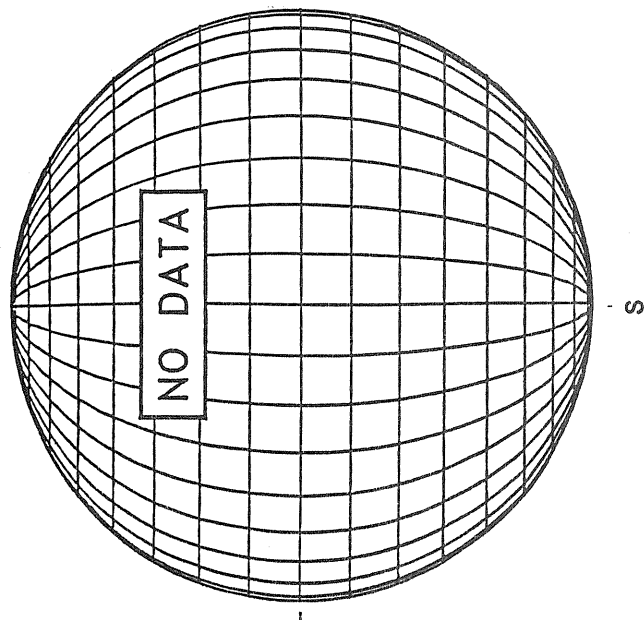
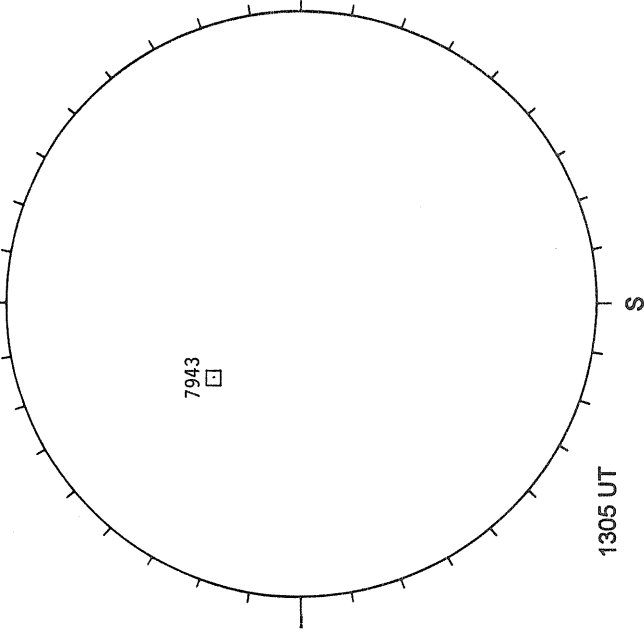
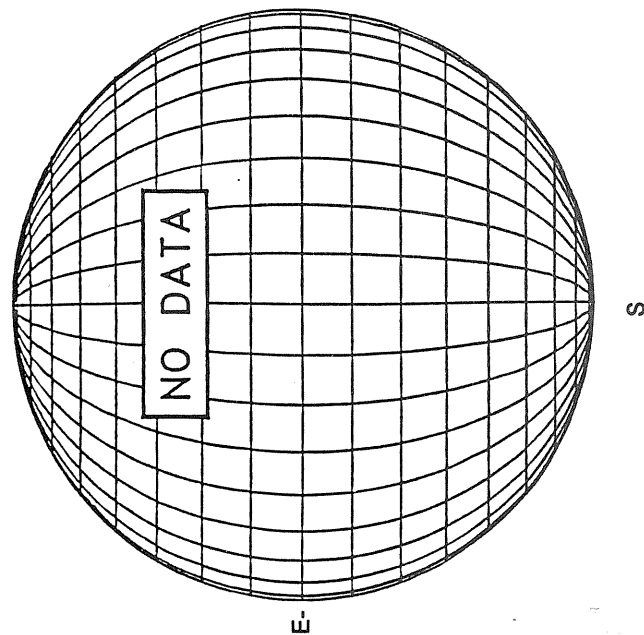




MAUNA LOA H-ALPHA

RAMEY SUNSPOT

SACRAMENTO PEAK CORONA (1.15 Radii)---

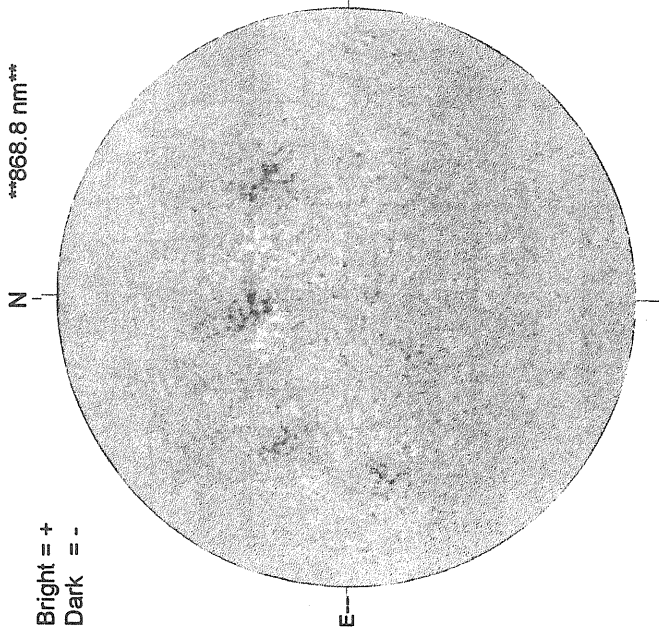


JANUARY 23, 1996 (F = 10.33, B0 = -3.14, L0 = -202.78)

KITT PEAK MAGNETOGRAM

868.8 nm

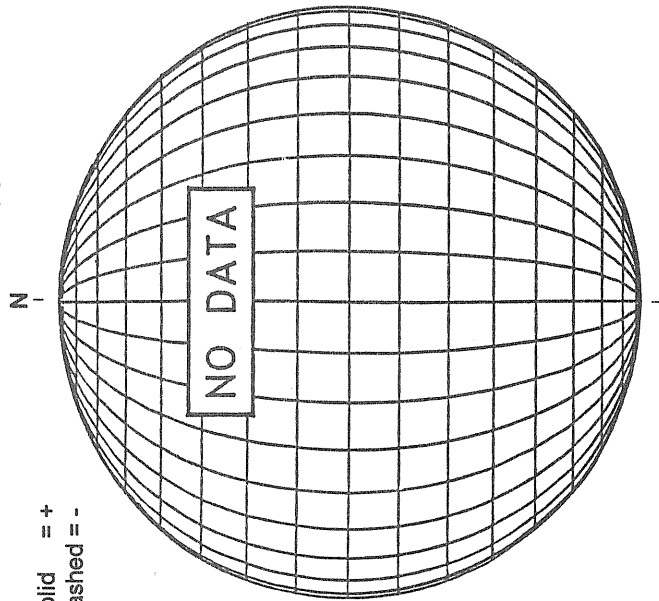
Bright = +
Dark = -



1633 UT

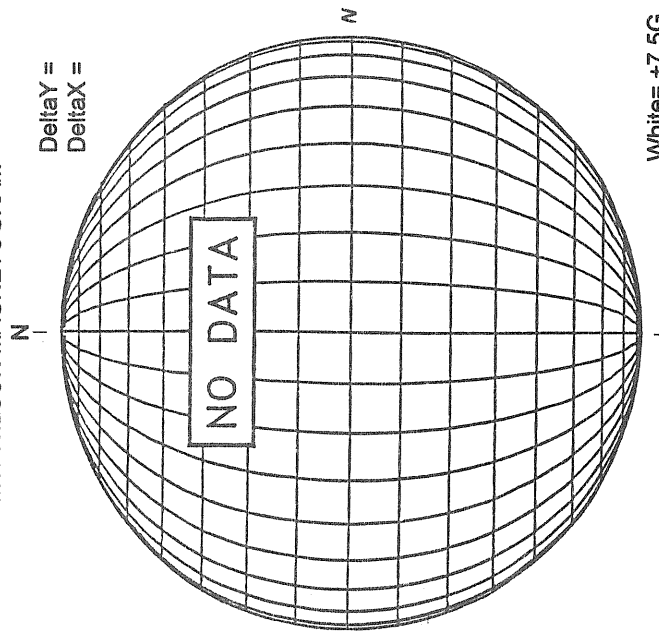
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



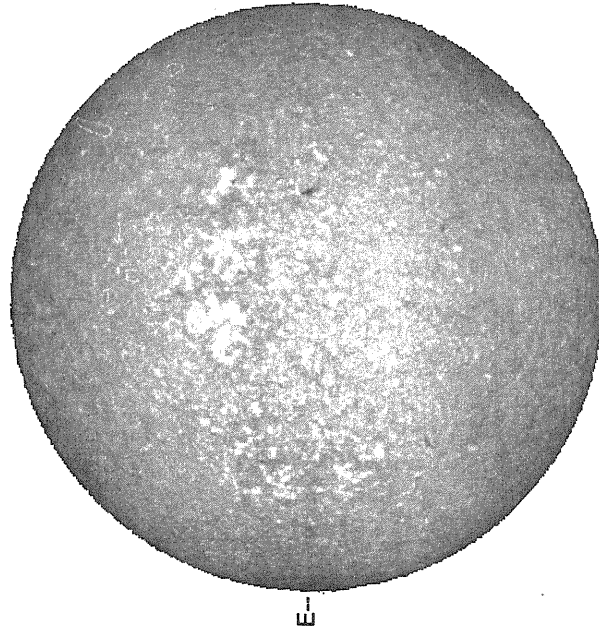
MT. WILSON MAGNETOGRAM

DeltaY =
DeltaX =



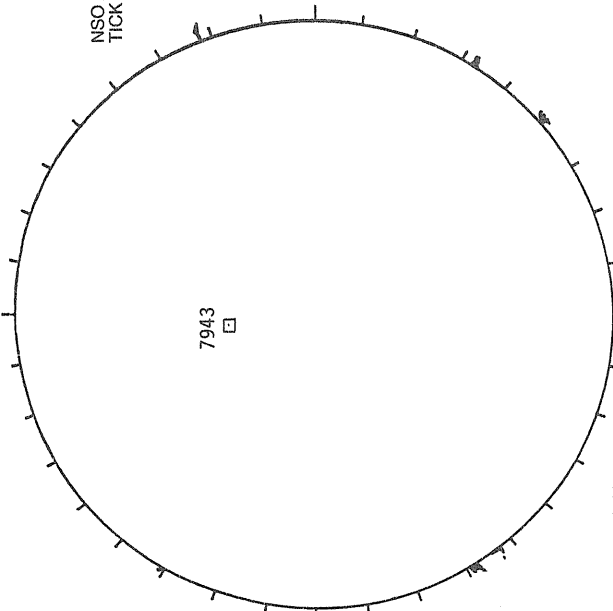
White = +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



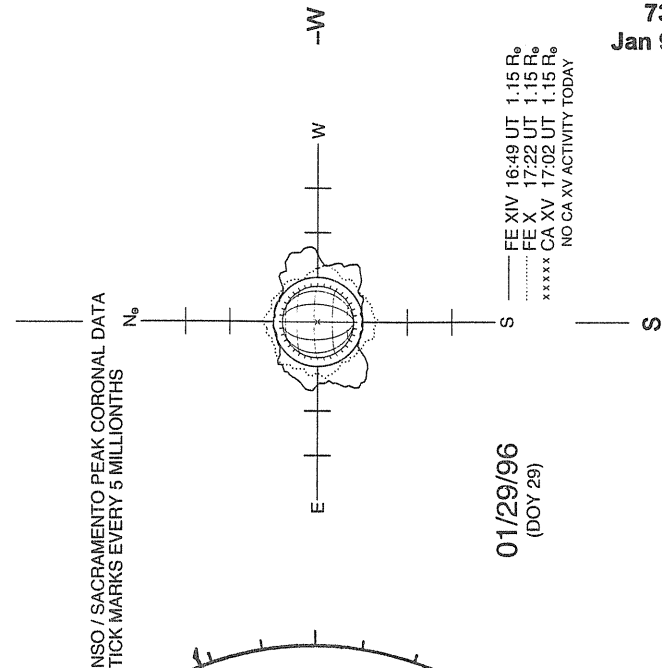
1553 UT

RAMEY SUNSPOT



1256 UT
1010 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)---



01/29/96
(DOY 29)

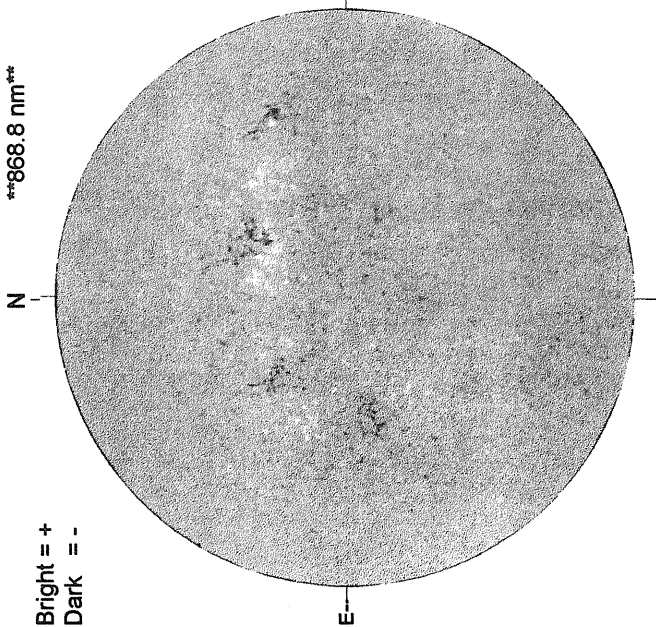
FE XIV 16:49 UT 1.15 R₀
FE X 17:22 UT 1.15 R₀
CA XV 17:02 UT 1.15 R₀
NO CA XV ACTIVITY TODAY

73
Jan 96

KITT PEAK MAGNETOGRAM

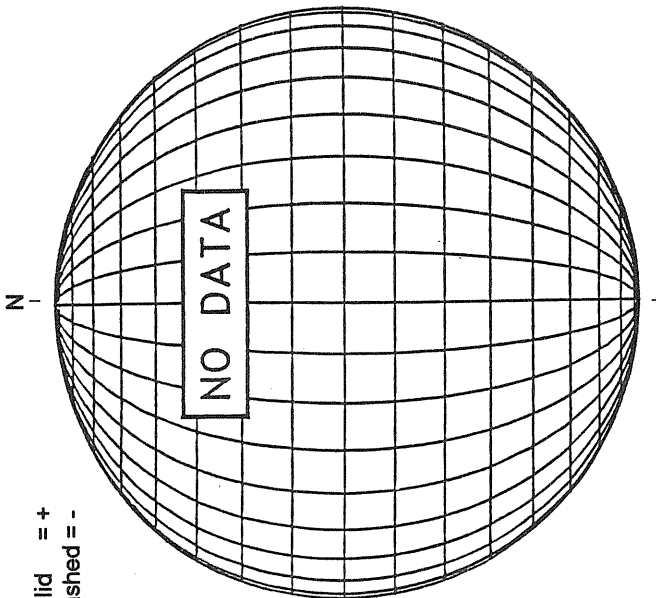
868.8 nm

Bright = +
Dark = -



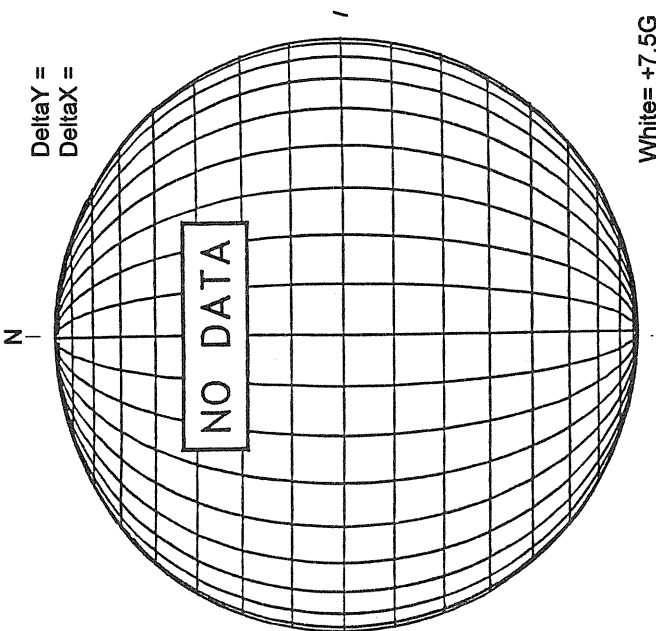
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

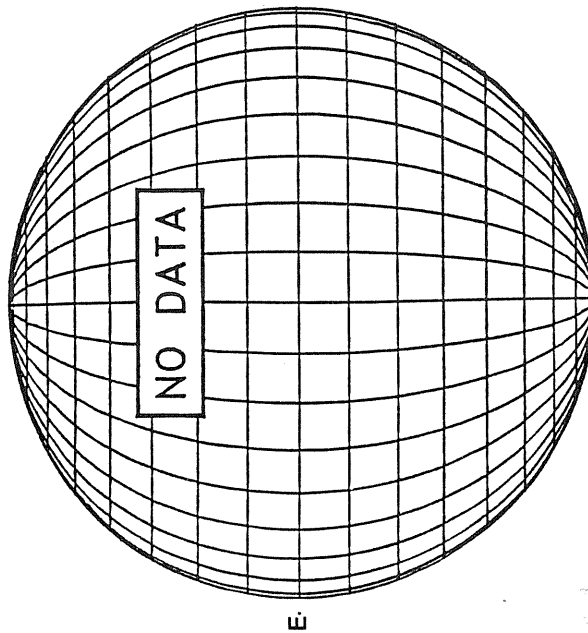
Delta Y =
Delta X =



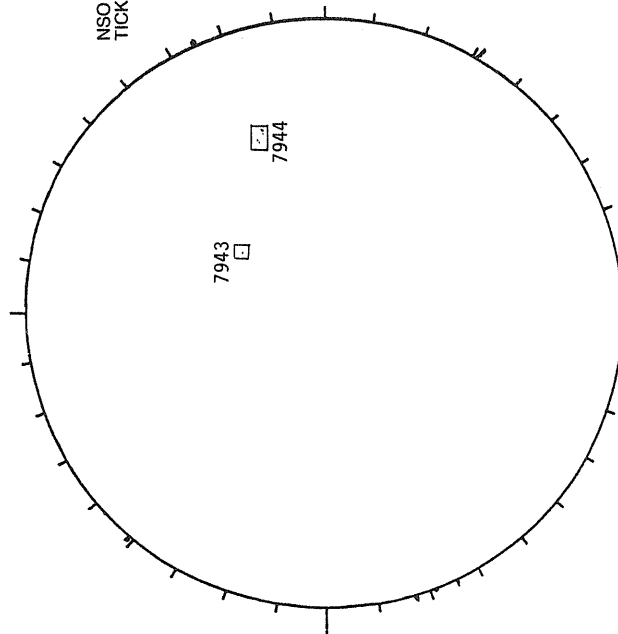
White = +7.5G
Black = -7.5G

1808 UT

MAUNA LOA H-ALPHA



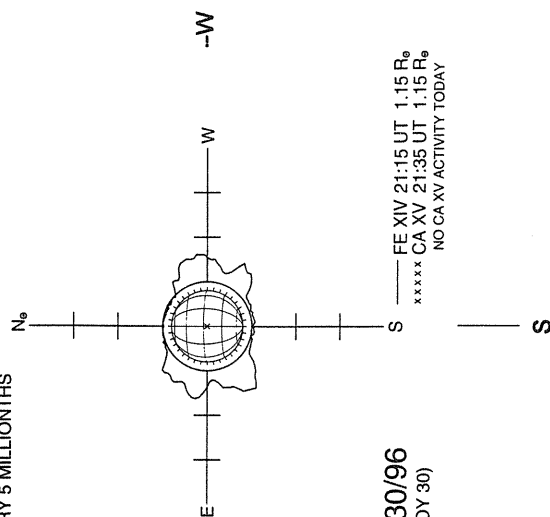
RAMEY SUNSPOT



1425 UT
0708 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



01/30/96
(DOY 30)

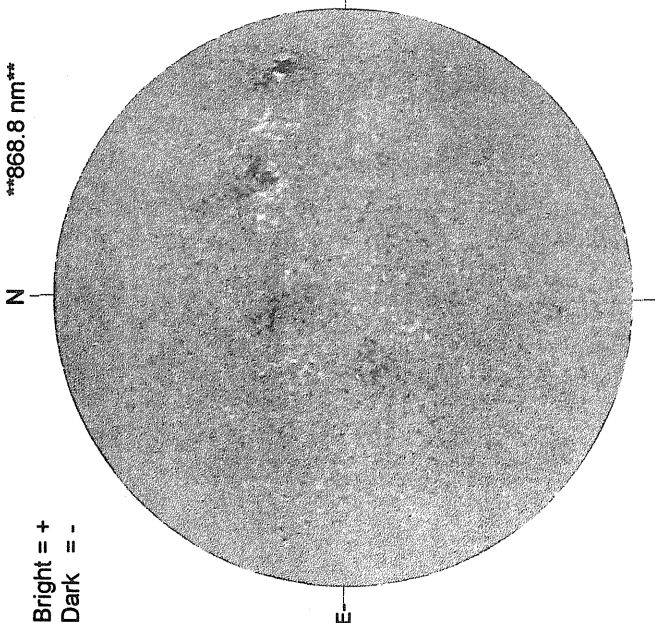
----- EE XIV 21:15 UT 1.15 R_o
***** CA XV 21:35 UT 1.15 R_o
NO CA XV ACTIVITY TODAY

STANFORD 01, 1990 (P = 11.49, B0 = 0.30, L0 = 176.44)

KITT PEAK MAGNETOGRAM

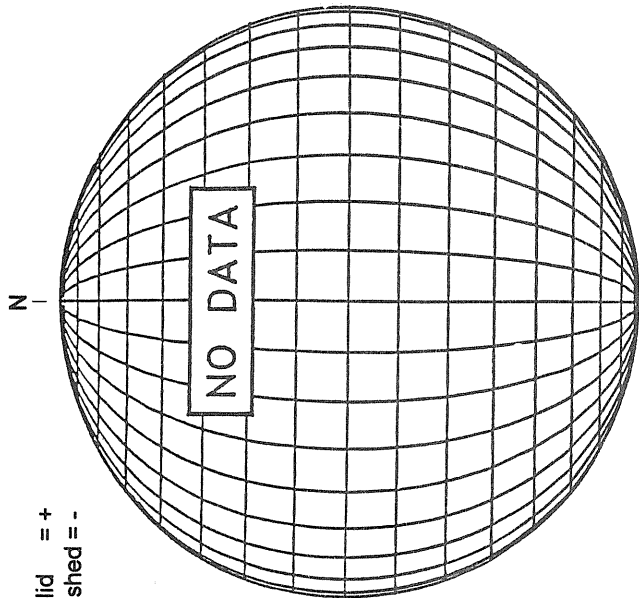
868.8 nm

Bright = +
Dark = -



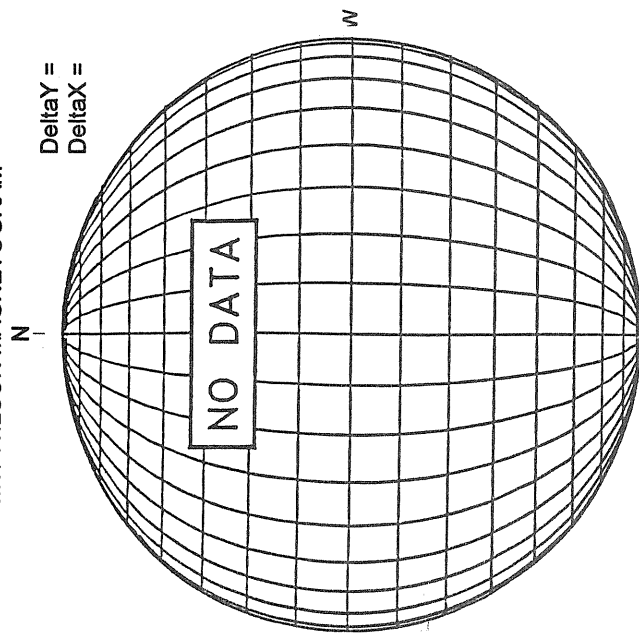
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

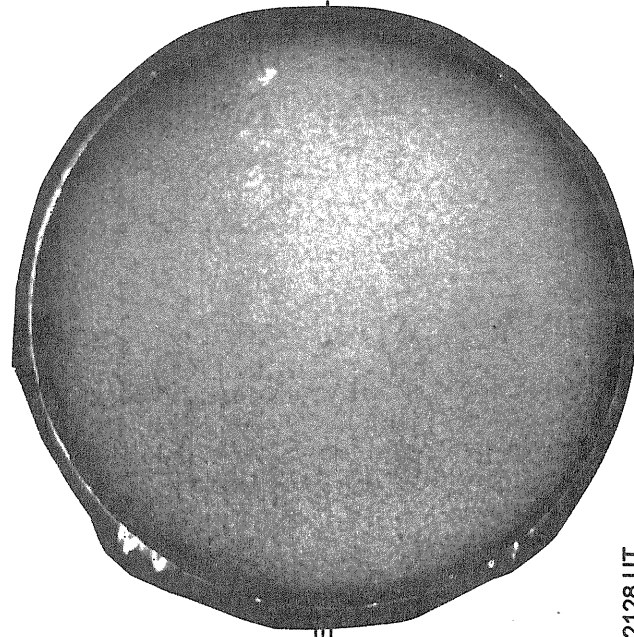
Delta Y =
Delta X =



White = +7.5G
Black = -7.5G

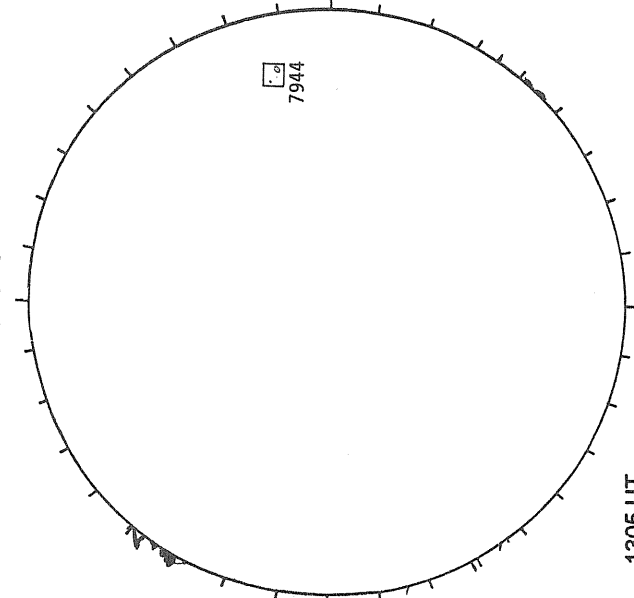
1709 UT

MAUNA LOA H-ALPHA



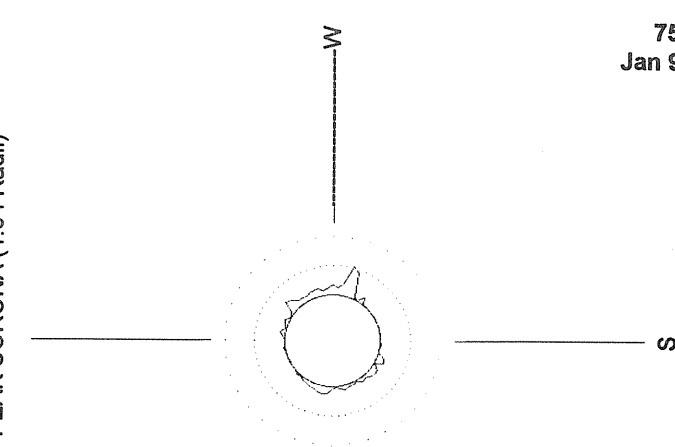
2128 UT
1955 UT Prom

RAMEY SUNSPOT

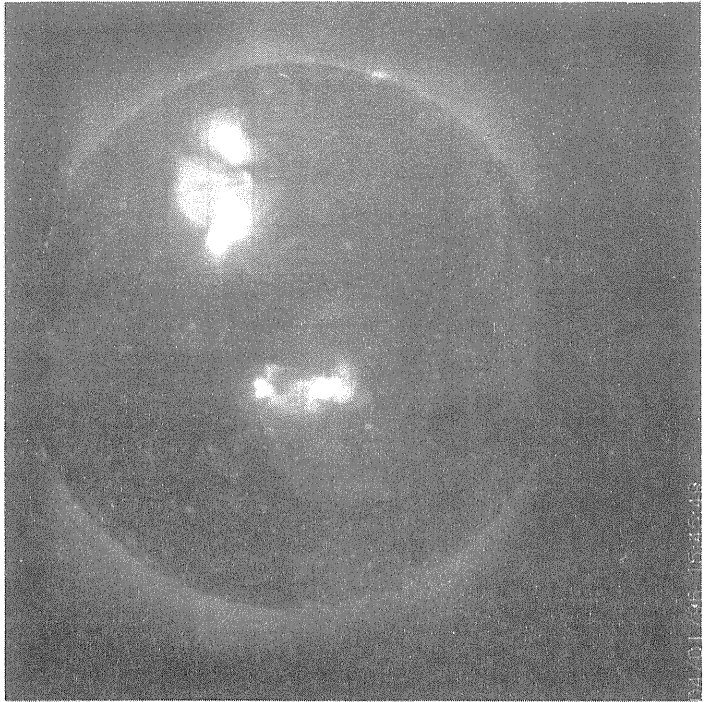
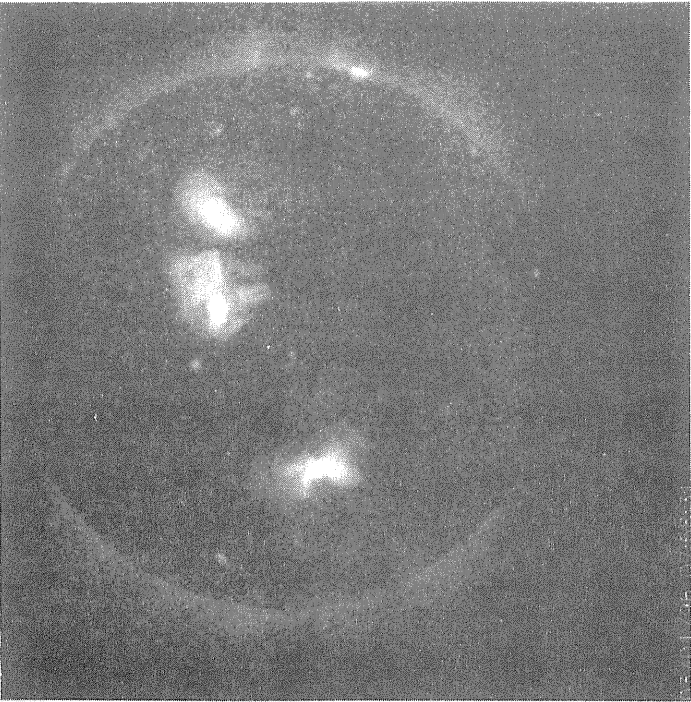


1305 UT
1306 UT LOMN Prom S

LOMNICKY PEAK CORONA (1.04 Radii)---



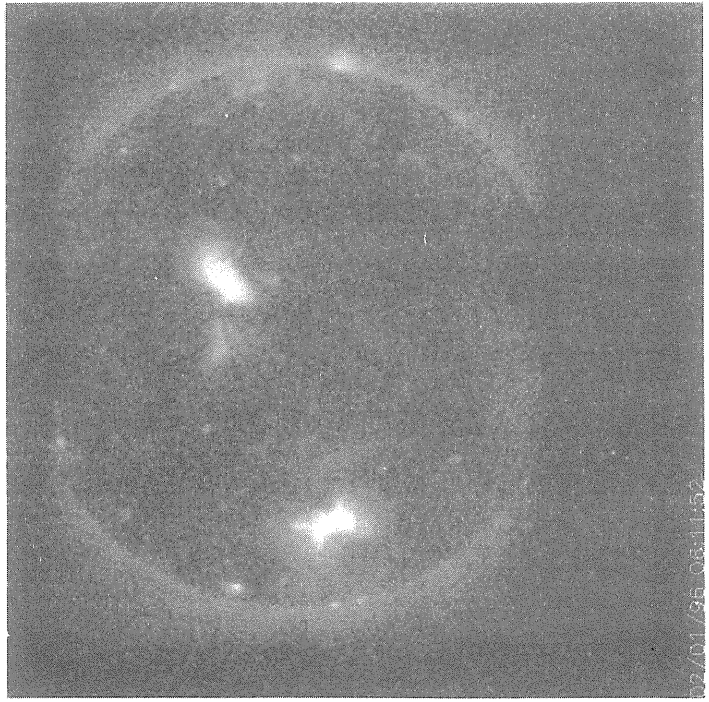
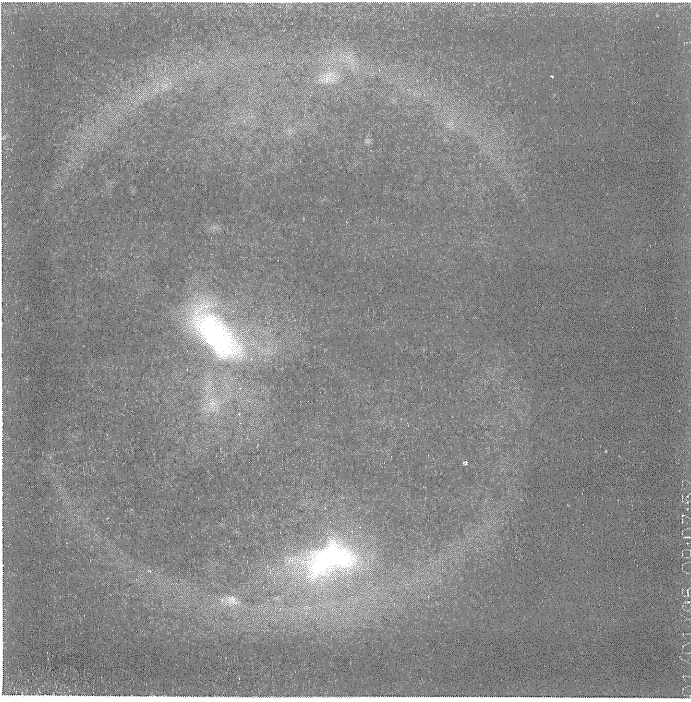
530.3 nm, 1405 UT
... 50 abs. units
.. 100 abs. units



**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 1 Day 3
09:07:52 UT 07:58:31 UT



Day 2 Day 4
06:11:52 UT 15:45:49 UT

YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 1 Day 3
09:07:52 UT 07:58:31 UT

01/01/96 09:07:52

03/01/96 07:58:31

Day 2 Day 4
06:11:52 UT 15:45:49 UT

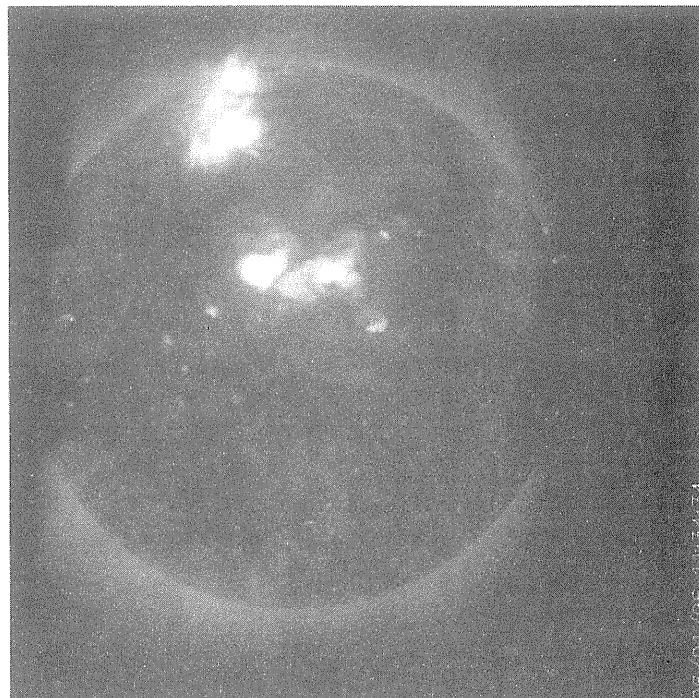
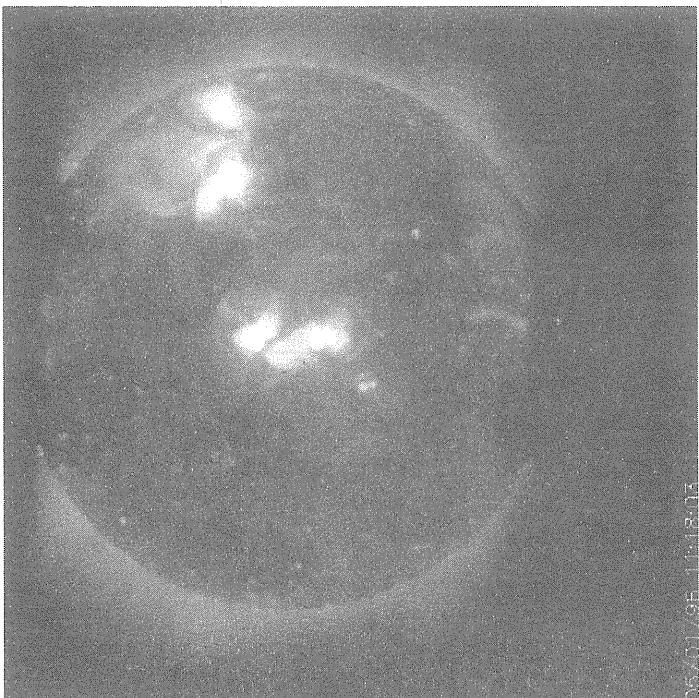
02/01/96 06:11:52

04/01/96 15:45:49

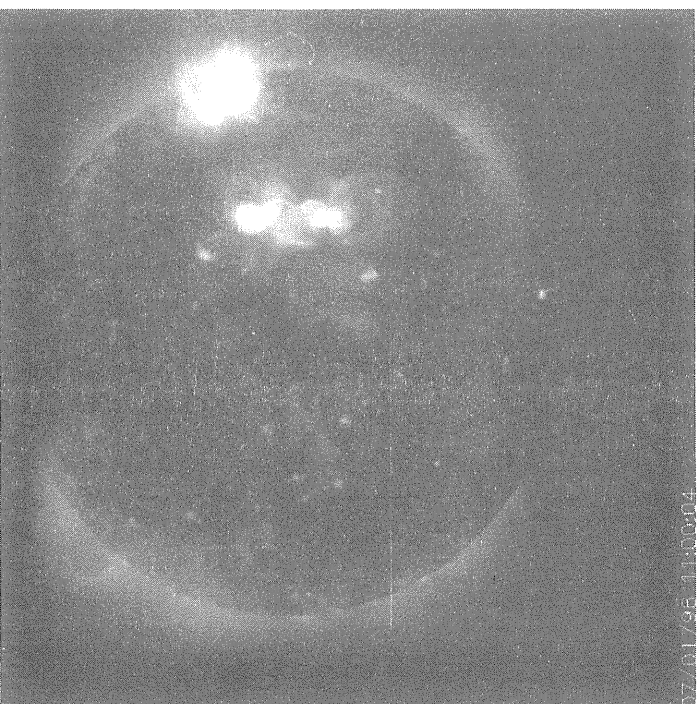
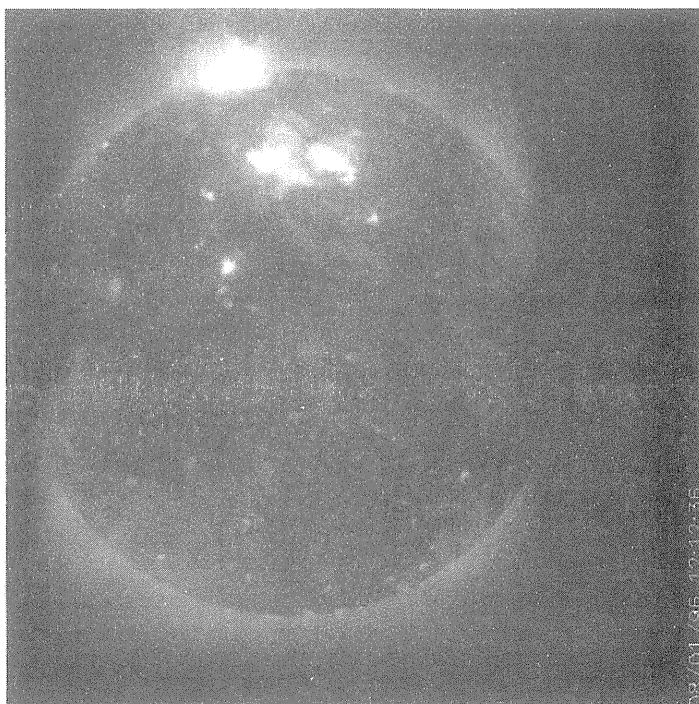
YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 5 Day 7
11:18:03 UT 11:00:04 UT



Day 6 Day 8
11:34:34 UT 12:12:36 UT



YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 5 Day 7
11:18:03 UT 11:00:04 UT

05/01/96 11:18:03

07/01/96 11:00:04

Day 6 Day 8
11:34:34 UT 12:12:36 UT

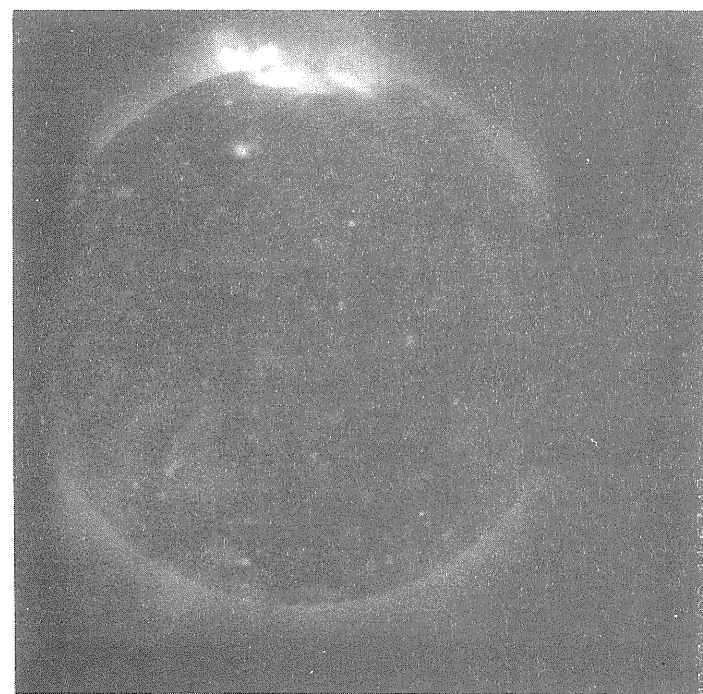
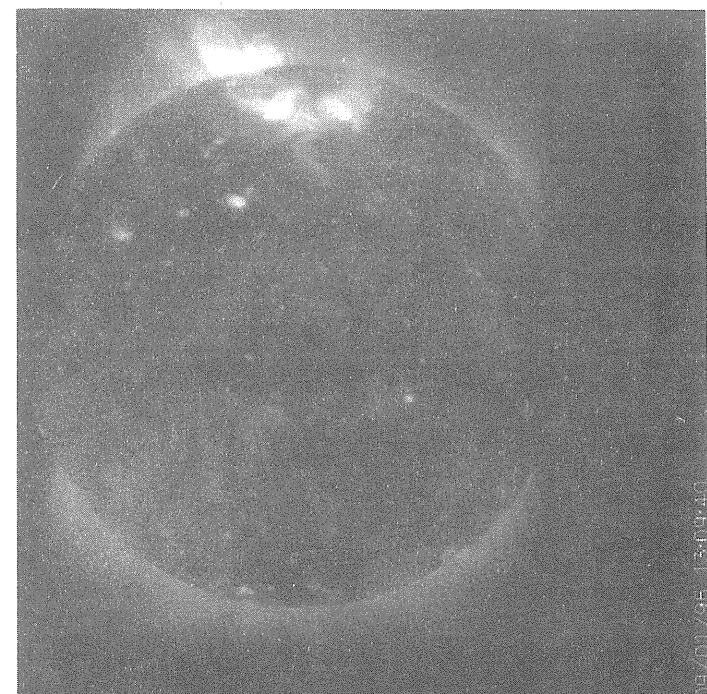
06/01/96 11:34:34

08/01/96 12:12:36

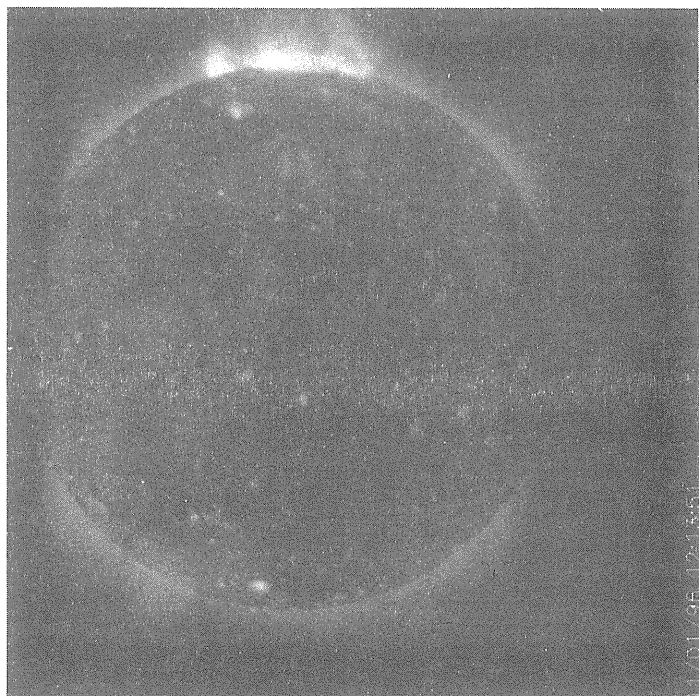
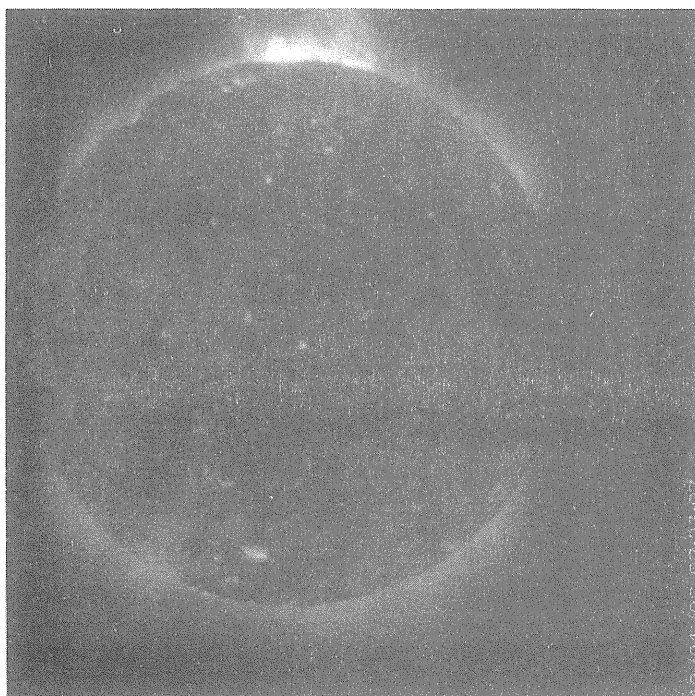
YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 9 Day 11
13:09:40 UT 12:13:51 UT



Day 10 Day 12
11:57:42 UT 07:23:07 UT



YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 9
13:09:40 UT

Day 11
12:13:51 UT

09/01/96 13:09:40

11/01/96 12:13:51

Day 10
11:57:42 UT

Day 12
07:23:07 UT

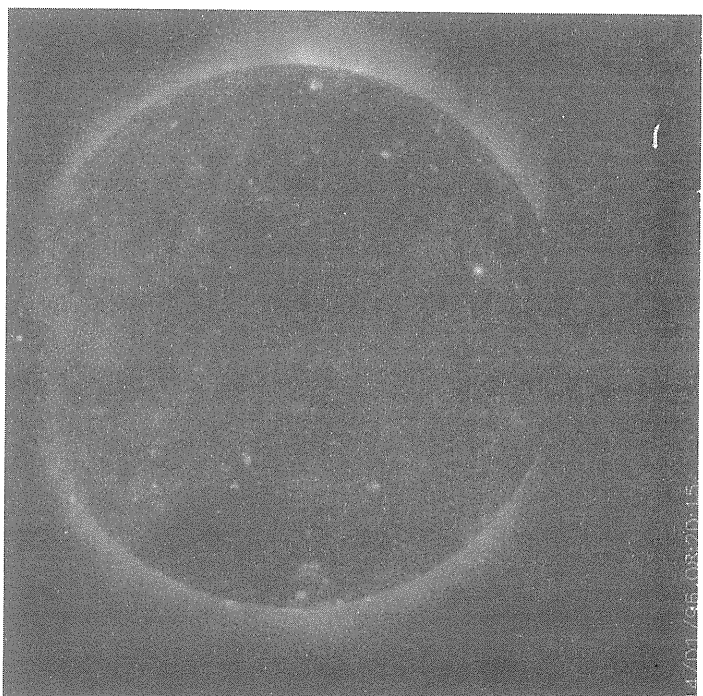
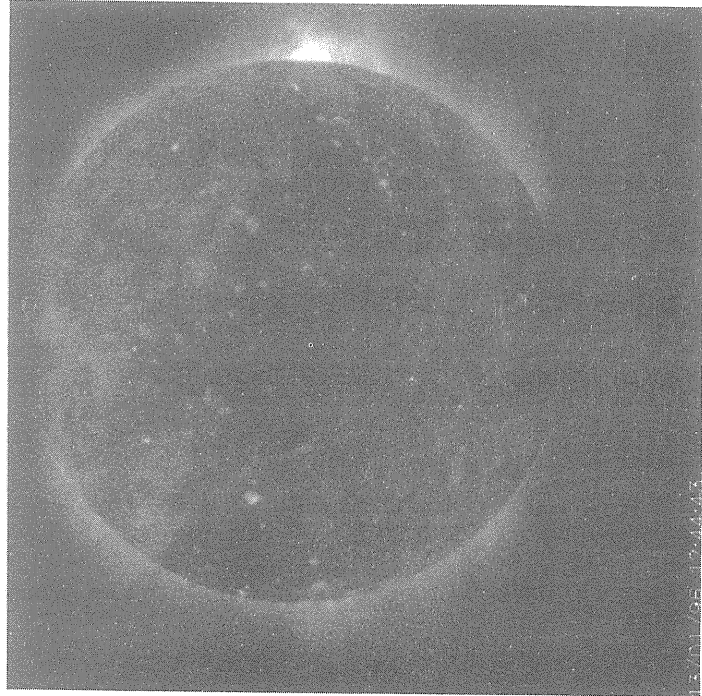
10/01/96 11:57:42

12/01/96 07:23:07

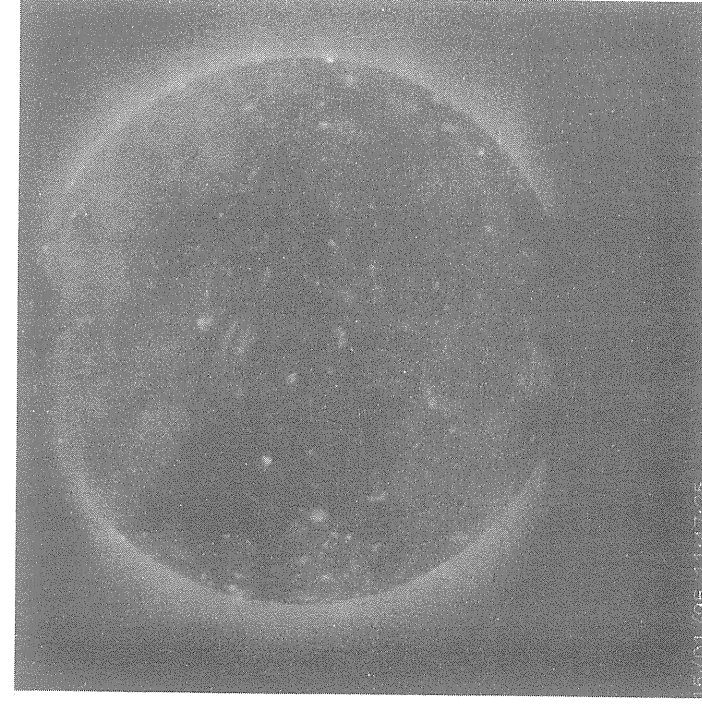
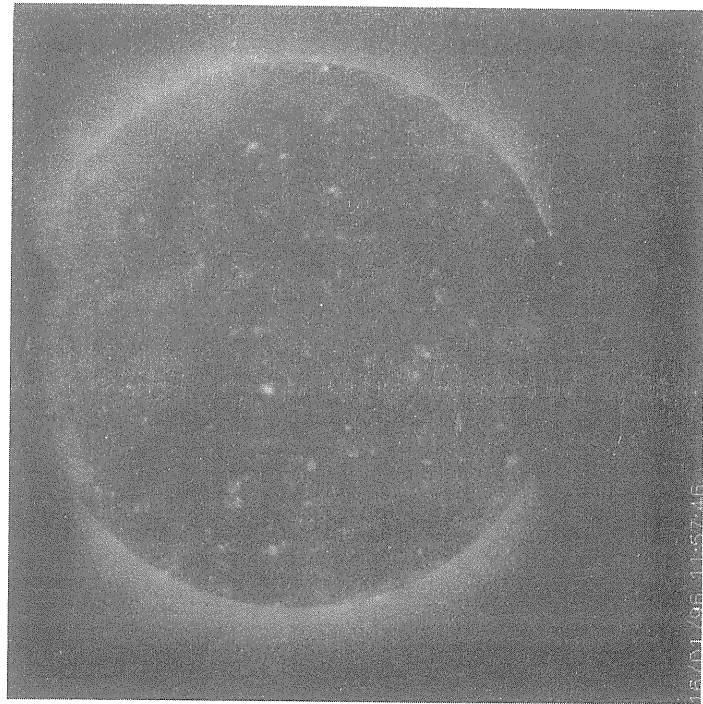
YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 13 Day 15
12:44:43 UT 11:47:25 UT



Day 14 Day 16
08:20:15 UT 11:57:46 UT



**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 13 Day 15
12:44:43 UT 11:47:25 UT

13/01/96 12:44:43

15/01/96 11:47:25

Day 14 Day 16
08:20:15 UT 11:57:46 UT

14/01/96 08:20:15

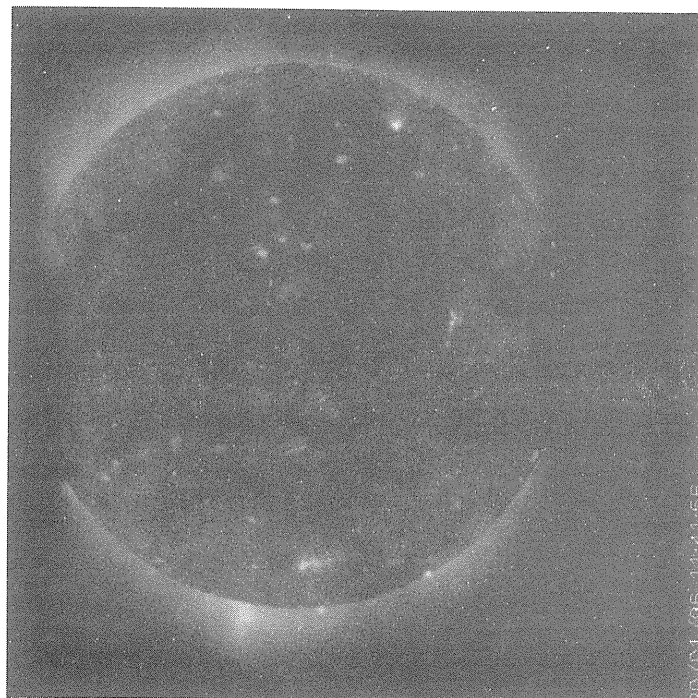
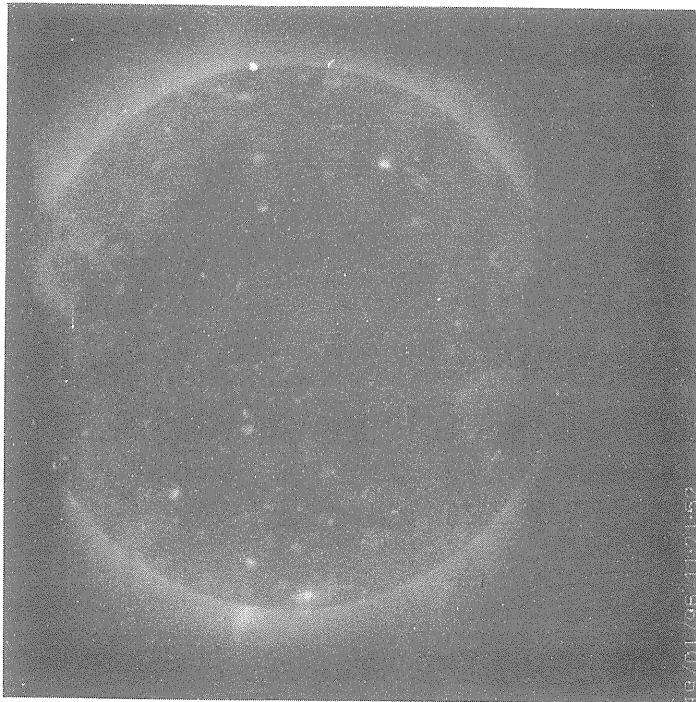
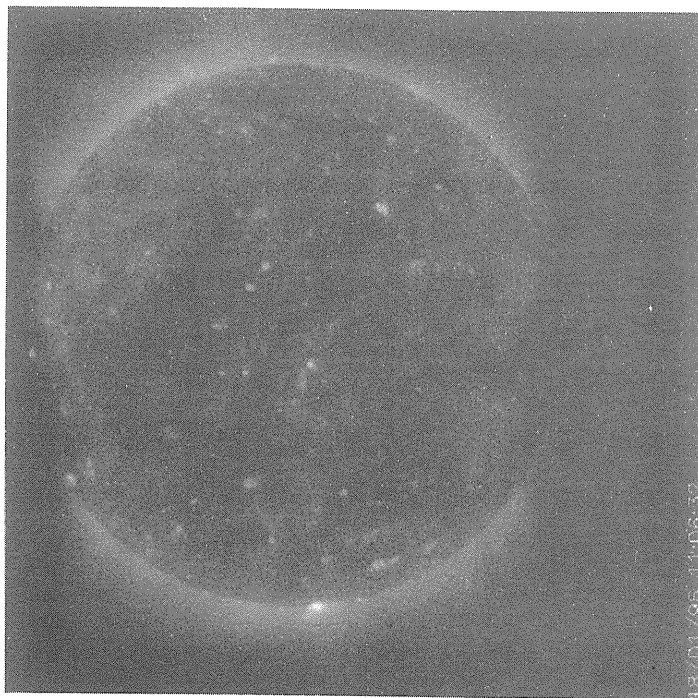
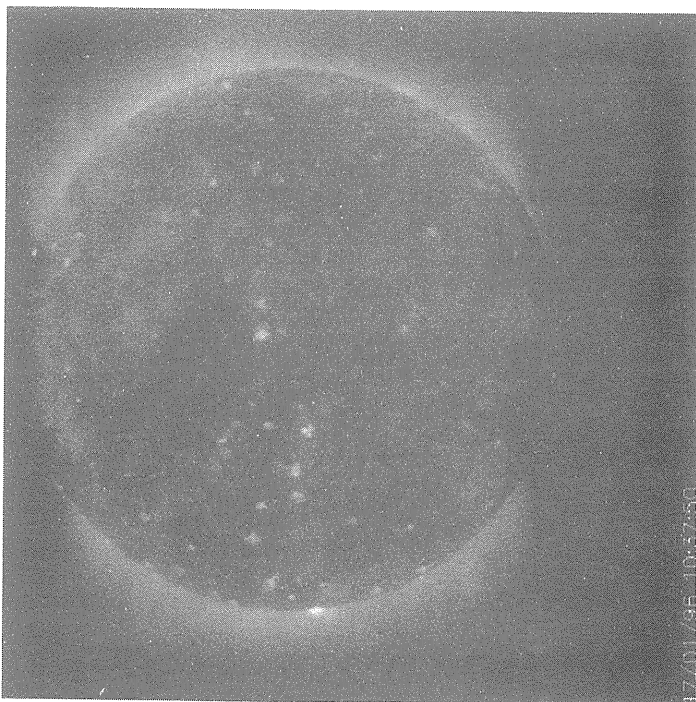
16/01/96 11:57:46

**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 17 Day 19
10:37:50 UT 11:21:52 UT

Day 18 Day 20
11:06:32 UT 11:41:56 UT



YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 17 Day 19
10:37:50 UT 11:21:52 UT

17/01/96 10:37:50

19/01/96 11:21:52

Day 18 Day 20
11:06:32 UT 11:41:56 UT

18/01/96 11:06:32

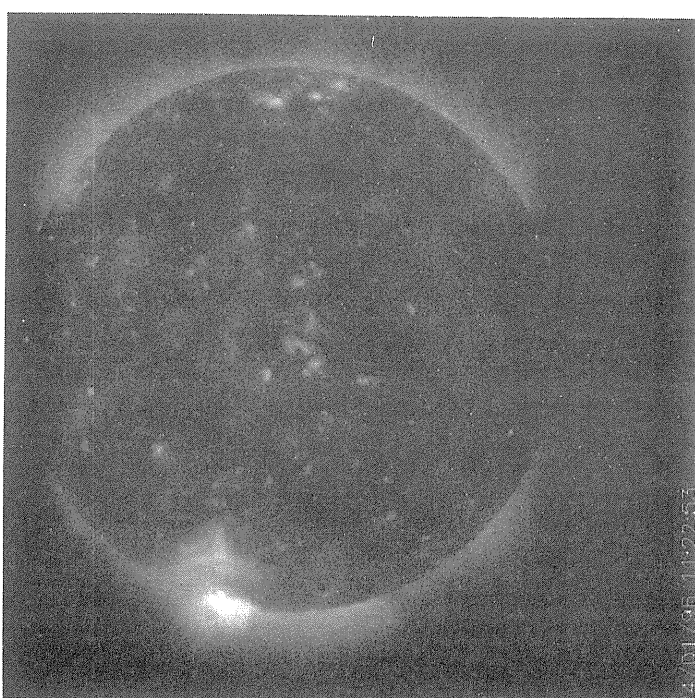
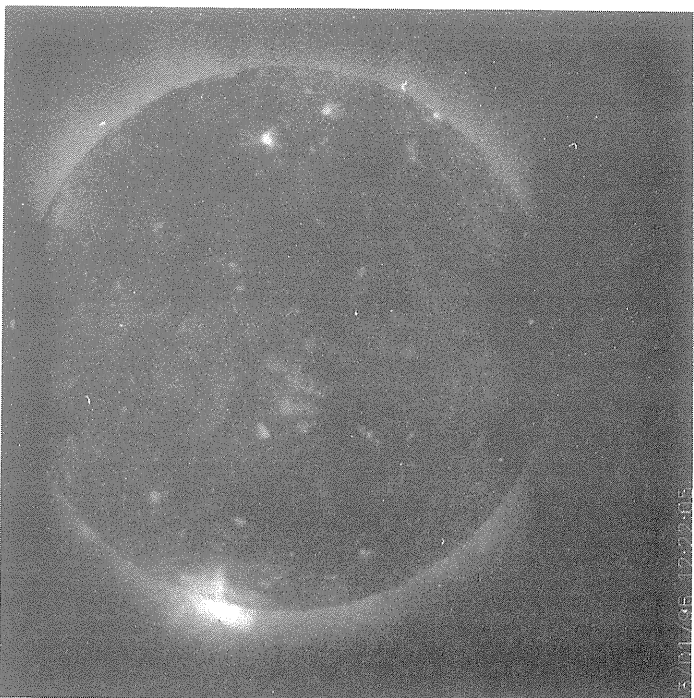
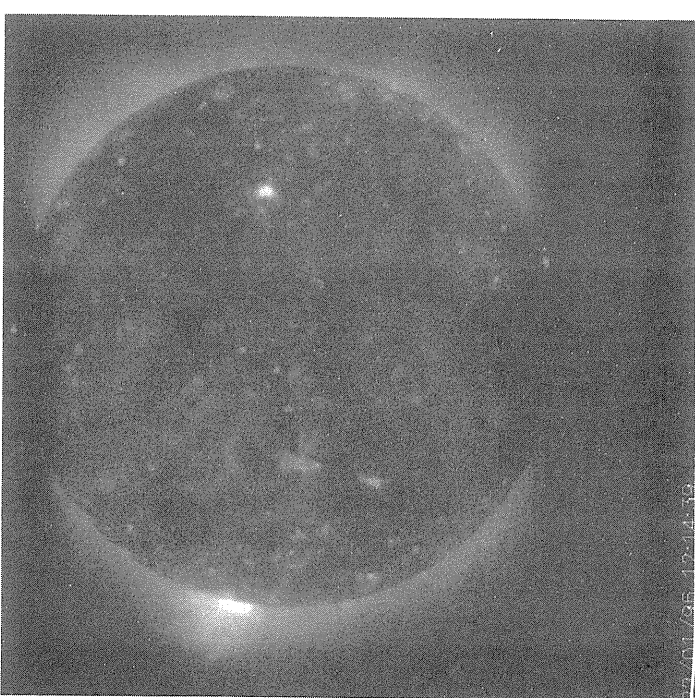
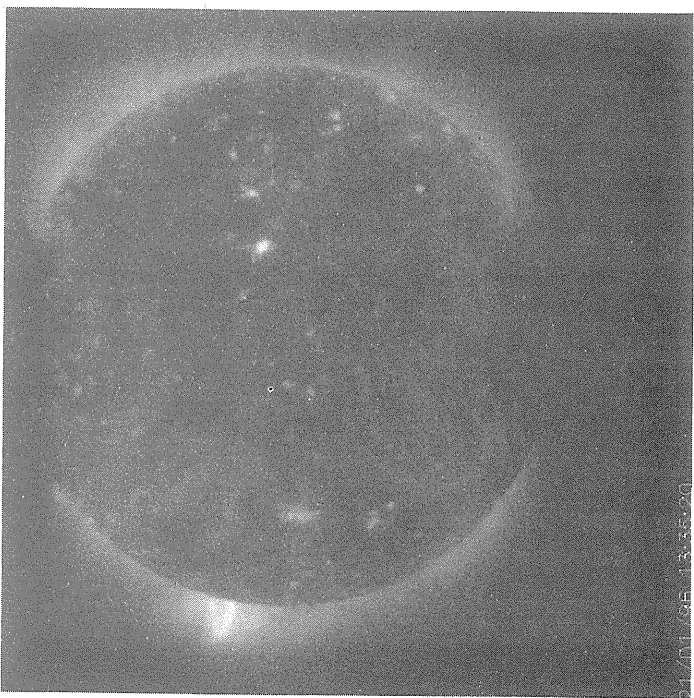
20/01/96 11:41:56

YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES

January
1996

Day 21 Day 23
13:35:20 UT 12:22:05 UT

Day 22 Day 24
12:14:39 UT 11:22:53 UT

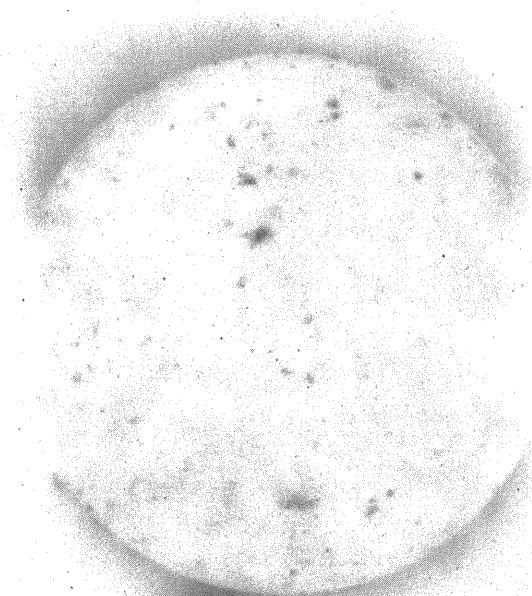


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IMAGES**

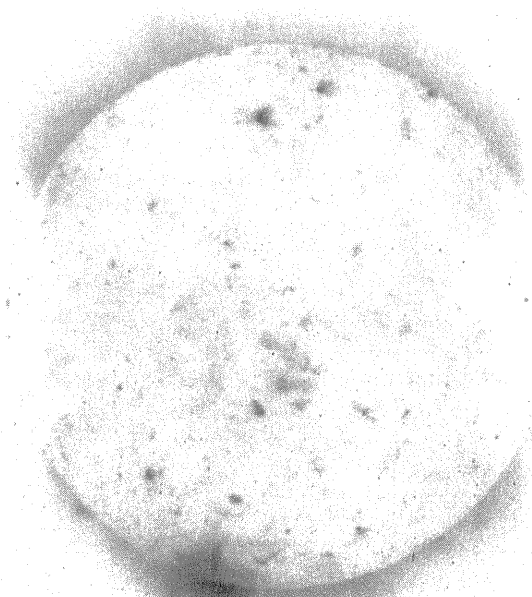
**January
1996**

Day 21 Day 23
13:35:20 UT 12:22:05 UT

21/01/96 13:35:20

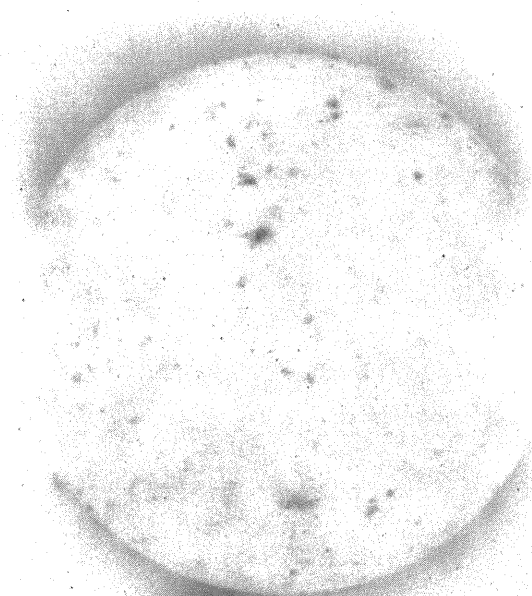


23/01/96 12:22:05

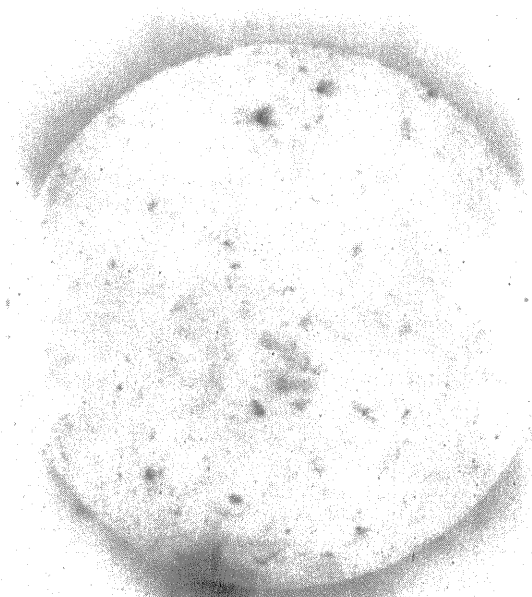


Day 22 Day 24
12:14:39 UT 11:22:53 UT

22/01/96 12:14:39



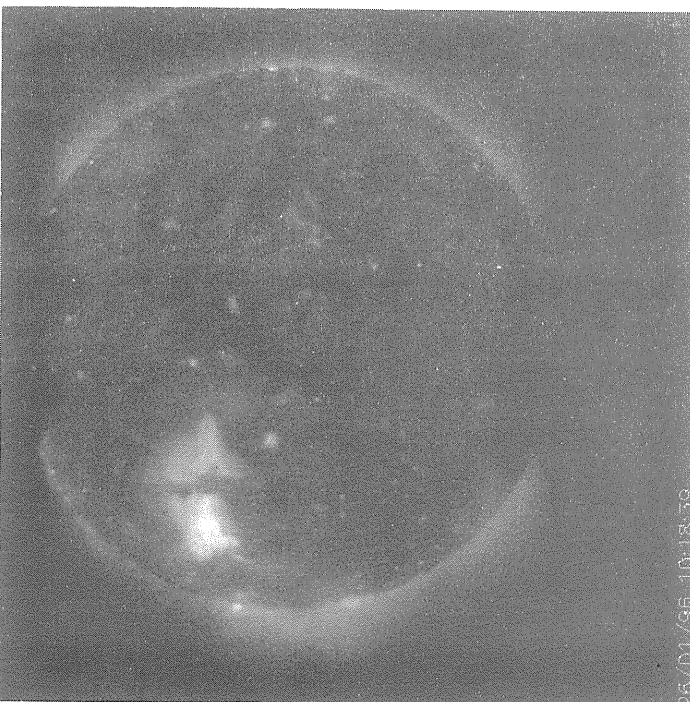
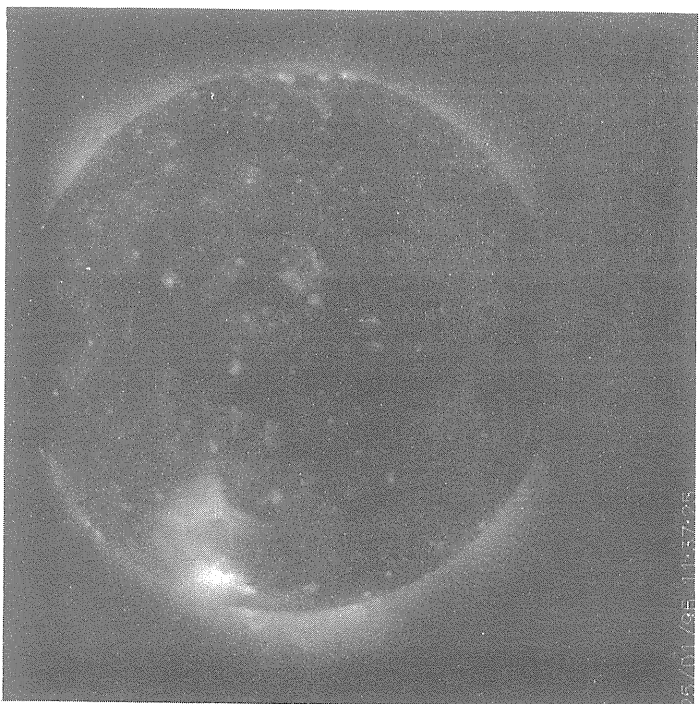
24/01/96 11:22:53



**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 25 Day 27
11:37:25 UT 10:38:46 UT



Day 26 Day 28
10:18:39 UT 14:02:50 UT



**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 25 Day 27
11:37:25 UT 10:38:46 UT

25/01/96 11:37:25

27/01/96 10:38:46

Day 26 Day 28
10:18:39 UT 14:02:50 UT

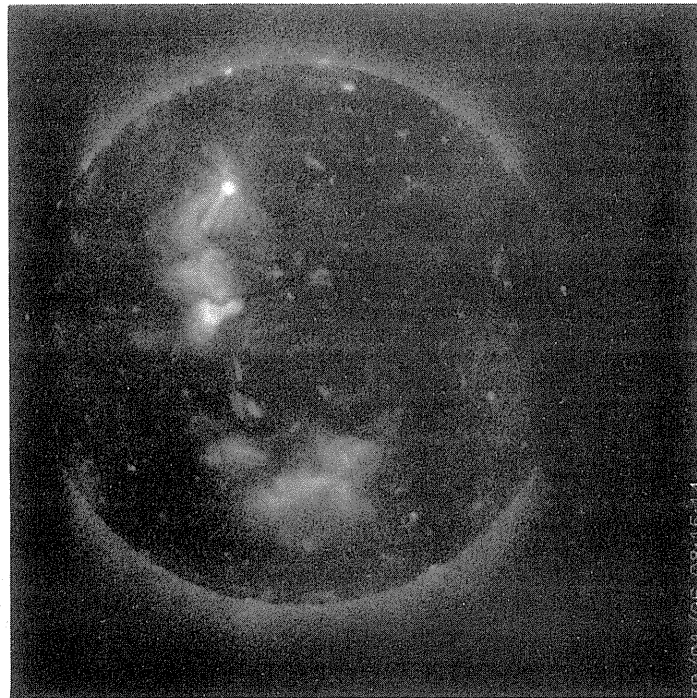
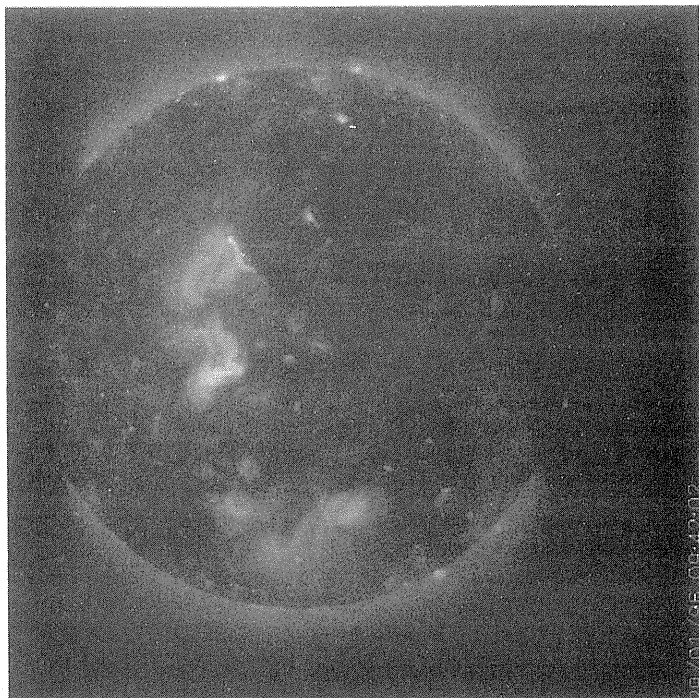
26/01/96 10:18:39

28/01/96 14:02:50

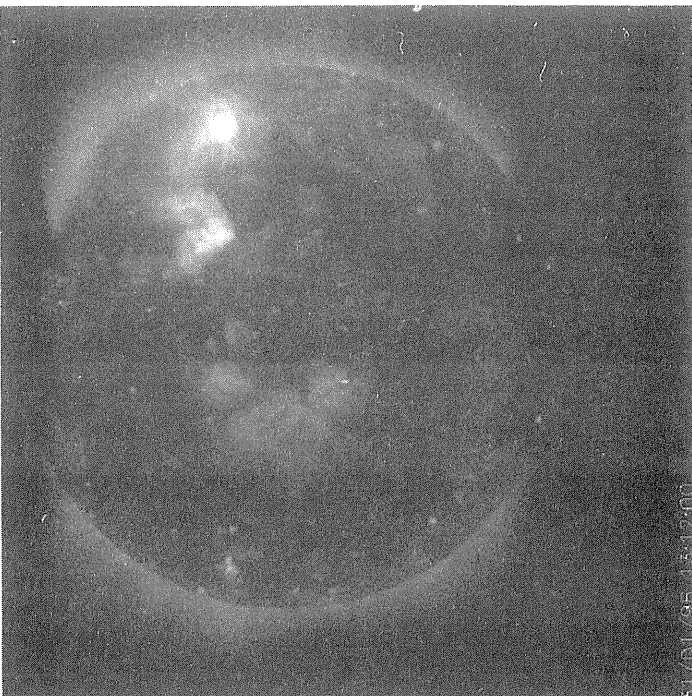
**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 29 Day 31
09:42:02 UT 13:12:00 UT



Day 30
08:15:14 UT



**YOHKOH
SOFT X-RAY
TELESCOPE
IMAGES**

**January
1996**

Day 29 Day 31
09:42:02 UT 13:12:00 UT

29/01/96 09:42:02

31/01/96 13:12:00

Day 30
08:15:14 UT

30/01/96 08:15:14

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Jan 96

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

JANUARY 1996

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7935		RAMY	12 26	1249	N11 E75	01	1.2		B	BXO	40	7	8	4
7935		HOLL	12 26	1536	N11 E76	01	1.4		B	BXO	30	3	12	3
7935	28332	MWIL	12 26	1800	N11 E76	01	1.5	4	(B					
7935		PALE	12 26	1950	N10 E75	01	1.5		B	BXO	40	3	12	3
7935		LEAR	12 27	0001	N11 E71	01	1.3		B	BXO	40	4	11	3
7935		SVTO	12 27	1030	N13 E73	01	1.9		A	HS	30	1	3	3
7935		RAMY	12 27	1417	N11 E64	01	1.4		B	CAO	40	3	11	3
7935		HOLL	12 27	1551	N10 E62	01	1.3		B	CSO	70	3	12	3
7935	28332	MWIL	12 27	1800	N11 E65	01	1.6	5	(B)					
7935		PALE	12 27	1818	N10 E60	01	1.3		B	CSO	60	2	10	2
7935		LEAR	12 28	0031	N15 E64	01	1.9		B	CRO	40	1	2	3
7935		SVTO	12 28	0725	N15 E60	01	1.8		A	HA	40	1	3	2
7935	28332	MWIL	12 28	1545	N11 E56	01	1.9	4	(AF)					
7935		RAMY	12 28	1630	N11 E56	01	1.9		A	AX	10	2	1	3
7935		PALE	12 28	1805	N11 E54	01	1.8		A	AX	30	2	1	2
7935		HOLL	12 28	1845	N12 E54	01	1.8		A	AX	20	1	1	2
7935		LEAR	12 29	0005	N12 E52	01	1.9		A	AX	10	3	2	3
7935		RAMY	12 29	1350	N11 E44	01	1.9		A	AX	10	5	1	3
7935		HOLL	12 29	1725	N10 E40	01	1.7		B	CRO	10	4	5	3
7935		PALE	12 29	1813	N11 E41	01	1.8		A	HR	30	2	1	2
7935		LEAR	12 30	0123	N11 E37	01	1.8		A	AX	10	3	2	3
7935		SVTO	12 30	0925	N14 E33	01	1.9		A	AX		1		3
7935		RAMY	12 30	1443	N11 E31	01	1.9		B	BXO	10	4	3	2
7935	28332	MWIL	12 30	1630	N12 E28	01	1.8	3	(AF)					
7935		HOLL	12 30	1805	N10 E28	01	1.8		A	AX		2	1	2
7935		LEAR	12 31	0025	N09 E17	01	1.3		A	AX	10	1	1	3
7935		LEAR	01 01	0005	N11 E12	01	1.9		B	BXO		4	8	4
7935		HOLL	01 01	1935	N11 E02	01	2.0		A	AX		2	1	3
7935		LEAR	01 02	0138	N11 W03	01	1.8		A	AX	10	2	1	3
7935		HOLL	01 02	2142	N12 W14	01	1.8		A	AX	10	2	1	2
7938		SVTO	01 03	0742	N11 W07	01	2.8		B	CRO	70	18	4	3
7938	28332	MWIL	01 03	1600	N12 W10	01	2.9	4	(BG)					
7938		HOLL	01 03	1623	N11 W10	01	2.9		B	DAI	90	19	6	2
7938		RAMY	01 03	1640	N12 W10	01	2.9		B	DAI	90	22	6	3
7938		PALE	01 03	2000	N12 W12	01	2.9		B	DSI	170	22	7	3
7938		LEAR	01 04	0210	N11 W15	01	3.0		B	DSI	80	29	7	3
7938		SVTO	01 04	0915	N11 W19	01	2.9		B	DAI	180	24	8	2
7938		RAMY	01 04	1158	N13 W20	01	3.0		B	DAI	290	19	8	3
7938	28332	MWIL	01 04	1545	N13 W22	01	3.0	5	(BG)					
7938		PALE	01 04	1826	N11 W24	01	3.0		B	DAO	190	14	8	3
7938		HOLL	01 04	1932	N12 W25	01	2.9		B	DAI	250	16	7	2
7938		HOLL	01 05	1547	N12 W36	01	2.9		B	DSI	270	26	9	3
7938	28332	MWIL	01 05	1700	N12 W37	01	2.9	4	(B)					
7938		MWIL	01 06	1530	N12 W49	01	2.9	4	(B)					
7938		HOLL	01 06	1620	N12 W49	01	3.0		B	DKI	300	14	9	3
7938		PALE	01 06	1948	N12 W53	01	2.8		B	DSI	220	18	9	2
7938		LEAR	01 07	0111	N11 W55	01	2.9		B	CSO	100	13	9	3
7938		RAMY	01 07	1430	N10 W63	01	2.9		B	CSO	110	9	9	4
7938	28332	MWIL	01 07	1530	N12 W63	01	2.9	4	(B)					
7938		HOLL	01 07	1725	N13 W65	01	2.8		B	CAO	130	12	8	3
7938		PALE	01 07	1955	N13 W65	01	2.9		B	CAO	100	5	9	2
7938		LEAR	01 08	0136	N11 W69	01	2.9		B	CAO	100	6	8	3
7938		KAND	01 08	0715	N11 W71	01	3.0			DAO		2	6	2
7938	28332	MWIL	01 08	1545	N12 W76	01	2.9	4	(B)					
7938		HOLL	01 08	1800	N13 W80	01	2.7		B	CAO	90	6	8	4
7938		PALE	01 08	1910	N14 W81	01	2.7		A	HS	30	1	2	3
7939		RAMY	01 04	1158	N04 E13	01	5.5		B	BXO		2	3	3
7939	28334	MWIL	01 04	1545	N03 E11	01	5.5	4	(BG)					
7939		PALE	01 04	1826	N03 E09	01	5.4		B	BXO	50	11	5	3
7939		HOLL	01 04	1932	N04 E08	01	5.4		B	BXO	70	9	4	2
7939		HOLL	01 05	1547	N03 W03	01	5.4		B	CSI	140	23	8	3
7939	28334	MWIL	01 05	1700	N04 W05	01	5.3	4	(BP)					
7939		MWIL	01 06	1530	N03 W16	01	5.4	5	(BP)					
7939		HOLL	01 06	1620	N03 W17	01	5.4		B	CSO	130	21	9	3
7939		PALE	01 06	1948	N03 W18	01	5.5		B	CSI	110	22	8	2
7939		LEAR	01 07	0111	N02 W22	01	5.4		B	CSO	80	17	8	3
7939		RAMY	01 07	1430	N02 W28	01	5.5		B	CAO	100	17	7	4

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

93
Jan 96

JANUARY 1996

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time		Lat	CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7939	28334	MWIL	01 07	1530	N03	W29	01 5.5	5	(BP)					
7939		HOLL	01 07	1725	N03	W31	01 5.4		B	CSO	130	15	9	3
7939		PALE	01 07	1955	N03	W32	01 5.4		B	CAO	120	10	8	2
7939		LEAR	01 08	0136	N02	W35	01 5.4		B	CAO	110	11	8	3
7939		KAND	01 08	0715	N02	W39	01 5.4			DAO		9	7	2
7939	28334	MWIL	01 08	1545	N03	W45	01 5.3	5	(BP)					
7939		HOLL	01 08	1800	N03	W45	01 5.4		B	CSI	90	17	7	4
7939		PALE	01 08	1910	N03	W45	01 5.4		B	CSO	60	8	6	3
7939		LEAR	01 09	0145	N01	W48	01 5.5		B	CSO	70	6	6	3
7939		SVTO	01 09	0935	N04	W55	01 5.3		B	CSO	50	5	8	3
7939		KAND	01 09	1115	N03	W57	01 5.2			HA		2	1	2
7939		HOLL	01 09	1535	N04	W58	01 5.3		B	CAO	40	6	7	4
7939	28334	MWIL	01 09	1545	N03	W58	01 5.3	4	(BP)					
7939		LEAR	01 10	0145	N02	W64	01 5.3		B	BXO	20	3	2	3
7937		RAMY	01 01	1251	S09	E54	01 5.6		A	AX		1		4
7937	28333	MWIL	01 01	1915	S08	E52	01 5.7	3	(AF)					
7937		HOLL	01 01	1935	S10	E52	01 5.7		A	AX		2	2	3
7937		LEAR	01 02	0138	S08	E47	01 5.6		A	AX	10	1		3
7937A		LEAR	01 07	0111	N14	W13	01 6.1		B	BXO	10	3	3	3
7940	28335	MWIL	01 08	1545	N09	W17	01 7.4	4	(B)					
7940		HOLL	01 08	1800	N09	W18	01 7.4		B	BXO	10	5	3	4
7940		PALE	01 08	1910	N09	W19	01 7.4		B	BXO	20	3	3	3
7940		LEAR	01 09	0145	N09	W24	01 7.3		B	BXO	20	5	3	3
7940		SVTO	01 09	0935	N10	W26	01 7.4		B	BXO	10	2	2	3
7940		KAND	01 09	1115	N10	W27	01 7.4			AX		1		2
7940		HOLL	01 09	1535	N11	W29	01 7.5		A	AX	10	1		4
7940	28335	MWIL	01 09	1545	N09	W29	01 7.5	4	(AF)					
7940A		RAMY	01 17	1304	S07	E17	01 18.8		A	AX		1		3
7940A		PALE	01 17	2120	S07	E12	01 18.8		A	AX		1		3
7942		RAMY	01 21	1250	S01	W19	01 20.1		A	AX		1		4
7942	28336	MWIL	01 21	1630	N01	W21	01 20.1	4	(AF)					
7942		HOLL	01 21	1925	N01	W22	01 20.2		B	BXO	10	4	3	3
7942		PALE	01 21	1945	N00	W23	01 20.1		B	BXO	10	4	3	3
7942		LEAR	01 22	0005	N01	W24	01 20.2		B	BXO		3	3	4
7942		RAMY	01 22	1304	S02	W33	01 20.1		A	AX		2	2	3
7944		RAMY	01 30	1425	N07	W37	01 27.8		B	BXO	10	5	4	4
7944		HOLL	01 30	1540	N09	W37	01 27.9		B	BXO	20	4	3	2
7944		LEAR	01 31	0415	N09	W47	01 27.6		B	BX	10	4	2	3
7944		RAMY	01 31	1305	N07	W52	01 27.6		B	CSO	40	4	5	4
7944		SVTO	01 31	1433	N08	W52	01 27.7		B	BXO	20	3	4	2
7944		PALE	01 31	1935	N10	W55	01 27.7		B	BXO	30	2	6	1
7944		HOLL	01 31	2000	N10	W54	01 27.8		B	BXO	20	3	5	1
7944		LEAR	02 01	0008	N10	W57	01 27.8		B	DAO	60	6	6	4
7944		SVTO	02 01	0815	N08	W63	01 27.7		B	DSO	140	5	8	3
7944		RAMY	02 01	1300	N06	W65	01 27.8		B	CSO	60	4	8	4
7944		HOLL	02 01	1905	N10	W67	01 27.9		B	CSO	90	4	6	2
7944		PALE	02 01	1930	N08	W66	01 28.0		B	CSO	70	4	9	3
7944		LEAR	02 02	0025	N10	W72	01 27.7		B	CAO	30	6	7	3
7944		KAND	02 02	0820	N10	W75	01 27.8			BXO		2	7	3
7944		SVTO	02 02	1208	N09	W76	01 27.9		B	DAO	60	5	5	1
7944		RAMY	02 02	1258	N07	W79	01 27.7		B	BXO	20	4	6	3
7944		HOLL	02 02	2050	N11	W81	01 27.9		B	CSO	10	3	5	2
7943		KAND	01 24	0745	N12	E75	01 30.0			AX		1		3
7943		SVTO	01 24	1115	N10	E72	01 29.9		A	HR	10	1	1	2
7943		RAMY	01 24	1337	N15	E68	01 29.7		A	AX	10	1		4
7943	28337	MWIL	01 24	1545	N11	E67	01 29.7	4	(AP)					
7943		HOLL	01 24	1552	N10	E67	01 29.7		A	AX	10	1		3
7943		LEAR	01 25	0400	N12	E61	01 29.8		A	AX	10	1	1	3
7943		KAND	01 25	0830	N12	E59	01 29.8			AX		1		3
7943		SVTO	01 25	1025	N10	E58	01 29.8		A	HR	10	1	1	3
7943		HOLL	01 25	1549	N12	E56	01 29.9		A	AX	10	1		2
7943		RAMY	01 25	1639	N14	E54	01 29.8		A	AX		1		2

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SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

JANUARY 1996

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time		Lat	CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7943	28337	MWIL	01	25	2000	N11 E52	01 29.7	4	(AP)					
7943		LEAR	01	26	0040	N11 E50	01 29.8		A	AX	10	1	1	3
7943		KAND	01	26	0820	N11 E45	01 29.7			AX		1		2
7943		RAMY	01	26	1249	N14 E41	01 29.6		A	AX	10	1		3
7943	28337	MWIL	01	26	1545	N11 E42	01 29.8	4	(AP)					
7943		HOLL	01	26	1720	N11 E41	01 29.8		A	AX		1		3
7943		PALE	01	26	2115	N09 E39	01 29.8		A	AX	10	1		3
7943		LEAR	01	27	0005	N11 E36	01 29.7		A	AX		1	1	3
7943		RAMY	01	27	1318	N13 E28	01 29.7		A	AX		1		5
7943		SVTO	01	27	1507	N09 E28	01 29.7		A	AX		1		2
7943		HOLL	01	27	1605	N11 E28	01 29.8		A	AX		1		2
7943		PALE	01	27	1944	N10 E25	01 29.7		A	AX	10	1		3
7943		LEAR	01	28	0020	N11 E23	01 29.7		A	AX		1		3
7943		SVTO	01	28	0731	N11 E18	01 29.7		A	AX		1		3
7943		RAMY	01	28	1305	N12 E15	01 29.7		A	AX		1		3
7943	28337	MWIL	01	28	1530	N11 E15	01 29.8	4	(AP)					
7943		HOLL	01	28	1620	N10 E15	01 29.8		A	AX		1		3
7943		PALE	01	28	1810	N10 E13	01 29.7		A	AX		1		2
7943		LEAR	01	29	0010	N12 E09	01 29.7		A	AX		2	3	4
7943		RAMY	01	29	1256	N11 E02	01 29.7		A	AX		2		4
7943		HOLL	01	29	1713	N10 E00	01 29.7		A	AX		1		2
7943		PALE	01	29	1803	N10 E00	01 29.7		A	AX		1		2
7943	28337	MWIL	01	29	1900	N10 W00	01 29.8	4	(AP)					
7943		LEAR	01	30	0104	N10 W04	01 29.7		A	AX		1		3
7943		RAMY	01	30	1425	N10 W13	01 29.6		A	AX		1		4
7943		HOLL	01	30	1540	N10 W12	01 29.7		A	AX		1		2
7943		LEAR	02	01	0008	N09 W33	01 29.6		A	AX		1		4
7943		RAMY	02	02	1258	N09 W49	01 30.0		A	AX		1		3
7943		HOLL	02	02	2050	N13 W55	01 29.8		A	AX		1		2
7943		LEAR	02	03	0455	N09 W59	01 29.9		A	AX	10	1		3

Stations reporting:

CULG = Culgoora
HOLL = Holloman

KAND = Kandilli
LEAR = Learmonth

MWIL = Mt. Wilson
PALE = Palehua

RAMY = Ramey
SVTO = San Vito

JANUARY 1996

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	Number of Station Reports by Type					Flare (UT)	X-ray Class	NOAA Region
						SWF	SEA	SPA	LF- SPA	SES			
01	0900	0907	0921	1	3		3				*		
03	1334	1336	1356	1-	1		1			2	1334	B6.0	7938
03	1406	1409	1417	1-	1					1	1405	B2.8	
03	1706	1707	1720U	1-	1					1	1707	C1.0	7938
03	1755	1757	1809	1-	1					1	1753	B3.8	
04	1004	1007	1020U	1-	1					1	1004	B4.9	
04	1108	1111	1130	1	1					1	1106	B3.8	
04	1618	1625	1640	1	5					2	1616	B4.0	
04	1816E	1827	1840	2	1					1	1754	B3.5	
05	0356	0406	0420	1-	1			1			0356	C1.3	7938
05	1029	1036	1110	2	3		2				No flare		
05	1330	1345	1414	1	1		1				*		
09	1337	1351	1430	1	1		1				*		
10	0927	0946U	1003	1	1		1				No flare		
12	1258	1306	1324	2	1		1				No flare		
14	1300	1314	1334	1	1		1				No flare		
17	0812	0815	0835	1	1		1				No flare		
21	0743	0749	0907	2	1		1				No flare		
22	0810	0822U	0837	1	1		1				No flare		
23	1238	1259U	1326	1	1		1				No flare		
27	0929	0945U	1009	1	1		1				No flare		
27	1146	1209U	1229	1	1		1				*		

* = no flare patrol.

OBSERVATORIES REPORTING FOR JANUARY 1996

Brazilian Antarctic Station	SPA	LaCrescenta, California, USA	SES
Cambridge, England, UK	SES	Madison, Wisconsin, USA	SES
Cranford, New Jersey, USA	SES	Nampa, Idaho, USA	SES
Durham, New Hampshire, USA	SES	Merja, Spain	SES
Fort Wayne, Indiana, USA	SES	Rimavska Sobota, Slovakia	SEA
Gettysburg, Pennsylvania, USA	SES	Rochester, New Hampshire, USA	SES
Hiraiso, Japan	SWF	Tucson, Arizona, USA	SES
Houston, Texas, USA	SES	Upice, Czech Republic	SEA
Hudson, Ohio, USA	SES	Wellington, Ohio, USA	SES
Indianapolis, Indiana, USA	SES	Windsor Locks, Connecticut, USA	SES
Inubo, Japan	SPA	Ziar nad Hronom, Slovakia	SEA
Itapetinga, Brazil	SPA	Zilina, Slovakia	SEA
Koniz, Switzerland	SES		

Observations are not necessarily continuous.

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

JANUARY 1996

OBSERVATION Day	Start End (UT) (UT)		Sta	Start (UT)	End (UT)	EVENT Spectral Class		Event Remarks	Int (1-3)	FREQUENCY Lower Upper (MHz) (MHz)		Remarks
01	0000	0737	HIRA									
	0000	0805	CULG									
	0700	1200	IZMI									
	0800	1420	POTS									
	1238	1855	ONDR									
	2035	2400	CULG									
	2148	2400	HIRA									
02	0000	0738	HIRA									
	0000	0805	CULG									
	0700	1200	IZMI									
	0800	1428	POTS	0930.5	0930.7	III	G		2	40X	170U	
	1526	1615	ONDR									
	2035	2400	CULG									
	2148	2400	HIRA									
03	0000	0739	HIRA									
	0000	0805	CULG									
	0514	1412	ONDR									
	0700	1200	IZMI									
	0800	1403	POTS	1136	1403 U	I	S		1	120	300	
	2036	2400	CULG									
	2148	2400	HIRA									
04	0000	0740	HIRA									
	0000	0806	CULG									
	0654	1333	ONDR									
	0754	1420	POTS	0754 E	1420 U	I	S,C		2	110U	350	
	0700	1200	IZMI	0830.0	1121.0U	I	N		1	95U	180X	
			POTS	1407.0	1408.0	III	GG		2	110U	170U	
	2148	2400	HIRA	2148.0E	2400.0D	I	S		1	100	250	
			HIRA	2241.1	2241.2	III	B		1	140	1000	
			HIRA	2243.5	2243.6	III	B		1	150	1000	
			HIRA	2245.0	2245.9	III	B		1	140	1500	
	2036	2400	CULG	2246.0	2247.0	III	B		1	140	1100	
			HIRA	2348.6	2348.6	III	B		2	90	1200	
			CULG	2349.0	2349.0	III	B		2	100	260	
05	0000	0741	HIRA	0000.0E	0741.0D	I	S		1	100	200	
			HIRA	0003.6	0003.7	III	B		1	90	210	
	0000	0806	CULG	0004.0	0004.0	III	B		1	80	160	
			CULG	0100.0	0101.0	III	B		1	100	170	
			LEAR	0230.0	0231.0	III			2	30	80	
			HIRA	0230.4	0230.8	III	B		2	25	160	
			CULG	0231.0	0232.0	III	B		2	25	160	
	0700	1200	IZMI	0700.0E	1200.0D	I	N		1	95U	135	
	0800	1403	POTS	0800 E	1403 U	I	S		2	110U	350	
	1334	1337	ONDR									
	2037	2400	CULG									
	2148	2400	HIRA									
06	0000	0742	HIRA									
	0000	0807	CULG									
	0700	1200	IZMI									
	0834	1338	ONDR									
	2037	2400	CULG									
	2149	2400	HIRA									
07	0000	0743	HIRA									
	0000	0807	CULG									
	0700	1200	IZMI									
	0833	1338	ONDR									
	2038	2400	CULG									
	2148	2400	HIRA	2148.0E	2400.0D	I	S		1	90	300	
08	0000	0808	CULG									
	0000	0744	HIRA	0000.0E	0744.0D	I	S		1	90	250	
	0700	1200	IZMI									
	0800	1403	POTS	0800 E	1403 U	I	S		1	140	325	

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

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JANUARY 1996

OBSERVATION Day	Start End		Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
	(UT)	(UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
08	0832	1730	ONDR								
	2038	2400	CULG								
	2148	2400	HIRA								
09	0000	0744	HIRA								
	0000	0808	CULG								
	0700	1200	IZMI								
	0800	1403	POTS	0800	E 1403	U	I S,W	1	200U	250	
	0831	1343	ONDR								
	2039	2400	CULG								
	2148	2400	HIRA								
10	0000	0809	CULG								
	0700	1200	IZMI								
	0000	0745	HIRA	0718.3	0718.4	III	B	2	50	500	
	0800	1403	POTS								
	0830	1342	ONDR								
	2039	2400	CULG								
	2148	2348	HIRA								
11	0426	0747	HIRA	0607.8	0608.1	III	B	1	25	80	
	0000	0809	CULG	0608.0	0609.0	III	B	1	18	85	
	0700	1200	IZMI								
	0800	1414	POTS								
	0837	1346	ONDR								
	2039	2400	CULG								
	2148	2400	HIRA								
12	0000	0748	HIRA								
	0000	0809	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	0828	1346	ONDR								
	2040	2400	CULG								
	2148	2400	HIRA								
13	0000	0748	LEAR	0313.0	0314.0	III		1	30	48	
	0000	0810	HIRA	0313.4	0313.9	III	B	1	25	50	
	0000	0810	CULG	0314.0	0314.0	III	B	1	20	50	
	0700	1200	IZMI								
	0827	1349	ONDR								
			PALE	2014.0	2021.0	III		1	25	45	
			PALE	2029.0	2032.0	II		1	28	42	ESS 2000
			SGMR	2029.0	2031.0	II		1	34	40	ESS 1000
	2040	2400	CULG								
			PALE	2129.0	2132.0	II		1	28	42	ESS 2000
	2148	2400	HIRA								
14	0000	0749	HIRA								
	0000	0810	CULG								
	0700	1200	IZMI								
	0826	1351	ONDR								
	2041	2400	CULG								
	2148	2400	HIRA								
15	0000	0750	HIRA								
	0000	0811	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	0825	1354	ONDR								
	2041	2400	CULG								
	2148	2400	HIRA								
16	0000	0752	HIRA								
	0000	0811	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	2041	2400	CULG								
	2147	2400	HIRA								

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

JANUARY 1996

OBSERVATION Day	Start End		Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
	(UT)	(UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
17	0000	0626	HIRA								
	0000	0811	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	2042	2400	CULG								
	2147	2400	HIRA								
18	0000	0753	HIRA								
	0000	0812	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	1348	1348	ONDR								
	2042	2400	CULG								
	2147	2400	HIRA								
19	0000	0754	HIRA								
	0000	0812	CULG								
	0700	1200	IZMI								
	0800	1414	POTS								
	0825	1401	ONDR								
	2042	2400	CULG								
	2145	2400	HIRA								
20	0000	0755	HIRA								
	0000	0812	CULG								
	0700	1200	IZMI								
	0826	1405	ONDR								
	2043	2400	CULG								
	2145	2400	HIRA								
21	0000	0756	HIRA								
	0000	0813	CULG								
	0700	1200	IZMI								
	0826	1405	ONDR								
	2043	2400	CULG								
	2145	2400	HIRA								
22	0000	0813	CULG								
	0000	0758	HIRA	0646.3	0646.5	III	B	2	40	500	
	0700	1200	IZMI								
	0754	1428	POTS								
	0826	1409	ONDR								
	2043	2400	CULG								
	2145	2400	HIRA								
23	0000	0758	HIRA								
	0000	0813	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0813	1408	ONDR								
	2044	2400	CULG								
	2144	2400	HIRA								
24	0000	0800	HIRA								
	0000	0814	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0812	1413	ONDR								
	2044	2400	CULG								
	2144	2400	HIRA								
25	0000	0801	HIRA								
	0000	0814	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0810	1414	ONDR								
			LEAR	0855.0	0858.0	III		2	47	55	
	2044	2400	CULG								
	2143	2400	HIRA								

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

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Jan 96

JANUARY 1996

Day	OBSERVATION		Sta	Start (UT)	End (UT)	EVENT		Int (1-3)	FREQUENCY		Remarks
	Start (UT)	End (UT)				Spectral Class	Event Remarks		Lower (MHz)	Upper (MHz)	
26	0000	0802	HIRA								
	0000	0814	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0808	1416	ONDR								
	2044	2400	CULG								
	2143	2400	HIRA								
27	0000	0802	HIRA								
	0000	0814	CULG								
	0700	1200	IZMI								
	0806	1420	ONDR								
	2044	2400	CULG								
	2142	2400	HIRA								
28	0000	0803	HIRA								
	0000	0814	CULG								
	0700	1200	IZMI								
	0805	1422	ONDR								
	2045	2400	CULG								
	2141	2400	HIRA								
29	0000	0804	HIRA								
	0000	0815	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0803	1423	ONDR								
	2045	2400	CULG								
	2141	2400	HIRA								
30	0000	0806	HIRA								
	0000	0815	CULG								
	0700	1200	IZMI								
	0754	1428	POTS								
	0801	1424	ONDR								
	2045	2400	CULG								
	2139	2400	HIRA								
31	0000	0807	HIRA								
	0000	0815	CULG								
	0700	1200	IZMI								
	0754	1428	POTS	0754	E	1301	I S	1	110U	170U	
	0759	1429	ONDR								
	2045	2400	CULG								
	2139	2400	HIRA								

Event Remarks:

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

X = Extends beyond instrument range	U = Uncertain frequency
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Remarks:

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

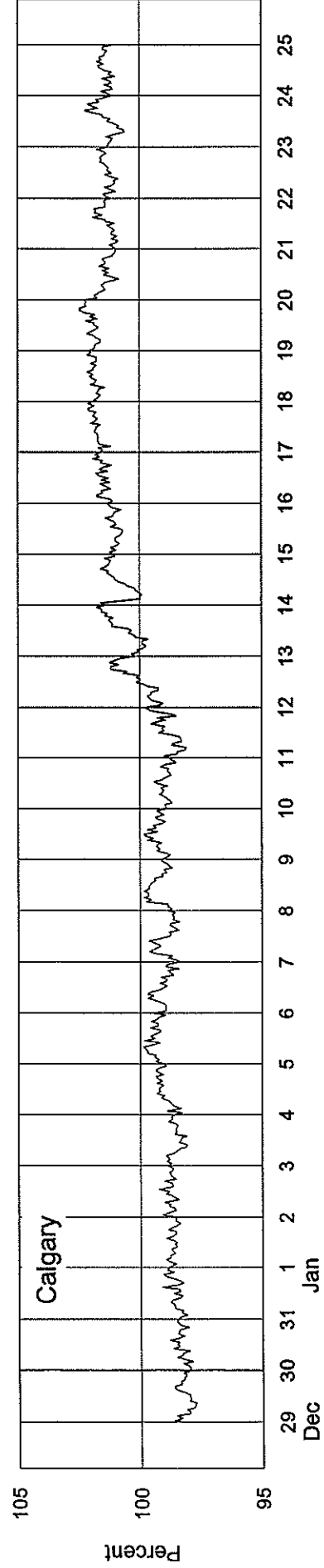
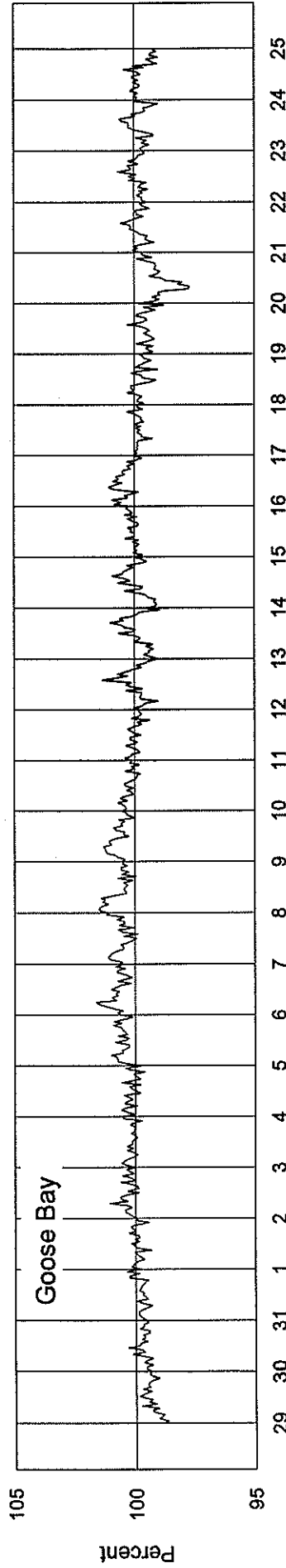
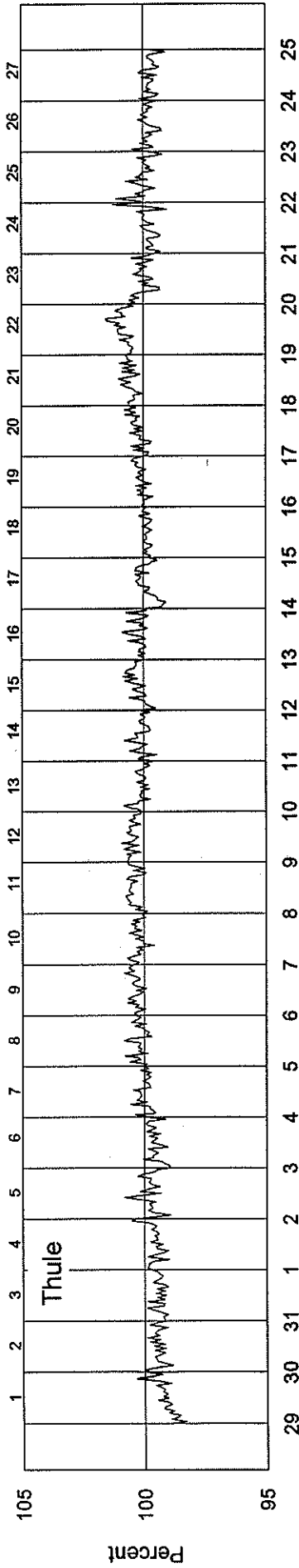
Stations Reporting: CULG = Culgoora HIRA = Hiraiso IZMI = Izmiran LEAR = Learmonth
ONDR = Ondrejov PALE = Palehua POTS = Potsdam SGMR = Sagamore Hill SVTO = San Vito

COSMIC RAY INDICES
(Neutron Monitor)
JANUARY 1996

Day	THULE Average (cts/h)/100	GOOSE BAY Average (cts/h)/100	CALGARY Average (cts/h)/300	MOSCOW Average (cts/h)/64	CLIMAX Average (cts/h)/100	BEIJING Average (cts/h)/256	TOKYO Average (cts/h)/256	HALEAKALA Average (cts/h)/1000
1	4493	7338.7	3884.3	9255.4	4179.3	2039.2	No data	3534.3
2	4503	7364.2	3888.2	9259.2	4197.8	2037.1	at time of	3544.5
3	4491	7354.7	3880.3	9276.1	4191.8	2039.0	publication	3552.0
4	4511	7355.4	3898.0	9293.7	4206.5	2035.4	---	3560.9
5	4521	7380.7	3913.7	9296.4	4206.0	2037.3	---	3554.7
6	4528	7399.0	3901.0	9306.0	4204.4	2037.9	---	3550.9
7	4523	7385.0	3892.7	9297.6	4190.3	2052.2	---	3561.2
8	4530	7396.9	3907.7	9268.3	4193.9	2045.8	---	3562.4
9	4535	7395.2	3908.3	9253.5	4187.4	2043.0	---	3562.3
10	4517	7360.5	3895.2	9241.6	4172.5	2038.8	---	3557.8
11	4515	7343.0	3890.7	9226.2	4154.0	2037.7	---	3551.4
12	4523	7343.3	3939.5	9217.5	4150.0	2040.4	---	3555.3
13	4519	7334.1	3961.3	9252.5	4203.0	2053.8	---	3575.7
14	4504	7336.2	3971.2	9226.2	4185.8	2050.2	---	3572.9
15	4506	7347.1	3976.7	9239.3	4179.1	2051.7	---	3579.1
16	4516	7375.9	3995.8	9275.8	4197.0	2052.1	---	3574.6
17	4521	7331.0	4006.5	9278.8	4229.5	2052.8	---	3580.3
18	4537	7323.7	4009.3	9294.2	4226.5	2054.6	---	3573.2
19	4549	7307.9	4014.5	9288.5	4219.2	2051.8	---	3570.4
20	4515	7268.5	3992.8	9252.4	4207.0	2051.5	---	3567.7
21	4503	7331.5	3988.0	9240.7	4187.9	2047.0	---	3557.8
22	4513	7335.7	3988.7	9249.5	4194.5	2044.0	---	3556.5
23	4504	7326.7	3990.5	9241.6	4199.6	2042.9	---	3553.5
24	4498	7324.2	3991.5	9226.5	4192.1	2041.9	---	3553.8
25	4499	7294.5	3996.0	9245.5	4203.3	2045.9	---	---
26	4511	7364.8	4006.0	9266.4	4210.8	2046.5	---	3553.5 (45)
27	4533	7354.9	4016.0	9266.3	4206.2	2050.4	---	3560.0
28	4554	7352.2	4030.3	9312.1	4235.8	2053.2	---	3564.1
29	4530	7385.3	4016.7	9290.1	4208.0	2045.9	---	3563.8
30	4513	7356.1	3998.0	9278.8	4192.8	2048.0	---	3550.6
31	4524	7393.2	3995.3	9312.7	4212.8	2049.1	---	3541.7
Mean	4517	7350.3	3959.5	9265.5	4197.6	2045.7	---	3559.9

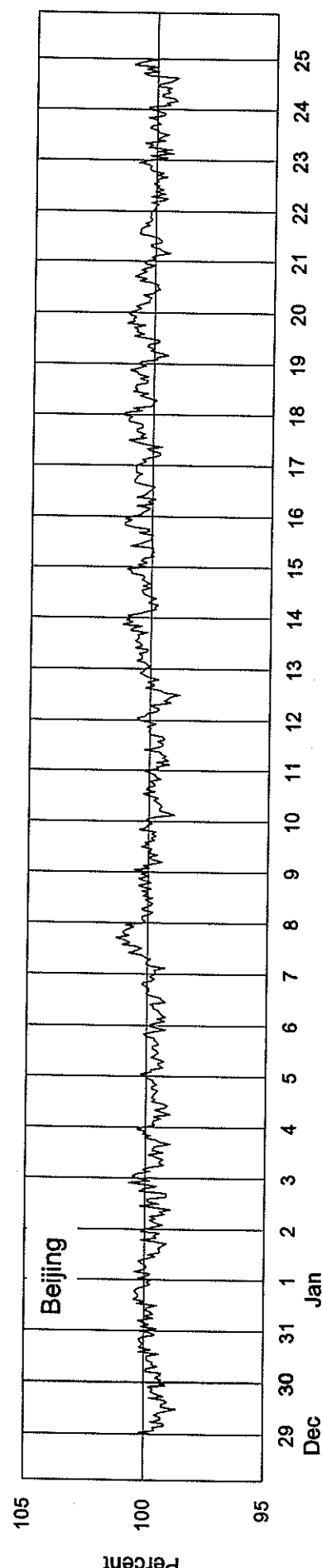
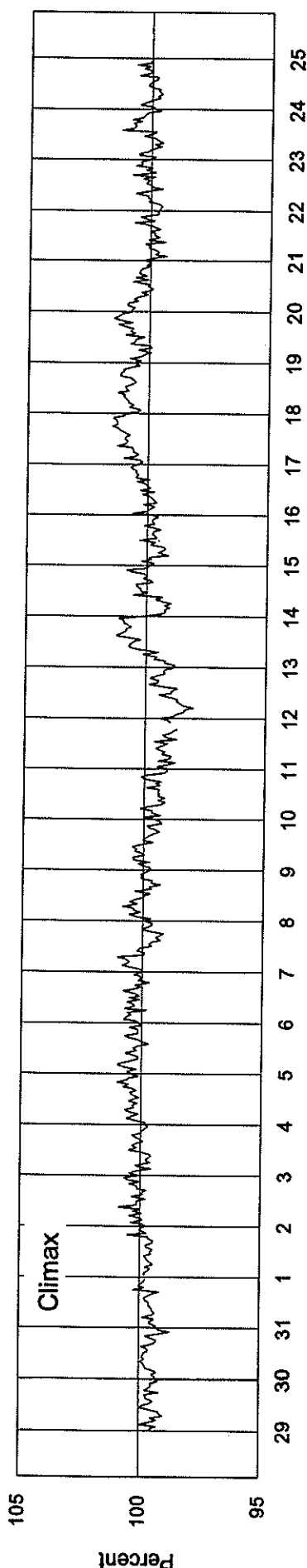
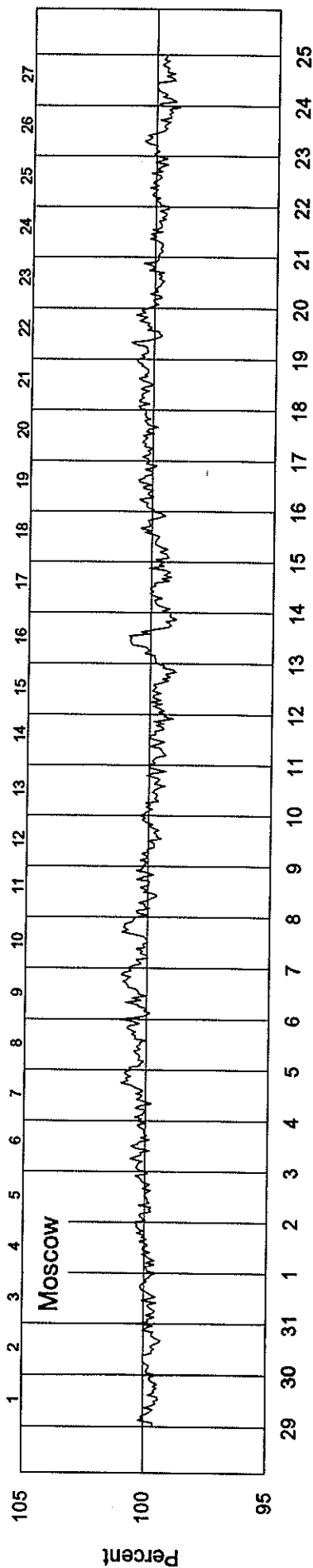
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours, and for Haleakala, whenever the sum of all three sections falls below 60 hours.

COSMIC RAY INDICES (Neutron Monitor) Bartels Rotation 2218 - Beginning 29 Dec 95

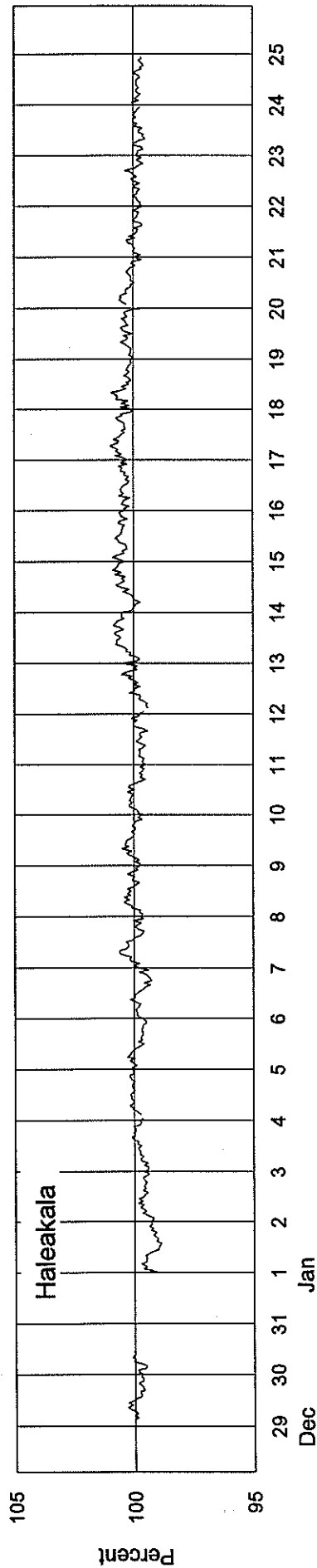
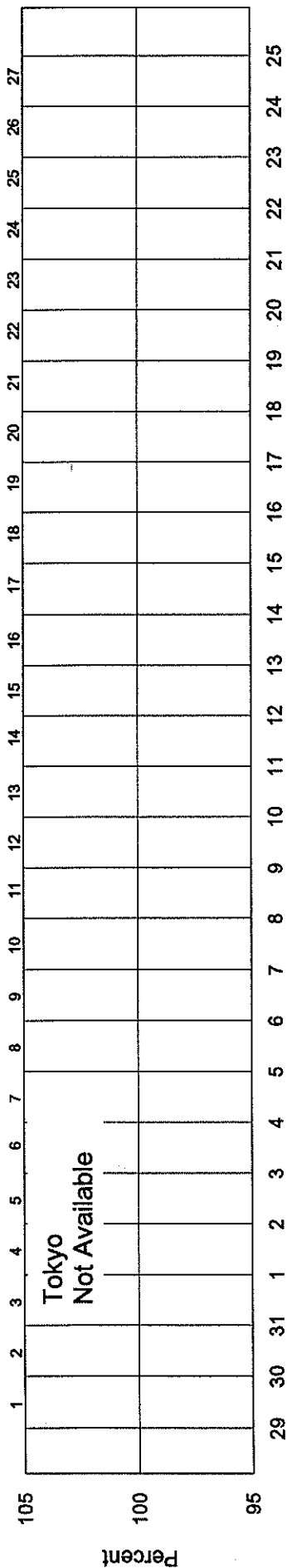


COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2218 - Beginning 29 Dec 95

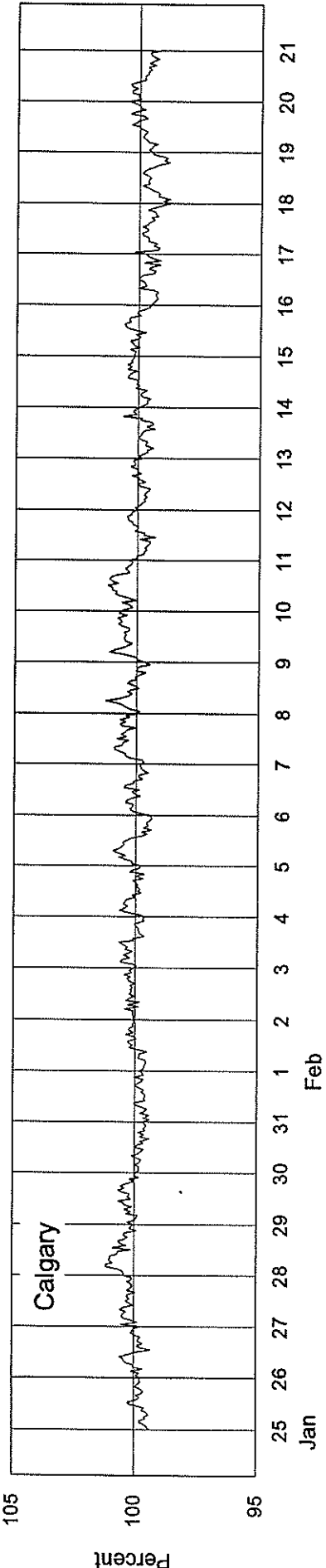
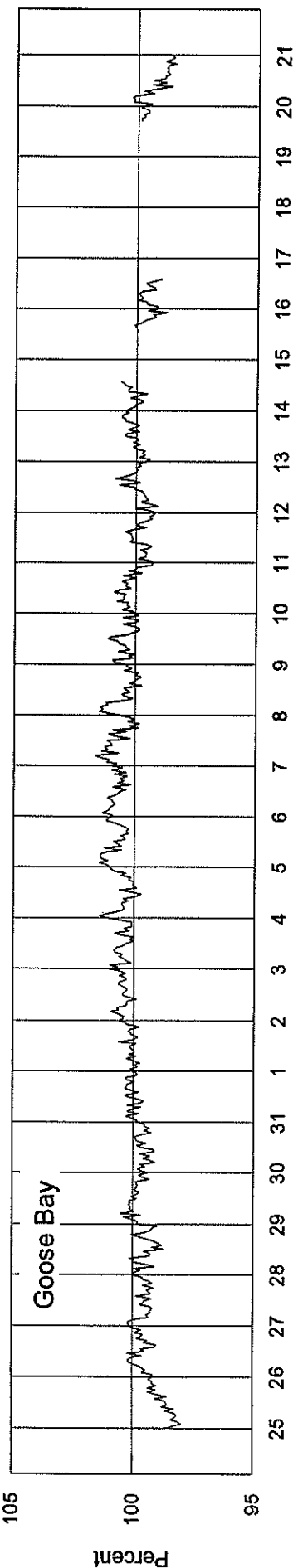
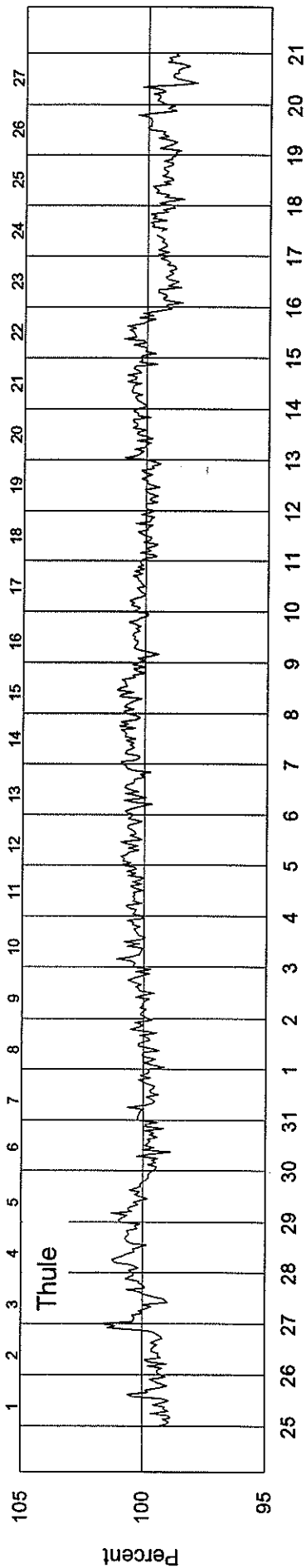


COSMIC RAY INDICES (Neutron Monitor) Bartels Rotation 2218 - Beginning 29 Dec 95



COSMIC RAY INDICES (Neutron Monitor)

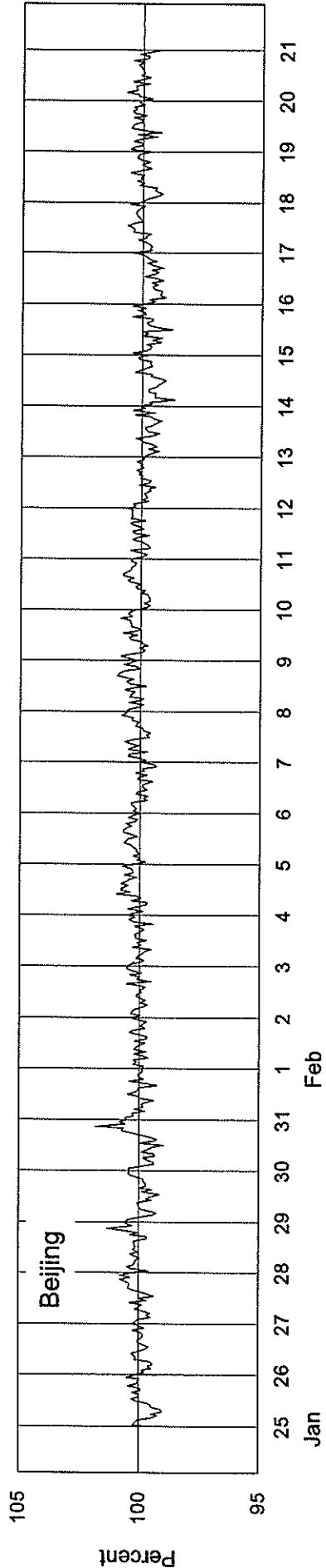
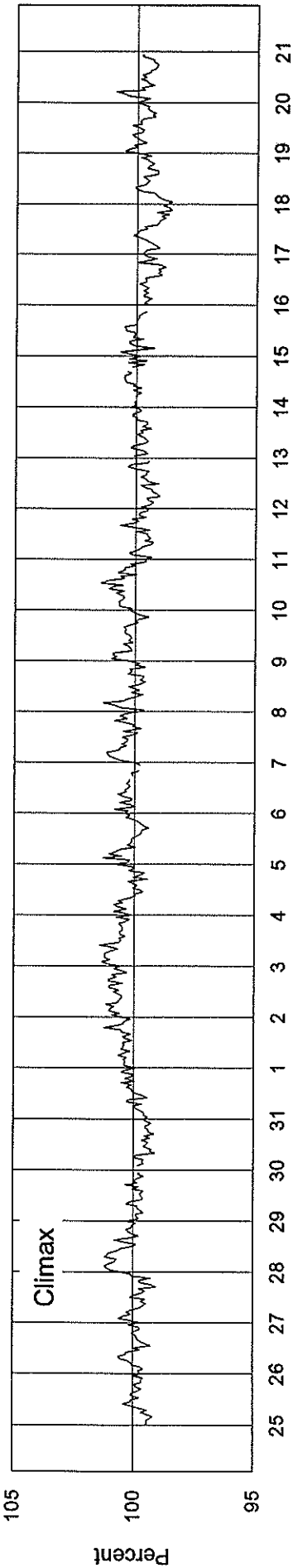
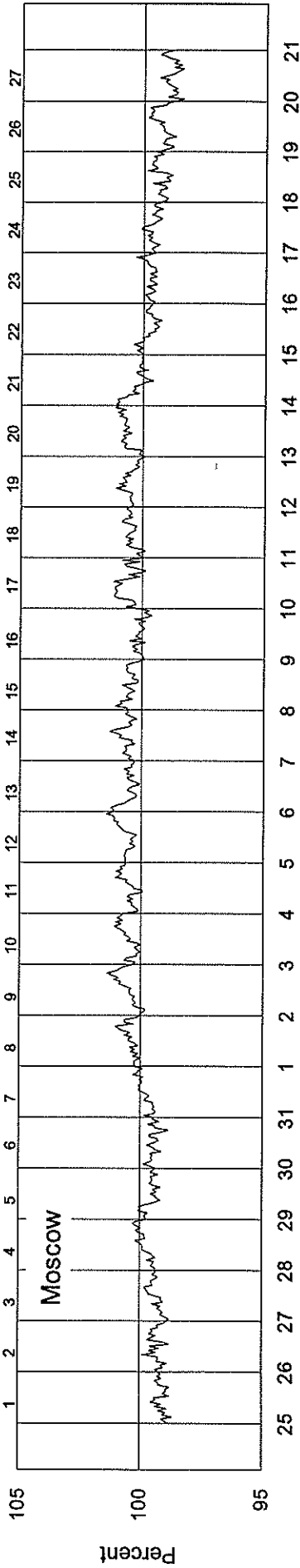
Bartels Rotation 2219 - Beginning 25 Jan 96



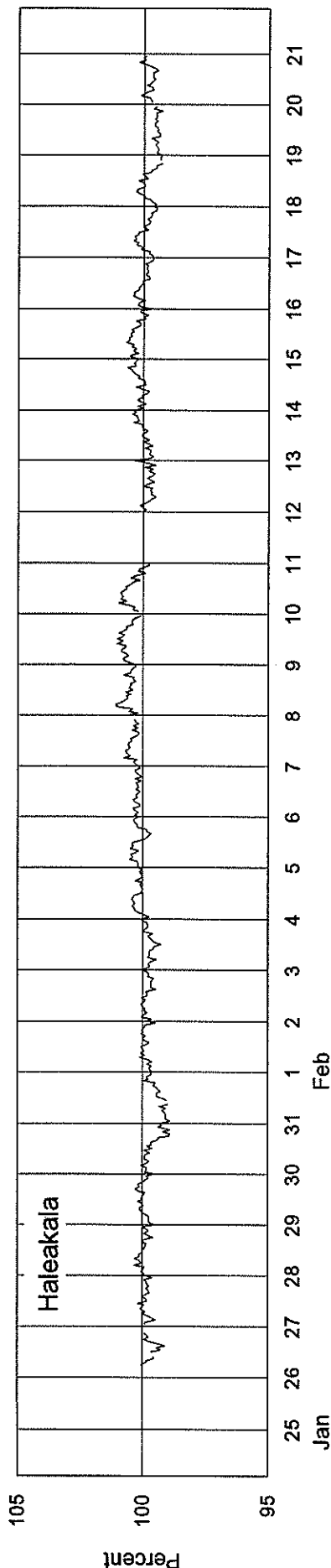
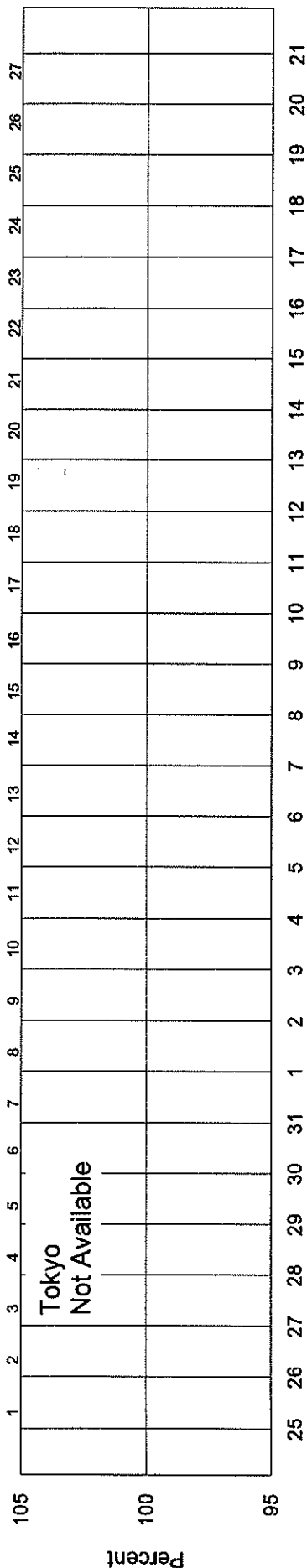
COSMIC RAY INDICES

(Neutron Monitor)

Bartels Rotation 2219 - Beginning 25 Jan 96

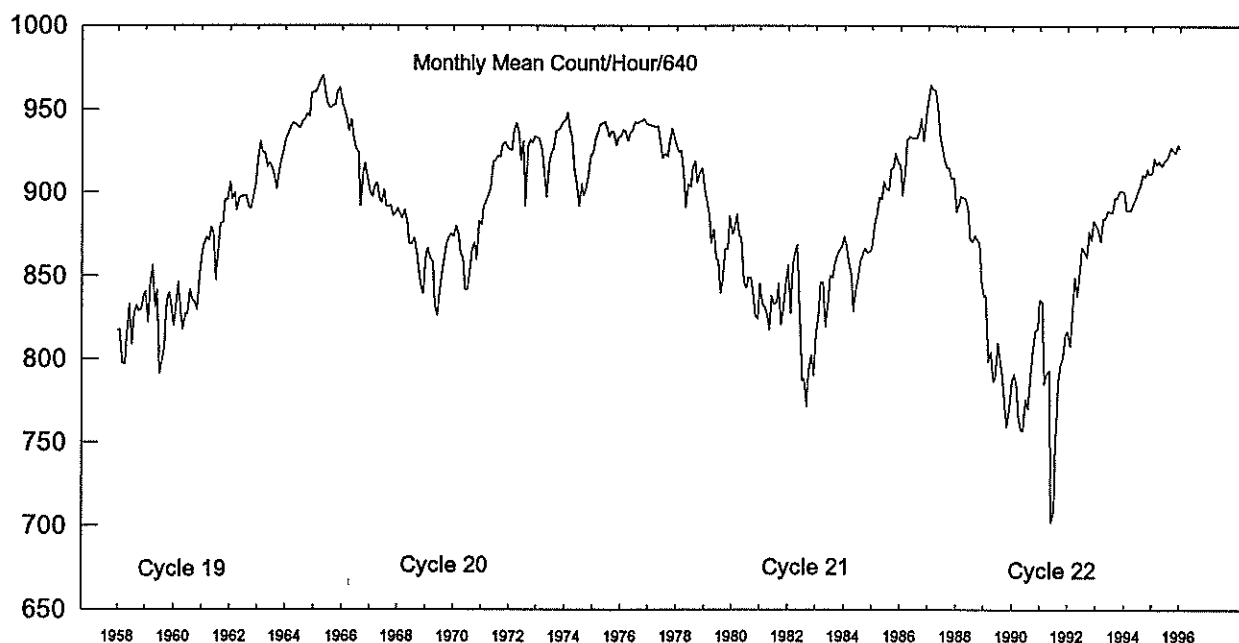


COSMIC RAY INDICES (Neutron Monitor) Bartels Rotation 2219 - Beginning 25 Jan 96



Moscow Neutron Monitor Pressure-Corrected Values Jan 1958 - Jan 1996

107
Jan 96



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1958	8171*	8175*	7973*	7971*	8145*	8330*	8087*	8266*	8324*	8291*	8294*	8378*	8200*
1959	8405	8223	8443	8565	8309	8416	7911	7972	8054	8351	8397	8325	8281
1960	8199	8313	8459	8264*	8178*	8272*	8272*	8417	8348	8348	8295	8464	8319*
1961	8619	8682	8731*	8708*	8791*	8759*	8472	8676	8808	8816	8957	8956	8748*
1962	9061	8959	8996	8891	8964*	8974	8977	8977	8908	8902	8973	9056	8940*
1963	9201	9308	9243	9239	9154	9180	9147	9109	9020	9110	9194	9259	9180
1964	9321	9353	9395	9416	9410	9396	9384	9425	9442	9473	9458	9594	9422
1965	9602	9608	9642	9685	9701	9586	9530	9505	9520	9525	9608	9630	9595
1966	9531	9502	9439	9367	9438	9336	9261	9242*	8916	9105*	9178	9094	9284*
1967	9006	8973	9038	9059	8956	8940	9015	8913	8911	8924	8860	8873	8956
1968	8904	8875*	8844*	8892*	8825*	8690*	8689	8725	8635*	8533*	8428	8394	8703*
1969	8628	8666	8606	8584	8334	8261	8378	8510	8612	8689	8731	8751	8562
1970	8735	8799	8749	8639	8608	8418	8420	8540	8656	8702	8596	8827	8641
1971	8805	8921	8952	8982	9028	9185	9190	9219	9215	9285	9302	9276	9113
1972	9260	9254	9367	9419	9364	9192	9311	8916	9275	9319	9298	9336	9275
1973	9333	9321	9258	9107	8975	9160	9233	9263	9368	9376	9392	9423	9267
1974	9431	9481	9390	9327	9153	9062	8916	9054	8983	9027	9092	9222	9178
1975	9238	9317	9361	9405	9415	9425	9395	9339	9370	9361	9285*	9330	9353*
1976	9339	9375	9370	9310	9363	9371	9423	9418	9423	9428	9440	9415	9380
1977	9405	9404	9401	9392	9399	9318	9209	9236	9216	9302	9384*	9341	9334*
1978	9279	9243	9254	9113	8907	9050	9035	9149	9189	9062	9118	9145	9216
1979	9012	8955	8860	8693	8778	8599	8592	8396	8470	8662	8661	8857	8740
1980	8752	8776	8871	8737	8732	8463	8430	8490	8491	8379	8259	8242	8552
1981	8451	8330	8311	8277	8176	8379	8332	8338	8452	8206	8289	8439	8332
1982	8565	8277	8565	8649	8686	8279	7870	7882	7712	7931	8023	7902	8195
1983	8150	8253	8460	8460	8194	8343	8498	8492	8575	8625	8658	8670	8448
1984	8736	8686	8574	8505	8286	8421	8476	8590	8632	8669	8641	8644	8575
1985	8671	8813	8878	8973	8958	9066	9018	9017	9140	9155	9233	9183	9009
1986	9162	8982	9125	9316	9339	9328	9326	9327	9368	9444	9312	9472	9292
1987	9553	9646	9619	9618	9505	9349	9268	9202	9149	9153	9085	9094	9353
1988	8885	8922	8979	8968	8961	8904	8724	8704	8745	8716	8699	8474	8807
1989	8381	8385	7985	8043	7868	7888	8102	7977	7897	7709	7592	7701	7961
1990	7871	7910	7846	7652	7574	7569	7755	7701	7864	8037	8168	8185	7844
1991	8356	8347	7850	7915	7926	7025	7082	7510	7863	7964	8008	8153	7833
1992	8169	8078	8247	8490	8378	8535	8670	8649	8614	8767	8717	8833	8512
1993	8804	8784	8705	8846	8842	8888	8884	8880	8968	8968	9010	9011	8882
1994	9001	8895	8899	8898	8942	8963	9013	9055	9110	9098	9141	9112	9011
1995	9122	9206	9169	9193	9159	9186	9203	9228	9272	9257	9241	9286	9210
1996	9266												9266

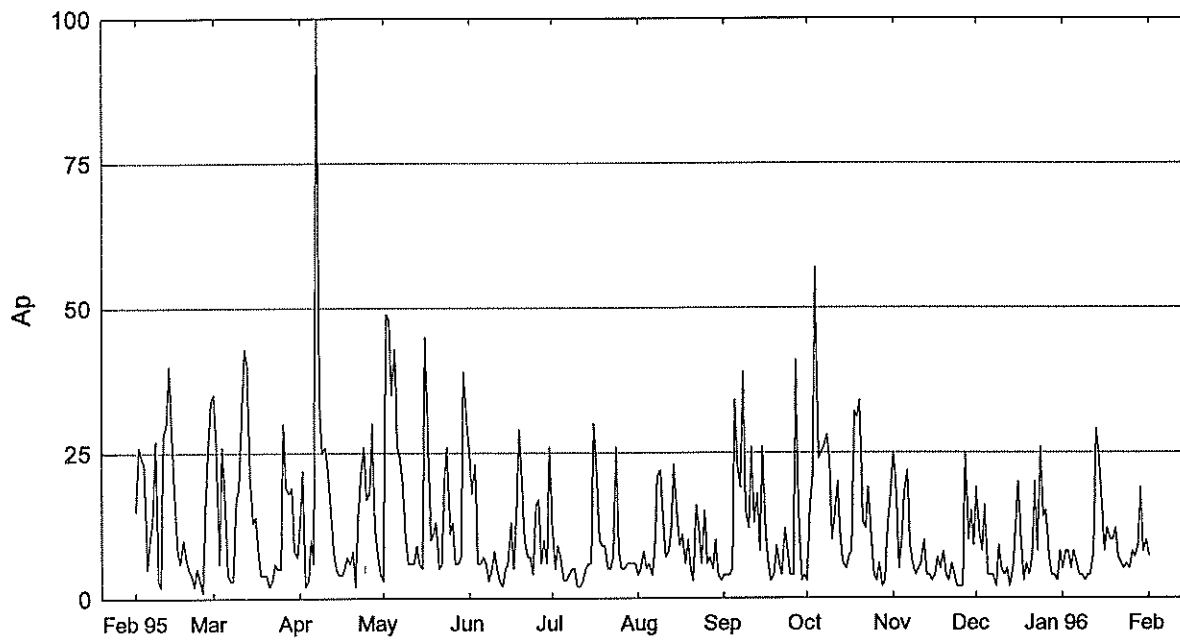
Multiply table entries by 64 to obtain hourly counting rate. Moscow, Russia: N55, E37, Alt= 200 m, Cutoff Rigidity= 2.42GV.
NOTE: * Indicates data have been restored using the corresponding data of other cosmic ray stations.

Geomagnetic Activity Indices January 1996

		Kp Three-Hourly Indices									Km Three-Hourly Indices								aa Provisional							
Day		1	2	3	4	5	6	7	8	Sum	Ap	Cp	1	2	3	4	5	6	7	8	Am	N	S	M		
1	Q8	1	0	0+	1+	1+	1	3-	2	10-	5	0.2	1-	1-	1-	2+	2-	1+	3-	1+	11	14	14	11	17	K
2		2-	0	1-	1	1	3-	2+	4-	13	8	0.4	1o	0o	1o	1+	2-	3o	3-	3o	15	18	18	8	28	
3		4-	1	2	2	3-	2-	1-	1+	15	8	0.4	2+	1o	2o	3-	3-	2-	1-	1o	14	18	15	20	13	
4	Q7	1	1-	1-	2-	2+	2-	1-	1+	10+	5	0.2	1-	1o	1+	2o	2+	1+	1o	1+	10	10	11	10	11	CC
5		2+	2	2+	2	2	2	2	3-	17+	8	0.4	2-	2o	3-	2-	2+	1+	2-	2o	15	18	18	17	19	
6	Q10K	3-	3-	1	1-	1+	2-	1+	1+	13-	6	0.3	2-	2+	2-	1+	1+	2-	1+	1+	11	15	11	15	11	CC
7	Q5	1-	1	1	1-	0+	1-	2	2+	9-	4	0.2	1o	1o	1+	1-	1o	1o	2-	2o	8	12	9	8	13	CC
8	Q2	2-	1-	1	1-	0+	1	1	0+	7-	4	0.1	1o	1-	1o	1-	1-	1-	1+	0+	5	10	7	9	8	CC
9	Q1	1-	0+	0	1-	1+	1-	1-	1	5+	3	0.1	1-	1-	0+	1-	2-	0o	1-	1o	5	8	6	7	8	CC
10	Q3	2-	0+	0+	0+	1-	1-	2-	2	8-	4	0.1	1+	0+	1-	1-	1o	1o	2o	2-	7	13	8	8	13	CC
11	Q4	1-	0+	1	1-	1	1-	2	2	8+	4	0.1	1-	1-	1+	1o	1+	1-	2o	2o	9	15	12	9	18	KC
12		2-	1-	1	2-	1	2-	1+	4+	13+	8	0.4	2-	1o	1+	2-	1+	2o	1+	4-	15	17	21	13	25	
13	D1	3+	5	5	4+	4	5-	2+	3-	31+	29	1.3	3o	4-	4+	5-	4-	5-	2+	3-	46	45	44	49	40	
14	D2	3-	1+	2+	5	4+	3+	4-	5+	28	25	1.2	2-	1+	3-	5-	4+	3+	3+	4+	40	42	43	34	51	
15	D4*	5-	3	2	2+	3+	3-	2	3+	23+	16	0.9	4o	2+	2o	3-	3+	2+	2o	3-	26	38	26	33	31	
16		3+	2	2	2-	1+	2	2+	2	17-	8	0.4	3-	1+	2-	2-	2-	2-	3-	2-	14	17	13	15	15	
17		2+	3	2	1+	2-	2+	4	3	20-	12	0.7	2-	2+	2-	1+	2o	3-	4-	3-	21	29	23	16	36	
18		2+	3+	2+	2-	1+	3-	3-	1+	18-	10	0.5	2o	3+	2+	2-	2-	2+	2+	1+	18	22	22	26	18	
19		1-	1	2+	2-	2-	3-	3-	4+	17	10	0.6	1o	1+	2+	1+	2-	2+	2+	4o	19	26	21	12	35	
20	D5*	3-	2	4	3+	3-	3-	1	1-	19	12	0.7	2+	2-	3+	3o	2+	3-	1+	1-	20	22	27	33	16	
21		1+	1+	3-	2	1	2	2	3-	15	7	0.4	1o	2-	2+	2o	1+	2+	2+	2+	14	15	15	13	17	
22		2+	1	1-	1-	2	2+	2	2	13	6	0.3	2-	2-	1+	1o	3o	2+	2-	2-	14	15	19	11	23	
23	Q6	3-	1	1-	2-	1+	1-	1	0+	9+	5	0.2	2o	1o	1o	2-	1+	1o	1o	1-	8	11	9	12	8	CK
24		0+	1	0+	1-	1	3	3-	2+	11+	6	0.3	1-	1o	0+	1o	1o	3o	3-	2o	12	17	13	7	23	K
25	Q9	2-	2-	1	1	1-	1	2	2+	11+	5	0.2	1o	2+	1+	1+	1-	1-	2-	2o	10	12	12	12	12	C
26		3+	2+	2-	1	1	3-	2+	1+	16-	8	0.5	3-	2-	2-	1+	1o	2+	2+	1+	14	20	11	15	16	
27		2+	2	1-	2	2	2-	2	3-	15+	7	0.4	1+	1+	1-	2o	3-	2-	1+	2o	13	16	11	12	15	
28		2-	2+	2+	1-	0+	1	3+	3+	15	9	0.5	1o	2-	2+	1+	0+	1+	3o	3o	15	24	14	13	25	
29	D3*	4-	3+	4+	4-	3-	3+	4-	2+	27	19	1.0	3+	3-	4-	4o	3o	3o	3+	2o	35	34	43	48	29	
30		3-	3	1-	1-	1+	2-	1+	3+	15-	8	0.5	2o	2+	1o	1-	2-	2-	1+	3o	14	21	13	14	20	
31		3+	2+	2+	2	2+	2-	2+	2+	19-	10	0.5	3-	2+	2+	2o	3-	2-	2o	2o	18	22	20	22	20	
Mean											9	0.45									16.0	19.9	17.7	18.8		
Day		Kn Three-Hourly Indices								An	Ks Three-Hourly Indices								As	Sa	Prov					
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			Ri	Ra	Rs	IMF		
1		1o	0o	0+	2-	2o	1o	3-	1+	9	1-	1o	1o	3-	2-	2-	2+	1+	12	72.6	13	13	16			
2		1+	0o	1o	1o	2o	3o	2+	3o	14	1-	0o	1o	2-	2-	3-	3-	3o	15	72.3	12	16	16			
3		3o	1-	2o	2+	3-	2-	1o	1o	15	1+	1+	2o	3-	3-	2o	0+	1o	13	78.2	19	20	22			
4		1-	1-	1o	2+	2+	2-	1o	1+	10	1-	1o	2o	2-	2o	1+	1o	1o	10	83.1	30	29	28			
5		2o	2-	2+	2-	2o	2-	2-	2o	14	1+	2o	3-	2-	3-	1+	2-	2+	16	82.1	48	40	27			
6		2o	3-	1+	1o	2-	2-	2-	1+	12	2-	2o	2-	2-	1+	2-	1o	1+	11	79.9	47	38	24			
7		1o	1o	1+	1-	1-	1o	1+	2o	8	1o	1-	1o	1-	1o	1o	2-	2o	8	79.8	41	31	24			
8		1o	0o	1-	0+	1-	1-	1+	0+	5	1-	1o	1o	1-	1-	1-	1+	0+	6	76.7	35	34	21			
9		0+	0o	0o	0+	2-	0+	1-	1o	4	1o	1o	0+	1o	2-	0o	1-	1-	6	73.4	24	16	17			
10		1o	0+	0o	0o	1o	1o	2-	2-	6	2-	0+	1o	1o	1o	1o	2o	2-	9	71.4	11	10	15			
11		0+	0+	1-	1o	1+	1-	2o	2o	8	1o	1-	2-	1o	2-	1-	2o	2+	10	69.1	0	0	13			
12		1+	0+	1-	2o	1o	2+	1+	3+	13	2o	2-	2-	2-	2-	2o	1+	4o	17	67.2	0	0	11			
13		3+	4+	5-	5-	4o	5o	3-	2+	53	3-	3o	4o	4+	3o	4o	2+	3-	38	66.7	0	0	10			
14		2o	1+	3-	5o	4+	3o	3+	5-	43	1+	2-	2+	4o	4o	3+	3o	4+	37	67.4	0	0	11			
15		4o	3-	2-	2+	4-	3-	2-	3o	28	4-	2+	2o	3-	3+	2-	2o	3-	24	67.9	0	0	11			
16		3-	1+	2-	2o	2-	2o	3-	2-	15	2+	1o	2-	2-	2-	2-	3-	1+	13	67.6	0	0	11			
17		1+	3-	2-	2-	2+	2+	4-	3o	20	2o	2o	2-	1+	2-	3-	4o	2+	20	68.2	0	0	12			
18		2-	4-	2+	2o	2-	2+	3-	1+	18	2o	3+	2+	2-	2o	2+	2o	1+	18	68.7	0	0	12			
19		1-	1o	2+	2-	2o	2+	2+	4o	19	1+	2-	3-	1+	1+	2+	2+	4o	19	68.5	0	0	12			
20		2+	2-	3+	3o	3-	3-	1+	1-	20	2o	2-	3+	3+	2+	3-	1o	1-	20	69.1	0	0	13			
21		1o	1+	2+	2o	1+	2o	2o	2o	13	1+	2-	2o	2-	2-	2+	2+	3-	15	69.5	9	8	13			
22		2o	1+	1o	1o	3-	3-	2o	2o	14	1+	2o	1+	1o	3o	2o	2-	2-	14	70.0	0	2	14			
23		2+	1-	1-	2-	1+	1o	1o	0+	8	2-	1o	1o	2-	1o	1o	1o	1-	8	71.0	0	0	15			
24		1-	1-	0+	1+	1o	3-	3-	2o	12	1-	1o	0o	0+	1o	3o	3o	2-	12	70.7	11	7	14			
25		1o	2o	1+	1+	1o	1+	2-	2o	10	1o	3-	2-	1o	0+	0+	1+	2+	10	71.7	9	9	15			
26		3+	2o	1+	1+	1o	3-	3-	1+	16	2+	1o	2-	1o	1o	2+	2o	1+	11	71.5	9	9	15			
27		1+	2-	0+	2o	3-	2o	2-	2+	14	1+	1o	1o	2o	3-	2-	1o	2-	12	71.6	9	9	15			
28		1+	2-	2+	1-	1-	1+	3+	3o	15	1o	2-	2o	2o	0o	1o	3-	3+	15	71.4	10	10	15			
29		3+	2+	4-	4o	3o	3o	3+	2o	35	3+	3o	4-	4o	3-	3o	3+	2o	34	71.8	9	9	16			
30		2o	3-	1-	0+	2-	2o	1+	3-	13	2-	2+	1o	1o	2-	2-	2-	3+	15	72.5	16	17	16			
31		3o	2+	2o	2o	3-	2-	2+	2-	17	3-	3-	2+	2o	3-	1+	2o	2o								

Daily Average Indices Ap Feb 1995 - Jan 1996

109
Jan 96

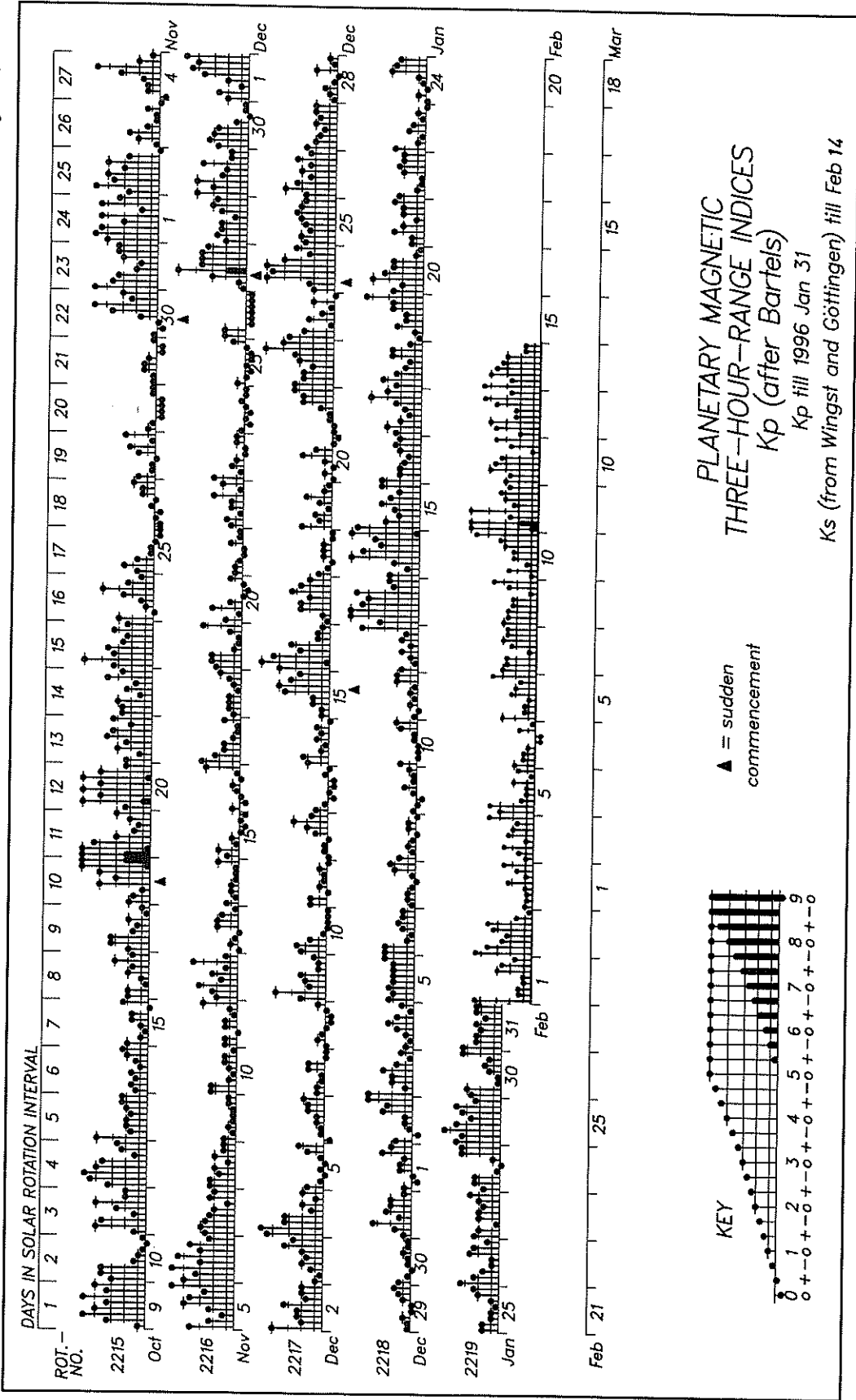


Day	Feb 95	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96
1	15	35	13	3	25	13	4	4	3	25	19	5
2	26	26	22	49	18	5	5	4	16	20	11	8
3	24	6	2	48	23	9	6	4	21	5	8	8
4	23	26	3	35	6	7	7	5	57	10	16	5
5	5	18	10	43	6	3	8	34	24	18	4	8
6	10	4	6	26	7	3	4	23	25	22	4	6
7	13	3	100	24	6	4	8	19	26	9	4	4
8	27	3	34	20	3	5	21	39	28	6	2	4
9	3	17	25	10	5	5	22	15	24	4	9	3
10	2	19	26	6	8	2	14	12	10	5	5	4
11	28	30	22	6	5	2	7	26	14	6	4	4
12	30	43	16	6	3	3	8	13	20	10	5	8
13	40	40	8	9	2	5	12	18	10	4	2	29
14	28	21	5	6	5	6	23	8	6	4	5	25
15	16	13	4	5	6	6	14	26	5	3	12	16
16	8	14	4	45	13	30	9	11	7	4	20	8
17	6	8	5	30	5	23	11	6	8	7	9	12
18	10	4	7	10	14	10	6	3	32	5	3	10
19	7	4	6	11	29	9	10	4	31	8	6	10
20	5	4	8	13	20	9	5	9	34	4	4	12
21	4	2	2	5	10	5	3	6	13	3	7	7
22	2	3	14	6	7	5	16	4	12	6	20	6
23	5	6	22	20	7	7	12	12	19	4	8	5
24	3	5	26	26	4	26	6	8	10	2	26	6
25	1	5	17	11	16	8	15	4	4	2	14	5
26	15	30	18	13	17	5	6	4	3	2	15	8
27	25	19	30	6	6	5	7	41	6	25	7	7
28	34	18	12	6	10	6	5	15	2	10	4	9
29		19	7	7	6	6	10	3	3	15	4	19
30		8	4	39	26	6	4	4	12	9	3	8
31		7		30		6	3		18		8	10
Mean	15	15	16	18	11	8	9	13	16	9	9	9

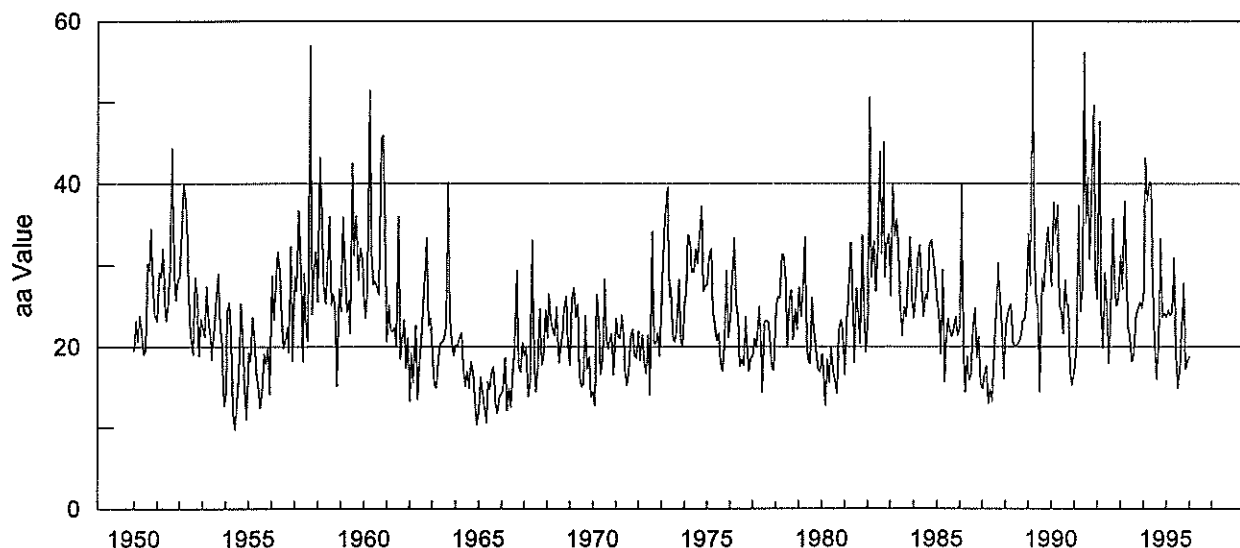
PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

University of Göttingen

Kp through January 31, 1996



111
Jan 96



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	29.9
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												18.8

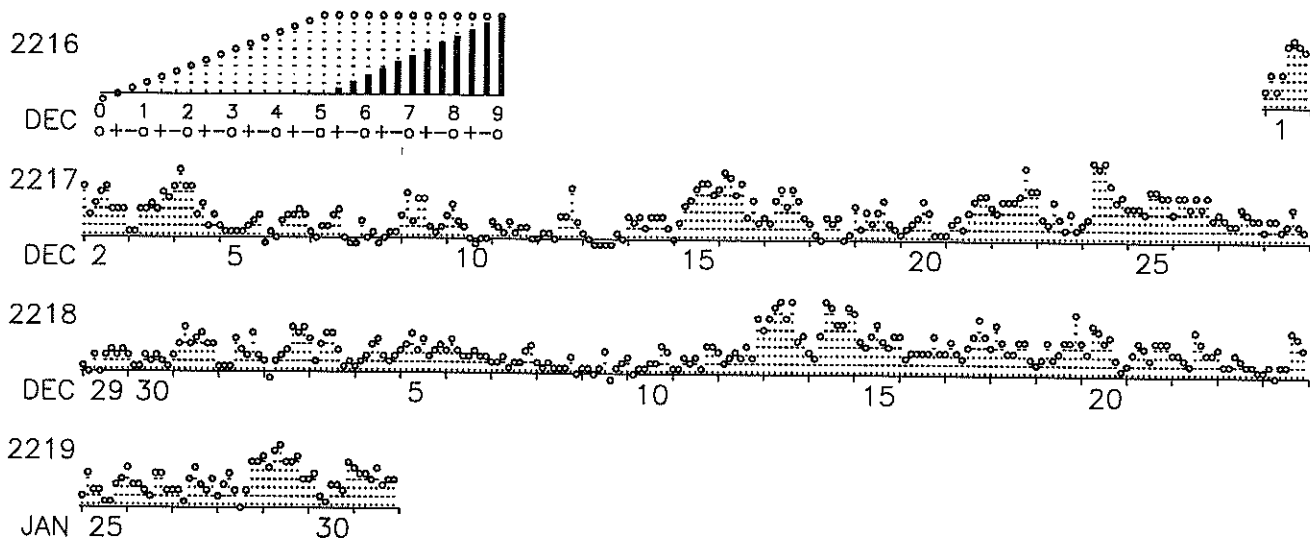
PLANETARY GEOMAGNETIC ACTIVITY

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

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

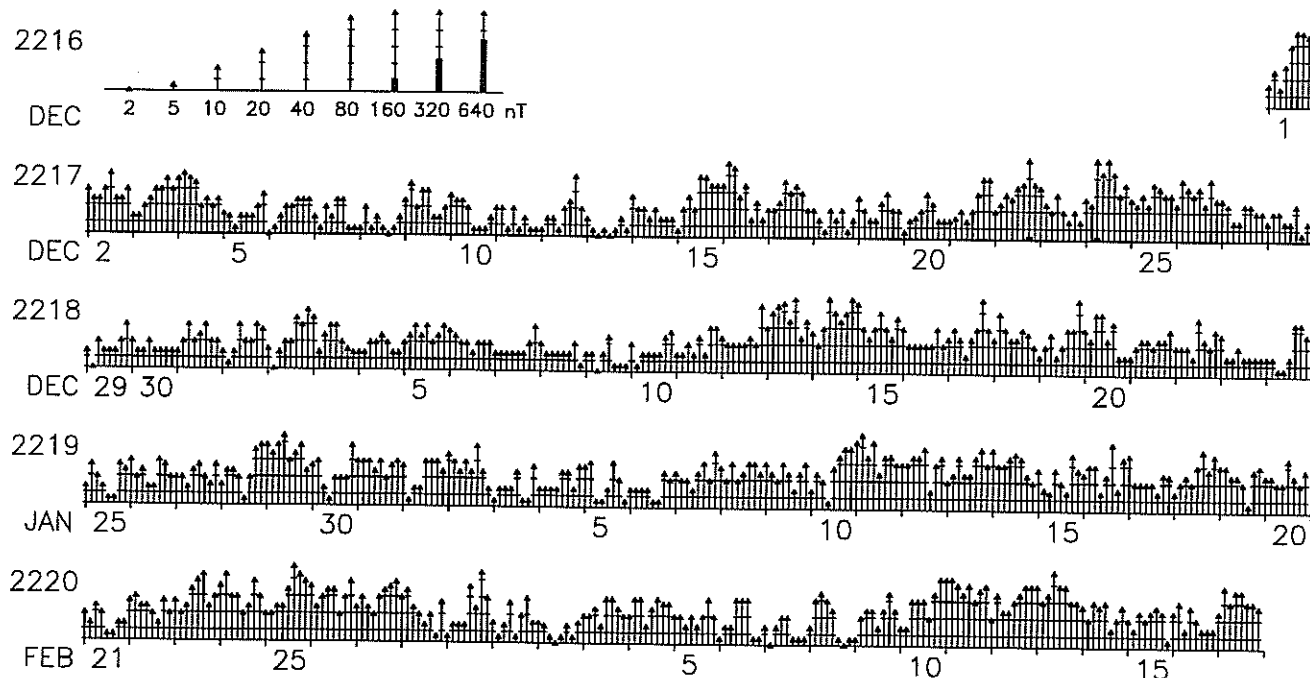
CETP, 4 Avenue de Neptune, F-94107 Saint Maur des Fosses CEDEX — FRANCE

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices Km (provisional) DEC1995-JAN1996
No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



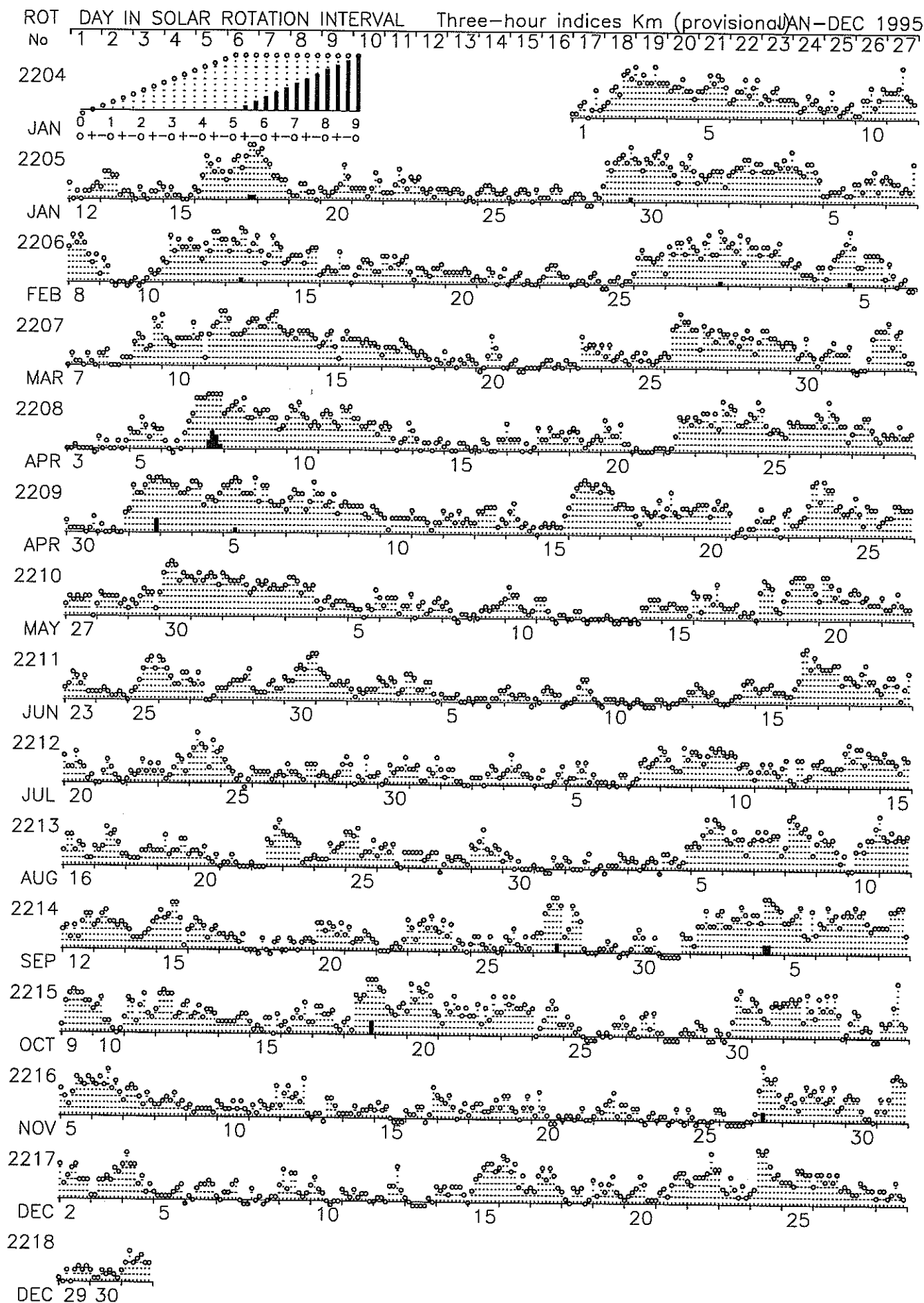
Indices Derivation at Universite Paris Sud; Graph Prepared at ISGI Publication Office.

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices aa (logscale) DEC1995-MAR1996
No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



Indices Derivation at Universite Paris Sud; Graph Prepared at ISGI Publication Office.

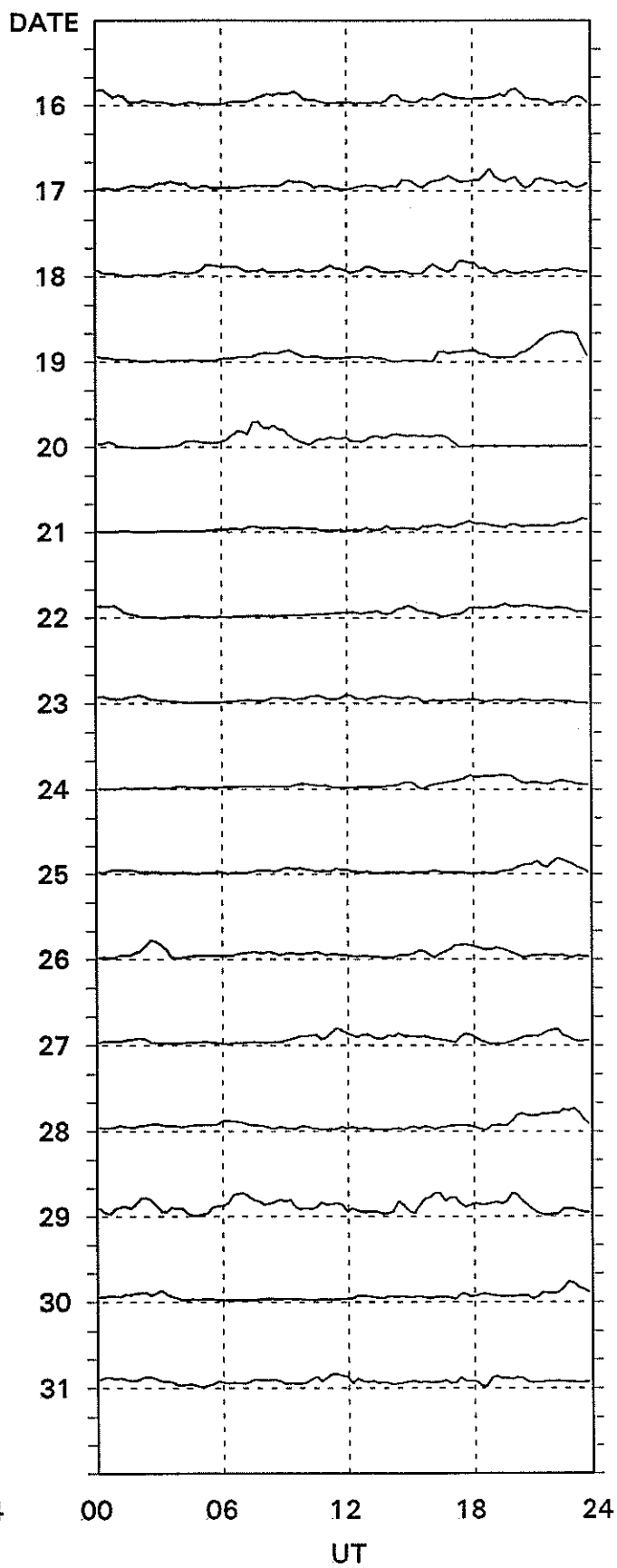
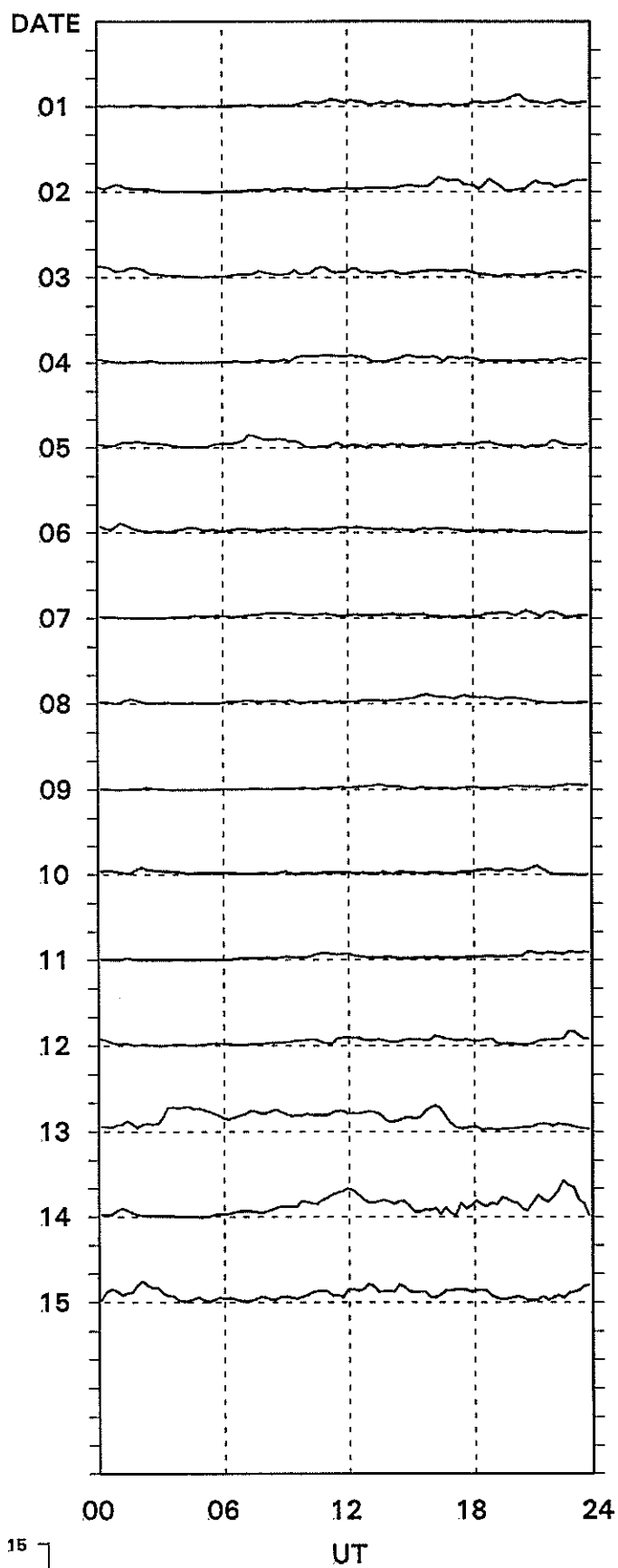
PLANETARY GEOMAGNETIC ACTIVITY -- MUSICAL DIAGRAM OF Km 1995



Indices Derivation at Universite Paris Sud; Graph Prepared at ISGI Publication Office.

Thule

January, 1996



15
0

Preliminary Values.

15-min. Values.

Danish Meteorological Institute

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

JANUARY 1996

Sta	Geomag Lat	Commencement Time			SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges			End Hour	
		Day	(UT)	Type	D (Min)	H (Gamma)	Z (Gamma)			D (Min)	H (Gamma)	Z (Gamma)	Day	(UT)
FRD	49.4N	12	22--	..	..	..	..	13(2,4)14(4,5,8)15(1)	5	27	102	34	15	11
BJI	28.8N	12	22--	..	..	..	..	13(4)	5	11	161	24	13	22
KRC	16.4N	12	2240	SC	- 1.0	26	14	13(6)	6	74	137	57	14	04
UJJ	13.6N	12	2200	..	..	..	..		-	5	122	23	15	01
ABG	09.4N	12	2200	..	..	..	..	13(3,4,6)14(4,5,8)	5	5	129	23	15	01
HYD	07.6N	12	2100	..	..	..	..	13(3,4,5,6)14(5)	5	5	143	20	15	04
ETT	00.7S	12	1600	..	..	..	..		-	6	137	45	15	09
TRD	01.1S	12	2200	..	..	..	..		-	4	130	66	15	01
HER	33.6S	12	22--	..	..	..	..	13(6)	5	18	123	78	13	19
GUA	04.3N	13	00--	..	..	..	..	13(2)	5	--	170	20	13	20
PAF	57.2S	13	01--	..	..	..	..	14(8)	6	192	271	276	15	16
DRV	75.2S	13	00--	..	..	..	..	14(1)	6	703	540	613	16	04
KRC	16.4N	14	1104	..	..	..	..	14(4,5,8)	5	65	91	45	16	00
GUA	04.3N	14	08--	..	..	..	..	14(4)	5	--	70	10	14	19
UJJ	13.6N	28	1900	..	..	..	..		-	3	59	15	29	22
ABG	09.4N	28	1900	..	..	..	..	29(6,7)	-	4	58	25	29	22
TRD	01.1S	28	1900	..	..	..	..		-	3	61	55	29	22
DRV	75.2S	28	2324	SC*	-202	*	137	299	5	544	481	574	30	05
UJJ	13.6N	30	1700	..	..	..	..		-	2	28	10	31	21
ABG	09.4N	30	1700	..	..	..	..		-	1	47	12	31	21
TRD	01.1S	30	1700	..	..	..	..		-	2	55	52	31	21

Stations:

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

Stations reporting no storms observed: CAN

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

JANUARY 1996

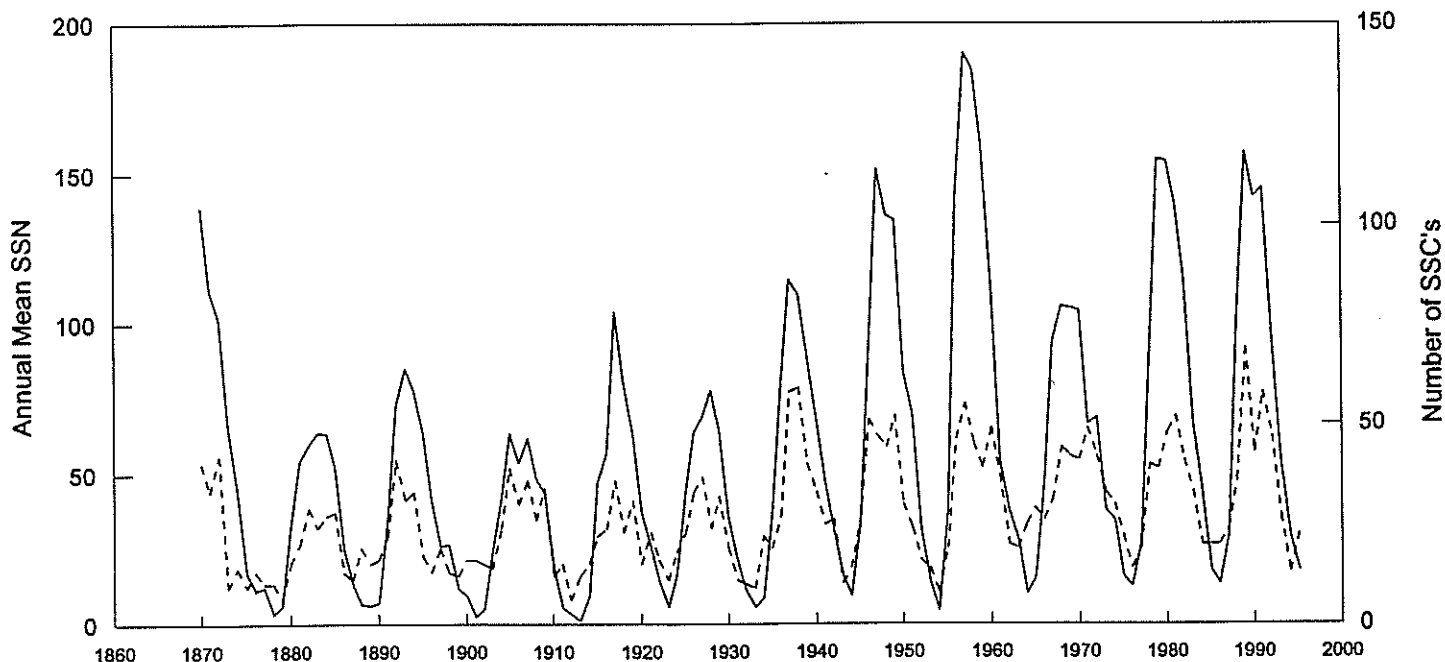
Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	Time UT	Quality: Station Group*	Day	Begin-End UT	Station(s)
None			02	1221-1227	MPO
			03	1145-1150	MPO
			04	1256-1302	BDV si: HRB
			19	1302-1315	TEN
			20	1204-1215	CLF
			21	0855-0903	CLF
			26	1327-1336	TEN

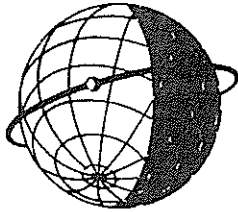
REPORTING OBSERVATORIES (up to the 1st of March 1996):

SOD DOB NUR WNG NGK DOU BDV CLF HRB NAG GCK MMB EBR COI BJI SPT FRD KAK HTY KNY
QUE TEN LNP HYB ETT MPO HER CNB AMS CZT PAF DRV

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 (+).

Storm Sudden Commencements (SSC) and Sunspot Numbers (SSN)

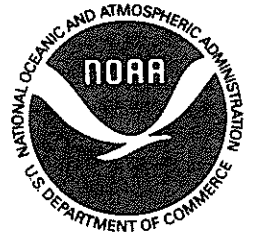




WORLD DATA CENTER A

FOR

SOLAR-TERRESTRIAL PHYSICS



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

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