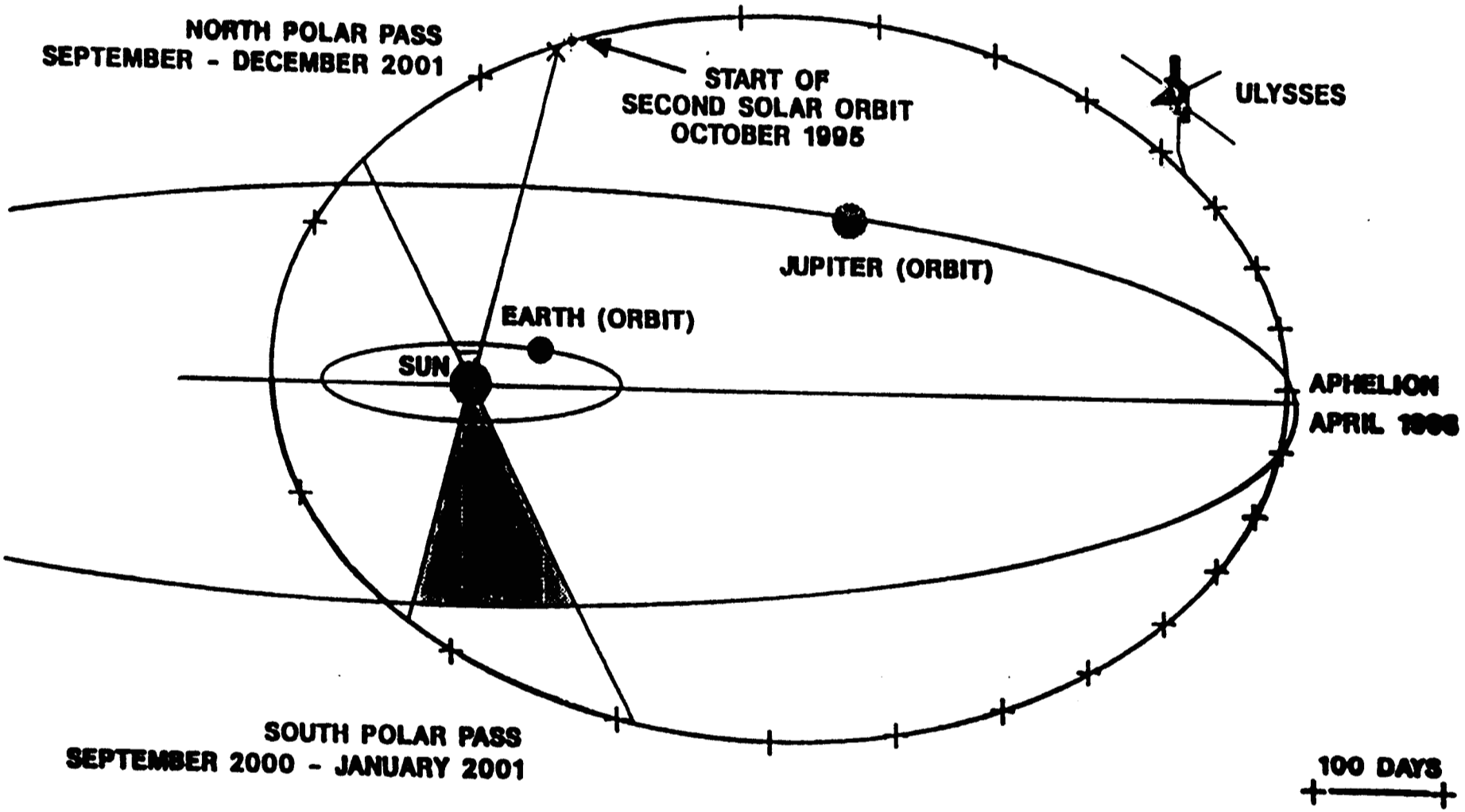
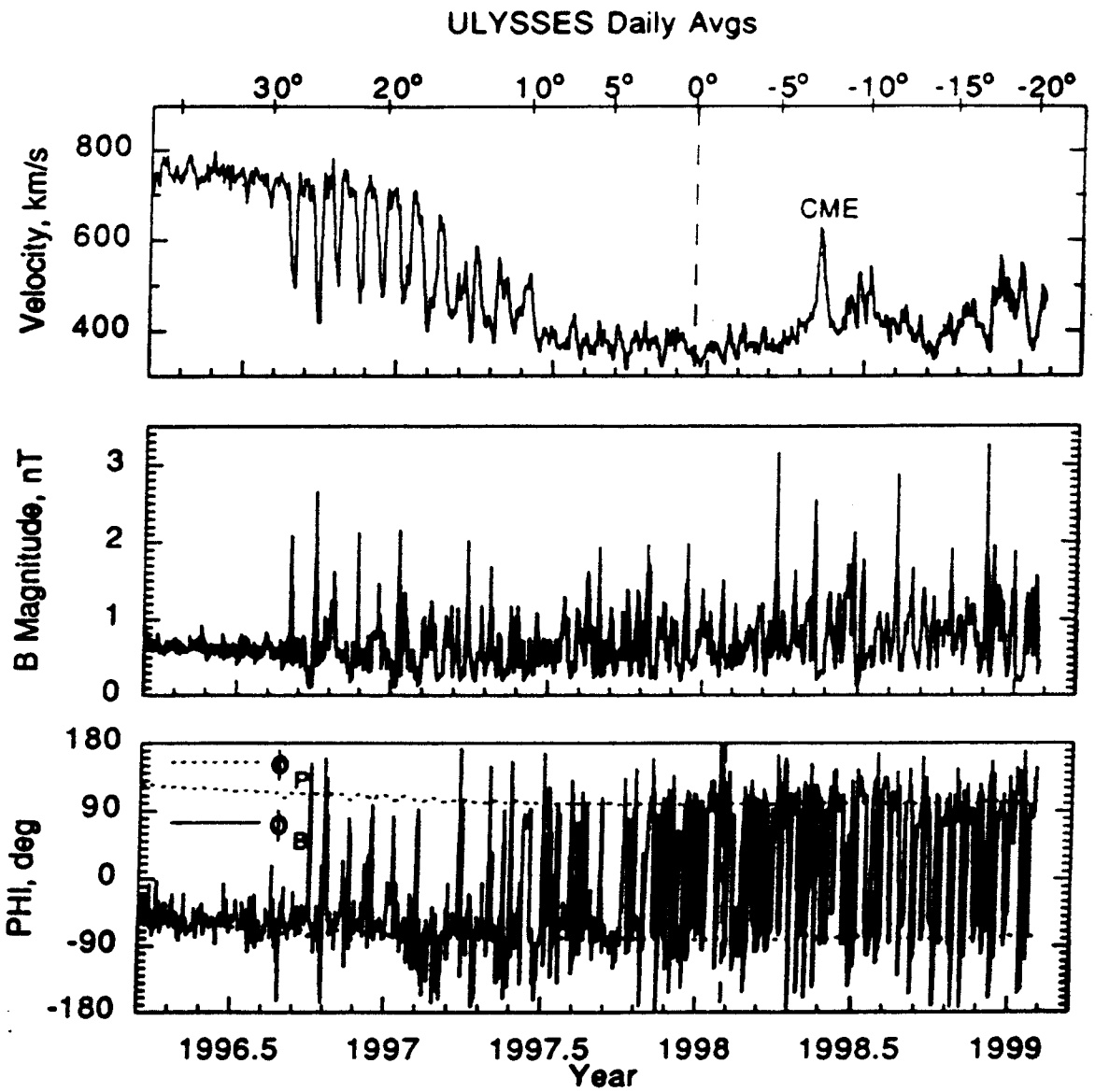
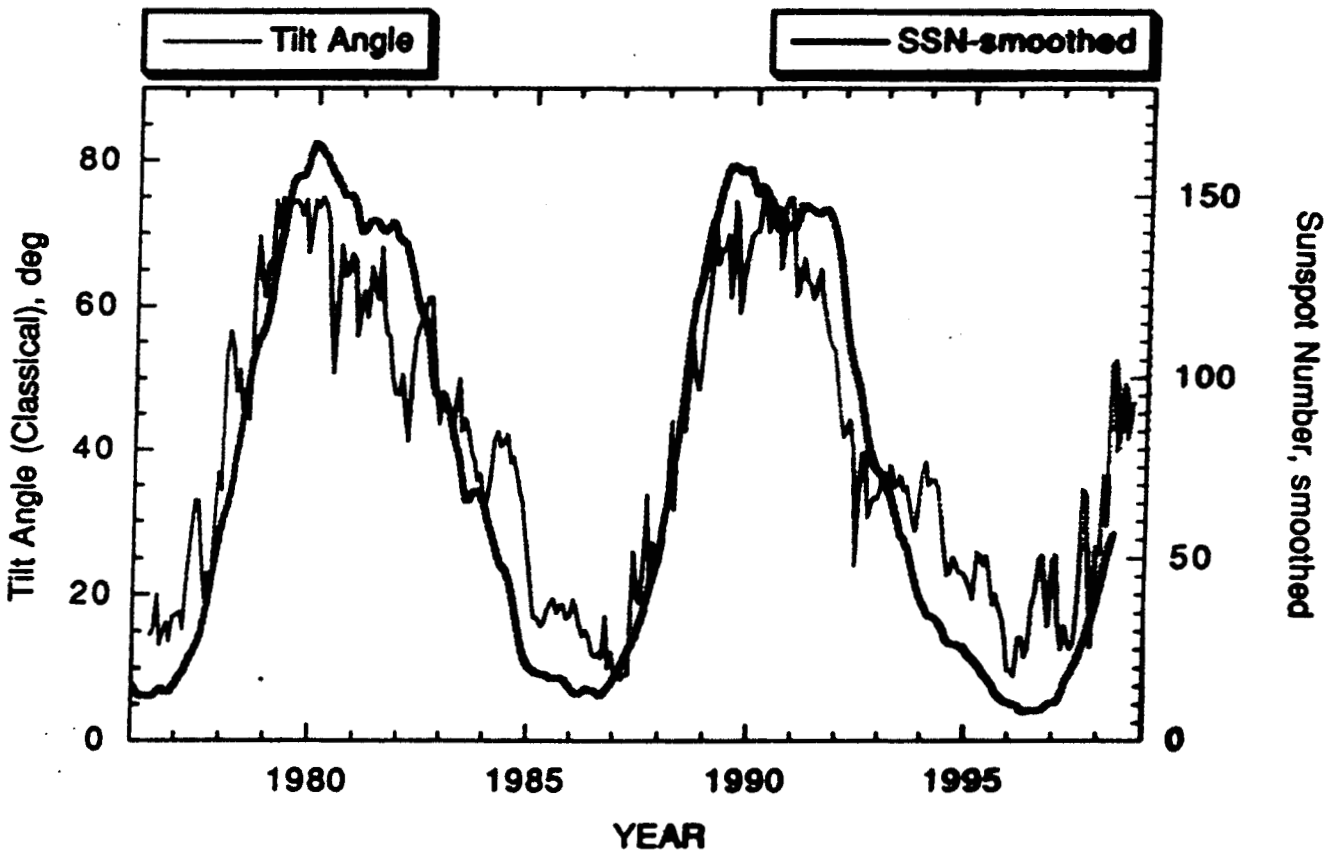
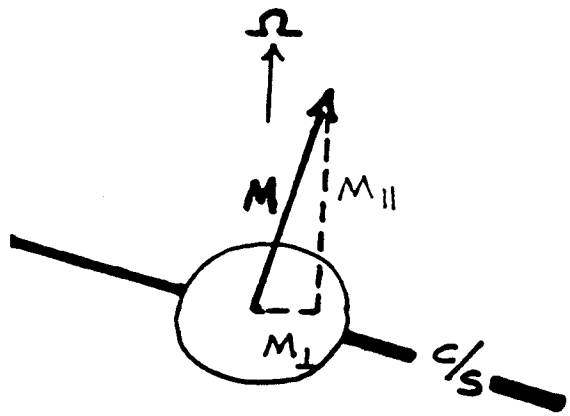

NORTH POLAR PASS
SEPTEMBER - DECEMBER 2001
START OF
SECOND SOLAR ORBIT
OCTOBER 1995
ULYSSES
JUPITER (ORBIT)
EARTH (ORBIT)
SUN
APHELION
APRIL 1998
SOUTH POLAR PASS
SEPTEMBER 2000 - JANUARY 2001
100 DAYS

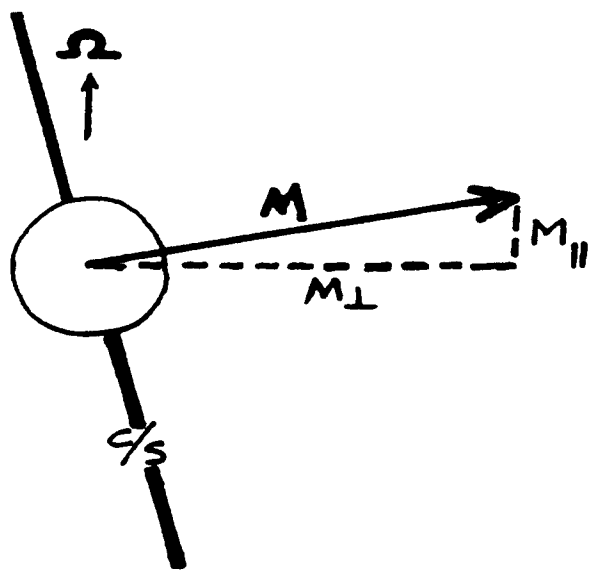

ULYSSES Daily Avgs
30°
20°
10°
5°
0°
-5°
-10°
-15°
-20°
Velocity, km/s
800
600
400
CME
B Magnitude, nT
3
2
1
0
PHI, deg
180
90
0
-90
-180
ϕ_P
ϕ_B
1996.5
1997
1997.5
1998
1998.5
1999
Year

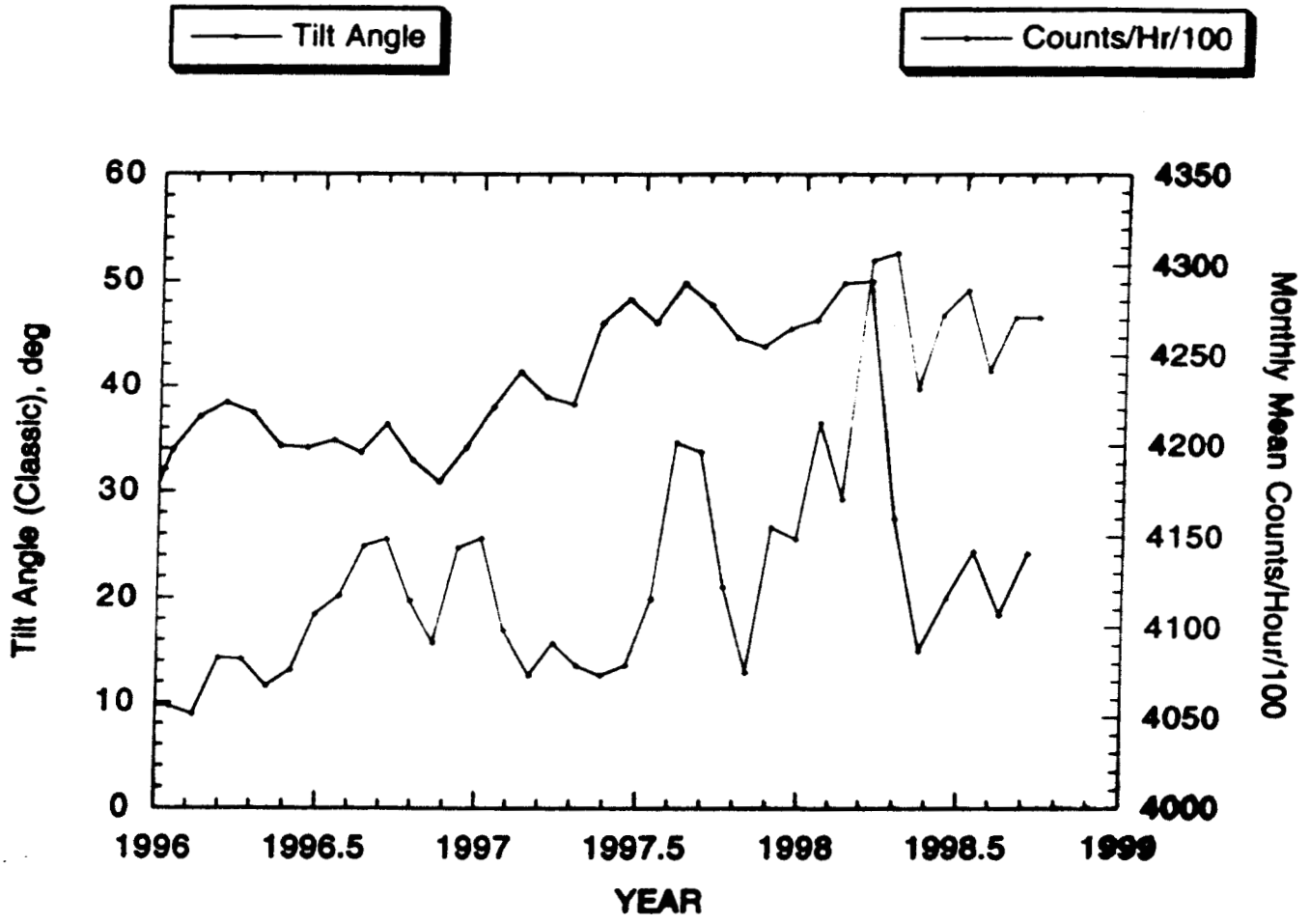

Tilt Angle
SSN-smoothed
Tilt Angle (Classical), deg
Sunspot Number, smoothed
YEAR
0
20
40
60
80
0
50
100
150
1980
1985
1990
1995

Solar Minimum



Solar Maximum

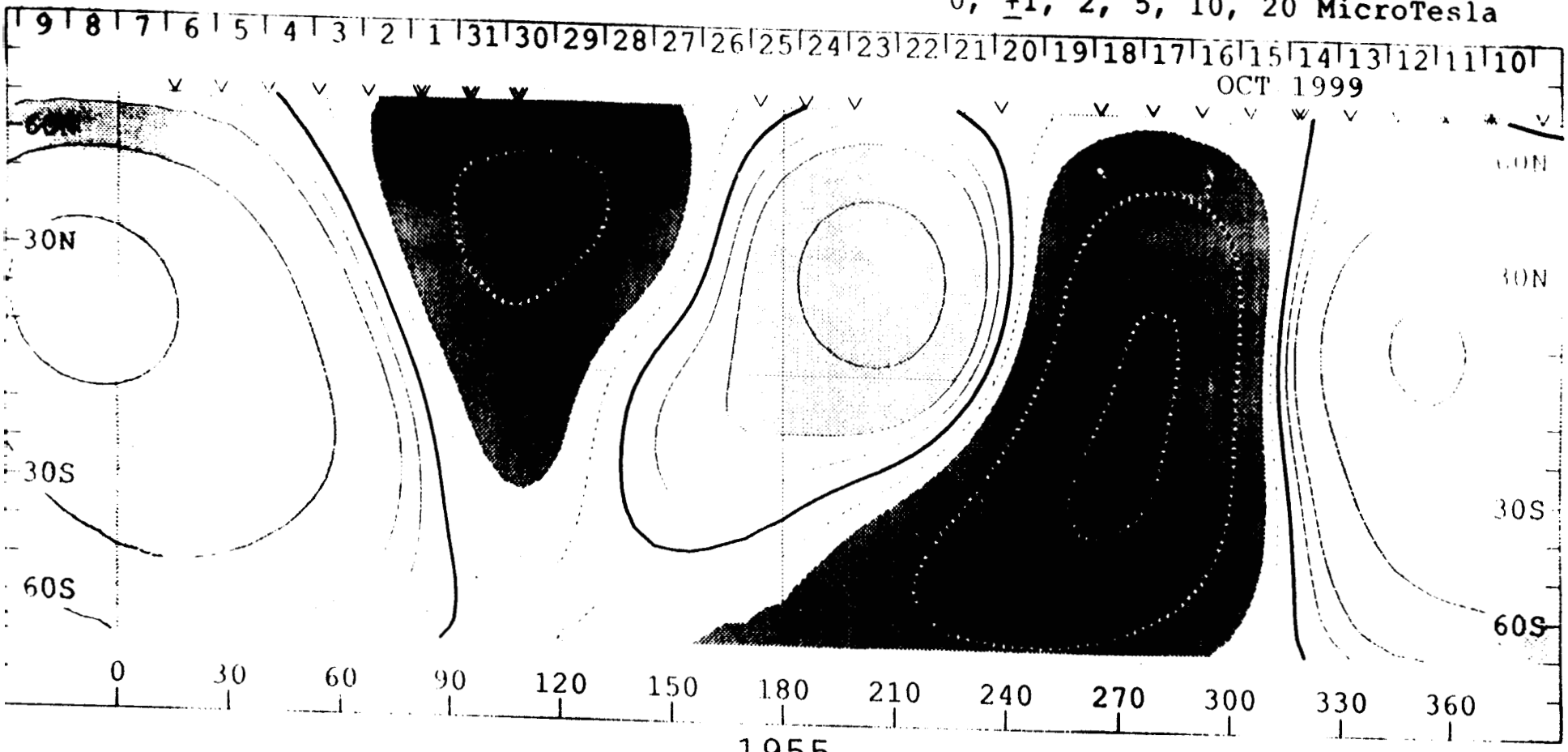



Tilt Angle
Counts/Hr/100
60
50
40
30
20
10
0
4350
4300
4250
4200
4150
4100
4050
4000
Tilt Angle (Classic), deg
Monthly Mean Counts/Hour/100
1996
1996.5
1997
1997.5
1998
1998.5
1999
YEAR

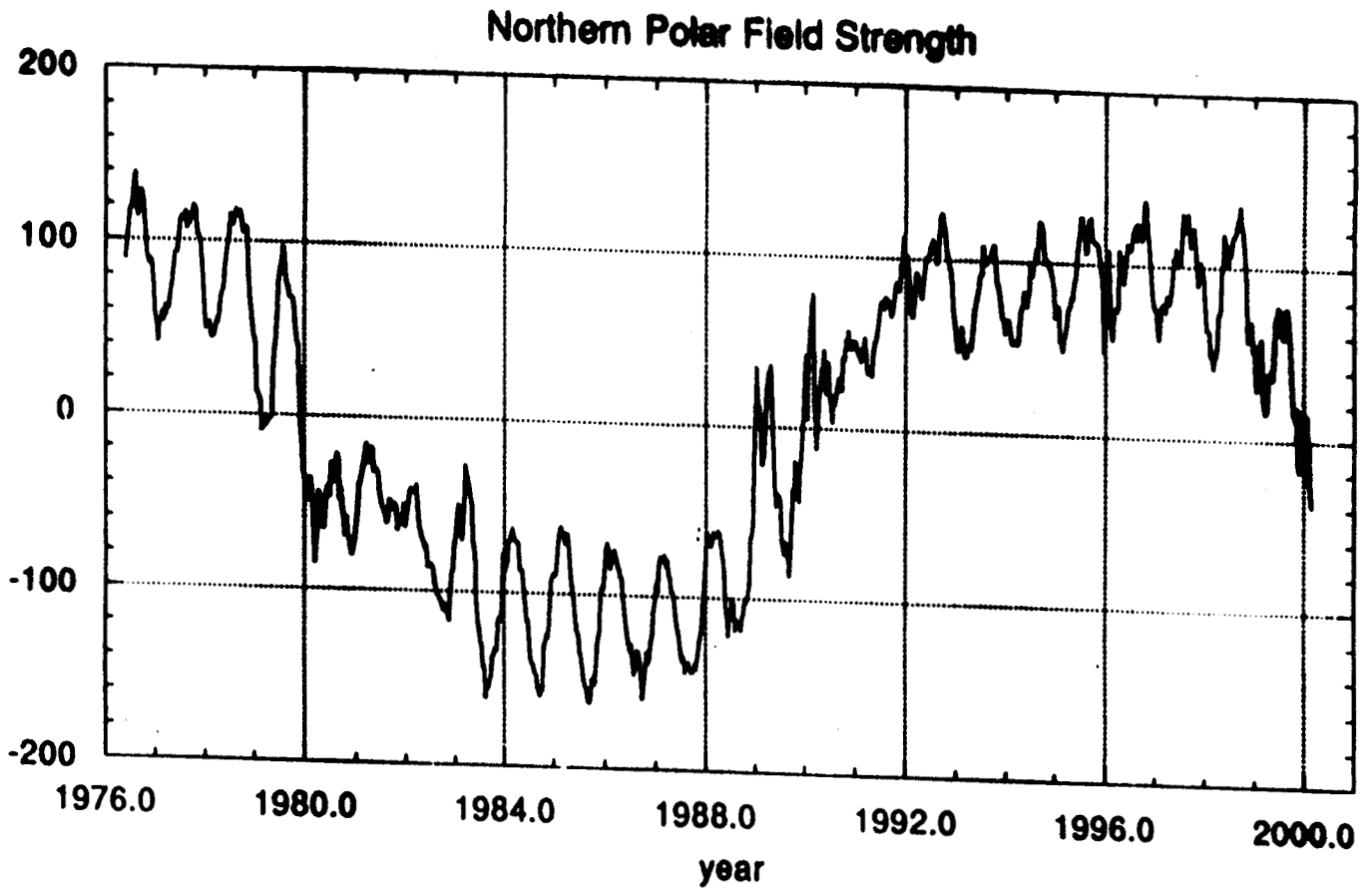
WILCOX SOLAR OBSERVATORY

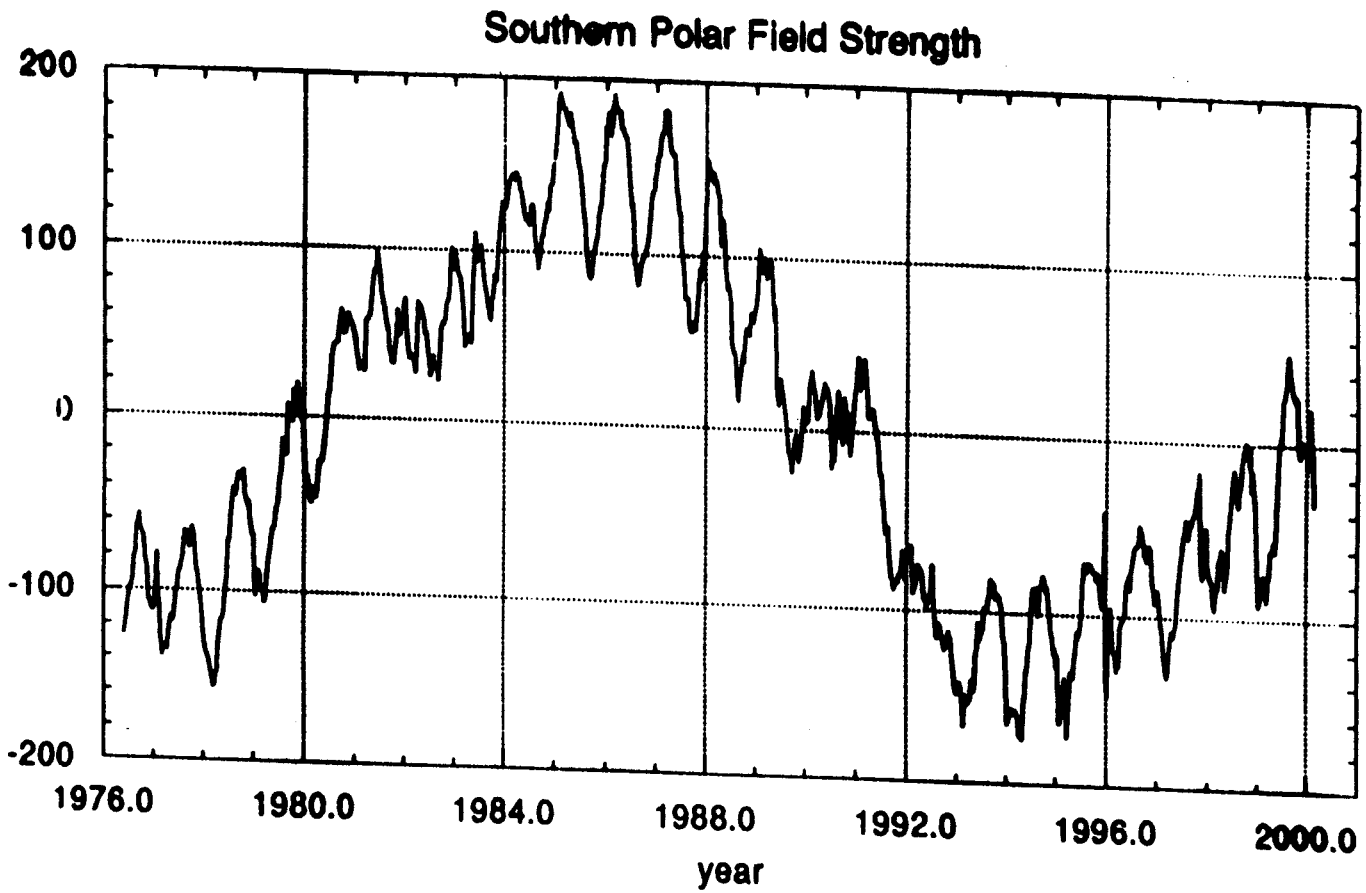
WSO - Source Surface Field

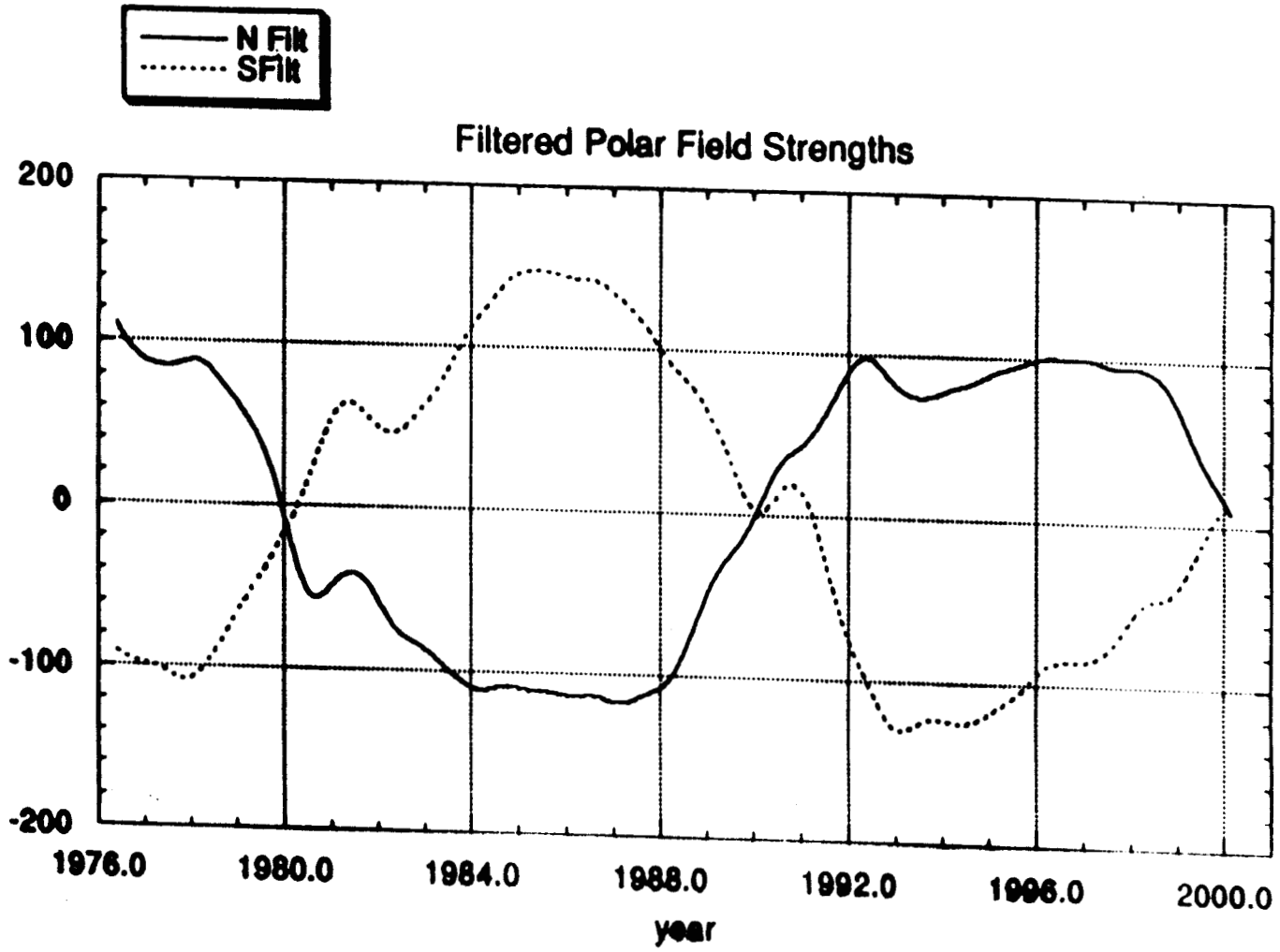
0, ±1, 2, 5, 10, 20 MicroTesla

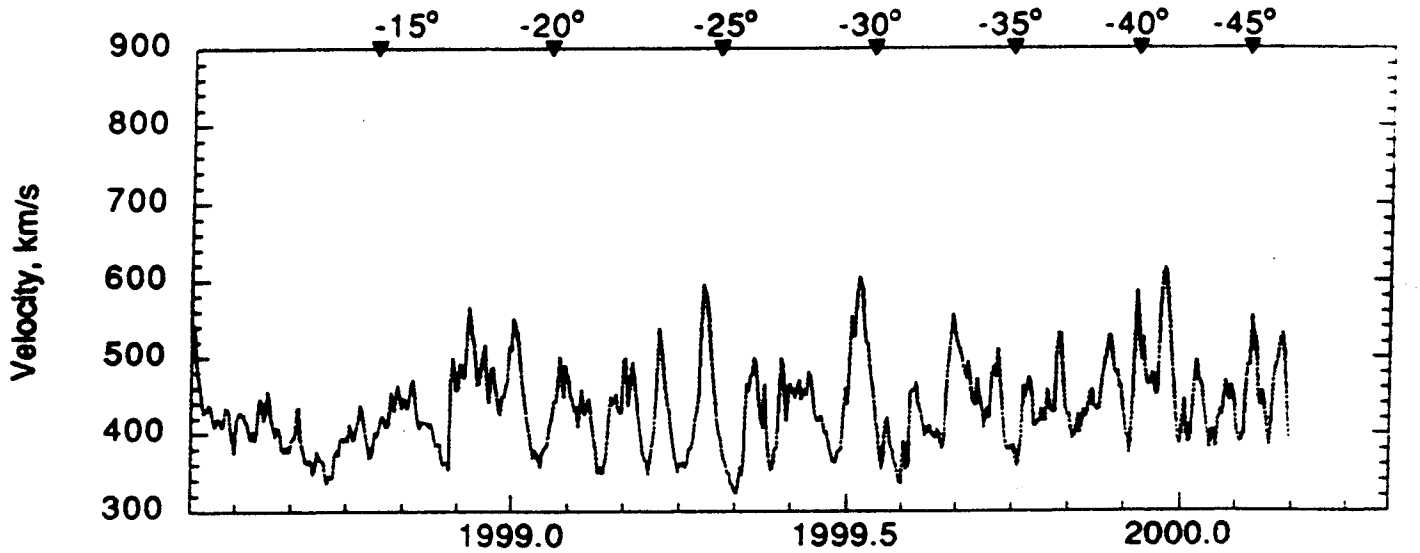


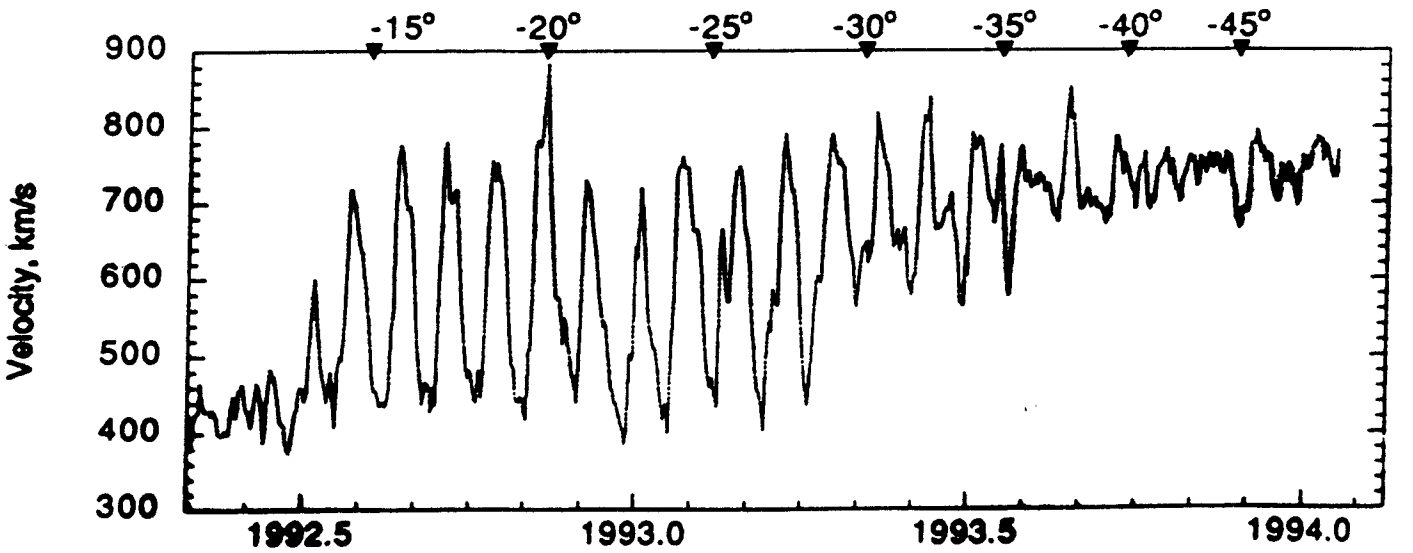
1955

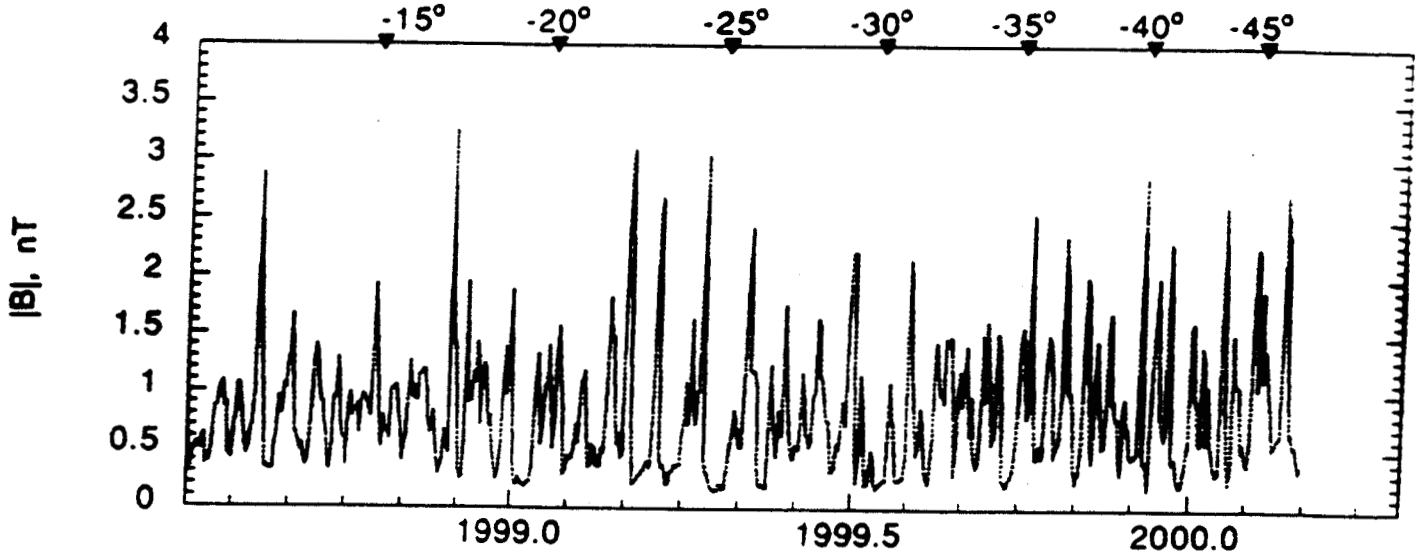

Northern Polar Field Strength
200
100
0
-100
-200
1976.0
1980.0
1984.0
1988.0
1992.0
1996.0
2000.0
year

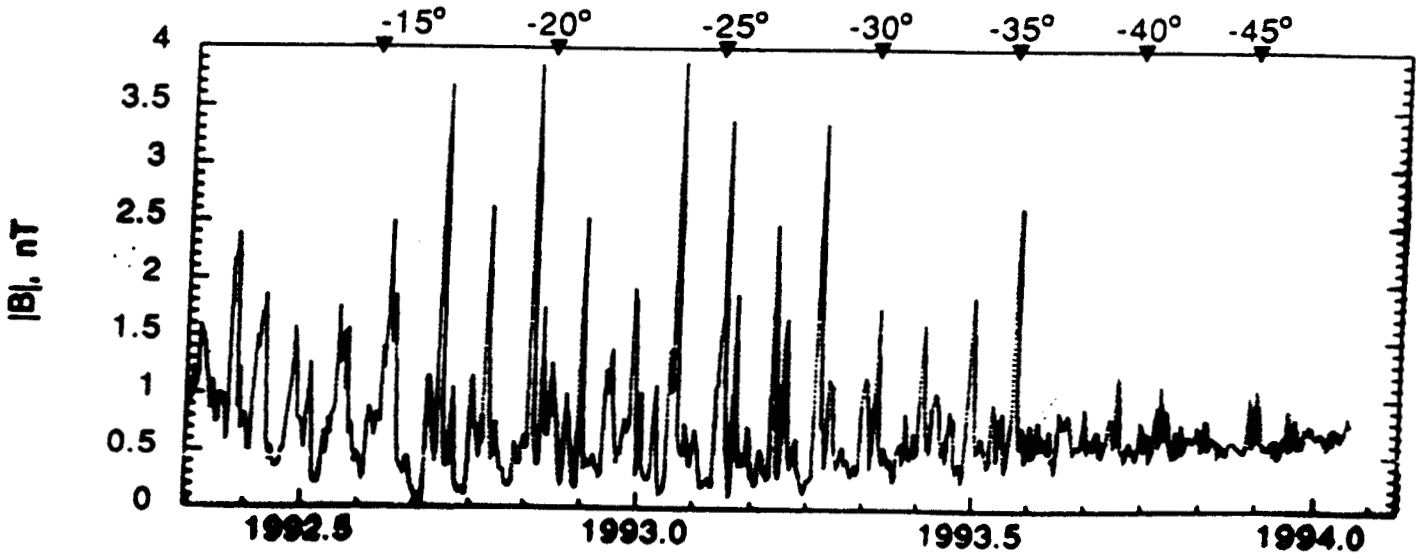

Southern Polar Field Strength
200
100
0
-100
-200
1976.0
1980.0
1984.0
1988.0
1992.0
1996.0
2000.0
year

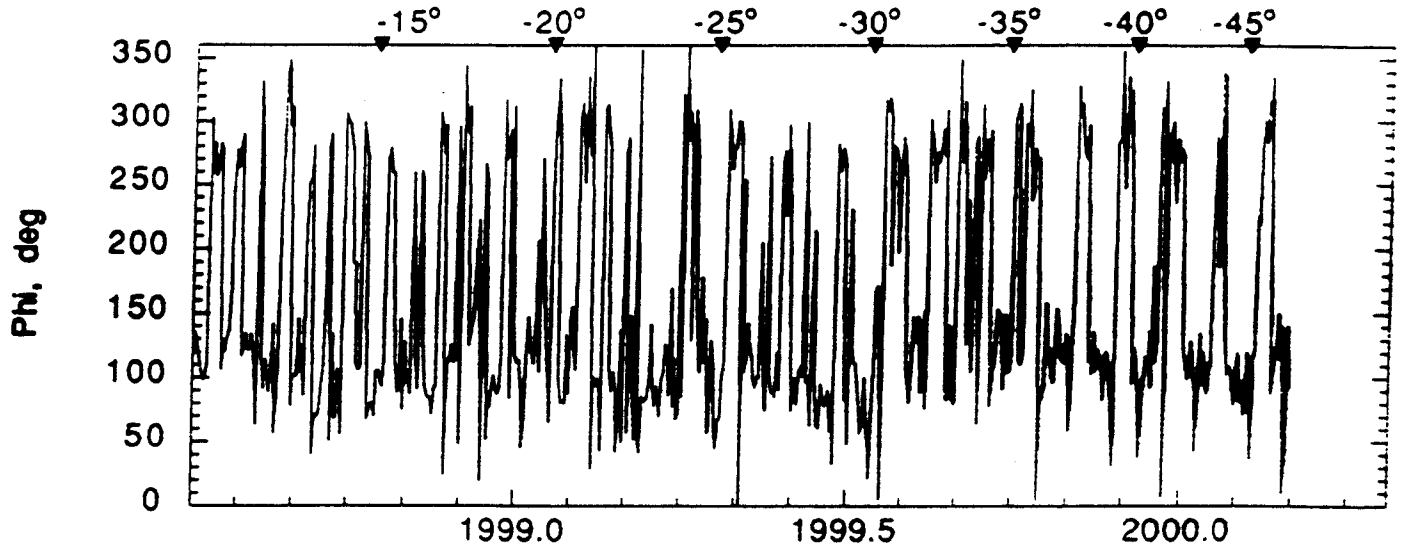

N Filt
SFilt
Filtered Polar Field Strengths
200
100
0
-100
-200
1976.0
1980.0
1984.0
1988.0
1992.0
1996.0
2000.0
year

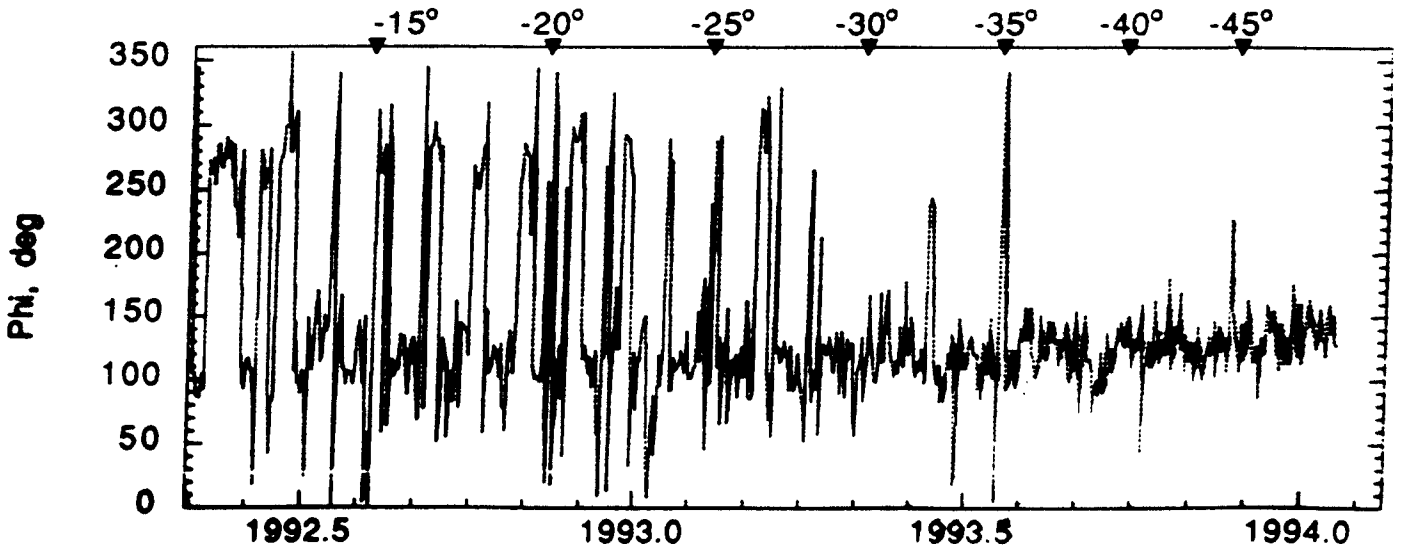

-15°
-20°
-25°
-30°
-35°
-40°
-45°
900
800
700
600
500
400
300
Velocity, km/s
1999.0
1999.5
2000.0

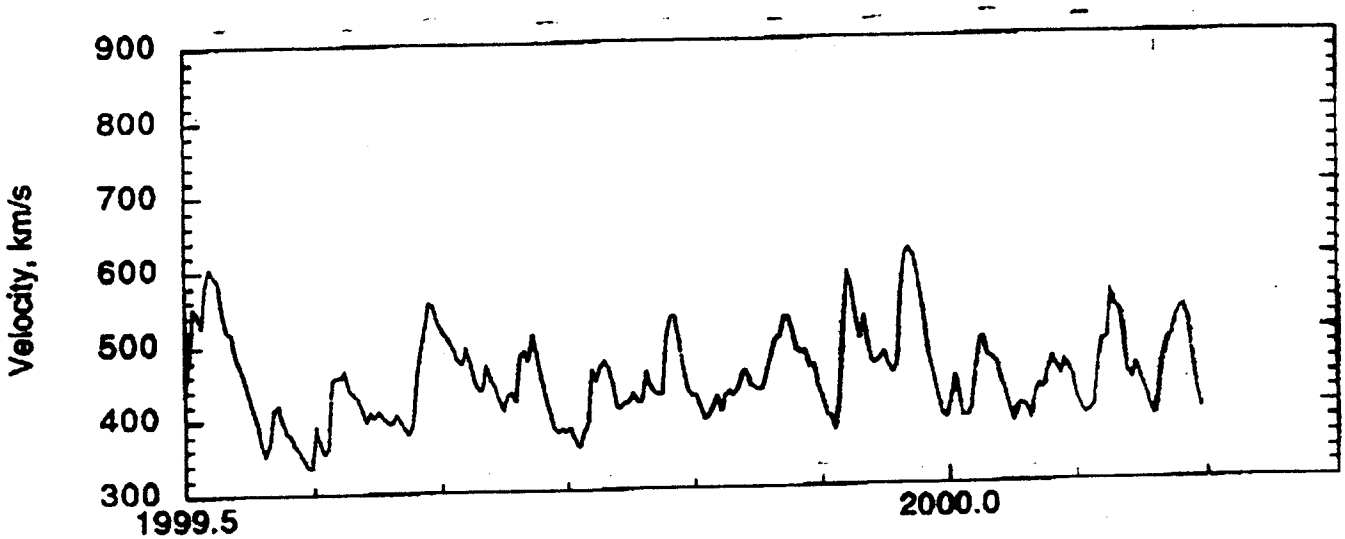

-15°
-20°
-25°
-30°
-35°
-40°
-45°
900
800
700
600
500
400
300
Velocity, km/s
1992.5
1993.0
1993.5
1994.0

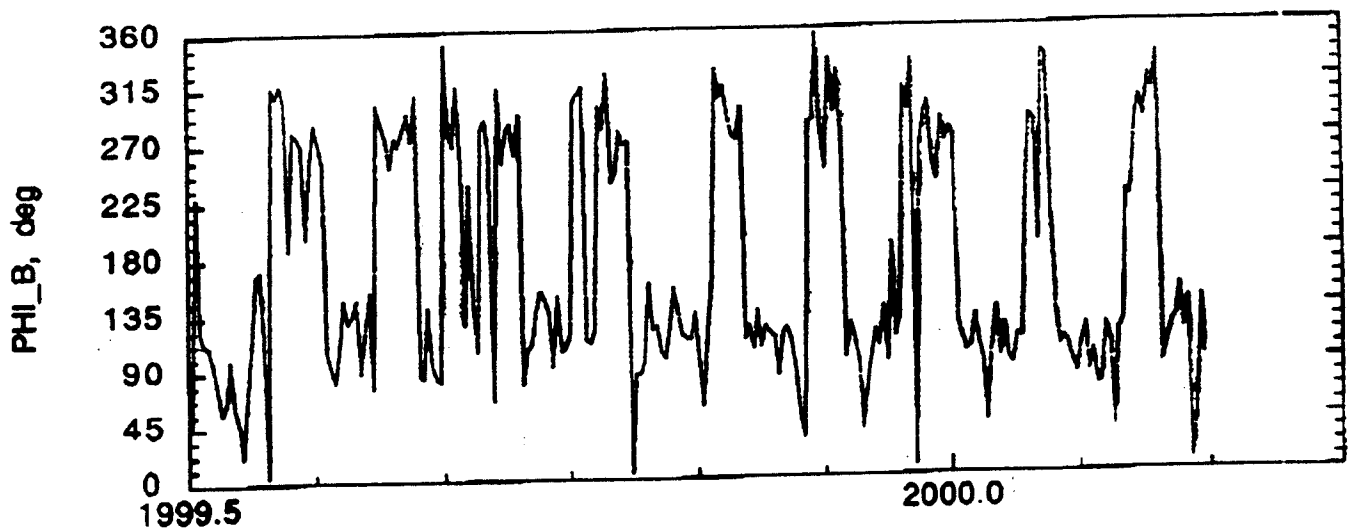

-15°
-20°
-25°
-30°
-35°
-40°
-45°
|B|, nT
4
3.5
3
2.5
2
1.5
1
0.5
0
1999.0
1999.5
2000.0


-15°
-20°
-25°
-30°
-35°
-40°
-45°
|B|, nT
4
3.5
3
2.5
2
1.5
1
0.5
0
1992.5
1993.0
1993.5
1994.0


-15°
-20°
-25°
-30°
-35°
-40°
-45°
350
300
250
200
150
100
50
0
Phi, deg
1999.0
1999.5
2000.0

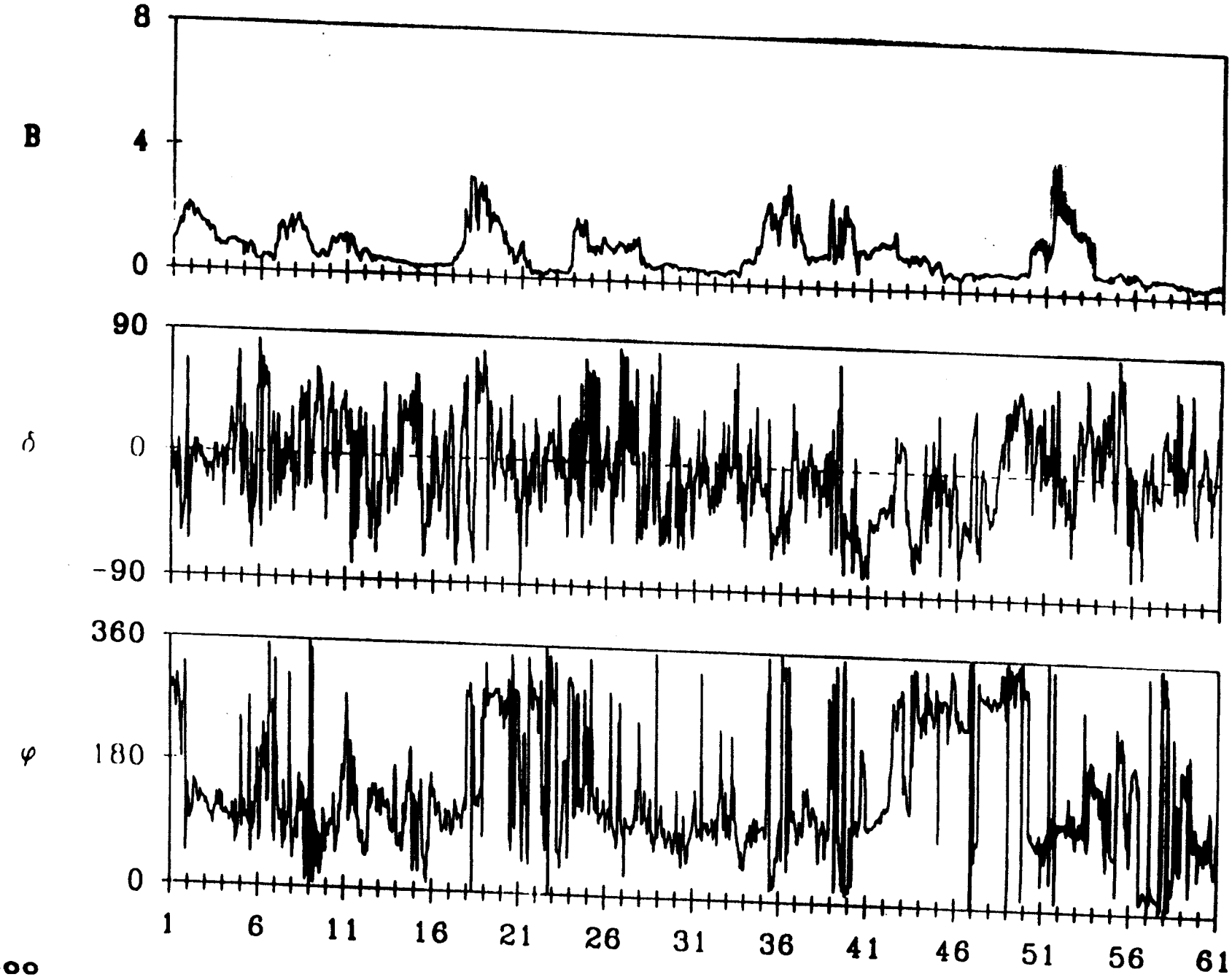

-15°
-20°
-25°
-30°
-35°
-40°
-45°
350
300
250
200
150
100
50
0
Phi, deg
1992.5
1993.0
1993.5
1994.0


Velocity, km/s
900
800
700
600
500
400
300
1999.5
2000.0


PHI_B, deg
360
315
270
225
180
135
90
45
0
1999.5
2000.0

ULS Hour Avgs SH Coords

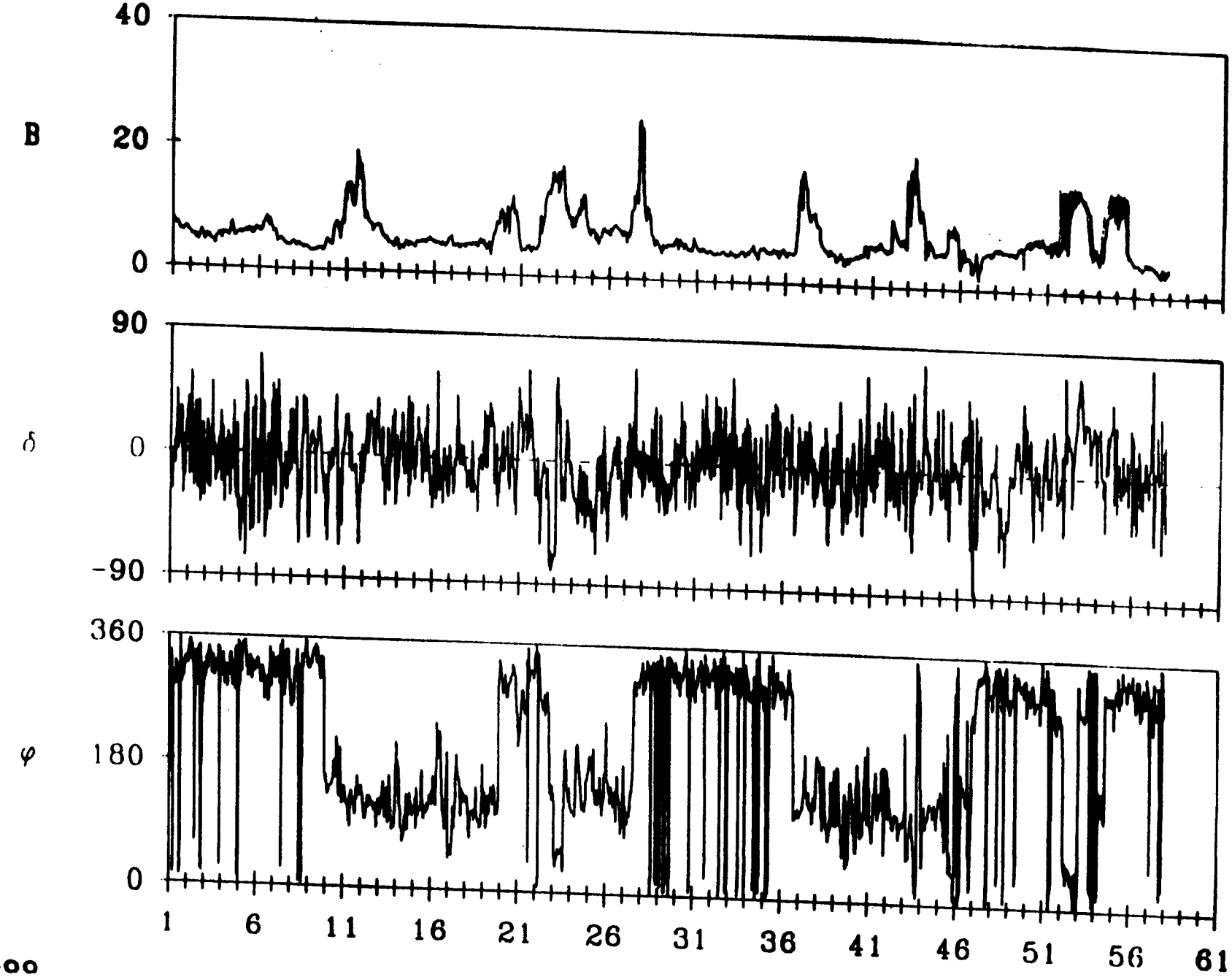
Jan 1 - Feb 29, 2000 (1-60)



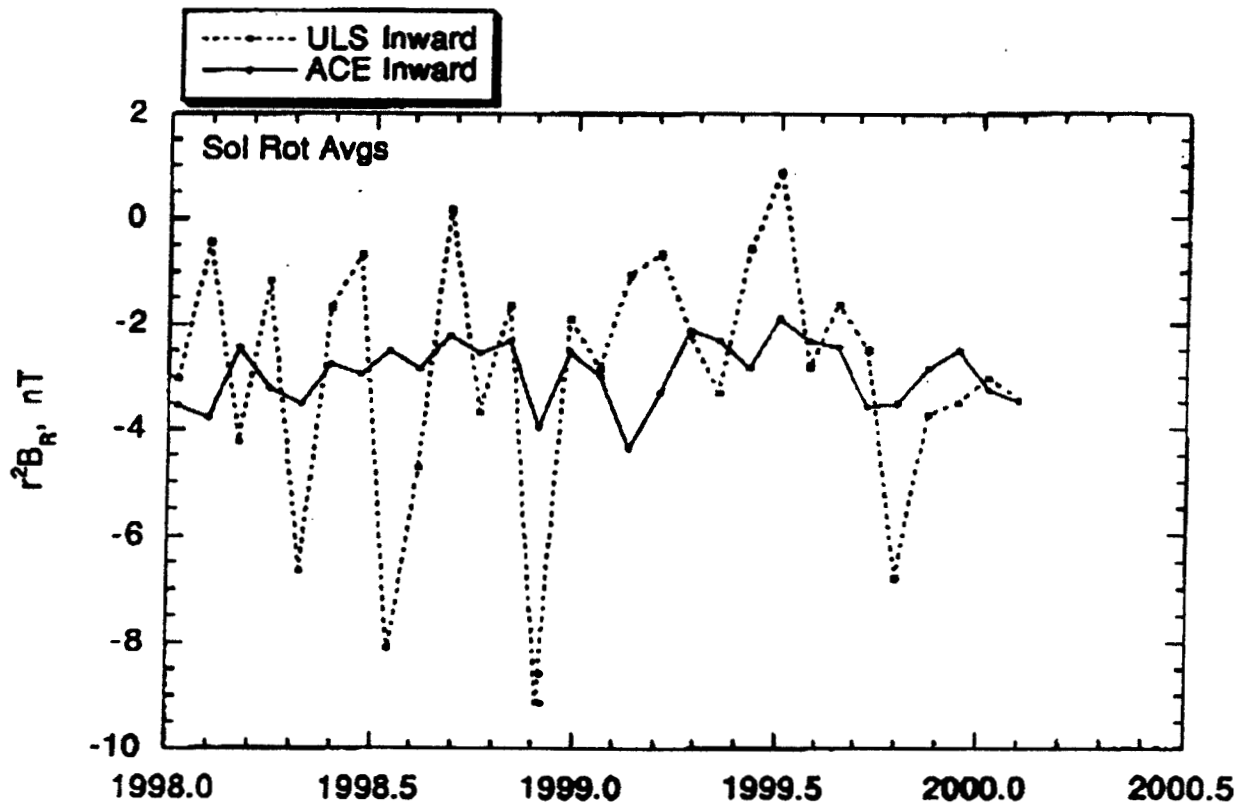
28-MAR-00

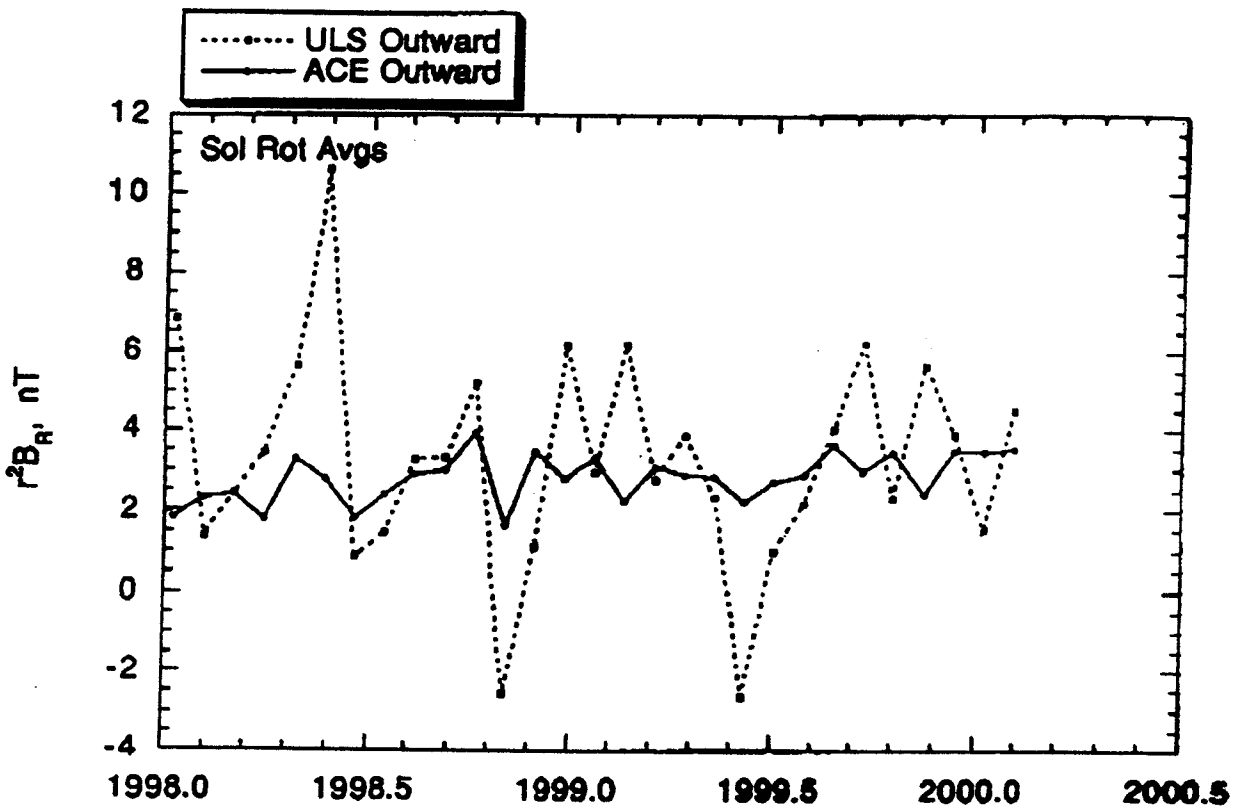
ACE Hour Avgs RTN Coords

Jan 1 - Feb 29, 2000 (1-60)



28-MAR-00


ULS Inward
ACE Inward
Sol Rot Avgs
2
0
-2
-4
-6
-8
-10
r^2B_R, nT
1998.0
1998.5
1999.0
1999.5
2000.0
2000.5


ULS Outward
ACE Outward
Sol Rot Avgs
r^2B_R, nT
12
10
8
6
4
2
0
-2
-4
1998.0
1998.5
1999.0
1999.5
2000.0
2000.5

SOLAR MAGNETIC FIELD SYNOPTIC CHART

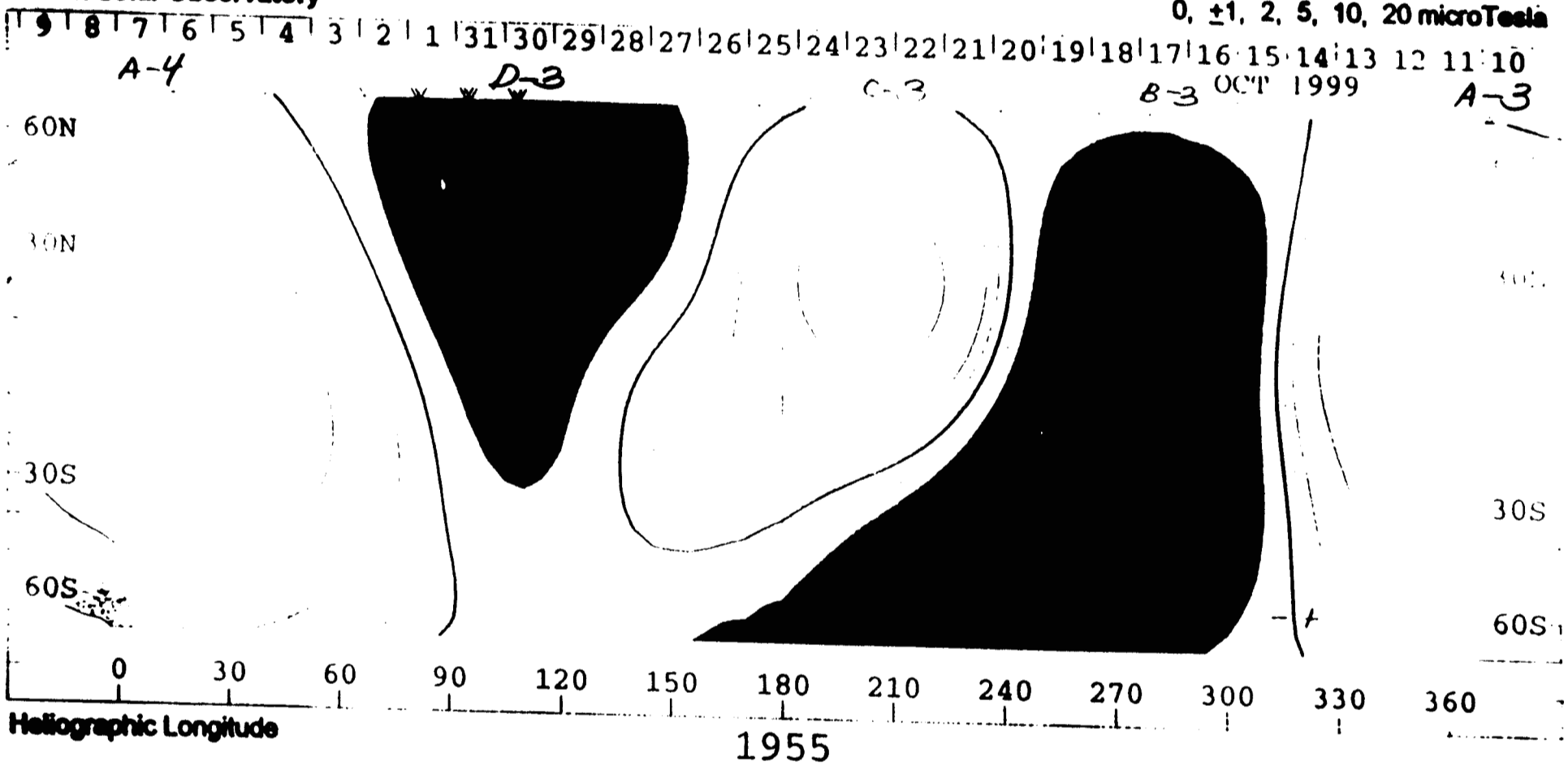
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1955

(11 October to 7 November 1999)

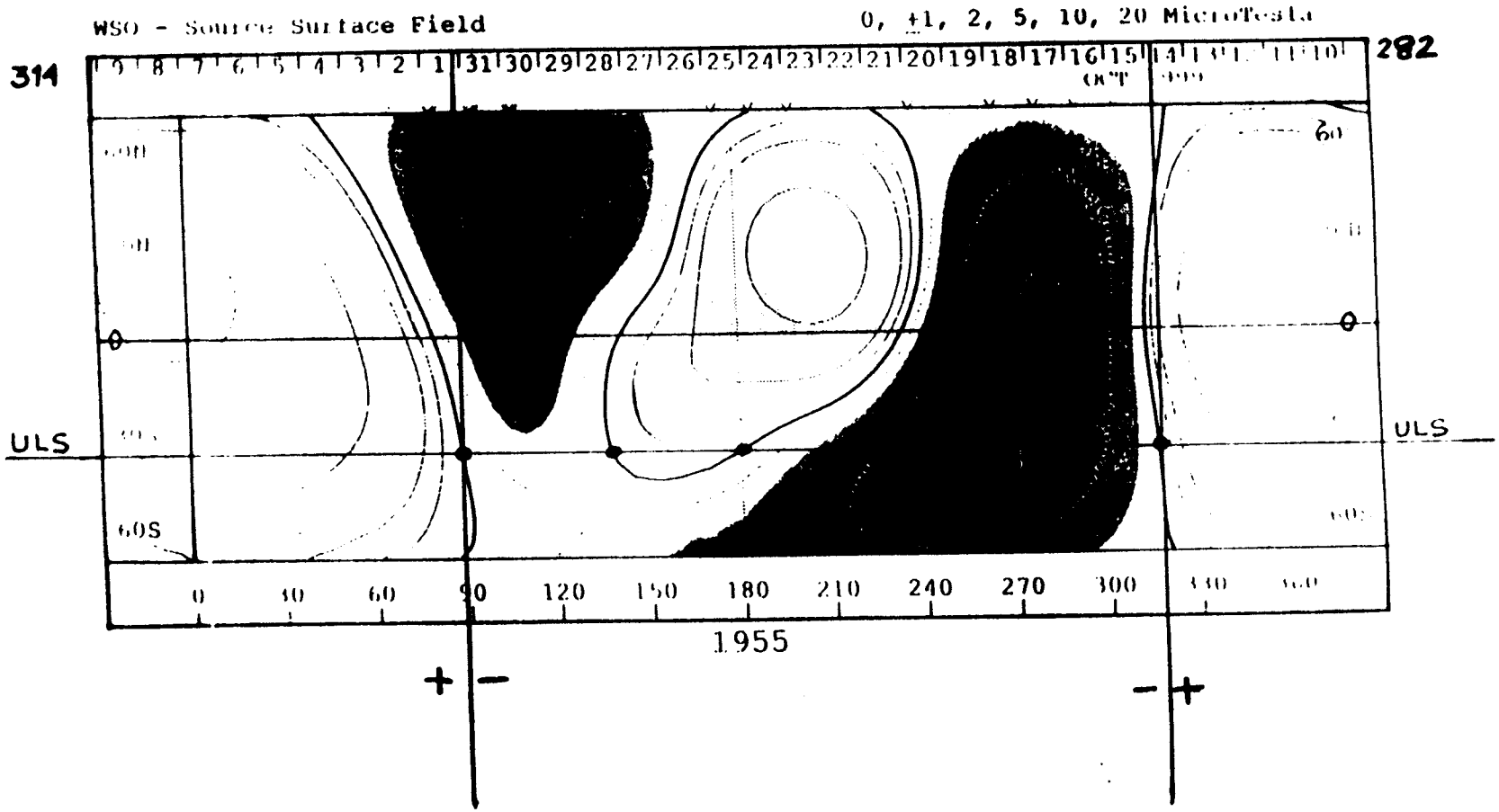
Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla

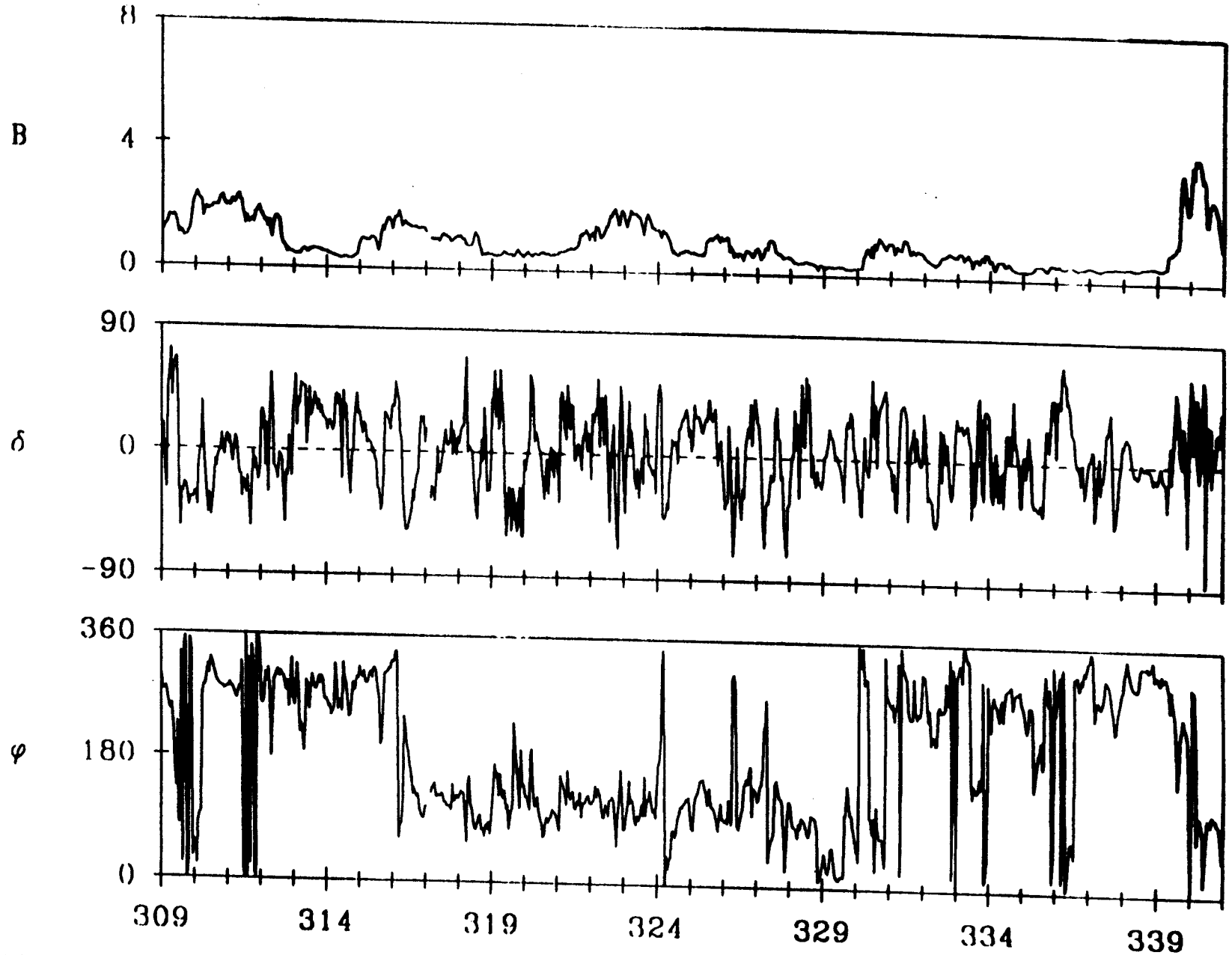


43
Nov 99

WILCOX SOLAR OBSERVATORY

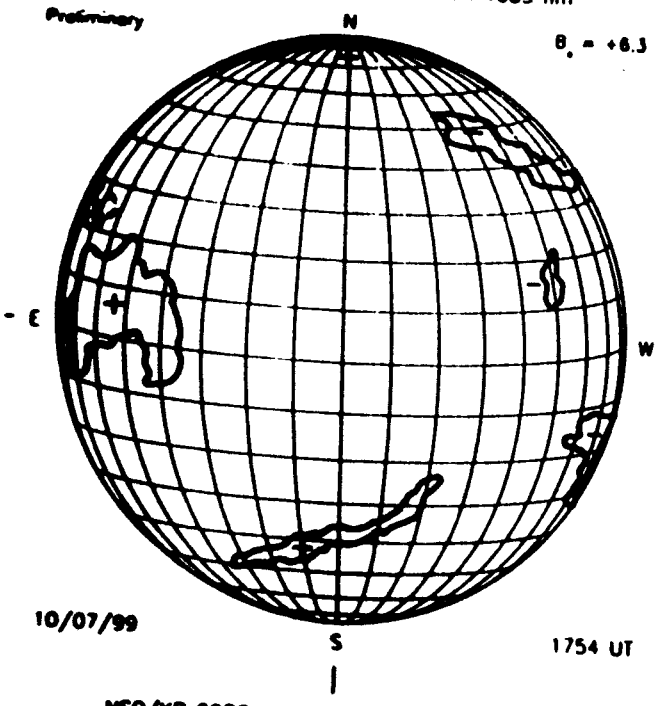


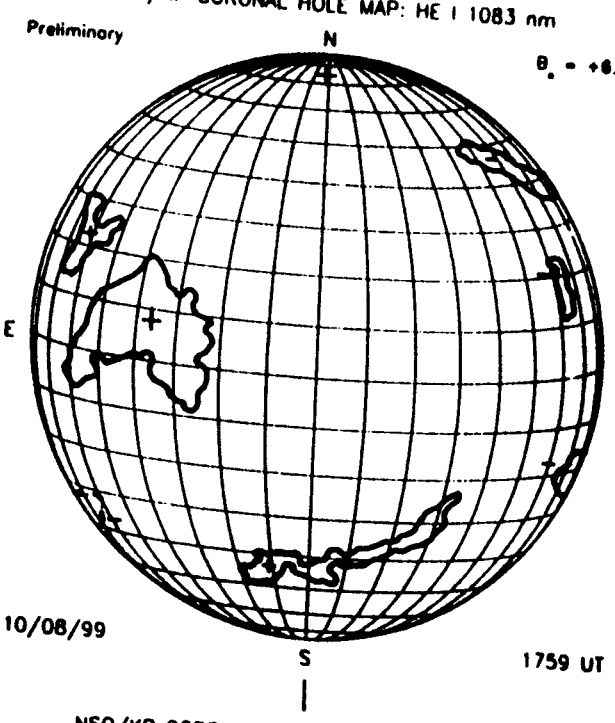
ULS Hr Avgs SH Coords Nov 5 - Dec 6, 1999 (309-340)

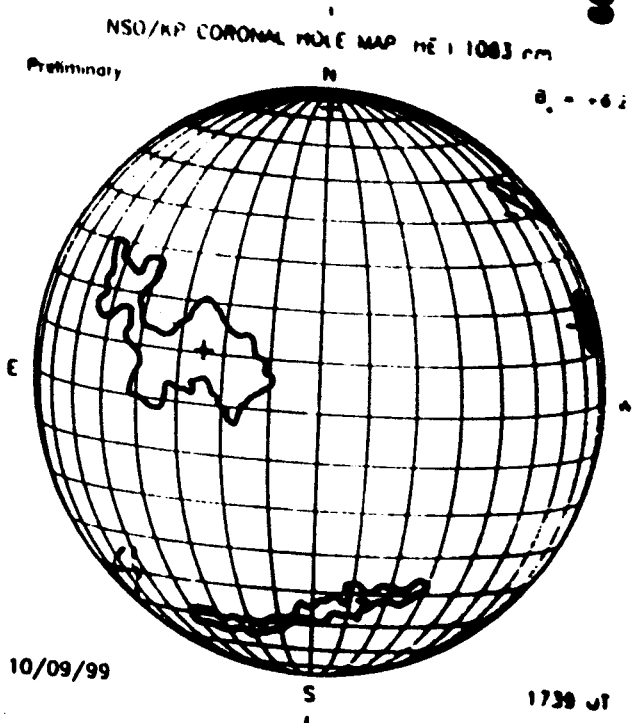


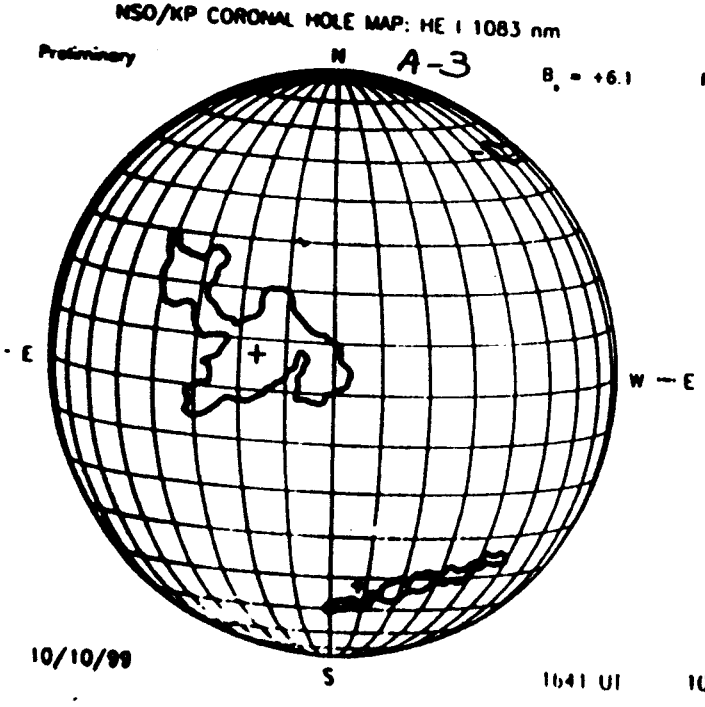
12-APR-00

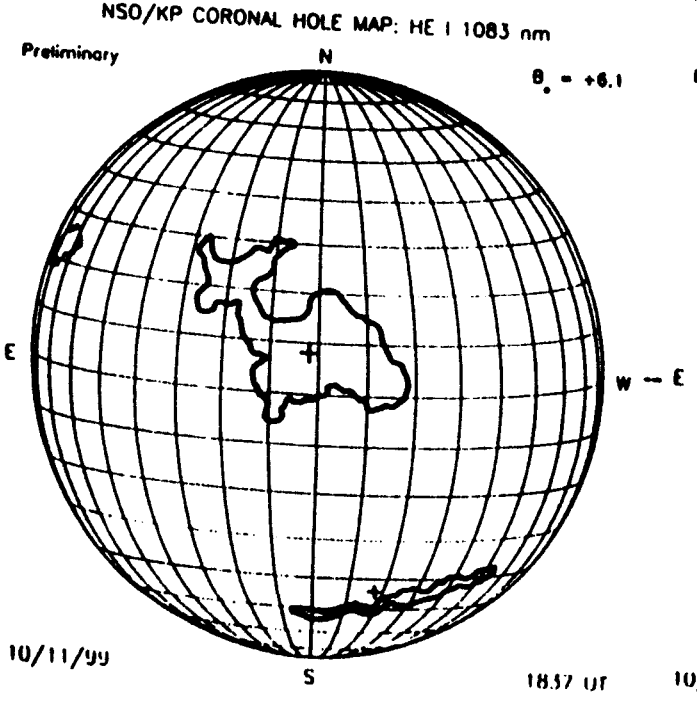
KITT PEAK CORONAL HOLE MAPS HE I 1083 nm
October 1999

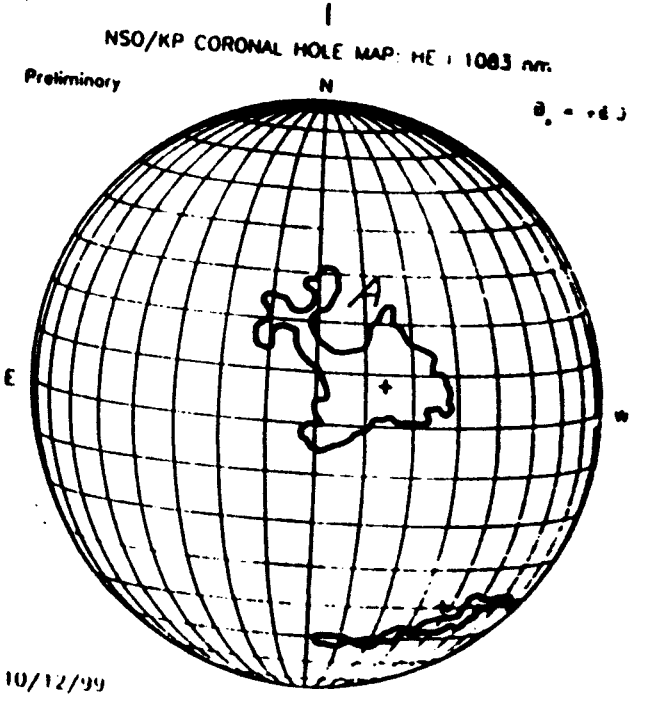


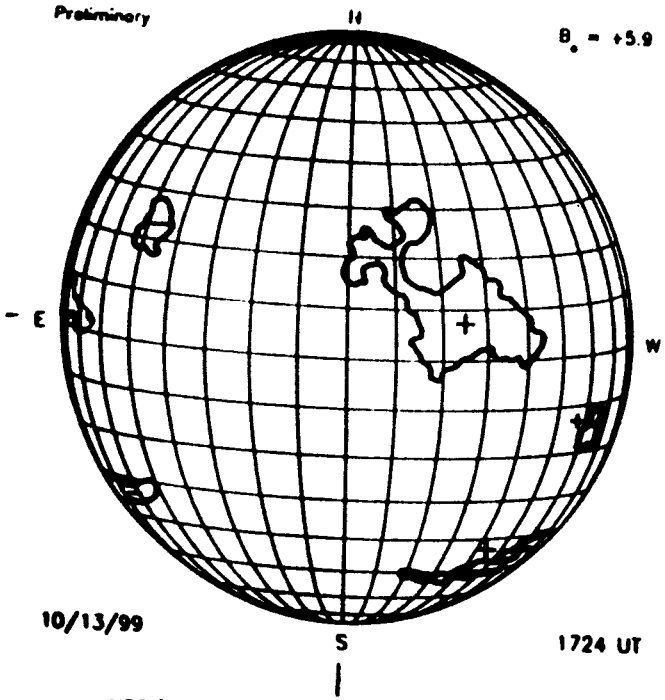


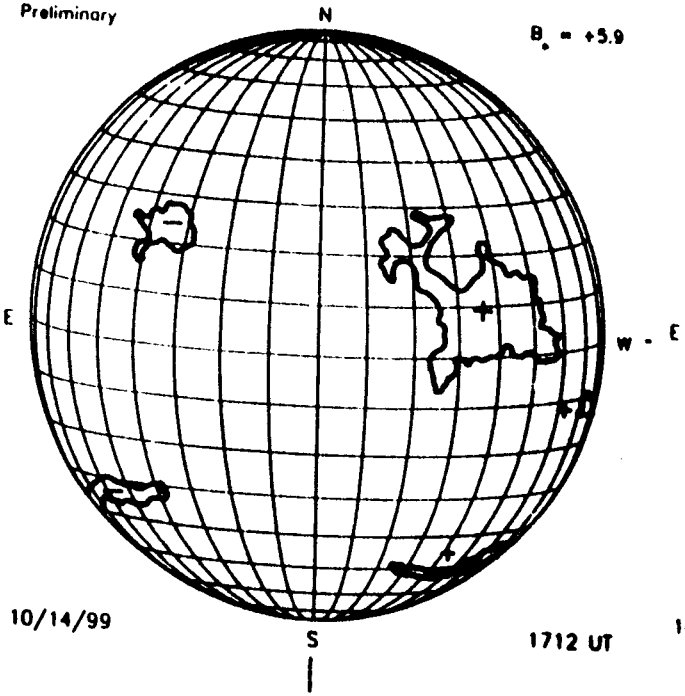


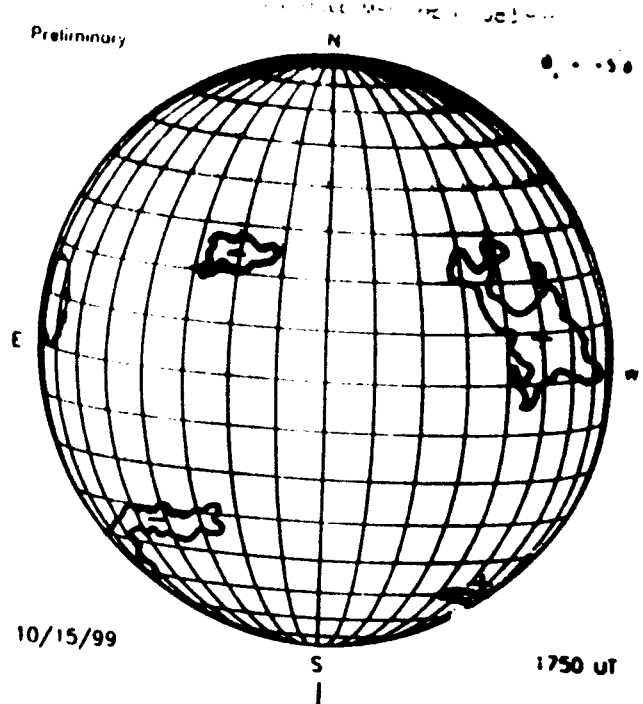




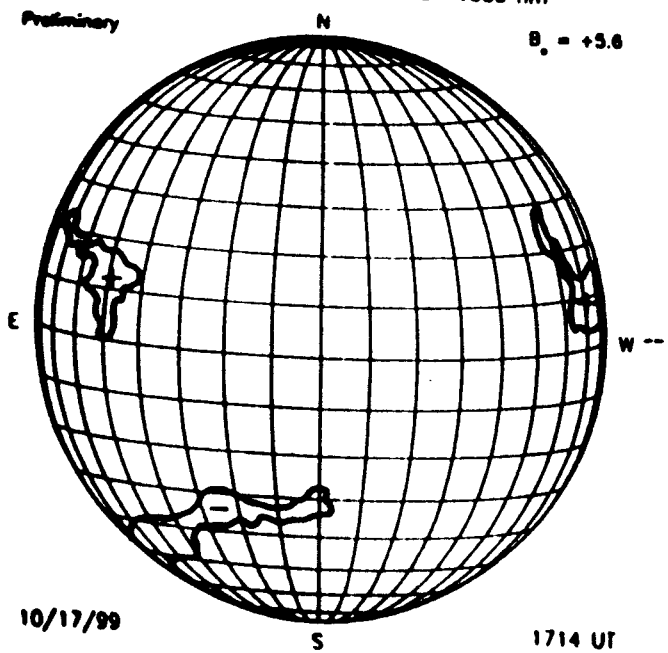




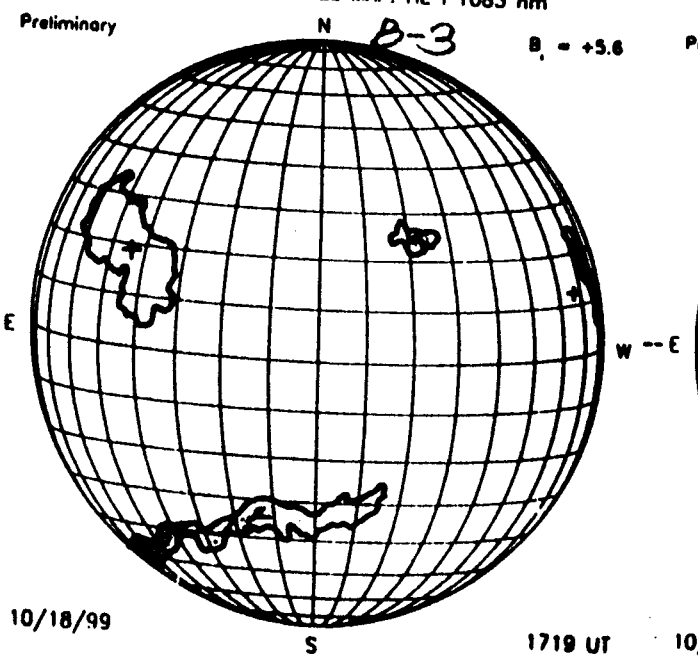




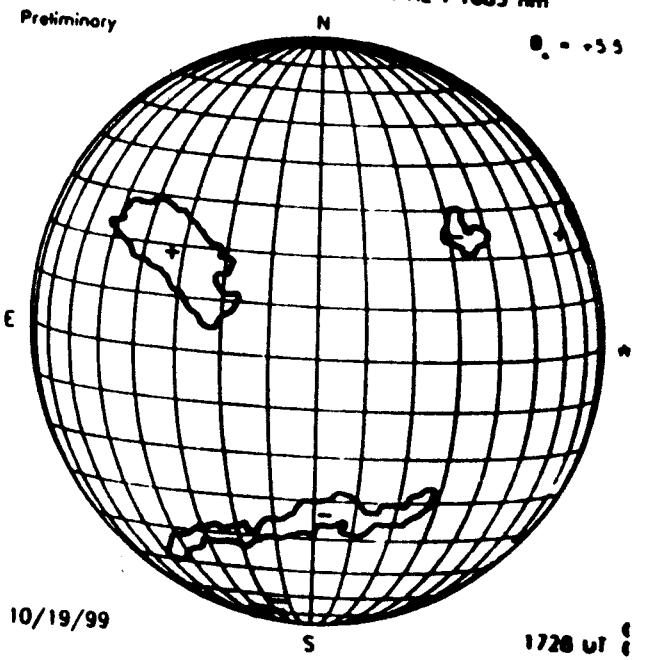
NSO/KP CORONAL HOLE MAP: HE I 1083 nm



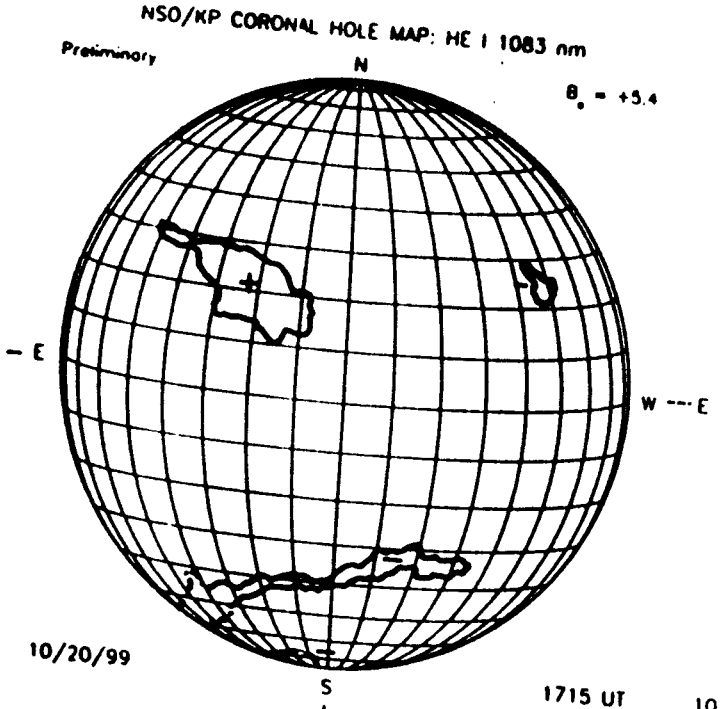
NSO/KP CORONAL HOLE MAP: HE I 1083 nm

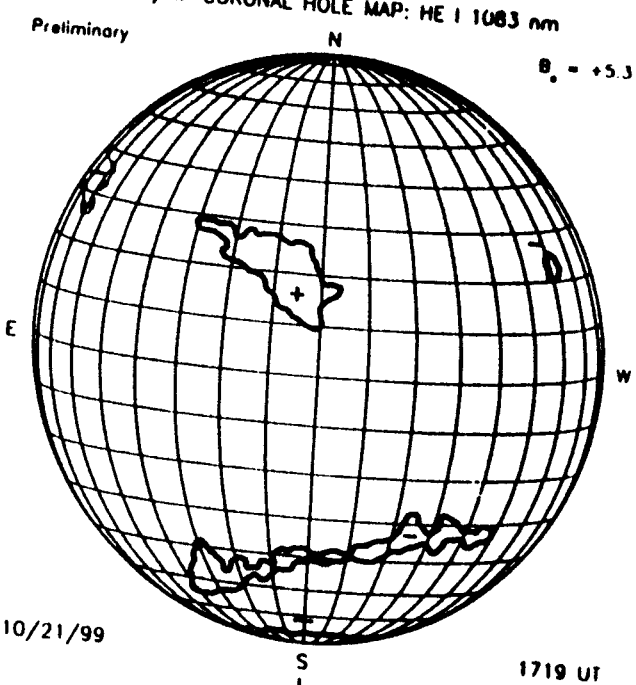


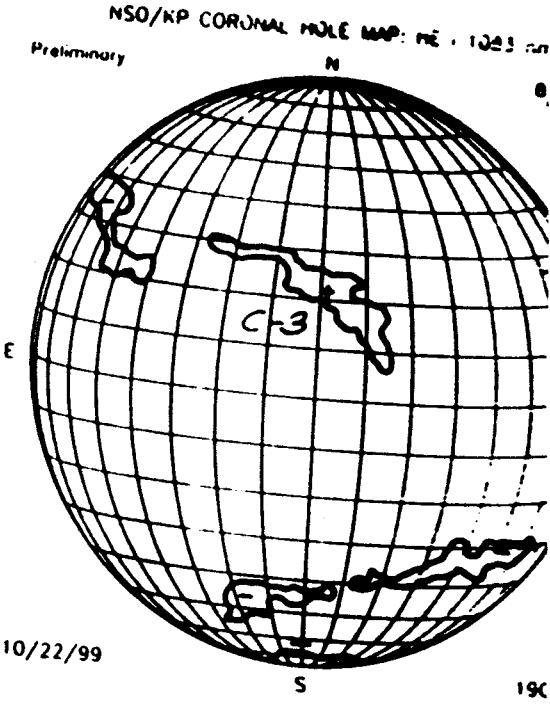
NSO/KP CORONAL HOLE MAP: HE I 1083 nm

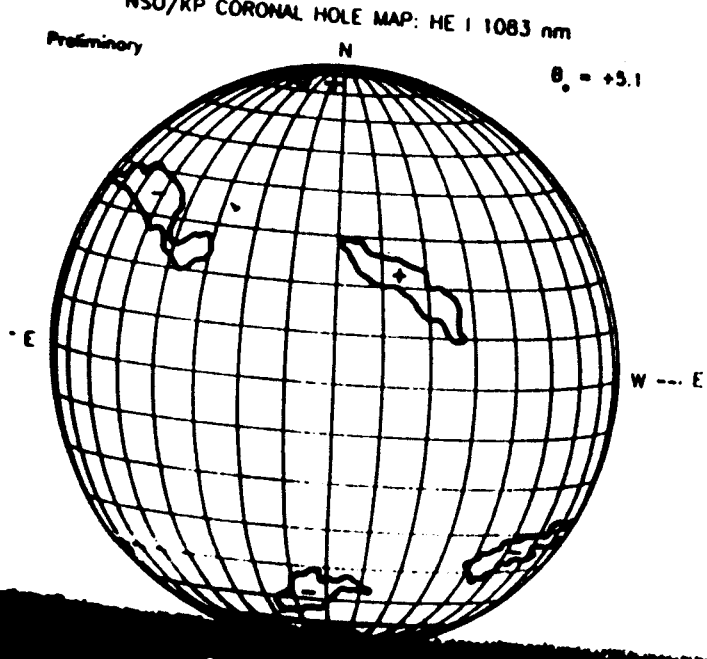


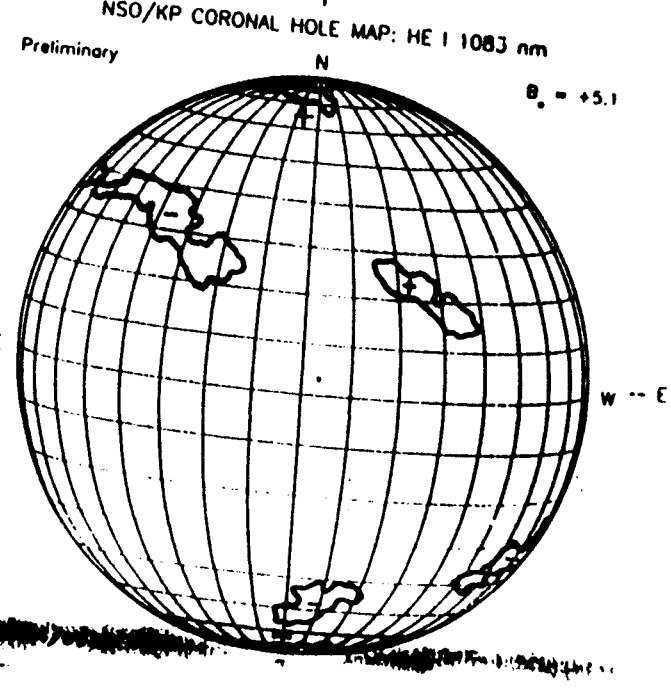
KITT PEAK CORONAL HOLE MAPS HE I 1083 nm
October 1999

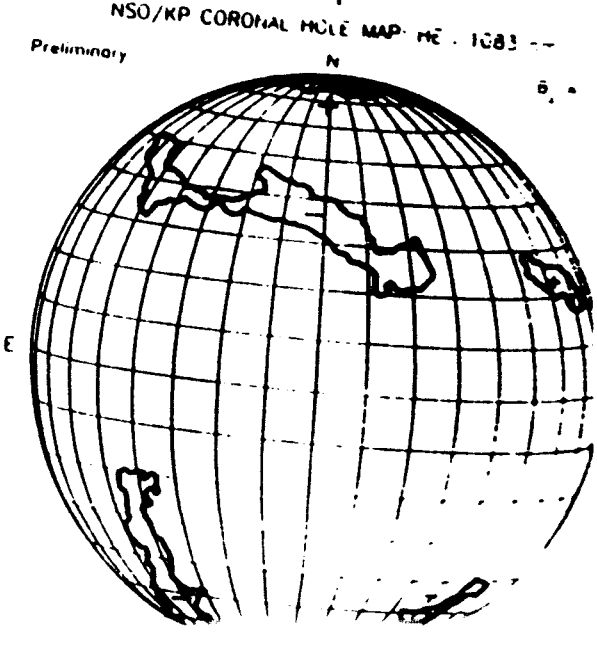




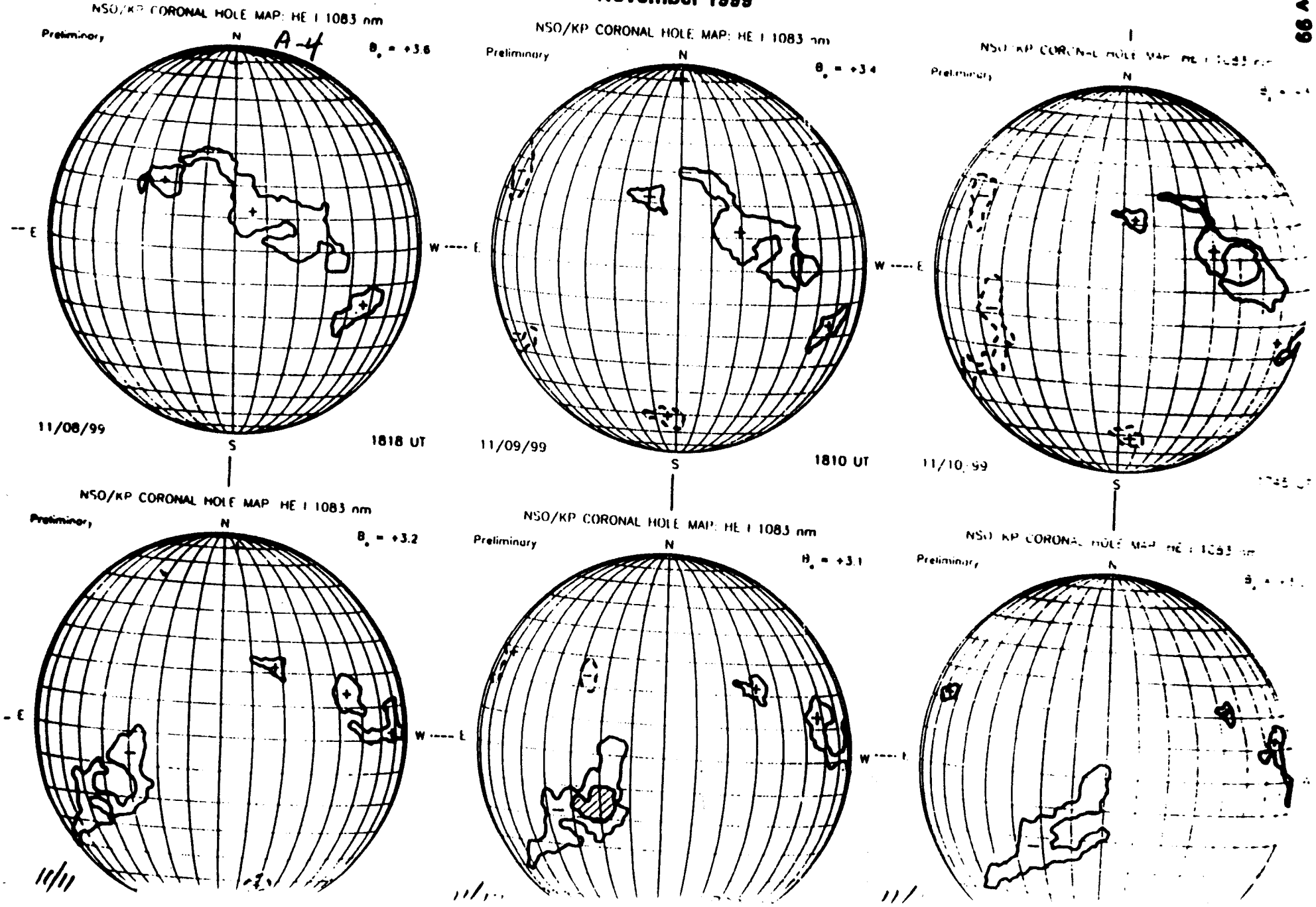








KITT PEAK CORONAL HOLE MAPS HE I 1083 nm
November 1999



Nov 99