World Data Center C2 for Geomagnetism

DATA BOOK

SPECIAL ISSUE No.2

Summary Plots of IMP-8 Magnetic Field and Plasma Data
and
AE, D_{ST} and K_P Indices for September, 1982 – April, 1986

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Data Analysis Center for
Geomagnetism and Space Magnetism
FACULTY OF SCIENCE
KYOTO UNIVERSITY
KYOTO

Space Data Analysis Center
INSTITUTE OF SPACE AND
ASTRONAUTICAL SCIENCE
SAGAMIHARA

FOREWORD

This Data Book compiles the interplanetary or magnetospheric magnetic field data and solar wind plasma parameters observed by the NASA IMP-8 spacecraft, and the geomagnetic indices, AE, Dst and Kp, in one frame.

This is the continuation of the special issue (August, 1986) of the WDC-C2 for Geomagnetism Data Book which used the data from the ISEE-3 instead of the IMP-8. The explanation of the data and plots is given on the next page.

The IMP-8 magnetic field and plasma data were provided through the World Data Center-A for Rockets and Satellites, NASA, by the courtesy of Drs. R. P. Lepping, A. J. Lazarus and J. H. King. The AE indices were derived at the World Data Center-C2 for Geomagnetism, Kyoto University. The Dst index was derived by Prof. M. Sugiura at NASA/GSFC and at Kyoto University. The Kp index was provided by Geophysical Institute, Göttingen University.

The distribution of this Data Book will generally be limited to the STE investigators inside Japan; other researchers may obtain IMP data from WDC-A-R&S, Code 633.4, NASA/GSFC, Greenbelt, MD 20771, USA.

The data were plotted by Mr. A. Nakagawa at the Data Analysis Center for Geomagnetism and Spacemagnetism, Faculty of Science, Kyoto University and printed by the Space Data Analysis Center, Institute of Space and Astronautical Science.

DATA PRESENTATION

Each frame (one page) covers 2 days period and presents, from top to bottom, the IMP-8 solar wind plasma parameters, the IMP-8 magnetic field data, the satellite position, the AE indices, the Dst index and the Kp index.

1. IMP-8 solar wind plasma data

1-2 minute resolution plasma parameter data (NSSDC ID: 73-078A-02G, Investigator name: A. J. Lazarus) are used. From top, the proton number density (cm^{-3}), the plasma bulk speed (km/sec), the thermal speed (km/sec), the solar wind dynamic pressure ($Newton/m^2$), flow angle ($degree$; east-west direction from which the plasma appears to come), and the ratio (%) of alpha current to proton peak current are plotted. Magnetosheath as well as interplanetary data are included. Aberration effects caused by the orbital motion of Earth have not been removed. Entries into and exits from the magnetosheath (across the bow shock) can be detected by noting large flow angle changes (about 10 degrees). When the number density is zero or greater than 150 (cm^{-3}), the data are not plotted. The scales are shown on the right-side of each panel.

2. IMP-8 magnetic field data

15 second resolution vector magnetic field data (NSSDC ID: 73-078A-01A, Investigator name: R. P. Lepping) are used. The X, Y and Z components (nT) in the GSM (Geocentric Solar Magnetospheric) coordinate system (see Russell, 1971), the field magnitude (15 sec average of the absolute value of every 1.28 sec), the latitudinal and longitudinal angle of the magnetic field vector in GSM are shown. Note that the data inside the magnetotail are also plotted. The spiky variations in the data are not removed even if they are obviously artificial.

3. Satellite position

The satellite position (Re) at every 2 hour is calculated by interpolation using nearest two points and is shown in the GSE (Geocentric Solar Ecliptic) coordinate system. At the data gap for more than 2 hours, the position is not shown. The initial values of IMP-8 orbit are; apogee=288,672 km, perigee=141,050 km, inclination=28.64 degrees, and orbital period=11days, 23hours, 40.5minutes (Butler, 1980).

4. AE indices

The 1 minute resolution AE indices (AU, AL and AE) are plotted in nT.

5. Dst index

The hourly Dst index (nT) is plotted in the bottom panel. Note that the data after 1985 is provisional Dst.

6. Kp index

Three hourly Kp index is shown in the bottom every 3 hours.

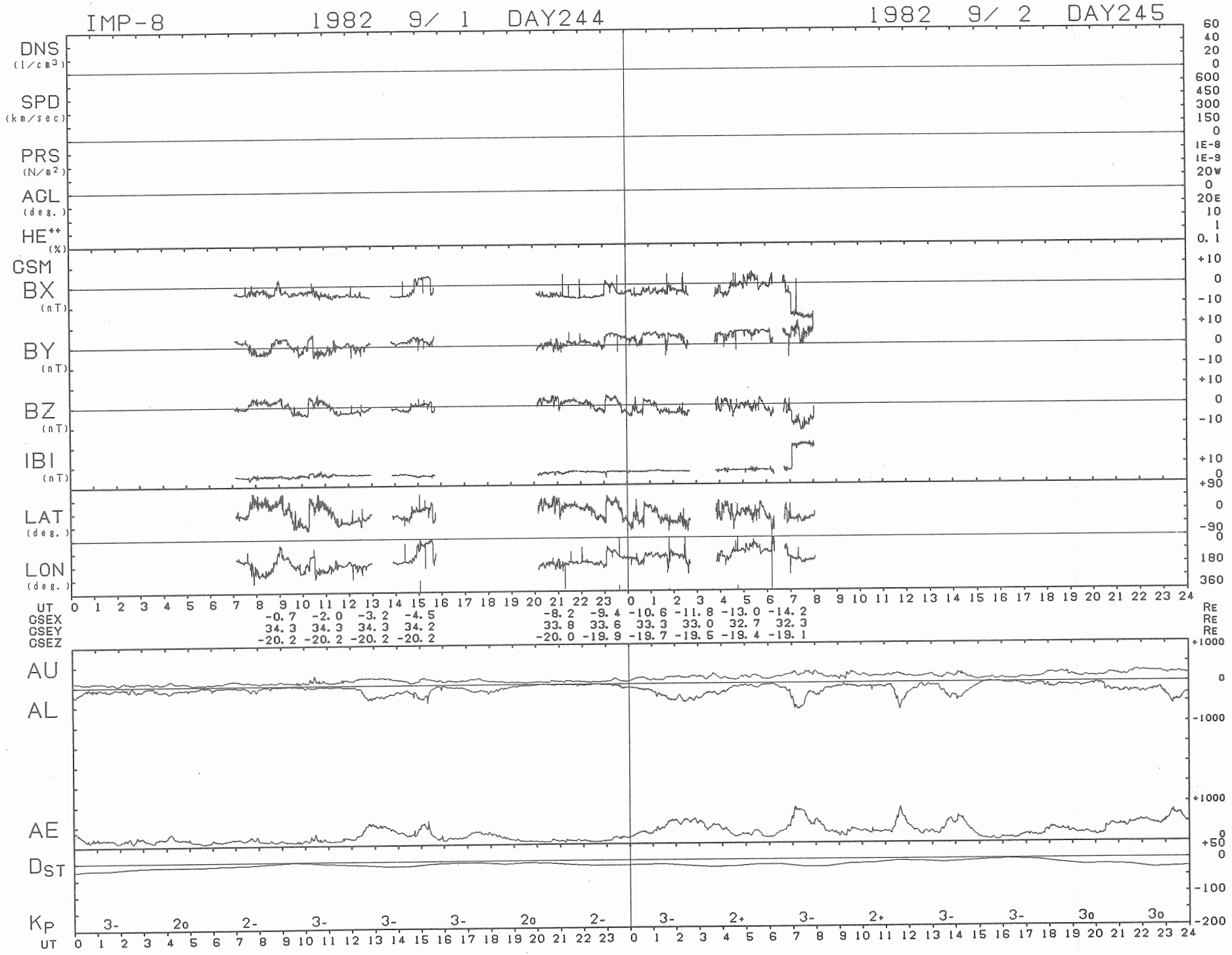
On the geomagnetic indices, see, for example, Mayaud (1980).

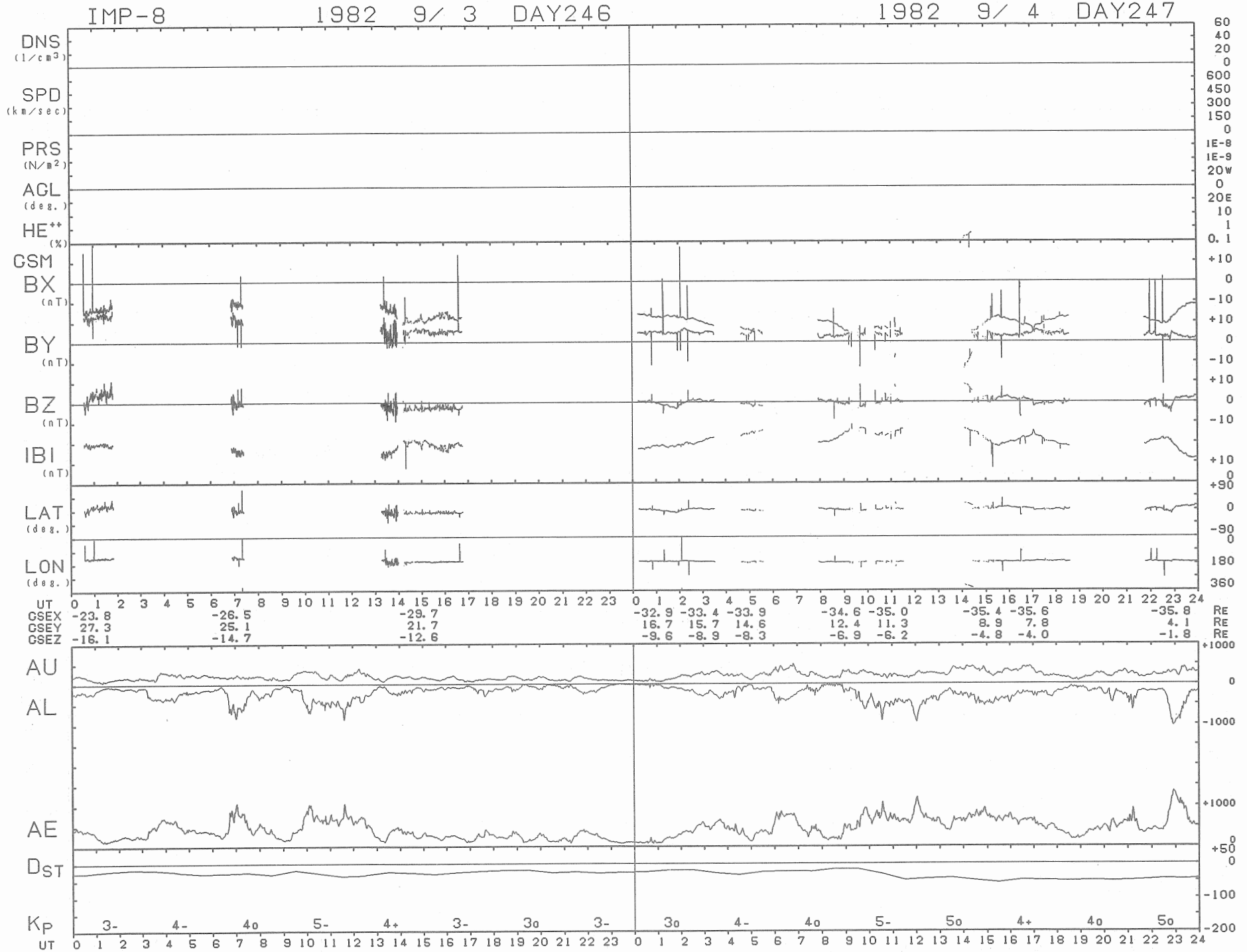
REFERENCES

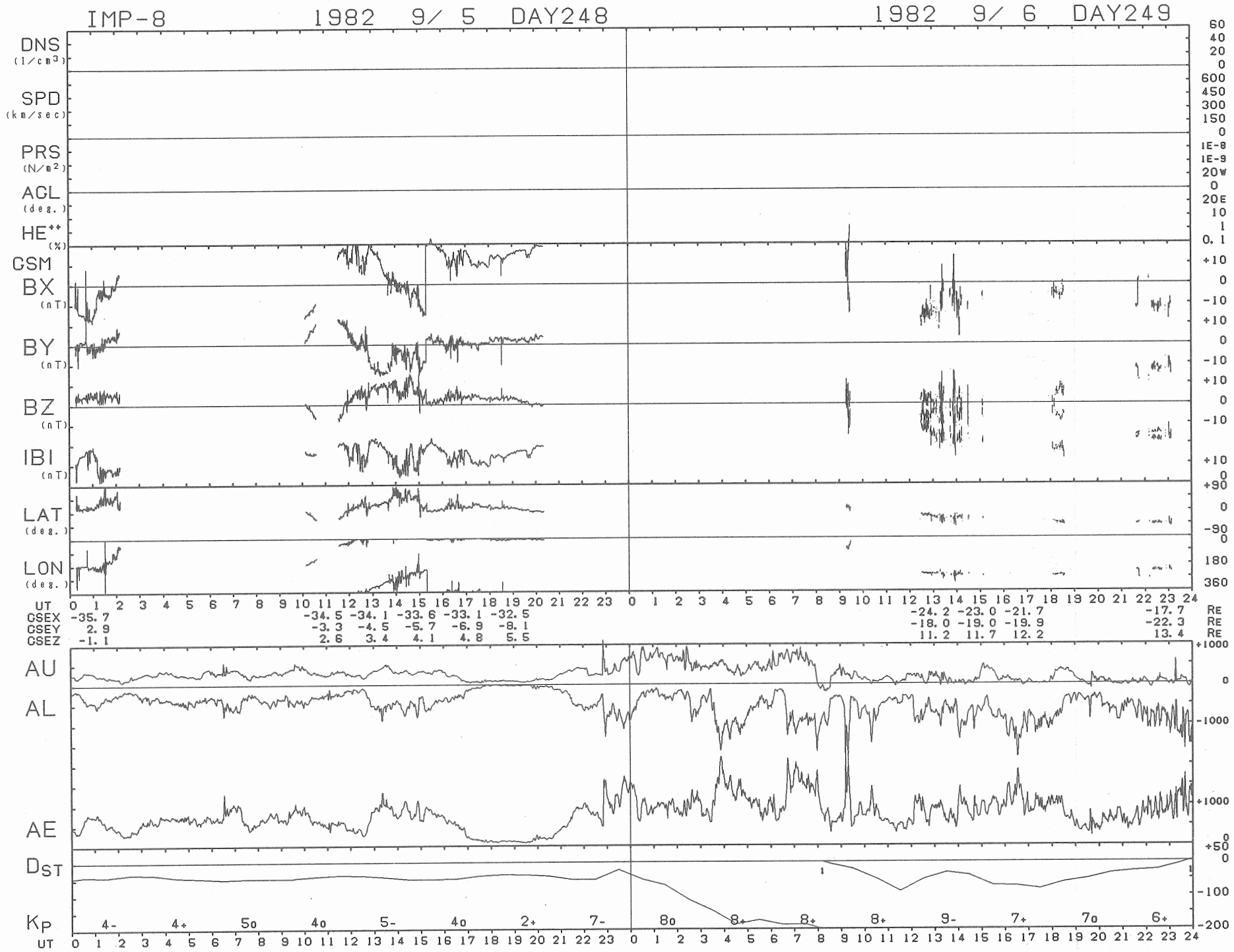
Butler, P., Interplanetary monitoring platform - Engineering history and achievements, NASA TM-80758, NASA/GSFC, Maryland, 1980.

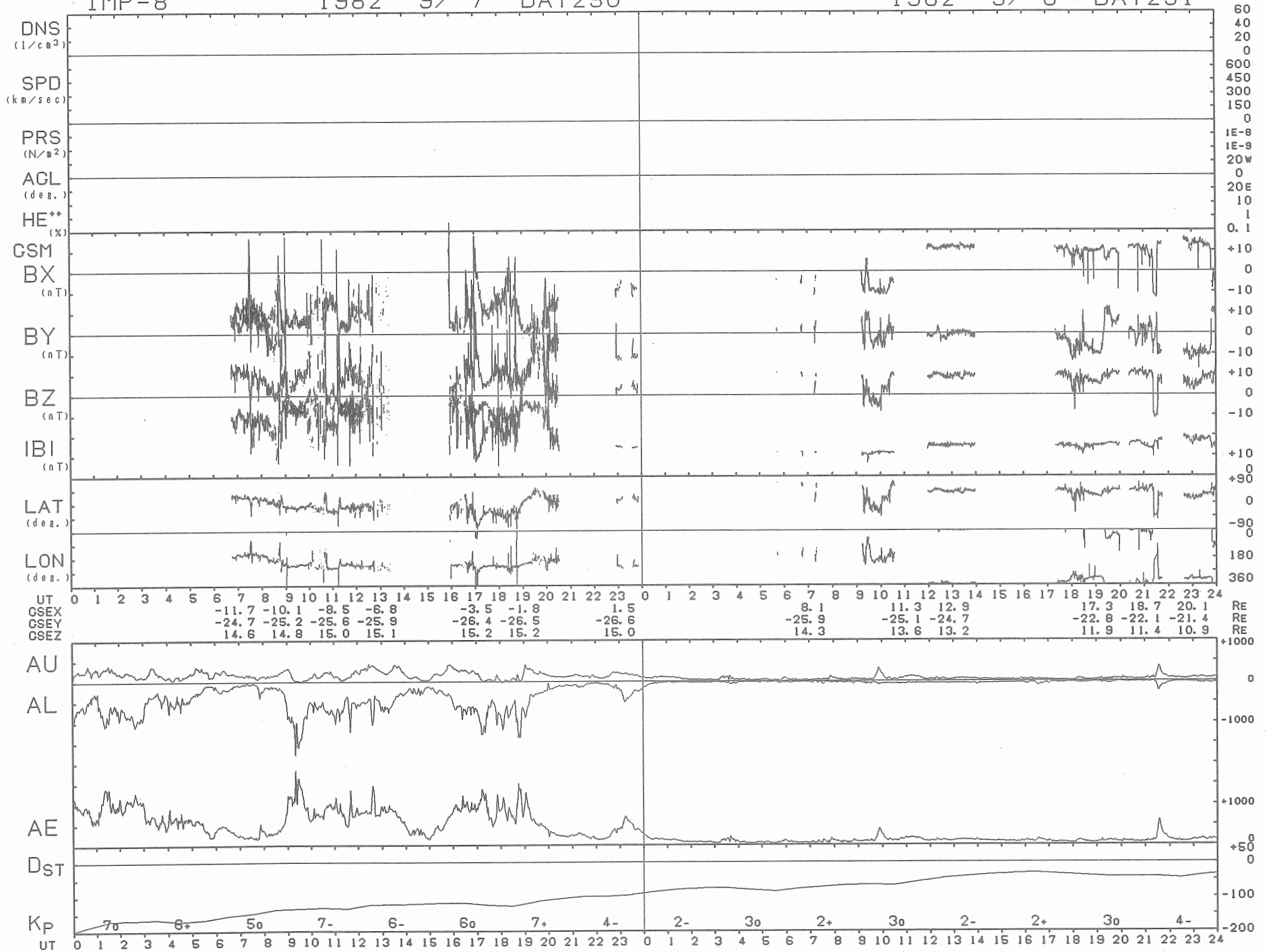
Mayaud, P.N., Derivation, meaning, and use of geomagnetic indices, Geophysical Monograph 22, American Geophysical Union, Washington D.C., 1980.

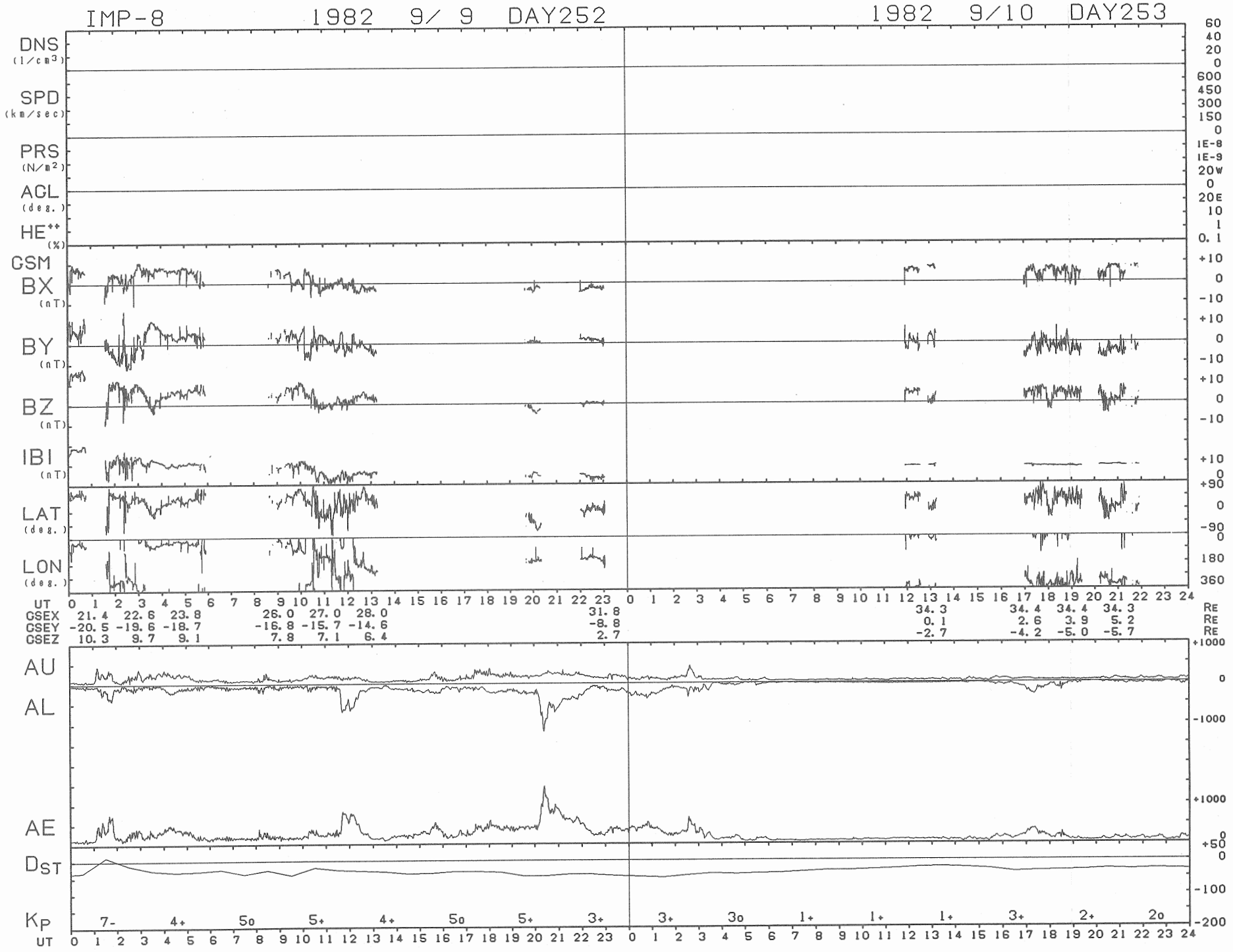
Russell, C.T., Geophysical coordinate transformation, Cosmic Electrodynamics, 2, 184, 1971.


IMP-8
1982 9/ 1 DAY244
1982 9/ 2 DAY245
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.7 -2.0 -3.2 -4.5 -8.2 -9.4 -10.6 -11.8 -13.0 -14.2
GSEY 34.3 34.3 34.3 34.2 33.8 33.6 33.3 33.0 32.7 32.3
GSEZ -20.2 -20.2 -20.2 -20.2 -20.0 -19.9 -19.7 -19.5 -19.4 -19.1
Re
AU
AL
AE
DST
KP 3- 2o 2- 3- 3- 3- 2o 2- 3- 2+ 3- 2+ 3- 3- 3o 3o
UT


IMP-8 1982 9/ 3 DAY246
1982 9/ 4 DAY247
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.8 -26.5 -29.7 -32.9 -33.4 -33.9 -34.6 -35.0 -35.4 -35.6 -35.8 RE
GSEY 27.3 25.1 21.7 16.7 15.7 14.6 12.4 11.3 8.9 7.8 4.1 RE
GSEZ -16.1 -14.7 -12.6 -9.6 -8.9 -8.3 -6.9 -6.2 -4.8 -4.0 -1.8 RE
AU
AL
AE
DST
KP 3- 4- 4o 5- 4+ 3- 3o 3- 3o 4- 4o 5- 5o 4+ 4o 5o
UT


IMP-8
1982 9/ 5 DAY248
1982 9/ 6 DAY249
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.7
GSEY 2.9
GSEZ -1.1
-34.5 -34.1 -33.6 -33.1 -32.5
-3.3 -4.5 -5.7 -6.9 -8.1
2.6 3.4 4.1 4.8 5.5
-24.2 -23.0 -21.7 -17.7
-18.0 -19.0 -19.9 -22.3
11.2 11.7 12.2 13.4
RE
AU
AL
AE
DST
KP
4- 4+ 5o 4o 5- 4o 2+ 7- 8o 8+ 8+ 8+ 9- 7+ 7o 6+


IMP-8 1982 9/ 7 DAY250
1982 9/ 8 DAY251
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.7 -10.1 -8.5 -6.8 -3.5 -1.8 1.5 8.1 11.3 12.9 17.3 18.7 20.1 RE
GSEY -24.7 -25.2 -25.6 -25.9 -26.4 -26.5 -26.6 -25.9 -25.1 -24.7 -22.8 -22.1 -21.4 RE
GSEZ 14.6 14.8 15.0 15.1 15.2 15.2 15.0 14.3 13.6 13.2 11.9 11.4 10.9 RE
AU
AL
AE
DST
KP
7o 6+ 5o 7- 6- 6o 7+ 4- 2- 3o 2+ 3o 2- 2+ 3o 4-
UT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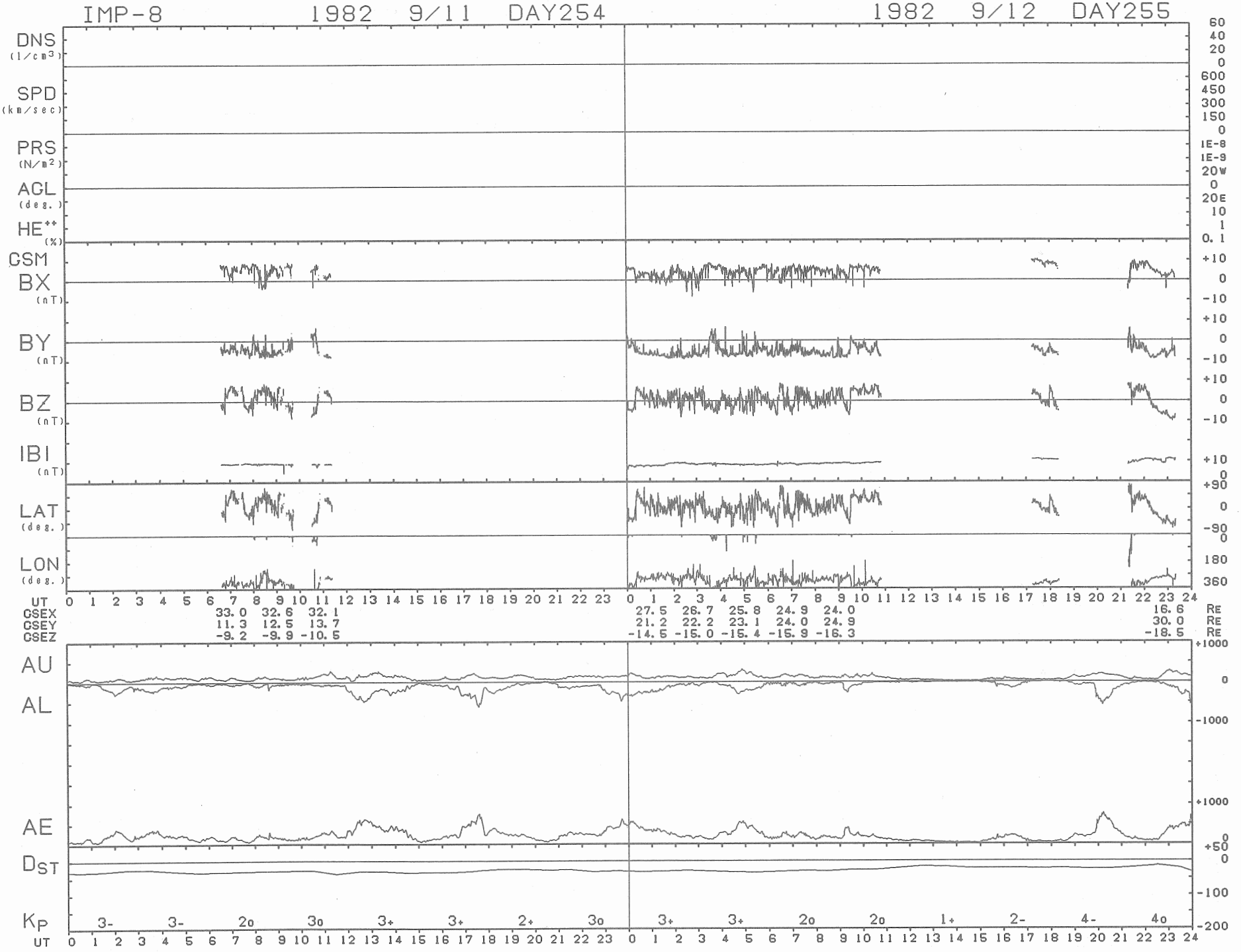
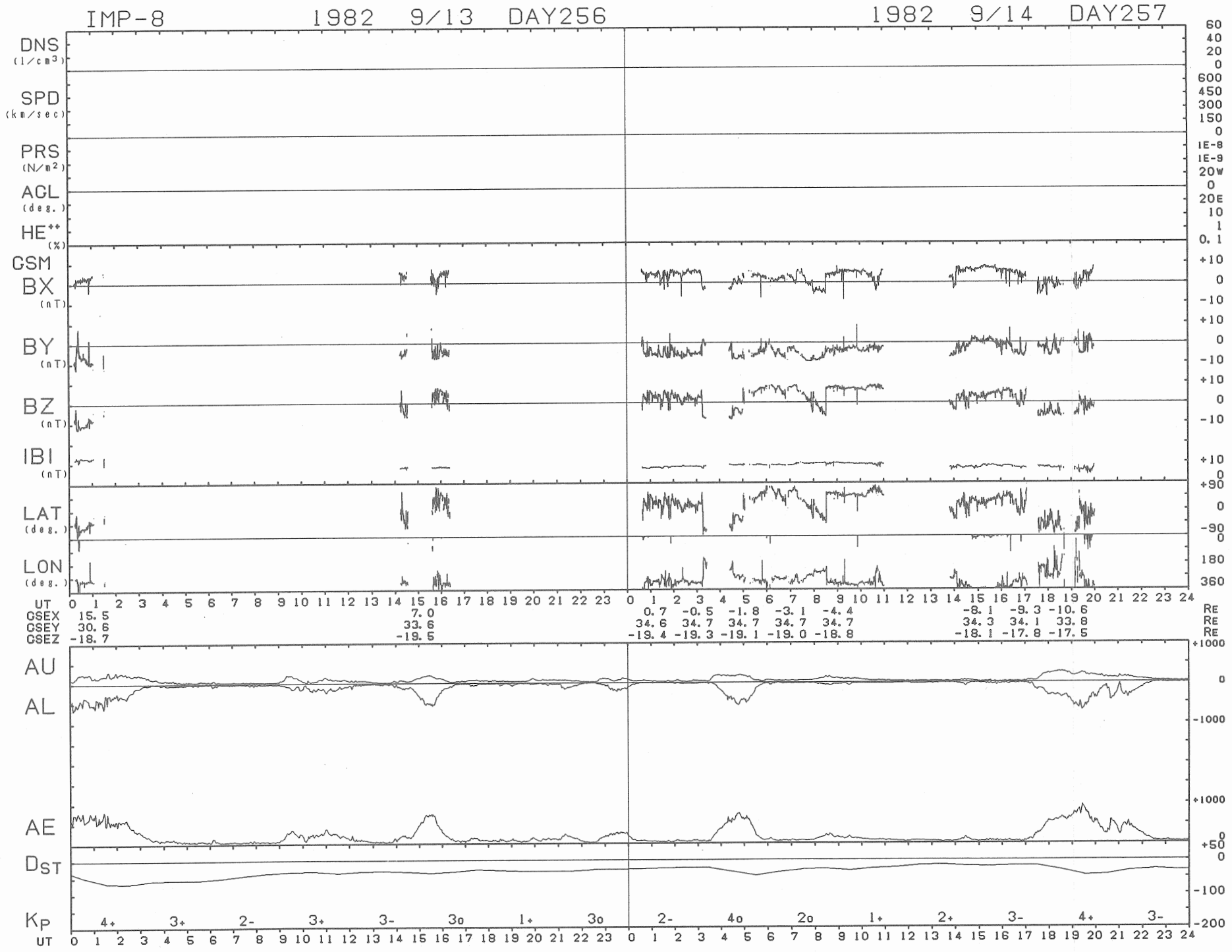
1982 9/ 9 DAY252
1982 9/10 DAY253
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.4 22.6 23.8 26.0 27.0 28.0 31.8 34.3 34.4 34.4 34.3 RE
GSEY -20.5 -19.6 -18.7 -16.8 -15.7 -14.6 -8.8 0.1 2.6 3.9 5.2 RE
GSEZ 10.3 9.7 9.1 7.8 7.1 6.4 2.7 -2.7 -4.2 -5.0 -5.7 RE
AU
AL
AE
DST
KP
7- 4+ 5o 5+ 4+ 5o 5+ 3+ 3+ 3o 1+ 1+ 1+ 3+ 2+ 2o
UT


IMP-8 1982 9/11 DAY254
1982 9/12 DAY255
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.0 32.6 32.1 27.5 26.7 25.8 24.9 24.0 16.6 RE
GSEY 11.3 12.5 13.7 21.2 22.2 23.1 24.0 24.9 30.0 RE
GSEZ -9.2 -9.9 -10.5 -14.5 -15.0 -15.4 -15.9 -16.3 -18.5 RE
AU
AL
AE
DST
KP 3- 3- 2o 3o 3+ 3+ 2+ 3o 3+ 3+ 2o 2o 1+ 2- 4- 4o
UT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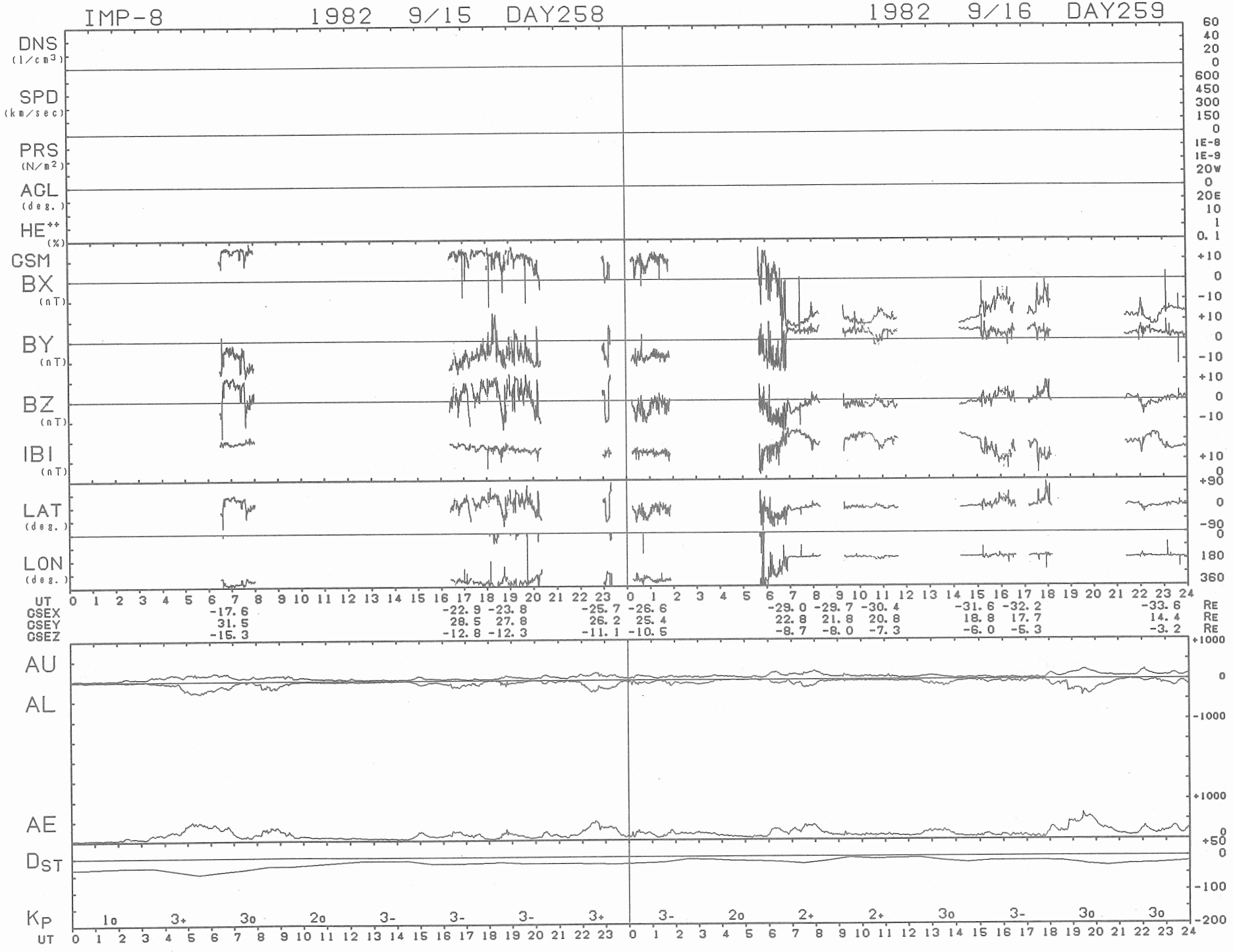
1982 9/13 DAY256
1982 9/14 DAY257
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.5 7.0 0.7 -0.5 -1.8 -3.1 -4.4 -8.1 -9.3 -10.6 RE
GSEY 30.6 33.6 34.6 34.7 34.7 34.7 34.7 34.3 34.1 33.8 RE
GSEZ -18.7 -19.5 -19.4 -19.3 -19.1 -19.0 -18.8 -18.1 -17.8 -17.5 RE
AU
AL
AE
DST
KP
4+ 3+ 2- 3+ 3- 3o 1+ 3o 2- 4o 2o 1+ 2+ 3- 4+ 3-
UT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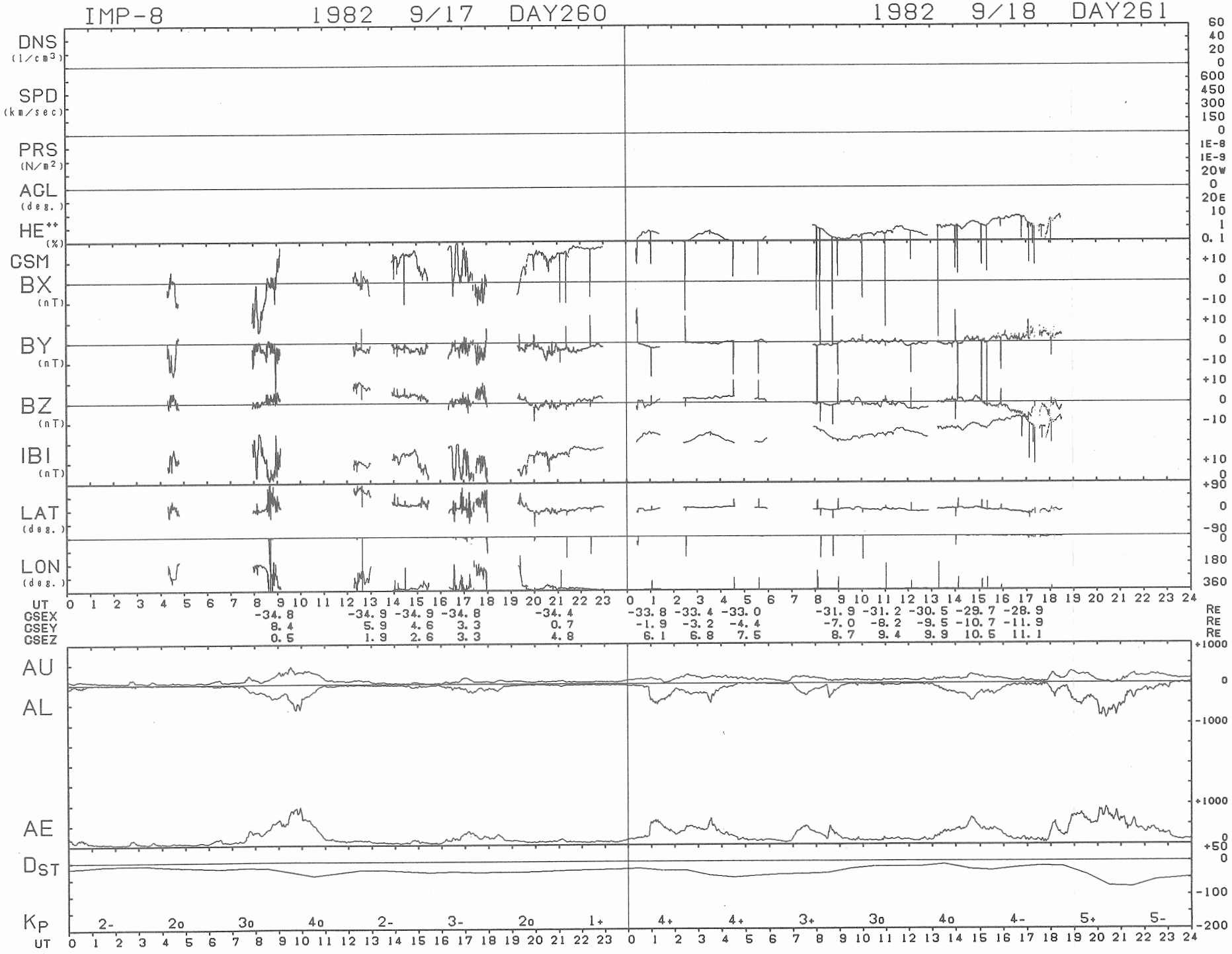
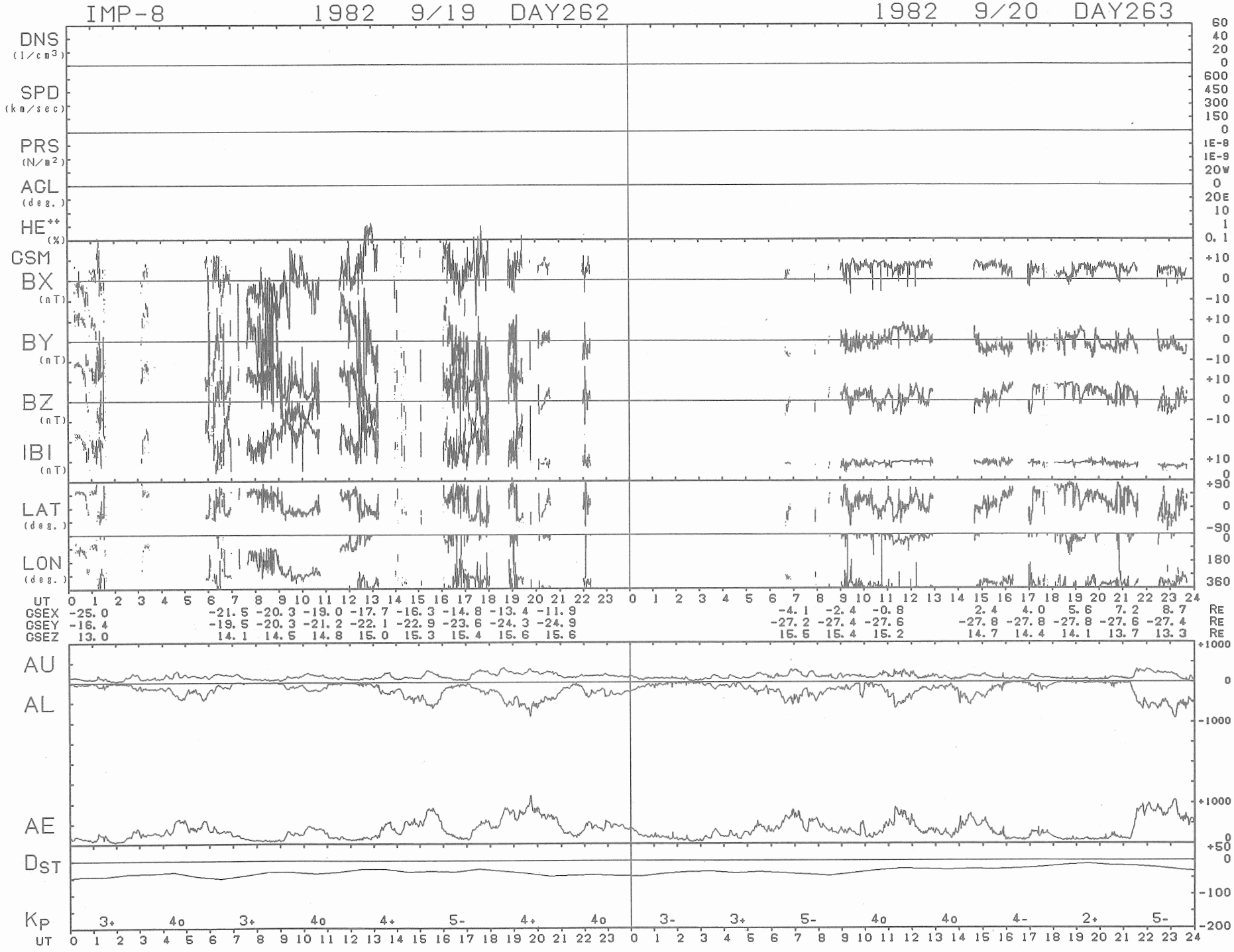
1982 9/15 DAY258
1982 9/16 DAY259
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.6 -22.9 -23.8 -25.7 -26.6 -29.0 -29.7 -30.4 -31.6 -32.2 -33.6 RE
GSEY 31.5 28.5 27.8 26.2 25.4 22.8 21.8 20.8 18.8 17.7 14.4 RE
GSEZ -15.3 -12.8 -12.3 -11.1 -10.5 -8.7 -8.0 -7.3 -6.0 -5.3 -3.2 RE
AU
AL
AE
DST
KP 1o 3+ 3o 2o 3- 3- 3- 3+ 3- 2o 2+ 2+ 3o 3- 3o 3o
UT


IMP-8
1982 9/17 DAY260
1982 9/18 DAY261
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -34.8 -34.9 -34.9 -34.8 -34.4 -33.8 -33.4 -33.0 -31.9 -31.2 -30.5 -29.7 -28.9 RE
GSEY 8.4 5.9 4.6 3.3 0.7 -1.9 -3.2 -4.4 -7.0 -8.2 -9.5 -10.7 -11.9 RE
GSEZ 0.5 1.9 2.6 3.3 4.8 6.1 6.8 7.5 8.7 9.4 9.9 10.5 11.1 RE
AU
AL
AE
DST
KP
2- 2o 3o 4o 2- 3- 2o 1+ 4+ 4+ 3+ 3o 4o 4- 5+ 5-
UT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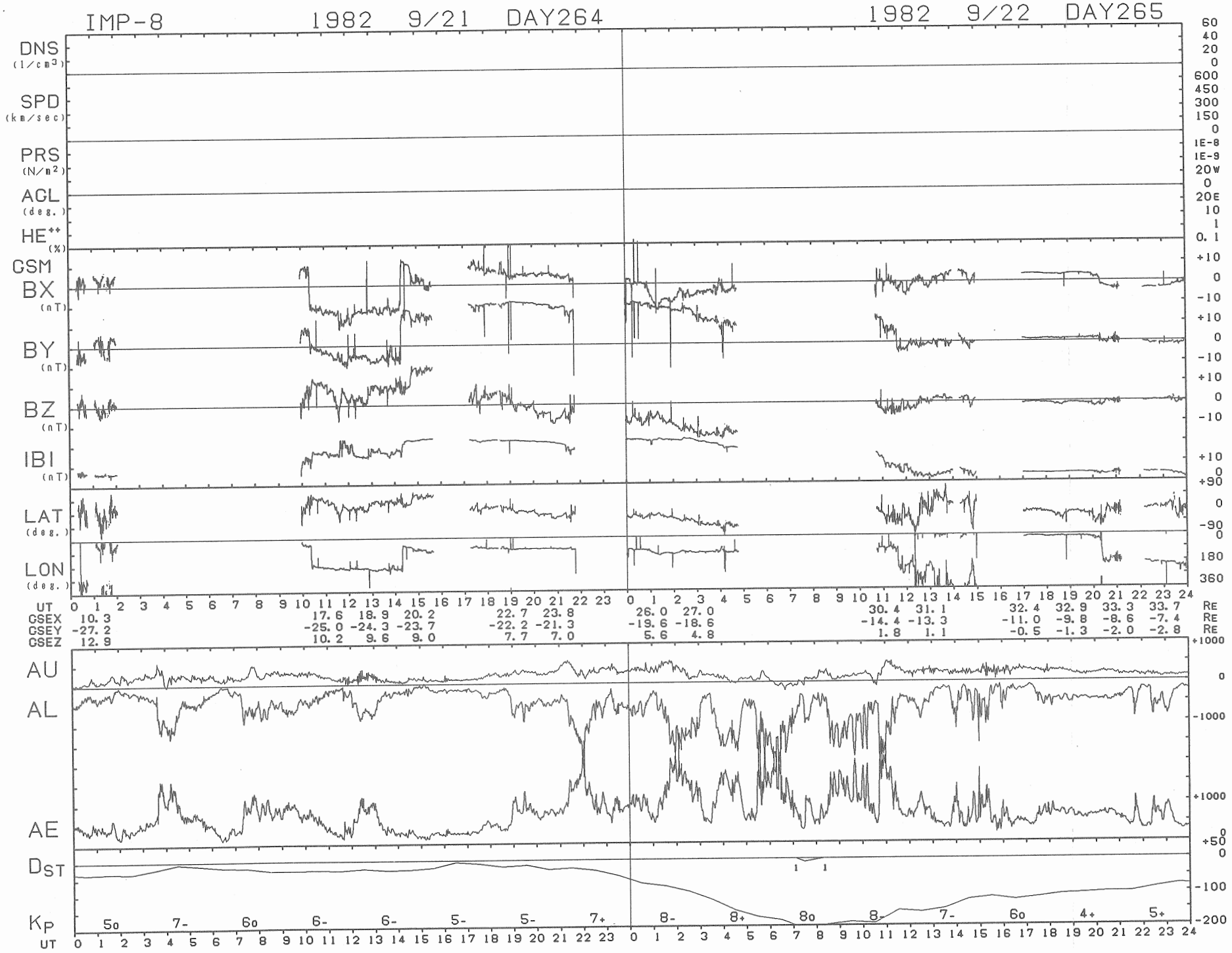
1982 9/20 DAY263
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.0 -21.5 -20.3 -19.0 -17.7 -16.3 -14.8 -13.4 -11.9 -4.1 -2.4 -0.8 2.4 4.0 5.6 7.2 8.7 RE
GSEY -16.4 -19.5 -20.3 -21.2 -22.1 -22.9 -23.6 -24.3 -24.9 -27.2 -27.4 -27.6 -27.8 -27.8 -27.8 -27.6 -27.4 RE
GSEZ 13.0 14.1 14.5 14.8 15.0 15.3 15.4 15.6 15.6 15.5 15.4 15.2 14.7 14.4 14.1 13.7 13.3 RE
AU
AL
AE
DST
KP 3+ 4o 3+ 4o 4+ 5- 4+ 4o 3- 3+ 5- 4o 4o 4- 2+ 5-
UT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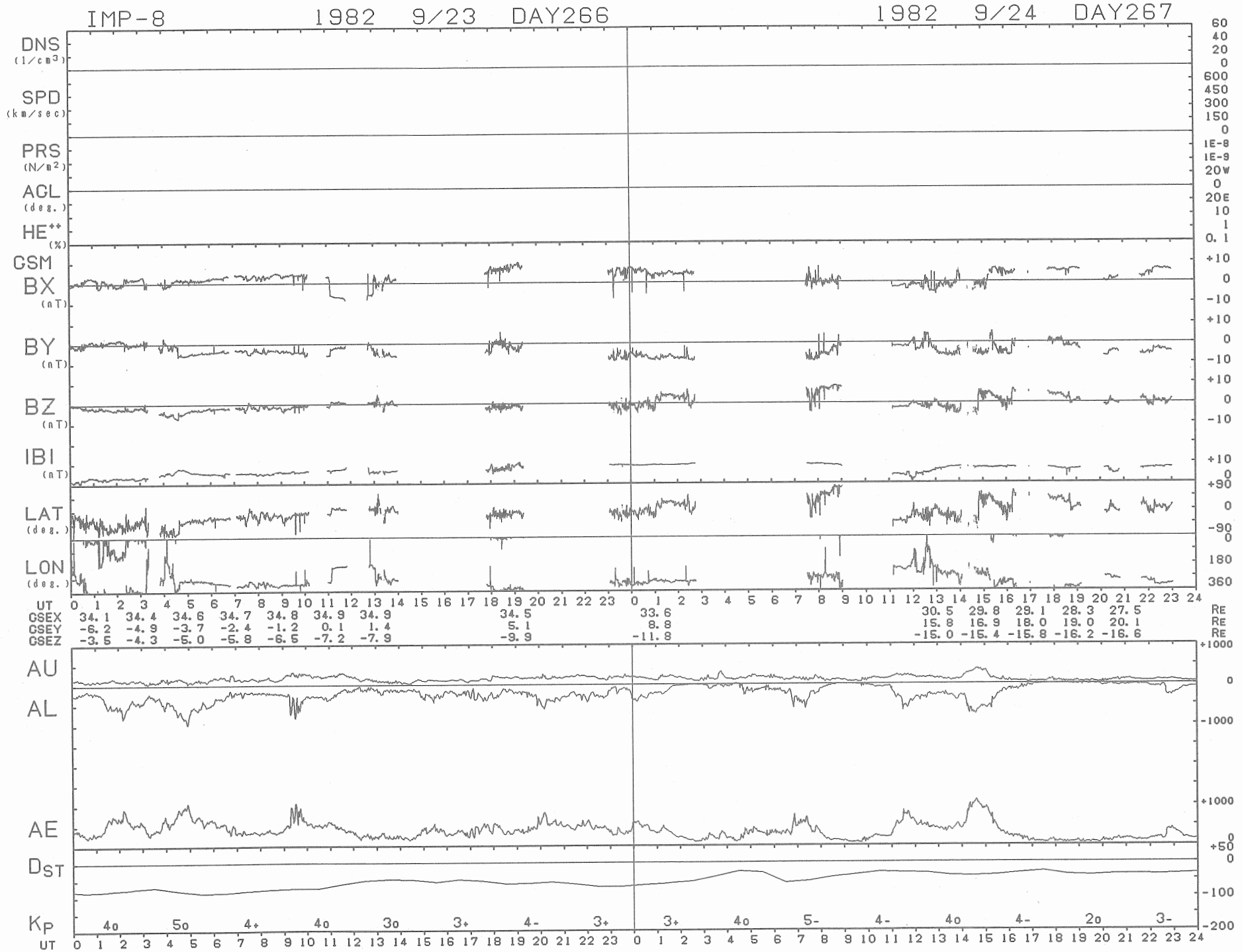
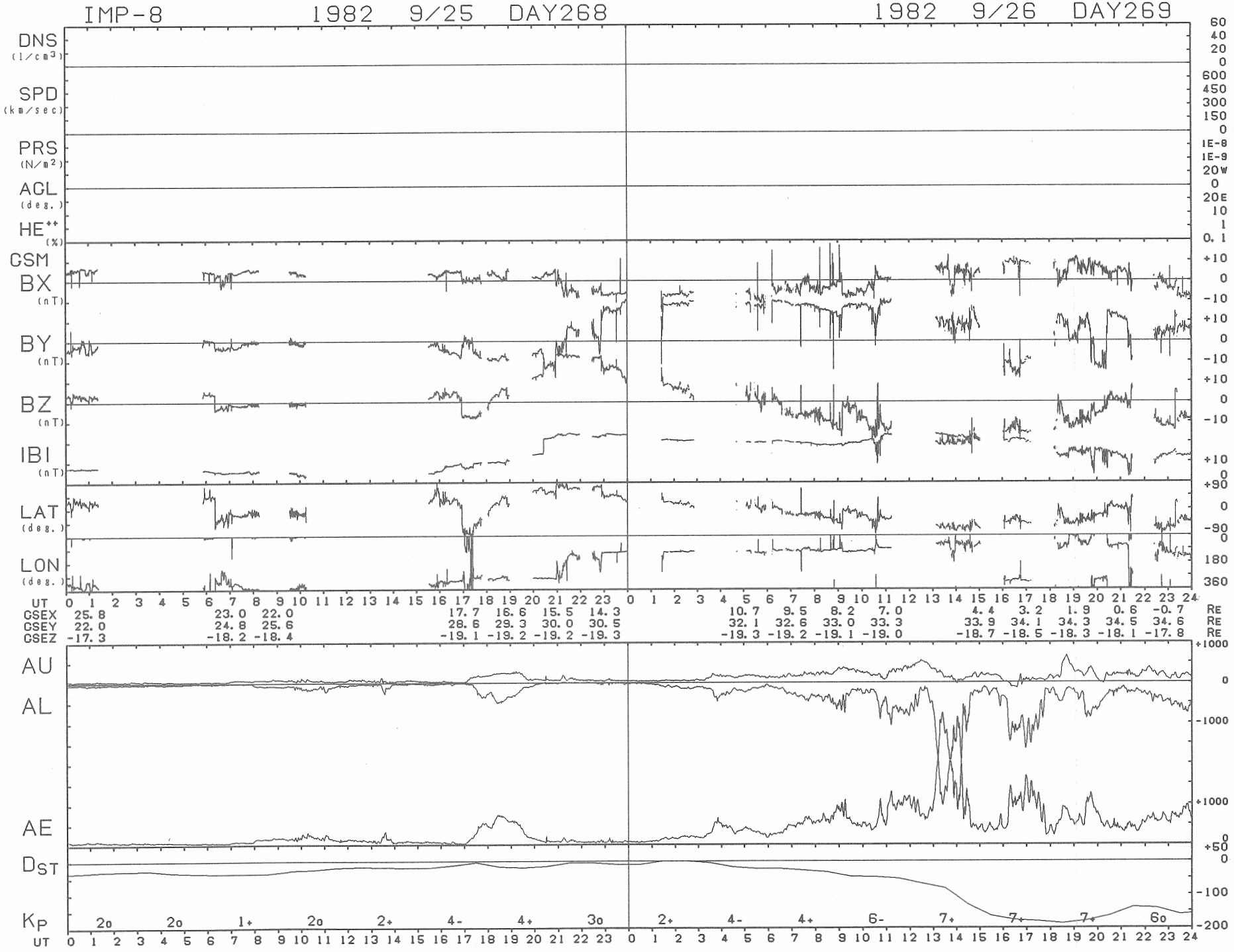
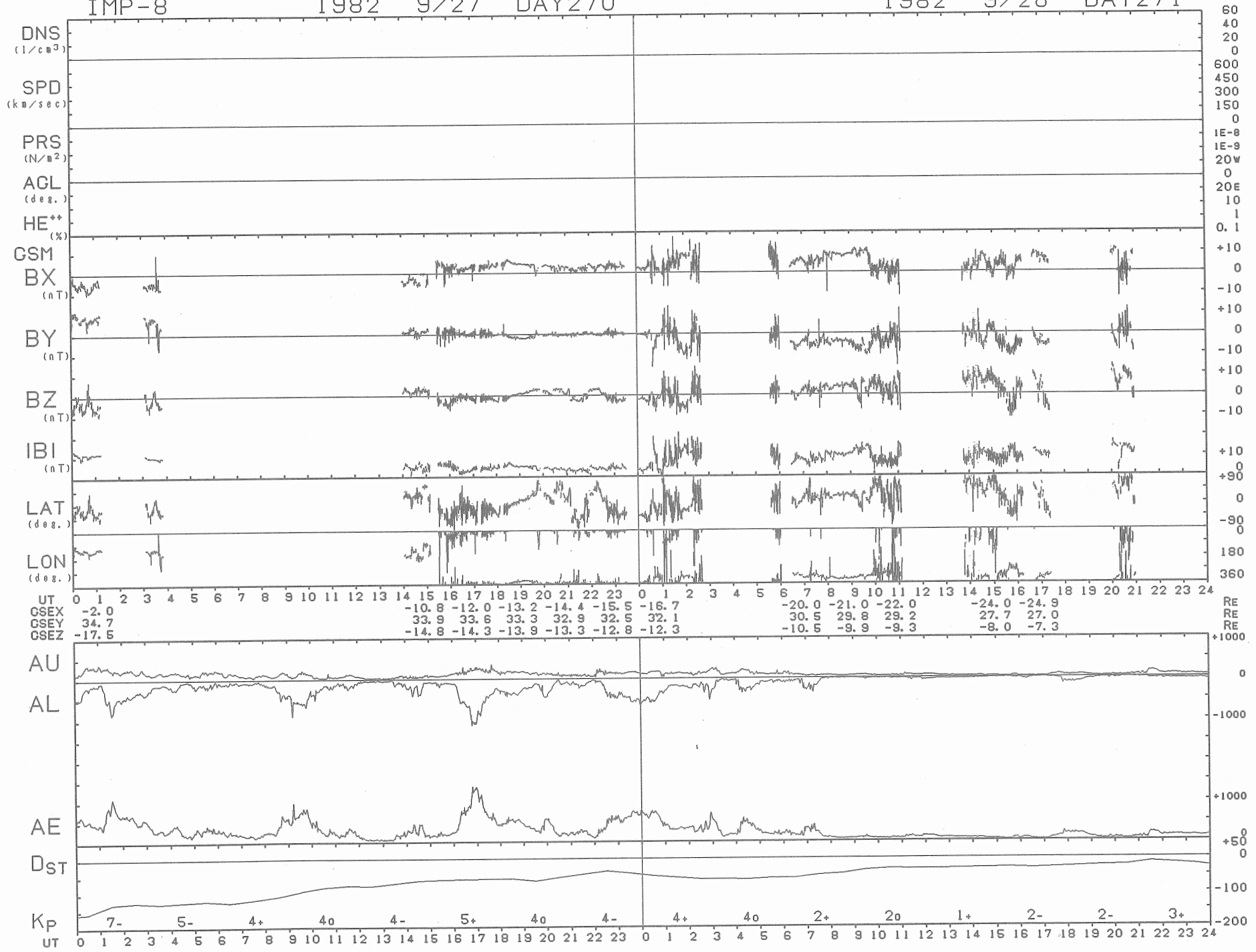
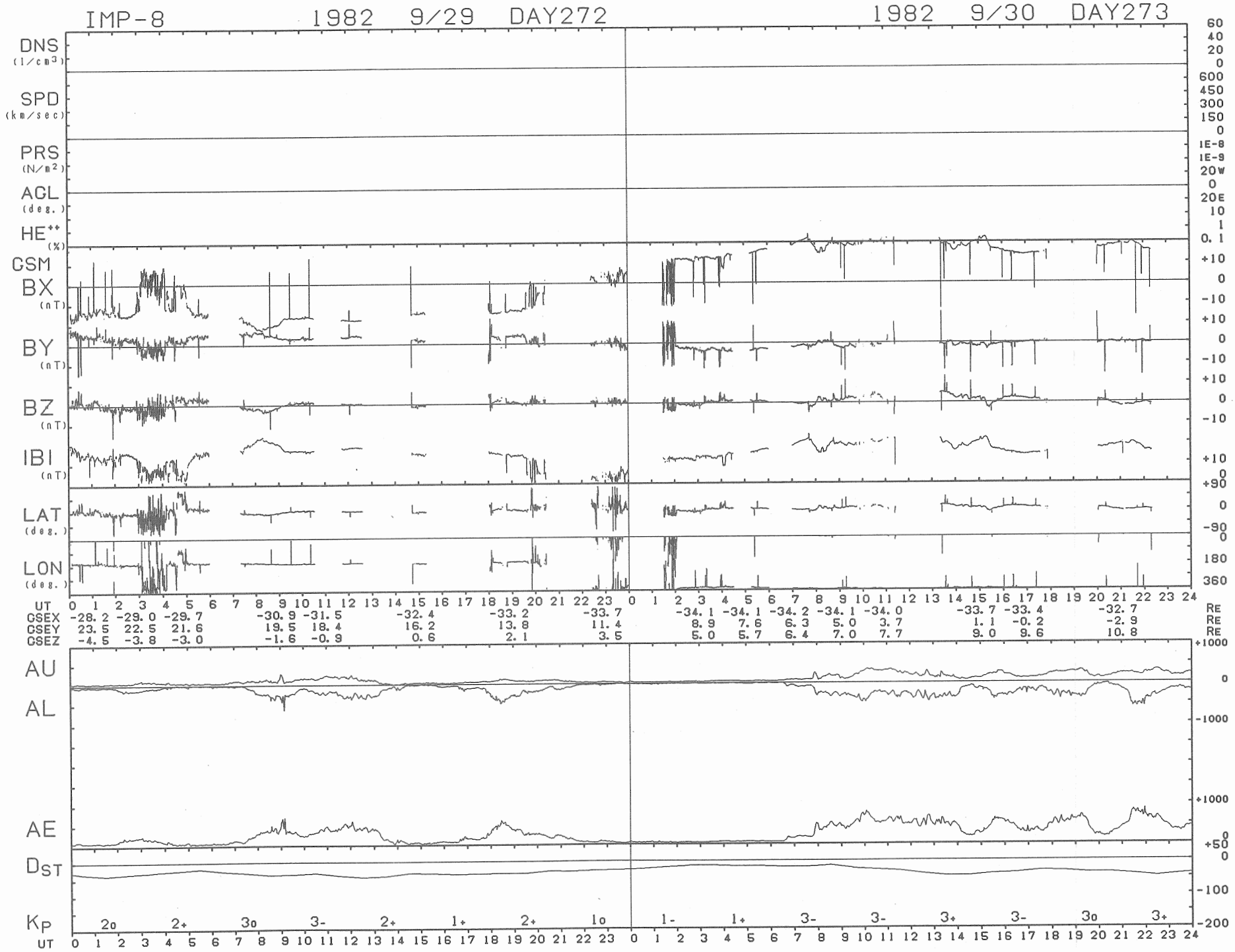
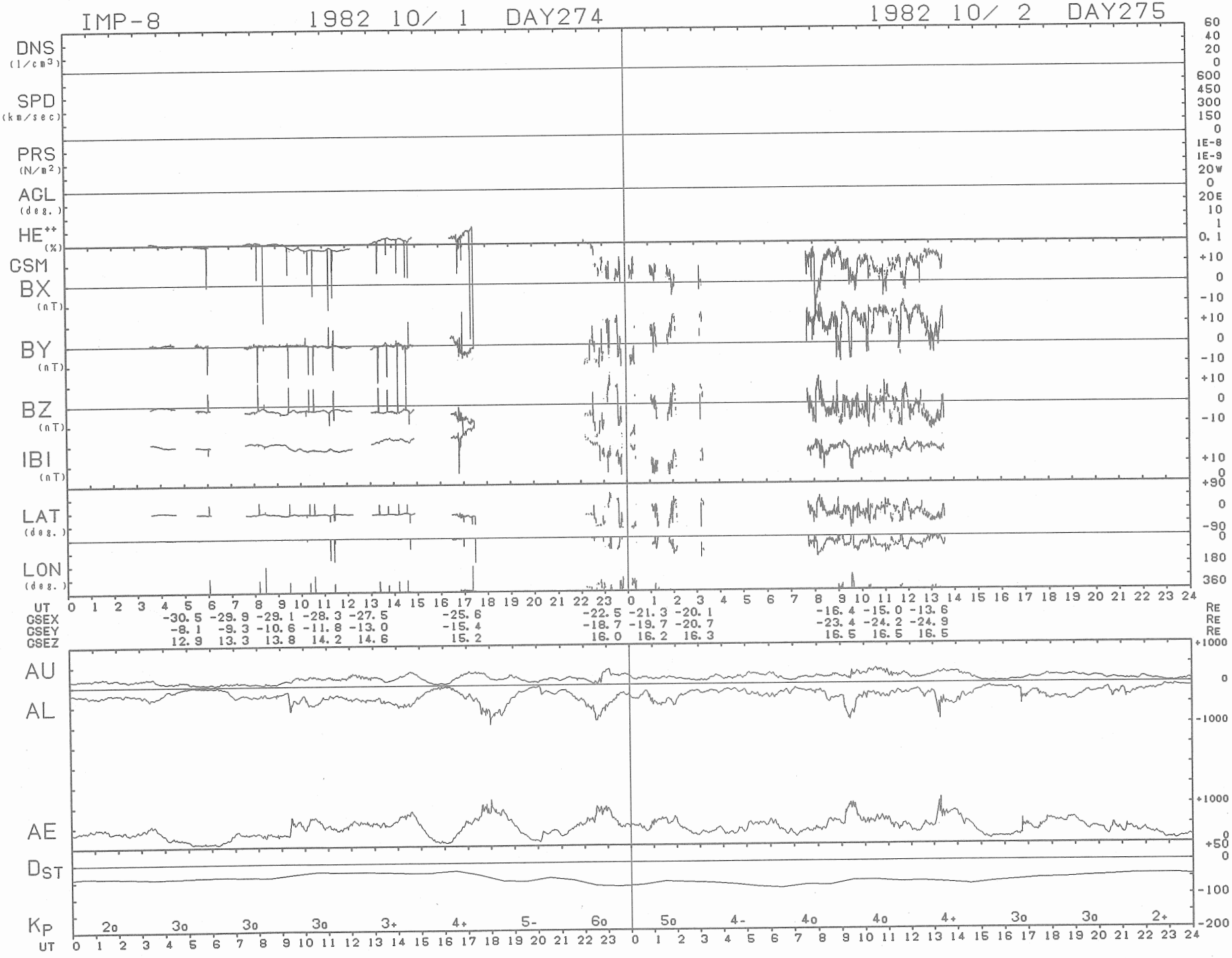
1982 9/21 DAY264
1982 9/22 DAY265
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.3
GSEY -27.2
GSEZ 12.9
AU
AL
AE
DST
KP
5o 7- 6o 6- 6- 5- 5- 7+ 8- 8+ 8o 8- 7- 6o 4+ 5+
UT

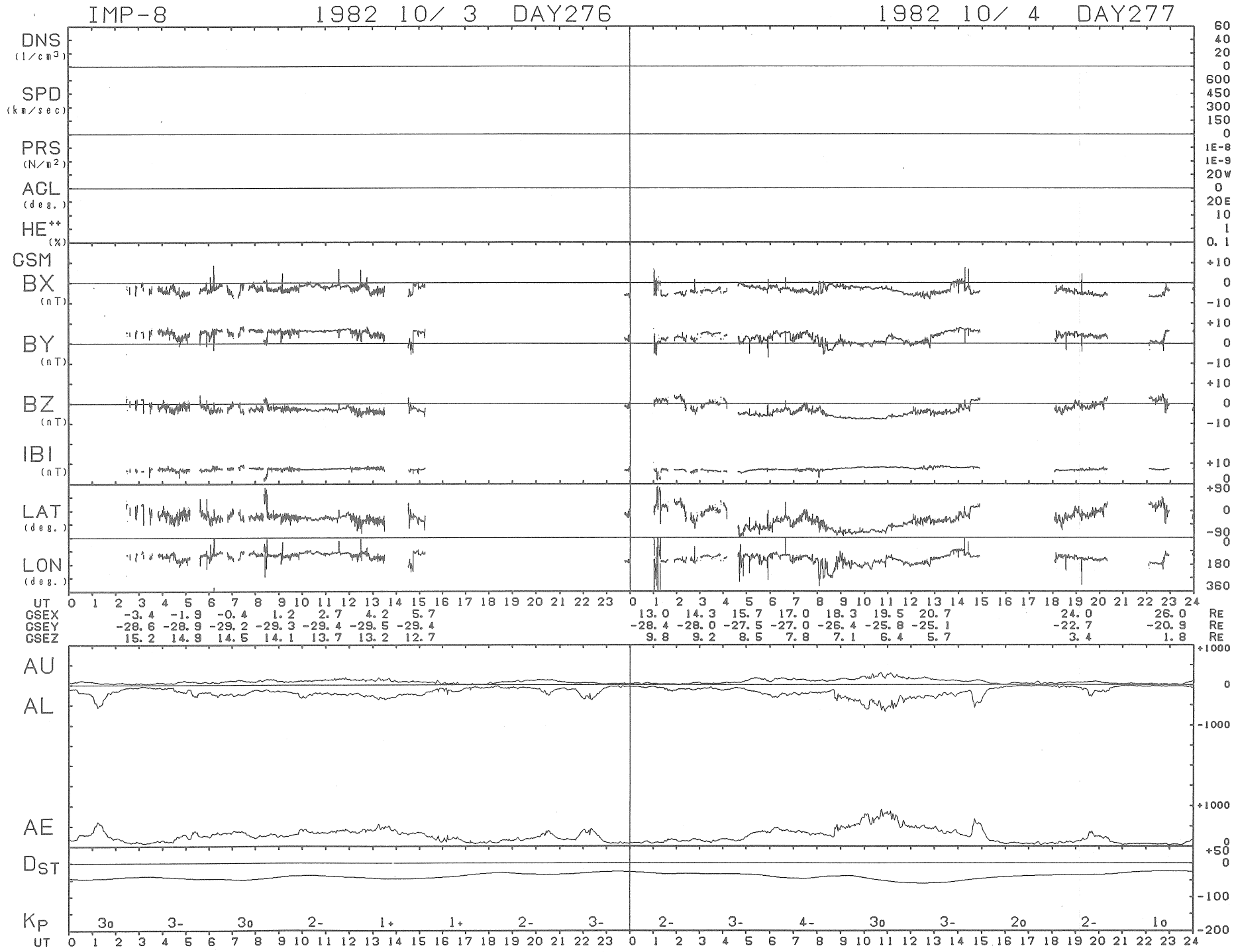

IMP-8 1982 9/23 DAY266
1982 9/24 DAY267
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.1 34.4 34.6 34.7 34.8 34.9 34.9 34.5 33.6 30.5 29.8 29.1 28.3 27.5 RE
GSEY -6.2 -4.9 -3.7 -2.4 -1.2 0.1 1.4 5.1 8.8 15.8 16.9 18.0 19.0 20.1 RE
GSEZ -3.5 -4.3 -5.0 -5.8 -6.5 -7.2 -7.9 -9.9 -11.8 -15.0 -15.4 -15.8 -16.2 -16.6 RE
AU
AL
AE
DST
KP 4o 5o 4+ 4o 3o 3+ 4- 3+ 3+ 4o 5- 4- 4o 4- 2o 3-
UT

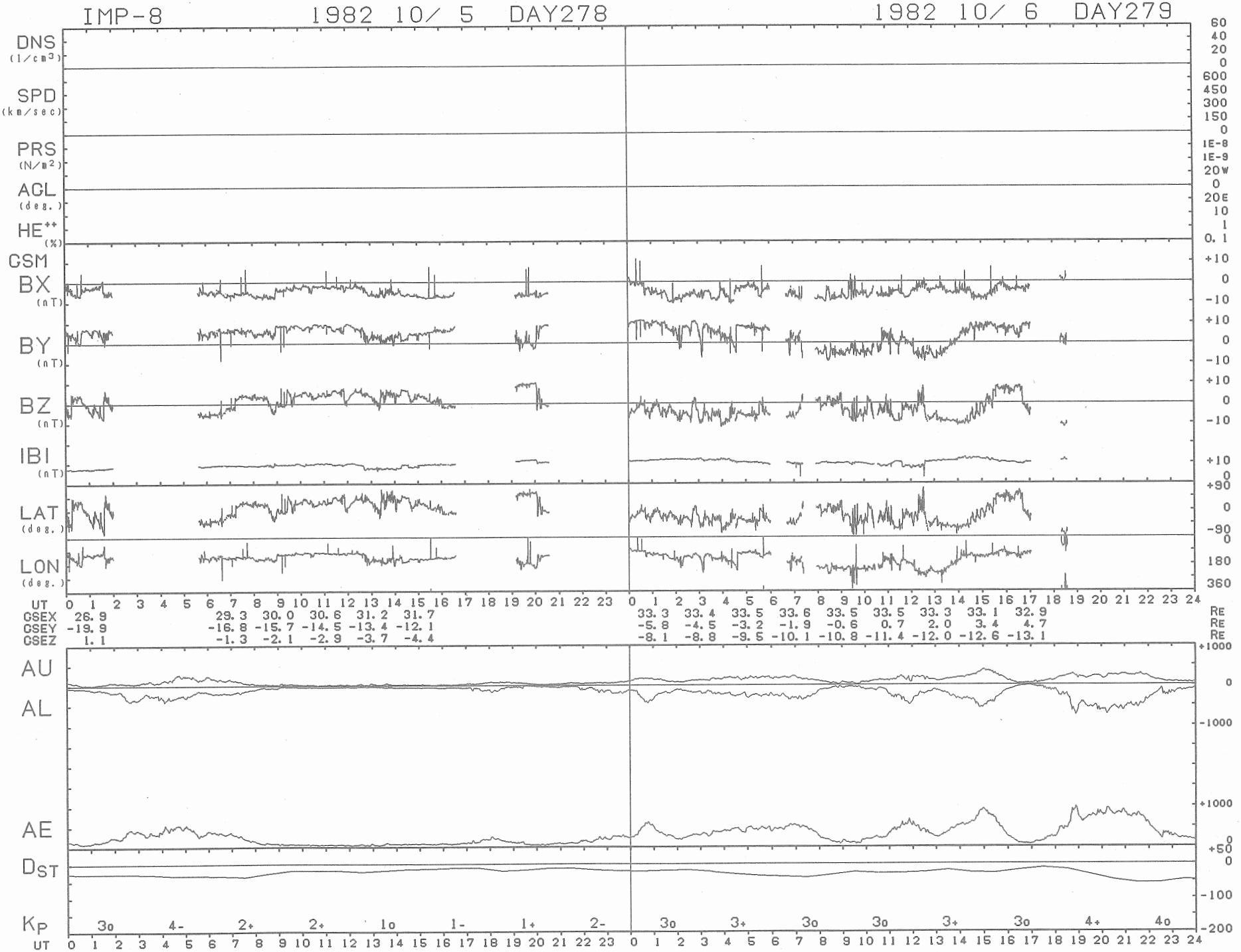

IMP-8 1982 9/25 DAY268
1982 9/26 DAY269
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.8 23.0 22.0 17.7 16.6 15.5 14.3 10.7 9.5 8.2 7.0 4.4 3.2 1.9 0.6 -0.7 RE
GSEY 22.0 24.8 25.6 28.6 29.3 30.0 30.5 32.1 32.6 33.0 33.3 33.9 34.1 34.3 34.5 34.6 RE
GSEZ -17.3 -18.2 -18.4 -19.1 -19.2 -19.2 -19.3 -19.3 -19.2 -19.1 -19.0 -18.7 -18.5 -18.3 -18.1 -17.8 RE
AU
AL
AE
DST
KP
2o 2o 1+ 2o 2+ 4- 4+ 3o 2+ 4- 4+ 6- 7+ 7+ 7+ 6o
UT

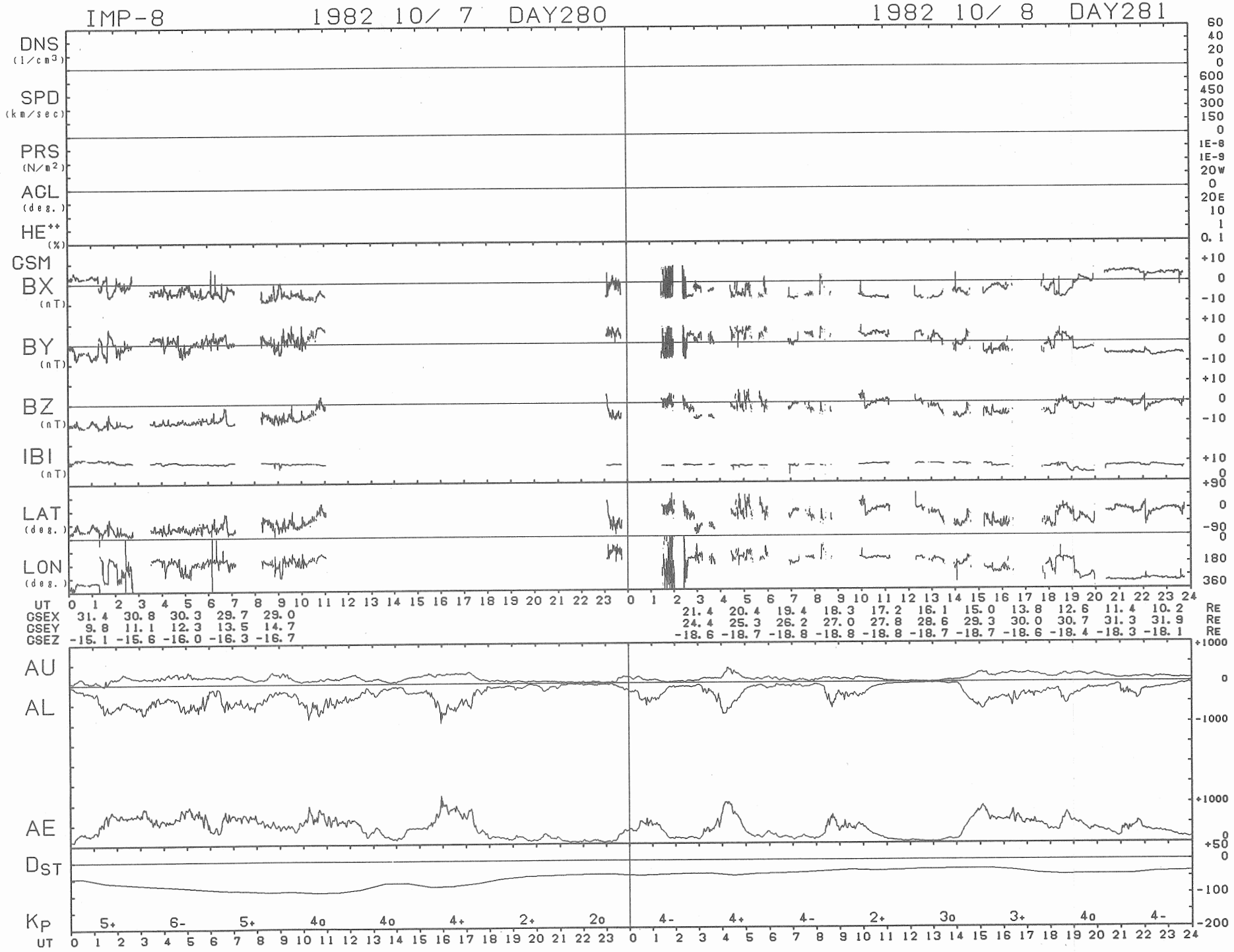

IMP-8
1982 9/27 DAY270
1982 9/28 DAY271
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.0
GSEY 34.7
GSEZ -17.5
-10.8 -12.0 -13.2 -14.4 -15.5 -16.7
33.9 33.6 33.3 32.9 32.5 32.1
-14.8 -14.3 -13.9 -13.3 -12.8 -12.3
-20.0 -21.0 -22.0
30.5 29.8 29.2
-10.5 -9.9 -9.3
-24.0 -24.9
27.7 27.0
-8.0 -7.3
RE
AU
AL
AE
DST
KP
7- 5- 4+ 4o 4- 5+ 4o 4- 4+ 4o 2+ 2o 1+ 2- 2- 3+

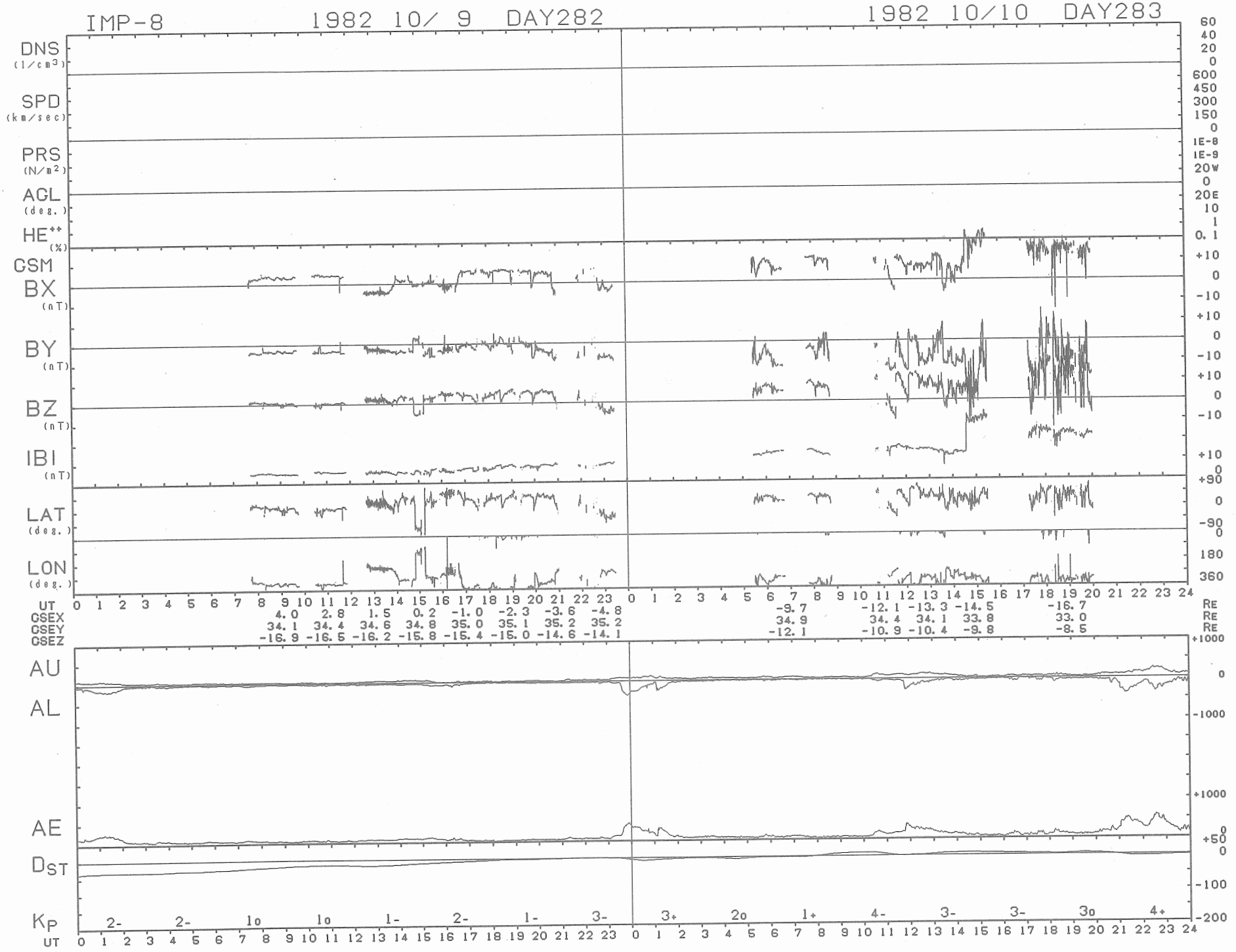

IMP-8
1982 9/29 DAY272
1982 9/30 DAY273
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE** (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.2 -29.0 -29.7 -30.9 -31.5 -32.4 -33.2 -33.7 -34.1 -34.1 -34.2 -34.1 -34.0 -33.7 -33.4 -32.7 RE
GSEY 23.5 22.5 21.6 19.5 18.4 16.2 13.8 11.4 8.9 7.6 6.3 5.0 3.7 1.1 -0.2 -2.9 RE
GSEZ -4.5 -3.8 -3.0 -1.6 -0.9 0.6 2.1 3.5 5.0 5.7 6.4 7.0 7.7 9.0 9.6 10.8 RE
AU
AL
AE
DST
KP
2o 2+ 3o 3- 2+ 1+ 2+ 1o 1- 1+ 3- 3- 3+ 3- 3o 3+
UT

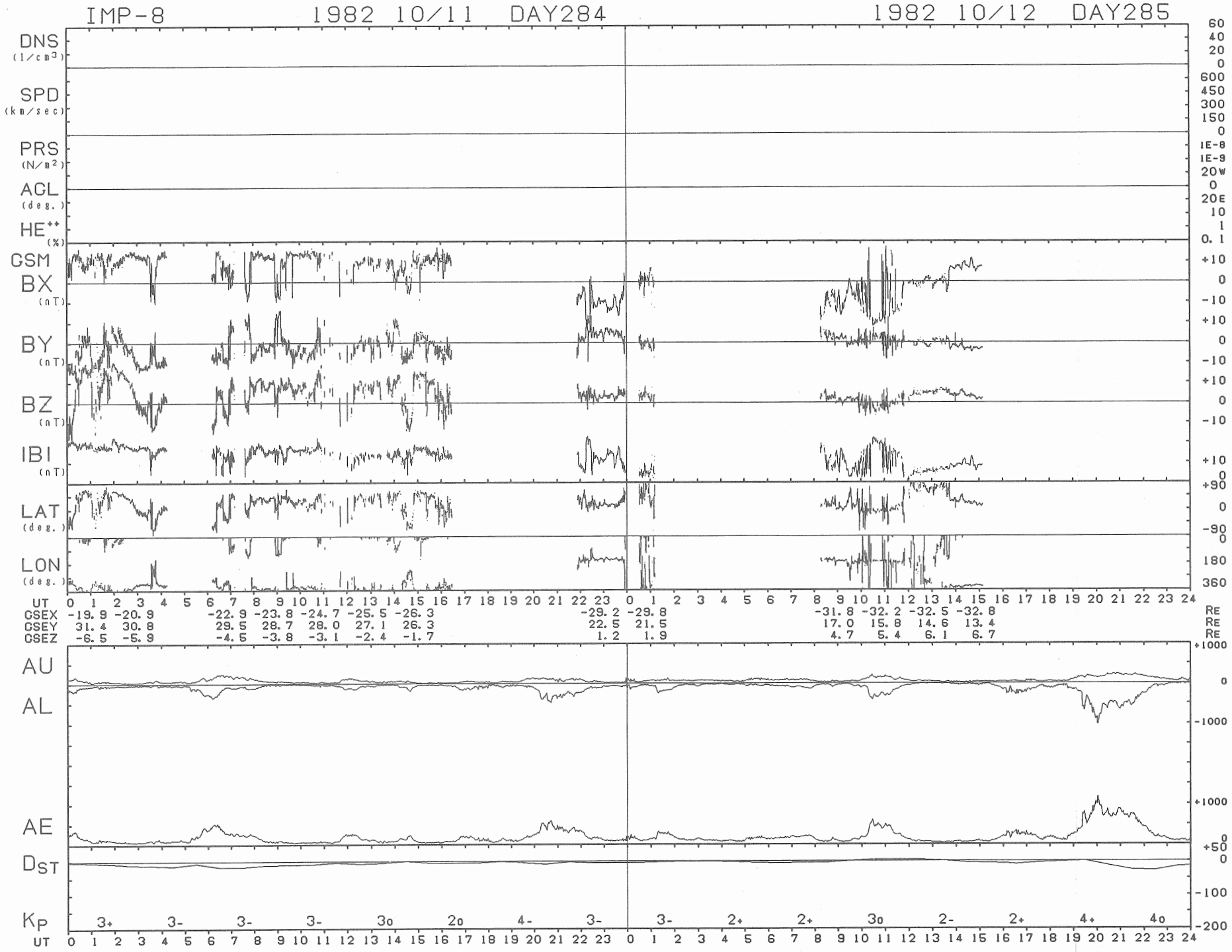

IMP-8
1982 10/ 1 DAY274
1982 10/ 2 DAY275
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.5 -29.9 -29.1 -28.3 -27.5 -25.6 -22.5 -21.3 -20.1 -16.4 -15.0 -13.6 RE
GSEY -8.1 -9.3 -10.6 -11.8 -13.0 -15.4 -18.7 -19.7 -20.7 -23.4 -24.2 -24.9 RE
GSEZ 12.9 13.3 13.8 14.2 14.6 15.2 16.0 16.2 16.3 16.5 16.5 16.5 RE
AU
AL
AE
DST
KP 2o 3o 3o 3o 3+ 4+ 5- 6o 5o 4- 4o 4o 4+ 3o 3o 2+
UT

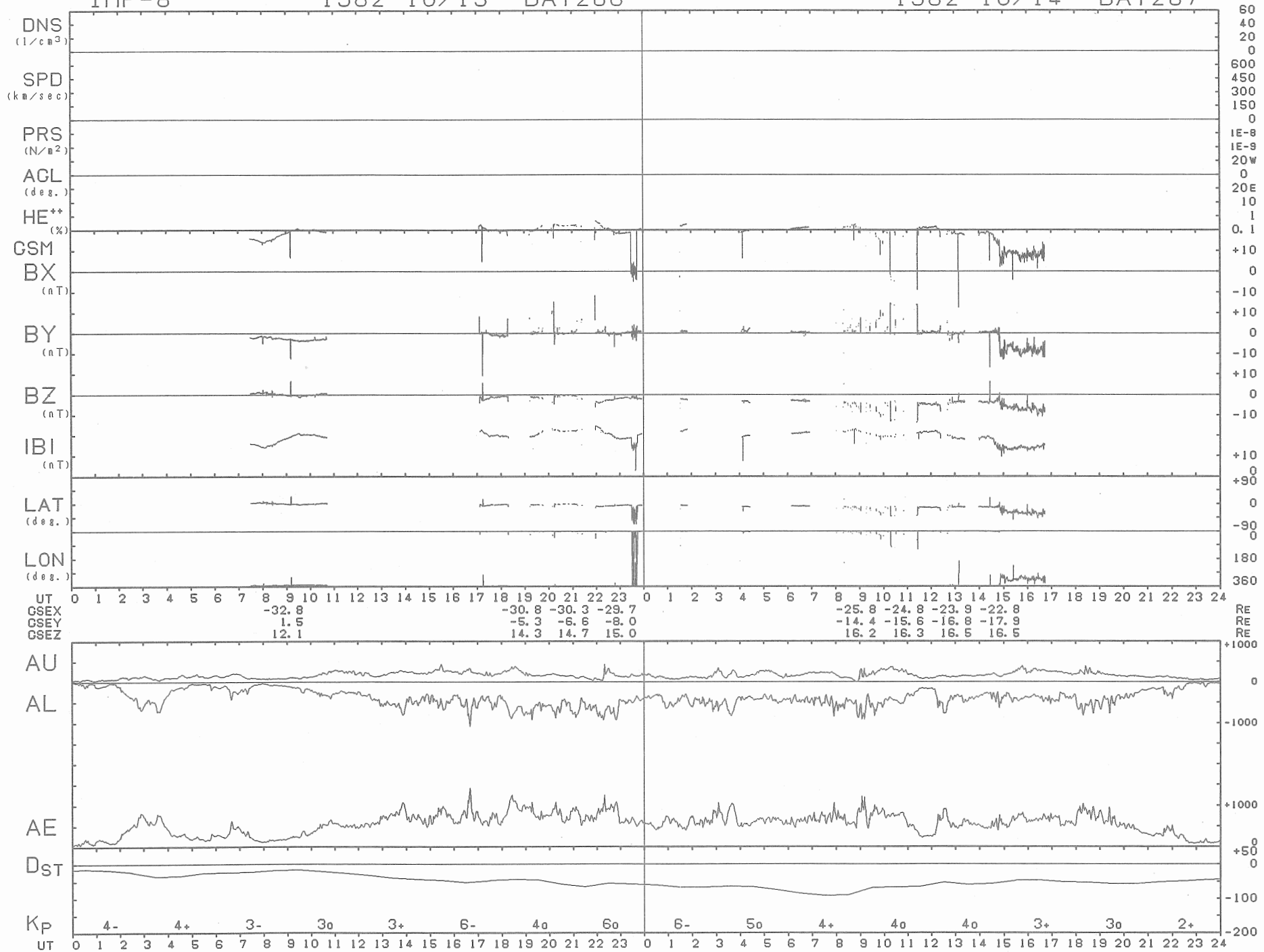

IMP-8
1982 10/ 3 DAY276
1982 10/ 4 DAY277
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -3.4 -1.9 -0.4 1.2 2.7 4.2 5.7 13.0 14.3 15.7 17.0 18.3 19.5 20.7 24.0 26.0 RE
GSEY -28.6 -28.9 -29.2 -29.3 -29.4 -29.5 -29.4 -28.4 -28.0 -27.5 -27.0 -26.4 -25.8 -25.1 -22.7 -20.9 RE
GSEZ 15.2 14.9 14.5 14.1 13.7 13.2 12.7 9.8 9.2 8.5 7.8 7.1 6.4 5.7 3.4 1.8 RE
AU
AL
AE
DST
KP
3o 3- 3o 2- 1+ 1+ 2- 3- 2- 3- 4- 3o 3- 2o 2- 1o

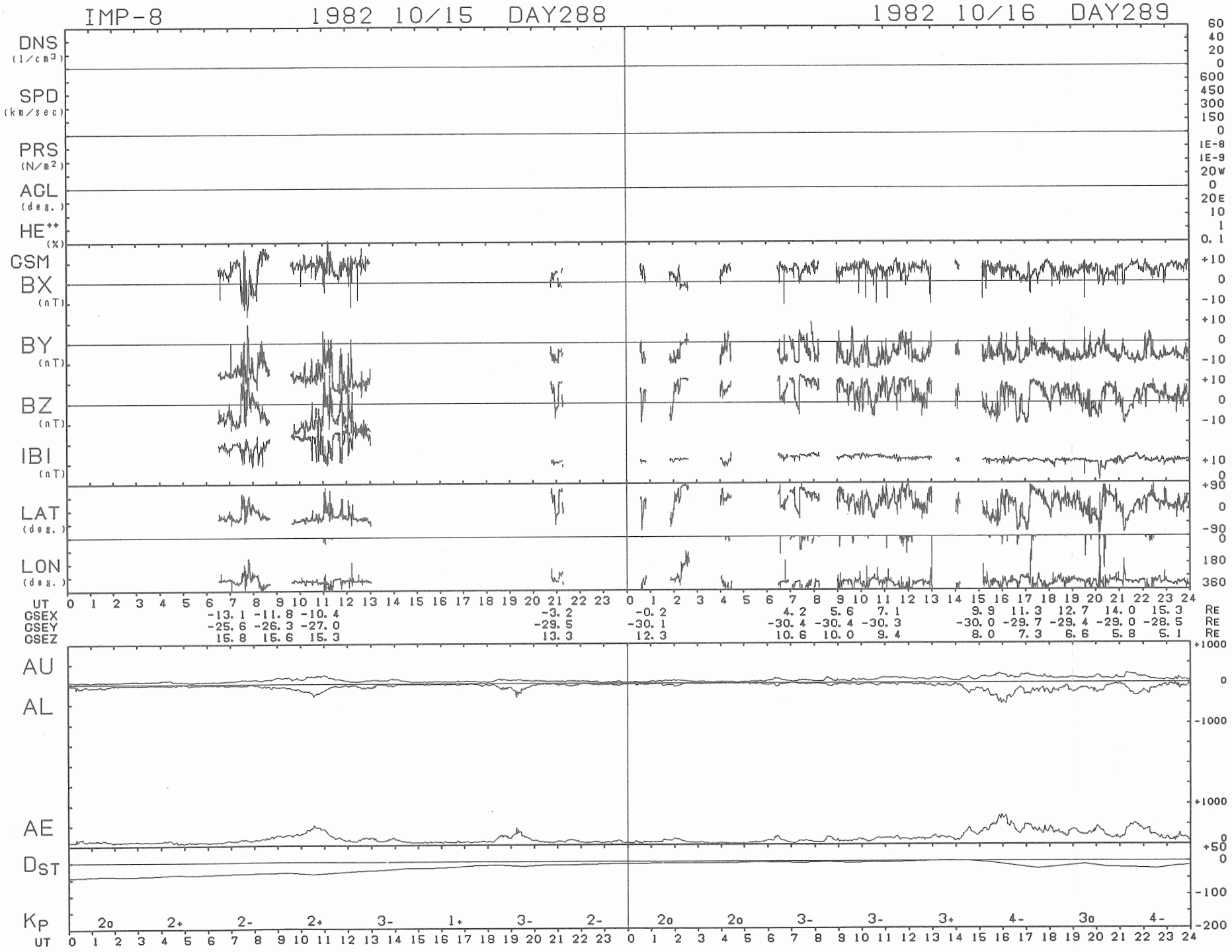

IMP-8
1982 10/ 5 DAY278
1982 10/ 6 DAY279
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.9 29.3 30.0 30.6 31.2 31.7 33.3 33.4 33.5 33.6 33.5 33.5 33.3 33.1 32.9
GSEY -19.9 -16.8 -15.7 -14.5 -13.4 -12.1 -5.8 -4.5 -3.2 -1.9 -0.6 0.7 2.0 3.4 4.7
GSEZ 1.1 -1.3 -2.1 -2.9 -3.7 -4.4 -8.1 -8.8 -9.5 -10.1 -10.8 -11.4 -12.0 -12.6 -13.1
RE
AU
AL
AE
DST
KP 3o 4- 2+ 2+ 1o 1- 1+ 2- 3o 3+ 3o 3o 3+ 3o 4+ 4o
UT

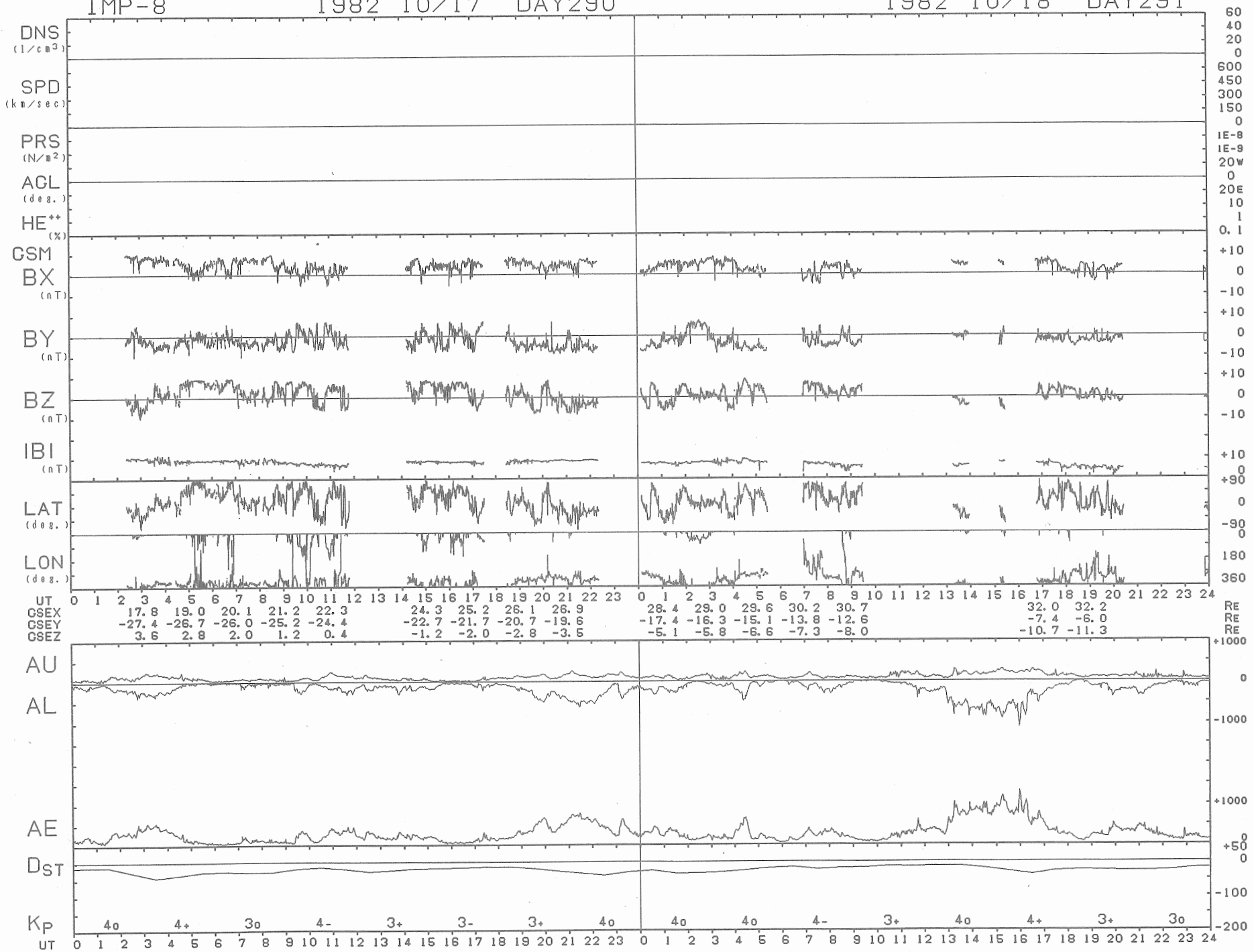

IMP-8
1982 10/ 7 DAY280
1982 10/ 8 DAY281
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.4 30.8 30.3 29.7 29.0
GSEY 9.8 11.1 12.3 13.5 14.7
GSEZ -15.1 -15.6 -16.0 -16.3 -16.7
21.4 20.4 19.4 18.3 17.2 16.1 15.0 13.8 12.6 11.4 10.2 RE
24.4 25.3 26.2 27.0 27.8 28.6 29.3 30.0 30.7 31.3 31.9 RE
-18.6 -18.7 -18.8 -18.8 -18.8 -18.7 -18.7 -18.6 -18.4 -18.3 -18.1 RE
AU
AL
AE
DST
KP
5+ 6- 5+ 4o 4o 4+ 2+ 2o 4- 4+ 4- 2+ 3o 3+ 4o 4-
UT

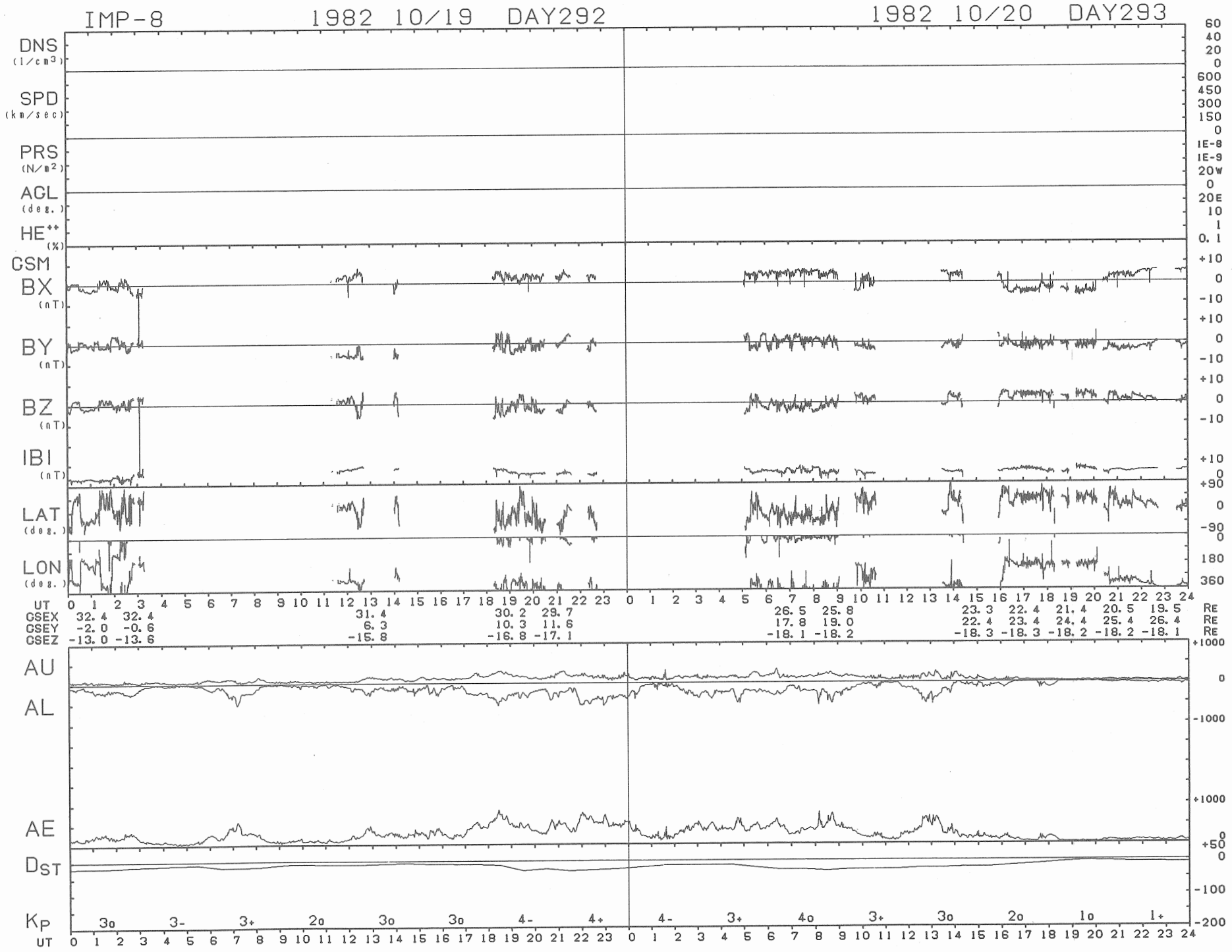

IMP-8
1982 10/ 9 DAY282
1982 10/10 DAY283
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
UT
RE

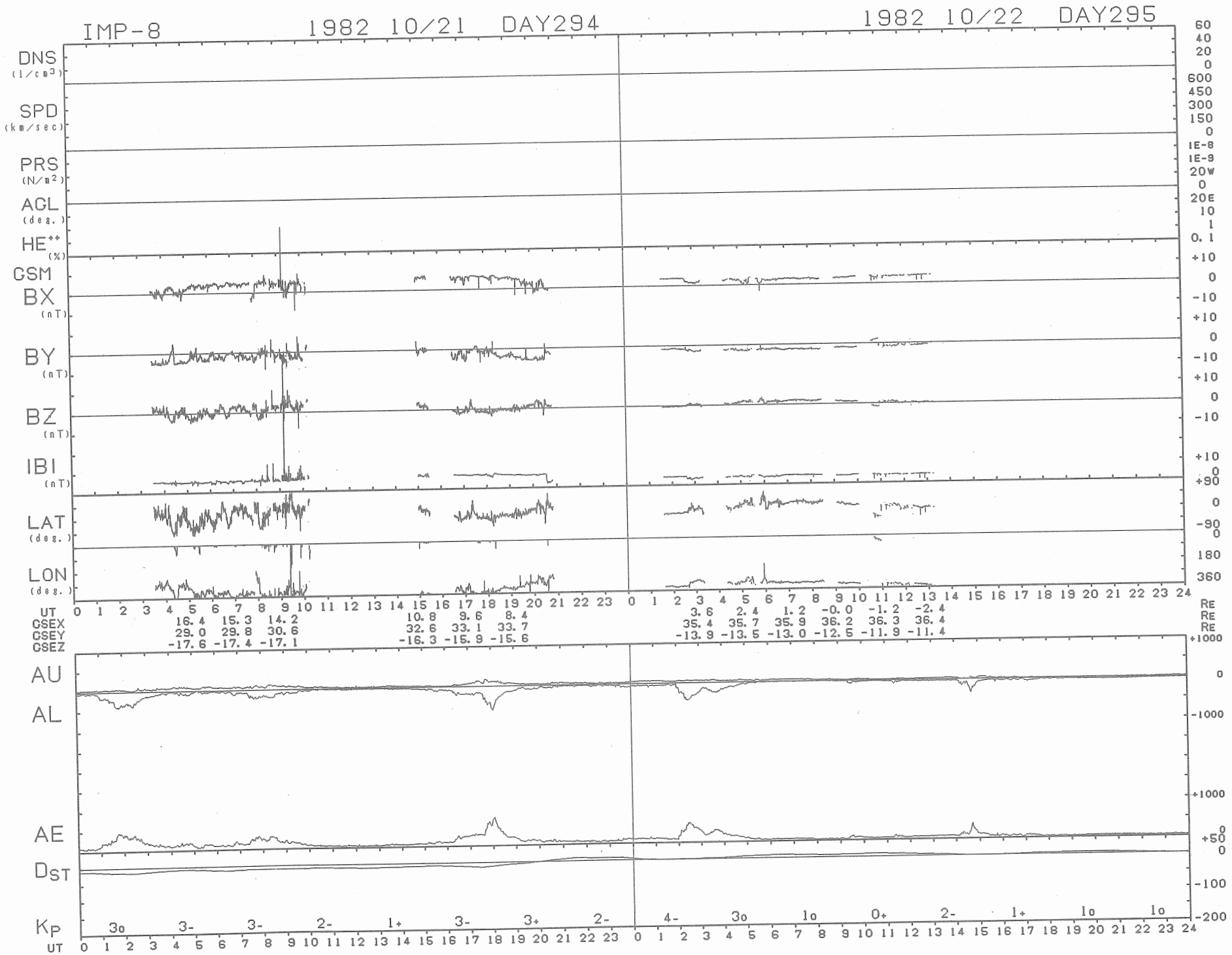

IMP-8
1982 10/11 DAY284
1982 10/12 DAY285
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -19.9 -20.9 -22.9 -23.8 -24.7 -25.5 -26.3 -29.2 -29.8 -31.8 -32.2 -32.5 -32.8 RE
GSEY 31.4 30.8 29.5 28.7 28.0 27.1 26.3 22.5 21.5 17.0 15.8 14.6 13.4 RE
GSEZ -6.5 -5.9 -4.5 -3.8 -3.1 -2.4 -1.7 1.2 1.9 4.7 5.4 6.1 6.7 RE
AU
AL
AE
DST
KP
3+ 3- 3- 3- 3o 2o 4- 3- 3- 2+ 2+ 3o 2- 2+ 4+ 4o
UT

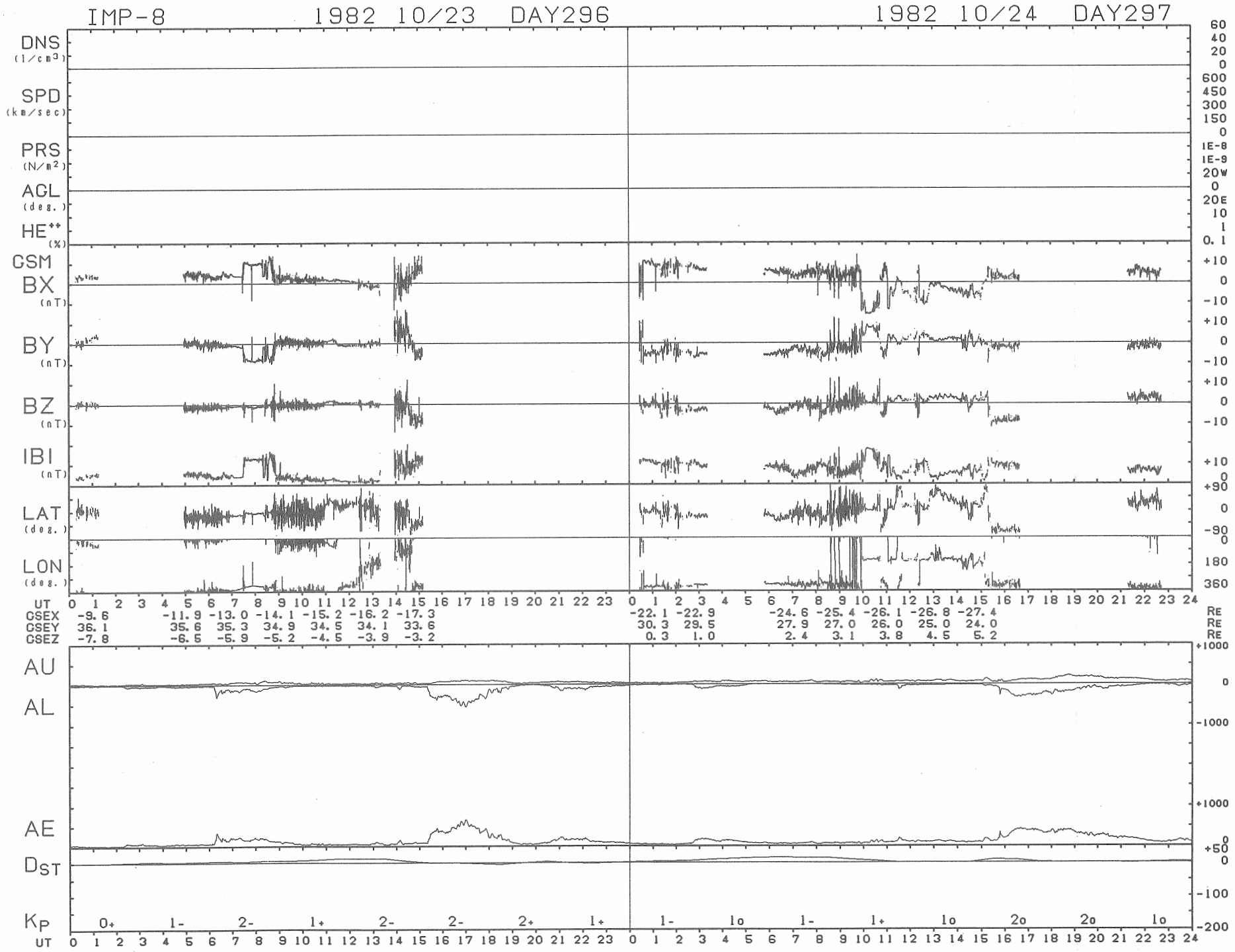

IMP-8
1982 10/13 DAY286
1982 10/14 DAY287
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.8 -30.8 -30.3 -29.7 -25.8 -24.8 -23.9 -22.8 RE
GSEY 1.5 -5.3 -6.6 -8.0 -14.4 -15.6 -16.8 -17.9 RE
GSEZ 12.1 14.3 14.7 15.0 16.2 16.3 16.5 16.5 RE
AU
AL
AE
DST
KP 4- 4+ 3- 3o 3+ 6- 4o 6o 6- 5o 4+ 4o 4o 3+ 3o 2+
UT

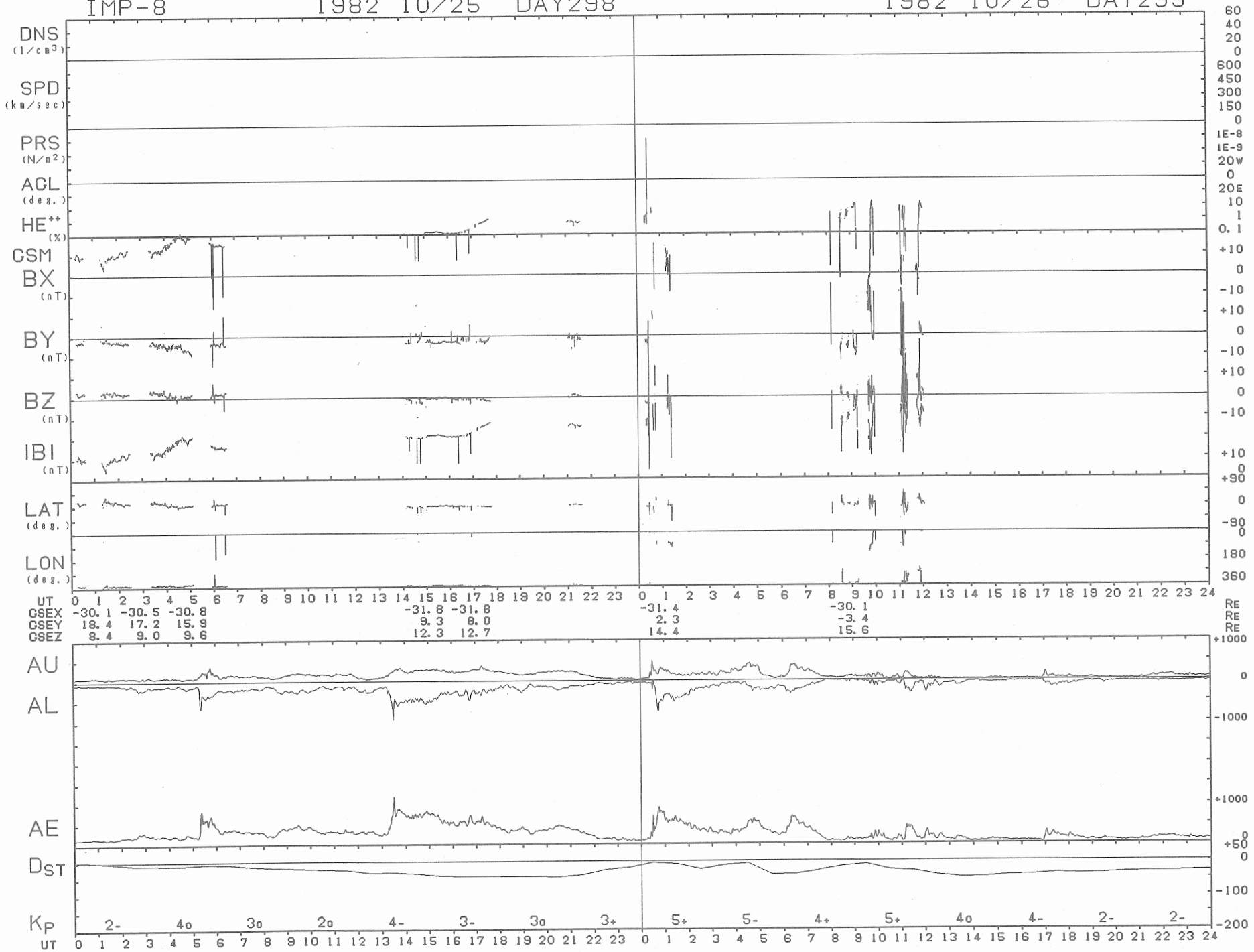

IMP-8
1982 10/15 DAY288
1982 10/16 DAY289
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.1 -11.8 -10.4 -3.2 -0.2 4.2 5.6 7.1 9.9 11.3 12.7 14.0 15.3 RE
GSEY -25.6 -26.3 -27.0 -29.5 -30.1 -30.4 -30.4 -30.3 -30.0 -29.7 -29.4 -29.0 -28.5 RE
GSEZ 15.8 15.6 15.3 13.3 12.3 10.6 10.0 9.4 8.0 7.3 6.6 5.8 5.1 RE
AU
AL
AE
DST
KP 2o 2+ 2- 2+ 3- 1+ 3- 2- 2o 2o 3- 3- 3+ 4- 3o 4-
UT

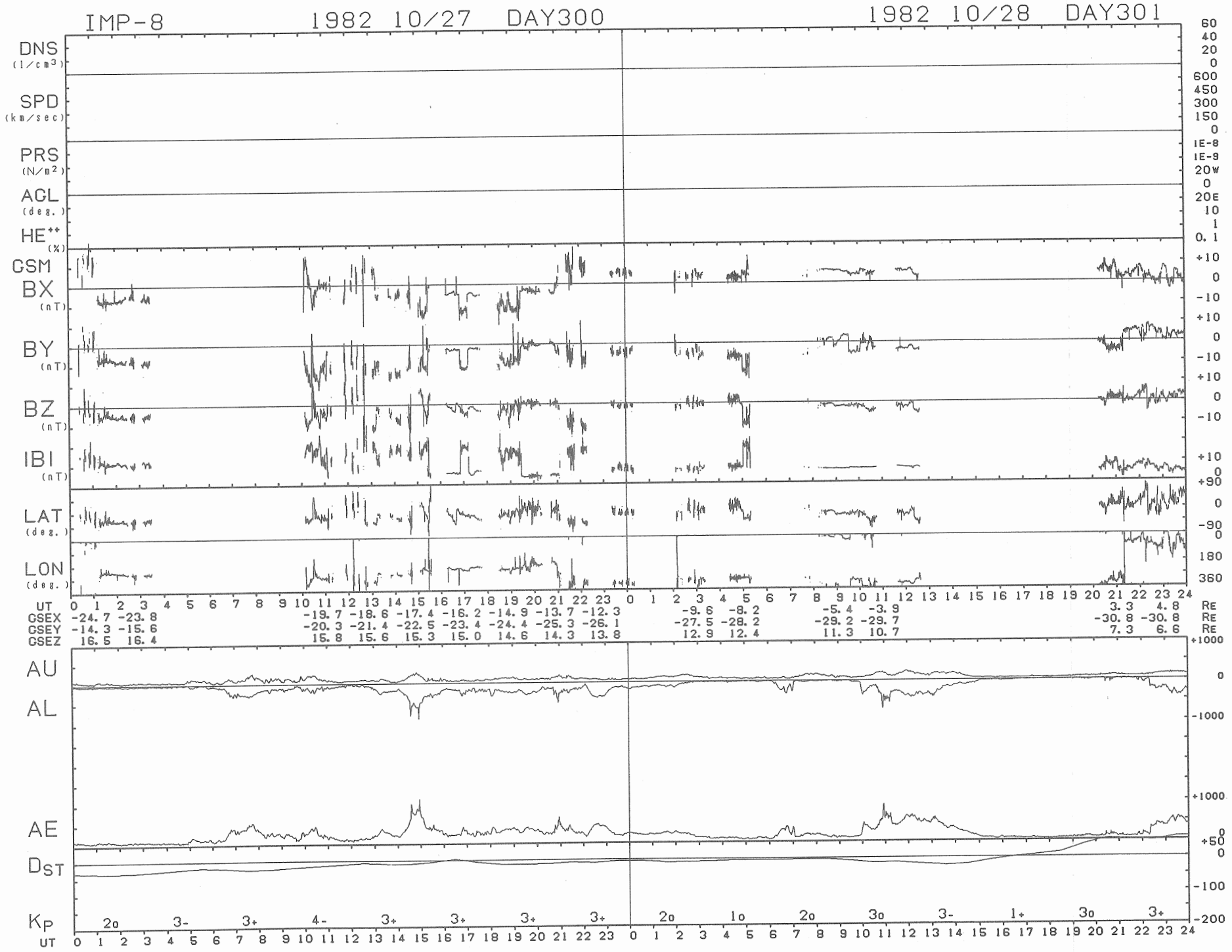

IMP-8
1982 10/17 DAY290
1982 10/18 DAY291
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 17.8 19.0 20.1 21.2 22.3 24.3 25.2 26.1 26.9 28.4 29.0 29.6 30.2 30.7 32.0 32.2 RE
GSEY -27.4 -26.7 -26.0 -25.2 -24.4 -22.7 -21.7 -20.7 -19.6 -17.4 -16.3 -15.1 -13.8 -12.6 -7.4 -6.0 RE
GSEZ 3.6 2.8 2.0 1.2 0.4 -1.2 -2.0 -2.8 -3.5 -5.1 -5.8 -6.6 -7.3 -8.0 -10.7 -11.3 RE
AU
AL
AE
DST
KP
4o 4+ 3o 4- 3+ 3- 3+ 4o 4o 4o 4- 3+ 4o 4+ 3+ 3o
UT

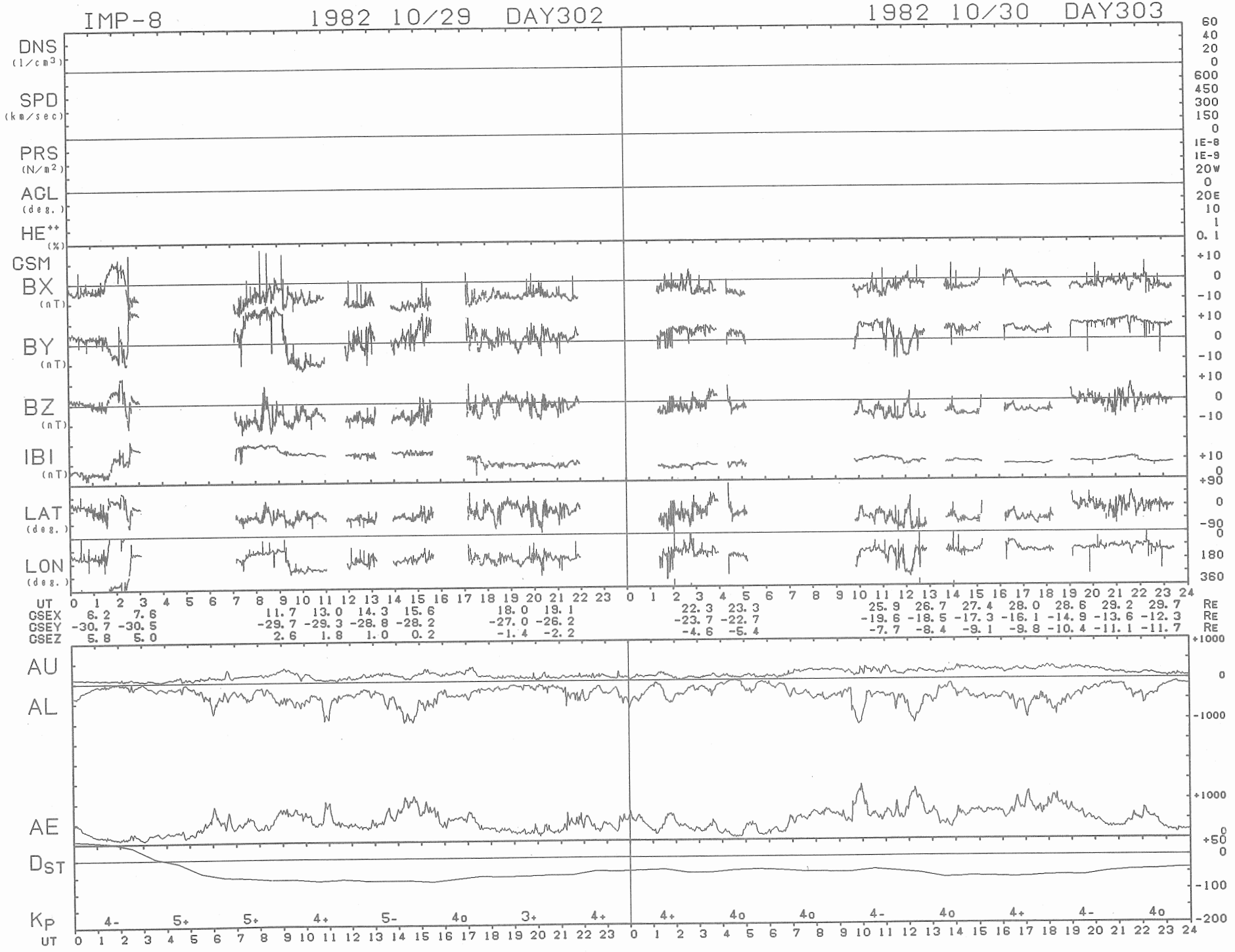

IMP-8
1982 10/19 DAY292
1982 10/20 DAY293
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.4 32.4 31.4 30.2 29.7 26.5 25.8 23.3 22.4 21.4 20.5 19.5 RE
GSEY -2.0 -0.6 6.3 10.3 11.6 17.8 19.0 22.4 23.4 24.4 25.4 26.4 RE
GSEZ -13.0 -13.6 -15.8 -16.8 -17.1 -18.1 -18.2 -18.3 -18.3 -18.2 -18.2 -18.1 RE
AU
AL
AE
DST
KP
3o 3- 3+ 2o 3o 3o 4- 4+ 4- 3+ 4o 3+ 3o 2o 1o 1+
UT

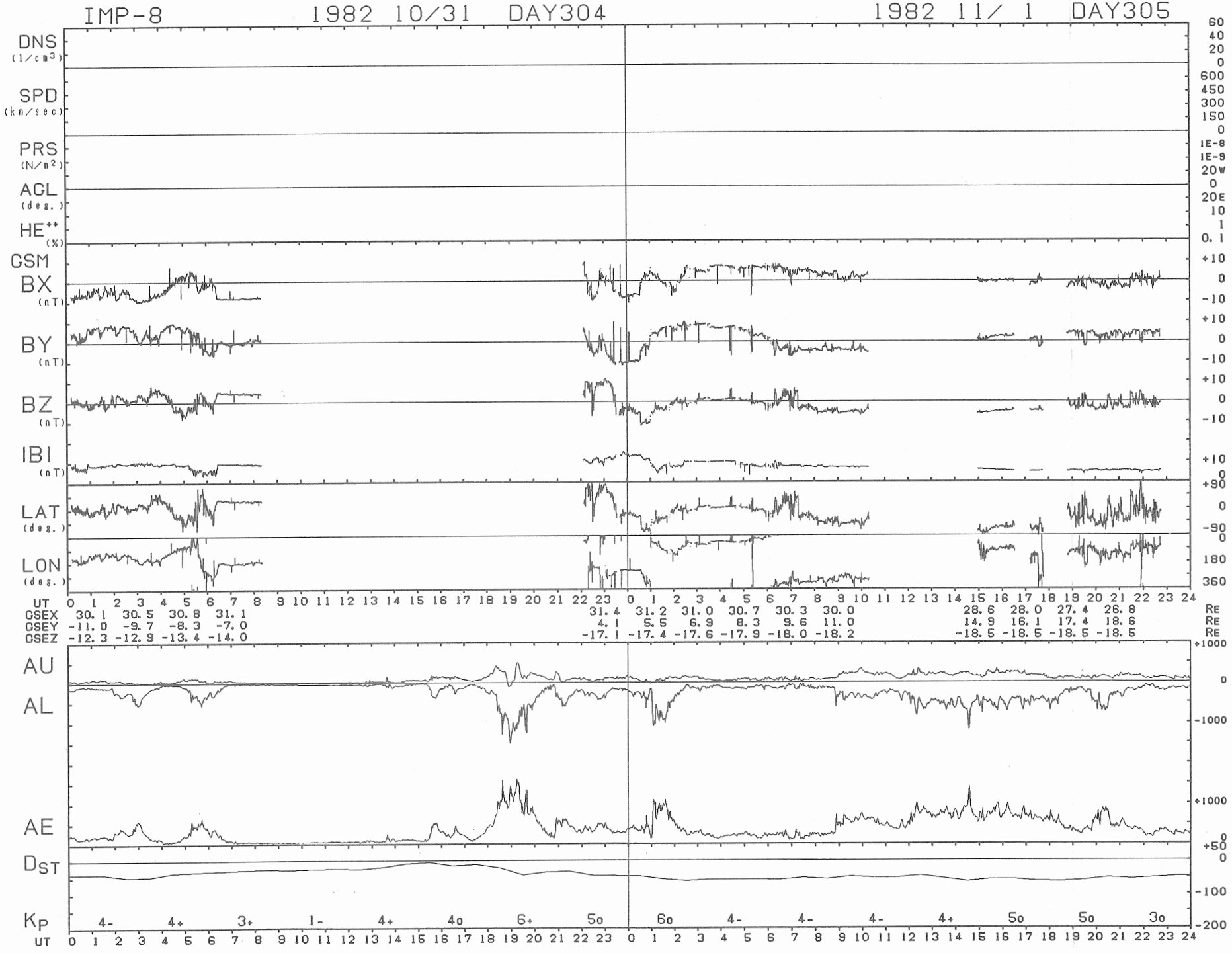

IMP-8
1982 10/21 DAY294
1982 10/22 DAY295
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.4 15.3 14.2 10.8 9.6 8.4 3.6 2.4 1.2 -0.0 -1.2 -2.4 RE
GSEY 29.0 29.8 30.6 32.6 33.1 33.7 35.4 35.7 35.9 36.2 36.3 36.4 RE
GSEZ -17.6 -17.4 -17.1 -16.3 -15.9 -15.6 -13.9 -13.5 -13.0 -12.5 -11.9 -11.4 RE
AU
AL
AE
DST
KP 3o 3- 3- 2- 1+ 3- 3+ 2- 4- 3o 1o 0+ 2- 1+ 1o 1o
UT

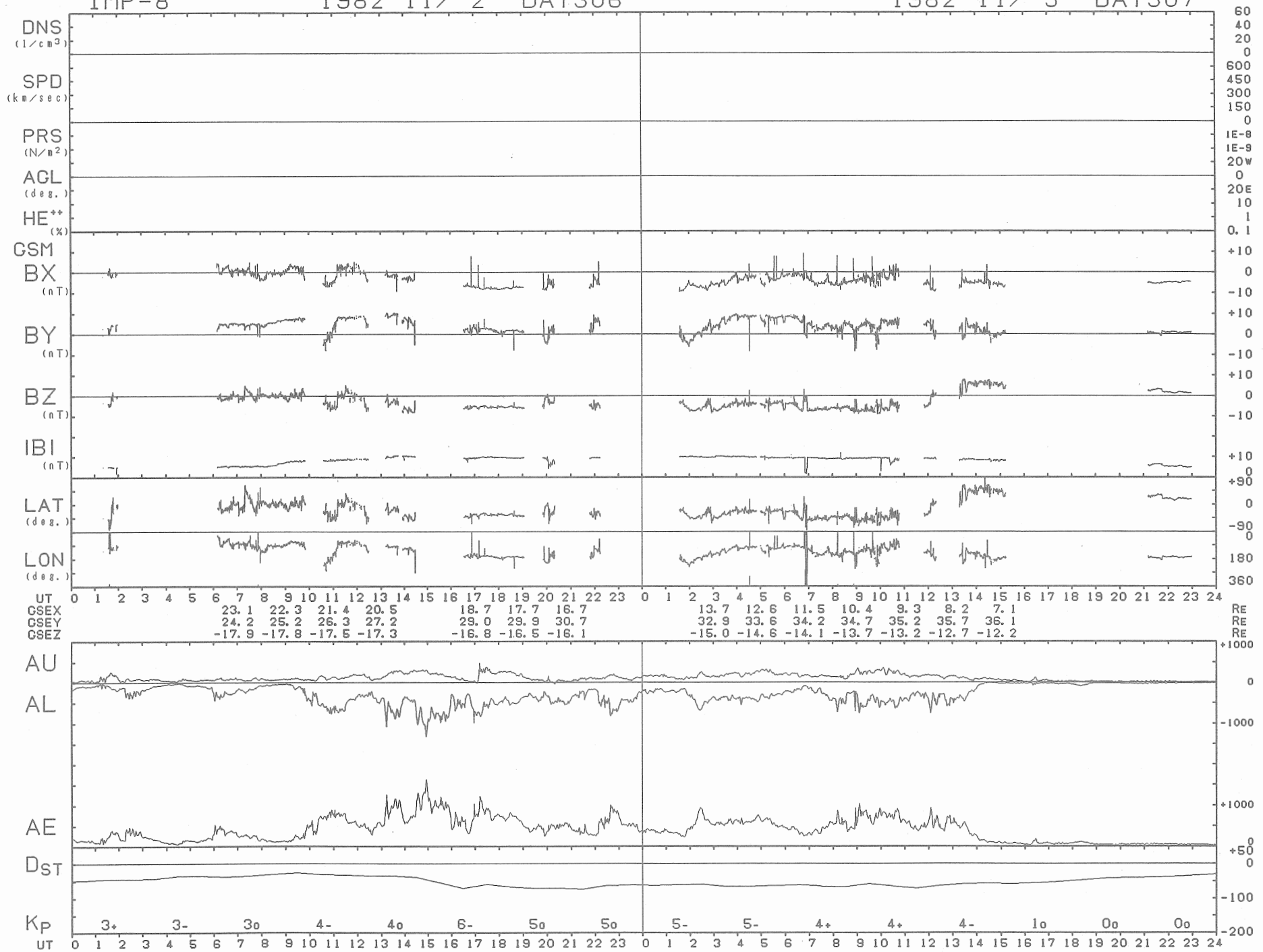

IMP-8
1982 10/23 DAY296
1982 10/24 DAY297
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.6 -11.9 -13.0 -14.1 -15.2 -16.2 -17.3 -22.1 -22.9 -24.6 -25.4 -26.1 -26.8 -27.4 RE
GSEY 36.1 35.6 35.3 34.9 34.5 34.1 33.6 30.3 29.5 27.9 27.0 26.0 25.0 24.0 RE
GSEZ -7.8 -6.5 -5.9 -5.2 -4.5 -3.9 -3.2 0.3 1.0 2.4 3.1 3.8 4.5 5.2 RE
AU
AL
AE
DST
KP
0+ 1- 2- 1+ 2- 2- 2+ 1+ 1- 1o 1- 1+ 1o 2o 2o 1o
UT

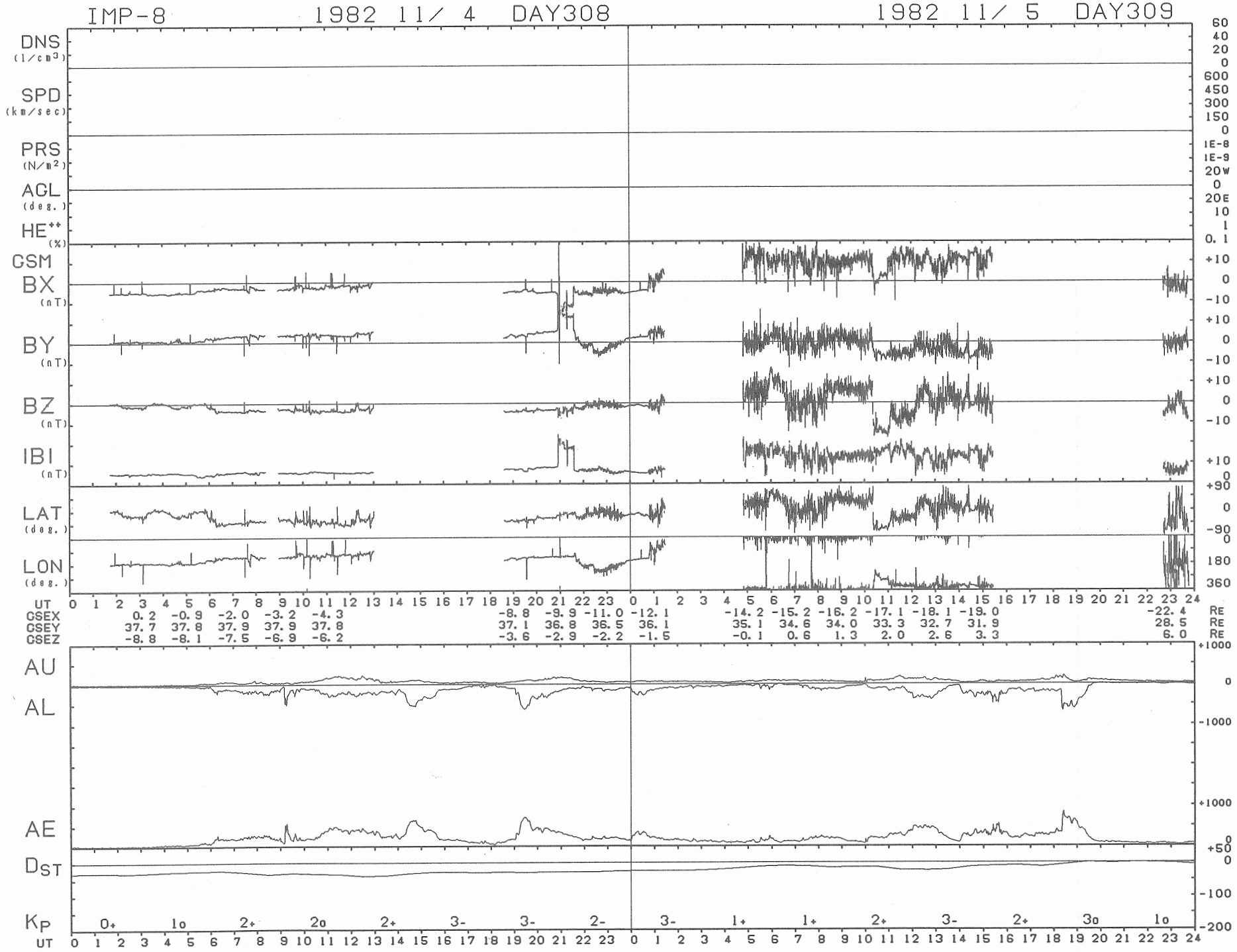

IMP-8
1982 10/25 DAY298
1982 10/26 DAY299
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.1 -30.5 -30.8 -31.8 -31.8 -31.4 -30.1
GSEY 18.4 17.2 15.9 9.3 8.0 2.3 -3.4
GSEZ 8.4 9.0 9.6 12.3 12.7 14.4 15.6
RE
AU
AL
AE
DST
KP
2- 4o 3o 2o 4- 3- 3o 3+ 5+ 5- 4+ 5+ 4o 4- 2- 2-
UT

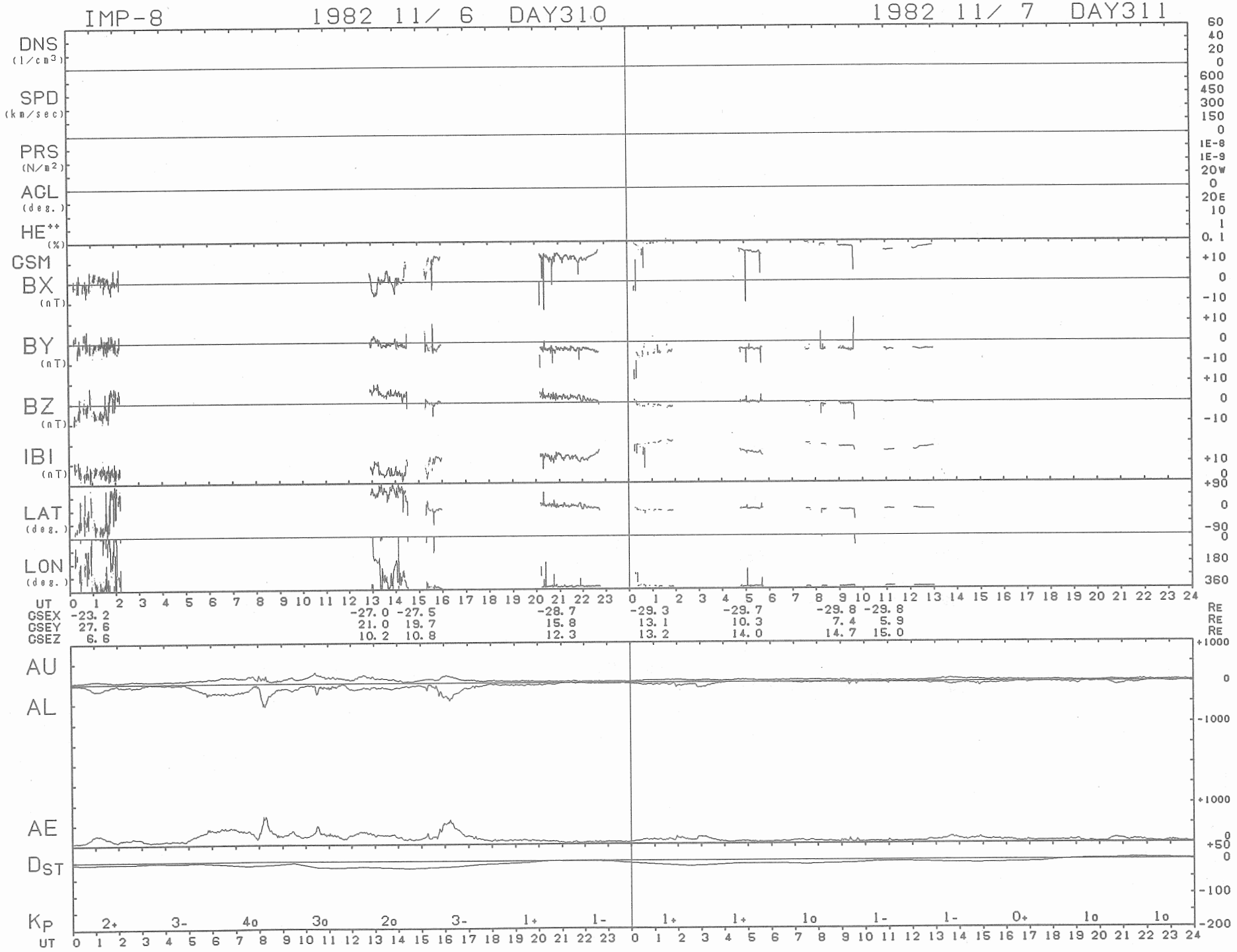

IMP-8
1982 10/27 DAY300
1982 10/28 DAY301
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.7 -23.8 -19.7 -18.6 -17.4 -16.2 -14.9 -13.7 -12.3 -9.6 -8.2 -5.4 -3.9 3.3 4.8 RE
GSEY -14.3 -15.6 -20.3 -21.4 -22.5 -23.4 -24.4 -25.3 -26.1 -27.5 -28.2 -29.2 -29.7 -30.8 -30.8 RE
GSEZ 16.5 16.4 15.8 15.6 15.3 15.0 14.6 14.3 13.8 12.9 12.4 11.3 10.7 7.3 6.6 RE
AU
AL
AE
DST
KP
2o 3- 3+ 4- 3+ 3+ 3+ 3+ 2o 1o 2o 3o 3- 1+ 3o 3+
UT

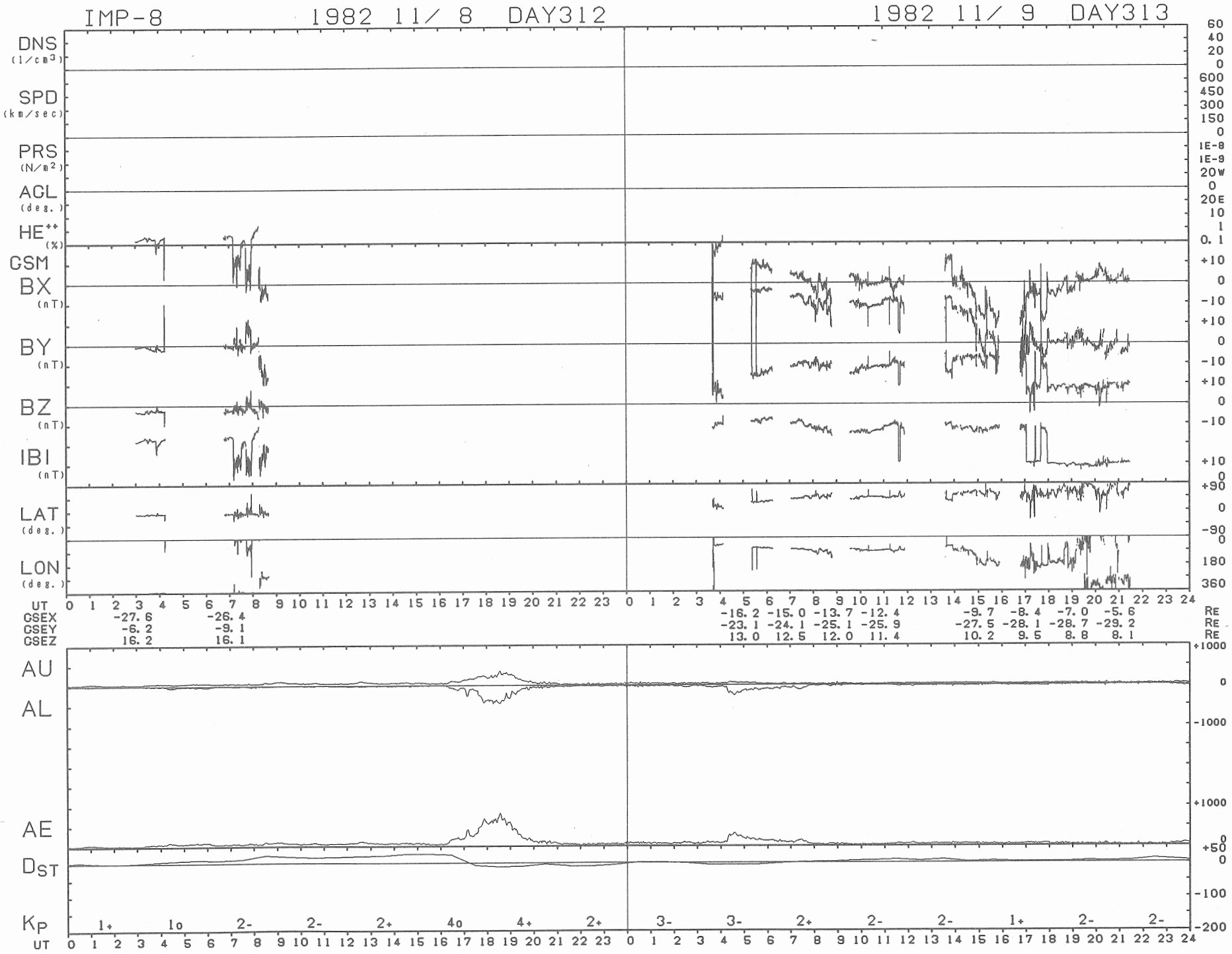

IMP-8
1982 10/29 DAY302
1982 10/30 DAY303
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 6.2 7.6 11.7 13.0 14.3 15.6 18.0 19.1 22.3 23.3 25.9 26.7 27.4 28.0 28.6 29.2 29.7 RE
GSEY -30.7 -30.5 -29.7 -29.3 -28.8 -28.2 -27.0 -26.2 -23.7 -22.7 -19.6 -18.5 -17.3 -16.1 -14.9 -13.6 -12.3 RE
GSEZ 5.8 5.0 2.6 1.8 1.0 0.2 -1.4 -2.2 -4.6 -5.4 -7.7 -8.4 -9.1 -9.8 -10.4 -11.1 -11.7 RE
AU
AL
AE
DST
KP 4- 5+ 5+ 4+ 5- 4o 3+ 4+ 4+ 4o 4o 4- 4o 4+ 4- 4o
UT

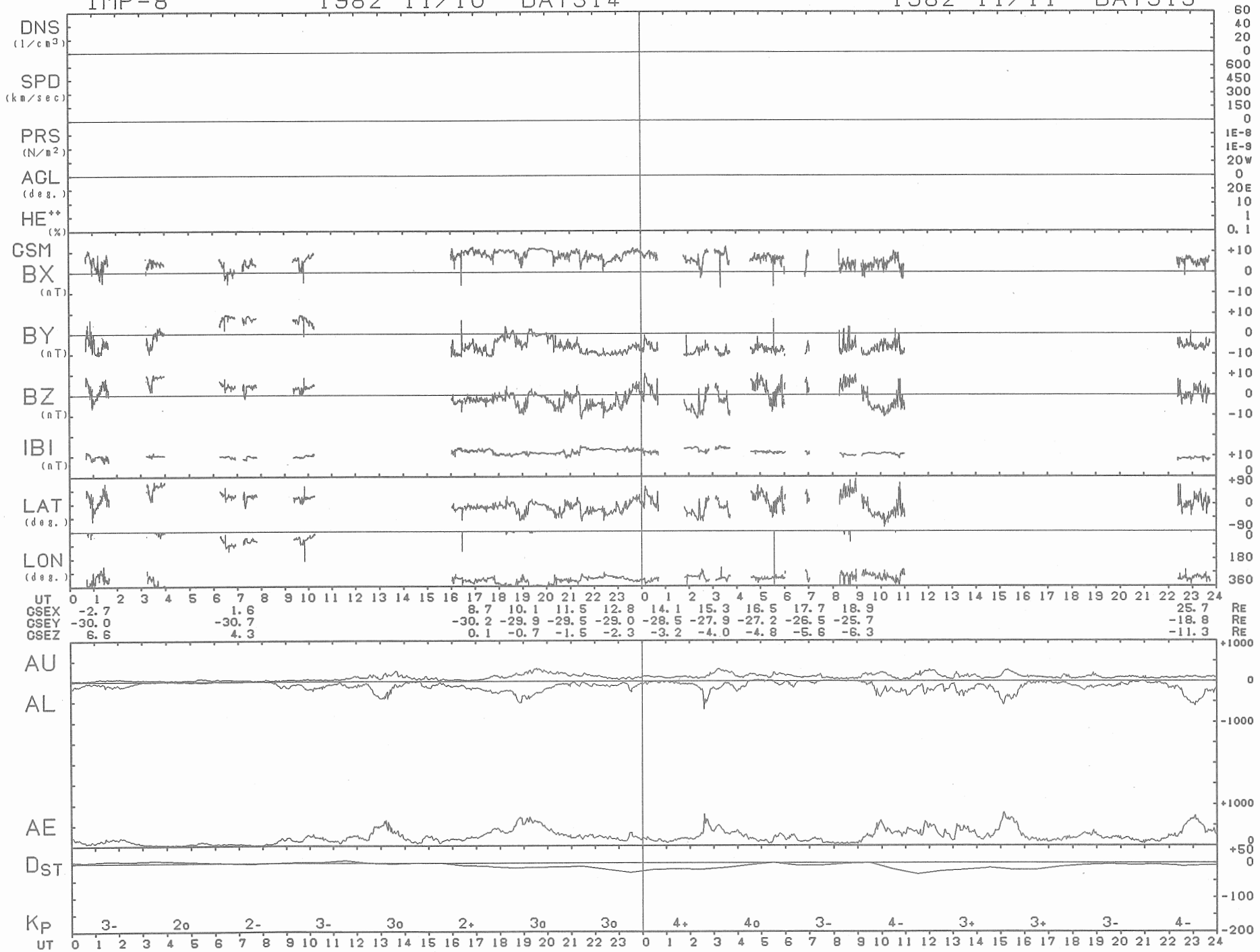

IMP-8
1982 10/31 DAY304
1982 11/ 1 DAY305
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.1 30.5 30.8 31.1 31.4 31.2 31.0 30.7 30.3 30.0 28.6 28.0 27.4 26.8 RE
GSEY -11.0 -9.7 -8.3 -7.0 4.1 5.5 6.9 8.3 9.6 11.0 14.9 16.1 17.4 18.6 RE
GSEZ -12.3 -12.9 -13.4 -14.0 -17.1 -17.4 -17.6 -17.9 -18.0 -18.2 -18.5 -18.5 -18.5 -18.5 RE
AU
AL
AE
DST
KP
4- 4+ 3+ 1- 4+ 4o 6+ 5o 6o 4- 4- 4- 4+ 5o 5o 3o
UT

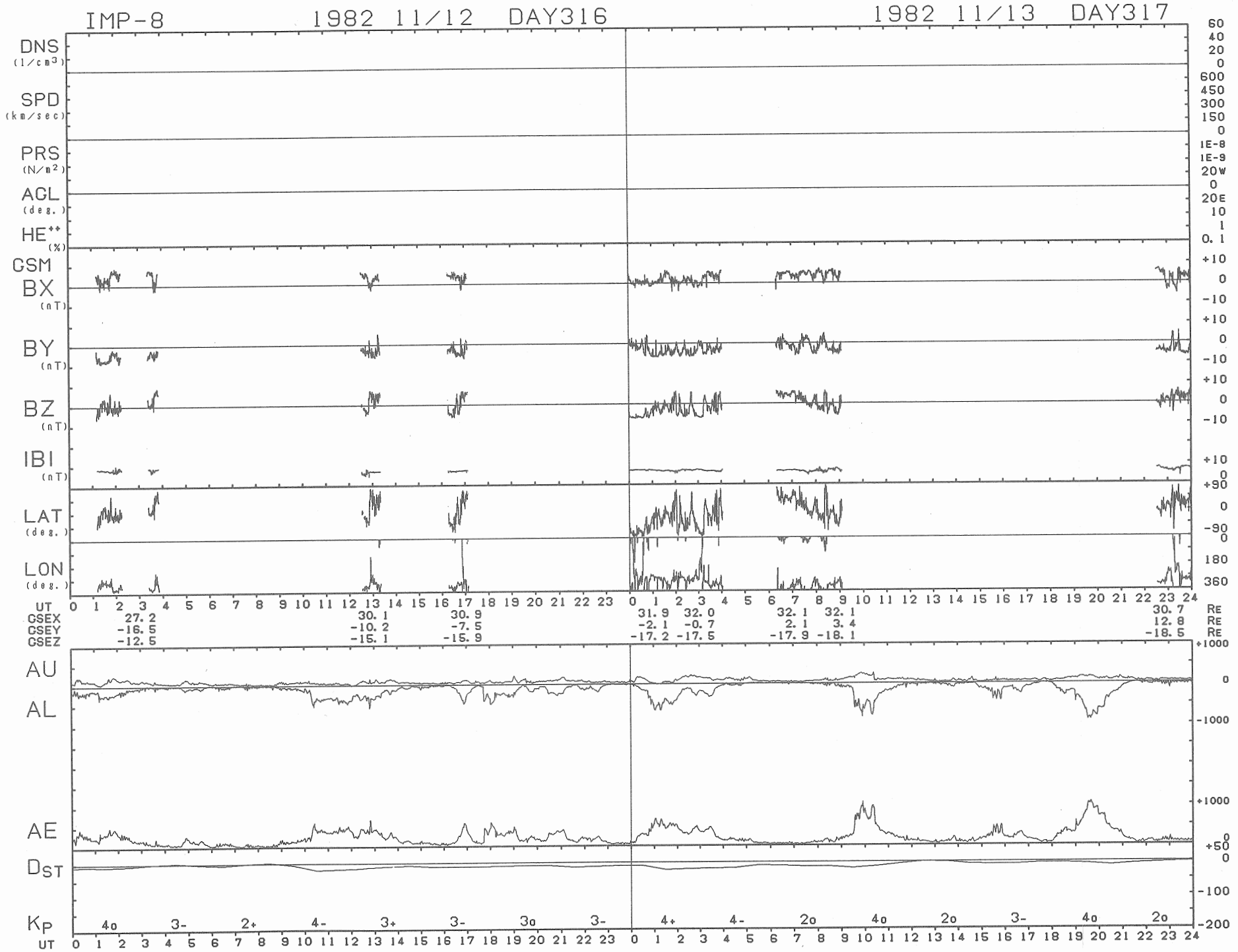

IMP-8
1982 11/ 2 DAY306
1982 11/ 3 DAY307
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.1 22.3 21.4 20.5 18.7 17.7 16.7 13.7 12.6 11.5 10.4 9.3 8.2 7.1 RE
GSEY 24.2 25.2 26.3 27.2 29.0 29.9 30.7 32.9 33.6 34.2 34.7 35.2 35.7 36.1 RE
GSEZ -17.9 -17.8 -17.5 -17.3 -16.8 -16.5 -16.1 -15.0 -14.6 -14.1 -13.7 -13.2 -12.7 -12.2 RE
AU
AL
AE
DST
KP 3+ 3- 3o 4- 4o 6- 5o 5o 5- 5- 4+ 4+ 4- 1o 0o 0o
UT

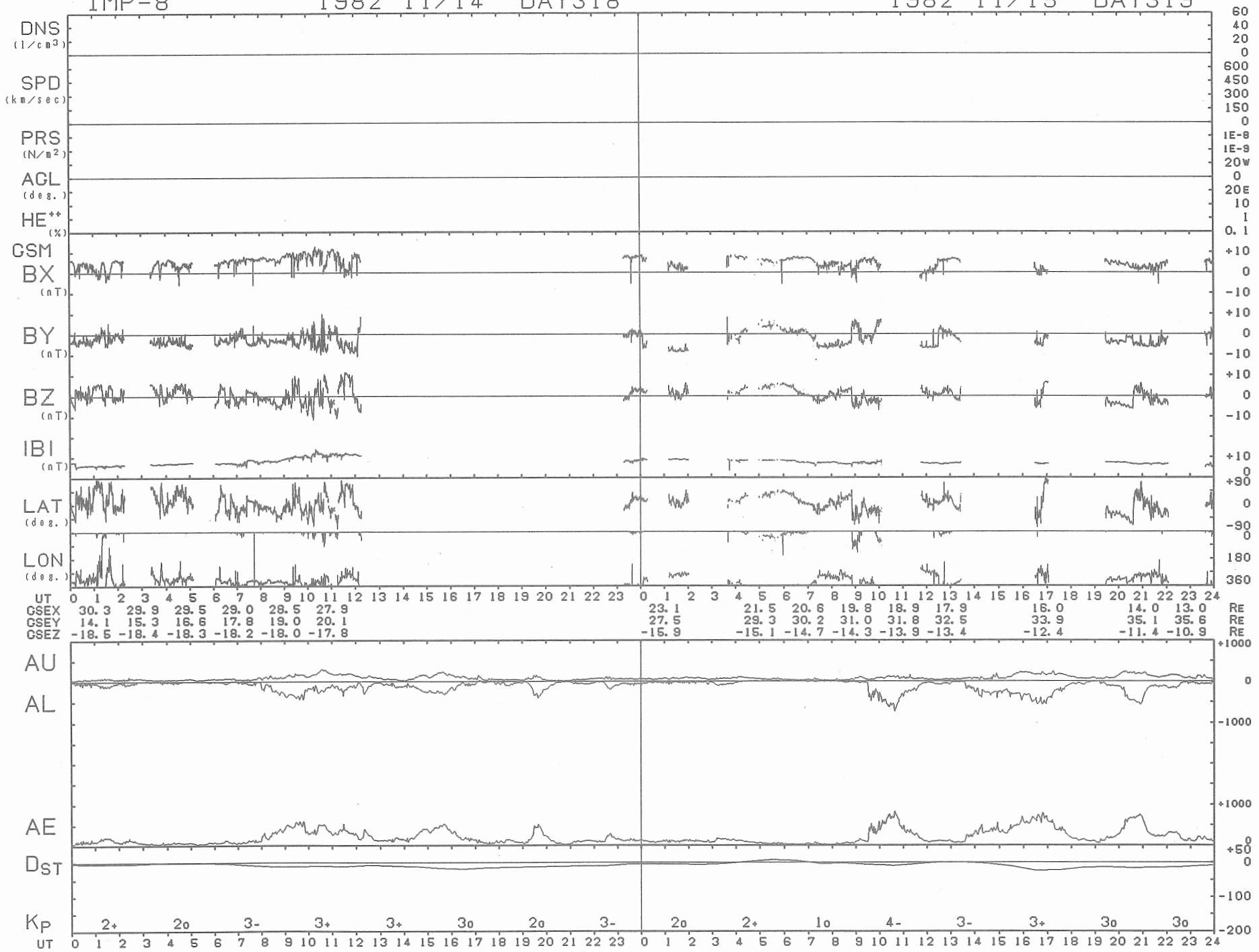

IMP-8
1982 11/ 4 DAY308
1982 11/ 5 DAY309
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.2 -0.9 -2.0 -3.2 -4.3 -8.8 -9.9 -11.0 -12.1 -14.2 -15.2 -16.2 -17.1 -18.1 -19.0 -22.4 RE
GSEY 37.7 37.8 37.9 37.9 37.8 37.1 36.8 36.5 36.1 35.1 34.6 34.0 33.3 32.7 31.9 28.5 RE
GSEZ -8.8 -8.1 -7.5 -6.9 -6.2 -3.6 -2.9 -2.2 -1.5 -0.1 0.6 1.3 2.0 2.6 3.3 6.0 RE
AU
AL
AE
DST
KP 0+ 1o 2+ 2o 2+ 3- 3- 2- 3- 1+ 1+ 2+ 3- 2+ 3o 1o
UT

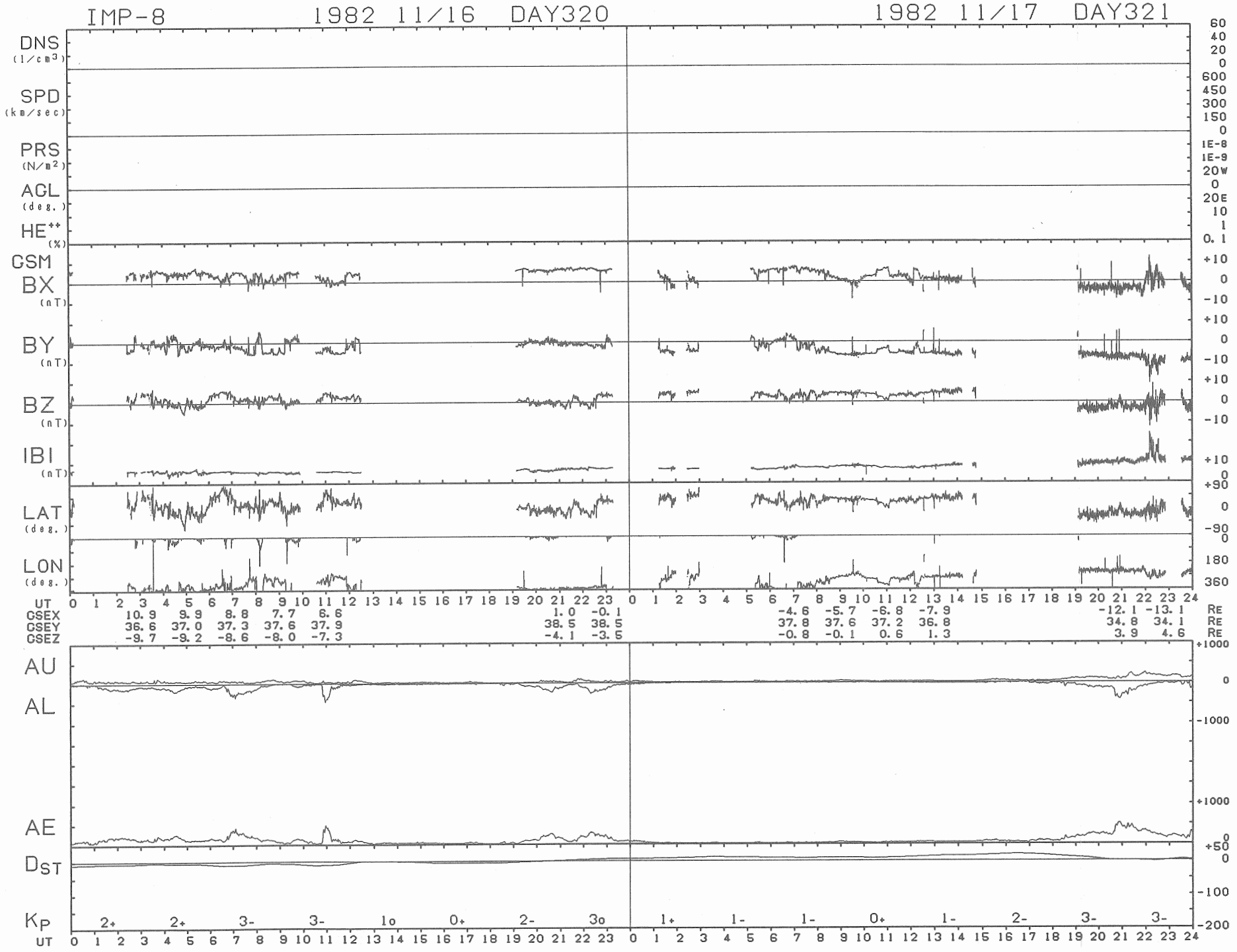

IMP-8
1982 11/ 6 DAY310
1982 11/ 7 DAY311
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.2 -27.0 -27.5 -28.7 -29.3 -29.7 -29.8 -29.8 RE
GSEY 27.6 21.0 19.7 15.8 13.1 10.3 7.4 5.9 RE
GSEZ 6.6 10.2 10.8 12.3 13.2 14.0 14.7 15.0 RE
AU
AL
AE
DST
KP
2+ 3- 4o 3o 2o 3- 1+ 1- 1+ 1+ 1o 1- 1- 0+ 1o 1o
UT

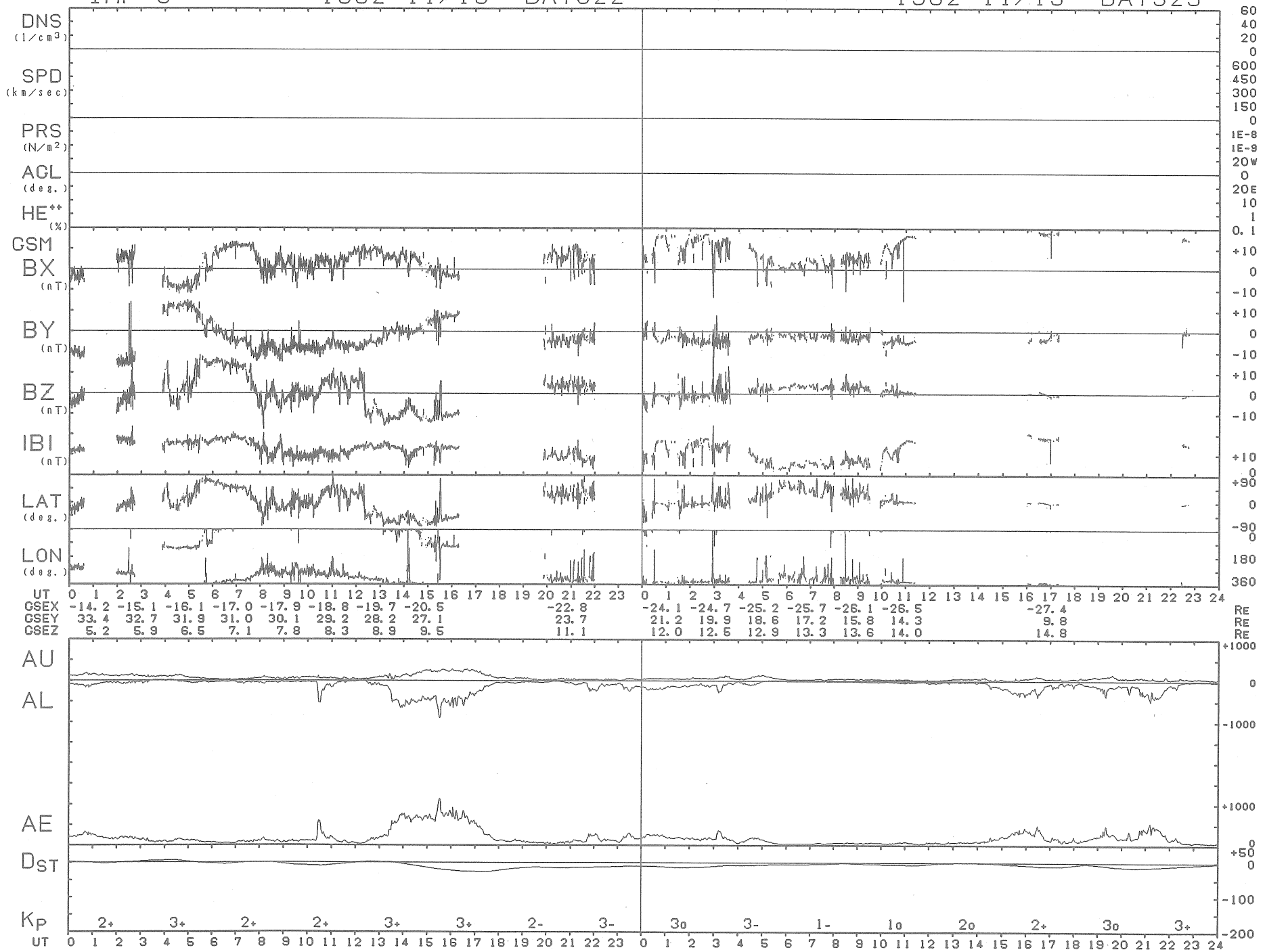

IMP-8
1982 11/ 8 DAY312
1982 11/ 9 DAY313
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -27.6 -26.4 -16.2 -15.0 -13.7 -12.4 -9.7 -8.4 -7.0 -5.6 RE
CSEY -6.2 -9.1 -23.1 -24.1 -25.1 -25.9 -27.5 -28.1 -28.7 -29.2 RE
CSEZ 16.2 16.1 13.0 12.5 12.0 11.4 10.2 9.5 8.8 8.1 RE
AU
AL
AE
DST
KP 1+ 1o 2- 2- 2+ 4o 4+ 2+ 3- 3- 2+ 2- 2- 1+ 2- 2-
UT

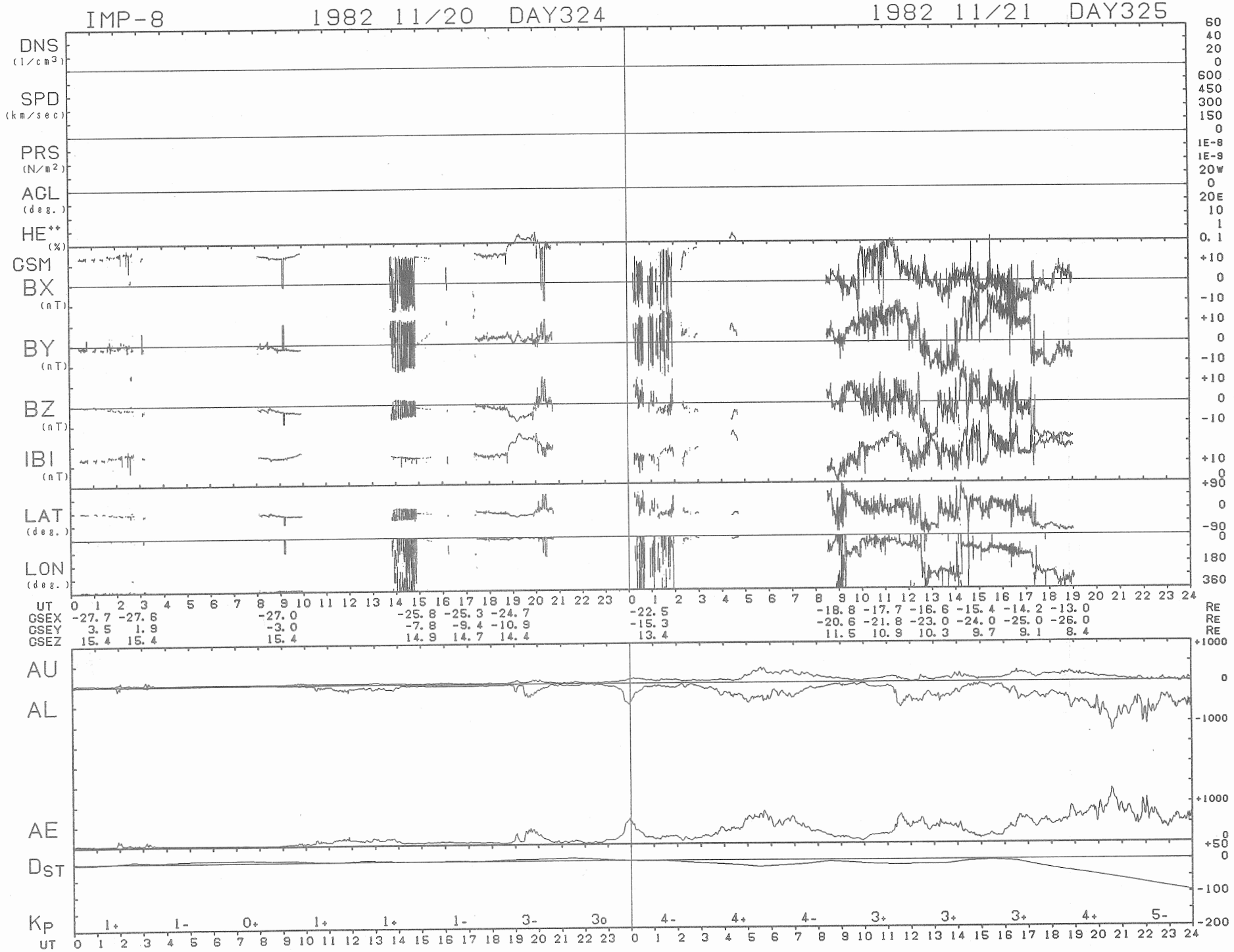

IMP-8
1982 11/10 DAY314
1982 11/11 DAY315
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.7 1.6 8.7 10.1 11.5 12.8 14.1 15.3 16.5 17.7 18.9 25.7 RE
GSEY -30.0 -30.7 -30.2 -29.9 -29.5 -29.0 -28.5 -27.9 -27.2 -26.5 -25.7 -18.8 RE
GSEZ 6.6 4.3 0.1 -0.7 -1.5 -2.3 -3.2 -4.0 -4.8 -5.6 -6.3 -11.3 RE
AU
AL
AE
DST
KP 3- 2o 2- 3- 3o 2+ 3o 3o 4+ 4o 3- 4- 3+ 3+ 3- 4-
UT

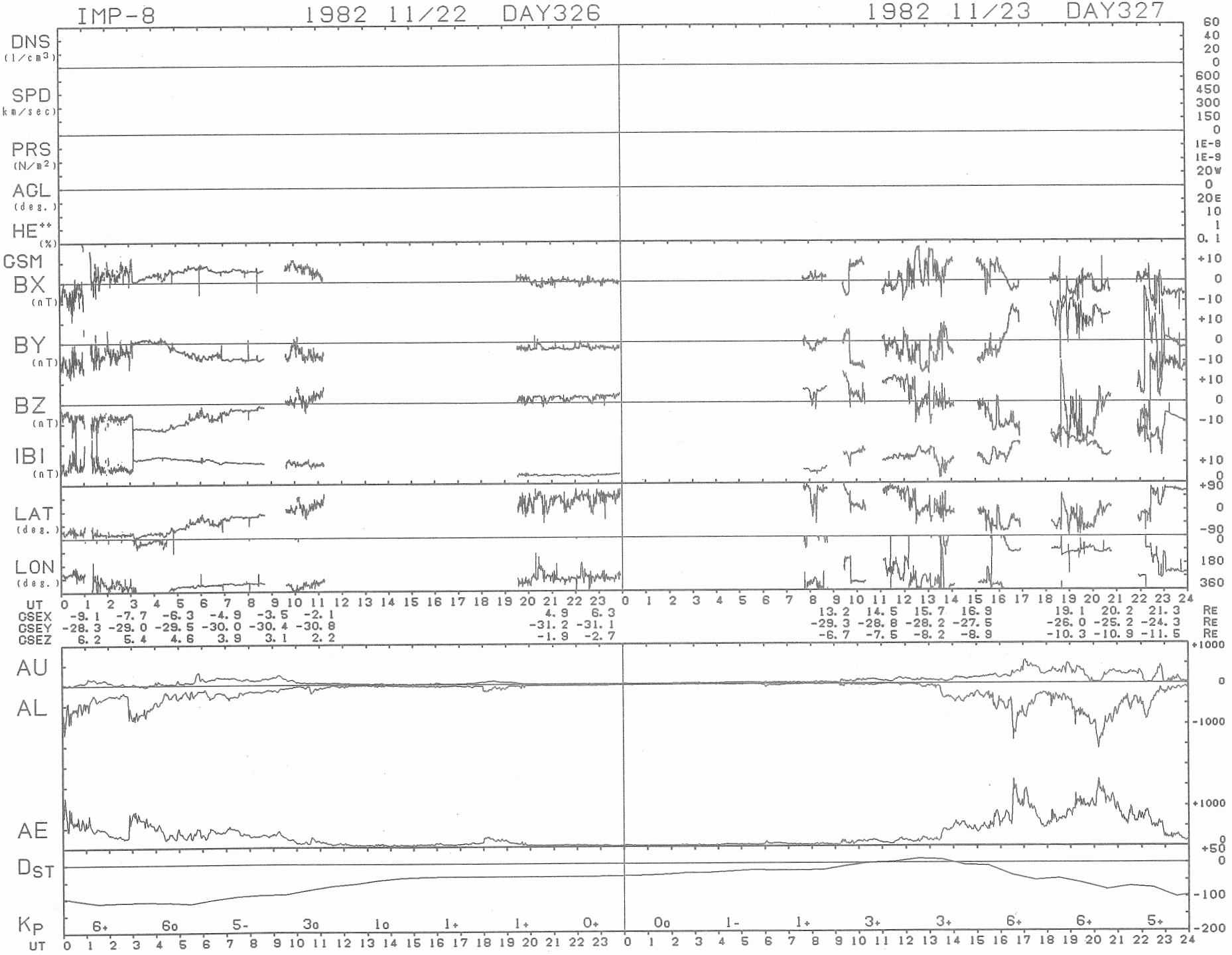

IMP-8
1982 11/12 DAY316
1982 11/13 DAY317
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
27.2 -16.5 -12.5
30.1 -10.2 -15.1
30.9 -7.5 -15.9
31.9 -2.1 -17.2
32.0 -0.7 -17.5
32.1 2.1 -17.9
32.1 3.4 -18.1
30.7 12.8 -18.5
RE
AU
AL
AE
DST
KP
4o 3- 2+ 4- 3+ 3- 3o 3- 4+ 4- 2o 4o 2o 3- 4o 2o

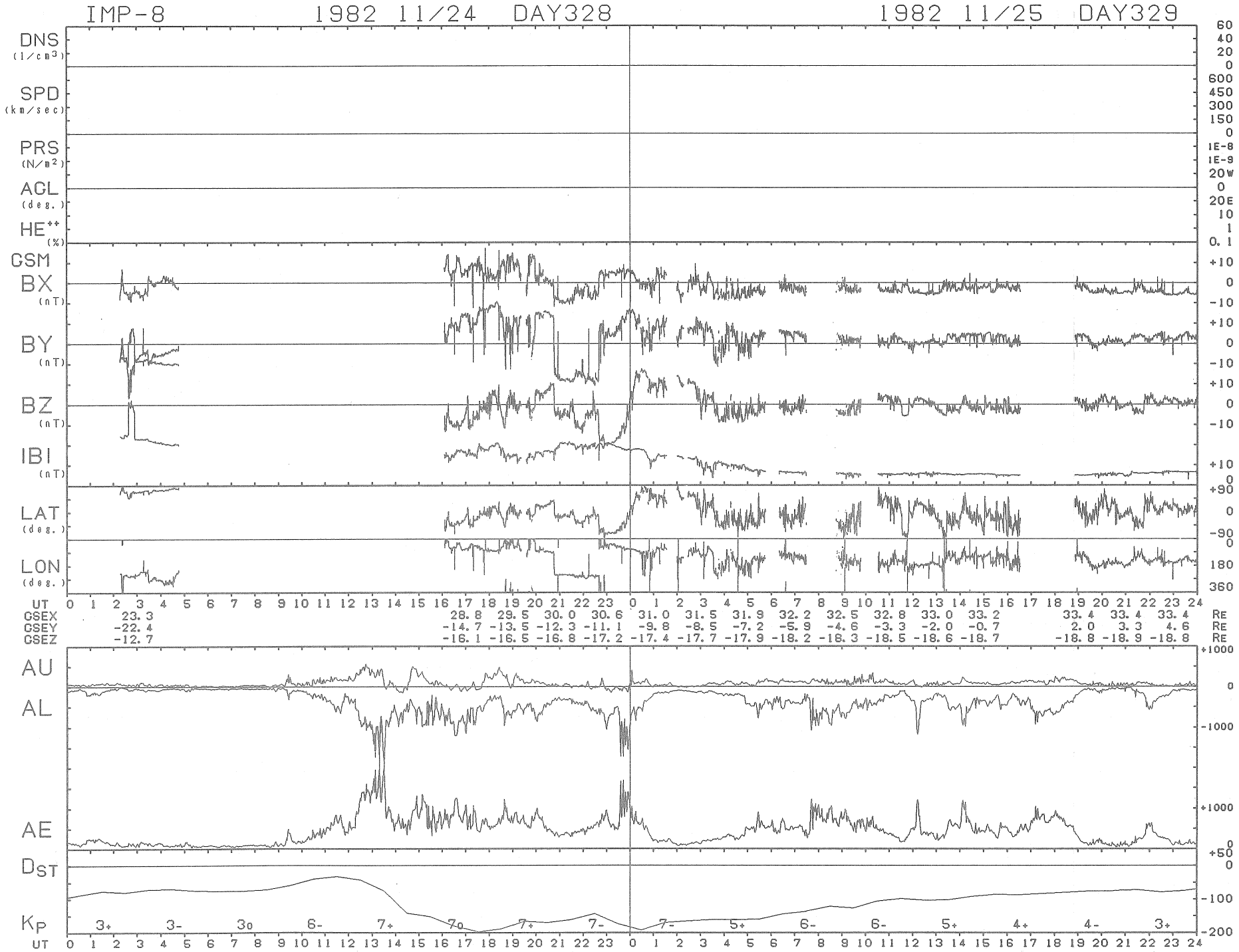

IMP-8
1982 11/14 DAY318
1982 11/15 DAY319
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.3 29.9 29.5 29.0 28.5 27.9 23.1 21.5 20.6 19.8 18.9 17.9 16.0 14.0 13.0 RE
GSEY 14.1 15.3 16.6 17.8 19.0 20.1 27.5 29.3 30.2 31.0 31.8 32.5 33.9 35.1 35.6 RE
GSEZ -18.5 -18.4 -18.3 -18.2 -18.0 -17.8 -15.9 -15.1 -14.7 -14.3 -13.9 -13.4 -12.4 -11.4 -10.9 RE
AU
AL
AE
DST
KP
2+ 2o 3- 3+ 3+ 3o 2o 3- 2o 2+ 1o 4- 3- 3+ 3o 3o
UT

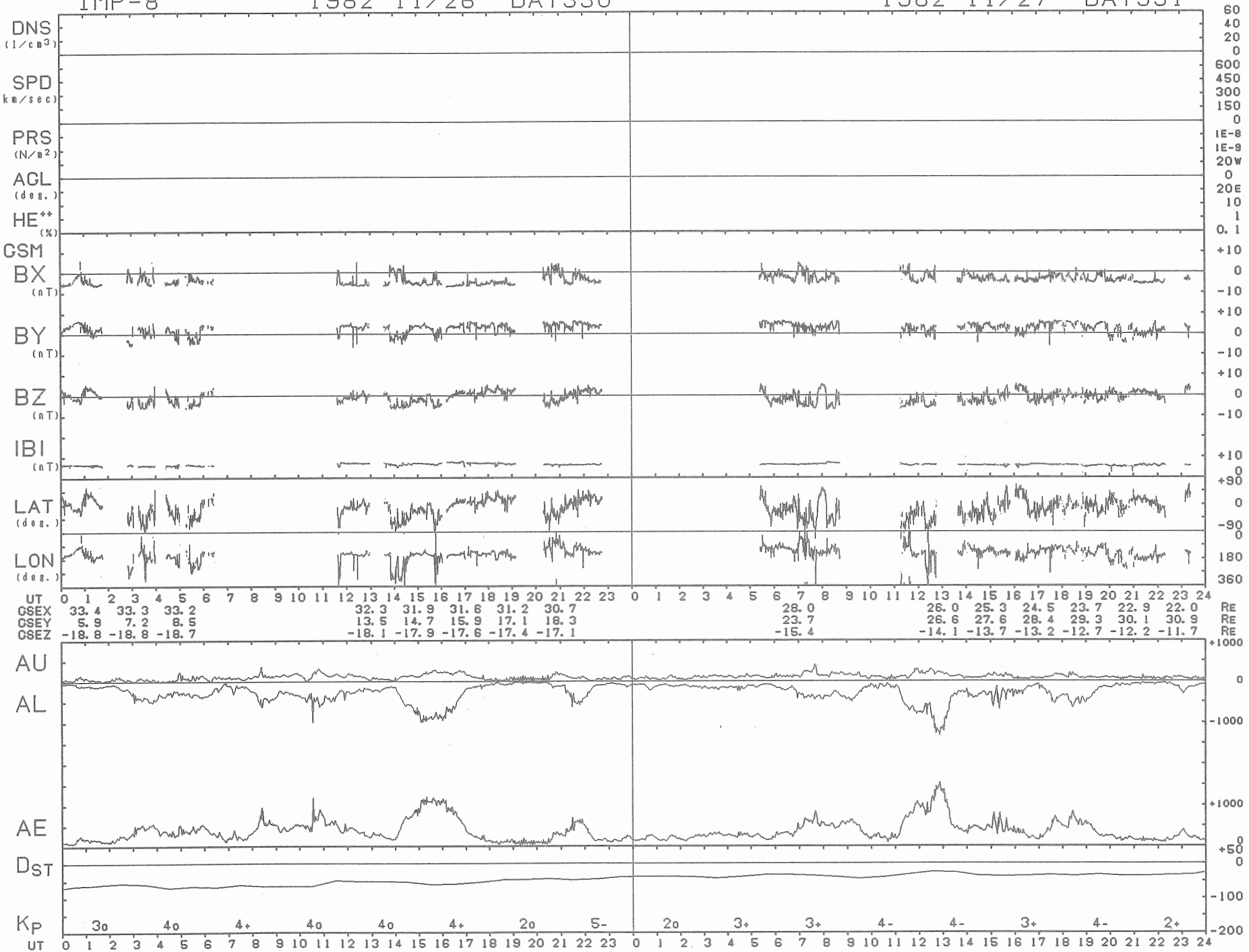

IMP-8
1982 11/16 DAY320
1982 11/17 DAY321
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.9 9.9 8.8 7.7 6.6 1.0 -0.1 -4.6 -5.7 -6.8 -7.9 -12.1 -13.1 RE
GSEY 36.6 37.0 37.3 37.6 37.9 38.5 38.5 37.8 37.6 37.2 36.8 34.8 34.1 RE
GSEZ -9.7 -9.2 -8.6 -8.0 -7.3 -4.1 -3.5 -0.8 -0.1 0.6 1.3 3.9 4.6 RE
AU
AL
AE
DST
KP 2+ 2+ 3- 3- 1o 0+ 2- 3o 1+ 1- 1- 0+ 1- 2- 3- 3-
UT

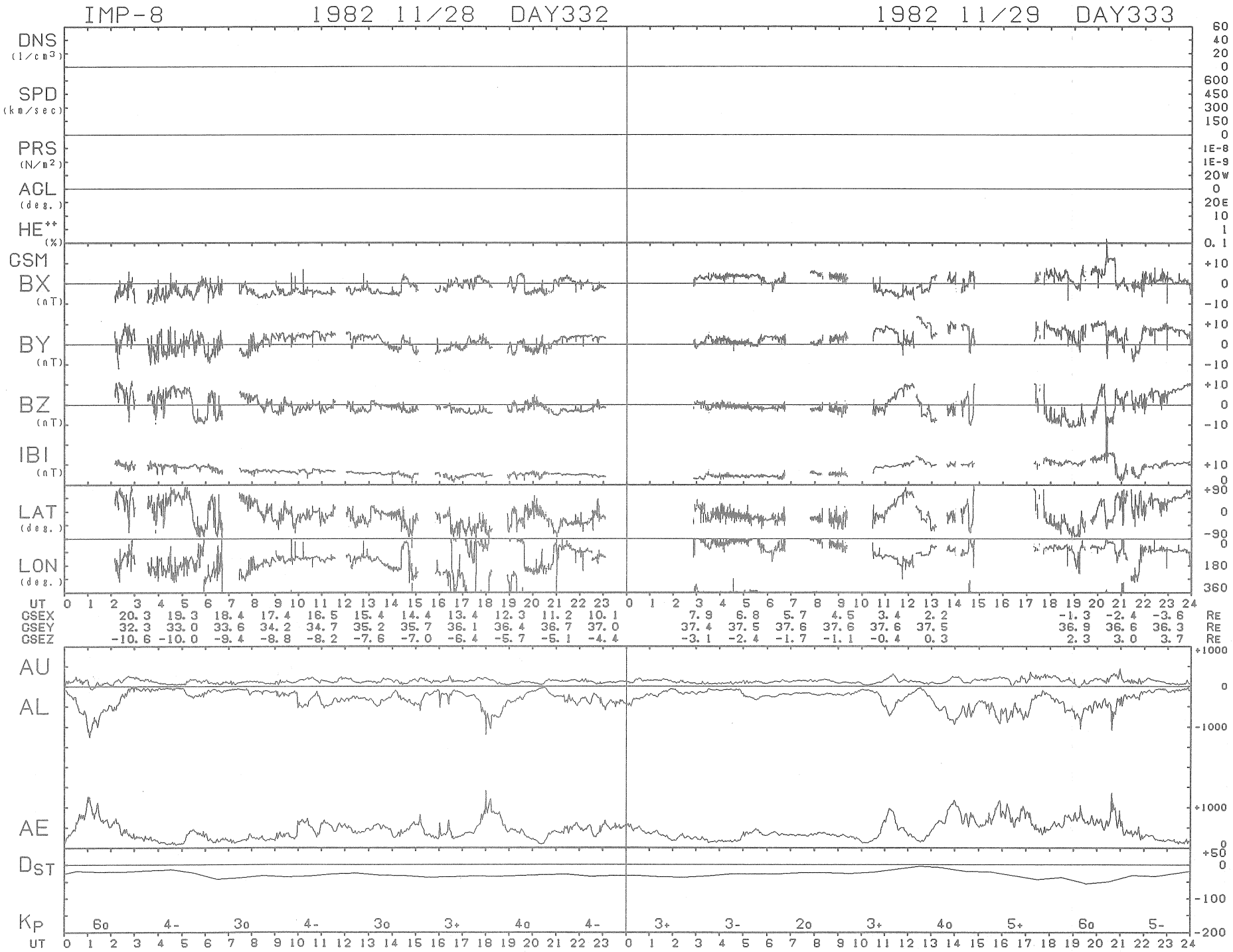

IMP-8
1982 11/18 DAY322
1982 11/19 DAY323
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.2 -15.1 -16.1 -17.0 -17.9 -18.8 -19.7 -20.5 -22.8 -24.1 -24.7 -25.2 -25.7 -26.1 -26.5 -27.4 RE
GSEY 33.4 32.7 31.9 31.0 30.1 29.2 28.2 27.1 23.7 21.2 19.9 18.6 17.2 15.8 14.3 9.8 RE
GSEZ 5.2 5.9 6.5 7.1 7.8 8.3 8.9 9.5 11.1 12.0 12.5 12.9 13.3 13.6 14.0 14.8 RE
AU
AL
AE
DST
KP
2+ 3+ 2+ 2+ 3+ 3+ 2- 3- 3o 3- 1- 1o 2o 2+ 3o 3+
UT

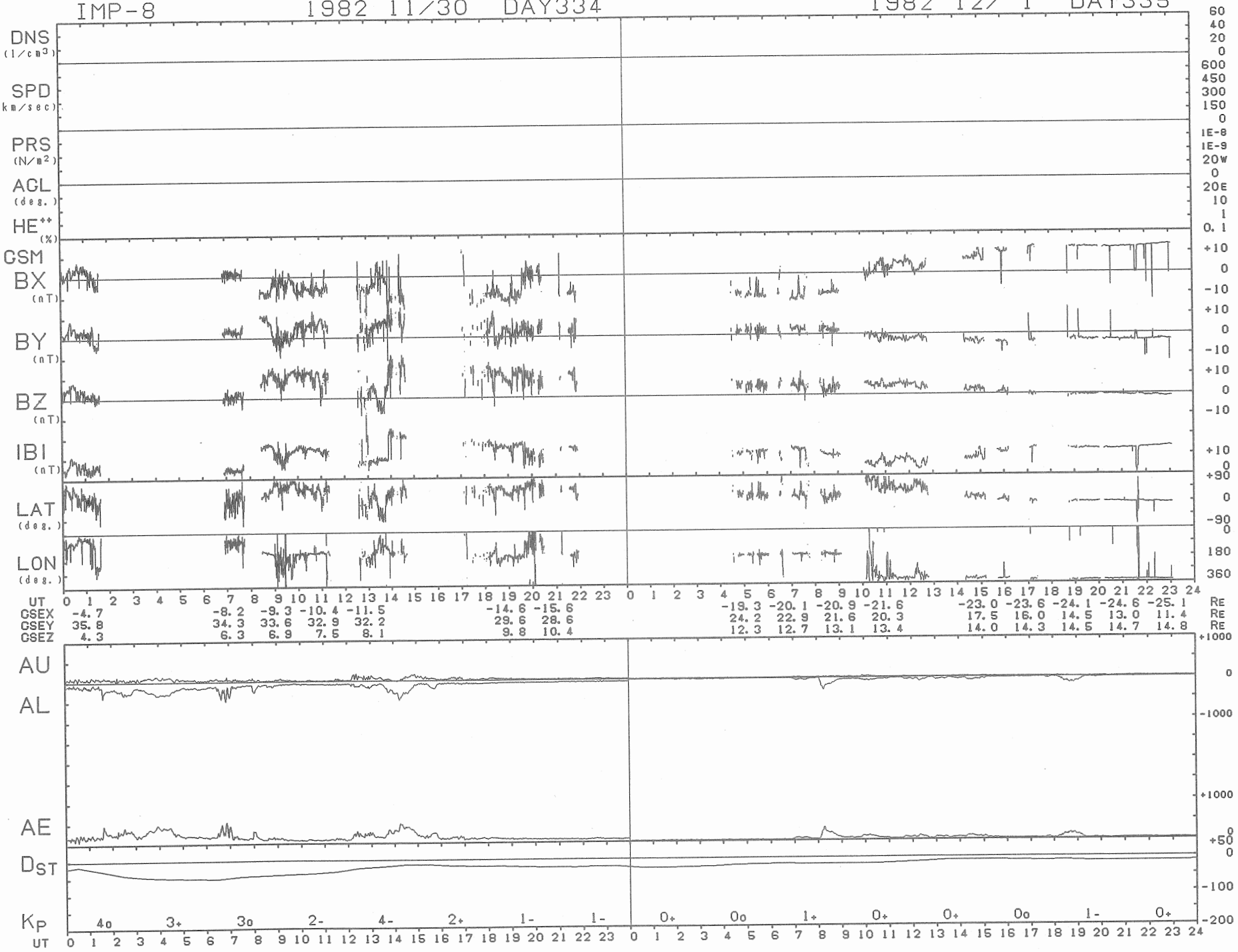

IMP-8
1982 11/20 DAY324
1982 11/21 DAY325
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.7 -27.6 -27.0 -25.8 -25.3 -24.7 -22.5 -18.8 -17.7 -16.6 -15.4 -14.2 -13.0 RE
GSEY 3.5 1.9 -3.0 -7.8 -9.4 -10.9 -15.3 -20.6 -21.8 -23.0 -24.0 -25.0 -26.0 RE
GSEZ 15.4 15.4 15.4 14.9 14.7 14.4 13.4 11.5 10.9 10.3 9.7 9.1 8.4 RE
AU
AL
AE
DST
KP
1+ 1- 0+ 1+ 1+ 1- 3- 3o 4- 4+ 4- 3+ 3+ 3+ 4+ 5-
UT

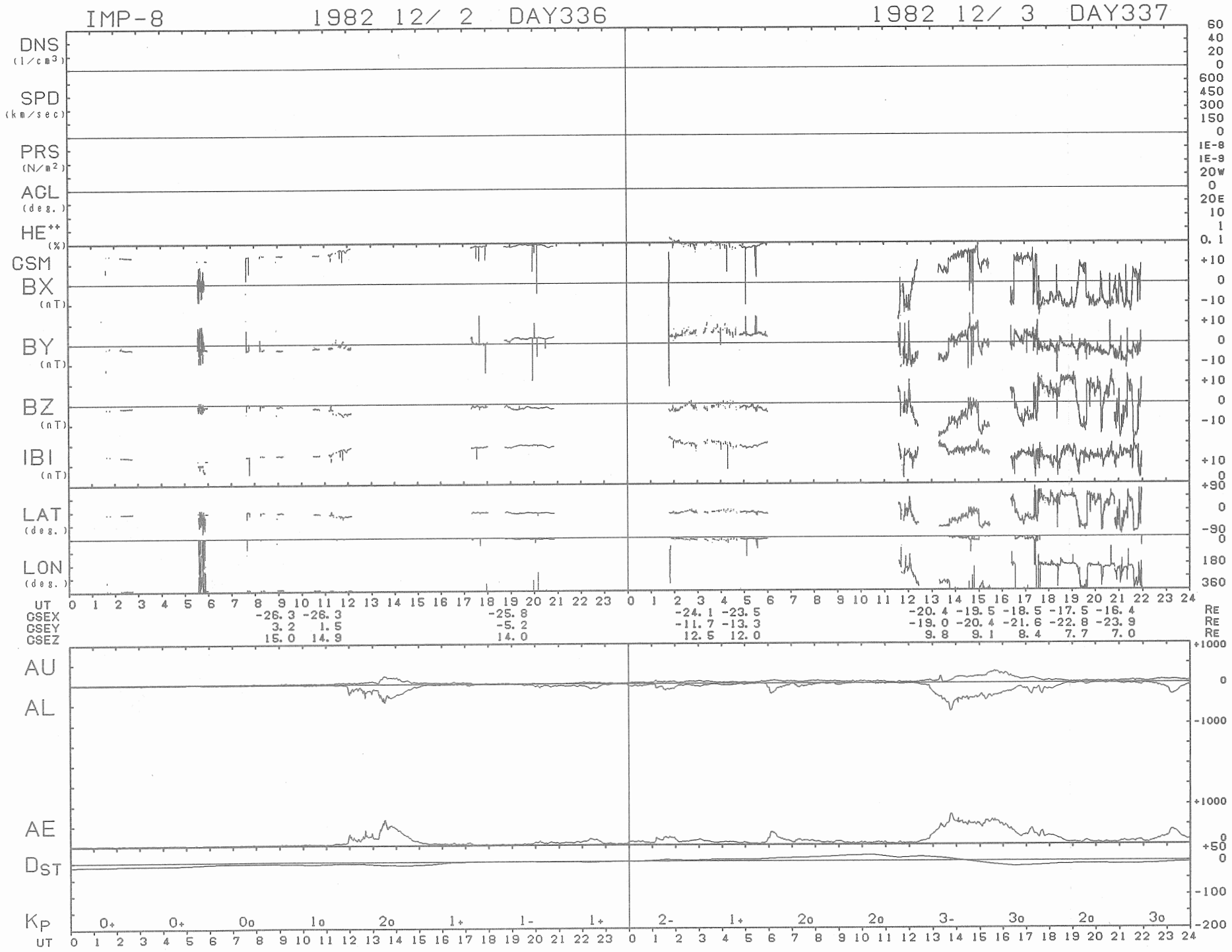

IMP-8
1982 11/22 DAY326
1982 11/23 DAY327
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.1 -7.7 -6.3 -4.9 -3.5 -2.1 4.9 6.3 13.2 14.5 15.7 16.9 19.1 20.2 21.3 RE
GSEY -28.3 -29.0 -29.5 -30.0 -30.4 -30.8 -31.2 -31.1 -29.3 -28.8 -28.2 -27.5 -26.0 -25.2 -24.3 RE
GSEZ 6.2 5.4 4.6 3.9 3.1 2.2 -1.9 -2.7 -6.7 -7.5 -8.2 -8.9 -10.3 -10.9 -11.5 RE
AU
AL
AE
DST
KP
6+ 6o 5- 3o 1o 1+ 1+ 0+ 0o 1- 1+ 3+ 3+ 6+ 6+ 5+
UT

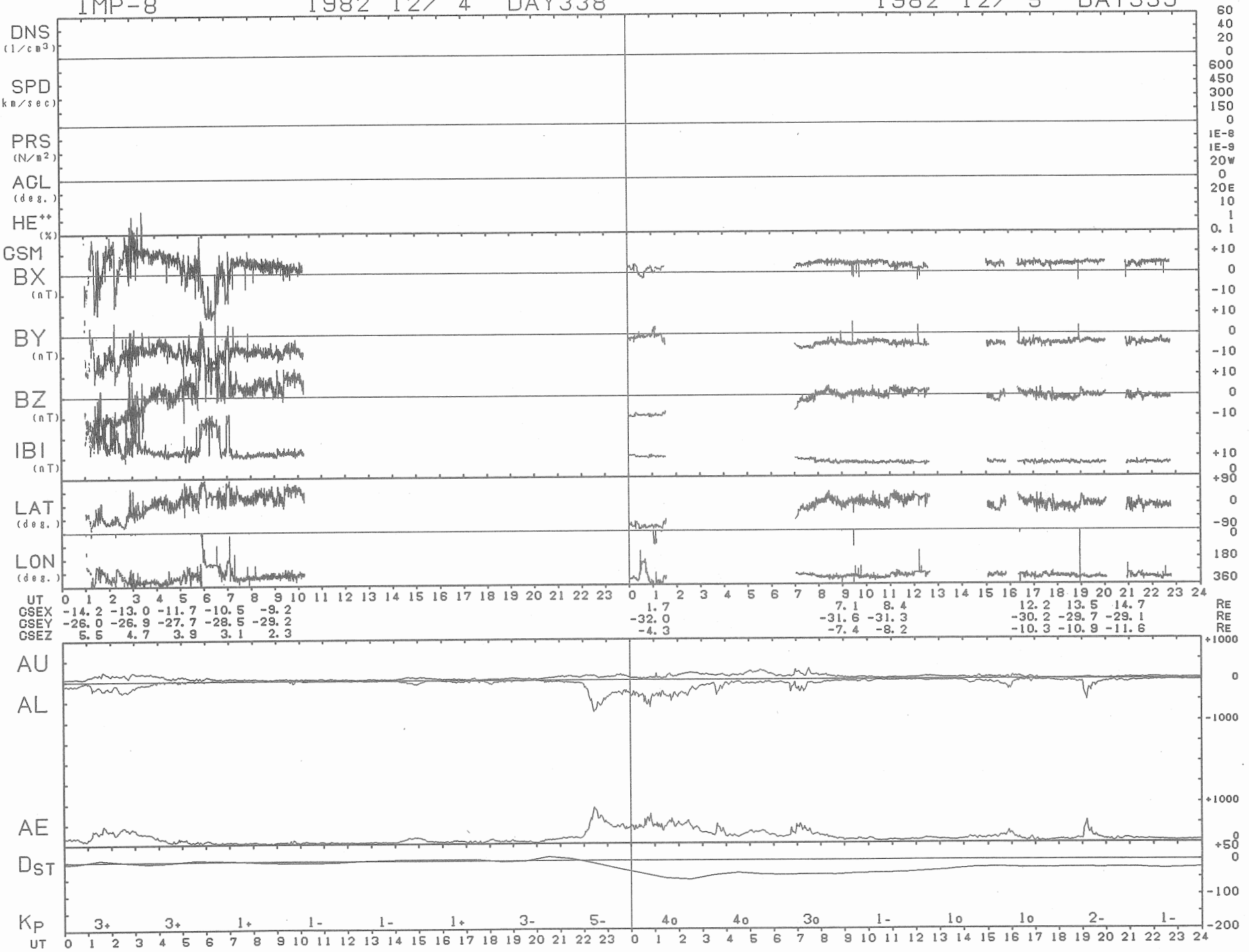

IMP-8
1982 11/24 DAY328
1982 11/25 DAY329
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.3 28.8 29.5 30.0 30.6 31.0 31.5 31.9 32.2 32.5 32.8 33.0 33.2 33.4 33.4 33.4 RE
GSEY -22.4 -14.7 -13.5 -12.3 -11.1 -9.8 -8.5 -7.2 -5.9 -4.6 -3.3 -2.0 -0.7 2.0 3.3 4.6 RE
GSEZ -12.7 -16.1 -16.5 -16.8 -17.2 -17.4 -17.7 -17.9 -18.2 -18.3 -18.5 -18.6 -18.7 -18.8 -18.9 -18.8 RE
AU
AL
AE
Dst
Kp
3+ 3- 3o 6- 7+ 7o 7+ 7- 7- 5+ 6- 6- 5+ 4+ 4- 3+
UT

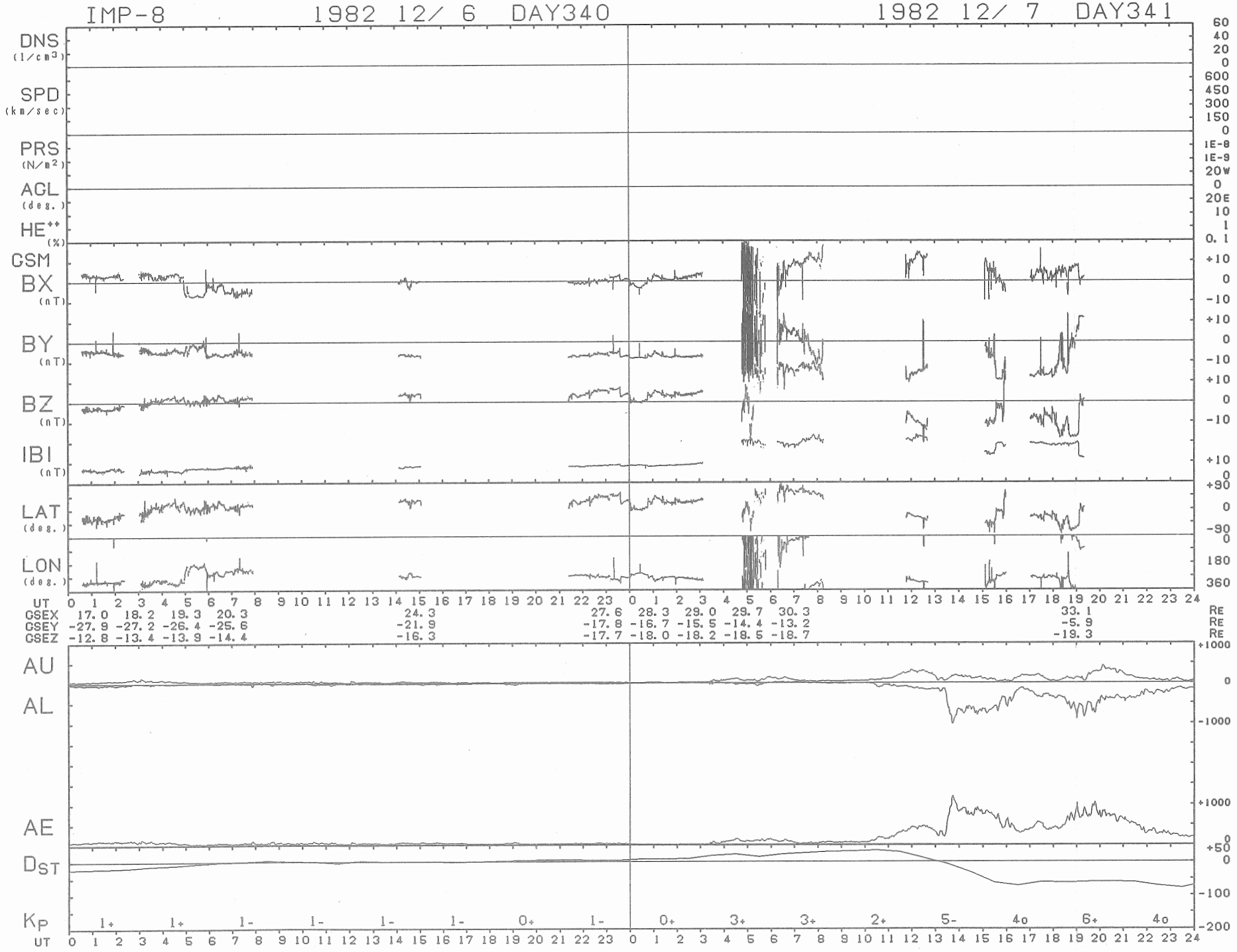

IMP-8
1982 11/26 DAY330
1982 11/27 DAY331
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.4 33.3 33.2 32.3 31.9 31.6 31.2 30.7 28.0 26.0 25.3 24.5 23.7 22.9 22.0 RE
GSEY 5.9 7.2 8.5 13.5 14.7 15.9 17.1 18.3 23.7 26.6 27.6 28.4 29.3 30.1 30.9 RE
GSEZ -18.8 -18.8 -18.7 -18.1 -17.9 -17.6 -17.4 -17.1 -15.4 -14.1 -13.7 -13.2 -12.7 -12.2 -11.7 RE
AU
AL
AE
DST
KP
3o 4o 4+ 4o 4o 4+ 2o 5- 2o 3+ 3+ 4- 4- 3+ 4- 2+
UT

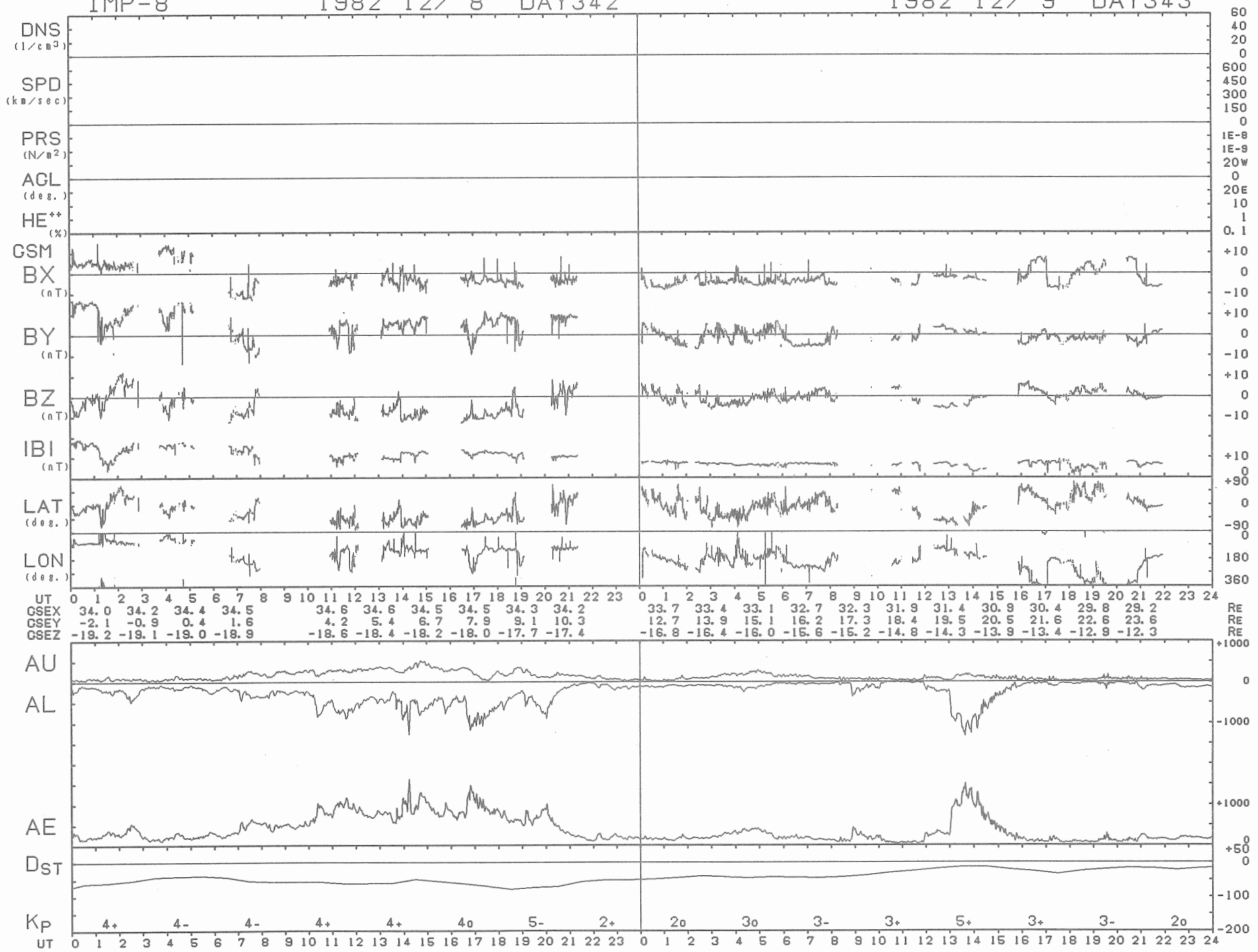

IMP-8
1982 11/28 DAY332
1982 11/29 DAY333
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.3 19.3 18.4 17.4 16.5 15.4 14.4 13.4 12.3 11.2 10.1 7.9 6.8 5.7 4.5 3.4 2.2 -1.3 -2.4 -3.6 RE
GSEY 32.3 33.0 33.6 34.2 34.7 35.2 35.7 36.1 36.4 36.7 37.0 37.4 37.5 37.6 37.6 37.6 37.5 36.9 36.6 36.3 RE
GSEZ -10.6 -10.0 -9.4 -8.8 -8.2 -7.6 -7.0 -6.4 -5.7 -5.1 -4.4 -3.1 -2.4 -1.7 -1.1 -0.4 0.3 2.3 3.0 3.7 RE
AU
AL
AE
DST
KP 6o 4- 3o 4- 3o 3+ 4o 4- 3+ 3- 2o 3+ 4o 5+ 6o 5-
UT

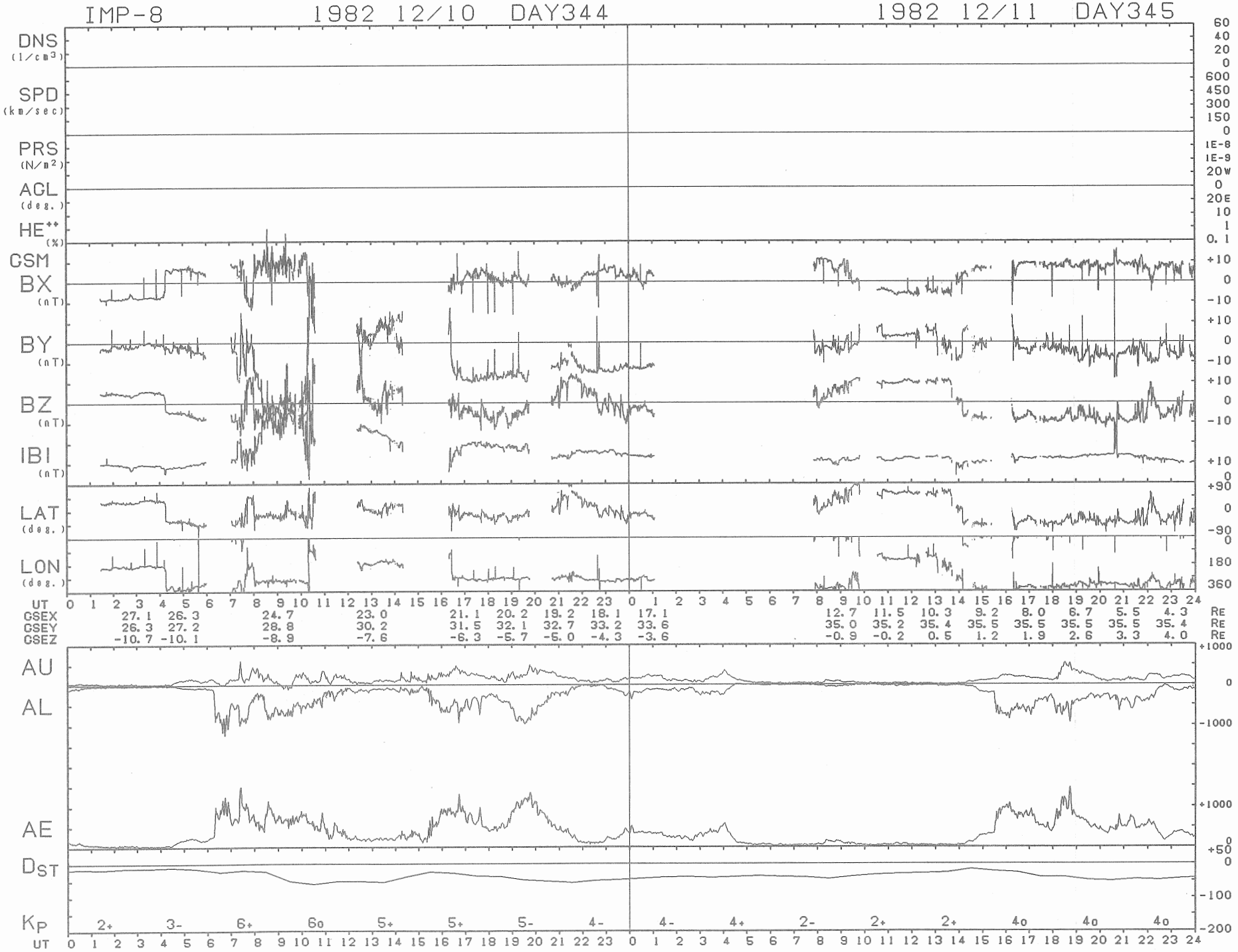

IMP-8
1982 11/30 DAY334
1982 12/ 1 DAY335
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP
4o 3+ 3o 2- 4- 2+ 1- 1- 0+ 0o 1+ 0+ 0+ 0o 1- 0+

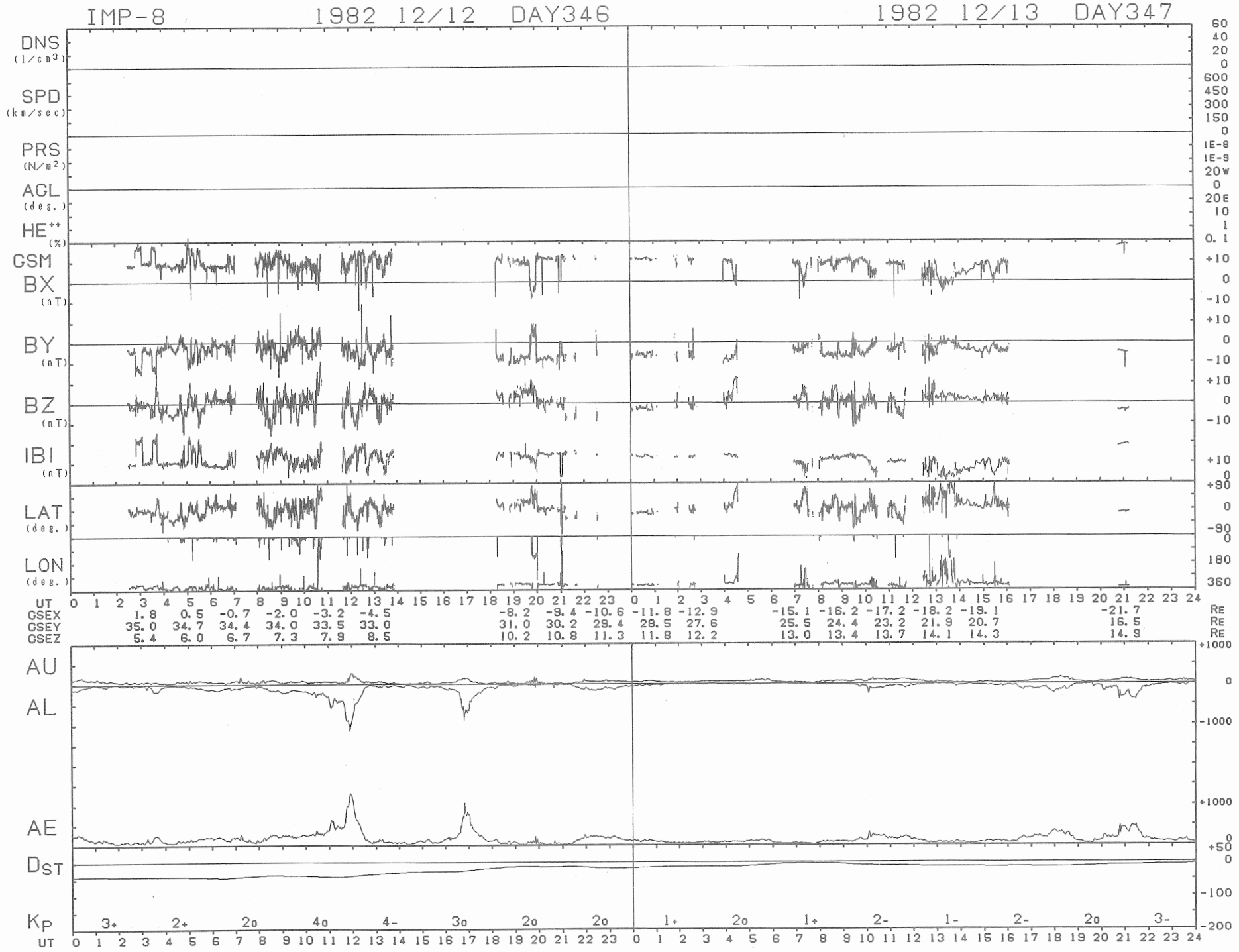

IMP-8
1982 12/ 2 DAY336
1982 12/ 3 DAY337
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.3 -26.3 -25.8 -24.1 -23.5 -20.4 -19.5 -18.5 -17.5 -16.4 RE
GSEY 3.2 1.5 -5.2 -11.7 -13.3 -19.0 -20.4 -21.6 -22.8 -23.9 RE
GSEZ 15.0 14.9 14.0 12.5 12.0 9.8 9.1 8.4 7.7 7.0 RE
AU
AL
AE
DST
KP 0+ 0+ 0o 1o 2o 1+ 1- 1+ 2- 1+ 2o 2o 3- 3o 2o 3o
UT

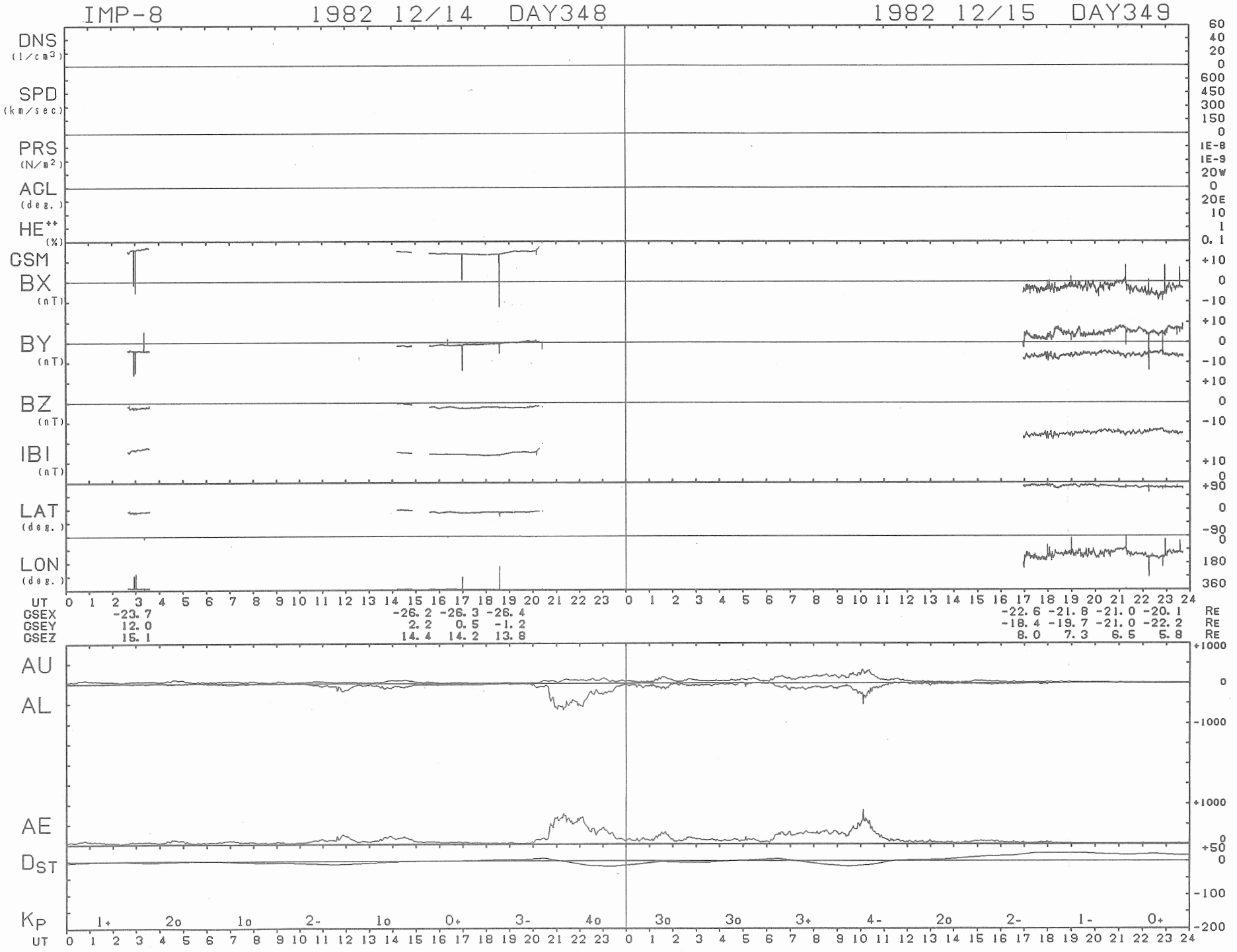

IMP-8
1982 12/ 4 DAY338
1982 12/ 5 DAY339
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.2 -13.0 -11.7 -10.5 -9.2 1.7 7.1 8.4 12.2 13.5 14.7 RE
GSEY -26.0 -26.9 -27.7 -28.5 -29.2 -32.0 -31.6 -31.3 -30.2 -29.7 -29.1 RE
GSEZ 5.5 4.7 3.9 3.1 2.3 -4.3 -7.4 -8.2 -10.3 -10.9 -11.6 RE
AU
AL
AE
Dst
Kp
3+ 3+ 1+ 1- 1- 1+ 3- 5- 4o 4o 3o 1- 1o 1o 2- 1-
UT

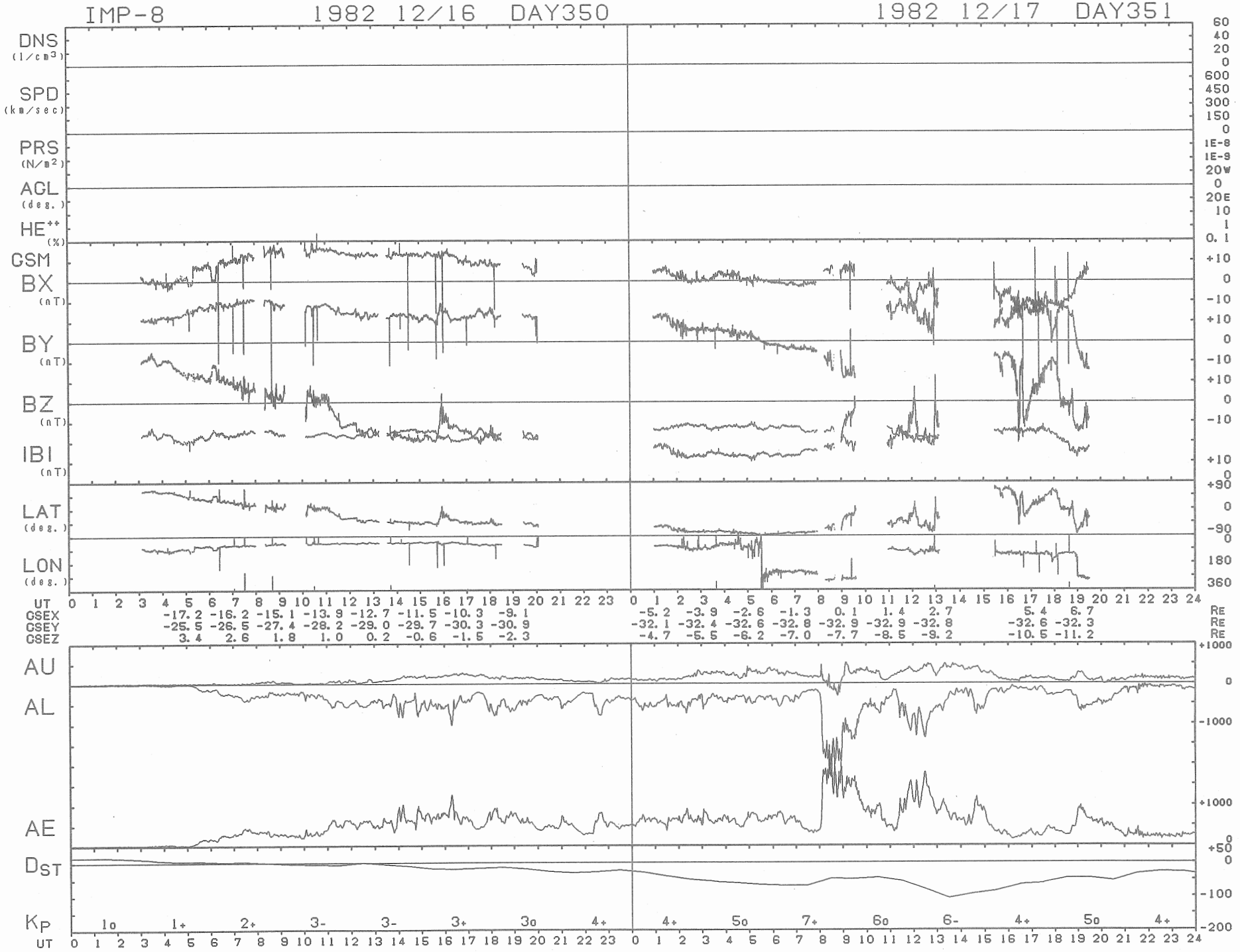

IMP-8
1982 12/ 6 DAY340
1982 12/ 7 DAY341
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 17.0 18.2 19.3 20.3 24.3 27.6 28.3 29.0 29.7 30.3 33.1 Re
GSEY -27.9 -27.2 -26.4 -25.6 -21.9 -17.8 -16.7 -15.5 -14.4 -13.2 -5.9 Re
GSEZ -12.8 -13.4 -13.9 -14.4 -16.3 -17.7 -18.0 -18.2 -18.5 -18.7 -19.3 Re
AU
AL
AE
Dst
Kp
1+ 1+ 1- 1- 1- 1- 0+ 1- 0+ 3+ 3+ 2+ 5- 4o 6+ 4o
UT

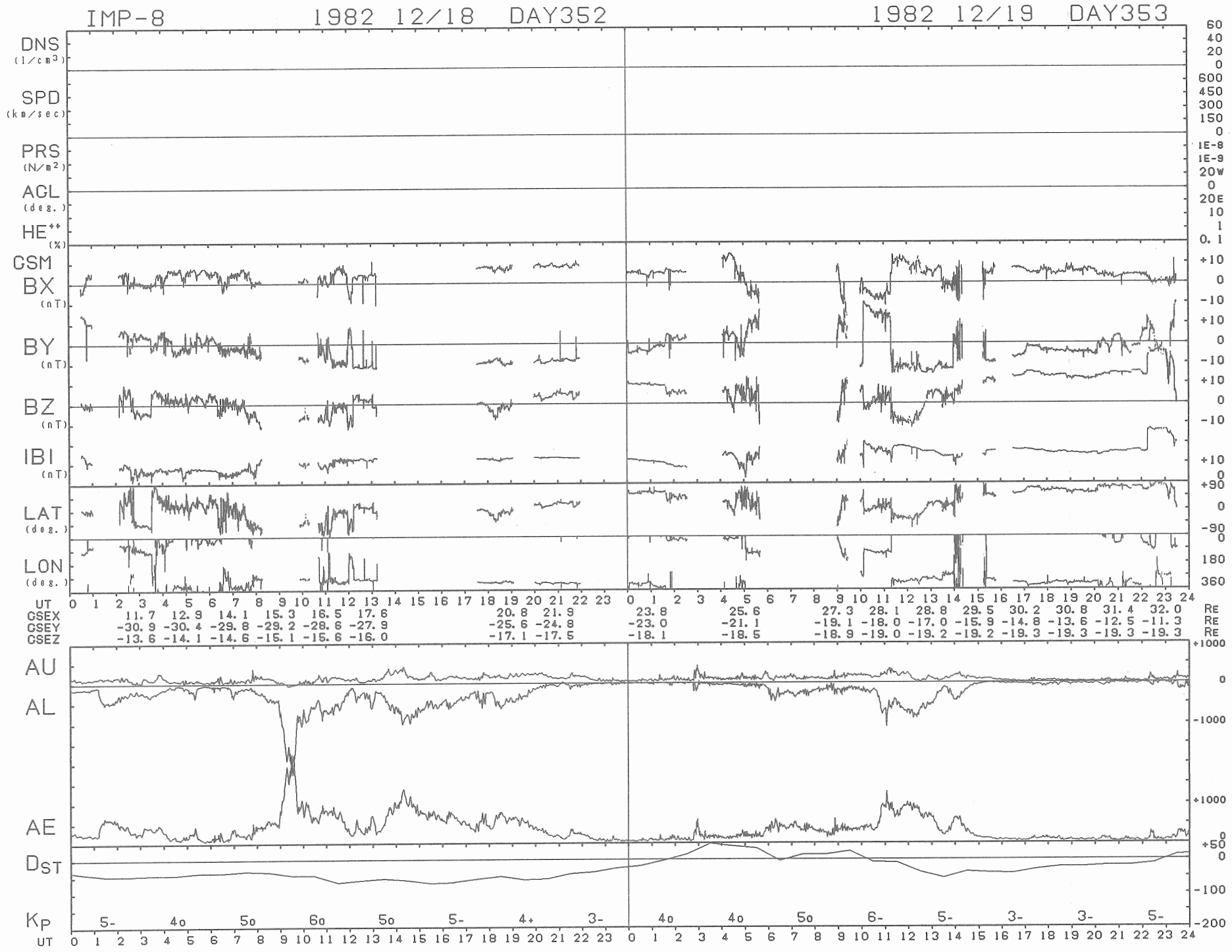

IMP-8
1982 12/ 8 DAY342
1982 12/ 9 DAY343
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.0 34.2 34.4 34.5 34.6 34.6 34.5 34.5 34.3 34.2 33.7 33.4 33.1 32.7 32.3 31.9 31.4 30.9 30.4 29.8 29.2 RE
GSEY -2.1 -0.9 0.4 1.6 4.2 5.4 6.7 7.9 9.1 10.3 12.7 13.9 15.1 16.2 17.3 18.4 19.5 20.5 21.6 22.6 23.6 RE
GSEZ -19.2 -19.1 -19.0 -18.9 -18.6 -18.4 -18.2 -18.0 -17.7 -17.4 -16.8 -16.4 -16.0 -15.6 -15.2 -14.8 -14.3 -13.9 -13.4 -12.9 -12.3 RE
AU
AL
AE
DST
KP 4+ 4- 4- 4+ 4+ 4o 5- 2+ 2o 3o 3- 3+ 5+ 3+ 3- 2o
UT

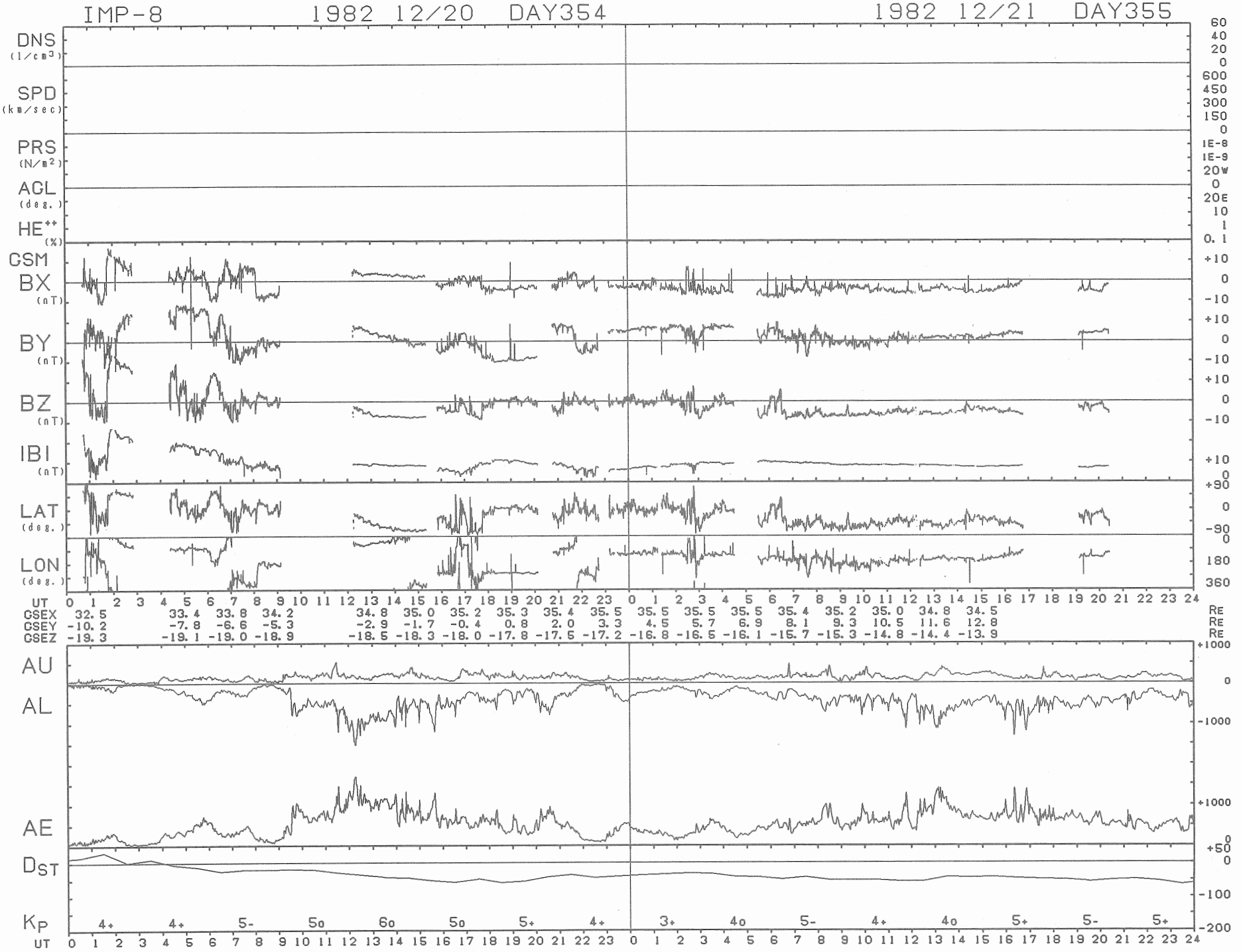

IMP-8
1982 12/10 DAY344
1982 12/11 DAY345
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.1 26.3 24.7 23.0 21.1 20.2 19.2 18.1 17.1 12.7 11.5 10.3 9.2 8.0 6.7 5.5 4.3 RE
GSEY 26.3 27.2 28.8 30.2 31.5 32.1 32.7 33.2 33.6 35.0 35.2 35.4 35.5 35.5 35.5 35.5 35.4 RE
GSEZ -10.7 -10.1 -8.9 -7.6 -6.3 -5.7 -5.0 -4.3 -3.6 -0.9 -0.2 0.5 1.2 1.9 2.6 3.3 4.0 RE
AU
AL
AE
DST
KP 2+ 3- 6+ 6o 5+ 5+ 5- 4- 4- 4+ 2- 2+ 2+ 4o 4o 4o
UT

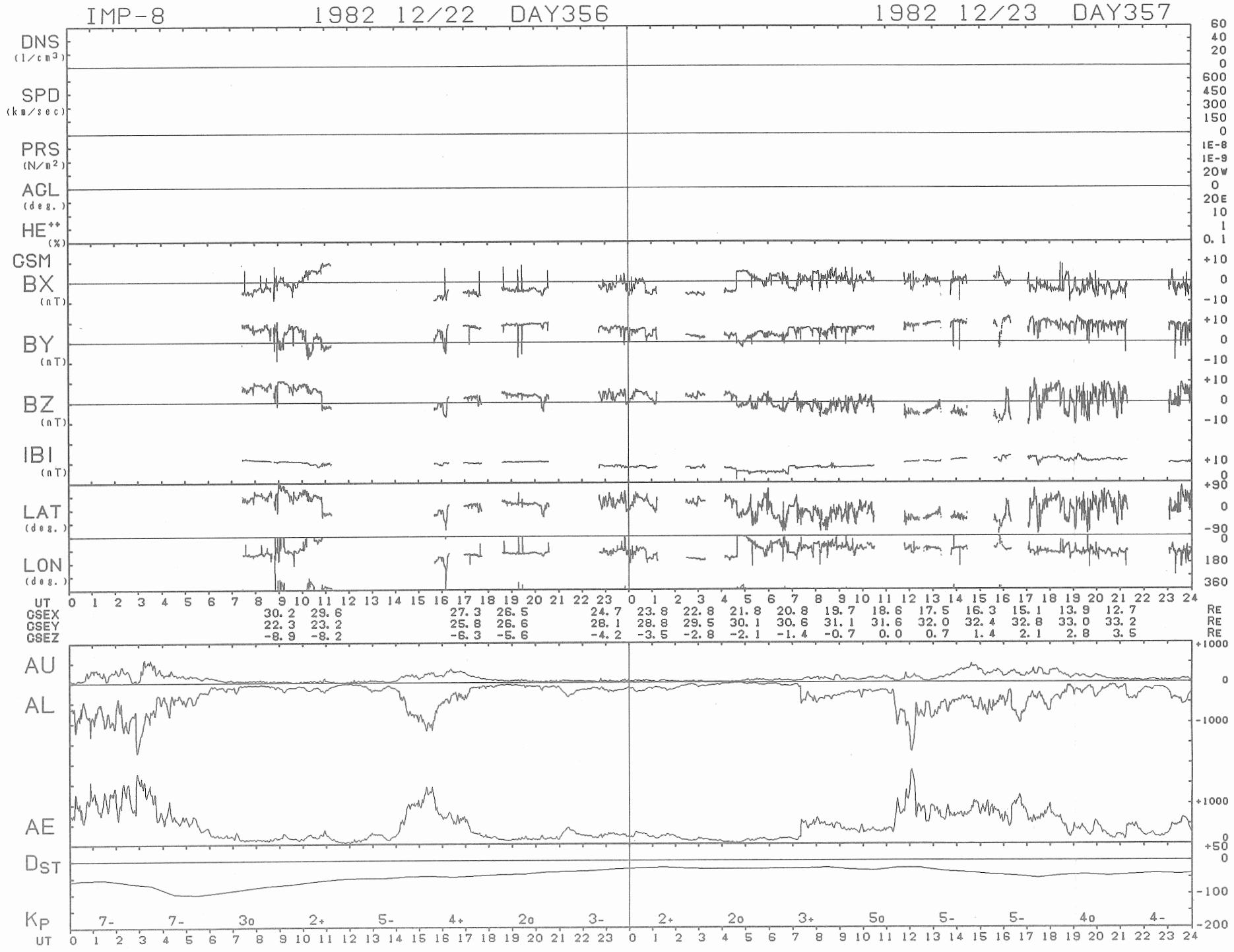

IMP-8
1982 12/12 DAY346
1982 12/13 DAY347
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.8 0.5 -0.7 -2.0 -3.2 -4.5 -8.2 -9.4 -10.6 -11.8 -12.9 -15.1 -16.2 -17.2 -18.2 -19.1 -21.7 RE
GSEY 35.0 34.7 34.4 34.0 33.5 33.0 31.0 30.2 29.4 28.5 27.6 25.5 24.4 23.2 21.9 20.7 16.5 RE
GSEZ 5.4 6.0 6.7 7.3 7.9 8.5 10.2 10.8 11.3 11.8 12.2 13.0 13.4 13.7 14.1 14.3 14.9 RE
AU
AL
AE
DST
KP
3+ 2+ 2o 4o 4- 3o 2o 2o 1+ 2o 1+ 2- 1- 2- 2o 3-
UT

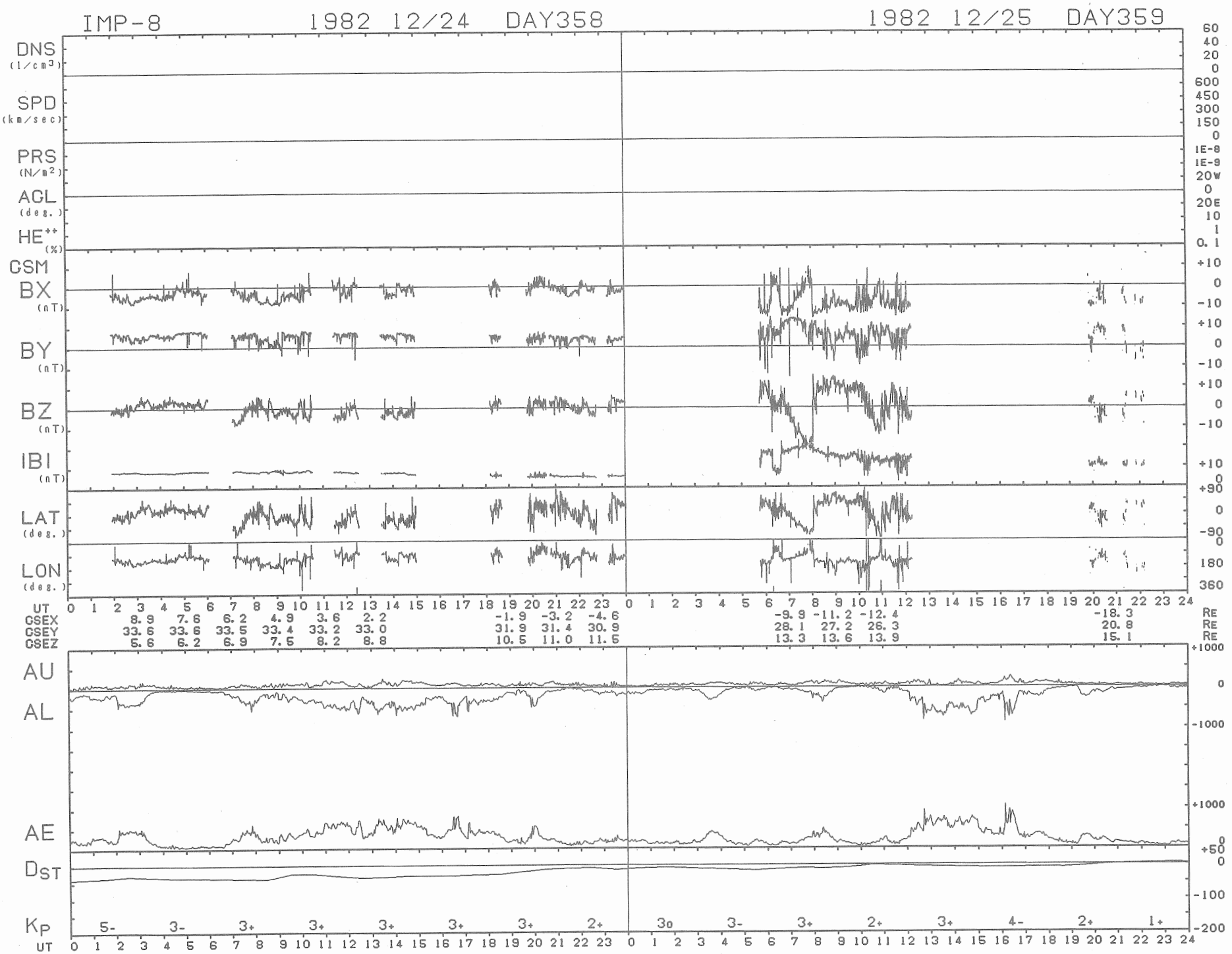

IMP-8
1982 12/14 DAY348
1982 12/15 DAY349
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.7 -26.2 -26.3 -26.4 -22.6 -21.8 -21.0 -20.1 RE
GSEY 12.0 2.2 0.5 -1.2 -18.4 -19.7 -21.0 -22.2 RE
GSEZ 15.1 14.4 14.2 13.8 8.0 7.3 6.5 5.8 RE
AU
AL
AE
DST
KP 1+ 2o 1o 2- 1o 0+ 3- 4o 3o 3o 3+ 4- 2o 2- 1- 0+
UT

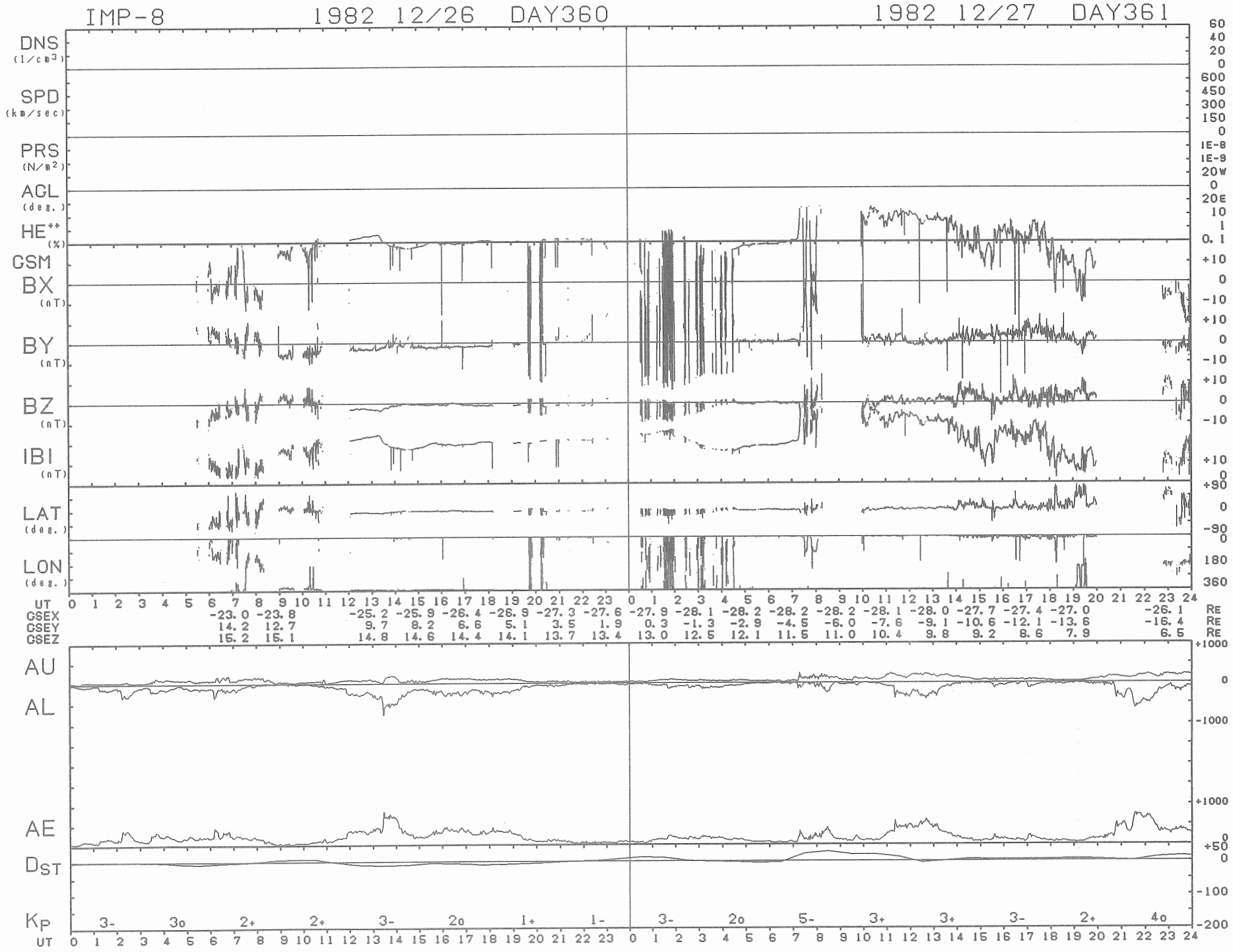

IMP-8
1982 12/16 DAY350
1982 12/17 DAY351
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.2 -16.2 -15.1 -13.9 -12.7 -11.5 -10.3 -9.1 -5.2 -3.9 -2.6 -1.3 0.1 1.4 2.7 5.4 6.7 RE
GSEY -25.5 -26.5 -27.4 -28.2 -29.0 -29.7 -30.3 -30.9 -32.1 -32.4 -32.6 -32.8 -32.9 -32.9 -32.8 -32.6 -32.3 RE
GSEZ 3.4 2.6 1.8 1.0 0.2 -0.6 -1.5 -2.3 -4.7 -5.5 -6.2 -7.0 -7.7 -8.5 -9.2 -10.5 -11.2 RE
AU
AL
AE
DST
KP
1o 1+ 2+ 3- 3- 3+ 3o 4+ 4+ 5o 7+ 6o 6- 4+ 5o 4+
UT

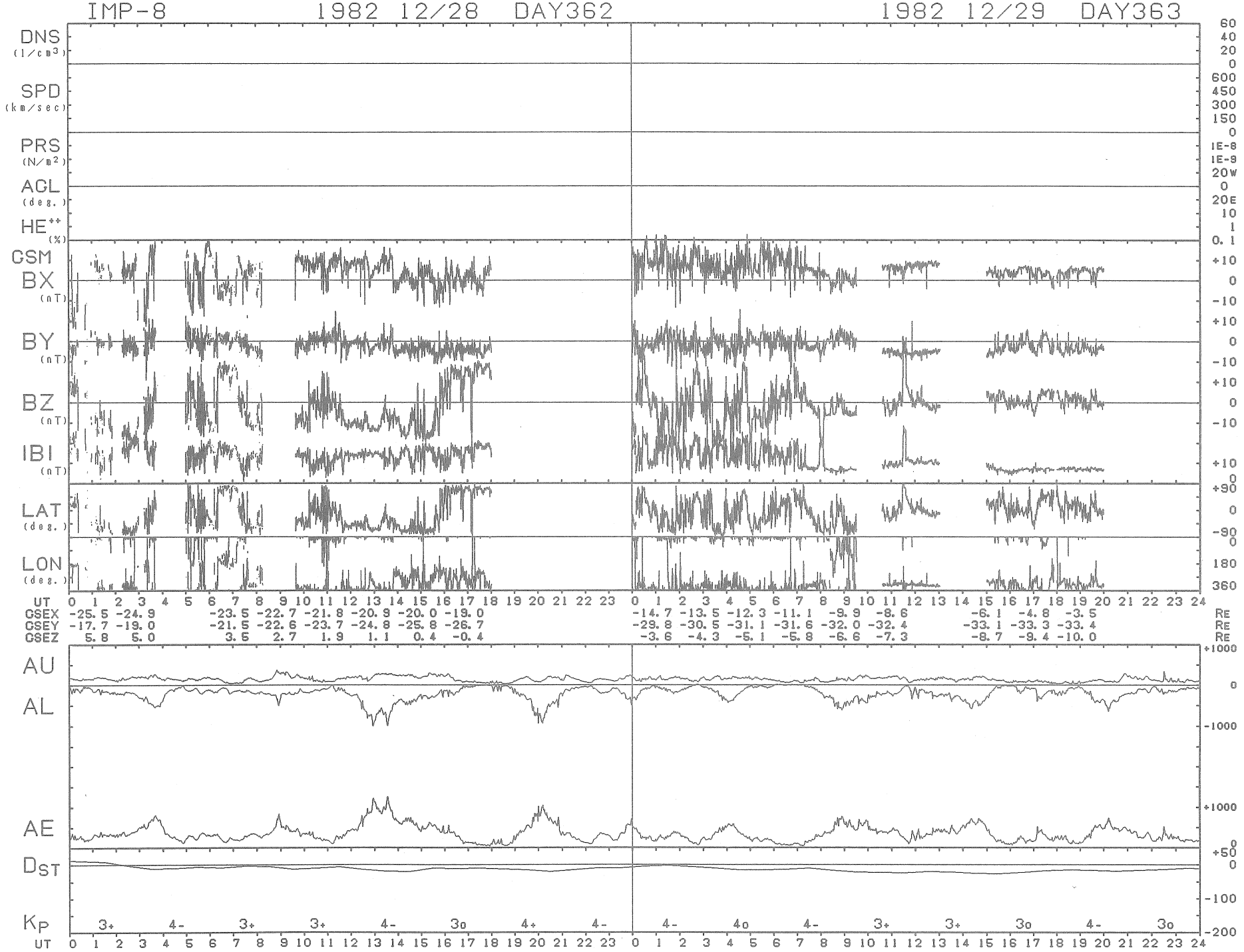

IMP-8
1982 12/18 DAY352
1982 12/19 DAY353
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.7 12.9 14.1 15.3 16.5 17.6 20.8 21.9 23.8 25.6 27.3 28.1 28.8 29.5 30.2 30.8 31.4 32.0 RE
GSEY -30.9 -30.4 -29.8 -29.2 -28.6 -27.9 -25.6 -24.8 -23.0 -21.1 -19.1 -18.0 -17.0 -15.9 -14.8 -13.6 -12.5 -11.3 RE
GSEZ -13.6 -14.1 -14.6 -15.1 -15.6 -16.0 -17.1 -17.5 -18.1 -18.5 -18.9 -19.0 -19.2 -19.2 -19.3 -19.3 -19.3 -19.3 RE
AU
AL
AE
DST
KP 5- 4o 5o 6o 5o 5- 4+ 3- 4o 4o 5o 6- 5- 3- 3- 5-
UT

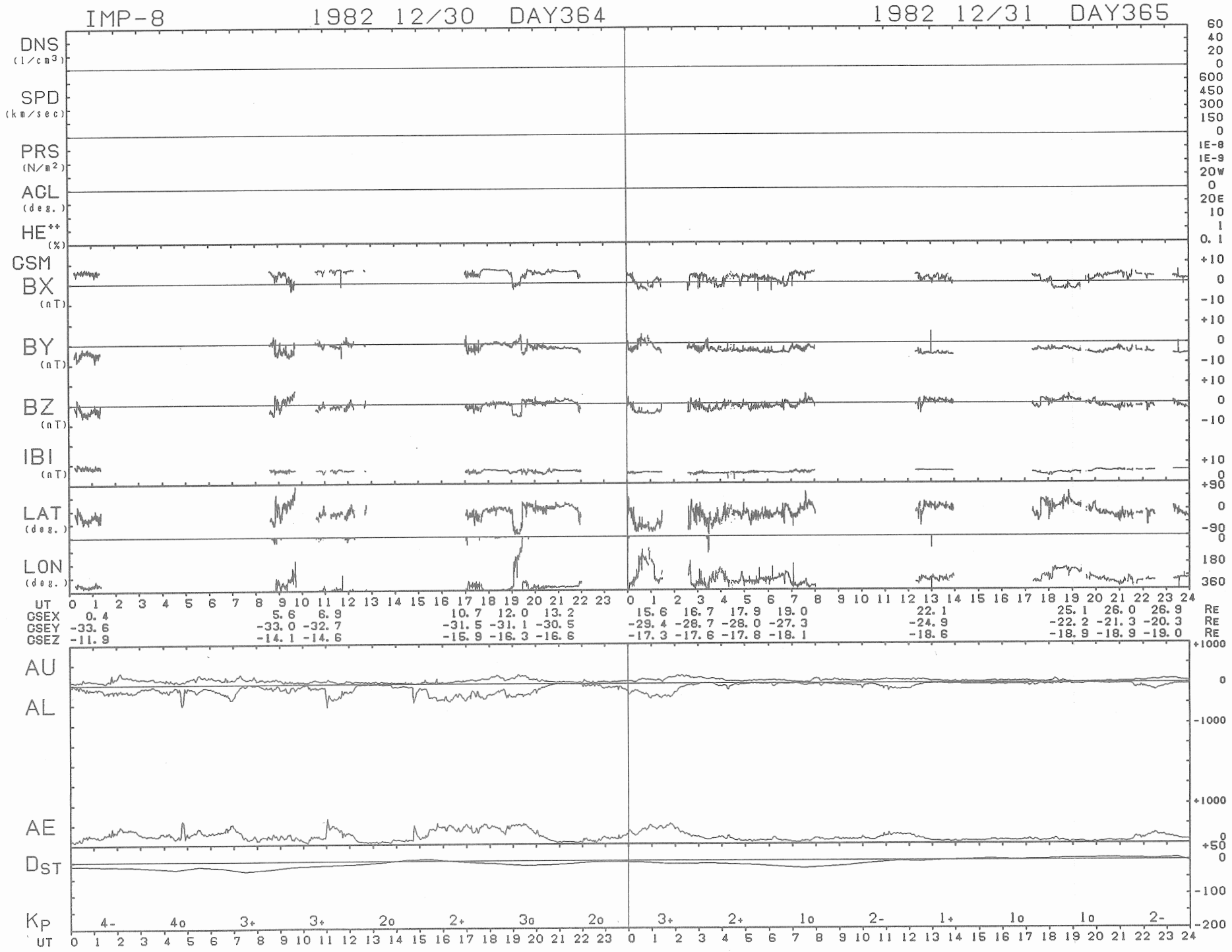

IMP-8
1982 12/20 DAY354
1982 12/21 DAY355
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.5 33.4 33.8 34.2 34.8 35.0 35.2 35.3 35.4 35.5 35.5 35.5 35.5 35.4 35.2 35.0 34.8 34.5
GSEY -10.2 -7.8 -6.6 -5.3 -2.9 -1.7 -0.4 0.8 2.0 3.3 4.5 5.7 6.9 8.1 9.3 10.5 11.6 12.8
GSEZ -19.3 -19.1 -19.0 -18.9 -18.5 -18.3 -18.0 -17.8 -17.5 -17.2 -16.8 -16.5 -16.1 -15.7 -15.3 -14.8 -14.4 -13.9
RE
AU
AL
AE
DST
KP
4+ 4+ 5- 5o 6o 5o 5+ 4+ 3+ 4o 5- 4+ 4o 5+ 5- 5+
UT

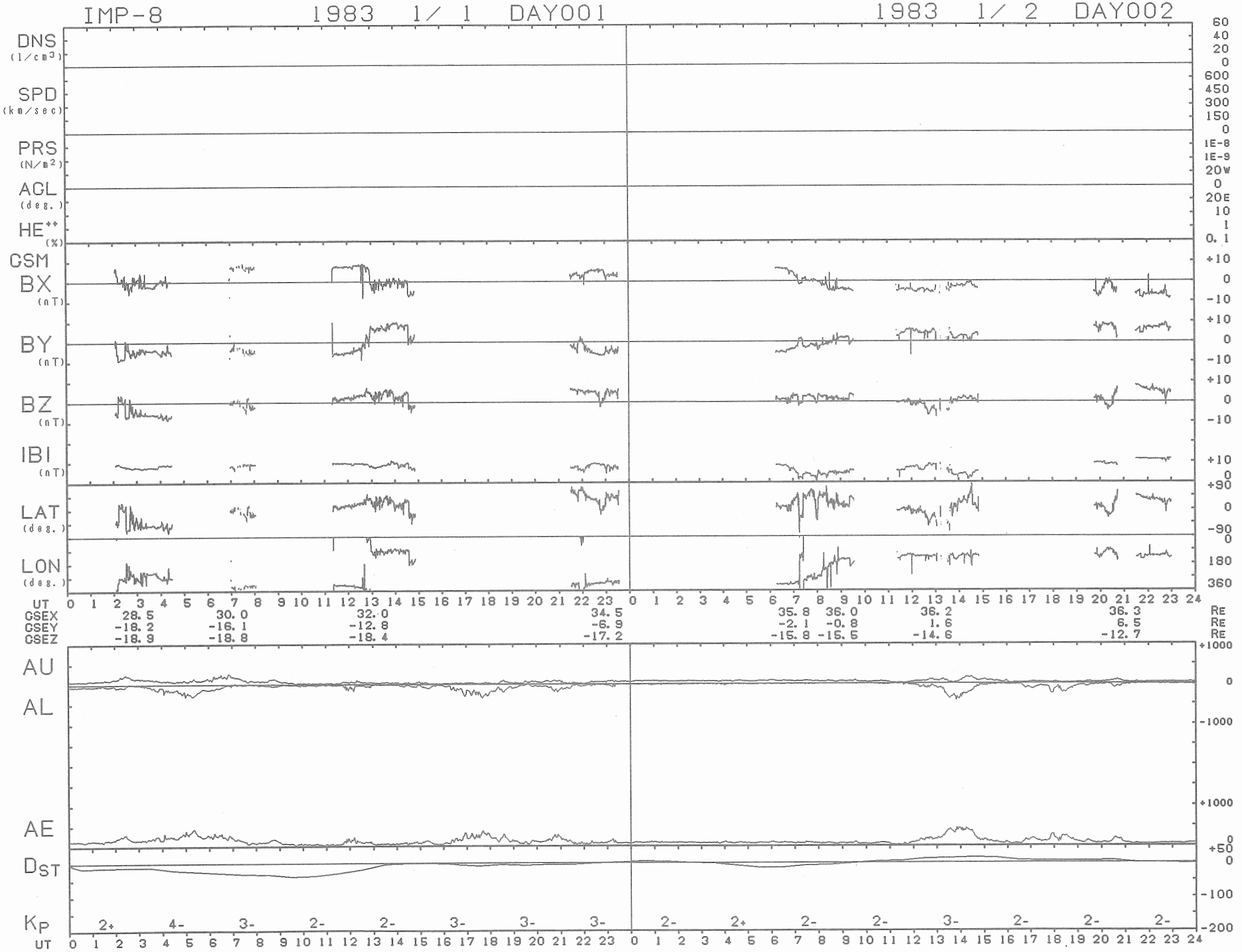

IMP-8
1982 12/22 DAY356
1982 12/23 DAY357
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.2 29.6 27.3 26.5 24.7 23.8 22.8 21.8 20.8 19.7 18.6 17.5 16.3 15.1 13.9 12.7 RE
GSEY 22.3 23.2 25.8 26.6 28.1 28.8 29.5 30.1 30.6 31.1 31.6 32.0 32.4 32.8 33.0 33.2 RE
GSEZ -8.9 -8.2 -6.3 -5.6 -4.2 -3.5 -2.8 -2.1 -1.4 -0.7 0.0 0.7 1.4 2.1 2.8 3.5 RE
AU
AL
AE
DST
KP 7- 7- 3o 2+ 5- 4+ 2o 3- 2+ 2o 3+ 5o 5- 5- 4o 4-
UT

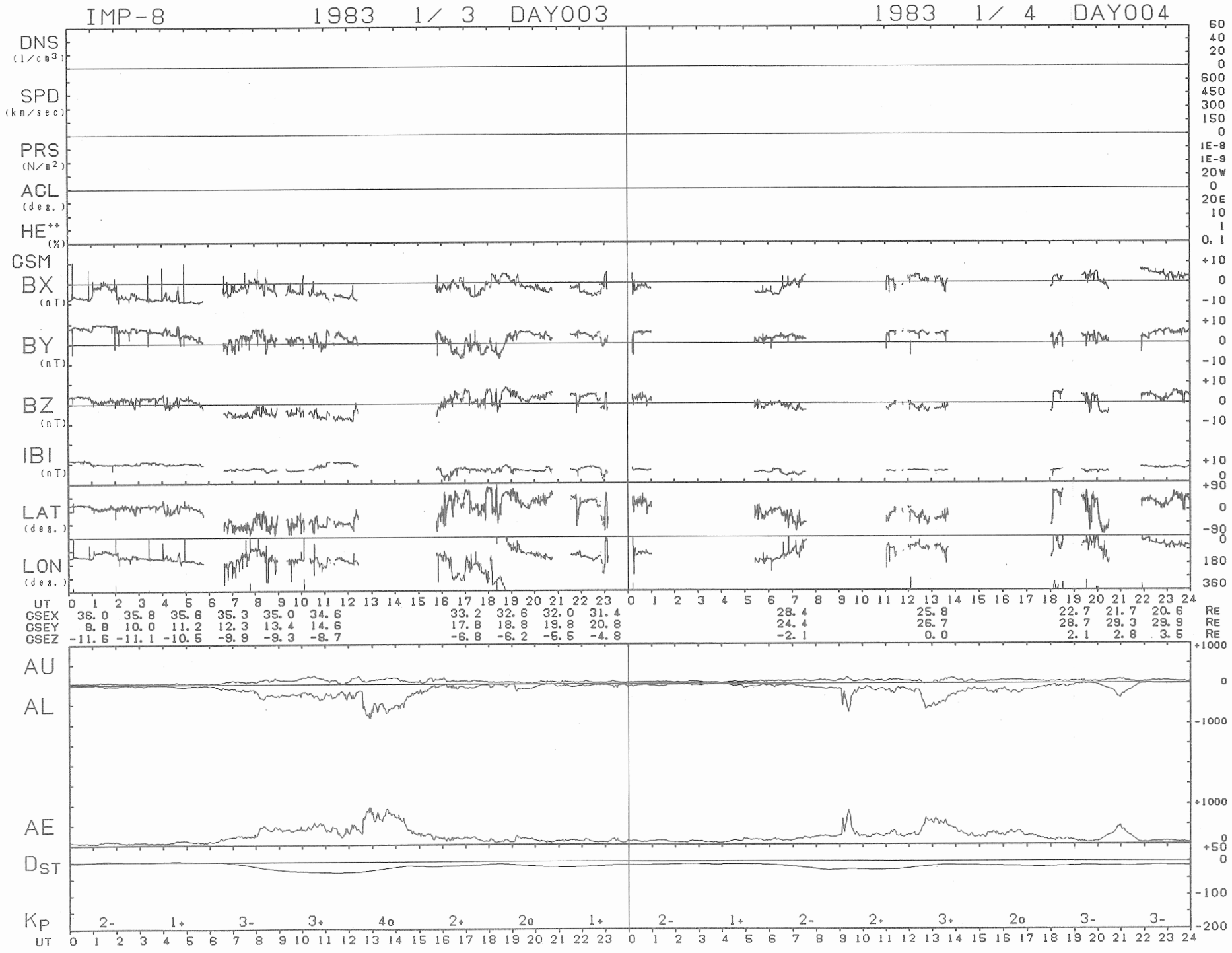

IMP-8
1982 12/24 DAY358
1982 12/25 DAY359
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.9 7.6 6.2 4.9 3.6 2.2 -1.9 -3.2 -4.6 -9.9 -11.2 -12.4 -18.3 RE
GSEY 33.6 33.6 33.5 33.4 33.2 33.0 31.9 31.4 30.9 28.1 27.2 26.3 20.8 RE
GSEZ 5.6 6.2 6.9 7.5 8.2 8.8 10.5 11.0 11.5 13.3 13.6 13.9 15.1 RE
AU
AL
AE
DST
KP 5- 3- 3+ 3+ 3+ 3+ 3+ 2+ 3o 3- 3+ 2+ 3+ 4- 2+ 1+
UT

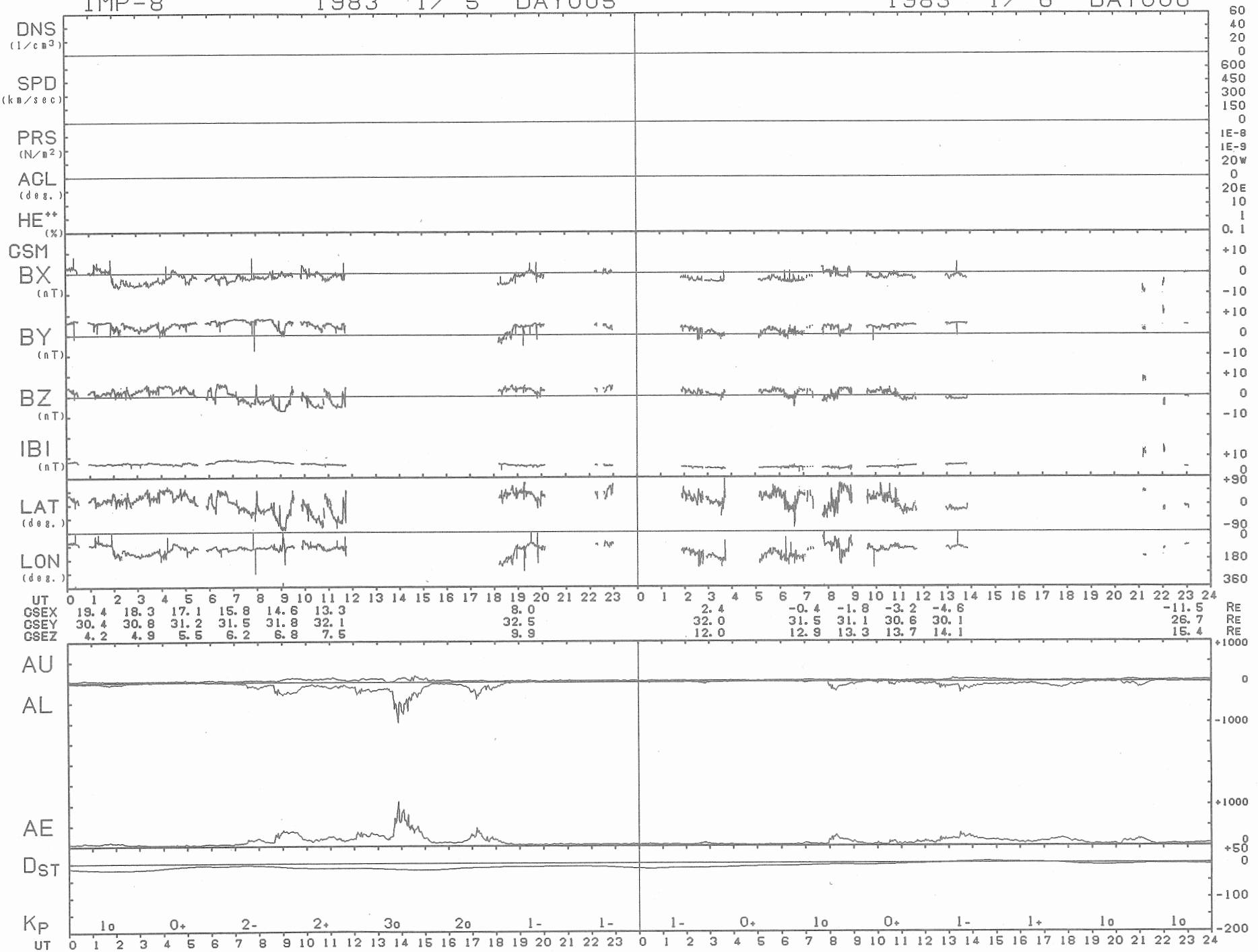

IMP-8
1982 12/26 DAY360
1982 12/27 DAY361
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.0 -23.8 -25.2 -25.9 -26.4 -26.9 -27.3 -27.6 -27.9 -28.1 -28.2 -28.2 -28.2 -28.1 -28.0 -27.7 -27.4 -27.0 -26.1 RE
GSEY 14.2 12.7 9.7 8.2 6.6 5.1 3.5 1.9 0.3 -1.3 -2.9 -4.5 -6.0 -7.6 -9.1 -10.6 -12.1 -13.6 -16.4 RE
GSEZ 15.2 15.1 14.8 14.6 14.4 14.1 13.7 13.4 13.0 12.5 12.1 11.5 11.0 10.4 9.8 9.2 8.6 7.9 6.5 RE
AU
AL
AE
DST
KP
3- 3o 2+ 2+ 3- 2o 1+ 1- 3- 2o 5- 3+ 3+ 3- 2+ 4o
UT

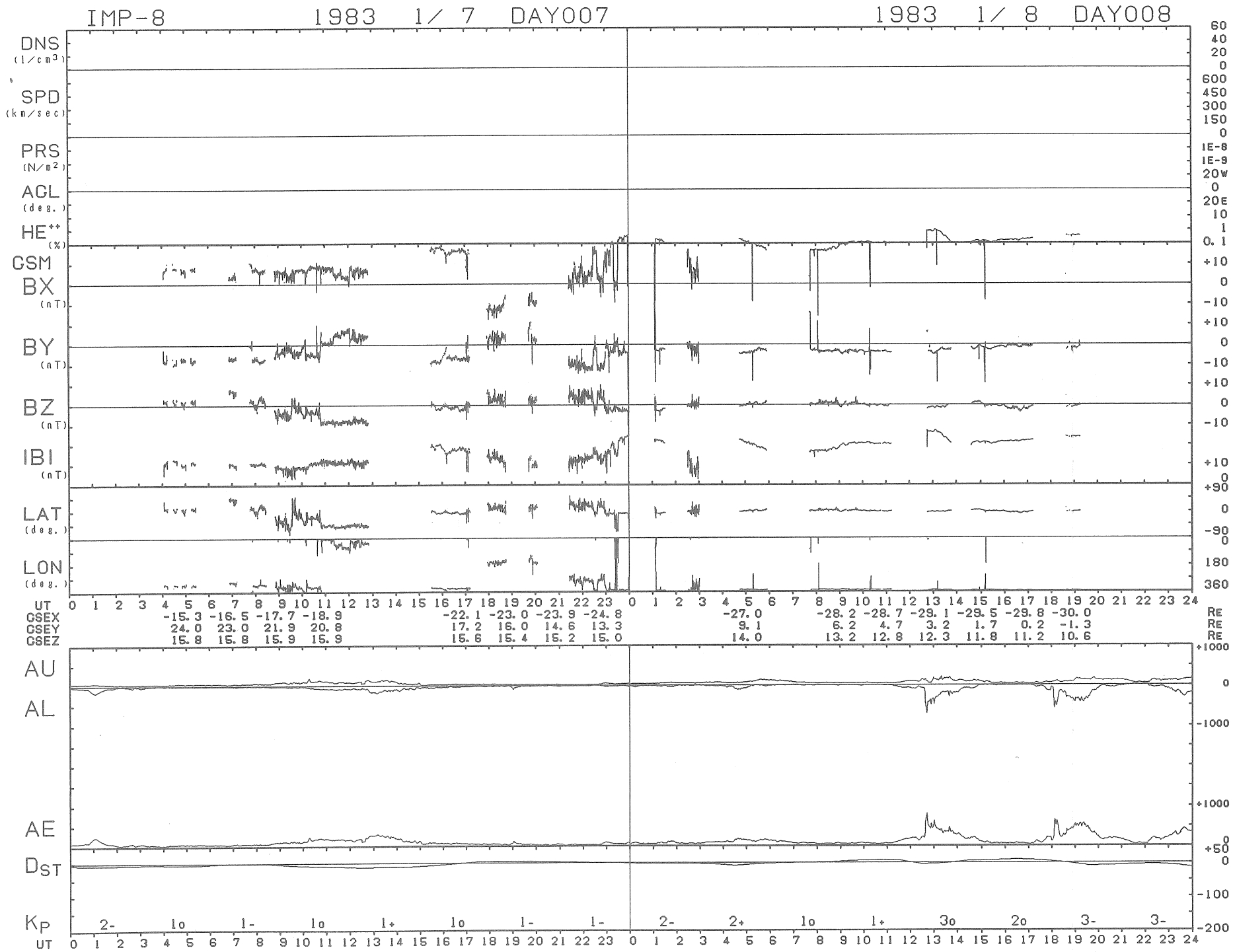

IMP-8 1982 12/28 DAY362
1982 12/29 DAY363
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.5 -24.9 -23.5 -22.7 -21.8 -20.9 -20.0 -19.0 -14.7 -13.5 -12.3 -11.1 -9.9 -8.6 -6.1 -4.8 -3.5 RE
GSEY -17.7 -19.0 -21.5 -22.6 -23.7 -24.8 -25.8 -26.7 -29.8 -30.5 -31.1 -31.6 -32.0 -32.4 -33.1 -33.3 -33.4 RE
GSEZ 5.8 5.0 3.5 2.7 1.9 1.1 0.4 -0.4 -3.6 -4.3 -5.1 -5.8 -6.6 -7.3 -8.7 -9.4 -10.0 RE
AU
AL
AE
DST
KP
3+ 4- 3+ 3+ 4- 3o 4+ 4- 4- 4o 4- 3+ 3+ 3o 4- 3o
UT

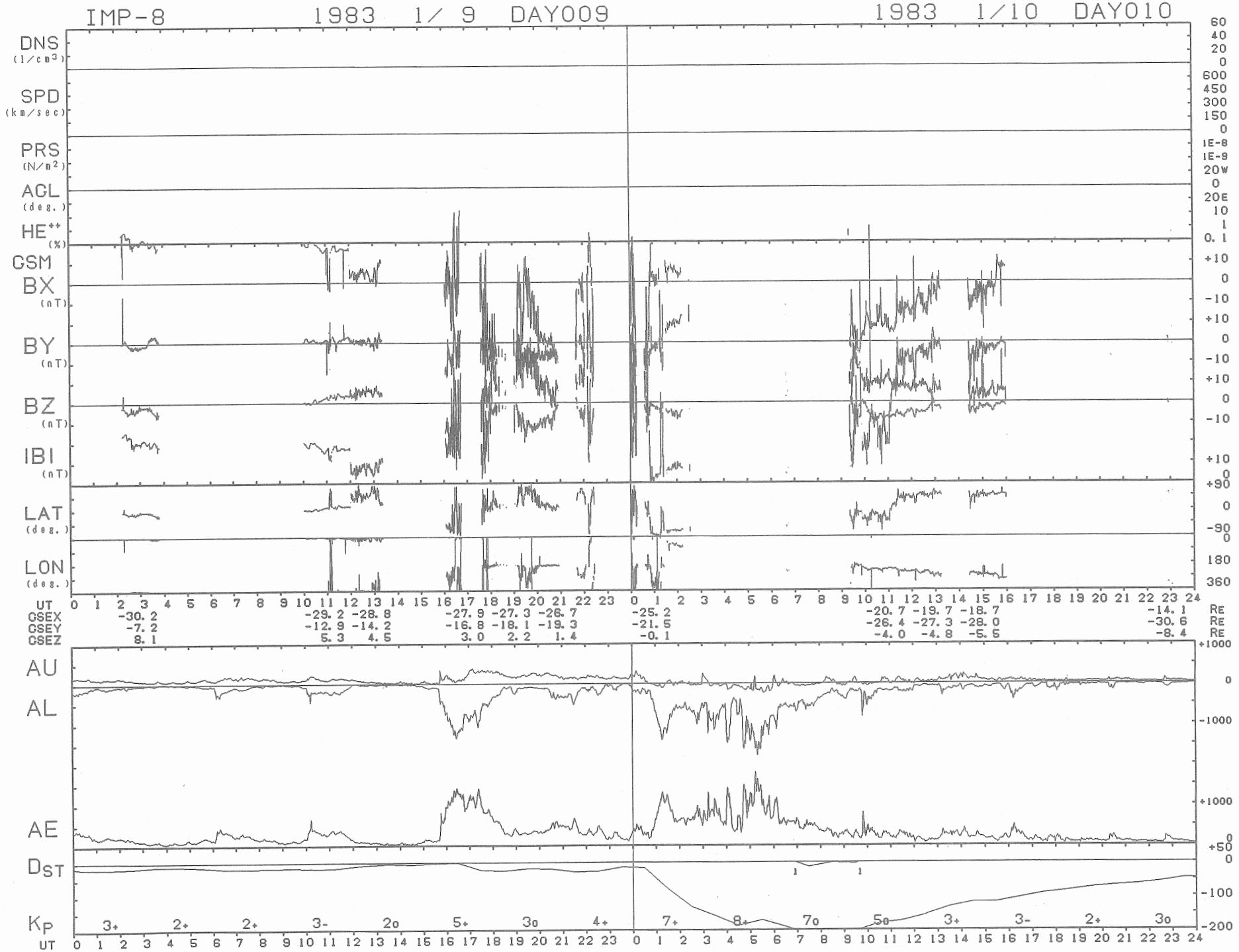

IMP-8
1982 12/30 DAY364
1982 12/31 DAY365
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.4 5.6 6.9 10.7 12.0 13.2 15.6 16.7 17.9 19.0 22.1 25.1 26.0 26.9 RE
GSEY -33.6 -33.0 -32.7 -31.5 -31.1 -30.5 -29.4 -28.7 -28.0 -27.3 -24.9 -22.2 -21.3 -20.3 RE
GSEZ -11.9 -14.1 -14.6 -15.9 -16.3 -16.6 -17.3 -17.6 -17.8 -18.1 -18.6 -18.9 -18.9 -19.0 RE
AU
AL
AE
DST
KP
4- 4o 3+ 3+ 2o 2+ 3o 2o 3+ 2+ 1o 2- 1+ 1o 1o 2-
UT

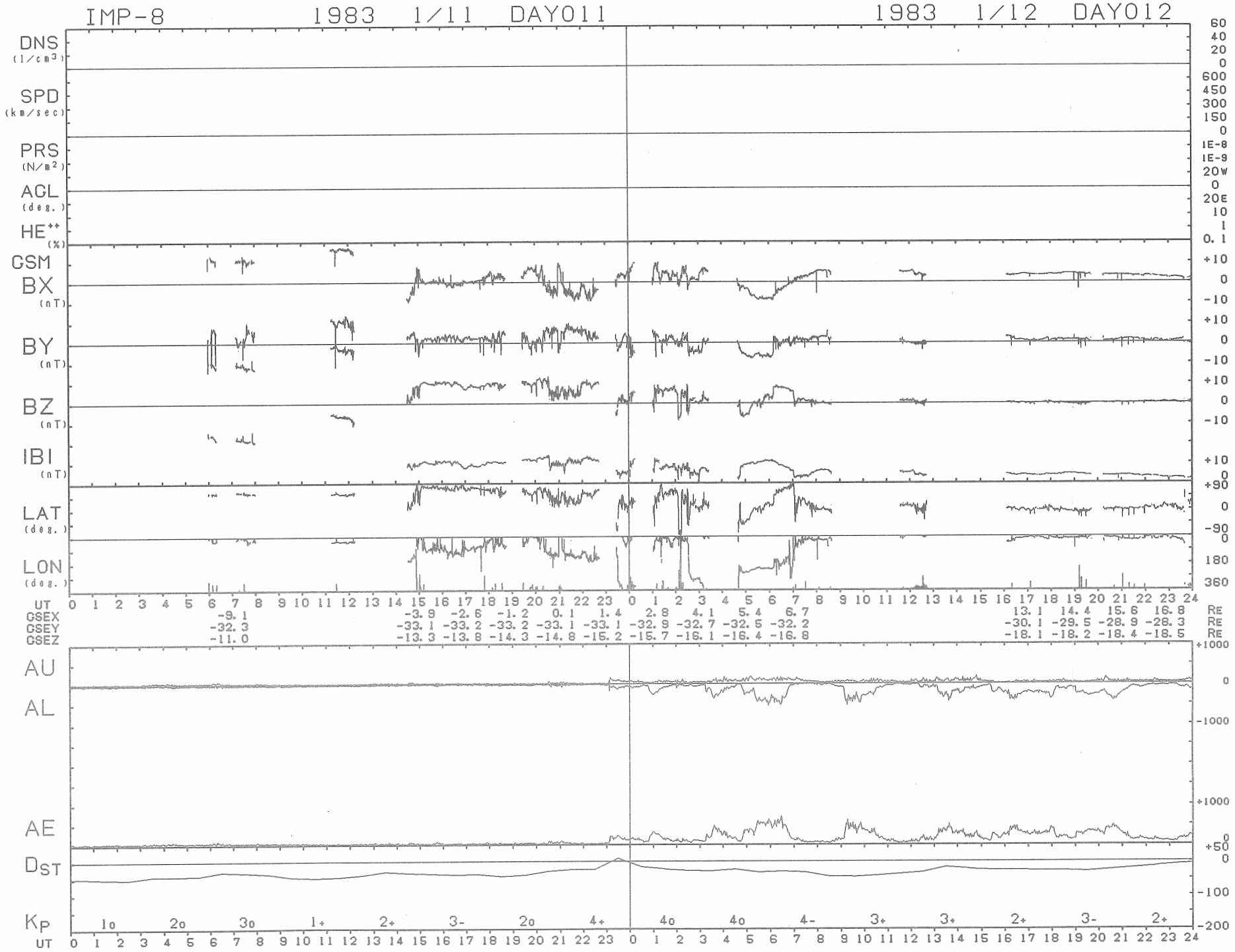

IMP-8 1983 1/ 1 DAY001
1983 1/ 2 DAY002
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.5 30.0 32.0 34.5 35.8 36.0 36.2 36.3 RE
GSEY -18.2 -16.1 -12.8 -6.9 -2.1 -0.8 1.6 6.5 RE
GSEZ -18.9 -18.8 -18.4 -17.2 -15.8 -15.5 -14.6 -12.7 RE
AU
AL
AE
DST
KP 2+ 4- 3- 2- 2- 3- 3- 3- 2- 2+ 2- 2- 3- 2- 2- 2-
UT

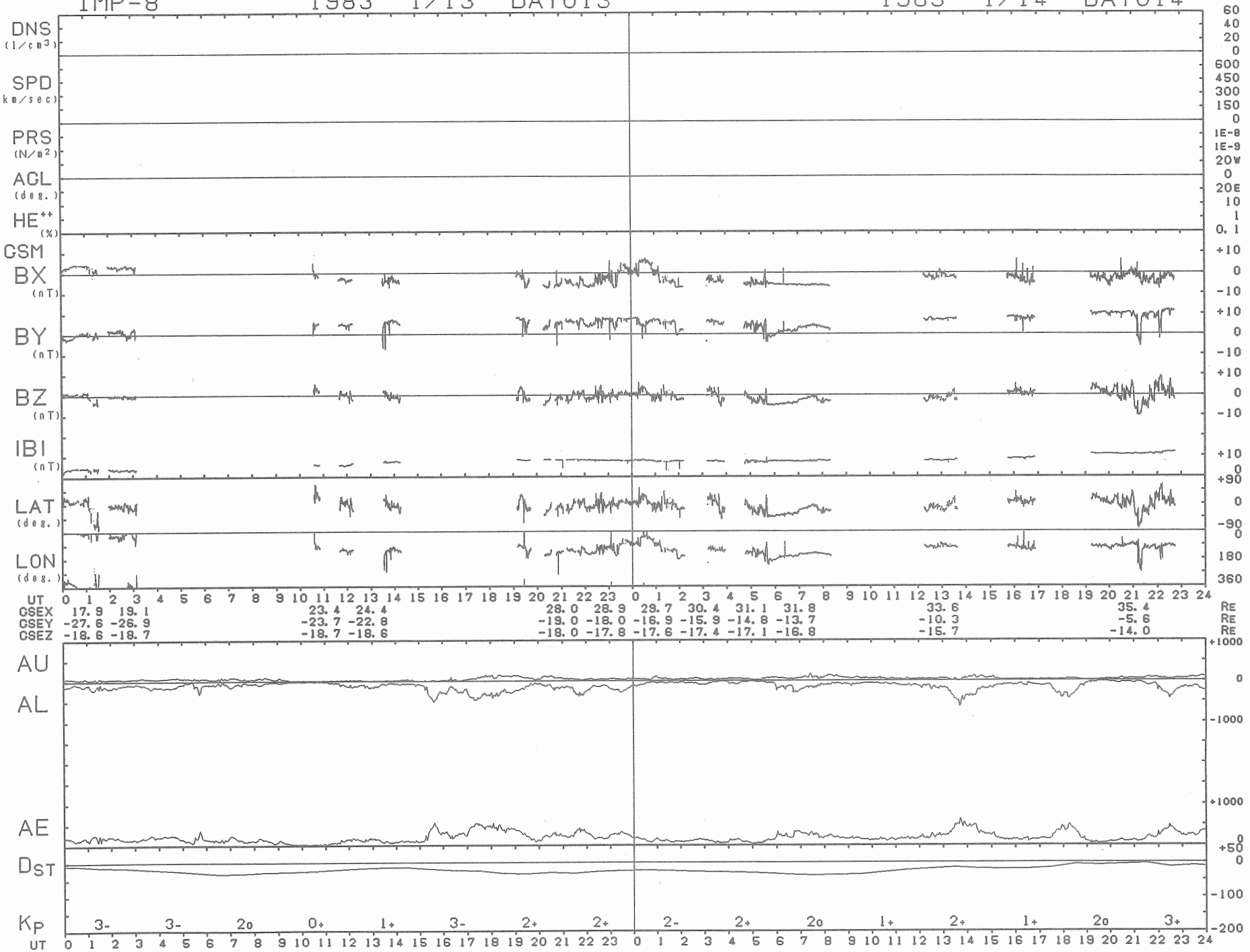

IMP-8 1983 1/ 3 DAY003
1983 1/ 4 DAY004
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 36.0 35.8 35.6 35.3 35.0 34.6 33.2 32.6 32.0 31.4 28.4 25.8 22.7 21.7 20.6 RE
GSEY 8.8 10.0 11.2 12.3 13.4 14.6 17.8 18.8 19.8 20.8 24.4 26.7 28.7 29.3 29.9 RE
GSEZ -11.6 -11.1 -10.5 -9.9 -9.3 -8.7 -6.8 -6.2 -5.5 -4.8 -2.1 0.0 2.1 2.8 3.5 RE
AU
AL
AE
DST
KP 2- 1+ 3- 3+ 4o 2+ 2o 1+ 2- 1+ 2- 2+ 3+ 2o 3- 3-
UT

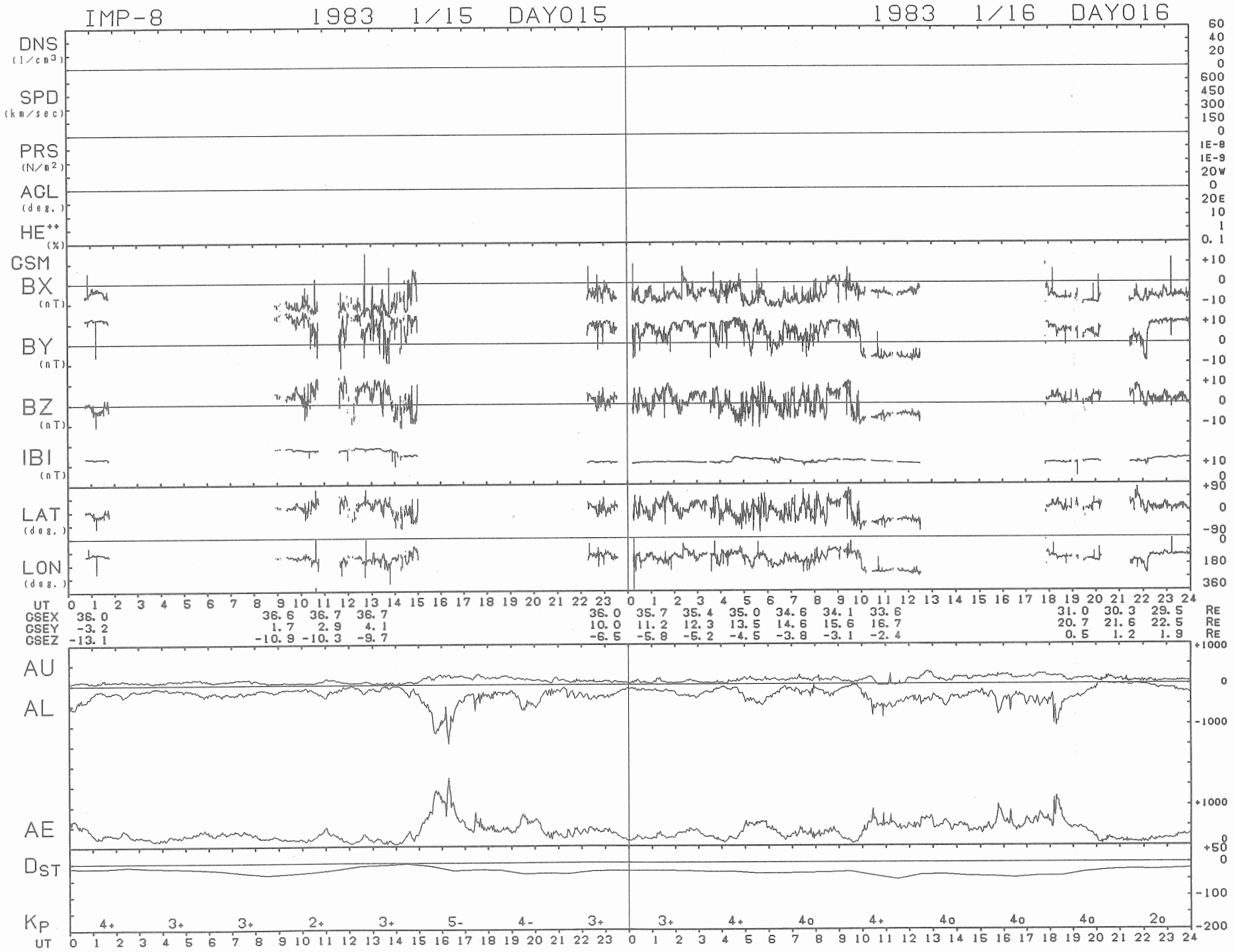

IMP-8 1983 1/ 5 DAY005
1983 1/ 6 DAY006
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.4 18.3 17.1 15.8 14.6 13.3 8.0 2.4 -0.4 -1.8 -3.2 -4.6 -11.5 RE
GSEY 30.4 30.8 31.2 31.5 31.8 32.1 32.5 32.0 31.5 31.1 30.6 30.1 26.7 RE
GSEZ 4.2 4.9 5.5 6.2 6.8 7.5 9.9 12.0 12.9 13.3 13.7 14.1 15.4 RE
AU
AL
AE
DST
KP 1o 0+ 2- 2+ 3o 2o 1- 1- 1- 0+ 1o 0+ 1- 1+ 1o 1o
UT

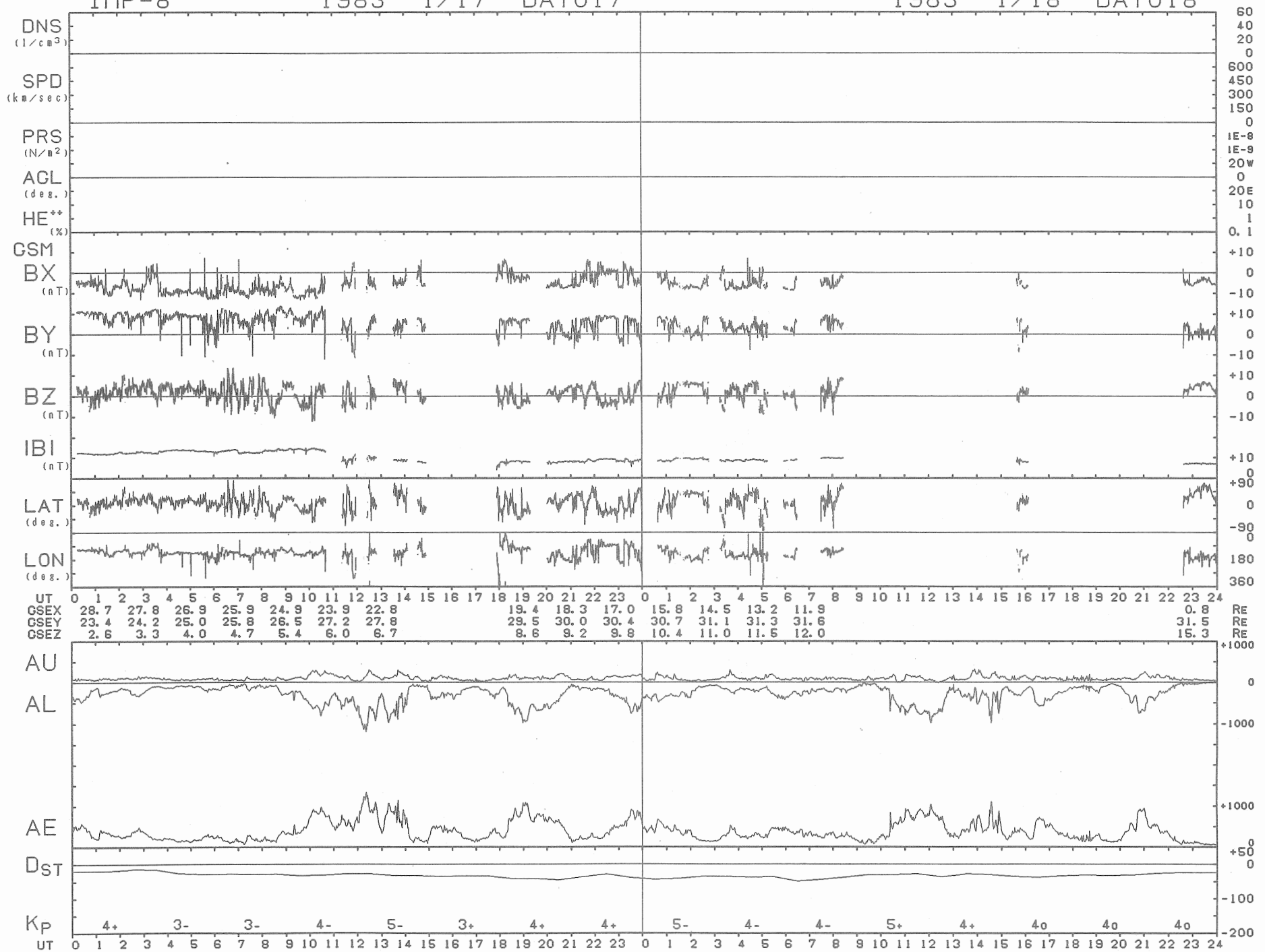

IMP-8 1983 1/ 7 DAY007
1983 1/ 8 DAY008
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.3 -16.5 -17.7 -18.9 -22.1 -23.0 -23.9 -24.8 -27.0 -28.2 -28.7 -29.1 -29.5 -29.8 -30.0 RE
GSEY 24.0 23.0 21.9 20.8 17.2 16.0 14.6 13.3 9.1 6.2 4.7 3.2 1.7 0.2 -1.3 RE
GSEZ 15.8 15.8 15.9 15.9 15.6 15.4 15.2 15.0 14.0 13.2 12.8 12.3 11.8 11.2 10.6 RE
AU
AL
AE
DST
KP 2- 1o 1- 1o 1+ 1o 1- 1- 2- 2+ 1o 1+ 3o 2o 3- 3-
UT

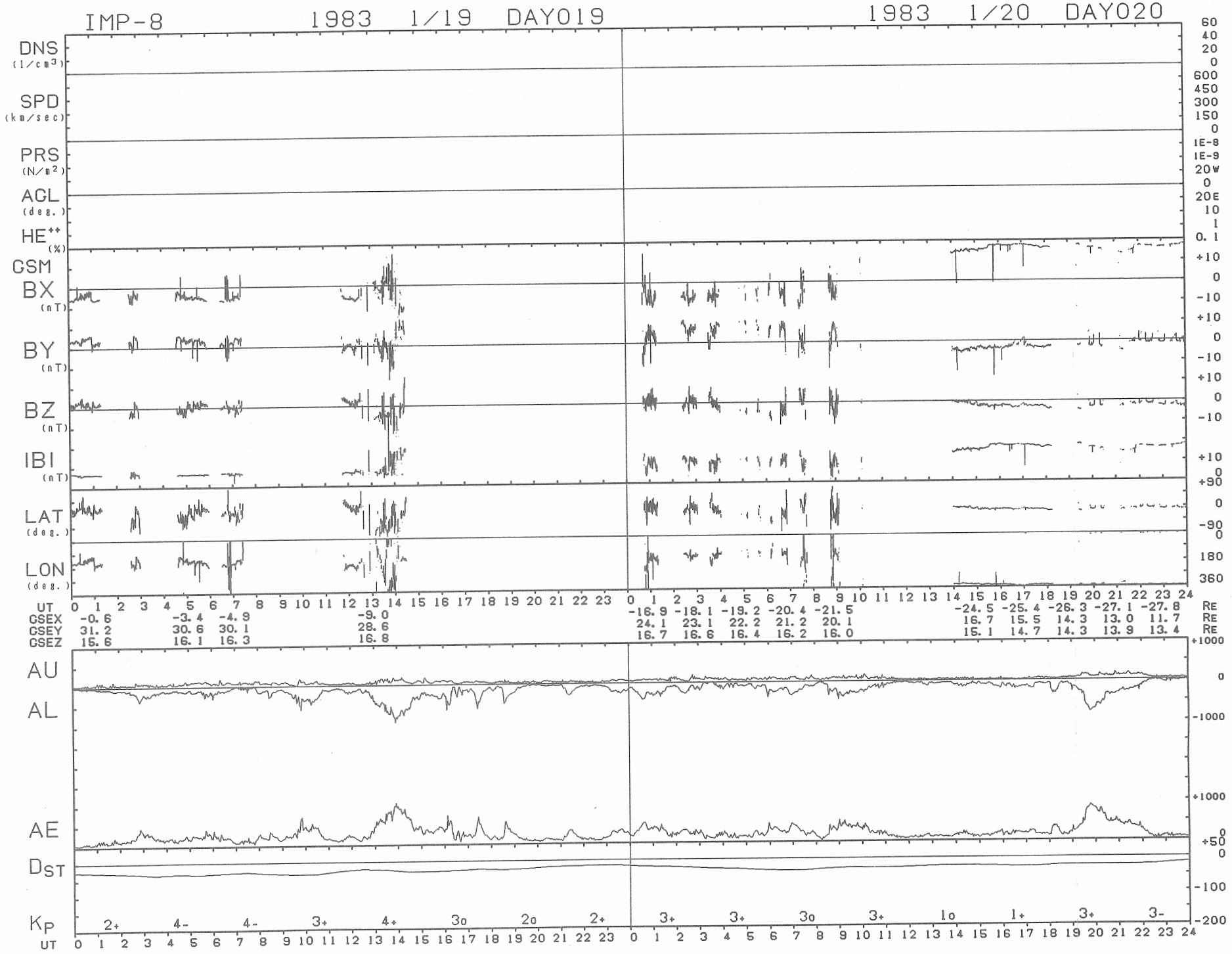

IMP-8
1983 1/ 9 DAY009
1983 1/10 DAY010
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.2 -29.2 -28.8 -27.9 -27.3 -26.7 -25.2 -20.7 -19.7 -18.7 -14.1 RE
GSEY -7.2 -12.9 -14.2 -16.8 -18.1 -19.3 -21.5 -26.4 -27.3 -28.0 -30.6 RE
GSEZ 8.1 5.3 4.5 3.0 2.2 1.4 -0.1 -4.0 -4.8 -5.6 -8.4 RE
AU
AL
AE
DST
KP
3+ 2+ 2+ 3- 2o 5+ 3o 4+ 7+ 8+ 7o 5o 3+ 3- 2+ 3o
UT

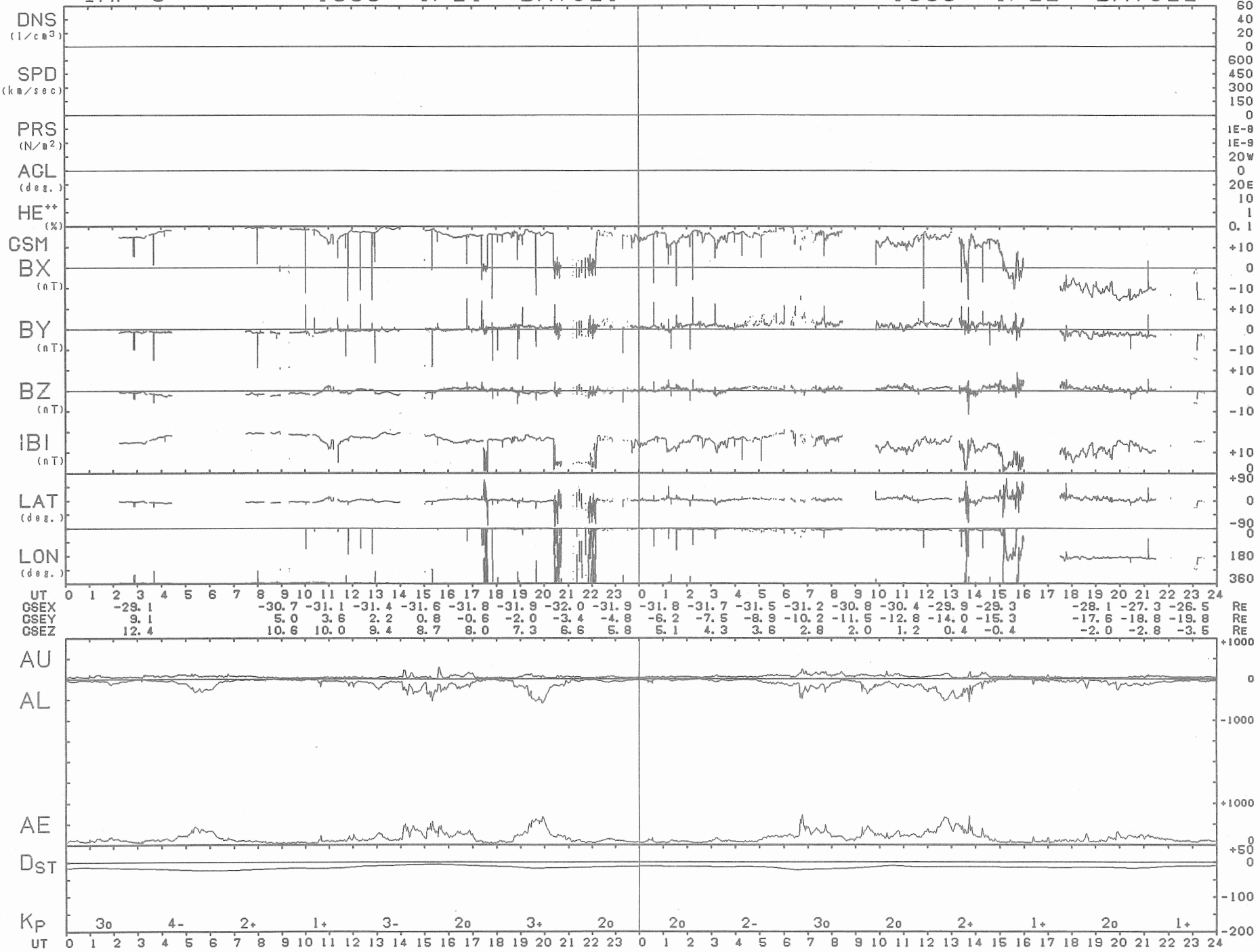

IMP-8 1983 1/11 DAY011
1983 1/12 DAY012
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
1o 2o 3o 1+ 2+ 3- 2o 4+ 4o 4o 4- 3+ 3+ 2+ 3- 2+

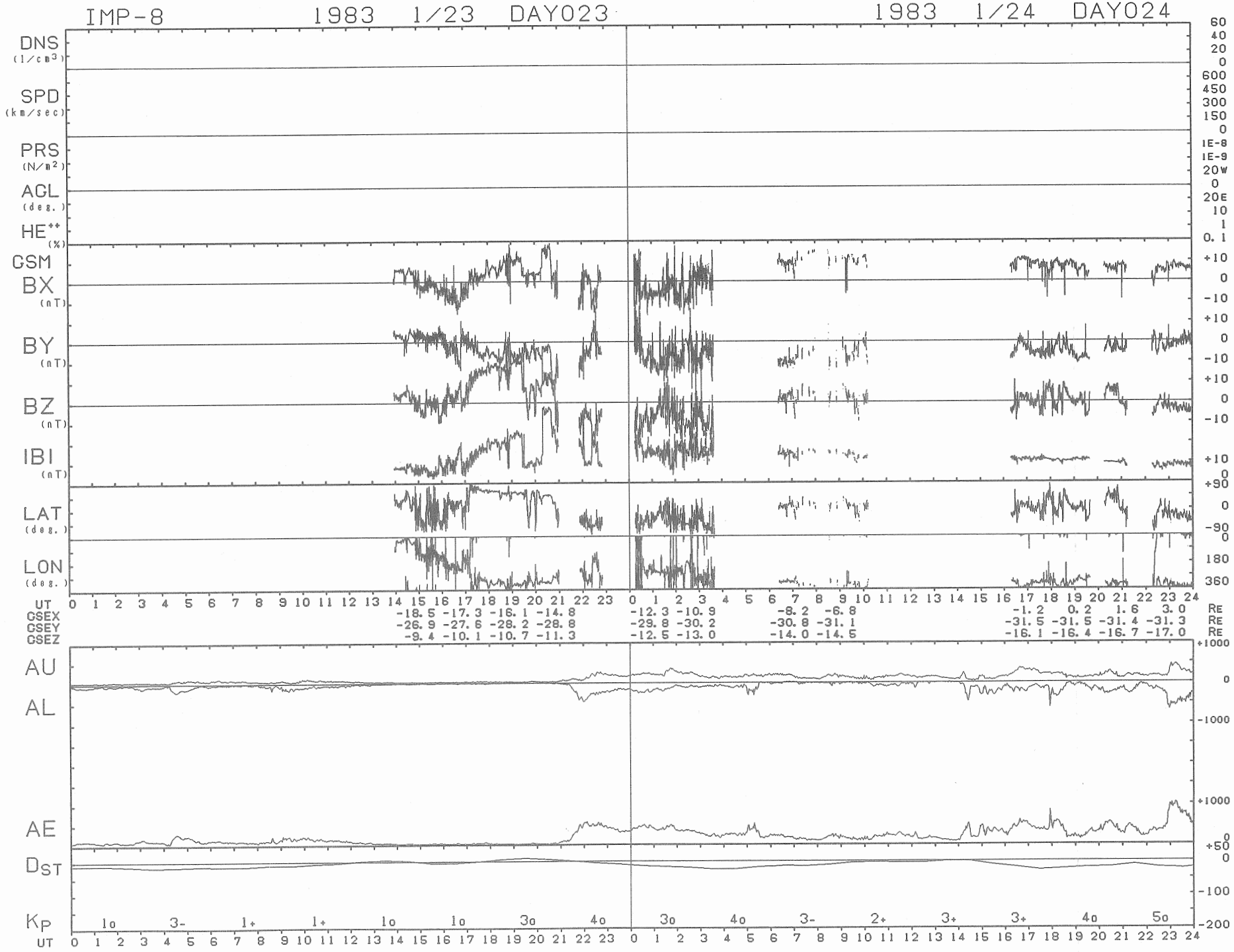

IMP-8
1983 1/13 DAY013
1983 1/14 DAY014
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 17.9 19.1 23.4 24.4 28.0 28.9 29.7 30.4 31.1 31.8 33.6 35.4 Re
GSEY -27.6 -26.9 -23.7 -22.8 -19.0 -18.0 -16.9 -15.9 -14.8 -13.7 -10.3 -5.6 Re
GSEZ -18.6 -18.7 -18.7 -18.6 -18.0 -17.8 -17.6 -17.4 -17.1 -16.8 -15.7 -14.0 Re
AU
AL
AE
Dst
Kp
3- 3- 2o 0+ 1+ 3- 2+ 2+ 2- 2+ 2o 1+ 2+ 1+ 2o 3+
UT

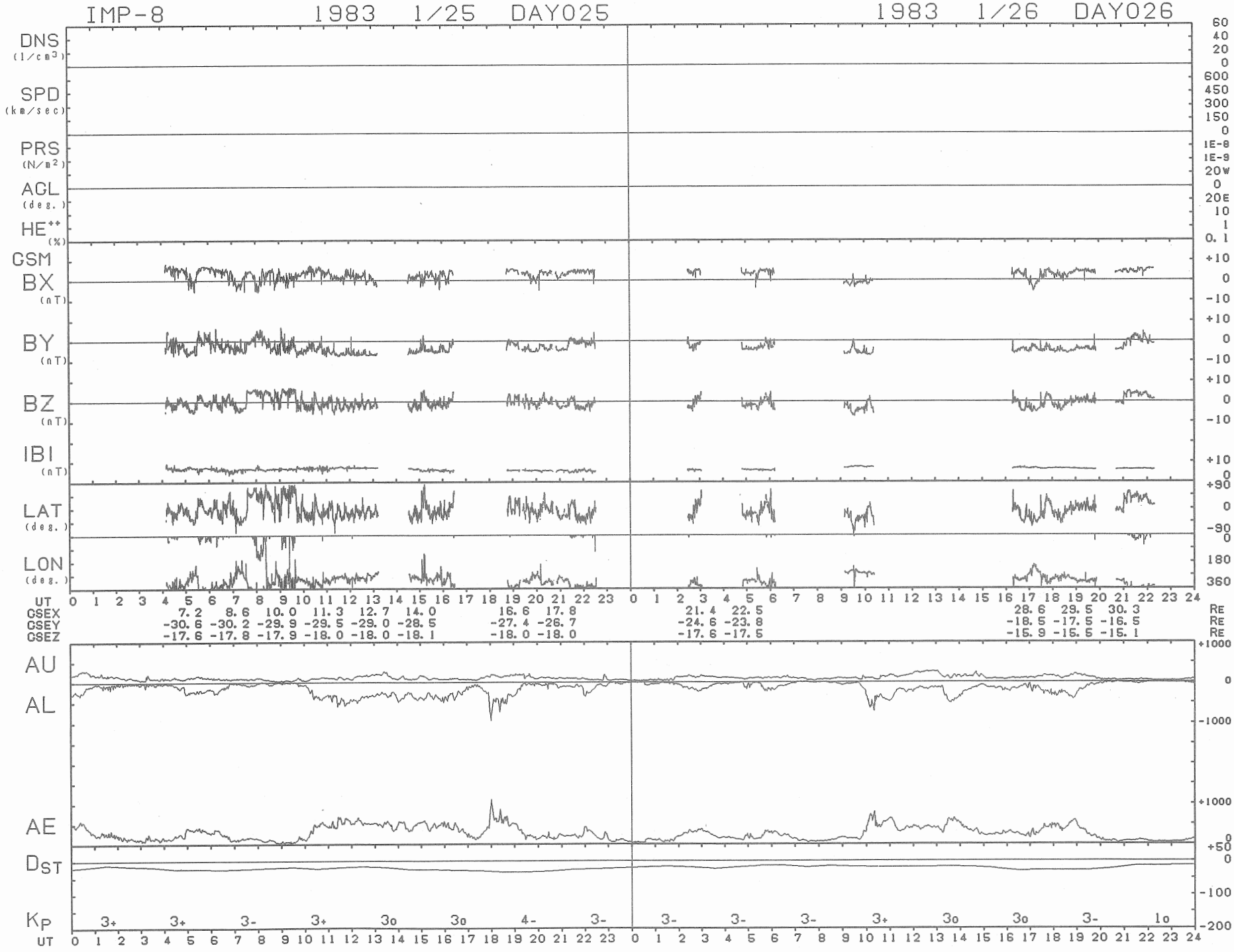

IMP-8 1983 1/15 DAY015
1983 1/16 DAY016
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 36.0 36.6 36.7 36.7 36.0 35.7 35.4 35.0 34.6 34.1 33.6 31.0 30.3 29.5 RE
GSEY -3.2 1.7 2.9 4.1 10.0 11.2 12.3 13.5 14.6 15.6 16.7 20.7 21.6 22.5 RE
GSEZ -13.1 -10.9 -10.3 -9.7 -6.5 -5.8 -5.2 -4.5 -3.8 -3.1 -2.4 0.5 1.2 1.9 RE
AU
AL
AE
DST
KP 4+ 3+ 3+ 2+ 3+ 5- 4- 3+ 3+ 4+ 4o 4+ 4o 4o 4o 2o
UT

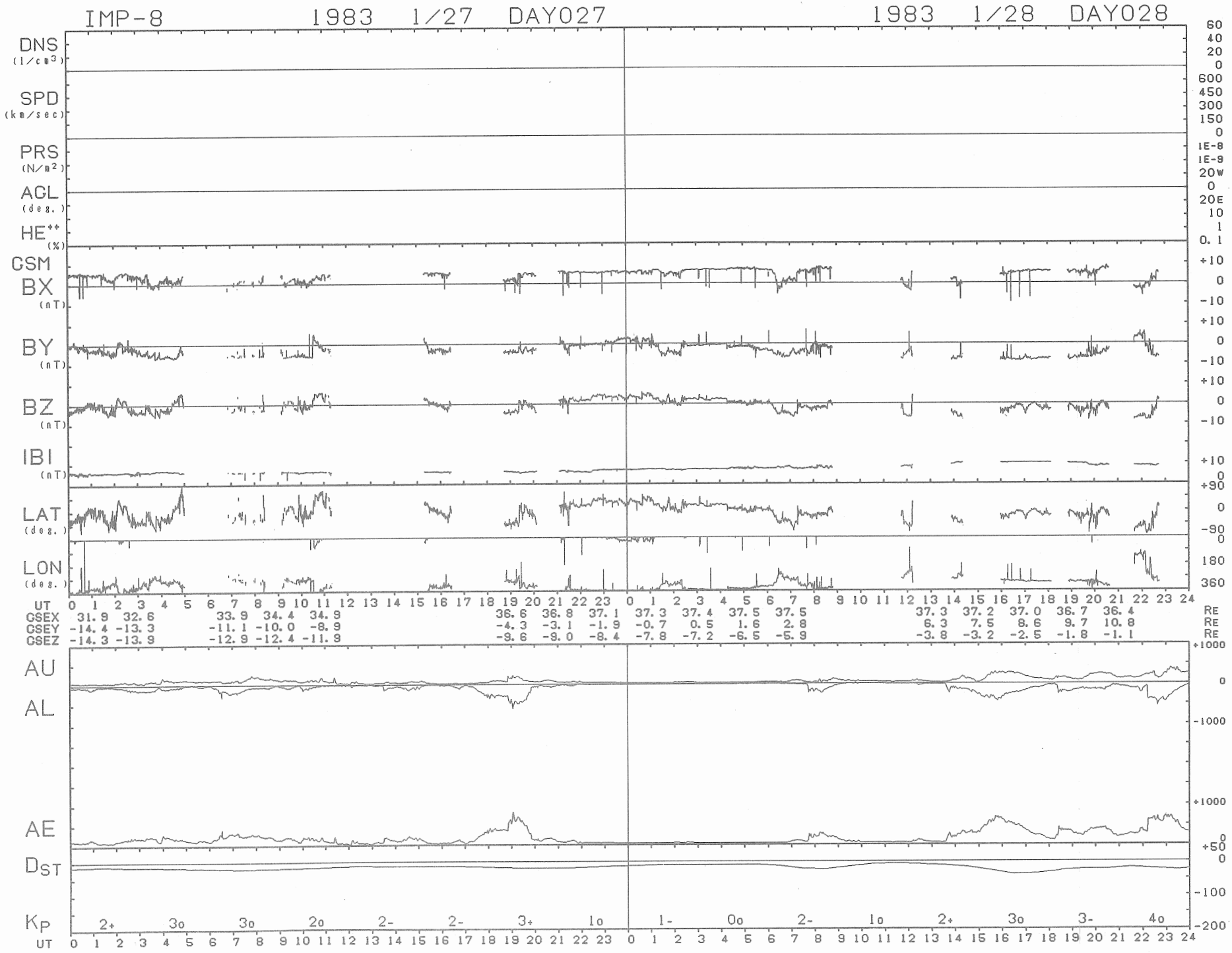

IMP-8 1983 1/17 DAY017
1983 1/18 DAY018
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.7 27.8 26.9 25.9 24.9 23.9 22.8 19.4 18.3 17.0 15.8 14.5 13.2 11.9 0.8 RE
GSEY 23.4 24.2 25.0 25.8 26.5 27.2 27.8 29.5 30.0 30.4 30.7 31.1 31.3 31.6 31.5 RE
GSEZ 2.6 3.3 4.0 4.7 5.4 6.0 6.7 8.6 9.2 9.8 10.4 11.0 11.5 12.0 15.3 RE
AU
AL
AE
DST
KP 4+ 3- 3- 4- 5- 3+ 4+ 4+ 5- 4- 4- 5+ 4+ 4o 4o 4o
UT

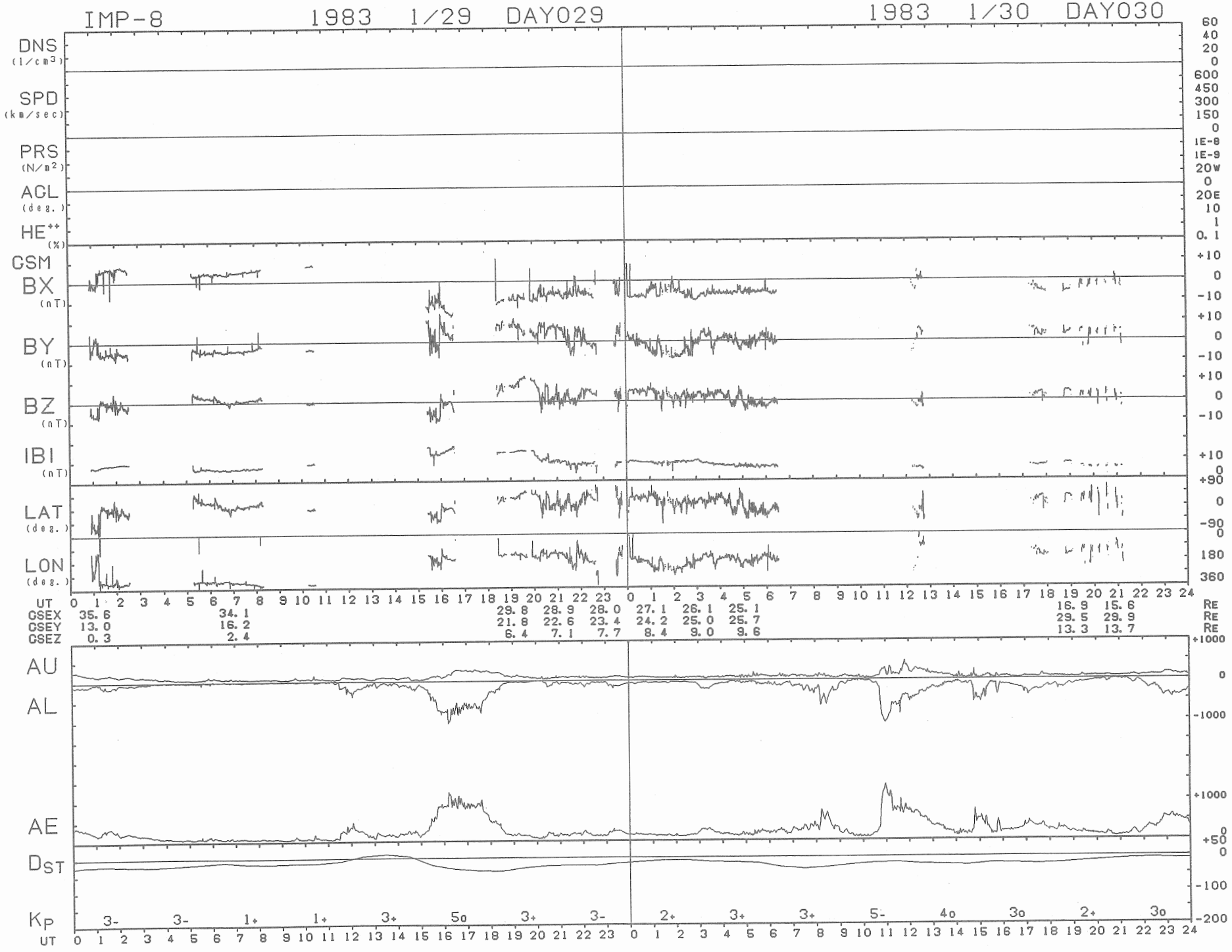

IMP-8
1983 1/19 DAY019
1983 1/20 DAY020
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.6 -3.4 -4.9 -9.0 -16.9 -18.1 -19.2 -20.4 -21.5 -24.5 -25.4 -26.3 -27.1 -27.8 RE
GSEY 31.2 30.6 30.1 28.6 24.1 23.1 22.2 21.2 20.1 16.7 15.5 14.3 13.0 11.7 RE
GSEZ 15.6 16.1 16.3 16.8 16.7 16.6 16.4 16.2 16.0 15.1 14.7 14.3 13.9 13.4 RE
AU
AL
AE
DST
KP
2+ 4- 4- 3+ 4+ 3o 2o 2+ 3+ 3+ 3o 3+ 1o 1+ 3+ 3-
UT

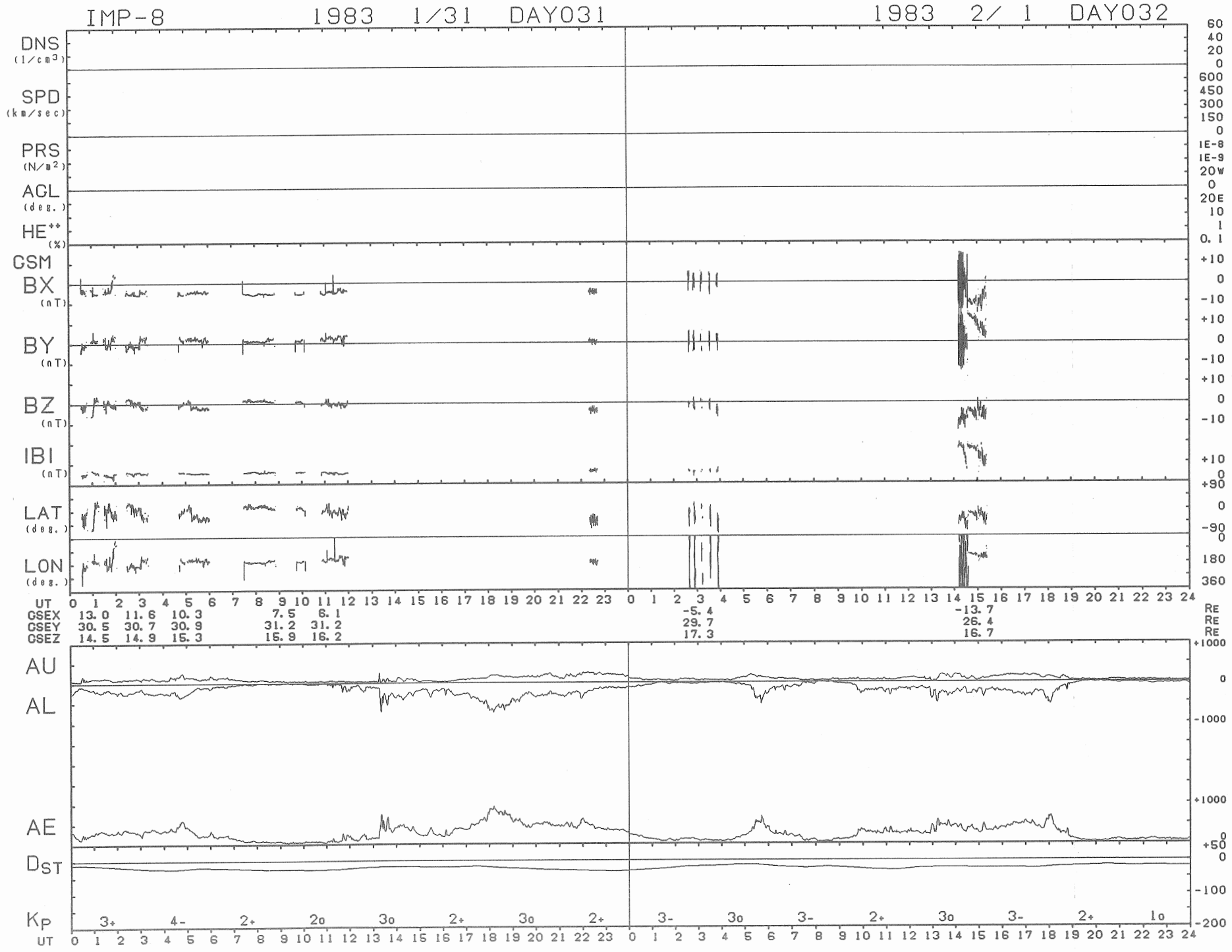

IMP-8 1983 1/21 DAY021
1983 1/22 DAY022
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.1 -30.7 -31.1 -31.4 -31.6 -31.8 -31.9 -32.0 -31.9 -31.8 -31.7 -31.5 -31.2 -30.8 -30.4 -29.9 -29.3 -28.1 -27.3 -26.5 RE
GSEY 9.1 5.0 3.6 2.2 0.8 -0.6 -2.0 -3.4 -4.8 -6.2 -7.5 -8.9 -10.2 -11.5 -12.8 -14.0 -15.3 -17.6 -18.8 -19.8 RE
GSEZ 12.4 10.6 10.0 9.4 8.7 8.0 7.3 6.6 5.8 5.1 4.3 3.6 2.8 2.0 1.2 0.4 -0.4 -2.0 -2.8 -3.5 RE
AU
AL
AE
DST
KP 3o 4- 2+ 1+ 3- 2o 3+ 2o 2o 2- 3o 2o 2+ 1+ 2o 1+
UT

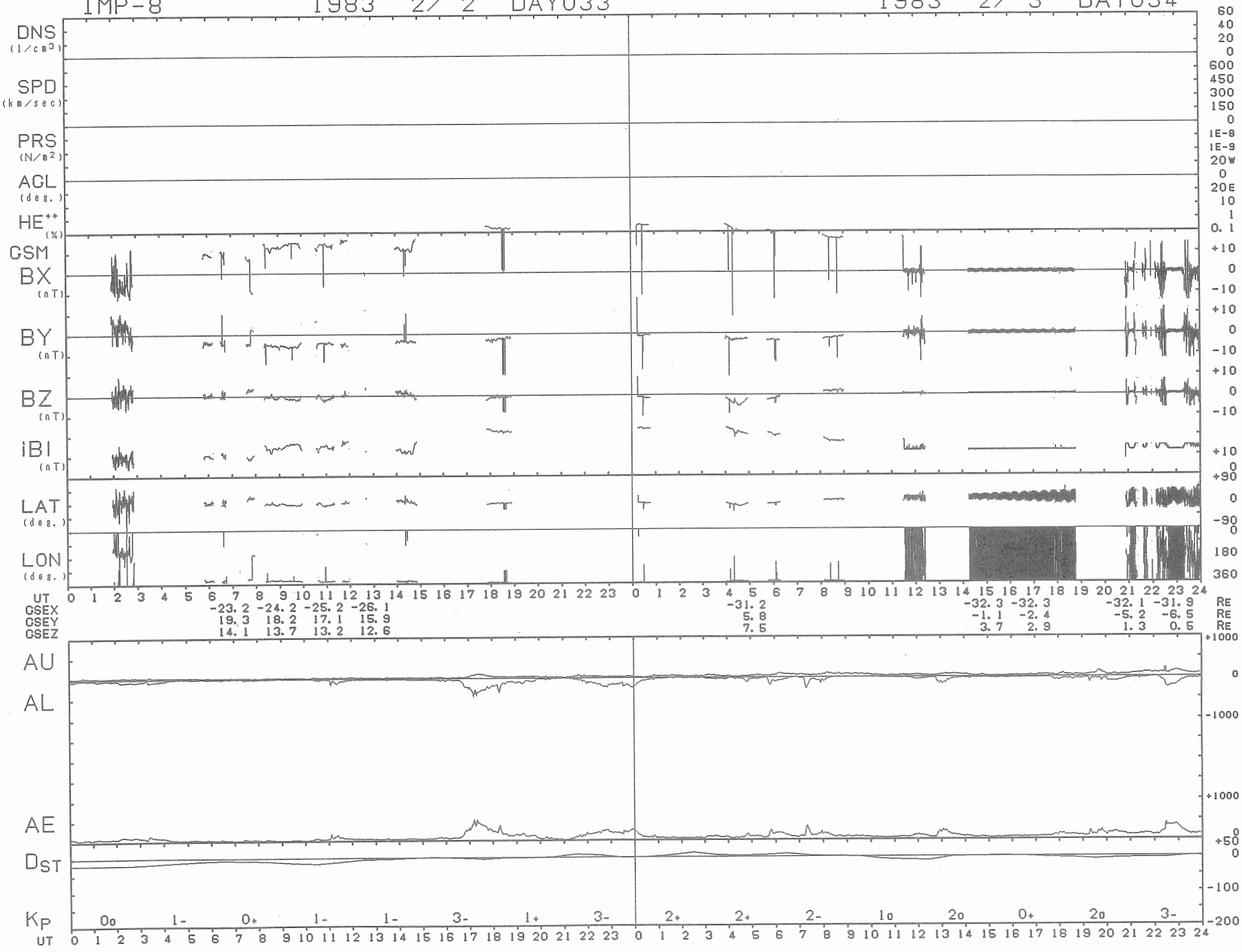

IMP-8
1983 1/23 DAY023
1983 1/24 DAY024
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.5 -17.3 -16.1 -14.8 -12.3 -10.9 -8.2 -6.8 -1.2 0.2 1.6 3.0 RE
GSEY -26.9 -27.6 -28.2 -28.8 -29.8 -30.2 -30.8 -31.1 -31.5 -31.5 -31.4 -31.3 RE
GSEZ -9.4 -10.1 -10.7 -11.3 -12.5 -13.0 -14.0 -14.5 -16.1 -16.4 -16.7 -17.0 RE
AU
AL
AE
DST
KP 1o 3- 1+ 1+ 1o 1o 3o 4o 3o 4o 3- 2+ 3+ 3+ 4o 5o
UT

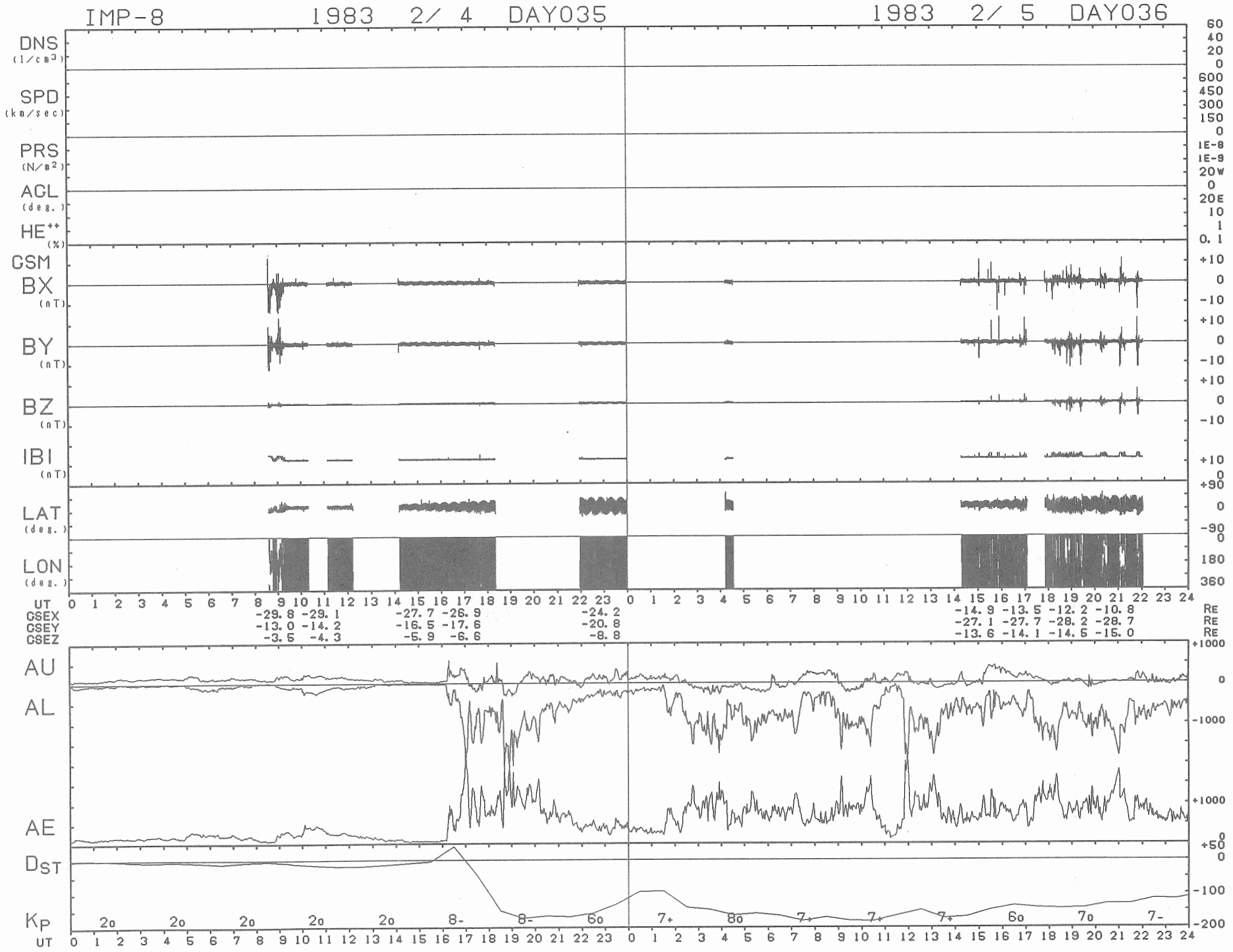

IMP-8 1983 1/25 DAY025
1983 1/26 DAY026
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 7.2 8.6 10.0 11.3 12.7 14.0 16.6 17.8 21.4 22.5 28.6 29.5 30.3 RE
GSEY -30.6 -30.2 -29.9 -29.5 -29.0 -28.5 -27.4 -26.7 -24.6 -23.8 -18.5 -17.5 -16.5 RE
GSEZ -17.6 -17.8 -17.9 -18.0 -18.0 -18.1 -18.0 -18.0 -17.6 -17.5 -15.9 -15.5 -15.1 RE
AU
AL
AE
DST
KP 3+ 3+ 3- 3+ 3o 3o 4- 3- 3- 3- 3- 3+ 3o 3o 3- 1o
UT

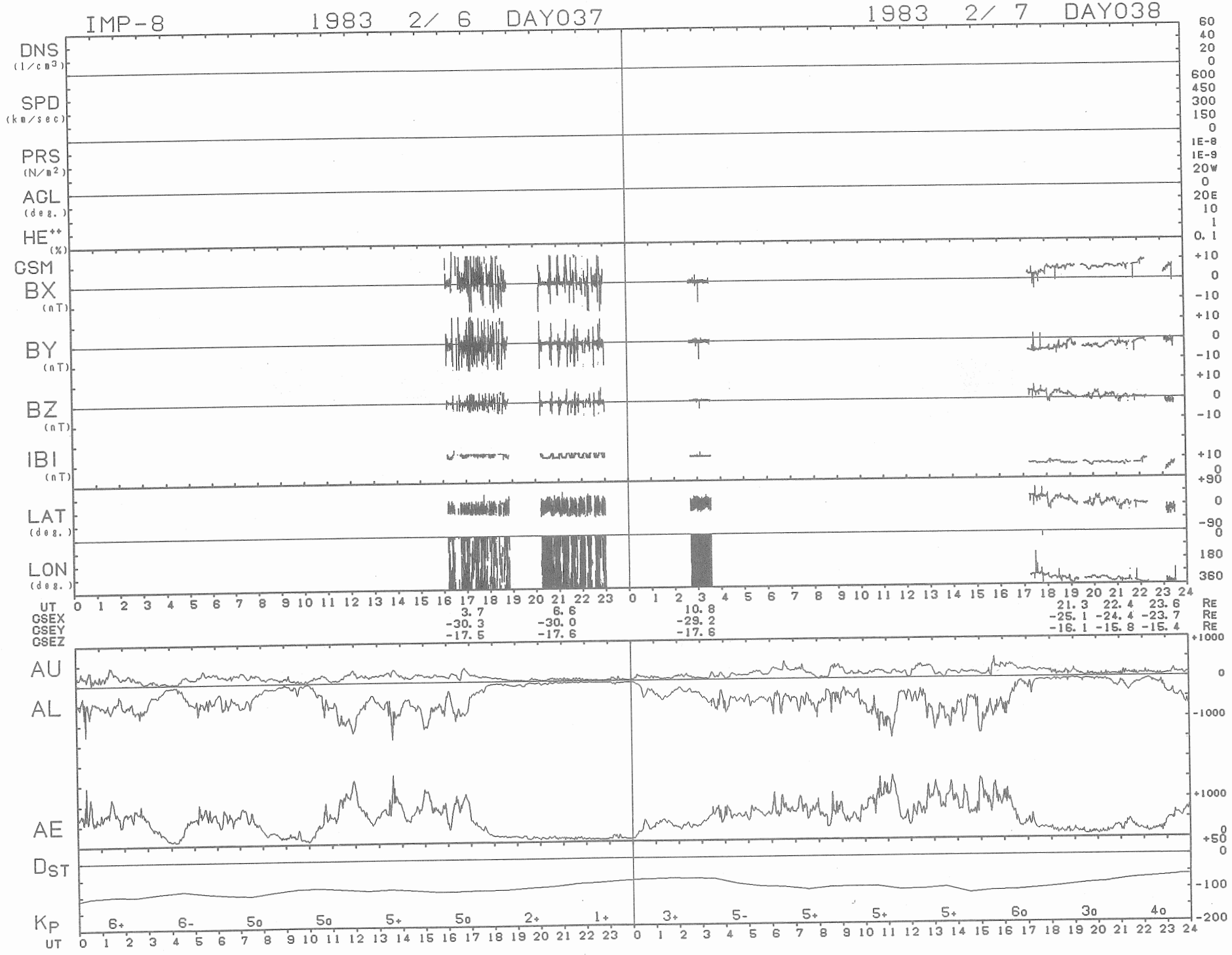

IMP-8 1983 1/27 DAY027
1983 1/28 DAY028
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.9 32.6 33.9 34.4 34.9 36.6 36.8 37.1 37.3 37.4 37.5 37.5 37.3 37.2 37.0 36.7 36.4 RE
GSEY -14.4 -13.3 -11.1 -10.0 -8.9 -4.3 -3.1 -1.9 -0.7 0.5 1.6 2.8 6.3 7.5 8.6 9.7 10.8 RE
GSEZ -14.3 -13.9 -12.9 -12.4 -11.9 -9.6 -9.0 -8.4 -7.8 -7.2 -6.5 -5.9 -3.8 -3.2 -2.5 -1.8 -1.1 RE
AU
AL
AE
DST
KP
2+ 3o 3o 2o 2- 2- 3+ 1o 1- 0o 2- 1o 2+ 3o 3- 4o
UT

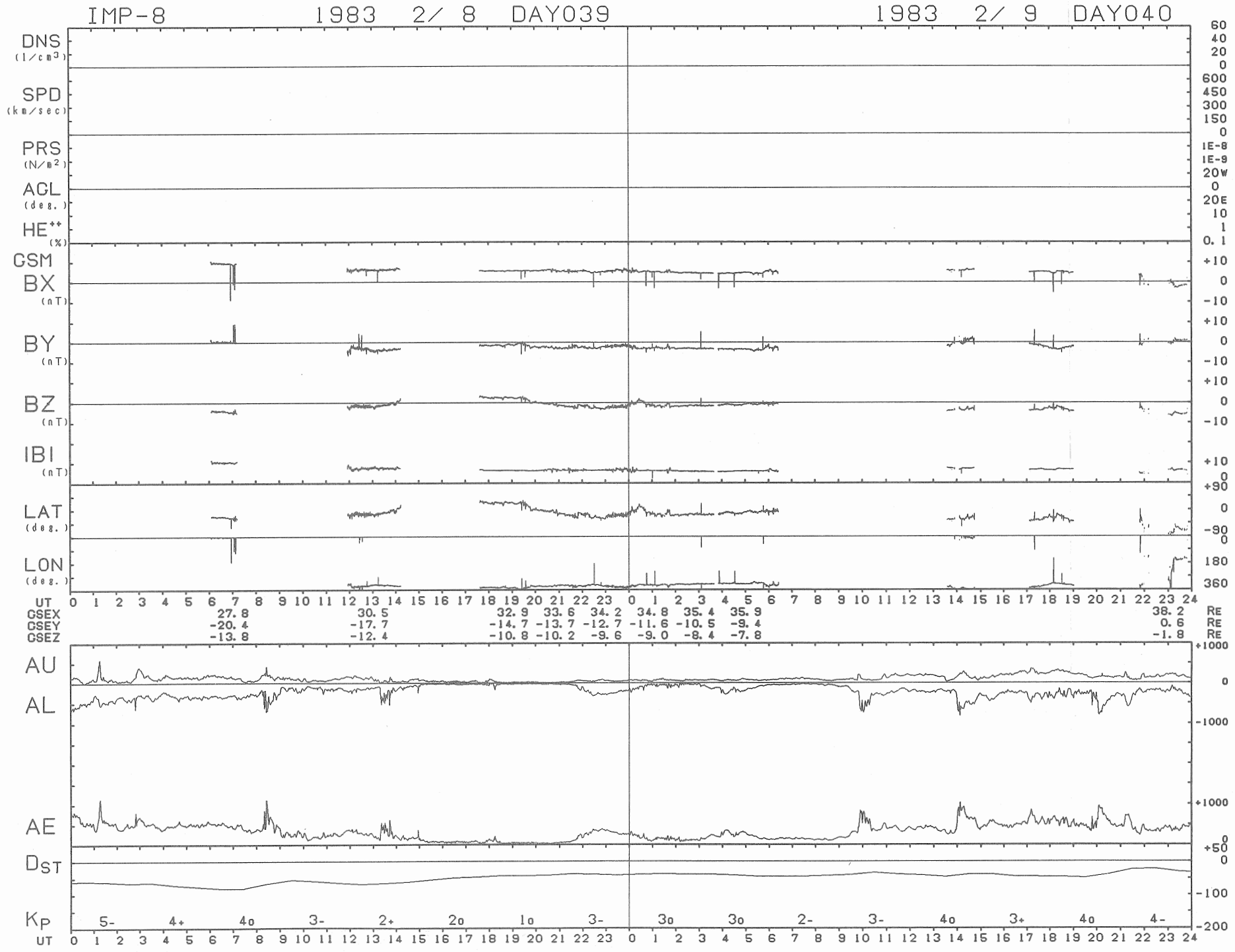

IMP-8 1983 1/29 DAY029
1983 1/30 DAY030
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.6 34.1 29.8 28.9 28.0 27.1 26.1 25.1 16.9 15.6 RE
GSEY 13.0 16.2 21.8 22.6 23.4 24.2 25.0 25.7 29.5 29.9 RE
GSEZ 0.3 2.4 6.4 7.1 7.7 8.4 9.0 9.6 13.3 13.7 RE
AU
AL
AE
DST
KP 3- 3- 1+ 1+ 3+ 5o 3+ 3- 2+ 3+ 3+ 5- 4o 3o 2+ 3o
UT

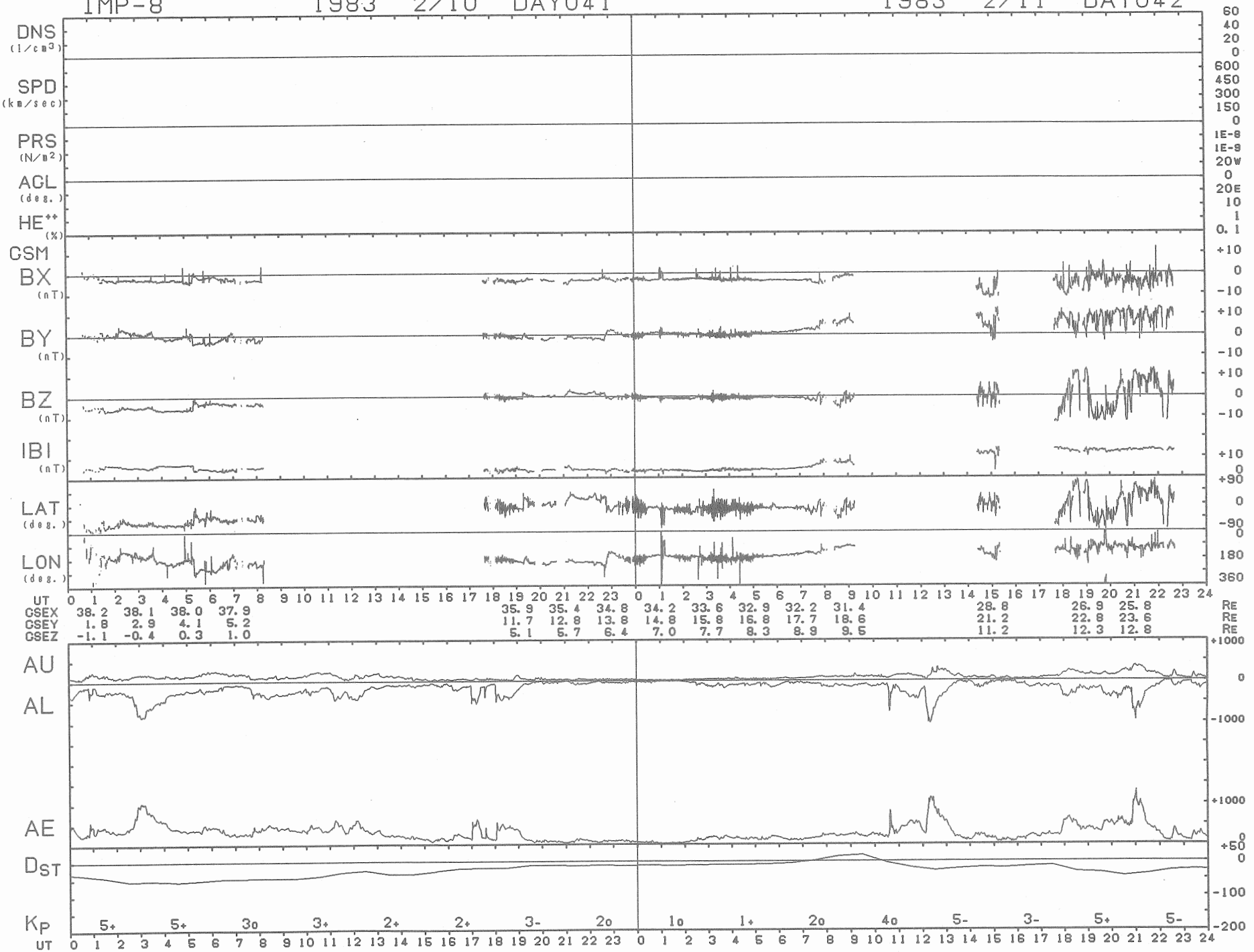

IMP-8 1983 1/31 DAY031
1983 2/ 1 DAY032
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.0 11.6 10.3 7.5 6.1 -5.4 -13.7 RE
GSEY 30.5 30.7 30.9 31.2 31.2 29.7 26.4 RE
GSEZ 14.5 14.9 15.3 15.9 16.2 17.3 16.7 RE
AU
AL
AE
DST
KP
3+ 4- 2+ 2o 3o 2+ 3o 2+ 3- 3o 3- 2+ 3o 3- 2+ 1o
UT

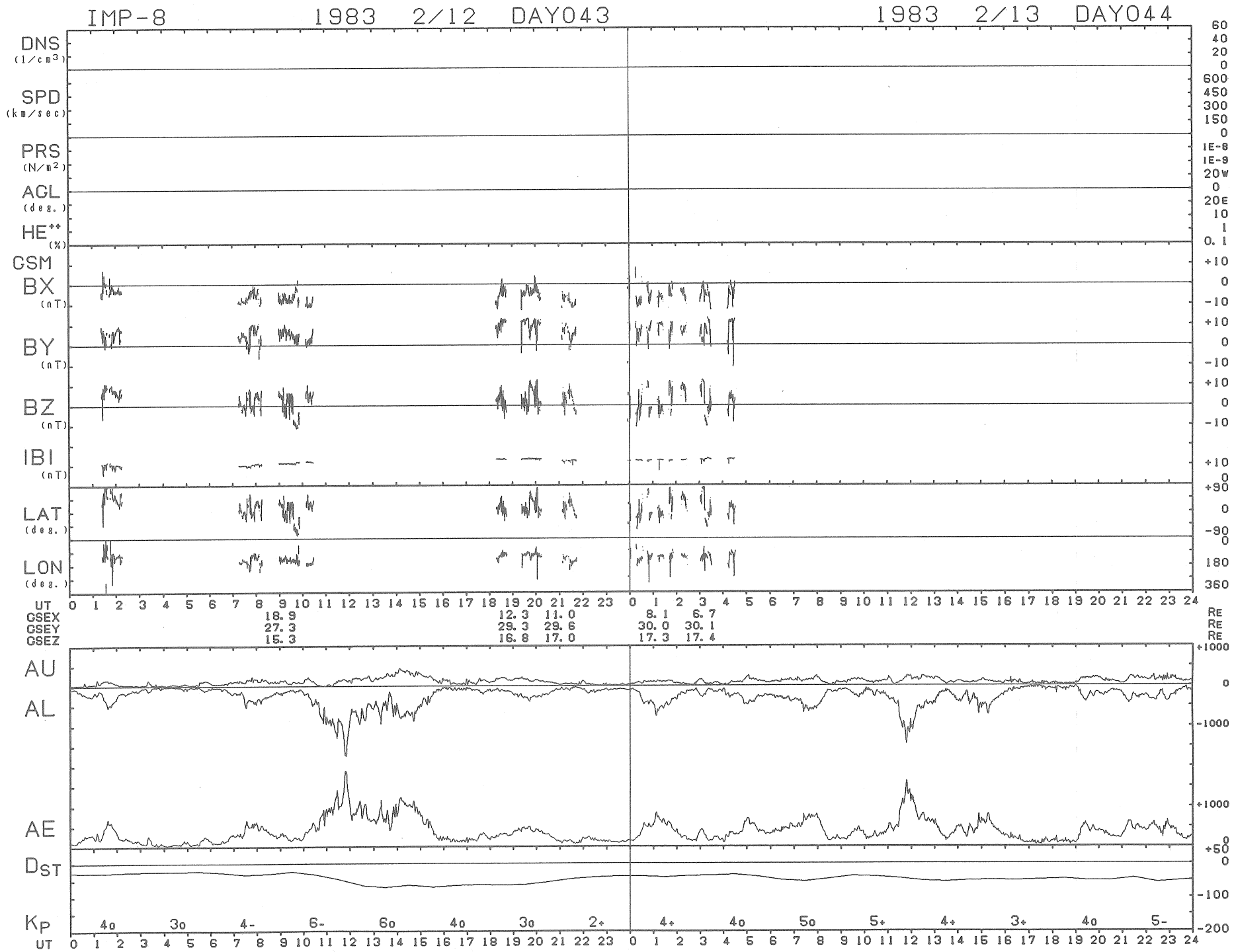

IMP-8 1983 2/ 2 DAY033
1983 2/ 3 DAY034
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.2 -24.2 -25.2 -26.1 -31.2 -32.3 -32.3 -32.1 -31.9 RE
GSEY 19.3 18.2 17.1 15.9 5.8 -1.1 -2.4 -5.2 -6.5 RE
GSEZ 14.1 13.7 13.2 12.6 7.5 3.7 2.9 1.3 0.5 RE
AU
AL
AE
DST
KP 0o 1- 0+ 1- 1- 3- 1+ 3- 2+ 2+ 2- 1o 2o 0+ 2o 3-
UT

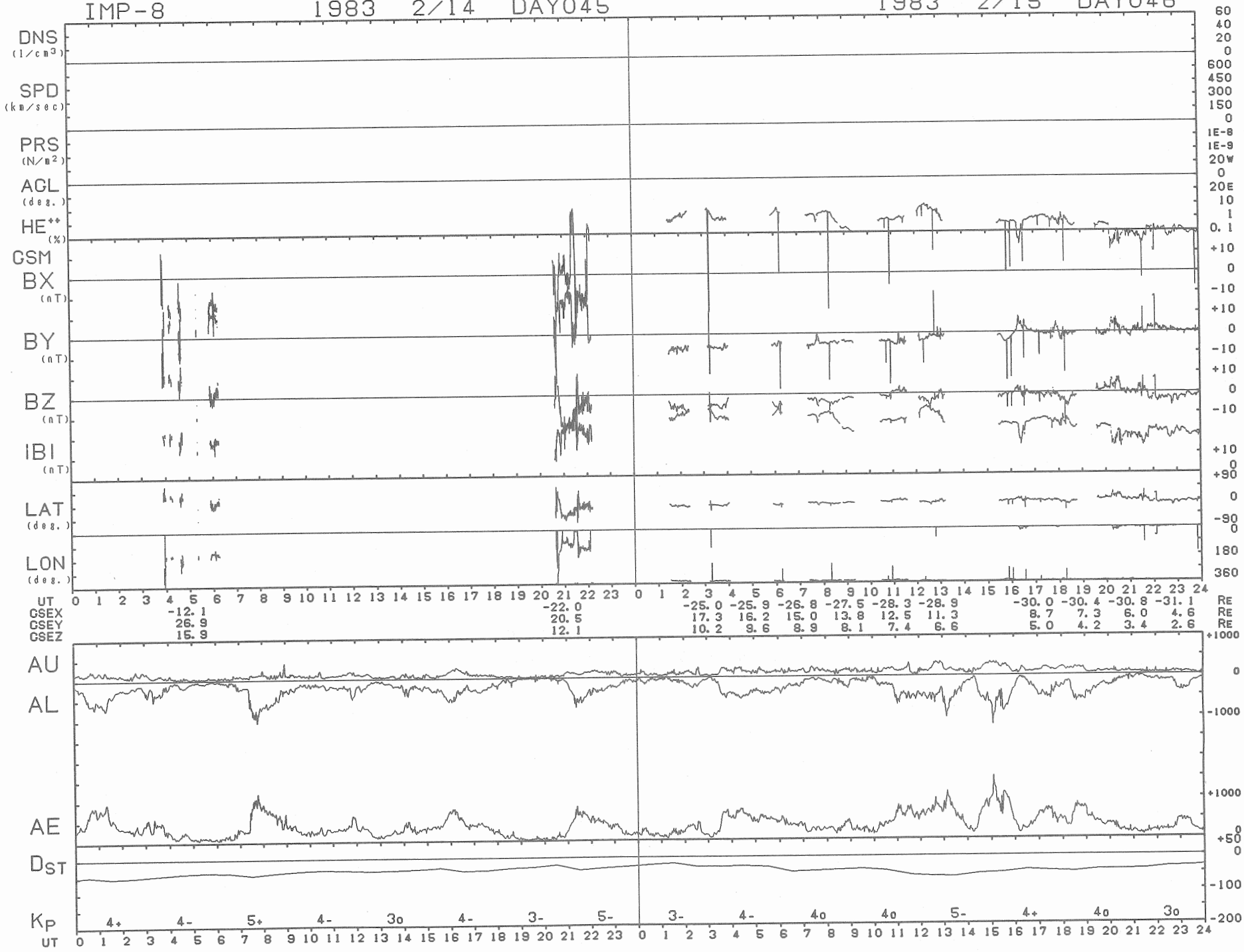

IMP-8
1983 2/ 4 DAY035
1983 2/ 5 DAY036
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.8 -29.1 -27.7 -26.9 -24.2 -14.9 -13.5 -12.2 -10.8 RE
GSEY -13.0 -14.2 -16.5 -17.6 -20.8 -27.1 -27.7 -28.2 -28.7 RE
GSEZ -3.5 -4.3 -5.9 -6.6 -8.8 -13.6 -14.1 -14.5 -15.0 RE
AU
AL
AE
DST
KP
2o 2o 2o 2o 2o 8- 8- 6o 7+ 8o 7+ 7+ 7+ 6o 7o 7-
UT

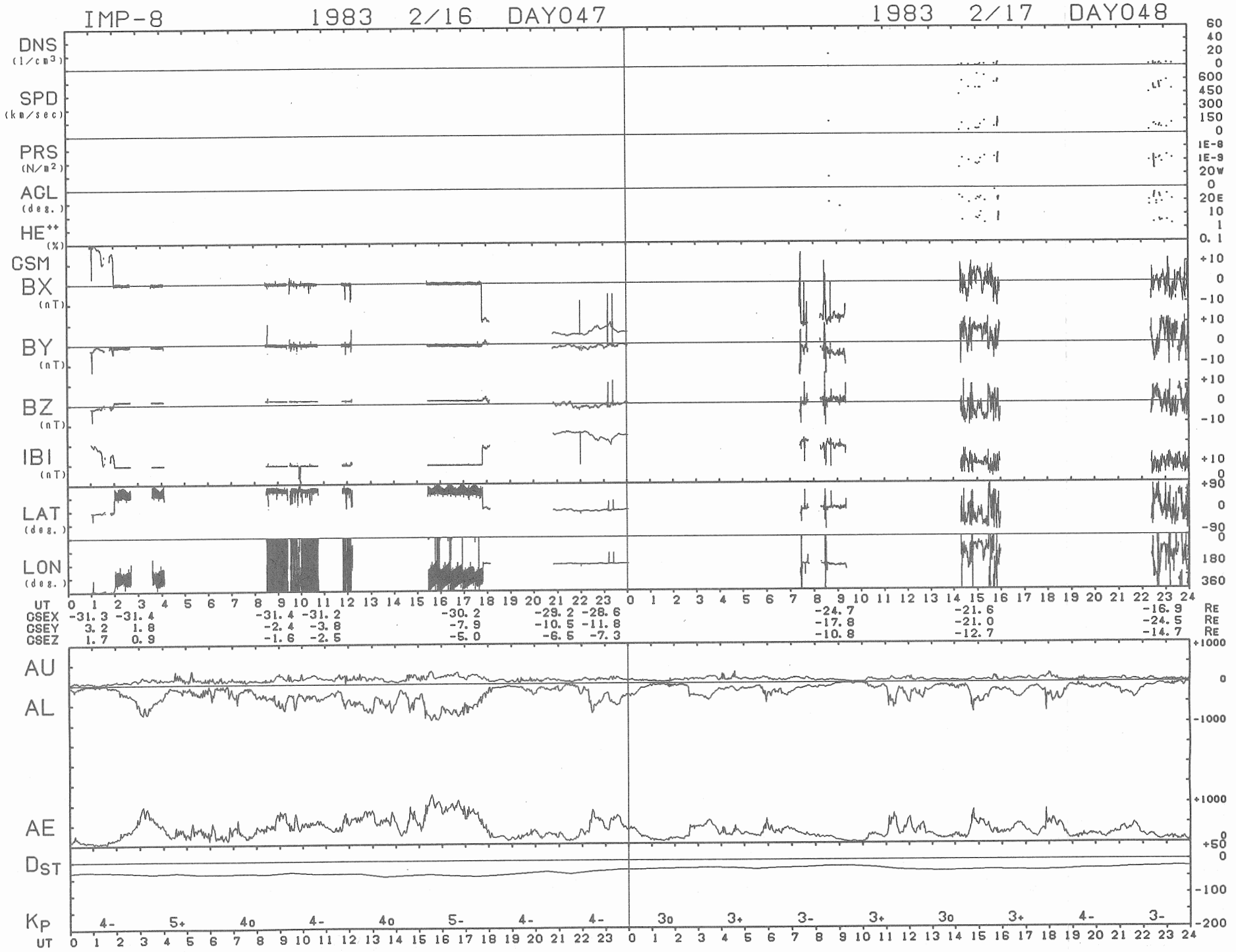

IMP-8
1983 2/ 6 DAY037
1983 2/ 7 DAY038
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
3.7
6.6
10.8
-30.3
-30.0
-29.2
-17.5
-17.6
-17.6
21.3 22.4 23.6 RE
-25.1 -24.4 -23.7 RE
-16.1 -15.8 -15.4 RE
AU
AL
AE
Dst
Kp
6+ 6- 5o 5o 5+ 5o 2+ 1+ 3+ 5- 5+ 5+ 5+ 6o 3o 4o

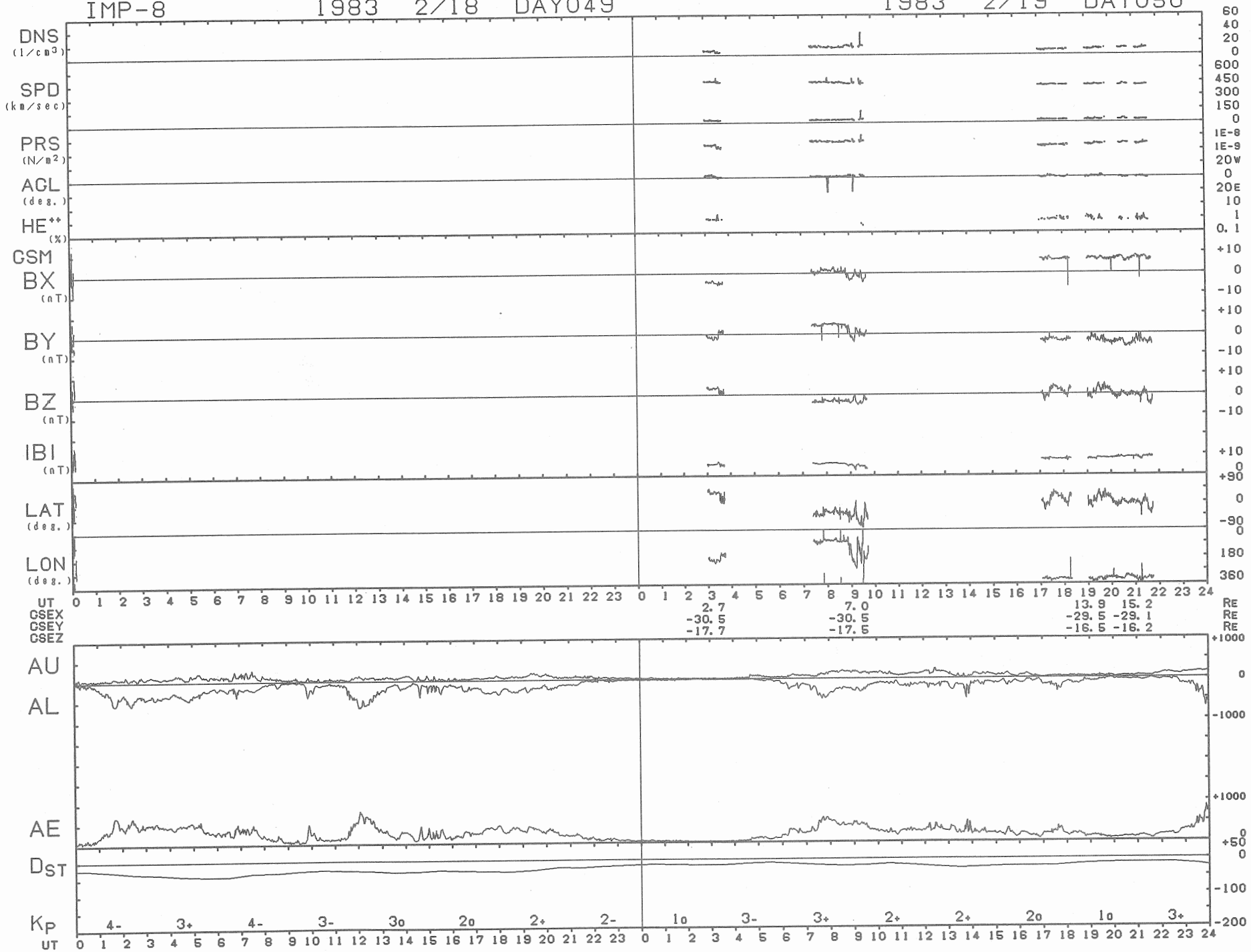

IMP-8 1983 2/ 8 DAY039
1983 2/ 9 DAY040
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.8 30.5 32.9 33.6 34.2 34.8 35.4 35.9 38.2 RE
GSEY -20.4 -17.7 -14.7 -13.7 -12.7 -11.6 -10.5 -9.4 0.6 RE
GSEZ -13.8 -12.4 -10.8 -10.2 -9.6 -9.0 -8.4 -7.8 -1.8 RE
AU
AL
AE
DST
KP 5- 4+ 4o 3- 2+ 2o 1o 3- 3o 3o 2- 3- 4o 3+ 4o 4-
UT

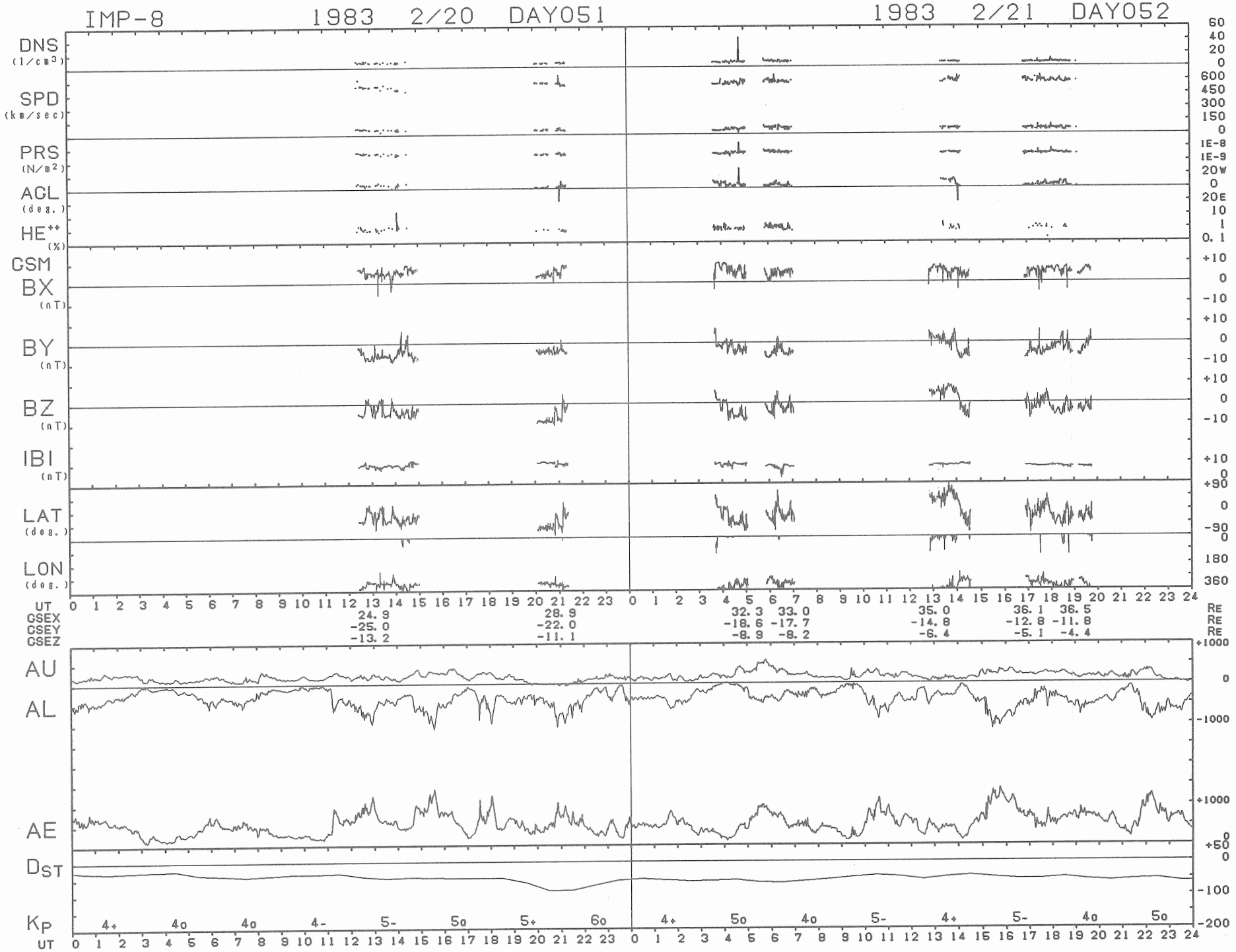

IMP-8 1983 2/10 DAY041
1983 2/11 DAY042
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 38.2 38.1 38.0 37.9 35.9 35.4 34.8 34.2 33.6 32.9 32.2 31.4 28.8 26.9 25.8 RE
GSEY 1.8 2.9 4.1 5.2 11.7 12.8 13.8 14.8 15.8 16.8 17.7 18.6 21.2 22.8 23.6 RE
GSEZ -1.1 -0.4 0.3 1.0 5.1 5.7 6.4 7.0 7.7 8.3 8.9 9.5 11.2 12.3 12.8 RE
AU
AL
AE
DST
KP 5+ 5+ 3o 3+ 2+ 2+ 3- 2o 1o 1+ 2o 4o 5- 3- 5+ 5-
UT

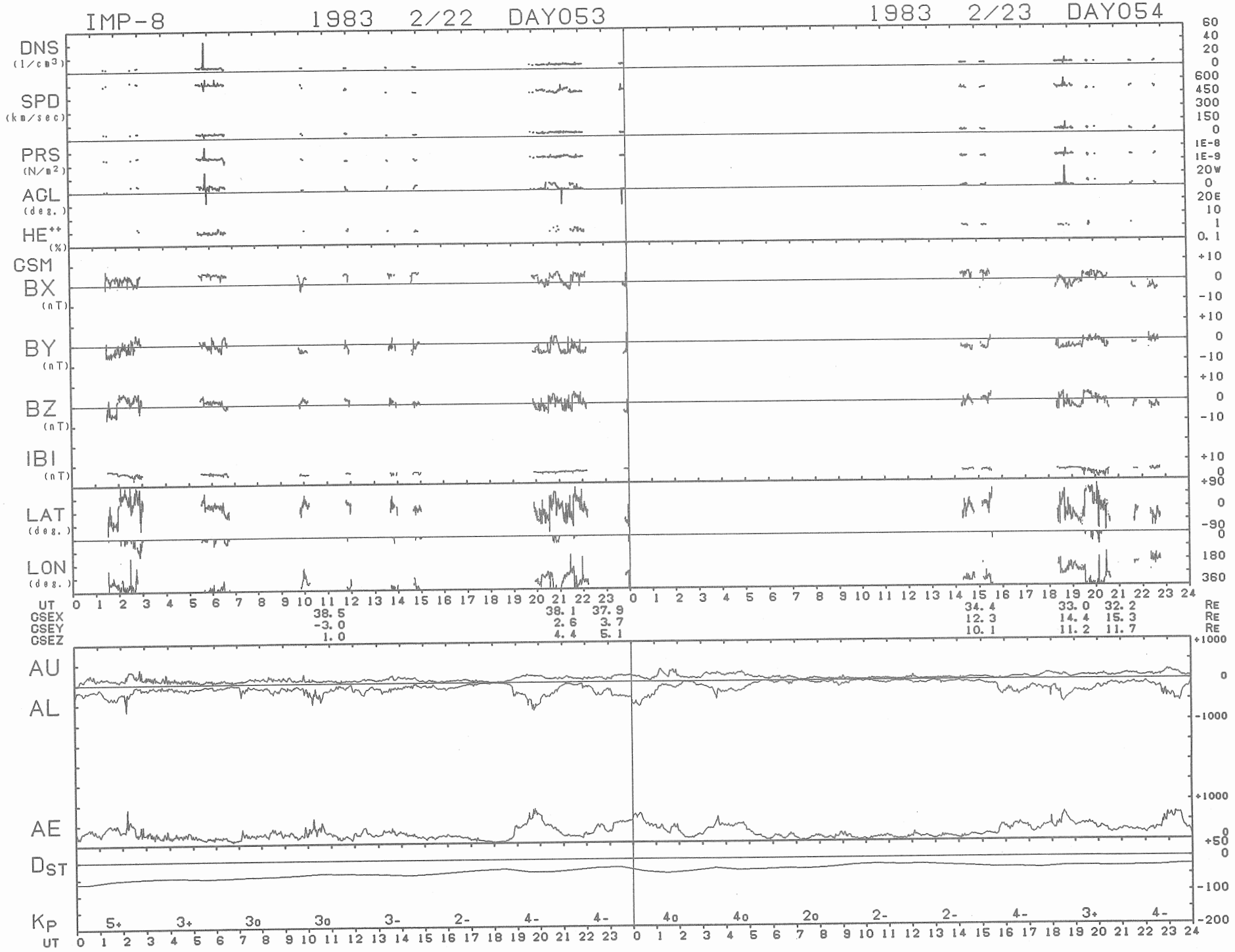

IMP-8 1983 2/12 DAY043
1983 2/13 DAY044
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.9 12.3 11.0 8.1 6.7 RE
GSEY 27.3 29.3 29.6 30.0 30.1 RE
GSEZ 15.3 16.8 17.0 17.3 17.4 RE
AU
AL
AE
DST
KP 4o 3o 4- 6- 6o 4o 3o 2+ 4+ 4o 5o 5+ 4+ 3+ 4o 5-
UT

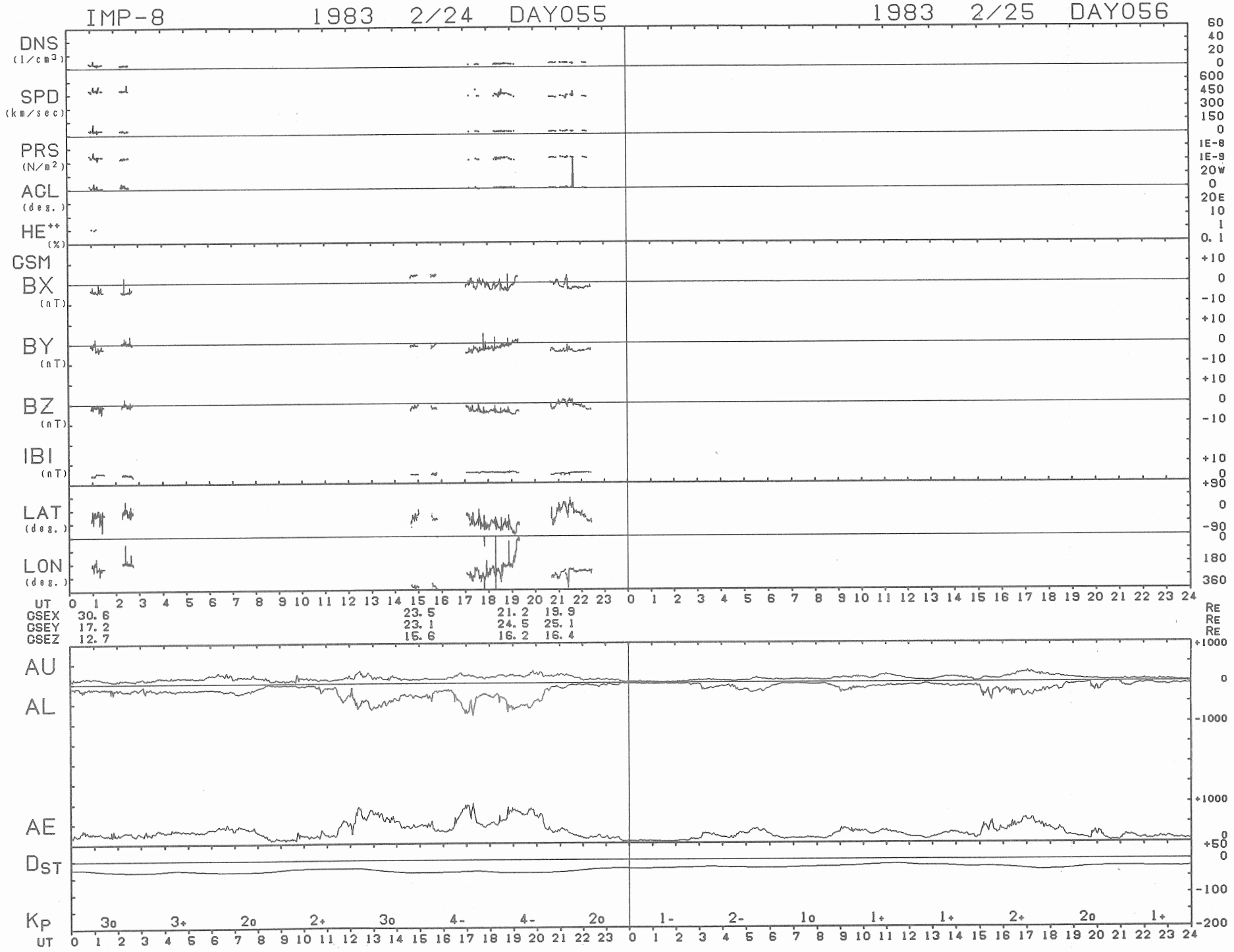

IMP-8
1983 2/14 DAY045
1983 2/15 DAY046
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.1 -22.0 -25.0 -25.9 -26.8 -27.5 -28.3 -28.9 -30.0 -30.4 -30.8 -31.1 RE
GSEY 26.9 20.5 17.3 16.2 15.0 13.8 12.5 11.3 8.7 7.3 6.0 4.6 RE
GSEZ 15.9 12.1 10.2 9.6 8.9 8.1 7.4 6.6 5.0 4.2 3.4 2.6 RE
AU
AL
AE
DST
KP
4+ 4- 5+ 4- 3o 4- 3- 5- 3- 4- 4o 4o 5- 4+ 4o 3o
UT

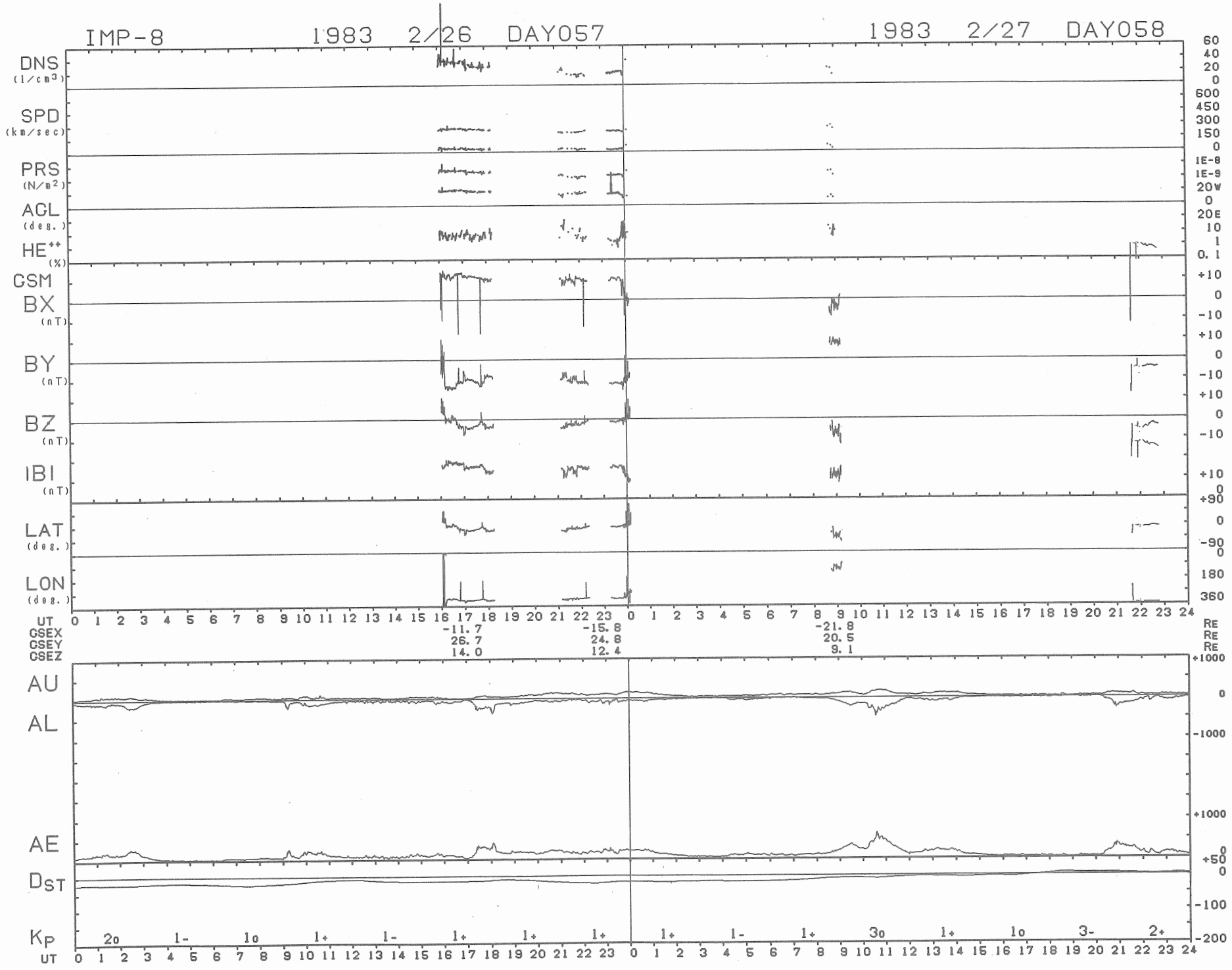

IMP-8 1983 2/16 DAY047
1983 2/17 DAY048
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.3 -31.4 -31.4 -31.2 -30.2 -29.2 -28.6 -24.7 -21.6 -16.9 RE
GSEY 3.2 1.8 -2.4 -3.8 -7.9 -10.5 -11.8 -17.8 -21.0 -24.5 RE
GSEZ 1.7 0.9 -1.6 -2.5 -5.0 -6.5 -7.3 -10.8 -12.7 -14.7 RE
AU
AL
AE
DST
KP
4- 5+ 4o 4- 4o 5- 4- 4- 3o 3+ 3- 3+ 3o 3+ 4- 3-
UT

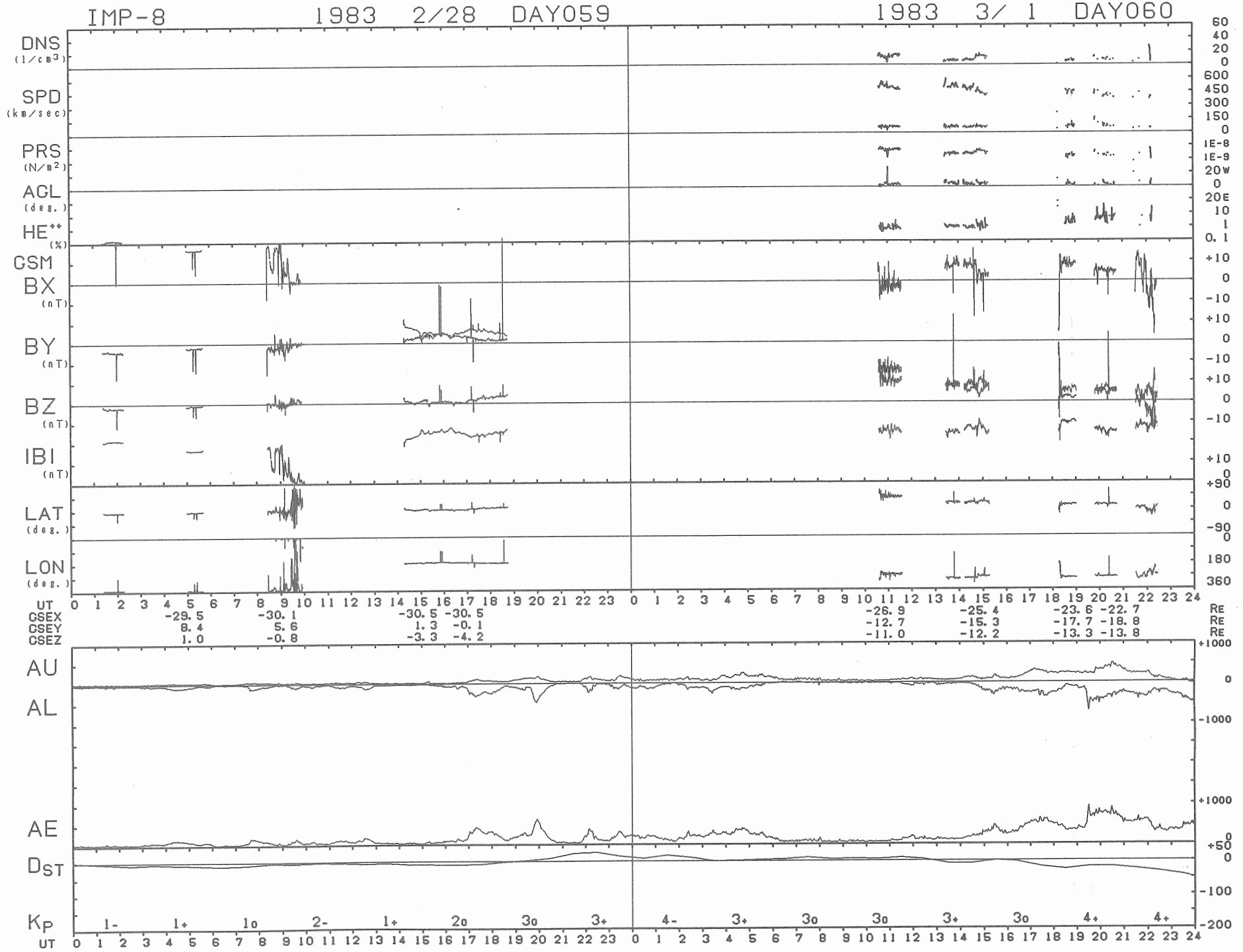

IMP-8
1983 2/18 DAY049
1983 2/19 DAY050
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
2.7
-30.5
-17.7
7.0
-30.5
-17.5
13.9 15.2
-29.5 -29.1
-16.5 -16.2
RE
AU
AL
AE
DST
KP
4- 3+ 4- 3- 3o 2o 2+ 2-
1o 3- 3+ 2+ 2+ 2o 1o 3+

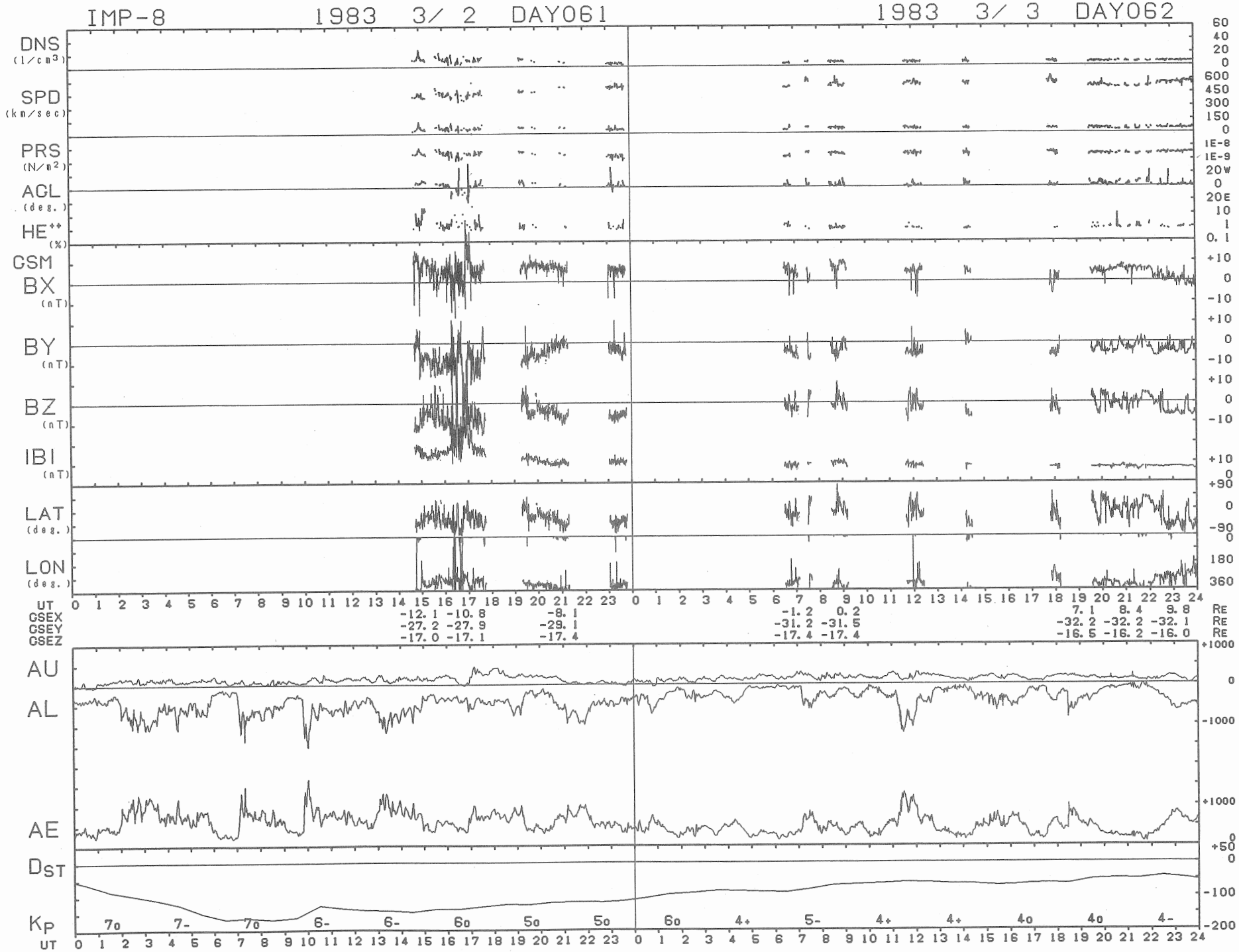

IMP-8
1983 2/20 DAY051
1983 2/21 DAY052
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.9 28.9 32.3 33.0 35.0 36.1 36.5 RE
GSEY -25.0 -22.0 -18.6 -17.7 -14.8 -12.8 -11.8 RE
GSEZ -13.2 -11.1 -8.9 -8.2 -6.4 -5.1 -4.4 RE
AU
AL
AE
DST
KP
4+ 4o 4o 4- 5- 5o 5+ 6o 4+ 5o 4o 5- 4+ 5- 4o 5o
UT

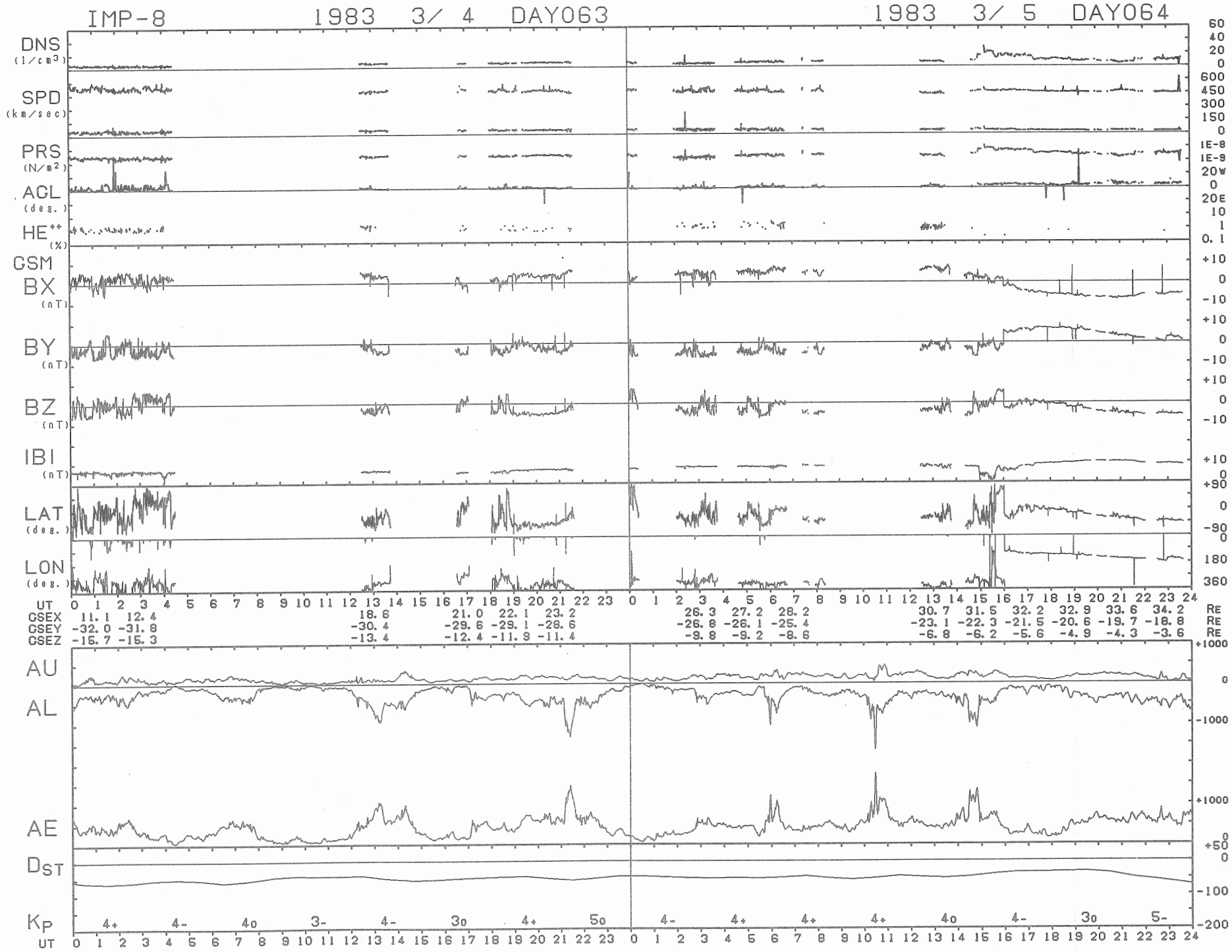

IMP-8
1983 2/22 DAY053
1983 2/23 DAY054
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
38.5
-3.0
1.0
38.1
2.6
4.4
37.9
3.7
5.1
34.4
12.3
10.1
33.0
14.4
11.2
32.2
15.3
11.7
RE
AU
AL
AE
DST
KP
5+ 3+ 3o 3o 3- 2- 4- 4- 4o 4o 2o 2- 2- 4- 3+ 4-

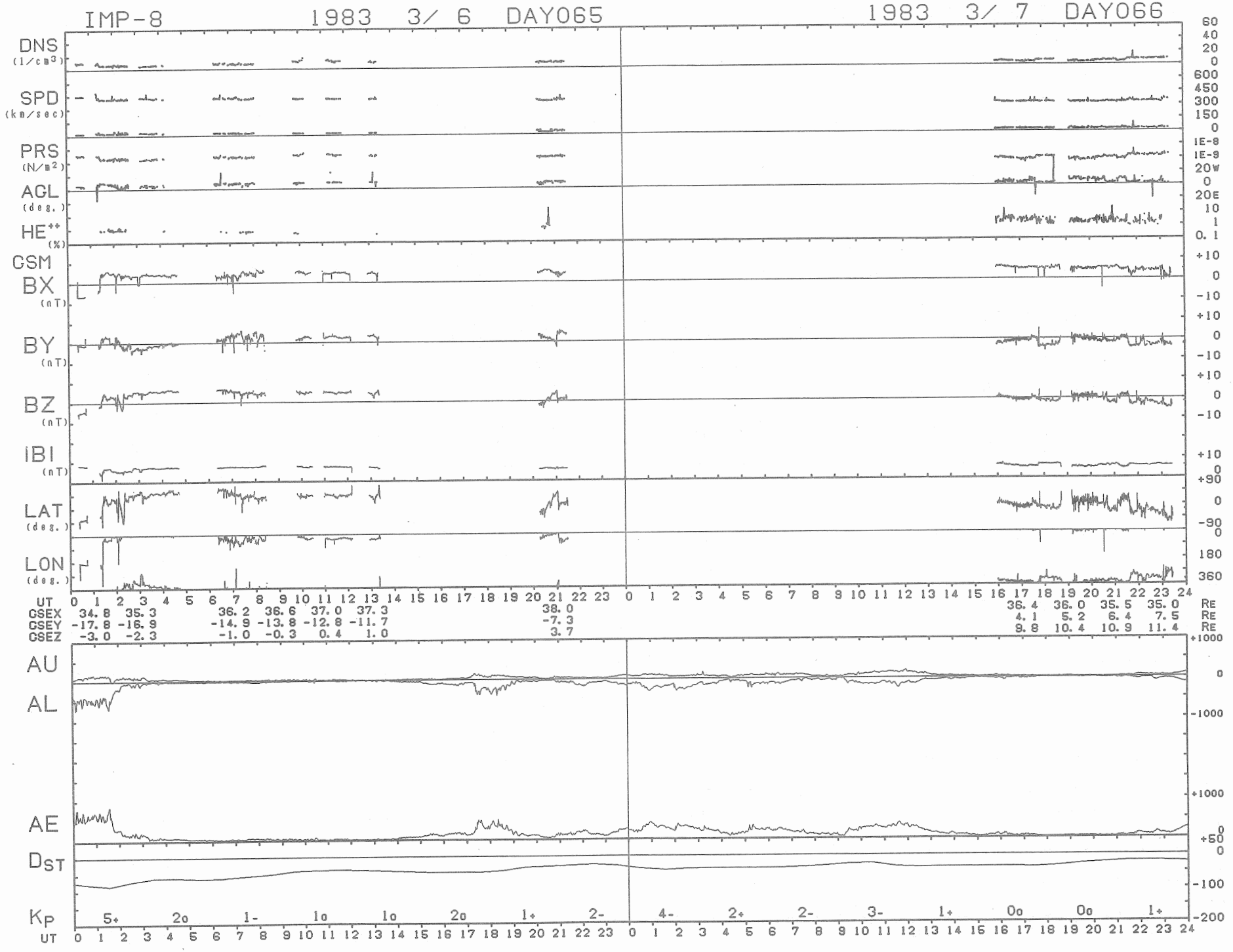

IMP-8
1983 2/24 DAY055
1983 2/25 DAY056
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.6 23.5 21.2 19.9
GSEY 17.2 23.1 24.5 25.1
GSEZ 12.7 15.6 16.2 16.4
RE
AU
AL
AE
DST
KP
3o 3+ 2o 2+ 3o 4- 4- 2o 1- 2- 1o 1+ 1+ 2+ 2o 1+

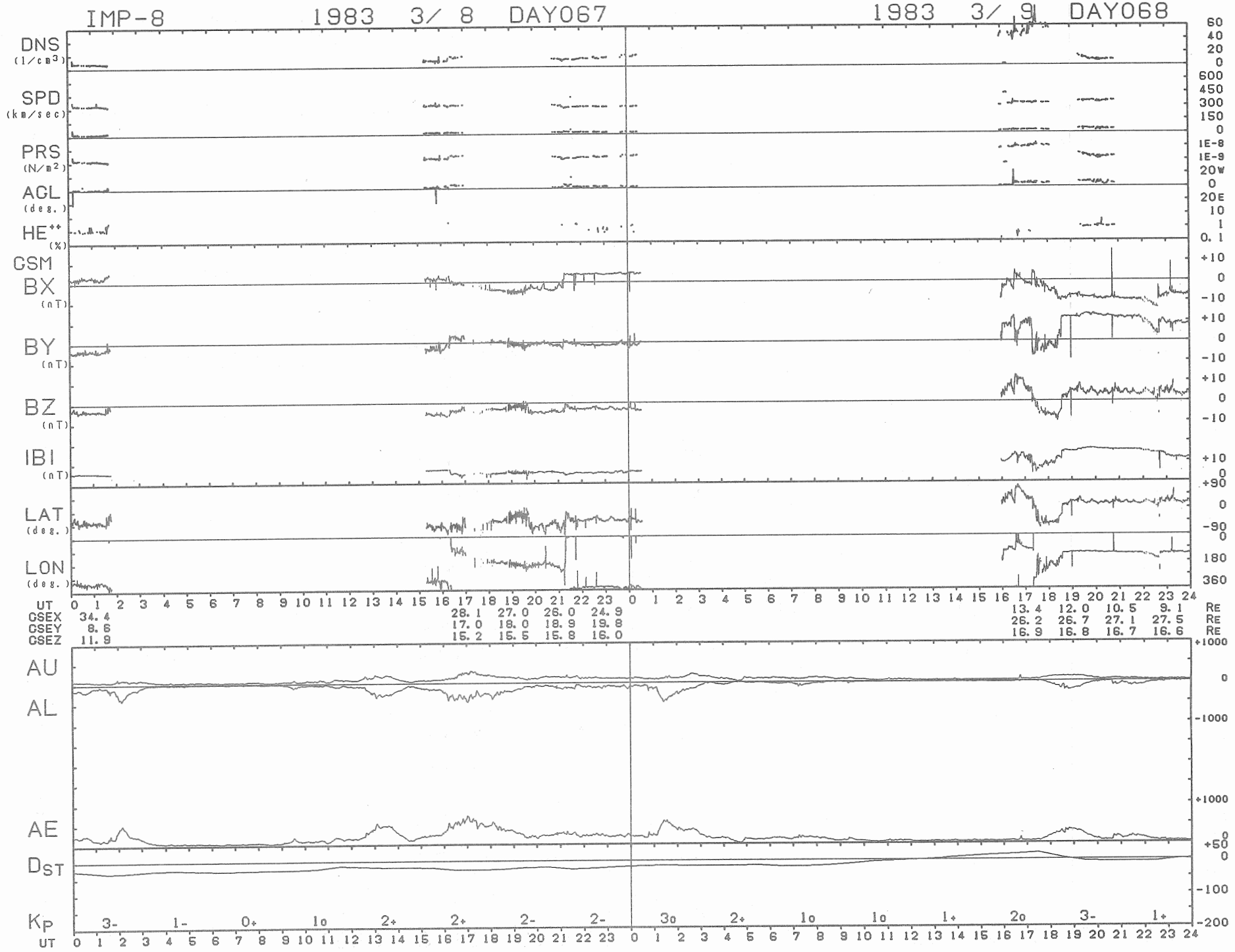

IMP-8
1983 2/26 DAY057
1983 2/27 DAY058
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.7 -15.8 -21.8 RE
GSEY 26.7 24.8 20.5 RE
GSEZ 14.0 12.4 9.1 RE
AU
AL
AE
DST
KP
2o 1- 1o 1+ 1- 1+ 1+ 1+ 1+ 1- 1+ 3o 1+ 1o 3- 2+

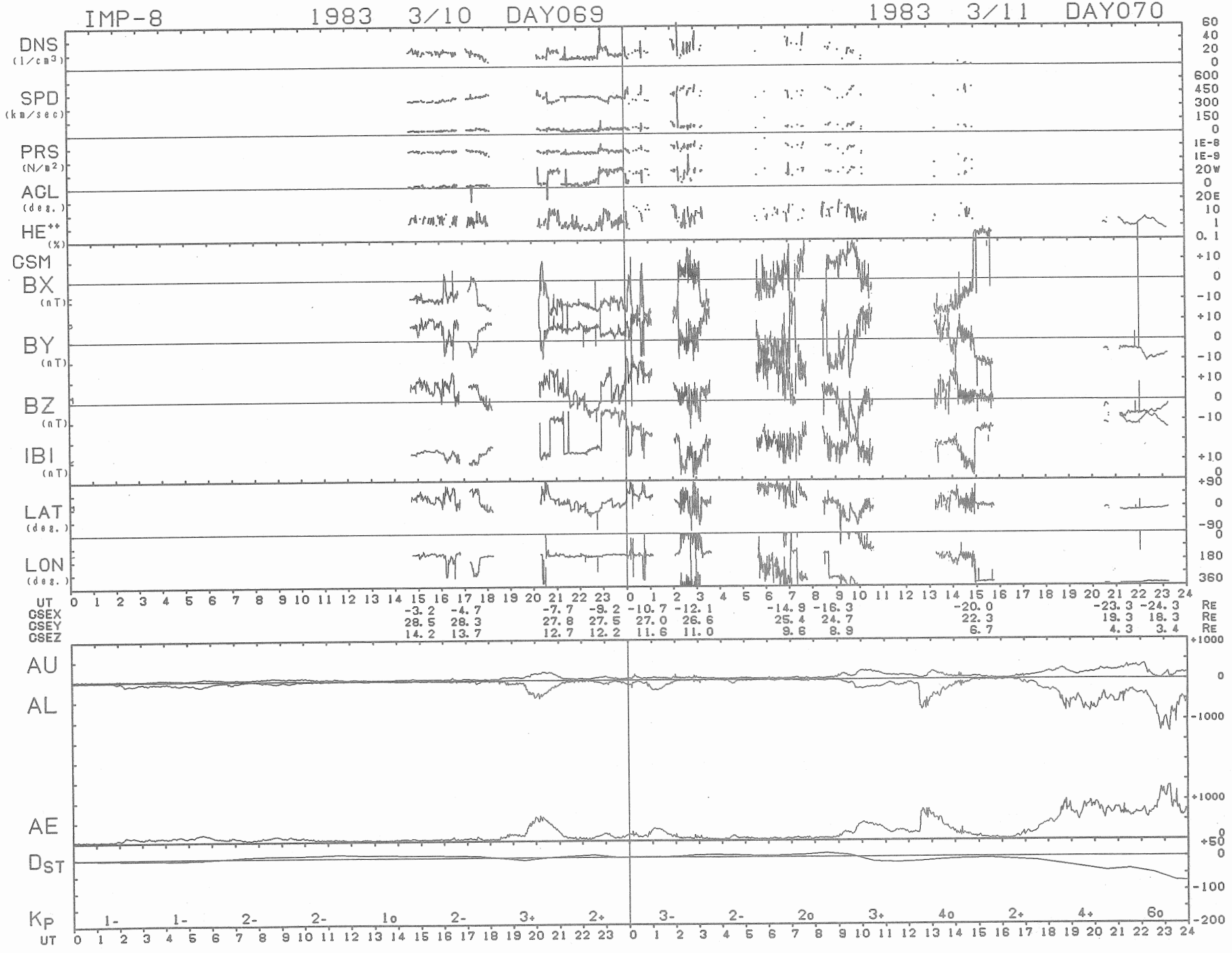

IMP-8
1983 2/28 DAY059
1983 3/ 1 DAY060
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.5 -30.1 -30.5 -30.5 -26.9 -25.4 -23.6 -22.7 RE
GSEY 8.4 5.6 1.3 -0.1 -12.7 -15.3 -17.7 -18.8 RE
GSEZ 1.0 -0.8 -3.3 -4.2 -11.0 -12.2 -13.3 -13.8 RE
AU
AL
AE
DST
KP
1- 1+ 1o 2- 1+ 2o 3o 3+ 4- 3+ 3o 3o 3+ 3o 4+ 4+
UT

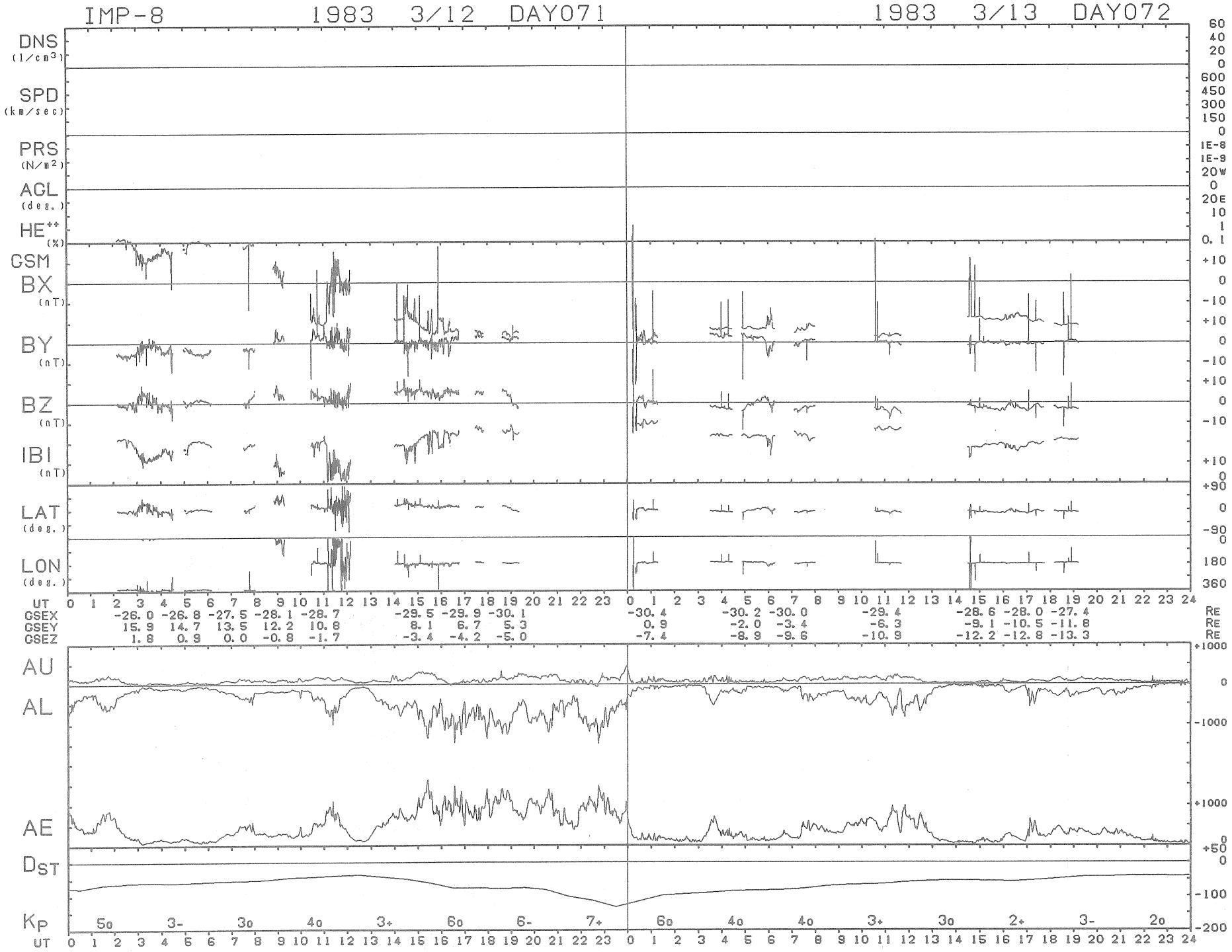

IMP-8
1983 3/ 2 DAY061
1983 3/ 3 DAY062
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.1 -10.8 -8.1 -1.2 0.2 7.1 8.4 9.8 RE
GSEY -27.2 -27.9 -29.1 -31.2 -31.5 -32.2 -32.2 -32.1 RE
GSEZ -17.0 -17.1 -17.4 -17.4 -17.4 -16.5 -16.2 -16.0 RE
AU
AL
AE
DST
KP 7o 7- 7o 6- 6- 6o 5o 5o 6o 4+ 5- 4+ 4+ 4o 4o 4-
UT

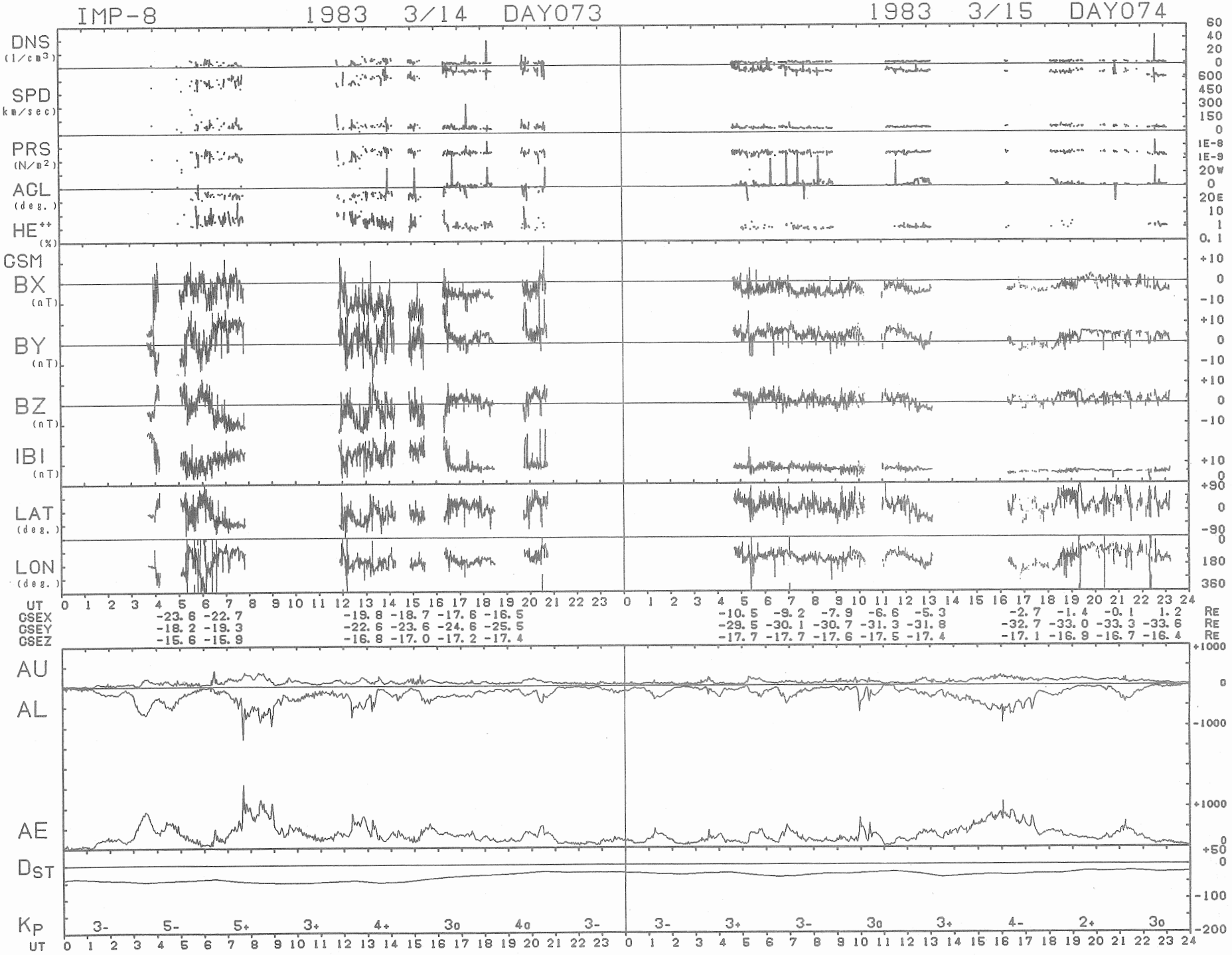

IMP-8
1983 3/ 4 DAY063
1983 3/ 5 DAY064
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.1 12.4 18.6 21.0 22.1 23.2 26.3 27.2 28.2 30.7 31.5 32.2 32.9 33.6 34.2 RE
GSEY -32.0 -31.8 -30.4 -29.6 -29.1 -28.6 -26.8 -26.1 -25.4 -23.1 -22.3 -21.5 -20.6 -19.7 -18.8 RE
GSEZ -15.7 -15.3 -13.4 -12.4 -11.9 -11.4 -9.8 -9.2 -8.6 -6.8 -6.2 -5.6 -4.9 -4.3 -3.6 RE
AU
AL
AE
DST
KP
4+ 4- 4o 3- 4- 3o 4+ 5o 4- 4+ 4+ 4+ 4o 4- 3o 5-
UT

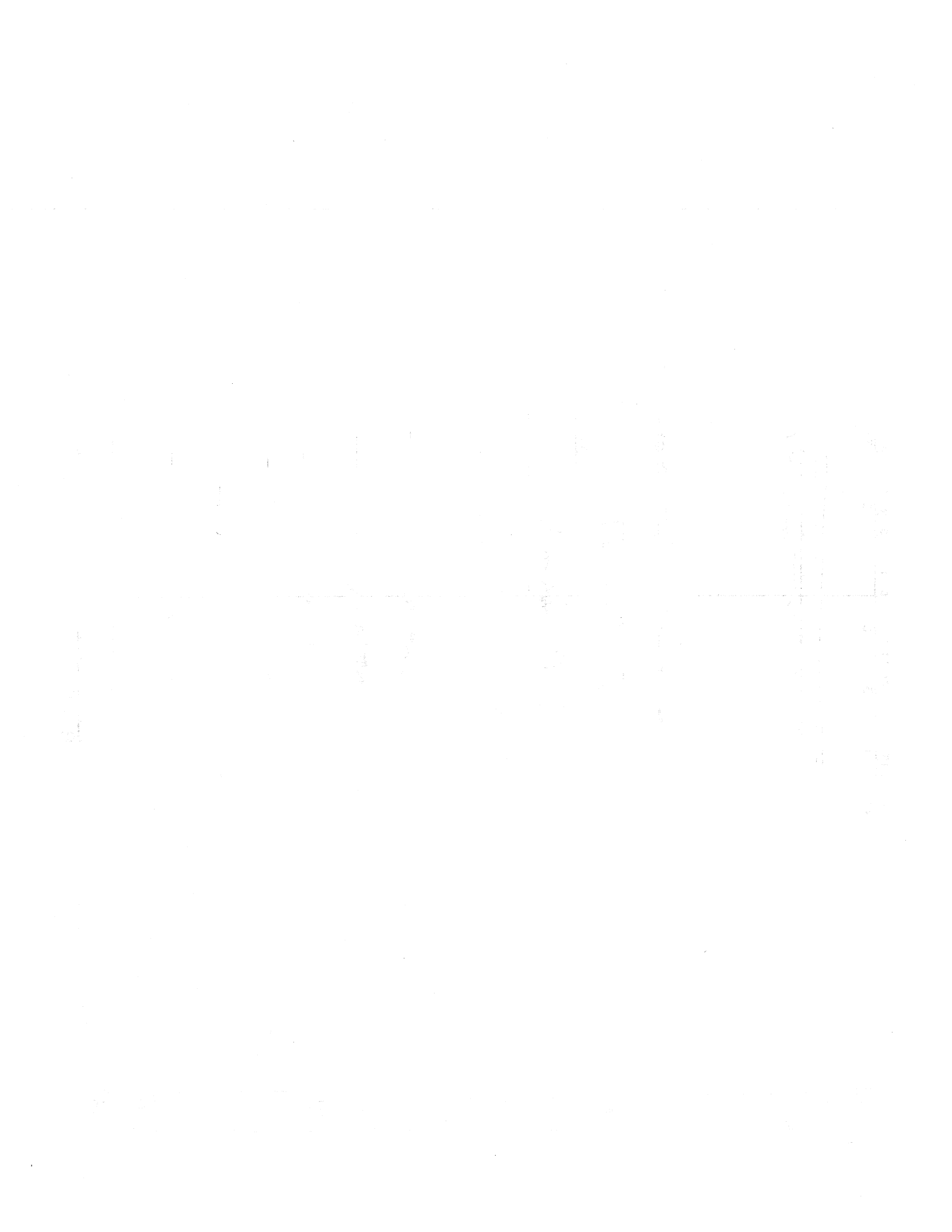

IMP-8
1983 3/ 6 DAY065
1983 3/ 7 DAY066
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.8 35.3 36.2 36.6 37.0 37.3 38.0 36.4 36.0 35.5 35.0 RE
GSEY -17.8 -16.9 -14.9 -13.8 -12.8 -11.7 -7.3 4.1 5.2 6.4 7.5 RE
GSEZ -3.0 -2.3 -1.0 -0.3 0.4 1.0 3.7 9.8 10.4 10.9 11.4 RE
AU
AL
AE
DST
KP
5+ 2o 1- 1o 1o 2o 1+ 2- 4- 2+ 2- 3- 1+ 0o 0o 1+
UT

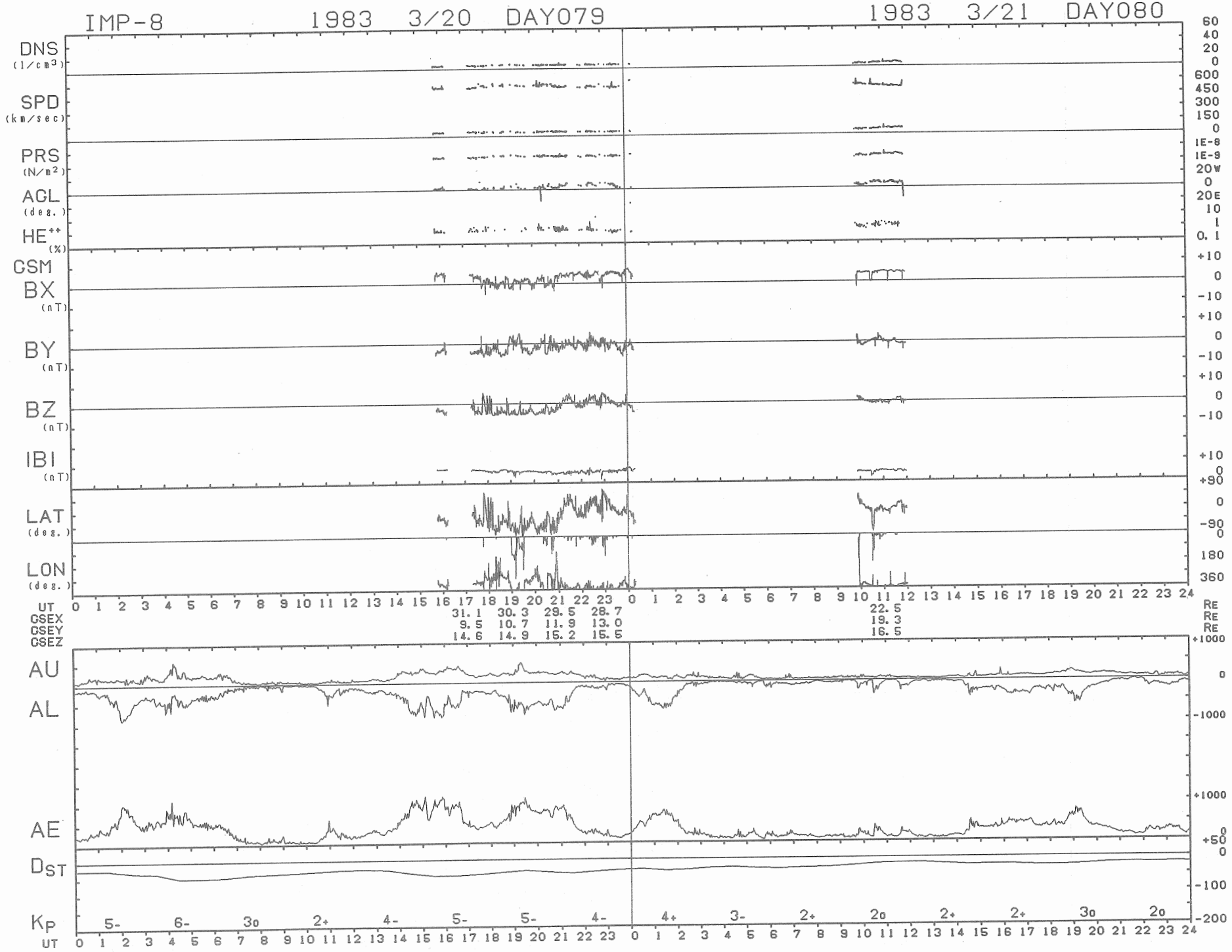

IMP-8
1983 3/ 8 DAY067
1983 3/ 9 DAY068
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.4
GSEY 8.6
GSEZ 11.9
28.1 27.0 26.0 24.9
17.0 18.0 18.9 19.8
15.2 15.5 15.8 16.0
13.4 12.0 10.5 9.1 RE
26.2 26.7 27.1 27.5 RE
16.9 16.8 16.7 16.6 RE
AU
AL
AE
DST
KP
3- 1- 0+ 1o 2+ 2+ 2- 2- 3o 2+ 1o 1o 1+ 2o 3- 1+
UT

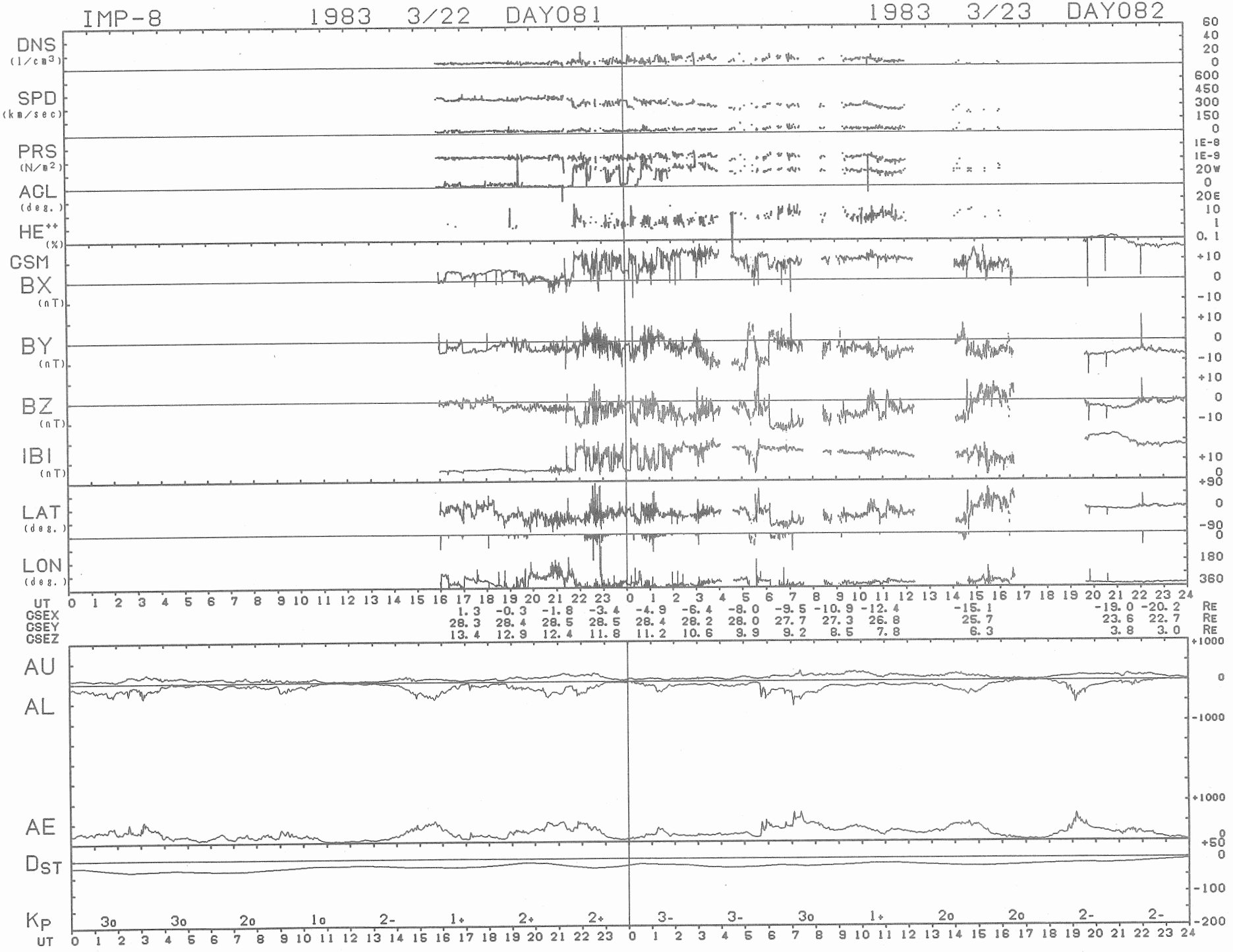

IMP-8
1983 3/10 DAY069
1983 3/11 DAY070
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -3.2 -4.7 -7.7 -9.2 -10.7 -12.1 -14.9 -16.3 -20.0 -23.3 -24.3 RE
GSEY 28.5 28.3 27.8 27.5 27.0 26.6 25.4 24.7 22.3 19.3 18.3 RE
GSEZ 14.2 13.7 12.7 12.2 11.6 11.0 9.6 8.9 6.7 4.3 3.4 RE
AU
AL
AE
DST
KP
1- 1- 2- 2- 1o 2- 3+ 2+ 3- 2- 2o 3+ 4o 2+ 4+ 6o
UT

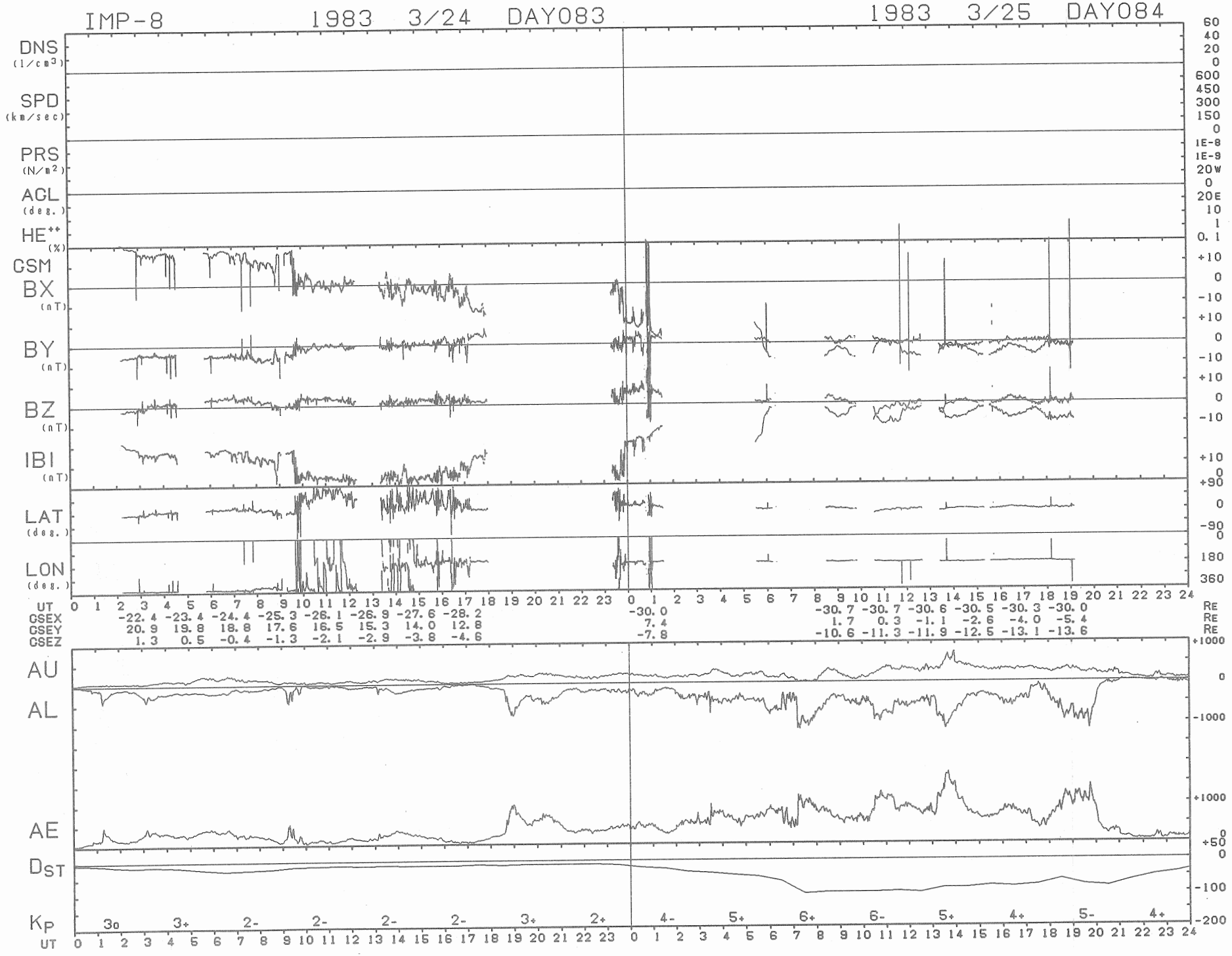

IMP-8 1983 3/12 DAY071
1983 3/13 DAY072
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.0 -26.8 -27.5 -28.1 -28.7 -29.5 -29.9 -30.1 -30.4 -30.2 -30.0 -29.4 -28.6 -28.0 -27.4 RE
GSEY 15.9 14.7 13.5 12.2 10.8 8.1 6.7 5.3 0.9 -2.0 -3.4 -6.3 -9.1 -10.5 -11.8 RE
GSEZ 1.8 0.9 0.0 -0.8 -1.7 -3.4 -4.2 -5.0 -7.4 -8.9 -9.6 -10.9 -12.2 -12.8 -13.3 RE
AU
AL
AE
DST
KP 5o 3- 3o 4o 3+ 6o 6- 7+ 6o 4o 4o 3+ 3o 2+ 3- 2o
UT

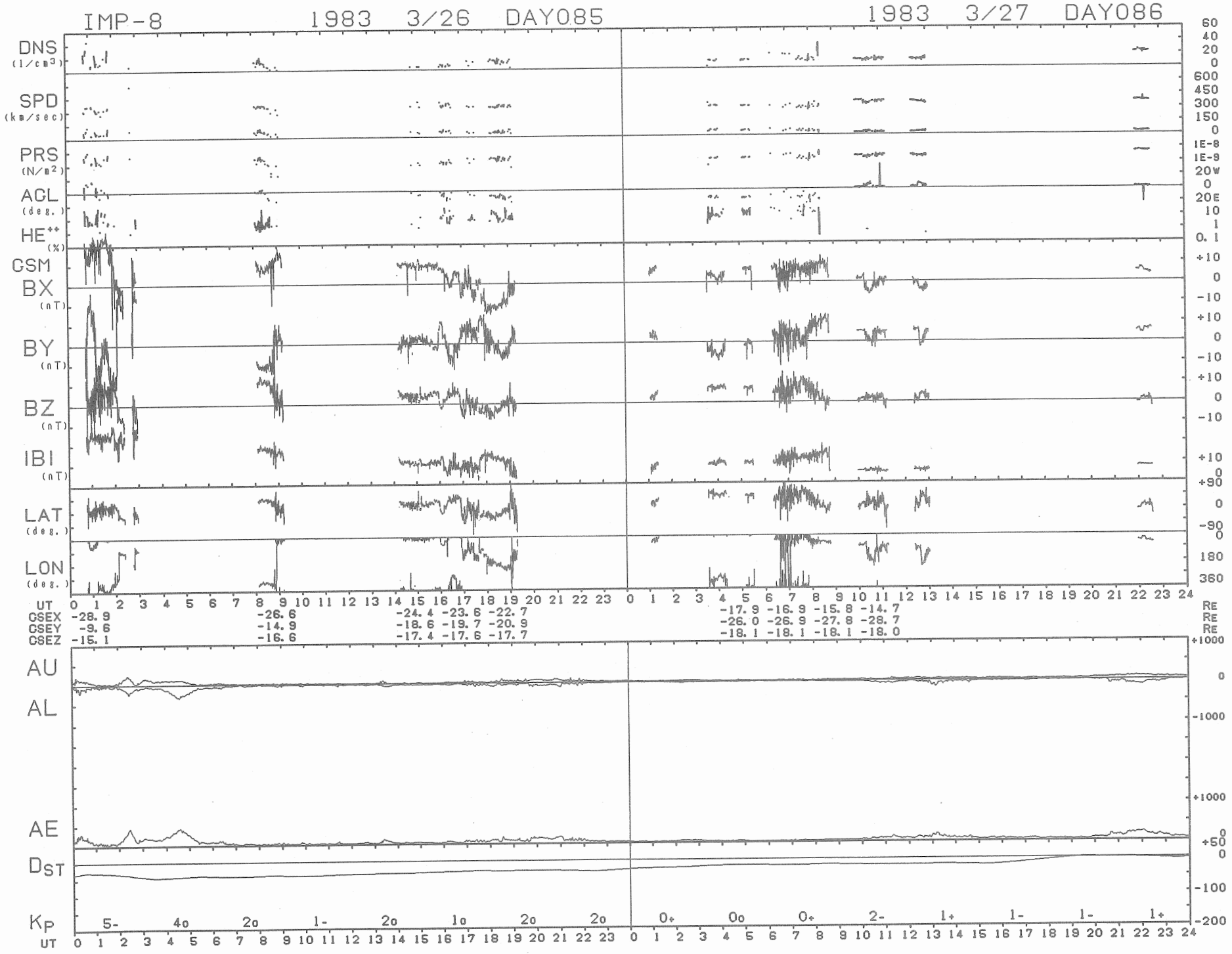

IMP-8
1983 3/14 DAY073
1983 3/15 DAY074
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.6 -22.7 -19.8 -18.7 -17.6 -16.5 -10.5 -9.2 -7.9 -6.6 -5.3 -2.7 -1.4 -0.1 1.2 RE
GSEY -18.2 -19.3 -22.6 -23.6 -24.6 -25.5 -29.5 -30.1 -30.7 -31.3 -31.8 -32.7 -33.0 -33.3 -33.6 RE
GSEZ -15.6 -15.9 -16.8 -17.0 -17.2 -17.4 -17.7 -17.7 -17.6 -17.5 -17.4 -17.1 -16.9 -16.7 -16.4 RE
AU
AL
AE
DST
KP 3- 5- 5+ 3+ 4+ 3o 4o 3- 3- 3+ 3- 3o 3+ 4- 2+ 3o
UT

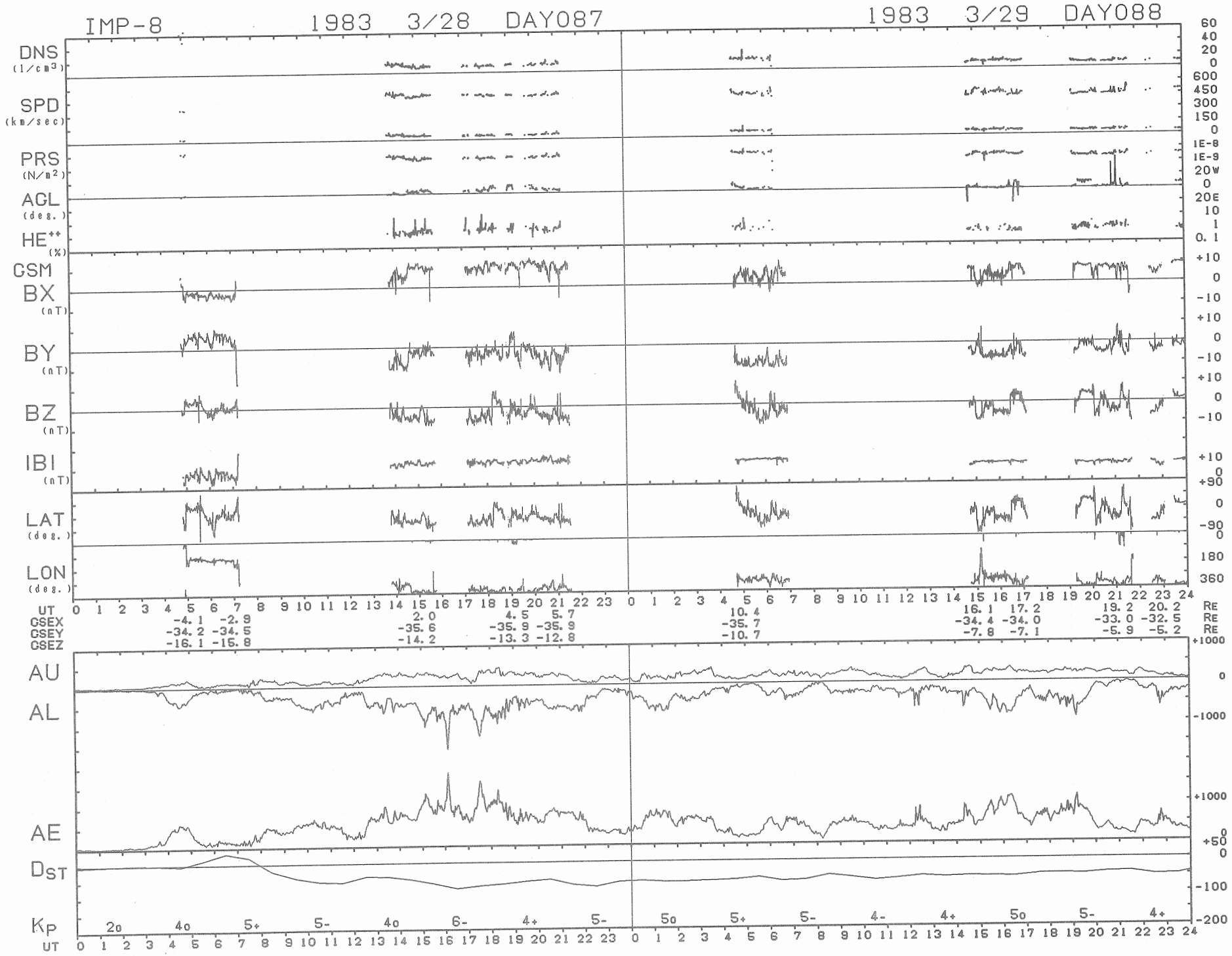


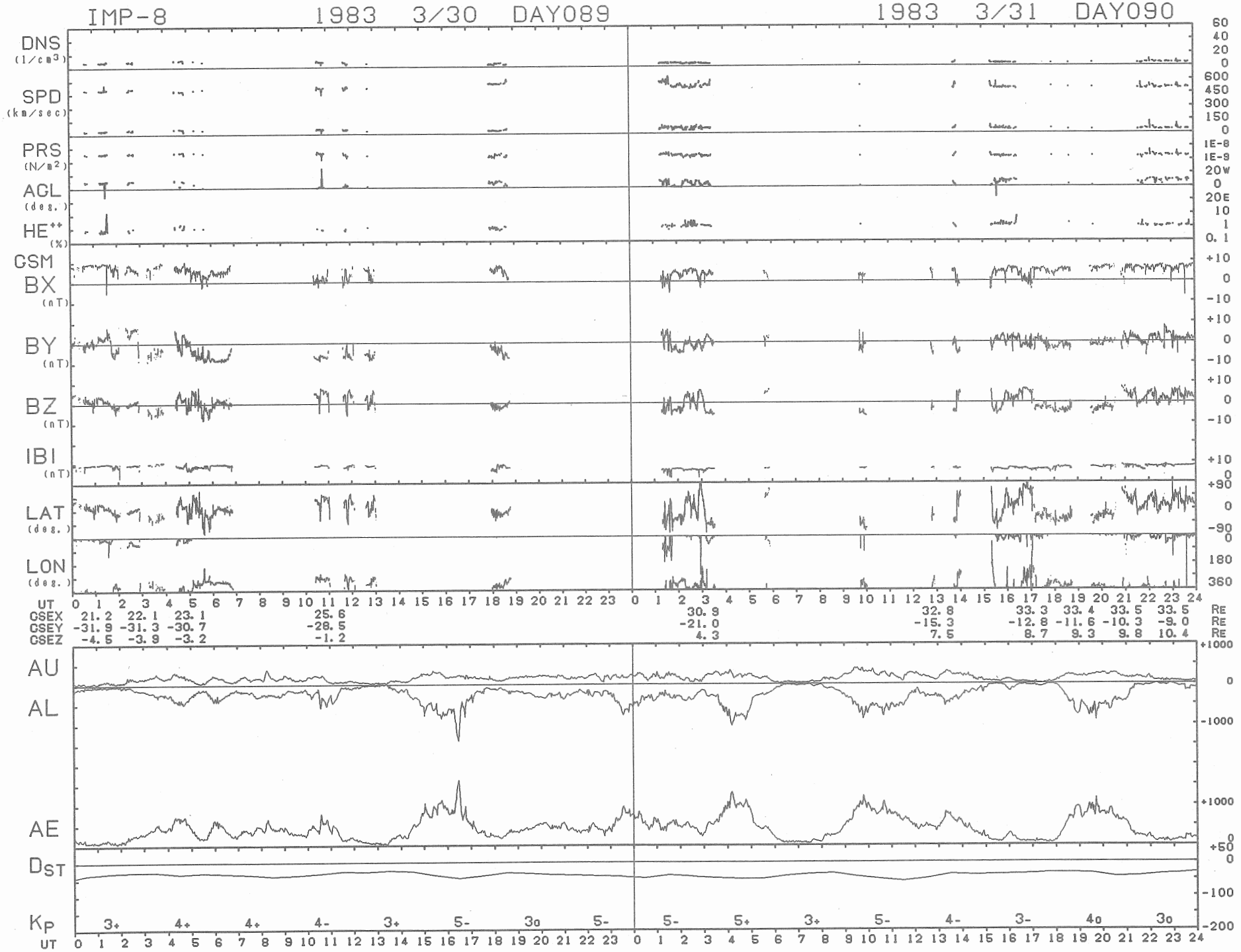

IMP-8
1983 3/20 DAY079
1983 3/21 DAY080
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
31.1 30.3 29.5 28.7
9.5 10.7 11.9 13.0
14.6 14.9 15.2 15.5
22.5
19.3
16.5
RE
AU
AL
AE
DST
KP
5- 6- 3o 2+ 4- 5- 5- 4-
4+ 3- 2+ 2o 2+ 2+ 3o 2o

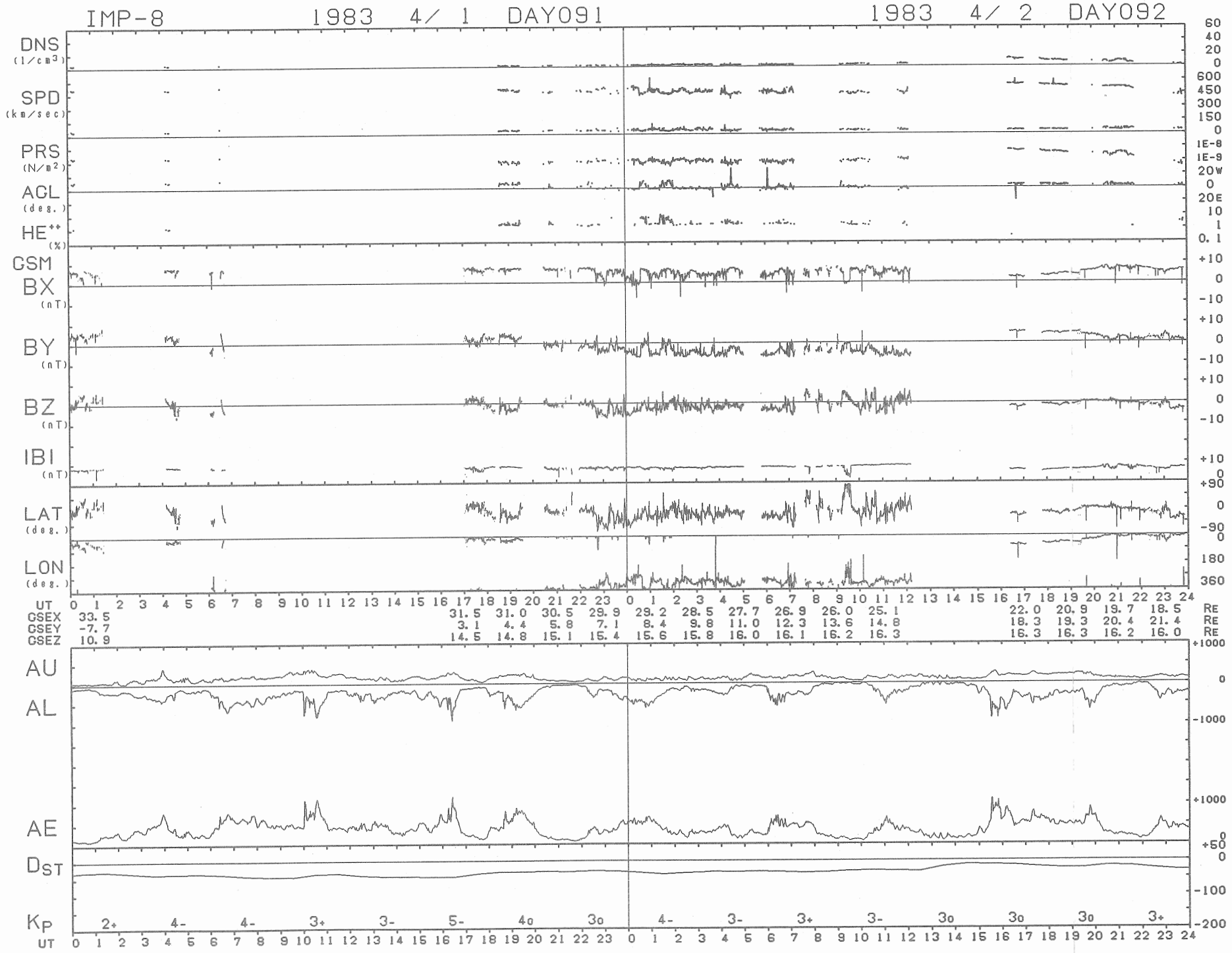

IMP-8 1983 3/22 DAY081 1983 3/23 DAY082
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.3 -0.3 -1.8 -3.4 -4.9 -6.4 -8.0 -9.5 -10.9 -12.4 -15.1 -19.0 -20.2 RE
GSEY 28.3 28.4 28.5 28.5 28.4 28.2 28.0 27.7 27.3 26.8 25.7 23.6 22.7 RE
GSEZ 13.4 12.9 12.4 11.8 11.2 10.6 9.9 9.2 8.5 7.8 6.3 3.8 3.0 RE
AU
AL
AE
Dst
Kp 3o 3o 2o 1o 2- 1+ 2+ 2+ 3- 3- 3o 1+ 2o 2o 2- 2-
UT

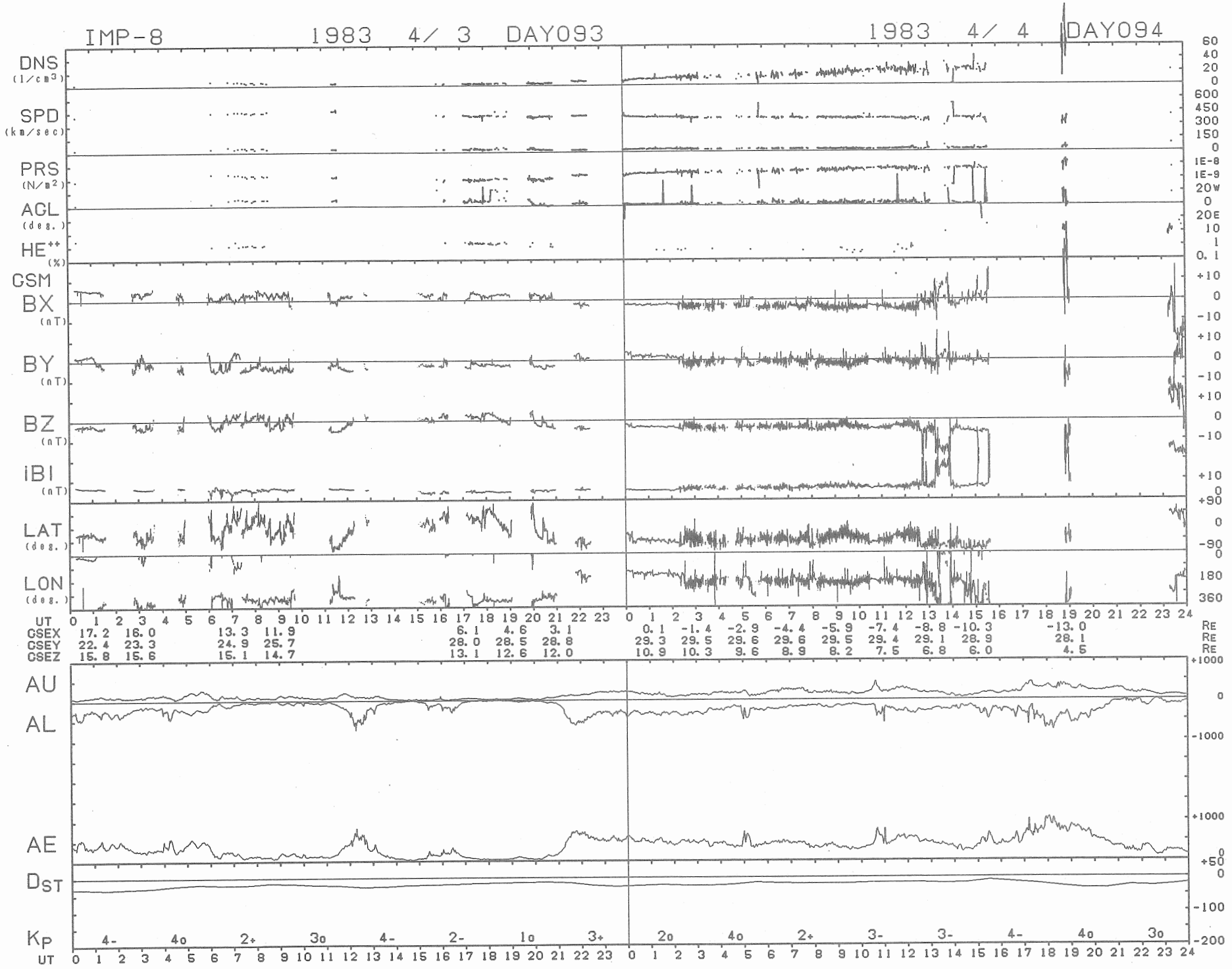

IMP-8
1983 3/24 DAY083
1983 3/25 DAY084
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -22.4 -23.4 -24.4 -25.3 -26.1 -26.9 -27.6 -28.2 -30.0 -30.7 -30.7 -30.6 -30.5 -30.3 -30.0 RE
GSEY 20.9 19.8 18.8 17.6 16.5 15.3 14.0 12.8 7.4 1.7 0.3 -1.1 -2.6 -4.0 -5.4 RE
GSEZ 1.3 0.5 -0.4 -1.3 -2.1 -2.9 -3.8 -4.6 -7.8 -10.6 -11.3 -11.9 -12.5 -13.1 -13.6 RE
AU
AL
AE
DST
KP
3o 3+ 2- 2- 2- 2- 3+ 2+ 4- 5+ 6+ 6- 5+ 4+ 5- 4+
UT

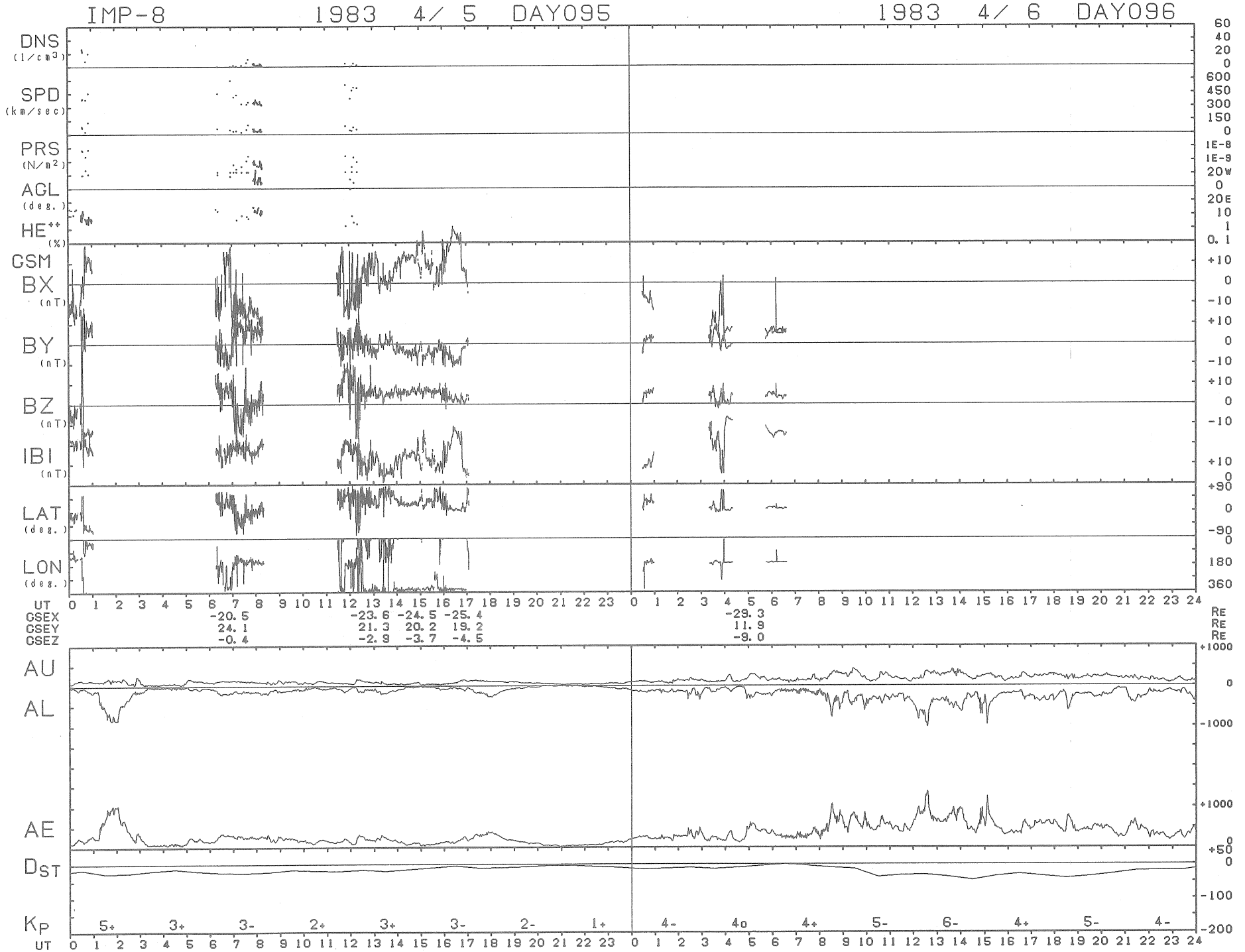

IMP-8
1983 3/26 DAY085
1983 3/27 DAY086
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.9 -26.6 -24.4 -23.6 -22.7 -17.9 -16.9 -15.8 -14.7 RE
GSEY -9.6 -14.9 -18.6 -19.7 -20.9 -26.0 -26.9 -27.8 -28.7 RE
GSEZ -15.1 -16.6 -17.4 -17.6 -17.7 -18.1 -18.1 -18.1 -18.0 RE
AU
AL
AE
DST
KP
5- 4o 2o 1- 2o 1o 2o 2o 0+ 0o 0+ 2- 1+ 1- 1- 1+
UT

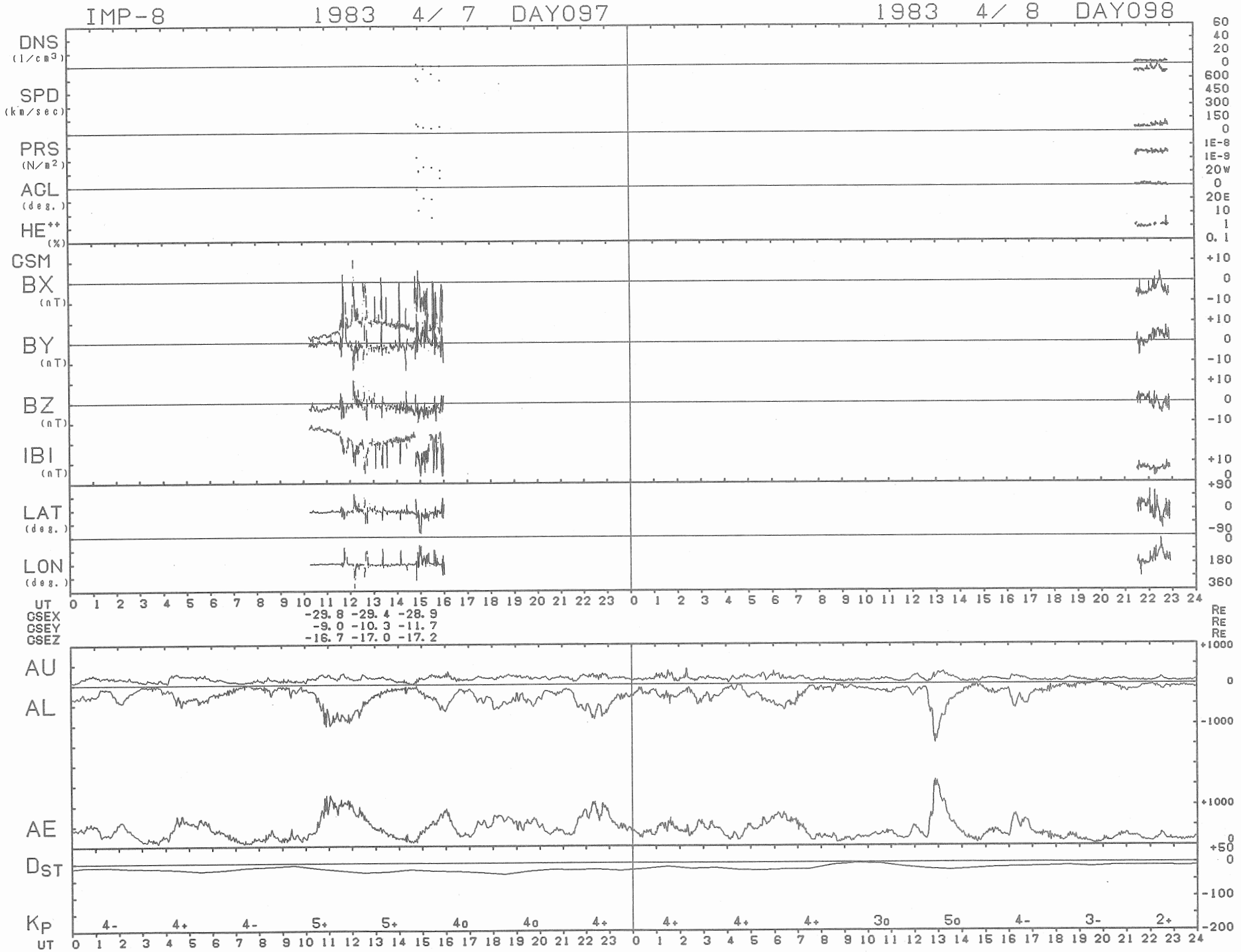

IMP-8
1983 3/28 DAY087
1983 3/29 DAY088
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -4.1 -2.9 2.0 4.5 5.7 10.4 16.1 17.2 19.2 20.2 RE
GSEY -34.2 -34.5 -35.6 -35.9 -35.9 -35.7 -34.4 -34.0 -33.0 -32.5 RE
GSEZ -16.1 -15.8 -14.2 -13.3 -12.8 -10.7 -7.8 -7.1 -5.9 -5.2 RE
AU
AL
AE
DST
KP
2o 4o 5+ 5- 4o 6- 4+ 5- 5o 5+ 5- 4- 4+ 5o 5- 4+
UT

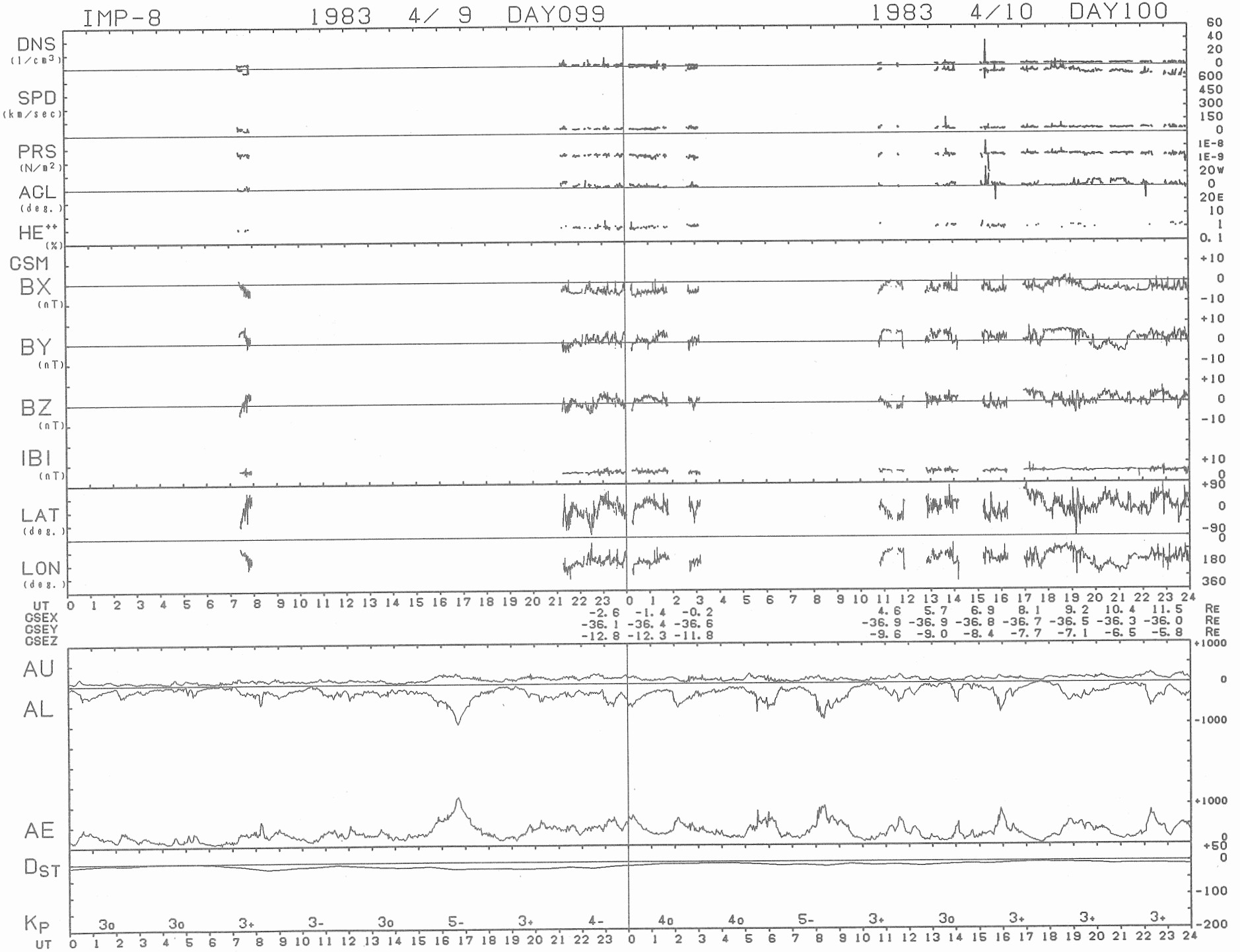

IMP-8 1983 3/30 DAY089
1983 3/31 DAY090
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.2 22.1 23.1 25.6 30.9 32.8 33.3 33.4 33.5 33.5 RE
GSEY -31.9 -31.3 -30.7 -28.5 -21.0 -15.3 -12.8 -11.6 -10.3 -9.0 RE
GSEZ -4.5 -3.9 -3.2 -1.2 4.3 7.5 8.7 9.3 9.8 10.4 RE
AU
AL
AE
DST
KP
3+ 4+ 4+ 4- 3+ 5- 3o 5- 5- 5+ 3+ 5- 4- 3- 4o 3o
UT

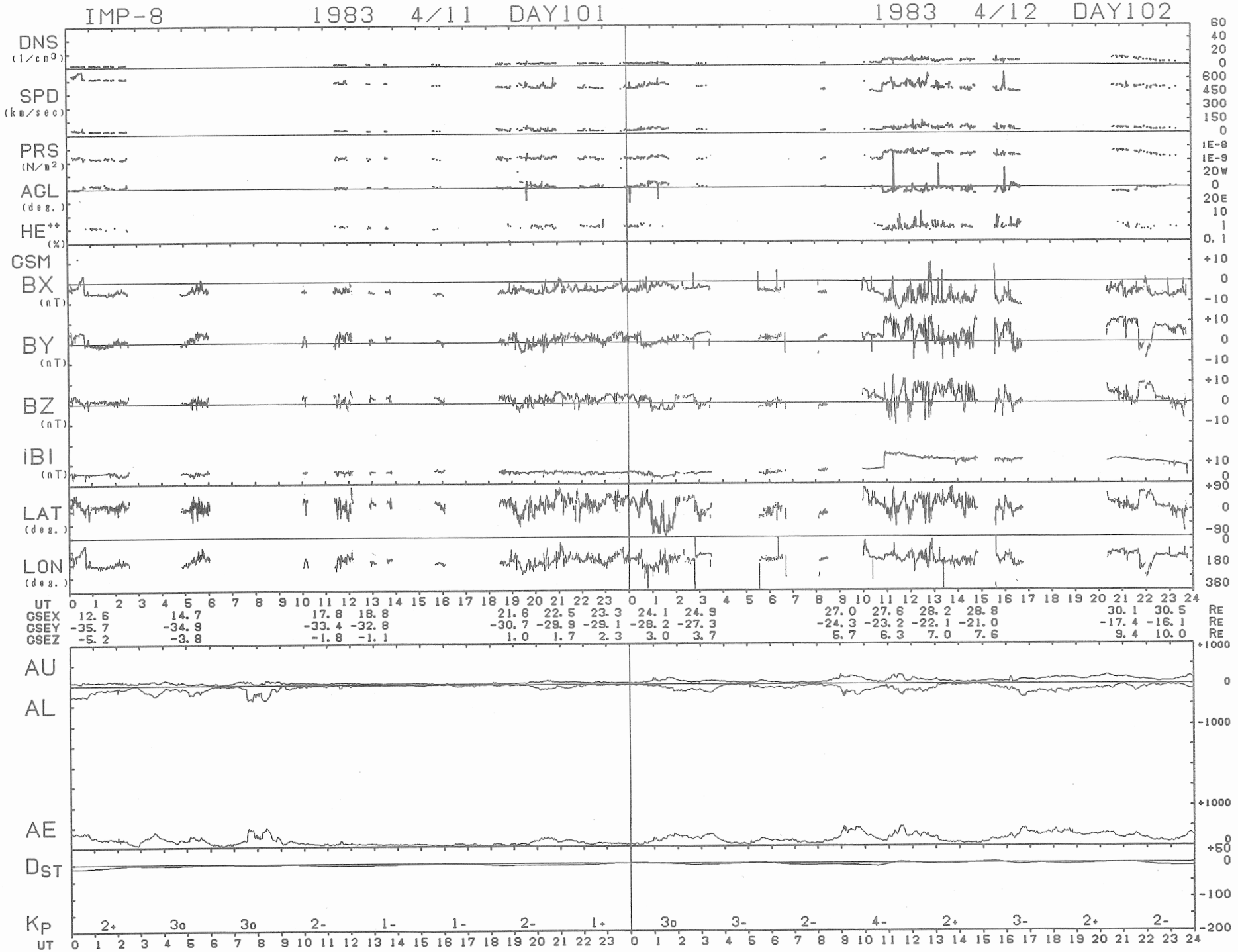

IMP-8
1983 4/ 1 DAY091
1983 4/ 2 DAY092
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.5
GSEY -7.7
GSEZ 10.9
AU
AL
AE
DST
KP
2+ 4- 4- 3+ 3- 5- 4o 3o 4- 3- 3+ 3- 3o 3o 3o 3+
UT

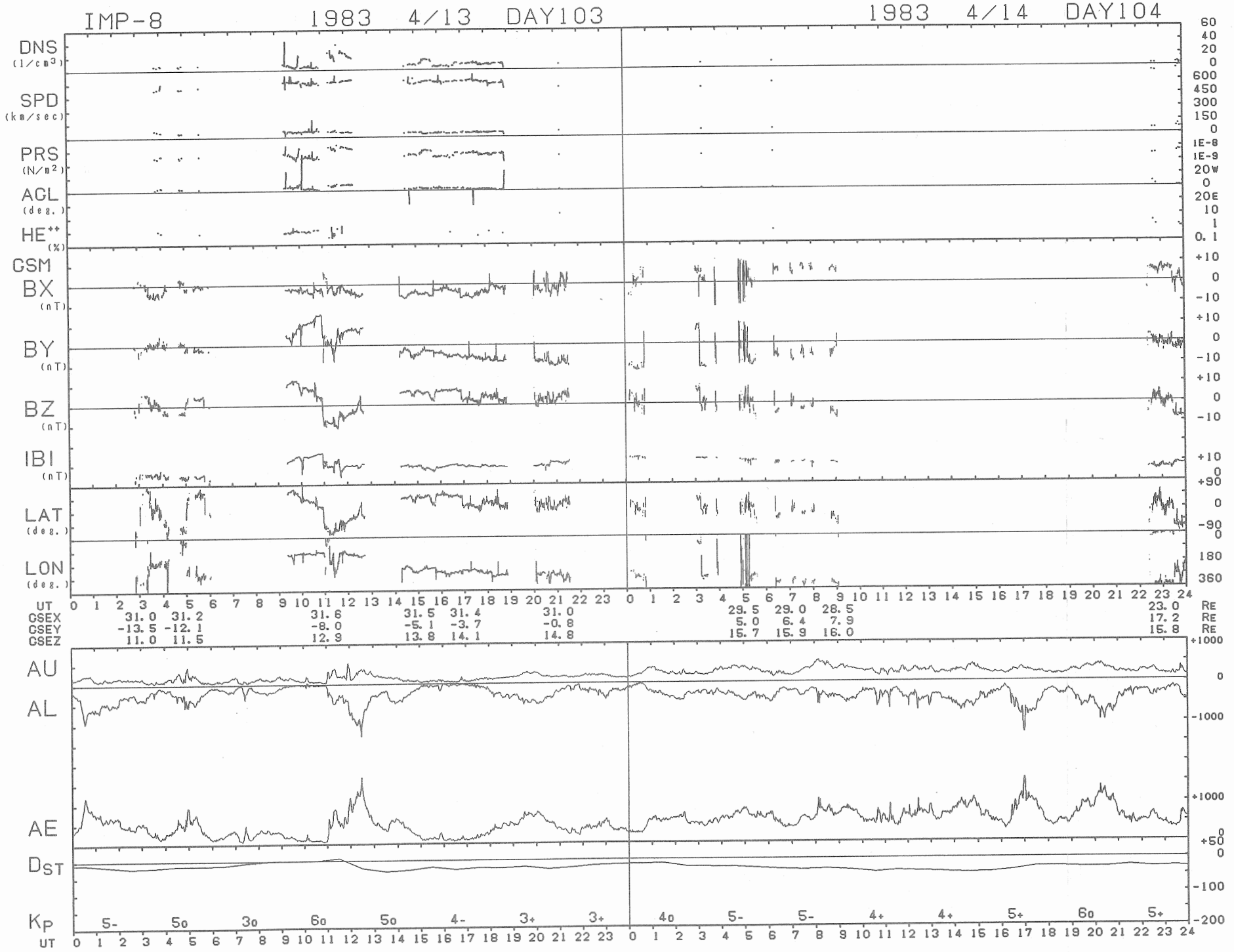

IMP-8
1983 4/ 3 DAY093
1983 4/ 4 DAY094
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 17.2 16.0 13.3 11.9 6.1 4.6 3.1 0.1 -1.4 -2.9 -4.4 -5.9 -7.4 -8.8 -10.3 -13.0
GSEY 22.4 23.3 24.9 25.7 28.0 28.5 28.8 29.3 29.5 29.6 29.6 29.5 29.4 29.1 28.9 28.1
GSEZ 15.8 15.6 15.1 14.7 13.1 12.6 12.0 10.9 10.3 9.6 8.9 8.2 7.5 6.8 6.0 4.5
RE
AU
AL
AE
DST
KP
4- 4o 2+ 3o 4- 2- 1o 3+ 2o 4o 2+ 3- 3- 4- 4o 3o
UT

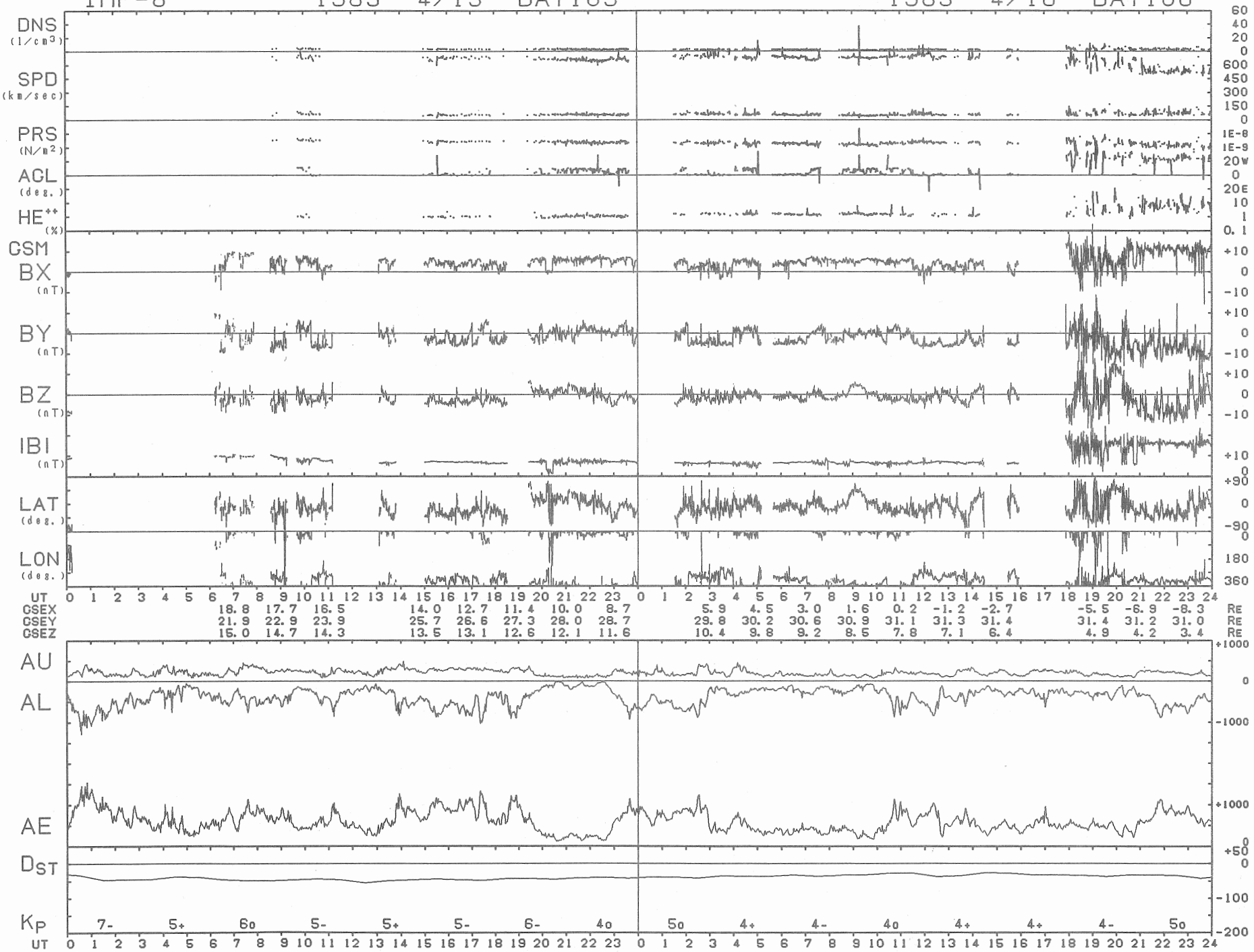

IMP-8 1983 4/ 5 DAY095
1983 4/ 6 DAY096
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.5 -23.6 -24.5 -25.4 -29.3 Re
GSEY 24.1 21.3 20.2 19.2 11.9 Re
GSEZ -0.4 -2.9 -3.7 -4.5 -9.0 Re
AU
AL
AE
Dst
Kp
5+ 3+ 3- 2+ 3+ 3- 2- 1+ 4- 4o 4+ 5- 6- 4+ 5- 4-
UT

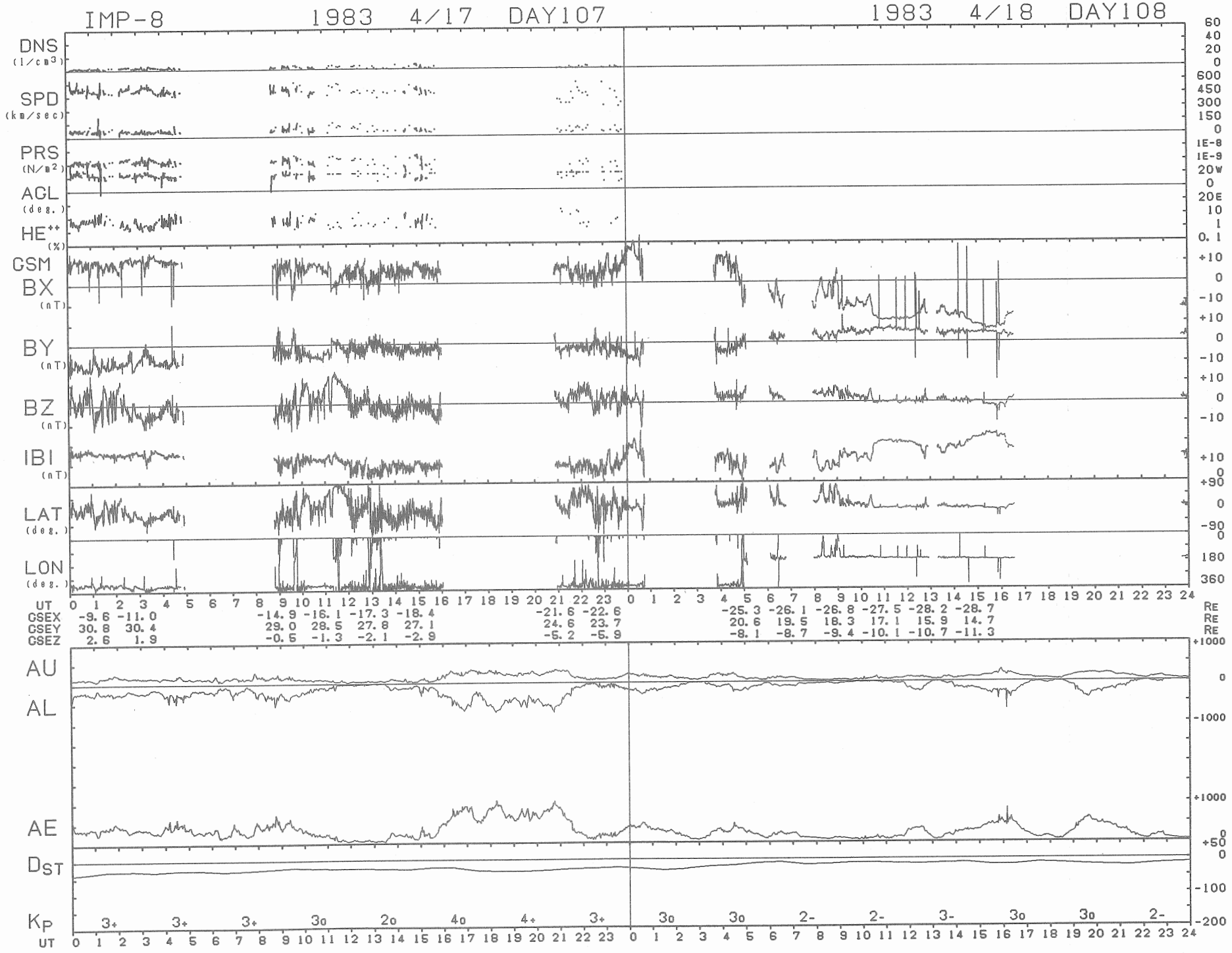

IMP-8
1983 4/ 7 DAY097
1983 4/ 8 DAY098
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.8 -29.4 -28.9
GSEY -9.0 -10.3 -11.7
GSEZ -16.7 -17.0 -17.2
AU
AL
AE
DST
KP
4- 4+ 4- 5+ 5+ 4o 4o 4+ 4+ 4+ 4+ 3o 5o 4- 3- 2+

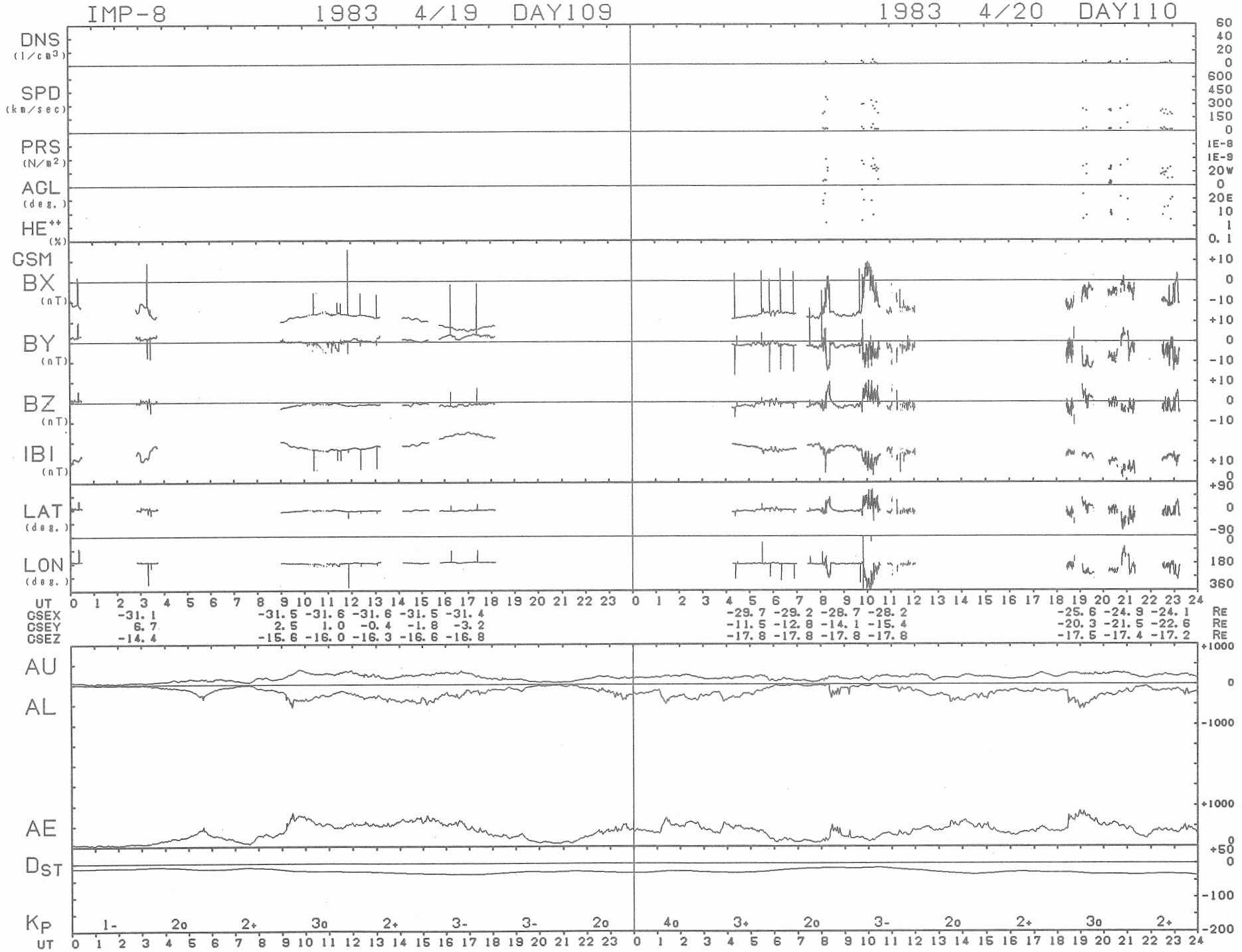

IMP-8
1983 4/ 9 DAY099
1983 4/10 DAY100
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.6 -1.4 -0.2 4.6 5.7 6.9 8.1 9.2 10.4 11.5 RE
GSEY -36.1 -36.4 -36.6 -36.9 -36.9 -36.8 -36.7 -36.5 -36.3 -36.0 RE
GSEZ -12.8 -12.3 -11.8 -9.6 -9.0 -8.4 -7.7 -7.1 -6.5 -5.8 RE
AU
AL
AE
DST
KP 3o 3o 3+ 3- 3o 5- 3+ 4- 4o 4o 5- 3+ 3o 3+ 3+ 3+
UT

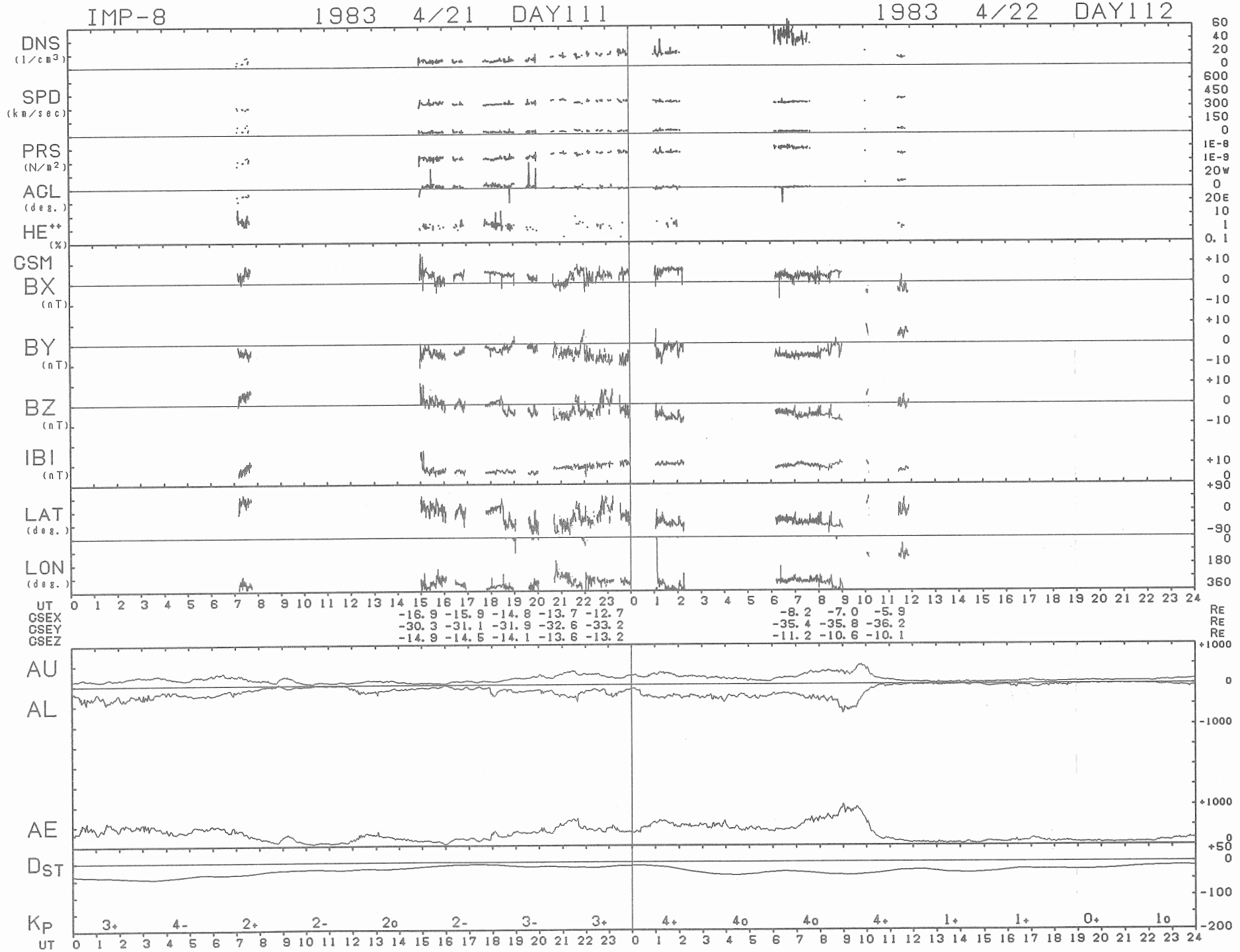

IMP-8 1983 4/11 DAY101
1983 4/12 DAY102
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.6 14.7 17.8 18.8 21.6 22.5 23.3 24.1 24.9 27.0 27.6 28.2 28.8 30.1 30.5 RE
GSEY -35.7 -34.9 -33.4 -32.8 -30.7 -29.9 -29.1 -28.2 -27.3 -24.3 -23.2 -22.1 -21.0 -17.4 -16.1 RE
GSEZ -5.2 -3.8 -1.8 -1.1 1.0 1.7 2.3 3.0 3.7 5.7 6.3 7.0 7.6 9.4 10.0 RE
AU
AL
AE
DST
KP 2+ 3o 3o 2- 1- 1- 2- 1+ 3o 3- 2- 4- 2+ 3- 2+ 2-
UT

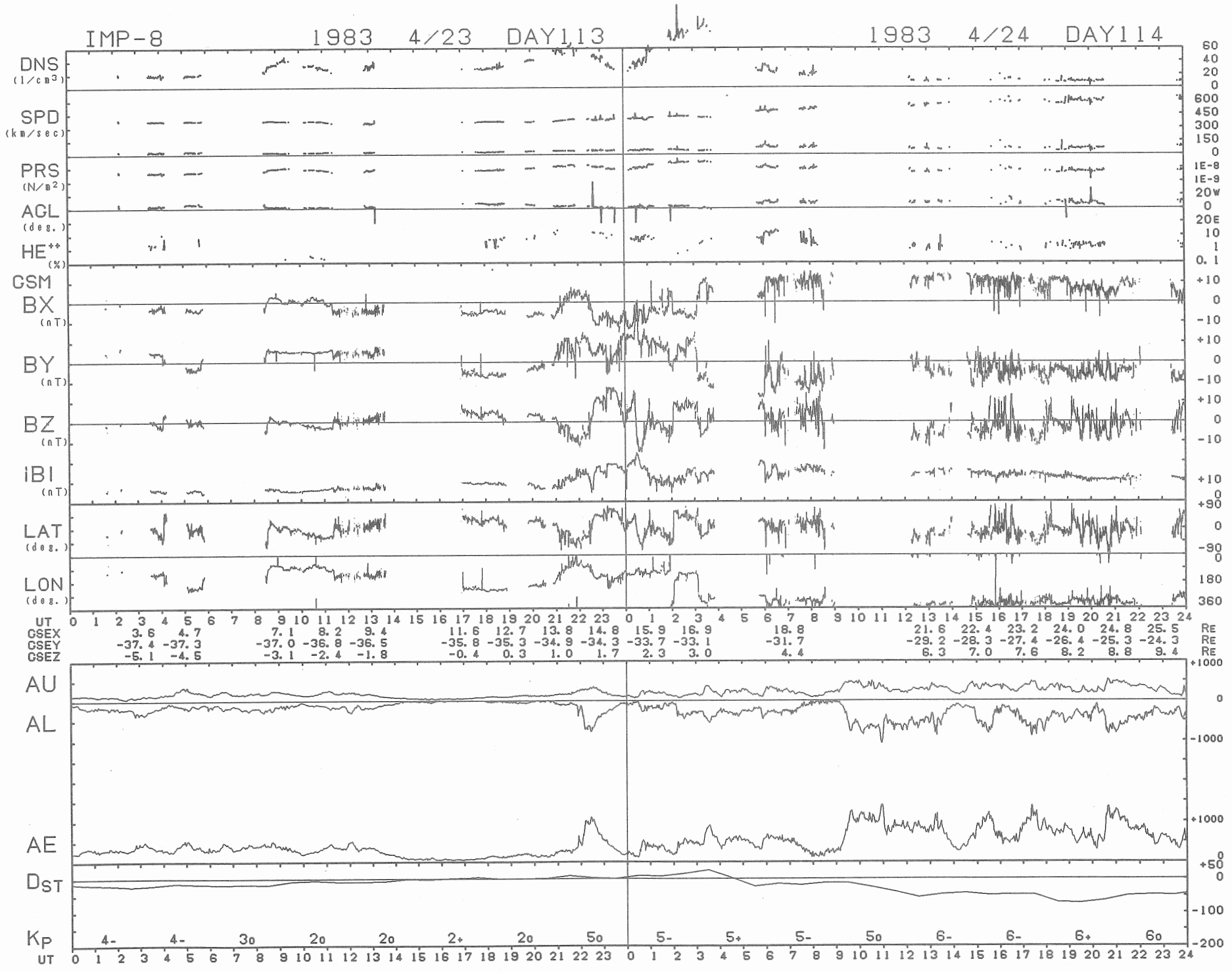

IMP-8
1983 4/13 DAY103
1983 4/14 DAY104
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.0 31.2 31.6 31.5 31.4 31.0 29.5 29.0 28.5 23.0 RE
GSEY -13.5 -12.1 -8.0 -5.1 -3.7 -0.8 5.0 6.4 7.9 17.2 RE
GSEZ 11.0 11.5 12.9 13.8 14.1 14.8 15.7 15.9 16.0 15.8 RE
AU
AL
AE
DST
KP 5- 5o 3o 6o 5o 4- 3+ 3+ 4o 5- 5- 4+ 4+ 5+ 6o 5+
UT

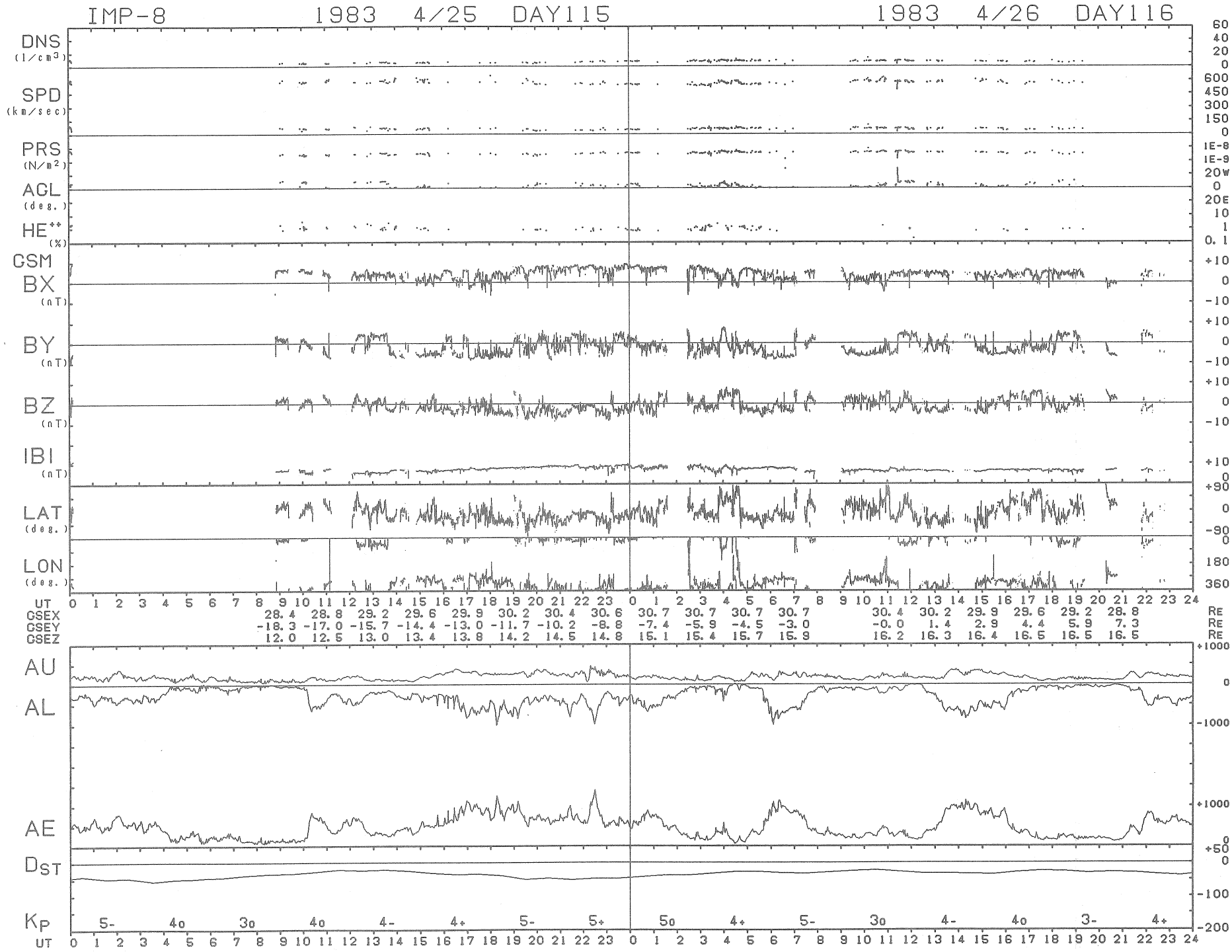

IMP-8 1983 4/15 DAY105
1983 4/16 DAY106
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.8 17.7 16.5 14.0 12.7 11.4 10.0 8.7 5.9 4.5 3.0 1.6 0.2 -1.2 -2.7 -5.5 -6.9 -8.3 RE
GSEY 21.9 22.9 23.9 25.7 26.6 27.3 28.0 28.7 29.8 30.2 30.6 30.9 31.1 31.3 31.4 31.4 31.2 31.0 RE
GSEZ 15.0 14.7 14.3 13.5 13.1 12.6 12.1 11.6 10.4 9.8 9.2 8.5 7.8 7.1 6.4 4.9 4.2 3.4 RE
AU
AL
AE
DST
KP 7- 5+ 6o 5- 5+ 5- 6- 4o 5o 4+ 4- 4o 4+ 4+ 4- 5o
UT

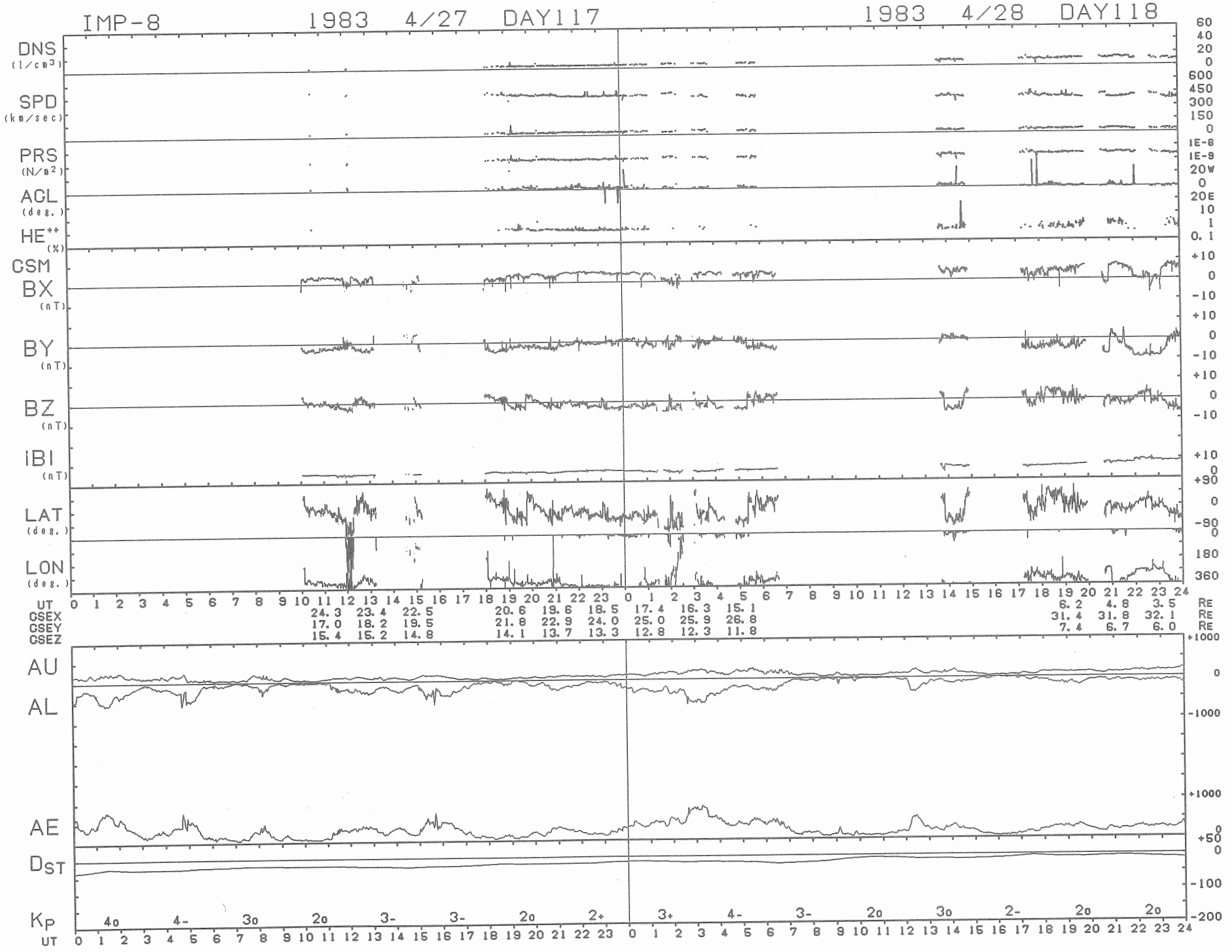

IMP-8
1983 4/17 DAY107
1983 4/18 DAY108
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.6 -11.0 -14.9 -16.1 -17.3 -18.4 -21.6 -22.6 -25.3 -26.1 -26.8 -27.5 -28.2 -28.7 RE
GSEY 30.8 30.4 29.0 28.5 27.8 27.1 24.6 23.7 20.6 19.5 18.3 17.1 15.9 14.7 RE
GSEZ 2.6 1.9 -0.5 -1.3 -2.1 -2.9 -5.2 -5.9 -8.1 -8.7 -9.4 -10.1 -10.7 -11.3 RE
AU
AL
AE
DST
KP
3+ 3+ 3+ 3o 2o 4o 4+ 3+ 3o 3o 2- 2- 3- 3o 3o 2-
UT

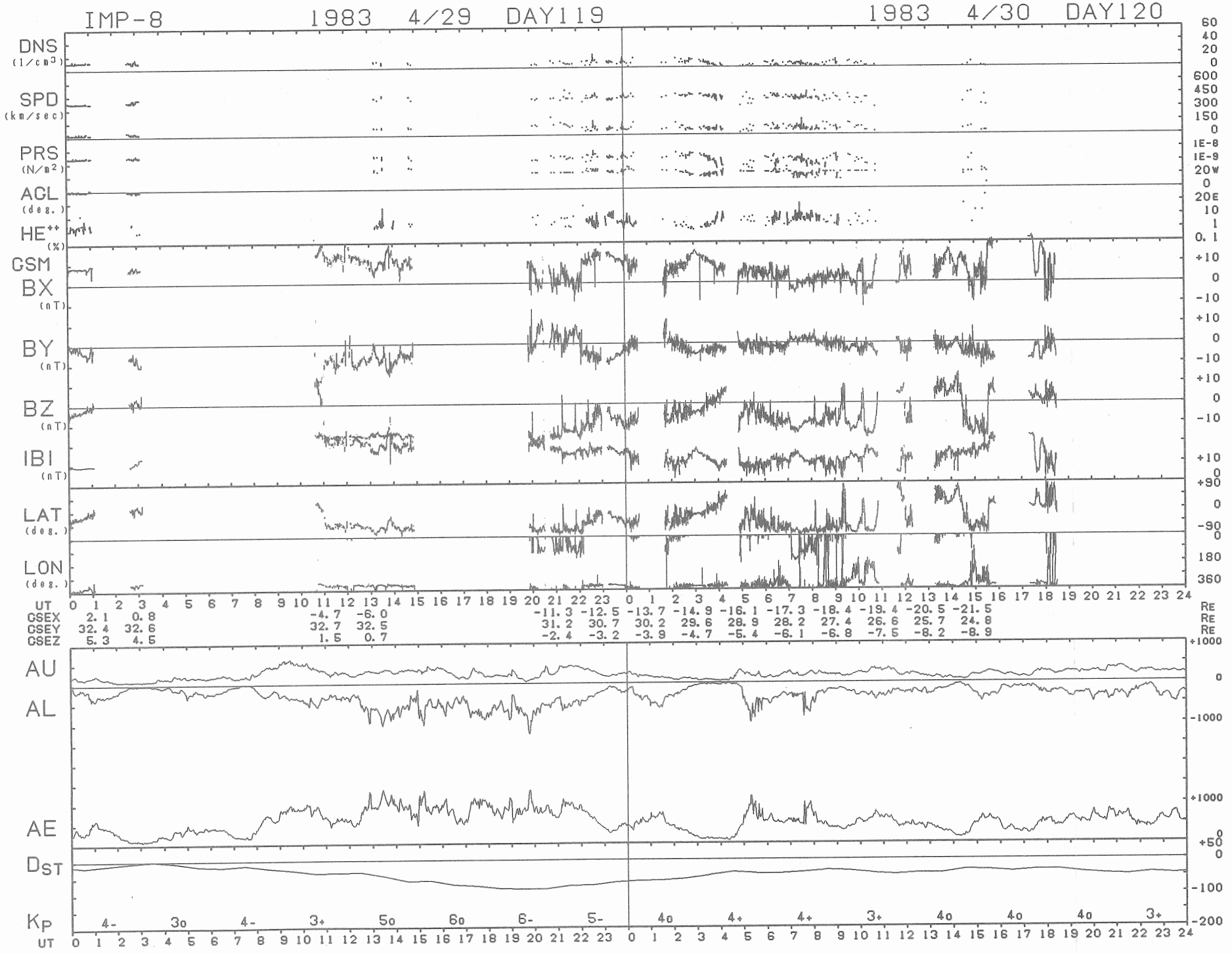

IMP-8 1983 4/19 DAY109
1983 4/20 DAY110
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.1 -31.5 -31.6 -31.6 -31.5 -31.4 -29.7 -29.2 -28.7 -28.2 -25.6 -24.9 -24.1 RE
GSEY 6.7 2.5 1.0 -0.4 -1.8 -3.2 -11.5 -12.8 -14.1 -15.4 -20.3 -21.5 -22.6 RE
GSEZ -14.4 -15.6 -16.0 -16.3 -16.6 -16.8 -17.8 -17.8 -17.8 -17.8 -17.5 -17.4 -17.2 RE
AU
AL
AE
DST
KP 1- 2o 2+ 3o 2+ 3- 3- 2o 4o 3+ 2o 3- 2o 2+ 3o 2+
UT

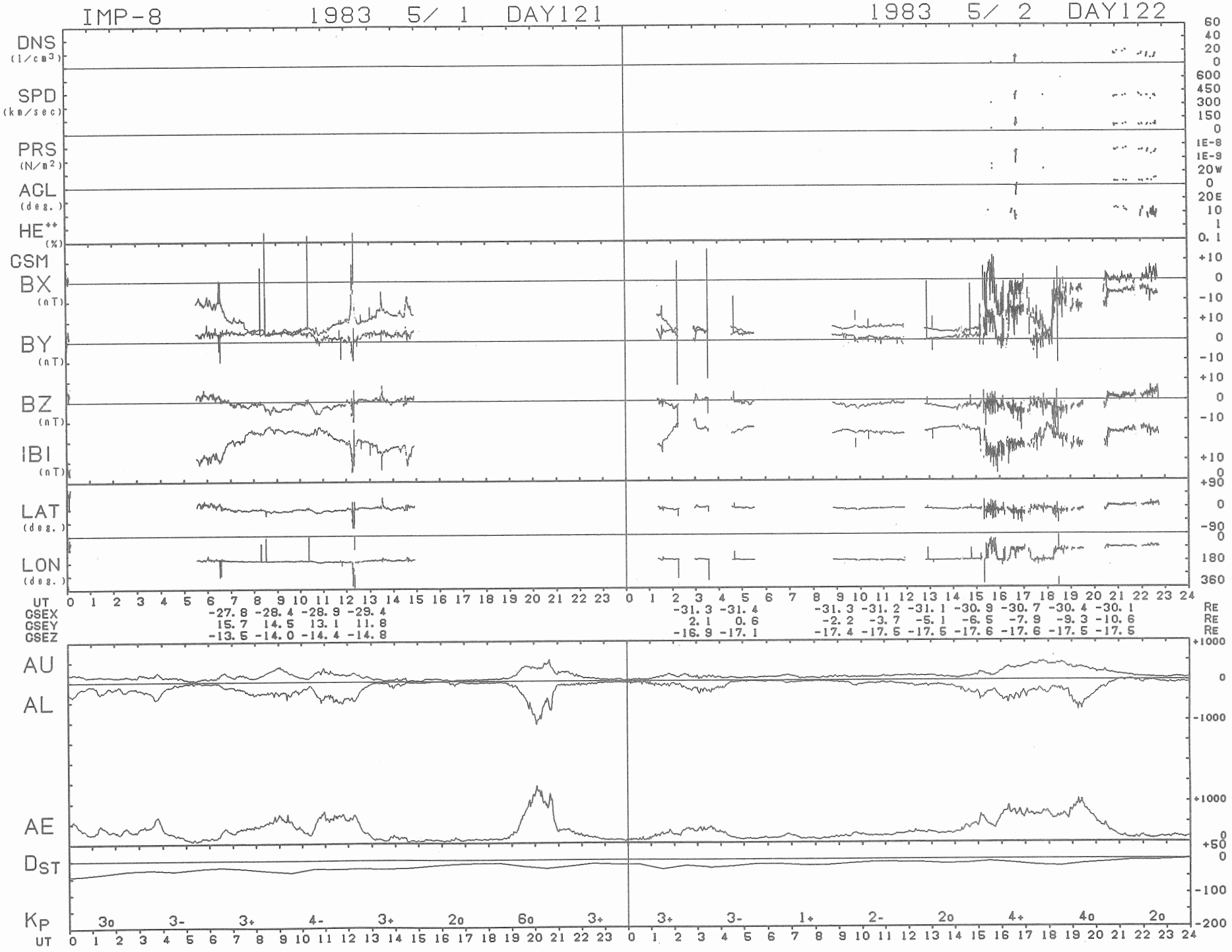

IMP-8 1983 4/21 DAY111
1983 4/22 DAY112
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.9 -15.9 -14.8 -13.7 -12.7 -8.2 -7.0 -5.9 RE
GSEY -30.3 -31.1 -31.9 -32.6 -33.2 -35.4 -35.8 -36.2 RE
GSEZ -14.9 -14.5 -14.1 -13.6 -13.2 -11.2 -10.6 -10.1 RE
AU
AL
AE
DST
KP 3+ 4- 2+ 2- 2o 2- 3- 3+ 4+ 4o 4o 4+ 1+ 1+ 0+ 1o
UT

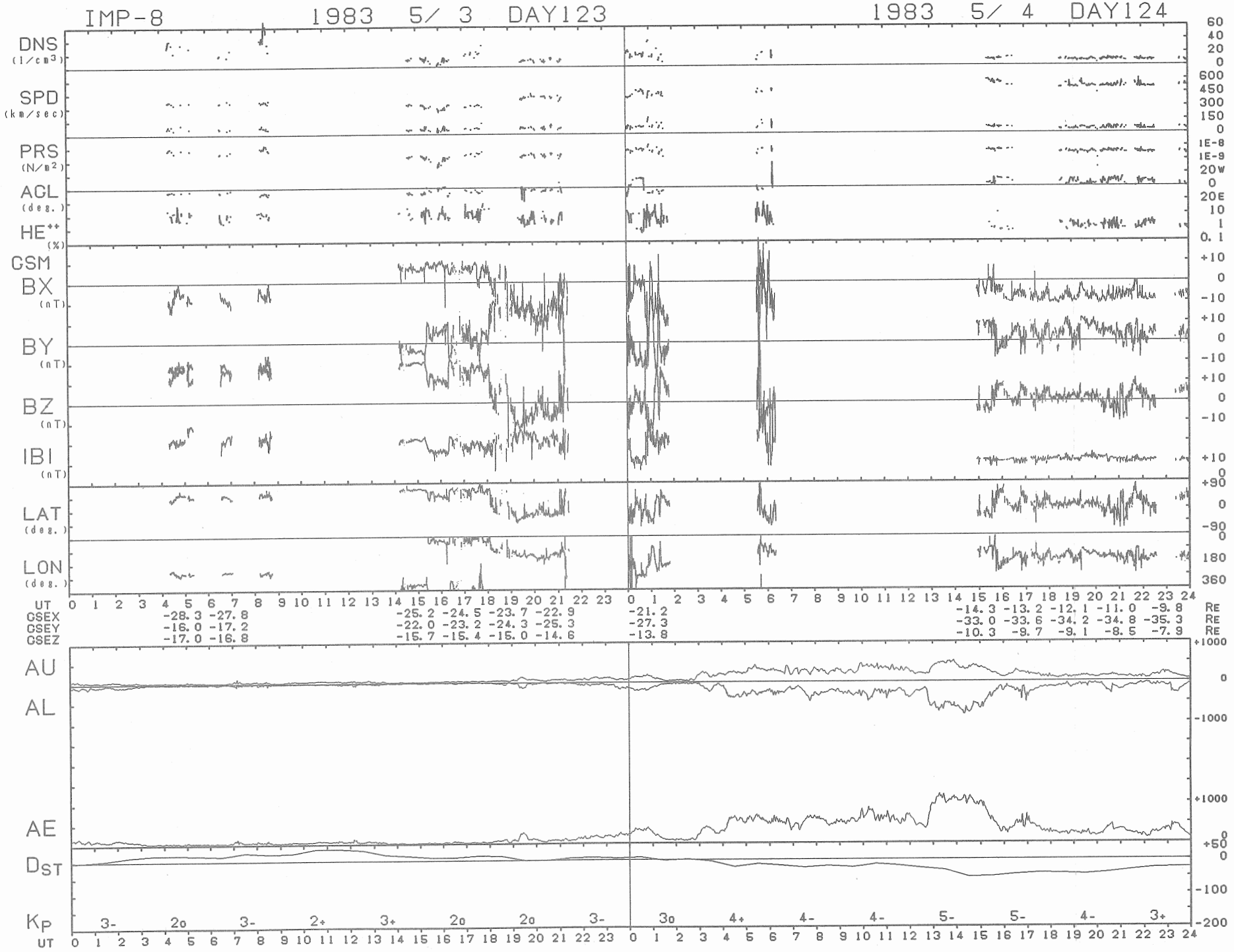

IMP-8 1983 4/23 DAY113
1983 4/24 DAY114
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.6 4.7 7.1 8.2 9.4 11.6 12.7 13.8 14.8 15.9 16.9 18.8 21.6 22.4 23.2 24.0 24.8 25.5 RE
GSEY -37.4 -37.3 -37.0 -36.8 -36.5 -35.8 -35.3 -34.9 -34.3 -33.7 -33.1 -31.7 -29.2 -28.3 -27.4 -26.4 -25.3 -24.3 RE
GSEZ -5.1 -4.5 -3.1 -2.4 -1.8 -0.4 0.3 1.0 1.7 2.3 3.0 4.4 6.3 7.0 7.6 8.2 8.8 9.4 RE
AU
AL
AE
DST
KP 4- 4- 3o 2o 2o 2+ 2o 5o 5- 5+ 5- 5o 6- 6- 6+ 6o
UT

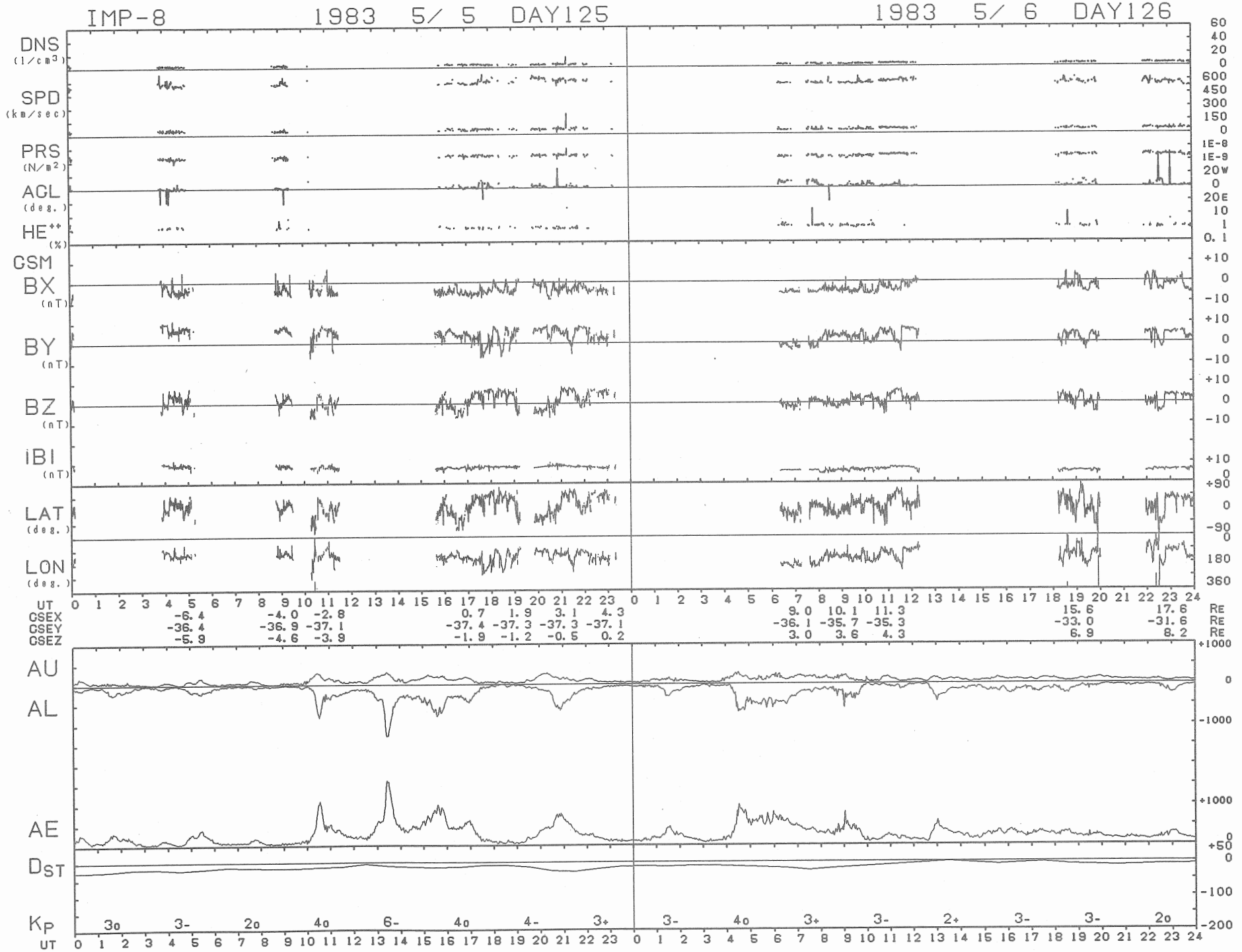

IMP-8 1983 4/25 DAY115
1983 4/26 DAY116
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.4 28.8 29.2 29.6 29.9 30.2 30.4 30.6 30.7 30.7 30.7 30.7 30.4 30.2 29.9 29.6 29.2 28.8 RE
GSEY -18.3 -17.0 -15.7 -14.4 -13.0 -11.7 -10.2 -8.8 -7.4 -5.9 -4.5 -3.0 -0.0 1.4 2.9 4.4 5.9 7.3 RE
GSEZ 12.0 12.5 13.0 13.4 13.8 14.2 14.5 14.8 15.1 15.4 15.7 15.9 16.2 16.3 16.4 16.5 16.5 16.5 RE
AU
AL
AE
DST
KP 5- 4o 3o 4o 4- 4+ 5- 5+ 5o 4+ 5- 3o 4- 4o 3- 4+
UT

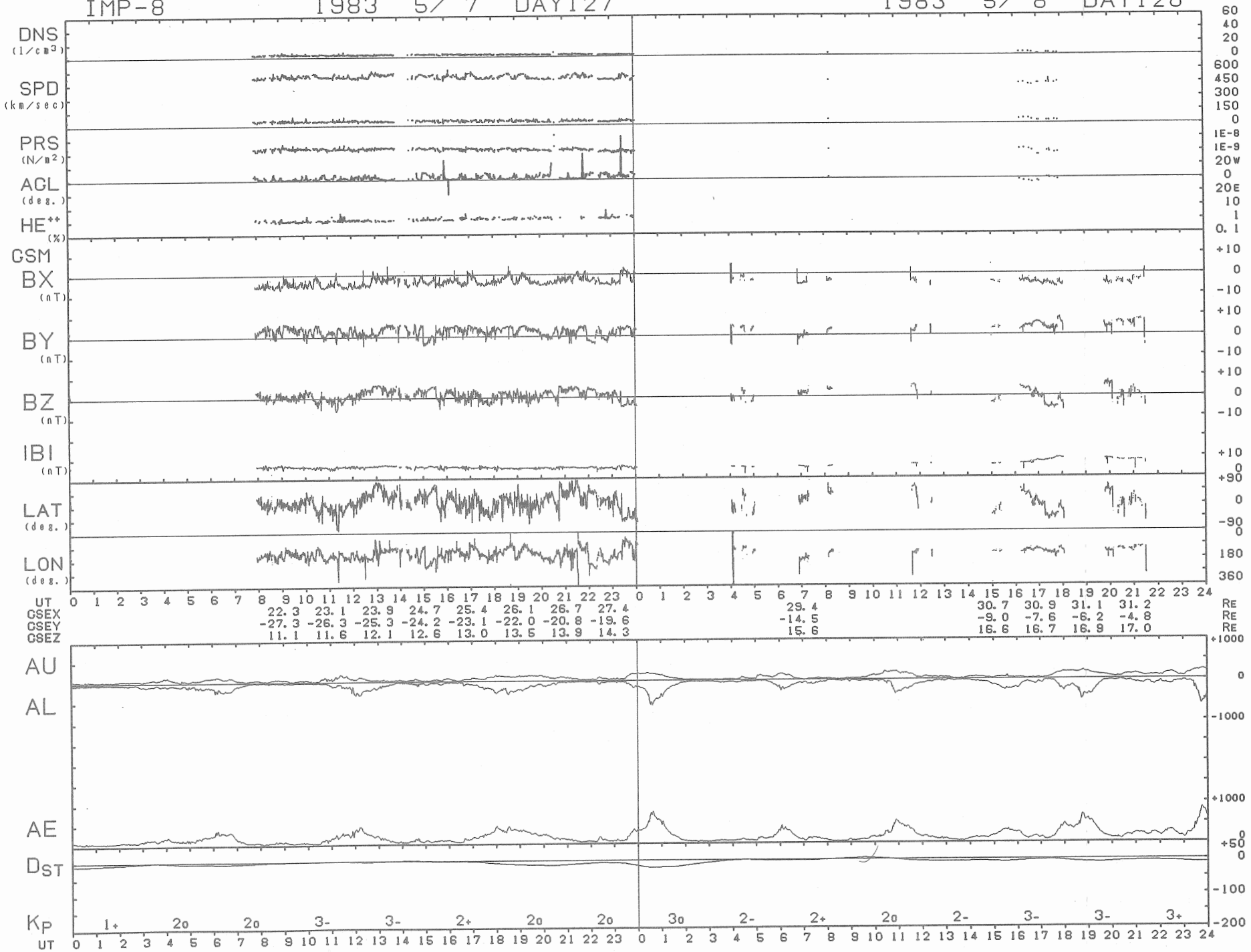

IMP-8
1983 4/27 DAY117
1983 4/28 DAY118
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
UT

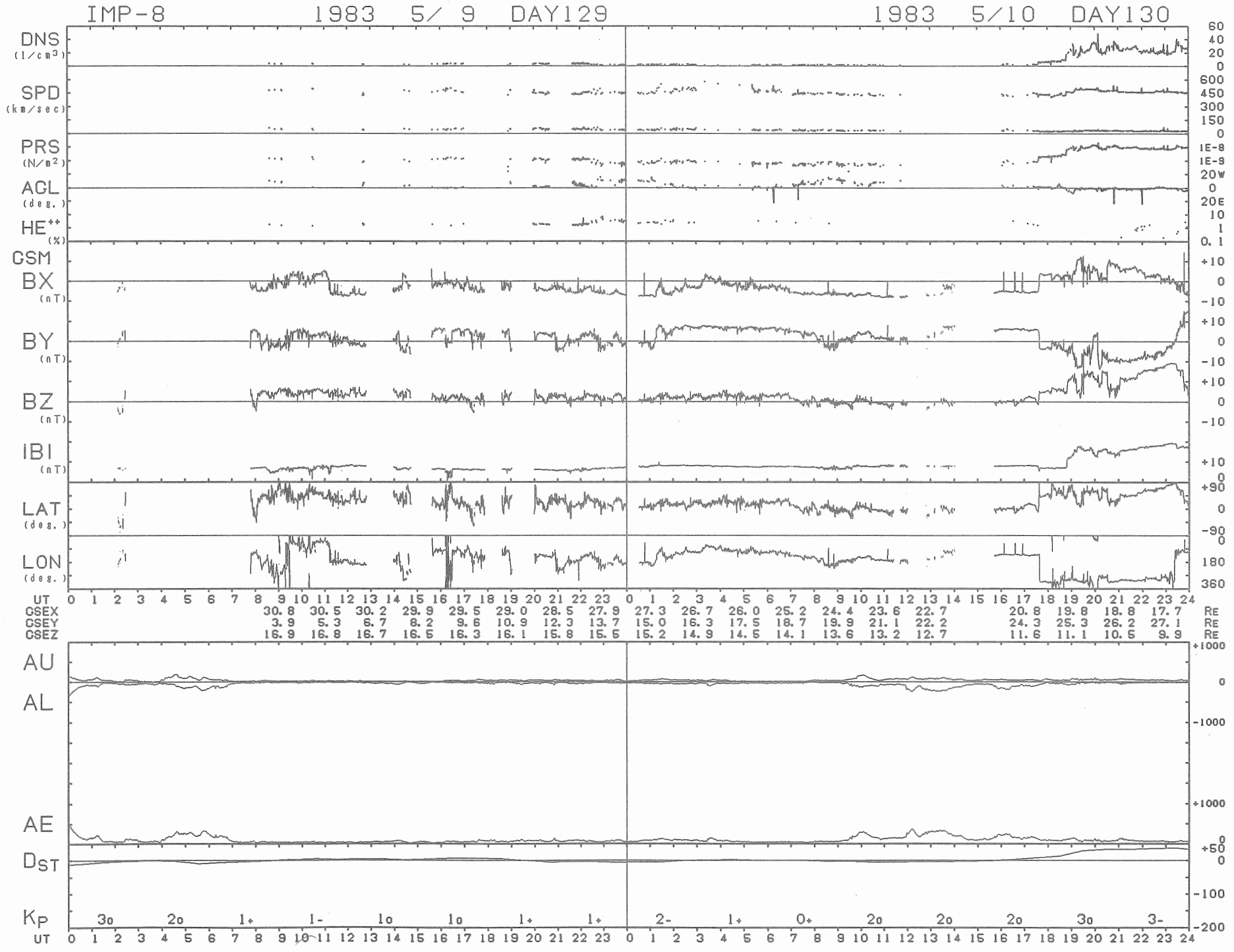

IMP-8 1983 4/29 DAY119
1983 4/30 DAY120
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.1 0.8 -4.7 -6.0 -11.3 -12.5 -13.7 -14.9 -16.1 -17.3 -18.4 -19.4 -20.5 -21.5
GSEY 32.4 32.6 32.7 32.5 31.2 30.7 30.2 29.6 28.9 28.2 27.4 26.6 25.7 24.8
GSEZ 5.3 4.5 1.5 0.7 -2.4 -3.2 -3.9 -4.7 -5.4 -6.1 -6.8 -7.5 -8.2 -8.9
RE
AU
AL
AE
DST
KP 4- 3o 4- 3+ 5o 6o 6- 5- 4o 4+ 4+ 3+ 4o 4o 4o 3+
UT

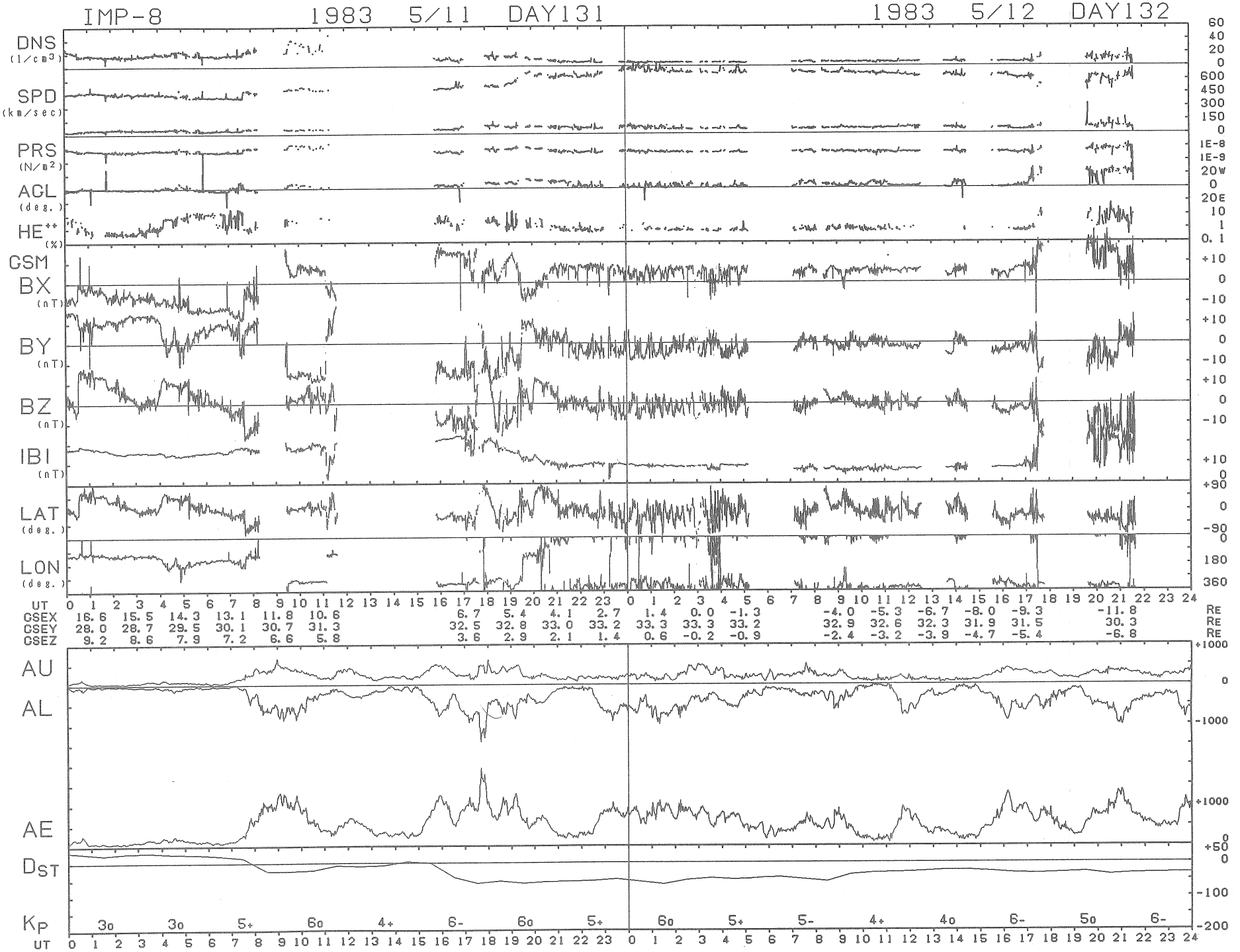

IMP-8
1983 5/ 1 DAY121
1983 5/ 2 DAY122
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
-27.8 -28.4 -28.9 -29.4
15.7 14.5 13.1 11.8
-13.5 -14.0 -14.4 -14.8
-31.3 -31.4
2.1 0.6
-16.9 -17.1
-31.3 -31.2 -31.1 -30.9 -30.7 -30.4 -30.1
-2.2 -3.7 -5.1 -6.5 -7.9 -9.3 -10.6
-17.4 -17.5 -17.5 -17.6 -17.6 -17.5 -17.5
RE
AU
AL
AE
DST
KP
3o 3- 3+ 4- 3+ 2o 6o 3+
3+ 3- 1+ 2- 2o 4+ 4o 2o

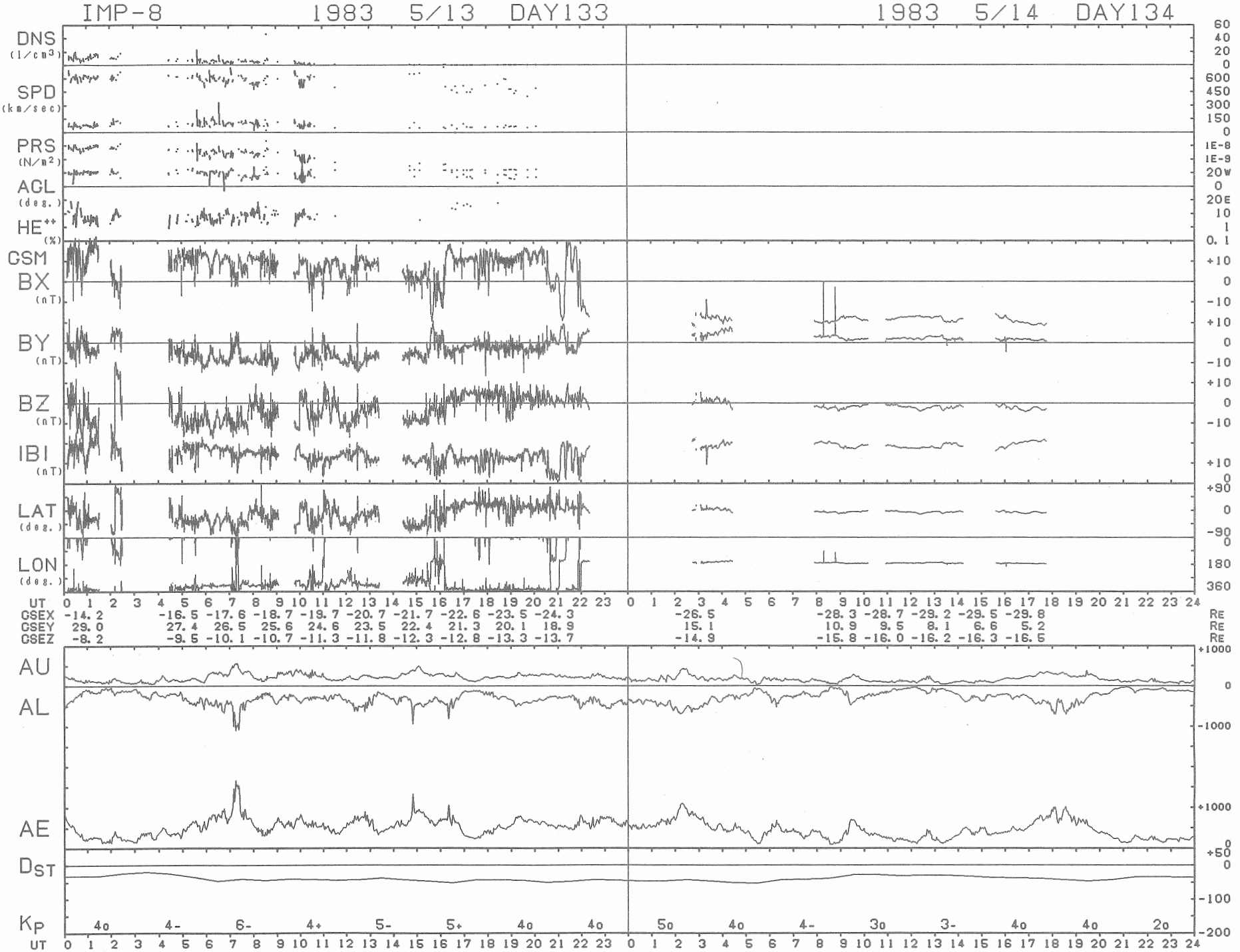

IMP-8
1983 5/ 3 DAY123
1983 5/ 4 DAY124
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.3 -27.8 -25.2 -24.5 -23.7 -22.9 -21.2 -14.3 -13.2 -12.1 -11.0 -9.8 RE
GSEY -16.0 -17.2 -22.0 -23.2 -24.3 -25.3 -27.3 -33.0 -33.6 -34.2 -34.8 -35.3 RE
GSEZ -17.0 -16.8 -15.7 -15.4 -15.0 -14.6 -13.8 -10.3 -9.7 -9.1 -8.5 -7.9 RE
AU
AL
AE
DST
KP 3- 2o 3- 2+ 3+ 2o 2o 3- 3o 4+ 4- 4- 5- 5- 4- 3+
UT

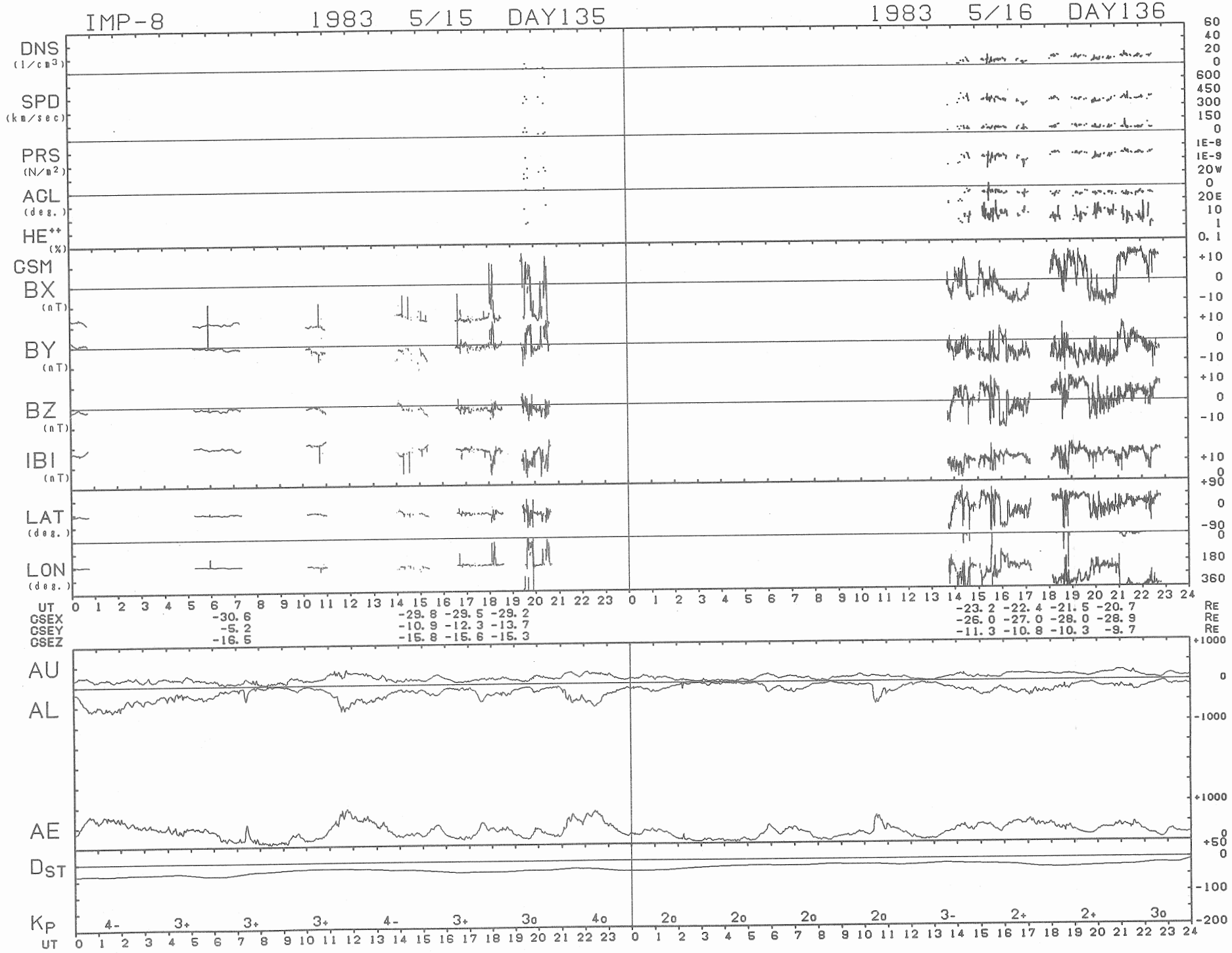

IMP-8 1983 5/ 5 DAY125
1983 5/ 6 DAY126
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -6.4 -4.0 -2.8 0.7 1.9 3.1 4.3 9.0 10.1 11.3 15.6 17.6 RE
GSEY -36.4 -36.9 -37.1 -37.4 -37.3 -37.3 -37.1 -36.1 -35.7 -35.3 -33.0 -31.6 RE
GSEZ -5.9 -4.6 -3.9 -1.9 -1.2 -0.5 0.2 3.0 3.6 4.3 6.9 8.2 RE
AU
AL
AE
DST
KP 3o 3- 2o 4o 6- 4o 4- 3+ 3- 4o 3+ 3- 2+ 3- 3- 2o
UT


IMP-8
1983 5/ 7 DAY127
1983 5/ 8 DAY128
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
RE

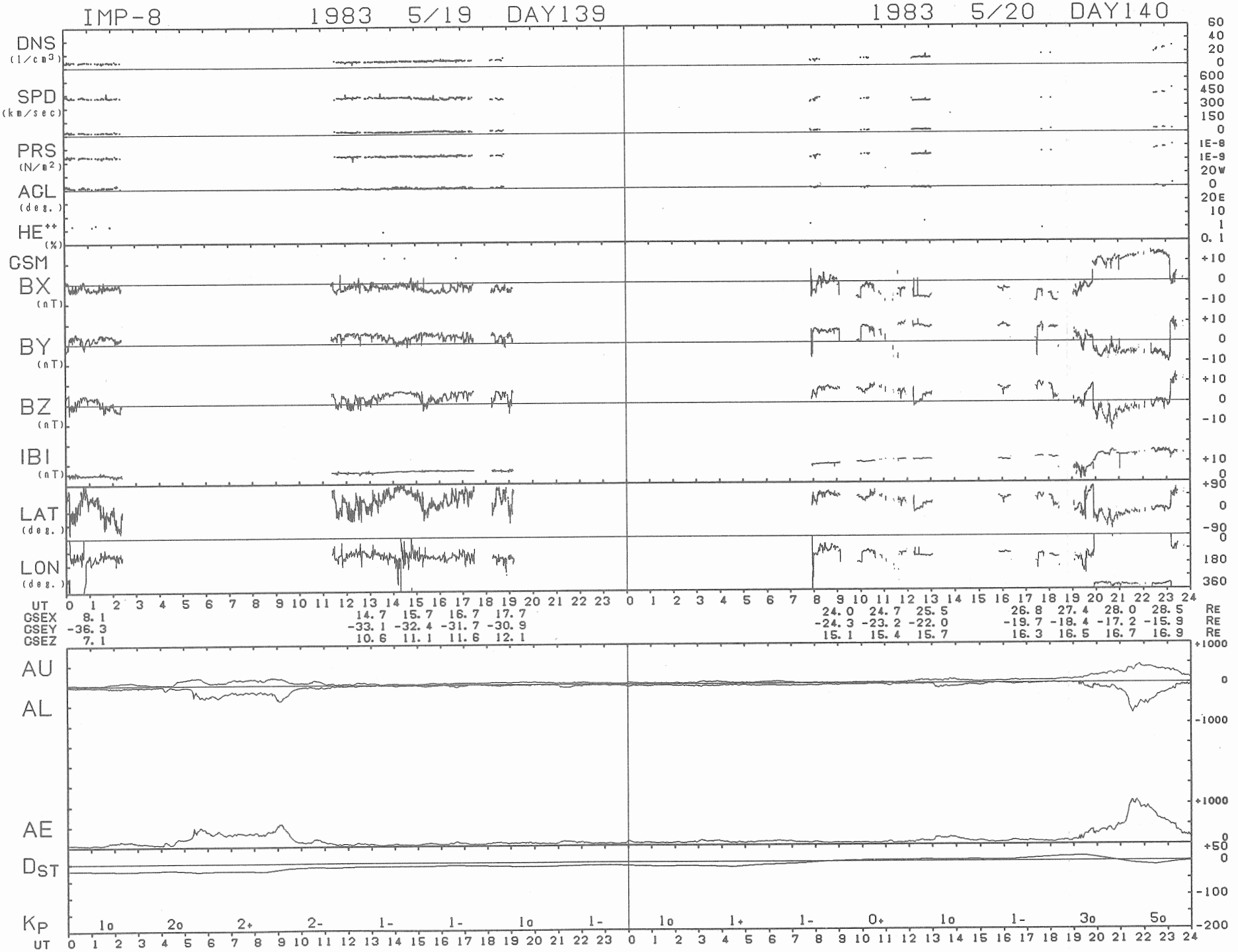

IMP-8 1983 5/ 9 DAY129
1983 5/10 DAY130
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.8 30.5 30.2 29.9 29.5 29.0 28.5 27.9 27.3 26.7 26.0 25.2 24.4 23.6 22.7 20.8 19.8 18.8 17.7 RE
GSEY 3.9 5.3 6.7 8.2 9.6 10.9 12.3 13.7 15.0 16.3 17.5 18.7 19.9 21.1 22.2 24.3 25.3 26.2 27.1 RE
GSEZ 16.9 16.8 16.7 16.5 16.3 16.1 15.8 15.5 15.2 14.9 14.5 14.1 13.6 13.2 12.7 11.6 11.1 10.5 9.9 RE
AU
AL
AE
DST
KP 3o 2o 1+ 1- 1o 1o 1+ 1+ 2- 1+ 0+ 2o 2o 2o 3o 3-
UT

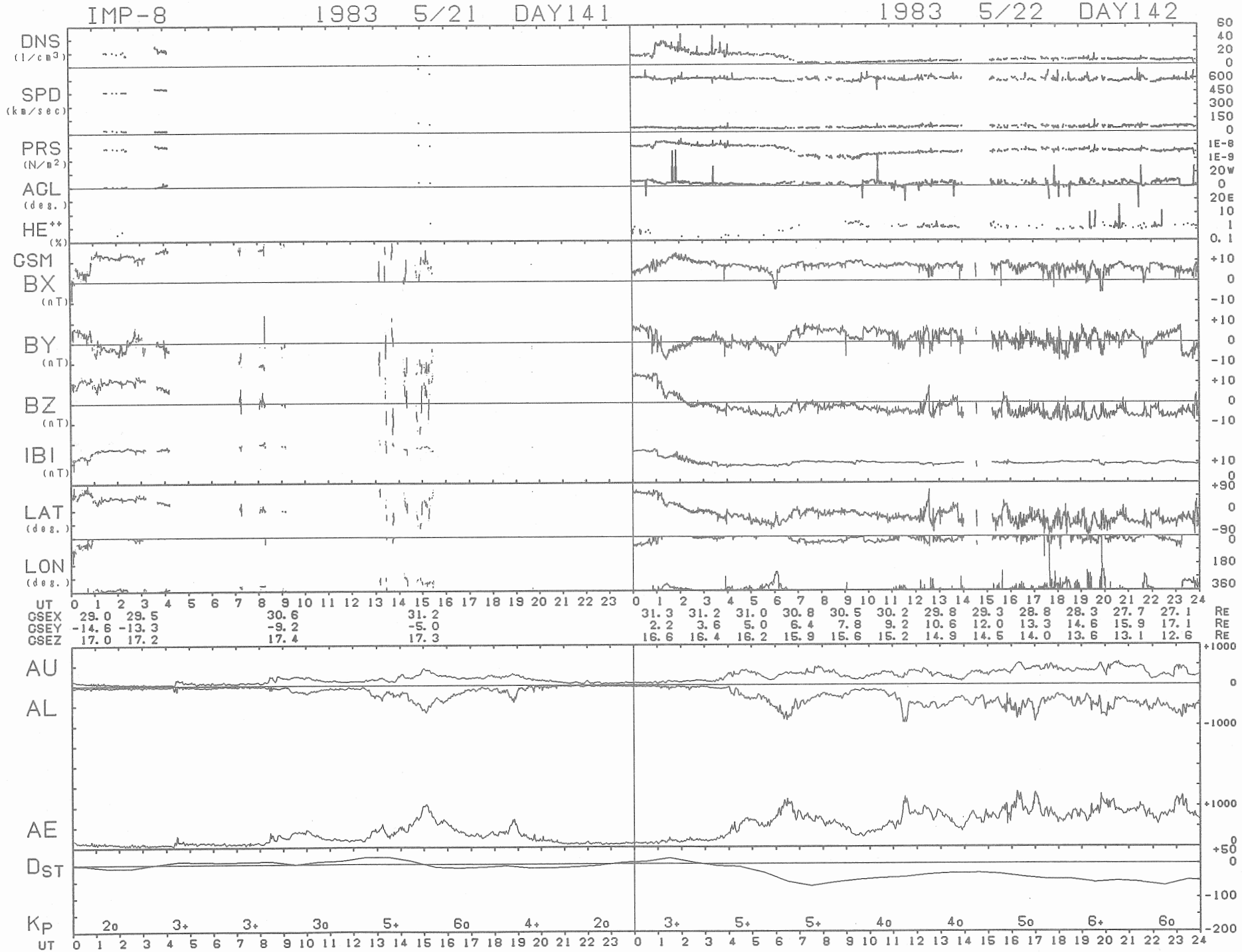

IMP-8 1983 5/11 DAY131
1983 5/12 DAY132
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.6 15.5 14.3 13.1 11.8 10.6 6.7 5.4 4.1 2.7 1.4 0.0 -1.3 -4.0 -5.3 -6.7 -8.0 -9.3 -11.8 RE
GSEY 28.0 28.7 29.5 30.1 30.7 31.3 32.5 32.8 33.0 33.2 33.3 33.3 33.2 32.9 32.6 32.3 31.9 31.5 30.3 RE
GSEZ 9.2 8.6 7.9 7.2 6.6 5.8 3.6 2.9 2.1 1.4 0.6 -0.2 -0.9 -2.4 -3.2 -3.9 -4.7 -5.4 -6.8 RE
AU
AL
AE
DST
KP 3o 3o 5+ 6o 4+ 6- 6o 5+ 6o 5+ 5- 4+ 4o 6- 5o 6-
UT

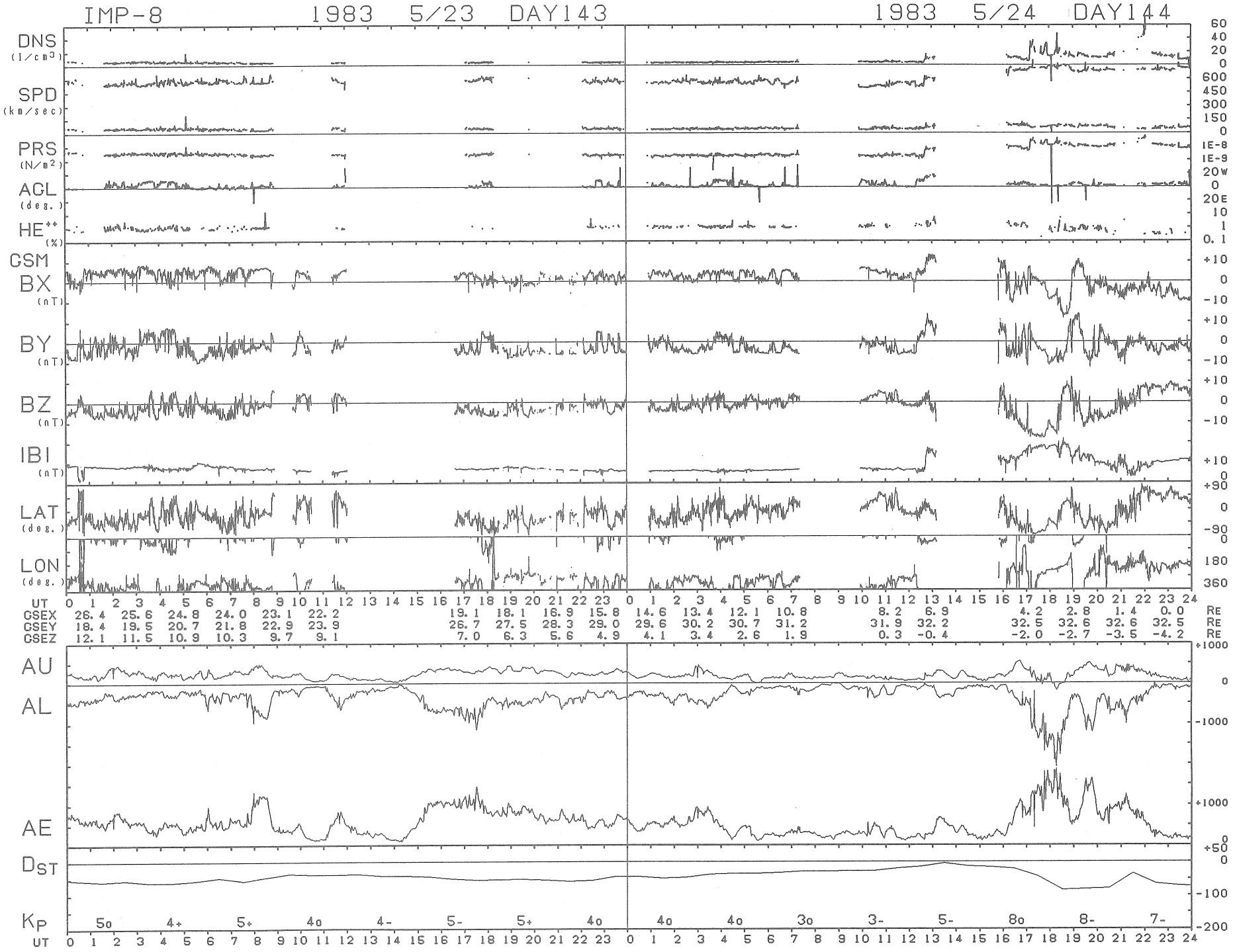

IMP-8 1983 5/13 DAY133
1983 5/14 DAY134
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.2 -16.5 -17.6 -18.7 -19.7 -20.7 -21.7 -22.6 -23.5 -24.3 -26.5 -28.3 -28.7 -29.2 -29.5 -29.8 RE
GSEY 29.0 27.4 26.5 25.6 24.6 23.5 22.4 21.3 20.1 18.9 15.1 10.9 9.5 8.1 6.6 5.2 RE
GSEZ -8.2 -9.5 -10.1 -10.7 -11.3 -11.8 -12.3 -12.8 -13.3 -13.7 -14.9 -15.8 -16.0 -16.2 -16.3 -16.5 RE
AU
AL
AE
DST
KP 4o 4- 6- 4+ 5- 5+ 4o 4o 5o 4o 4- 3o 3- 4o 4o 2o
UT

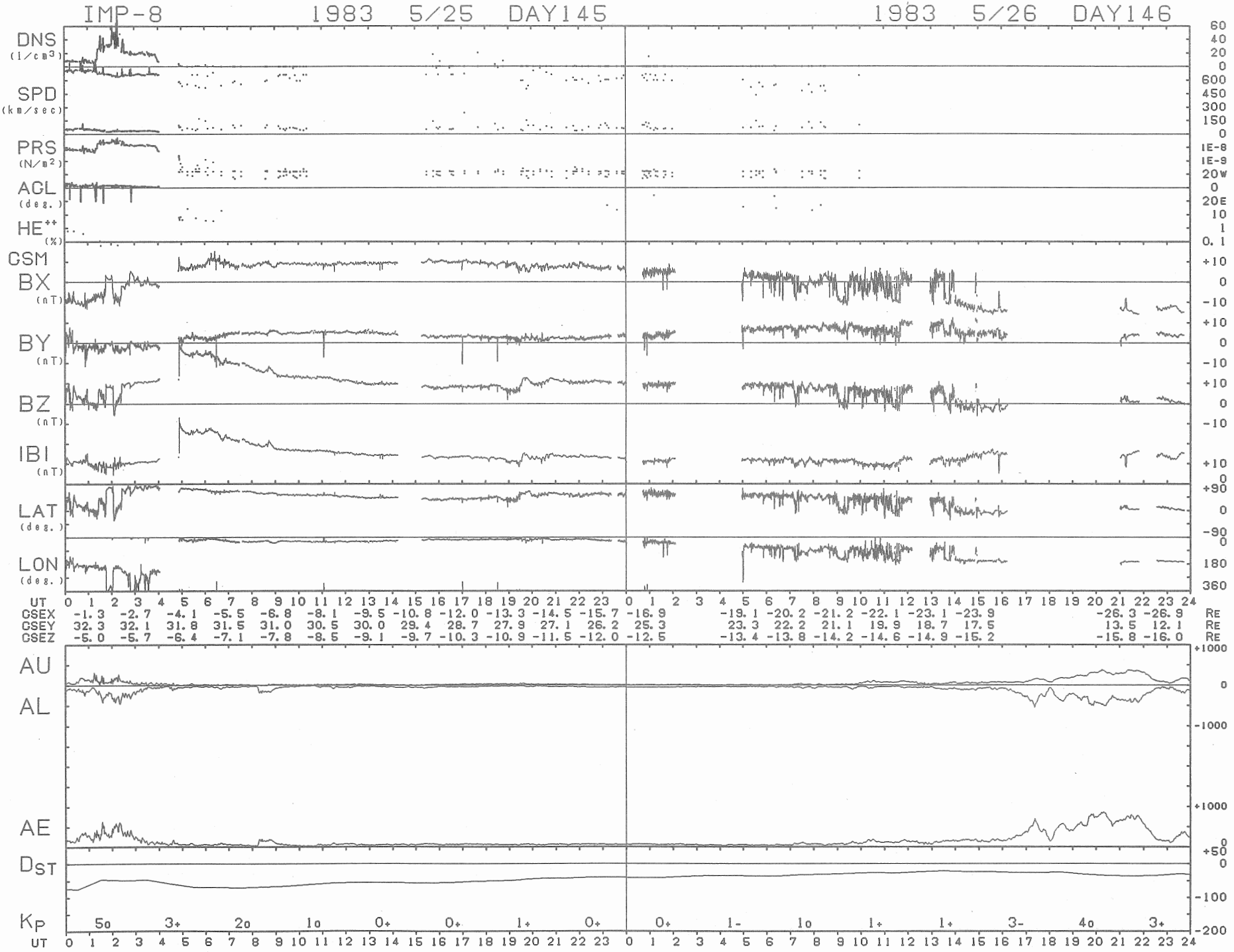

IMP-8
1983 5/15 DAY135
1983 5/16 DAY136
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.6 -29.8 -29.5 -29.2 -23.2 -22.4 -21.5 -20.7 RE
GSEY -5.2 -10.9 -12.3 -13.7 -26.0 -27.0 -28.0 -28.9 RE
GSEZ -16.5 -15.8 -15.6 -15.3 -11.3 -10.8 -10.3 -9.7 RE
AU
AL
AE
DST
KP 4- 3+ 3+ 3+ 4- 3+ 3o 4o 2o 2o 2o 2o 3- 2+ 2+ 3o
UT

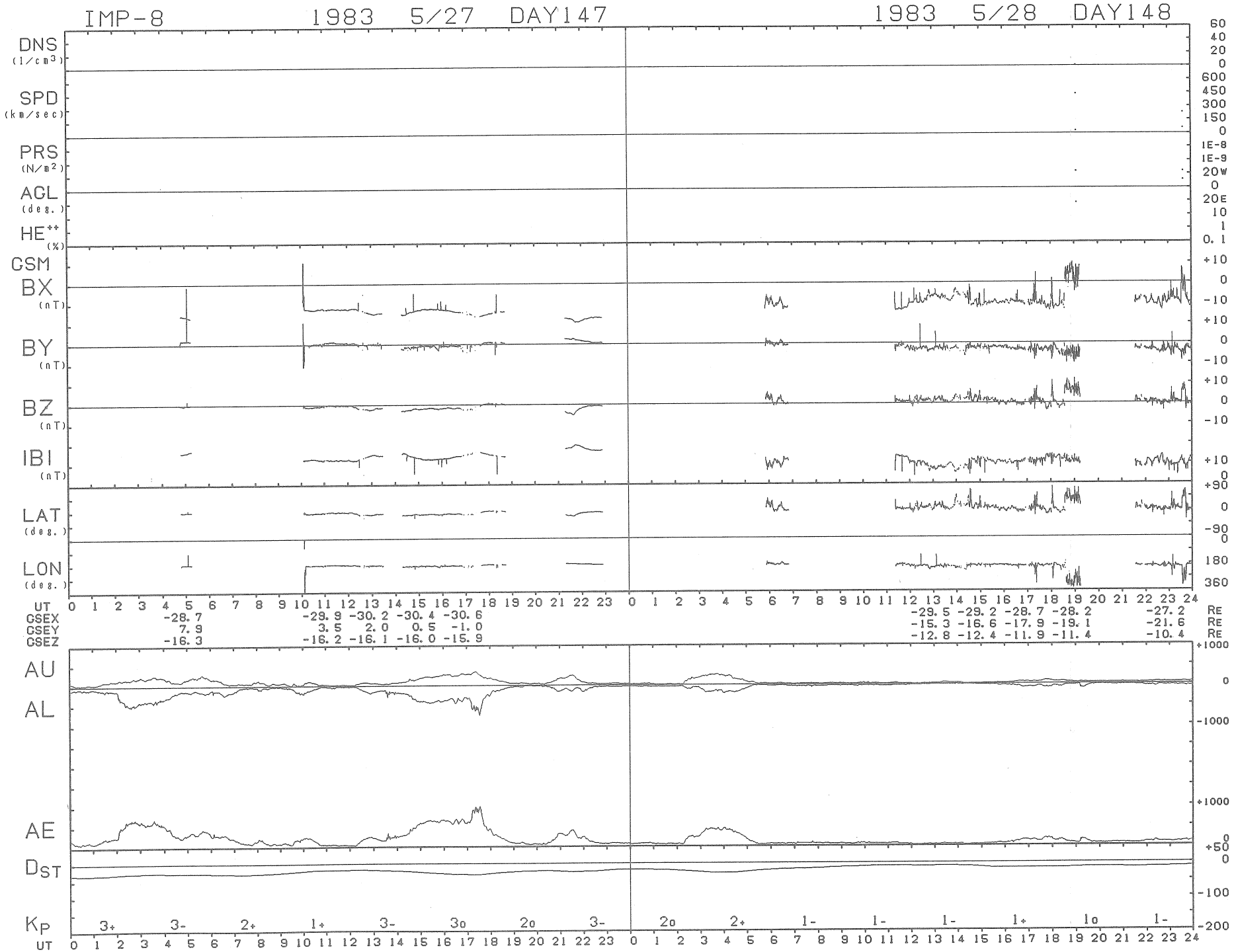

IMP-8
1983 5/17 DAY137
1983 5/18 DAY138
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.8 -17.9 -16.9 -14.8 -13.8 -11.6 -10.5 -1.3 -0.1 1.1 2.3 3.4 4.6 5.8 6.9 RE
GSEY -30.7 -31.5 -32.3 -33.6 -34.3 -35.4 -35.8 -37.7 -37.7 -37.7 -37.6 -37.4 -37.2 -37.0 -36.7 RE
GSEZ -8.6 -8.0 -7.4 -6.1 -5.5 -4.2 -3.5 1.9 2.5 3.2 3.9 4.5 5.2 5.8 6.5 RE
AU
AL
AE
DST
KP
5- 3- 3+ 4+ 6- 5- 7+ 7+ 3o 2+ 3+ 3+ 3- 2+ 2o 2-
UT

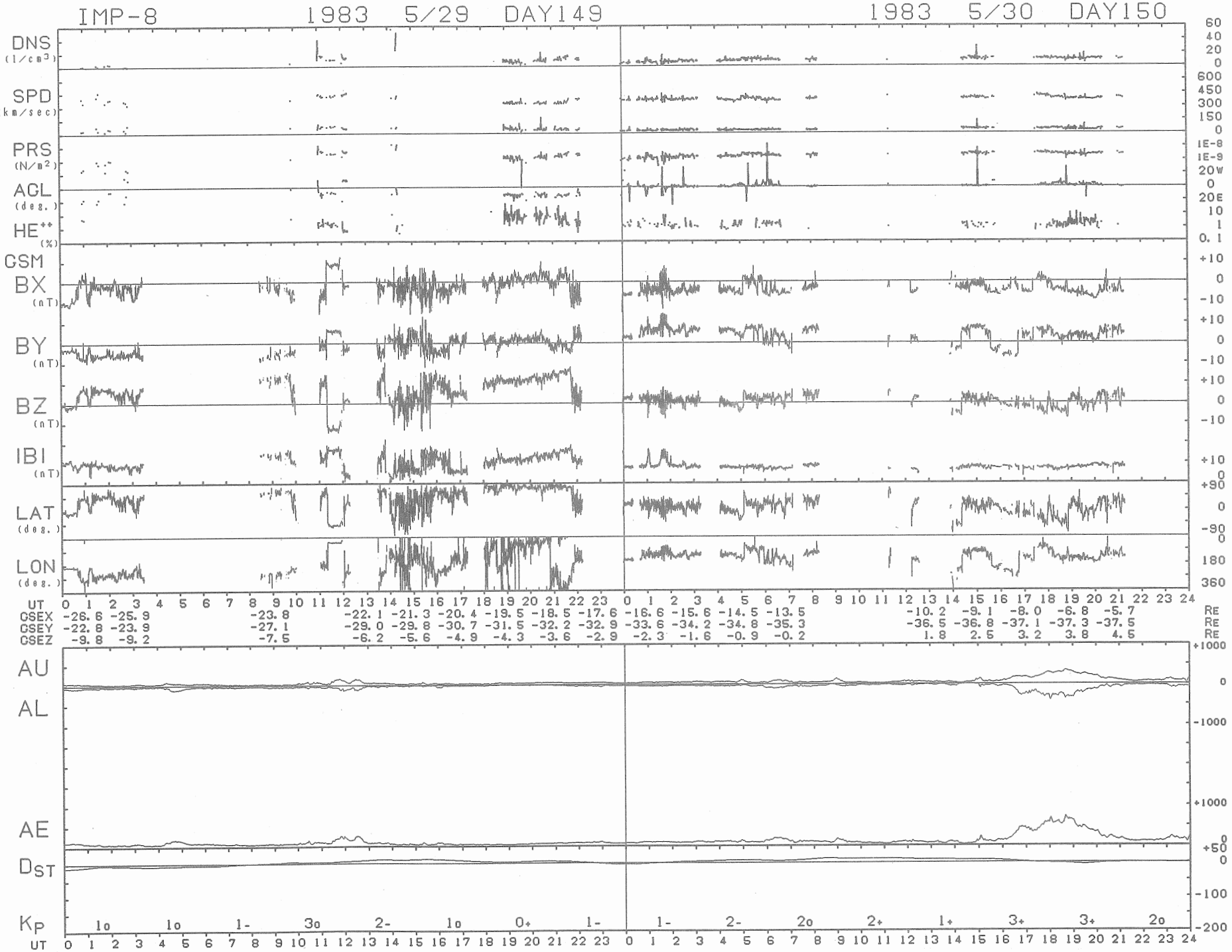

IMP-8 1983 5/19 DAY139
1983 5/20 DAY140
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.1 14.7 15.7 16.7 17.7 24.0 24.7 25.5 26.8 27.4 28.0 28.5 RE
GSEY -36.3 -33.1 -32.4 -31.7 -30.9 -24.3 -23.2 -22.0 -19.7 -18.4 -17.2 -15.9 RE
GSEZ 7.1 10.6 11.1 11.6 12.1 15.1 15.4 15.7 16.3 16.5 16.7 16.9 RE
AU
AL
AE
DST
KP
1o 2o 2+ 2- 1- 1- 1o 1- 1o 1+ 1- 0+ 1o 1- 3o 5o
UT

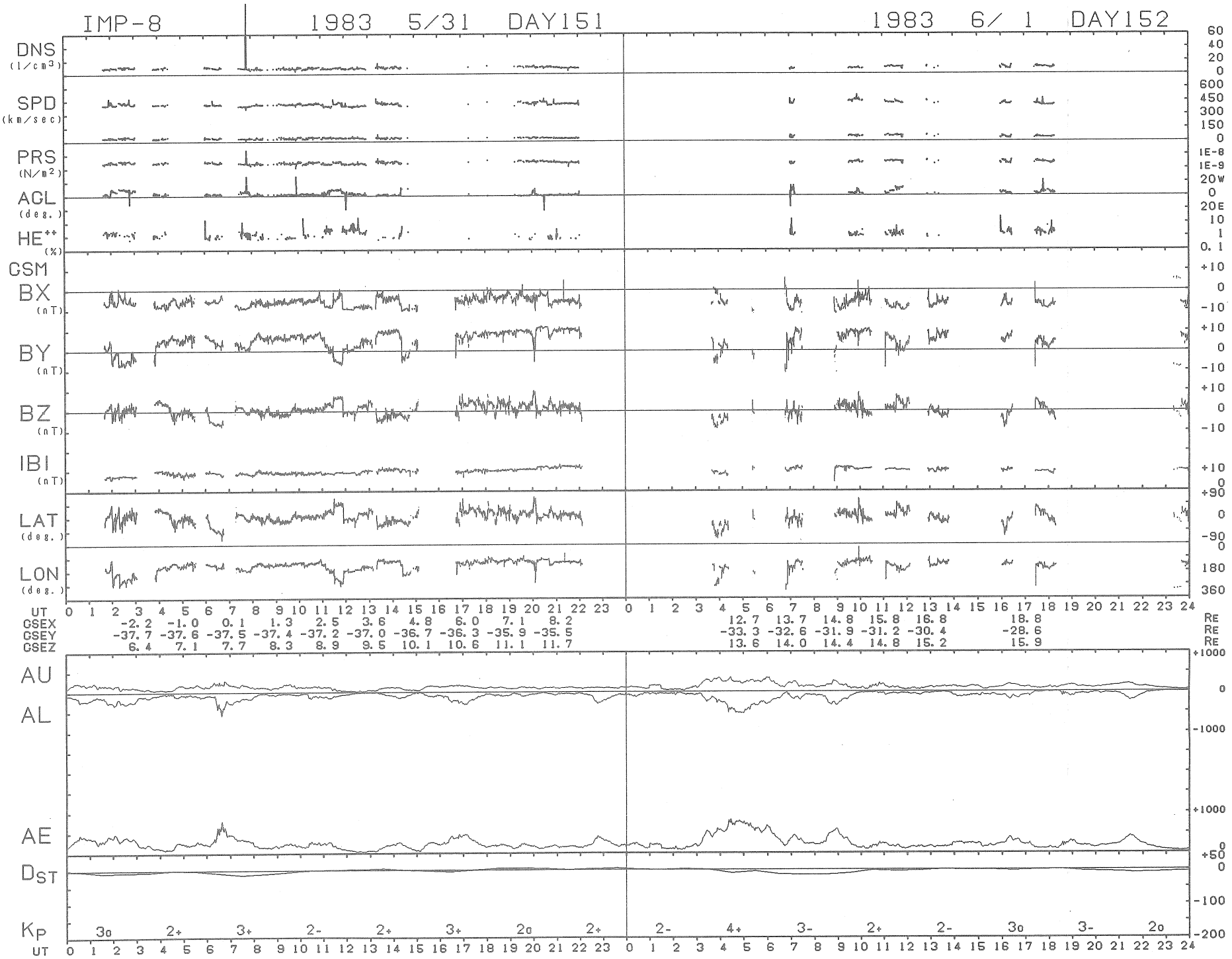

IMP-8 1983 5/21 DAY141
1983 5/22 DAY142
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 29.5 30.6 31.2 31.3 31.2 31.0 30.8 30.5 30.2 29.8 29.3 28.8 28.3 27.7 27.1 RE
GSEY -14.6 -13.3 -9.2 -5.0 2.2 3.6 5.0 6.4 7.8 9.2 10.6 12.0 13.3 14.6 15.9 17.1 RE
GSEZ 17.0 17.2 17.4 17.3 16.6 16.4 16.2 15.9 15.6 15.2 14.9 14.5 14.0 13.6 13.1 12.6 RE
AU
AL
AE
DST
KP
2o 3+ 3+ 3o 5+ 6o 4+ 2o 3+ 5+ 5+ 4o 4o 5o 6+ 6o
UT

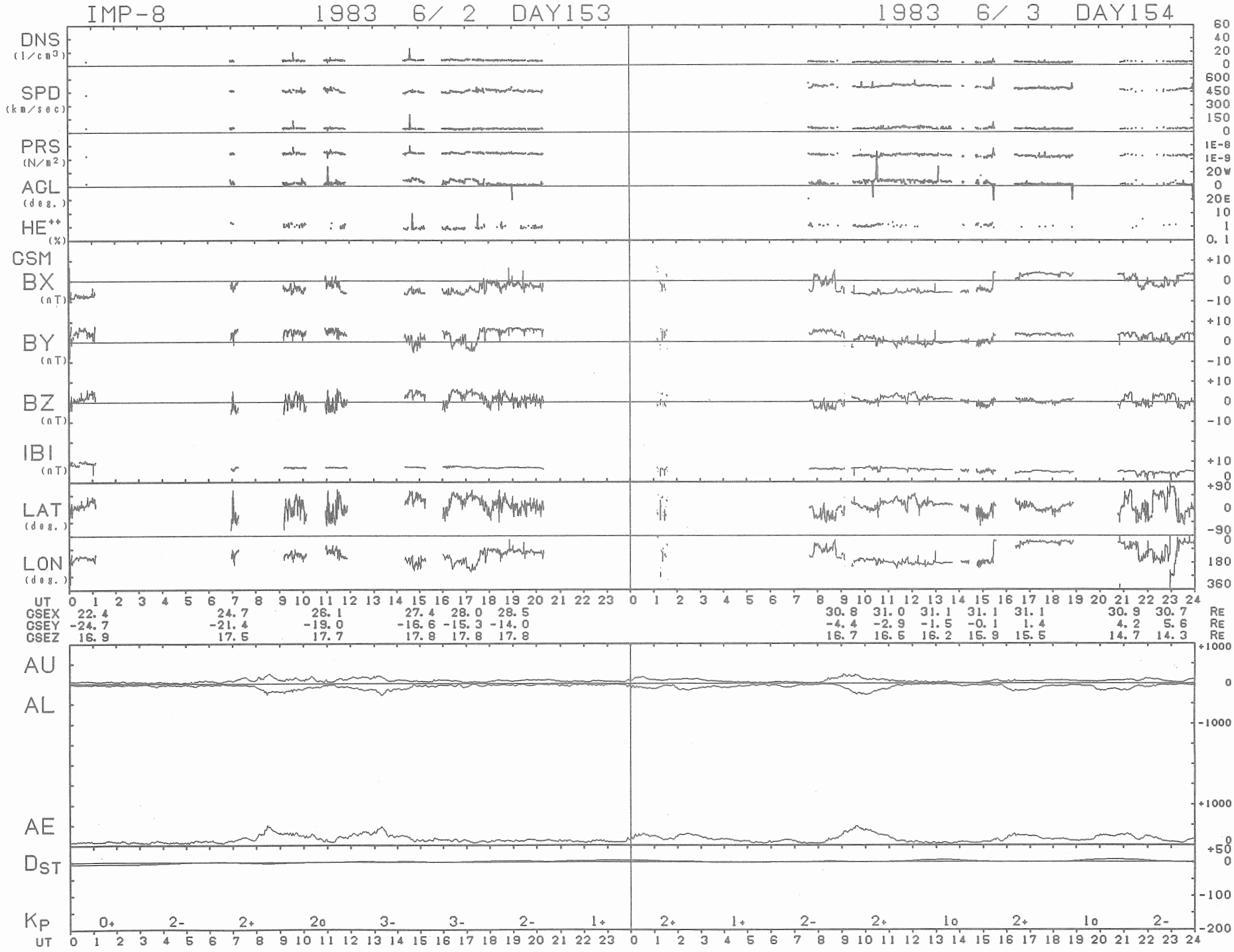

IMP-8 1983 5/23 DAY143
1983 5/24 DAY144
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.4 25.6 24.8 24.0 23.1 22.2 19.1 18.1 16.9 15.8 14.6 13.4 12.1 10.8 8.2 6.9 4.2 2.8 1.4 0.0 RE
GSEY 18.4 19.5 20.7 21.8 22.9 23.9 26.7 27.5 28.3 29.0 29.6 30.2 30.7 31.2 31.9 32.2 32.5 32.6 32.6 32.5 RE
GSEZ 12.1 11.5 10.9 10.3 9.7 9.1 7.0 6.3 5.6 4.9 4.1 3.4 2.6 1.9 0.3 -0.4 -2.0 -2.7 -3.5 -4.2 RE
AU
AL
AE
DST
KP
5o 4+ 5+ 4o 4- 5- 5+ 4o 4o 4o 3o 3- 5- 8o 8- 7-
UT

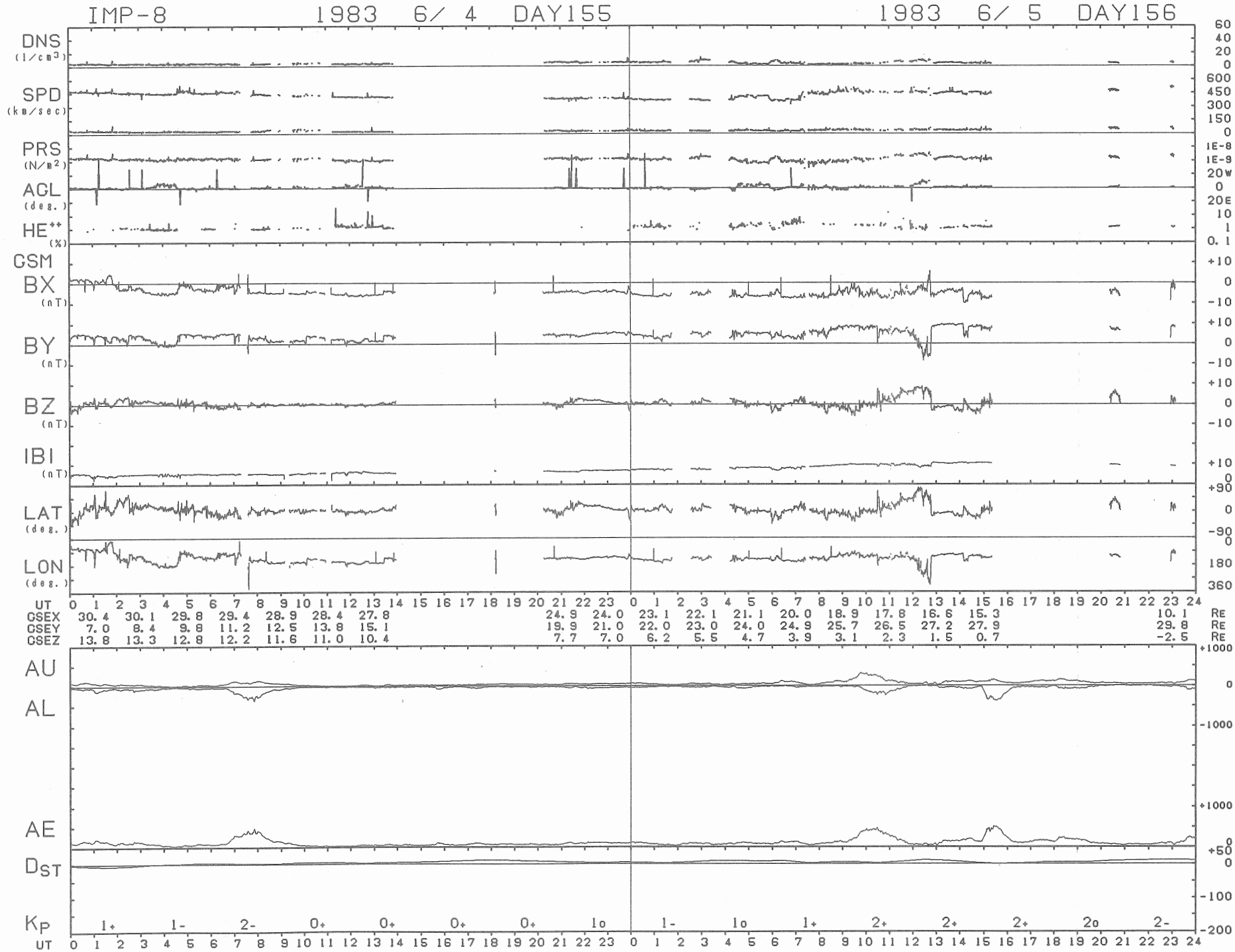

IMP-8 1983 5/25 DAY145
1983 5/26 DAY146
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -1.3 -2.7 -4.1 -5.5 -6.8 -8.1 -9.5 -10.8 -12.0 -13.3 -14.5 -15.7 -16.9 -19.1 -20.2 -21.2 -22.1 -23.1 -23.9 -26.3 -26.9 RE
GSEY 32.3 32.1 31.8 31.5 31.0 30.5 30.0 29.4 28.7 27.9 27.1 26.2 25.3 23.3 22.2 21.1 19.9 18.7 17.5 13.5 12.1 RE
GSEZ -5.0 -5.7 -6.4 -7.1 -7.8 -8.5 -9.1 -9.7 -10.3 -10.9 -11.5 -12.0 -12.5 -13.4 -13.8 -14.2 -14.6 -14.9 -15.2 -15.8 -16.0 RE
AU
AL
AE
DST
KP
5o 3+ 2o 1o 0+ 0+ 1+ 0+ 0+ 1- 1o 1+ 1+ 3- 4o 3+
UT

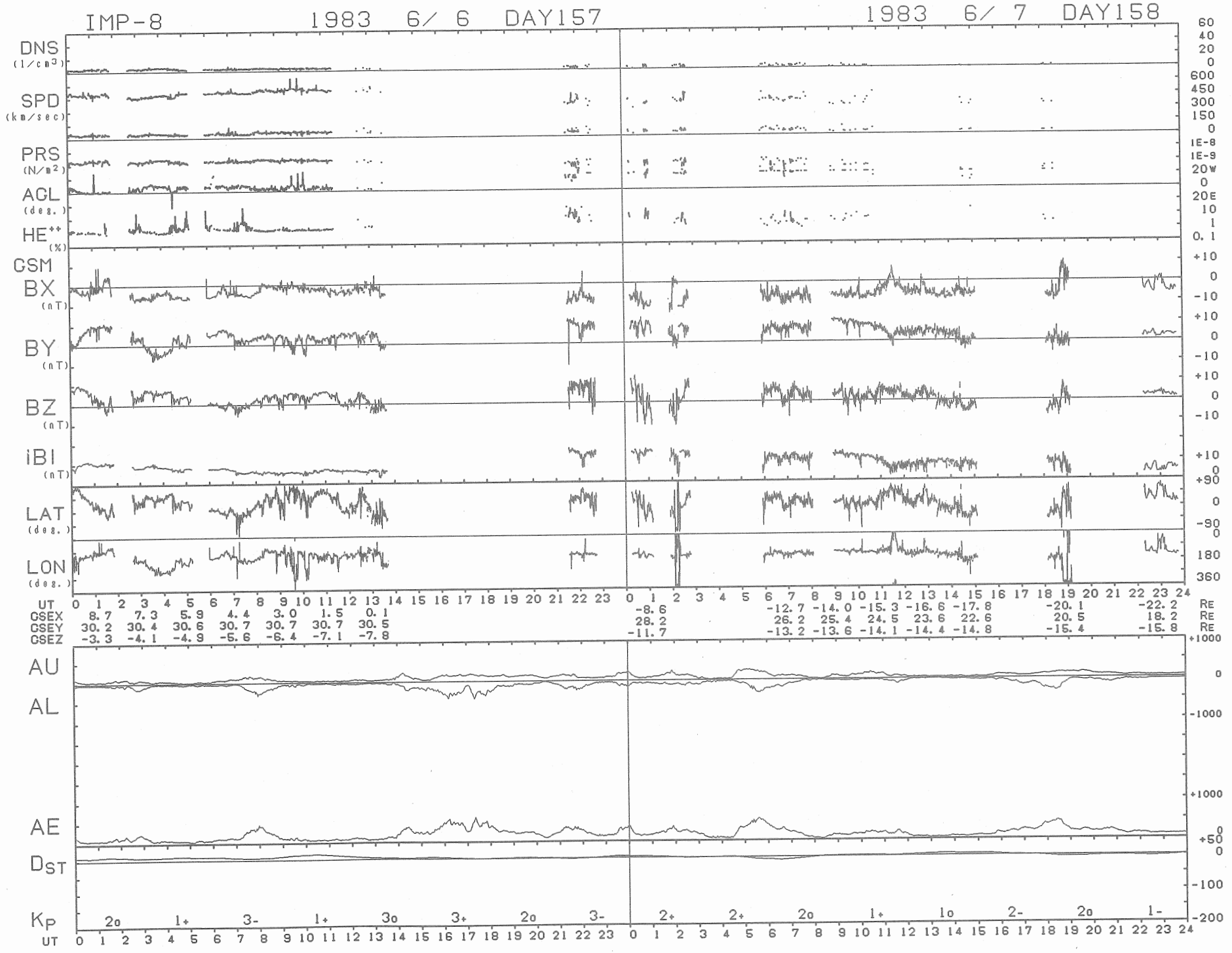

IMP-8
1983 5/27 DAY147
1983 5/28 DAY148
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.7 -29.9 -30.2 -30.4 -30.6 -29.5 -29.2 -28.7 -28.2 -27.2 RE
GSEY 7.9 3.5 2.0 0.5 -1.0 -15.3 -16.6 -17.9 -19.1 -21.6 RE
GSEZ -16.3 -16.2 -16.1 -16.0 -15.9 -12.8 -12.4 -11.9 -11.4 -10.4 RE
AU
AL
AE
DST
KP 3+ 3- 2+ 1+ 3- 3o 2o 3- 2o 2+ 1- 1- 1- 1+ 1o 1-
UT

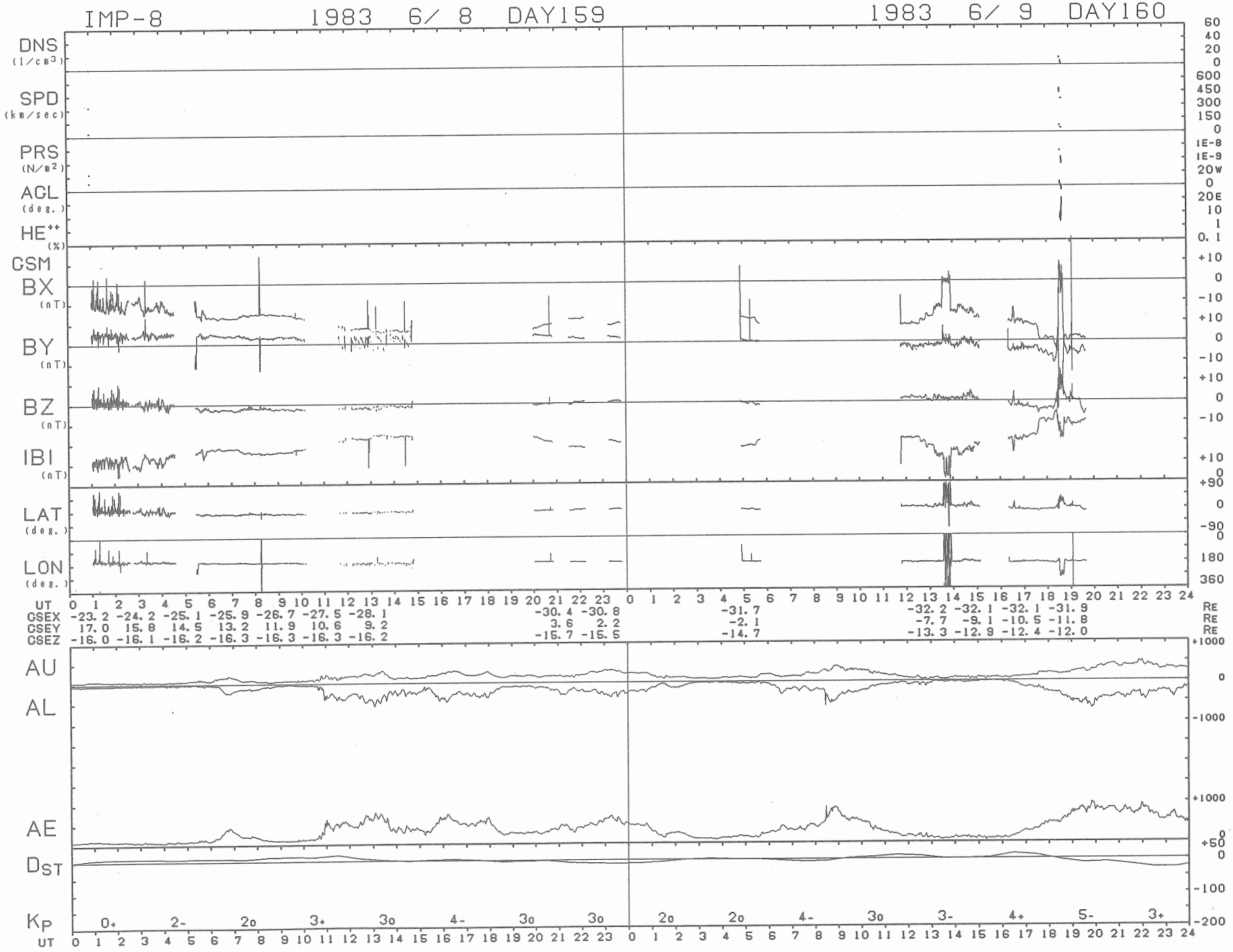

IMP-8 1983 5/29 DAY149
1983 5/30 DAY150
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.6 -25.9 -23.8 -22.1 -21.3 -20.4 -19.5 -18.5 -17.6 -16.6 -15.6 -14.5 -13.5 -10.2 -9.1 -8.0 -6.8 -5.7 RE
GSEY -22.8 -23.9 -27.1 -29.0 -29.8 -30.7 -31.5 -32.2 -32.9 -33.6 -34.2 -34.8 -35.3 -36.5 -36.8 -37.1 -37.3 -37.5 RE
GSEZ -9.8 -9.2 -7.5 -6.2 -5.6 -4.9 -4.3 -3.6 -2.9 -2.3 -1.6 -0.9 -0.2 1.8 2.5 3.2 3.8 4.5 RE
AU
AL
AE
DST
KP 1o 1o 1- 3o 2- 1o 0+ 1- 1- 2- 2o 2+ 1+ 3+ 3+ 2o
UT

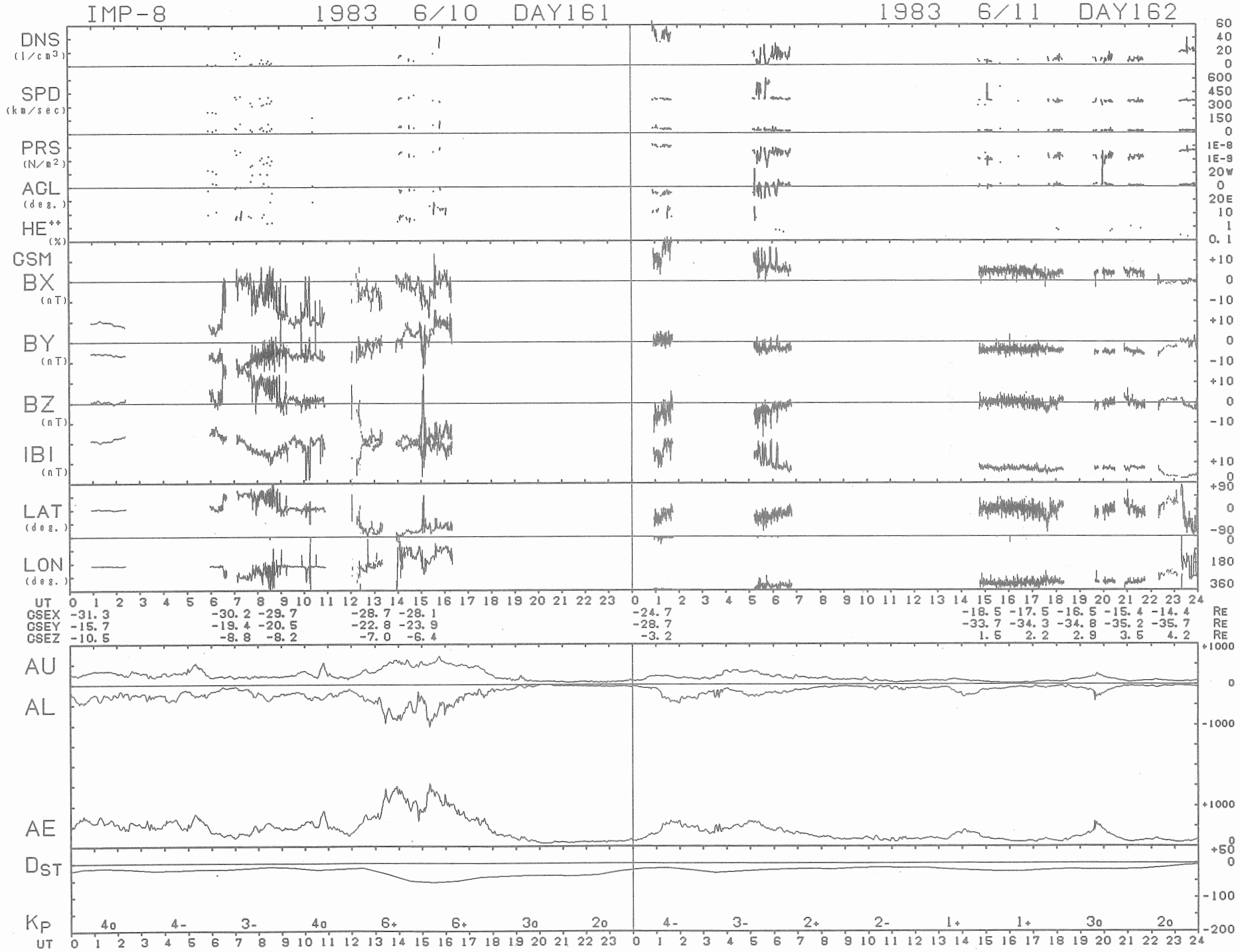

IMP-8
1983 5/31 DAY151
1983 6/ 1 DAY152
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.2 -1.0 0.1 1.3 2.5 3.6 4.8 6.0 7.1 8.2 12.7 13.7 14.8 15.8 16.8 18.8
GSEY -37.7 -37.6 -37.5 -37.4 -37.2 -37.0 -36.7 -36.3 -35.9 -35.5 -33.3 -32.6 -31.9 -31.2 -30.4 -28.6
GSEZ 6.4 7.1 7.7 8.3 8.9 9.5 10.1 10.6 11.1 11.7 13.6 14.0 14.4 14.8 15.2 15.9
RE
AU
AL
AE
DST
KP
3o 2+ 3+ 2- 2+ 3+ 2o 2+ 2- 4+ 3- 2+ 2- 3o 3- 2o
UT

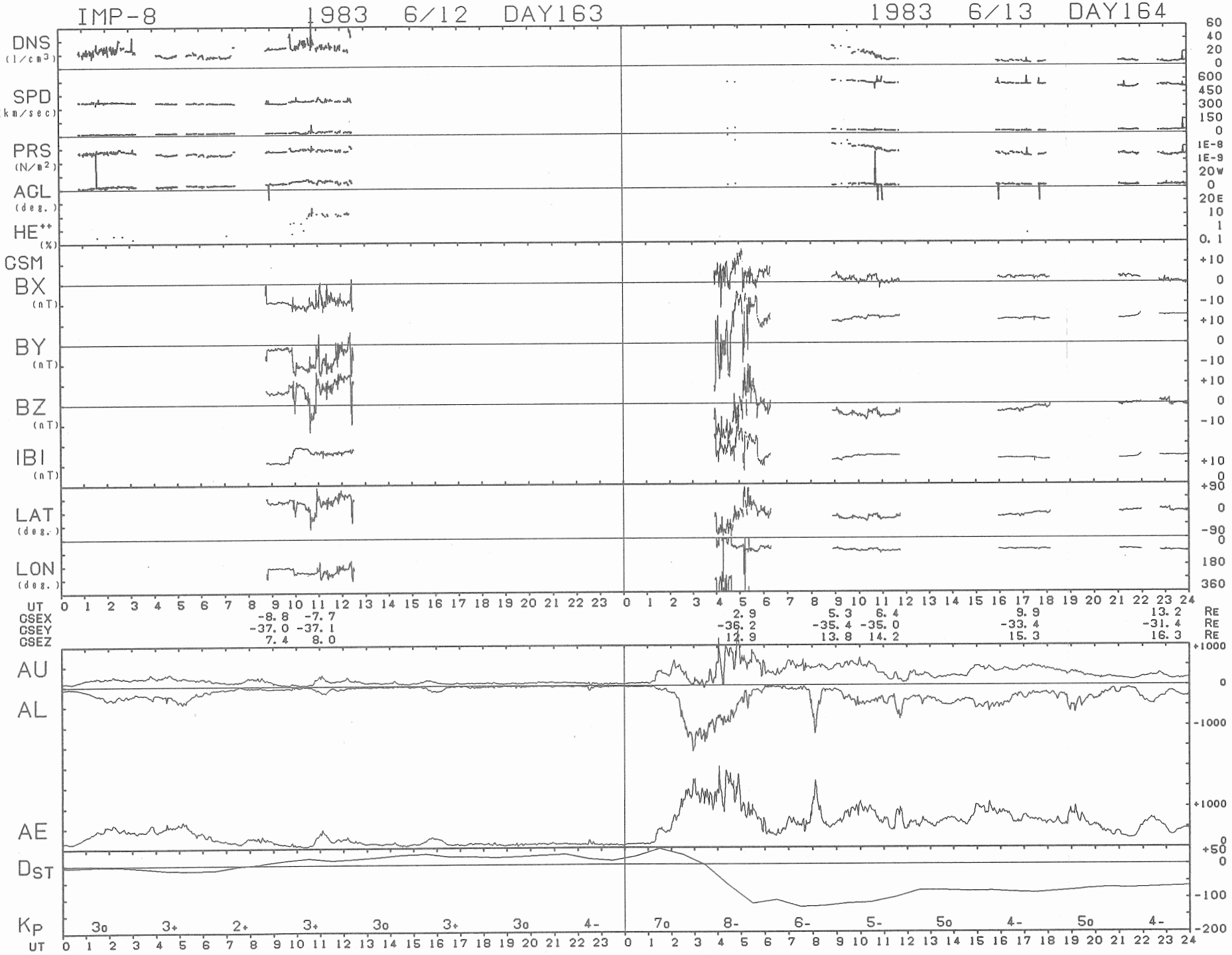

IMP-8
1983 6/ 2 DAY153
1983 6/ 3 DAY154
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.4 24.7 26.1 27.4 28.0 28.5 30.8 31.0 31.1 31.1 31.1 30.9 30.7 RE
GSEY -24.7 -21.4 -19.0 -16.6 -15.3 -14.0 -4.4 -2.9 -1.5 -0.1 1.4 4.2 5.6 RE
GSEZ 16.9 17.5 17.7 17.8 17.8 17.8 16.7 16.5 16.2 15.9 15.5 14.7 14.3 RE
AU
AL
AE
DST
KP
0+ 2- 2+ 2o 3- 3- 2- 1+ 2+ 1+ 2- 2+ 1o 2+ 1o 2-
UT

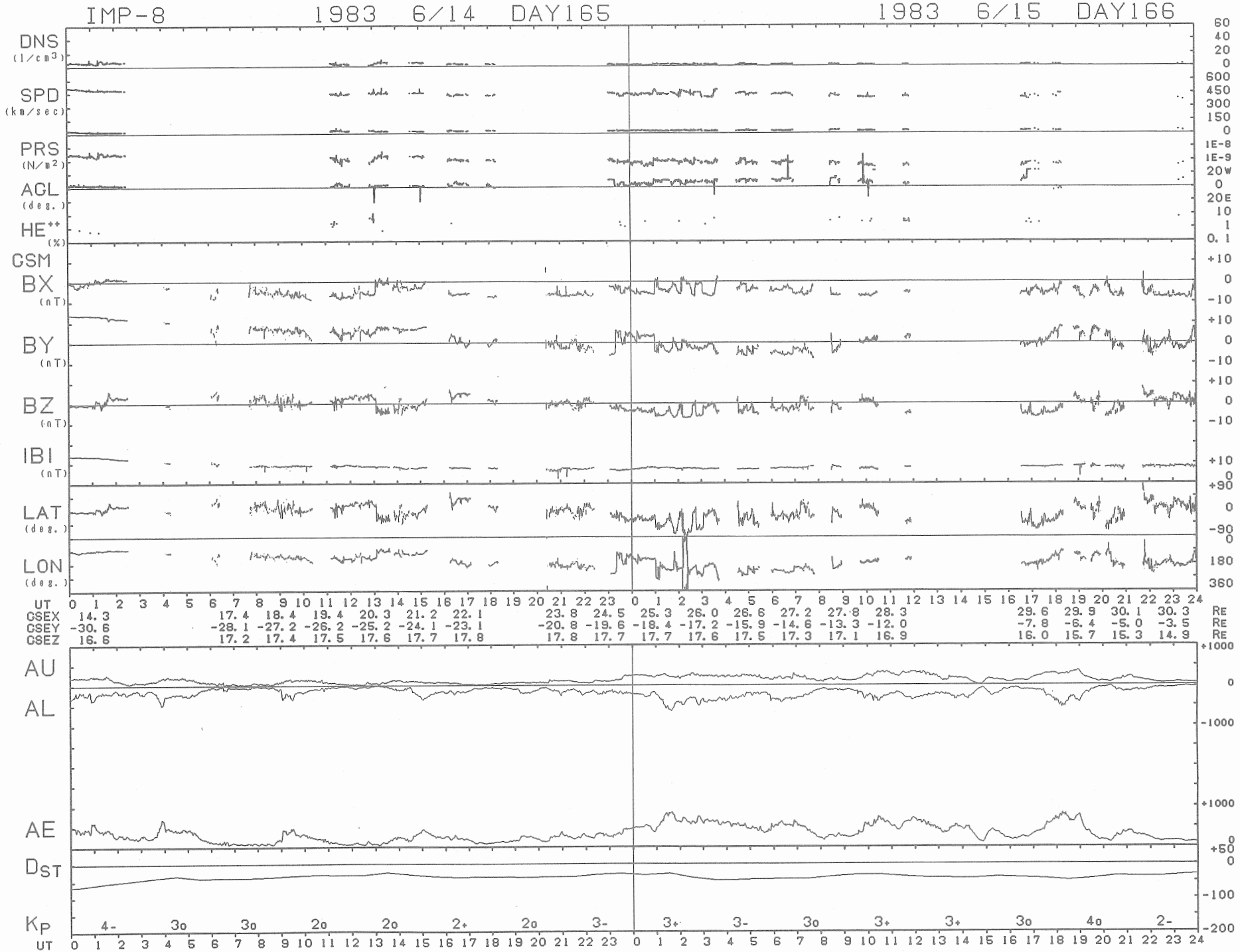

IMP-8 1983 6/ 4 DAY155
1983 6/ 5 DAY156
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.4 30.1 29.8 29.4 28.9 28.4 27.8 24.9 24.0 23.1 22.1 21.1 20.0 18.9 17.8 16.6 15.3 10.1 RE
GSEY 7.0 8.4 9.8 11.2 12.5 13.8 15.1 19.9 21.0 22.0 23.0 24.0 24.9 25.7 26.5 27.2 27.9 29.8 RE
GSEZ 13.8 13.3 12.8 12.2 11.6 11.0 10.4 7.7 7.0 6.2 5.5 4.7 3.9 3.1 2.3 1.5 0.7 -2.5 RE
AU
AL
AE
DST
KP 1+ 1- 2- 0+ 0+ 0+ 0+ 1o 1- 1o 1+ 2+ 2+ 2+ 2o 2-
UT

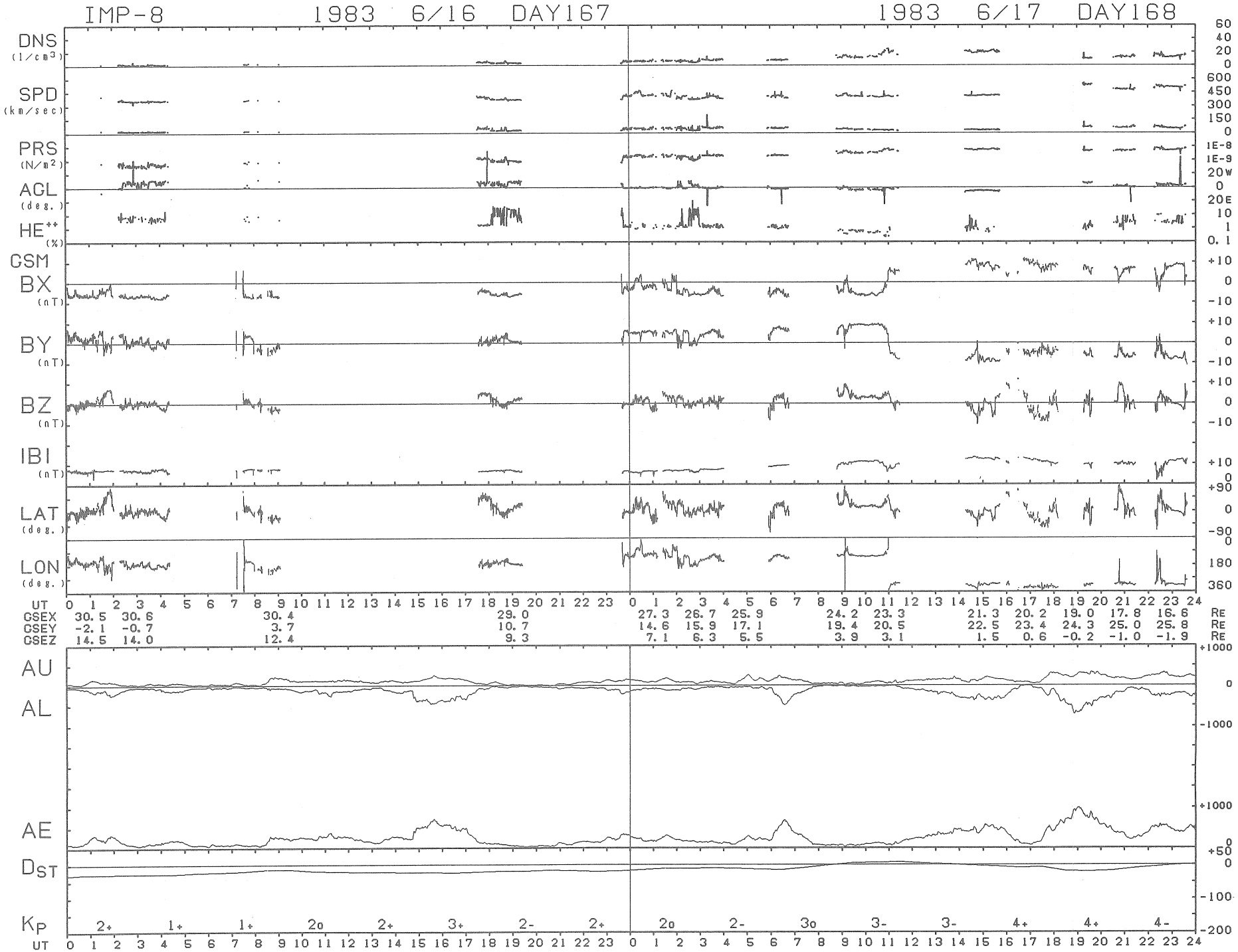

IMP-8 1983 6/ 6 DAY157
1983 6/ 7 DAY158
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.7 7.3 5.9 4.4 3.0 1.5 0.1 -8.6 -12.7 -14.0 -15.3 -16.6 -17.8 -20.1 -22.2 RE
GSEY 30.2 30.4 30.6 30.7 30.7 30.7 30.5 28.2 26.2 25.4 24.5 23.6 22.6 20.5 18.2 RE
GSEZ -3.3 -4.1 -4.9 -5.6 -6.4 -7.1 -7.8 -11.7 -13.2 -13.6 -14.1 -14.4 -14.8 -15.4 -15.8 RE
AU
AL
AE
DST
KP 2o 1+ 3- 1+ 3o 3+ 2o 3- 2+ 2+ 2o 1+ 1o 2- 2o 1-
UT

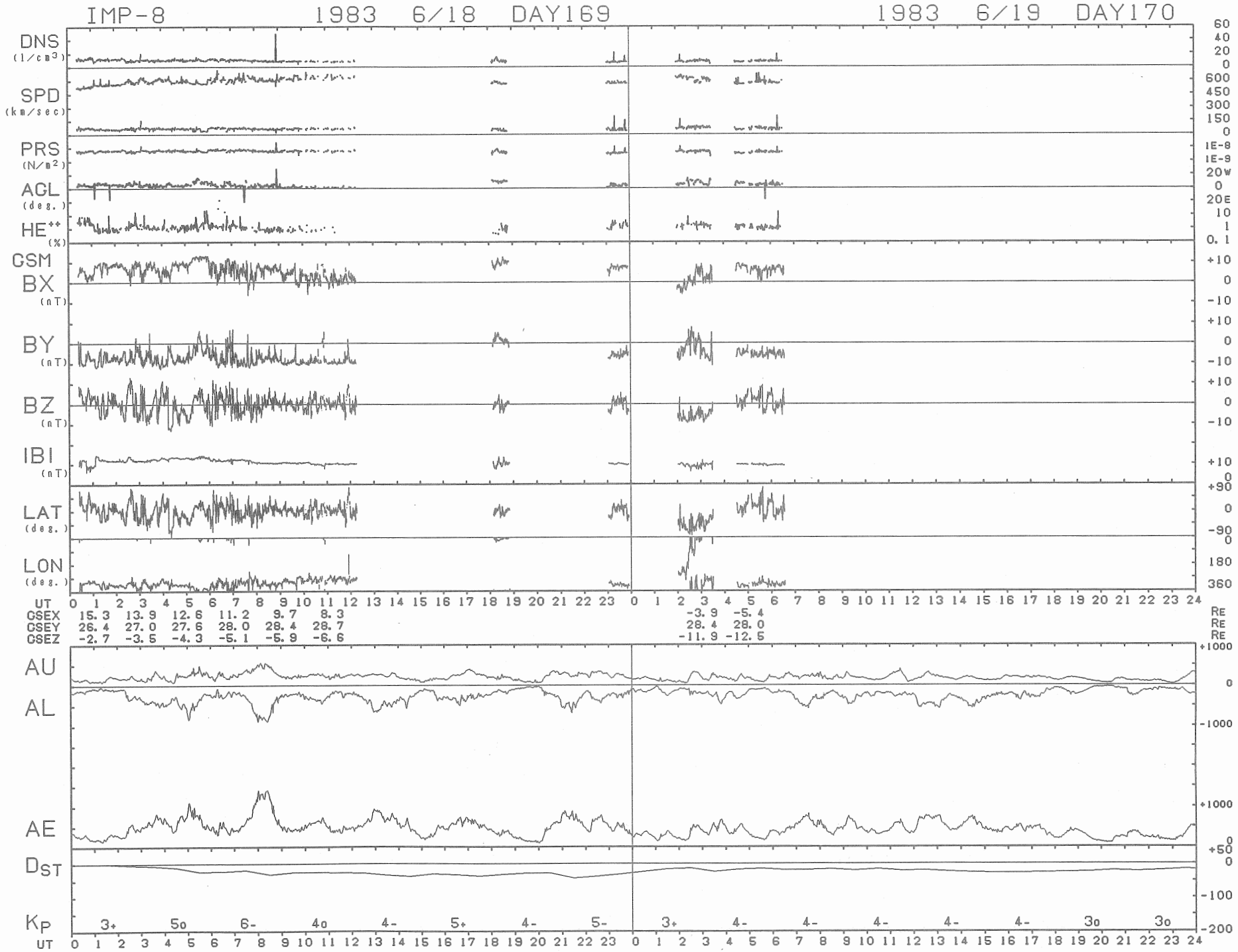

IMP-8
1983 6/ 8 DAY159
1983 6/ 9 DAY160
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.2 -24.2 -25.1 -25.9 -26.7 -27.5 -28.1 -30.4 -30.8 -31.7 -32.2 -32.1 -32.1 -31.9 RE
GSEY 17.0 15.8 14.5 13.2 11.9 10.6 9.2 3.6 2.2 -2.1 -7.7 -9.1 -10.5 -11.8 RE
GSEZ -16.0 -16.1 -16.2 -16.3 -16.3 -16.3 -16.2 -15.7 -15.5 -14.7 -13.3 -12.9 -12.4 -12.0 RE
AU
AL
AE
DST
KP
0+ 2- 2o 3+ 3o 4- 3o 3o 2o 2o 4- 3o 3- 4+ 5- 3+
UT

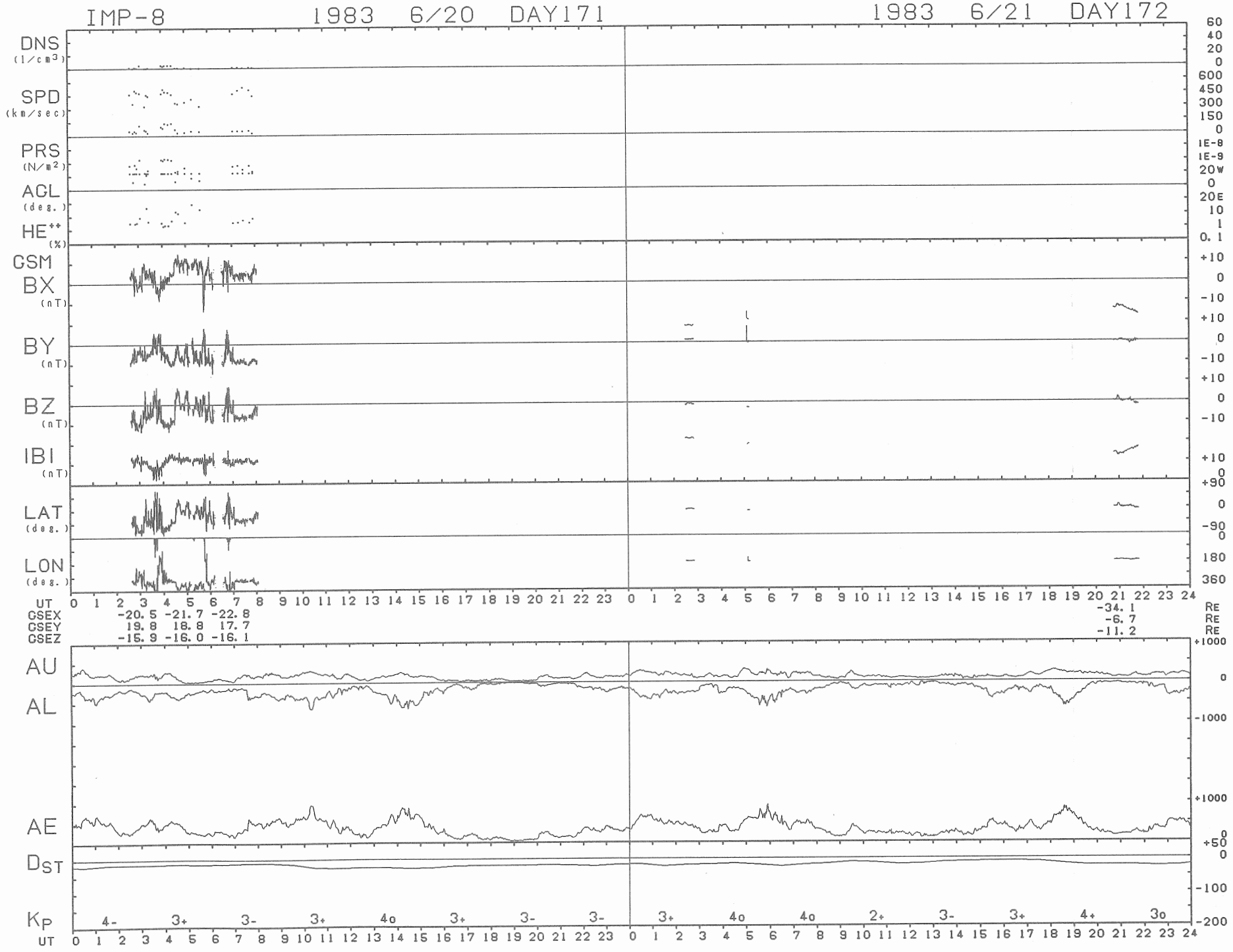

IMP-8 1983 6/10 DAY161
1983 6/11 DAY162
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.3 -30.2 -29.7 -28.7 -28.1 -24.7 -18.5 -17.5 -16.5 -15.4 -14.4 RE
GSEY -15.7 -19.4 -20.5 -22.8 -23.9 -28.7 -33.7 -34.3 -34.8 -35.2 -35.7 RE
GSEZ -10.5 -8.8 -8.2 -7.0 -6.4 -3.2 1.5 2.2 2.9 3.5 4.2 RE
AU
AL
AE
DST
KP
4o 4- 3- 4o 6+ 6+ 3o 2o 4- 3- 2+ 2- 1+ 1+ 3o 2o
UT

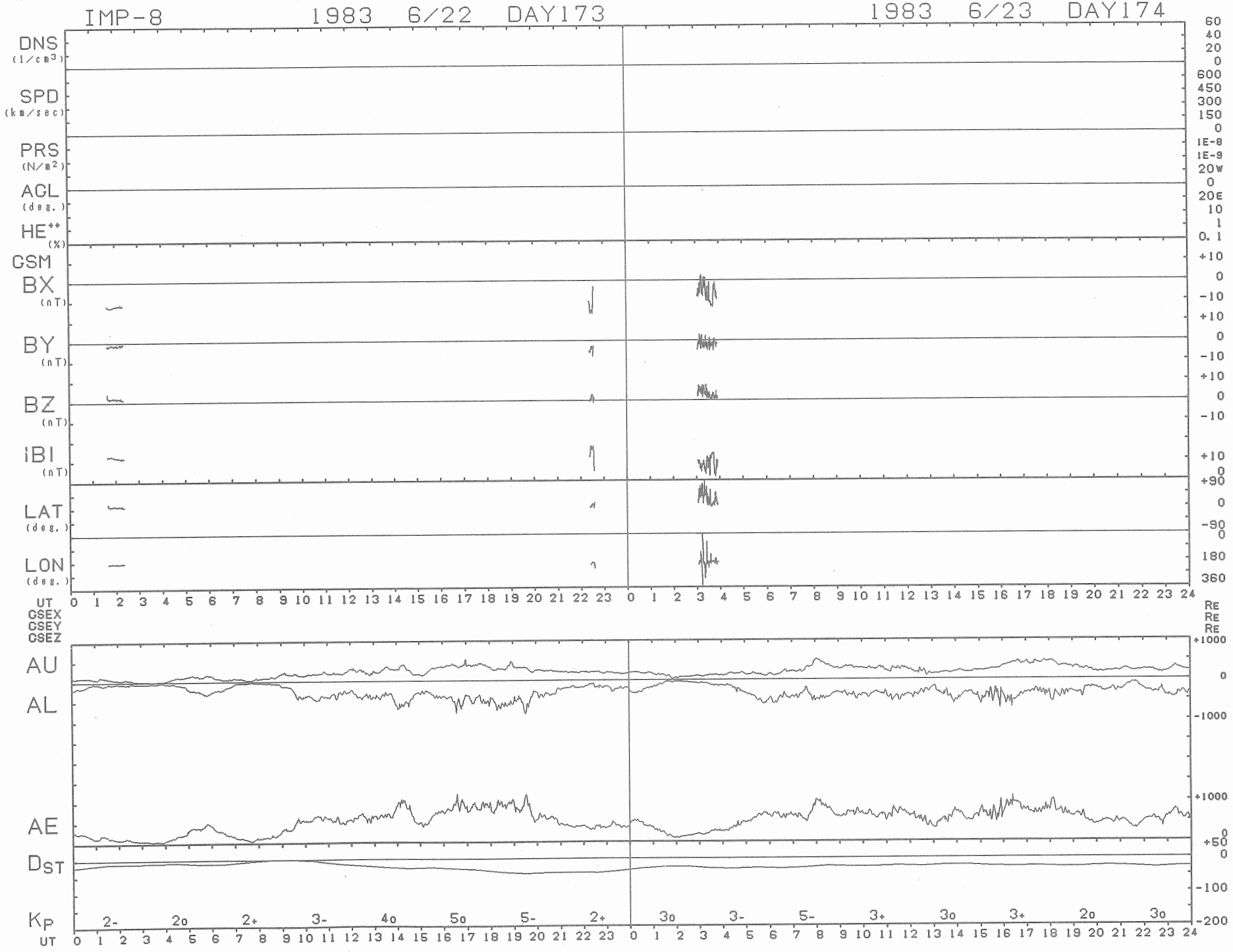

IMP-8 1983 6/12 DAY163
1983 6/13 DAY164
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.8 -7.7 2.9 5.3 6.4 9.9 13.2 RE
GSEY -37.0 -37.1 -36.2 -35.4 -35.0 -33.4 -31.4 RE
GSEZ 7.4 8.0 12.9 13.8 14.2 15.3 16.3 RE
AU
AL
AE
DST
KP
3o 3+ 2+ 3+ 3o 3+ 3o 4- 7o 8- 6- 5- 5o 4- 5o 4-
UT

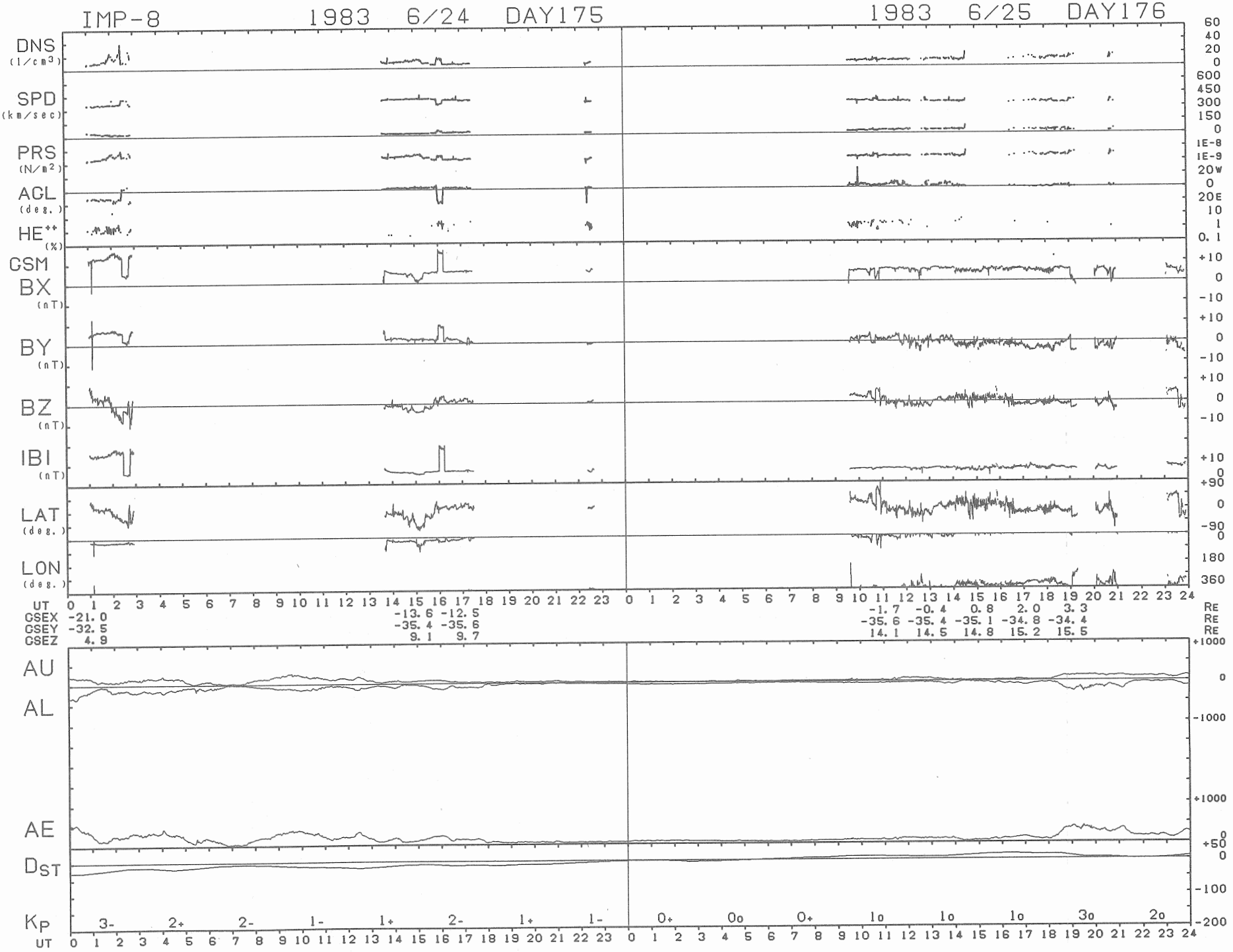

IMP-8 1983 6/14 DAY165
1983 6/15 DAY166
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.3 17.4 18.4 19.4 20.3 21.2 22.1 23.8 24.5 25.3 26.0 26.6 27.2 27.8 28.3 29.6 29.9 30.1 30.3 RE
GSEY -30.6 -28.1 -27.2 -26.2 -25.2 -24.1 -23.1 -20.8 -19.6 -18.4 -17.2 -15.9 -14.6 -13.3 -12.0 -7.8 -6.4 -5.0 -3.5 RE
GSEZ 16.6 17.2 17.4 17.5 17.6 17.7 17.8 17.8 17.7 17.7 17.6 17.5 17.3 17.1 16.9 16.0 15.7 15.3 14.9 RE
AU
AL
AE
DST
KP 4- 3o 3o 2o 2o 2+ 2o 3- 3+ 3- 3o 3+ 3+ 3o 4o 2-
UT

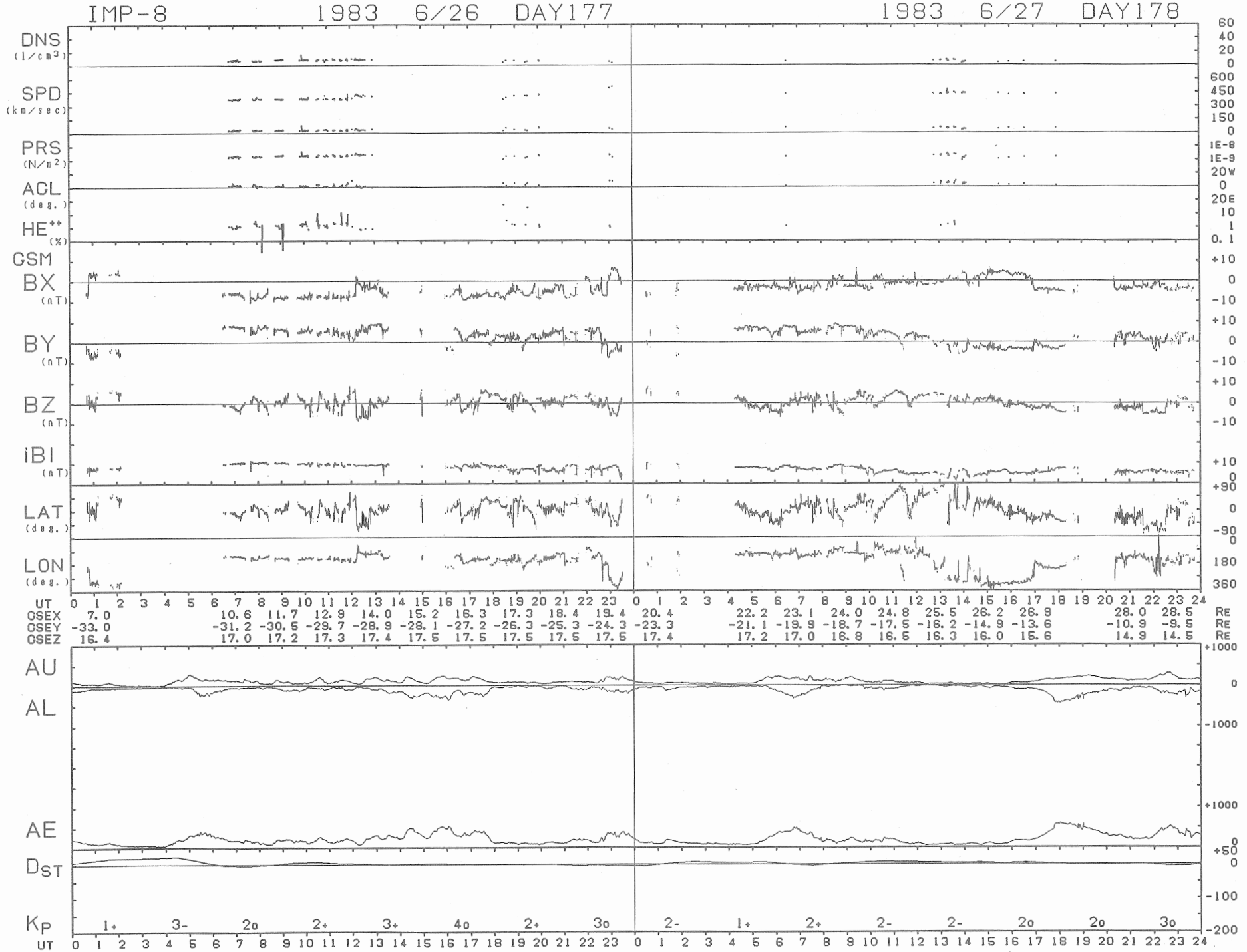

IMP-8 1983 6/16 DAY167
1983 6/17 DAY168
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.5 30.6 30.4 29.0 27.3 26.7 25.9 24.2 23.3 21.3 20.2 19.0 17.8 16.6 RE
GSEY -2.1 -0.7 3.7 10.7 14.6 15.9 17.1 19.4 20.5 22.5 23.4 24.3 25.0 25.8 RE
GSEZ 14.5 14.0 12.4 9.3 7.1 6.3 5.5 3.9 3.1 1.5 0.6 -0.2 -1.0 -1.9 RE
AU
AL
AE
DST
KP
2+ 1+ 1+ 2o 2+ 3+ 2- 2+ 2o 2- 3o 3- 3- 4+ 4+ 4-
UT

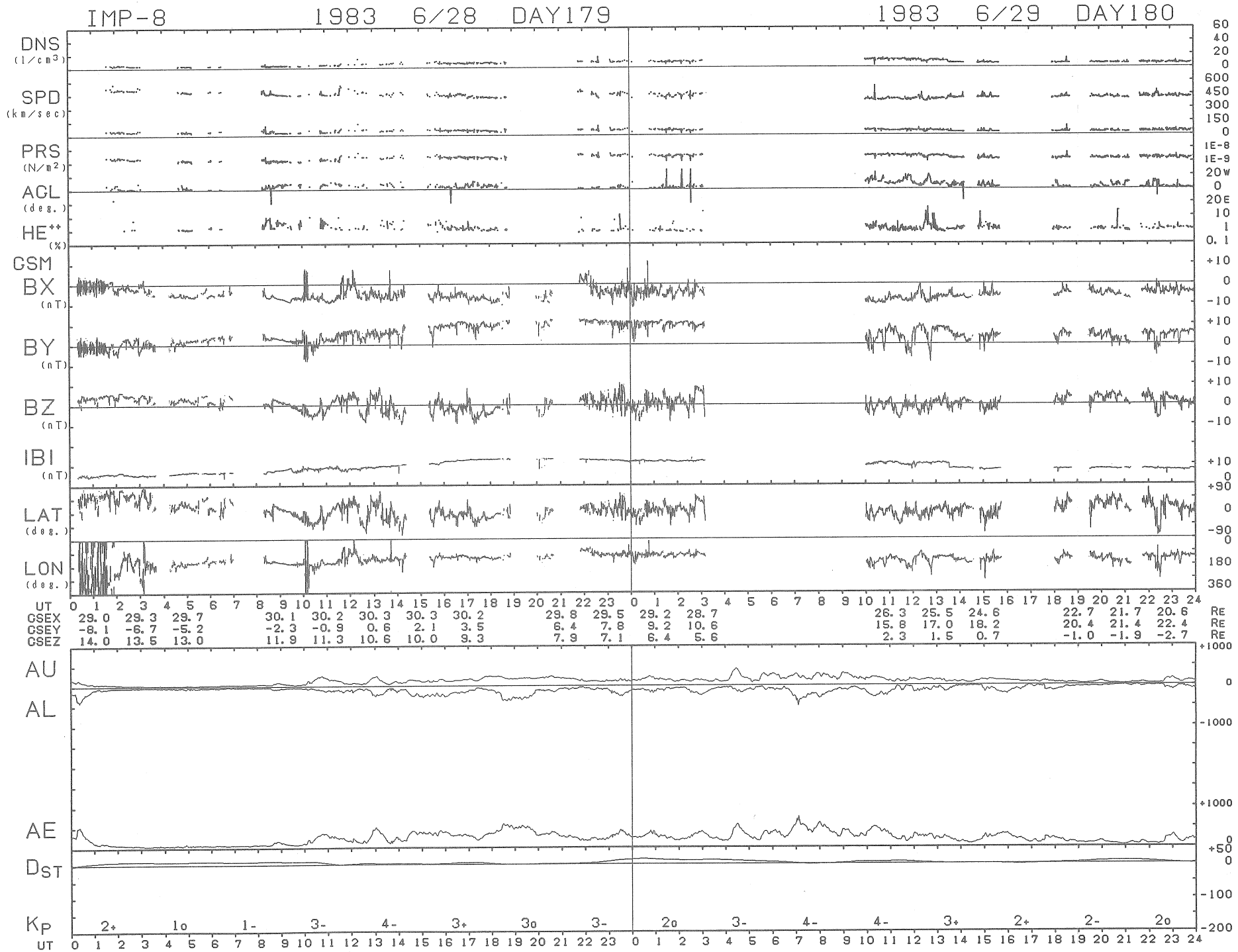

IMP-8 1983 6/18 DAY169
1983 6/19 DAY170
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.3 13.9 12.6 11.2 9.7 8.3 -3.9 -5.4 RE
GSEY 26.4 27.0 27.6 28.0 28.4 28.7 28.4 28.0 RE
GSEZ -2.7 -3.5 -4.3 -5.1 -5.9 -6.6 -11.9 -12.5 RE
AU
AL
AE
DST
KP
3+ 5o 6- 4o 4- 5+ 4- 5- 3+ 4- 4- 4- 4- 4- 3o 3o
UT

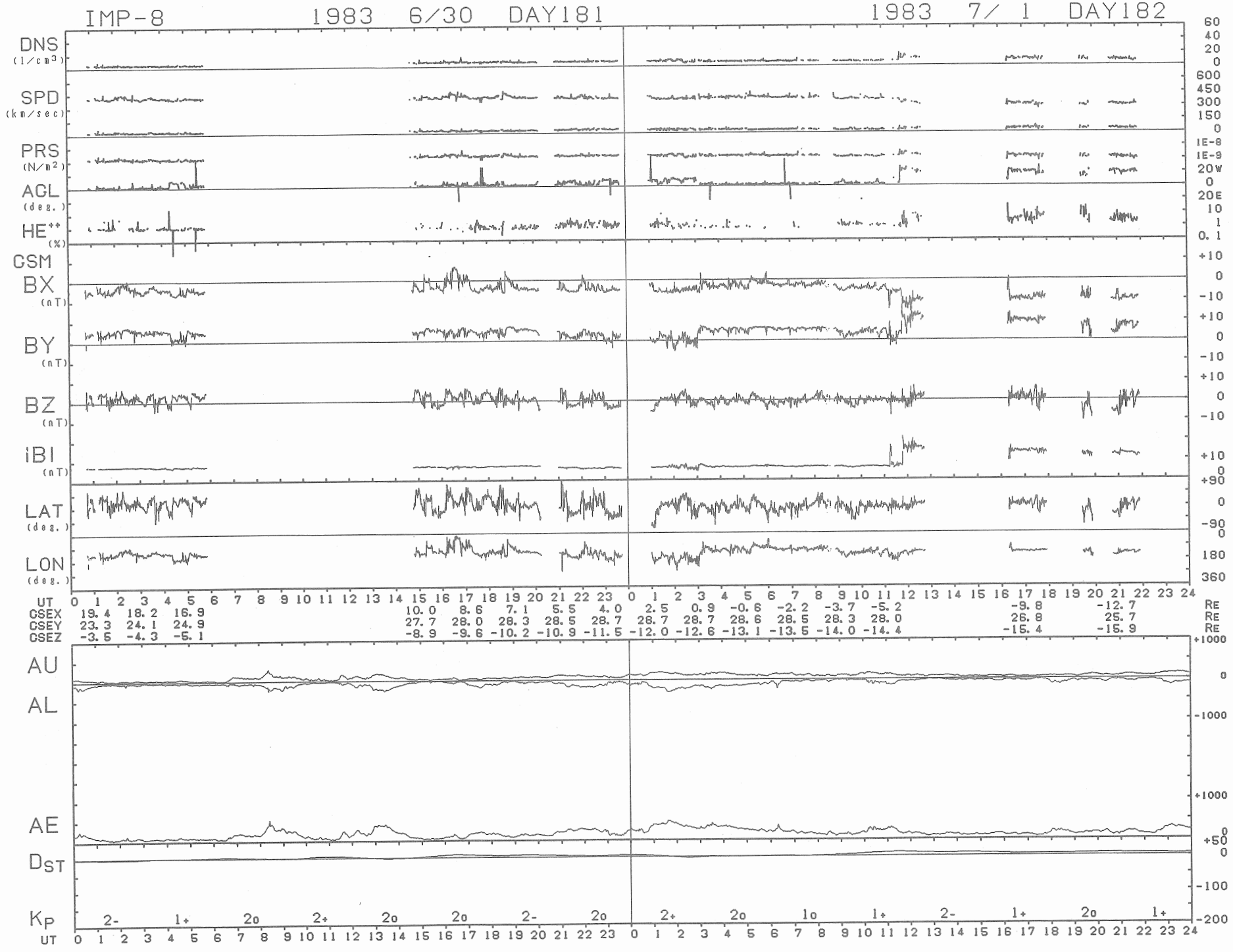

IMP-8
1983 6/20 DAY171
1983 6/21 DAY172
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.5 -21.7 -22.8 -34.1 RE
GSEY 19.8 18.8 17.7 -6.7 RE
GSEZ -15.9 -16.0 -16.1 -11.2 RE
AU
AL
AE
DST
KP
4- 3+ 3- 3+ 4o 3+ 3- 3- 3+ 4o 4o 2+ 3- 3+ 4+ 3o

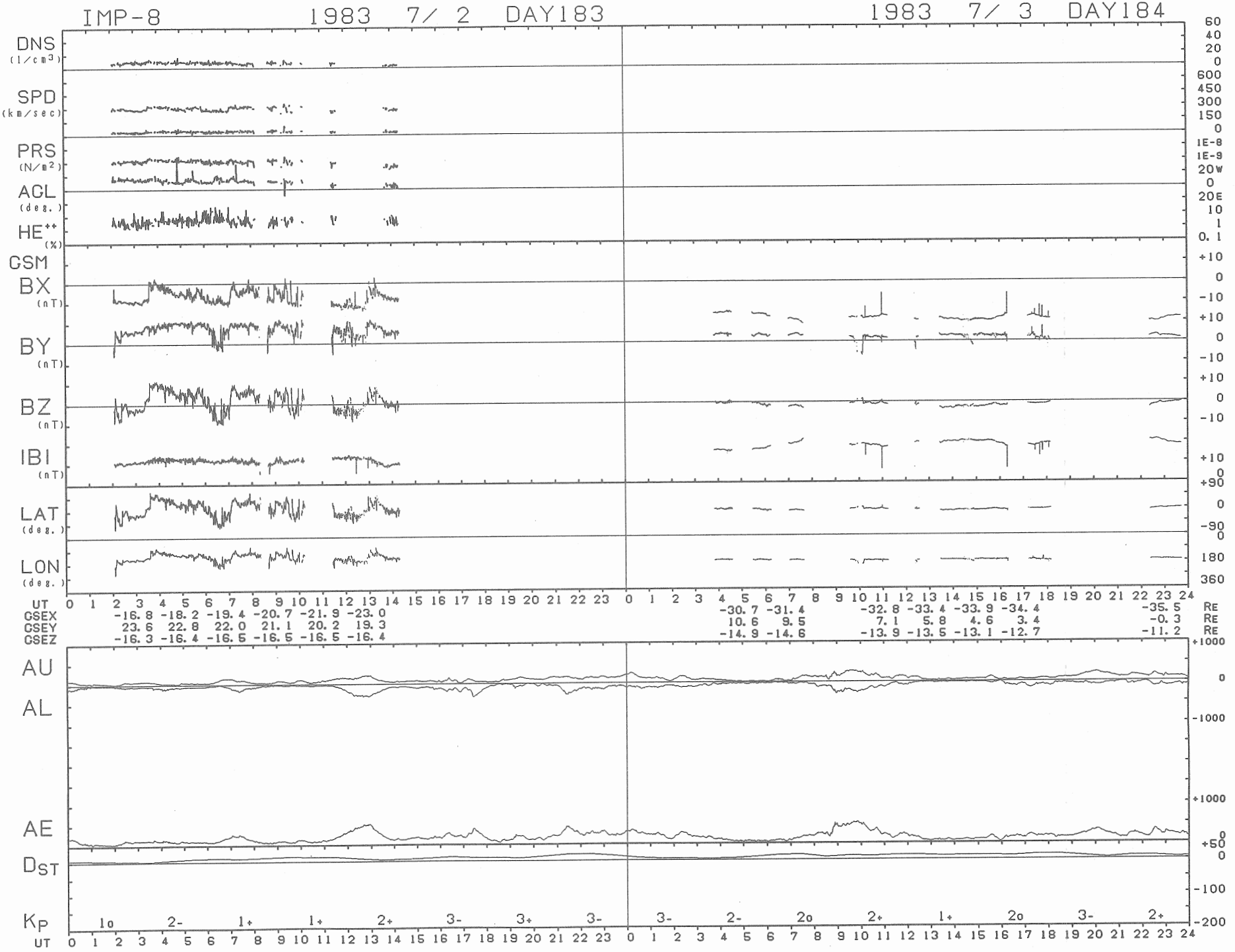

IMP-8
1983 6/22 DAY173
1983 6/23 DAY174
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
2- 2o 2+ 3- 4o 5o 5- 2+ 3o 3- 5- 3+ 3o 3+ 2o 3o

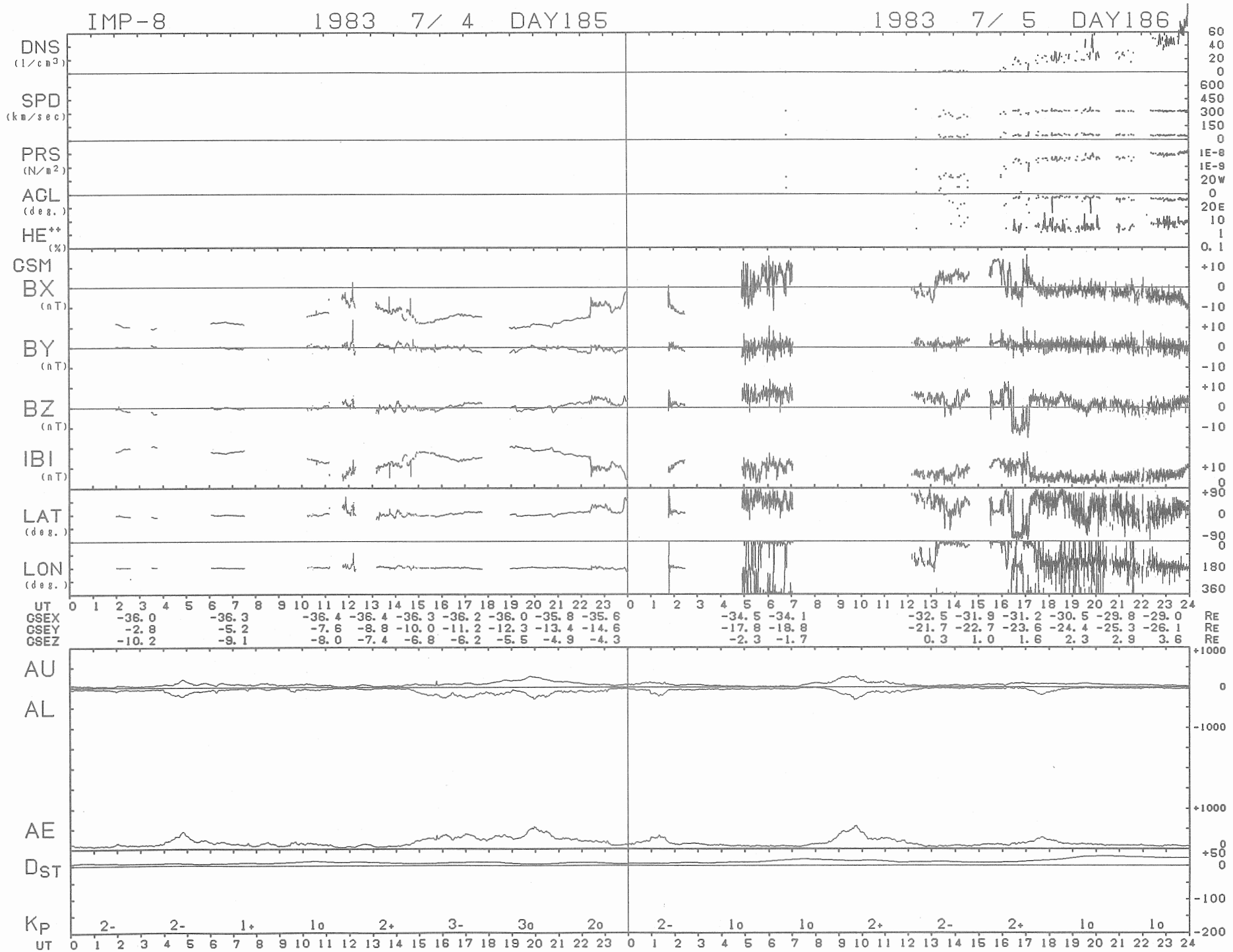

IMP-8
1983 6/24 DAY175
1983 6/25 DAY176
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -21.0 -13.6 -12.5 -1.7 -0.4 0.8 2.0 3.3 RE
GSEY -32.5 -35.4 -35.6 -35.6 -35.4 -35.1 -34.8 -34.4 RE
GSEZ 4.9 9.1 9.7 14.1 14.5 14.8 15.2 15.5 RE
AU
AL
AE
DST
KP
3- 2+ 2- 1- 1+ 2- 1+ 1- 0+ 0o 0+ 1o 1o 1o 3o 2o
UT

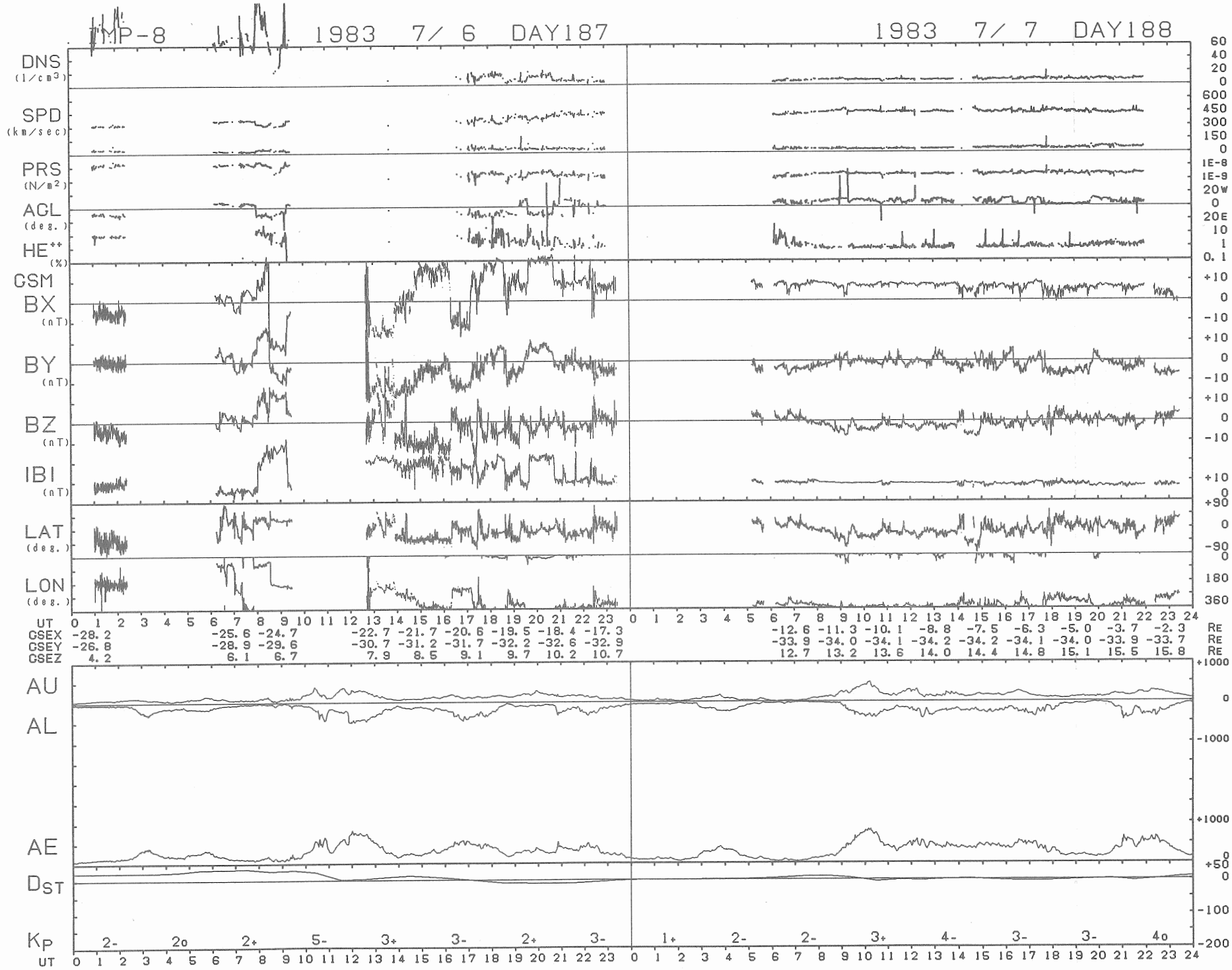

IMP-8 1983 6/26 DAY177
1983 6/27 DAY178
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 7.0 10.6 11.7 12.9 14.0 15.2 16.3 17.3 18.4 19.4 20.4 22.2 23.1 24.0 24.8 25.5 26.2 26.9 28.0 28.5 RE
GSEY -33.0 -31.2 -30.5 -29.7 -28.9 -28.1 -27.2 -26.3 -25.3 -24.3 -23.3 -21.1 -19.9 -18.7 -17.5 -16.2 -14.9 -13.6 -10.9 -9.5 RE
GSEZ 16.4 17.0 17.2 17.3 17.4 17.5 17.5 17.5 17.5 17.5 17.4 17.2 17.0 16.8 16.5 16.3 16.0 15.6 14.9 14.5 RE
AU
AL
AE
DST
KP 1+ 3- 2o 2+ 3+ 4o 2+ 3o 2- 1+ 2+ 2- 2- 2o 2o 3o
UT

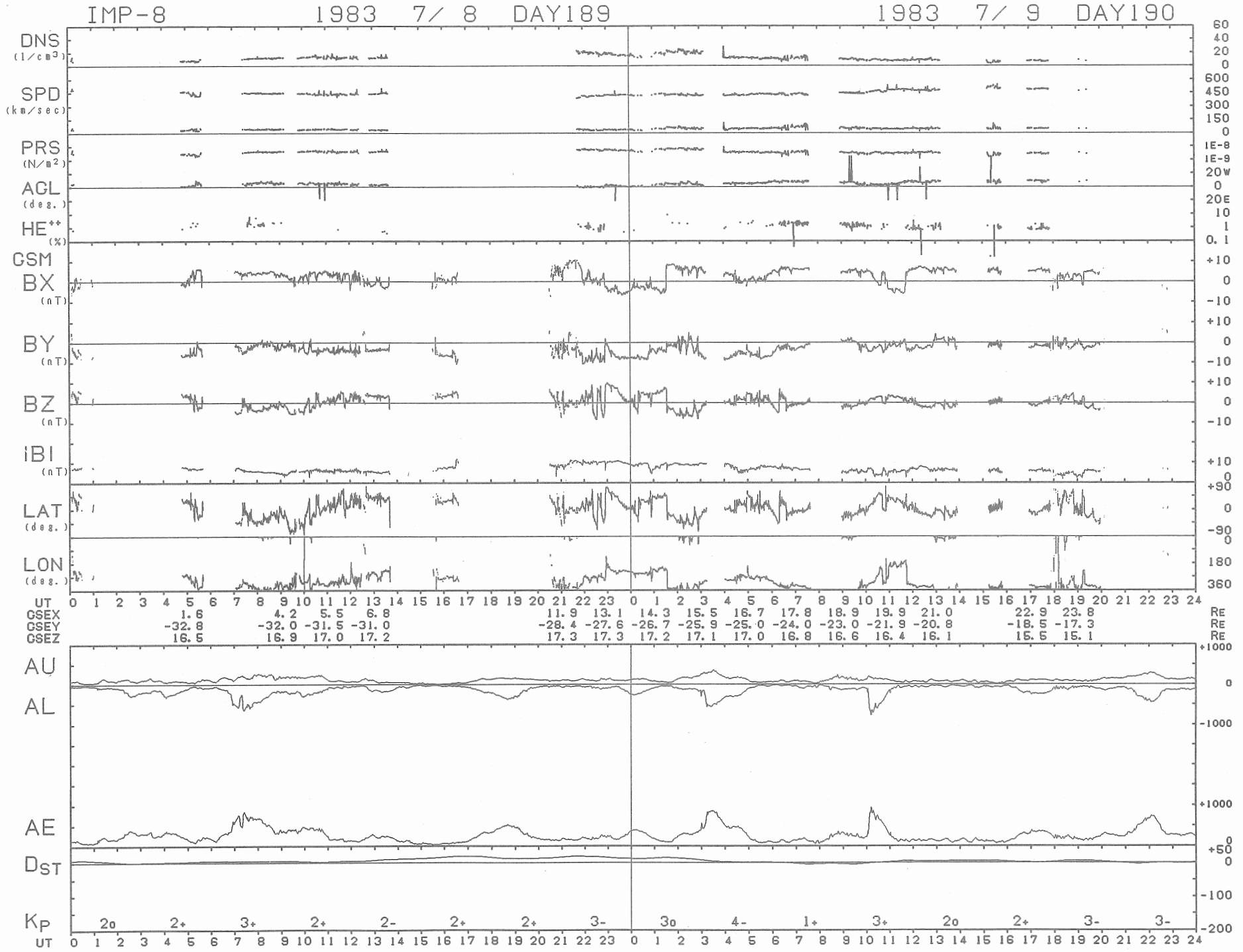

IMP-8
1983 6/28 DAY179
1983 6/29 DAY180
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 29.3 29.7 30.1 30.2 30.3 30.3 30.2 29.8 29.5 29.2 28.7 26.3 25.5 24.6 22.7 21.7 20.6 RE
GSEY -8.1 -6.7 -5.2 -2.3 -0.9 0.6 2.1 3.5 6.4 7.8 9.2 10.6 15.8 17.0 18.2 20.4 21.4 22.4 RE
GSEZ 14.0 13.5 13.0 11.9 11.3 10.6 10.0 9.3 7.9 7.1 6.4 5.6 2.3 1.5 0.7 -1.0 -1.9 -2.7 RE
AU
AL
AE
DST
KP
2+ 1o 1- 3- 4- 3+ 3o 3- 2o 3- 4- 4- 3+ 2+ 2- 2o
UT

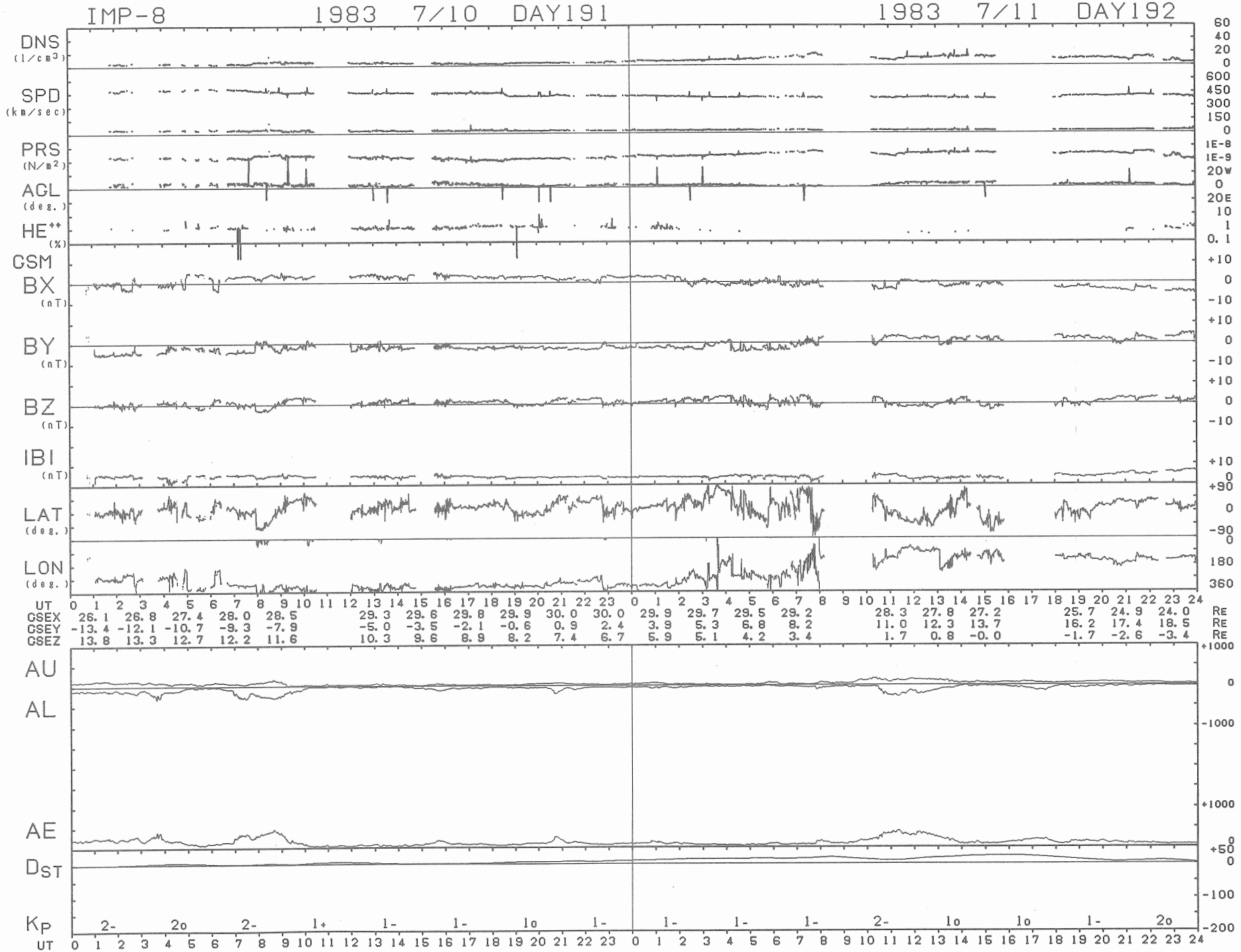

IMP-8 1983 6/30 DAY181
1983 7/ 1 DAY182
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.4 18.2 16.9 10.0 8.6 7.1 5.5 4.0 2.5 0.9 -0.6 -2.2 -3.7 -5.2 -9.8 -12.7 RE
GSEY 23.3 24.1 24.9 27.7 28.0 28.3 28.5 28.7 28.7 28.7 28.6 28.5 28.3 28.0 26.8 25.7 RE
GSEZ -3.5 -4.3 -5.1 -8.9 -9.6 -10.2 -10.9 -11.5 -12.0 -12.6 -13.1 -13.5 -14.0 -14.4 -15.4 -15.9 RE
AU
AL
AE
DST
KP
2- 1+ 2o 2+ 2o 2o 2- 2o 2+ 2o 1o 1+ 2- 1+ 2o 1+
UT

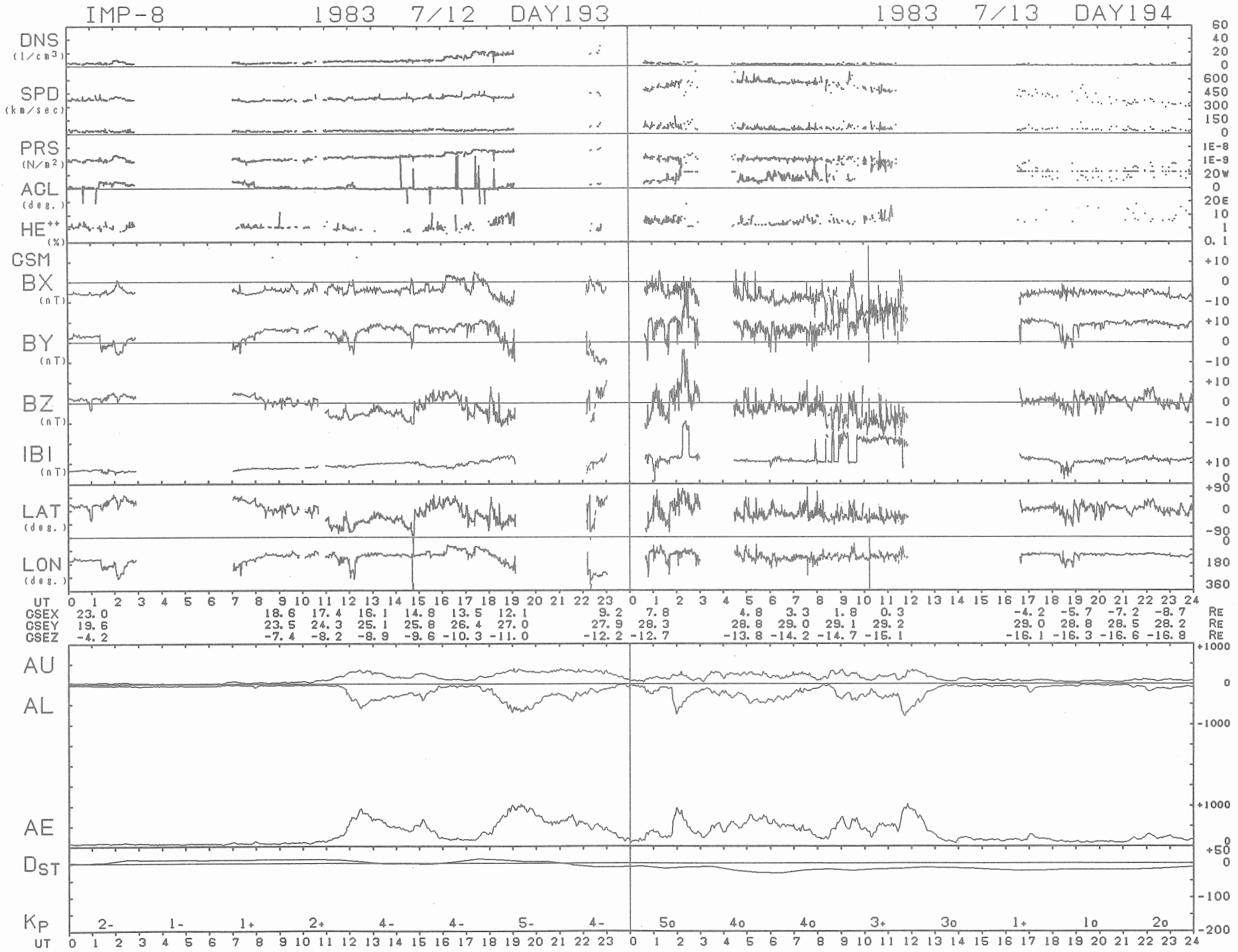

IMP-8
1983 7/ 2 DAY183
1983 7/ 3 DAY184
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.8 -18.2 -19.4 -20.7 -21.9 -23.0 -30.7 -31.4 -32.8 -33.4 -33.9 -34.4 -35.5 RE
GSEY 23.6 22.8 22.0 21.1 20.2 19.3 10.6 9.5 7.1 5.8 4.6 3.4 -0.3 RE
GSEZ -16.3 -16.4 -16.5 -16.5 -16.5 -16.4 -14.9 -14.6 -13.9 -13.5 -13.1 -12.7 -11.2 RE
AU
AL
AE
DST
KP 1o 2- 1+ 1+ 2+ 3- 3+ 3- 3- 2- 2o 2+ 1+ 2o 3- 2+
UT

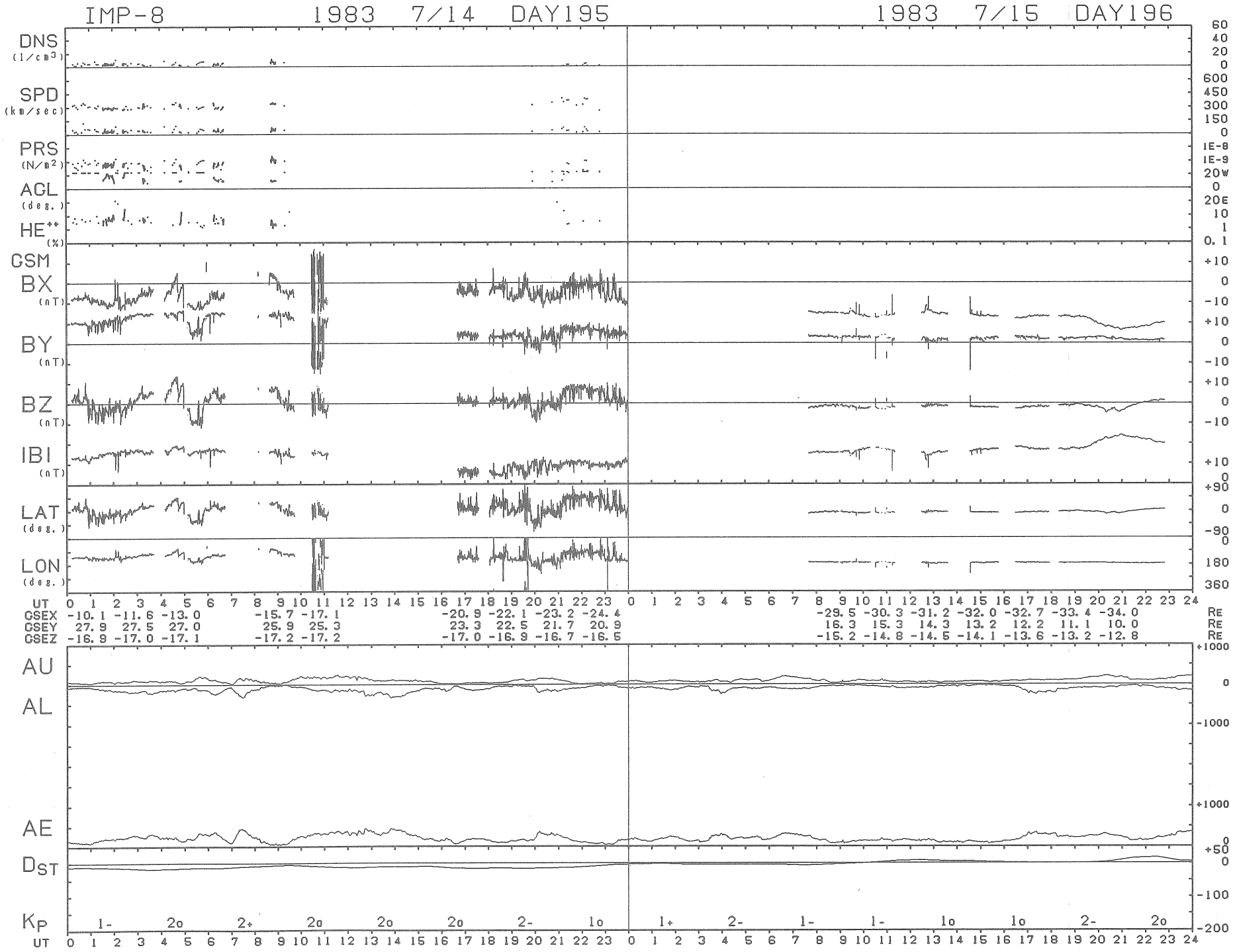

IMP-8 1983 7/ 4 DAY185
1983 7/ 5 DAY186
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.0 -36.3 -36.4 -36.4 -36.3 -36.2 -36.0 -35.8 -35.6 -34.5 -34.1 -32.5 -31.9 -31.2 -30.5 -29.8 -29.0 RE
GSEY -2.8 -5.2 -7.6 -8.8 -10.0 -11.2 -12.3 -13.4 -14.6 -17.8 -18.8 -21.7 -22.7 -23.6 -24.4 -25.3 -26.1 RE
GSEZ -10.2 -9.1 -8.0 -7.4 -6.8 -6.2 -5.5 -4.9 -4.3 -2.3 -1.7 0.3 1.0 1.6 2.3 2.9 3.6 RE
AU
AL
AE
DST
KP
2- 2- 1+ 1o 2+ 3- 3o 2o 2- 1o 1o 2+ 2- 2+ 1o 1o
UT

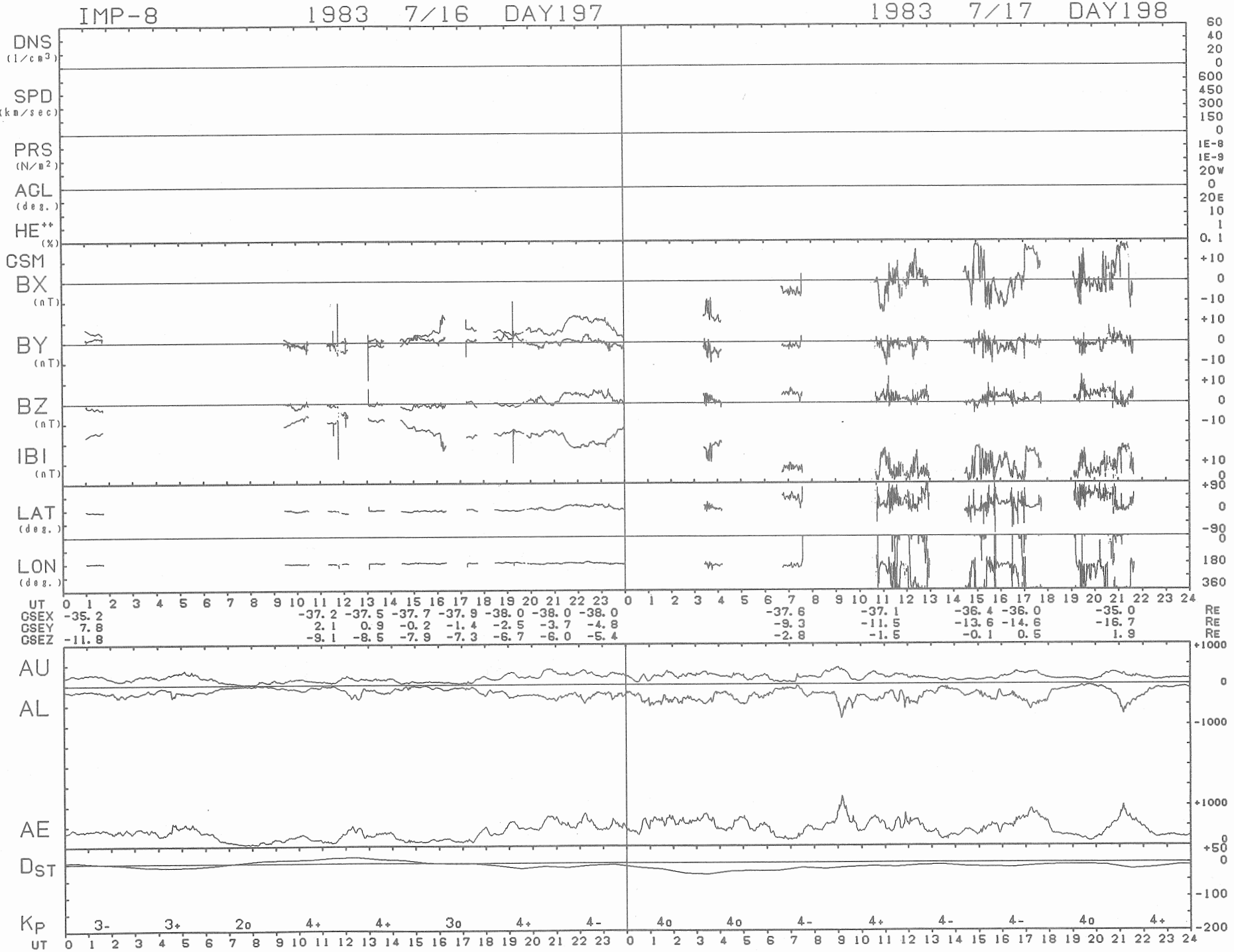

IMP-8
1983 7/ 6 DAY187
1983 7/ 7 DAY188
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.2 -25.6 -24.7 -22.7 -21.7 -20.6 -19.5 -18.4 -17.3 -12.6 -11.3 -10.1 -8.8 -7.5 -6.3 -5.0 -3.7 -2.3 RE
GSEY -26.8 -28.9 -29.6 -30.7 -31.2 -31.7 -32.2 -32.6 -32.9 -33.9 -34.0 -34.1 -34.2 -34.2 -34.1 -34.0 -33.9 -33.7 RE
GSEZ 4.2 6.1 6.7 7.9 8.5 9.1 9.7 10.2 10.7 12.7 13.2 13.6 14.0 14.4 14.8 15.1 15.5 15.8 RE
AU
AL
AE
DST
KP
2- 2o 2+ 5- 3+ 3- 2+ 3- 1+ 2- 2- 3+ 4- 3- 3- 4o
UT

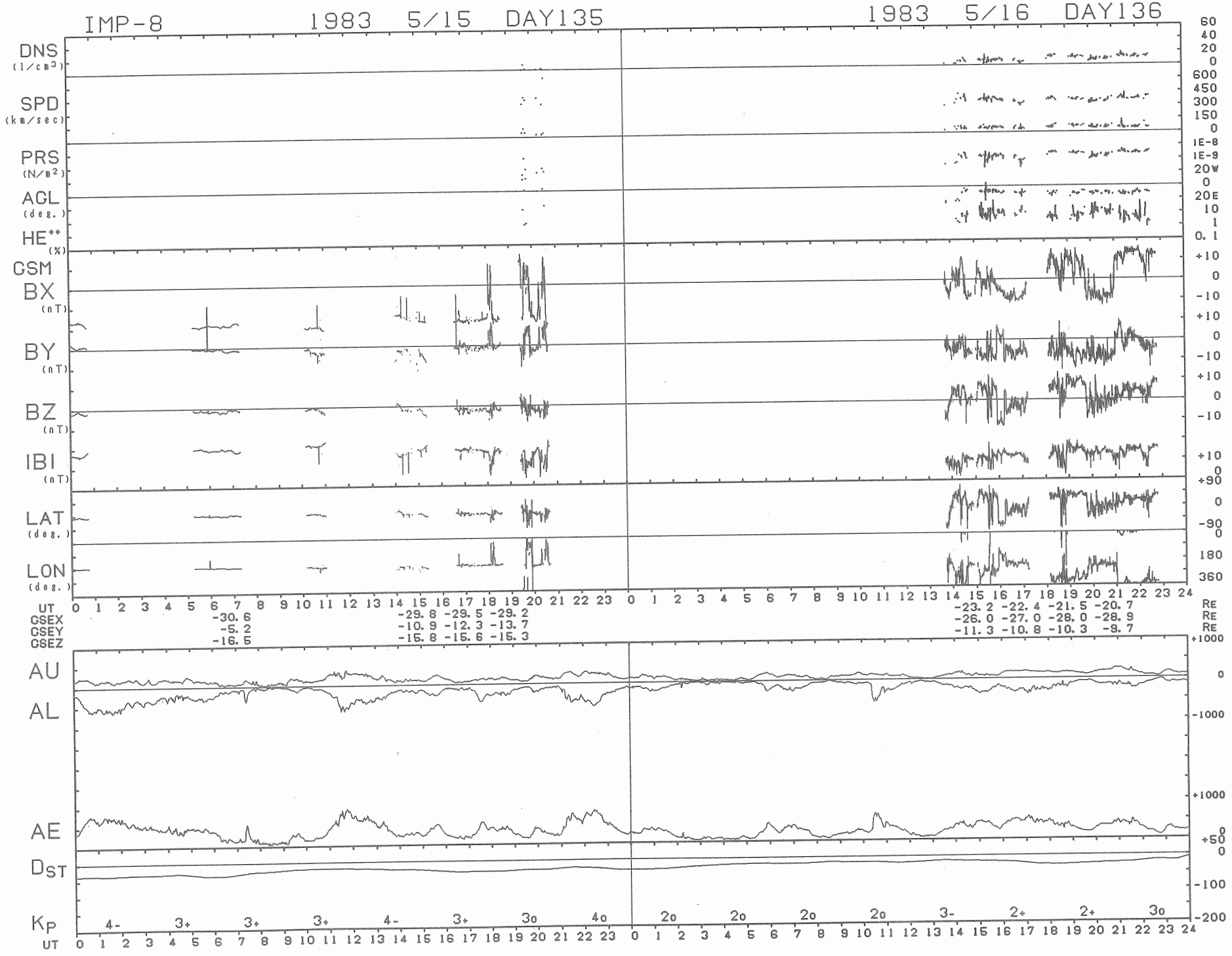

IMP-8 1983 7/ 8 DAY189
1983 7/ 9 DAY190
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.6 4.2 5.5 6.8 11.9 13.1 14.3 15.5 16.7 17.8 18.9 19.9 21.0 22.9 23.8 Re
GSEY -32.8 -32.0 -31.5 -31.0 -28.4 -27.6 -26.7 -25.9 -25.0 -24.0 -23.0 -21.9 -20.8 -18.5 -17.3 Re
GSEZ 16.5 16.9 17.0 17.2 17.3 17.3 17.2 17.1 17.0 16.8 16.6 16.4 16.1 15.5 15.1 Re
AU
AL
AE
DST
KP
2o 2+ 3+ 2+ 2- 2+ 2+ 3- 3o 4- 1+ 3+ 2o 2+ 3- 3-
UT

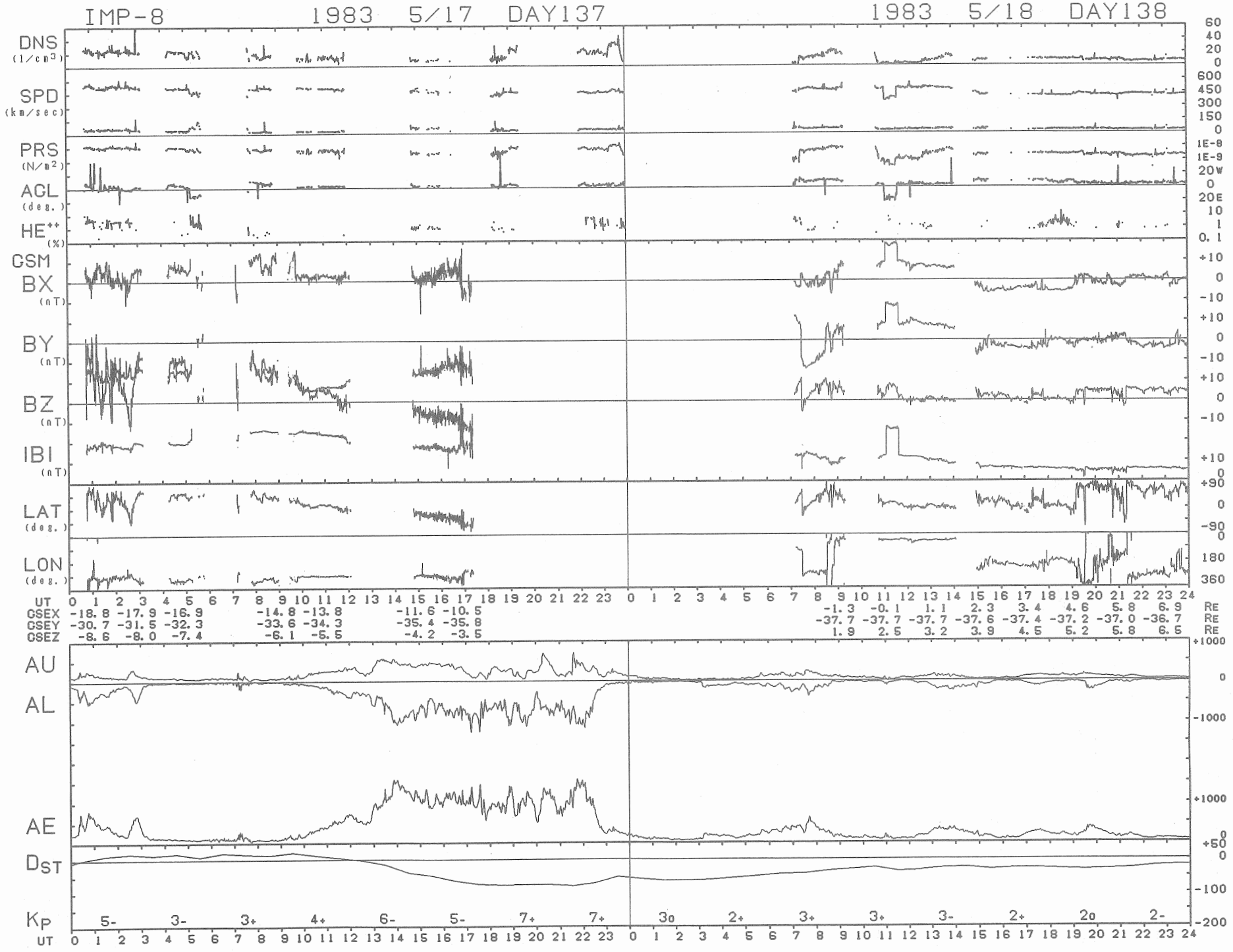

IMP-8 1983 7/10 DAY191
1983 7/11 DAY192
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.1 26.8 27.4 28.0 28.5 29.3 29.6 29.8 29.9 30.0 30.0 29.9 29.7 29.5 29.2 28.3 27.8 27.2 25.7 24.9 24.0 RE
GSEY -13.4 -12.1 -10.7 -9.3 -7.9 -5.0 -3.5 -2.1 -0.6 0.9 2.4 3.9 5.3 6.8 8.2 11.0 12.3 13.7 16.2 17.4 18.5 RE
GSEZ 13.8 13.3 12.7 12.2 11.6 10.3 9.6 8.9 8.2 7.4 6.7 5.9 5.1 4.2 3.4 1.7 0.8 -0.0 -1.7 -2.6 -3.4 RE
AU
AL
AE
DST
KP
2- 2o 2- 1+ 1- 1- 1o 1- 1- 1- 1- 2- 1o 1o 1- 2o
UT

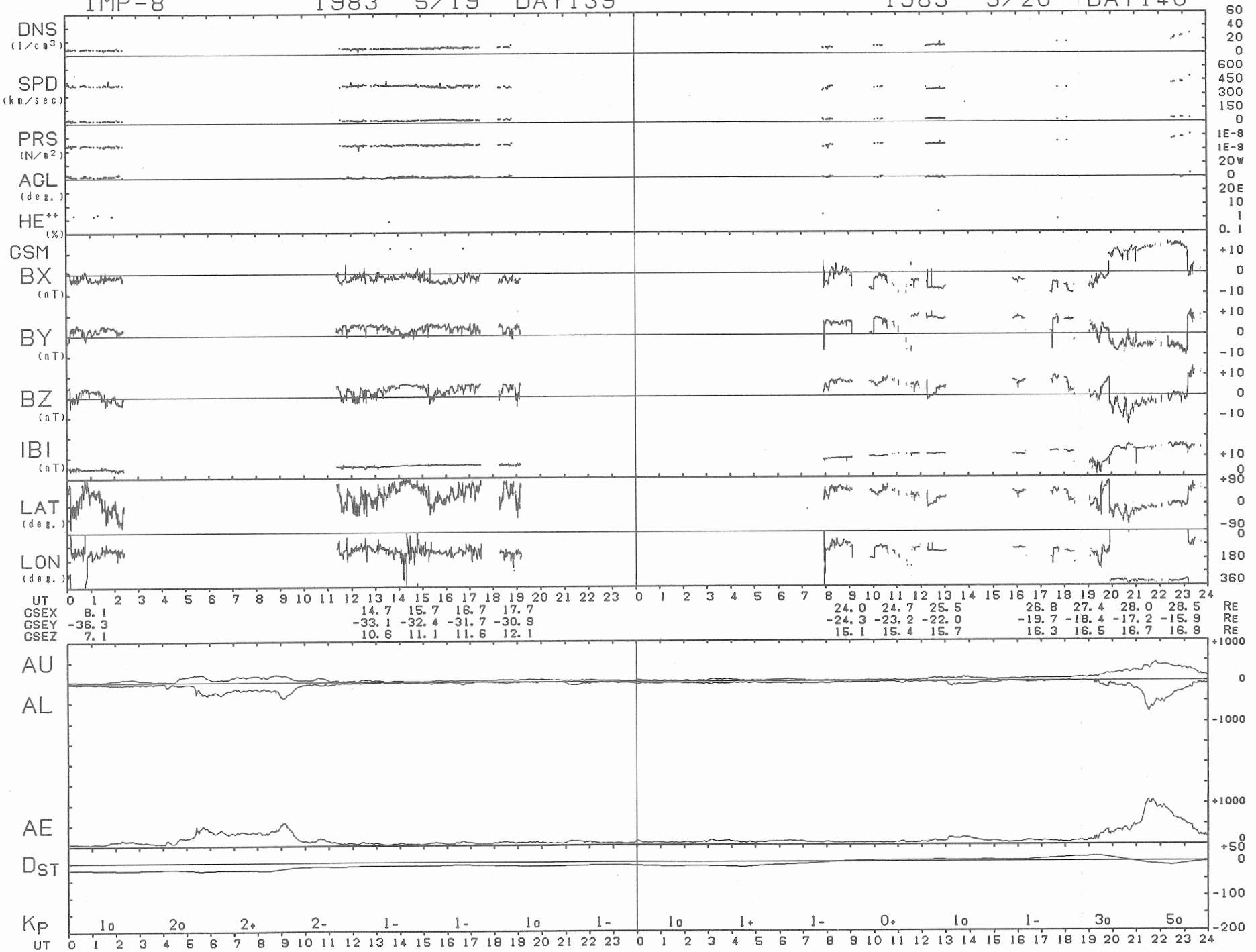

IMP-8 1983 7/12 DAY193
1983 7/13 DAY194
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.0 18.6 17.4 16.1 14.8 13.5 12.1 9.2 7.8 4.8 3.3 1.8 0.3 -4.2 -5.7 -7.2 -8.7 RE
GSEY 19.6 23.5 24.3 25.1 25.8 26.4 27.0 27.9 28.3 28.8 29.0 29.1 29.2 29.0 28.8 28.5 28.2 RE
GSEZ -4.2 -7.4 -8.2 -8.9 -9.6 -10.3 -11.0 -12.2 -12.7 -13.8 -14.2 -14.7 -15.1 -16.1 -16.3 -16.6 -16.8 RE
AU
AL
AE
DST
KP 2- 1- 1+ 2+ 4- 4- 5- 4- 5o 4o 4o 3+ 3o 1+ 1o 2o
UT

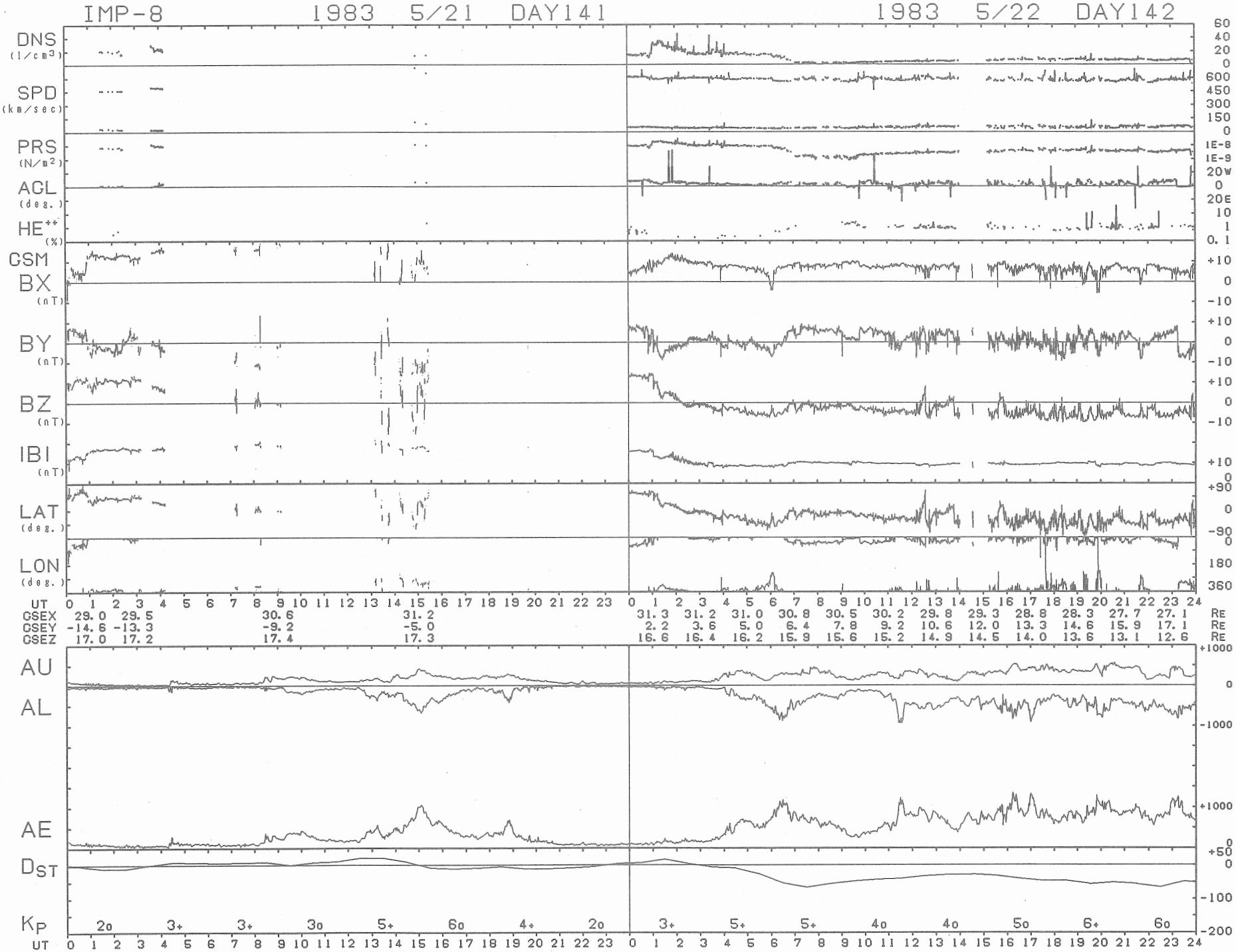

IMP-8 1983 7/14 DAY195
1983 7/15 DAY196
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.1 -11.6 -13.0 -15.7 -17.1 -20.9 -22.1 -23.2 -24.4 -29.5 -30.3 -31.2 -32.0 -32.7 -33.4 -34.0 RE
GSEY 27.9 27.5 27.0 25.9 25.3 23.3 22.5 21.7 20.9 16.3 15.3 14.3 13.2 12.2 11.1 10.0 RE
GSEZ -16.9 -17.0 -17.1 -17.2 -17.2 -17.0 -16.9 -16.7 -16.5 -15.2 -14.8 -14.5 -14.1 -13.6 -13.2 -12.8 RE
AU
AL
AE
DST
KP
1- 2o 2+ 2o 2o 2o 2- 1o 1+ 2- 1- 1- 1o 1o 2- 2o
UT

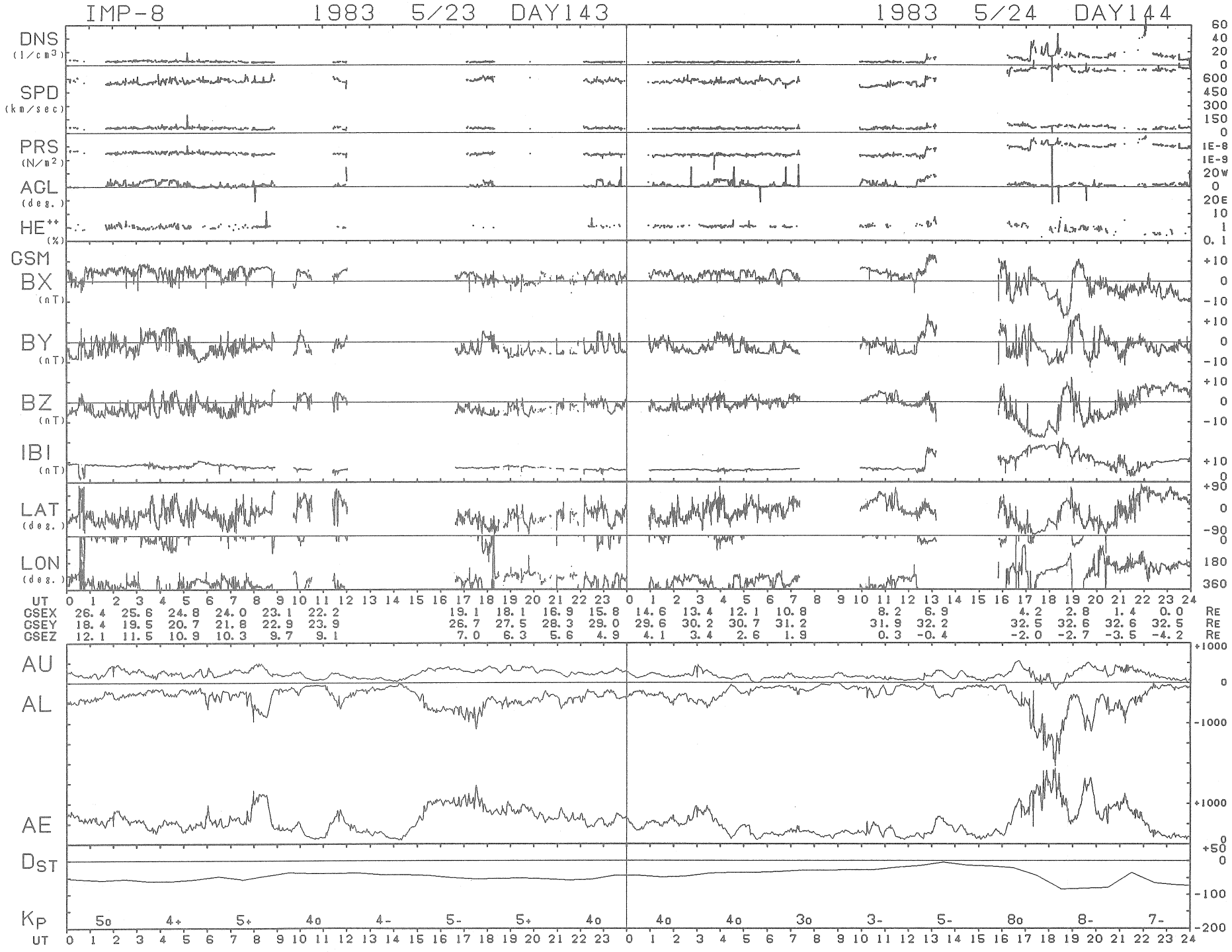

IMP-8 1983 7/16 DAY197
1983 7/17 DAY198
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.2 -37.2 -37.5 -37.7 -37.9 -38.0 -38.0 -38.0 -37.6 -37.1 -36.4 -36.0 -35.0 RE
GSEY 7.8 2.1 0.9 -0.2 -1.4 -2.5 -3.7 -4.8 -9.3 -11.5 -13.6 -14.6 -16.7 RE
GSEZ -11.8 -9.1 -8.5 -7.9 -7.3 -6.7 -6.0 -5.4 -2.8 -1.5 -0.1 0.5 1.9 RE
AU
AL
AE
DST
KP 3- 3+ 2o 4+ 4+ 3o 4+ 4- 4o 4o 4- 4+ 4- 4- 4o 4+
UT

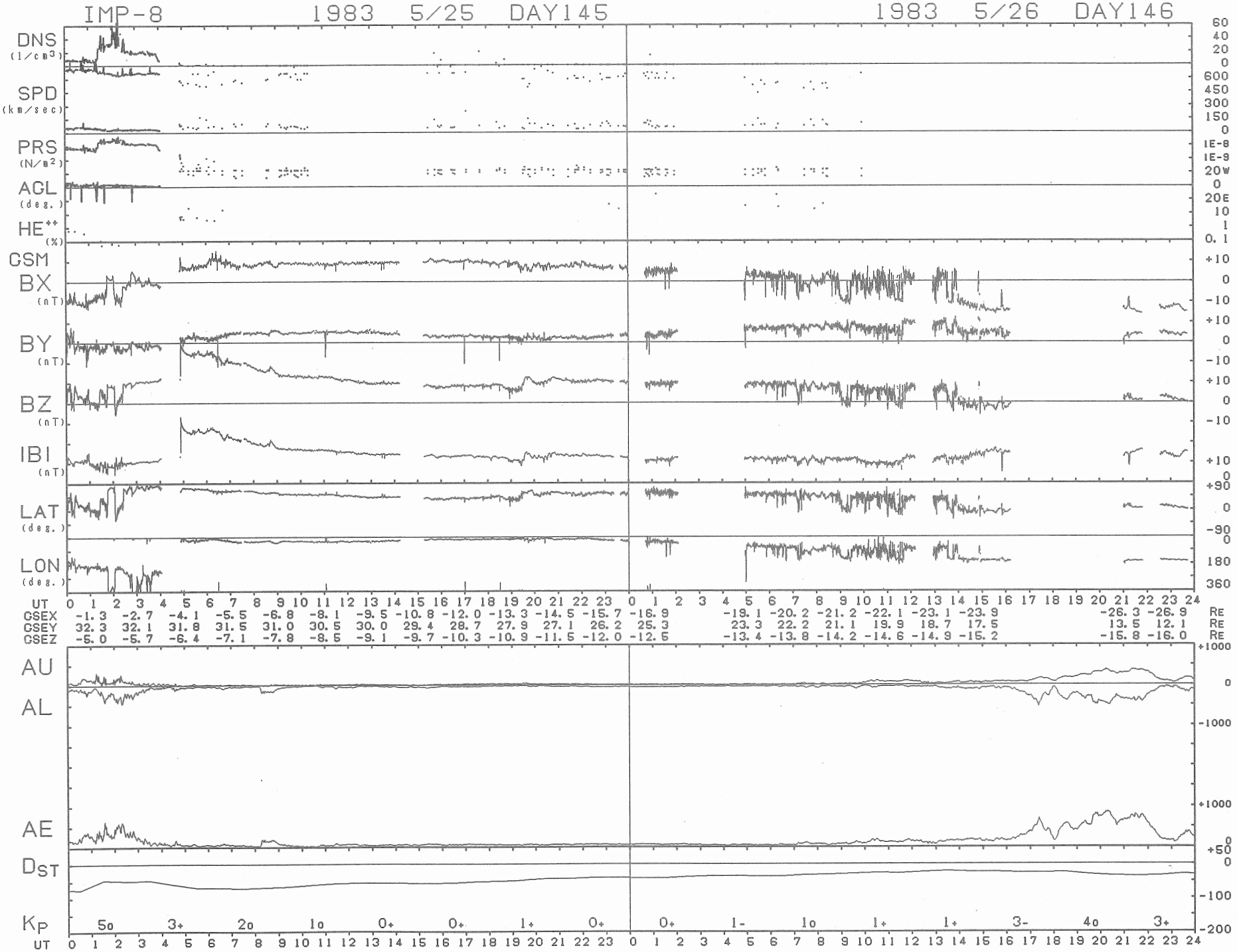

IMP-8
1983 5/15 DAY135
1983 5/16 DAY136
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.6 -29.8 -29.5 -29.2 -23.2 -22.4 -21.5 -20.7 RE
GSEY -5.2 -10.9 -12.3 -13.7 -26.0 -27.0 -28.0 -28.9 RE
GSEZ -16.5 -15.8 -15.6 -15.3 -11.3 -10.8 -10.3 -9.7 RE
AU
AL
AE
DST
KP
4- 3+ 3+ 3+ 4- 3+ 3o 4o 2o 2o 2o 2o 3- 2+ 2+ 3o
UT

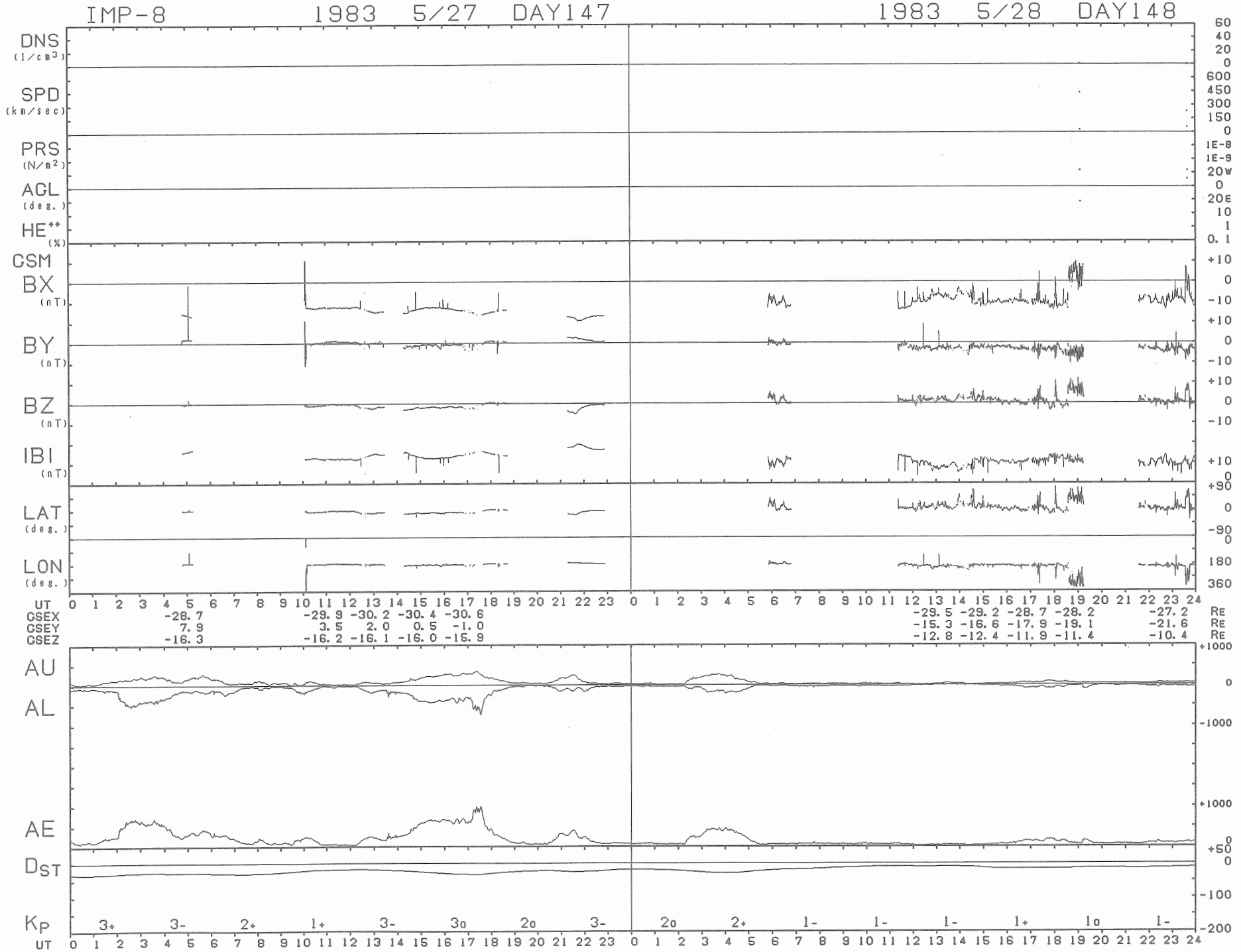

IMP-8
1983 5/17 DAY137
1983 5/18 DAY138
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.8 -17.9 -16.9 -14.8 -13.8 -11.6 -10.5 -1.3 -0.1 1.1 2.3 3.4 4.6 5.8 6.9 RE
GSEY -30.7 -31.5 -32.3 -33.6 -34.3 -35.4 -35.8 -37.7 -37.7 -37.7 -37.6 -37.4 -37.2 -37.0 -36.7 RE
GSEZ -8.6 -8.0 -7.4 -6.1 -5.5 -4.2 -3.5 1.9 2.5 3.2 3.9 4.5 5.2 5.8 6.5 RE
AU
AL
AE
DST
KP
5- 3- 3+ 4+ 6- 5- 7+ 7+ 3o 2+ 3+ 3+ 3- 2+ 2o 2-
UT

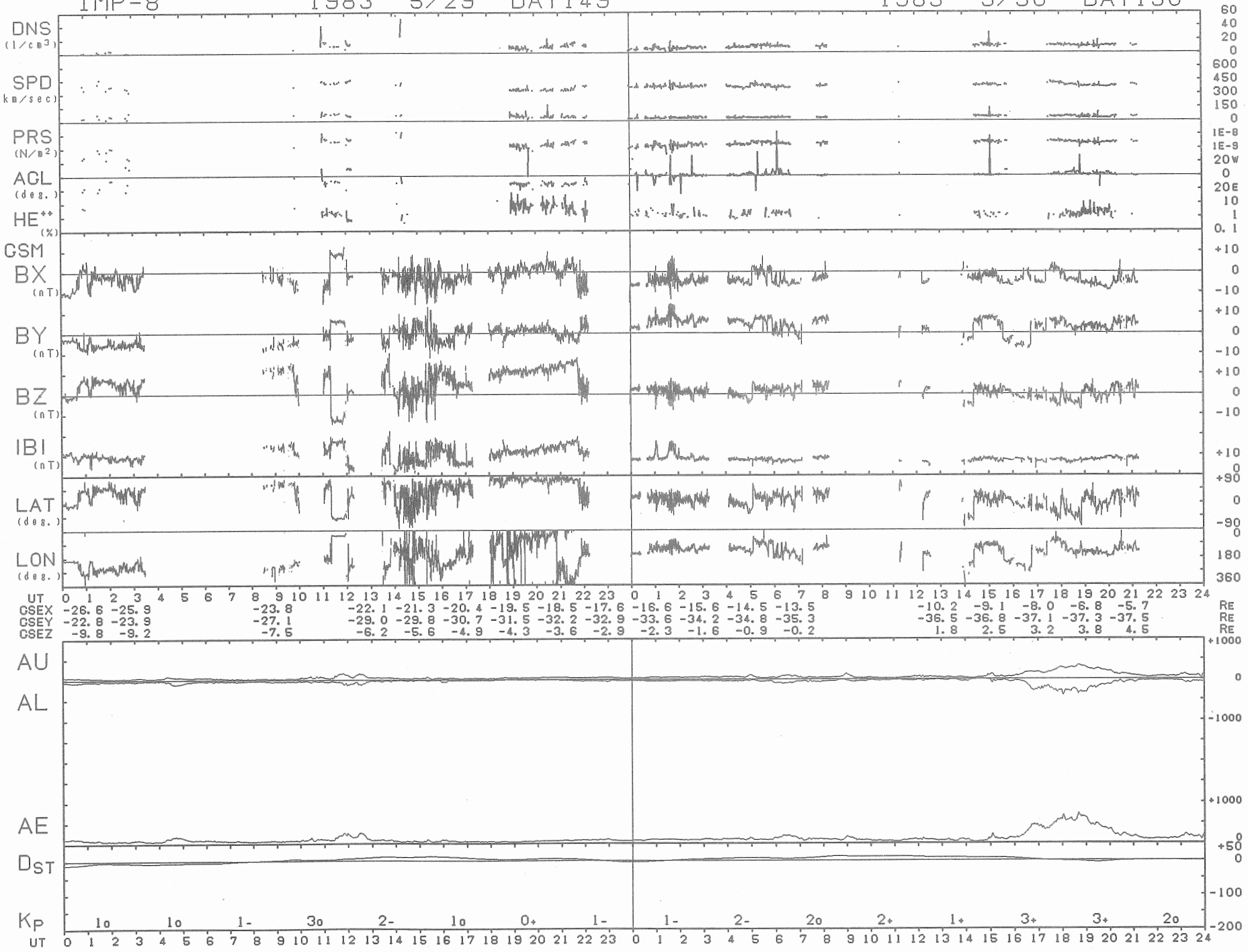

IMP-8
1983 5/19 DAY139
1983 5/20 DAY140
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.1 14.7 15.7 16.7 17.7 24.0 24.7 25.5 26.8 27.4 28.0 28.5 RE
GSEY -36.3 -33.1 -32.4 -31.7 -30.9 -24.3 -23.2 -22.0 -19.7 -18.4 -17.2 -15.9 RE
GSEZ 7.1 10.6 11.1 11.6 12.1 15.1 15.4 15.7 16.3 16.5 16.7 16.9 RE
AU
AL
AE
DST
KP
1o 2o 2+ 2- 1- 1- 1o 1- 1o 1+ 1- 0+ 1o 1- 3o 5o
UT

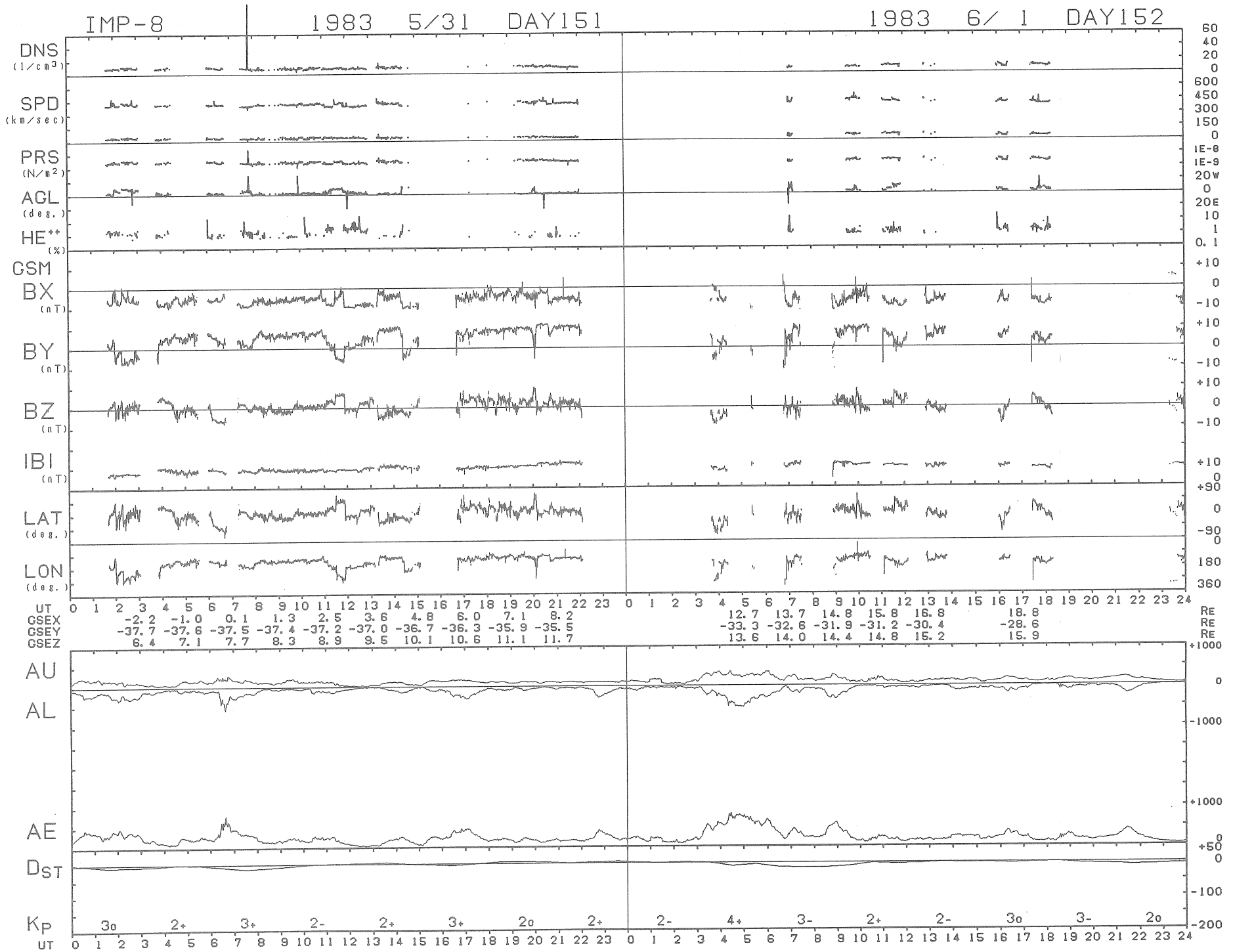

IMP-8 1983 5/21 DAY141
1983 5/22 DAY142
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 29.5 30.6 31.2 31.3 31.2 31.0 30.8 30.5 30.2 29.8 29.3 28.8 28.3 27.7 27.1 RE
GSEY -14.6 -13.3 -9.2 -5.0 2.2 3.6 5.0 6.4 7.8 9.2 10.6 12.0 13.3 14.6 15.9 17.1 RE
GSEZ 17.0 17.2 17.4 17.3 16.6 16.4 16.2 15.9 15.6 15.2 14.9 14.5 14.0 13.6 13.1 12.6 RE
AU
AL
AE
DST
KP 2o 3+ 3+ 3o 5+ 6o 4+ 2o 3+ 5+ 5+ 4o 4o 5o 6+ 6o
UT

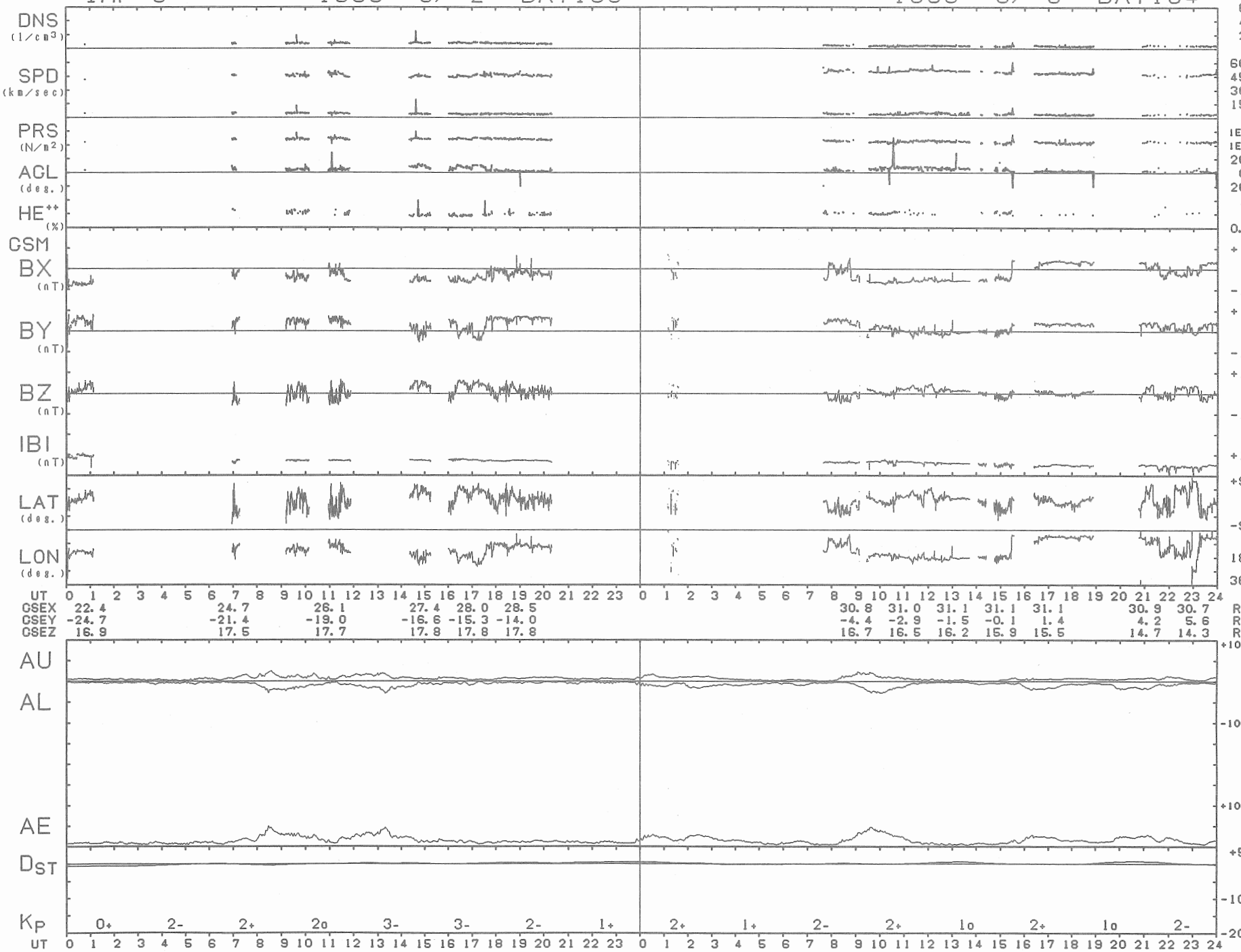

IMP-8 1983 5/23 DAY143
1983 5/24 DAY144
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.4 25.6 24.8 24.0 23.1 22.2 19.1 18.1 16.9 15.8 14.6 13.4 12.1 10.8 8.2 6.9 4.2 2.8 1.4 0.0 RE
GSEY 18.4 19.5 20.7 21.8 22.9 23.9 26.7 27.5 28.3 29.0 29.6 30.2 30.7 31.2 31.9 32.2 32.5 32.6 32.6 32.5 RE
GSEZ 12.1 11.5 10.9 10.3 9.7 9.1 7.0 6.3 5.6 4.9 4.1 3.4 2.6 1.9 0.3 -0.4 -2.0 -2.7 -3.5 -4.2 RE
AU
AL
AE
DST
KP
5o 4+ 5+ 4o 4- 5- 5+ 4o 4o 4o 3o 3- 5- 8o 8- 7-
UT

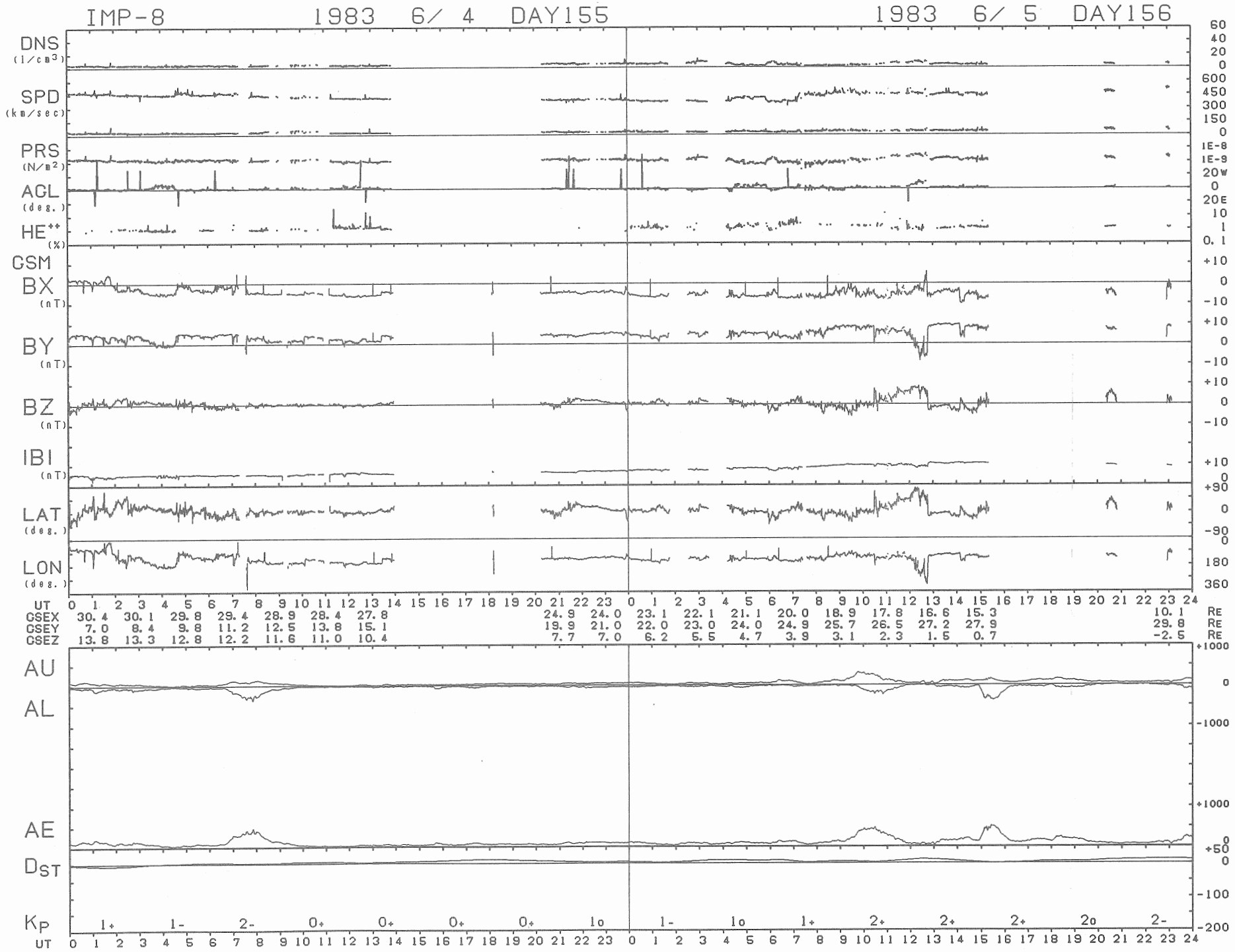

IMP-8 1983 5/25 DAY145
1983 5/26 DAY146
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -1.3 -2.7 -4.1 -5.5 -6.8 -8.1 -9.5 -10.8 -12.0 -13.3 -14.5 -15.7 -16.9 -19.1 -20.2 -21.2 -22.1 -23.1 -23.9 -26.3 -26.9 RE
GSEY 32.3 32.1 31.8 31.5 31.0 30.5 30.0 29.4 28.7 27.9 27.1 26.2 25.3 23.3 22.2 21.1 19.9 18.7 17.5 13.5 12.1 RE
GSEZ -5.0 -5.7 -6.4 -7.1 -7.8 -8.5 -9.1 -9.7 -10.3 -10.9 -11.5 -12.0 -12.5 -13.4 -13.8 -14.2 -14.6 -14.9 -15.2 -15.8 -16.0 RE
AU
AL
AE
DST
KP
5o 3+ 2o 1o 0+ 0+ 1+ 0+ 0+ 1- 1o 1+ 1+ 3- 4o 3+
UT

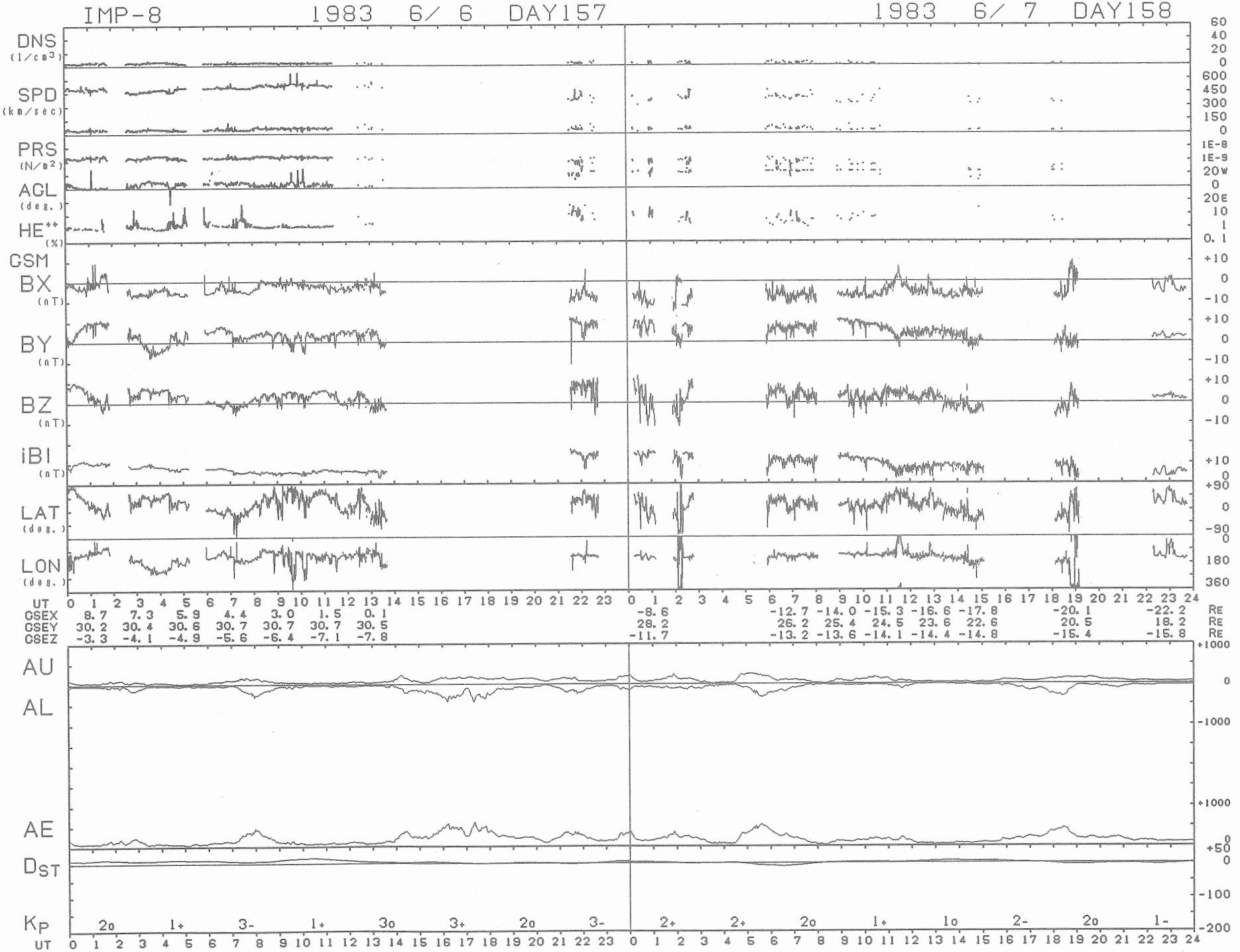

IMP-8 1983 5/27 DAY147
1983 5/28 DAY148
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.7 -29.9 -30.2 -30.4 -30.6 -29.5 -29.2 -28.7 -28.2 -27.2 RE
GSEY 7.9 3.5 2.0 0.5 -1.0 -15.3 -16.6 -17.9 -19.1 -21.6 RE
GSEZ -16.3 -16.2 -16.1 -16.0 -15.9 -12.8 -12.4 -11.9 -11.4 -10.4 RE
AU
AL
AE
DST
KP 3+ 3- 2+ 1+ 3- 3o 2o 3- 2o 2+ 1- 1- 1- 1+ 1o 1-
UT

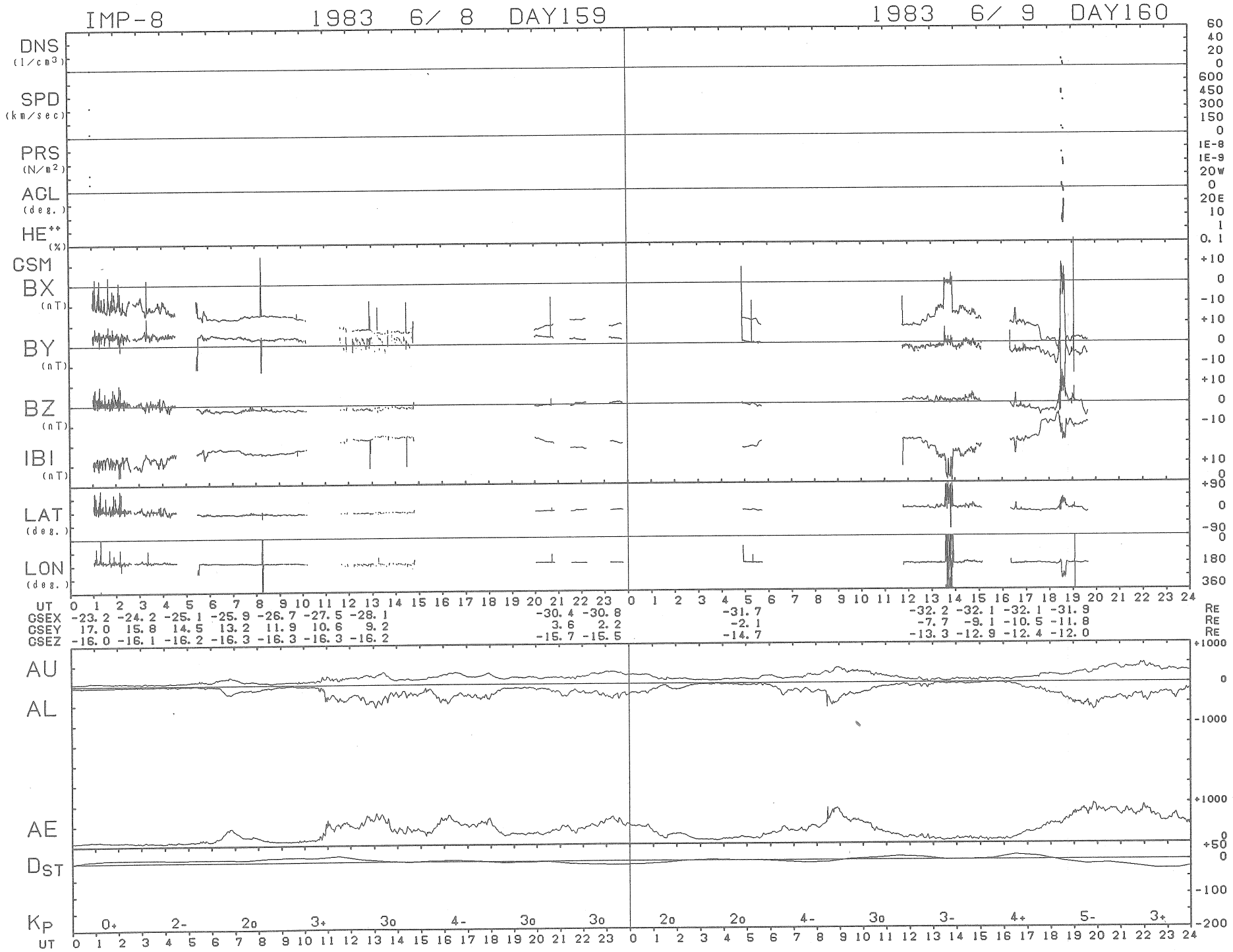

IMP-8 1983 5/29 DAY149
1983 5/30 DAY150
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.6 -25.9 -23.8 -22.1 -21.3 -20.4 -19.5 -18.5 -17.6 -16.6 -15.6 -14.5 -13.5 -10.2 -9.1 -8.0 -6.8 -5.7 RE
GSEY -22.8 -23.9 -27.1 -29.0 -29.8 -30.7 -31.5 -32.2 -32.9 -33.6 -34.2 -34.8 -35.3 -36.5 -36.8 -37.1 -37.3 -37.5 RE
GSEZ -9.8 -9.2 -7.5 -6.2 -5.6 -4.9 -4.3 -3.6 -2.9 -2.3 -1.6 -0.9 -0.2 1.8 2.5 3.2 3.8 4.5 RE
AU
AL
AE
DST
KP
1o 1o 1- 3o 2- 1o 0+ 1- 1- 2- 2o 2+ 1+ 3+ 3+ 2o
UT

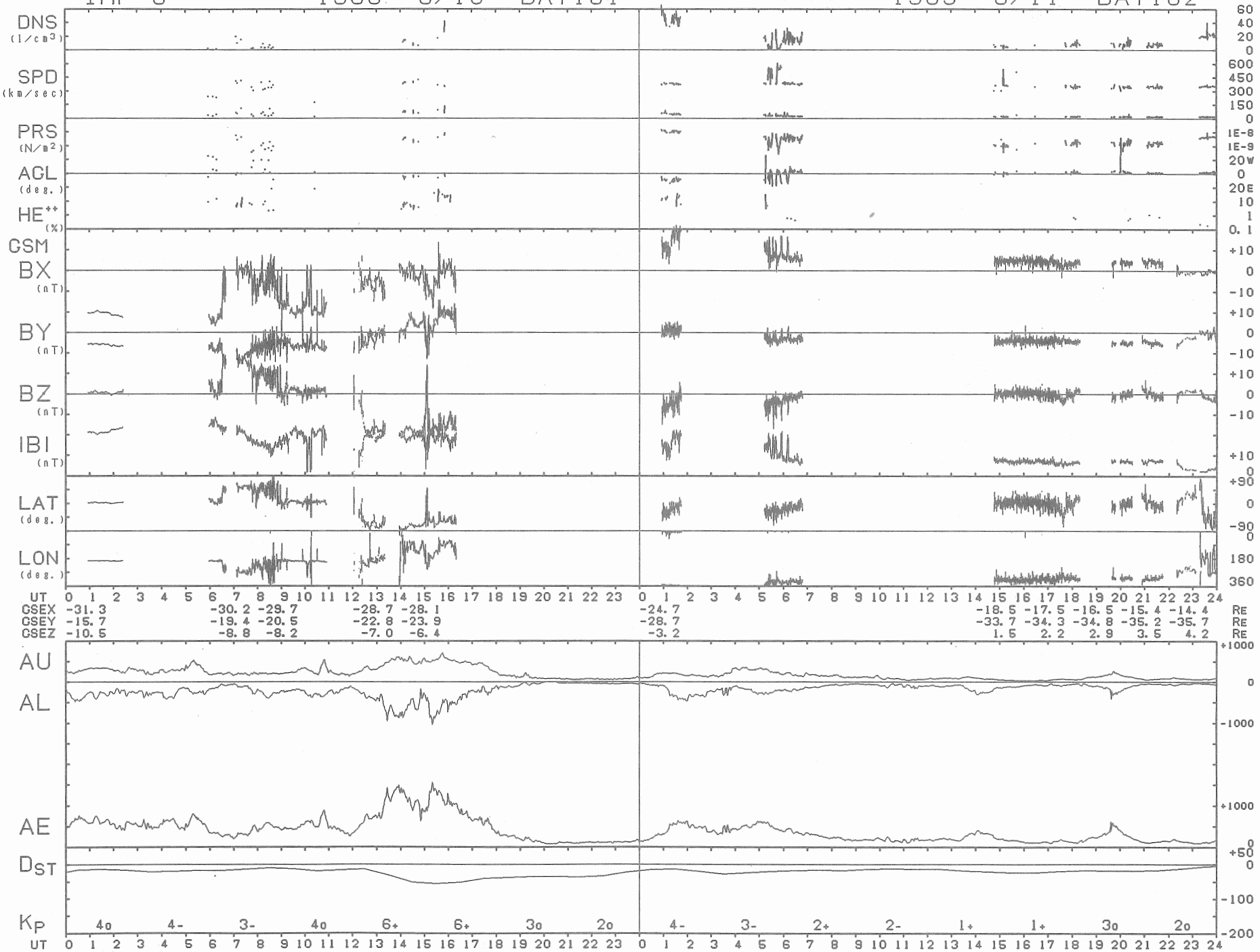

IMP-8
1983 5/31 DAY151
1983 6/ 1 DAY152
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.2 -1.0 0.1 1.3 2.5 3.6 4.8 6.0 7.1 8.2 12.7 13.7 14.8 15.8 16.8 18.8 RE
GSEY -37.7 -37.6 -37.5 -37.4 -37.2 -37.0 -36.7 -36.3 -35.9 -35.5 -33.3 -32.6 -31.9 -31.2 -30.4 -28.6 RE
GSEZ 6.4 7.1 7.7 8.3 8.9 9.5 10.1 10.6 11.1 11.7 13.6 14.0 14.4 14.8 15.2 15.9 RE
AU
AL
AE
DST
KP
3o 2+ 3+ 2- 2+ 3+ 2o 2+ 2- 4+ 3- 2+ 2- 3o 3- 2o
UT

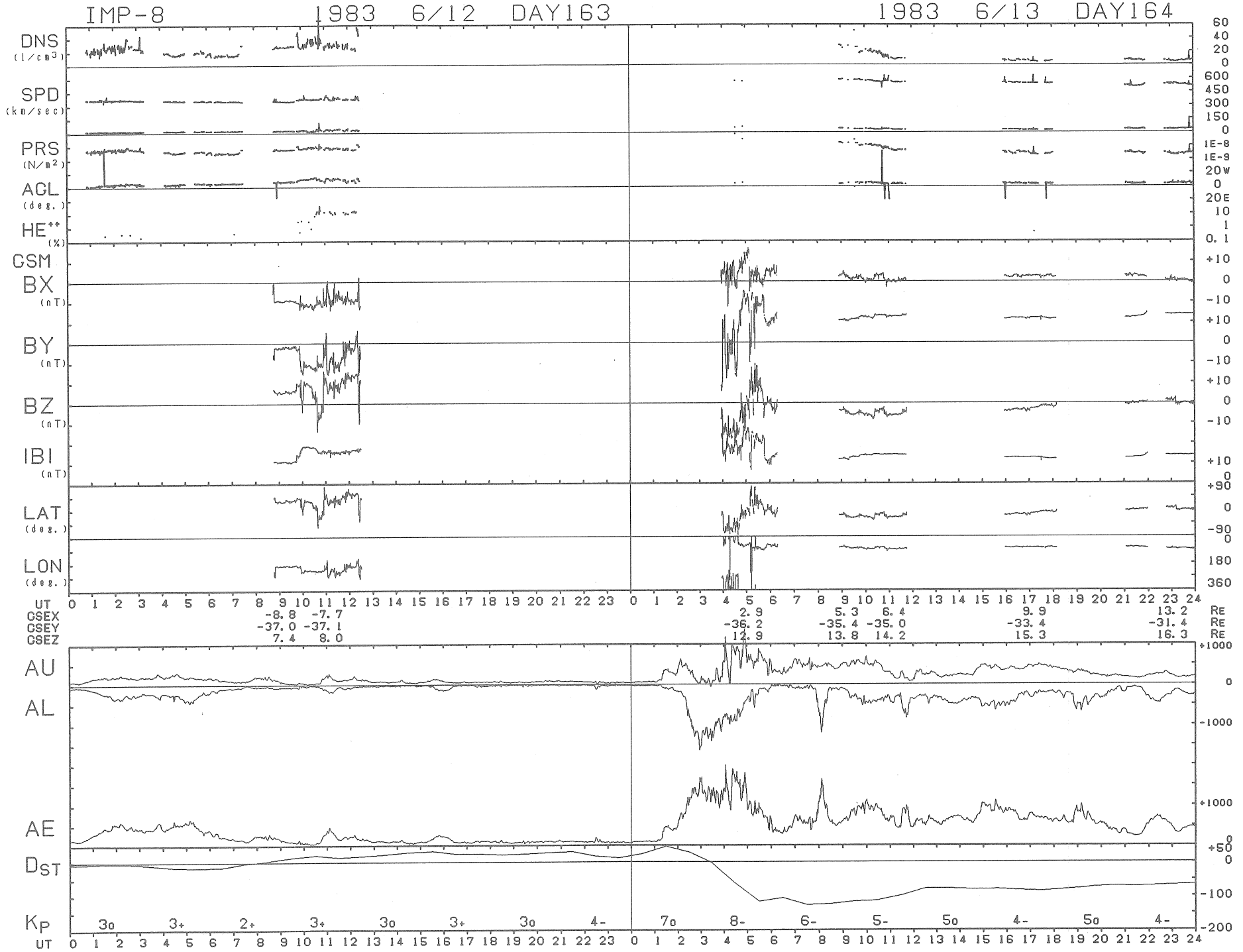

IMP-8 1983 6/ 2 DAY153
1983 6/ 3 DAY154
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.4 24.7 26.1 27.4 28.0 28.5 30.8 31.0 31.1 31.1 31.1 30.9 30.7 RE
GSEY -24.7 -21.4 -19.0 -16.6 -15.3 -14.0 -4.4 -2.9 -1.5 -0.1 1.4 4.2 5.6 RE
GSEZ 16.9 17.5 17.7 17.8 17.8 17.8 16.7 16.5 16.2 15.9 15.5 14.7 14.3 RE
AU
AL
AE
DST
KP 0+ 2- 2+ 2o 3- 3- 2- 1+ 2+ 1+ 2- 2+ 1o 2+ 1o 2-
UT

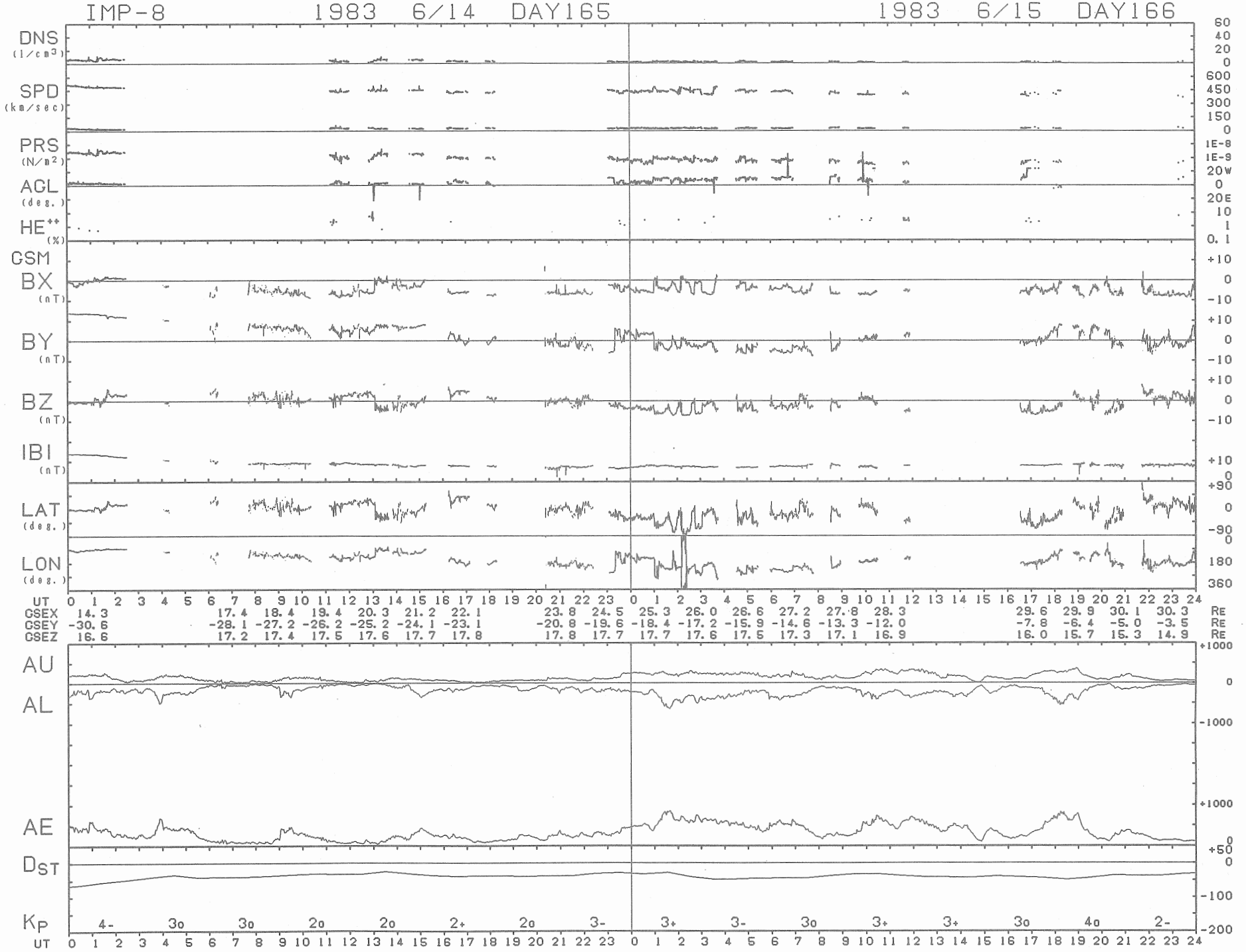

IMP-8 1983 6/ 4 DAY155
1983 6/ 5 DAY156
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.4 30.1 29.8 29.4 28.9 28.4 27.8 24.9 24.0 23.1 22.1 21.1 20.0 18.9 17.8 16.6 15.3 10.1 RE
GSEY 7.0 8.4 9.8 11.2 12.5 13.8 15.1 19.9 21.0 22.0 23.0 24.0 24.9 25.7 26.5 27.2 27.9 29.8 RE
GSEZ 13.8 13.3 12.8 12.2 11.6 11.0 10.4 7.7 7.0 6.2 5.5 4.7 3.9 3.1 2.3 1.5 0.7 -2.5 RE
AU
AL
AE
DST
KP 1+ 1- 2- 0+ 0+ 0+ 0+ 1o 1- 1o 1+ 2+ 2+ 2+ 2o 2-
UT

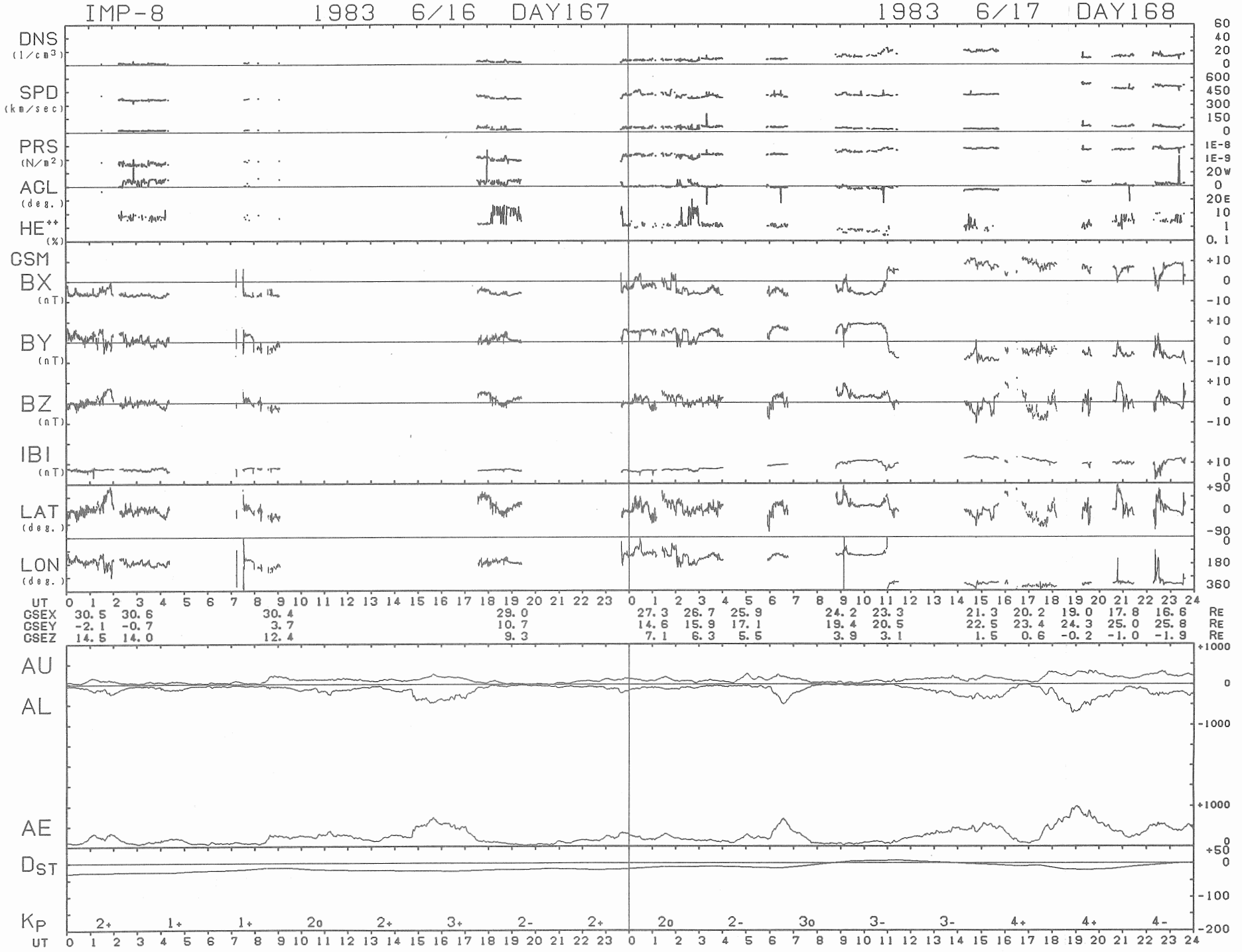

IMP-8 1983 6/ 6 DAY157
1983 6/ 7 DAY158
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.7 7.3 5.9 4.4 3.0 1.5 0.1 -8.6 -12.7 -14.0 -15.3 -16.6 -17.8 -20.1 -22.2 RE
GSEY 30.2 30.4 30.6 30.7 30.7 30.7 30.5 28.2 26.2 25.4 24.5 23.6 22.6 20.5 18.2 RE
GSEZ -3.3 -4.1 -4.9 -5.6 -6.4 -7.1 -7.8 -11.7 -13.2 -13.6 -14.1 -14.4 -14.8 -15.4 -15.8 RE
AU
AL
AE
DST
KP 2o 1+ 3- 1+ 3o 3+ 2o 3- 2+ 2+ 2o 1+ 1o 2- 2o 1-
UT

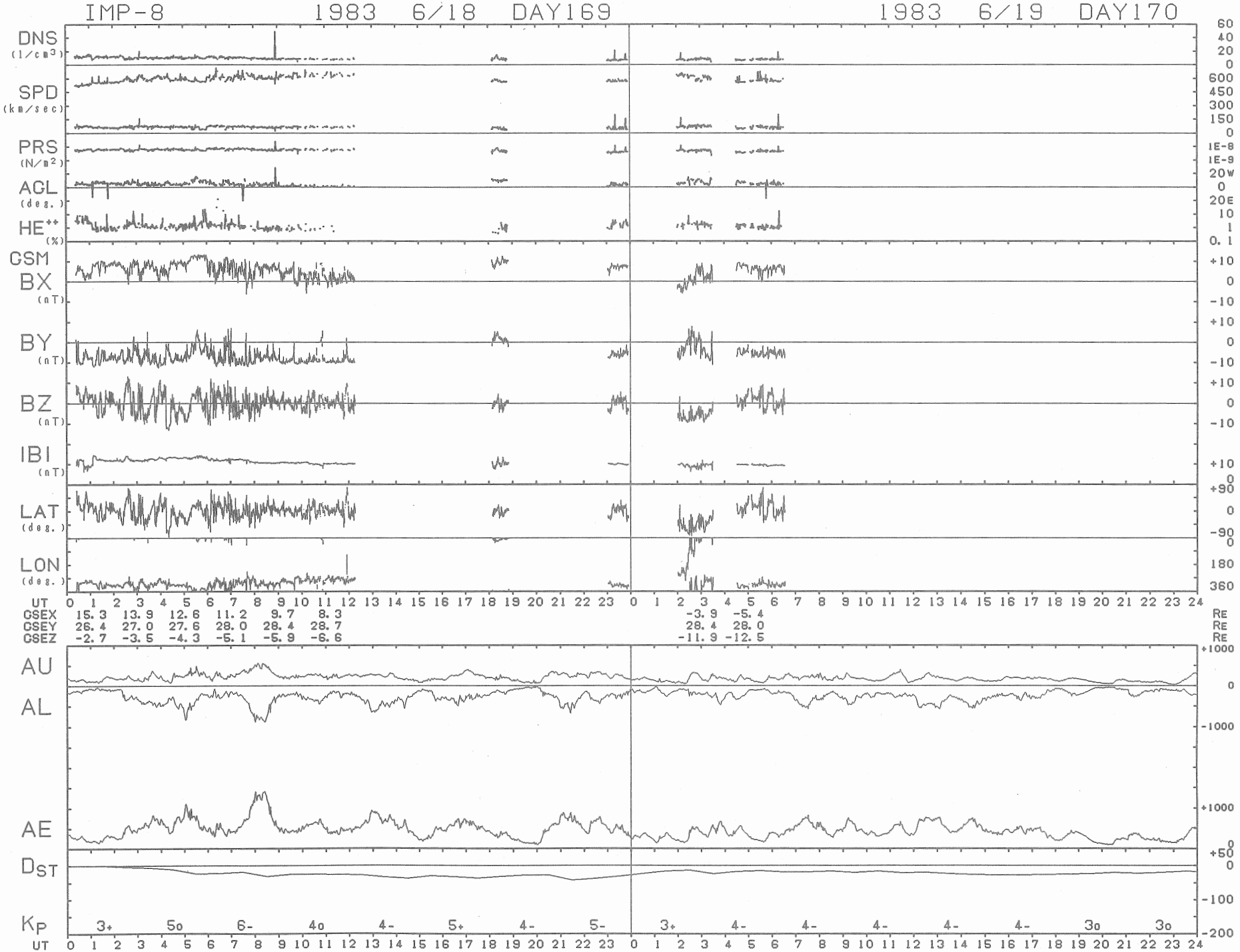

IMP-8 1983 6/ 8 DAY159
1983 6/ 9 DAY160
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.2 -24.2 -25.1 -25.9 -26.7 -27.5 -28.1 -30.4 -30.8 -31.7 -32.2 -32.1 -32.1 -31.9 RE
GSEY 17.0 15.8 14.5 13.2 11.9 10.6 9.2 3.6 2.2 -2.1 -7.7 -9.1 -10.5 -11.8 RE
GSEZ -16.0 -16.1 -16.2 -16.3 -16.3 -16.3 -16.2 -15.7 -15.5 -14.7 -13.3 -12.9 -12.4 -12.0 RE
AU
AL
AE
DST
KP
0+ 2- 2o 3+ 3o 4- 3o 3o 2o 2o 4- 3o 3- 4+ 5- 3+
UT

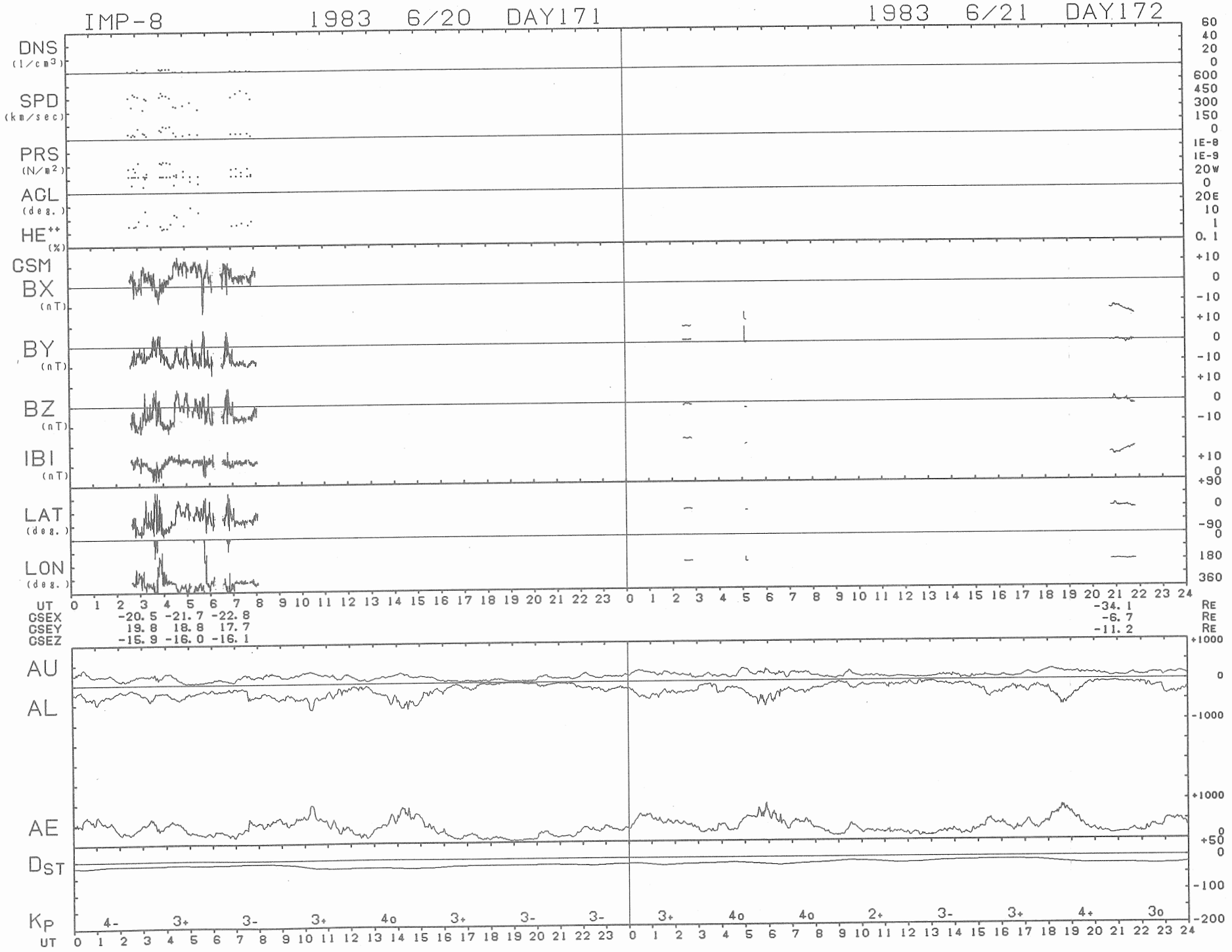

IMP-8 1983 6/10 DAY161
1983 6/11 DAY162
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.3 -30.2 -29.7 -28.7 -28.1 -24.7 -18.5 -17.5 -16.5 -15.4 -14.4 RE
GSEY -15.7 -19.4 -20.5 -22.8 -23.9 -28.7 -33.7 -34.3 -34.8 -35.2 -35.7 RE
GSEZ -10.5 -8.8 -8.2 -7.0 -6.4 -3.2 1.5 2.2 2.9 3.5 4.2 RE
AU
AL
AE
DST
KP
4o 4- 3- 4o 6+ 6+ 3o 2o 4- 3- 2+ 2- 1+ 1+ 3o 2o
UT

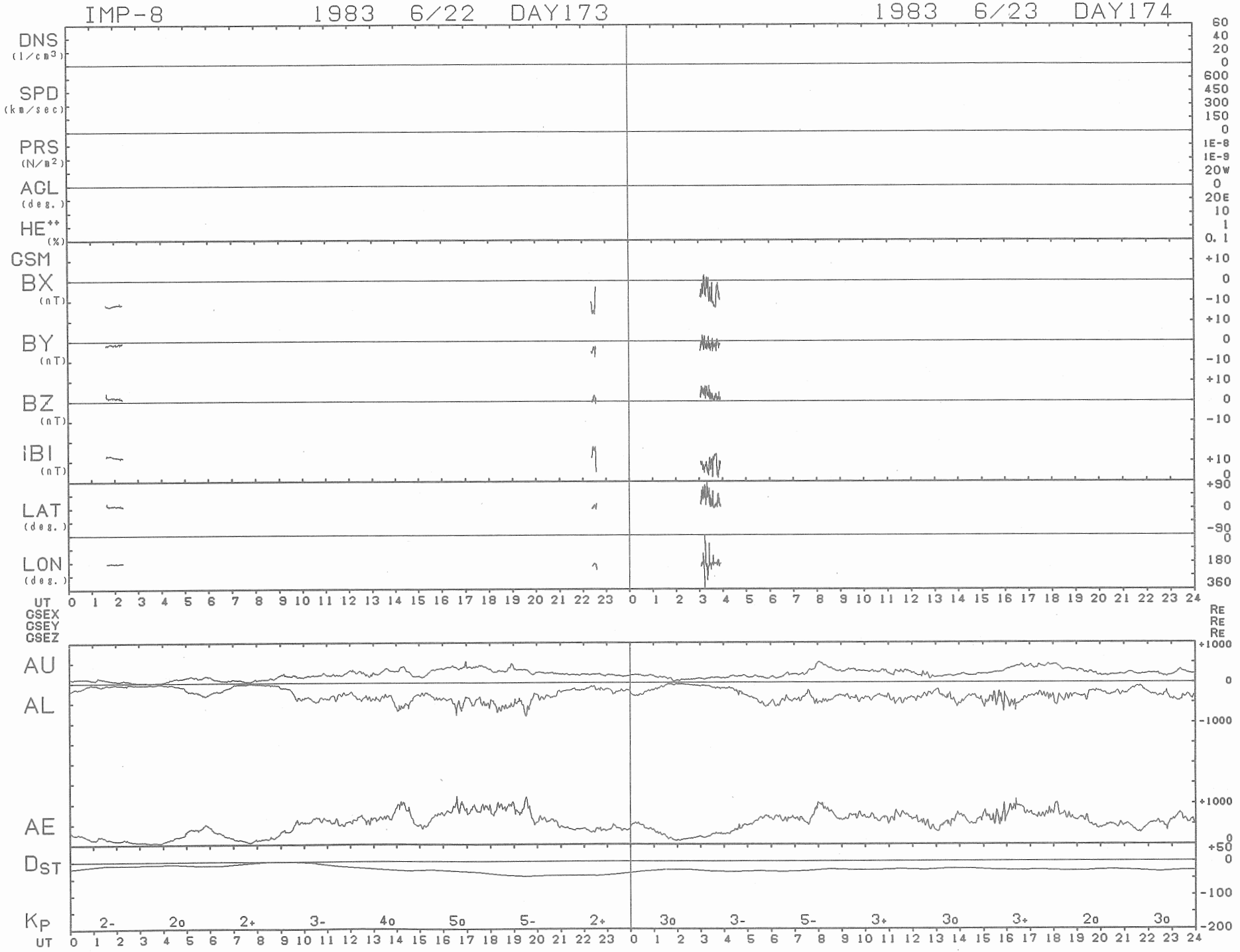

IMP-8 1983 6/12 DAY163
1983 6/13 DAY164
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.8 -7.7 2.9 5.3 6.4 9.9 13.2 RE
GSEY -37.0 -37.1 -36.2 -35.4 -35.0 -33.4 -31.4 RE
GSEZ 7.4 8.0 12.9 13.8 14.2 15.3 16.3 RE
AU
AL
AE
DST
KP
3o 3+ 2+ 3+ 3o 3+ 3o 4- 7o 8- 6- 5- 5o 4- 5o 4-
UT

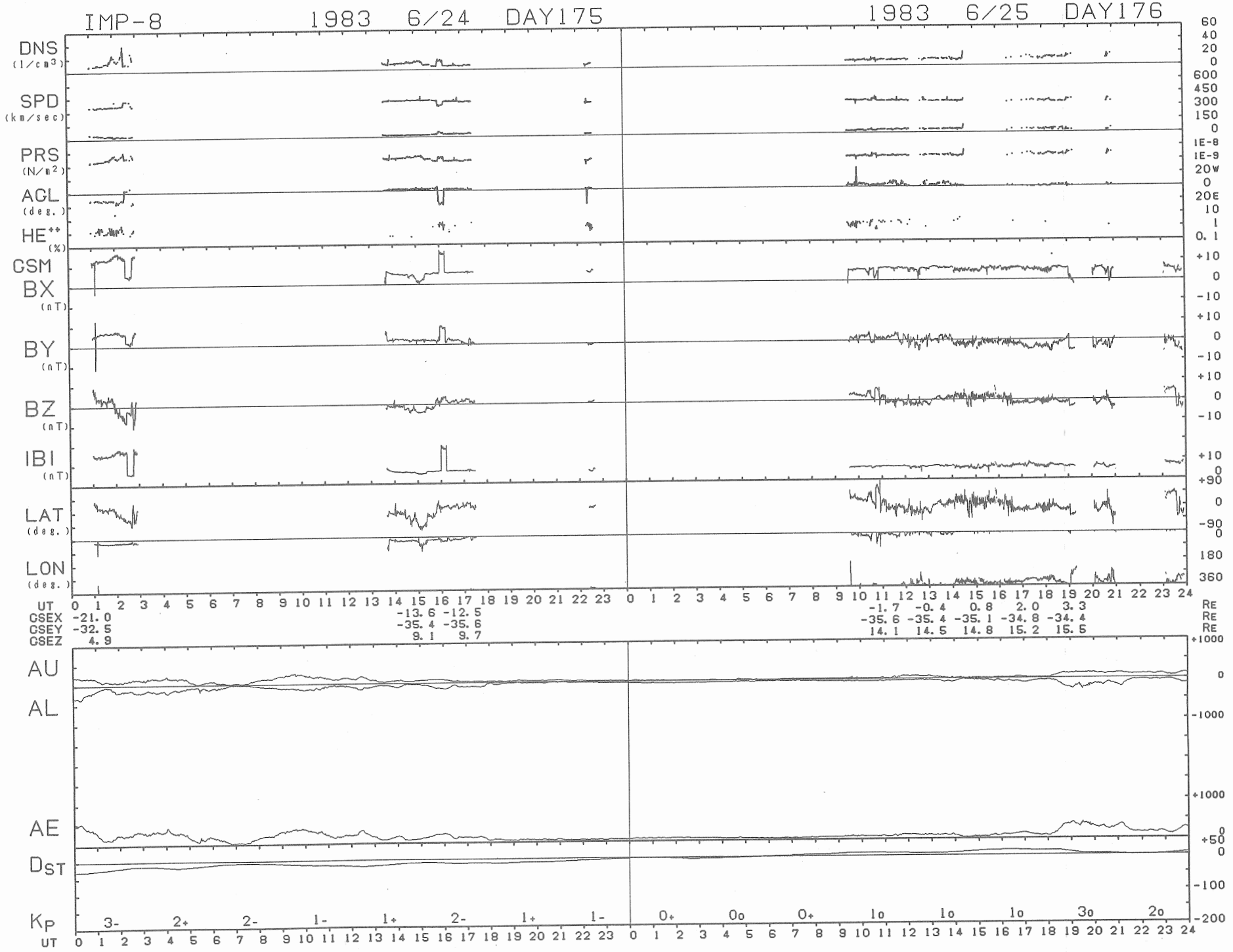

IMP-8 1983 6/14 DAY165
1983 6/15 DAY166
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.3 17.4 18.4 19.4 20.3 21.2 22.1 23.8 24.5 25.3 26.0 26.6 27.2 27.8 28.3 29.6 29.9 30.1 30.3 RE
GSEY -30.6 -28.1 -27.2 -26.2 -25.2 -24.1 -23.1 -20.8 -19.6 -18.4 -17.2 -15.9 -14.6 -13.3 -12.0 -7.8 -6.4 -5.0 -3.5 RE
GSEZ 16.6 17.2 17.4 17.5 17.6 17.7 17.8 17.8 17.7 17.7 17.6 17.5 17.3 17.1 16.9 16.0 15.7 15.3 14.9 RE
AU
AL
AE
DST
KP 4- 3o 3o 2o 2o 2+ 2o 3- 3+ 3- 3o 3+ 3+ 3o 4o 2-
UT

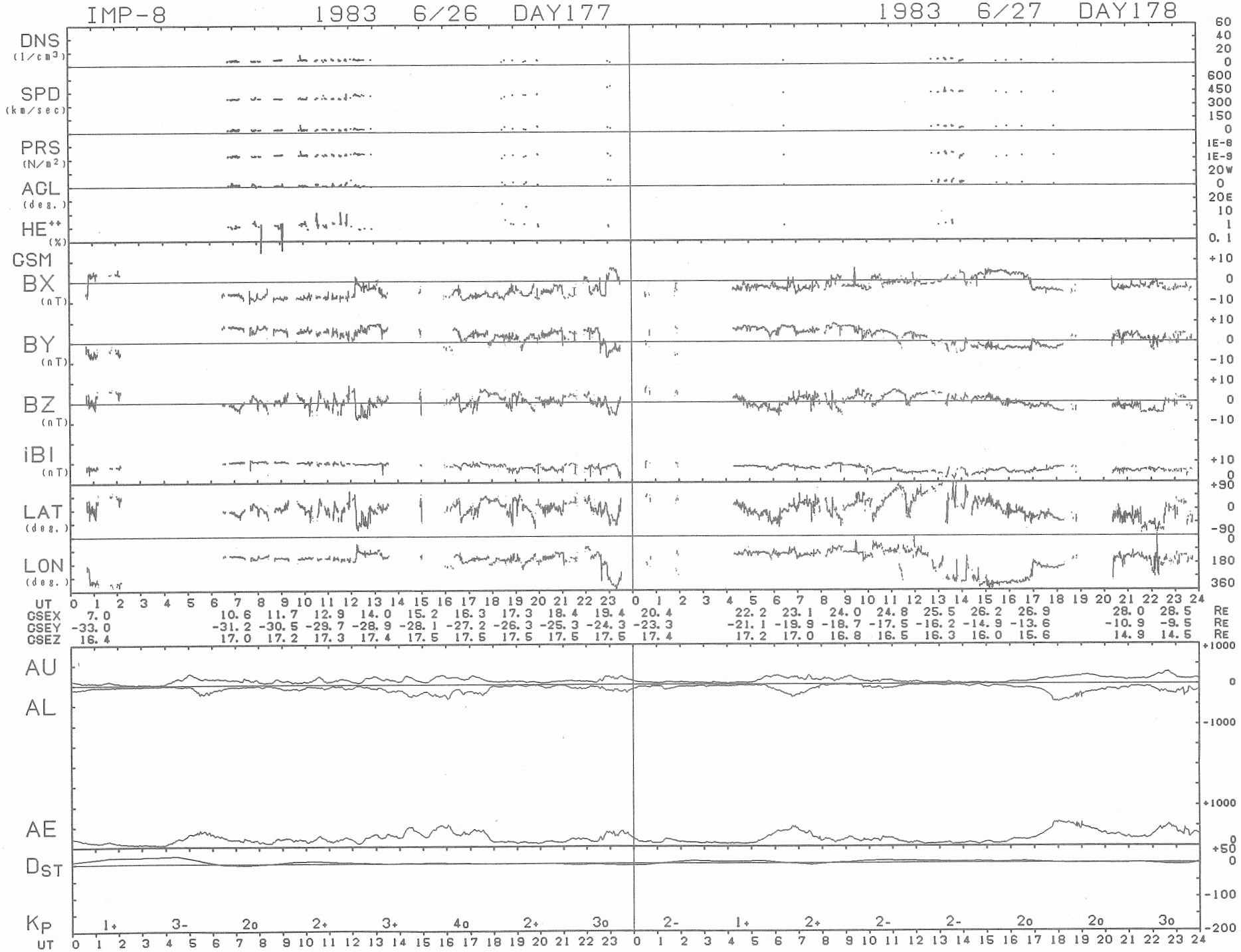

IMP-8 1983 6/16 DAY167
1983 6/17 DAY168
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.5 30.6 30.4 29.0 27.3 26.7 25.9 24.2 23.3 21.3 20.2 19.0 17.8 16.6 RE
GSEY -2.1 -0.7 3.7 10.7 14.6 15.9 17.1 19.4 20.5 22.5 23.4 24.3 25.0 25.8 RE
GSEZ 14.5 14.0 12.4 9.3 7.1 6.3 5.5 3.9 3.1 1.5 0.6 -0.2 -1.0 -1.9 RE
AU
AL
AE
DST
KP 2+ 1+ 1+ 2o 2+ 3+ 2- 2+ 2o 2- 3o 3- 3- 4+ 4+ 4-
UT

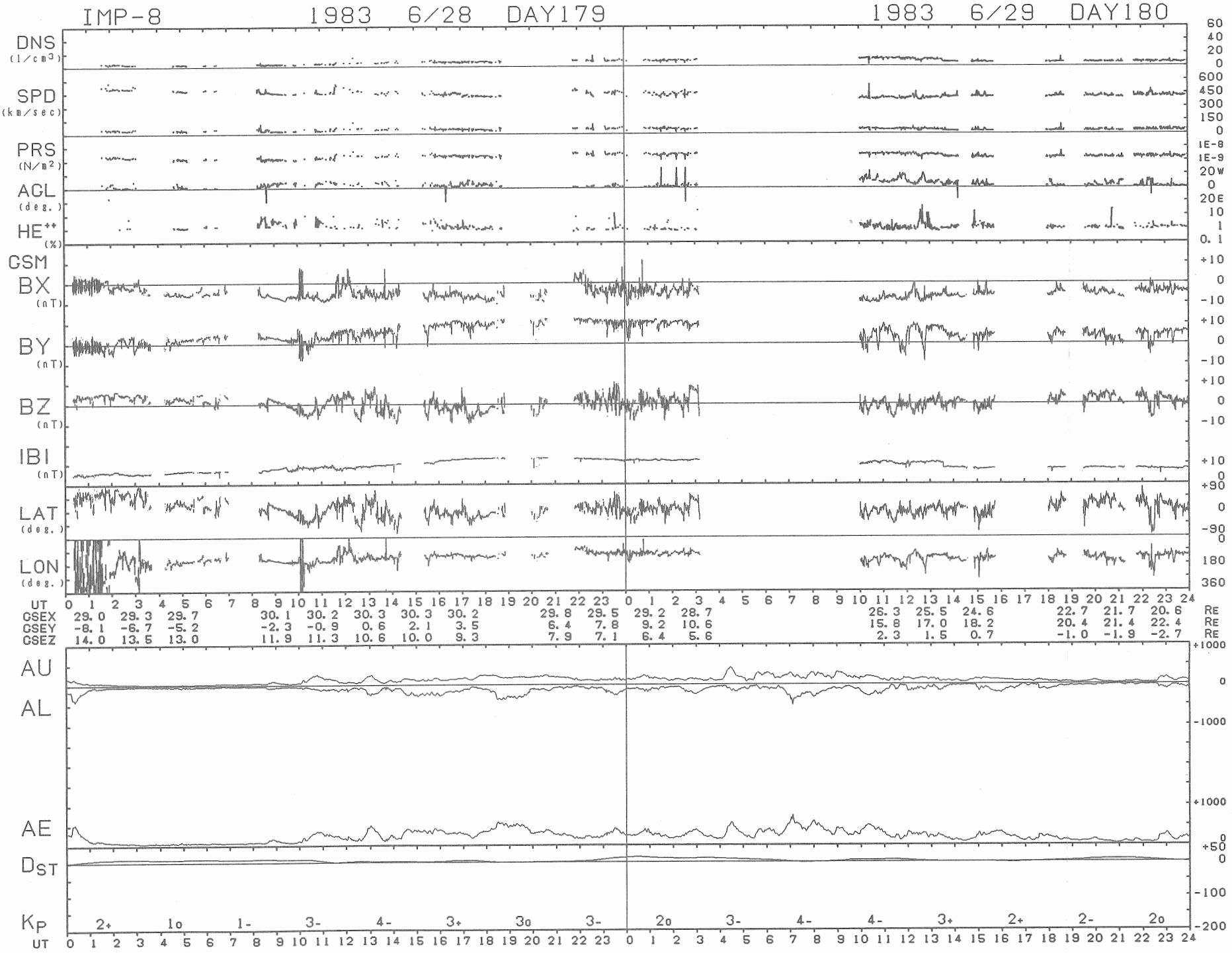

IMP-8 1983 6/18 DAY169
1983 6/19 DAY170
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.3 13.9 12.6 11.2 9.7 8.3 -3.9 -5.4 RE
GSEY 26.4 27.0 27.6 28.0 28.4 28.7 28.4 28.0 RE
GSEZ -2.7 -3.5 -4.3 -5.1 -5.9 -6.6 -11.9 -12.5 RE
AU
AL
AE
DST
KP
3+ 5o 6- 4o 4- 5+ 4- 5- 3+ 4- 4- 4- 4- 4- 3o 3o
UT

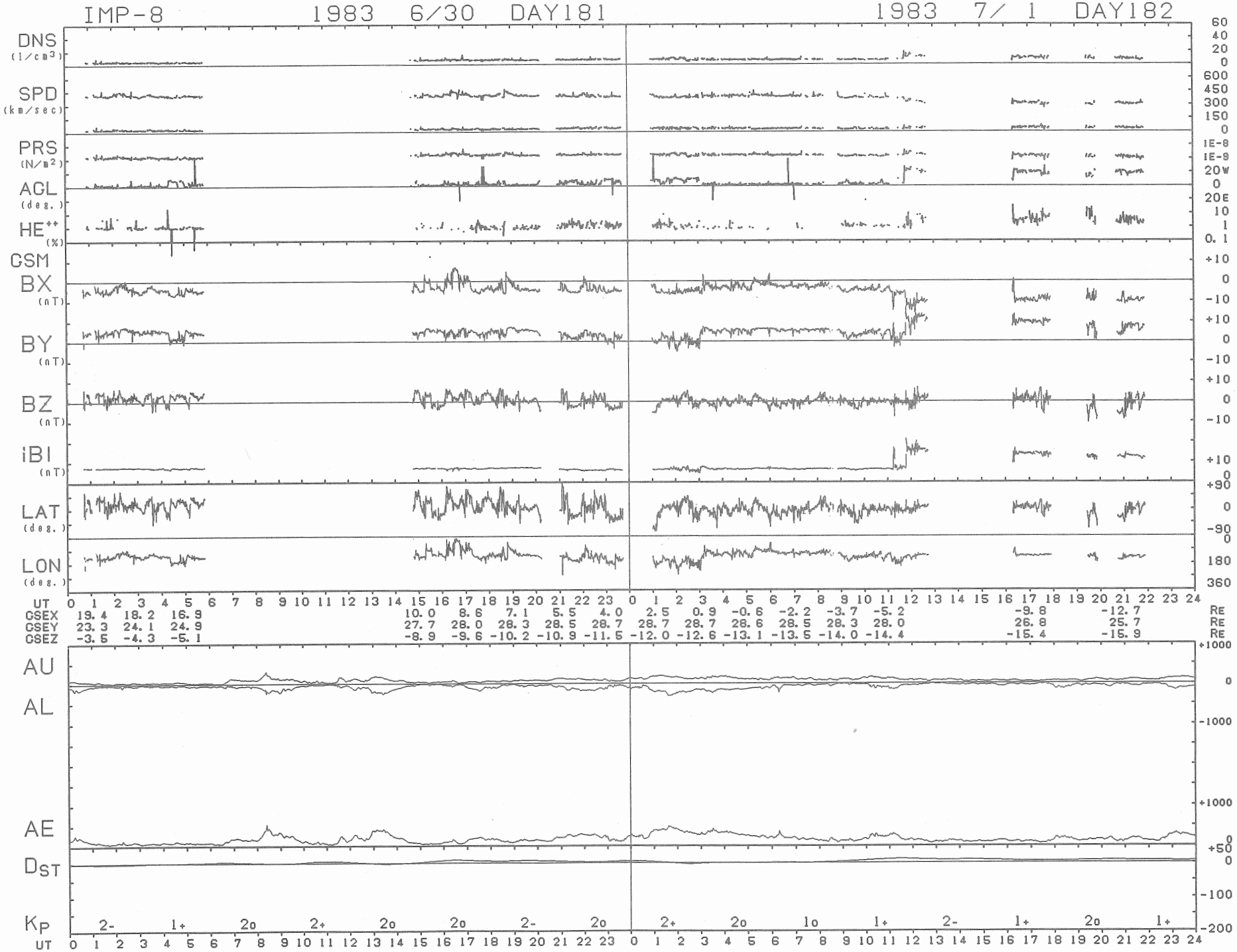

IMP-8
1983 6/20 DAY171
1983 6/21 DAY172
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.5 -21.7 -22.8 -34.1 RE
GSEY 19.8 18.8 17.7 -6.7 RE
GSEZ -15.9 -16.0 -16.1 -11.2 RE
AU
AL
AE
DST
KP
4- 3+ 3- 3+ 4o 3+ 3- 3- 3+ 4o 4o 2+ 3- 3+ 4+ 3o
UT

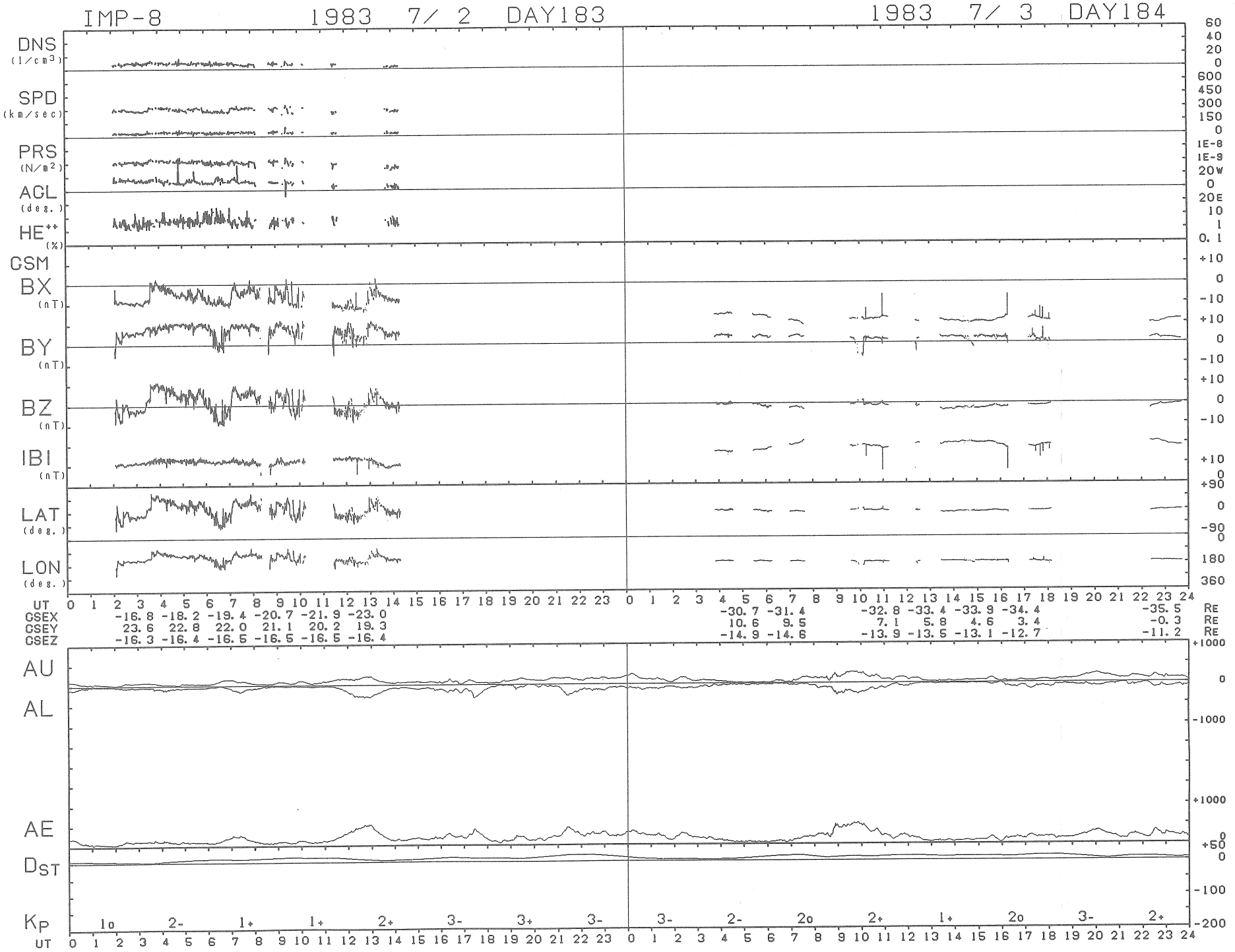

IMP-8
1983 6/22 DAY173
1983 6/23 DAY174
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP
2- 2o 2+ 3- 4o 5o 5- 2+ 3o 3- 5- 3+ 3o 3+ 2o 3o

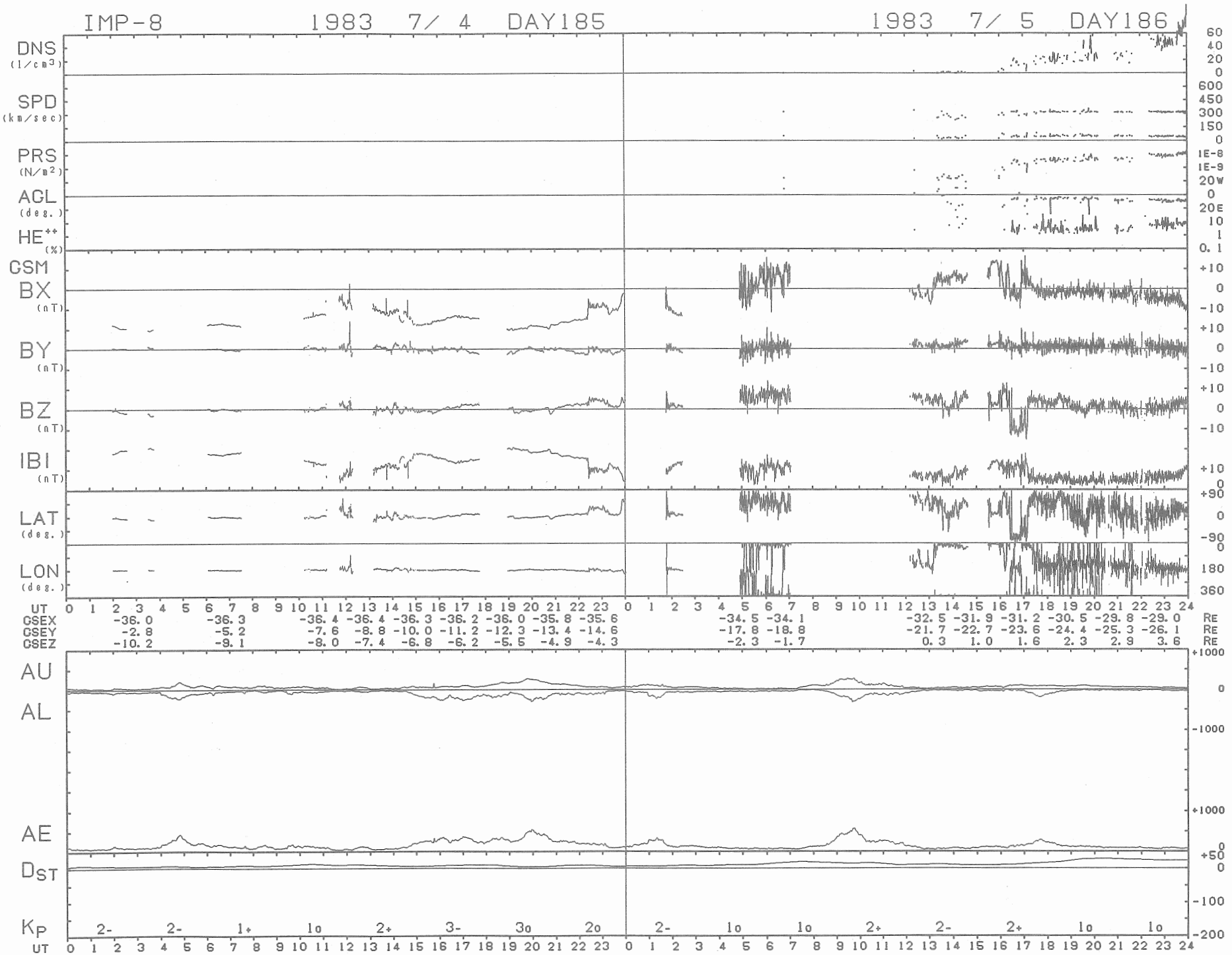

IMP-8
1983 6/24 DAY175
1983 6/25 DAY176
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -21.0 -13.6 -12.5 -1.7 -0.4 0.8 2.0 3.3 RE
CSEY -32.5 -35.4 -35.6 -35.6 -35.4 -35.1 -34.8 -34.4 RE
CSEZ 4.9 9.1 9.7 14.1 14.5 14.8 15.2 15.5 RE
AU
AL
AE
DST
KP
3- 2+ 2- 1- 1+ 2- 1+ 1- 0+ 0o 0+ 1o 1o 1o 3o 2o
UT

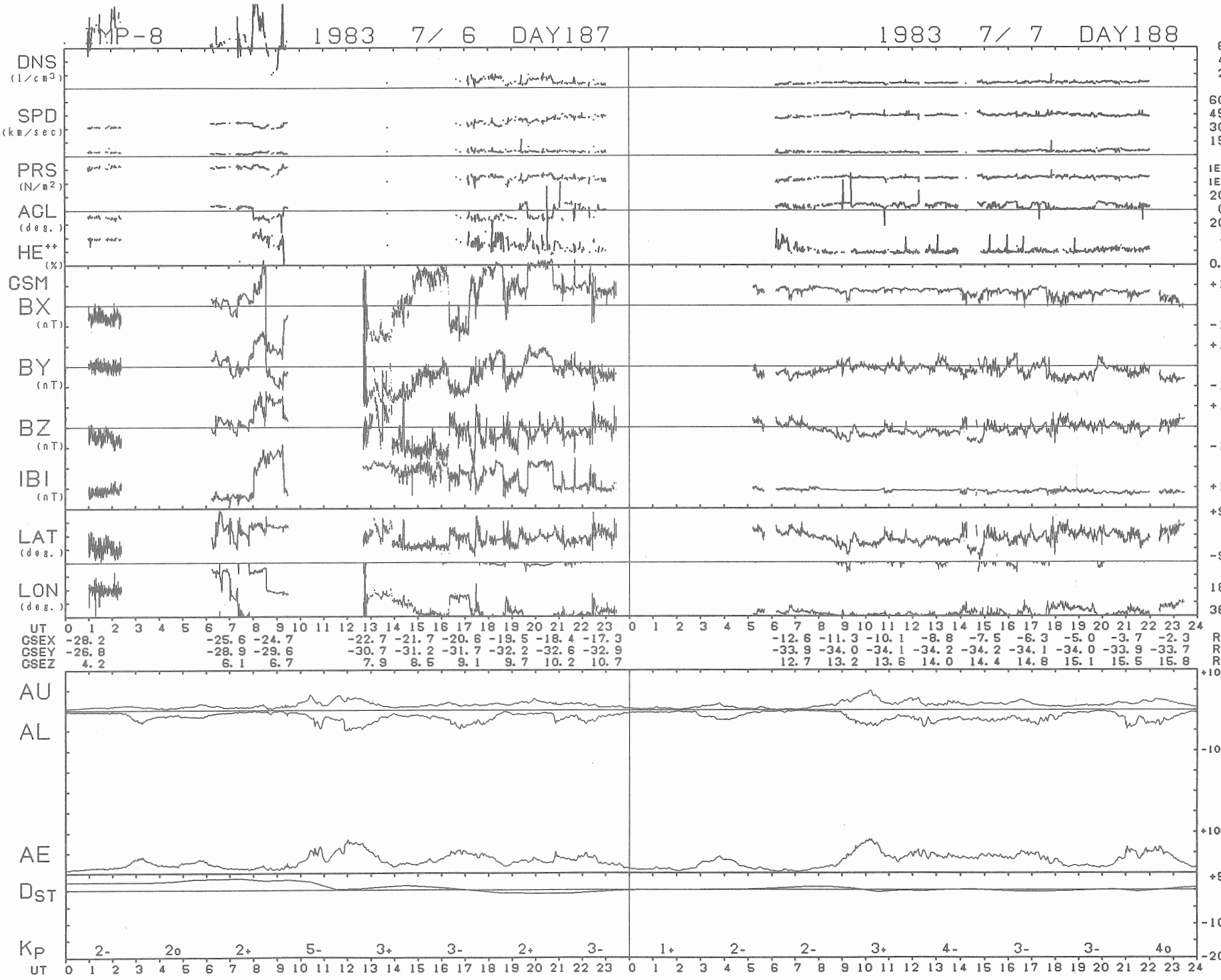

IMP-8 1983 6/26 DAY177
1983 6/27 DAY178
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 7.0 10.6 11.7 12.9 14.0 15.2 16.3 17.3 18.4 19.4 20.4 22.2 23.1 24.0 24.8 25.5 26.2 26.9 28.0 28.5 RE
GSEY -33.0 -31.2 -30.5 -29.7 -28.9 -28.1 -27.2 -26.3 -25.3 -24.3 -23.3 -21.1 -19.9 -18.7 -17.5 -16.2 -14.9 -13.6 -10.9 -9.5 RE
GSEZ 16.4 17.0 17.2 17.3 17.4 17.5 17.5 17.5 17.5 17.5 17.4 17.2 17.0 16.8 16.5 16.3 16.0 15.6 14.9 14.5 RE
AU
AL
AE
DST
KP 1+ 3- 2o 2+ 3+ 4o 2+ 3o 2- 1+ 2+ 2- 2- 2o 2o 3o
UT

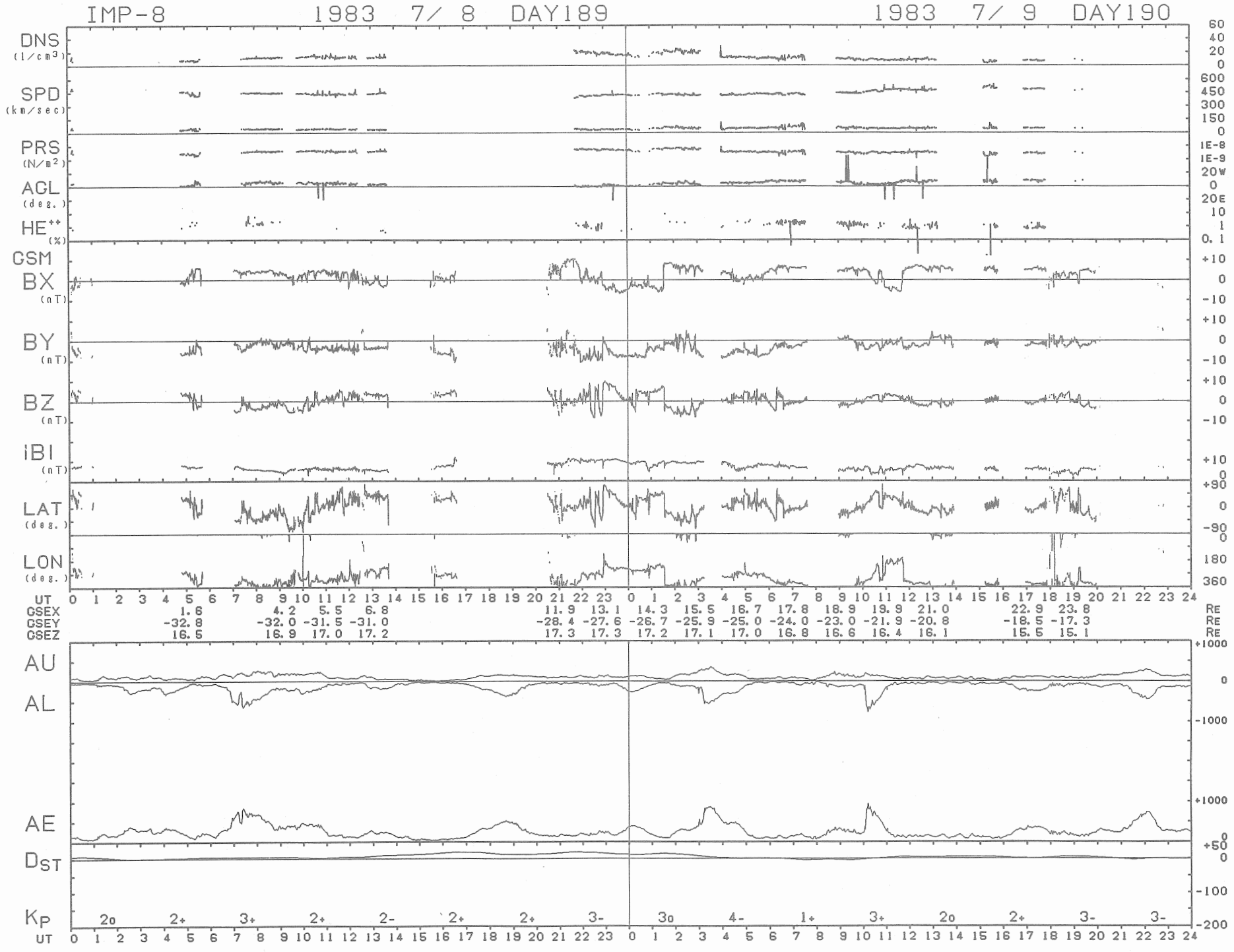

IMP-8 1983 6/28 DAY179
1983 6/29 DAY180
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 29.3 29.7 30.1 30.2 30.3 30.3 30.2 29.8 29.5 29.2 28.7 26.3 25.5 24.6 22.7 21.7 20.6 RE
GSEY -8.1 -6.7 -5.2 -2.3 -0.9 0.6 2.1 3.5 6.4 7.8 9.2 10.6 15.8 17.0 18.2 20.4 21.4 22.4 RE
GSEZ 14.0 13.5 13.0 11.9 11.3 10.6 10.0 9.3 7.9 7.1 6.4 5.6 2.3 1.5 0.7 -1.0 -1.9 -2.7 RE
AU
AL
AE
DST
KP
2+ 1o 1- 3- 4- 3+ 3o 3- 2o 3- 4- 4- 3+ 2+ 2- 2o
UT

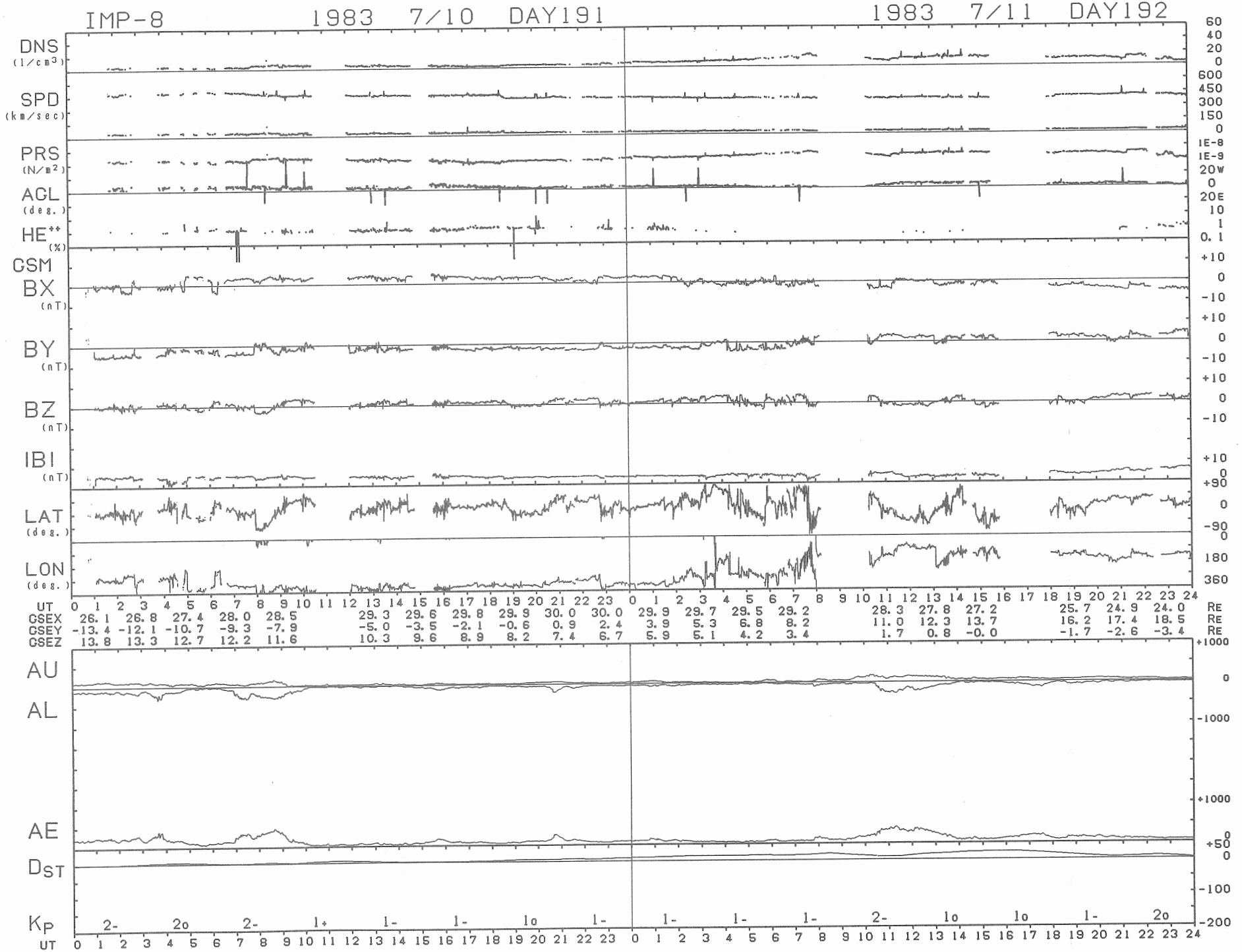

IMP-8 1983 6/30 DAY181
1983 7/ 1 DAY182
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.4 18.2 16.9 10.0 8.6 7.1 5.5 4.0 2.5 0.9 -0.6 -2.2 -3.7 -5.2 -9.8 -12.7 RE
GSEY 23.3 24.1 24.9 27.7 28.0 28.3 28.5 28.7 28.7 28.7 28.6 28.5 28.3 28.0 26.8 25.7 RE
GSEZ -3.5 -4.3 -5.1 -8.9 -9.6 -10.2 -10.9 -11.5 -12.0 -12.6 -13.1 -13.5 -14.0 -14.4 -15.4 -15.9 RE
AU
AL
AE
DST
KP 2- 1+ 2o 2+ 2o 2o 2- 2o 2+ 2o 1o 1+ 2- 1+ 2o 1+
UT

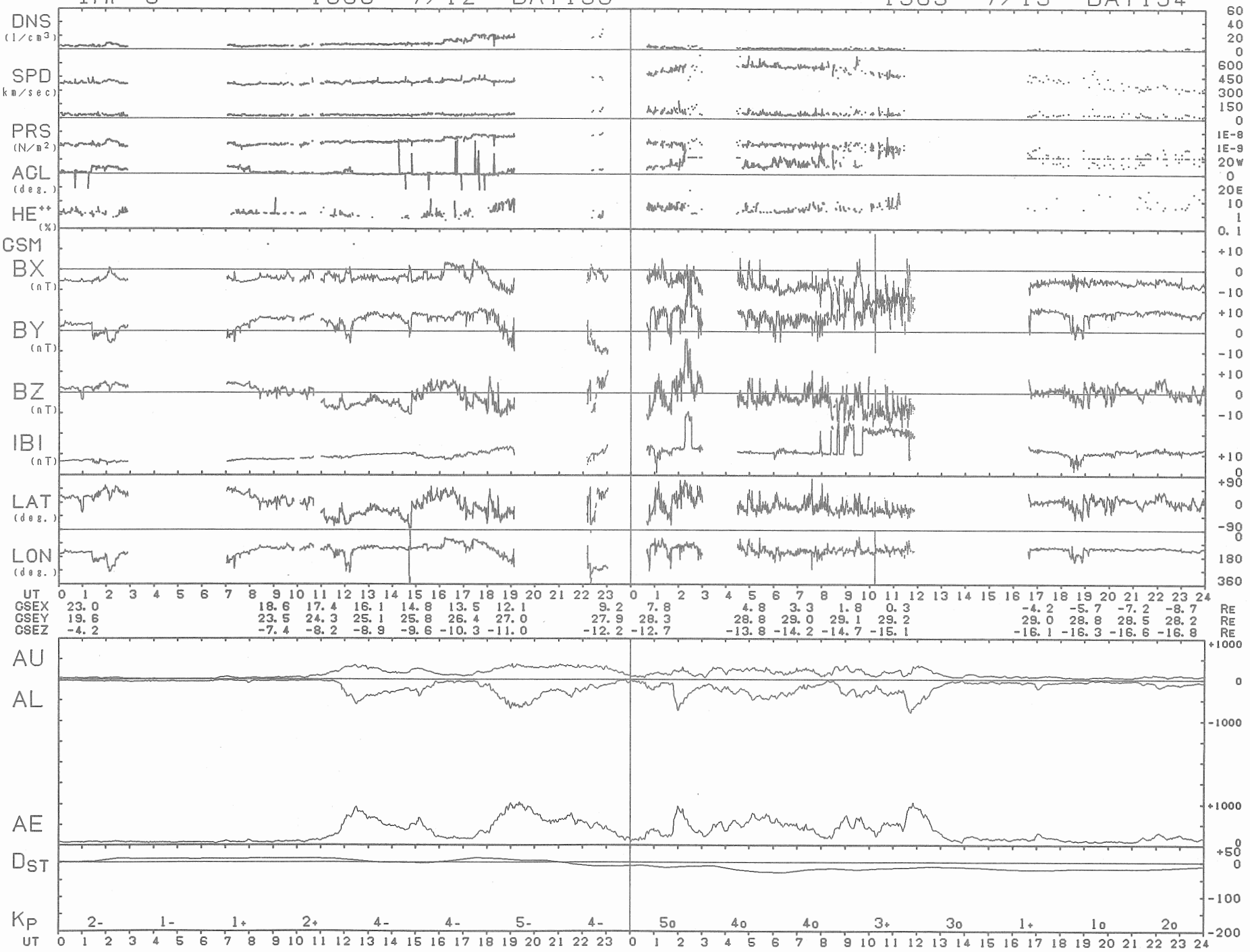

IMP-8
1983 7/ 2 DAY183
1983 7/ 3 DAY184
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.8 -18.2 -19.4 -20.7 -21.9 -23.0 -30.7 -31.4 -32.8 -33.4 -33.9 -34.4 -35.5 RE
GSEY 23.6 22.8 22.0 21.1 20.2 19.3 10.6 9.5 7.1 5.8 4.6 3.4 -0.3 RE
GSEZ -16.3 -16.4 -16.5 -16.5 -16.5 -16.4 -14.9 -14.6 -13.9 -13.5 -13.1 -12.7 -11.2 RE
AU
AL
AE
DST
KP 1o 2- 1+ 1+ 2+ 3- 3+ 3- 3- 2- 2o 2+ 1+ 2o 3- 2+
UT

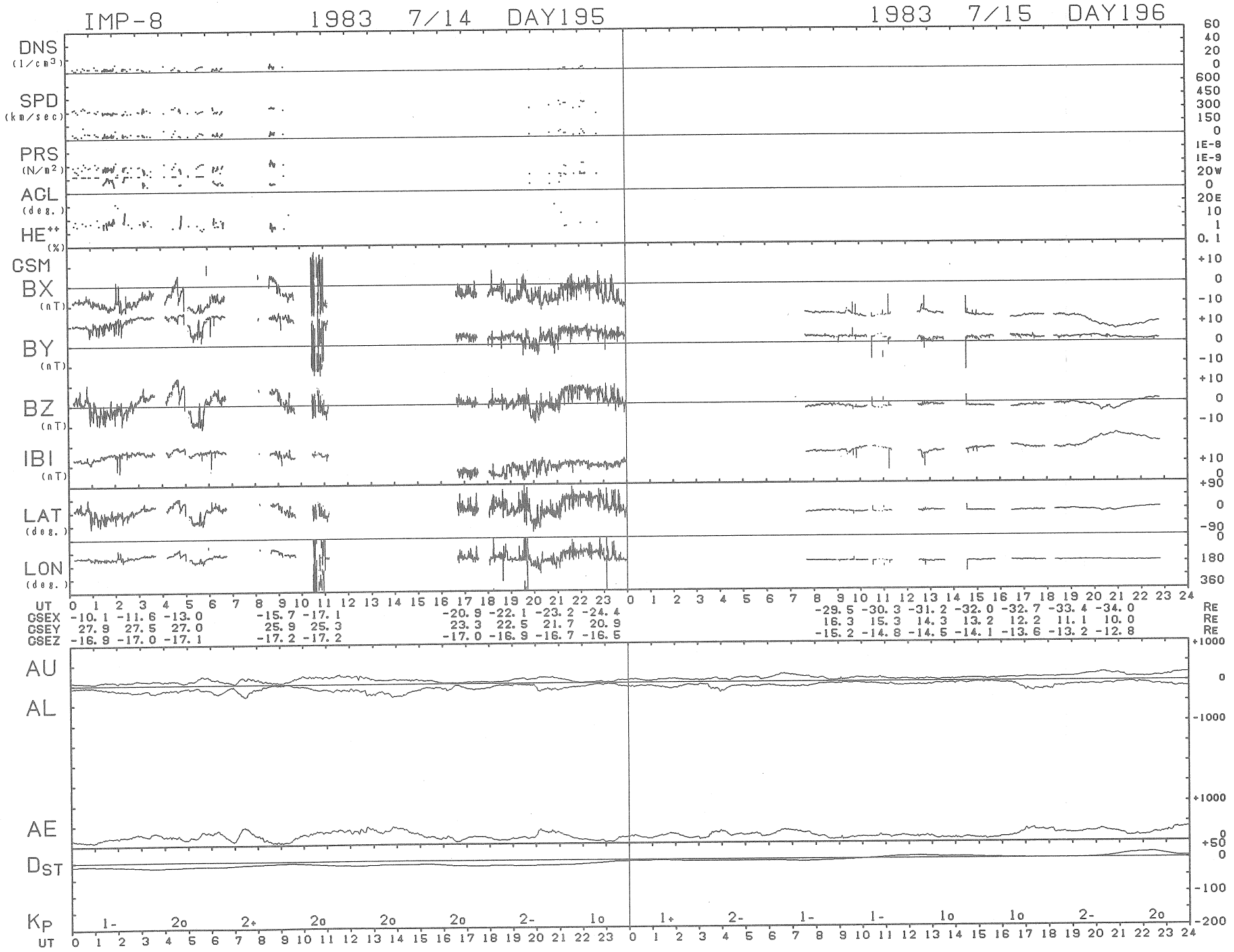

IMP-8
1983 7/ 4 DAY185
1983 7/ 5 DAY186
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.0 -36.3 -36.4 -36.4 -36.3 -36.2 -36.0 -35.8 -35.6 -34.5 -34.1 -32.5 -31.9 -31.2 -30.5 -29.8 -29.0 RE
GSEY -2.8 -5.2 -7.6 -8.8 -10.0 -11.2 -12.3 -13.4 -14.6 -17.8 -18.8 -21.7 -22.7 -23.6 -24.4 -25.3 -26.1 RE
GSEZ -10.2 -9.1 -8.0 -7.4 -6.8 -6.2 -5.5 -4.9 -4.3 -2.3 -1.7 0.3 1.0 1.6 2.3 2.9 3.6 RE
AU
AL
AE
DST
KP 2- 2- 1+ 1o 2+ 3- 3o 2o 2- 1o 1o 2+ 2- 2+ 1o 1o
UT

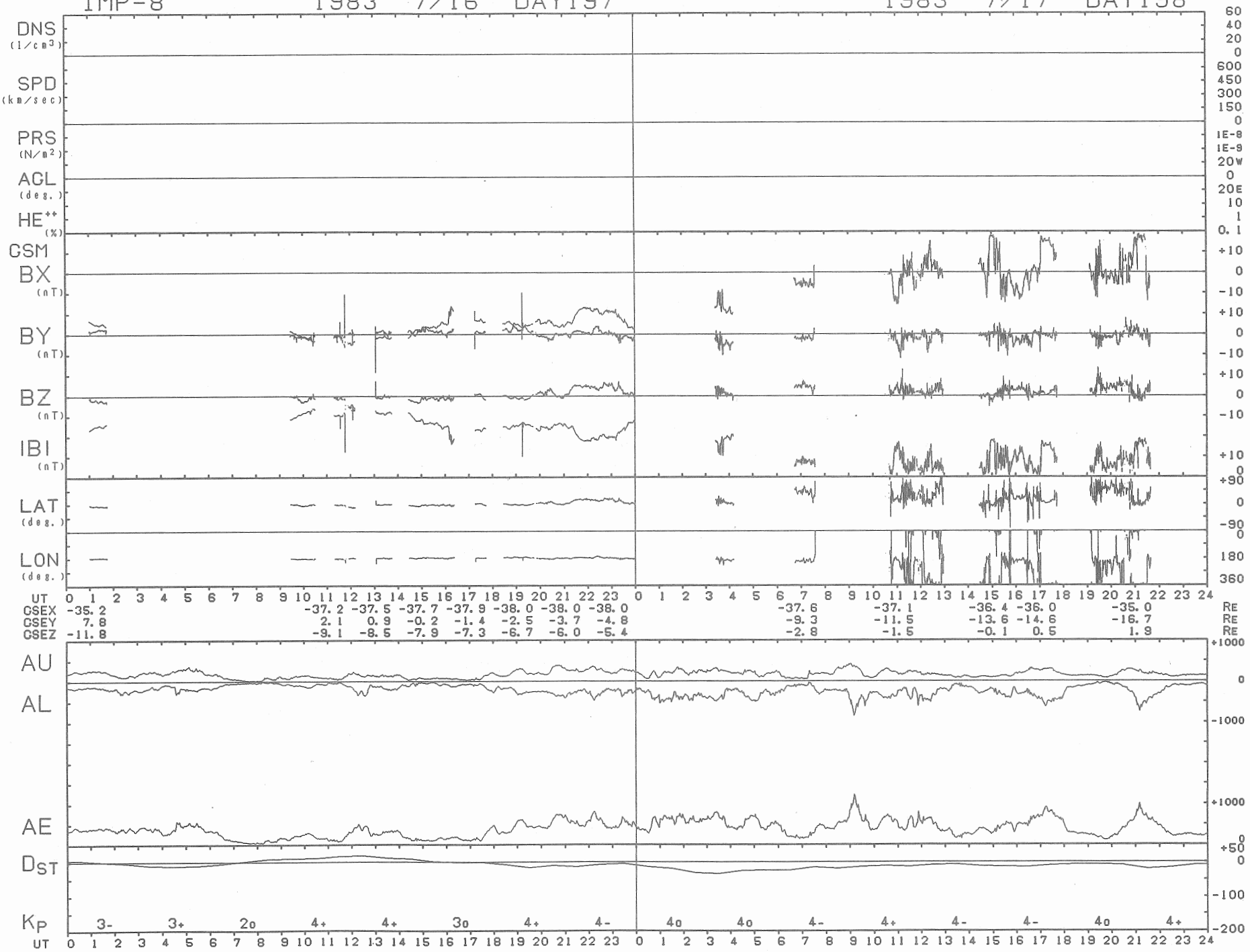

IMP-8
1983 7/ 6 DAY187
1983 7/ 7 DAY188
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.2 -25.6 -24.7 -22.7 -21.7 -20.6 -19.5 -18.4 -17.3 -12.6 -11.3 -10.1 -8.8 -7.5 -6.3 -5.0 -3.7 -2.3 RE
GSEY -26.8 -28.9 -29.6 -30.7 -31.2 -31.7 -32.2 -32.6 -32.9 -33.9 -34.0 -34.1 -34.2 -34.2 -34.1 -34.0 -33.9 -33.7 RE
GSEZ 4.2 6.1 6.7 7.9 8.5 9.1 9.7 10.2 10.7 12.7 13.2 13.6 14.0 14.4 14.8 15.1 15.5 15.8 RE
AU
AL
AE
DST
KP
2- 2o 2+ 5- 3+ 3- 2+ 3- 1+ 2- 2- 3+ 4- 3- 3- 4o
UT

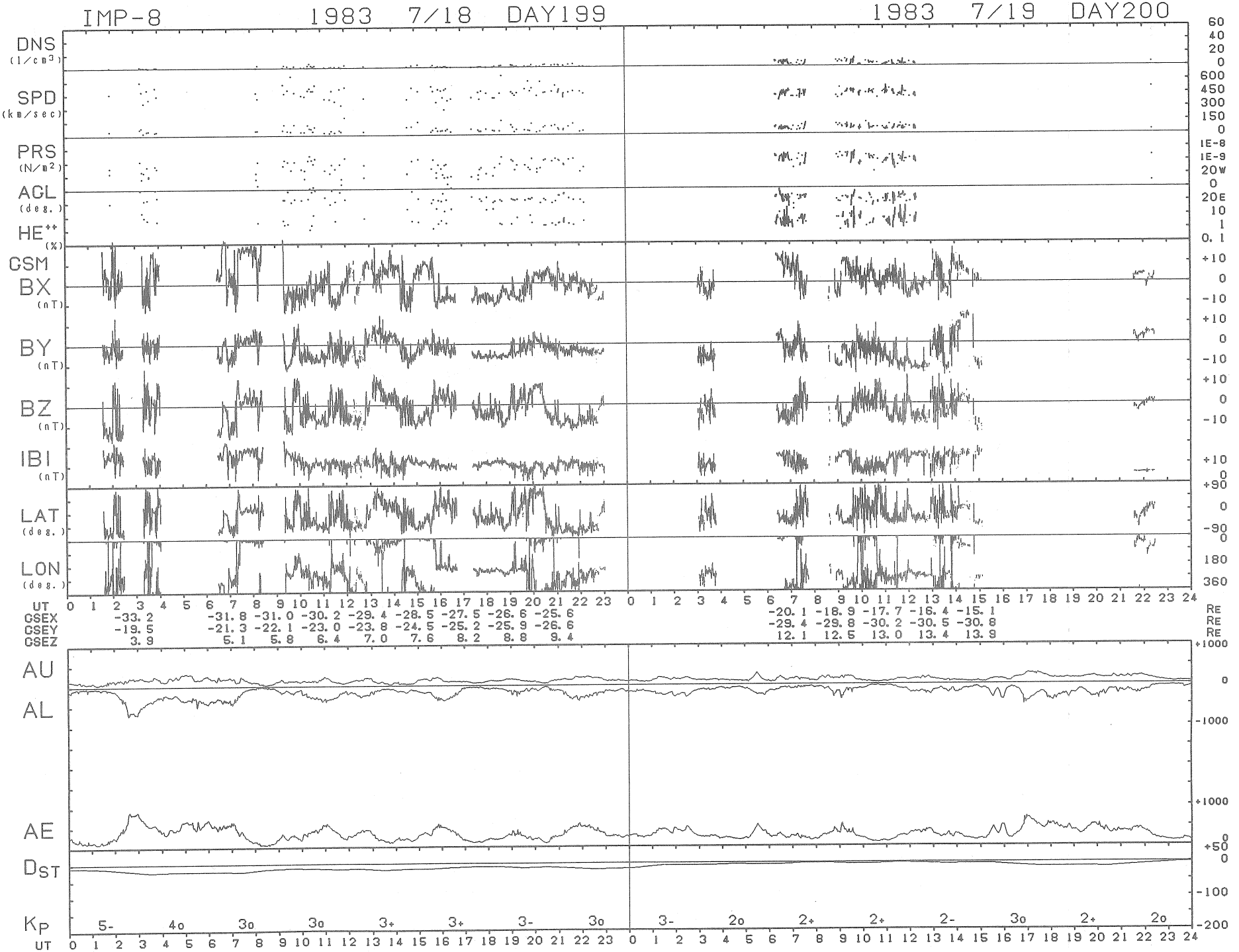

IMP-8
1983 7/ 8 DAY189
1983 7/ 9 DAY190
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.6 4.2 5.5 6.8 11.9 13.1 14.3 15.5 16.7 17.8 18.9 19.9 21.0 22.9 23.8 RE
GSEY -32.8 -32.0 -31.5 -31.0 -28.4 -27.6 -26.7 -25.9 -25.0 -24.0 -23.0 -21.9 -20.8 -18.5 -17.3 RE
GSEZ 16.5 16.9 17.0 17.2 17.3 17.3 17.2 17.1 17.0 16.8 16.6 16.4 16.1 15.5 15.1 RE
AU
AL
AE
DST
KP
2o 2+ 3+ 2+ 2- 2+ 2+ 3- 3o 4- 1+ 3+ 2o 2+ 3- 3-
UT

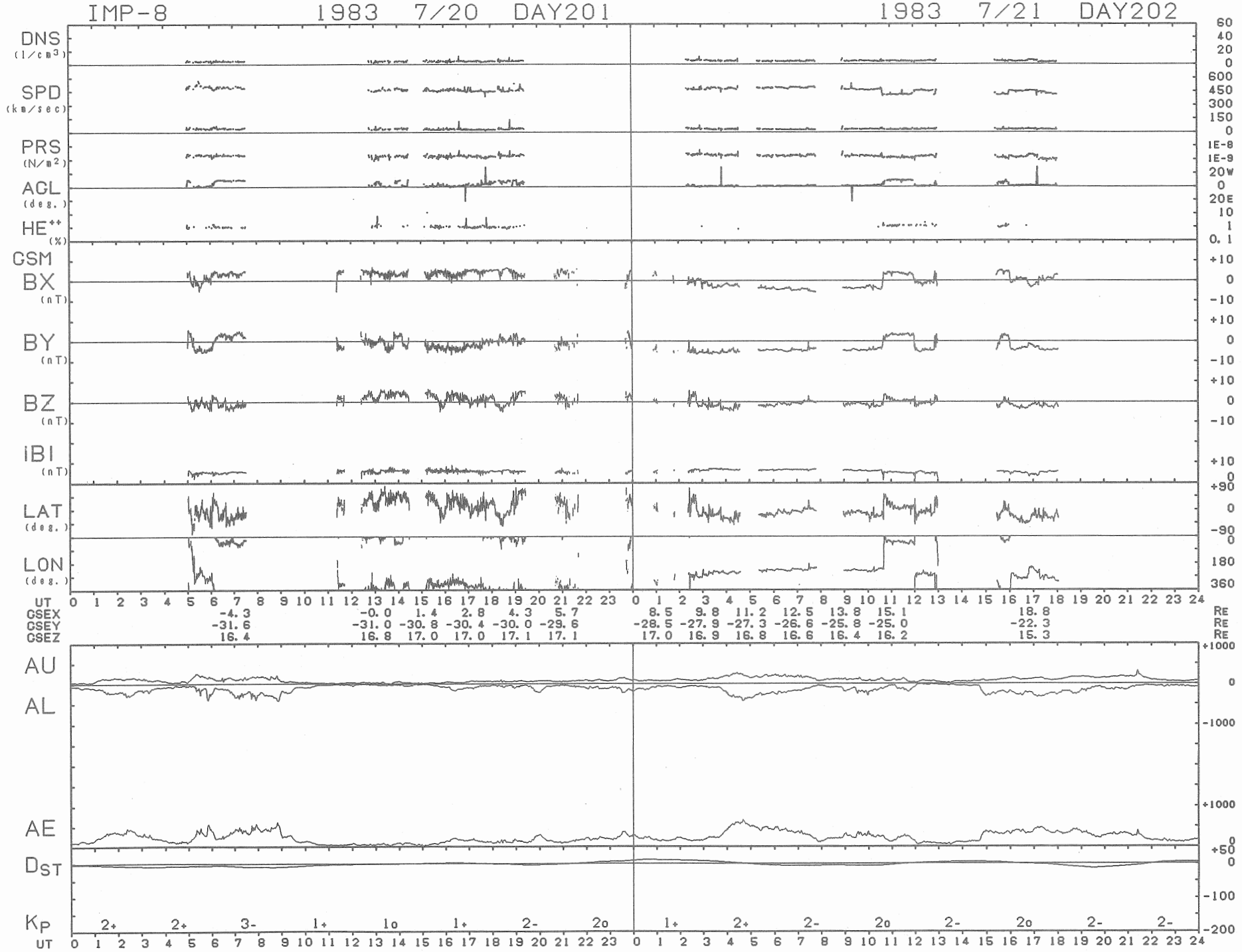

IMP-8
1983 7/10 DAY191
1983 7/11 DAY192
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.1 26.8 27.4 28.0 28.5 29.3 29.6 29.8 29.9 30.0 30.0 29.9 29.7 29.5 29.2 28.3 27.8 27.2 25.7 24.9 24.0 RE
GSEY -13.4 -12.1 -10.7 -9.3 -7.9 -5.0 -3.5 -2.1 -0.6 0.9 2.4 3.9 5.3 6.8 8.2 11.0 12.3 13.7 16.2 17.4 18.5 RE
GSEZ 13.8 13.3 12.7 12.2 11.6 10.3 9.6 8.9 8.2 7.4 6.7 5.9 5.1 4.2 3.4 1.7 0.8 -0.0 -1.7 -2.6 -3.4 RE
AU
AL
AE
DST
KP
2- 2o 2- 1+ 1- 1- 1o 1- 1- 1- 1- 2- 1o 1o 1- 2o
UT

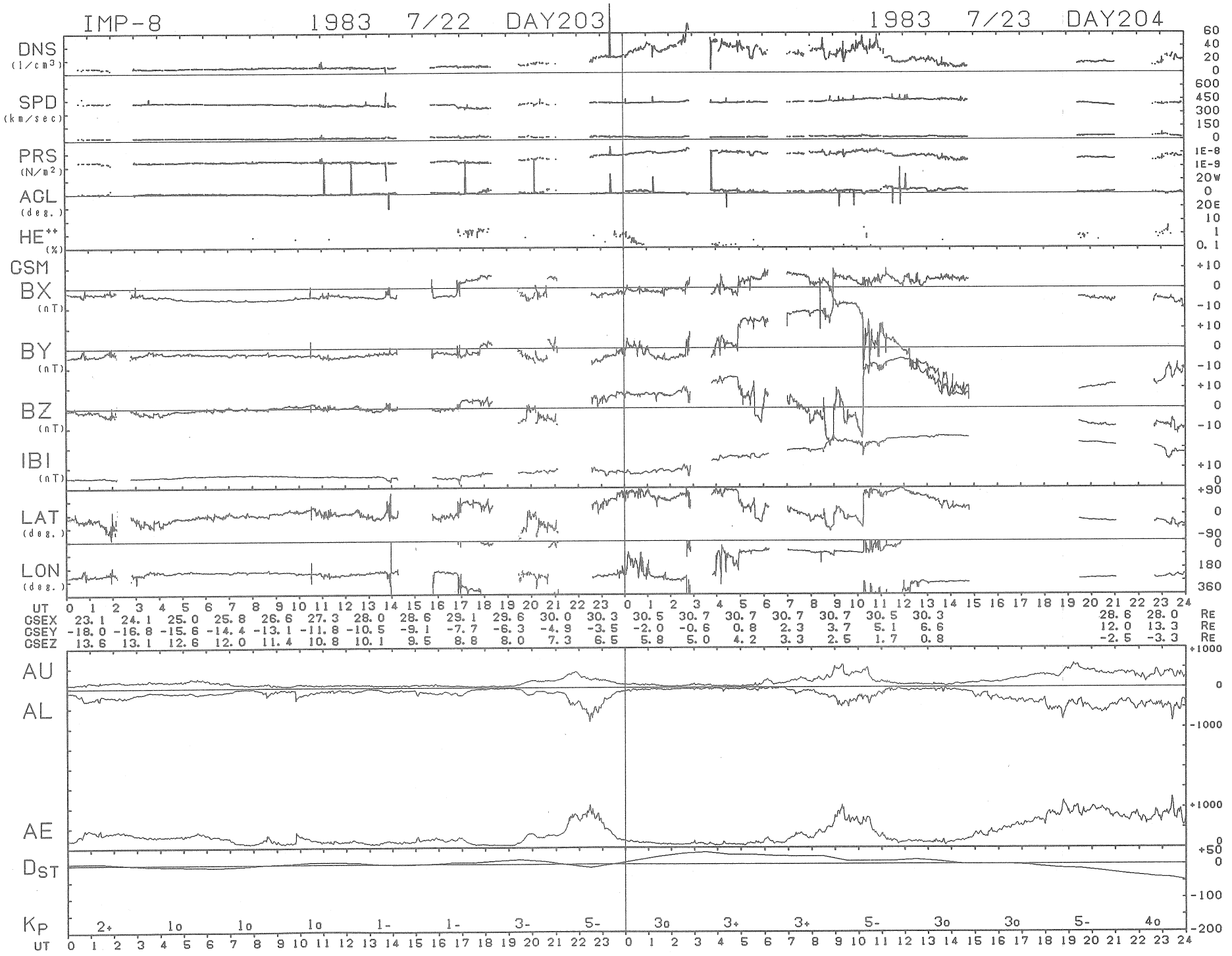

IMP-8
1983 7/12 DAY193
1983 7/13 DAY194
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.0 18.6 17.4 16.1 14.8 13.5 12.1 9.2 7.8 4.8 3.3 1.8 0.3 -4.2 -5.7 -7.2 -8.7 RE
GSEY 19.6 23.5 24.3 25.1 25.8 26.4 27.0 27.9 28.3 28.8 29.0 29.1 29.2 29.0 28.8 28.5 28.2 RE
GSEZ -4.2 -7.4 -8.2 -8.9 -9.6 -10.3 -11.0 -12.2 -12.7 -13.8 -14.2 -14.7 -15.1 -16.1 -16.3 -16.6 -16.8 RE
AU
AL
AE
DST
KP 2- 1- 1+ 2+ 4- 4- 5- 4- 5o 4o 4o 3+ 3o 1+ 1o 2o
UT

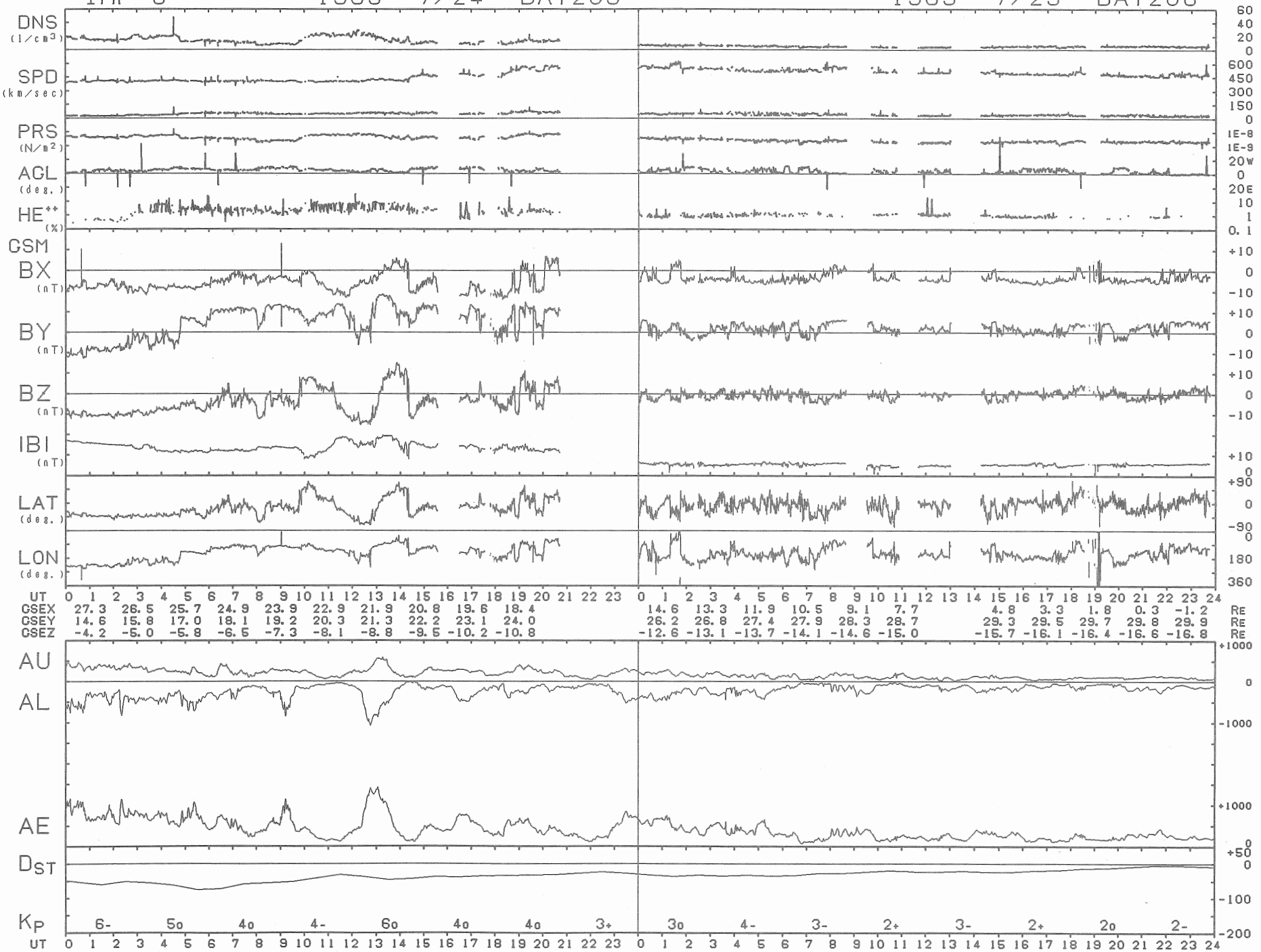

IMP-8
1983 7/14 DAY195
1983 7/15 DAY196
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.1 -11.6 -13.0 -15.7 -17.1 -20.9 -22.1 -23.2 -24.4 -29.5 -30.3 -31.2 -32.0 -32.7 -33.4 -34.0 RE
GSEY 27.9 27.5 27.0 25.9 25.3 23.3 22.5 21.7 20.9 16.3 15.3 14.3 13.2 12.2 11.1 10.0 RE
GSEZ -16.9 -17.0 -17.1 -17.2 -17.2 -17.0 -16.9 -16.7 -16.5 -15.2 -14.8 -14.5 -14.1 -13.6 -13.2 -12.8 RE
AU
AL
AE
DST
KP
1- 2o 2+ 2o 2o 2o 2- 1o 1+ 2- 1- 1- 1o 1o 2- 2o
UT

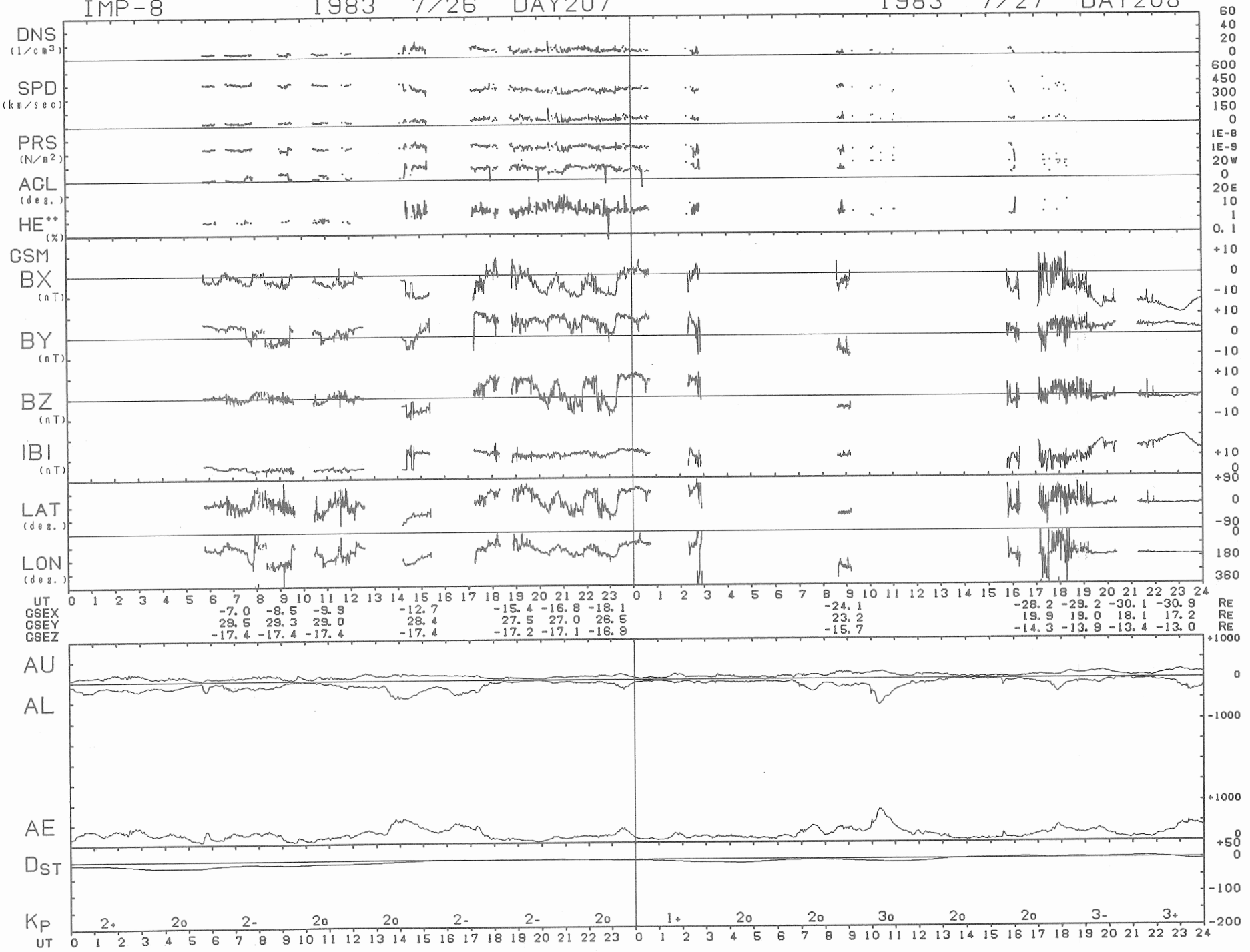

IMP-8
1983 7/16 DAY197
1983 7/17 DAY198
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.2 -37.2 -37.5 -37.7 -37.9 -38.0 -38.0 -38.0 -37.6 -37.1 -36.4 -36.0 -35.0 RE
GSEY 7.8 2.1 0.9 -0.2 -1.4 -2.5 -3.7 -4.8 -9.3 -11.5 -13.6 -14.6 -16.7 RE
GSEZ -11.8 -9.1 -8.5 -7.9 -7.3 -6.7 -6.0 -5.4 -2.8 -1.5 -0.1 0.5 1.9 RE
AU
AL
AE
DST
KP 3- 3+ 2o 4+ 4+ 3o 4+ 4- 4o 4o 4- 4+ 4- 4- 4o 4+
UT

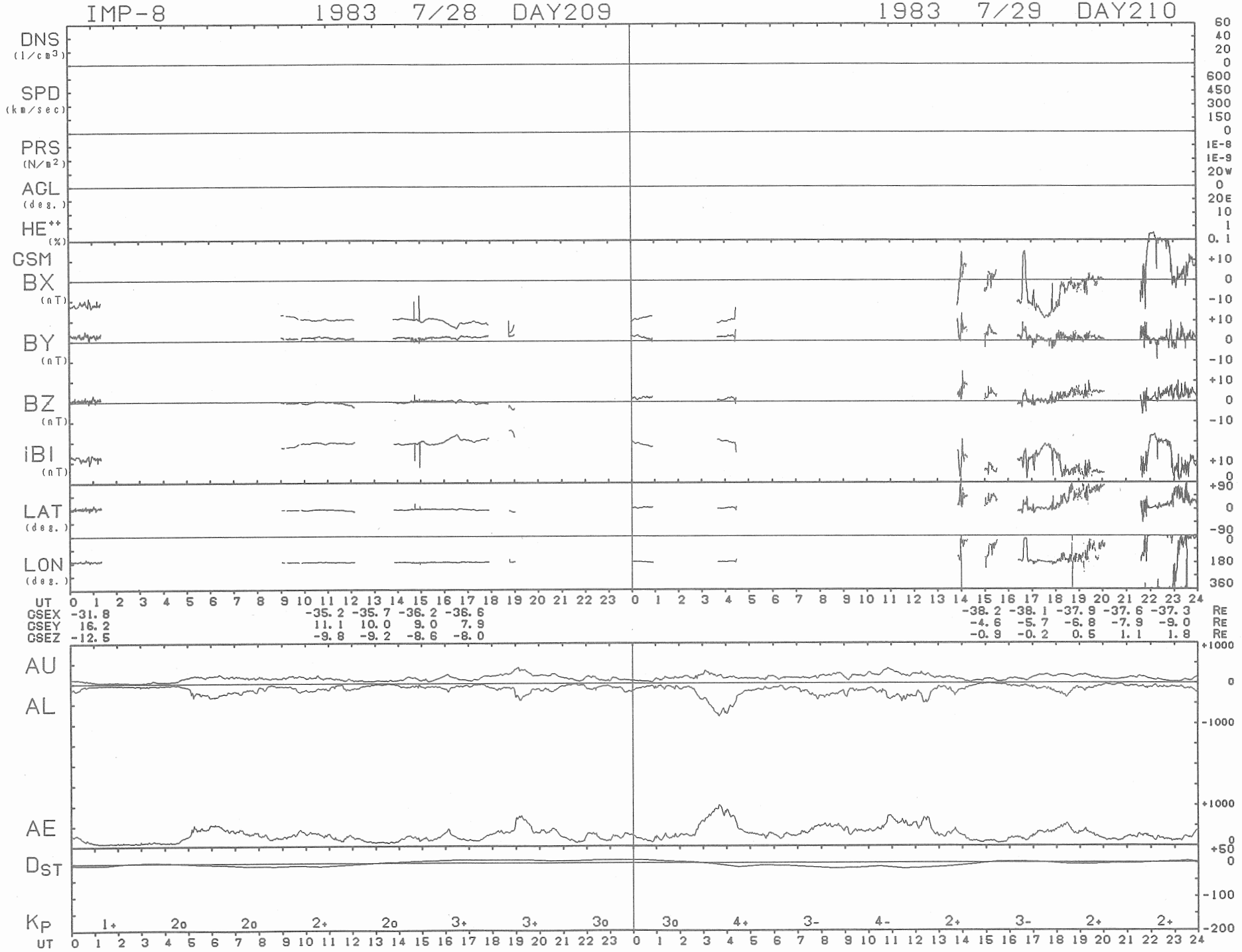

IMP-8
1983 7/18 DAY199
1983 7/19 DAY200
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.2 -31.8 -31.0 -30.2 -29.4 -28.5 -27.5 -26.6 -25.6 -20.1 -18.9 -17.7 -16.4 -15.1 RE
GSEY -19.5 -21.3 -22.1 -23.0 -23.8 -24.5 -25.2 -25.9 -26.6 -29.4 -29.8 -30.2 -30.5 -30.8 RE
GSEZ 3.9 5.1 5.8 6.4 7.0 7.6 8.2 8.8 9.4 12.1 12.5 13.0 13.4 13.9 RE
AU
AL
AE
DST
KP 5- 4o 3o 3o 3+ 3+ 3- 3o 3- 2o 2+ 2+ 2- 3o 2+ 2o
UT

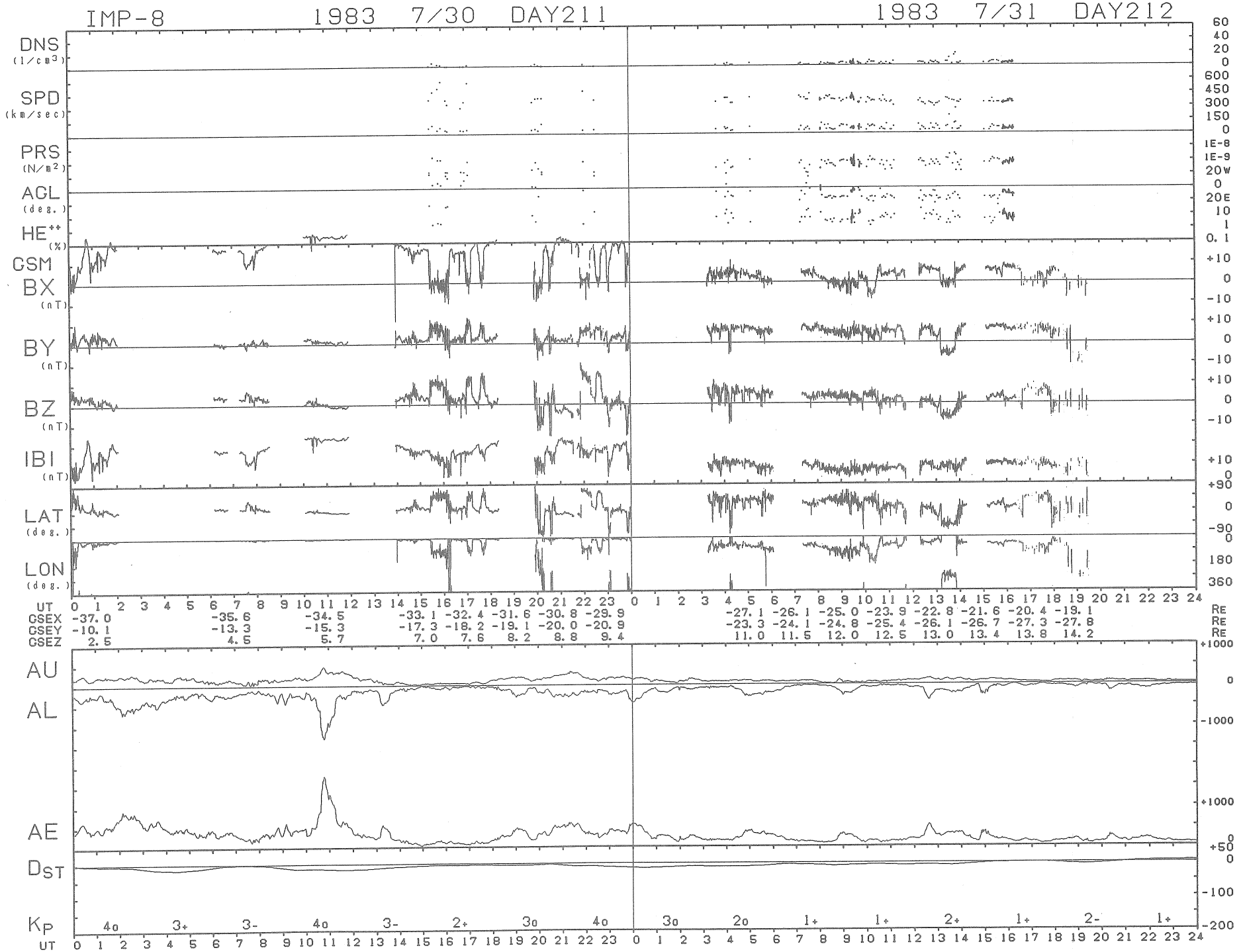

IMP-8 1983 7/20 DAY201
1983 7/21 DAY202
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -4.3 -0.0 1.4 2.8 4.3 5.7 8.5 9.8 11.2 12.5 13.8 15.1 18.8 RE
GSEY -31.6 -31.0 -30.8 -30.4 -30.0 -29.6 -28.5 -27.9 -27.3 -26.6 -25.8 -25.0 -22.3 RE
GSEZ 16.4 16.8 17.0 17.0 17.1 17.1 17.0 16.9 16.8 16.6 16.4 16.2 15.3 RE
AU
AL
AE
DST
KP 2+ 2+ 3- 1+ 1o 1+ 2- 2o 1+ 2+ 2- 2o 2- 2o 2- 2-
UT

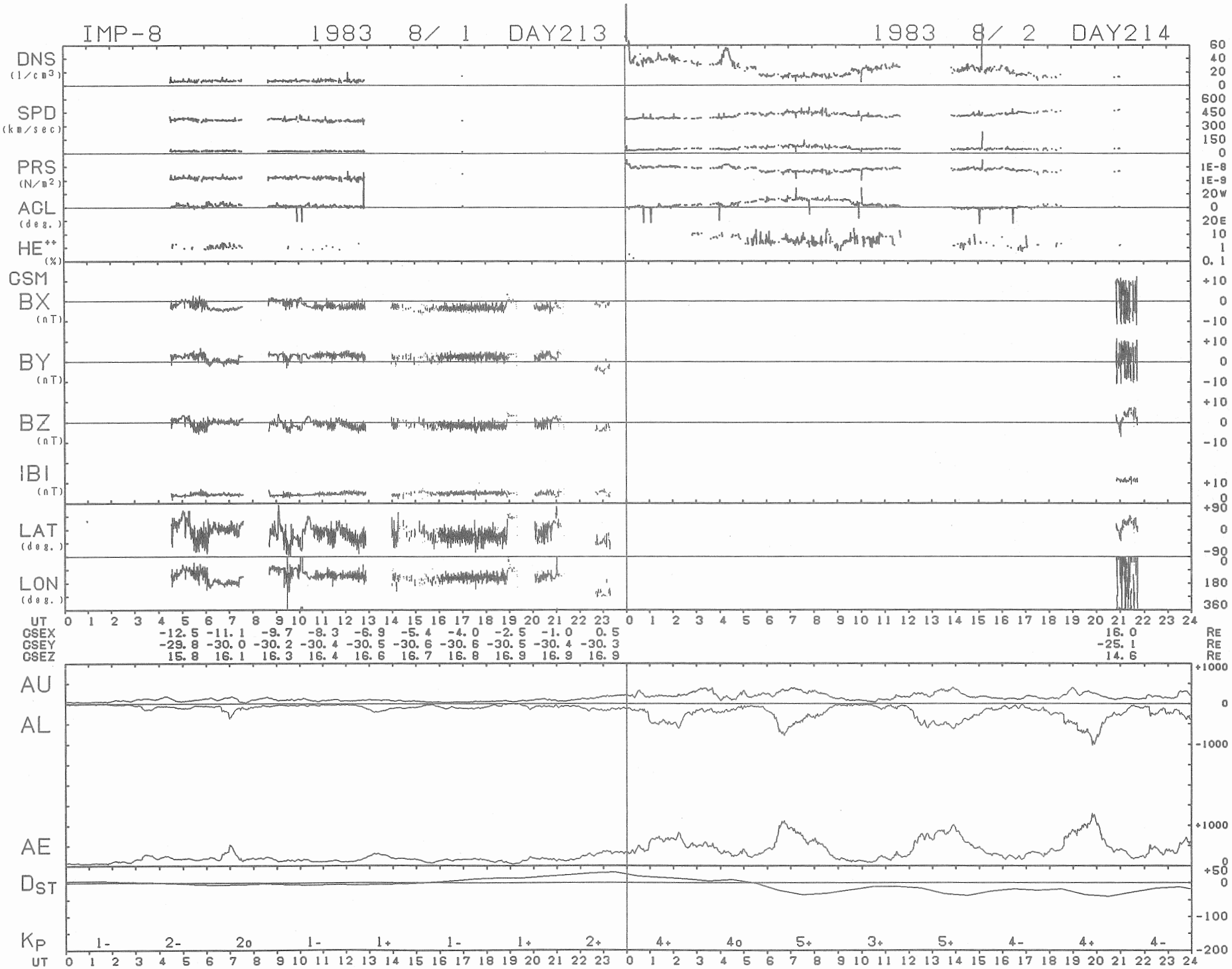

IMP-8 1983 7/22 DAY203
1983 7/23 DAY204
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.1 24.1 25.0 25.8 26.6 27.3 28.0 28.6 29.1 29.6 30.0 30.3 30.5 30.7 30.7 30.7 30.7 30.5 30.3 28.6 28.0 RE
GSEY -18.0 -16.8 -15.6 -14.4 -13.1 -11.8 -10.5 -9.1 -7.7 -6.3 -4.9 -3.5 -2.0 -0.6 0.8 2.3 3.7 5.1 6.6 12.0 13.3 RE
GSEZ 13.6 13.1 12.6 12.0 11.4 10.8 10.1 9.5 8.8 8.0 7.3 6.5 5.8 5.0 4.2 3.3 2.5 1.7 0.8 -2.5 -3.3 RE
AU
AL
AE
DST
KP
2+ 1o 1o 1o 1- 1- 3- 5- 3o 3+ 3+ 5- 3o 3o 5- 4o
UT

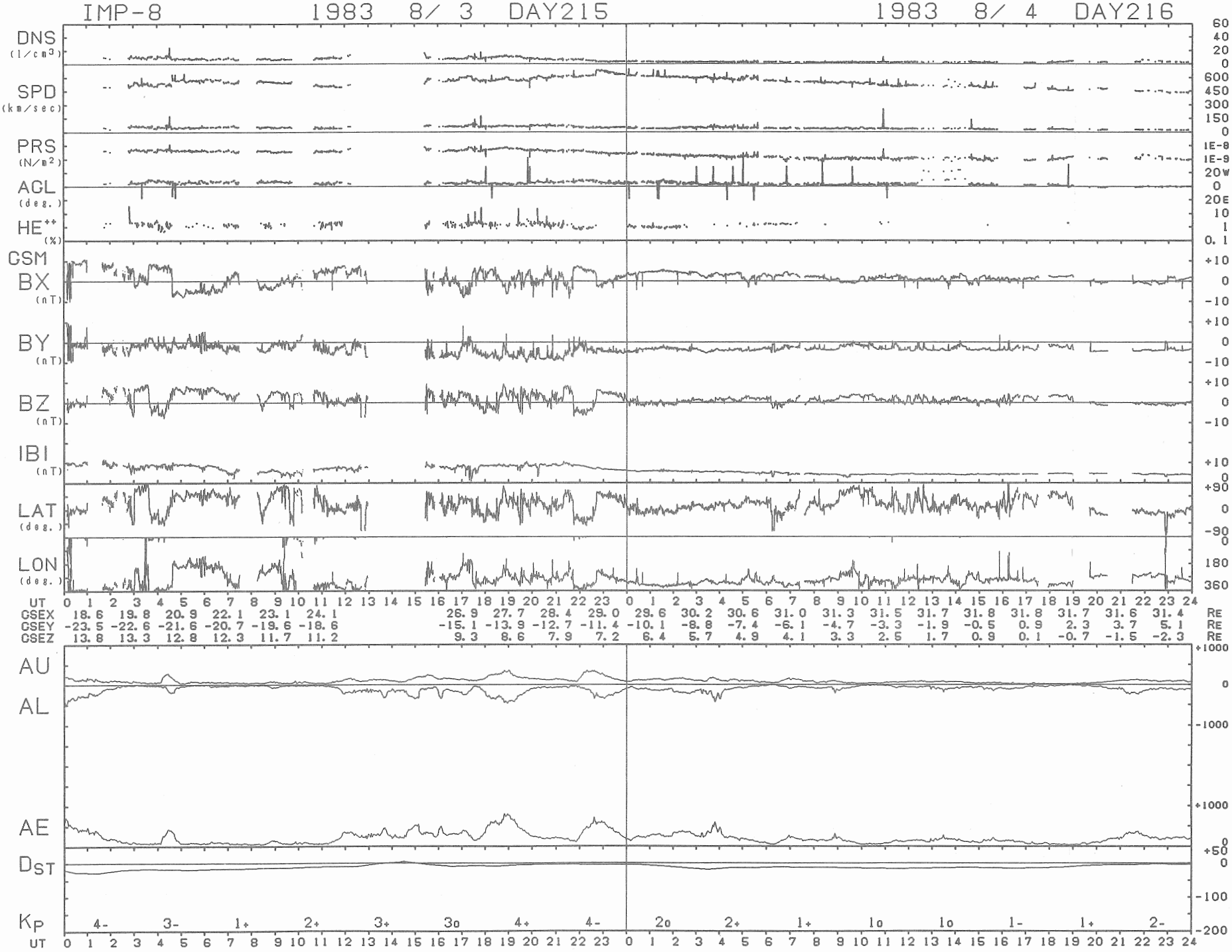

IMP-8 1983 7/24 DAY205
1983 7/25 DAY206
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.3 26.5 25.7 24.9 23.9 22.9 21.9 20.8 19.6 18.4 14.6 13.3 11.9 10.5 9.1 7.7 4.8 3.3 1.8 0.3 -1.2 RE
GSEY 14.6 15.8 17.0 18.1 19.2 20.3 21.3 22.2 23.1 24.0 26.2 26.8 27.4 27.9 28.3 28.7 29.3 29.5 29.7 29.8 29.9 RE
GSEZ -4.2 -5.0 -5.8 -6.5 -7.3 -8.1 -8.8 -9.5 -10.2 -10.8 -12.6 -13.1 -13.7 -14.1 -14.6 -15.0 -15.7 -16.1 -16.4 -16.6 -16.8 RE
AU
AL
AE
DST
KP 6- 5o 4o 4- 6o 4o 4o 3+ 3o 4- 3- 2+ 3- 2+ 2o 2-
UT

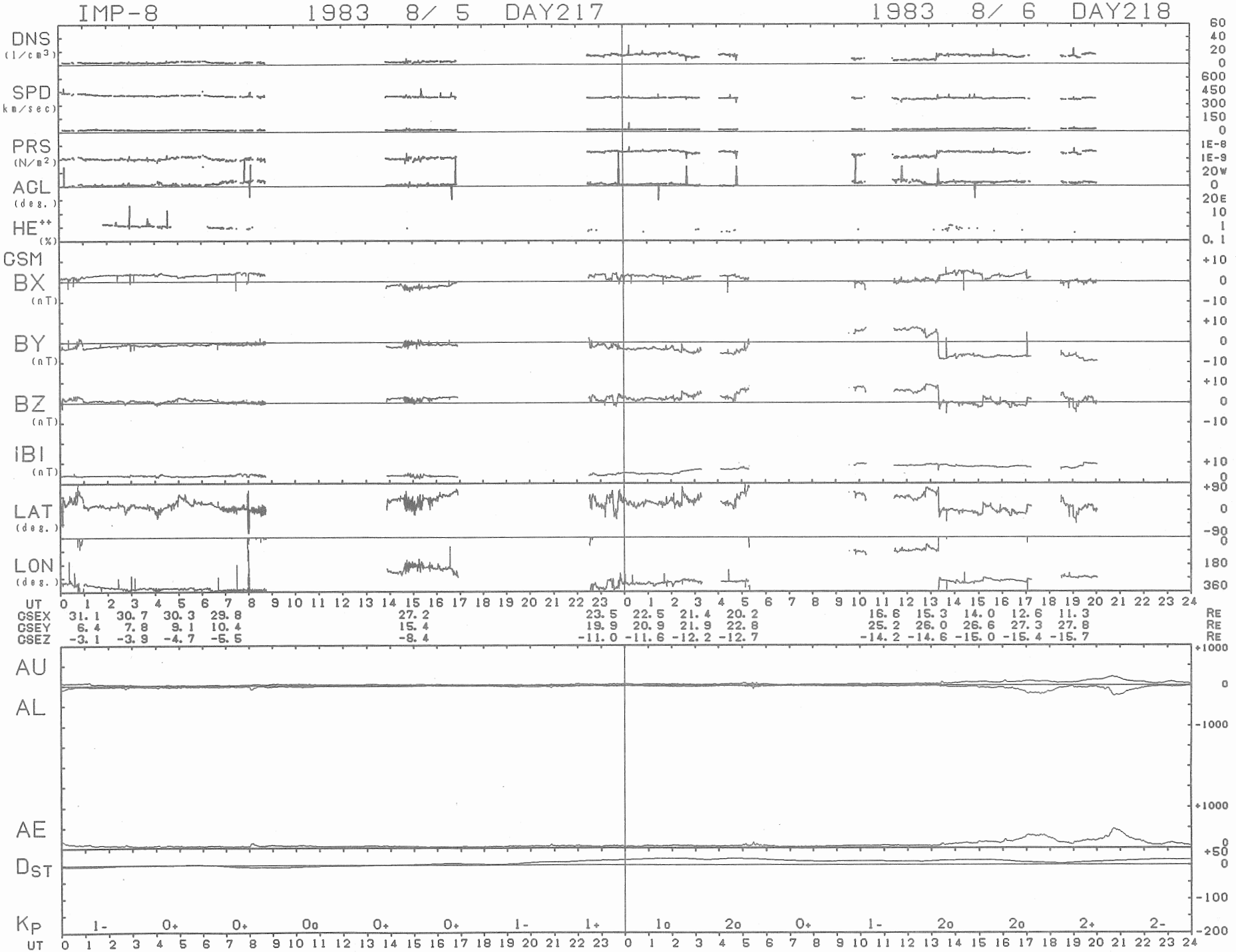

IMP-8
1983 7/26 DAY207
1983 7/27 DAY208
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.0 -8.5 -9.9 -12.7 -15.4 -16.8 -18.1 -24.1 -28.2 -29.2 -30.1 -30.9 RE
GSEY 29.5 29.3 29.0 28.4 27.5 27.0 26.5 23.2 19.9 19.0 18.1 17.2 RE
GSEZ -17.4 -17.4 -17.4 -17.4 -17.2 -17.1 -16.9 -15.7 -14.3 -13.9 -13.4 -13.0 RE
AU
AL
AE
DST
KP
2+ 2o 2- 2o 2o 2- 2- 2o 1+ 2o 2o 3o 2o 2o 3- 3+
UT

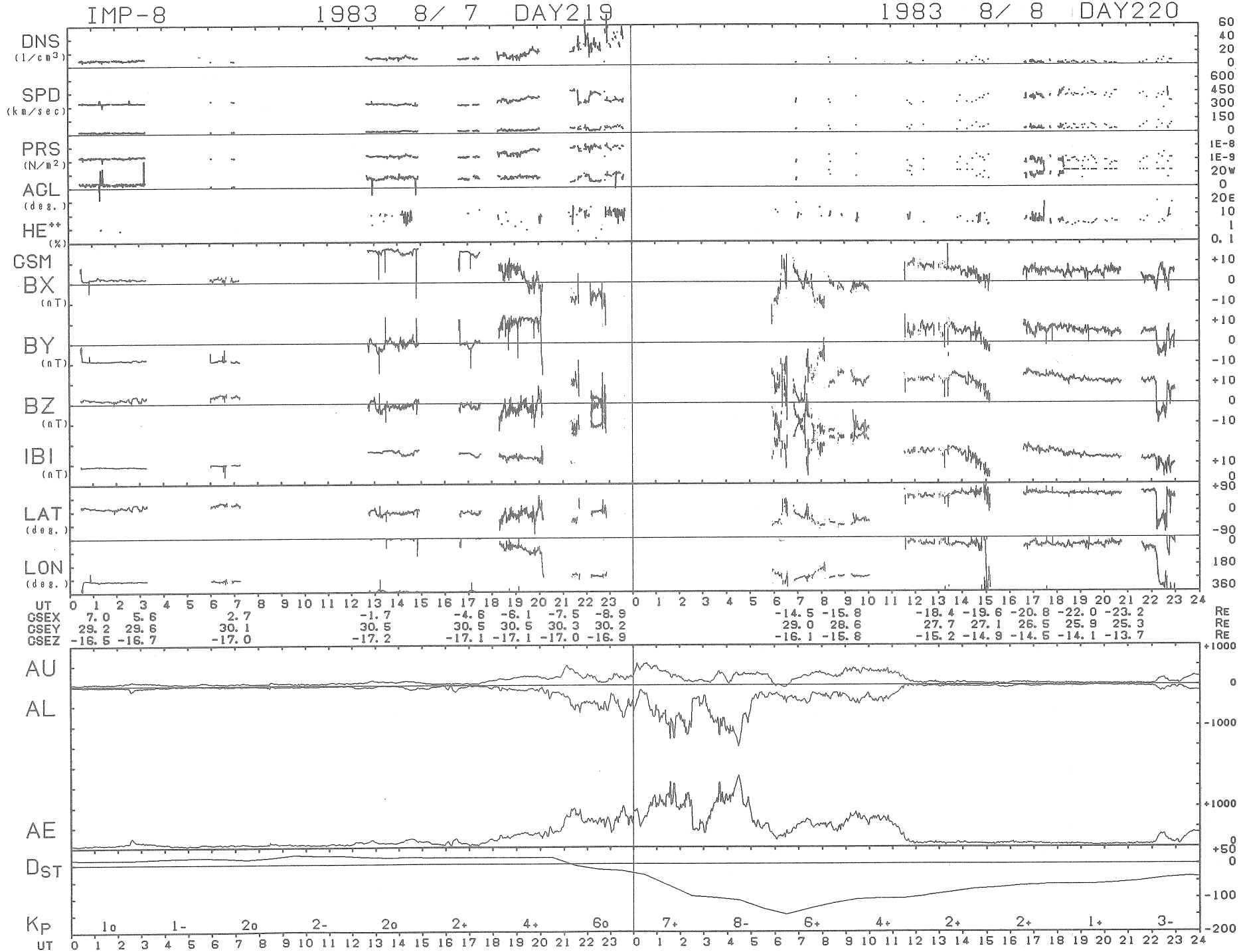

IMP-8
1983 7/28 DAY209
1983 7/29 DAY210
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.8 -35.2 -35.7 -36.2 -36.6 -38.2 -38.1 -37.9 -37.6 -37.3 RE
GSEY 16.2 11.1 10.0 9.0 7.9 -4.6 -5.7 -6.8 -7.9 -9.0 RE
GSEZ -12.5 -9.8 -9.2 -8.6 -8.0 -0.9 -0.2 0.5 1.1 1.8 RE
AU
AL
AE
DST
KP
1+ 2o 2o 2+ 2o 3+ 3+ 3o 3o 4+ 3- 4- 2+ 3- 2+ 2+
UT

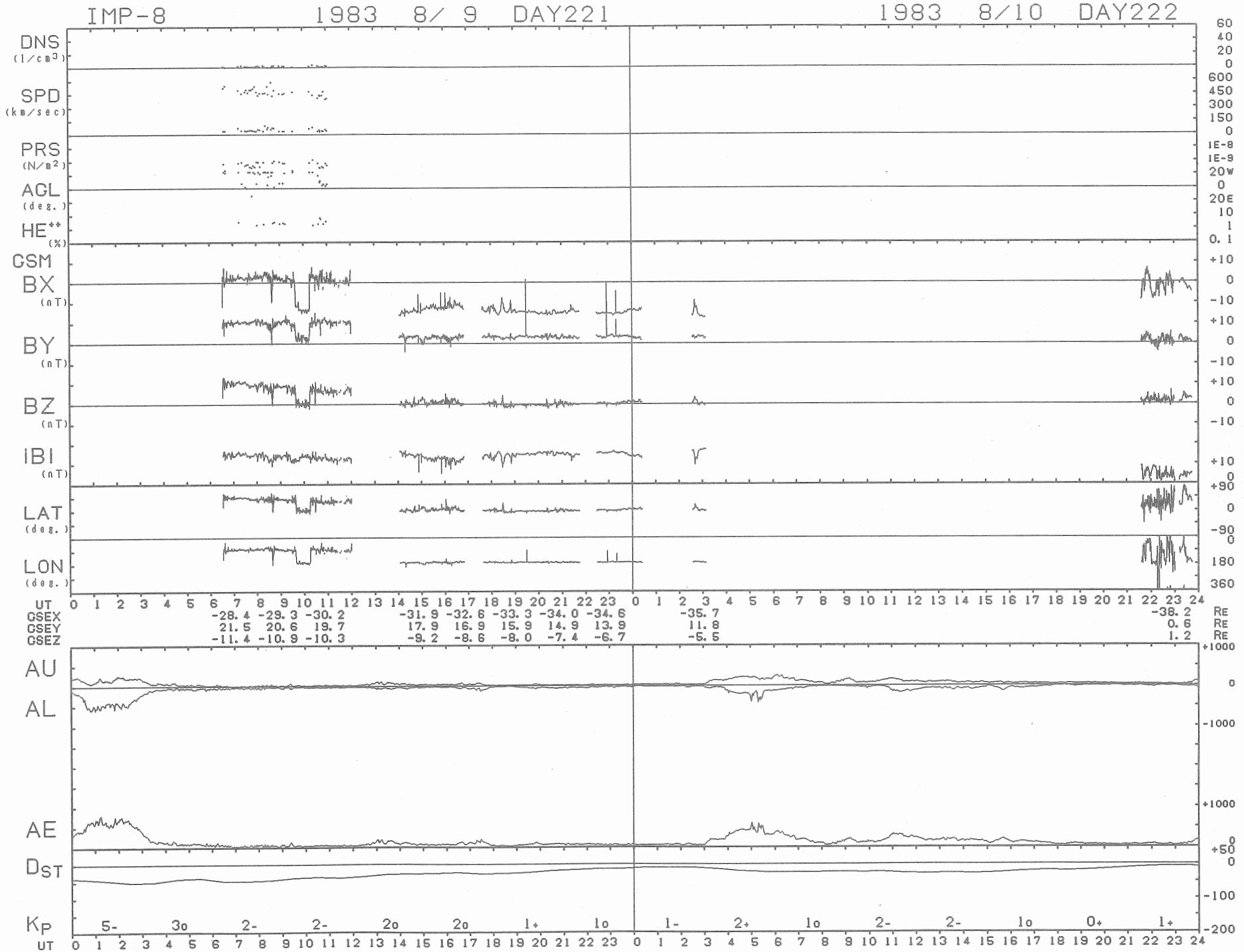

IMP-8 1983 7/30 DAY211
1983 7/31 DAY212
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.0 -35.6 -34.5 -33.1 -32.4 -31.6 -30.8 -29.9 -27.1 -26.1 -25.0 -23.9 -22.8 -21.6 -20.4 -19.1
GSEY -10.1 -13.3 -15.3 -17.3 -18.2 -19.1 -20.0 -20.9 -23.3 -24.1 -24.8 -25.4 -26.1 -26.7 -27.3 -27.8
GSEZ 2.5 4.5 5.7 7.0 7.6 8.2 8.8 9.4 11.0 11.5 12.0 12.5 13.0 13.4 13.8 14.2
RE
AU
AL
AE
DST
KP
4o 3+ 3- 4o 3- 2+ 3o 4o 3o 2o 1+ 1+ 2+ 1+ 2- 1+
UT

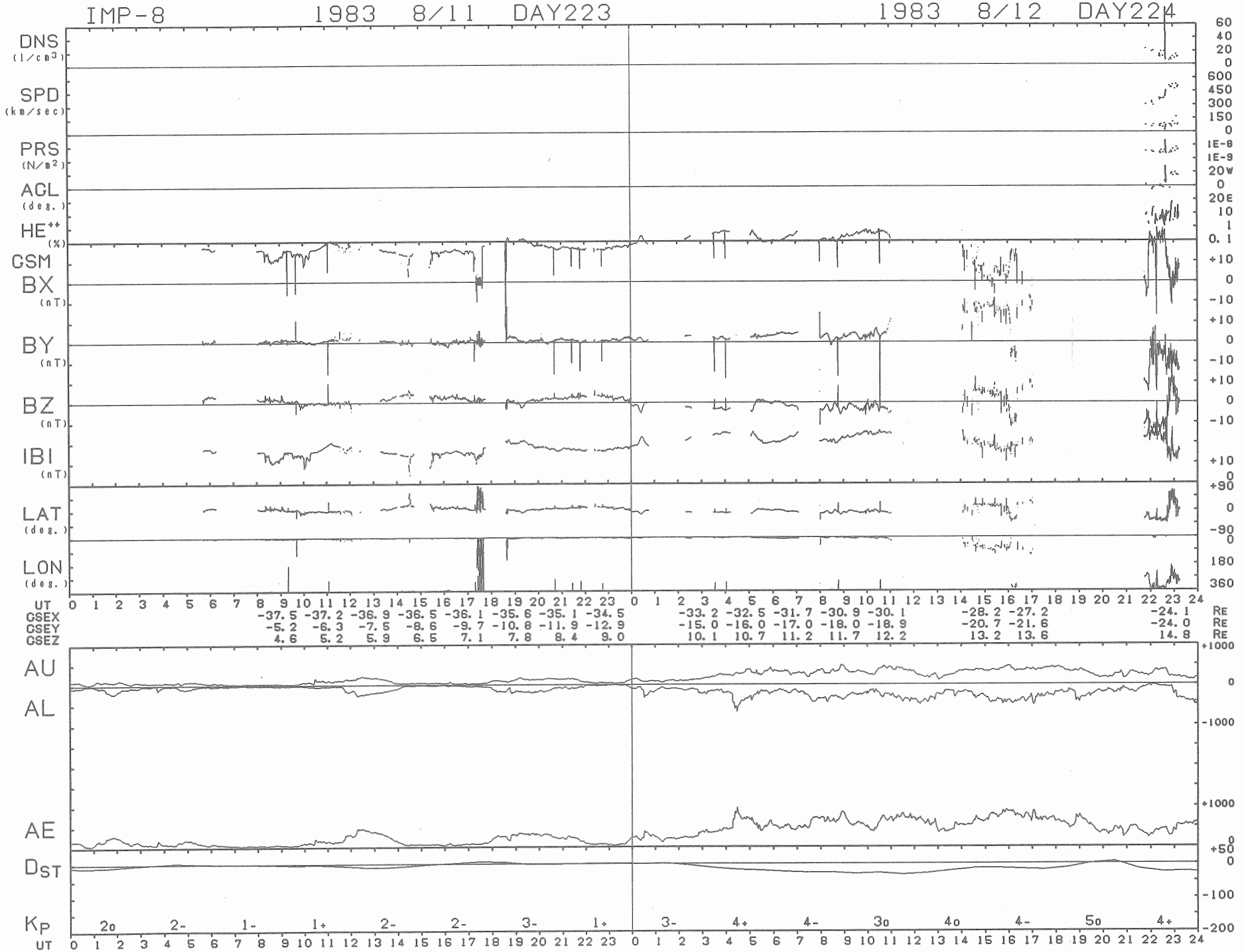

IMP-8 1983 8/ 1 DAY213
1983 8/ 2 DAY214
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.5 -11.1 -9.7 -8.3 -6.9 -5.4 -4.0 -2.5 -1.0 0.5 16.0 RE
GSEY -29.8 -30.0 -30.2 -30.4 -30.5 -30.6 -30.6 -30.5 -30.4 -30.3 -25.1 RE
GSEZ 15.8 16.1 16.3 16.4 16.6 16.7 16.8 16.9 16.9 16.9 14.6 RE
AU
AL
AE
DST
KP 1- 2- 2o 1- 1+ 1- 1+ 2+ 4+ 4o 5+ 3+ 5+ 4- 4+ 4-
UT

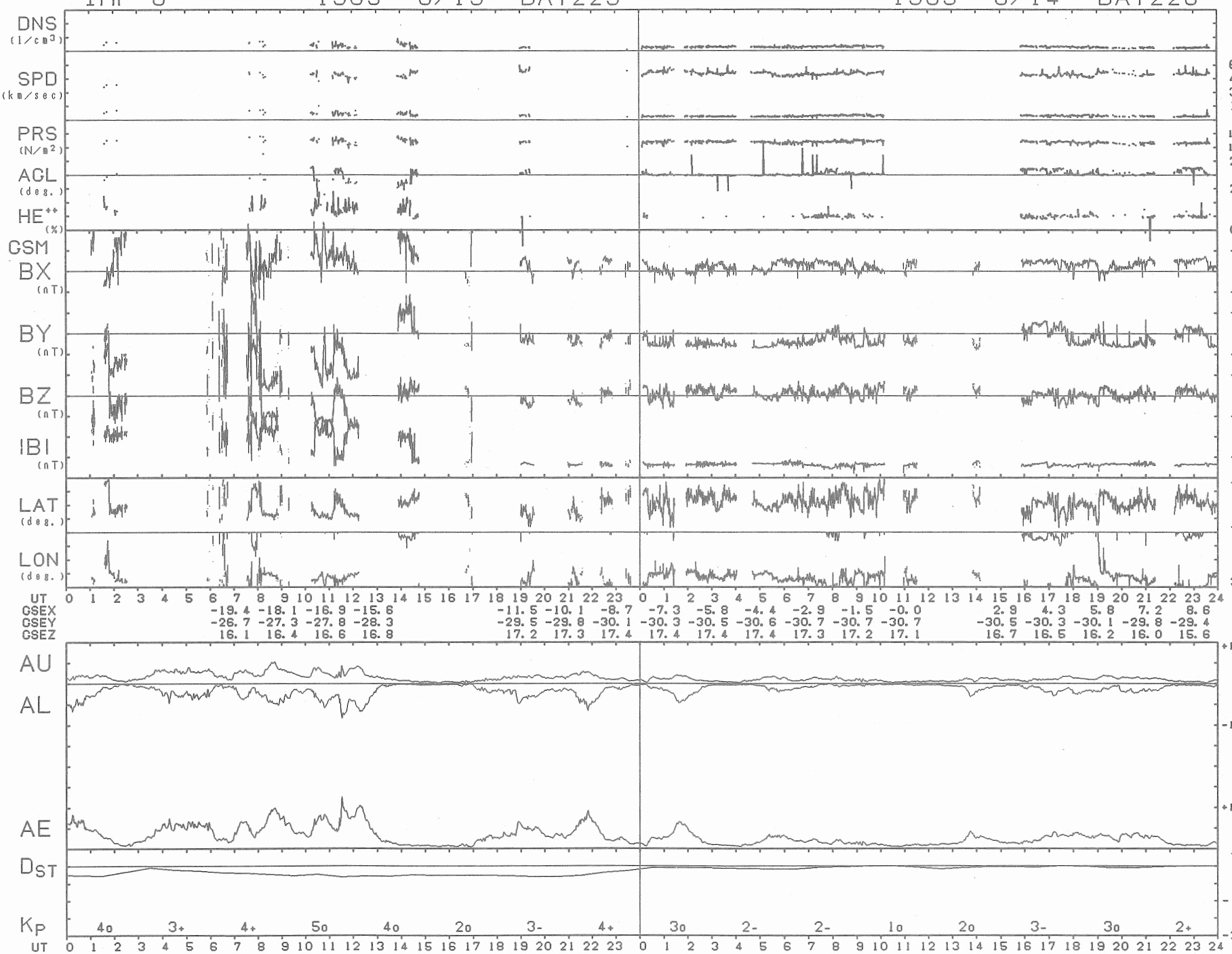

IMP-8 1983 8/ 3 DAY215 1983 8/ 4 DAY216
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.6 19.8 20.9 22.1 23.1 24.1 26.9 27.7 28.4 29.0 29.6 30.2 30.6 31.0 31.3 31.5 31.7 31.8 31.8 31.7 31.6 31.4 RE
GSEY -23.5 -22.6 -21.6 -20.7 -19.6 -18.6 -15.1 -13.9 -12.7 -11.4 -10.1 -8.8 -7.4 -6.1 -4.7 -3.3 -1.9 -0.5 0.9 2.3 3.7 5.1 RE
GSEZ 13.8 13.3 12.8 12.3 11.7 11.2 9.3 8.6 7.9 7.2 6.4 5.7 4.9 4.1 3.3 2.5 1.7 0.9 0.1 -0.7 -1.5 -2.3 RE
AU
AL
AE
DST
KP
4- 3- 1+ 2+ 3+ 3o 4+ 4- 2o 2+ 1+ 1o 1o 1- 1+ 2-
UT

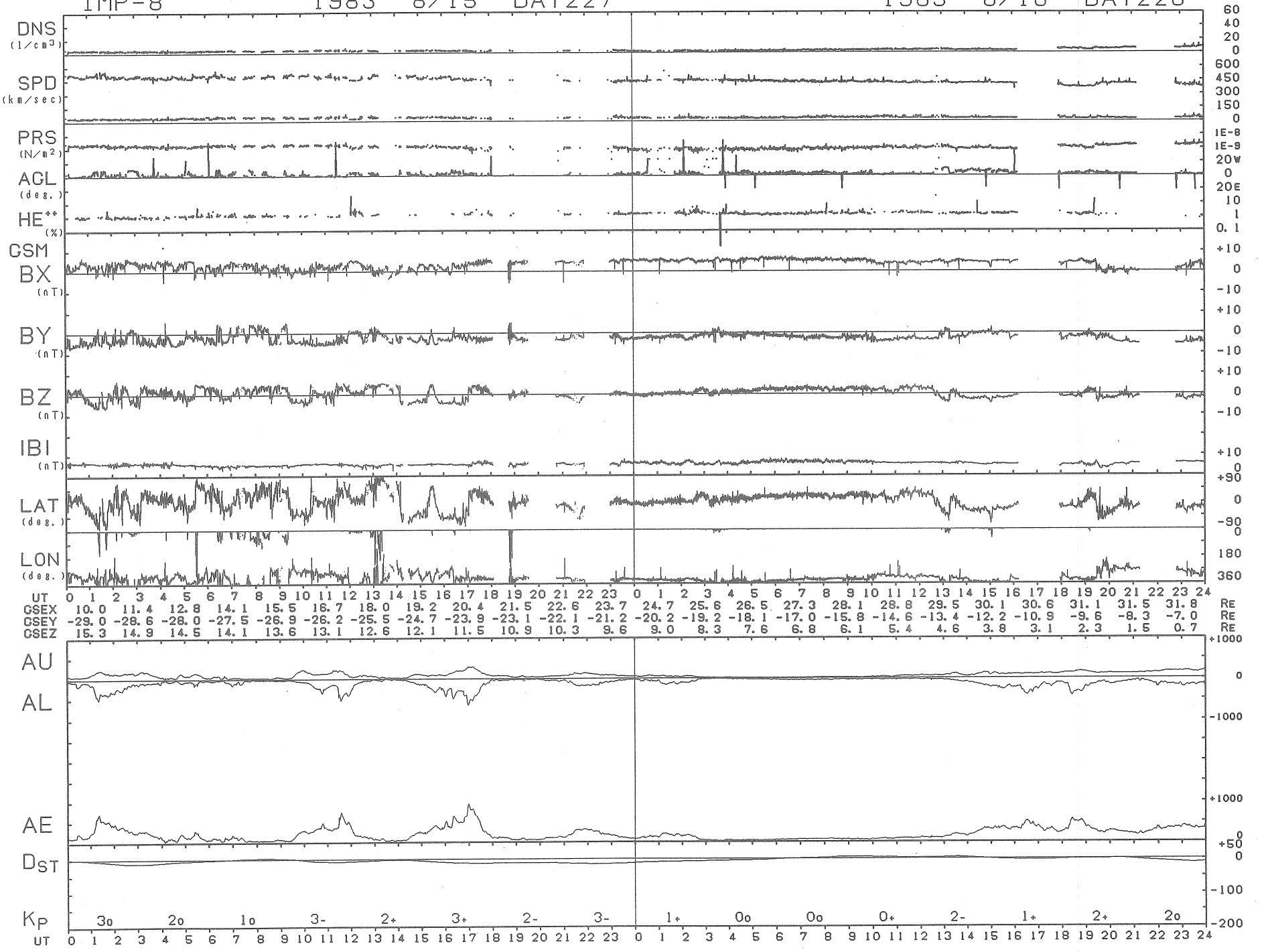

IMP-8 1983 8/ 5 DAY217 1983 8/ 6 DAY218
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.1 30.7 30.3 29.8 27.2 23.5 22.5 21.4 20.2 16.6 15.3 14.0 12.6 11.3 RE
GSEY 6.4 7.8 9.1 10.4 15.4 19.9 20.9 21.9 22.8 25.2 26.0 26.6 27.3 27.8 RE
GSEZ -3.1 -3.9 -4.7 -5.5 -8.4 -11.0 -11.6 -12.2 -12.7 -14.2 -14.6 -15.0 -15.4 -15.7 RE
AU
AL
AE
DST
KP 1- 0+ 0+ 0o 0+ 0+ 1- 1+ 1o 2o 0+ 1- 2o 2o 2+ 2-
UT

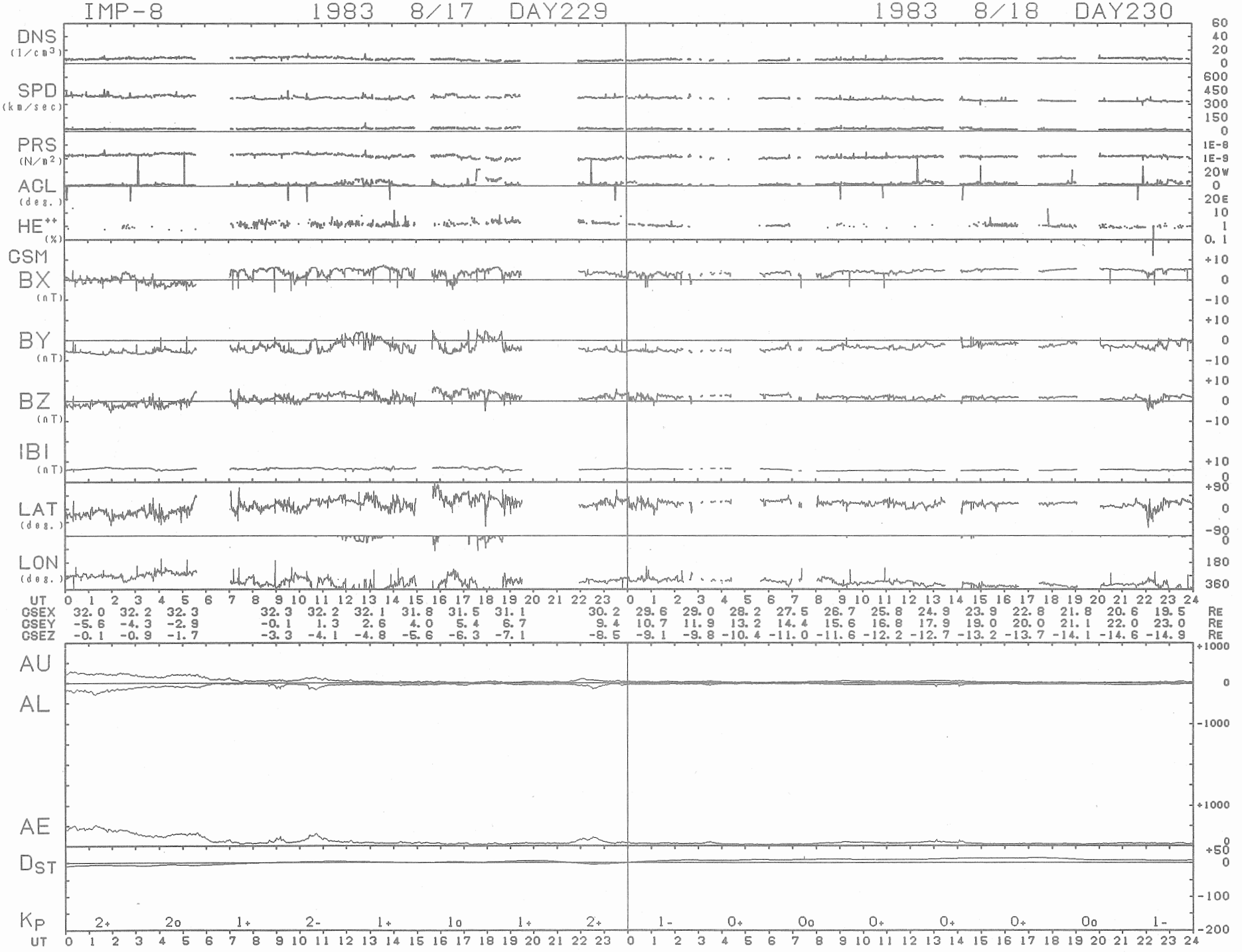

IMP-8
1983 8/ 7 DAY219
1983 8/ 8 DAY220
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 7.0 5.6 2.7 -1.7 -4.6 -6.1 -7.5 -8.9 -14.5 -15.8 -18.4 -19.6 -20.8 -22.0 -23.2 RE
GSEY 29.2 29.6 30.1 30.5 30.5 30.5 30.3 30.2 29.0 28.6 27.7 27.1 26.5 25.9 25.3 RE
GSEZ -16.5 -16.7 -17.0 -17.2 -17.1 -17.1 -17.0 -16.9 -16.1 -15.8 -15.2 -14.9 -14.5 -14.1 -13.7 RE
AU
AL
AE
DST
KP
1o 1- 2o 2- 2o 2+ 4+ 6o 7+ 8- 6+ 4+ 2+ 2+ 1+ 3-
UT

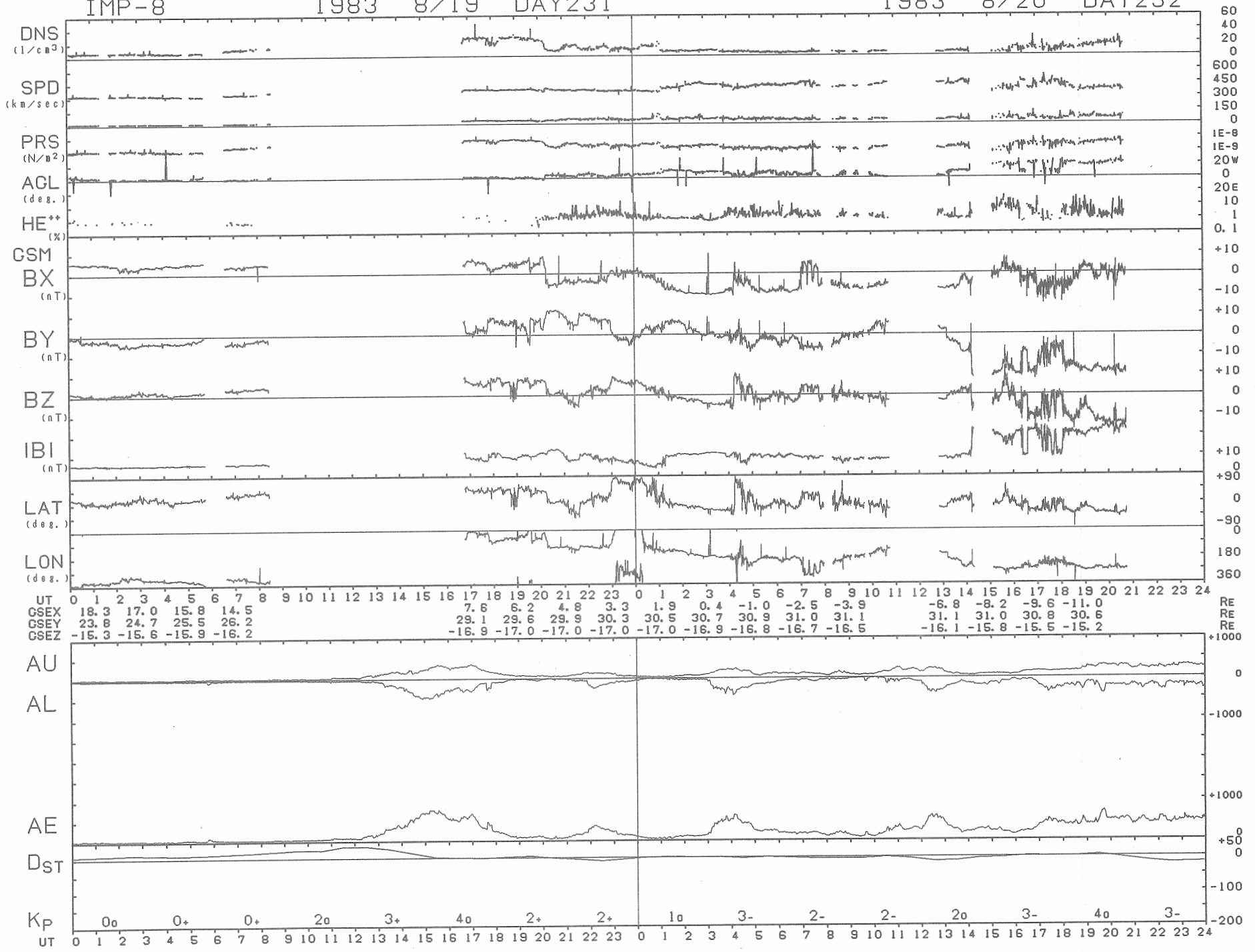

IMP-8
1983 8/ 9 DAY221
1983 8/10 DAY222
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.4 -29.3 -30.2 -31.9 -32.6 -33.3 -34.0 -34.6 -35.7 -38.2 RE
GSEY 21.5 20.6 19.7 17.9 16.9 15.9 14.9 13.9 11.8 0.6 RE
GSEZ -11.4 -10.9 -10.3 -9.2 -8.6 -8.0 -7.4 -6.7 -5.5 1.2 RE
AU
AL
AE
DST
KP
5- 3o 2- 2- 2o 2o 1+ 1o 1- 2+ 1o 2- 2- 1o 0+ 1+
UT

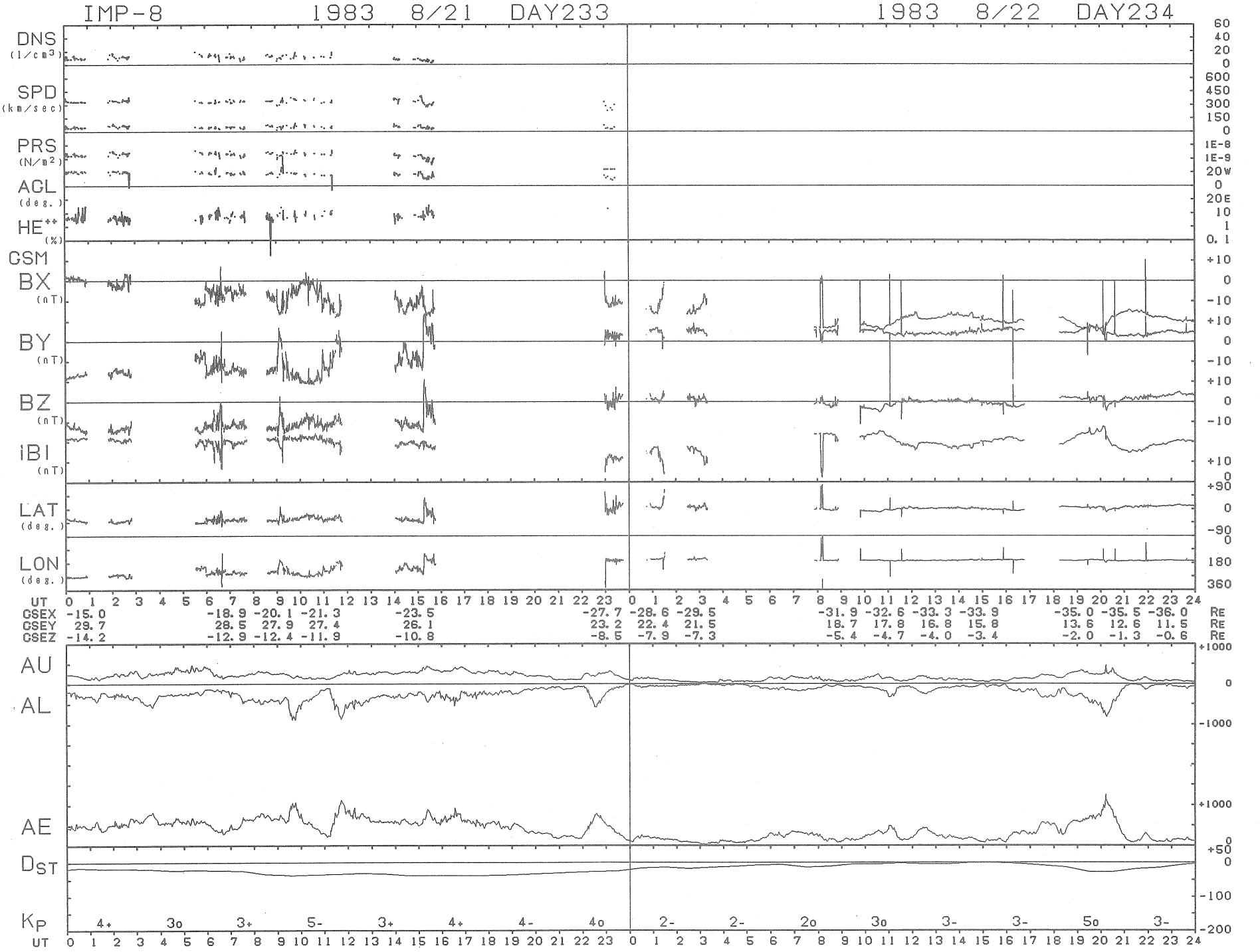

IMP-8 1983 8/11 DAY223
1983 8/12 DAY224
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.5 -37.2 -36.9 -36.5 -36.1 -35.6 -35.1 -34.5 -33.2 -32.5 -31.7 -30.9 -30.1 -28.2 -27.2 -24.1 RE
GSEY -5.2 -6.3 -7.5 -8.6 -9.7 -10.8 -11.9 -12.9 -15.0 -16.0 -17.0 -18.0 -18.9 -20.7 -21.6 -24.0 RE
GSEZ 4.6 5.2 5.9 6.5 7.1 7.8 8.4 9.0 10.1 10.7 11.2 11.7 12.2 13.2 13.6 14.8 RE
AU
AL
AE
DST
KP
2o 2- 1- 1+ 2- 2- 3- 1+ 3- 4+ 4- 3o 4o 4- 5o 4+
UT

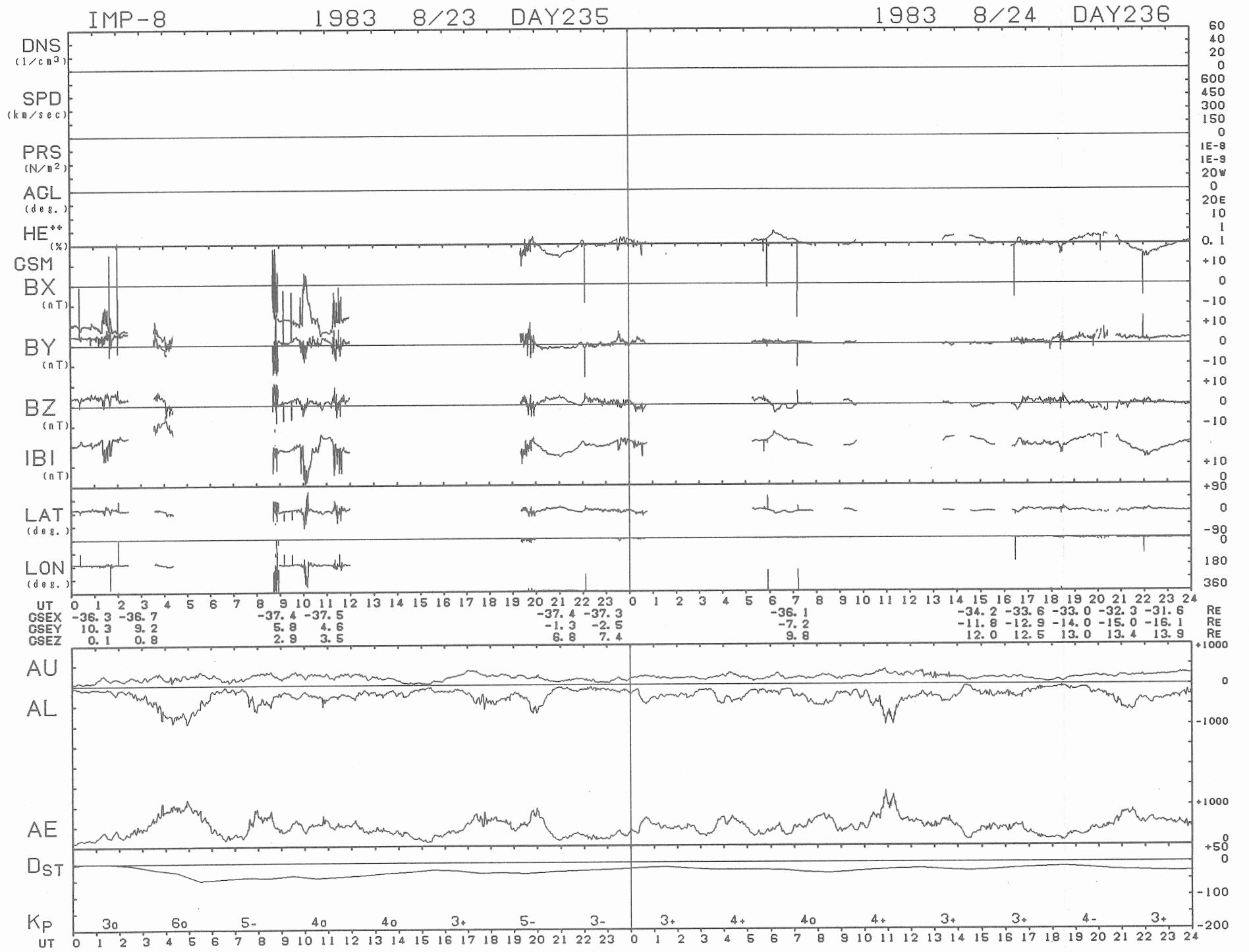

IMP-8 1983 8/13 DAY225
1983 8/14 DAY226
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -19.4 -18.1 -16.9 -15.6 -11.5 -10.1 -8.7 -7.3 -5.8 -4.4 -2.9 -1.5 -0.0 2.9 4.3 5.8 7.2 8.6 RE
GSEY -26.7 -27.3 -27.8 -28.3 -29.5 -29.8 -30.1 -30.3 -30.5 -30.6 -30.7 -30.7 -30.7 -30.5 -30.3 -30.1 -29.8 -29.4 RE
GSEZ 16.1 16.4 16.6 16.8 17.2 17.3 17.4 17.4 17.4 17.4 17.3 17.2 17.1 16.7 16.5 16.2 16.0 15.6 RE
AU
AL
AE
DST
KP
4o 3+ 4+ 5o 4o 2o 3- 4+ 3o 2- 2- 1o 2o 3- 3o 2+
UT

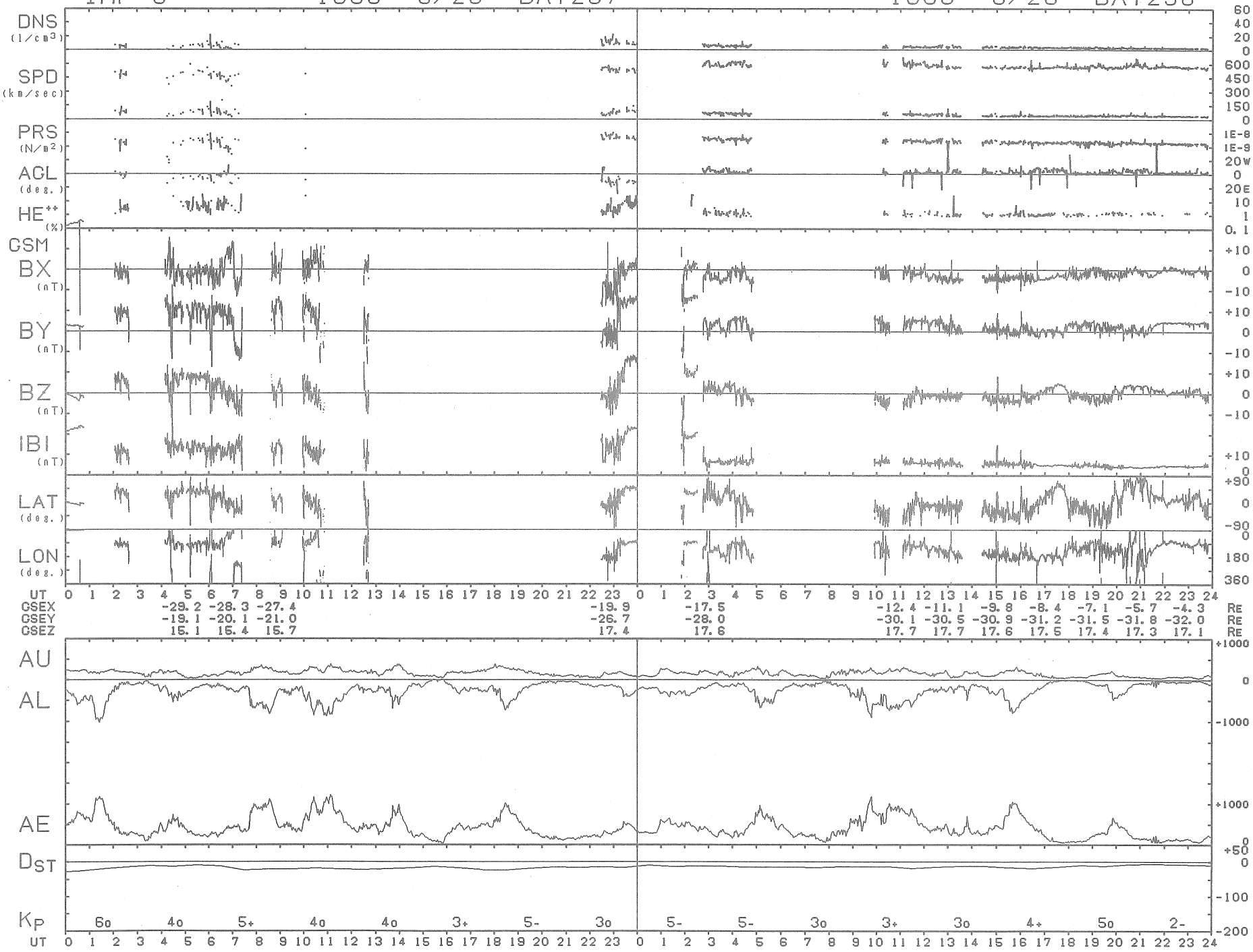

IMP-8 1983 8/15 DAY227
1983 8/16 DAY228
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX 10.0 11.4 12.8 14.1 15.5 16.7 18.0 19.2 20.4 21.5 22.6 23.7 24.7 25.6 26.5 27.3 28.1 28.8 29.5 30.1 30.6 31.1 31.5 31.8 RE
GSEY -29.0 -28.6 -28.0 -27.5 -26.9 -26.2 -25.5 -24.7 -23.9 -23.1 -22.1 -21.2 -20.2 -19.2 -18.1 -17.0 -15.8 -14.6 -13.4 -12.2 -10.9 -9.6 -8.3 -7.0 RE
GSEZ 15.3 14.9 14.5 14.1 13.6 13.1 12.6 12.1 11.5 10.9 10.3 9.6 9.0 8.3 7.6 6.8 6.1 5.4 4.6 3.8 3.1 2.3 1.5 0.7 RE
AU
AL
AE
DST
KP 3o 2o 1o 3- 2+ 3+ 2- 3- 1+ 0o 0o 0+ 2- 1+ 2+ 2o
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

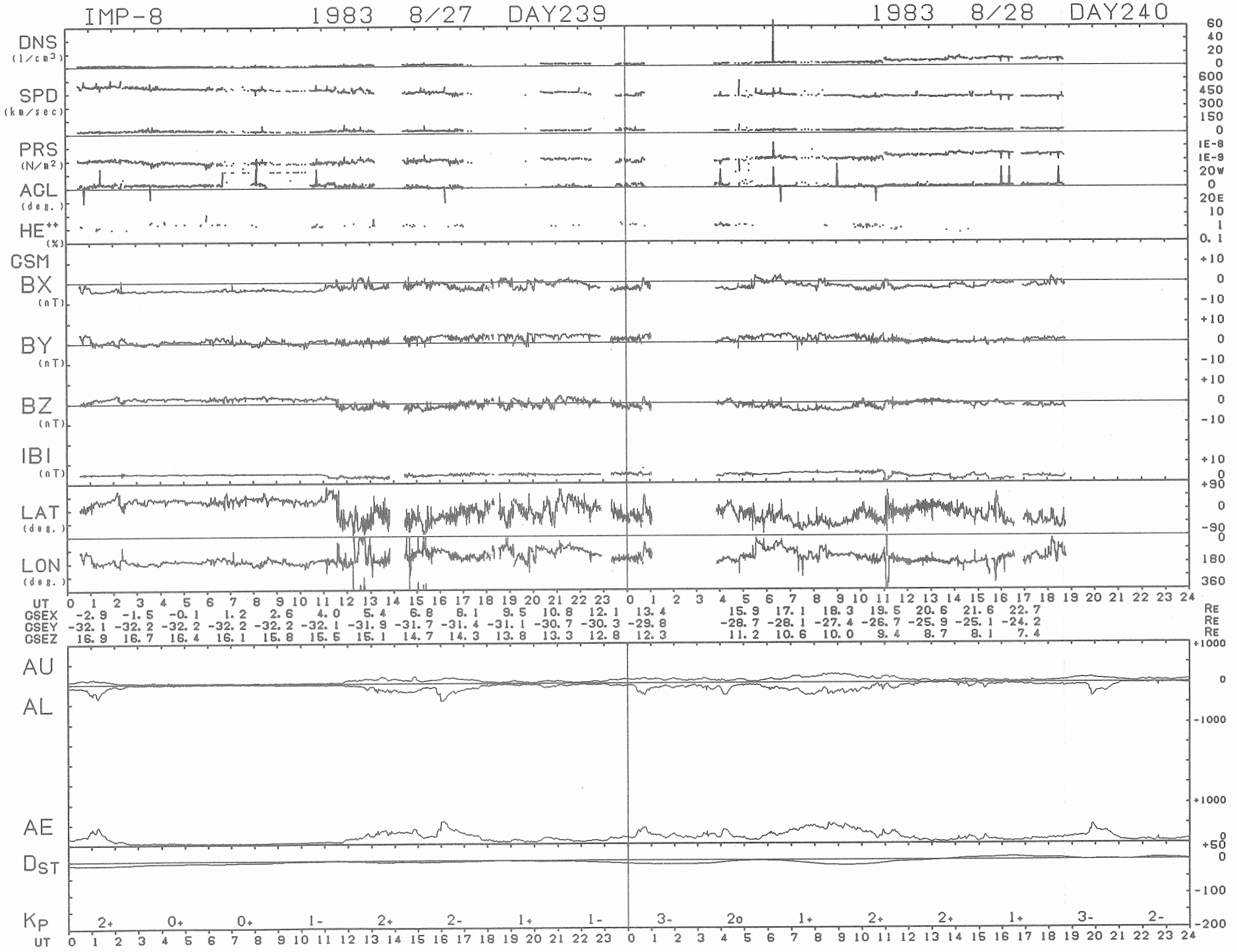

IMP-8 1983 8/17 DAY229
1983 8/18 DAY230
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.0 32.2 32.3 32.3 32.2 32.1 31.8 31.5 31.1 30.2 29.6 29.0 28.2 27.5 26.7 25.8 24.9 23.9 22.8 21.8 20.6 19.5 RE
GSEY -5.6 -4.3 -2.9 -0.1 1.3 2.6 4.0 5.4 6.7 9.4 10.7 11.9 13.2 14.4 15.6 16.8 17.9 19.0 20.0 21.1 22.0 23.0 RE
GSEZ -0.1 -0.9 -1.7 -3.3 -4.1 -4.8 -5.6 -6.3 -7.1 -8.5 -9.1 -9.8 -10.4 -11.0 -11.6 -12.2 -12.7 -13.2 -13.7 -14.1 -14.6 -14.9 RE
AU
AL
AE
DST
KP 2+ 2o 1+ 2- 1+ 1o 1+ 2+ 1- 0+ 0o 0+ 0+ 0+ 0o 1-
UT

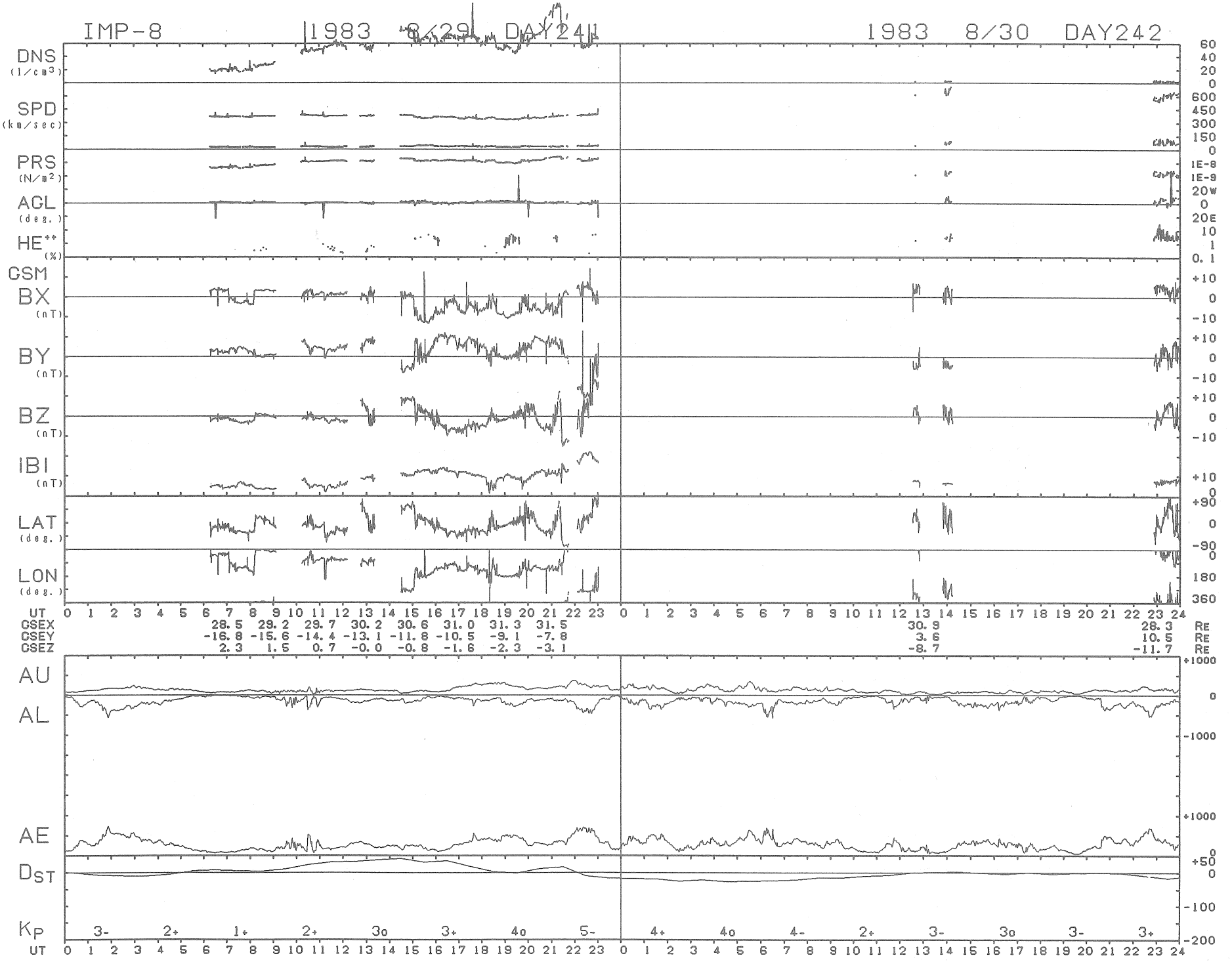

IMP-8
1983 8/19 DAY231
1983 8/20 DAY232
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.3 17.0 15.8 14.5 7.6 6.2 4.8 3.3 1.9 0.4 -1.0 -2.5 -3.9 -6.8 -8.2 -9.6 -11.0 RE
GSEY 23.8 24.7 25.5 26.2 29.1 29.6 29.9 30.3 30.5 30.7 30.9 31.0 31.1 31.1 31.0 30.8 30.6 RE
GSEZ -15.3 -15.6 -15.9 -16.2 -16.9 -17.0 -17.0 -17.0 -17.0 -16.9 -16.8 -16.7 -16.5 -16.1 -15.8 -15.5 -15.2 RE
AU
AL
AE
DST
KP 0o 0+ 0+ 2o 3+ 4o 2+ 2+ 1o 3- 2- 2- 2o 3- 4o 3-
UT

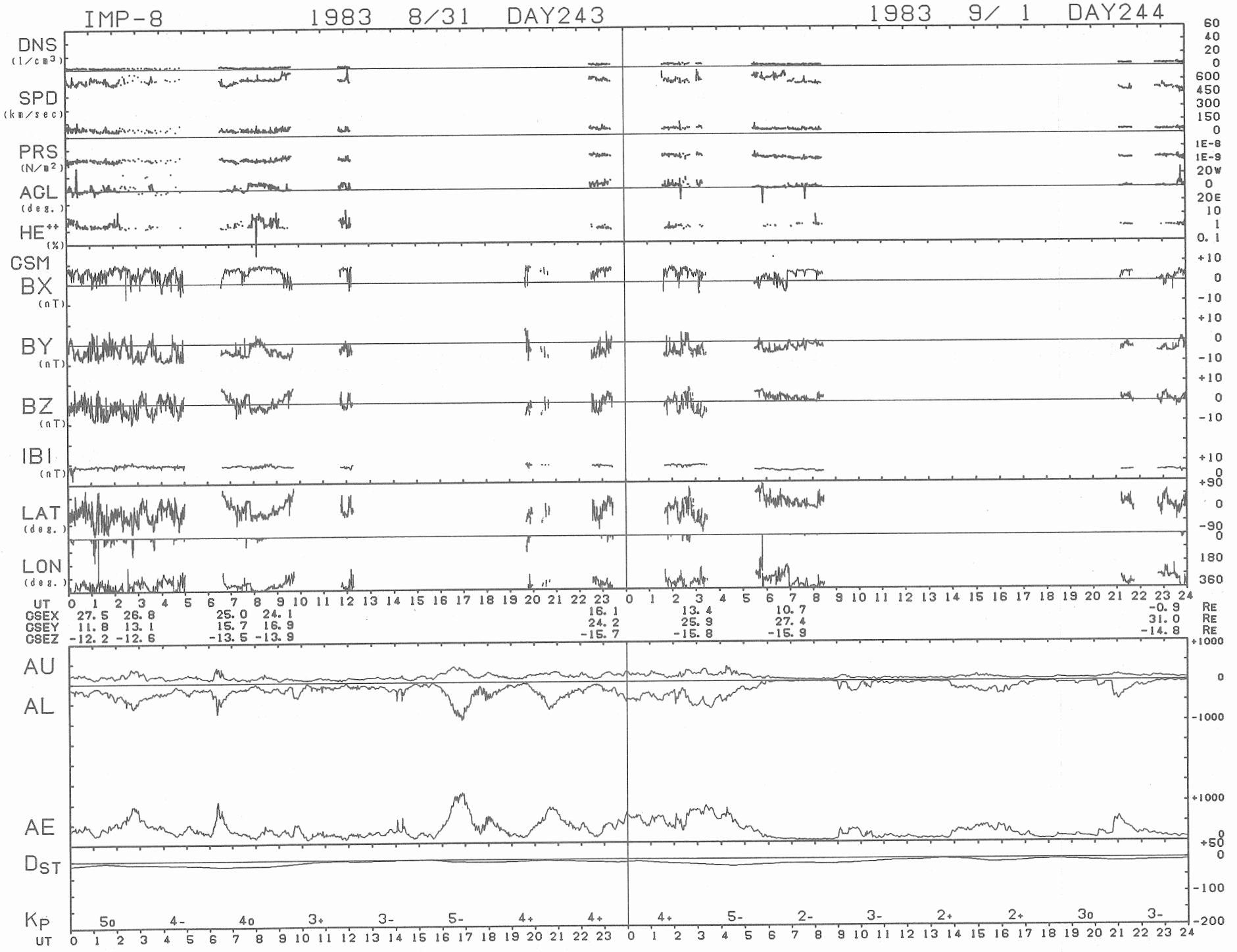

IMP-8 1983 8/21 DAY233 1983 8/22 DAY234
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.0 -18.9 -20.1 -21.3 -23.5 -27.7 -28.6 -29.5 -31.9 -32.6 -33.3 -33.9 -35.0 -35.5 -36.0 RE
GSEY 29.7 28.5 27.9 27.4 26.1 23.2 22.4 21.5 18.7 17.8 16.8 15.8 13.6 12.6 11.5 RE
GSEZ -14.2 -12.9 -12.4 -11.9 -10.8 -8.5 -7.9 -7.3 -5.4 -4.7 -4.0 -3.4 -2.0 -1.3 -0.6 RE
AU
AL
AE
DST
KP 4+ 3o 3+ 5- 3+ 4+ 4- 4o 2- 2- 2o 3o 3- 3- 5o 3-
UT

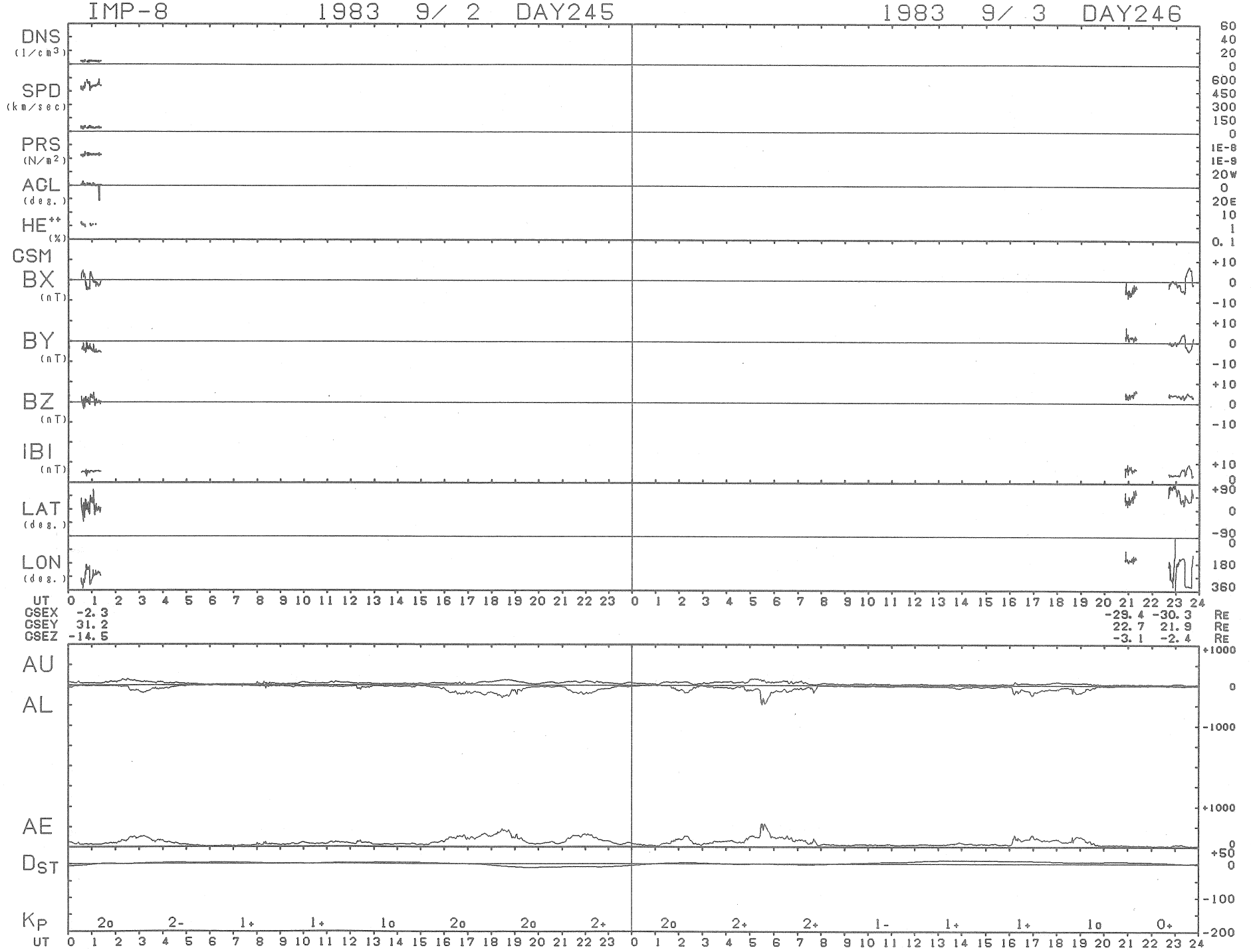

IMP-8 1983 8/23 DAY235
1983 8/24 DAY236
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.3 -36.7 -37.4 -37.5 -37.4 -37.3 -36.1 -34.2 -33.6 -33.0 -32.3 -31.6 RE
GSEY 10.3 9.2 5.8 4.6 -1.3 -2.5 -7.2 -11.8 -12.9 -14.0 -15.0 -16.1 RE
GSEZ 0.1 0.8 2.9 3.5 6.8 7.4 9.8 12.0 12.5 13.0 13.4 13.9 RE
AU
AL
AE
DST
KP 3o 6o 5- 4o 4o 3+ 5- 3- 3+ 4+ 4o 4+ 3+ 3+ 4- 3+
UT

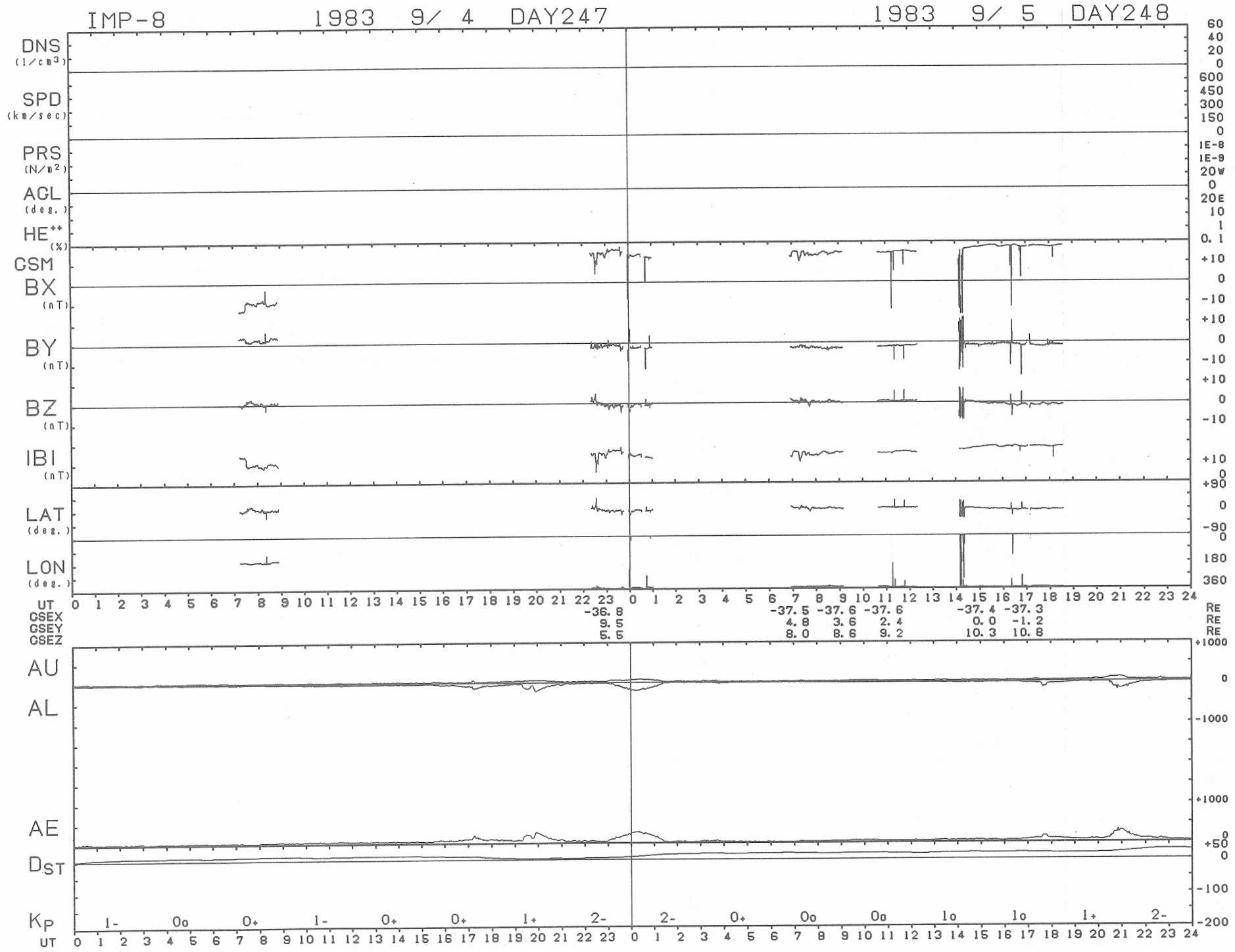

IMP-8 1983 8/25 DAY237
1983 8/26 DAY238
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.2 -28.3 -27.4 -19.9 -17.5 -12.4 -11.1 -9.8 -8.4 -7.1 -5.7 -4.3 RE
GSEY -19.1 -20.1 -21.0 -26.7 -28.0 -30.1 -30.5 -30.9 -31.2 -31.5 -31.8 -32.0 RE
GSEZ 15.1 15.4 15.7 17.4 17.6 17.7 17.7 17.6 17.5 17.4 17.3 17.1 RE
AU
AL
AE
DST
KP 6o 4o 5+ 4o 4o 3+ 5- 3o 5- 5- 3o 3+ 3o 4+ 5o 2-
UT

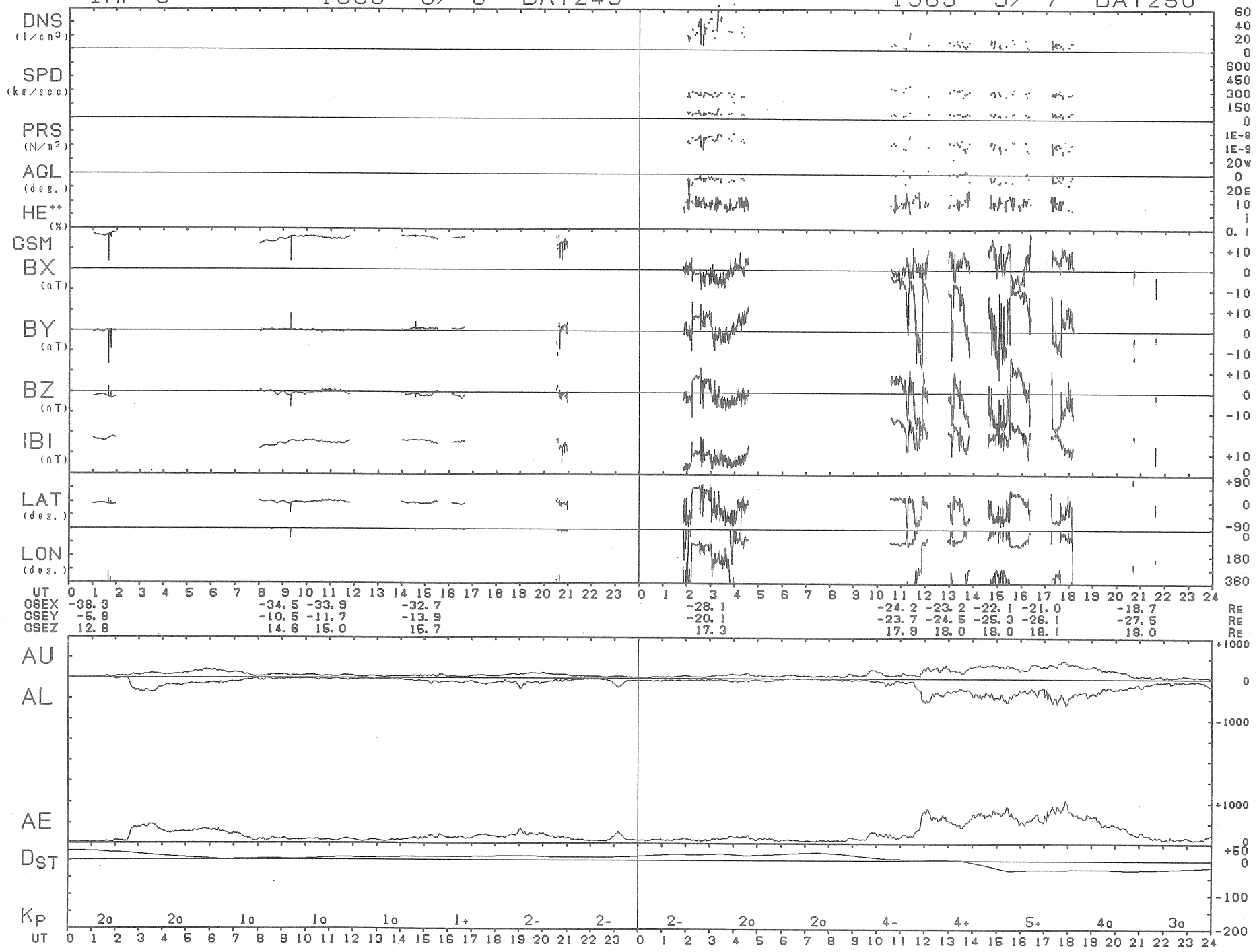

IMP-8 1983 8/27 DAY239
1983 8/28 DAY240
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.9 -1.5 -0.1 1.2 2.6 4.0 5.4 6.8 8.1 9.5 10.8 12.1 13.4 15.9 17.1 18.3 19.5 20.6 21.6 22.7 RE
GSEY -32.1 -32.2 -32.2 -32.2 -32.2 -32.1 -31.9 -31.7 -31.4 -31.1 -30.7 -30.3 -29.8 -28.7 -28.1 -27.4 -26.7 -25.9 -25.1 -24.2 RE
GSEZ 16.9 16.7 16.4 16.1 15.8 15.5 15.1 14.7 14.3 13.8 13.3 12.8 12.3 11.2 10.6 10.0 9.4 8.7 8.1 7.4 RE
AU
AL
AE
DST
KP
2+ 0+ 0+ 1- 2+ 2- 1+ 1- 3- 2o 1+ 2+ 2+ 1+ 3- 2-
UT

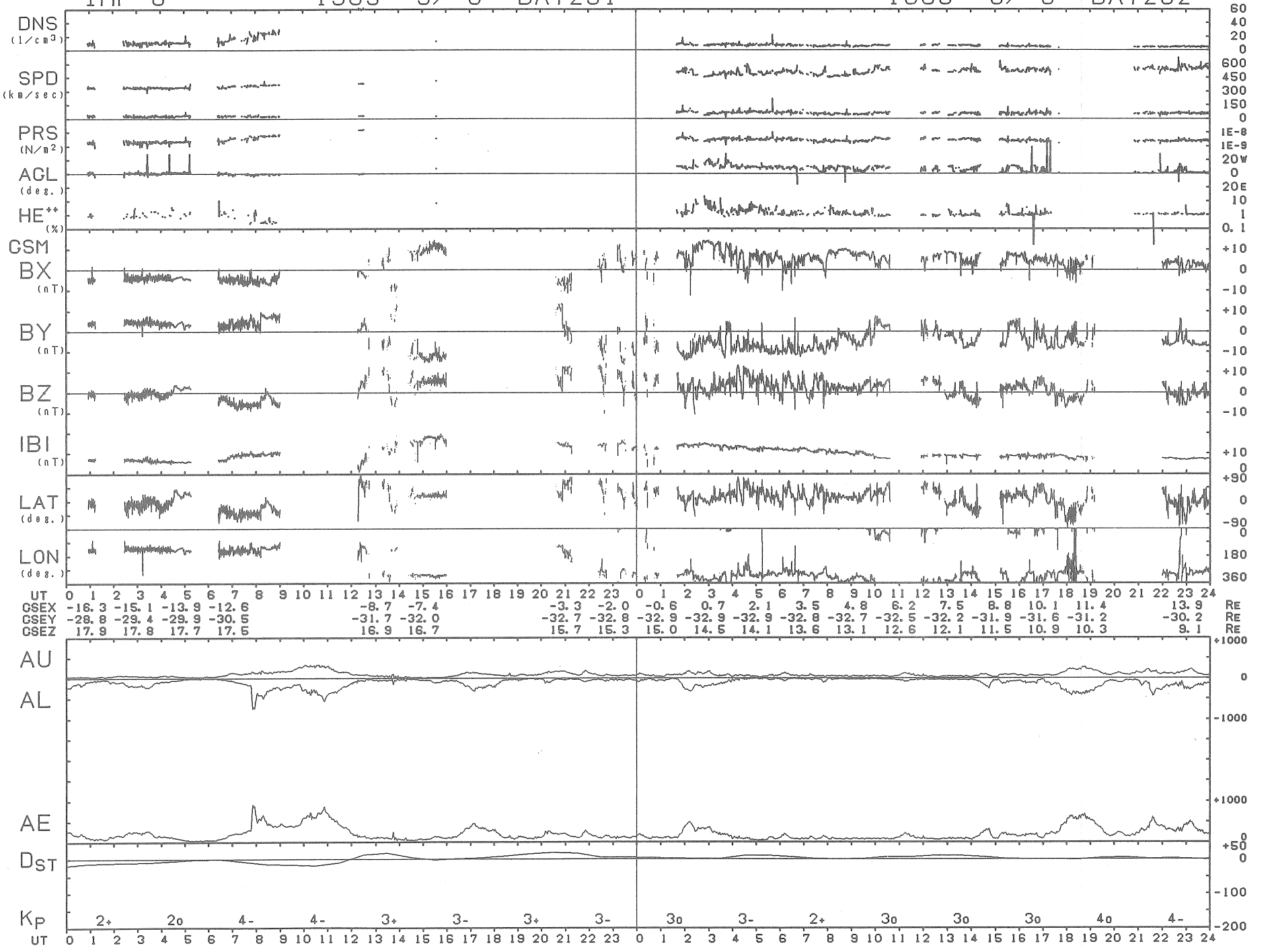

IMP-8
1983 8/29 DAY241
1983 8/30 DAY242
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.5 29.2 29.7 30.2 30.6 31.0 31.3 31.5 30.9 28.3 RE
GSEY -16.8 -15.6 -14.4 -13.1 -11.8 -10.5 -9.1 -7.8 3.6 10.5 RE
GSEZ 2.3 1.5 0.7 -0.0 -0.8 -1.6 -2.3 -3.1 -8.7 -11.7 RE
AU
AL
AE
DST
KP 3- 2+ 1+ 2+ 3o 3+ 4o 5- 4+ 4o 4- 2+ 3- 3o 3- 3+
UT

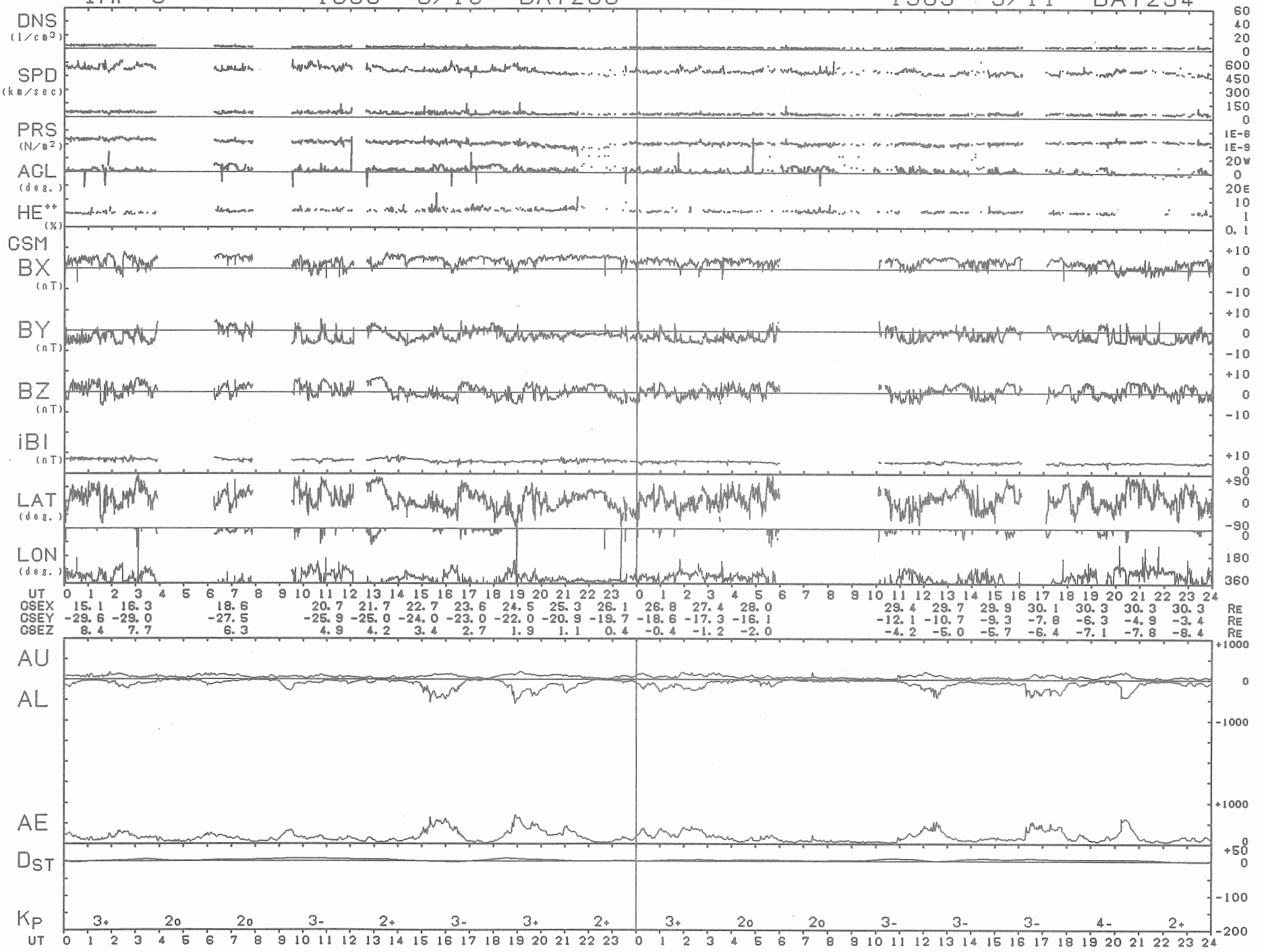

IMP-8 1983 8/31 DAY243
1983 9/ 1 DAY244
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.5 26.8 25.0 24.1 16.1 13.4 10.7 -0.9 RE
GSEY 11.8 13.1 15.7 16.9 24.2 25.9 27.4 31.0 RE
GSEZ -12.2 -12.6 -13.5 -13.9 -15.7 -15.8 -15.9 -14.8 RE
AU
AL
AE
DST
KP 5o 4- 4o 3+ 3- 5- 4+ 4+ 4+ 5- 2- 3- 2+ 2+ 3o 3-
UT

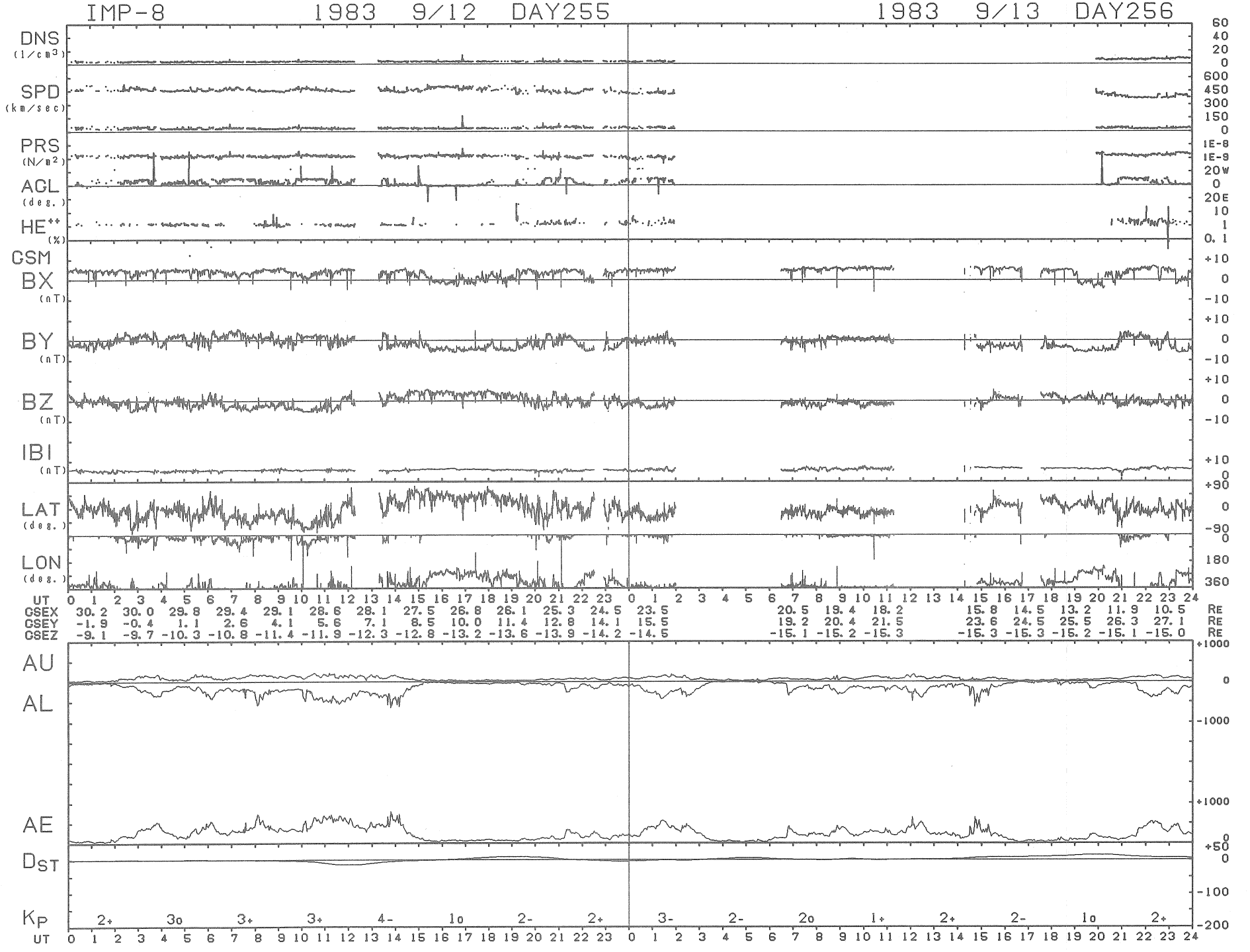

IMP-8
1983 9/ 2 DAY245
1983 9/ 3 DAY246
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.3 -29.4 -30.3 RE
GSEY 31.2 22.7 21.9 RE
GSEZ -14.5 -3.1 -2.4 RE
AU
AL
AE
DST
KP
2o 2- 1+ 1+ 1o 2o 2o 2+ 2o 2+ 2+ 1- 1+ 1+ 1o 0+

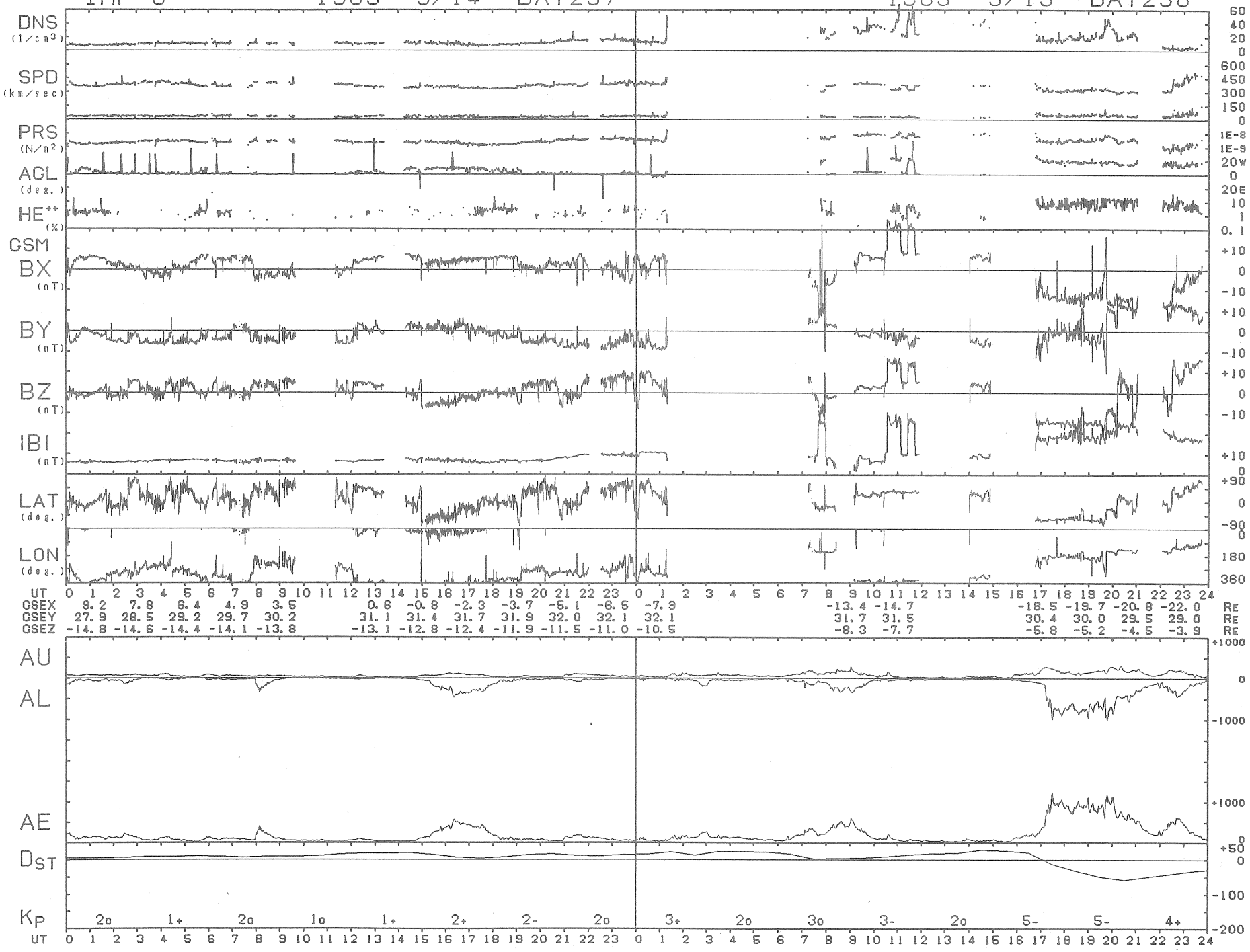

IMP-8
1983 9/ 4 DAY247
1983 9/ 5 DAY248
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.8 -37.5 -37.6 -37.6 -37.4 -37.3 RE
GSEY 9.5 4.8 3.6 2.4 0.0 -1.2 RE
GSEZ 5.5 8.0 8.6 9.2 10.3 10.8 RE
AU
AL
AE
DST
KP 1- 0o 0+ 1- 0+ 0+ 1+ 2- 2- 0+ 0o 0o 1o 1o 1+ 2-
UT

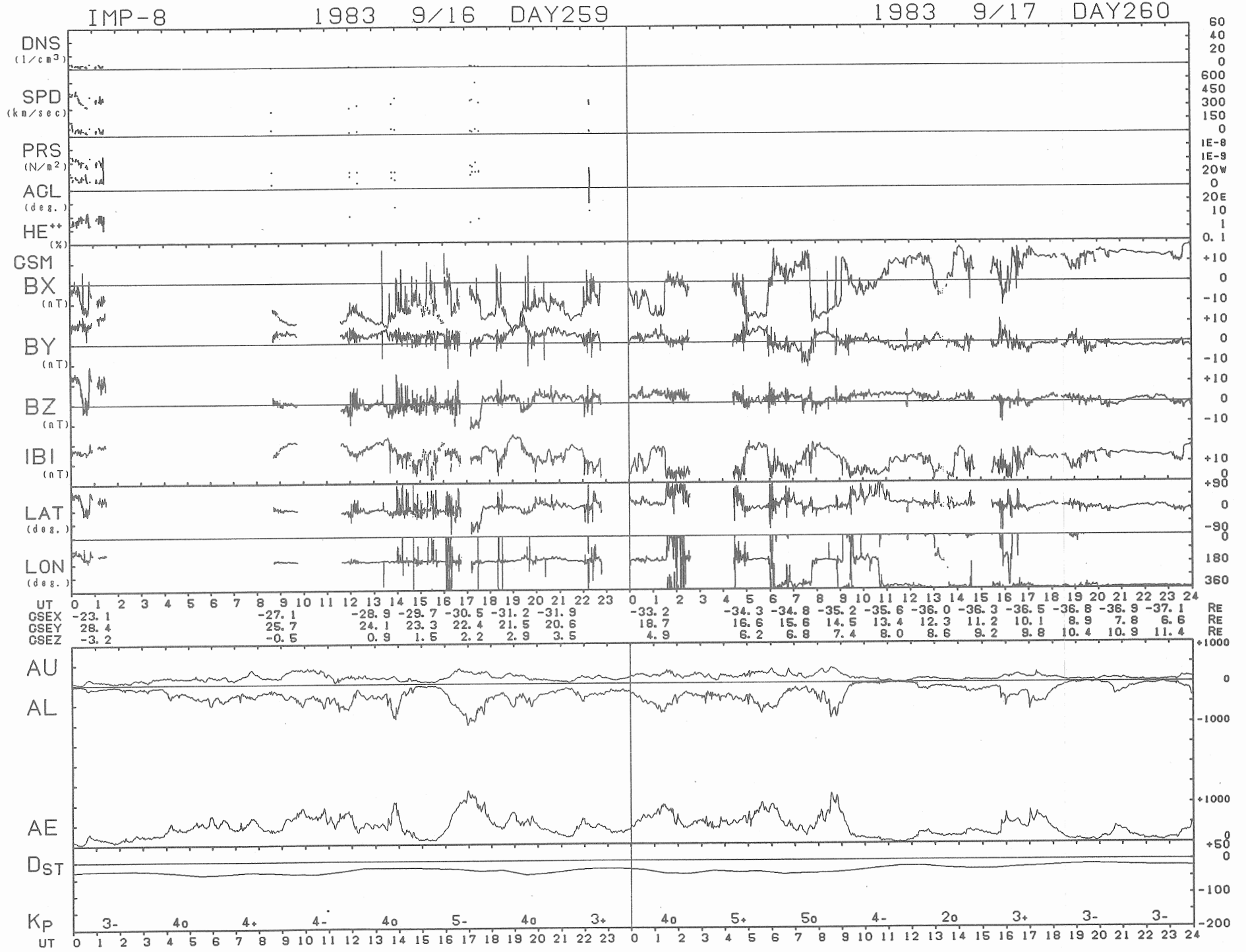

IMP-8
1983 9/ 6 DAY249
1983 9/ 7 DAY250
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.3 -34.5 -33.9 -32.7 -28.1 -24.2 -23.2 -22.1 -21.0 -18.7 RE
GSEY -5.9 -10.5 -11.7 -13.9 -20.1 -23.7 -24.5 -25.3 -26.1 -27.5 RE
GSEZ 12.8 14.6 15.0 15.7 17.3 17.9 18.0 18.0 18.1 18.0 RE
AU
AL
AE
DST
KP
2o 2o 1o 1o 1o 1+ 2- 2- 2- 2o 2o 4- 4+ 5+ 4o 3o
UT

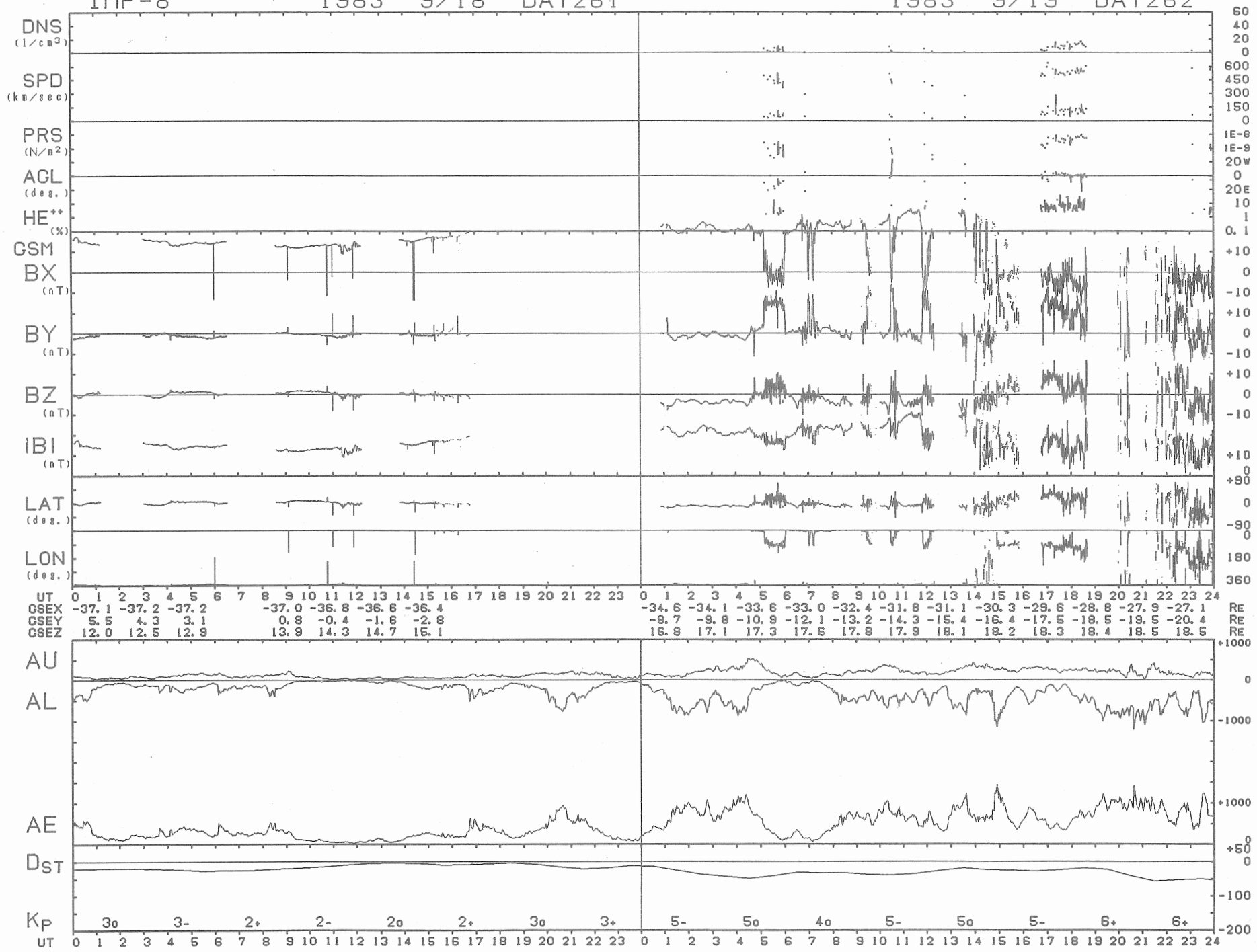

IMP-8 1983 9/ 8 DAY251
1983 9/ 9 DAY252
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.3 -15.1 -13.9 -12.6 -8.7 -7.4 -3.3 -2.0 -0.6 0.7 2.1 3.5 4.8 6.2 7.5 8.8 10.1 11.4 13.9 RE
GSEY -28.8 -29.4 -29.9 -30.5 -31.7 -32.0 -32.7 -32.8 -32.9 -32.9 -32.9 -32.8 -32.7 -32.5 -32.2 -31.9 -31.6 -31.2 -30.2 RE
GSEZ 17.9 17.8 17.7 17.5 16.9 16.7 15.7 15.3 15.0 14.5 14.1 13.6 13.1 12.6 12.1 11.5 10.9 10.3 9.1 RE
AU
AL
AE
DST
KP
2+ 2o 4- 4- 3+ 3- 3+ 3- 3o 3- 2+ 3o 3o 3o 4o 4-
UT

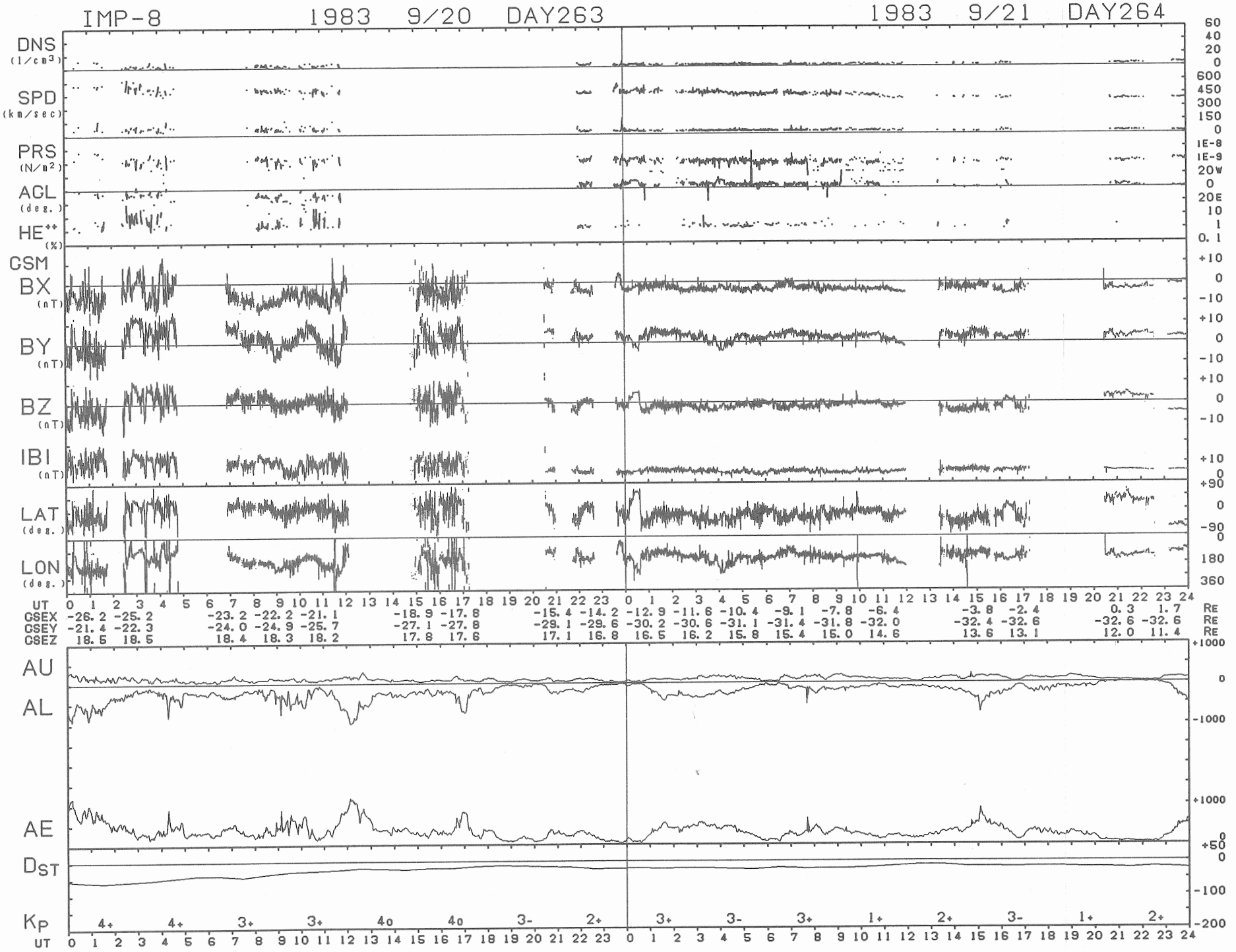

IMP-8
1983 9/10 DAY253
1983 9/11 DAY254
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
Dst
Kp

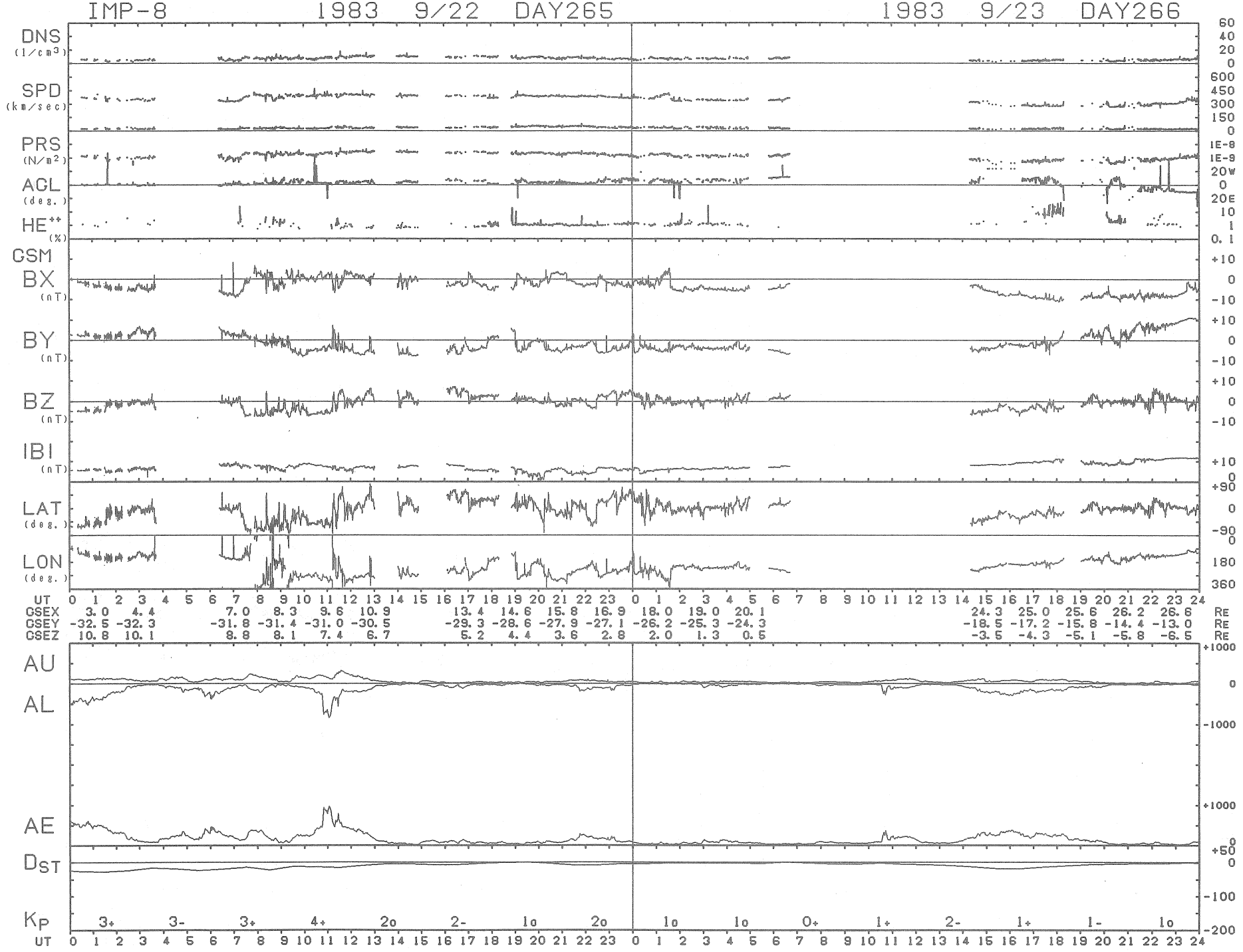

IMP-8 1983 9/12 DAY255
1983 9/13 DAY256
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.2 30.0 29.8 29.4 29.1 28.6 28.1 27.5 26.8 26.1 25.3 24.5 23.5 20.5 19.4 18.2 15.8 14.5 13.2 11.9 10.5 RE
GSEY -1.9 -0.4 1.1 2.6 4.1 5.6 7.1 8.5 10.0 11.4 12.8 14.1 15.5 19.2 20.4 21.5 23.6 24.5 25.5 26.3 27.1 RE
GSEZ -9.1 -9.7 -10.3 -10.8 -11.4 -11.9 -12.3 -12.8 -13.2 -13.6 -13.9 -14.2 -14.5 -15.1 -15.2 -15.3 -15.3 -15.3 -15.2 -15.1 -15.0 RE
AU
AL
AE
DST
KP 2+ 3o 3+ 3+ 4- 1o 2- 2+ 3- 2- 2o 1+ 2+ 2- 1o 2+
UT

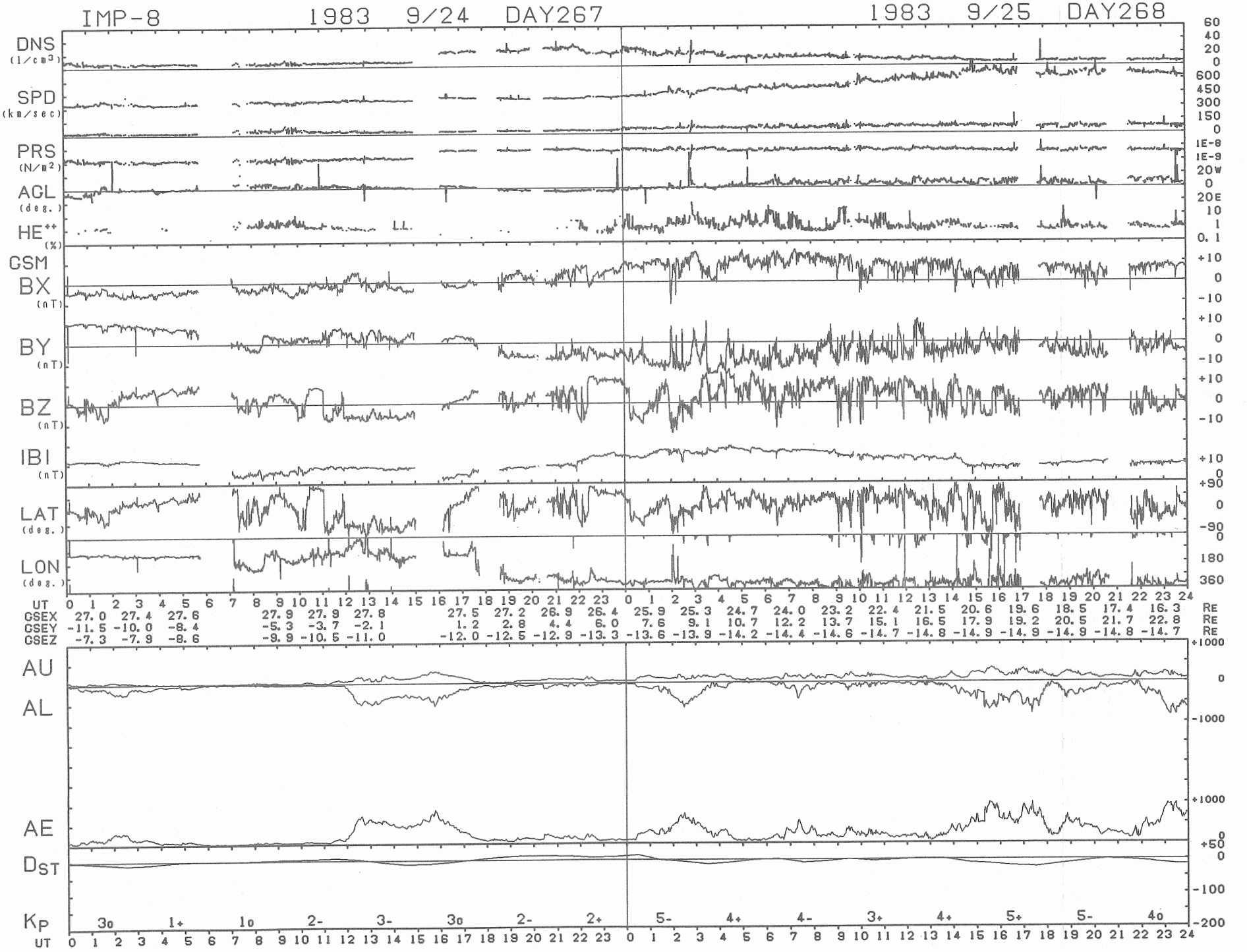

IMP-8 1983 9/14 DAY257
1983 9/15 DAY258
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 9.2 7.8 6.4 4.9 3.5 0.6 -0.8 -2.3 -3.7 -5.1 -6.5 -7.9 -13.4 -14.7 -18.5 -19.7 -20.8 -22.0 RE
GSEY 27.9 28.5 29.2 29.7 30.2 31.1 31.4 31.7 31.9 32.0 32.1 32.1 31.7 31.5 30.4 30.0 29.5 29.0 RE
GSEZ -14.8 -14.6 -14.4 -14.1 -13.8 -13.1 -12.8 -12.4 -11.9 -11.5 -11.0 -10.5 -8.3 -7.7 -5.8 -5.2 -4.5 -3.9 RE
AU
AL
AE
DST
KP
2o 1+ 2o 1o 1+ 2+ 2- 2o 3+ 2o 3o 3- 2o 5- 5- 4+
UT

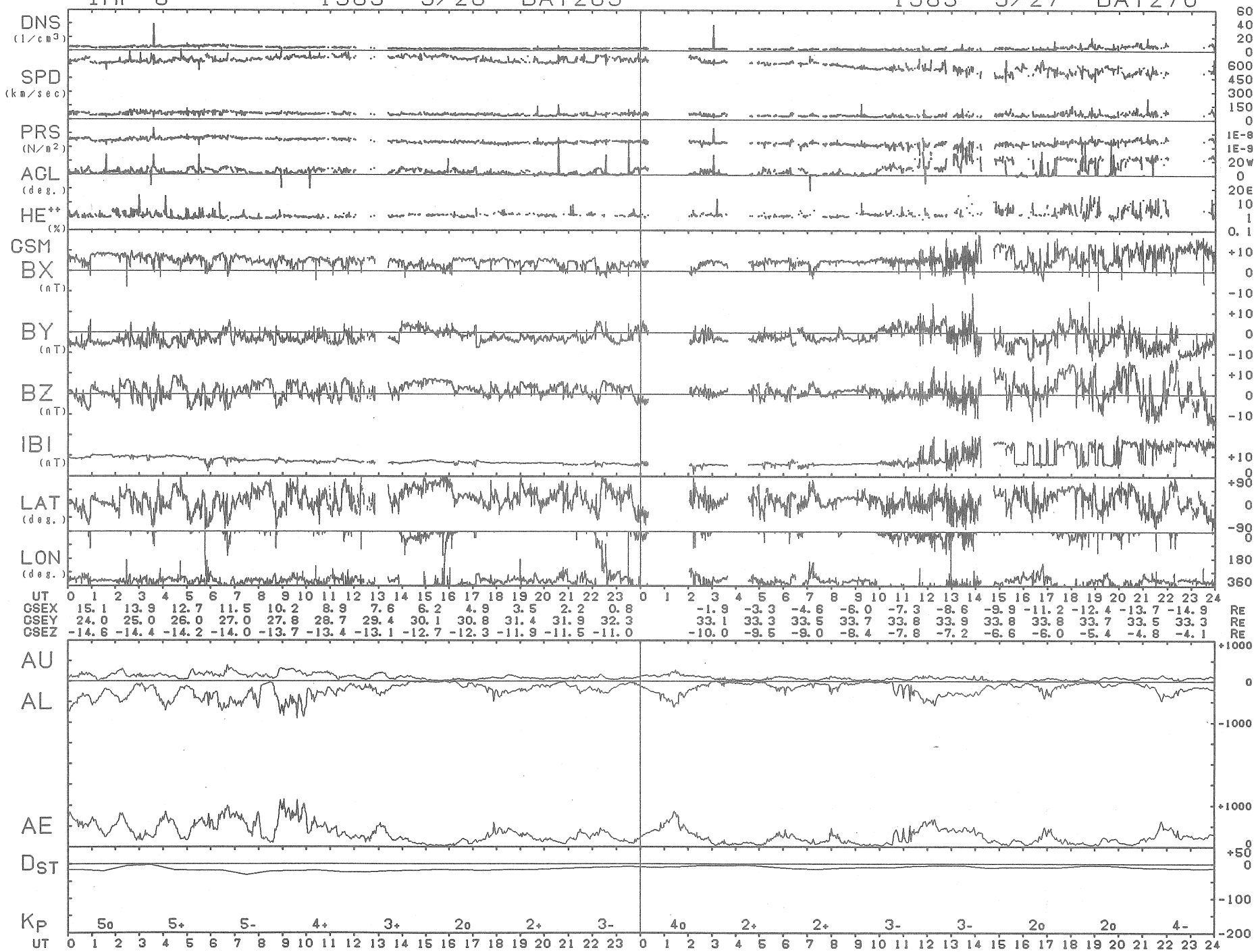

IMP-8 1983 9/16 DAY259
1983 9/17 DAY260
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.1 -27.1 -28.9 -29.7 -30.5 -31.2 -31.9 -33.2 -34.3 -34.8 -35.2 -35.6 -36.0 -36.3 -36.5 -36.8 -36.9 -37.1 RE
GSEY 28.4 25.7 24.1 23.3 22.4 21.5 20.6 18.7 16.6 15.6 14.5 13.4 12.3 11.2 10.1 8.9 7.8 6.6 RE
GSEZ -3.2 -0.5 0.9 1.5 2.2 2.9 3.5 4.9 6.2 6.8 7.4 8.0 8.6 9.2 9.8 10.4 10.9 11.4 RE
AU
AL
AE
DST
KP 3- 4o 4+ 4- 4o 5- 4o 3+ 4o 5+ 5o 4- 2o 3+ 3- 3-
UT

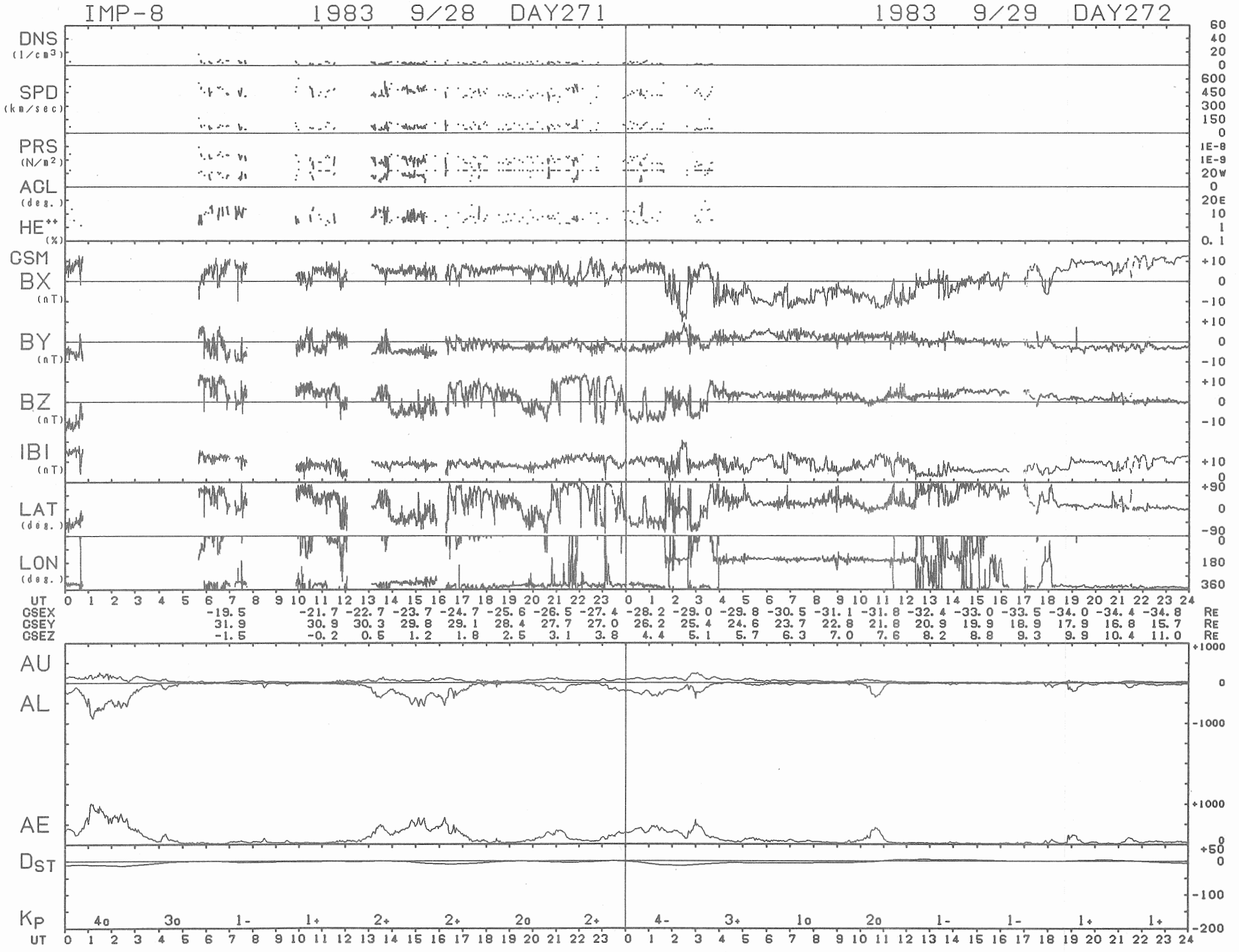

IMP-8 1983 9/18 DAY261 1983 9/19 DAY262
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.1 -37.2 -37.2 -37.0 -36.8 -36.6 -36.4 -34.6 -34.1 -33.6 -33.0 -32.4 -31.8 -31.1 -30.3 -29.6 -28.8 -27.9 -27.1 RE
GSEY 5.5 4.3 3.1 0.8 -0.4 -1.6 -2.8 -8.7 -9.8 -10.9 -12.1 -13.2 -14.3 -15.4 -16.4 -17.5 -18.5 -19.5 -20.4 RE
GSEZ 12.0 12.5 12.9 13.9 14.3 14.7 15.1 16.8 17.1 17.3 17.6 17.8 17.9 18.1 18.2 18.3 18.4 18.5 18.5 RE
AU
AL
AE
DST
KP 3o 3- 2+ 2- 2o 2+ 3o 3+ 5- 5o 4o 5- 5o 5- 6+ 6+
UT

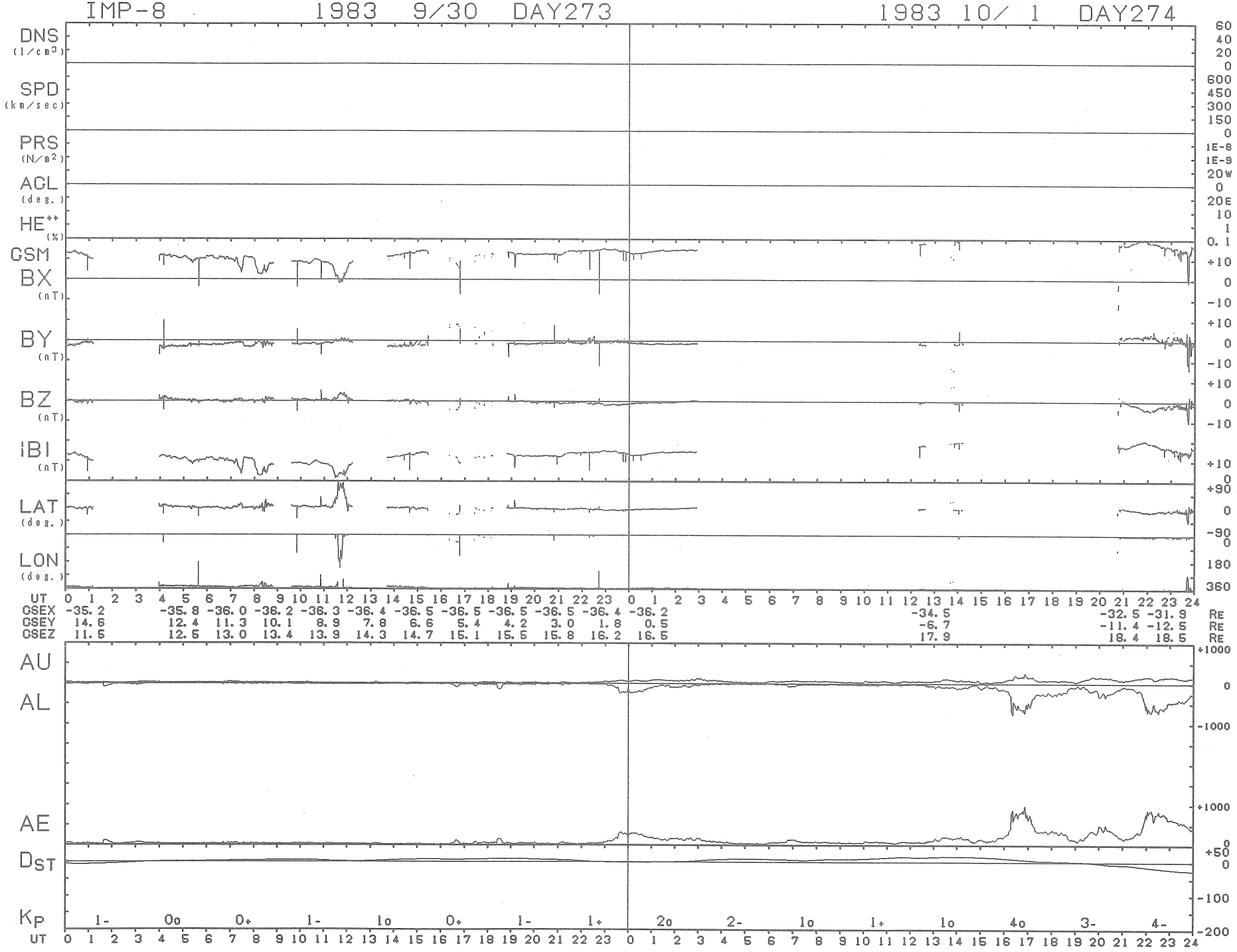

IMP-8 1983 9/20 DAY263
1983 9/21 DAY264
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.2 -25.2 -23.2 -22.2 -21.1 -18.9 -17.8 -15.4 -14.2 -12.9 -11.6 -10.4 -9.1 -7.8 -6.4 -3.8 -2.4 0.3 1.7 RE
GSEY -21.4 -22.3 -24.0 -24.9 -25.7 -27.1 -27.8 -29.1 -29.6 -30.2 -30.6 -31.1 -31.4 -31.8 -32.0 -32.4 -32.6 -32.6 -32.6 RE
GSEZ 18.5 18.5 18.4 18.3 18.2 17.8 17.6 17.1 16.8 16.5 16.2 15.8 15.4 15.0 14.6 13.6 13.1 12.0 11.4 RE
AU
AL
AE
DST
KP
4+ 4+ 3+ 3+ 4o 4o 3- 2+ 3+ 3- 3+ 1+ 2+ 3- 1+ 2+
UT

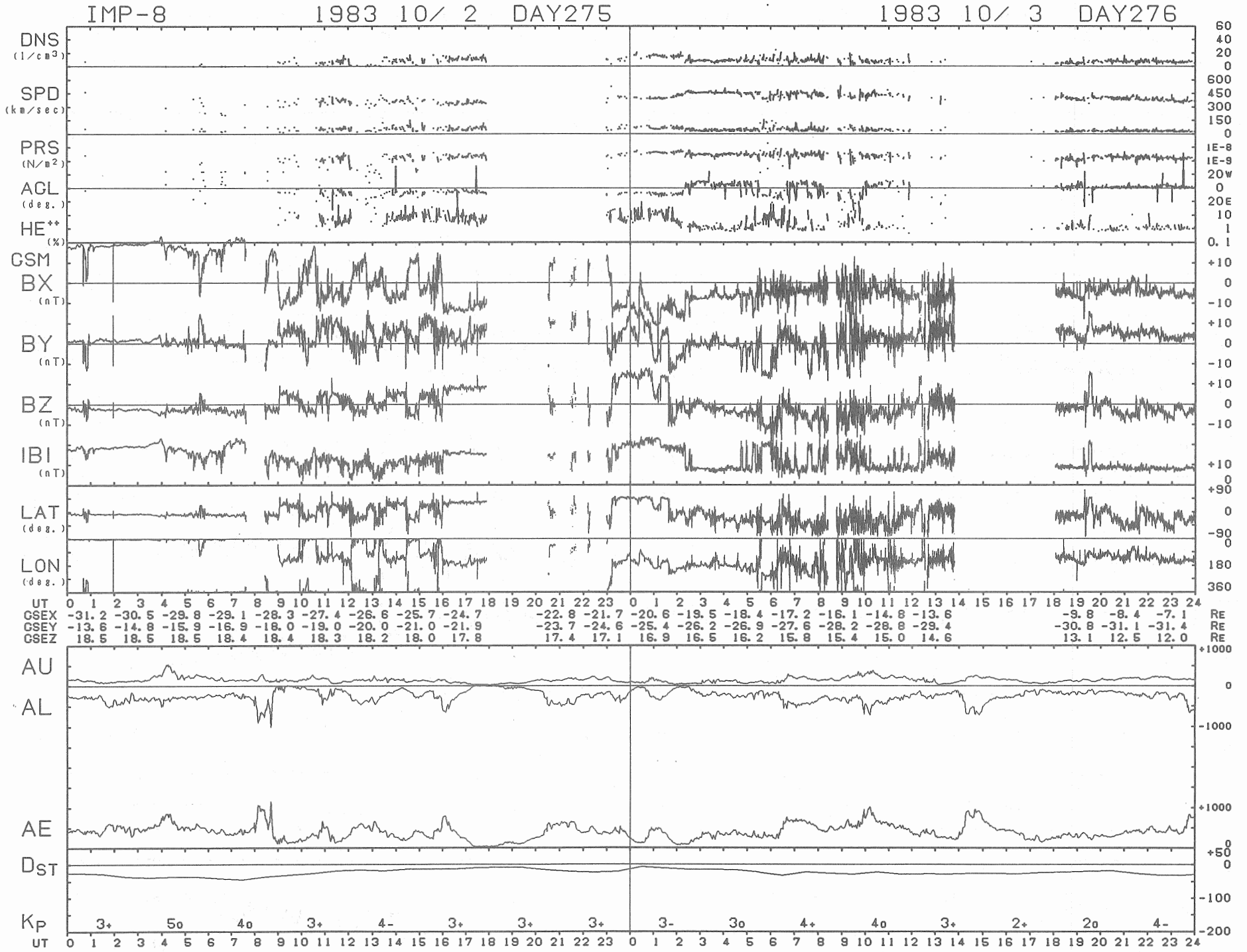

IMP-8
1983 9/22 DAY265
1983 9/23 DAY266
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.0 4.4 7.0 8.3 9.6 10.9 13.4 14.6 15.8 16.9 18.0 19.0 20.1 24.3 25.0 25.6 26.2 26.6 RE
GSEY -32.5 -32.3 -31.8 -31.4 -31.0 -30.5 -29.3 -28.6 -27.9 -27.1 -26.2 -25.3 -24.3 -18.5 -17.2 -15.8 -14.4 -13.0 RE
GSEZ 10.8 10.1 8.8 8.1 7.4 6.7 5.2 4.4 3.6 2.8 2.0 1.3 0.5 -3.5 -4.3 -5.1 -5.8 -6.5 RE
AU
AL
AE
DST
KP 3+ 3- 3+ 4+ 2o 2- 1o 2o 1o 1o 0+ 1+ 2- 1+ 1- 1o
UT

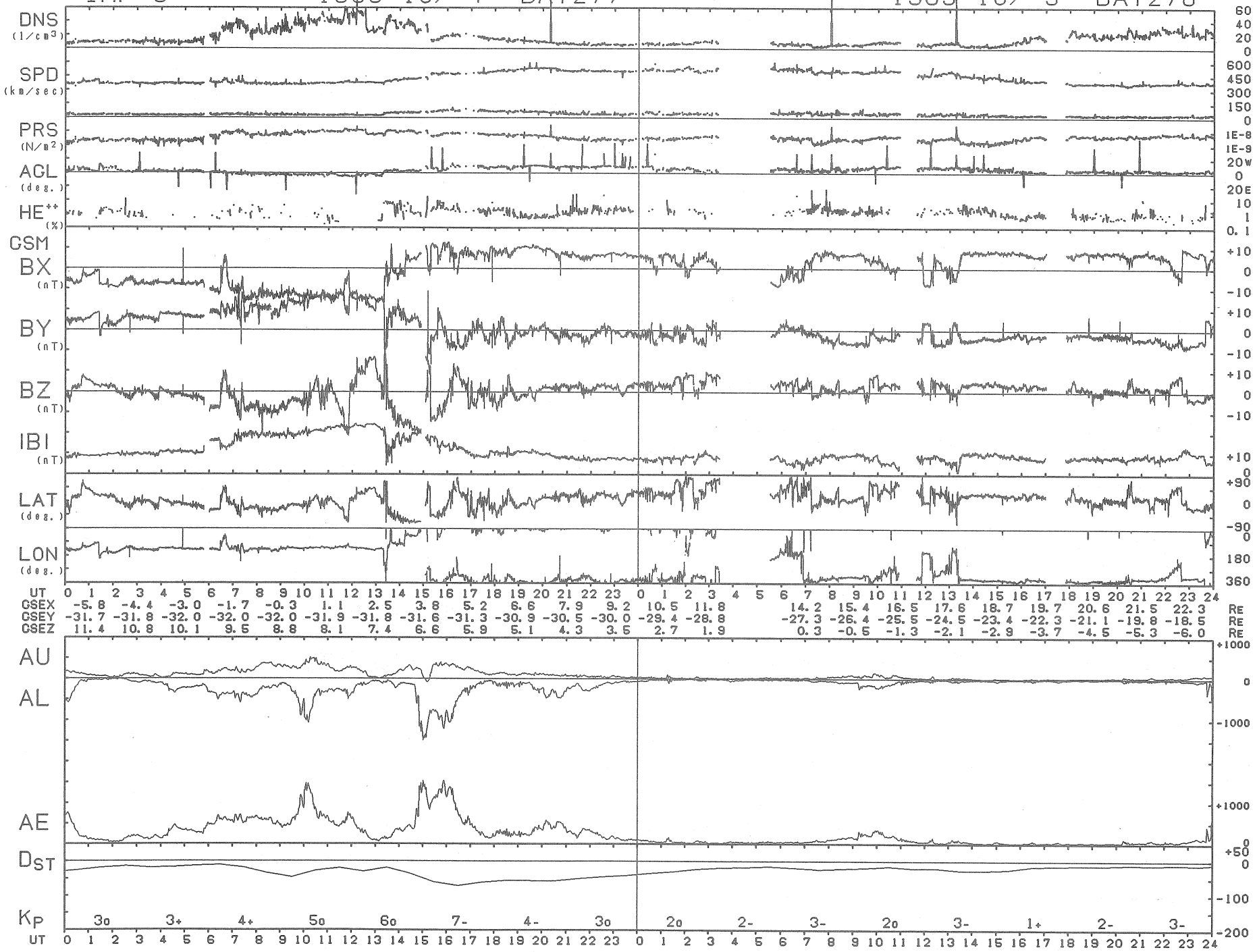

IMP-8 1983 9/24 DAY267
1983 9/25 DAY268
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.0 27.4 27.6 27.9 27.9 27.8 27.5 27.2 26.9 26.4 25.9 25.3 24.7 24.0 23.2 22.4 21.5 20.6 19.6 18.5 17.4 16.3 RE
GSEY -11.5 -10.0 -8.4 -5.3 -3.7 -2.1 1.2 2.8 4.4 6.0 7.6 9.1 10.7 12.2 13.7 15.1 16.5 17.9 19.2 20.5 21.7 22.8 RE
GSEZ -7.3 -7.9 -8.6 -9.9 -10.5 -11.0 -12.0 -12.5 -12.9 -13.3 -13.6 -13.9 -14.2 -14.4 -14.6 -14.7 -14.8 -14.9 -14.9 -14.9 -14.8 -14.7 RE
AU
AL
AE
DST
KP
3o 1+ 1o 2- 3- 3o 2- 2+ 5- 4+ 4- 3+ 4+ 5+ 5- 4o
UT

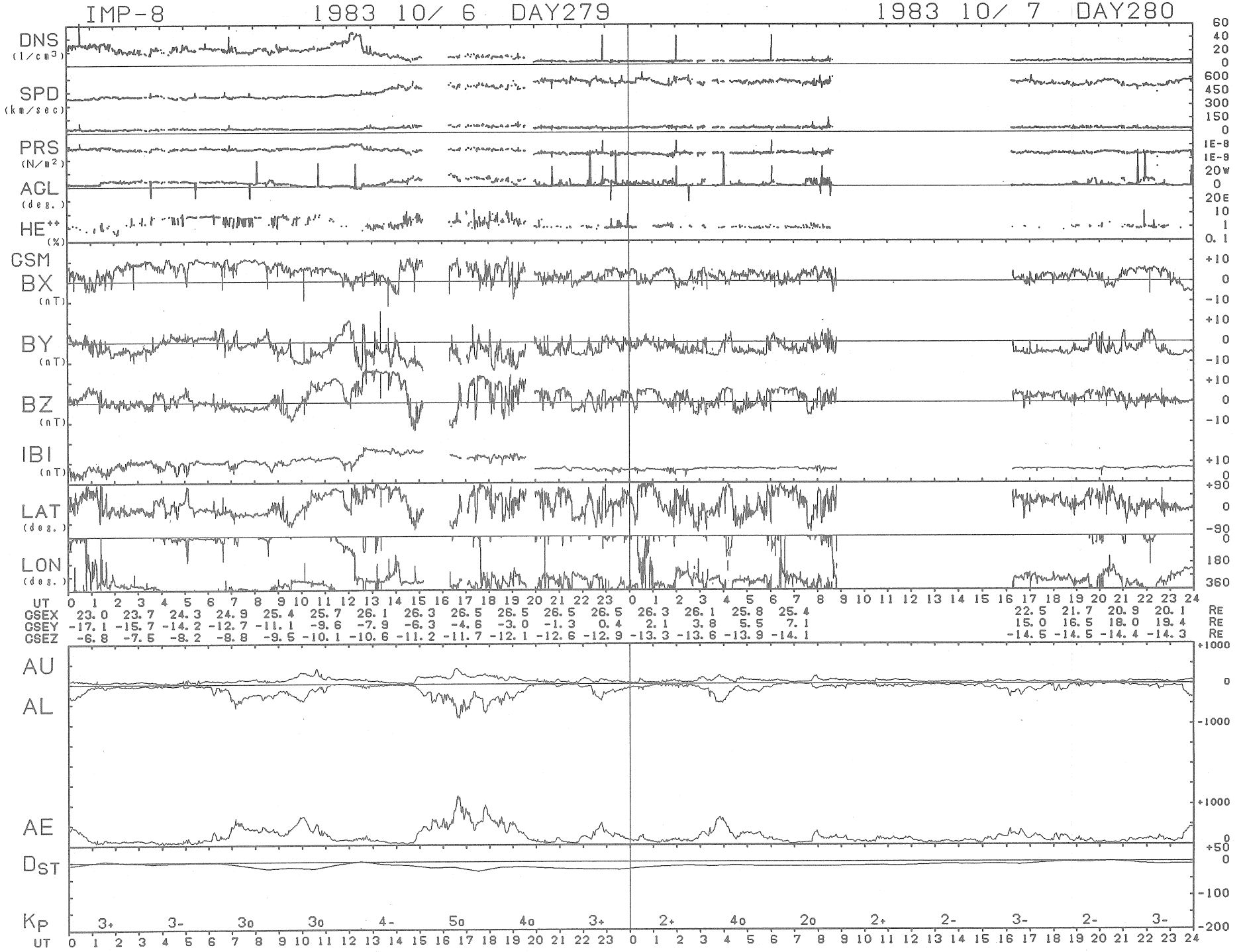

IMP-8 1983 9/26 DAY269
1983 9/27 DAY270
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.1 13.9 12.7 11.5 10.2 8.9 7.6 6.2 4.9 3.5 2.2 0.8 -1.9 -3.3 -4.6 -6.0 -7.3 -8.6 -9.9 -11.2 -12.4 -13.7 -14.9 RE
GSEY 24.0 25.0 26.0 27.0 27.8 28.7 29.4 30.1 30.8 31.4 31.9 32.3 33.1 33.3 33.5 33.7 33.8 33.9 33.8 33.8 33.7 33.5 33.3 RE
GSEZ -14.6 -14.4 -14.2 -14.0 -13.7 -13.4 -13.1 -12.7 -12.3 -11.9 -11.5 -11.0 -10.0 -9.5 -9.0 -8.4 -7.8 -7.2 -6.6 -6.0 -5.4 -4.8 -4.1 RE
AU
AL
AE
DST
KP 5o 5+ 5- 4+ 3+ 2o 2+ 3- 4o 2+ 2+ 3- 3- 2o 2o 4-
UT

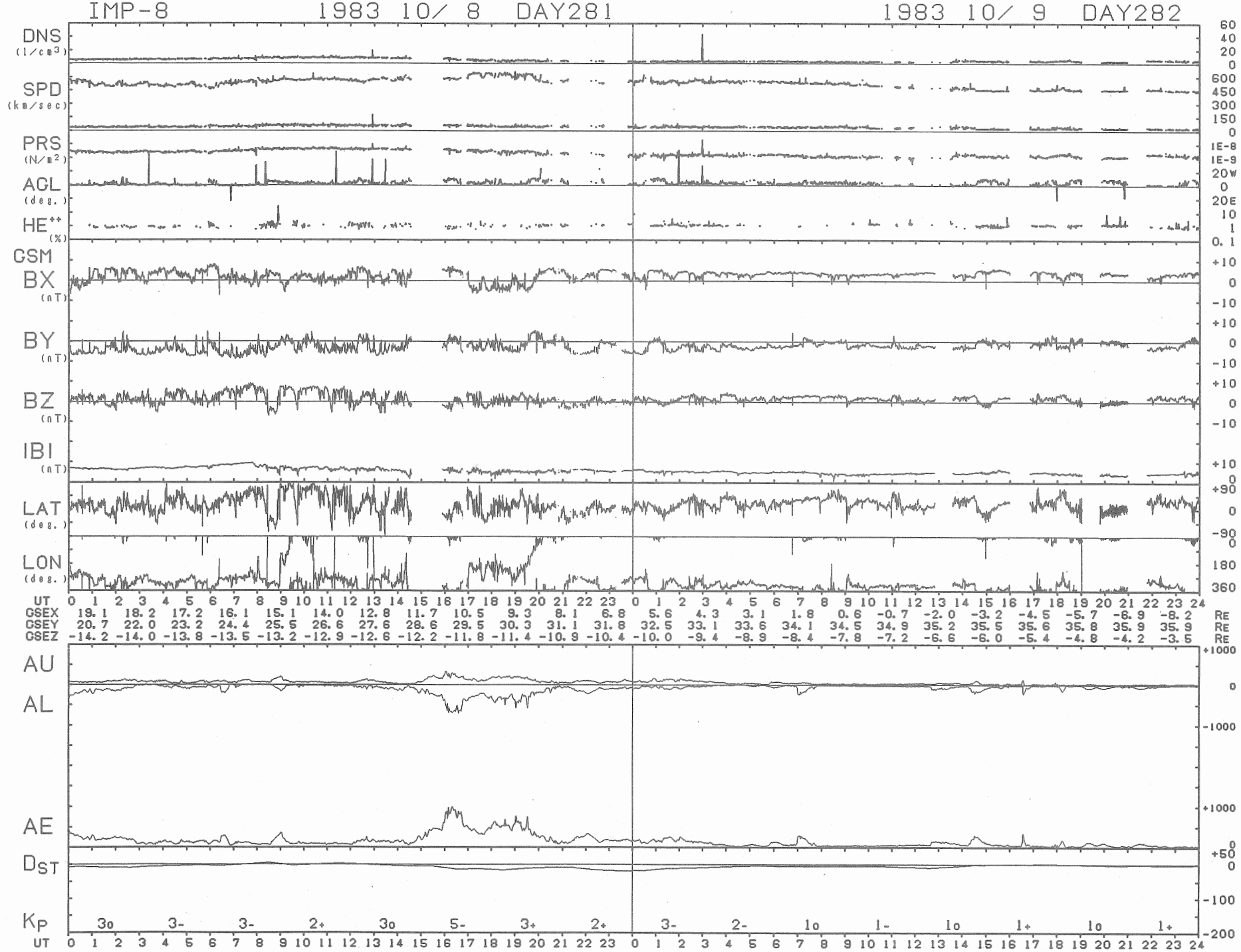

IMP-8 1983 9/28 DAY271
1983 9/29 DAY272
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -19.5 -21.7 -22.7 -23.7 -24.7 -25.6 -26.5 -27.4 -28.2 -29.0 -29.8 -30.5 -31.1 -31.8 -32.4 -33.0 -33.5 -34.0 -34.4 -34.8 RE
GSEY 31.9 30.9 30.3 29.8 29.1 28.4 27.7 27.0 26.2 25.4 24.6 23.7 22.8 21.8 20.9 19.9 18.9 17.9 16.8 15.7 RE
GSEZ -1.5 -0.2 0.5 1.2 1.8 2.5 3.1 3.8 4.4 5.1 5.7 6.3 7.0 7.6 8.2 8.8 9.3 9.9 10.4 11.0 RE
AU
AL
AE
DST
KP 4o 3o 1- 1+ 2+ 2+ 2o 2+ 4- 3+ 1o 2o 1- 1- 1+ 1+
UT

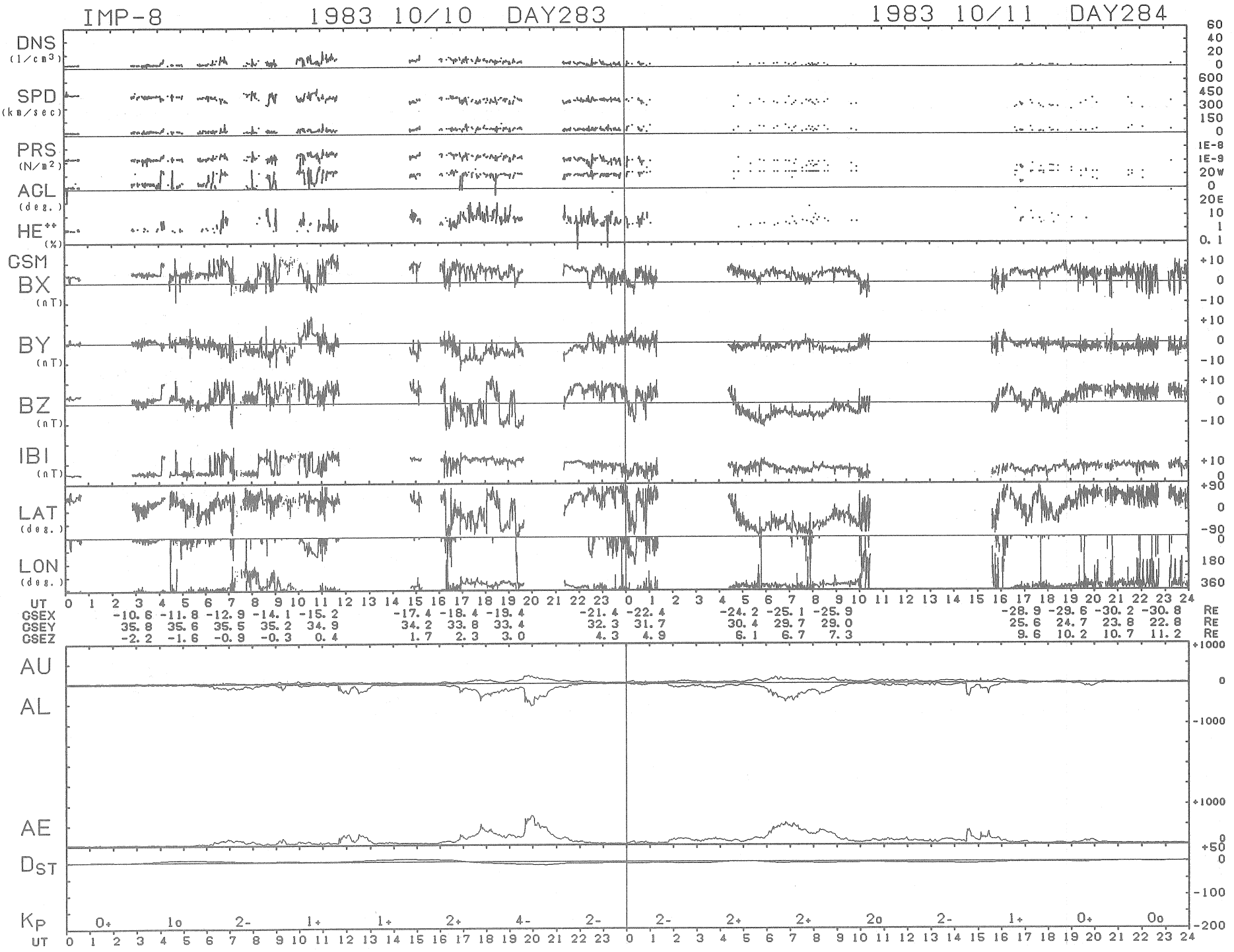

IMP-8 1983 9/30 DAY273
1983 10/ 1 DAY274
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.2 -35.8 -36.0 -36.2 -36.3 -36.4 -36.5 -36.5 -36.5 -36.5 -36.4 -36.2 -34.5 -32.5 -31.9 RE
GSEY 14.6 12.4 11.3 10.1 8.9 7.8 6.6 5.4 4.2 3.0 1.8 0.5 -6.7 -11.4 -12.5 RE
GSEZ 11.5 12.5 13.0 13.4 13.9 14.3 14.7 15.1 15.5 15.8 16.2 16.5 17.9 18.4 18.5 RE
AU
AL
AE
DST
KP 1- 0o 0+ 1- 1o 0+ 1- 1+ 2o 2- 1o 1+ 1o 4o 3- 4-
UT

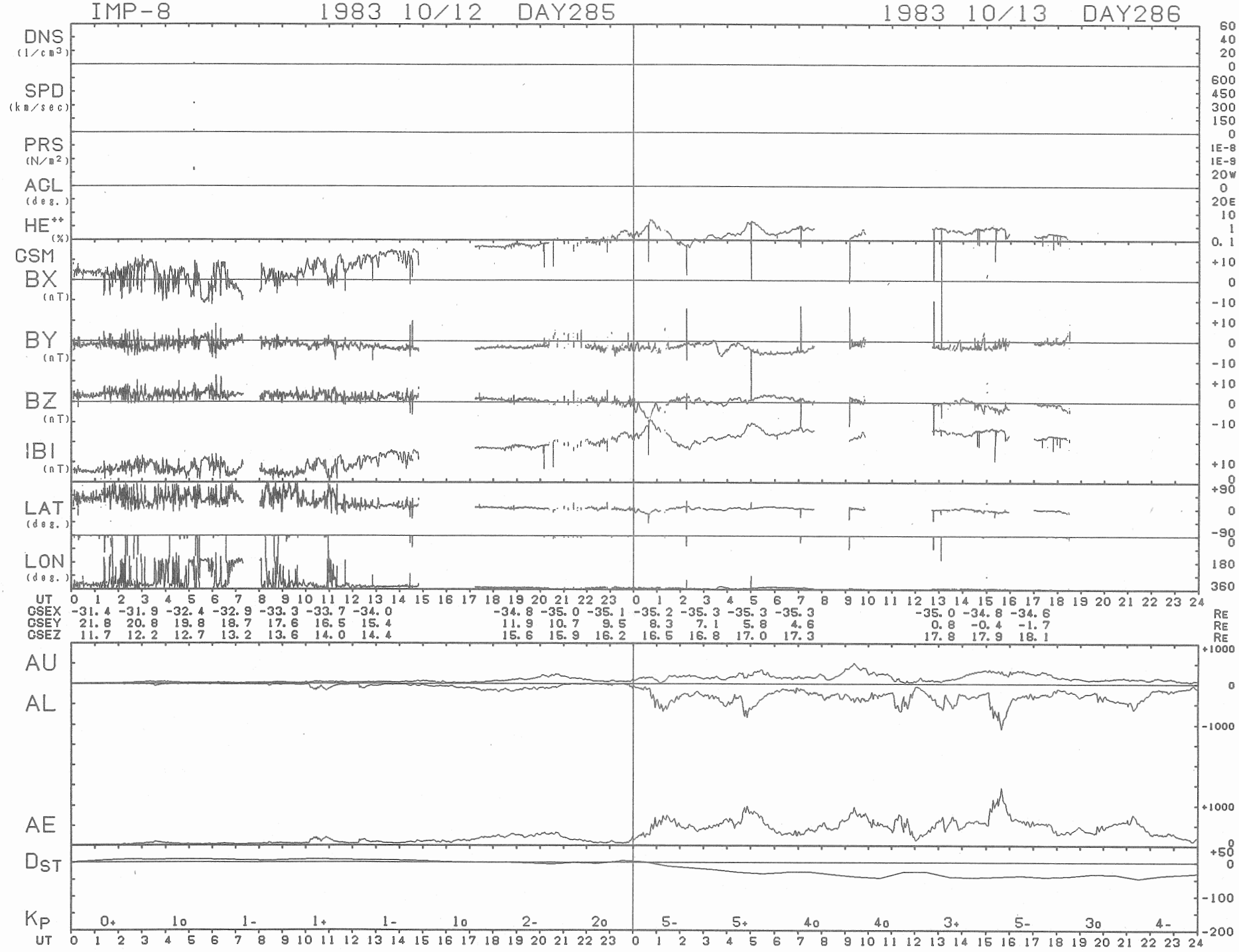

IMP-8
1983 10/ 2 DAY275
1983 10/ 3 DAY276
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.2 -30.5 -29.8 -29.1 -28.3 -27.4 -26.6 -25.7 -24.7 -22.8 -21.7 -20.6 -19.5 -18.4 -17.2 -16.1 -14.8 -13.6 -9.8 -8.4 -7.1 RE
GSEY -13.6 -14.8 -15.9 -16.9 -18.0 -19.0 -20.0 -21.0 -21.9 -23.7 -24.6 -25.4 -26.2 -26.9 -27.6 -28.2 -28.8 -29.4 -30.8 -31.1 -31.4 RE
GSEZ 18.5 18.5 18.5 18.4 18.4 18.3 18.2 18.0 17.8 17.4 17.1 16.9 16.5 16.2 15.8 15.4 15.0 14.6 13.1 12.5 12.0 RE
AU
AL
AE
DST
KP
3+ 5o 4o 3+ 4- 3+ 3+ 3+ 3- 3o 4+ 4o 3+ 2+ 2o 4-
UT

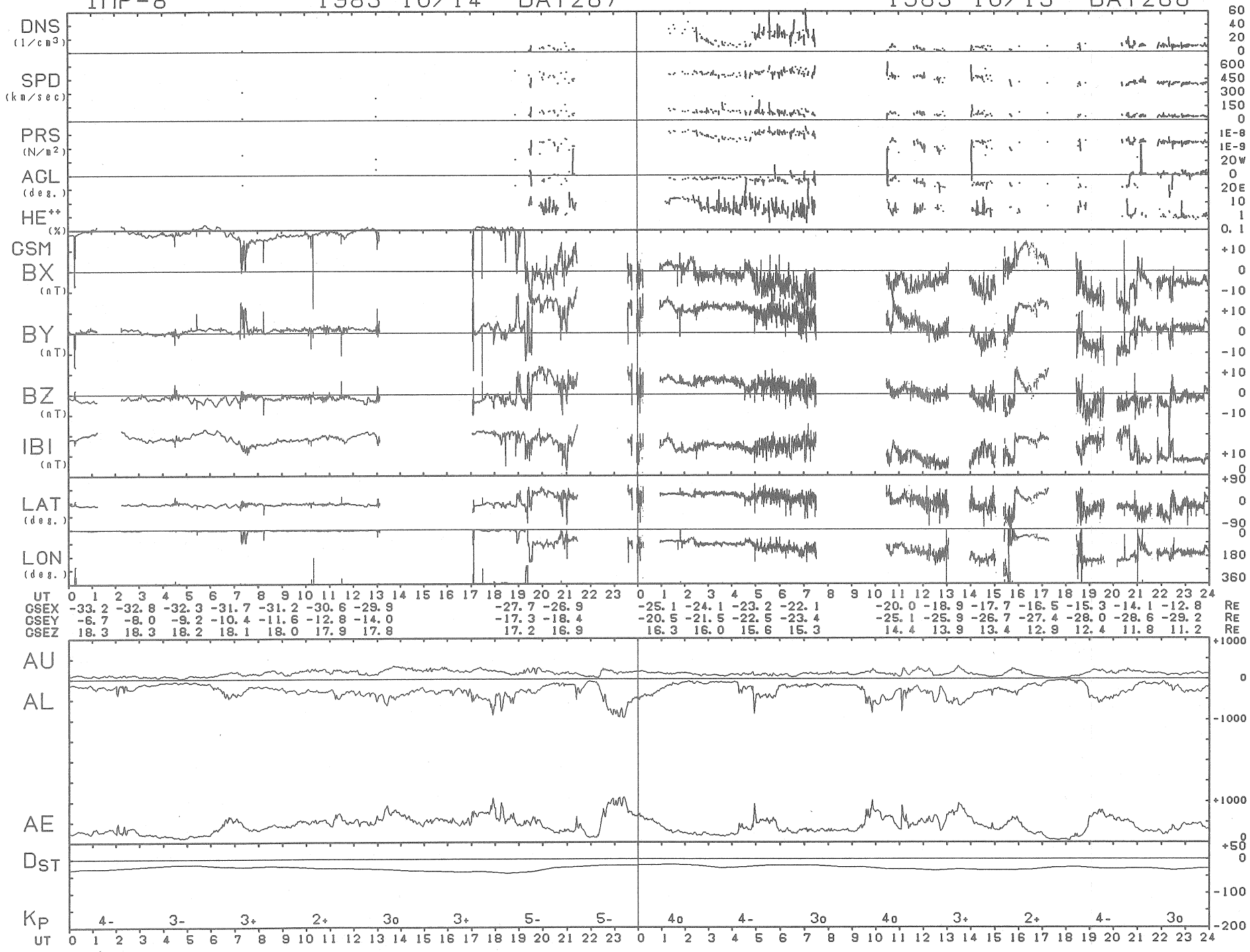

IMP-8
1983 10/ 4 DAY277
1983 10/ 5 DAY278
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.8 -4.4 -3.0 -1.7 -0.3 1.1 2.5 3.8 5.2 6.6 7.9 9.2 10.5 11.8 14.2 15.4 16.5 17.6 18.7 19.7 20.6 21.5 22.3 RE
GSEY -31.7 -31.8 -32.0 -32.0 -32.0 -31.9 -31.8 -31.6 -31.3 -30.9 -30.5 -30.0 -29.4 -28.8 -27.3 -26.4 -25.5 -24.5 -23.4 -22.3 -21.1 -19.8 -18.5 RE
GSEZ 11.4 10.8 10.1 9.5 8.8 8.1 7.4 6.6 5.9 5.1 4.3 3.5 2.7 1.9 0.3 -0.5 -1.3 -2.1 -2.9 -3.7 -4.5 -5.3 -6.0 RE
AU
AL
AE
DST
KP 3o 3+ 4+ 5o 6o 7- 4- 3o 2o 2- 3- 2o 3- 1+ 2- 3-
UT

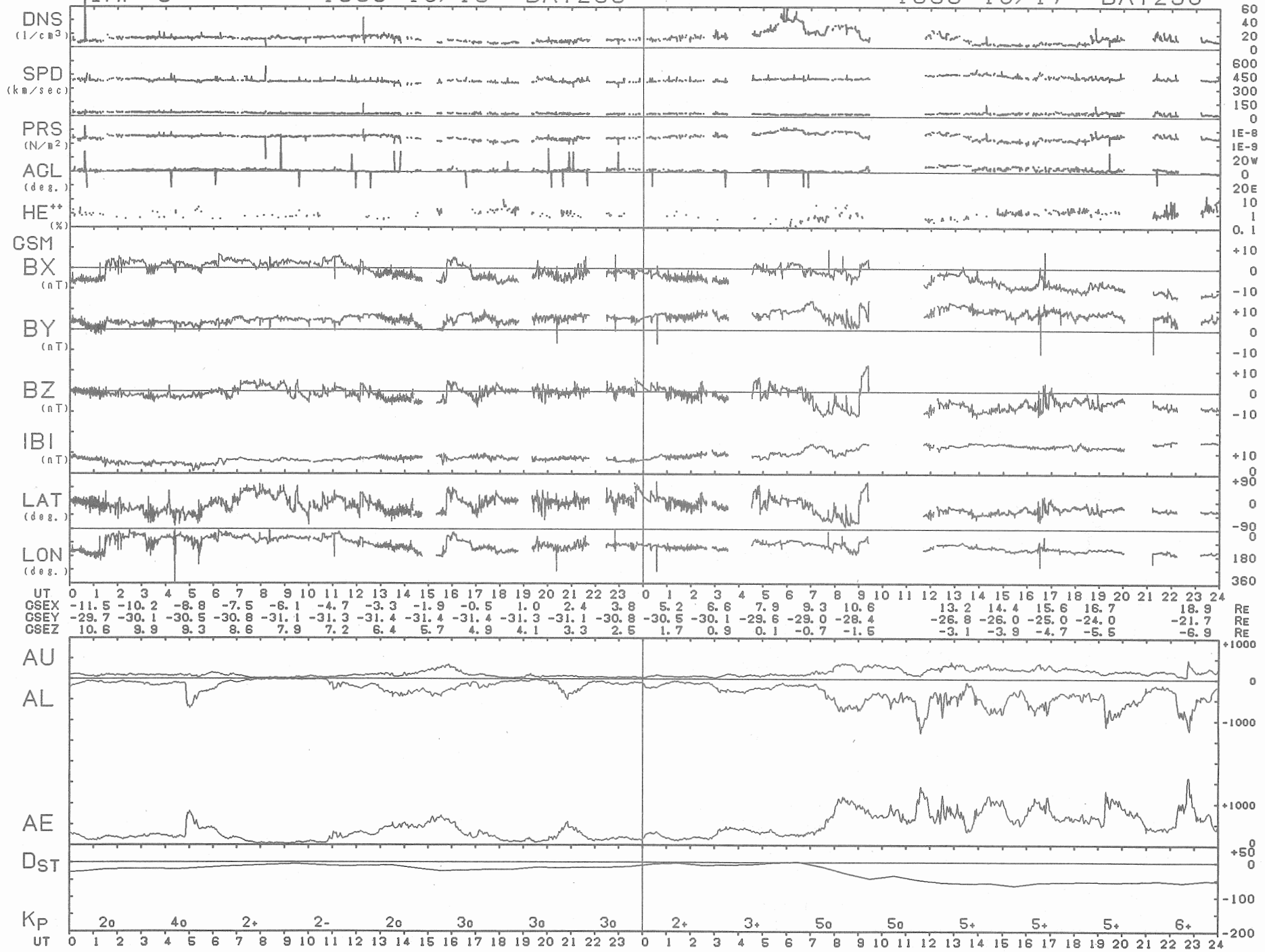

IMP-8
1983 10/ 6 DAY279
1983 10/ 7 DAY280
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.0 23.7 24.3 24.9 25.4 25.7 26.1 26.3 26.5 26.5 26.5 26.5 26.3 26.1 25.8 25.4 22.5 21.7 20.9 20.1 RE
GSEY -17.1 -15.7 -14.2 -12.7 -11.1 -9.6 -7.9 -6.3 -4.6 -3.0 -1.3 0.4 2.1 3.8 5.5 7.1 15.0 16.5 18.0 19.4 RE
GSEZ -6.8 -7.5 -8.2 -8.8 -9.5 -10.1 -10.6 -11.2 -11.7 -12.1 -12.6 -12.9 -13.3 -13.6 -13.9 -14.1 -14.5 -14.5 -14.4 -14.3 RE
AU
AL
AE
DST
KP 3+ 3- 3o 3o 4- 5o 4o 3+ 2+ 4o 2o 2+ 2- 3- 2- 3-
UT

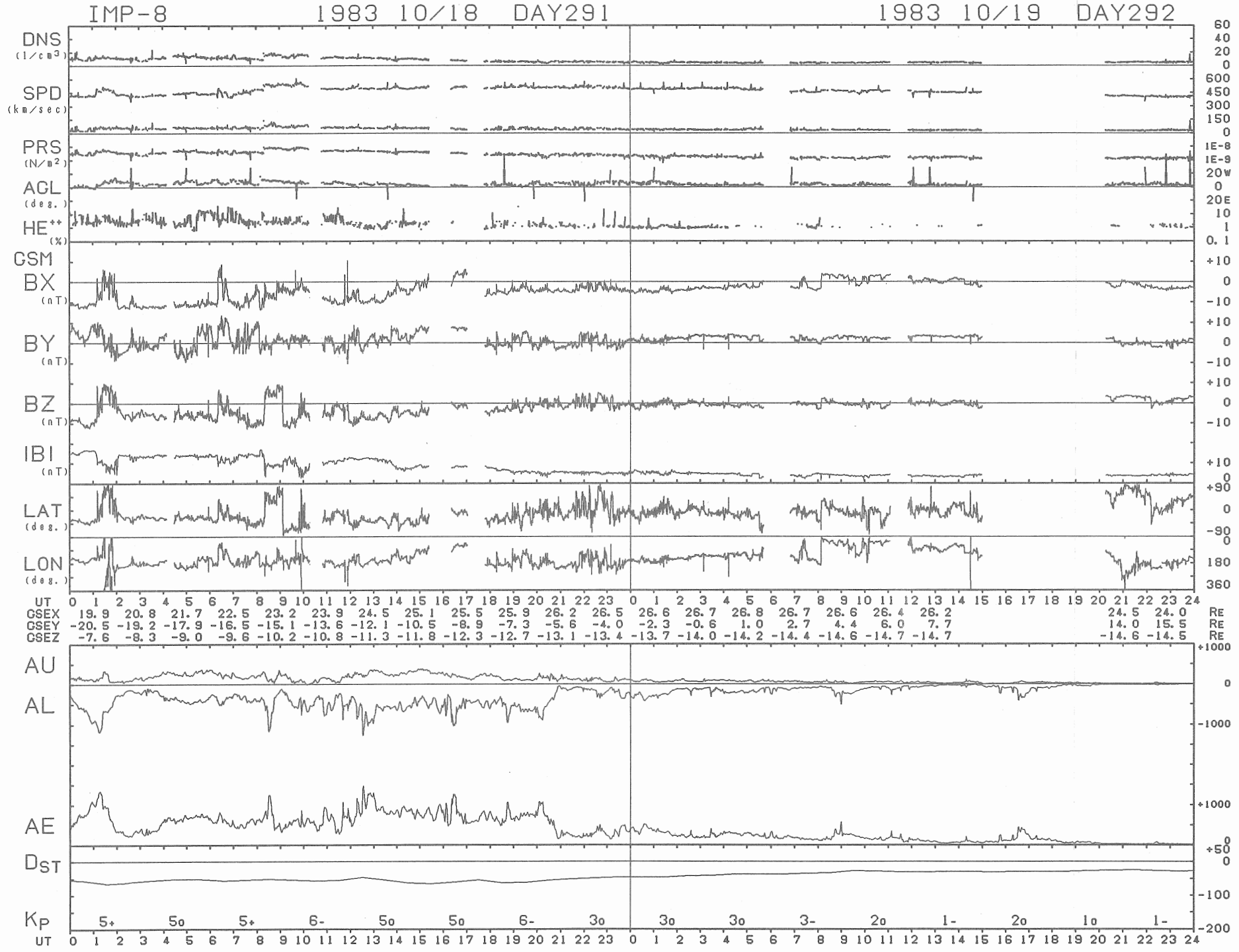

IMP-8
1983 10/ 8 DAY281
1983 10/ 9 DAY282
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.1 18.2 17.2 16.1 15.1 14.0 12.8 11.7 10.5 9.3 8.1 6.8 5.6 4.3 3.1 1.8 0.6 -0.7 -2.0 -3.2 -4.5 -5.7 -6.9 -8.2 RE
GSEY 20.7 22.0 23.2 24.4 25.5 26.6 27.6 28.6 29.5 30.3 31.1 31.8 32.5 33.1 33.6 34.1 34.5 34.9 35.2 35.5 35.6 35.8 35.9 35.9 RE
GSEZ -14.2 -14.0 -13.8 -13.5 -13.2 -12.9 -12.6 -12.2 -11.8 -11.4 -10.9 -10.4 -10.0 -9.4 -8.9 -8.4 -7.8 -7.2 -6.6 -6.0 -5.4 -4.8 -4.2 -3.5 RE
AU
AL
AE
DST
KP 3o 3- 3- 2+ 3o 5- 3+ 2+ 3- 2- 1o 1- 1o 1+ 1o 1+
UT

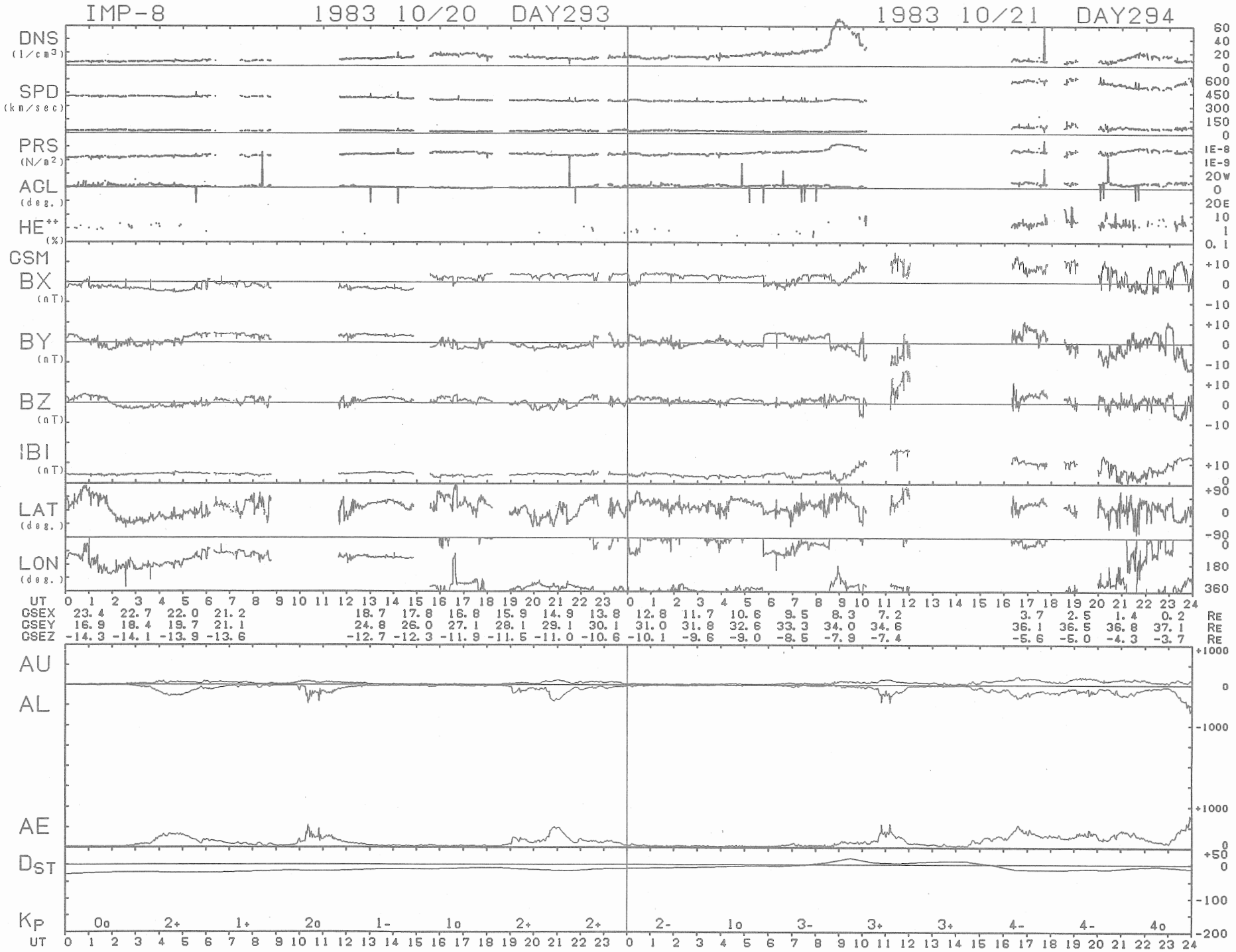

IMP-8
1983 10/10 DAY283
1983 10/11 DAY284
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.6 -11.8 -12.9 -14.1 -15.2 -17.4 -18.4 -19.4 -21.4 -22.4 -24.2 -25.1 -25.9 -28.9 -29.6 -30.2 -30.8 RE
GSEY 35.8 35.6 35.5 35.2 34.9 34.2 33.8 33.4 32.3 31.7 30.4 29.7 29.0 25.6 24.7 23.8 22.8 RE
GSEZ -2.2 -1.6 -0.9 -0.3 0.4 1.7 2.3 3.0 4.3 4.9 6.1 6.7 7.3 9.6 10.2 10.7 11.2 RE
AU
AL
AE
DST
KP
0+ 1o 2- 1+ 1+ 2+ 4- 2- 2- 2+ 2+ 2o 2- 1+ 0+ 0o
UT

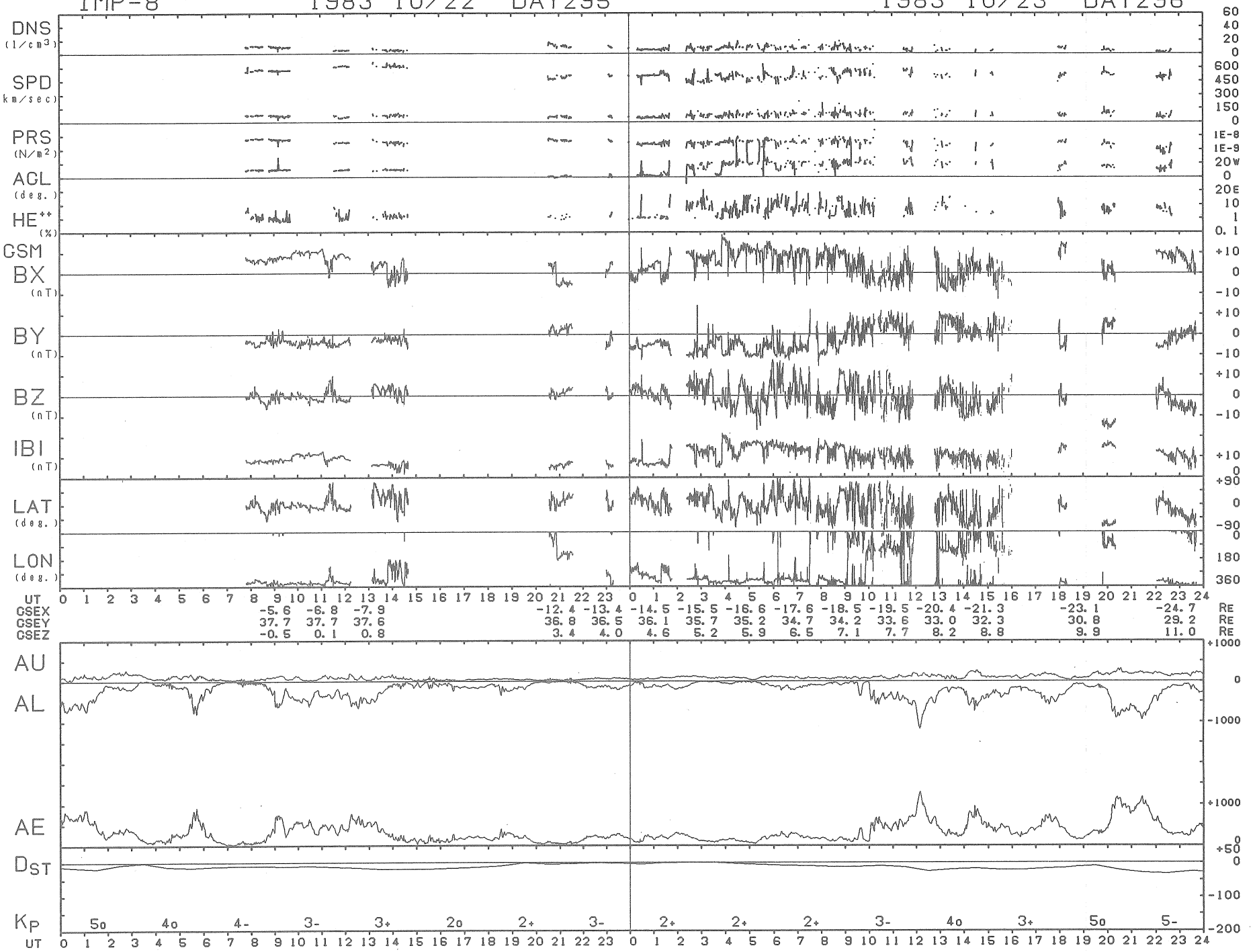

IMP-8
1983 10/12 DAY285
1983 10/13 DAY286
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.4 -31.9 -32.4 -32.9 -33.3 -33.7 -34.0 -34.8 -35.0 -35.1 -35.2 -35.3 -35.3 -35.3 -35.0 -34.8 -34.6 RE
GSEY 21.8 20.8 19.8 18.7 17.6 16.5 15.4 11.9 10.7 9.5 8.3 7.1 5.8 4.6 0.8 -0.4 -1.7 RE
GSEZ 11.7 12.2 12.7 13.2 13.6 14.0 14.4 15.6 15.9 16.2 16.5 16.8 17.0 17.3 17.8 17.9 18.1 RE
AU
AL
AE
DST
KP
0+ 1o 1- 1+ 1- 1o 2- 2o 5- 5+ 4o 4o 3+ 5- 3o 4-
UT

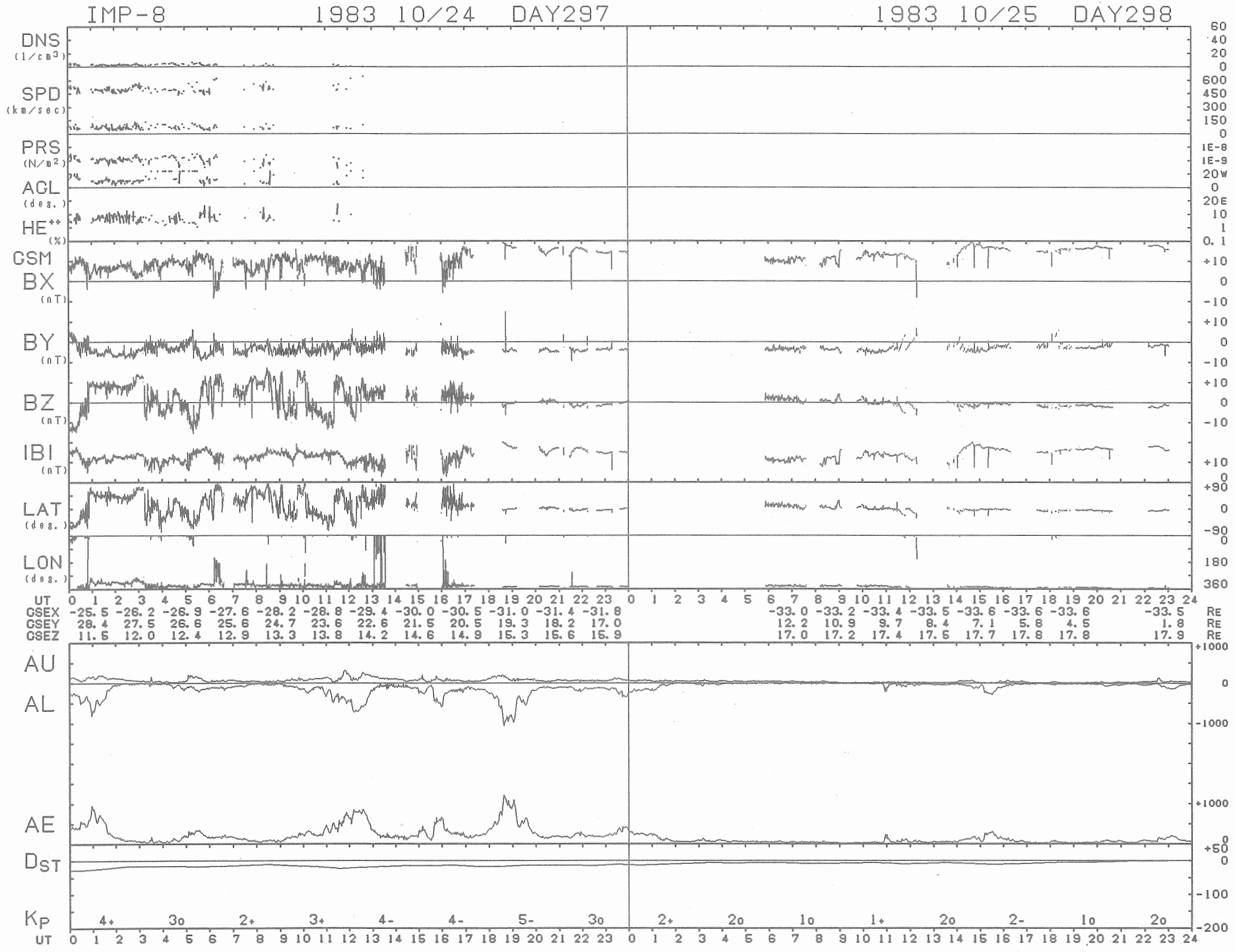

IMP-8
1983 10/14 DAY287
1983 10/15 DAY288
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.2 -32.8 -32.3 -31.7 -31.2 -30.6 -29.9 -27.7 -26.9 -25.1 -24.1 -23.2 -22.1 -20.0 -18.9 -17.7 -16.5 -15.3 -14.1 -12.8 RE
GSEY -6.7 -8.0 -9.2 -10.4 -11.6 -12.8 -14.0 -17.3 -18.4 -20.5 -21.5 -22.5 -23.4 -25.1 -25.9 -26.7 -27.4 -28.0 -28.6 -29.2 RE
GSEZ 18.3 18.3 18.2 18.1 18.0 17.9 17.8 17.2 16.9 16.3 16.0 15.6 15.3 14.4 13.9 13.4 12.9 12.4 11.8 11.2 RE
AU
AL
AE
DST
KP
4- 3- 3+ 2+ 3o 3+ 5- 5- 4o 4- 3o 4o 3+ 2+ 4- 3o
UT

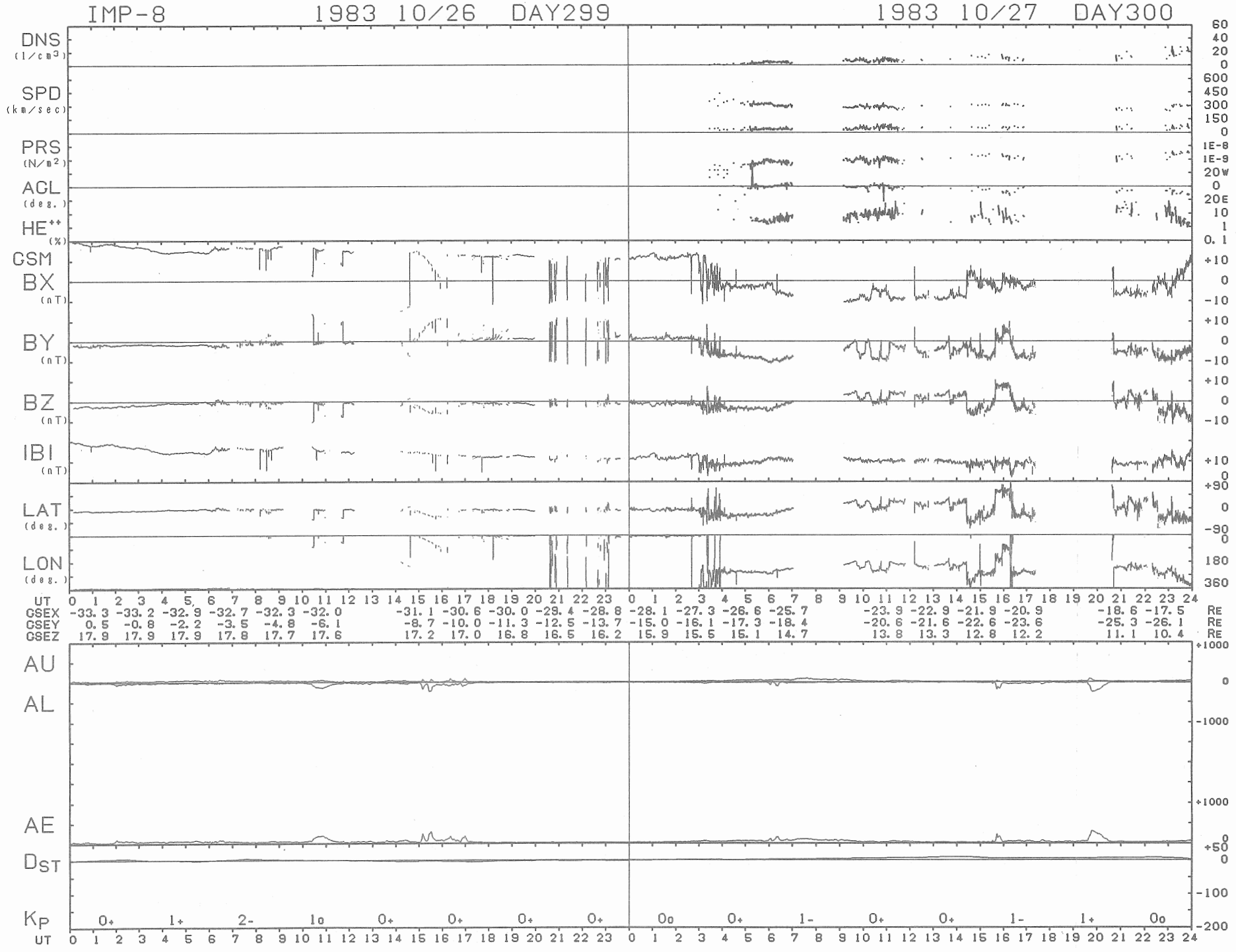

IMP-8
1983 10/16 DAY289
1983 10/17 DAY290
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.5 -10.2 -8.8 -7.5 -6.1 -4.7 -3.3 -1.9 -0.5 1.0 2.4 3.8 5.2 6.6 7.9 9.3 10.6 13.2 14.4 15.6 16.7 18.9 RE
GSEY -29.7 -30.1 -30.5 -30.8 -31.1 -31.3 -31.4 -31.4 -31.4 -31.3 -31.1 -30.8 -30.5 -30.1 -29.6 -29.0 -28.4 -26.8 -26.0 -25.0 -24.0 -21.7 RE
GSEZ 10.6 9.9 9.3 8.6 7.9 7.2 6.4 5.7 4.9 4.1 3.3 2.5 1.7 0.9 0.1 -0.7 -1.5 -3.1 -3.9 -4.7 -5.5 -6.9 RE
AU
AL
AE
DST
KP
2o 4o 2+ 2- 2o 3o 3o 3o 2+ 3+ 5o 5o 5+ 5+ 5+ 6+
UT

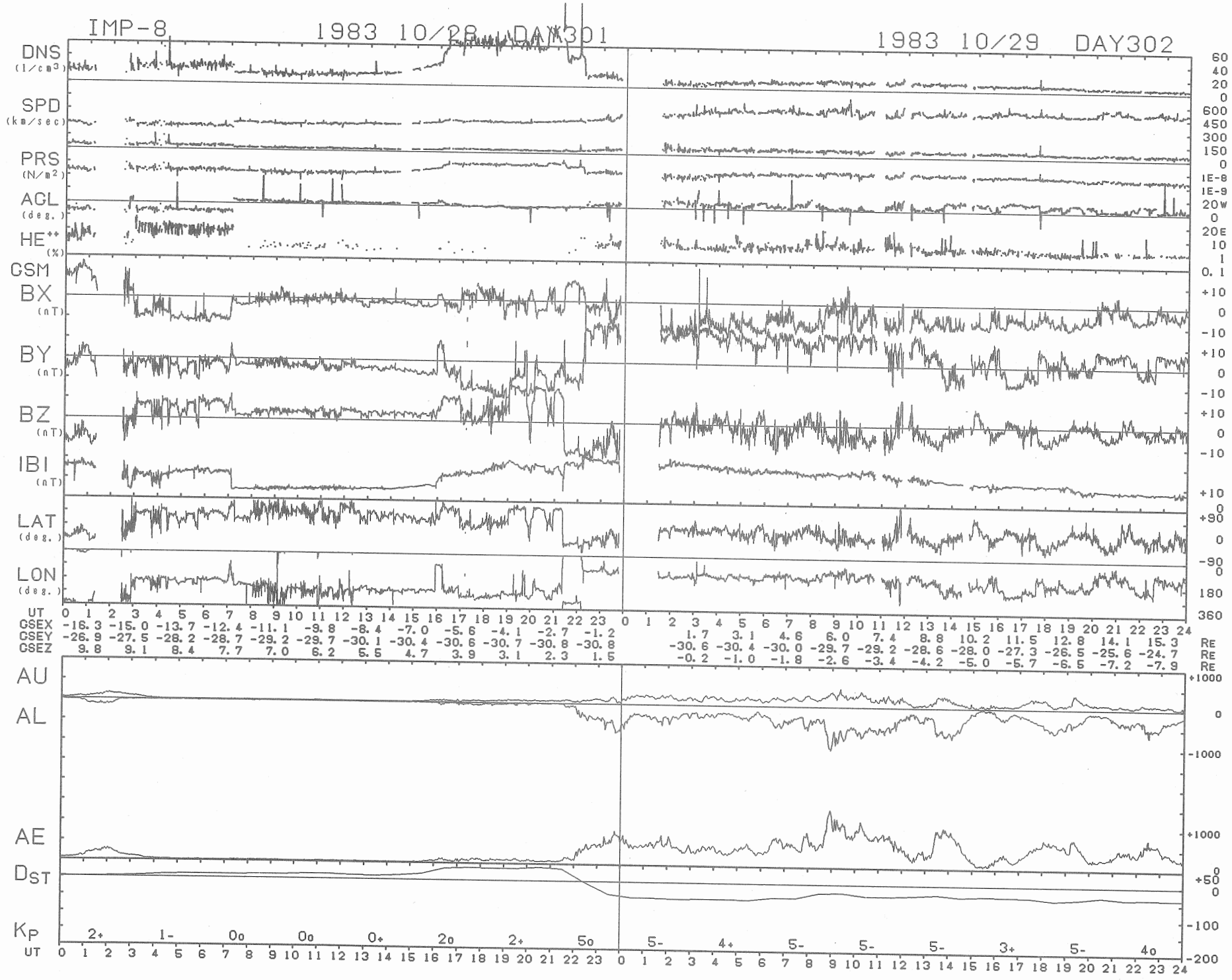

IMP-8
1983 10/18 DAY291
1983 10/19 DAY292
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.9 20.8 21.7 22.5 23.2 23.9 24.5 25.1 25.5 25.9 26.2 26.5 26.6 26.7 26.8 26.7 26.6 26.4 26.2 24.5 24.0 RE
GSEY -20.5 -19.2 -17.9 -16.5 -15.1 -13.6 -12.1 -10.5 -8.9 -7.3 -5.6 -4.0 -2.3 -0.6 1.0 2.7 4.4 6.0 7.7 14.0 15.5 RE
GSEZ -7.6 -8.3 -9.0 -9.6 -10.2 -10.8 -11.3 -11.8 -12.3 -12.7 -13.1 -13.4 -13.7 -14.0 -14.2 -14.4 -14.6 -14.7 -14.7 -14.6 -14.5 RE
AU
AL
AE
DST
KP
5+ 5o 5+ 6- 5o 5o 6- 3o 3o 3o 3- 2o 1- 2o 1o 1-
UT

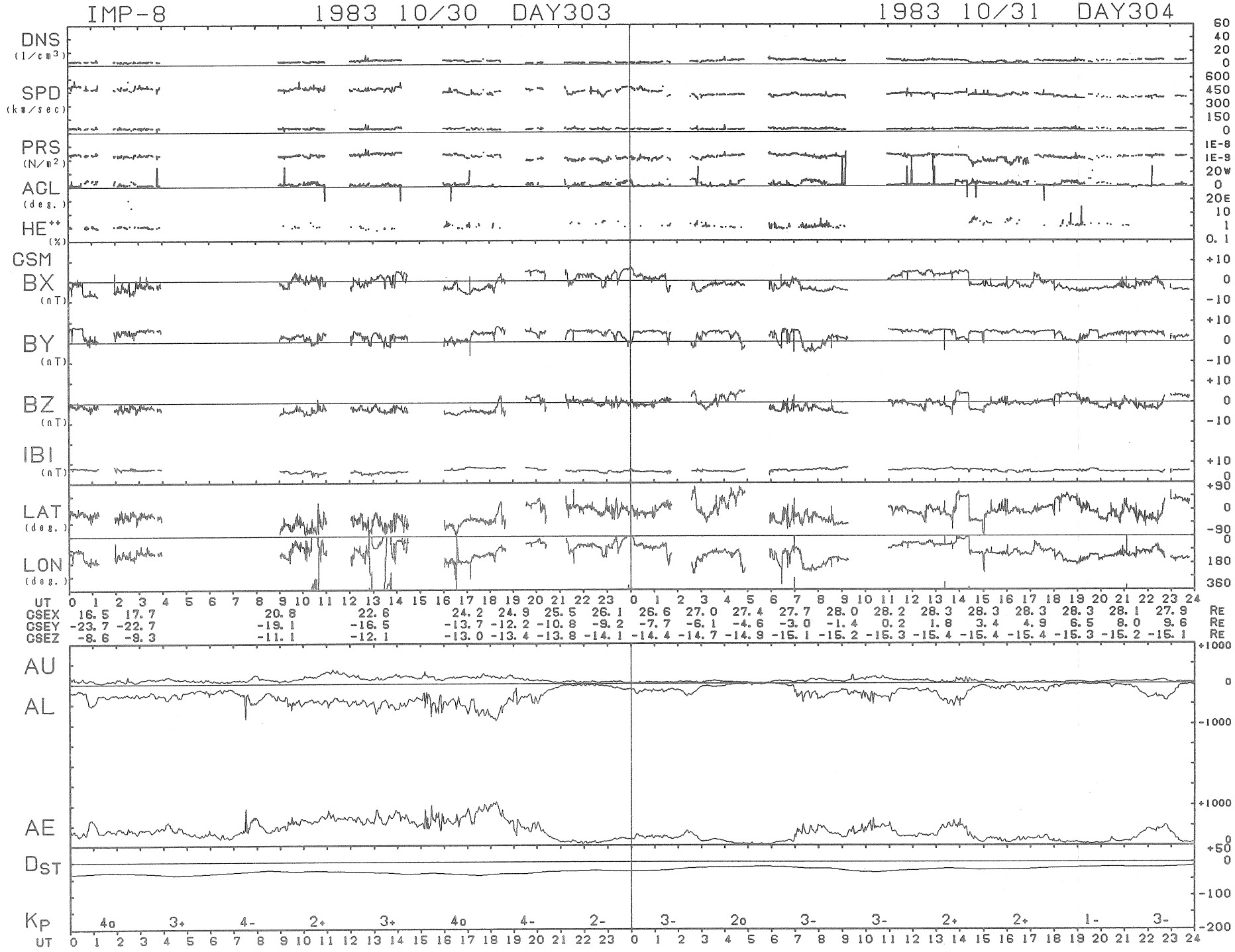

IMP-8
1983 10/20 DAY293
1983 10/21 DAY294
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.4 22.7 22.0 21.2 18.7 17.8 16.8 15.9 14.9 13.8 12.8 11.7 10.6 9.5 8.3 7.2 3.7 2.5 1.4 0.2 RE
GSEY 16.9 18.4 19.7 21.1 24.8 26.0 27.1 28.1 29.1 30.1 31.0 31.8 32.6 33.3 34.0 34.6 36.1 36.5 36.8 37.1 RE
GSEZ -14.3 -14.1 -13.9 -13.6 -12.7 -12.3 -11.9 -11.5 -11.0 -10.6 -10.1 -9.6 -9.0 -8.5 -7.9 -7.4 -5.6 -5.0 -4.3 -3.7 RE
AU
AL
AE
DST
KP
0o 2+ 1+ 2o 1- 1o 2+ 2+ 2- 1o 3- 3+ 3+ 4- 4- 4o
UT

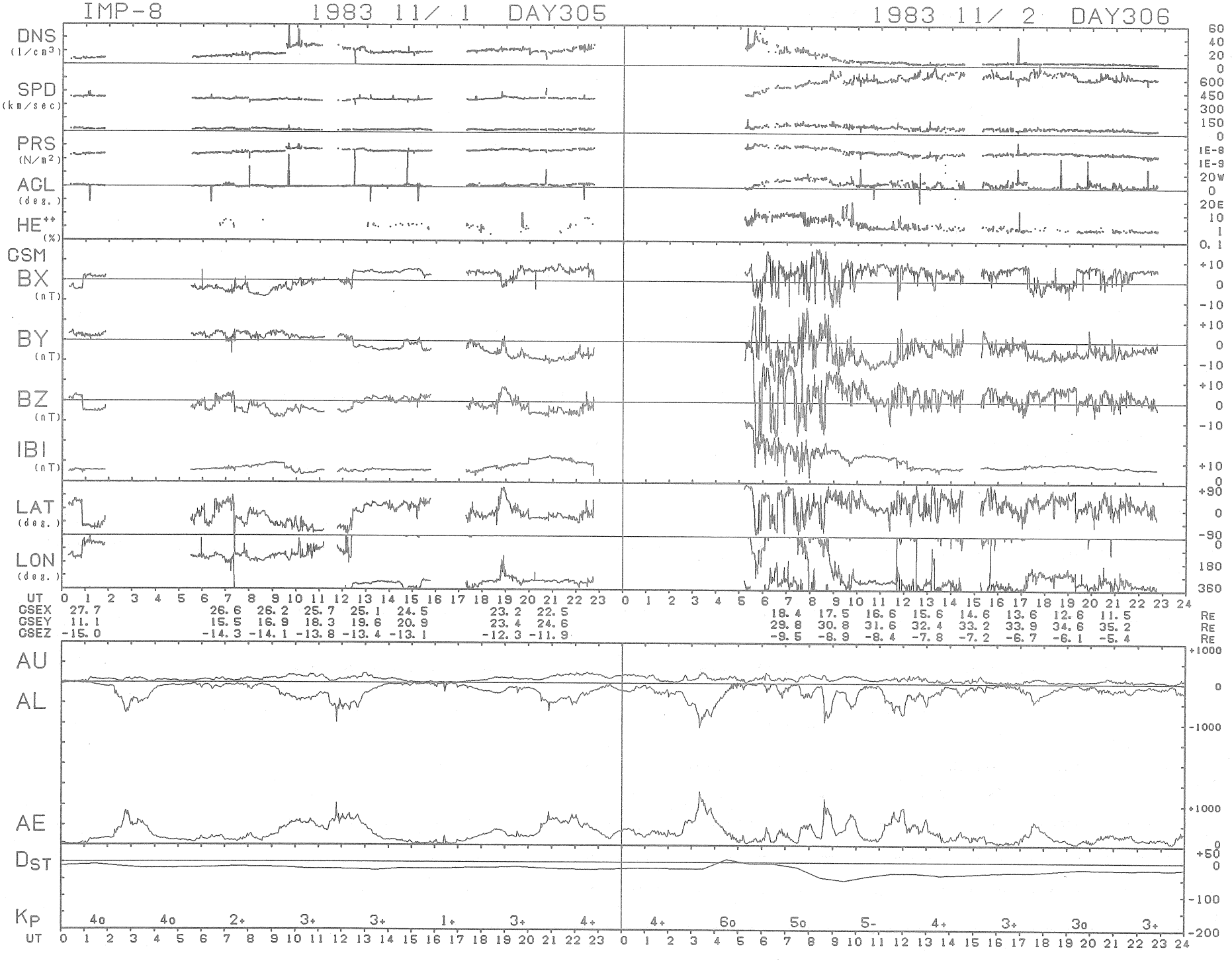

IMP-8
1983 10/22 DAY295
1983 10/23 DAY296
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.6 -6.8 -7.9 -12.4 -13.4 -14.5 -15.5 -16.6 -17.6 -18.5 -19.5 -20.4 -21.3 -23.1 -24.7 RE
GSEY 37.7 37.7 37.6 36.8 36.5 36.1 35.7 35.2 34.7 34.2 33.6 33.0 32.3 30.8 29.2 RE
GSEZ -0.5 0.1 0.8 3.4 4.0 4.6 5.2 5.9 6.5 7.1 7.7 8.2 8.8 9.9 11.0 RE
AU
AL
AE
DST
KP
5o 4o 4- 3- 3+ 2o 2+ 3- 2+ 2+ 2+ 3- 4o 3+ 5o 5-
UT

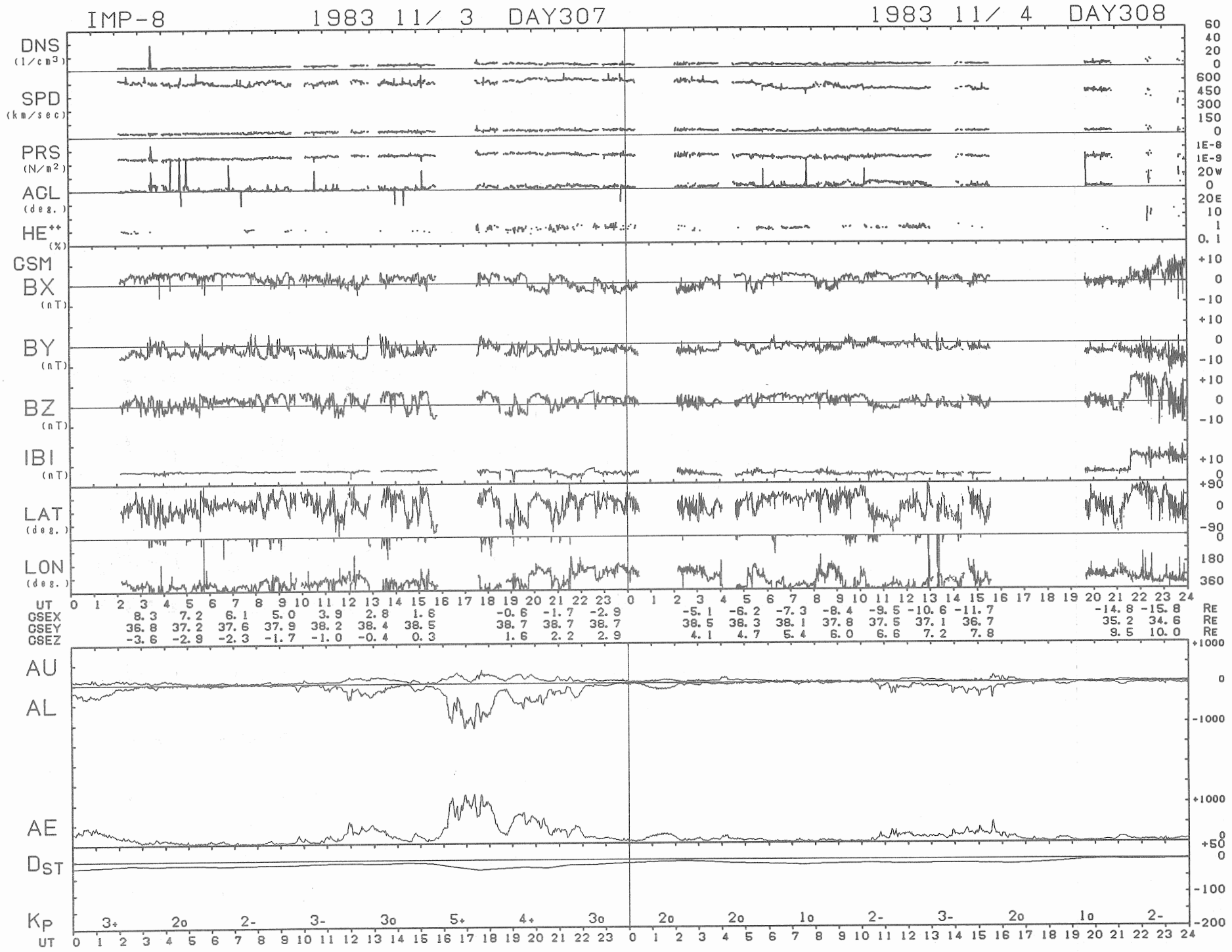

IMP-8
1983 10/24 DAY297
1983 10/25 DAY298
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.5 -26.2 -26.9 -27.6 -28.2 -28.8 -29.4 -30.0 -30.5 -31.0 -31.4 -31.8 -33.0 -33.2 -33.4 -33.5 -33.6 -33.6 -33.6 -33.5 RE
GSEY 28.4 27.5 26.6 25.6 24.7 23.6 22.6 21.5 20.5 19.3 18.2 17.0 12.2 10.9 9.7 8.4 7.1 5.8 4.5 1.8 RE
GSEZ 11.5 12.0 12.4 12.9 13.3 13.8 14.2 14.6 14.9 15.3 15.6 15.9 17.0 17.2 17.4 17.5 17.7 17.8 17.8 17.9 RE
AU
AL
AE
DST
KP 4+ 3o 2+ 3+ 4- 4- 5- 3o 2+ 2o 1o 1+ 2o 2- 1o 2o
UT

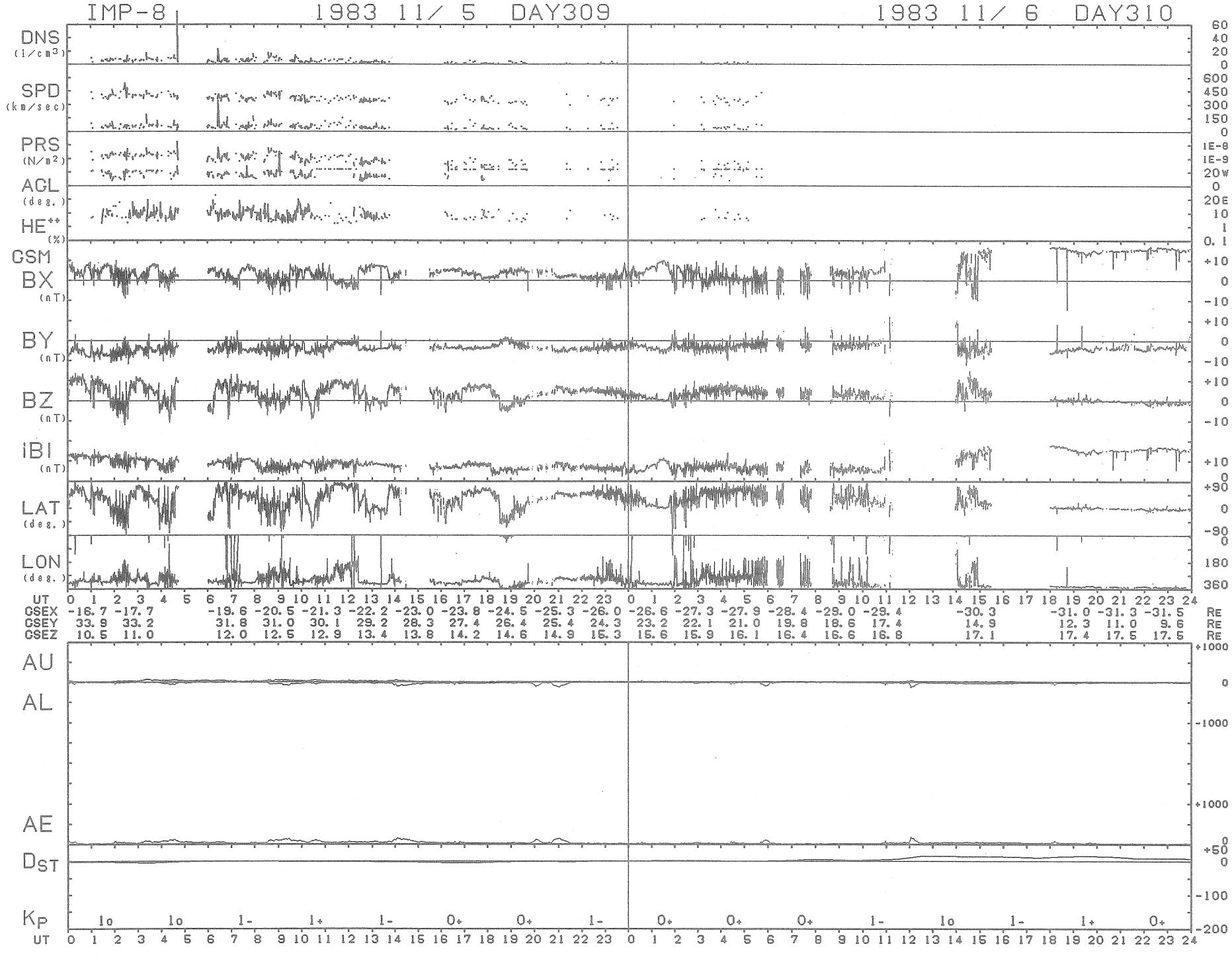

IMP-8
1983 10/26 DAY299
1983 10/27 DAY300
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.3 -33.2 -32.9 -32.7 -32.3 -32.0 -31.1 -30.6 -30.0 -29.4 -28.8 -28.1 -27.3 -26.6 -25.7 -23.9 -22.9 -21.9 -20.9 -18.6 -17.5 RE
GSEY 0.5 -0.8 -2.2 -3.5 -4.8 -6.1 -8.7 -10.0 -11.3 -12.5 -13.7 -15.0 -16.1 -17.3 -18.4 -20.6 -21.6 -22.6 -23.6 -25.3 -26.1 RE
GSEZ 17.9 17.9 17.9 17.8 17.7 17.6 17.2 17.0 16.8 16.5 16.2 15.9 15.5 15.1 14.7 13.8 13.3 12.8 12.2 11.1 10.4 RE
AU
AL
AE
DST
KP
0+ 1+ 2- 1o 0+ 0+ 0+ 0+ 0o 0+ 1- 0+ 0+ 1- 1+ 0o
UT

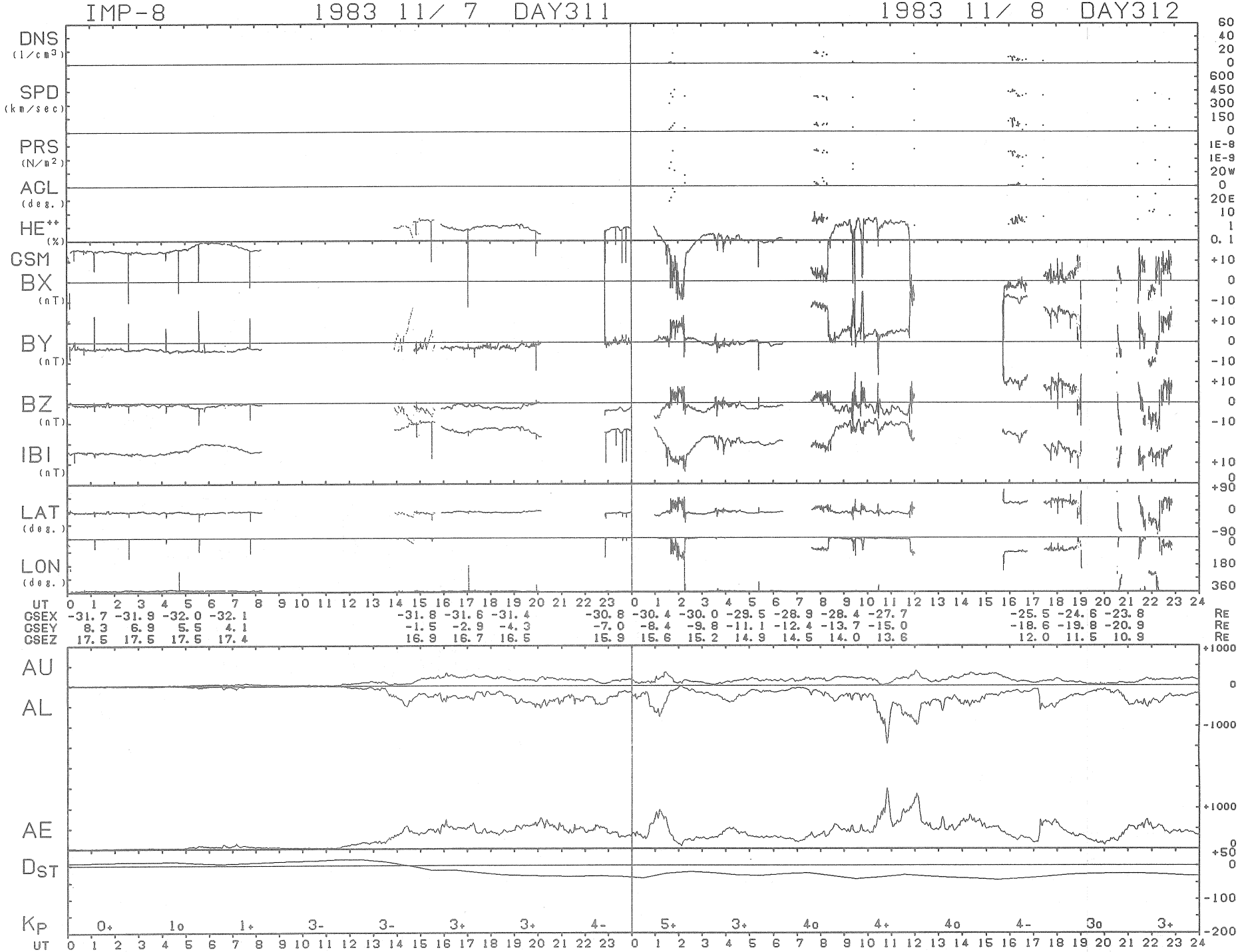

IMP-8
1983 10/28 DAY301
1983 10/29 DAY302
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.3 -15.0 -13.7 -12.4 -11.1 -9.8 -8.4 -7.0 -5.6 -4.1 -2.7 -1.2 1.7 3.1 4.6 6.0 7.4 8.8 10.2 11.5 12.8 14.1 15.3 RE
GSEY -26.9 -27.5 -28.2 -28.7 -29.2 -29.7 -30.1 -30.4 -30.6 -30.7 -30.8 -30.8 -30.6 -30.4 -30.0 -29.7 -29.2 -28.6 -28.0 -27.3 -26.5 -25.6 -24.7 RE
GSEZ 9.8 9.1 8.4 7.7 7.0 6.2 5.5 4.7 3.9 3.1 2.3 1.5 -0.2 -1.0 -1.8 -2.6 -3.4 -4.2 -5.0 -5.7 -6.5 -7.2 -7.9 RE
AU
AL
AE
DST
KP
2+ 1- 0o 0o 0+ 2o 2+ 5o 5- 4+ 5- 5- 5- 3+ 5- 4o
UT

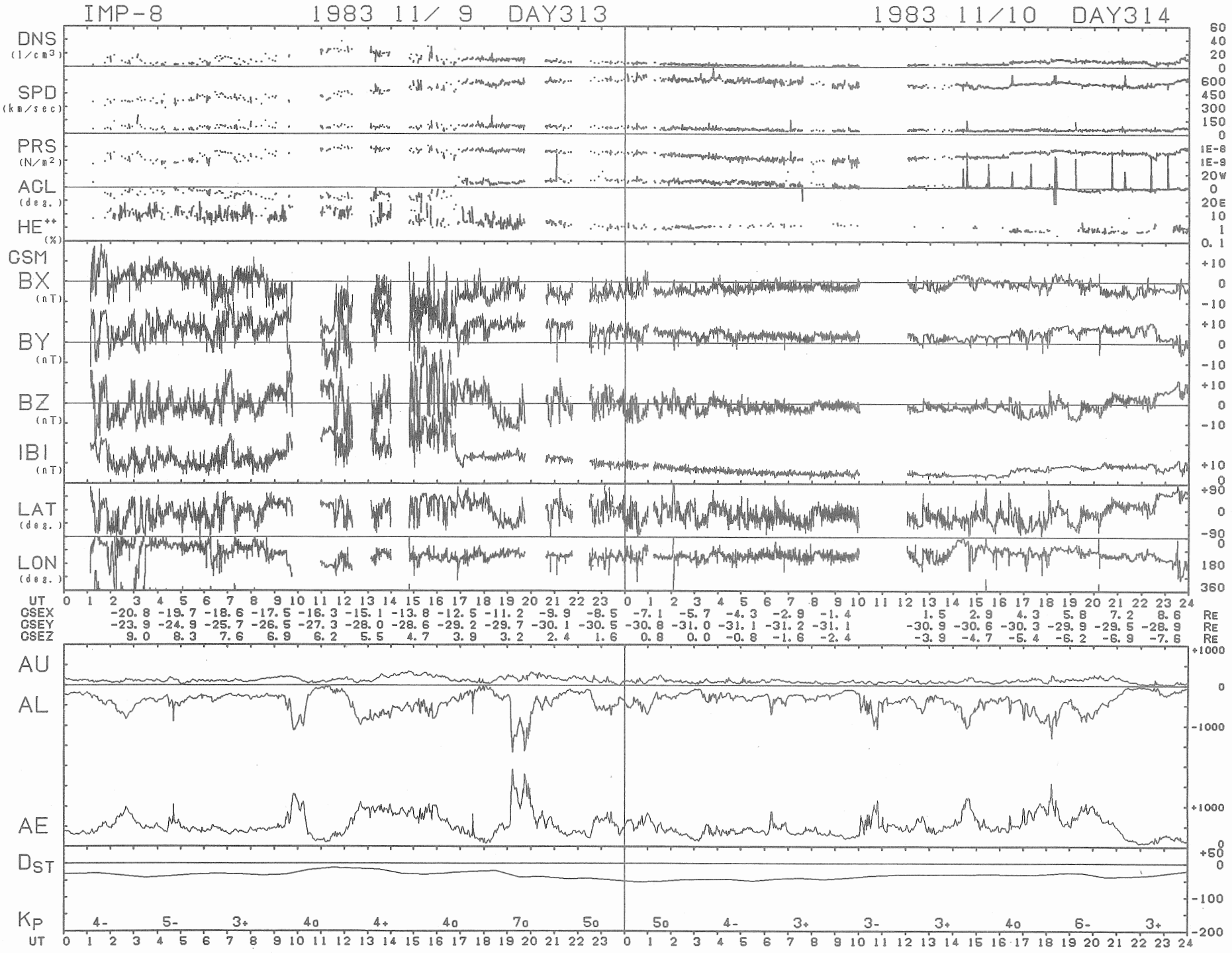

IMP-8
1983 10/30 DAY303
1983 10/31 DAY304
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.5 17.7 20.8 22.6 24.2 24.9 25.5 26.1 26.6 27.0 27.4 27.7 28.0 28.2 28.3 28.3 28.3 28.3 28.1 27.9 RE
GSEY -23.7 -22.7 -19.1 -16.5 -13.7 -12.2 -10.8 -9.2 -7.7 -6.1 -4.6 -3.0 -1.4 0.2 1.8 3.4 4.9 6.5 8.0 9.6 RE
GSEZ -8.6 -9.3 -11.1 -12.1 -13.0 -13.4 -13.8 -14.1 -14.4 -14.7 -14.9 -15.1 -15.2 -15.3 -15.4 -15.4 -15.4 -15.3 -15.2 -15.1 RE
AU
AL
AE
DST
KP
4o 3+ 4- 2+ 3+ 4o 4- 2- 3- 2o 3- 3- 2+ 2+ 1- 3-
UT

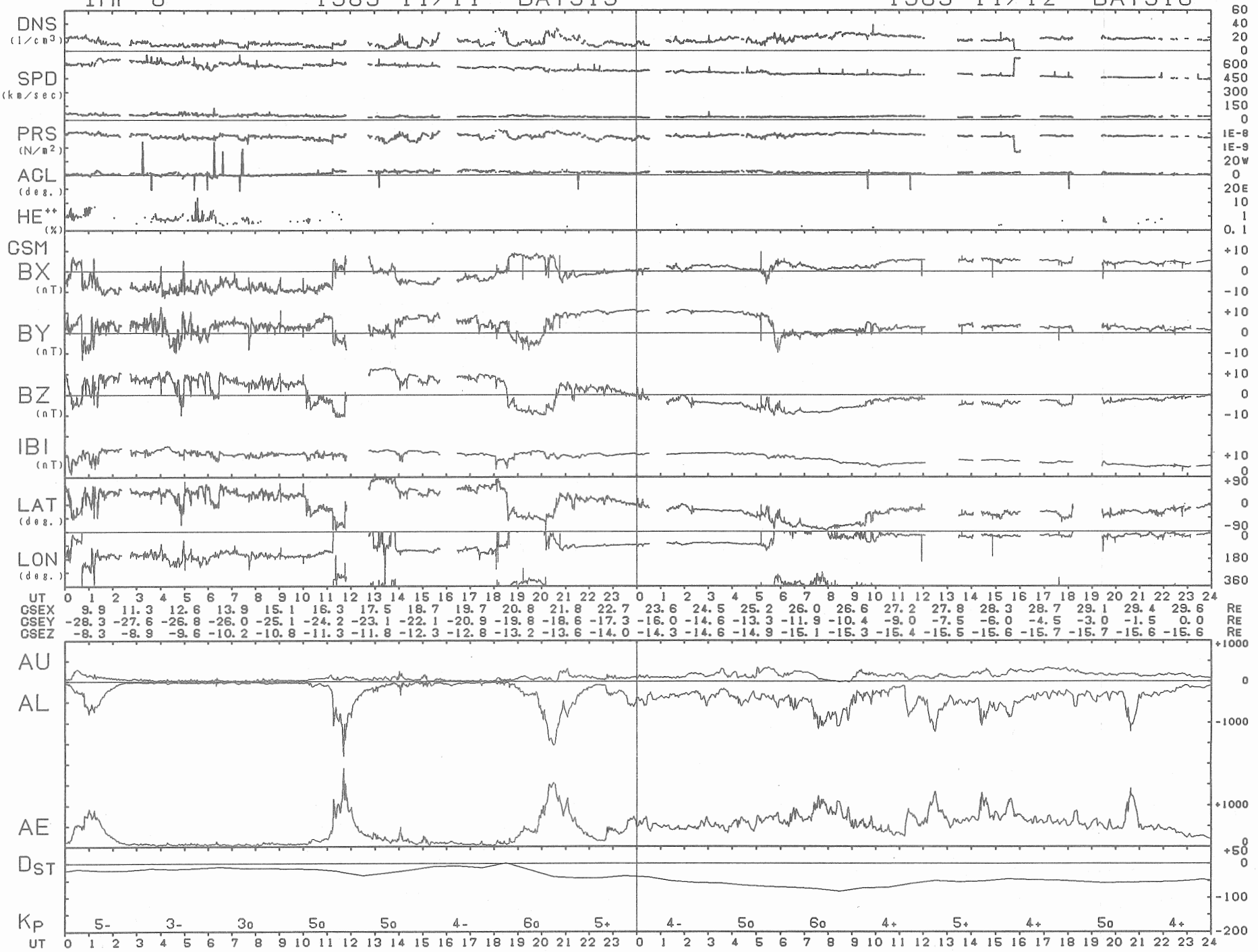

IMP-8
1983 11/ 1 DAY305
1983 11/ 2 DAY306
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.7 26.6 26.2 25.7 25.1 24.5 23.2 22.5 18.4 17.5 16.6 15.6 14.6 13.6 12.6 11.5 RE
GSEY 11.1 15.5 16.9 18.3 19.6 20.9 23.4 24.6 29.8 30.8 31.6 32.4 33.2 33.9 34.6 35.2 RE
GSEZ -15.0 -14.3 -14.1 -13.8 -13.4 -13.1 -12.3 -11.9 -9.5 -8.9 -8.4 -7.8 -7.2 -6.7 -6.1 -5.4 RE
AU
AL
AE
DST
KP
4o 4o 2+ 3+ 3+ 1+ 3+ 4+ 4+ 6o 5o 5- 4+ 3+ 3o 3+
UT

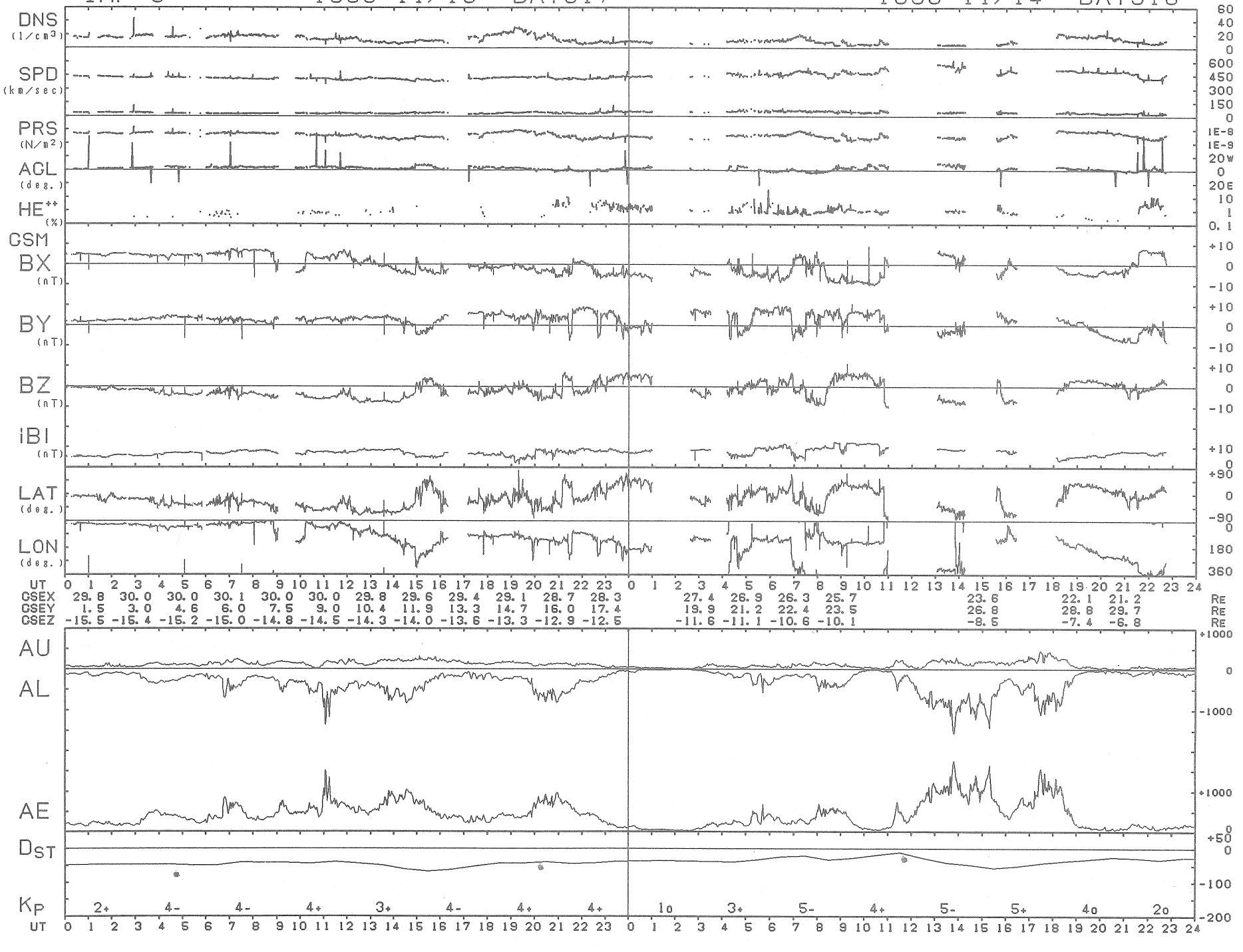

IMP-8
1983 11/ 3 DAY307
1983 11/ 4 DAY308
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.3 7.2 6.1 5.0 3.9 2.8 1.6 -0.6 -1.7 -2.9 -5.1 -6.2 -7.3 -8.4 -9.5 -10.6 -11.7 -14.8 -15.8 RE
GSEY 36.8 37.2 37.6 37.9 38.2 38.4 38.5 38.7 38.7 38.7 38.5 38.3 38.1 37.8 37.5 37.1 36.7 35.2 34.6 RE
GSEZ -3.6 -2.9 -2.3 -1.7 -1.0 -0.4 0.3 1.6 2.2 2.9 4.1 4.7 5.4 6.0 6.6 7.2 7.8 9.5 10.0 RE
AU
AL
AE
DST
KP 3+ 2o 2- 3- 3o 5+ 4+ 3o 2o 2o 1o 2- 3- 2o 1o 2-
UT

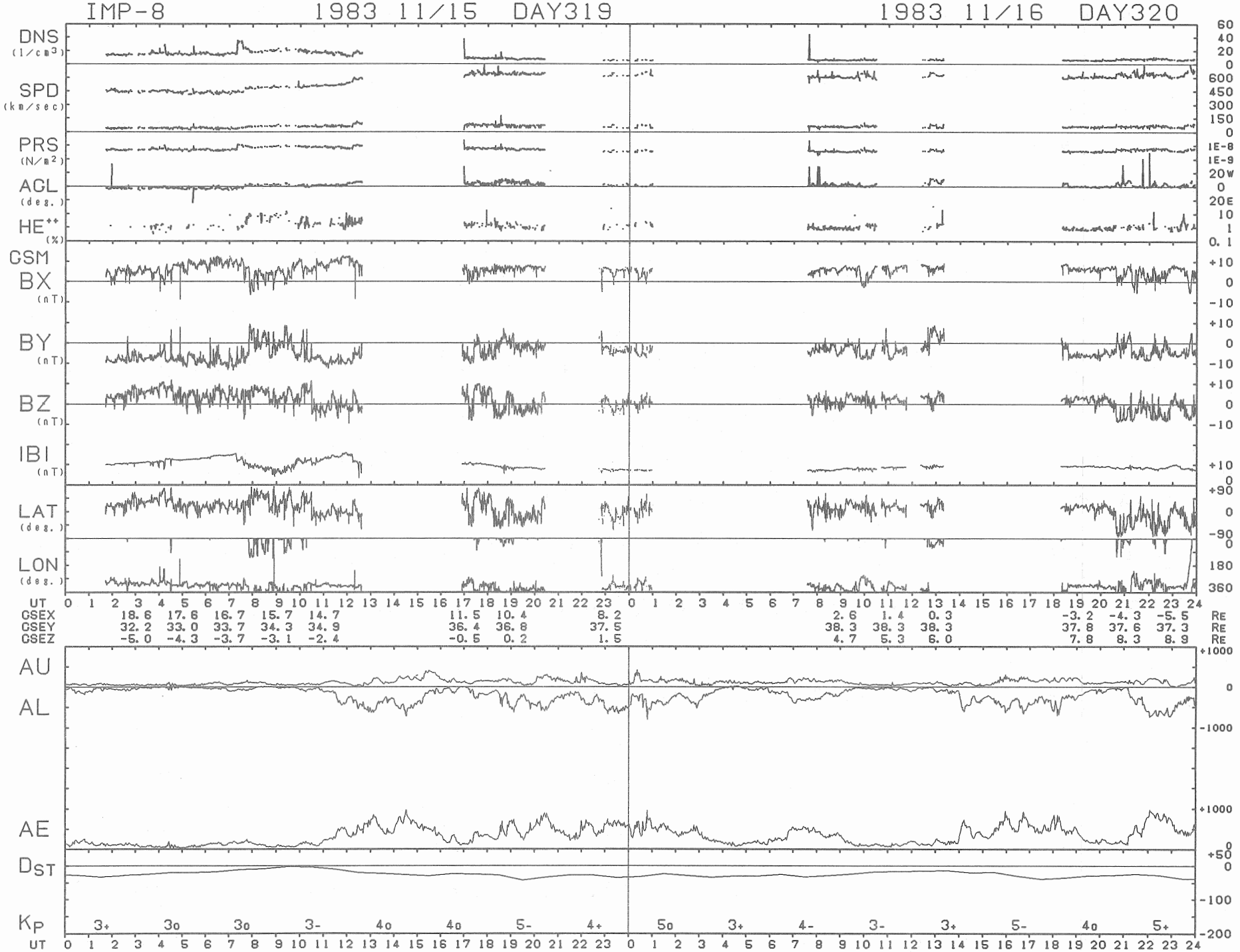

IMP-8
1983 11/ 5 DAY309
1983 11/ 6 DAY310
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP

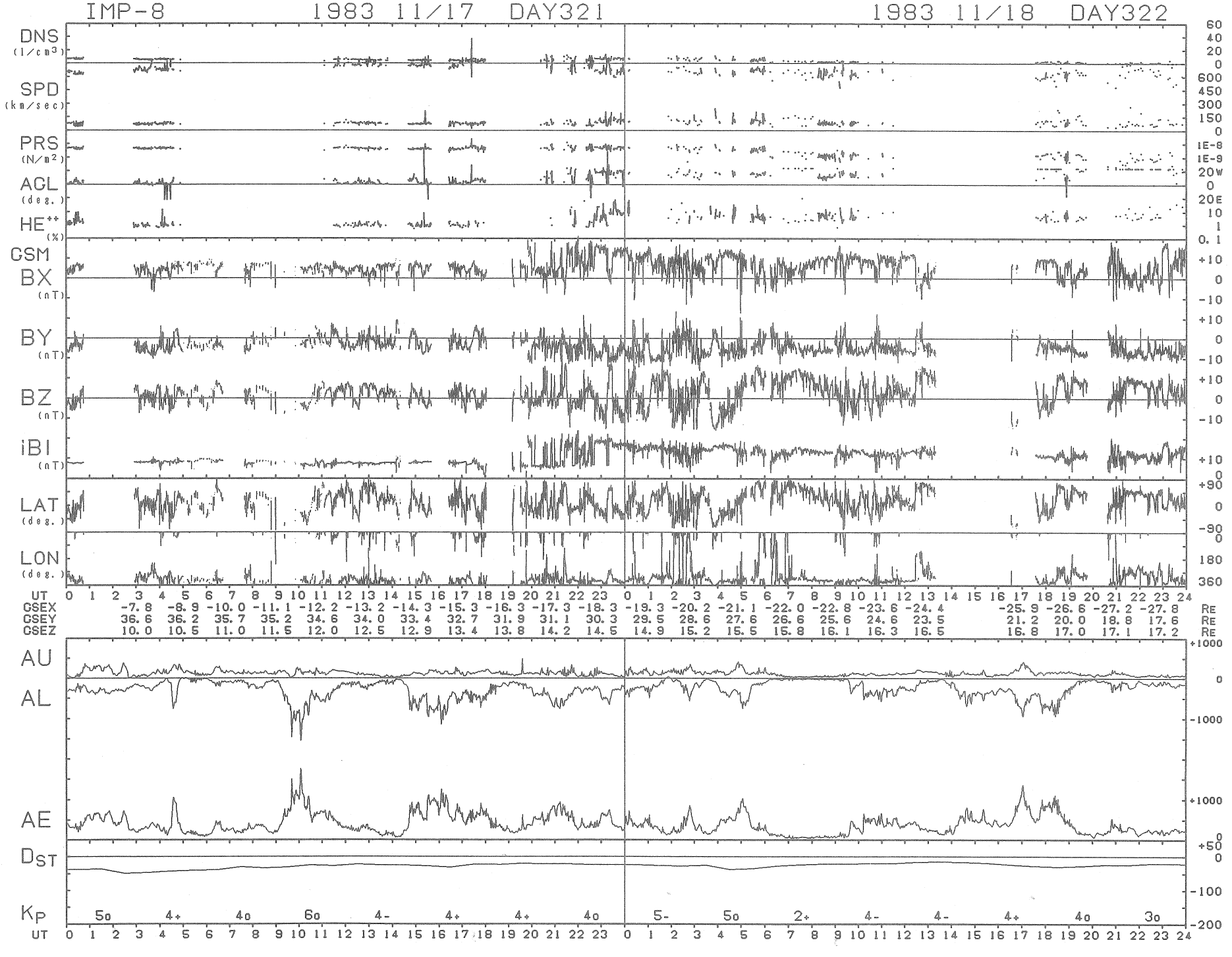

IMP-8
1983 11/ 7 DAY311
1983 11/ 8 DAY312
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.7 -31.9 -32.0 -32.1 -31.8 -31.6 -31.4 -30.8 -30.4 -30.0 -29.5 -28.9 -28.4 -27.7 -25.5 -24.6 -23.8 RE
GSEY 8.3 6.9 5.5 4.1 -1.5 -2.9 -4.3 -7.0 -8.4 -9.8 -11.1 -12.4 -13.7 -15.0 -18.6 -19.8 -20.9 RE
GSEZ 17.5 17.5 17.5 17.4 16.9 16.7 16.5 15.9 15.6 15.2 14.9 14.5 14.0 13.6 12.0 11.5 10.9 RE
AU
AL
AE
DST
KP
0+ 1o 1+ 3- 3- 3+ 3+ 4- 5+ 3+ 4o 4+ 4o 4- 3o 3+
UT

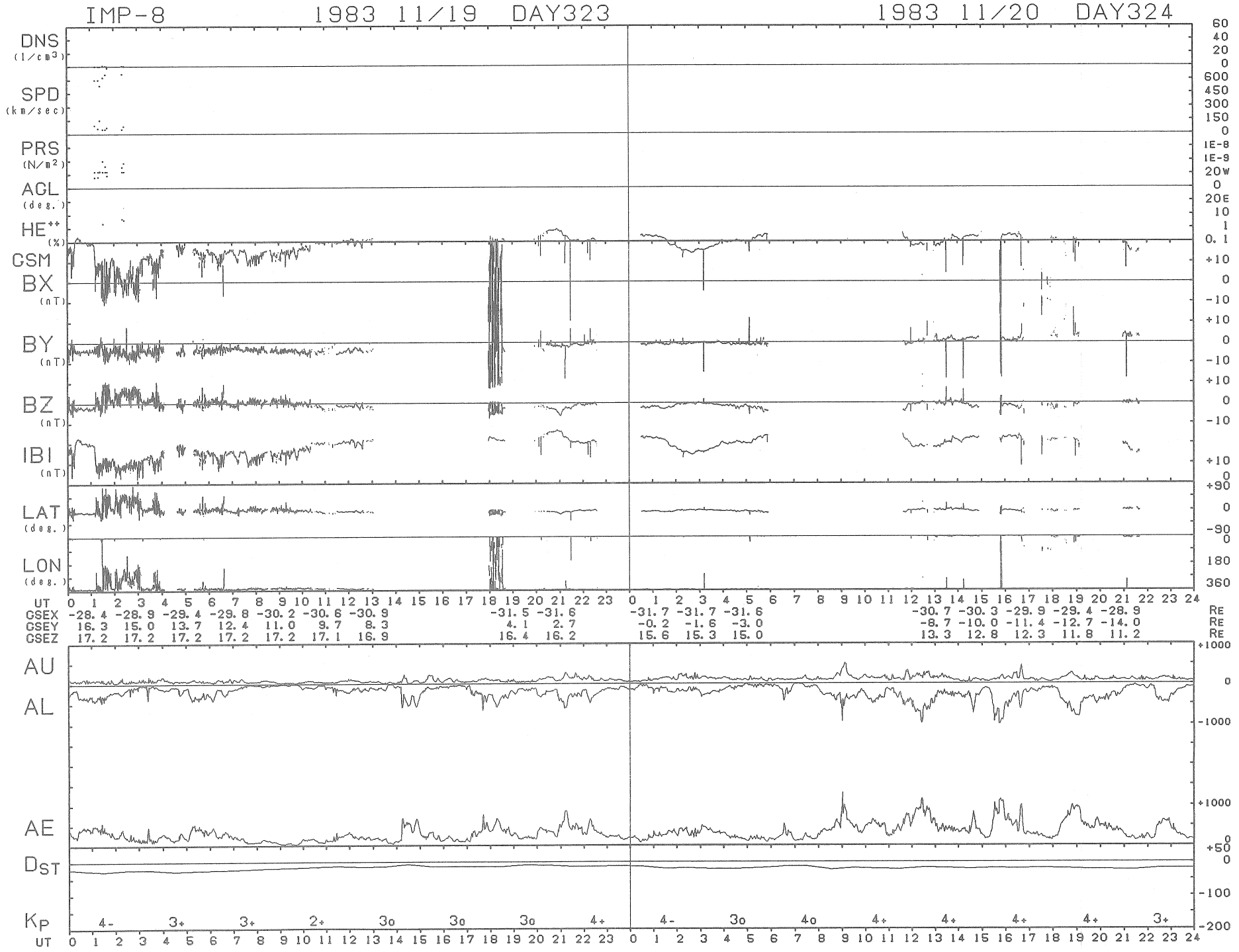

IMP-8
1983 11/ 9 DAY313
1983 11/10 DAY314
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.8 -19.7 -18.6 -17.5 -16.3 -15.1 -13.8 -12.5 -11.2 -9.9 -8.5 -7.1 -5.7 -4.3 -2.9 -1.4 1.5 2.9 4.3 5.8 7.2 8.6 RE
GSEY -23.9 -24.9 -25.7 -26.5 -27.3 -28.0 -28.6 -29.2 -29.7 -30.1 -30.5 -30.8 -31.0 -31.1 -31.2 -31.1 -30.9 -30.6 -30.3 -29.9 -29.5 -28.9 RE
GSEZ 9.0 8.3 7.6 6.9 6.2 5.5 4.7 3.9 3.2 2.4 1.6 0.8 0.0 -0.8 -1.6 -2.4 -3.9 -4.7 -5.4 -6.2 -6.9 -7.6 RE
AU
AL
AE
DST
KP
4- 5- 3+ 4o 4+ 4o 7o 5o 5o 4- 3+ 3- 3+ 4o 6- 3+

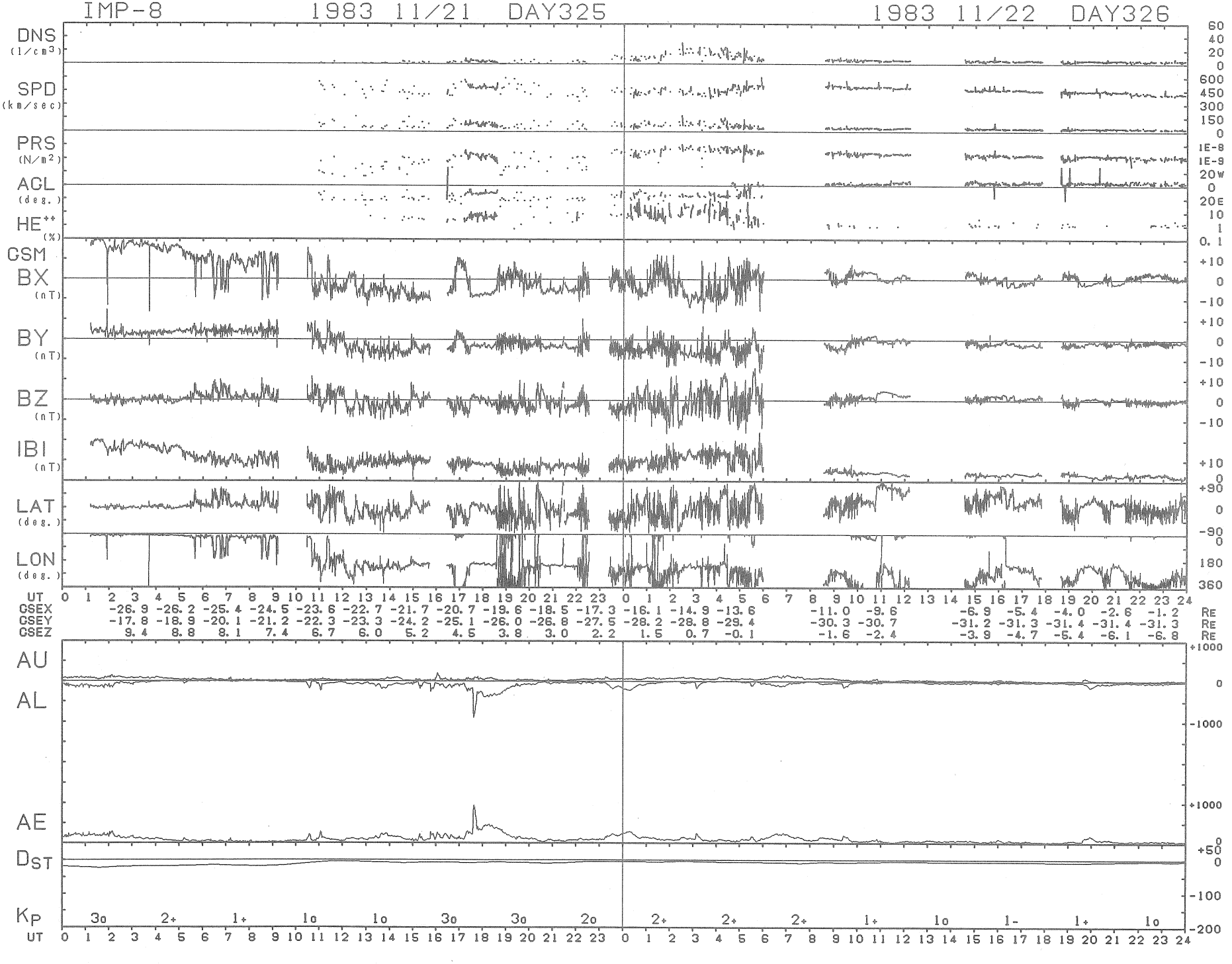

IMP-8 1983 11/11 DAY315 1983 11/12 DAY316
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 9.9 11.3 12.6 13.9 15.1 16.3 17.5 18.7 19.7 20.8 21.8 22.7 23.6 24.5 25.2 26.0 26.6 27.2 27.8 28.3 28.7 29.1 29.4 29.6 RE
GSEY -28.3 -27.6 -26.8 -26.0 -25.1 -24.2 -23.1 -22.1 -20.9 -19.8 -18.6 -17.3 -16.0 -14.6 -13.3 -11.9 -10.4 -9.0 -7.5 -6.0 -4.5 -3.0 -1.5 0.0 RE
GSEZ -8.3 -8.9 -9.6 -10.2 -10.8 -11.3 -11.8 -12.3 -12.8 -13.2 -13.6 -14.0 -14.3 -14.6 -14.9 -15.1 -15.3 -15.4 -15.5 -15.6 -15.7 -15.7 -15.6 -15.6 RE
AU
AL
AE
DST
KP 5- 3- 3o 5o 5o 4- 6o 5+ 4- 5o 6o 4+ 5+ 4+ 5o 4+
UT

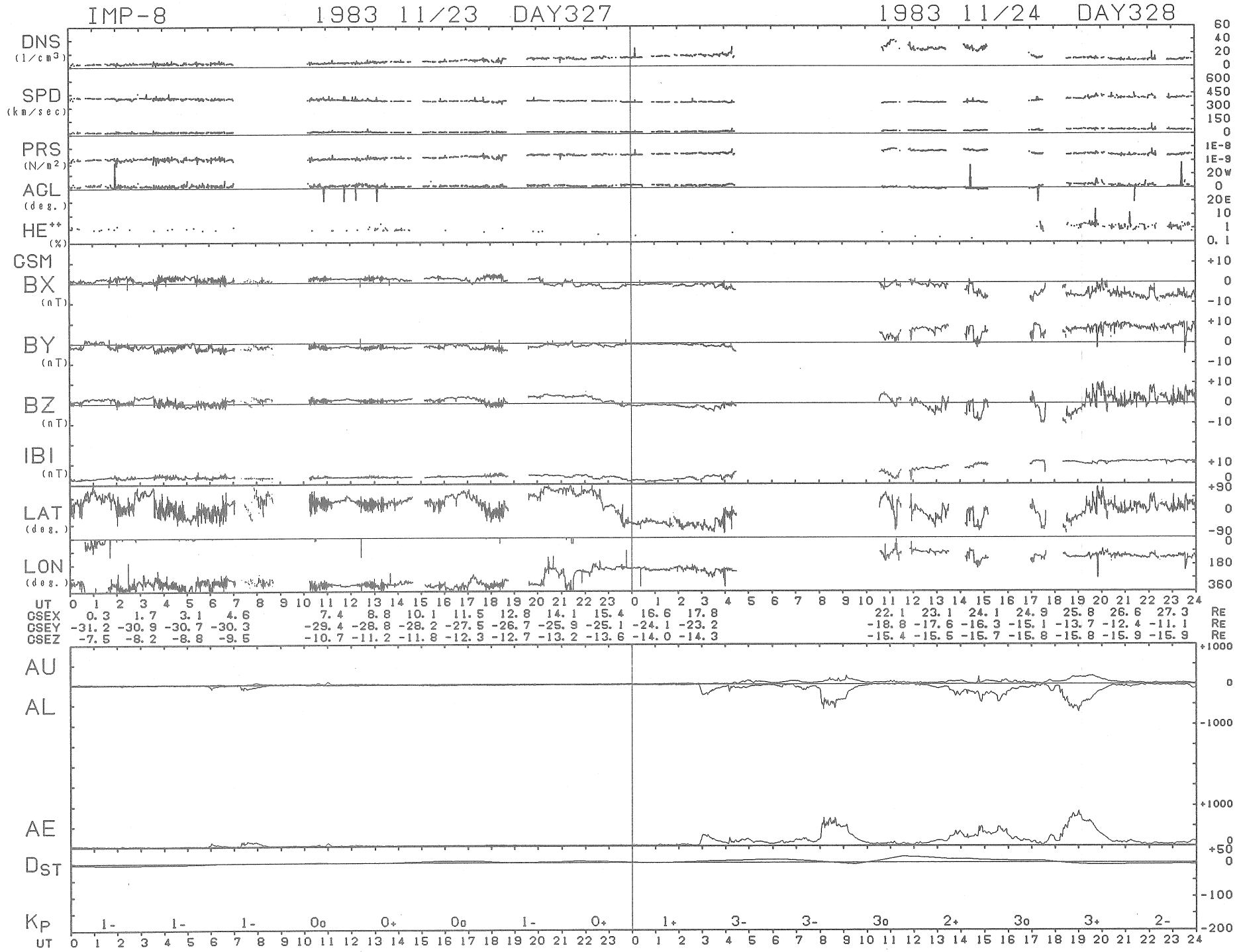

IMP-8
1983 11/13 DAY317
1983 11/14 DAY318
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.8 30.0 30.0 30.1 30.0 30.0 29.8 29.6 29.4 29.1 28.7 28.3 27.4 26.9 26.3 25.7 23.6 22.1 21.2 RE
GSEY 1.5 3.0 4.6 6.0 7.5 9.0 10.4 11.9 13.3 14.7 16.0 17.4 19.9 21.2 22.4 23.5 26.8 28.8 29.7 RE
GSEZ -15.5 -15.4 -15.2 -15.0 -14.8 -14.5 -14.3 -14.0 -13.6 -13.3 -12.9 -12.5 -11.6 -11.1 -10.6 -10.1 -8.5 -7.4 -6.8 RE
AU
AL
AE
DST
KP
2+ 4- 4- 4+ 3+ 4- 4+ 4+ 1o 3+ 5- 4+ 5- 5+ 4o 2o
UT

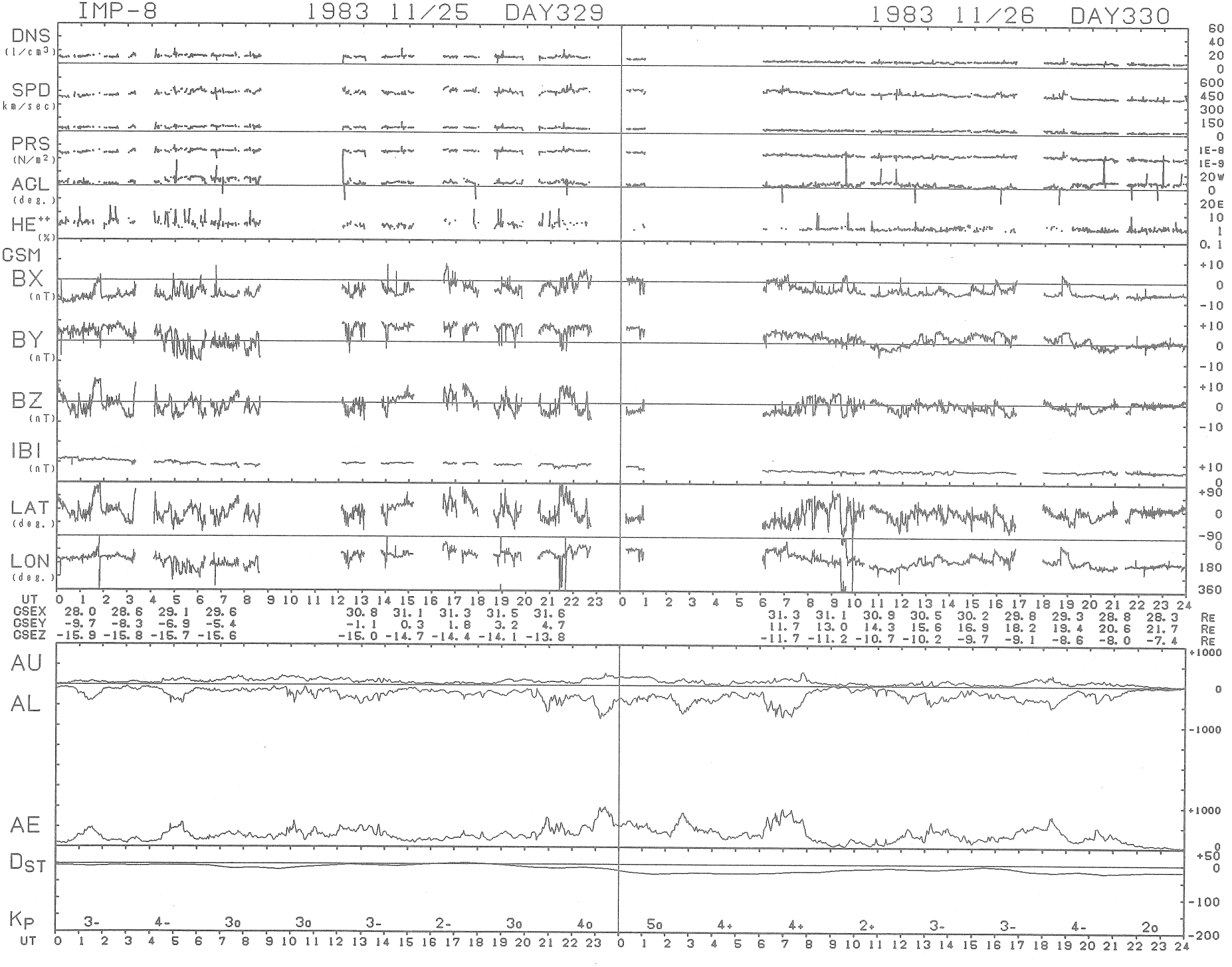

IMP-8
1983 11/15 DAY319
1983 11/16 DAY320
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.6 17.6 16.7 15.7 14.7 11.5 10.4 8.2 2.6 1.4 0.3 -3.2 -4.3 -5.5 RE
GSEY 32.2 33.0 33.7 34.3 34.9 36.4 36.8 37.5 38.3 38.3 38.3 37.8 37.6 37.3 RE
GSEZ -5.0 -4.3 -3.7 -3.1 -2.4 -0.5 0.2 1.5 4.7 5.3 6.0 7.8 8.3 8.9 RE
AU
AL
AE
DST
KP
3+ 3o 3o 3- 4o 4o 5- 4+ 5o 3+ 4- 3- 3+ 5- 4o 5+
UT

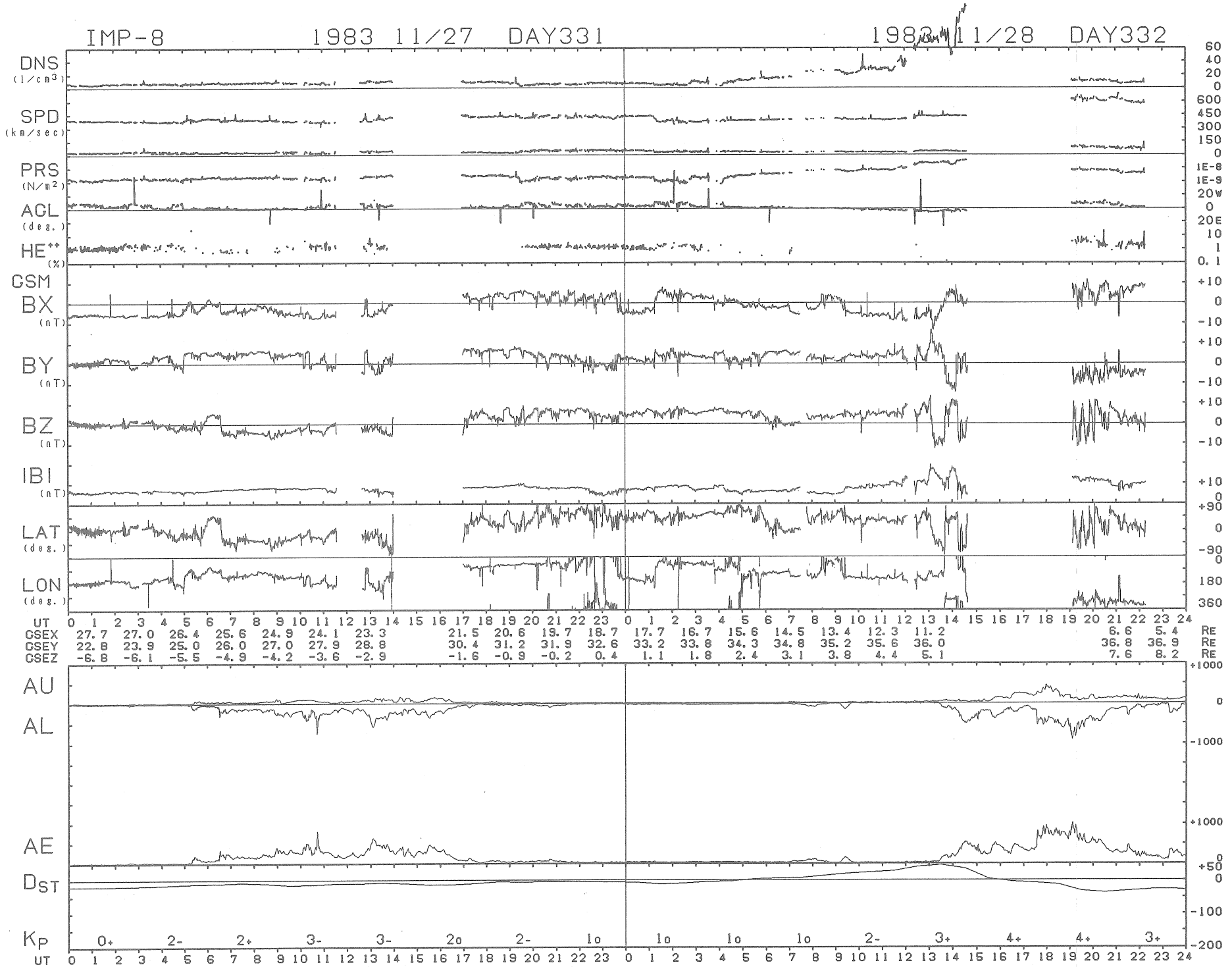

IMP-8
1983 11/17 DAY321
1983 11/18 DAY322
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.8 -8.9 -10.0 -11.1 -12.2 -13.2 -14.3 -15.3 -16.3 -17.3 -18.3 -19.3 -20.2 -21.1 -22.0 -22.8 -23.6 -24.4 -25.9 -26.6 -27.2 -27.8 RE
GSEY 36.6 36.2 35.7 35.2 34.6 34.0 33.4 32.7 31.9 31.1 30.3 29.5 28.6 27.6 26.6 25.6 24.6 23.5 21.2 20.0 18.8 17.6 RE
GSEZ 10.0 10.5 11.0 11.5 12.0 12.5 12.9 13.4 13.8 14.2 14.5 14.9 15.2 15.5 15.8 16.1 16.3 16.5 16.8 17.0 17.1 17.2 RE
AU
AL
AE
DST
KP
5o 4+ 4o 6o 4- 4+ 4+ 4o 5- 5o 2+ 4- 4- 4+ 4o 3o
UT

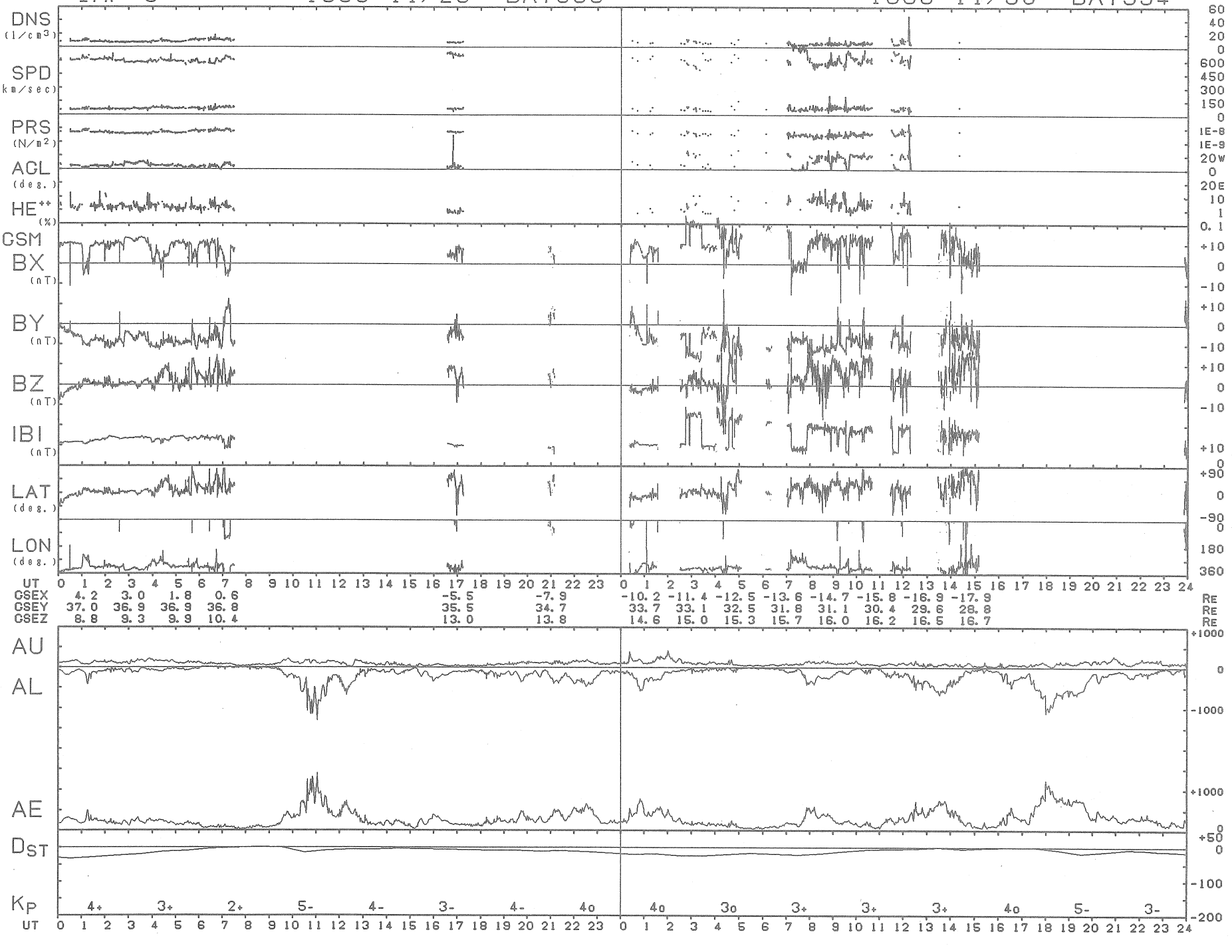

IMP-8
1983 11/19 DAY323
1983 11/20 DAY324
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.4 -28.9 -29.4 -29.8 -30.2 -30.6 -30.9 -31.5 -31.6 -31.7 -31.7 -31.6 -30.7 -30.3 -29.9 -29.4 -28.9 RE
GSEY 16.3 15.0 13.7 12.4 11.0 9.7 8.3 4.1 2.7 -0.2 -1.6 -3.0 -8.7 -10.0 -11.4 -12.7 -14.0 RE
GSEZ 17.2 17.2 17.2 17.2 17.2 17.1 16.9 16.4 16.2 15.6 15.3 15.0 13.3 12.8 12.3 11.8 11.2 RE
AU
AL
AE
DST
KP
4- 3+ 3+ 2+ 3o 3o 3o 4+ 4- 3o 4o 4+ 4+ 4+ 4+ 3+
UT

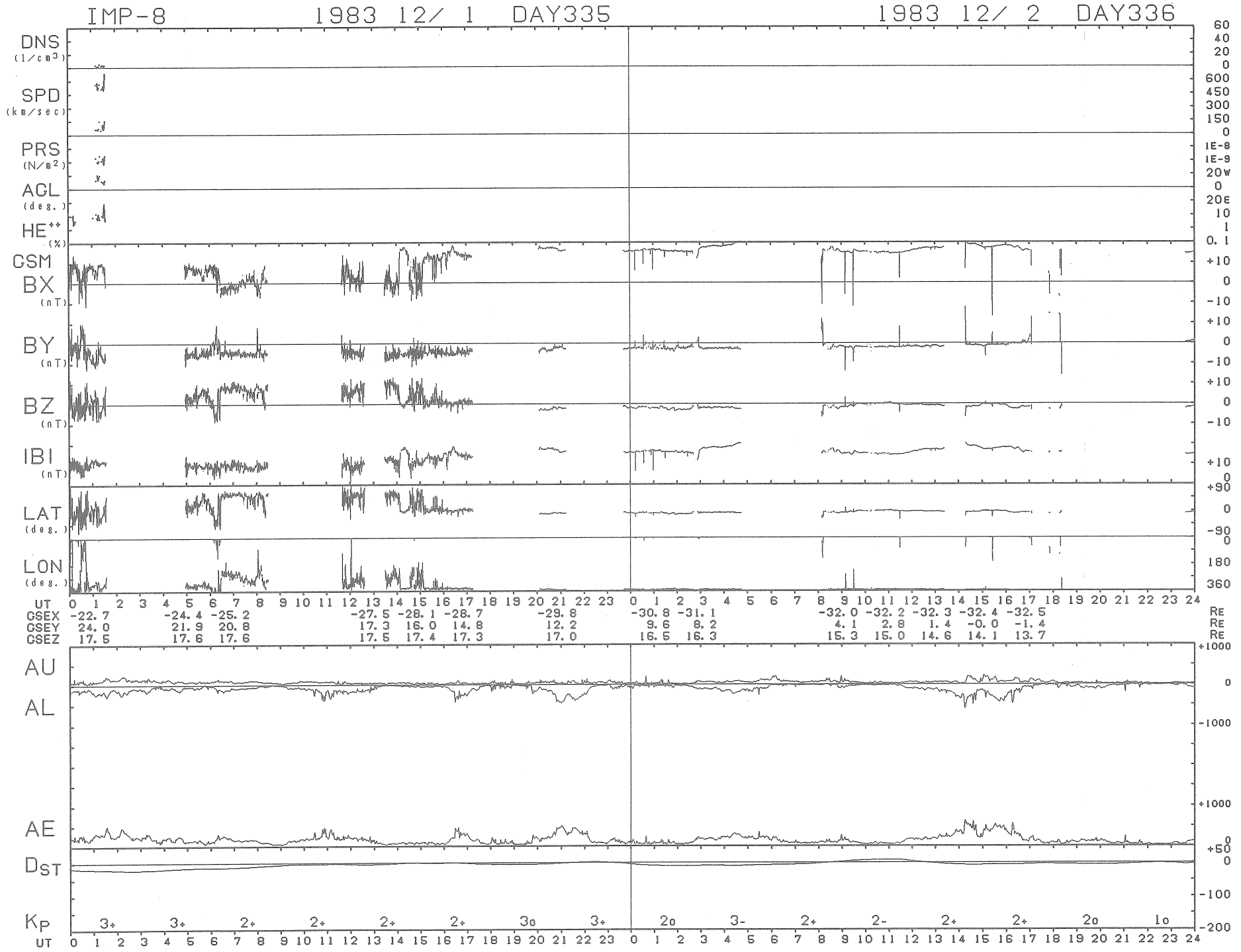

IMP-8
1983 11/21 DAY325
1983 11/22 DAY326
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.9 -26.2 -25.4 -24.5 -23.6 -22.7 -21.7 -20.7 -19.6 -18.5 -17.3 -16.1 -14.9 -13.6 -11.0 -9.6 -6.9 -5.4 -4.0 -2.6 -1.2 RE
GSEY -17.8 -18.9 -20.1 -21.2 -22.3 -23.3 -24.2 -25.1 -26.0 -26.8 -27.5 -28.2 -28.8 -29.4 -30.3 -30.7 -31.2 -31.3 -31.4 -31.4 -31.3 RE
GSEZ 9.4 8.8 8.1 7.4 6.7 6.0 5.2 4.5 3.8 3.0 2.2 1.5 0.7 -0.1 -1.6 -2.4 -3.9 -4.7 -5.4 -6.1 -6.8 RE
AU
AL
AE
DST
KP 3o 2+ 1+ 1o 1o 3o 3o 2o 2+ 2+ 2+ 1+ 1o 1- 1+ 1o
UT

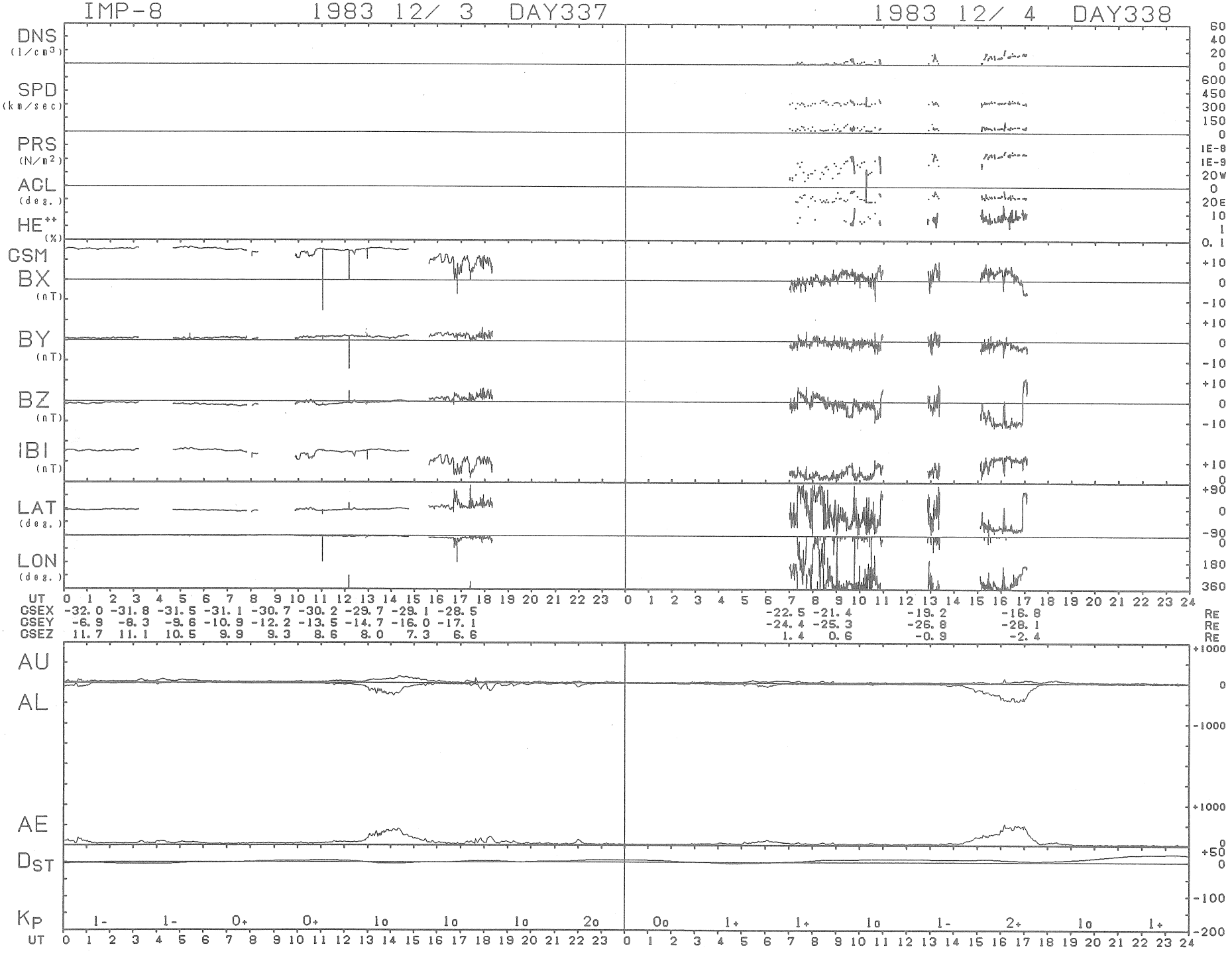

IMP-8
1983 11/23 DAY327
1983 11/24 DAY328
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.3 1.7 3.1 4.6 7.4 8.8 10.1 11.5 12.8 14.1 15.4 16.6 17.8 22.1 23.1 24.1 24.9 25.8 26.6 27.3 RE
GSEY -31.2 -30.9 -30.7 -30.3 -29.4 -28.8 -28.2 -27.5 -26.7 -25.9 -25.1 -24.1 -23.2 -18.8 -17.6 -16.3 -15.1 -13.7 -12.4 -11.1 RE
GSEZ -7.5 -8.2 -8.8 -9.5 -10.7 -11.2 -11.8 -12.3 -12.7 -13.2 -13.6 -14.0 -14.3 -15.4 -15.5 -15.7 -15.8 -15.8 -15.9 -15.9 RE
AU
AL
AE
DST
KP
1- 1- 1- 0o 0+ 0o 1- 0+ 1+ 3- 3- 3o 2+ 3o 3+ 2-
UT

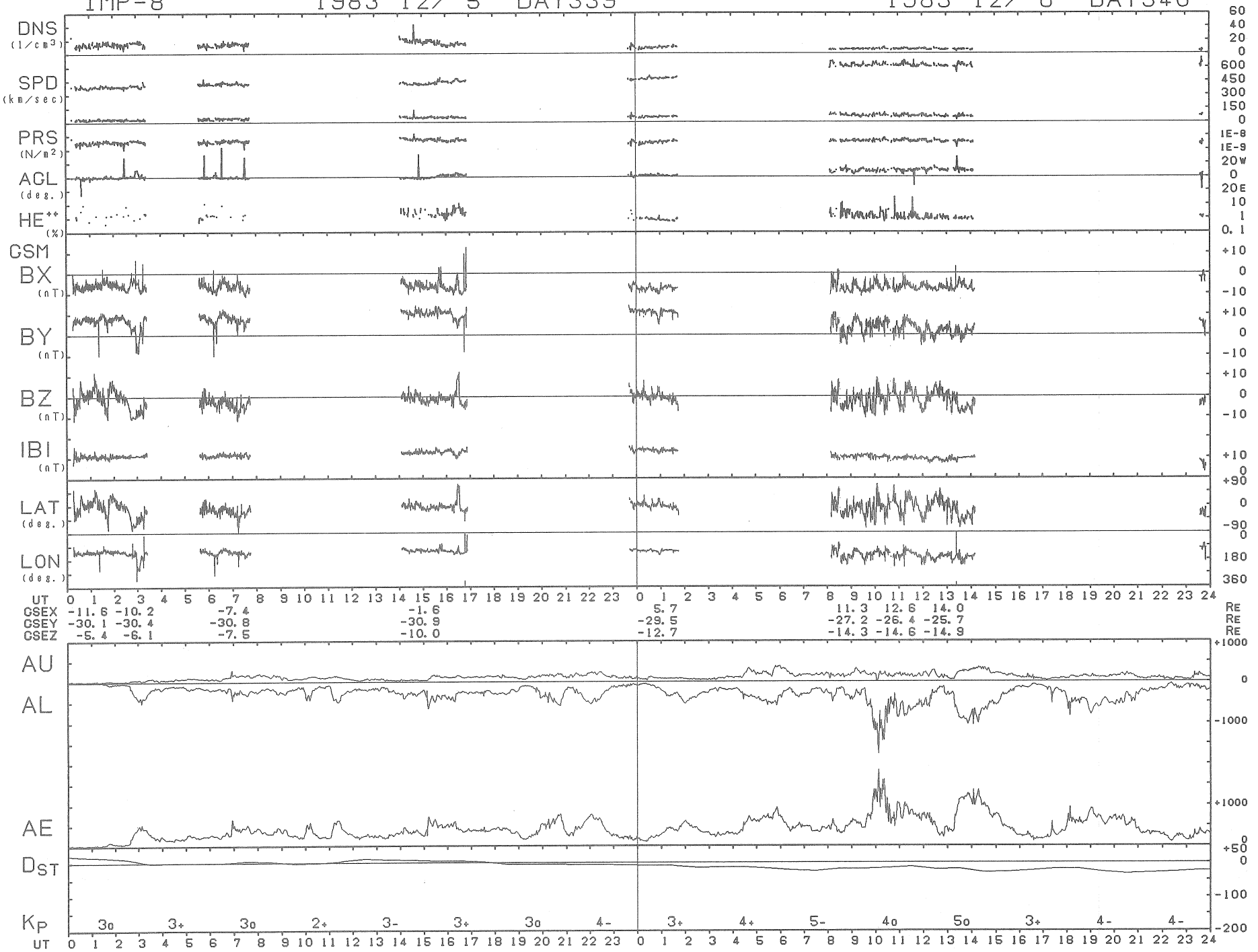

IMP-8
1983 11/25 DAY329
1983 11/26 DAY330
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.0 28.6 29.1 29.6 30.8 31.1 31.3 31.5 31.6 31.3 31.1 30.9 30.5 30.2 29.8 29.3 28.8 28.3 RE
GSEY -9.7 -8.3 -6.9 -5.4 -1.1 0.3 1.8 3.2 4.7 11.7 13.0 14.3 15.6 16.9 18.2 19.4 20.6 21.7 RE
GSEZ -15.9 -15.8 -15.7 -15.6 -15.0 -14.7 -14.4 -14.1 -13.8 -11.7 -11.2 -10.7 -10.2 -9.7 -9.1 -8.6 -8.0 -7.4 RE
AU
AL
AE
DST
KP 3- 4- 3o 3o 3- 2- 3o 4o 5o 4+ 4+ 2+ 3- 3- 4- 2o
UT

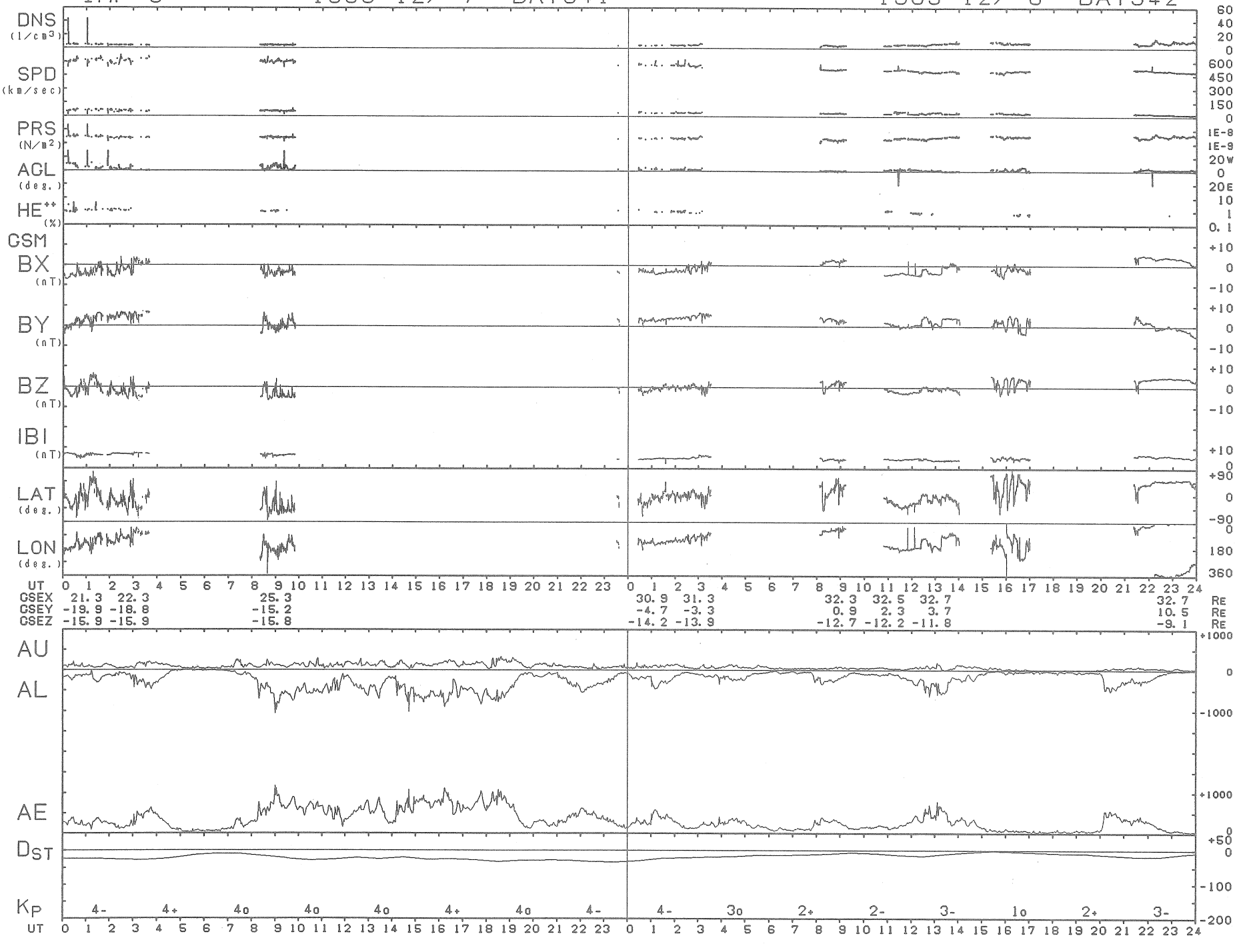

IMP-8
1983 11/27 DAY331
1983 11/28 DAY332
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.7 27.0 26.4 25.6 24.9 24.1 23.3 21.5 20.6 19.7 18.7 17.7 16.7 15.6 14.5 13.4 12.3 11.2 6.6 5.4 RE
GSEY 22.8 23.9 25.0 26.0 27.0 27.9 28.8 30.4 31.2 31.9 32.6 33.2 33.8 34.3 34.8 35.2 35.6 36.0 36.8 36.9 RE
GSEZ -6.8 -6.1 -5.5 -4.9 -4.2 -3.6 -2.9 -1.6 -0.9 -0.2 0.4 1.1 1.8 2.4 3.1 3.8 4.4 5.1 7.6 8.2 RE
AU
AL
AE
DST
KP 0+ 2- 2+ 3- 3- 2o 2- 1o 1o 1o 1o 2- 3+ 4+ 4+ 3+
UT

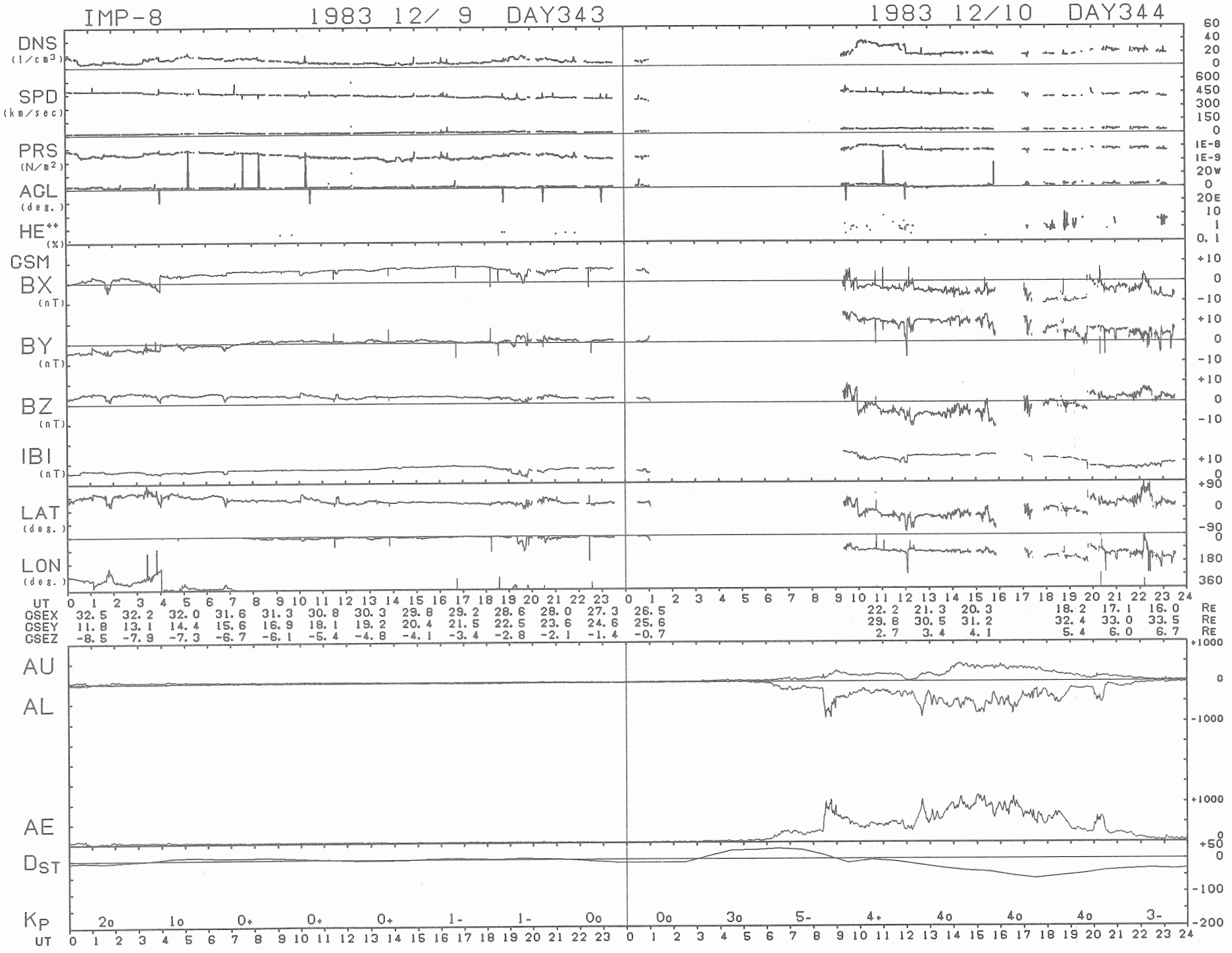

IMP-8
1983 11/29 DAY333
1983 11/30 DAY334
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 4.2 3.0 1.8 0.6 -5.5 -7.9 -10.2 -11.4 -12.5 -13.6 -14.7 -15.8 -16.9 -17.9 RE
GSEY 37.0 36.9 36.9 36.8 35.5 34.7 33.7 33.1 32.5 31.8 31.1 30.4 29.6 28.8 RE
GSEZ 8.8 9.3 9.9 10.4 13.0 13.8 14.6 15.0 15.3 15.7 16.0 16.2 16.5 16.7 RE
AU
AL
AE
DST
KP 4+ 3+ 2+ 5- 4- 3- 4- 4o 4o 3o 3+ 3+ 3+ 4o 5- 3-
UT

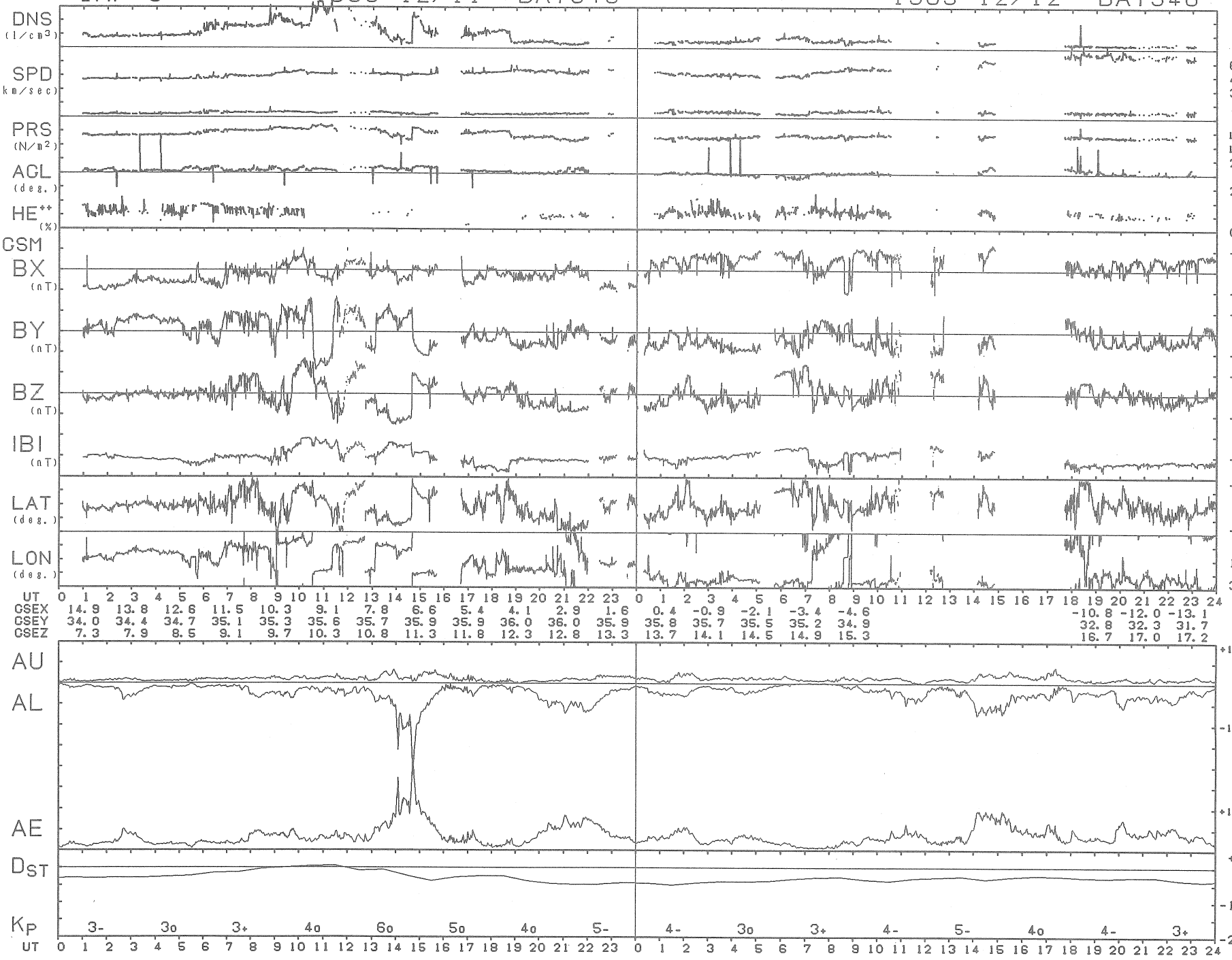

IMP-8
1983 12/ 1 DAY335
1983 12/ 2 DAY336
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -22.7 -24.4 -25.2 -27.5 -28.1 -28.7 -29.8 -30.8 -31.1 -32.0 -32.2 -32.3 -32.4 -32.5 RE
GSEY 24.0 21.9 20.8 17.3 16.0 14.8 12.2 9.6 8.2 4.1 2.8 1.4 -0.0 -1.4 RE
GSEZ 17.5 17.6 17.6 17.5 17.4 17.3 17.0 16.5 16.3 15.3 15.0 14.6 14.1 13.7 RE
AU
AL
AE
DST
KP 3+ 3+ 2+ 2+ 2+ 2+ 3o 3+ 2o 3- 2+ 2- 2+ 2+ 2o 1o
UT

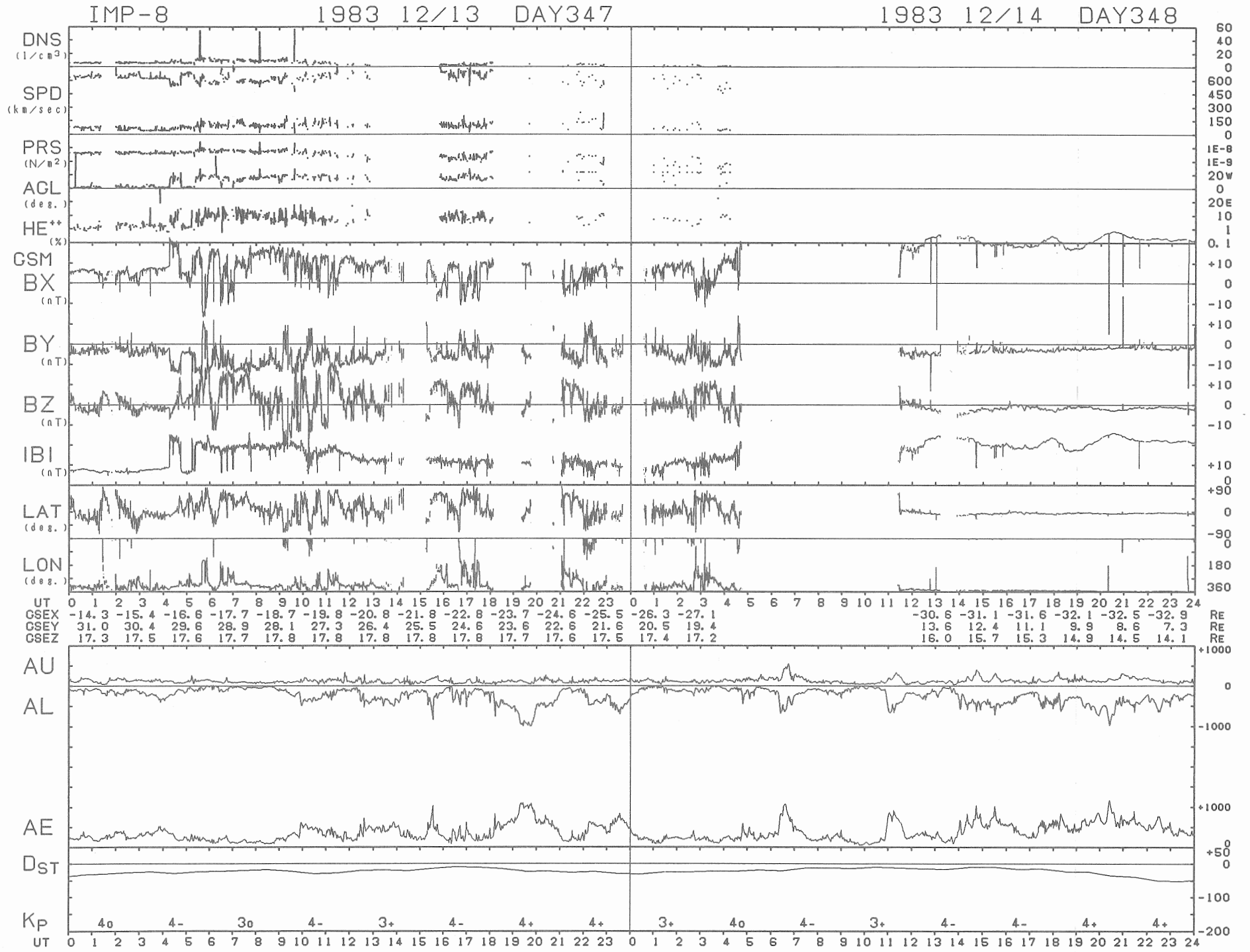

IMP-8
1983 12/ 3 DAY337
1983 12/ 4 DAY338
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.0 -31.8 -31.5 -31.1 -30.7 -30.2 -29.7 -29.1 -28.5 -22.5 -21.4 -19.2 -16.8 RE
GSEY -6.9 -8.3 -9.6 -10.9 -12.2 -13.5 -14.7 -16.0 -17.1 -24.4 -25.3 -26.8 -28.1 RE
GSEZ 11.7 11.1 10.5 9.9 9.3 8.6 8.0 7.3 6.6 1.4 0.6 -0.9 -2.4 RE
AU
AL
AE
DST
KP 1- 1- 0+ 0+ 1o 1o 1o 2o 0o 1+ 1+ 1o 1- 2+ 1o 1+
UT

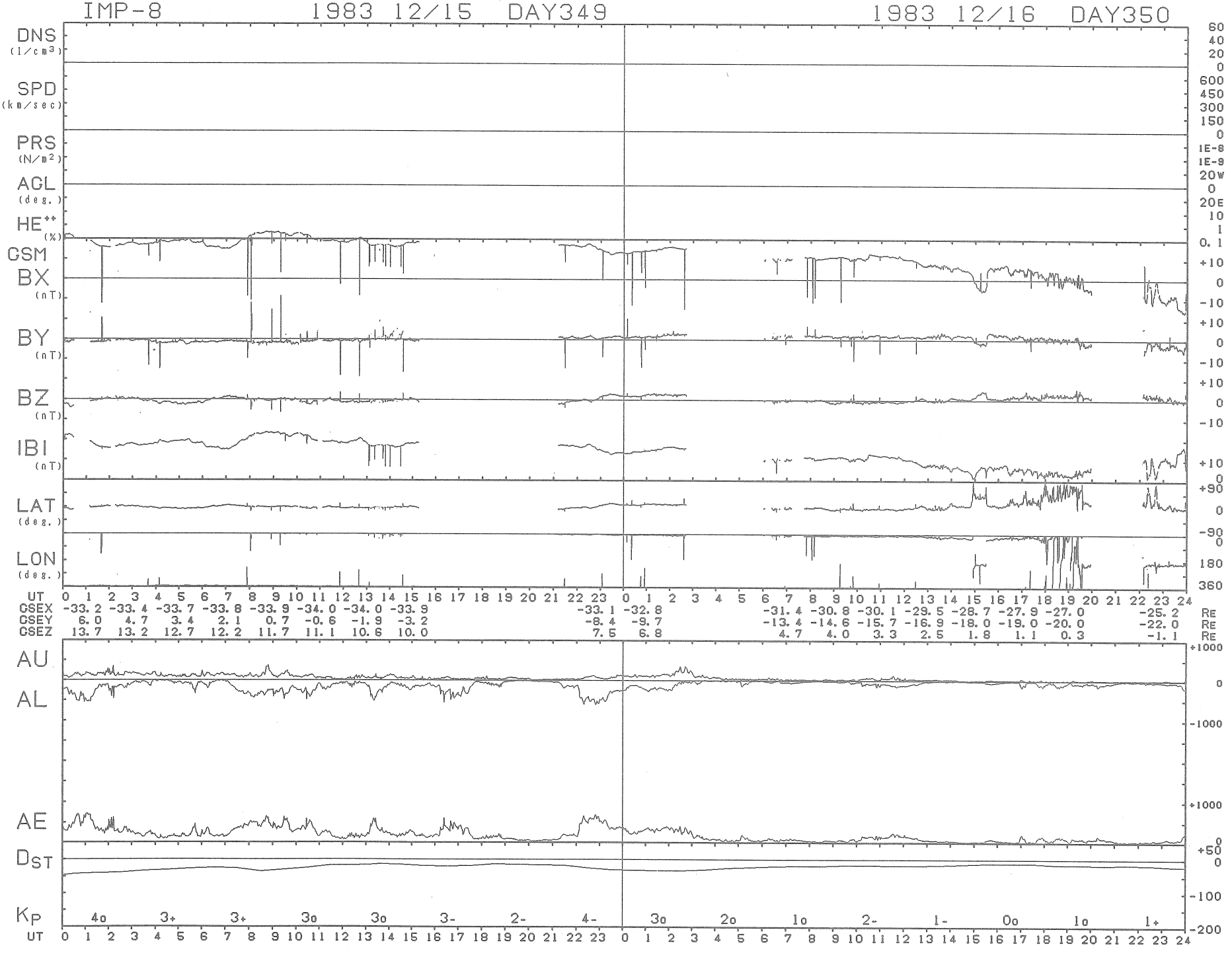

IMP-8
1983 12/ 5 DAY339
1983 12/ 6 DAY340
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.6 -10.2 -7.4 -1.6 5.7 11.3 12.6 14.0 RE
GSEY -30.1 -30.4 -30.8 -30.9 -29.5 -27.2 -26.4 -25.7 RE
GSEZ -5.4 -6.1 -7.5 -10.0 -12.7 -14.3 -14.6 -14.9 RE
AU
AL
AE
DST
KP
3o 3+ 3o 2+ 3- 3+ 3o 4- 3+ 4+ 5- 4o 5o 3+ 4- 4-
UT

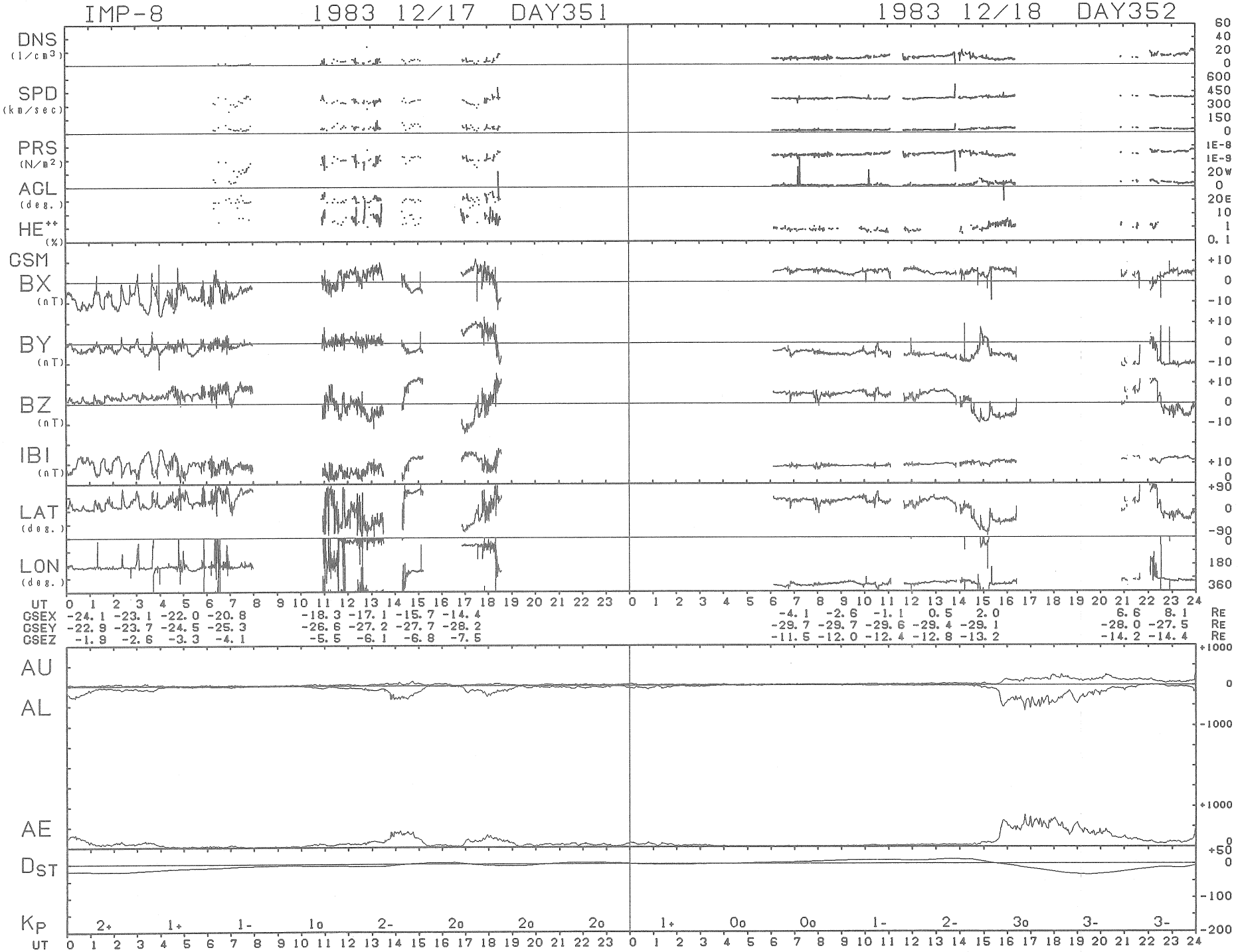

IMP-8
1983 12/ 7 DAY341
1983 12/ 8 DAY342
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.3 22.3 25.3 30.9 31.3 32.3 32.5 32.7 32.7 RE
GSEY -19.9 -18.8 -15.2 -4.7 -3.3 0.9 2.3 3.7 10.5 RE
GSEZ -15.9 -15.9 -15.8 -14.2 -13.9 -12.7 -12.2 -11.8 -9.1 RE
AU
AL
AE
DST
KP
4- 4+ 4o 4o 4o 4+ 4o 4- 4- 3o 2+ 2- 3- 1o 2+ 3-
UT

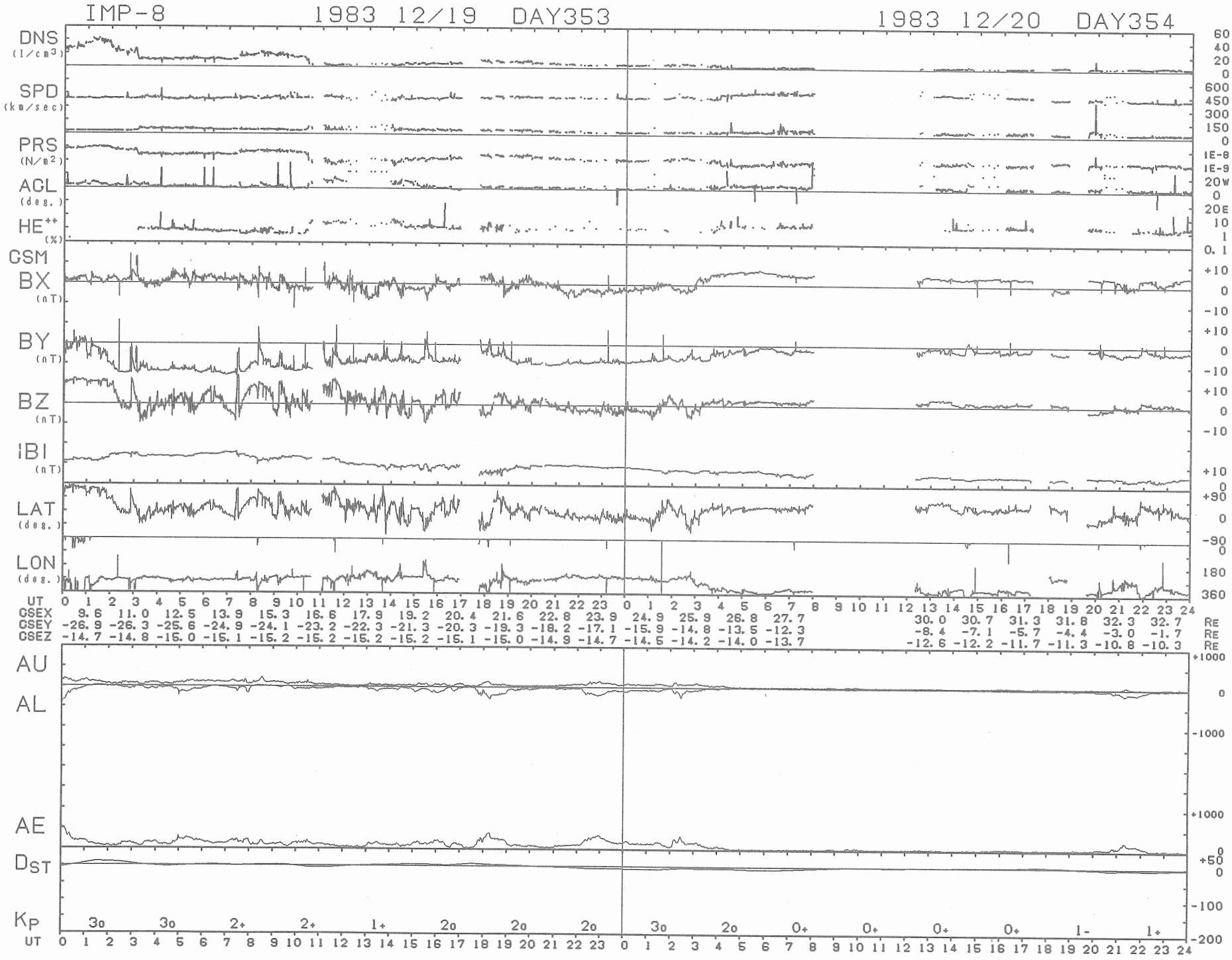

IMP-8
1983 12/ 9 DAY343
1983 12/10 DAY344
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.5 32.2 32.0 31.6 31.3 30.8 30.3 29.8 29.2 28.6 28.0 27.3 26.5 22.2 21.3 20.3 18.2 17.1 16.0 RE
GSEY 11.8 13.1 14.4 15.6 16.9 18.1 19.2 20.4 21.5 22.5 23.6 24.6 25.6 29.8 30.5 31.2 32.4 33.0 33.5 RE
GSEZ -8.5 -7.9 -7.3 -6.7 -6.1 -5.4 -4.8 -4.1 -3.4 -2.8 -2.1 -1.4 -0.7 2.7 3.4 4.1 5.4 6.0 6.7 RE
AU
AL
AE
DST
KP 2o 1o 0+ 0+ 0+ 1- 1- 0o 0o 3o 5- 4+ 4o 4o 4o 3-
UT

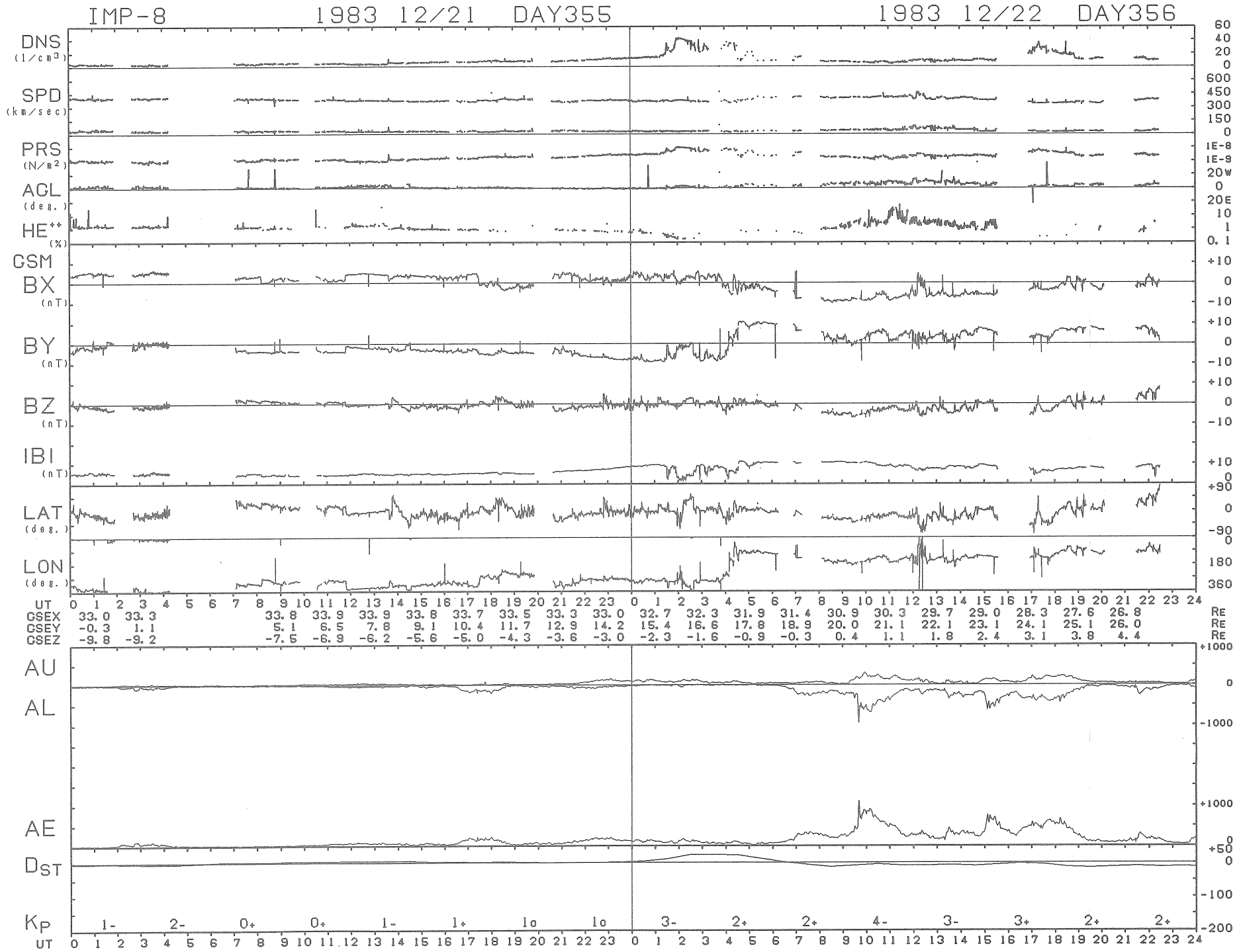

IMP-8
1983 12/11 DAY345
1983 12/12 DAY346
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.9 13.8 12.6 11.5 10.3 9.1 7.8 6.6 5.4 4.1 2.9 1.6 0.4 -0.9 -2.1 -3.4 -4.6 -10.8 -12.0 -13.1 RE
GSEY 34.0 34.4 34.7 35.1 35.3 35.6 35.7 35.9 35.9 36.0 36.0 35.9 35.8 35.7 35.5 35.2 34.9 32.8 32.3 31.7 RE
GSEZ 7.3 7.9 8.5 9.1 9.7 10.3 10.8 11.3 11.8 12.3 12.8 13.3 13.7 14.1 14.5 14.9 15.3 16.7 17.0 17.2 RE
AU
AL
AE
DST
KP 3- 3o 3+ 4o 6o 5o 4o 5- 4- 3o 3+ 4- 5- 4o 4- 3+
UT

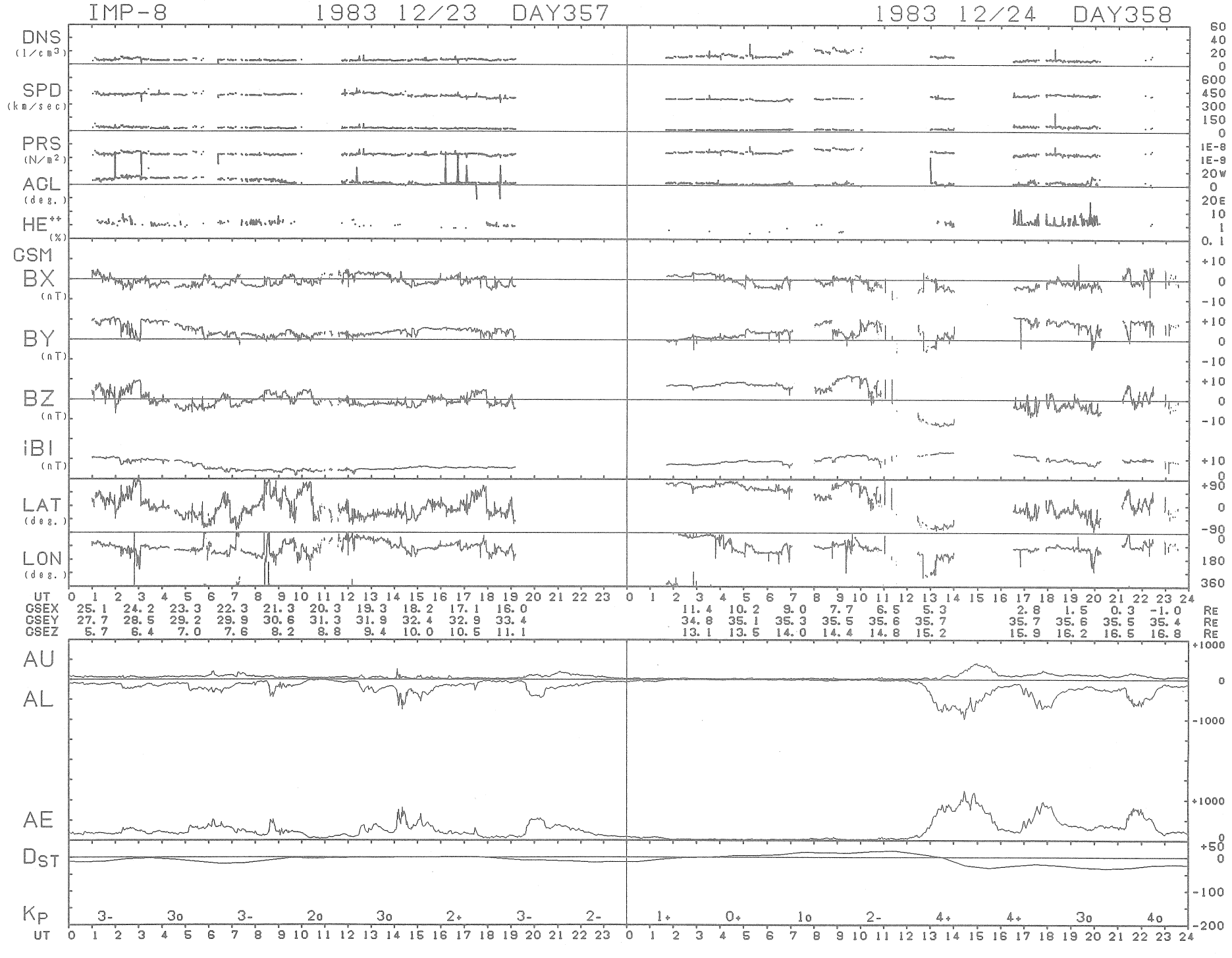

IMP-8
1983 12/13 DAY347
1983 12/14 DAY348
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.3 -15.4 -16.6 -17.7 -18.7 -19.8 -20.8 -21.8 -22.8 -23.7 -24.6 -25.5 -26.3 -27.1 -30.6 -31.1 -31.6 -32.1 -32.5 -32.9 RE
GSEY 31.0 30.4 29.6 28.9 28.1 27.3 26.4 25.5 24.6 23.6 22.6 21.6 20.5 19.4 13.6 12.4 11.1 9.9 8.6 7.3 RE
GSEZ 17.3 17.5 17.6 17.7 17.8 17.8 17.8 17.8 17.8 17.7 17.6 17.5 17.4 17.2 16.0 15.7 15.3 14.9 14.5 14.1 RE
AU
AL
AE
DST
KP
4o 4- 3o 4- 3+ 4- 4+ 4+ 3+ 4o 4- 3+ 4- 4- 4+ 4+
UT

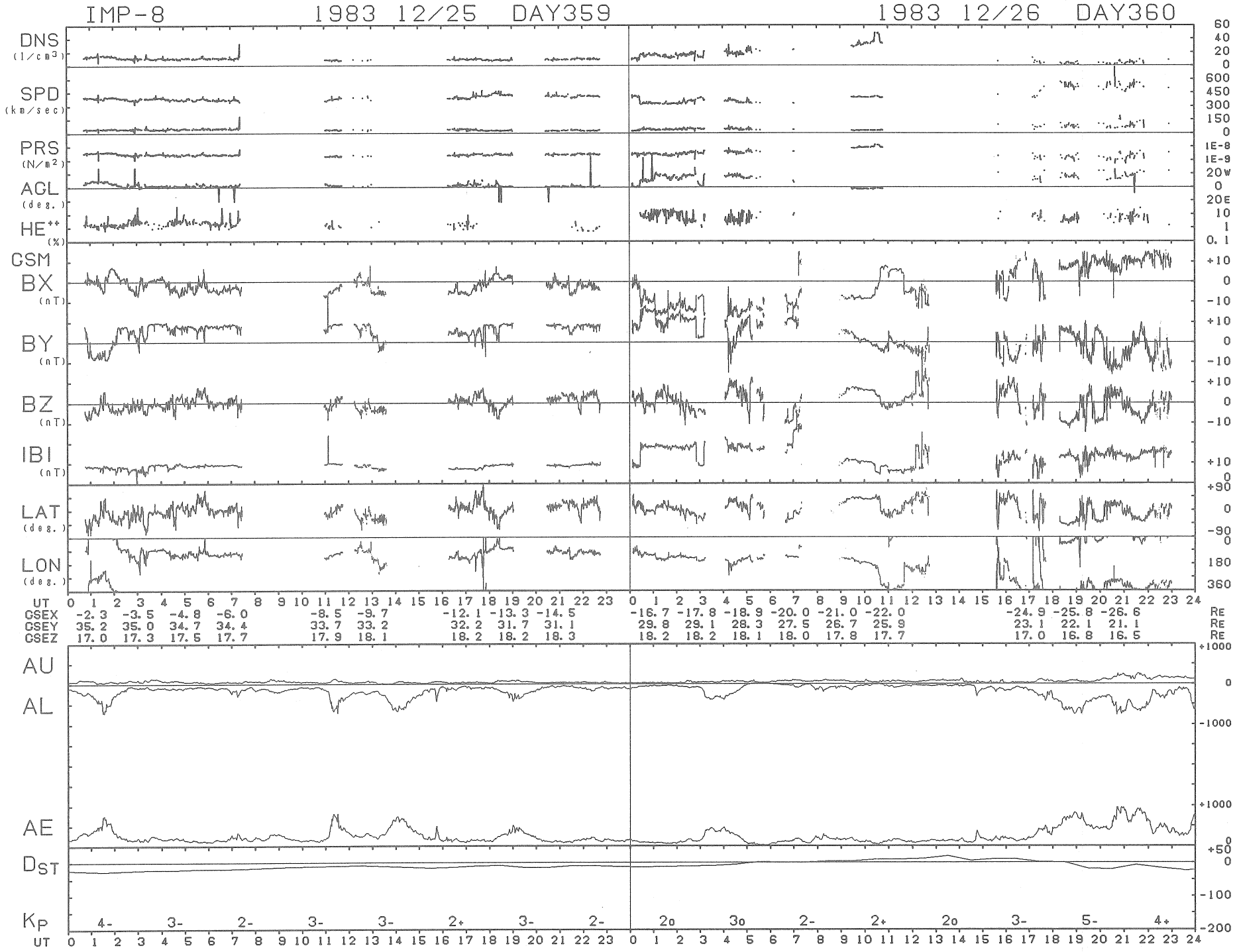

IMP-8
1983 12/15 DAY349
1983 12/16 DAY350
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.2 -33.4 -33.7 -33.8 -33.9 -34.0 -34.0 -33.9 -33.1 -32.8 -31.4 -30.8 -30.1 -29.5 -28.7 -27.9 -27.0 -25.2 RE
GSEY 6.0 4.7 3.4 2.1 0.7 -0.6 -1.9 -3.2 -8.4 -9.7 -13.4 -14.6 -15.7 -16.9 -18.0 -19.0 -20.0 -22.0 RE
GSEZ 13.7 13.2 12.7 12.2 11.7 11.1 10.6 10.0 7.5 6.8 4.7 4.0 3.3 2.5 1.8 1.1 0.3 -1.1 RE
AU
AL
AE
DST
KP
4o 3+ 3+ 3o 3o 3- 2- 4- 3o 2o 1o 2- 1- 0o 1o 1+
UT

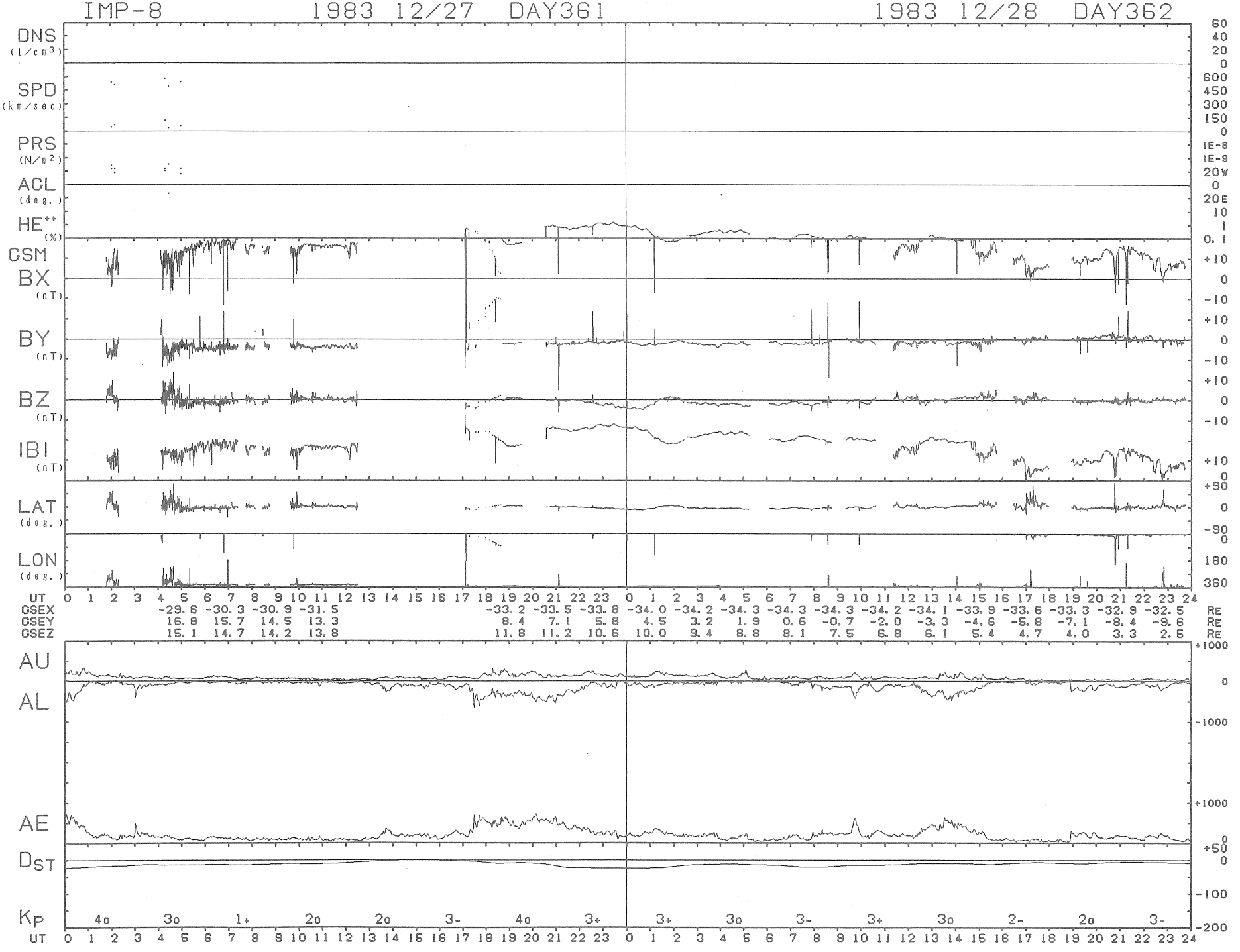

IMP-8
1983 12/17 DAY351
1983 12/18 DAY352
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.1 -23.1 -22.0 -20.8 -18.3 -17.1 -15.7 -14.4 -4.1 -2.6 -1.1 0.5 2.0 6.6 8.1 RE
GSEY -22.9 -23.7 -24.5 -25.3 -26.6 -27.2 -27.7 -28.2 -29.7 -29.7 -29.6 -29.4 -29.1 -28.0 -27.5 RE
GSEZ -1.9 -2.6 -3.3 -4.1 -5.5 -6.1 -6.8 -7.5 -11.5 -12.0 -12.4 -12.8 -13.2 -14.2 -14.4 RE
AU
AL
AE
DST
KP
2+ 1+ 1- 1o 2- 2o 2o 2o 1+ 0o 0o 1- 2- 3o 3- 3-

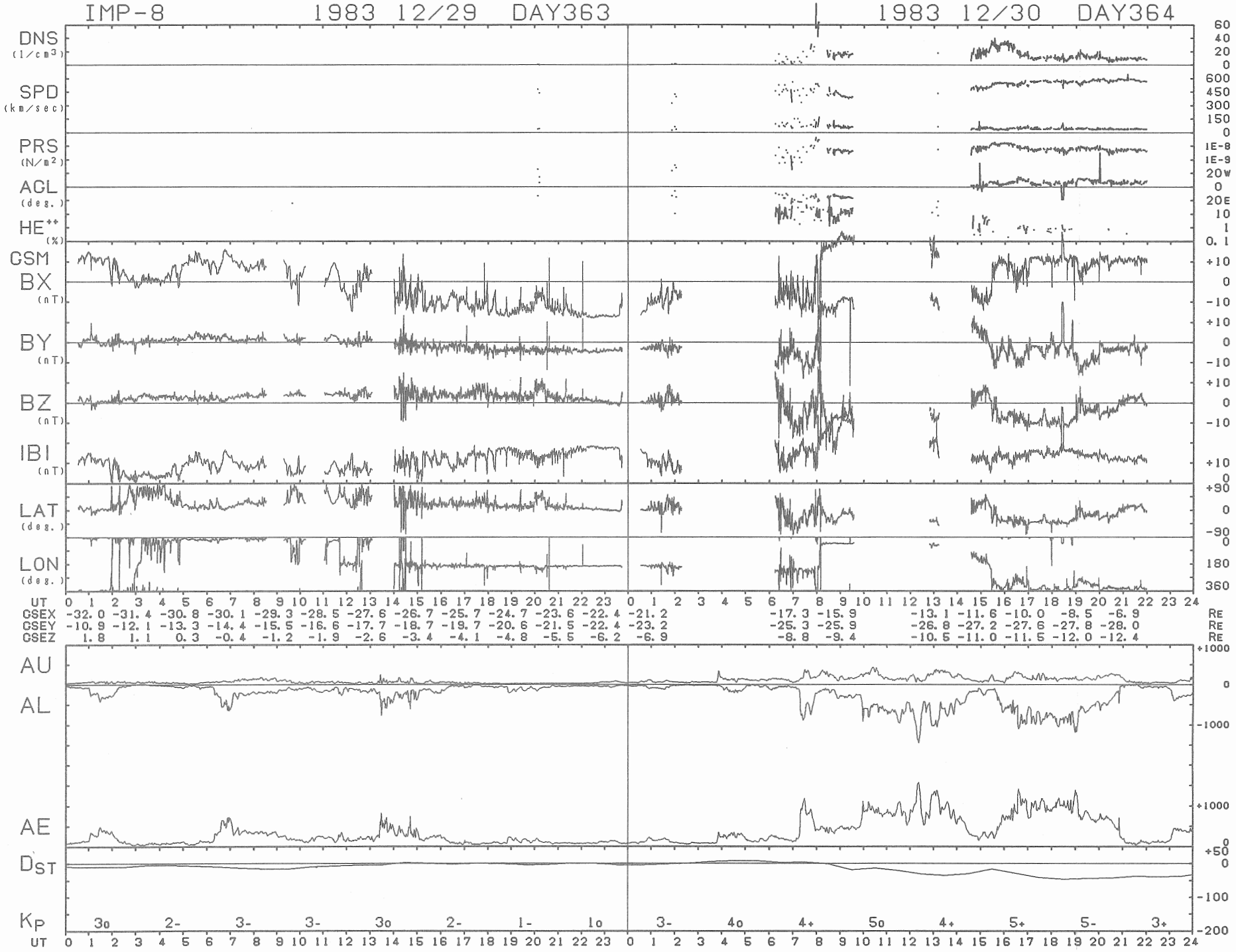

IMP-8
1983 12/19 DAY353
1983 12/20 DAY354
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 9.6 11.0 12.5 13.9 15.3 16.6 17.9 19.2 20.4 21.6 22.8 23.9 24.9 25.9 26.8 27.7 30.0 30.7 31.3 31.8 32.3 32.7 RE
GSEY -26.9 -26.3 -25.6 -24.9 -24.1 -23.2 -22.3 -21.3 -20.3 -19.3 -18.2 -17.1 -15.9 -14.8 -13.5 -12.3 -8.4 -7.1 -5.7 -4.4 -3.0 -1.7 RE
GSEZ -14.7 -14.8 -15.0 -15.1 -15.2 -15.2 -15.2 -15.2 -15.1 -15.0 -14.9 -14.7 -14.5 -14.2 -14.0 -13.7 -12.6 -12.2 -11.7 -11.3 -10.8 -10.3 RE
AU
AL
AE
DST
KP 3o 3o 2+ 2+ 1+ 2o 2o 2o 3o 2o 0+ 0+ 0+ 0+ 1- 1+
UT

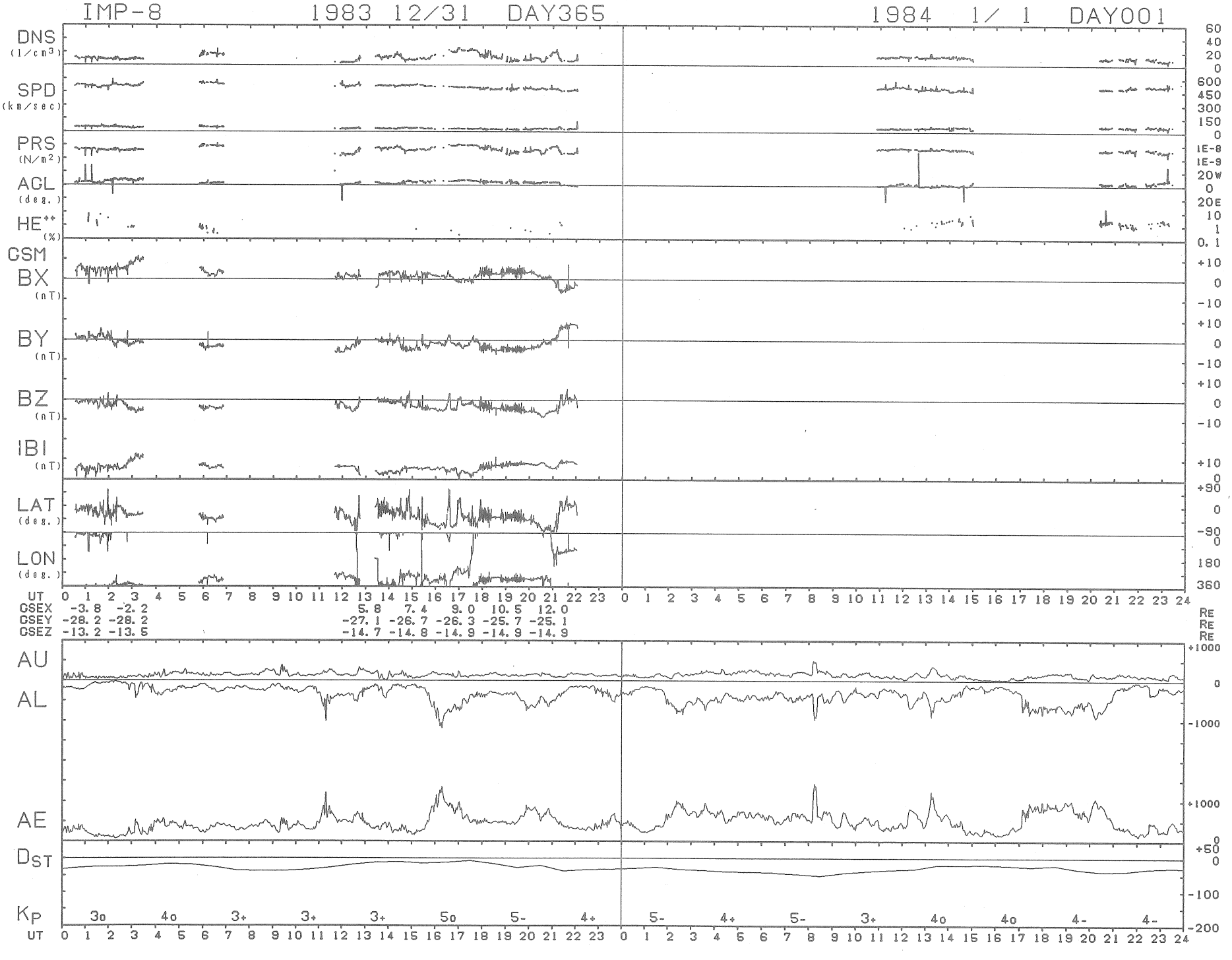

IMP-8
1983 12/21 DAY355
1983 12/22 DAY356
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.0 33.3 33.8 33.9 33.9 33.8 33.7 33.5 33.3 33.0 32.7 32.3 31.9 31.4 30.9 30.3 29.7 29.0 28.3 27.6 26.8 RE
GSEY -0.3 1.1 5.1 6.5 7.8 9.1 10.4 11.7 12.9 14.2 15.4 16.6 17.8 18.9 20.0 21.1 22.1 23.1 24.1 25.1 26.0 RE
GSEZ -9.8 -9.2 -7.5 -6.9 -6.2 -5.6 -5.0 -4.3 -3.6 -3.0 -2.3 -1.6 -0.9 -0.3 0.4 1.1 1.8 2.4 3.1 3.8 4.4 RE
AU
AL
AE
DST
KP 1- 2- 0+ 0+ 1- 1+ 1o 1o 3- 2+ 2+ 4- 3- 3+ 2+ 2+
UT

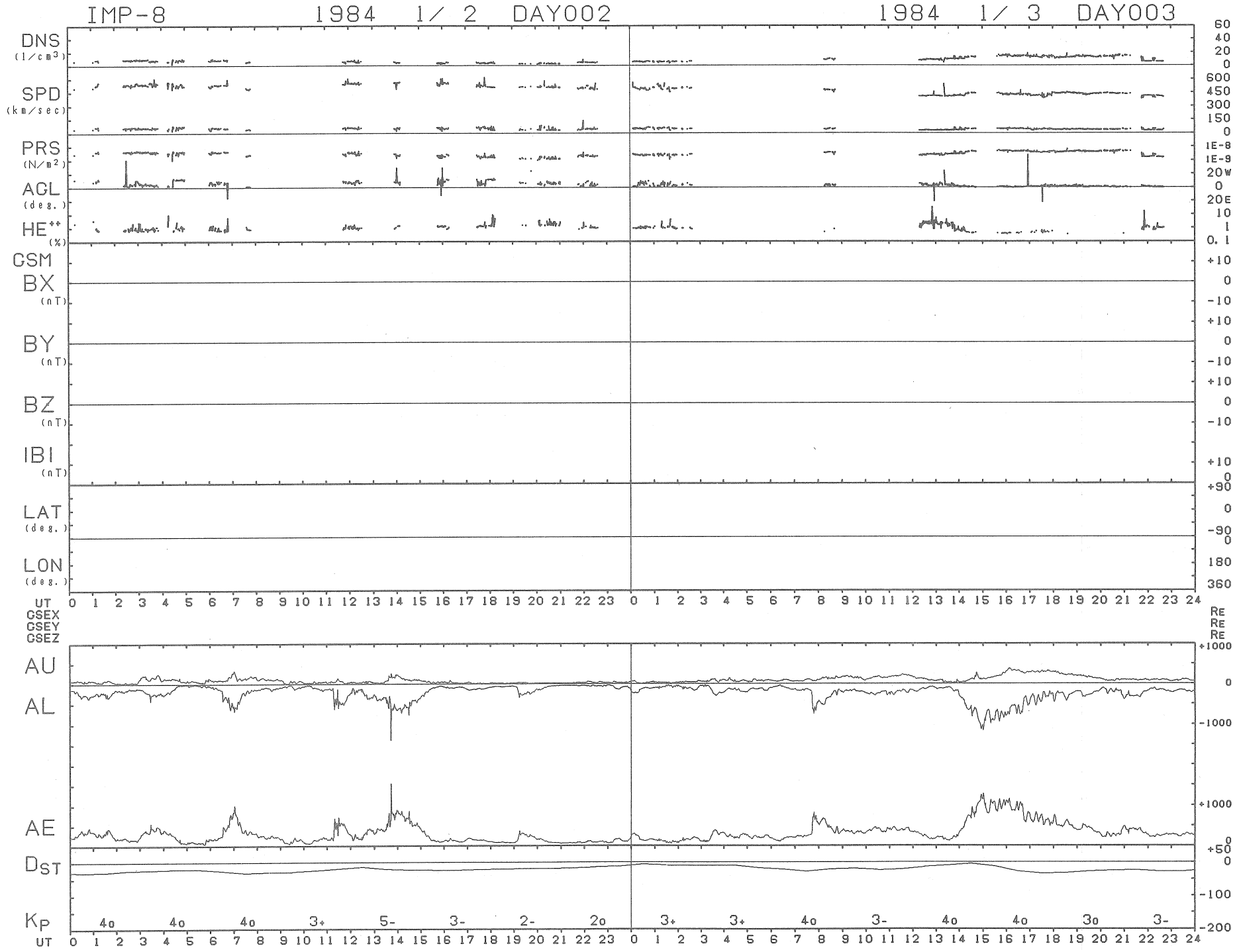

IMP-8
1983 12/23 DAY357
1983 12/24 DAY358
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.1 24.2 23.3 22.3 21.3 20.3 19.3 18.2 17.1 16.0 11.4 10.2 9.0 7.7 6.5 5.3 2.8 1.5 0.3 -1.0 RE
GSEY 27.7 28.5 29.2 29.9 30.6 31.3 31.9 32.4 32.9 33.4 34.8 35.1 35.3 35.5 35.6 35.7 35.7 35.6 35.5 35.4 RE
GSEZ 5.7 6.4 7.0 7.6 8.2 8.8 9.4 10.0 10.5 11.1 13.1 13.5 14.0 14.4 14.8 15.2 15.9 16.2 16.5 16.8 RE
AU
AL
AE
DST
KP 3- 3o 3- 2o 3o 2+ 3- 2- 1+ 0+ 1o 2- 4+ 4+ 3o 4o
UT

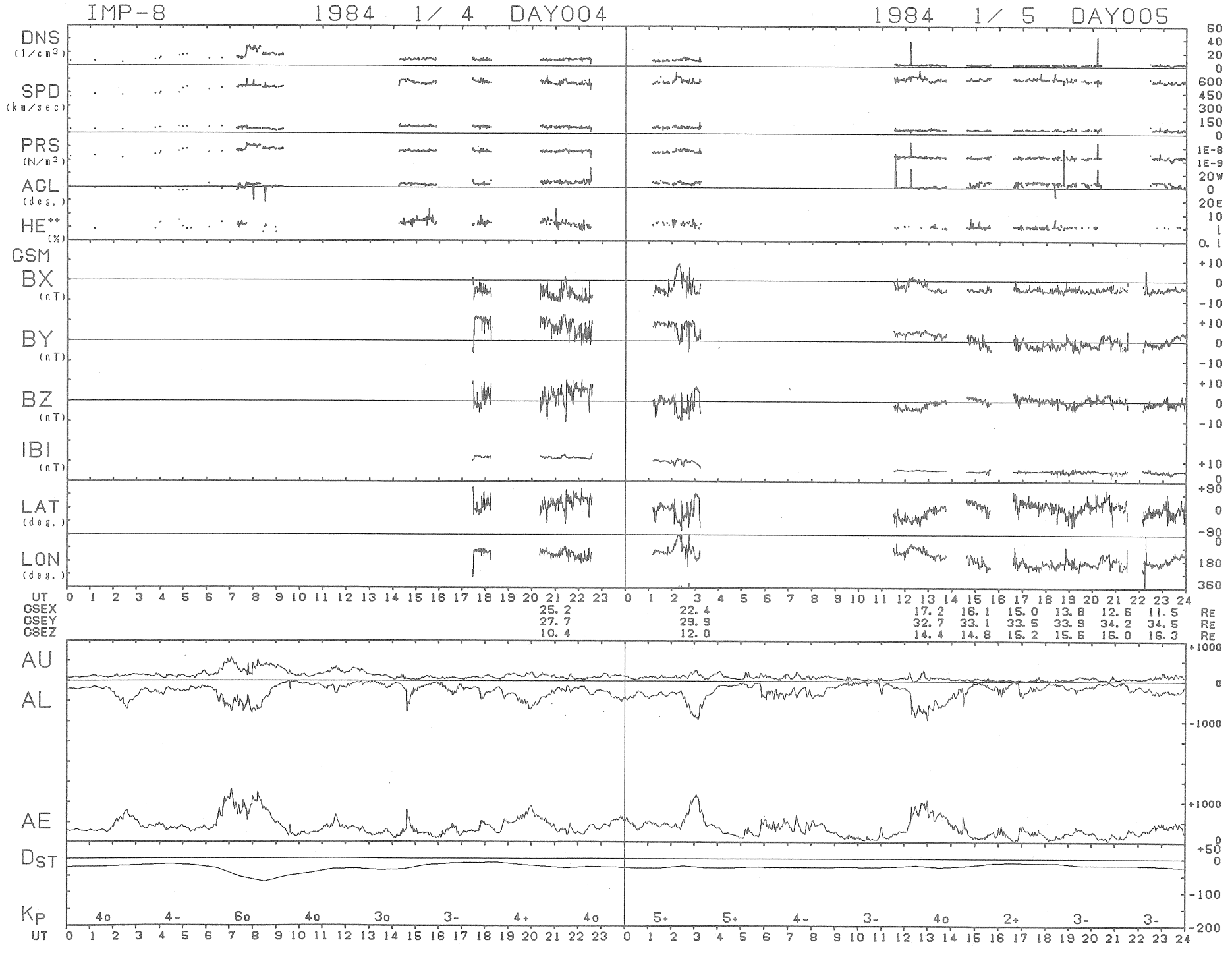

IMP-8
1983 12/25 DAY359
1983 12/26 DAY360
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.3 -3.5 -4.8 -6.0 -8.5 -9.7 -12.1 -13.3 -14.5 -16.7 -17.8 -18.9 -20.0 -21.0 -22.0 -24.9 -25.8 -26.6 RE
GSEY 35.2 35.0 34.7 34.4 33.7 33.2 32.2 31.7 31.1 29.8 29.1 28.3 27.5 26.7 25.9 23.1 22.1 21.1 RE
GSEZ 17.0 17.3 17.5 17.7 17.9 18.1 18.2 18.2 18.3 18.2 18.2 18.1 18.0 17.8 17.7 17.0 16.8 16.5 RE
AU
AL
AE
DST
KP
4- 3- 2- 3- 3- 2+ 3- 2- 2o 3o 2- 2+ 2o 3- 5- 4+
UT

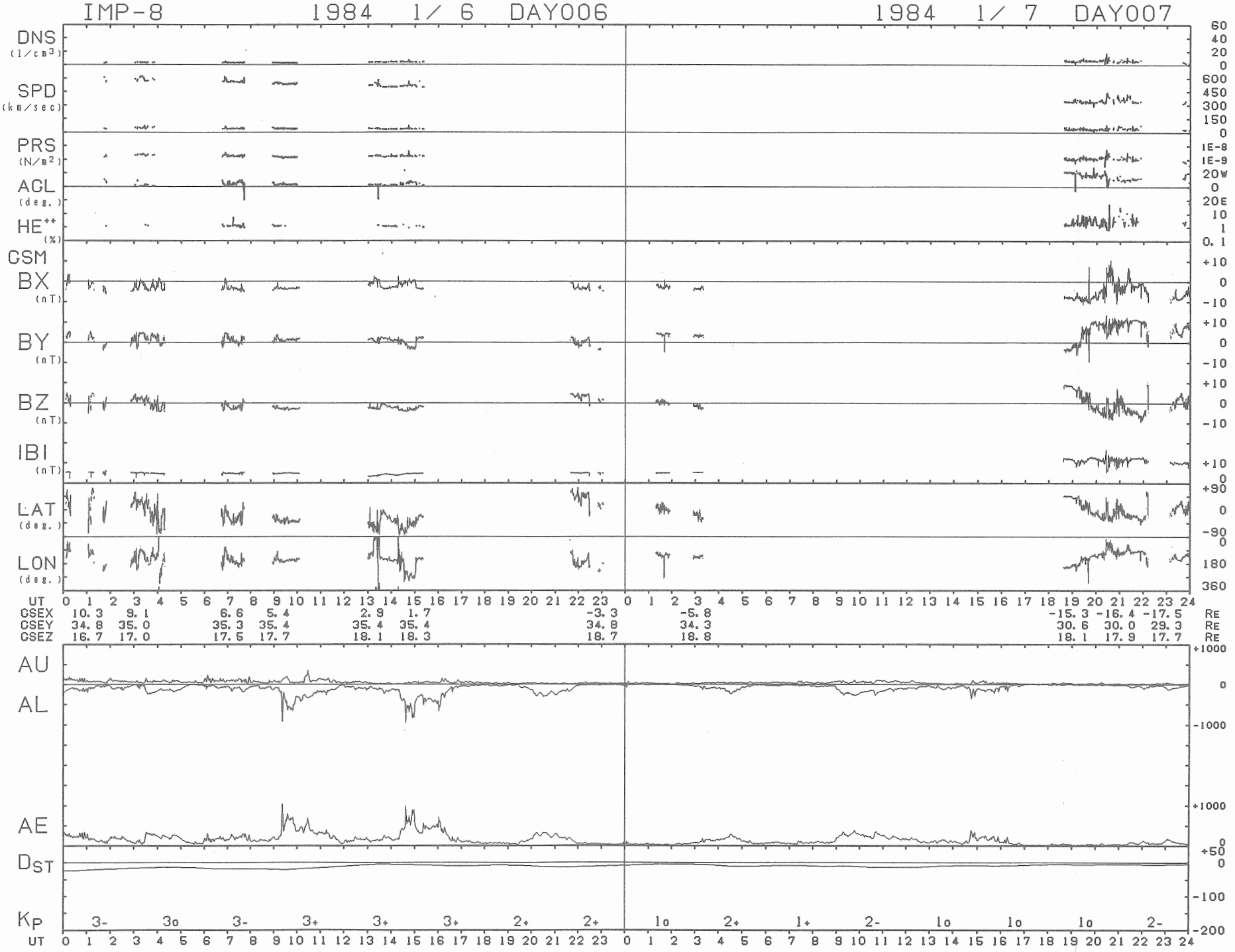

IMP-8
1983 12/27 DAY361
1983 12/28 DAY362
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.6 -30.3 -30.9 -31.5 -33.2 -33.5 -33.8 -34.0 -34.2 -34.3 -34.3 -34.3 -34.2 -34.1 -33.9 -33.6 -33.3 -32.9 -32.5 RE
GSEY 16.8 15.7 14.5 13.3 8.4 7.1 5.8 4.5 3.2 1.9 0.6 -0.7 -2.0 -3.3 -4.6 -5.8 -7.1 -8.4 -9.6 RE
GSEZ 15.1 14.7 14.2 13.8 11.8 11.2 10.6 10.0 9.4 8.8 8.1 7.5 6.8 6.1 5.4 4.7 4.0 3.3 2.5 RE
AU
AL
AE
DST
KP
4o 3o 1+ 2o 2o 3- 4o 3+ 3+ 3o 3- 3+ 3o 2- 2o 3-
UT

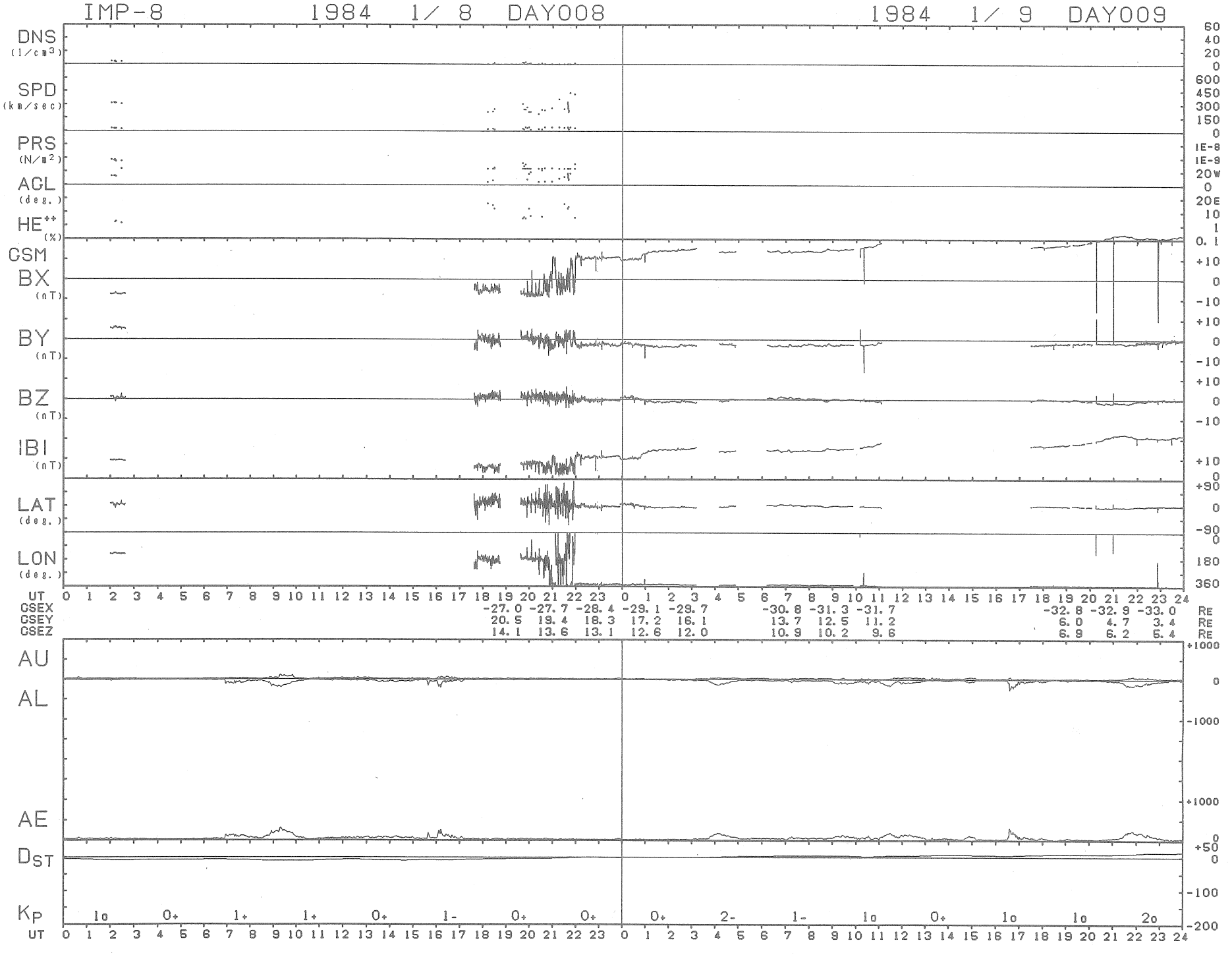

IMP-8
1983 12/29 DAY363
1983 12/30 DAY364
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.0 -31.4 -30.8 -30.1 -29.3 -28.5 -27.6 -26.7 -25.7 -24.7 -23.6 -22.4 -21.2 -17.3 -15.9 -13.1 -11.6 -10.0 -8.5 -6.9 RE
GSEY -10.9 -12.1 -13.3 -14.4 -15.5 -16.6 -17.7 -18.7 -19.7 -20.6 -21.5 -22.4 -23.2 -25.3 -25.9 -26.8 -27.2 -27.6 -27.8 -28.0 RE
GSEZ 1.8 1.1 0.3 -0.4 -1.2 -1.9 -2.6 -3.4 -4.1 -4.8 -5.5 -6.2 -6.9 -8.8 -9.4 -10.5 -11.0 -11.5 -12.0 -12.4 RE
AU
AL
AE
DST
KP 3o 2- 3- 3- 3o 2- 1- 1o 3- 4o 4+ 5o 4+ 5+ 5- 3+
UT

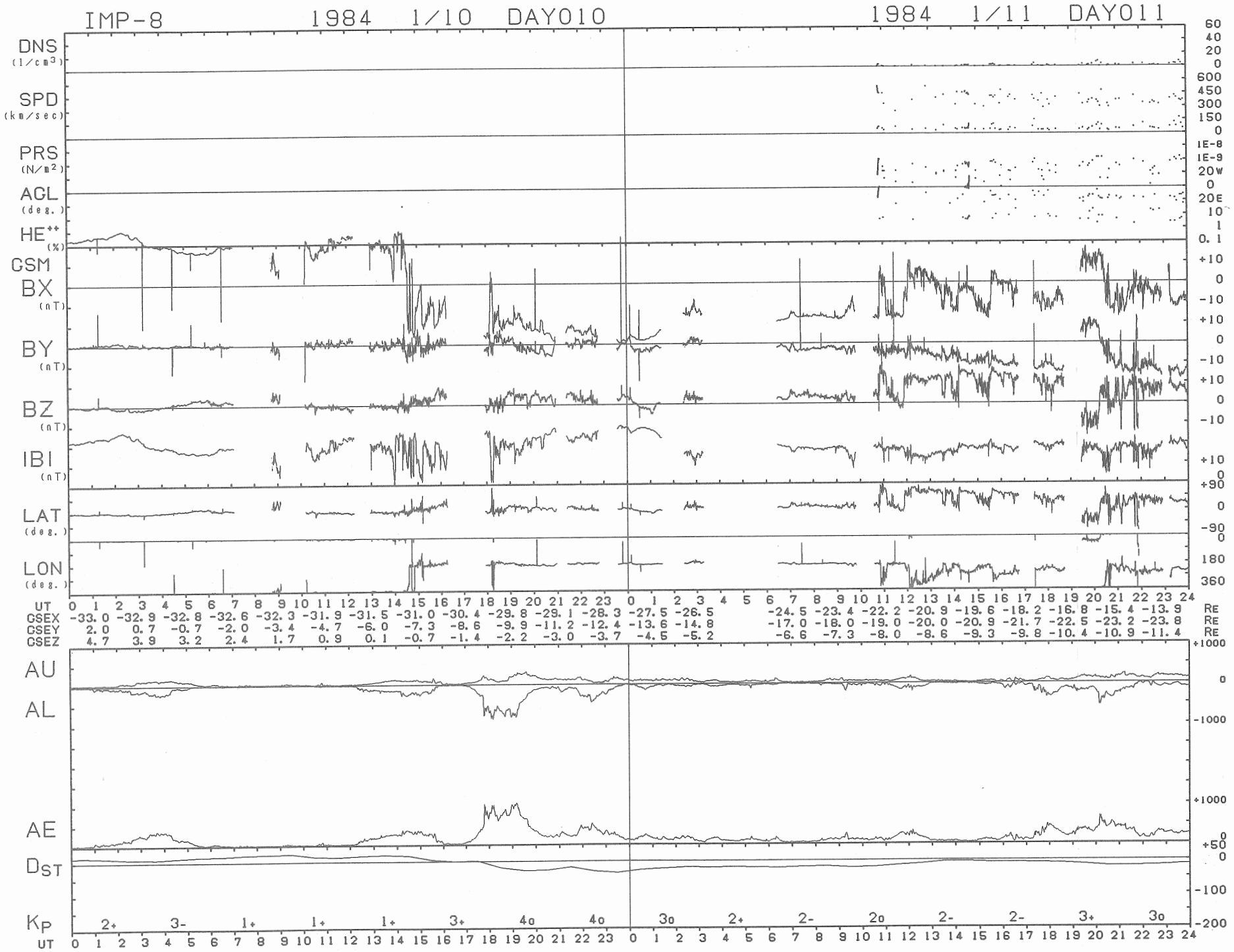

IMP-8
1983 12/31 DAY365
1984 1/ 1 DAY001
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -3.8 -2.2 5.8 7.4 9.0 10.5 12.0
GSEY -28.2 -28.2 -27.1 -26.7 -26.3 -25.7 -25.1
GSEZ -13.2 -13.5 -14.7 -14.8 -14.9 -14.9 -14.9
RE
AU
AL
AE
DST
KP
3o 4o 3+ 3+ 3+ 5o 5- 4+ 5- 4+ 5- 3+ 4o 4o 4- 4-

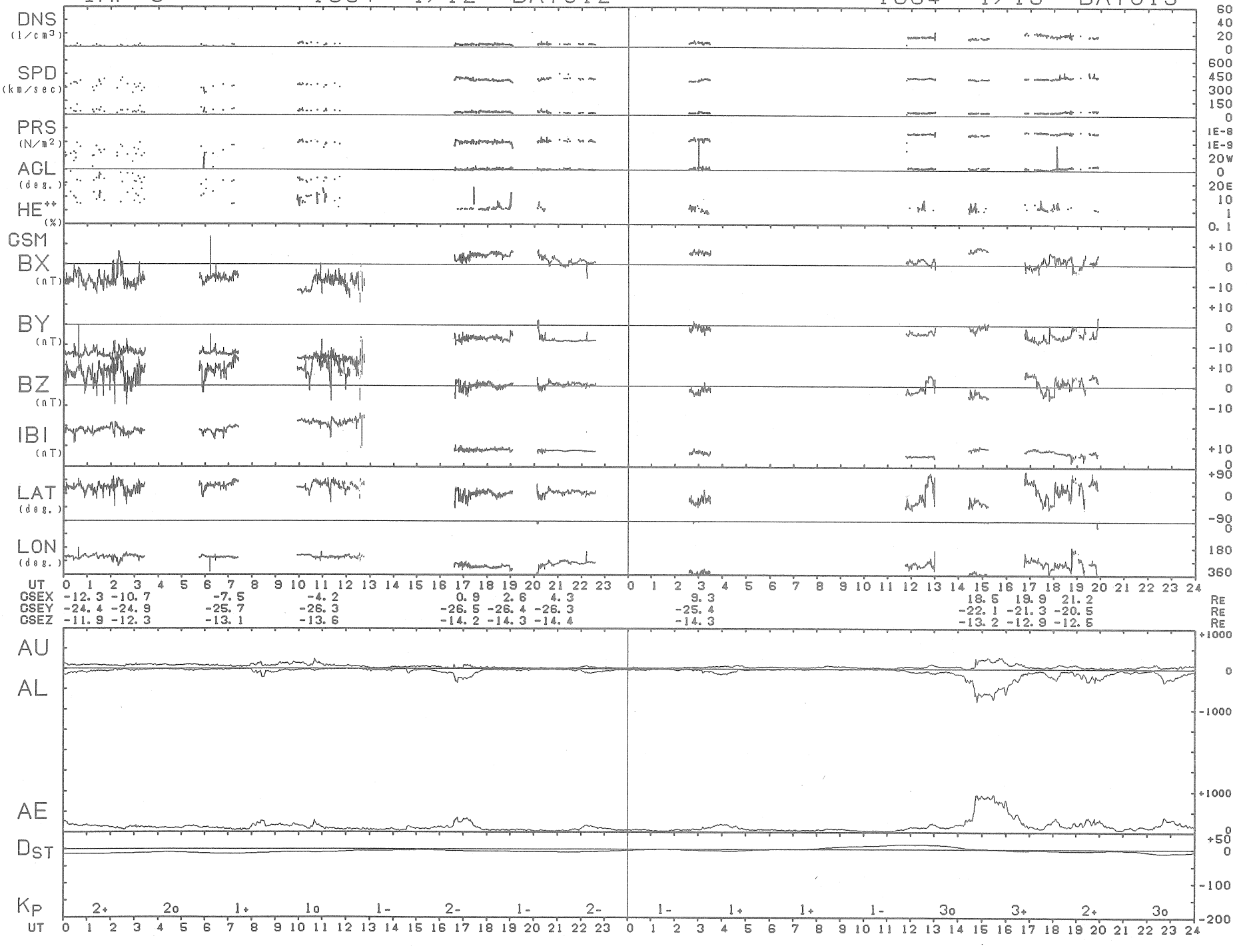

IMP-8
1984 1/ 2 DAY002
1984 1/ 3 DAY003
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4o 4o 4o 3+ 5- 3- 2- 2o 3+ 3+ 4o 3- 4o 4o 3o 3-
Re

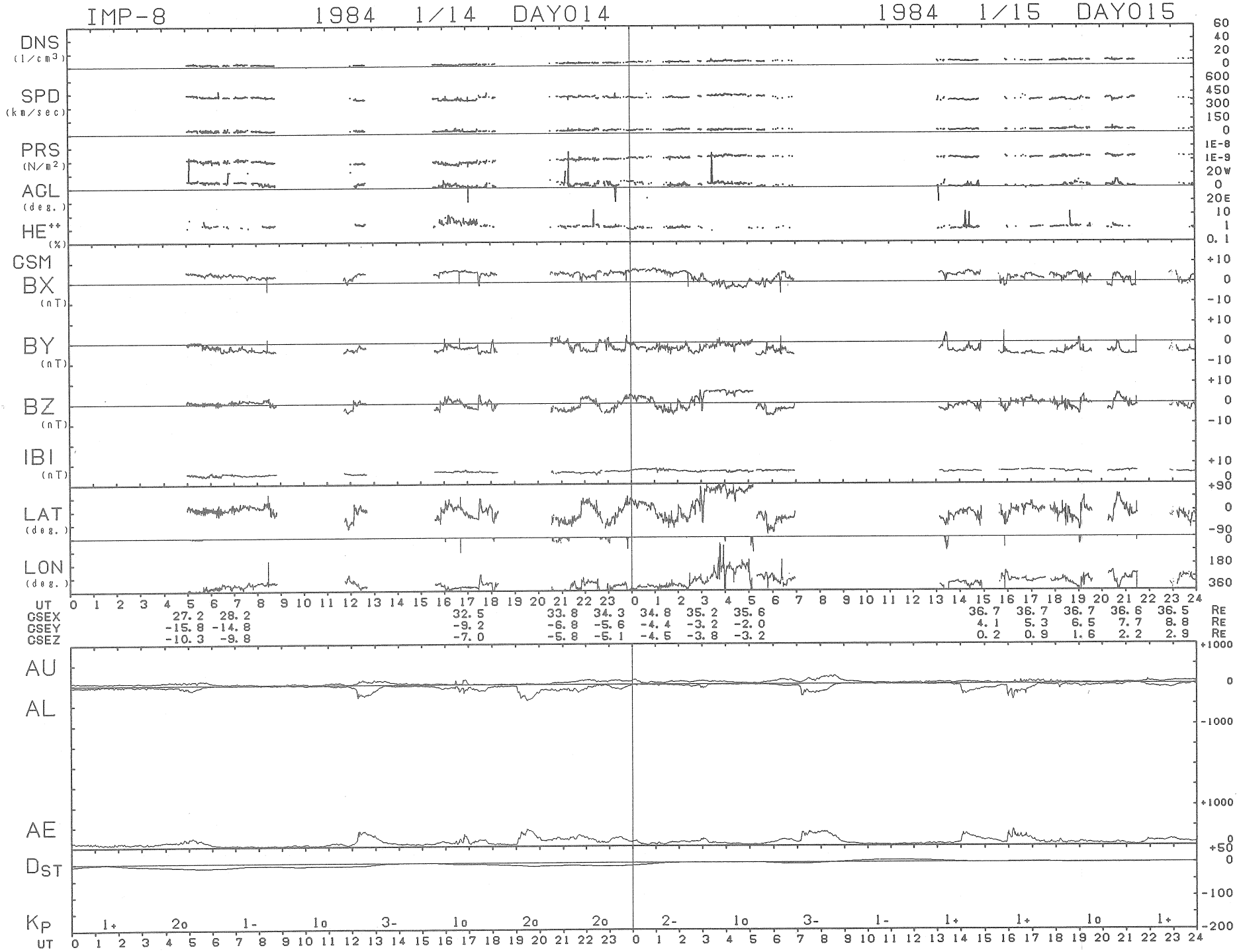

IMP-8 1984 1/ 4 DAY004
1984 1/ 5 DAY005
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.2 22.4 17.2 16.1 15.0 13.8 12.6 11.5 RE
GSEY 27.7 29.9 32.7 33.1 33.5 33.9 34.2 34.5 RE
GSEZ 10.4 12.0 14.4 14.8 15.2 15.6 16.0 16.3 RE
AU
AL
AE
DST
KP 4o 4- 6o 4o 3o 3- 4+ 4o 5+ 5+ 4- 3- 4o 2+ 3- 3-
UT

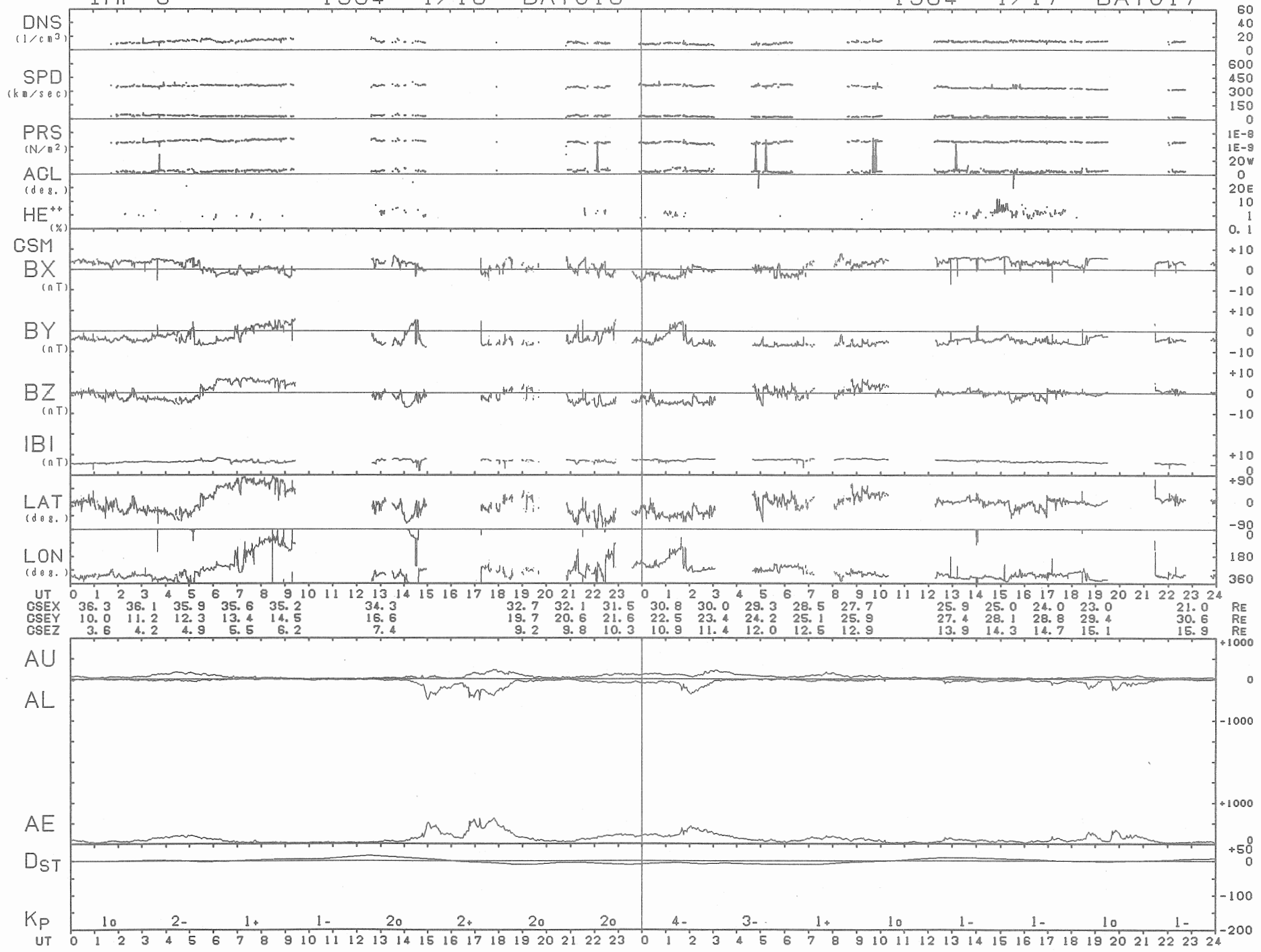

IMP-8 1984 1/ 6 DAY006
1984 1/ 7 DAY007
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.3 9.1 6.6 5.4 2.9 1.7 -3.3 -5.8 -15.3 -16.4 -17.5 RE
GSEY 34.8 35.0 35.3 35.4 35.4 35.4 34.8 34.3 30.6 30.0 29.3 RE
GSEZ 16.7 17.0 17.5 17.7 18.1 18.3 18.7 18.8 18.1 17.9 17.7 RE
AU
AL
AE
DST
KP 3- 3o 3- 3+ 3+ 3+ 2+ 2+ 1o 2+ 1+ 2- 1o 1o 1o 2-
UT

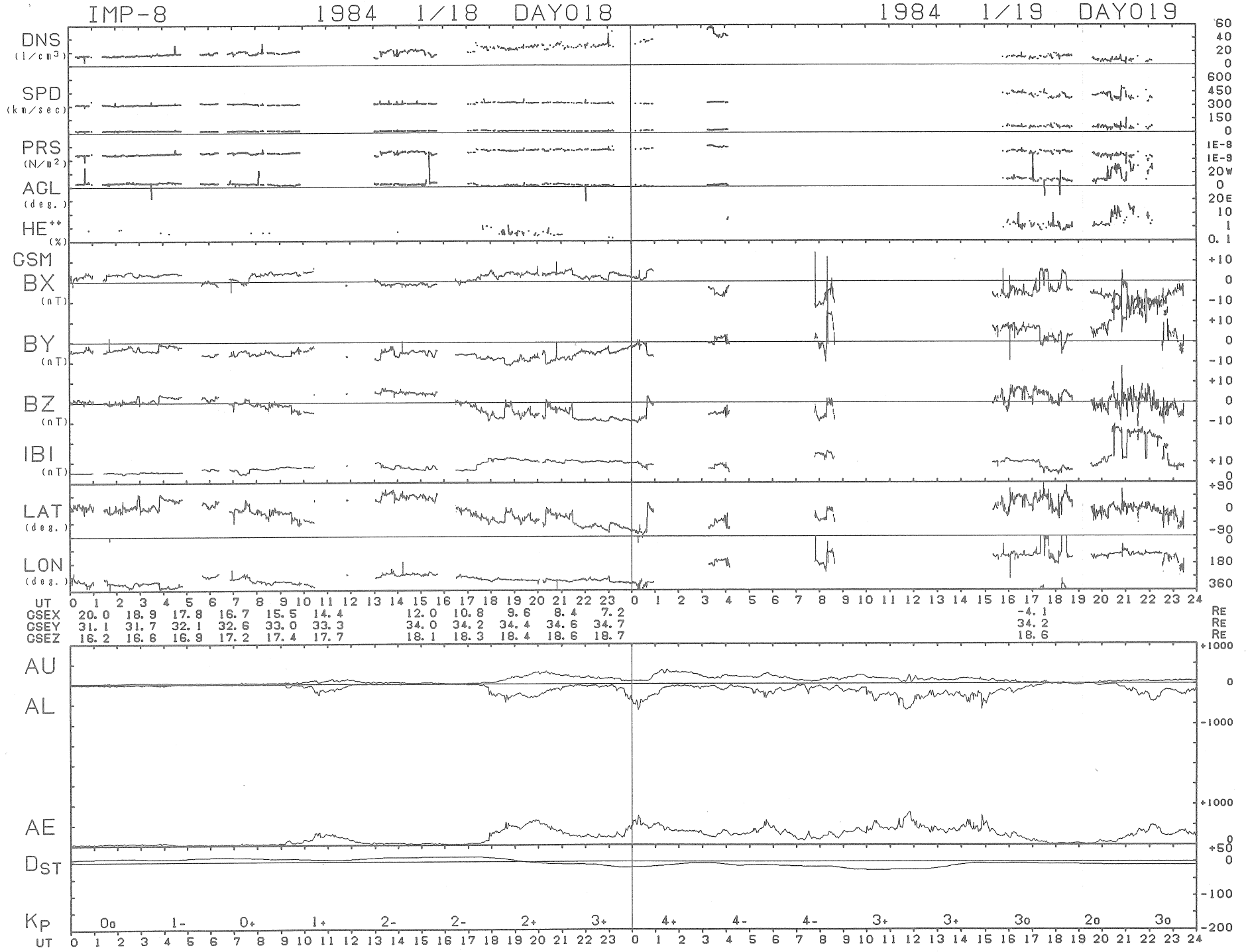

IMP-8 1984 1/ 8 DAY008
1984 1/ 9 DAY009
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.0 -27.7 -28.4 -29.1 -29.7 -30.8 -31.3 -31.7 -32.8 -32.9 -33.0 RE
GSEY 20.5 19.4 18.3 17.2 16.1 13.7 12.5 11.2 6.0 4.7 3.4 RE
GSEZ 14.1 13.6 13.1 12.6 12.0 10.9 10.2 9.6 6.9 6.2 5.4 RE
AU
AL
AE
DST
KP 1o 0+ 1+ 1+ 0+ 1- 0+ 0+ 0+ 2- 1- 1o 0+ 1o 1o 2o
UT

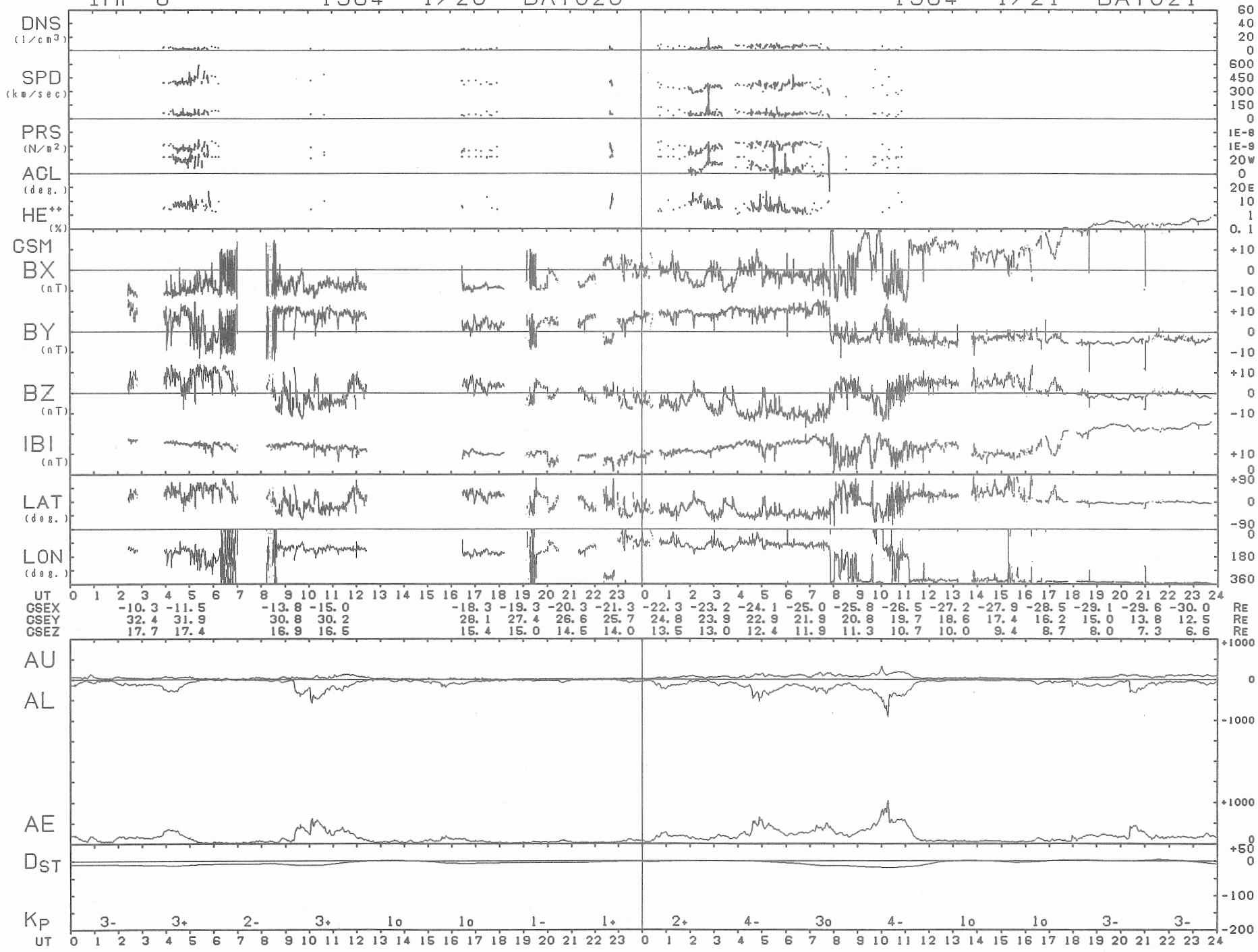

IMP-8 1984 1/10 DAY010
1984 1/11 DAY011
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.0 -32.9 -32.8 -32.6 -32.3 -31.9 -31.5 -31.0 -30.4 -29.8 -29.1 -28.3 -27.5 -26.5 -24.5 -23.4 -22.2 -20.9 -19.6 -18.2 -16.8 -15.4 -13.9 RE
GSEY 2.0 0.7 -0.7 -2.0 -3.4 -4.7 -6.0 -7.3 -8.6 -9.9 -11.2 -12.4 -13.6 -14.8 -17.0 -18.0 -19.0 -20.0 -20.9 -21.7 -22.5 -23.2 -23.8 RE
GSEZ 4.7 3.9 3.2 2.4 1.7 0.9 0.1 -0.7 -1.4 -2.2 -3.0 -3.7 -4.5 -5.2 -6.6 -7.3 -8.0 -8.6 -9.3 -9.8 -10.4 -10.9 -11.4 RE
AU
AL
AE
DST
KP
2+ 3- 1+ 1+ 1+ 3+ 4o 4o 3o 2+ 2- 2o 2- 2- 3+ 3o
UT

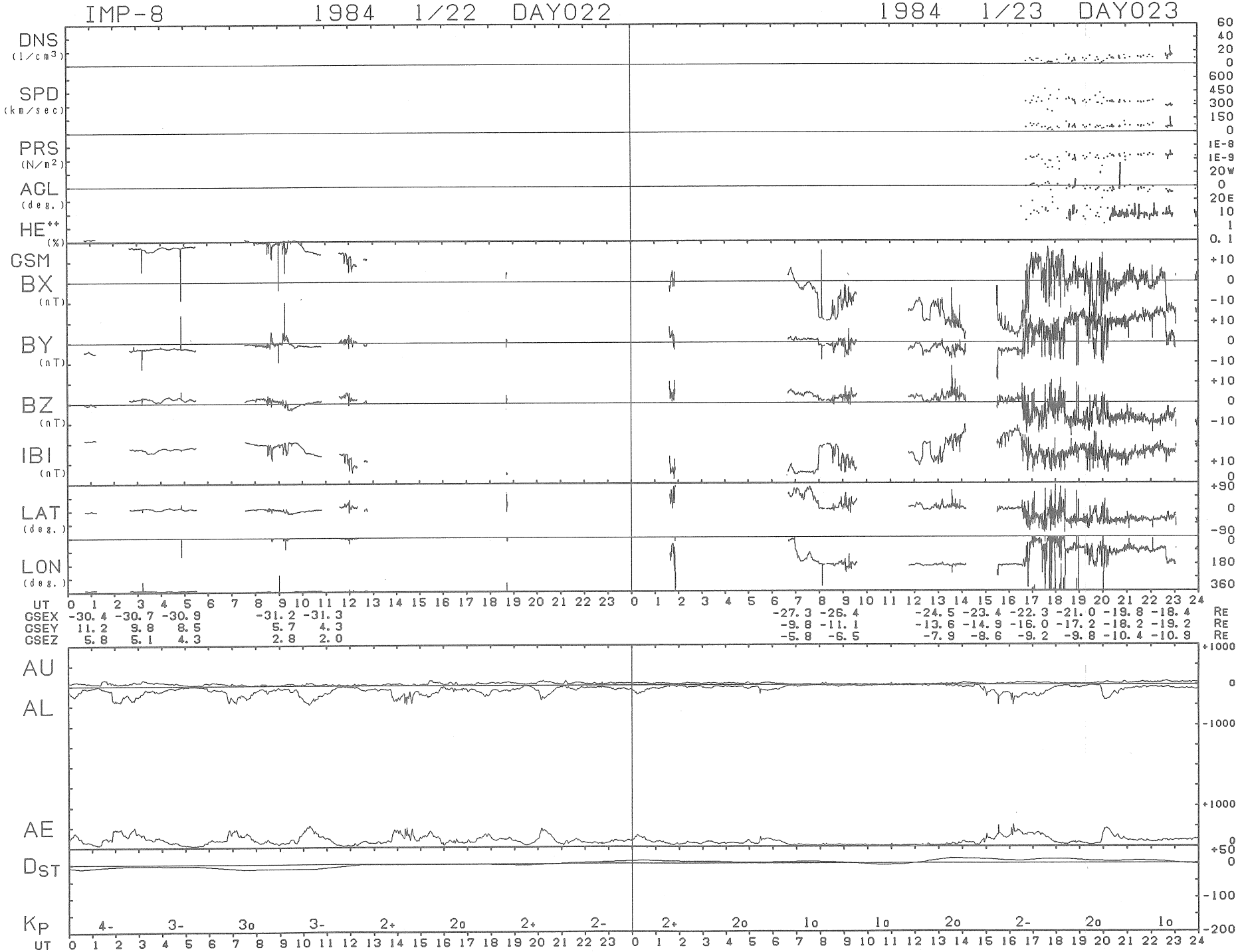

IMP-8 1984 1/12 DAY012
1984 1/13 DAY013
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.3 -10.7 -7.5 -4.2 0.9 2.6 4.3 9.3 18.5 19.9 21.2 RE
GSEY -24.4 -24.9 -25.7 -26.3 -26.5 -26.4 -26.3 -25.4 -22.1 -21.3 -20.5 RE
GSEZ -11.9 -12.3 -13.1 -13.6 -14.2 -14.3 -14.4 -14.3 -13.2 -12.9 -12.5 RE
AU
AL
AE
DST
KP
2+ 2o 1+ 1o 1- 2- 1- 2- 1- 1+ 1+ 1- 3o 3+ 2+ 3o
UT

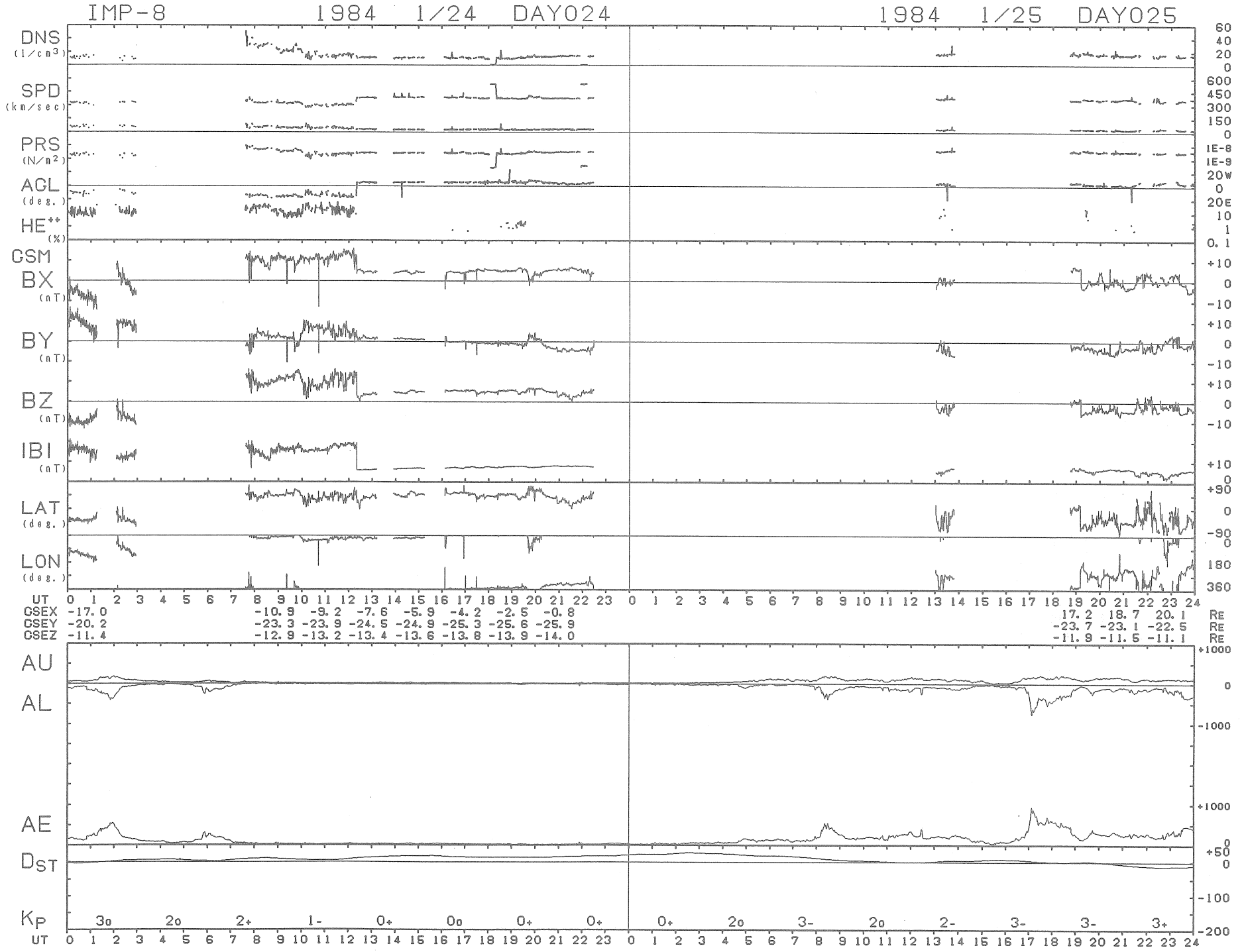

IMP-8
1984 1/14 DAY014
1984 1/15 DAY015
DNS (l/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.2 28.2 32.5 33.8 34.3 34.8 35.2 35.6 36.7 36.7 36.7 36.6 36.5 RE
GSEY -15.8 -14.8 -9.2 -6.8 -5.6 -4.4 -3.2 -2.0 4.1 5.3 6.5 7.7 8.8 RE
GSEZ -10.3 -9.8 -7.0 -5.8 -5.1 -4.5 -3.8 -3.2 0.2 0.9 1.6 2.2 2.9 RE
AU
AL
AE
DST
KP 1+ 2o 1- 1o 3- 1o 2o 2o 2- 1o 3- 1- 1+ 1+ 1o 1+
UT

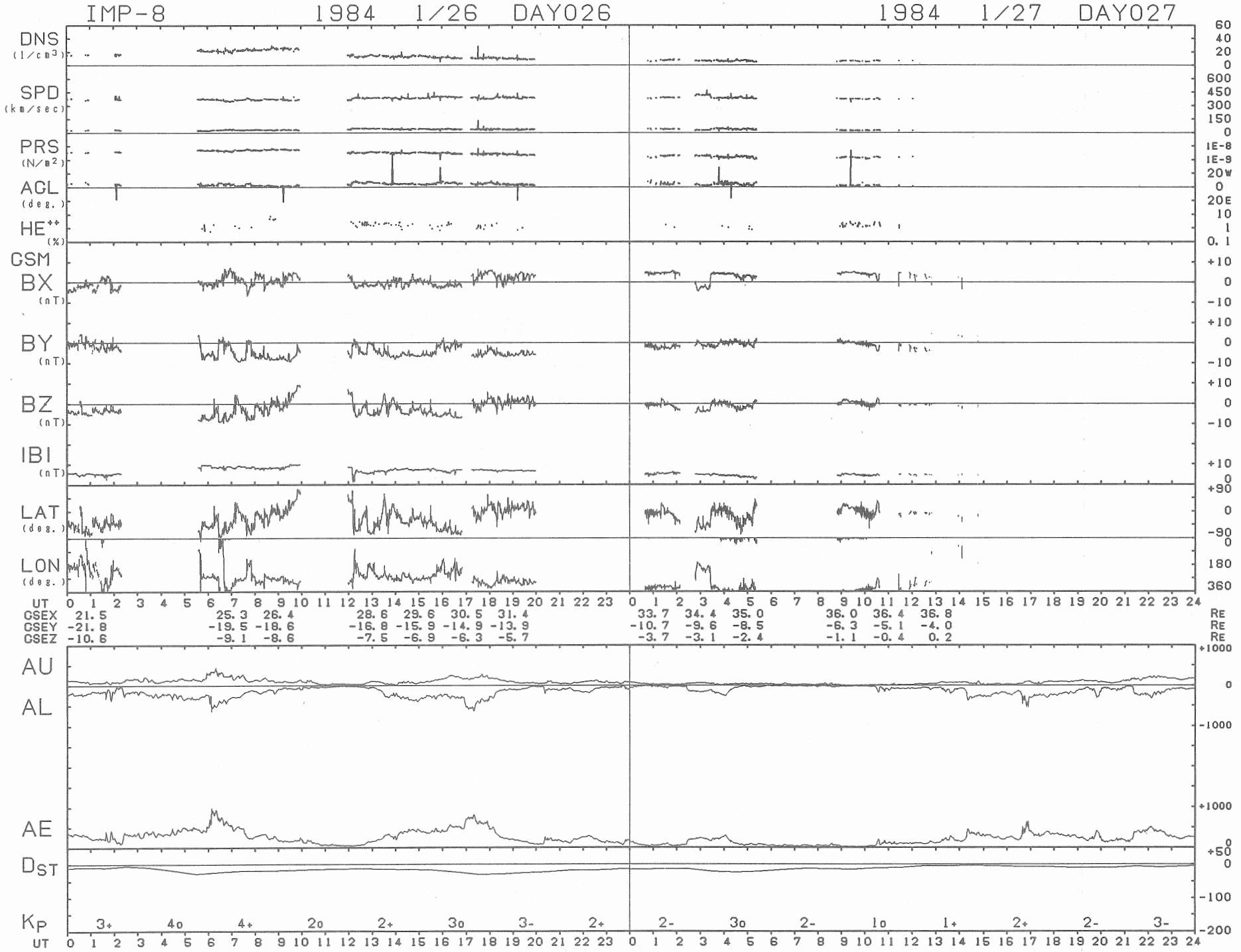

IMP-8 1984 1/16 DAY016
1984 1/17 DAY017
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 36.3 36.1 35.9 35.6 35.2 34.3 32.7 32.1 31.5 30.8 30.0 29.3 28.5 27.7 25.9 25.0 24.0 23.0 21.0 RE
GSEY 10.0 11.2 12.3 13.4 14.5 16.6 19.7 20.6 21.6 22.5 23.4 24.2 25.1 25.9 27.4 28.1 28.8 29.4 30.6 RE
GSEZ 3.6 4.2 4.9 5.5 6.2 7.4 9.2 9.8 10.3 10.9 11.4 12.0 12.5 12.9 13.9 14.3 14.7 15.1 15.9 RE
AU
AL
AE
DST
KP 1o 2- 1+ 1- 2o 2+ 2o 2o 4- 3- 1+ 1o 1- 1- 1o 1-
UT

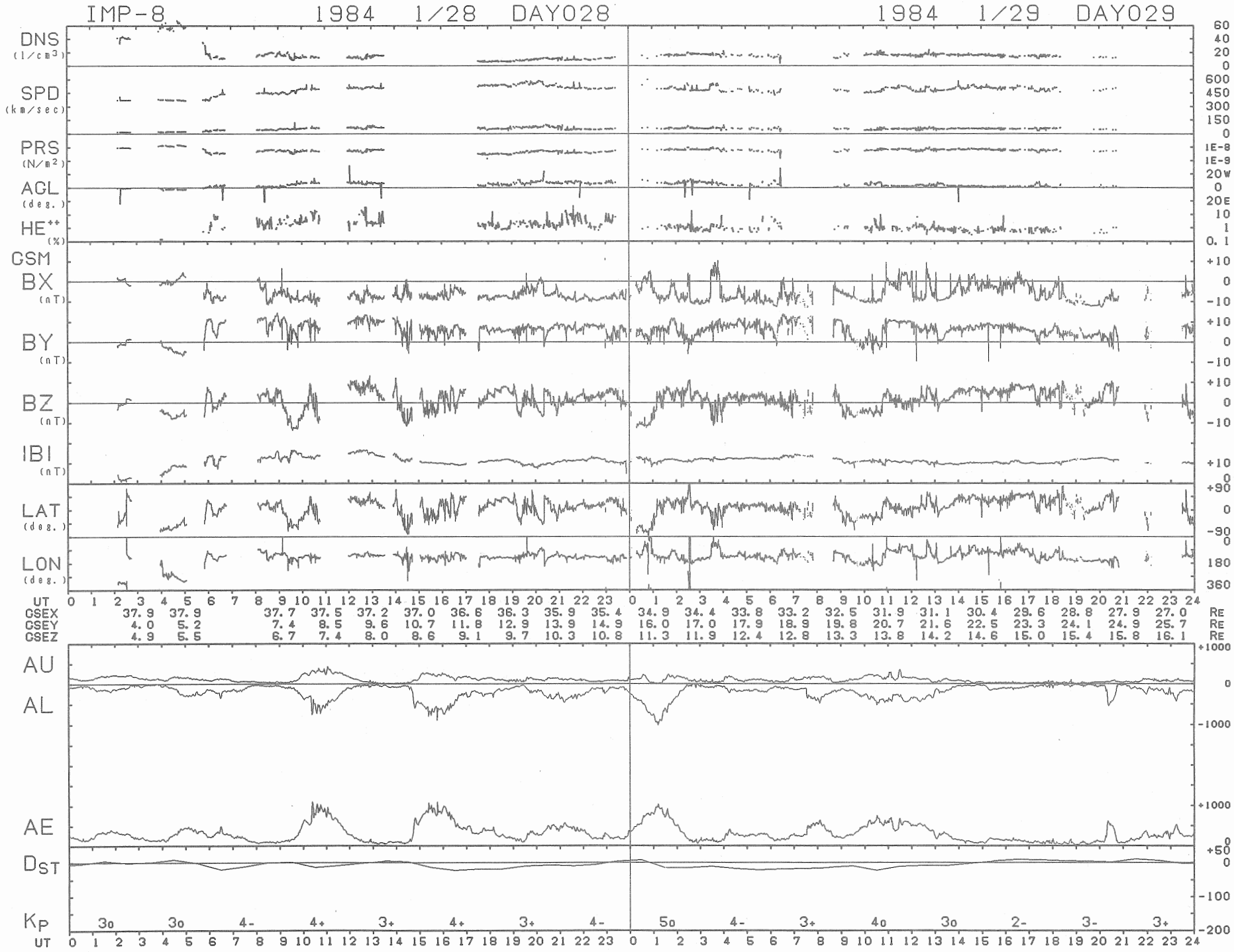

IMP-8
1984 1/18 DAY018
1984 1/19 DAY019
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.0 18.9 17.8 16.7 15.5 14.4 12.0 10.8 9.6 8.4 7.2 -4.1 RE
GSEY 31.1 31.7 32.1 32.6 33.0 33.3 34.0 34.2 34.4 34.6 34.7 34.2 RE
GSEZ 16.2 16.6 16.9 17.2 17.4 17.7 18.1 18.3 18.4 18.6 18.7 18.6 RE
AU
AL
AE
DST
KP 0o 1- 0+ 1+ 2- 2- 2+ 3+ 4+ 4- 4- 3+ 3+ 3o 2o 3o
UT

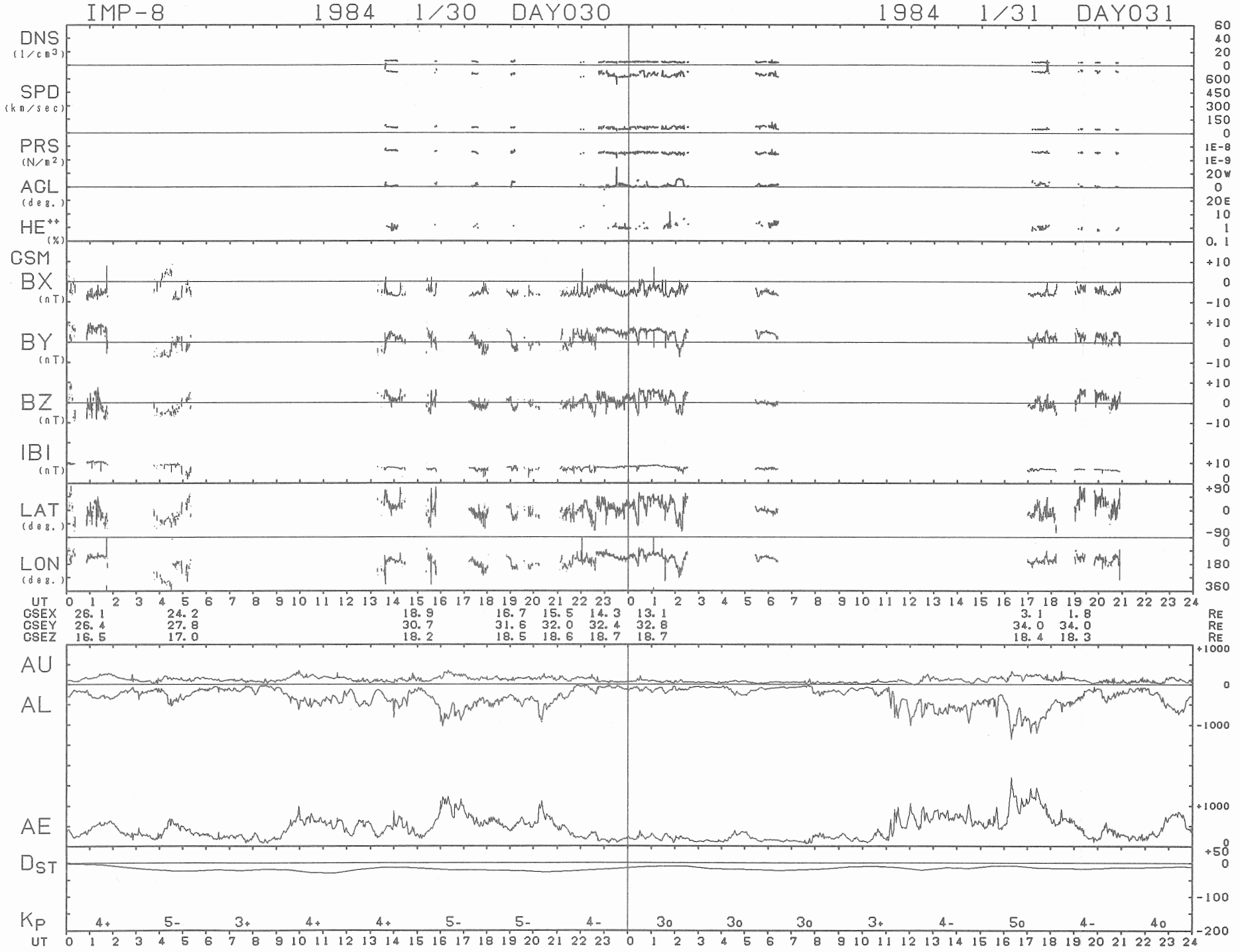

IMP-8 1984 1/20 DAY020
1984 1/21 DAY021
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.3 -11.5 -13.8 -15.0 -18.3 -19.3 -20.3 -21.3 -22.3 -23.2 -24.1 -25.0 -25.8 -26.5 -27.2 -27.9 -28.5 -29.1 -29.6 -30.0 RE
GSEY 32.4 31.9 30.8 30.2 28.1 27.4 26.6 25.7 24.8 23.9 22.9 21.9 20.8 19.7 18.6 17.4 16.2 15.0 13.8 12.5 RE
GSEZ 17.7 17.4 16.9 16.5 15.4 15.0 14.5 14.0 13.5 13.0 12.4 11.9 11.3 10.7 10.0 9.4 8.7 8.0 7.3 6.6 RE
AU
AL
AE
DST
KP 3- 3+ 2- 3+ 1o 1o 1- 1+ 2+ 4- 3o 4- 1o 1o 3- 3-
UT

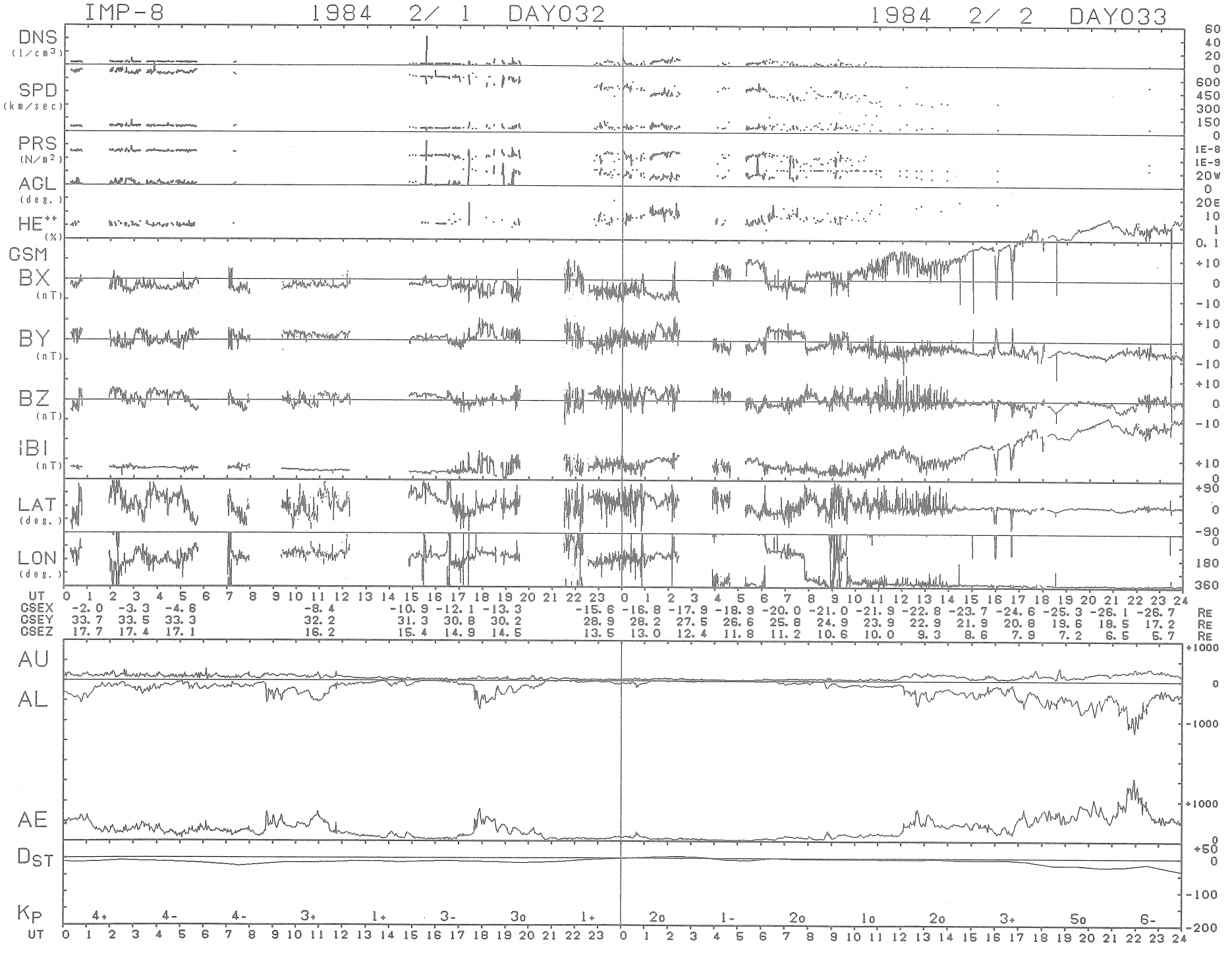

IMP-8 1984 1/22 DAY022
1984 1/23 DAY023
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.4 -30.7 -30.9 -31.2 -31.3 -27.3 -26.4 -24.5 -23.4 -22.3 -21.0 -19.8 -18.4 RE
GSEY 11.2 9.8 8.5 5.7 4.3 -9.8 -11.1 -13.6 -14.9 -16.0 -17.2 -18.2 -19.2 RE
GSEZ 5.8 5.1 4.3 2.8 2.0 -5.8 -6.5 -7.9 -8.6 -9.2 -9.8 -10.4 -10.9 RE
AU
AL
AE
DST
KP
4- 3- 3o 3- 2+ 2o 2+ 2- 2+ 2o 1o 1o 2o 2- 2o 1o
UT

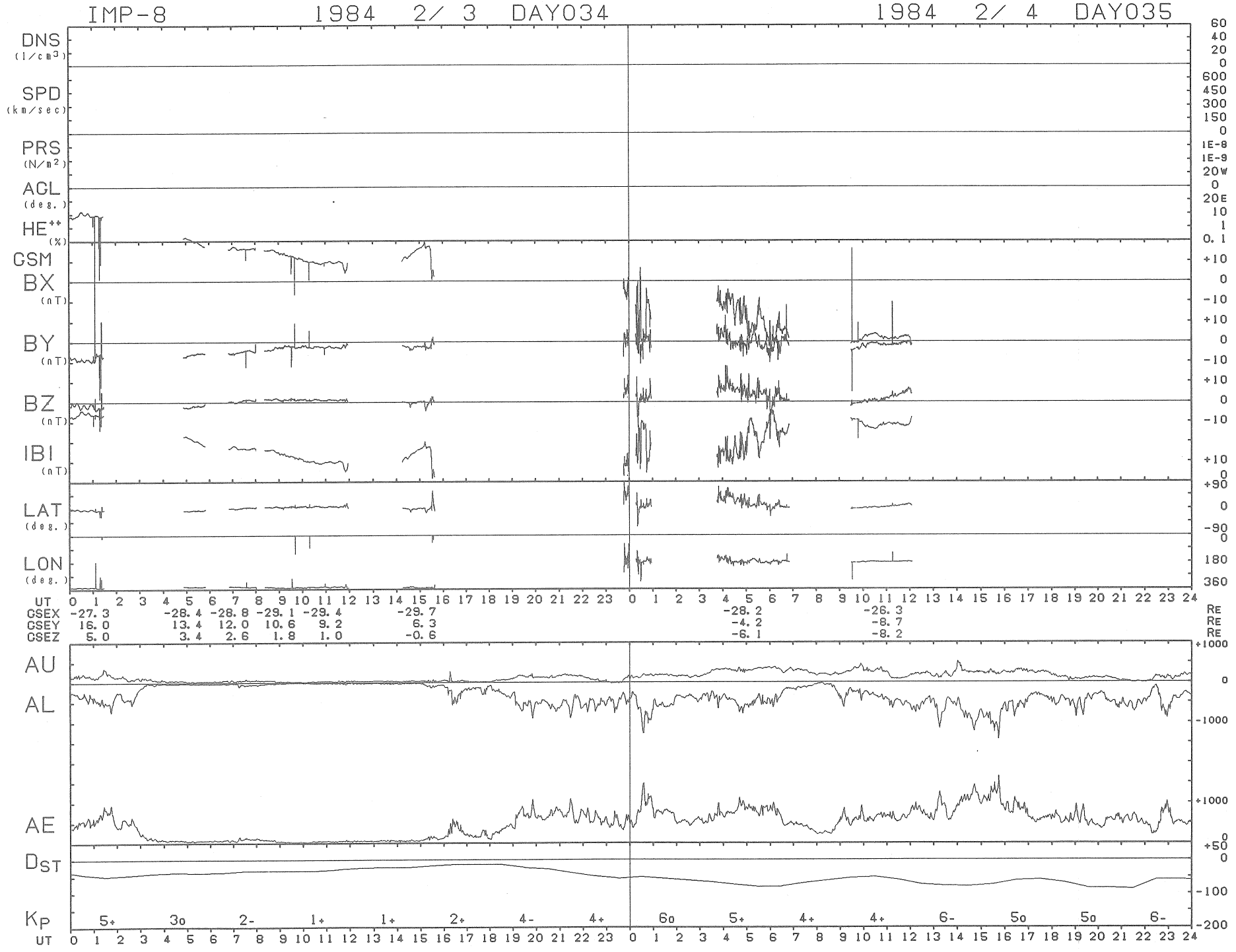

IMP-8 1984 1/24 DAY024
1984 1/25 DAY025
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.0 -10.9 -9.2 -7.6 -5.9 -4.2 -2.5 -0.8 17.2 18.7 20.1 RE
GSEY -20.2 -23.3 -23.9 -24.5 -24.9 -25.3 -25.6 -25.9 -23.7 -23.1 -22.5 RE
GSEZ -11.4 -12.9 -13.2 -13.4 -13.6 -13.8 -13.9 -14.0 -11.9 -11.5 -11.1 RE
AU
AL
AE
DST
KP
3o 2o 2+ 1- 0+ 0o 0+ 0+ 0+ 2o 3- 2o 2- 3- 3- 3+
UT

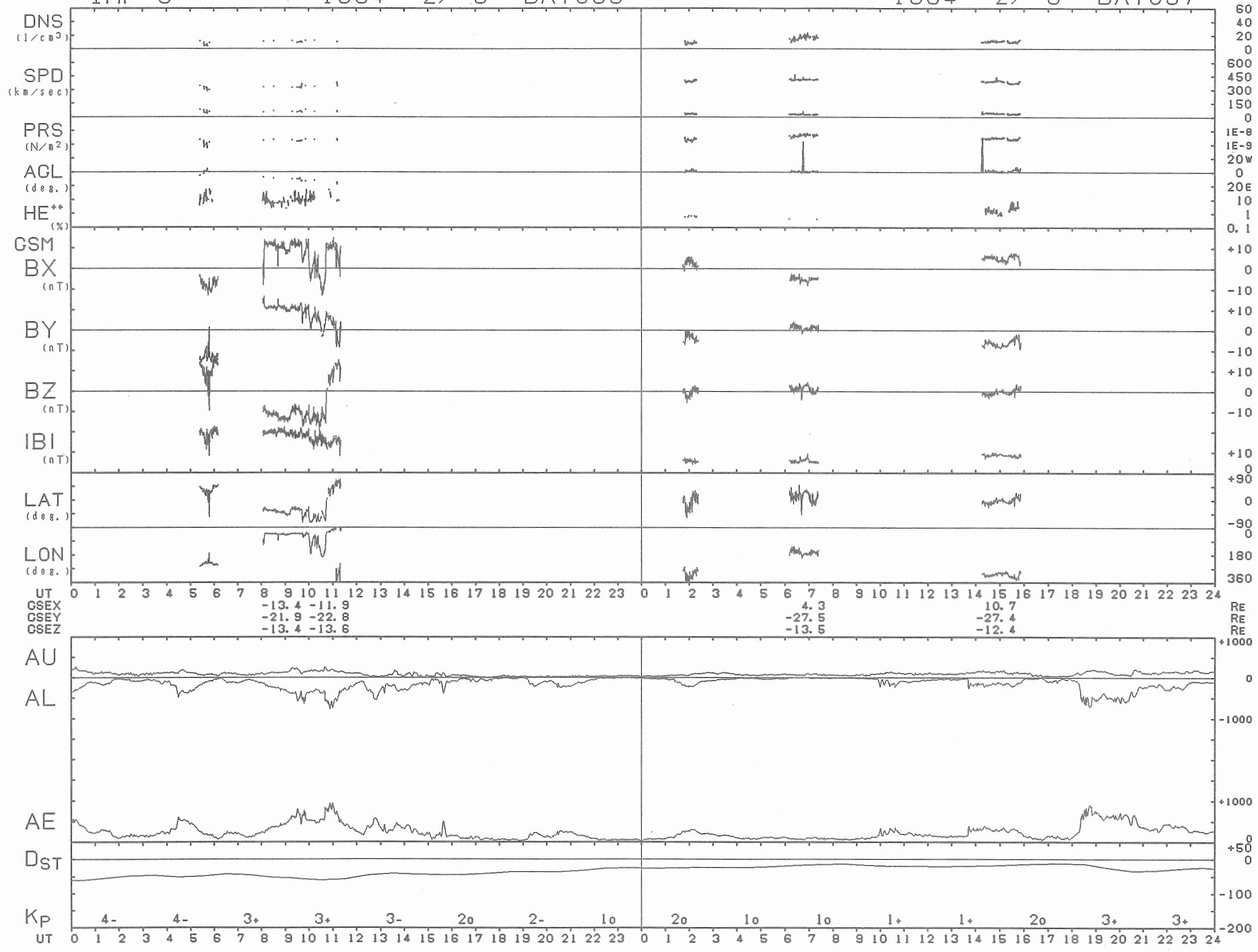

IMP-8 1984 1/26 DAY026 1984 1/27 DAY027
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.5 25.3 26.4 28.6 29.6 30.5 31.4 33.7 34.4 35.0 36.0 36.4 36.8 RE
GSEY -21.8 -19.5 -18.6 -16.8 -15.9 -14.9 -13.9 -10.7 -9.6 -8.5 -6.3 -5.1 -4.0 RE
GSEZ -10.6 -9.1 -8.6 -7.5 -6.9 -6.3 -5.7 -3.7 -3.1 -2.4 -1.1 -0.4 0.2 RE
AU
AL
AE
DST
KP 3+ 4o 4+ 2o 2+ 3o 3- 2+ 2- 3o 2- 1o 1+ 2+ 2- 3-
UT

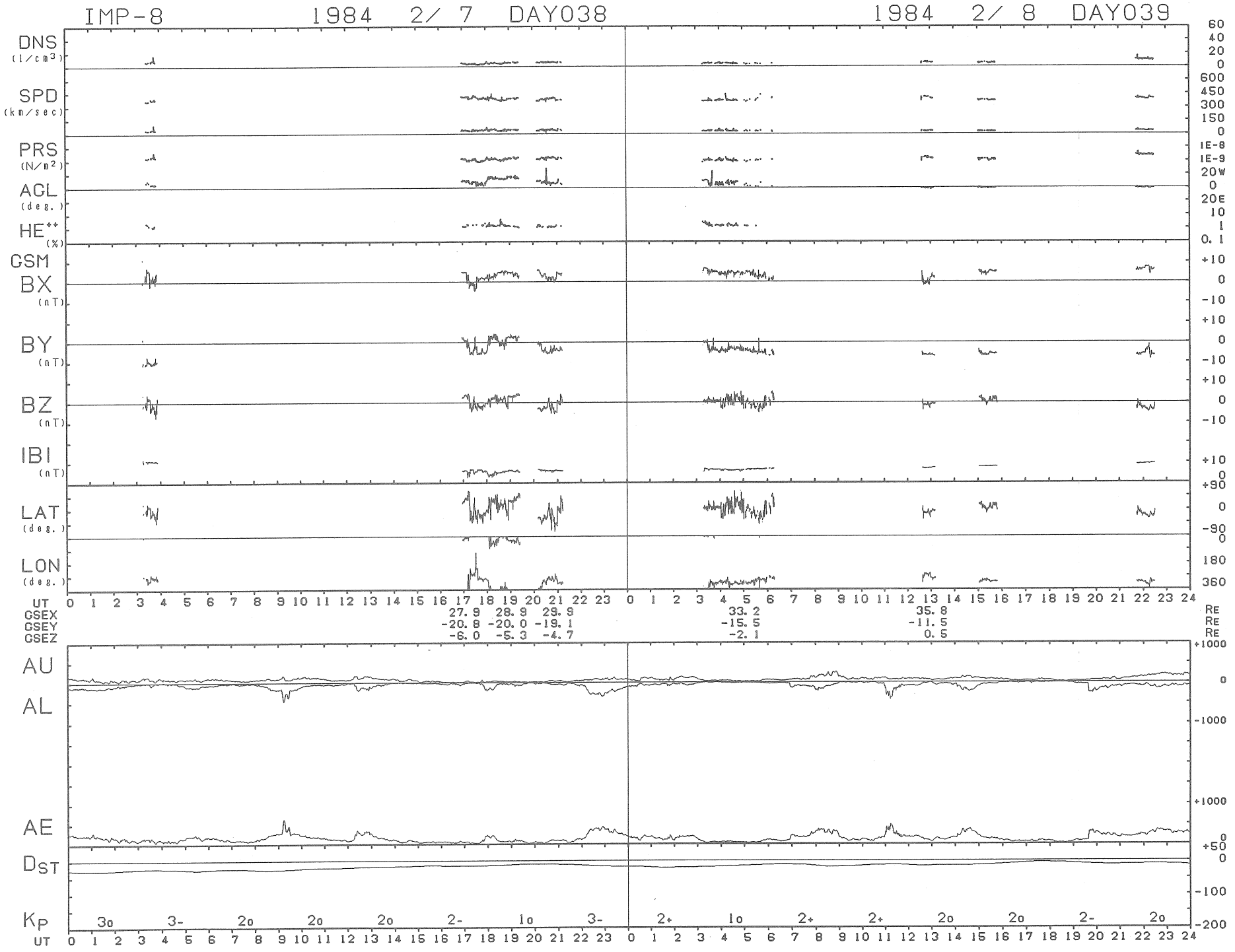

IMP-8 1984 1/28 DAY028
1984 1/29 DAY029
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 37.9 37.9 37.7 37.5 37.2 37.0 36.6 36.3 35.9 35.4 34.9 34.4 33.8 33.2 32.5 31.9 31.1 30.4 29.6 28.8 27.9 27.0 RE
GSEY 4.0 5.2 7.4 8.5 9.6 10.7 11.8 12.9 13.9 14.9 16.0 17.0 17.9 18.9 19.8 20.7 21.6 22.5 23.3 24.1 24.9 25.7 RE
GSEZ 4.9 5.5 6.7 7.4 8.0 8.6 9.1 9.7 10.3 10.8 11.3 11.9 12.4 12.8 13.3 13.8 14.2 14.6 15.0 15.4 15.8 16.1 RE
AU
AL
AE
DST
KP 3o 3o 4- 4+ 3+ 4+ 3+ 4- 5o 4- 3+ 4o 3o 2- 3- 3+
UT

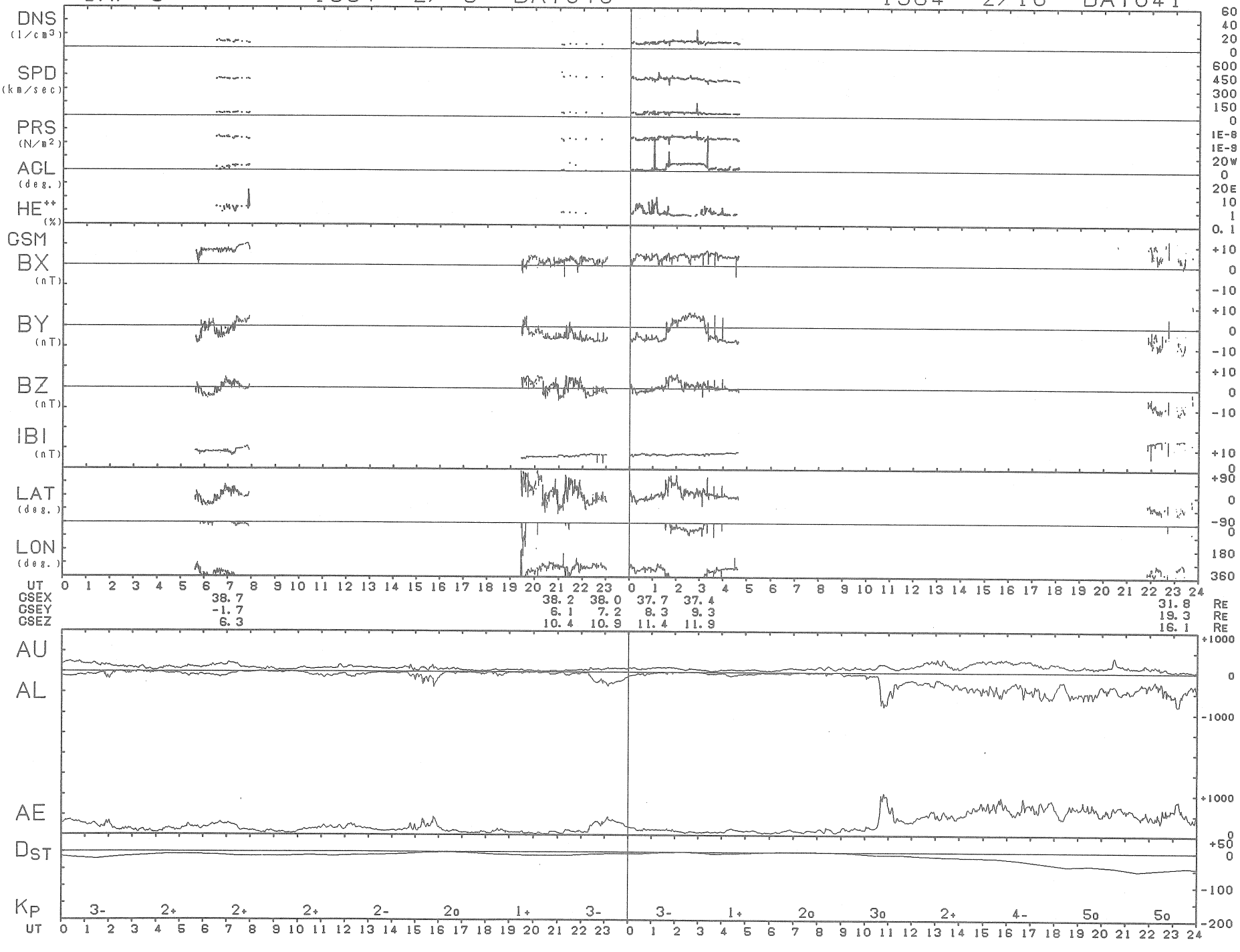

IMP-8 1984 1/30 DAY030 1984 1/31 DAY031
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.1 24.2 18.9 16.7 15.5 14.3 13.1 3.1 1.8 RE
GSEY 26.4 27.8 30.7 31.6 32.0 32.4 32.8 34.0 34.0 RE
GSEZ 16.5 17.0 18.2 18.5 18.6 18.7 18.7 18.4 18.3 RE
AU
AL
AE
DST
KP
4+ 5- 3+ 4+ 4+ 5- 5- 4- 3o 3o 3o 3+ 4- 5o 4- 4o
UT

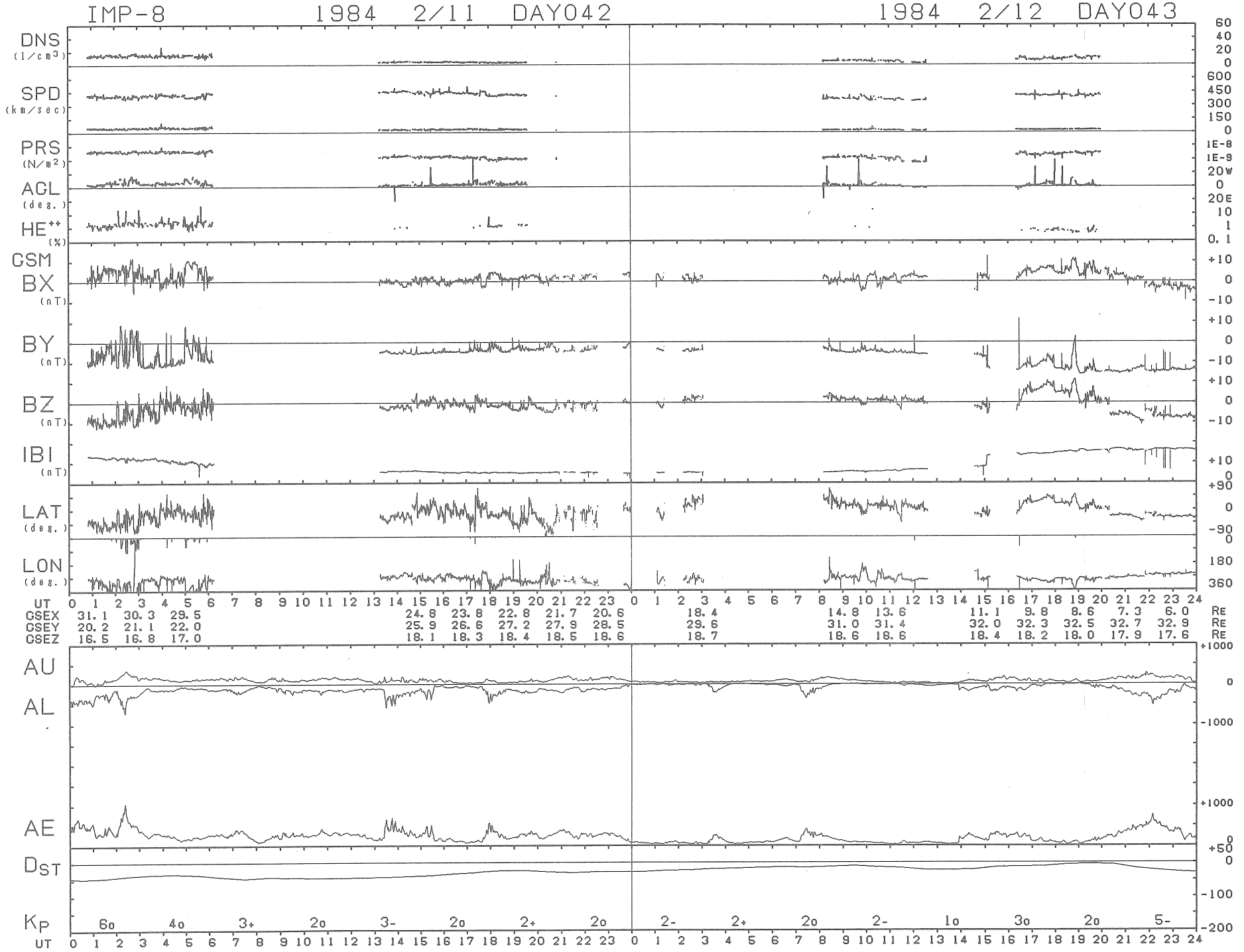

IMP-8 1984 2/ 1 DAY032
1984 2/ 2 DAY033
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.0 -3.3 -4.6 -8.4 -10.9 -12.1 -13.3 -15.6 -16.8 -17.9 -18.9 -20.0 -21.0 -21.9 -22.8 -23.7 -24.6 -25.3 -26.1 -26.7 RE
GSEY 33.7 33.5 33.3 32.2 31.3 30.8 30.2 28.9 28.2 27.5 26.6 25.8 24.9 23.9 22.9 21.9 20.8 19.6 18.5 17.2 RE
GSEZ 17.7 17.4 17.1 16.2 15.4 14.9 14.5 13.5 13.0 12.4 11.8 11.2 10.6 10.0 9.3 8.6 7.9 7.2 6.5 5.7 RE
AU
AL
AE
DST
KP 4+ 4- 4- 3+ 1+ 3- 3o 1+ 2o 1- 2o 1o 2o 3+ 5o 6-
UT

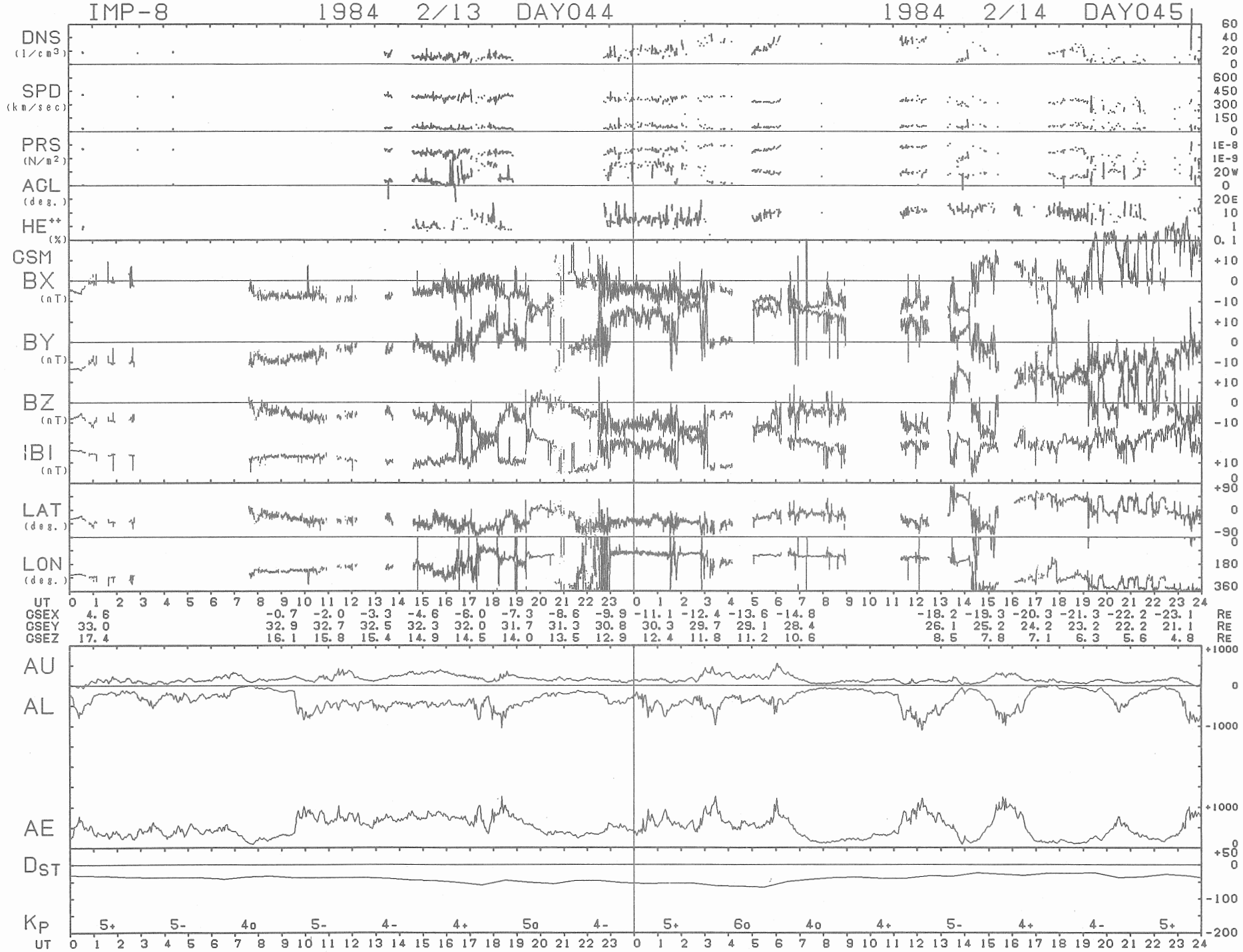

IMP-8 1984 2/ 3 DAY034
1984 2/ 4 DAY035
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.3 -28.4 -28.8 -29.1 -29.4 -29.7 -28.2 -26.3 RE
GSEY 16.0 13.4 12.0 10.6 9.2 6.3 -4.2 -8.7 RE
GSEZ 5.0 3.4 2.6 1.8 1.0 -0.6 -6.1 -8.2 RE
AU
AL
AE
Dst
Kp
5+ 3o 2- 1+ 1+ 2+ 4- 4+ 6o 5+ 4+ 4+ 6- 5o 5o 6-
UT

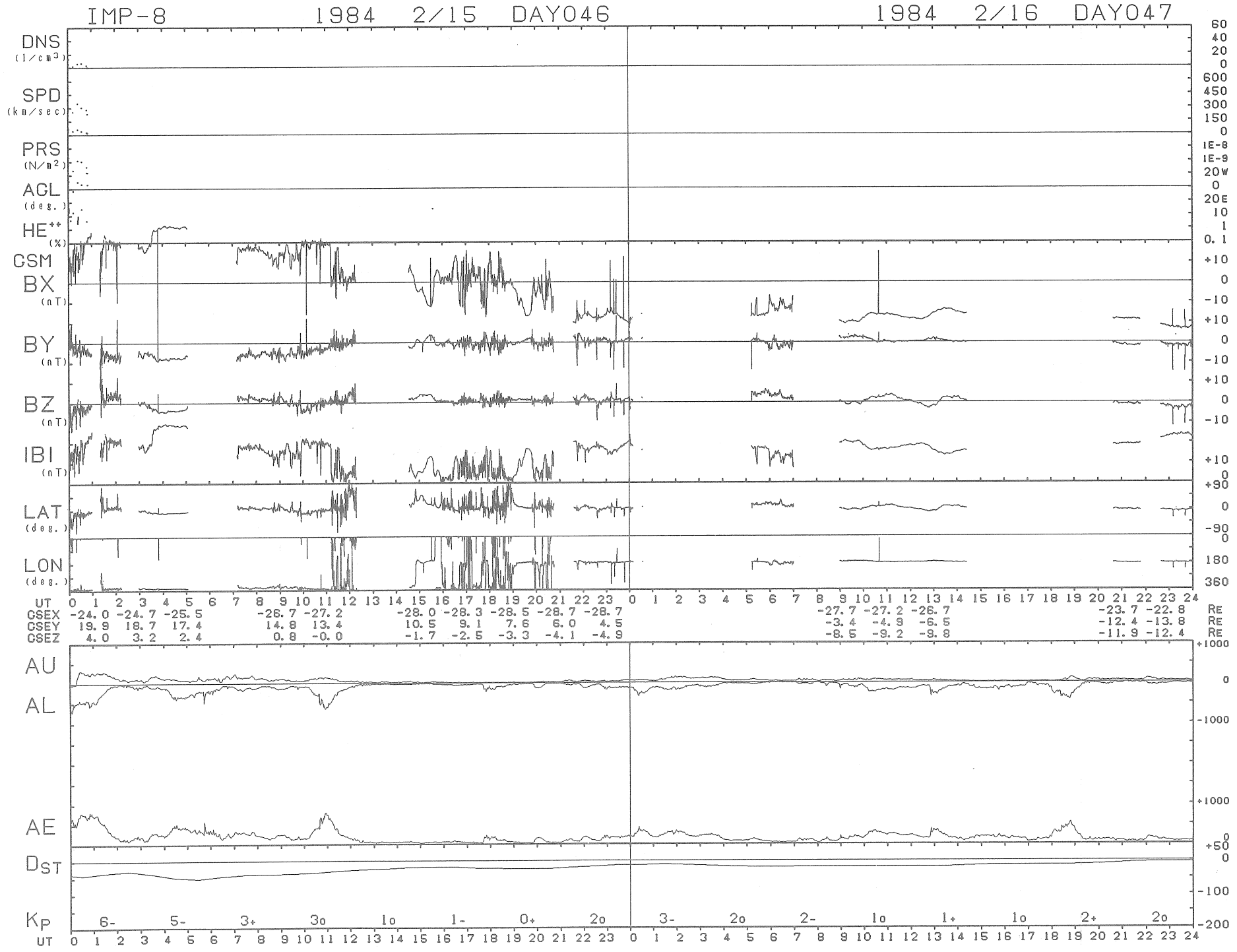

IMP-8 1984 2/ 5 DAY036
1984 2/ 6 DAY037
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.4 -11.9 4.3 10.7 RE
GSEY -21.9 -22.8 -27.5 -27.4 RE
GSEZ -13.4 -13.6 -13.5 -12.4 RE
AU
AL
AE
DST
KP
4- 4- 3+ 3+ 3- 2o 2- 1o 2o 1o 1o 1+ 1+ 2o 3+ 3+
UT

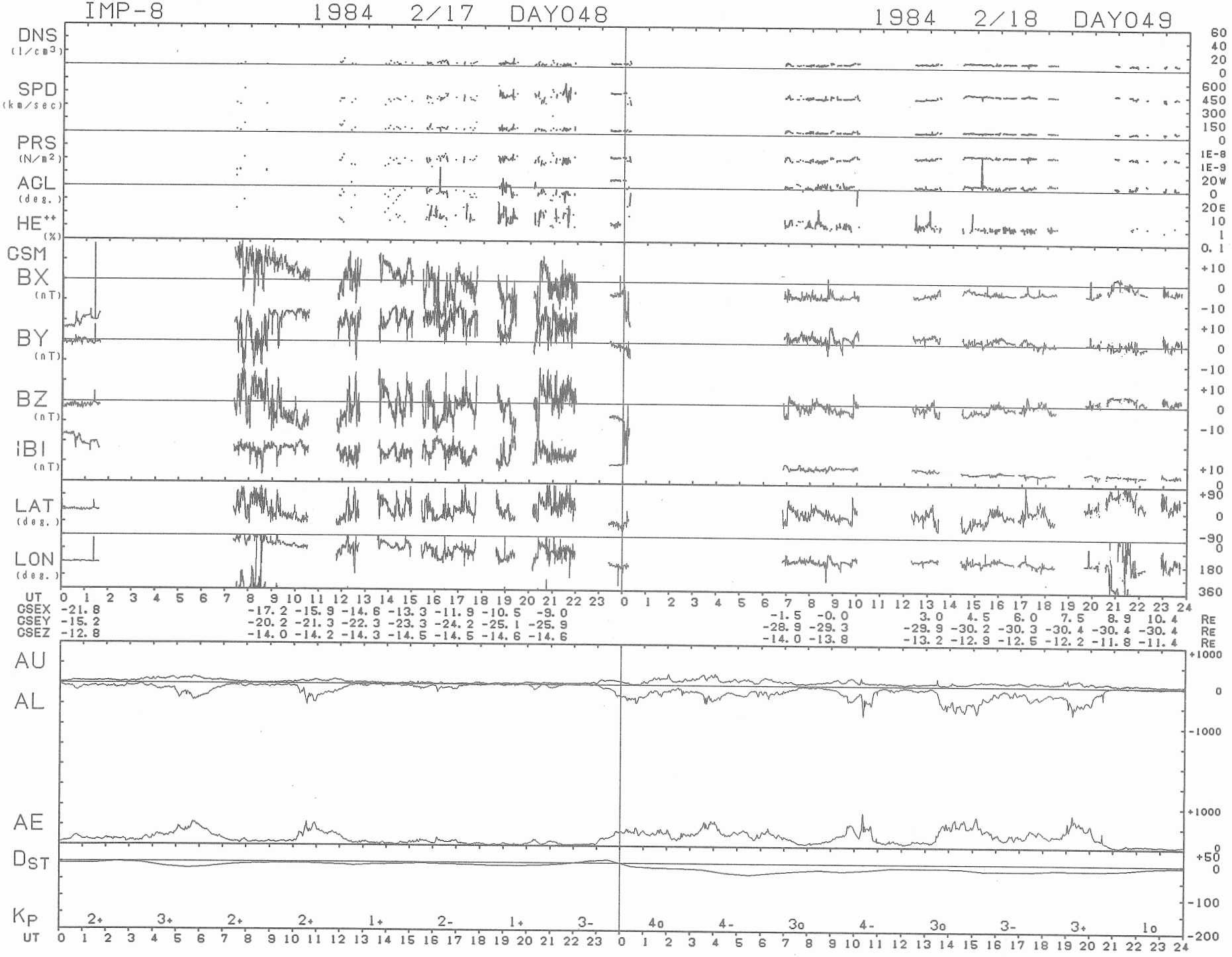

IMP-8
1984 2/ 7 DAY038
1984 2/ 8 DAY039
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.9 28.9 29.9 33.2 35.8 Re
GSEY -20.8 -20.0 -19.1 -15.5 -11.5 Re
GSEZ -6.0 -5.3 -4.7 -2.1 0.5 Re
AU
AL
AE
DST
KP 3o 3- 2o 2o 2o 2- 1o 3- 2+ 1o 2+ 2+ 2o 2o 2- 2o
UT

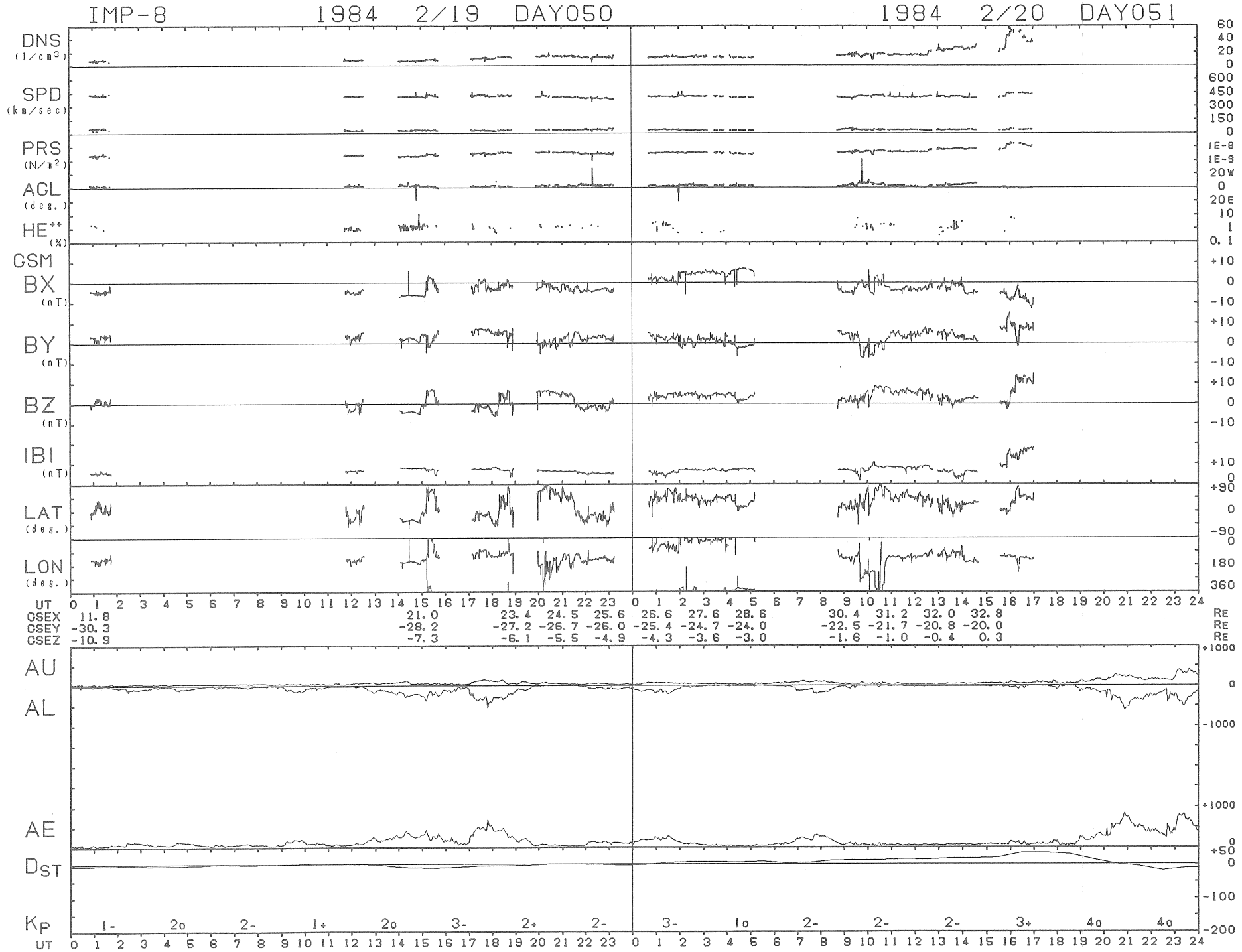

IMP-8
1984 2/ 9 DAY040
1984 2/10 DAY041
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 38.7 38.2 38.0 37.7 37.4 31.8 RE
GSEY -1.7 6.1 7.2 8.3 9.3 19.3 RE
GSEZ 6.3 10.4 10.9 11.4 11.9 16.1 RE
AU
AL
AE
DST
KP 3- 2+ 2+ 2+ 2- 2o 1+ 3- 3- 1+ 2o 3o 2+ 4- 5o 5o
UT

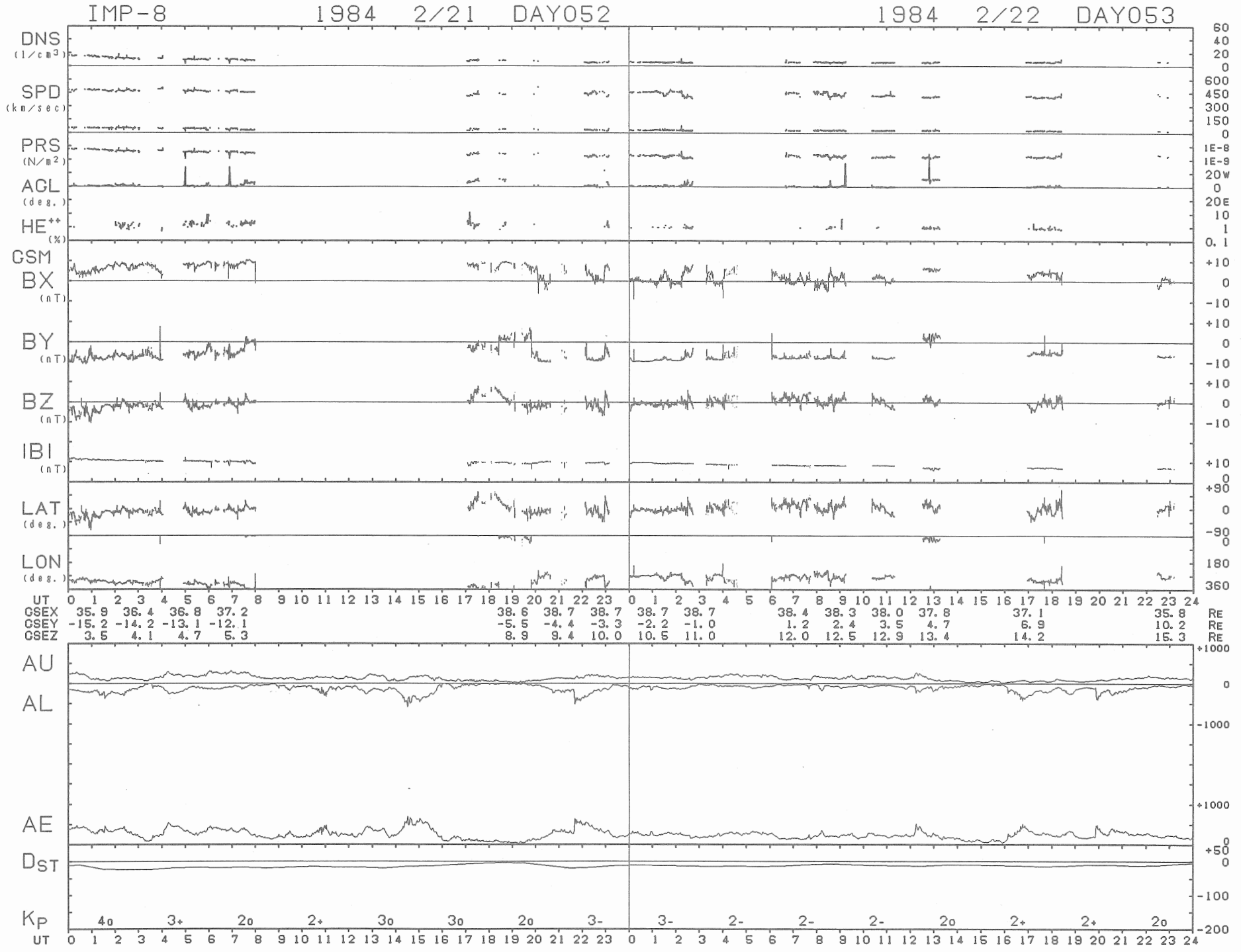

IMP-8 1984 2/11 DAY042
1984 2/12 DAY043
DNS (l/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.1 30.3 29.5 24.8 23.8 22.8 21.7 20.6 18.4 14.8 13.6 11.1 9.8 8.6 7.3 6.0 RE
GSEY 20.2 21.1 22.0 25.9 26.6 27.2 27.9 28.5 29.6 31.0 31.4 32.0 32.3 32.5 32.7 32.9 RE
GSEZ 16.5 16.8 17.0 18.1 18.3 18.4 18.5 18.6 18.7 18.6 18.6 18.4 18.2 18.0 17.9 17.6 RE
AU
AL
AE
DST
KP 6o 4o 3+ 2o 3- 2o 2+ 2o 2- 2+ 2o 2- 1o 3o 2o 5-
UT

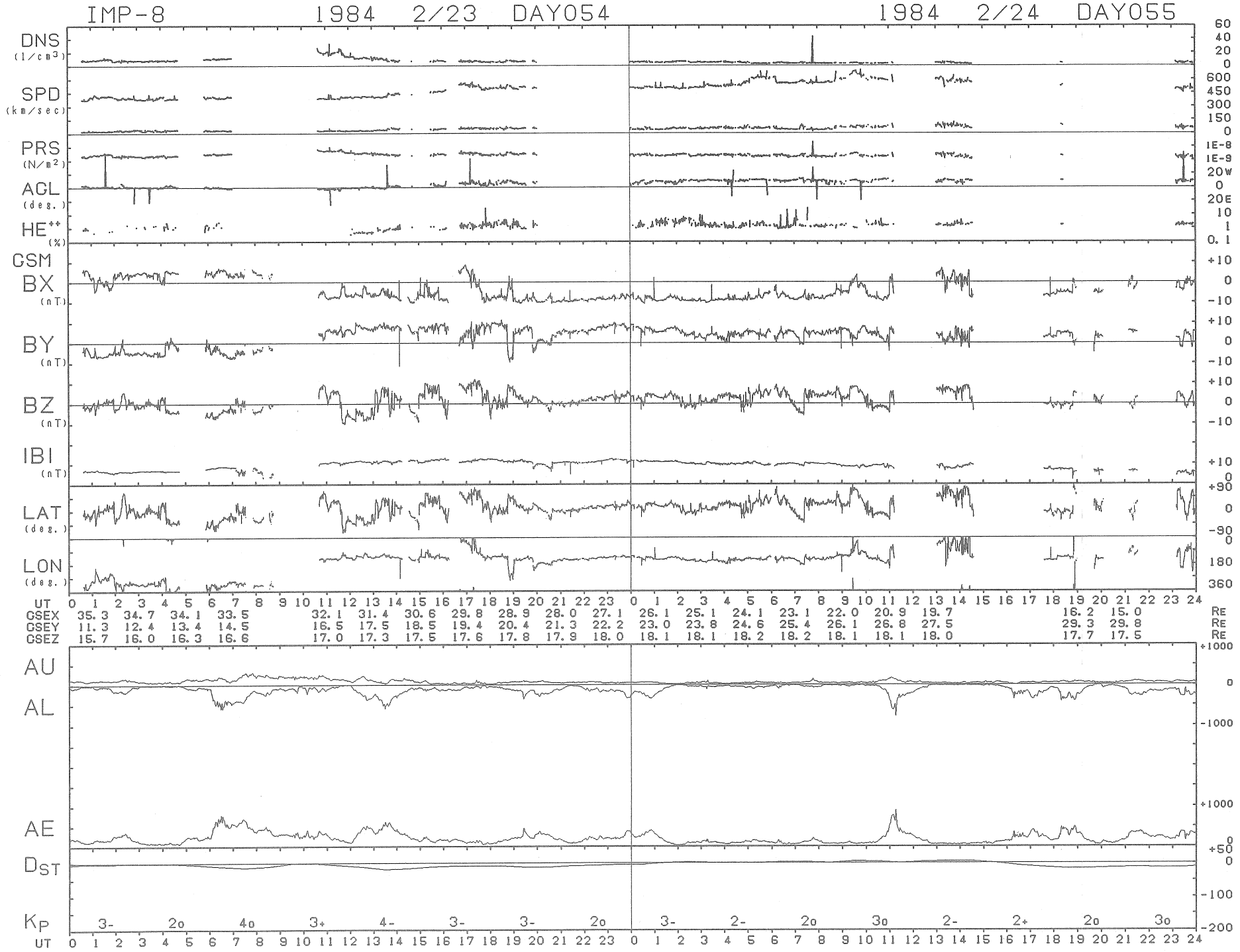

IMP-8 1984 2/13 DAY044 1984 2/14 DAY045
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 4.6 -0.7 -2.0 -3.3 -4.6 -6.0 -7.3 -8.6 -9.9 -11.1 -12.4 -13.6 -14.8 -18.2 -19.3 -20.3 -21.3 -22.2 -23.1 RE
GSEY 33.0 32.9 32.7 32.5 32.3 32.0 31.7 31.3 30.8 30.3 29.7 29.1 28.4 26.1 25.2 24.2 23.2 22.2 21.1 RE
GSEZ 17.4 16.1 15.8 15.4 14.9 14.5 14.0 13.5 12.9 12.4 11.8 11.2 10.6 8.5 7.8 7.1 6.3 5.6 4.8 RE
AU
AL
AE
DST
KP 5+ 5- 4o 5- 4- 4+ 5o 4- 5+ 6o 4o 4+ 5- 4+ 4- 5+
UT

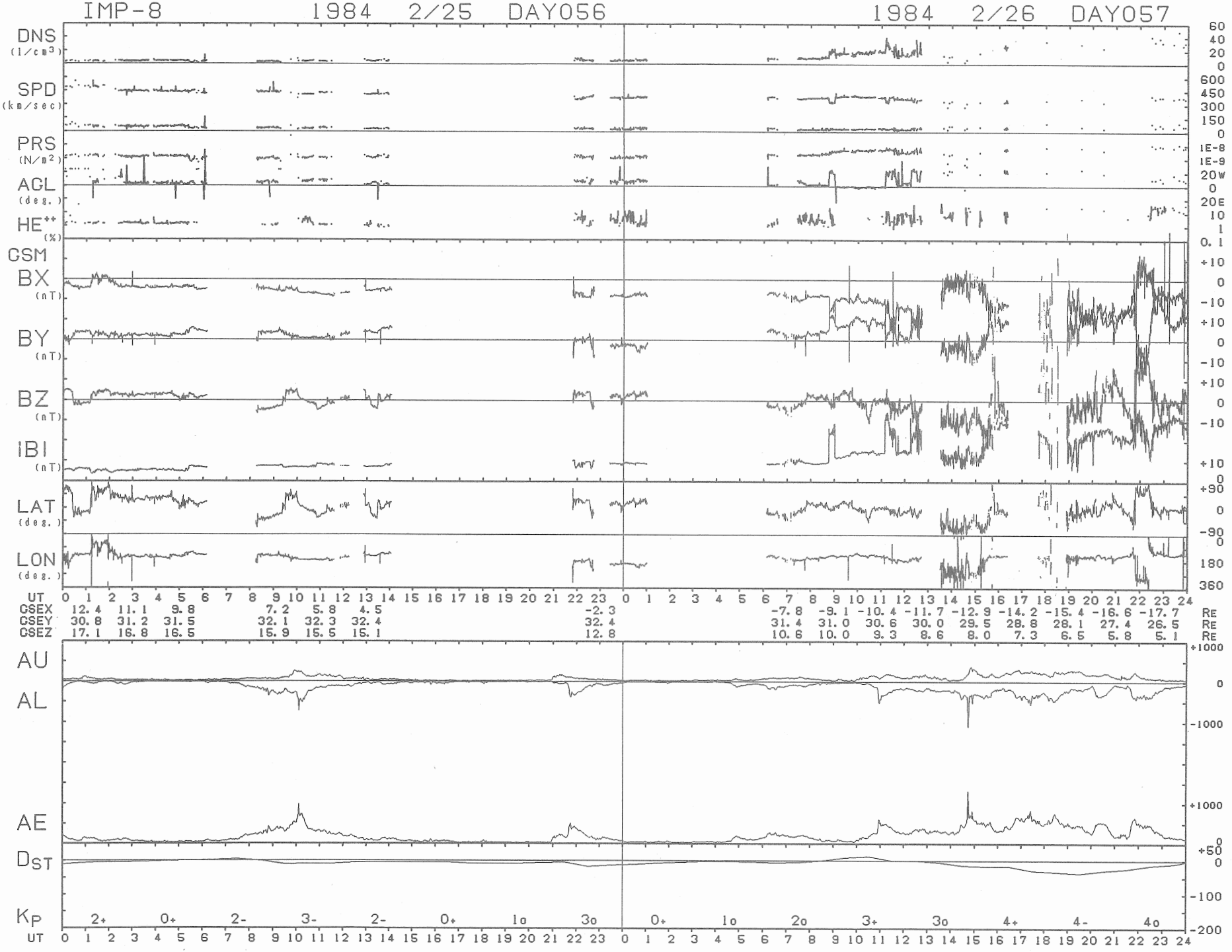

IMP-8 1984 2/15 DAY046
1984 2/16 DAY047
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.0 -24.7 -25.5 -26.7 -27.2 -28.0 -28.3 -28.5 -28.7 -28.7 -27.7 -27.2 -26.7 -23.7 -22.8 RE
GSEY 19.9 18.7 17.4 14.8 13.4 10.5 9.1 7.6 6.0 4.5 -3.4 -4.9 -6.5 -12.4 -13.8 RE
GSEZ 4.0 3.2 2.4 0.8 -0.0 -1.7 -2.5 -3.3 -4.1 -4.9 -8.5 -9.2 -9.8 -11.9 -12.4 RE
AU
AL
AE
DST
KP
6- 5- 3+ 3o 1o 1- 0+ 2o 3- 2o 2- 1o 1+ 1o 2+ 2o
UT

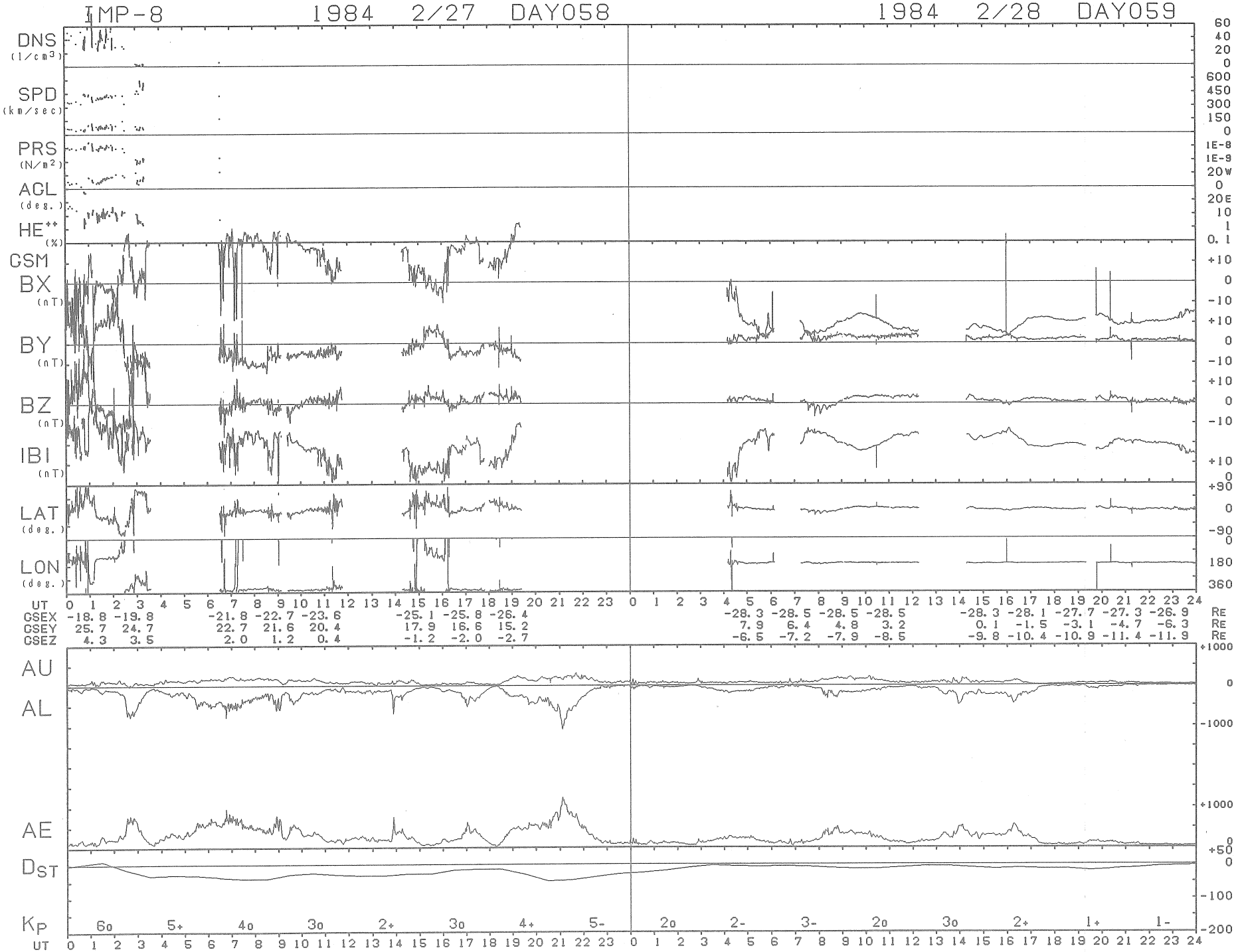

IMP-8
1984 2/17 DAY048
1984 2/18 DAY049
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -21.8
GSEY -15.2
GSEZ -12.8
-17.2 -15.9 -14.6 -13.3 -11.9 -10.5 -9.0
-20.2 -21.3 -22.3 -23.3 -24.2 -25.1 -25.9
-14.0 -14.2 -14.3 -14.5 -14.5 -14.6 -14.6
-1.5 -0.0 3.0 4.5 6.0 7.5 8.9 10.4 RE
-28.9 -29.3 -29.9 -30.2 -30.3 -30.4 -30.4 -30.4 RE
-14.0 -13.8 -13.2 -12.9 -12.5 -12.2 -11.8 -11.4 RE
AU
AL
AE
DST
KP
2+ 3+ 2+ 2+ 1+ 2- 1+ 3- 4o 4- 3o 4- 3o 3- 3+ 1o

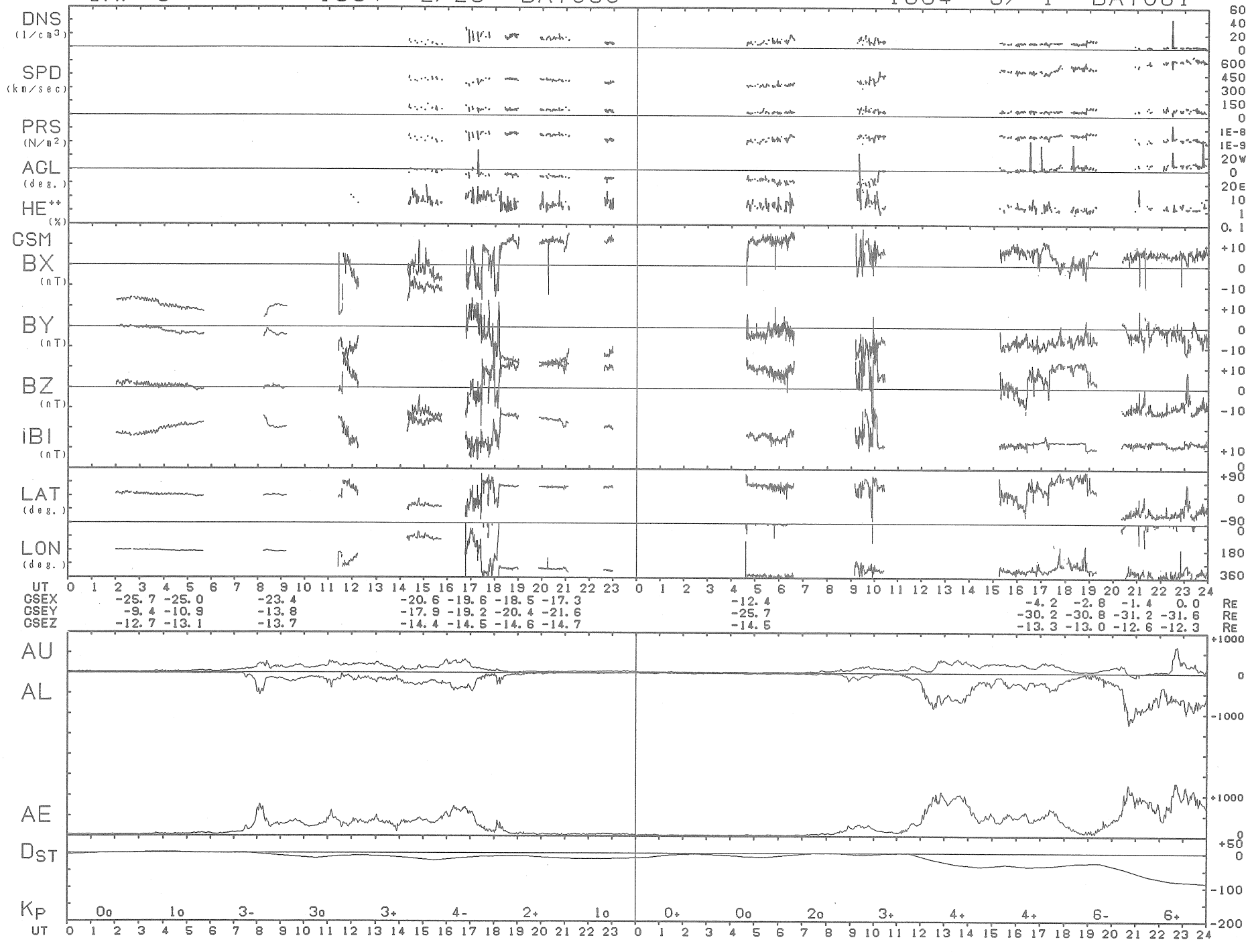

IMP-8 1984 2/19 DAY050
1984 2/20 DAY051
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.8 21.0 23.4 24.5 25.6 26.6 27.6 28.6 30.4 31.2 32.0 32.8 RE
GSEY -30.3 -28.2 -27.2 -26.7 -26.0 -25.4 -24.7 -24.0 -22.5 -21.7 -20.8 -20.0 RE
GSEZ -10.9 -7.3 -6.1 -5.5 -4.9 -4.3 -3.6 -3.0 -1.6 -1.0 -0.4 0.3 RE
AU
AL
AE
DST
KP
1- 2o 2- 1+ 2o 3- 2+ 2- 3- 1o 2- 2- 2- 3+ 4o 4o
UT

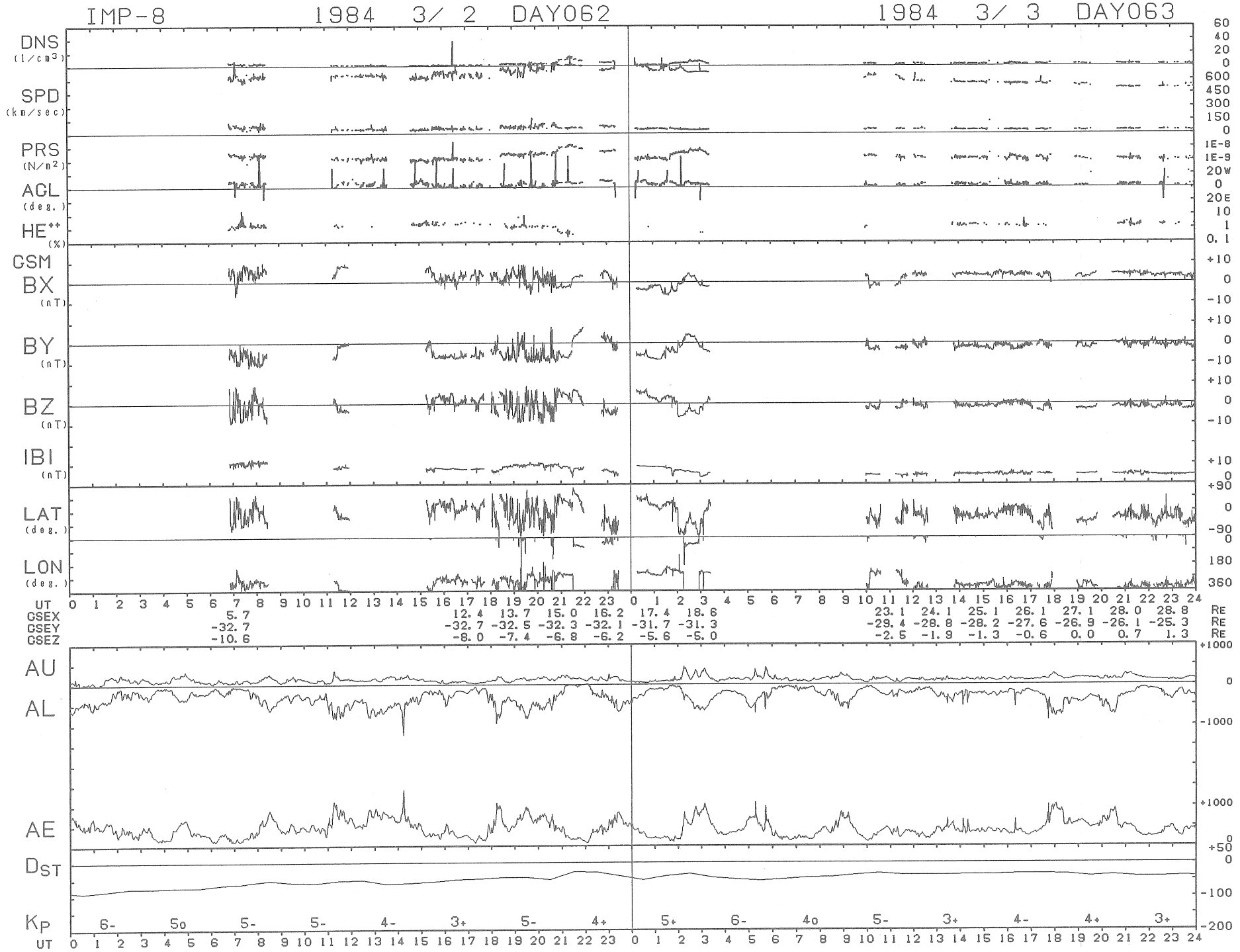

IMP-8 1984 2/21 DAY052
1984 2/22 DAY053
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.9 36.4 36.8 37.2 38.6 38.7 38.7 38.7 38.7 38.4 38.3 38.0 37.8 37.1 35.8 RE
GSEY -15.2 -14.2 -13.1 -12.1 -5.5 -4.4 -3.3 -2.2 -1.0 1.2 2.4 3.5 4.7 6.9 10.2 RE
GSEZ 3.5 4.1 4.7 5.3 8.9 9.4 10.0 10.5 11.0 12.0 12.5 12.9 13.4 14.2 15.3 RE
AU
AL
AE
DST
KP 4o 3+ 2o 2+ 3o 3o 2o 3- 3- 2- 2- 2- 2o 2+ 2+ 2o
UT

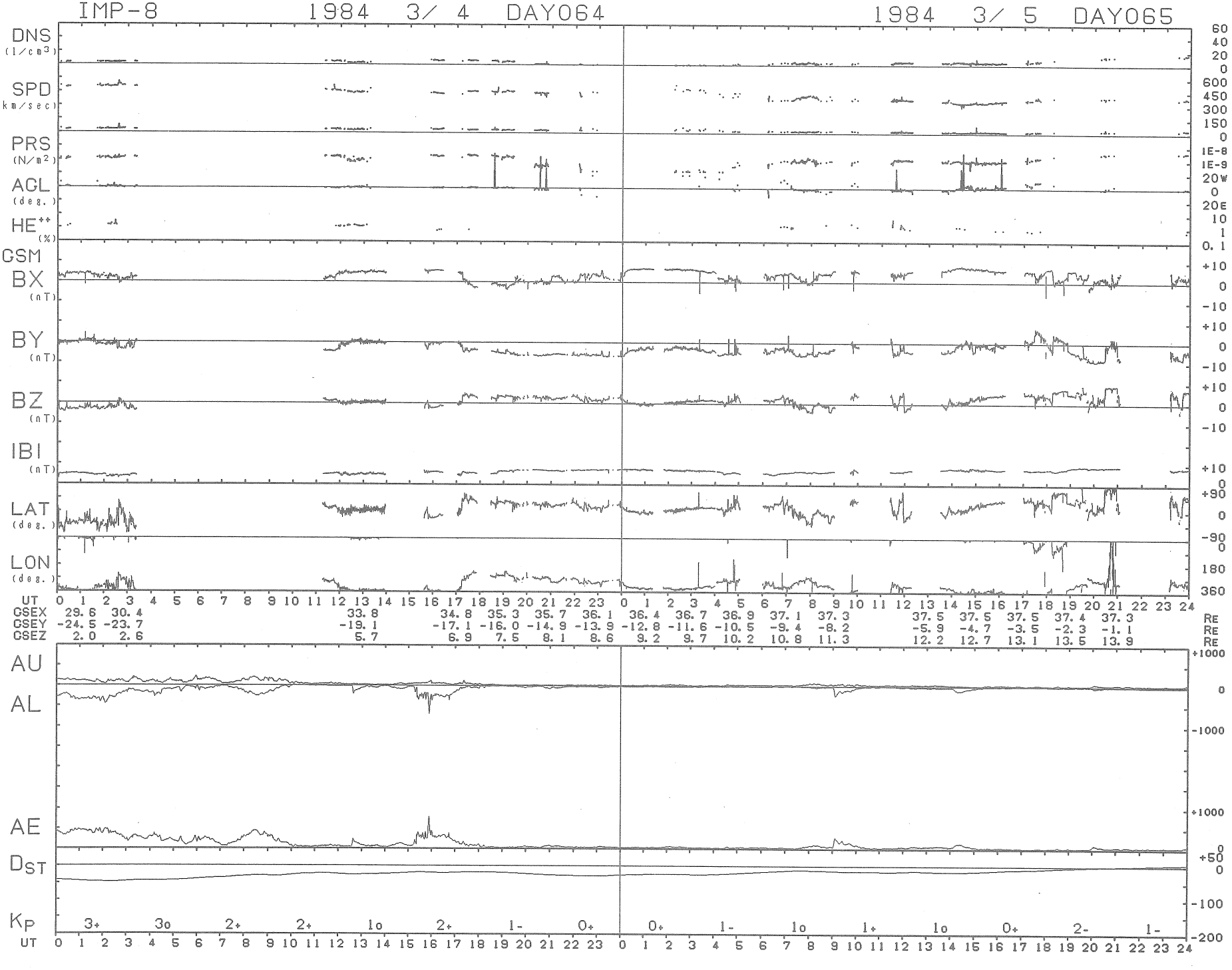

IMP-8 1984 2/23 DAY054 1984 2/24 DAY055
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.3 34.7 34.1 33.5 32.1 31.4 30.6 29.8 28.9 28.0 27.1 26.1 25.1 24.1 23.1 22.0 20.9 19.7 16.2 15.0 Re
GSEY 11.3 12.4 13.4 14.5 16.5 17.5 18.5 19.4 20.4 21.3 22.2 23.0 23.8 24.6 25.4 26.1 26.8 27.5 29.3 29.8 Re
GSEZ 15.7 16.0 16.3 16.6 17.0 17.3 17.5 17.6 17.8 17.9 18.0 18.1 18.1 18.2 18.2 18.1 18.1 18.0 17.7 17.5 Re
AU
AL
AE
DST
KP 3- 2o 4o 3+ 4- 3- 3- 2o 3- 2- 2o 3o 2- 2+ 2o 3o
UT

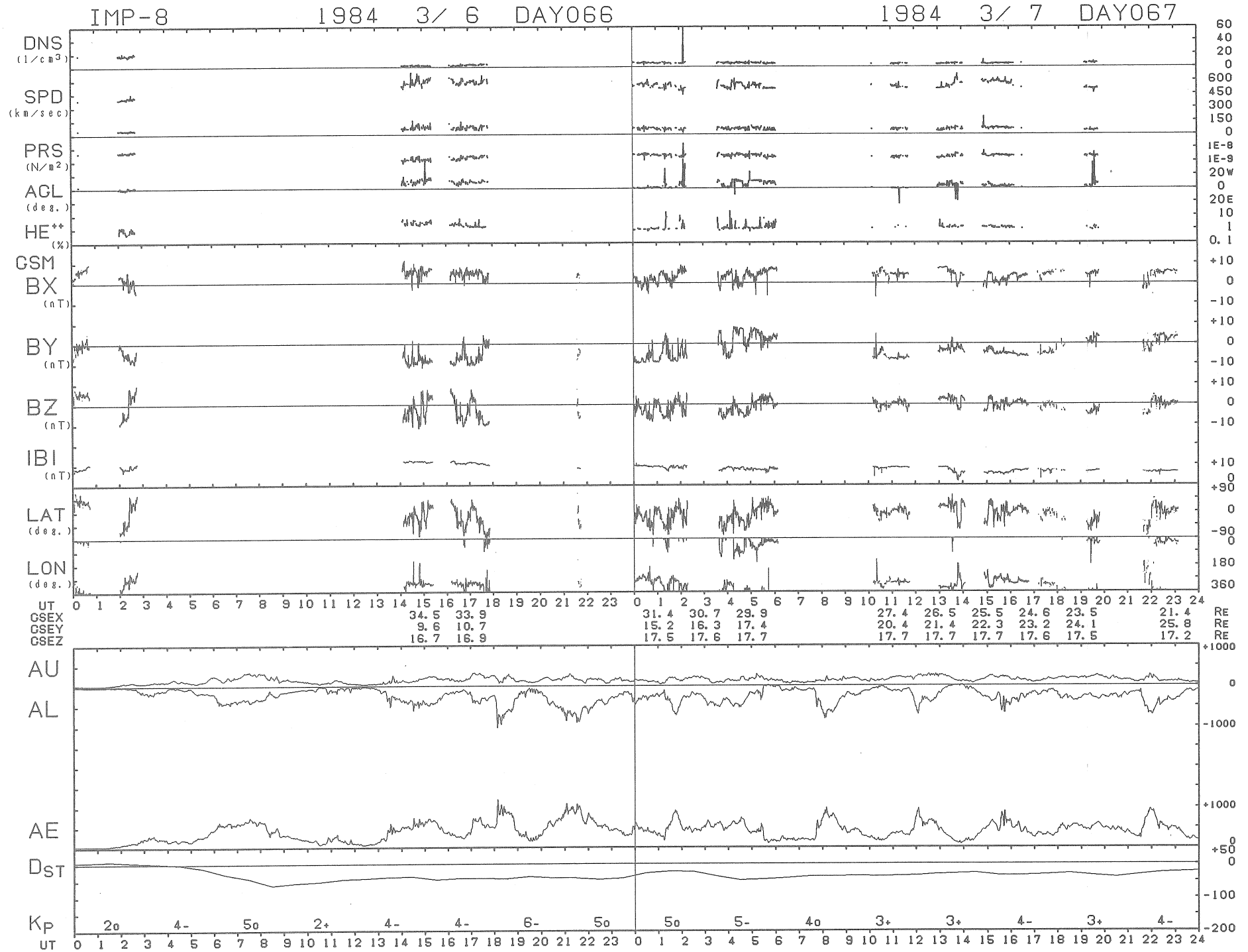

IMP-8 1984 2/25 DAY056 1984 2/26 DAY057
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.4 11.1 9.8 7.2 5.8 4.5 -2.3 -7.8 -9.1 -10.4 -11.7 -12.9 -14.2 -15.4 -16.6 -17.7 RE
GSEY 30.8 31.2 31.5 32.1 32.3 32.4 32.4 31.4 31.0 30.6 30.0 29.5 28.8 28.1 27.4 26.5 RE
GSEZ 17.1 16.8 16.5 15.9 15.5 15.1 12.8 10.6 10.0 9.3 8.6 8.0 7.3 6.5 5.8 5.1 RE
AU
AL
AE
DST
KP 2+ 0+ 2- 3- 2- 0+ 1o 3o 0+ 1o 2o 3+ 3o 4+ 4- 4o
UT

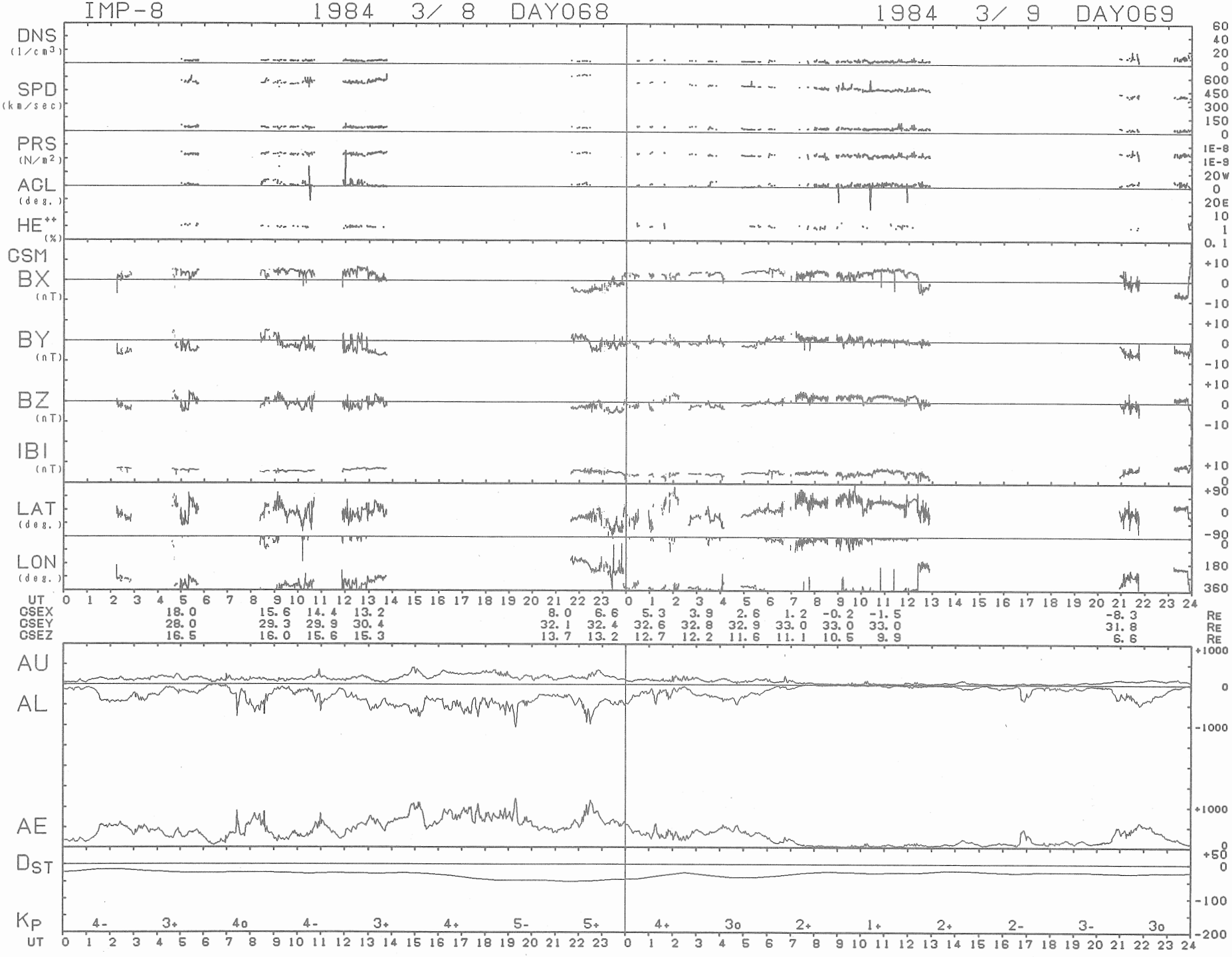

IMP-8
1984 2/27 DAY058
1984 2/28 DAY059
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.8 -19.8 -21.8 -22.7 -23.6 -25.1 -25.8 -26.4 -28.3 -28.5 -28.5 -28.5 -28.3 -28.1 -27.7 -27.3 -26.9 RE
GSEY 25.7 24.7 22.7 21.6 20.4 17.9 16.6 15.2 7.9 6.4 4.8 3.2 0.1 -1.5 -3.1 -4.7 -6.3 RE
GSEZ 4.3 3.5 2.0 1.2 0.4 -1.2 -2.0 -2.7 -6.5 -7.2 -7.9 -8.5 -9.8 -10.4 -10.9 -11.4 -11.9 RE
AU
AL
AE
DST
KP
6o 5+ 4o 3o 2+ 3o 4+ 5- 2o 2- 3- 2o 3o 2+ 1+ 1-
UT

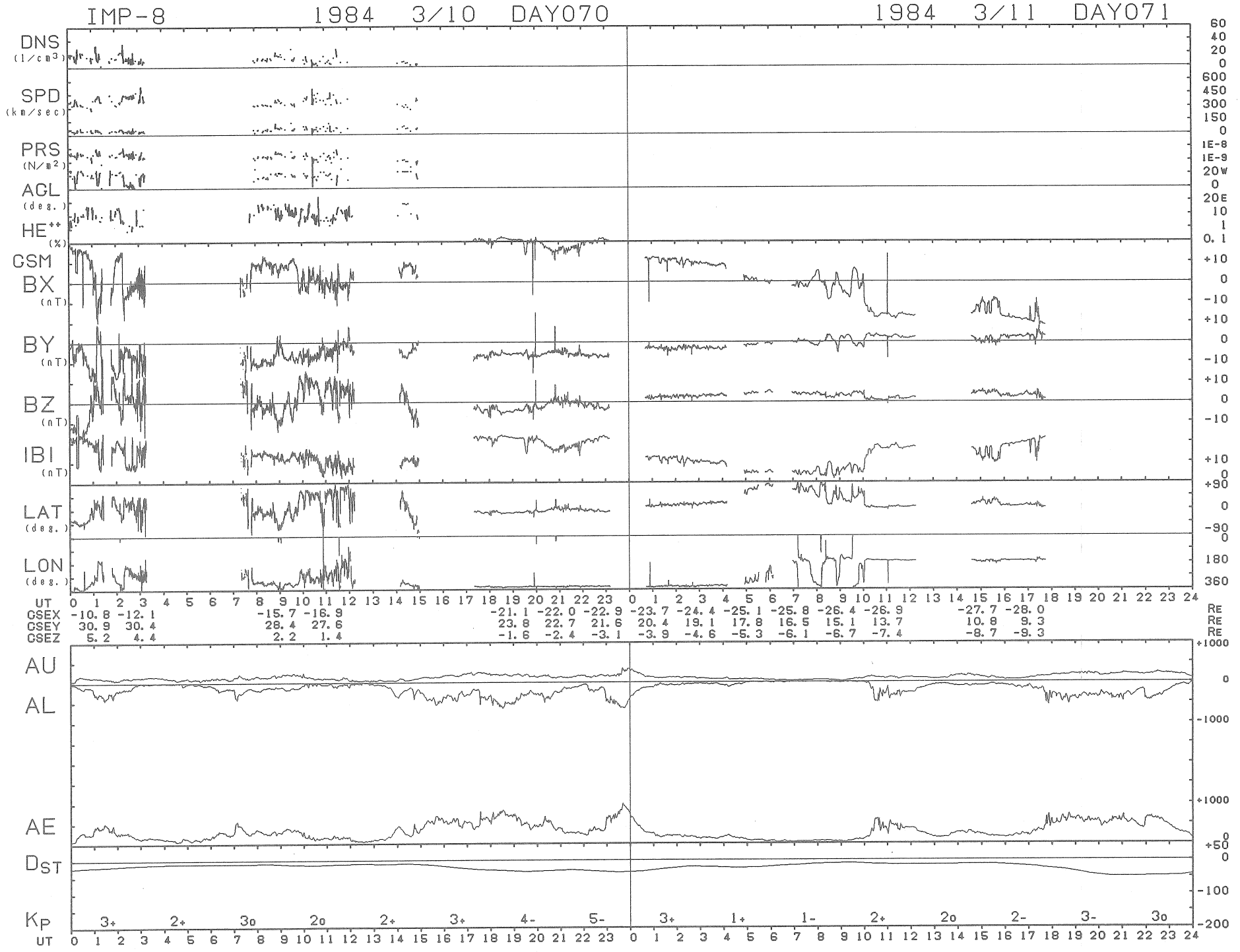

IMP-8 1984 2/29 DAY060
1984 3/ 1 DAY061
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.7 -25.0 -23.4 -20.6 -19.6 -18.5 -17.3 -12.4 -4.2 -2.8 -1.4 0.0 RE
GSEY -9.4 -10.9 -13.8 -17.9 -19.2 -20.4 -21.6 -25.7 -30.2 -30.8 -31.2 -31.6 RE
GSEZ -12.7 -13.1 -13.7 -14.4 -14.5 -14.6 -14.7 -14.5 -13.3 -13.0 -12.6 -12.3 RE
AU
AL
AE
DST
KP 0o 1o 3- 3o 3+ 4- 2+ 1o 0+ 0o 2o 3+ 4+ 4+ 6- 6+
UT

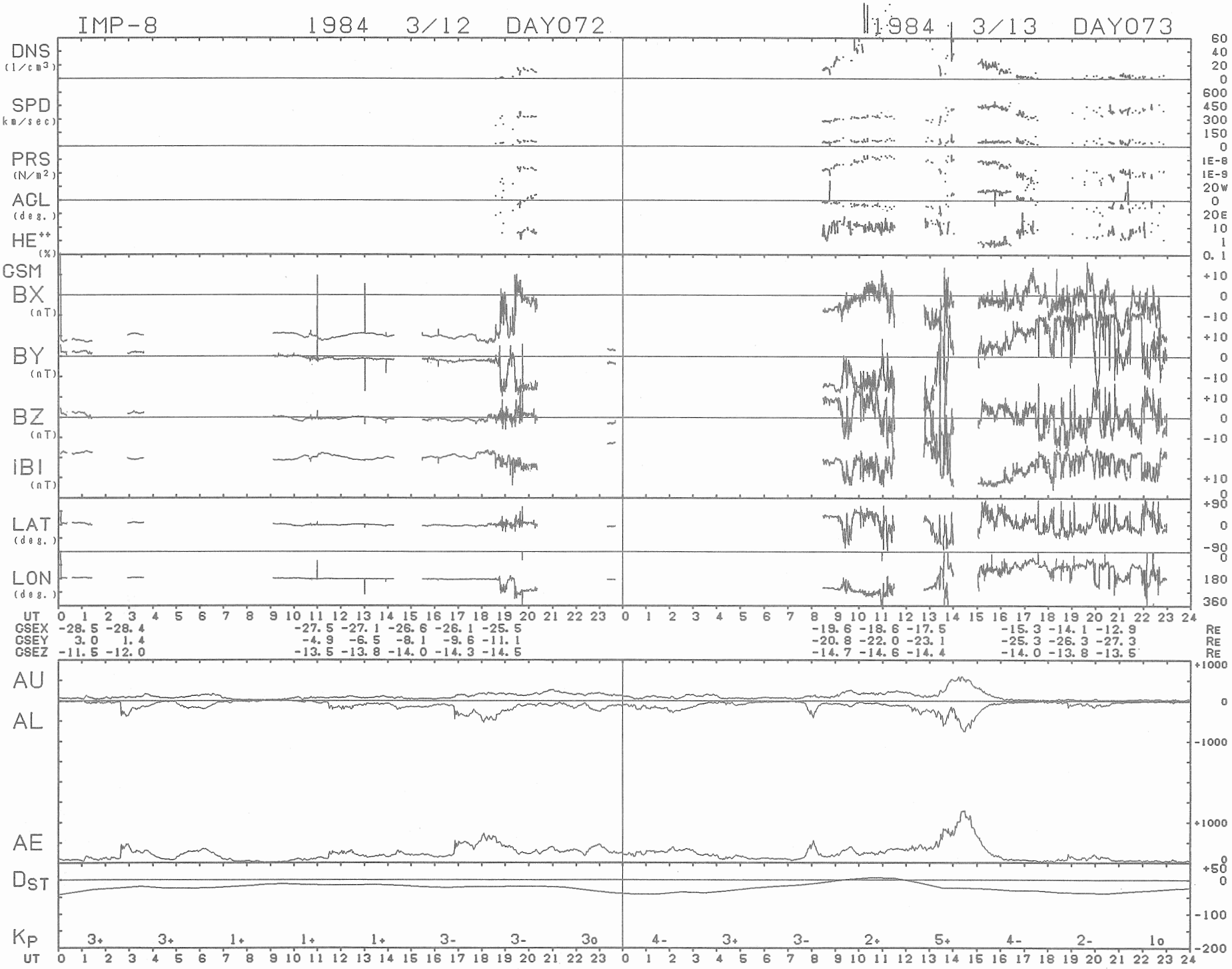

IMP-8
1984 3/ 2 DAY062
1984 3/ 3 DAY063
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 5.7 12.4 13.7 15.0 16.2 17.4 18.6 23.1 24.1 25.1 26.1 27.1 28.0 28.8 RE
GSEY -32.7 -32.7 -32.5 -32.3 -32.1 -31.7 -31.3 -29.4 -28.8 -28.2 -27.6 -26.9 -26.1 -25.3 RE
GSEZ -10.6 -8.0 -7.4 -6.8 -6.2 -5.6 -5.0 -2.5 -1.9 -1.3 -0.6 0.0 0.7 1.3 RE
AU
AL
AE
DST
KP 6- 5o 5- 5- 4- 3+ 5- 4+ 5+ 6- 4o 5- 3+ 4- 4+ 3+
UT

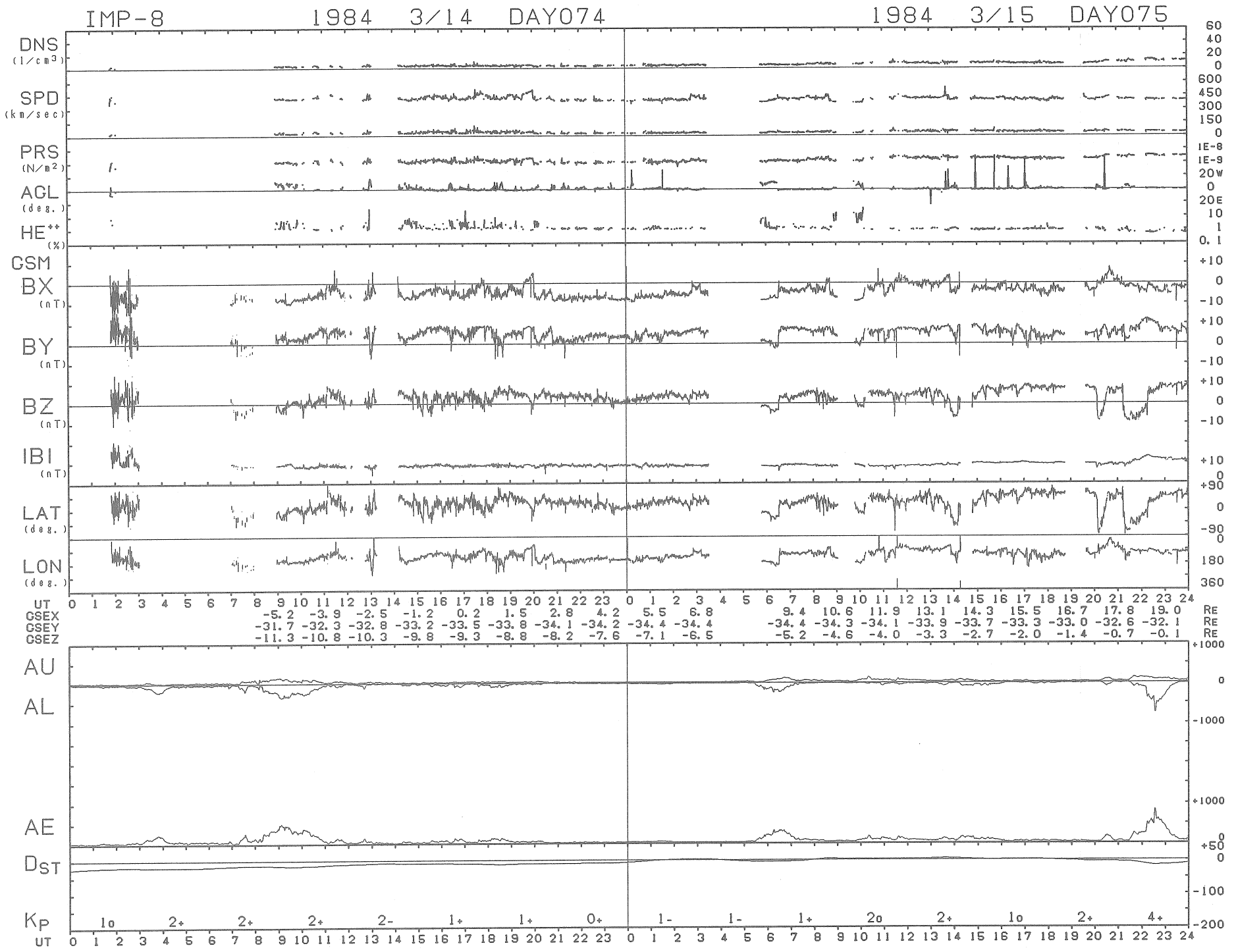

IMP-8
1984 3/ 4 DAY064
1984 3/ 5 DAY065
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.6 30.4 33.8 34.8 35.3 35.7 36.1 36.4 36.7 36.9 37.1 37.3 37.5 37.5 37.5 37.4 37.3 RE
GSEY -24.5 -23.7 -19.1 -17.1 -16.0 -14.9 -13.9 -12.8 -11.6 -10.5 -9.4 -8.2 -5.9 -4.7 -3.5 -2.3 -1.1 RE
GSEZ 2.0 2.6 5.7 6.9 7.5 8.1 8.6 9.2 9.7 10.2 10.8 11.3 12.2 12.7 13.1 13.5 13.9 RE
AU
AL
AE
DST
KP 3+ 3o 2+ 2+ 1o 2+ 1- 0+ 0+ 1- 1o 1+ 1o 0+ 2- 1-
UT

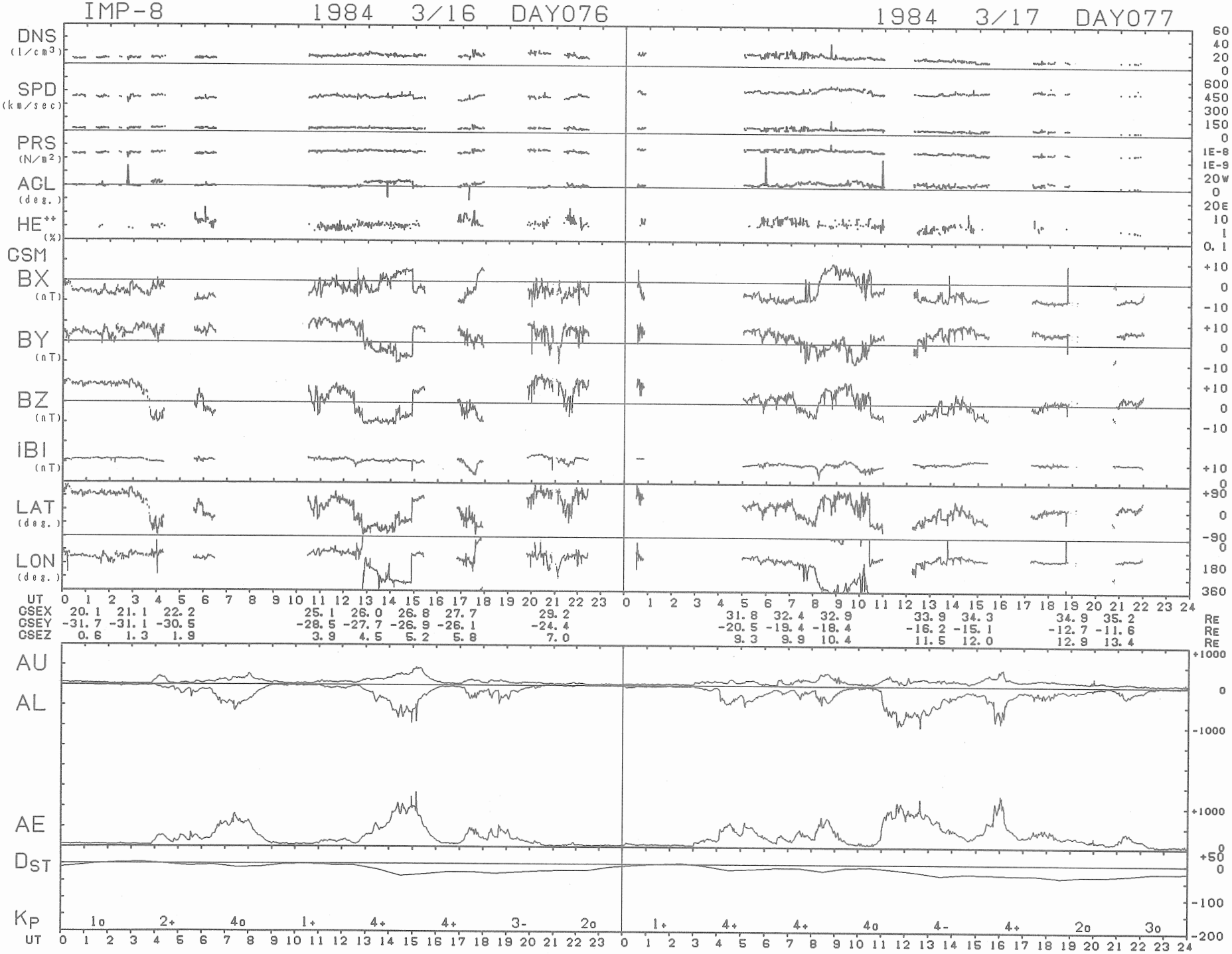

IMP-8
1984 3/ 6 DAY066
1984 3/ 7 DAY067
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
2o 4- 5o 2+ 4- 4- 6- 5o 5o 5- 4o 3+ 3+ 4- 3+ 4-

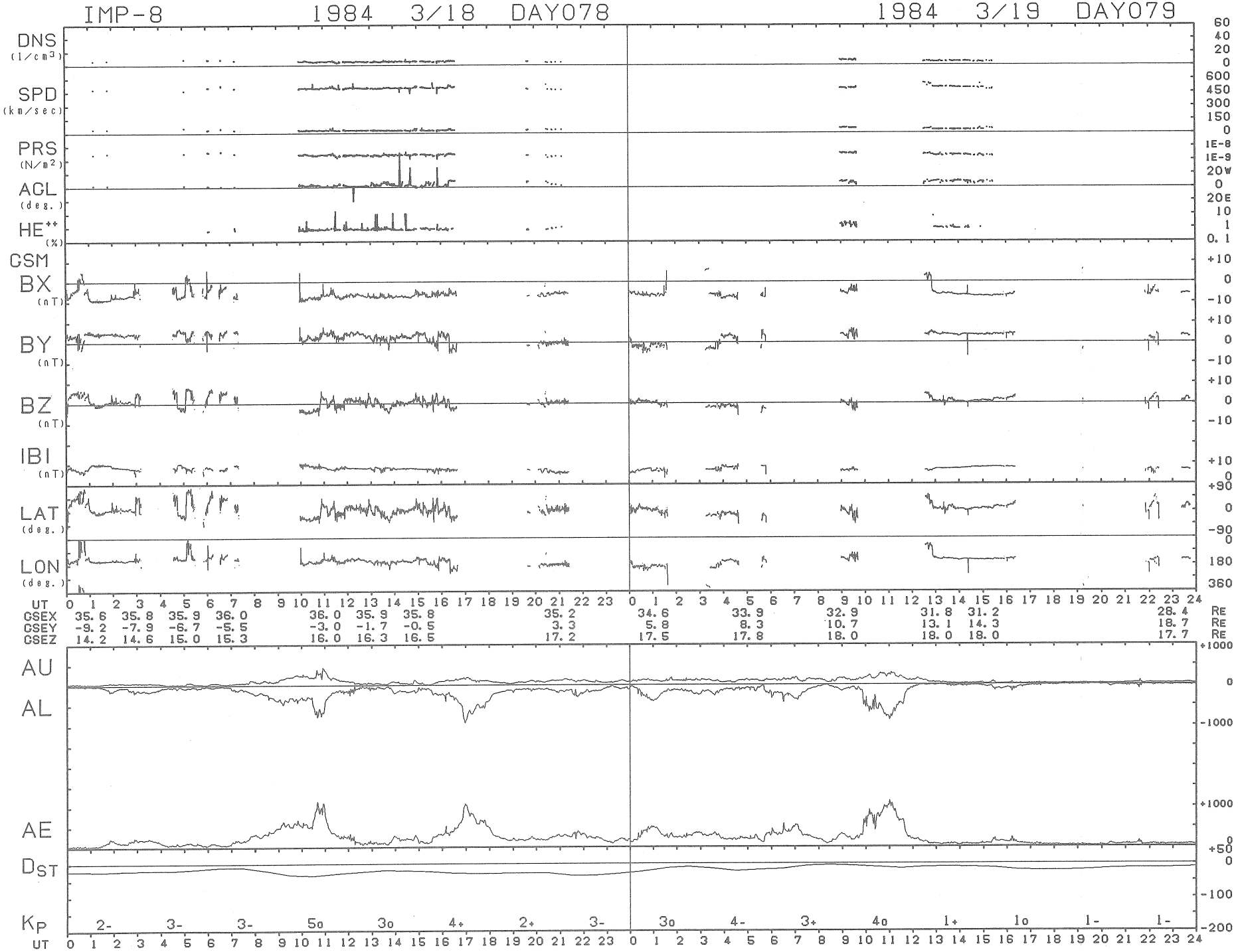

IMP-8 1984 3/ 8 DAY068
1984 3/ 9 DAY069
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.0 15.6 14.4 13.2 8.0 6.6 5.3 3.9 2.6 1.2 -0.2 -1.5 -8.3 RE
GSEY 28.0 29.3 29.9 30.4 32.1 32.4 32.6 32.8 32.9 33.0 33.0 33.0 31.8 RE
GSEZ 16.5 16.0 15.6 15.3 13.7 13.2 12.7 12.2 11.6 11.1 10.5 9.9 6.6 RE
AU
AL
AE
DST
KP 4- 3+ 4o 4- 3+ 4+ 5- 5+ 4+ 3o 2+ 1+ 2+ 2- 3- 3o
UT

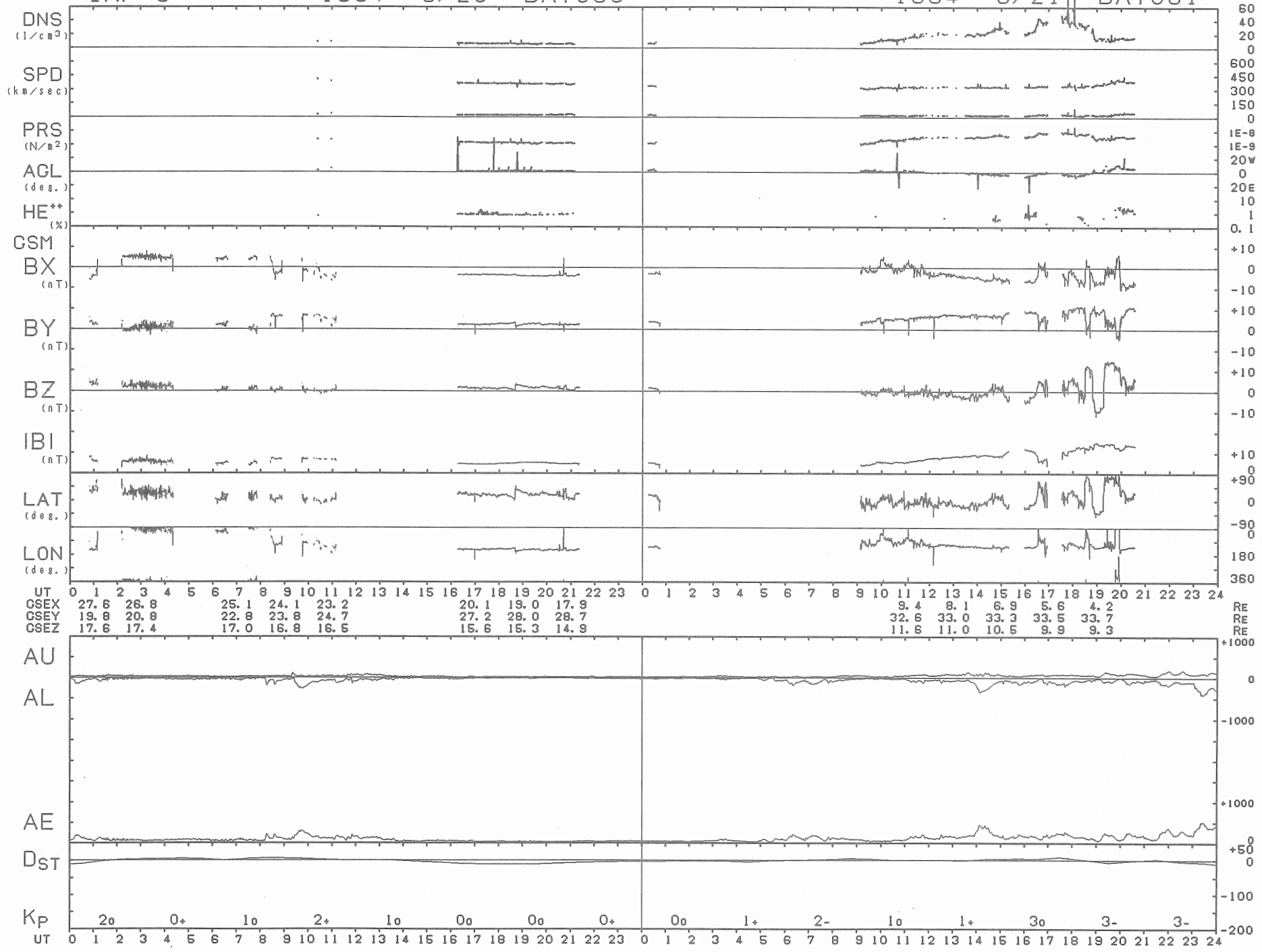

IMP-8 1984 3/10 DAY070
1984 3/11 DAY071
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.8 -12.1 -15.7 -16.9 -21.1 -22.0 -22.9 -23.7 -24.4 -25.1 -25.8 -26.4 -26.9 -27.7 -28.0 RE
GSEY 30.9 30.4 28.4 27.6 23.8 22.7 21.6 20.4 19.1 17.8 16.5 15.1 13.7 10.8 9.3 RE
GSEZ 5.2 4.4 2.2 1.4 -1.6 -2.4 -3.1 -3.9 -4.6 -5.3 -6.1 -6.7 -7.4 -8.7 -9.3 RE
AU
AL
AE
DST
KP
3+ 2+ 3o 2o 2+ 3+ 4- 5- 3+ 1+ 1- 2+ 2o 2- 3- 3o
UT

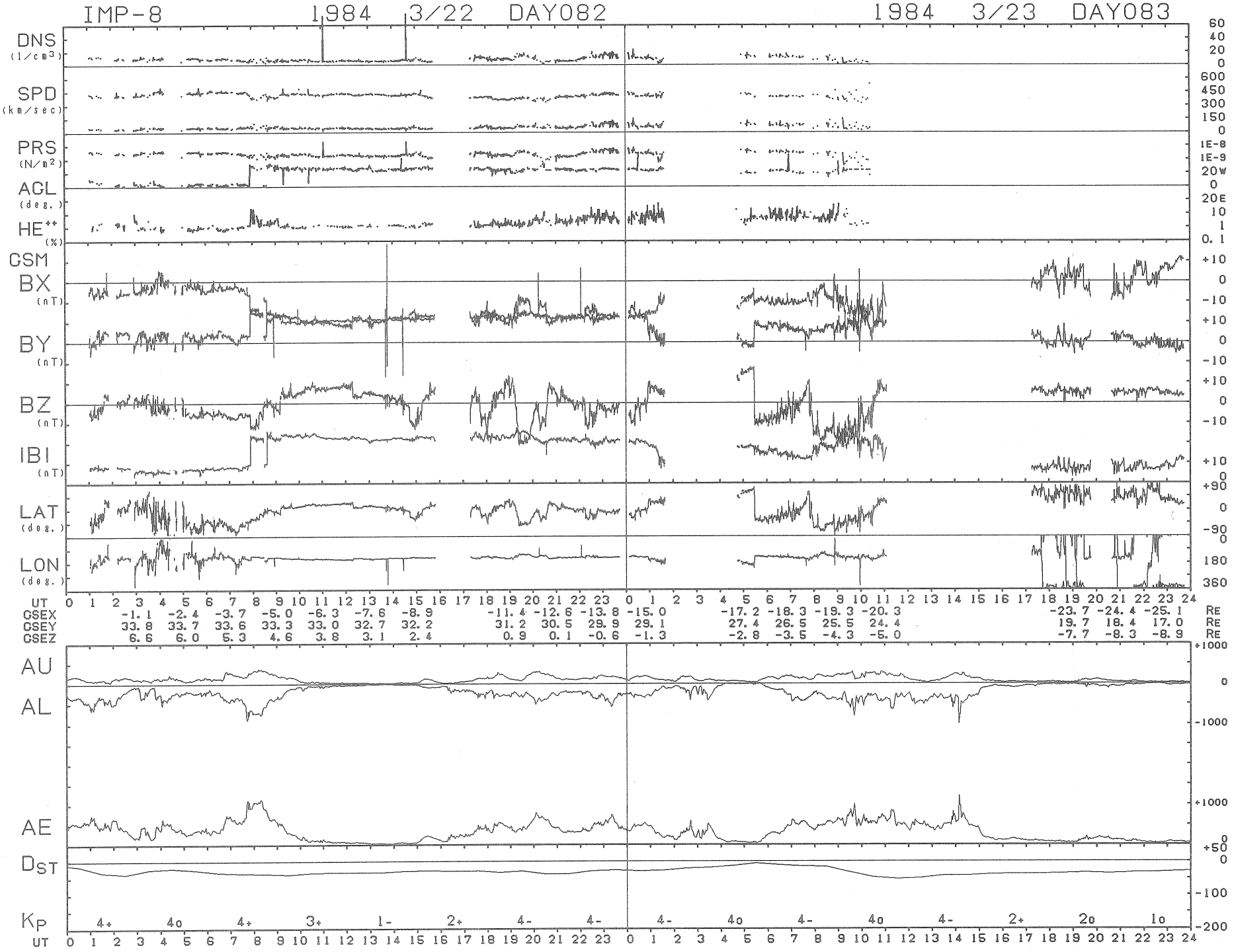

IMP-8 1984 3/12 DAY072
1984 3/13 DAY073
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.5 -28.4 -27.5 -27.1 -26.6 -26.1 -25.5 -19.6 -18.6 -17.5 -15.3 -14.1 -12.9 RE
GSEY 3.0 1.4 -4.9 -6.5 -8.1 -9.6 -11.1 -20.8 -22.0 -23.1 -25.3 -26.3 -27.3 RE
GSEZ -11.5 -12.0 -13.5 -13.8 -14.0 -14.3 -14.5 -14.7 -14.6 -14.4 -14.0 -13.8 -13.5 RE
AU
AL
AE
DST
KP
3+ 3+ 1+ 1+ 1+ 3- 3- 3o 4- 3+ 3- 2+ 5+ 4- 2- 1o
UT

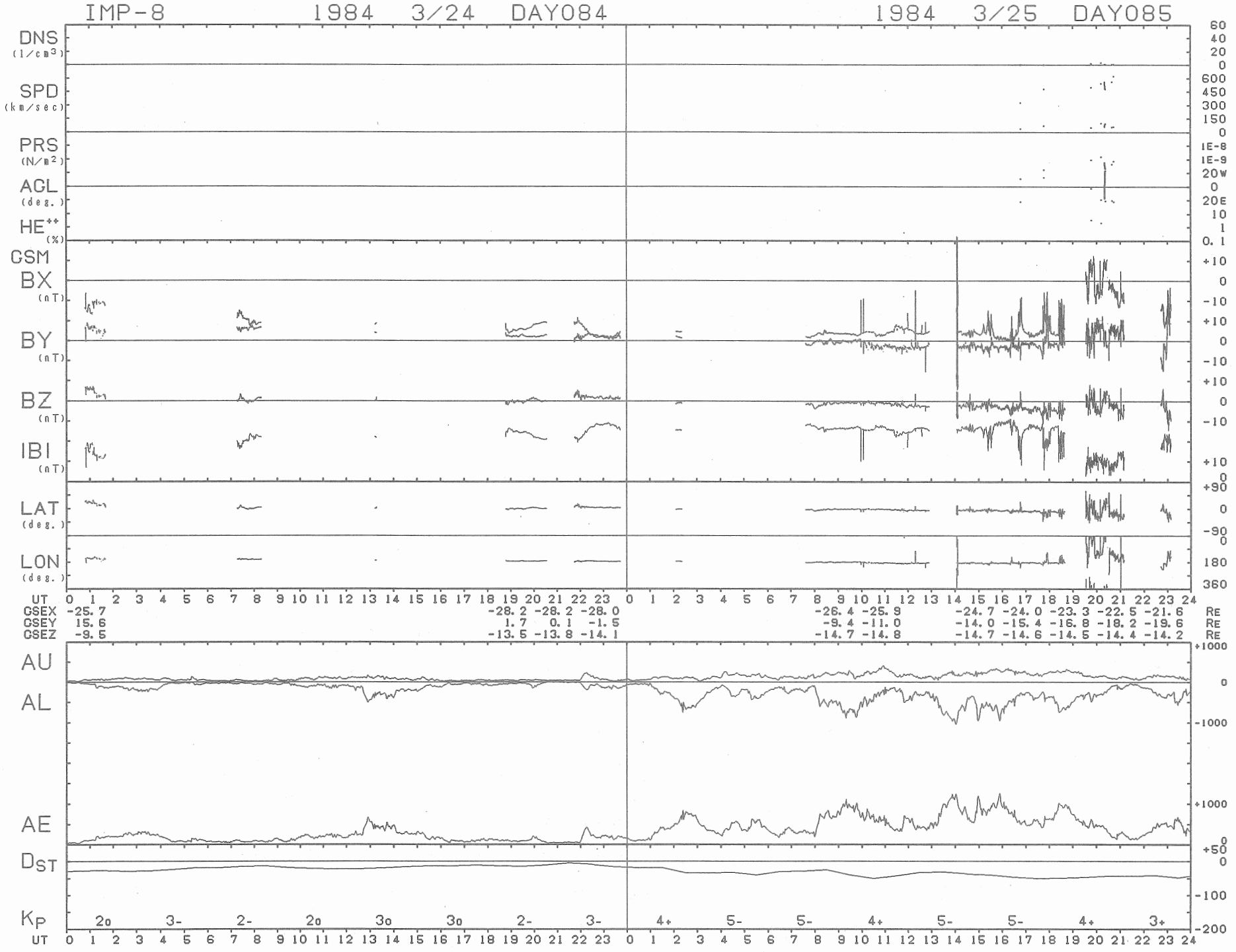

IMP-8
1984 3/14 DAY074
1984 3/15 DAY075
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.2 -3.9 -2.5 -1.2 0.2 1.5 2.8 4.2 5.5 6.8 9.4 10.6 11.9 13.1 14.3 15.5 16.7 17.8 19.0 RE
GSEY -31.7 -32.3 -32.8 -33.2 -33.5 -33.8 -34.1 -34.2 -34.4 -34.4 -34.4 -34.3 -34.1 -33.9 -33.7 -33.3 -33.0 -32.6 -32.1 RE
GSEZ -11.3 -10.8 -10.3 -9.8 -9.3 -8.8 -8.2 -7.6 -7.1 -6.5 -5.2 -4.6 -4.0 -3.3 -2.7 -2.0 -1.4 -0.7 -0.1 RE
AU
AL
AE
DST
KP 1o 2+ 2+ 2+ 2- 1+ 1+ 0+ 1- 1- 1+ 2o 2+ 1o 2+ 4+
UT

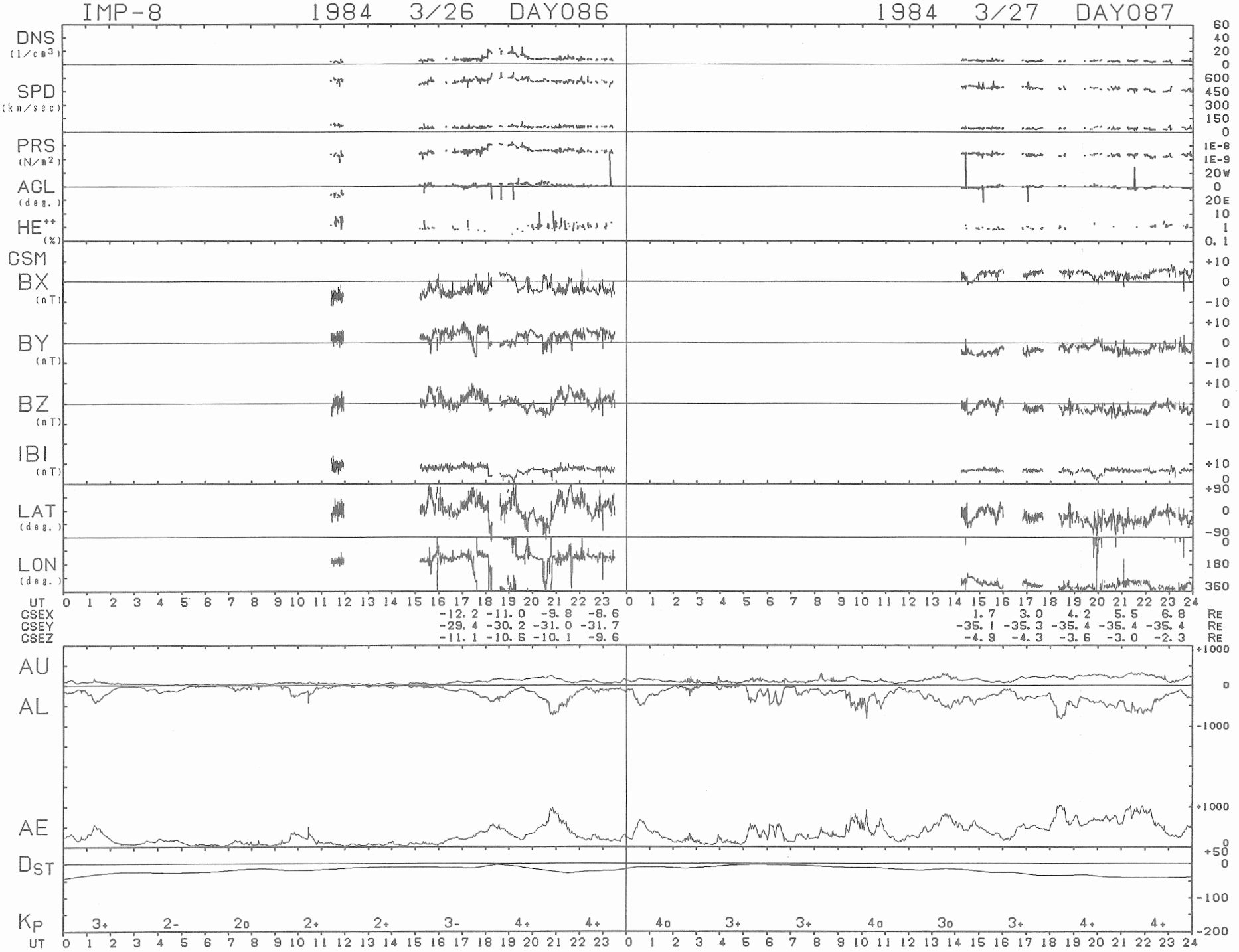

IMP-8
1984 3/16 DAY076
1984 3/17 DAY077
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.1 21.1 22.2 25.1 26.0 26.8 27.7 29.2 31.8 32.4 32.9 33.9 34.3 34.9 35.2 RE
GSEY -31.7 -31.1 -30.5 -28.5 -27.7 -26.9 -26.1 -24.4 -20.5 -19.4 -18.4 -16.2 -15.1 -12.7 -11.6 RE
GSEZ 0.6 1.3 1.9 3.9 4.5 5.2 5.8 7.0 9.3 9.9 10.4 11.5 12.0 12.9 13.4 RE
AU
AL
AE
DST
KP
1o 2+ 4o 1+ 4+ 4+ 3- 2o 1+ 4+ 4+ 4o 4- 4+ 2o 3o
UT

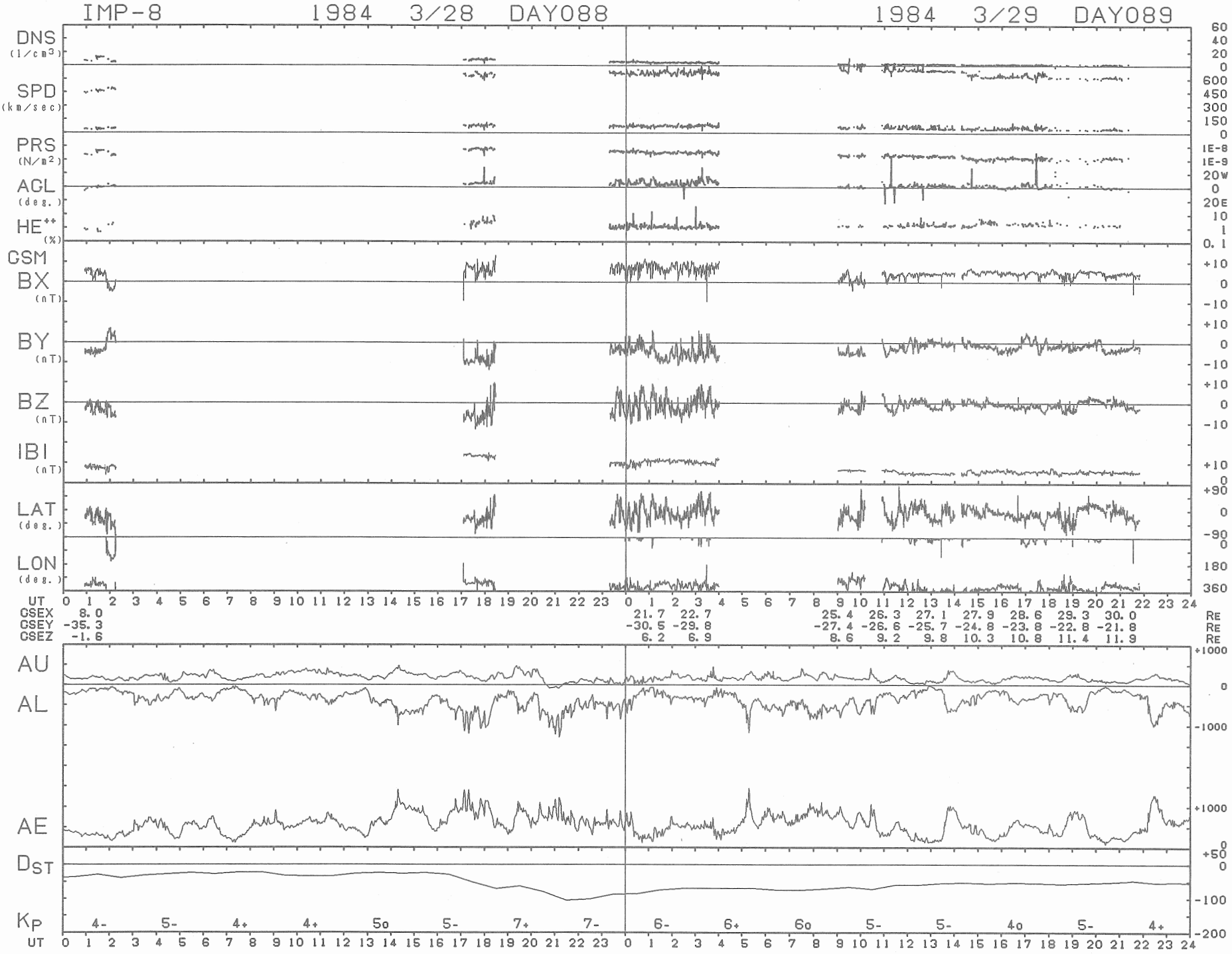

IMP-8
1984 3/18 DAY078
1984 3/19 DAY079
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.6 35.8 35.9 36.0 36.0 35.9 35.8 35.2 34.6 33.9 32.9 31.8 31.2 28.4 RE
GSEY -9.2 -7.9 -6.7 -5.5 -3.0 -1.7 -0.5 3.3 5.8 8.3 10.7 13.1 14.3 18.7 RE
GSEZ 14.2 14.6 15.0 15.3 16.0 16.3 16.5 17.2 17.5 17.8 18.0 18.0 18.0 17.7 RE
AU
AL
AE
DST
KP 2- 3- 3- 5o 3o 4+ 2+ 3- 3o 4- 3+ 4o 1+ 1o 1- 1-
UT

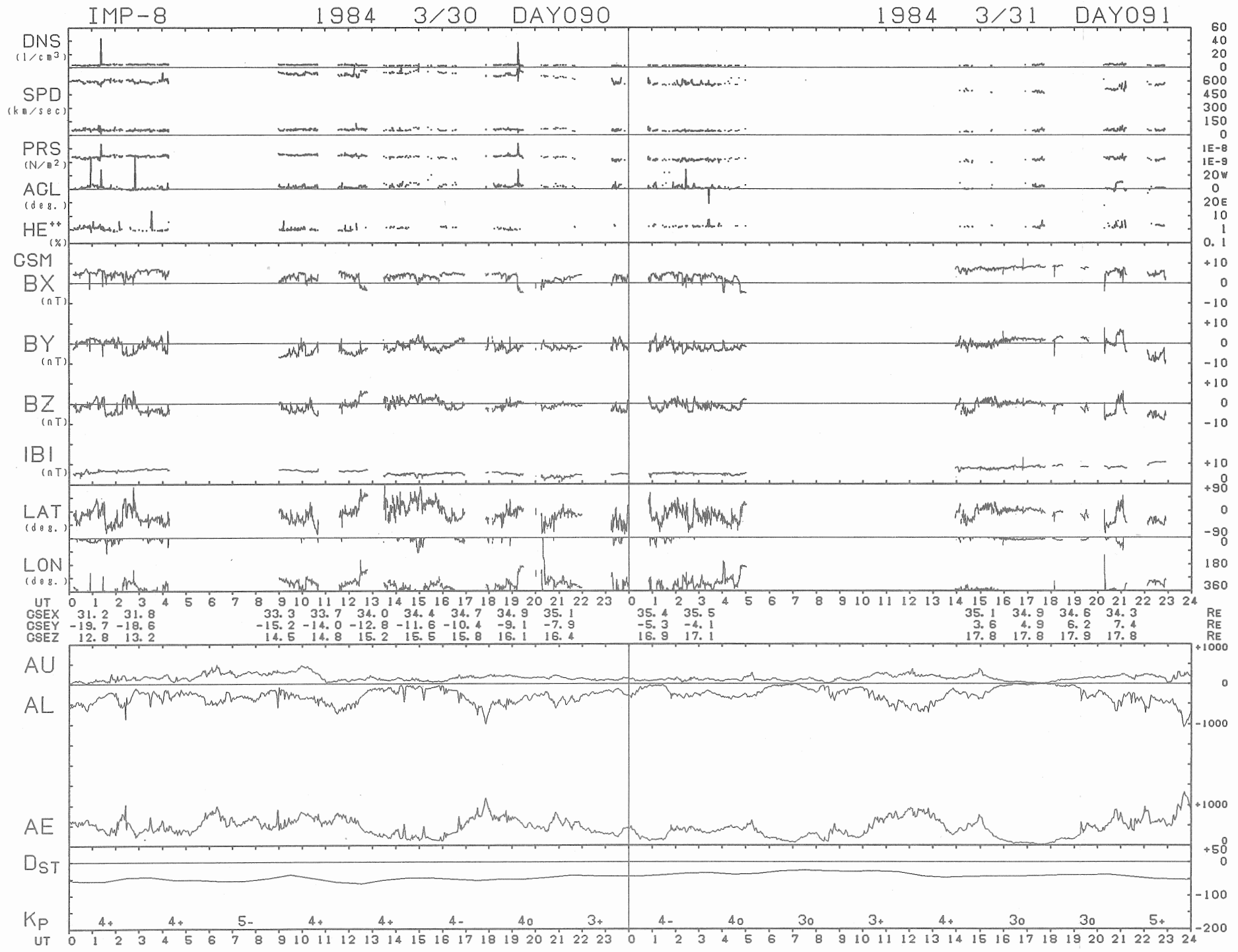

IMP-8 1984 3/20 DAY080
1984 3/21 DAY081
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.6 26.8 25.1 24.1 23.2 20.1 19.0 17.9 9.4 8.1 6.9 5.6 4.2 RE
GSEY 19.8 20.8 22.8 23.8 24.7 27.2 28.0 28.7 32.6 33.0 33.3 33.5 33.7 RE
GSEZ 17.6 17.4 17.0 16.8 16.5 15.6 15.3 14.9 11.6 11.0 10.5 9.9 9.3 RE
AU
AL
AE
DST
KP 2o 0+ 1o 2+ 1o 0o 0o 0+ 0o 1+ 2- 1o 1+ 3o 3- 3-
UT

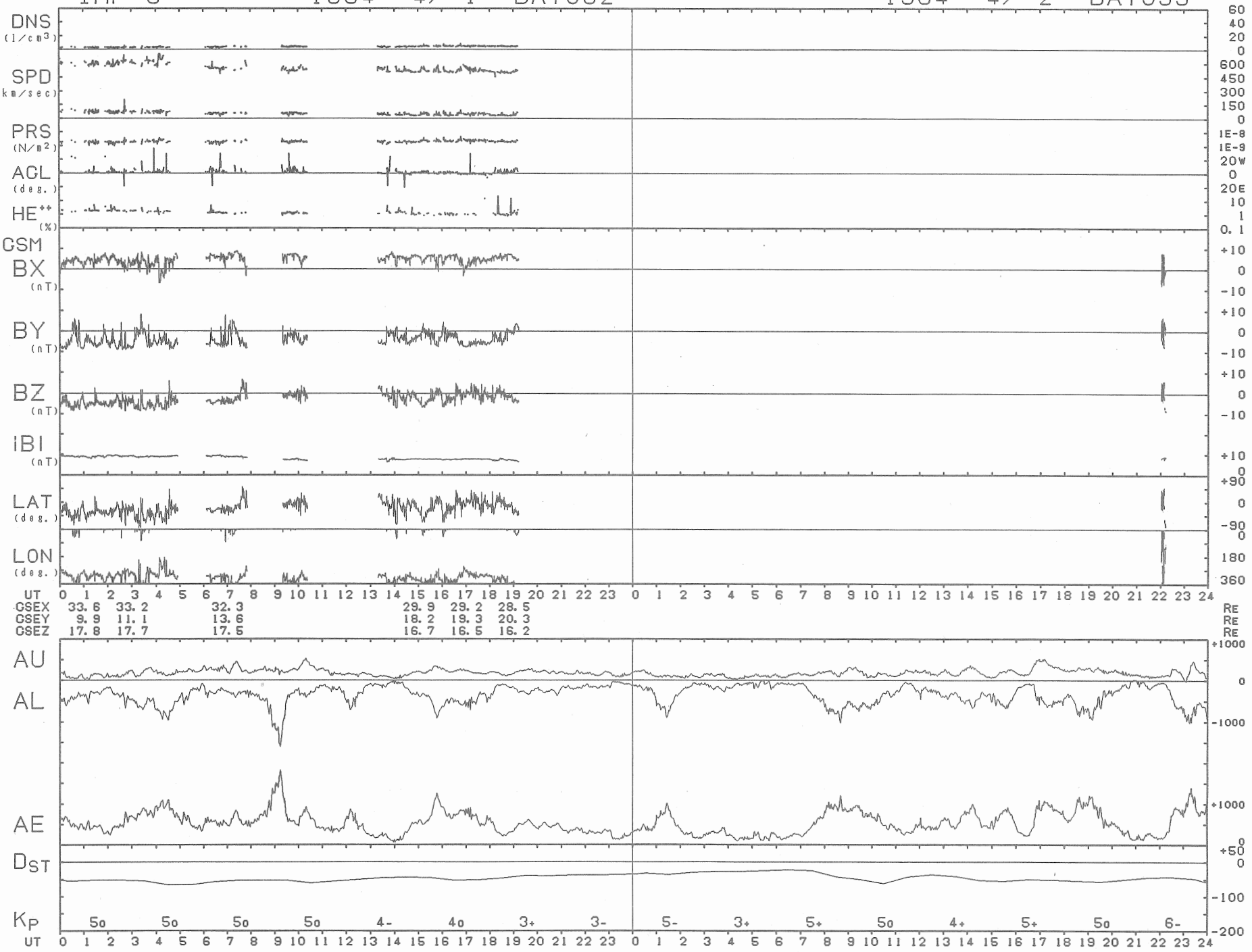

IMP-8 1984 3/22 DAY082
1984 3/23 DAY083
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -1.1 -2.4 -3.7 -5.0 -6.3 -7.6 -8.9 -11.4 -12.6 -13.8 -15.0 -17.2 -18.3 -19.3 -20.3 -23.7 -24.4 -25.1 RE
GSEY 33.8 33.7 33.6 33.3 33.0 32.7 32.2 31.2 30.5 29.9 29.1 27.4 26.5 25.5 24.4 19.7 18.4 17.0 RE
GSEZ 6.6 6.0 5.3 4.6 3.8 3.1 2.4 0.9 0.1 -0.6 -1.3 -2.8 -3.5 -4.3 -5.0 -7.7 -8.3 -8.9 RE
AU
AL
AE
DST
KP 4+ 4o 4+ 3+ 1- 2+ 4- 4- 4- 4o 4- 4o 4- 2+ 2o 1o
UT

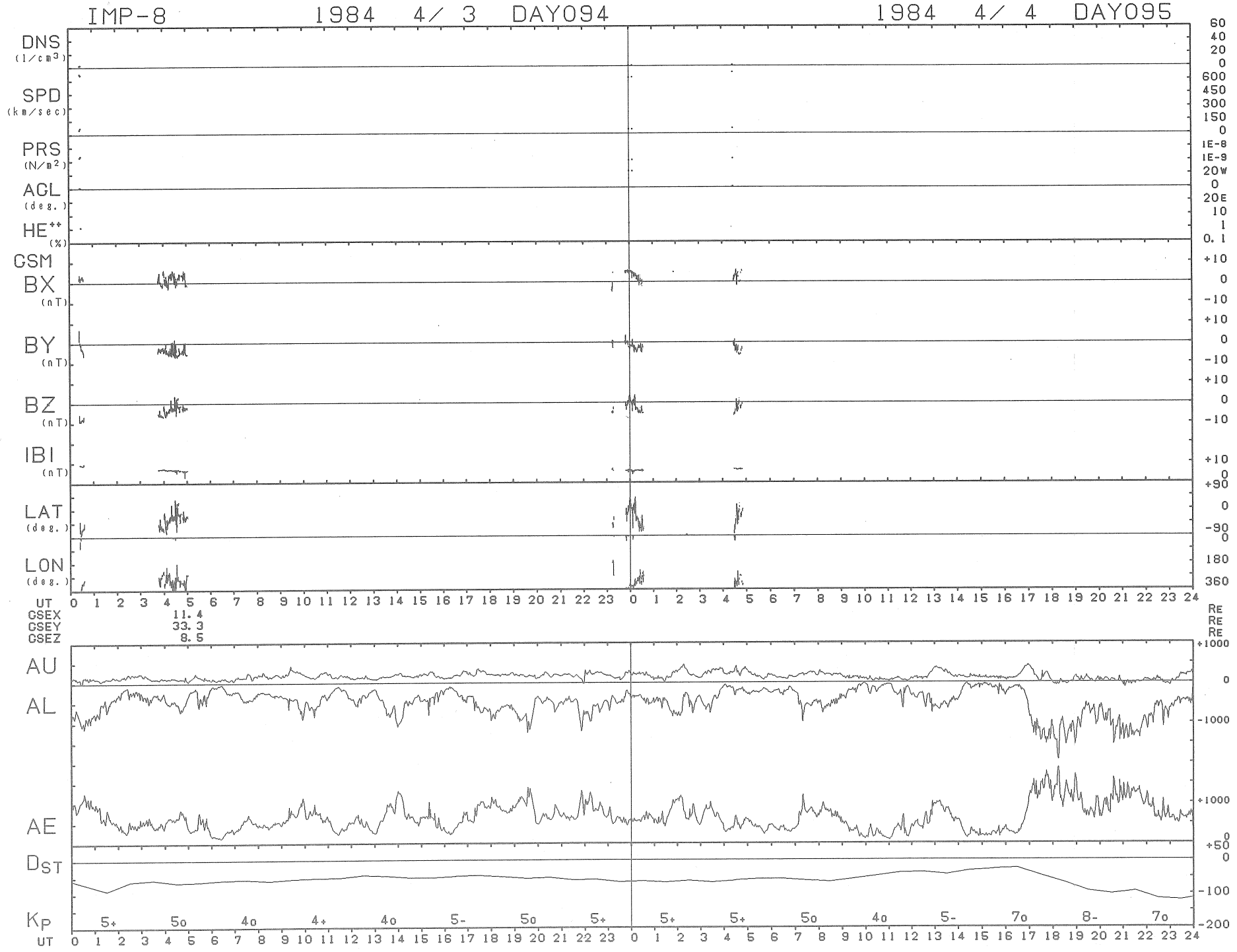

IMP-8 1984 3/24 DAY084
1984 3/25 DAY085
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.7 -28.2 -28.2 -28.0 -26.4 -25.9 -24.7 -24.0 -23.3 -22.5 -21.6 RE
GSEY 15.6 1.7 0.1 -1.5 -9.4 -11.0 -14.0 -15.4 -16.8 -18.2 -19.6 RE
GSEZ -9.5 -13.5 -13.8 -14.1 -14.7 -14.8 -14.7 -14.6 -14.5 -14.4 -14.2 RE
AU
AL
AE
DST
KP
2o 3- 2- 2o 3o 3o 2- 3- 4+ 5- 5- 4+ 5- 5- 4+ 3+
UT

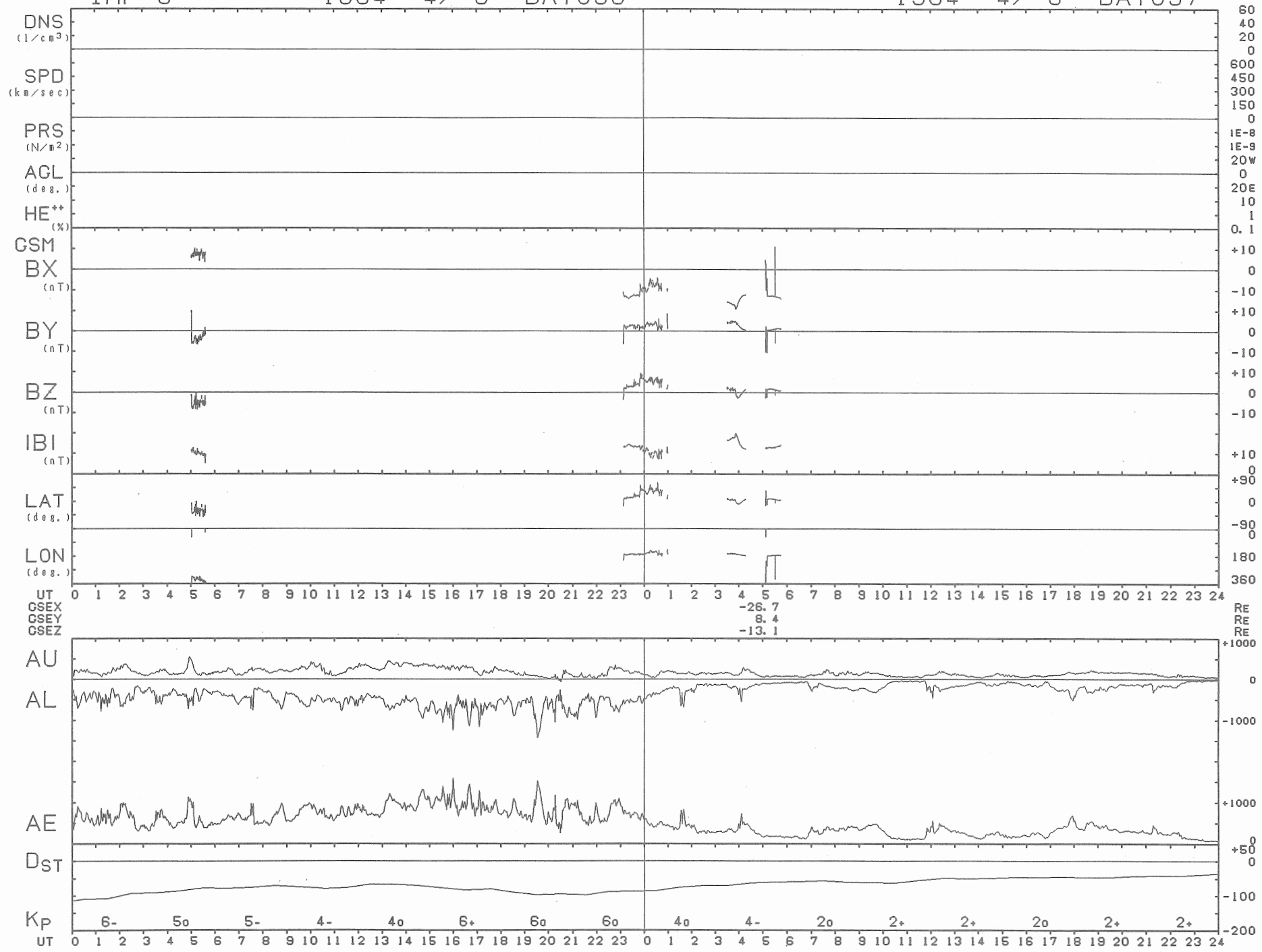

IMP-8 1984 3/26 DAY086
1984 3/27 DAY087
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.2 -11.0 -9.8 -8.6 1.7 3.0 4.2 5.5 6.8 RE
GSEY -29.4 -30.2 -31.0 -31.7 -35.1 -35.3 -35.4 -35.4 -35.4 RE
GSEZ -11.1 -10.6 -10.1 -9.6 -4.9 -4.3 -3.6 -3.0 -2.3 RE
AU
AL
AE
DST
KP
3+ 2- 2o 2+ 2+ 3- 4+ 4+ 4o 3+ 3+ 4o 3o 3+ 4+ 4+
UT

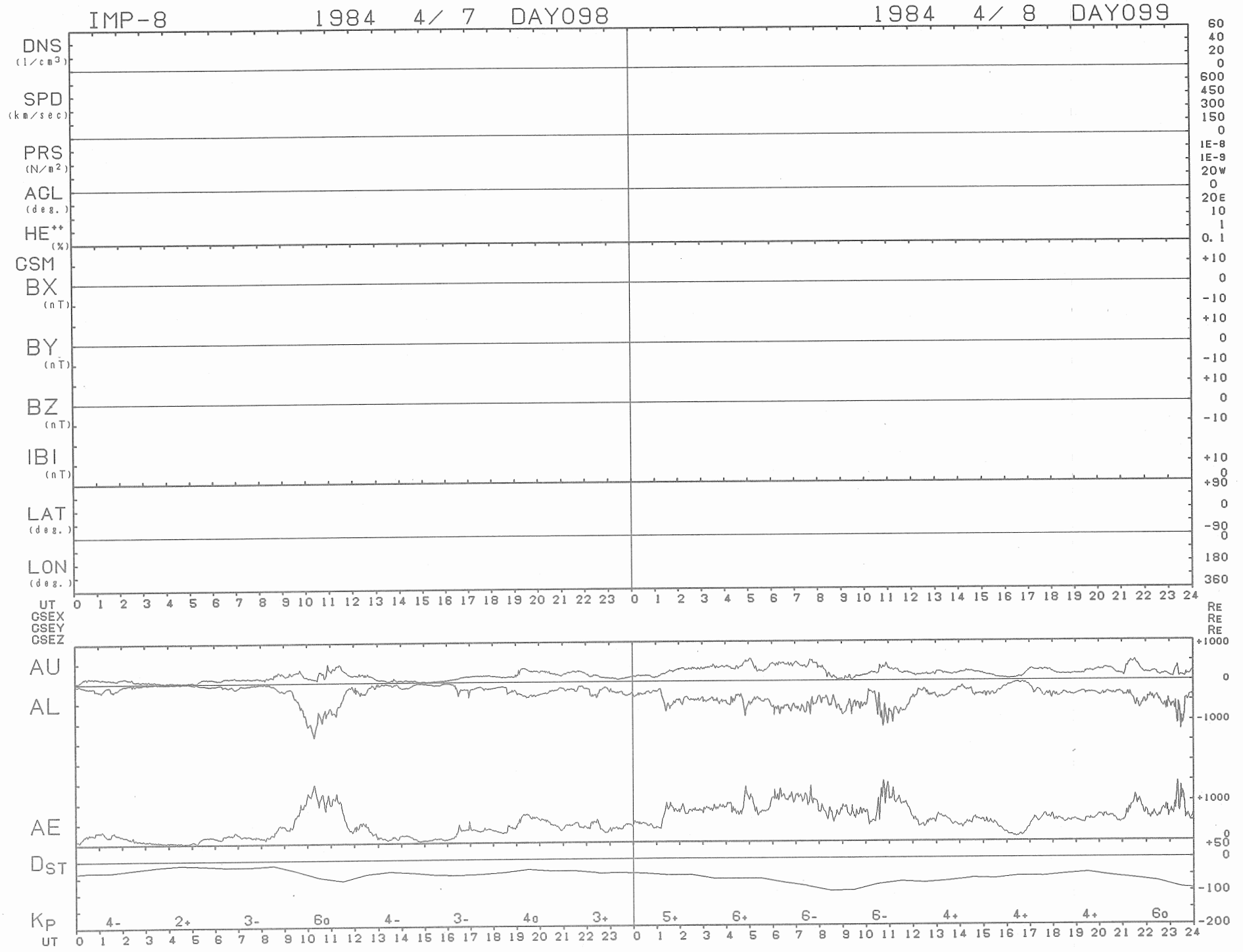

IMP-8 1984 3/28 DAY088
1984 3/29 DAY089
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.0 21.7 22.7 25.4 26.3 27.1 27.9 28.6 29.3 30.0 RE
GSEY -35.3 -30.5 -29.8 -27.4 -26.6 -25.7 -24.8 -23.8 -22.8 -21.8 RE
GSEZ -1.6 6.2 6.9 8.6 9.2 9.8 10.3 10.8 11.4 11.9 RE
AU
AL
AE
DST
KP
4- 5- 4+ 4+ 5o 5- 7+ 7- 6- 6+ 6o 5- 5- 4o 5- 4+
UT

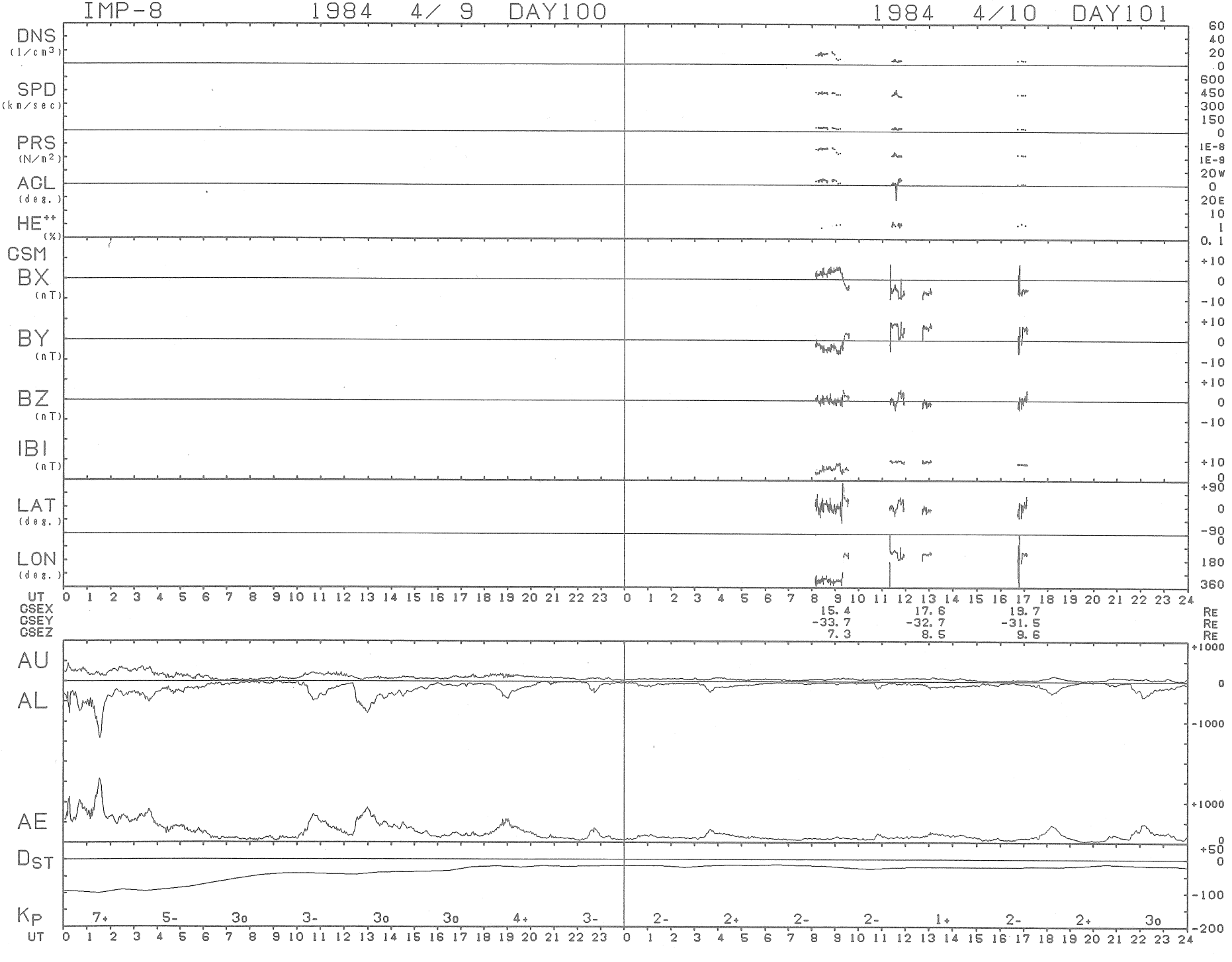

IMP-8 1984 3/30 DAY090
1984 3/31 DAY091
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.2 31.8 33.3 33.7 34.0 34.4 34.7 34.9 35.1 35.4 35.5 35.1 34.9 34.6 34.3 RE
GSEY -19.7 -18.6 -15.2 -14.0 -12.8 -11.6 -10.4 -9.1 -7.9 -5.3 -4.1 3.6 4.9 6.2 7.4 RE
GSEZ 12.8 13.2 14.5 14.8 15.2 15.5 15.8 16.1 16.4 16.9 17.1 17.8 17.8 17.9 17.8 RE
AU
AL
AE
DST
KP 4+ 4+ 5- 4+ 4+ 4- 4o 3+ 4- 4o 3o 3+ 4+ 3o 3o 5+
UT

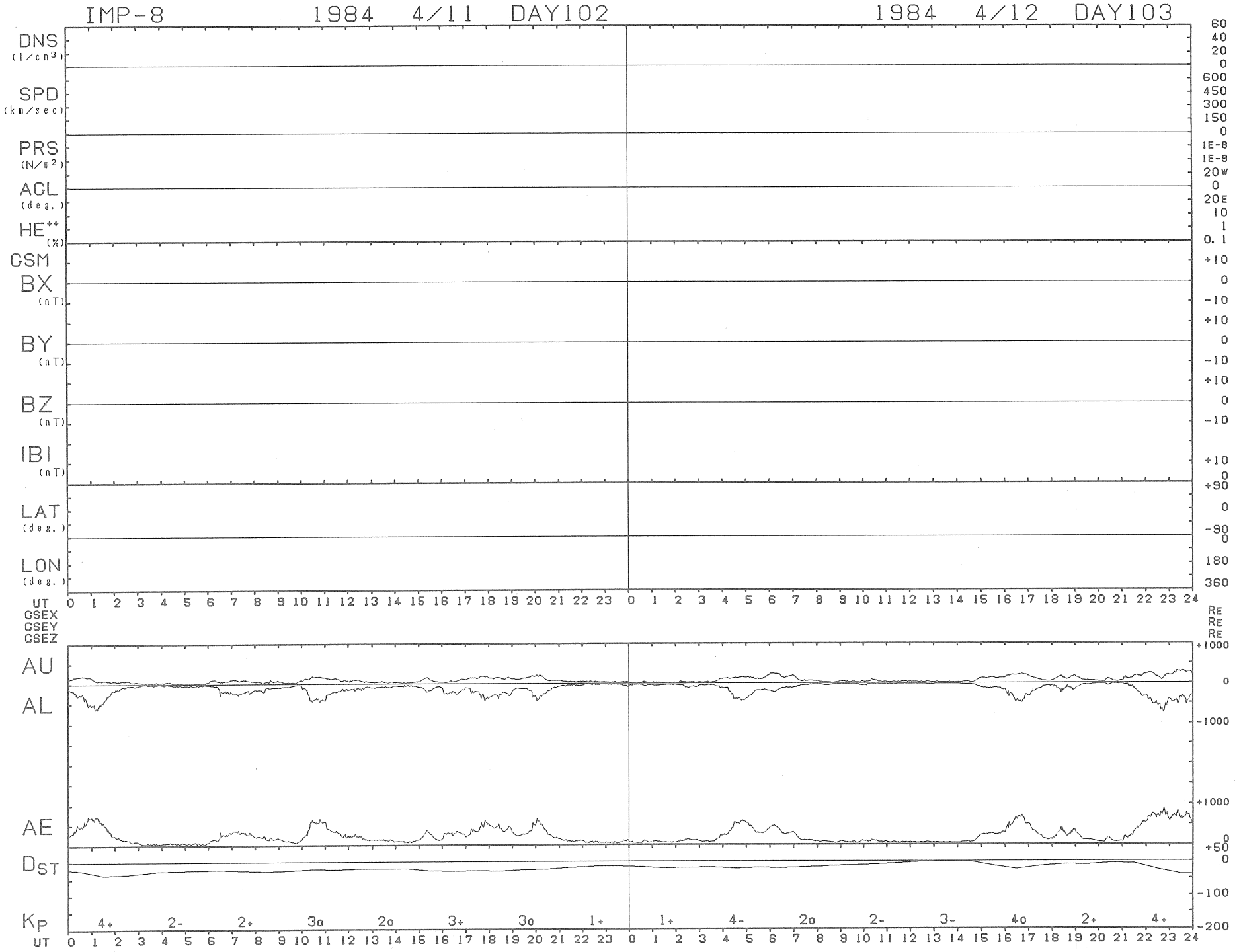

IMP-8
1984 4/ 1 DAY092
1984 4/ 2 DAY093
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.6 33.2 32.3 29.9 29.2 28.5 RE
GSEY 9.9 11.1 13.6 18.2 19.3 20.3 RE
GSEZ 17.8 17.7 17.5 16.7 16.5 16.2 RE
AU
AL
AE
DST
KP 5o 5o 5o 5o 4- 4o 3+ 3- 5- 3+ 5+ 5o 4+ 5+ 5o 6-
UT

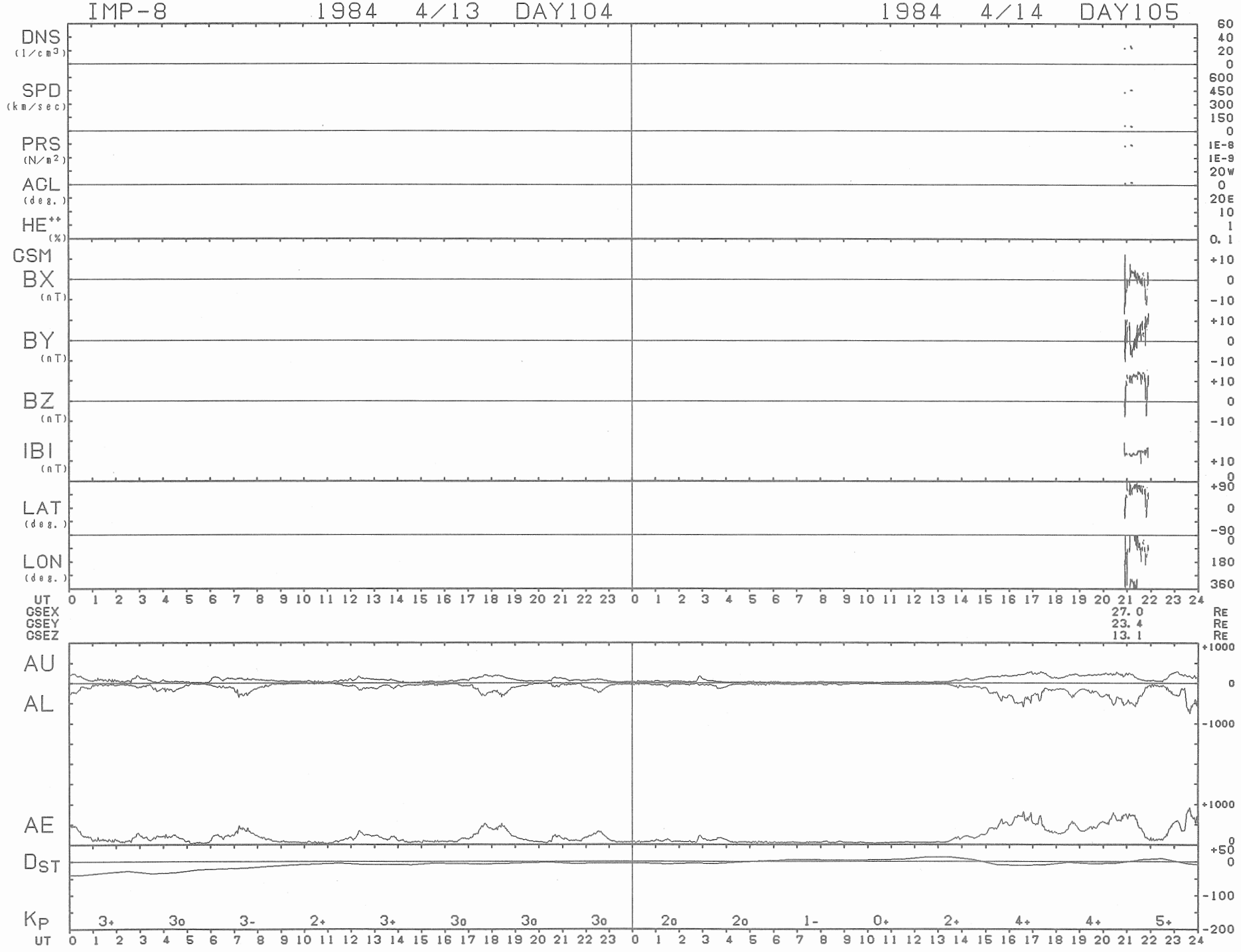

IMP-8
1984 4/ 3 DAY094
1984 4/ 4 DAY095
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.4
GSEY 33.3
GSEZ 8.5
AU
AL
AE
DST
KP
5+ 5o 4o 4+ 4o 5- 5o 5+ 5+ 5+ 5o 4o 5- 7o 8- 7o
UT

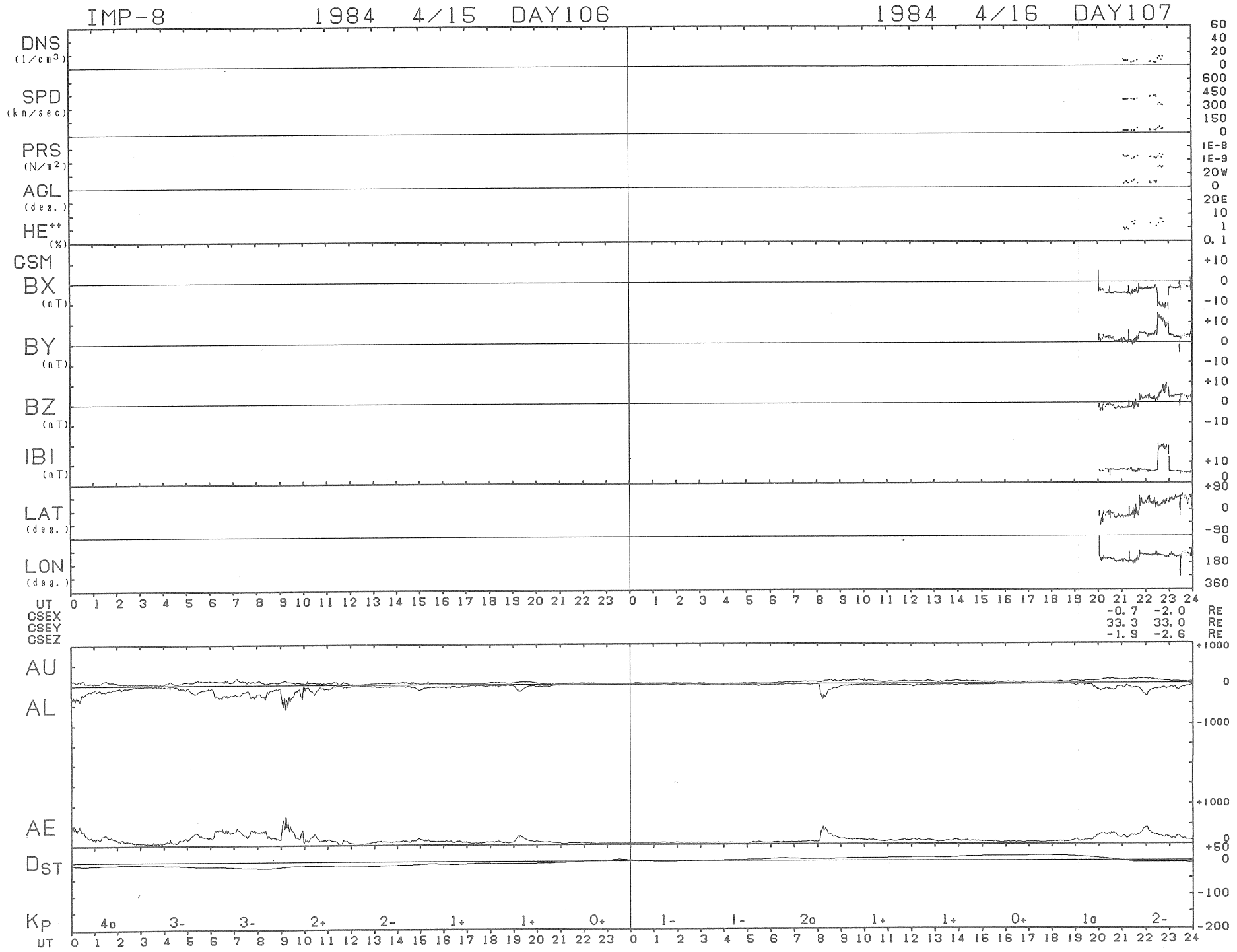

IMP-8
1984 4/ 5 DAY096
1984 4/ 6 DAY097
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.7 RE
GSEY 8.4 RE
GSEZ -13.1 RE
AU
AL
AE
DST
KP
6- 5o 5- 4- 4o 6+ 6o 6o 4o 4- 2o 2+ 2+ 2o 2+ 2+

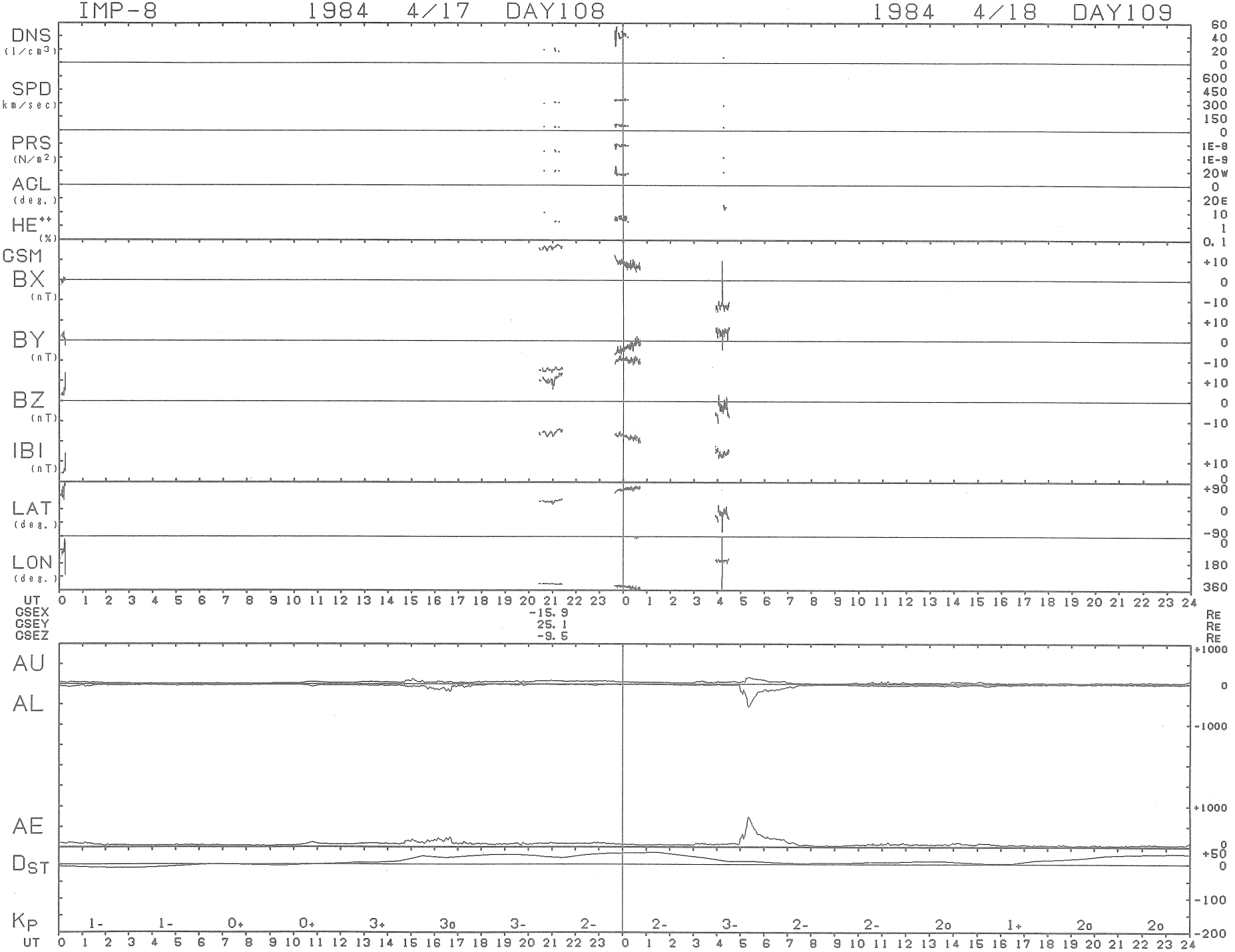

IMP-8
1984 4/ 7 DAY098
1984 4/ 8 DAY099
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4- 2+ 3- 6o 4- 3- 4o 3+ 5+ 6+ 6- 6- 4+ 4+ 4+ 6o
UT

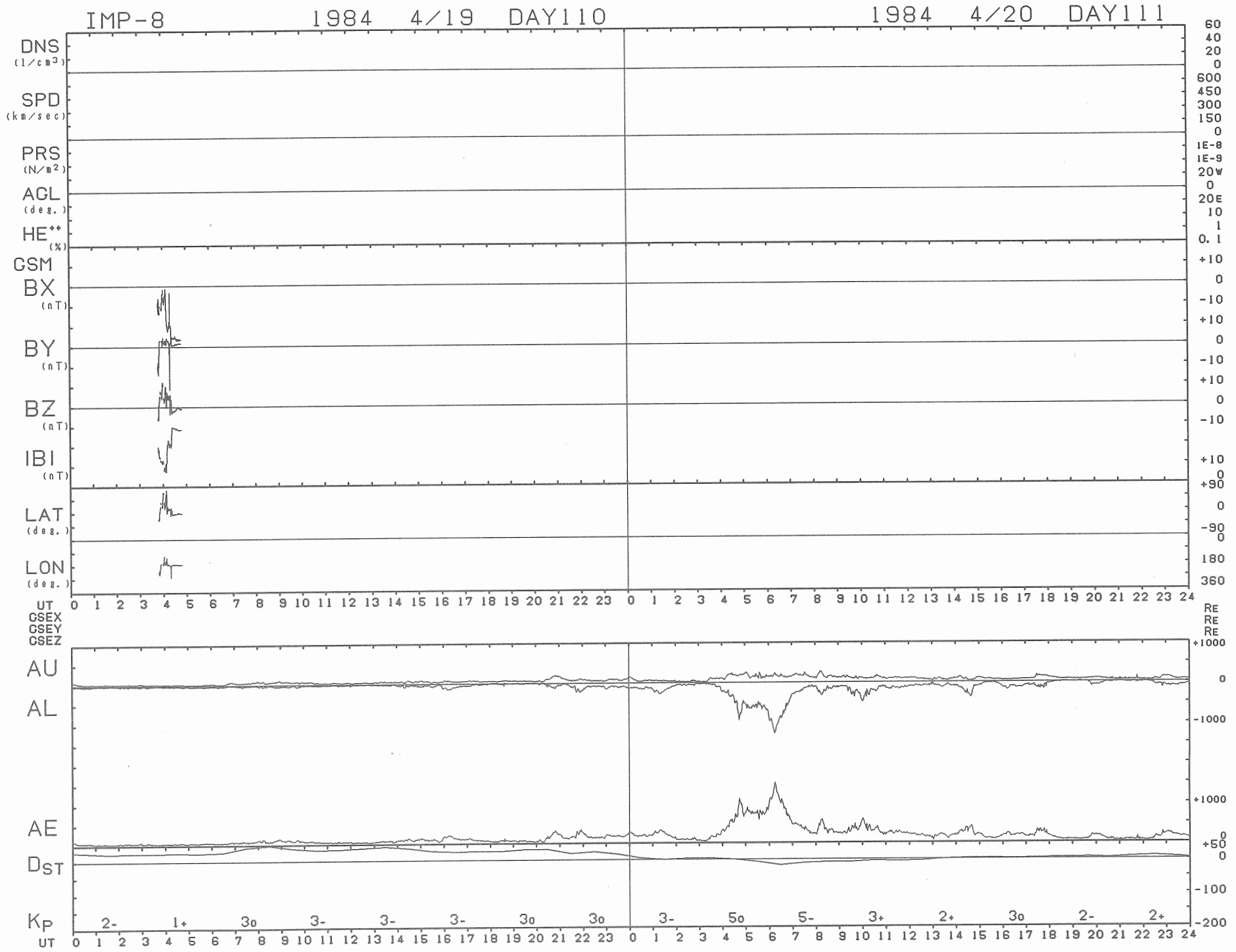

IMP-8
1984 4/ 9 DAY100
1984 4/10 DAY101
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.4 17.6 19.7 RE
GSEY -33.7 -32.7 -31.5 RE
GSEZ 7.3 8.5 9.6 RE
AU
AL
AE
DST
KP 7+ 5- 3o 3- 3o 3o 4+ 3- 2- 2+ 2- 2- 1+ 2- 2+ 3o
UT

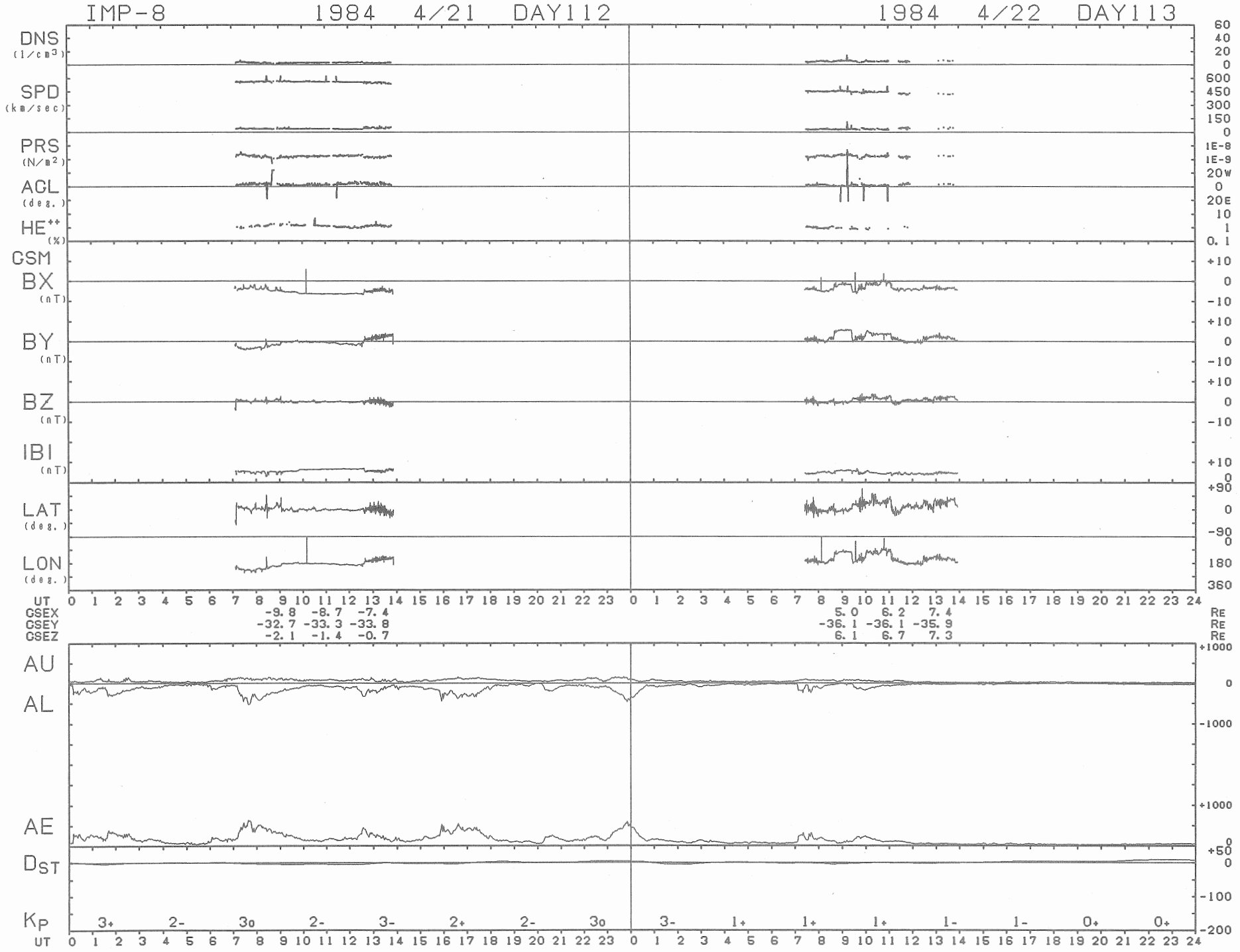

IMP-8
1984 4/11 DAY102
1984 4/12 DAY103
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4+ 2- 2+ 3o 2o 3+ 3o 1+ 1+ 4- 2o 2- 3- 4o 2+ 4+

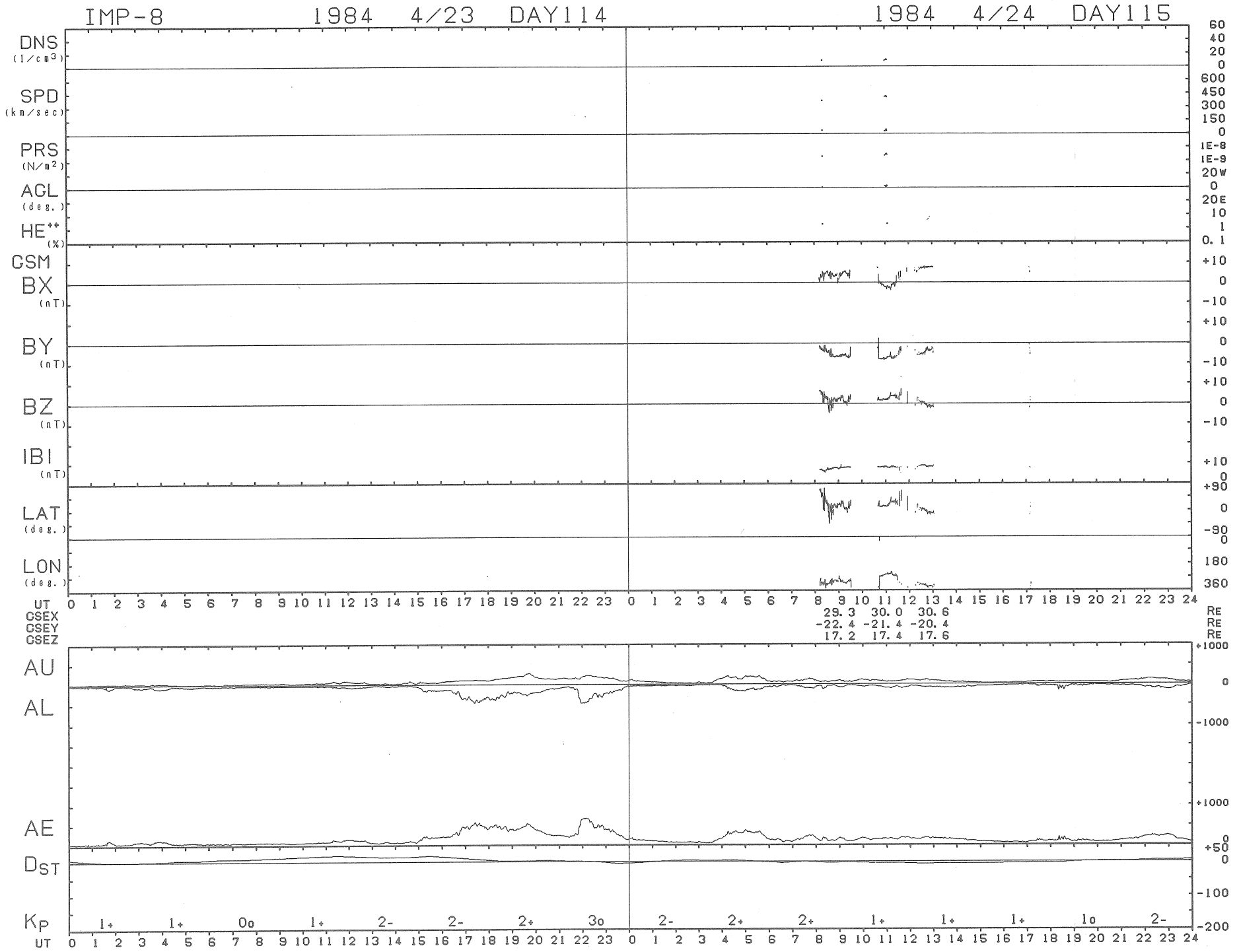

IMP-8
1984 4/13 DAY104
1984 4/14 DAY105
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.0 RE
GSEY 23.4 RE
GSEZ 13.1 RE
AU
AL
AE
DST
KP
3+ 3o 3- 2+ 3+ 3o 3o 3o 2o 2o 1- 0+ 2+ 4+ 4+ 5+

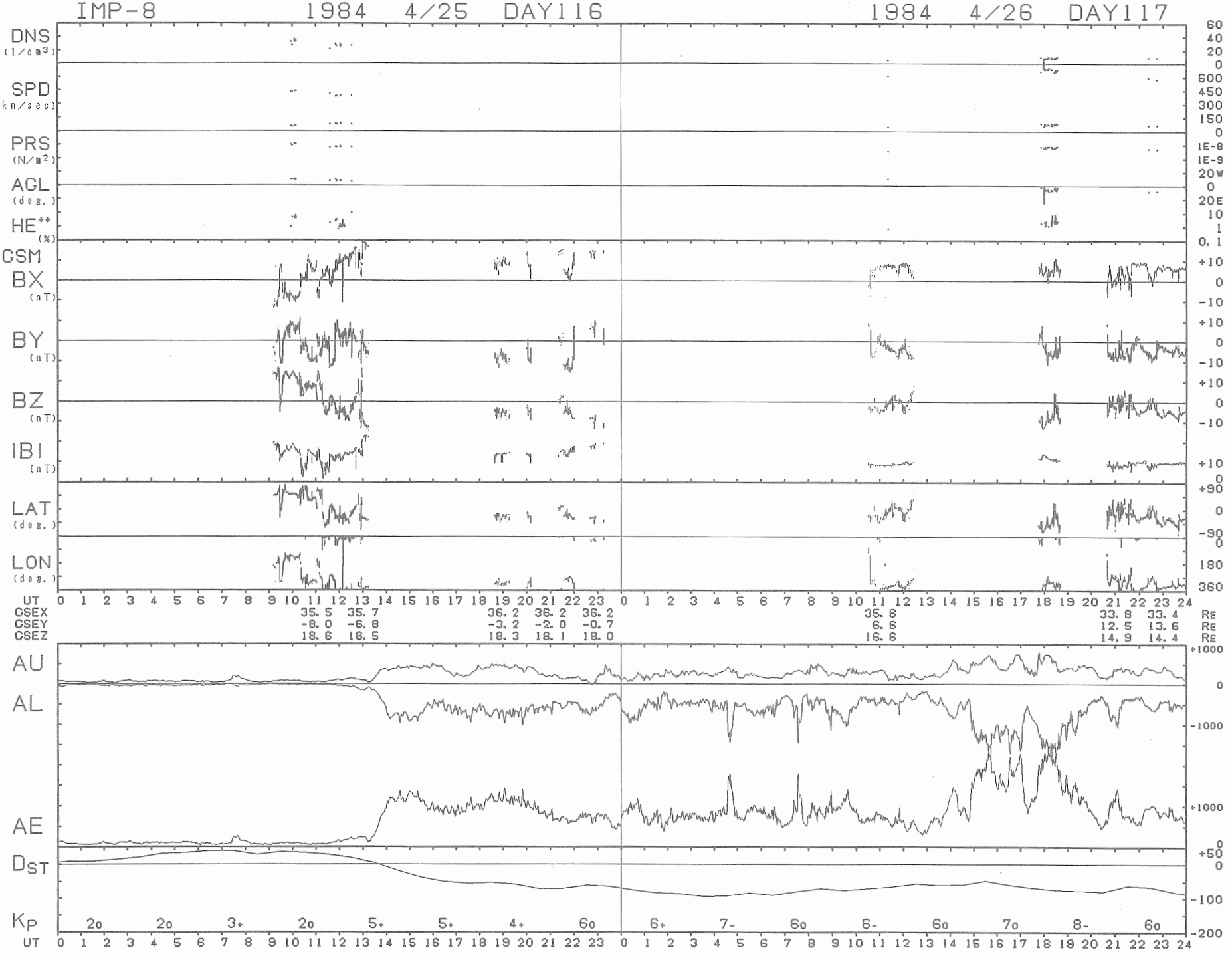

IMP-8 1984 4/15 DAY106
1984 4/16 DAY107
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.7 -2.0 RE
GSEY 33.3 33.0 RE
GSEZ -1.9 -2.6 RE
AU
AL
AE
DST
KP
4o 3- 3- 2+ 2- 1+ 1+ 0+ 1- 1- 2o 1+ 1+ 0+ 1o 2-

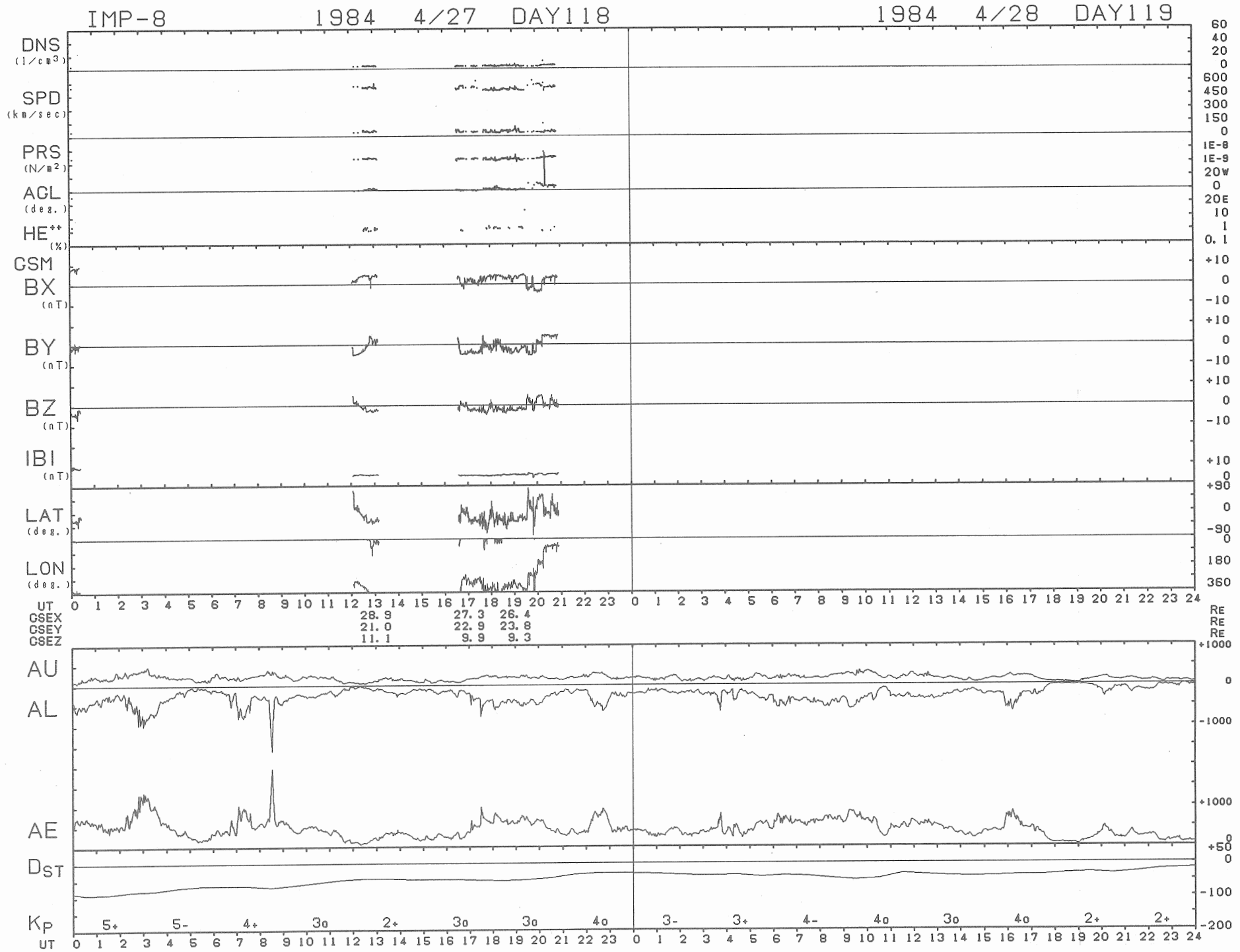

IMP-8
1984 4/17 DAY108
1984 4/18 DAY109
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.9 RE
GSEY 25.1 RE
GSEZ -9.5 RE
AU
AL
AE
DST
KP
1- 1- 0+ 0+ 3+ 3o 3- 2- 2- 3- 2- 2- 2o 1+ 2o 2o

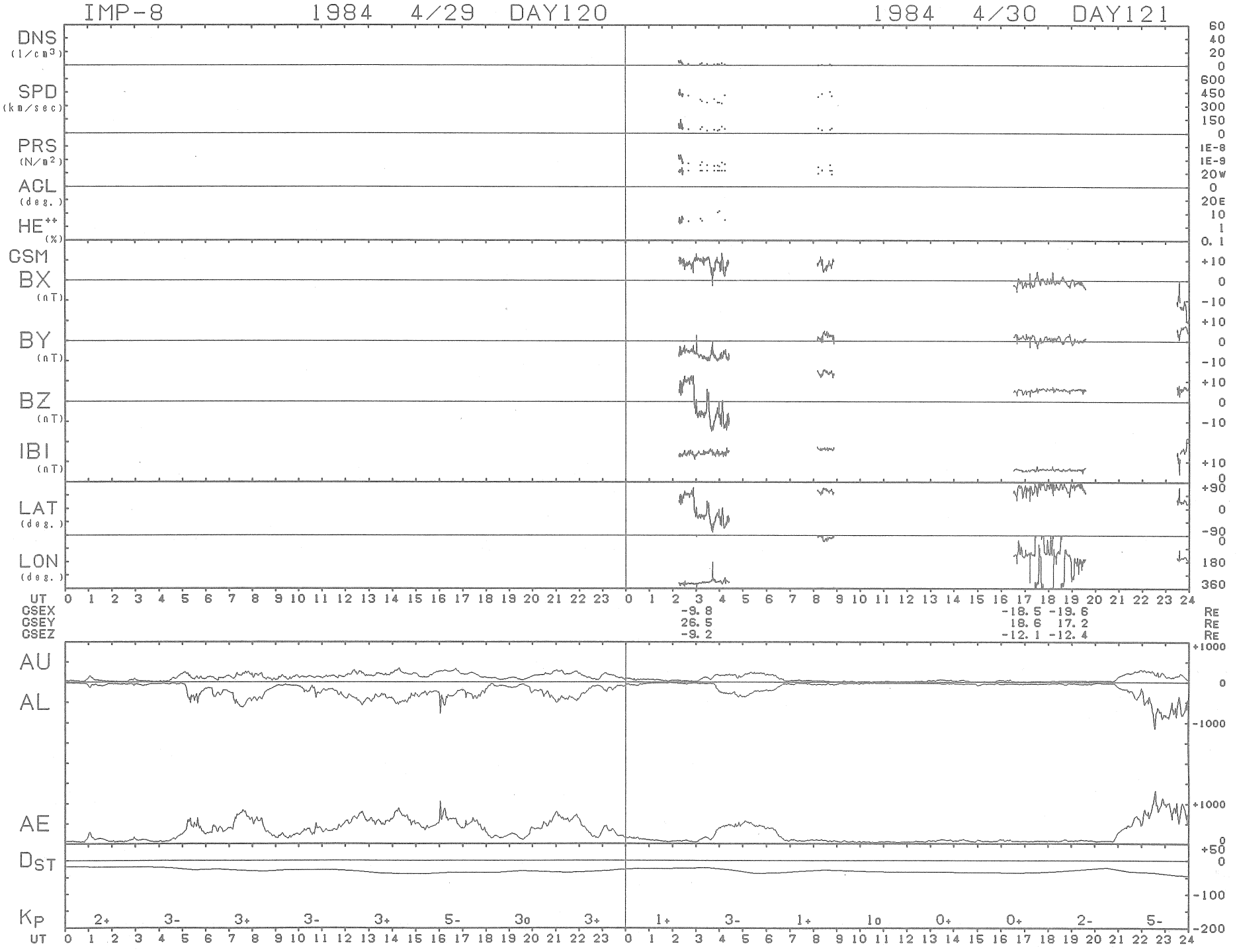

IMP-8
1984 4/19 DAY110
1984 4/20 DAY111
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
Dst
Kp
2- 1+ 3o 3- 3- 3- 3o 3o 3- 5o 5- 3+ 2+ 3o 2- 2+

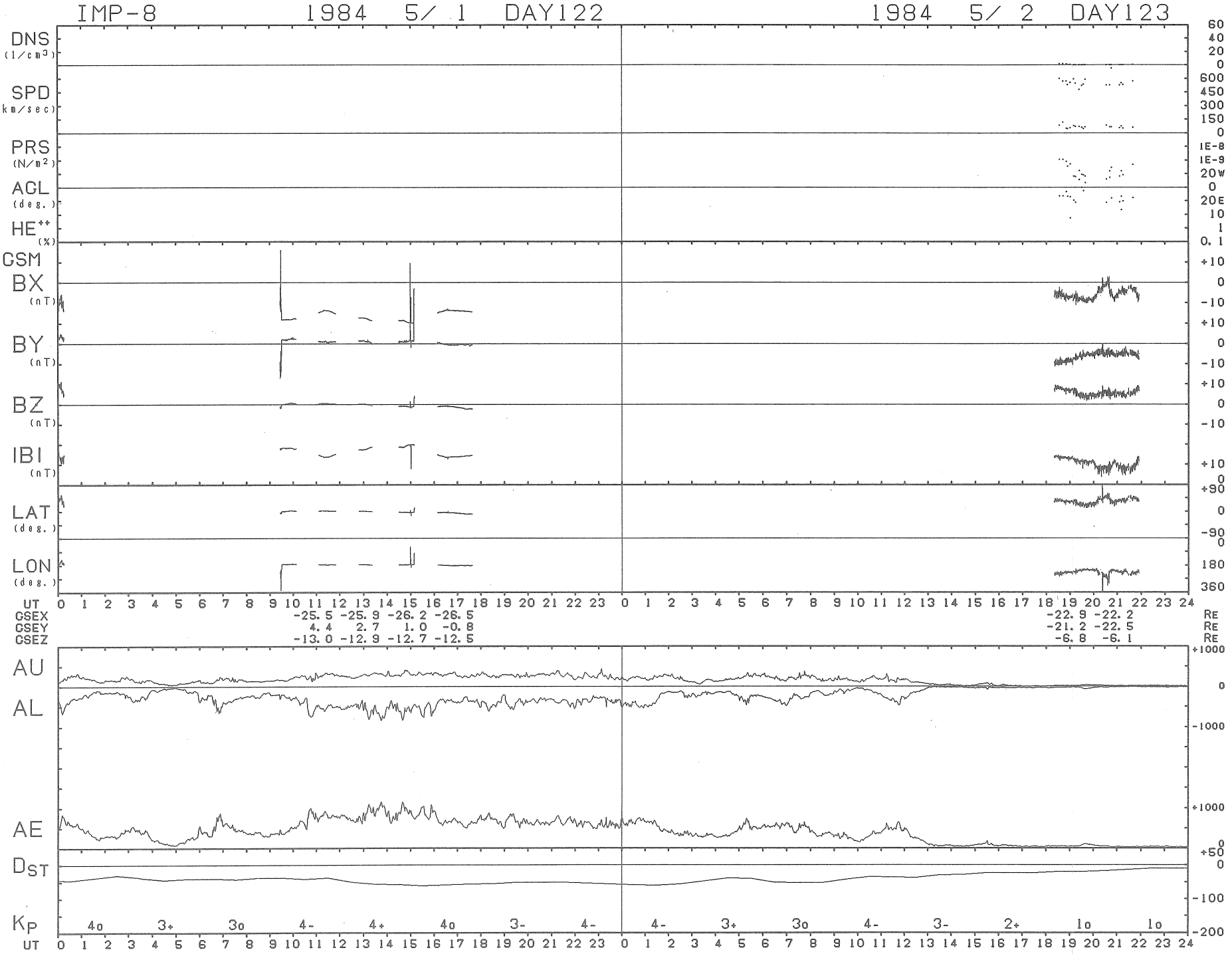

IMP-8 1984 4/21 DAY112
1984 4/22 DAY113
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.8 -8.7 -7.4 5.0 6.2 7.4 Re
GSEY -32.7 -33.3 -33.8 -36.1 -36.1 -35.9 Re
GSEZ -2.1 -1.4 -0.7 6.1 6.7 7.3 Re
AU
AL
AE
DST
KP
3+ 2- 3o 2- 3- 2+ 2- 3o 3- 1+ 1+ 1+ 1- 1- 0+ 0+

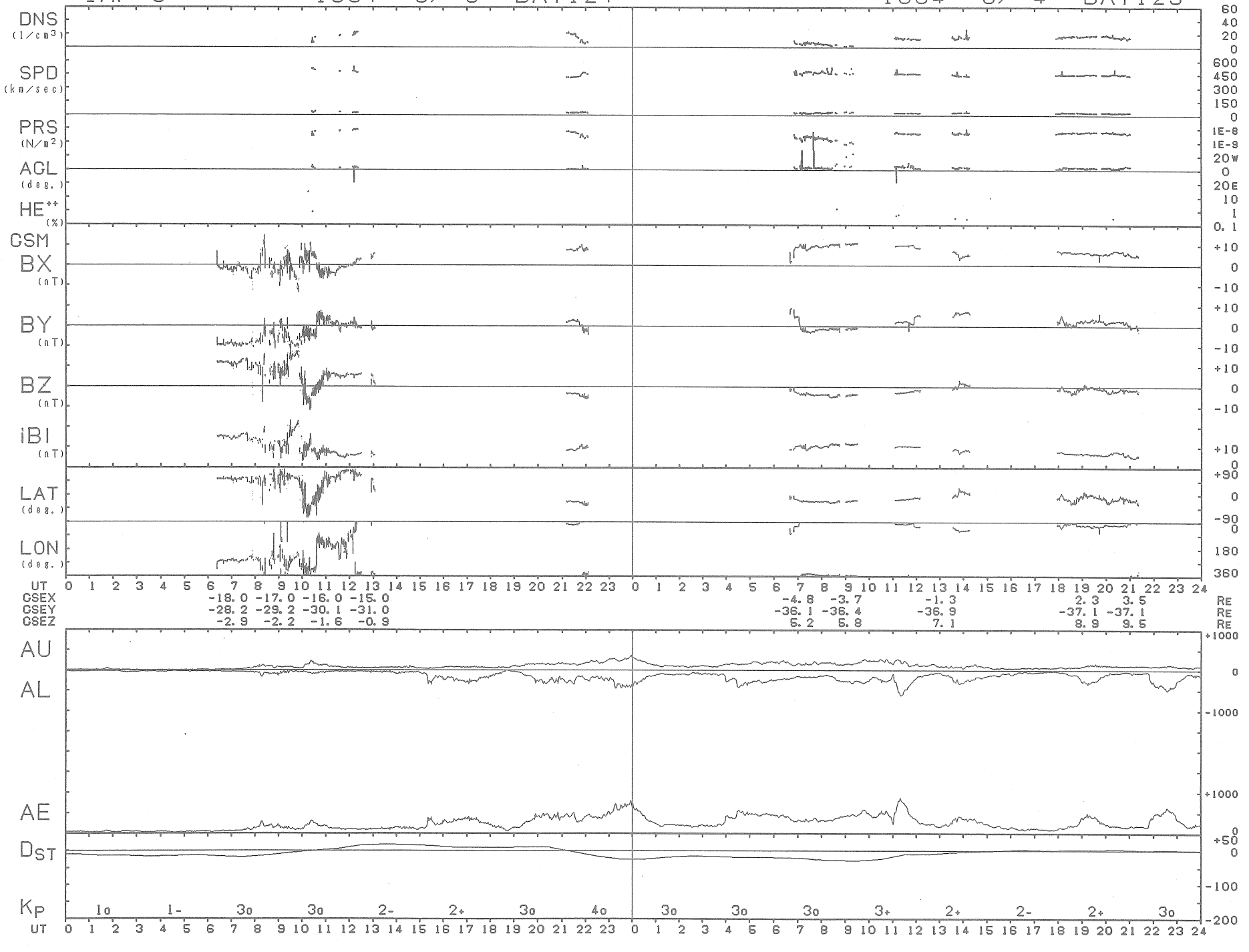

IMP-8
1984 4/23 DAY114
1984 4/24 DAY115
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
29.3 30.0 30.6
-22.4 -21.4 -20.4
17.2 17.4 17.6
RE
AU
AL
AE
DST
KP
1+ 1+ 0o 1+ 2- 2- 2+ 3o 2- 2+ 2+ 1+ 1+ 1+ 1o 2-

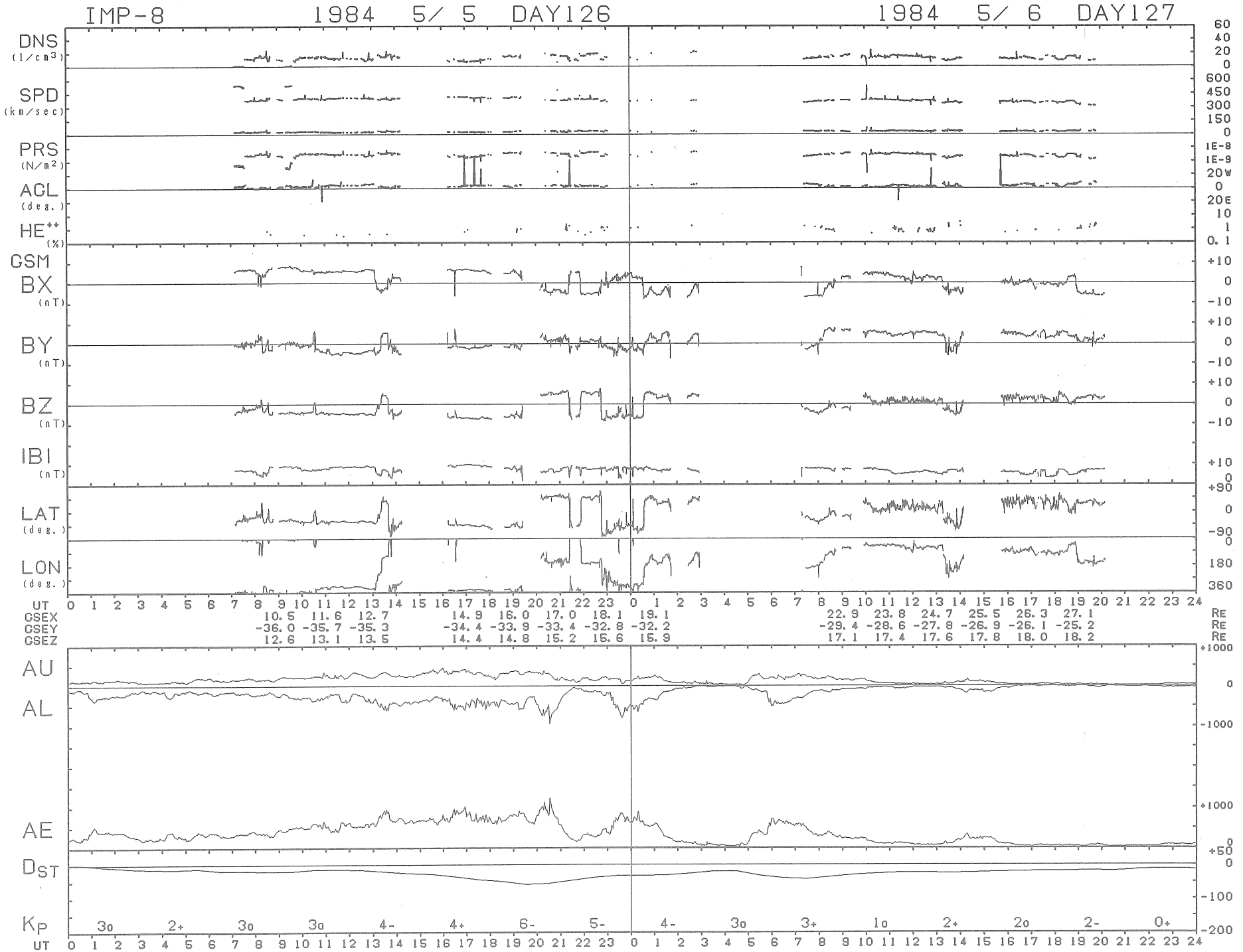

IMP-8 1984 4/25 DAY116
1984 4/26 DAY117
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.5 35.7 36.2 36.2 36.2 35.6 33.8 33.4 RE
GSEY -8.0 -6.8 -3.2 -2.0 -0.7 6.6 12.5 13.6 RE
GSEZ 18.6 18.5 18.3 18.1 18.0 16.6 14.9 14.4 RE
AU
AL
AE
DST
KP
2o 2o 3+ 2o 5+ 5+ 4+ 6o 6+ 7- 6o 6- 6o 7o 8- 6o
UT

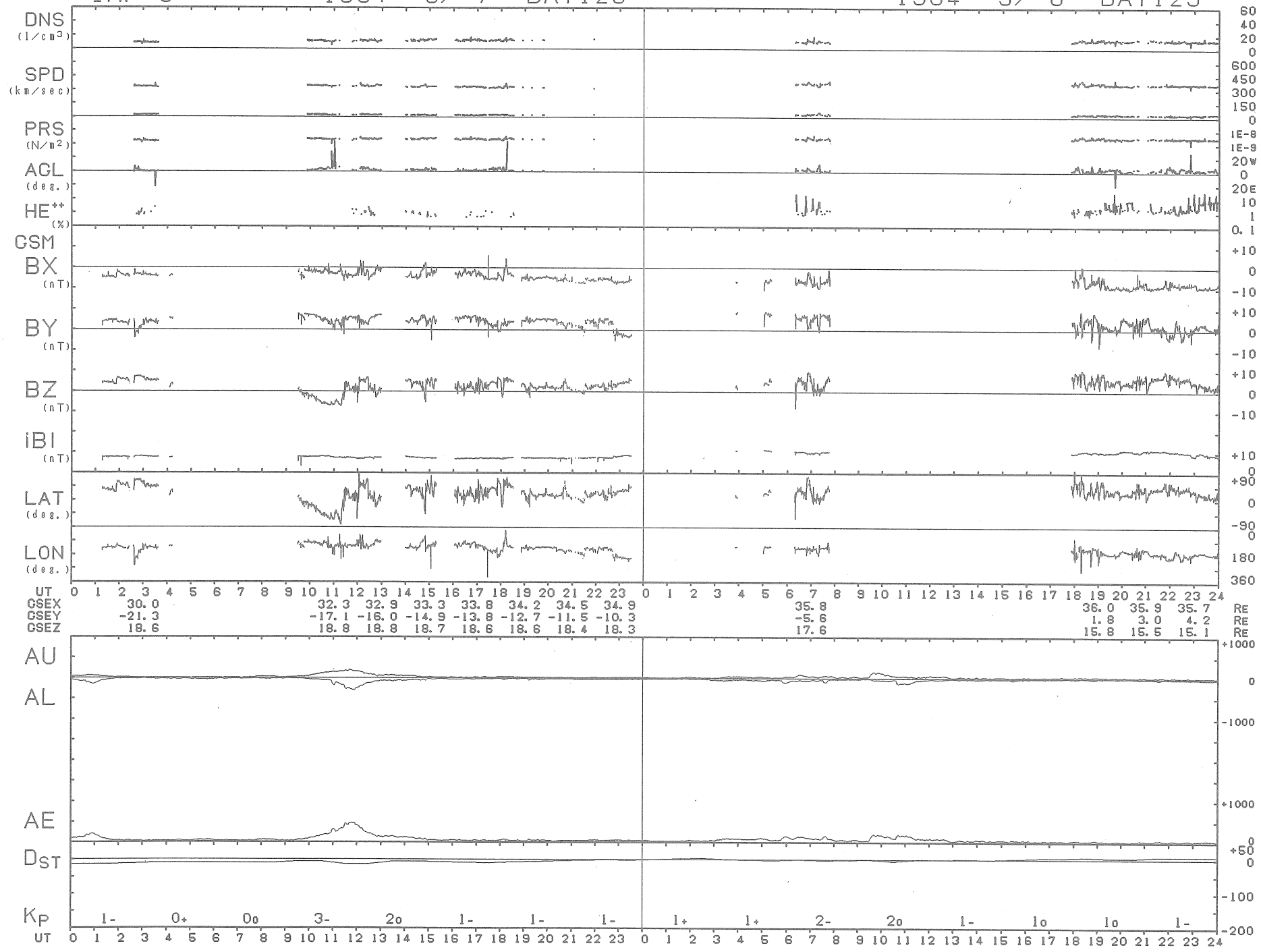

IMP-8
1984 4/27 DAY118
1984 4/28 DAY119
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.9 27.3 26.4 RE
GSEY 21.0 22.9 23.8 RE
GSEZ 11.1 9.9 9.3 RE
AU
AL
AE
DST
KP
5+ 5- 4+ 3o 2+ 3o 3o 4o 3- 3+ 4- 4o 3o 4o 2+ 2+
UT

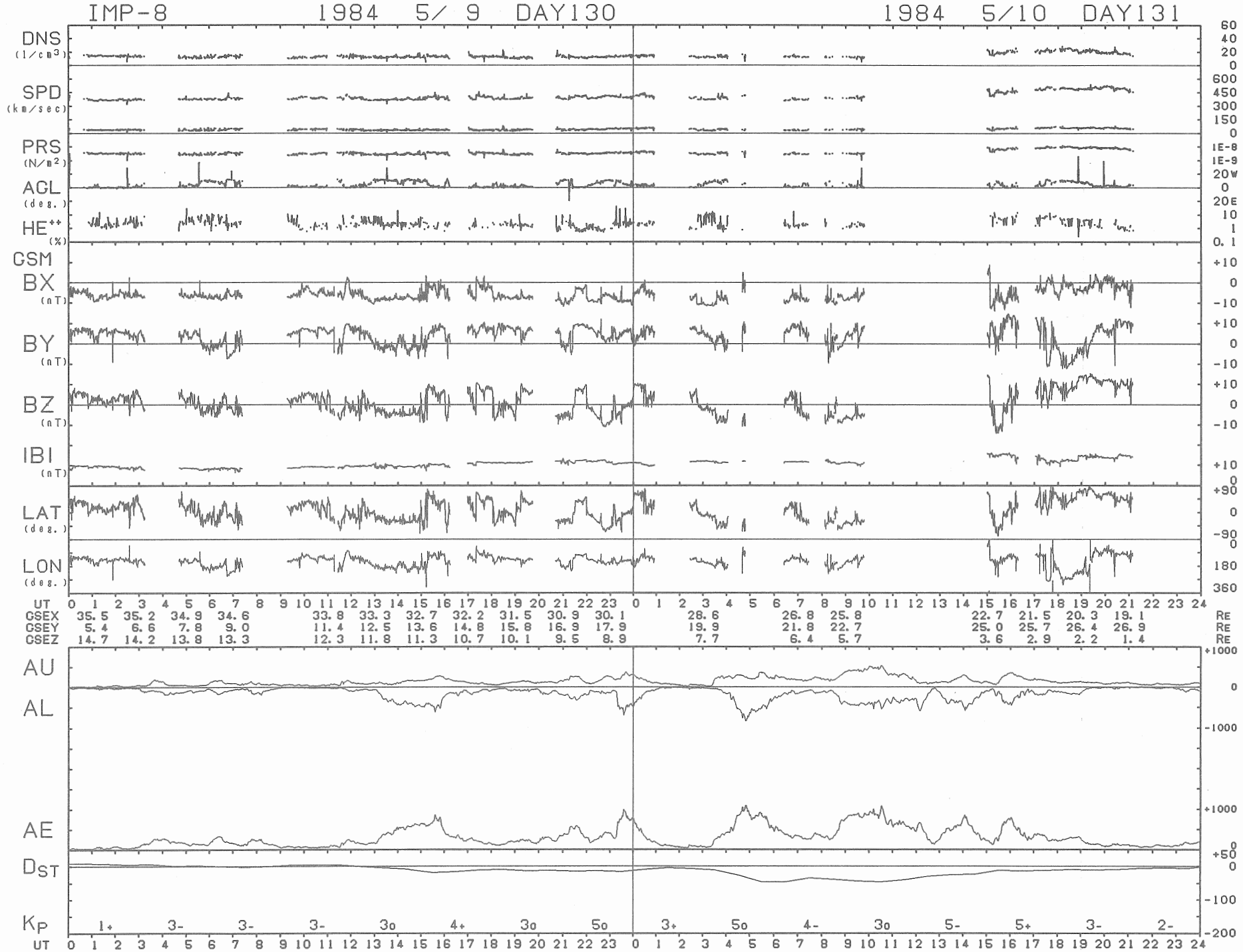

IMP-8
1984 4/29 DAY120
1984 4/30 DAY121
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.8 -18.5 -19.6 RE
GSEY 26.5 18.6 17.2 RE
GSEZ -9.2 -12.1 -12.4 RE
AU
AL
AE
DST
KP 2+ 3- 3+ 3- 3+ 5- 3o 3+ 1+ 3- 1+ 1o 0+ 0+ 2- 5-
UT

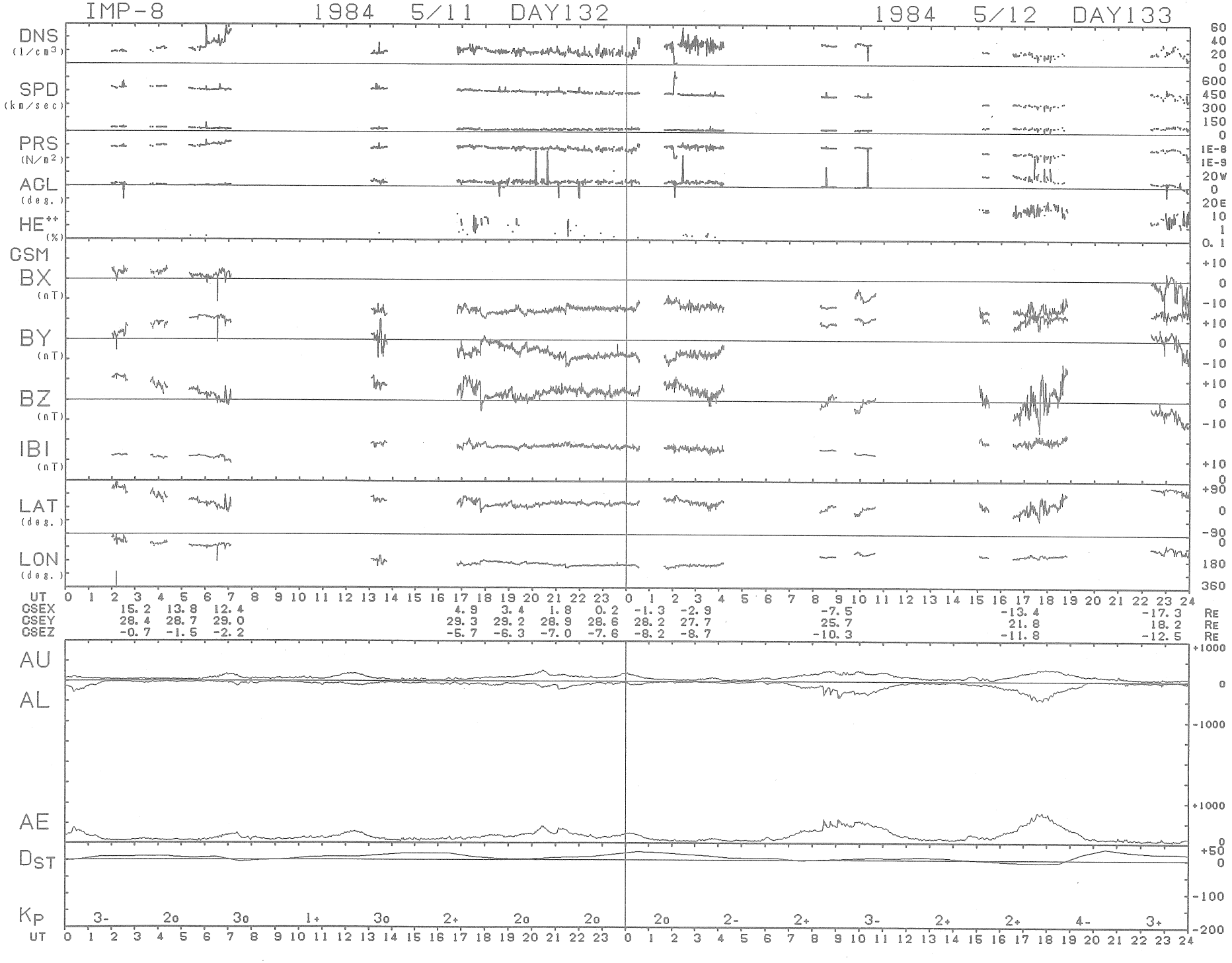

IMP-8 1984 5/ 1 DAY122
1984 5/ 2 DAY123
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.5 -25.9 -26.2 -26.5 -22.9 -22.2 RE
GSEY 4.4 2.7 1.0 -0.8 -21.2 -22.5 RE
GSEZ -13.0 -12.9 -12.7 -12.5 -6.8 -6.1 RE
AU
AL
AE
DST
KP
4o 3+ 3o 4- 4+ 4o 3- 4- 4- 3+ 3o 4- 3- 2+ 1o 1o
UT

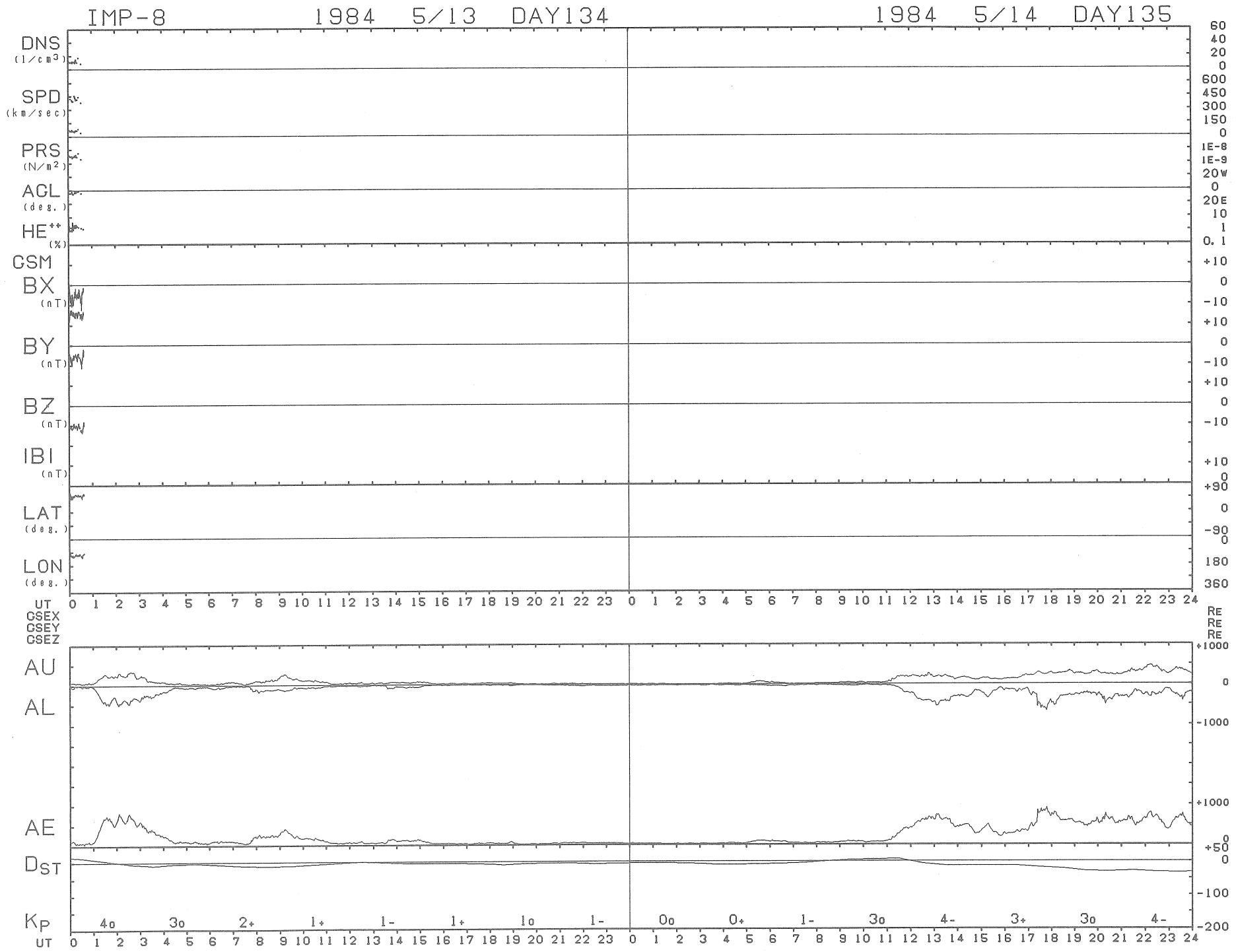

IMP-8
1984 5/ 3 DAY124
1984 5/ 4 DAY125
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.0 -17.0 -16.0 -15.0 -4.8 -3.7 -1.3 2.3 3.5 RE
GSEY -28.2 -29.2 -30.1 -31.0 -36.1 -36.4 -36.9 -37.1 -37.1 RE
GSEZ -2.9 -2.2 -1.6 -0.9 5.2 5.8 7.1 8.9 9.5 RE
AU
AL
AE
DST
KP
1o 1- 3o 3o 2- 2+ 3o 4o 3o 3o 3o 3+ 2+ 2- 2+ 3o
UT

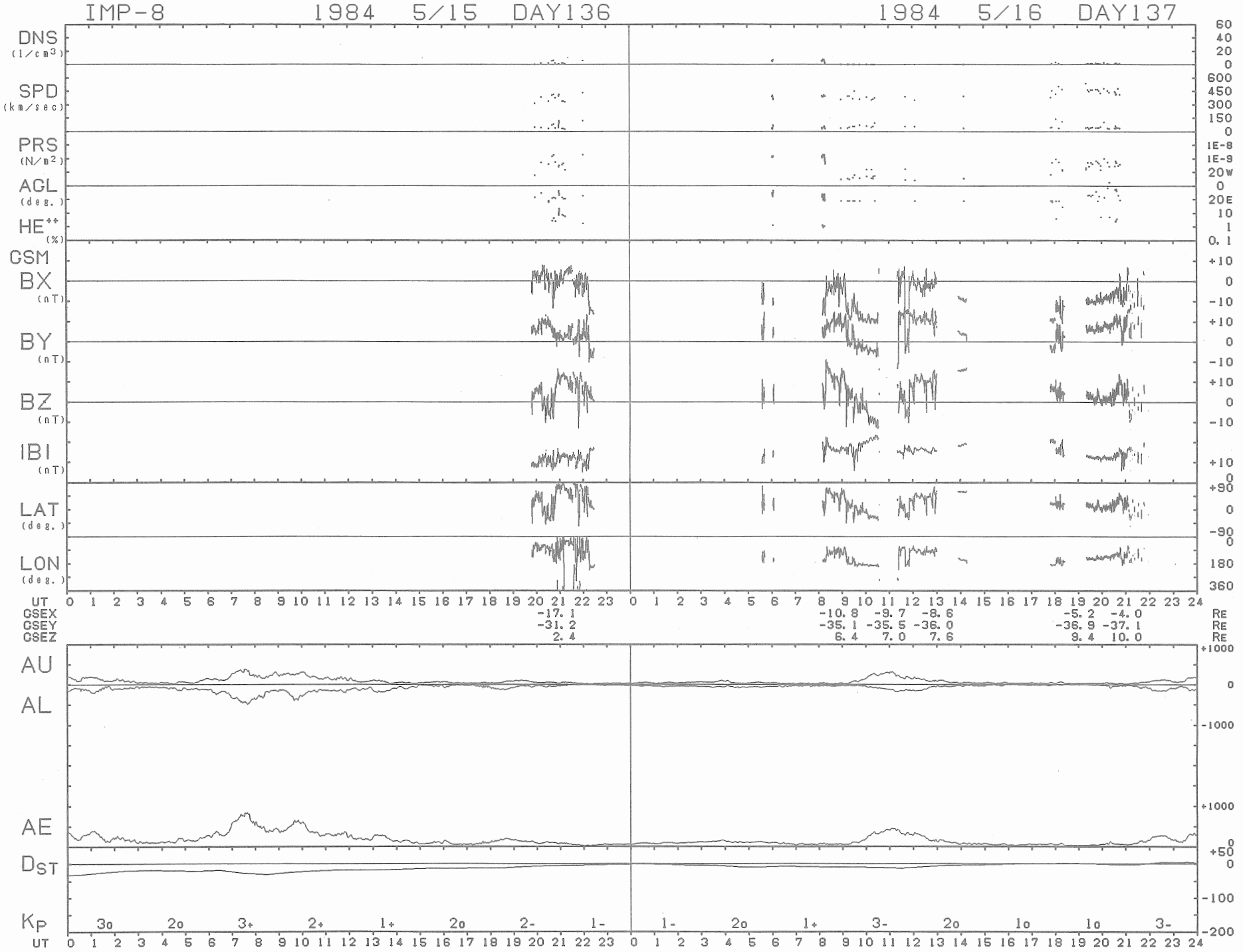

IMP-8
1984 5/ 5 DAY126
1984 5/ 6 DAY127
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.5 11.6 12.7 14.9 16.0 17.0 18.1 19.1 22.9 23.8 24.7 25.5 26.3 27.1 RE
GSEY -36.0 -35.7 -35.3 -34.4 -33.9 -33.4 -32.8 -32.2 -29.4 -28.6 -27.8 -26.9 -26.1 -25.2 RE
GSEZ 12.6 13.1 13.5 14.4 14.8 15.2 15.6 15.9 17.1 17.4 17.6 17.8 18.0 18.2 RE
AU
AL
AE
DST
KP 3o 2+ 3o 3o 4- 4+ 6- 5- 4- 3o 3+ 1o 2+ 2o 2- 0+
UT

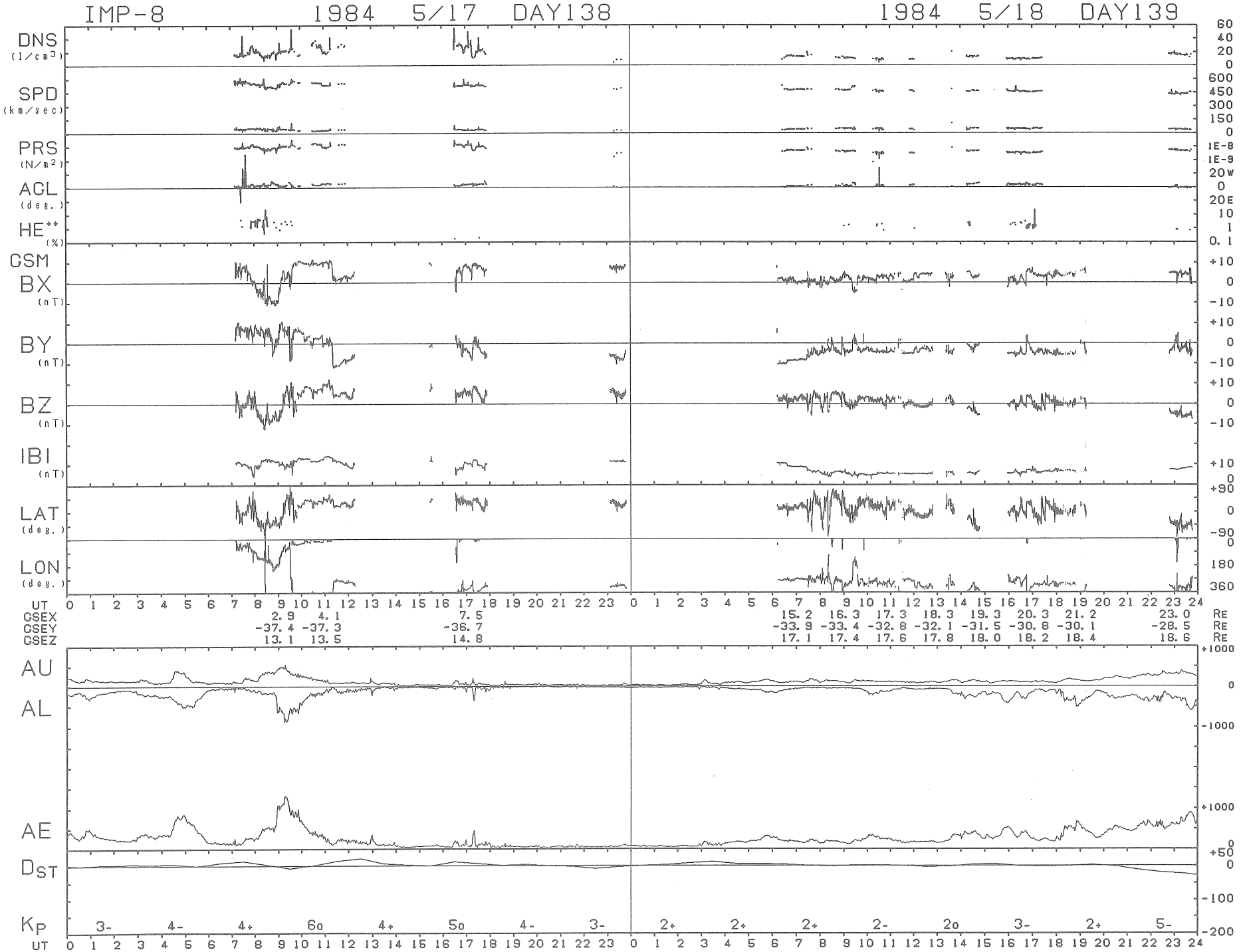

IMP-8
1984 5/ 7 DAY128
1984 5/ 8 DAY129
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.0 32.3 32.9 33.3 33.8 34.2 34.5 34.9 35.8 36.0 35.9 35.7 RE
GSEY -21.3 -17.1 -16.0 -14.9 -13.8 -12.7 -11.5 -10.3 -5.6 1.8 3.0 4.2 RE
GSEZ 18.6 18.8 18.8 18.7 18.6 18.6 18.4 18.3 17.6 15.8 15.5 15.1 RE
AU
AL
AE
DST
KP 1- 0+ 0o 3- 2o 1- 1- 1- 1+ 1+ 2- 2o 1- 1o 1o 1-
UT

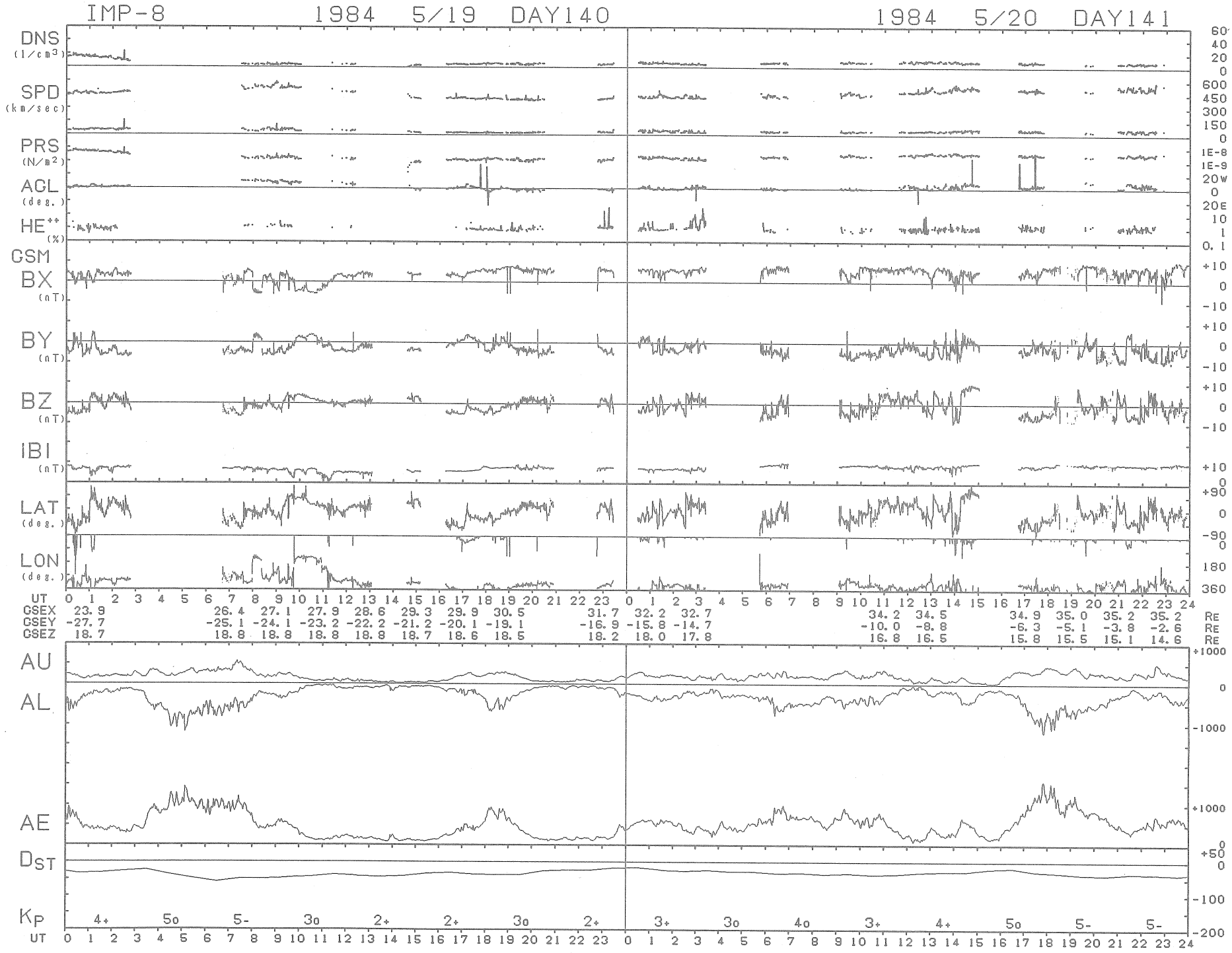

IMP-8 1984 5/ 9 DAY130
1984 5/10 DAY131
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.5 35.2 34.9 34.6 33.8 33.3 32.7 32.2 31.5 30.9 30.1 28.6 26.8 25.8 22.7 21.5 20.3 19.1 RE
GSEY 5.4 6.6 7.8 9.0 11.4 12.5 13.6 14.8 15.8 16.9 17.9 19.9 21.8 22.7 25.0 25.7 26.4 26.9 RE
GSEZ 14.7 14.2 13.8 13.3 12.3 11.8 11.3 10.7 10.1 9.5 8.9 7.7 6.4 5.7 3.6 2.9 2.2 1.4 RE
AU
AL
AE
DST
KP 1+ 3- 3- 3- 3o 4+ 3o 5o 3+ 5o 4- 3o 5- 5+ 3- 2-
UT

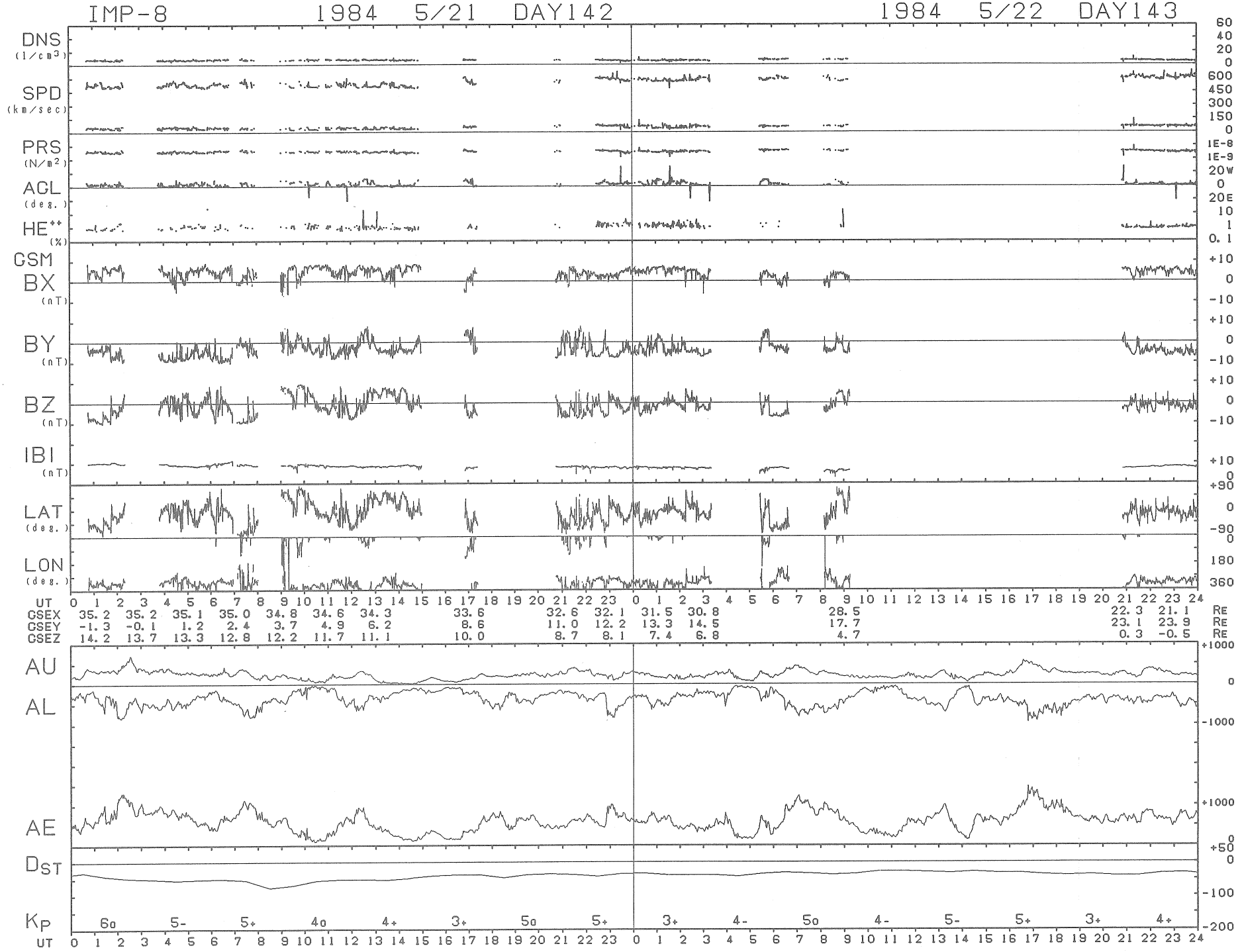

IMP-8
1984 5/11 DAY132
1984 5/12 DAY133
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.2 13.8 12.4 4.9 3.4 1.8 0.2 -1.3 -2.9 -7.5 -13.4 -17.3 RE
GSEY 28.4 28.7 29.0 29.3 29.2 28.9 28.6 28.2 27.7 25.7 21.8 18.2 RE
GSEZ -0.7 -1.5 -2.2 -5.7 -6.3 -7.0 -7.6 -8.2 -8.7 -10.3 -11.8 -12.5 RE
AU
AL
AE
DST
KP 3- 2o 3o 1+ 3o 2+ 2o 2o 2o 2- 2+ 3- 2+ 2+ 4- 3+
UT

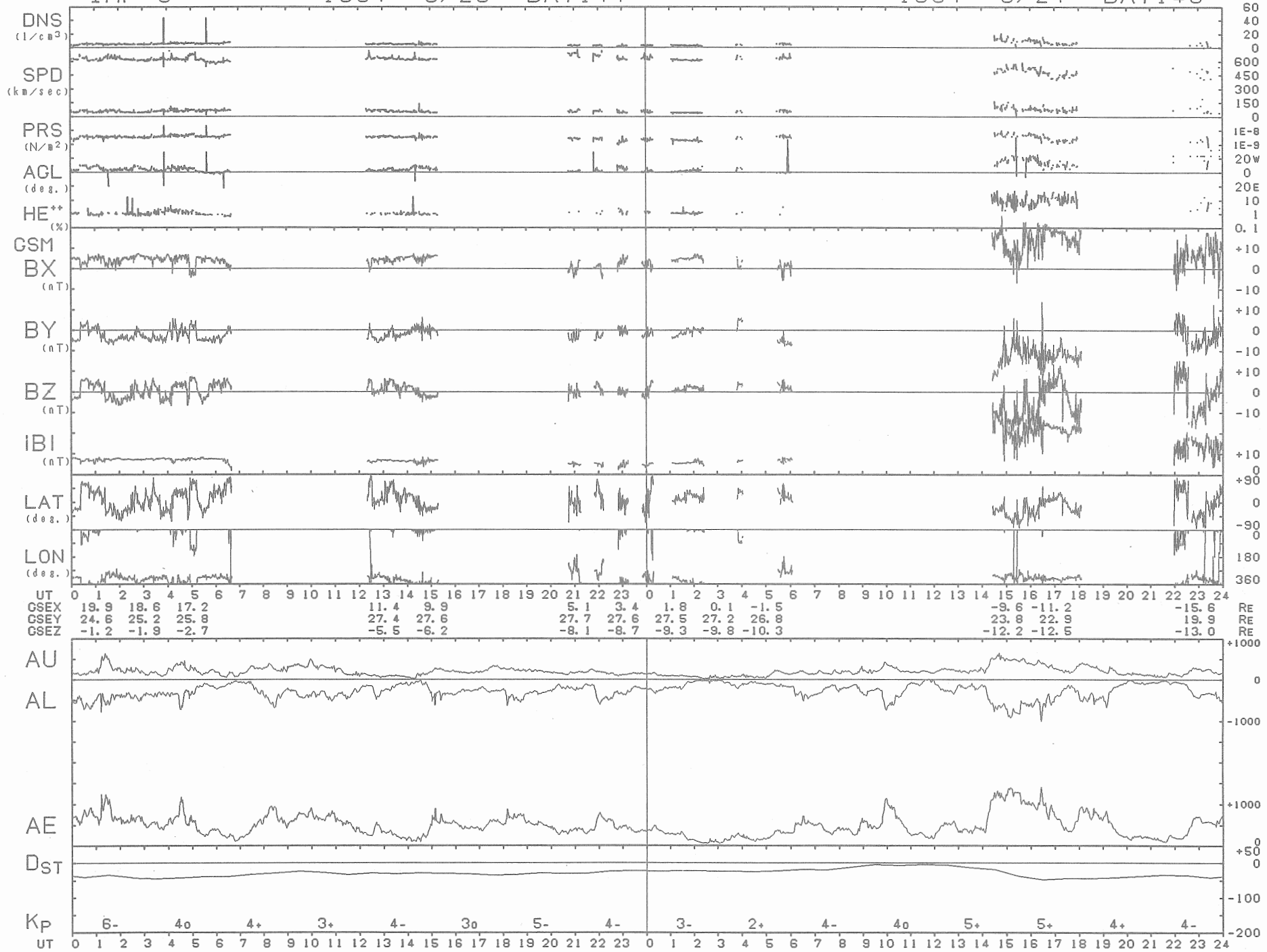

IMP-8
1984 5/13 DAY134
1984 5/14 DAY135
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4o 3o 2+ 1+ 1- 1+ 1o 1- 0o 0+ 1- 3o 4- 3+ 3o 4-

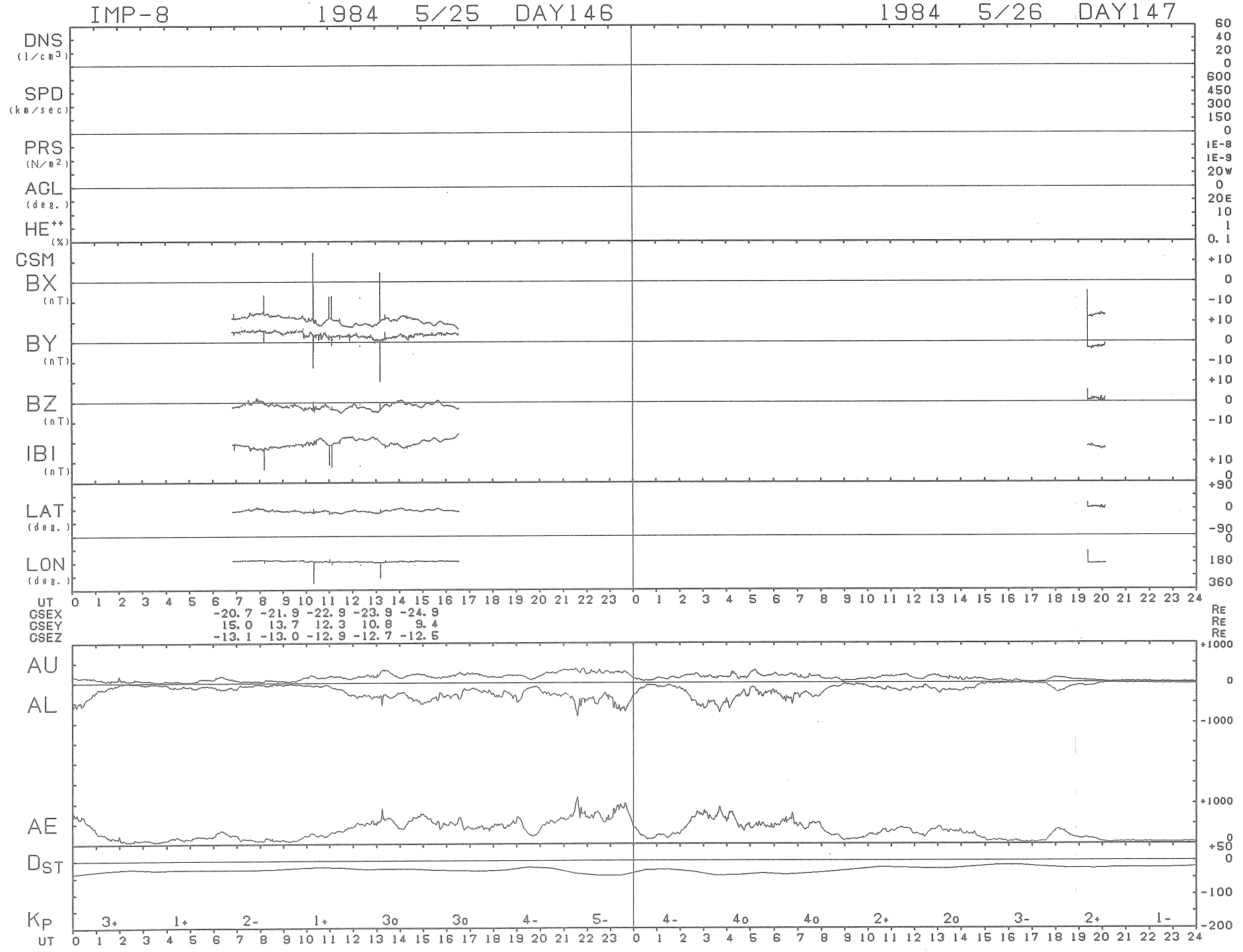

IMP-8 1984 5/15 DAY136
1984 5/16 DAY137
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.1 -10.8 -9.7 -8.6 -5.2 -4.0 Re
GSEY -31.2 -35.1 -35.5 -36.0 -36.9 -37.1 Re
GSEZ 2.4 6.4 7.0 7.6 9.4 10.0 Re
AU
AL
AE
DST
KP
3o 2o 3+ 2+ 1+ 2o 2- 1-
1- 2o 1+ 3- 2o 1o 1o 3-

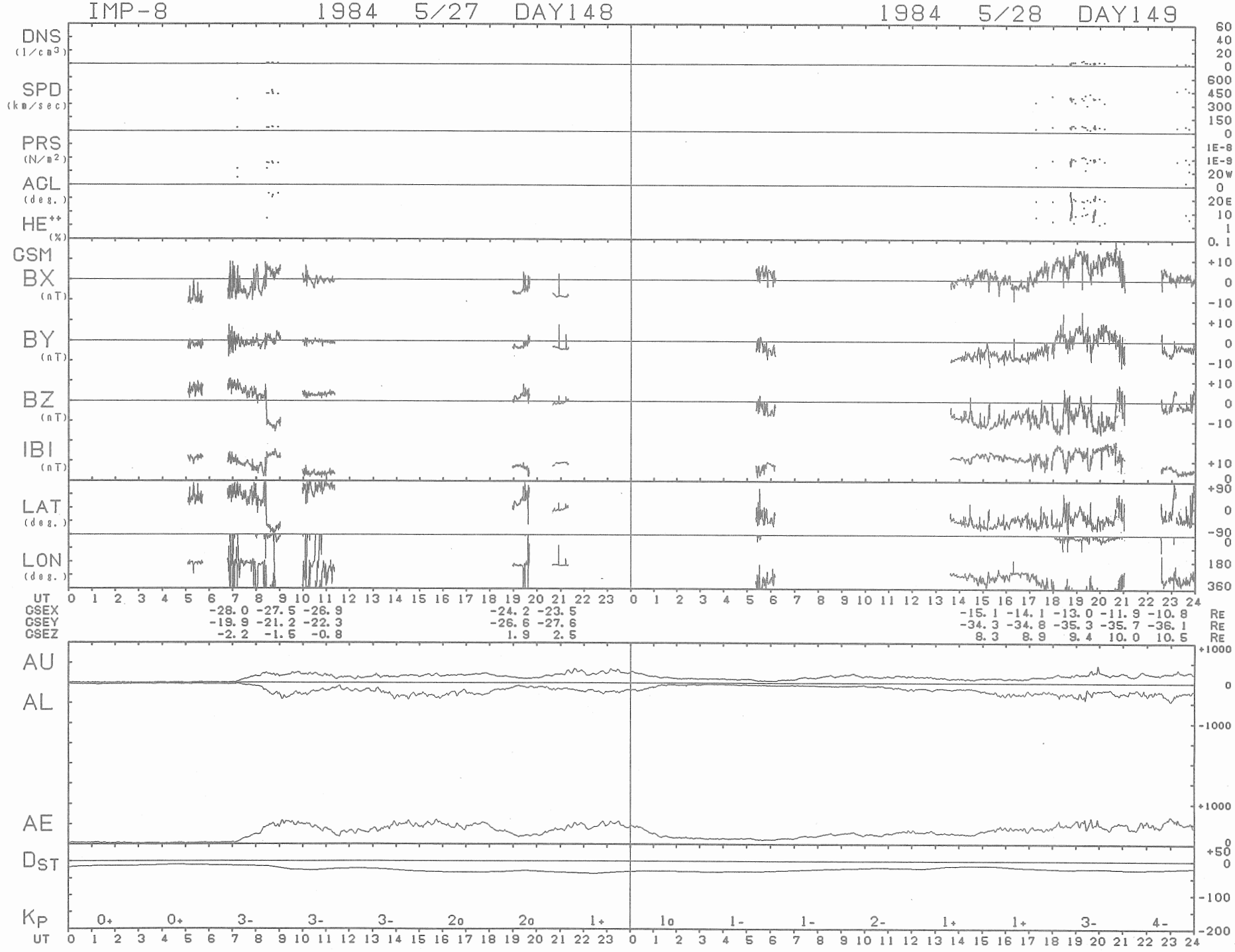

IMP-8
1984 5/17 DAY138
1984 5/18 DAY139
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
3- 4- 4+ 6o 4+ 5o 4- 3-
2+ 2+ 2+ 2- 2o 3- 2+ 5-

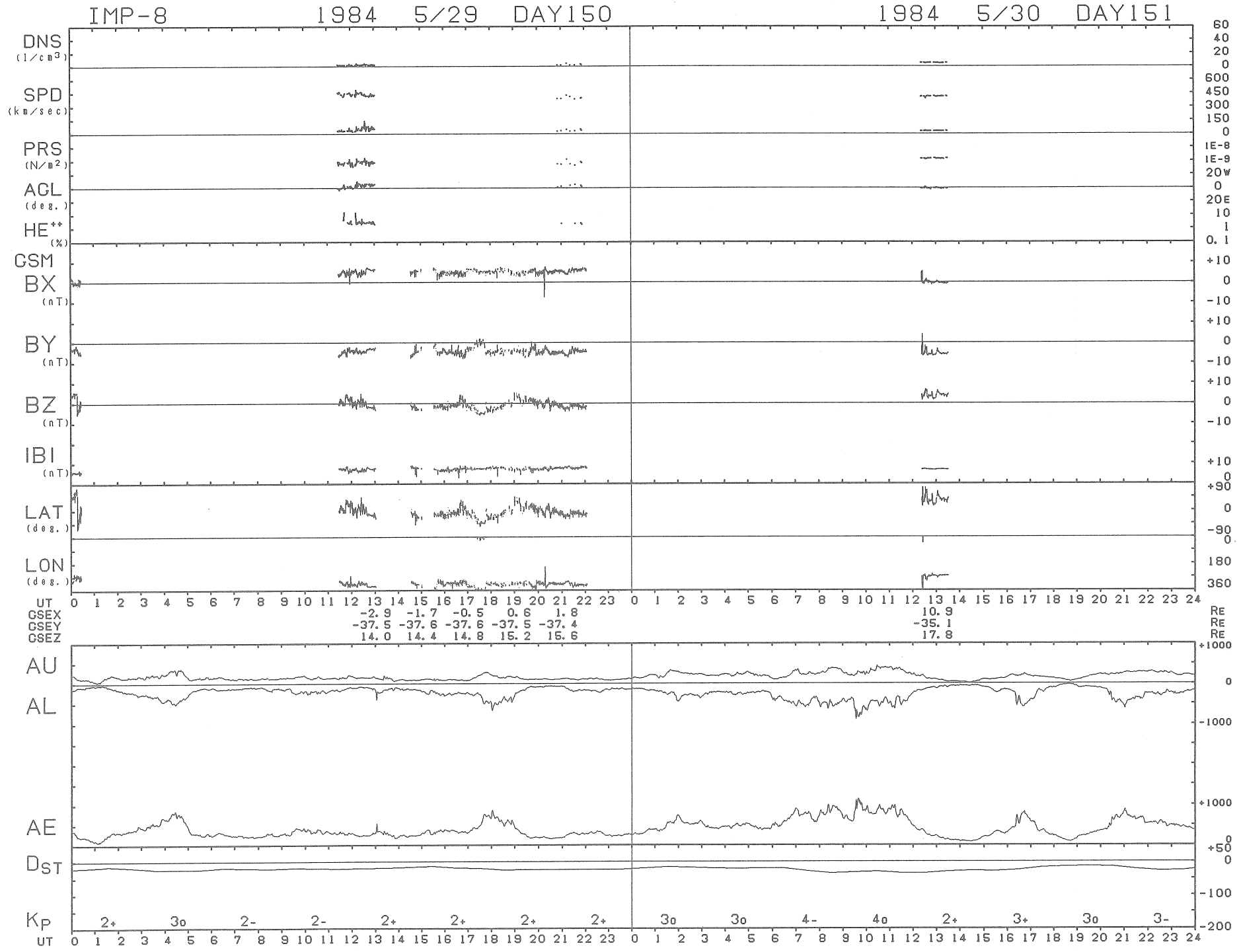

IMP-8 1984 5/19 DAY140
1984 5/20 DAY141
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.9 26.4 27.1 27.9 28.6 29.3 29.9 30.5 31.7 32.2 32.7 34.2 34.5 34.9 35.0 35.2 35.2 RE
GSEY -27.7 -25.1 -24.1 -23.2 -22.2 -21.2 -20.1 -19.1 -16.9 -15.8 -14.7 -10.0 -8.8 -6.3 -5.1 -3.8 -2.6 RE
GSEZ 18.7 18.8 18.8 18.8 18.8 18.7 18.6 18.5 18.2 18.0 17.8 16.8 16.5 15.8 15.5 15.1 14.6 RE
AU
AL
AE
DST
KP
4+ 5o 5- 3o 2+ 2+ 3o 2+ 3+ 3o 4o 3+ 4+ 5o 5- 5-
UT

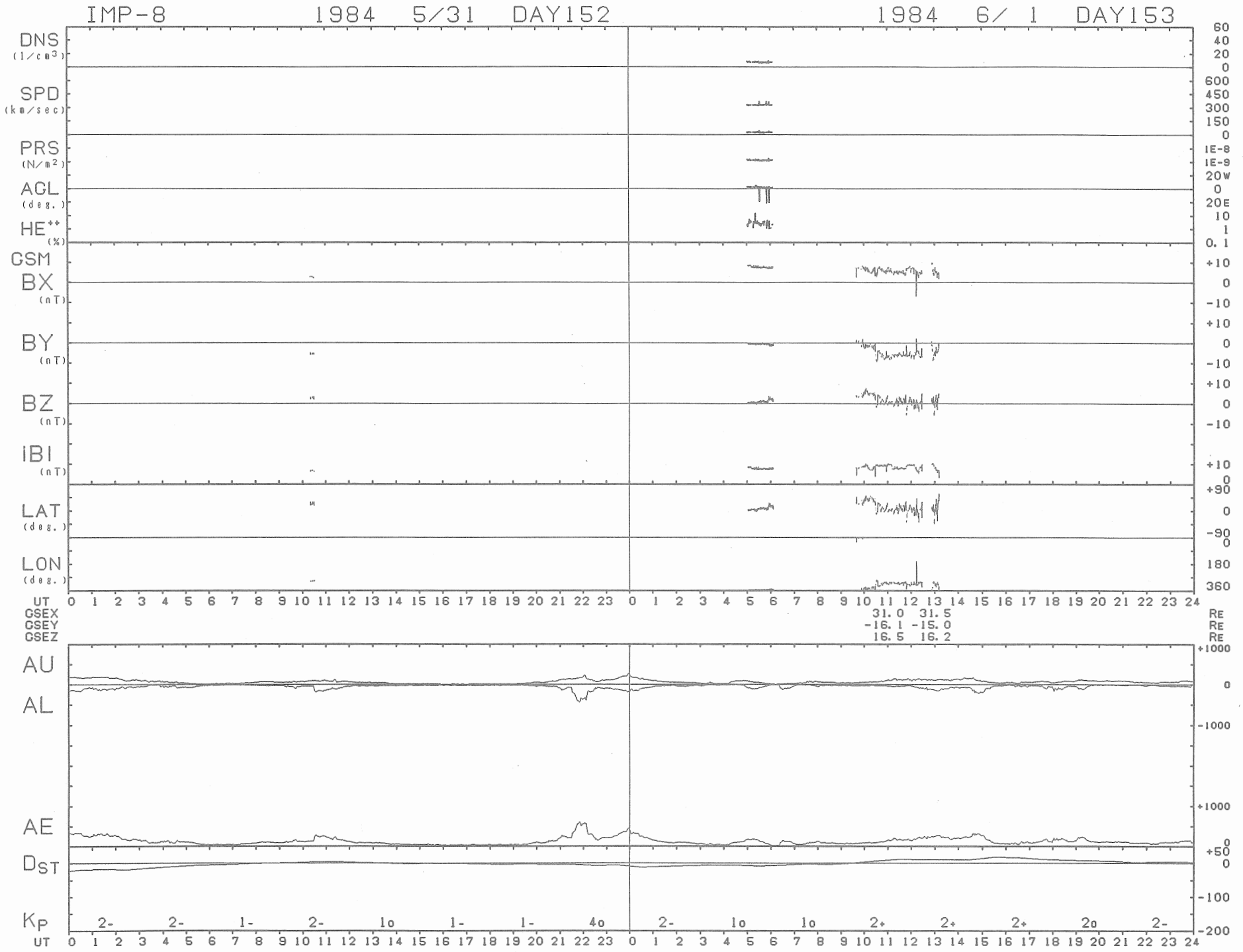

IMP-8 1984 5/21 DAY142
1984 5/22 DAY143
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.2 35.2 35.1 35.0 34.8 34.6 34.3 33.6 32.6 32.1 31.5 30.8 28.5 22.3 21.1 RE
GSEY -1.3 -0.1 1.2 2.4 3.7 4.9 6.2 8.6 11.0 12.2 13.3 14.5 17.7 23.1 23.9 RE
GSEZ 14.2 13.7 13.3 12.8 12.2 11.7 11.1 10.0 8.7 8.1 7.4 6.8 4.7 0.3 -0.5 RE
AU
AL
AE
DST
KP
6o 5- 5+ 4o 4+ 3+ 5o 5+ 3+ 4- 5o 4- 5- 5+ 3+ 4+
UT

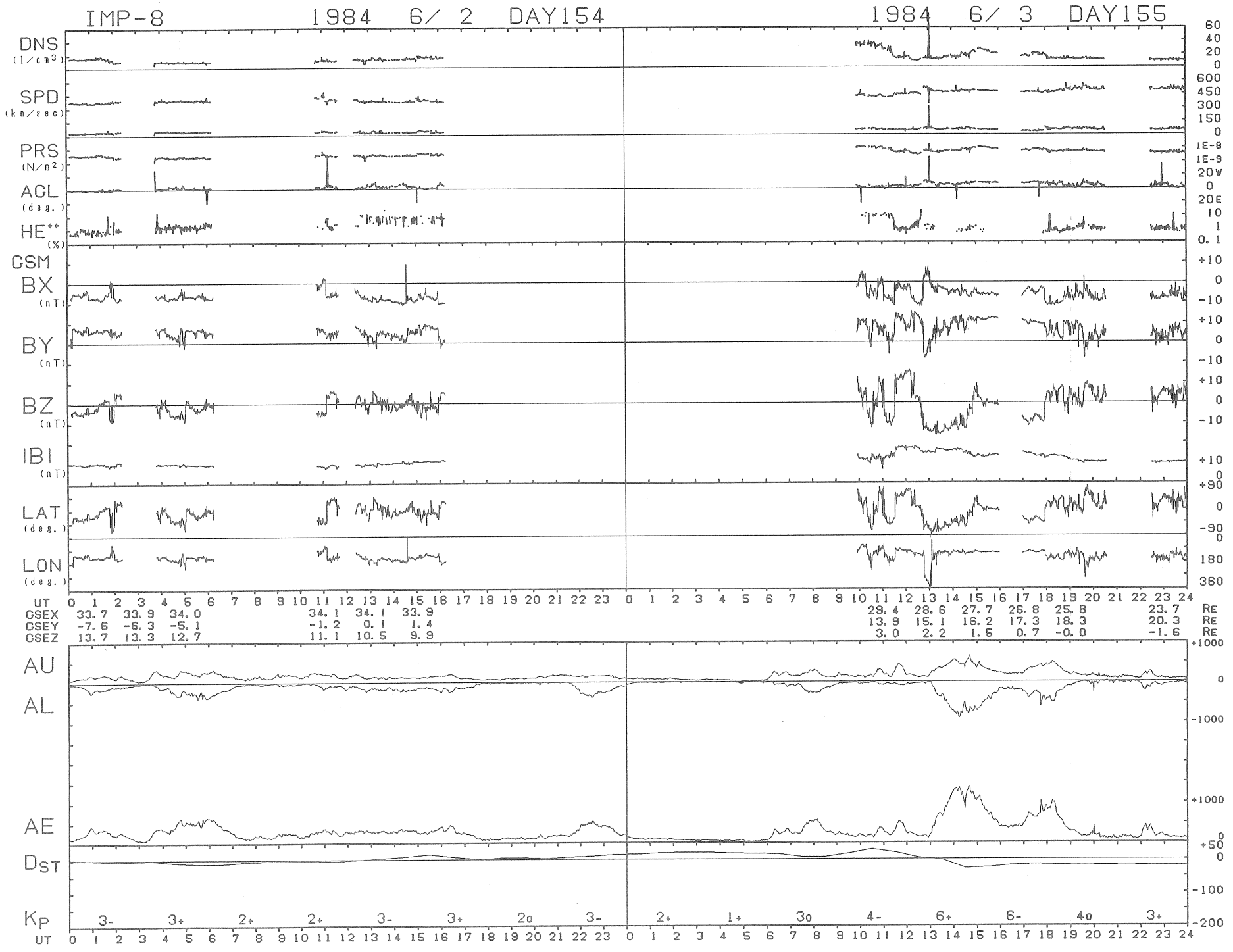

IMP-8 1984 5/23 DAY144
1984 5/24 DAY145
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.9 18.6 17.2 11.4 9.9 5.1 3.4 1.8 0.1 -1.5 -9.6 -11.2 -15.6 RE
GSEY 24.6 25.2 25.8 27.4 27.6 27.7 27.6 27.5 27.2 26.8 23.8 22.9 19.9 RE
GSEZ -1.2 -1.9 -2.7 -5.5 -6.2 -8.1 -8.7 -9.3 -9.8 -10.3 -12.2 -12.5 -13.0 RE
AU
AL
AE
DST
KP 6- 4o 4+ 3+ 4- 3o 5- 4- 3- 2+ 4- 4o 5+ 5+ 4+ 4-
UT

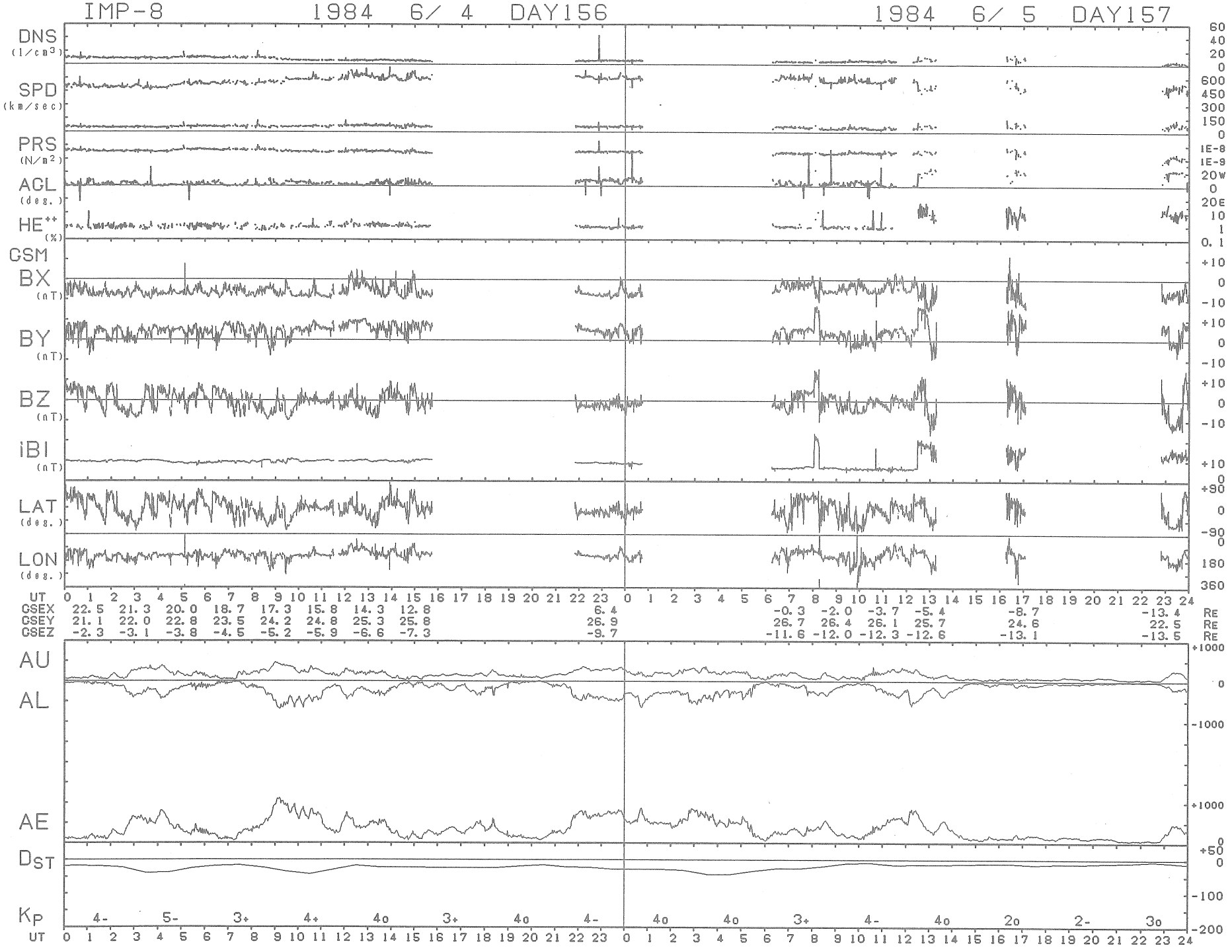

IMP-8
1984 5/25 DAY146
1984 5/26 DAY147
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.7 -21.9 -22.9 -23.9 -24.9
GSEY 15.0 13.7 12.3 10.8 9.4
GSEZ -13.1 -13.0 -12.9 -12.7 -12.5
RE
AU
AL
AE
DST
KP
3+ 1+ 2- 1+ 3o 3o 4- 5- 4- 4o 4o 2+ 2o 3- 2+ 1-

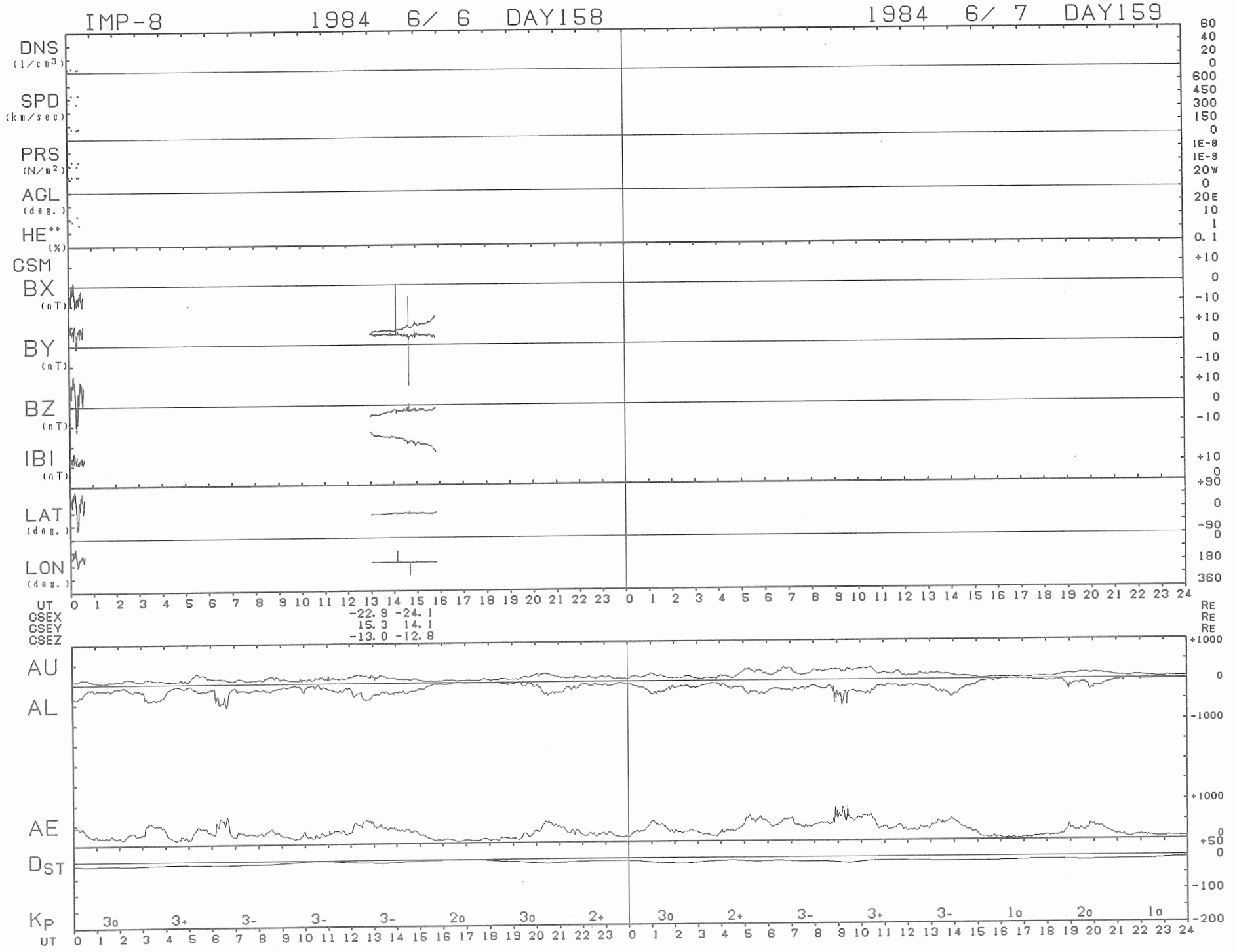

IMP-8 1984 5/27 DAY148
1984 5/28 DAY149
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.0 -27.5 -26.9 -24.2 -23.5 -15.1 -14.1 -13.0 -11.9 -10.8 RE
GSEY -19.9 -21.2 -22.3 -26.6 -27.6 -34.3 -34.8 -35.3 -35.7 -36.1 RE
GSEZ -2.2 -1.5 -0.8 1.9 2.5 8.3 8.9 9.4 10.0 10.5 RE
AU
AL
AE
DST
KP
0+ 0+ 3- 3- 3- 2o 2o 1+ 1o 1- 1- 2- 1+ 1+ 3- 4-

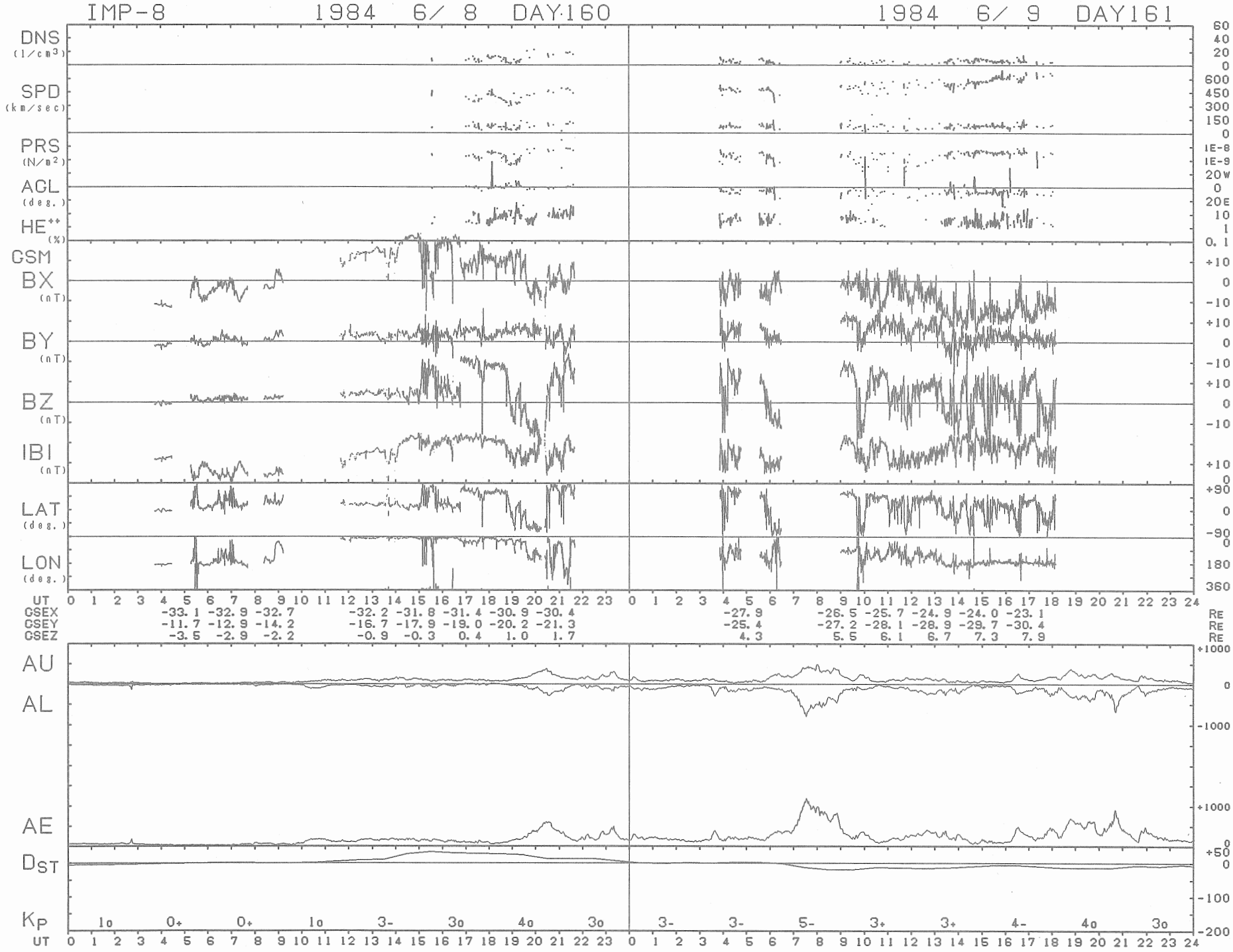

IMP-8 1984 5/29 DAY150
1984 5/30 DAY151
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -2.9 -1.7 -0.5 0.6 1.8 10.9 RE
GSEY -37.5 -37.6 -37.6 -37.5 -37.4 -35.1 RE
GSEZ 14.0 14.4 14.8 15.2 15.6 17.8 RE
AU
AL
AE
DST
KP
2+ 3o 2- 2- 2+ 2+ 2+ 2+ 3o 3o 4- 4o 2+ 3+ 3o 3-

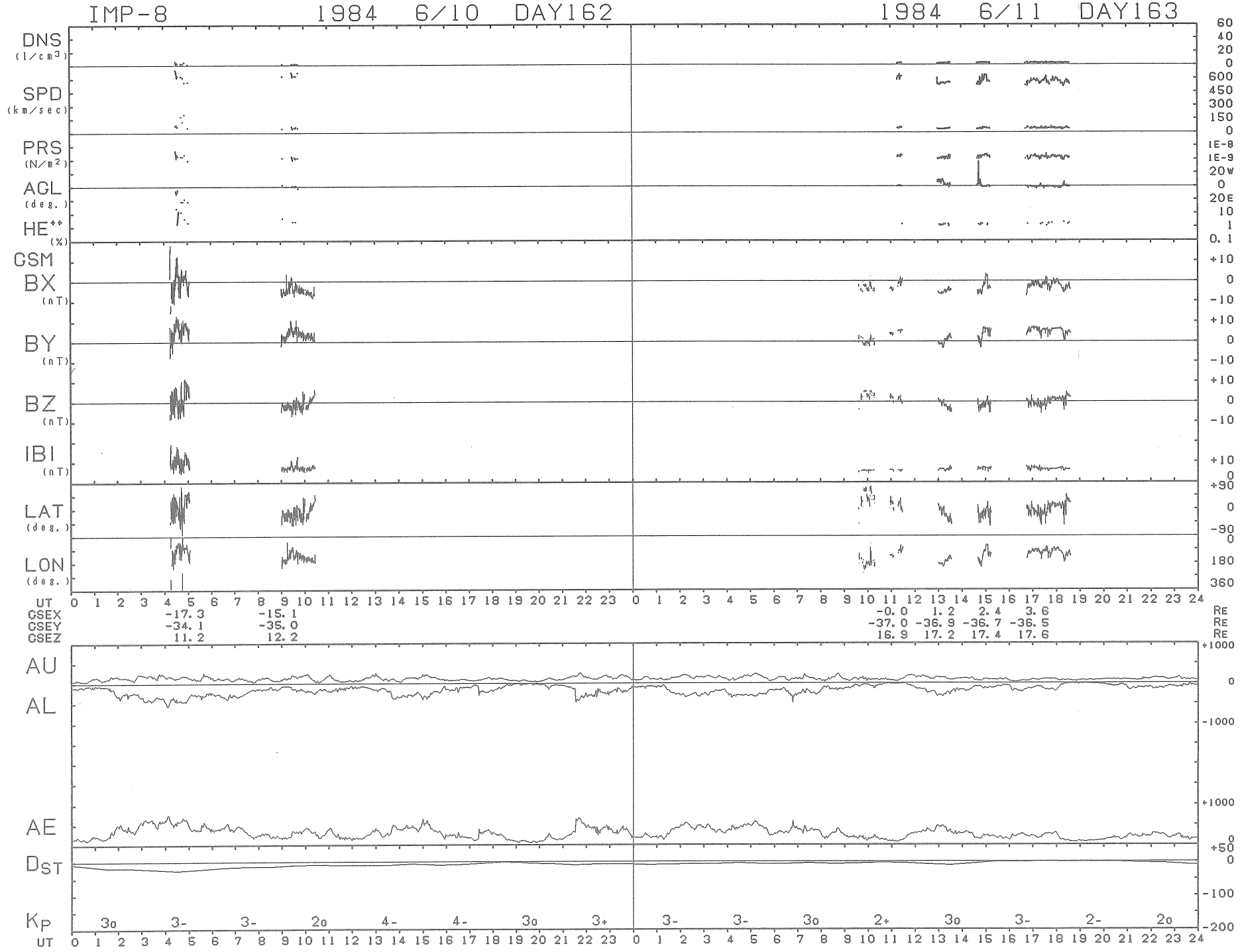

IMP-8 1984 5/31 DAY152
1984 6/ 1 DAY153
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.0 31.5 RE
GSEY -16.1 -15.0 RE
GSEZ 16.5 16.2 RE
AU
AL
AE
DST
KP
2- 2- 1- 2- 1o 1- 1- 4o 2- 1o 1o 2+ 2+ 2+ 2o 2-

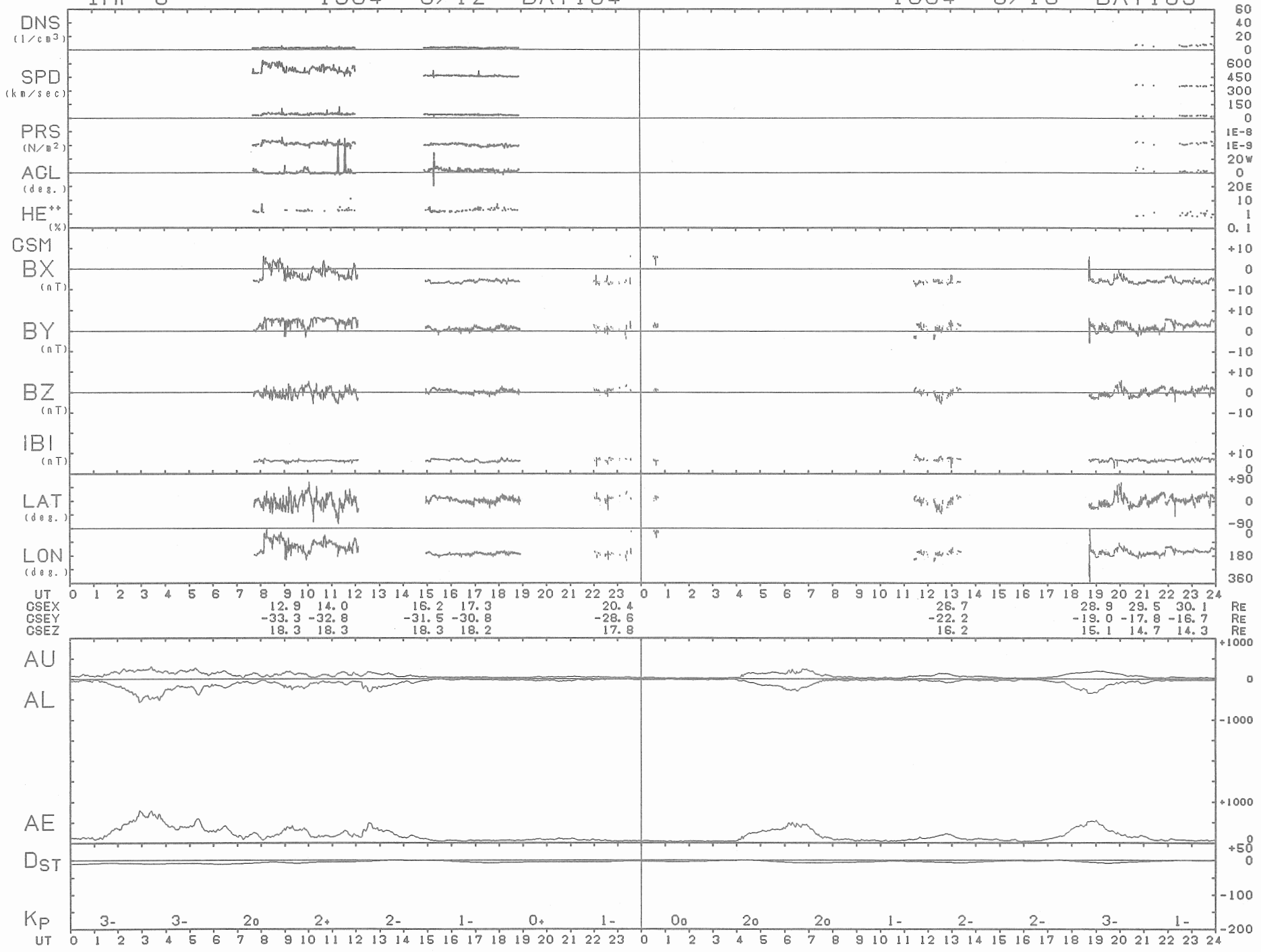

IMP-8 1984 6/ 2 DAY154
1984 6/ 3 DAY155
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.7 33.9 34.0 34.1 34.1 33.9 29.4 28.6 27.7 26.8 25.8 23.7 RE
GSEY -7.6 -6.3 -5.1 -1.2 0.1 1.4 13.9 15.1 16.2 17.3 18.3 20.3 RE
GSEZ 13.7 13.3 12.7 11.1 10.5 9.9 3.0 2.2 1.5 0.7 -0.0 -1.6 RE
AU
AL
AE
DST
KP 3- 3+ 2+ 2+ 3- 3+ 2o 3- 2+ 1+ 3o 4- 6+ 6- 4o 3+
UT

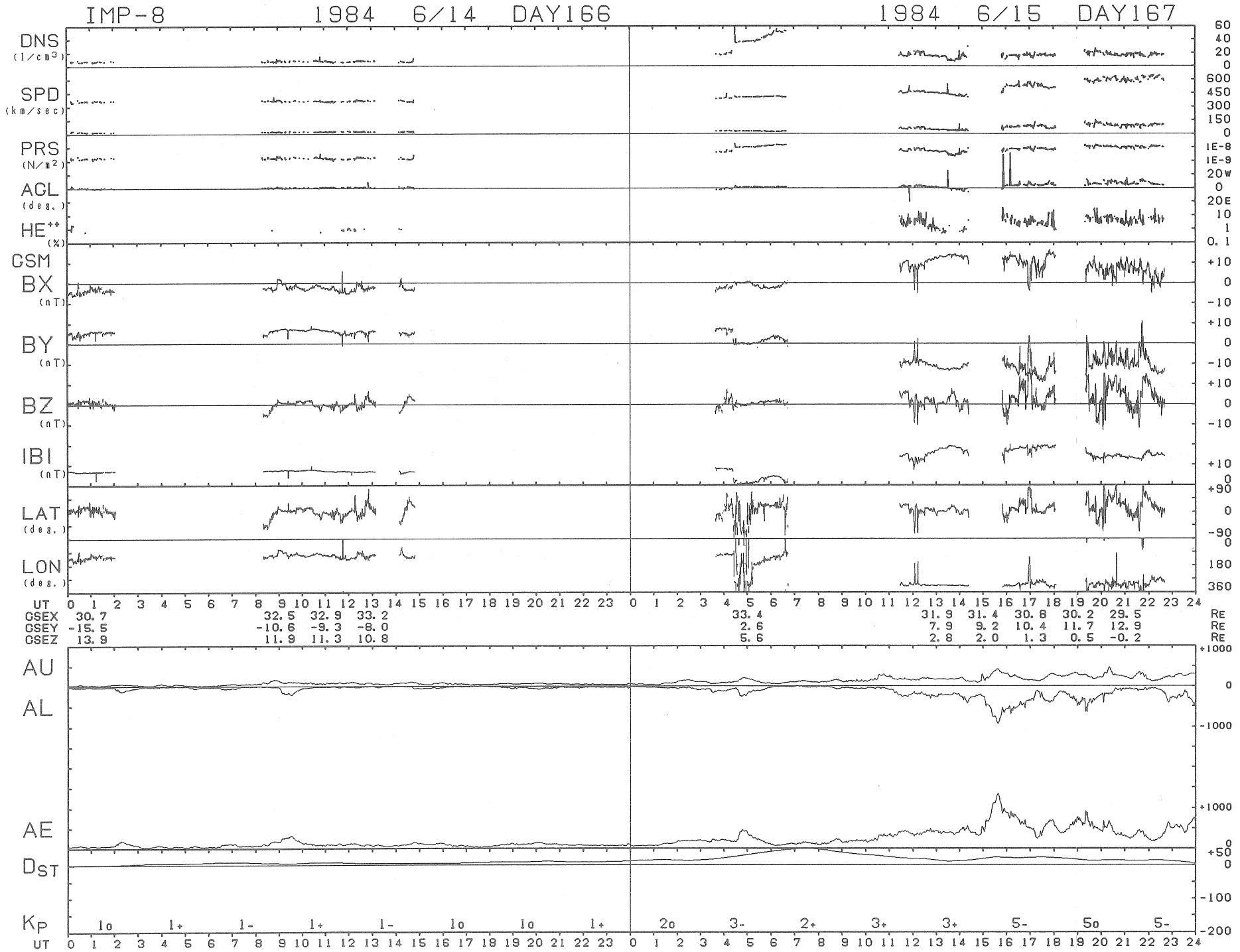

IMP-8 1984 6/ 4 DAY156
1984 6/ 5 DAY157
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
iBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.5 21.3 20.0 18.7 17.3 15.8 14.3 12.8 6.4 -0.3 -2.0 -3.7 -5.4 -8.7 -13.4 RE
GSEY 21.1 22.0 22.8 23.5 24.2 24.8 25.3 25.8 26.9 26.7 26.4 26.1 25.7 24.6 22.5 RE
GSEZ -2.3 -3.1 -3.8 -4.5 -5.2 -5.9 -6.6 -7.3 -9.7 -11.6 -12.0 -12.3 -12.6 -13.1 -13.5 RE
AU
AL
AE
DST
KP 4- 5- 3+ 4+ 4o 3+ 4o 4- 4o 4o 3+ 4- 4o 2o 2- 3o
UT

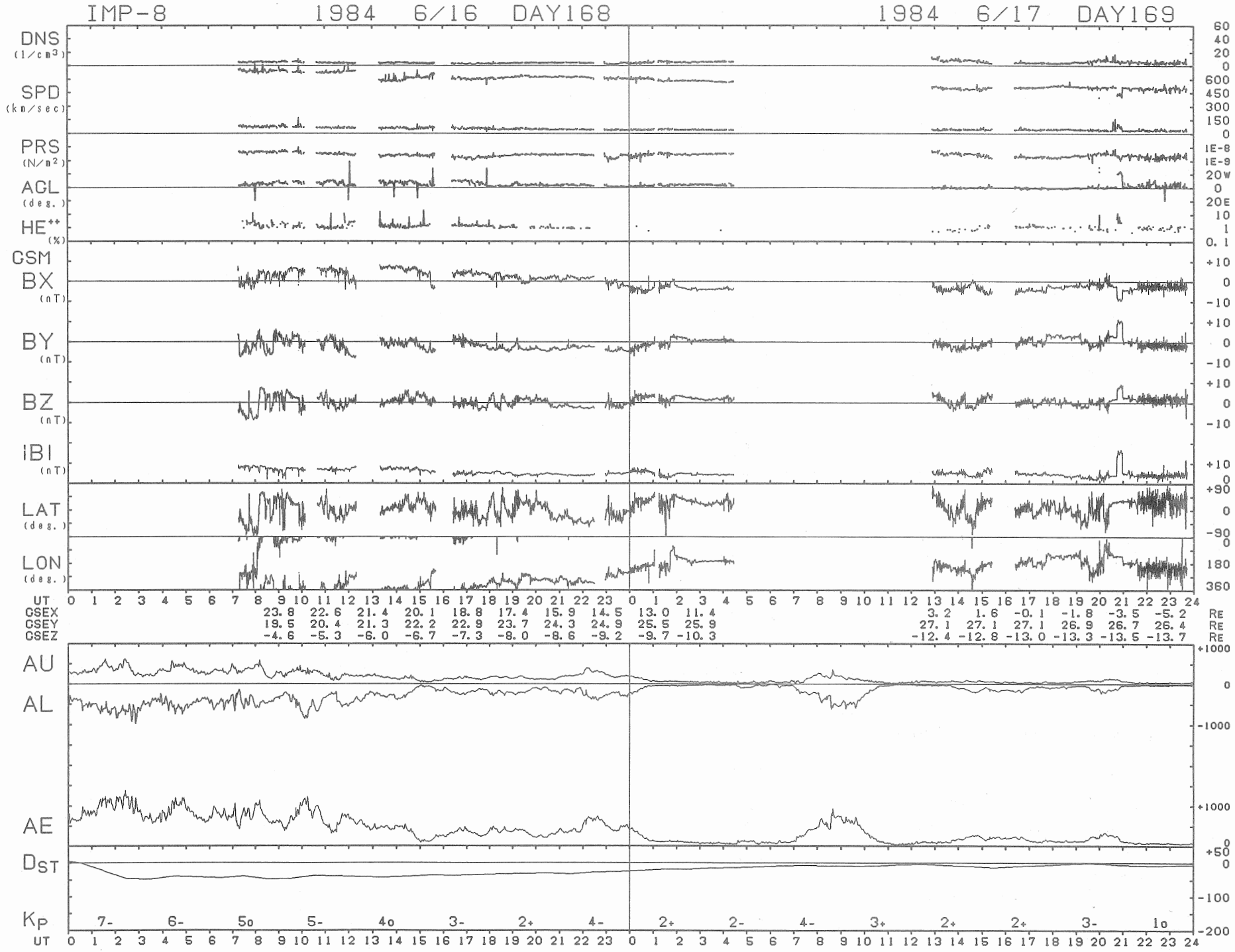

IMP-8
1984 6/ 6 DAY158
1984 6/ 7 DAY159
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -22.9 -24.1
GSEY 15.3 14.1
GSEZ -13.0 -12.8
AU
AL
AE
DST
KP
3o 3+ 3- 3- 3- 2o 3o 2+ 3o 2+ 3- 3+ 3- 1o 2o 1o
RE

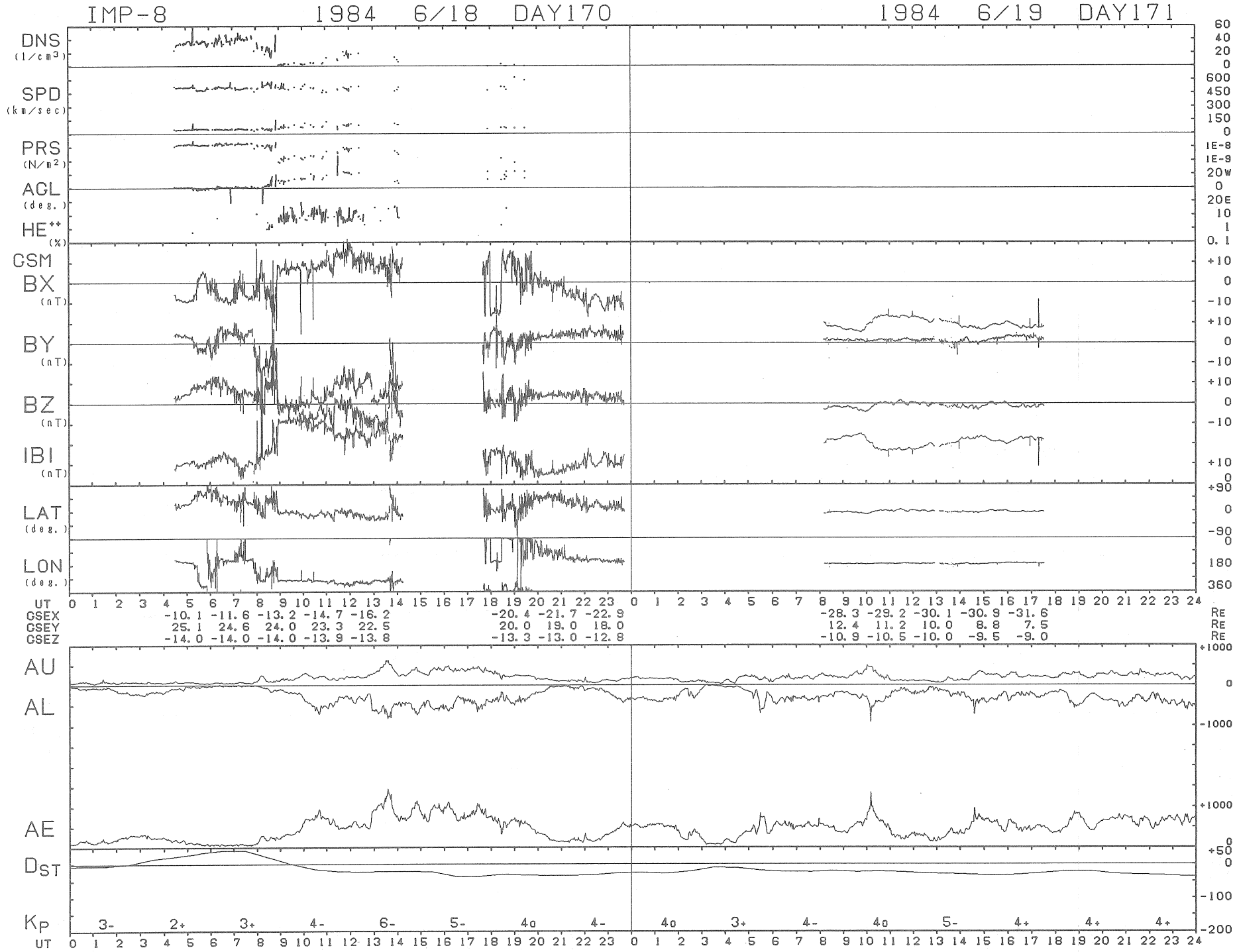

IMP-8
1984 6/ 8 DAY160
1984 6/ 9 DAY161
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.1 -32.9 -32.7 -32.2 -31.8 -31.4 -30.9 -30.4 -27.9 -26.5 -25.7 -24.9 -24.0 -23.1 RE
GSEY -11.7 -12.9 -14.2 -16.7 -17.9 -19.0 -20.2 -21.3 -25.4 -27.2 -28.1 -28.9 -29.7 -30.4 RE
GSEZ -3.5 -2.9 -2.2 -0.9 -0.3 0.4 1.0 1.7 4.3 5.5 6.1 6.7 7.3 7.9 RE
AU
AL
AE
DST
KP
1o 0+ 0+ 1o 3- 3o 4o 3o 3- 3- 5- 3+ 3+ 4- 4o 3o
UT

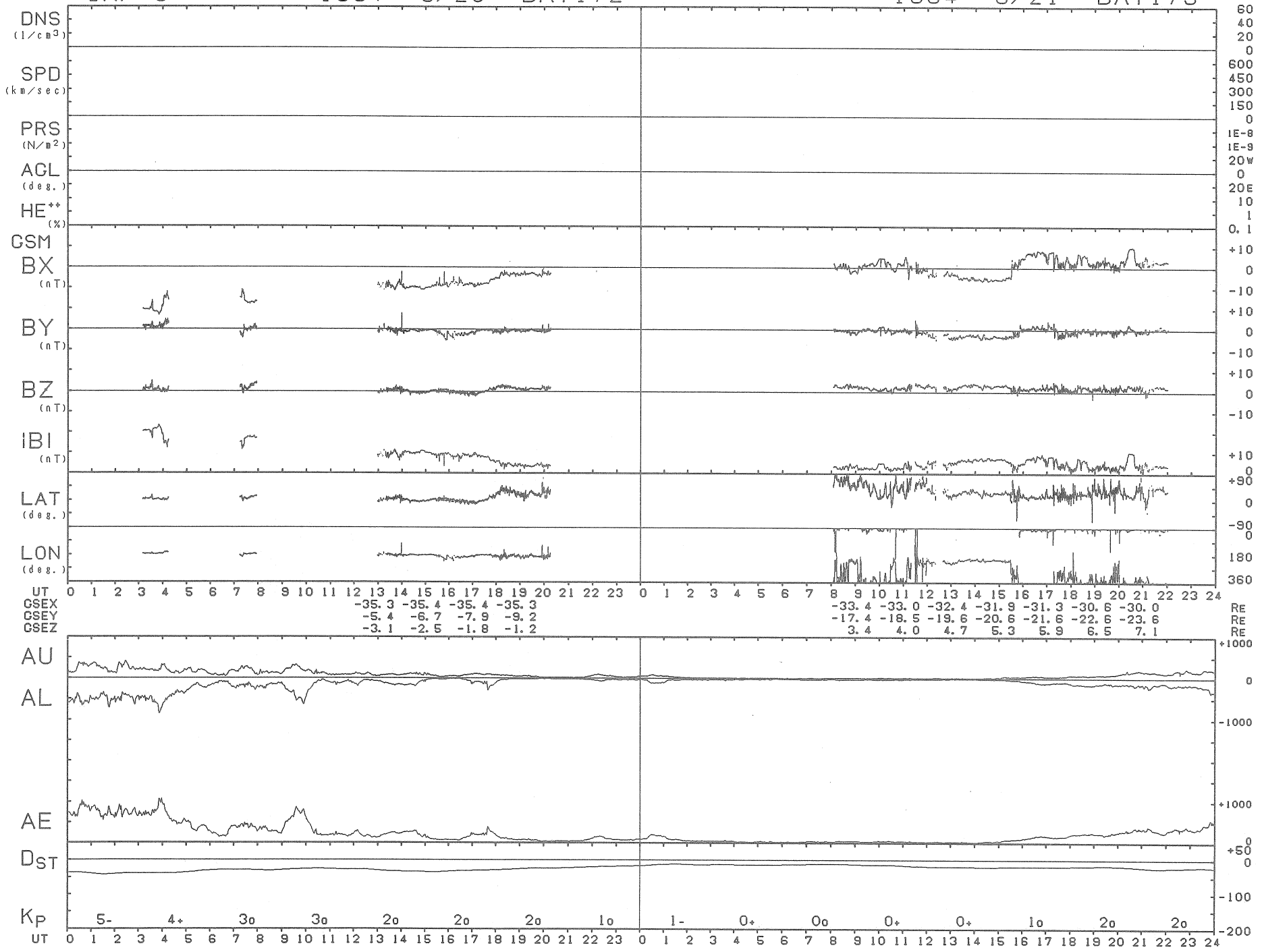

IMP-8
1984 6/10 DAY162
1984 6/11 DAY163
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.3 -15.1 -0.0 1.2 2.4 3.6 RE
GSEY -34.1 -35.0 -37.0 -36.9 -36.7 -36.5 RE
GSEZ 11.2 12.2 16.9 17.2 17.4 17.6 RE
AU
AL
AE
DST
KP
3o 3- 3- 2o 4- 4- 3o 3+ 3- 3- 3o 2+ 3o 3- 2- 2o
UT

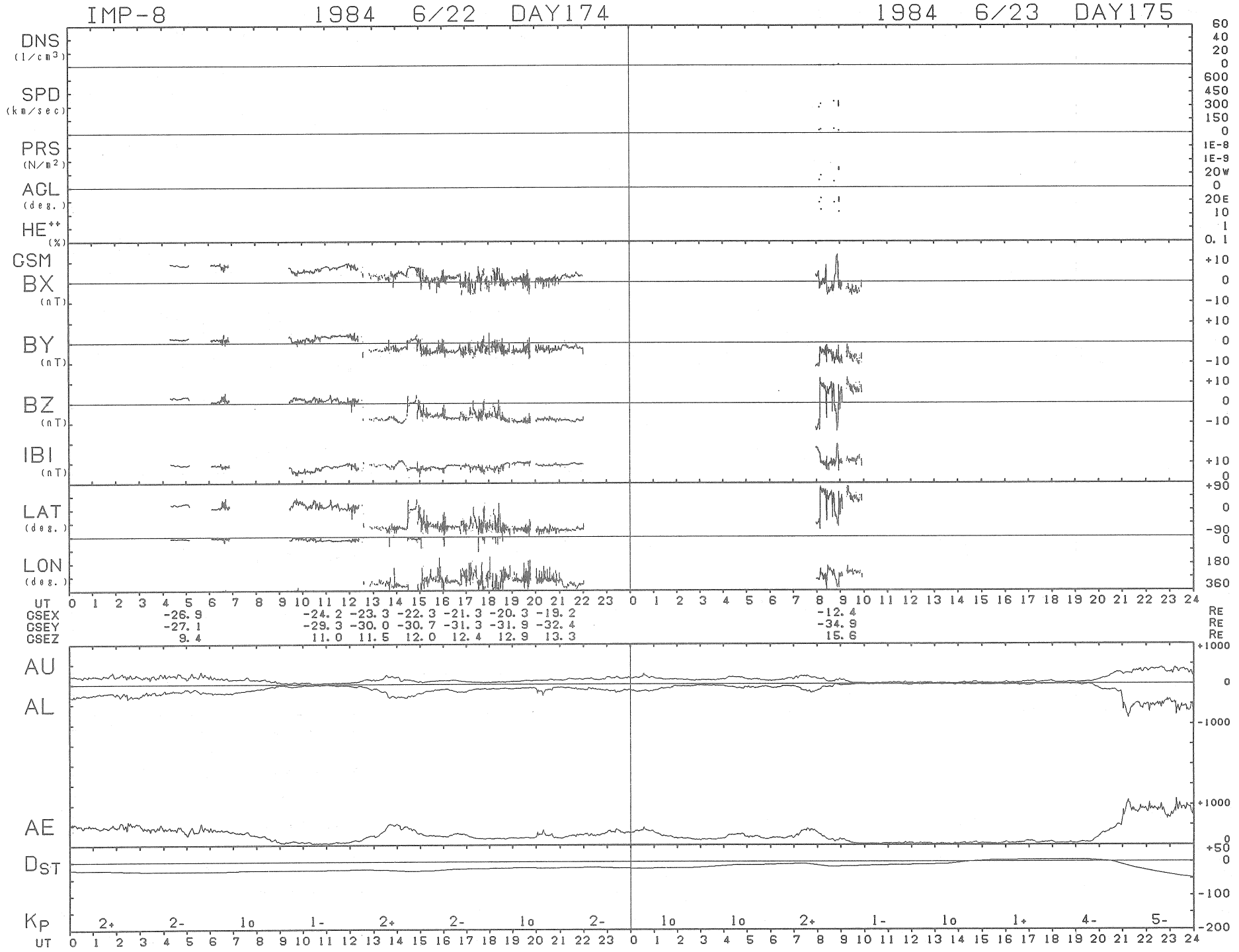

IMP-8 1984 6/12 DAY164
1984 6/13 DAY165
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.9 14.0 16.2 17.3 20.4 26.7 28.9 29.5 30.1 RE
GSEY -33.3 -32.8 -31.5 -30.8 -28.6 -22.2 -19.0 -17.8 -16.7 RE
GSEZ 18.3 18.3 18.3 18.2 17.8 16.2 15.1 14.7 14.3 RE
AU
AL
AE
DST
KP 3- 3- 2o 2+ 2- 1- 0+ 1- 0o 2o 2o 1- 2- 2- 3- 1-
UT

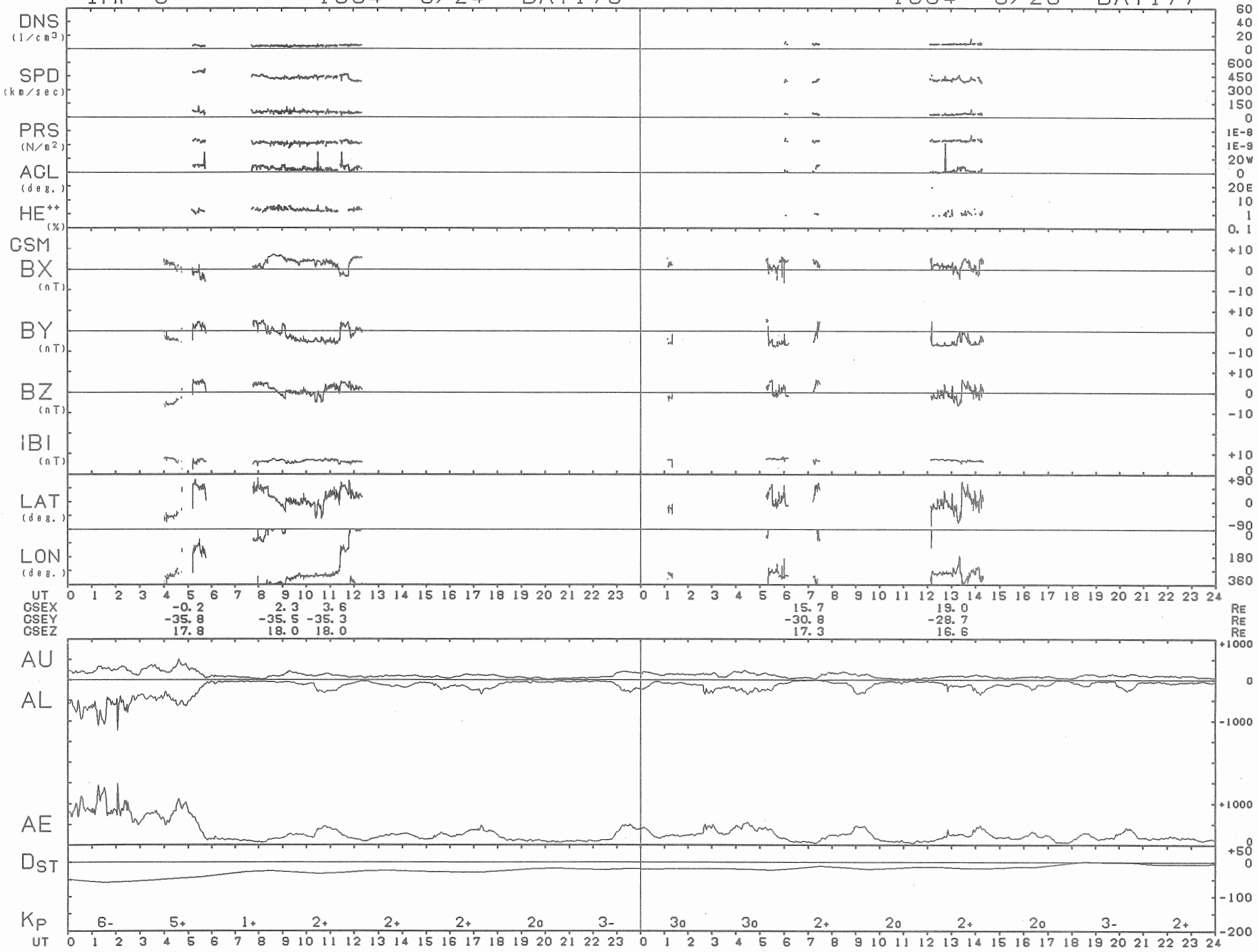

IMP-8 1984 6/14 DAY166
1984 6/15 DAY167
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.7 32.5 32.9 33.2 33.4 31.9 31.4 30.8 30.2 29.5 RE
GSEY -15.5 -10.6 -9.3 -8.0 2.6 7.9 9.2 10.4 11.7 12.9 RE
GSEZ 13.9 11.9 11.3 10.8 5.6 2.8 2.0 1.3 0.5 -0.2 RE
AU
AL
AE
DST
KP
1o 1+ 1- 1+ 1- 1o 1o 1+ 2o 3- 2+ 3+ 3+ 5- 5o 5-
UT

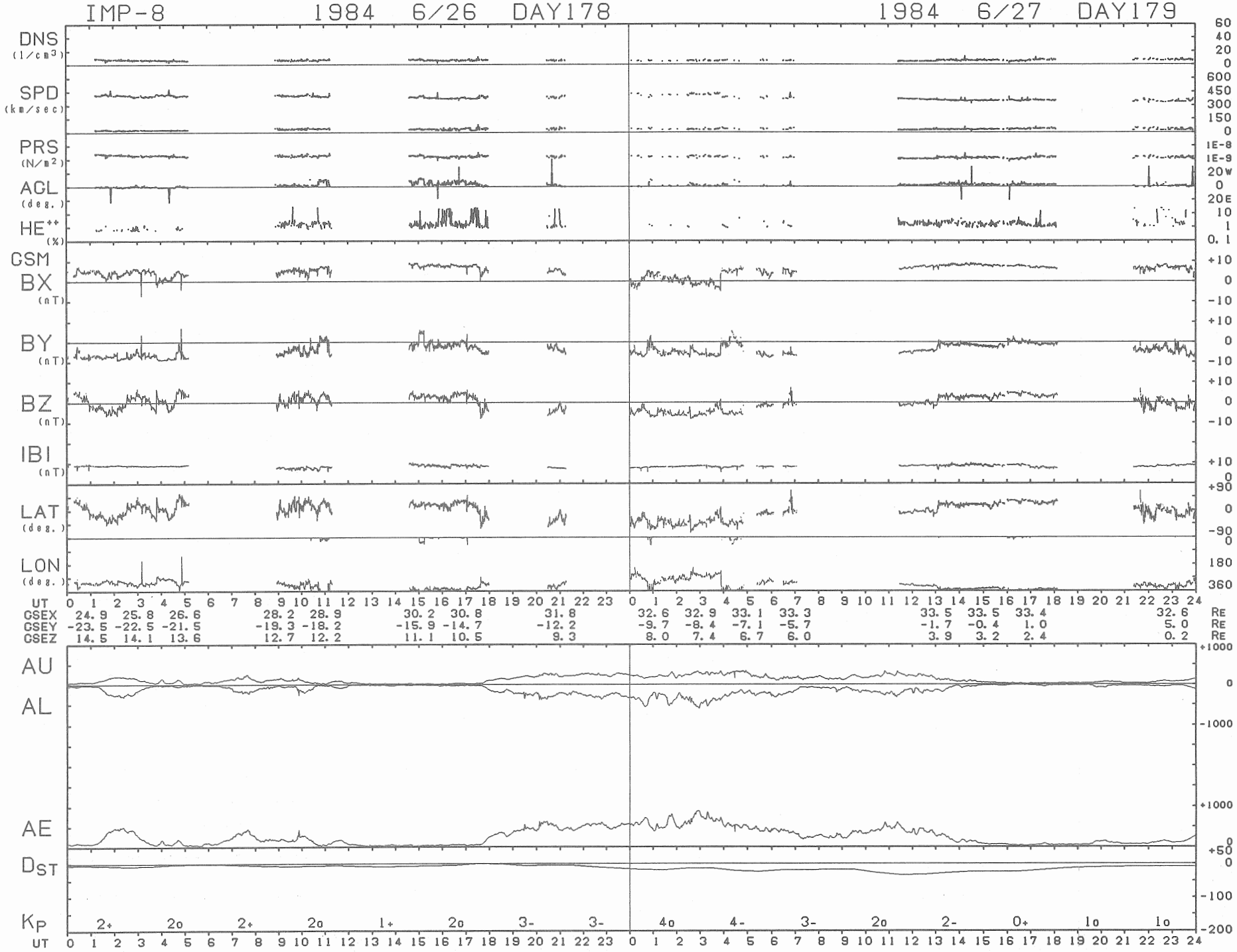

IMP-8 1984 6/16 DAY168
1984 6/17 DAY169
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.8 22.6 21.4 20.1 18.8 17.4 15.9 14.5 13.0 11.4 3.2 1.6 -0.1 -1.8 -3.5 -5.2 RE
GSEY 19.5 20.4 21.3 22.2 22.9 23.7 24.3 24.9 25.5 25.9 27.1 27.1 27.1 26.9 26.7 26.4 RE
GSEZ -4.6 -5.3 -6.0 -6.7 -7.3 -8.0 -8.6 -9.2 -9.7 -10.3 -12.4 -12.8 -13.0 -13.3 -13.5 -13.7 RE
AU
AL
AE
DST
KP 7- 6- 5o 5- 4o 3- 2+ 4- 2+ 2- 4- 3+ 2+ 2+ 3- 1o
UT

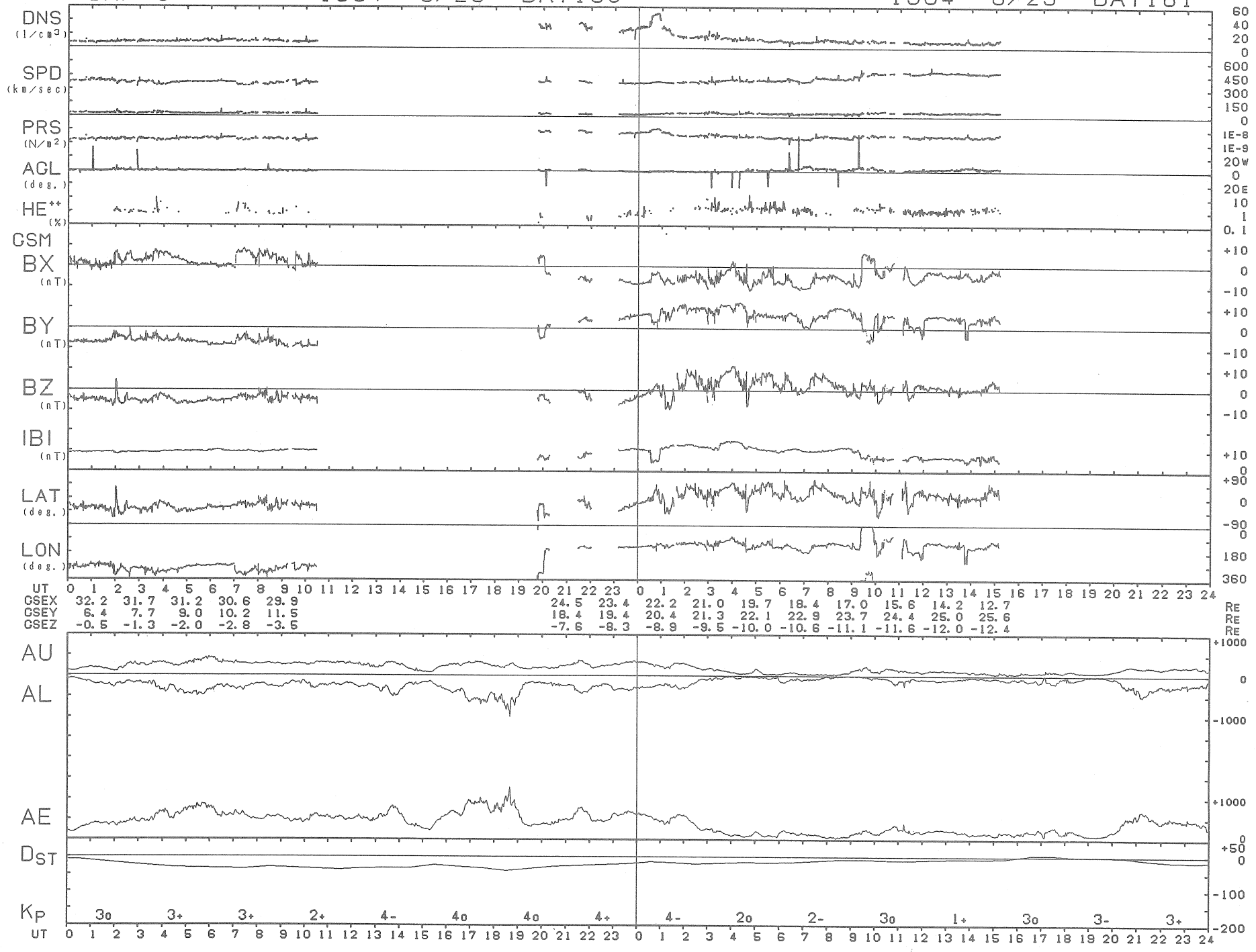

IMP-8 1984 6/18 DAY170
1984 6/19 DAY171
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -10.1 -11.6 -13.2 -14.7 -16.2 -20.4 -21.7 -22.9 -28.3 -29.2 -30.1 -30.9 -31.6 RE
GSEY 25.1 24.6 24.0 23.3 22.5 20.0 19.0 18.0 12.4 11.2 10.0 8.8 7.5 RE
GSEZ -14.0 -14.0 -14.0 -13.9 -13.8 -13.3 -13.0 -12.8 -10.9 -10.5 -10.0 -9.5 -9.0 RE
AU
AL
AE
DST
KP 3- 2+ 3+ 4- 6- 5- 4o 4- 4o 3+ 4- 4o 5- 4+ 4+ 4+
UT

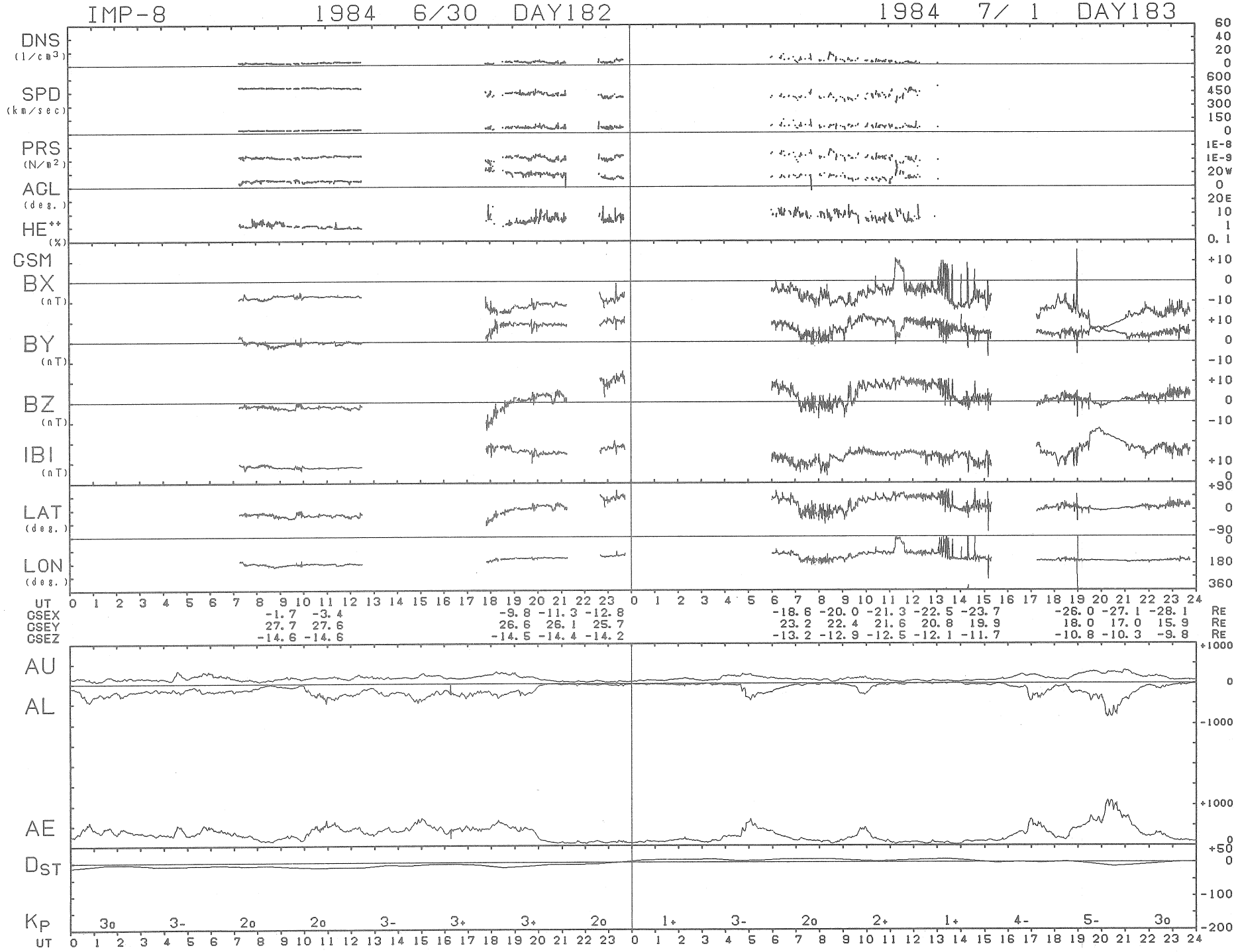

IMP-8 1984 6/20 DAY172
1984 6/21 DAY173
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.3 -35.4 -35.4 -35.3 -33.4 -33.0 -32.4 -31.9 -31.3 -30.6 -30.0 RE
GSEY -5.4 -6.7 -7.9 -9.2 -17.4 -18.5 -19.6 -20.6 -21.6 -22.6 -23.6 RE
GSEZ -3.1 -2.5 -1.8 -1.2 3.4 4.0 4.7 5.3 5.9 6.5 7.1 RE
AU
AL
AE
DST
KP 5- 4+ 3o 3o 2o 2o 2o 1o 1- 0+ 0o 0+ 0+ 1o 2o 2o
UT

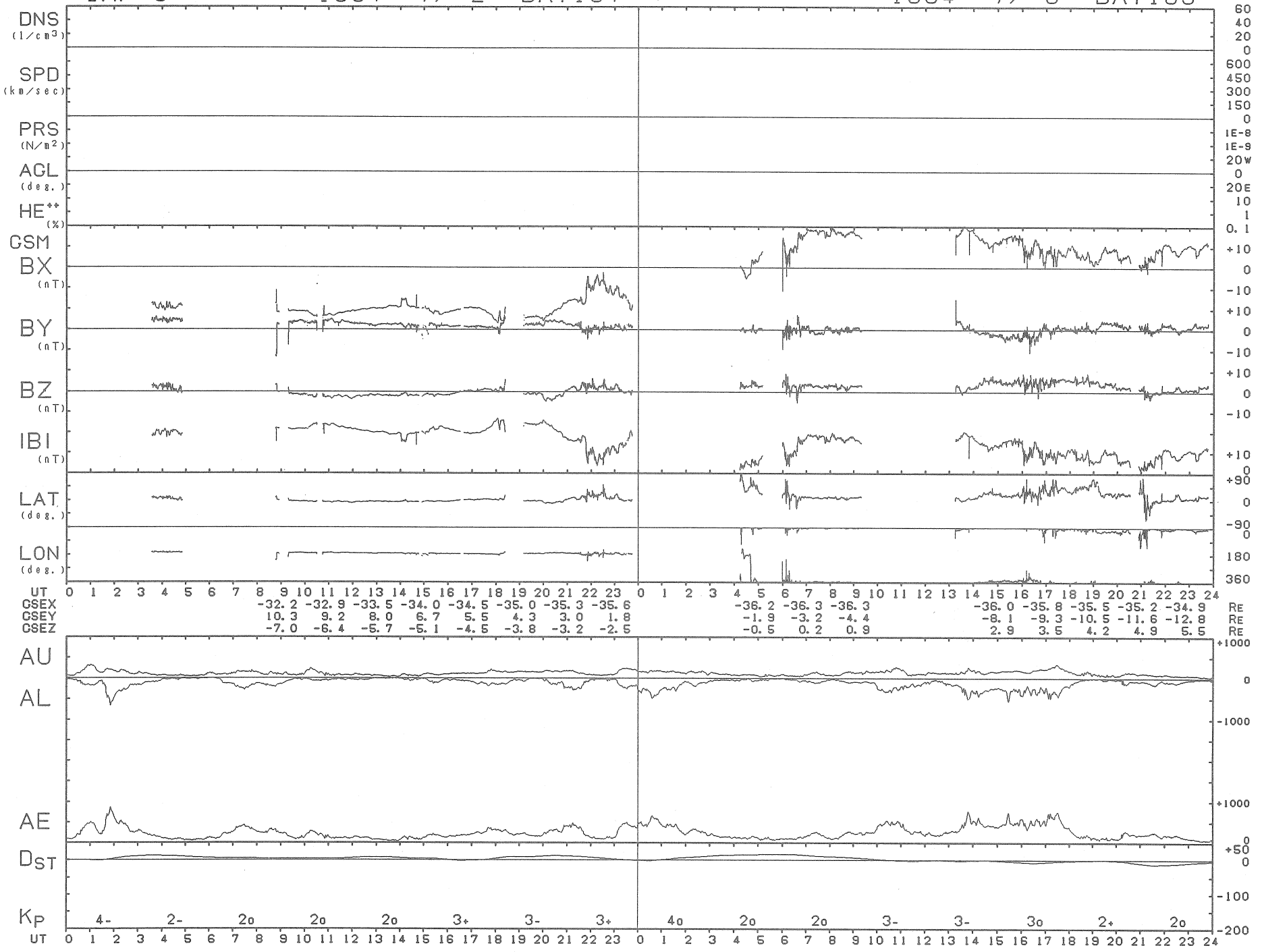

IMP-8
1984 6/22 DAY174
1984 6/23 DAY175
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.9 -24.2 -23.3 -22.3 -21.3 -20.3 -19.2 -12.4 RE
GSEY -27.1 -29.3 -30.0 -30.7 -31.3 -31.9 -32.4 -34.9 RE
GSEZ 9.4 11.0 11.5 12.0 12.4 12.9 13.3 15.6 RE
AU
AL
AE
DST
KP
2+ 2- 1o 1- 2+ 2- 1o 2- 1o 1o 2+ 1- 1o 1+ 4- 5-
UT

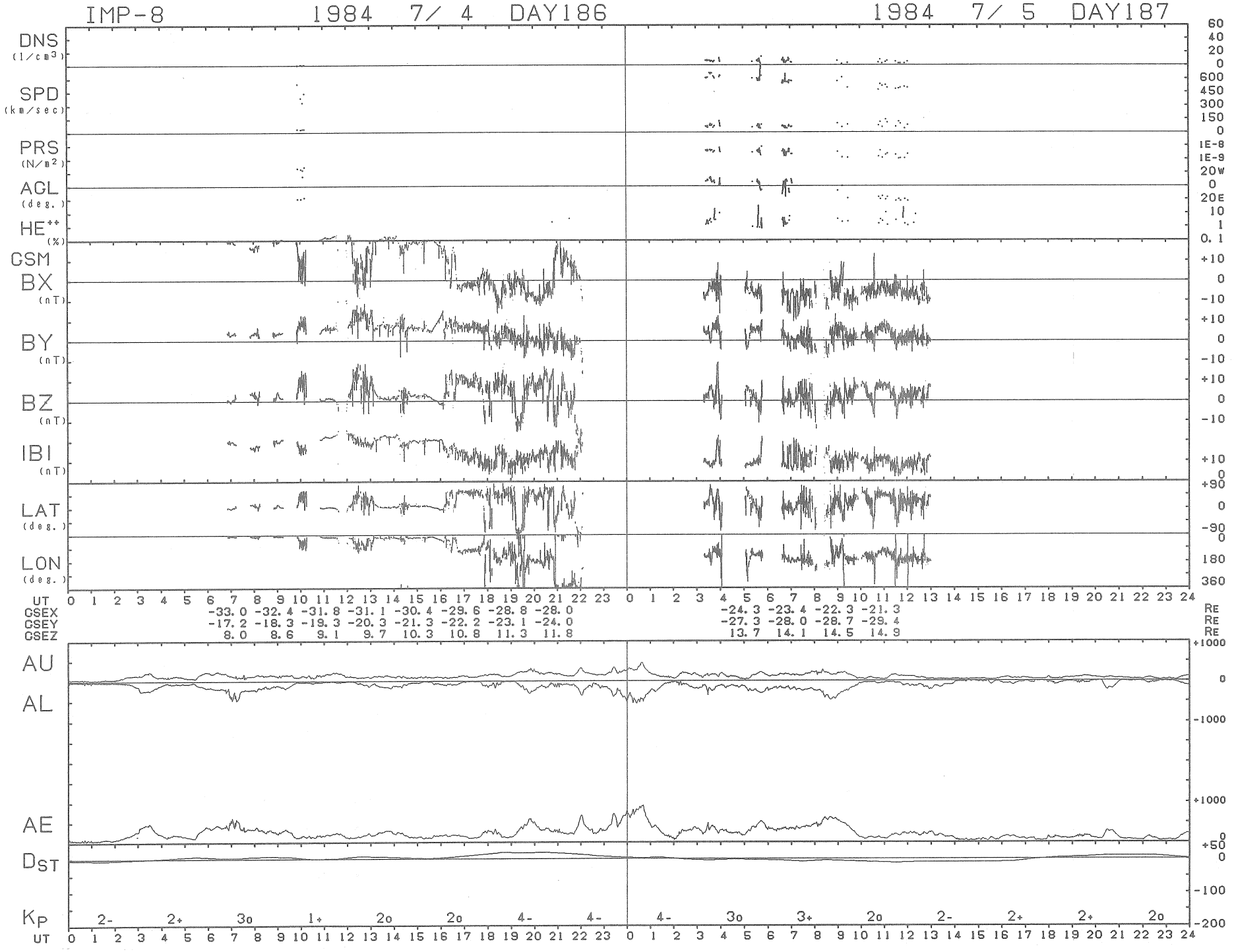

IMP-8 1984 6/24 DAY176
1984 6/25 DAY177
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.2 2.3 3.6 15.7 19.0 RE
GSEY -35.8 -35.5 -35.3 -30.8 -28.7 RE
GSEZ 17.8 18.0 18.0 17.3 16.6 RE
AU
AL
AE
DST
KP 6- 5+ 1+ 2+ 2+ 2+ 2o 3- 3o 3o 2+ 2o 2+ 2o 3- 2+

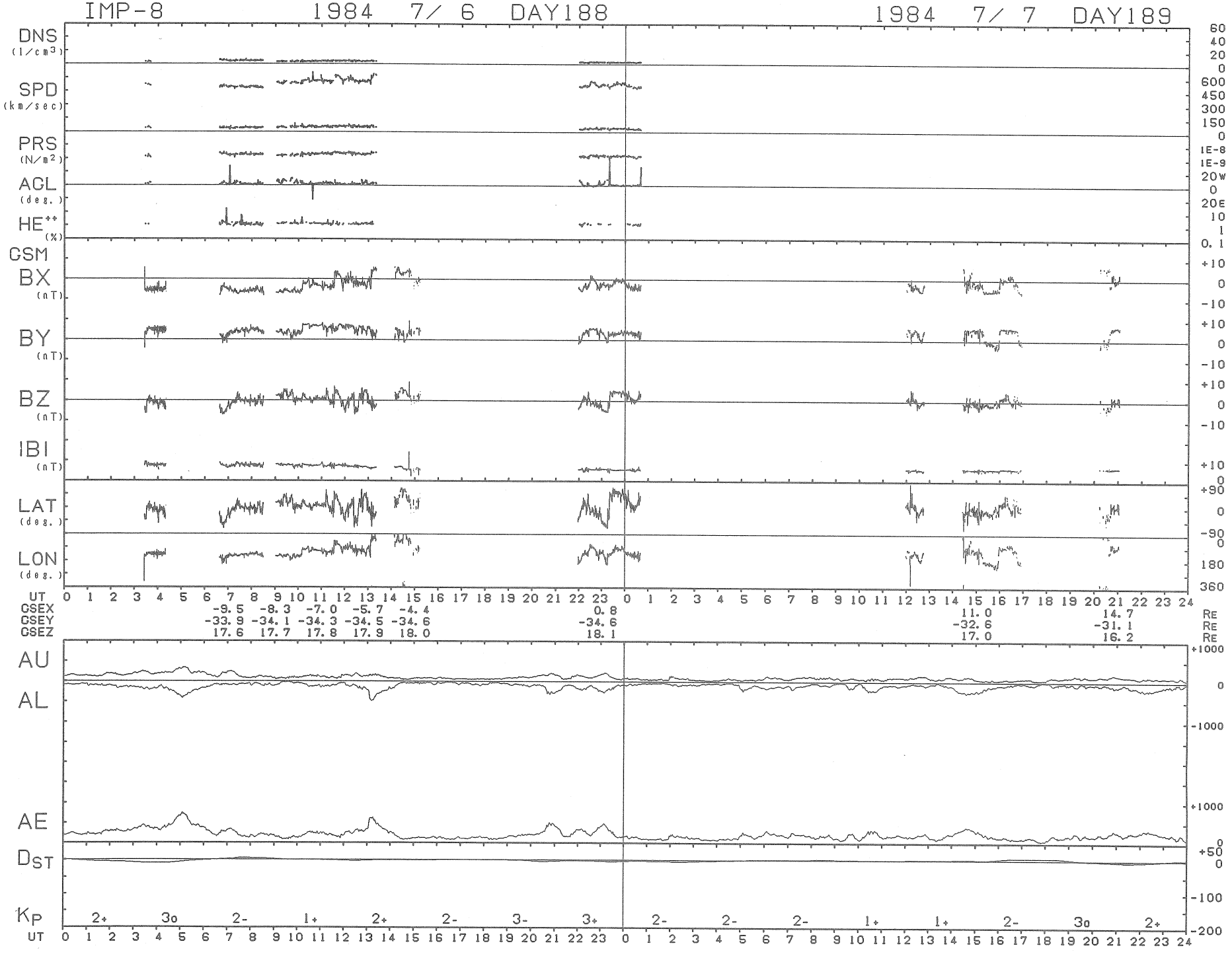

IMP-8 1984 6/26 DAY178
1984 6/27 DAY179
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.9 25.8 26.6 28.2 28.9 30.2 30.8 31.8 32.6 32.9 33.1 33.3 33.5 33.5 33.4 32.6 RE
GSEY -23.5 -22.5 -21.5 -19.3 -18.2 -15.9 -14.7 -12.2 -9.7 -8.4 -7.1 -5.7 -1.7 -0.4 1.0 5.0 RE
GSEZ 14.5 14.1 13.6 12.7 12.2 11.1 10.5 9.3 8.0 7.4 6.7 6.0 3.9 3.2 2.4 0.2 RE
AU
AL
AE
DST
KP
2+ 2o 2+ 2o 1+ 2o 3- 3- 4o 4- 3- 2o 2- 0+ 1o 1o
UT

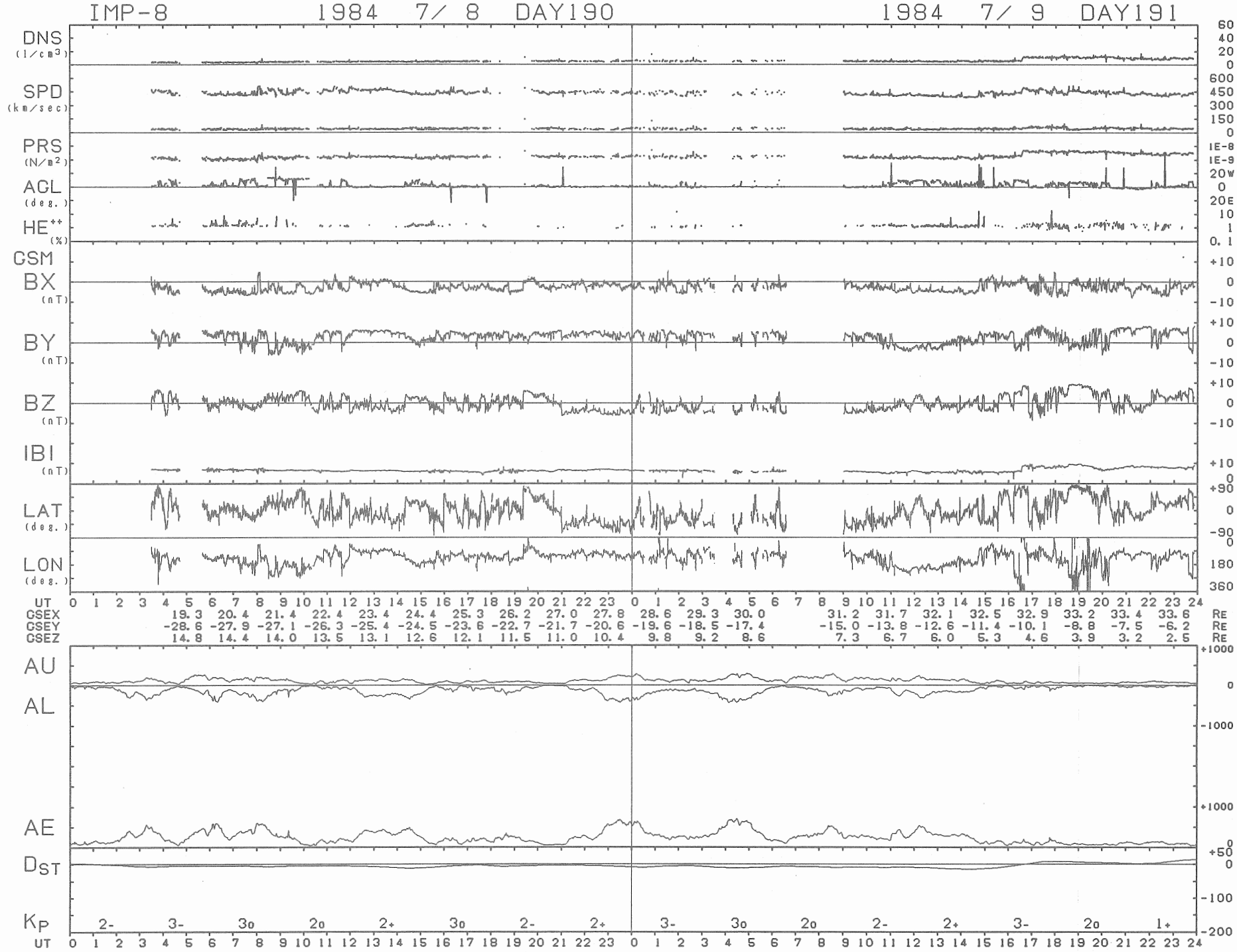

IMP-8 1984 6/28 DAY180
1984 6/29 DAY181
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.2 31.7 31.2 30.6 29.9 24.5 23.4 22.2 21.0 19.7 18.4 17.0 15.6 14.2 12.7 RE
GSEY 6.4 7.7 9.0 10.2 11.5 18.4 19.4 20.4 21.3 22.1 22.9 23.7 24.4 25.0 25.6 RE
GSEZ -0.5 -1.3 -2.0 -2.8 -3.5 -7.6 -8.3 -8.9 -9.5 -10.0 -10.6 -11.1 -11.6 -12.0 -12.4 RE
AU
AL
AE
DST
KP
3o 3+ 3+ 2+ 4- 4o 4o 4+ 4- 2o 2- 3o 1+ 3o 3- 3+
UT

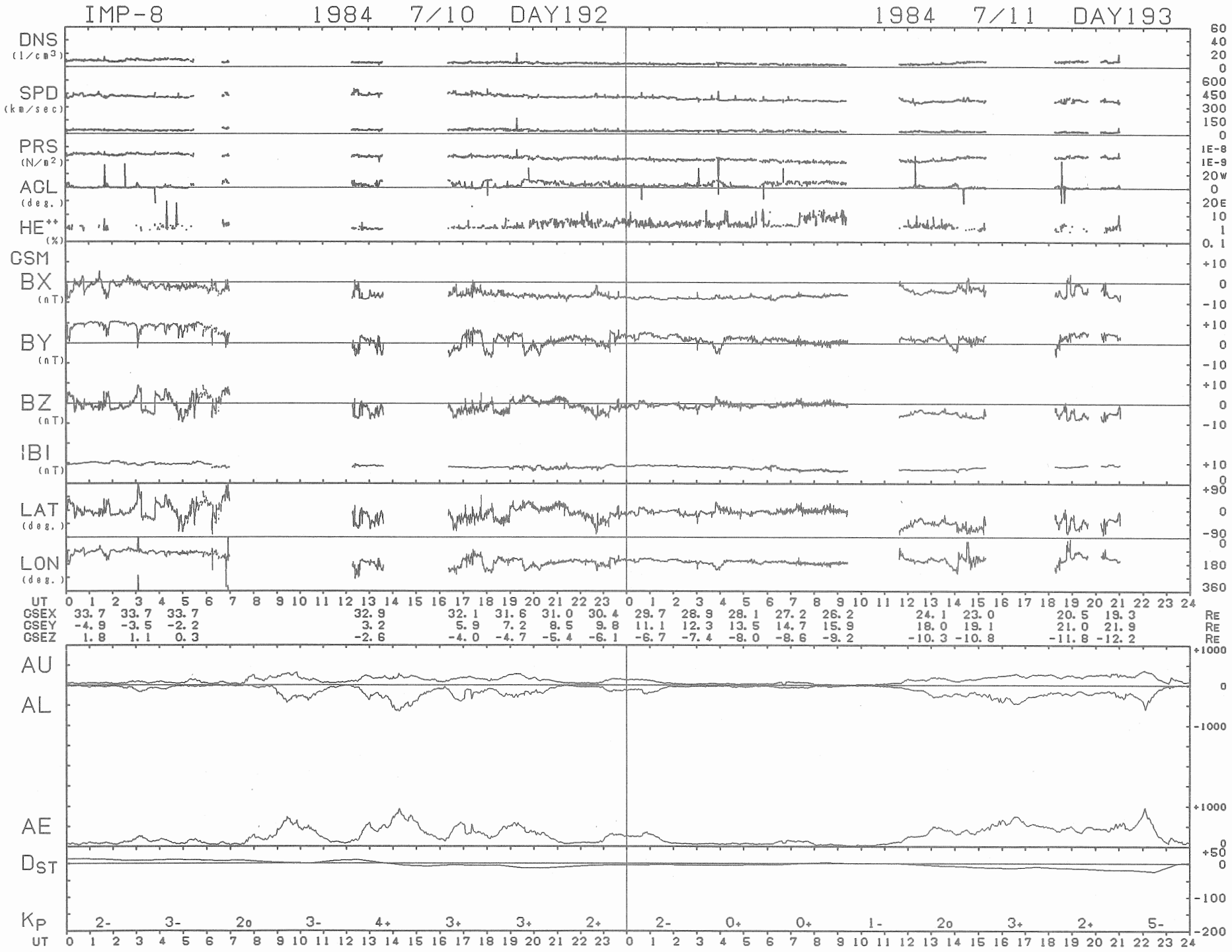

IMP-8 1984 6/30 DAY182
1984 7/ 1 DAY183
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -1.7 -3.4 -9.8 -11.3 -12.8 -18.6 -20.0 -21.3 -22.5 -23.7 -26.0 -27.1 -28.1 RE
GSEY 27.7 27.6 26.6 26.1 25.7 23.2 22.4 21.6 20.8 19.9 18.0 17.0 15.9 RE
GSEZ -14.6 -14.6 -14.5 -14.4 -14.2 -13.2 -12.9 -12.5 -12.1 -11.7 -10.8 -10.3 -9.8 RE
AU
AL
AE
DST
KP 3o 3- 2o 2o 3- 3+ 3+ 2o 1+ 3- 2o 2+ 1+ 4- 5- 3o
UT

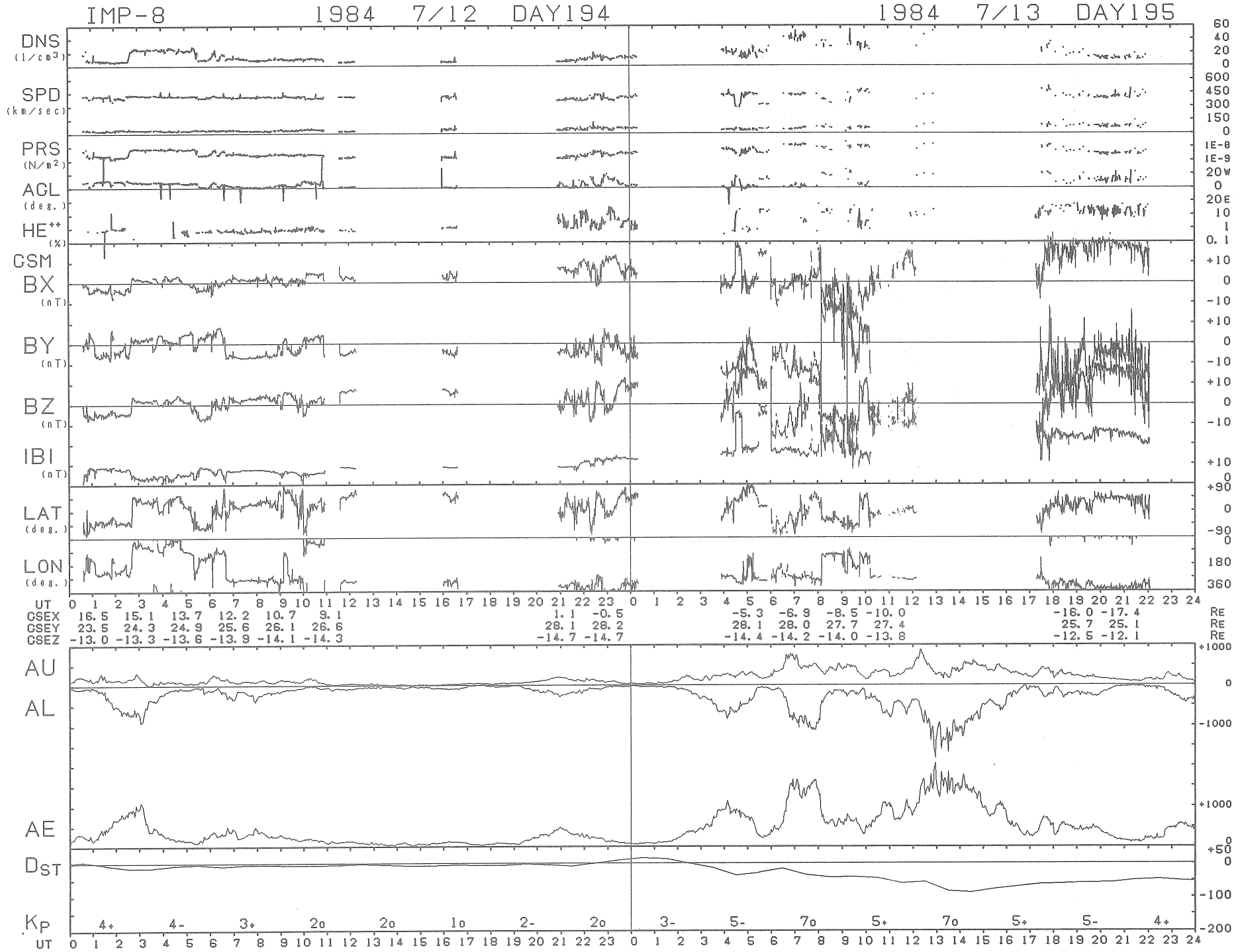

IMP-8 1984 7/ 2 DAY184
1984 7/ 3 DAY185
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.2 -32.9 -33.5 -34.0 -34.5 -35.0 -35.3 -35.6 -36.2 -36.3 -36.3 -36.0 -35.8 -35.5 -35.2 -34.9 RE
GSEY 10.3 9.2 8.0 6.7 5.5 4.3 3.0 1.8 -1.9 -3.2 -4.4 -8.1 -9.3 -10.5 -11.6 -12.8 RE
GSEZ -7.0 -6.4 -5.7 -5.1 -4.5 -3.8 -3.2 -2.5 -0.5 0.2 0.9 2.9 3.5 4.2 4.9 5.5 RE
AU
AL
AE
DST
KP 4- 2- 2o 2o 2o 3+ 3- 3+ 4o 2o 2o 3- 3- 3o 2+ 2o
UT

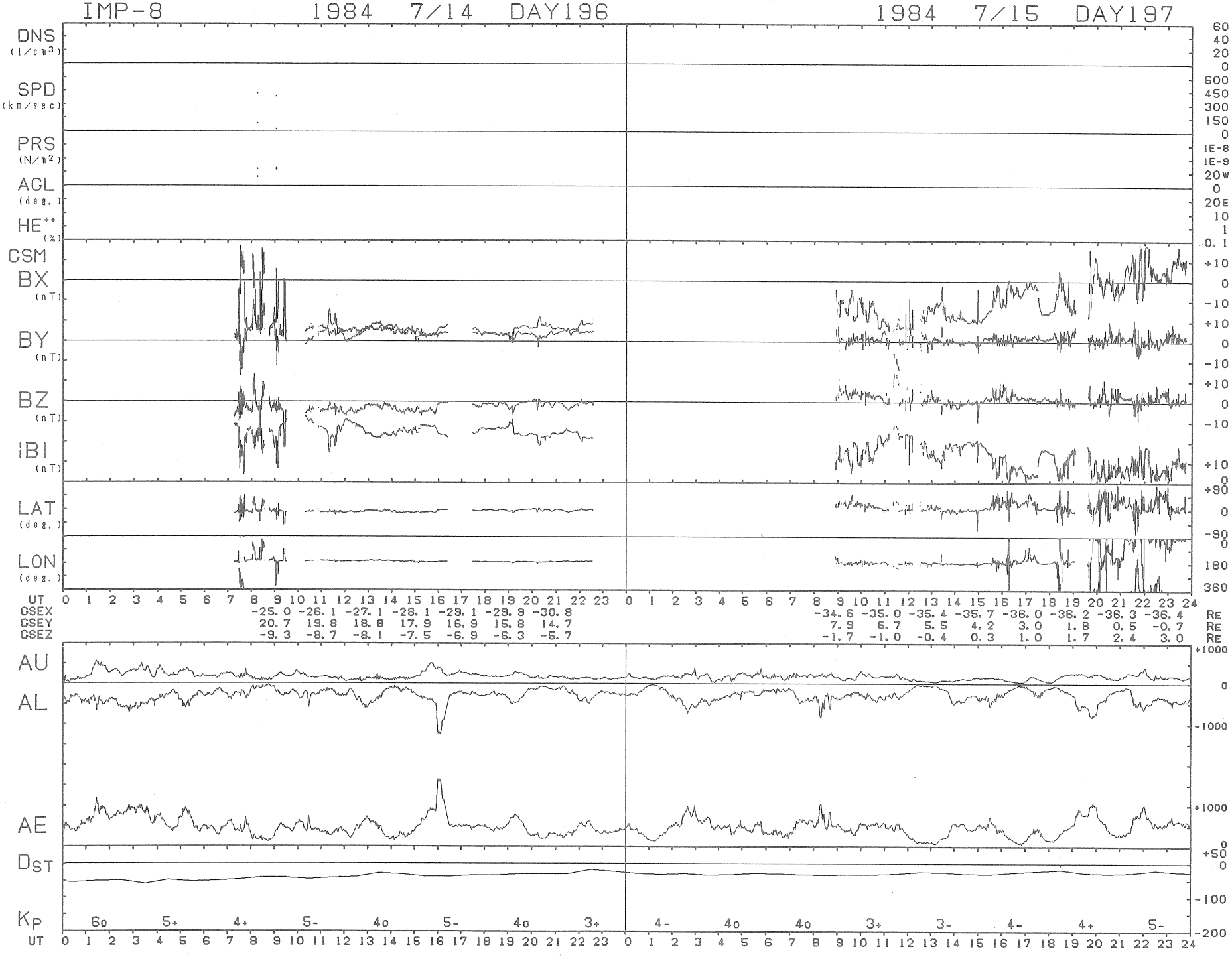

IMP-8
1984 7/ 4 DAY186
1984 7/ 5 DAY187
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.0 -32.4 -31.8 -31.1 -30.4 -29.6 -28.8 -28.0 -24.3 -23.4 -22.3 -21.3 RE
GSEY -17.2 -18.3 -19.3 -20.3 -21.3 -22.2 -23.1 -24.0 -27.3 -28.0 -28.7 -29.4 RE
GSEZ 8.0 8.6 9.1 9.7 10.3 10.8 11.3 11.8 13.7 14.1 14.5 14.9 RE
AU
AL
AE
DST
KP 2- 2+ 3o 1+ 2o 2o 4- 4- 4- 3o 3+ 2o 2- 2+ 2+ 2o
UT

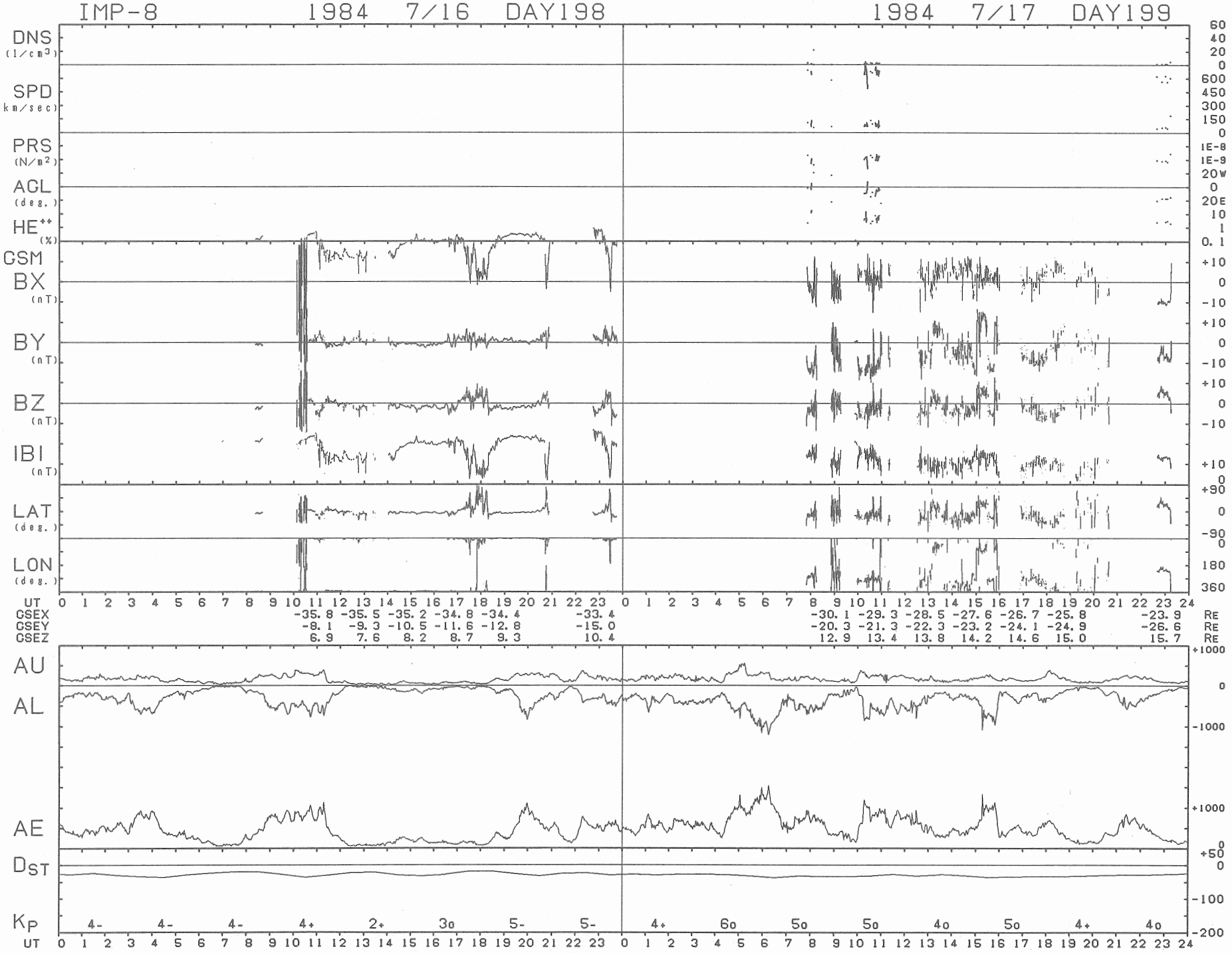

IMP-8
1984 7/ 6 DAY188
1984 7/ 7 DAY189
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.5 -8.3 -7.0 -5.7 -4.4 0.8 11.0 14.7 RE
GSEY -33.9 -34.1 -34.3 -34.5 -34.6 -34.6 -32.6 -31.1 RE
GSEZ 17.6 17.7 17.8 17.9 18.0 18.1 17.0 16.2 RE
AU
AL
AE
DST
KP
2+ 3o 2- 1+ 2+ 2- 3- 3+ 2- 2- 2- 1+ 1+ 2- 3o 2+
UT

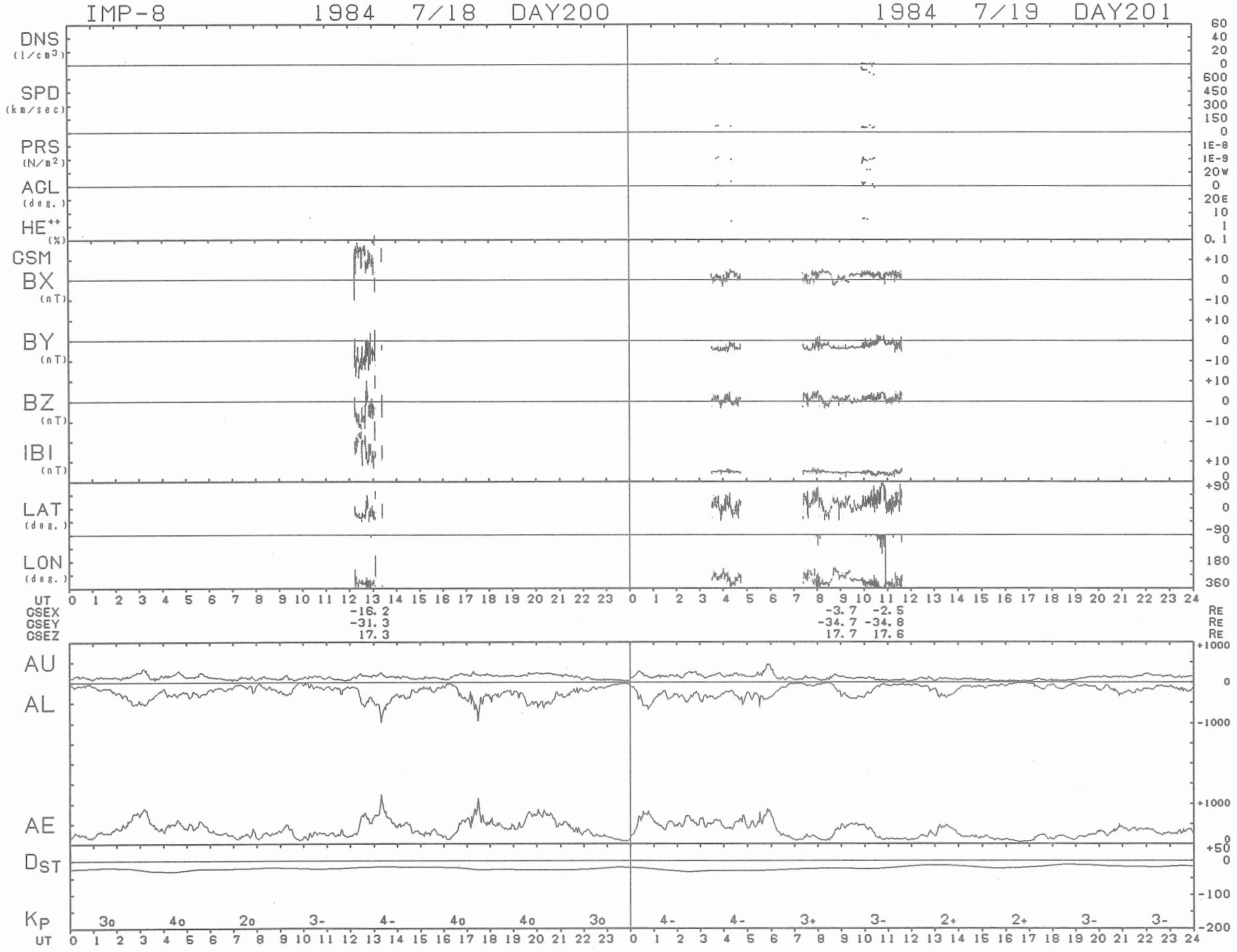

IMP-8 1984 7/ 8 DAY190
1984 7/ 9 DAY191
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.3 20.4 21.4 22.4 23.4 24.4 25.3 26.2 27.0 27.8 28.6 29.3 30.0 31.2 31.7 32.1 32.5 32.9 33.2 33.4 33.6 RE
GSEY -28.6 -27.9 -27.1 -26.3 -25.4 -24.5 -23.6 -22.7 -21.7 -20.6 -19.6 -18.5 -17.4 -15.0 -13.8 -12.6 -11.4 -10.1 -8.8 -7.5 -6.2 RE
GSEZ 14.8 14.4 14.0 13.5 13.1 12.6 12.1 11.5 11.0 10.4 9.8 9.2 8.6 7.3 6.7 6.0 5.3 4.6 3.9 3.2 2.5 RE
AU
AL
AE
DST
KP 2- 3- 3o 2o 2+ 3o 2- 2+ 3- 3o 2o 2- 2+ 3- 2o 1+
UT

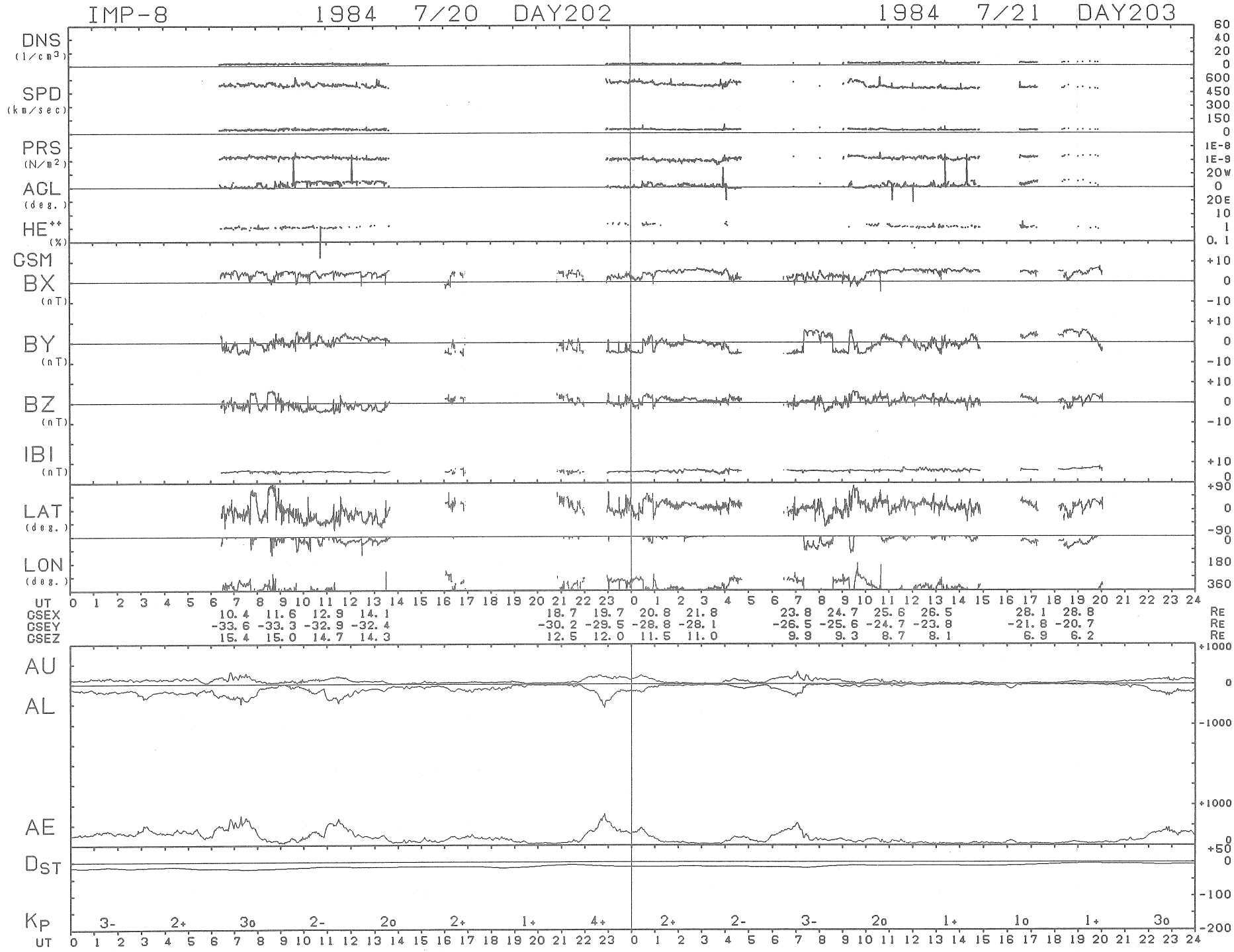

IMP-8
1984 7/10 DAY192
1984 7/11 DAY193
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.7 33.7 33.7 32.9 32.1 31.6 31.0 30.4 29.7 28.9 28.1 27.2 26.2 24.1 23.0 20.5 19.3 RE
GSEY -4.9 -3.5 -2.2 3.2 5.9 7.2 8.5 9.8 11.1 12.3 13.5 14.7 15.9 18.0 19.1 21.0 21.9 RE
GSEZ 1.8 1.1 0.3 -2.6 -4.0 -4.7 -5.4 -6.1 -6.7 -7.4 -8.0 -8.6 -9.2 -10.3 -10.8 -11.8 -12.2 RE
AU
AL
AE
DST
KP 2- 3- 2o 3- 4+ 3+ 3+ 2+ 2- 0+ 0+ 1- 2o 3+ 2+ 5-
UT

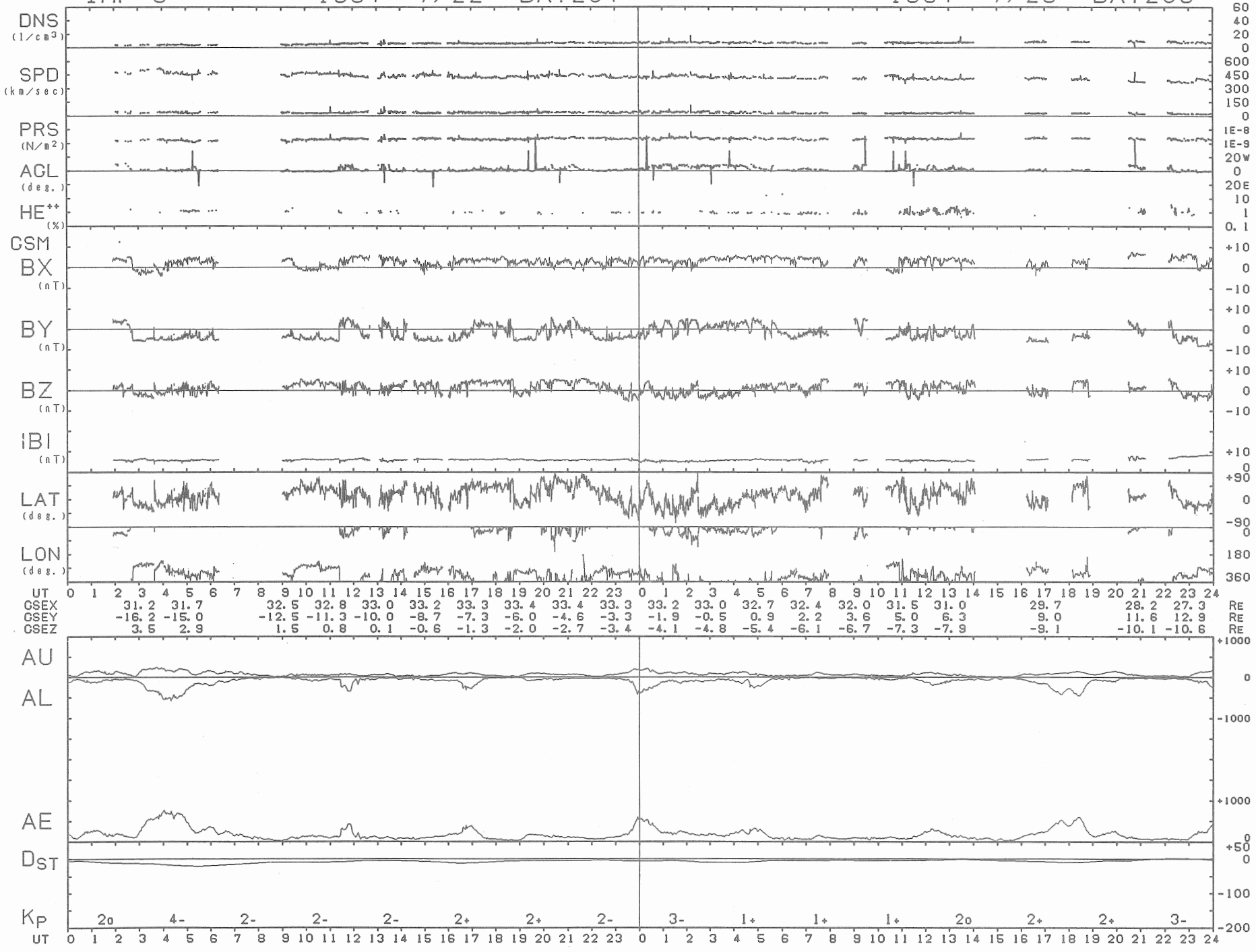

IMP-8
1984 7/12 DAY194
1984 7/13 DAY195
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.5 15.1 13.7 12.2 10.7 9.1 1.1 -0.5 -5.3 -6.9 -8.5 -10.0 -16.0 -17.4 RE
GSEY 23.5 24.3 24.9 25.6 26.1 26.6 28.1 28.2 28.1 28.0 27.7 27.4 25.7 25.1 RE
GSEZ -13.0 -13.3 -13.6 -13.9 -14.1 -14.3 -14.7 -14.7 -14.4 -14.2 -14.0 -13.8 -12.5 -12.1 RE
AU
AL
AE
DST
KP 4+ 4- 3+ 2o 2o 1o 2- 2o 3- 5- 7o 5+ 7o 5+ 5- 4+
UT

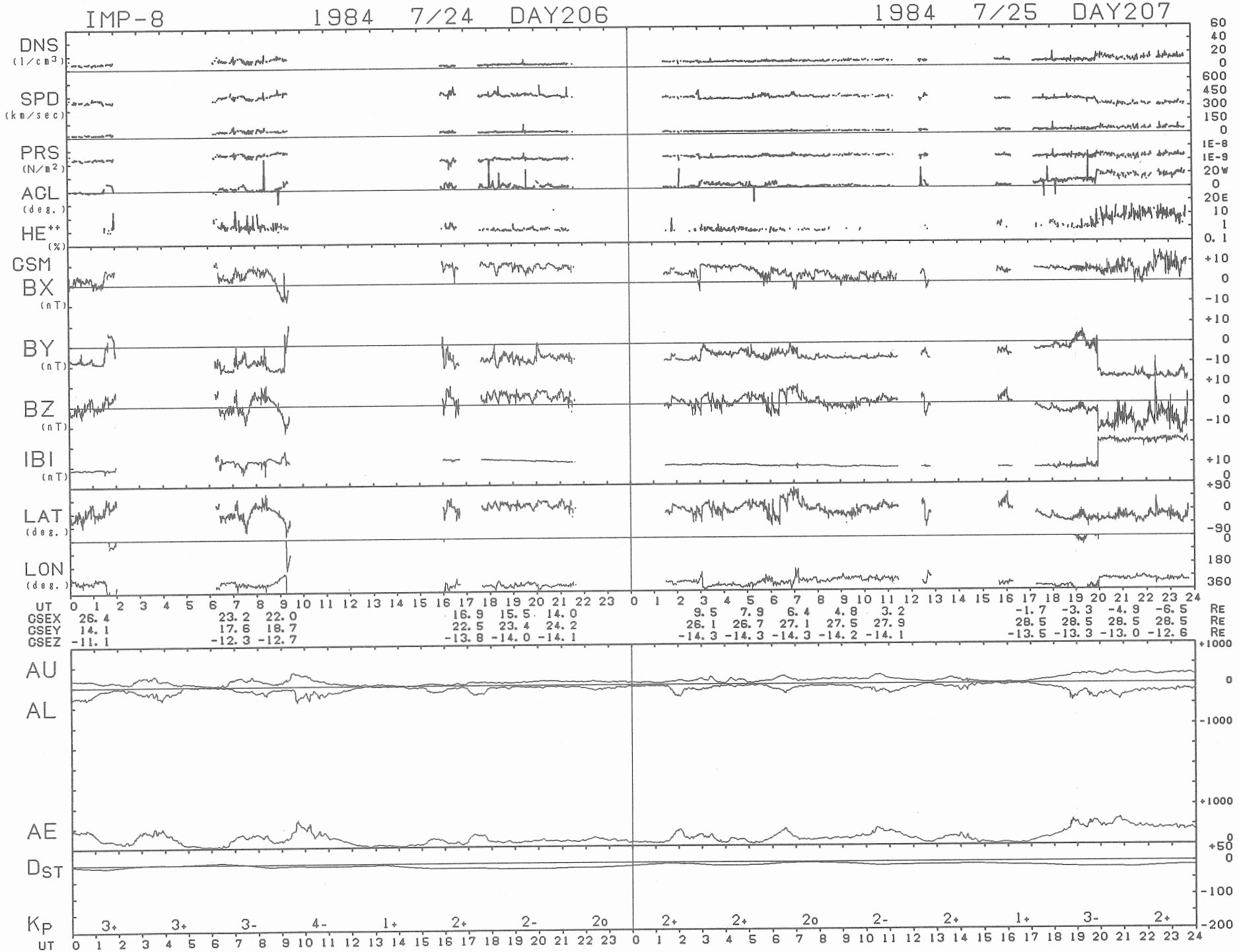

IMP-8
1984 7/14 DAY196
1984 7/15 DAY197
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.0 -26.1 -27.1 -28.1 -29.1 -29.9 -30.8 -34.6 -35.0 -35.4 -35.7 -36.0 -36.2 -36.3 -36.4 RE
GSEY 20.7 19.8 18.8 17.9 16.9 15.8 14.7 7.9 6.7 5.5 4.2 3.0 1.8 0.5 -0.7 RE
GSEZ -9.3 -8.7 -8.1 -7.5 -6.9 -6.3 -5.7 -1.7 -1.0 -0.4 0.3 1.0 1.7 2.4 3.0 RE
AU
AL
AE
DST
KP
6o 5+ 4+ 5- 4o 5- 4o 3+ 4- 4o 4o 3+ 3- 4- 4+ 5-

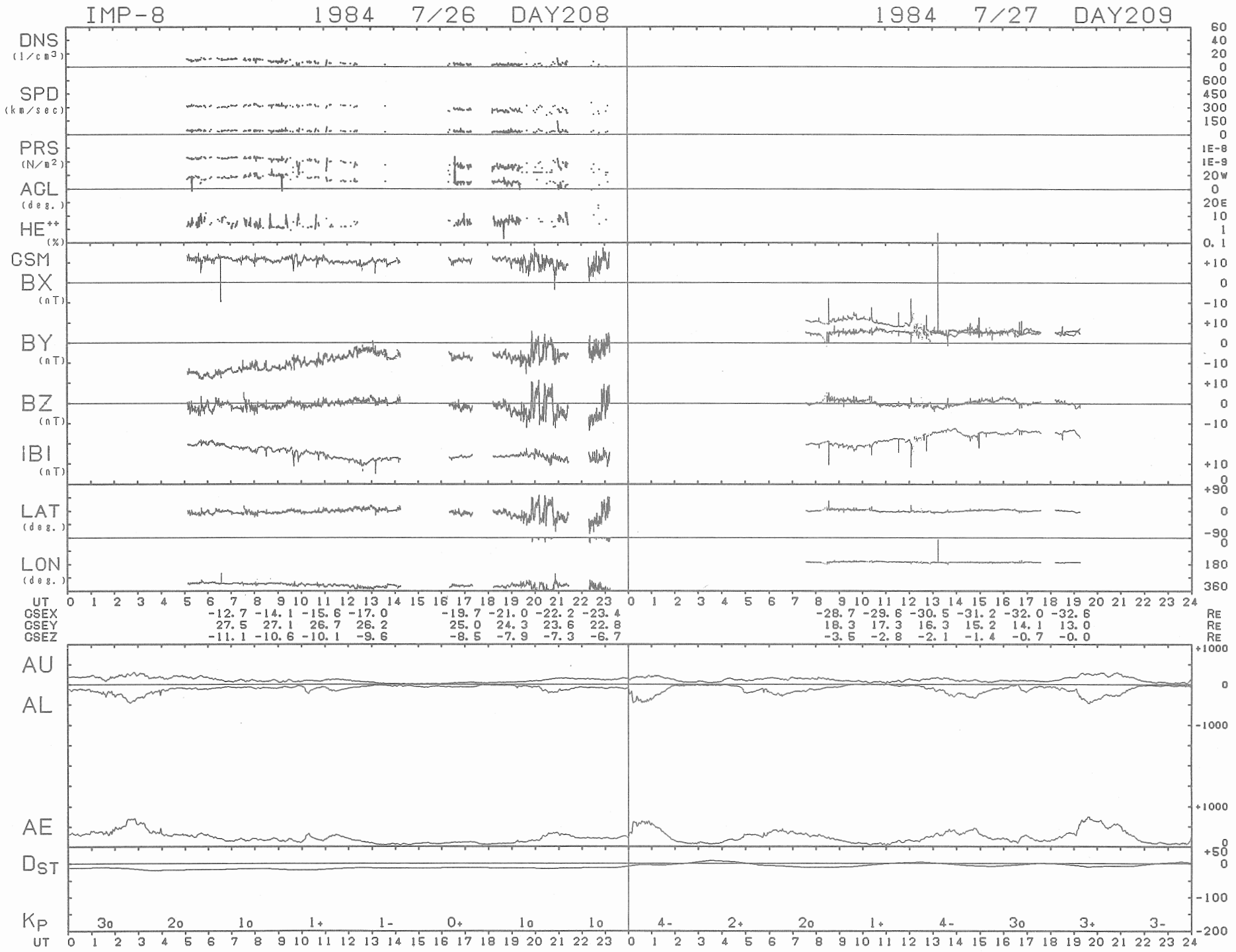

IMP-8 1984 7/16 DAY198
1984 7/17 DAY199
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.8 -35.5 -35.2 -34.8 -34.4 -33.4 -30.1 -29.3 -28.5 -27.6 -26.7 -25.8 -23.9 RE
GSEY -8.1 -9.3 -10.5 -11.6 -12.8 -15.0 -20.3 -21.3 -22.3 -23.2 -24.1 -24.9 -26.6 RE
GSEZ 6.9 7.6 8.2 8.7 9.3 10.4 12.9 13.4 13.8 14.2 14.6 15.0 15.7 RE
AU
AL
AE
DST
KP 4- 4- 4- 4+ 2+ 3o 5- 5- 4+ 6o 5o 5o 4o 5o 4+ 4o
UT

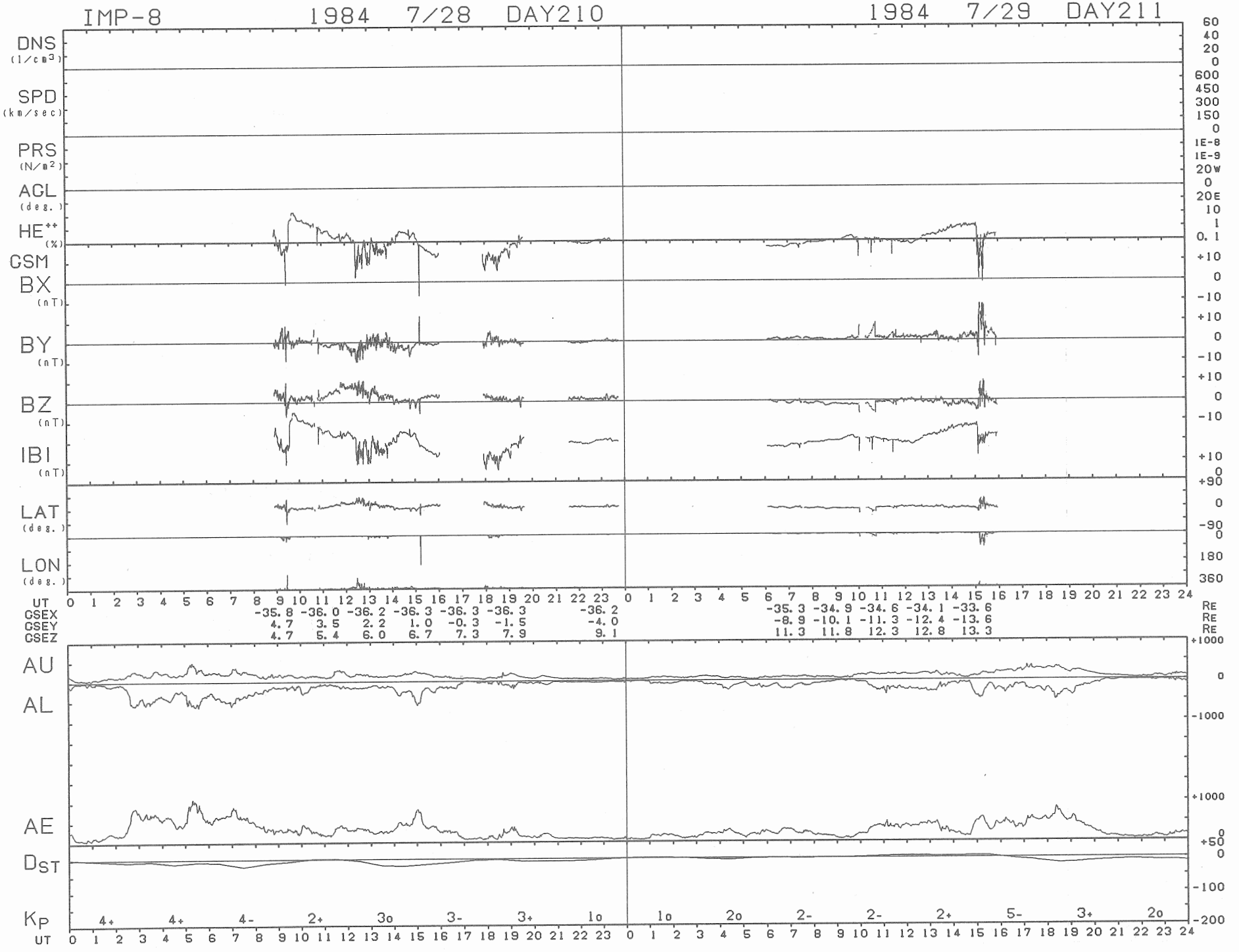

IMP-8
1984 7/18 DAY200
1984 7/19 DAY201
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.2 -3.7 -2.5 Re
GSEY -31.3 -34.7 -34.8 Re
GSEZ 17.3 17.7 17.6 Re
AU
AL
AE
DST
KP
3o 4o 2o 3- 4- 4o 4o 3o 4- 4- 3+ 3- 2+ 2+ 3- 3-

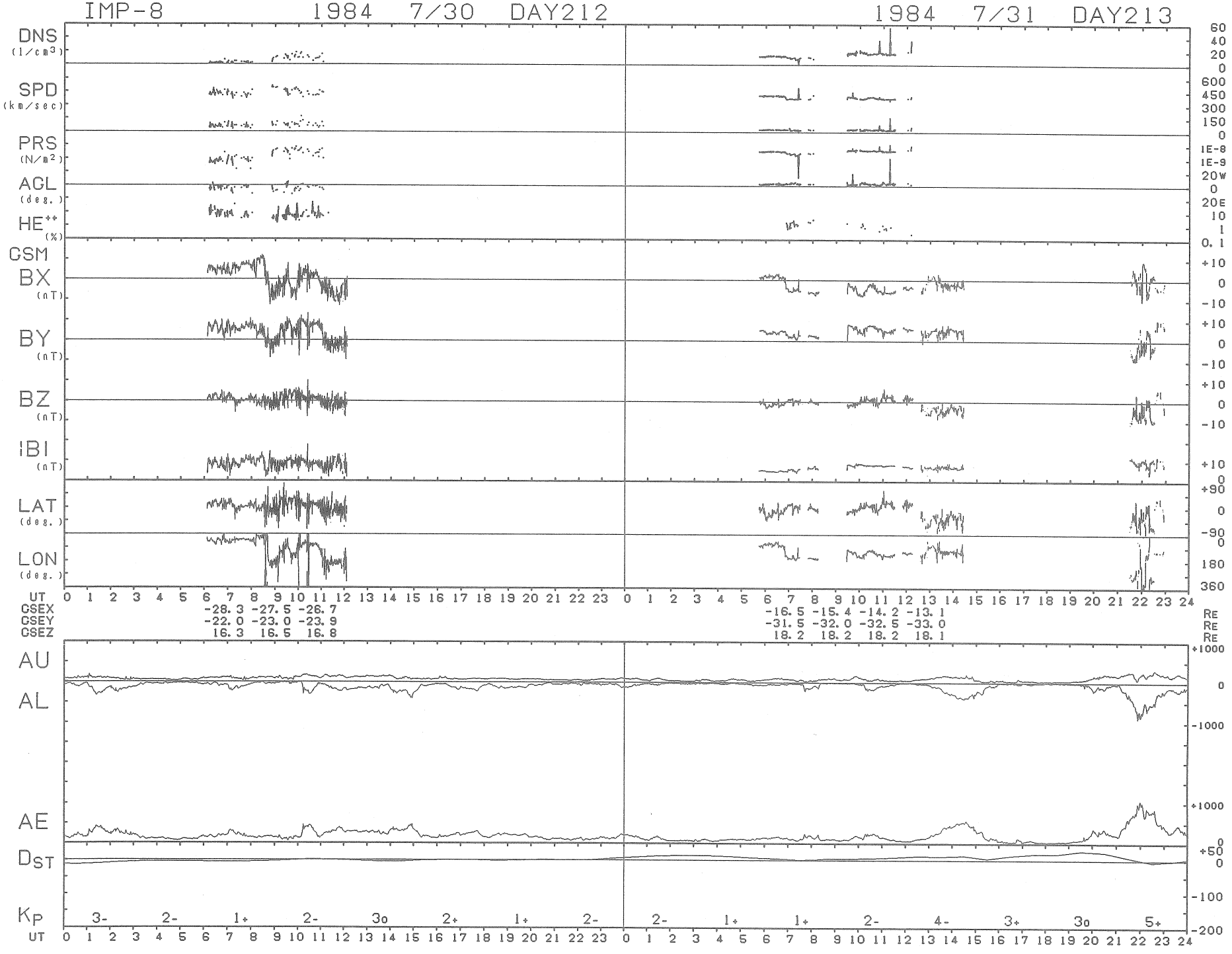

IMP-8
1984 7/20 DAY202
1984 7/21 DAY203
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.4 11.6 12.9 14.1 18.7 19.7 20.8 21.8 23.8 24.7 25.6 26.5 28.1 28.8 RE
GSEY -33.6 -33.3 -32.9 -32.4 -30.2 -29.5 -28.8 -28.1 -26.5 -25.6 -24.7 -23.8 -21.8 -20.7 RE
GSEZ 15.4 15.0 14.7 14.3 12.5 12.0 11.5 11.0 9.9 9.3 8.7 8.1 6.9 6.2 RE
AU
AL
AE
DST
KP 3- 2+ 3o 2- 2o 2+ 1+ 4+ 2+ 2- 3- 2o 1+ 1o 1+ 3o
UT

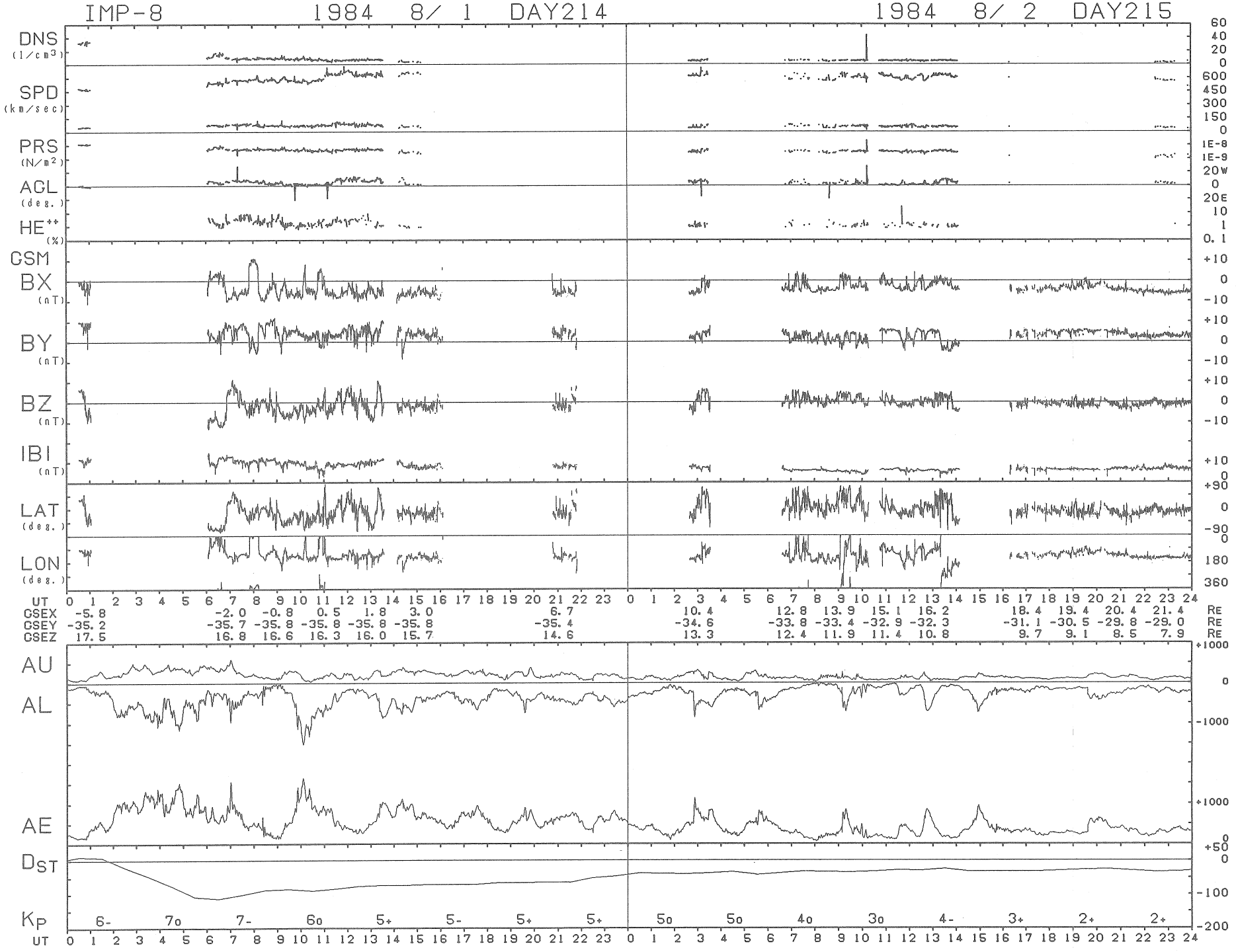

IMP-8 1984 7/22 DAY204 1984 7/23 DAY205
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.2 31.7 32.5 32.8 33.0 33.2 33.3 33.4 33.4 33.3 33.2 33.0 32.7 32.4 32.0 31.5 31.0 29.7 28.2 27.3 RE
GSEY -16.2 -15.0 -12.5 -11.3 -10.0 -8.7 -7.3 -6.0 -4.6 -3.3 -1.9 -0.5 0.9 2.2 3.6 5.0 6.3 9.0 11.6 12.9 RE
GSEZ 3.5 2.9 1.5 0.8 0.1 -0.6 -1.3 -2.0 -2.7 -3.4 -4.1 -4.8 -5.4 -6.1 -6.7 -7.3 -7.9 -9.1 -10.1 -10.6 RE
AU
AL
AE
DST
KP 2o 4- 2- 2- 2- 2+ 2+ 2- 3- 1+ 1+ 1+ 2o 2+ 2+ 3-
UT

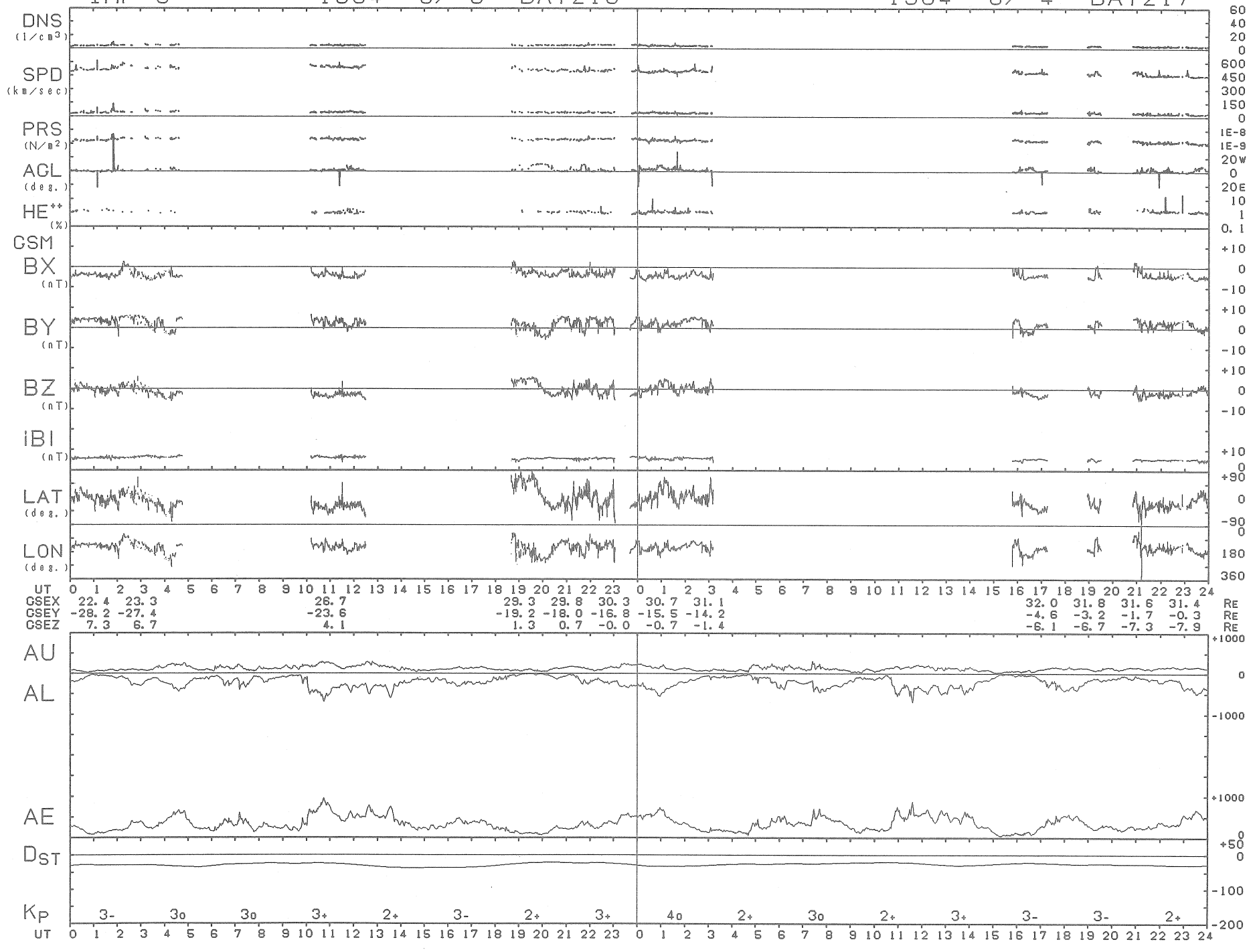

IMP-8
1984 7/24 DAY206
1984 7/25 DAY207
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.4 23.2 22.0 16.9 15.5 14.0 9.5 7.9 6.4 4.8 3.2 -1.7 -3.3 -4.9 -6.5 RE
GSEY 14.1 17.6 18.7 22.5 23.4 24.2 26.1 26.7 27.1 27.5 27.9 28.5 28.5 28.5 28.5 RE
GSEZ -11.1 -12.3 -12.7 -13.8 -14.0 -14.1 -14.3 -14.3 -14.3 -14.2 -14.1 -13.5 -13.3 -13.0 -12.6 RE
AU
AL
AE
DST
KP 3+ 3+ 3- 4- 1+ 2+ 2- 2o 2+ 2+ 2o 2- 2+ 1+ 3- 2+
UT

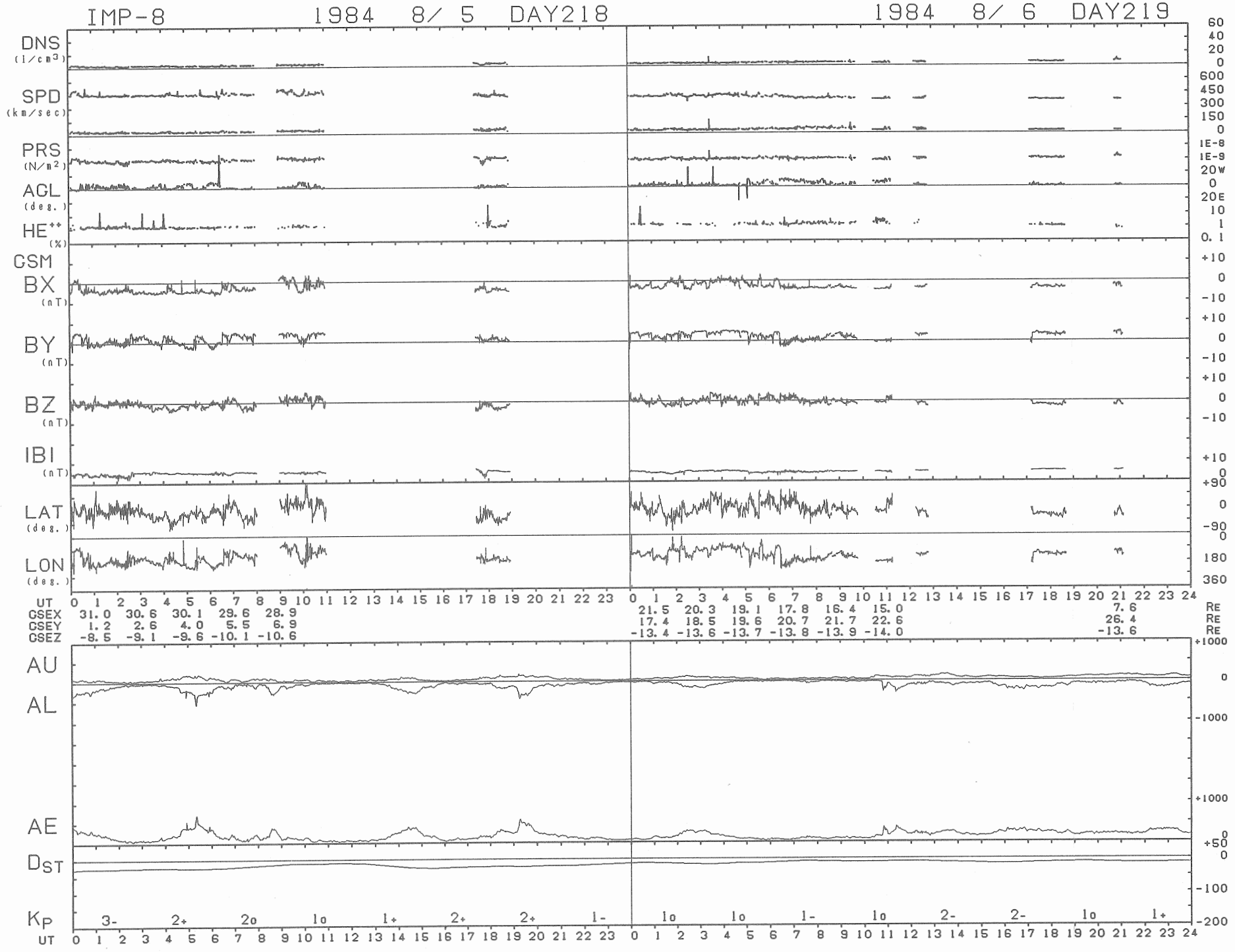

IMP-8 1984 7/26 DAY208
1984 7/27 DAY209
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.7 -14.1 -15.6 -17.0 -19.7 -21.0 -22.2 -23.4 -28.7 -29.6 -30.5 -31.2 -32.0 -32.6 RE
GSEY 27.5 27.1 26.7 26.2 25.0 24.3 23.6 22.8 18.3 17.3 16.3 15.2 14.1 13.0 RE
GSEZ -11.1 -10.6 -10.1 -9.6 -8.5 -7.9 -7.3 -6.7 -3.5 -2.8 -2.1 -1.4 -0.7 -0.0 RE
AU
AL
AE
DST
KP
3o 2o 1o 1+ 1- 0+ 1o 1o 4- 2+ 2o 1+ 4- 3o 3+ 3-
UT

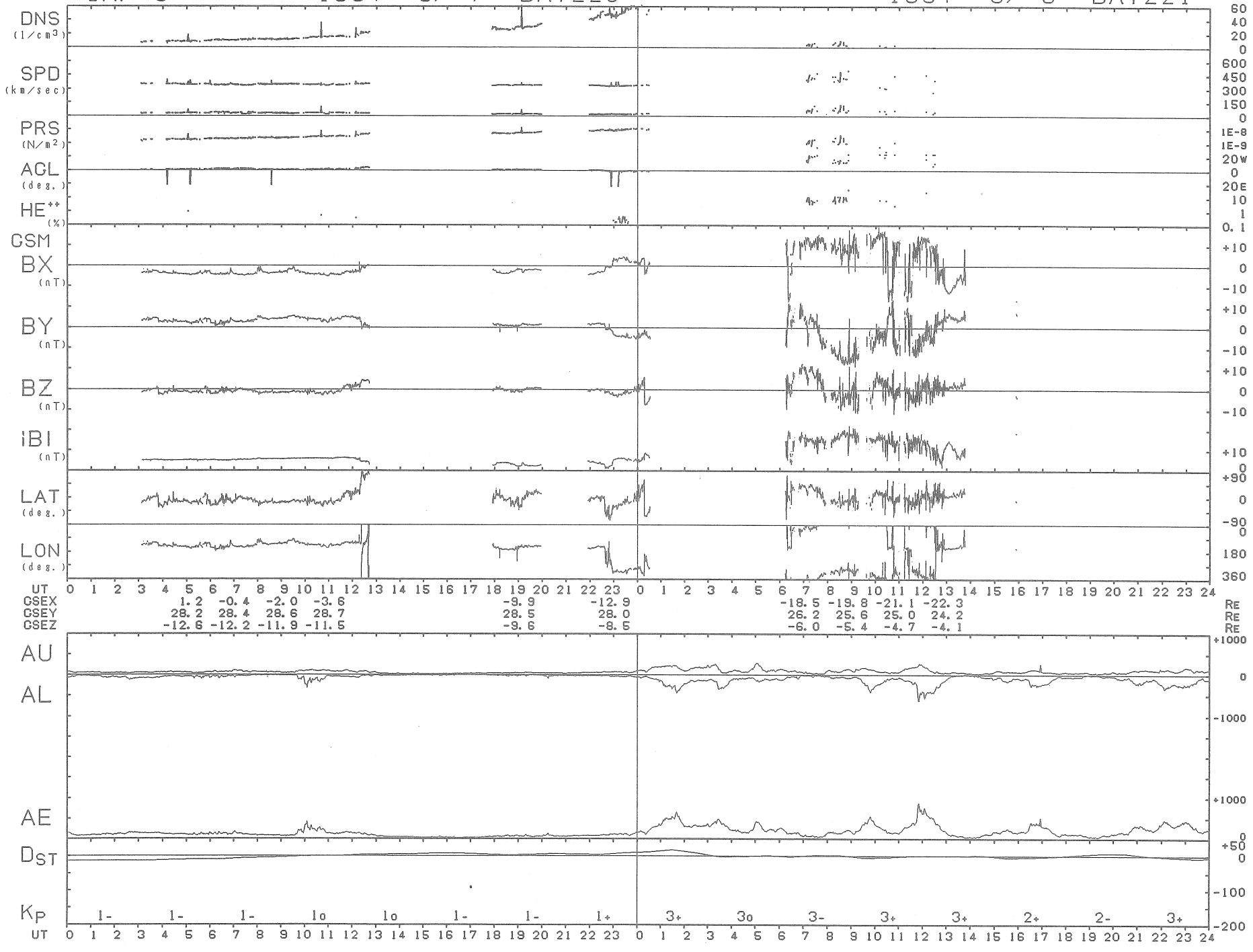

IMP-8
1984 7/28 DAY210
1984 7/29 DAY211
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.8 -36.0 -36.2 -36.3 -36.3 -36.3 -36.2 -35.3 -34.9 -34.6 -34.1 -33.6
GSEY 4.7 3.5 2.2 1.0 -0.3 -1.5 -4.0 -8.9 -10.1 -11.3 -12.4 -13.6
GSEZ 4.7 5.4 6.0 6.7 7.3 7.9 9.1 11.3 11.8 12.3 12.8 13.3
RE
AU
AL
AE
DST
KP 4+ 4+ 4- 2+ 3o 3- 3+ 1o 1o 2o 2- 2- 2+ 5- 3+ 2o

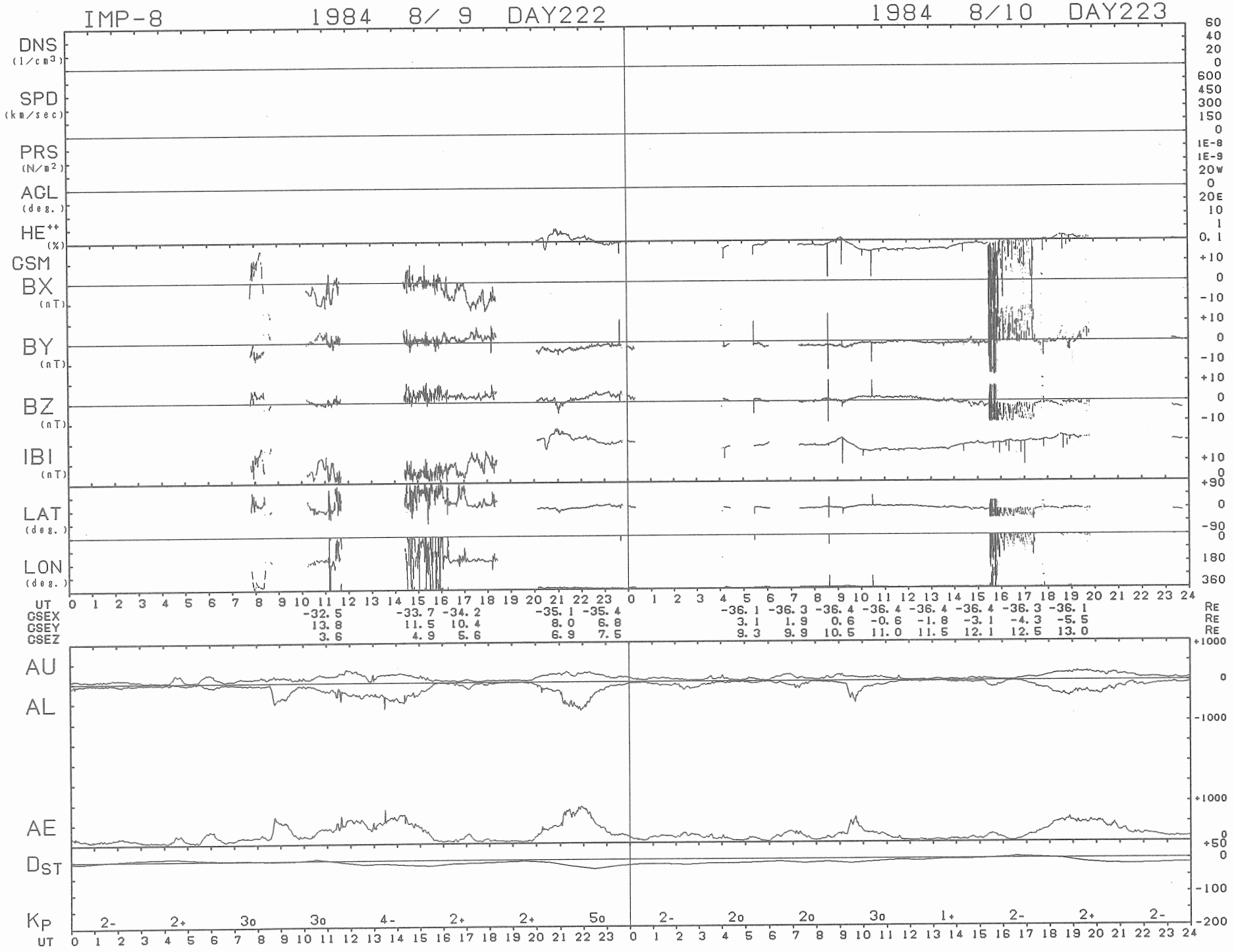

IMP-8 1984 7/30 DAY212
1984 7/31 DAY213
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.3 -27.5 -26.7 -16.5 -15.4 -14.2 -13.1 RE
GSEY -22.0 -23.0 -23.9 -31.5 -32.0 -32.5 -33.0 RE
GSEZ 16.3 16.5 16.8 18.2 18.2 18.2 18.1 RE
AU
AL
AE
DST
KP
3- 2- 1+ 2- 3o 2+ 1+ 2- 2- 1+ 1+ 2- 4- 3+ 3o 5+
UT

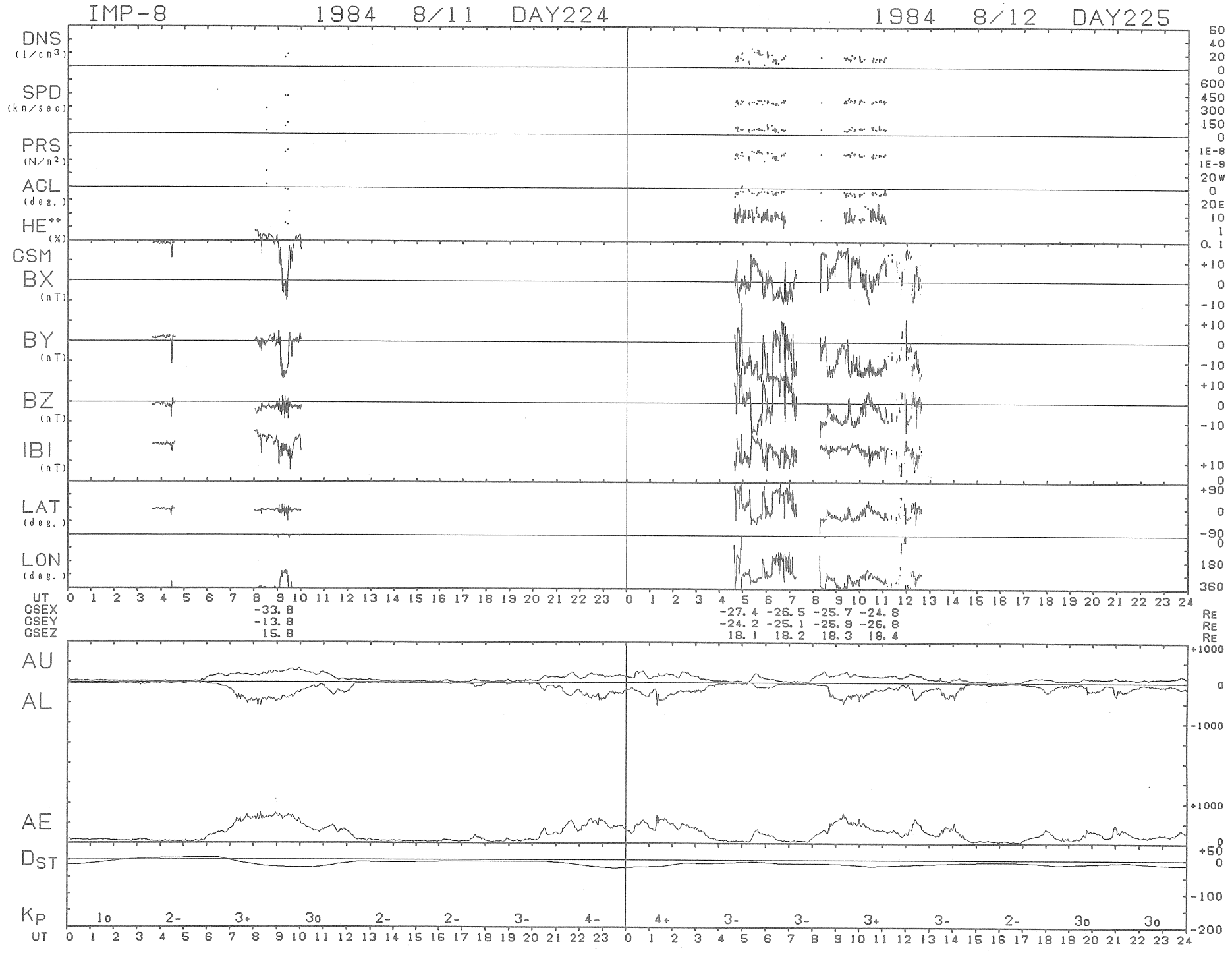

IMP-8 1984 8/ 1 DAY214
1984 8/ 2 DAY215
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.8 -2.0 -0.8 0.5 1.8 3.0 6.7 10.4 12.8 13.9 15.1 16.2 18.4 19.4 20.4 21.4 RE
GSEY -35.2 -35.7 -35.8 -35.8 -35.8 -35.8 -35.4 -34.6 -33.8 -33.4 -32.9 -32.3 -31.1 -30.5 -29.8 -29.0 RE
GSEZ 17.5 16.8 16.6 16.3 16.0 15.7 14.6 13.3 12.4 11.9 11.4 10.8 9.7 9.1 8.5 7.9 RE
AU
AL
AE
DST
KP
6- 7o 7- 6o 5+ 5- 5+ 5+ 5o 5o 4o 3o 4- 3+ 2+ 2+
UT

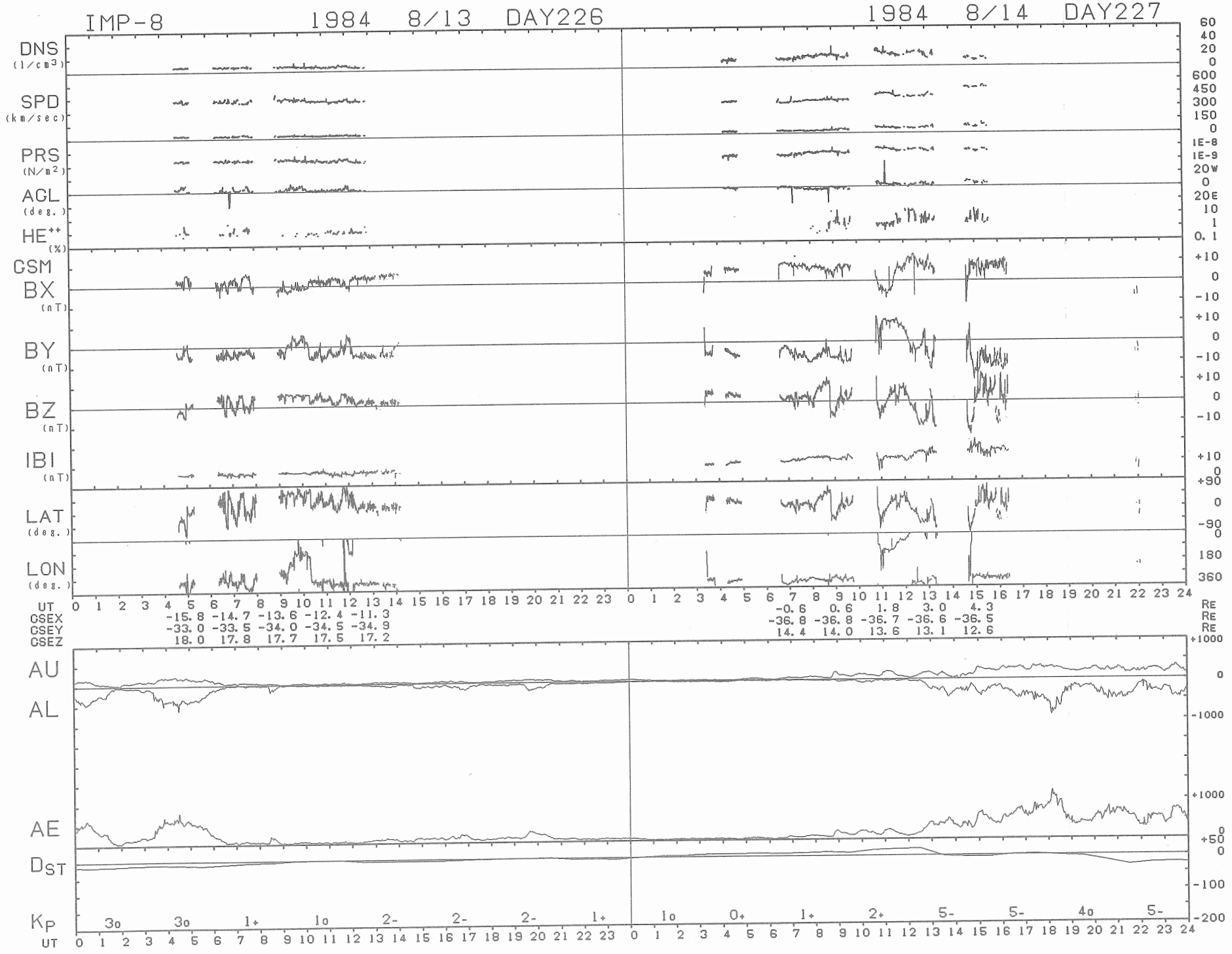

IMP-8 1984 8/ 3 DAY216
1984 8/ 4 DAY217
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.4 23.3 26.7 29.3 29.8 30.3 30.7 31.1 32.0 31.8 31.6 31.4 RE
GSEY -28.2 -27.4 -23.6 -19.2 -18.0 -16.8 -15.5 -14.2 -4.6 -3.2 -1.7 -0.3 RE
GSEZ 7.3 6.7 4.1 1.3 0.7 -0.0 -0.7 -1.4 -6.1 -6.7 -7.3 -7.9 RE
AU
AL
AE
DST
KP 3- 3o 3o 3+ 2+ 3- 2+ 3+ 4o 2+ 3o 2+ 3+ 3- 3- 2+
UT

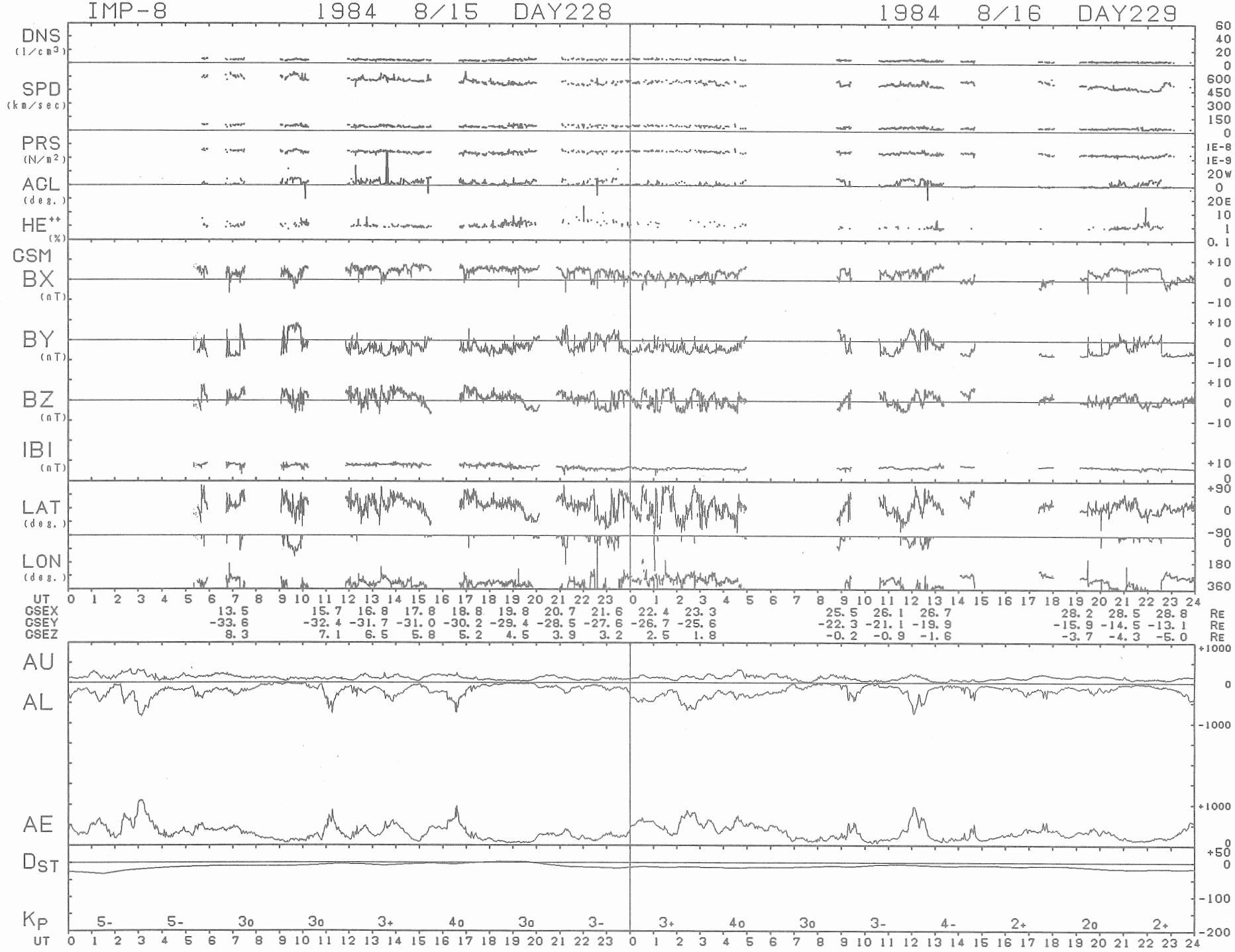

IMP-8
1984 8/ 5 DAY218
1984 8/ 6 DAY219
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.0 30.6 30.1 29.6 28.9 21.5 20.3 19.1 17.8 16.4 15.0 7.6 RE
GSEY 1.2 2.6 4.0 5.5 6.9 17.4 18.5 19.6 20.7 21.7 22.6 26.4 RE
GSEZ -8.5 -9.1 -9.6 -10.1 -10.6 -13.4 -13.6 -13.7 -13.8 -13.9 -14.0 -13.6 RE
AU
AL
AE
DST
KP 3- 2+ 2o 1o 1+ 2+ 2+ 1- 1o 1o 1- 1o 2- 2- 1o 1+
UT

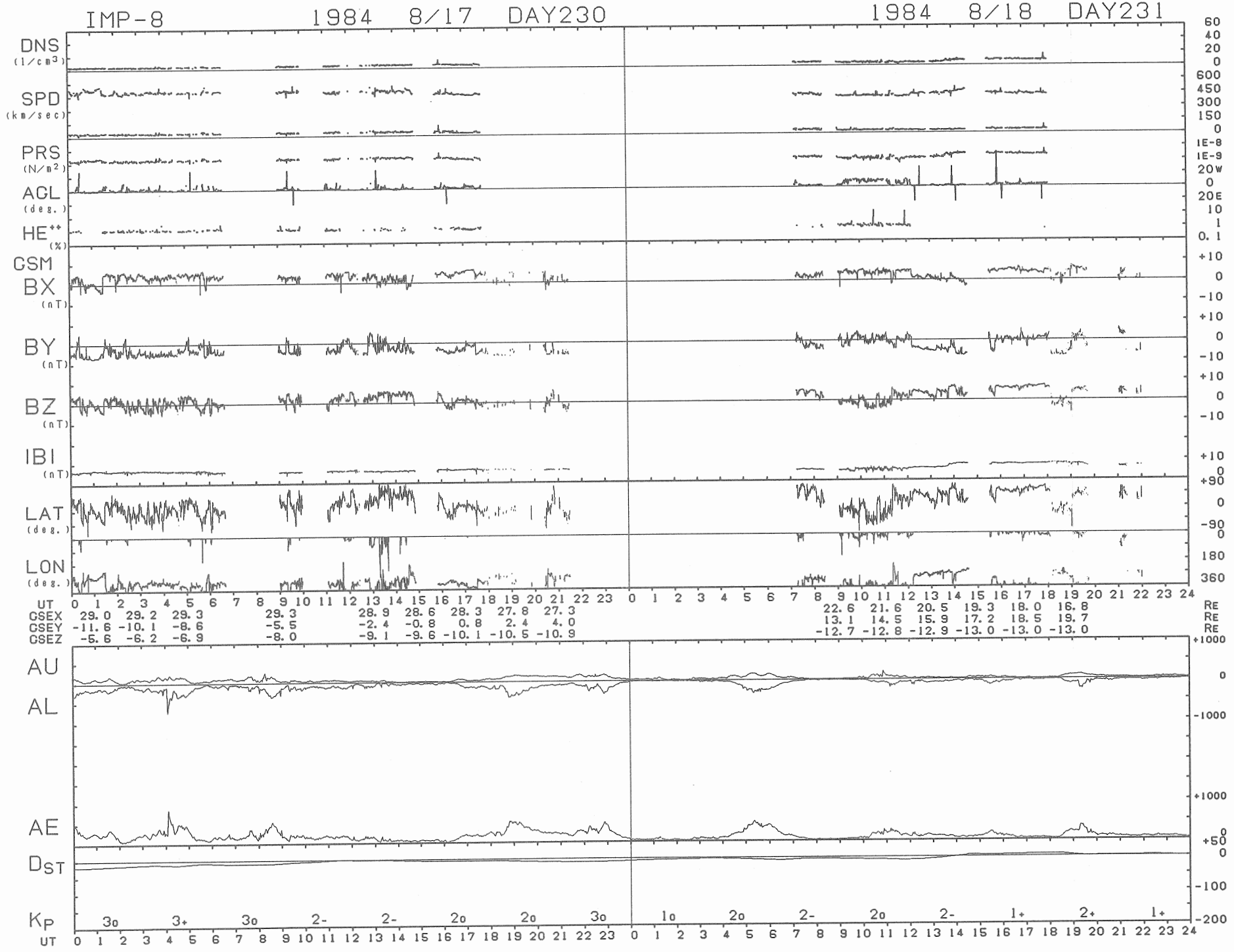

IMP-8
1984 8/ 7 DAY220
1984 8/ 8 DAY221
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.2 -0.4 -2.0 -3.6 -9.9 -12.9 -18.5 -19.8 -21.1 -22.3 RE
GSEY 28.2 28.4 28.6 28.7 28.5 28.0 26.2 25.6 25.0 24.2 RE
GSEZ -12.6 -12.2 -11.9 -11.5 -9.6 -8.5 -6.0 -5.4 -4.7 -4.1 RE
AU
AL
AE
DST
KP 1- 1- 1- 1o 1o 1- 1- 1+ 3+ 3o 3- 3+ 3+ 2+ 2- 3+
UT

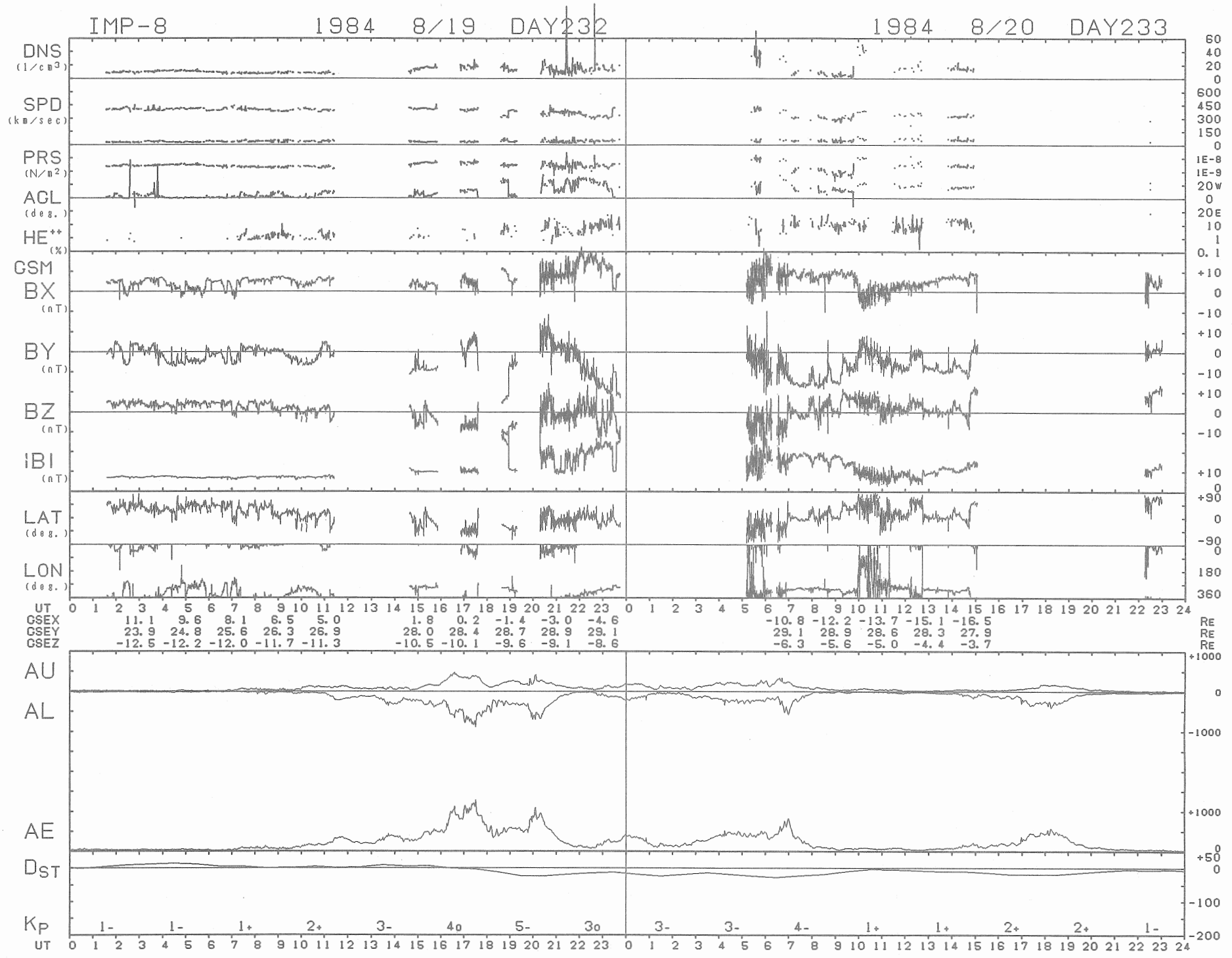

IMP-8 1984 8/ 9 DAY222
1984 8/10 DAY223
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.5 -33.7 -34.2 -35.1 -35.4 -36.1 -36.3 -36.4 -36.4 -36.4 -36.4 -36.4 -36.3 -36.1
GSEY 13.8 11.5 10.4 8.0 6.8 3.1 1.9 0.6 -0.6 -1.8 -3.1 -4.3 -5.5
GSEZ 3.6 4.9 5.6 6.9 7.5 9.3 9.9 10.5 11.0 11.5 12.1 12.5 13.0
RE
AU
AL
AE
DST
KP 2- 2+ 3o 3o 4- 2+ 2+ 5o 2- 2o 2o 3o 1+ 2- 2+ 2-
UT

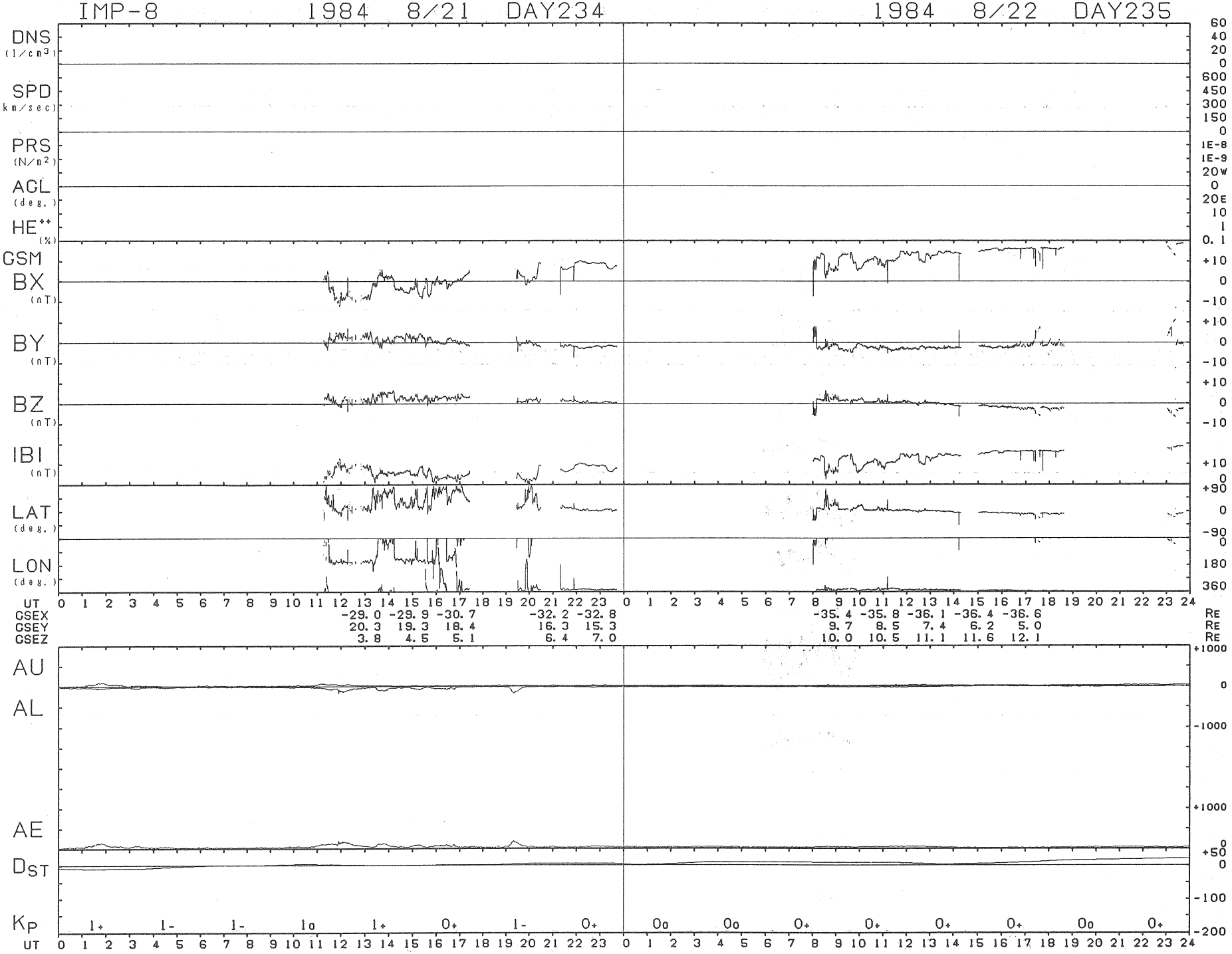

IMP-8
1984 8/11 DAY224
1984 8/12 DAY225
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.8 -27.4 -26.5 -25.7 -24.8 RE
GSEY -13.8 -24.2 -25.1 -25.9 -26.8 RE
GSEZ 15.8 18.1 18.2 18.3 18.4 RE
AU
AL
AE
DST
KP 1o 2- 3+ 3o 2- 2- 3- 4- 4+ 3- 3- 3+ 3- 2- 3o 3o
UT

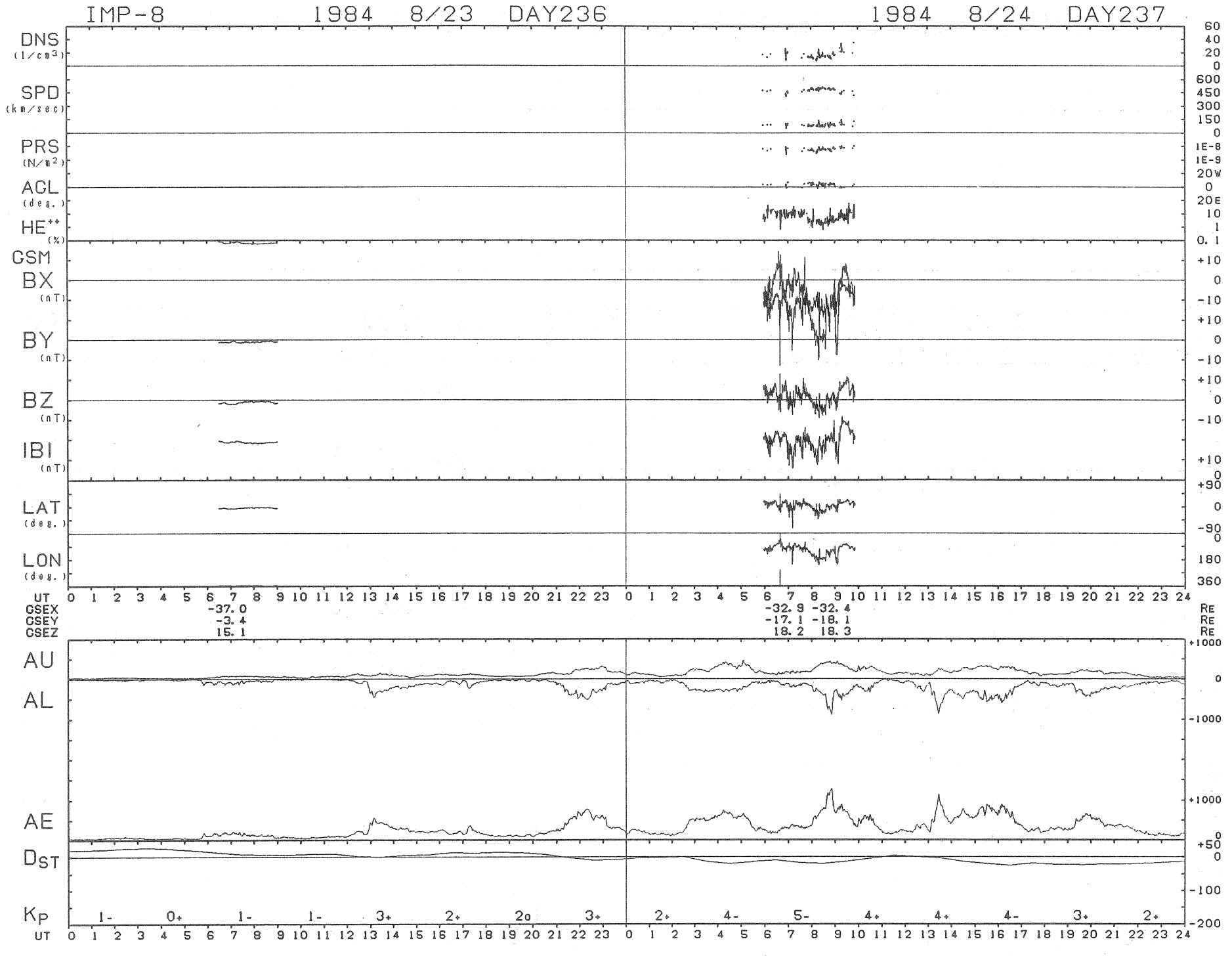

IMP-8
1984 8/13 DAY226
1984 8/14 DAY227
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.8 -14.7 -13.6 -12.4 -11.3 -0.6 0.6 1.8 3.0 4.3 RE
GSEY -33.0 -33.5 -34.0 -34.5 -34.9 -36.8 -36.8 -36.7 -36.6 -36.5 RE
GSEZ 18.0 17.8 17.7 17.5 17.2 14.4 14.0 13.6 13.1 12.6 RE
AU
AL
AE
DST
KP 3o 3o 1+ 1o 2- 2- 2- 1+ 1o 0+ 1+ 2+ 5- 5- 4o 5-
UT

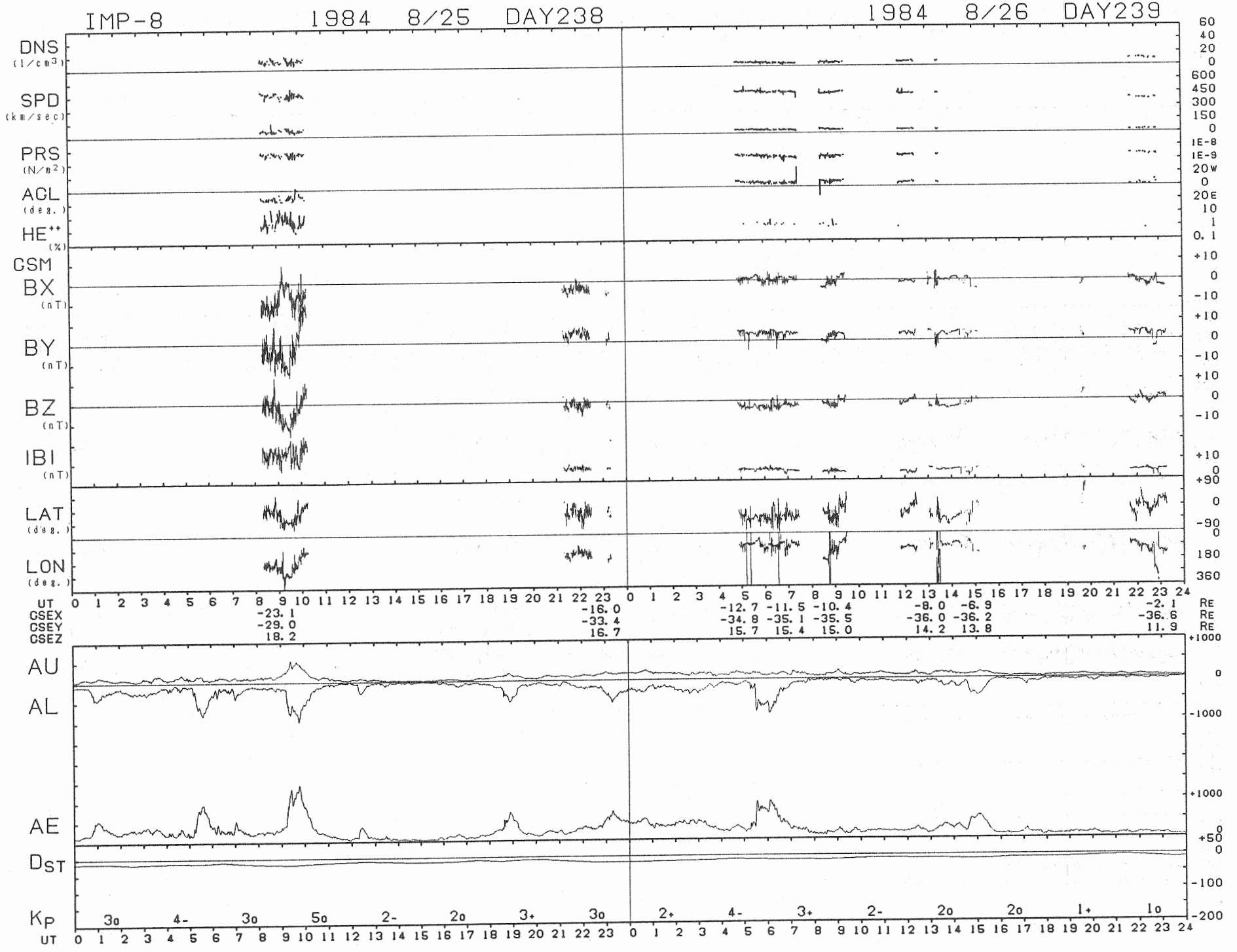

IMP-8
1984 8/15 DAY228
1984 8/16 DAY229
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.5 15.7 16.8 17.8 18.8 19.8 20.7 21.6 22.4 23.3 25.5 26.1 26.7 28.2 28.5 28.8 RE
GSEY -33.6 -32.4 -31.7 -31.0 -30.2 -29.4 -28.5 -27.6 -26.7 -25.6 -22.3 -21.1 -19.9 -15.9 -14.5 -13.1 RE
GSEZ 8.3 7.1 6.5 5.8 5.2 4.5 3.9 3.2 2.5 1.8 -0.2 -0.9 -1.6 -3.7 -4.3 -5.0 RE
AU
AL
AE
DST
KP 5- 5- 3o 3o 3+ 4o 3o 3- 3+ 4o 3o 3- 4- 2+ 2o 2+
UT

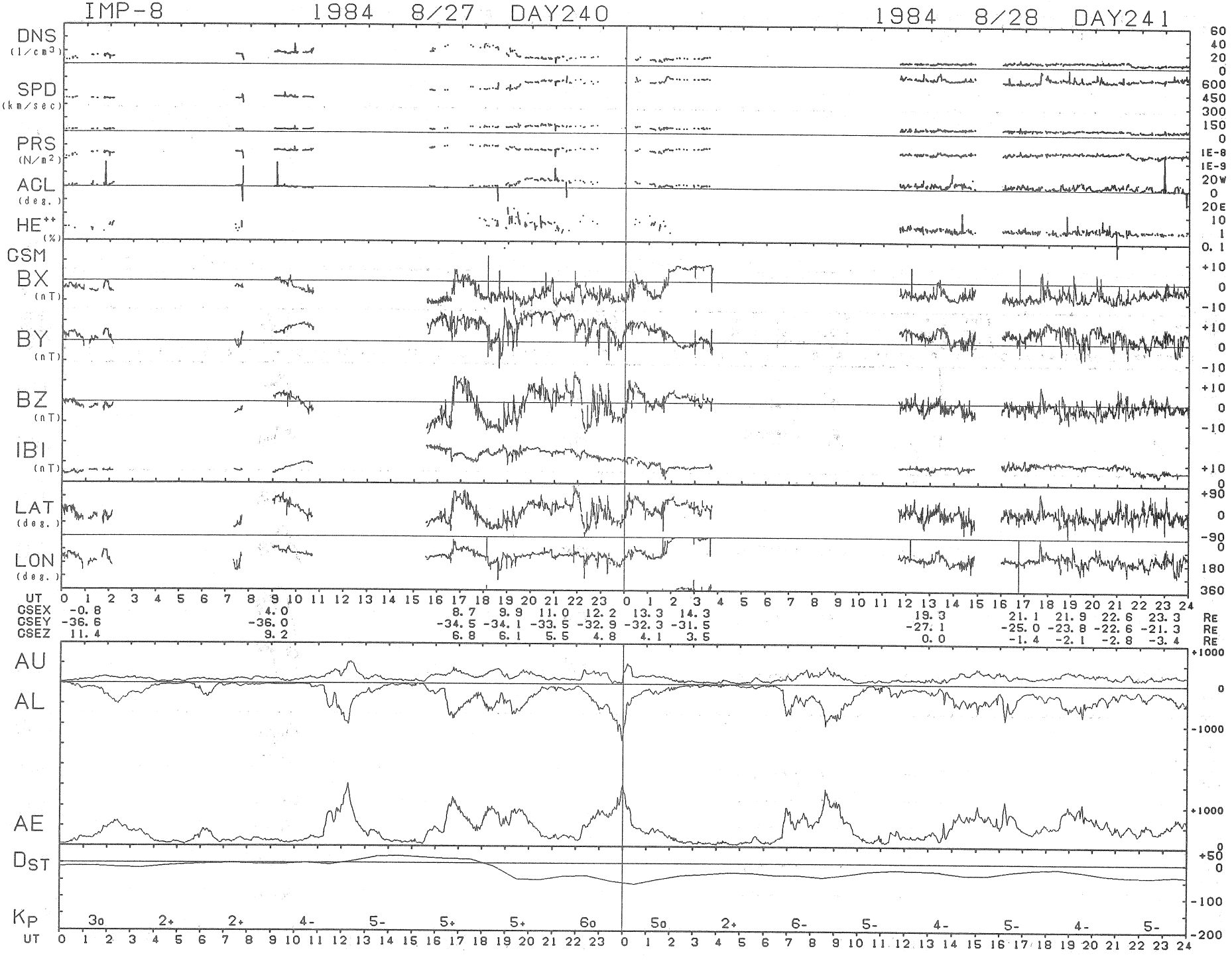

IMP-8
1984 8/17 DAY230
1984 8/18 DAY231
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 29.2 29.3 29.3 28.9 28.6 28.3 27.8 27.3 22.6 21.6 20.5 19.3 18.0 16.8 RE
GSEY -11.6 -10.1 -8.6 -5.5 -2.4 -0.8 0.8 2.4 4.0 13.1 14.5 15.9 17.2 18.5 19.7 RE
GSEZ -5.6 -6.2 -6.9 -8.0 -9.1 -9.6 -10.1 -10.5 -10.9 -12.7 -12.8 -12.9 -13.0 -13.0 -13.0 RE
AU
AL
AE
DST
KP 3o 3+ 3o 2- 2- 2o 2o 3o 1o 2o 2- 2o 2- 1+ 2+ 1+
UT

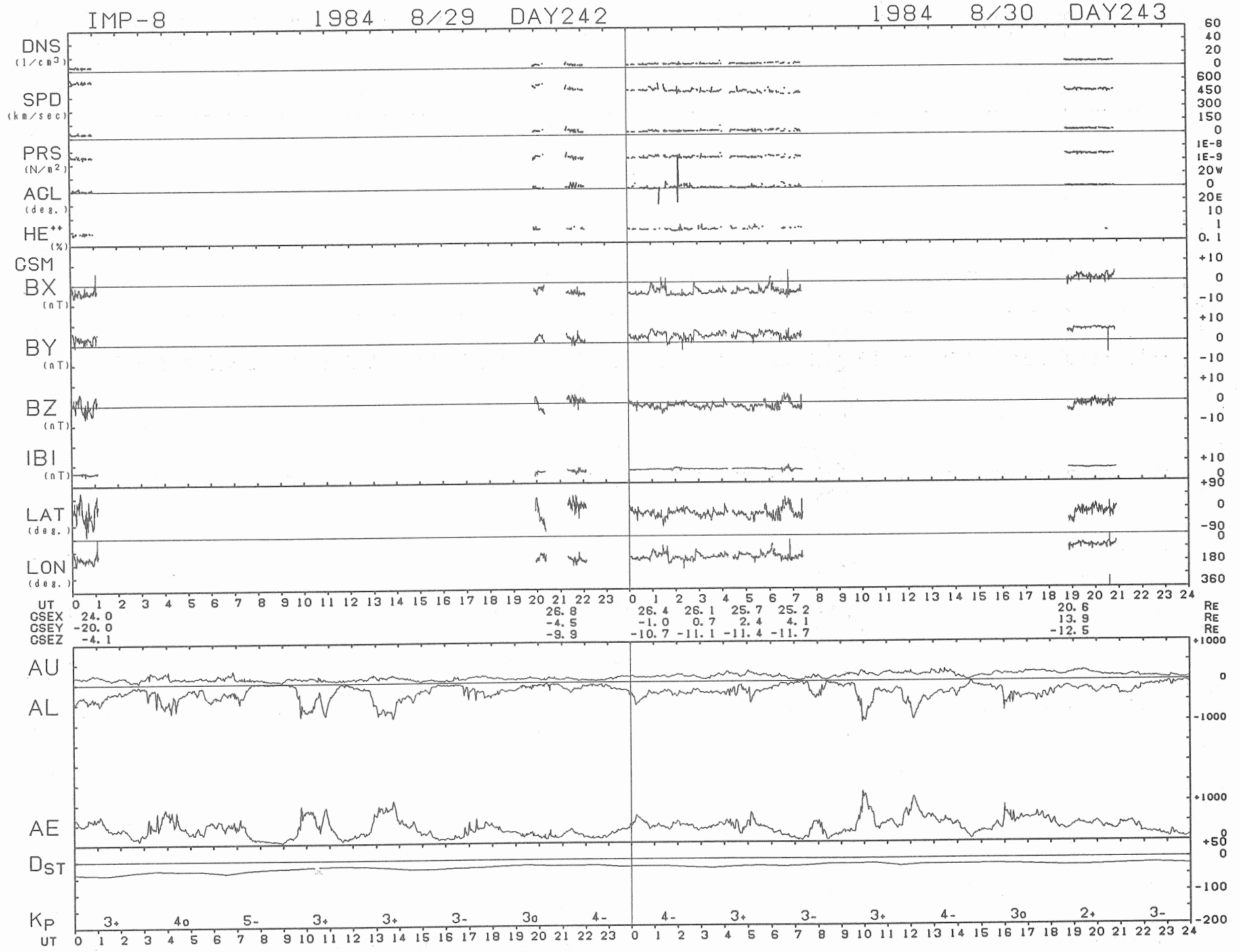

IMP-8 1984 8/19 DAY232
1984 8/20 DAY233
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.1 9.6 8.1 6.5 5.0 1.8 0.2 -1.4 -3.0 -4.6 -10.8 -12.2 -13.7 -15.1 -16.5 RE
GSEY 23.9 24.8 25.6 26.3 26.9 28.0 28.4 28.7 28.9 29.1 29.1 28.9 28.6 28.3 27.9 RE
GSEZ -12.5 -12.2 -12.0 -11.7 -11.3 -10.5 -10.1 -9.6 -9.1 -8.6 -6.3 -5.6 -5.0 -4.4 -3.7 RE
AU
AL
AE
DST
KP 1- 1- 1+ 2+ 3- 4o 5- 3o 3- 3- 4- 1+ 1+ 2+ 2+ 1-
UT

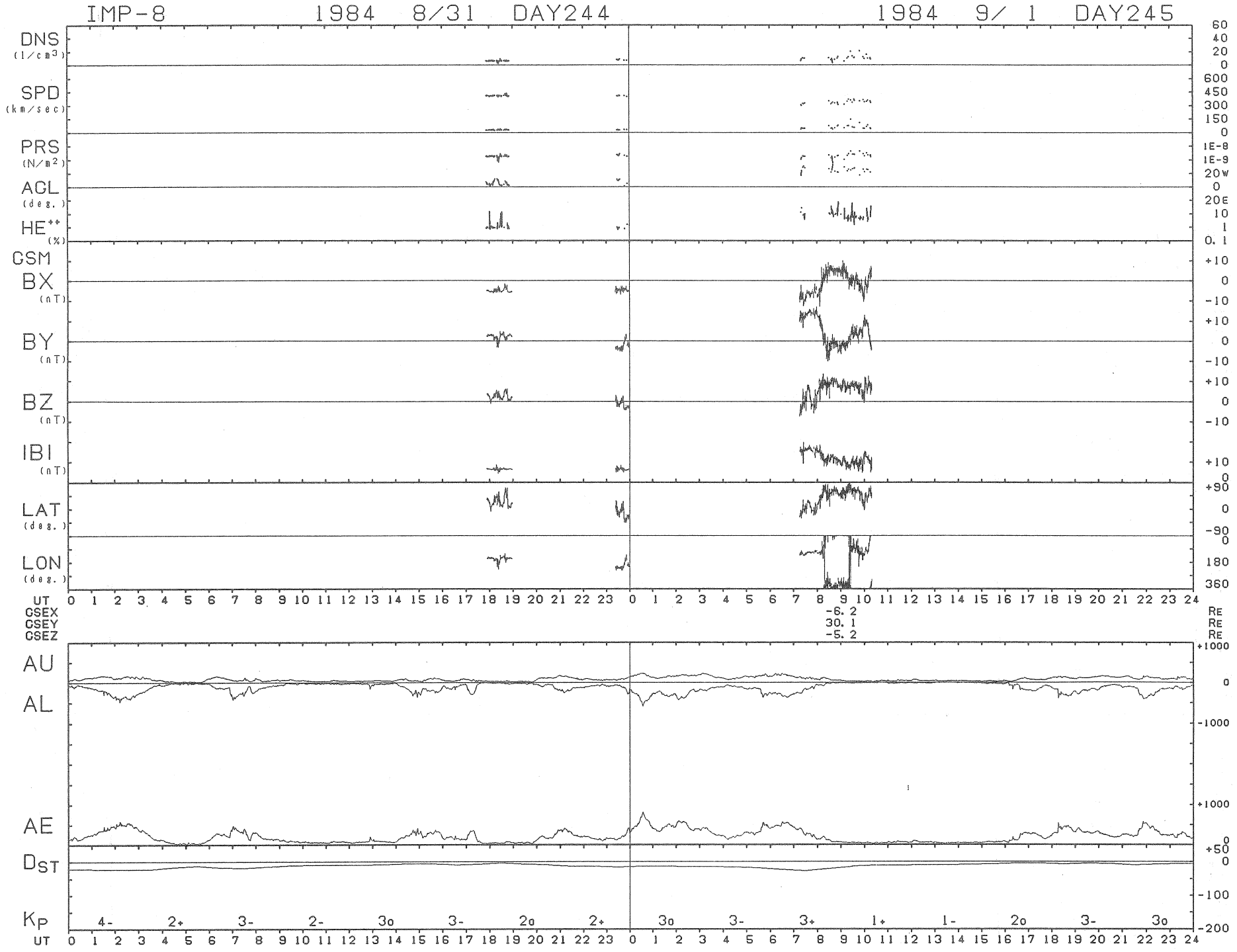

IMP-8 1984 8/21 DAY234
1984 8/22 DAY235
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.0 -29.9 -30.7 -32.2 -32.8 -35.4 -35.8 -36.1 -36.4 -36.6 RE
GSEY 20.3 19.3 18.4 16.3 15.3 9.7 8.5 7.4 6.2 5.0 RE
GSEZ 3.8 4.5 5.1 6.4 7.0 10.0 10.5 11.1 11.6 12.1 RE
AU
AL
AE
DST
KP 1+ 1- 1- 1o 1+ 0+ 1- 0+ 0o 0o 0+ 0+ 0+ 0+ 0o 0+
UT

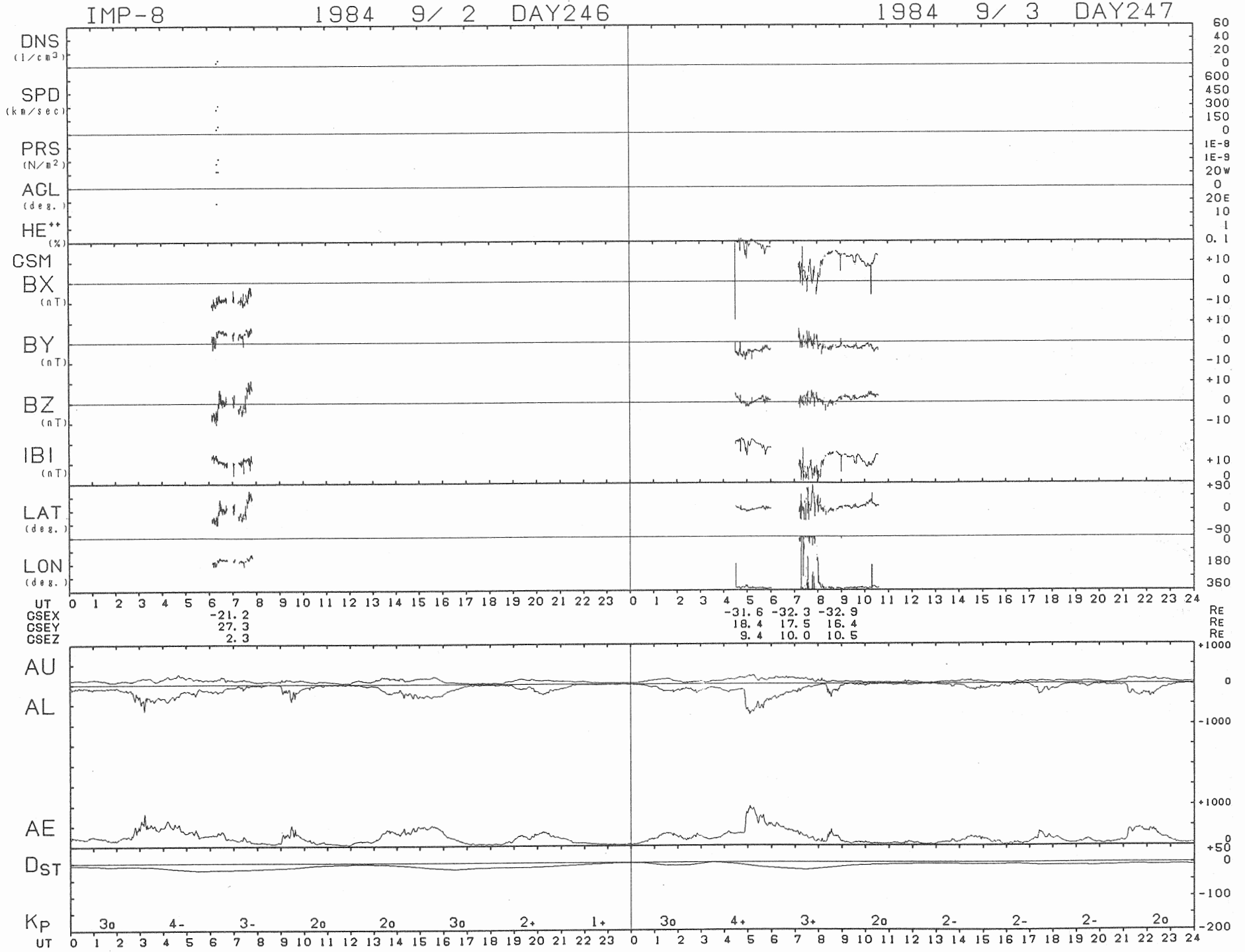

IMP-8
1984 8/23 DAY236
1984 8/24 DAY237
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.0 -32.9 -32.4 RE
GSEY -3.4 -17.1 -18.1 RE
GSEZ 15.1 18.2 18.3 RE
AU
AL
AE
DST
KP 1- 0+ 1- 1- 3+ 2+ 2o 3+ 2+ 4- 5- 4+ 4+ 4- 3+ 2+

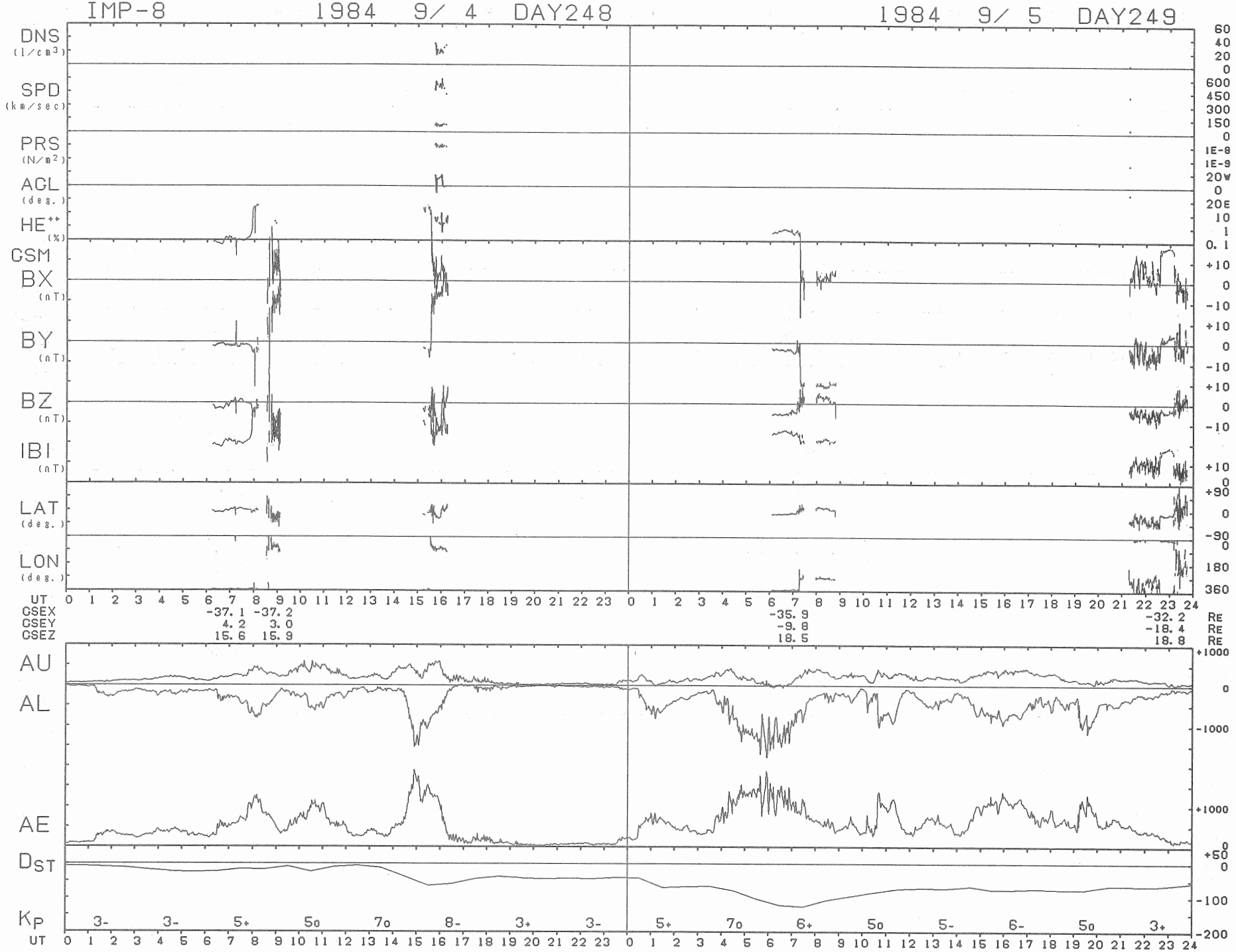

IMP-8 1984 8/25 DAY238
1984 8/26 DAY239
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.1 -16.0 -12.7 -11.5 -10.4 -8.0 -6.9 -2.1 RE
GSEY -29.0 -33.4 -34.8 -35.1 -35.5 -36.0 -36.2 -36.6 RE
GSEZ 18.2 16.7 15.7 15.4 15.0 14.2 13.8 11.9 RE
AU
AL
AE
DST
KP 3o 4- 3o 5o 2- 2o 3+ 3o 2+ 4- 3+ 2- 2o 2o 1+ 1o
UT

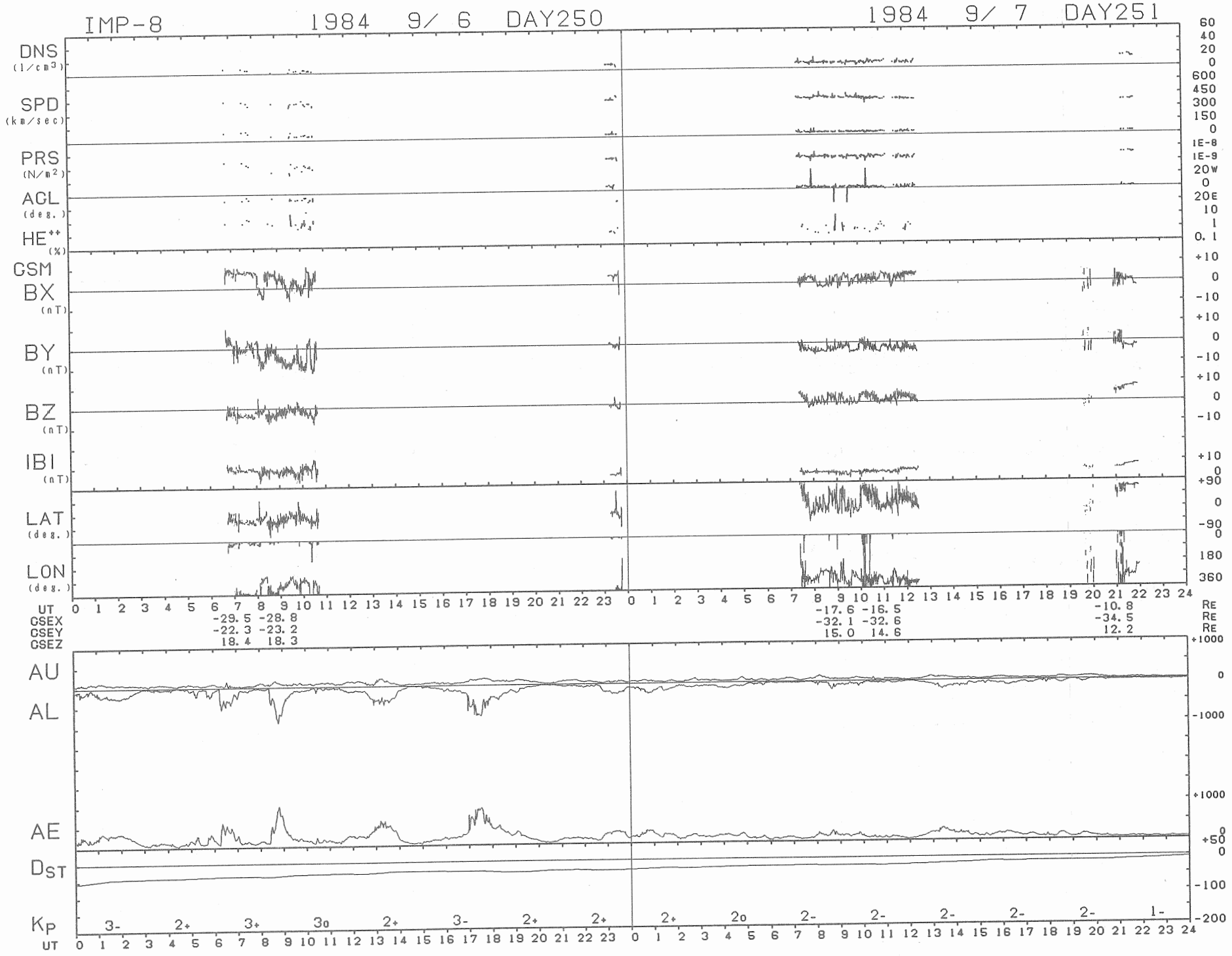

IMP-8
1984 8/27 DAY240
1984 8/28 DAY241
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.8 4.0 8.7 9.9 11.0 12.2 13.3 14.3 19.3 21.1 21.9 22.6 23.3 RE
GSEY -36.6 -36.0 -34.5 -34.1 -33.5 -32.9 -32.3 -31.5 -27.1 -25.0 -23.8 -22.6 -21.3 RE
GSEZ 11.4 9.2 6.8 6.1 5.5 4.8 4.1 3.5 0.0 -1.4 -2.1 -2.8 -3.4 RE
AU
AL
AE
DST
KP
3o 2+ 2+ 4- 5- 5+ 5+ 6o 5o 2+ 6- 5- 4- 5- 4- 5-
UT

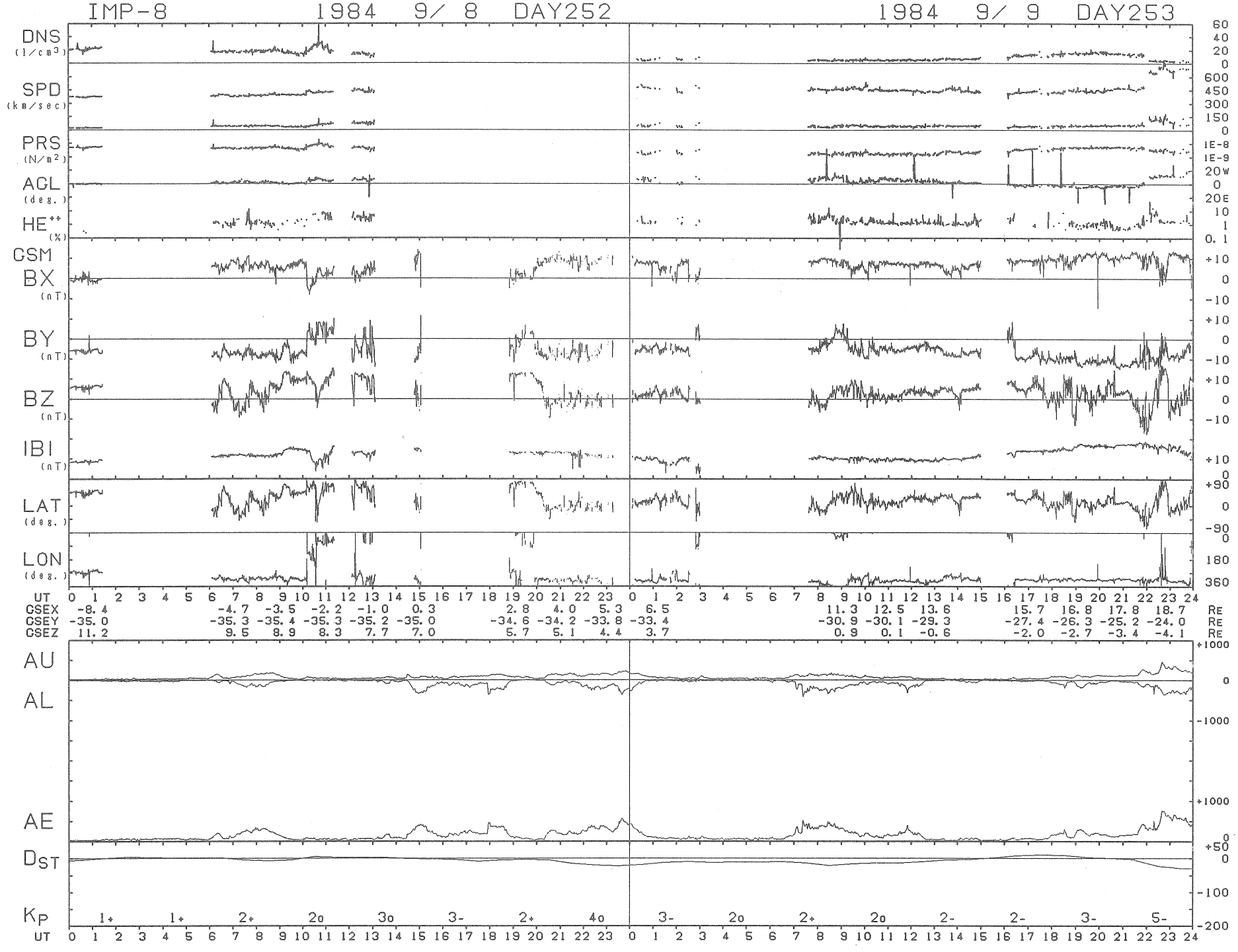

IMP-8
1984 8/29 DAY242
1984 8/30 DAY243
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 24.0 26.8 26.4 26.1 25.7 25.2 20.6 RE
CSEY -20.0 -4.5 -1.0 0.7 2.4 4.1 13.9 RE
CSEZ -4.1 -9.9 -10.7 -11.1 -11.4 -11.7 -12.5 RE
AU
AL
AE
DST
KP 3+ 4o 5- 3+ 3+ 3- 3o 4- 4- 3+ 3- 3+ 4- 3o 2+ 3-
UT

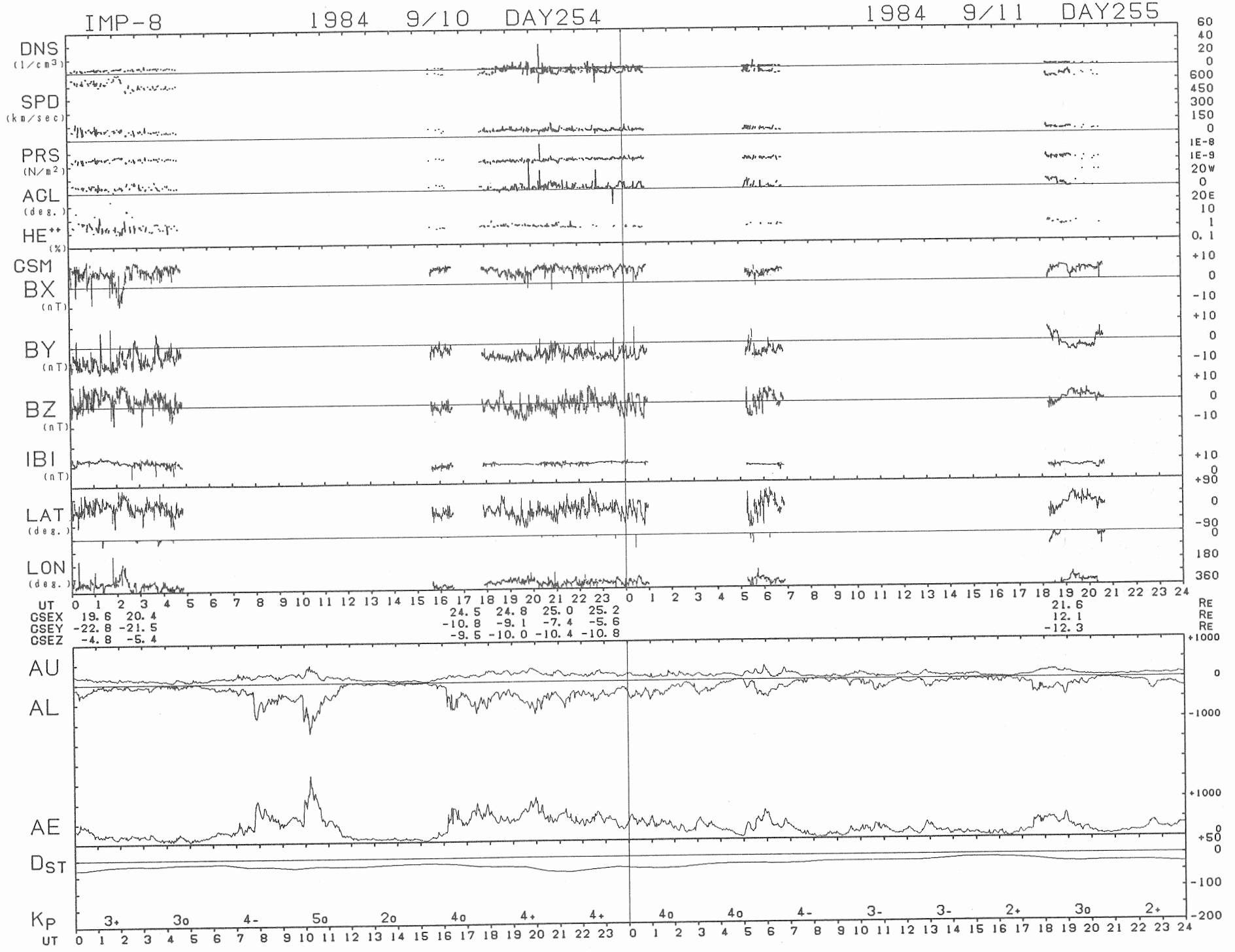

IMP-8
1984 8/31 DAY244
1984 9/ 1 DAY245
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -6.2 Re
CSEY 30.1 Re
CSEZ -5.2 Re
AU
AL
AE
DST
KP
4- 2+ 3- 2- 3o 3- 2o 2+ 3o 3- 3+ 1+ 1- 2o 3- 3o

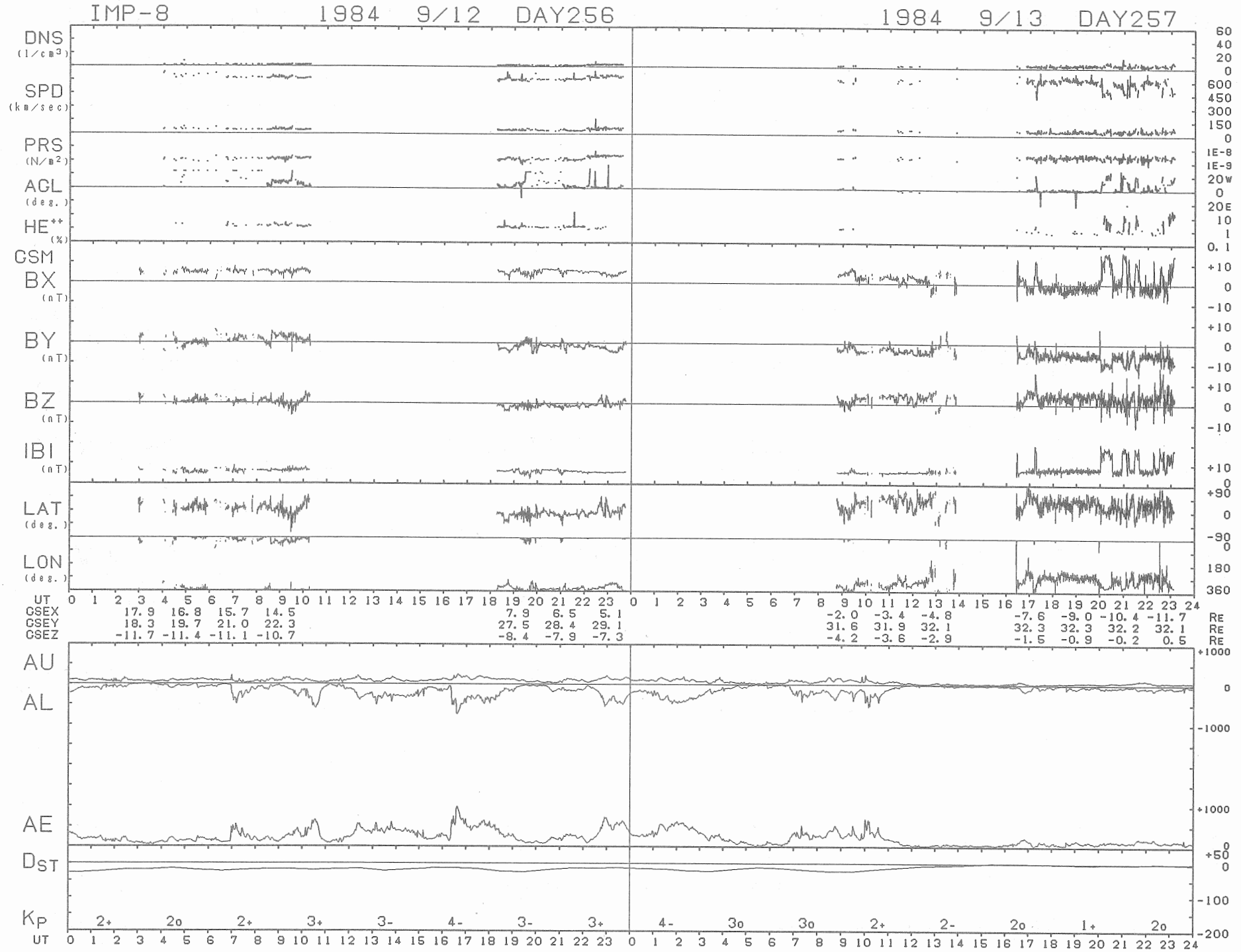

IMP-8
1984 9/ 2 DAY246
1984 9/ 3 DAY247
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -21.2 -31.6 -32.3 -32.9 RE
GSEY 27.3 18.4 17.5 16.4 RE
GSEZ 2.3 9.4 10.0 10.5 RE
AU
AL
AE
DST
KP 3o 4- 3- 2o 2o 3o 2+ 1+ 3o 4+ 3+ 2o 2- 2- 2- 2o
UT

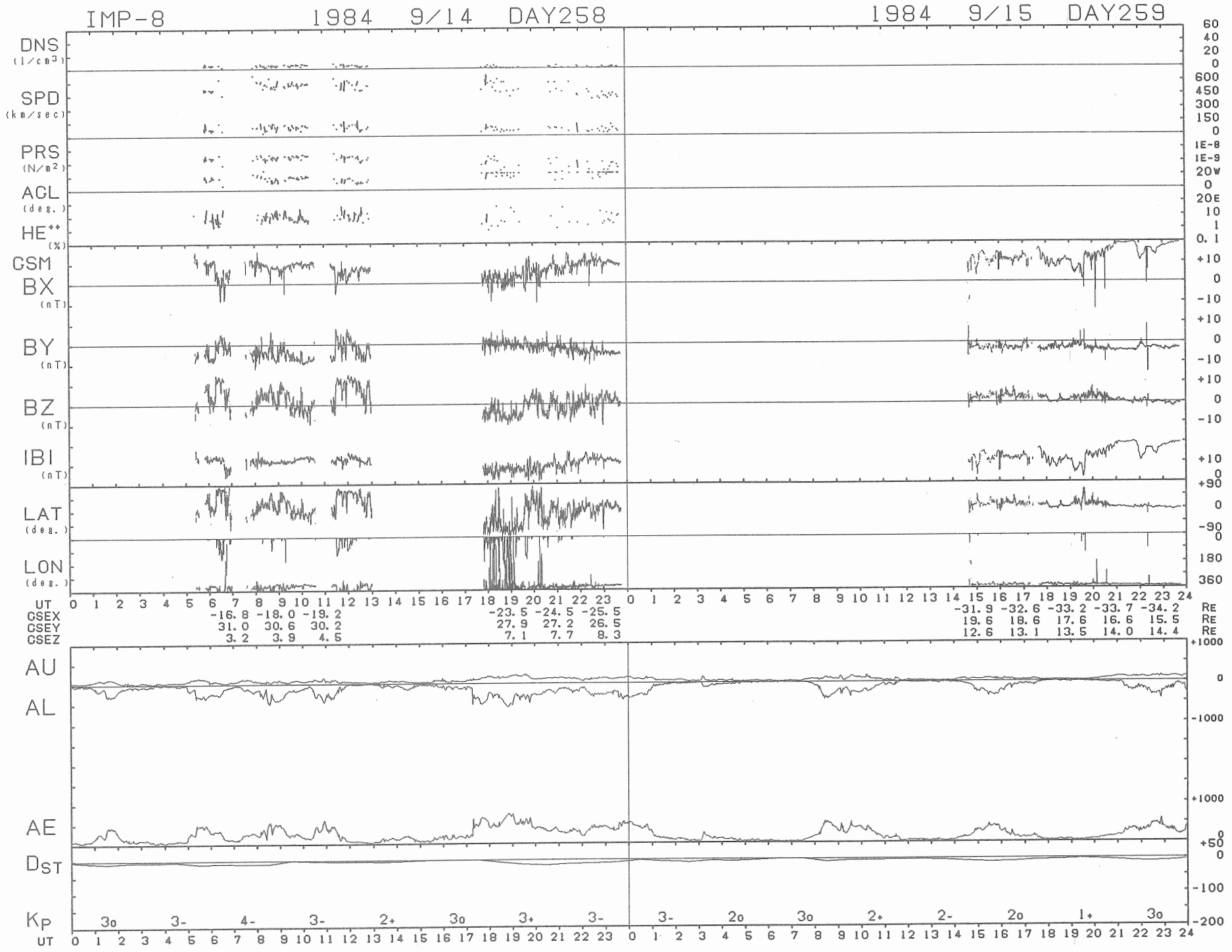

IMP-8
1984 9/ 4 DAY248
1984 9/ 5 DAY249
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.1 -37.2 -35.9 -32.2 RE
GSEY 4.2 3.0 -9.8 -18.4 RE
GSEZ 15.6 15.9 18.5 18.8 RE
AU
AL
AE
DST
KP
3- 3- 5+ 5o 7o 8- 3+ 3- 5+ 7o 6+ 5o 5- 6- 5o 3+

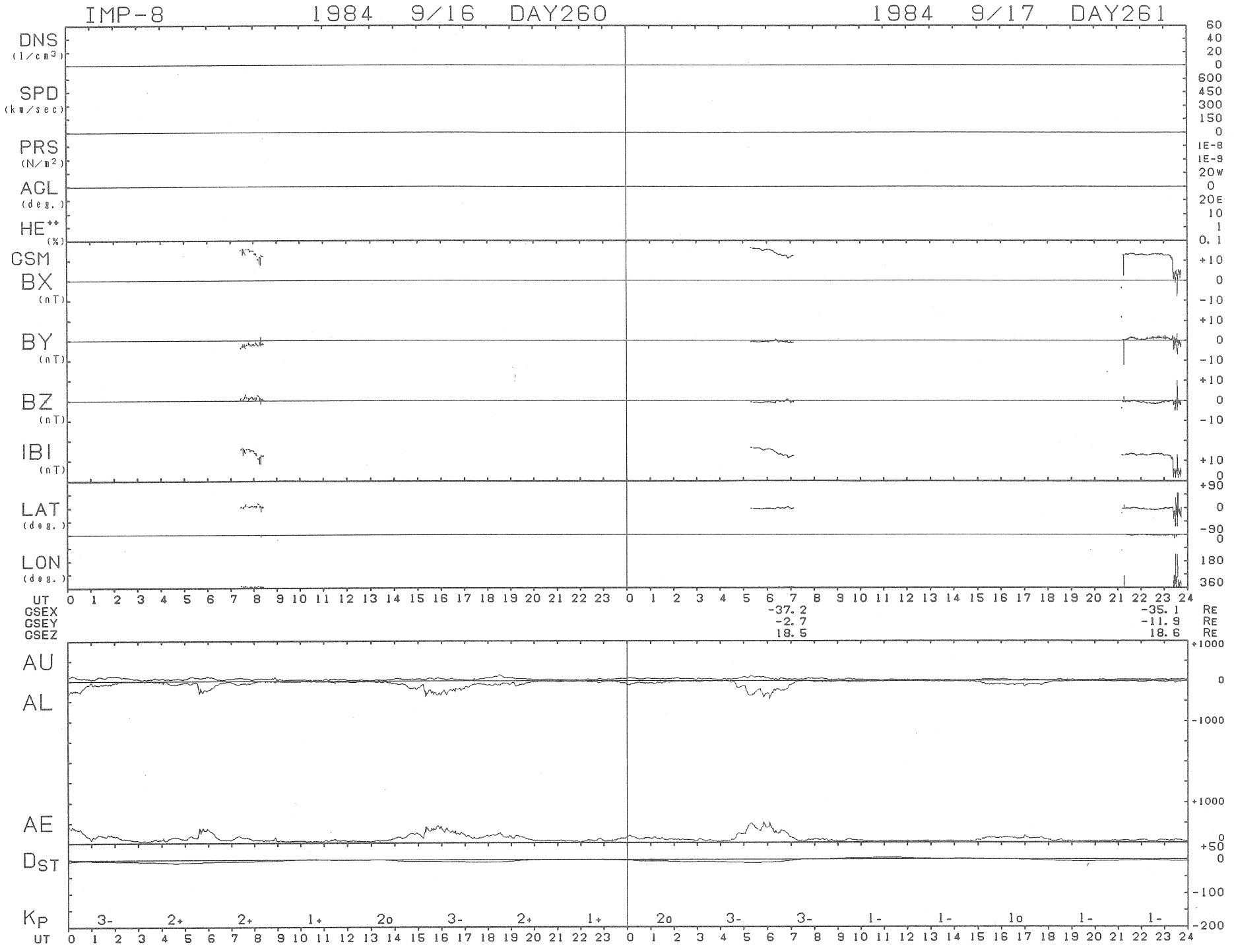

IMP-8
1984 9/ 6 DAY250
1984 9/ 7 DAY251
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.5 -28.8 -17.6 -16.5 -10.8 Re
GSEY -22.3 -23.2 -32.1 -32.6 -34.5 Re
GSEZ 18.4 18.3 15.0 14.6 12.2 Re
AU
AL
AE
Dst
Kp 3- 2+ 3+ 3o 2+ 3- 2+ 2+ 2+ 2o 2- 2- 2- 2- 2- 1-
UT

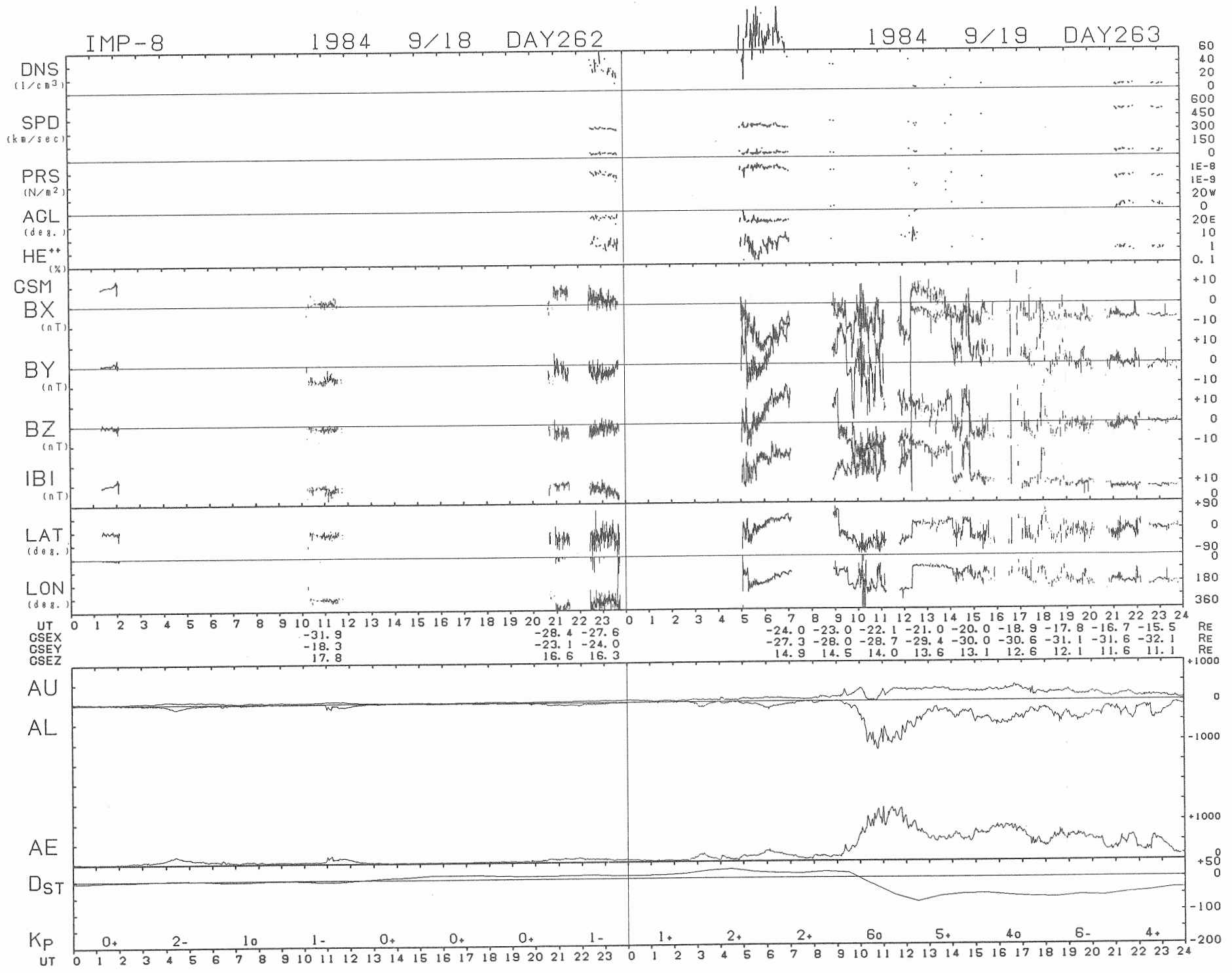

IMP-8 1984 9/ 8 DAY252
1984 9/ 9 DAY253
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.4 -4.7 -3.5 -2.2 -1.0 0.3 2.8 4.0 5.3 6.5 11.3 12.5 13.6 15.7 16.8 17.8 18.7 RE
GSEY -35.0 -35.3 -35.4 -35.3 -35.2 -35.0 -34.6 -34.2 -33.8 -33.4 -30.9 -30.1 -29.3 -27.4 -26.3 -25.2 -24.0 RE
GSEZ 11.2 9.5 8.9 8.3 7.7 7.0 5.7 5.1 4.4 3.7 0.9 0.1 -0.6 -2.0 -2.7 -3.4 -4.1 RE
AU
AL
AE
DST
KP 1+ 1+ 2+ 2o 3o 3- 2+ 4o 3- 2o 2+ 2o 2- 2- 3- 5-
UT

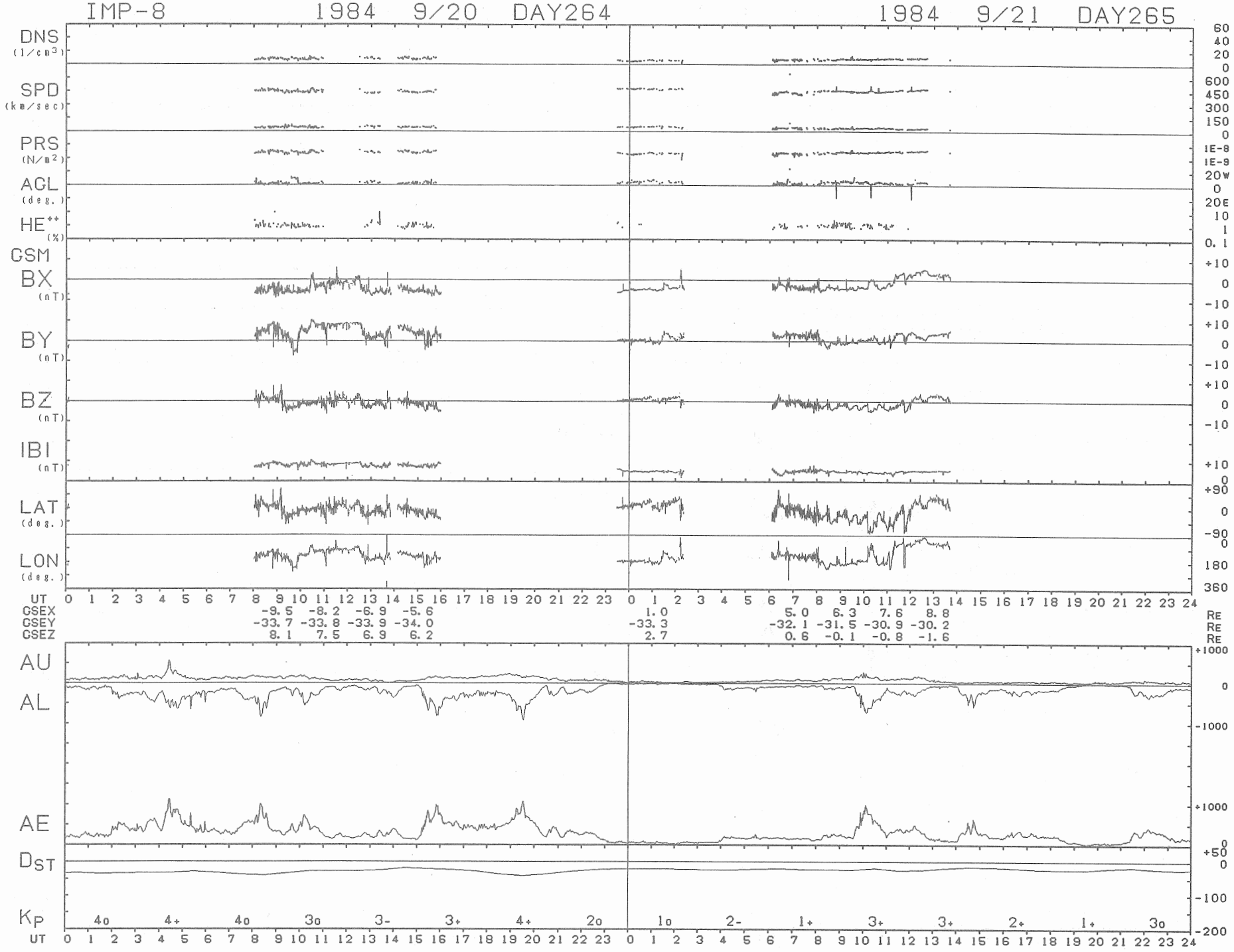

IMP-8
1984 9/10 DAY254
1984 9/11 DAY255
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.6 20.4 24.5 24.8 25.0 25.2 21.6
GSEY -22.8 -21.5 -10.8 -9.1 -7.4 -5.6 12.1
GSEZ -4.8 -5.4 -9.5 -10.0 -10.4 -10.8 -12.3
RE
AU
AL
AE
DST
KP
3+ 3o 4- 5o 2o 4o 4+ 4+ 4o 4o 4- 3- 3- 2+ 3o 2+
UT

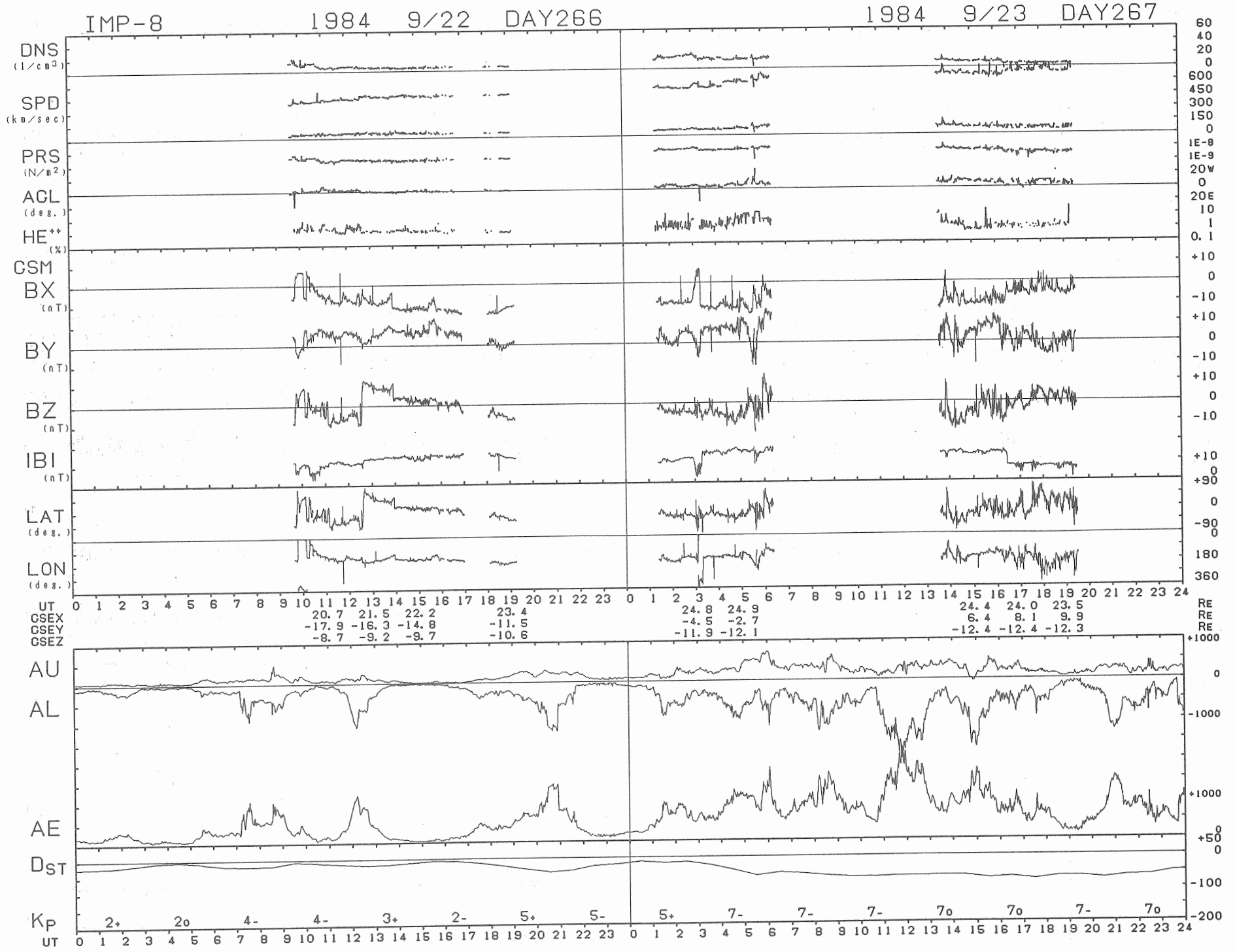

IMP-8
1984 9/12 DAY256
1984 9/13 DAY257
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 17.9 16.8 15.7 14.5 7.9 6.5 5.1 -2.0 -3.4 -4.8 -7.6 -9.0 -10.4 -11.7 RE
GSEY 18.3 19.7 21.0 22.3 27.5 28.4 29.1 31.6 31.9 32.1 32.3 32.3 32.2 32.1 RE
GSEZ -11.7 -11.4 -11.1 -10.7 -8.4 -7.9 -7.3 -4.2 -3.6 -2.9 -1.5 -0.9 -0.2 0.5 RE
AU
AL
AE
DST
KP 2+ 2o 2+ 3+ 3- 4- 3- 3+ 4- 3o 3o 2+ 2- 2o 1+ 2o
UT

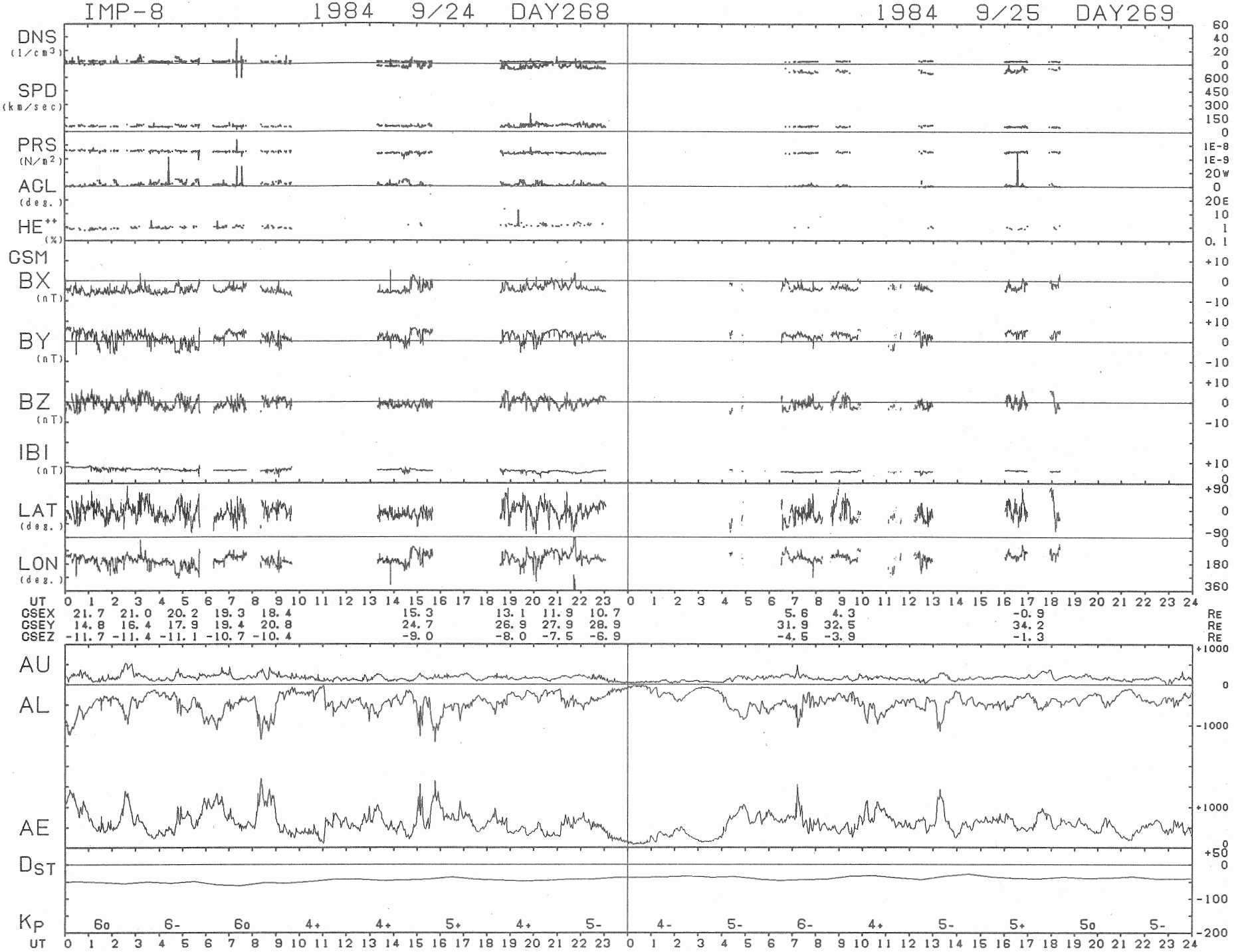

IMP-8
1984 9/14 DAY258
1984 9/15 DAY259
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -16.8 -18.0 -19.2 -23.5 -24.5 -25.5 -31.9 -32.6 -33.2 -33.7 -34.2 RE
CSEY 31.0 30.6 30.2 27.9 27.2 26.5 19.6 18.6 17.6 16.6 15.5 RE
CSEZ 3.2 3.9 4.5 7.1 7.7 8.3 12.6 13.1 13.5 14.0 14.4 RE
AU
AL
AE
DST
KP 3o 3- 4- 3- 2+ 3o 3+ 3- 3- 2o 3o 2+ 2- 2o 1+ 3o
UT

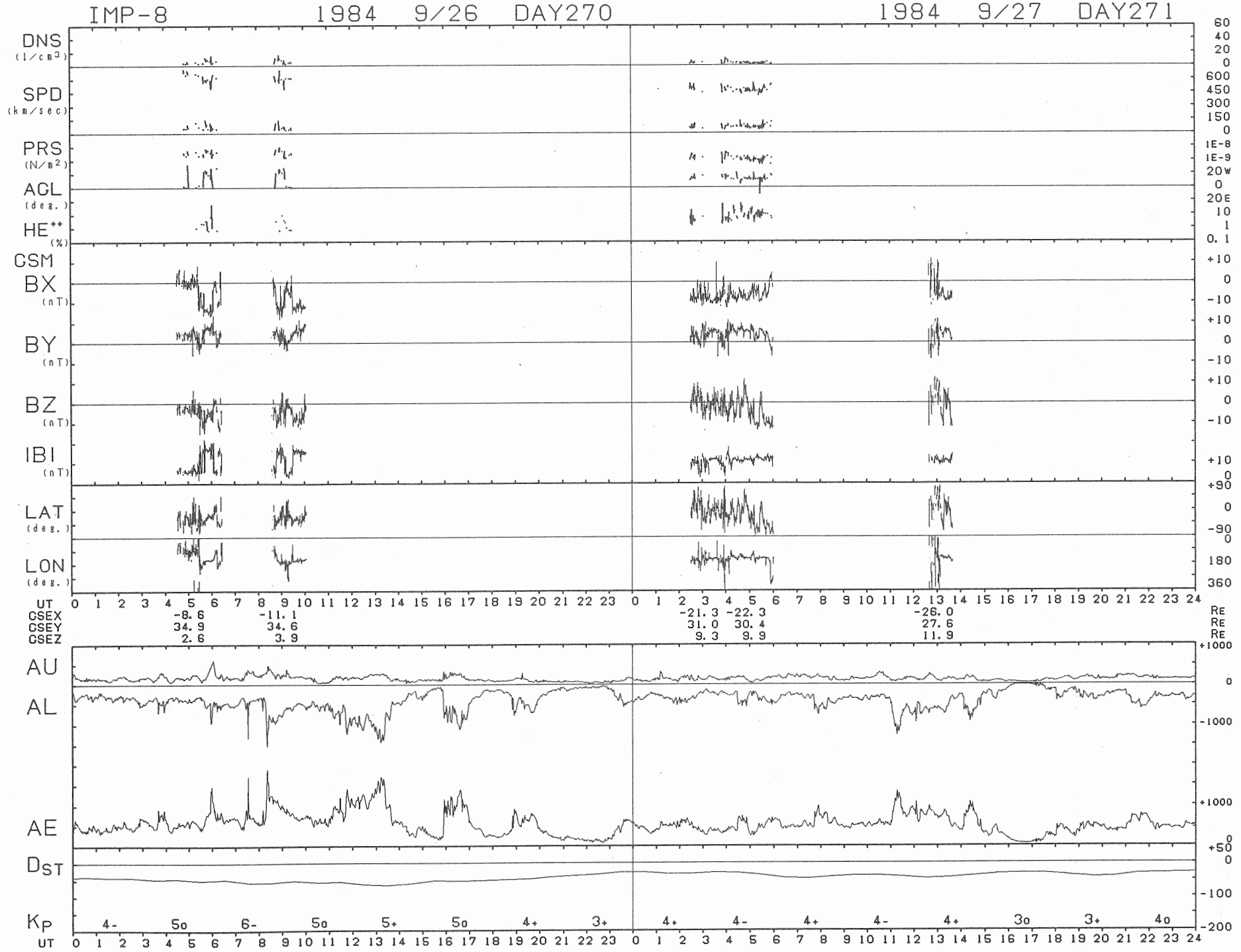

IMP-8
1984 9/16 DAY260
1984 9/17 DAY261
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.2 -35.1 Re
GSEY -2.7 -11.9 Re
GSEZ 18.5 18.6 Re
AU
AL
AE
Dst
Kp 3- 2+ 2+ 1+ 2o 3- 2+ 1+ 2o 3- 3- 1- 1- 1o 1- 1-
UT

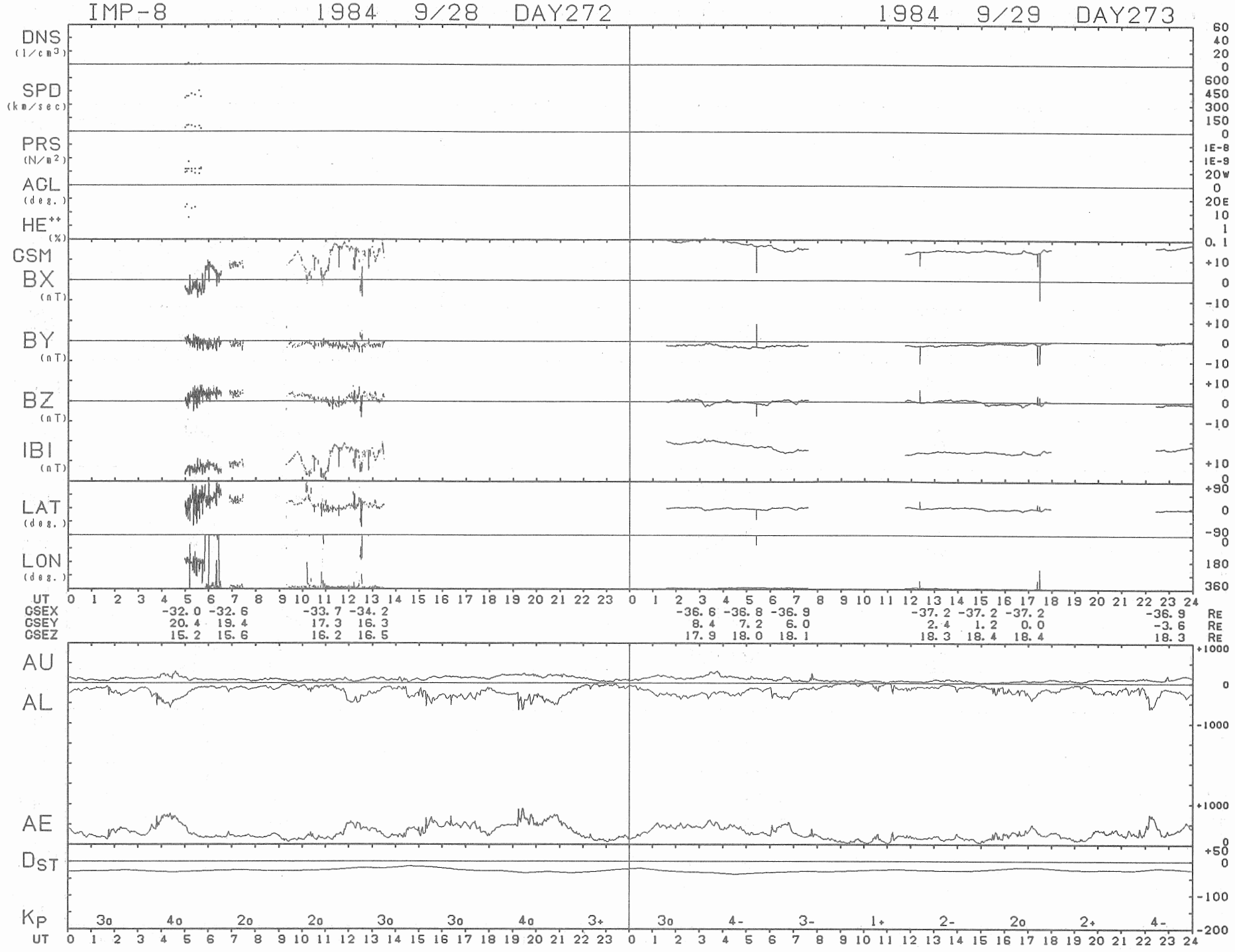

IMP-8 1984 9/18 DAY262
1984 9/19 DAY263
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.9 -28.4 -27.6 -24.0 -23.0 -22.1 -21.0 -20.0 -18.9 -17.8 -16.7 -15.5 RE
GSEY -18.3 -23.1 -24.0 -27.3 -28.0 -28.7 -29.4 -30.0 -30.6 -31.1 -31.6 -32.1 RE
GSEZ 17.8 16.6 16.3 14.9 14.5 14.0 13.6 13.1 12.6 12.1 11.6 11.1 RE
AU
AL
AE
DST
KP 0+ 2- 1o 1- 0+ 0+ 0+ 1- 1+ 2+ 2+ 6o 5+ 4o 6- 4+
UT

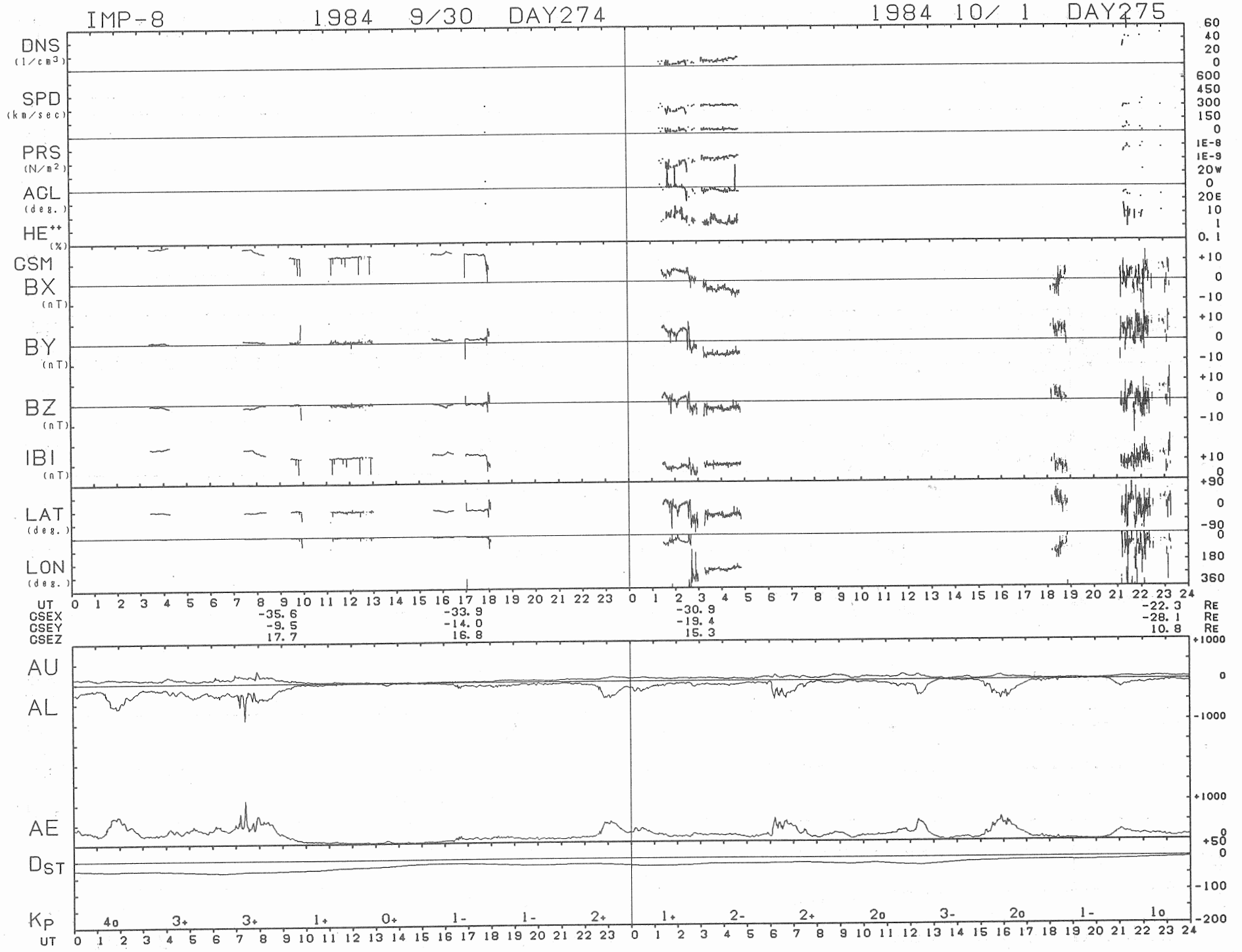

IMP-8 1984 9/20 DAY264
1984 9/21 DAY265
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.5 -8.2 -6.9 -5.6 1.0 5.0 6.3 7.6 8.8 RE
GSEY -33.7 -33.8 -33.9 -34.0 -33.3 -32.1 -31.5 -30.9 -30.2 RE
GSEZ 8.1 7.5 6.9 6.2 2.7 0.6 -0.1 -0.8 -1.6 RE
AU
AL
AE
DST
KP
4o 4+ 4o 3o 3- 3+ 4+ 2o 1o 2- 1+ 3+ 3+ 2+ 1+ 3o
UT

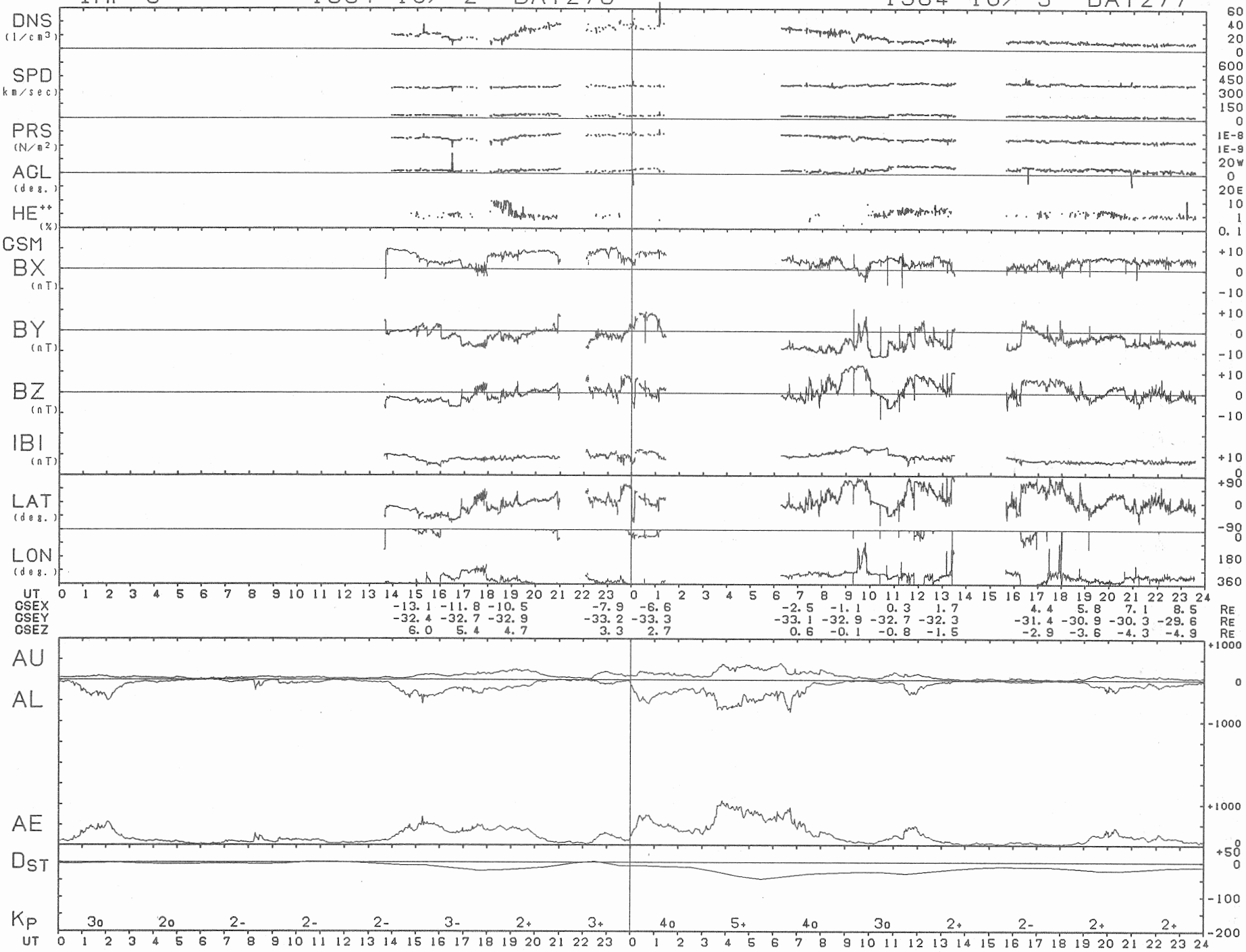

IMP-8
1984 9/22 DAY266
1984 9/23 DAY267
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
20.7 21.5 22.2 23.4
-17.9 -16.3 -14.8 -11.5
-8.7 -9.2 -9.7 -10.6
24.8 24.9
-4.5 -2.7
-11.9 -12.1
24.4 24.0 23.5
6.4 8.1 9.9
-12.4 -12.4 -12.3
RE
AU
AL
AE
DST
KP
2+ 2o 4- 4- 3+ 2- 5+ 5-
5+ 7- 7- 7- 7o 7o 7- 7o

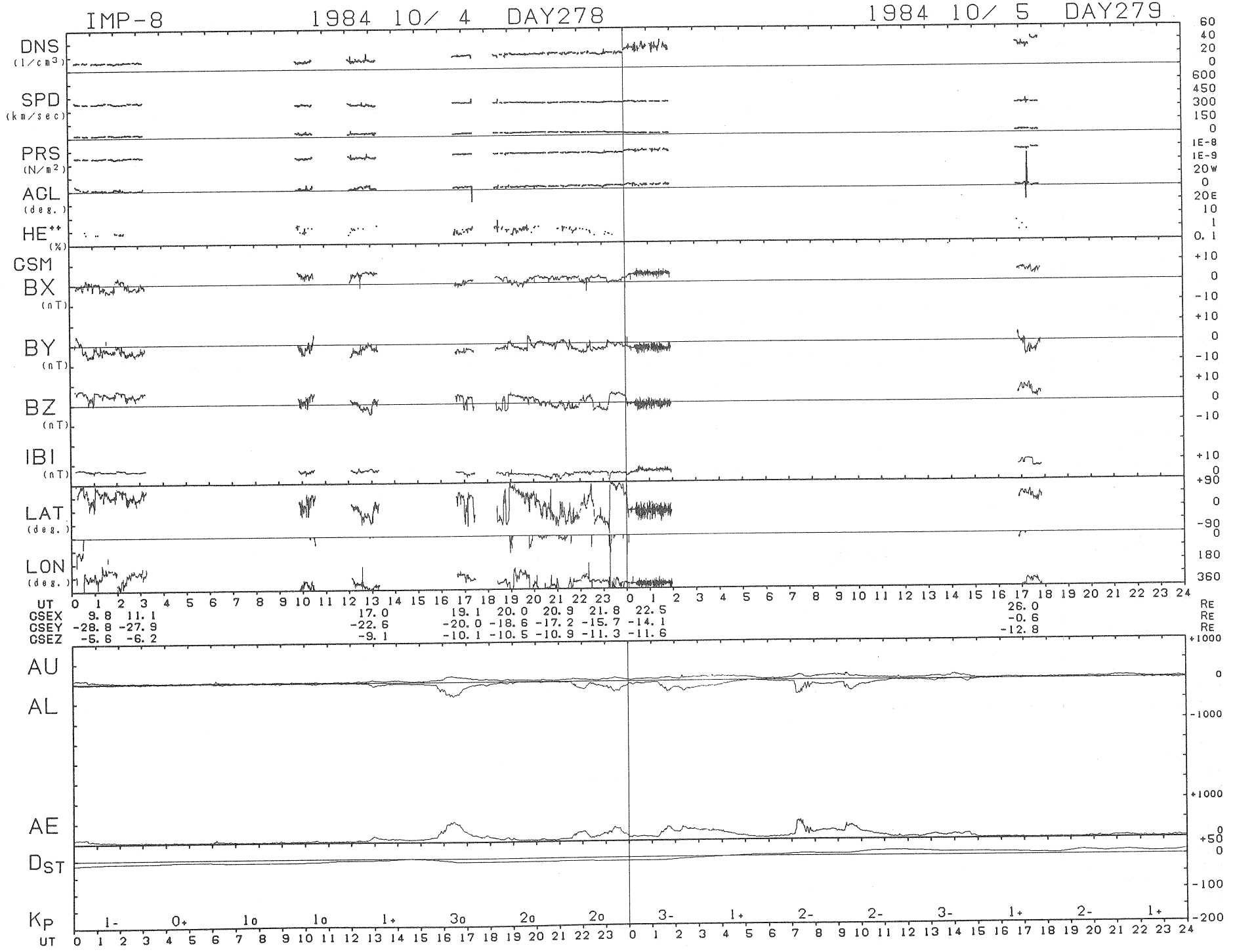

IMP-8 1984 9/24 DAY268
1984 9/25 DAY269
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.7 21.0 20.2 19.3 18.4 15.3 13.1 11.9 10.7 5.6 4.3 -0.9 RE
GSEY 14.8 16.4 17.9 19.4 20.8 24.7 26.9 27.9 28.9 31.9 32.5 34.2 RE
GSEZ -11.7 -11.4 -11.1 -10.7 -10.4 -9.0 -8.0 -7.5 -6.9 -4.5 -3.9 -1.3 RE
AU
AL
AE
DST
KP 6o 6- 6o 4+ 4+ 5+ 4+ 5- 4- 5- 6- 4+ 5- 5+ 5o 5-
UT

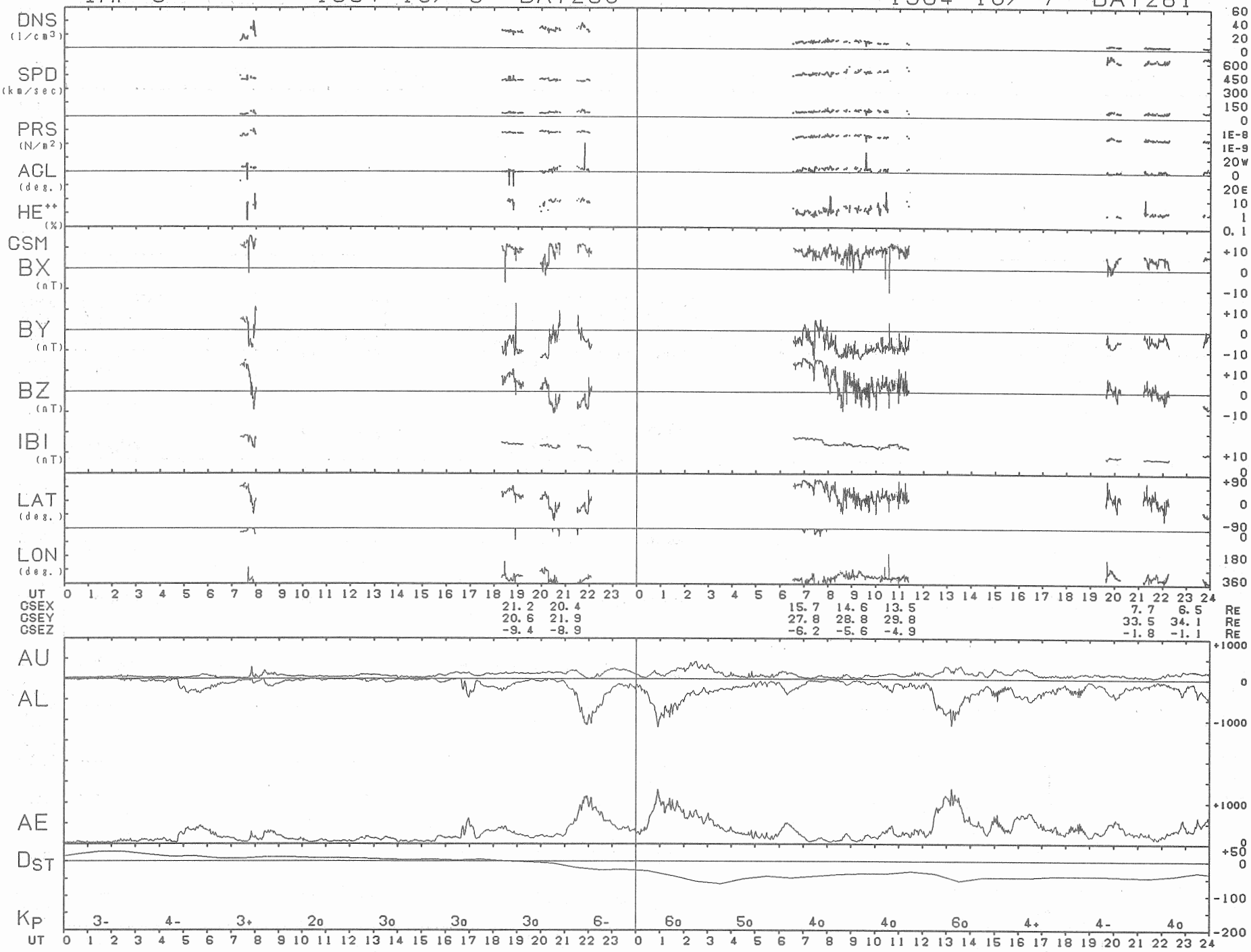

IMP-8
1984 9/26 DAY270
1984 9/27 DAY271
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.6 -11.1 -21.3 -22.3 -26.0 RE
GSEY 34.9 34.6 31.0 30.4 27.6 RE
GSEZ 2.6 3.9 9.3 9.9 11.9 RE
AU
AL
AE
DST
KP 4- 5o 6- 5o 5+ 5o 4+ 3+ 4+ 4- 4+ 4- 4+ 3o 3+ 4o
UT

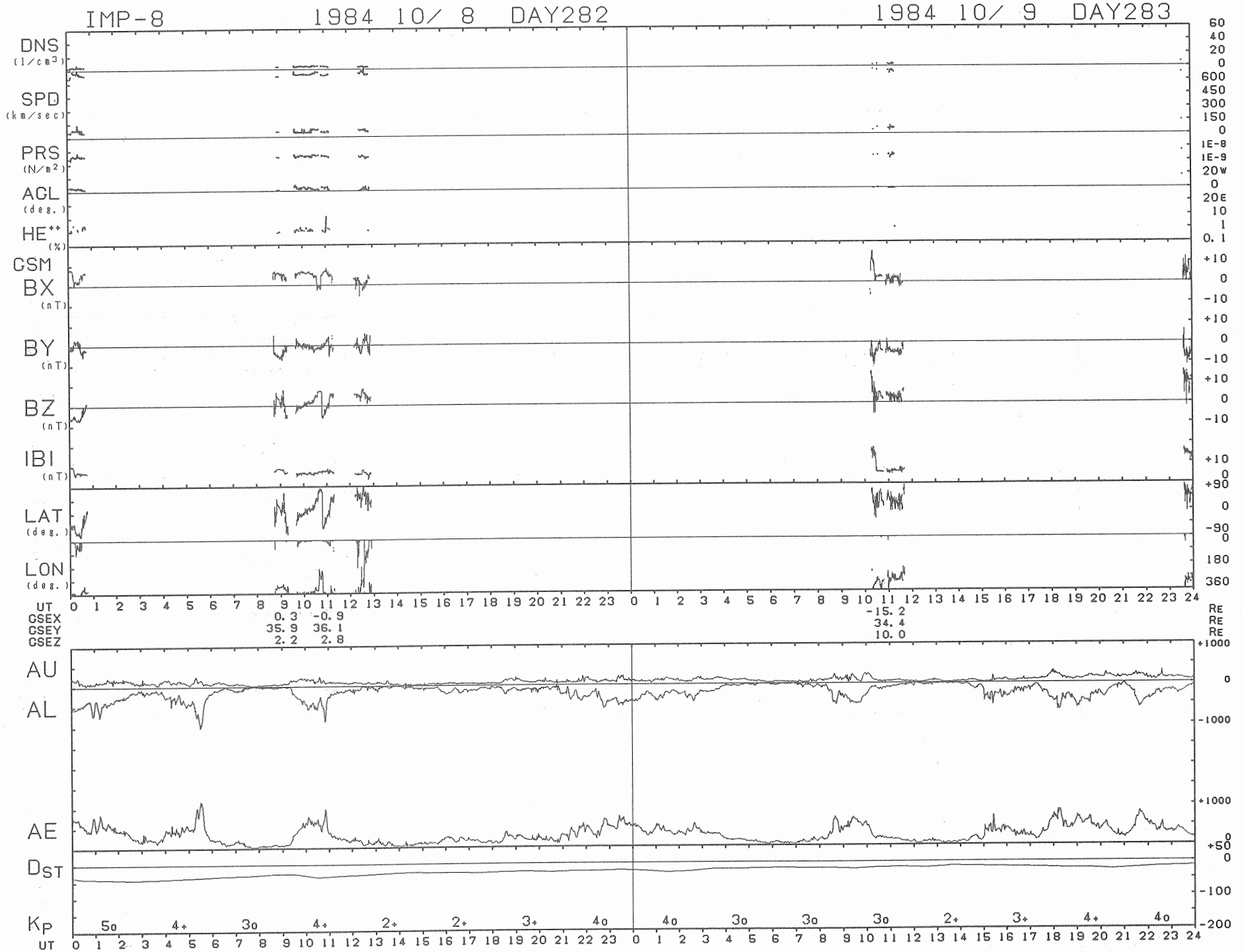

IMP-8
1984 9/28 DAY272
1984 9/29 DAY273
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.0 -32.6 -33.7 -34.2 -36.6 -36.8 -36.9 -37.2 -37.2 -37.2 -36.9 RE
GSEY 20.4 19.4 17.3 16.3 8.4 7.2 6.0 2.4 1.2 0.0 -3.6 RE
GSEZ 15.2 15.6 16.2 16.5 17.9 18.0 18.1 18.3 18.4 18.4 18.3 RE
AU
AL
AE
Dst
Kp 3o 4o 2o 2o 3o 3o 4o 3+ 3o 4- 3- 1+ 2- 2o 2+ 4-
UT

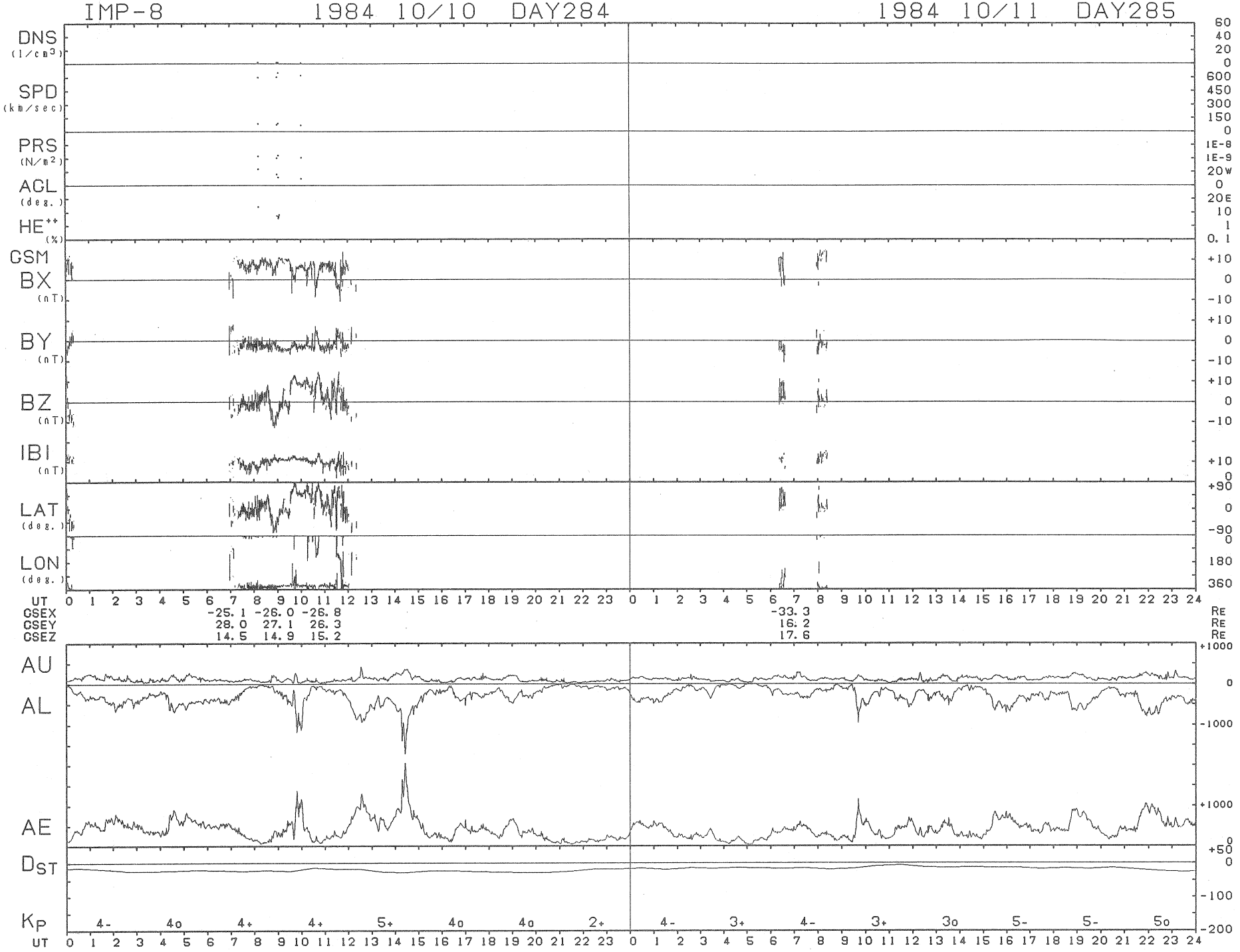

IMP-8
1984 9/30 DAY274
1984 10/ 1 DAY275
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.6 -33.9 -30.9 -22.3 RE
GSEY -9.5 -14.0 -19.4 -28.1 RE
GSEZ 17.7 16.8 15.3 10.8 RE
AU
AL
AE
DST
KP 4o 3+ 3+ 1+ 0+ 1- 1- 2+ 1+ 2- 2+ 2o 3- 2o 1- 1o
UT

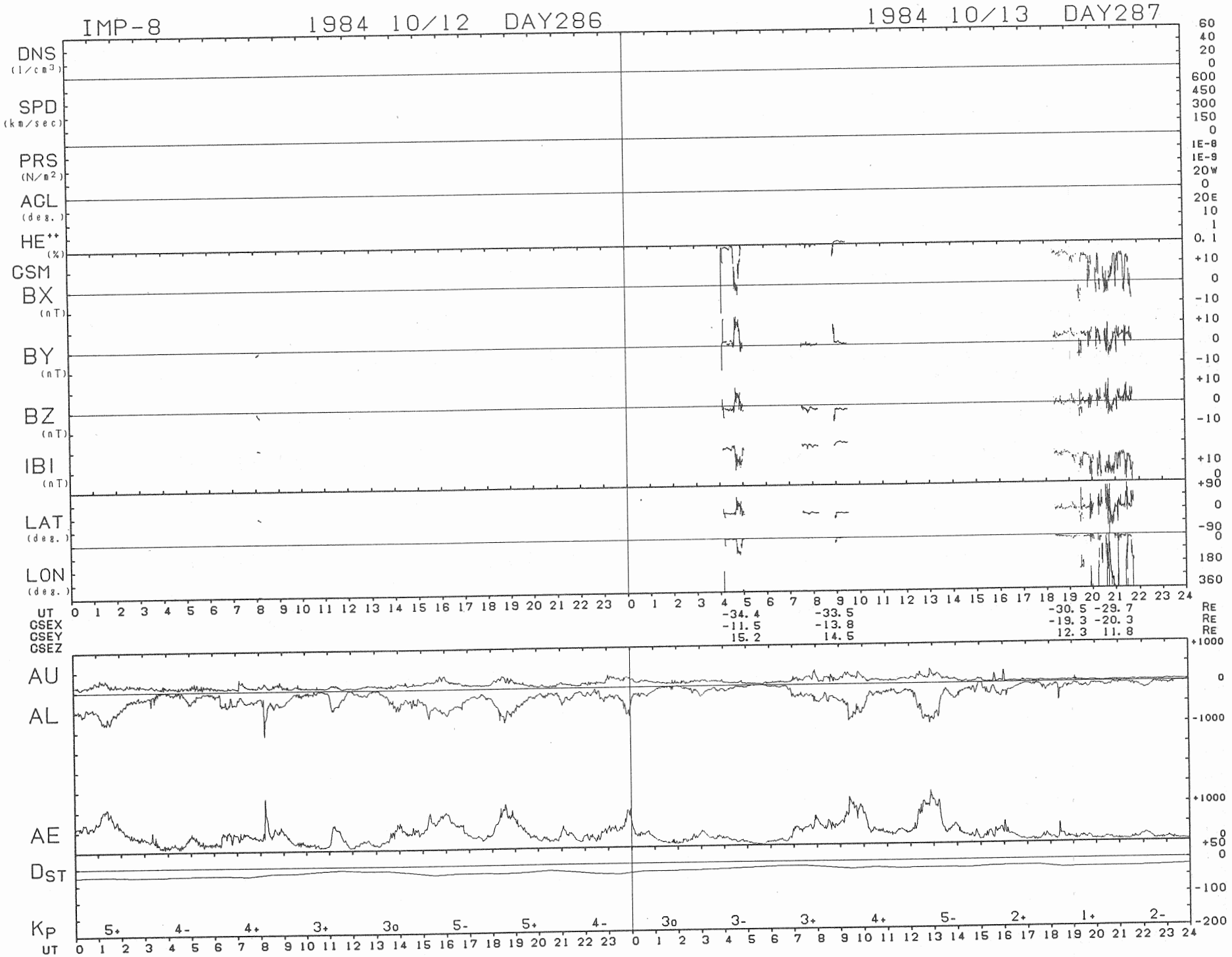

IMP-8
1984 10/ 2 DAY276
1984 10/ 3 DAY277
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -13.1 -11.8 -10.5 -7.9 -6.6 -2.5 -1.1 0.3 1.7 4.4 5.8 7.1 8.5 RE
CSEY -32.4 -32.7 -32.9 -33.2 -33.3 -33.1 -32.9 -32.7 -32.3 -31.4 -30.9 -30.3 -29.6 RE
CSEZ 6.0 5.4 4.7 3.3 2.7 0.6 -0.1 -0.8 -1.5 -2.9 -3.6 -4.3 -4.9 RE
AU
AL
AE
DST
KP 3o 2o 2- 2- 2- 3- 2+ 3+ 4o 5+ 4o 3o 2+ 2- 2+ 2+
UT

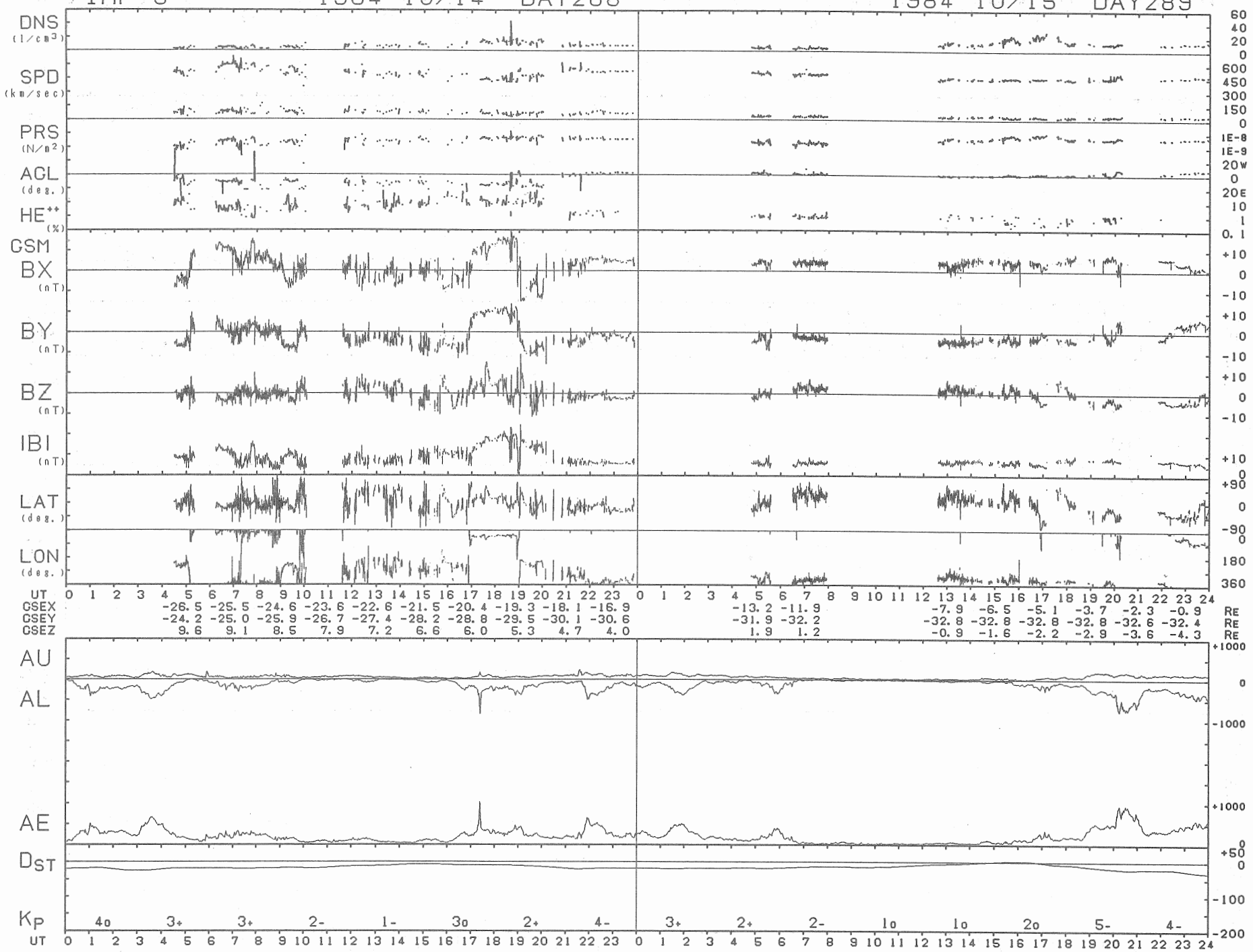

IMP-8
1984 10/ 4 DAY278
1984 10/ 5 DAY279
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 9.8 11.1 17.0 19.1 20.0 20.9 21.8 22.5 26.0
GSEY -28.8 -27.9 -22.6 -20.0 -18.6 -17.2 -15.7 -14.1 -0.6
GSEZ -5.6 -6.2 -9.1 -10.1 -10.5 -10.9 -11.3 -11.6 -12.8
RE
AU
AL
AE
DST
KP
1- 0+ 1o 1o 1+ 3o 2o 2o 3- 1+ 2- 2- 3- 1+ 2- 1+

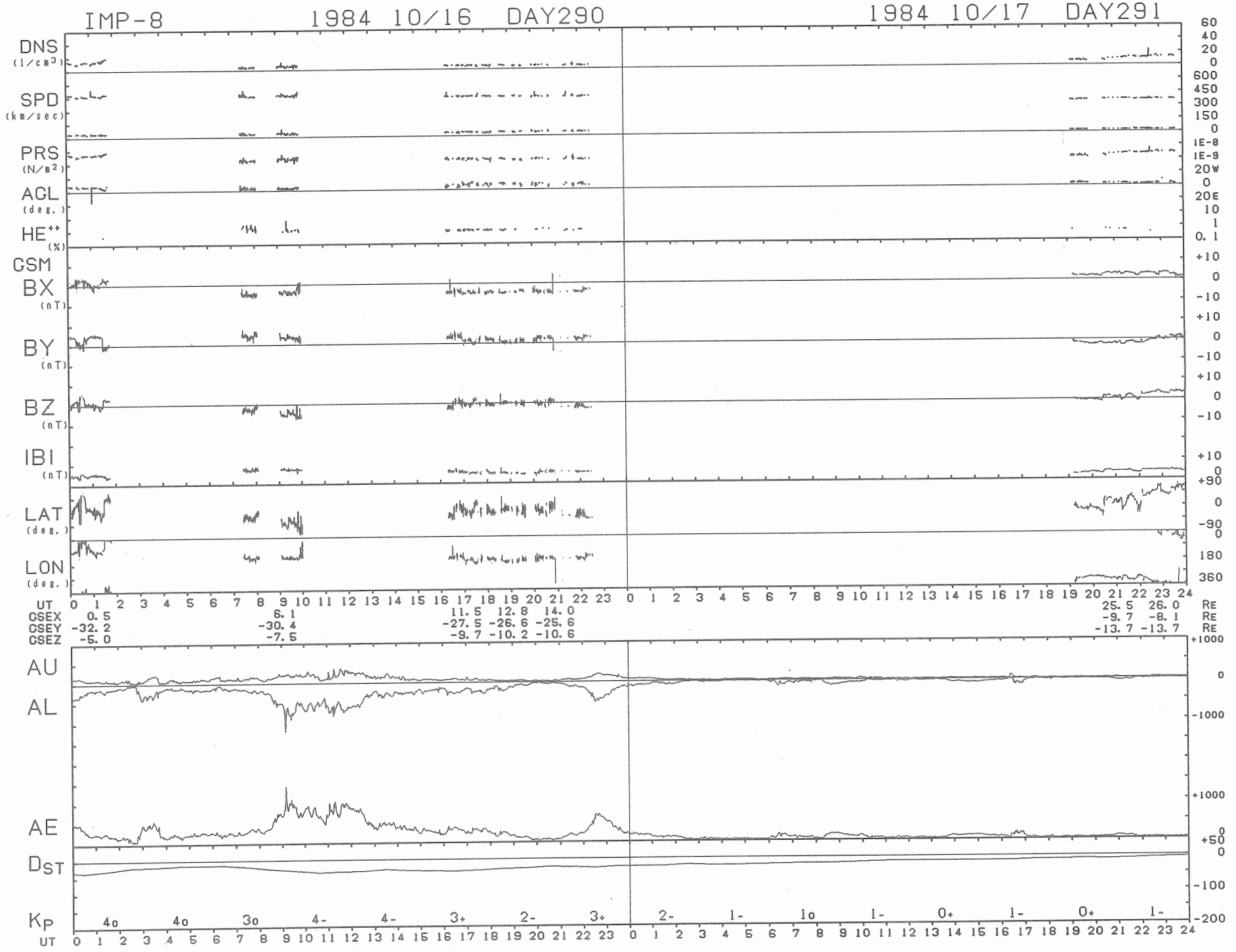

IMP-8
1984 10/ 6 DAY280
1984 10/ 7 DAY281
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.2 20.4 15.7 14.6 13.5 7.7 6.5 RE
GSEY 20.6 21.9 27.8 28.8 29.8 33.5 34.1 RE
GSEZ -9.4 -8.9 -6.2 -5.6 -4.9 -1.8 -1.1 RE
AU
AL
AE
DST
KP
3- 4- 3+ 2o 3o 3o 3o 6- 6o 5o 4o 4o 6o 4+ 4- 4o
UT

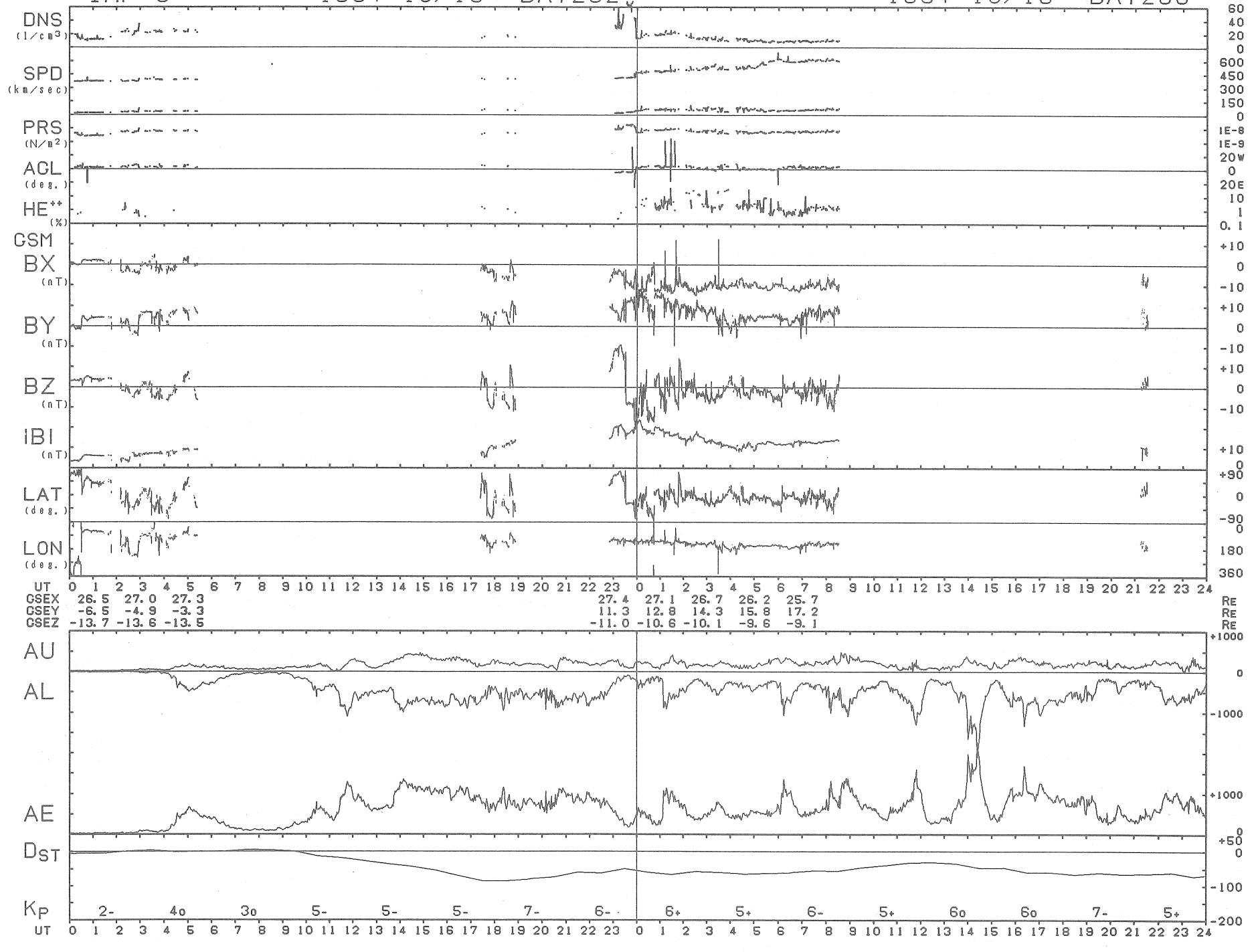

IMP-8
1984 10/ 8 DAY282
1984 10/ 9 DAY283
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.3 -0.9 -15.2 RE
GSEY 35.9 36.1 34.4 RE
GSEZ 2.2 2.8 10.0 RE
AU
AL
AE
DST
KP
5o 4+ 3o 4+ 2+ 2+ 3+ 4o 4o 3o 3o 3o 2+ 3+ 4+ 4o

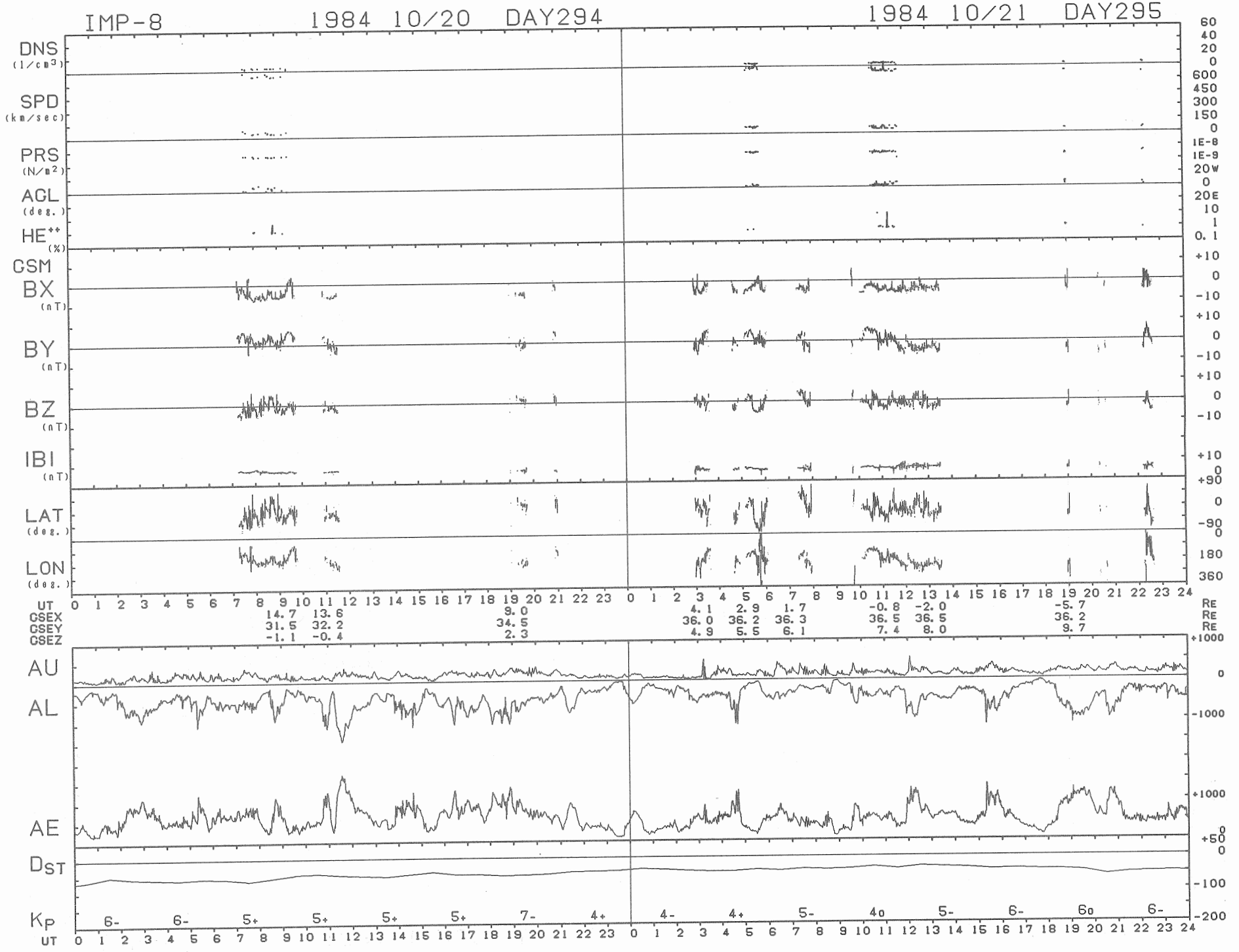

IMP-8
1984 10/10 DAY284
1984 10/11 DAY285
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -25.1 -26.0 -26.8 -33.3 RE
GSEY 28.0 27.1 26.3 16.2 RE
GSEZ 14.5 14.9 15.2 17.6 RE
AU
AL
AE
DST
KP
4- 4o 4+ 4+ 5+ 4o 4o 2+ 4- 3+ 4- 3+ 3o 5- 5- 5o

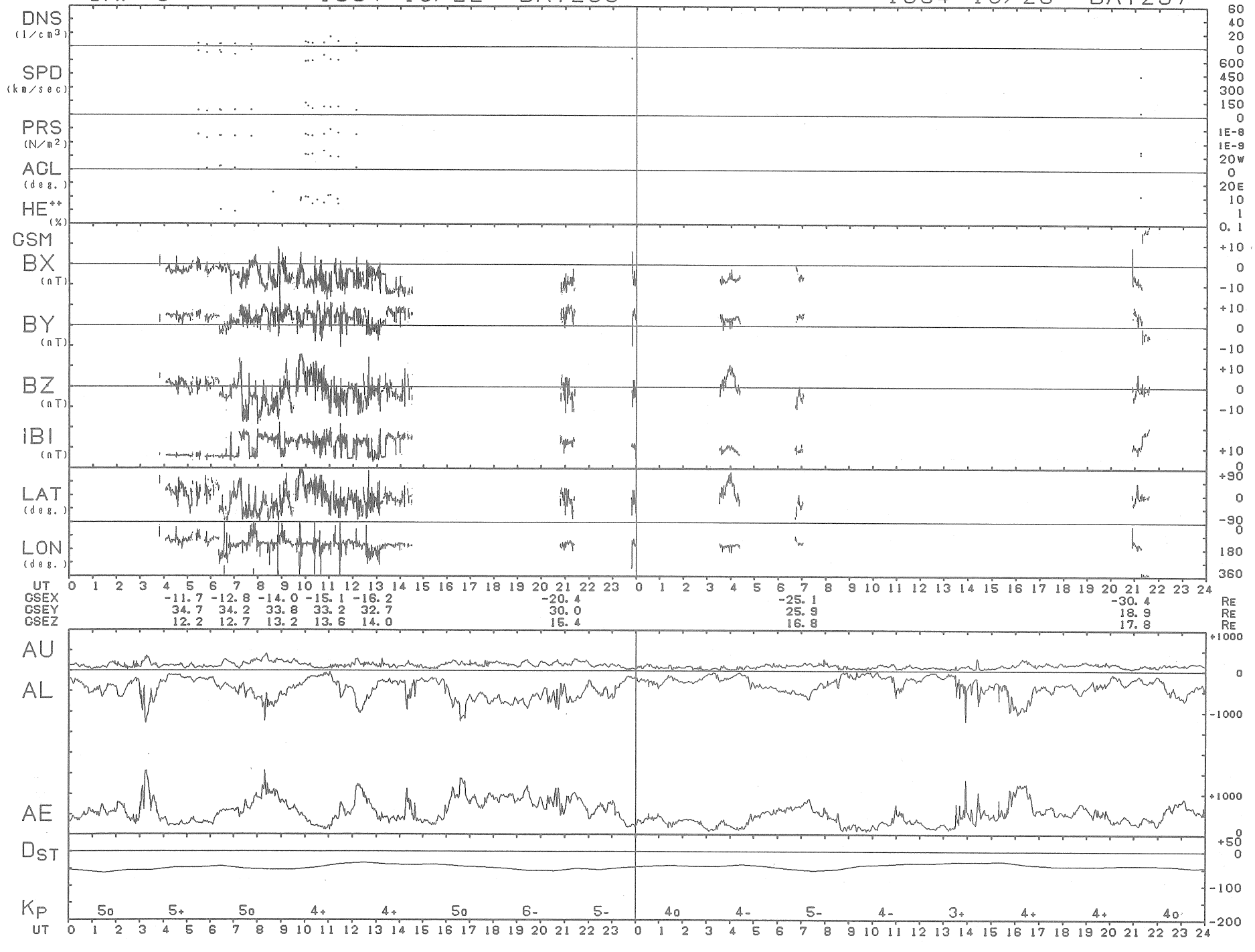

IMP-8
1984 10/12 DAY286
1984 10/13 DAY287
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
-34.4 -33.5 -30.5 -29.7 RE
-11.5 -13.8 -19.3 -20.3 RE
15.2 14.5 12.3 11.8 RE
AU
AL
AE
DST
KP
5+ 4- 4+ 3+ 3o 5- 5+ 4- 3o 3- 3+ 4+ 5- 2+ 1+ 2-
UT

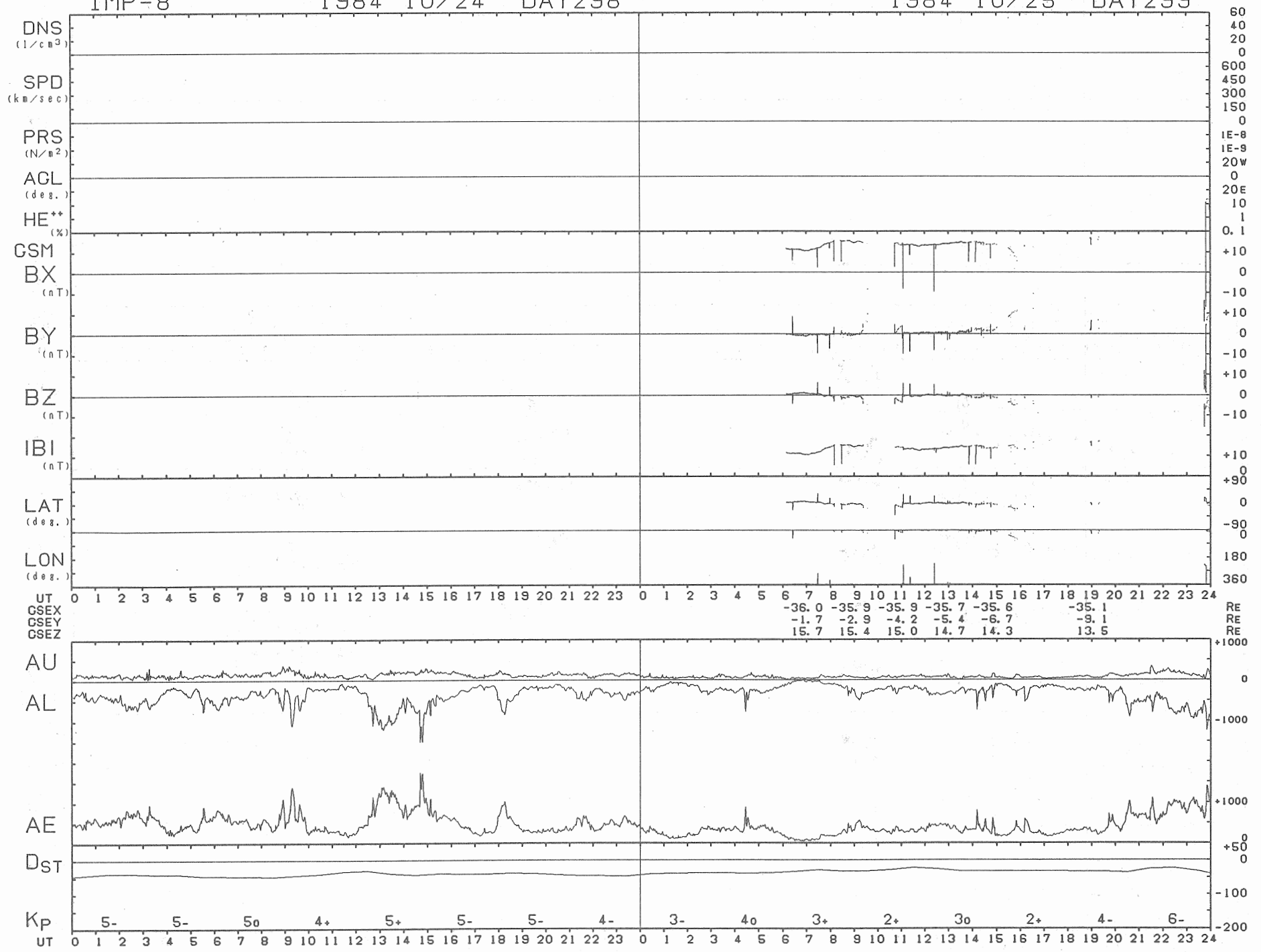

IMP-8
1984 10/14 DAY288
1984 10/15 DAY289
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.5 -25.5 -24.6 -23.6 -22.6 -21.5 -20.4 -19.3 -18.1 -16.9 -13.2 -11.9 -7.9 -6.5 -5.1 -3.7 -2.3 -0.9 RE
GSEY -24.2 -25.0 -25.9 -26.7 -27.4 -28.2 -28.8 -29.5 -30.1 -30.6 -31.9 -32.2 -32.8 -32.8 -32.8 -32.8 -32.6 -32.4 RE
GSEZ 9.6 9.1 8.5 7.9 7.2 6.6 6.0 5.3 4.7 4.0 1.9 1.2 -0.9 -1.6 -2.2 -2.9 -3.6 -4.3 RE
AU
AL
AE
DST
KP 4o 3+ 3+ 2- 1- 3o 2+ 4- 3+ 2+ 2- 1o 1o 2o 5- 4-
UT

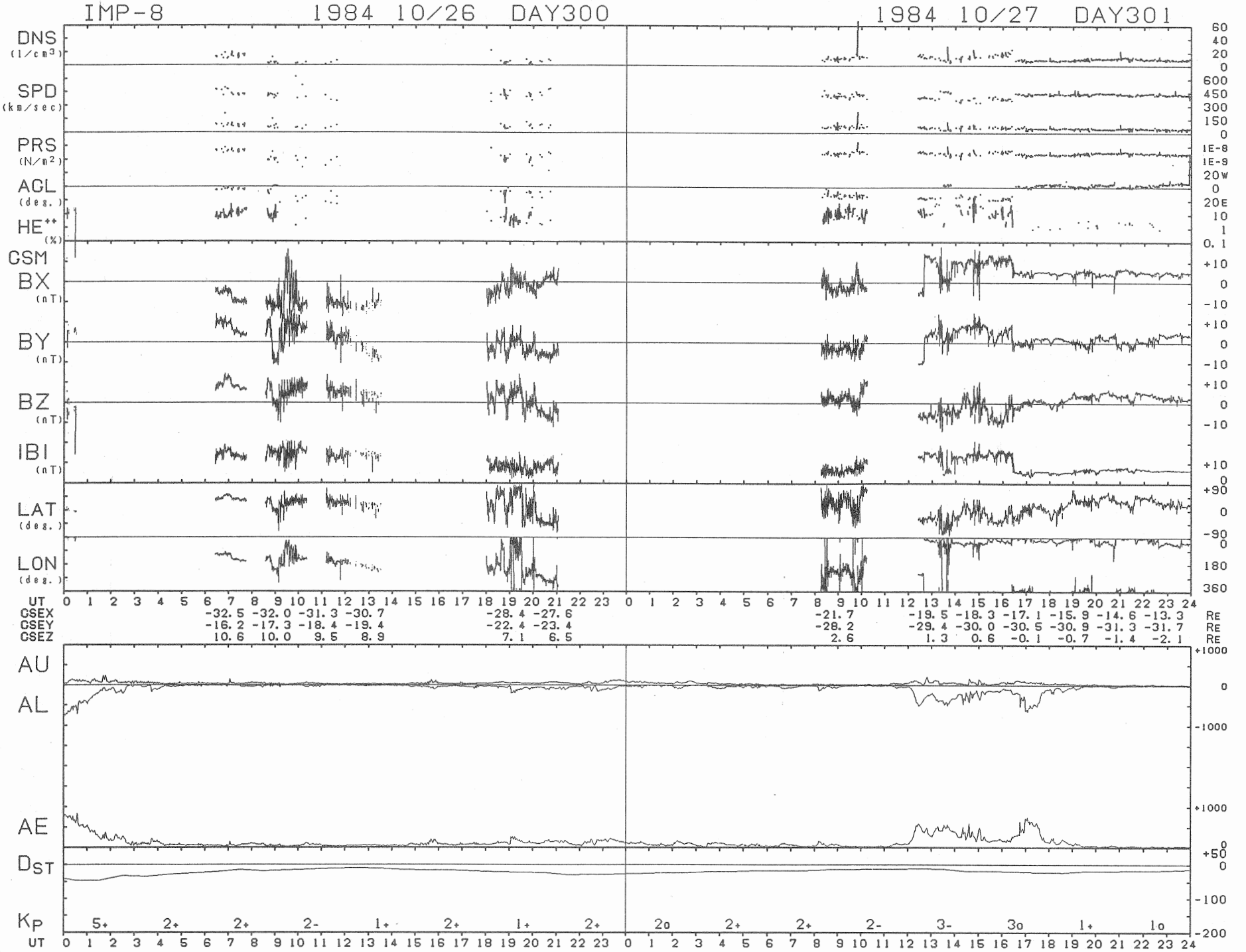

IMP-8
1984 10/16 DAY290
1984 10/17 DAY291
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.5 6.1 11.5 12.8 14.0 25.5 26.0 RE
GSEY -32.2 -30.4 -27.5 -26.6 -25.6 -9.7 -8.1 RE
GSEZ -5.0 -7.5 -9.7 -10.2 -10.6 -13.7 -13.7 RE
AU
AL
AE
DST
Kp
4o 4o 3o 4- 4- 3+ 2- 3+ 2- 1- 1o 1- 0+ 1- 0+ 1-
UT

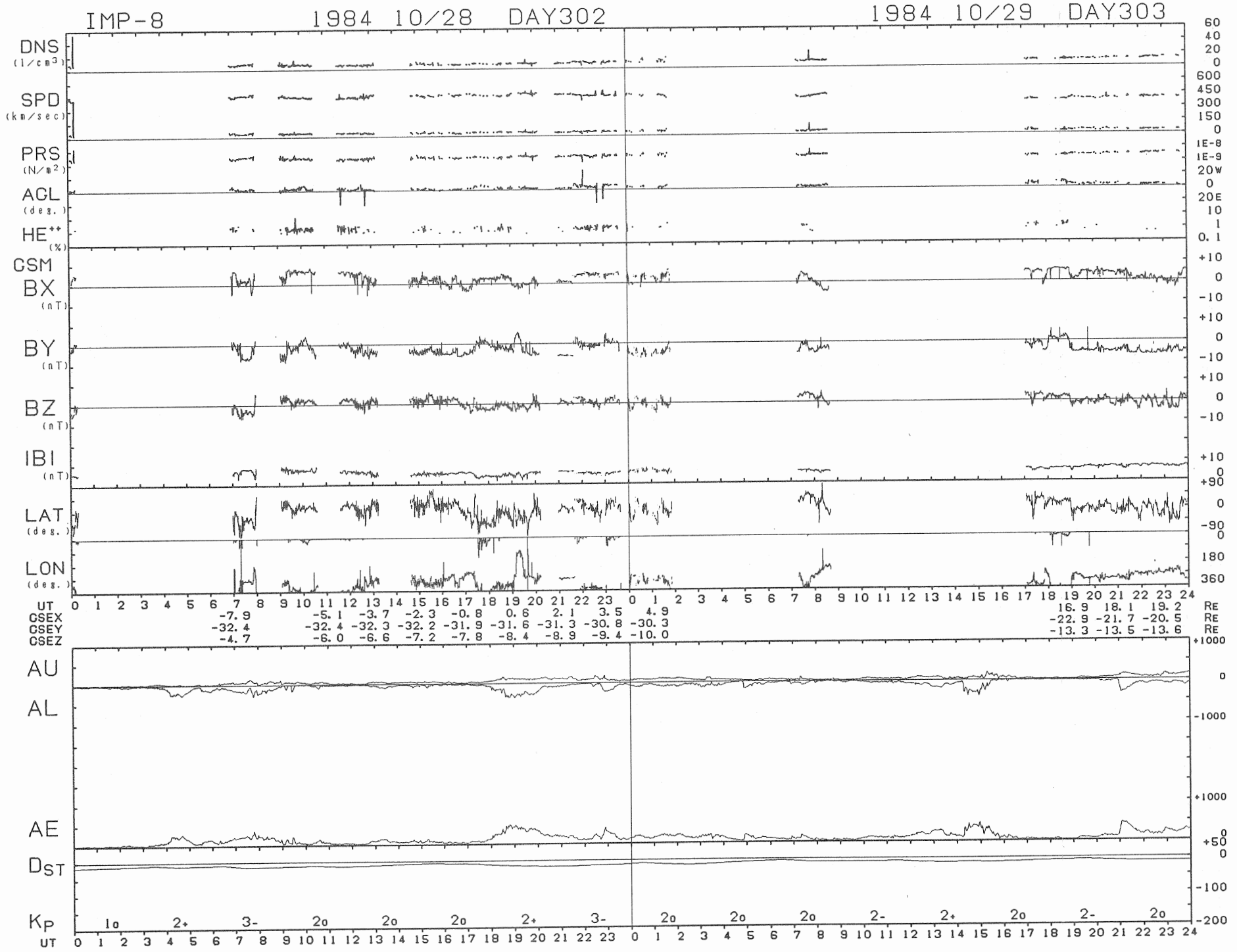

IMP-8
1984 10/18 DAY292
1984 10/19 DAY293
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.5 27.0 27.3 27.4 27.1 26.7 26.2 25.7 RE
GSEY -6.5 -4.9 -3.3 11.3 12.8 14.3 15.8 17.2 RE
GSEZ -13.7 -13.6 -13.5 -11.0 -10.6 -10.1 -9.6 -9.1 RE
AU
AL
AE
DST
KP
2- 4o 3o 5- 5- 5- 7- 6- 6+ 5+ 6- 5+ 6o 6o 7- 5+
UT

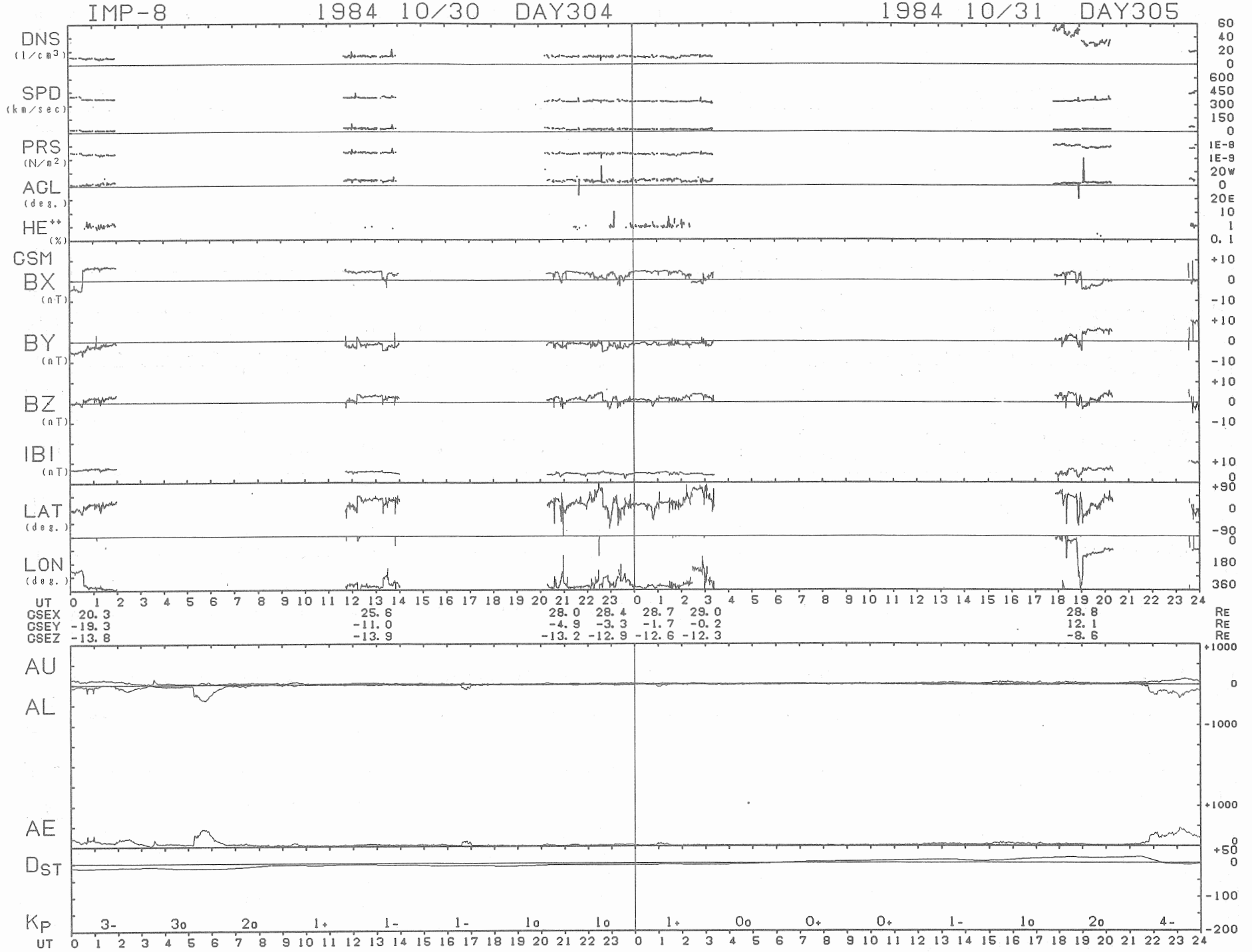

IMP-8
1984 10/20 DAY294
1984 10/21 DAY295
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.7 13.6 9.0 4.1 2.9 1.7 -0.8 -2.0 -5.7 RE
GSEY 31.5 32.2 34.5 36.0 36.2 36.3 36.5 36.5 36.2 RE
GSEZ -1.1 -0.4 2.3 4.9 5.5 6.1 7.4 8.0 9.7 RE
AU
AL
AE
DST
KP 6- 6- 5+ 5+ 5+ 5+ 7- 4+ 4- 4+ 5- 4o 5- 6- 6o 6-
UT

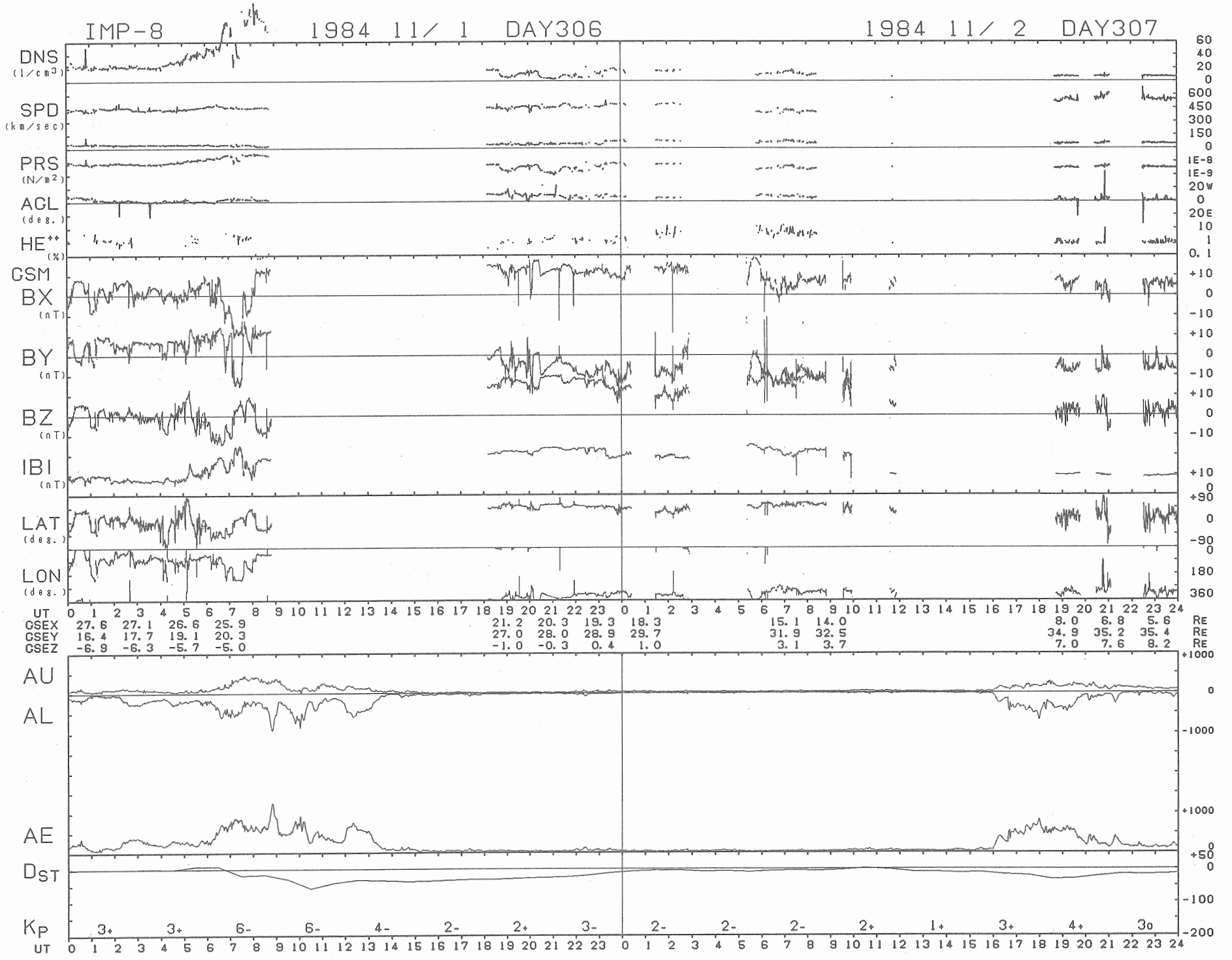

IMP-8
1984 10/22 DAY296
1984 10/23 DAY297
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.7 -12.8 -14.0 -15.1 -16.2 -20.4 -25.1 -30.4 RE
GSEY 34.7 34.2 33.8 33.2 32.7 30.0 25.9 18.9 RE
GSEZ 12.2 12.7 13.2 13.6 14.0 15.4 16.8 17.8 RE
AU
AL
AE
DST
KP
5o 5+ 5o 4+ 4+ 5o 6- 5- 4o 4- 5- 4- 3+ 4+ 4+ 4o
UT

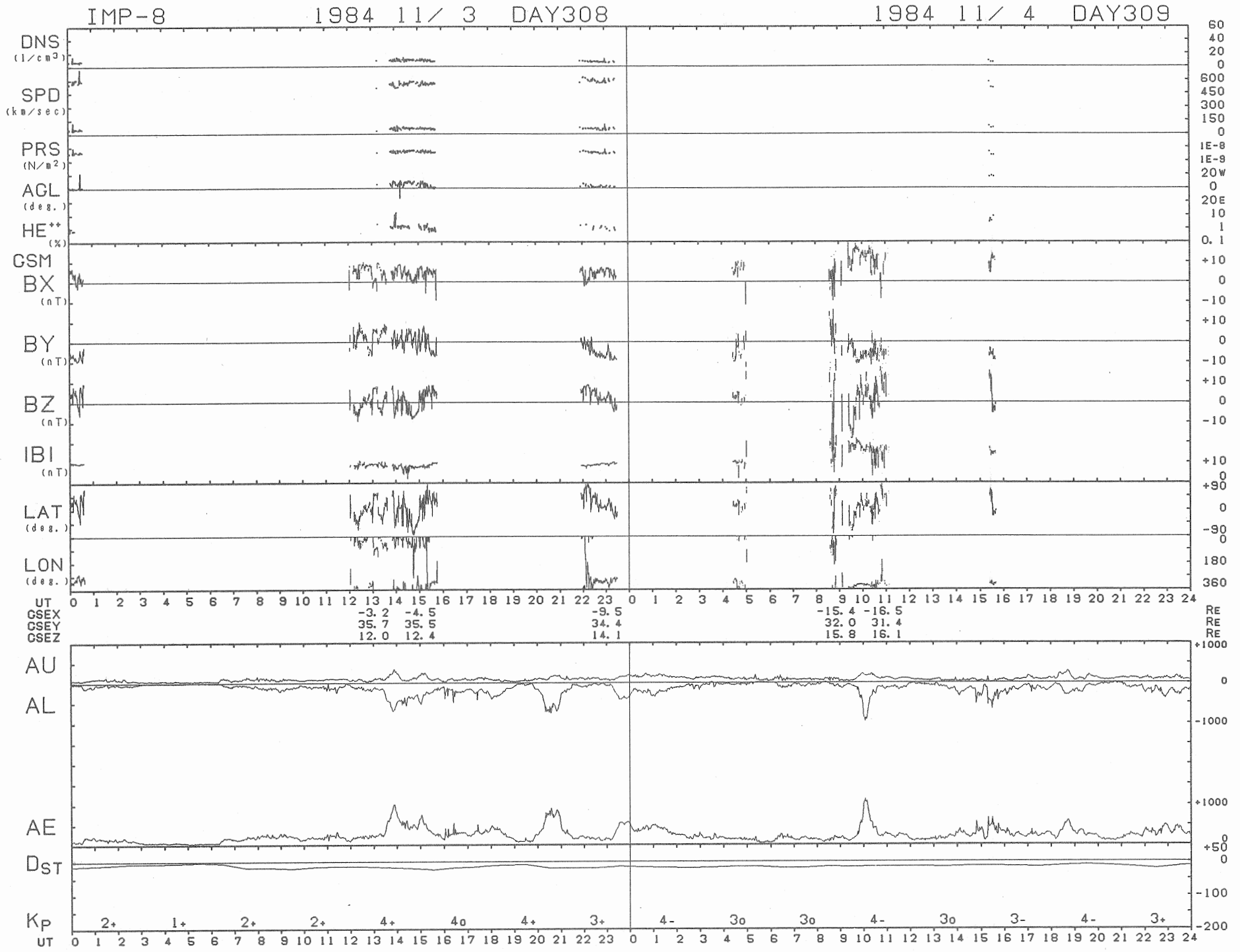

IMP-8
1984 10/24 DAY298
1984 10/25 DAY299
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.0 -35.9 -35.9 -35.7 -35.6 -35.1 RE
GSEY -1.7 -2.9 -4.2 -5.4 -6.7 -9.1 RE
GSEZ 15.7 15.4 15.0 14.7 14.3 13.5 RE
AU
AL
AE
DST
KP
5- 5- 5o 4+ 5+ 5- 5- 4- 3- 4o 3+ 2+ 3o 2+ 4- 6-

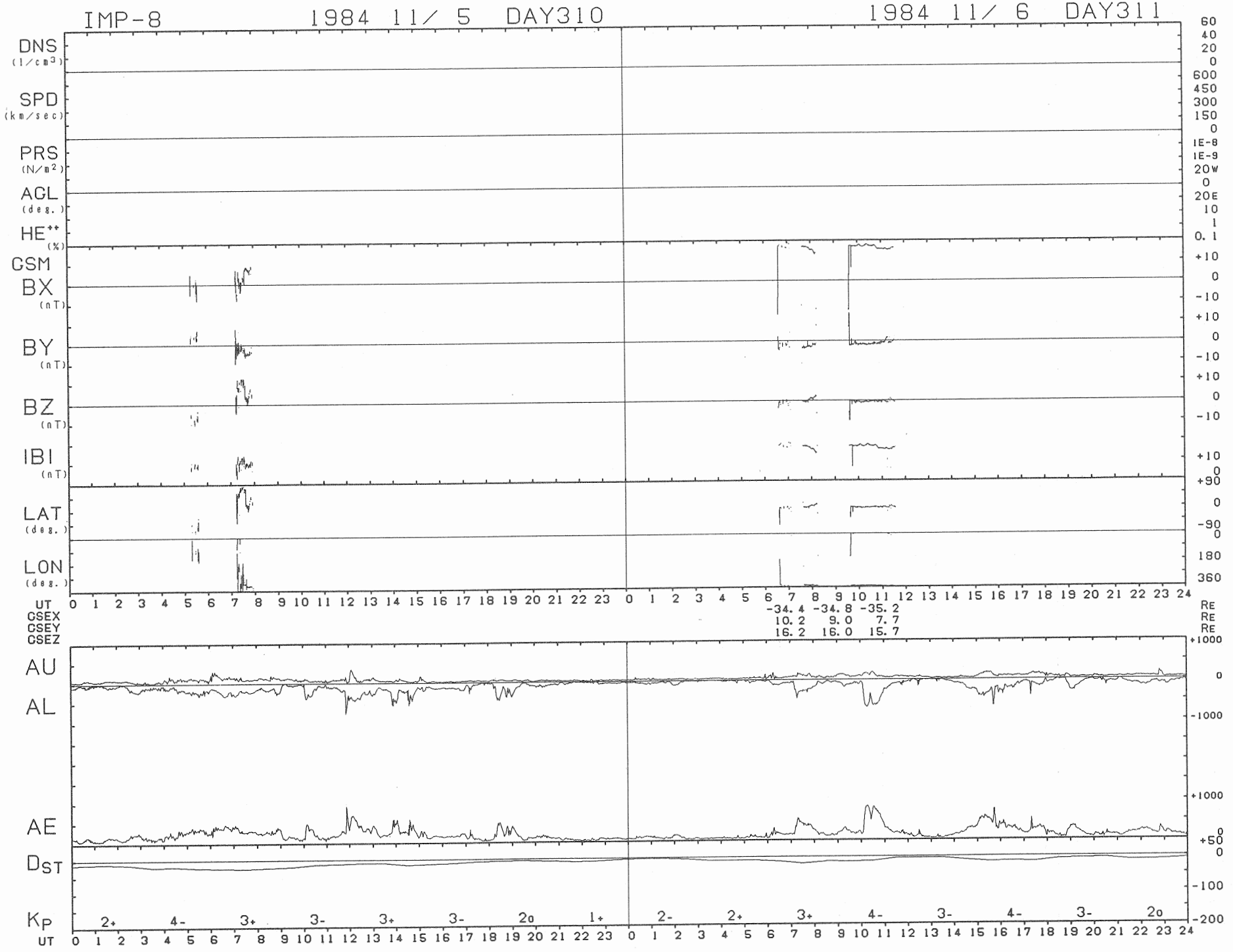

IMP-8
1984 10/26 DAY300
1984 10/27 DAY301
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.5 -32.0 -31.3 -30.7 -28.4 -27.6 -21.7 -19.5 -18.3 -17.1 -15.9 -14.6 -13.3 RE
GSEY -16.2 -17.3 -18.4 -19.4 -22.4 -23.4 -28.2 -29.4 -30.0 -30.5 -30.9 -31.3 -31.7 RE
GSEZ 10.6 10.0 9.5 8.9 7.1 6.5 2.6 1.3 0.6 -0.1 -0.7 -1.4 -2.1 RE
AU
AL
AE
DST
KP
5+ 2+ 2+ 2- 1+ 2+ 1+ 2+ 2o 2+ 2+ 2- 3- 3o 1+ 1o

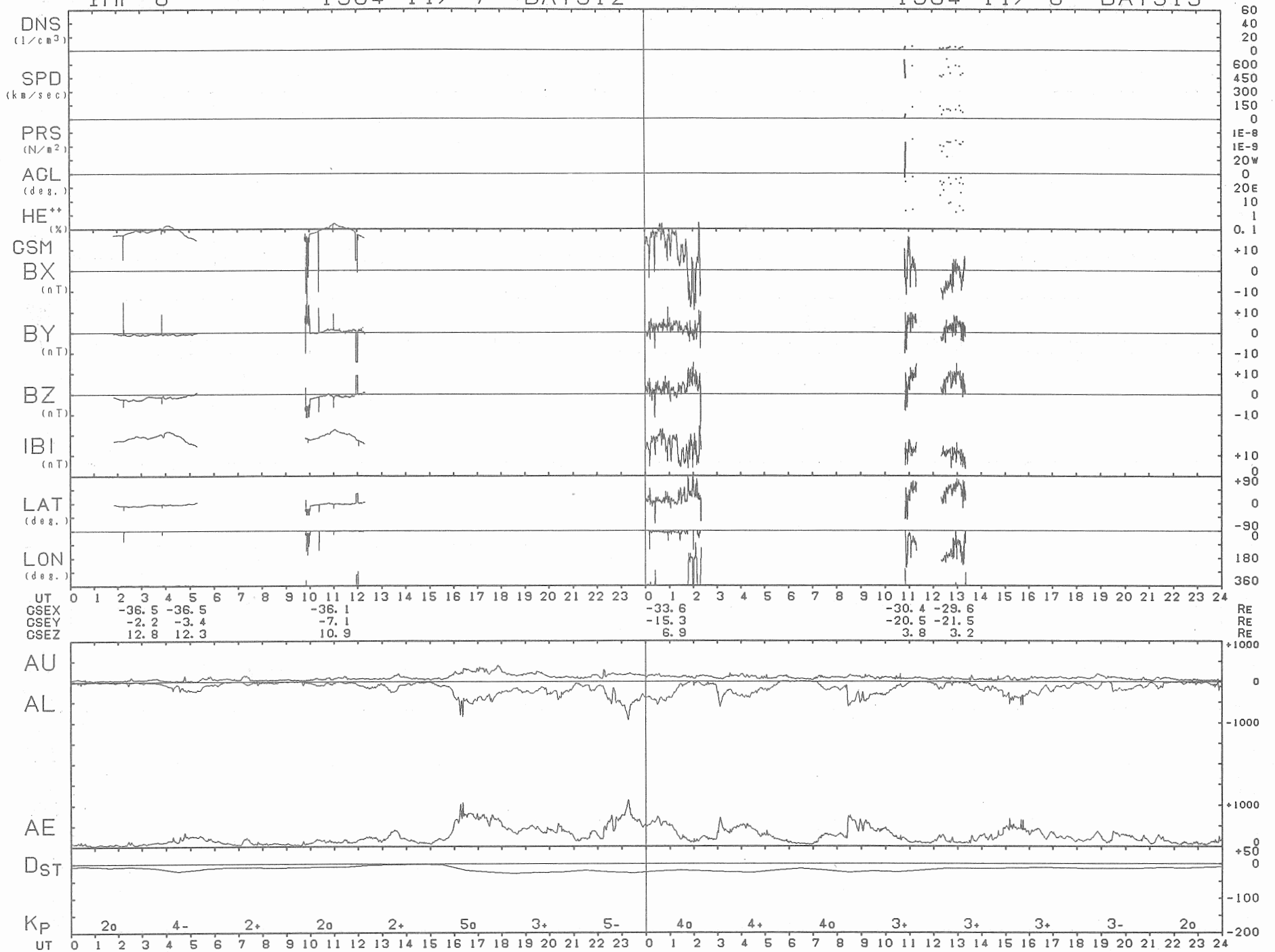

IMP-8
1984 10/28 DAY302
1984 10/29 DAY303
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.9 -5.1 -3.7 -2.3 -0.8 0.6 2.1 3.5 4.9 16.9 18.1 19.2 Re
GSEY -32.4 -32.4 -32.3 -32.2 -31.9 -31.6 -31.3 -30.8 -30.3 -22.9 -21.7 -20.5 Re
GSEZ -4.7 -6.0 -6.6 -7.2 -7.8 -8.4 -8.9 -9.4 -10.0 -13.3 -13.5 -13.6 Re
AU
AL
AE
DST
KP
1o 2+ 3- 2o 2o 2o 2+ 3- 2o 2o 2o 2- 2+ 2o 2- 2o
UT

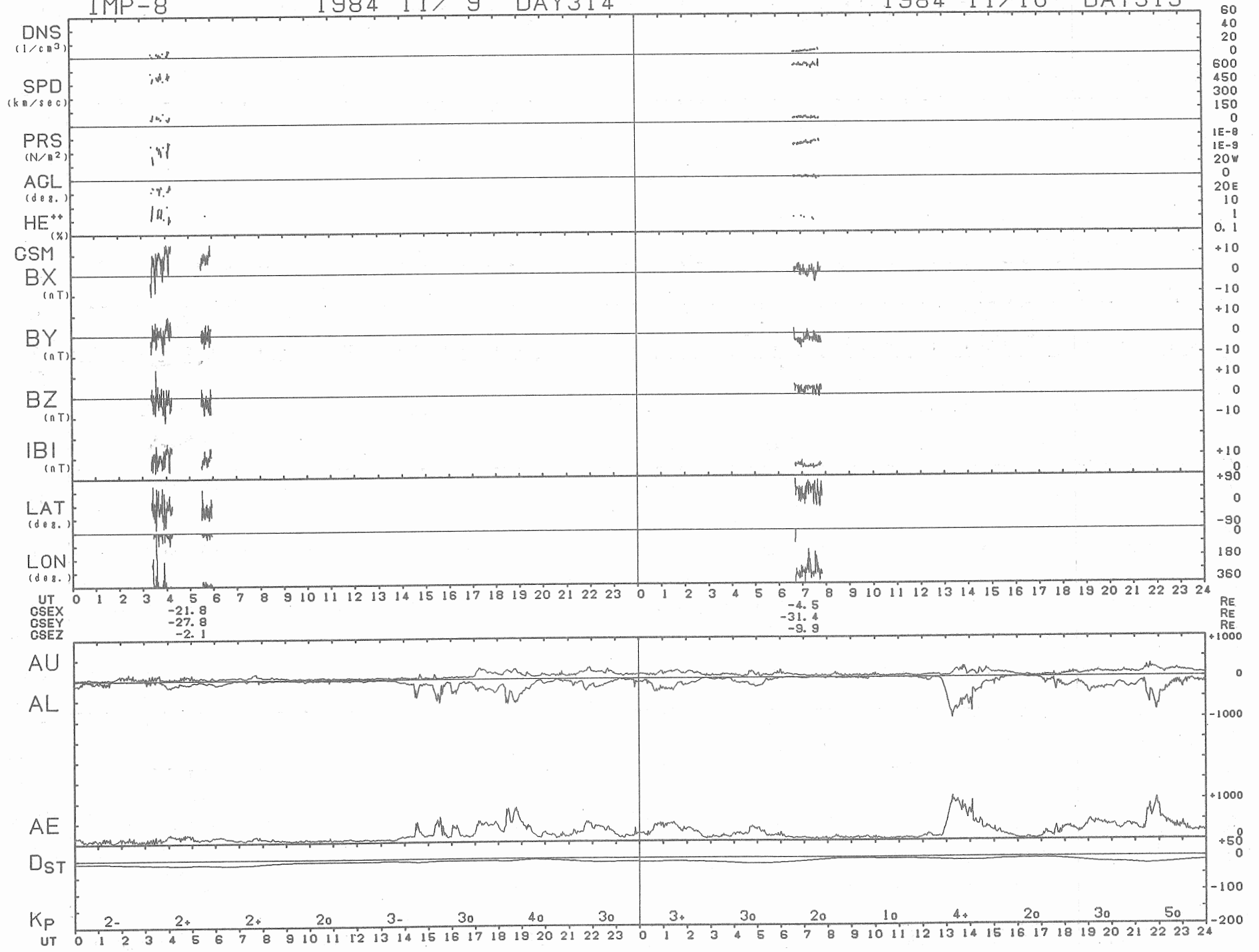

IMP-8
1984 10/30 DAY304
1984 10/31 DAY305
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.3 25.6 28.0 28.4 28.7 29.0 28.8 RE
GSEY -19.3 -11.0 -4.9 -3.3 -1.7 -0.2 12.1 RE
GSEZ -13.8 -13.9 -13.2 -12.9 -12.6 -12.3 -8.6 RE
AU
AL
AE
DST
KP
3- 3o 2o 1+ 1- 1- 1o 1o 1+ 0o 0+ 0+ 1- 1o 2o 4-
UT

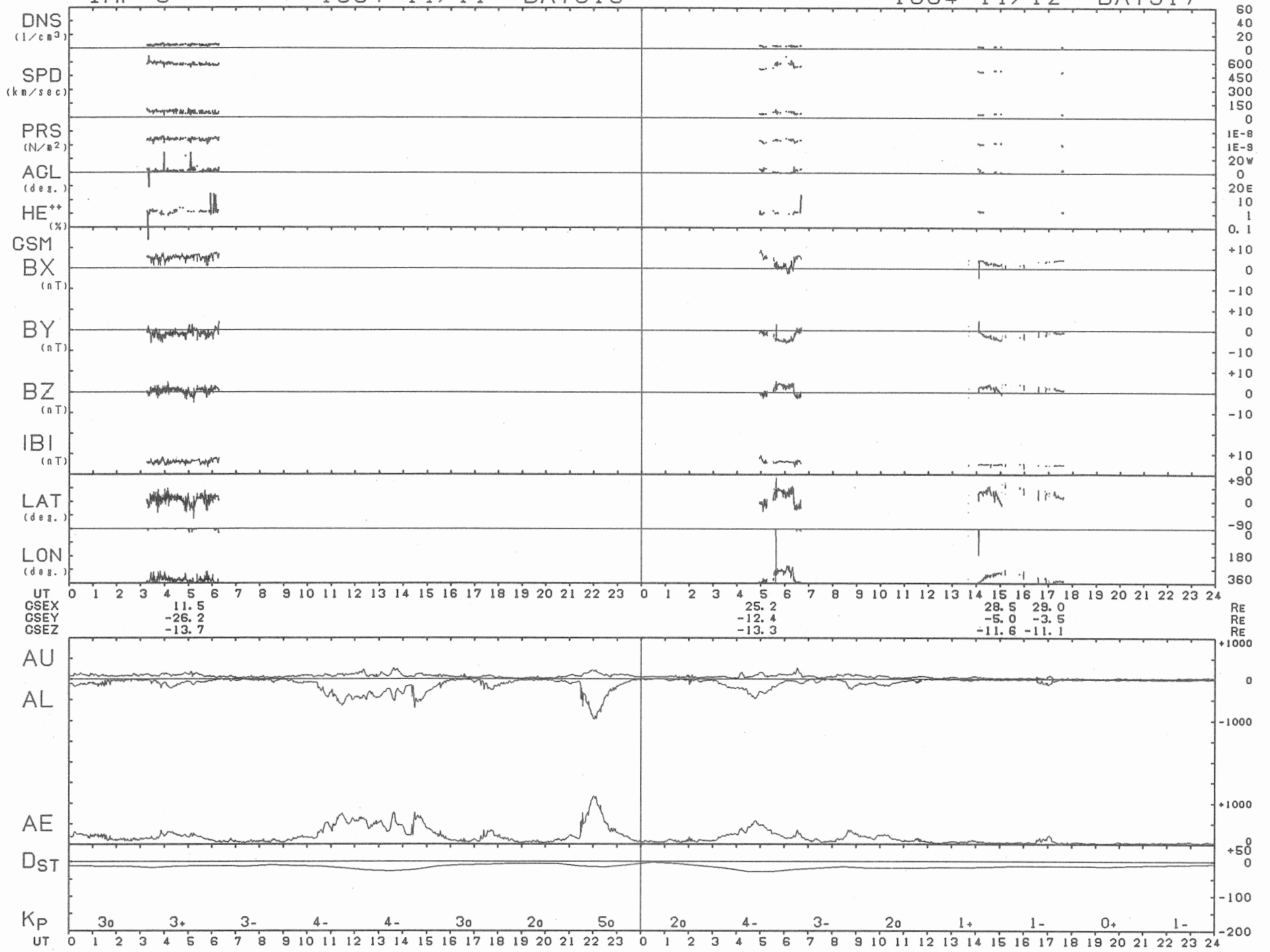

IMP-8
1984 11/ 1 DAY306
1984 11/ 2 DAY307
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.6 27.1 26.6 25.9 21.2 20.3 19.3 18.3 15.1 14.0 8.0 6.8 5.6 Re
GSEY 16.4 17.7 19.1 20.3 27.0 28.0 28.9 29.7 31.9 32.5 34.9 35.2 35.4 Re
GSEZ -6.9 -6.3 -5.7 -5.0 -1.0 -0.3 0.4 1.0 3.1 3.7 7.0 7.6 8.2 Re
AU
AL
AE
DST
KP 3+ 3+ 6- 6- 4- 2- 2+ 3- 2- 2- 2- 2+ 1+ 3+ 4+ 3o
UT

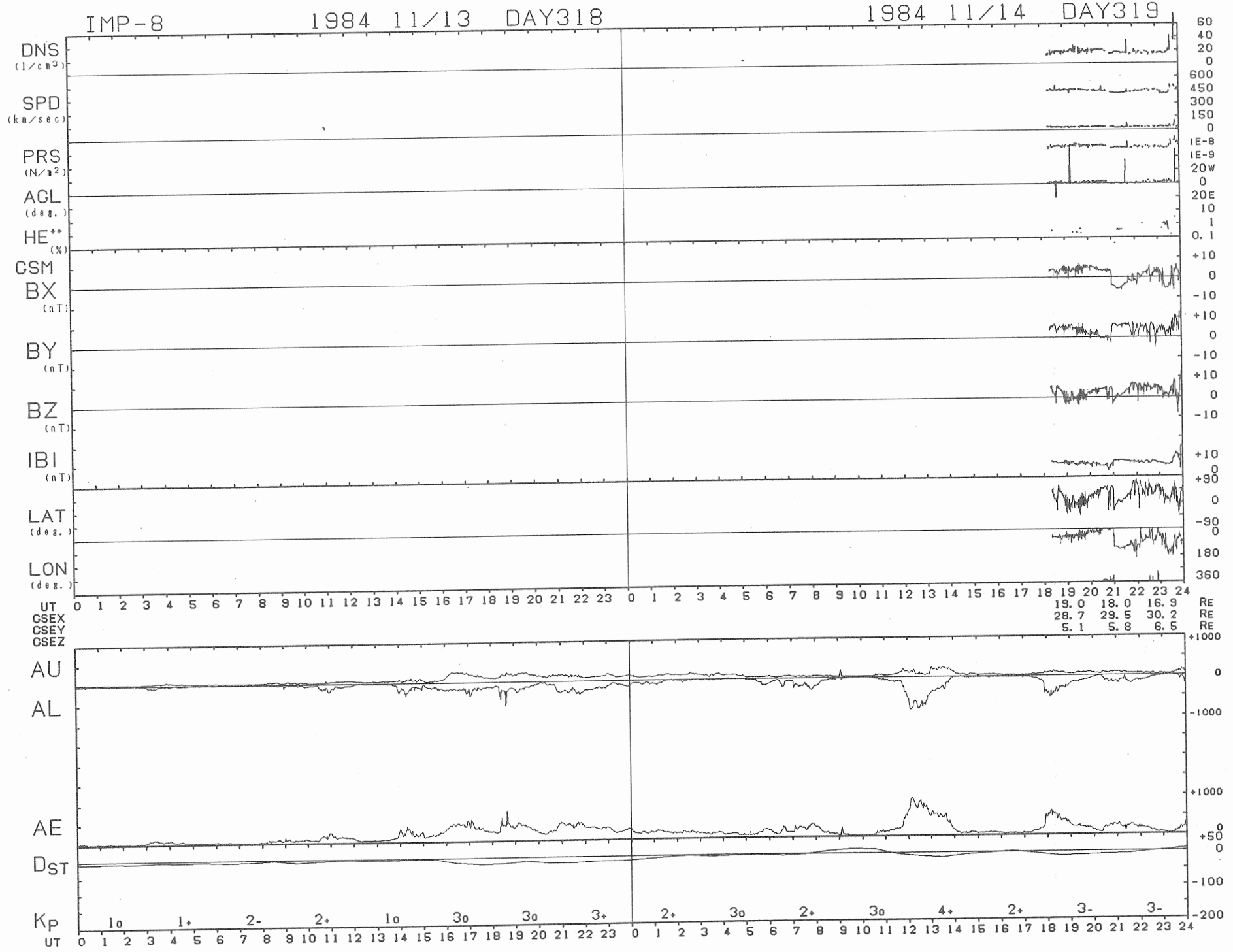

IMP-8
1984 11/ 3 DAY308
1984 11/ 4 DAY309
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -3.2 -4.5 -9.5 -15.4 -16.5 RE
GSEY 35.7 35.5 34.4 32.0 31.4 RE
GSEZ 12.0 12.4 14.1 15.8 16.1 RE
AU
AL
AE
DST
KP 2+ 1+ 2+ 2+ 4+ 4o 4+ 3+ 4- 3o 3o 4- 3o 3- 4- 3+
UT

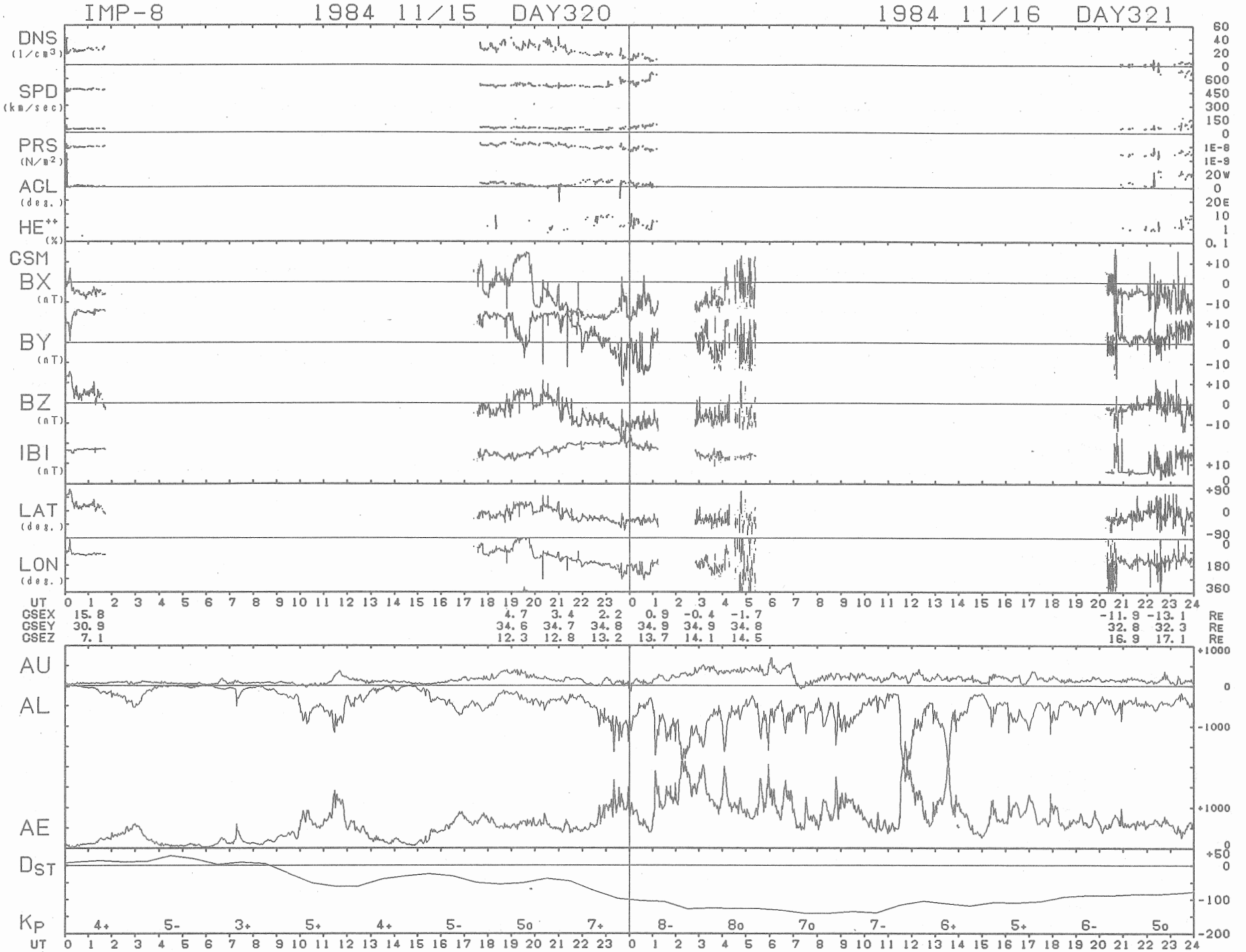

IMP-8
1984 11/ 5 DAY310
1984 11/ 6 DAY311
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
60 40 20 0
600 450 300 150 0
1E-8 1E-9
20W 0 20E
10 1 0.1
+10 0 -10
+10 0 -10
+10 0 -10
+10 0
+90 0 -90
0 180 360
Re Re Re
CSEX -34.4 -34.8 -35.2
CSEY 10.2 9.0 7.7
CSEZ 16.2 16.0 15.7
AU
AL
AE
Dst
Kp
2+ 4- 3+ 3- 3+ 3- 2o 1+ 2- 2+ 3+ 4- 3- 4- 3- 2o
+1000 0 -1000
+1000 0
+50 0
-100 -200

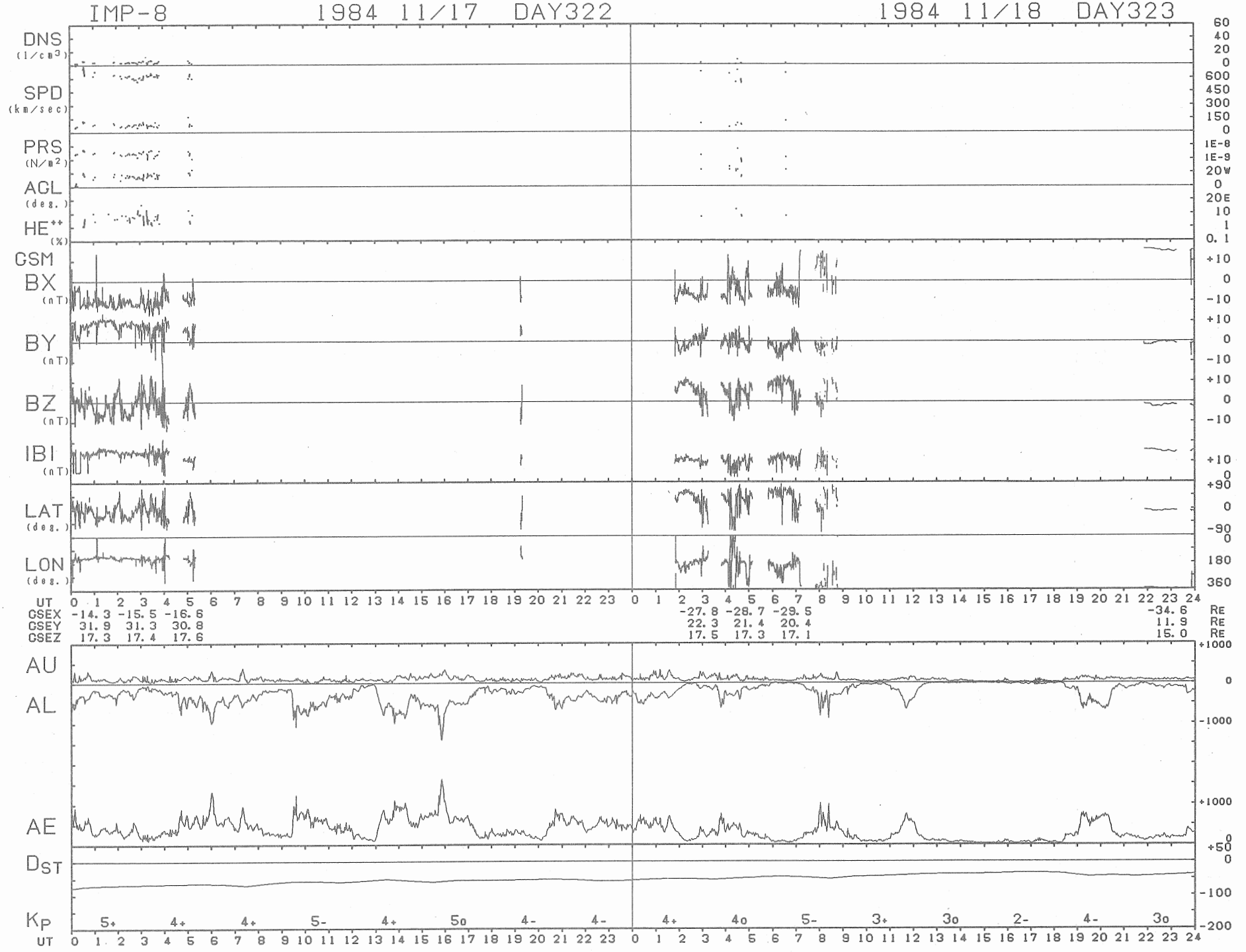

IMP-8
1984 11/ 7 DAY312
1984 11/ 8 DAY313
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.5 -36.5 -36.1 -33.6 -30.4 -29.6 RE
GSEY -2.2 -3.4 -7.1 -15.3 -20.5 -21.5 RE
GSEZ 12.8 12.3 10.9 6.9 3.8 3.2 RE
AU
AL
AE
DST
KP
2o 4- 2+ 2o 2+ 5o 3+ 5- 4o 4+ 4o 3+ 3+ 3+ 3- 2o
UT

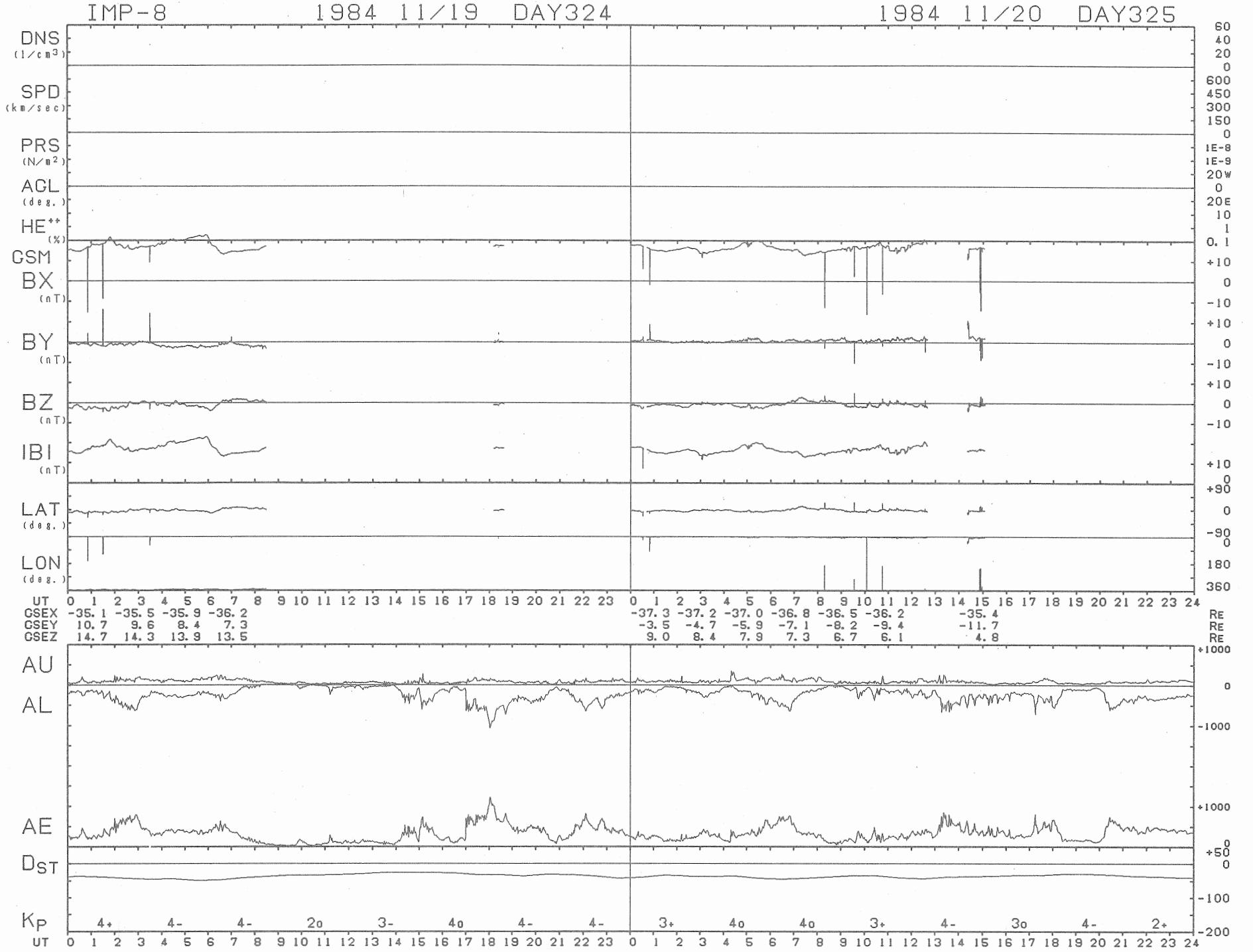

IMP-8
1984 11/ 9 DAY314
1984 11/10 DAY315
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -21.8 -4.5 RE
GSEY -27.8 -31.4 RE
GSEZ -2.1 -9.9 RE
AU
AL
AE
DST
KP
2- 2+ 2+ 2o 3- 3o 4o 3o 3+ 3o 2o 1o 4+ 2o 3o 5o

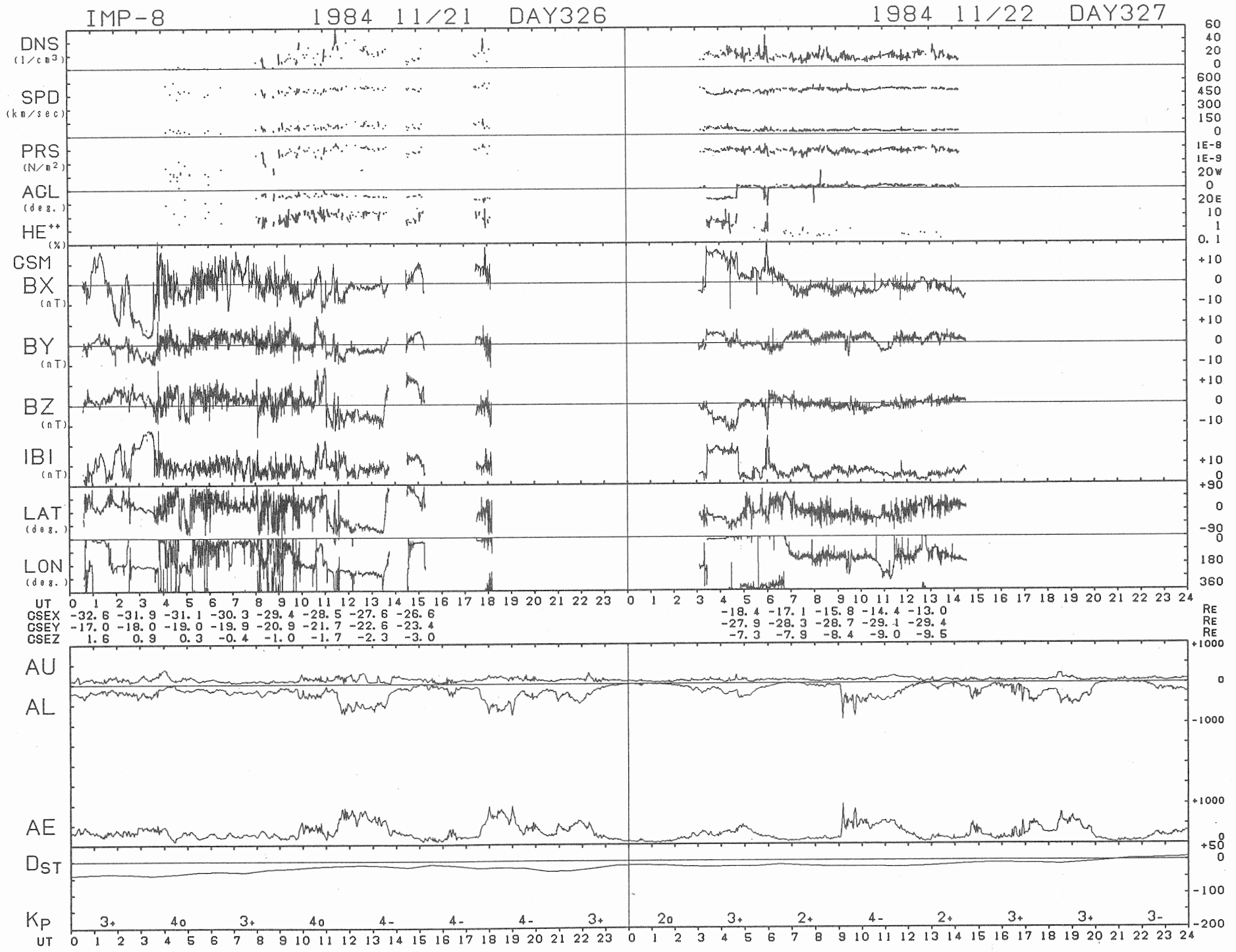

IMP-8
1984 11/11 DAY316
1984 11/12 DAY317
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.5 25.2 28.5 29.0 RE
GSEY -26.2 -12.4 -5.0 -3.5 RE
GSEZ -13.7 -13.3 -11.6 -11.1 RE
AU
AL
AE
DST
KP
3o 3+ 3- 4- 4- 3o 2o 5o 2o 4- 3- 2o 1+ 1- 0+ 1-

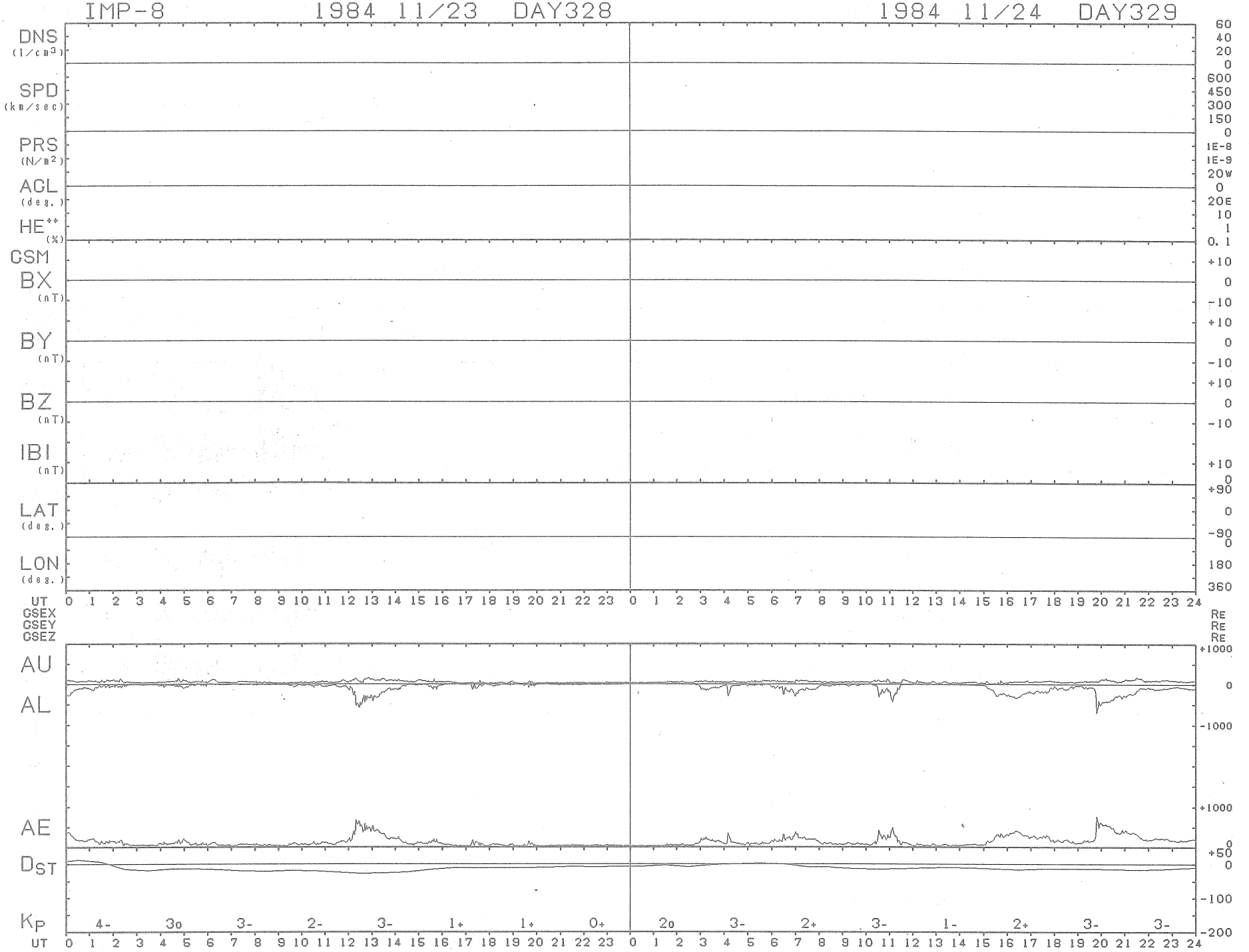

IMP-8
1984 11/13 DAY318
1984 11/14 DAY319
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
19.0 18.0 16.9 RE
28.7 29.5 30.2 RE
5.1 5.8 6.5 RE
AU
AL
AE
DST
KP
1o 1+ 2- 2+ 1o 3o 3o 3+ 2+ 3o 2+ 3o 4+ 2+ 3- 3-
UT

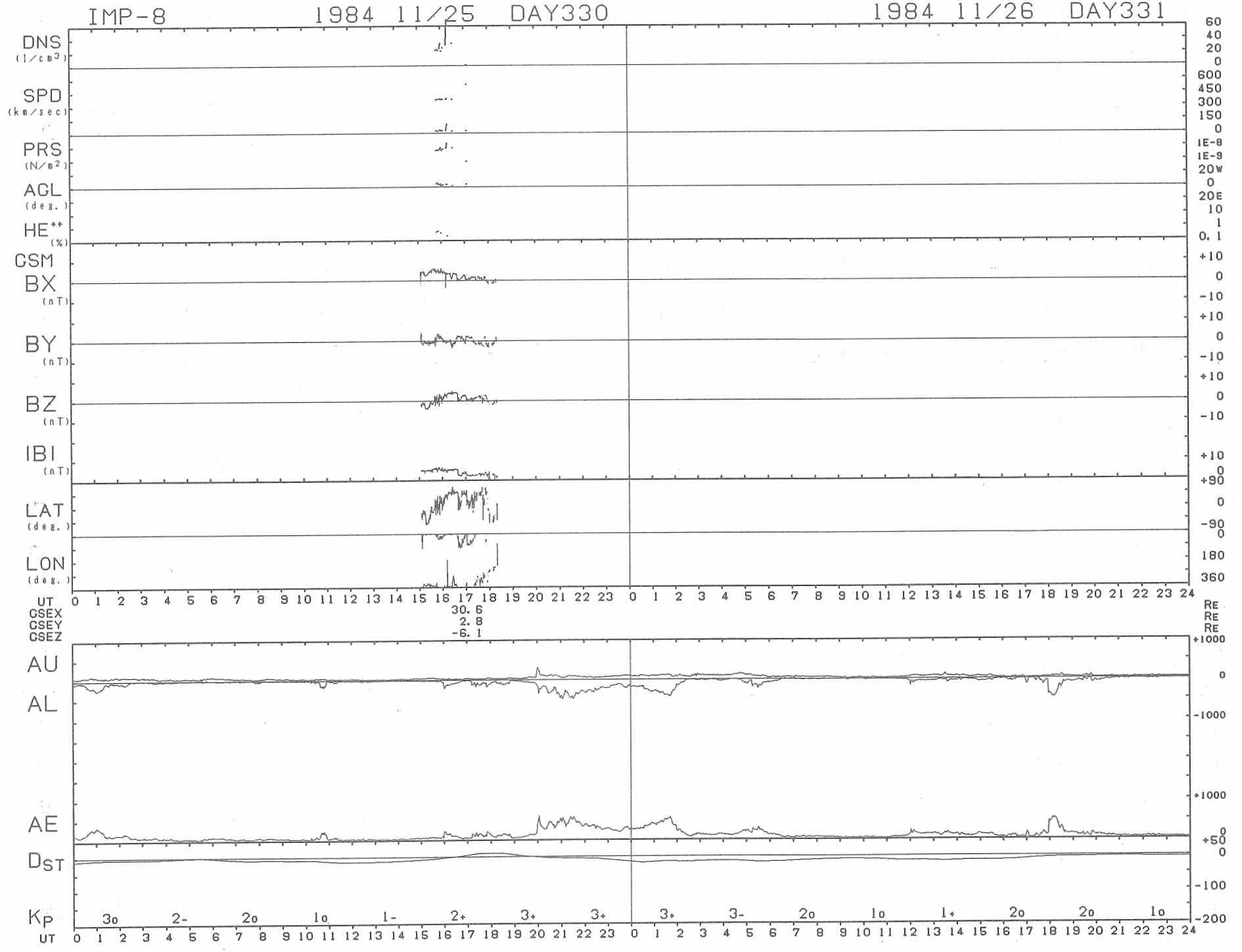

IMP-8
1984 11/15 DAY320
1984 11/16 DAY321
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.8 4.7 3.4 2.2 0.9 -0.4 -1.7 -11.9 -13.1 RE
GSEY 30.9 34.6 34.7 34.8 34.9 34.9 34.8 32.8 32.3 RE
GSEZ 7.1 12.3 12.8 13.2 13.7 14.1 14.5 16.9 17.1 RE
AU
AL
AE
DST
KP
4+ 5- 3+ 5+ 4+ 5- 5o 7+ 8- 8o 7o 7- 6+ 5+ 6- 5o
UT

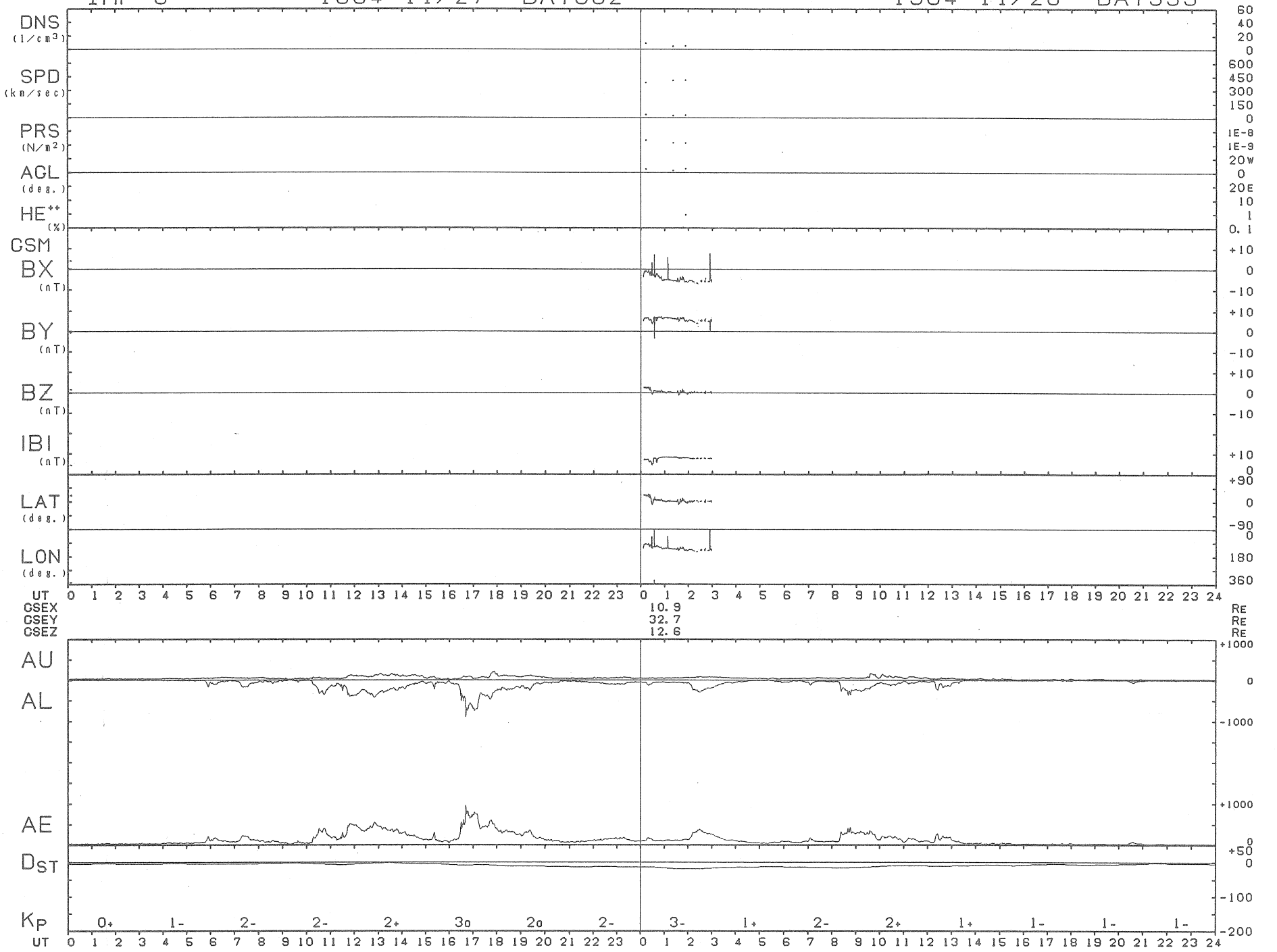

IMP-8
1984 11/17 DAY322
1984 11/18 DAY323
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.3 -15.5 -16.6 -27.8 -28.7 -29.5 -34.6 RE
GSEY 31.9 31.3 30.8 22.3 21.4 20.4 11.9 RE
GSEZ 17.3 17.4 17.6 17.5 17.3 17.1 15.0 RE
AU
AL
AE
DST
KP
5+ 4+ 4+ 5- 4+ 5o 4- 4- 4+ 4o 5- 3+ 3o 2- 4- 3o
UT

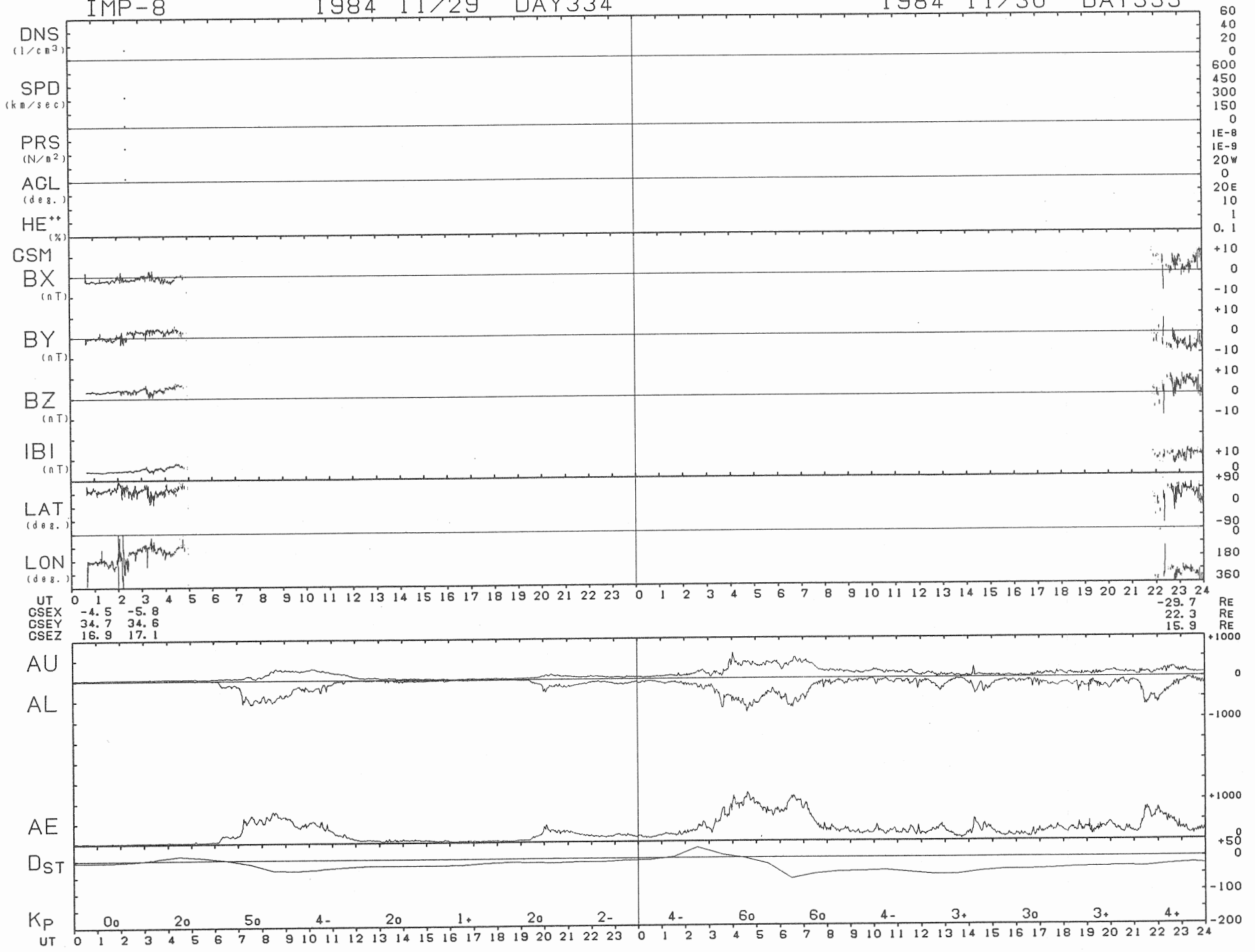

IMP-8
1984 11/19 DAY324
1984 11/20 DAY325
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.1 -35.5 -35.9 -36.2 -37.3 -37.2 -37.0 -36.8 -36.5 -36.2 -35.4 RE
GSEY 10.7 9.6 8.4 7.3 -3.5 -4.7 -5.9 -7.1 -8.2 -9.4 -11.7 RE
GSEZ 14.7 14.3 13.9 13.5 9.0 8.4 7.9 7.3 6.7 6.1 4.8 RE
AU
AL
AE
DST
KP
4+ 4- 4- 2o 3- 4o 4- 4- 3+ 4o 4o 3+ 4- 3o 4- 2+
UT

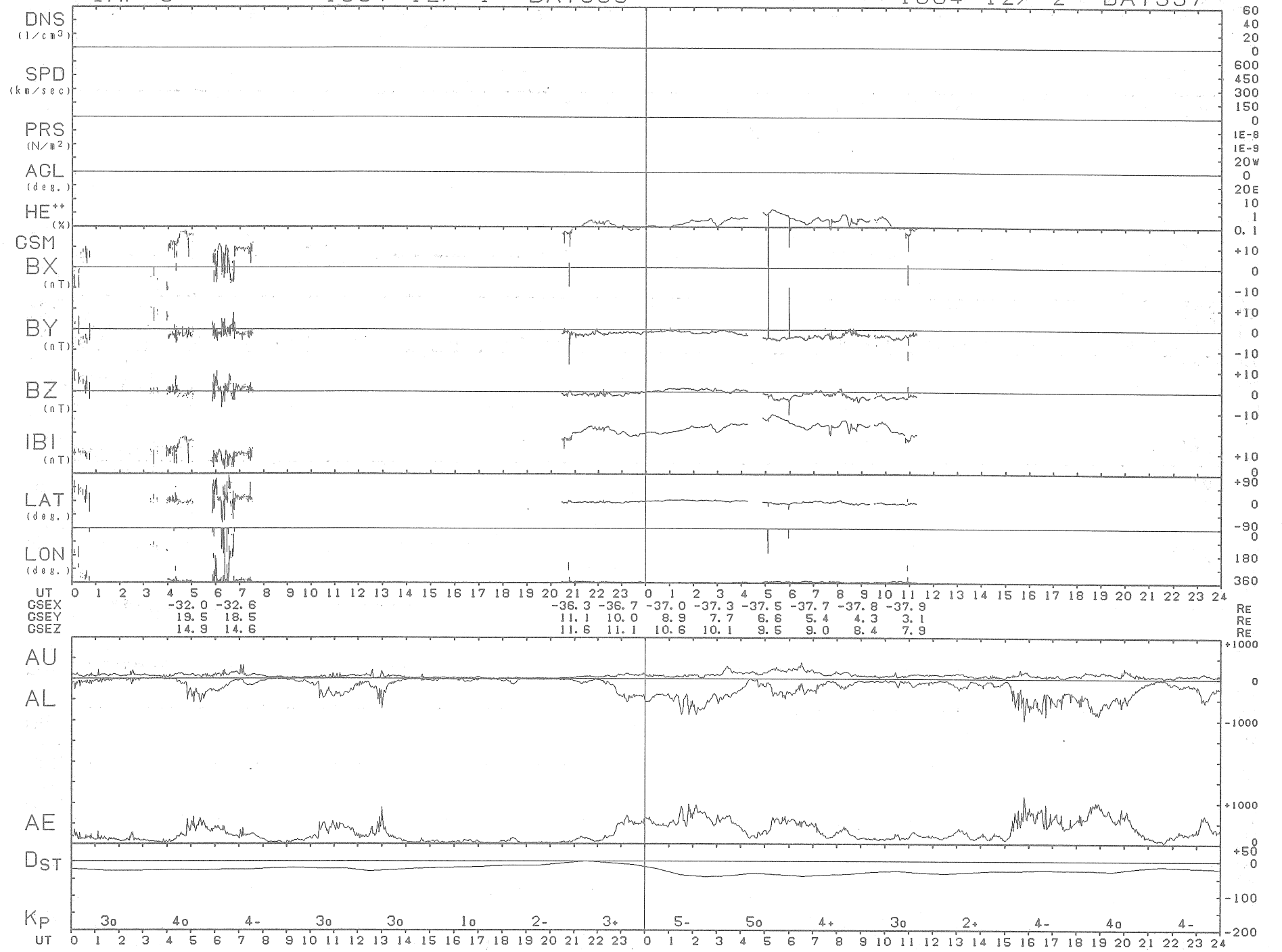

IMP-8
1984 11/21 DAY326
1984 11/22 DAY327
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.6 -31.9 -31.1 -30.3 -29.4 -28.5 -27.6 -26.6 -18.4 -17.1 -15.8 -14.4 -13.0
GSEY -17.0 -18.0 -19.0 -19.9 -20.9 -21.7 -22.6 -23.4 -27.9 -28.3 -28.7 -29.1 -29.4
GSEZ 1.6 0.9 0.3 -0.4 -1.0 -1.7 -2.3 -3.0 -7.3 -7.9 -8.4 -9.0 -9.5
RE
AU
AL
AE
DST
KP
3+ 4o 3+ 4o 4- 4- 4- 3+ 2o 3+ 2+ 4- 2+ 3+ 3+ 3-
UT

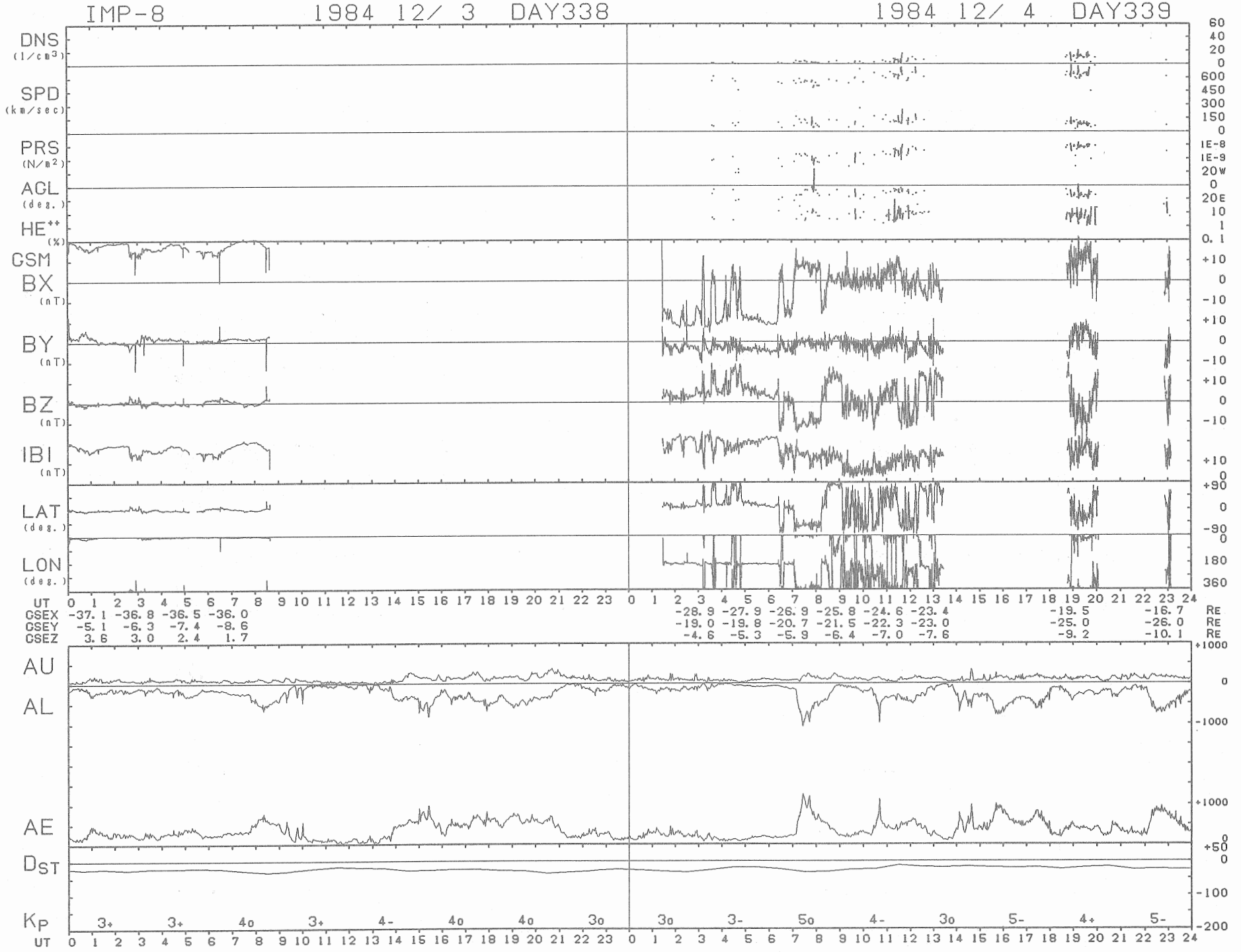

IMP-8
1984 11/23 DAY328
1984 11/24 DAY329
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4- 3o 3- 2- 3- 1+ 1+ 0+ 2o 3- 2+ 3- 1- 2+ 3- 3-

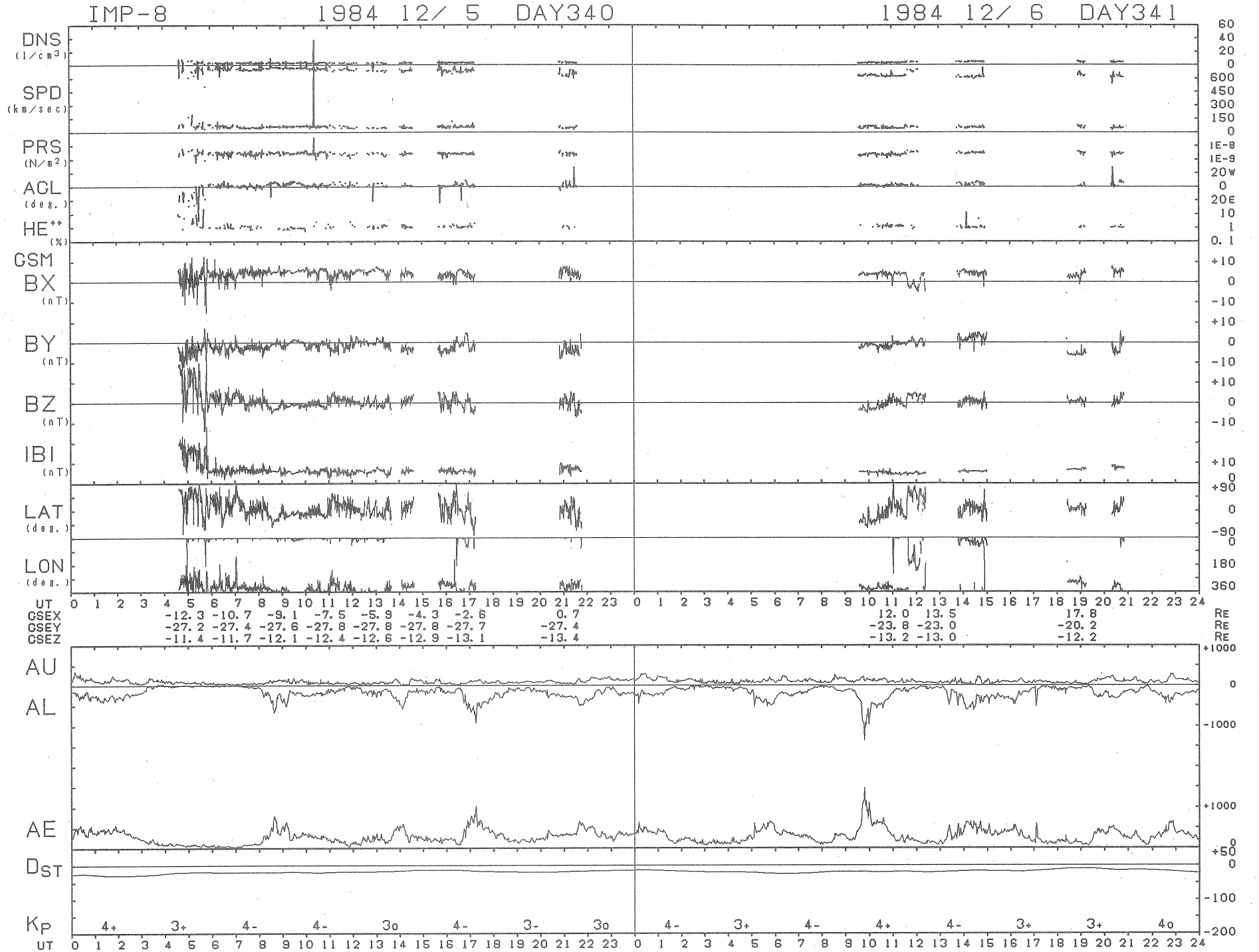

IMP-8
1984 11/25 DAY330
1984 11/26 DAY331
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.6
GSEY 2.8
GSEZ -6.1
AU
AL
AE
DST
KP
3o 2- 2o 1o 1- 2+ 3+ 3+ 3+ 3- 2o 1o 1+ 2o 2o 1o

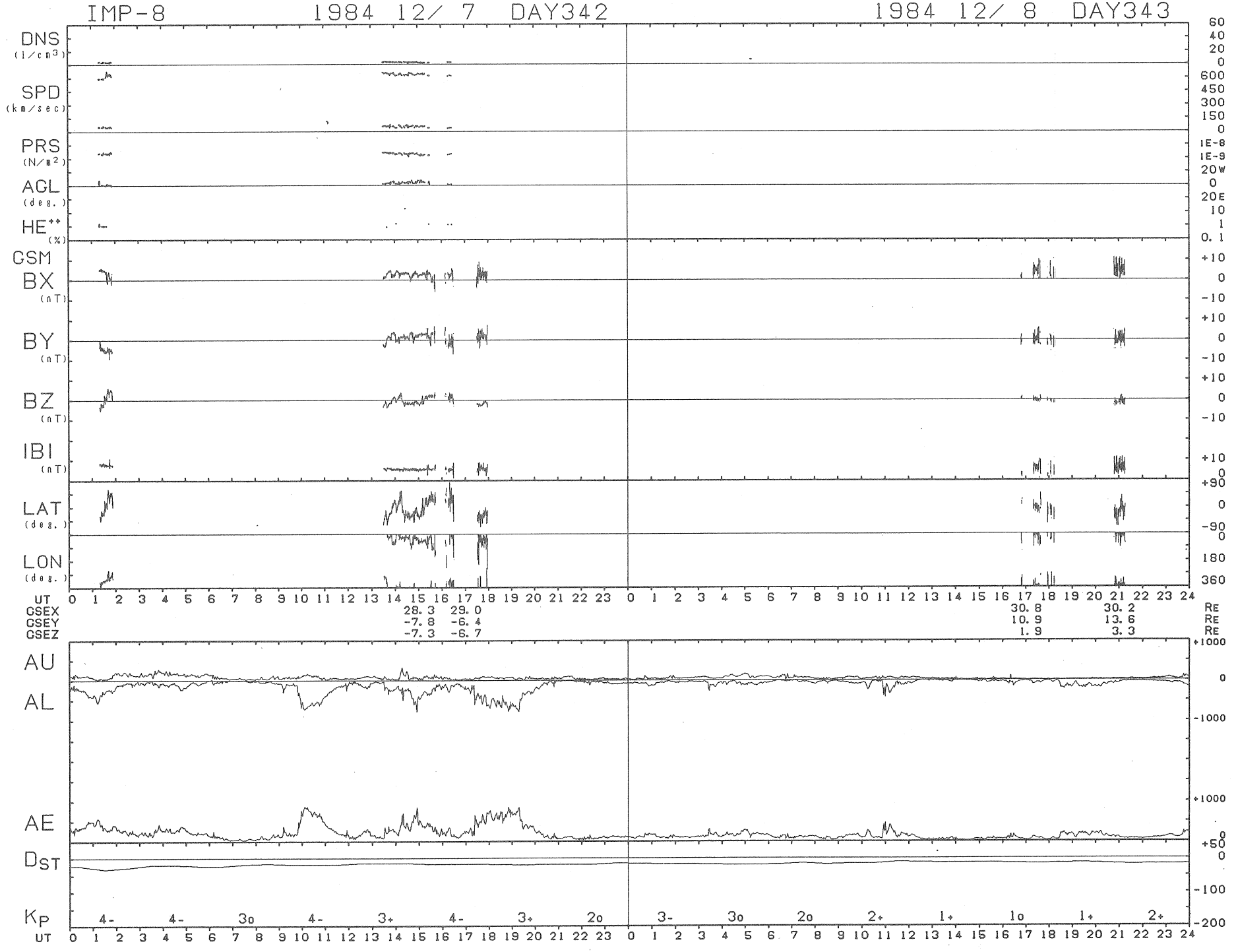

IMP-8
1984 11/27 DAY332
1984 11/28 DAY333
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.9 RE
GSEY 32.7 RE
GSEZ 12.6 RE
AU
AL
AE
DST
KP
0+ 1- 2- 2- 2+ 3o 2o 2- 3- 1+ 2- 2+ 1+ 1- 1- 1-

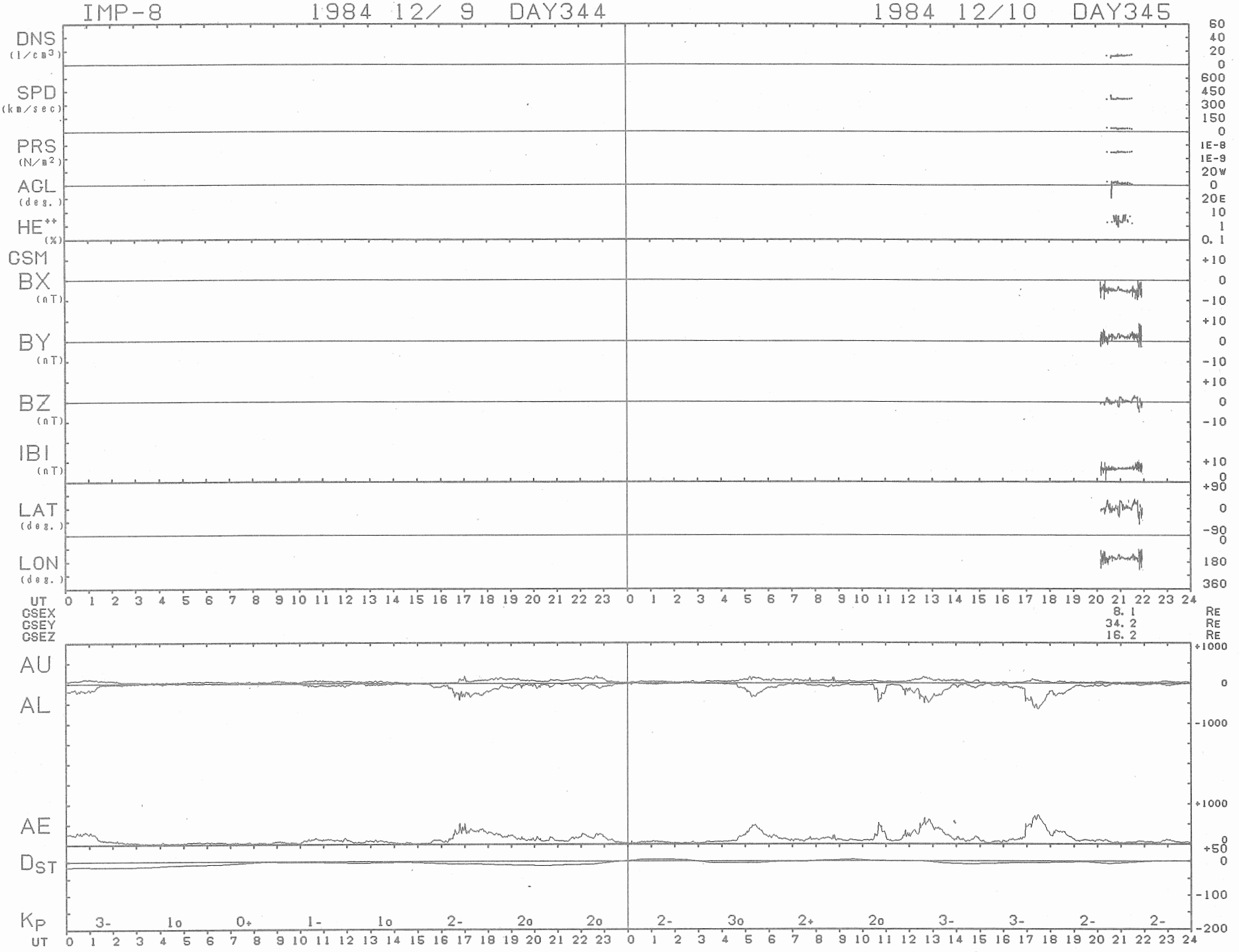

IMP-8
1984 11/29 DAY334
1984 11/30 DAY335
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -4.5 -5.8 -29.7 RE
GSEY 34.7 34.6 22.3 RE
GSEZ 16.9 17.1 15.9 RE
AU
AL
AE
DST
KP
0o 2o 5o 4- 2o 1+ 2o 2- 4- 6o 6o 4- 3+ 3o 3+ 4+

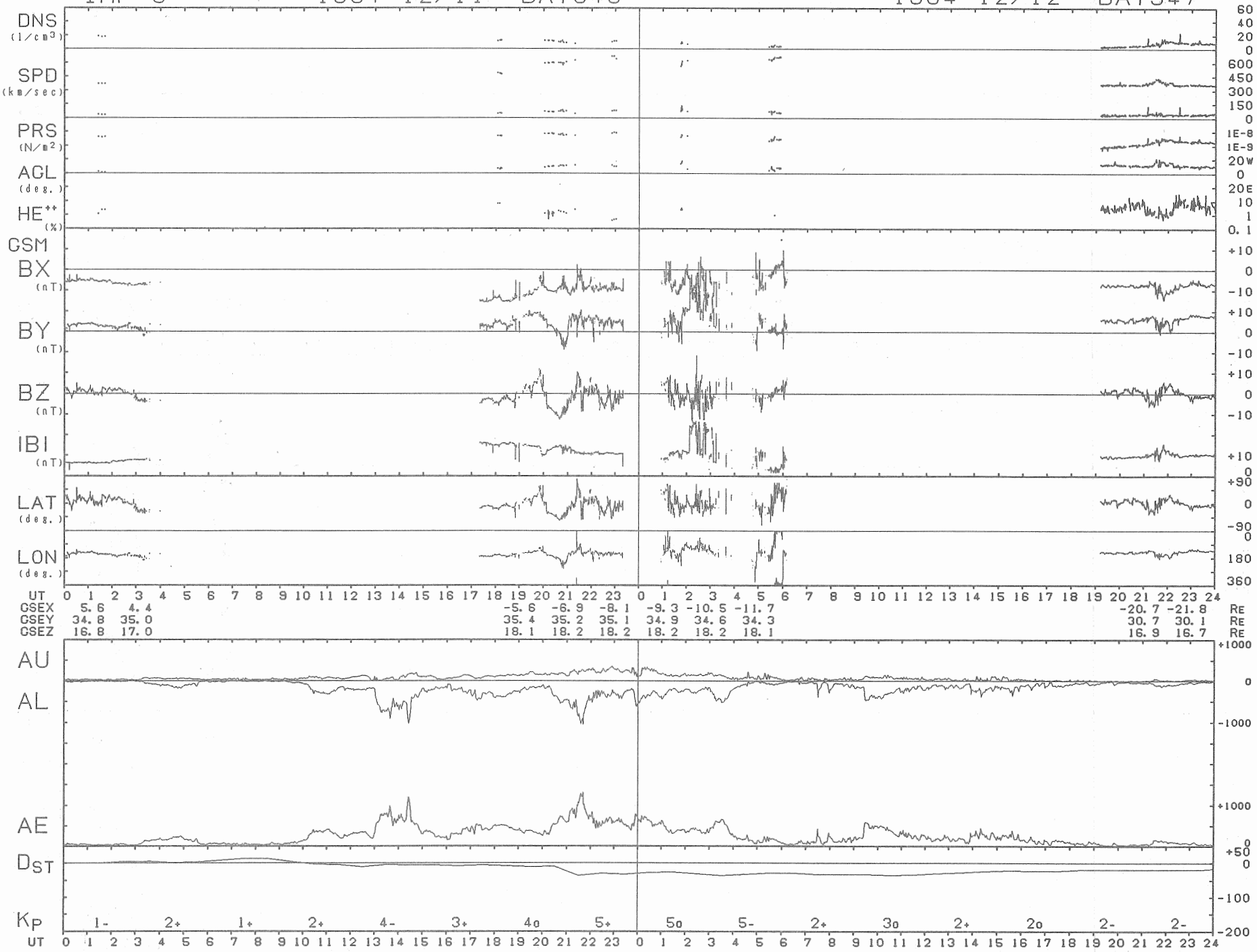

IMP-8
1984 12/ 1 DAY336
1984 12/ 2 DAY337
DNS (l/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.0 -32.6 -36.3 -36.7 -37.0 -37.3 -37.5 -37.7 -37.8 -37.9 RE
GSEY 19.5 18.5 11.1 10.0 8.9 7.7 6.6 5.4 4.3 3.1 RE
GSEZ 14.9 14.6 11.6 11.1 10.6 10.1 9.5 9.0 8.4 7.9 RE
AU
AL
AE
DST
KP
3o 4o 4- 3o 3o 1o 2- 3+ 5- 5o 4+ 3o 2+ 4- 4o 4-

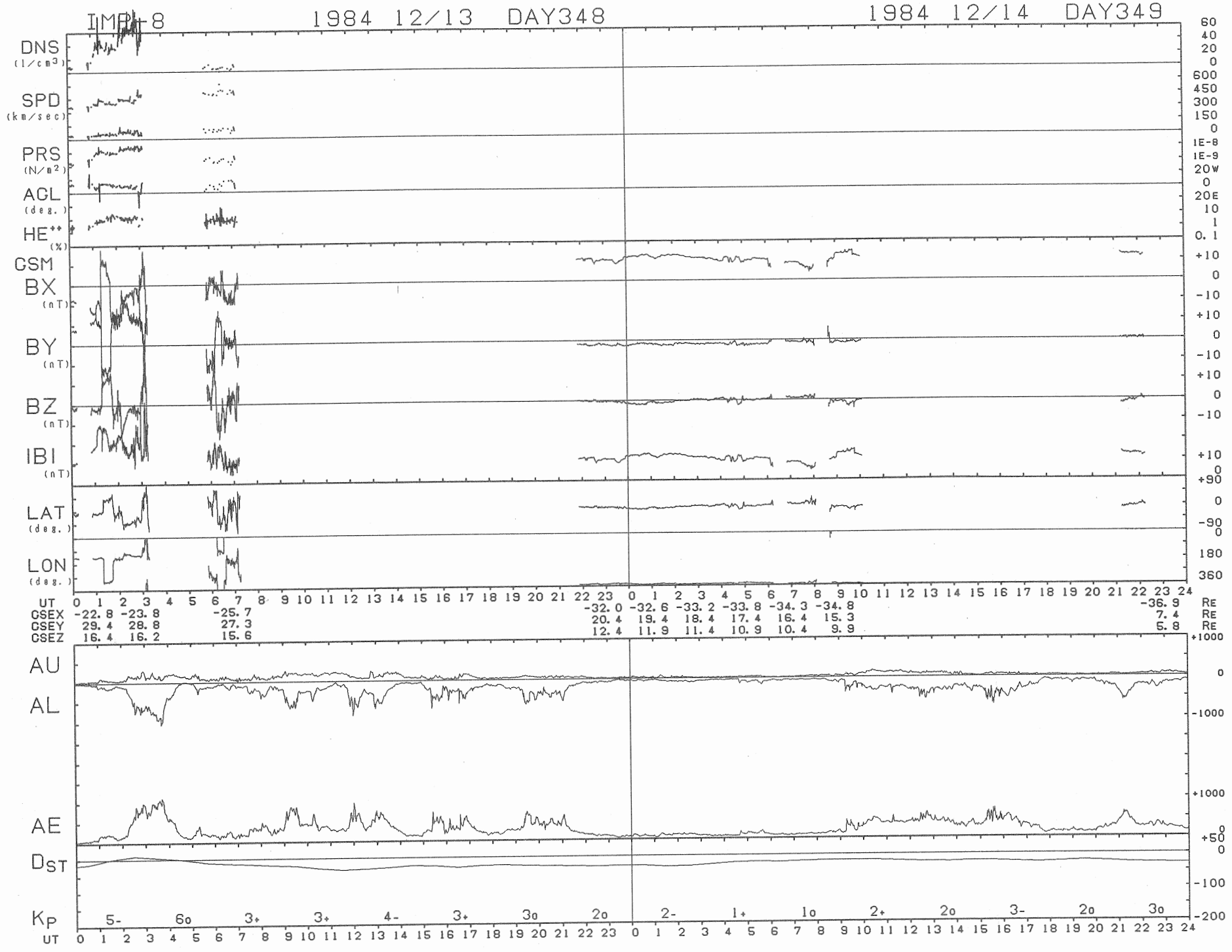

IMP-8
1984 12/ 3 DAY338
1984 12/ 4 DAY339
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.1 -36.8 -36.5 -36.0 -28.9 -27.9 -26.9 -25.8 -24.6 -23.4 -19.5 -16.7 RE
GSEY -5.1 -6.3 -7.4 -8.6 -19.0 -19.8 -20.7 -21.5 -22.3 -23.0 -25.0 -26.0 RE
GSEZ 3.6 3.0 2.4 1.7 -4.6 -5.3 -5.9 -6.4 -7.0 -7.6 -9.2 -10.1 RE
AU
AL
AE
DST
KP
3+ 3+ 4o 3+ 4- 4o 4o 3o 3o 3- 5o 4- 3o 5- 4+ 5-
UT

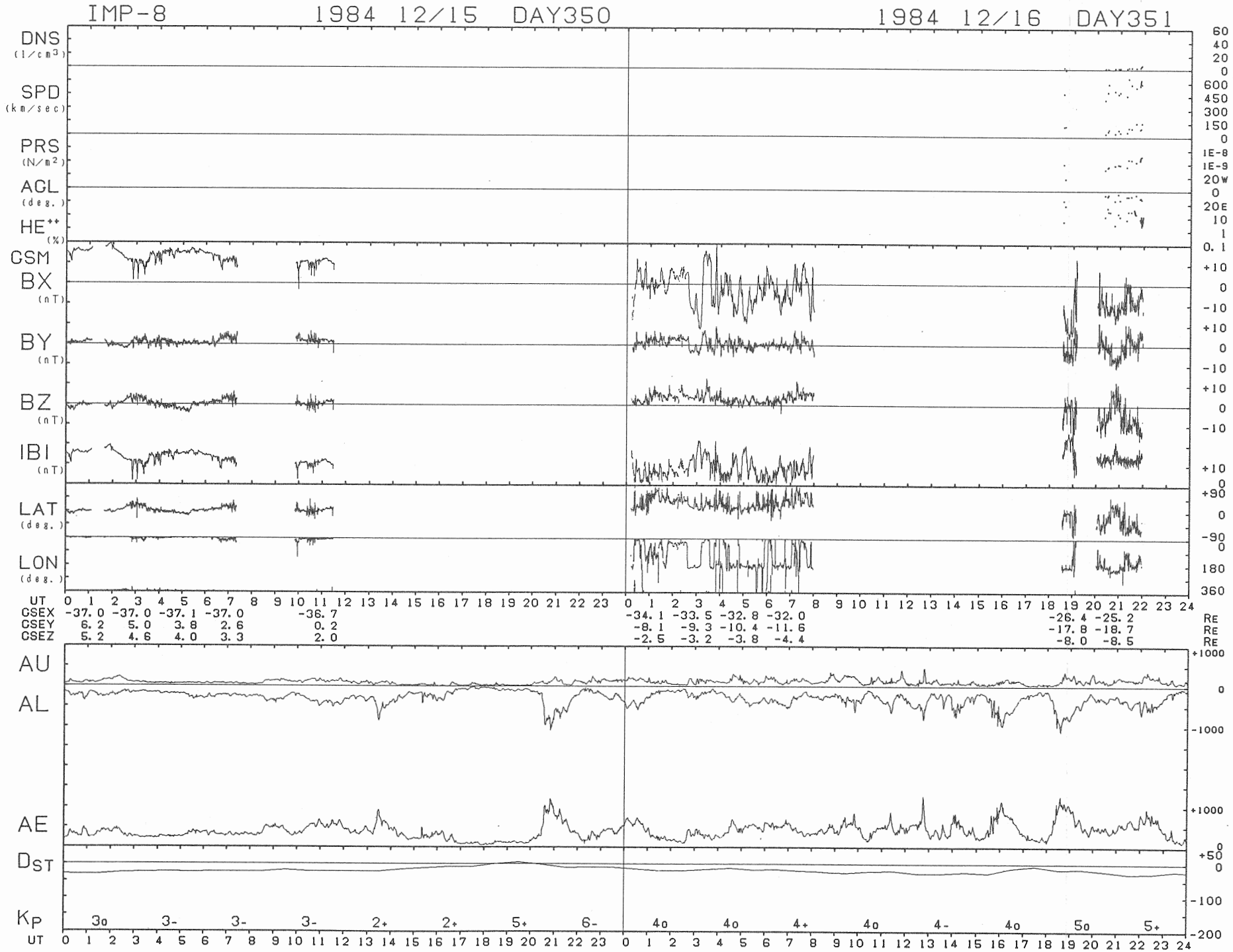

IMP-8
1984 12/ 5 DAY340
1984 12/ 6 DAY341
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.3 -10.7 -9.1 -7.5 -5.9 -4.3 -2.6 0.7 12.0 13.5 17.8 Re
GSEY -27.2 -27.4 -27.6 -27.8 -27.8 -27.8 -27.7 -27.4 -23.8 -23.0 -20.2 Re
GSEZ -11.4 -11.7 -12.1 -12.4 -12.6 -12.9 -13.1 -13.4 -13.2 -13.0 -12.2 Re
AU
AL
AE
DST
KP
4+ 3+ 4- 4- 3o 4- 3- 3o 4- 3+ 4- 4+ 4- 3+ 3+ 4o

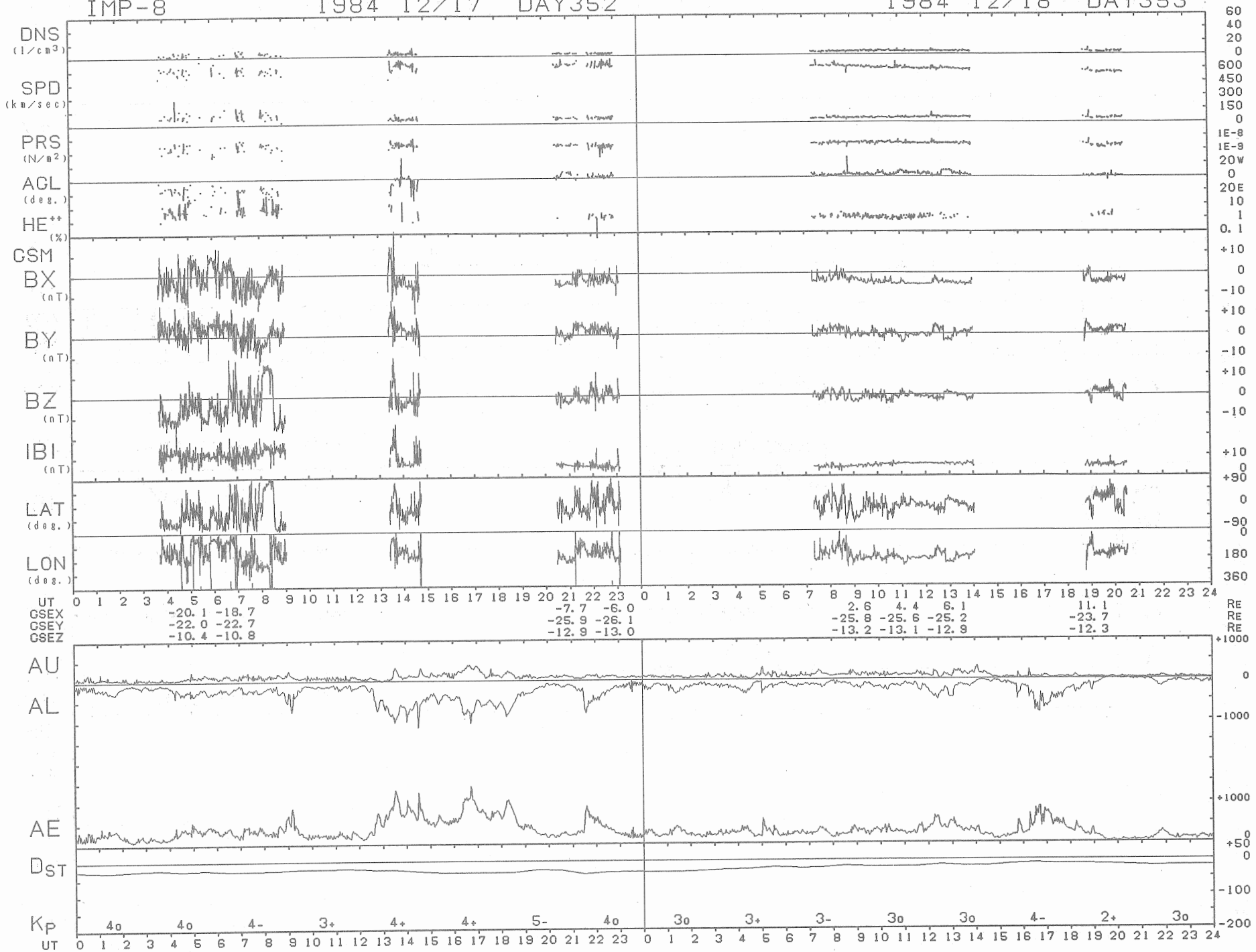

IMP-8
1984 12/ 7 DAY342
1984 12/ 8 DAY343
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.3 29.0 30.8 30.2 RE
GSEY -7.8 -6.4 10.9 13.6 RE
GSEZ -7.3 -6.7 1.9 3.3 RE
AU
AL
AE
DST
KP 4- 4- 3o 4- 3+ 4- 3+ 2o 3- 3o 2o 2+ 1+ 1o 1+ 2+
UT

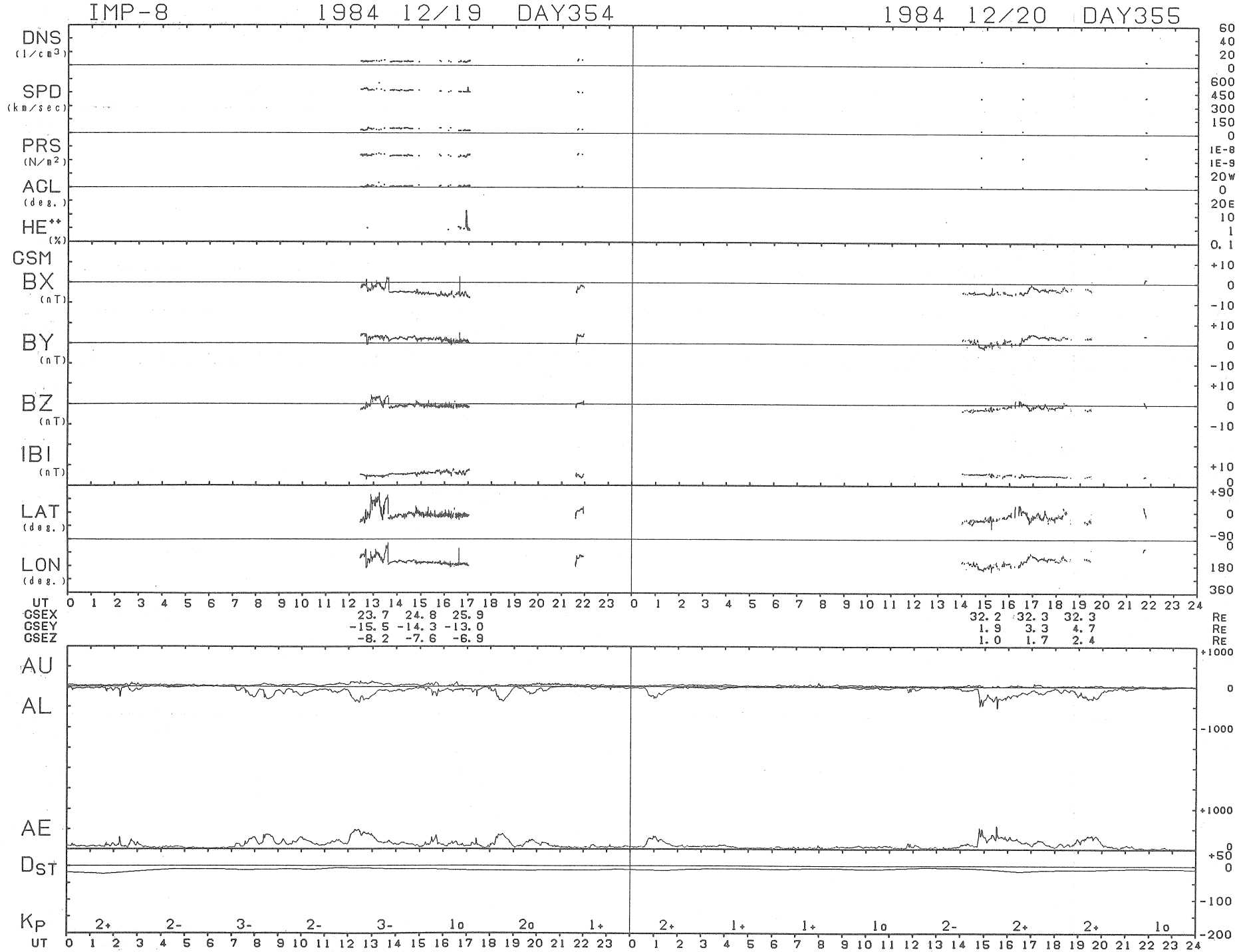

IMP-8
1984 12/ 9 DAY344
1984 12/10 DAY345
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 8.1 RE
GSEY 34.2 RE
GSEZ 16.2 RE
AU
AL
AE
DST
KP
3- 1o 0+ 1- 1o 2- 2o 2o 2- 3o 2+ 2o 3- 3- 2- 2-
UT

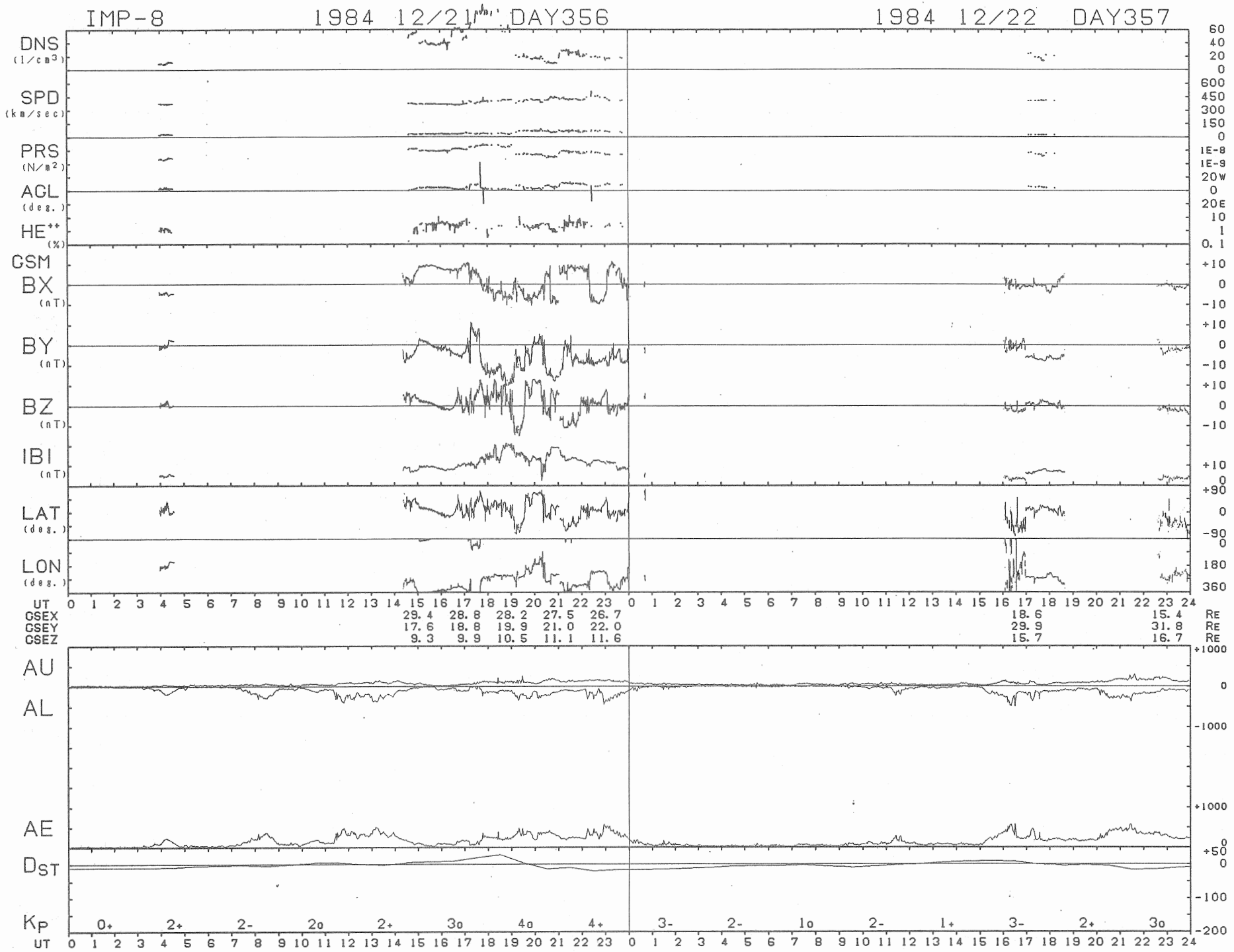

IMP-8
1984 12/11 DAY346
1984 12/12 DAY347
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 5.6 4.4 -5.6 -6.9 -8.1 -9.3 -10.5 -11.7 -20.7 -21.8 RE
GSEY 34.8 35.0 35.4 35.2 35.1 34.9 34.6 34.3 30.7 30.1 RE
GSEZ 16.8 17.0 18.1 18.2 18.2 18.2 18.2 18.1 16.9 16.7 RE
AU
AL
AE
DST
KP 1- 2+ 1+ 2+ 4- 3+ 4o 5+ 5o 5- 2+ 3o 2+ 2o 2- 2-
UT

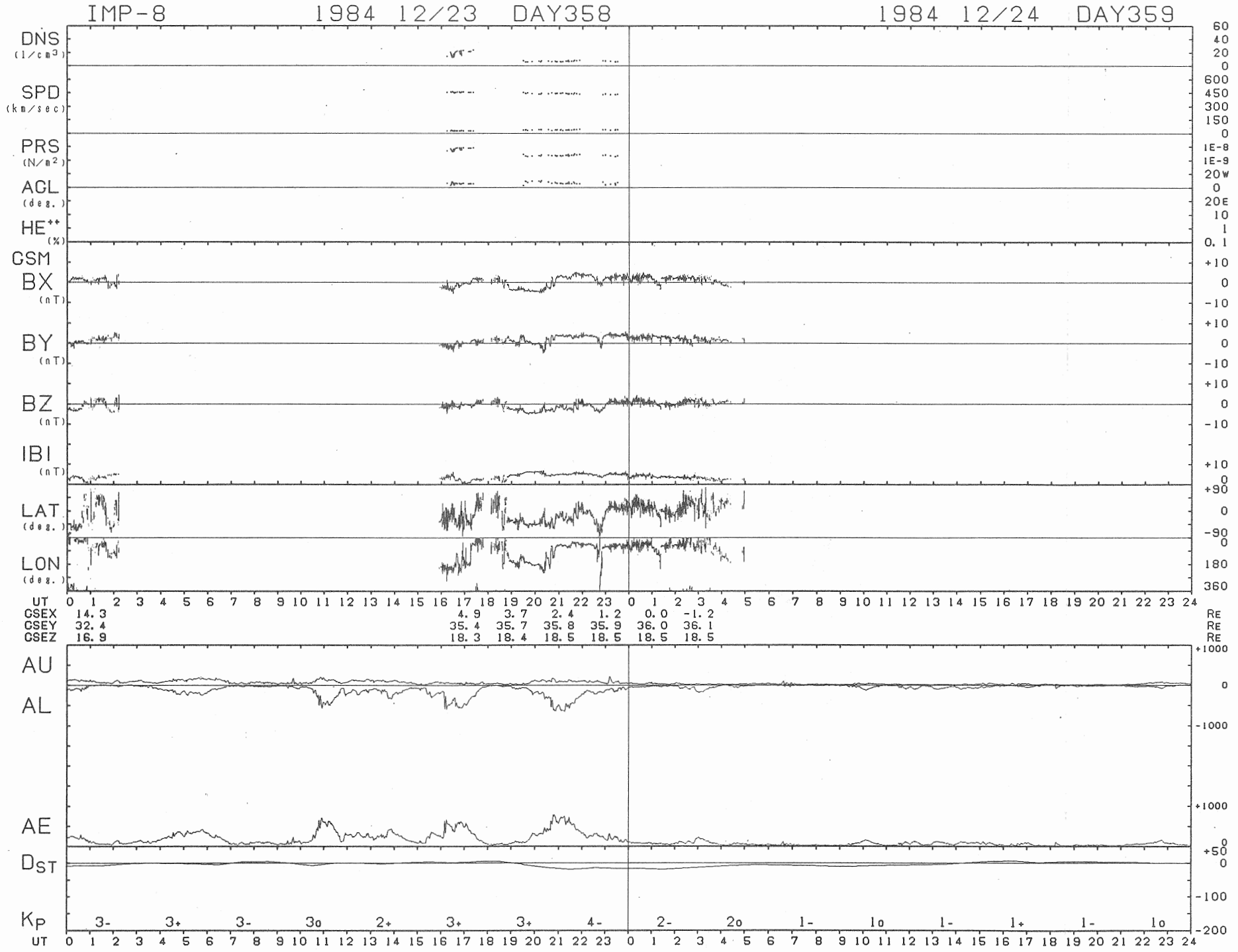

IMP-8
1984 12/13 DAY348
1984 12/14 DAY349
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -22.8 -23.8 -25.7 -32.0 -32.6 -33.2 -33.8 -34.3 -34.8 -36.9 RE
GSEY 29.4 28.8 27.3 20.4 19.4 18.4 17.4 16.4 15.3 7.4 RE
GSEZ 16.4 16.2 15.6 12.4 11.9 11.4 10.9 10.4 9.9 5.8 RE
AU
AL
AE
DST
KP
5- 6o 3+ 3+ 4- 3+ 3o 2o 2- 1+ 1o 2+ 2o 3- 2o 3o
UT

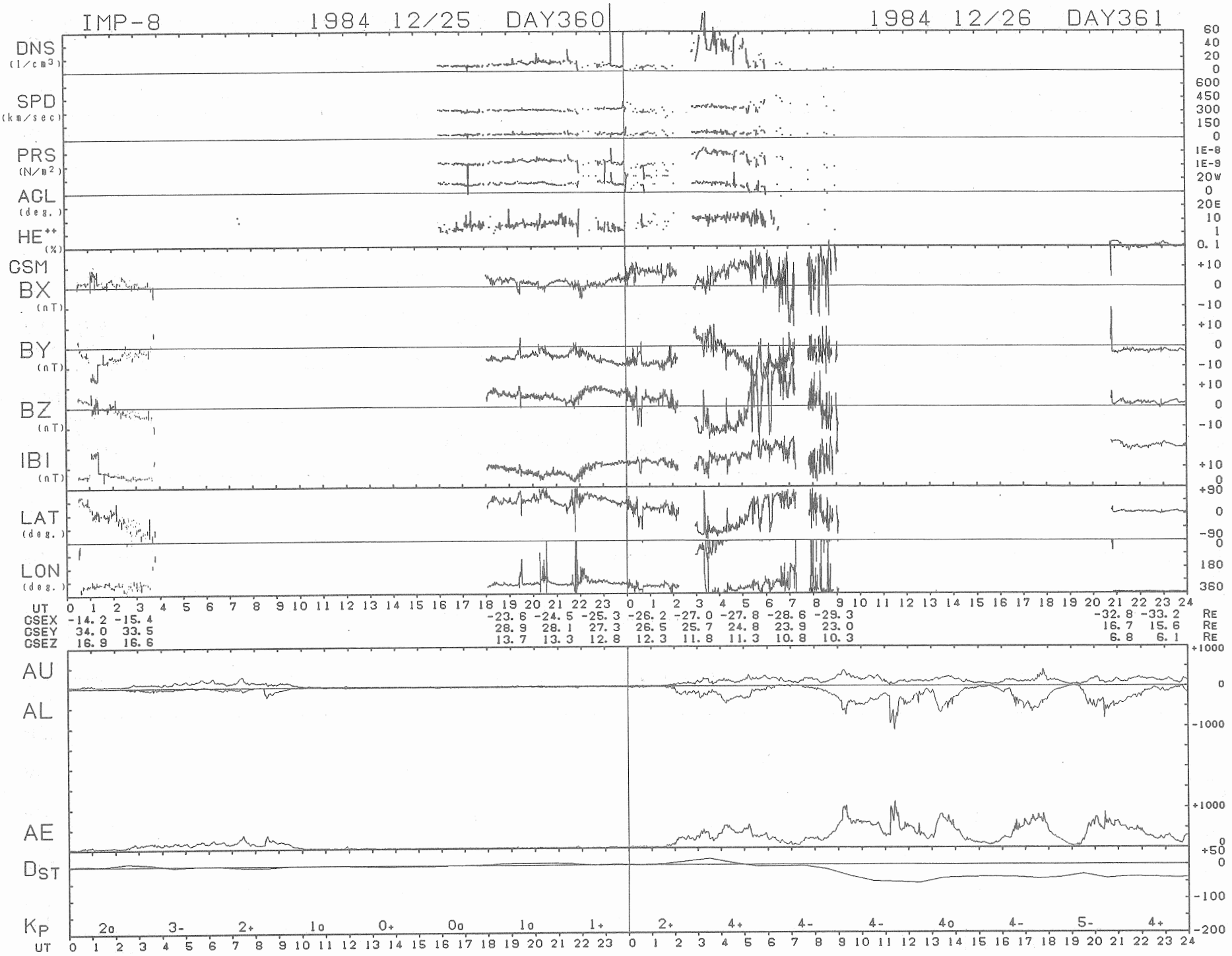

IMP-8
1984 12/15 DAY350
1984 12/16 DAY351
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.0 -37.0 -37.1 -37.0 -36.7 -34.1 -33.5 -32.8 -32.0 -26.4 -25.2 RE
GSEY 6.2 5.0 3.8 2.6 0.2 -8.1 -9.3 -10.4 -11.6 -17.8 -18.7 RE
GSEZ 5.2 4.6 4.0 3.3 2.0 -2.5 -3.2 -3.8 -4.4 -8.0 -8.5 RE
AU
AL
AE
DST
KP
3o 3- 3- 3- 2+ 2+ 5+ 6- 4o 4o 4+ 4o 4- 4o 5o 5+
UT

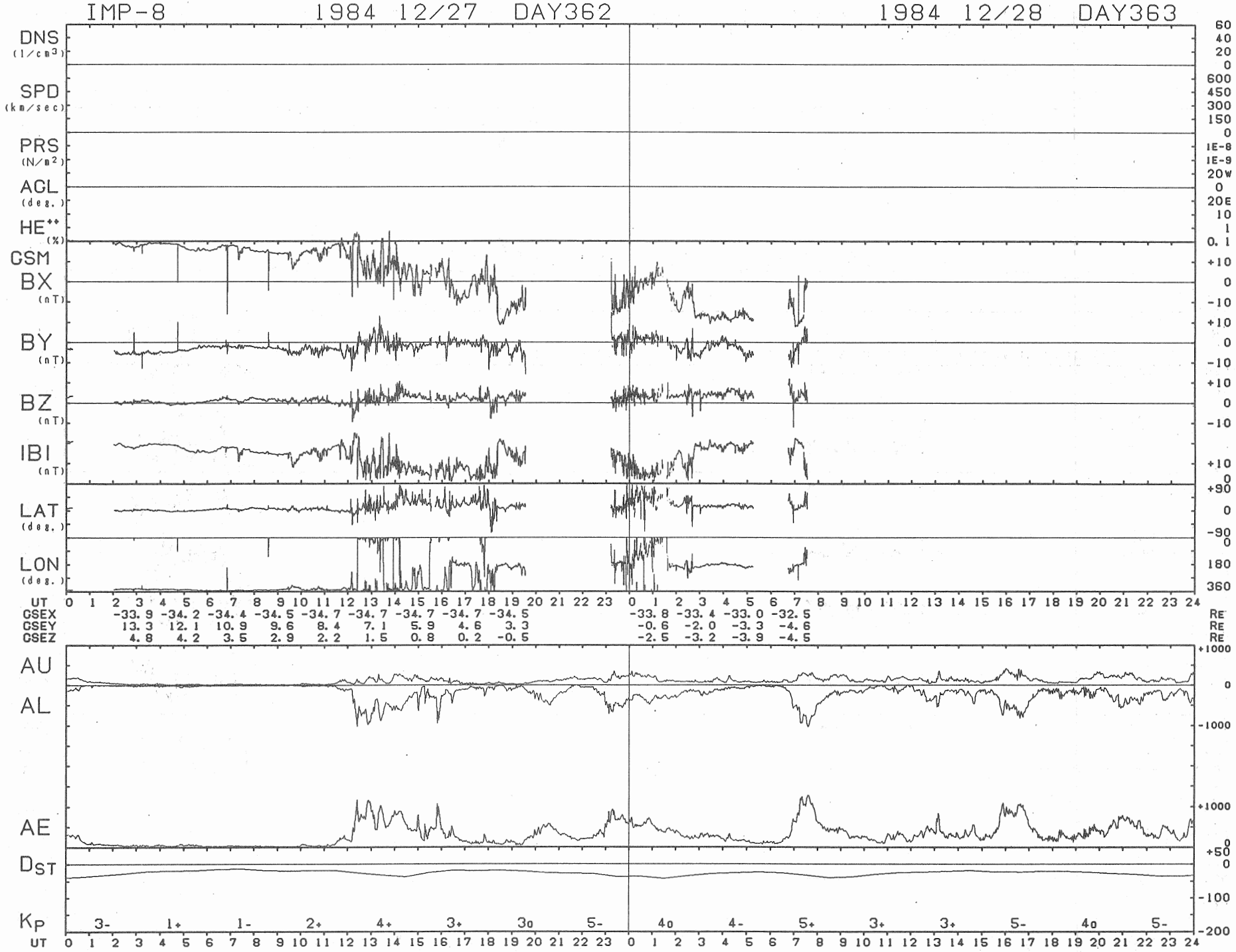

IMP-8
1984 12/17 DAY352
1984 12/18 DAY353
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.1 -18.7 -7.7 -6.0 2.6 4.4 6.1 11.1 RE
GSEY -22.0 -22.7 -25.9 -26.1 -25.8 -25.6 -25.2 -23.7 RE
GSEZ -10.4 -10.8 -12.9 -13.0 -13.2 -13.1 -12.9 -12.3 RE
AU
AL
AE
DST
KP
4o 4o 4- 3+ 4+ 4+ 5- 4o 3o 3+ 3- 3o 3o 4- 2+ 3o
UT

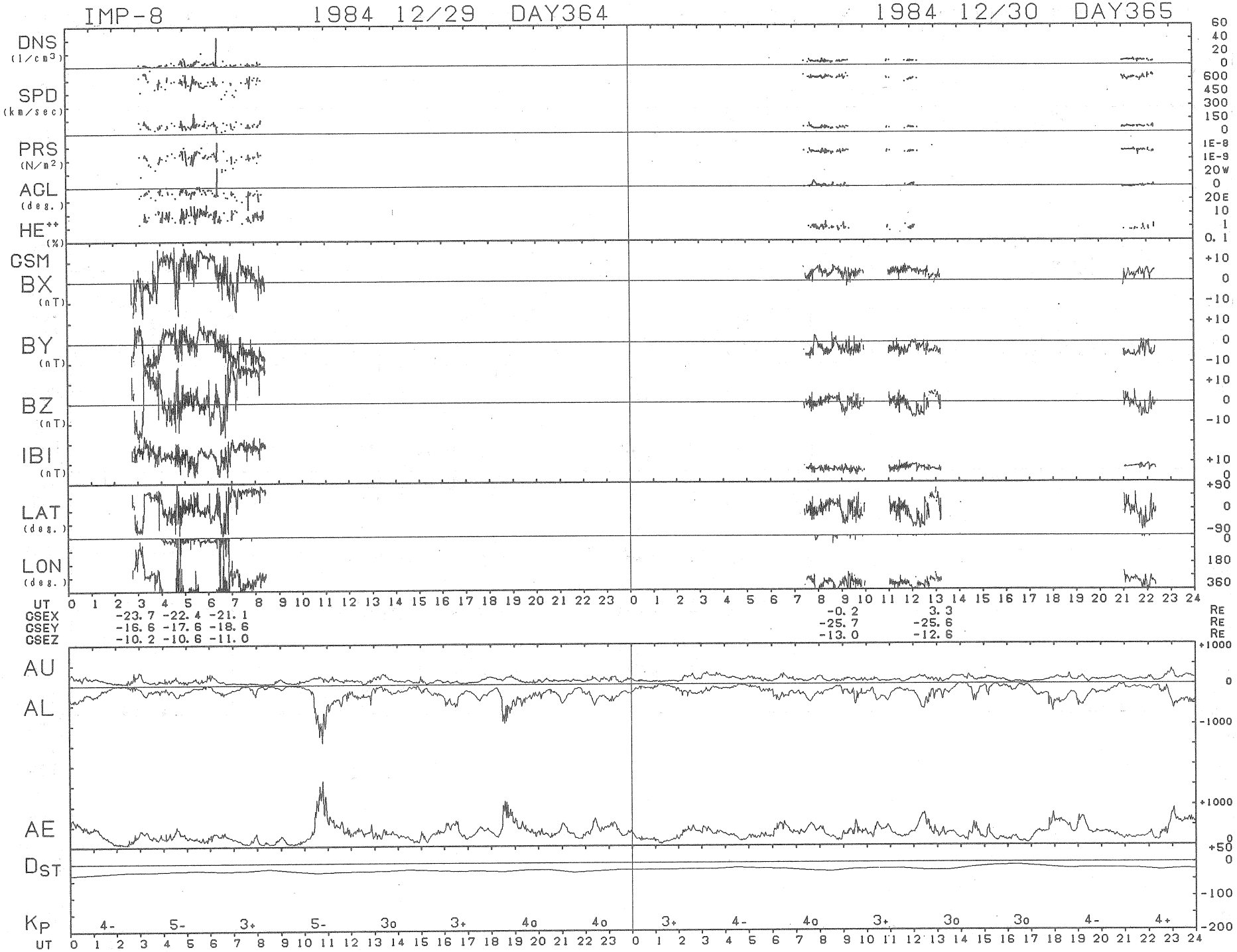

IMP-8
1984 12/19 DAY354
1984 12/20 DAY355
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.7 24.8 25.9
GSEY -15.5 -14.3 -13.0
GSEZ -8.2 -7.6 -6.9
32.2 32.3 32.3 RE
1.9 3.3 4.7 RE
1.0 1.7 2.4 RE
AU
AL
AE
DST
KP
2+ 2- 3- 2- 3- 1o 2o 1+
2+ 1+ 1+ 1o 2- 2+ 2+ 1o

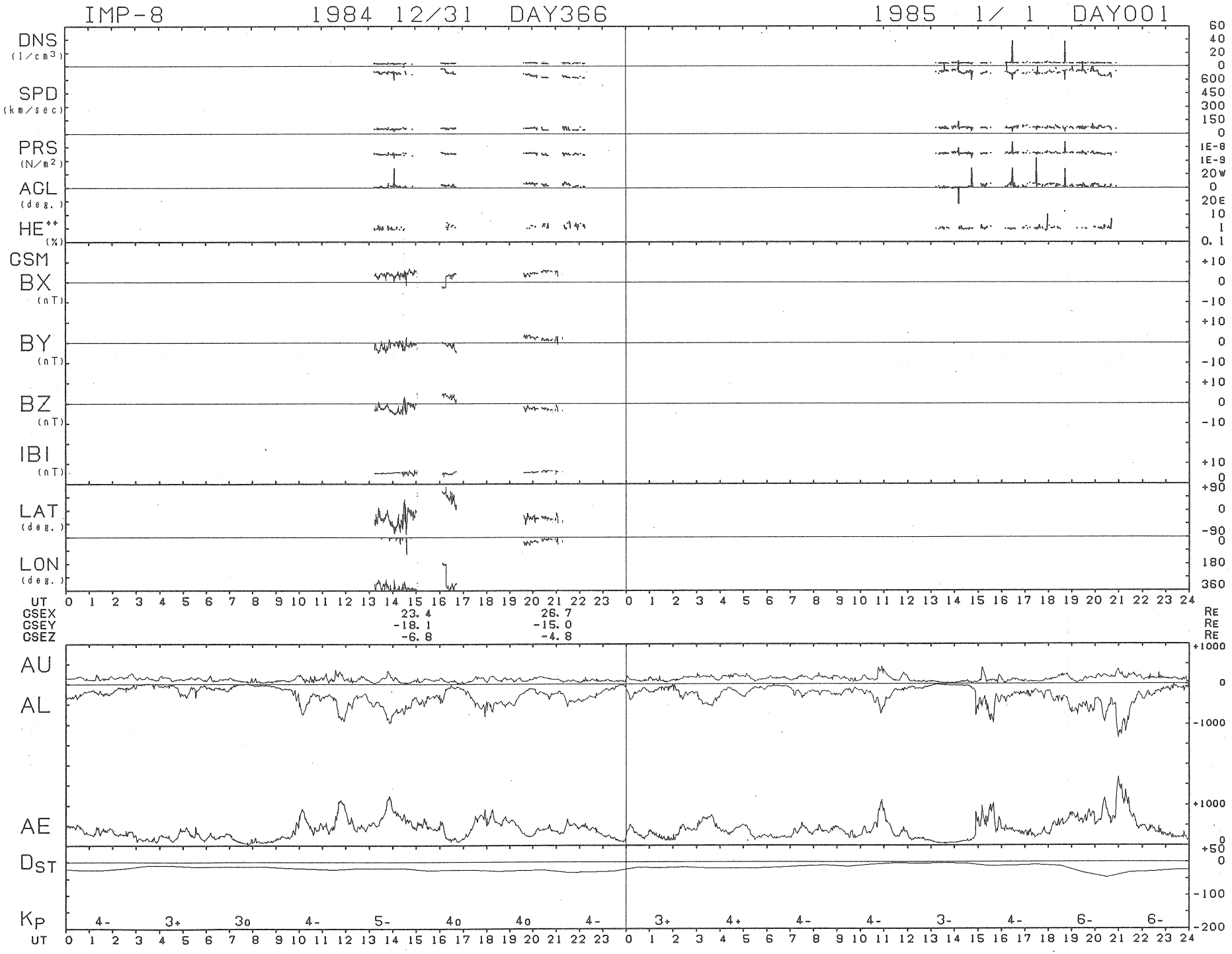

IMP-8
1984 12/21 DAY356
1984 12/22 DAY357
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.4 28.8 28.2 27.5 26.7 18.6 15.4 RE
GSEY 17.6 18.8 19.9 21.0 22.0 29.9 31.8 RE
GSEZ 9.3 9.9 10.5 11.1 11.6 15.7 16.7 RE
AU
AL
AE
DST
KP
0+ 2+ 2- 2o 2+ 3o 4o 4+ 3- 2- 1o 2- 1+ 3- 2+ 3o
UT

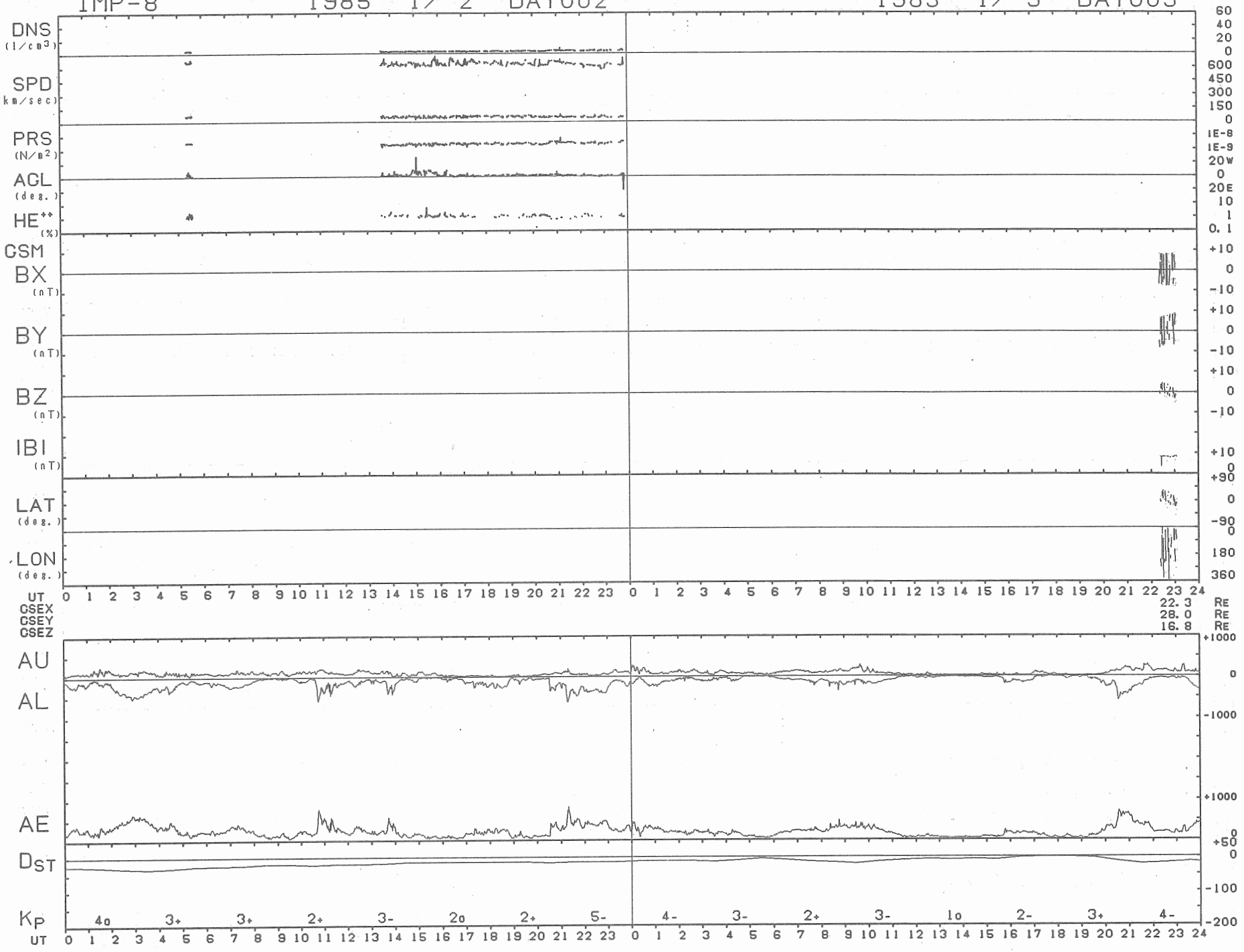

IMP-8
1984 12/23 DAY358
1984 12/24 DAY359
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.3 4.9 3.7 2.4 1.2 0.0 -1.2 RE
GSEY 32.4 35.4 35.7 35.8 35.9 36.0 36.1 RE
GSEZ 16.9 18.3 18.4 18.5 18.5 18.5 18.5 RE
AU
AL
AE
DST
KP
3- 3+ 3- 3o 2+ 3+ 3+ 4- 2- 2o 1- 1o 1- 1+ 1- 1o

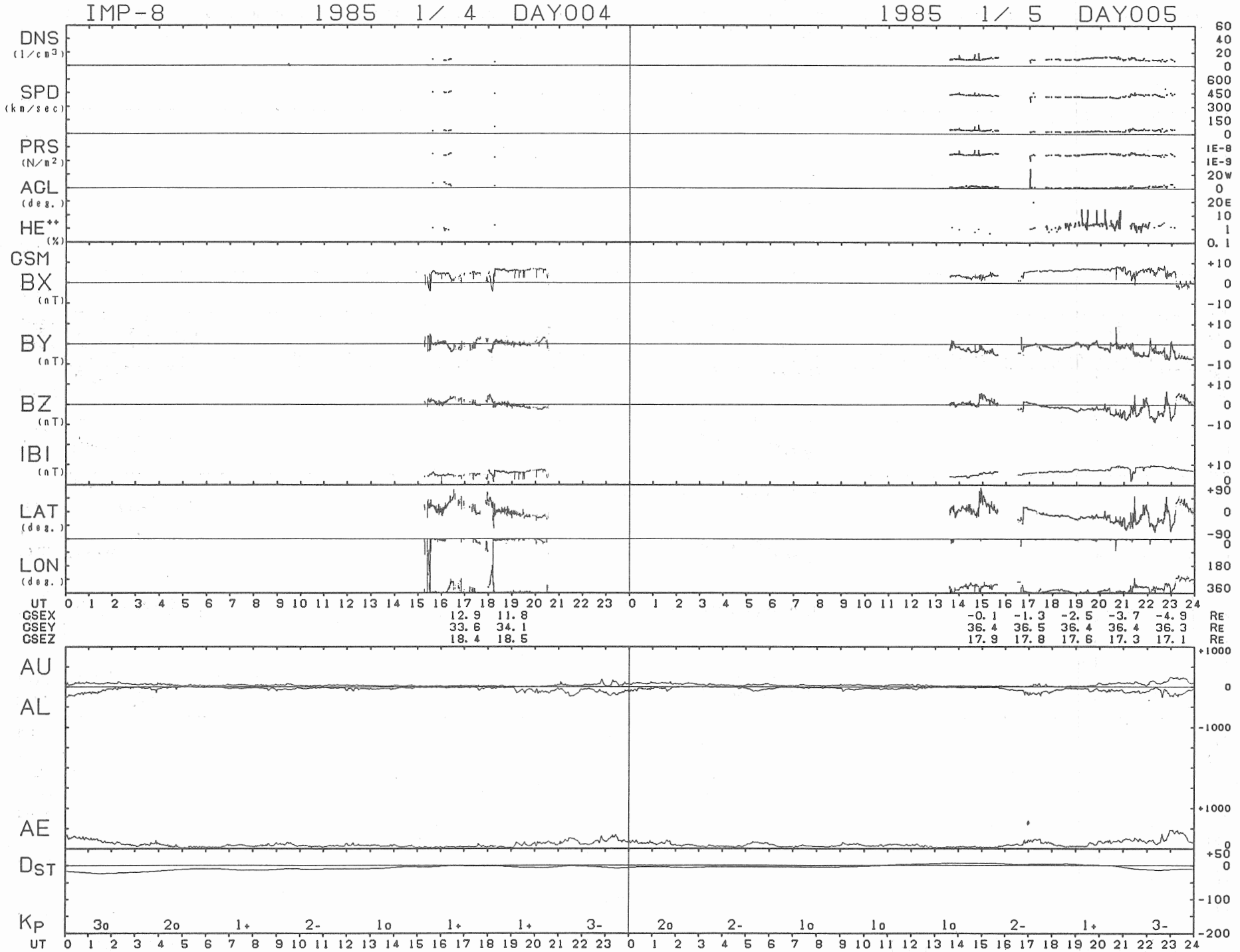

IMP-8
1984 12/25 DAY360
1984 12/26 DAY361
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.2 -15.4 -23.6 -24.5 -25.3 -26.2 -27.0 -27.8 -28.6 -29.3 -32.8 -33.2 RE
GSEY 34.0 33.5 28.9 28.1 27.3 26.5 25.7 24.8 23.9 23.0 16.7 15.6 RE
GSEZ 16.9 16.6 13.7 13.3 12.8 12.3 11.8 11.3 10.8 10.3 6.8 6.1 RE
AU
AL
AE
DST
KP
2o 3- 2+ 1o 0+ 0o 1o 1+ 2+ 4+ 4- 4- 4o 4- 5- 4+
UT

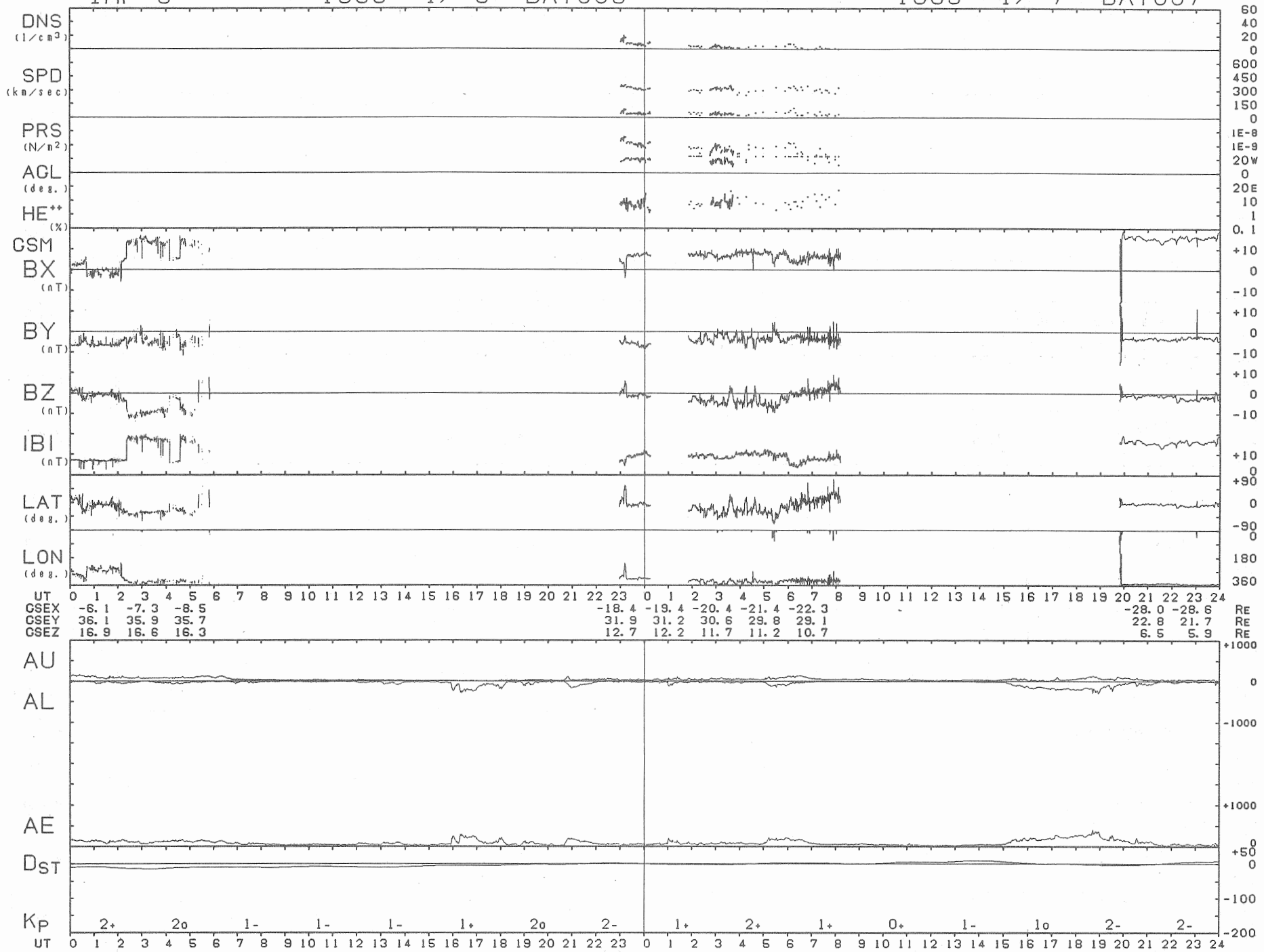

IMP-8
1984 12/27 DAY362
1984 12/28 DAY363
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.9 -34.2 -34.4 -34.5 -34.7 -34.7 -34.7 -34.7 -34.5 -33.8 -33.4 -33.0 -32.5 Re
GSEY 13.3 12.1 10.9 9.6 8.4 7.1 5.9 4.6 3.3 -0.6 -2.0 -3.3 -4.6 Re
GSEZ 4.8 4.2 3.5 2.9 2.2 1.5 0.8 0.2 -0.5 -2.5 -3.2 -3.9 -4.5 Re
AU
AL
AE
DST
KP 3- 1+ 1- 2+ 4+ 3+ 3o 5- 4o 4- 5+ 3+ 3+ 5- 4o 5-
UT

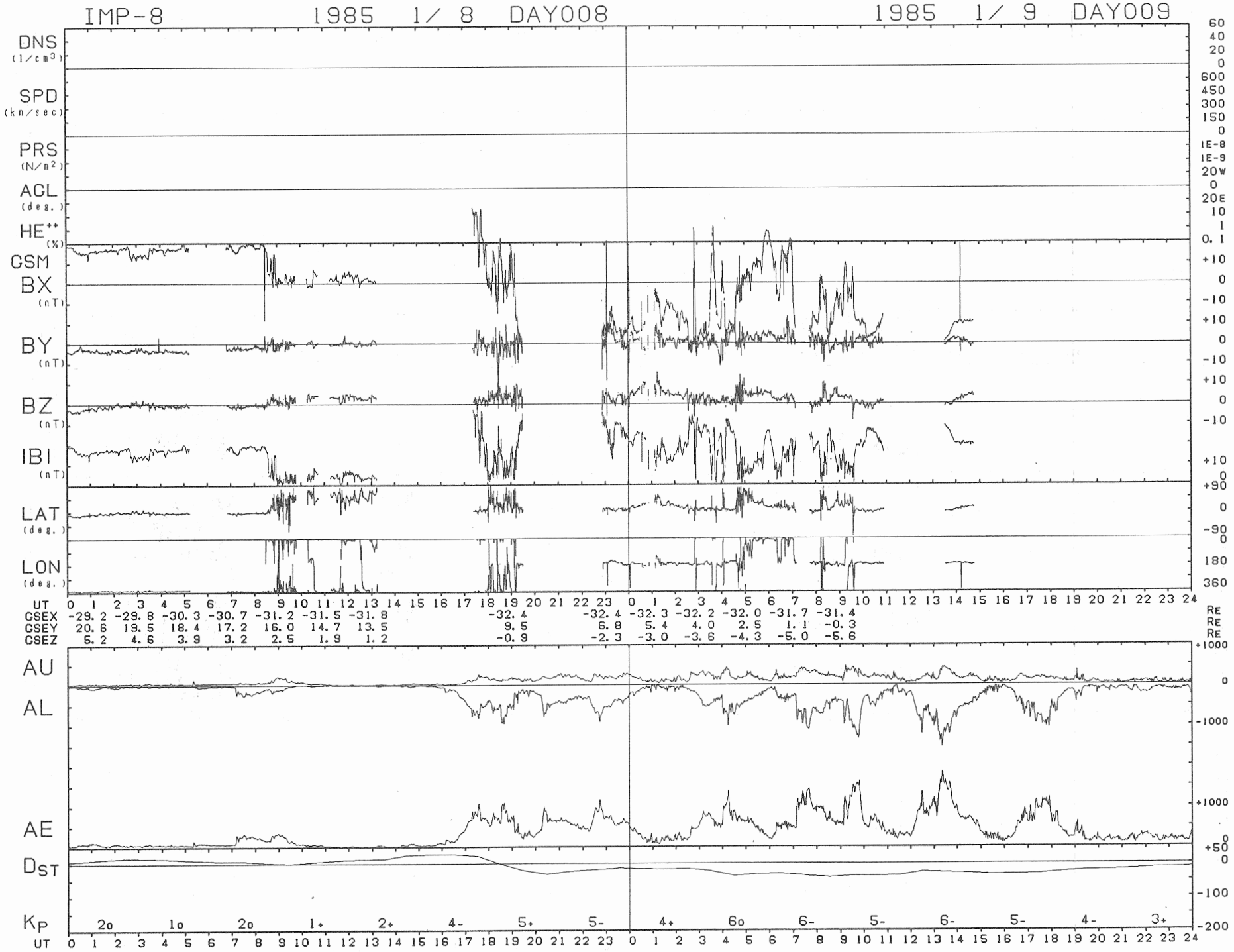

IMP-8
1984 12/29 DAY364
1984 12/30 DAY365
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.7 -22.4 -21.1 -0.2 3.3 RE
GSEY -16.6 -17.6 -18.6 -25.7 -25.6 RE
GSEZ -10.2 -10.6 -11.0 -13.0 -12.6 RE
AU
AL
AE
DST
KP 4- 5- 3+ 5- 3o 3+ 4o 4o 3+ 4- 4o 3+ 3o 3o 4- 4+
UT

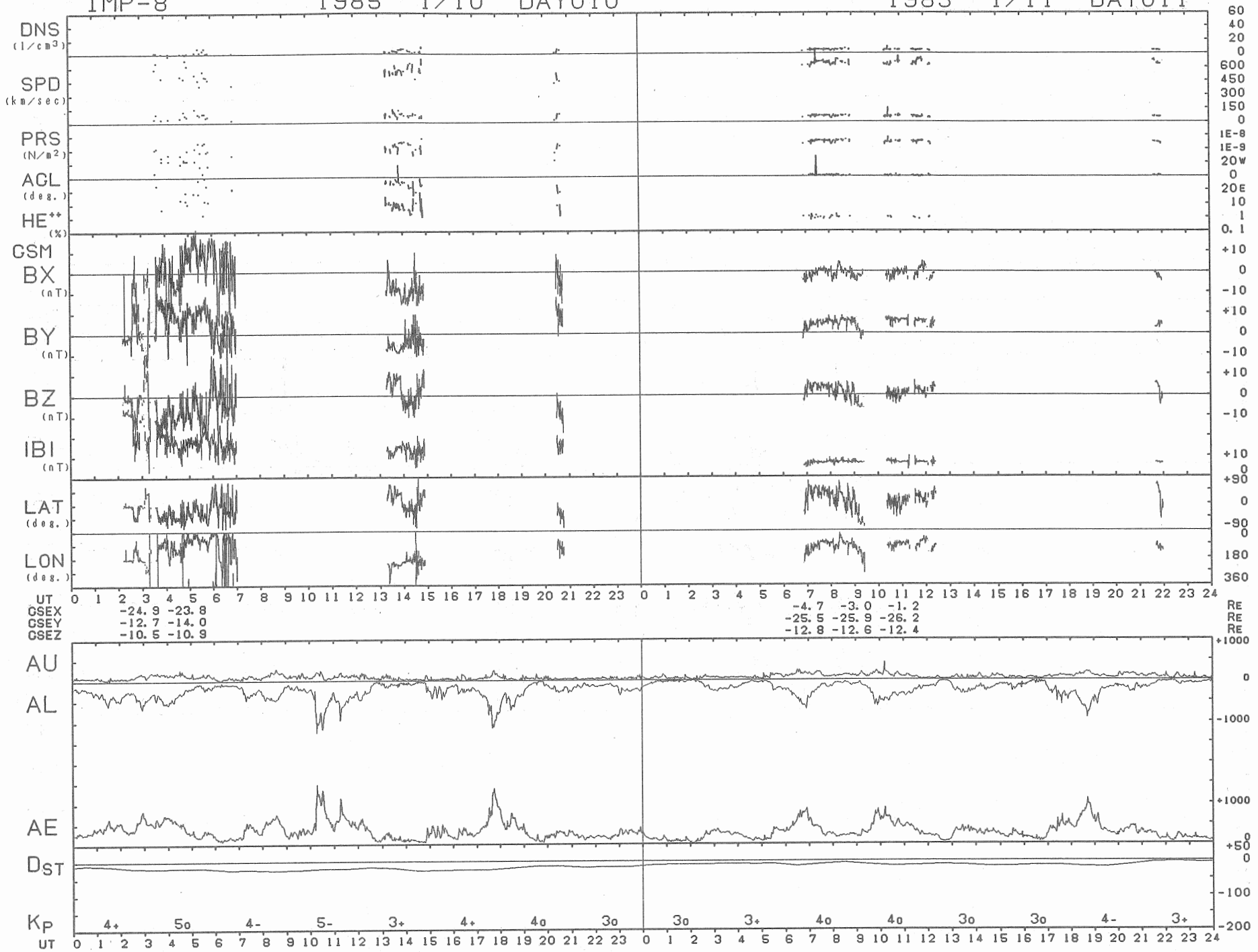

IMP-8
1984 12/31 DAY366
1985 1/ 1 DAY001
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.4 26.7 Re
GSEY -18.1 -15.0 Re
GSEZ -6.8 -4.8 Re
AU
AL
AE
DST
KP
4- 3+ 30 4- 5- 40 40 4- 3+ 4+ 4- 4- 3- 4- 6- 6-
UT

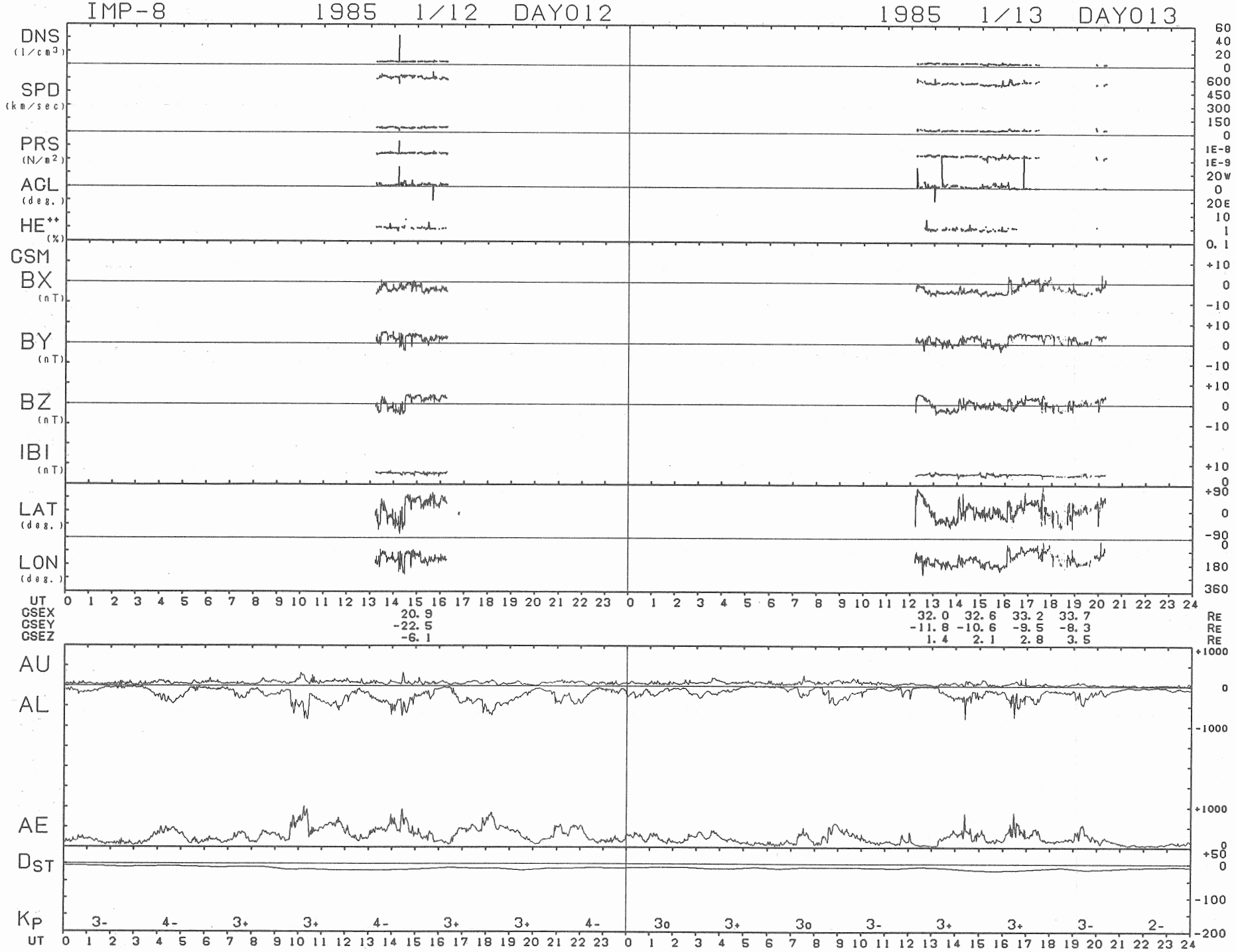

IMP-8
1985 1/ 2 DAY002
1985 1/ 3 DAY003
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.3 RE
GSEY 28.0 RE
GSEZ 16.8 RE
AU
AL
AE
DST
KP
4o 3+ 3+ 2+ 3- 2o 2+ 5- 4- 3- 2+ 3- 1o 2- 3+ 4-

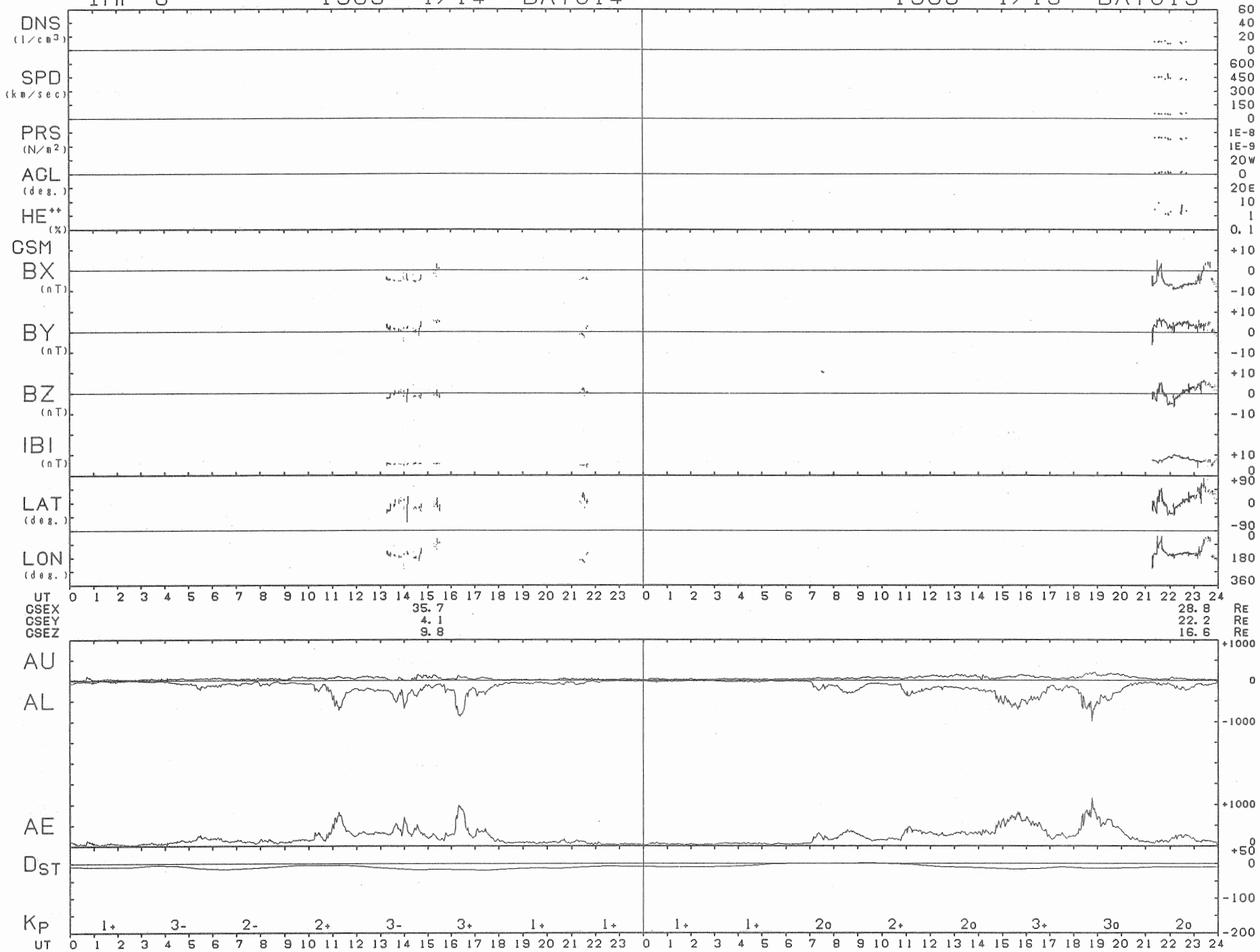

IMP-8 1985 1/ 4 DAY004
1985 1/ 5 DAY005
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.9 11.8 -0.1 -1.3 -2.5 -3.7 -4.9 RE
GSEY 33.6 34.1 36.4 36.5 36.4 36.4 36.3 RE
GSEZ 18.4 18.5 17.9 17.8 17.6 17.3 17.1 RE
AU
AL
AE
DST
KP 3o 2o 1+ 2- 1o 1+ 1+ 3- 2o 2- 1o 1o 1o 2- 1+ 3-
UT

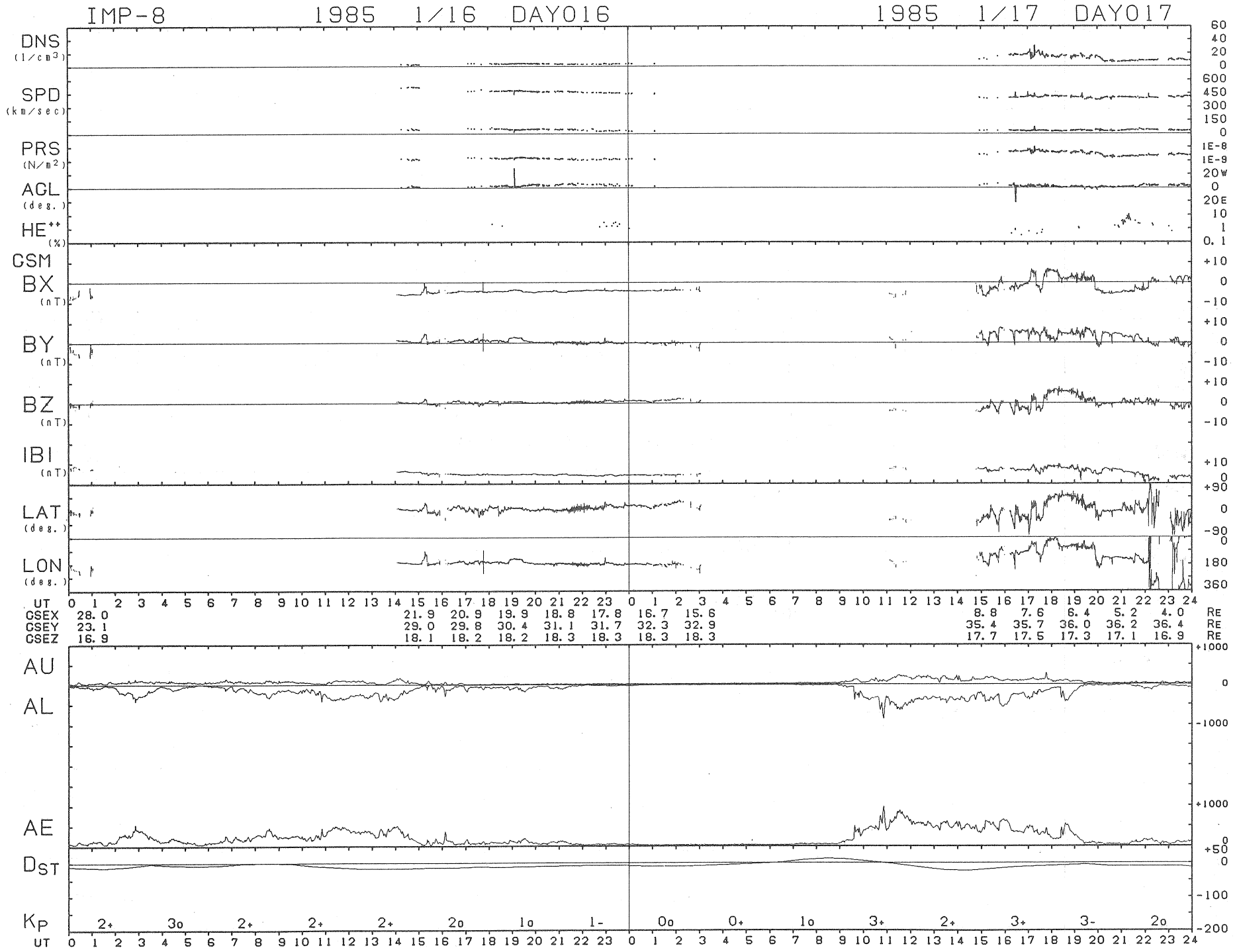

IMP-8 1985 1/ 6 DAY006
1985 1/ 7 DAY007
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -6.1 -7.3 -8.5 -18.4 -19.4 -20.4 -21.4 -22.3 -28.0 -28.6 RE
GSEY 36.1 35.9 35.7 31.9 31.2 30.6 29.8 29.1 22.8 21.7 RE
GSEZ 16.9 16.6 16.3 12.7 12.2 11.7 11.2 10.7 6.5 5.9 RE
AU
AL
AE
DST
KP
2+ 2o 1- 1- 1- 1+ 2o 2- 1+ 2+ 1+ 0+ 1- 1o 2- 2-
UT

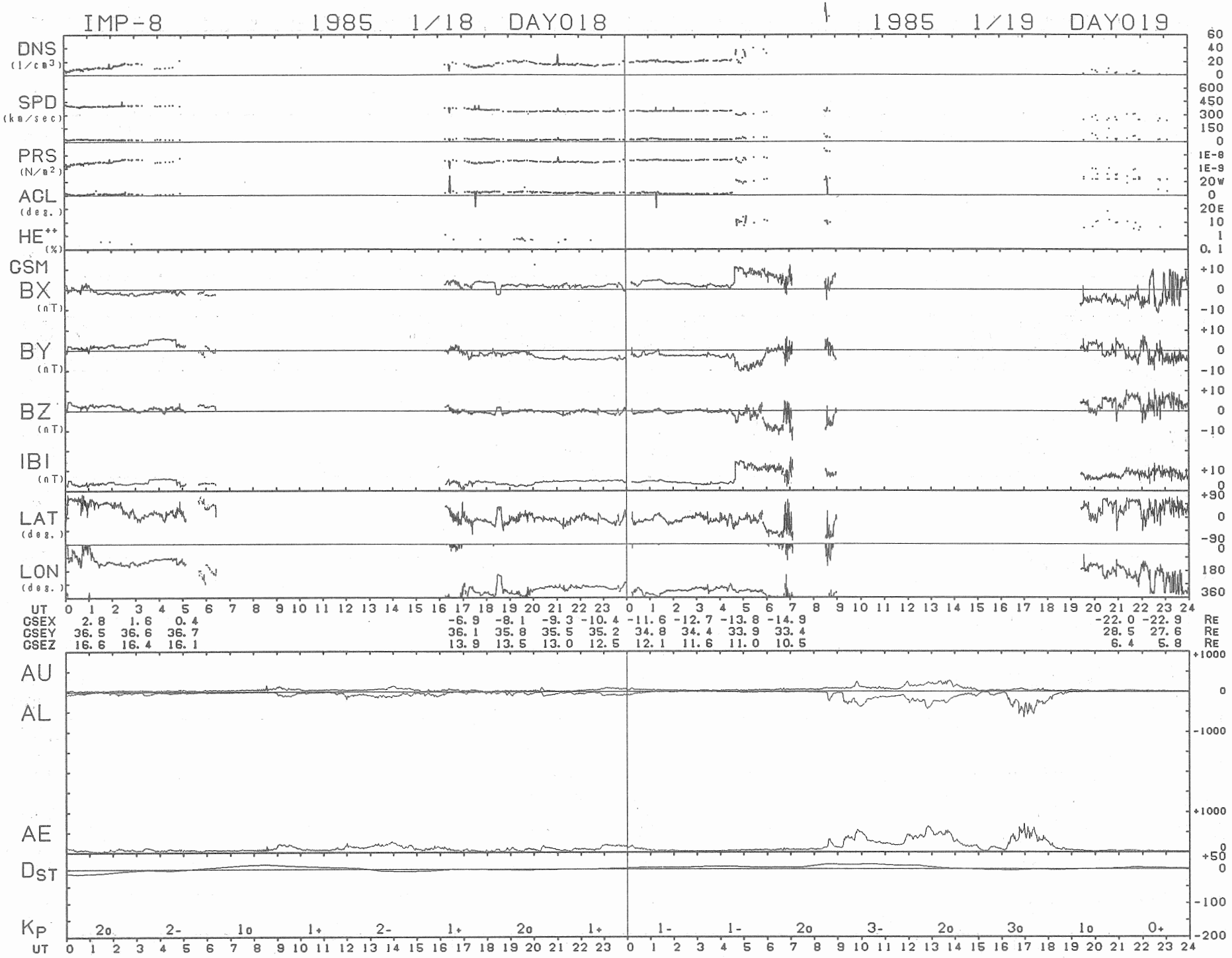

IMP-8 1985 1/ 8 DAY008
1985 1/ 9 DAY009
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.2 -29.8 -30.3 -30.7 -31.2 -31.5 -31.8 -32.4 -32.4 -32.3 -32.2 -32.0 -31.7 -31.4 RE
GSEY 20.6 19.5 18.4 17.2 16.0 14.7 13.5 9.5 6.8 5.4 4.0 2.5 1.1 -0.3 RE
GSEZ 5.2 4.6 3.9 3.2 2.5 1.9 1.2 -0.9 -2.3 -3.0 -3.6 -4.3 -5.0 -5.6 RE
AU
AL
AE
DST
KP
2o 1o 2o 1+ 2+ 4- 5+ 5- 4+ 6o 6- 5- 6- 5- 4- 3+
UT

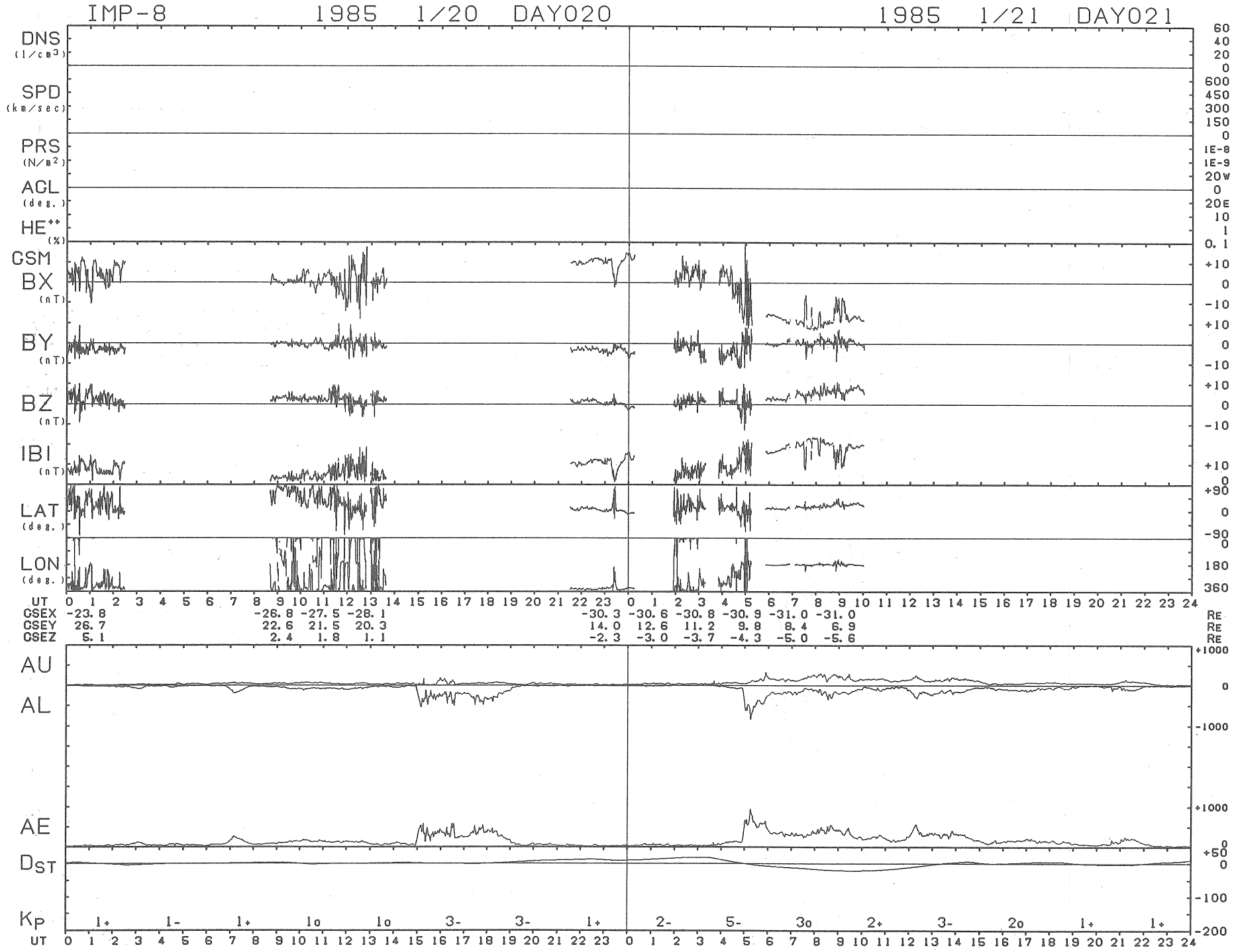

IMP-8 1985 1/10 DAY010
1985 1/11 DAY011
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.9 -23.8 -4.7 -3.0 -1.2 RE
GSEY -12.7 -14.0 -25.5 -25.9 -26.2 RE
GSEZ -10.5 -10.9 -12.8 -12.6 -12.4 RE
AU
AL
AE
DST
KP
4+ 5o 4- 5- 3+ 4+ 4o 3o 3o 3+ 4o 4o 3o 3o 4- 3+
UT

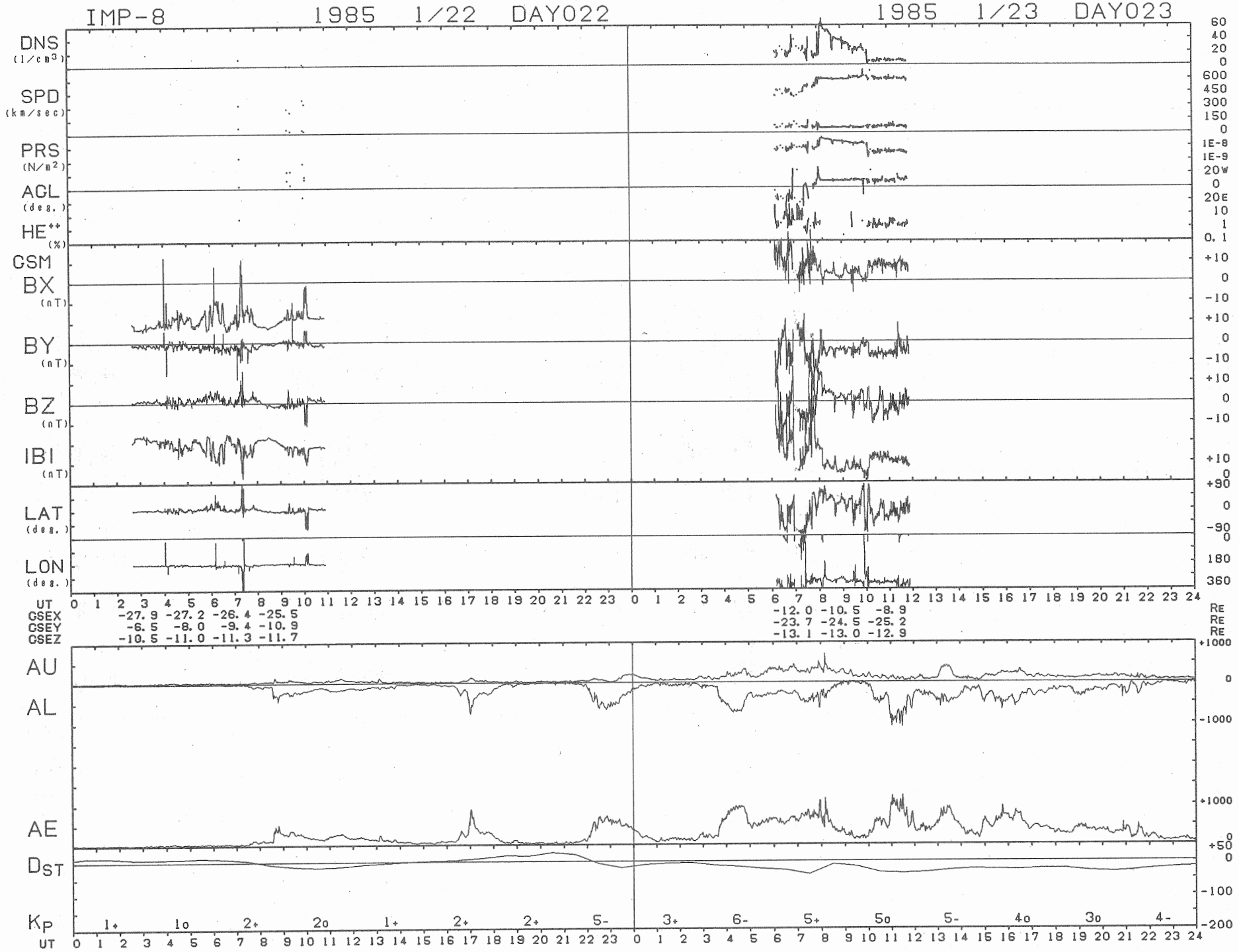

IMP-8
1985 1/12 DAY012
1985 1/13 DAY013
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.9 32.0 32.6 33.2 33.7 RE
GSEY -22.5 -11.8 -10.6 -9.5 -8.3 RE
GSEZ -6.1 1.4 2.1 2.8 3.5 RE
AU
AL
AE
DST
KP 3- 4- 3+ 3+ 4- 3+ 3+ 4- 3o 3+ 3o 3- 3+ 3+ 3- 2-
UT

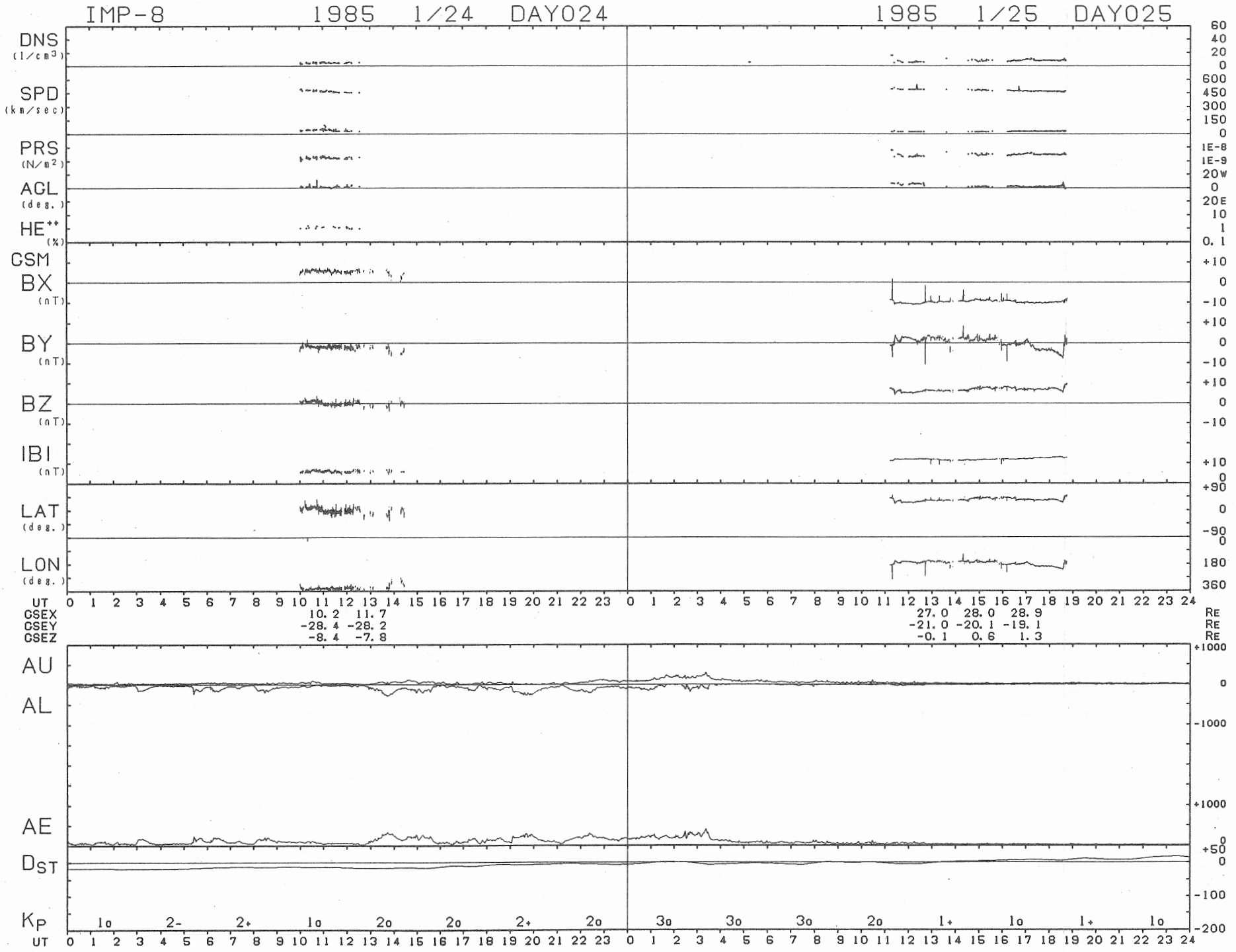

IMP-8
1985 1/14 DAY014
1985 1/15 DAY015
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.7 28.8 RE
GSEY 4.1 22.2 RE
GSEZ 9.8 16.6 RE
AU
AL
AE
DST
KP
1+ 3- 2- 2+ 3- 3+ 1+ 1+
1+ 1+ 2o 2+ 2o 3+ 3o 2o

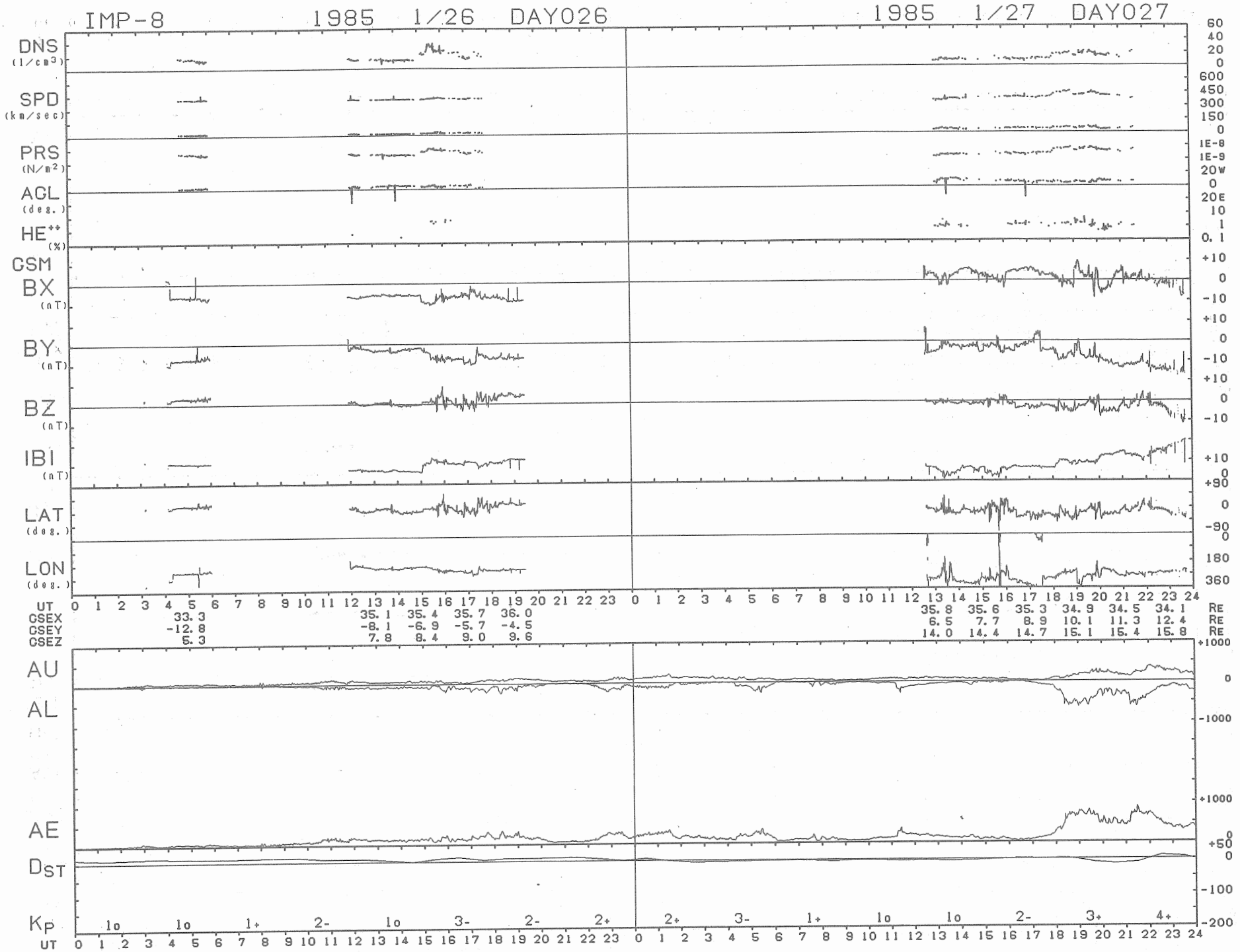

IMP-8 1985 1/16 DAY016
1985 1/17 DAY017
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.0 21.9 20.9 19.9 18.8 17.8 16.7 15.6 8.8 7.6 6.4 5.2 4.0 RE
GSEY 23.1 29.0 29.8 30.4 31.1 31.7 32.3 32.9 35.4 35.7 36.0 36.2 36.4 RE
GSEZ 16.9 18.1 18.2 18.2 18.3 18.3 18.3 18.3 17.7 17.5 17.3 17.1 16.9 RE
AU
AL
AE
DST
KP 2+ 3o 2+ 2+ 2+ 2o 1o 1- 0o 0+ 1o 3+ 2+ 3+ 3- 2o
UT

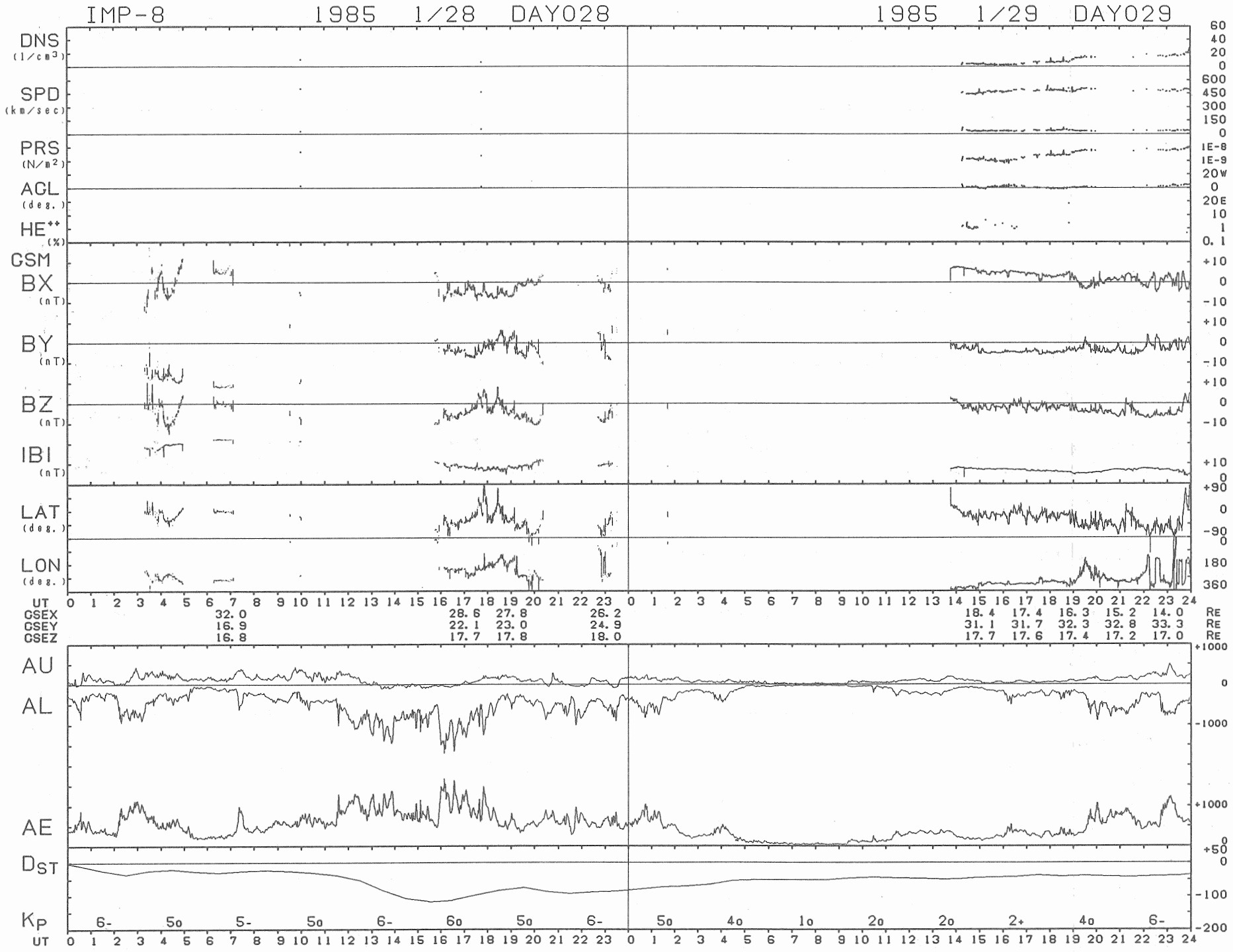

IMP-8 1985 1/18 DAY018
1985 1/19 DAY019
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.8 1.6 0.4 -6.9 -8.1 -9.3 -10.4 -11.6 -12.7 -13.8 -14.9 -22.0 -22.9 RE
GSEY 36.5 36.6 36.7 36.1 35.8 35.5 35.2 34.8 34.4 33.9 33.4 28.5 27.6 RE
GSEZ 16.6 16.4 16.1 13.9 13.5 13.0 12.5 12.1 11.6 11.0 10.5 6.4 5.8 RE
AU
AL
AE
DST
KP
2o 2- 1o 1+ 2- 1+ 2o 1+ 1- 1- 2o 3- 2o 3o 1o 0+
UT

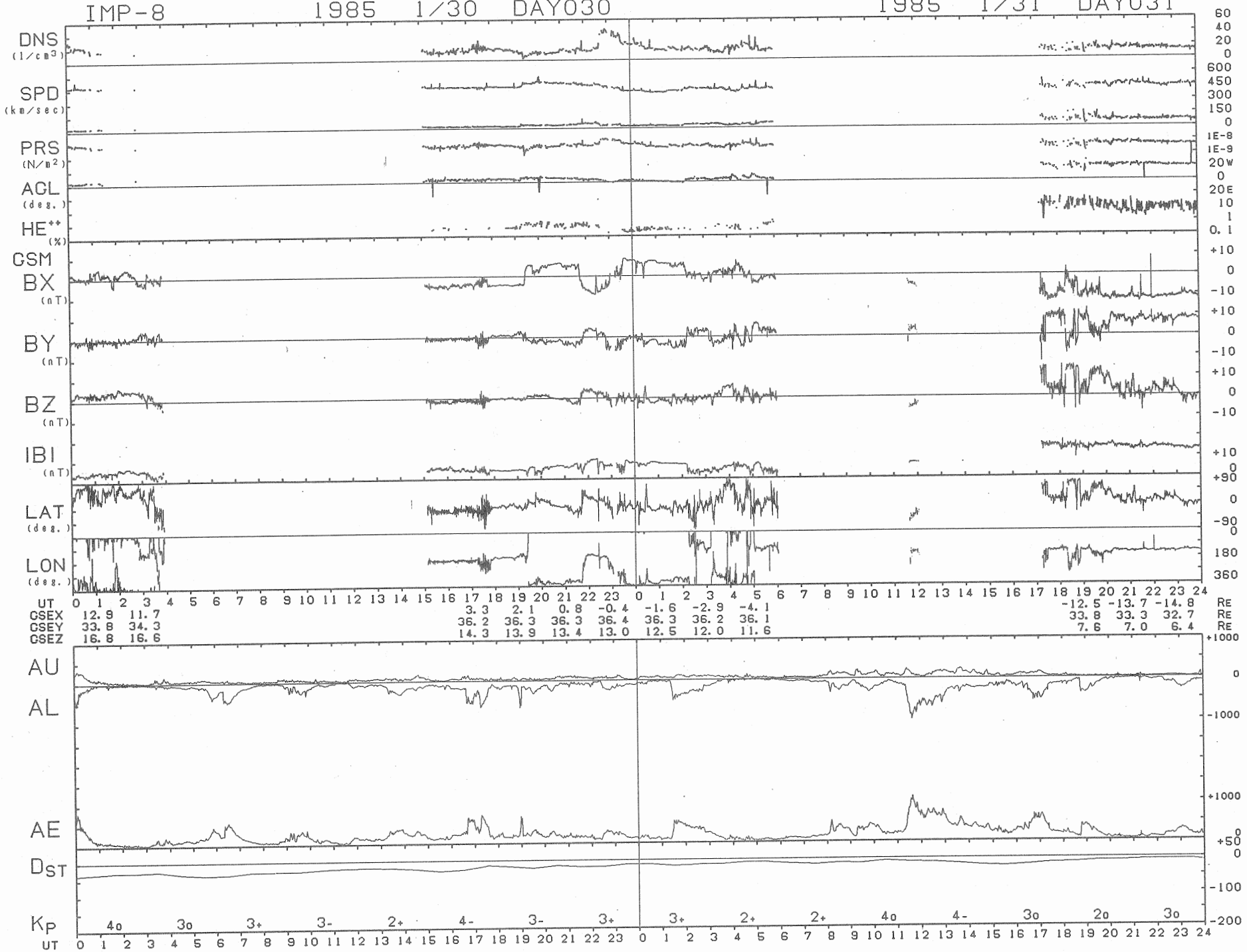

IMP-8 1985 1/20 DAY020
1985 1/21 DAY021
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.8 -26.8 -27.5 -28.1 -30.3 -30.6 -30.8 -30.9 -31.0 -31.0 RE
GSEY 26.7 22.6 21.5 20.3 14.0 12.6 11.2 9.8 8.4 6.9 RE
GSEZ 5.1 2.4 1.8 1.1 -2.3 -3.0 -3.7 -4.3 -5.0 -5.6 RE
AU
AL
AE
DST
KP 1+ 1- 1+ 1o 1o 3- 3- 1+ 2- 5- 3o 2+ 3- 2o 1+ 1+
UT

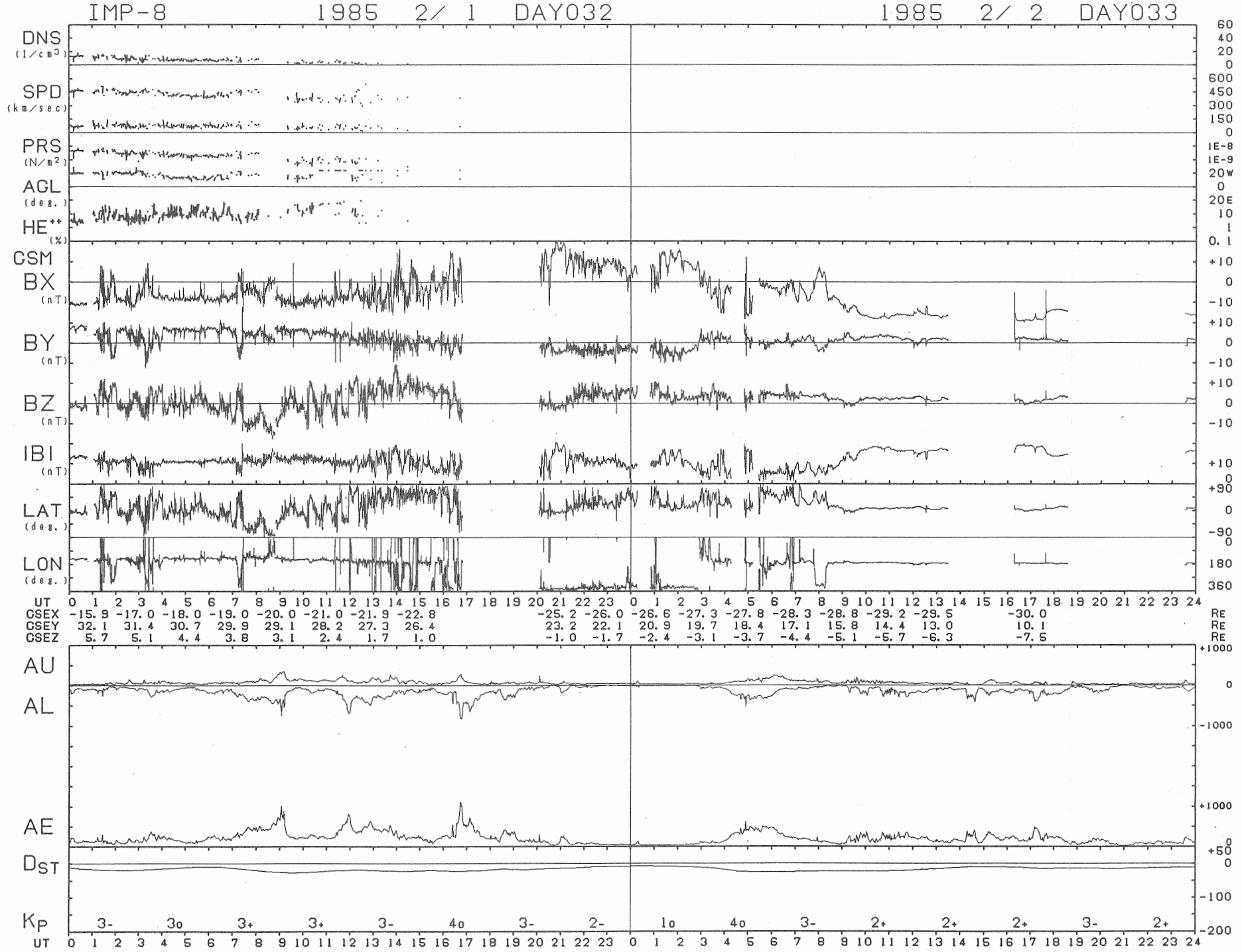

IMP-8
1985 1/22 DAY022
1985 1/23 DAY023
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.9 -27.2 -26.4 -25.5 -12.0 -10.5 -8.9 Re
GSEY -6.5 -8.0 -9.4 -10.9 -23.7 -24.5 -25.2 Re
GSEZ -10.5 -11.0 -11.3 -11.7 -13.1 -13.0 -12.9 Re
AU
AL
AE
DST
KP
1+ 1o 2+ 2o 1+ 2+ 2+ 5- 3+ 6- 5+ 5o 5- 4o 3o 4-
UT

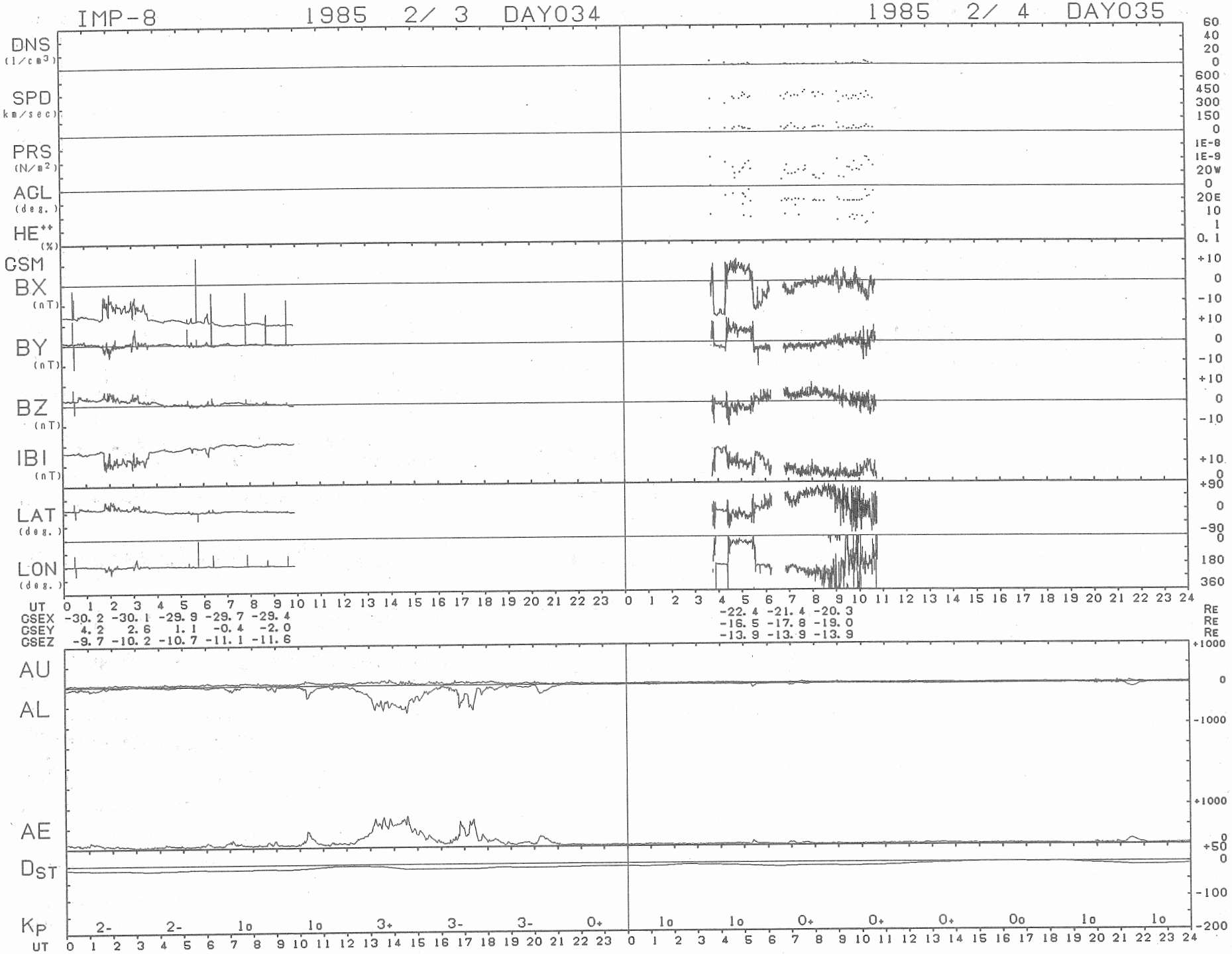

IMP-8 1985 1/24 DAY024
1985 1/25 DAY025
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.2 11.7 27.0 28.0 28.9 RE
GSEY -28.4 -28.2 -21.0 -20.1 -19.1 RE
GSEZ -8.4 -7.8 -0.1 0.6 1.3 RE
AU
AL
AE
DST
KP 1o 2- 2+ 1o 2o 2o 2+ 2o 3o 3o 3o 2o 1+ 1o 1+ 1o
UT

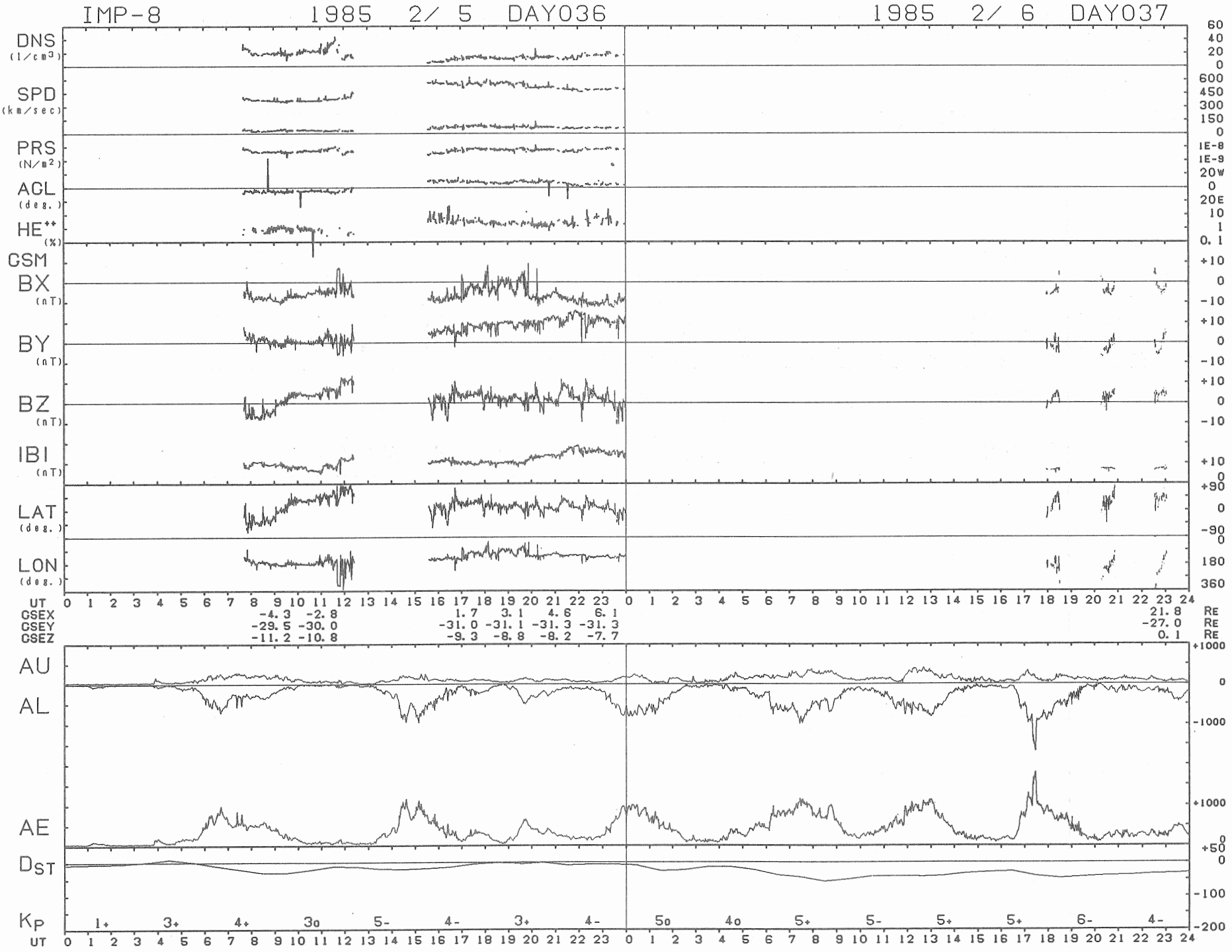

IMP-8
1985 1/26 DAY026
1985 1/27 DAY027
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.3 35.1 35.4 35.7 36.0 35.8 35.6 35.3 34.9 34.5 34.1 RE
GSEY -12.8 -8.1 -6.9 -5.7 -4.5 6.5 7.7 8.9 10.1 11.3 12.4 RE
GSEZ 5.3 7.8 8.4 9.0 9.6 14.0 14.4 14.7 15.1 15.4 15.8 RE
AU
AL
AE
DST
KP 1o 1o 1+ 2- 1o 3- 2- 2+ 2+ 3- 1+ 1o 1o 2- 3+ 4+
UT

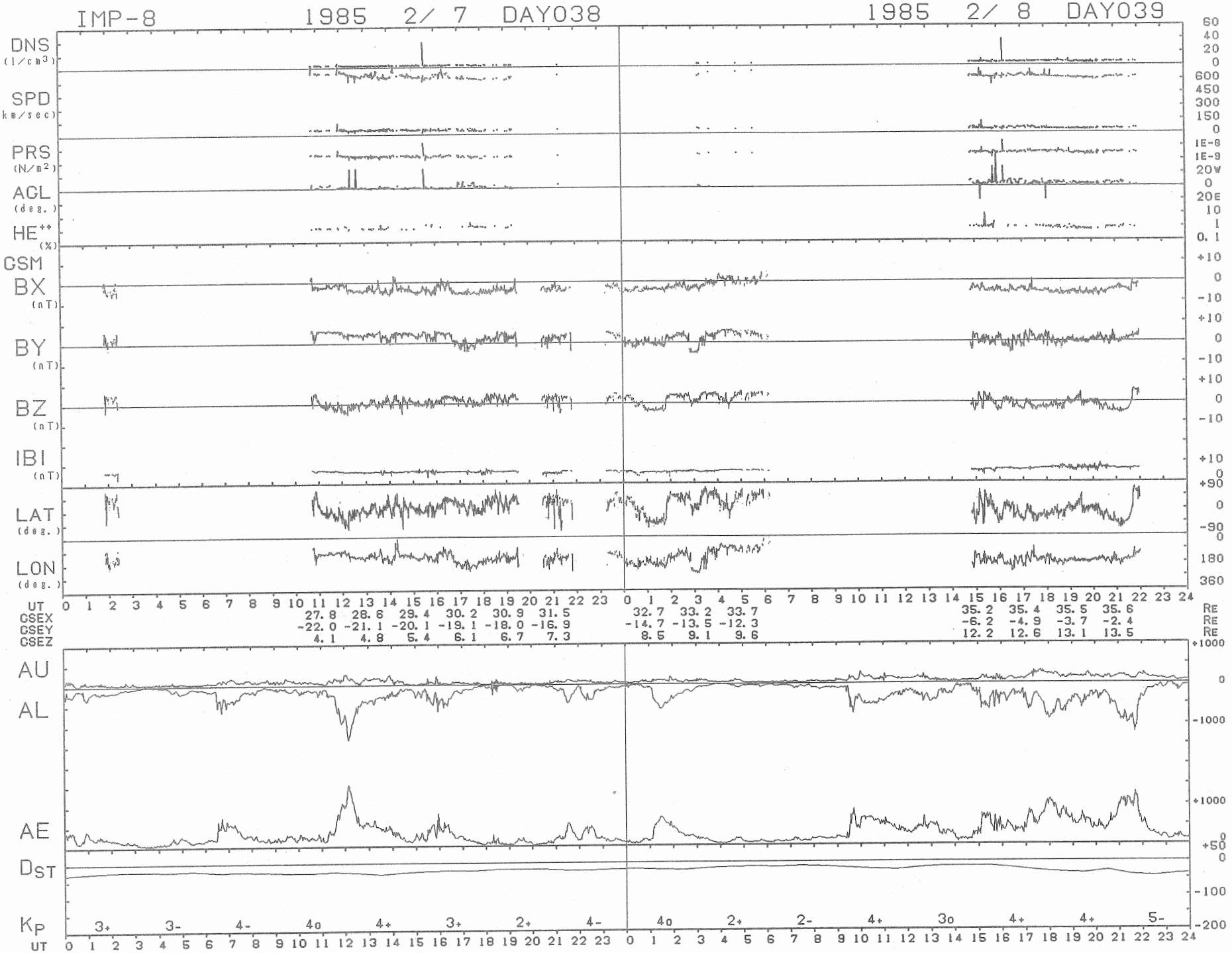

IMP-8 1985 1/28 DAY028
1985 1/29 DAY029
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.0 28.6 27.8 26.2 18.4 17.4 16.3 15.2 14.0 RE
GSEY 16.9 22.1 23.0 24.9 31.1 31.7 32.3 32.8 33.3 RE
GSEZ 16.8 17.7 17.8 18.0 17.7 17.6 17.4 17.2 17.0 RE
AU
AL
AE
DST
KP 6- 5o 5- 5o 6- 6o 5o 6- 5o 4o 1o 2o 2o 2+ 4o 6-
UT

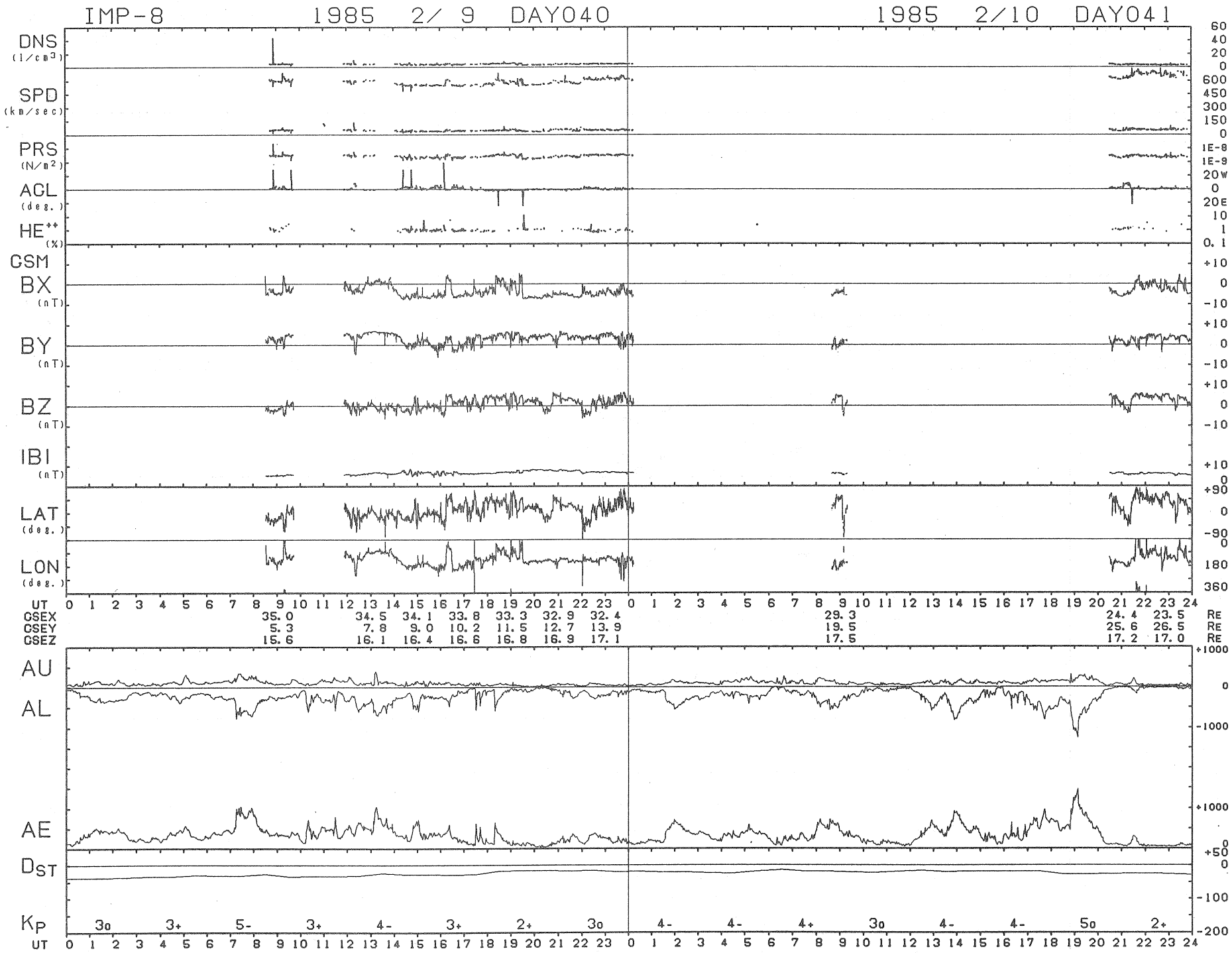

IMP-8
1985 1/30 DAY030
1985 1/31 DAY031
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 12.9 11.7 3.3 2.1 0.8 -0.4 -1.6 -2.9 -4.1 -12.5 -13.7 -14.8 RE
CSEY 33.8 34.3 36.2 36.3 36.3 36.4 36.3 36.2 36.1 33.8 33.3 32.7 RE
CSEZ 16.8 16.6 14.3 13.9 13.4 13.0 12.5 12.0 11.6 7.6 7.0 6.4 RE
AU
AL
AE
DST
KP
4o 3o 3+ 3- 2+ 4- 3- 3+ 3+ 2+ 2+ 4o 4- 3o 2o 3o
UT

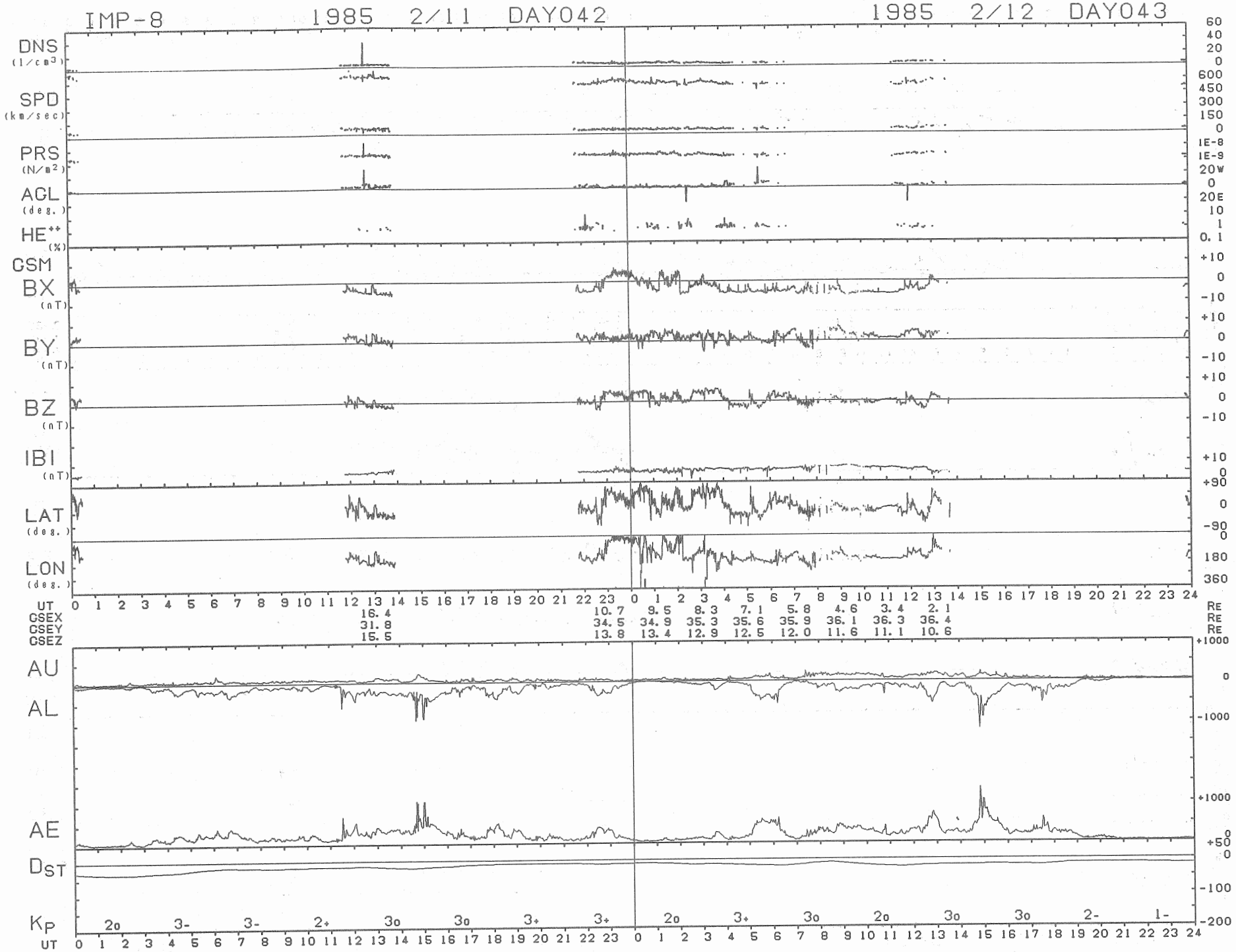

IMP-8 1985 2/ 1 DAY032
1985 2/ 2 DAY033
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.9 -17.0 -18.0 -19.0 -20.0 -21.0 -21.9 -22.8 -25.2 -26.0 -26.6 -27.3 -27.8 -28.3 -28.8 -29.2 -29.5 -30.0 RE
GSEY 32.1 31.4 30.7 29.9 29.1 28.2 27.3 26.4 23.2 22.1 20.9 19.7 18.4 17.1 15.8 14.4 13.0 10.1 RE
GSEZ 5.7 5.1 4.4 3.8 3.1 2.4 1.7 1.0 -1.0 -1.7 -2.4 -3.1 -3.7 -4.4 -5.1 -5.7 -6.3 -7.5 RE
AU
AL
AE
DST
KP 3- 3o 3+ 3+ 3- 4o 3- 2- 1o 4o 3- 2+ 2+ 2+ 3- 2+
UT

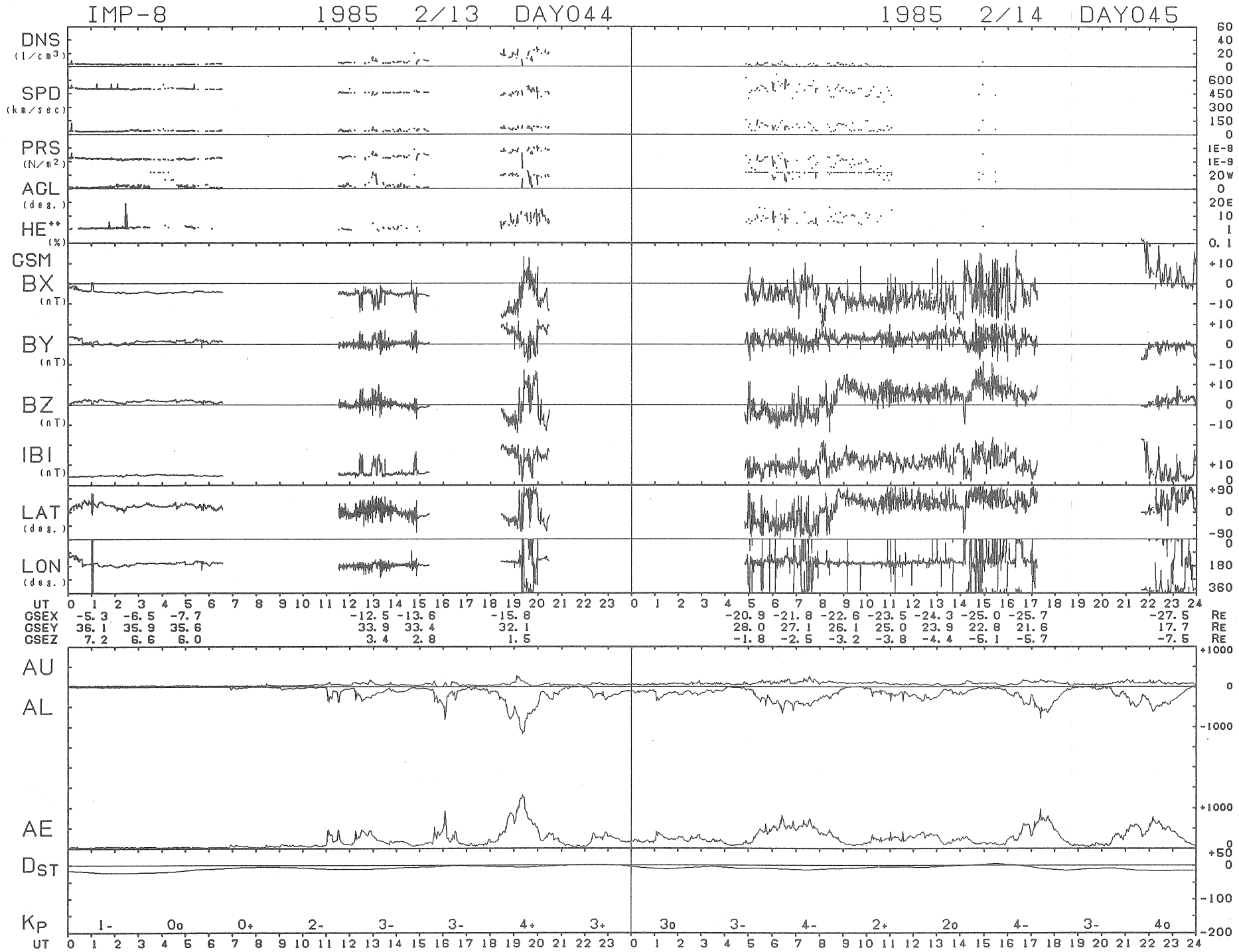

IMP-8
1985 2/ 3 DAY034
1985 2/ 4 DAY035
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.2 -30.1 -29.9 -29.7 -29.4
GSEY 4.2 2.6 1.1 -0.4 -2.0
GSEZ -9.7 -10.2 -10.7 -11.1 -11.6
-22.4 -21.4 -20.3
-16.5 -17.8 -19.0
-13.9 -13.9 -13.9
RE
AU
AL
AE
DST
KP
2- 2- 1o 1o 3+ 3- 3- 0+ 1o 1o 0+ 0+ 0+ 0o 1o 1o

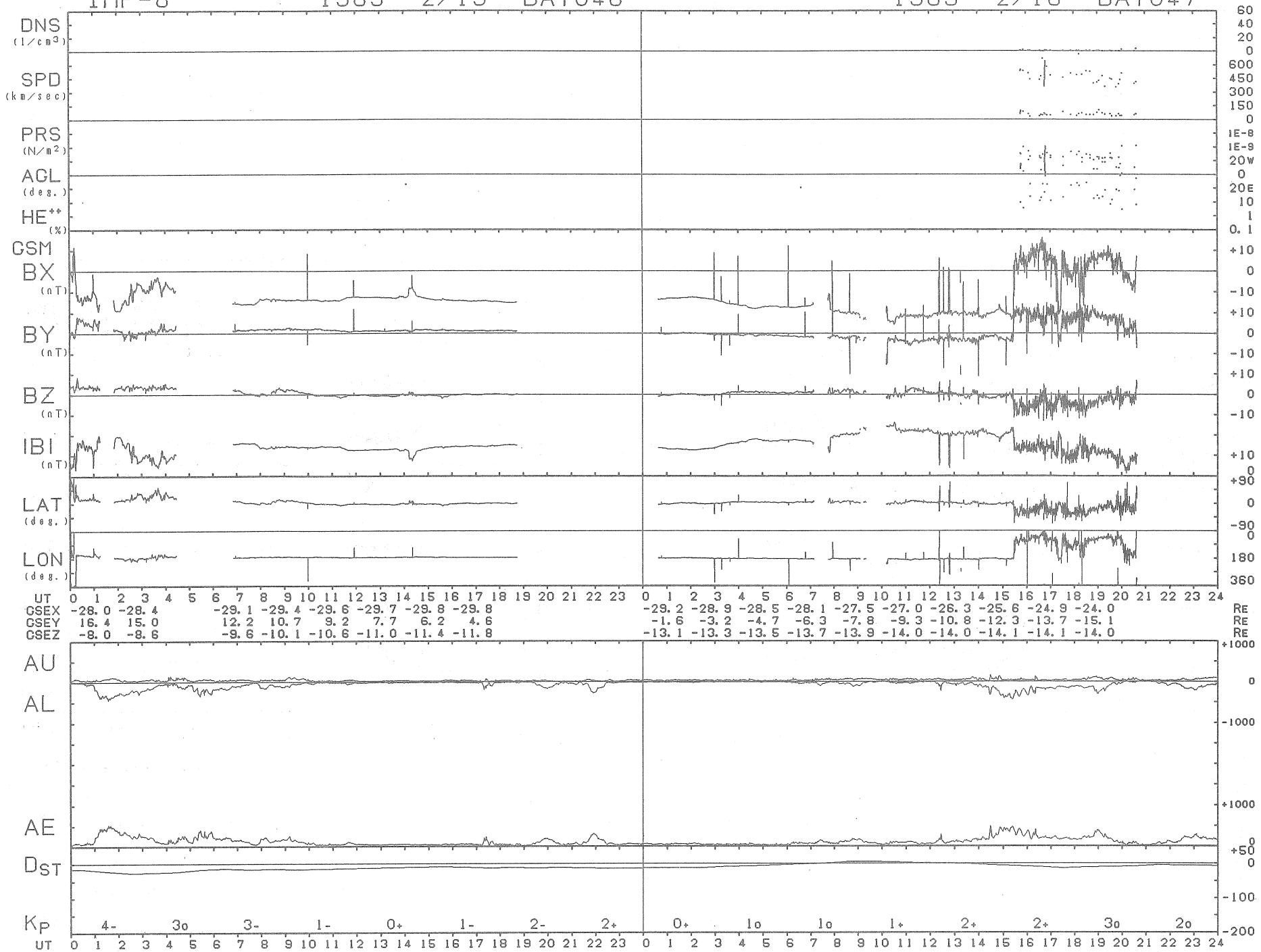

IMP-8 1985 2/ 5 DAY036
1985 2/ 6 DAY037
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -4.3 -2.8 1.7 3.1 4.6 6.1 21.8 RE
GSEY -29.5 -30.0 -31.0 -31.1 -31.3 -31.3 -27.0 RE
GSEZ -11.2 -10.8 -9.3 -8.8 -8.2 -7.7 0.1 RE
AU
AL
AE
DST
KP 1+ 3+ 4+ 3o 5- 4- 3+ 4- 5o 4o 5+ 5- 5+ 5+ 6- 4-
UT

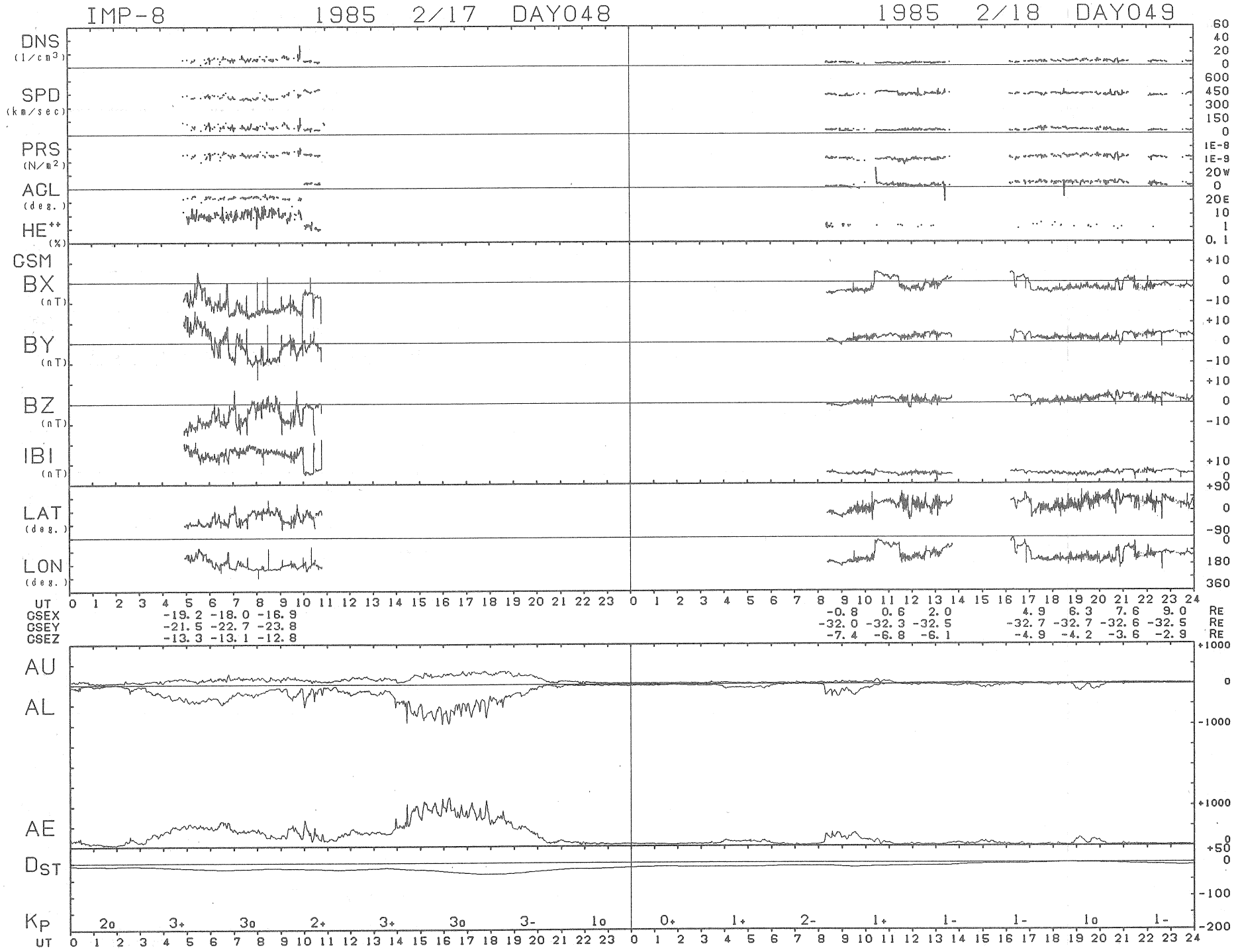

IMP-8
1985 2/ 7 DAY038
1985 2/ 8 DAY039
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
27.8 28.6 29.4 30.2 30.9 31.5
-22.0 -21.1 -20.1 -19.1 -18.0 -16.9
4.1 4.8 5.4 6.1 6.7 7.3
32.7 33.2 33.7
-14.7 -13.5 -12.3
8.5 9.1 9.6
35.2 35.4 35.5 35.6
-6.2 -4.9 -3.7 -2.4
12.2 12.6 13.1 13.5
RE
AU
AL
AE
DST
KP
3+ 3- 4- 4o 4+ 3+ 2+ 4-
4o 2+ 2- 4+ 3o 4+ 4+ 5-

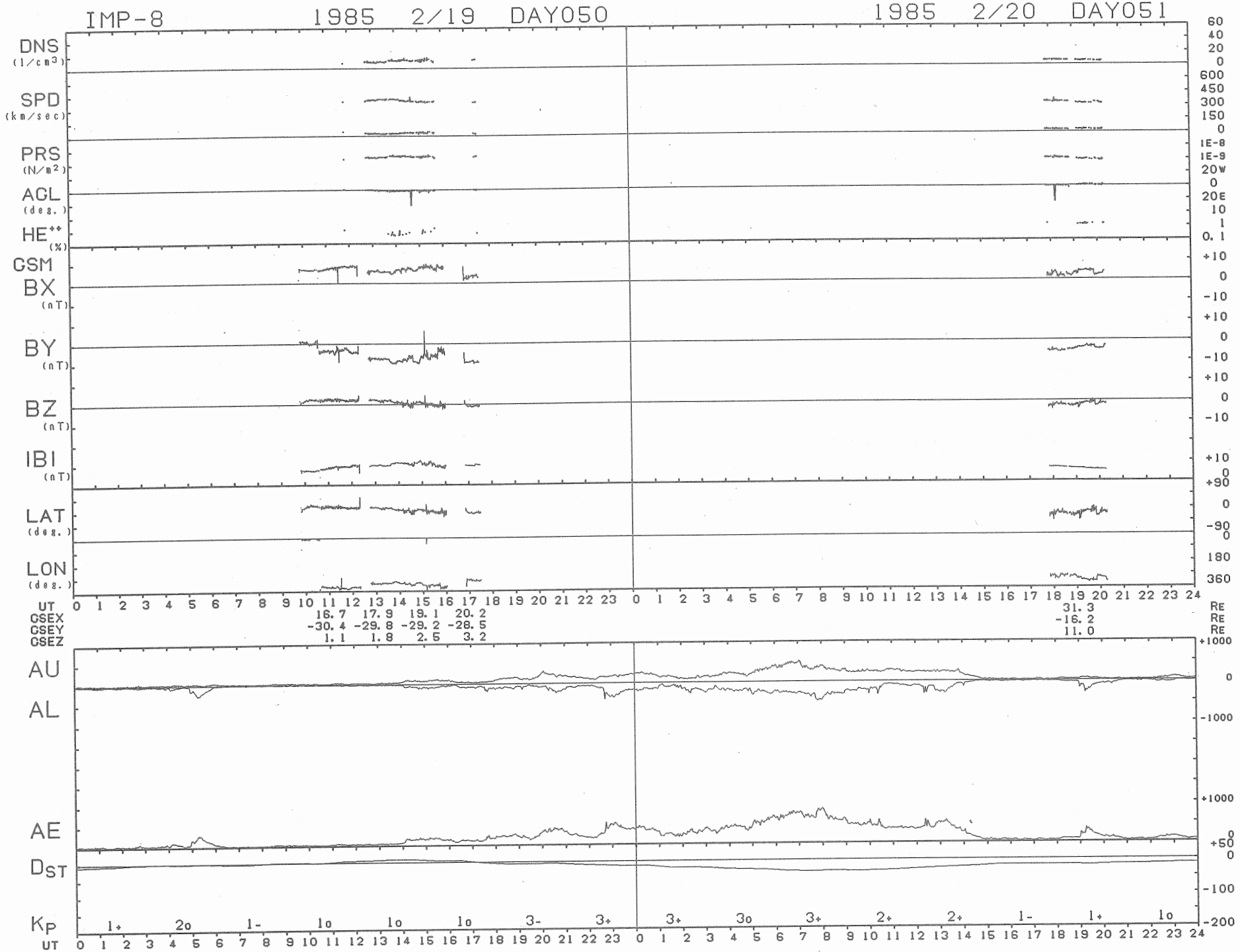

IMP-8
1985 2/ 9 DAY040
1985 2/10 DAY041
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.0 34.5 34.1 33.8 33.3 32.9 32.4 29.3 24.4 23.5 RE
GSEY 5.3 7.8 9.0 10.2 11.5 12.7 13.9 19.5 25.6 26.5 RE
GSEZ 15.6 16.1 16.4 16.6 16.8 16.9 17.1 17.5 17.2 17.0 RE
AU
AL
AE
DST
KP 3o 3+ 5- 3+ 4- 3+ 2+ 3o 4- 4- 4+ 3o 4- 4- 5o 2+
UT

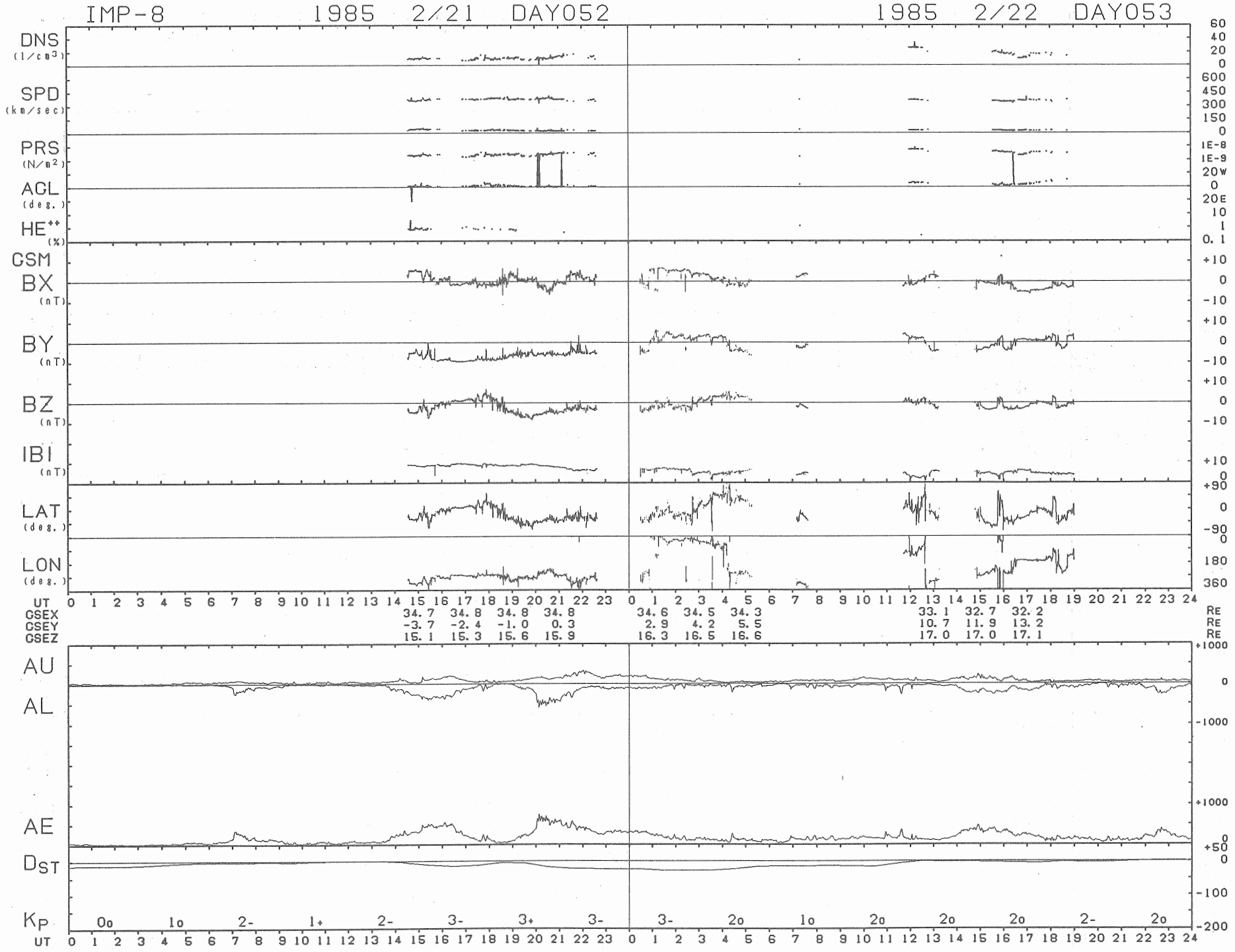

IMP-8
1985 2/11 DAY042
1985 2/12 DAY043
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP
2o 3- 3- 2+ 3o 3o 3+ 3+ 2o 3+ 3o 2o 3o 3o 2- 1-

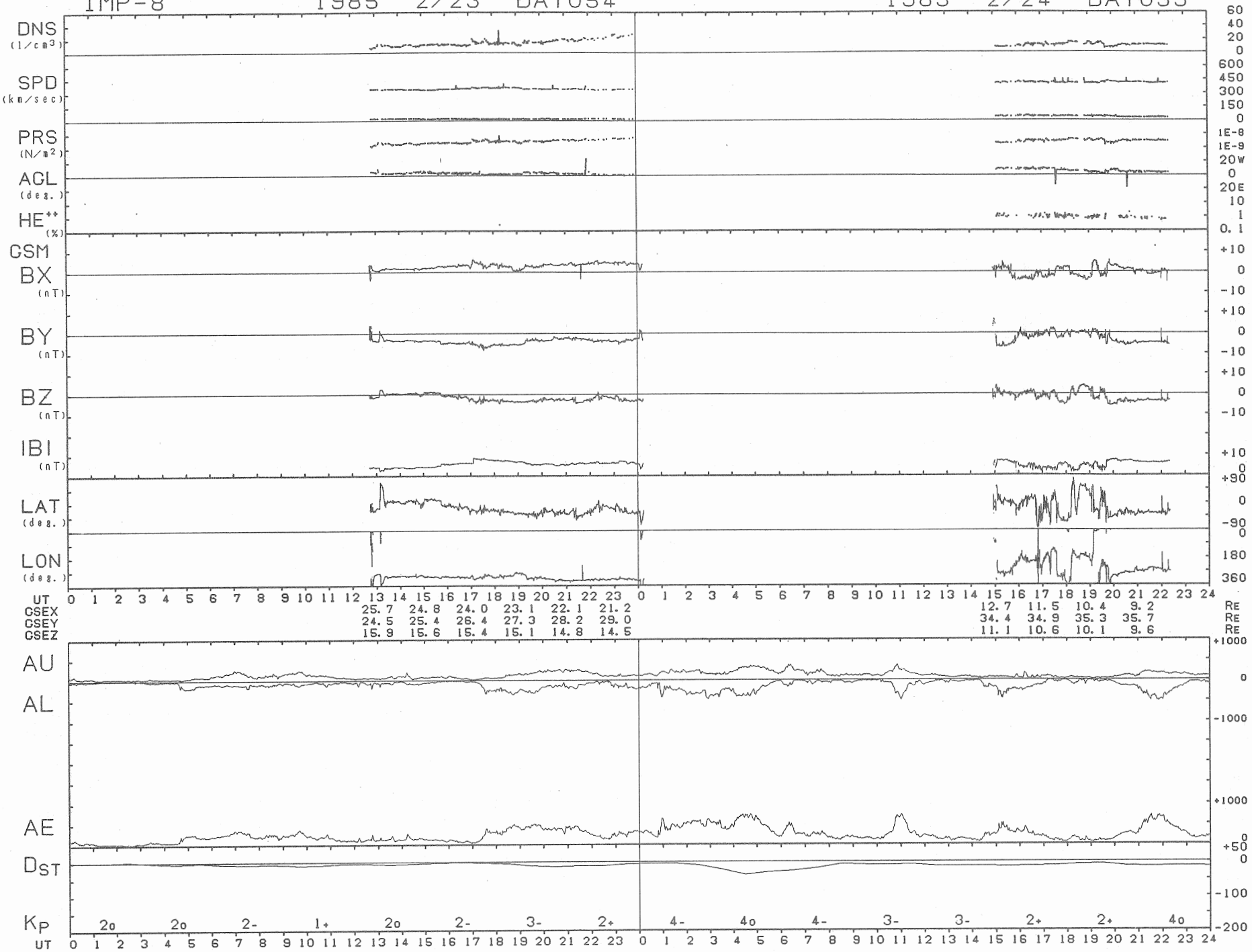

IMP-8 1985 2/13 DAY044
1985 2/14 DAY045
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.3 -6.5 -7.7 -12.5 -13.6 -15.8 -20.9 -21.8 -22.6 -23.5 -24.3 -25.0 -25.7 -27.5 RE
GSEY 36.1 35.9 35.6 33.9 33.4 32.1 28.0 27.1 26.1 25.0 23.9 22.8 21.6 17.7 RE
GSEZ 7.2 6.6 6.0 3.4 2.8 1.5 -1.8 -2.5 -3.2 -3.8 -4.4 -5.1 -5.7 -7.5 RE
AU
AL
AE
DST
KP
1- 0o 0+ 2- 3- 3- 4+ 3+ 3o 3- 4- 2+ 2o 4- 3- 4o
UT

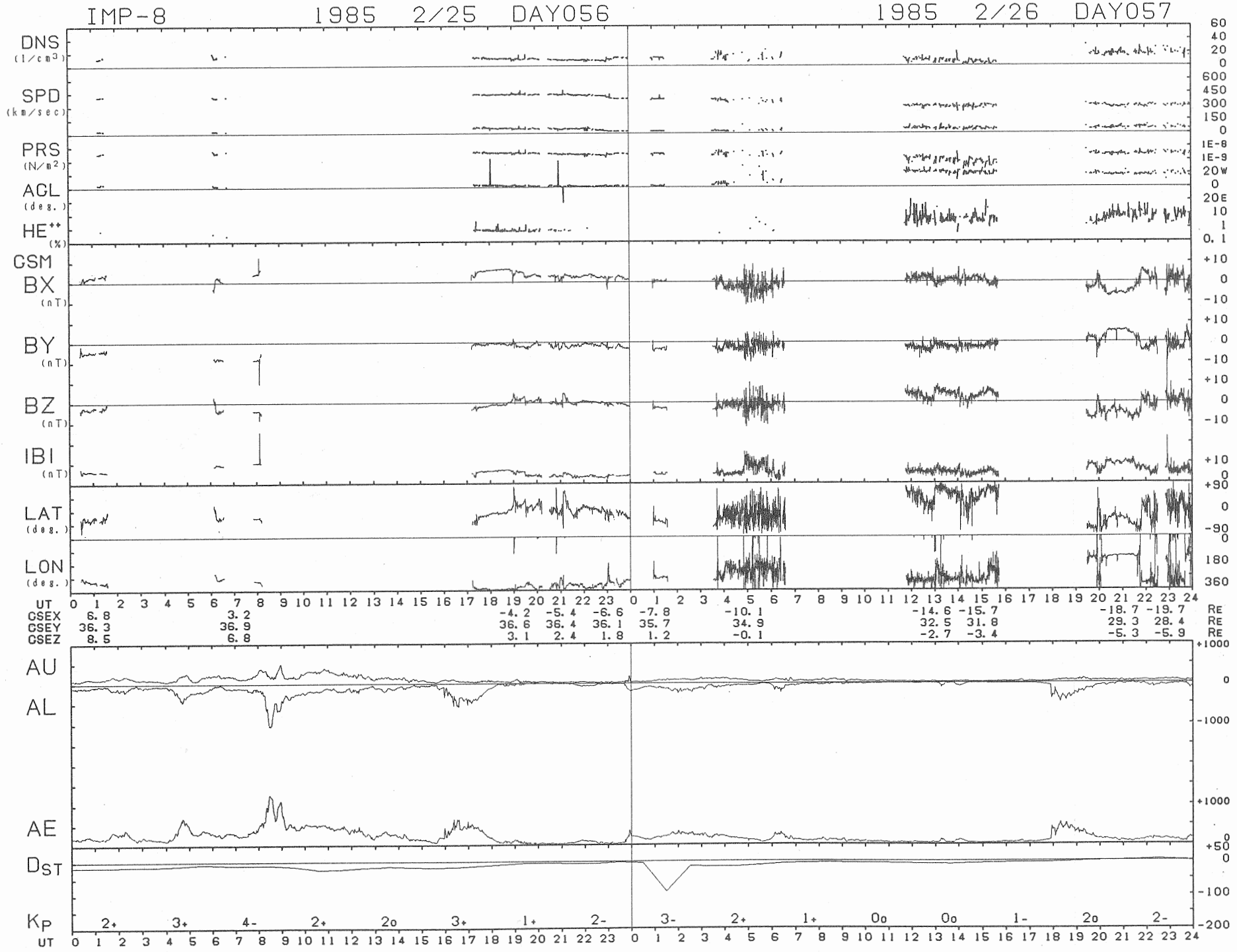

IMP-8 1985 2/15 DAY046
1985 2/16 DAY047
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX -28.0 -28.4 -29.1 -29.4 -29.6 -29.7 -29.8 -29.8 -29.2 -28.9 -28.5 -28.1 -27.5 -27.0 -26.3 -25.6 -24.9 -24.0 RE
GSEY 16.4 15.0 12.2 10.7 9.2 7.7 6.2 4.6 -1.6 -3.2 -4.7 -6.3 -7.8 -9.3 -10.8 -12.3 -13.7 -15.1 RE
GSEZ -8.0 -8.6 -9.6 -10.1 -10.6 -11.0 -11.4 -11.8 -13.1 -13.3 -13.5 -13.7 -13.9 -14.0 -14.0 -14.1 -14.1 -14.0 RE
AU
AL
AE
DST
KP 4- 3o 3- 1- 0+ 1- 2- 2+ 0+ 1o 1o 1+ 2+ 2+ 3o 2o
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

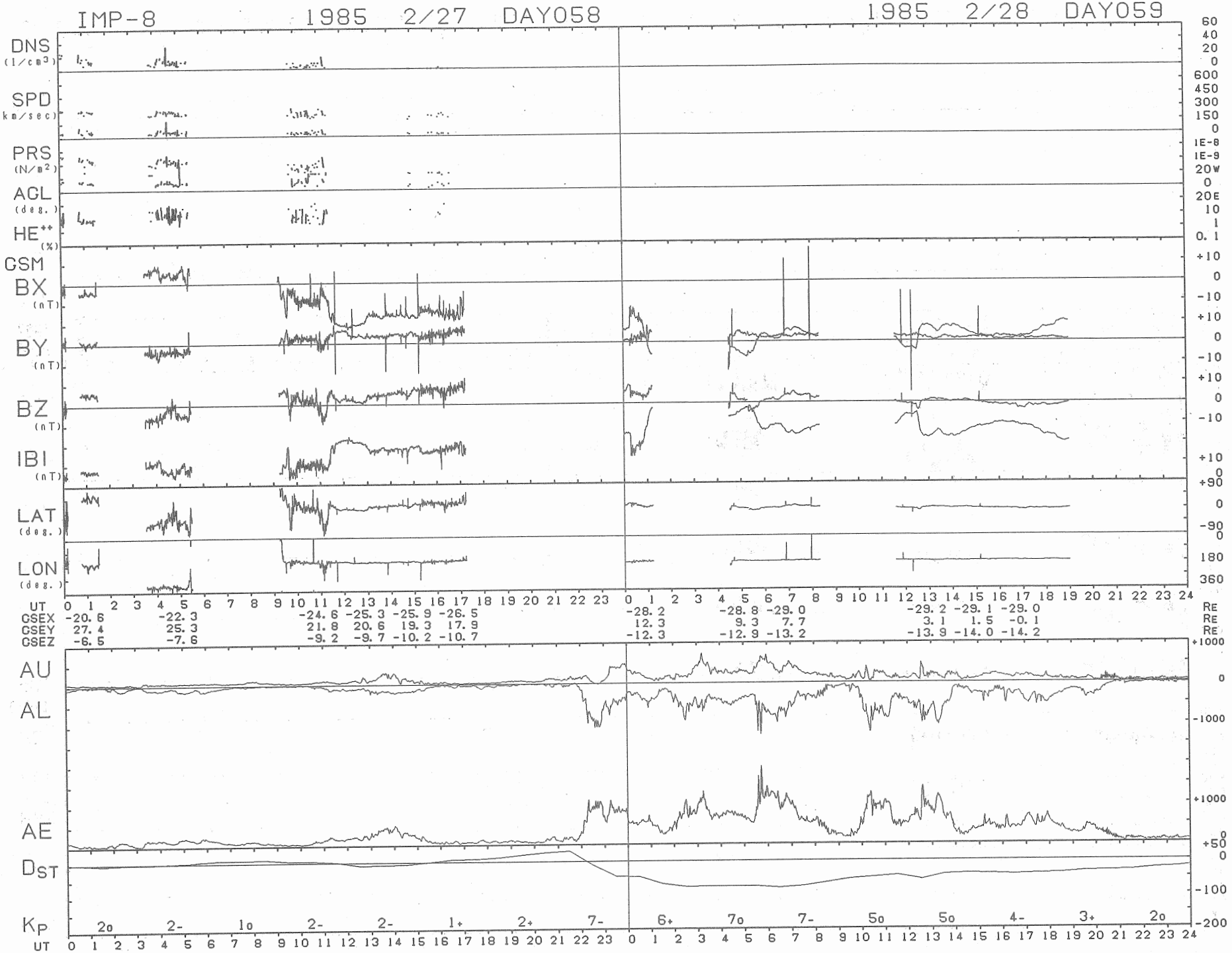

IMP-8 1985 2/17 DAY048
1985 2/18 DAY049
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -19.2 -18.0 -16.9 -0.8 0.6 2.0 4.9 6.3 7.6 9.0 RE
GSEY -21.5 -22.7 -23.8 -32.0 -32.3 -32.5 -32.7 -32.7 -32.6 -32.5 RE
GSEZ -13.3 -13.1 -12.8 -7.4 -6.8 -6.1 -4.9 -4.2 -3.6 -2.9 RE
AU
AL
AE
DST
KP
2o 3+ 3o 2+ 3+ 3o 3- 1o 0+ 1+ 2- 1+ 1- 1- 1o 1-

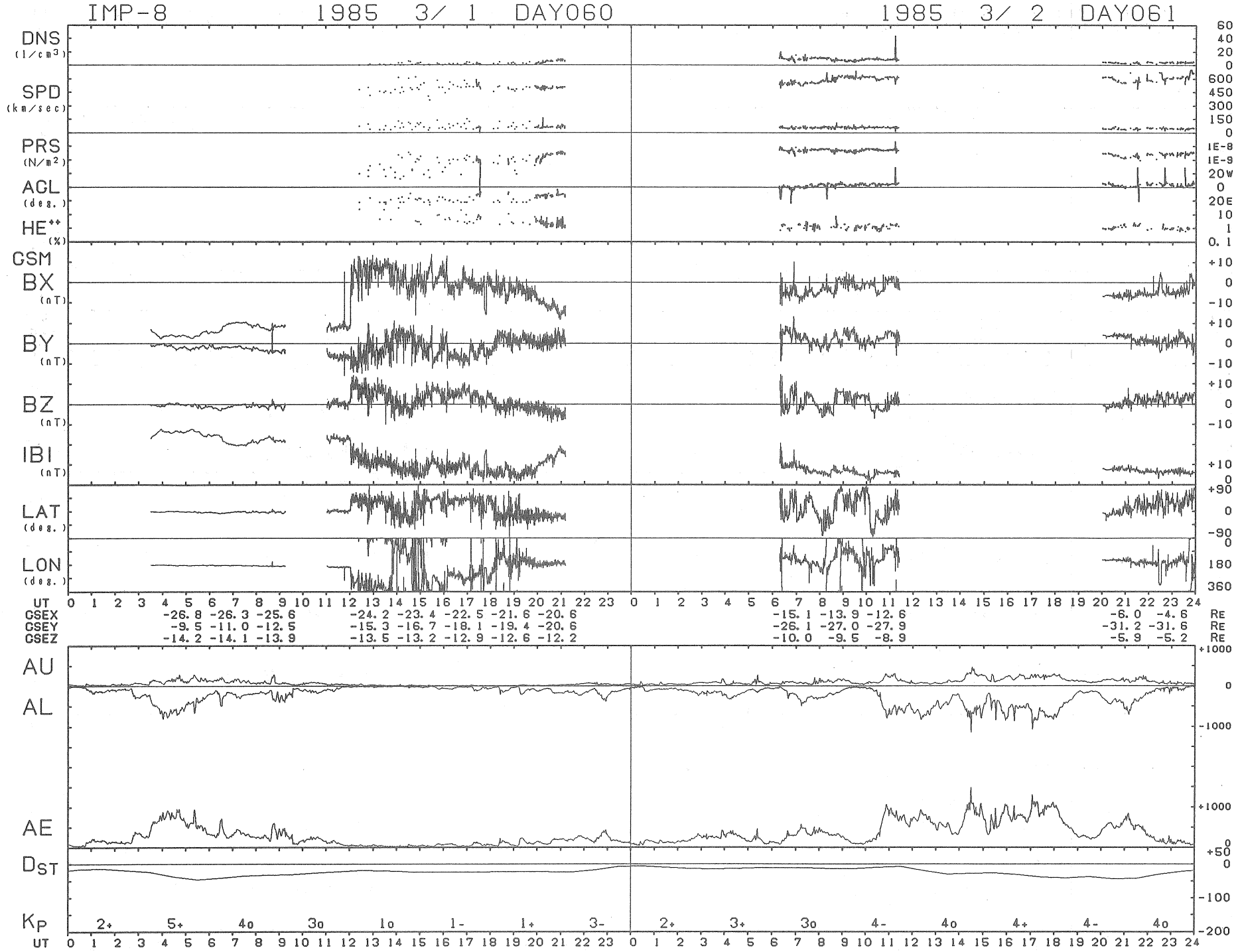

IMP-8
1985 2/19 DAY050
1985 2/20 DAY051
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.7 17.9 19.1 20.2 31.3
GSEY -30.4 -29.8 -29.2 -28.5 -16.2
GSEZ 1.1 1.8 2.5 3.2 11.0
RE
AU
AL
AE
DST
KP
1+ 2o 1- 1o 1o 1o 3- 3+ 3+ 3o 3+ 2+ 2+ 1- 1+ 1o

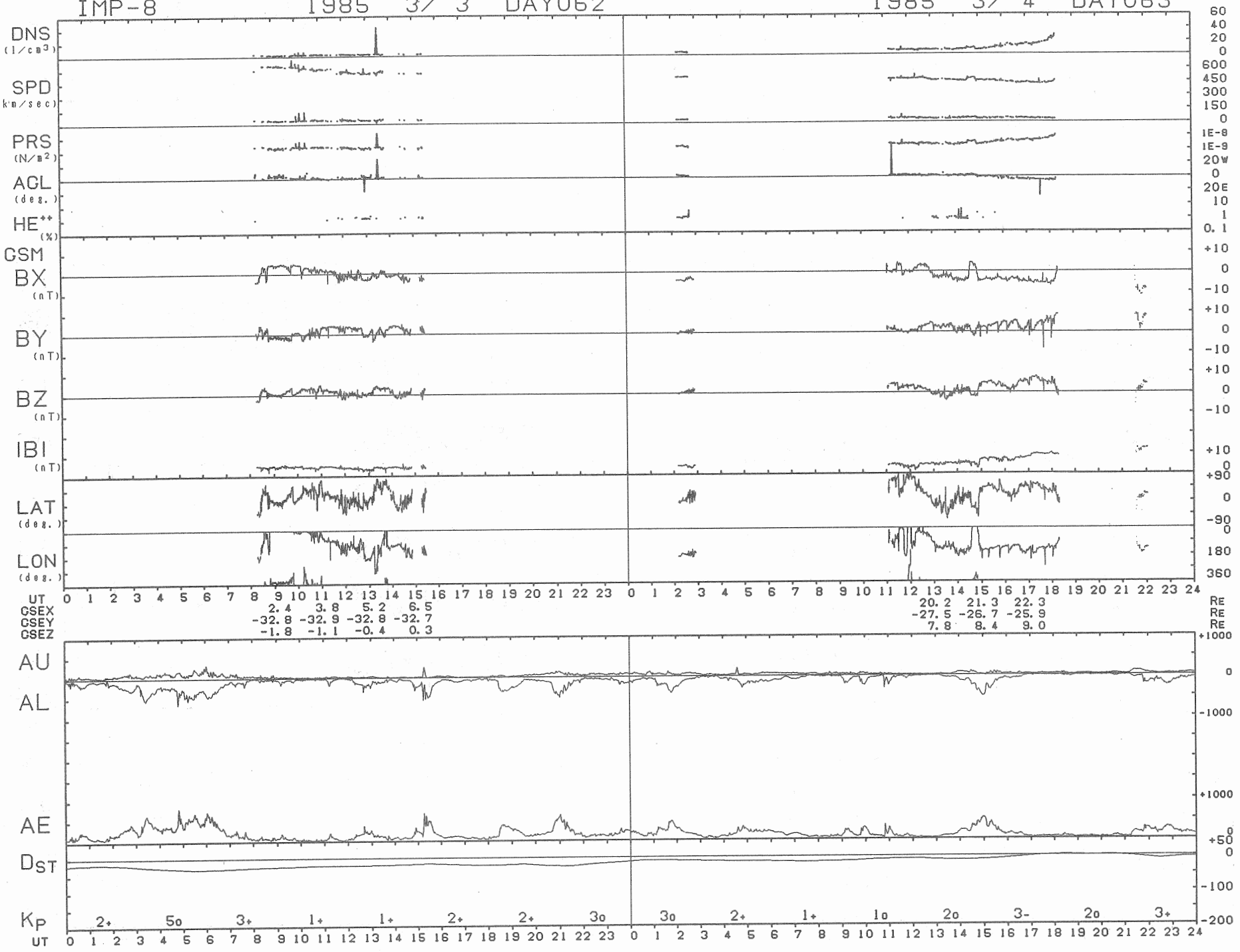

IMP-8 1985 2/21 DAY052
1985 2/22 DAY053
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.7 34.8 34.8 34.8 34.6 34.5 34.3 33.1 32.7 32.2 RE
GSEY -3.7 -2.4 -1.0 0.3 2.9 4.2 5.5 10.7 11.9 13.2 RE
GSEZ 15.1 15.3 15.6 15.9 16.3 16.5 16.6 17.0 17.0 17.1 RE
AU
AL
AE
DST
KP 0o 1o 2- 1+ 2- 3- 3+ 3- 3- 2o 1o 2o 2o 2o 2- 2o
UT

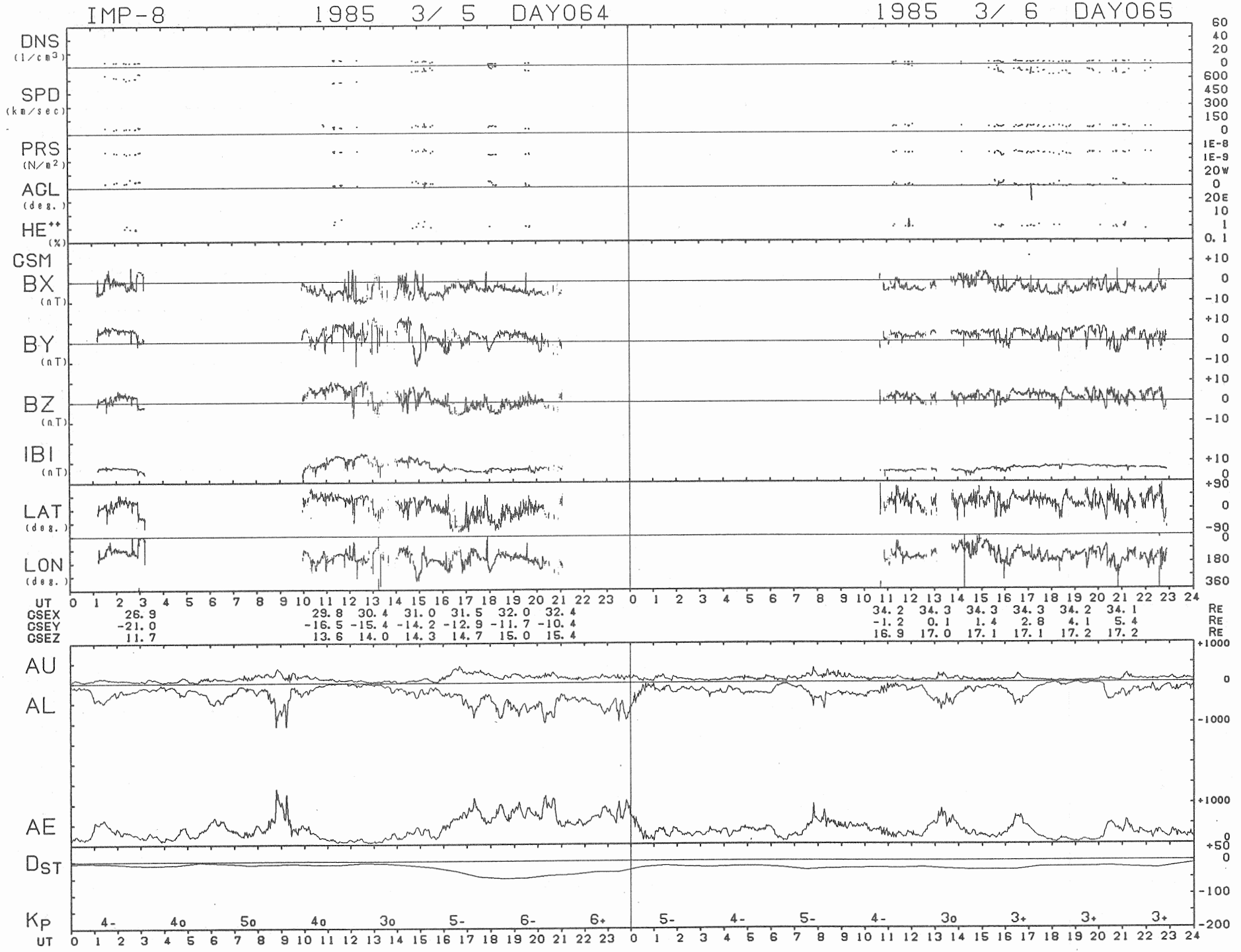

IMP-8
1985 2/23 DAY054
1985 2/24 DAY055
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.7 24.8 24.0 23.1 22.1 21.2 12.7 11.5 10.4 9.2 RE
GSEY 24.5 25.4 26.4 27.3 28.2 29.0 34.4 34.9 35.3 35.7 RE
GSEZ 15.9 15.6 15.4 15.1 14.8 14.5 11.1 10.6 10.1 9.6 RE
AU
AL
AE
DST
KP 2o 2o 2- 1+ 2o 2- 3- 2+ 4- 4o 4- 3- 3- 2+ 2+ 4o
UT

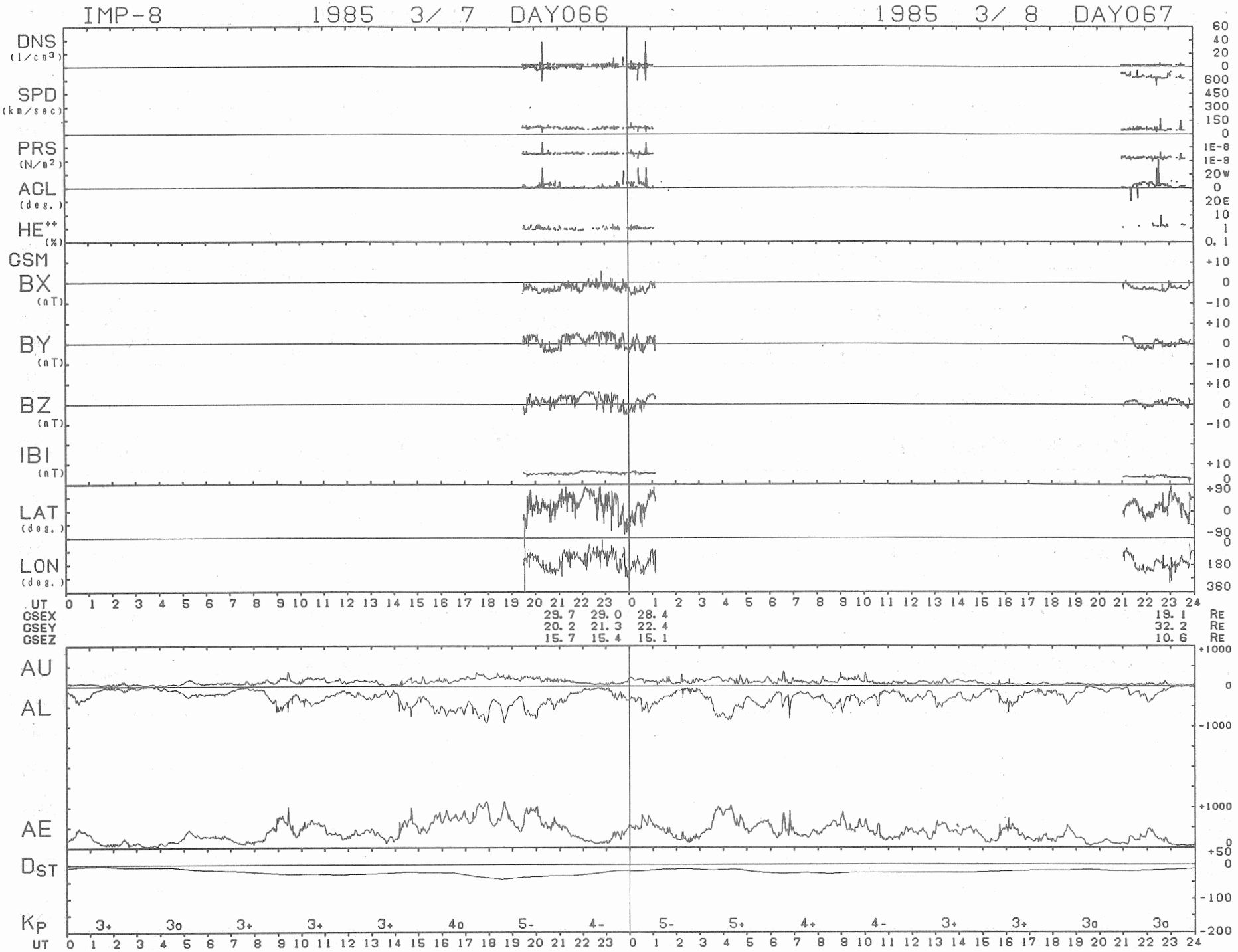

IMP-8 1985 2/25 DAY056
1985 2/26 DAY057
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 6.8 3.2 -4.2 -5.4 -6.6 -7.8 -10.1 -14.6 -15.7 -18.7 -19.7 RE
GSEY 36.3 36.9 36.6 36.4 36.1 35.7 34.9 32.5 31.8 29.3 28.4 RE
GSEZ 8.5 6.8 3.1 2.4 1.8 1.2 -0.1 -2.7 -3.4 -5.3 -5.9 RE
AU
AL
AE
DST
KP
2+ 3+ 4- 2+ 2o 3+ 1+ 2- 3- 2+ 1+ 0o 0o 1- 2o 2-
UT

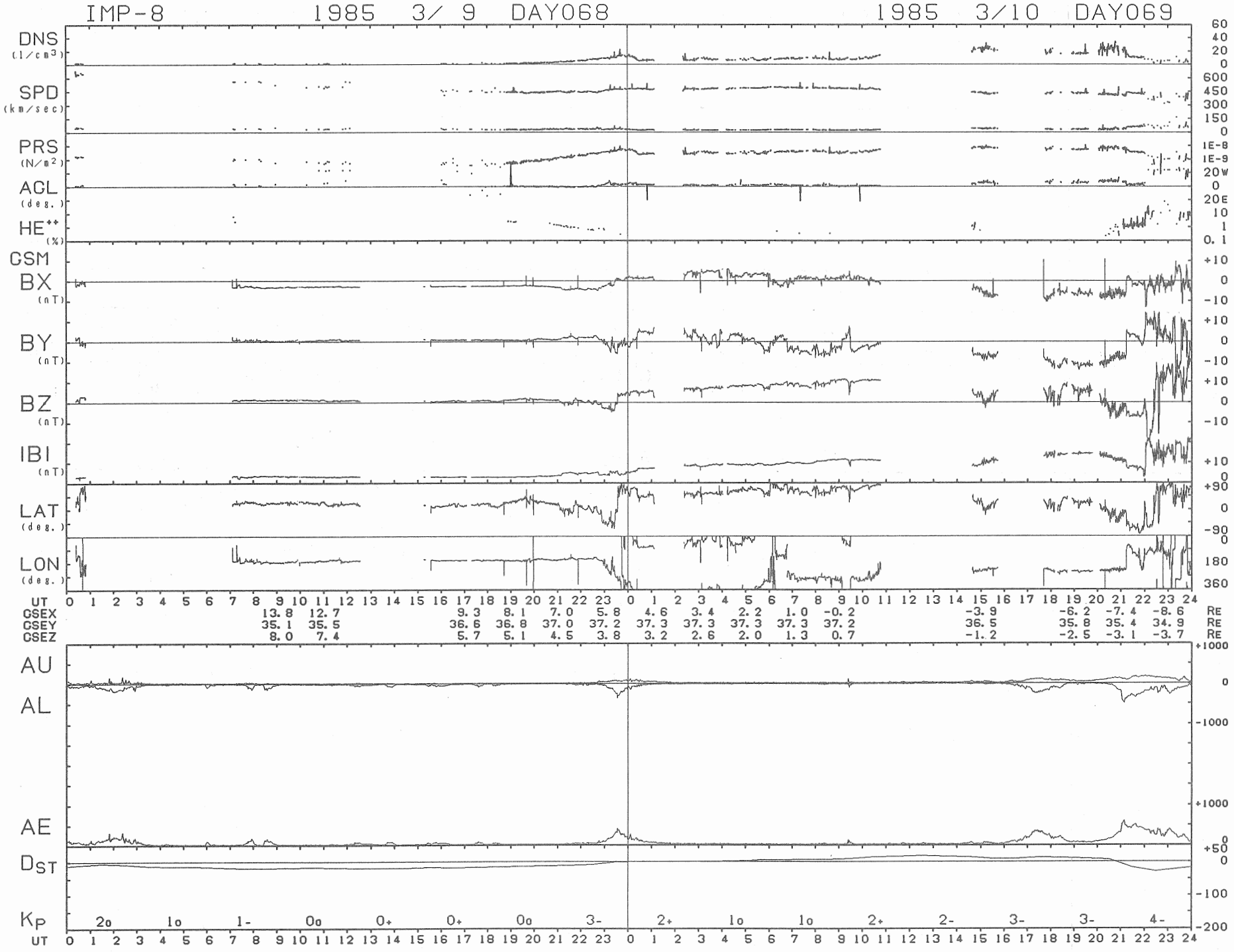

IMP-8
1985 2/27 DAY058
1985 2/28 DAY059
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.6 -22.3 -24.6 -25.3 -25.9 -26.5 -28.2 -28.8 -29.0 -29.2 -29.1 -29.0
GSEY 27.4 25.3 21.8 20.6 19.3 17.9 12.3 9.3 7.7 3.1 1.5 -0.1
GSEZ -6.5 -7.6 -9.2 -9.7 -10.2 -10.7 -12.3 -12.9 -13.2 -13.9 -14.0 -14.2
RE
AU
AL
AE
DST
KP
2o 2- 1o 2- 2- 1+ 2+ 7- 6+ 7o 7- 5o 5o 4- 3+ 2o

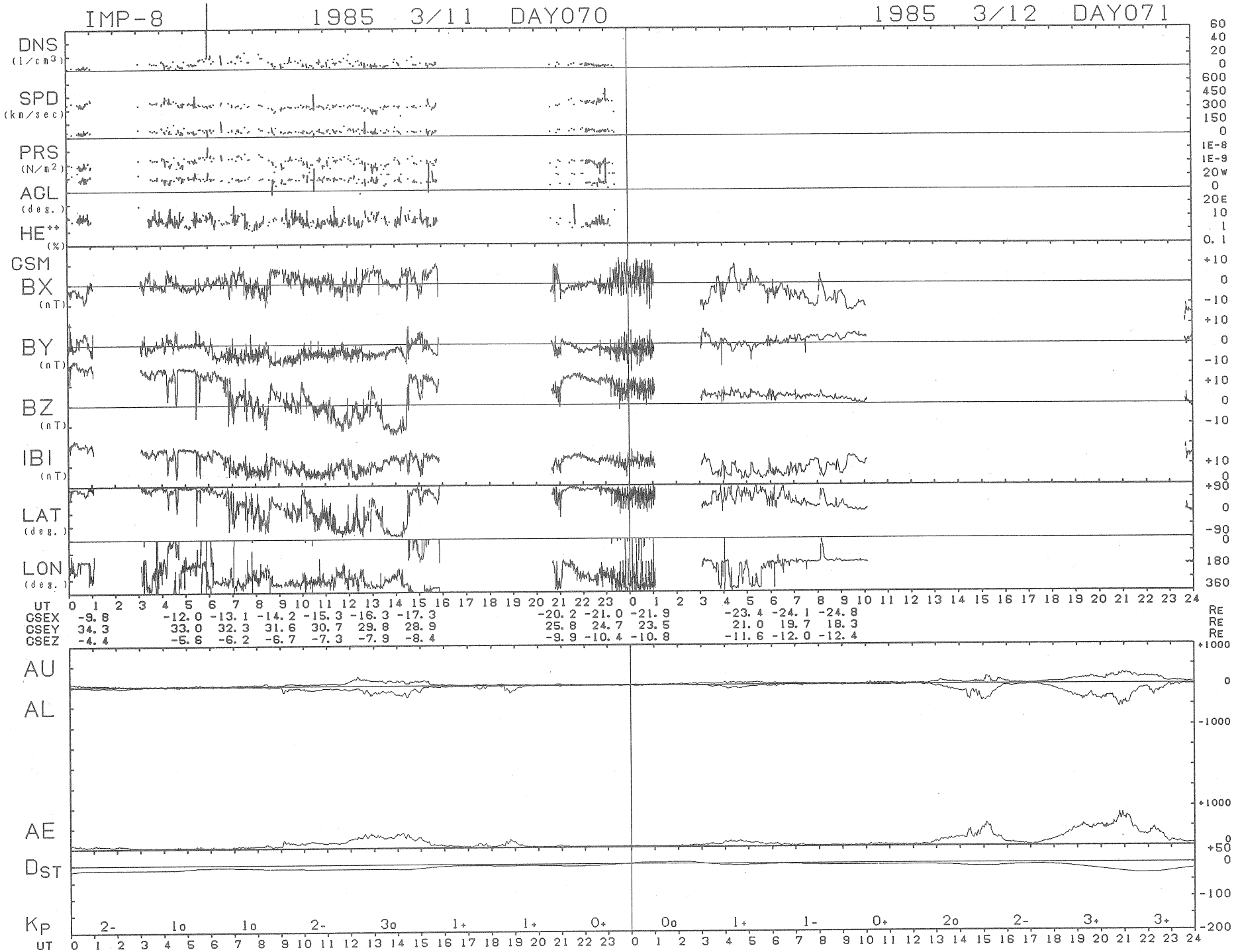

IMP-8 1985 3/ 1 DAY060
1985 3/ 2 DAY061
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.8 -26.3 -25.6 -24.2 -23.4 -22.5 -21.6 -20.6 -15.1 -13.9 -12.6 -6.0 -4.6 RE
GSEY -9.5 -11.0 -12.5 -15.3 -16.7 -18.1 -19.4 -20.6 -26.1 -27.0 -27.9 -31.2 -31.6 RE
GSEZ -14.2 -14.1 -13.9 -13.5 -13.2 -12.9 -12.6 -12.2 -10.0 -9.5 -8.9 -5.9 -5.2 RE
AU
AL
AE
DST
KP 2+ 5+ 4o 3o 1o 1- 1+ 3- 2+ 3+ 3o 4- 4o 4+ 4- 4o
UT

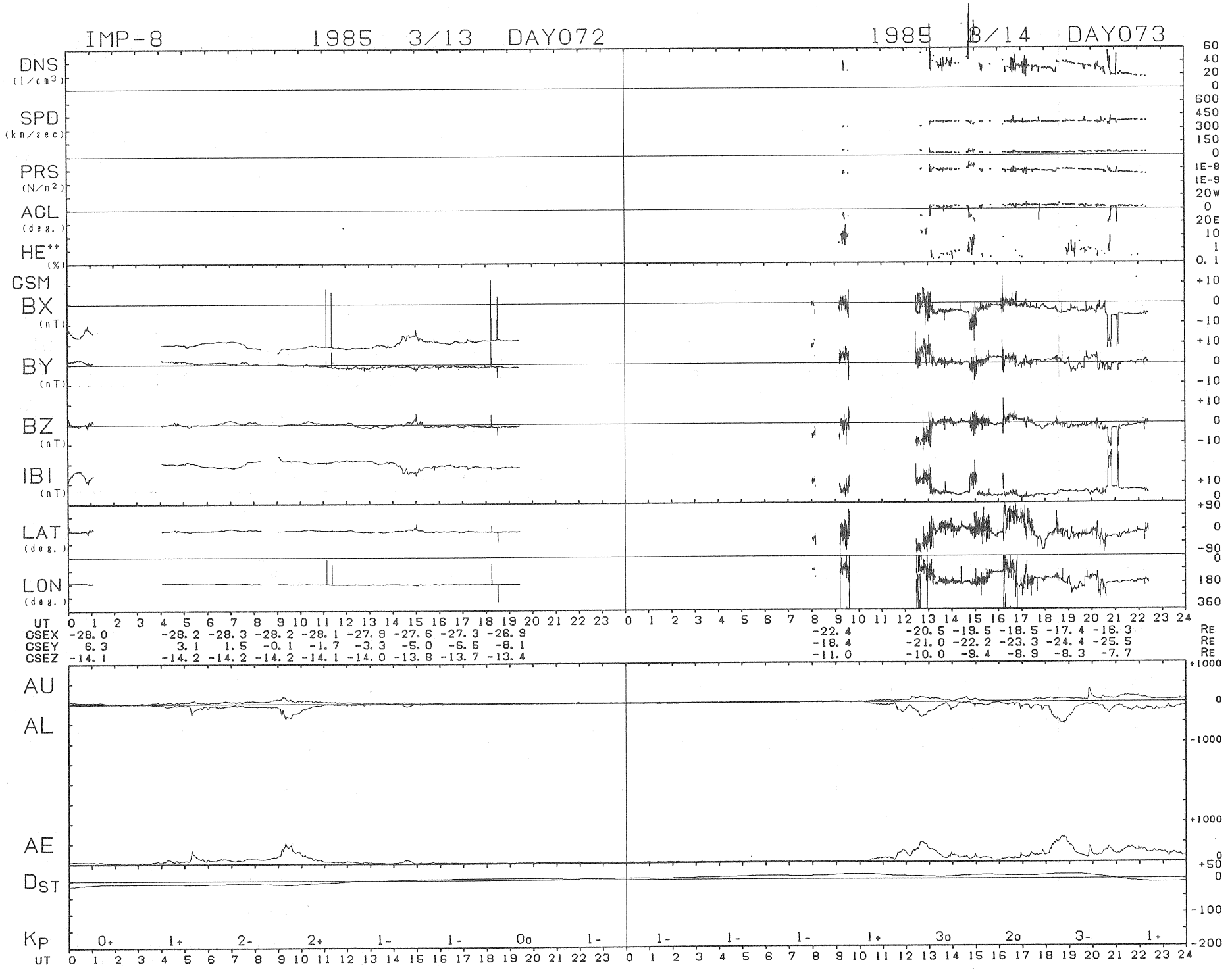

IMP-8
1985 3/ 3 DAY062
1985 3/ 4 DAY063
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.4 3.8 5.2 6.5 20.2 21.3 22.3 RE
GSEY -32.8 -32.9 -32.8 -32.7 -27.5 -26.7 -25.9 RE
GSEZ -1.8 -1.1 -0.4 0.3 7.8 8.4 9.0 RE
AU
AL
AE
DST
KP 2+ 5o 3+ 1+ 1+ 2+ 2+ 3o 3o 2+ 1+ 1o 2o 3- 2o 3+
UT

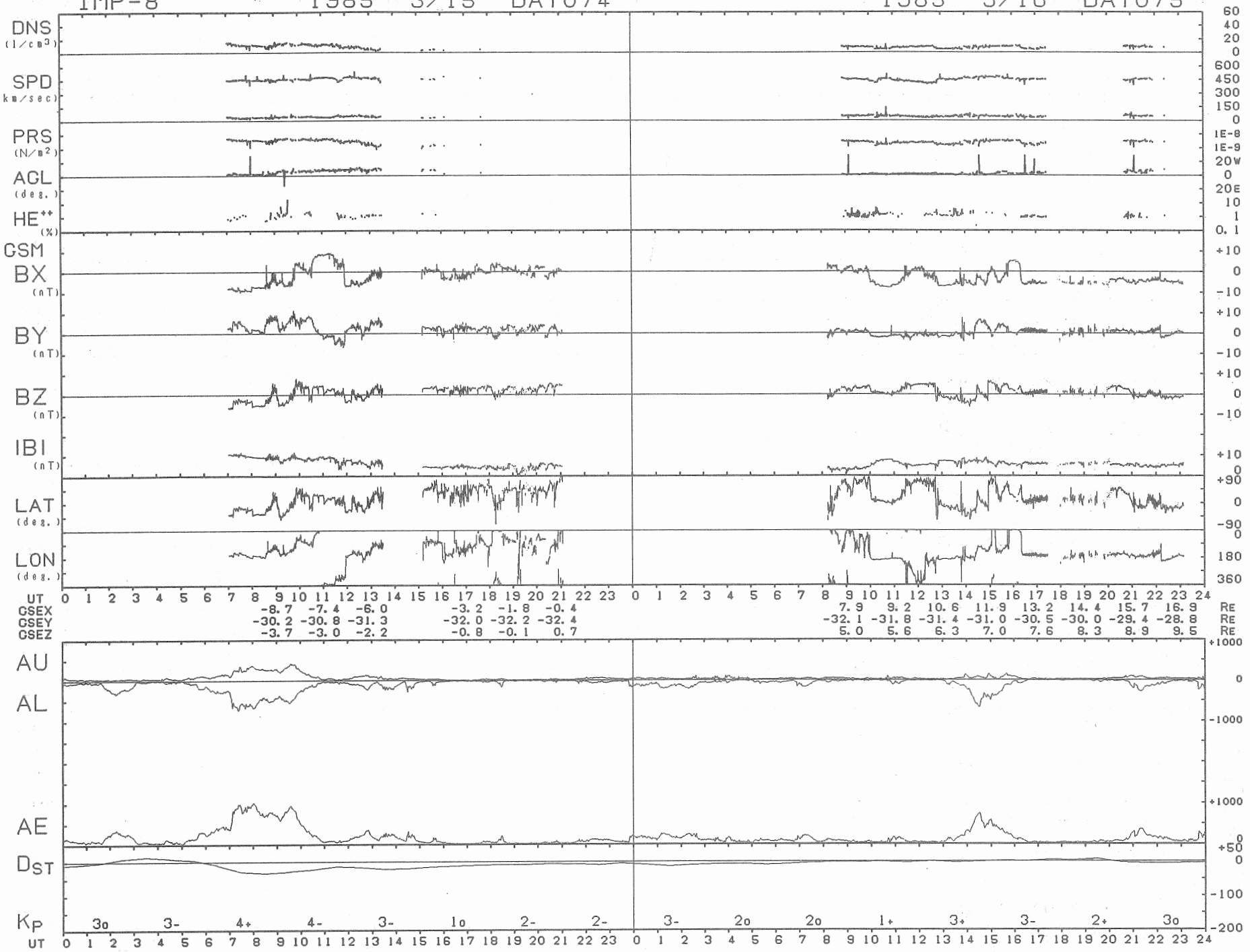

IMP-8
1985 3/ 5 DAY064
1985 3/ 6 DAY065
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.9 29.8 30.4 31.0 31.5 32.0 32.4 34.2 34.3 34.3 34.3 34.2 34.1 RE
GSEY -21.0 -16.5 -15.4 -14.2 -12.9 -11.7 -10.4 -1.2 0.1 1.4 2.8 4.1 5.4 RE
GSEZ 11.7 13.6 14.0 14.3 14.7 15.0 15.4 16.9 17.0 17.1 17.1 17.2 17.2 RE
AU
AL
AE
DST
KP 4- 4o 5o 4o 3o 5- 6- 6+ 5- 4- 5- 4- 3o 3+ 3+ 3+
UT

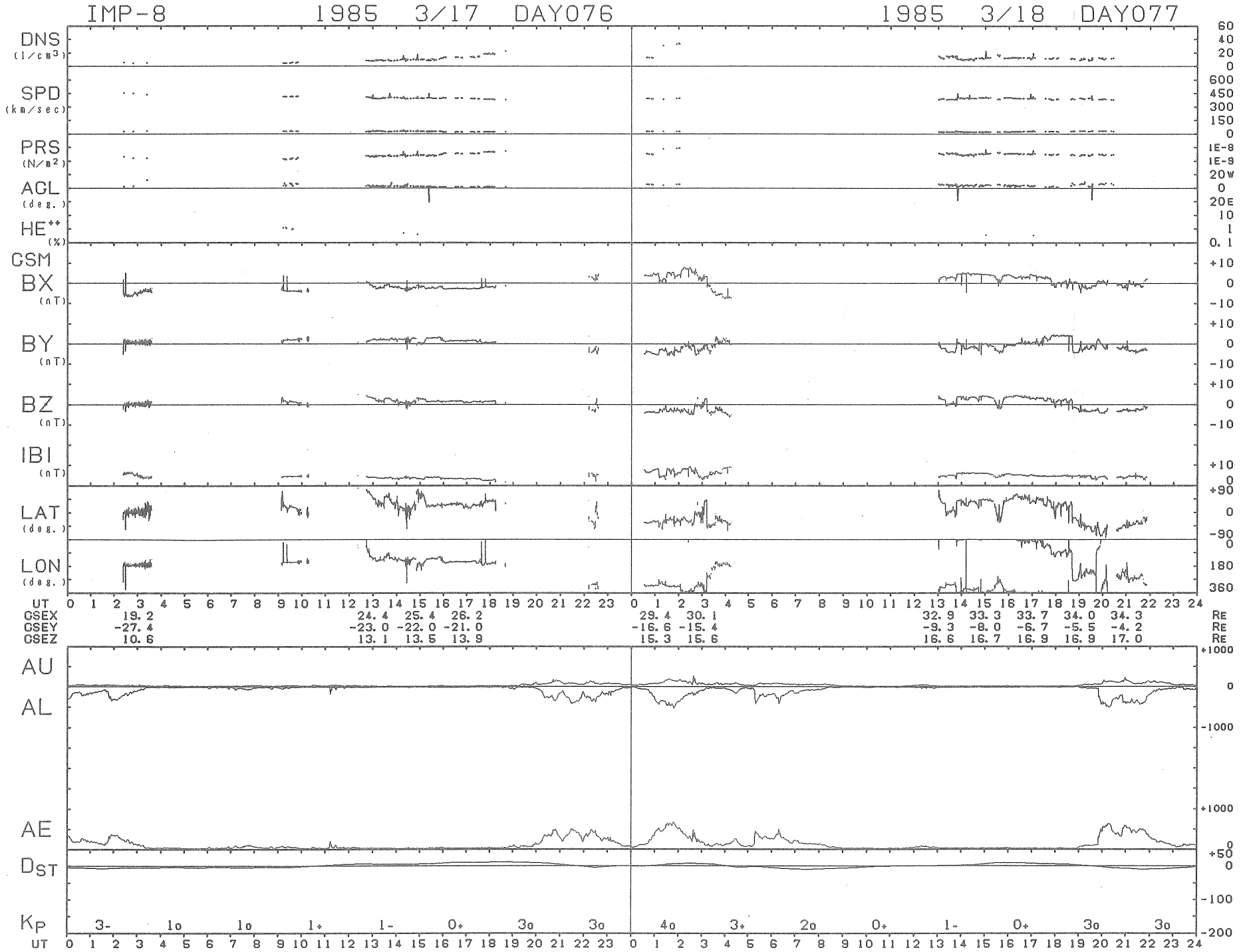

IMP-8
1985 3/ 7 DAY066
1985 3/ 8 DAY067
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.7 29.0 28.4 19.1 RE
GSEY 20.2 21.3 22.4 32.2 RE
GSEZ 15.7 15.4 15.1 10.6 RE
AU
AL
AE
DST
KP 3+ 3o 3+ 3+ 3+ 4o 5- 4- 5- 5+ 4+ 4- 3+ 3+ 3o 3o
UT

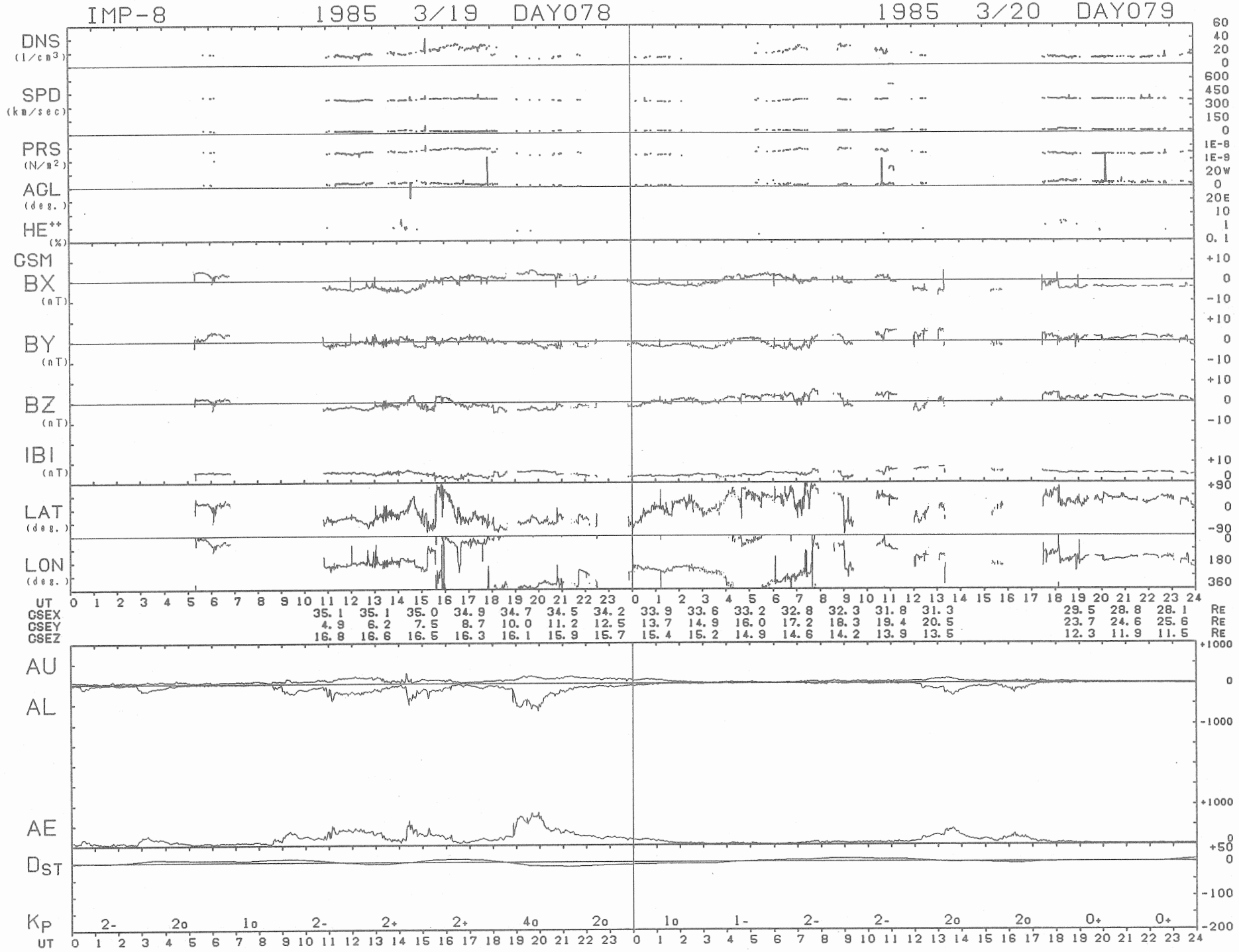

IMP-8 1985 3/ 9 DAY068
1985 3/10 DAY069
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
UT

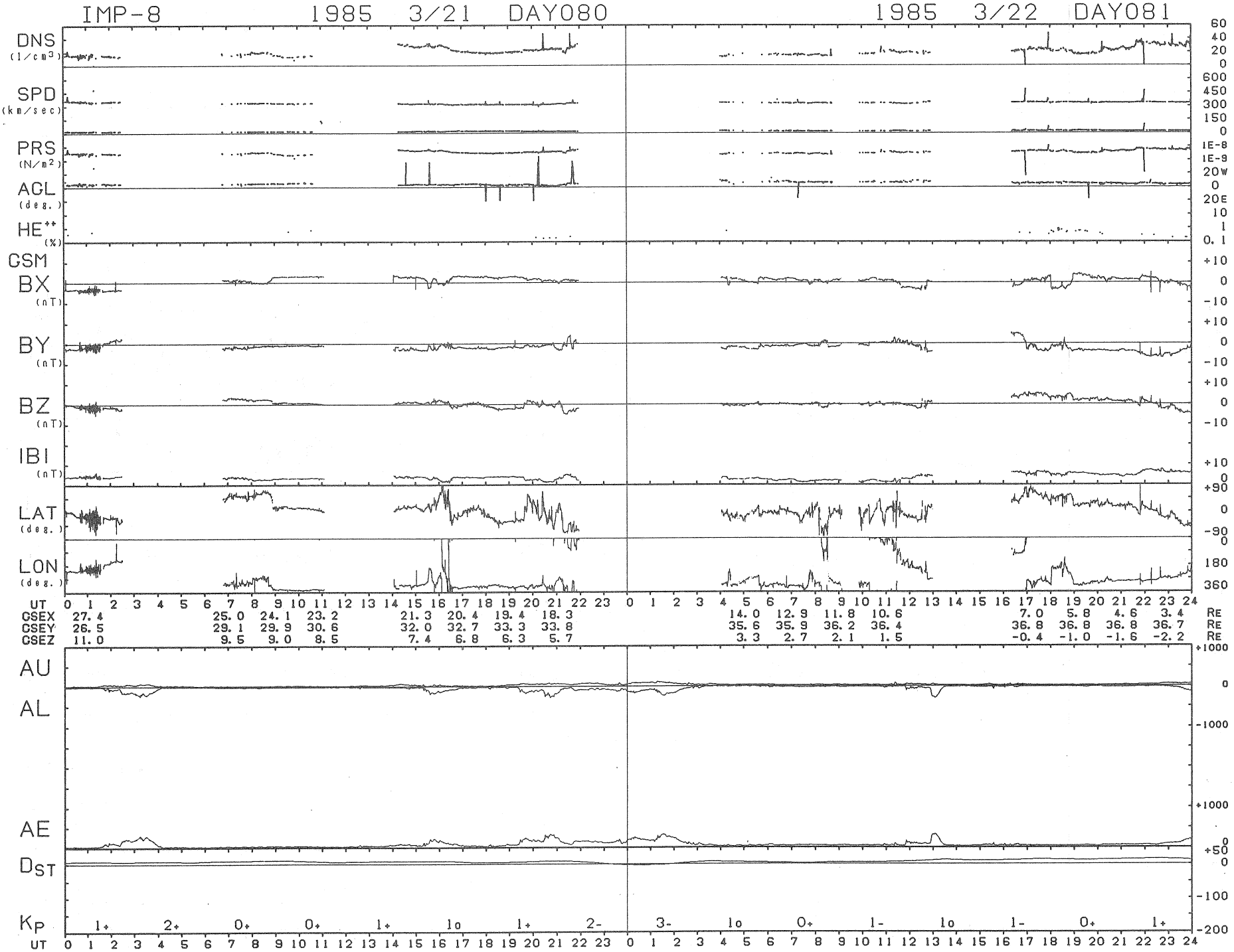

IMP-8
1985 3/11 DAY070
1985 3/12 DAY071
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.8 -12.0 -13.1 -14.2 -15.3 -16.3 -17.3 -20.2 -21.0 -21.9 -23.4 -24.1 -24.8
GSEY 34.3 33.0 32.3 31.6 30.7 29.8 28.9 25.8 24.7 23.5 21.0 19.7 18.3
GSEZ -4.4 -5.6 -6.2 -6.7 -7.3 -7.9 -8.4 -9.9 -10.4 -10.8 -11.6 -12.0 -12.4
Re
AU
AL
AE
DST
KP
2- 1o 1o 2- 3o 1+ 1+ 0+ 0o 1+ 1- 0+ 2o 2- 3+ 3+
UT

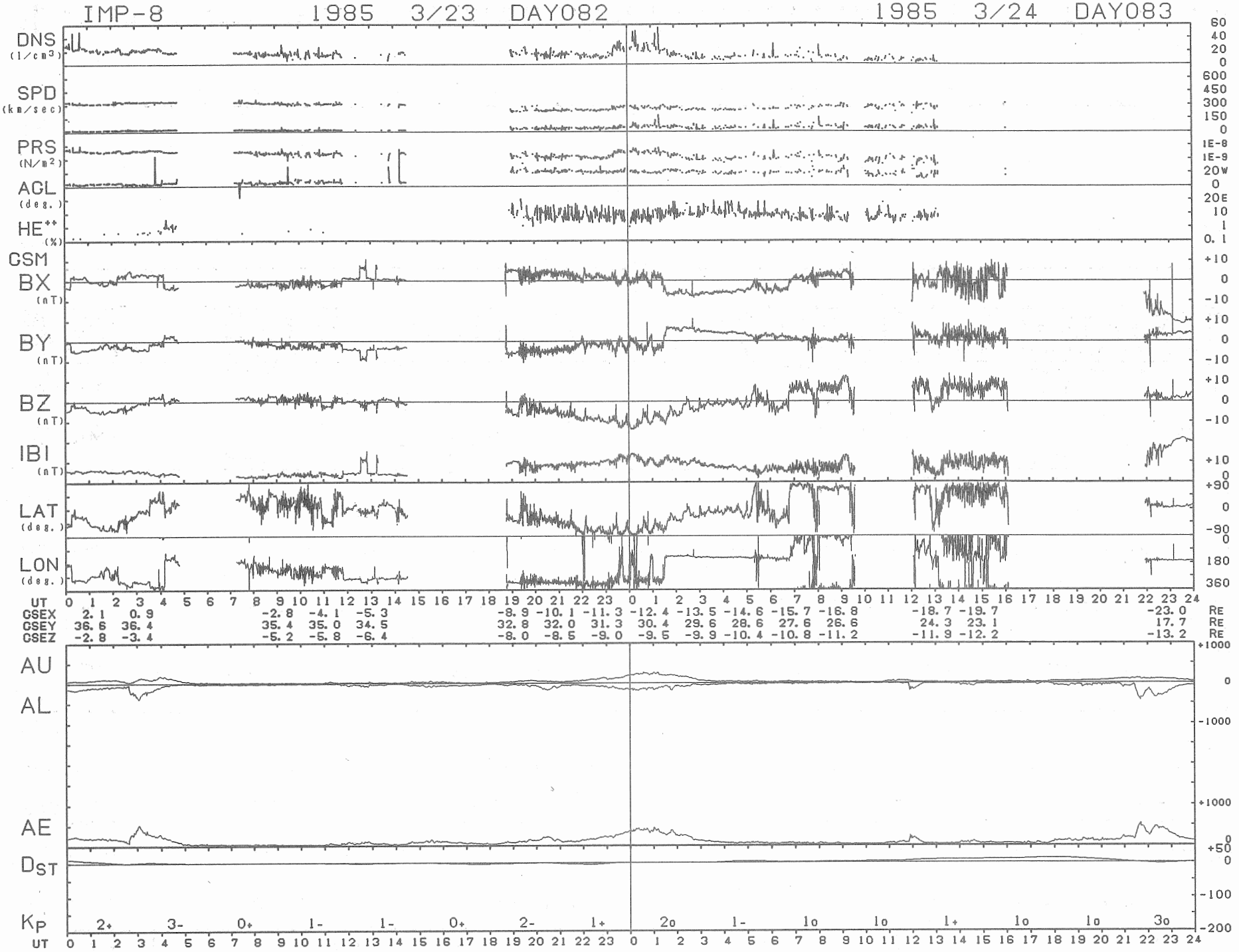

IMP-8 1985 3/13 DAY072
1985 3/14 DAY073
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.0 -28.2 -28.3 -28.2 -28.1 -27.9 -27.6 -27.3 -26.9 -22.4 -20.5 -19.5 -18.5 -17.4 -16.3 Re
GSEY 6.3 3.1 1.5 -0.1 -1.7 -3.3 -5.0 -6.6 -8.1 -18.4 -21.0 -22.2 -23.3 -24.4 -25.5 Re
GSEZ -14.1 -14.2 -14.2 -14.2 -14.1 -14.0 -13.8 -13.7 -13.4 -11.0 -10.0 -9.4 -8.9 -8.3 -7.7 Re
AU
AL
AE
DST
KP
0+ 1+ 2- 2+ 1- 1- 0o 1- 1- 1- 1- 1+ 3o 2o 3- 1+
UT

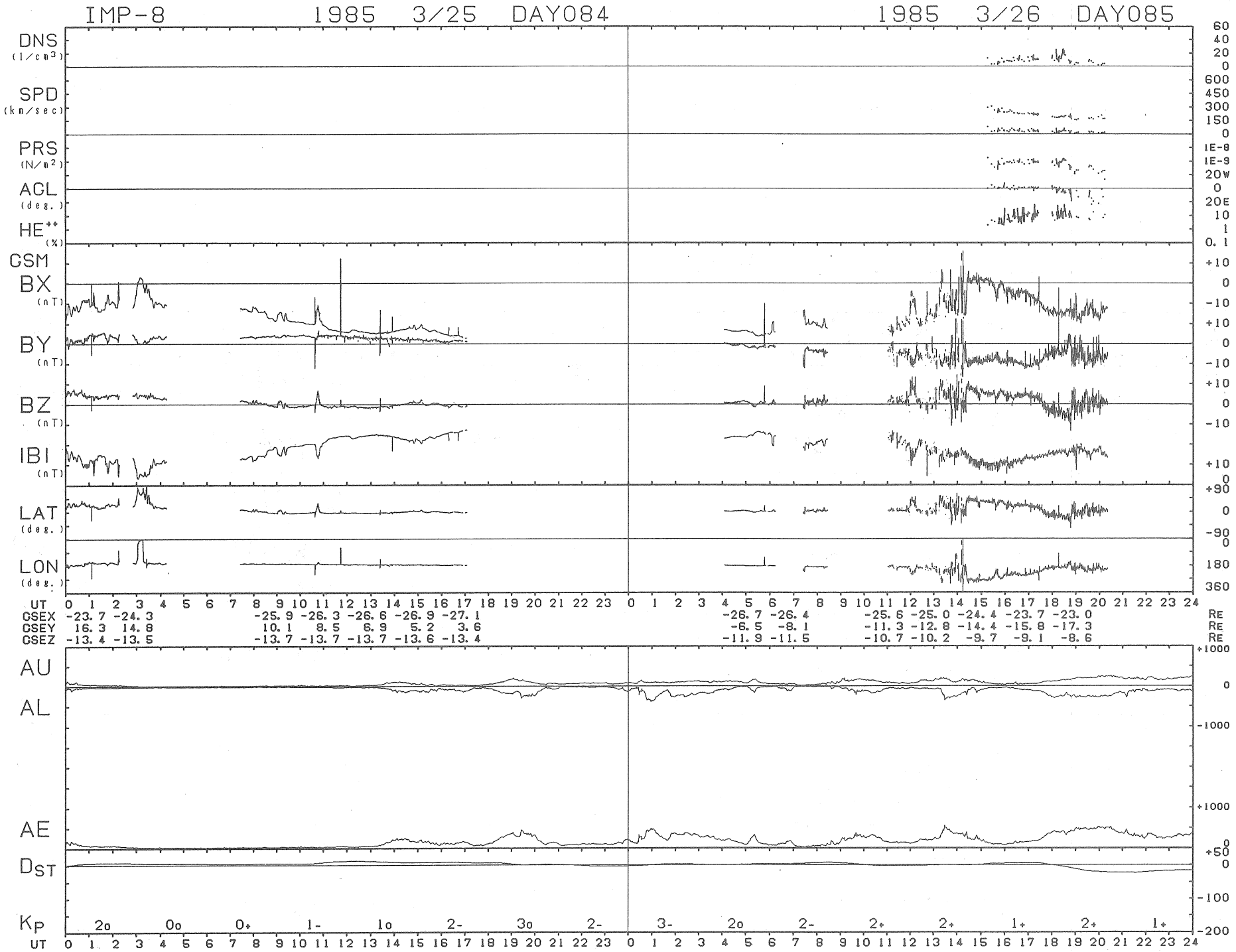

IMP-8
1985 3/15 DAY074
1985 3/16 DAY075
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.7 -7.4 -6.0 -3.2 -1.8 -0.4 7.9 9.2 10.6 11.9 13.2 14.4 15.7 16.9 RE
GSEY -30.2 -30.8 -31.3 -32.0 -32.2 -32.4 -32.1 -31.8 -31.4 -31.0 -30.5 -30.0 -29.4 -28.8 RE
GSEZ -3.7 -3.0 -2.2 -0.8 -0.1 0.7 5.0 5.6 6.3 7.0 7.6 8.3 8.9 9.5 RE
AU
AL
AE
DST
KP
3o 3- 4+ 4- 3- 1o 2- 2- 3- 2o 2o 1+ 3+ 3- 2+ 3o
UT

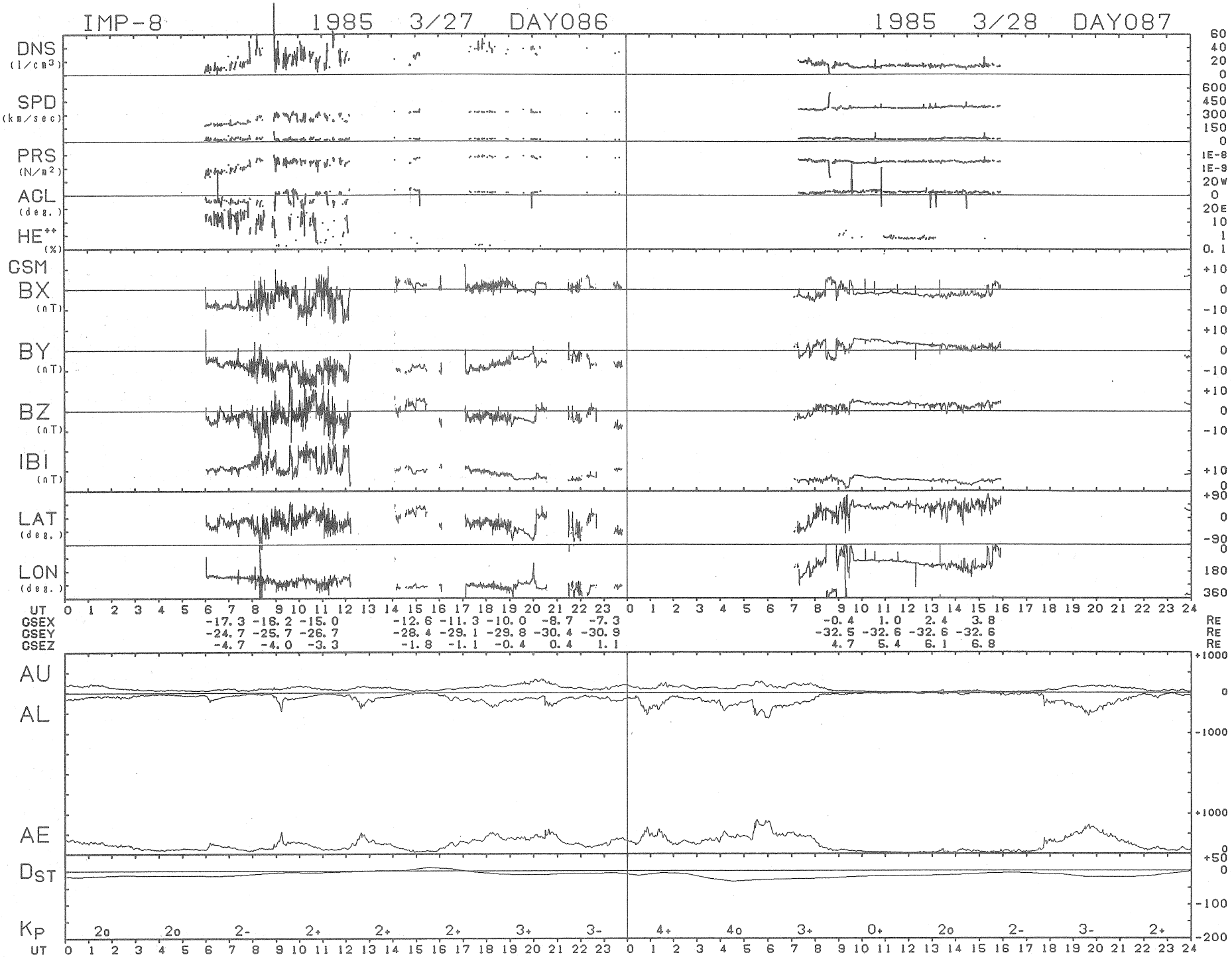

IMP-8 1985 3/17 DAY076
1985 3/18 DAY077
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.2 24.4 25.4 26.2 29.4 30.1 32.9 33.3 33.7 34.0 34.3 RE
GSEY -27.4 -23.0 -22.0 -21.0 -16.6 -15.4 -9.3 -8.0 -6.7 -5.5 -4.2 RE
GSEZ 10.6 13.1 13.5 13.9 15.3 15.6 16.6 16.7 16.9 16.9 17.0 RE
AU
AL
AE
DST
KP 3- 1o 1o 1+ 1- 0+ 3o 3o 4o 3+ 2o 0+ 1- 0+ 3o 3o
UT

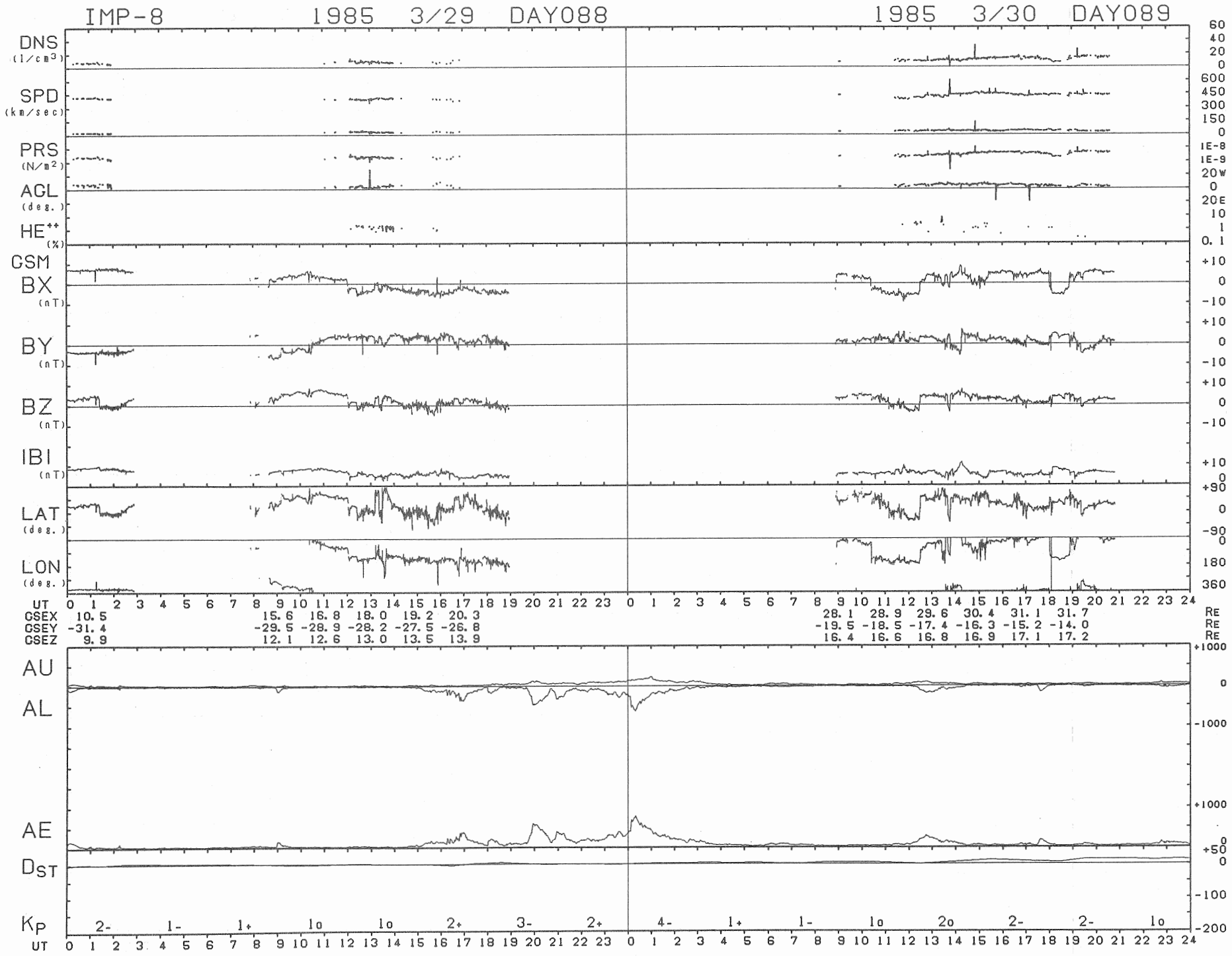

IMP-8 1985 3/19 DAY078
1985 3/20 DAY079
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.1 35.1 35.0 34.9 34.7 34.5 34.2 33.9 33.6 33.2 32.8 32.3 31.8 31.3 29.5 28.8 28.1 RE
GSEY 4.9 6.2 7.5 8.7 10.0 11.2 12.5 13.7 14.9 16.0 17.2 18.3 19.4 20.5 23.7 24.6 25.6 RE
GSEZ 16.8 16.6 16.5 16.3 16.1 15.9 15.7 15.4 15.2 14.9 14.6 14.2 13.9 13.5 12.3 11.9 11.5 RE
AU
AL
AE
DST
KP 2- 2o 1o 2- 2+ 2+ 4o 2o 1o 1- 2- 2- 2o 2o 0+ 0+
UT

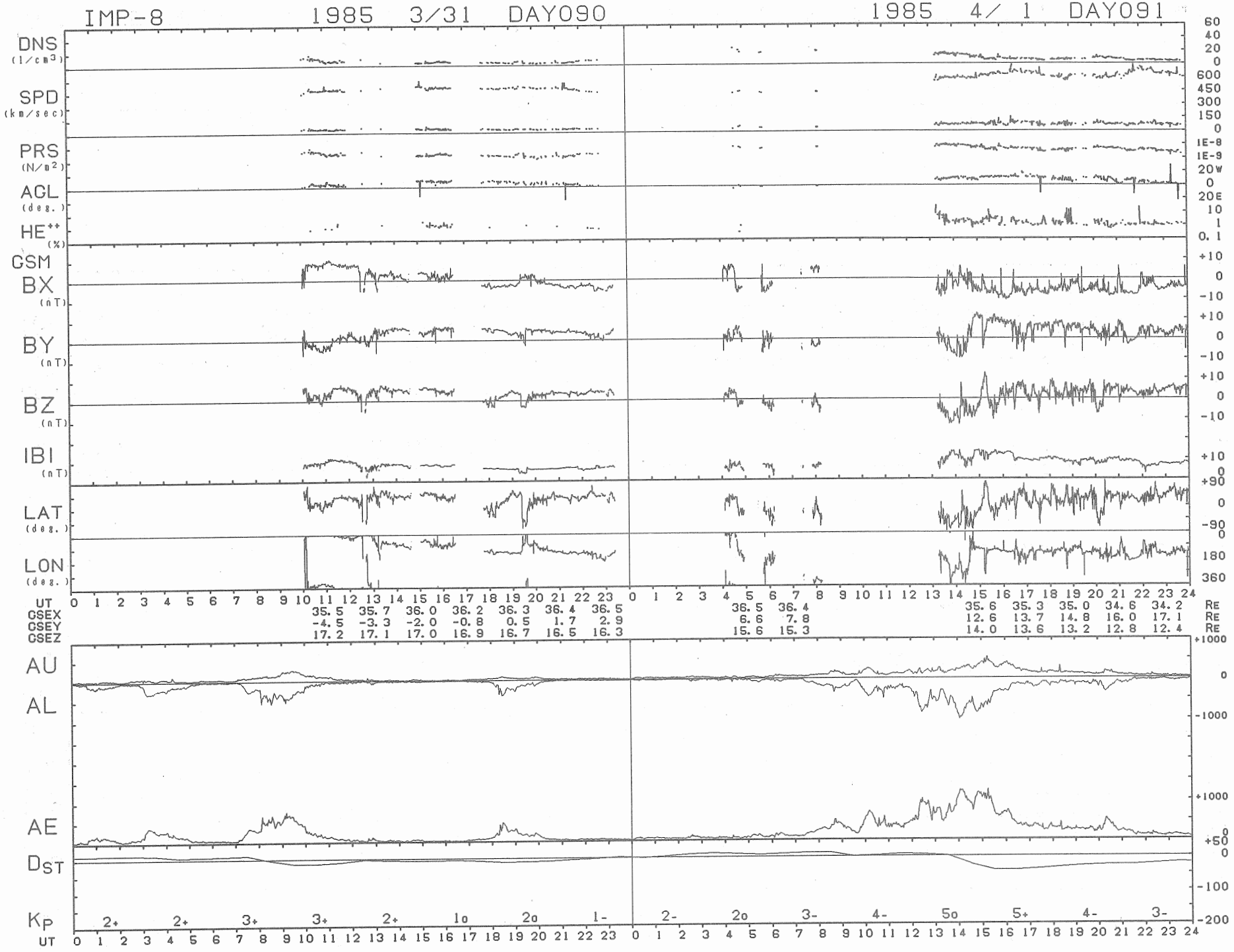

IMP-8 1985 3/21 DAY080
1985 3/22 DAY081
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.4 25.0 24.1 23.2 21.3 20.4 19.4 18.3 14.0 12.9 11.8 10.6 7.0 5.8 4.6 3.4 RE
GSEY 26.5 29.1 29.9 30.6 32.0 32.7 33.3 33.8 35.6 35.9 36.2 36.4 36.8 36.8 36.8 36.7 RE
GSEZ 11.0 9.5 9.0 8.5 7.4 6.8 6.3 5.7 3.3 2.7 2.1 1.5 -0.4 -1.0 -1.6 -2.2 RE
AU
AL
AE
DST
KP 1+ 2+ 0+ 0+ 1+ 1o 1+ 2- 3- 1o 0+ 1- 1o 1- 0+ 1+
UT

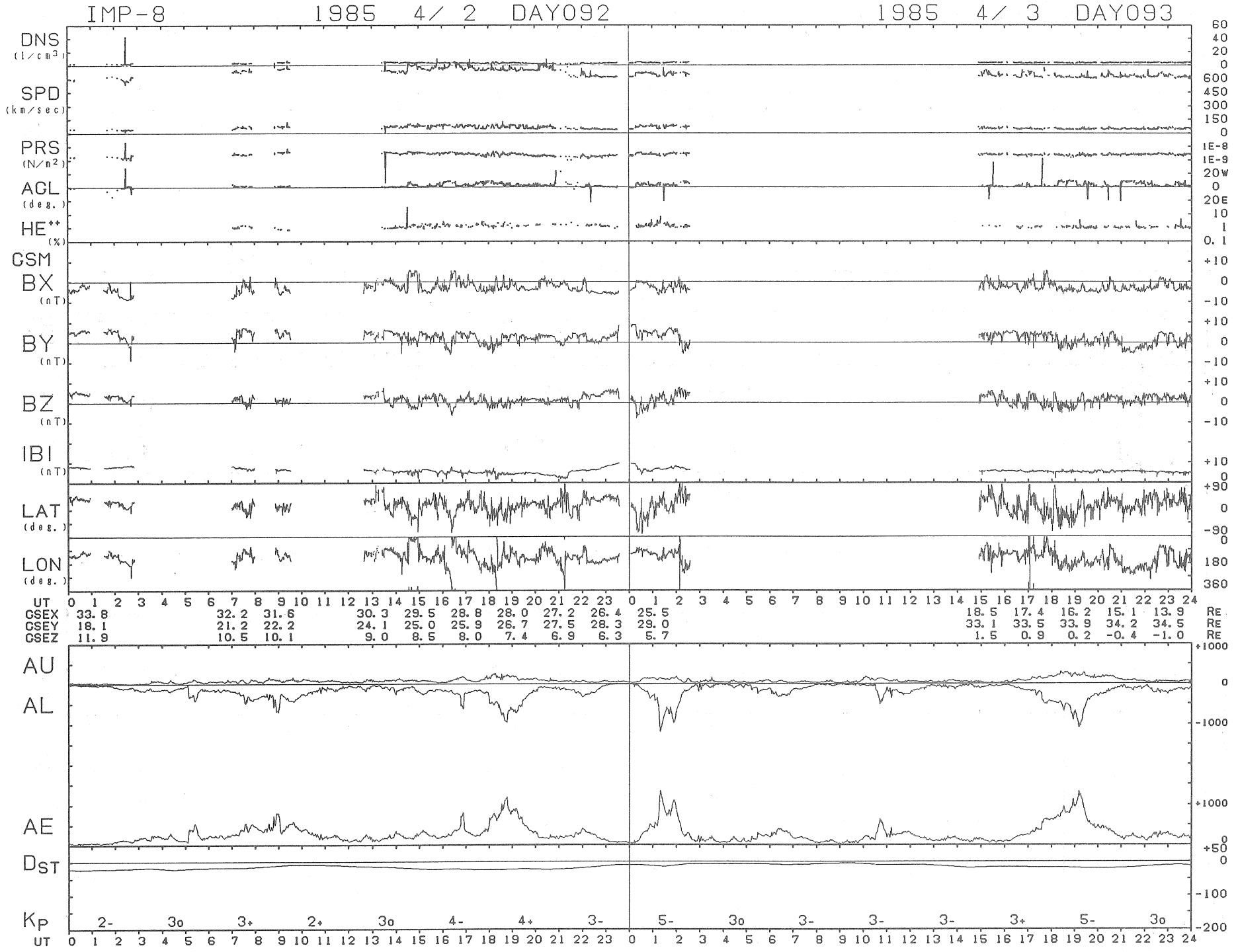

IMP-8 1985 3/23 DAY082
1985 3/24 DAY083
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.1 0.9 -2.8 -4.1 -5.3 -8.9 -10.1 -11.3 -12.4 -13.5 -14.6 -15.7 -16.8 -18.7 -19.7 -23.0 RE
GSEY 36.6 36.4 35.4 35.0 34.5 32.8 32.0 31.3 30.4 29.6 28.6 27.6 26.6 24.3 23.1 17.7 RE
GSEZ -2.8 -3.4 -5.2 -5.8 -6.4 -8.0 -8.5 -9.0 -9.5 -9.9 -10.4 -10.8 -11.2 -11.9 -12.2 -13.2 RE
AU
AL
AE
DST
KP 2+ 3- 0+ 1- 1- 0+ 2- 1+ 2o 1- 1o 1o 1+ 1o 1o 3o
UT

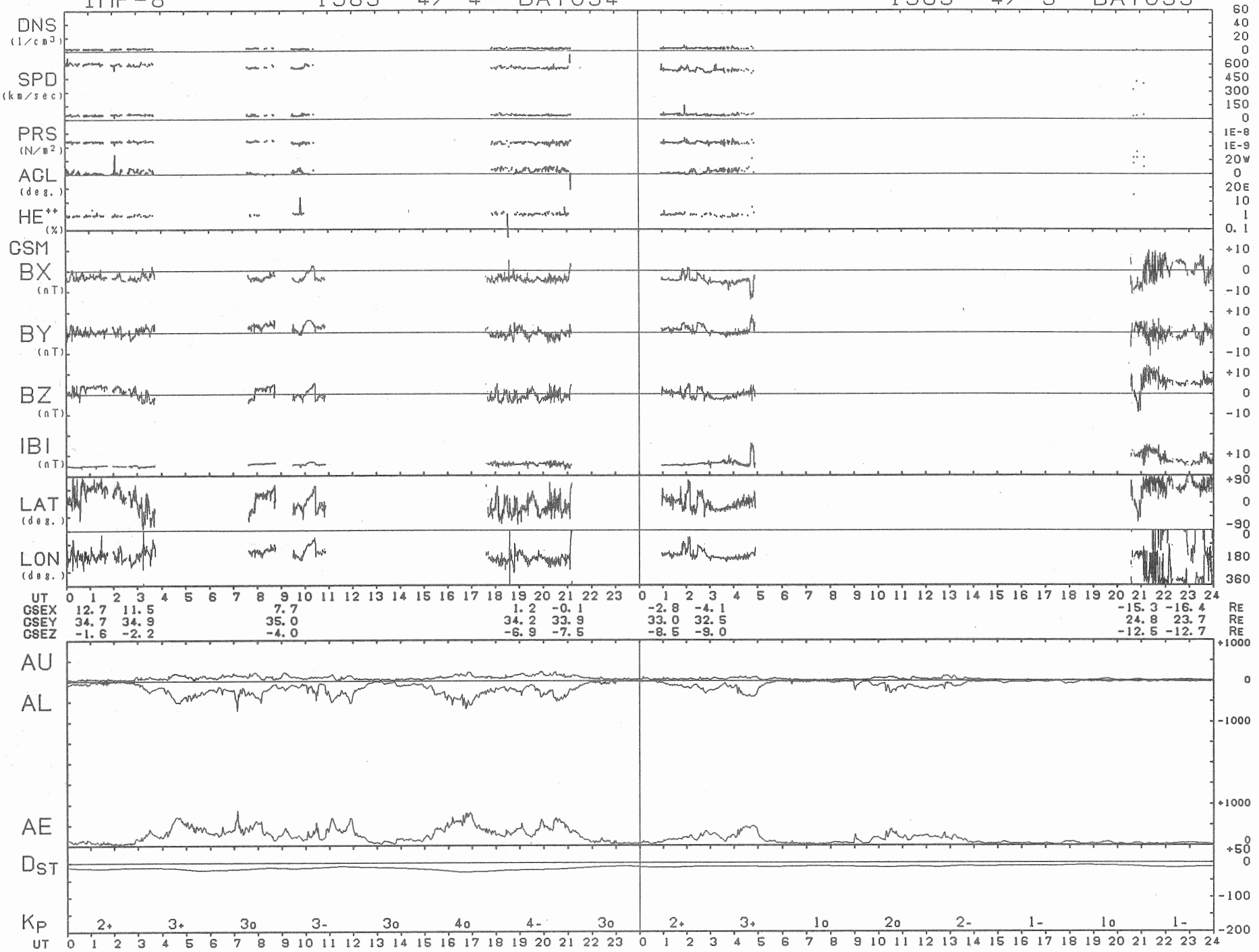

IMP-8 1985 3/25 DAY084
1985 3/26 DAY085
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.7 -24.3 -25.9 -26.3 -26.6 -26.9 -27.1 -26.7 -26.4 -25.6 -25.0 -24.4 -23.7 -23.0 RE
GSEY 16.3 14.8 10.1 8.5 6.9 5.2 3.6 -6.5 -8.1 -11.3 -12.8 -14.4 -15.8 -17.3 RE
GSEZ -13.4 -13.5 -13.7 -13.7 -13.7 -13.6 -13.4 -11.9 -11.5 -10.7 -10.2 -9.7 -9.1 -8.6 RE
AU
AL
AE
DST
KP
2o 0o 0+ 1- 1o 2- 3o 2- 3- 2o 2- 2+ 2+ 1+ 2+ 1+
UT

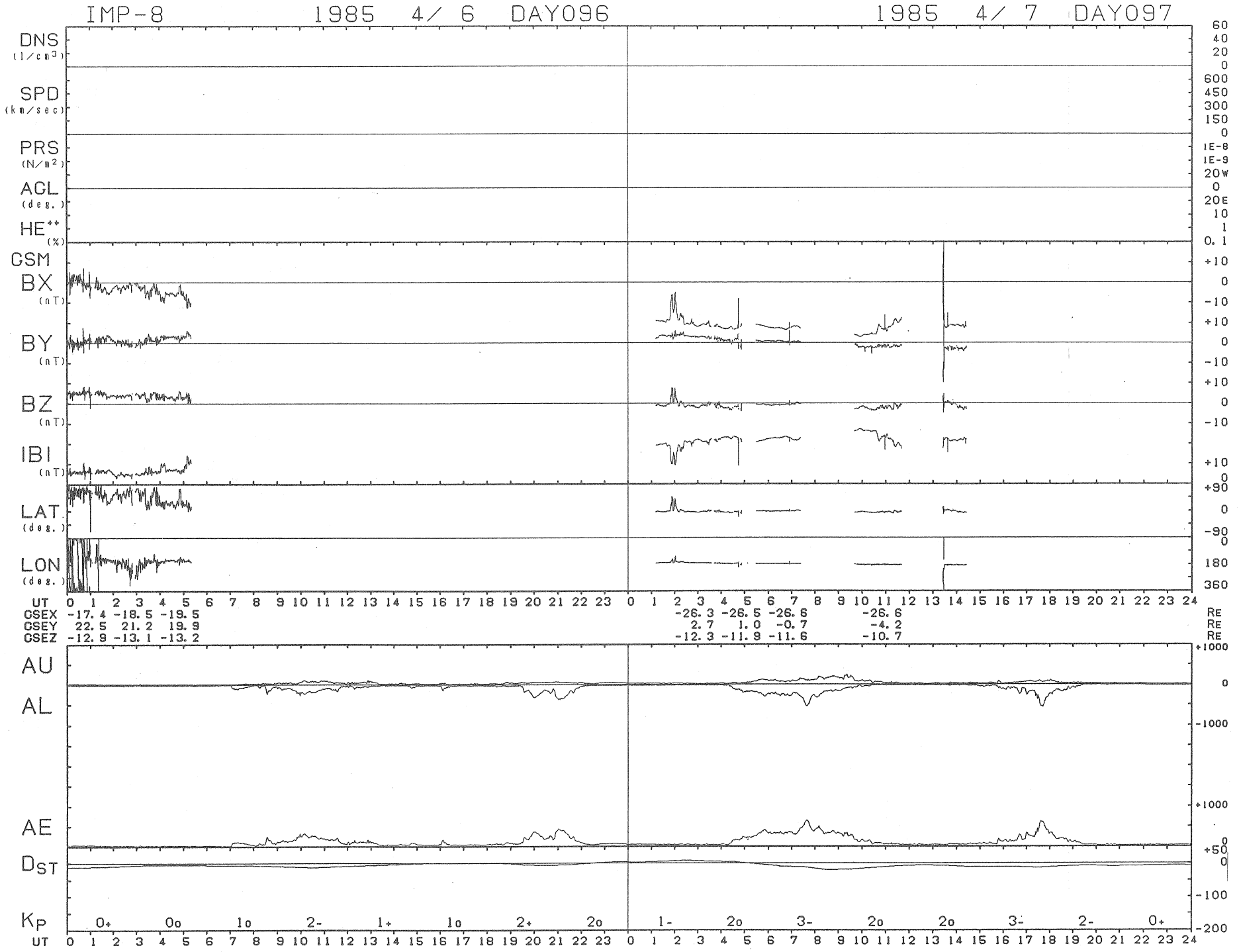

IMP-8
1985 3/27 DAY086
1985 3/28 DAY087
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.3 -16.2 -15.0 -12.6 -11.3 -10.0 -8.7 -7.3 -0.4 1.0 2.4 3.8 RE
GSEY -24.7 -25.7 -26.7 -28.4 -29.1 -29.8 -30.4 -30.9 -32.5 -32.6 -32.6 -32.6 RE
GSEZ -4.7 -4.0 -3.3 -1.8 -1.1 -0.4 0.4 1.1 4.7 5.4 6.1 6.8 RE
AU
AL
AE
DST
KP 2o 2o 2- 2+ 2+ 2+ 3+ 3- 4+ 4o 3+ 0+ 2o 2- 3- 2+
UT

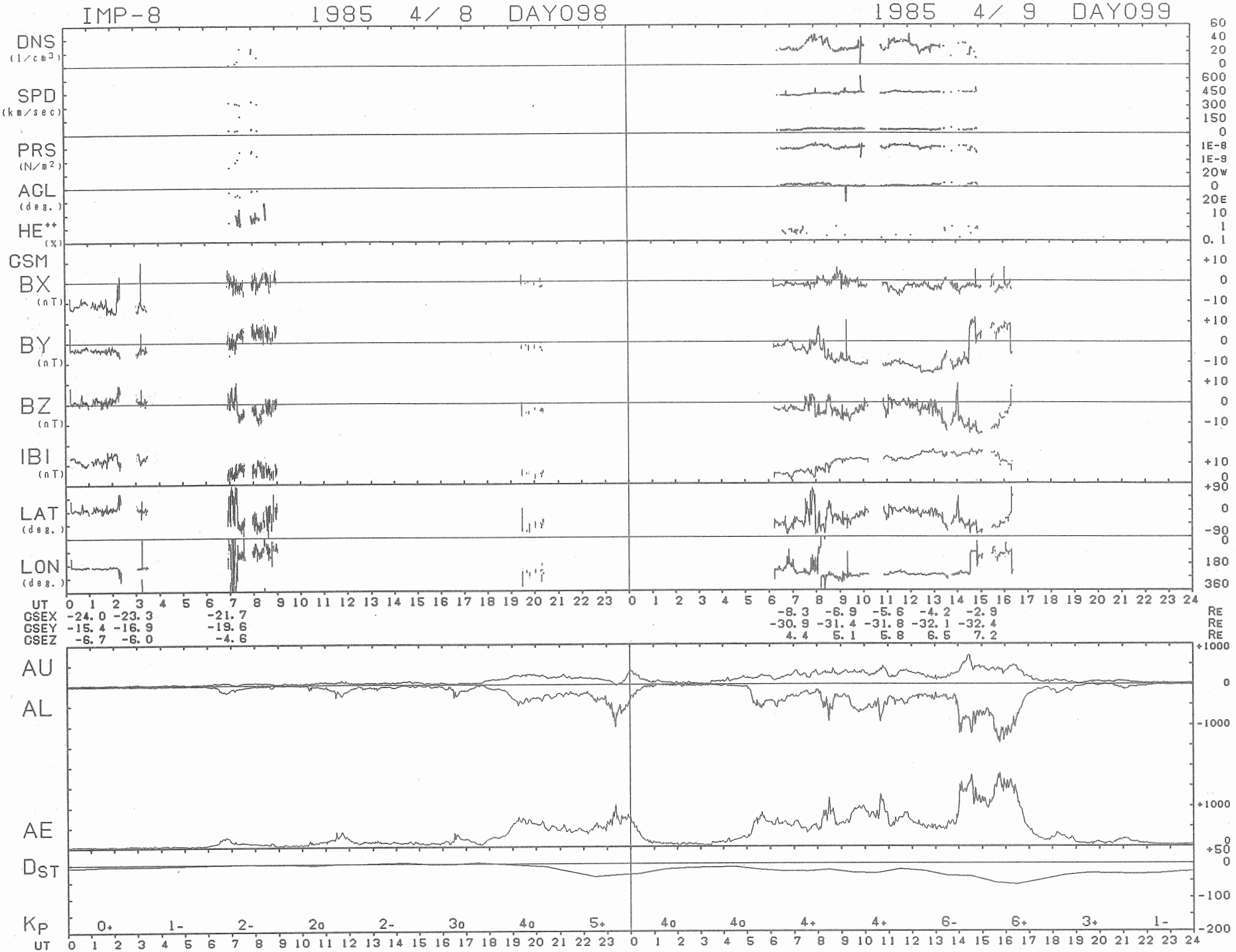

IMP-8 1985 3/29 DAY088
1985 3/30 DAY089
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.5 15.6 16.8 18.0 19.2 20.3 28.1 28.9 29.6 30.4 31.1 31.7 RE
GSEY -31.4 -29.5 -28.9 -28.2 -27.5 -26.8 -19.5 -18.5 -17.4 -16.3 -15.2 -14.0 RE
GSEZ 9.9 12.1 12.6 13.0 13.5 13.9 16.4 16.6 16.8 16.9 17.1 17.2 RE
AU
AL
AE
DST
KP
2- 1- 1+ 1o 1o 2+ 3- 2+ 4- 1+ 1- 1o 2o 2- 2- 1o
UT

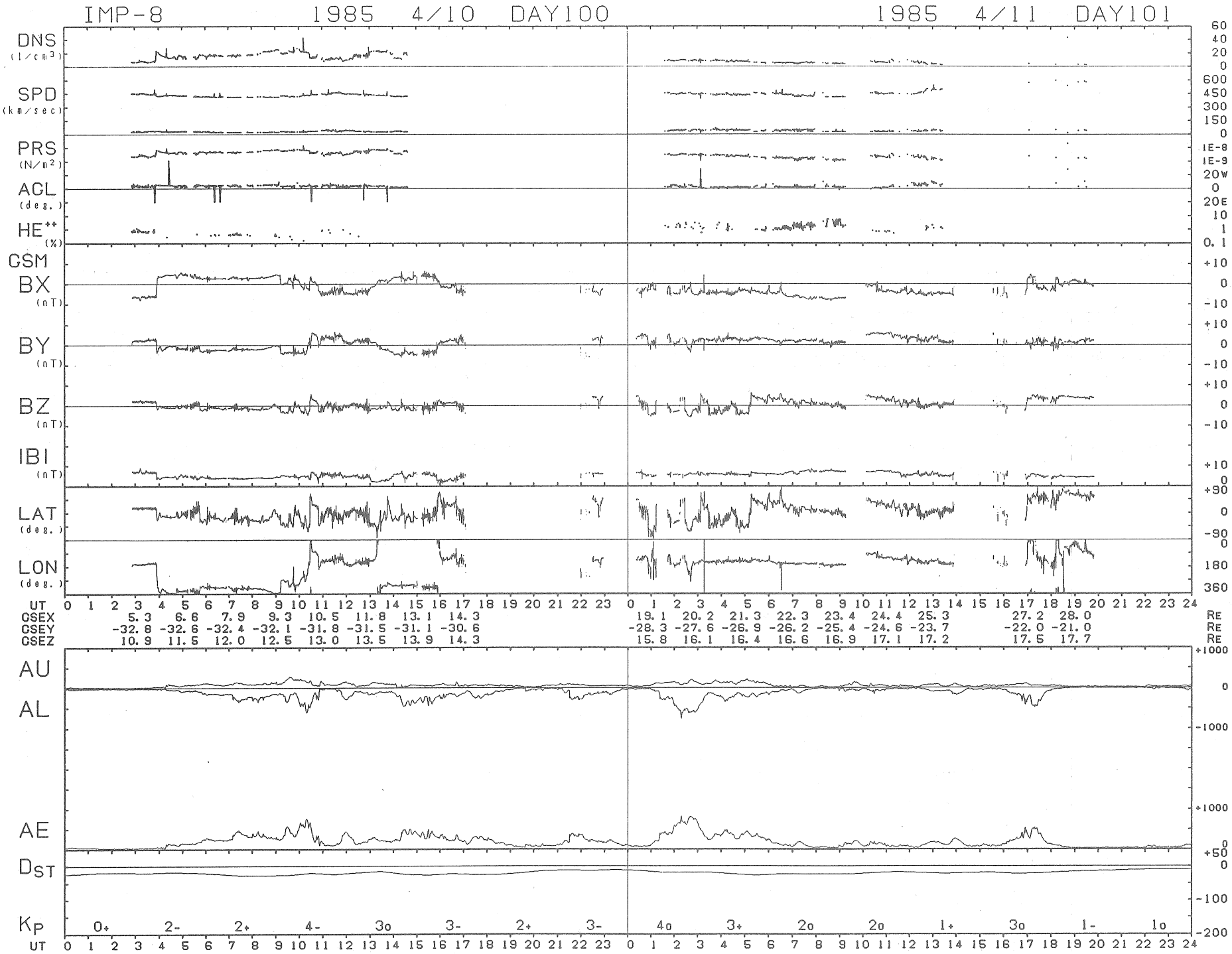

IMP-8
1985 3/31 DAY090
1985 4/ 1 DAY091
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
UT

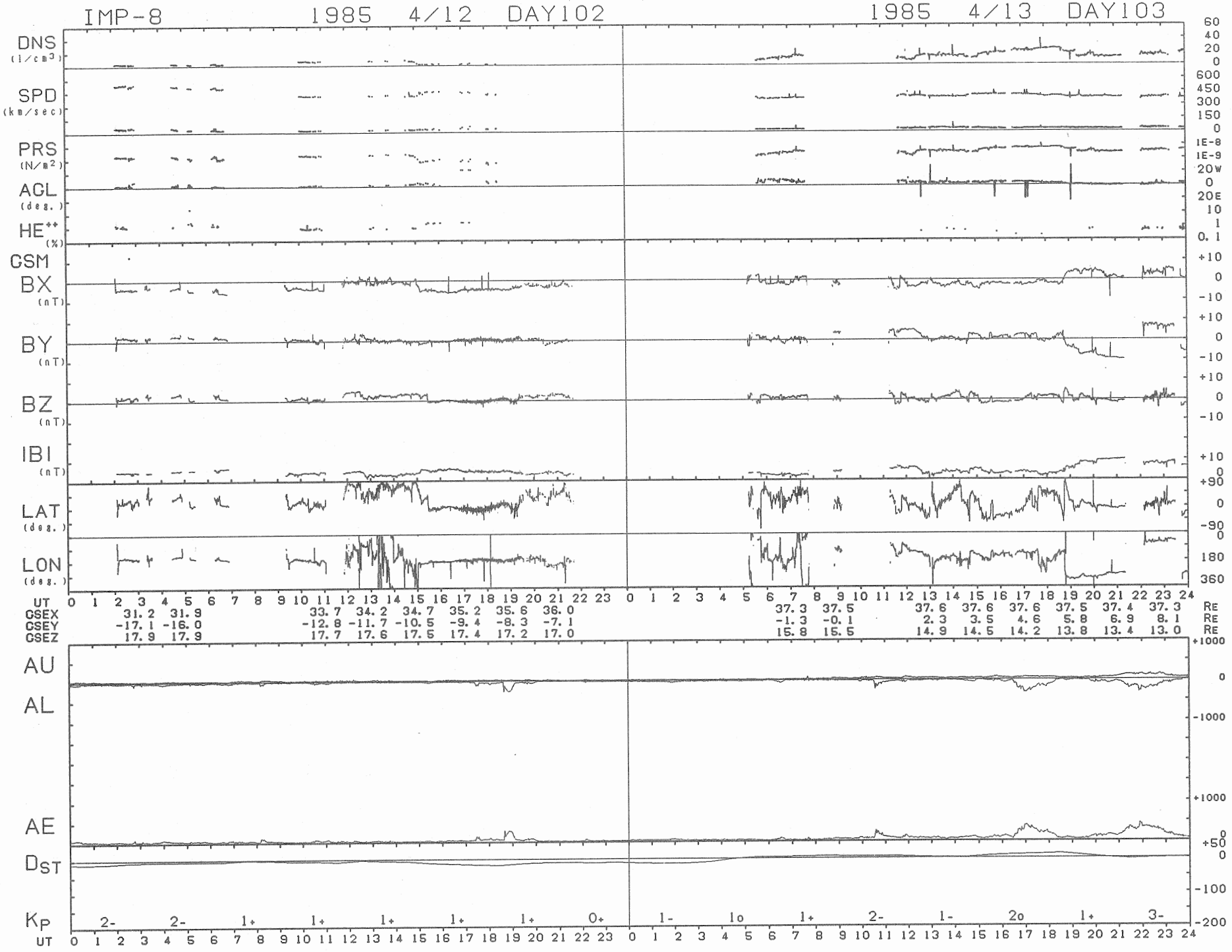

IMP-8
1985 4/ 2 DAY092
1985 4/ 3 DAY093
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.8 32.2 31.6 30.3 29.5 28.8 28.0 27.2 26.4 25.5 18.5 17.4 16.2 15.1 13.9 Re
GSEY 18.1 21.2 22.2 24.1 25.0 25.9 26.7 27.5 28.3 29.0 33.1 33.5 33.9 34.2 34.5 Re
GSEZ 11.9 10.5 10.1 9.0 8.5 8.0 7.4 6.9 6.3 5.7 1.5 0.9 0.2 -0.4 -1.0 Re
AU
AL
AE
DST
KP 2- 3o 3+ 2+ 3o 4- 4+ 3- 5- 3o 3- 3- 3- 3+ 5- 3o
UT

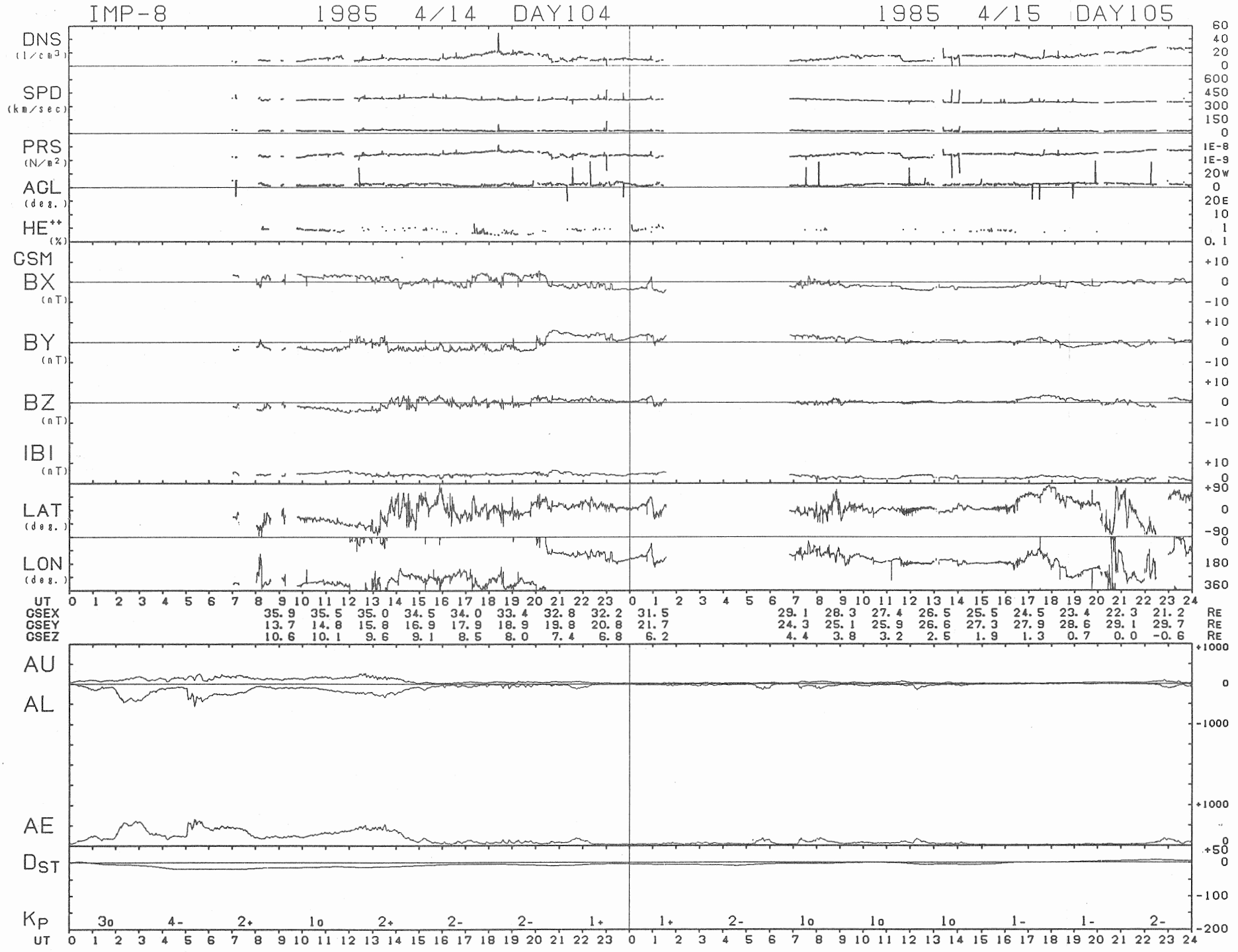

IMP-8
1985 4/ 4 DAY094
1985 4/ 5 DAY095
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.7 11.5 7.7 1.2 -0.1 -2.8 -4.1 -15.3 -16.4 RE
GSEY 34.7 34.9 35.0 34.2 33.9 33.0 32.5 24.8 23.7 RE
GSEZ -1.6 -2.2 -4.0 -6.9 -7.5 -8.5 -9.0 -12.5 -12.7 RE
AU
AL
AE
DST
KP
2+ 3+ 3o 3- 3o 4o 4- 3o 2+ 3+ 1o 2o 2- 1- 1o 1-
UT

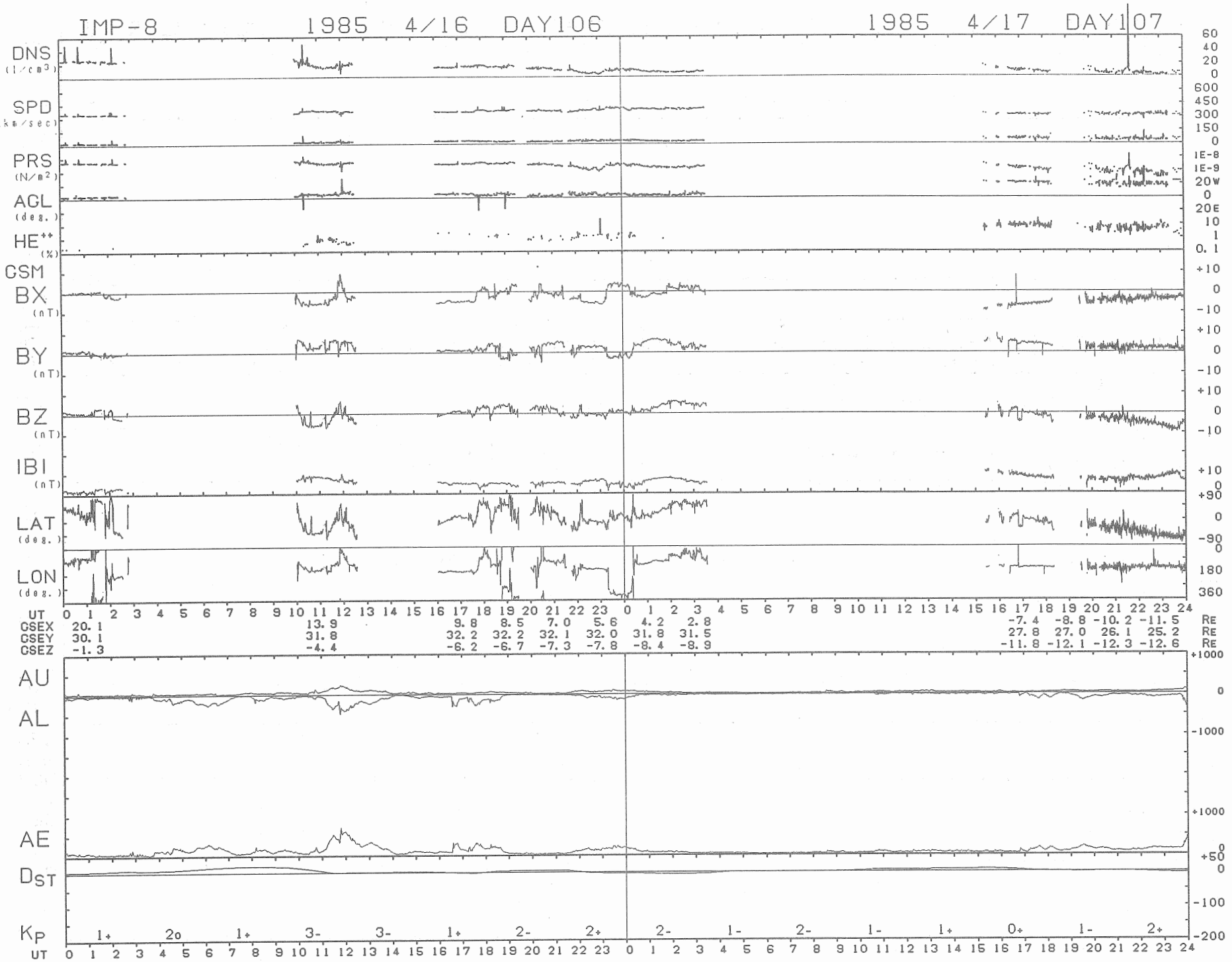

IMP-8
1985 4/ 6 DAY096
1985 4/ 7 DAY097
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.4 -18.5 -19.5 -26.3 -26.5 -26.6 -26.6 RE
GSEY 22.5 21.2 19.9 2.7 1.0 -0.7 -4.2 RE
GSEZ -12.9 -13.1 -13.2 -12.3 -11.9 -11.6 -10.7 RE
AU
AL
AE
DST
KP
0+ 0o 1o 2- 1+ 1o 2+ 2o 1- 2o 3- 2o 2o 3- 2- 0+
UT

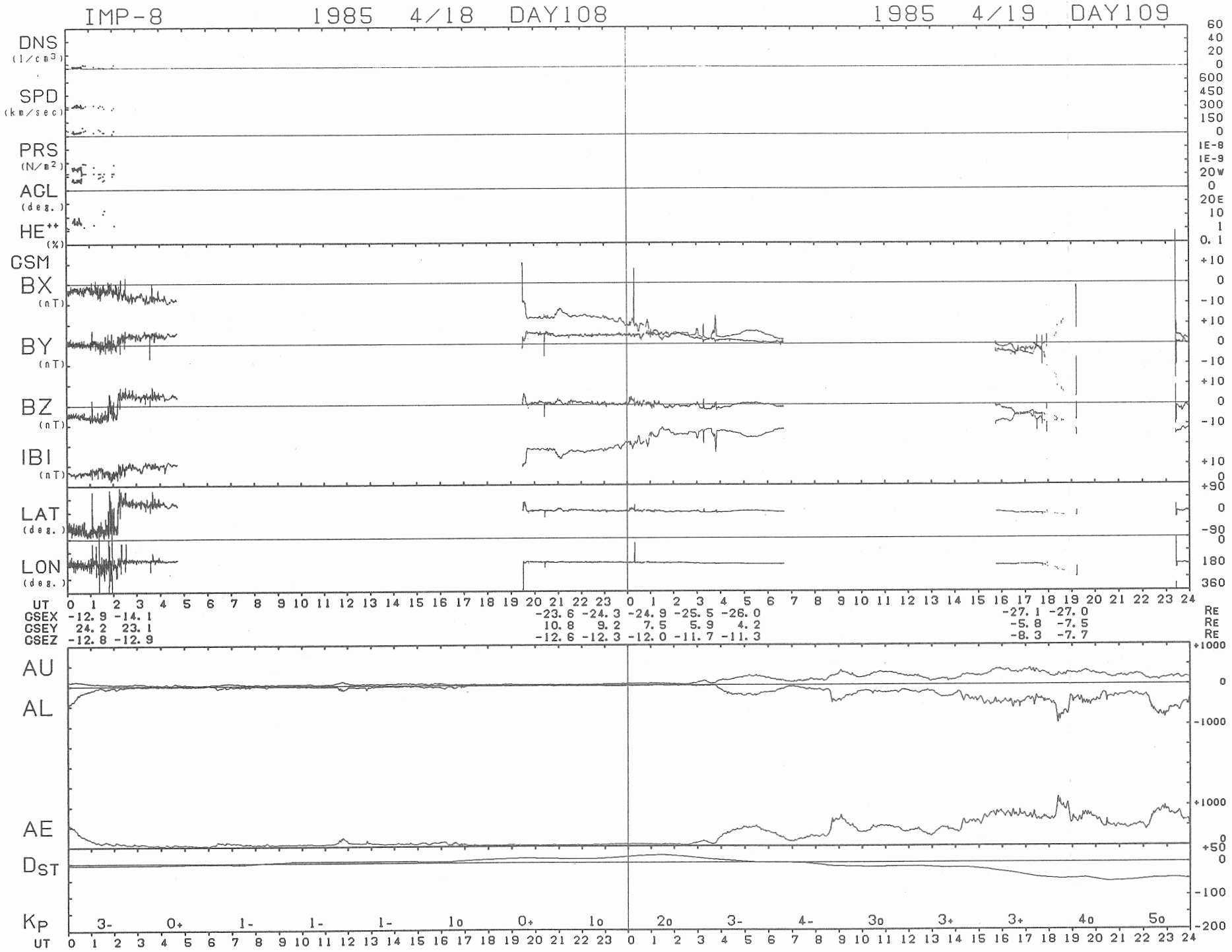

IMP-8
1985 4/ 8 DAY098
1985 4/ 9 DAY099
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.0 -23.3 -21.7 -8.3 -6.9 -5.6 -4.2 -2.9 RE
GSEY -15.4 -16.9 -19.6 -30.9 -31.4 -31.8 -32.1 -32.4 RE
GSEZ -6.7 -6.0 -4.6 4.4 5.1 5.8 6.5 7.2 RE
AU
AL
AE
DST
KP
0+ 1- 2- 2o 2- 3o 4o 5+ 4o 4o 4+ 4+ 6- 6+ 3+ 1-
UT

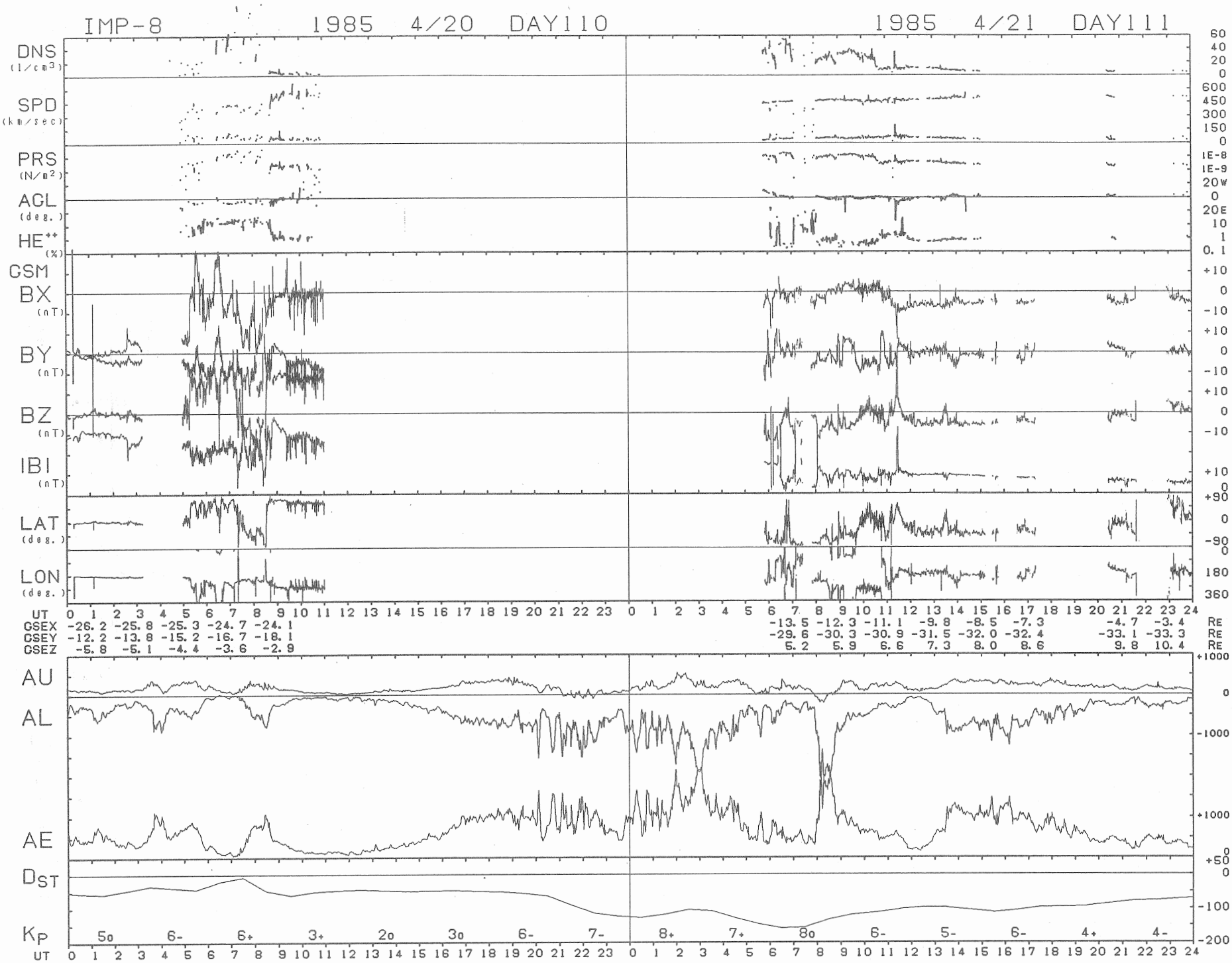

IMP-8 1985 4/10 DAY100
1985 4/11 DAY101
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 5.3 6.6 7.9 9.3 10.5 11.8 13.1 14.3 19.1 20.2 21.3 22.3 23.4 24.4 25.3 27.2 28.0 RE
GSEY -32.8 -32.6 -32.4 -32.1 -31.8 -31.5 -31.1 -30.6 -28.3 -27.6 -26.9 -26.2 -25.4 -24.6 -23.7 -22.0 -21.0 RE
GSEZ 10.9 11.5 12.0 12.5 13.0 13.5 13.9 14.3 15.8 16.1 16.4 16.6 16.9 17.1 17.2 17.5 17.7 RE
AU
AL
AE
DST
KP 0+ 2- 2+ 4- 3o 3- 2+ 3- 4o 3+ 2o 2o 1+ 3o 1- 1o
UT

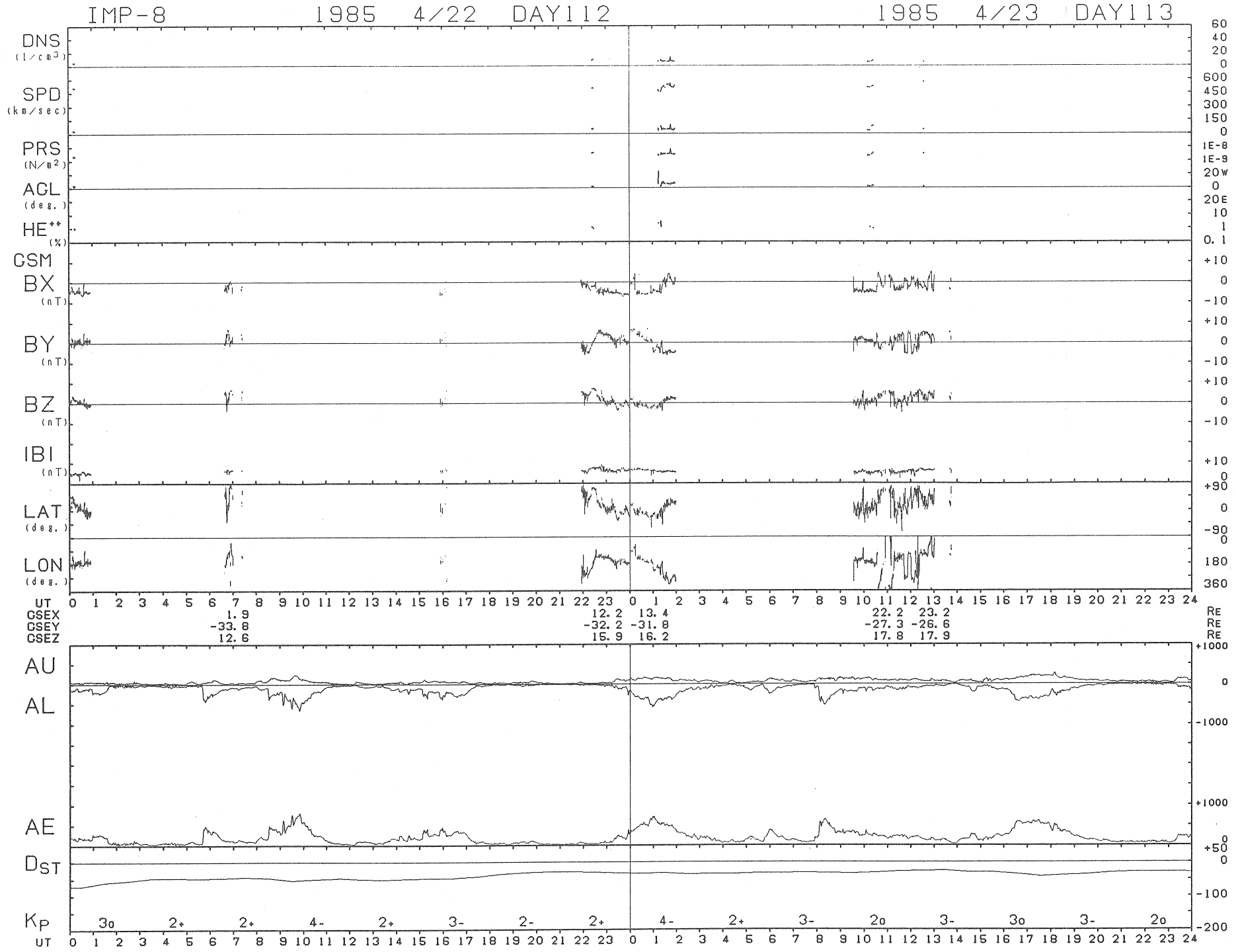

IMP-8 1985 4/12 DAY102
1985 4/13 DAY103
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.2 31.9 33.7 34.2 34.7 35.2 35.6 36.0 37.3 37.5 37.6 37.6 37.6 37.5 37.4 37.3 RE
GSEY -17.1 -16.0 -12.8 -11.7 -10.5 -9.4 -8.3 -7.1 -1.3 -0.1 2.3 3.5 4.6 5.8 6.9 8.1 RE
GSEZ 17.9 17.9 17.7 17.6 17.5 17.4 17.2 17.0 15.8 15.5 14.9 14.5 14.2 13.8 13.4 13.0 RE
AU
AL
AE
DST
KP 2- 2- 1+ 1+ 1+ 1+ 1+ 0+ 1- 1o 1+ 2- 1- 2o 1+ 3-
UT

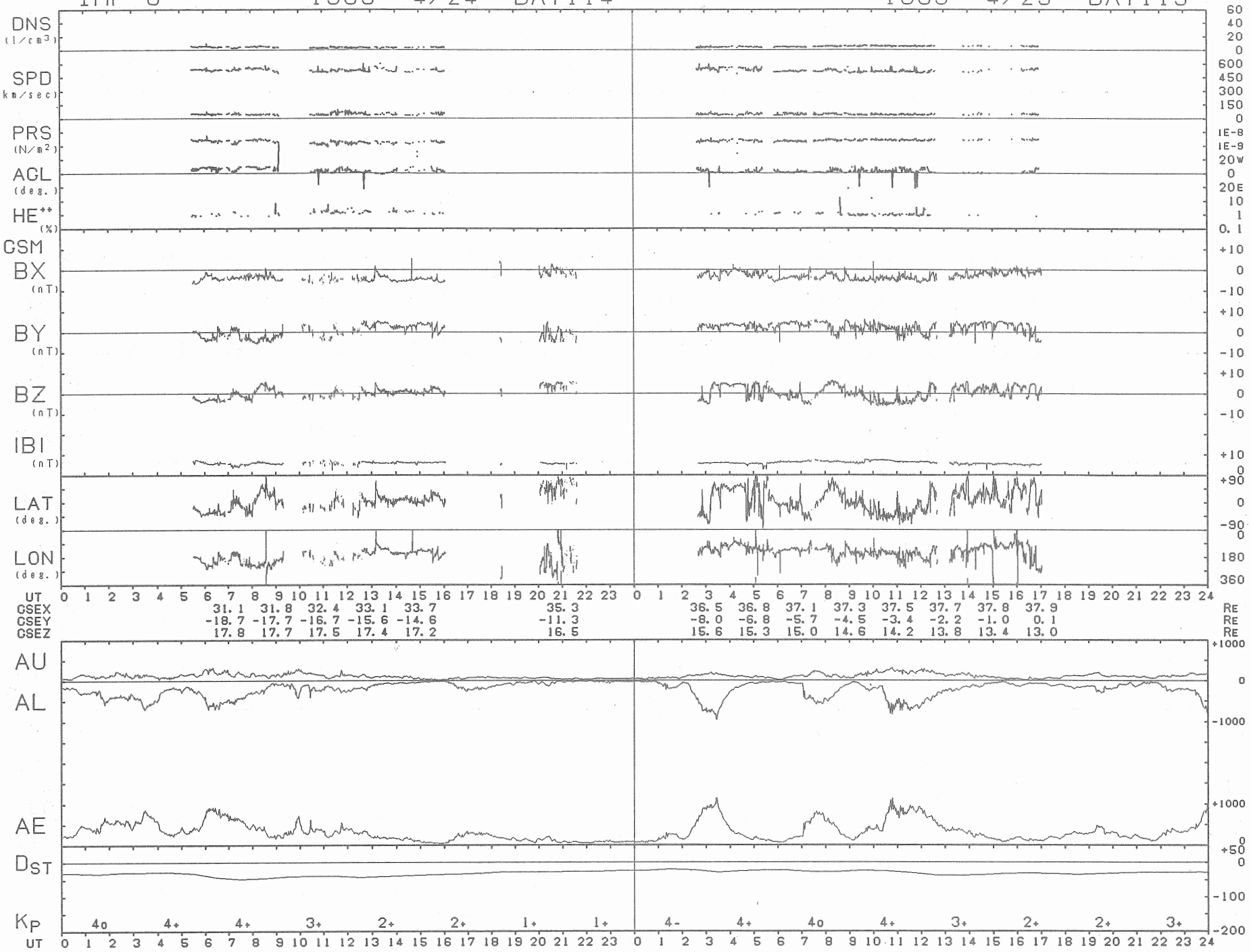

IMP-8 1985 4/14 DAY104
1985 4/15 DAY105
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.9 35.5 35.0 34.5 34.0 33.4 32.8 32.2 31.5 29.1 28.3 27.4 26.5 25.5 24.5 23.4 22.3 21.2 RE
GSEY 13.7 14.8 15.8 16.9 17.9 18.9 19.8 20.8 21.7 24.3 25.1 25.9 26.6 27.3 27.9 28.6 29.1 29.7 RE
GSEZ 10.6 10.1 9.6 9.1 8.5 8.0 7.4 6.8 6.2 4.4 3.8 3.2 2.5 1.9 1.3 0.7 0.0 -0.6 RE
AU
AL
AE
DST
KP
3o 4- 2+ 1o 2+ 2- 2- 1+ 1+ 2- 1o 1o 1o 1- 1- 2-
UT

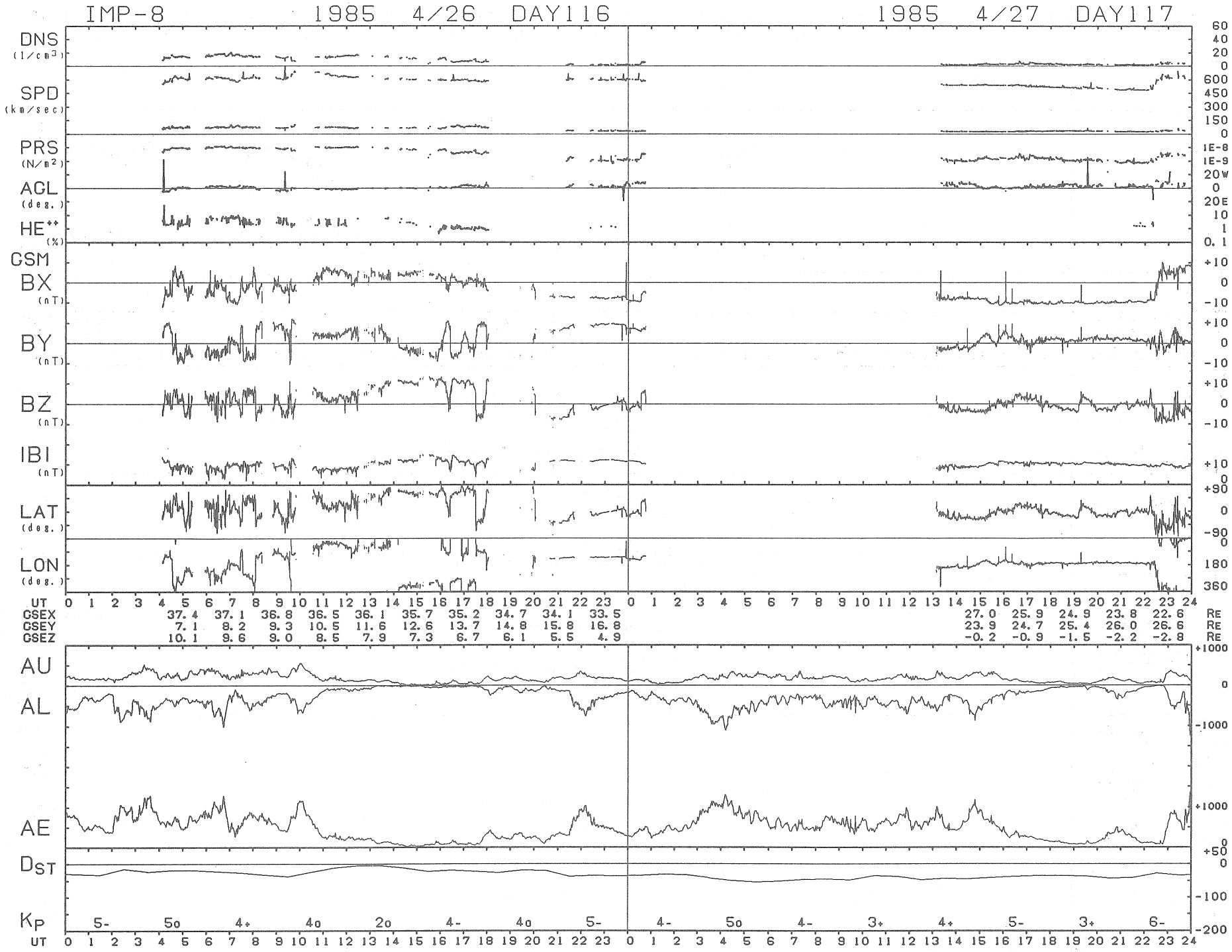

IMP-8
1985 4/16 DAY106
1985 4/17 DAY107
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.1 13.9 9.8 8.5 7.0 5.6 4.2 2.8 -7.4 -8.8 -10.2 -11.5 RE
GSEY 30.1 31.8 32.2 32.2 32.1 32.0 31.8 31.5 27.8 27.0 26.1 25.2 RE
GSEZ -1.3 -4.4 -6.2 -6.7 -7.3 -7.8 -8.4 -8.9 -11.8 -12.1 -12.3 -12.6 RE
AU
AL
AE
DST
KP
1+ 2o 1+ 3- 3- 1+ 2- 2+ 2- 1- 2- 1- 1+ 0+ 1- 2+
UT

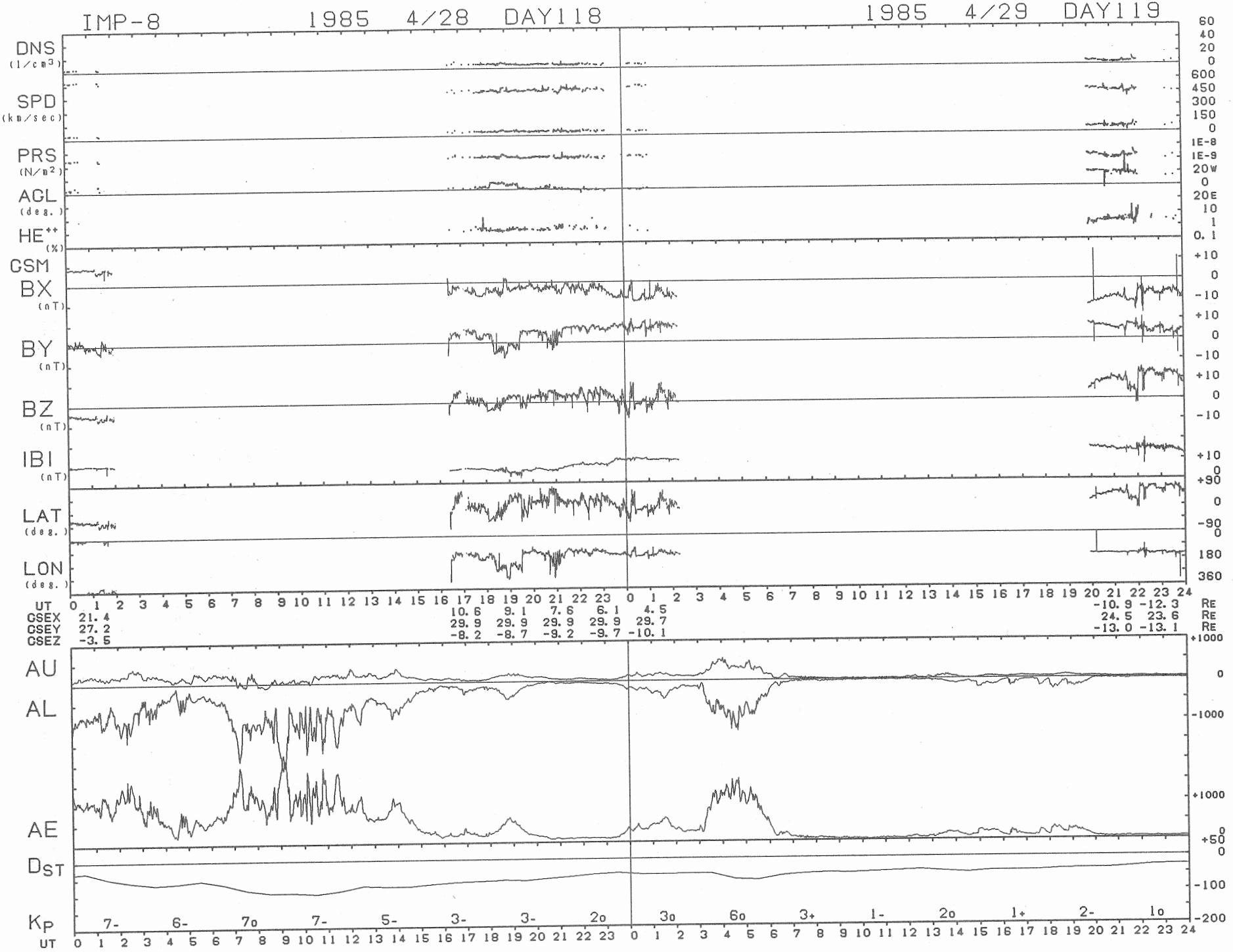

IMP-8
1985 4/18 DAY108
1985 4/19 DAY109
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -12.9 -14.1 -23.6 -24.3 -24.9 -25.5 -26.0 -27.1 -27.0 RE
GSEY 24.2 23.1 10.8 9.2 7.5 5.9 4.2 -5.8 -7.5 RE
GSEZ -12.8 -12.9 -12.6 -12.3 -12.0 -11.7 -11.3 -8.3 -7.7 RE
AU
AL
AE
DST
KP
3- 0+ 1- 1- 1- 1o 0+ 1o 2o 3- 4- 3o 3+ 3+ 4o 5o
UT

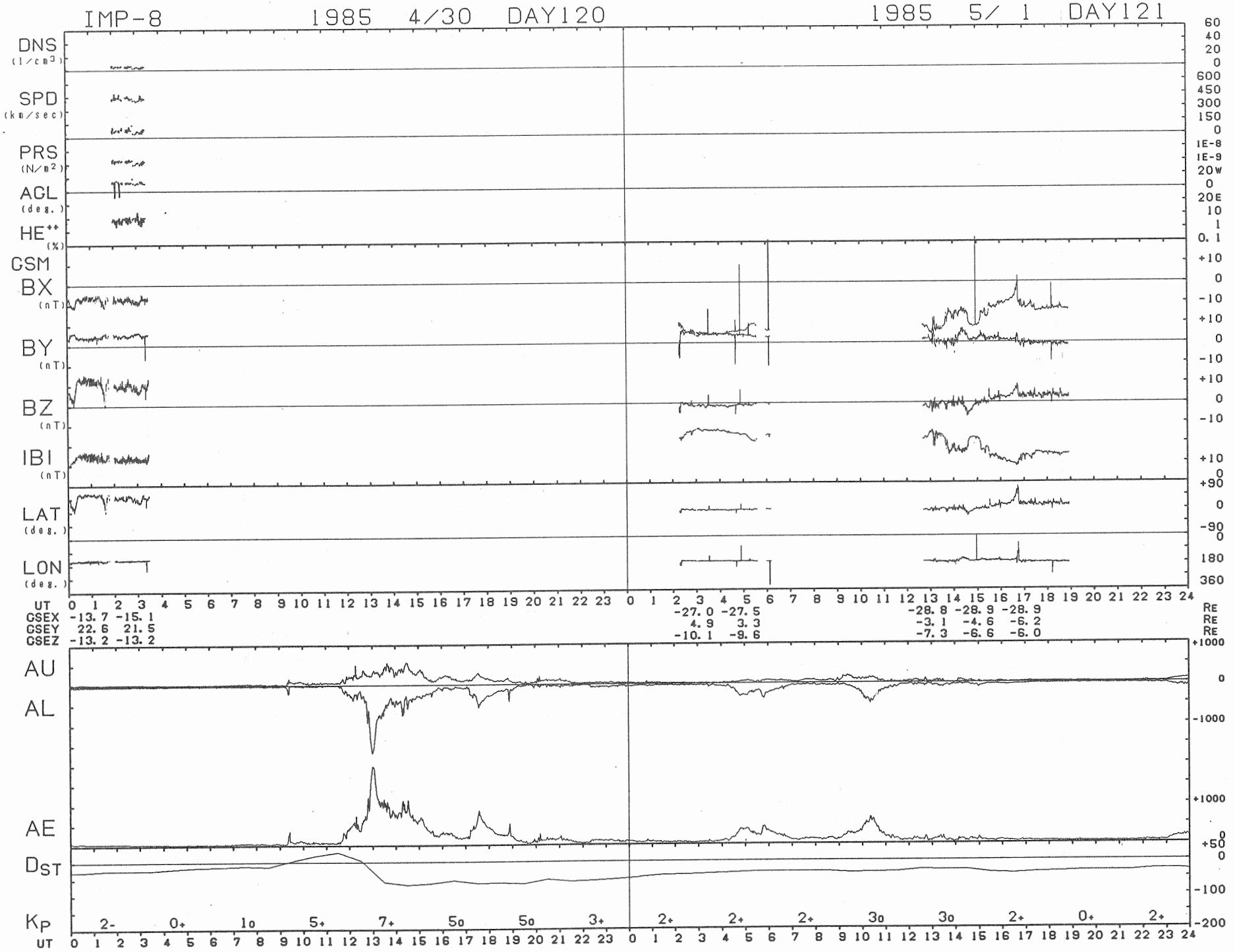

IMP-8 1985 4/20 DAY110
1985 4/21 DAY111
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.2 -25.8 -25.3 -24.7 -24.1 -13.5 -12.3 -11.1 -9.8 -8.5 -7.3 -4.7 -3.4 RE
GSEY -12.2 -13.8 -15.2 -16.7 -18.1 -29.6 -30.3 -30.9 -31.5 -32.0 -32.4 -33.1 -33.3 RE
GSEZ -5.8 -5.1 -4.4 -3.6 -2.9 5.2 5.9 6.6 7.3 8.0 8.6 9.8 10.4 RE
AU
AL
AE
DST
KP
5o 6- 6+ 3+ 2o 3o 6- 7- 8+ 7+ 8o 6- 5- 6- 4+ 4-
UT

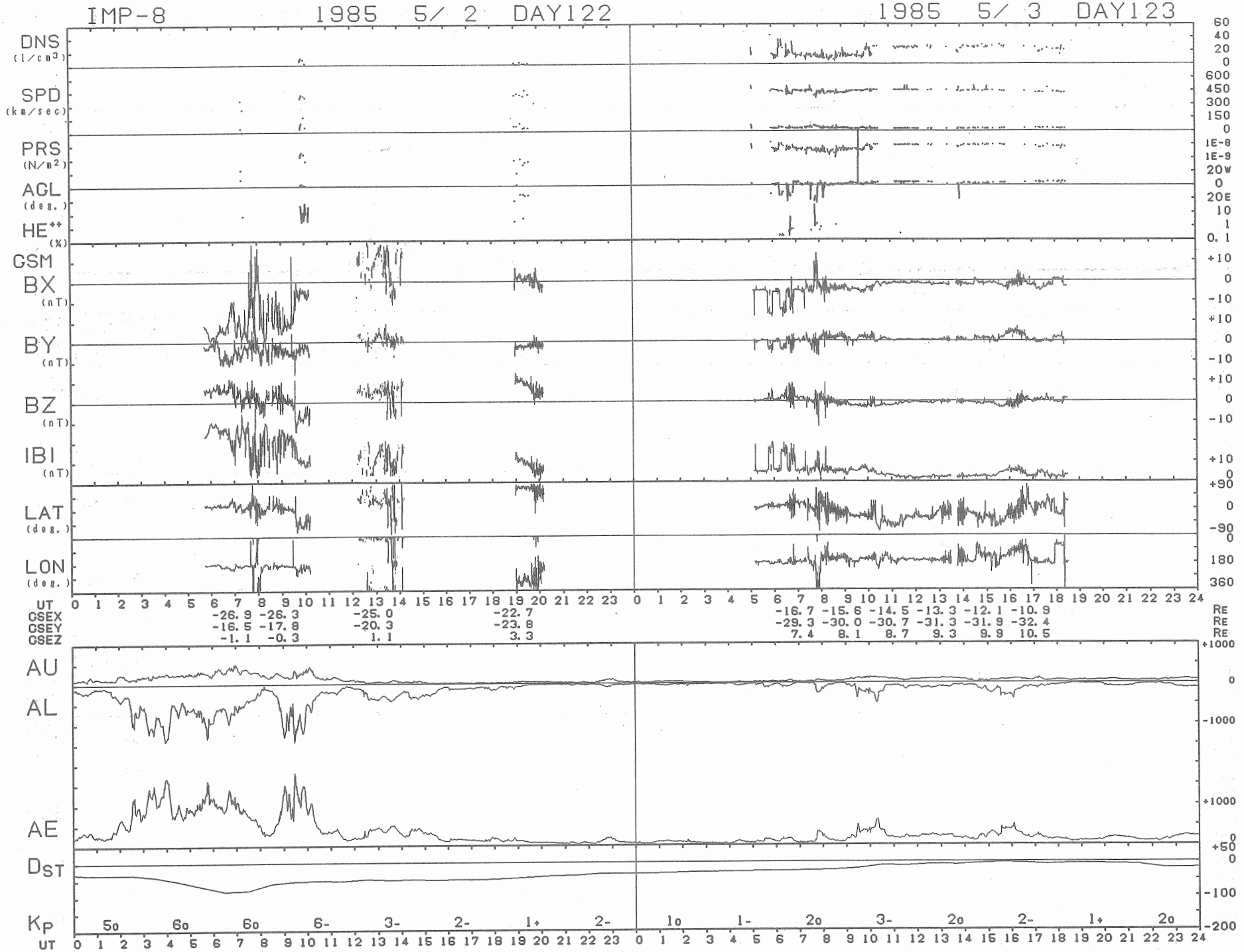

IMP-8 1985 4/22 DAY112
1985 4/23 DAY113
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.9 12.2 13.4 22.2 23.2 RE
GSEY -33.8 -32.2 -31.8 -27.3 -26.6 RE
GSEZ 12.6 15.9 16.2 17.8 17.9 RE
AU
AL
AE
DST
KP 3o 2+ 2+ 4- 2+ 3- 2- 2+ 4- 2+ 3- 2o 3- 3o 3- 2o
UT

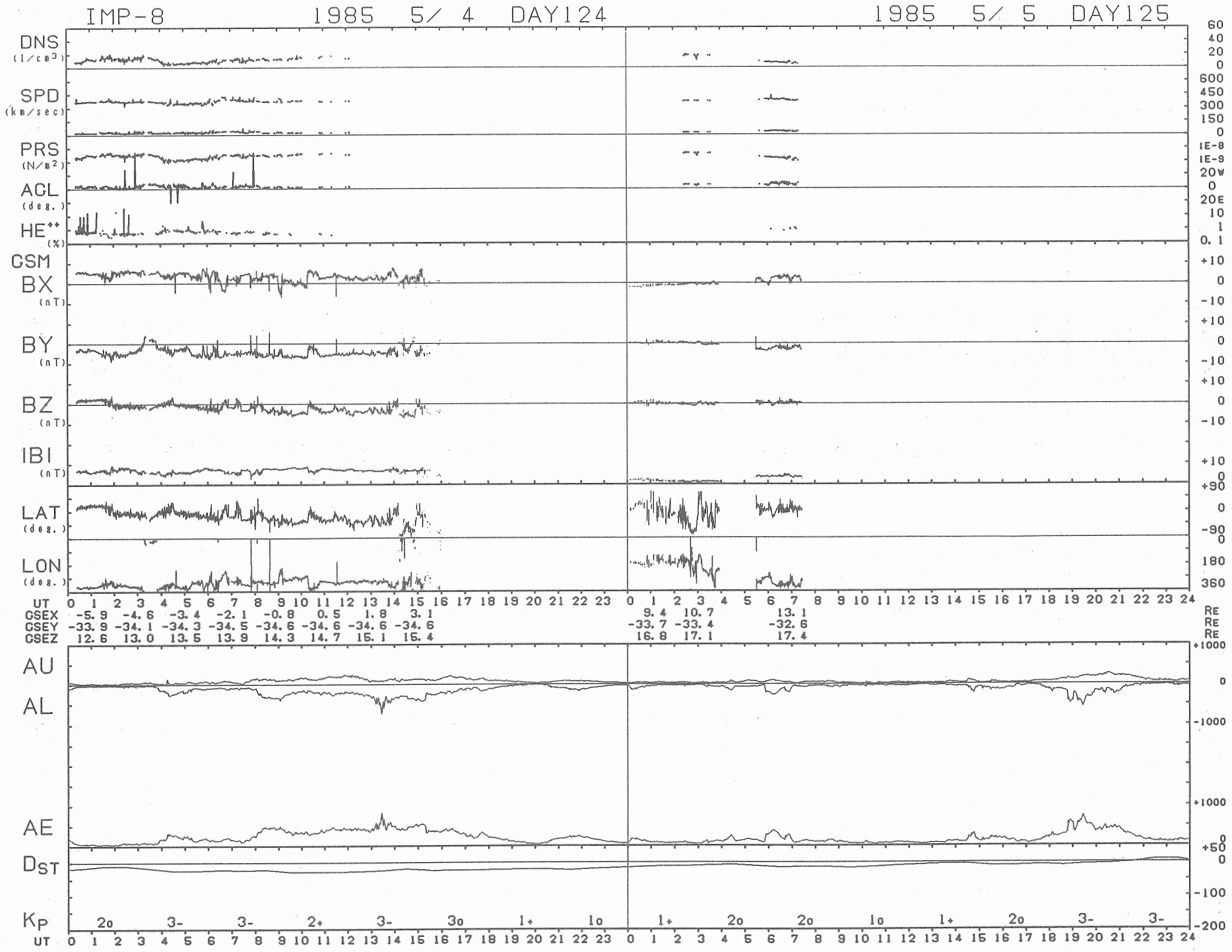

IMP-8 1985 4/24 DAY114
1985 4/25 DAY115
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 31.1 31.8 32.4 33.1 33.7 35.3 36.5 36.8 37.1 37.3 37.5 37.7 37.8 37.9 RE
GSEY -18.7 -17.7 -16.7 -15.6 -14.6 -11.3 -8.0 -6.8 -5.7 -4.5 -3.4 -2.2 -1.0 0.1 RE
GSEZ 17.8 17.7 17.5 17.4 17.2 16.5 15.6 15.3 15.0 14.6 14.2 13.8 13.4 13.0 RE
AU
AL
AE
DST
KP 4o 4+ 4+ 3+ 2+ 2+ 1+ 1+ 4- 4+ 4o 4+ 3+ 2+ 2+ 3+
UT

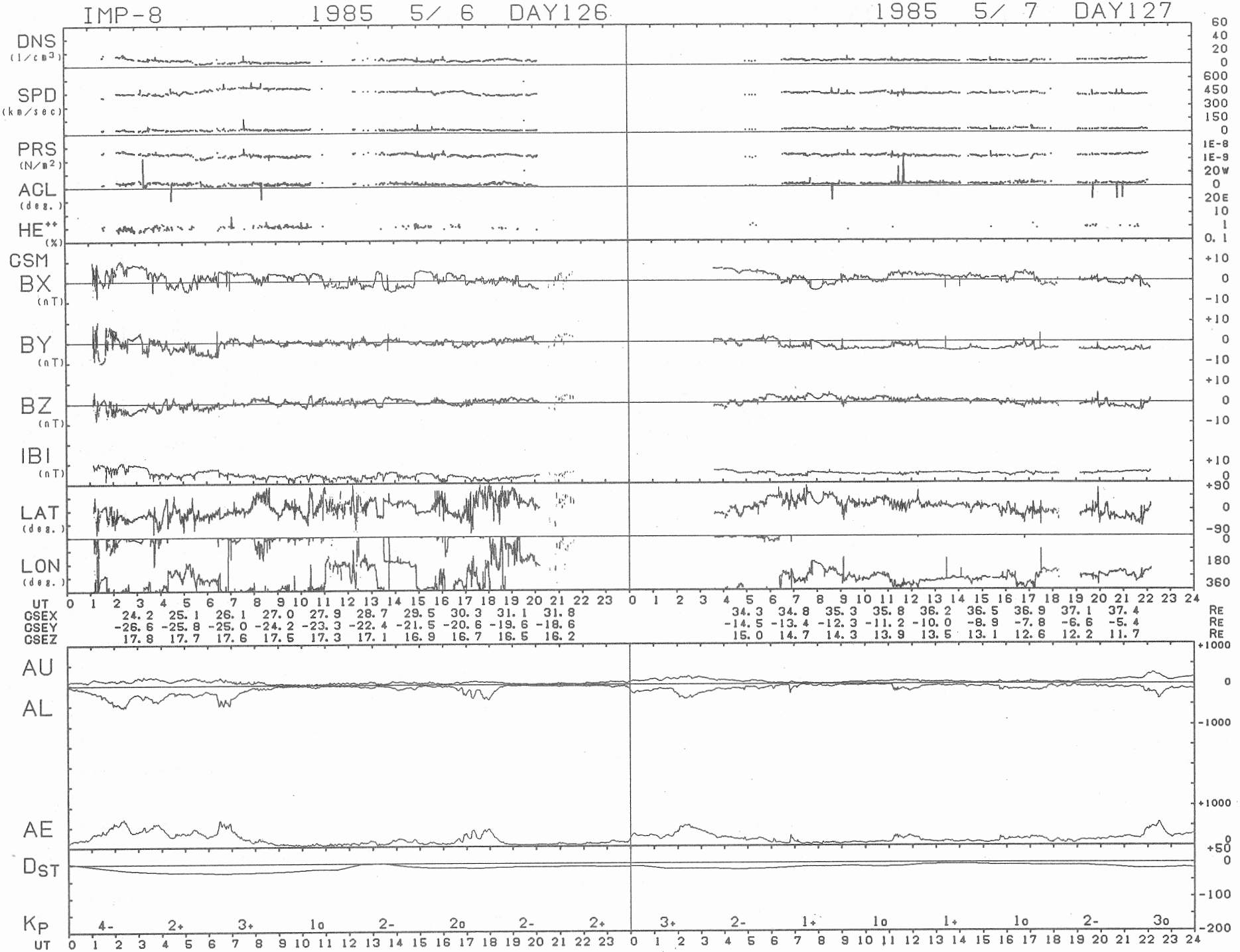

IMP-8 1985 4/26 DAY116
1985 4/27 DAY117
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 37.4 37.1 36.8 36.5 36.1 35.7 35.2 34.7 34.1 33.5 27.0 25.9 24.9 23.8 22.6 RE
GSEY 7.1 8.2 9.3 10.5 11.6 12.6 13.7 14.8 15.8 16.8 23.9 24.7 25.4 26.0 26.6 RE
GSEZ 10.1 9.6 9.0 8.5 7.9 7.3 6.7 6.1 5.5 4.9 -0.2 -0.9 -1.5 -2.2 -2.8 RE
AU
AL
AE
DST
KP 5- 5o 4+ 4o 2o 4- 4o 5- 4- 5o 4- 3+ 4+ 5- 3+ 6-
UT

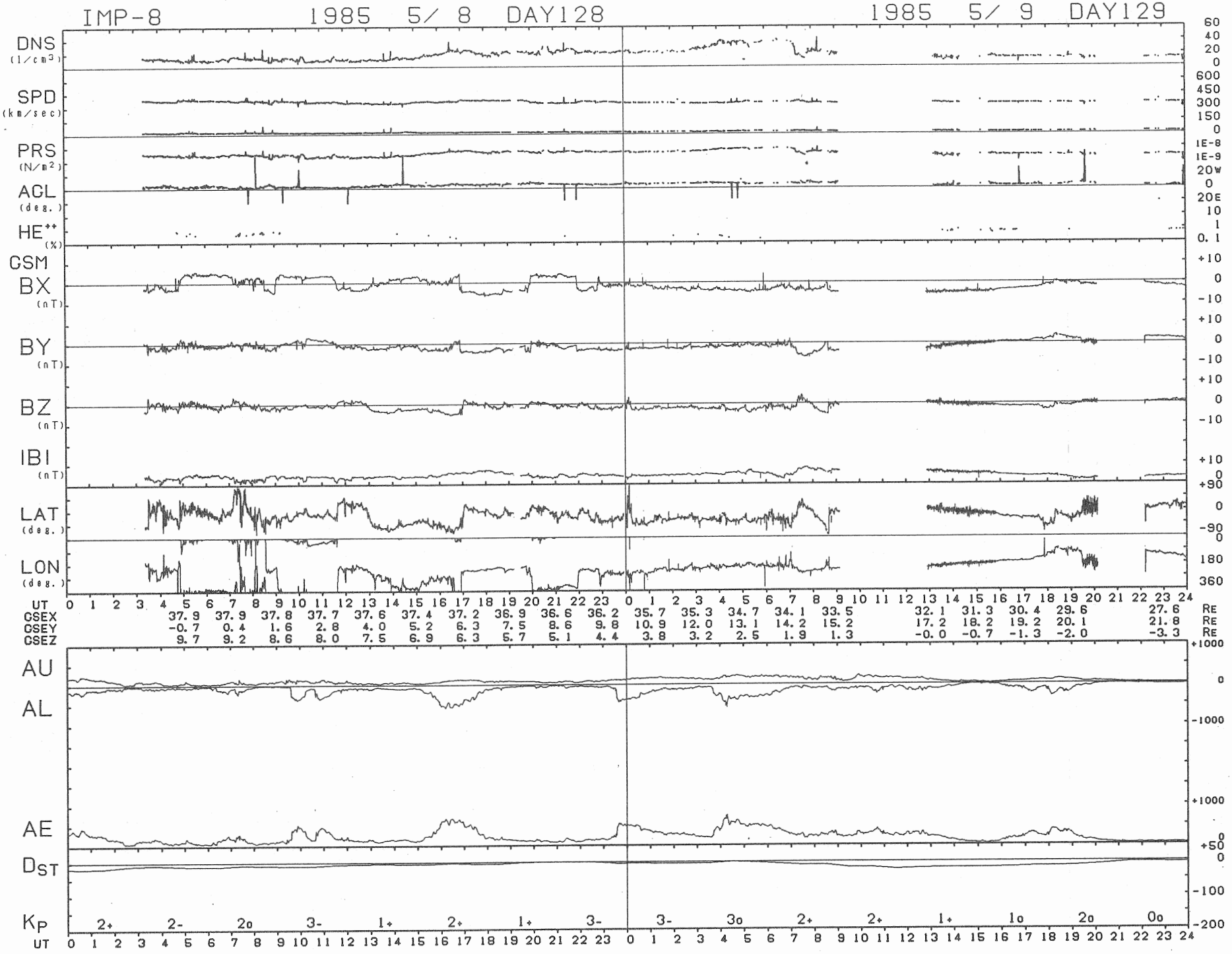

IMP-8
1985 4/28 DAY118
1985 4/29 DAY119
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 21.4
CSEY 27.2
CSEZ -3.5
10.6 9.1 7.6 6.1 4.5
29.9 29.9 29.9 29.9 29.7
-8.2 -8.7 -9.2 -9.7 -10.1
-10.9 -12.3 RE
24.5 23.6 RE
-13.0 -13.1 RE
AU
AL
AE
DST
KP
7- 6- 7o 7- 5- 3- 3- 2o 3o 6o 3+ 1- 2o 1+ 2- 1o
UT

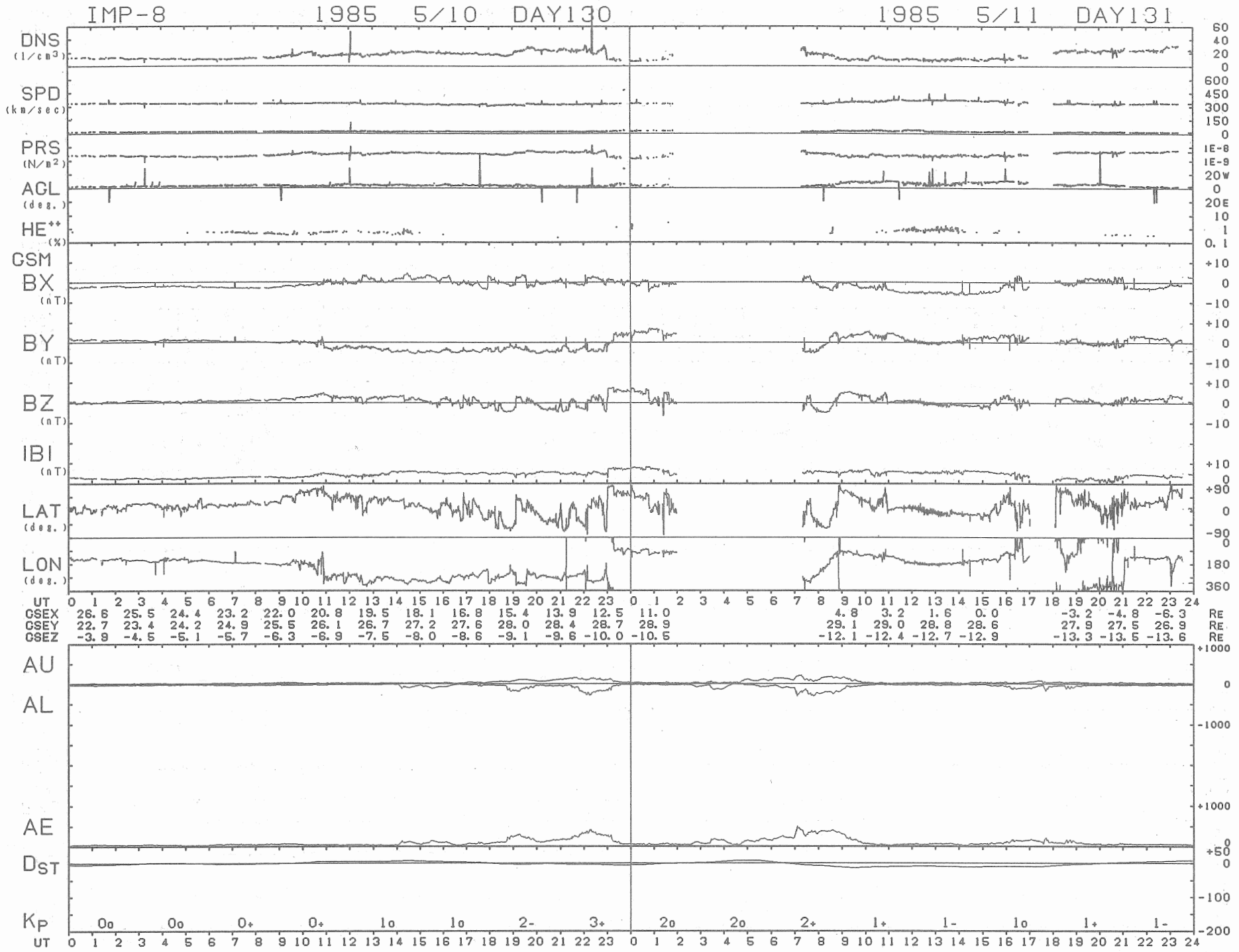

IMP-8
1985 4/30 DAY120
1985 5/ 1 DAY121
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.7 -15.1 -27.0 -27.5 -28.8 -28.9 -28.9 RE
GSEY 22.6 21.5 4.9 3.3 -3.1 -4.6 -6.2 RE
GSEZ -13.2 -13.2 -10.1 -9.6 -7.3 -6.6 -6.0 RE
AU
AL
AE
DST
KP
2- 0+ 1o 5+ 7+ 5o 5o 3+ 2+ 2+ 2+ 3o 3o 2+ 0+ 2+
UT

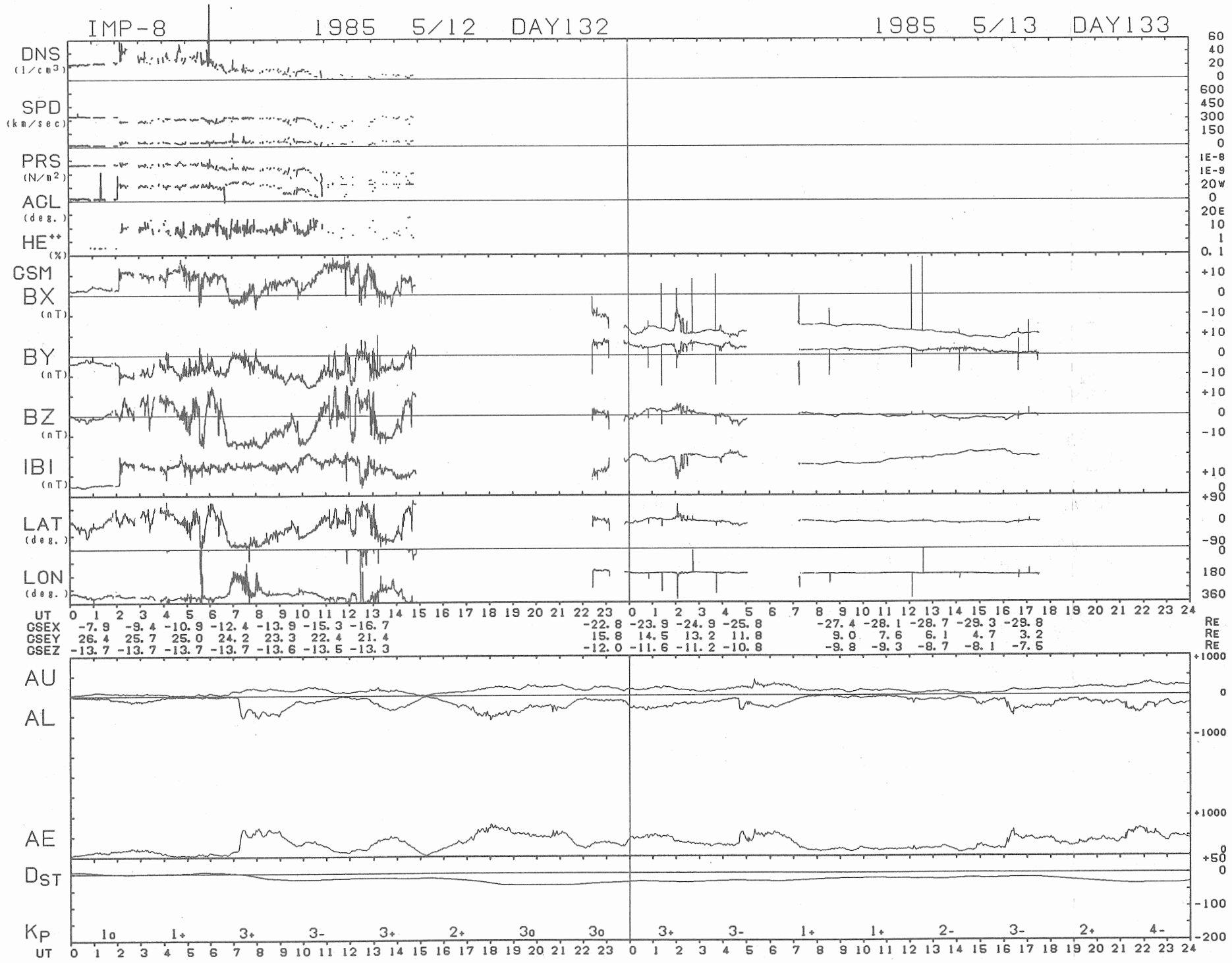

IMP-8
1985 5/ 2 DAY122
1985 5/ 3 DAY123
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.9 -26.3 -25.0 -22.7 -16.7 -15.6 -14.5 -13.3 -12.1 -10.9 Re
GSEY -16.5 -17.8 -20.3 -23.8 -29.3 -30.0 -30.7 -31.3 -31.9 -32.4 Re
GSEZ -1.1 -0.3 1.1 3.3 7.4 8.1 8.7 9.3 9.9 10.5 Re
AU
AL
AE
DST
KP
5o 6o 6o 6- 3- 2- 1+ 2- 1o 1- 2o 3- 2o 2- 1+ 2o
UT

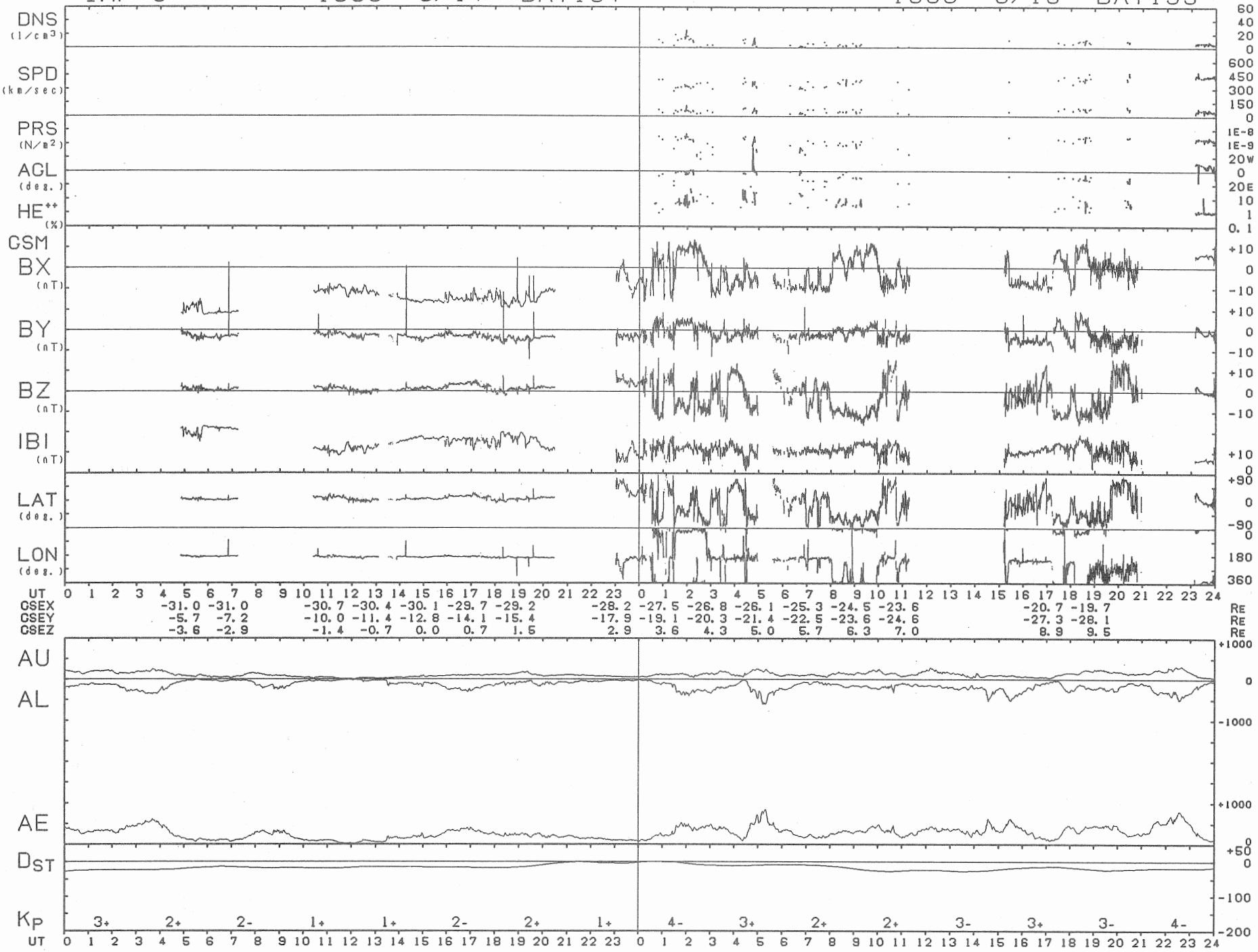

IMP-8
1985 5/ 4 DAY124
1985 5/ 5 DAY125
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.9 -4.6 -3.4 -2.1 -0.8 0.5 1.8 3.1 9.4 10.7 13.1 RE
GSEY -33.9 -34.1 -34.3 -34.5 -34.6 -34.6 -34.6 -34.6 -33.7 -33.4 -32.6 RE
GSEZ 12.6 13.0 13.5 13.9 14.3 14.7 15.1 15.4 16.8 17.1 17.4 RE
AU
AL
AE
DST
KP
2o 3- 3- 2+ 3- 3o 1+ 1o 1+ 2o 2o 1o 1+ 2o 3- 3-
UT

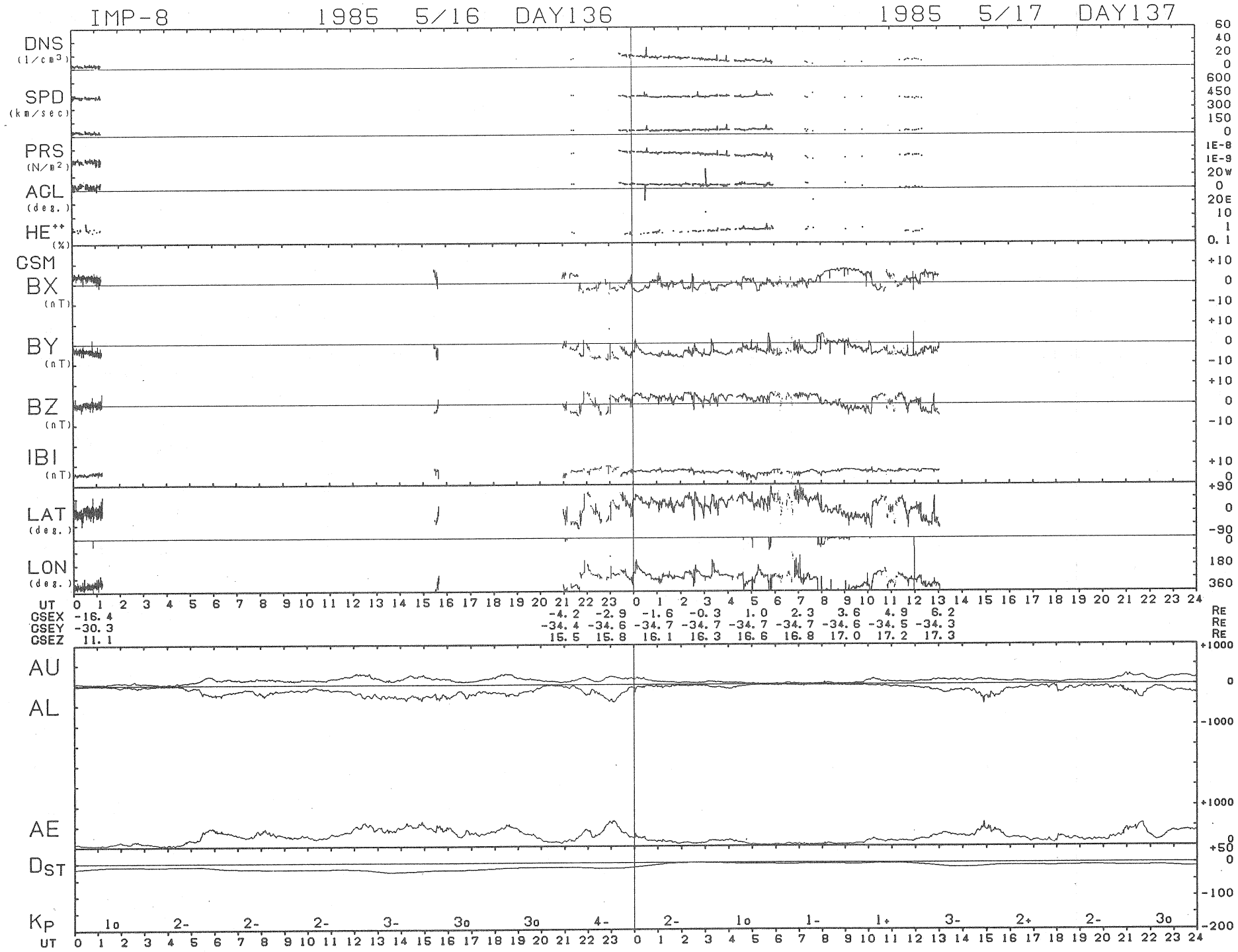

IMP-8
1985 5/ 6 DAY126
1985 5/ 7 DAY127
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.2 25.1 26.1 27.0 27.9 28.7 29.5 30.3 31.1 31.8 34.3 34.8 35.3 35.8 36.2 36.5 36.9 37.1 37.4 RE
GSEY -26.6 -25.8 -25.0 -24.2 -23.3 -22.4 -21.5 -20.6 -19.6 -18.6 -14.5 -13.4 -12.3 -11.2 -10.0 -8.9 -7.8 -6.6 -5.4 RE
GSEZ 17.8 17.7 17.6 17.5 17.3 17.1 16.9 16.7 16.5 16.2 15.0 14.7 14.3 13.9 13.5 13.1 12.6 12.2 11.7 RE
AU
AL
AE
DST
KP 4- 2+ 3+ 1o 2- 2o 2- 2+ 3+ 2- 1+ 1o 1+ 1o 2- 3o
UT

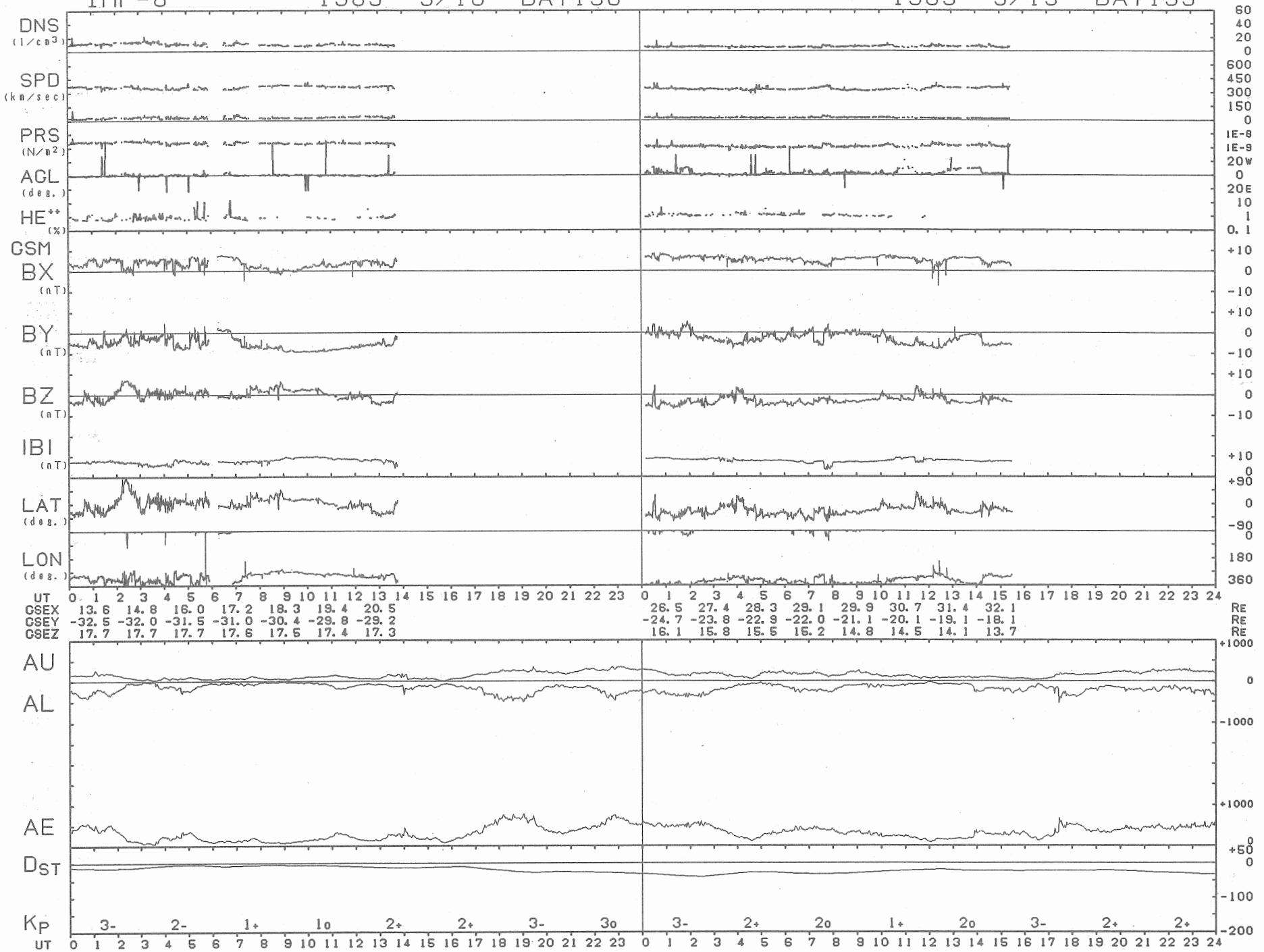

IMP-8
1985 5/ 8 DAY128
1985 5/ 9 DAY129
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 37.9 37.9 37.8 37.7 37.6 37.4 37.2 36.9 36.6 36.2 35.7 35.3 34.7 34.1 33.5 32.1 31.3 30.4 29.6 27.6 RE
GSEY -0.7 0.4 1.6 2.8 4.0 5.2 6.3 7.5 8.6 9.8 10.9 12.0 13.1 14.2 15.2 17.2 18.2 19.2 20.1 21.8 RE
GSEZ 9.7 9.2 8.6 8.0 7.5 6.9 6.3 5.7 5.1 4.4 3.8 3.2 2.5 1.9 1.3 -0.0 -0.7 -1.3 -2.0 -3.3 RE
AU
AL
AE
DST
KP 2+ 2- 2o 3- 1+ 2+ 1+ 3- 3- 3o 2+ 2+ 1+ 1o 2o 0o
UT

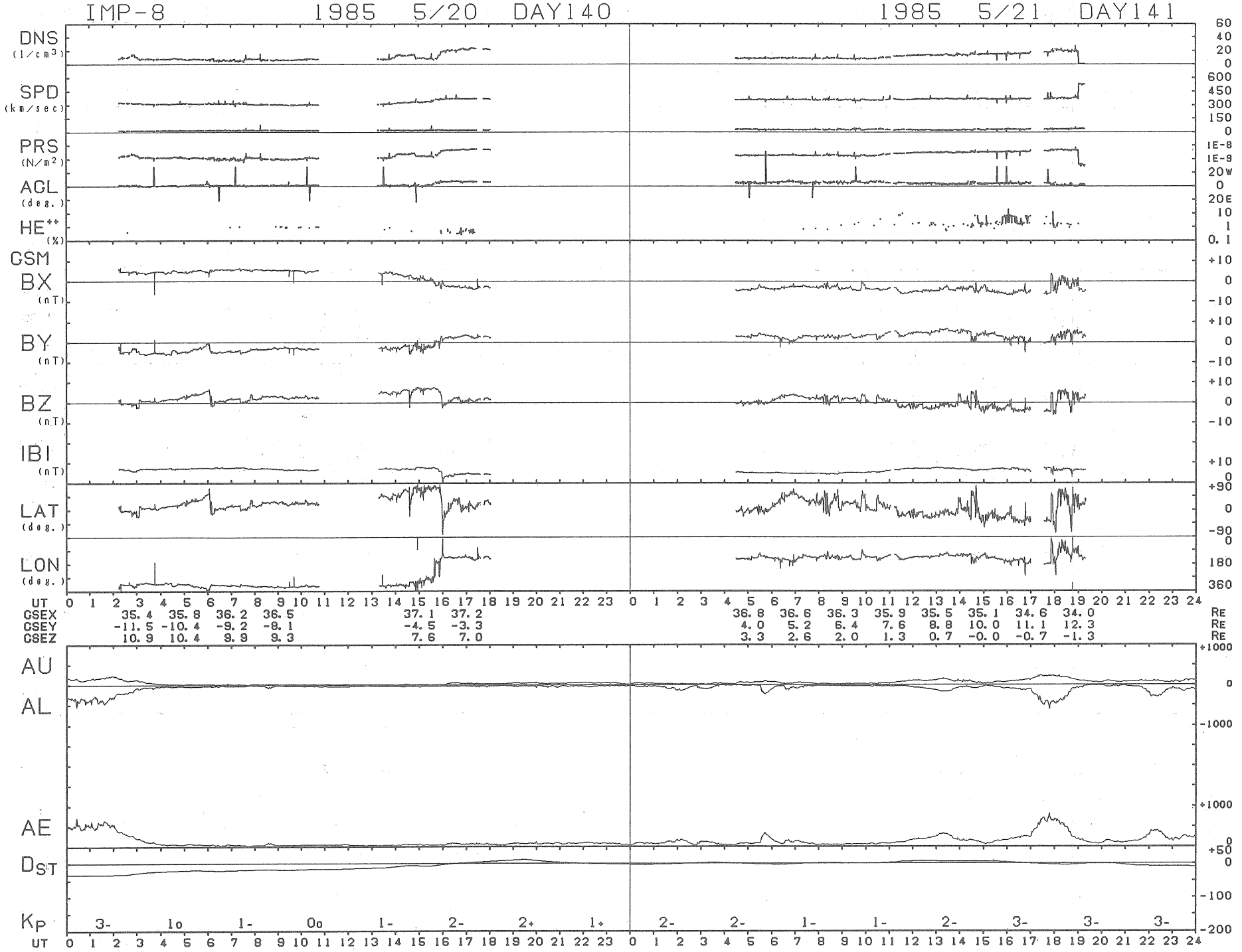

IMP-8 1985 5/10 DAY130
1985 5/11 DAY131
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.6 25.5 24.4 23.2 22.0 20.8 19.5 18.1 16.8 15.4 13.9 12.5 11.0 4.8 3.2 1.6 0.0 -3.2 -4.8 -6.3 RE
GSEY 22.7 23.4 24.2 24.9 25.5 26.1 26.7 27.2 27.6 28.0 28.4 28.7 28.9 29.1 29.0 28.8 28.6 27.9 27.5 26.9 RE
GSEZ -3.9 -4.5 -5.1 -5.7 -6.3 -6.9 -7.5 -8.0 -8.6 -9.1 -9.6 -10.0 -10.5 -12.1 -12.4 -12.7 -12.9 -13.3 -13.5 -13.6 RE
AU
AL
AE
DST
KP
0o 0o 0+ 0+ 1o 1o 2- 3+ 2o 2o 2+ 1+ 1- 1o 1+ 1-
UT

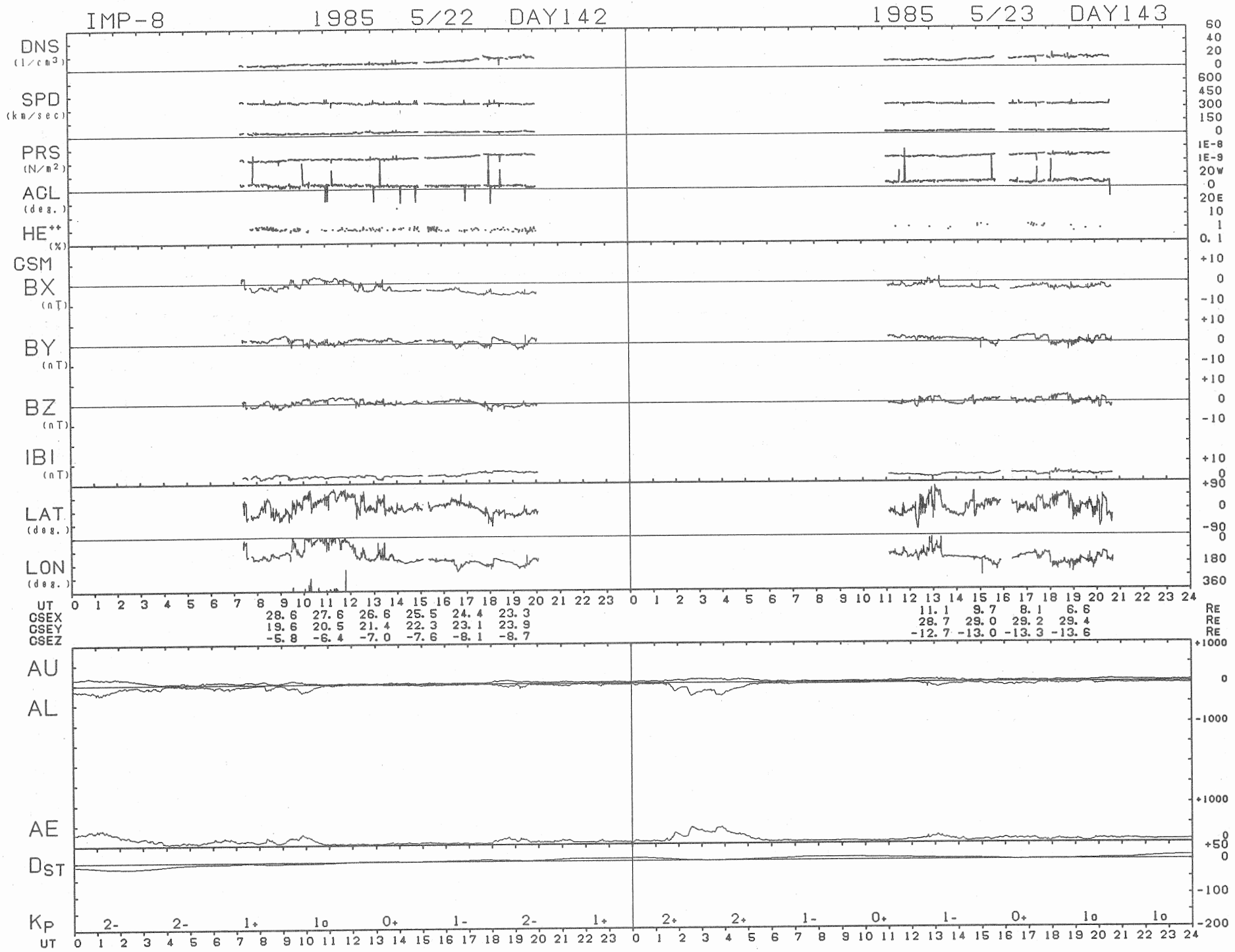

IMP-8
1985 5/12 DAY132
1985 5/13 DAY133
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.9 -9.4 -10.9 -12.4 -13.9 -15.3 -16.7 -22.8 -23.9 -24.9 -25.8 -27.4 -28.1 -28.7 -29.3 -29.8 RE
GSEY 26.4 25.7 25.0 24.2 23.3 22.4 21.4 15.8 14.5 13.2 11.8 9.0 7.6 6.1 4.7 3.2 RE
GSEZ -13.7 -13.7 -13.7 -13.7 -13.6 -13.5 -13.3 -12.0 -11.6 -11.2 -10.8 -9.8 -9.3 -8.7 -8.1 -7.5 RE
AU
AL
AE
DST
KP
1o 1+ 3+ 3- 3+ 2+ 3o 3o 3+ 3- 1+ 1+ 2- 3- 2+ 4-
UT

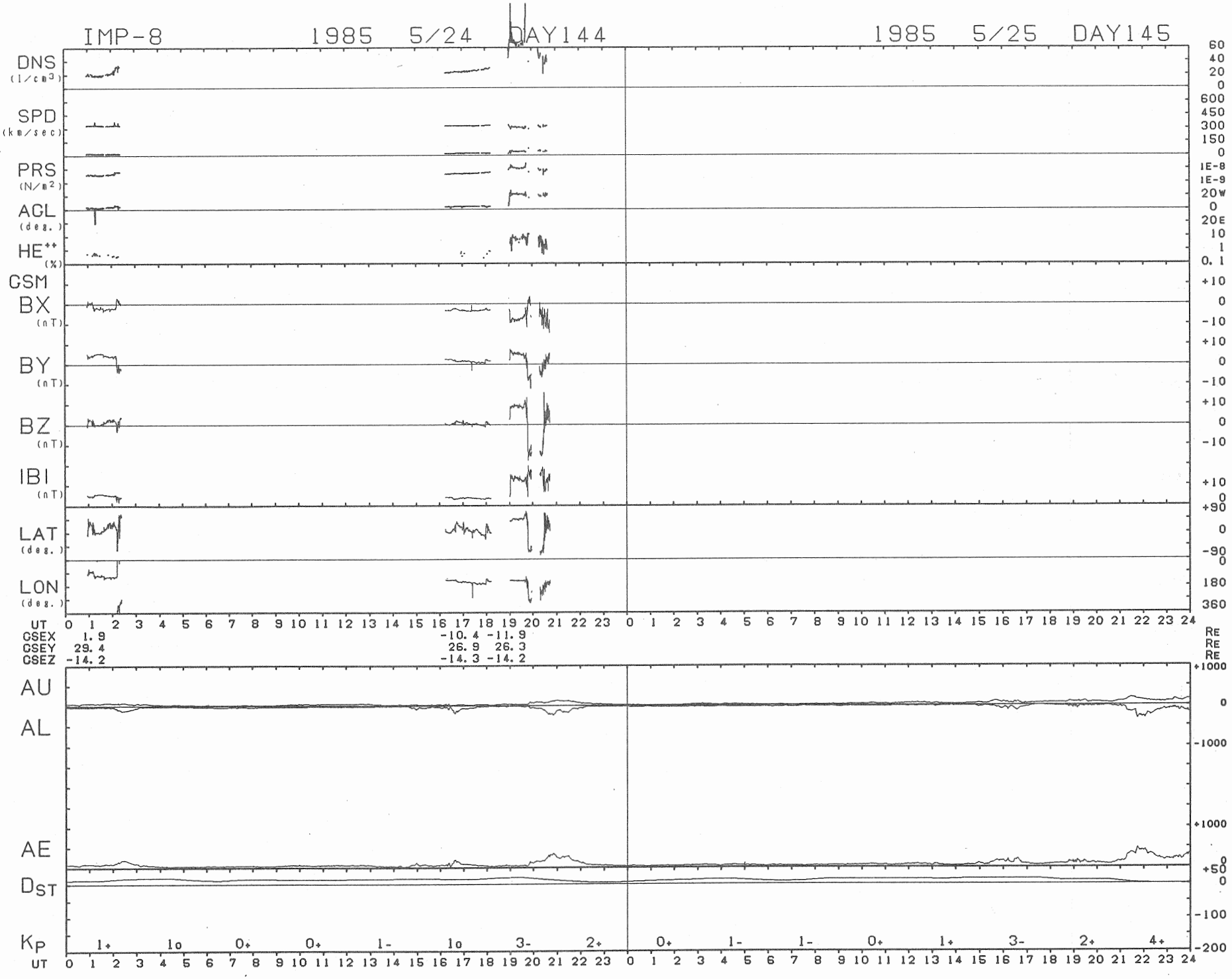

IMP-8 1985 5/14 DAY134
1985 5/15 DAY135
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.0 -31.0 -30.7 -30.4 -30.1 -29.7 -29.2 -28.2 -27.5 -26.8 -26.1 -25.3 -24.5 -23.6 -20.7 -19.7 RE
GSEY -5.7 -7.2 -10.0 -11.4 -12.8 -14.1 -15.4 -17.9 -19.1 -20.3 -21.4 -22.5 -23.6 -24.6 -27.3 -28.1 RE
GSEZ -3.6 -2.9 -1.4 -0.7 0.0 0.7 1.5 2.9 3.6 4.3 5.0 5.7 6.3 7.0 8.9 9.5 RE
AU
AL
AE
DST
KP 3+ 2+ 2- 1+ 1+ 2- 2+ 1+ 4- 3+ 2+ 2+ 3- 3+ 3- 4-
UT

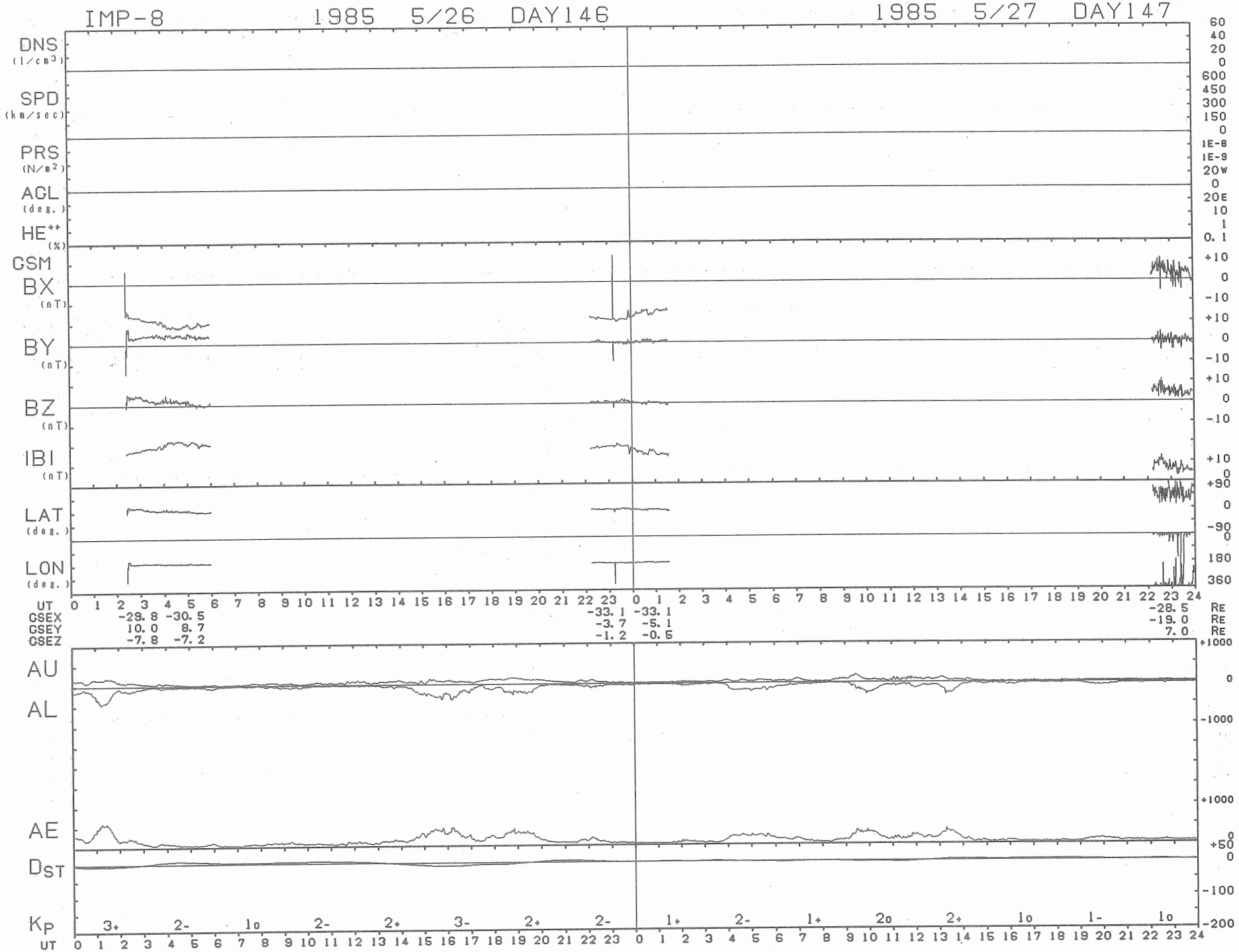

IMP-8 1985 5/16 DAY136
1985 5/17 DAY137
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.4
GSEY -30.3
GSEZ 11.1
-4.2 -2.9 -1.6 -0.3 1.0 2.3 3.6 4.9 6.2 RE
-34.4 -34.6 -34.7 -34.7 -34.7 -34.7 -34.6 -34.5 -34.3 RE
15.5 15.8 16.1 16.3 16.6 16.8 17.0 17.2 17.3 RE
AU
AL
AE
DST
KP
1o 2- 2- 2- 3- 3o 3o 4- 2- 1o 1- 1+ 3- 2+ 2- 3o
UT

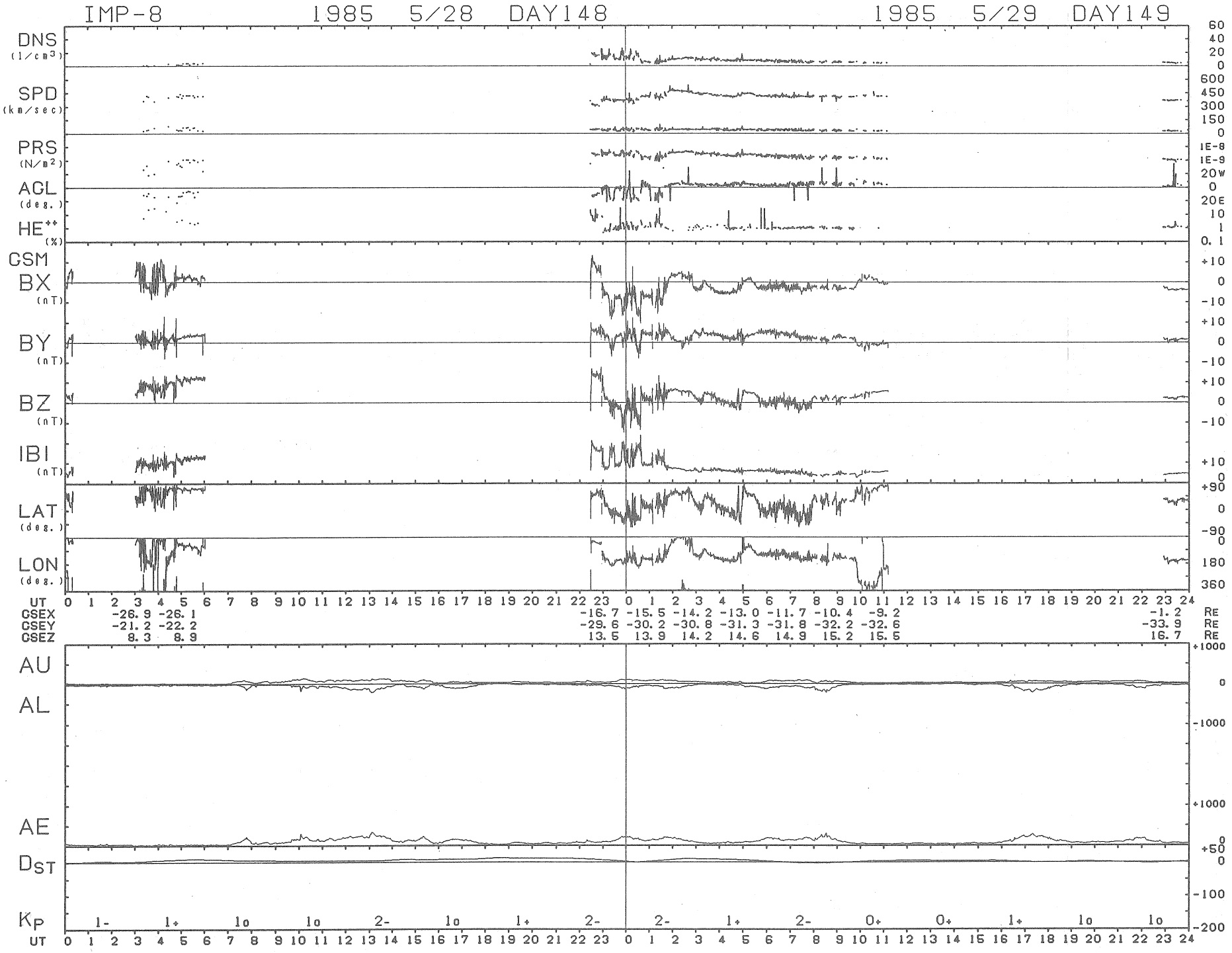

IMP-8 1985 5/18 DAY138
1985 5/19 DAY139
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.6 14.8 16.0 17.2 18.3 19.4 20.5 26.5 27.4 28.3 29.1 29.9 30.7 31.4 32.1 RE
GSEY -32.5 -32.0 -31.5 -31.0 -30.4 -29.8 -29.2 -24.7 -23.8 -22.9 -22.0 -21.1 -20.1 -19.1 -18.1 RE
GSEZ 17.7 17.7 17.7 17.6 17.5 17.4 17.3 16.1 15.8 15.5 15.2 14.8 14.5 14.1 13.7 RE
AU
AL
AE
DST
KP 3- 2- 1+ 1o 2+ 2+ 3- 3o 3- 2+ 2o 1+ 2o 3- 2+ 2+
UT

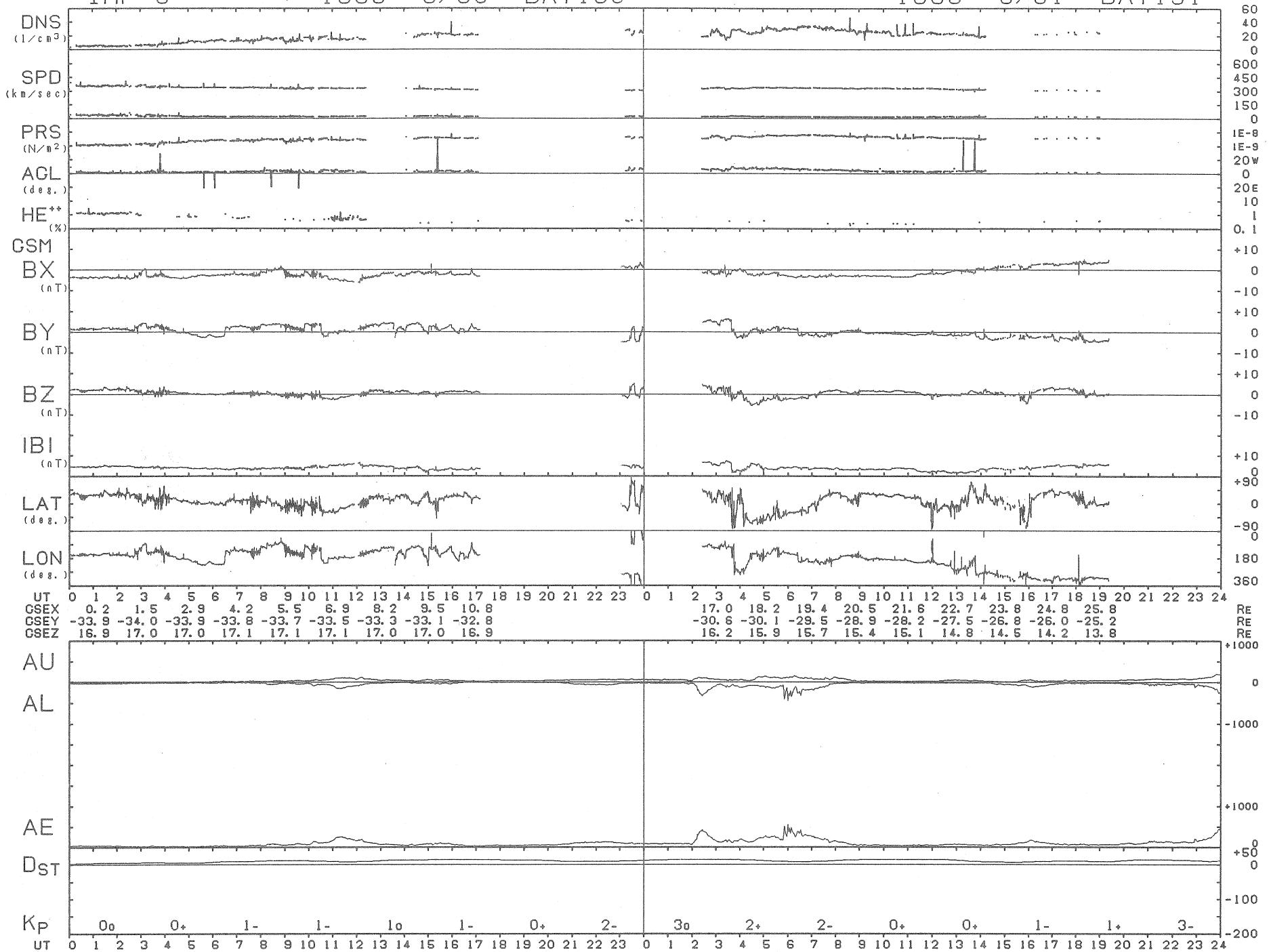

IMP-8 1985 5/20 DAY140
1985 5/21 DAY141
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.4 35.8 36.2 36.5 37.1 37.2 36.8 36.6 36.3 35.9 35.5 35.1 34.6 34.0 RE
GSEY -11.5 -10.4 -9.2 -8.1 -4.5 -3.3 4.0 5.2 6.4 7.6 8.8 10.0 11.1 12.3 RE
GSEZ 10.9 10.4 9.9 9.3 7.6 7.0 3.3 2.6 2.0 1.3 0.7 -0.0 -0.7 -1.3 RE
AU
AL
AE
DST
KP
3- 1o 1- 0o 1- 2- 2+ 1+ 2- 2- 1- 1- 2- 3- 3- 3-
UT

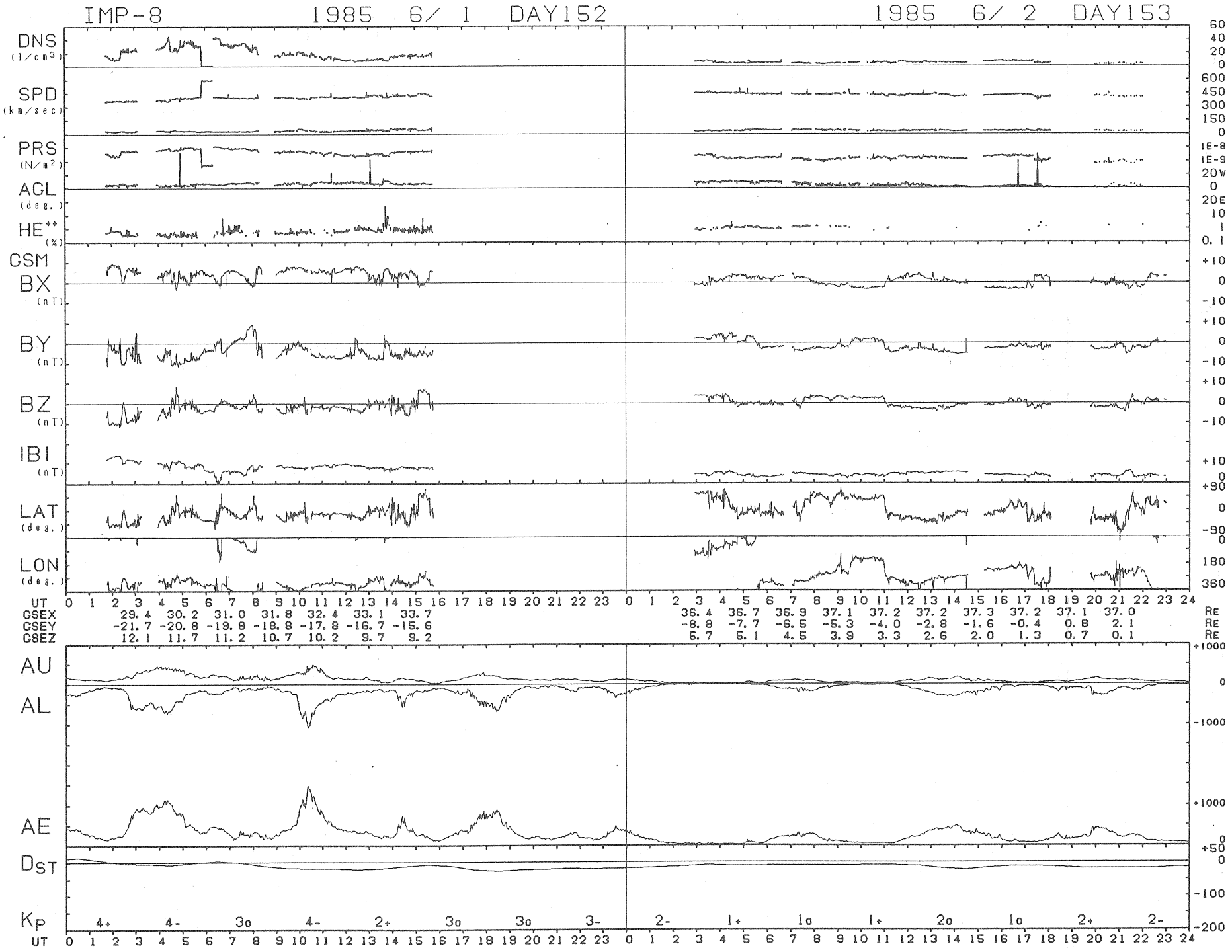

IMP-8
1985 5/22 DAY142
1985 5/23 DAY143
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.6 27.6 26.6 25.5 24.4 23.3 11.1 9.7 8.1 6.6 RE
GSEY 19.6 20.5 21.4 22.3 23.1 23.9 28.7 29.0 29.2 29.4 RE
GSEZ -5.8 -6.4 -7.0 -7.6 -8.1 -8.7 -12.7 -13.0 -13.3 -13.6 RE
AU
AL
AE
DST
KP 2- 2- 1+ 1o 0+ 1- 2- 1+ 2+ 2+ 1- 0+ 1- 0+ 1o 1o
UT

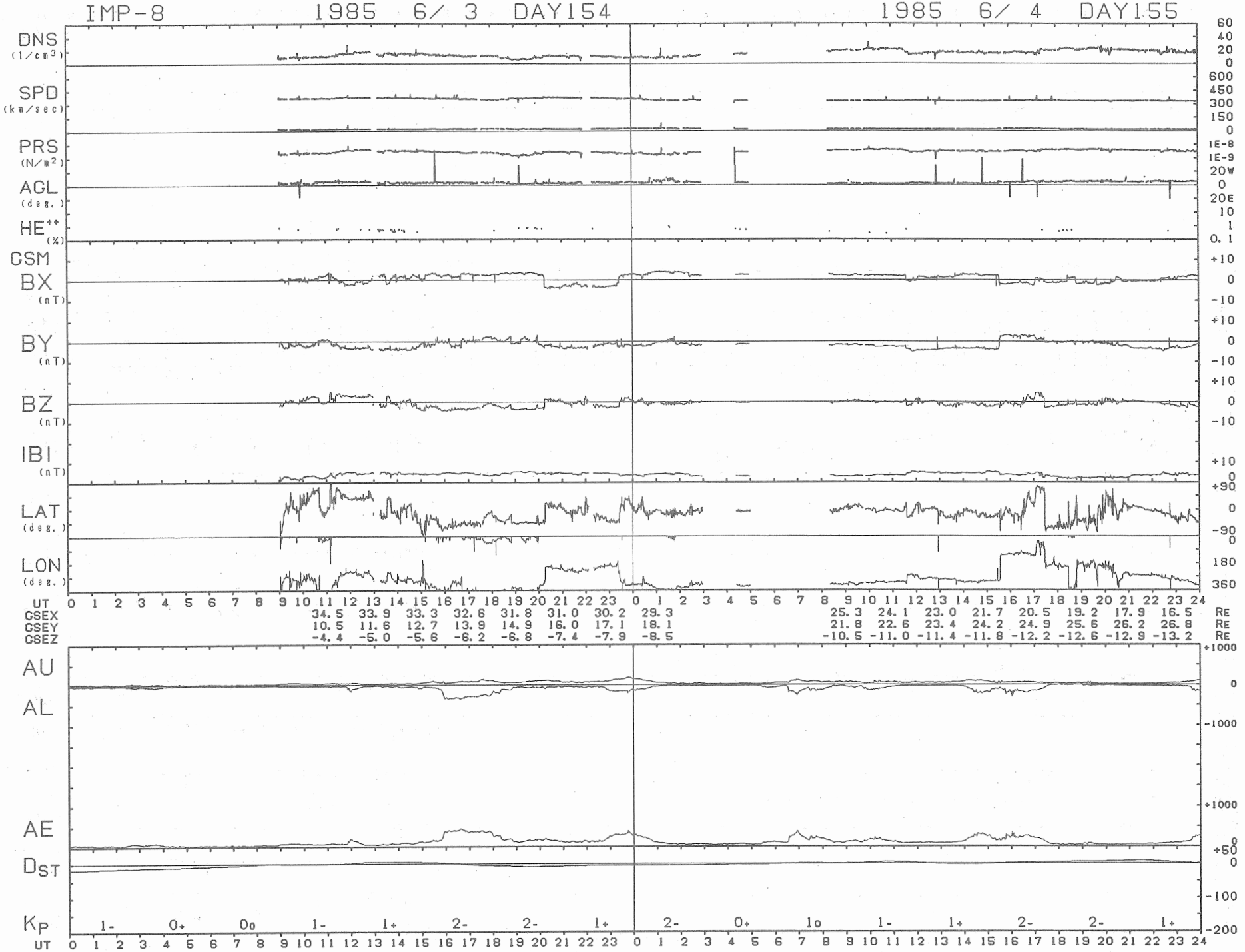

IMP-8
1985 5/24 DAY144
1985 5/25 DAY145
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.9 -10.4 -11.9 Re
GSEY 29.4 26.9 26.3 Re
GSEZ -14.2 -14.3 -14.2 Re
AU
AL
AE
DST
KP
1+ 1o 0+ 0+ 1- 1o 3- 2+ 0+ 1- 1- 0+ 1+ 3- 2+ 4+

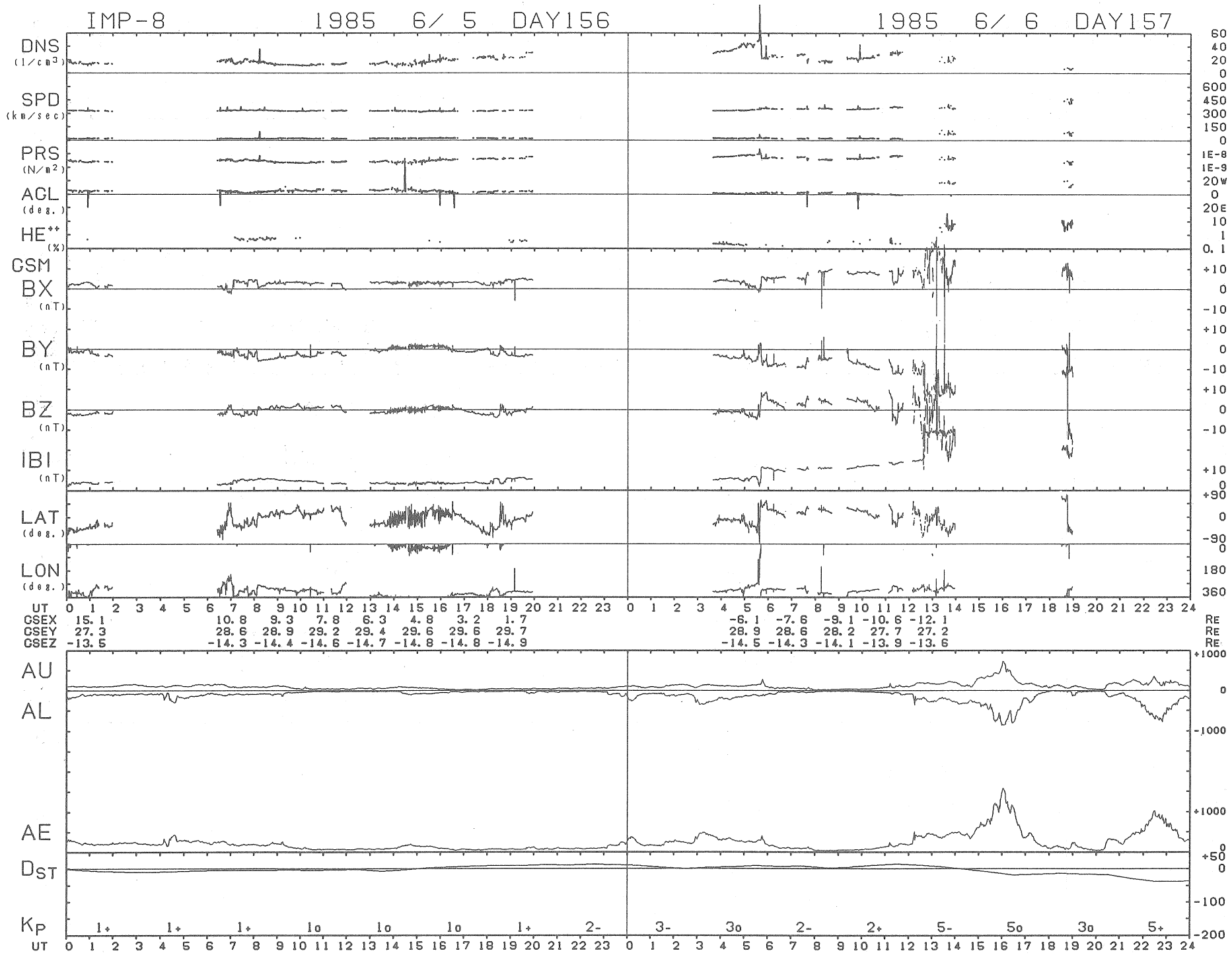

IMP-8
1985 5/26 DAY146
1985 5/27 DAY147
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.8 -30.5 -33.1 -33.1 -28.5 RE
GSEY 10.0 8.7 -3.7 -5.1 -19.0 RE
GSEZ -7.8 -7.2 -1.2 -0.5 7.0 RE
AU
AL
AE
DST
KP 3+ 2- 1o 2- 2+ 3- 2+ 2- 1+ 2- 1+ 2o 2+ 1o 1- 1o
UT

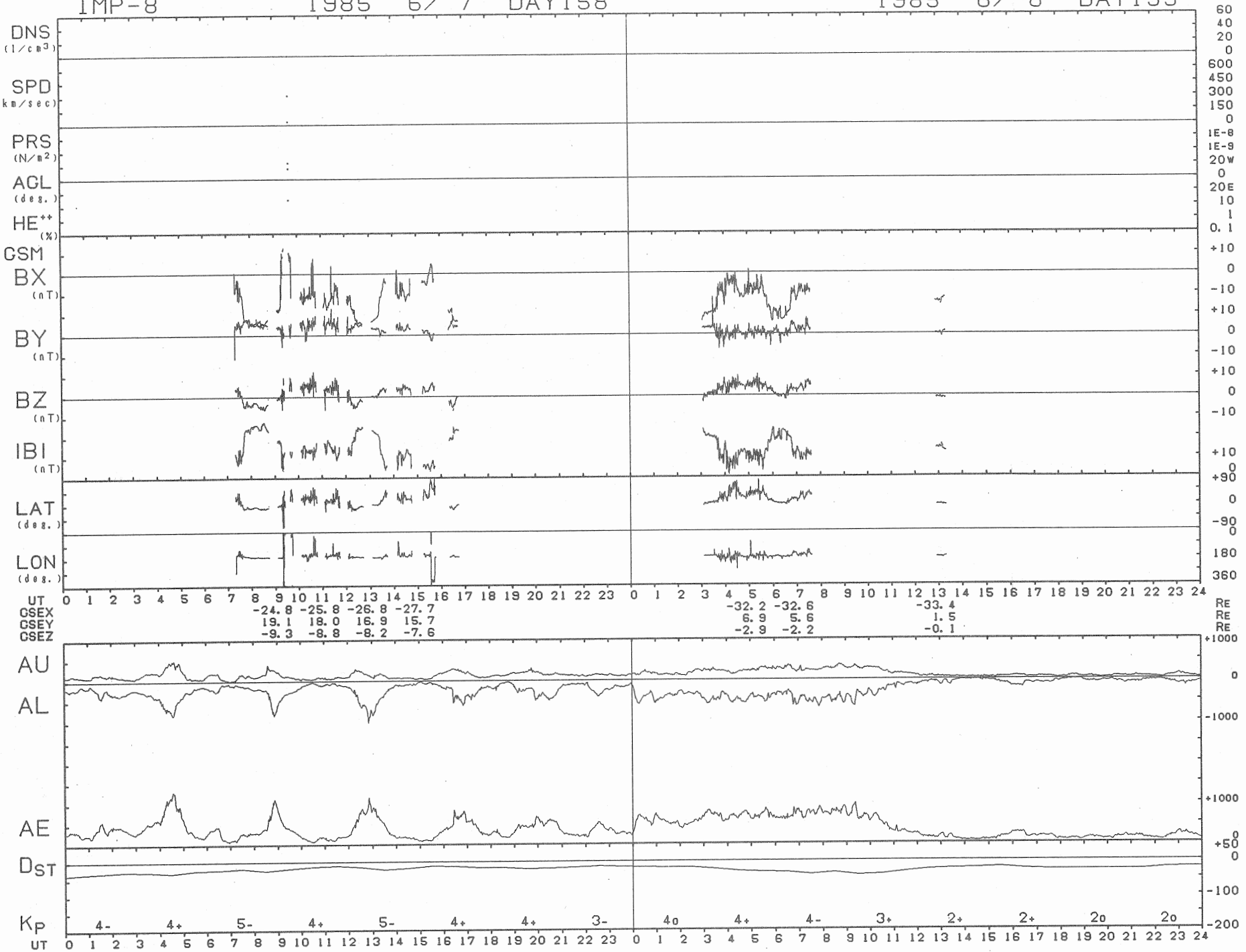

IMP-8 1985 5/28 DAY148 1985 5/29 DAY149
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.9 -26.1 -16.7 -15.5 -14.2 -13.0 -11.7 -10.4 -9.2 -1.2 RE
GSEY -21.2 -22.2 -29.6 -30.2 -30.8 -31.3 -31.8 -32.2 -32.6 -33.9 RE
GSEZ 8.3 8.9 13.5 13.9 14.2 14.6 14.9 15.2 15.5 16.7 RE
AU
AL
AE
DST
KP 1- 1+ 1o 1o 2- 1o 1+ 2- 2- 1+ 2- 0+ 0+ 1+ 1o 1o
UT

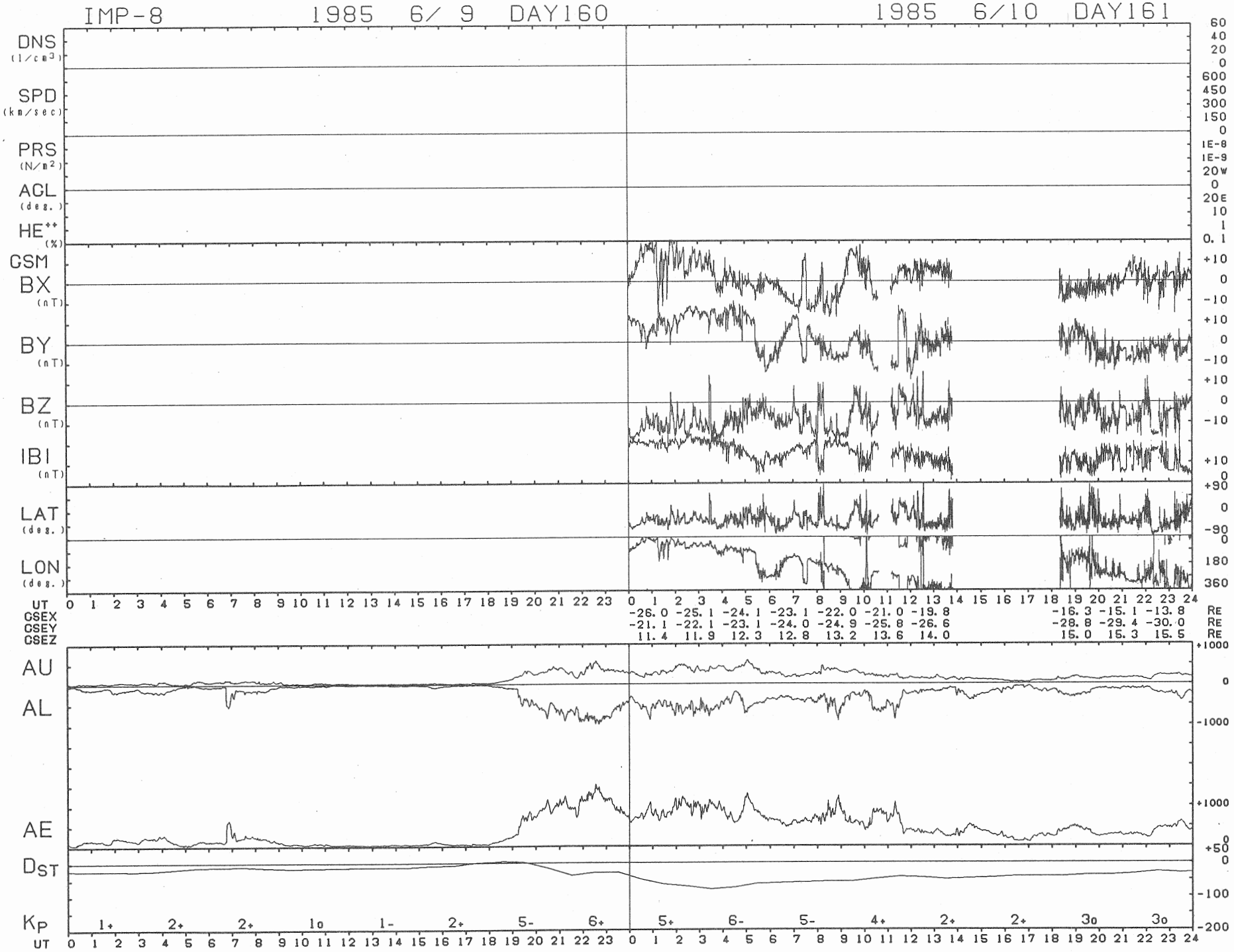

IMP-8 1985 5/30 DAY150
1985 5/31 DAY151
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.2 1.5 2.9 4.2 5.5 6.9 8.2 9.5 10.8 17.0 18.2 19.4 20.5 21.6 22.7 23.8 24.8 25.8 RE
GSEY -33.9 -34.0 -33.9 -33.8 -33.7 -33.5 -33.3 -33.1 -32.8 -30.6 -30.1 -29.5 -28.9 -28.2 -27.5 -26.8 -26.0 -25.2 RE
GSEZ 16.9 17.0 17.0 17.1 17.1 17.1 17.0 17.0 16.9 16.2 15.9 15.7 15.4 15.1 14.8 14.5 14.2 13.8 RE
AU
AL
AE
DST
KP
0o 0+ 1- 1- 1o 1- 0+ 2- 3o 2+ 2- 0+ 0+ 1- 1+ 3-
UT

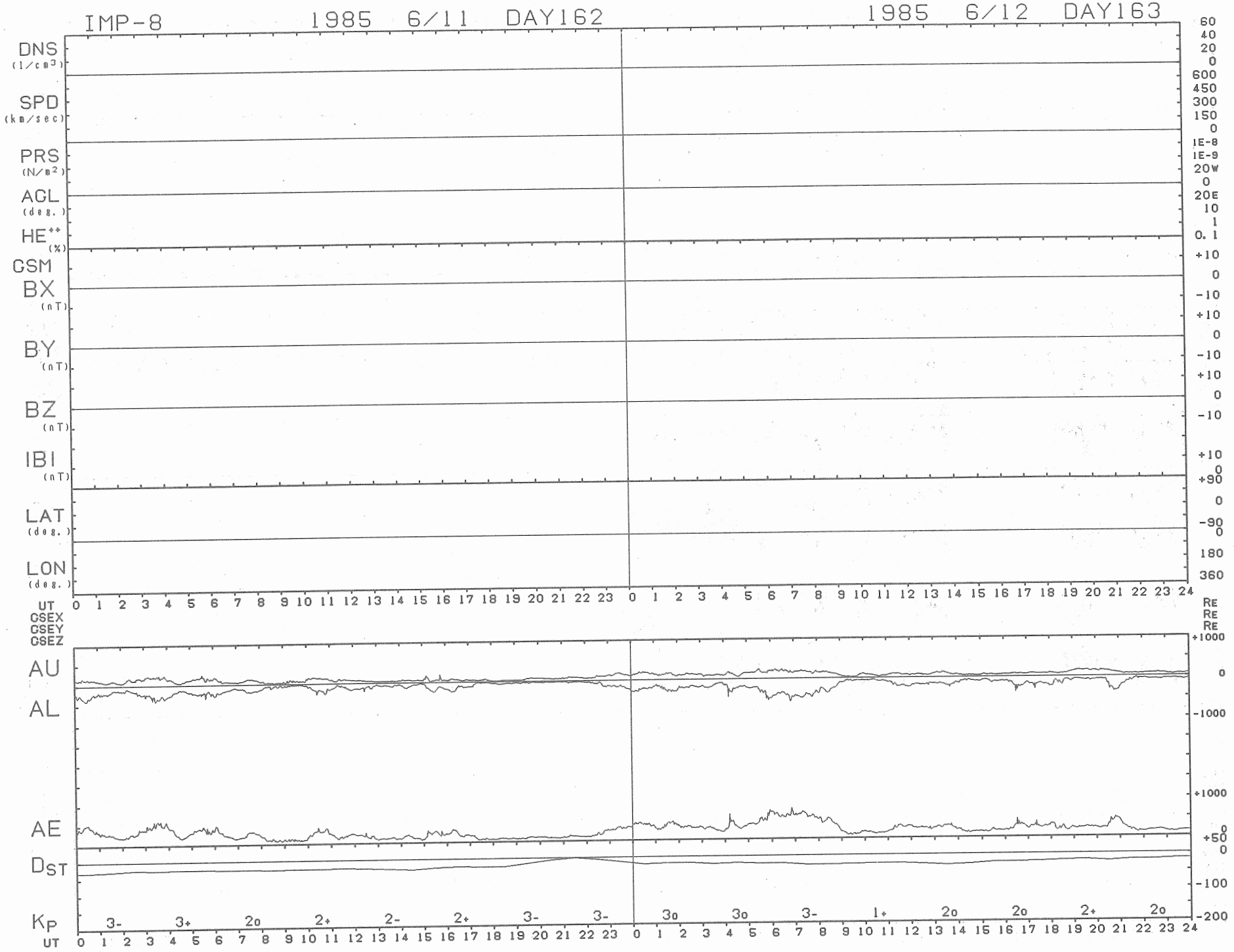

IMP-8 1985 6/ 1 DAY152
1985 6/ 2 DAY153
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.4 30.2 31.0 31.8 32.4 33.1 33.7 36.4 36.7 36.9 37.1 37.2 37.2 37.3 37.2 37.1 37.0 RE
GSEY -21.7 -20.8 -19.8 -18.8 -17.8 -16.7 -15.6 -8.8 -7.7 -6.5 -5.3 -4.0 -2.8 -1.6 -0.4 0.8 2.1 RE
GSEZ 12.1 11.7 11.2 10.7 10.2 9.7 9.2 5.7 5.1 4.5 3.9 3.3 2.6 2.0 1.3 0.7 0.1 RE
AU
AL
AE
DST
KP
4+ 4- 3o 4- 2+ 3o 3o 3- 2- 1+ 1o 1+ 2o 1o 2+ 2-
UT

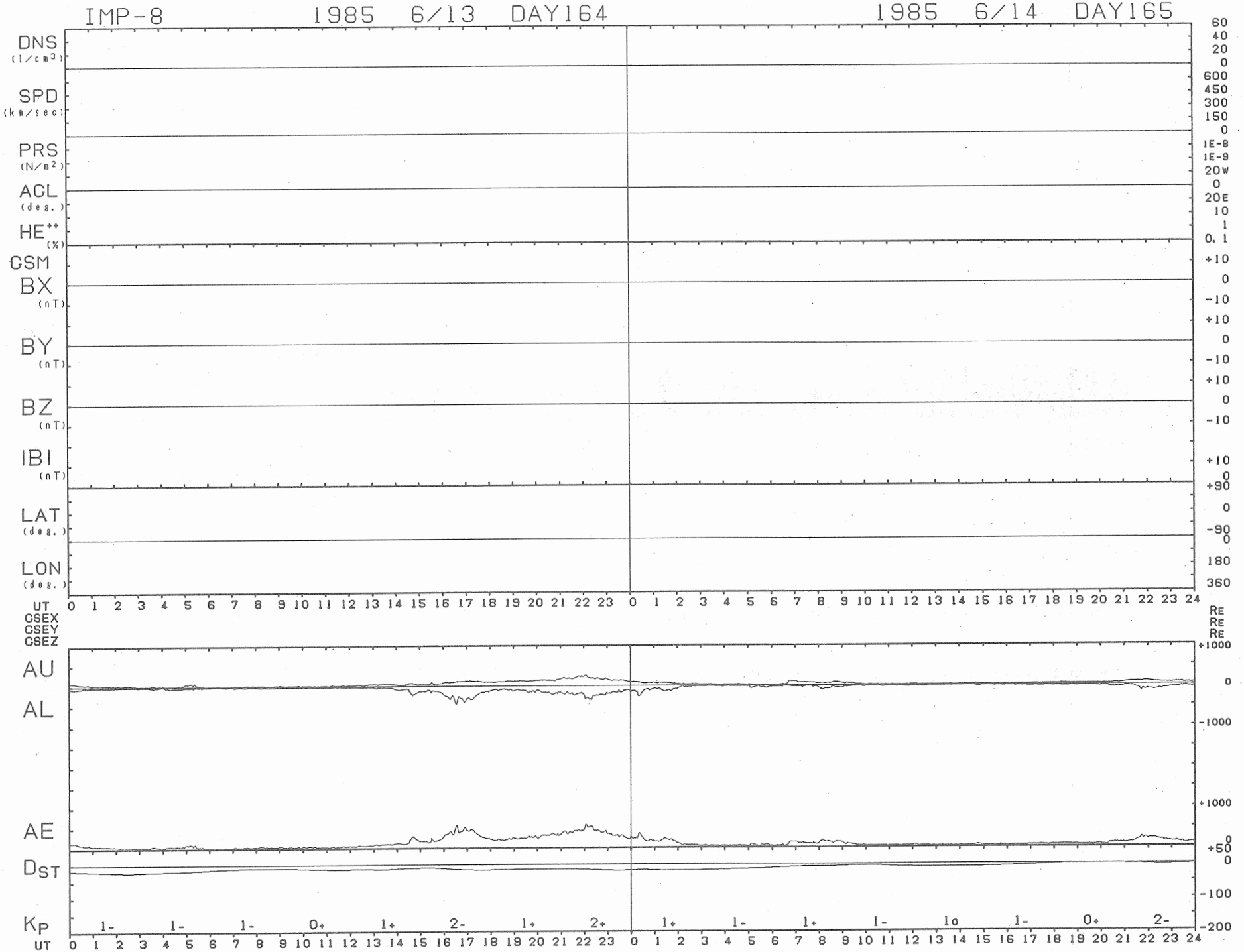

IMP-8
1985 6/ 3 DAY154
1985 6/ 4 DAY155
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.5 33.9 33.3 32.6 31.8 31.0 30.2 29.3 25.3 24.1 23.0 21.7 20.5 19.2 17.9 16.5 RE
GSEY 10.5 11.6 12.7 13.9 14.9 16.0 17.1 18.1 21.8 22.6 23.4 24.2 24.9 25.6 26.2 26.8 RE
GSEZ -4.4 -5.0 -5.6 -6.2 -6.8 -7.4 -7.9 -8.5 -10.5 -11.0 -11.4 -11.8 -12.2 -12.6 -12.9 -13.2 RE
AU
AL
AE
DST
KP 1- 0+ 0o 1- 1+ 2- 2- 1+ 2- 0+ 1o 1- 1+ 2- 2- 1+
UT

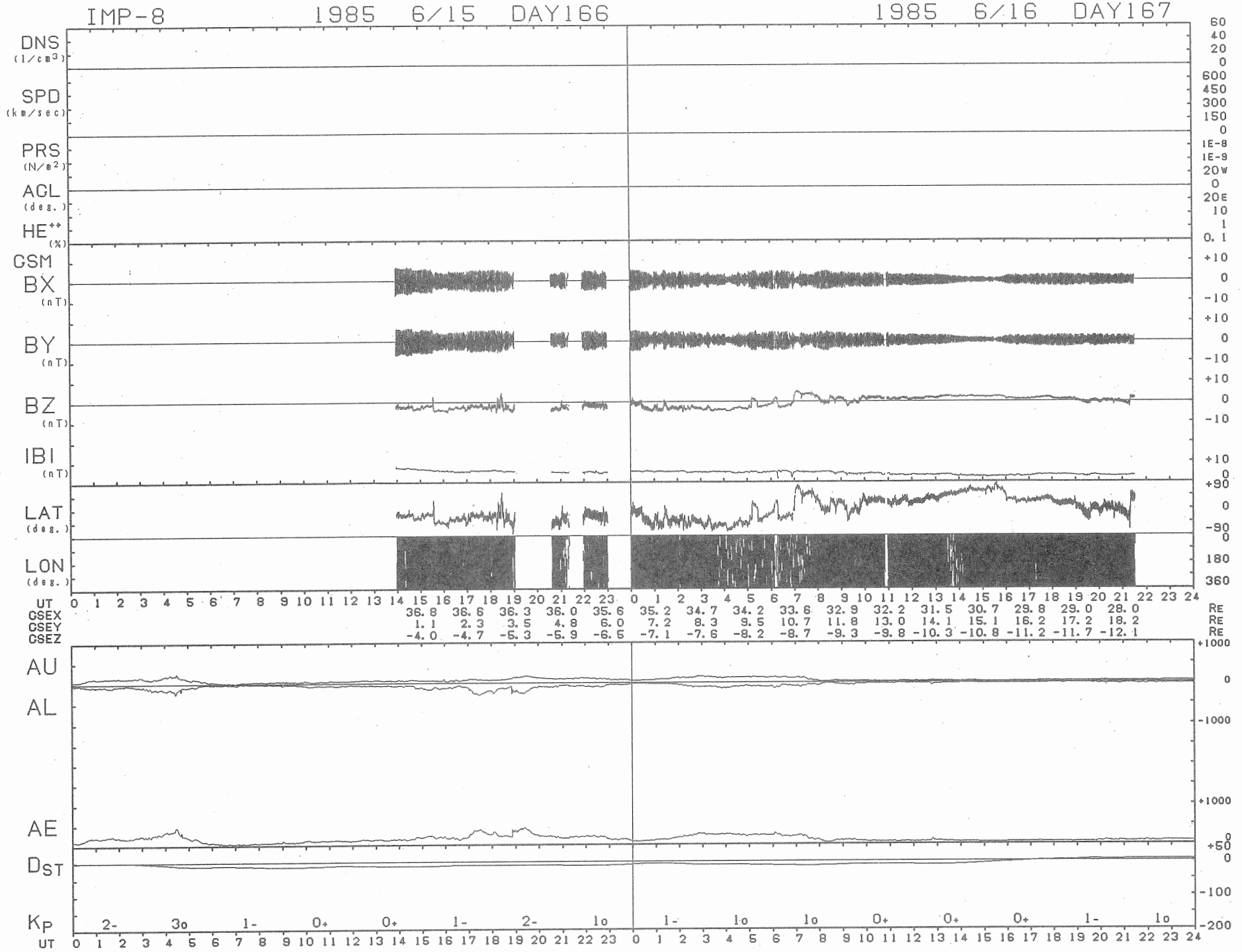

IMP-8
1985 6/ 5 DAY156
1985 6/ 6 DAY157
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.1 10.8 9.3 7.8 6.3 4.8 3.2 1.7 -6.1 -7.6 -9.1 -10.6 -12.1 RE
GSEY 27.3 28.6 28.9 29.2 29.4 29.6 29.6 29.7 28.9 28.6 28.2 27.7 27.2 RE
GSEZ -13.5 -14.3 -14.4 -14.6 -14.7 -14.8 -14.8 -14.9 -14.5 -14.3 -14.1 -13.9 -13.6 RE
AU
AL
AE
DST
KP
1+ 1+ 1+ 1o 1o 1o 1+ 2- 3- 3o 2- 2+ 5- 5o 3o 5+
UT

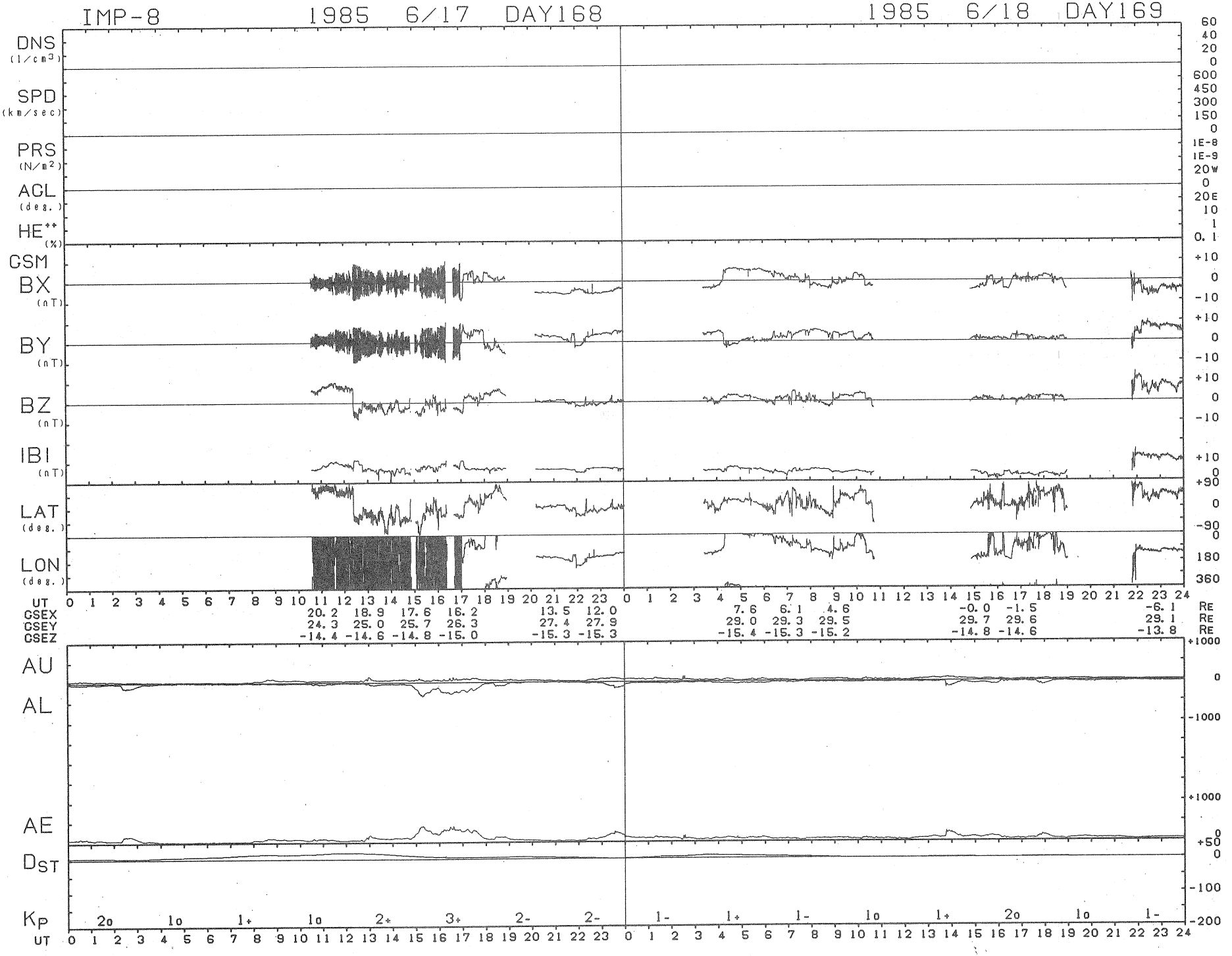

IMP-8
1985 6/ 7 DAY158
1985 6/ 8 DAY159
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.8 -25.8 -26.8 -27.7 -32.2 -32.6 -33.4 RE
GSEY 19.1 18.0 16.9 15.7 6.9 5.6 1.5 RE
GSEZ -9.3 -8.8 -8.2 -7.6 -2.9 -2.2 -0.1 RE
AU
AL
AE
DST
KP 4- 4+ 5- 4+ 5- 4+ 4+ 3- 4o 4+ 4- 3+ 2+ 2+ 2o 2o
UT

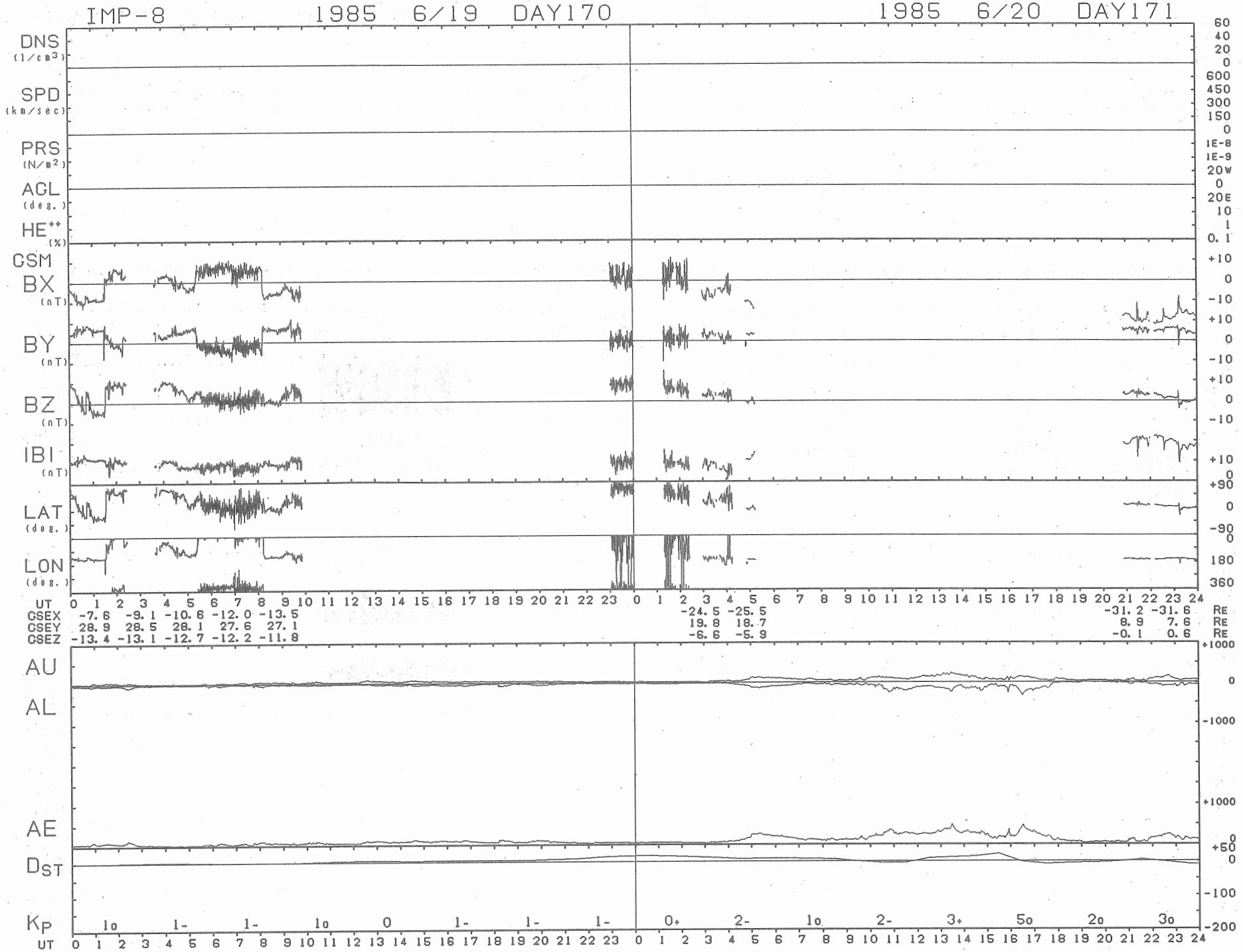

IMP-8
1985 6/ 9 DAY160
1985 6/10 DAY161
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
-26.0 -25.1 -24.1 -23.1 -22.0 -21.0 -19.8 -16.3 -15.1 -13.8 RE
-21.1 -22.1 -23.1 -24.0 -24.9 -25.8 -26.6 -28.8 -29.4 -30.0 RE
11.4 11.9 12.3 12.8 13.2 13.6 14.0 15.0 15.3 15.5 RE
AU
AL
AE
DST
KP
1+ 2+ 2+ 1o 1- 2+ 5- 6+ 5+ 6- 5- 4+ 2+ 2+ 3o 3o
UT

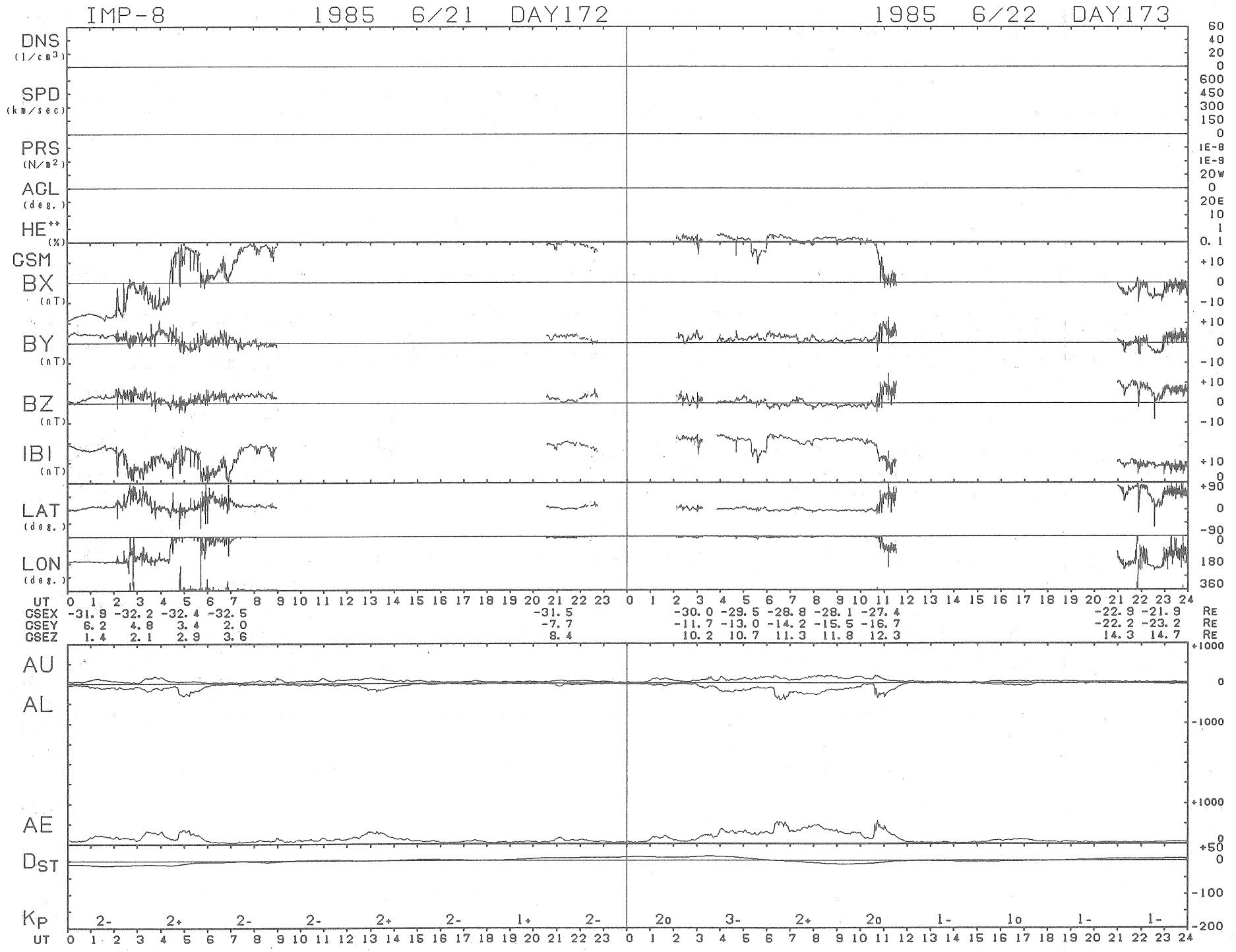

IMP-8
1985 6/11 DAY162
1985 6/12 DAY163
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
60 40 20 0
600 450 300 150 0
1E-8 1E-9 20W 0 20E 10 1 0.1
+10 0 -10
+10 0 -10
+10 0 -10
+10 0 -10
+90 0 -90
0 180 360
GSEX
GSEY
GSEZ
RE RE RE
+1000 0 -1000
AU
AL
AE
DST
KP
3- 3+ 2o 2+ 2- 2+ 3- 3- 3o 3o 3- 1+ 2o 2o 2+ 2o
+1000 0
+50 0 -100 -200

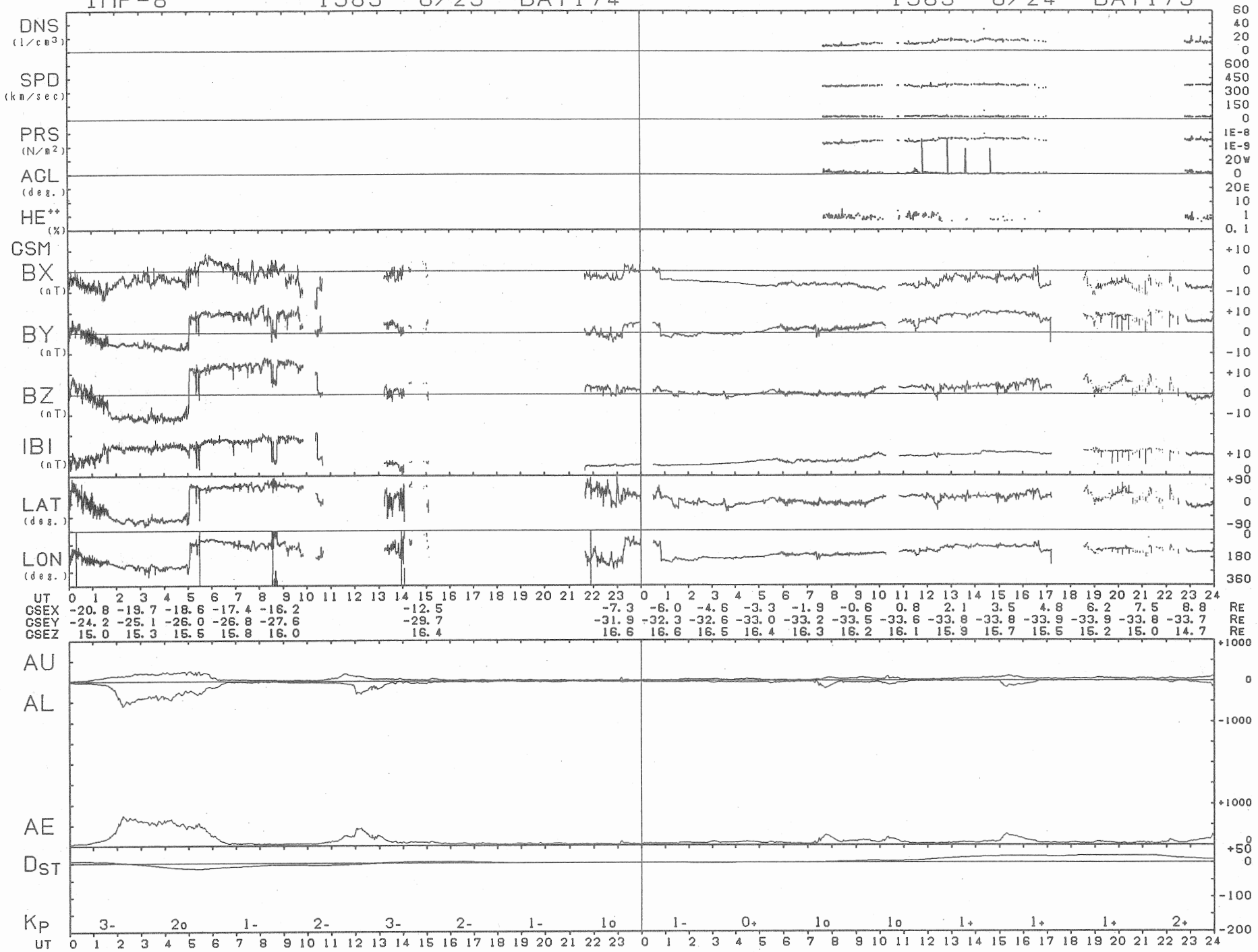

IMP-8
1985 6/13 DAY164
1985 6/14 DAY165
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
1- 1- 1- 0+ 1+ 2- 1+ 2+ 1+ 1- 1+ 1- 1o 1- 0+ 2-

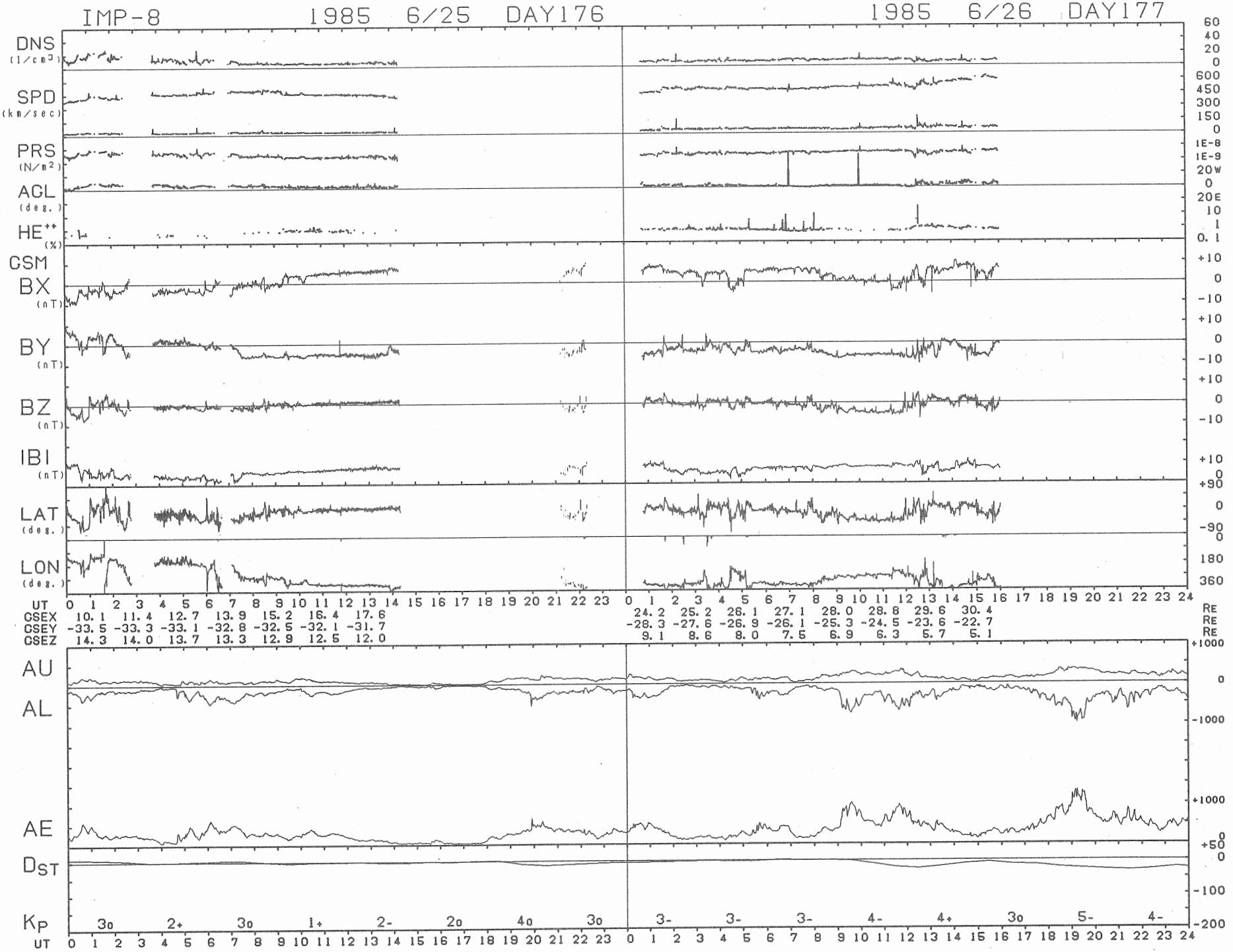

IMP-8
1985 6/15 DAY166
1985 6/16 DAY167
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
2- 3o 1- 0+ 0+ 1- 2- 1o 1- 1o 1o 0+ 0+ 0+ 1- 1o

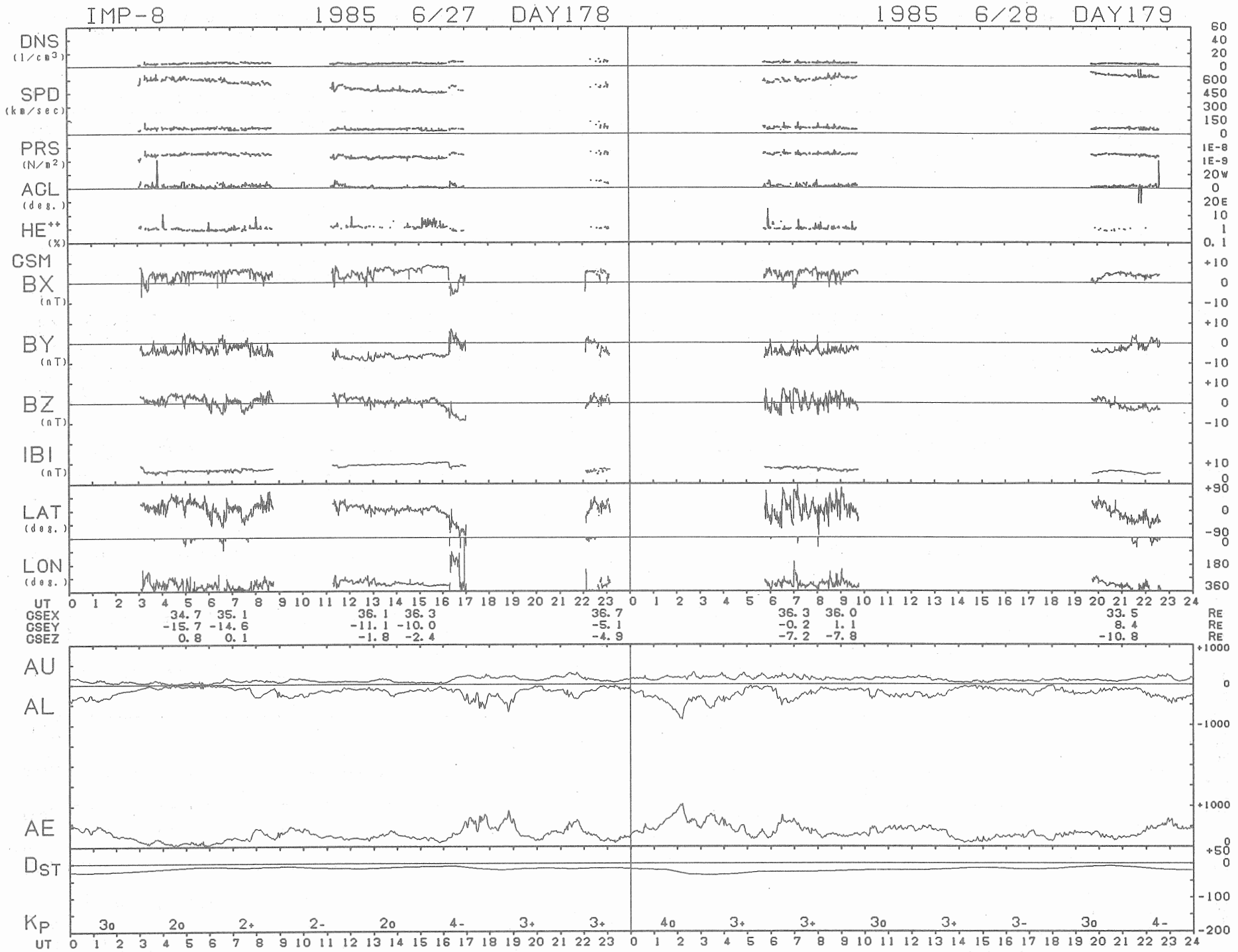

IMP-8
1985 6/17 DAY168
1985 6/18 DAY169
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.2 18.9 17.6 16.2 13.5 12.0 7.6 6.1 4.6 -0.0 -1.5 -6.1 RE
GSEY 24.3 25.0 25.7 26.3 27.4 27.9 29.0 29.3 29.5 29.7 29.6 29.1 RE
GSEZ -14.4 -14.6 -14.8 -15.0 -15.3 -15.3 -15.4 -15.3 -15.2 -14.8 -14.6 -13.8 RE
AU
AL
AE
DST
KP 2o 1o 1+ 1o 2+ 3+ 2- 2- 1- 1+ 1- 1o 1+ 2o 1o 1-
UT

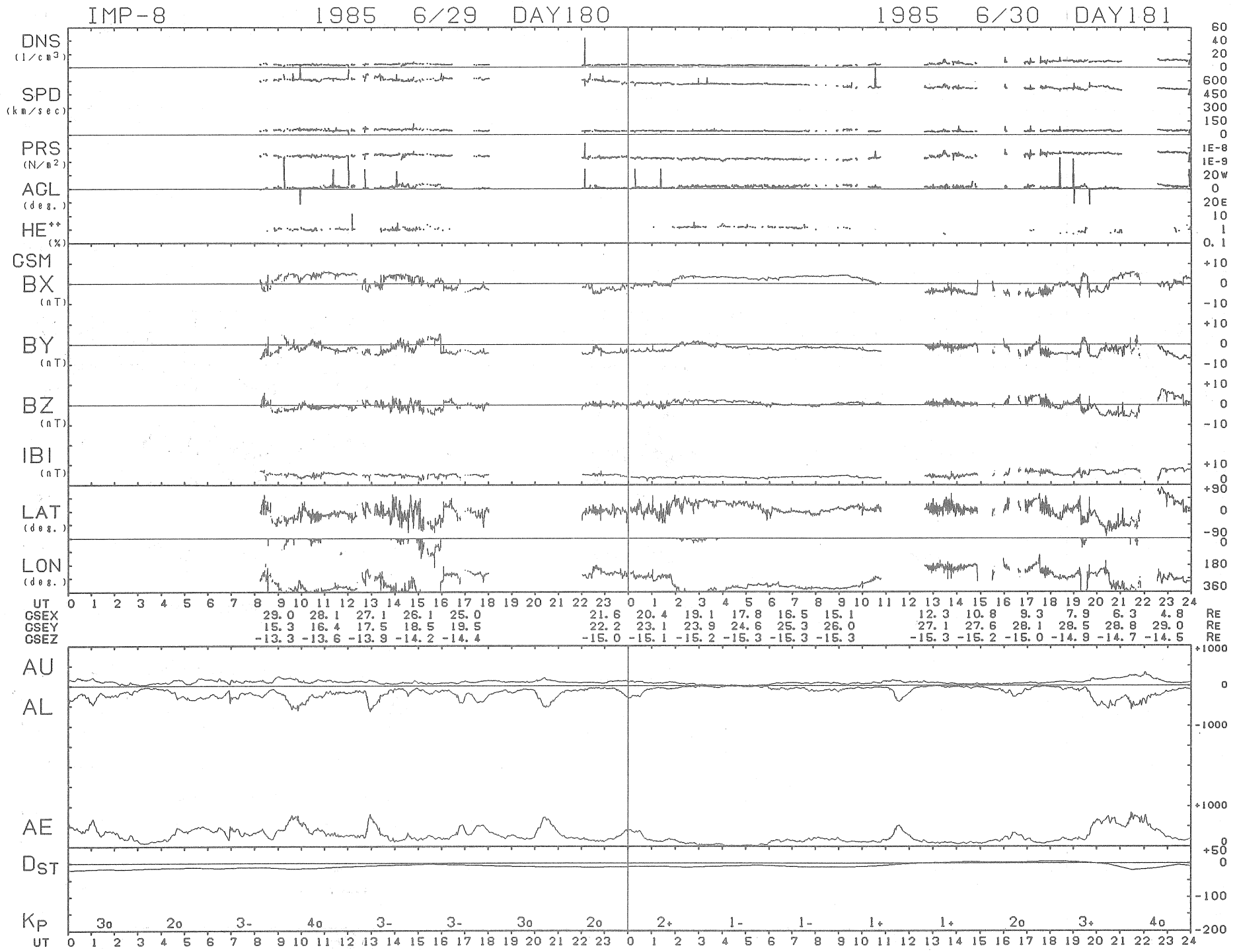

IMP-8
1985 6/19 DAY170
1985 6/20 DAY171
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.6 -9.1 -10.6 -12.0 -13.5 -24.5 -25.5 -31.2 -31.6 RE
GSEY 28.9 28.5 28.1 27.6 27.1 19.8 18.7 8.9 7.6 RE
GSEZ -13.4 -13.1 -12.7 -12.2 -11.8 -6.6 -5.9 -0.1 0.6 RE
AU
AL
AE
DST
KP
1o 1- 1- 1o 0 1- 1- 1- 0+ 2- 1o 2- 3+ 5o 2o 3o
UT

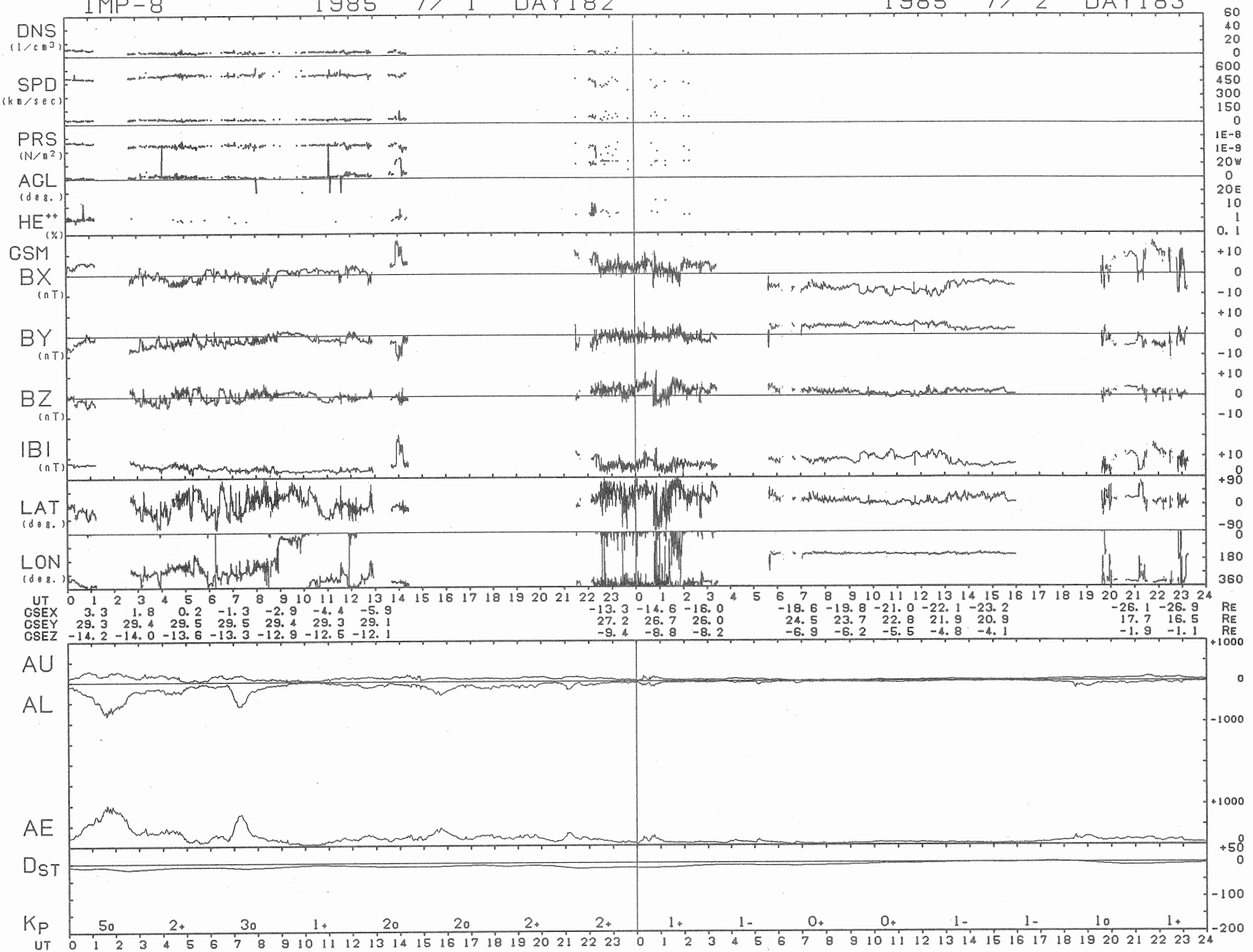

IMP-8 1985 6/21 DAY172
1985 6/22 DAY173
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.9 -32.2 -32.4 -32.5 -31.5 -30.0 -29.5 -28.8 -28.1 -27.4 -22.9 -21.9 RE
GSEY 6.2 4.8 3.4 2.0 -7.7 -11.7 -13.0 -14.2 -15.5 -16.7 -22.2 -23.2 RE
GSEZ 1.4 2.1 2.9 3.6 8.4 10.2 10.7 11.3 11.8 12.3 14.3 14.7 RE
AU
AL
AE
DST
KP
2- 2+ 2- 2- 2+ 2- 1+ 2- 2o 3- 2+ 2o 1- 1o 1- 1-

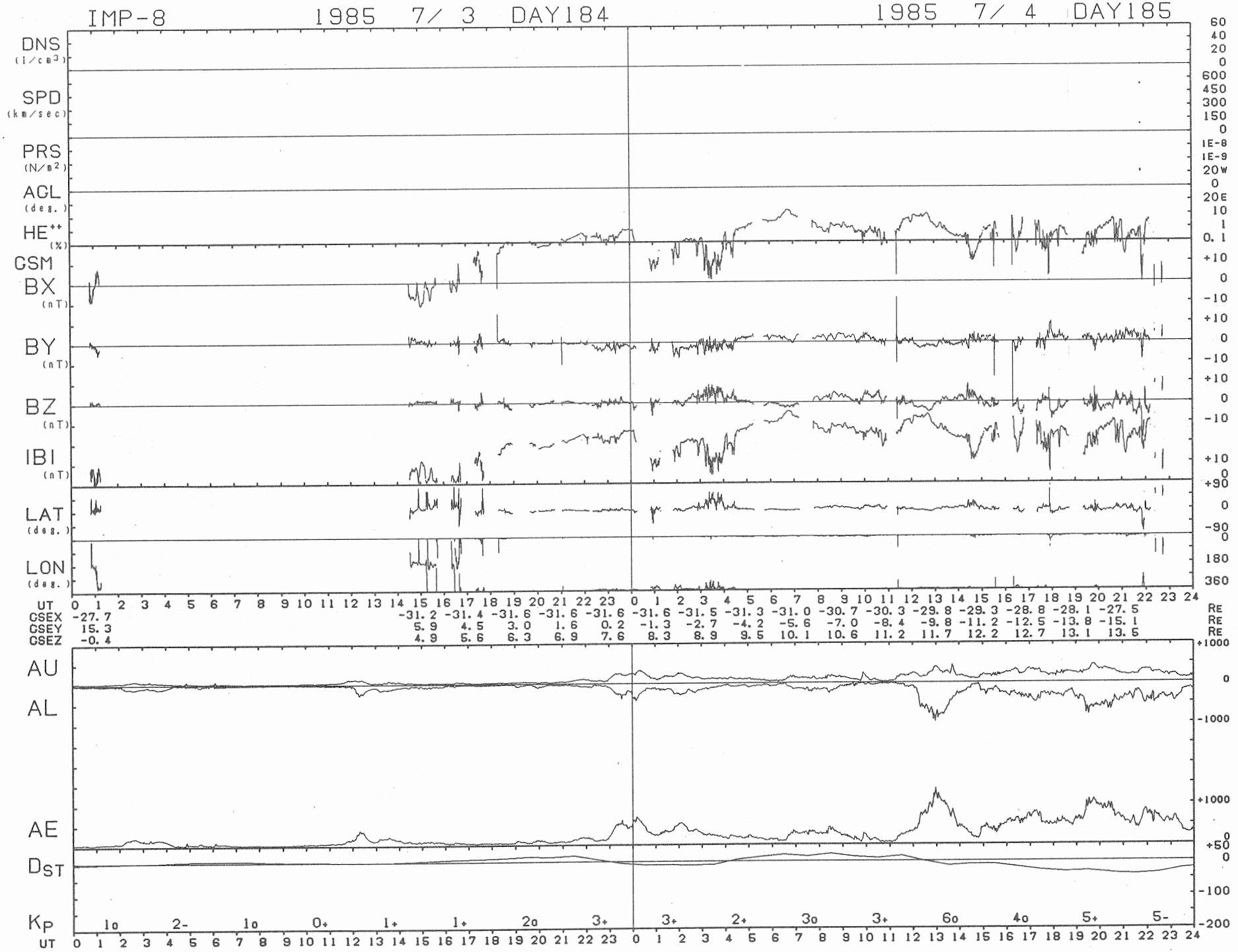

IMP-8 1985 6/23 DAY174
1985 6/24 DAY175
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.8 -19.7 -18.6 -17.4 -16.2 -12.5 -7.3 -6.0 -4.6 -3.3 -1.9 -0.6 0.8 2.1 3.5 4.8 6.2 7.5 8.8 RE
GSEY -24.2 -25.1 -26.0 -26.8 -27.6 -29.7 -31.9 -32.3 -32.6 -33.0 -33.2 -33.5 -33.6 -33.8 -33.8 -33.9 -33.9 -33.8 -33.7 RE
GSEZ 15.0 15.3 15.5 15.8 16.0 16.4 16.6 16.6 16.5 16.4 16.3 16.2 16.1 15.9 15.7 15.5 15.2 15.0 14.7 RE
AU
AL
AE
DST
KP
3- 2o 1- 2- 3- 2- 1- 1o 1- 0+ 1o 1o 1+ 1+ 1+ 2+
UT

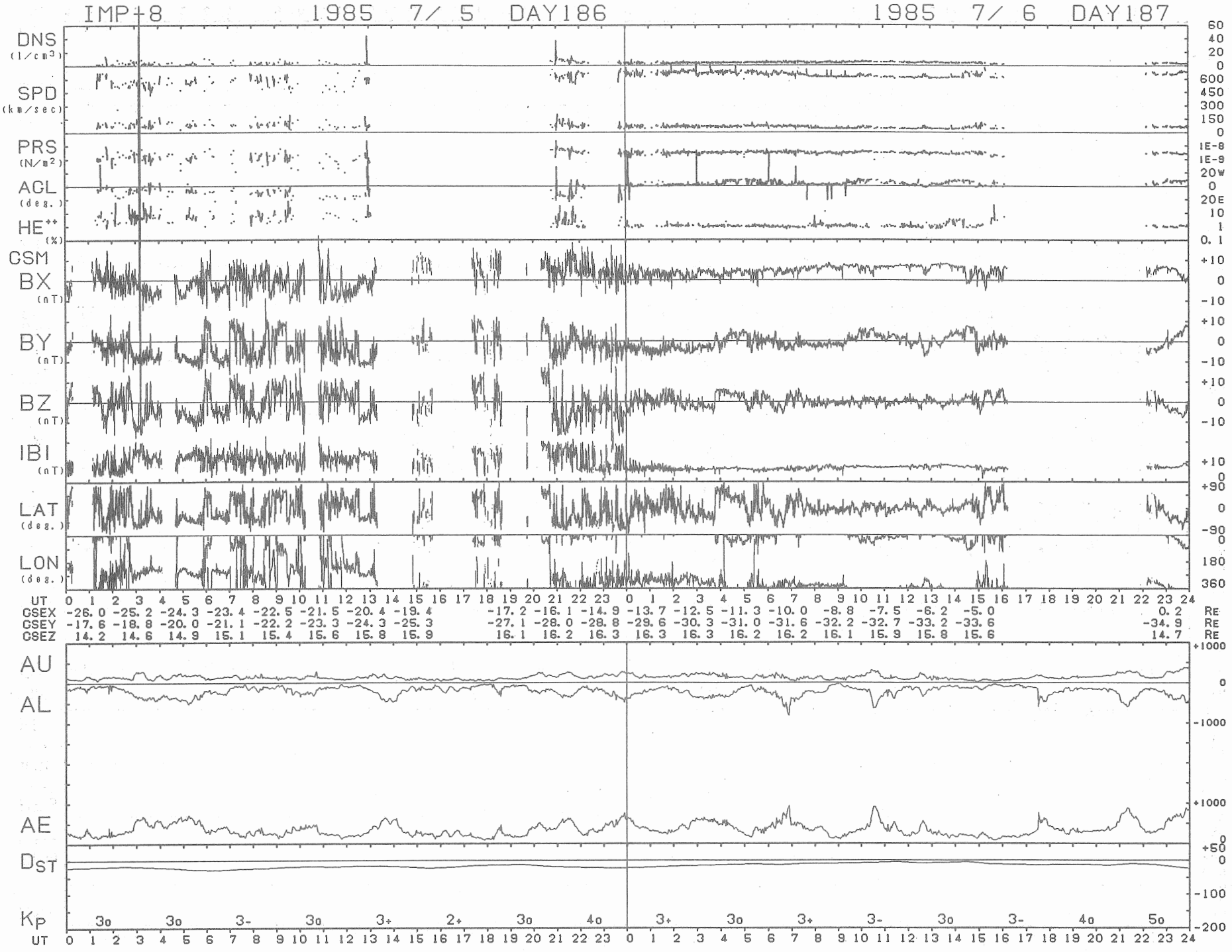

IMP-8 1985 6/25 DAY176
1985 6/26 DAY177
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.1 11.4 12.7 13.9 15.2 16.4 17.6 24.2 25.2 26.1 27.1 28.0 28.8 29.6 30.4
GSEY -33.5 -33.3 -33.1 -32.8 -32.5 -32.1 -31.7 -28.3 -27.6 -26.9 -26.1 -25.3 -24.5 -23.6 -22.7
GSEZ 14.3 14.0 13.7 13.3 12.9 12.5 12.0 9.1 8.6 8.0 7.5 6.9 6.3 5.7 5.1
Re
AU
AL
AE
Dst
Kp
3o 2+ 3o 1+ 2- 2o 4o 3o 3- 3- 3- 4- 4+ 3o 5- 4-

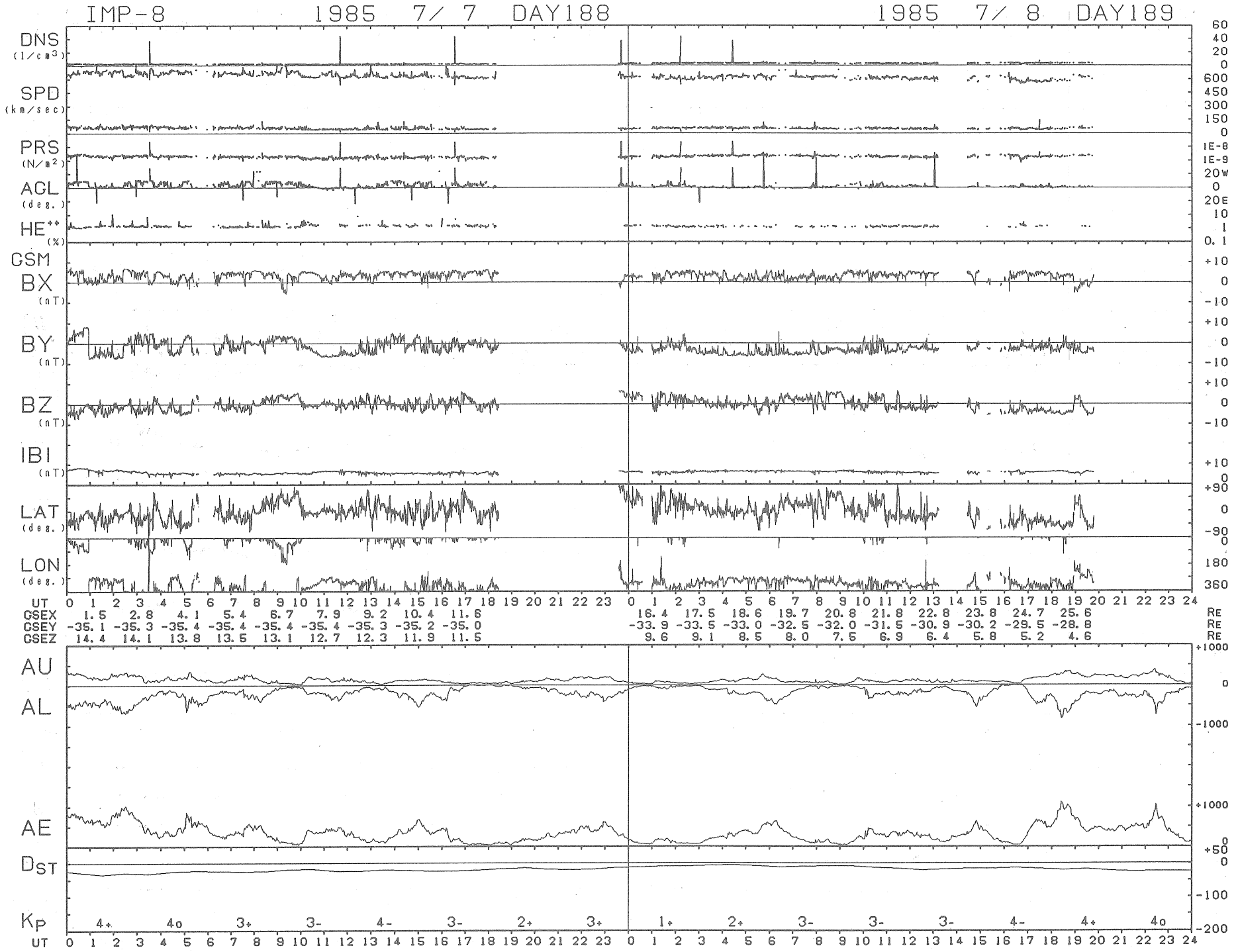

IMP-8 1985 6/27 DAY178
1985 6/28 DAY179
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.7 35.1 36.1 36.3 36.7 36.3 36.0 33.5 RE
GSEY -15.7 -14.6 -11.1 -10.0 -5.1 -0.2 1.1 8.4 RE
GSEZ 0.8 0.1 -1.8 -2.4 -4.9 -7.2 -7.8 -10.8 RE
AU
AL
AE
DST
KP 3o 2o 2+ 2- 2o 4- 3+ 3+ 4o 3+ 3+ 3o 3+ 3- 3o 4-
UT

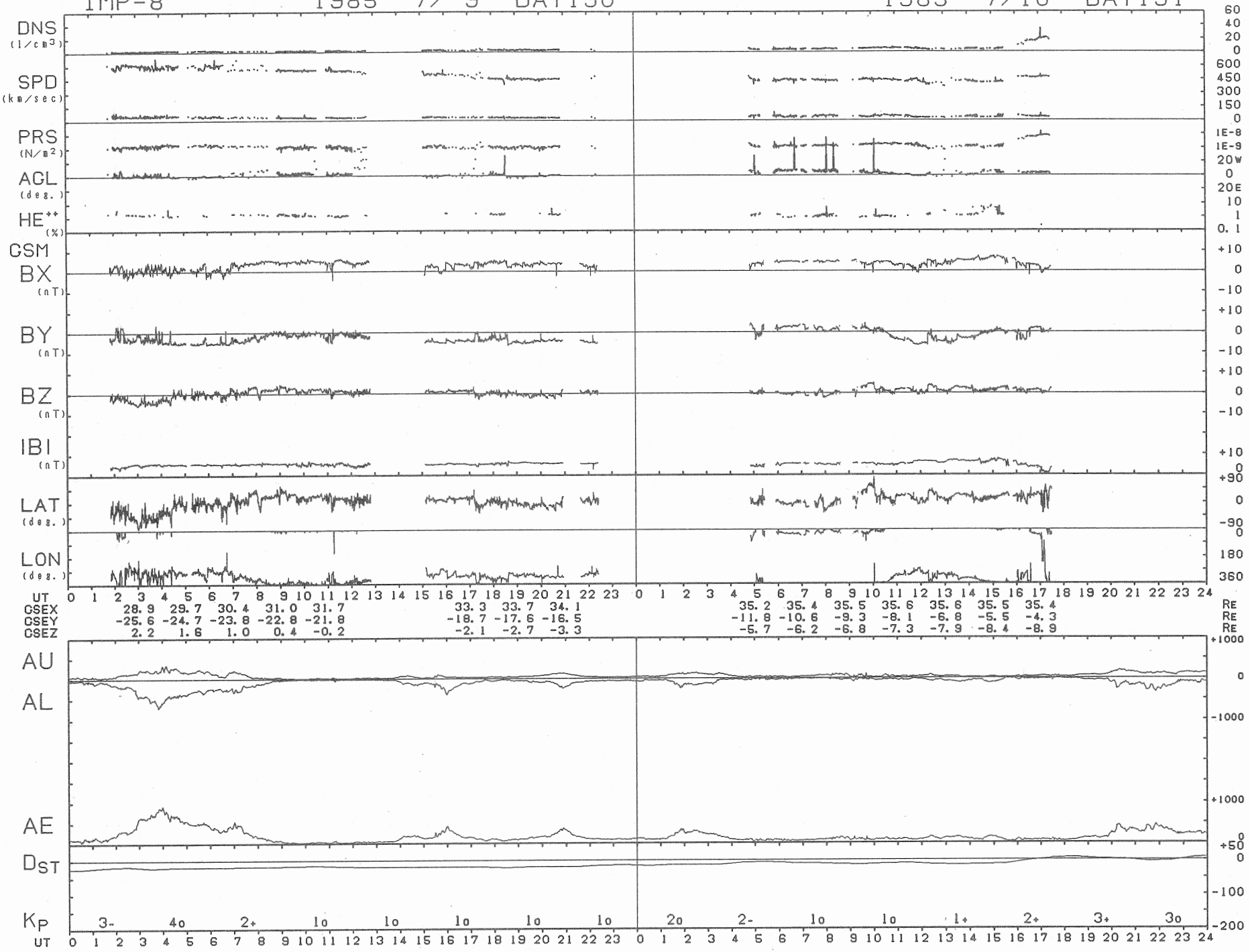

IMP-8 1985 6/29 DAY180
1985 6/30 DAY181
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.0 28.1 27.1 26.1 25.0 21.6 20.4 19.1 17.8 16.5 15.1 12.3 10.8 9.3 7.9 6.3 4.8 RE
GSEY 15.3 16.4 17.5 18.5 19.5 22.2 23.1 23.9 24.6 25.3 26.0 27.1 27.6 28.1 28.5 28.8 29.0 RE
GSEZ -13.3 -13.6 -13.9 -14.2 -14.4 -15.0 -15.1 -15.2 -15.3 -15.3 -15.3 -15.3 -15.2 -15.0 -14.9 -14.7 -14.5 RE
AU
AL
AE
DST
KP 3o 2o 3- 4o 3- 3- 3o 2o 2+ 1- 1- 1+ 1+ 2o 3+ 4o
UT

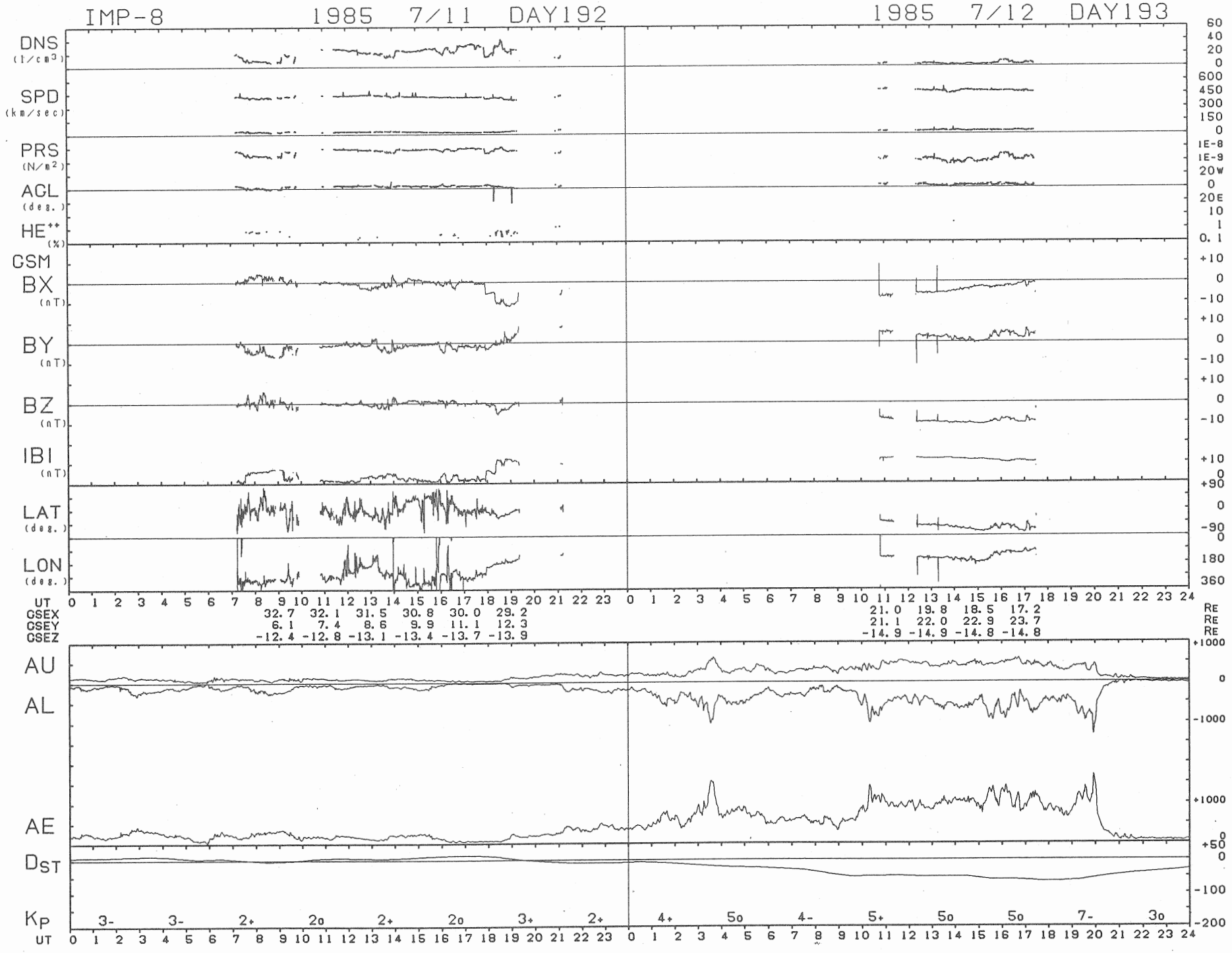

IMP-8 1985 7/ 1 DAY182
1985 7/ 2 DAY183
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.3 1.8 0.2 -1.3 -2.9 -4.4 -5.9 -13.3 -14.6 -16.0 -18.6 -19.8 -21.0 -22.1 -23.2 -26.1 -26.9 RE
GSEY 29.3 29.4 29.5 29.5 29.4 29.3 29.1 27.2 26.7 26.0 24.5 23.7 22.8 21.9 20.9 17.7 16.5 RE
GSEZ -14.2 -14.0 -13.6 -13.3 -12.9 -12.5 -12.1 -9.4 -8.8 -8.2 -6.9 -6.2 -5.5 -4.8 -4.1 -1.9 -1.1 RE
AU
AL
AE
DST
KP 5o 2+ 3o 1+ 2o 2o 2+ 2+ 1+ 1- 0+ 0+ 1- 1- 1o 1+
UT

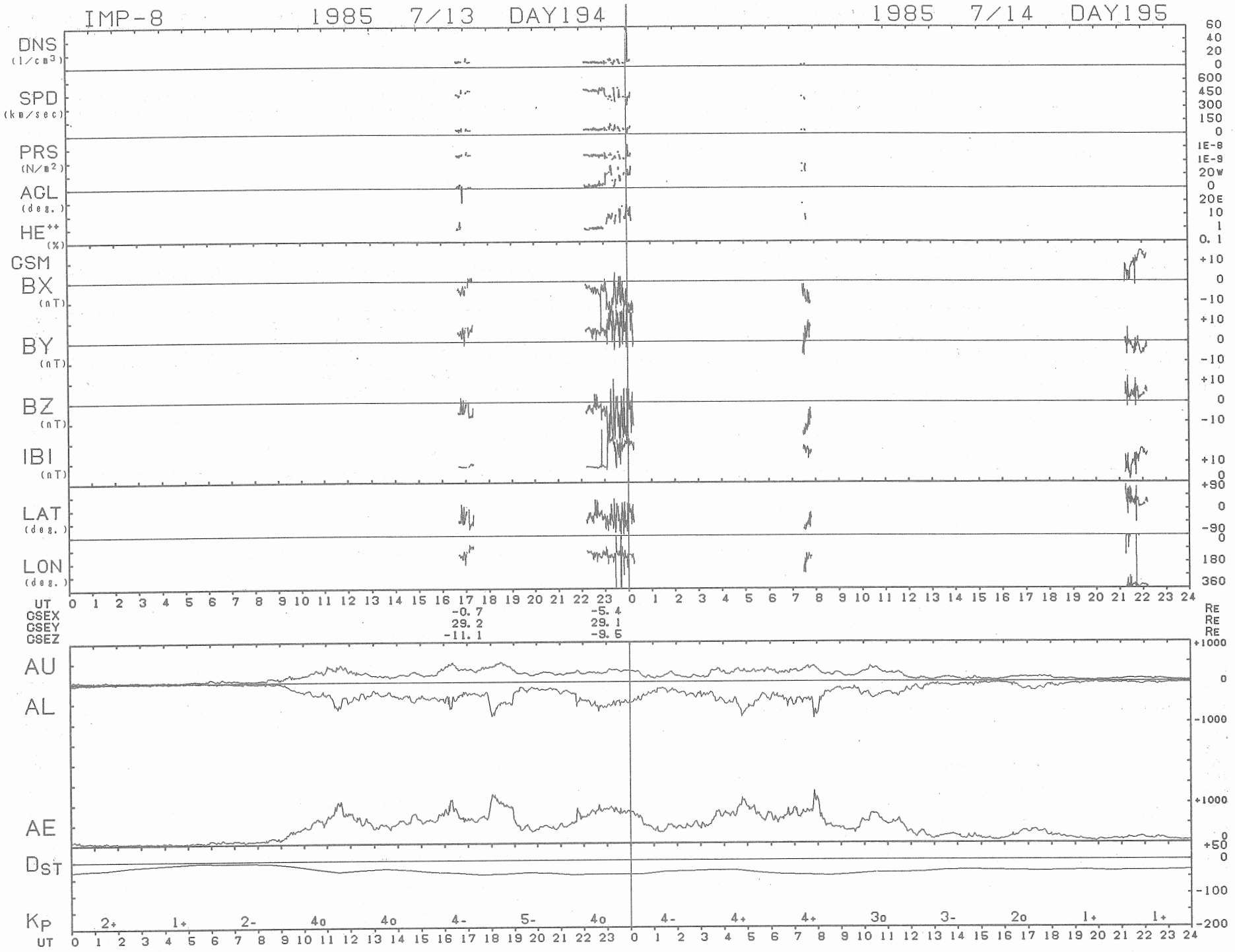

IMP-8
1985 7/ 3 DAY184
1985 7/ 4 DAY185
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.7
GSEY 15.3
GSEZ -0.4
-31.2 -31.4 -31.6 -31.6 -31.6 -31.6 -31.5 -31.3 -31.0 -30.7 -30.3 -29.8 -29.3 -28.8 -28.1 -27.5
5.9 4.5 3.0 1.6 0.2 -1.3 -2.7 -4.2 -5.6 -7.0 -8.4 -9.8 -11.2 -12.5 -13.8 -15.1
4.9 5.6 6.3 6.9 7.6 8.3 8.9 9.5 10.1 10.6 11.2 11.7 12.2 12.7 13.1 13.5
RE
AU
AL
AE
DST
KP
1o 2- 1o 0+ 1+ 1+ 2o 3+ 3+ 2+ 3o 3+ 6o 4o 5+ 5-

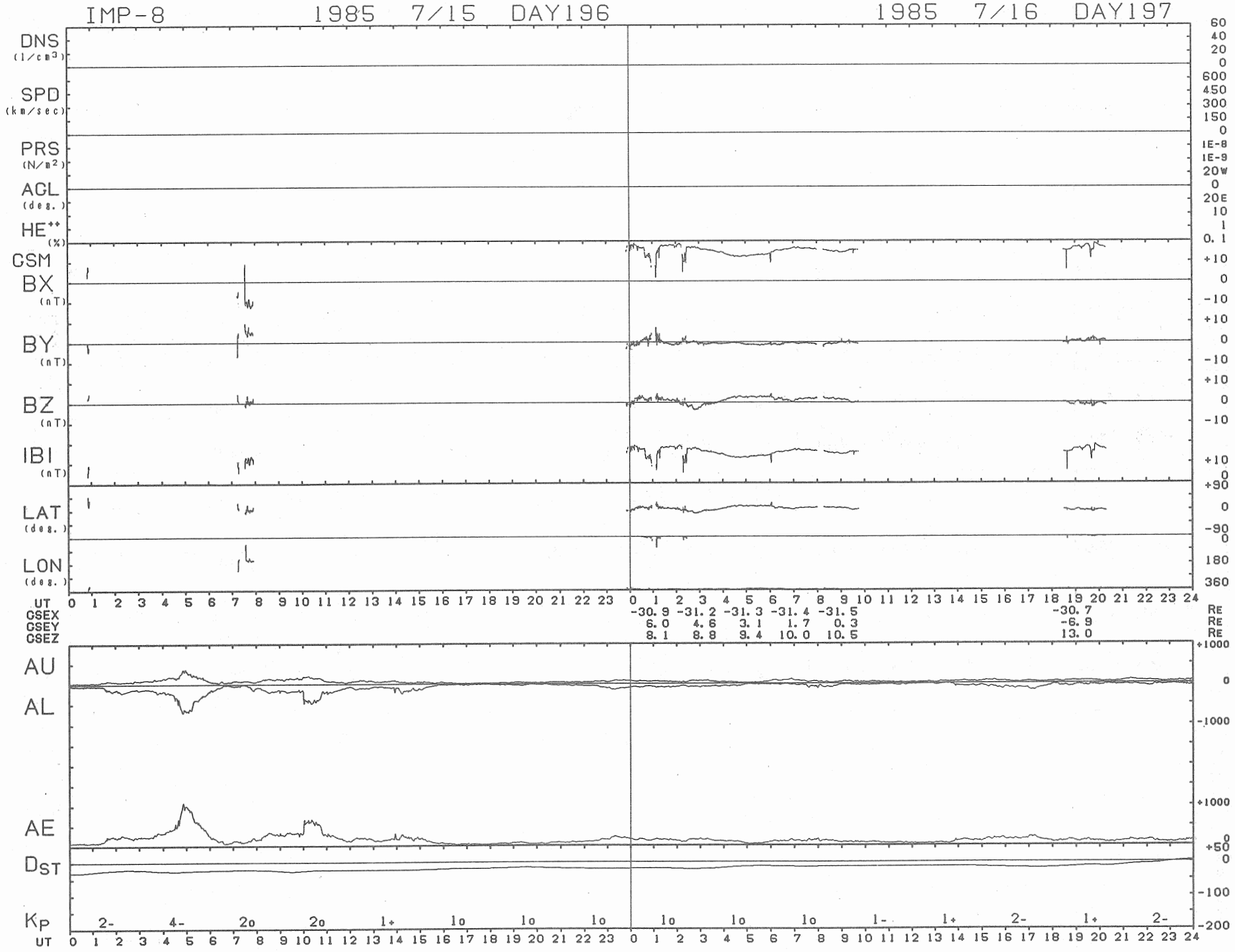

IMP+8
1985 7/ 5 DAY186
1985 7/ 6 DAY187
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX -26.0 -25.2 -24.3 -23.4 -22.5 -21.5 -20.4 -19.4 -17.2 -16.1 -14.9 -13.7 -12.5 -11.3 -10.0 -8.8 -7.5 -6.2 -5.0 0.2 RE
GSEY -17.6 -18.8 -20.0 -21.1 -22.2 -23.3 -24.3 -25.3 -27.1 -28.0 -28.8 -29.6 -30.3 -31.0 -31.6 -32.2 -32.7 -33.2 -33.6 -34.9 RE
GSEZ 14.2 14.6 14.9 15.1 15.4 15.6 15.8 15.9 16.1 16.2 16.3 16.3 16.3 16.2 16.2 16.1 15.9 15.8 15.6 14.7 RE
AU
AL
AE
DST
KP 3o 3o 3- 3o 3+ 2+ 3o 4o 3+ 3o 3+ 3- 3o 3- 4o 5o
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

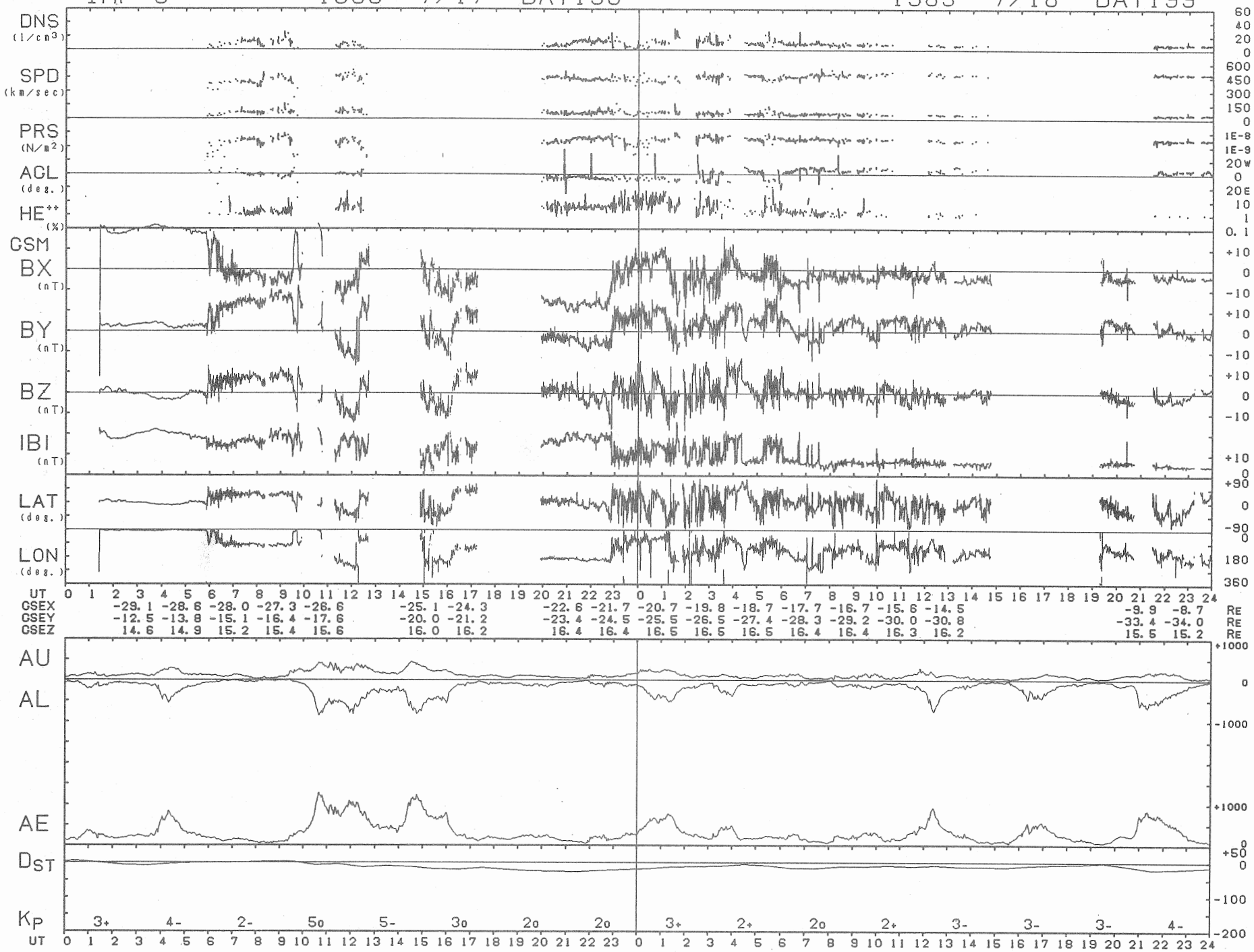

IMP-8 1985 7/ 7 DAY188
1985 7/ 8 DAY189
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 1.5 2.8 4.1 5.4 6.7 7.9 9.2 10.4 11.6 16.4 17.5 18.6 19.7 20.8 21.8 22.8 23.8 24.7 25.6 RE
GSEY -35.1 -35.3 -35.4 -35.4 -35.4 -35.4 -35.3 -35.2 -35.0 -33.9 -33.5 -33.0 -32.5 -32.0 -31.5 -30.9 -30.2 -29.5 -28.8 RE
GSEZ 14.4 14.1 13.8 13.5 13.1 12.7 12.3 11.9 11.5 9.6 9.1 8.5 8.0 7.5 6.9 6.4 5.8 5.2 4.6 RE
AU
AL
AE
DST
KP 4+ 4o 3+ 3- 4- 3- 2+ 3+ 1+ 2+ 3- 3- 3- 4- 4+ 4o
UT

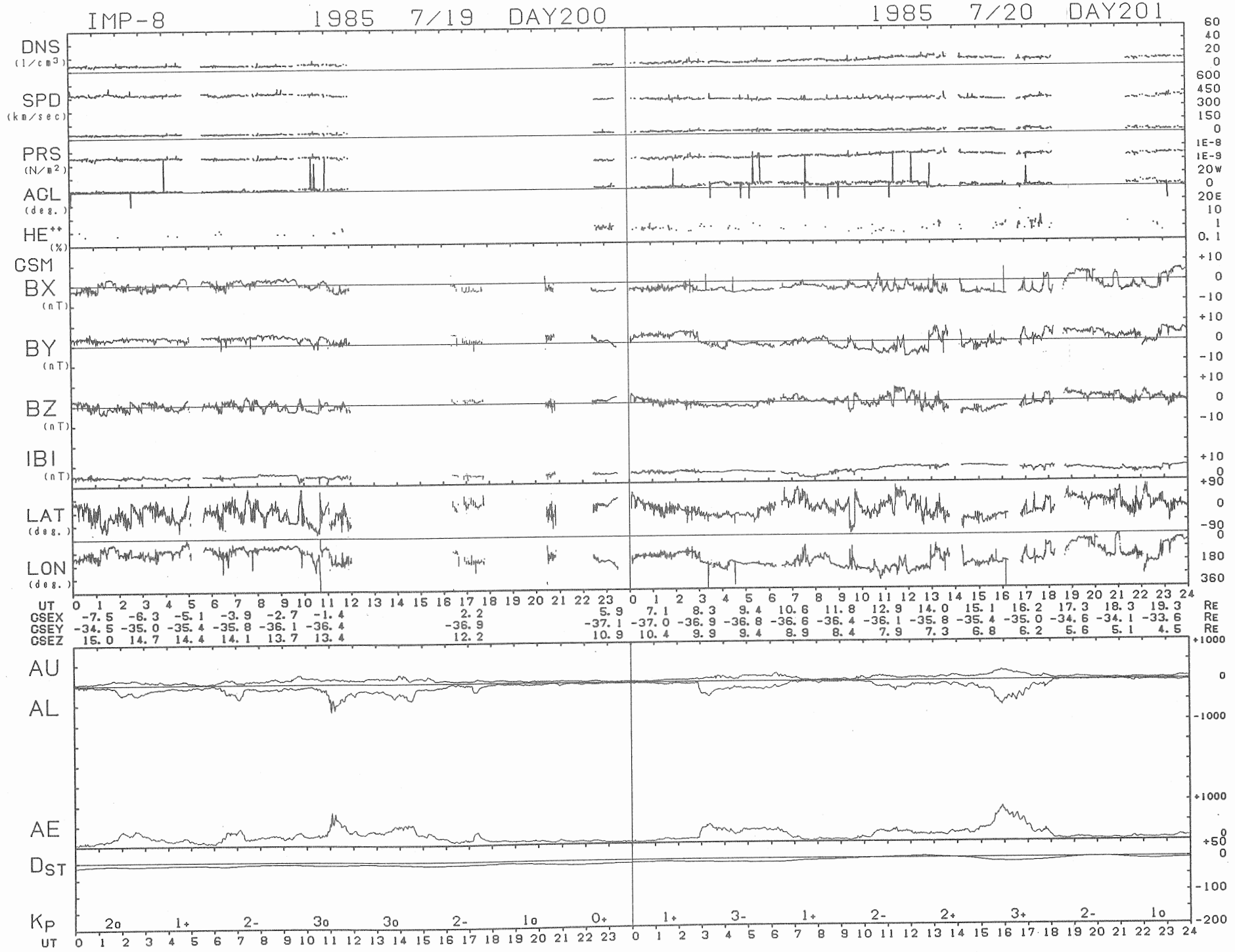

IMP-8 1985 7/ 9 DAY190
1985 7/10 DAY191
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.9 29.7 30.4 31.0 31.7 33.3 33.7 34.1 35.2 35.4 35.5 35.6 35.6 35.5 35.4 RE
GSEY -25.6 -24.7 -23.8 -22.8 -21.8 -18.7 -17.6 -16.5 -11.8 -10.6 -9.3 -8.1 -6.8 -5.5 -4.3 RE
GSEZ 2.2 1.6 1.0 0.4 -0.2 -2.1 -2.7 -3.3 -5.7 -6.2 -6.8 -7.3 -7.9 -8.4 -8.9 RE
AU
AL
AE
DST
KP 3- 4o 2+ 1o 1o 1o 1o 1o 2o 2- 1o 1o 1+ 2+ 3+ 3o
UT

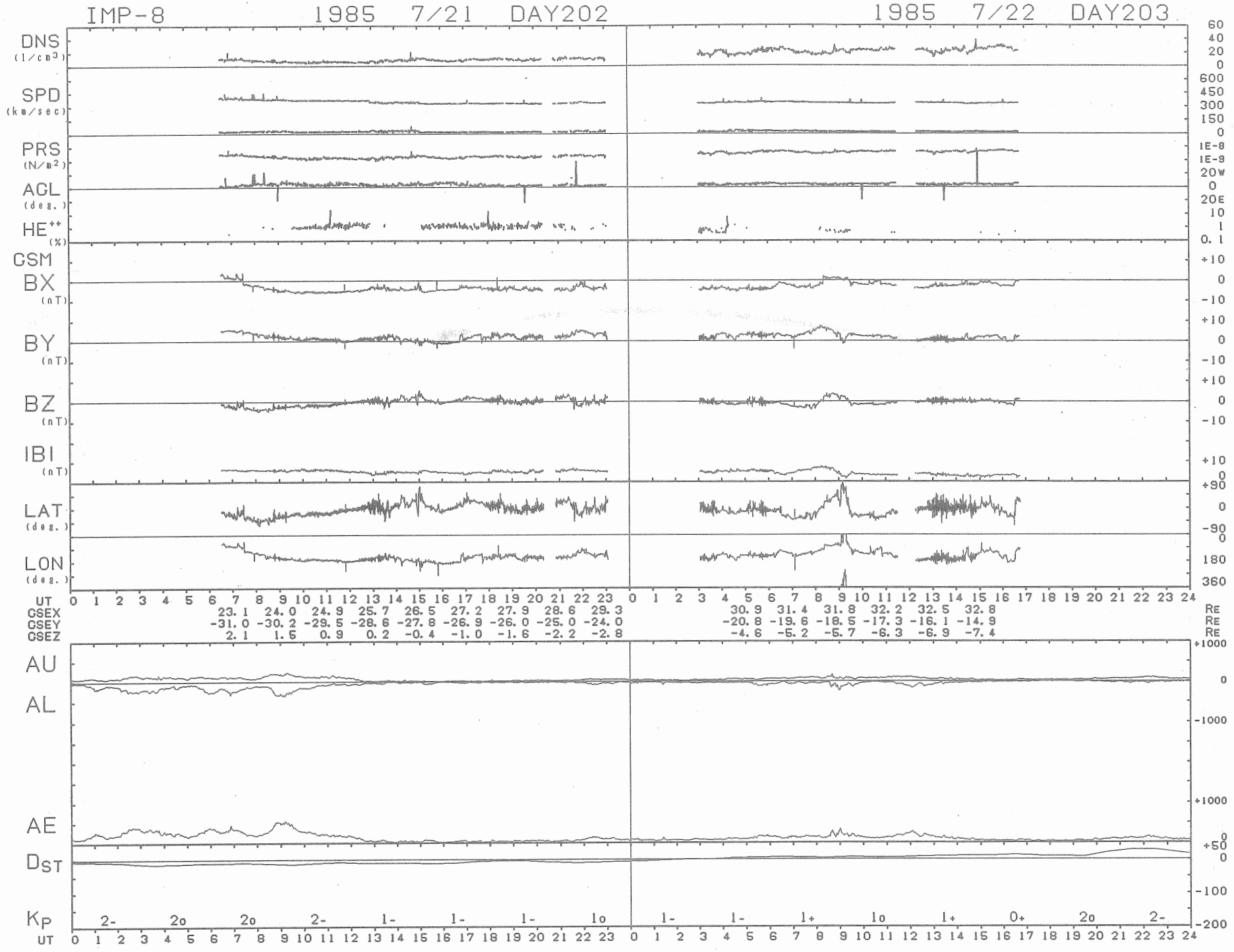

IMP-8
1985 7/11 DAY192
1985 7/12 DAY193
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.7 32.1 31.5 30.8 30.0 29.2
GSEY 6.1 7.4 8.6 9.9 11.1 12.3
GSEZ -12.4 -12.8 -13.1 -13.4 -13.7 -13.9
21.0 19.8 18.5 17.2
21.1 22.0 22.9 23.7
-14.9 -14.9 -14.8 -14.8
RE
AU
AL
AE
DST
KP
3- 3- 2+ 2o 2+ 2o 3+ 2+
4+ 5o 4- 5+ 5o 5o 7- 3o

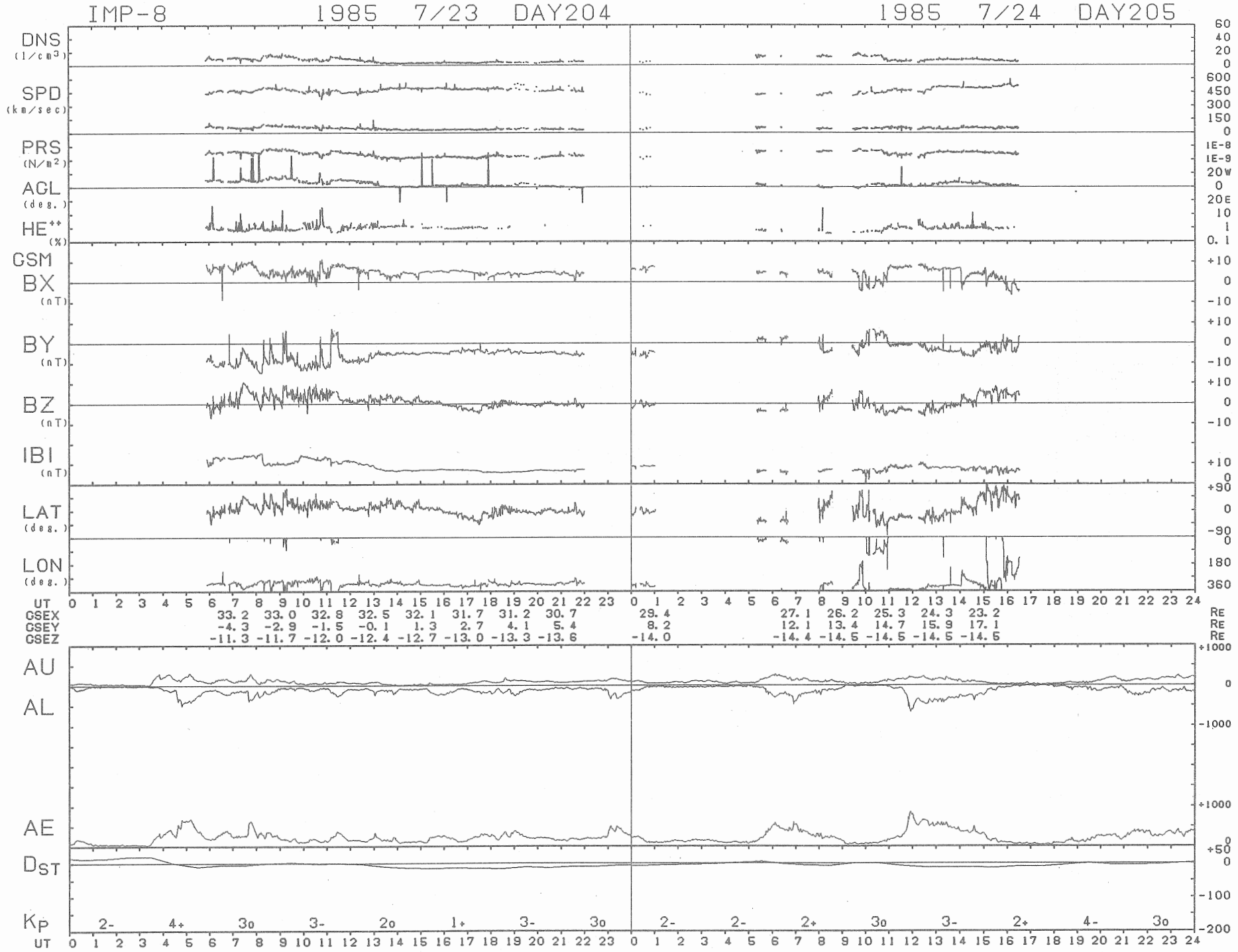

IMP-8
1985 7/13 DAY194
1985 7/14 DAY195
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.7 -5.4 RE
GSEY 29.2 29.1 RE
GSEZ -11.1 -9.5 RE
AU
AL
AE
Dst
Kp
2+ 1+ 2- 4o 4o 4- 5- 4o 4- 4+ 4+ 3o 3- 2o 1+ 1+

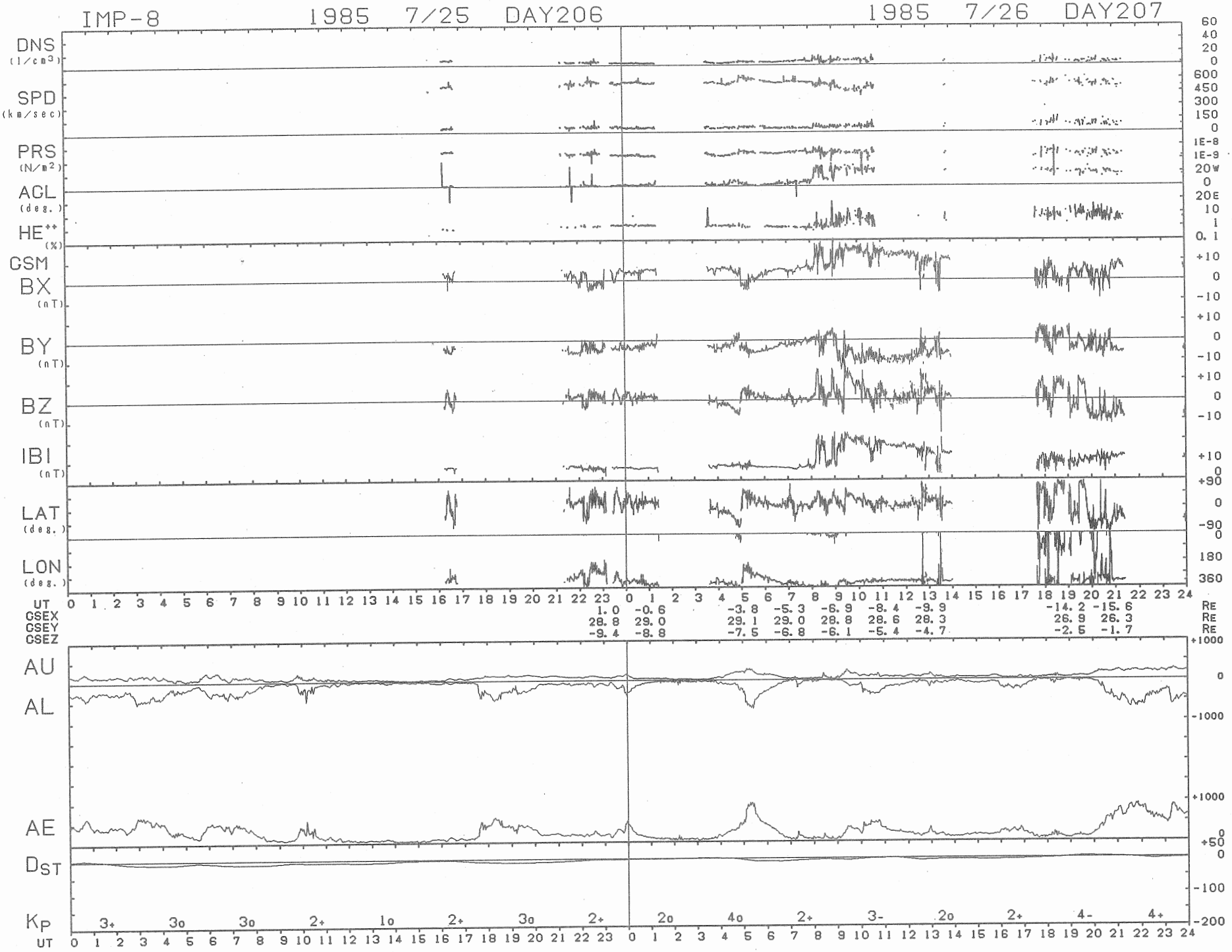

IMP-8
1985 7/15 DAY196
1985 7/16 DAY197
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -30.9 -31.2 -31.3 -31.4 -31.5 -30.7 RE
CSEY 6.0 4.6 3.1 1.7 0.3 -6.9 RE
CSEZ 8.1 8.8 9.4 10.0 10.5 13.0 RE
AU
AL
AE
DST
KP 2- 4- 2o 2o 1+ 1o 1o 1o 1o 1o 1o 1- 1+ 2- 1+ 2-
UT

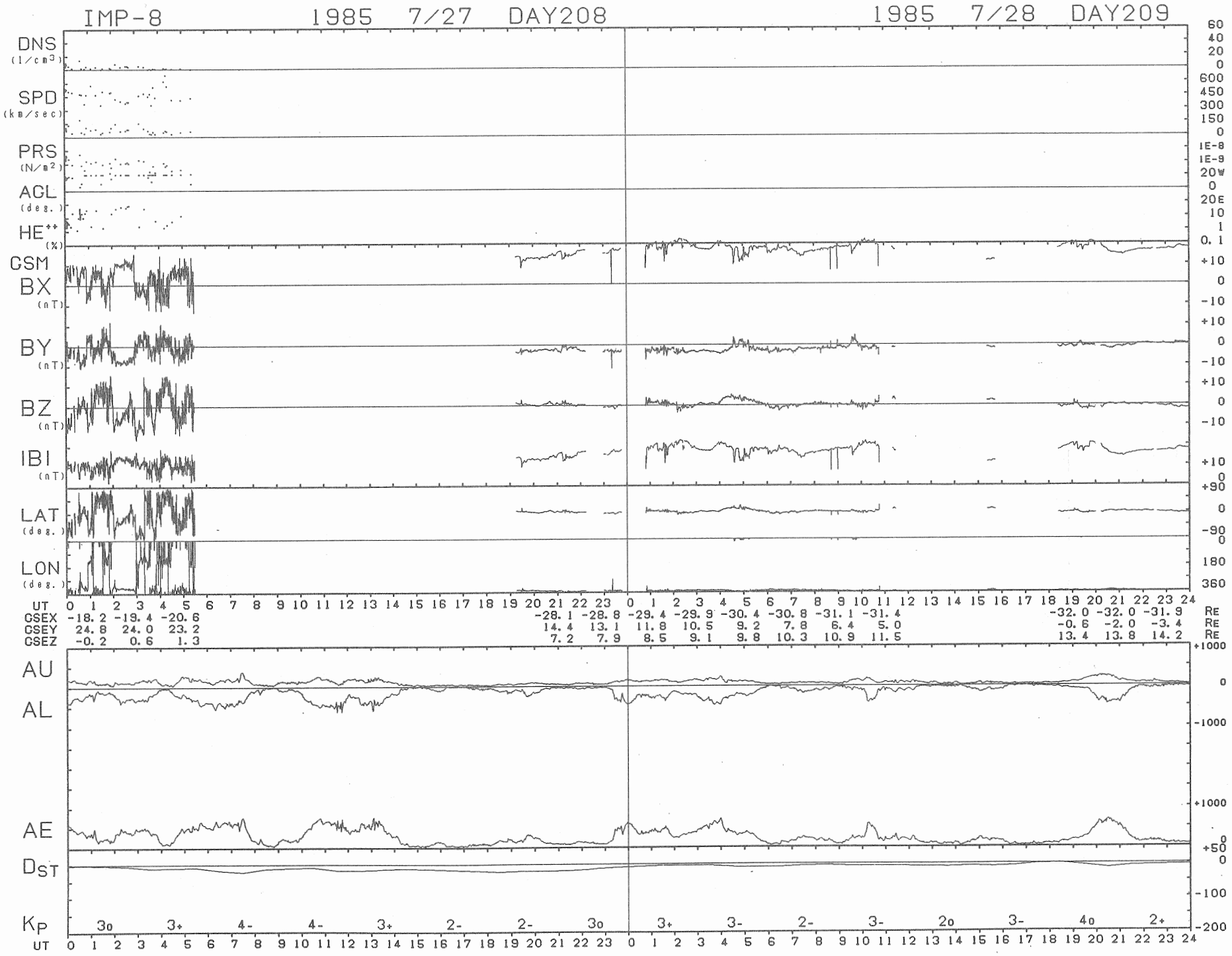

IMP-8 1985 7/17 DAY198
1985 7/18 DAY199
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -29.1 -28.6 -28.0 -27.3 -26.6 -25.1 -24.3 -22.6 -21.7 -20.7 -19.8 -18.7 -17.7 -16.7 -15.6 -14.5 -9.9 -8.7 RE
GSEY -12.5 -13.8 -15.1 -16.4 -17.6 -20.0 -21.2 -23.4 -24.5 -25.5 -26.5 -27.4 -28.3 -29.2 -30.0 -30.8 -33.4 -34.0 RE
GSEZ 14.6 14.9 15.2 15.4 15.6 16.0 16.2 16.4 16.4 16.5 16.5 16.5 16.4 16.4 16.3 16.2 15.5 15.2 RE
AU
AL
AE
DST
KP
3+ 4- 2- 5o 5- 3o 2o 2o 3+ 2+ 2o 2+ 3- 3- 3- 4-
UT

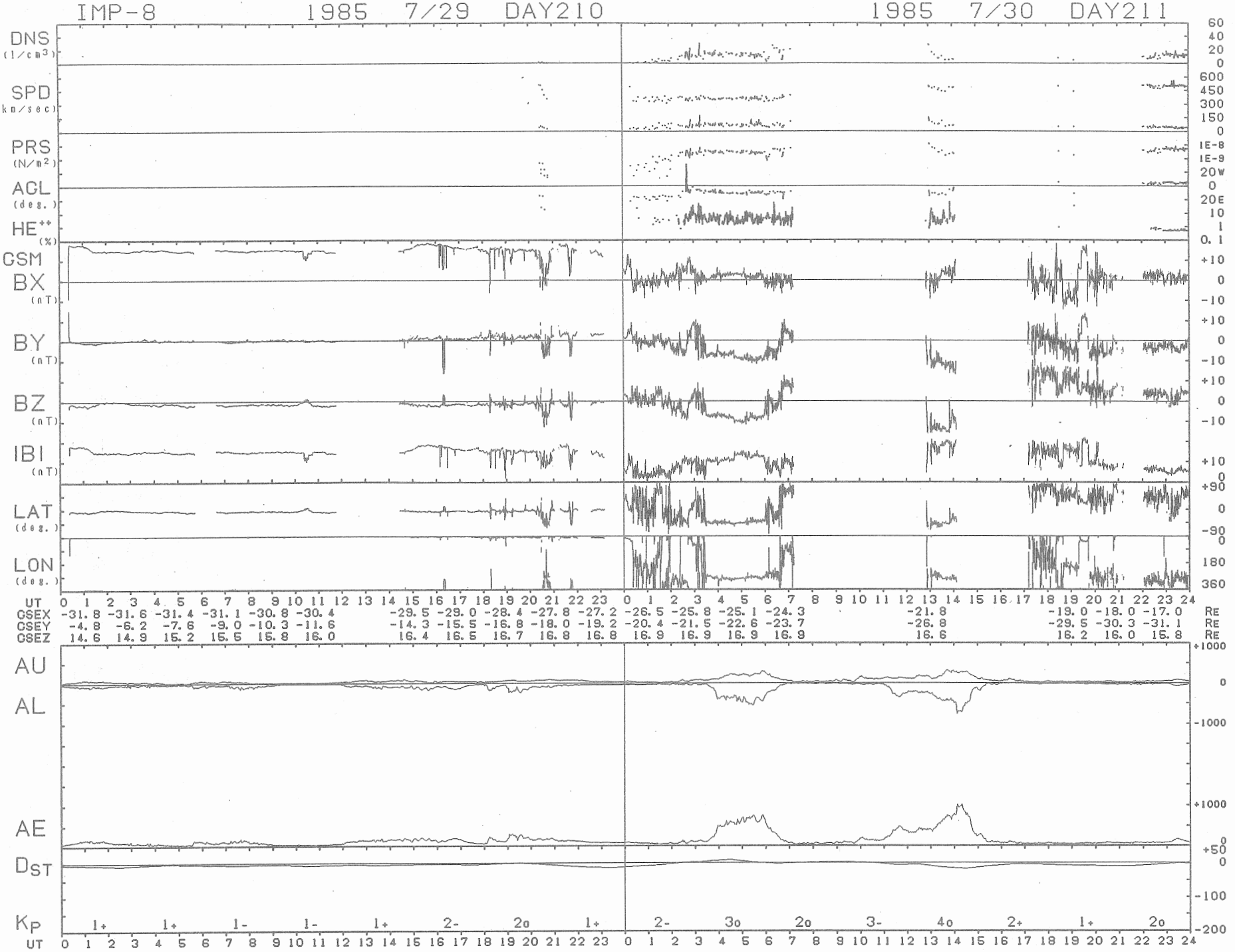

IMP-8 1985 7/19 DAY200
1985 7/20 DAY201
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.5 -6.3 -5.1 -3.9 -2.7 -1.4 2.2 5.9 7.1 8.3 9.4 10.6 11.8 12.9 14.0 15.1 16.2 17.3 18.3 19.3 RE
GSEY -34.5 -35.0 -35.4 -35.8 -36.1 -36.4 -36.9 -37.1 -37.0 -36.9 -36.8 -36.6 -36.4 -36.1 -35.8 -35.4 -35.0 -34.6 -34.1 -33.6 RE
GSEZ 15.0 14.7 14.4 14.1 13.7 13.4 12.2 10.9 10.4 9.9 9.4 8.9 8.4 7.9 7.3 6.8 6.2 5.6 5.1 4.5 RE
AU
AL
AE
DST
KP
2o 1+ 2- 3o 3o 2- 1o 0+ 1+ 3- 1+ 2- 2+ 3+ 2- 1o
UT

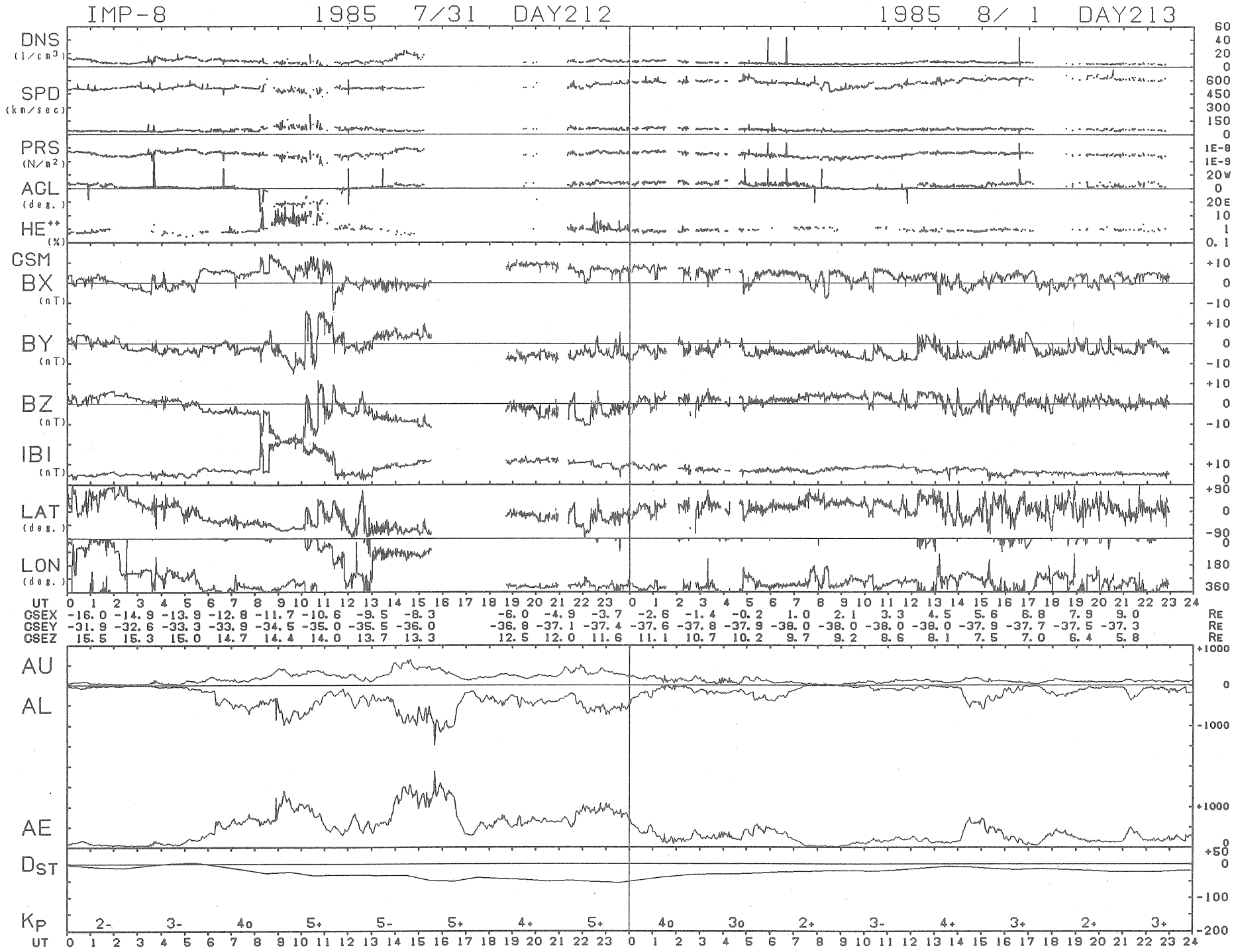

IMP-8
1985 7/21 DAY202
1985 7/22 DAY203
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.1 24.0 24.9 25.7 26.5 27.2 27.9 28.6 29.3 30.9 31.4 31.8 32.2 32.5 32.8 RE
GSEY -31.0 -30.2 -29.5 -28.6 -27.8 -26.9 -26.0 -25.0 -24.0 -20.8 -19.6 -18.5 -17.3 -16.1 -14.9 RE
GSEZ 2.1 1.5 0.9 0.2 -0.4 -1.0 -1.6 -2.2 -2.8 -4.6 -5.2 -5.7 -6.3 -6.9 -7.4 RE
AU
AL
AE
DST
KP 2- 2o 2o 2- 1- 1- 1- 1o 1- 1- 1+ 1o 1+ 0+ 2o 2-
UT

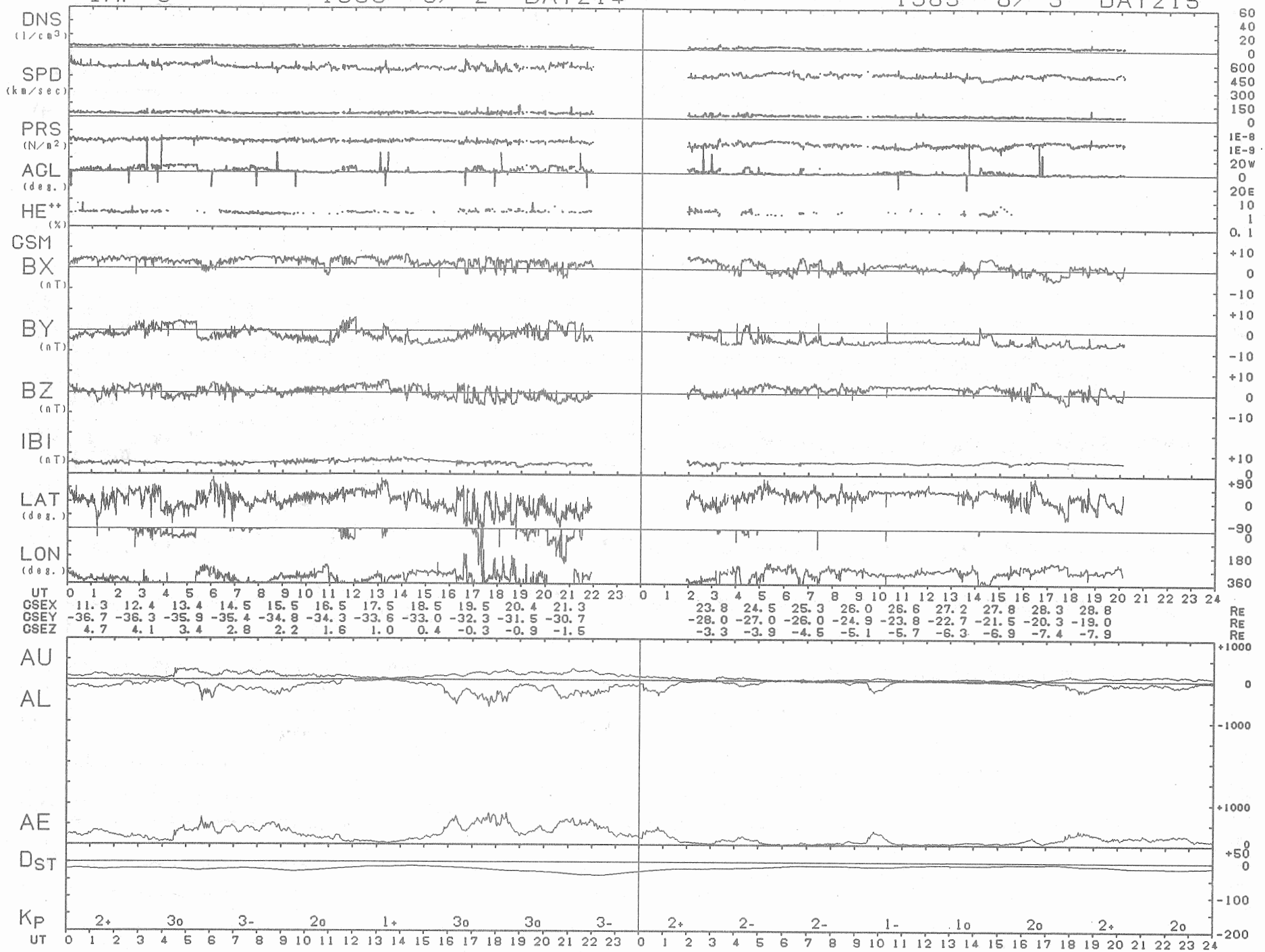

IMP-8 1985 7/23 DAY204
1985 7/24 DAY205
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 33.2 33.0 32.8 32.5 32.1 31.7 31.2 30.7 29.4 27.1 26.2 25.3 24.3 23.2 RE
GSEY -4.3 -2.9 -1.5 -0.1 1.3 2.7 4.1 5.4 8.2 12.1 13.4 14.7 15.9 17.1 RE
GSEZ -11.3 -11.7 -12.0 -12.4 -12.7 -13.0 -13.3 -13.6 -14.0 -14.4 -14.5 -14.5 -14.5 -14.5 RE
AU
AL
AE
DST
KP 2- 4+ 3o 3- 2o 1+ 3- 3o 2- 2- 2+ 3o 3- 2+ 4- 3o
UT

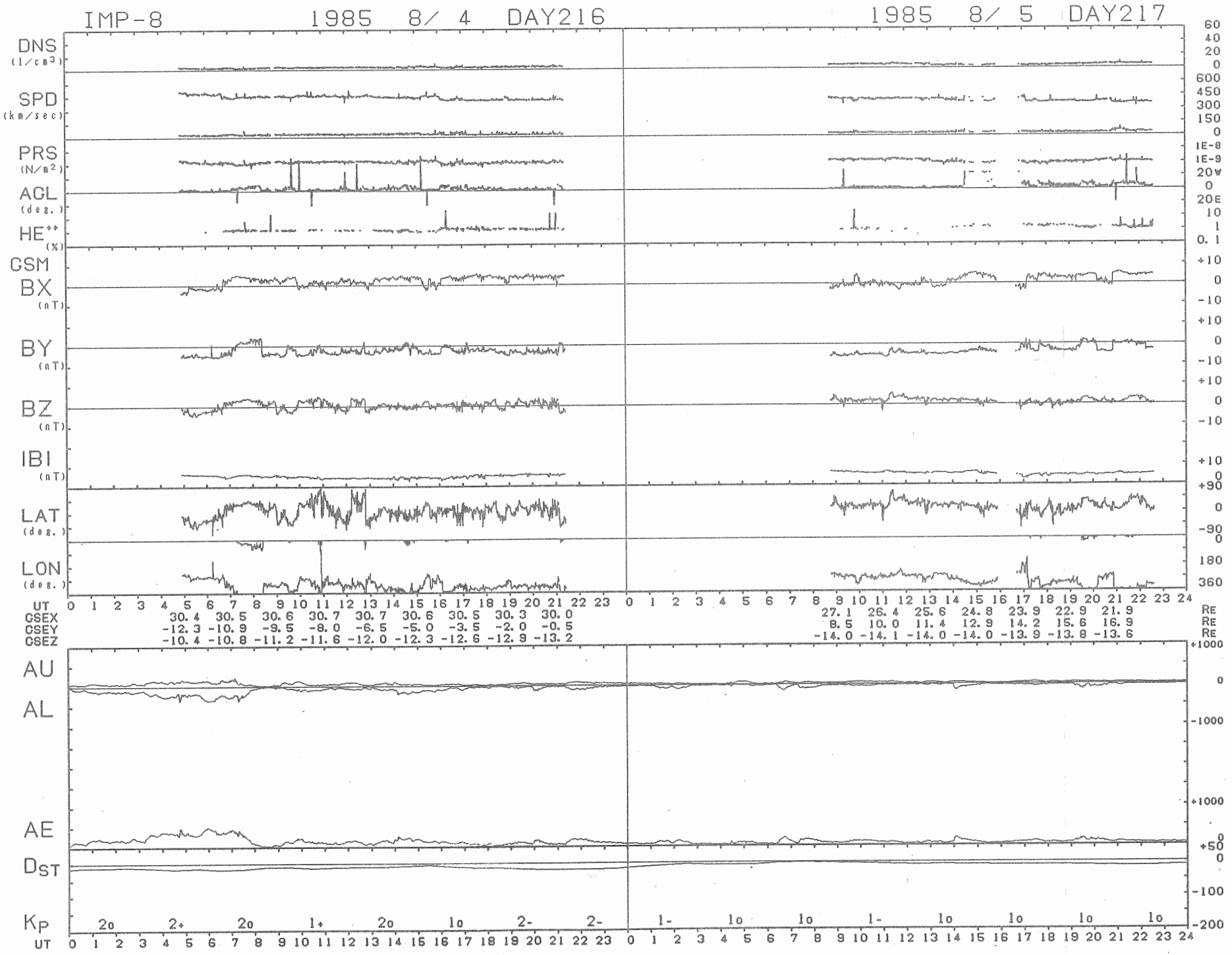

IMP-8
1985 7/25 DAY206
1985 7/26 DAY207
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
AU
AL
AE
DST
KP
UT

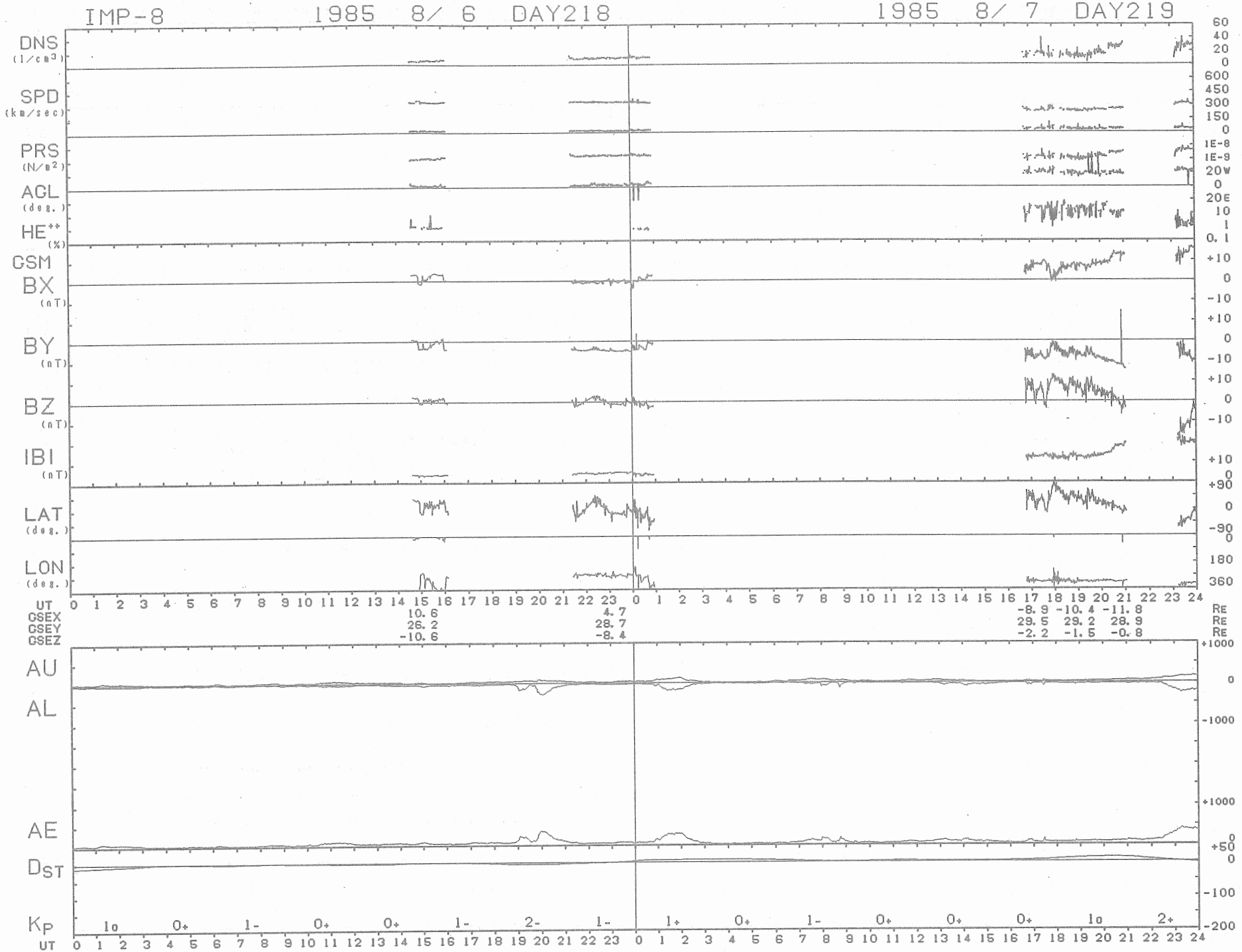

IMP-8 1985 7/27 DAY208
1985 7/28 DAY209
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.2 -19.4 -20.6 -28.1 -28.8 -29.4 -29.9 -30.4 -30.8 -31.1 -31.4 -32.0 -32.0 -31.9 RE
GSEY 24.8 24.0 23.2 14.4 13.1 11.8 10.5 9.2 7.8 6.4 5.0 -0.6 -2.0 -3.4 RE
GSEZ -0.2 0.6 1.3 7.2 7.9 8.5 9.1 9.8 10.3 10.9 11.5 13.4 13.8 14.2 RE
AU
AL
AE
DST
KP 3o 3+ 4- 4- 3+ 2- 2- 3o 3+ 3- 2- 3- 2o 3- 4o 2+
UT

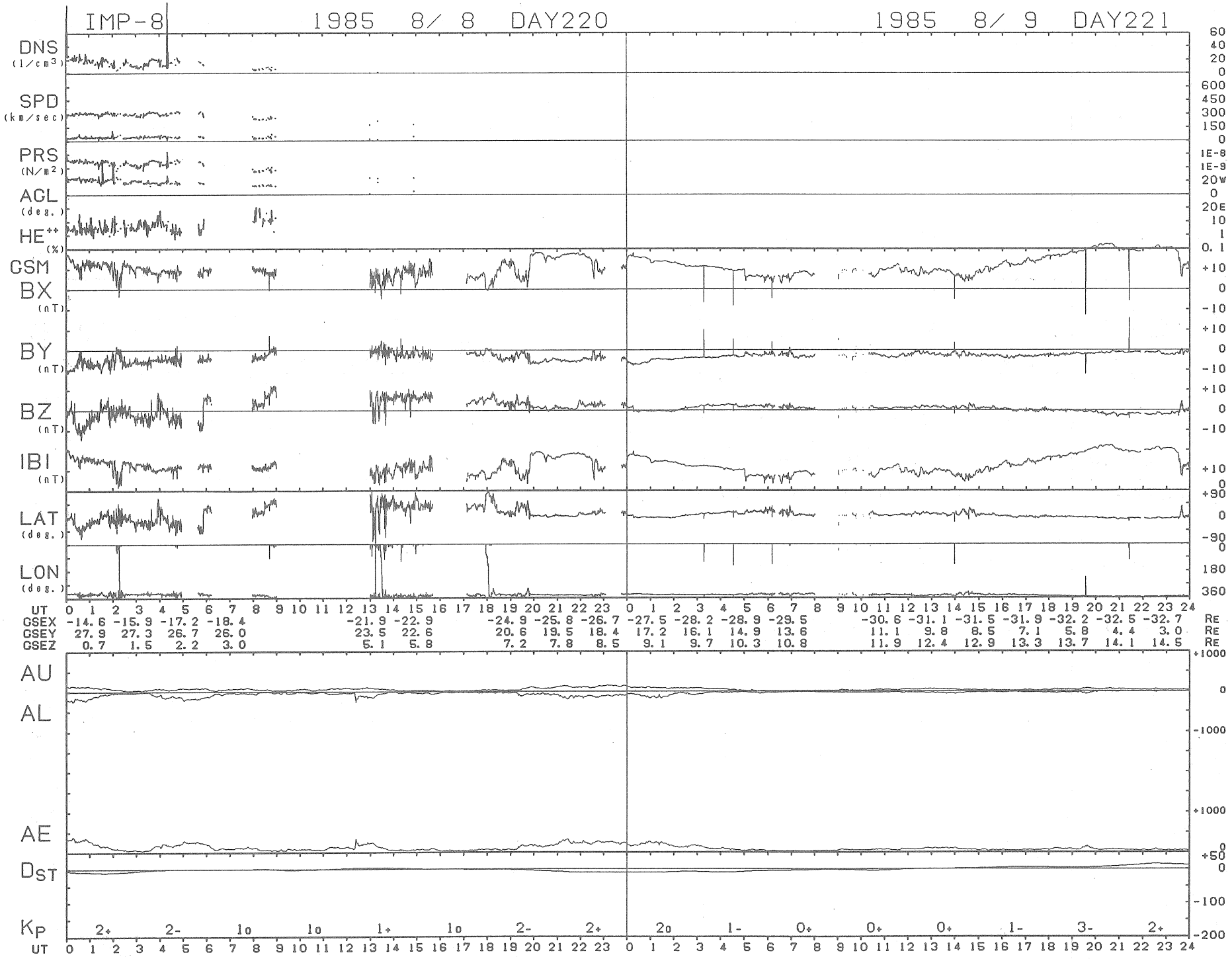

IMP-8 1985 7/29 DAY210
1985 7/30 DAY211
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.8 -31.6 -31.4 -31.1 -30.8 -30.4 -29.5 -29.0 -28.4 -27.8 -27.2 -26.5 -25.8 -25.1 -24.3 -21.8 -19.0 -18.0 -17.0 RE
GSEY -4.8 -6.2 -7.6 -9.0 -10.3 -11.6 -14.3 -15.5 -16.8 -18.0 -19.2 -20.4 -21.5 -22.6 -23.7 -26.8 -29.5 -30.3 -31.1 RE
GSEZ 14.6 14.9 15.2 15.5 15.8 16.0 16.4 16.5 16.7 16.8 16.8 16.9 16.9 16.9 16.9 16.6 16.2 16.0 15.8 RE
AU
AL
AE
DST
KP 1+ 1+ 1- 1- 1+ 2- 2o 1+ 2- 3o 2o 3- 4o 2+ 1+ 2o
UT

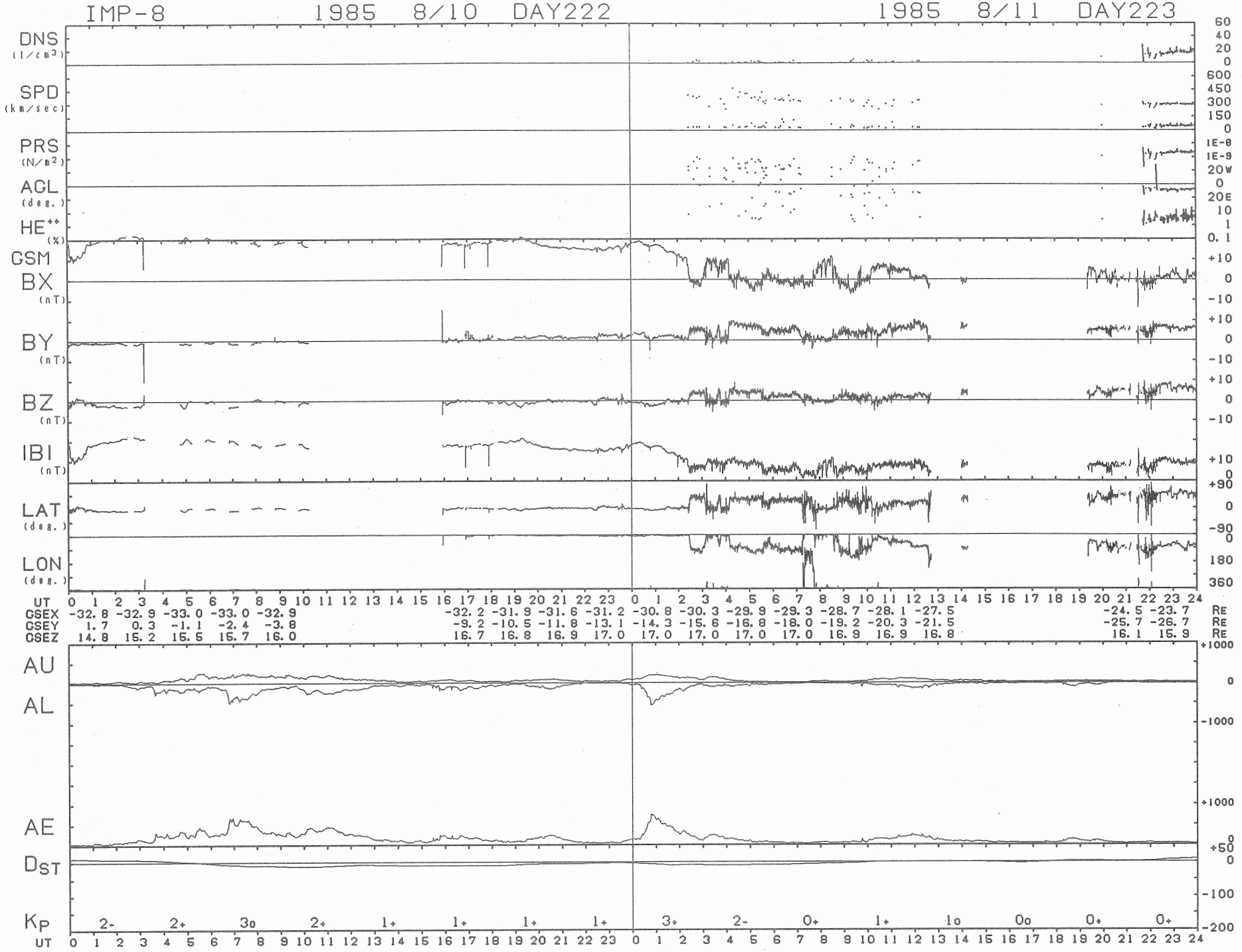

IMP-8 1985 7/31 DAY212
1985 8/ 1 DAY213
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.0 -14.9 -13.9 -12.8 -11.7 -10.6 -9.5 -8.3 -6.0 -4.9 -3.7 -2.6 -1.4 -0.2 1.0 2.1 3.3 4.5 5.6 6.8 7.9 9.0 RE
GSEY -31.9 -32.6 -33.3 -33.9 -34.5 -35.0 -35.5 -36.0 -36.8 -37.1 -37.4 -37.6 -37.8 -37.9 -38.0 -38.0 -38.0 -38.0 -37.9 -37.7 -37.5 -37.3 RE
GSEZ 15.5 15.3 15.0 14.7 14.4 14.0 13.7 13.3 12.5 12.0 11.6 11.1 10.7 10.2 9.7 9.2 8.6 8.1 7.5 7.0 6.4 5.8 RE
AU
AL
AE
DST
KP
2- 3- 4o 5+ 5- 5+ 4+ 5+ 4o 3o 2+ 3- 4+ 3+ 2+ 3+
UT

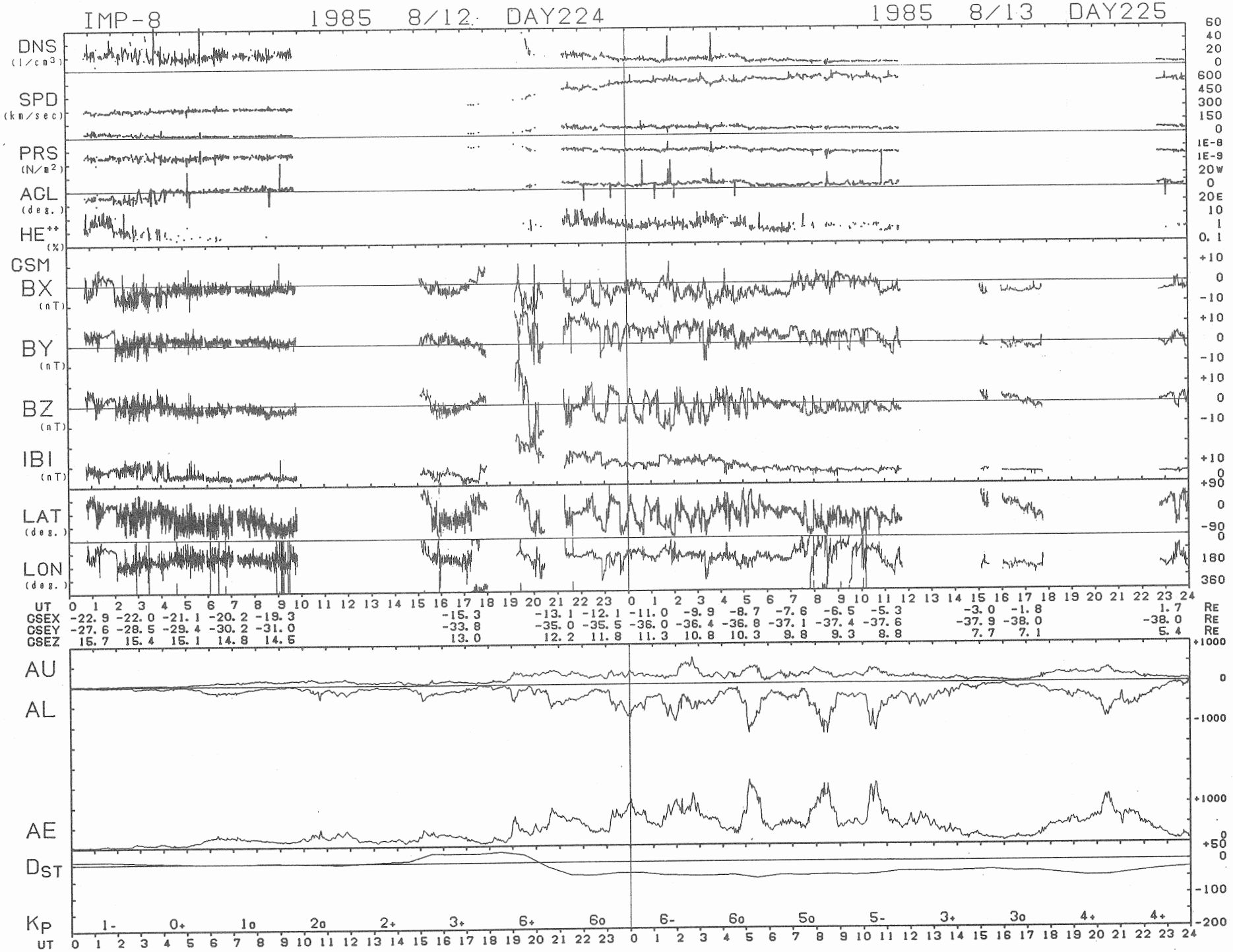

IMP-8
1985 8/ 2 DAY214
1985 8/ 3 DAY215
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.3 12.4 13.4 14.5 15.5 16.5 17.5 18.5 19.5 20.4 21.3 23.8 24.5 25.3 26.0 26.6 27.2 27.8 28.3 28.8 RE
GSEY -36.7 -36.3 -35.9 -35.4 -34.8 -34.3 -33.6 -33.0 -32.3 -31.5 -30.7 -28.0 -27.0 -26.0 -24.9 -23.8 -22.7 -21.5 -20.3 -19.0 RE
GSEZ 4.7 4.1 3.4 2.8 2.2 1.6 1.0 0.4 -0.3 -0.9 -1.5 -3.3 -3.9 -4.5 -5.1 -5.7 -6.3 -6.9 -7.4 -7.9 RE
AU
AL
AE
DST
KP 2+ 3o 3- 2o 1+ 3o 3o 3- 2+ 2- 2- 1- 1o 2o 2+ 2o
UT

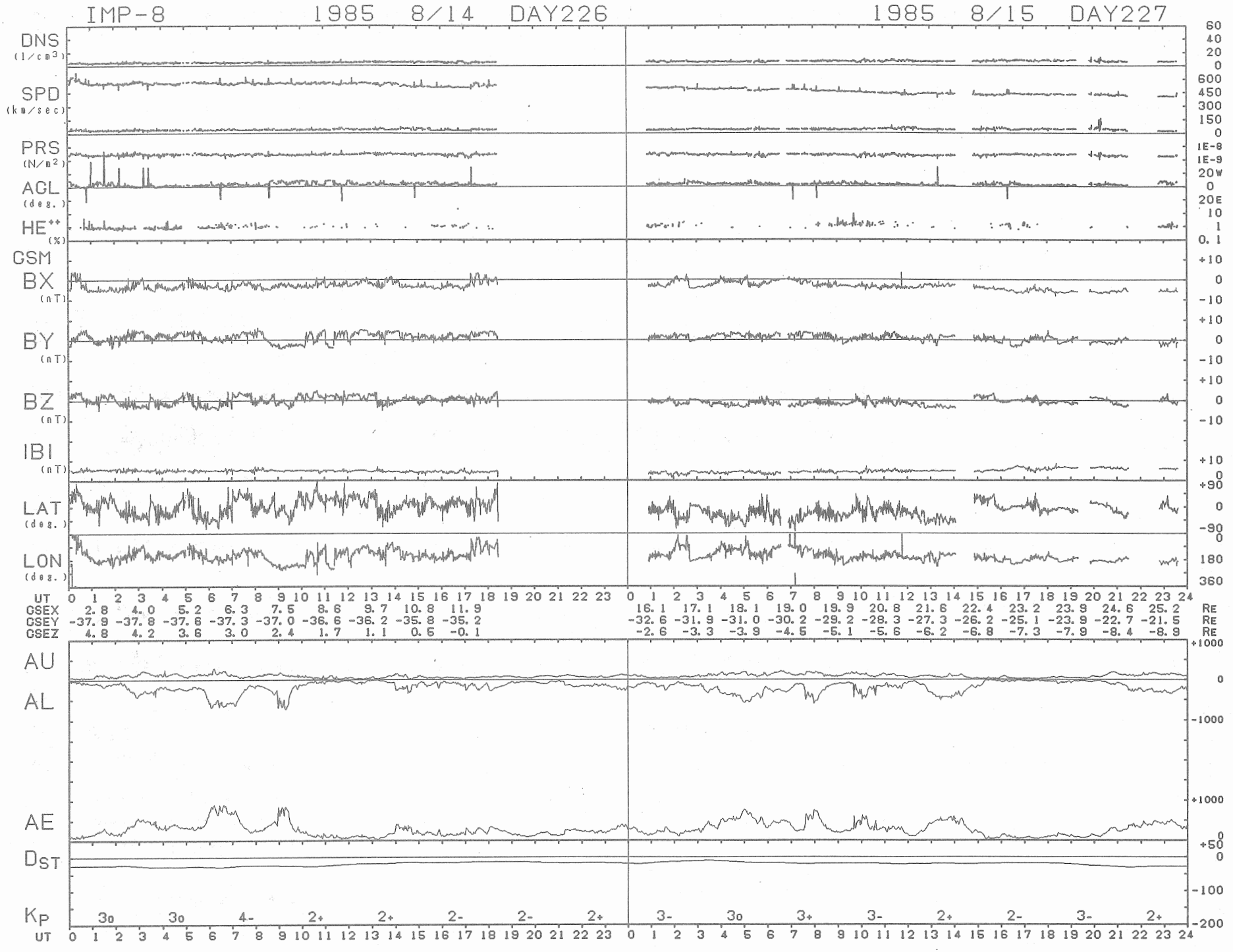

IMP-8
1985 8/ 4 DAY216
1985 8/ 5 DAY217
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.4 30.5 30.6 30.7 30.7 30.6 30.5 30.3 30.0
GSEY -12.3 -10.9 -9.5 -8.0 -6.5 -5.0 -3.5 -2.0 -0.5
GSEZ -10.4 -10.8 -11.2 -11.6 -12.0 -12.3 -12.6 -12.9 -13.2
27.1 26.4 25.6 24.8 23.9 22.9 21.9
8.5 10.0 11.4 12.9 14.2 15.6 16.9
-14.0 -14.1 -14.0 -14.0 -13.9 -13.8 -13.6
RE
AU
AL
AE
DST
KP
2o 2+ 2o 1+ 2o 1o 2- 2-
1- 1o 1o 1- 1o 1o 1o 1o

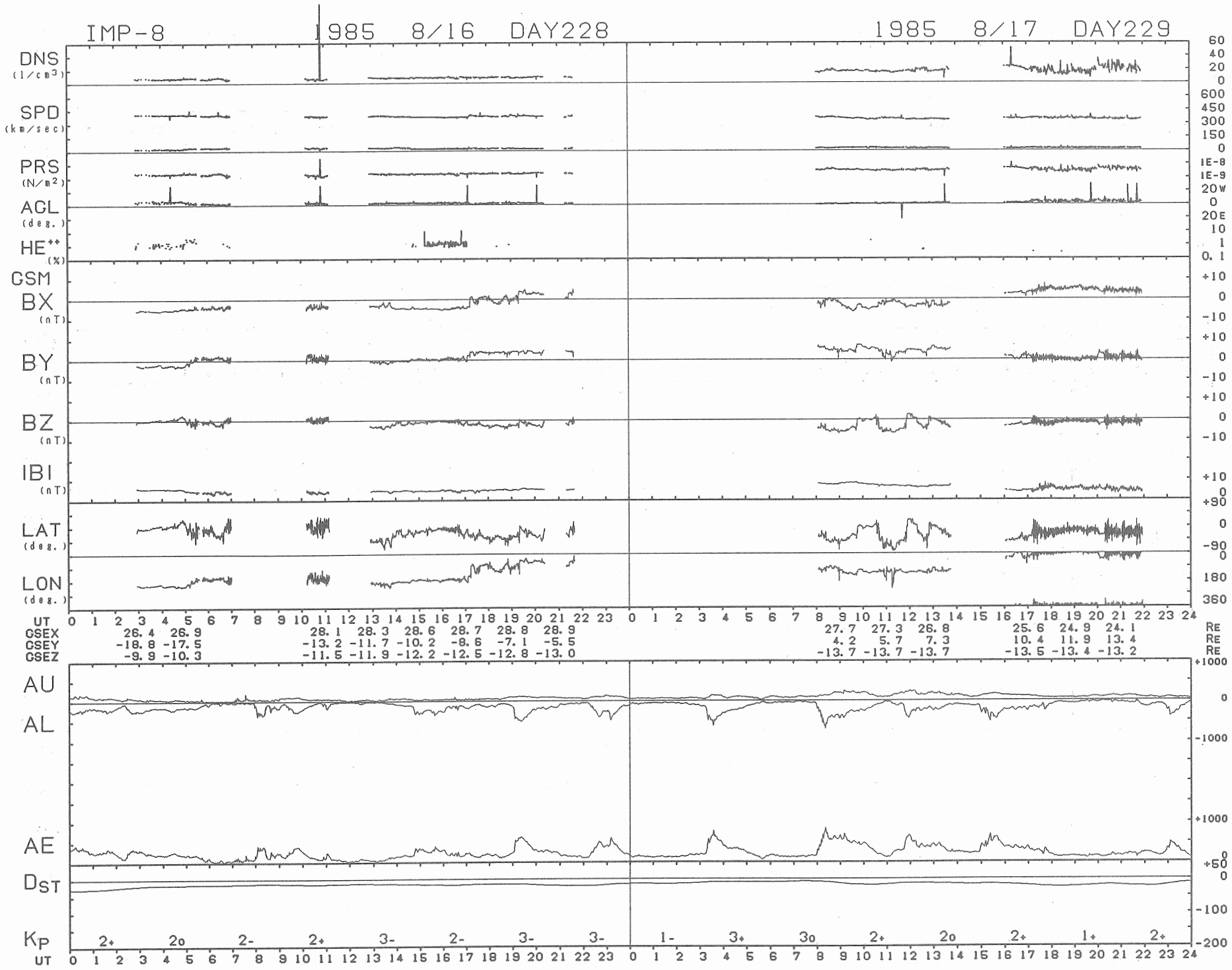

IMP-8
1985 8/ 6 DAY218
1985 8/ 7 DAY219
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 10.6 4.7 -8.9 -10.4 -11.8 RE
GSEY 26.2 28.7 29.5 29.2 28.9 RE
GSEZ -10.6 -8.4 -2.2 -1.5 -0.8 RE
AU
AL
AE
DST
KP
1o 0+ 1- 0+ 0+ 1- 2- 1- 1+ 0+ 1- 0+ 0+ 0+ 1o 2+

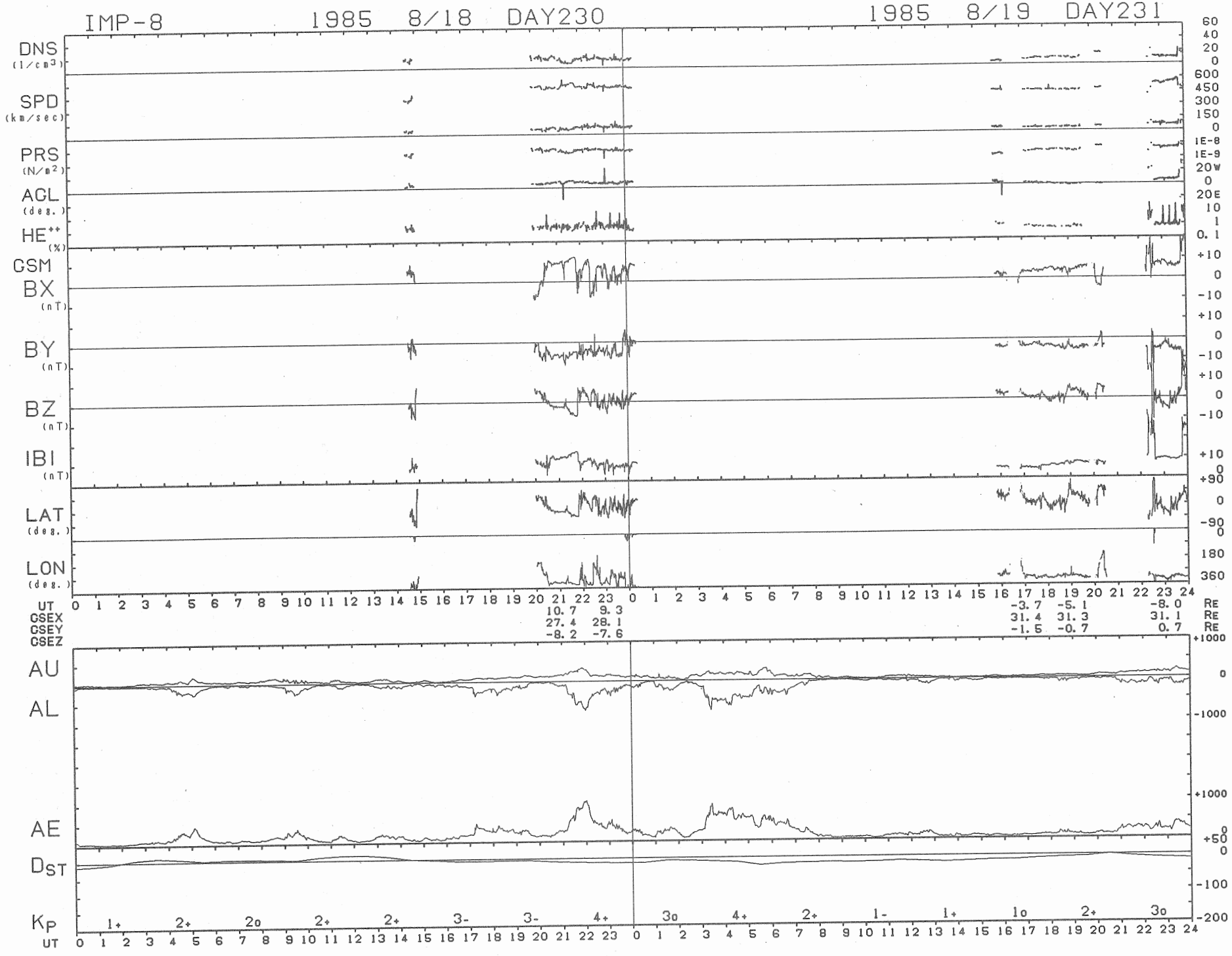

IMP-8
1985 8/ 8 DAY220
1985 8/ 9 DAY221
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.6 -15.9 -17.2 -18.4 -21.9 -22.9 -24.9 -25.8 -26.7 -27.5 -28.2 -28.9 -29.5 -30.6 -31.1 -31.5 -31.9 -32.2 -32.5 -32.7 RE
GSEY 27.9 27.3 26.7 26.0 23.5 22.6 20.6 19.5 18.4 17.2 16.1 14.9 13.6 11.1 9.8 8.5 7.1 5.8 4.4 3.0 RE
GSEZ 0.7 1.5 2.2 3.0 5.1 5.8 7.2 7.8 8.5 9.1 9.7 10.3 10.8 11.9 12.4 12.9 13.3 13.7 14.1 14.5 RE
AU
AL
AE
DST
KP 2+ 2- 1o 1o 1+ 1o 2- 2+ 2o 1- 0+ 0+ 0+ 1- 3- 2+
UT

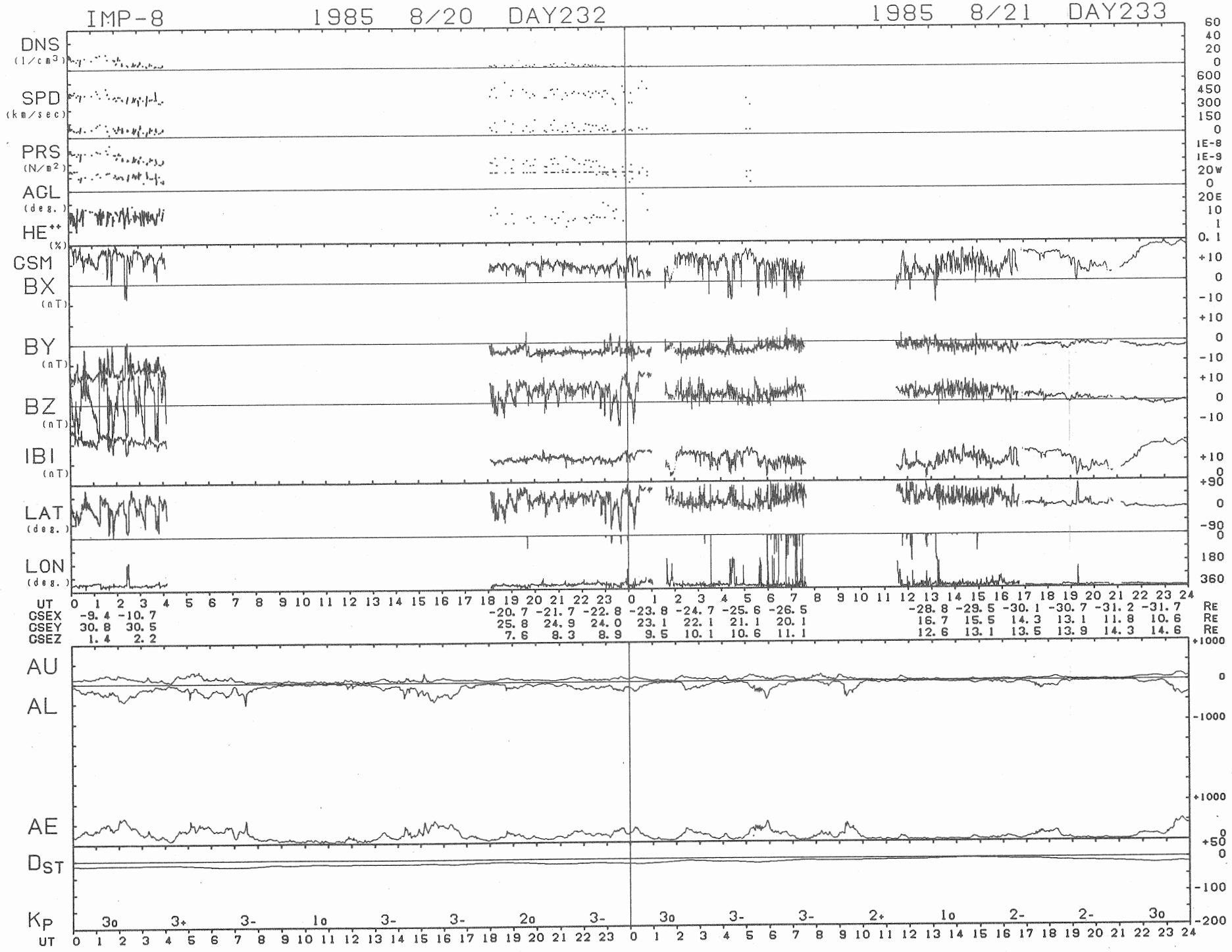

IMP-8 1985 8/10 DAY222 1985 8/11 DAY223
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX -32.8 -32.9 -33.0 -33.0 -32.9 -32.2 -31.9 -31.6 -31.2 -30.8 -30.3 -29.9 -29.3 -28.7 -28.1 -27.5 -24.5 -23.7 RE
GSEY 1.7 0.3 -1.1 -2.4 -3.8 -9.2 -10.5 -11.8 -13.1 -14.3 -15.6 -16.8 -18.0 -19.2 -20.3 -21.5 -25.7 -26.7 RE
GSEZ 14.8 15.2 15.5 15.7 16.0 16.7 16.8 16.9 17.0 17.0 17.0 17.0 17.0 16.9 16.9 16.8 16.1 15.9 RE
AU
AL
AE
DST
KP 2- 2+ 3o 2+ 1+ 1+ 1+ 1+ 3+ 2- 0+ 1+ 1o 0o 0+ 0+
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

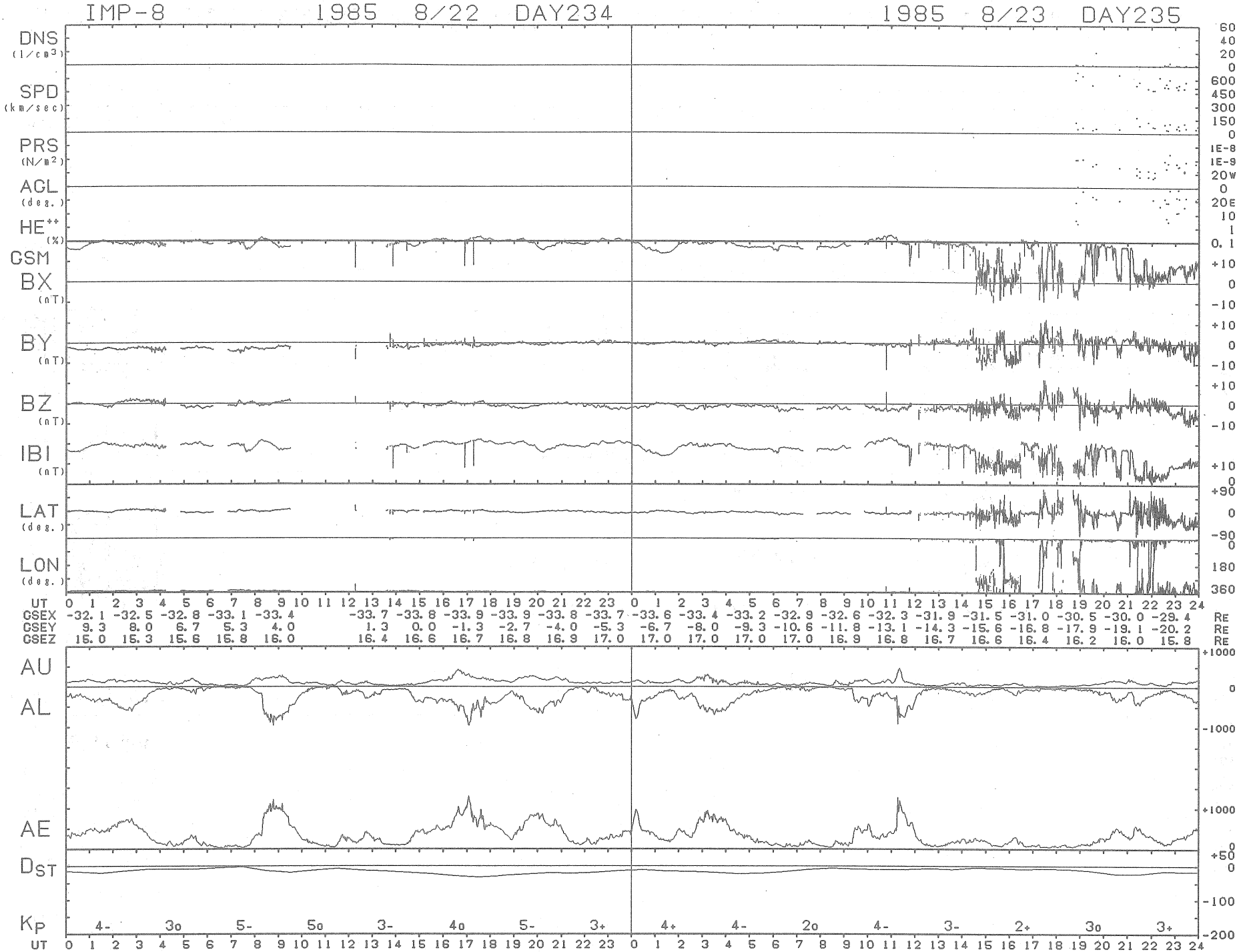

IMP-8 1985 8/12 DAY224 1985 8/13 DAY225
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX -22.9 -22.0 -21.1 -20.2 -19.3 -15.3 -13.1 -12.1 -11.0 -9.9 -8.7 -7.6 -6.5 -5.3 -3.0 -1.8 1.7 RE
GSEY -27.6 -28.5 -29.4 -30.2 -31.0 -33.8 -35.0 -35.5 -36.0 -36.4 -36.8 -37.1 -37.4 -37.6 -37.9 -38.0 -38.0 RE
GSEZ 15.7 15.4 15.1 14.8 14.5 13.0 12.2 11.8 11.3 10.8 10.3 9.8 9.3 8.8 7.7 7.1 5.4 RE
AU
AL
AE
DST
KP 1- 0+ 1o 2o 2+ 3+ 6+ 6o 6- 6o 5o 5- 3+ 3o 4+ 4+
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

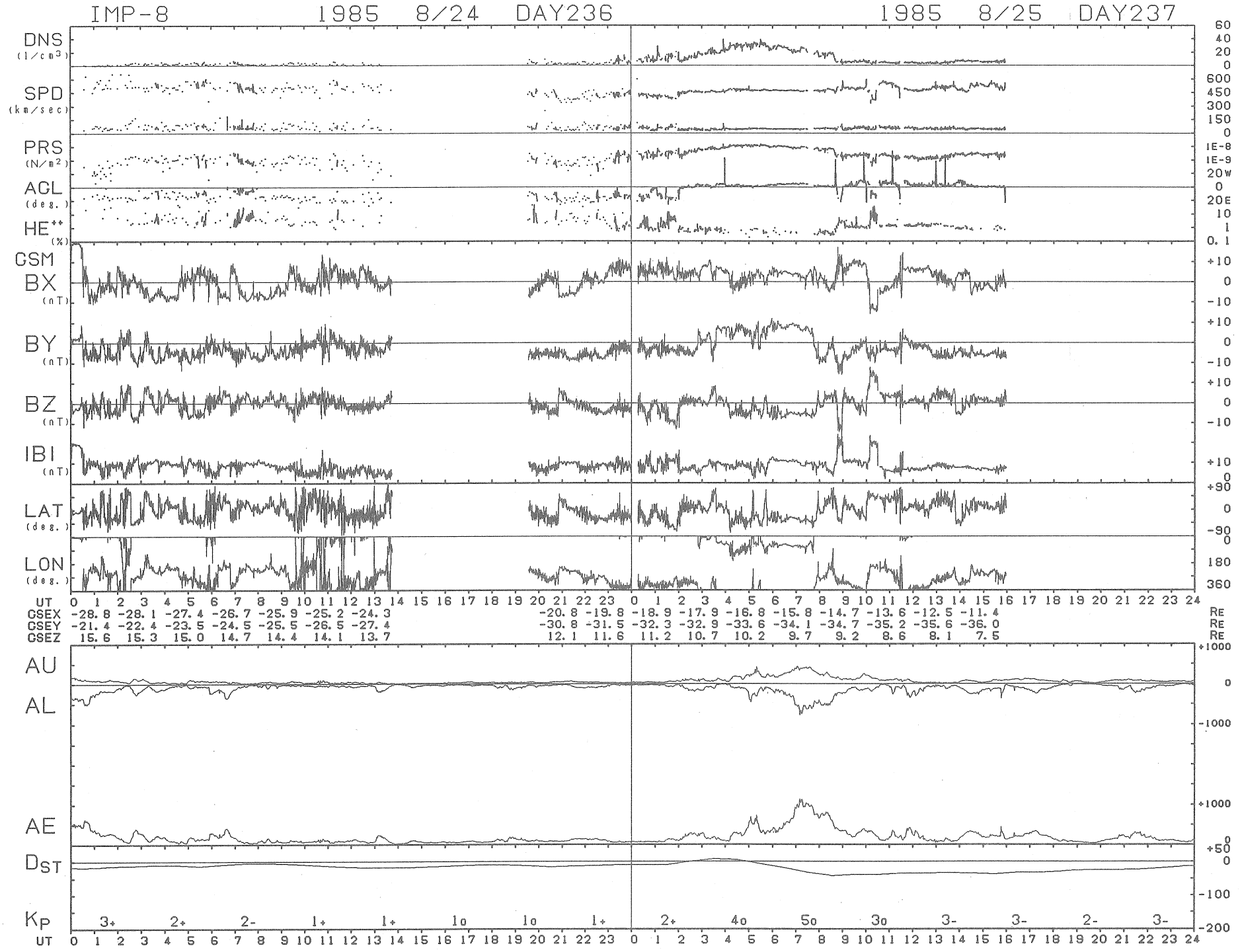

IMP-8 1985 8/14 DAY226
1985 8/15 DAY227
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.8 4.0 5.2 6.3 7.5 8.6 9.7 10.8 11.9 16.1 17.1 18.1 19.0 19.9 20.8 21.6 22.4 23.2 23.9 24.6 25.2 RE
GSEY -37.9 -37.8 -37.6 -37.3 -37.0 -36.6 -36.2 -35.8 -35.2 -32.6 -31.9 -31.0 -30.2 -29.2 -28.3 -27.3 -26.2 -25.1 -23.9 -22.7 -21.5 RE
GSEZ 4.8 4.2 3.6 3.0 2.4 1.7 1.1 0.5 -0.1 -2.6 -3.3 -3.9 -4.5 -5.1 -5.6 -6.2 -6.8 -7.3 -7.9 -8.4 -8.9 RE
AU
AL
AE
DST
KP 3o 3o 4- 2+ 2+ 2- 2- 2+ 3- 3o 3+ 3- 2+ 2- 3- 2+
UT

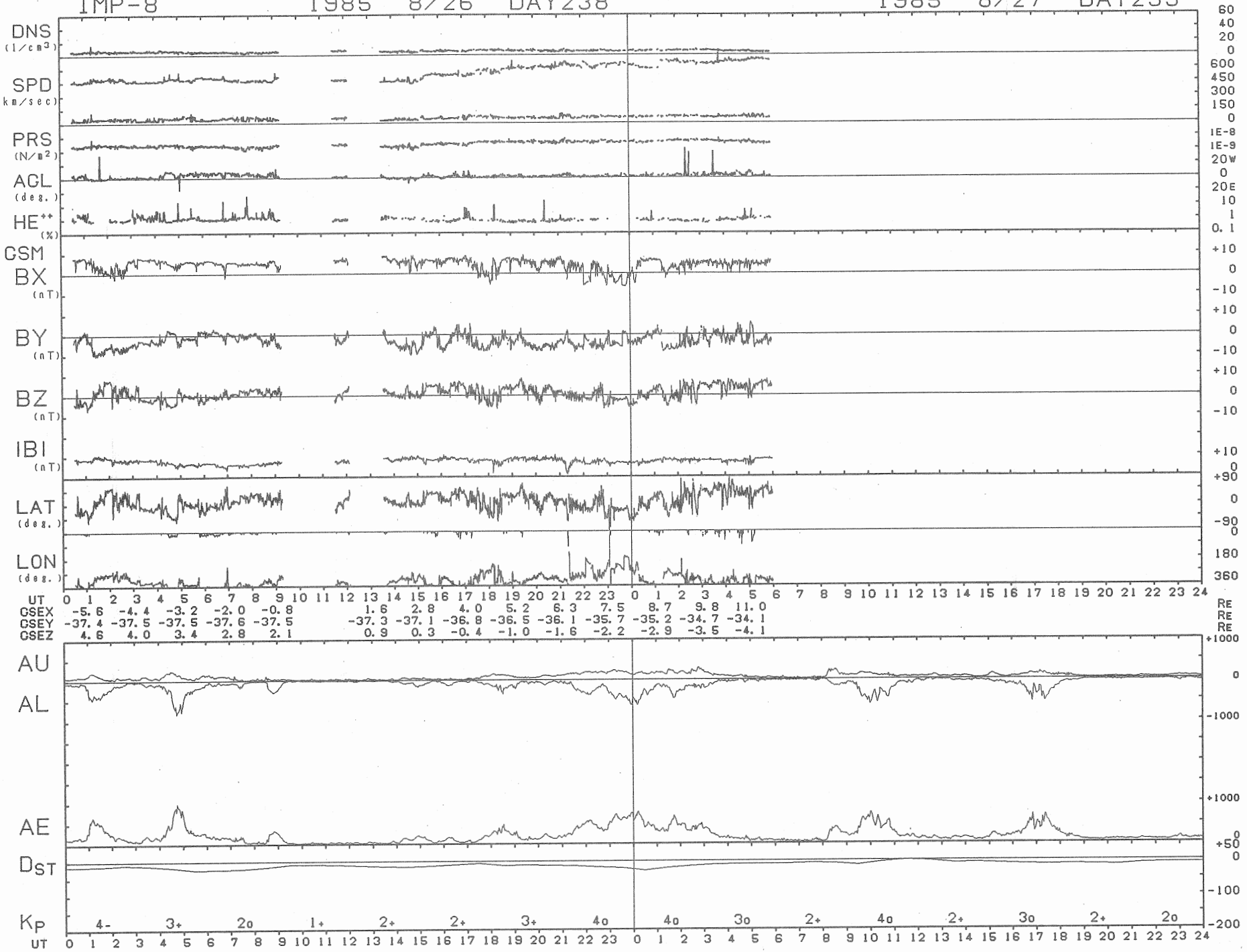

IMP-8
1985 8/16 DAY228
1985 8/17 DAY229
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 26.4 26.9 28.1 28.3 28.6 28.7 28.8 28.9 27.7 27.3 26.8 25.6 24.9 24.1 RE
GSEY -18.8 -17.5 -13.2 -11.7 -10.2 -8.6 -7.1 -5.5 4.2 5.7 7.3 10.4 11.9 13.4 RE
GSEZ -9.9 -10.3 -11.5 -11.9 -12.2 -12.5 -12.8 -13.0 -13.7 -13.7 -13.7 -13.5 -13.4 -13.2 RE
AU
AL
AE
DST
KP 2+ 2o 2- 2+ 3- 2- 3- 3- 1- 3+ 3o 2+ 2o 2+ 1+ 2+
UT

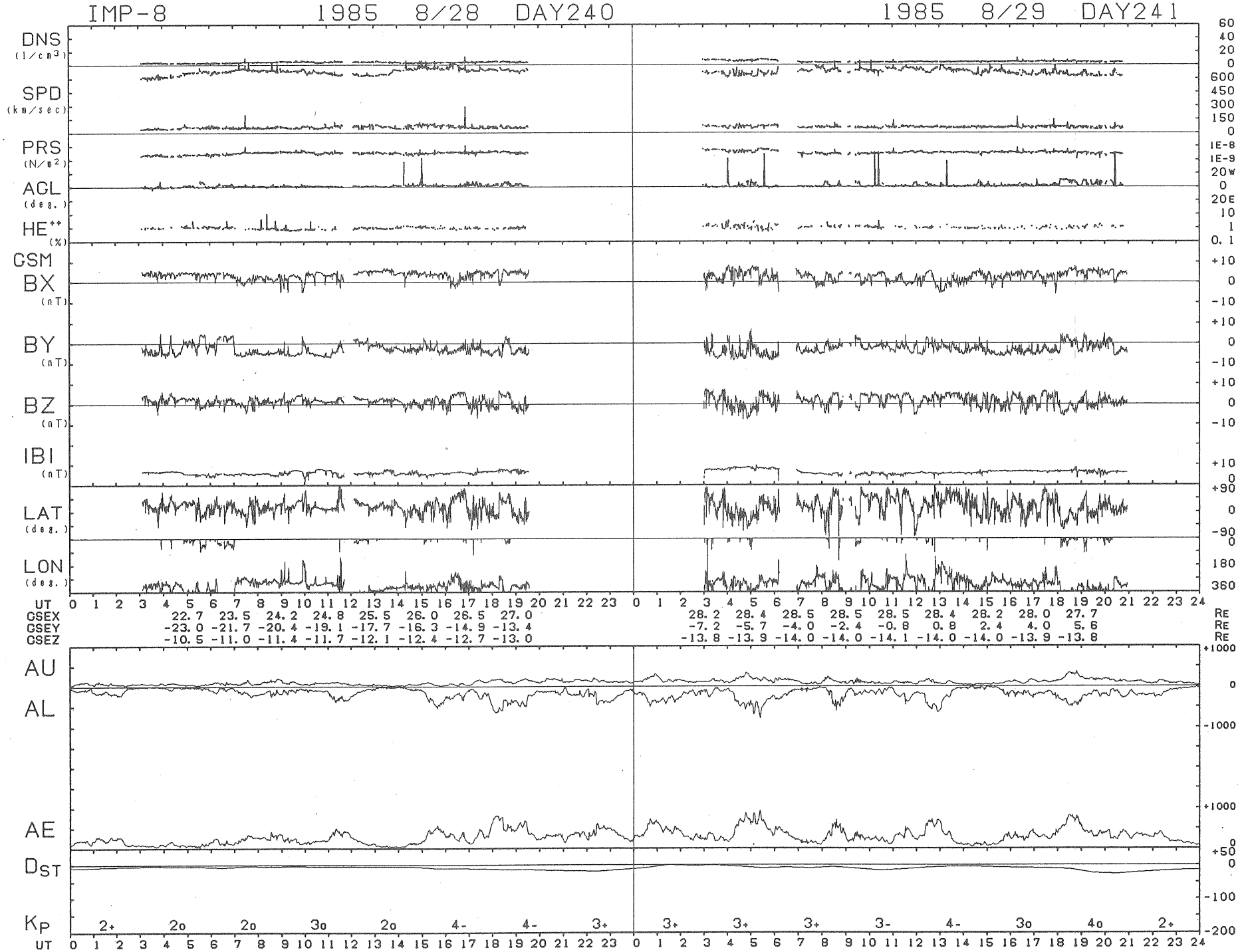

IMP-8
1985 8/18 DAY230
1985 8/19 DAY231
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
10.7 9.3
27.4 28.1
-8.2 -7.6
-3.7 -5.1 -8.0 RE
31.4 31.3 31.1 RE
-1.5 -0.7 0.7 RE
AU
AL
AE
DST
KP
1+ 2+ 2o 2+ 2+ 3- 3- 4+ 3o 4+ 2+ 1- 1+ 1o 2+ 3o

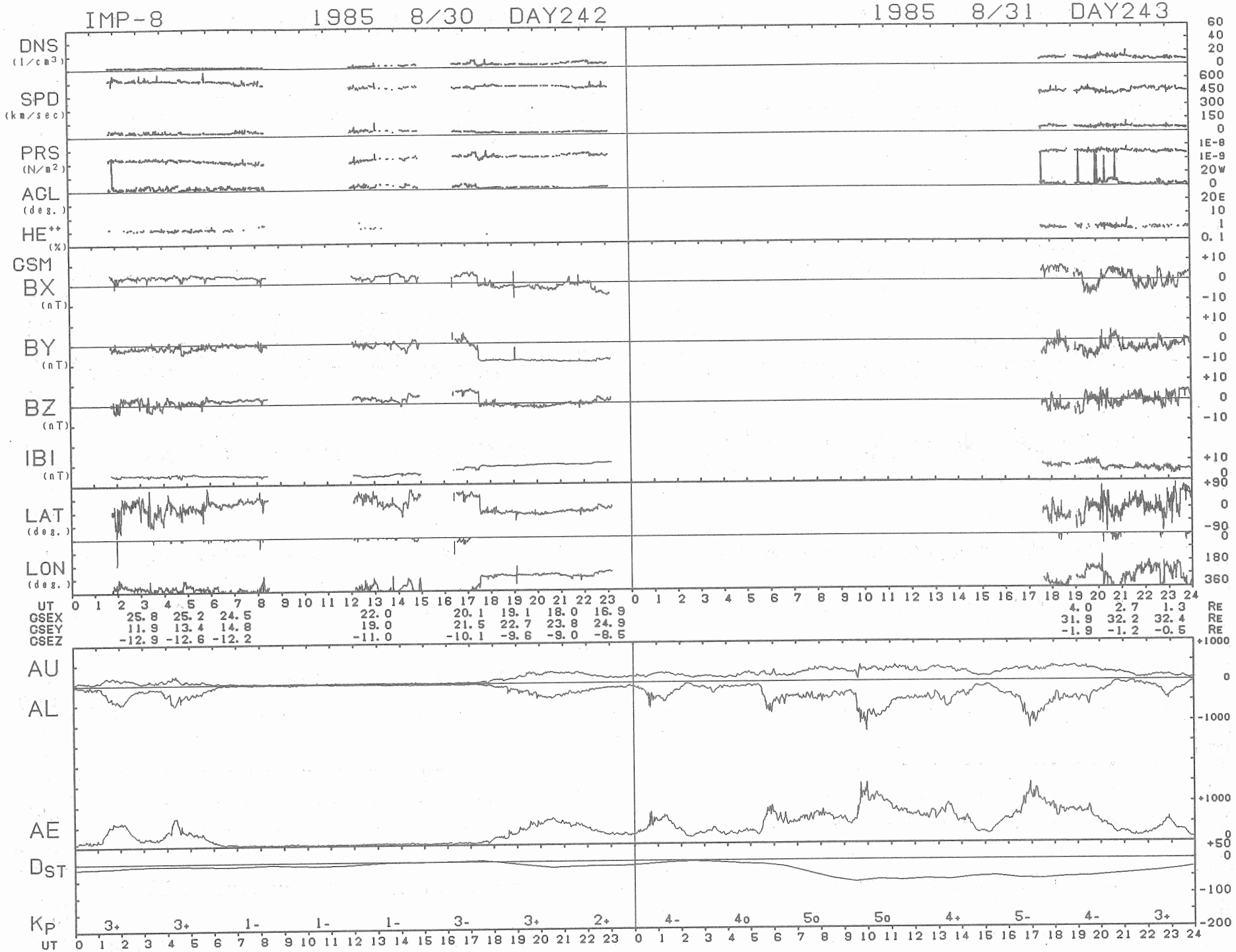

IMP-8
1985 8/20 DAY232
1985 8/21 DAY233
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.4 -10.7 -20.7 -21.7 -22.8 -23.8 -24.7 -25.6 -26.5 -28.8 -29.5 -30.1 -30.7 -31.2 -31.7 RE
GSEY 30.8 30.5 25.8 24.9 24.0 23.1 22.1 21.1 20.1 16.7 15.5 14.3 13.1 11.8 10.6 RE
GSEZ 1.4 2.2 7.6 8.3 8.9 9.5 10.1 10.6 11.1 12.6 13.1 13.5 13.9 14.3 14.6 RE
AU
AL
AE
DST
KP
3o 3+ 3- 1o 3- 3- 2o 3- 3o 3- 3- 2+ 1o 2- 2- 3o
UT

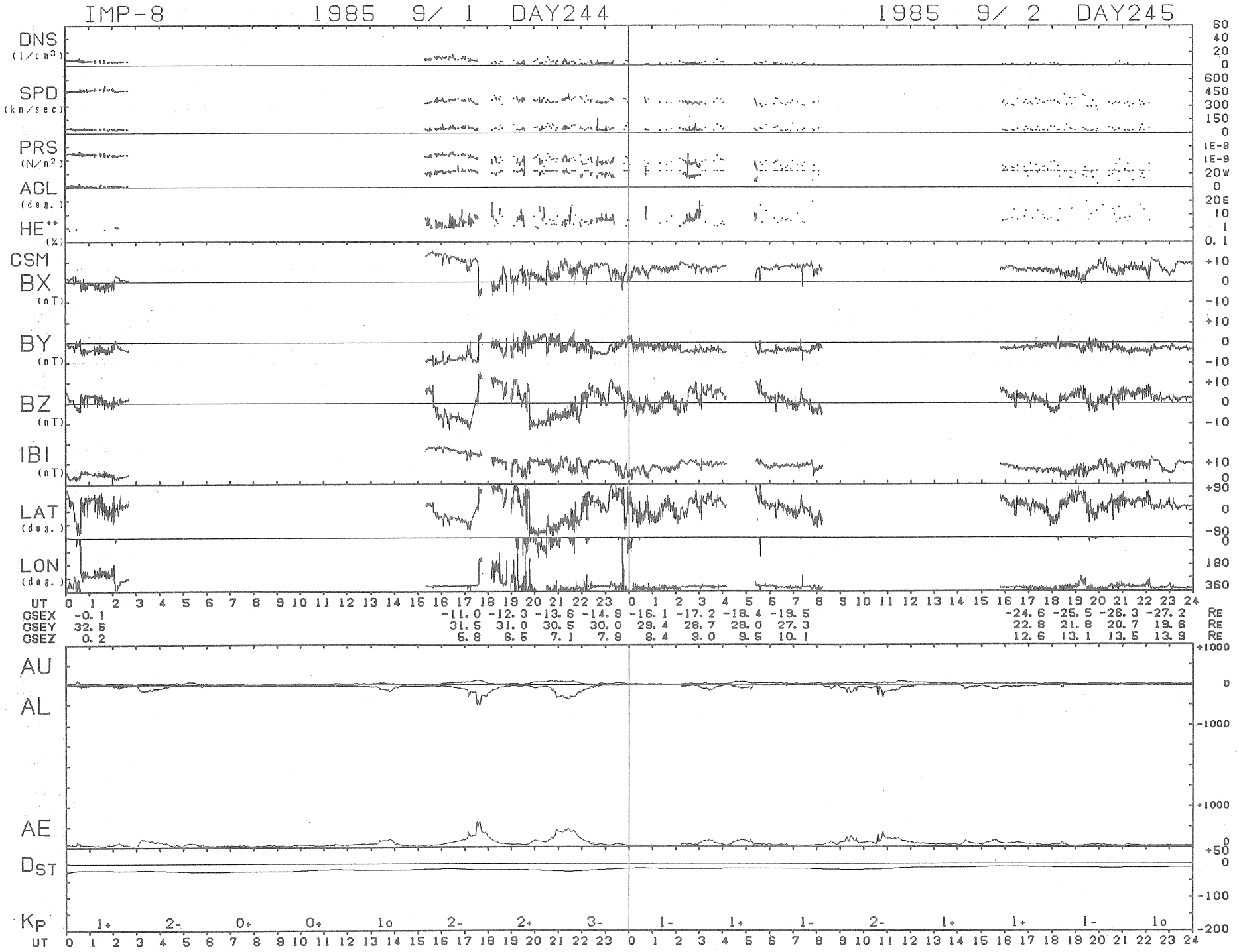

IMP-8 1985 8/22 DAY234
1985 8/23 DAY235
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.1 -32.5 -32.8 -33.1 -33.4 -33.7 -33.8 -33.9 -33.9 -33.8 -33.7 -33.6 -33.4 -33.2 -32.9 -32.6 -32.3 -31.9 -31.5 -31.0 -30.5 -30.0 -29.4 RE
GSEY 9.3 8.0 6.7 5.3 4.0 1.3 0.0 -1.3 -2.7 -4.0 -5.3 -6.7 -8.0 -9.3 -10.6 -11.8 -13.1 -14.3 -15.6 -16.8 -17.9 -19.1 -20.2 RE
GSEZ 15.0 15.3 15.6 15.8 16.0 16.4 16.6 16.7 16.8 16.9 17.0 17.0 17.0 17.0 17.0 16.9 16.8 16.7 16.6 16.4 16.2 16.0 15.8 RE
AU
AL
AE
DST
KP 4- 3o 5- 5o 3- 4o 5- 3+ 4+ 4- 2o 4- 3- 2+ 3o 3+
UT

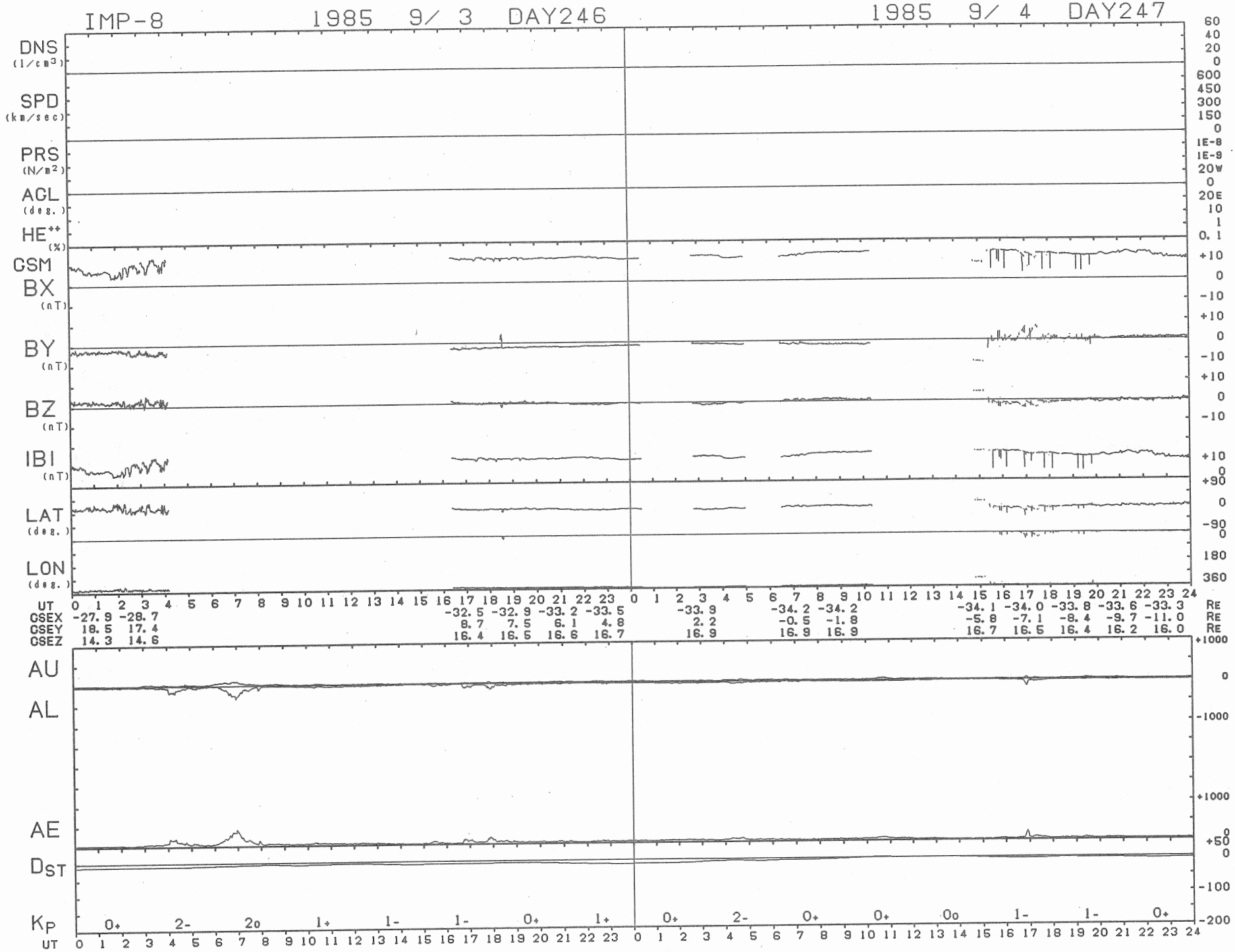

IMP-8 1985 8/24 DAY236
1985 8/25 DAY237
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.8 -28.1 -27.4 -26.7 -25.9 -25.2 -24.3 -20.8 -19.8 -18.9 -17.9 -16.8 -15.8 -14.7 -13.6 -12.5 -11.4 RE
GSEY -21.4 -22.4 -23.5 -24.5 -25.5 -26.5 -27.4 -30.8 -31.5 -32.3 -32.9 -33.6 -34.1 -34.7 -35.2 -35.6 -36.0 RE
GSEZ 15.6 15.3 15.0 14.7 14.4 14.1 13.7 12.1 11.6 11.2 10.7 10.2 9.7 9.2 8.6 8.1 7.5 RE
AU
AL
AE
DST
KP
3+ 2+ 2- 1+ 1+ 1o 1o 1+ 2+ 4o 5o 3o 3- 3- 2- 3-
UT

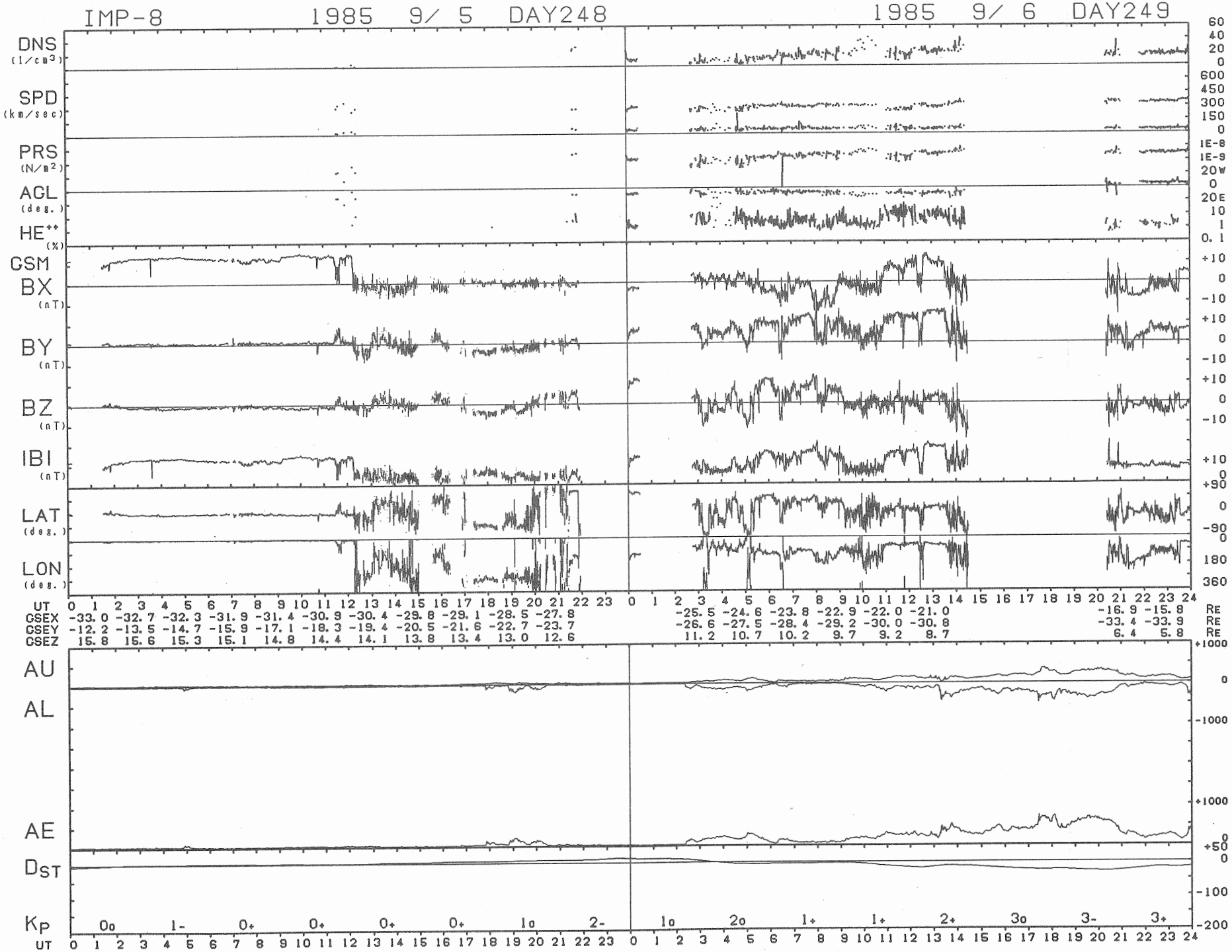

IMP-8 1985 8/26 DAY238
1985 8/27 DAY239
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.6 -4.4 -3.2 -2.0 -0.8 1.6 2.8 4.0 5.2 6.3 7.5 8.7 9.8 11.0
GSEY -37.4 -37.5 -37.5 -37.6 -37.5 -37.3 -37.1 -36.8 -36.5 -36.1 -35.7 -35.2 -34.7 -34.1
GSEZ 4.6 4.0 3.4 2.8 2.1 0.9 0.3 -0.4 -1.0 -1.6 -2.2 -2.9 -3.5 -4.1
RE
AU
AL
AE
Dst
Kp
4- 3+ 2o 1+ 2+ 2+ 3+ 4o 4o 3o 2+ 4o 2+ 3o 2+ 2o
UT

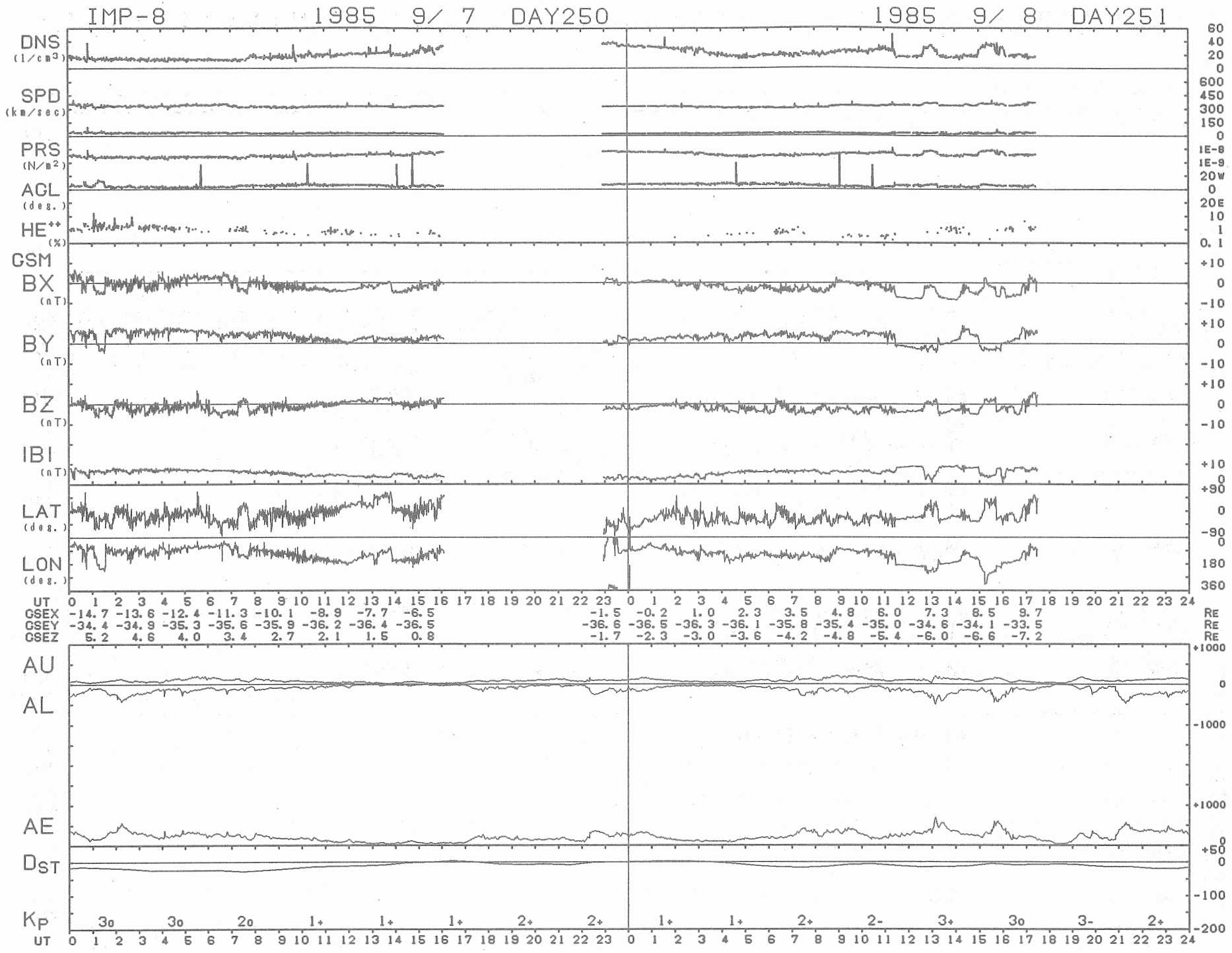

IMP-8 1985 8/28 DAY240
1985 8/29 DAY241
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.7 23.5 24.2 24.8 25.5 26.0 26.5 27.0 28.2 28.4 28.5 28.5 28.5 28.4 28.2 28.0 27.7 RE
GSEY -23.0 -21.7 -20.4 -19.1 -17.7 -16.3 -14.9 -13.4 -7.2 -5.7 -4.0 -2.4 -0.8 0.8 2.4 4.0 5.6 RE
GSEZ -10.5 -11.0 -11.4 -11.7 -12.1 -12.4 -12.7 -13.0 -13.8 -13.9 -14.0 -14.0 -14.1 -14.0 -14.0 -13.9 -13.8 RE
AU
AL
AE
DST
KP 2+ 2o 2o 3o 2o 4- 4- 3+ 3+ 3+ 3+ 3- 4- 3o 4o 2+
UT

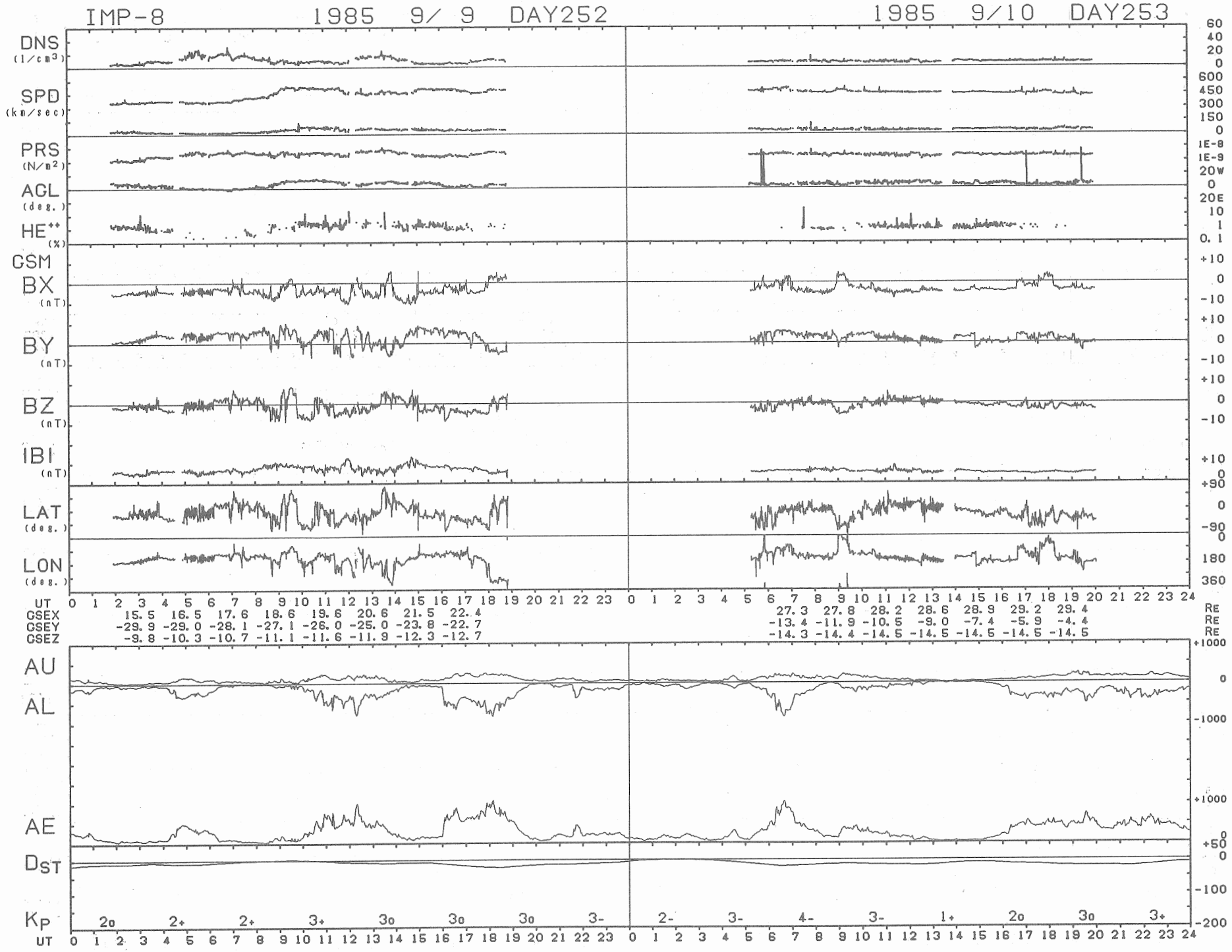

IMP-8
1985 8/30 DAY242
1985 8/31 DAY243
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.8 25.2 24.5 22.0 20.1 19.1 18.0 16.9 4.0 2.7 1.3 RE
GSEY 11.9 13.4 14.8 19.0 21.5 22.7 23.8 24.9 31.9 32.2 32.4 RE
GSEZ -12.9 -12.6 -12.2 -11.0 -10.1 -9.6 -9.0 -8.5 -1.9 -1.2 -0.5 RE
AU
AL
AE
DST
KP 3+ 3+ 1- 1- 1- 3- 3+ 2+ 4- 4o 5o 5o 4+ 5- 4- 3+
UT

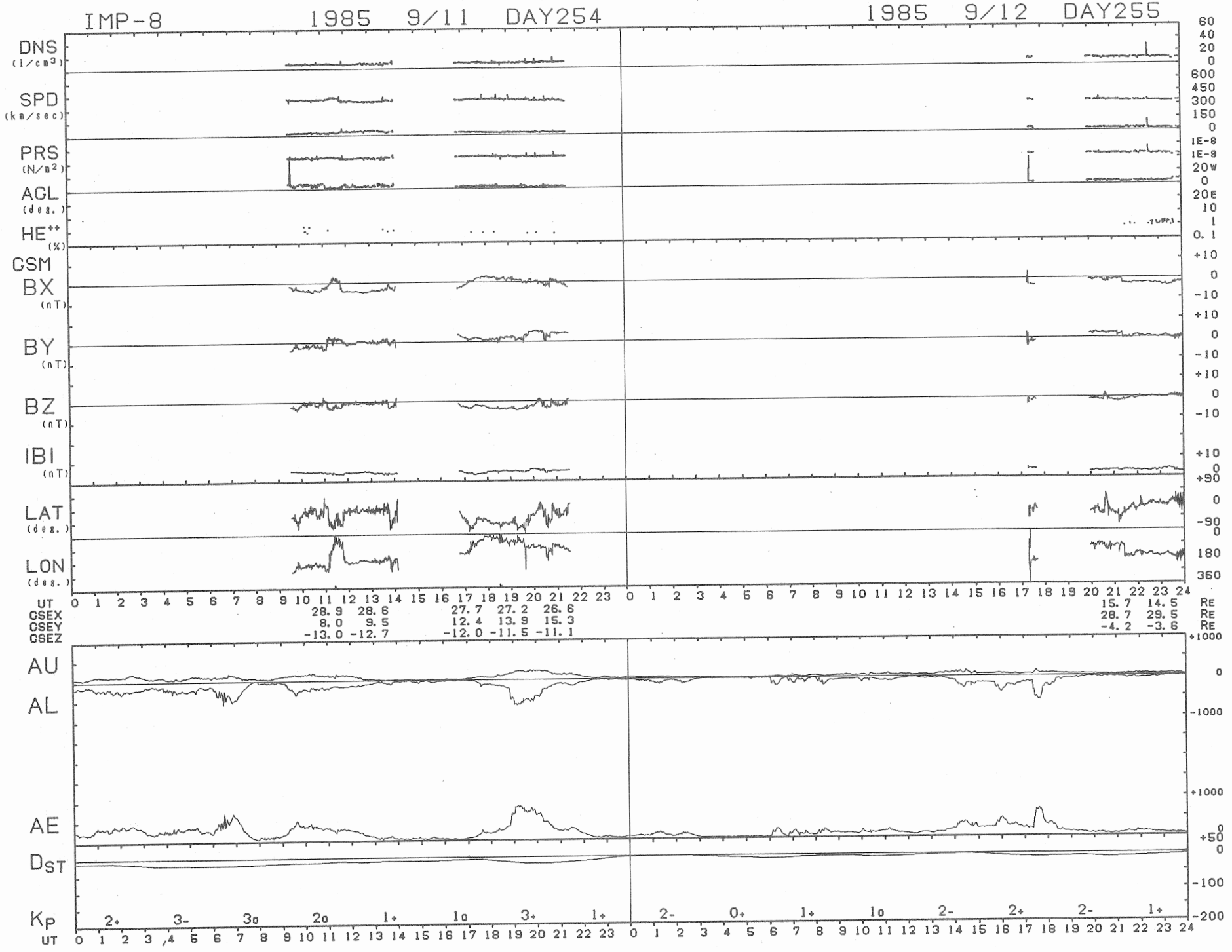

IMP-8 1985 9/ 1 DAY244
1985 9/ 2 DAY245
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -0.1 -11.0 -12.3 -13.6 -14.8 -16.1 -17.2 -18.4 -19.5 -24.6 -25.5 -26.3 -27.2 RE
GSEY 32.6 31.5 31.0 30.5 30.0 29.4 28.7 28.0 27.3 22.8 21.8 20.7 19.6 RE
GSEZ 0.2 5.8 6.5 7.1 7.8 8.4 9.0 9.5 10.1 12.6 13.1 13.5 13.9 RE
AU
AL
AE
DST
KP 1+ 2- 0+ 0+ 1o 2- 2+ 3- 1- 1+ 1- 2- 1+ 1+ 1- 1o
UT

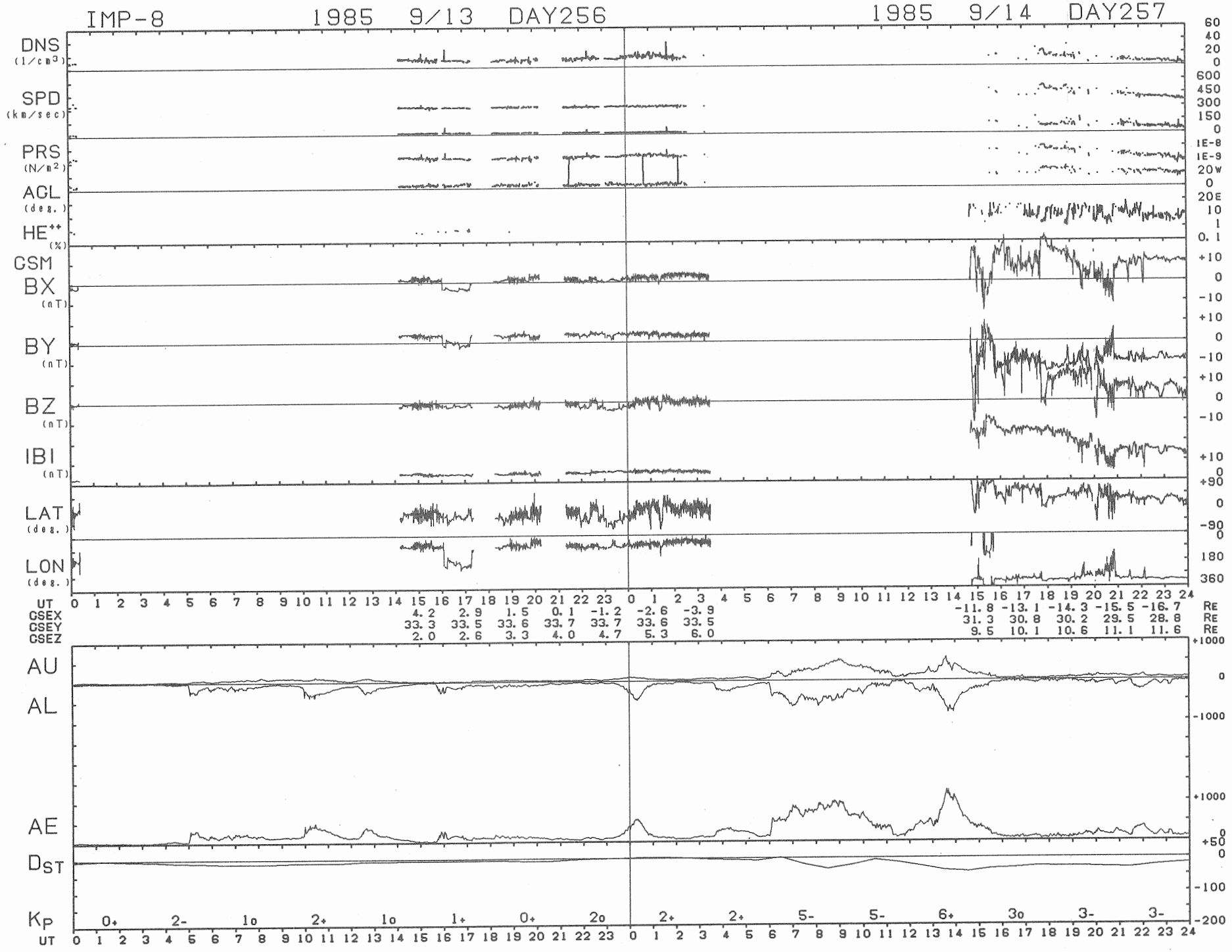

IMP-8
1985 9/ 3 DAY246
1985 9/ 4 DAY247
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -27.9 -28.7 -32.5 -32.9 -33.2 -33.5 -33.9 -34.2 -34.2 -34.1 -34.0 -33.8 -33.6 -33.3 RE
CSEY 18.5 17.4 8.7 7.5 6.1 4.8 2.2 -0.5 -1.8 -5.8 -7.1 -8.4 -9.7 -11.0 RE
CSEZ 14.3 14.6 16.4 16.5 16.6 16.7 16.9 16.9 16.9 16.7 16.5 16.4 16.2 16.0 RE
AU
AL
AE
DST
KP 0+ 2- 2o 1+ 1- 1- 0+ 1+ 0+ 2- 0+ 0+ 0o 1- 1- 0+
UT

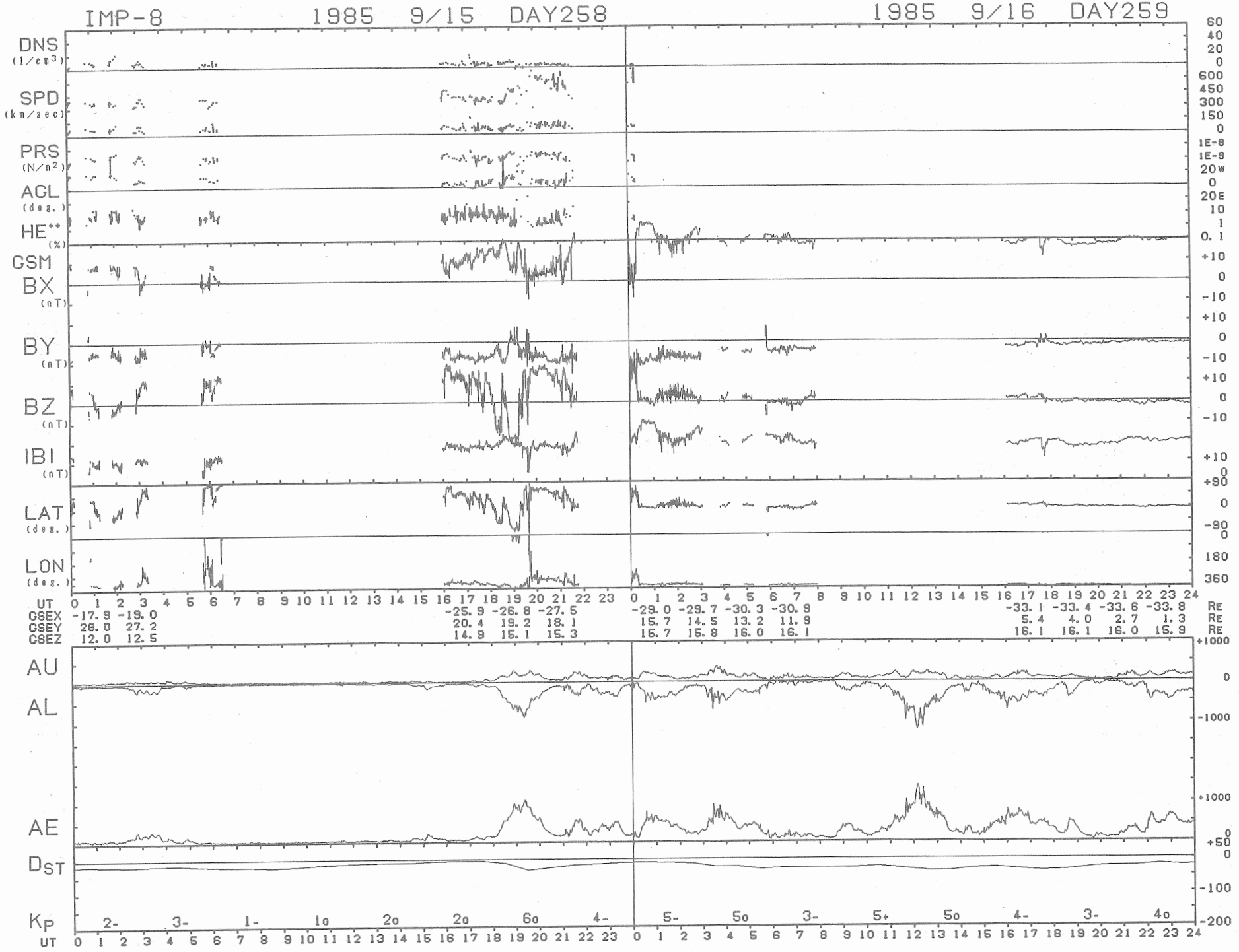

IMP-8 1985 9/ 5 DAY248
1985 9/ 6 DAY249
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.0 -32.7 -32.3 -31.9 -31.4 -30.9 -30.4 -29.8 -29.1 -28.5 -27.8
-25.5 -24.6 -23.8 -22.9 -22.0 -21.0 -16.9 -15.8 RE
GSEY -12.2 -13.5 -14.7 -15.9 -17.1 -18.3 -19.4 -20.5 -21.6 -22.7 -23.7
-26.6 -27.5 -28.4 -29.2 -30.0 -30.8 -33.4 -33.9 RE
GSEZ 15.8 15.6 15.3 15.1 14.8 14.4 14.1 13.8 13.4 13.0 12.6
11.2 10.7 10.2 9.7 9.2 8.7 6.4 5.8 RE
AU
AL
AE
DST
KP
0o 1- 0+ 0+ 0+ 0+ 1o 2- 1o 2o 1+ 1+ 2+ 3o 3- 3+
UT

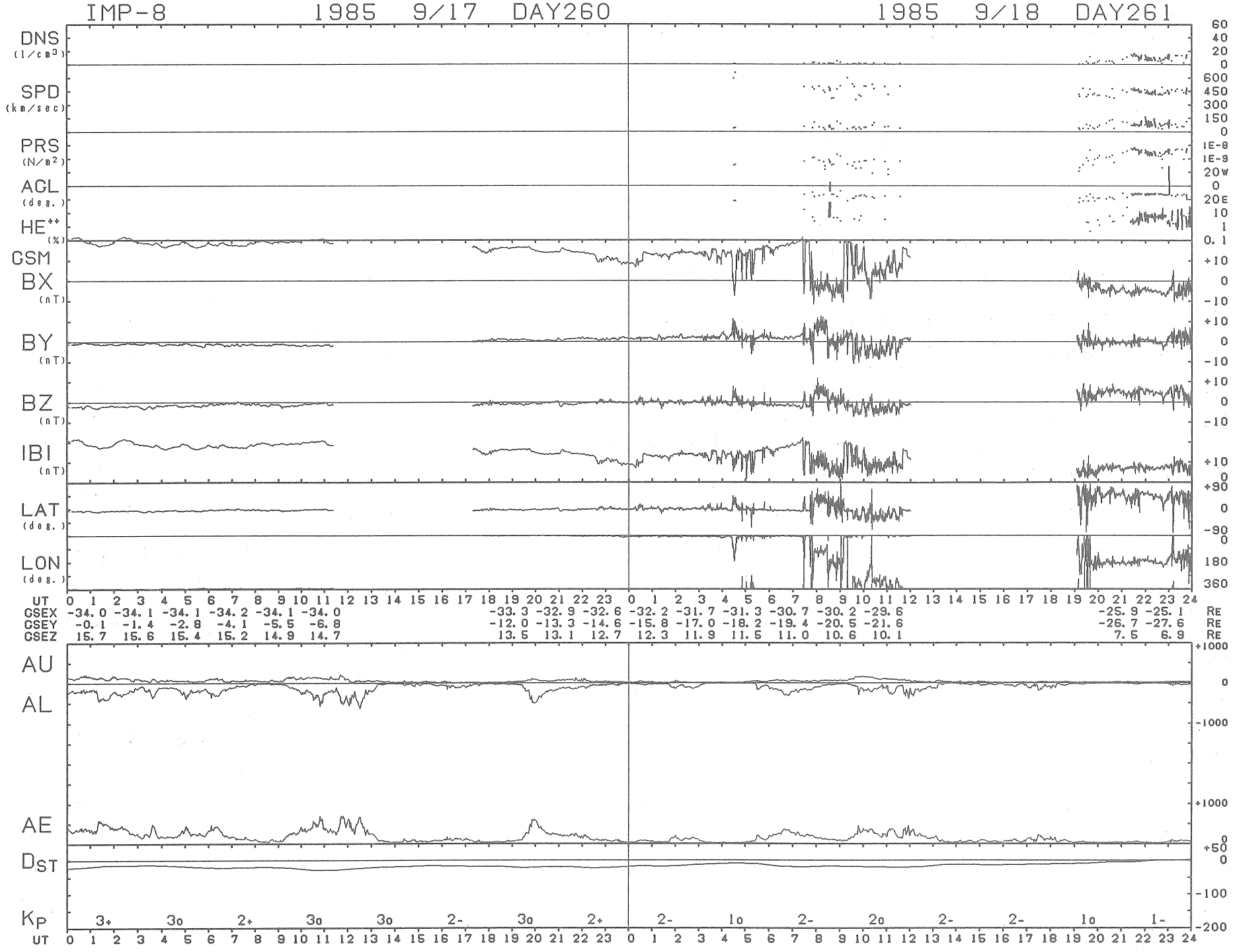

IMP-8
1985 9/ 7 DAY250
1985 9/ 8 DAY251
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.7 -13.6 -12.4 -11.3 -10.1 -8.9 -7.7 -6.5 -1.5 -0.2 1.0 2.3 3.5 4.8 6.0 7.3 8.5 9.7 RE
GSEY -34.4 -34.9 -35.3 -35.6 -35.9 -36.2 -36.4 -36.5 -36.6 -36.5 -36.3 -36.1 -35.8 -35.4 -35.0 -34.6 -34.1 -33.5 RE
GSEZ 5.2 4.6 4.0 3.4 2.7 2.1 1.5 0.8 -1.7 -2.3 -3.0 -3.6 -4.2 -4.8 -5.4 -6.0 -6.6 -7.2 RE
AU
AL
AE
DST
KP
3o 3o 2o 1+ 1+ 1+ 2+ 2+ 1+ 1+ 2+ 2- 3+ 3o 3- 2+
UT

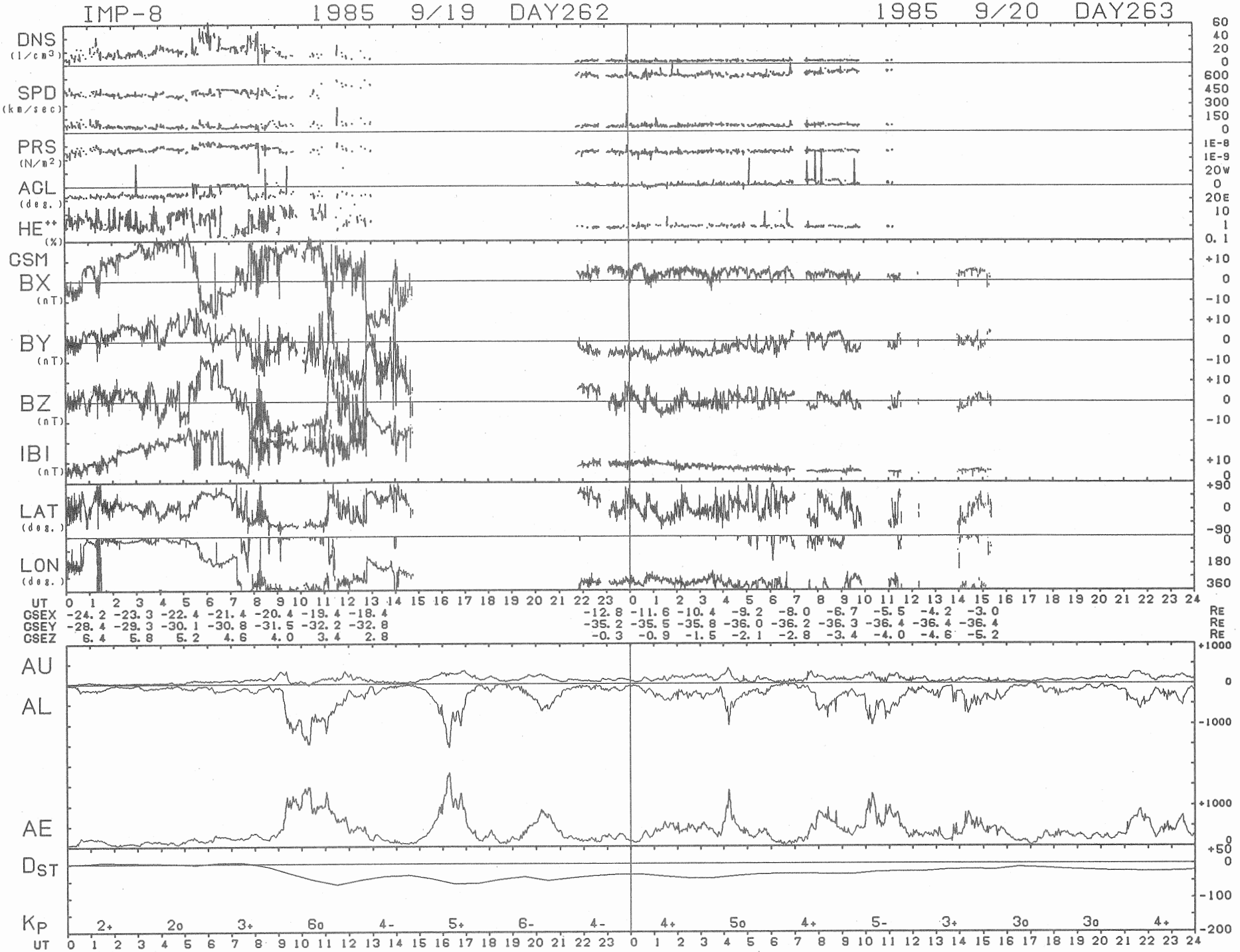

IMP-8 1985 9/ 9 DAY252
1985 9/10 DAY253
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 15.5 16.5 17.6 18.6 19.6 20.6 21.5 22.4
GSEY -29.9 -29.0 -28.1 -27.1 -26.0 -25.0 -23.8 -22.7
GSEZ -9.8 -10.3 -10.7 -11.1 -11.6 -11.9 -12.3 -12.7
27.3 27.8 28.2 28.6 28.9 29.2 29.4
-13.4 -11.9 -10.5 -9.0 -7.4 -5.9 -4.4
-14.3 -14.4 -14.5 -14.5 -14.5 -14.5 -14.5
RE
AU
AL
AE
DST
KP
2o 2+ 2+ 3+ 3o 3o 3o 3- 2- 3- 4- 3- 1+ 2o 3o 3+

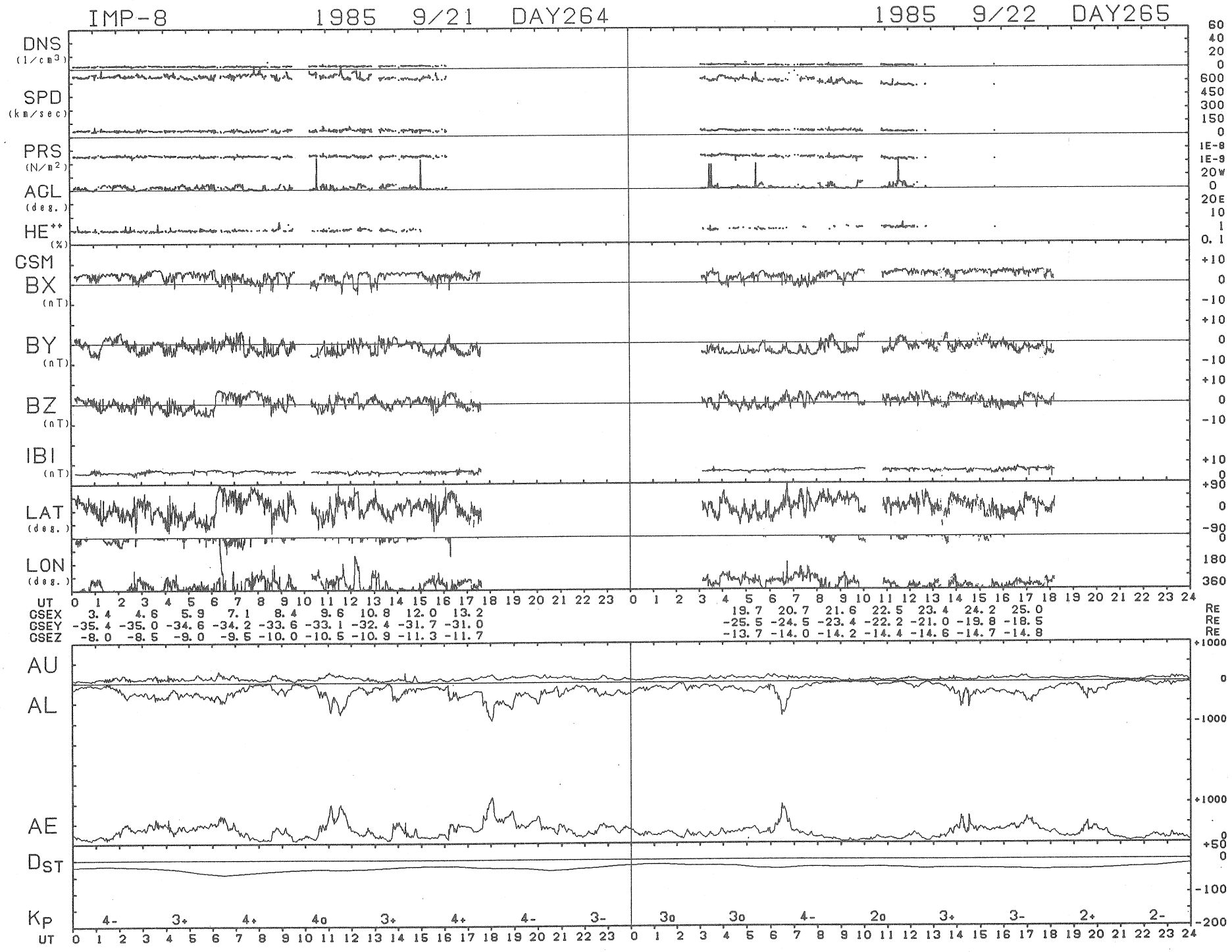

IMP-8
1985 9/11 DAY254
1985 9/12 DAY255
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.9 28.6 27.7 27.2 26.6 15.7 14.5 RE
GSEY 8.0 9.5 12.4 13.9 15.3 28.7 29.5 RE
GSEZ -13.0 -12.7 -12.0 -11.5 -11.1 -4.2 -3.6 RE
AU
AL
AE
DST
KP 2+ 3- 3o 2o 1+ 1o 3+ 1+ 2- 0+ 1+ 1o 2- 2+ 2- 1+
UT

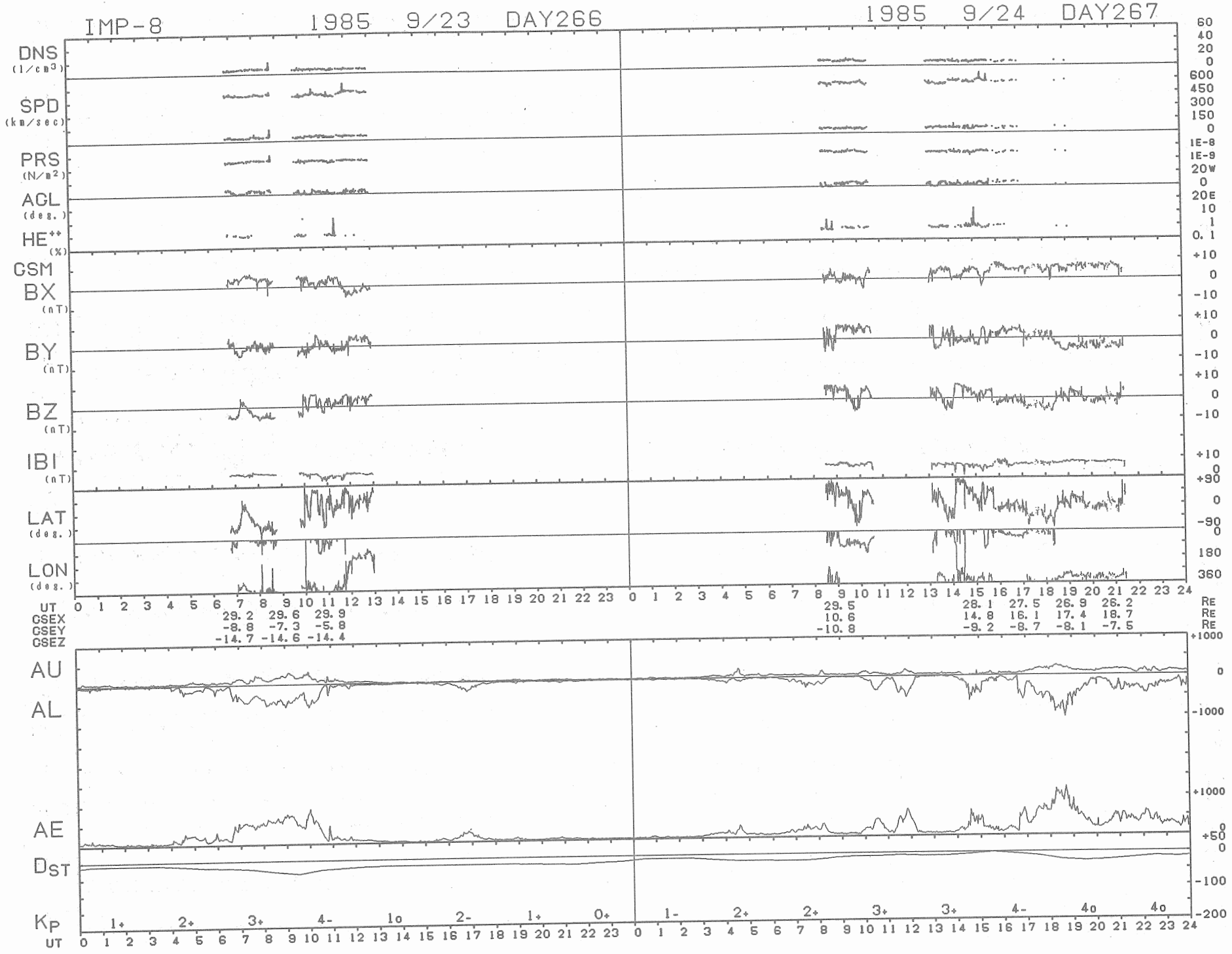

IMP-8
1985 9/13 DAY256
1985 9/14 DAY257
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 4.2 2.9 1.5 0.1 -1.2 -2.6 -3.9 -11.8 -13.1 -14.3 -15.5 -16.7 RE
GSEY 33.3 33.5 33.6 33.7 33.7 33.6 33.5 31.3 30.8 30.2 29.5 28.8 RE
GSEZ 2.0 2.6 3.3 4.0 4.7 5.3 6.0 9.5 10.1 10.6 11.1 11.6 RE
AU
AL
AE
DST
KP 0+ 2- 1o 2+ 1o 1+ 0+ 2o 2+ 2+ 5- 5- 6+ 3o 3- 3-
UT

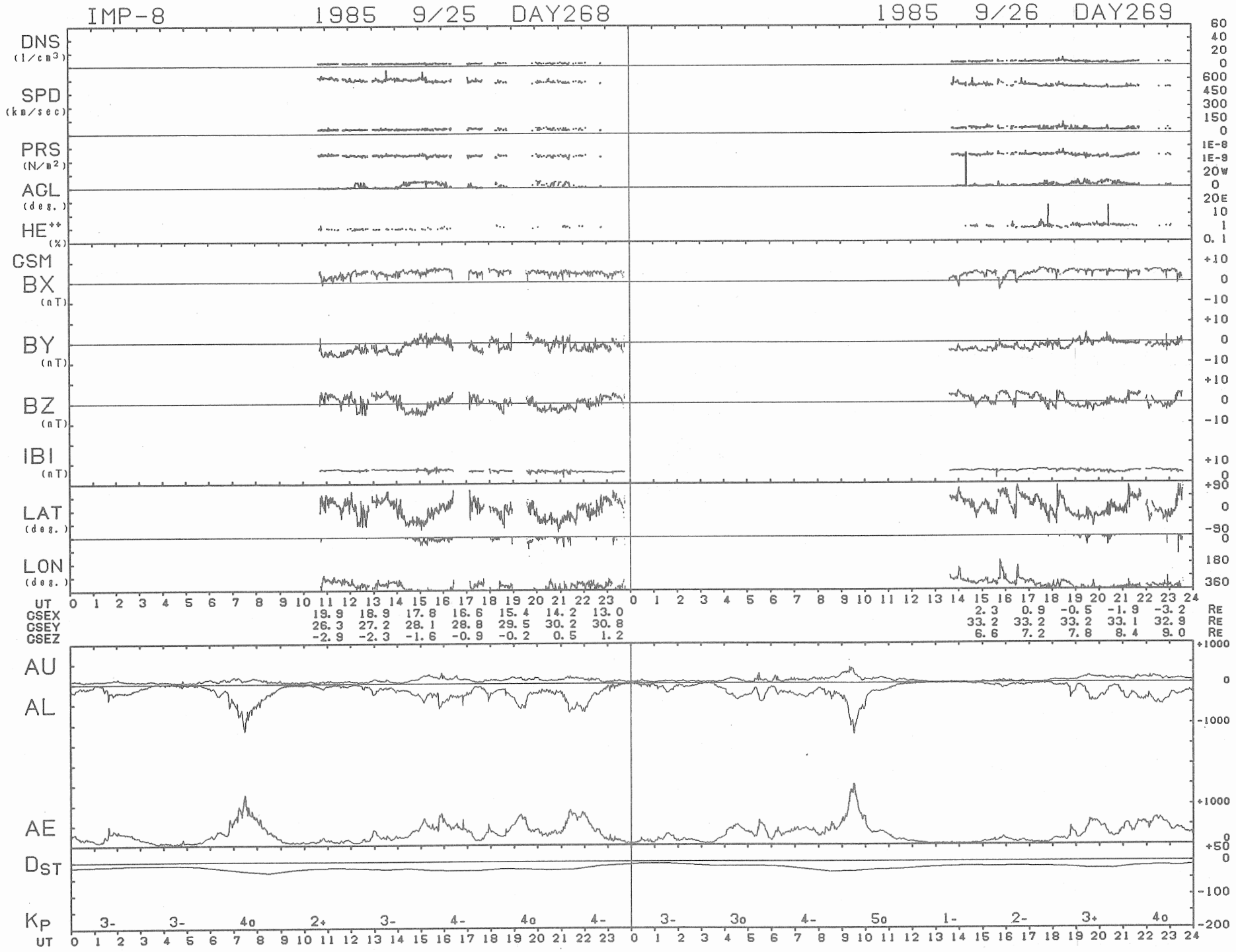

IMP-8
1985 9/15 DAY258
1985 9/16 DAY259
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.9 -19.0 -25.9 -26.8 -27.5 -29.0 -29.7 -30.3 -30.9 -33.1 -33.4 -33.6 -33.8 RE
GSEY 28.0 27.2 20.4 19.2 18.1 15.7 14.5 13.2 11.9 5.4 4.0 2.7 1.3 RE
GSEZ 12.0 12.5 14.9 15.1 15.3 15.7 15.8 16.0 16.1 16.1 16.1 16.0 15.9 RE
AU
AL
AE
DST
KP
2- 3- 1- 1o 2o 2o 6o 4- 5- 5o 3- 5+ 5o 4- 3- 4o
UT

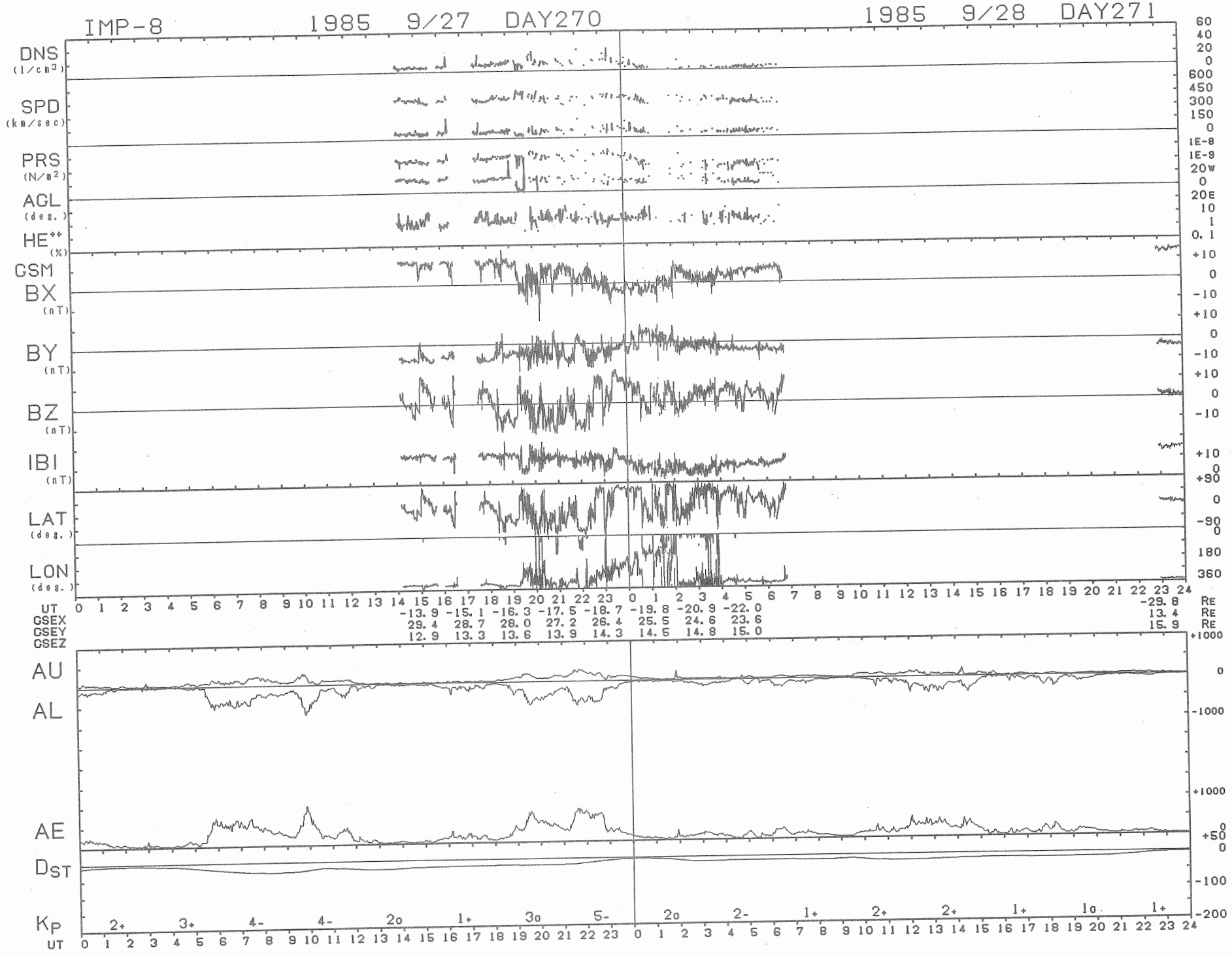

IMP-8 1985 9/17 DAY260
1985 9/18 DAY261
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -34.0 -34.1 -34.1 -34.2 -34.1 -34.0 -33.3 -32.9 -32.6 -32.2 -31.7 -31.3 -30.7 -30.2 -29.6 -25.9 -25.1 RE
GSEY -0.1 -1.4 -2.8 -4.1 -5.5 -6.8 -12.0 -13.3 -14.6 -15.8 -17.0 -18.2 -19.4 -20.5 -21.6 -26.7 -27.6 RE
GSEZ 15.7 15.6 15.4 15.2 14.9 14.7 13.5 13.1 12.7 12.3 11.9 11.5 11.0 10.6 10.1 7.5 6.9 RE
AU
AL
AE
DST
KP
3+ 3o 2+ 3o 3o 2- 3o 2+ 2- 1o 2- 2o 2- 2- 1o 1-
UT

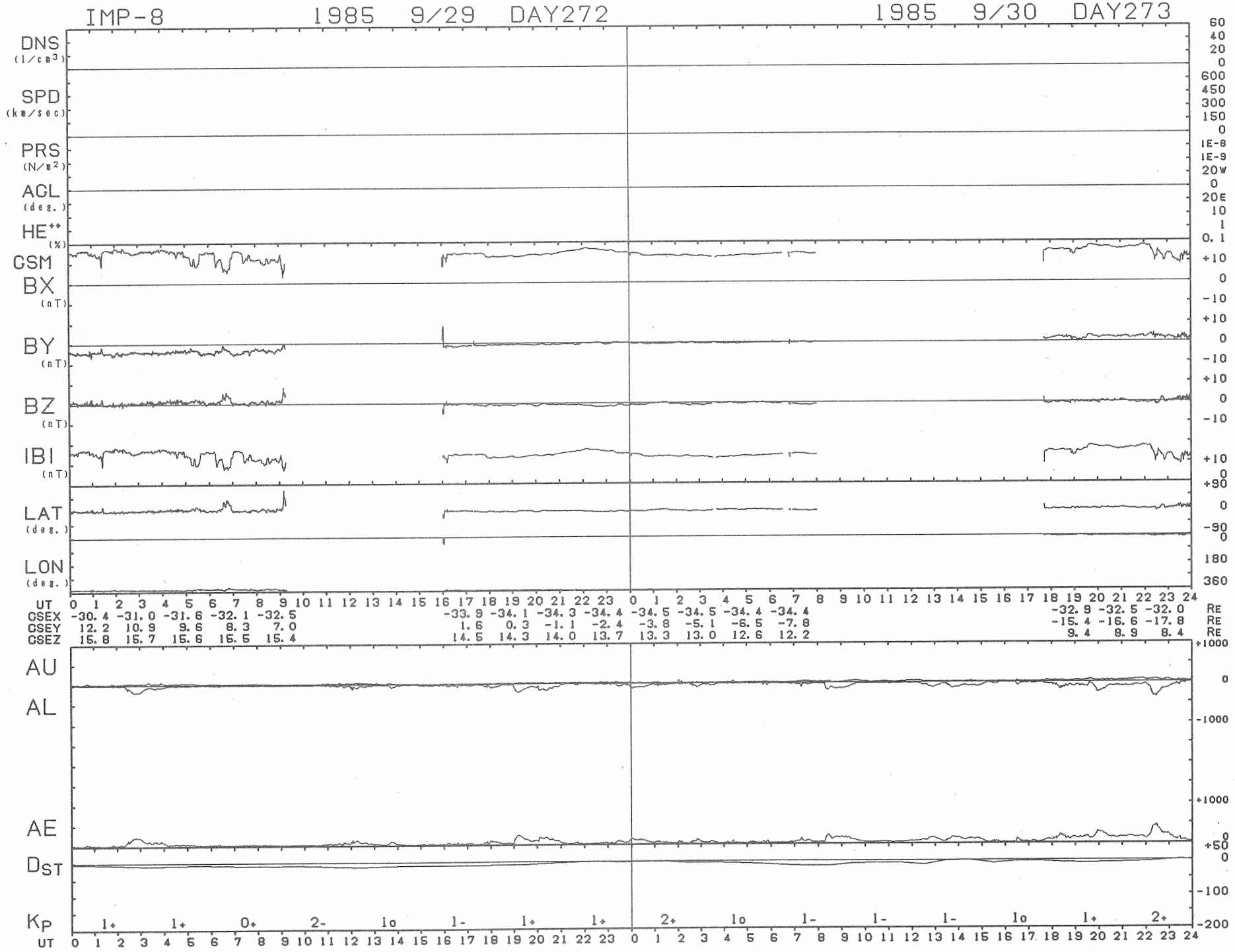

IMP-8 1985 9/19 DAY262
1985 9/20 DAY263
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.2 -23.3 -22.4 -21.4 -20.4 -19.4 -18.4 -12.8 -11.6 -10.4 -9.2 -8.0 -6.7 -5.5 -4.2 -3.0
GSEY -28.4 -29.3 -30.1 -30.8 -31.5 -32.2 -32.8 -35.2 -35.5 -35.8 -36.0 -36.2 -36.3 -36.4 -36.4 -36.4
GSEZ 6.4 5.8 5.2 4.6 4.0 3.4 2.8 -0.3 -0.9 -1.5 -2.1 -2.8 -3.4 -4.0 -4.6 -5.2
RE
AU
AL
AE
DST
KP
2+ 2o 3+ 6o 4- 5+ 6- 4- 4+ 5o 4+ 5- 3+ 3o 3o 4+
UT

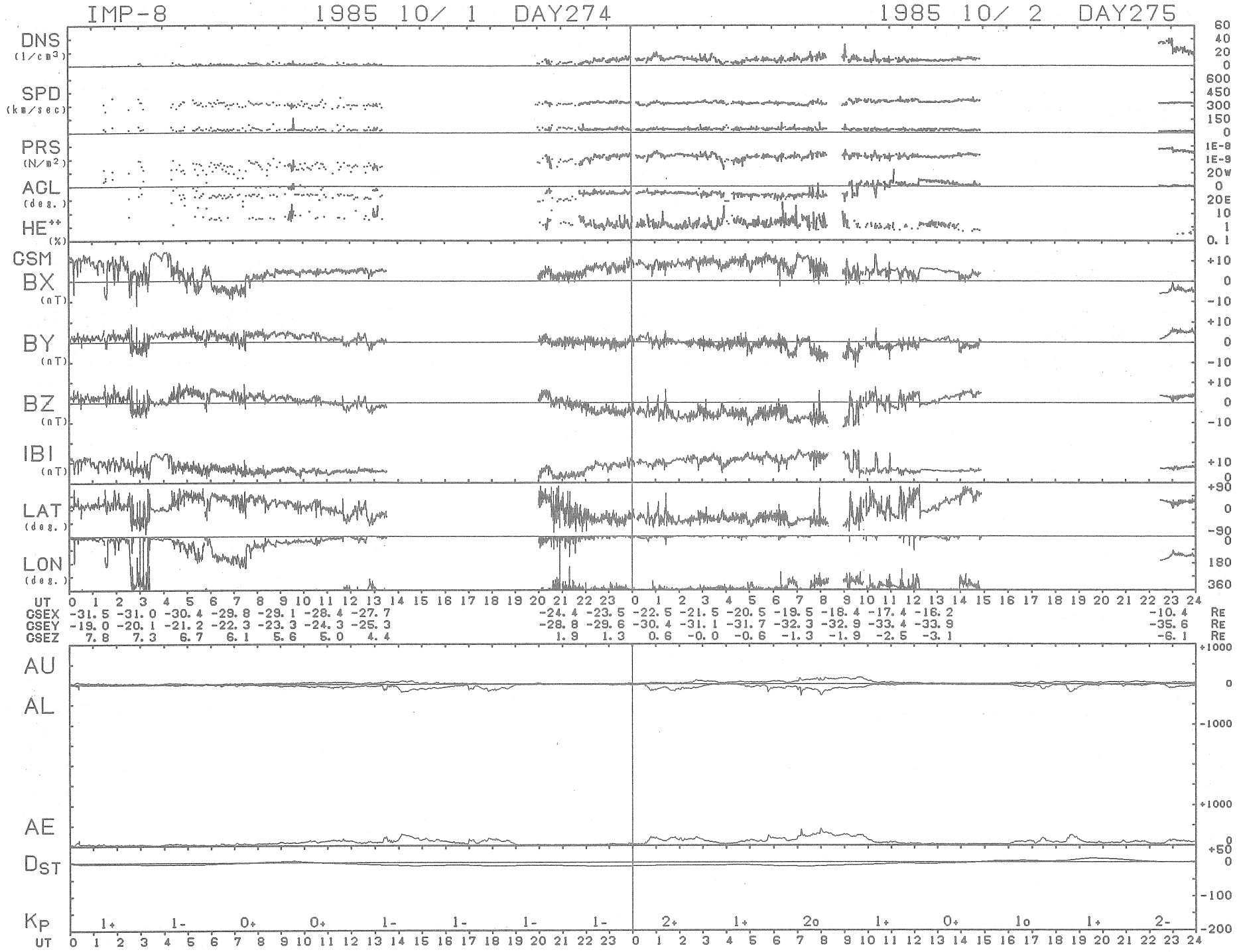

IMP-8 1985 9/21 DAY264
1985 9/22 DAY265
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.4 4.6 5.9 7.1 8.4 9.6 10.8 12.0 13.2 19.7 20.7 21.6 22.5 23.4 24.2 25.0 RE
GSEY -35.4 -35.0 -34.6 -34.2 -33.6 -33.1 -32.4 -31.7 -31.0 -25.5 -24.5 -23.4 -22.2 -21.0 -19.8 -18.5 RE
GSEZ -8.0 -8.5 -9.0 -9.5 -10.0 -10.5 -10.9 -11.3 -11.7 -13.7 -14.0 -14.2 -14.4 -14.6 -14.7 -14.8 RE
AU
AL
AE
DST
KP
4- 3+ 4+ 4o 3+ 4+ 4- 3- 3o 3o 4- 2o 3+ 3- 2+ 2-
UT

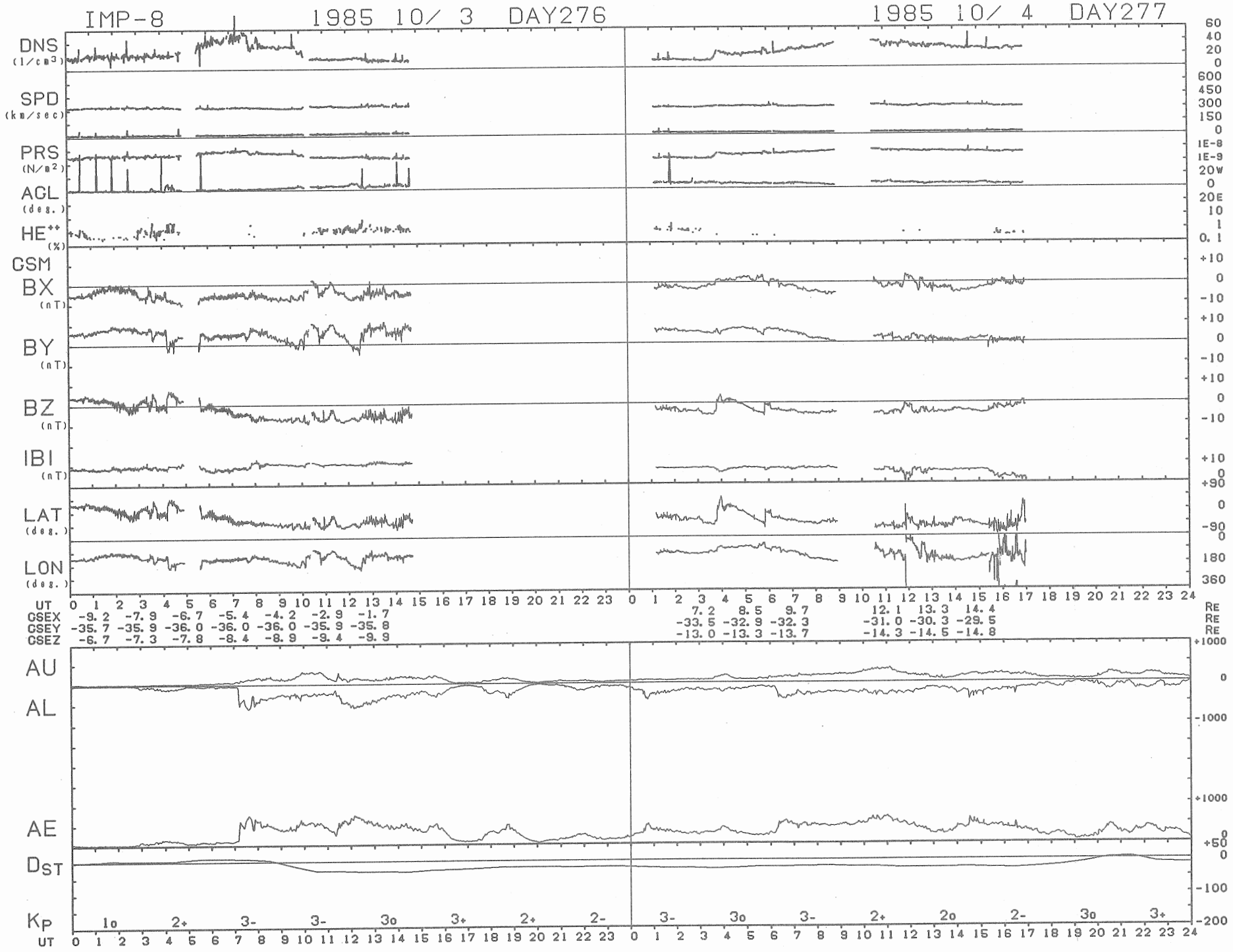

IMP-8
1985 9/23 DAY266
1985 9/24 DAY267
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 29.2 29.6 29.9 29.5 28.1 27.5 26.9 26.2 RE
GSEY -8.8 -7.3 -5.8 10.6 14.8 16.1 17.4 18.7 RE
GSEZ -14.7 -14.6 -14.4 -10.8 -9.2 -8.7 -8.1 -7.5 RE
AU
AL
AE
DST
KP
1+ 2+ 3+ 4- 1o 2- 1+ 0+ 1- 2+ 2+ 3+ 3+ 4- 4o 4o
UT

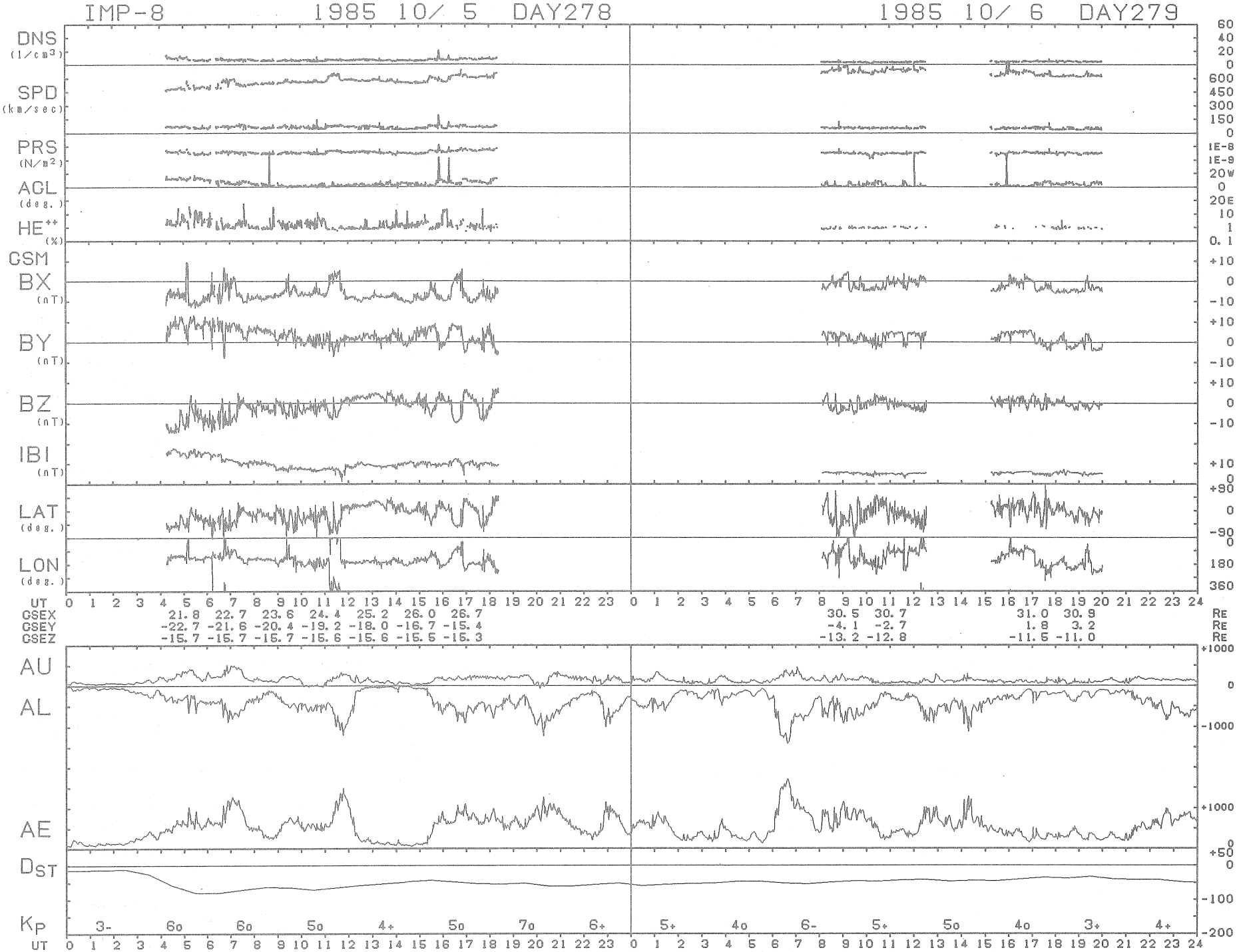

IMP-8
1985 9/25 DAY268
1985 9/26 DAY269
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 19.9 18.9 17.8 16.6 15.4 14.2 13.0 2.3 0.9 -0.5 -1.9 -3.2 RE
GSEY 26.3 27.2 28.1 28.8 29.5 30.2 30.8 33.2 33.2 33.2 33.1 32.9 RE
GSEZ -2.9 -2.3 -1.6 -0.9 -0.2 0.5 1.2 6.6 7.2 7.8 8.4 9.0 RE
AU
AL
AE
DST
KP 3- 3- 4o 2+ 3- 4- 4o 4- 3- 3o 4- 5o 1- 2- 3+ 4o
UT

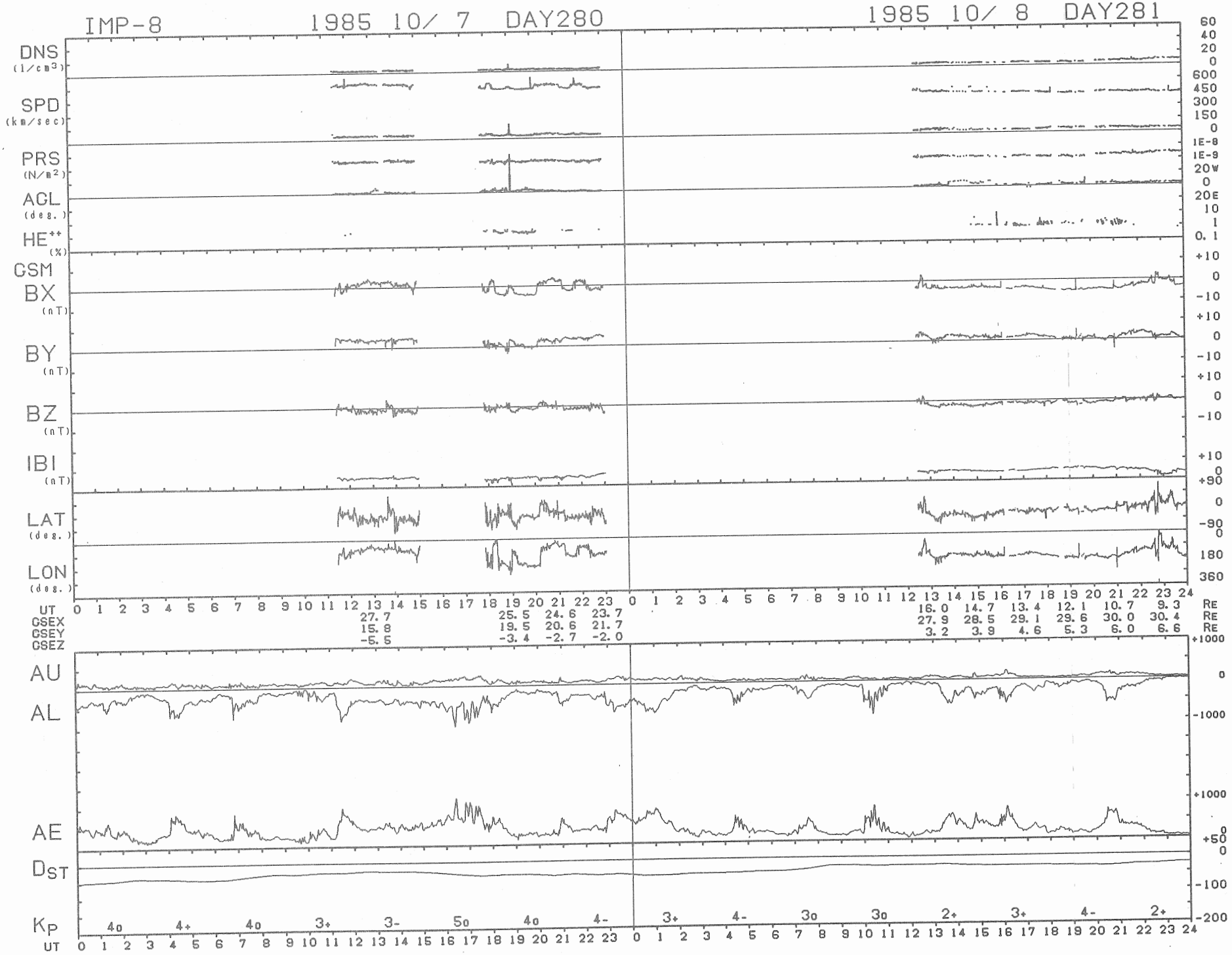

IMP-8
1985 9/27 DAY270
1985 9/28 DAY271
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.9 -15.1 -16.3 -17.5 -18.7 -19.8 -20.9 -22.0 -29.8 RE
GSEY 29.4 28.7 28.0 27.2 26.4 25.5 24.6 23.6 13.4 RE
GSEZ 12.9 13.3 13.6 13.9 14.3 14.5 14.8 15.0 15.9 RE
AU
AL
AE
DST
KP 2+ 3+ 4- 4- 2o 1+ 3o 5- 2o 2- 1+ 2+ 2+ 1+ 1o 1+
UT

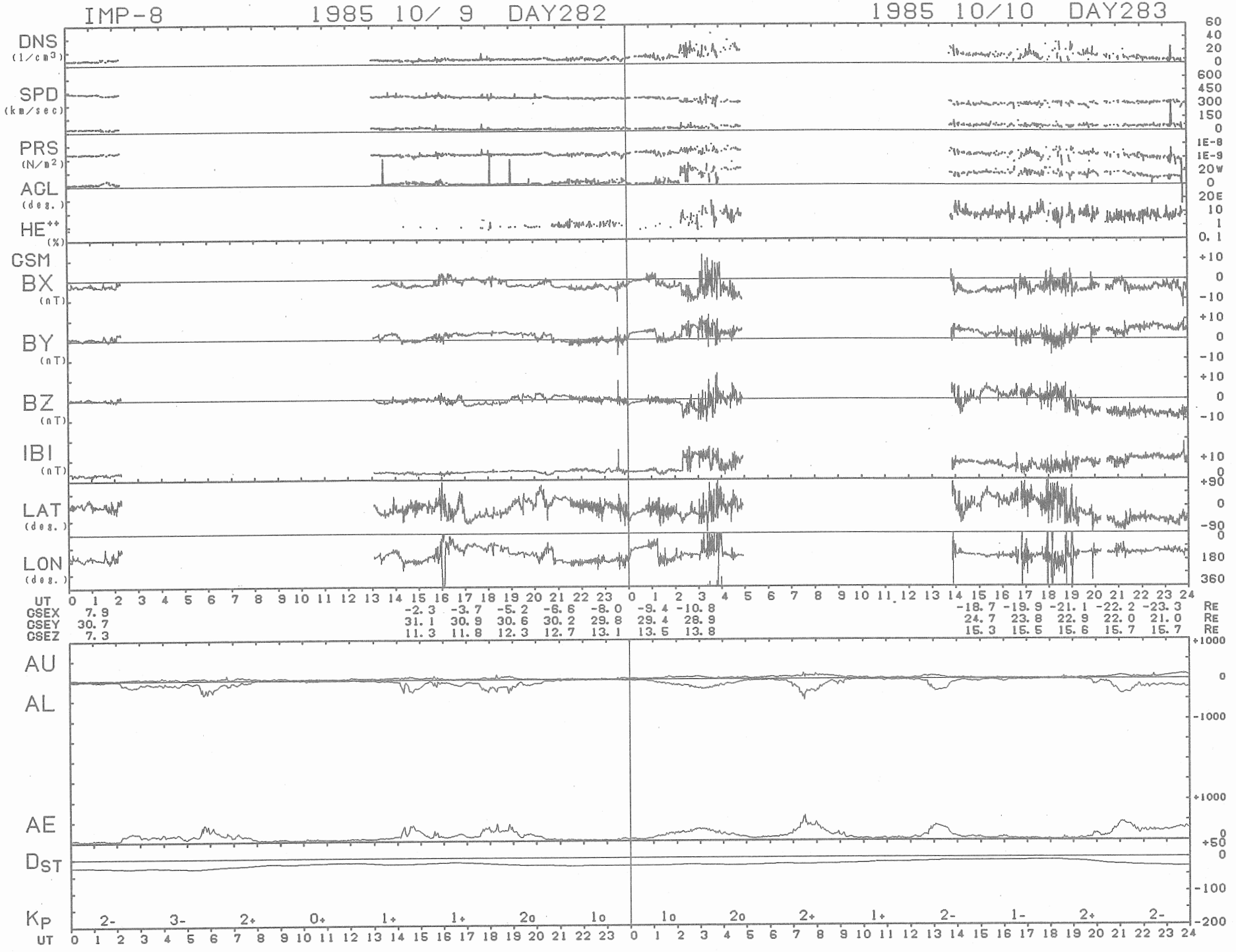

IMP-8
1985 9/29 DAY272
1985 9/30 DAY273
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -30.4 -31.0 -31.6 -32.1 -32.5 -33.9 -34.1 -34.3 -34.4 -34.5 -34.5 -34.4 -34.4 -32.9 -32.5 -32.0 RE
GSEY 12.2 10.9 9.6 8.3 7.0 1.6 0.3 -1.1 -2.4 -3.8 -5.1 -6.5 -7.8 -15.4 -16.6 -17.8 RE
GSEZ 15.8 15.7 15.6 15.5 15.4 14.5 14.3 14.0 13.7 13.3 13.0 12.6 12.2 9.4 8.9 8.4 RE
AU
AL
AE
DST
KP
1+ 1+ 0+ 2- 1o 1- 1+ 1+ 2+ 1o 1- 1- 1- 1o 1+ 2+
UT

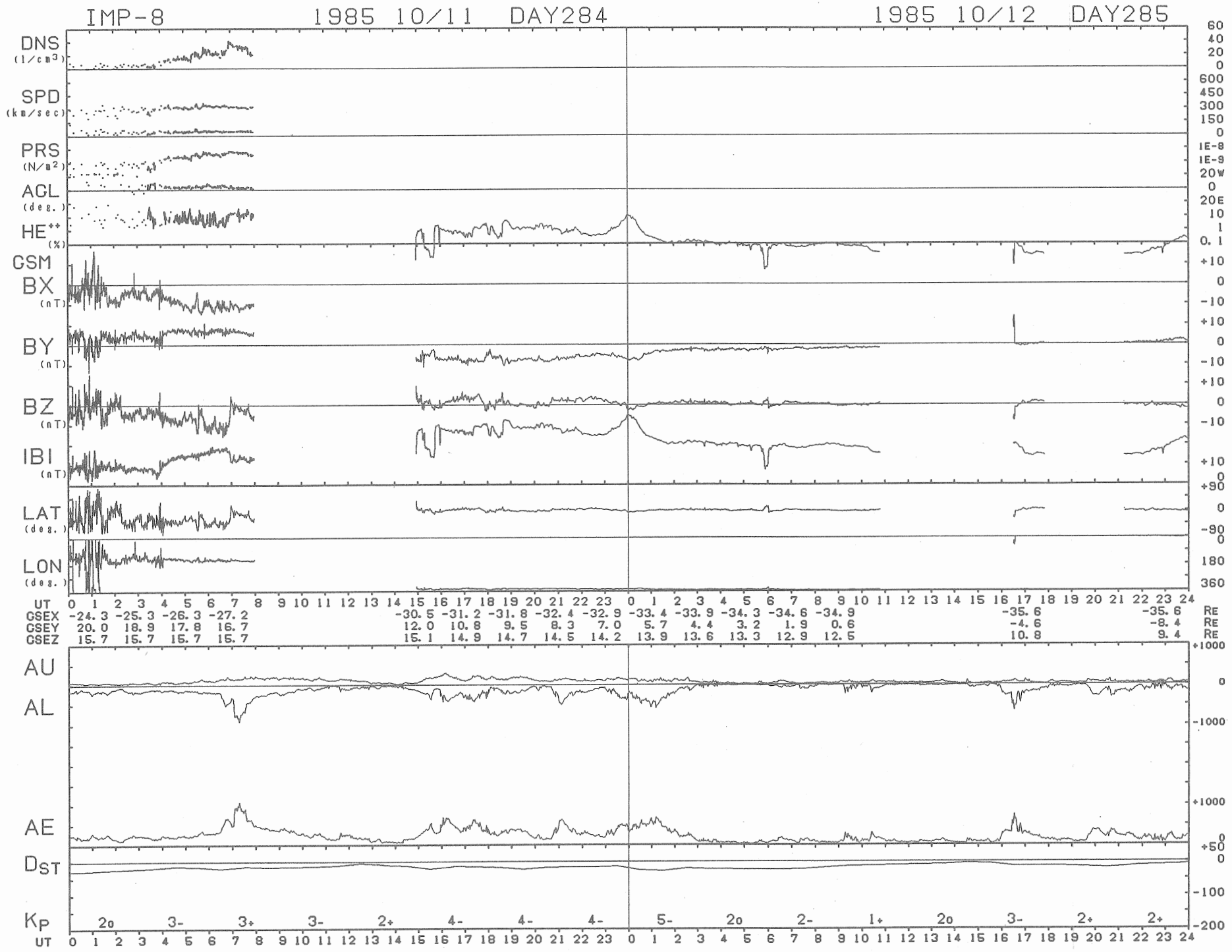

IMP-8
1985 10/ 1 DAY274
1985 10/ 2 DAY275
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.5 -31.0 -30.4 -29.8 -29.1 -28.4 -27.7 -24.4 -23.5 -22.5 -21.5 -20.5 -19.5 -18.4 -17.4 -16.2 -10.4 RE
GSEY -19.0 -20.1 -21.2 -22.3 -23.3 -24.3 -25.3 -28.8 -29.6 -30.4 -31.1 -31.7 -32.3 -32.9 -33.4 -33.9 -35.6 RE
GSEZ 7.8 7.3 6.7 6.1 5.6 5.0 4.4 1.9 1.3 0.6 -0.0 -0.6 -1.3 -1.9 -2.5 -3.1 -6.1 RE
AU
AL
AE
DST
KP
1+ 1- 0+ 0+ 1- 1- 1- 1- 2+ 1+ 2o 1+ 0+ 1o 1+ 2-
UT

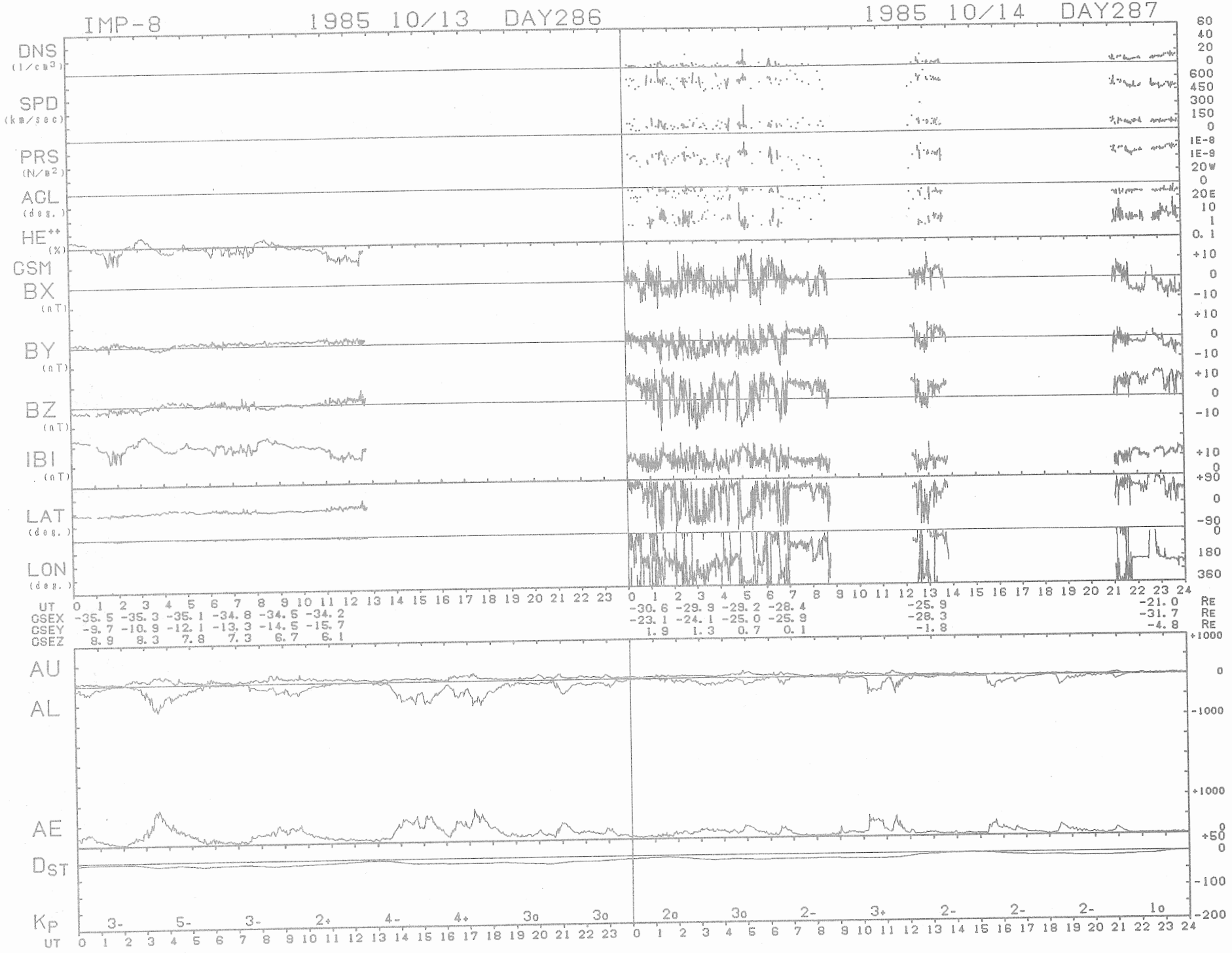

IMP-8
1985 10/ 3 DAY276
1985 10/ 4 DAY277
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -9.2 -7.9 -6.7 -5.4 -4.2 -2.9 -1.7 7.2 8.5 9.7 12.1 13.3 14.4 RE
GSEY -35.7 -35.9 -36.0 -36.0 -36.0 -35.9 -35.8 -33.5 -32.9 -32.3 -31.0 -30.3 -29.5 RE
GSEZ -6.7 -7.3 -7.8 -8.4 -8.9 -9.4 -9.9 -13.0 -13.3 -13.7 -14.3 -14.5 -14.8 RE
AU
AL
AE
DST
KP
1o 2+ 3- 3- 3o 3+ 2+ 2- 3- 3o 3- 2+ 2o 2- 3o 3+
UT

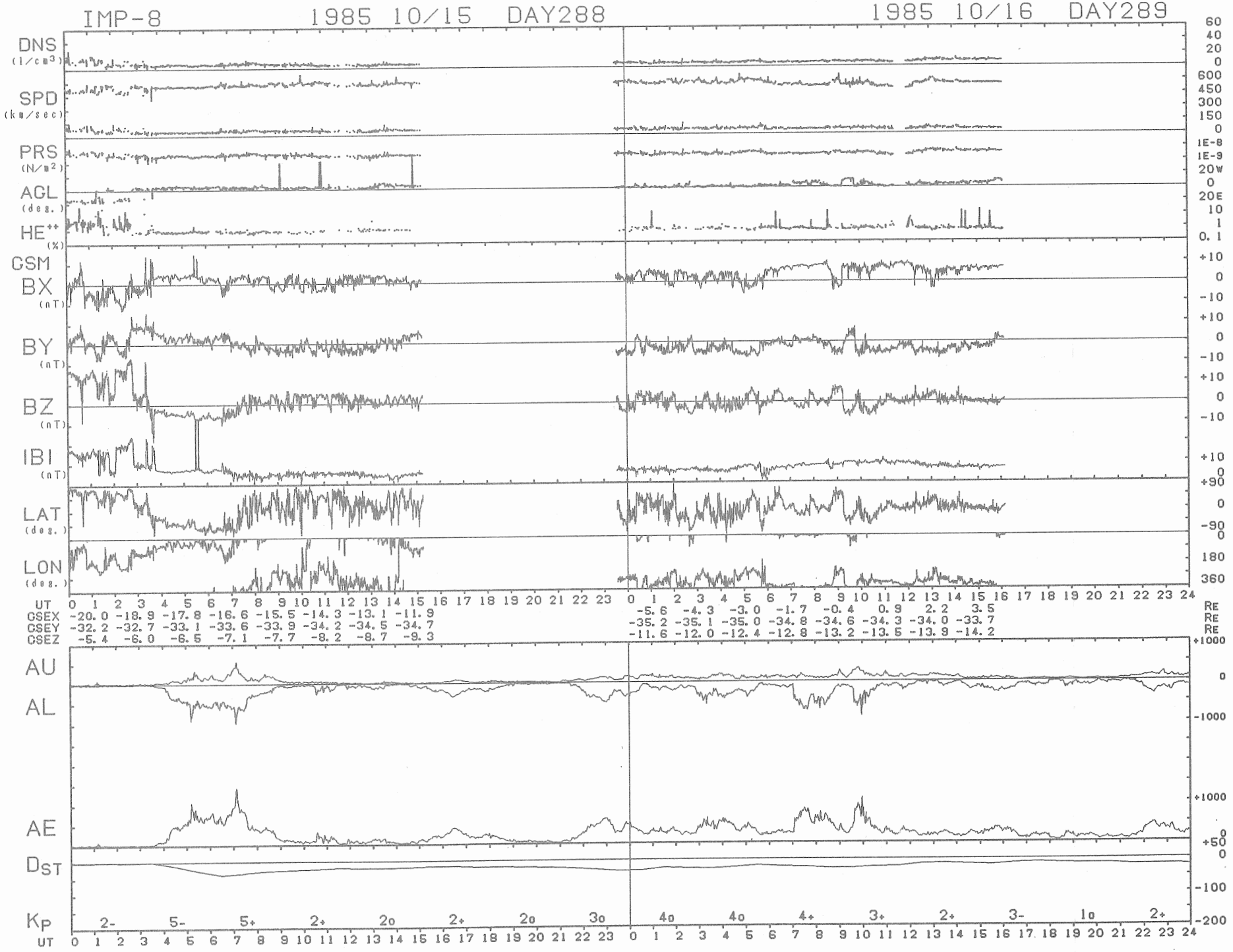

IMP-8
1985 10/ 5 DAY278
1985 10/ 6 DAY279
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.8 22.7 23.6 24.4 25.2 26.0 26.7 30.5 30.7 31.0 30.9 RE
GSEY -22.7 -21.6 -20.4 -19.2 -18.0 -16.7 -15.4 -4.1 -2.7 1.8 3.2 RE
GSEZ -15.7 -15.7 -15.7 -15.6 -15.6 -15.5 -15.3 -13.2 -12.8 -11.5 -11.0 RE
AU
AL
AE
DST
KP 3- 6o 6o 5o 4+ 5o 7o 6+ 5+ 4o 6- 5+ 5o 4o 3+ 4+
UT

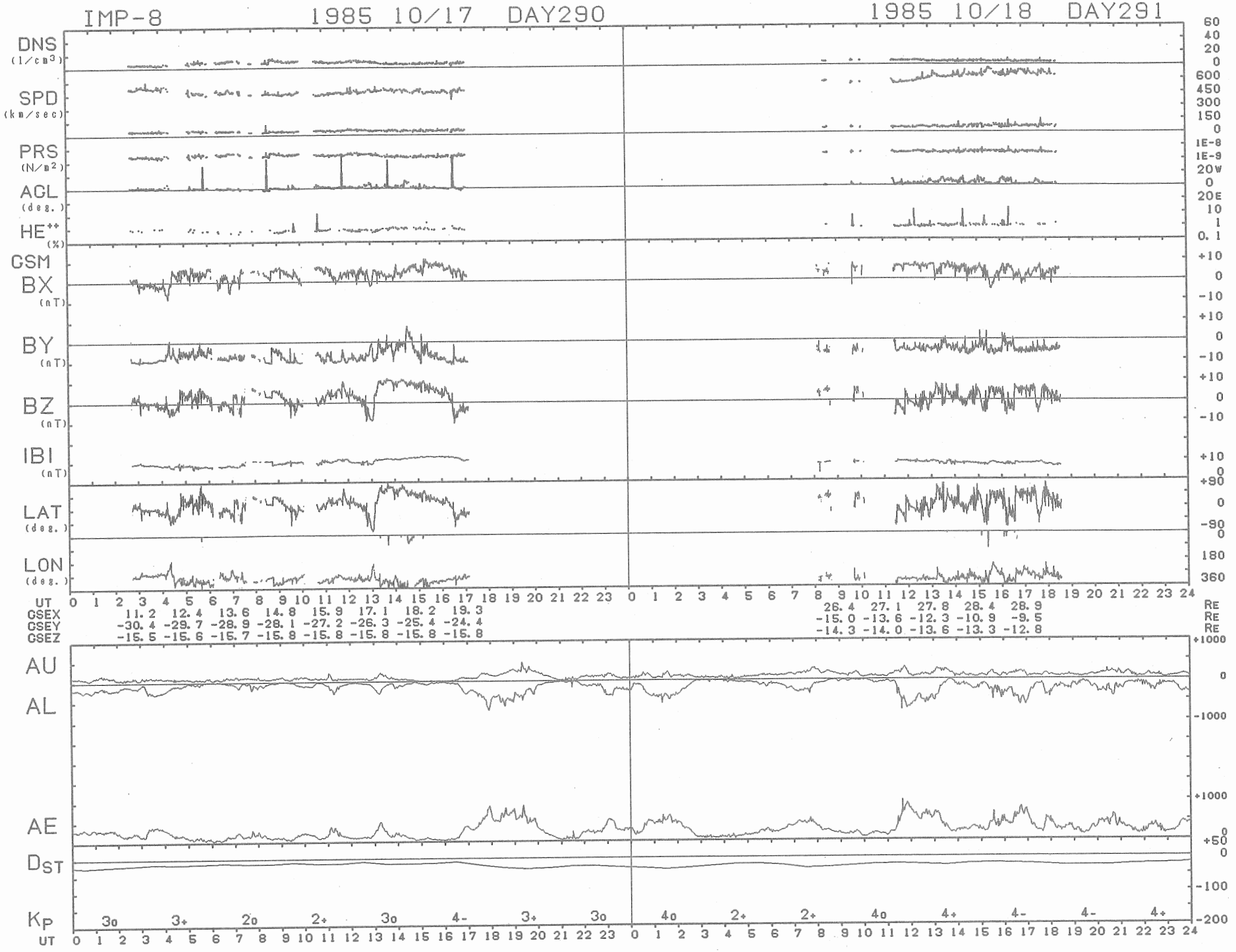

IMP-8
1985 10/ 7 DAY280
1985 10/ 8 DAY281
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
Dst
Kp
UT

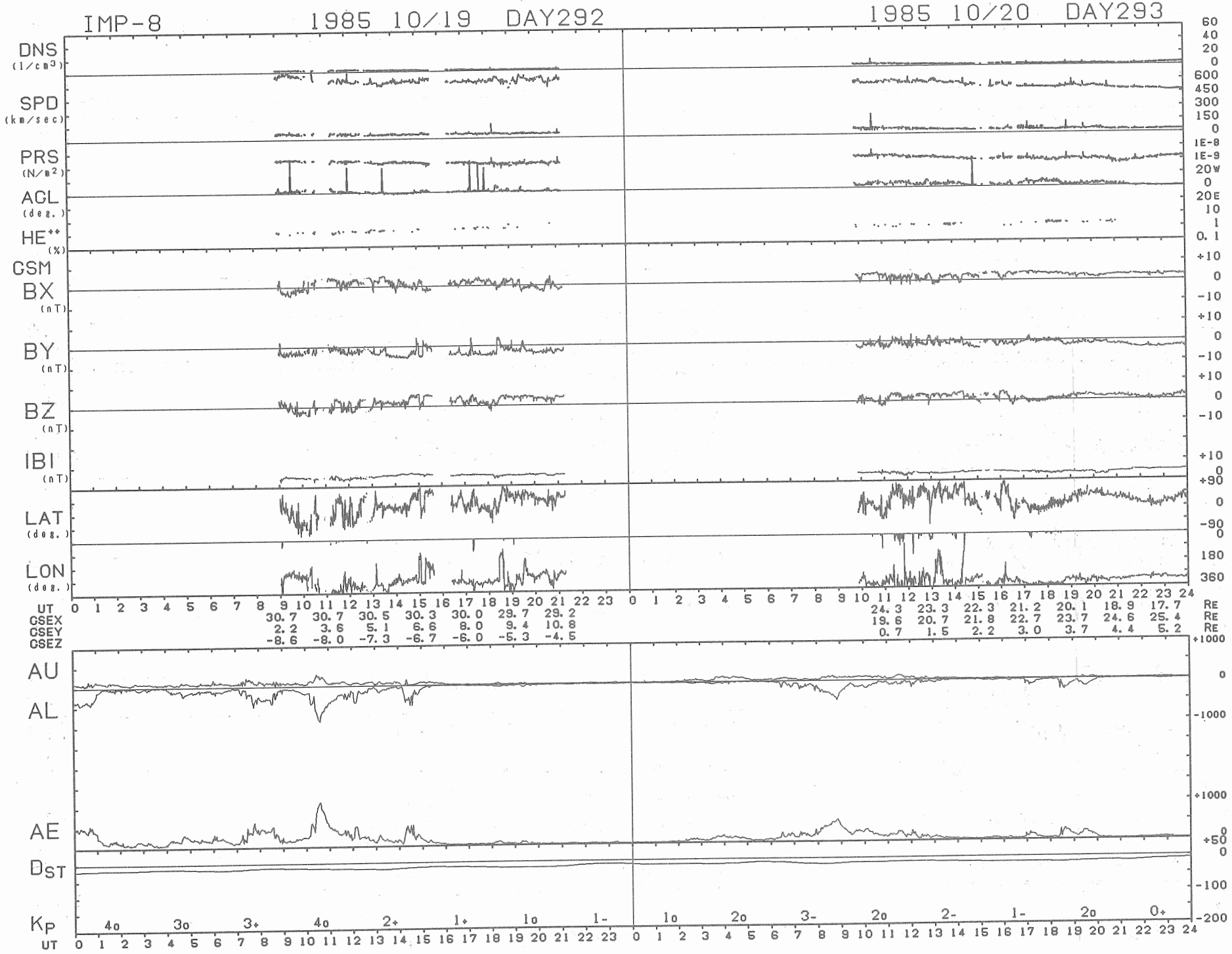

IMP-8
1985 10/ 9 DAY282
1985 10/10 DAY283
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 7.9 -2.3 -3.7 -5.2 -6.6 -8.0 -9.4 -10.8 -18.7 -19.9 -21.1 -22.2 -23.3 RE
GSEY 30.7 31.1 30.9 30.6 30.2 29.8 29.4 28.9 24.7 23.8 22.9 22.0 21.0 RE
GSEZ 7.3 11.3 11.8 12.3 12.7 13.1 13.5 13.8 15.3 15.5 15.6 15.7 15.7 RE
AU
AL
AE
DST
KP 2- 3- 2+ 0+ 1+ 1+ 2o 1o 1o 2o 2+ 1+ 2- 1- 2+ 2-
UT

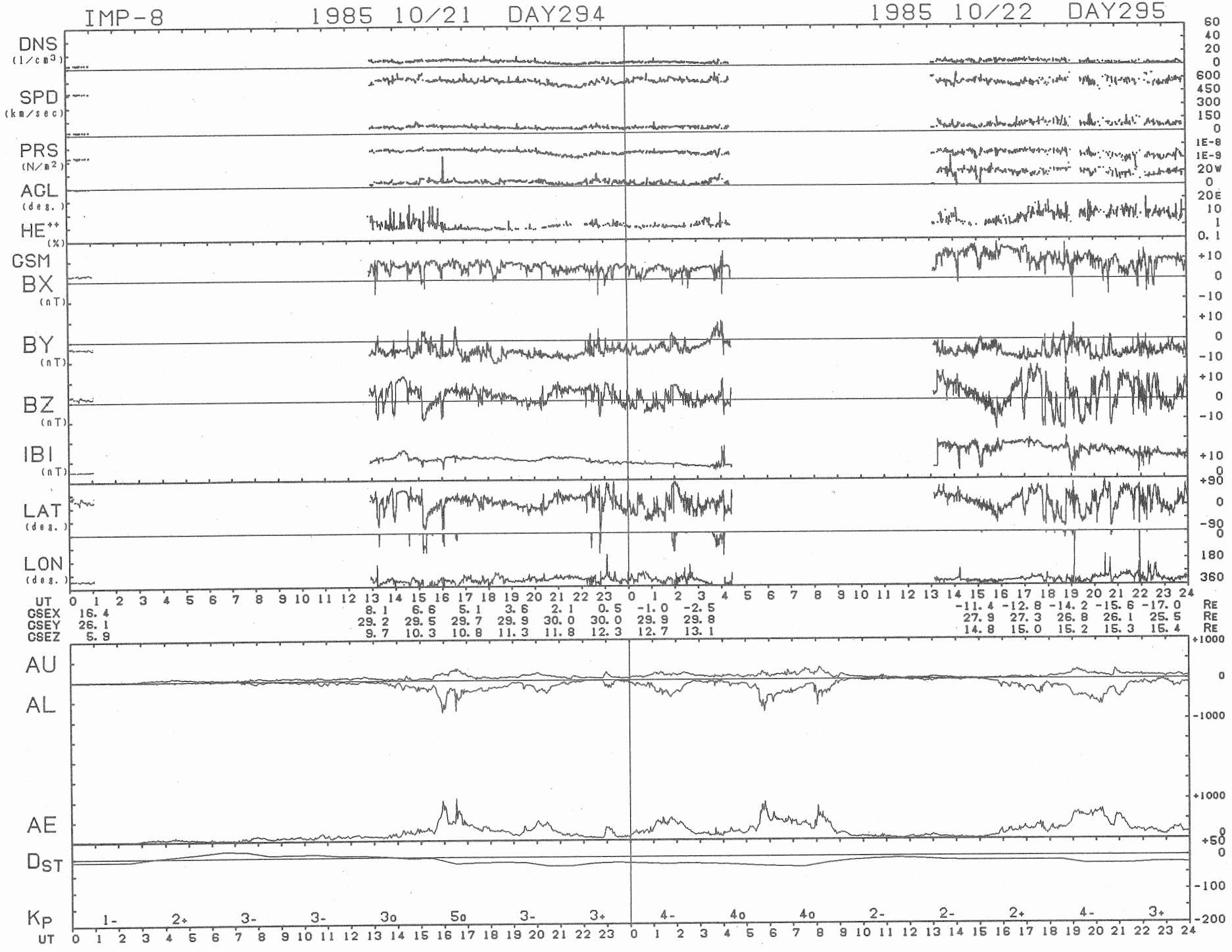

IMP-8
1985 10/11 DAY284
1985 10/12 DAY285
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -24.3 -25.3 -26.3 -27.2 -30.5 -31.2 -31.8 -32.4 -32.9 -33.4 -33.9 -34.3 -34.6 -34.9 -35.6 -35.6 RE
GSEY 20.0 18.9 17.8 16.7 12.0 10.8 9.5 8.3 7.0 5.7 4.4 3.2 1.9 0.6 -4.6 -8.4 RE
GSEZ 15.7 15.7 15.7 15.7 15.1 14.9 14.7 14.5 14.2 13.9 13.6 13.3 12.9 12.5 10.8 9.4 RE
AU
AL
AE
DST
KP 2o 3- 3+ 3- 2+ 4- 4- 4- 5- 2o 2- 1+ 2o 3- 2+ 2+
UT

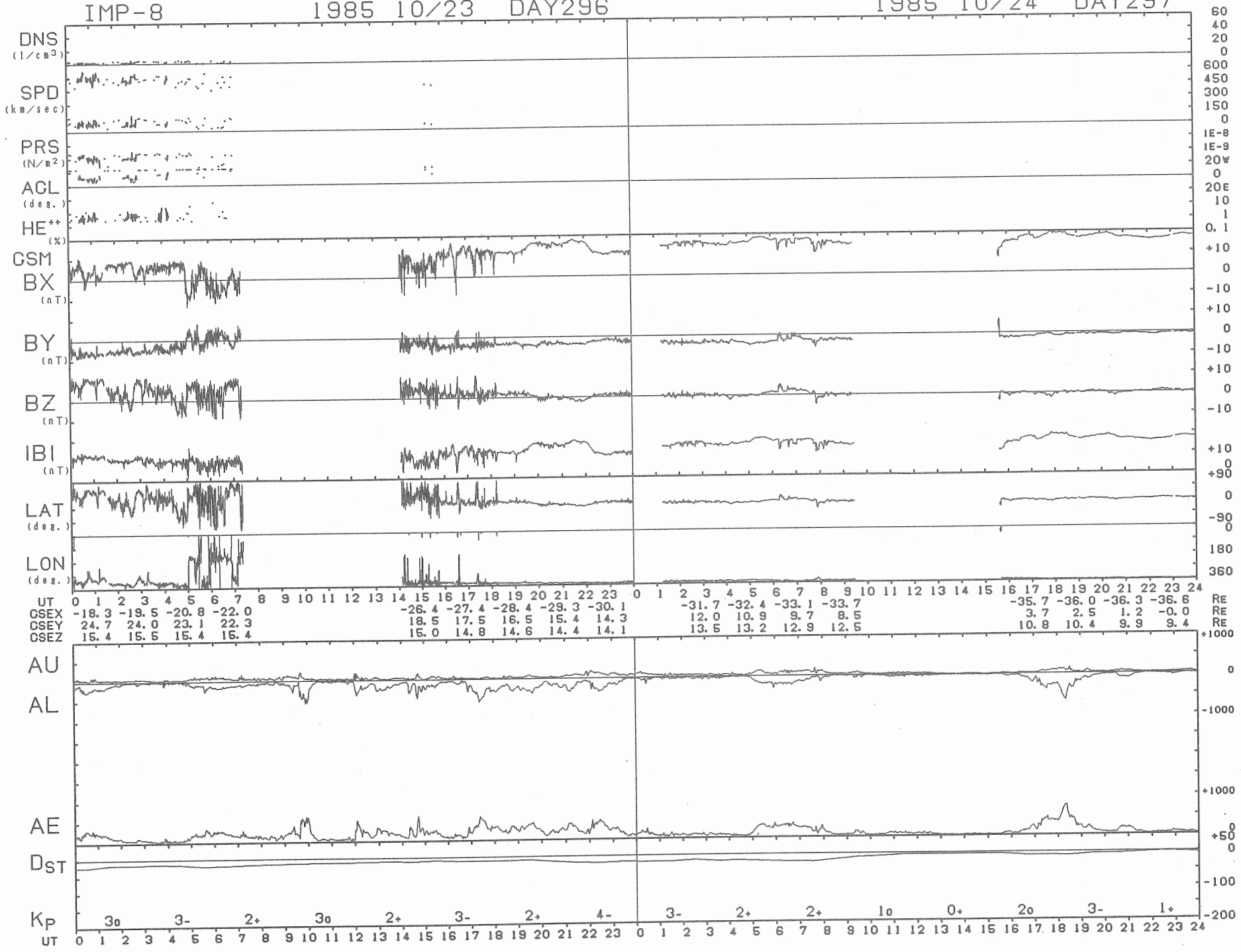

IMP-8
1985 10/13 DAY286
1985 10/14 DAY287
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -35.5 -35.3 -35.1 -34.8 -34.5 -34.2 -30.6 -29.9 -29.2 -28.4 -25.9 -21.0 RE
GSEY -9.7 -10.9 -12.1 -13.3 -14.5 -15.7 -23.1 -24.1 -25.0 -25.9 -28.3 -31.7 RE
GSEZ 8.9 8.3 7.8 7.3 6.7 6.1 1.9 1.3 0.7 0.1 -1.8 -4.8 RE
AU
AL
AE
DST
KP
3- 5- 3- 2+ 4- 4+ 3o 3o 2o 3o 2- 3+ 2- 2- 2- 1o
UT

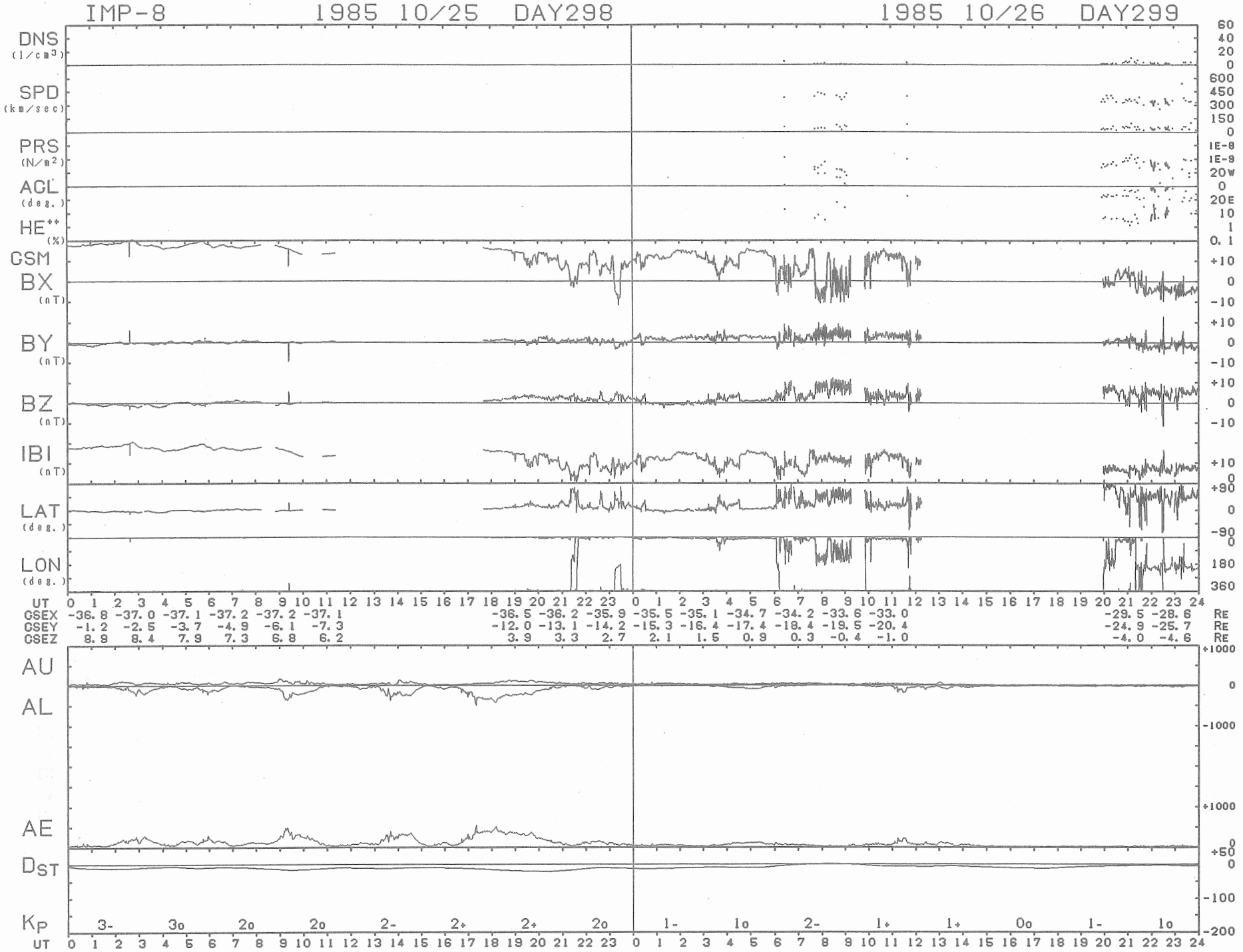

IMP-8
1985 10/15 DAY288
1985 10/16 DAY289
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -20.0 -18.9 -17.8 -16.6 -15.5 -14.3 -13.1 -11.9 -5.6 -4.3 -3.0 -1.7 -0.4 0.9 2.2 3.5
GSEY -32.2 -32.7 -33.1 -33.6 -33.9 -34.2 -34.5 -34.7 -35.2 -35.1 -35.0 -34.8 -34.6 -34.3 -34.0 -33.7
GSEZ -5.4 -6.0 -6.5 -7.1 -7.7 -8.2 -8.7 -9.3 -11.6 -12.0 -12.4 -12.8 -13.2 -13.5 -13.9 -14.2
RE
AU
AL
AE
DST
KP
2- 5- 5+ 2+ 2o 2+ 2o 3o 4o 4o 4+ 3+ 2+ 3- 1o 2+
UT

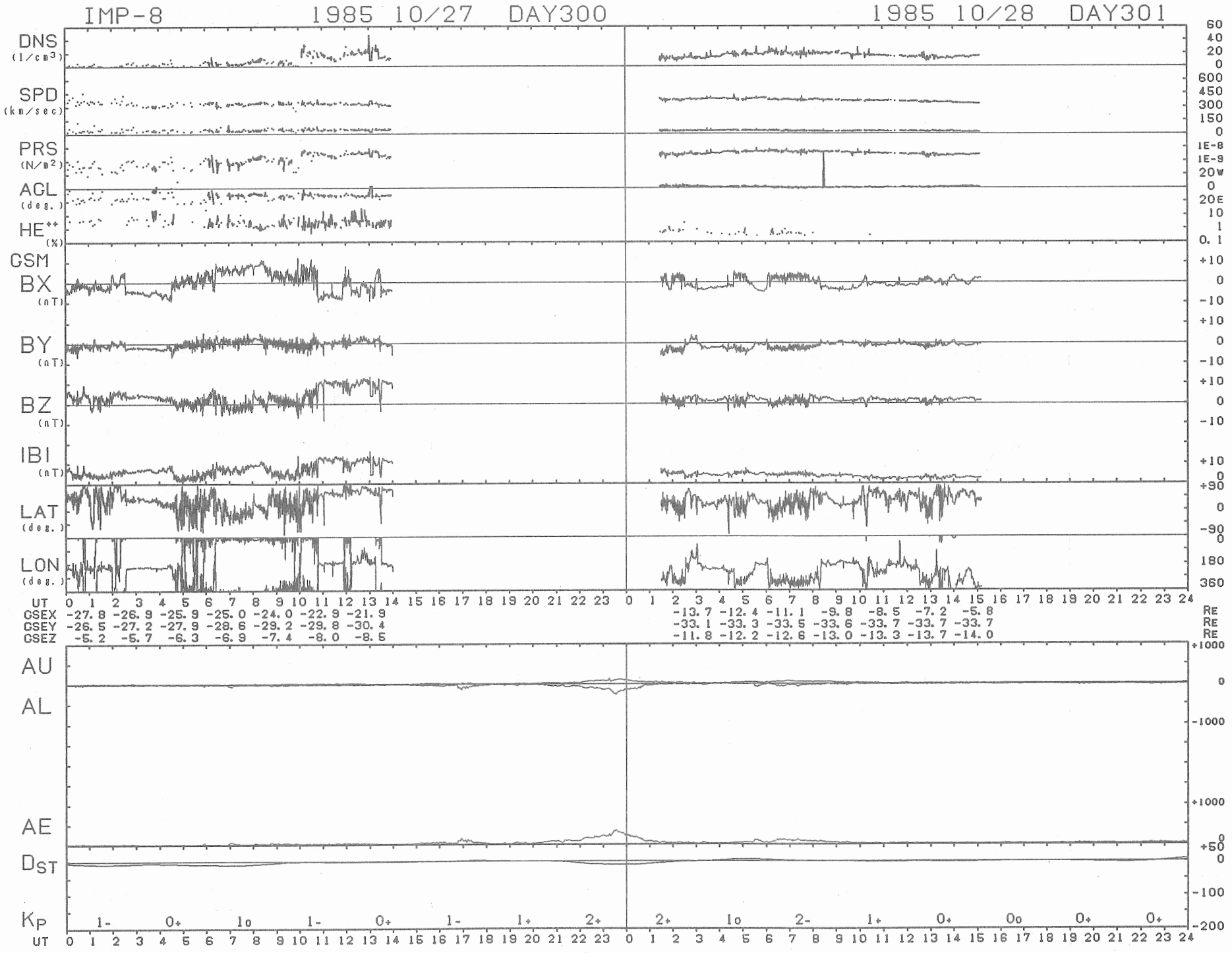

IMP-8
1985 10/17 DAY290
1985 10/18 DAY291
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.2 12.4 13.6 14.8 15.9 17.1 18.2 19.3
GSEY -30.4 -29.7 -28.9 -28.1 -27.2 -26.3 -25.4 -24.4
GSEZ -15.5 -15.6 -15.7 -15.8 -15.8 -15.8 -15.8 -15.8
26.4 27.1 27.8 28.4 28.9
-15.0 -13.6 -12.3 -10.9 -9.5
-14.3 -14.0 -13.6 -13.3 -12.8
RE
AU
AL
AE
DST
KP
3o 3+ 2o 2+ 3o 4- 3+ 3o
4o 2+ 2+ 4o 4+ 4- 4- 4+

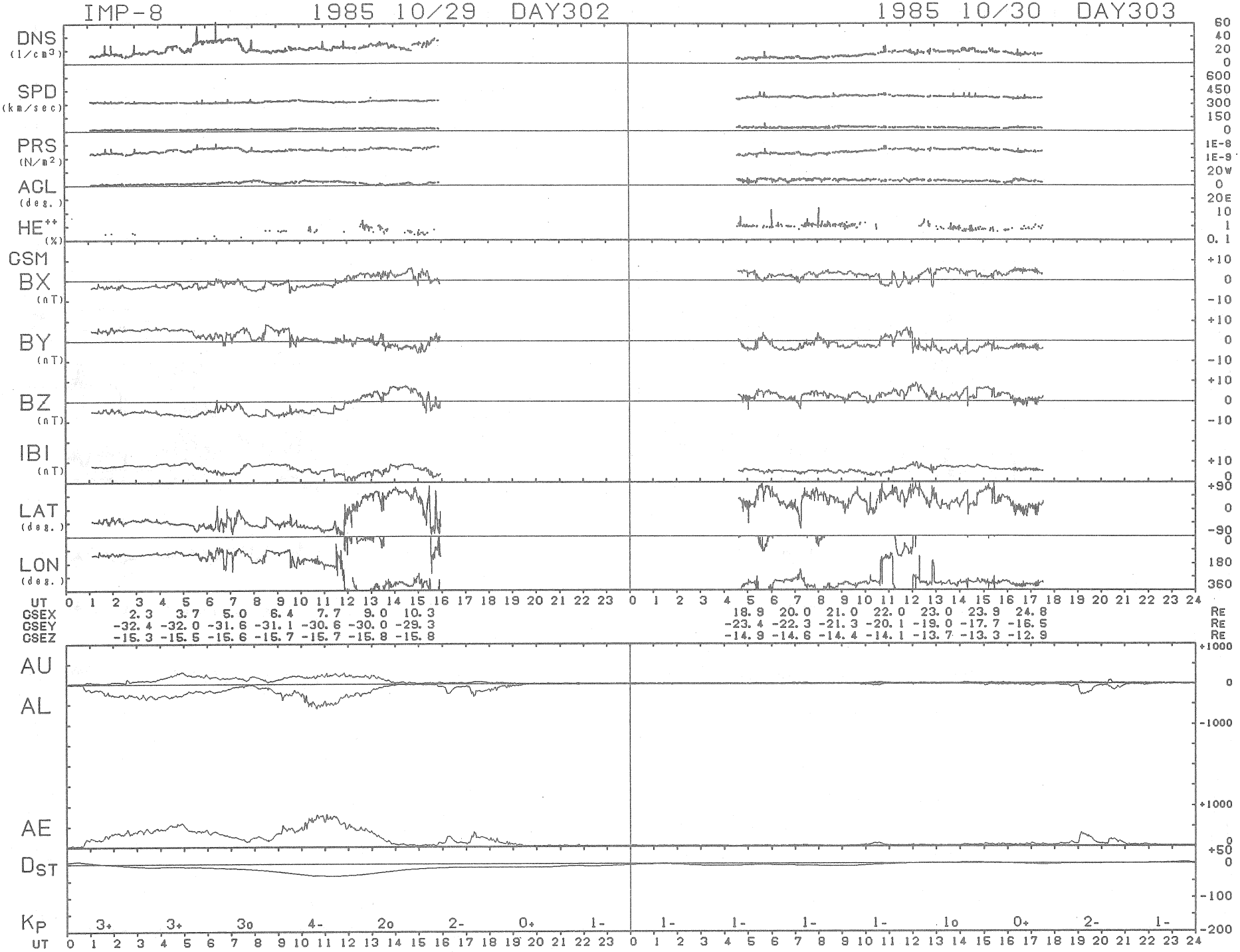

IMP-8
1985 10/19 DAY292
1985 10/20 DAY293
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.7 30.7 30.5 30.3 30.0 29.7 29.2 24.3 23.3 22.3 21.2 20.1 18.9 17.7 RE
GSEY 2.2 3.6 5.1 6.6 8.0 9.4 10.8 19.6 20.7 21.8 22.7 23.7 24.6 25.4 RE
GSEZ -8.6 -8.0 -7.3 -6.7 -6.0 -5.3 -4.5 0.7 1.5 2.2 3.0 3.7 4.4 5.2 RE
AU
AL
AE
DST
KP 4o 3o 3+ 4o 2+ 1+ 1o 1- 1o 2o 3- 2o 2- 1- 2o 0+
UT

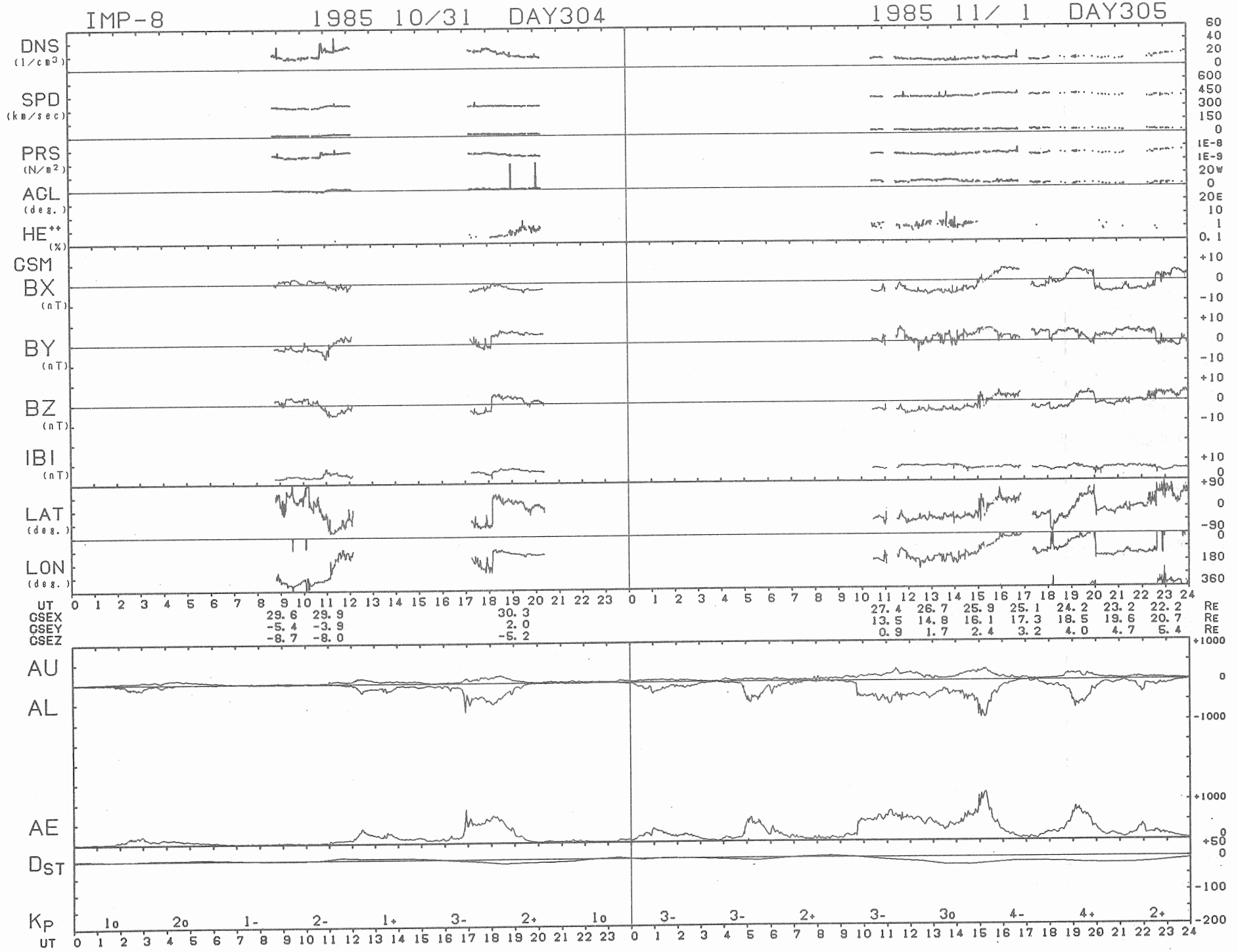

IMP-8
1985 10/21 DAY294
1985 10/22 DAY295
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 16.4
GSEY 26.1
GSEZ 5.9
8.1 6.6 5.1 3.6 2.1 0.5 -1.0 -2.5
29.2 29.5 29.7 29.9 30.0 30.0 29.9 29.8
9.7 10.3 10.8 11.3 11.8 12.3 12.7 13.1
-11.4 -12.8 -14.2 -15.6 -17.0 RE
27.9 27.3 26.8 26.1 25.5 RE
14.8 15.0 15.2 15.3 15.4 RE
AU
AL
AE
DST
KP
1- 2+ 3- 3- 3o 5o 3- 3+ 4- 4o 4o 2- 2- 2+ 4- 3+
UT

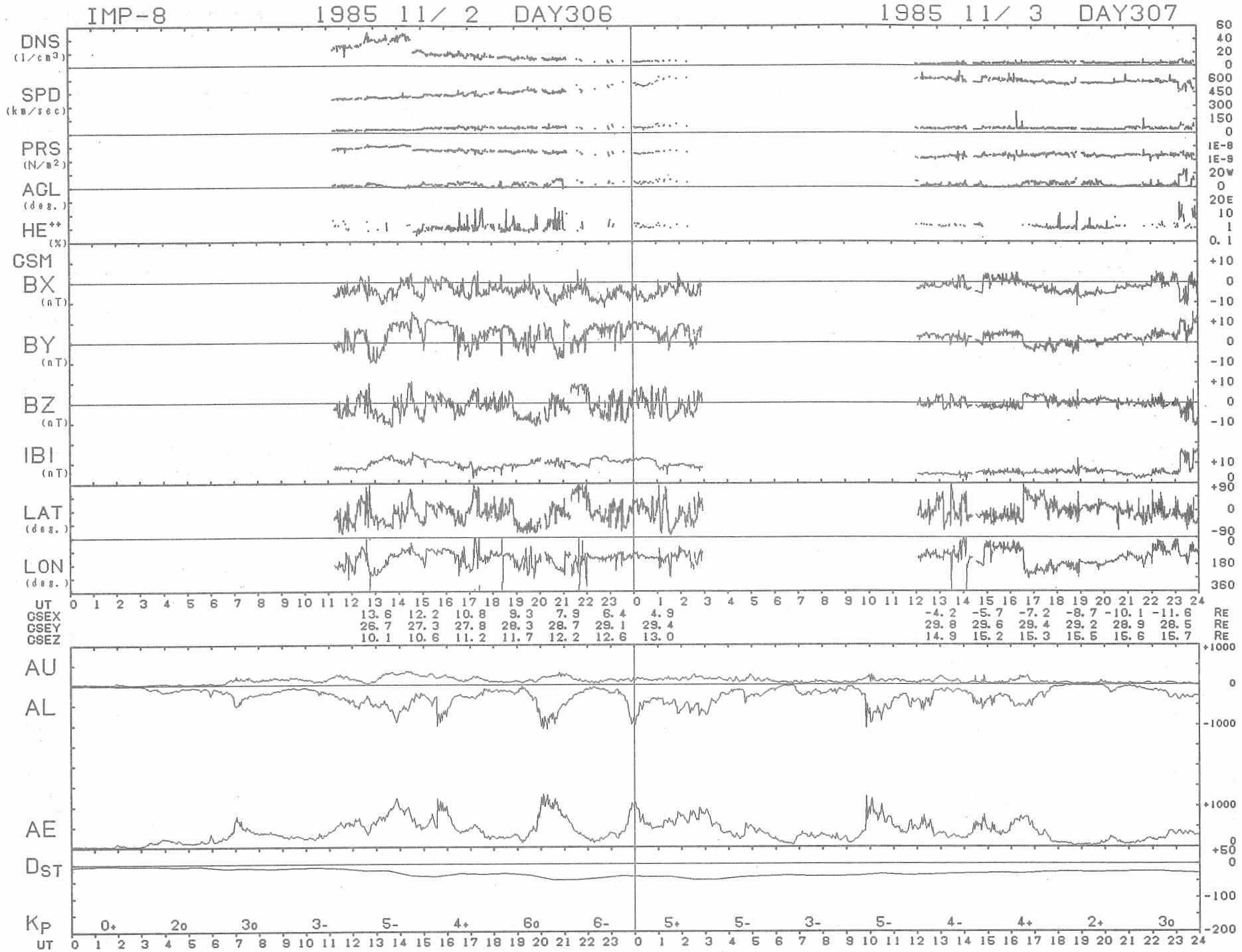

IMP-8
1985 10/23 DAY296
1985 10/24 DAY297
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.3 -19.5 -20.8 -22.0 -26.4 -27.4 -28.4 -29.3 -30.1 -31.7 -32.4 -33.1 -33.7 -35.7 -36.0 -36.3 -36.6 RE
GSEY 24.7 24.0 23.1 22.3 18.5 17.5 16.5 15.4 14.3 12.0 10.9 9.7 8.5 3.7 2.5 1.2 -0.0 RE
GSEZ 15.4 15.5 15.4 15.4 15.0 14.8 14.6 14.4 14.1 13.5 13.2 12.9 12.5 10.8 10.4 9.9 9.4 RE
AU
AL
AE
DST
KP
3o 3- 2+ 3o 2+ 3- 2+ 4- 3- 2+ 2+ 1o 0+ 2o 3- 1+
UT

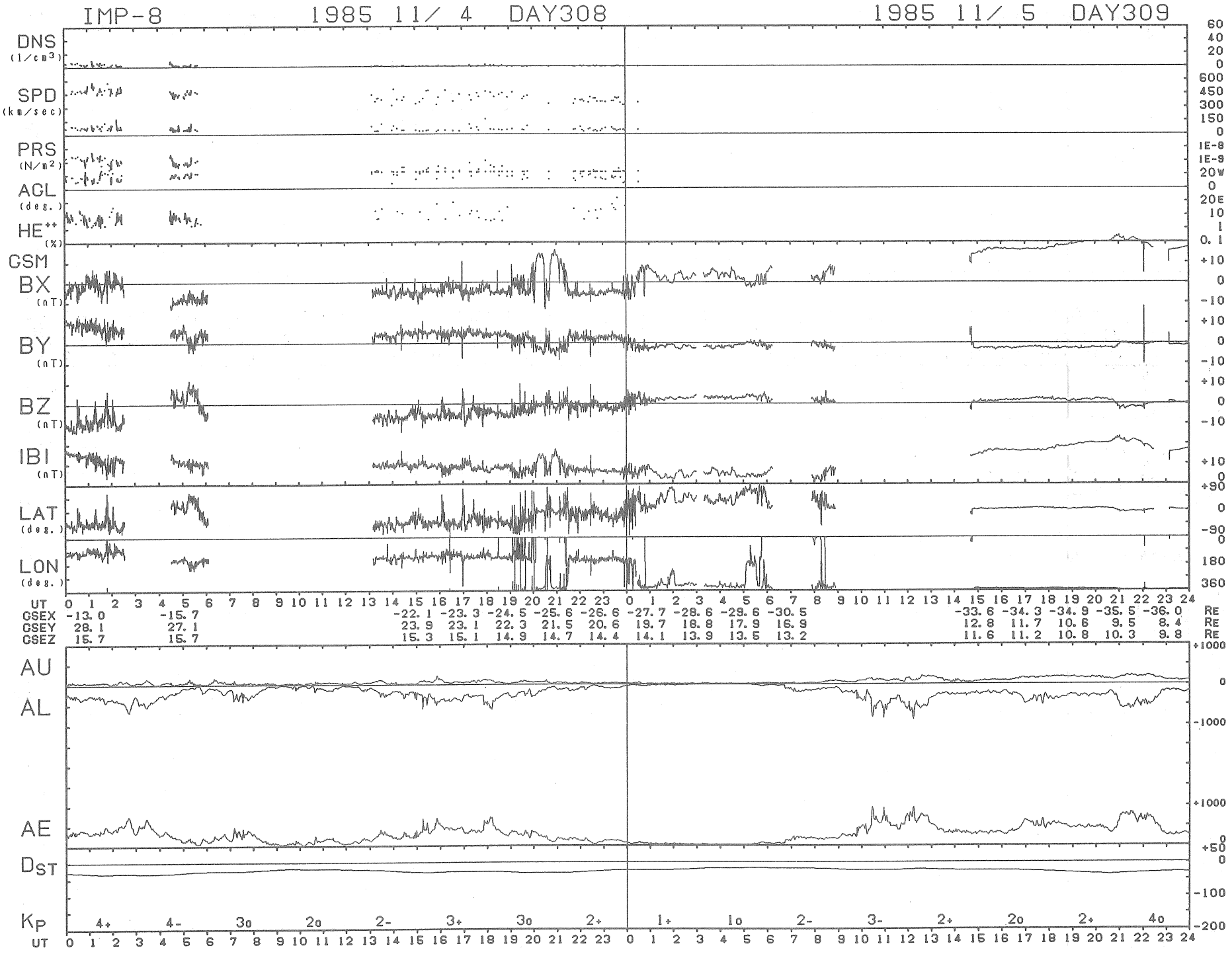

IMP-8
1985 10/25 DAY298
1985 10/26 DAY299
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.8 -37.0 -37.1 -37.2 -37.2 -37.1 -36.5 -36.2 -35.9 -35.5 -35.1 -34.7 -34.2 -33.6 -33.0 -29.5 -28.6 RE
GSEY -1.2 -2.5 -3.7 -4.9 -6.1 -7.3 -12.0 -13.1 -14.2 -15.3 -16.4 -17.4 -18.4 -19.5 -20.4 -24.9 -25.7 RE
GSEZ 8.9 8.4 7.9 7.3 6.8 6.2 3.9 3.3 2.7 2.1 1.5 0.9 0.3 -0.4 -1.0 -4.0 -4.6 RE
AU
AL
AE
DST
KP
3- 3o 2o 2o 2- 2+ 2+ 2o 1- 1o 2- 1+ 1+ 0o 1- 1o
UT

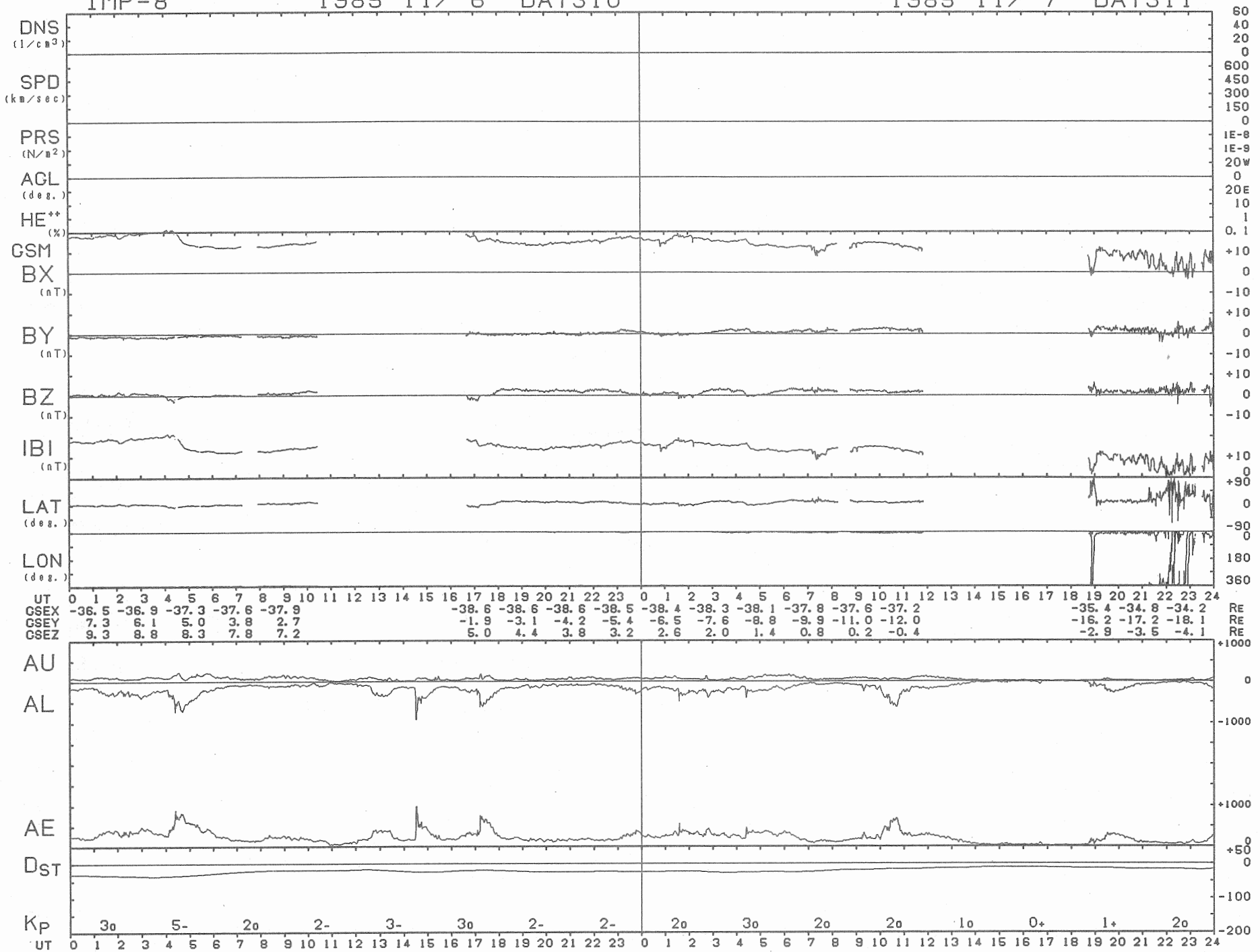

IMP-8
1985 10/27 DAY300
1985 10/28 DAY301
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.8 -26.9 -25.9 -25.0 -24.0 -22.9 -21.9 -13.7 -12.4 -11.1 -9.8 -8.5 -7.2 -5.8 RE
GSEY -26.5 -27.2 -27.9 -28.6 -29.2 -29.8 -30.4 -33.1 -33.3 -33.5 -33.6 -33.7 -33.7 -33.7 RE
GSEZ -5.2 -5.7 -6.3 -6.9 -7.4 -8.0 -8.5 -11.8 -12.2 -12.6 -13.0 -13.3 -13.7 -14.0 RE
AU
AL
AE
DST
KP
1- 0+ 1o 1- 0+ 1- 1+ 2+ 2+ 1o 2- 1+ 0+ 0o 0+ 0+
UT

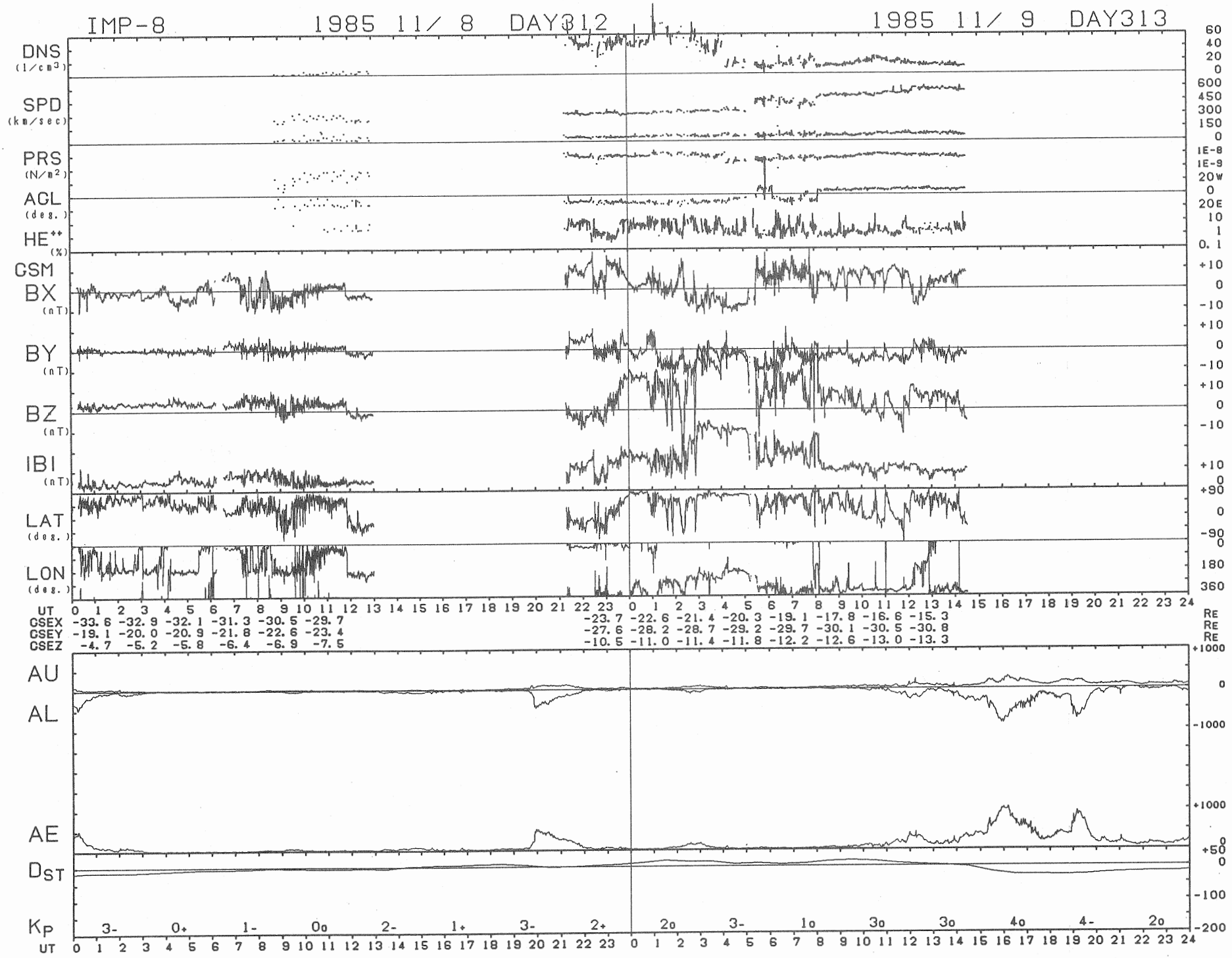

IMP-8
1985 10/29 DAY302
1985 10/30 DAY303
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.3 3.7 5.0 6.4 7.7 9.0 10.3 18.9 20.0 21.0 22.0 23.0 23.9 24.8 RE
GSEY -32.4 -32.0 -31.6 -31.1 -30.6 -30.0 -29.3 -23.4 -22.3 -21.3 -20.1 -19.0 -17.7 -16.5 RE
GSEZ -15.3 -15.5 -15.6 -15.7 -15.7 -15.8 -15.8 -14.9 -14.6 -14.4 -14.1 -13.7 -13.3 -12.9 RE
AU
AL
AE
DST
KP 3+ 3+ 3o 4- 2o 2- 0+ 1- 1- 1- 1- 1- 1o 0+ 2- 1-
UT

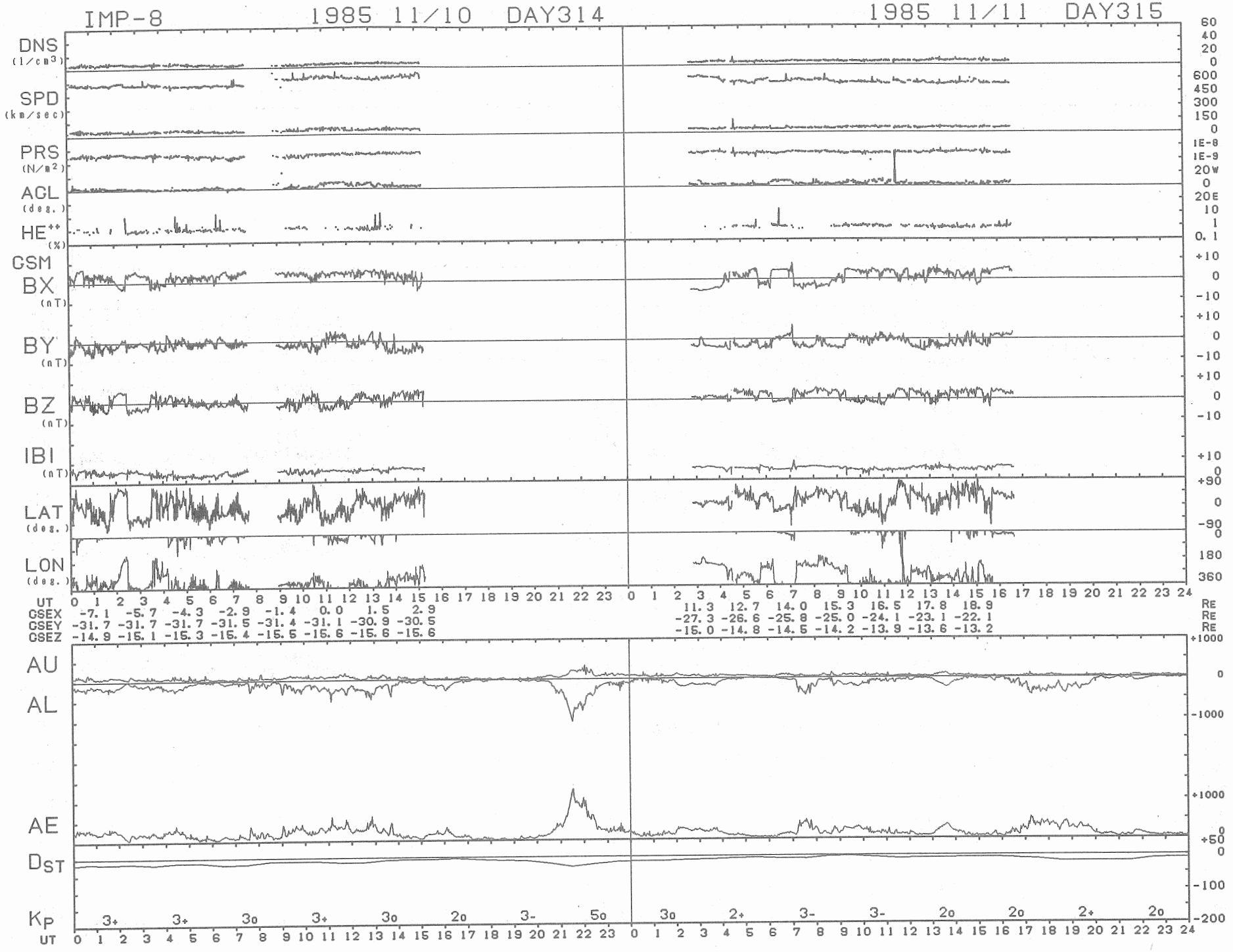

IMP-8
1985 10/31 DAY304
1985 11/ 1 DAY305
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 29.6 29.9 30.3 27.4 26.7 25.9 25.1 24.2 23.2 22.2 Re
CSEY -5.4 -3.9 2.0 13.5 14.8 16.1 17.3 18.5 19.6 20.7 Re
CSEZ -8.7 -8.0 -5.2 0.9 1.7 2.4 3.2 4.0 4.7 5.4 Re
AU
AL
AE
DST
KP
1o 2o 1- 2- 1+ 3- 2+ 1o 3- 3- 2+ 3- 3o 4- 4+ 2+
UT

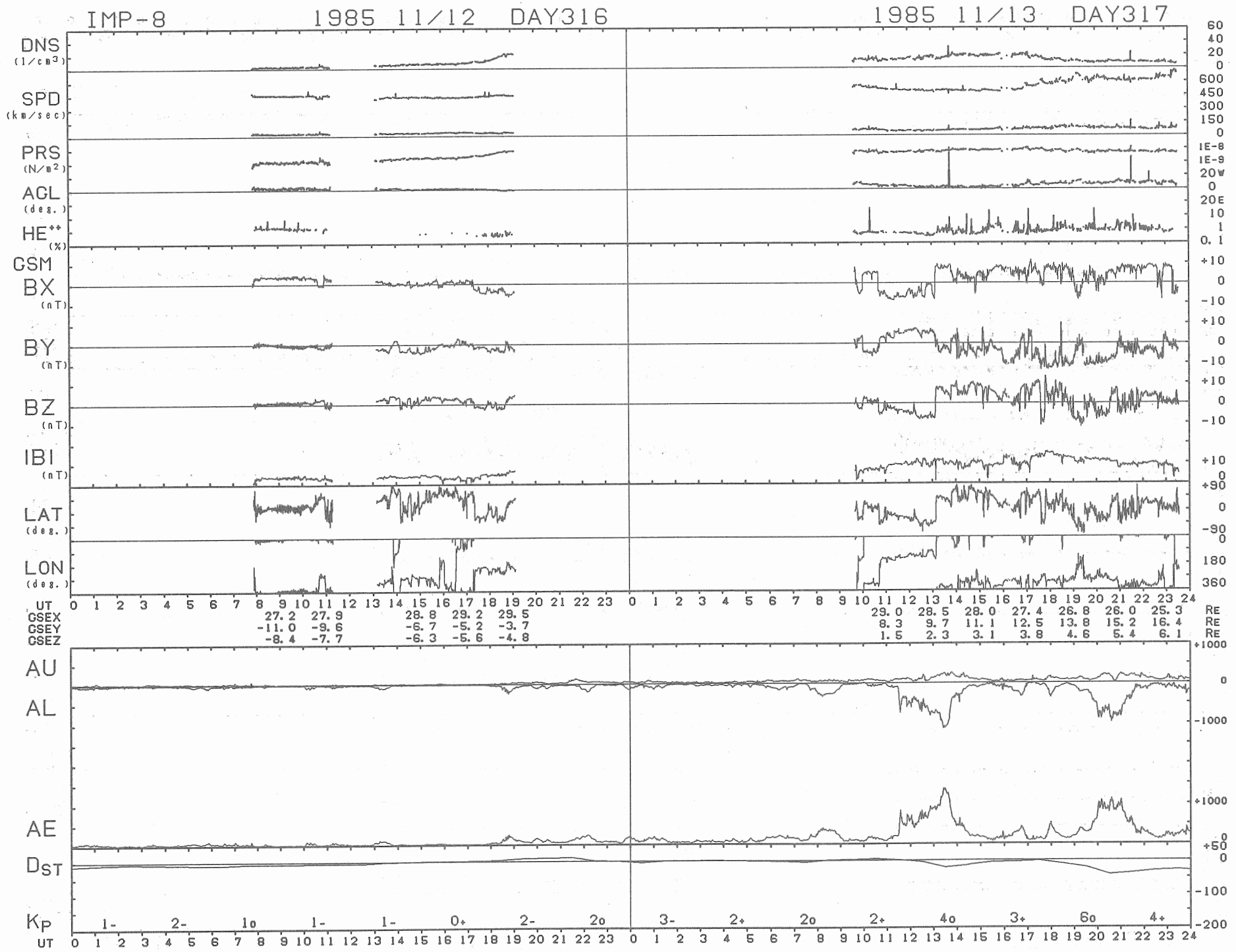

IMP-8
1985 11/ 2 DAY306
1985 11/ 3 DAY307
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.6 12.2 10.8 9.3 7.9 6.4 4.9 -4.2 -5.7 -7.2 -8.7 -10.1 -11.6 RE
GSEY 26.7 27.3 27.8 28.3 28.7 29.1 29.4 29.8 29.6 29.4 29.2 28.9 28.5 RE
GSEZ 10.1 10.6 11.2 11.7 12.2 12.6 13.0 14.9 15.2 15.3 15.5 15.6 15.7 RE
AU
AL
AE
DST
KP 0+ 2o 3o 3- 5- 4+ 6o 6- 5+ 5- 3- 5- 4- 4+ 2+ 3o
UT

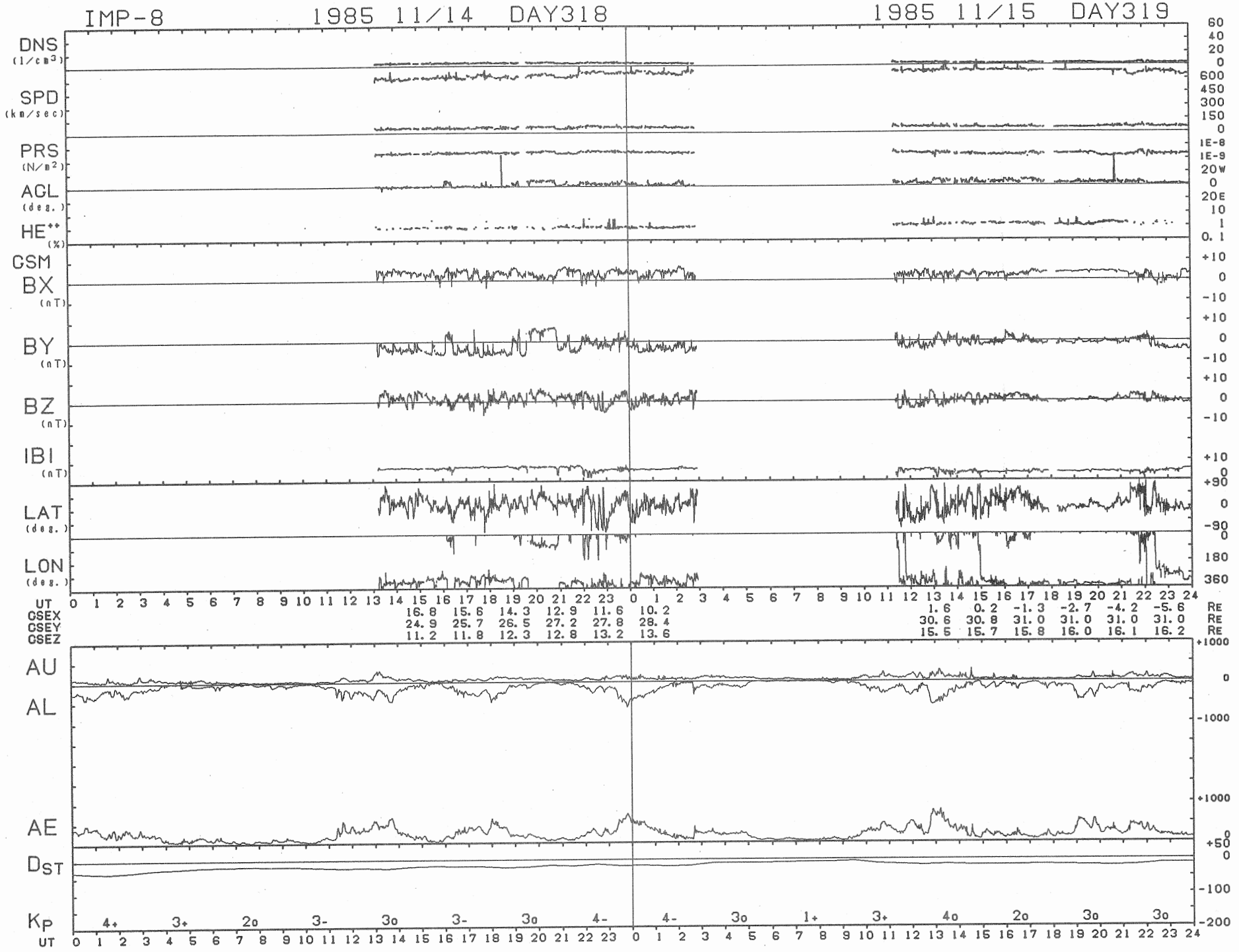

IMP-8
1985 11/ 4 DAY308
1985 11/ 5 DAY309
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.0 -15.7 -22.1 -23.3 -24.5 -25.6 -26.6 -27.7 -28.6 -29.6 -30.5 -33.6 -34.3 -34.9 -35.5 -36.0 RE
GSEY 28.1 27.1 23.9 23.1 22.3 21.5 20.6 19.7 18.8 17.9 16.9 12.8 11.7 10.6 9.5 8.4 RE
GSEZ 15.7 15.7 15.3 15.1 14.9 14.7 14.4 14.1 13.9 13.5 13.2 11.6 11.2 10.8 10.3 9.8 RE
AU
AL
AE
DST
KP
4+ 4- 3o 2o 2- 3+ 3o 2+ 1+ 1o 2- 3- 2+ 2o 2+ 4o
UT

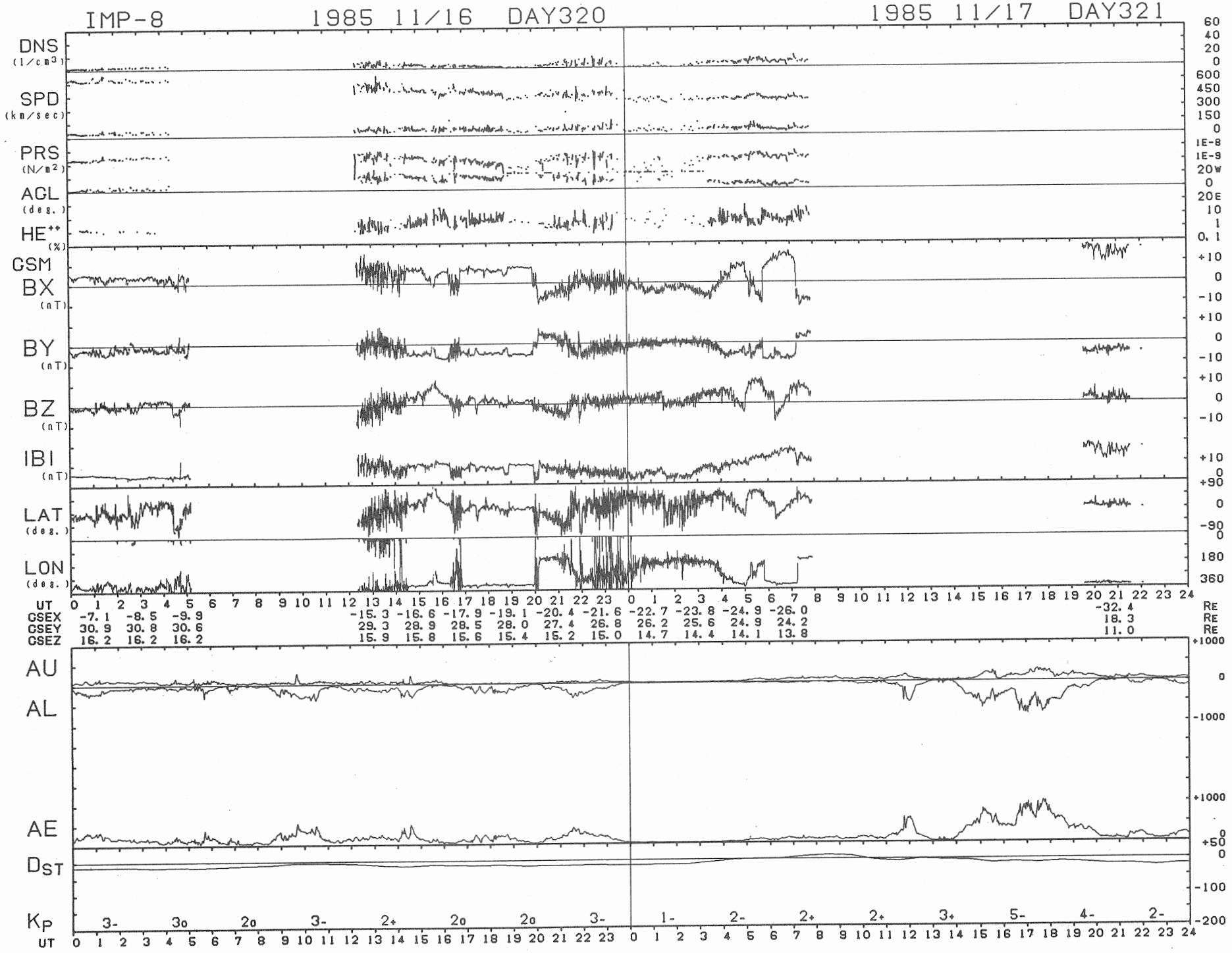

IMP-8
1985 11/ 6 DAY310
1985 11/ 7 DAY311
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -36.5 -36.9 -37.3 -37.6 -37.9 -38.6 -38.6 -38.6 -38.5 -38.4 -38.3 -38.1 -37.8 -37.6 -37.2 -35.4 -34.8 -34.2 RE
GSEY 7.3 6.1 5.0 3.8 2.7 -1.9 -3.1 -4.2 -5.4 -6.5 -7.6 -8.8 -9.9 -11.0 -12.0 -16.2 -17.2 -18.1 RE
GSEZ 9.3 8.8 8.3 7.8 7.2 5.0 4.4 3.8 3.2 2.6 2.0 1.4 0.8 0.2 -0.4 -2.9 -3.5 -4.1 RE
AU
AL
AE
DST
KP 3o 5- 2o 2- 3- 3o 2- 2- 2o 3o 2o 2o 1o 0+ 1+ 2o
UT

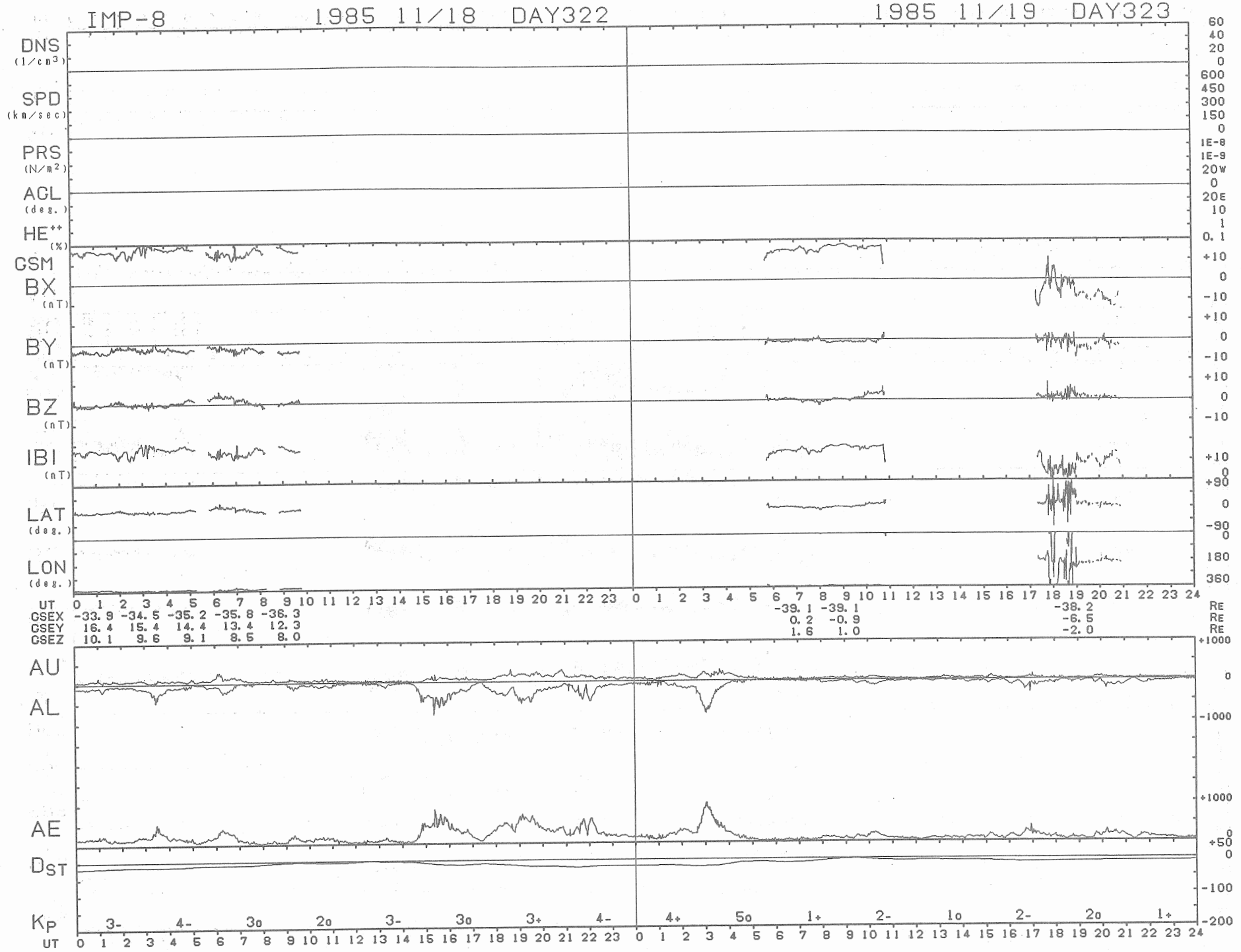

IMP-8
1985 11/ 8 DAY312
1985 11/ 9 DAY313
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.6 -32.9 -32.1 -31.3 -30.5 -29.7 -23.7 -22.6 -21.4 -20.3 -19.1 -17.8 -16.6 -15.3 RE
GSEY -19.1 -20.0 -20.9 -21.8 -22.6 -23.4 -27.6 -28.2 -28.7 -29.2 -29.7 -30.1 -30.5 -30.8 RE
GSEZ -4.7 -5.2 -5.8 -6.4 -6.9 -7.5 -10.5 -11.0 -11.4 -11.8 -12.2 -12.6 -13.0 -13.3 RE
AU
AL
AE
DST
KP
3- 0+ 1- 0o 2- 1+ 3- 2+ 2o 3- 1o 3o 3o 4o 4- 2o
UT

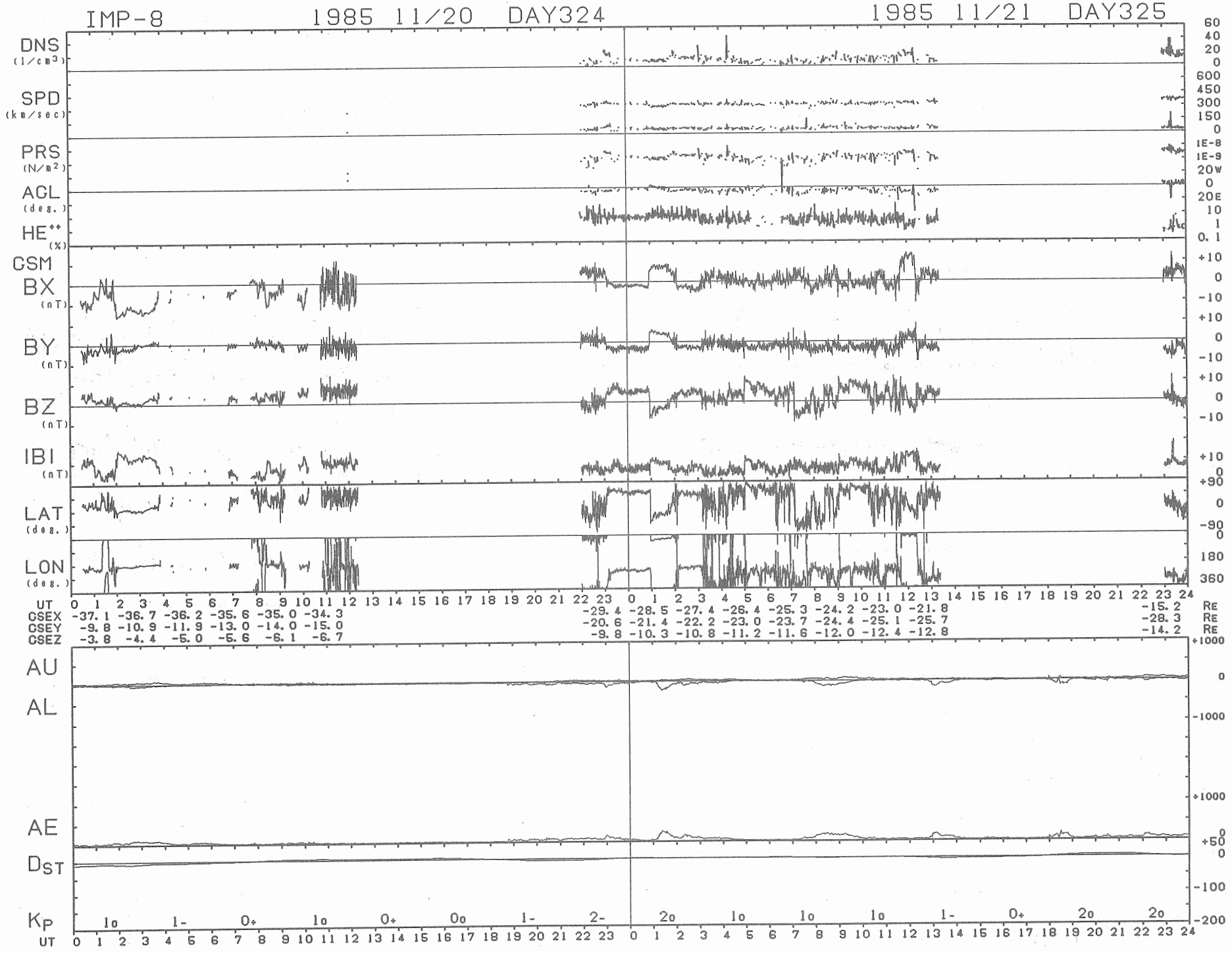

IMP-8
1985 11/10 DAY314
1985 11/11 DAY315
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.1 -5.7 -4.3 -2.9 -1.4 0.0 1.5 2.9
GSEY -31.7 -31.7 -31.7 -31.5 -31.4 -31.1 -30.9 -30.5
GSEZ -14.9 -15.1 -15.3 -15.4 -15.5 -15.6 -15.6 -15.6
11.3 12.7 14.0 15.3 16.5 17.8 18.9
-27.3 -26.6 -25.8 -25.0 -24.1 -23.1 -22.1
-15.0 -14.8 -14.5 -14.2 -13.9 -13.6 -13.2
RE
AU
AL
AE
DST
KP
3+ 3+ 3o 3+ 3o 2o 3- 5o 3o 2+ 3- 3- 2o 2o 2+ 2o
UT

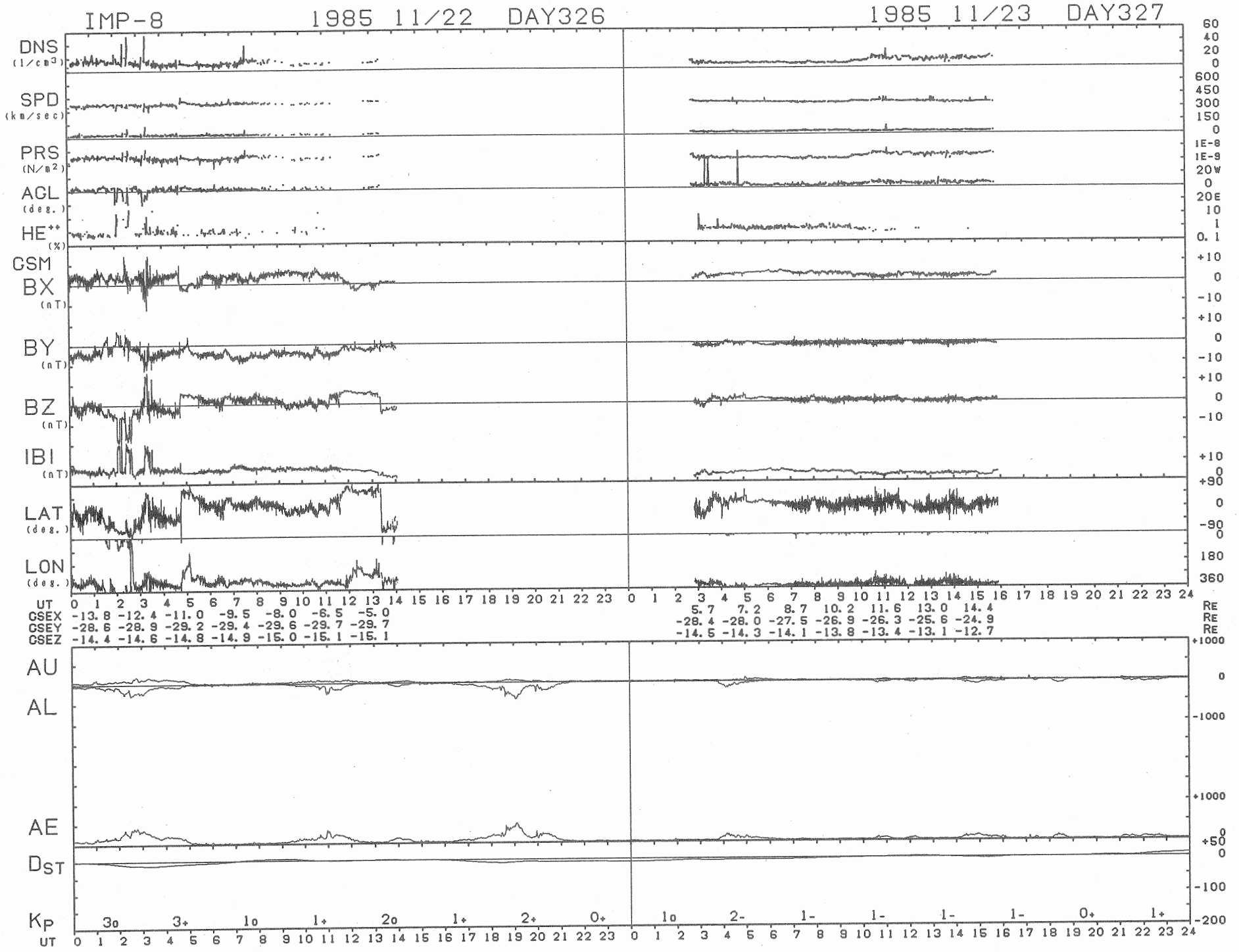

IMP-8
1985 11/12 DAY316
1985 11/13 DAY317
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.2 27.9 28.8 29.2 29.5 29.0 28.5 28.0 27.4 26.8 26.0 25.3 RE
GSEY -11.0 -9.6 -6.7 -5.2 -3.7 8.3 9.7 11.1 12.5 13.8 15.2 16.4 RE
GSEZ -8.4 -7.7 -6.3 -5.6 -4.8 1.5 2.3 3.1 3.8 4.6 5.4 6.1 RE
AU
AL
AE
DST
KP 1- 2- 1o 1- 1- 0+ 2- 2o 3- 2+ 2o 2+ 4o 3+ 6o 4+
UT

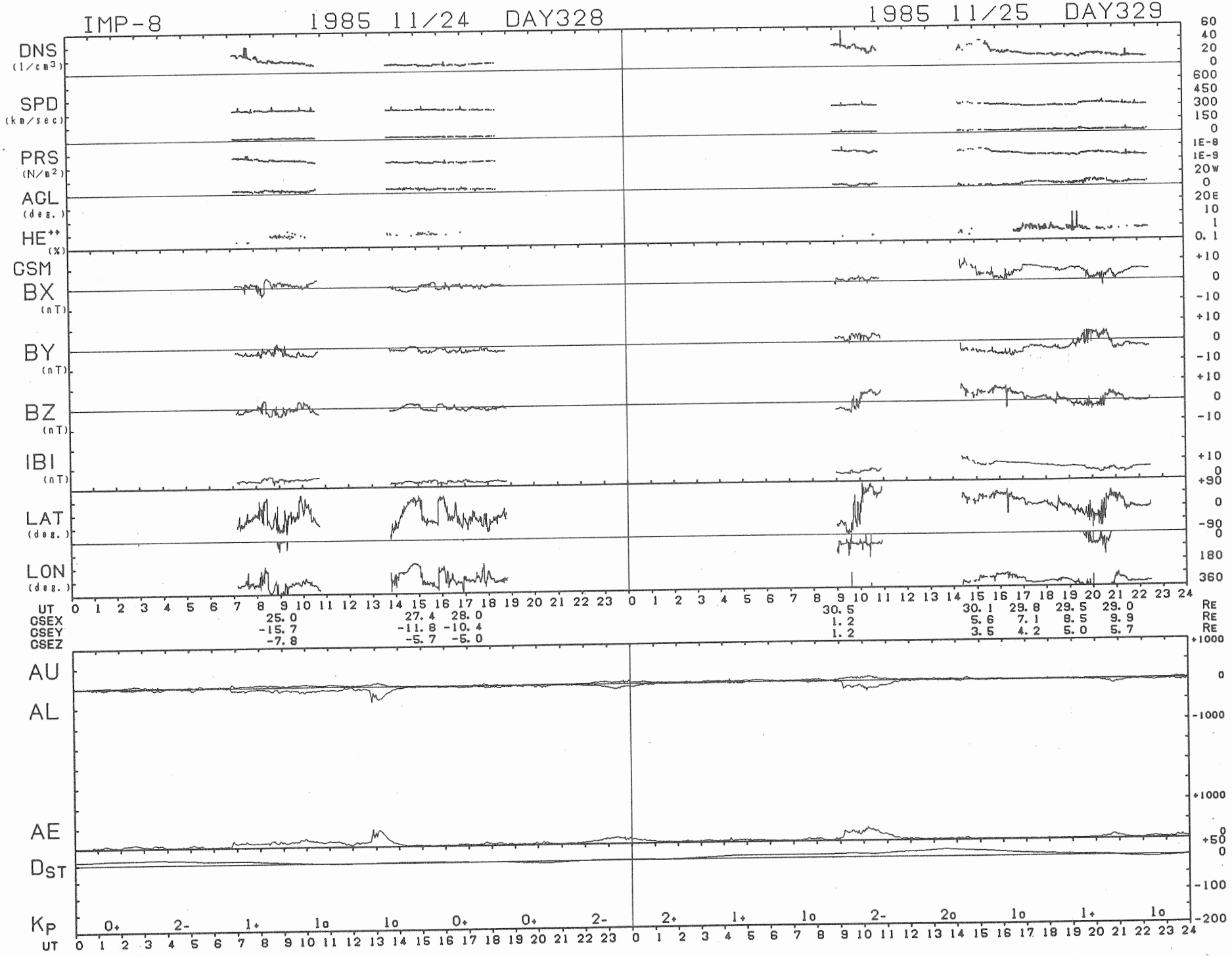

IMP-8
1985 11/14 DAY318
1985 11/15 DAY319
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
Dst
Kp
4+ 3+ 2o 3- 3o 3- 3o 4- 4- 3o 1+ 3+ 4o 2o 3o 3o

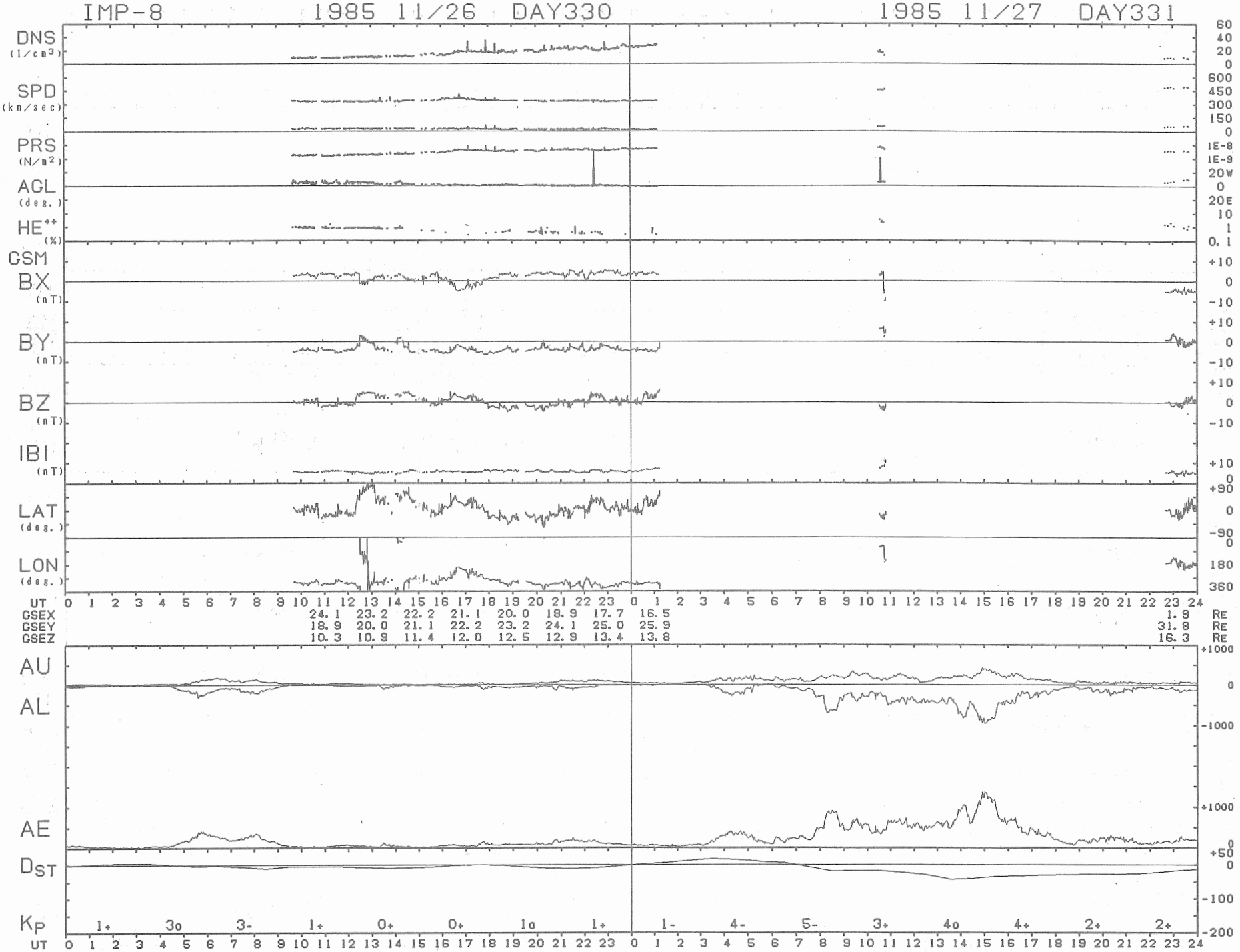

IMP-8
1985 11/16 DAY320
1985 11/17 DAY321
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -7.1 -8.5 -9.9 -15.3 -16.6 -17.9 -19.1 -20.4 -21.6 -22.7 -23.8 -24.9 -26.0 -32.4 RE
GSEY 30.9 30.8 30.6 29.3 28.9 28.5 28.0 27.4 26.8 26.2 25.6 24.9 24.2 18.3 RE
GSEZ 16.2 16.2 16.2 15.9 15.8 15.6 15.4 15.2 15.0 14.7 14.4 14.1 13.8 11.0 RE
AU
AL
AE
DST
KP
3- 3o 2o 3- 2+ 2o 2o 3- 1- 2- 2+ 2+ 3+ 5- 4- 2-
UT

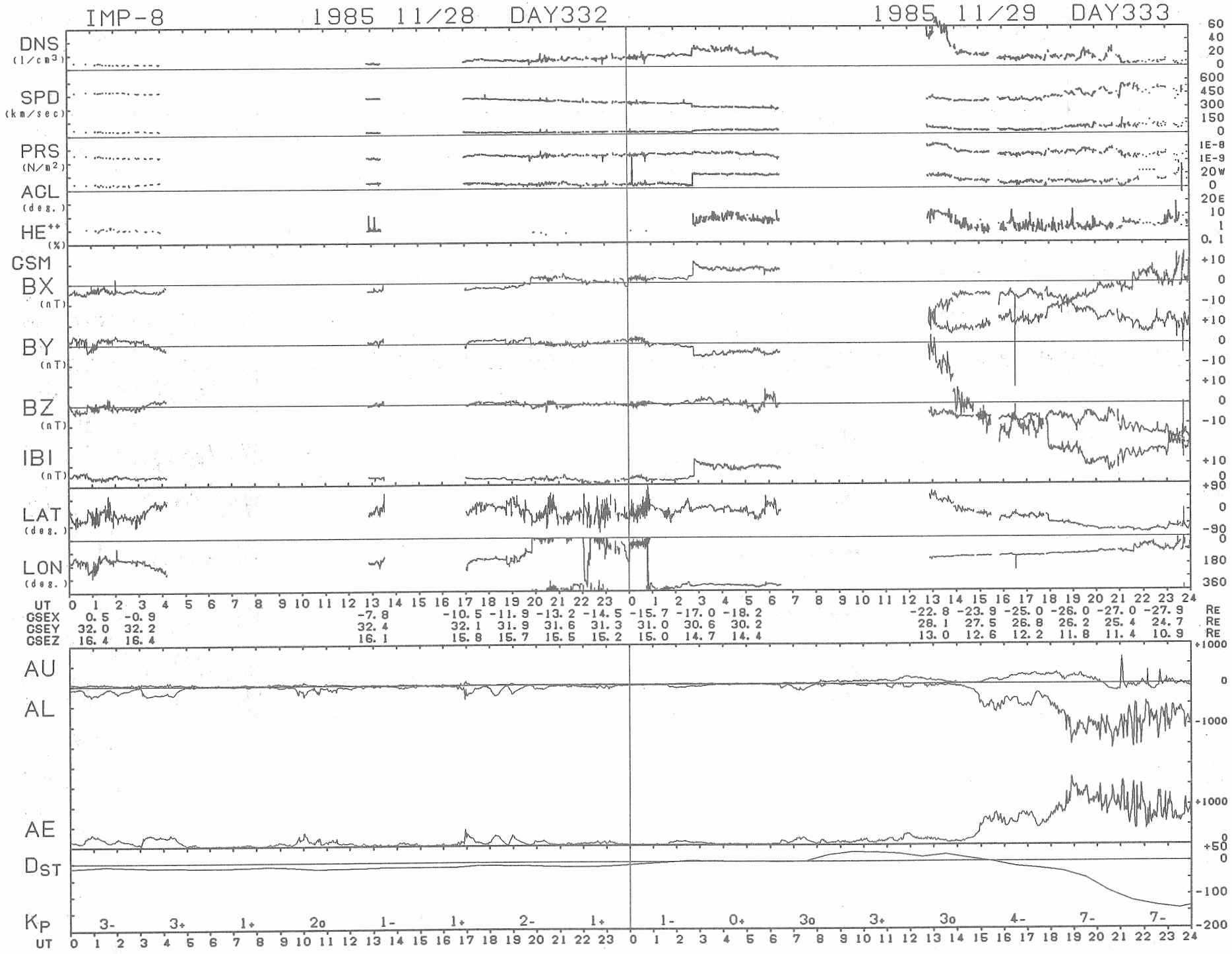

IMP-8
1985 11/18 DAY322
1985 11/19 DAY323
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.9 -34.5 -35.2 -35.8 -36.3 -39.1 -39.1 -38.2
GSEY 16.4 15.4 14.4 13.4 12.3 0.2 -0.9 -6.5
GSEZ 10.1 9.6 9.1 8.5 8.0 1.6 1.0 -2.0
RE
AU
AL
AE
DST
KP
3- 4- 3o 2o 3- 3o 3+ 4- 4+ 5o 1+ 2- 1o 2- 2o 1+

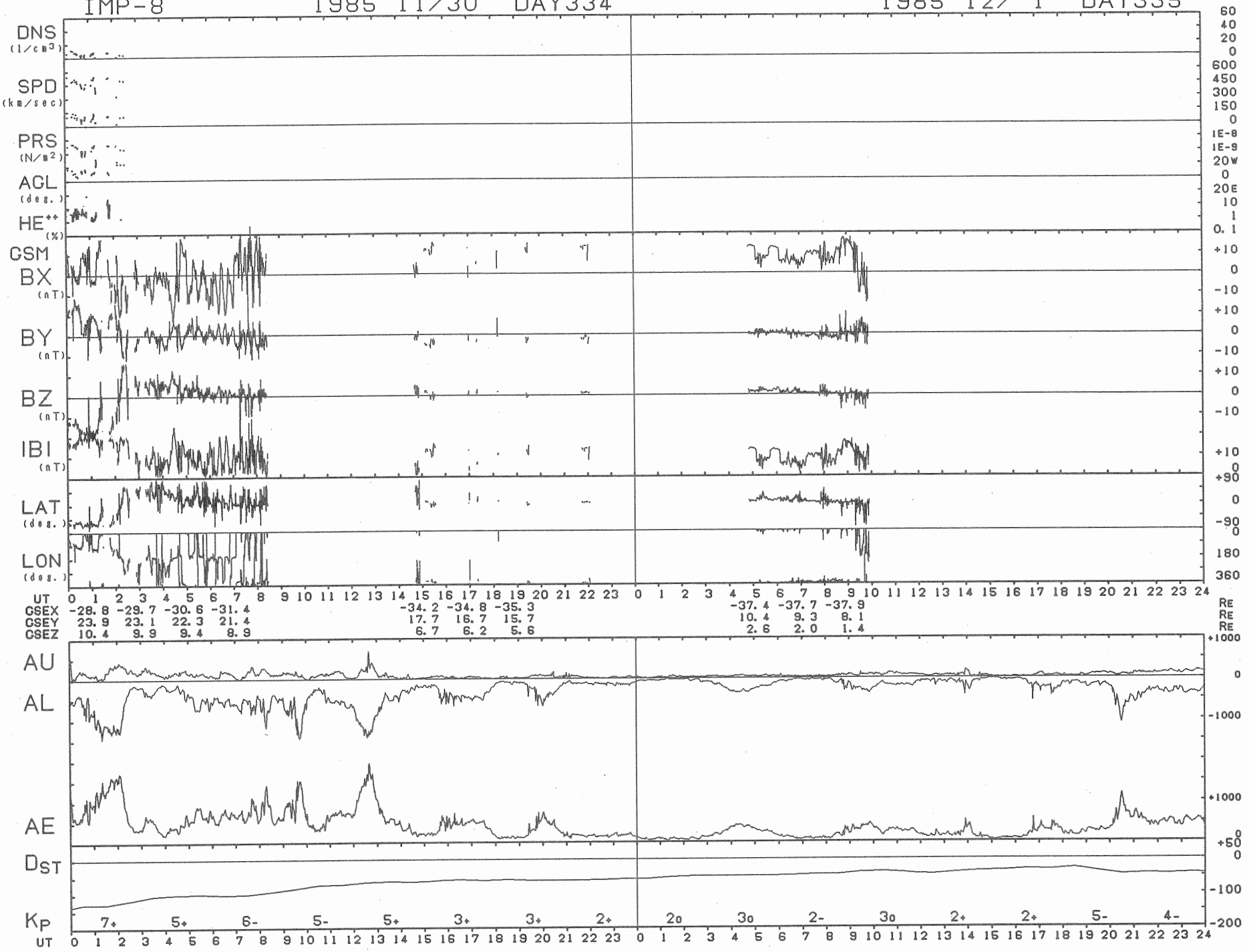

IMP-8
1985 11/20 DAY324
1985 11/21 DAY325
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GSEX -37.1 -36.7 -36.2 -35.6 -35.0 -34.3 -29.4 -28.5 -27.4 -26.4 -25.3 -24.2 -23.0 -21.8 -15.2 Re
GSEY -9.8 -10.9 -11.9 -13.0 -14.0 -15.0 -20.6 -21.4 -22.2 -23.0 -23.7 -24.4 -25.1 -25.7 -28.3 Re
GSEZ -3.8 -4.4 -5.0 -5.6 -6.1 -6.7 -9.8 -10.3 -10.8 -11.2 -11.6 -12.0 -12.4 -12.8 -14.2 Re
AU
AL
AE
DST
KP 1o 1- 0+ 1o 0+ 0o 1- 2- 2o 1o 1o 1o 1- 0+ 2o 2o
UT 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

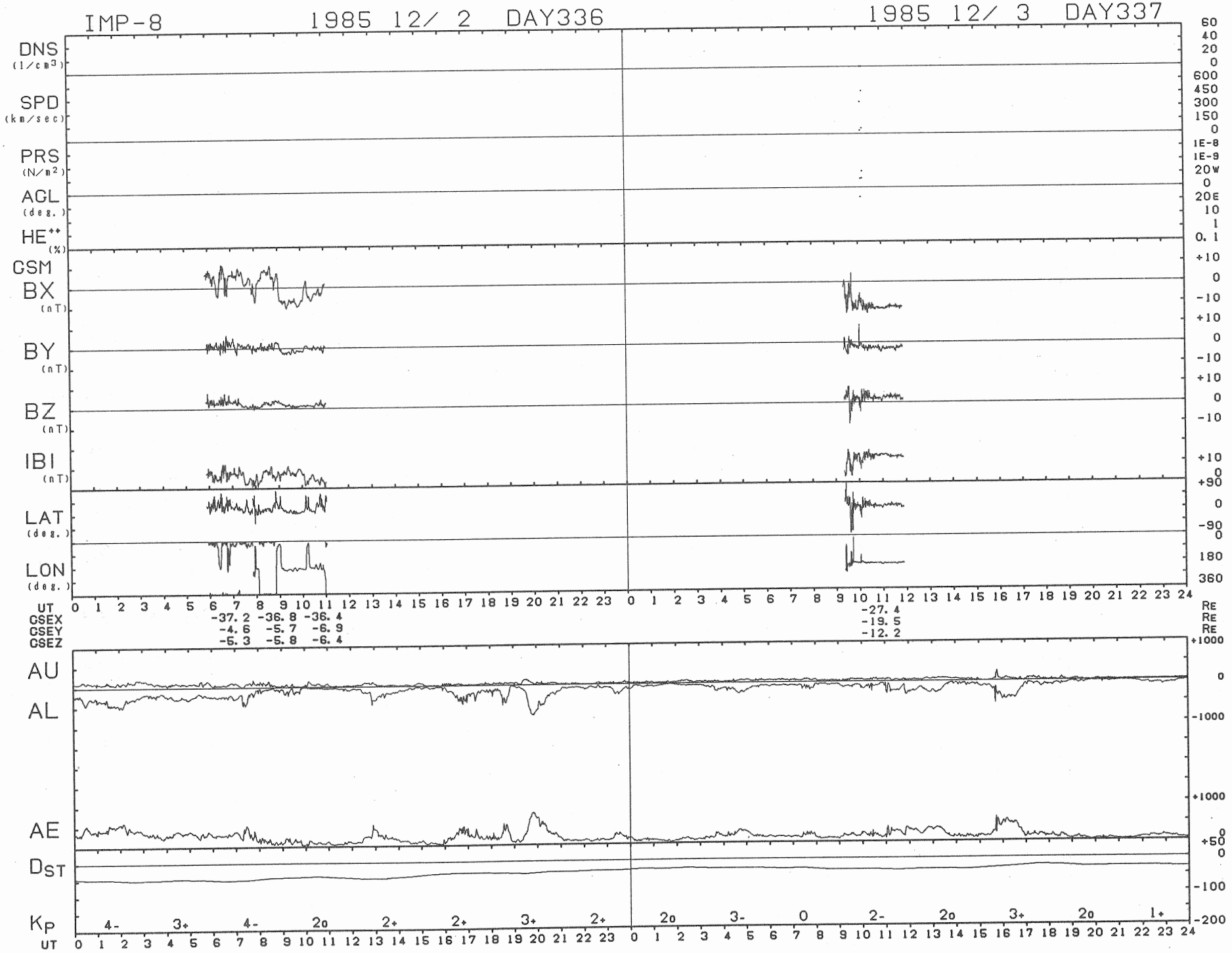

IMP-8
1985 11/22 DAY326
1985 11/23 DAY327
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -13.8 -12.4 -11.0 -9.5 -8.0 -6.5 -5.0
GSEY -28.6 -28.9 -29.2 -29.4 -29.6 -29.7 -29.7
GSEZ -14.4 -14.6 -14.8 -14.9 -15.0 -15.1 -15.1
5.7 7.2 8.7 10.2 11.6 13.0 14.4
-28.4 -28.0 -27.5 -26.9 -26.3 -25.6 -24.9
-14.5 -14.3 -14.1 -13.8 -13.4 -13.1 -12.7
RE
AU
AL
AE
DST
KP
3o 3+ 1o 1+ 2o 1+ 2+ 0+
1o 2- 1- 1- 1- 1- 0+ 1+

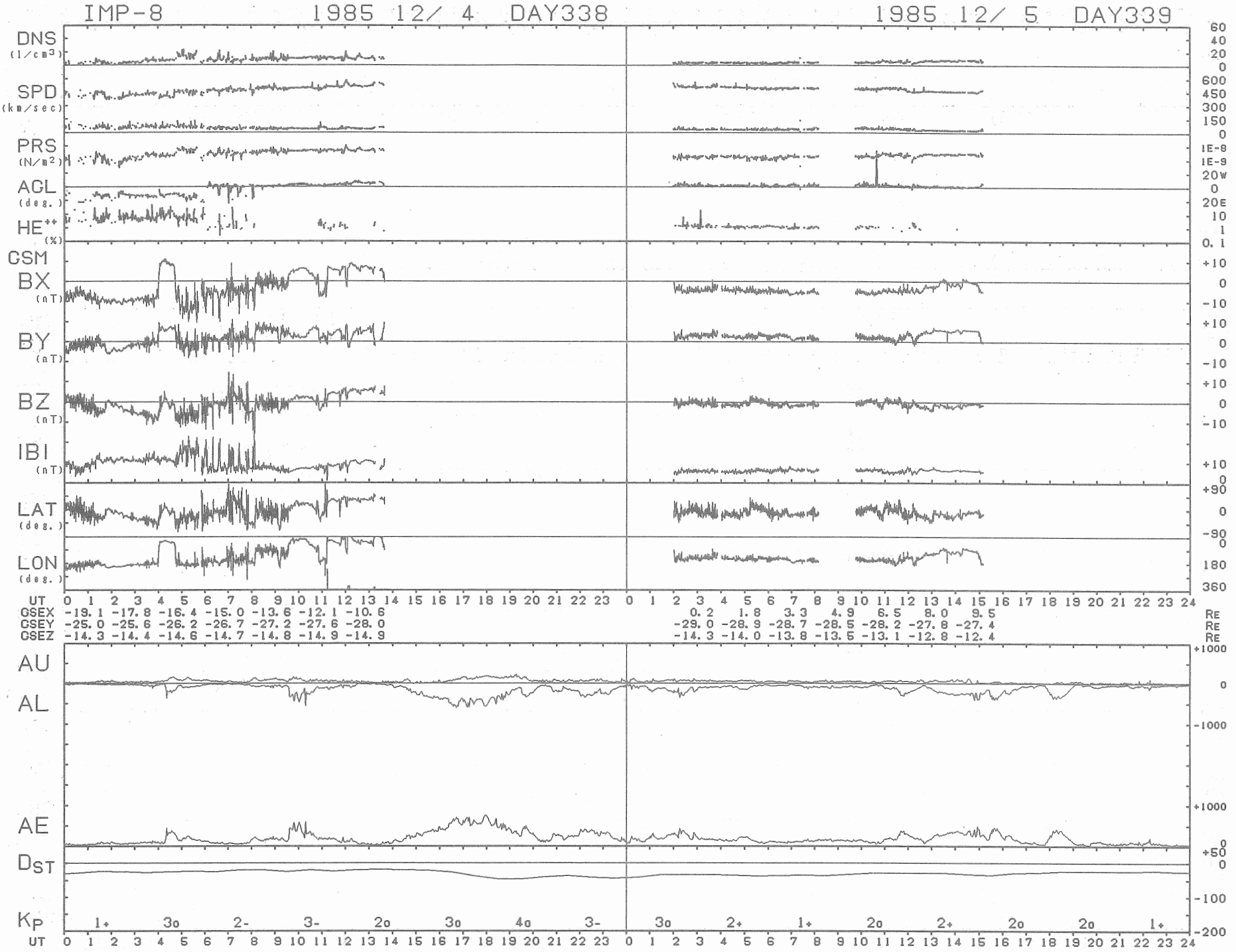

IMP-8
1985 11/24 DAY328
1985 11/25 DAY329
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
25.0
-15.7
-7.8
27.4 28.0
-11.8 -10.4
-5.7 -5.0
30.5
1.2
1.2
30.1 29.8 29.5 29.0
5.6 7.1 8.5 9.9
3.5 4.2 5.0 5.7
RE
AU
AL
AE
DST
KP
0+ 2- 1+ 1o 1o 0+ 0+ 2-
2+ 1+ 1o 2- 2o 1o 1+ 1o

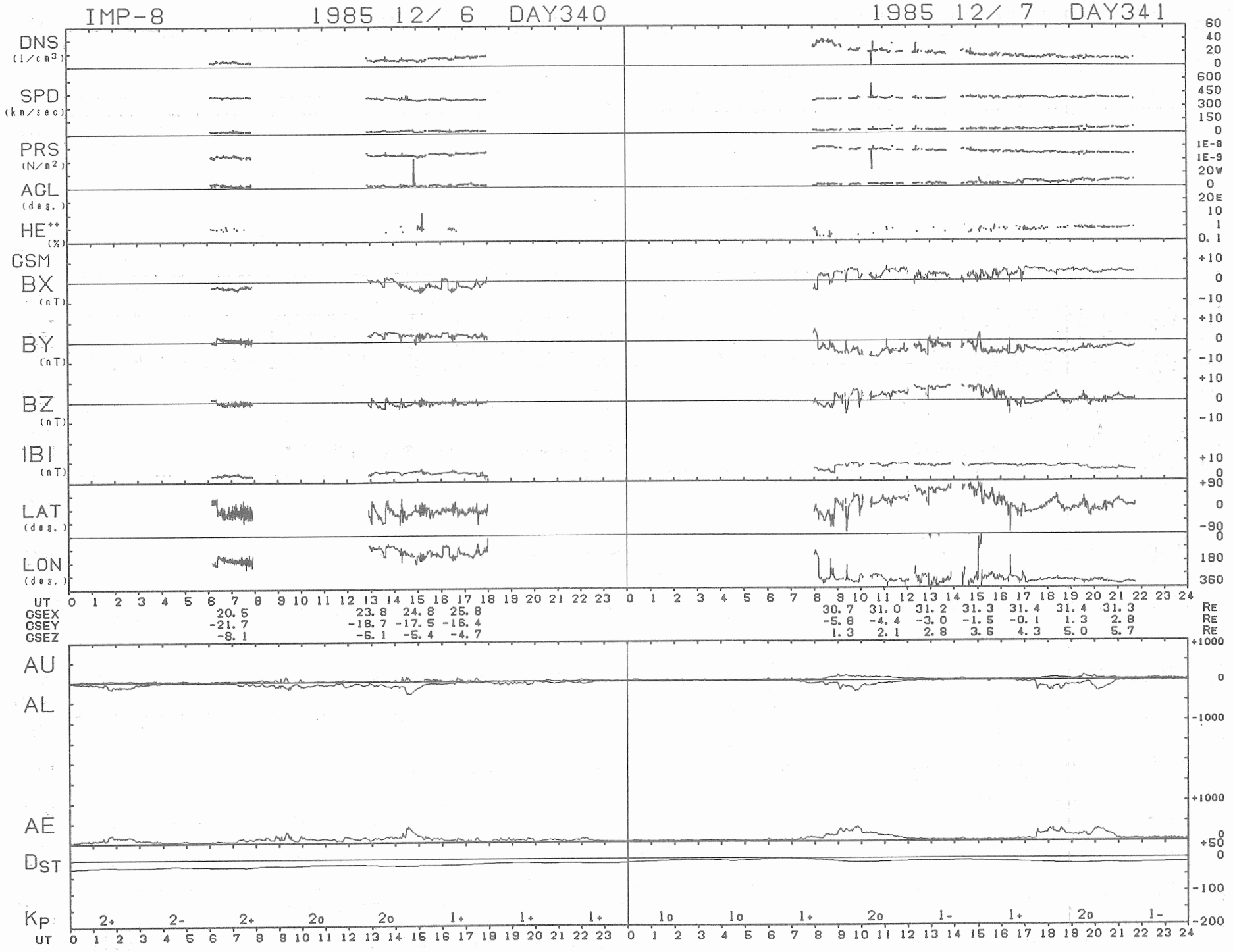

IMP-8
1985 11/26 DAY330
1985 11/27 DAY331
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.1 23.2 22.2 21.1 20.0 18.9 17.7 16.5 1.9 RE
GSEY 18.9 20.0 21.1 22.2 23.2 24.1 25.0 25.9 31.8 RE
GSEZ 10.3 10.9 11.4 12.0 12.5 12.9 13.4 13.8 16.3 RE
AU
AL
AE
DST
KP 1+ 3o 3- 1+ 0+ 0+ 1o 1+ 1- 4- 5- 3+ 4o 4+ 2+ 2+
UT

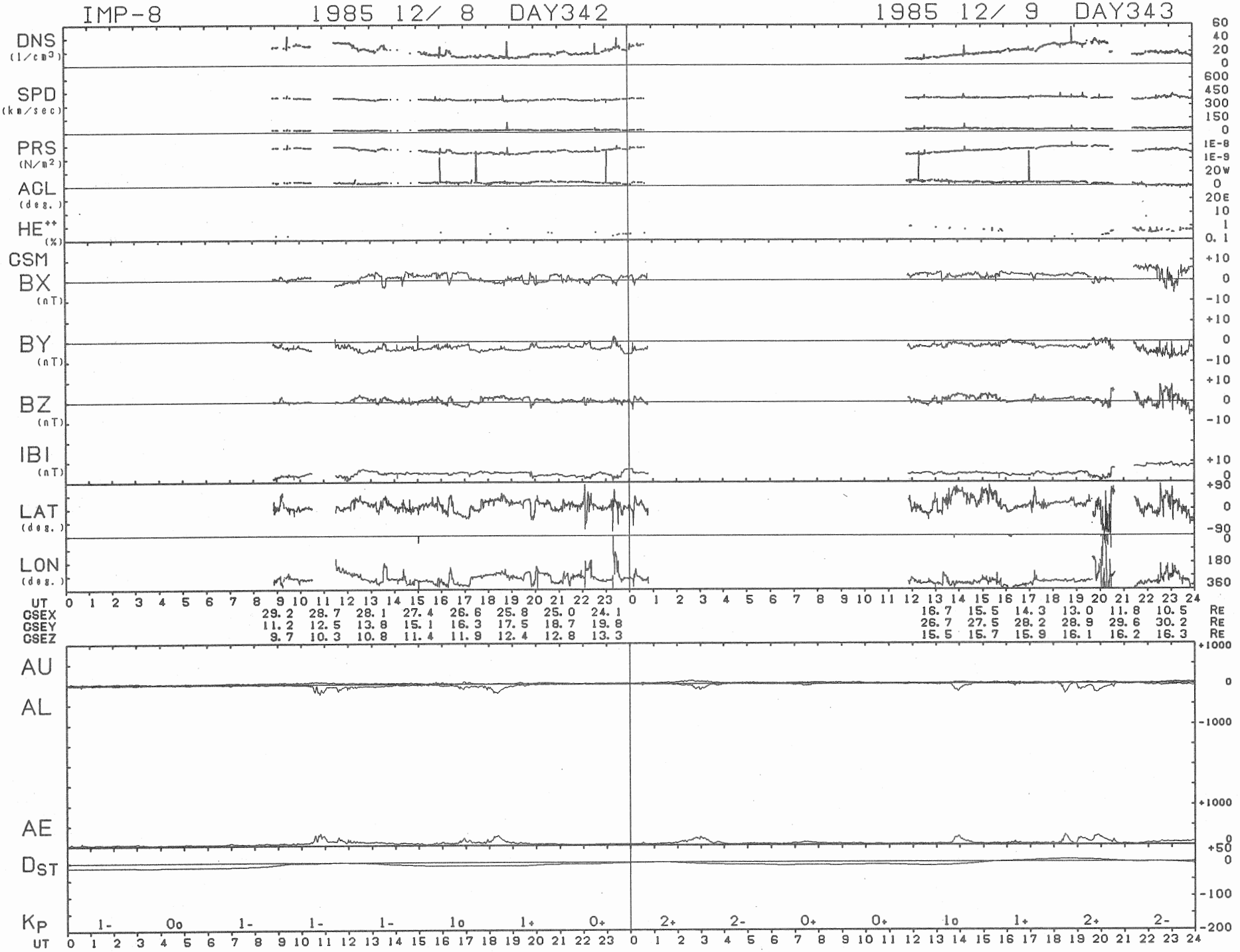

IMP-8
1985 11/28 DAY332
1985 11/29 DAY333
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 0.5 -0.9 -7.8 -10.5 -11.9 -13.2 -14.5 -15.7 -17.0 -18.2 -22.8 -23.9 -25.0 -26.0 -27.0 -27.9 RE
GSEY 32.0 32.2 32.4 32.1 31.9 31.6 31.3 31.0 30.6 30.2 28.1 27.5 26.8 26.2 25.4 24.7 RE
GSEZ 16.4 16.4 16.1 15.8 15.7 15.5 15.2 15.0 14.7 14.4 13.0 12.6 12.2 11.8 11.4 10.9 RE
AU
AL
AE
DST
KP
3- 3+ 1+ 2o 1- 1+ 2- 1+ 1- 0+ 3o 3+ 3o 4- 7- 7-
UT

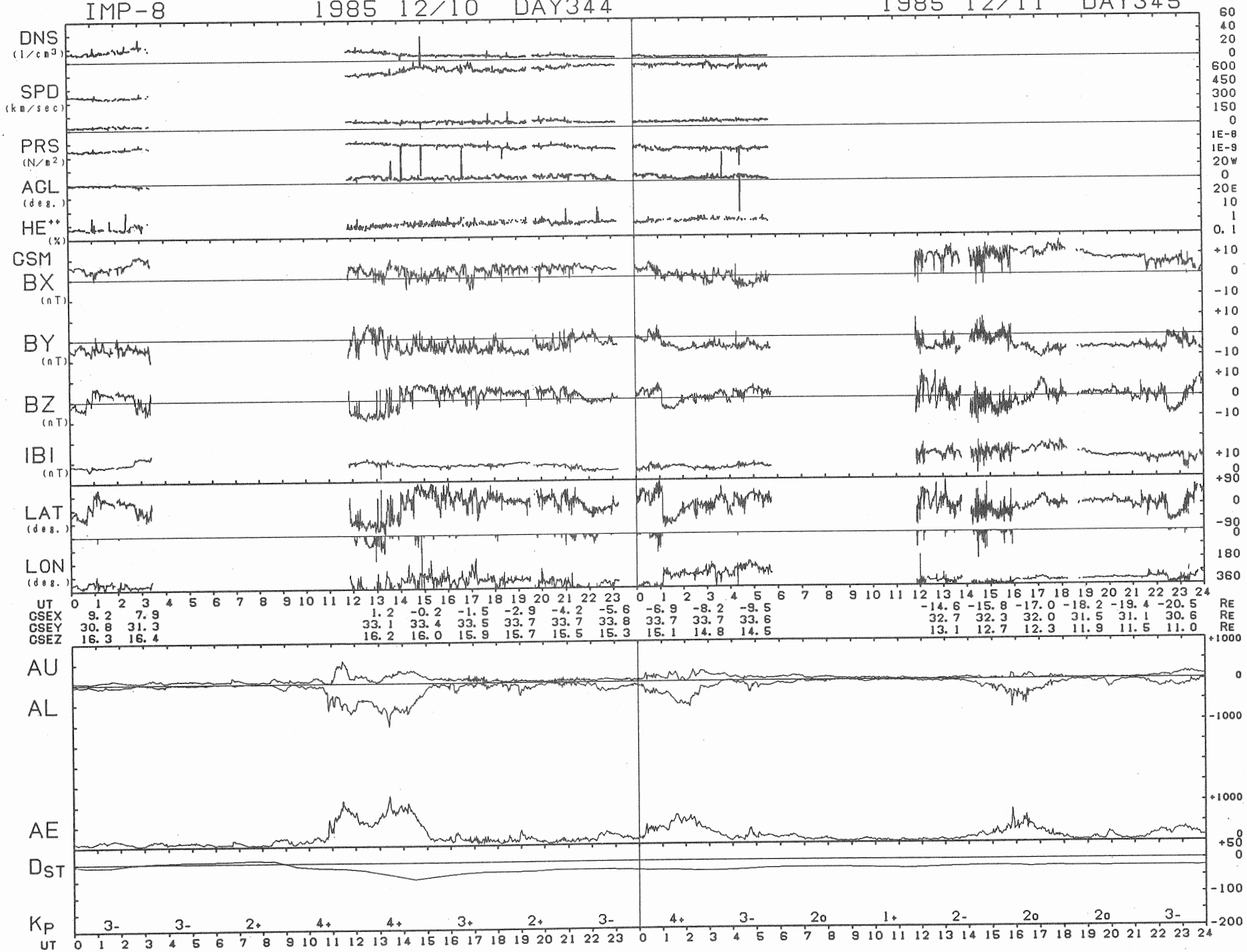

IMP-8
1985 11/30 DAY334
1985 12/ 1 DAY335
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.8 -29.7 -30.6 -31.4 -34.2 -34.8 -35.3 -37.4 -37.7 -37.9
GSEY 23.9 23.1 22.3 21.4 17.7 16.7 15.7 10.4 9.3 8.1
GSEZ 10.4 9.9 9.4 8.9 6.7 6.2 5.6 2.6 2.0 1.4
RE
AU
AL
AE
Dst
Kp
7+ 5+ 6- 5- 5+ 3+ 3+ 2+ 2o 3o 2- 3o 2+ 2+ 5- 4-
UT

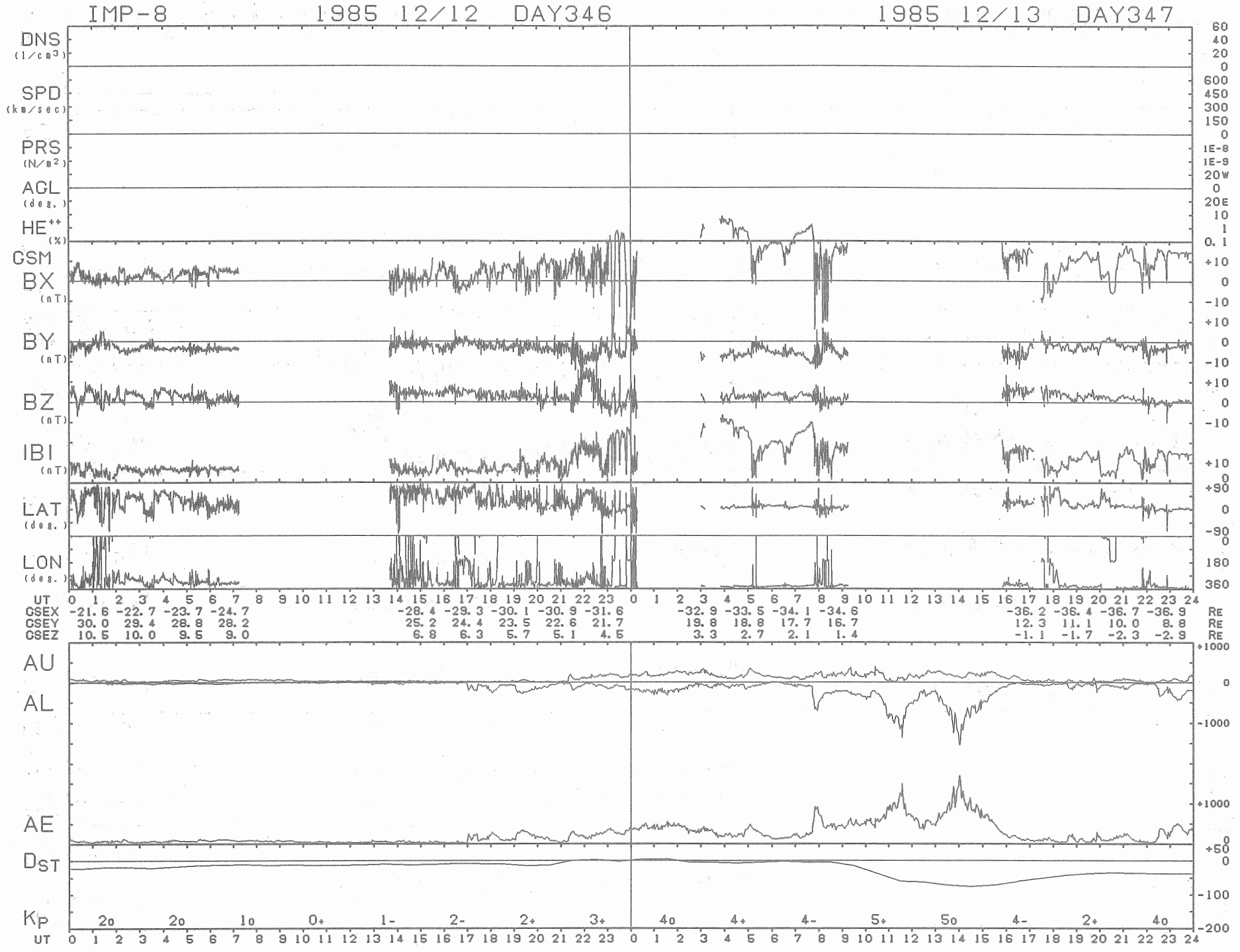

IMP-8
1985 12/ 2 DAY336
1985 12/ 3 DAY337
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.2 -36.8 -36.4 -27.4
GSEY -4.6 -5.7 -6.9 -19.5
GSEZ -5.3 -5.8 -6.4 -12.2
RE
AU
AL
AE
DST
KP 4- 3+ 4- 2o 2+ 2+ 3+ 2+ 2o 3- 0 2- 2o 3+ 2o 1+

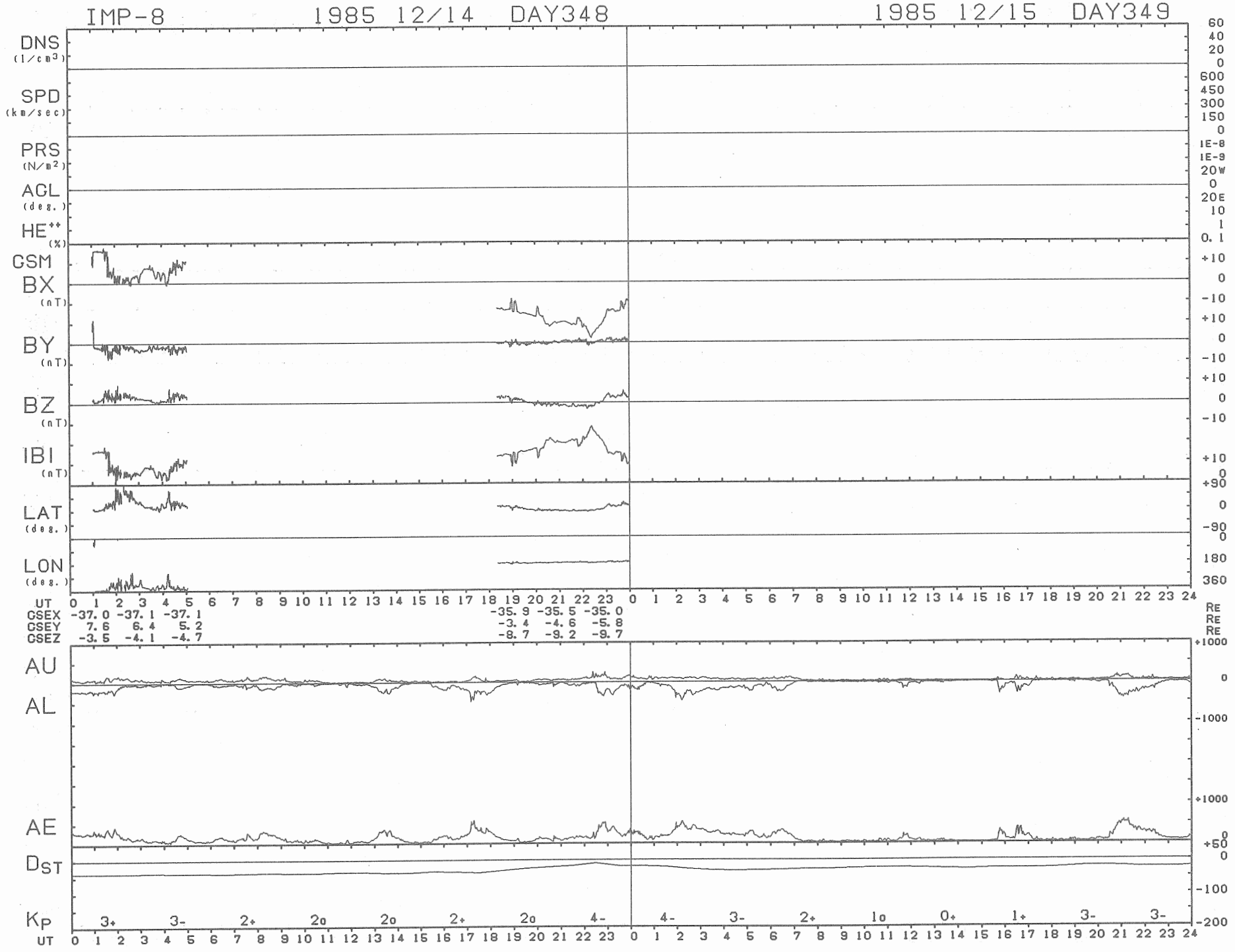

IMP-8
1985 12/ 4 DAY338
1985 12/ 5 DAY339
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -19.1 -17.8 -16.4 -15.0 -13.6 -12.1 -10.6 0.2 1.8 3.3 4.9 6.5 8.0 9.5 RE
GSEY -25.0 -25.6 -26.2 -26.7 -27.2 -27.6 -28.0 -29.0 -28.9 -28.7 -28.5 -28.2 -27.8 -27.4 RE
GSEZ -14.3 -14.4 -14.6 -14.7 -14.8 -14.9 -14.9 -14.3 -14.0 -13.8 -13.5 -13.1 -12.8 -12.4 RE
AU
AL
AE
DST
KP
1+ 3o 2- 3- 2o 3o 4o 3- 3o 2+ 1+ 2o 2+ 2o 2o 1+
UT

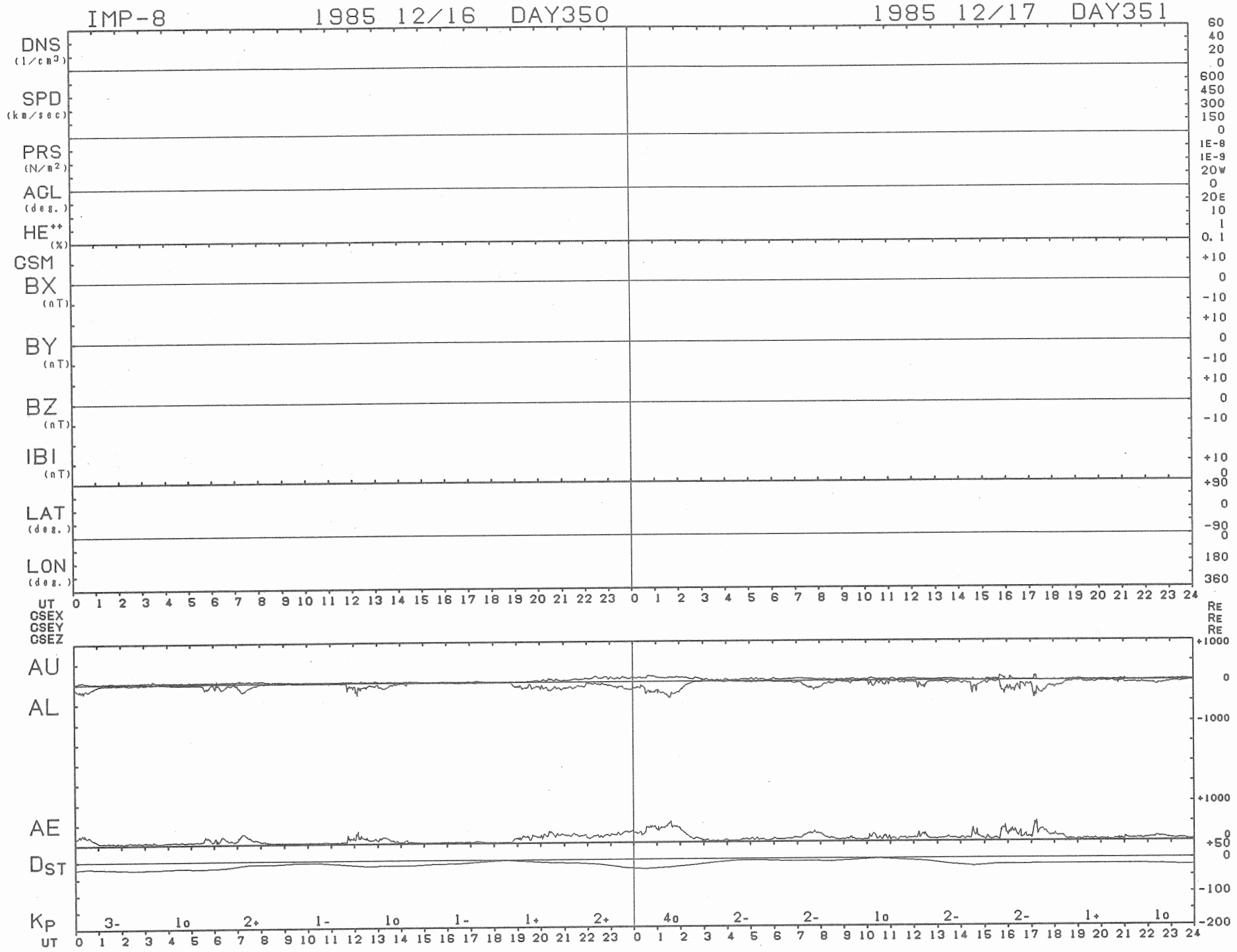

IMP-8
1985 12/ 6 DAY340
1985 12/ 7 DAY341
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.5 23.8 24.8 25.8 30.7 31.0 31.2 31.3 31.4 31.4 31.3 RE
GSEY -21.7 -18.7 -17.5 -16.4 -5.8 -4.4 -3.0 -1.5 -0.1 1.3 2.8 RE
GSEZ -8.1 -6.1 -5.4 -4.7 1.3 2.1 2.8 3.6 4.3 5.0 5.7 RE
AU
AL
AE
DST
KP 2+ 2- 2+ 2o 2o 1+ 1+ 1+ 1o 1o 1+ 2o 1- 1+ 2o 1-
UT

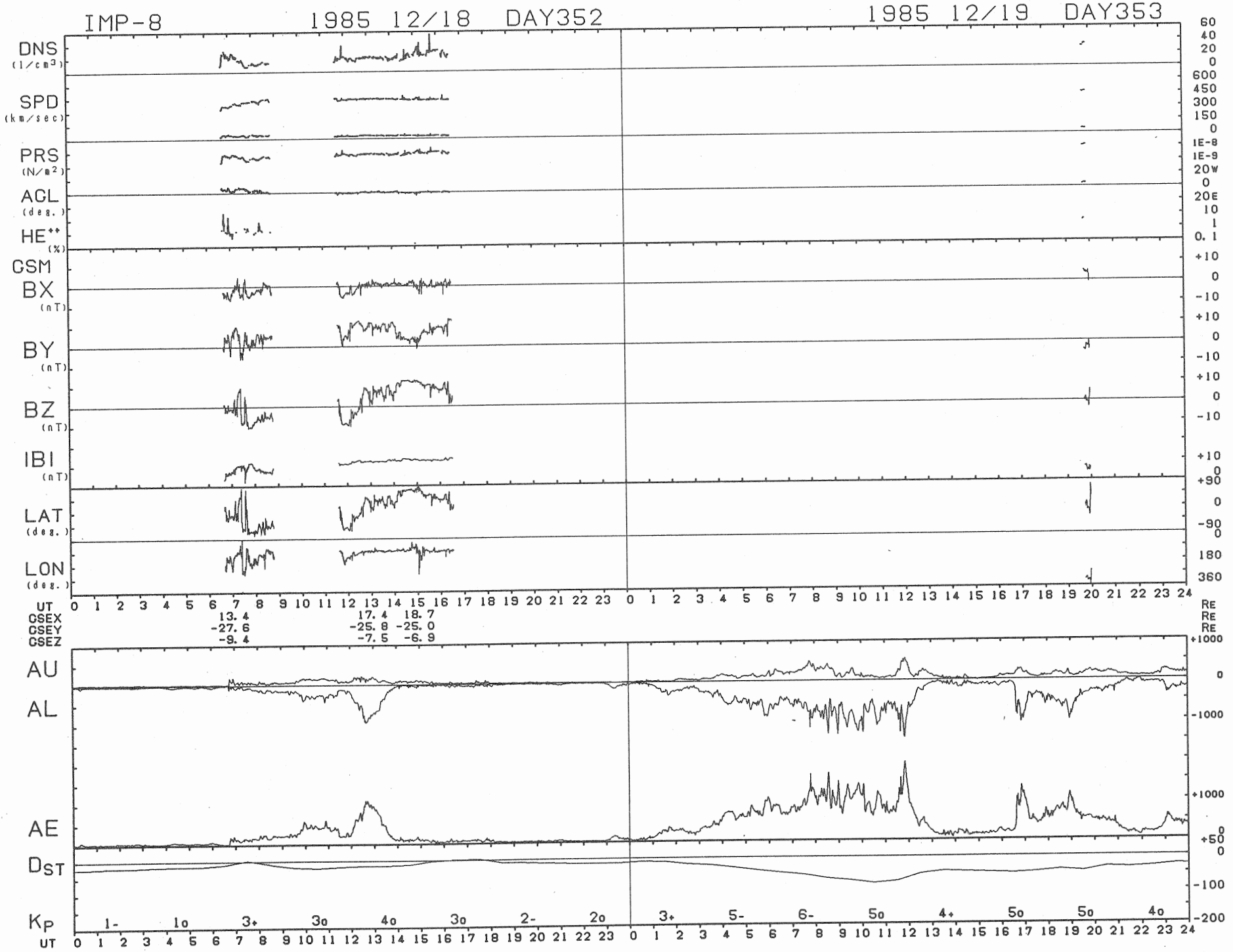

IMP-8
1985 12/ 8 DAY342
1985 12/ 9 DAY343
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 29.2 28.7 28.1 27.4 26.6 25.8 25.0 24.1 16.7 15.5 14.3 13.0 11.8 10.5 RE
CSEY 11.2 12.5 13.8 15.1 16.3 17.5 18.7 19.8 26.7 27.5 28.2 28.9 29.6 30.2 RE
CSEZ 9.7 10.3 10.8 11.4 11.9 12.4 12.8 13.3 15.5 15.7 15.9 16.1 16.2 16.3 RE
AU
AL
AE
DST
KP 1- 0o 1- 1- 1- 1o 1+ 0+ 2+ 2- 0+ 0+ 1o 1+ 2+ 2-
UT

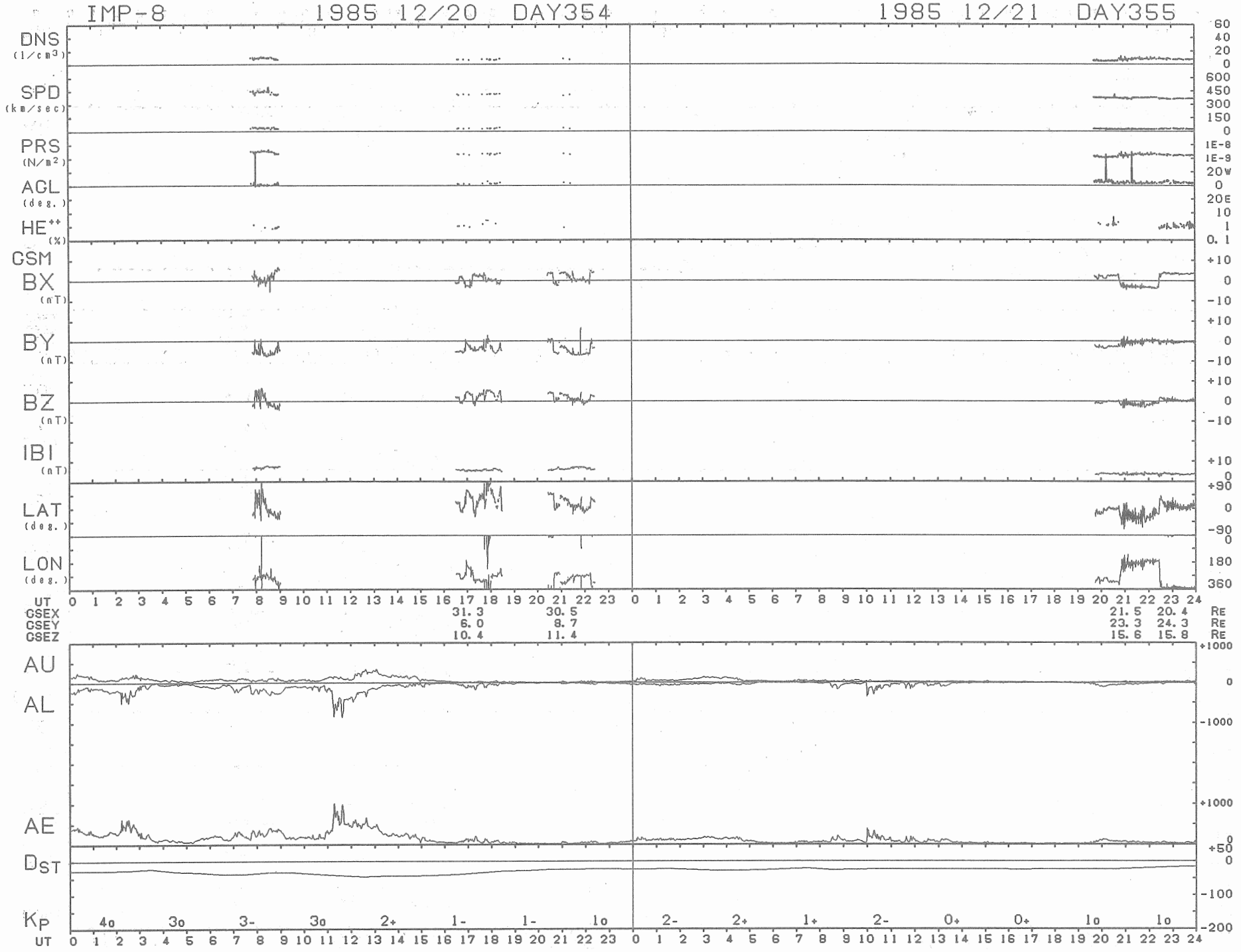

IMP-8
1985 12/10 DAY344
1985 12/11 DAY345
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 9.2 7.9 1.2 -0.2 -1.5 -2.9 -4.2 -5.6 -6.9 -8.2 -9.5 -14.6 -15.8 -17.0 -18.2 -19.4 -20.5 RE
GSEY 30.8 31.3 33.1 33.4 33.5 33.7 33.7 33.8 33.7 33.7 33.6 32.7 32.3 32.0 31.5 31.1 30.6 RE
GSEZ 16.3 16.4 16.2 16.0 15.9 15.7 15.5 15.3 15.1 14.8 14.5 13.1 12.7 12.3 11.9 11.5 11.0 RE
AU
AL
AE
Dst
Kp 3- 3- 2+ 4+ 4+ 3+ 2+ 3- 4+ 3- 2o 1+ 2- 2o 2o 3-
UT

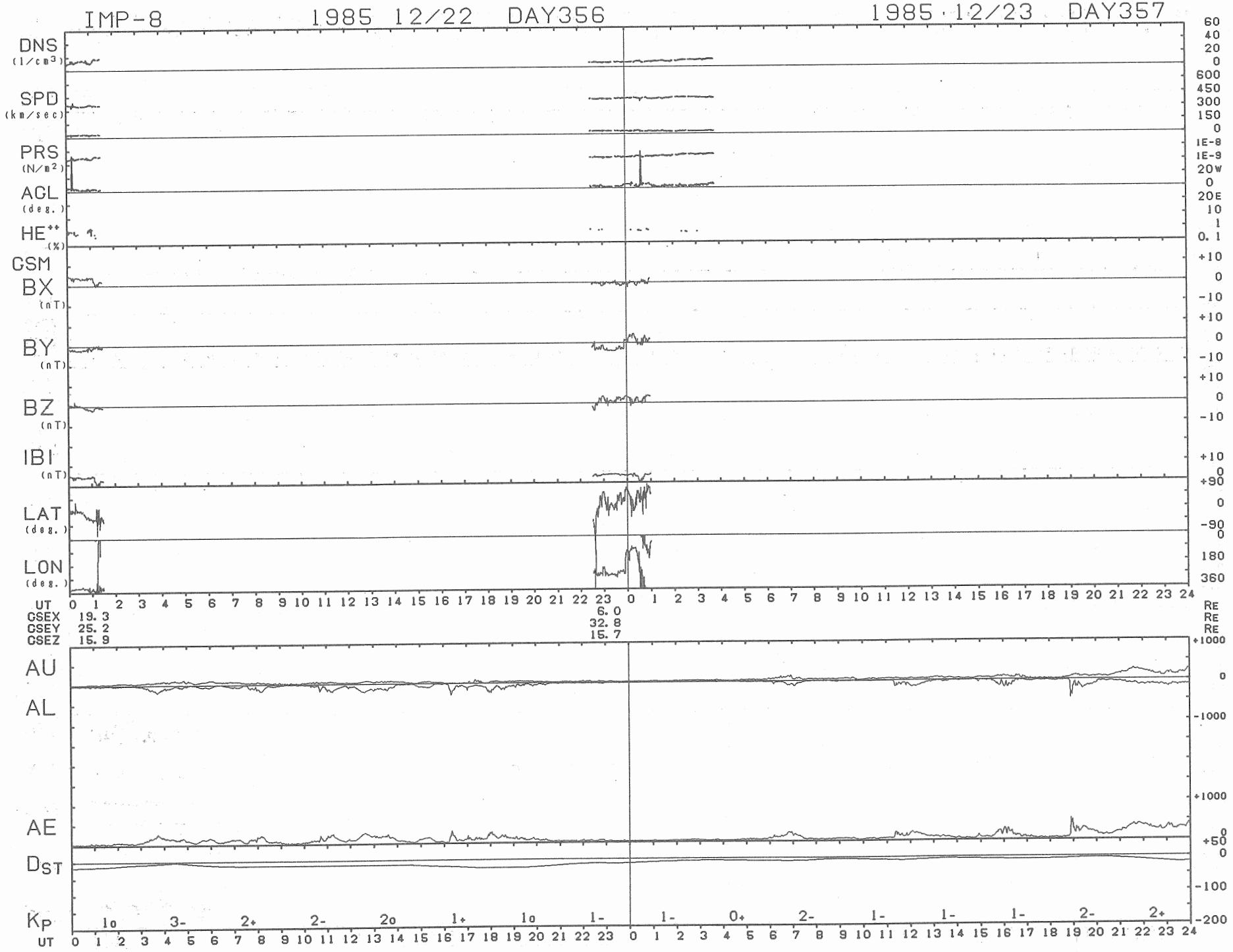

IMP-8
1985 12/12 DAY346
1985 12/13 DAY347
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -21.6 -22.7 -23.7 -24.7 -28.4 -29.3 -30.1 -30.9 -31.6 -32.9 -33.5 -34.1 -34.6 -36.2 -36.4 -36.7 -36.9 RE
GSEY 30.0 29.4 28.8 28.2 25.2 24.4 23.5 22.6 21.7 19.8 18.8 17.7 16.7 12.3 11.1 10.0 8.8 RE
GSEZ 10.5 10.0 9.5 9.0 6.8 6.3 5.7 5.1 4.5 3.3 2.7 2.1 1.4 -1.1 -1.7 -2.3 -2.9 RE
AU
AL
AE
DST
KP
2o 2o 1o 0+ 1- 2- 2+ 3+ 4o 4+ 4- 5+ 5o 4- 2+ 4o
UT

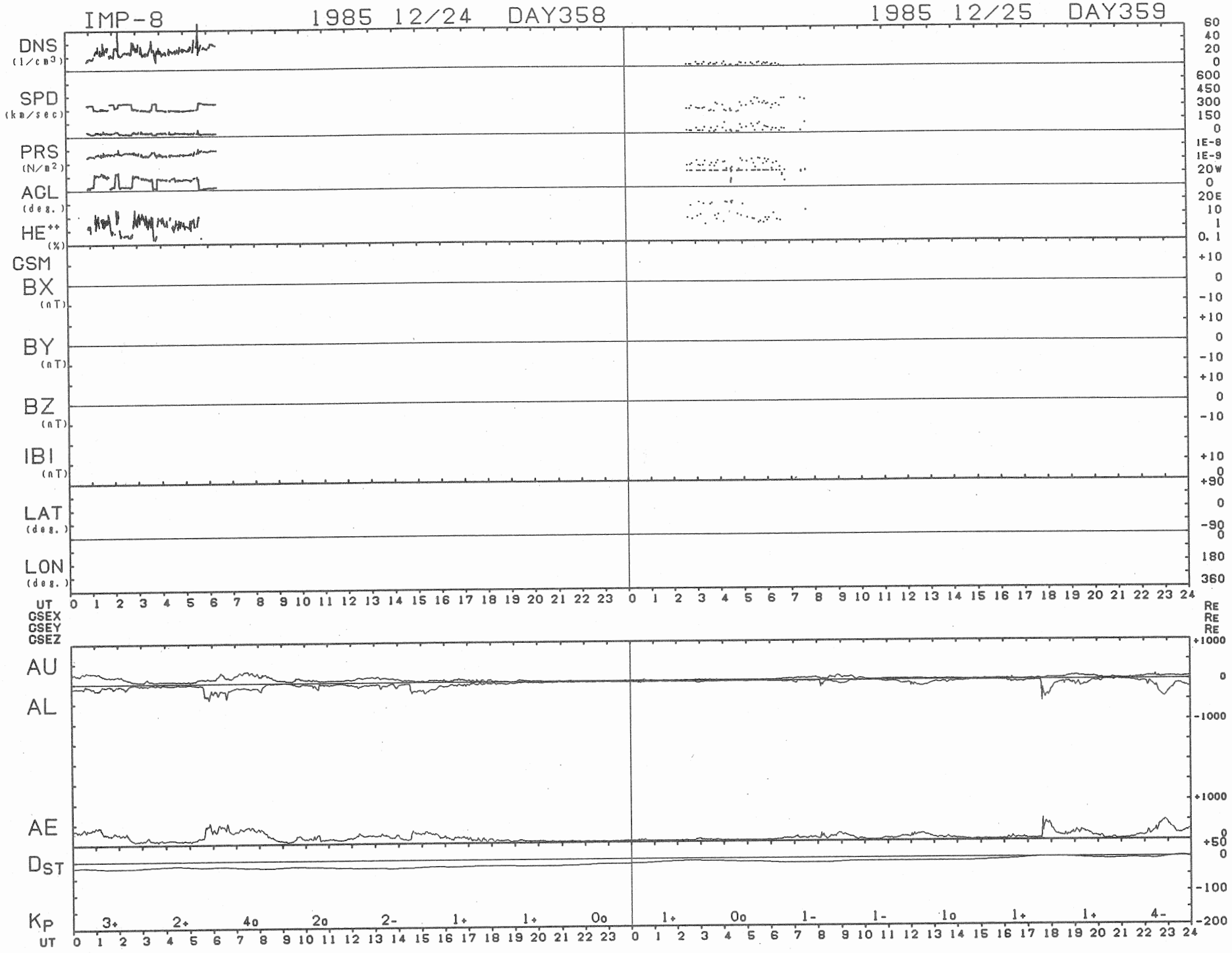

IMP-8
1985 12/14 DAY348
1985 12/15 DAY349
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -37.0 -37.1 -37.1 -35.9 -35.5 -35.0
GSEY 7.6 6.4 5.2 -3.4 -4.6 -5.8
GSEZ -3.5 -4.1 -4.7 -8.7 -9.2 -9.7
RE
AU
AL
AE
DST
KP
3+ 3- 2+ 2o 2o 2+ 2o 4- 4- 3- 2+ 1o 0+ 1+ 3- 3-
UT

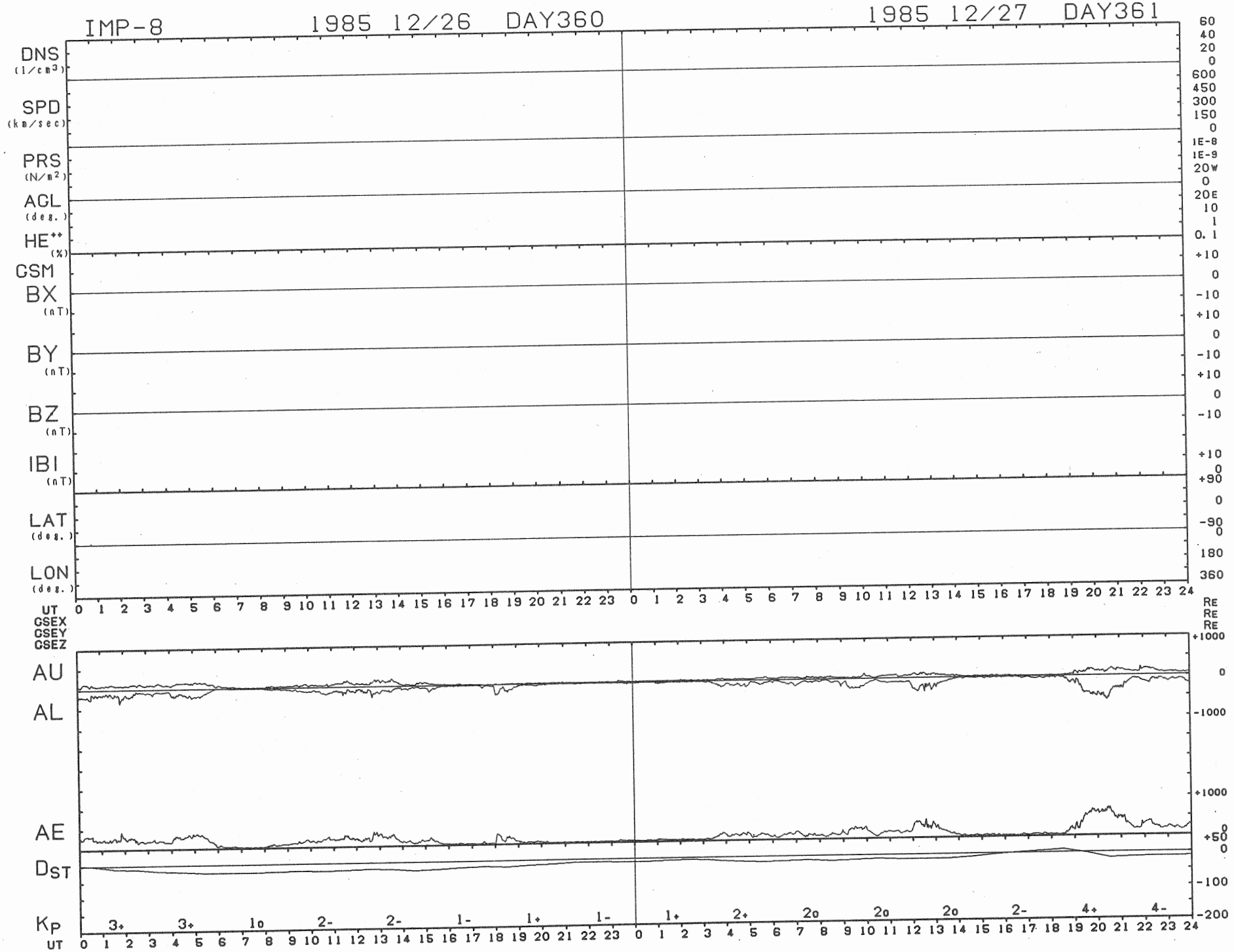

IMP-8
1985 12/16 DAY350
1985 12/17 DAY351
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX
CSEY
CSEZ
AU
AL
AE
DST
KP
3- 1o 2+ 1- 1o 1- 1+ 2+ 4o 2- 2- 1o 2- 2- 1+ 1o

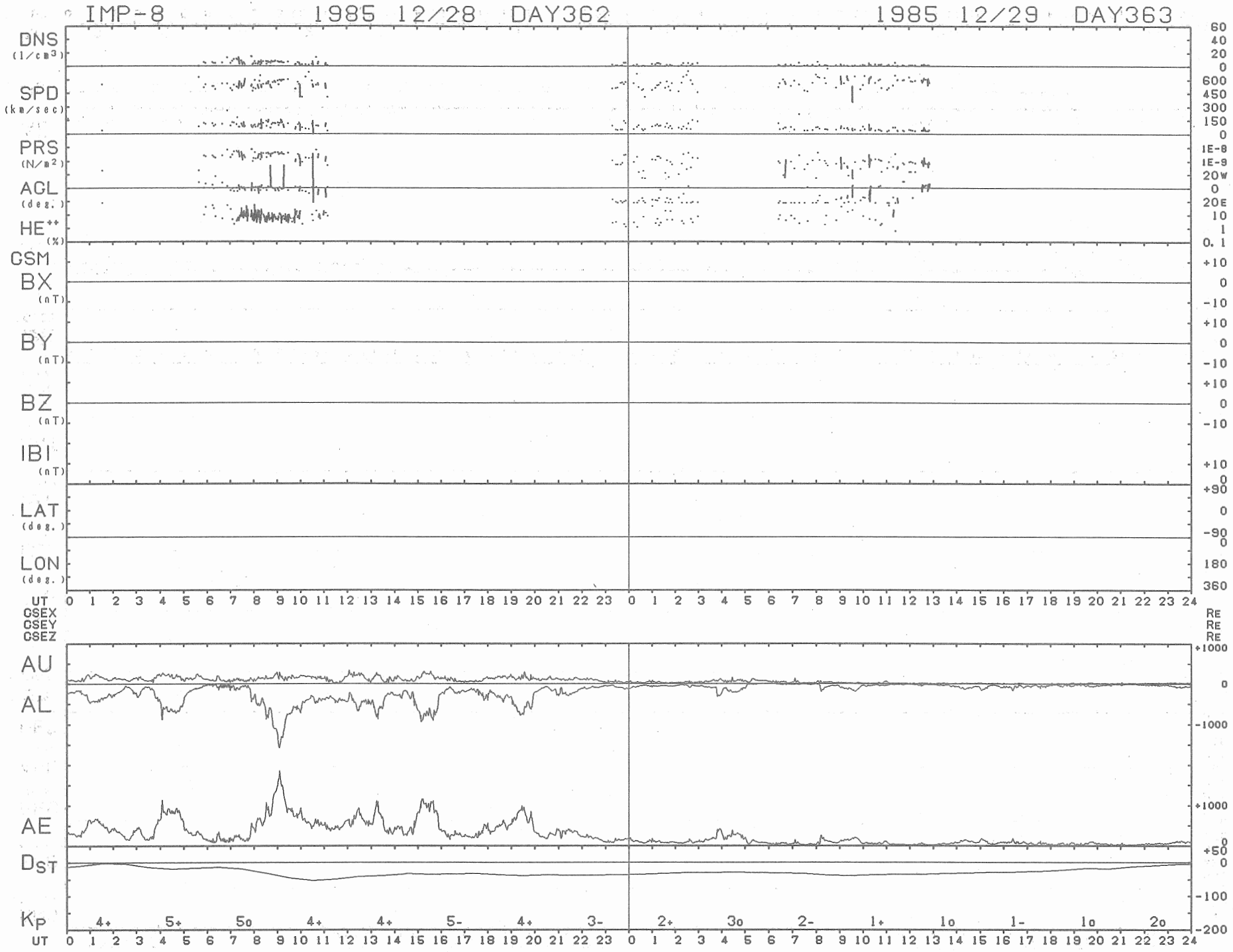

IMP-8
1985 12/18 DAY352
1985 12/19 DAY353
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.4 17.4 18.7
GSEY -27.6 -25.8 -25.0
GSEZ -9.4 -7.5 -6.9
RE
AU
AL
AE
Dst
Kp
1- 1o 3+ 3o 4o 3o 2- 2o 3+ 5- 6- 5o 4+ 5o 5o 4o

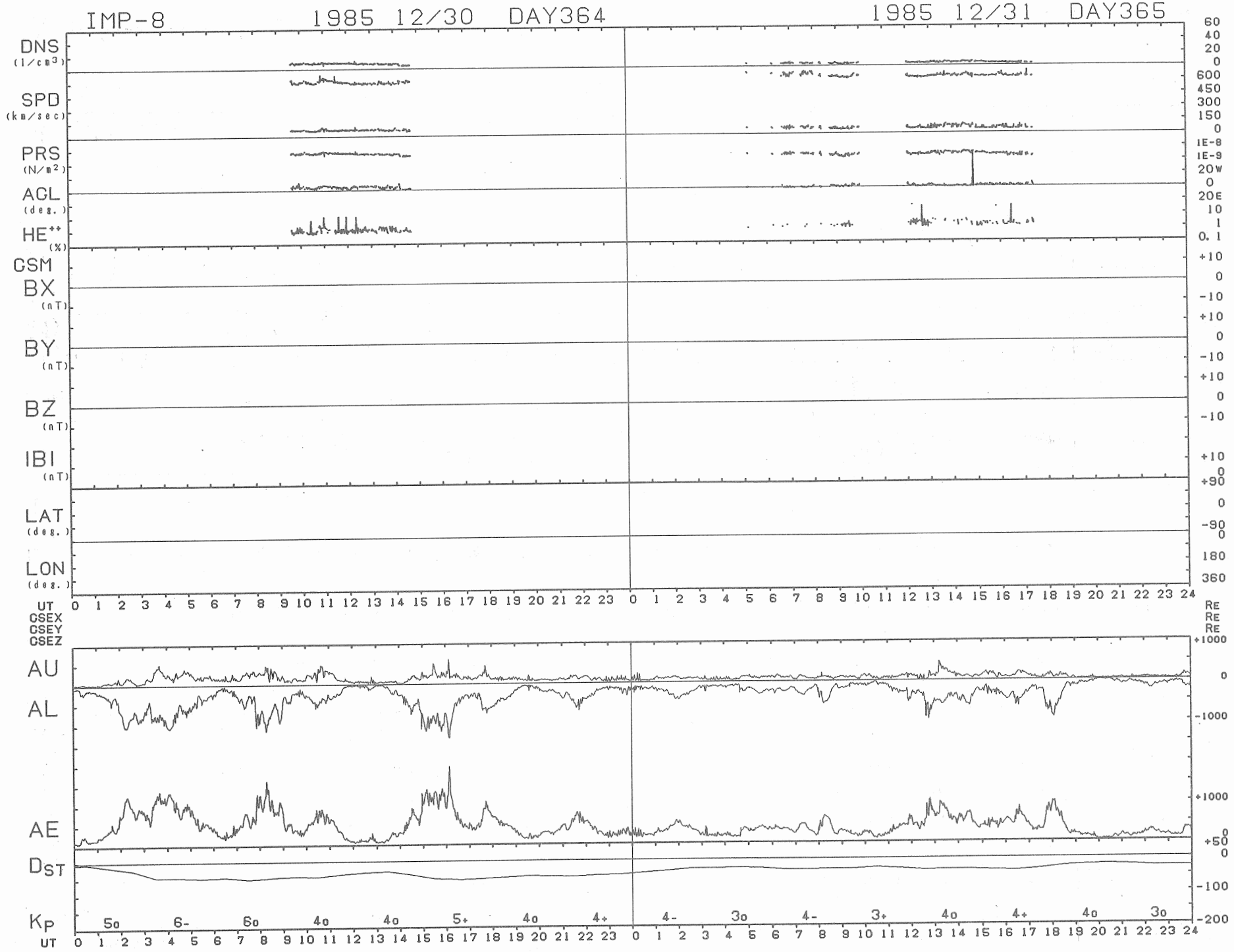

IMP-8
1985 12/20 DAY354
1985 12/21 DAY355
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 31.3 30.5 21.5 20.4 RE
CSEY 6.0 8.7 23.3 24.3 RE
CSEZ 10.4 11.4 15.6 15.8 RE
AU
AL
AE
DST
KP 4o 3o 3- 3o 2+ 1- 1- 1o 2- 2+ 1+ 2- 0+ 0+ 1o 1o

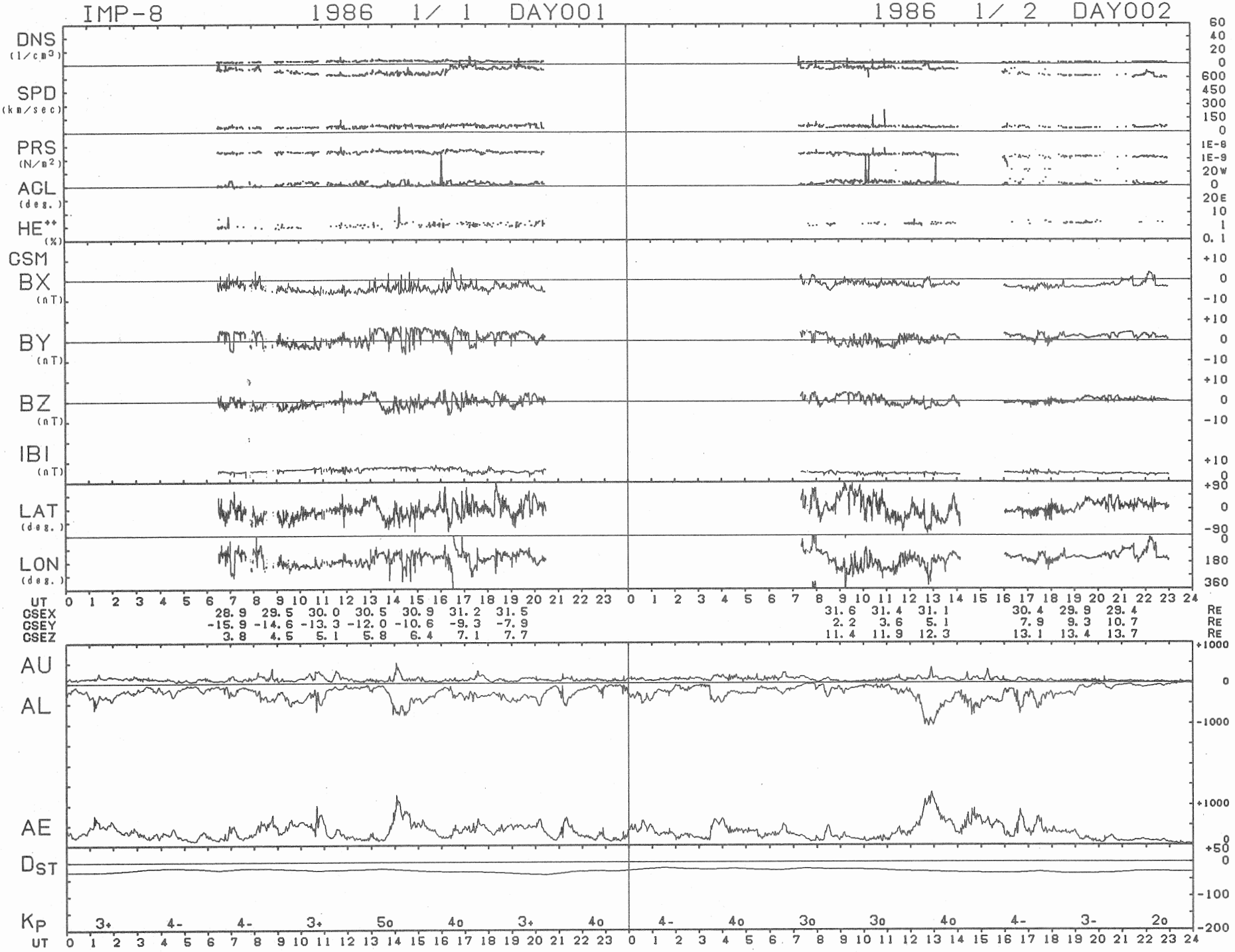

IMP-8
1985 12/22 DAY356
1985·12/23 DAY357
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 19.3
CSEY 25.2
CSEZ 15.9
6.0
32.8
15.7
RE
AU
AL
AE
DST
KP
1o 3- 2+ 2- 2o 1+ 1o 1- 1- 0+ 2- 1- 1- 1- 2- 2+

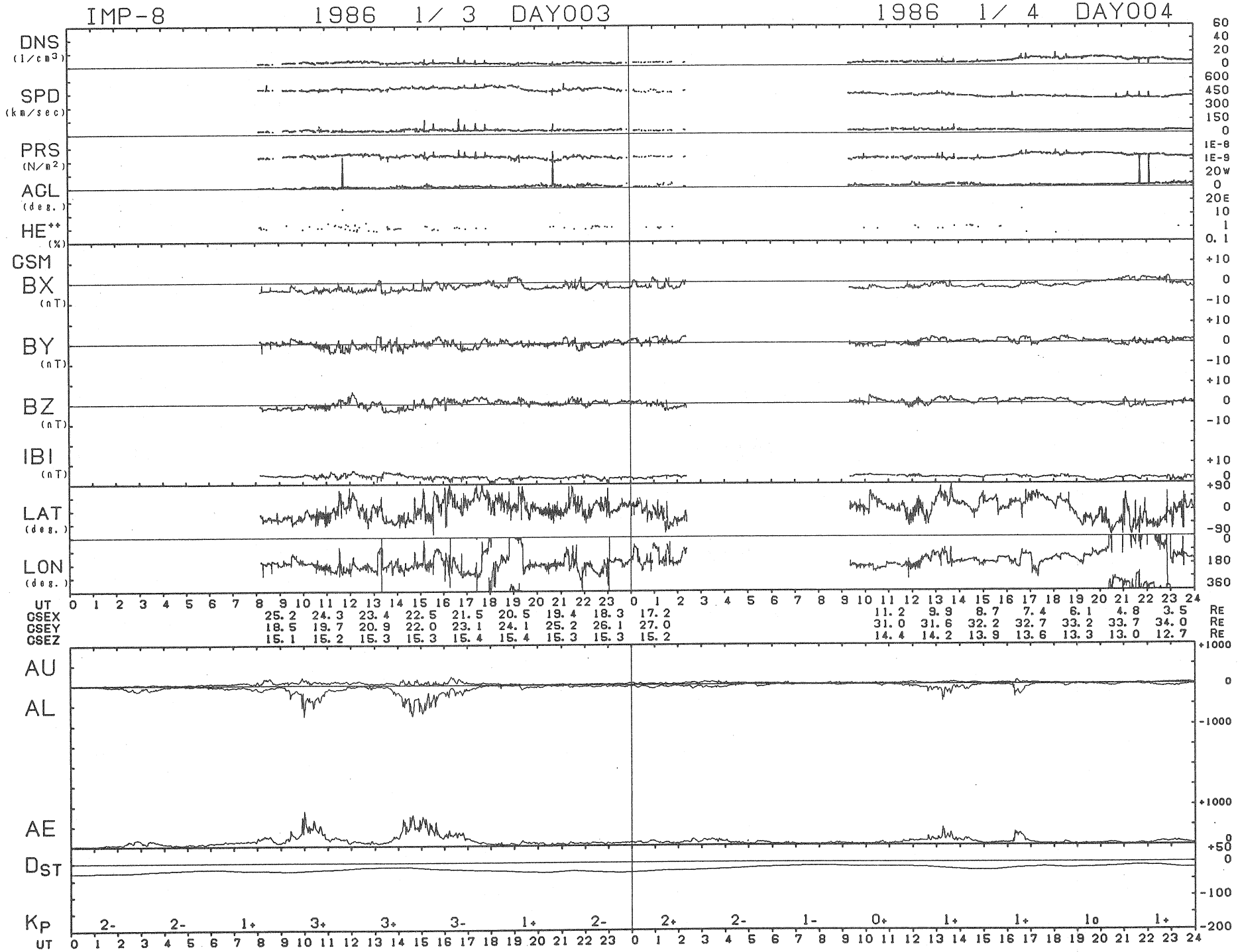

IMP-8
1985 12/24 DAY358
1985 12/25 DAY359
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
3+ 2+ 4o 2o 2- 1+ 1+ 0o 1+ 0o 1- 1- 1o 1+ 1+ 4-
UT

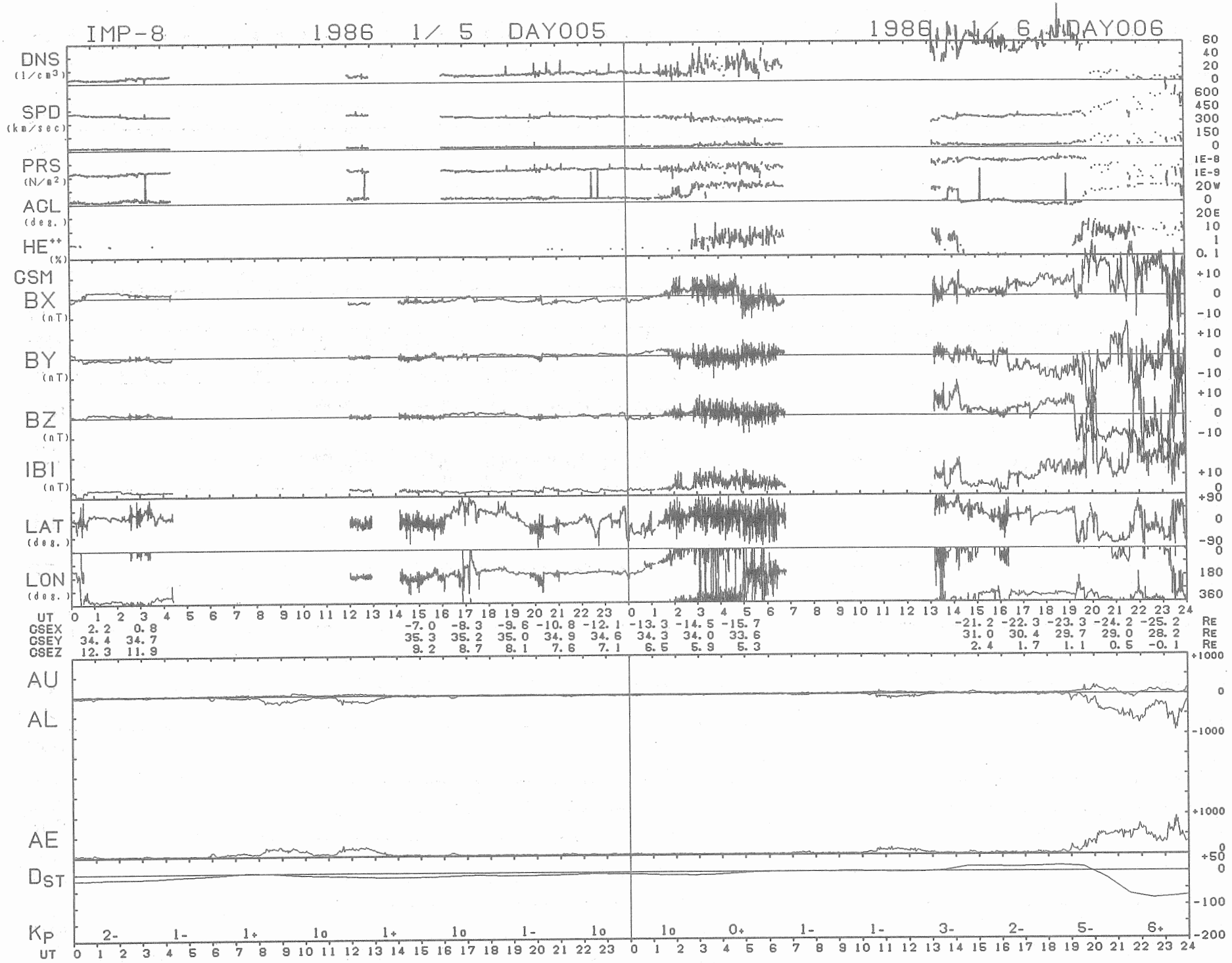

IMP-8
1985 12/26 DAY360
1985 12/27 DAY361
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP
3+ 3+ 1o 2- 2- 1- 1+ 1- 1+ 2+ 2o 2o 2o 2- 4+ 4-

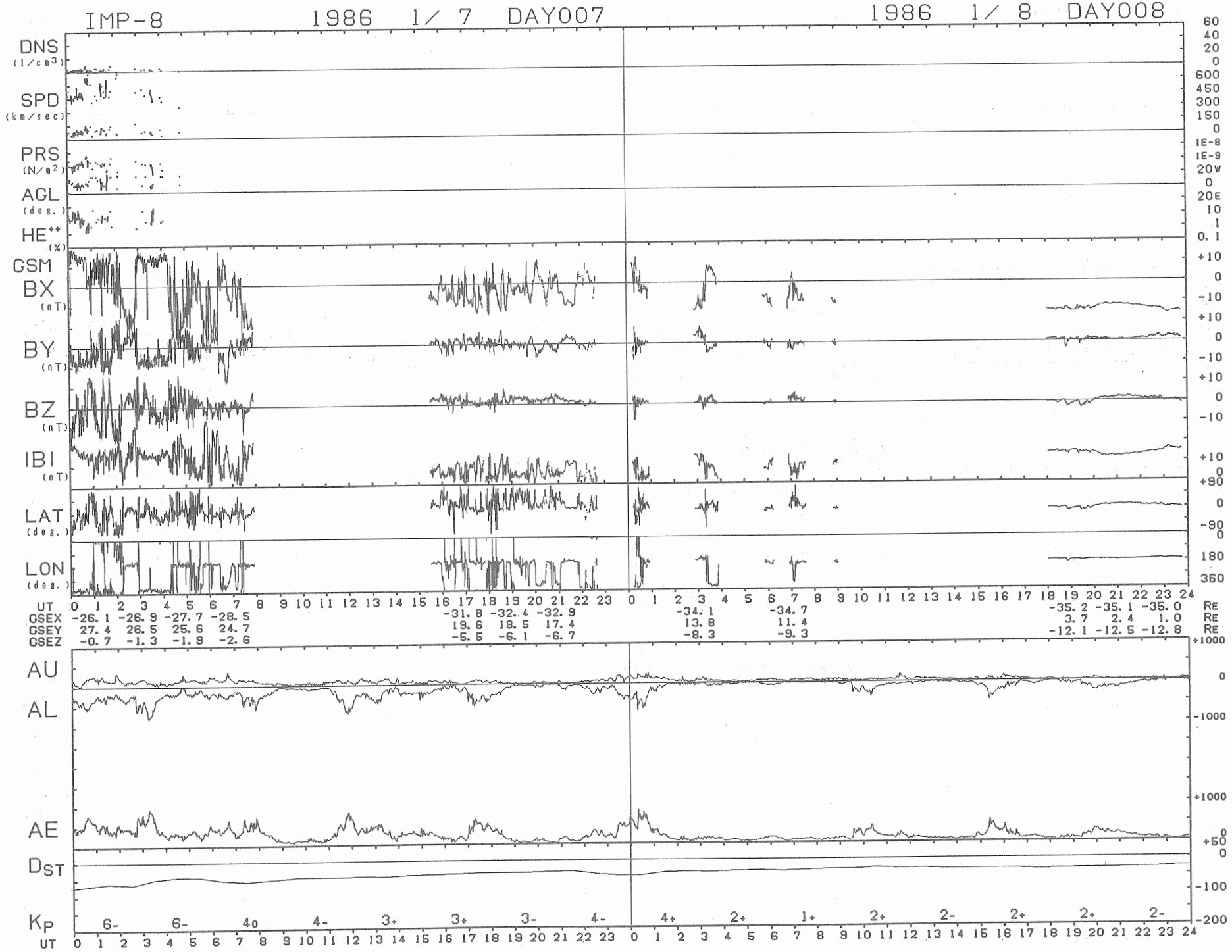

IMP-8
1985 12/28 DAY362
1985 12/29 DAY363
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
DST
KP
4+ 5+ 5o 4+ 4+ 5- 4+ 3- 2+ 3o 2- 1+ 1o 1- 1o 2o

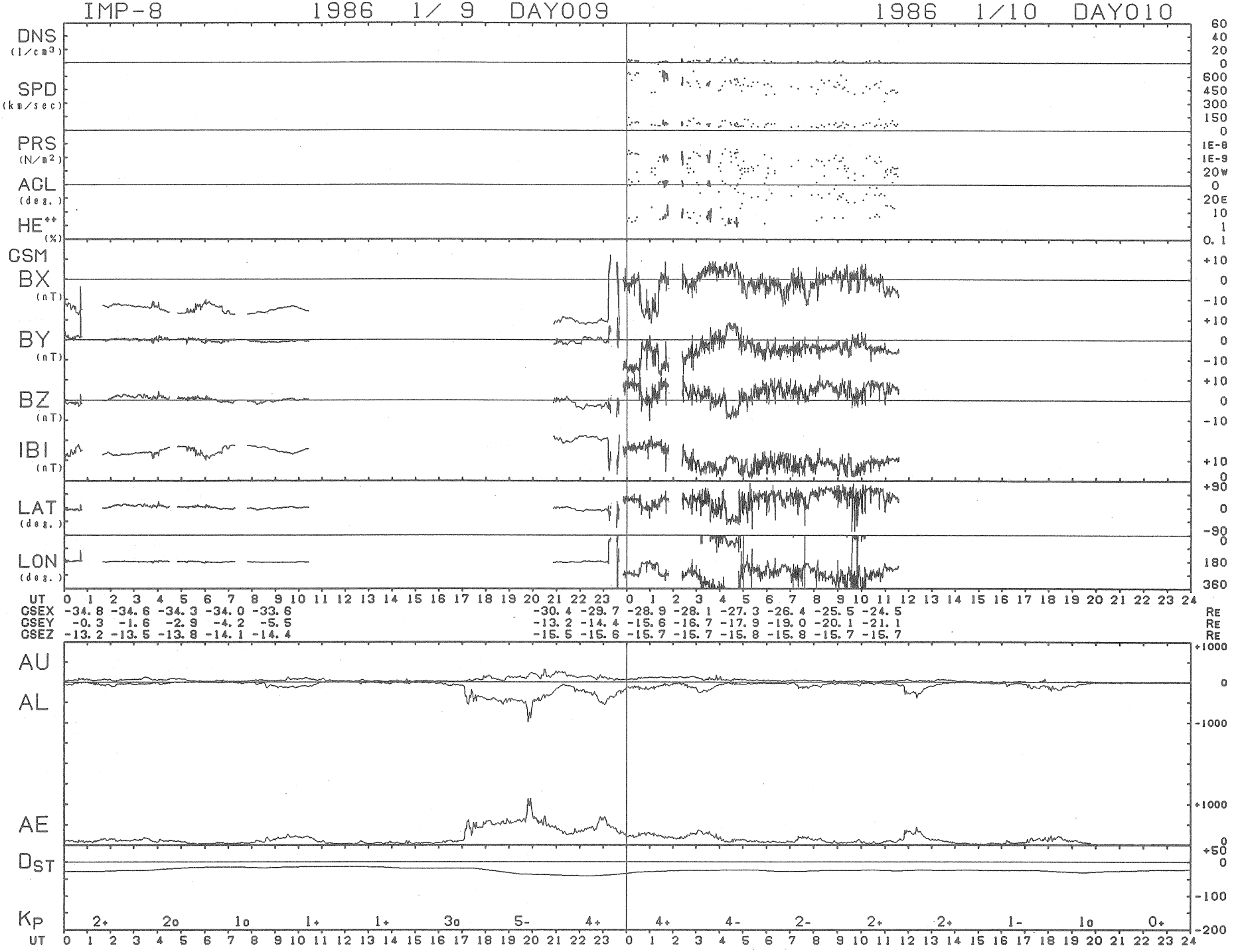

IMP-8
1985 12/30 DAY364
1985 12/31 DAY365
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
RE
AU
AL
AE
DST
KP
5o 6- 6o 4o 4o 5+ 4o 4+ 4- 3o 4- 3+ 4o 4+ 4o 3o

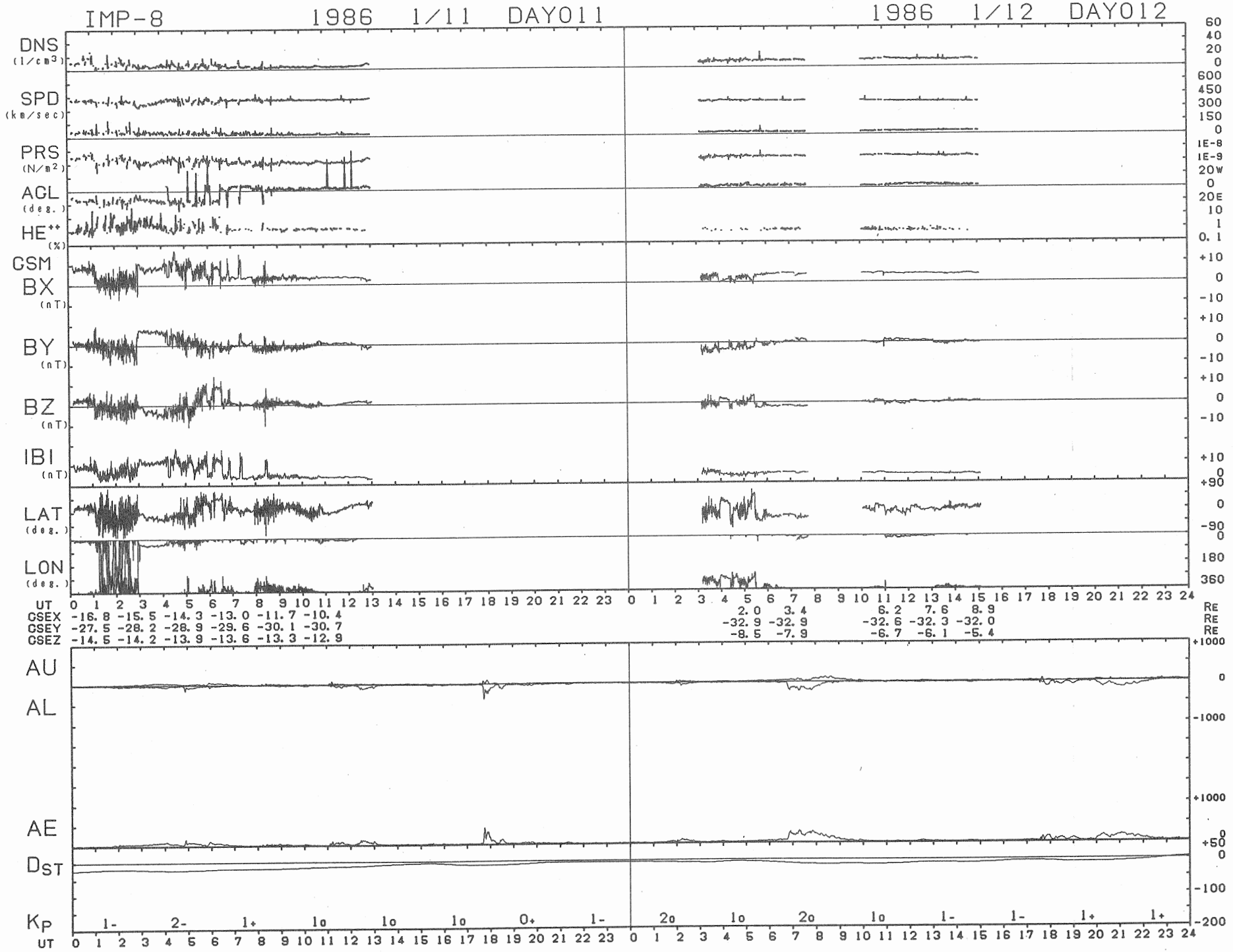

IMP-8 1986 1/ 1 DAY001
1986 1/ 2 DAY002
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.9 29.5 30.0 30.5 30.9 31.2 31.5 31.6 31.4 31.1 30.4 29.9 29.4 RE
GSEY -15.9 -14.6 -13.3 -12.0 -10.6 -9.3 -7.9 2.2 3.6 5.1 7.9 9.3 10.7 RE
GSEZ 3.8 4.5 5.1 5.8 6.4 7.1 7.7 11.4 11.9 12.3 13.1 13.4 13.7 RE
AU
AL
AE
DST
KP 3+ 4- 4- 3+ 5o 4o 3+ 4o 4- 4o 3o 3o 4o 4- 3- 2o
UT

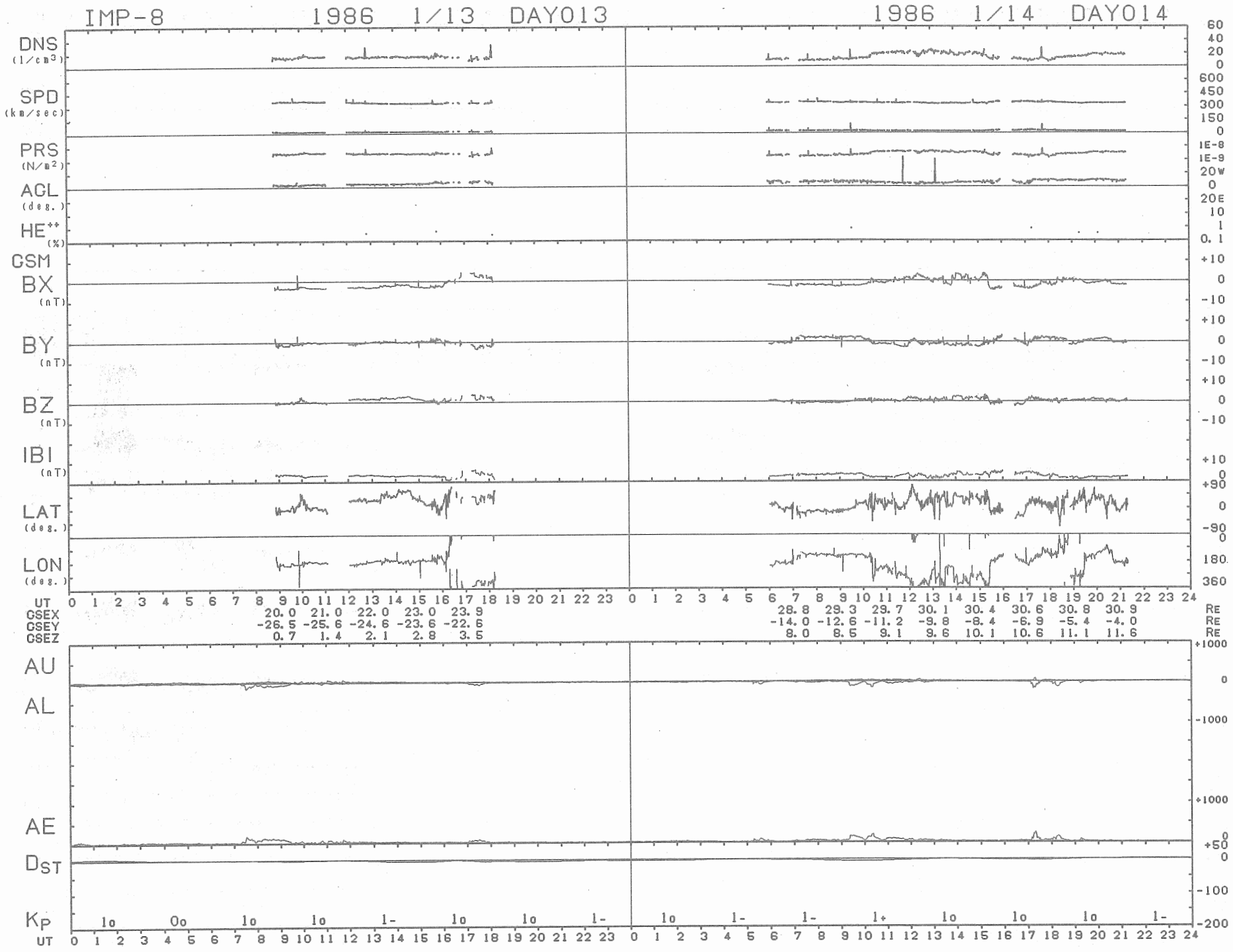

IMP-8
1986 1/ 3 DAY003
1986 1/ 4 DAY004
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 25.2 24.3 23.4 22.5 21.5 20.5 19.4 18.3 17.2 | 11.2 9.9 8.7 7.4 6.1 4.8 3.5 RE
GSEY 18.5 19.7 20.9 22.0 23.1 24.1 25.2 26.1 27.0 | 31.0 31.6 32.2 32.7 33.2 33.7 34.0 RE
GSEZ 15.1 15.2 15.3 15.3 15.4 15.4 15.3 15.3 15.2 | 14.4 14.2 13.9 13.6 13.3 13.0 12.7 RE
AU
AL
AE
DST
KP 2- 2- 1+ 3+ 3+ 3- 1+ 2- | 2+ 2- 1- 0+ 1+ 1+ 1o 1+
UT

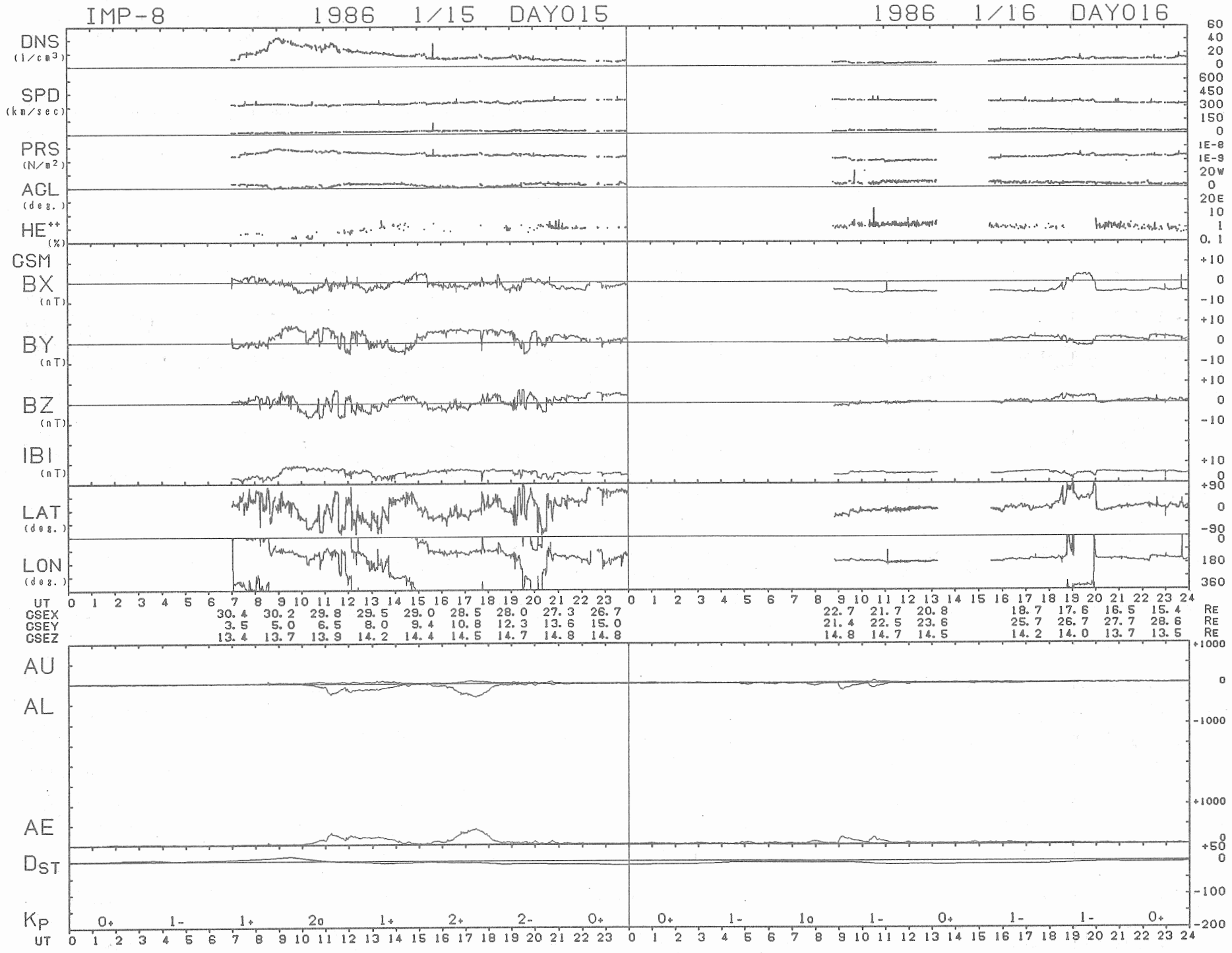

IMP-8 1986 1/ 5 DAY005
1986 1/ 6 DAY006
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 2.2 0.8 -7.0 -8.3 -9.6 -10.8 -12.1 -13.3 -14.5 -15.7 -21.2 -22.3 -23.3 -24.2 -25.2 RE
GSEY 34.4 34.7 35.3 35.2 35.0 34.9 34.6 34.3 34.0 33.6 31.0 30.4 29.7 29.0 28.2 RE
GSEZ 12.3 11.9 9.2 8.7 8.1 7.6 7.1 6.5 5.9 5.3 2.4 1.7 1.1 0.5 -0.1 RE
AU
AL
AE
DST
KP 2- 1- 1+ 1o 1+ 1o 1- 1o 1o 0+ 1- 1- 3- 2- 5- 6+
UT

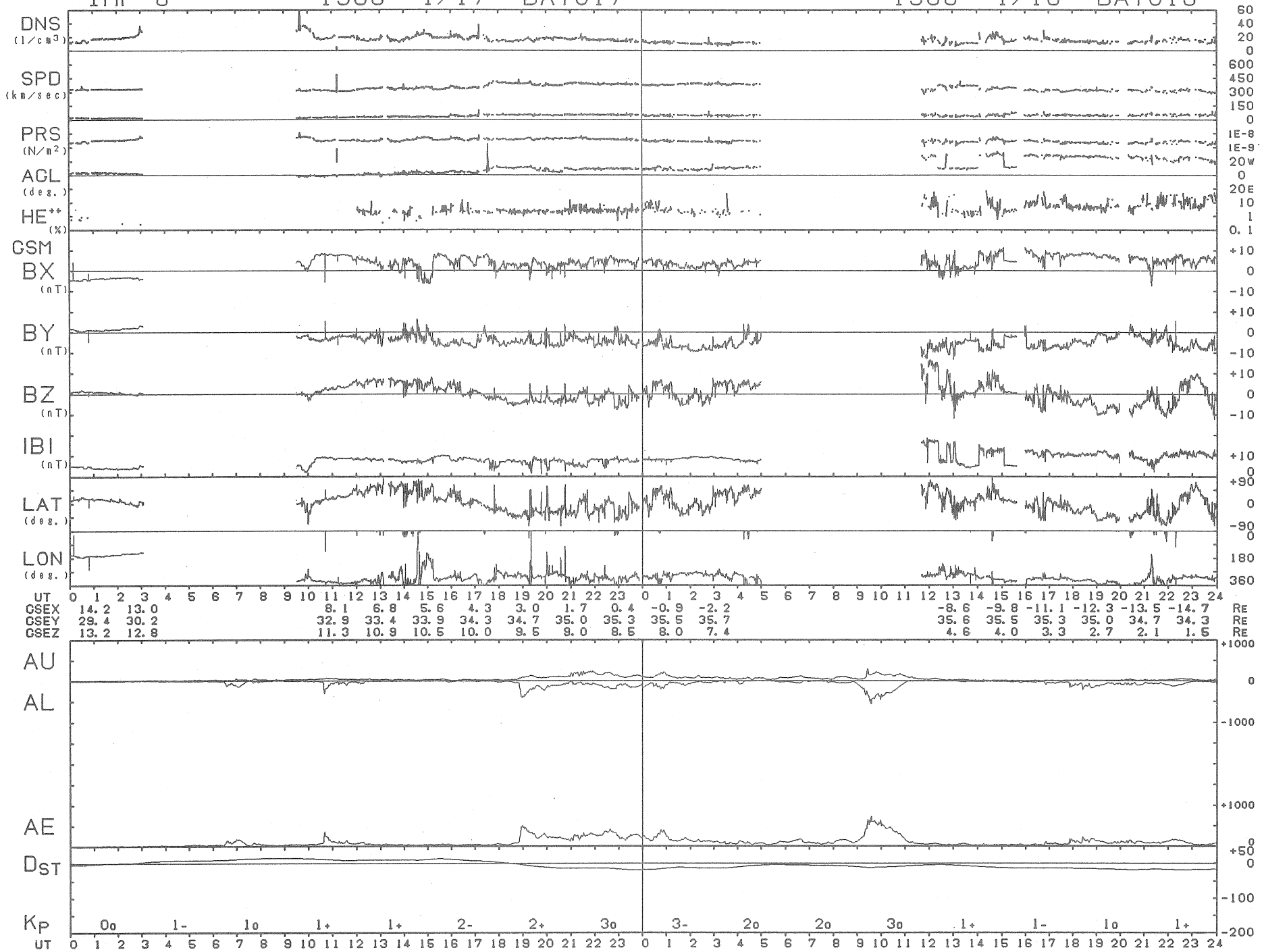

IMP-8
1986 1/ 7 DAY007
1986 1/ 8 DAY008
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -26.1 -26.9 -27.7 -28.5 -31.8 -32.4 -32.9 -34.1 -34.7 -35.2 -35.1 -35.0 RE
GSEY 27.4 26.5 25.6 24.7 19.6 18.5 17.4 13.8 11.4 3.7 2.4 1.0 RE
GSEZ -0.7 -1.3 -1.9 -2.6 -5.5 -6.1 -6.7 -8.3 -9.3 -12.1 -12.5 -12.8 RE
AU
AL
AE
DST
KP
6- 6- 4o 4- 3+ 3+ 3- 4- 4+ 2+ 1+ 2+ 2- 2+ 2+ 2-
UT

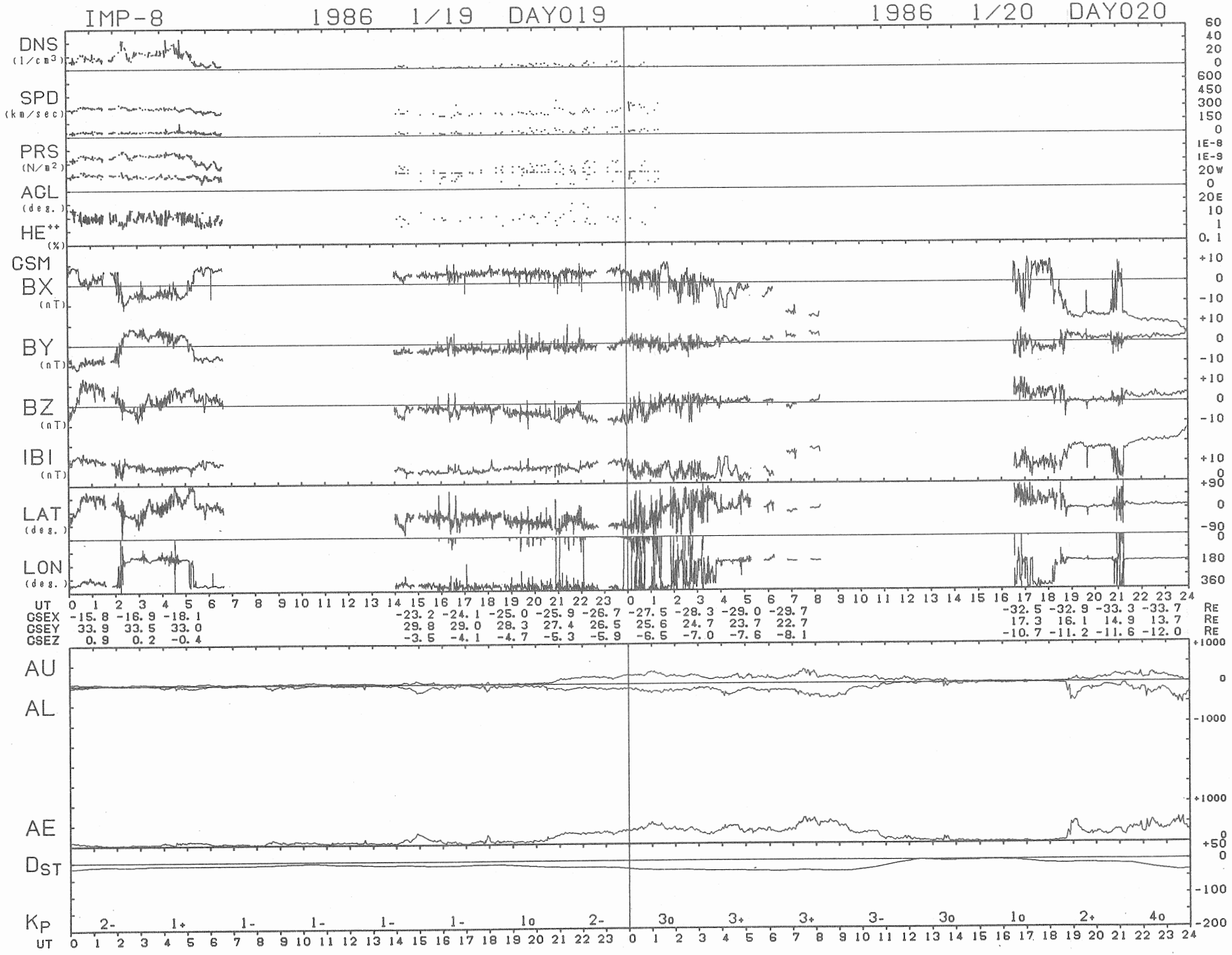

IMP-8 1986 1/ 9 DAY009
1986 1/10 DAY010
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -34.8 -34.6 -34.3 -34.0 -33.6 -30.4 -29.7 -28.9 -28.1 -27.3 -26.4 -25.5 -24.5
GSEY -0.3 -1.6 -2.9 -4.2 -5.5 -13.2 -14.4 -15.6 -16.7 -17.9 -19.0 -20.1 -21.1
GSEZ -13.2 -13.5 -13.8 -14.1 -14.4 -15.5 -15.6 -15.7 -15.7 -15.8 -15.8 -15.7 -15.7
Re
AU
AL
AE
Dst
Kp
2+ 2o 1o 1+ 1+ 3o 5- 4+ 4+ 4- 2- 2+ 2+ 1- 1o 0+
UT

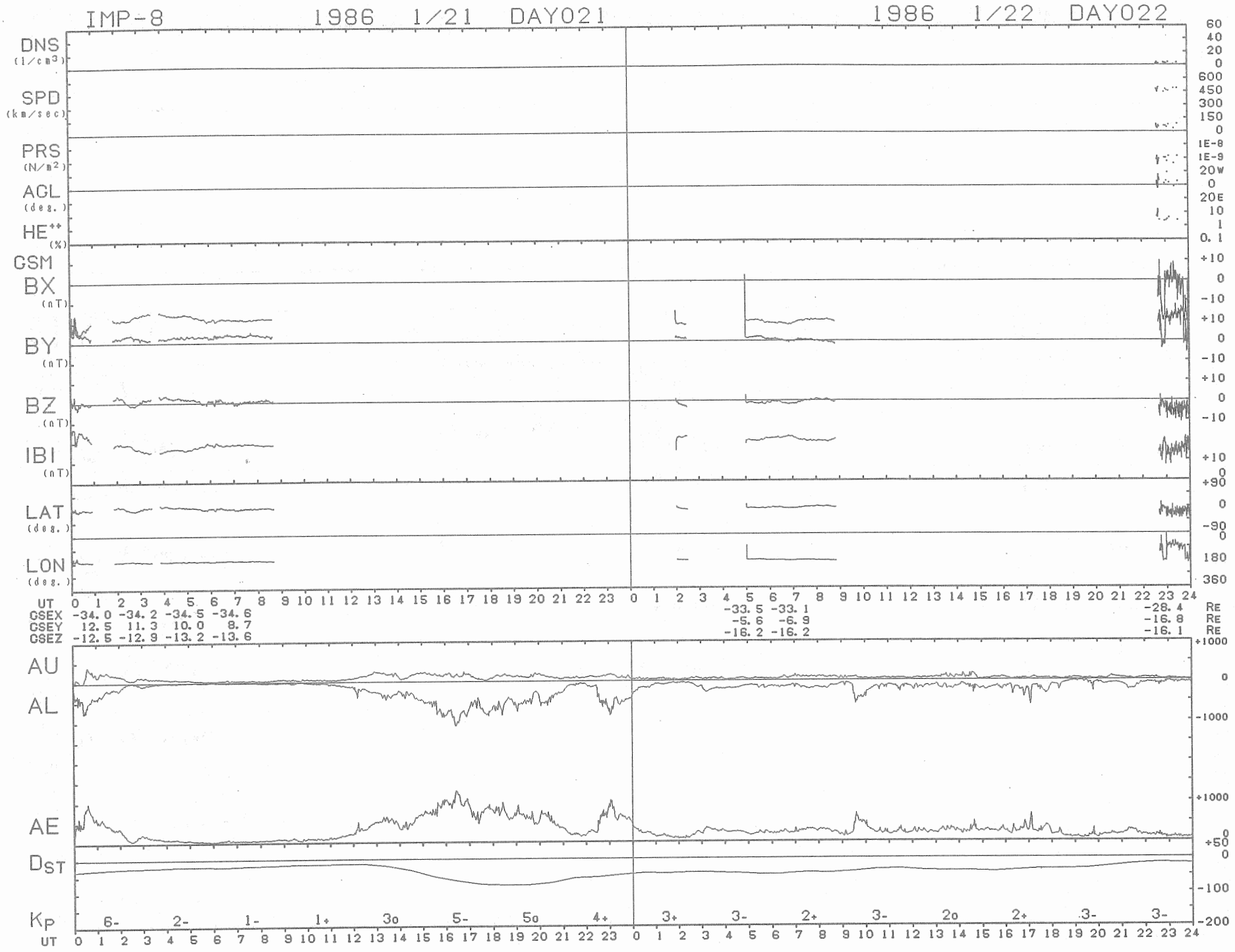

IMP-8 1986 1/11 DAY011
1986 1/12 DAY012
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -16.8 -15.5 -14.3 -13.0 -11.7 -10.4 2.0 3.4 6.2 7.6 8.9
GSEY -27.5 -28.2 -28.9 -29.6 -30.1 -30.7 -32.9 -32.9 -32.6 -32.3 -32.0
GSEZ -14.5 -14.2 -13.9 -13.6 -13.3 -12.9 -8.5 -7.9 -6.7 -6.1 -5.4
RE
AU
AL
AE
DST
KP
1- 2- 1+ 1o 1o 1o 0+ 1- 2o 1o 2o 1o 1- 1- 1+ 1+

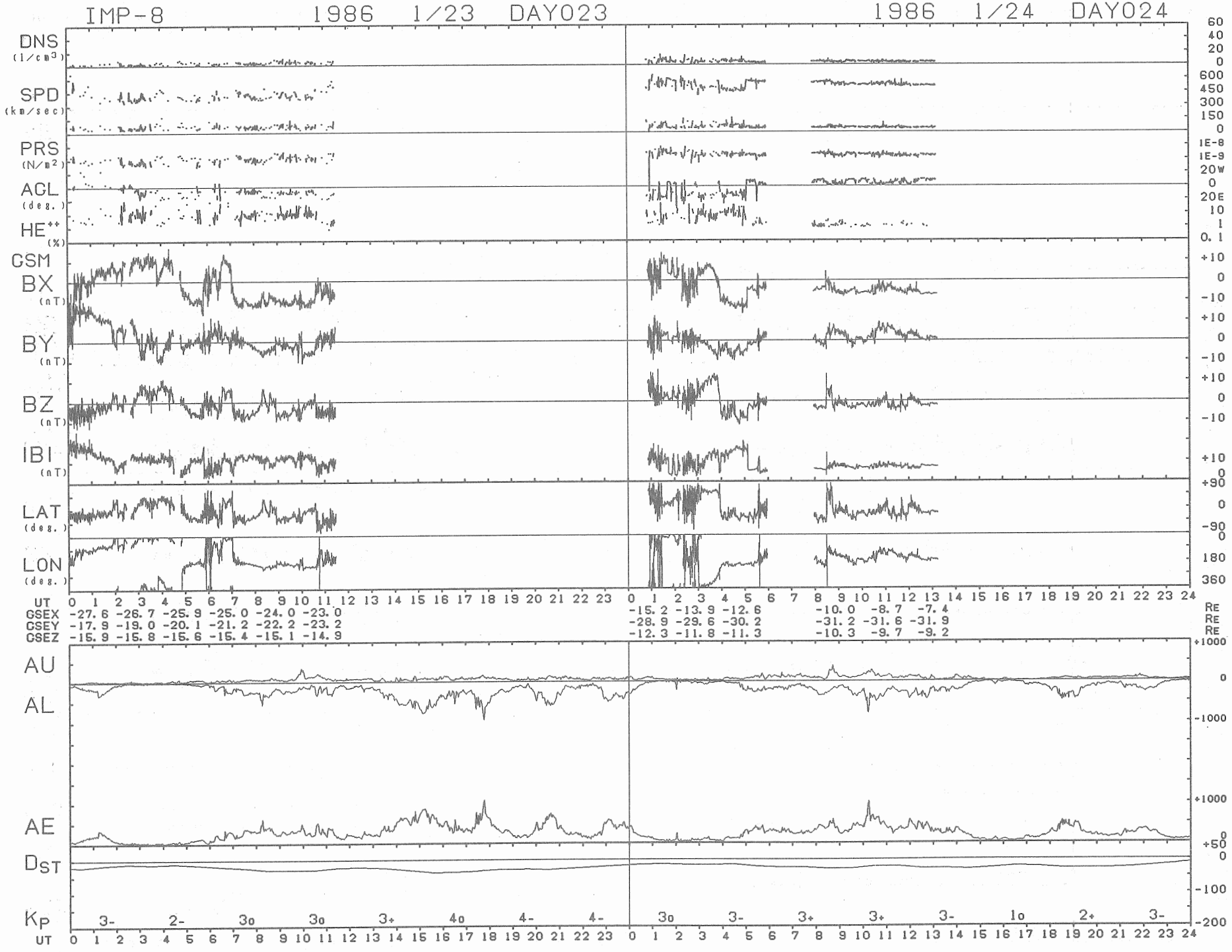

IMP-8 1986 1/13 DAY013
1986 1/14 DAY014
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
CSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.0 21.0 22.0 23.0 23.9 28.8 29.3 29.7 30.1 30.4 30.6 30.8 30.9 RE
GSEY -26.5 -25.6 -24.6 -23.6 -22.6 -14.0 -12.6 -11.2 -9.8 -8.4 -6.9 -5.4 -4.0 RE
GSEZ 0.7 1.4 2.1 2.8 3.5 8.0 8.5 9.1 9.6 10.1 10.6 11.1 11.6 RE
AU
AL
AE
DST
KP
1o 0o 1o 1o 1- 1o 1o 1- 1o 1- 1- 1+ 1o 1o 1o 1-
UT

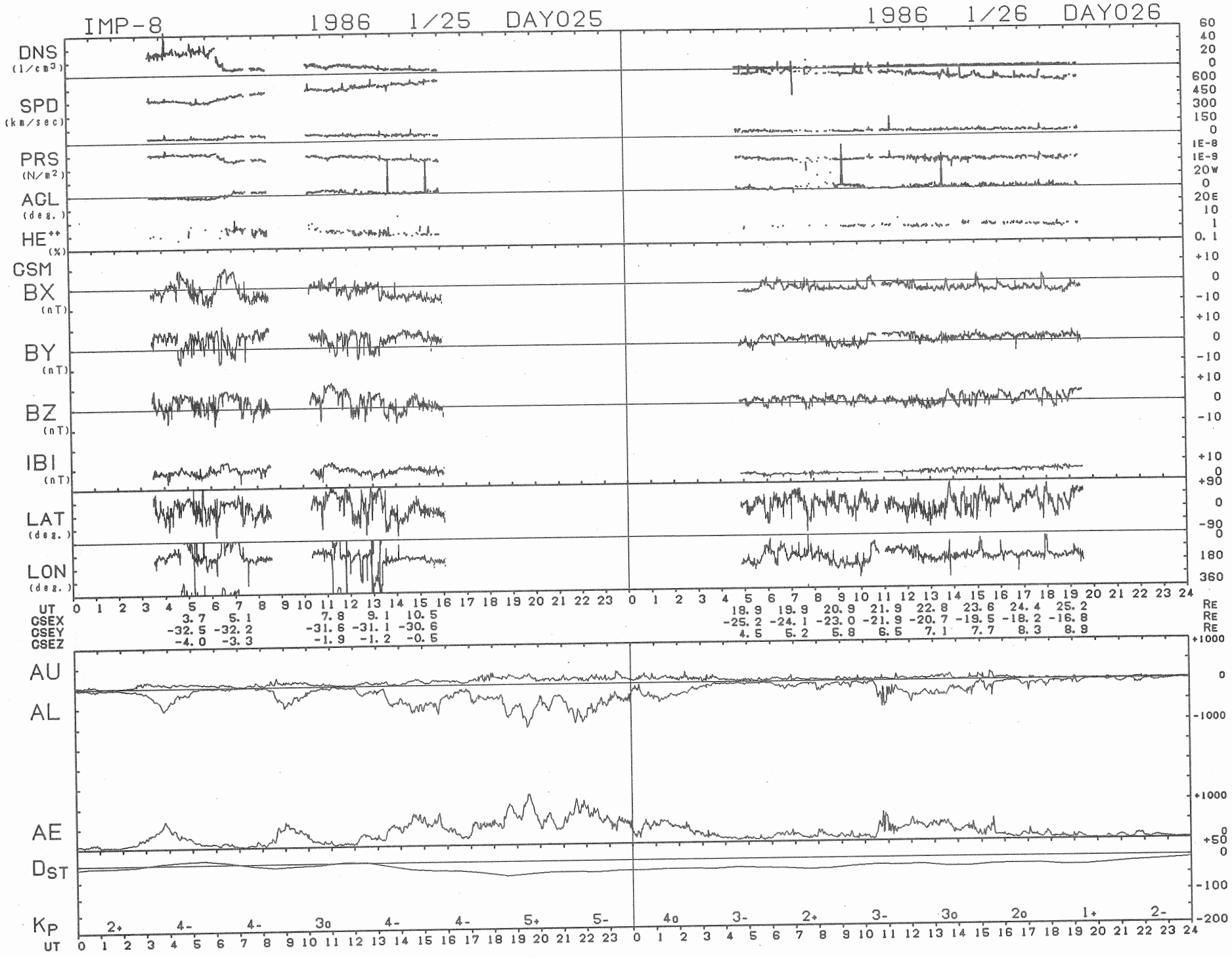

IMP-8
1986 1/15 DAY015
1986 1/16 DAY016
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 30.4 30.2 29.8 29.5 29.0 28.5 28.0 27.3 26.7 22.7 21.7 20.8 18.7 17.6 16.5 15.4 RE
CSEY 3.5 5.0 6.5 8.0 9.4 10.8 12.3 13.6 15.0 21.4 22.5 23.6 25.7 26.7 27.7 28.6 RE
CSEZ 13.4 13.7 13.9 14.2 14.4 14.5 14.7 14.8 14.8 14.8 14.7 14.5 14.2 14.0 13.7 13.5 RE
AU
AL
AE
DST
KP 0+ 1- 1+ 2o 1+ 2+ 2- 0+ 0+ 1- 1o 1- 0+ 1- 1- 0+
UT

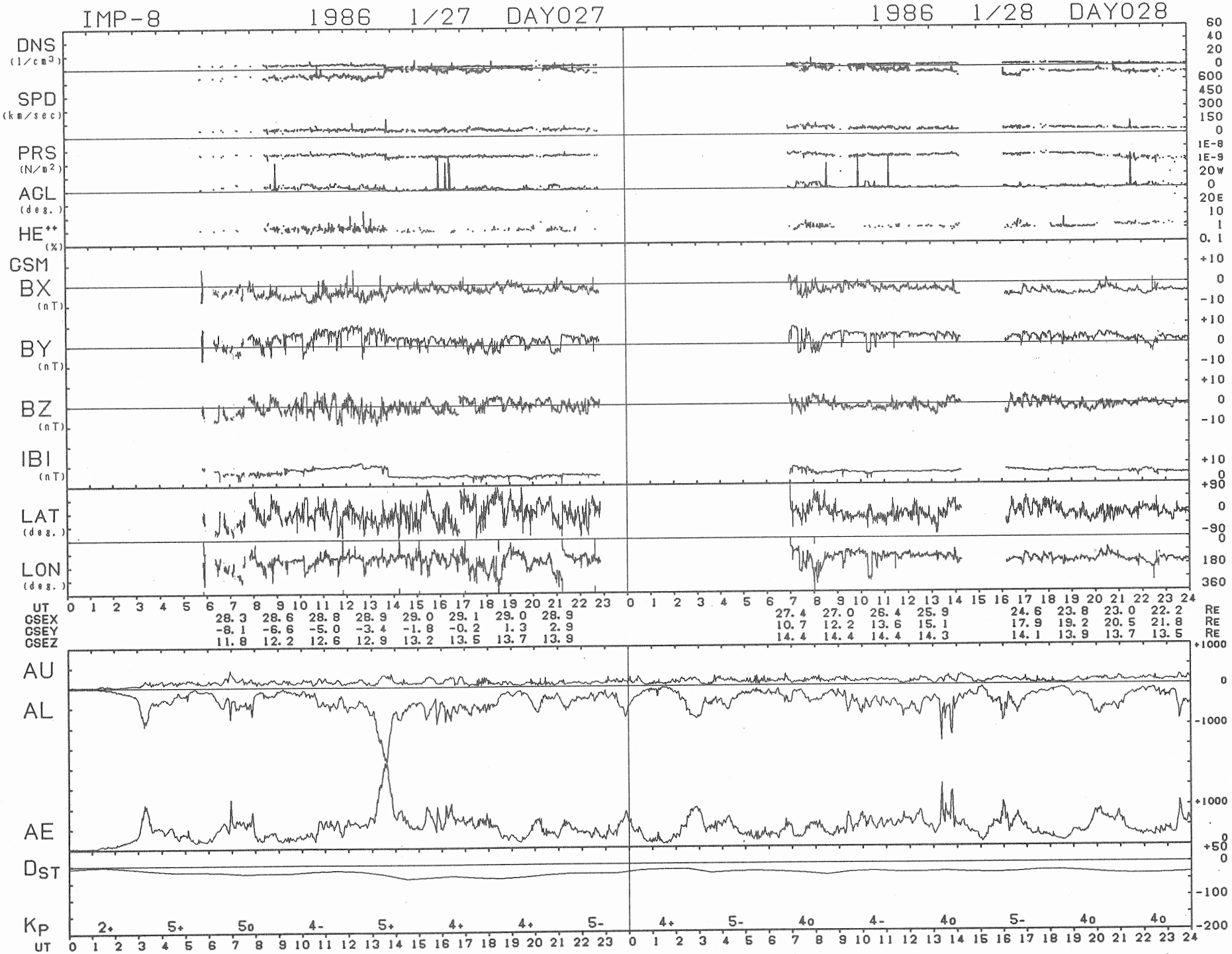

IMP-8 1986 1/17 DAY017
1986 1/18 DAY018
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 14.2 13.0 8.1 6.8 5.6 4.3 3.0 1.7 0.4 -0.9 -2.2 -8.6 -9.8 -11.1 -12.3 -13.5 -14.7 RE
GSEY 29.4 30.2 32.9 33.4 33.9 34.3 34.7 35.0 35.3 35.5 35.7 35.6 35.5 35.3 35.0 34.7 34.3 RE
GSEZ 13.2 12.8 11.3 10.9 10.5 10.0 9.5 9.0 8.5 8.0 7.4 4.6 4.0 3.3 2.7 2.1 1.5 RE
AU
AL
AE
DST
KP 0o 1- 1o 1+ 1+ 2- 2+ 3o 3- 2o 2o 3o 1+ 1- 1o 1+
UT

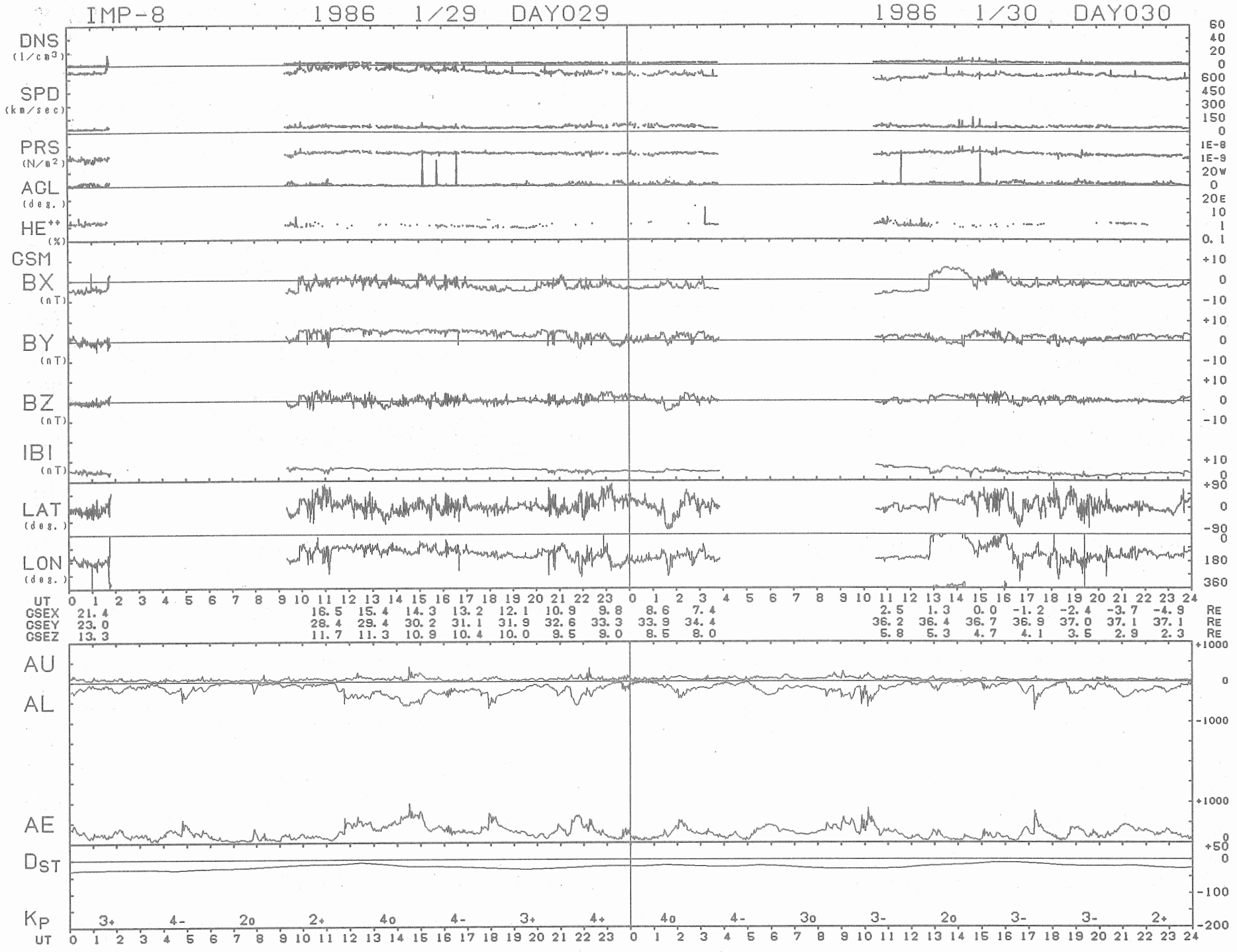

IMP-8
1986 1/19 DAY019
1986 1/20 DAY020
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -15.8 -16.9 -18.1 -23.2 -24.1 -25.0 -25.9 -26.7 -27.5 -28.3 -29.0 -29.7 -32.5 -32.9 -33.3 -33.7 RE
GSEY 33.9 33.5 33.0 29.8 29.0 28.3 27.4 26.5 25.6 24.7 23.7 22.7 17.3 16.1 14.9 13.7 RE
GSEZ 0.9 0.2 -0.4 -3.5 -4.1 -4.7 -5.3 -5.9 -6.5 -7.0 -7.6 -8.1 -10.7 -11.2 -11.6 -12.0 RE
AU
AL
AE
DST
KP
2- 1+ 1- 1- 1- 1- 1o 2- 3o 3+ 3+ 3- 3o 1o 2+ 4o
UT

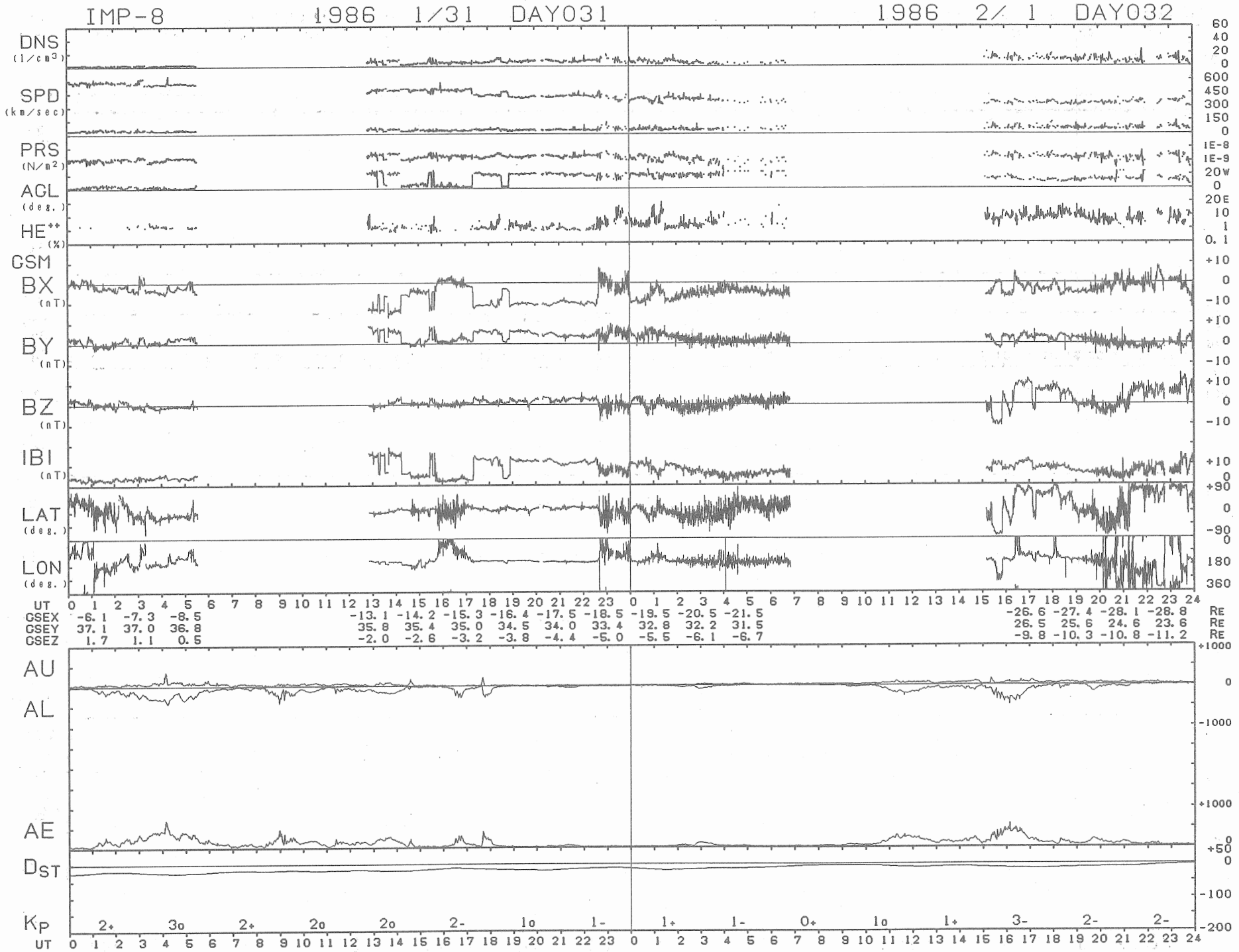

IMP-8
1986 1/21 DAY021
1986 1/22 DAY022
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -34.0 -34.2 -34.5 -34.6 -33.5 -33.1 -28.4 RE
GSEY 12.5 11.3 10.0 8.7 -5.6 -6.9 -16.8 RE
GSEZ -12.5 -12.9 -13.2 -13.6 -16.2 -16.2 -16.1 RE
AU
AL
AE
Dst
Kp
6- 2- 1- 1+ 3o 5- 5o 4+ 3+ 3- 2+ 3- 2o 2+ 3- 3-
UT

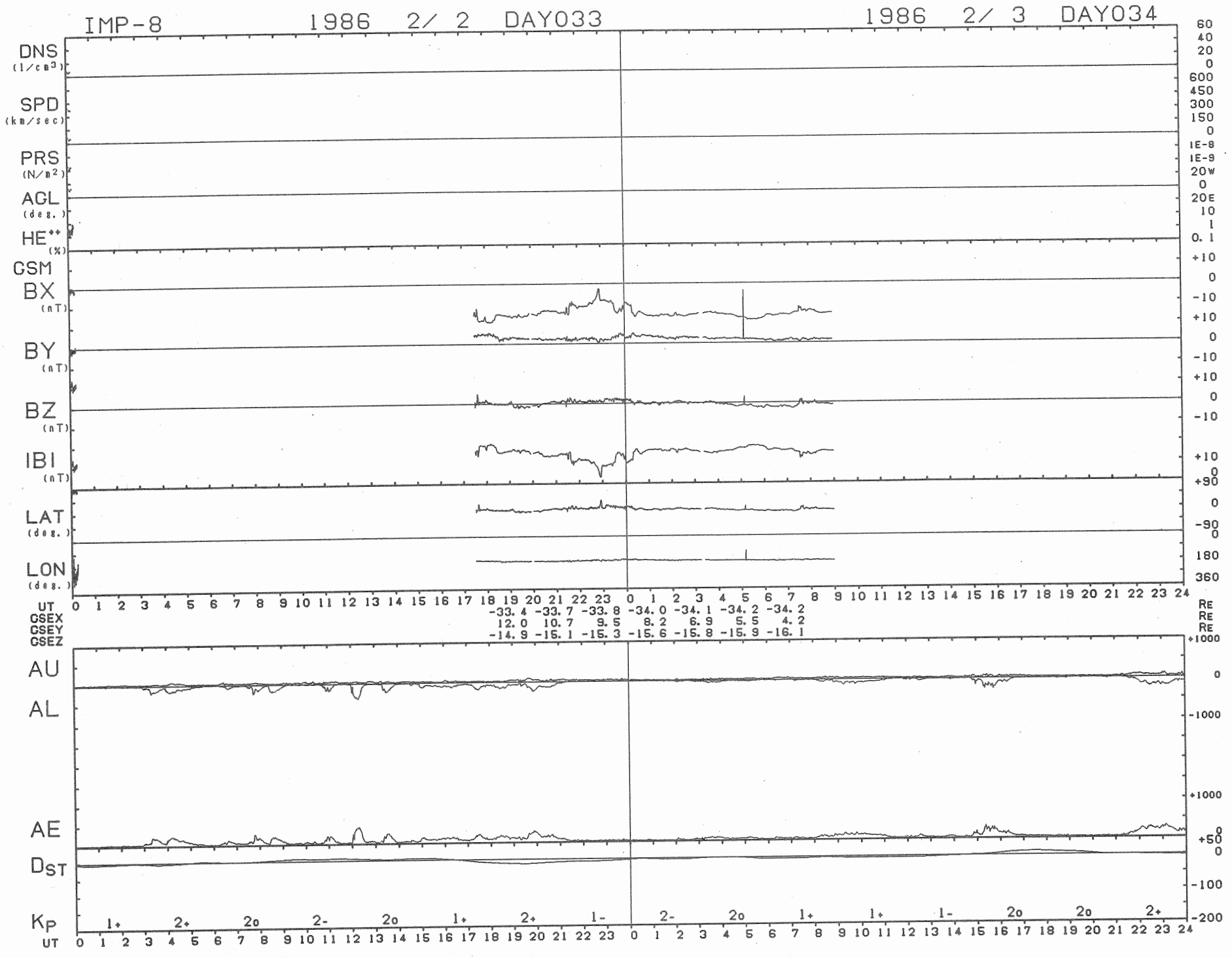

IMP-8 1986 1/23 DAY023
1986 1/24 DAY024
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.6 -26.7 -25.9 -25.0 -24.0 -23.0 -15.2 -13.9 -12.6 -10.0 -8.7 -7.4
GSEY -17.9 -19.0 -20.1 -21.2 -22.2 -23.2 -28.9 -29.6 -30.2 -31.2 -31.6 -31.9
GSEZ -15.9 -15.8 -15.6 -15.4 -15.1 -14.9 -12.3 -11.8 -11.3 -10.3 -9.7 -9.2
RE
AU
AL
AE
DST
KP
3- 2- 3o 3o 3+ 4o 4- 4- 3o 3- 3+ 3+ 3- 1o 2+ 3-

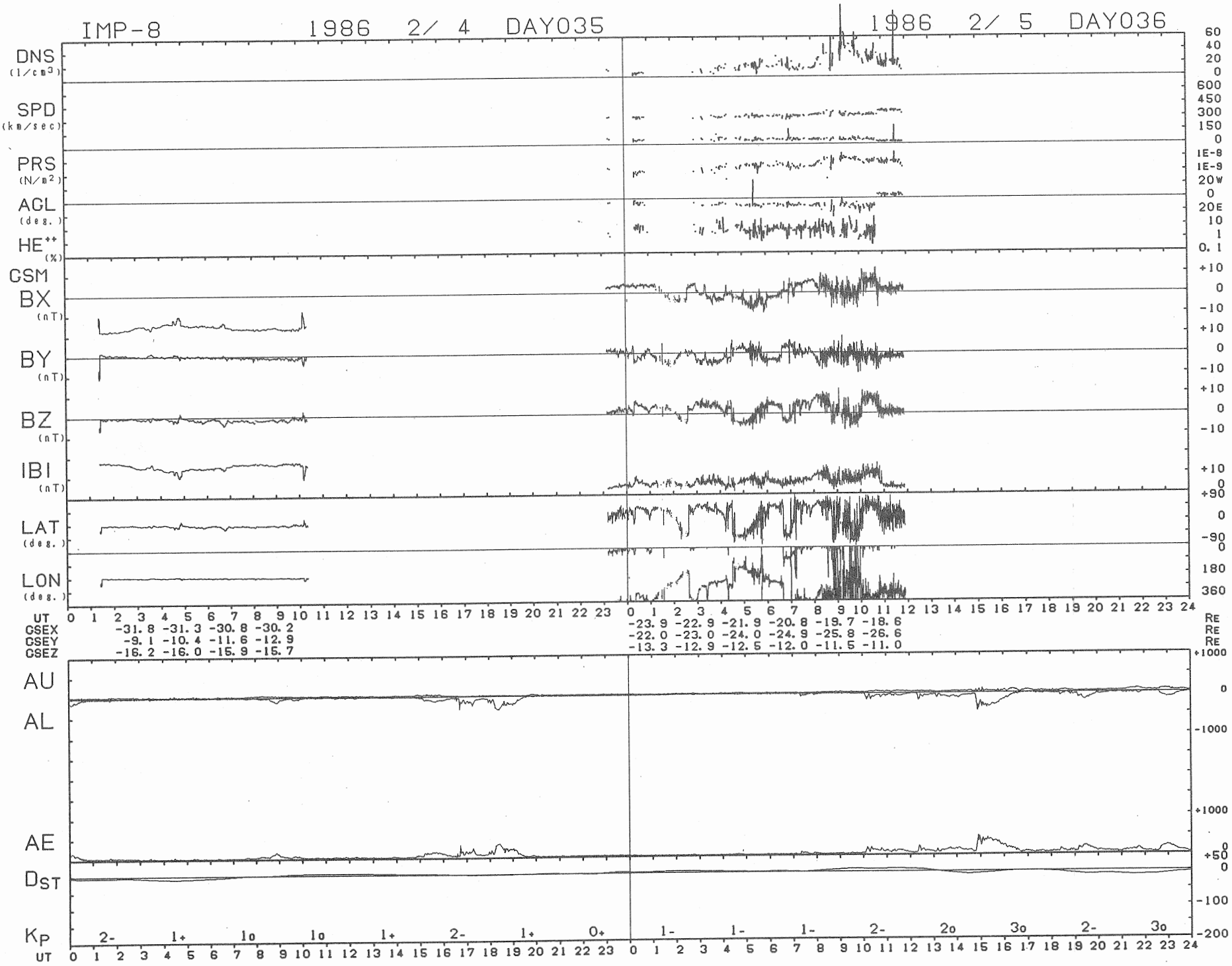

IMP-8
1986 1/25 DAY025
1986 1/26 DAY026
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX 3.7 5.1 7.8 9.1 10.5 18.9 19.9 20.9 21.9 22.8 23.6 24.4 25.2 RE
CSEY -32.5 -32.2 -31.6 -31.1 -30.6 -25.2 -24.1 -23.0 -21.9 -20.7 -19.5 -18.2 -16.8 RE
CSEZ -4.0 -3.3 -1.9 -1.2 -0.5 4.5 5.2 5.8 6.5 7.1 7.7 8.3 8.9 RE
AU
AL
AE
DST
KP 2+ 4- 4- 3o 4- 4- 5+ 5- 4o 3- 2+ 3- 3o 2o 1+ 2-
UT

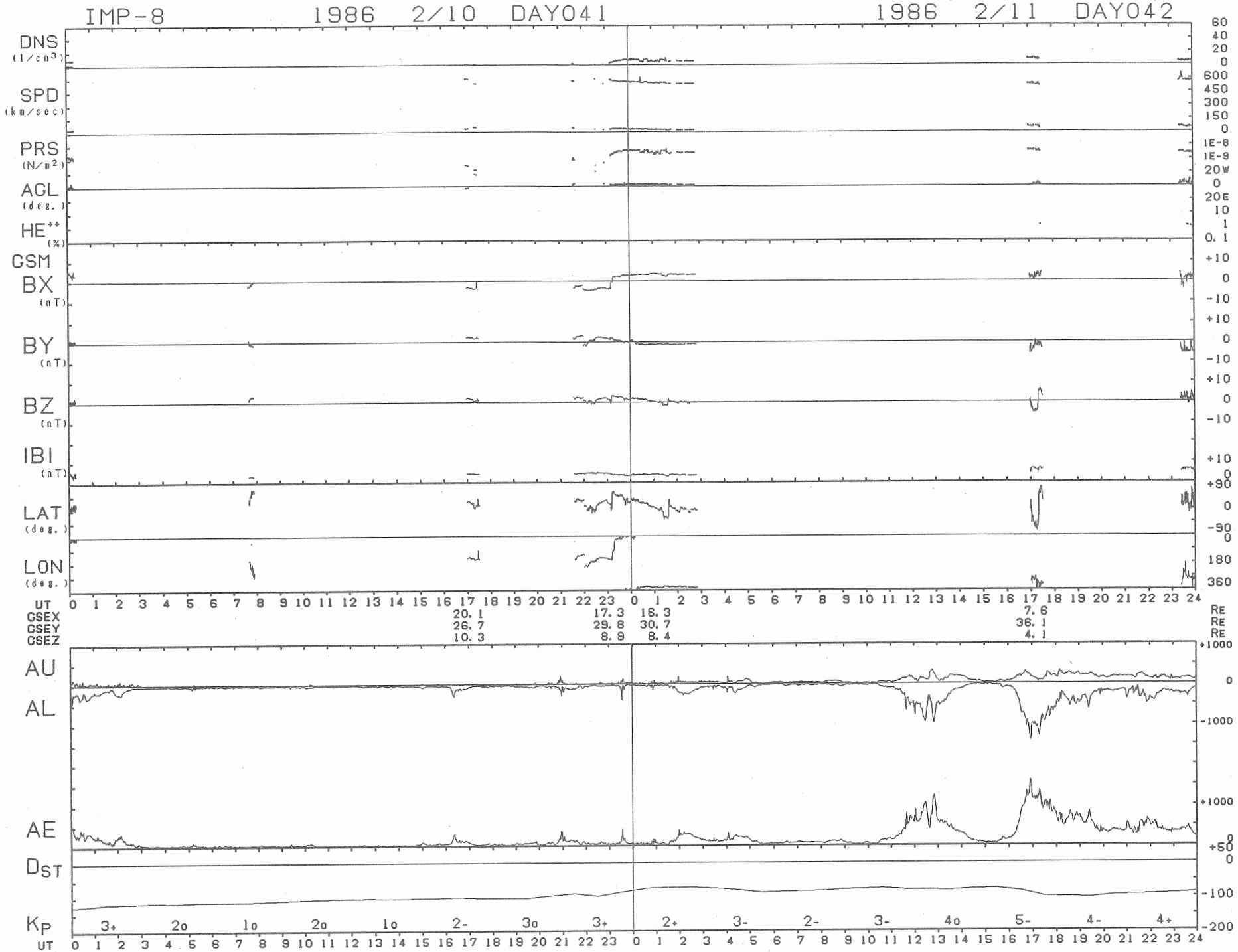

IMP-8 1986 1/27 DAY027
1986 1/28 DAY028
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 28.3 28.6 28.8 28.9 29.0 29.1 29.0 28.9 27.4 27.0 26.4 25.9 24.6 23.8 23.0 22.2 RE
GSEY -8.1 -6.6 -5.0 -3.4 -1.8 -0.2 1.3 2.9 10.7 12.2 13.6 15.1 17.9 19.2 20.5 21.8 RE
GSEZ 11.8 12.2 12.6 12.9 13.2 13.5 13.7 13.9 14.4 14.4 14.4 14.3 14.1 13.9 13.7 13.5 RE
AU
AL
AE
DST
KP 2+ 5+ 5o 4- 5+ 4+ 4+ 5- 4+ 5- 4o 4- 4o 5- 4o 4o
UT

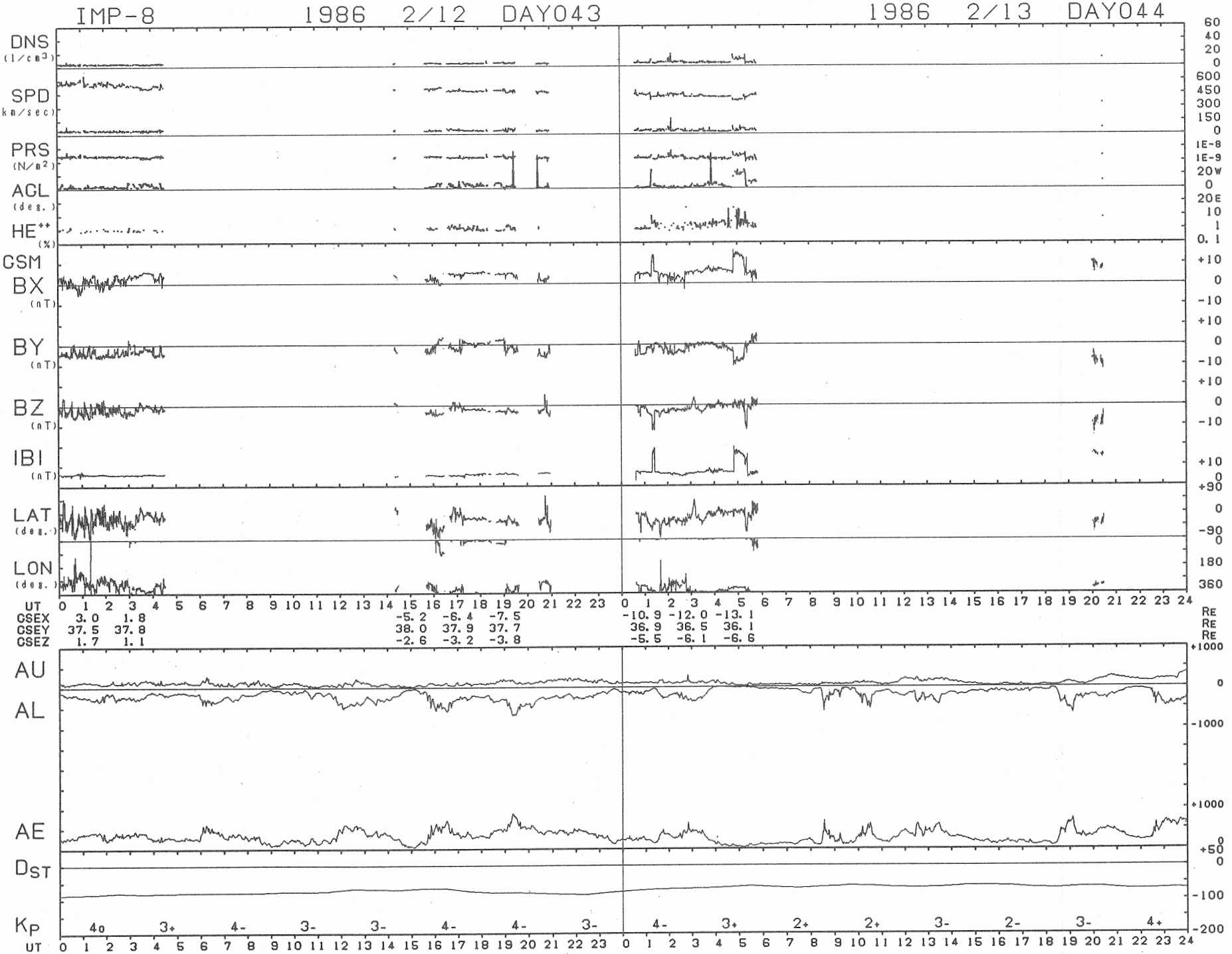

IMP-8 1986 1/29 DAY029
1986 1/30 DAY030
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.4 16.5 15.4 14.3 13.2 12.1 10.9 9.8 8.6 7.4 2.5 1.3 0.0 -1.2 -2.4 -3.7 -4.9 RE
GSEY 23.0 28.4 29.4 30.2 31.1 31.9 32.6 33.3 33.9 34.4 36.2 36.4 36.7 36.9 37.0 37.1 37.1 RE
GSEZ 13.3 11.7 11.3 10.9 10.4 10.0 9.5 9.0 8.5 8.0 5.8 5.3 4.7 4.1 3.5 2.9 2.3 RE
AU
AL
AE
DST
KP 3+ 4- 2o 2+ 4o 4- 3+ 4+ 4o 4- 3o 3- 2o 3- 3- 2+
UT

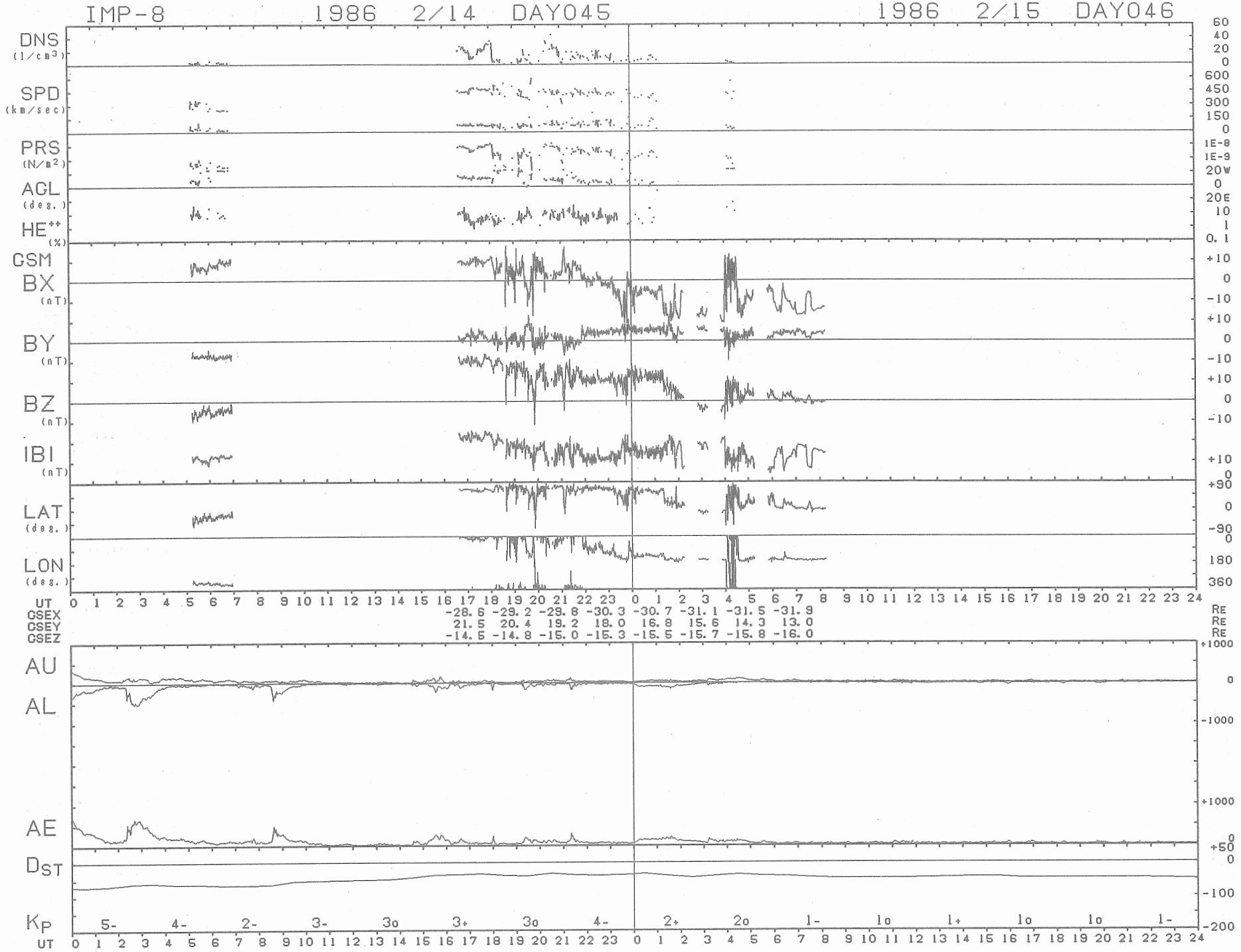

IMP-8
1986 1/31 DAY031
1986 2/ 1 DAY032
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -6.1 -7.3 -8.5 -13.1 -14.2 -15.3 -16.4 -17.5 -18.5 -19.5 -20.5 -21.5 -26.6 -27.4 -28.1 -28.8 RE
GSEY 37.1 37.0 36.8 35.8 35.4 35.0 34.5 34.0 33.4 32.8 32.2 31.5 26.5 25.6 24.6 23.6 RE
GSEZ 1.7 1.1 0.5 -2.0 -2.6 -3.2 -3.8 -4.4 -5.0 -5.5 -6.1 -6.7 -9.8 -10.3 -10.8 -11.2 RE
AU
AL
AE
DST
KP
2+ 3o 2+ 2o 2o 2- 1o 1- 1+ 1- 0+ 1o 1+ 3- 2- 2-
UT

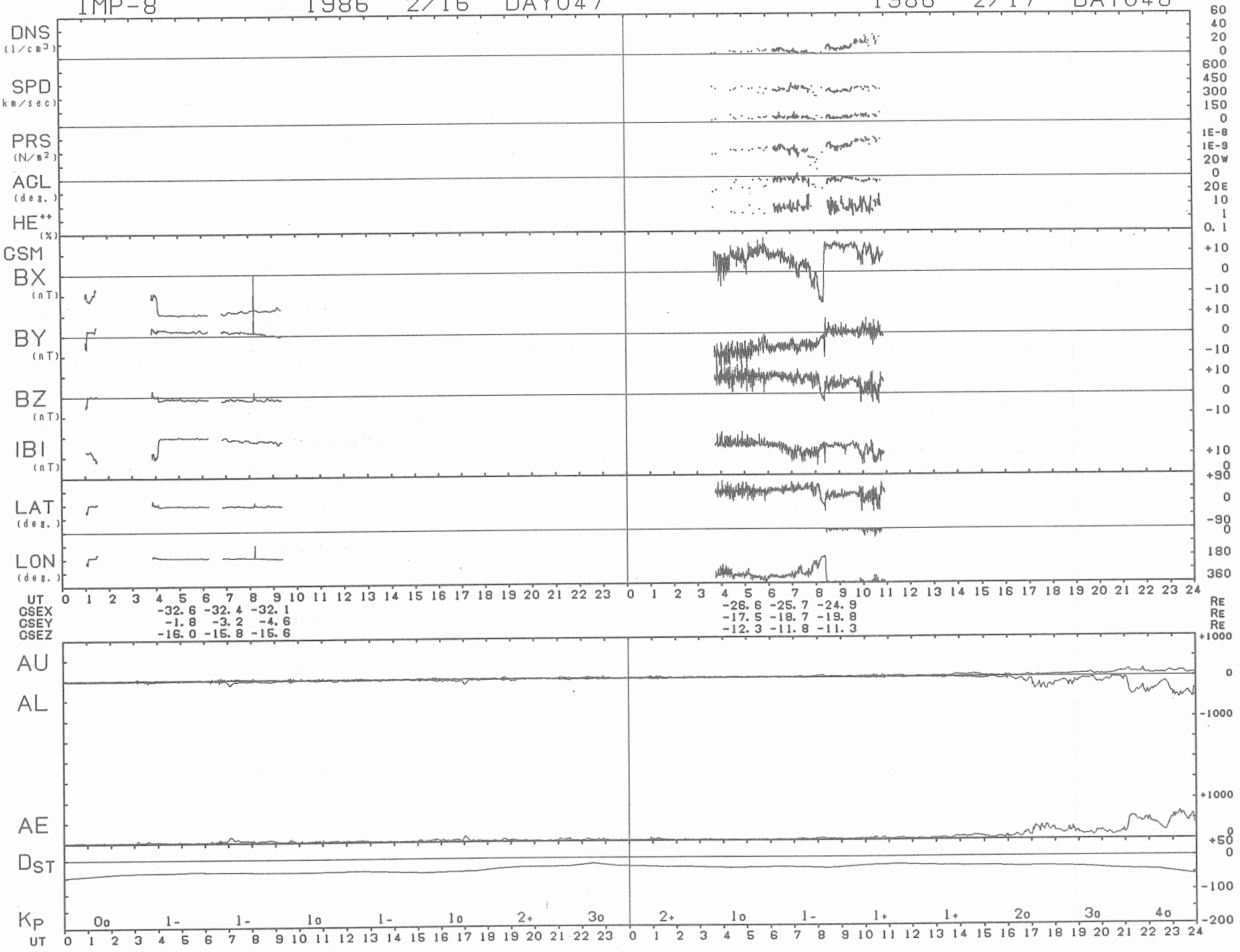

IMP-8
1986 2/ 2 DAY033
1986 2/ 3 DAY034
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -33.4 -33.7 -33.8 -34.0 -34.1 -34.2 -34.2
GSEY 12.0 10.7 9.5 8.2 6.9 5.5 4.2
GSEZ -14.9 -15.1 -15.3 -15.6 -15.8 -15.9 -16.1
RE
AU
AL
AE
DST
KP
1+ 2+ 2o 2- 2o 1+ 2+ 1- 2- 2o 1+ 1+ 1- 2o 2o 2+

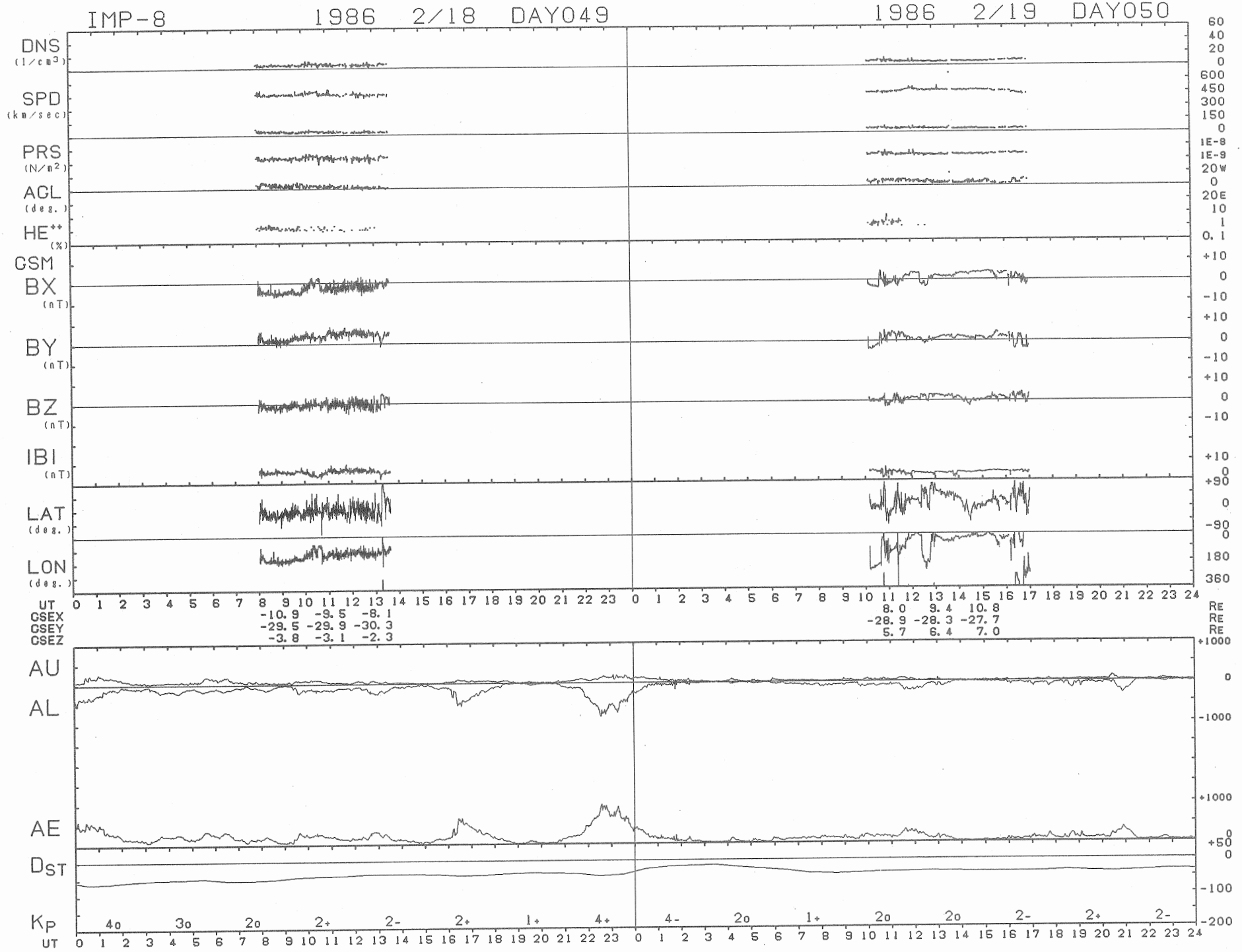

IMP-8
1986 2/ 4 DAY035
1986 2/ 5 DAY036
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.8 -31.3 -30.8 -30.2 -23.9 -22.9 -21.9 -20.8 -19.7 -18.6
GSEY -9.1 -10.4 -11.6 -12.9 -22.0 -23.0 -24.0 -24.9 -25.8 -26.6
GSEZ -16.2 -16.0 -15.9 -15.7 -13.3 -12.9 -12.5 -12.0 -11.5 -11.0
RE
AU
AL
AE
DST
KP
2- 1+ 1o 1o 1+ 2- 1+ 0+ 1- 1- 1- 2- 2o 3o 2- 3o
UT

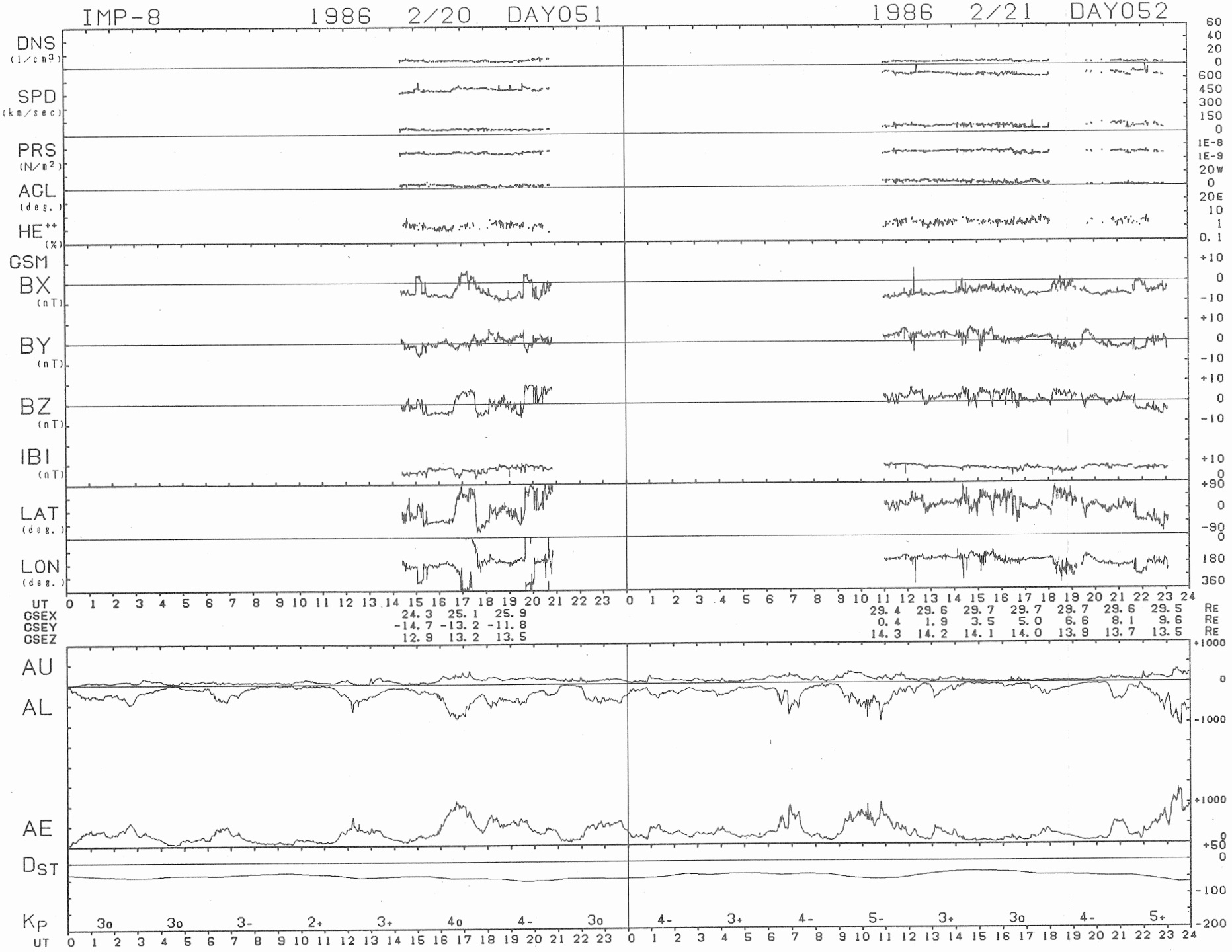

IMP-8
1986 2/10 DAY041
1986 2/11 DAY042
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 20.1 17.3 16.3 7.6 RE
GSEY 26.7 29.8 30.7 36.1 RE
GSEZ 10.3 8.9 8.4 4.1 RE
AU
AL
AE
DST
KP
3+ 2o 1o 2o 1o 2- 3o 3+ 2+ 3- 2- 3- 4o 5- 4- 4+
UT

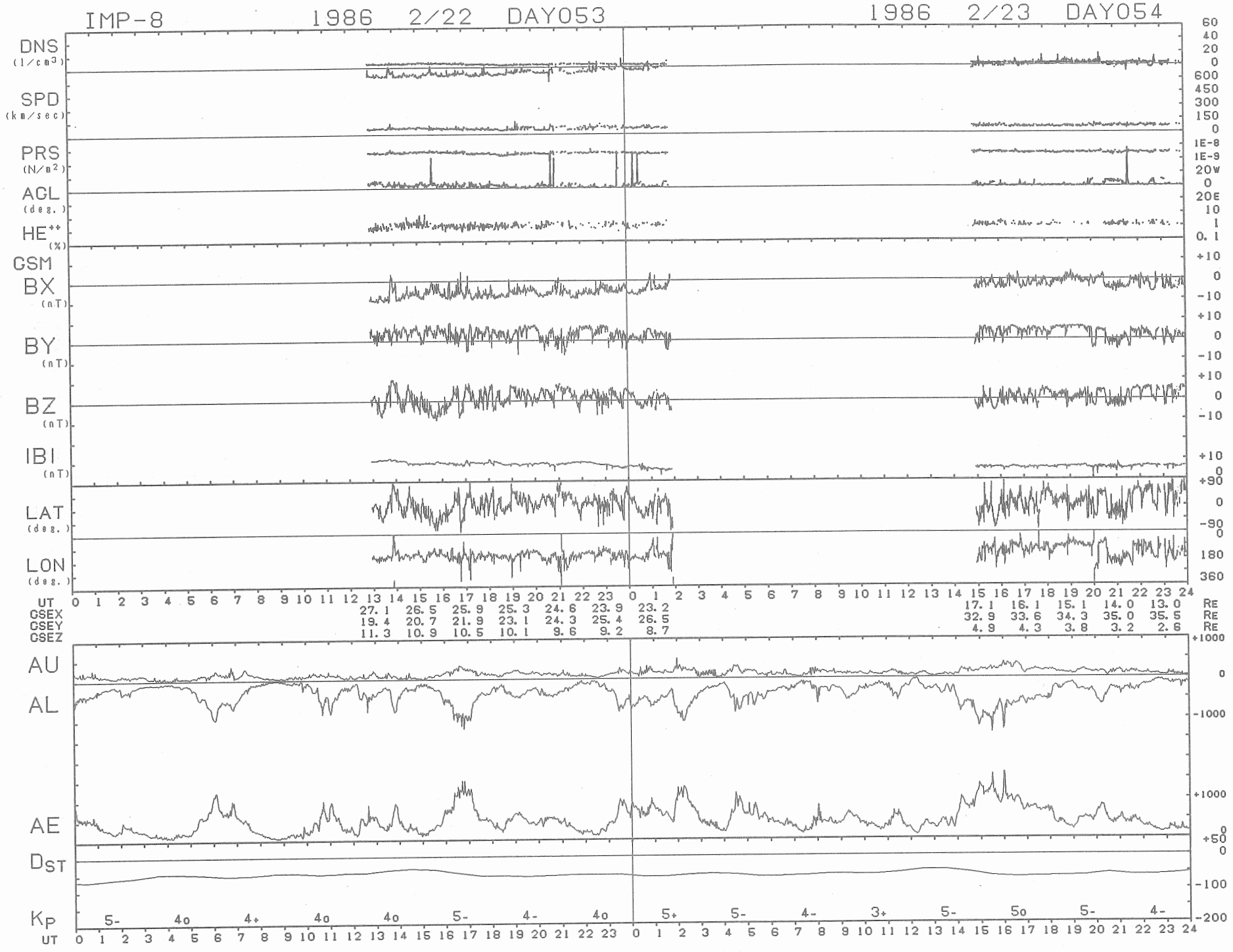

IMP-8
1986 2/12 DAY043
1986 2/13 DAY044
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.0 1.8 -5.2 -6.4 -7.5 -10.9 -12.0 -13.1 RE
GSEY 37.5 37.8 38.0 37.9 37.7 36.9 36.5 36.1 RE
GSEZ 1.7 1.1 -2.6 -3.2 -3.8 -5.5 -6.1 -6.6 RE
AU
AL
AE
DST
KP
4o 3+ 4- 3- 3- 4- 4- 3- 4- 3+ 2+ 2+ 3- 2- 3- 4+
UT

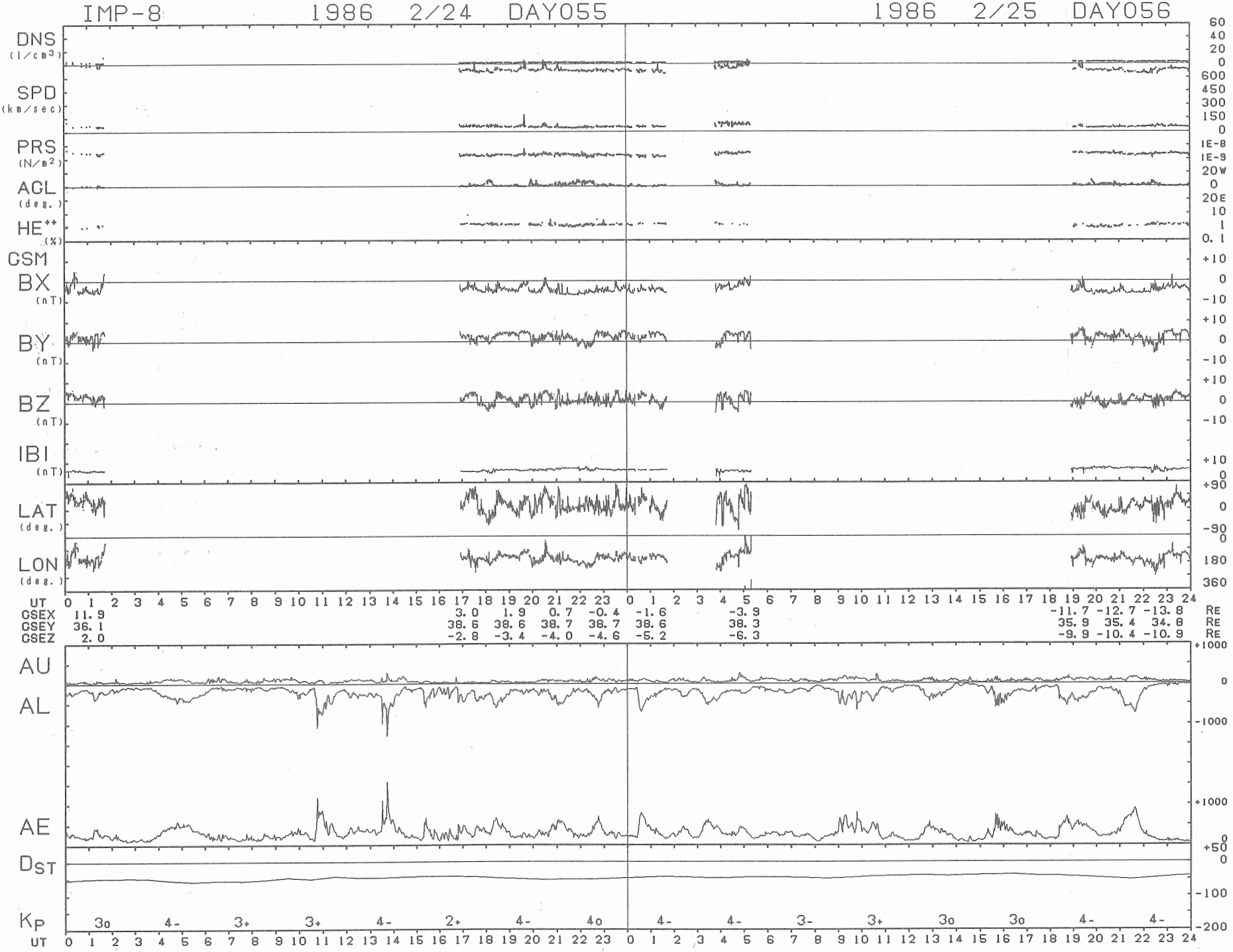

IMP-8
1986 2/14 DAY045
1986 2/15 DAY046
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.6 -29.2 -29.8 -30.3 -30.7 -31.1 -31.5 -31.9 RE
GSEY 21.5 20.4 19.2 18.0 16.8 15.6 14.3 13.0 RE
GSEZ -14.5 -14.8 -15.0 -15.3 -15.5 -15.7 -15.8 -16.0 RE
AU
AL
AE
DST
KP
5- 4- 2- 3- 3o 3+ 3o 4- 2+ 2o 1- 1o 1+ 1o 1o 1-
UT

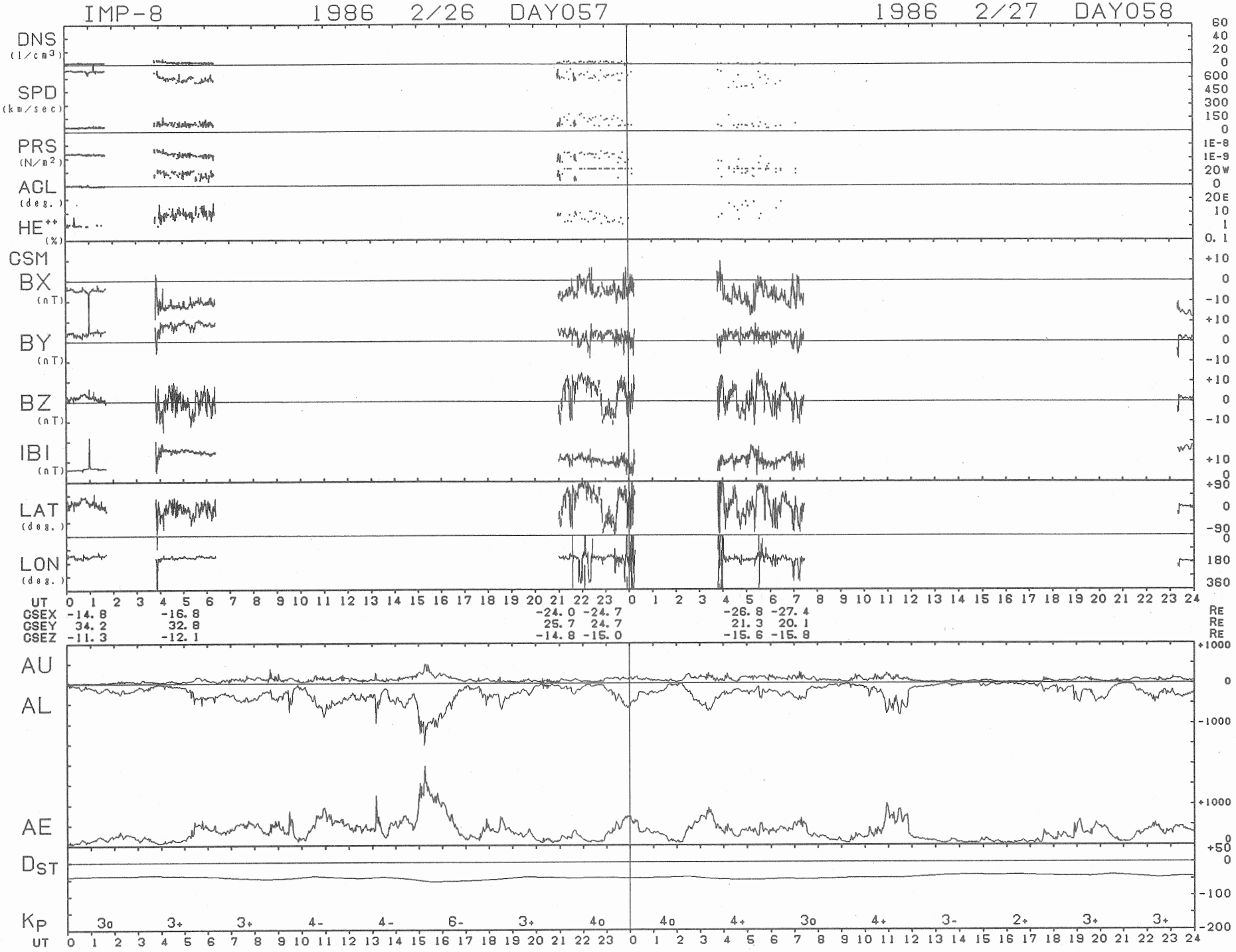

IMP-8 1986 2/16 DAY047
1986 2/17 DAY048
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.6 -32.4 -32.1 -26.6 -25.7 -24.9 RE
GSEY -1.8 -3.2 -4.6 -17.5 -18.7 -19.8 RE
GSEZ -16.0 -15.8 -15.6 -12.3 -11.8 -11.3 RE
AU
AL
AE
Dst
Kp
0o 1- 1- 1o 1- 1o 2+ 3o 2+ 1o 1- 1+ 1+ 2o 3o 4o
UT

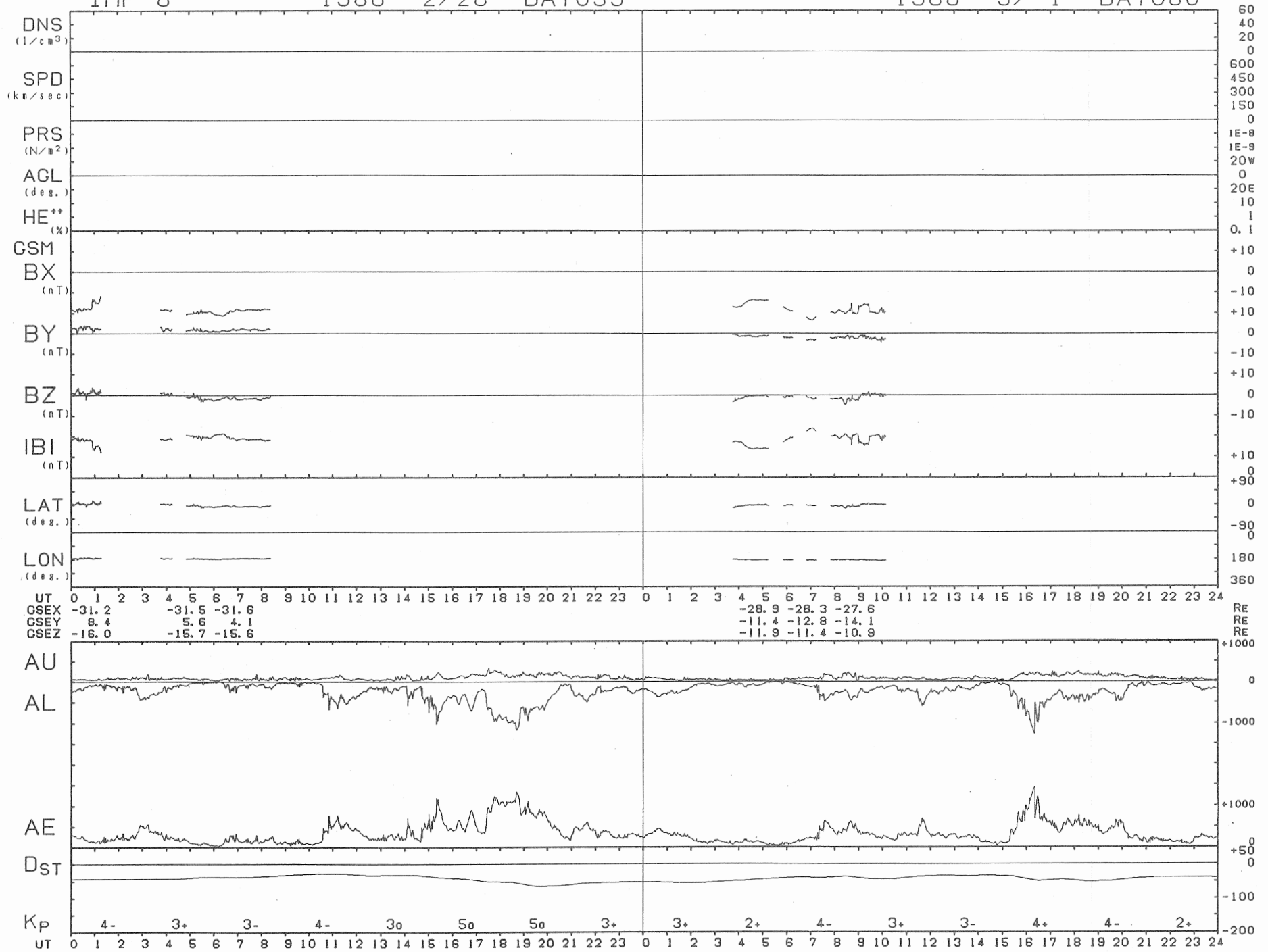

IMP-8
1986 2/18 DAY049
1986 2/19 DAY050
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
CSEX -10.9 -9.5 -8.1 8.0 9.4 10.8 RE
CSEY -29.5 -29.9 -30.3 -28.9 -28.3 -27.7 RE
CSEZ -3.8 -3.1 -2.3 5.7 6.4 7.0 RE
AU
AL
AE
DST
KP 4o 3o 2o 2+ 2- 2+ 1+ 4+ 4- 2o 1+ 2o 2o 2- 2+ 2-
UT

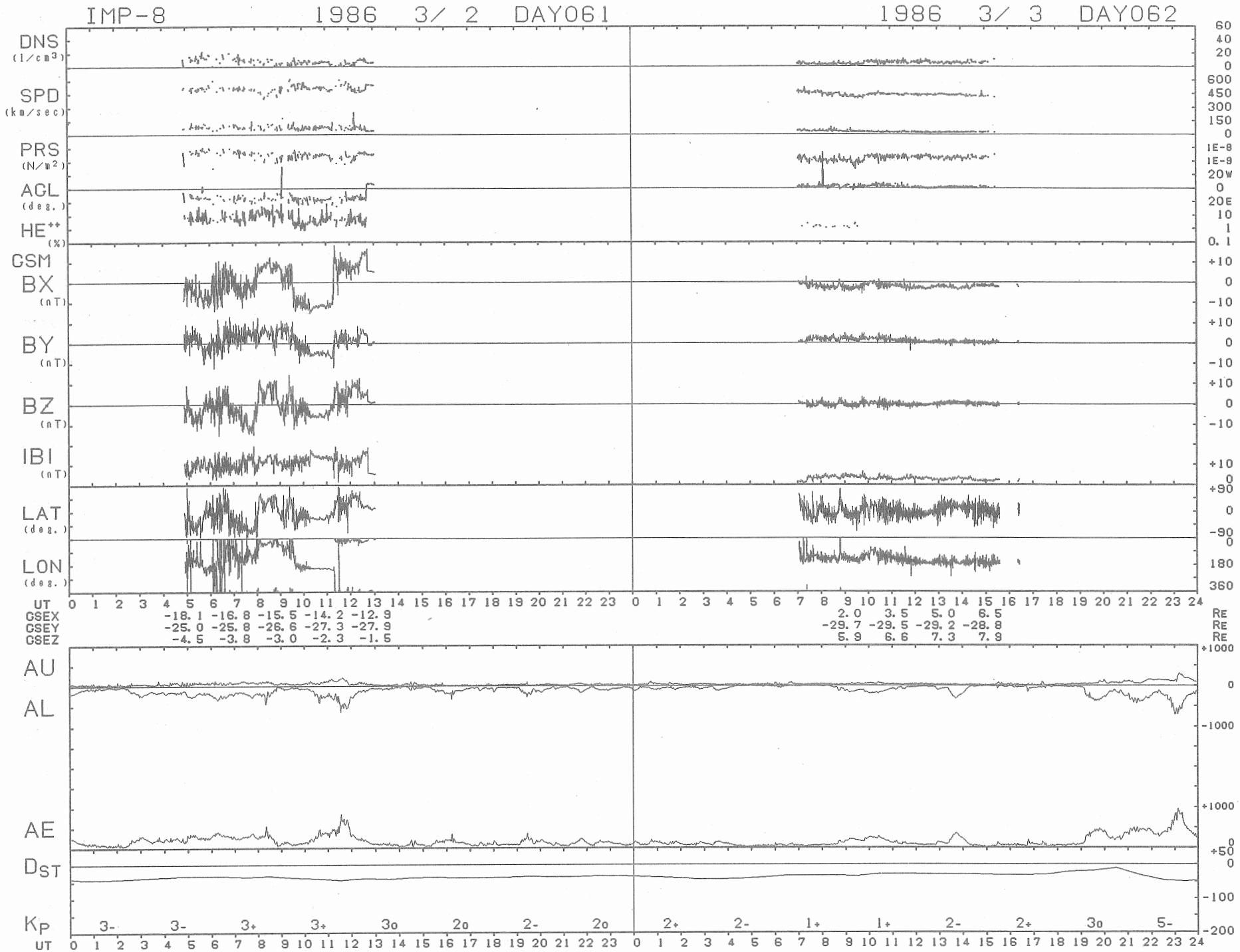

IMP-8 1986 2/20 DAY051
1986 2/21 DAY052
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.3 25.1 25.9 29.4 29.6 29.7 29.7 29.7 29.6 29.5 RE
GSEY -14.7 -13.2 -11.8 0.4 1.9 3.5 5.0 6.6 8.1 9.6 RE
GSEZ 12.9 13.2 13.5 14.3 14.2 14.1 14.0 13.9 13.7 13.5 RE
AU
AL
AE
DST
KP 3o 3o 3- 2+ 3+ 4o 4- 3o 4- 3+ 4- 5- 3+ 3o 4- 5+
UT

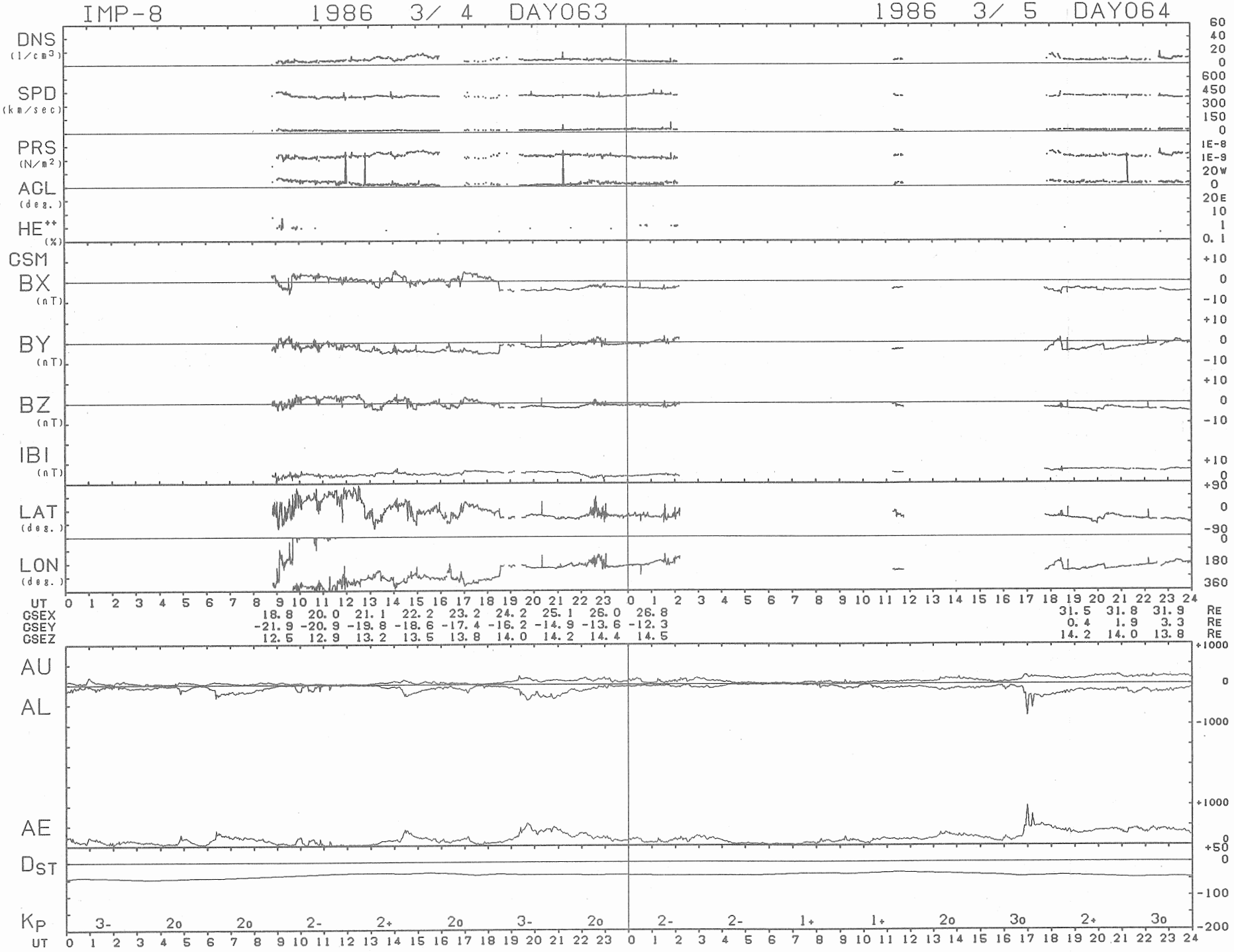

IMP-8
1986 2/22 DAY053
1986 2/23 DAY054
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 27.1 26.5 25.9 25.3 24.6 23.9 23.2 17.1 16.1 15.1 14.0 13.0 RE
GSEY 19.4 20.7 21.9 23.1 24.3 25.4 26.5 32.9 33.6 34.3 35.0 35.5 RE
GSEZ 11.3 10.9 10.5 10.1 9.6 9.2 8.7 4.9 4.3 3.8 3.2 2.6 RE
AU
AL
AE
DST
KP 5- 4o 4+ 4o 4o 5- 4- 4o 5+ 5- 4- 3+ 5- 5o 5- 4-
UT

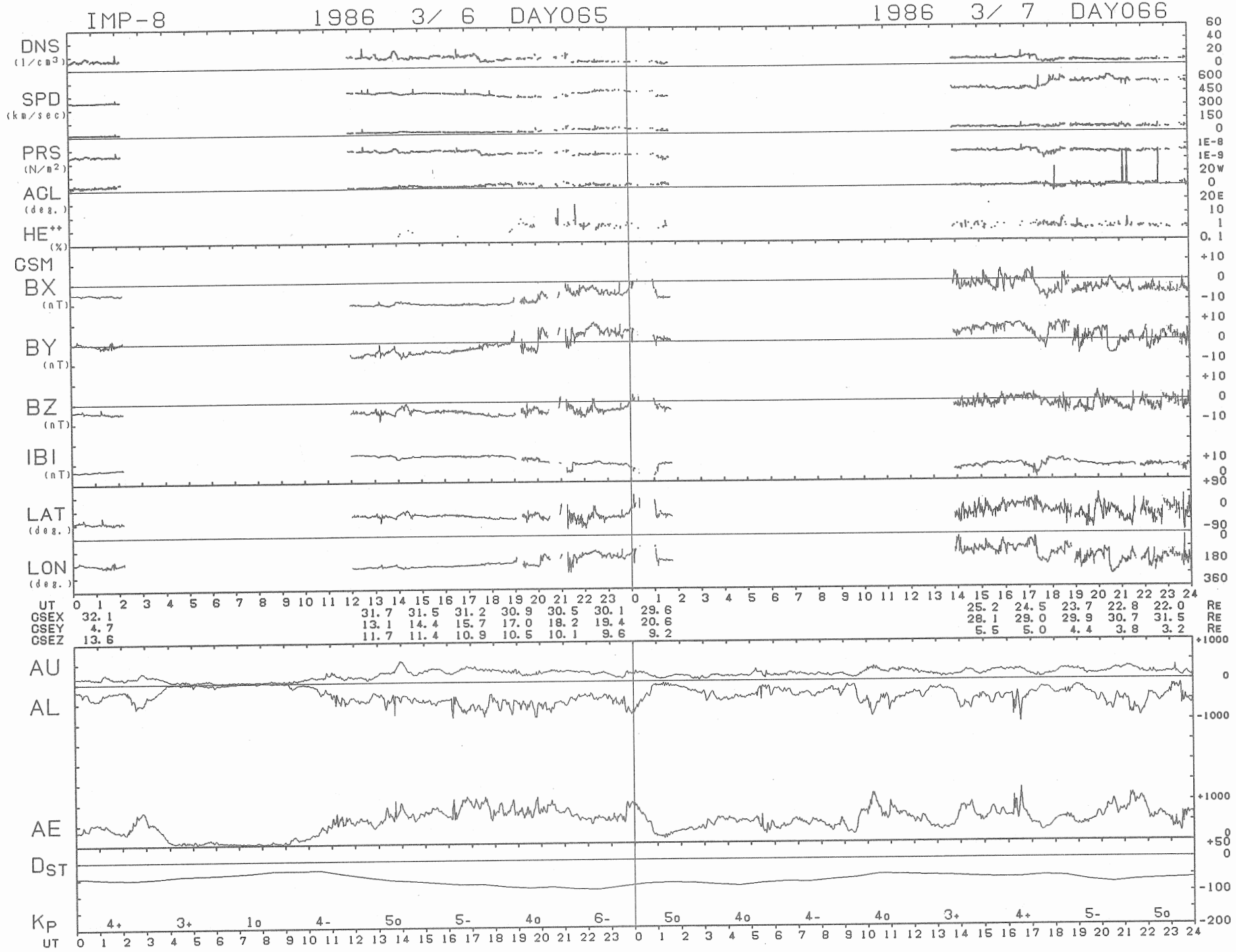

IMP-8 1986 2/24 DAY055
1986 2/25 DAY056
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 11.9 3.0 1.9 0.7 -0.4 -1.6 -3.9 -11.7 -12.7 -13.8 RE
GSEY 36.1 38.6 38.6 38.7 38.7 38.6 38.3 35.9 35.4 34.8 RE
GSEZ 2.0 -2.8 -3.4 -4.0 -4.6 -5.2 -6.3 -9.9 -10.4 -10.9 RE
AU
AL
AE
DST
KP 3o 4- 3+ 3+ 4- 2+ 4- 4o 4- 4- 3- 3+ 3o 3o 4- 4-
UT

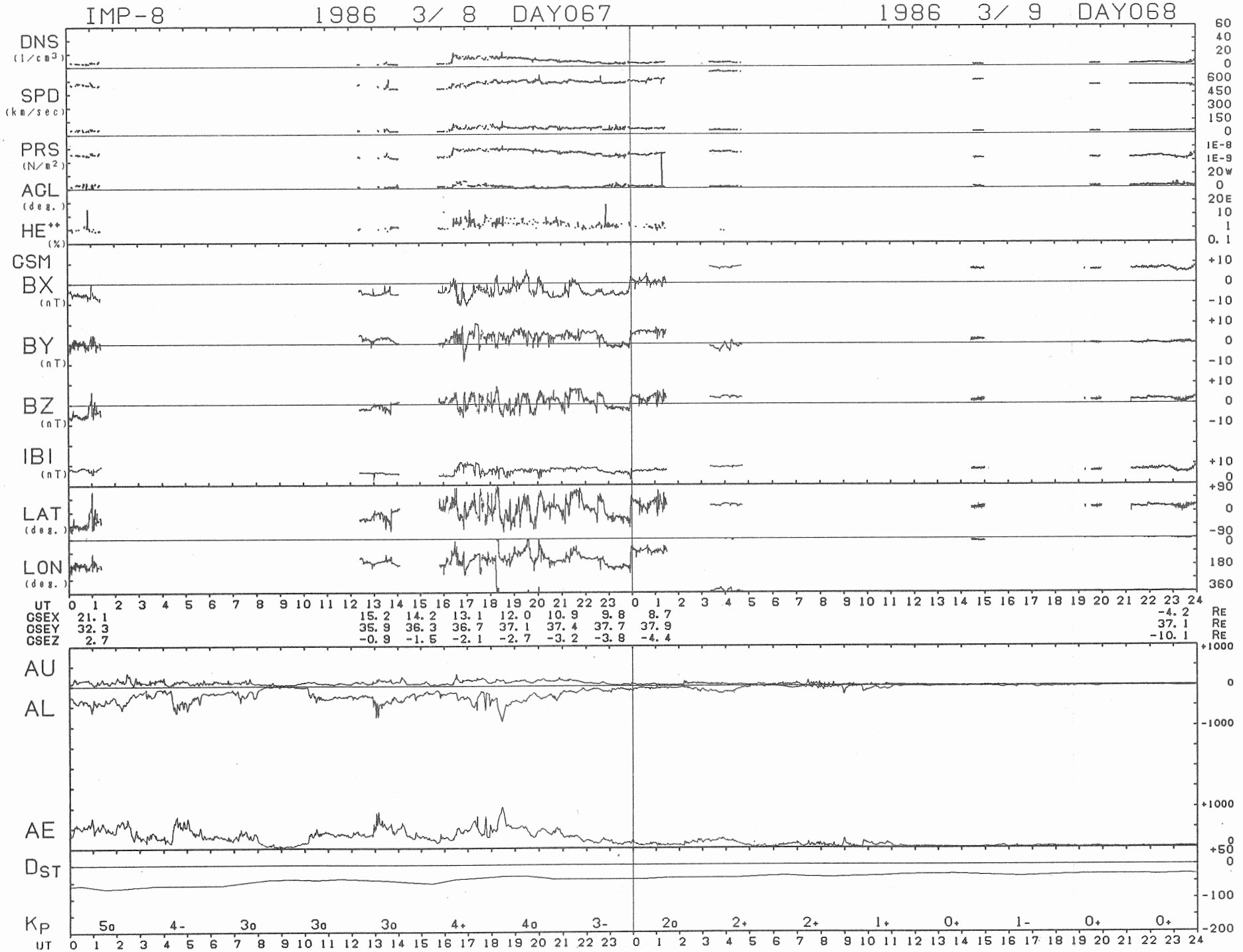

IMP-8 1986 2/26 DAY057
1986 2/27 DAY058
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -14.8 -16.8 -24.0 -24.7 -26.8 -27.4 RE
GSEY 34.2 32.8 25.7 24.7 21.3 20.1 RE
GSEZ -11.3 -12.1 -14.8 -15.0 -15.6 -15.8 RE
AU
AL
AE
DST
KP 3o 3+ 3+ 4- 4- 6- 3+ 4o 4o 4+ 3o 4+ 3- 2+ 3+ 3+
UT

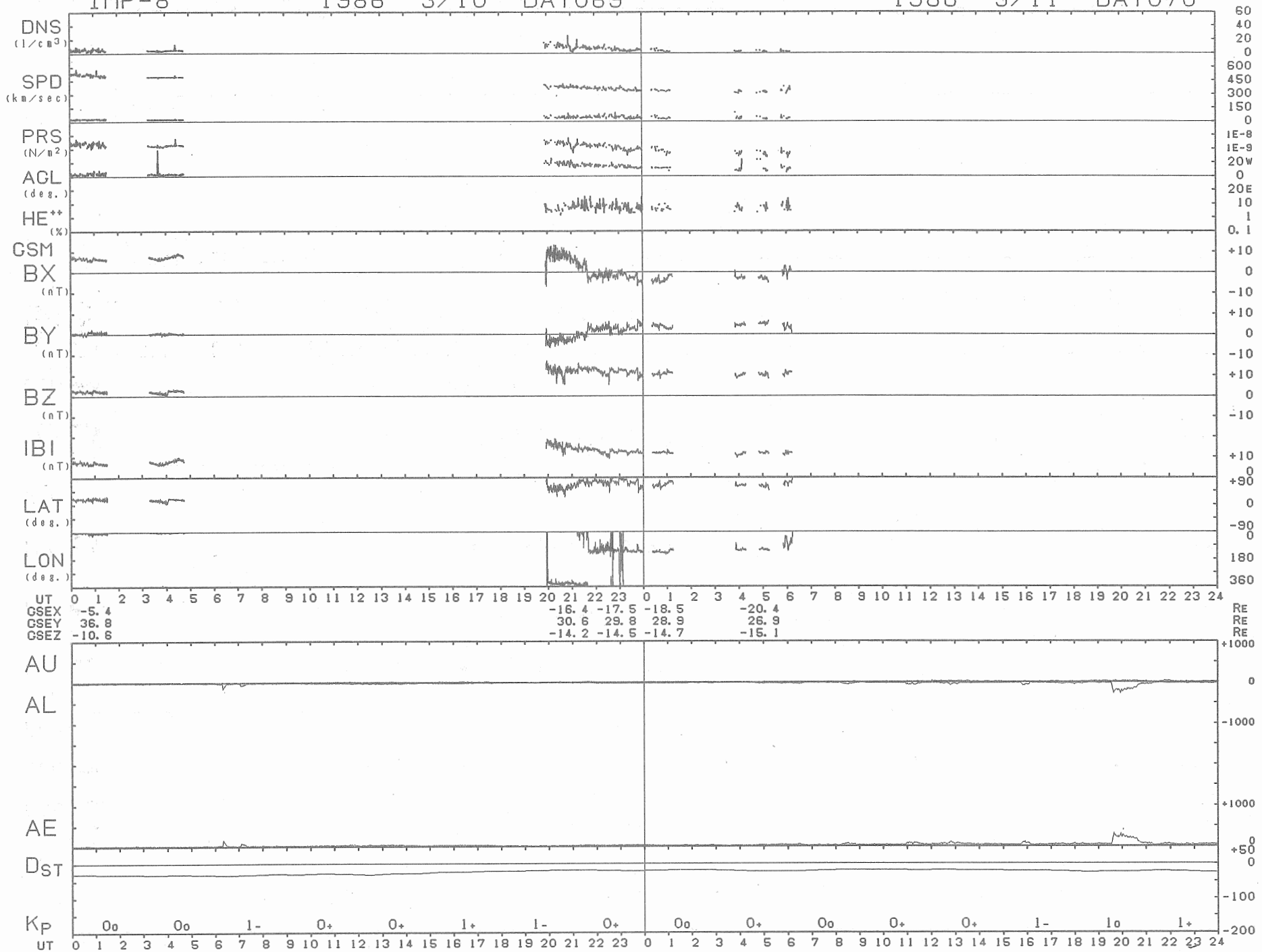

IMP-8 1986 2/28 DAY059
1986 3/ 1 DAY060
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.2 -31.5 -31.6 -28.9 -28.3 -27.6 Re
GSEY 8.4 5.6 4.1 -11.4 -12.8 -14.1 Re
GSEZ -16.0 -15.7 -15.6 -11.9 -11.4 -10.9 Re
AU
AL
AE
Dst
Kp
4- 3+ 3- 4- 3o 5o 5o 3+ 3+ 2+ 4- 3+ 3- 4+ 4- 2+
UT

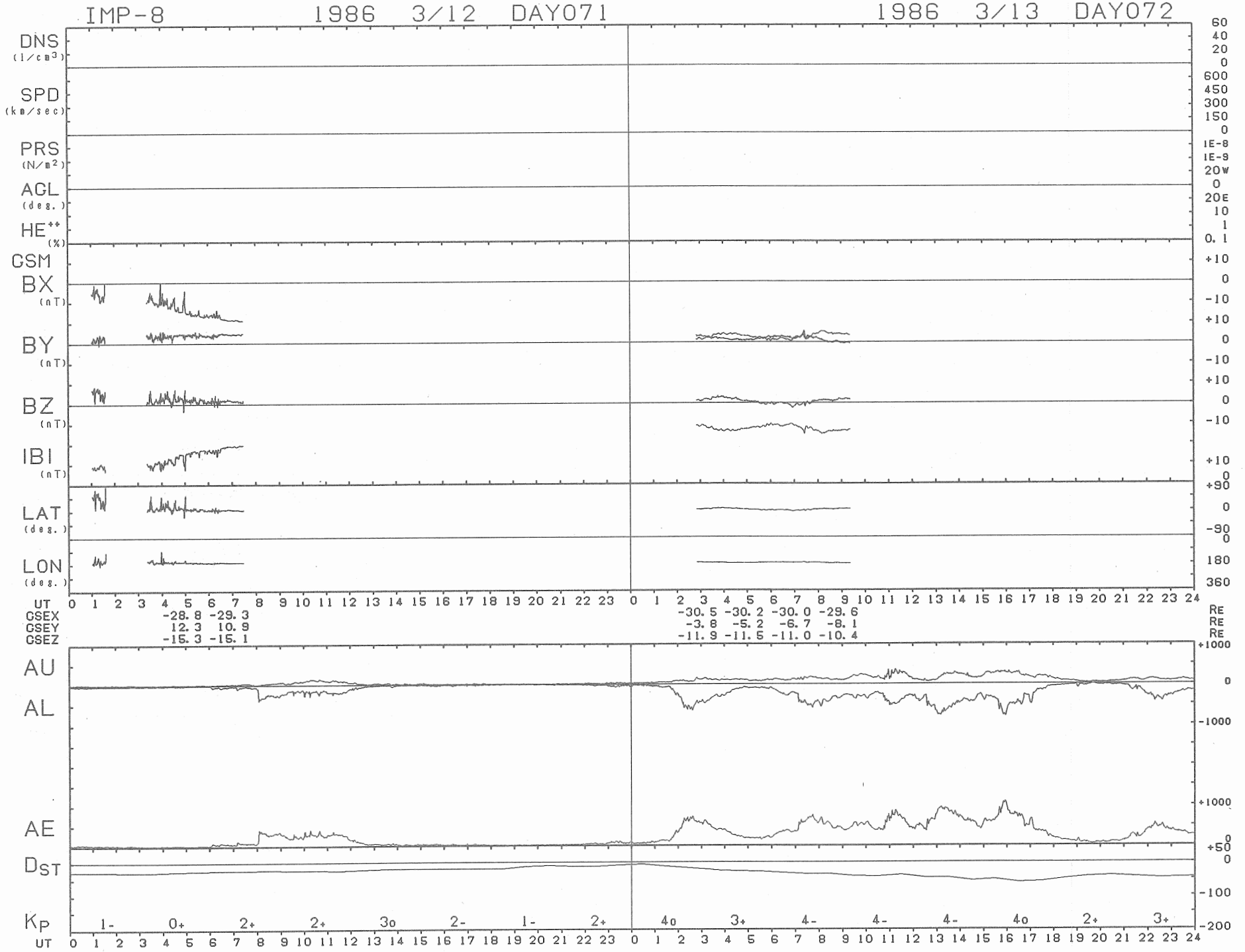

IMP-8
1986 3/ 2 DAY061
1986 3/ 3 DAY062
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -18.1 -16.8 -15.5 -14.2 -12.9 2.0 3.5 5.0 6.5 RE
GSEY -25.0 -25.8 -26.6 -27.3 -27.9 -29.7 -29.5 -29.2 -28.8 RE
GSEZ -4.5 -3.8 -3.0 -2.3 -1.5 5.9 6.6 7.3 7.9 RE
AU
AL
AE
DST
KP
3- 3- 3+ 3+ 3o 2o 2- 2o 2+ 2- 1+ 1+ 2- 2+ 3o 5-
UT

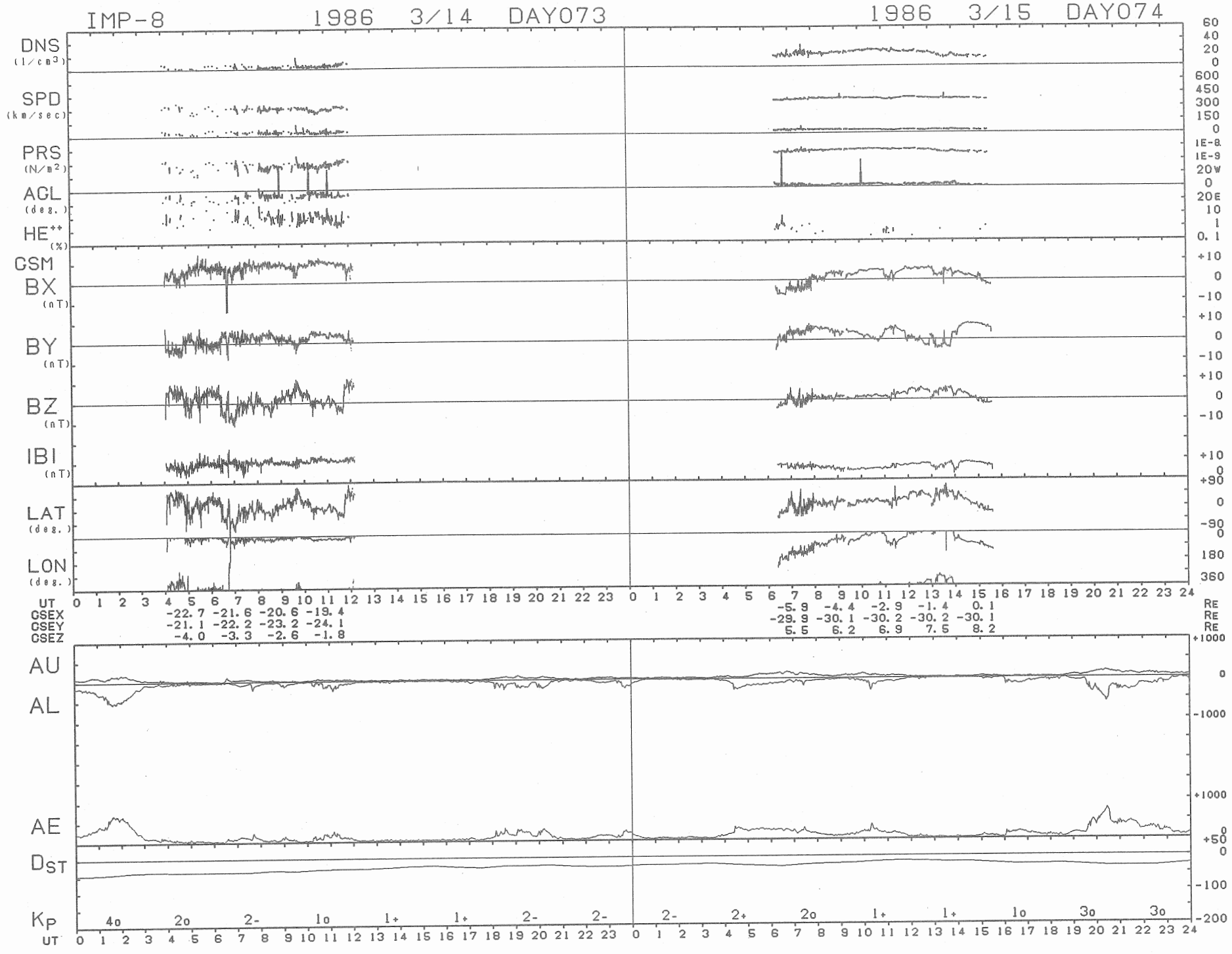

IMP-8
1986 3/ 4 DAY063
1986 3/ 5 DAY064
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 18.8 20.0 21.1 22.2 23.2 24.2 25.1 26.0 26.8 31.5 31.8 31.9 RE
GSEY -21.9 -20.9 -19.8 -18.6 -17.4 -16.2 -14.9 -13.6 -12.3 0.4 1.9 3.3 RE
GSEZ 12.5 12.9 13.2 13.5 13.8 14.0 14.2 14.4 14.5 14.2 14.0 13.8 RE
AU
AL
AE
DST
KP 3- 2o 2o 2- 2+ 2o 3- 2o 2- 2- 1+ 1+ 2o 3o 2+ 3o
UT

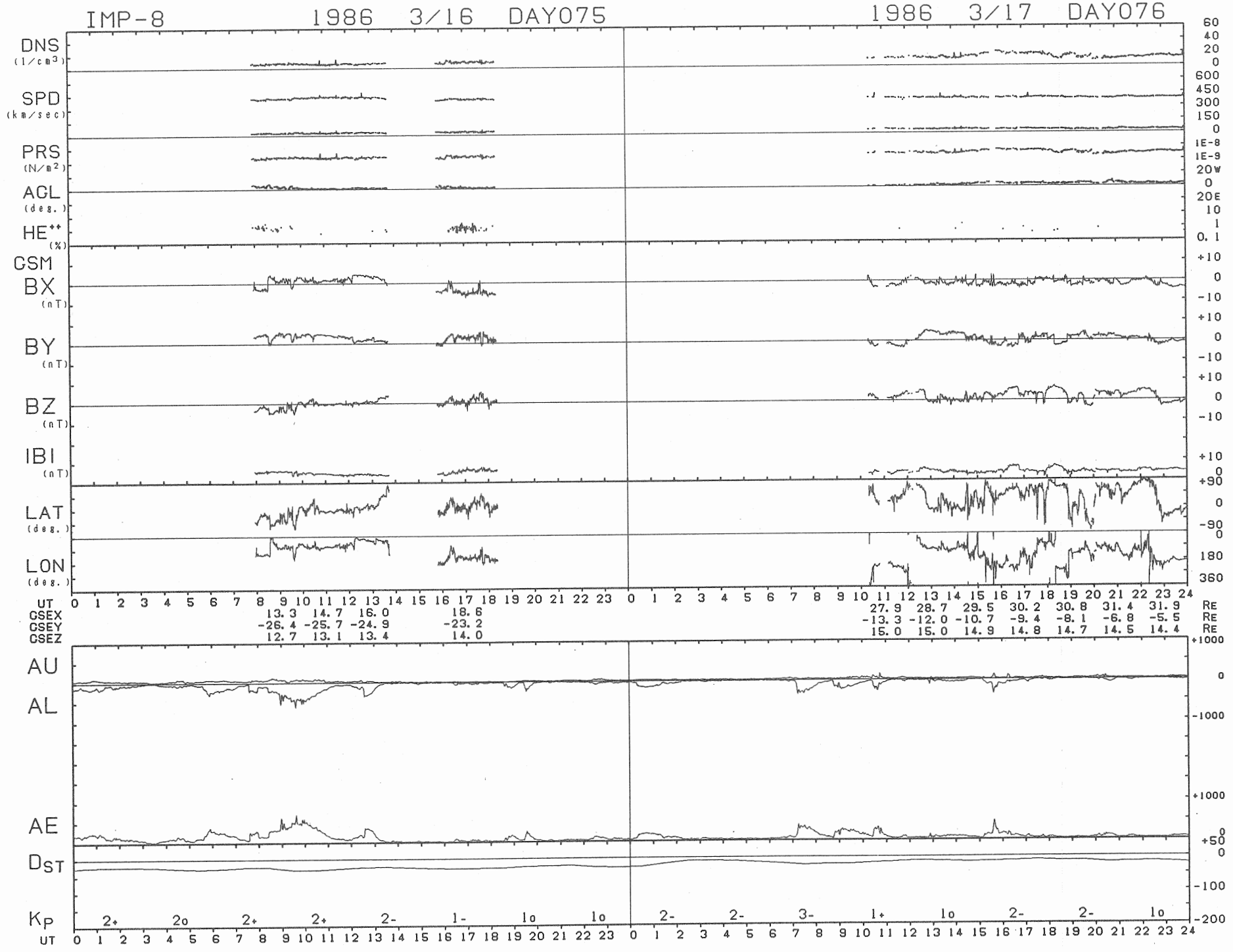

IMP-8
1986 3/ 6 DAY065
1986 3/ 7 DAY066
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.1 31.7 31.5 31.2 30.9 30.5 30.1 29.6 25.2 24.5 23.7 22.8 22.0 RE
GSEY 4.7 13.1 14.4 15.7 17.0 18.2 19.4 20.6 28.1 29.0 29.9 30.7 31.5 RE
GSEZ 13.6 11.7 11.4 10.9 10.5 10.1 9.6 9.2 5.5 5.0 4.4 3.8 3.2 RE
AU
AL
AE
DST
KP 4+ 3+ 1o 4- 5o 5- 4o 6- 5o 4o 4- 4o 3+ 4+ 5- 5o
UT

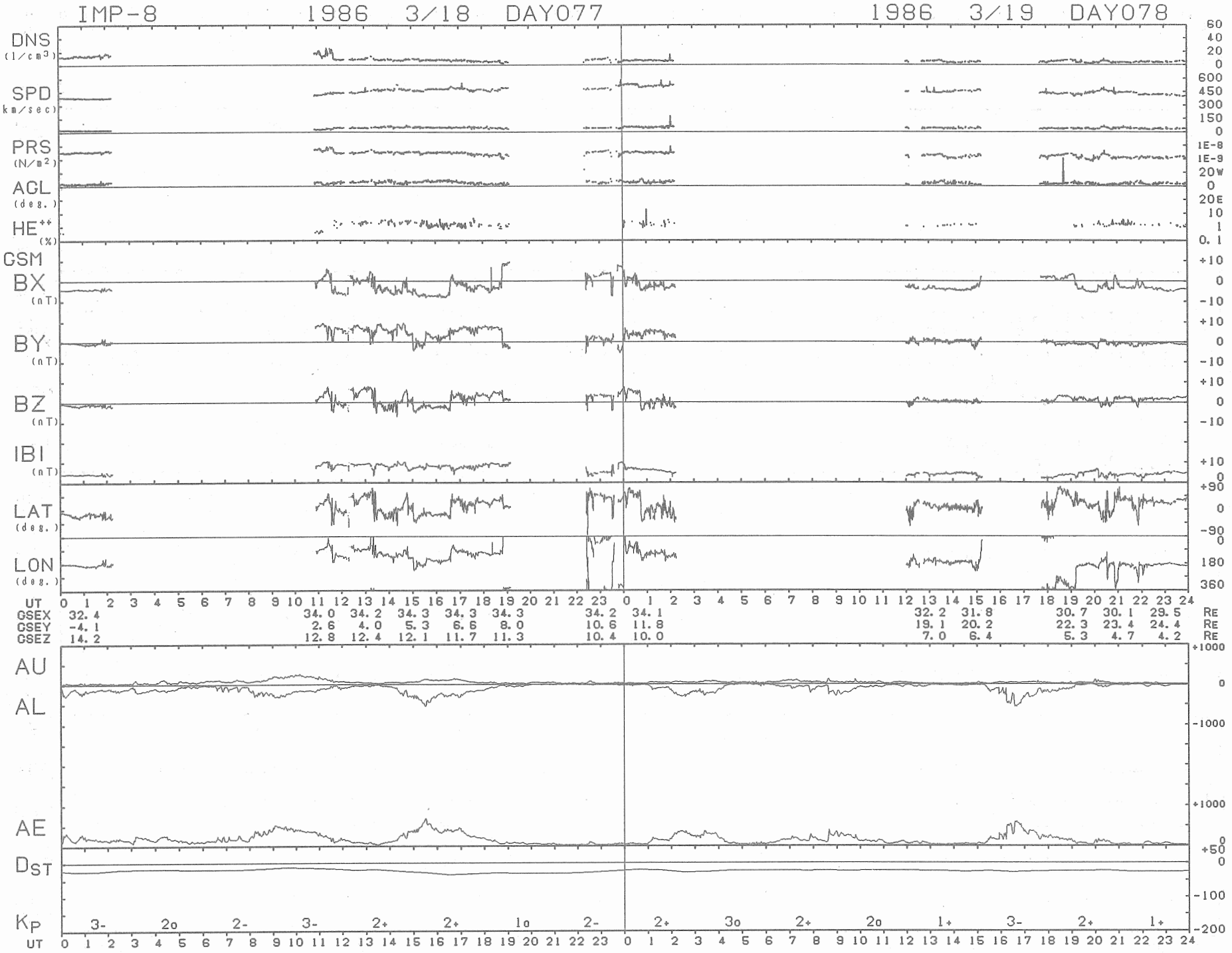

IMP-8
1986 3/ 8 DAY067
1986 3/ 9 DAY068
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 21.1 15.2 14.2 13.1 12.0 10.9 9.8 8.7 -4.2 RE
GSEY 32.3 35.9 36.3 36.7 37.1 37.4 37.7 37.9 37.1 RE
GSEZ 2.7 -0.9 -1.5 -2.1 -2.7 -3.2 -3.8 -4.4 -10.1 RE
AU
AL
AE
DST
KP
5o 4- 3o 3o 3o 4+ 4o 3- 2o 2+ 2+ 1+ 0+ 1- 0+ 0+
UT

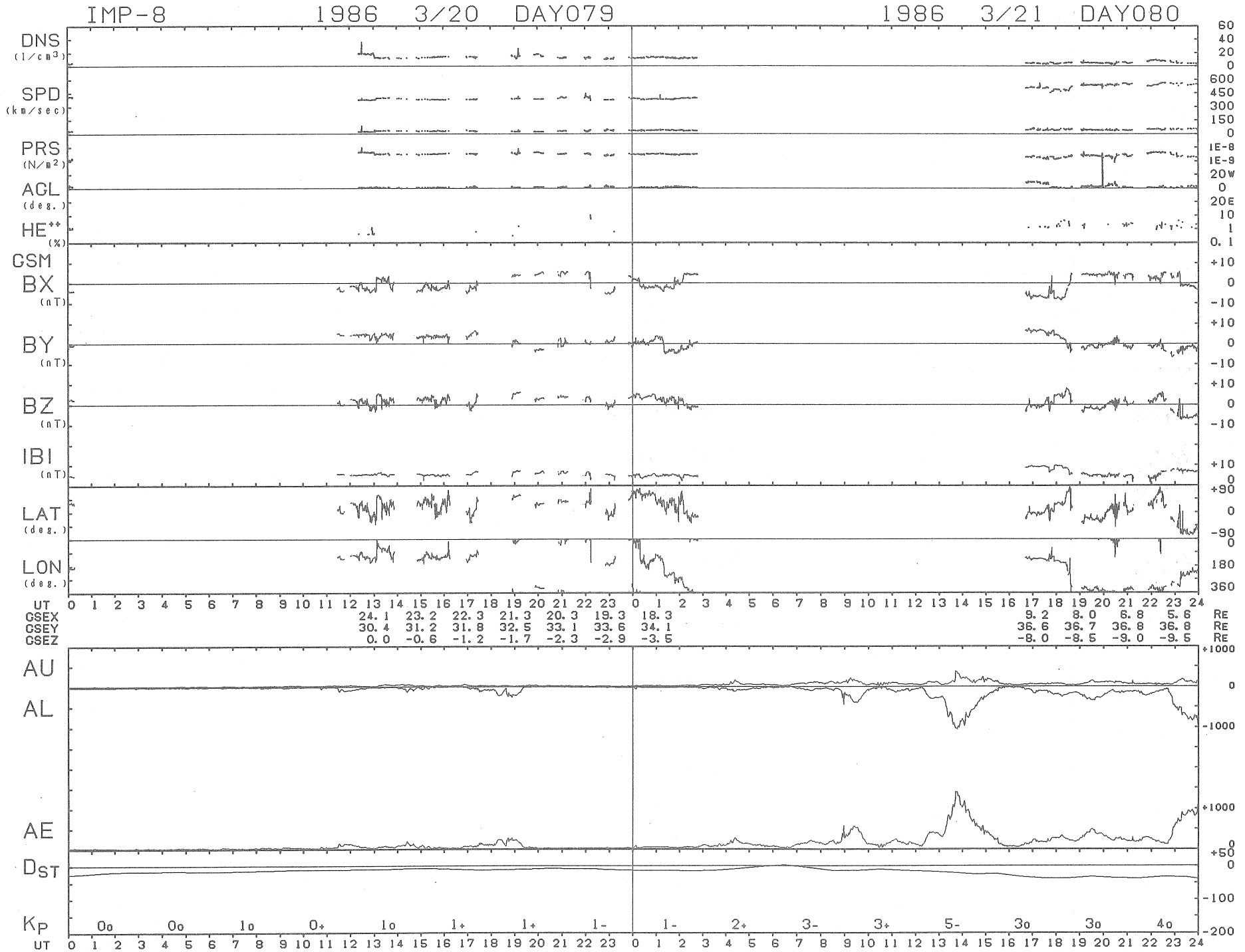

IMP-8 1986 3/10 DAY069
1986 3/11 DAY070
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -5.4 -16.4 -17.5 -18.5 -20.4 RE
GSEY 36.8 30.6 29.8 28.9 26.9 RE
GSEZ -10.6 -14.2 -14.5 -14.7 -15.1 RE
AU
AL
AE
DST
KP
0o 0o 1- 0+ 0+ 1+ 1- 0+ 0o 0+ 0o 0+ 0+ 1- 1o 1+
UT

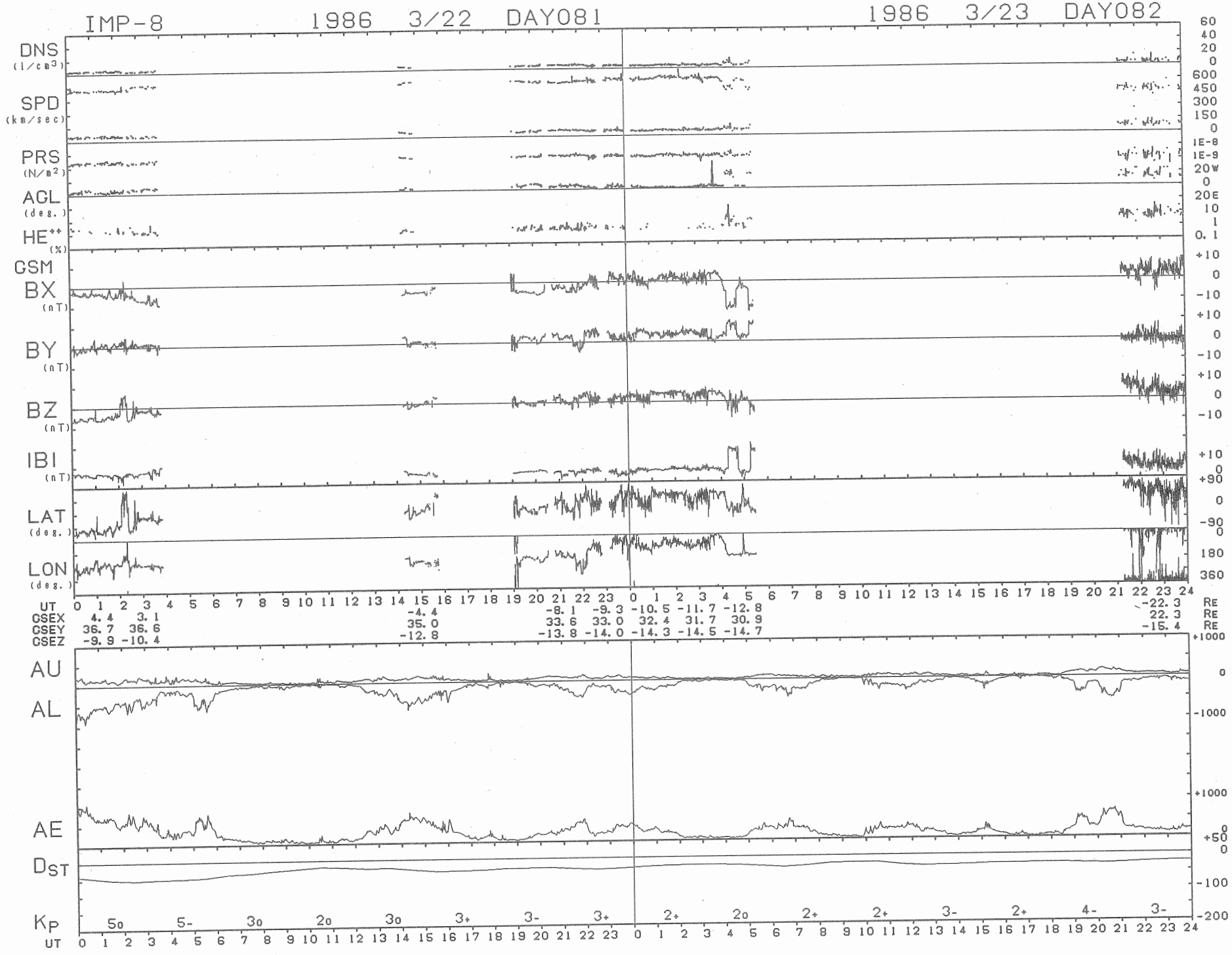

IMP-8
1986 3/12 DAY071
1986 3/13 DAY072
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -28.8 -29.3 -30.5 -30.2 -30.0 -29.6
GSEY 12.3 10.9 -3.8 -5.2 -6.7 -8.1
GSEZ -15.3 -15.1 -11.9 -11.5 -11.0 -10.4
RE
AU
AL
AE
DST
KP 1- 0+ 2+ 2+ 3o 2- 1- 2+ 4o 3+ 4- 4- 4- 4o 2+ 3+

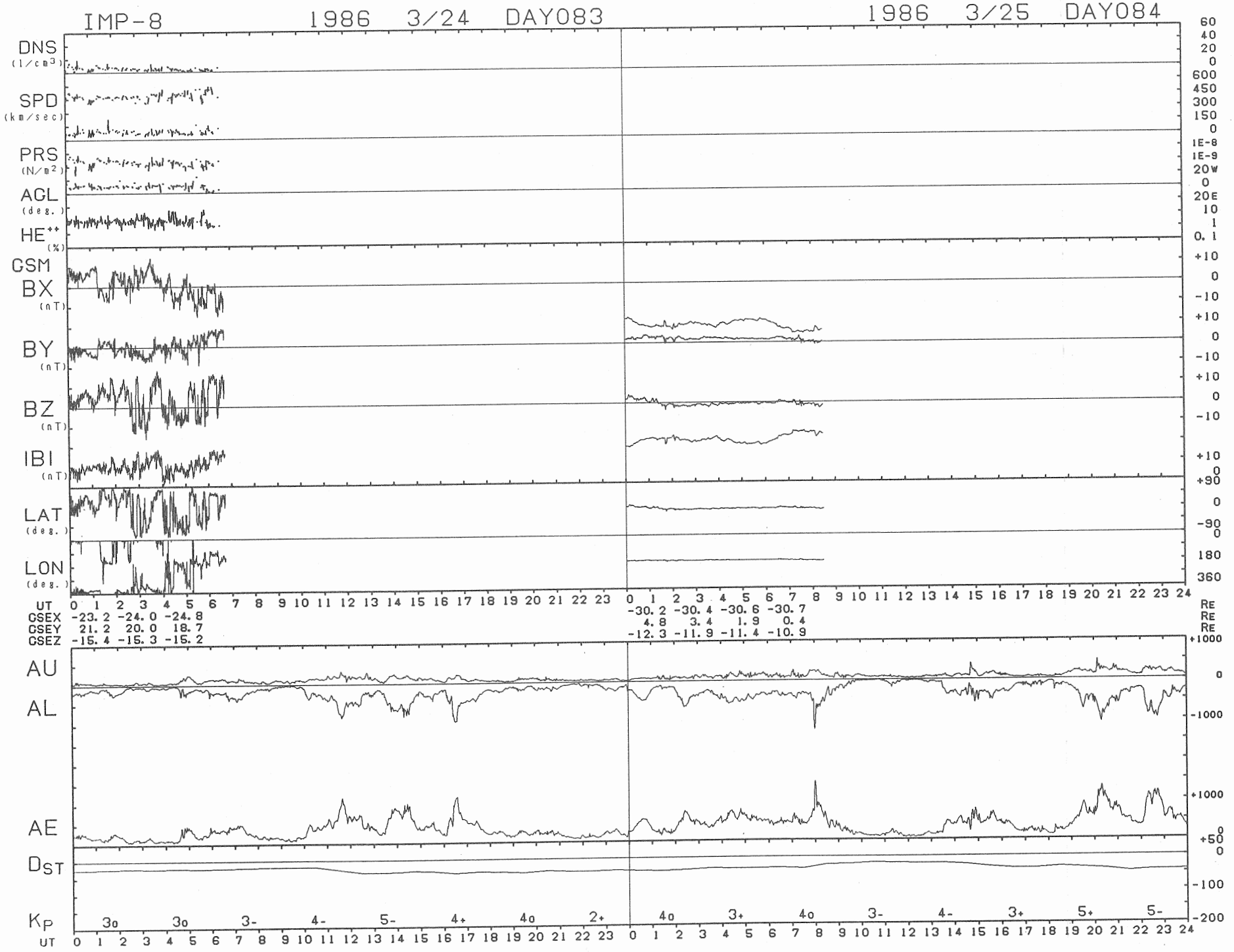

IMP-8 1986 3/14 DAY073
1986 3/15 DAY074
DNS (1/cm³)
SPD (km/sec)
PRS (N/m²)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -22.7 -21.6 -20.6 -19.4 -5.9 -4.4 -2.9 -1.4 0.1 RE
GSEY -21.1 -22.2 -23.2 -24.1 -29.9 -30.1 -30.2 -30.2 -30.1 RE
GSEZ -4.0 -3.3 -2.6 -1.8 5.5 6.2 6.9 7.5 8.2 RE
AU
AL
AE
DST
KP
4o 2o 2- 1o 1+ 1+ 2- 2- 2- 2+ 2o 1+ 1+ 1o 3o 3o
UT

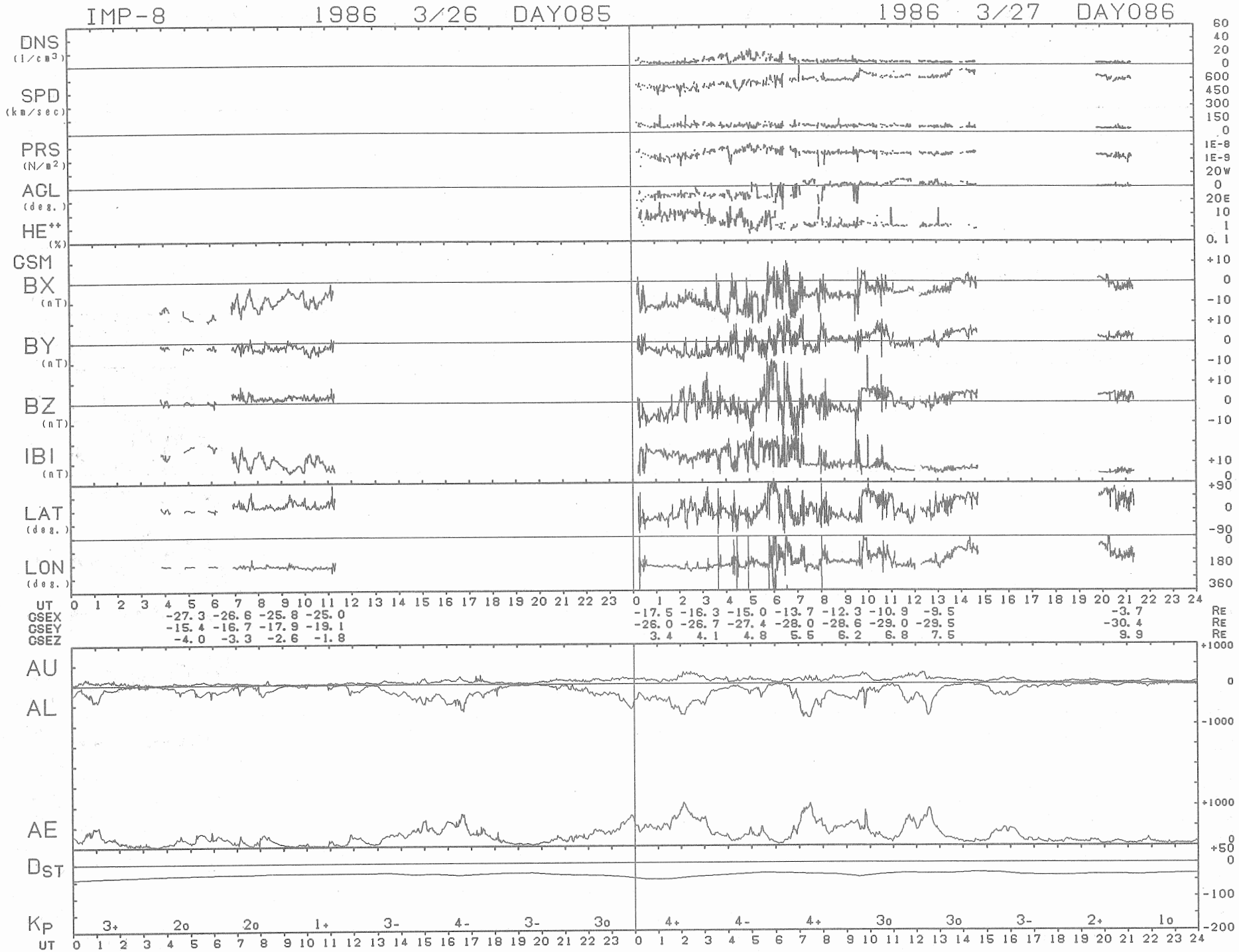

IMP-8 1986 3/16 DAY075
1986 3/17 DAY076
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.3 14.7 16.0 18.6
GSEY -26.4 -25.7 -24.9 -23.2
GSEZ 12.7 13.1 13.4 14.0
27.9 28.7 29.5 30.2 30.8 31.4 31.9 RE
-13.3 -12.0 -10.7 -9.4 -8.1 -6.8 -5.5 RE
15.0 15.0 14.9 14.8 14.7 14.5 14.4 RE
AU
AL
AE
DST
KP
2+ 2o 2+ 2+ 2- 1- 1o 1o 2- 2- 3- 1+ 1o 2- 2- 1o

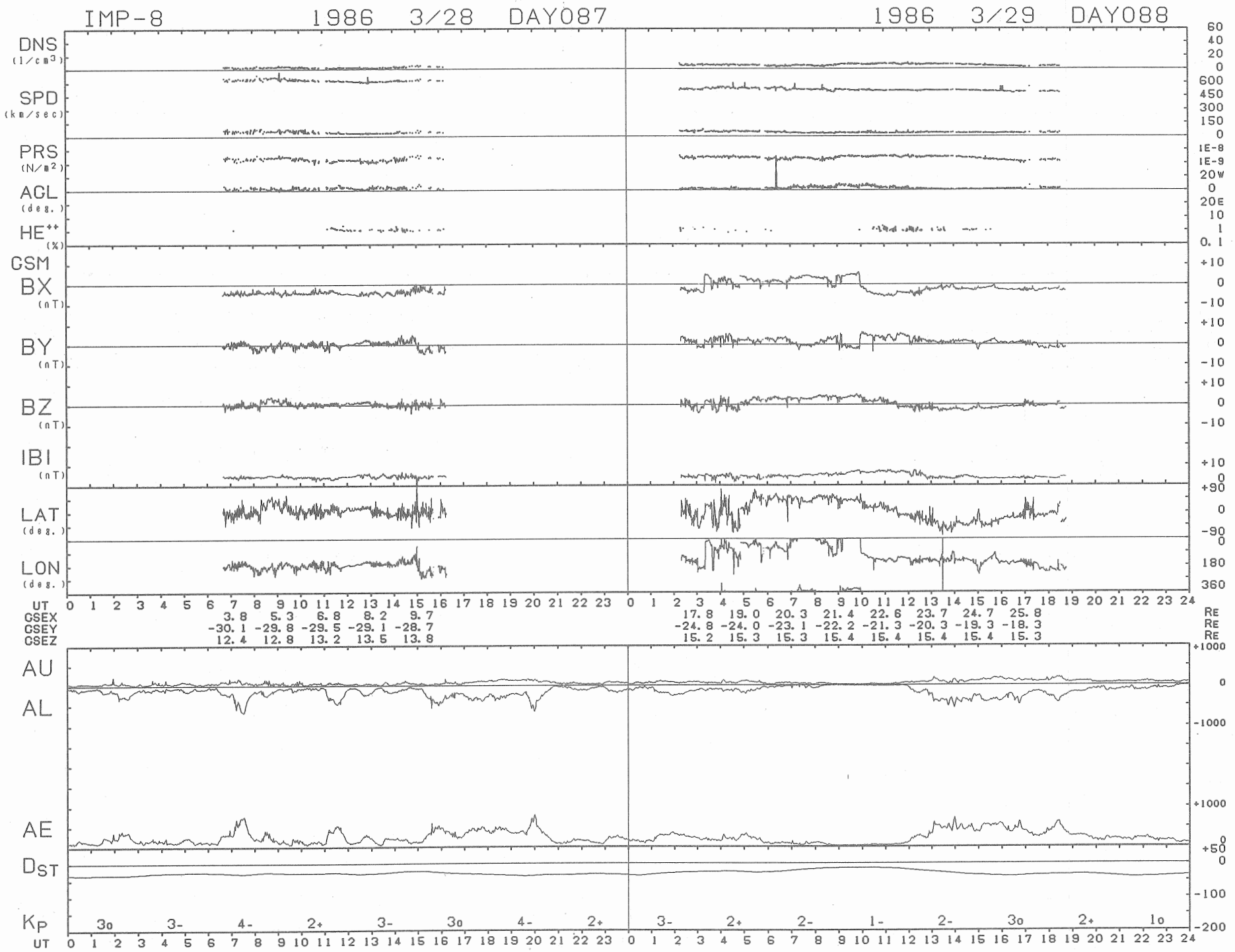

IMP-8 1986 3/18 DAY077
1986 3/19 DAY078
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 32.4 34.0 34.2 34.3 34.3 34.3 34.2 34.1 32.2 31.8 30.7 30.1 29.5 RE
GSEY -4.1 2.6 4.0 5.3 6.6 8.0 10.6 11.8 19.1 20.2 22.3 23.4 24.4 RE
GSEZ 14.2 12.8 12.4 12.1 11.7 11.3 10.4 10.0 7.0 6.4 5.3 4.7 4.2 RE
AU
AL
AE
DST
KP 3- 2o 2- 3- 2+ 2+ 1o 2- 2+ 3o 2+ 2o 1+ 3- 2+ 1+
UT

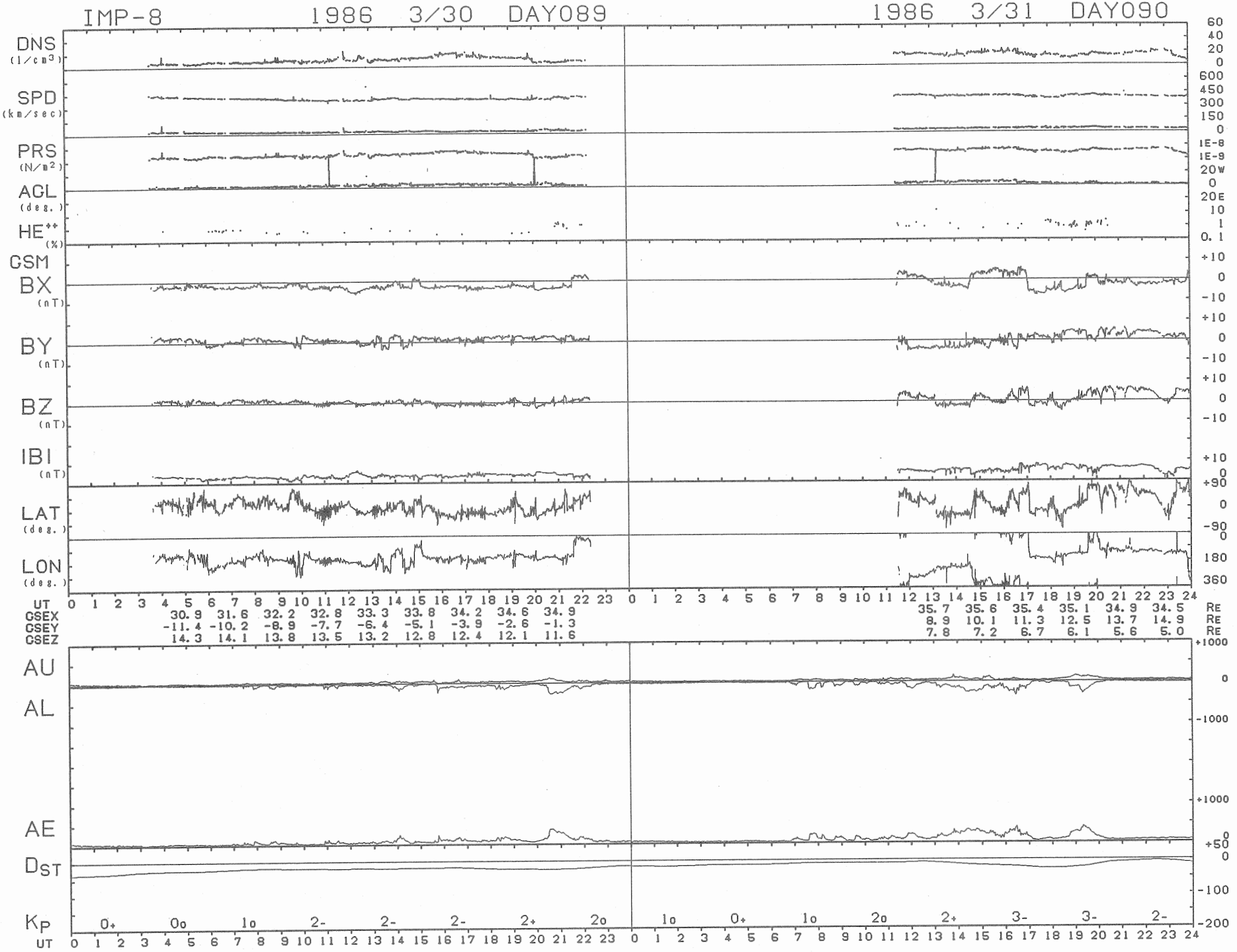

IMP-8 1986 3/20 DAY079
1986 3/21 DAY080
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 24.1 23.2 22.3 21.3 20.3 19.3 18.3 9.2 8.0 6.8 5.6 RE
GSEY 30.4 31.2 31.8 32.5 33.1 33.6 34.1 36.6 36.7 36.8 36.8 RE
GSEZ 0.0 -0.6 -1.2 -1.7 -2.3 -2.9 -3.5 -8.0 -8.5 -9.0 -9.5 RE
AU
AL
AE
DST
KP 0o 0o 1o 0+ 1o 1+ 1+ 1- 1- 2+ 3- 3+ 5- 3o 3o 4o
UT

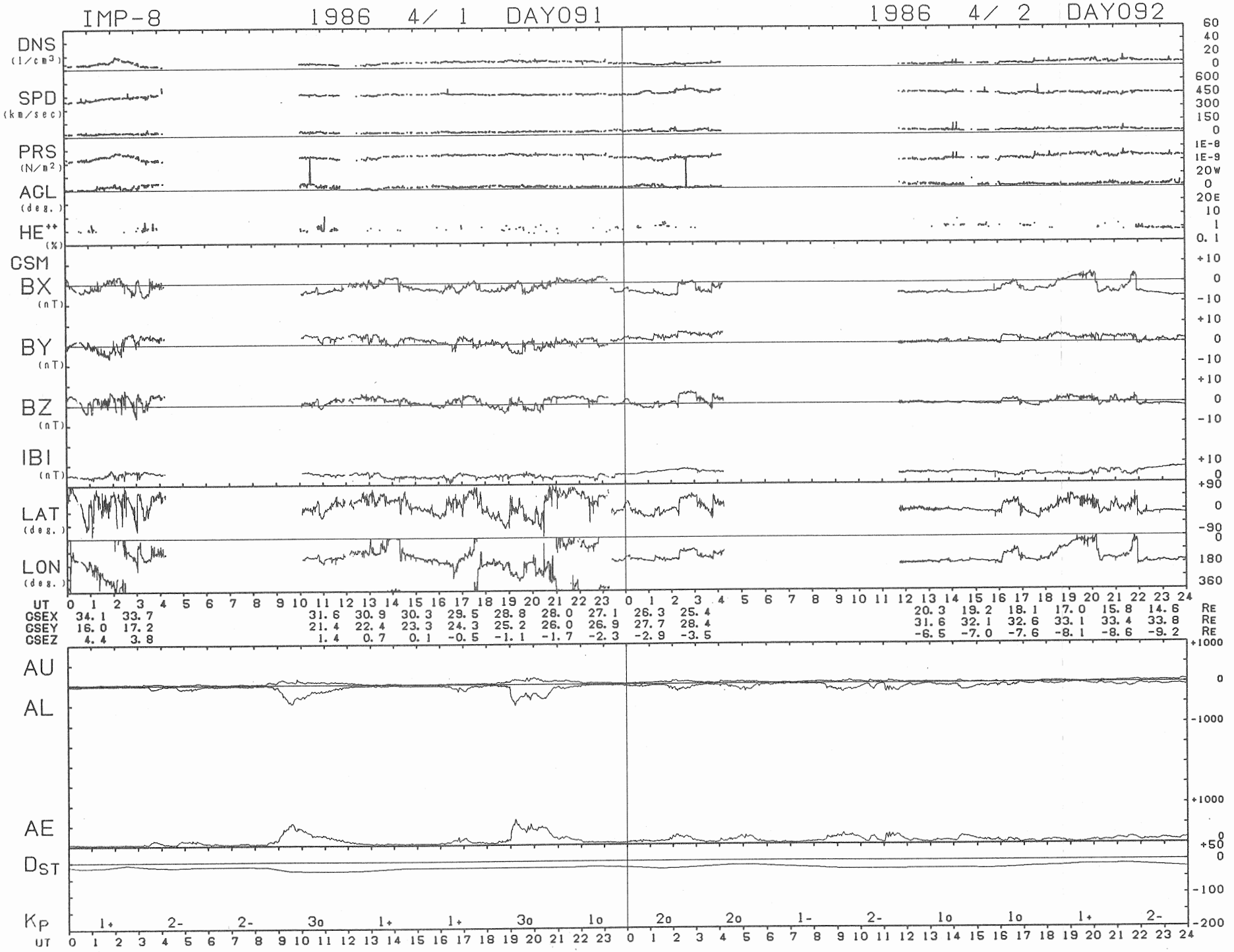

IMP-8
1986 3/22 DAY081
1986 3/23 DAY082
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 4.4 3.1 -4.4 -8.1 -9.3 -10.5 -11.7 -12.8 -22.3 RE
GSEY 36.7 36.6 35.0 33.6 33.0 32.4 31.7 30.9 22.3 RE
GSEZ -9.9 -10.4 -12.8 -13.8 -14.0 -14.3 -14.5 -14.7 -15.4 RE
AU
AL
AE
DST
KP
5o 5- 3o 2o 3o 3+ 3- 3+ 2+ 2o 2+ 2+ 3- 2+ 4- 3-
UT

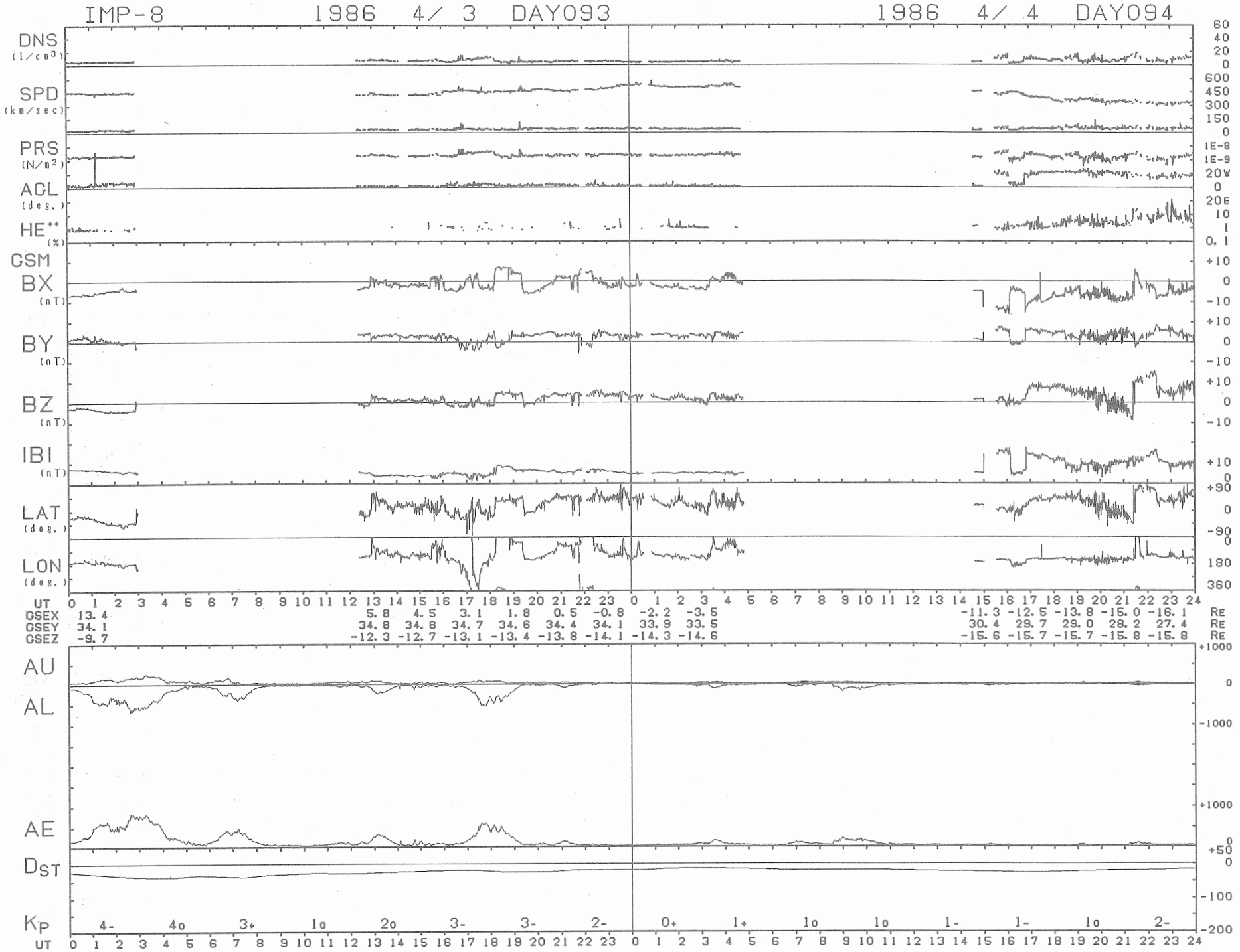

IMP-8
1986 3/24 DAY083
1986 3/25 DAY084
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.2 -24.0 -24.8
GSEY 21.2 20.0 18.7
GSEZ -15.4 -15.3 -15.2
-30.2 -30.4 -30.6 -30.7
4.8 3.4 1.9 0.4
-12.3 -11.9 -11.4 -10.9
RE
AU
AL
AE
DST
KP
3o 3o 3- 4- 5- 4+ 4o 2+ 4o 3+ 4o 3- 4- 3+ 5+ 5-
UT

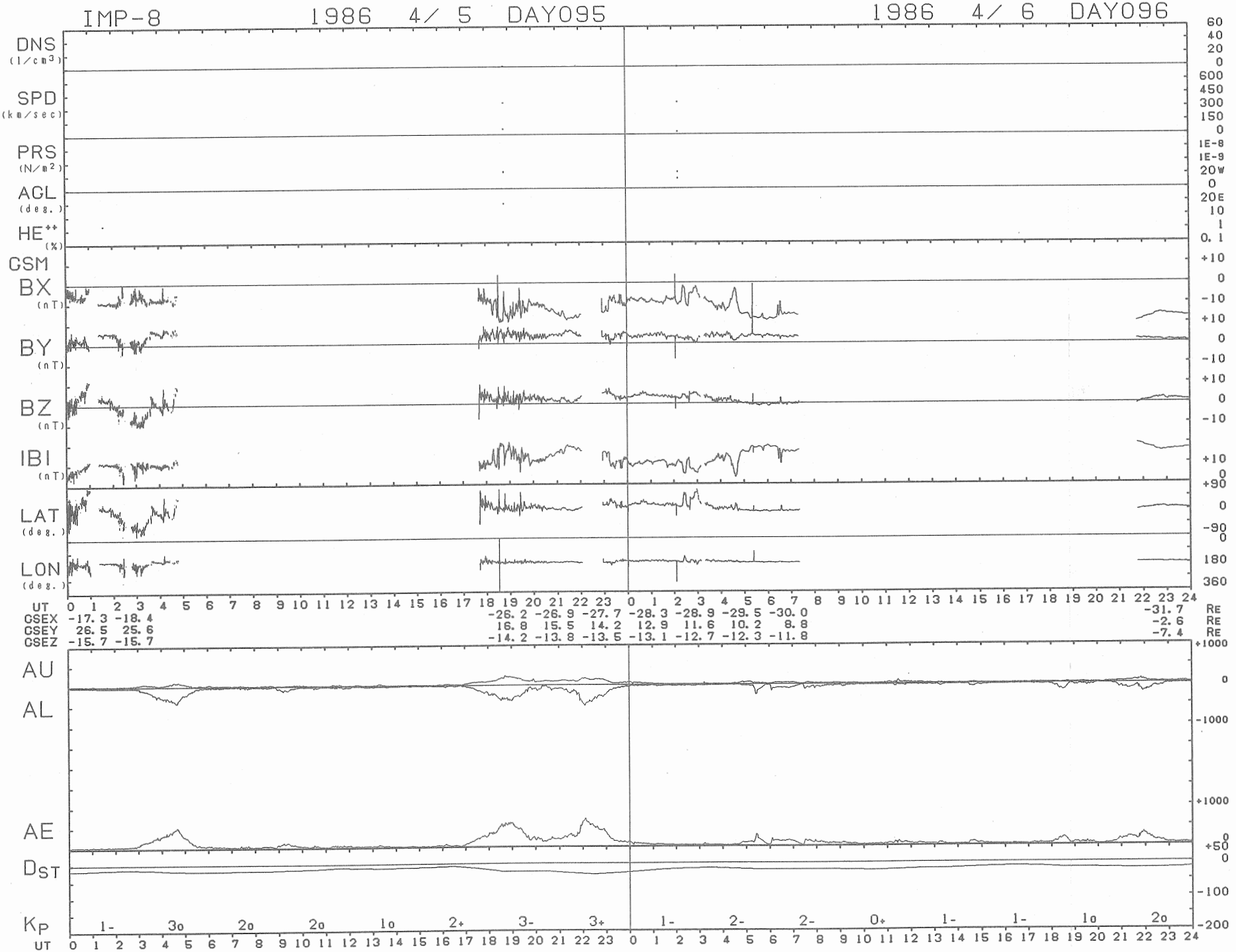

IMP-8 1986 3/26 DAY085
1986 3/27 DAY086
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -27.3 -26.6 -25.8 -25.0 -17.5 -16.3 -15.0 -13.7 -12.3 -10.9 -9.5 -3.7 RE
GSEY -15.4 -16.7 -17.9 -19.1 -26.0 -26.7 -27.4 -28.0 -28.6 -29.0 -29.5 -30.4 RE
GSEZ -4.0 -3.3 -2.6 -1.8 3.4 4.1 4.8 5.5 6.2 6.8 7.5 9.9 RE
AU
AL
AE
DST
KP 3+ 2o 2o 1+ 3- 4- 3- 3o 4+ 4- 4+ 3o 3o 3- 2+ 1o
UT

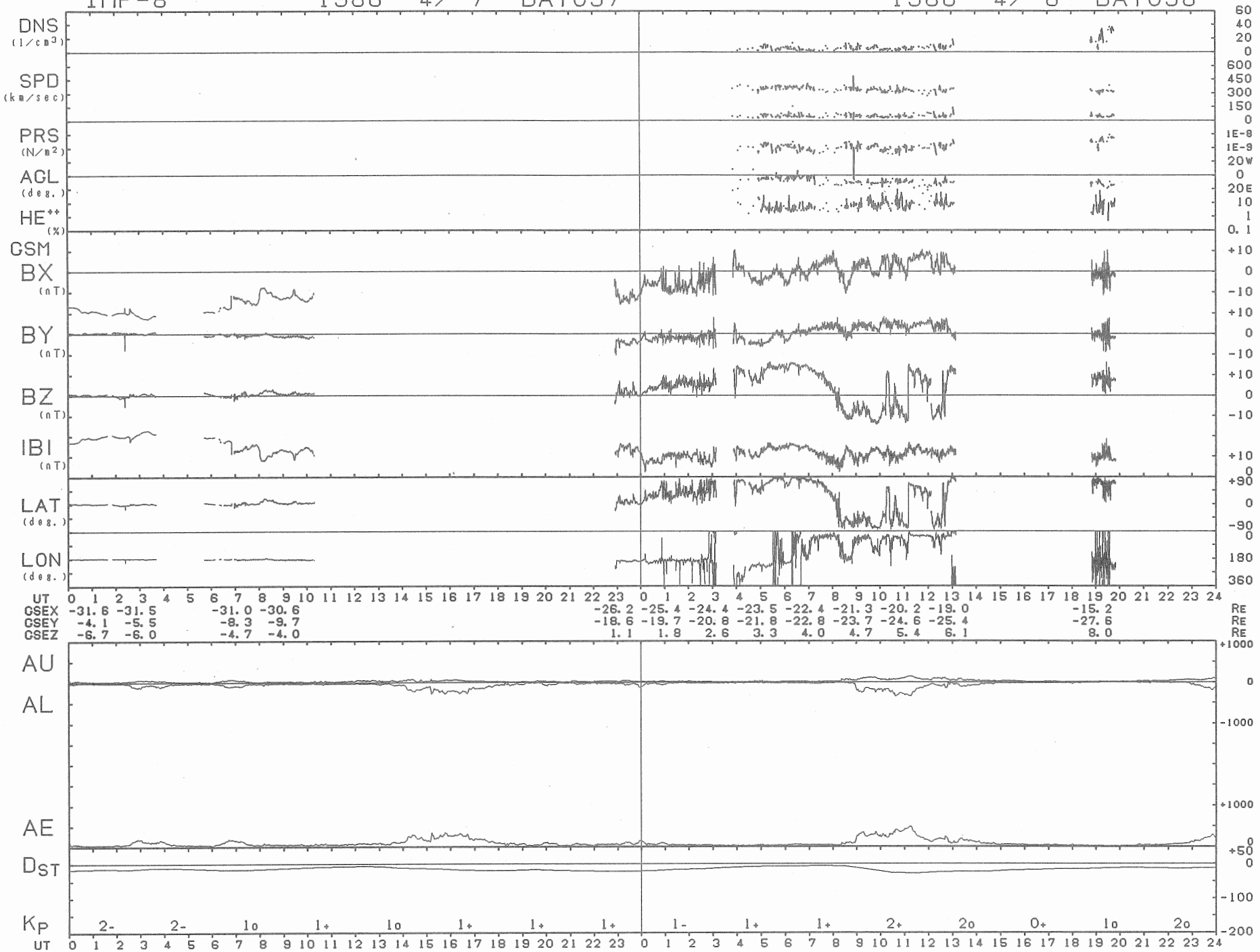

IMP-8 1986 3/28 DAY087
1986 3/29 DAY088
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.8 5.3 6.8 8.2 9.7 17.8 19.0 20.3 21.4 22.6 23.7 24.7 25.8 RE
GSEY -30.1 -29.8 -29.5 -29.1 -28.7 -24.8 -24.0 -23.1 -22.2 -21.3 -20.3 -19.3 -18.3 RE
GSEZ 12.4 12.8 13.2 13.5 13.8 15.2 15.3 15.3 15.4 15.4 15.4 15.4 15.3 RE
AU
AL
AE
DST
KP 3o 3- 4- 2+ 3- 3o 4- 2+ 3- 2+ 2- 1- 2- 3o 2+ 1o
UT

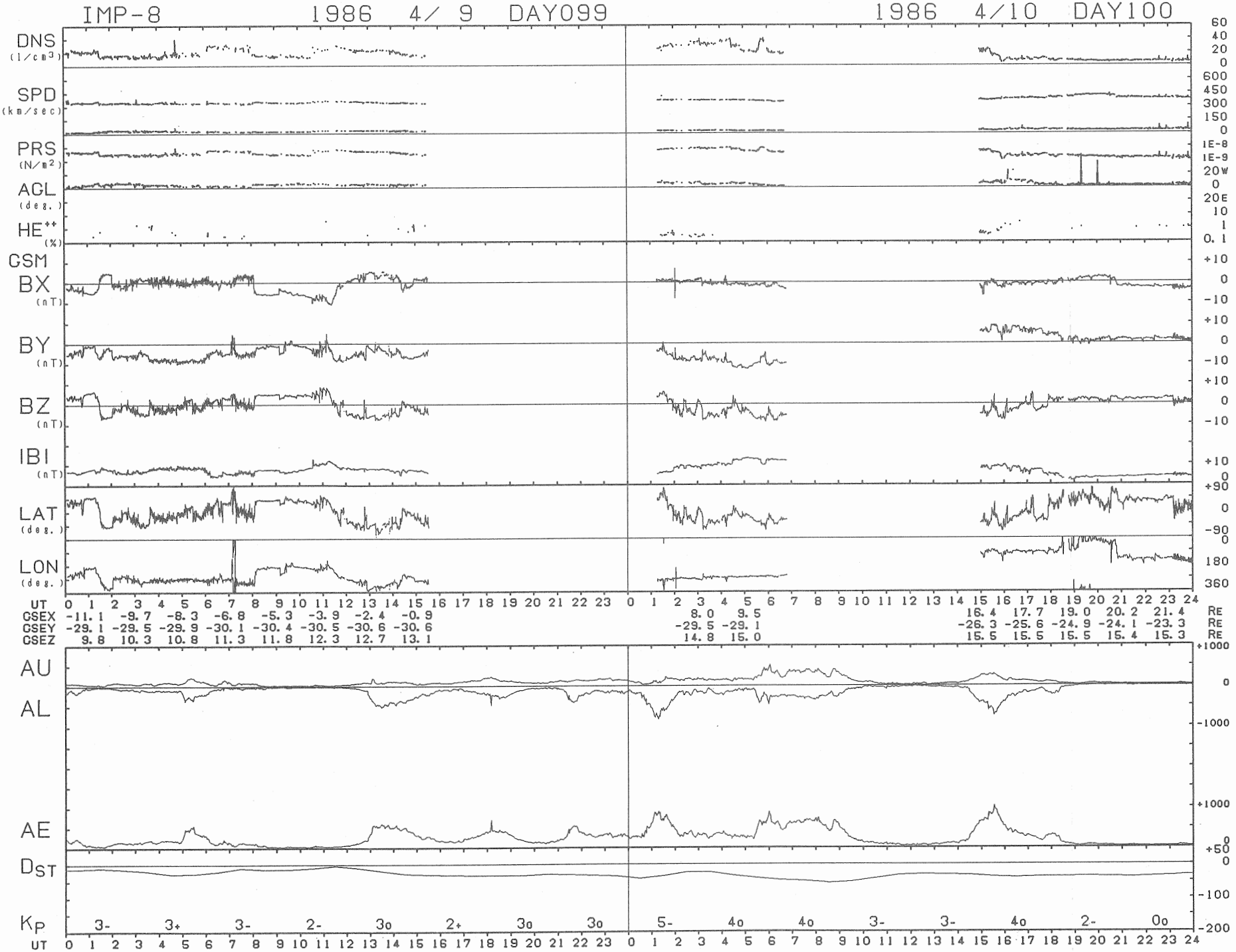

IMP-8 1986 3/30 DAY089
1986 3/31 DAY090
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.9 31.6 32.2 32.8 33.3 33.8 34.2 34.6 34.9
GSEY -11.4 -10.2 -8.9 -7.7 -6.4 -5.1 -3.9 -2.6 -1.3
GSEZ 14.3 14.1 13.8 13.5 13.2 12.8 12.4 12.1 11.6
35.7 35.6 35.4 35.1 34.9 34.5 RE
8.9 10.1 11.3 12.5 13.7 14.9 RE
7.8 7.2 6.7 6.1 5.6 5.0 RE
AU
AL
AE
DST
KP 0+ 0o 1o 2- 2- 2- 2+ 2o 1o 0+ 1o 2o 2+ 3- 3- 2-

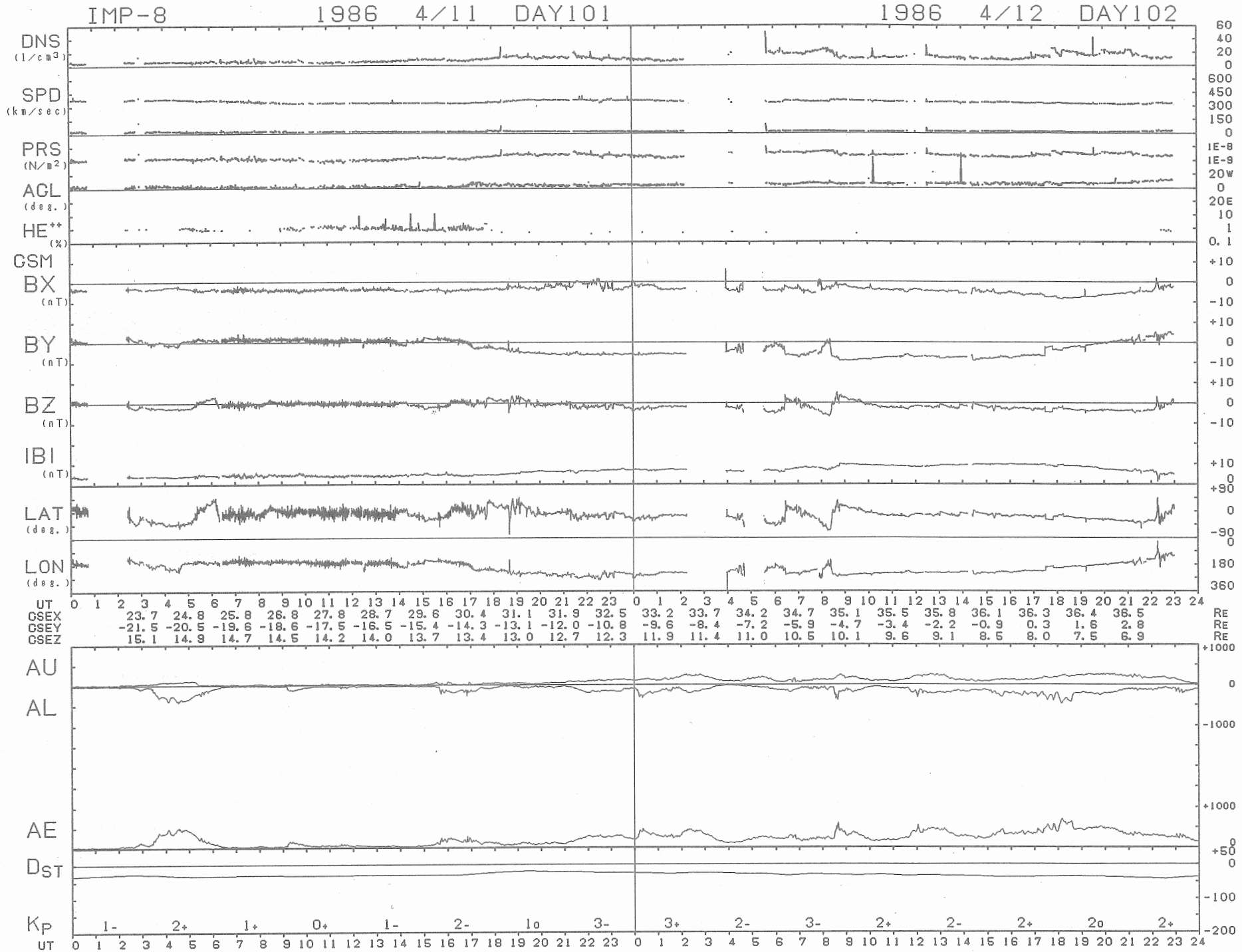

IMP-8
1986 4/ 1 DAY091
1986 4/ 2 DAY092
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 34.1 33.7 31.6 30.9 30.3 29.5 28.8 28.0 27.1 26.3 25.4 20.3 19.2 18.1 17.0 15.8 14.6 RE
GSEY 16.0 17.2 21.4 22.4 23.3 24.3 25.2 26.0 26.9 27.7 28.4 31.6 32.1 32.6 33.1 33.4 33.8 RE
GSEZ 4.4 3.8 1.4 0.7 0.1 -0.5 -1.1 -1.7 -2.3 -2.9 -3.5 -6.5 -7.0 -7.6 -8.1 -8.6 -9.2 RE
AU
AL
AE
DST
KP 1+ 2- 2- 3o 1+ 1+ 3o 1o 2o 2o 1- 2- 1o 1o 1+ 2-
UT

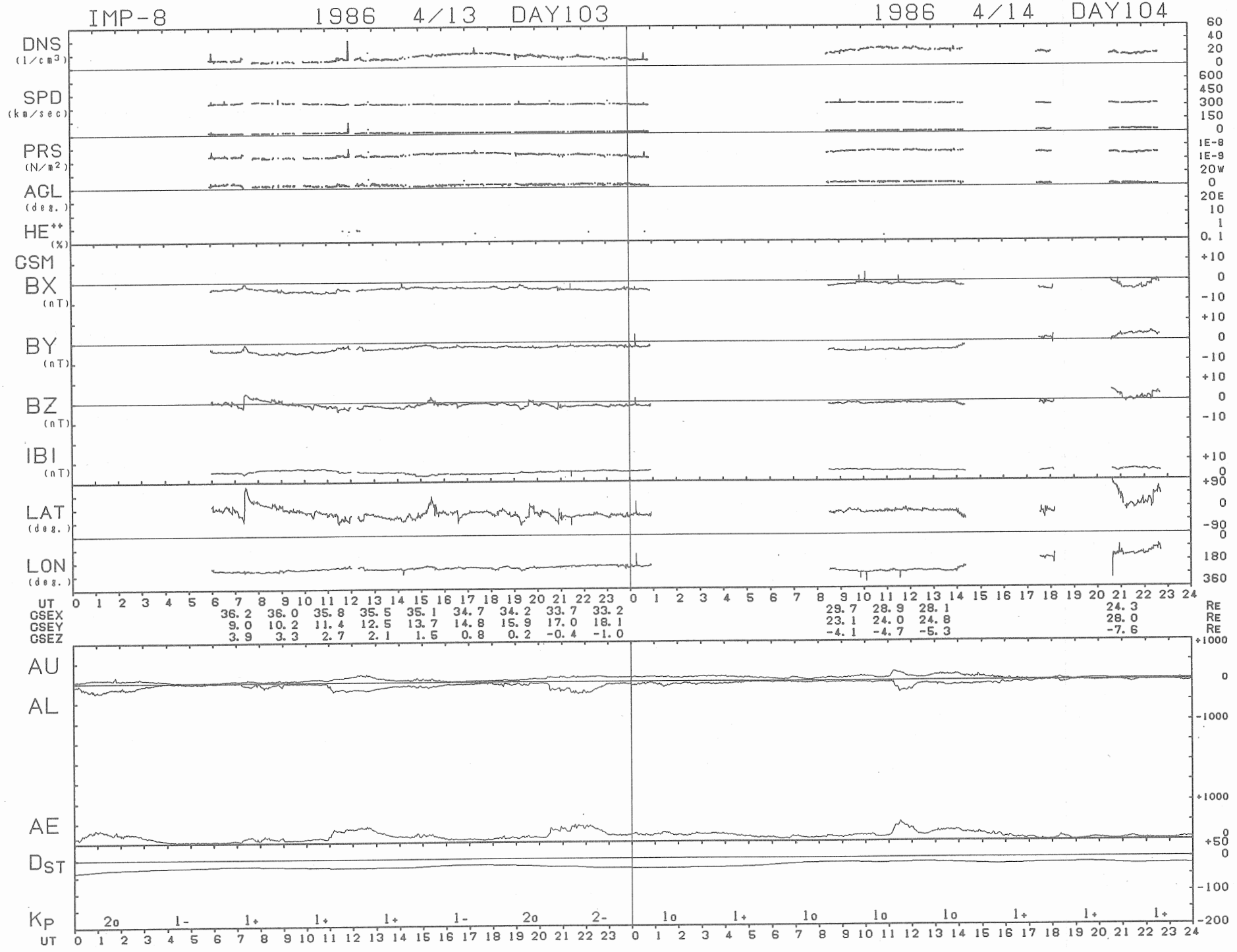

IMP-8
1986 4/ 3 DAY093
1986 4/ 4 DAY094
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 13.4 5.8 4.5 3.1 1.8 0.5 -0.8 -2.2 -3.5 -11.3 -12.5 -13.8 -15.0 -16.1 RE
GSEY 34.1 34.8 34.8 34.7 34.6 34.4 34.1 33.9 33.5 30.4 29.7 29.0 28.2 27.4 RE
GSEZ -9.7 -12.3 -12.7 -13.1 -13.4 -13.8 -14.1 -14.3 -14.6 -15.6 -15.7 -15.7 -15.8 -15.8 RE
AU
AL
AE
DST
KP 4- 4o 3+ 1o 2o 3- 3- 2- 0+ 1+ 1o 1o 1- 1- 1o 2-
UT

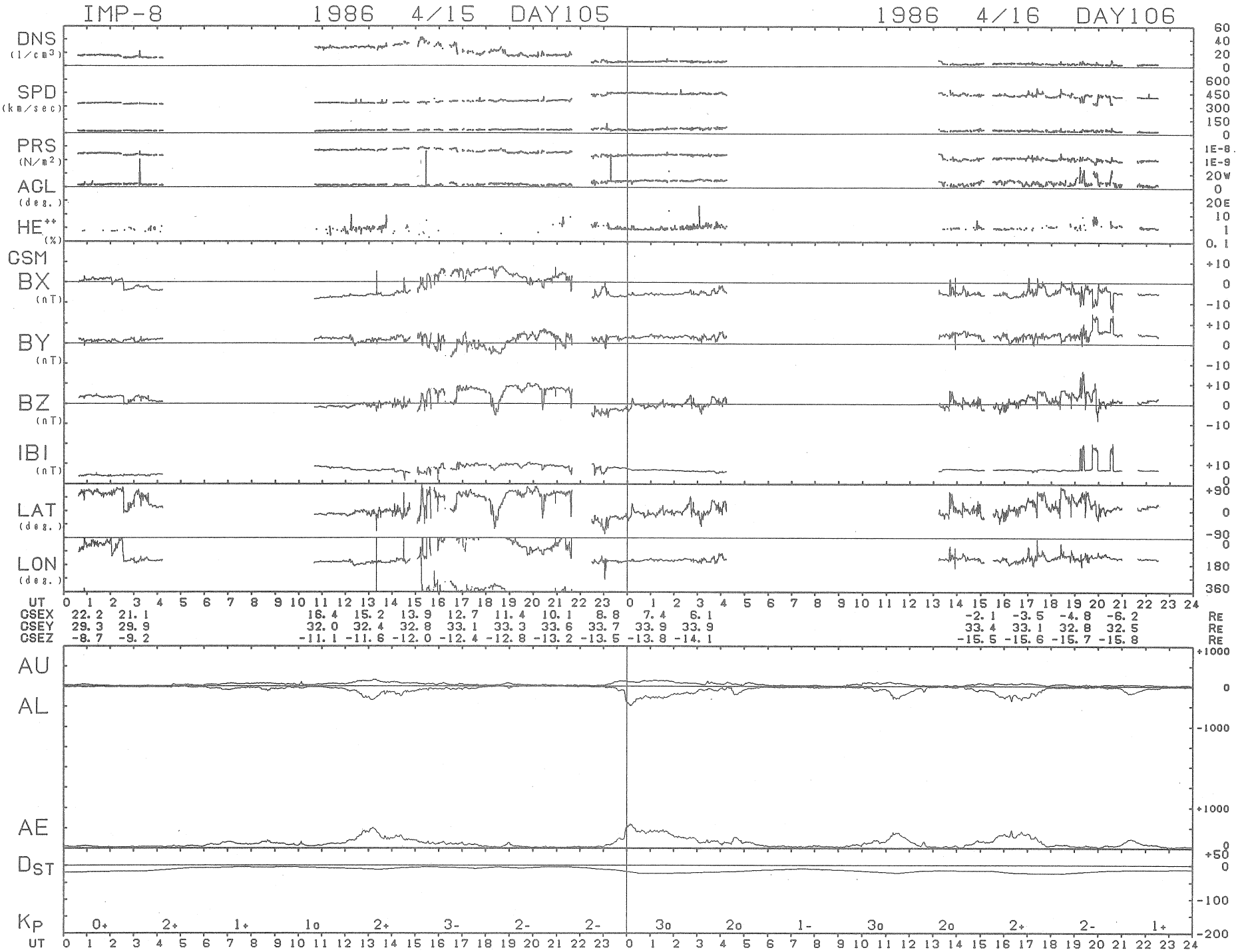

IMP-8
1986 4/ 5 DAY095
1986 4/ 6 DAY096
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -17.3 -18.4 -26.2 -26.9 -27.7 -28.3 -28.9 -29.5 -30.0 -31.7 RE
GSEY 26.5 25.6 16.8 15.5 14.2 12.9 11.6 10.2 8.8 -2.6 RE
GSEZ -15.7 -15.7 -14.2 -13.8 -13.5 -13.1 -12.7 -12.3 -11.8 -7.4 RE
AU
AL
AE
DST
KP
1- 3o 2o 2o 1o 2+ 3- 3+ 1- 2- 2- 0+ 1- 1- 1o 2o
UT

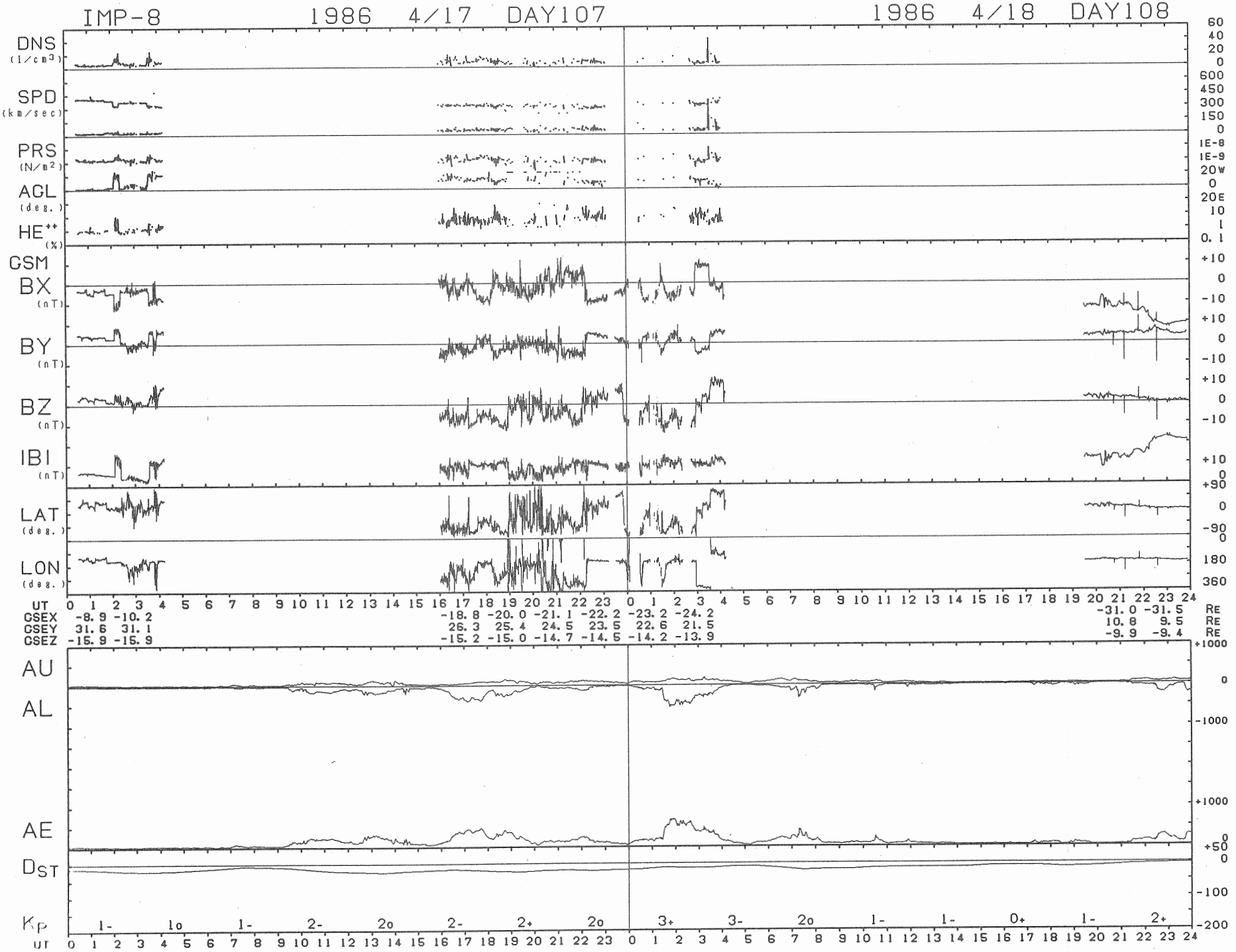

IMP-8 1986 4/ 7 DAY097 1986 4/ 8 DAY098
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -31.6 -31.5 -31.0 -30.6 -26.2 -25.4 -24.4 -23.5 -22.4 -21.3 -20.2 -19.0 -15.2 RE
GSEY -4.1 -5.5 -8.3 -9.7 -18.6 -19.7 -20.8 -21.8 -22.8 -23.7 -24.6 -25.4 -27.6 RE
GSEZ -6.7 -6.0 -4.7 -4.0 1.1 1.8 2.6 3.3 4.0 4.7 5.4 6.1 8.0 RE
AU
AL
AE
DST
KP 2- 2- 1o 1+ 1o 1+ 1+ 1+ 1- 1+ 1+ 2+ 2o 0+ 1o 2o
UT

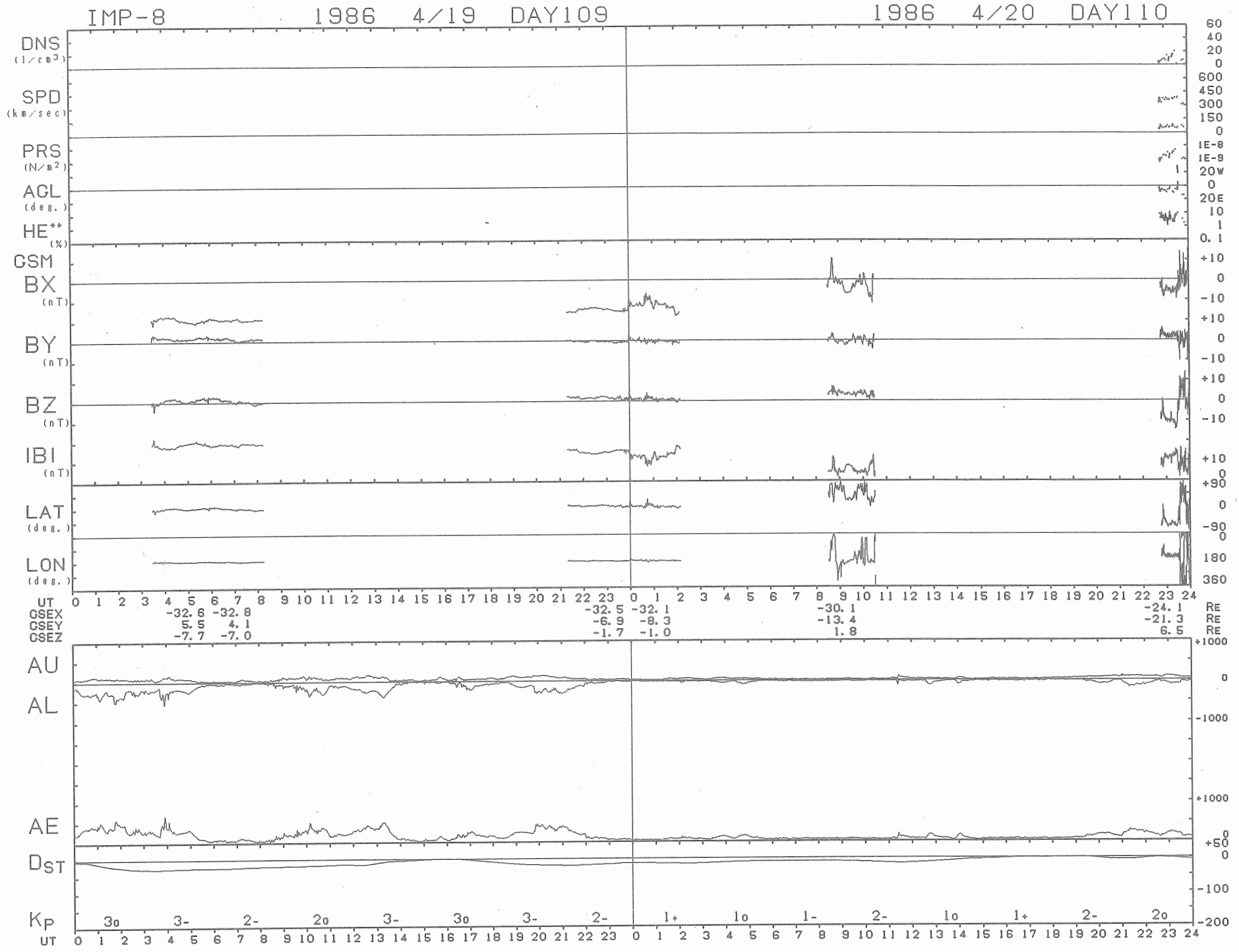

IMP-8 1986 4/ 9 DAY099
1986 4/10 DAY100
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -11.1 -9.7 -8.3 -6.8 -5.3 -3.9 -2.4 -0.9 8.0 9.5 16.4 17.7 19.0 20.2 21.4 RE
GSEY -29.1 -29.5 -29.9 -30.1 -30.4 -30.5 -30.6 -30.6 -29.5 -29.1 -26.3 -25.6 -24.9 -24.1 -23.3 RE
GSEZ 9.8 10.3 10.8 11.3 11.8 12.3 12.7 13.1 14.8 15.0 15.5 15.5 15.5 15.4 15.3 RE
AU
AL
AE
DST
KP 3- 3+ 3- 2- 3o 2+ 3o 3o 5- 4o 4o 3- 3- 4o 2- 0o
UT

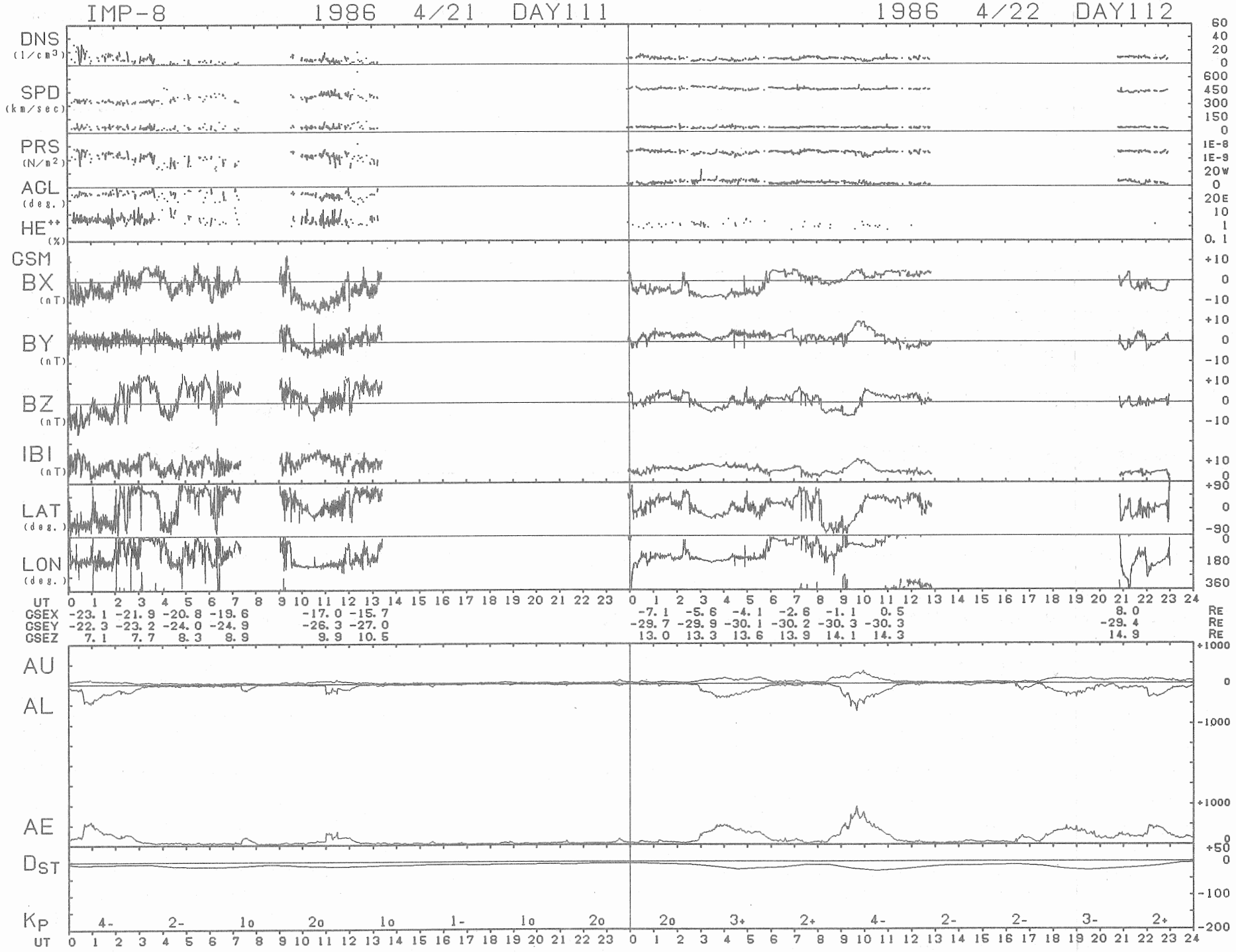

IMP-8
1986 4/11 DAY101
1986 4/12 DAY102
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 23.7 24.8 25.8 26.8 27.8 28.7 29.6 30.4 31.1 31.9 32.5 33.2 33.7 34.2 34.7 35.1 35.5 35.8 36.1 36.3 36.4 36.5 RE
GSEY -21.5 -20.5 -19.6 -18.6 -17.5 -16.5 -15.4 -14.3 -13.1 -12.0 -10.8 -9.6 -8.4 -7.2 -5.9 -4.7 -3.4 -2.2 -0.9 0.3 1.6 2.8 RE
GSEZ 15.1 14.9 14.7 14.5 14.2 14.0 13.7 13.4 13.0 12.7 12.3 11.9 11.4 11.0 10.5 10.1 9.6 9.1 8.5 8.0 7.5 6.9 RE
AU
AL
AE
DST
KP 1- 2+ 1+ 0+ 1- 2- 1o 3- 3+ 2- 3- 2+ 2- 2+ 2o 2+
UT

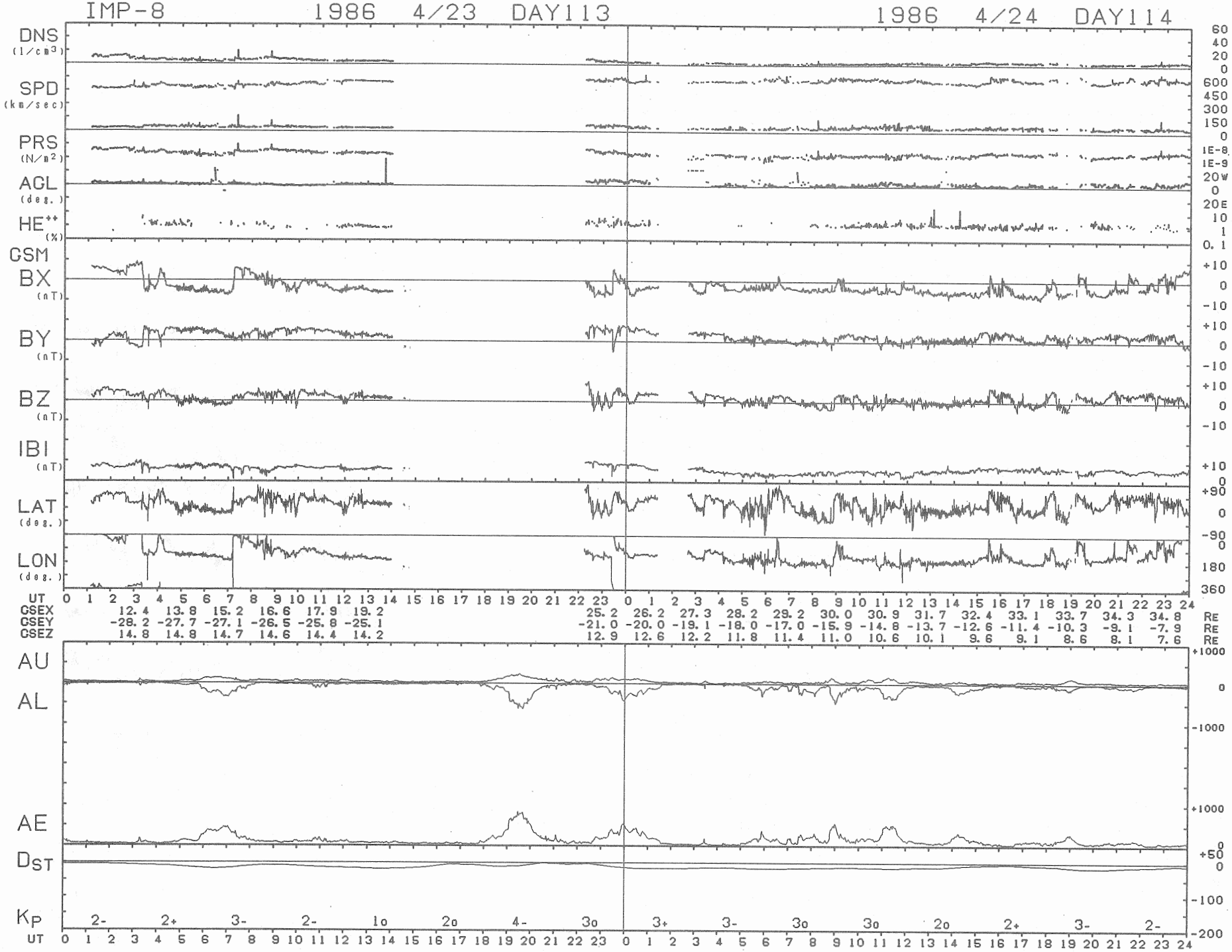

IMP-8
1986 4/13 DAY103
1986 4/14 DAY104
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 36.2 36.0 35.8 35.5 35.1 34.7 34.2 33.7 33.2 29.7 28.9 28.1 24.3 RE
GSEY 9.0 10.2 11.4 12.5 13.7 14.8 15.9 17.0 18.1 23.1 24.0 24.8 28.0 RE
GSEZ 3.9 3.3 2.7 2.1 1.5 0.8 0.2 -0.4 -1.0 -4.1 -4.7 -5.3 -7.6 RE
AU
AL
AE
DST
KP 2o 1- 1+ 1+ 1+ 1- 2o 2- 1o 1+ 1o 1o 1o 1+ 1+ 1+
UT

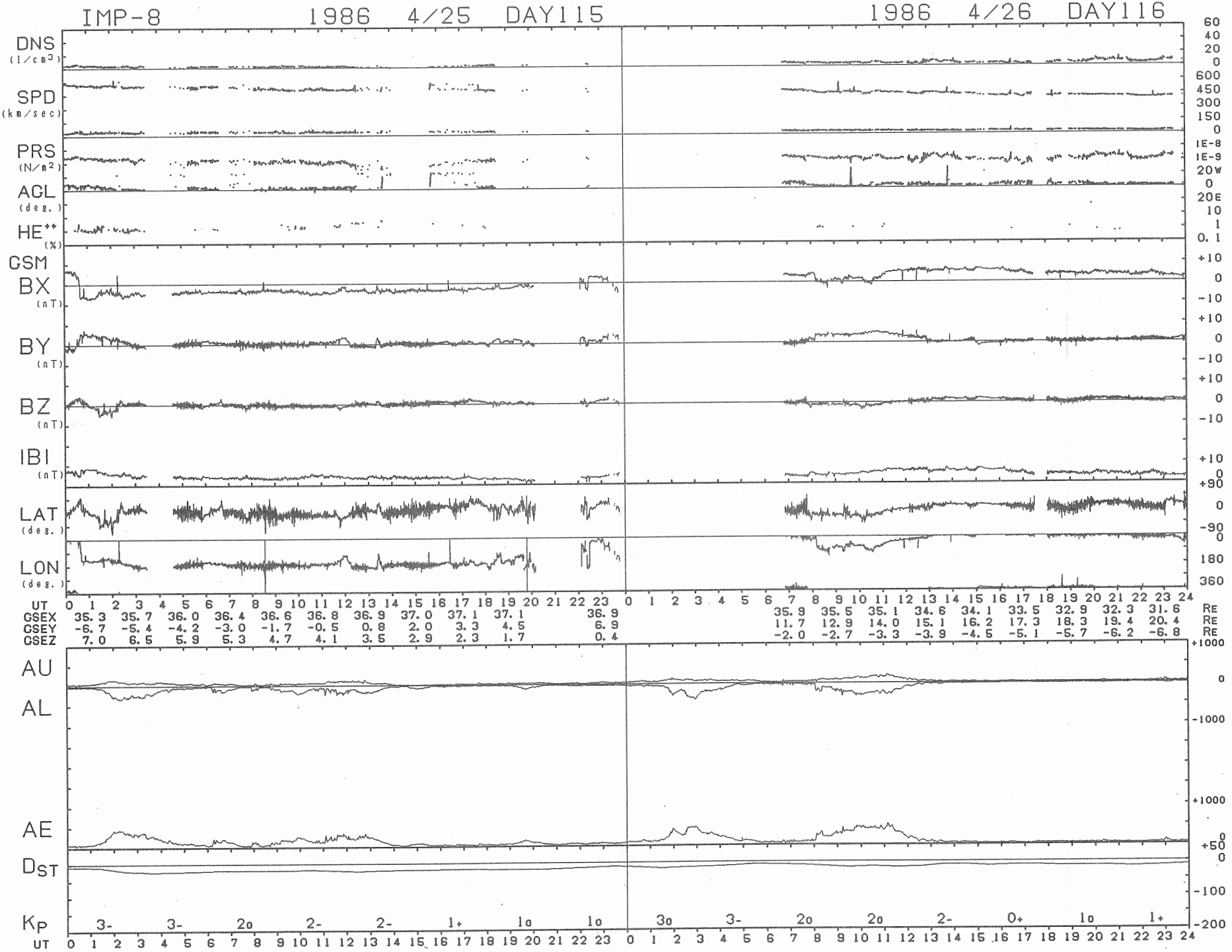

IMP-8 1986 4/15 DAY105
1986 4/16 DAY106
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 22.2 21.1 16.4 15.2 13.9 12.7 11.4 10.1 8.8 7.4 6.1 -2.1 -3.5 -4.8 -6.2 RE
GSEY 29.3 29.9 32.0 32.4 32.8 33.1 33.3 33.6 33.7 33.9 33.9 33.4 33.1 32.8 32.5 RE
GSEZ -8.7 -9.2 -11.1 -11.6 -12.0 -12.4 -12.8 -13.2 -13.5 -13.8 -14.1 -15.5 -15.6 -15.7 -15.8 RE
AU
AL
AE
DST
KP 0+ 2+ 1+ 1o 2+ 3- 2- 2- 3o 2o 1- 3o 2o 2+ 2- 1+
UT

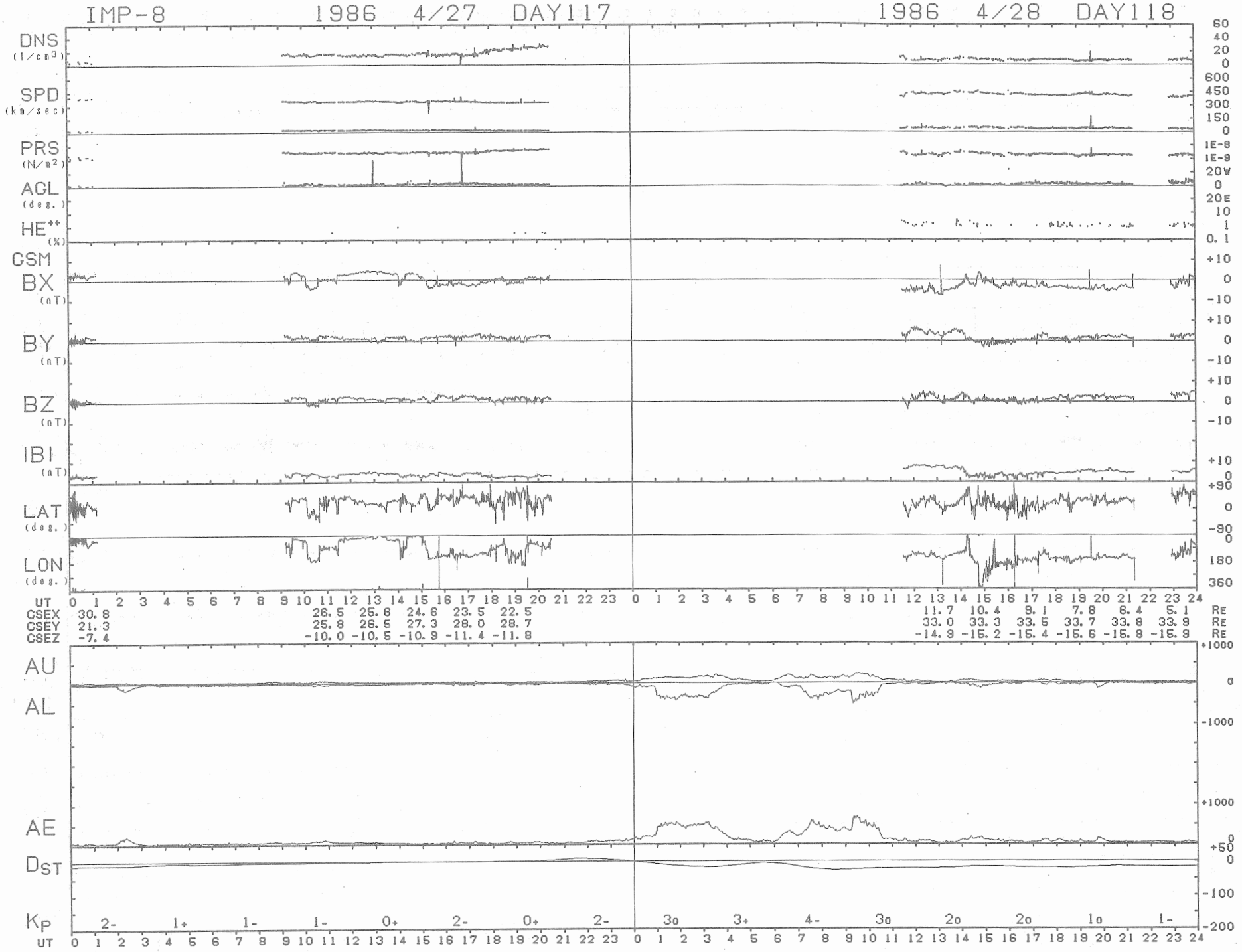

IMP-8
1986 4/17 DAY107
1986 4/18 DAY108
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -8.9 -10.2 -18.8 -20.0 -21.1 -22.2 -23.2 -24.2 -31.0 -31.5 RE
GSEY 31.6 31.1 26.3 25.4 24.5 23.5 22.6 21.5 10.8 9.5 RE
GSEZ -15.9 -15.9 -15.2 -15.0 -14.7 -14.5 -14.2 -13.9 -9.9 -9.4 RE
AU
AL
AE
DST
Kp
1- 1o 1- 2- 2o 2- 2+ 2o 3+ 3- 2o 1- 1- 0+ 1- 2+
UT

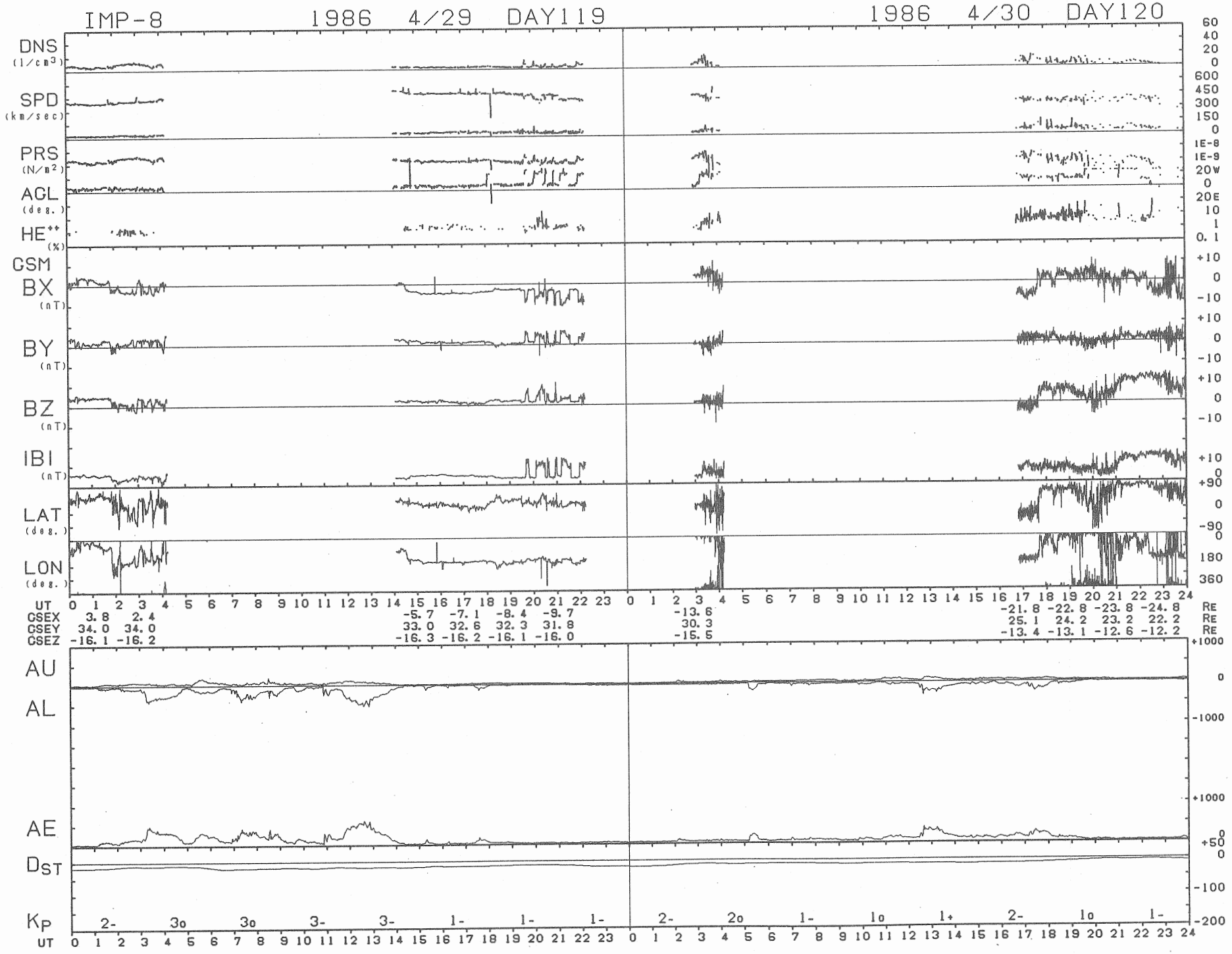

IMP-8 1986 4/19 DAY109
1986 4/20 DAY110
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -32.6 -32.8 -32.5 -32.1 -30.1 -24.1 RE
GSEY 5.5 4.1 -6.9 -8.3 -13.4 -21.3 RE
GSEZ -7.7 -7.0 -1.7 -1.0 1.8 6.5 RE
AU
AL
AE
DST
KP 3o 3- 2- 2o 3- 3o 3- 2- 1+ 1o 1- 2- 1o 1+ 2- 2o
UT

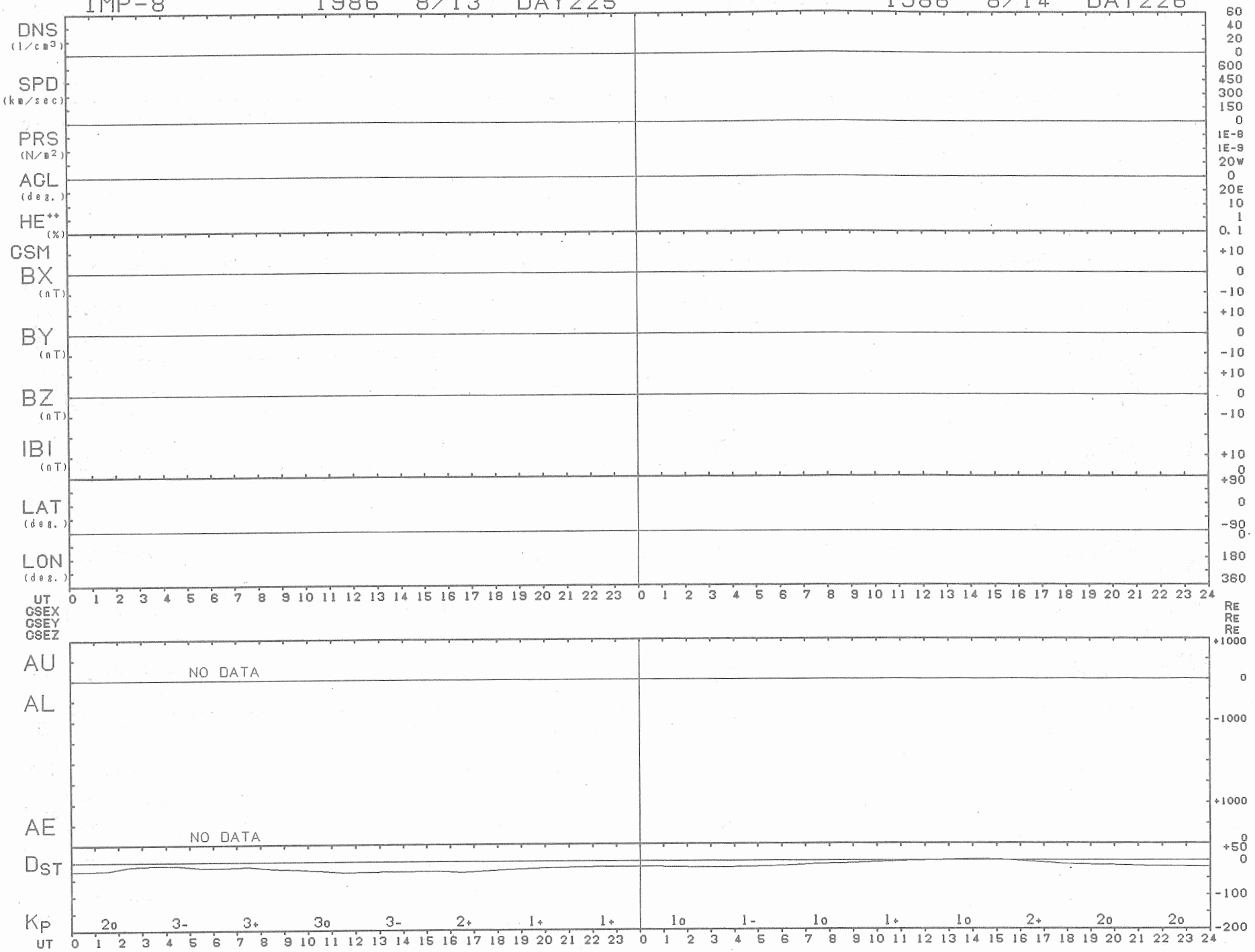

IMP-8 1986 4/21 DAY111
1986 4/22 DAY112
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX -23.1 -21.9 -20.8 -19.6 -17.0 -15.7 -7.1 -5.6 -4.1 -2.6 -1.1 0.5 8.0 RE
GSEY -22.3 -23.2 -24.0 -24.9 -26.3 -27.0 -29.7 -29.9 -30.1 -30.2 -30.3 -30.3 -29.4 RE
GSEZ 7.1 7.7 8.3 8.9 9.9 10.5 13.0 13.3 13.6 13.9 14.1 14.3 14.9 RE
AU
AL
AE
DST
KP
4- 2- 1o 2o 1o 1- 1o 2o 2o 3+ 2+ 4- 2- 2- 3- 2+
UT


IMP-8 1986 4/23 DAY113
1986 4/24 DAY114
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 12.4 13.8 15.2 16.6 17.9 19.2 25.2 26.2 27.3 28.2 29.2 30.0 30.9 31.7 32.4 33.1 33.7 34.3 34.8 RE
GSEY -28.2 -27.7 -27.1 -26.5 -25.8 -25.1 -21.0 -20.0 -19.1 -18.0 -17.0 -15.9 -14.8 -13.7 -12.6 -11.4 -10.3 -9.1 -7.9 RE
GSEZ 14.8 14.8 14.7 14.6 14.4 14.2 12.9 12.6 12.2 11.8 11.4 11.0 10.6 10.1 9.6 9.1 8.6 8.1 7.6 RE
AU
AL
AE
DST
KP 2- 2+ 3- 2- 1o 2o 4- 3o 3+ 3- 3o 3o 2o 2+ 3- 2-
UT


IMP-8 1986 4/25 DAY115
1986 4/26 DAY116
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 35.3 35.7 36.0 36.4 36.6 36.8 36.9 37.0 37.1 37.1 36.9
GSEY -6.7 -5.4 -4.2 -3.0 -1.7 -0.5 0.8 2.0 3.3 4.5 6.9
GSEZ 7.0 6.5 5.9 5.3 4.7 4.1 3.5 2.9 2.3 1.7 0.4
35.9 35.5 35.1 34.6 34.1 33.5 32.9 32.3 31.6 RE
11.7 12.9 14.0 15.1 16.2 17.3 18.3 19.4 20.4 RE
-2.0 -2.7 -3.3 -3.9 -4.5 -5.1 -5.7 -6.2 -6.8 RE
AU
AL
AE
DST
KP 3- 3- 2o 2- 2- 1+ 1o 1o 3o 3- 2o 2o 2- 0+ 1o 1+
UT


IMP-8
1986 4/27 DAY117
1986 4/28 DAY118
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
ACL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 30.8 26.5 25.6 24.6 23.5 22.5 11.7 10.4 9.1 7.8 6.4 5.1 RE
GSEY 21.3 25.8 26.5 27.3 28.0 28.7 33.0 33.3 33.5 33.7 33.8 33.9 RE
GSEZ -7.4 -10.0 -10.5 -10.9 -11.4 -11.8 -14.9 -15.2 -15.4 -15.6 -15.8 -15.9 RE
AU
AL
AE
DST
KP
2- 1+ 1- 1- 0+ 2- 0+ 2- 3o 3+ 4- 3o 2o 2o 1o 1-
UT


IMP-8
1986 4/29 DAY119
1986 4/30 DAY120
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX 3.8 2.4 -5.7 -7.1 -8.4 -9.7 -13.6 -21.8 -22.8 -23.8 -24.8 RE
GSEY 34.0 34.0 33.0 32.6 32.3 31.8 30.3 25.1 24.2 23.2 22.2 RE
GSEZ -16.1 -16.2 -16.3 -16.2 -16.1 -16.0 -15.5 -13.4 -13.1 -12.6 -12.2 RE
AU
AL
AE
Dst
Kp
2- 3o 3o 3- 3- 1- 1- 1- 2- 2o 1- 1o 1+ 2- 1o 1-
UT


IMP-8
1986 8/13 DAY225
1986 8/14 DAY226
DNS (1/cm3)
SPD (km/sec)
PRS (N/m2)
AGL (deg.)
HE++ (%)
GSM
BX (nT)
BY (nT)
BZ (nT)
IBI (nT)
LAT (deg.)
LON (deg.)
UT
GSEX
GSEY
GSEZ
AU
AL
AE
Dst
Kp
NO DATA
NO DATA
2o 3- 3+ 3o 3- 2+ 1+ 1+ 1o 1- 1o 1+ 1o 2+ 2o 2o