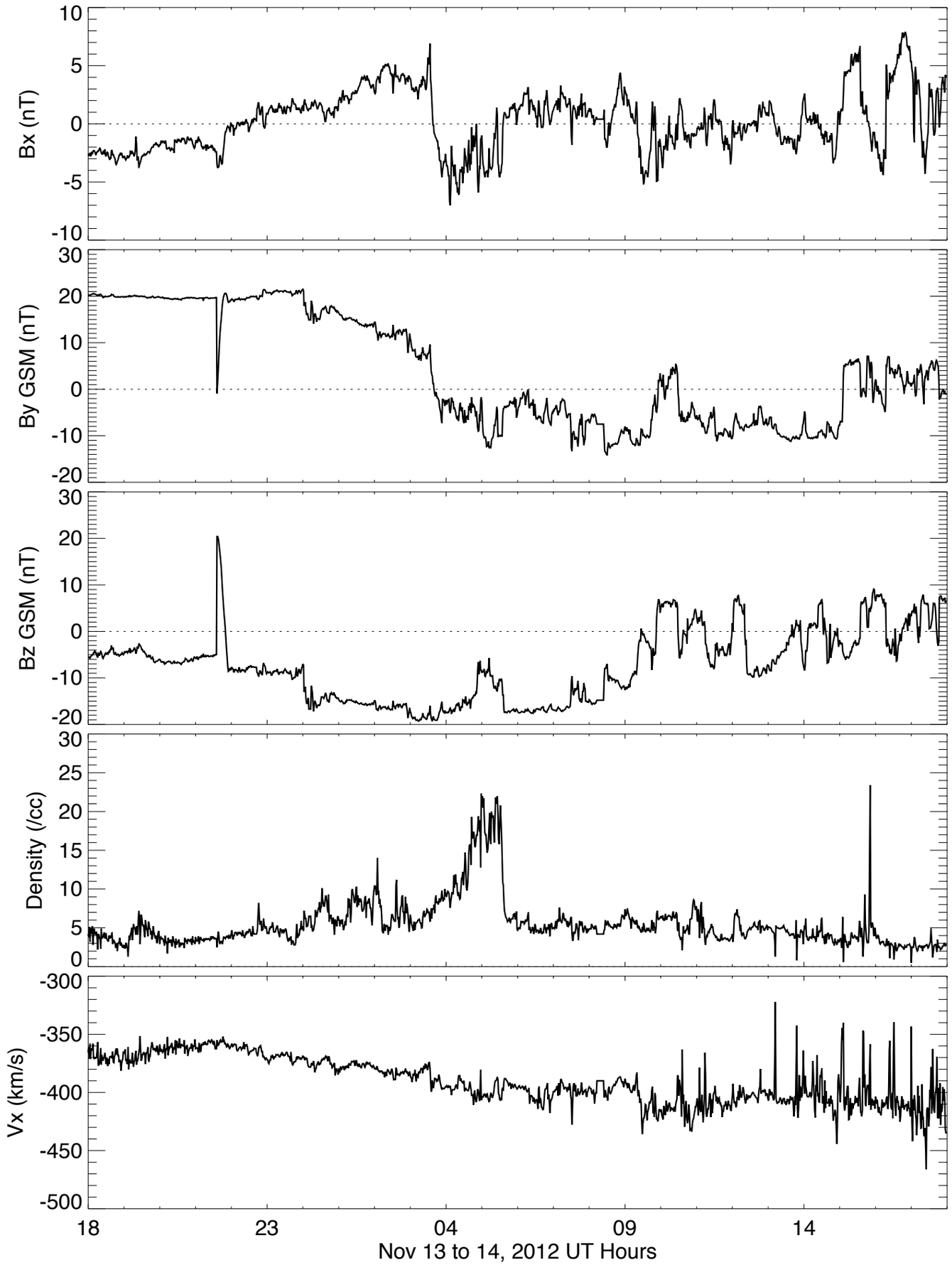
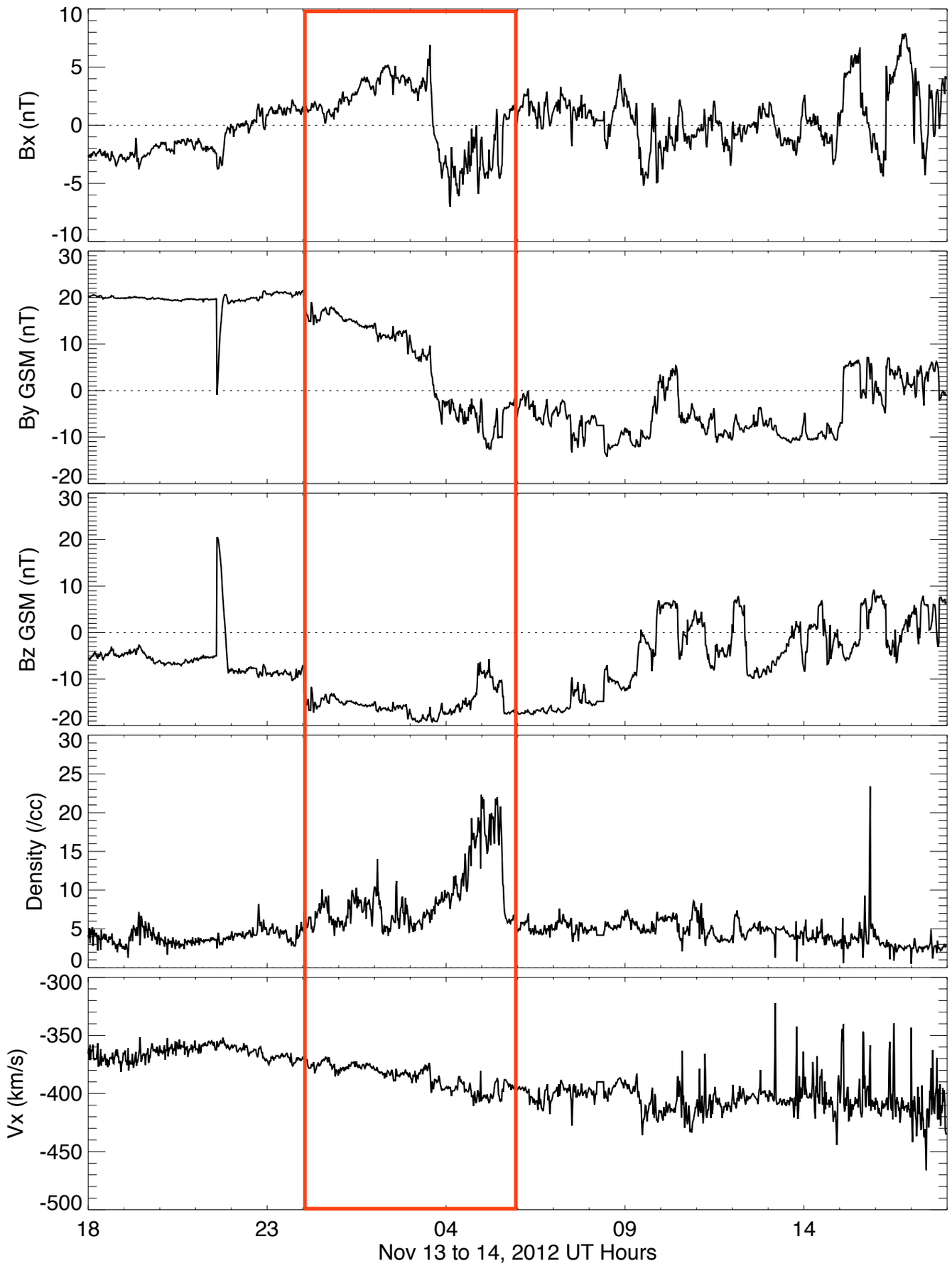
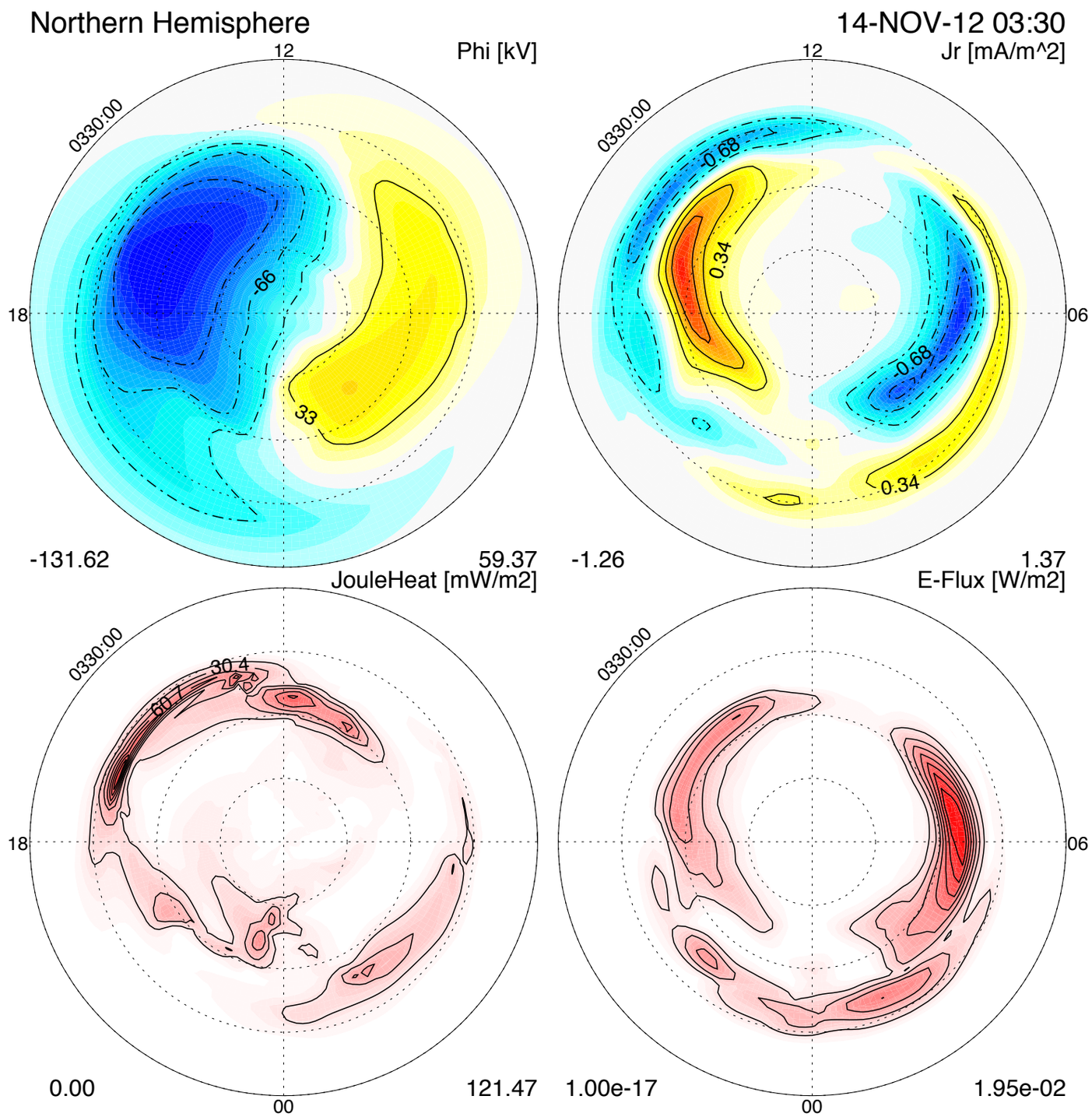
Summary of Simulations for November 14th 2012 Event

A. Glocer, M. Fok, N. Buzulukova


Bx (nT)
10
5
0
-5
-10
By GSM (nT)
30
20
10
0
-10
-20
Bz GSM (nT)
30
20
10
0
-10
-20
Density (/cc)
30
25
20
15
10
5
0
Vx (km/s)
-300
-350
-400
-450
-500
18
23
04
09
14
Nov 13 to 14, 2012 UT Hours


Bx (nT)
10
5
0
-5
-10
By GSM (nT)
30
20
10
0
-10
-20
Bz GSM (nT)
30
20
10
0
-10
-20
Density (/cc)
30
25
20
15
10
5
0
Vx (km/s)
-300
-350
-400
-450
-500
18
23
04
09
14
Nov 13 to 14, 2012 UT Hours



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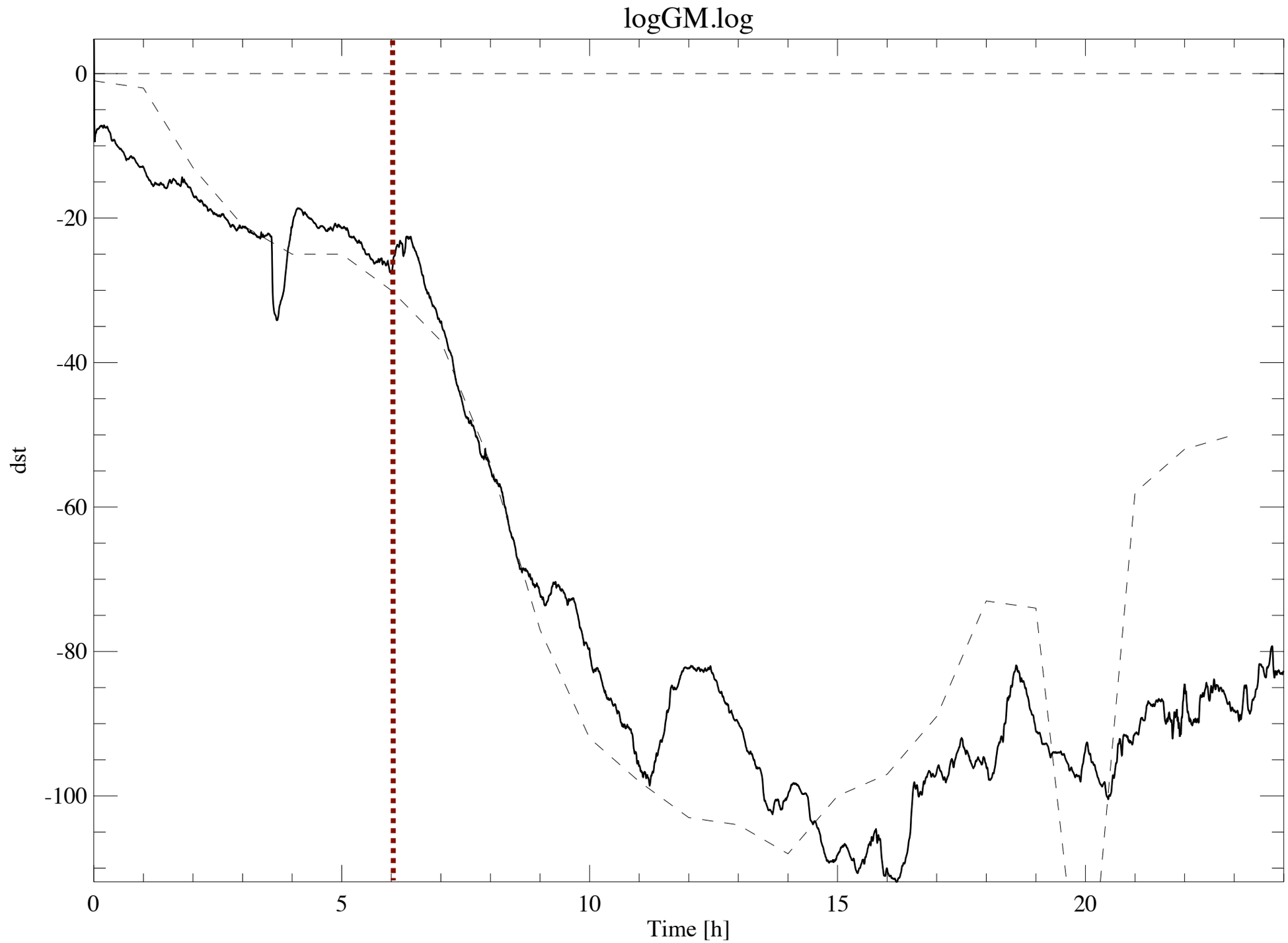
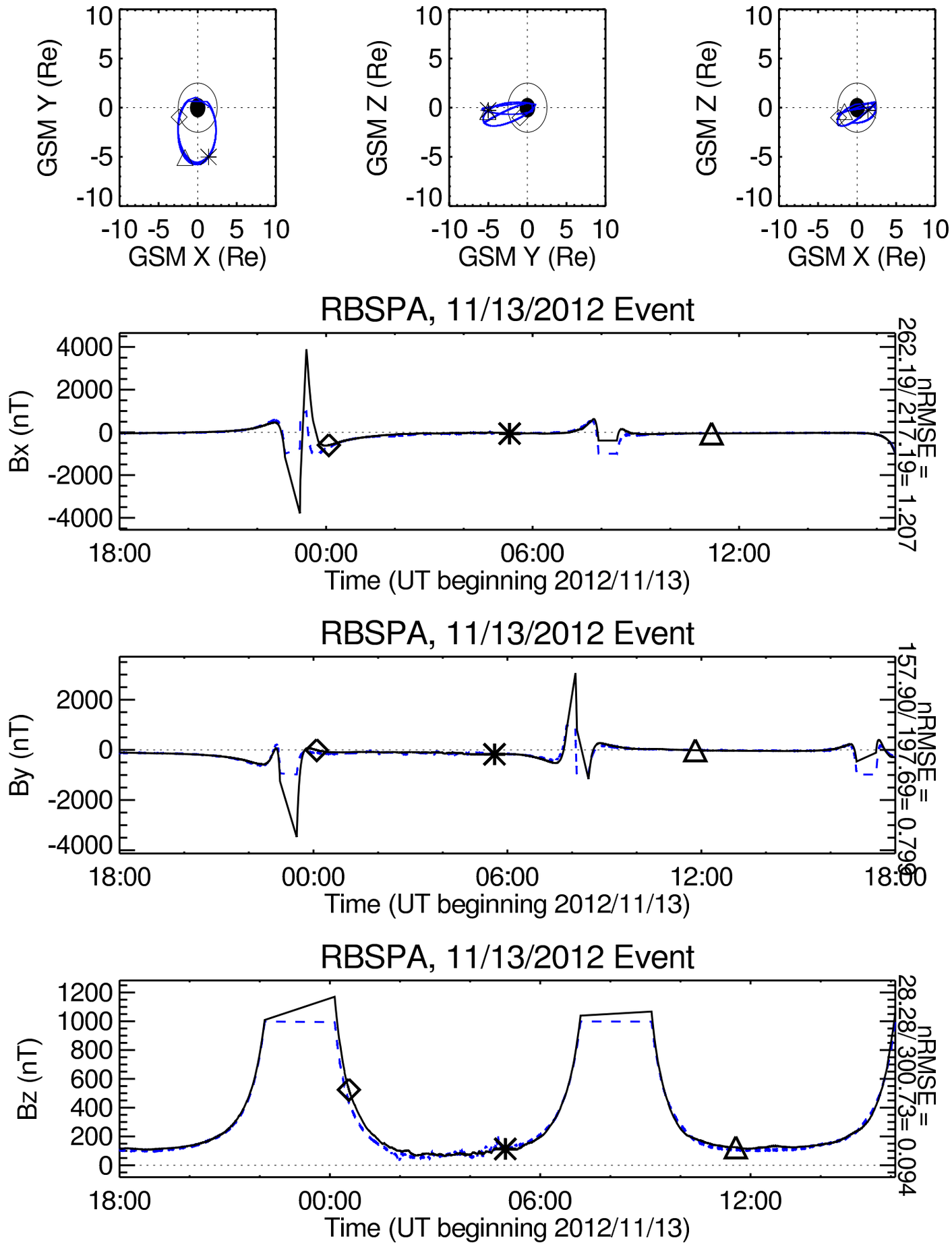
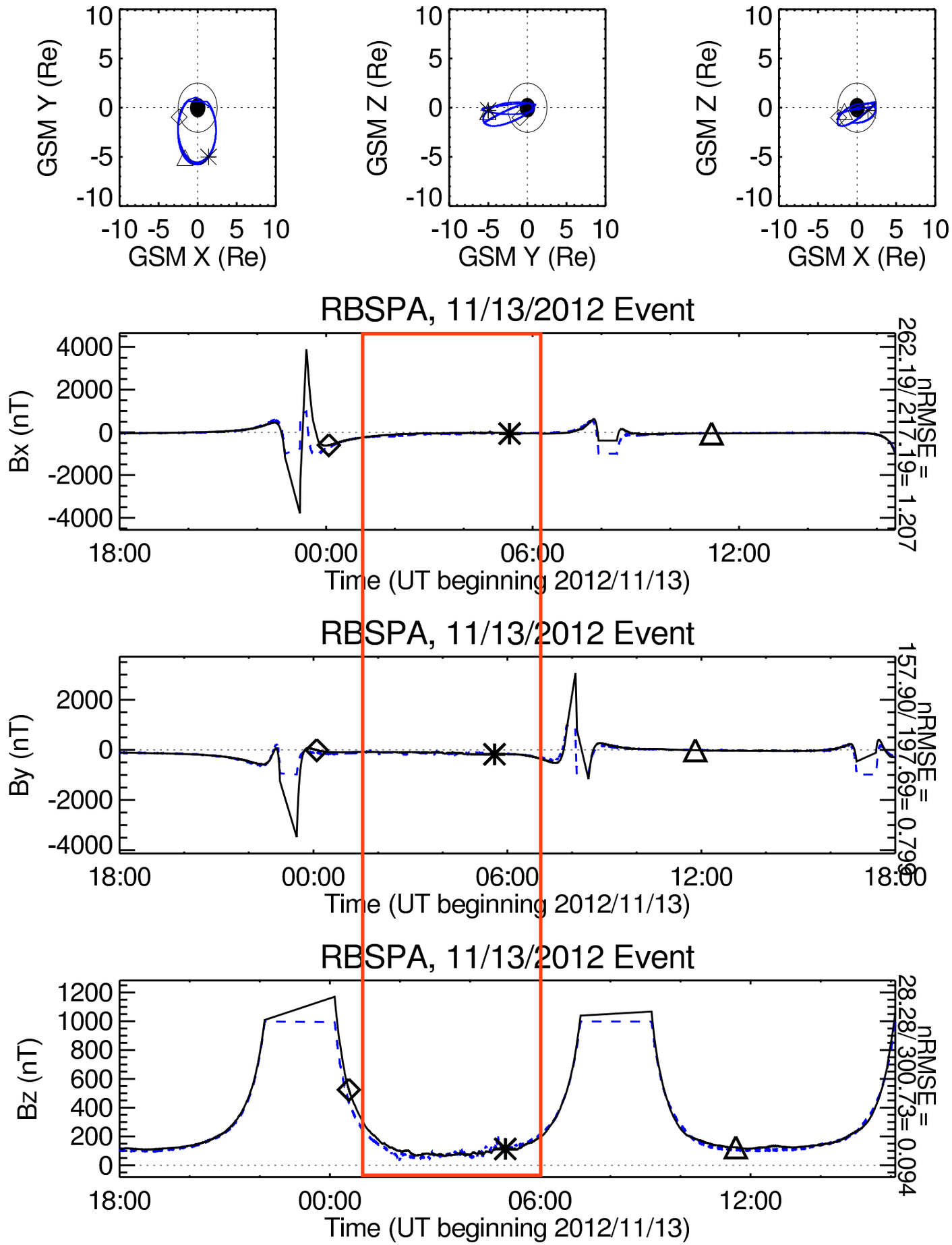
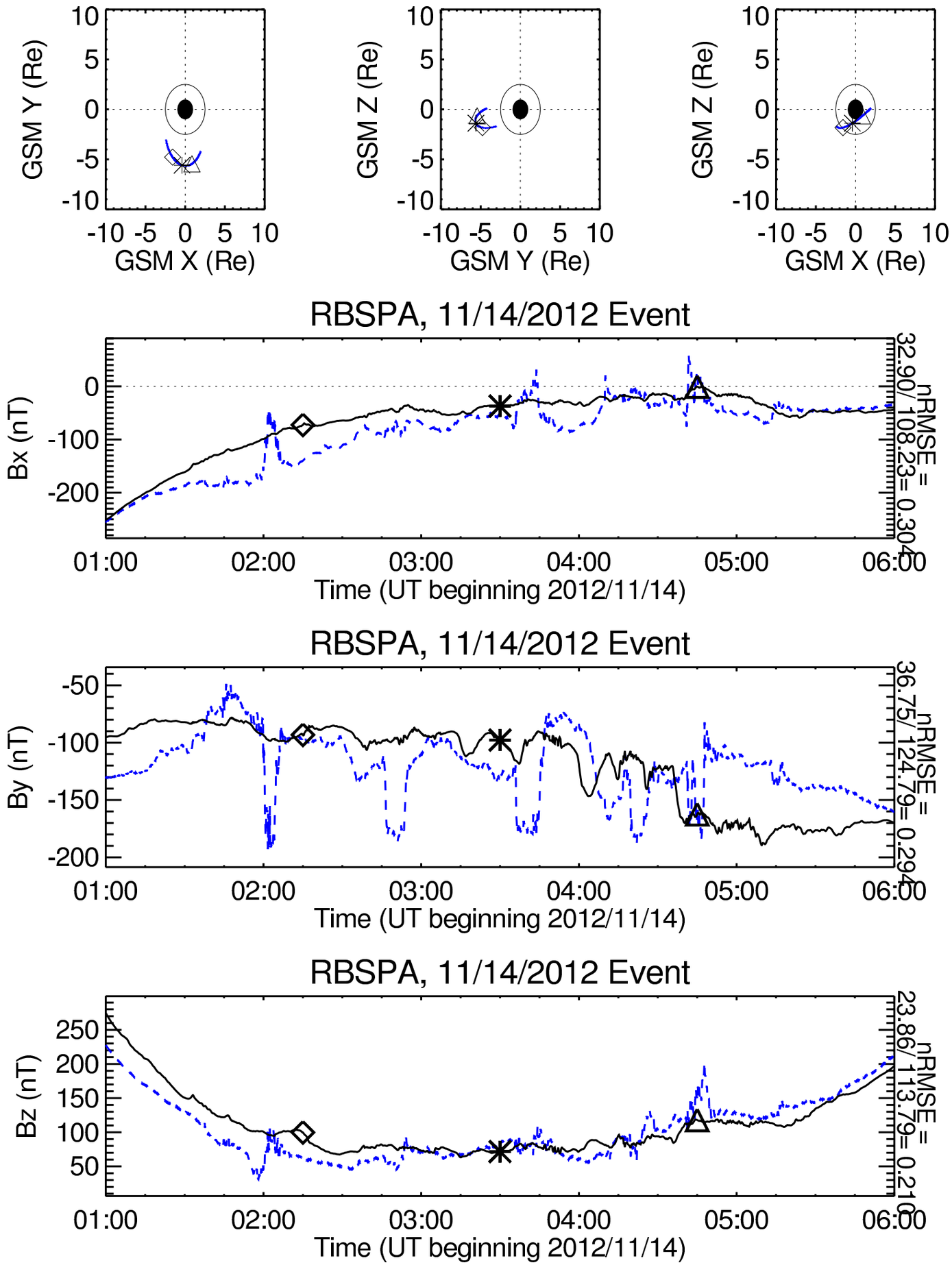
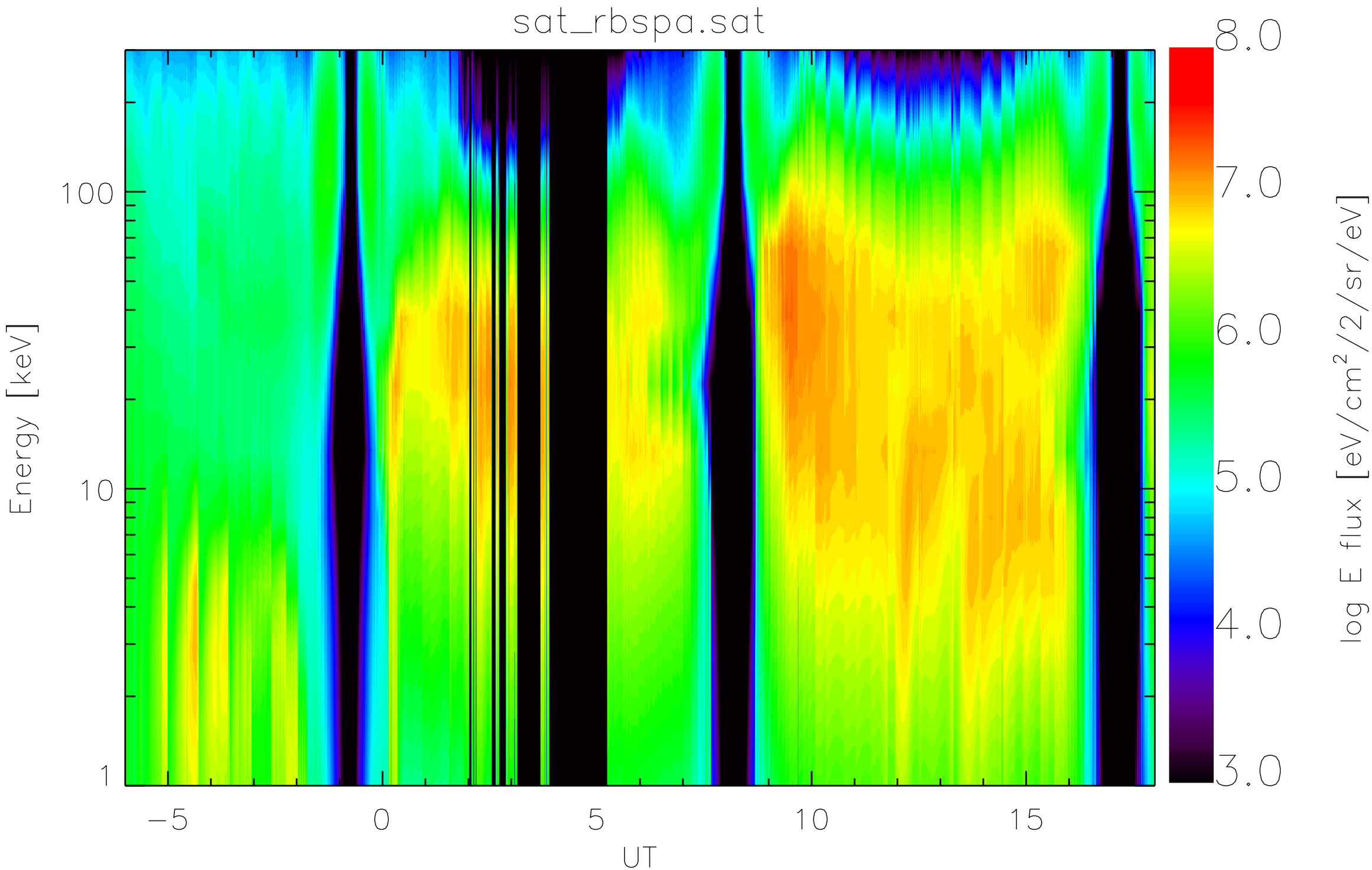
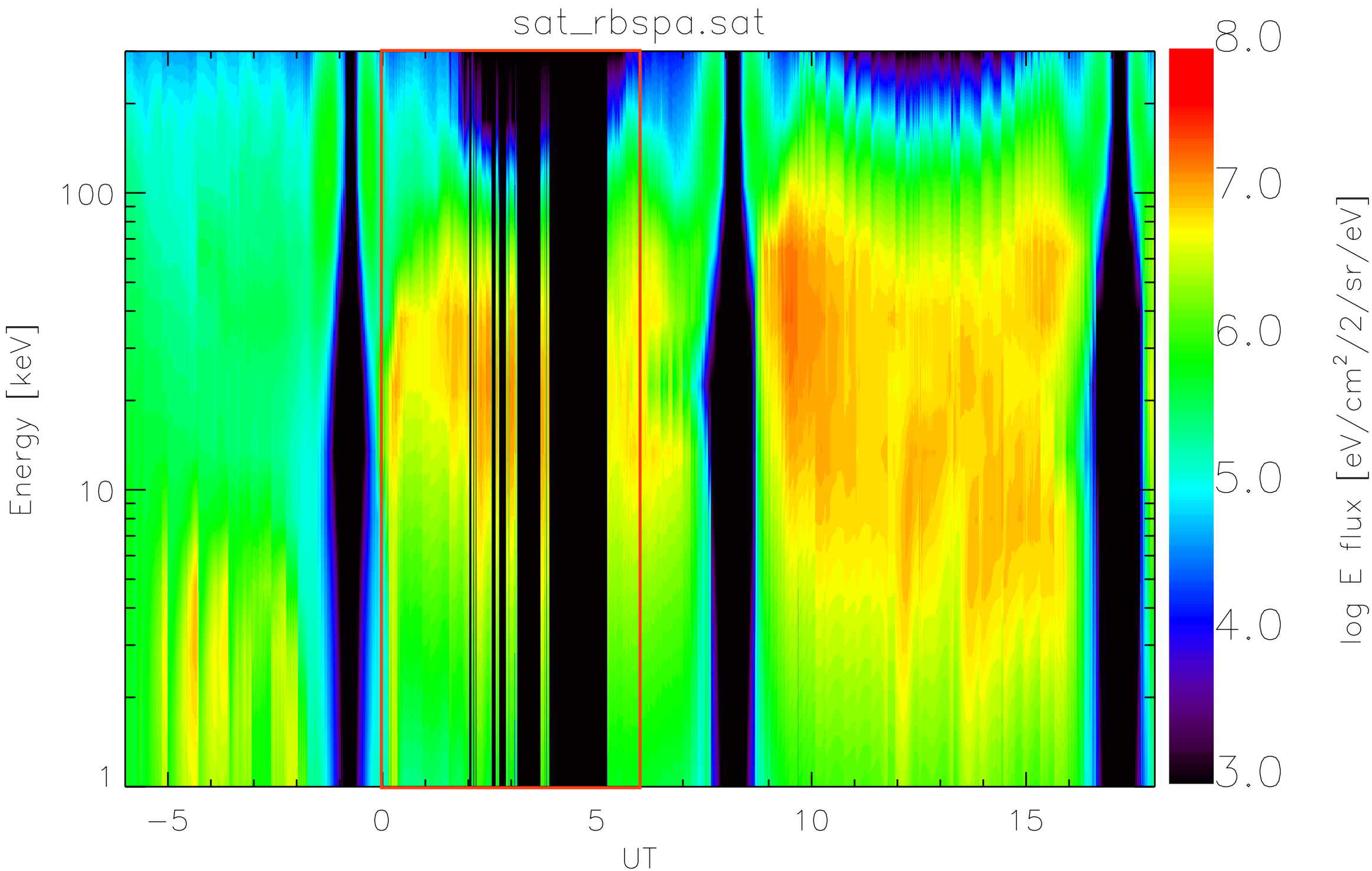

logGM.log
0
-20
-40
-60
-80
-100
dst
0
5
10
15
20
Time [h]

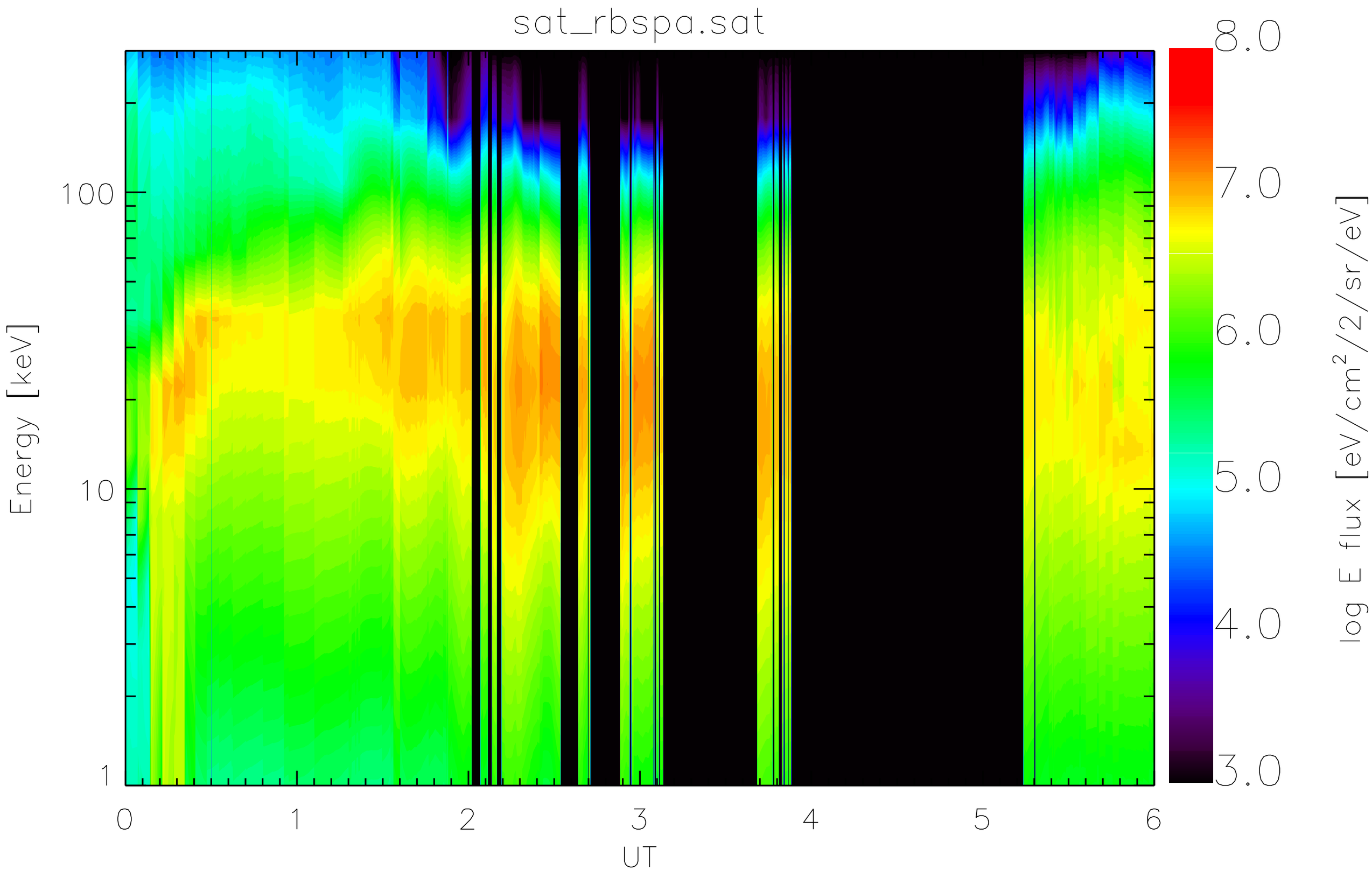

GSM Y (Re)
GSM X (Re)
GSM Z (Re)
GSM Y (Re)
GSM Z (Re)
GSM X (Re)
RBSPA, 11/13/2012 Event
Bx (nT)
nRMSE = 262.19/ 217.19= 1.207
Time (UT beginning 2012/11/13)
RBSPA, 11/13/2012 Event
By (nT)
nRMSE = 157.90/ 197.69= 0.799
Time (UT beginning 2012/11/13)
RBSPA, 11/13/2012 Event
Bz (nT)
nRMSE = 28.28/ 300.73= 0.094
Time (UT beginning 2012/11/13)

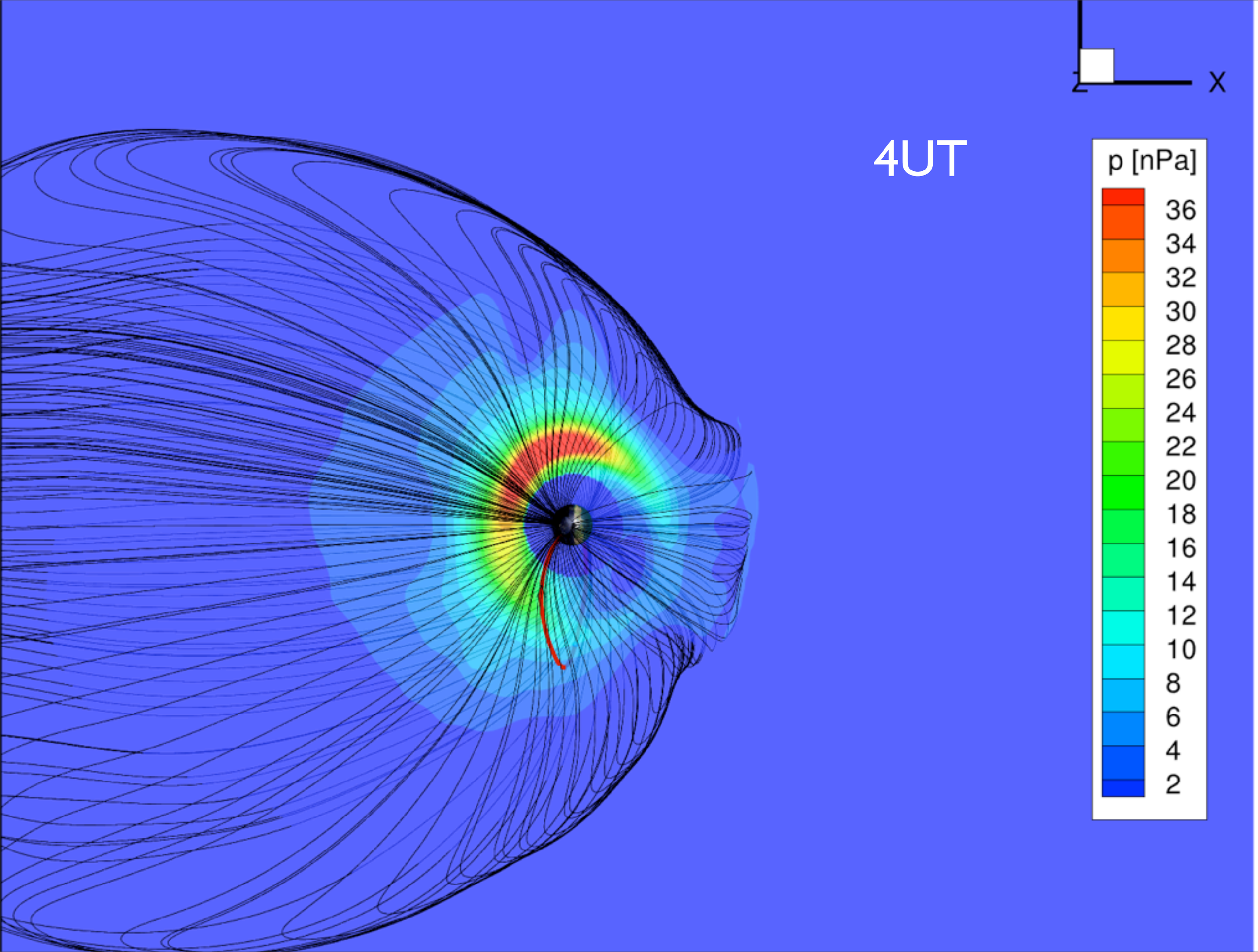

GSM Y (Re)
GSM X (Re)
GSM Z (Re)
GSM Y (Re)
GSM Z (Re)
GSM X (Re)
RBSPA, 11/13/2012 Event
Bx (nT)
Time (UT beginning 2012/11/13)
nRMSE = 262.19/ 217.19= 1.207
RBSPA, 11/13/2012 Event
By (nT)
Time (UT beginning 2012/11/13)
nRMSE = 157.90/ 197.69= 0.796
RBSPA, 11/13/2012 Event
Bz (nT)
Time (UT beginning 2012/11/13)
nRMSE = 28.28/ 300.73= 0.094

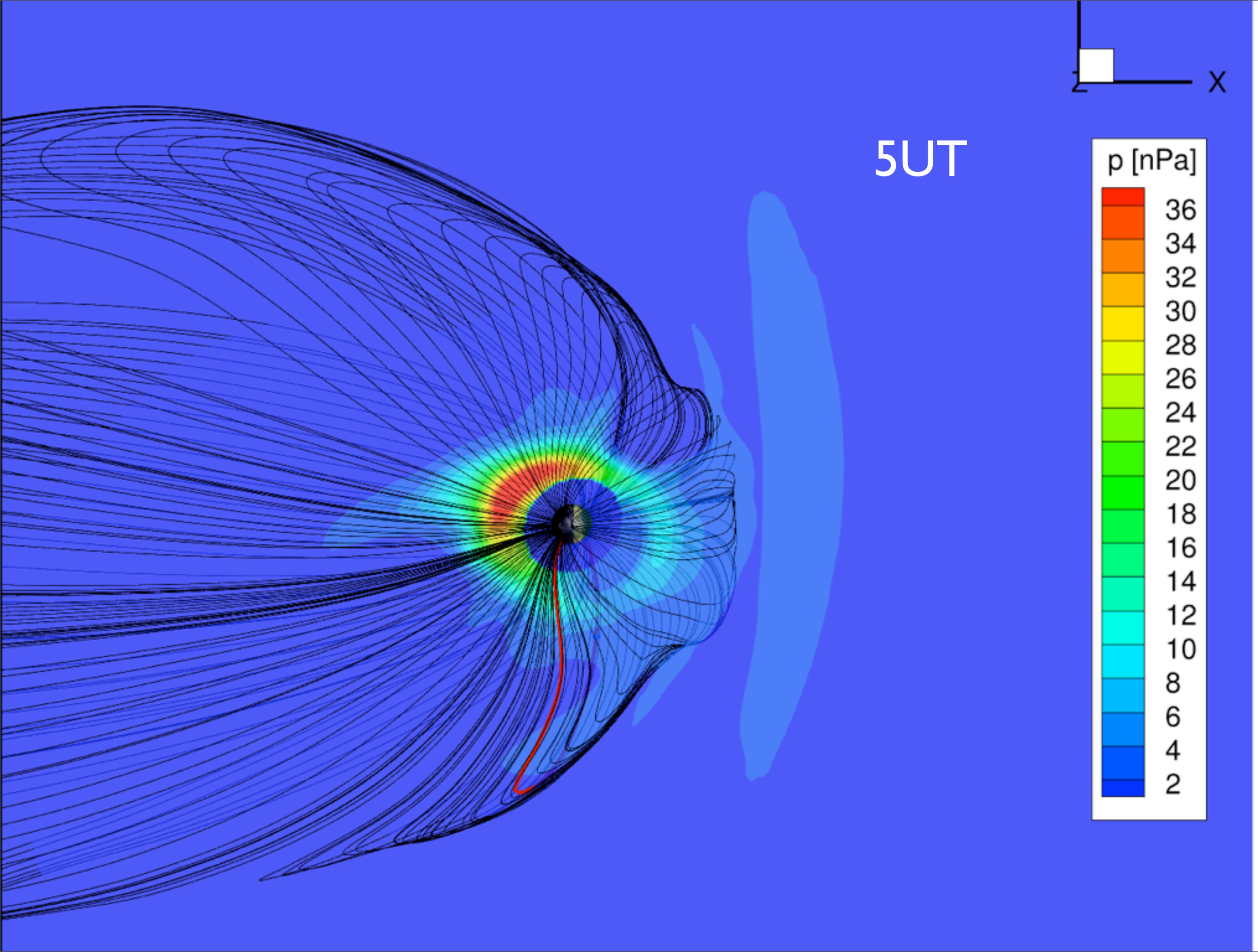

GSM Y (Re)
GSM X (Re)
GSM Z (Re)
GSM Y (Re)
GSM Z (Re)
GSM X (Re)
RBSPA, 11/14/2012 Event
Bx (nT)
nRMSE = 32.90/ 108.23= 0.304
Time (UT beginning 2012/11/14)
RBSPA, 11/14/2012 Event
By (nT)
nRMSE = 36.75/ 124.79= 0.294
Time (UT beginning 2012/11/14)
RBSPA, 11/14/2012 Event
Bz (nT)
nRMSE = 23.86/ 113.79= 0.210
Time (UT beginning 2012/11/14)


sat_rbspa.sat
Energy [keV]
100
10
1
−5
0
5
10
15
UT
8.0
7.0
6.0
5.0
4.0
3.0
log E flux [eV/cm²/2/sr/eV]


sat_rbspa.sat
Energy [keV]
100
10
1
−5
0
5
10
15
UT
8.0
7.0
6.0
5.0
4.0
3.0
log E flux [eV/cm²/2/sr/eV]


sat_rbspa.sat
Energy [keV]
100
10
1
0
1
2
3
4
5
6
UT
8.0
7.0
6.0
5.0
4.0
3.0
log E flux [eV/cm^2/2/sr/eV]


4UT
p [nPa]
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
X


5UT
p [nPa]
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
X

UT	R at Min(B)
0	2.6
1	4.27
2	5.4
3	6.05
4	6.75
5	14