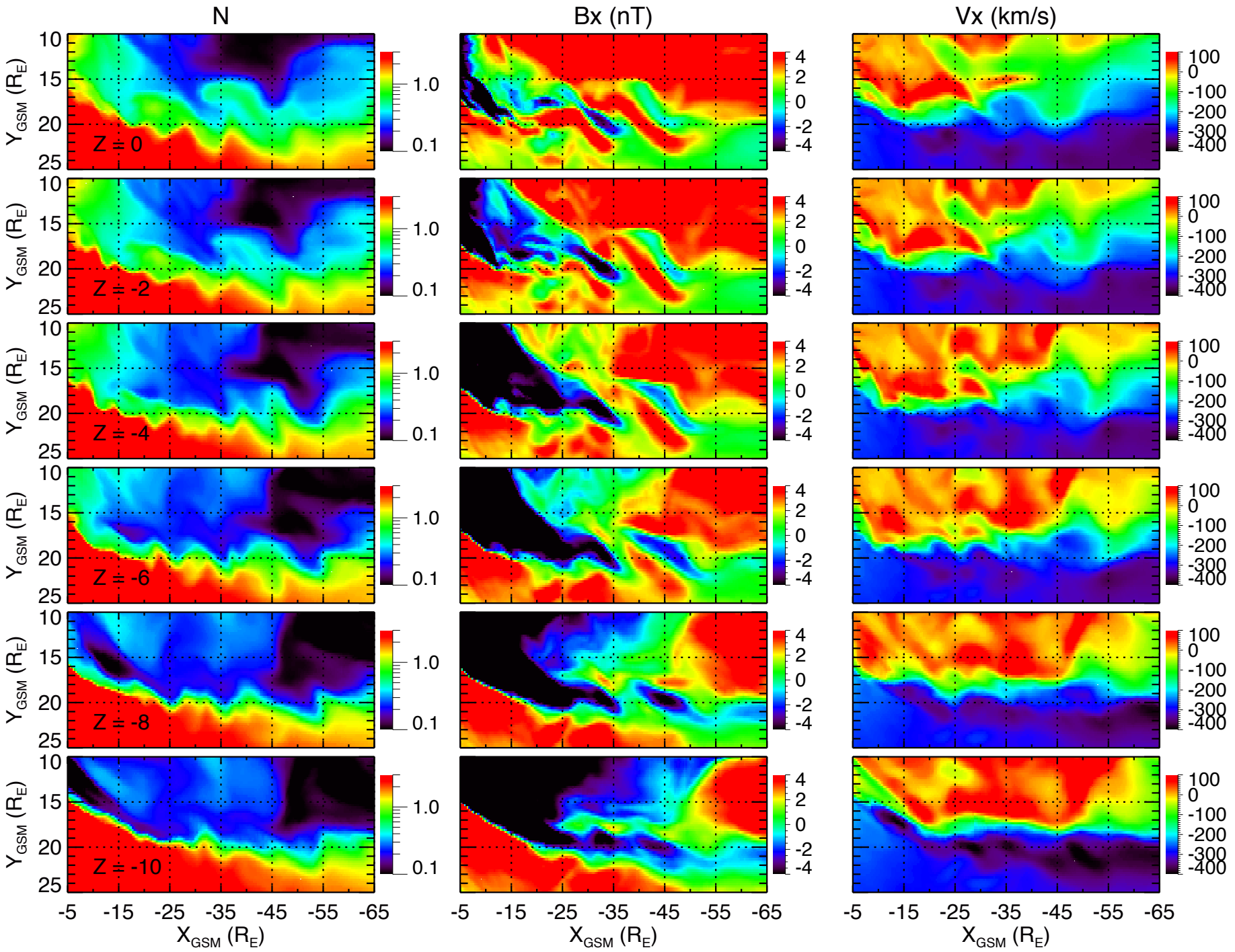
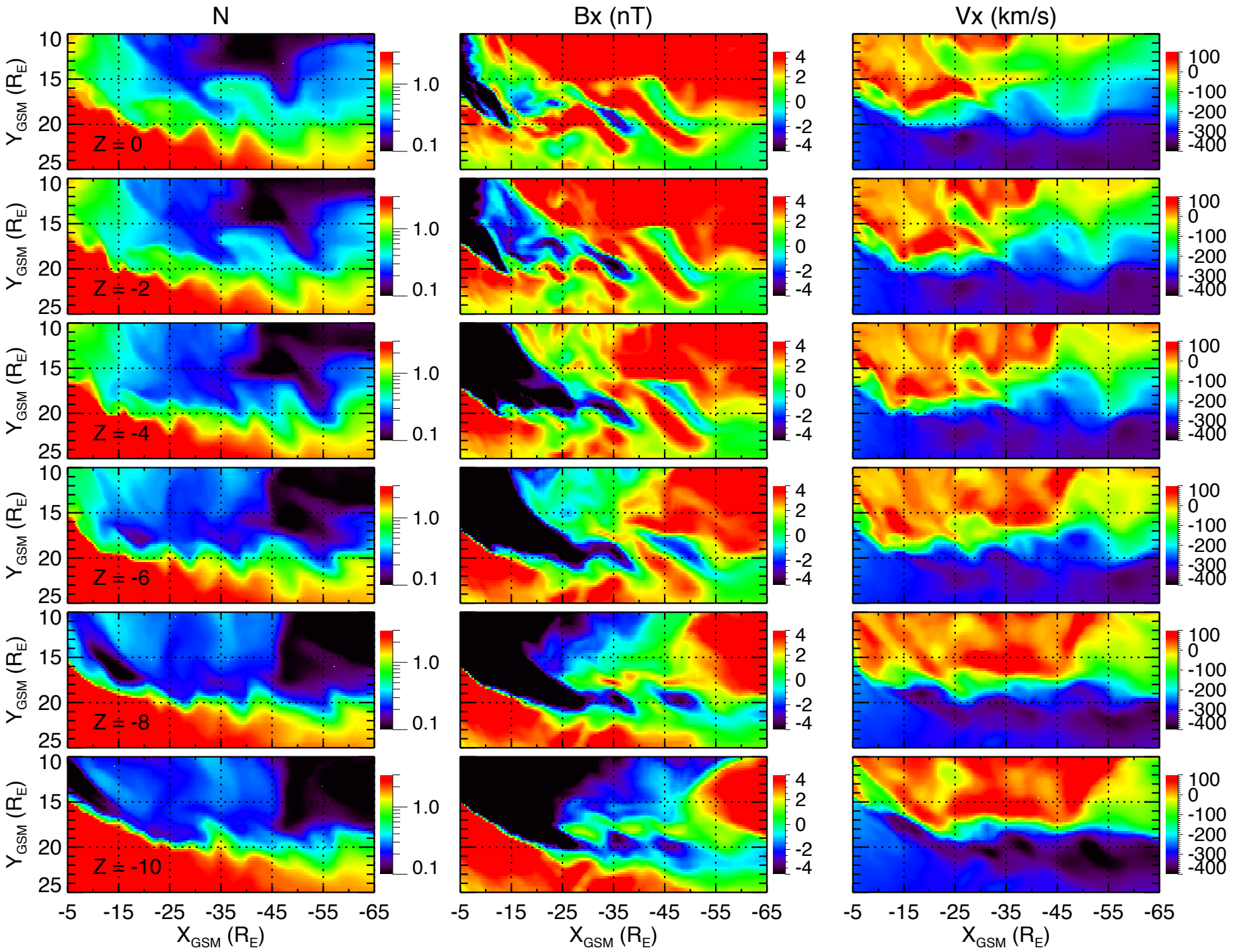
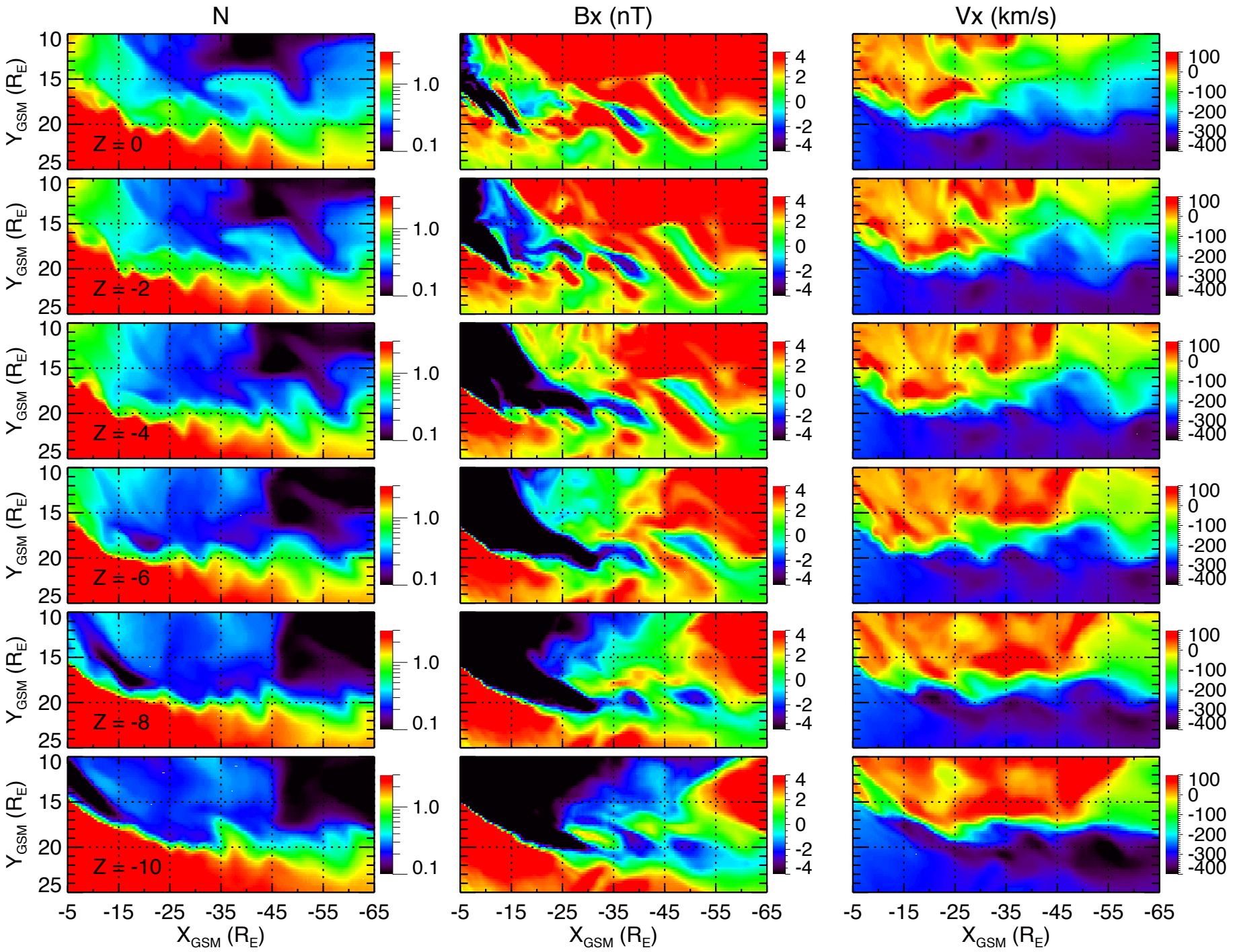
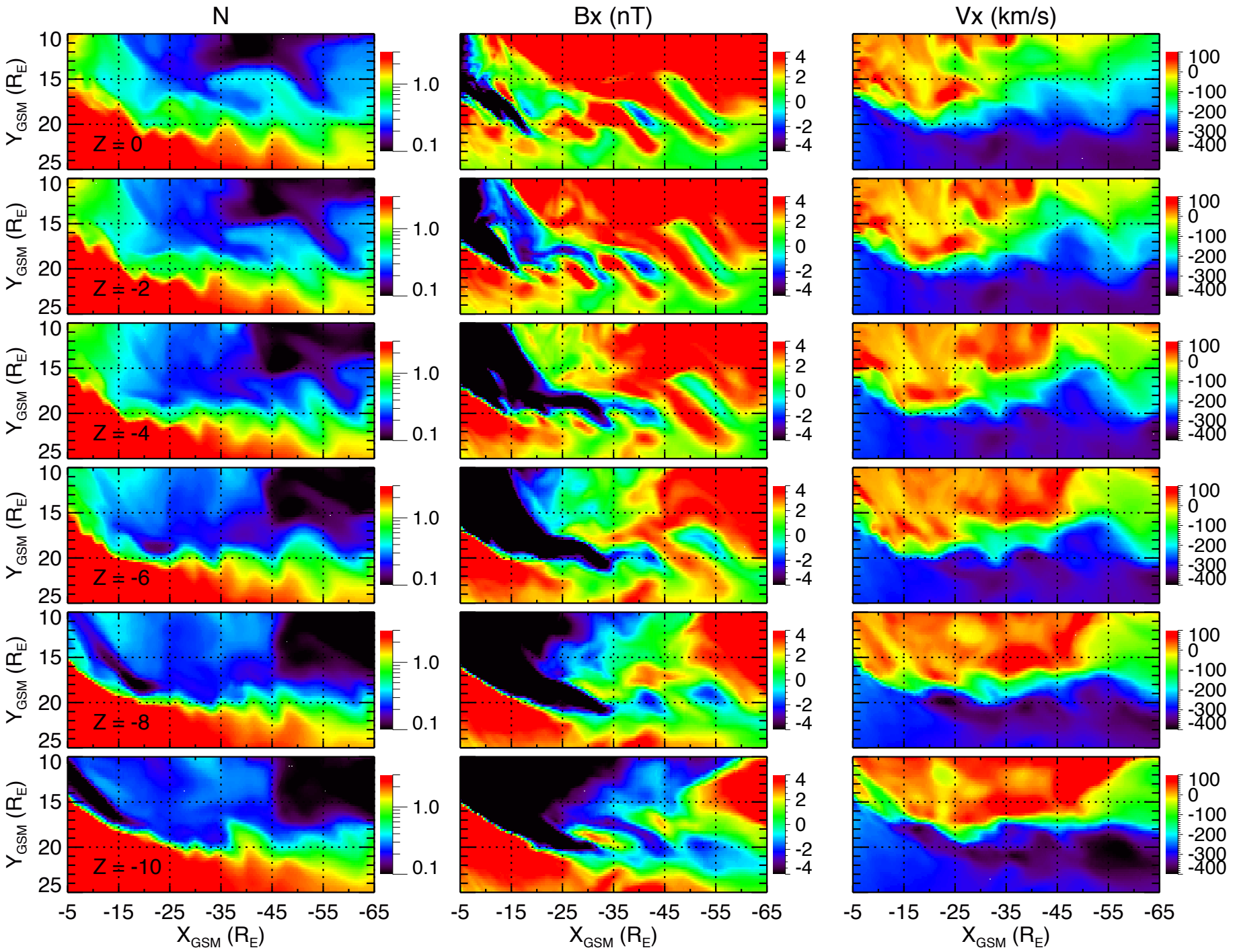
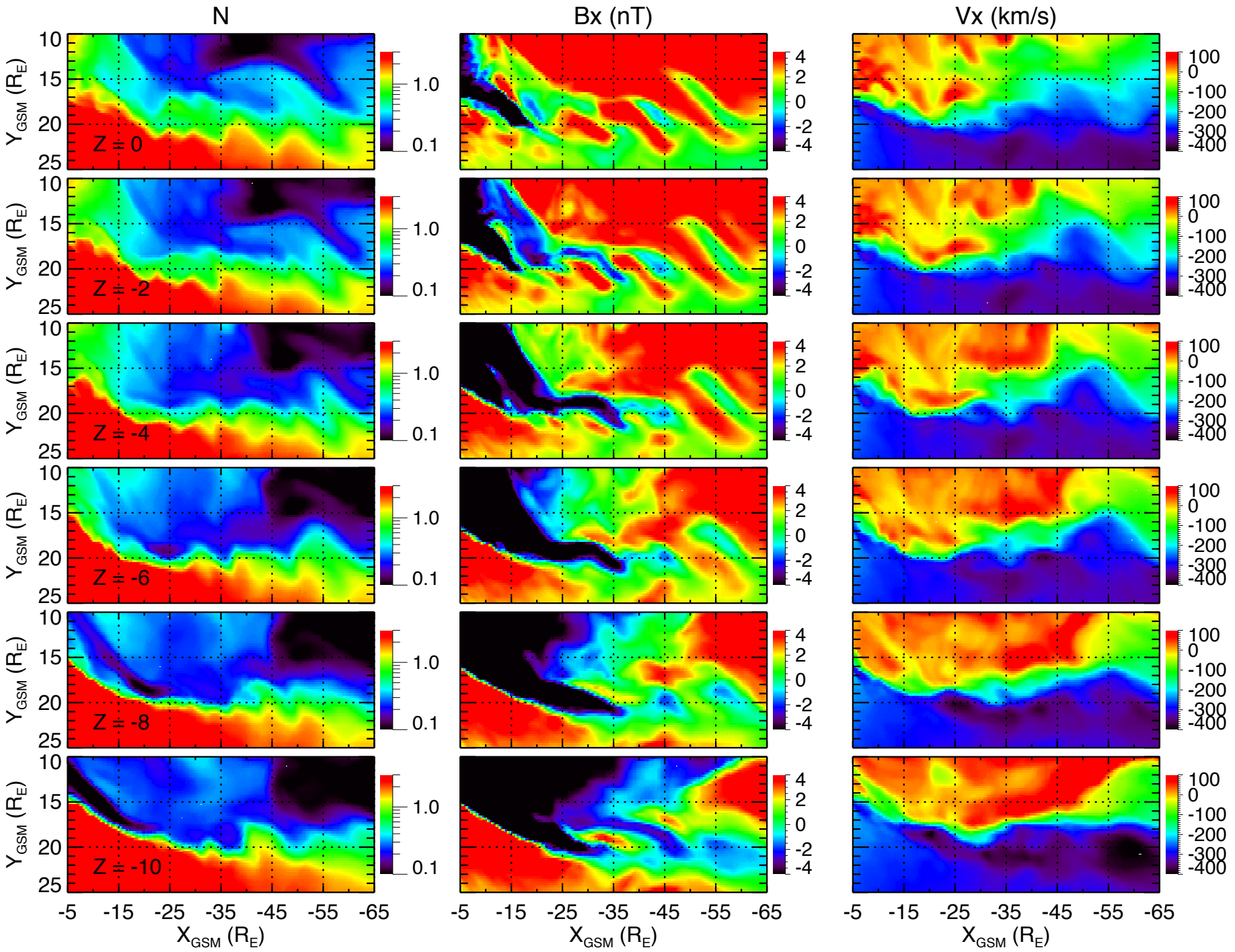
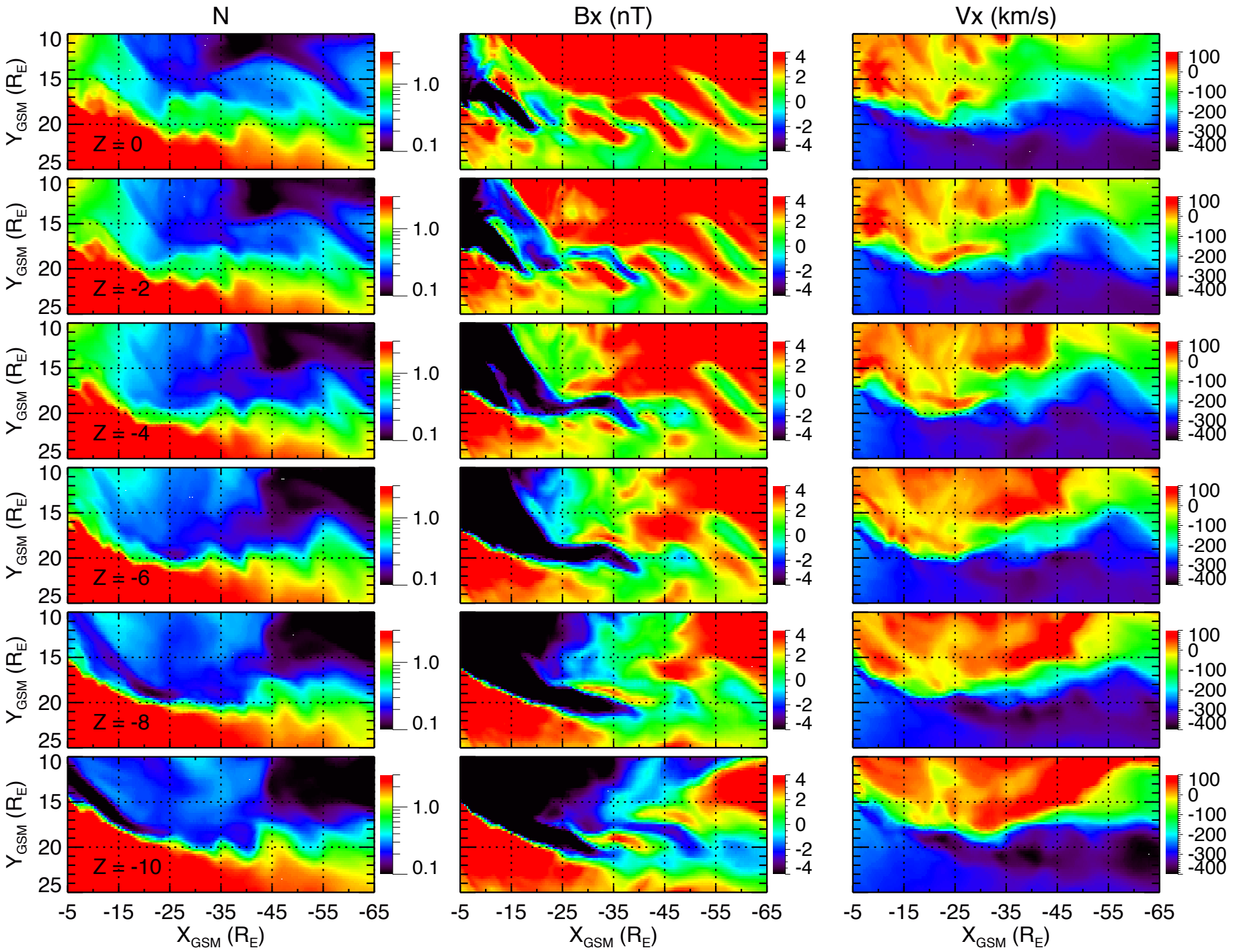

LFM-Merkin, 2014-02-13, t = 06:30
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

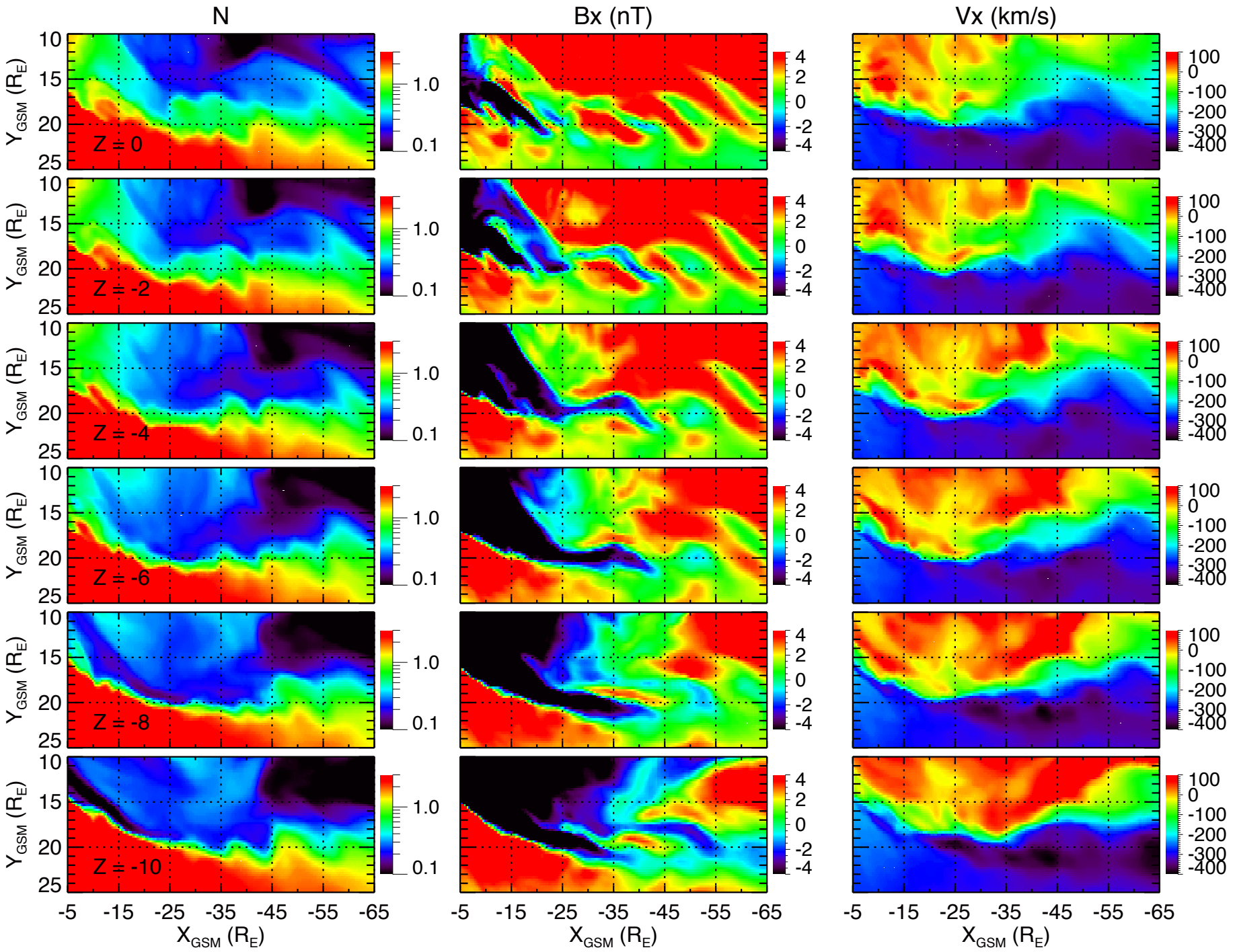

LFM-Merkin, 2014-02-13, t = 06:31
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

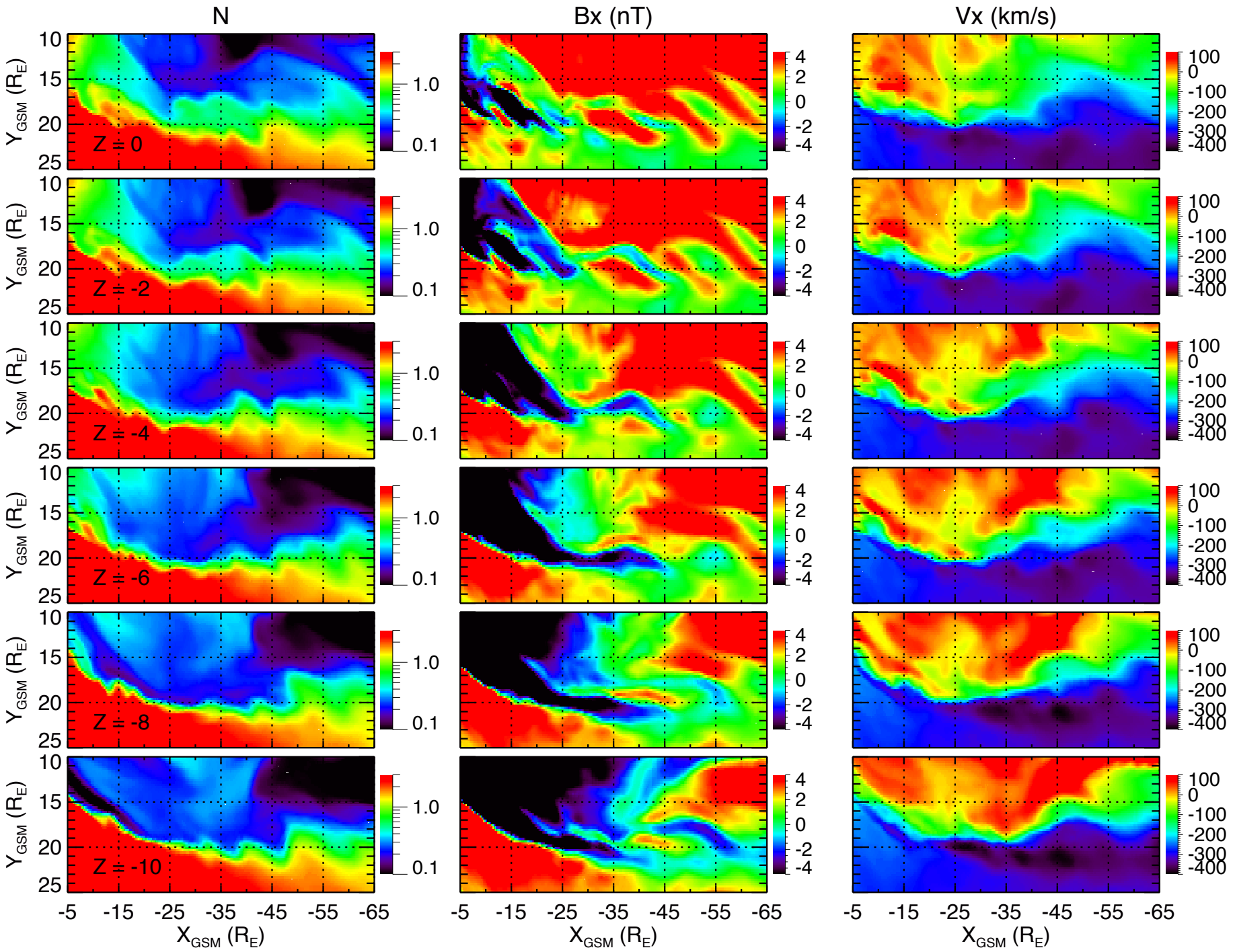

LFM-Merkin, 2014-02-13, t = 06:32
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

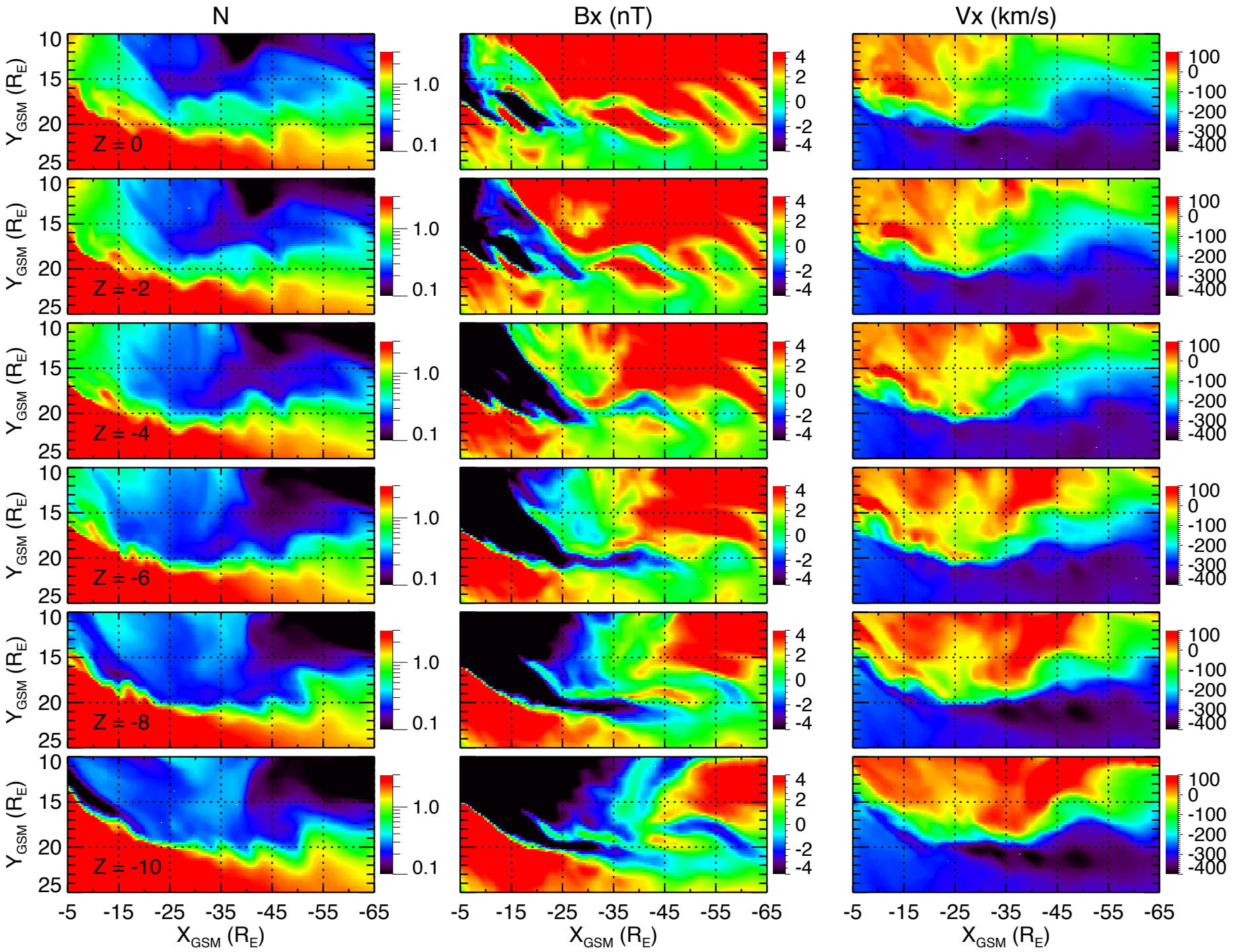

LFM-Merkin, 2014-02-13, t = 06:33
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

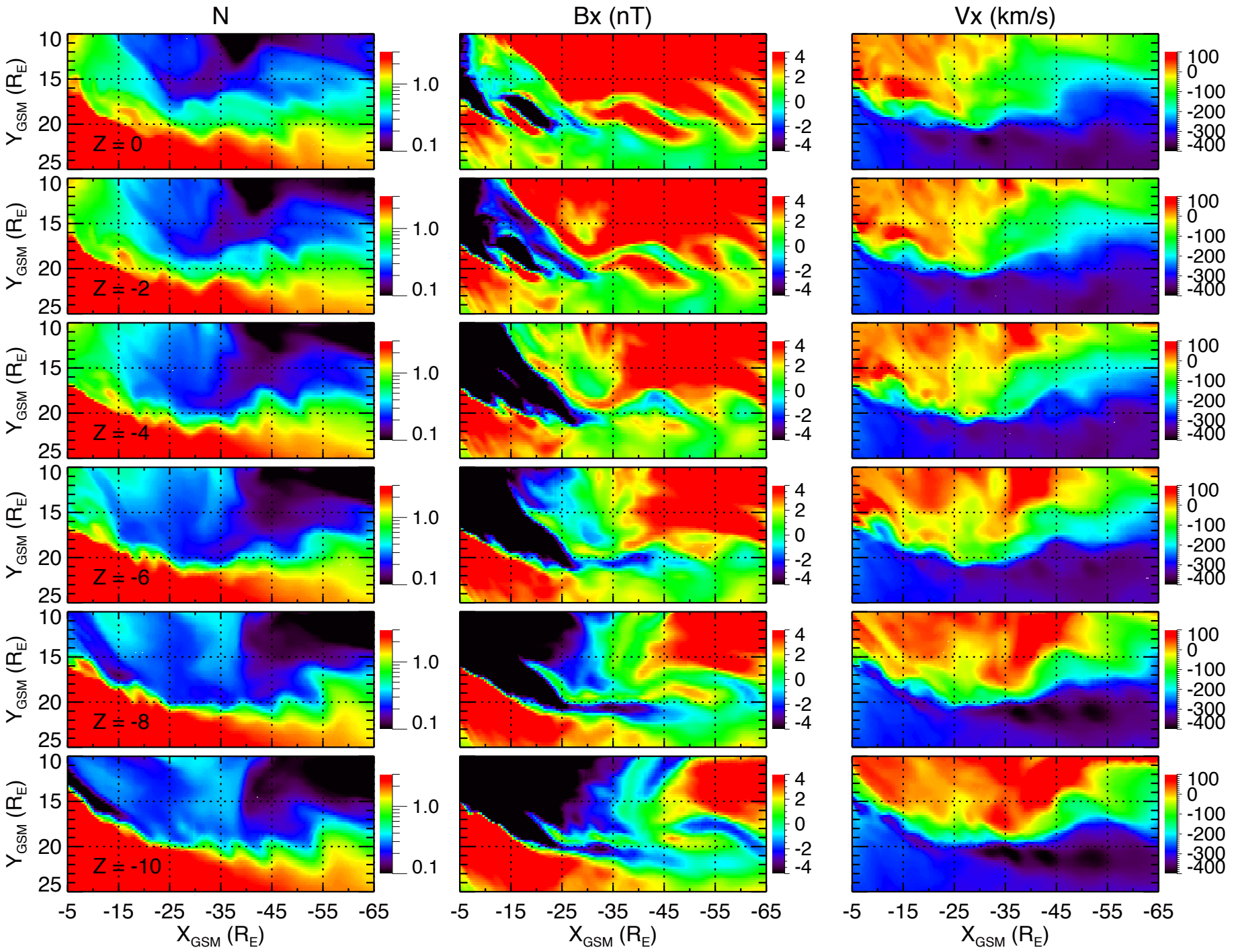

LFM-Merkin, 2014-02-13, t = 06:34
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

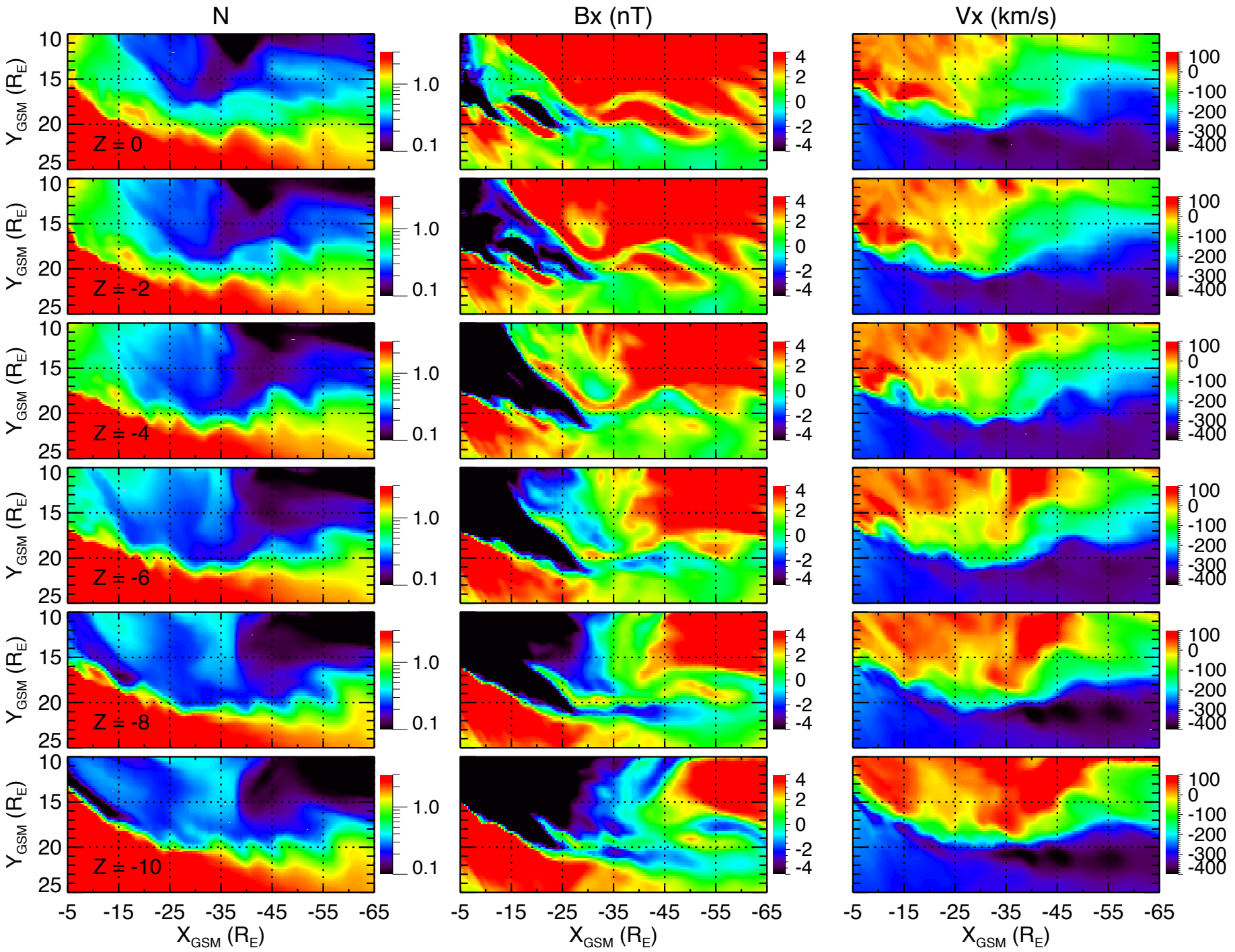

LFM-Merkin, 2014-02-13, t = 06:35
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

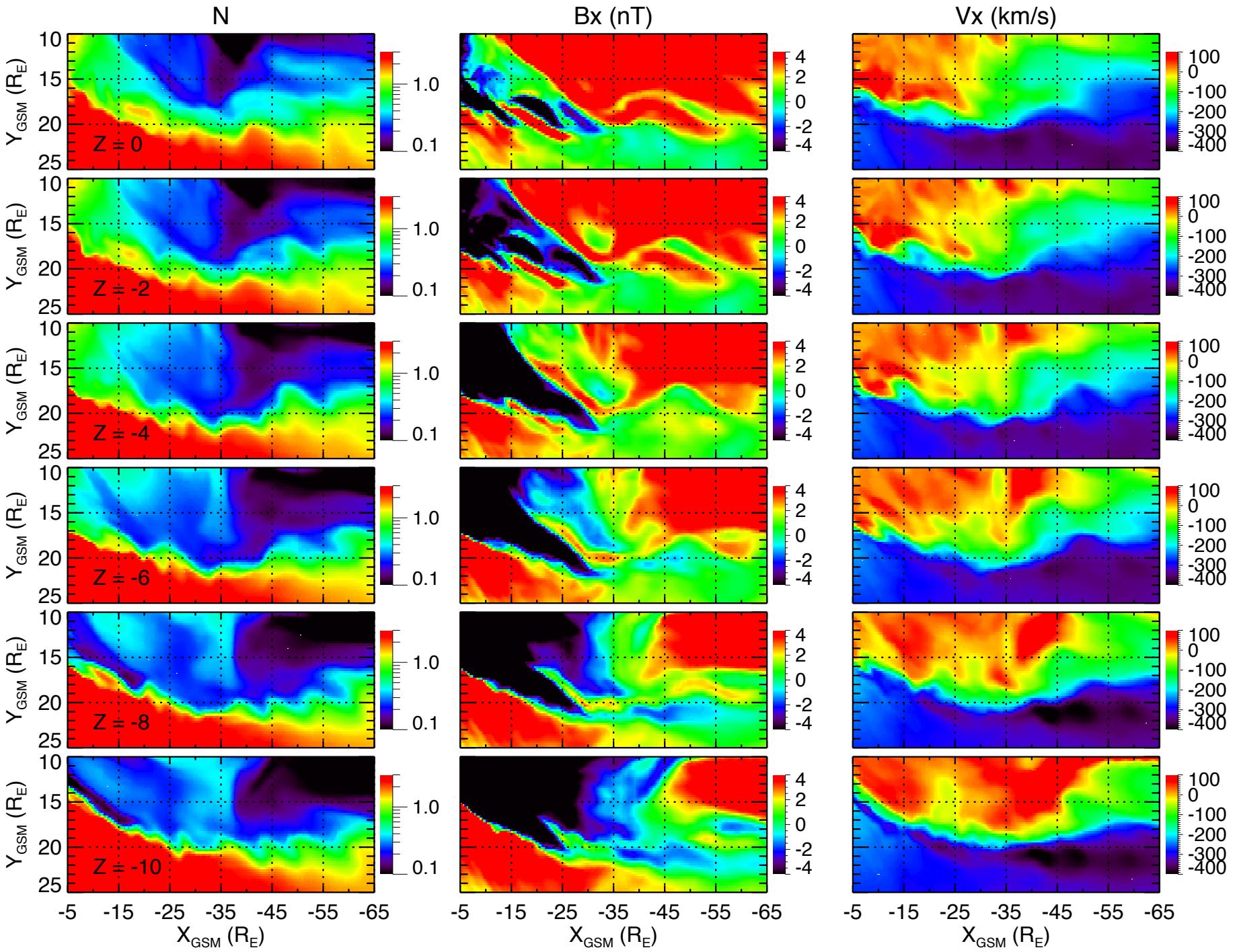

LFM-Merkin, 2014-02-13, t = 06:36
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

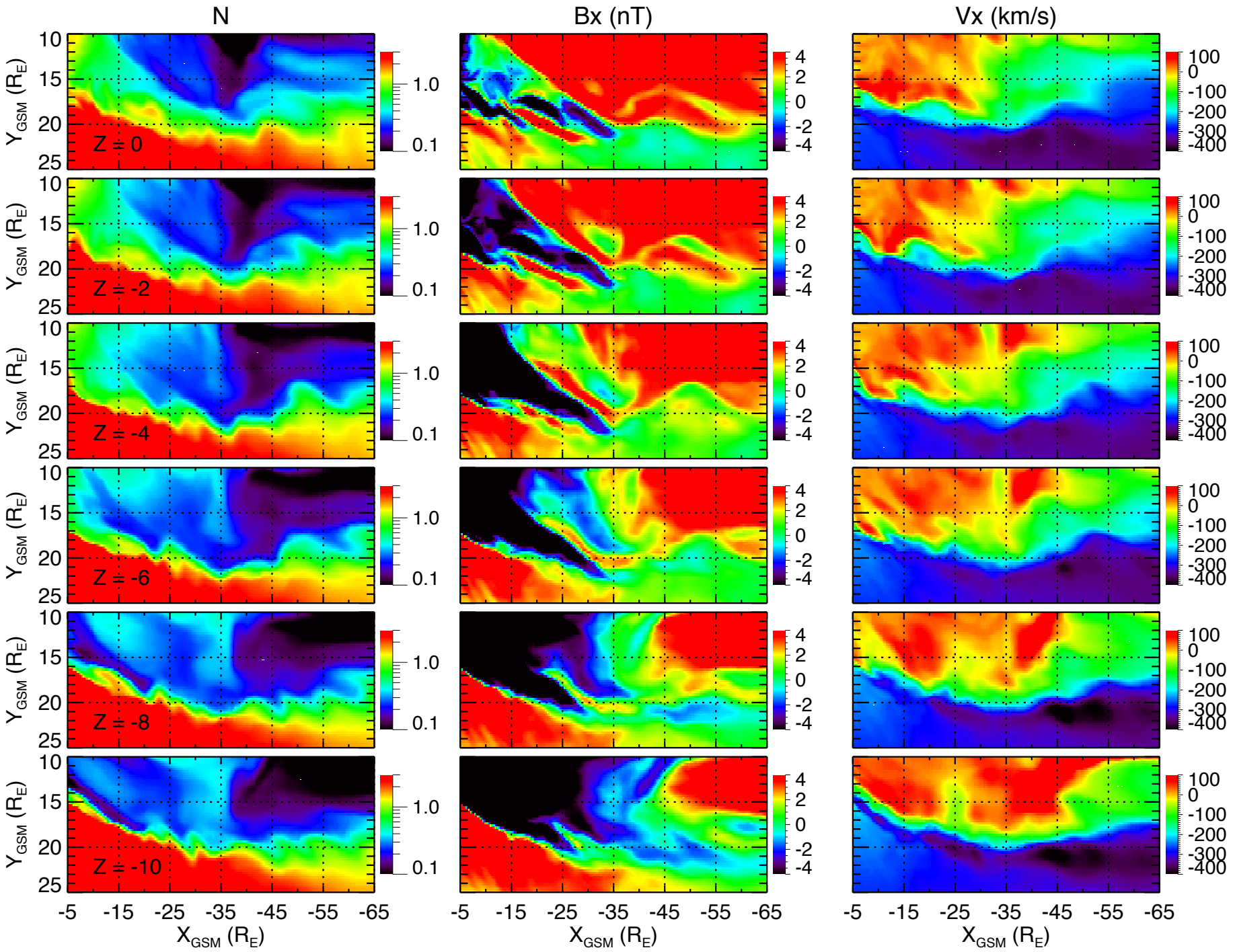

LFM-Merkin, 2014-02-13, t = 06:37
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

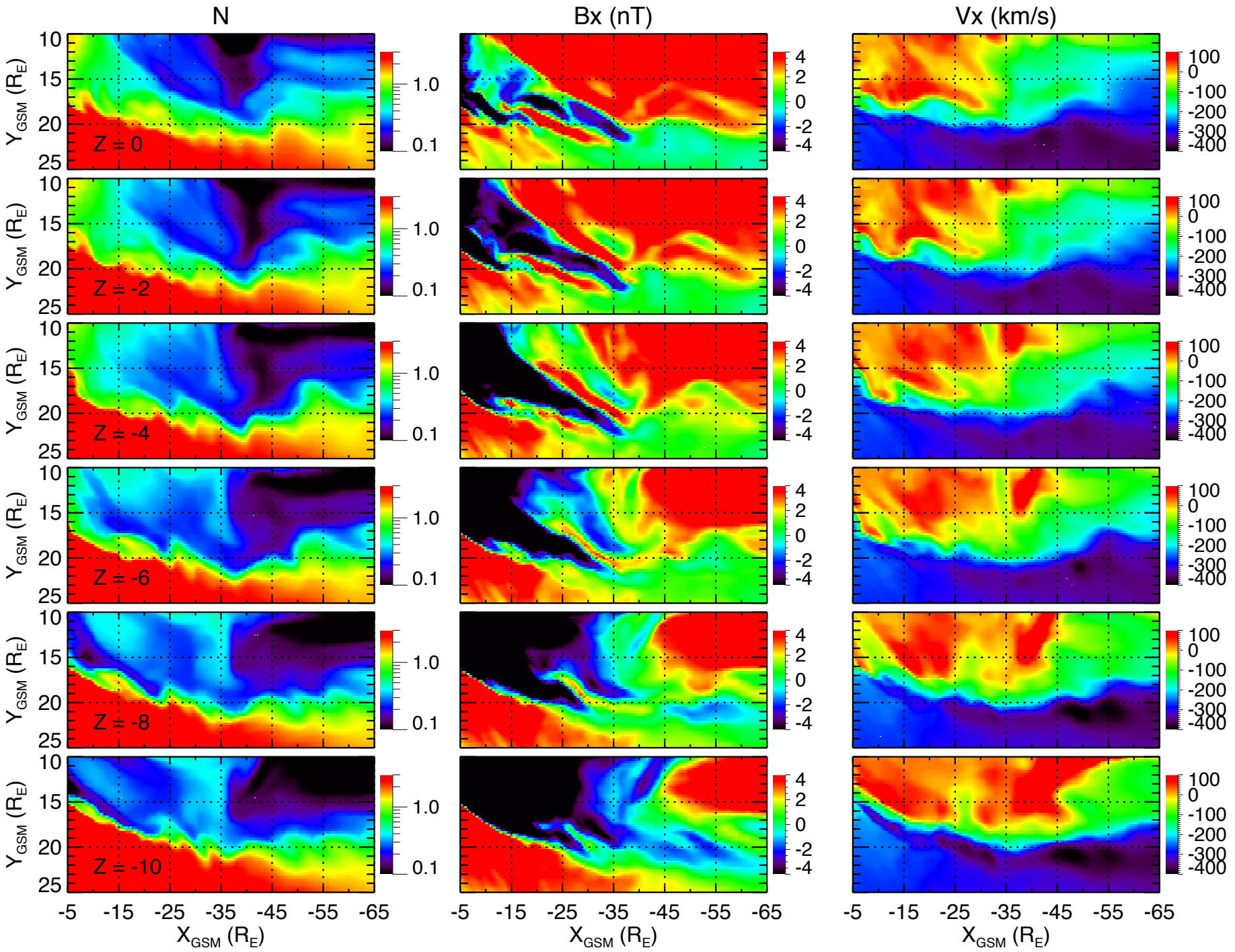

LFM-Merkin, 2014-02-13, t = 06:38
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

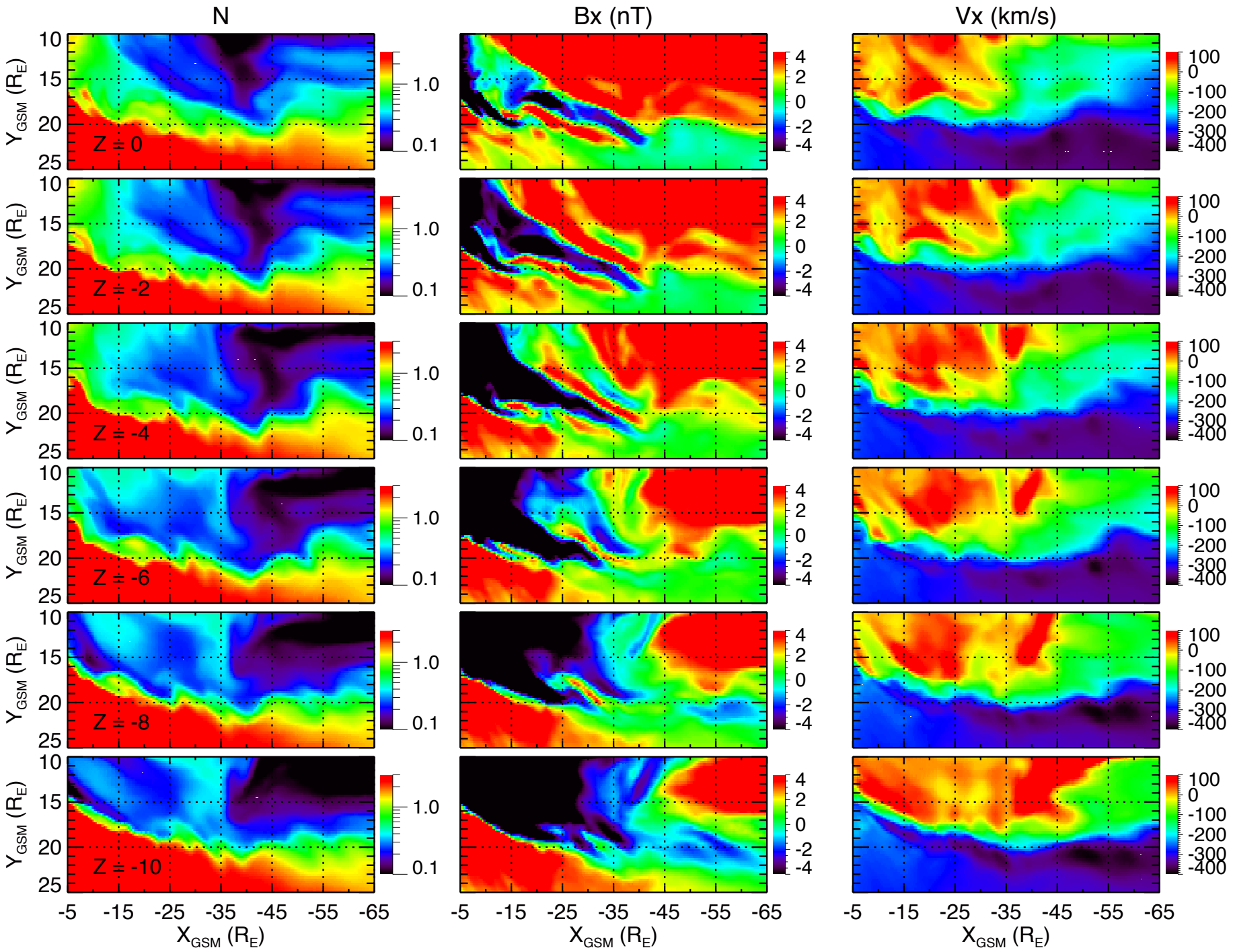

LFM-Merkin, 2014-02-13, t = 06:39
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

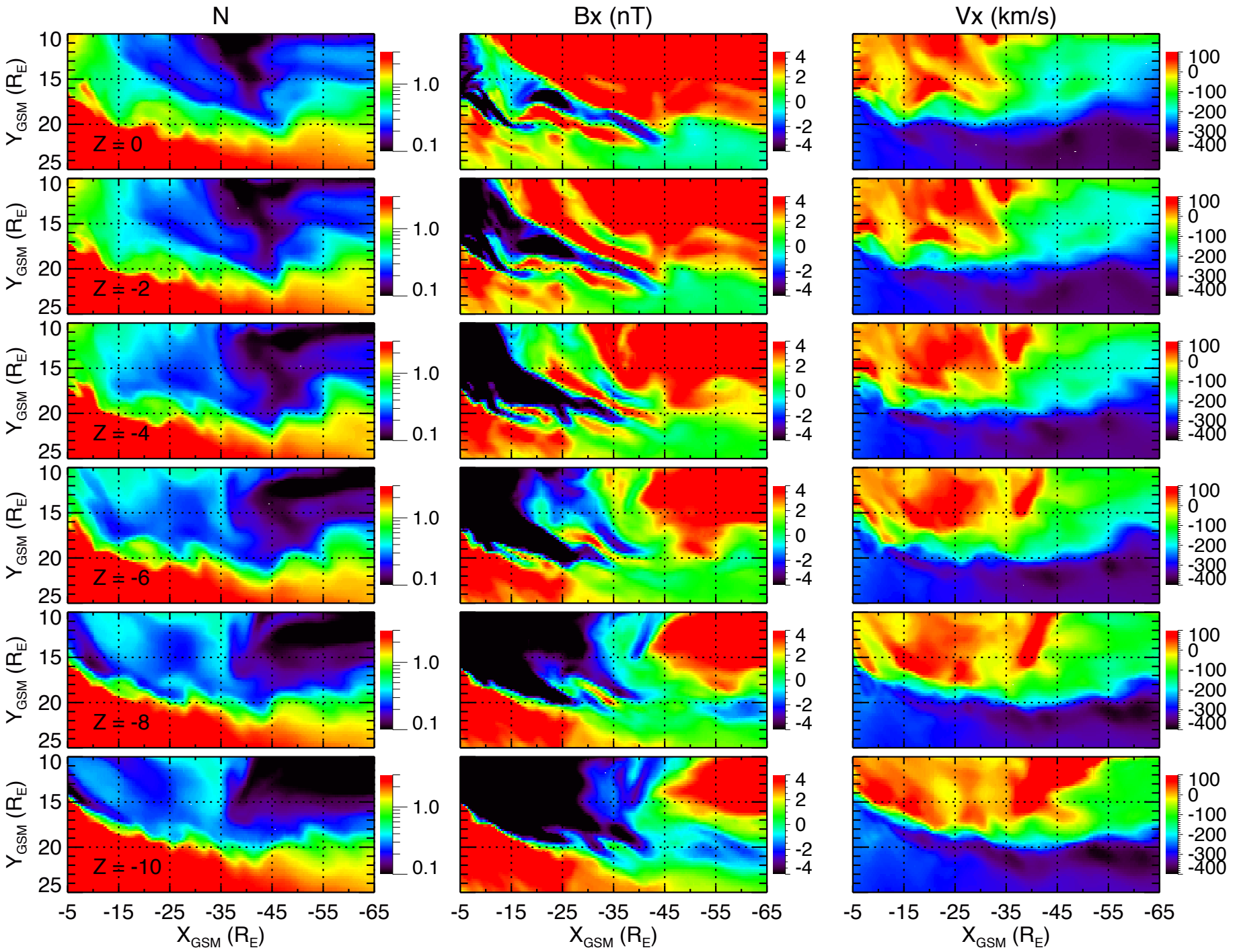

LFM-Merkin, 2014-02-13, t = 06:40
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

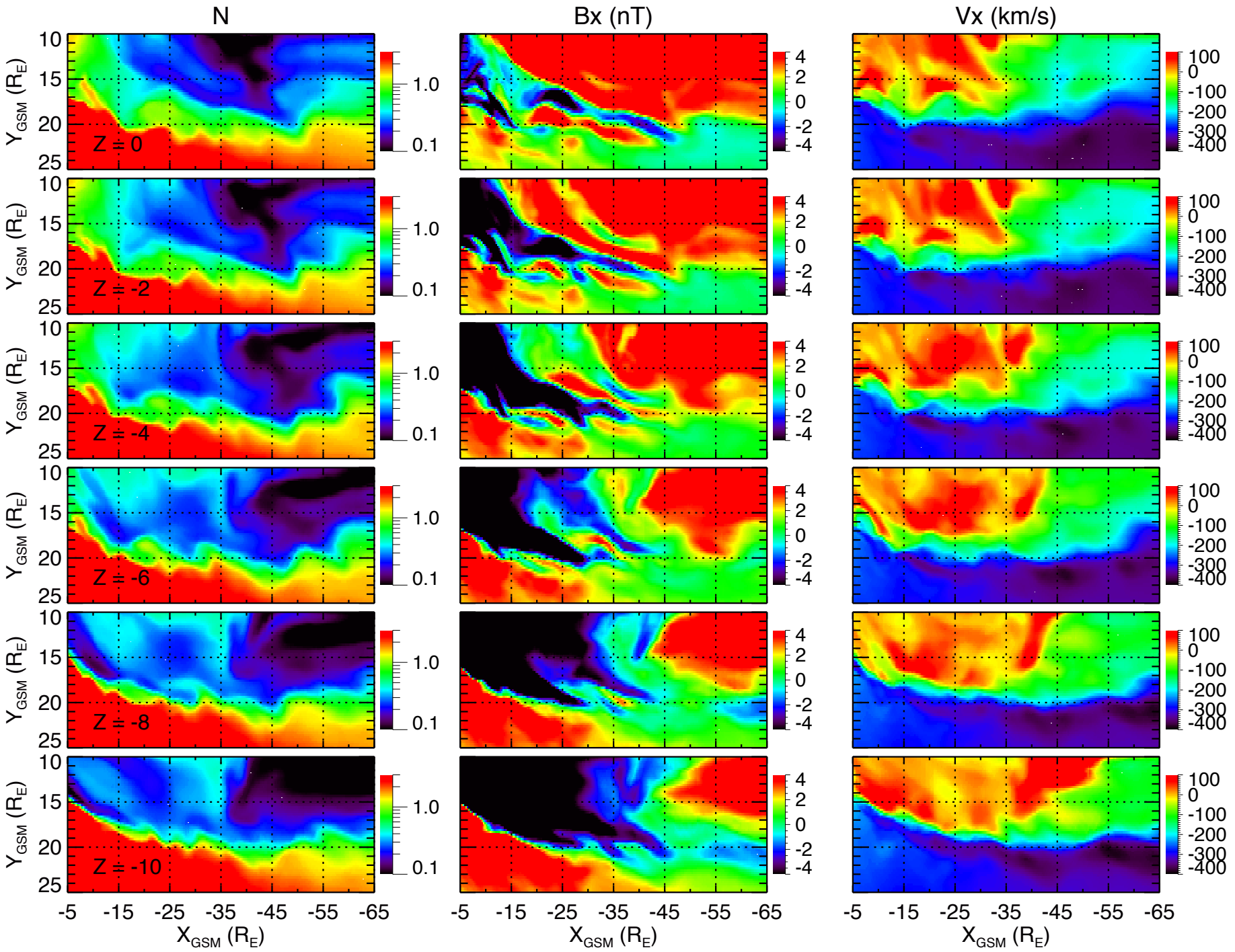

LFM-Merkin, 2014-02-13, t = 06:41
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

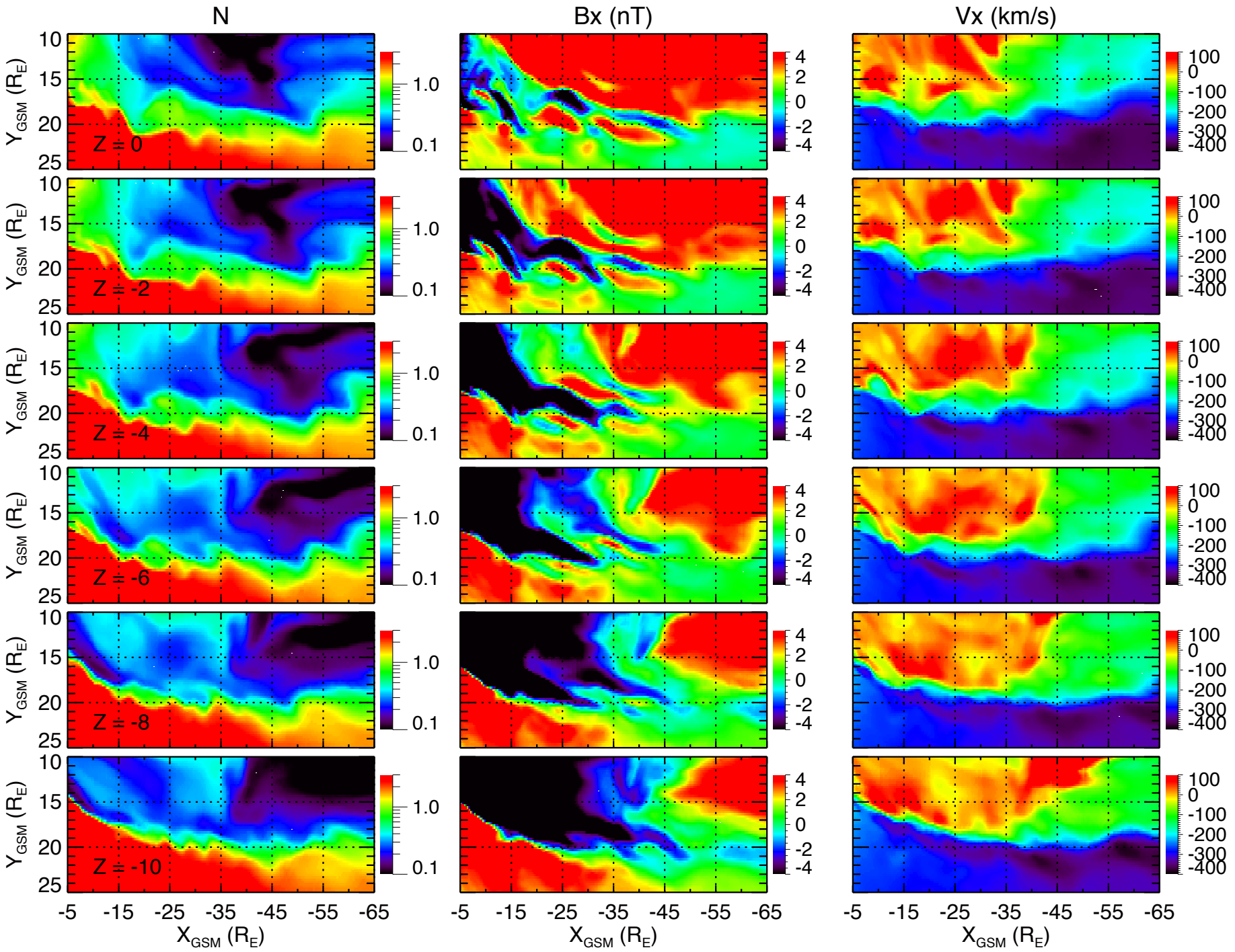

LFM-Merkin, 2014-02-13, t = 06:42
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

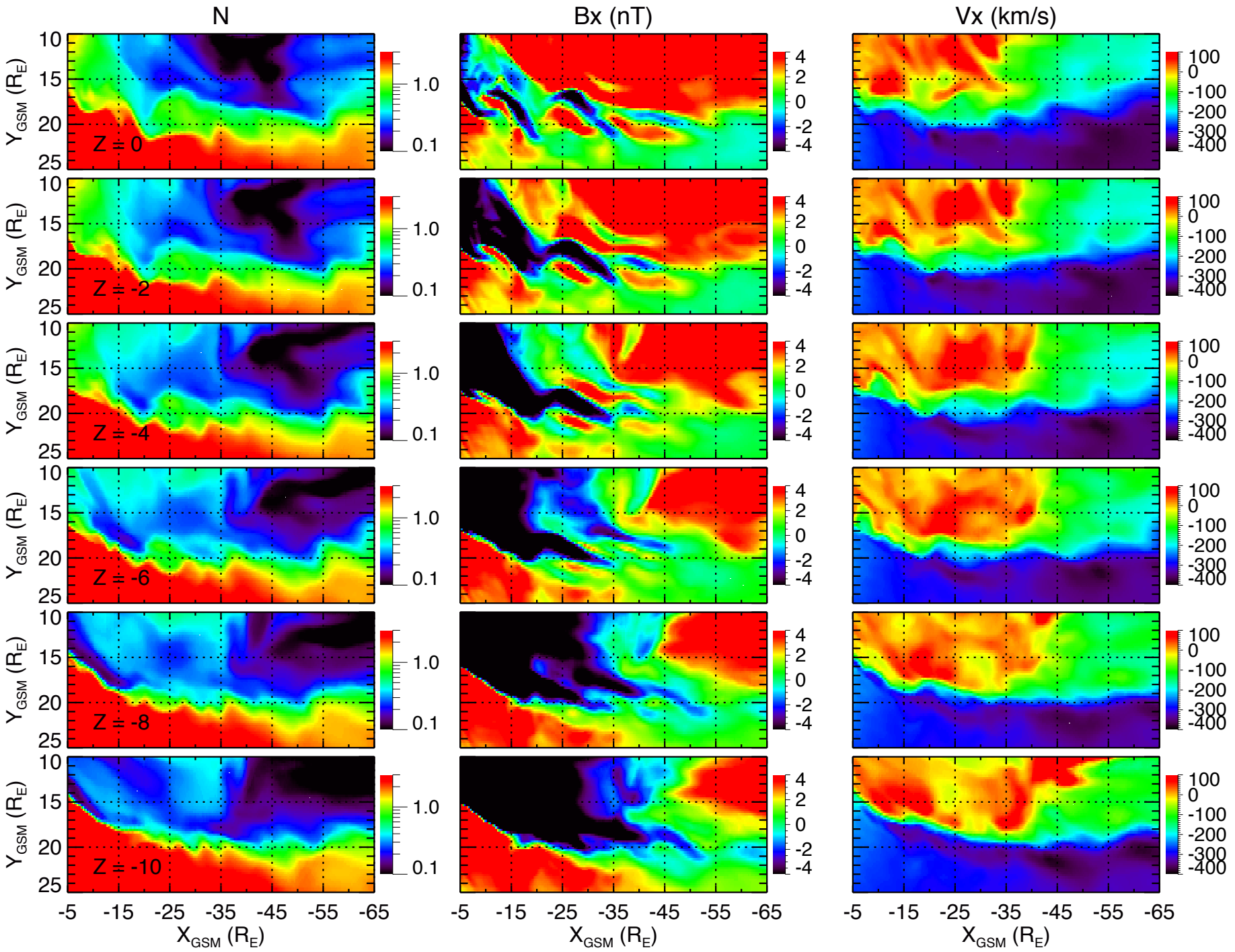

LFM-Merkin, 2014-02-13, t = 06:43
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

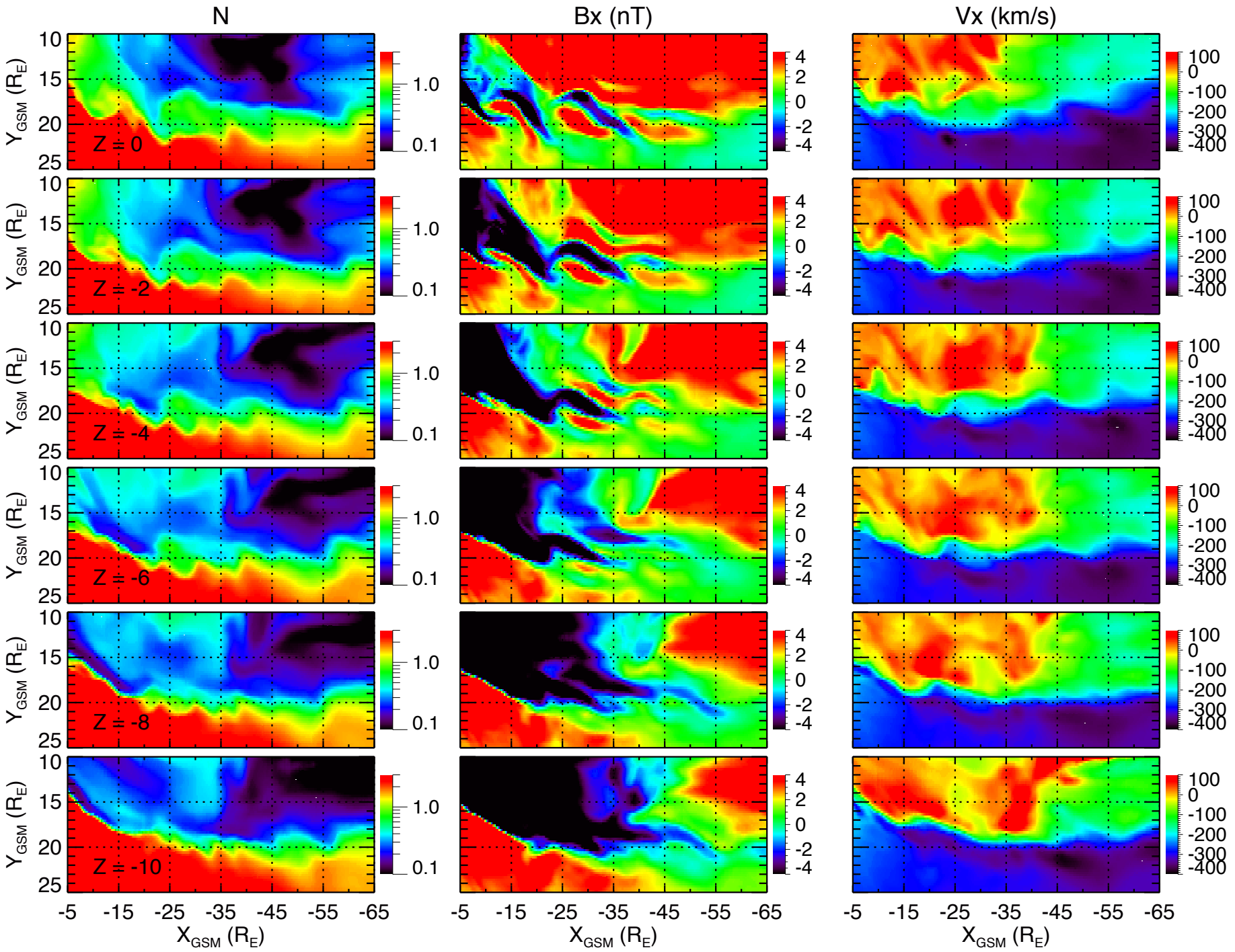

LFM-Merkin, 2014-02-13, t = 06:44
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

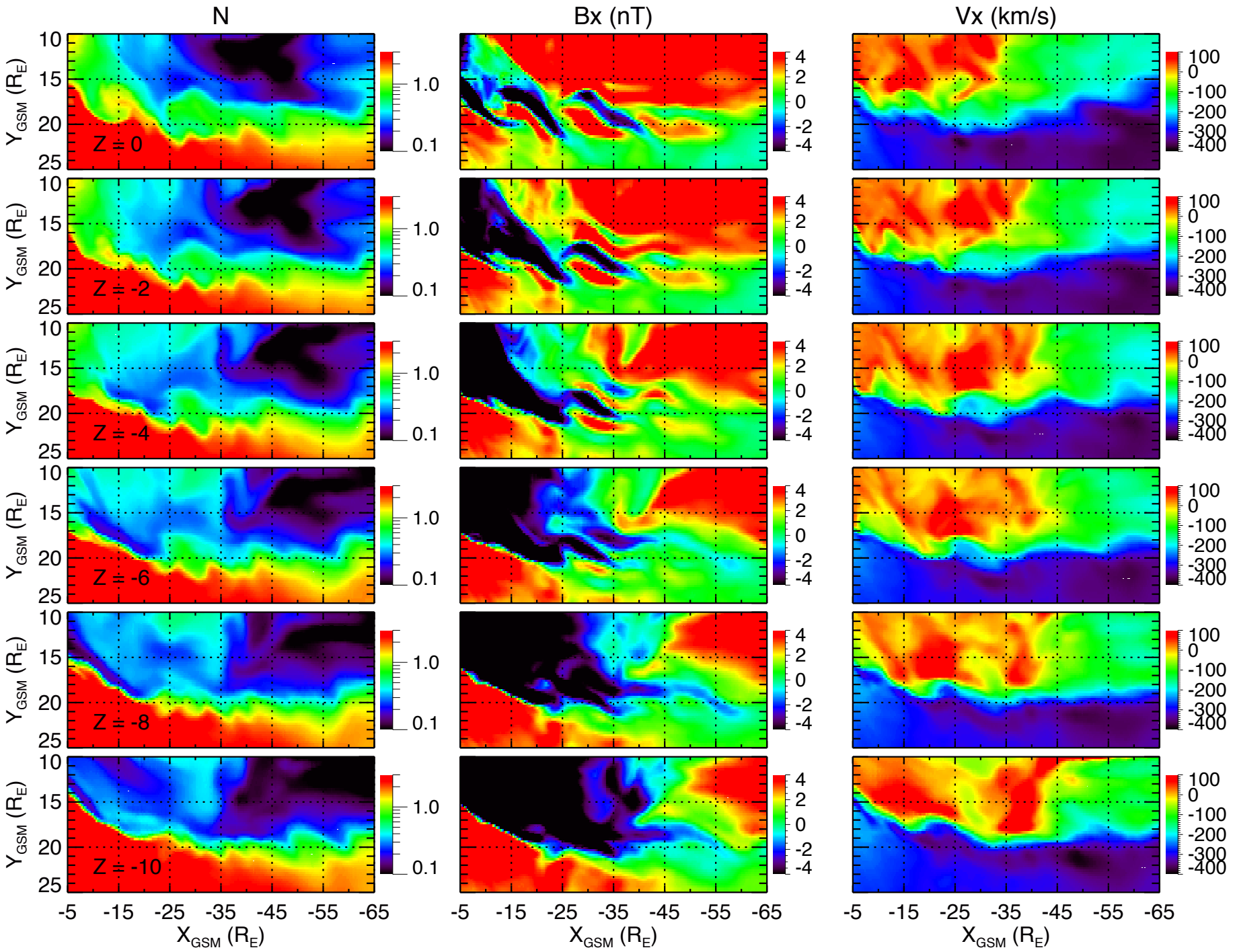

LFM-Merkin, 2014-02-13, t = 06:45
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

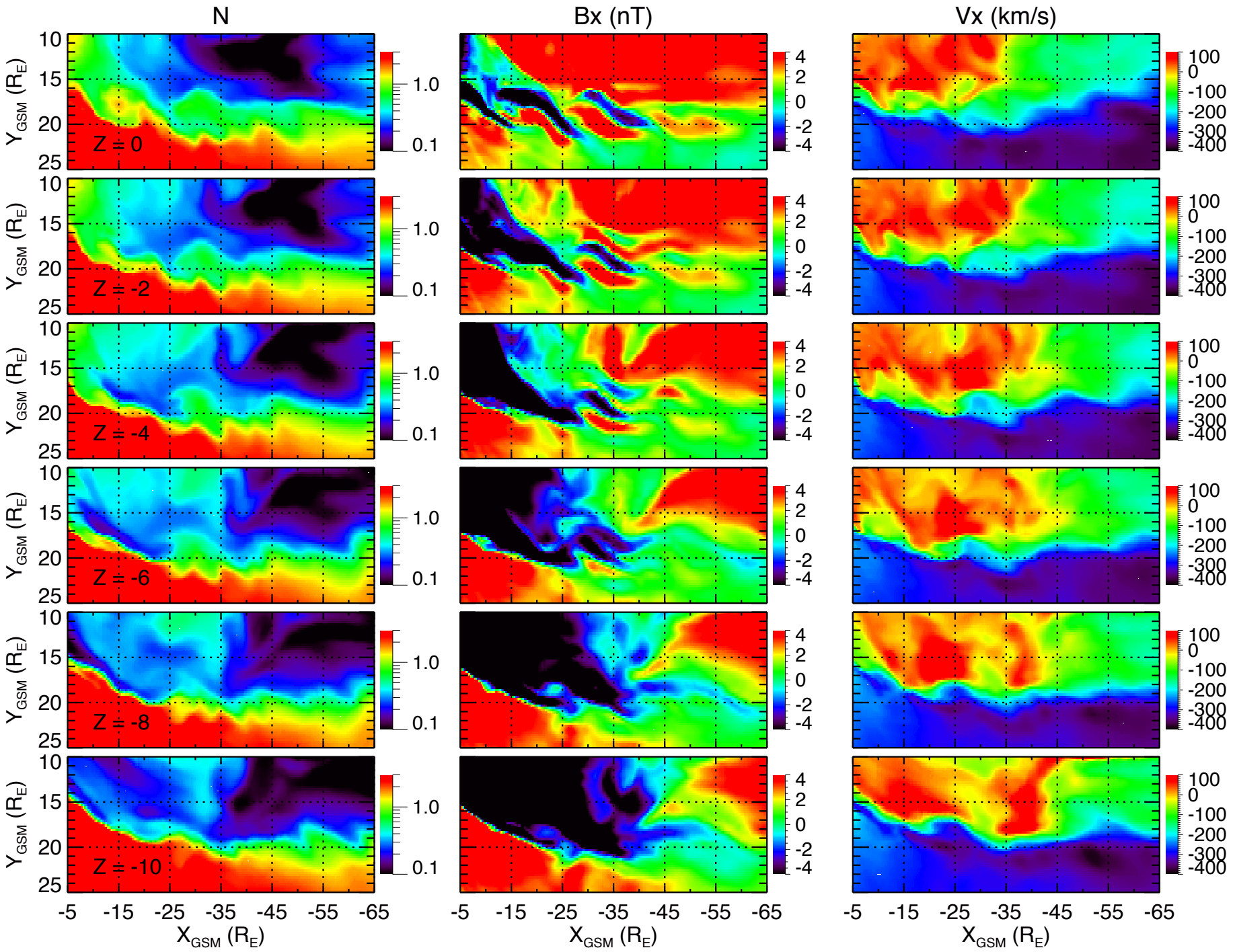

LFM-Merkin, 2014-02-13, t = 06:46
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

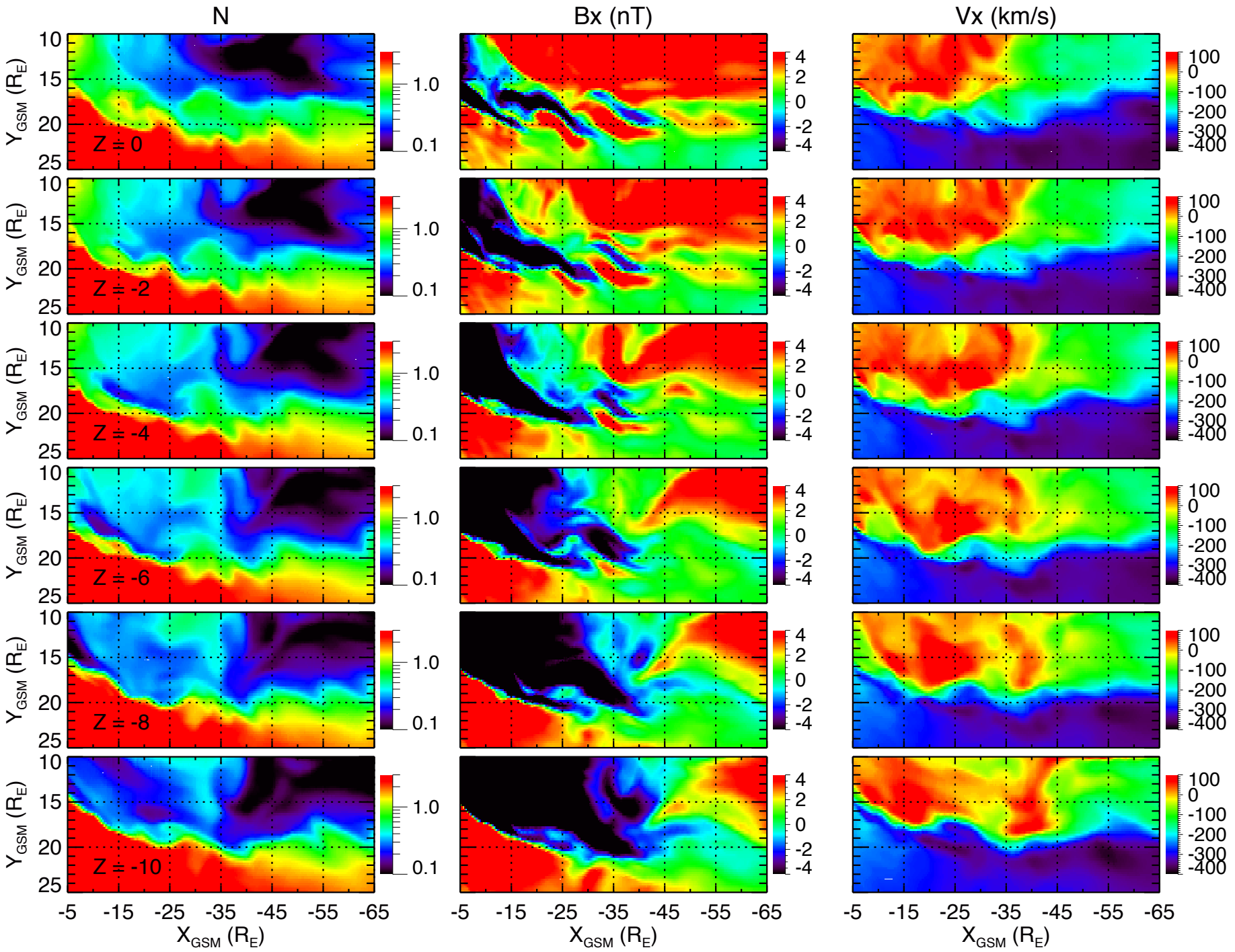

LFM-Merkin, 2014-02-13, t = 06:47
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

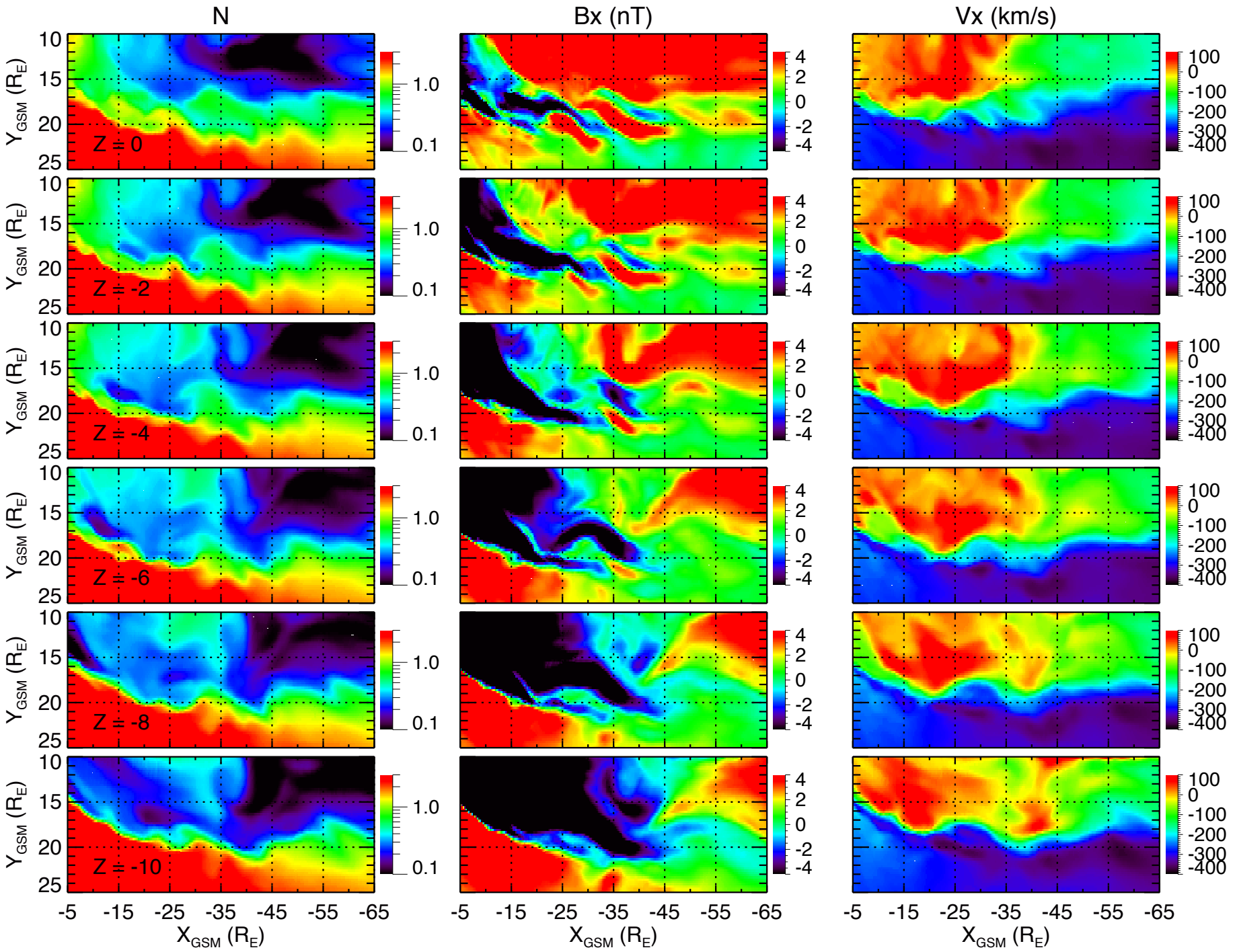

LFM-Merkin, 2014-02-13, t = 06:48
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

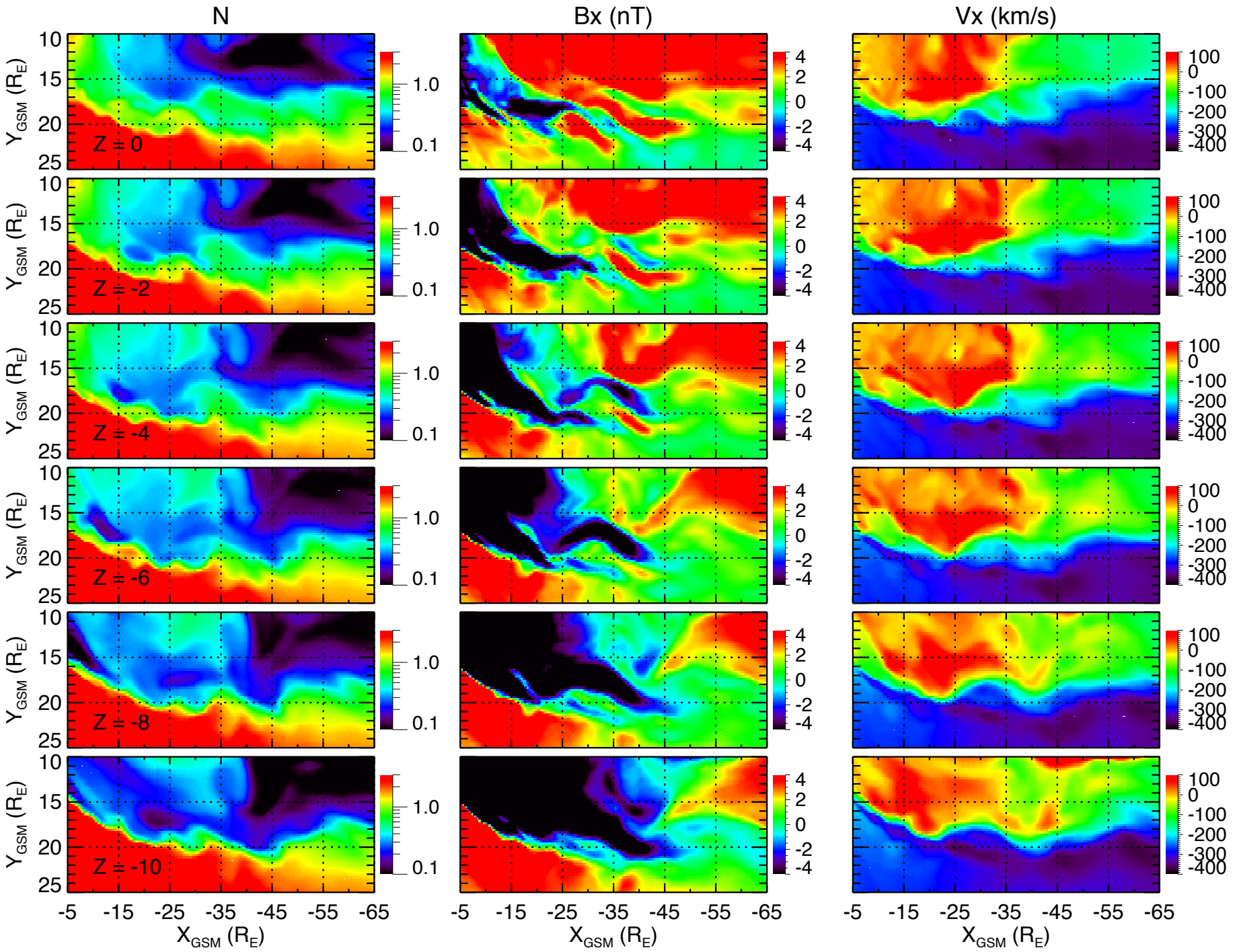

LFM-Merkin, 2014-02-13, t = 06:49
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

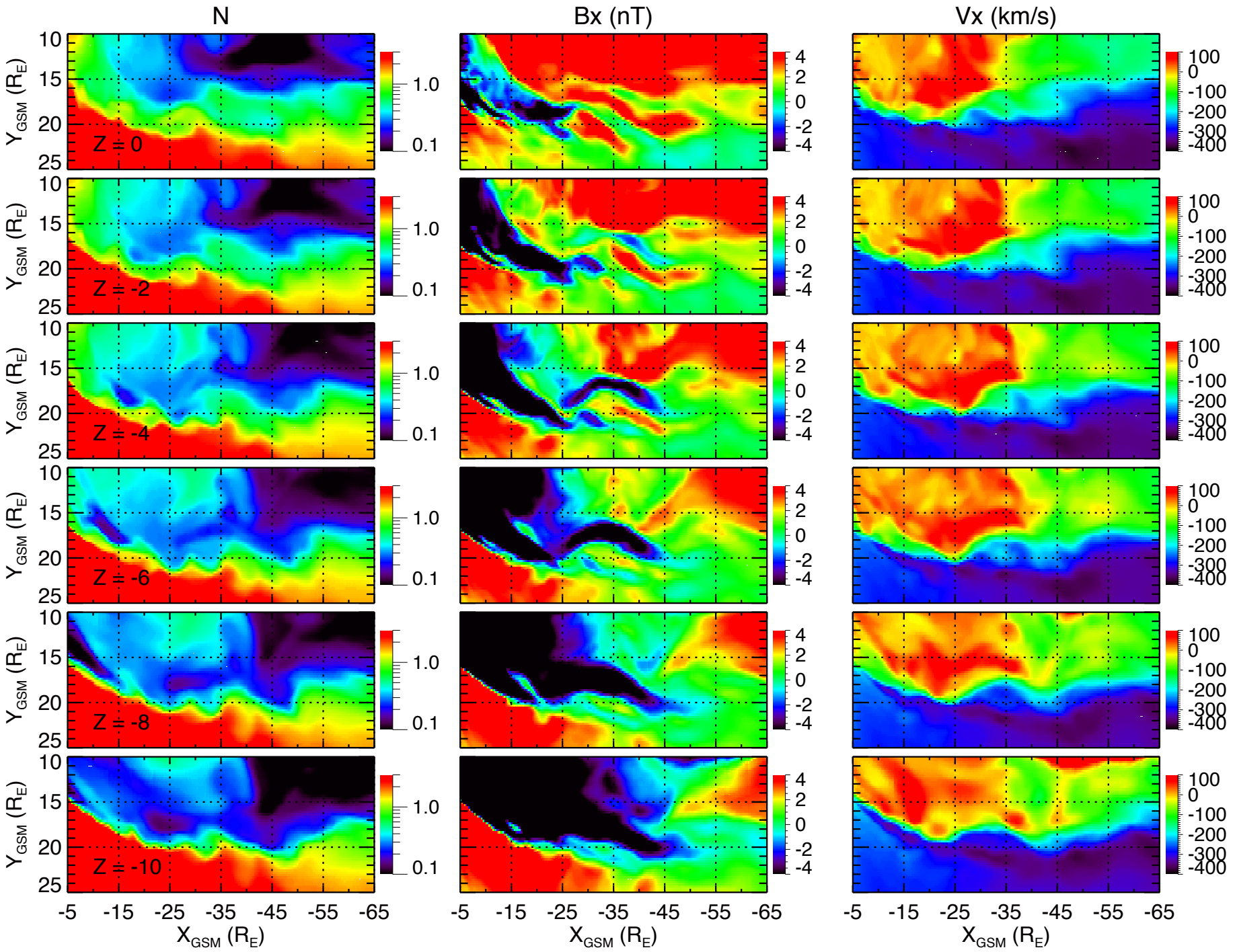

LFM-Merkin, 2014-02-13, t = 06:50
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

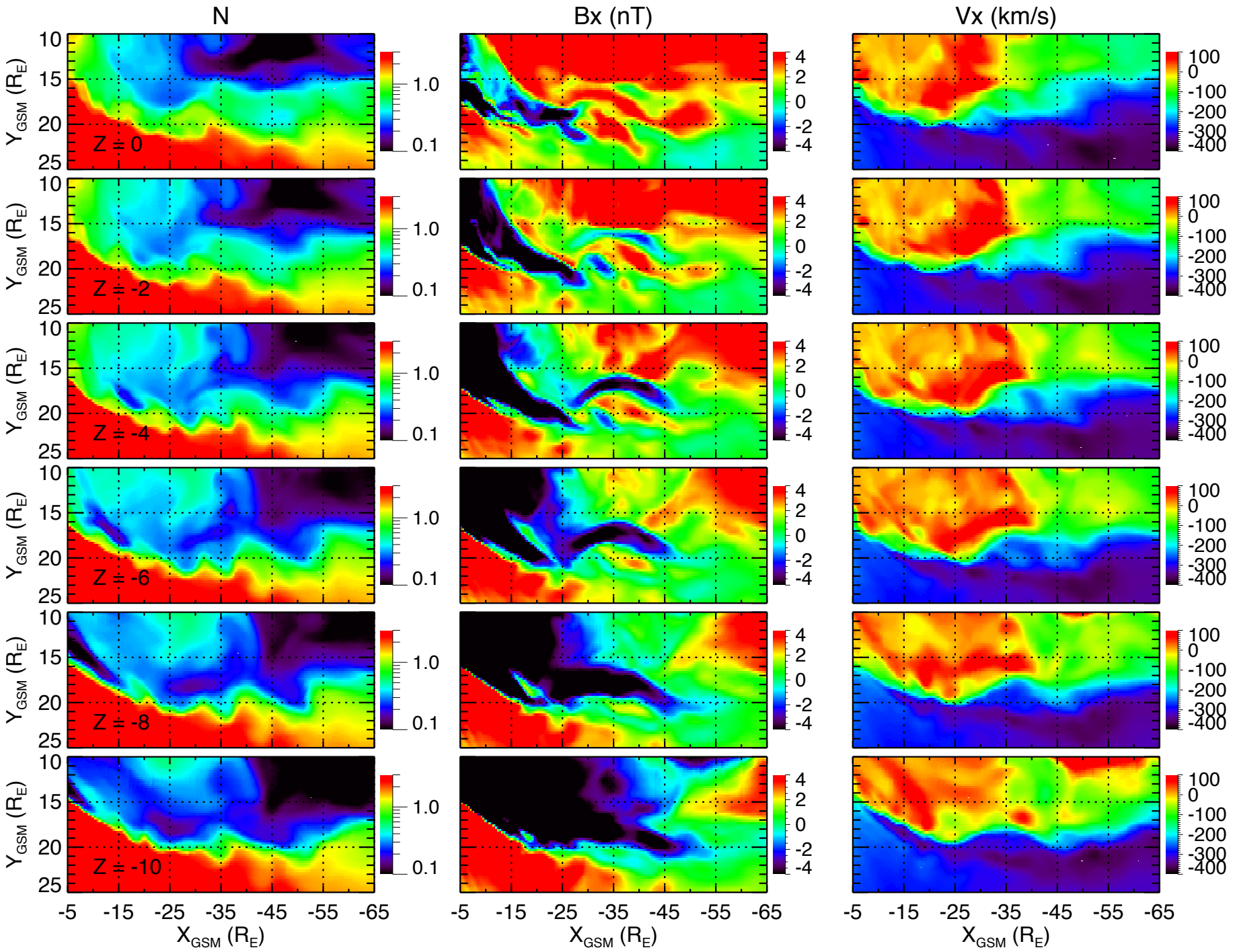

LFM-Merkin, 2014-02-13, t = 06:51
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

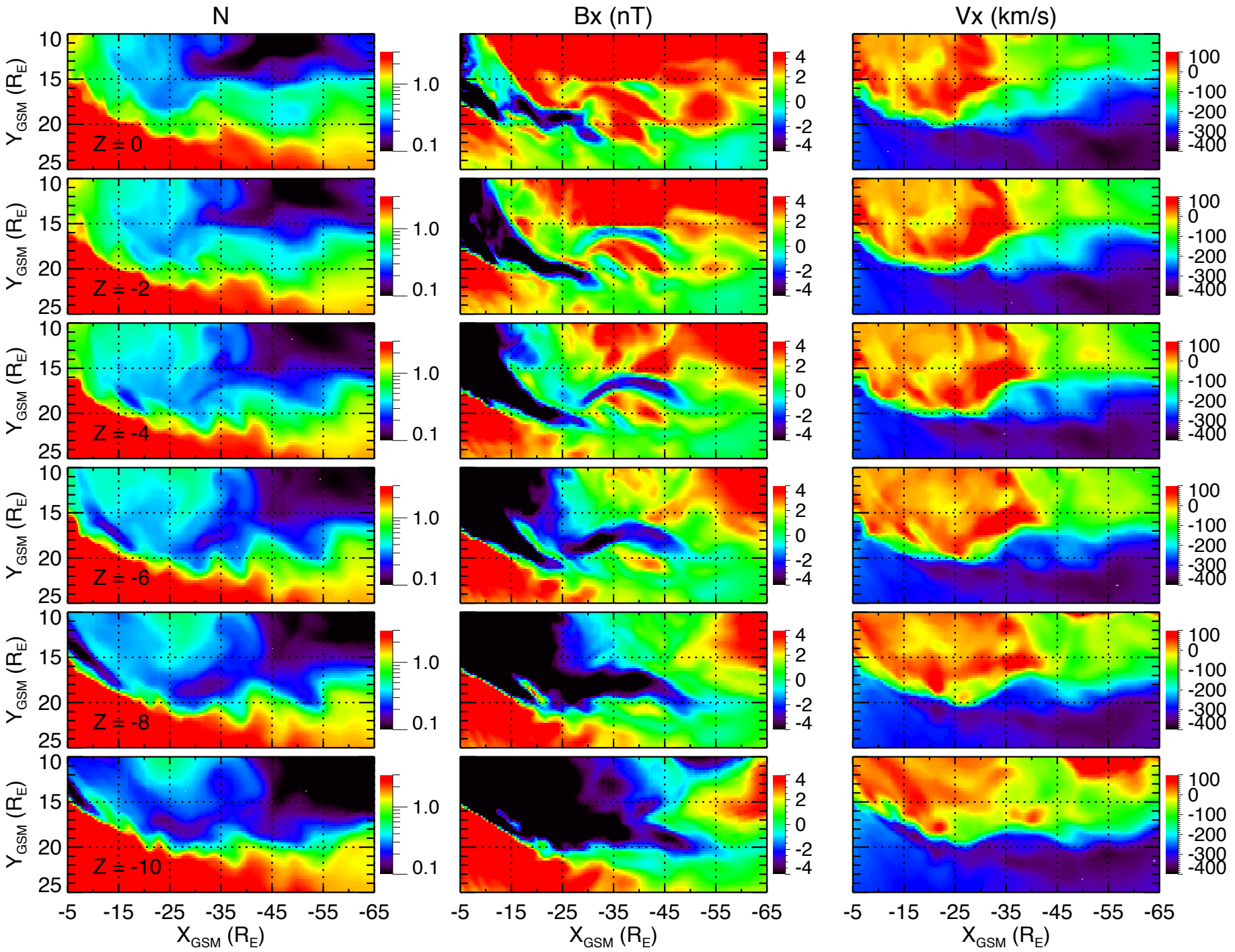

LFM-Merkin, 2014-02-13, t = 06:52
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

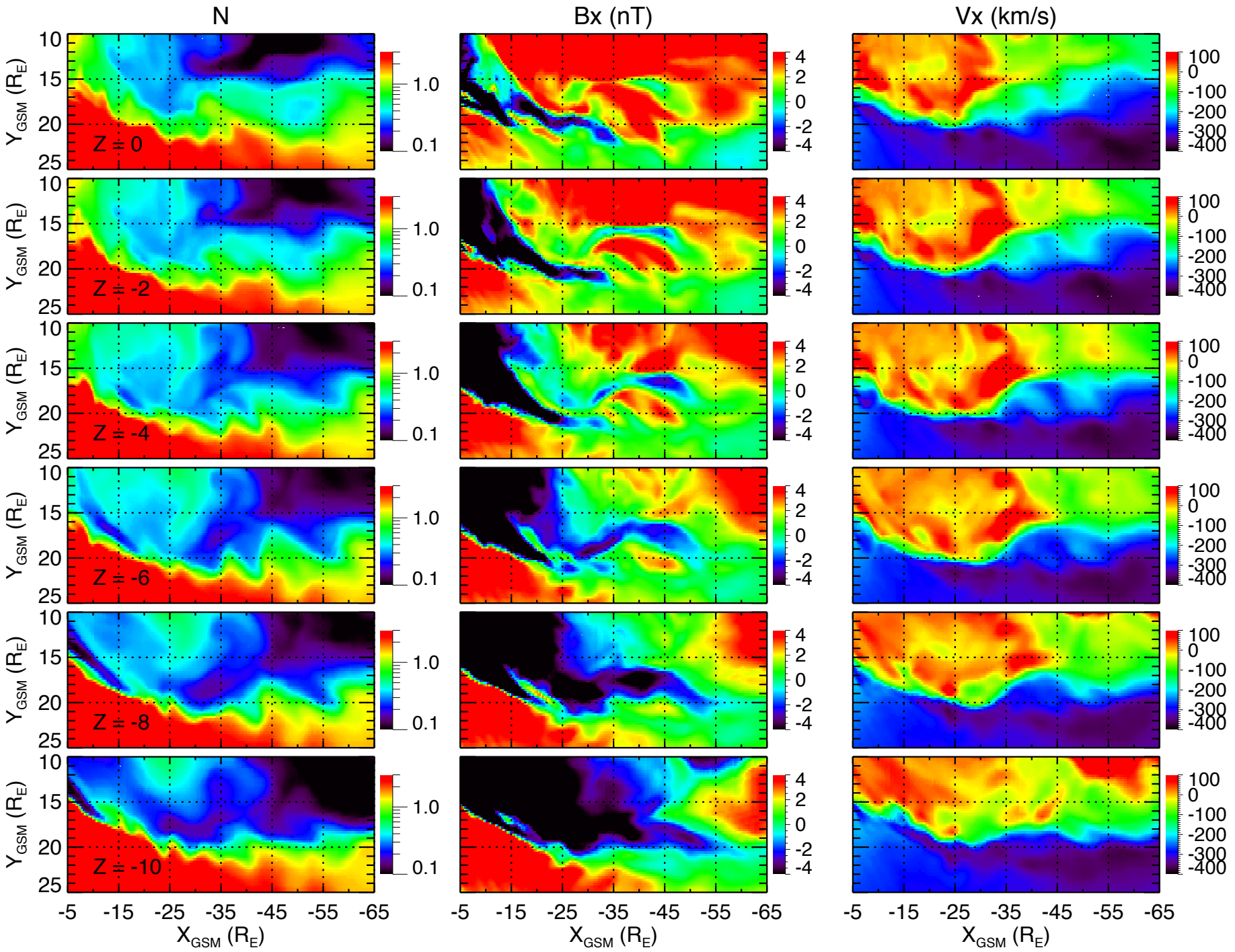

LFM-Merkin, 2014-02-13, t = 06:53
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

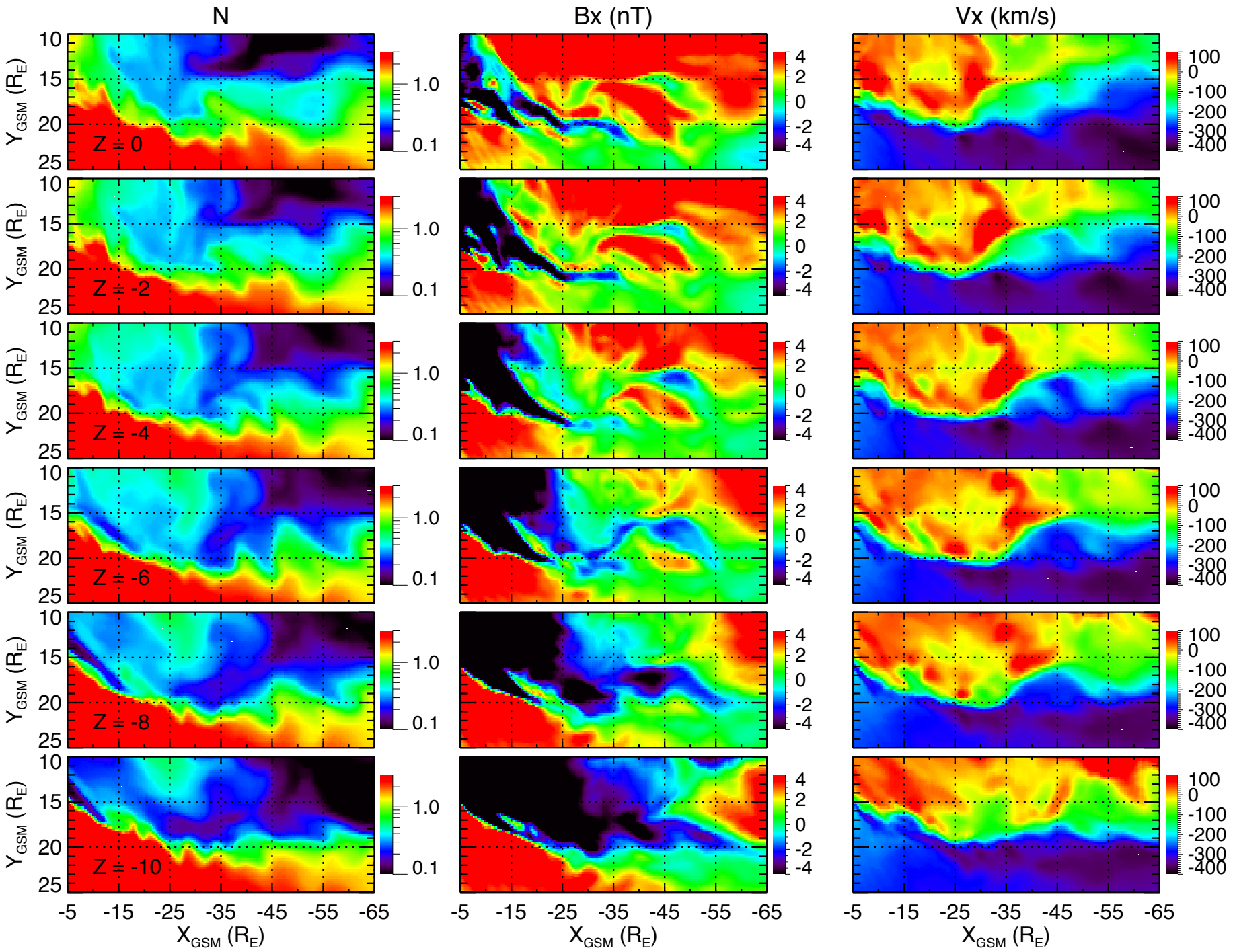

LFM-Merkin, 2014-02-13, t = 06:54
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

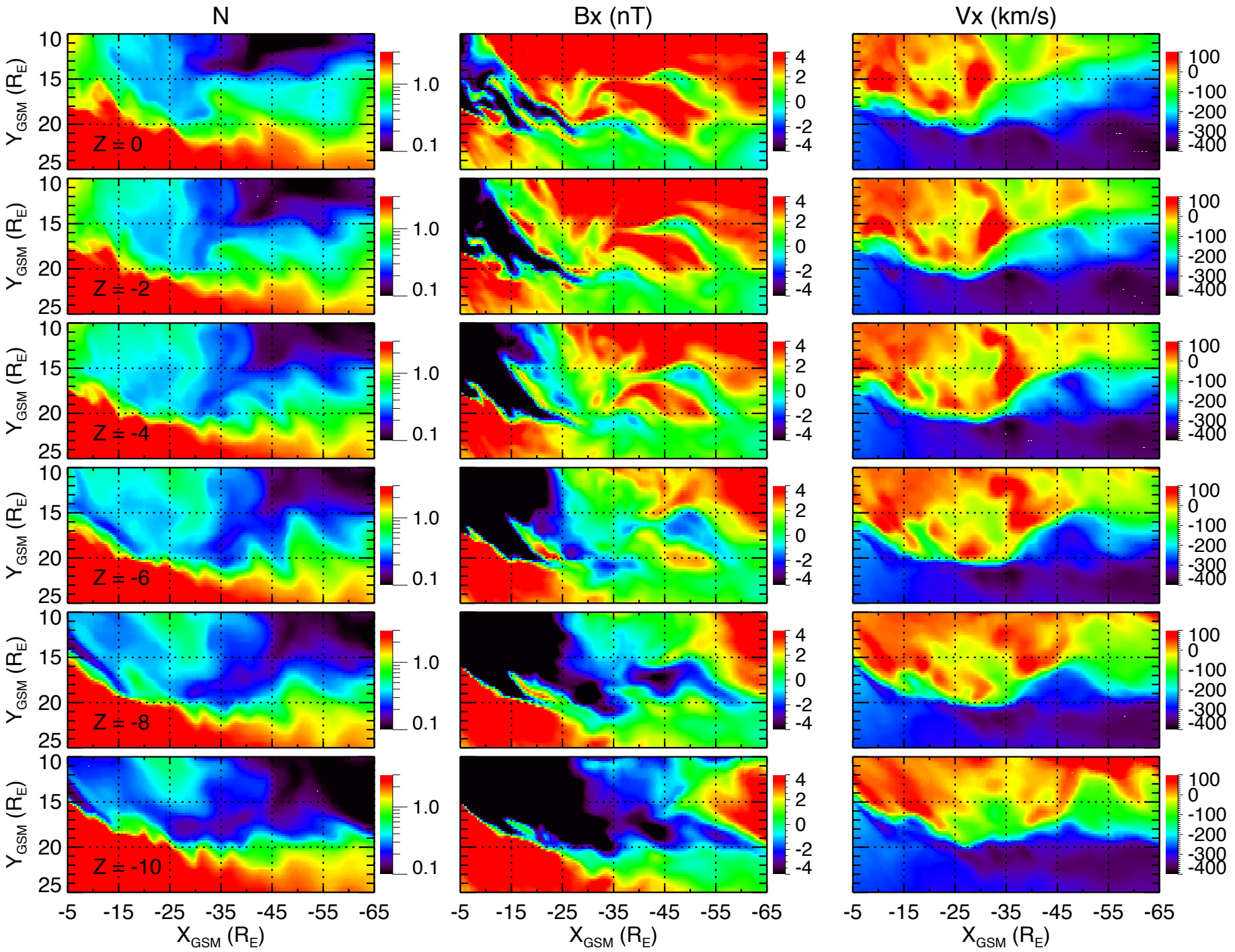

LFM-Merkin, 2014-02-13, t = 06:55
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

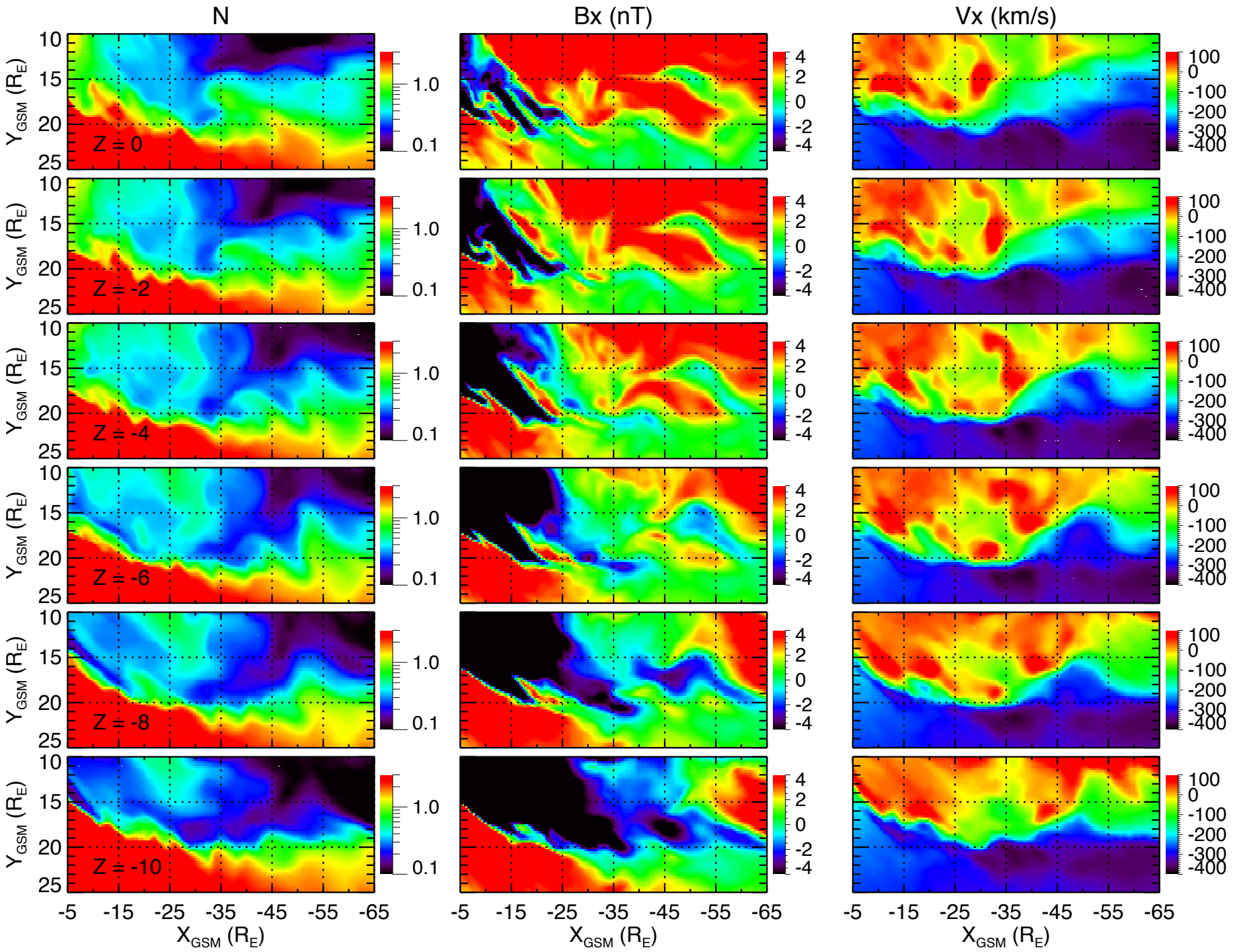

LFM-Merkin, 2014-02-13, t = 06:56
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

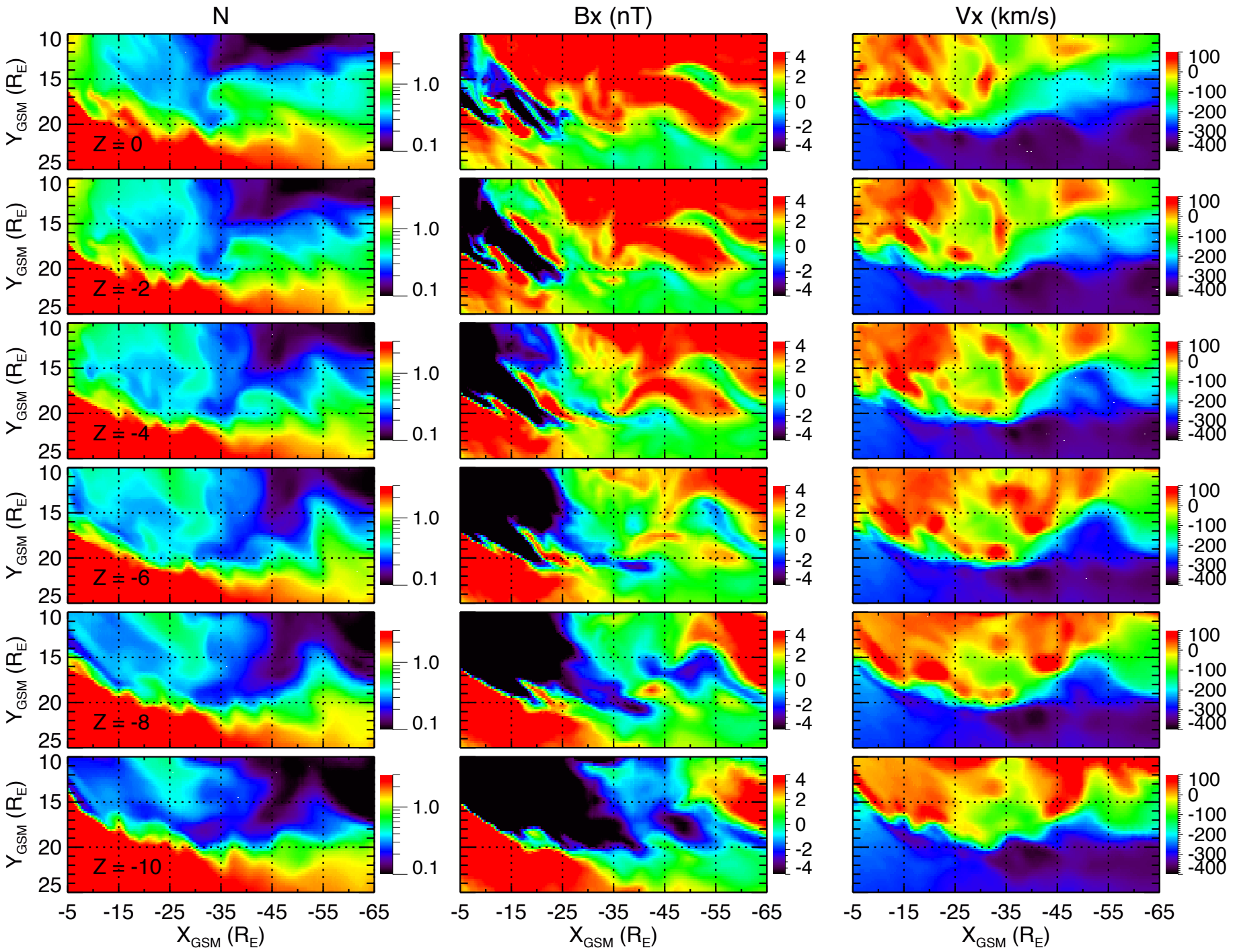

LFM-Merkin, 2014-02-13, t = 06:57
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

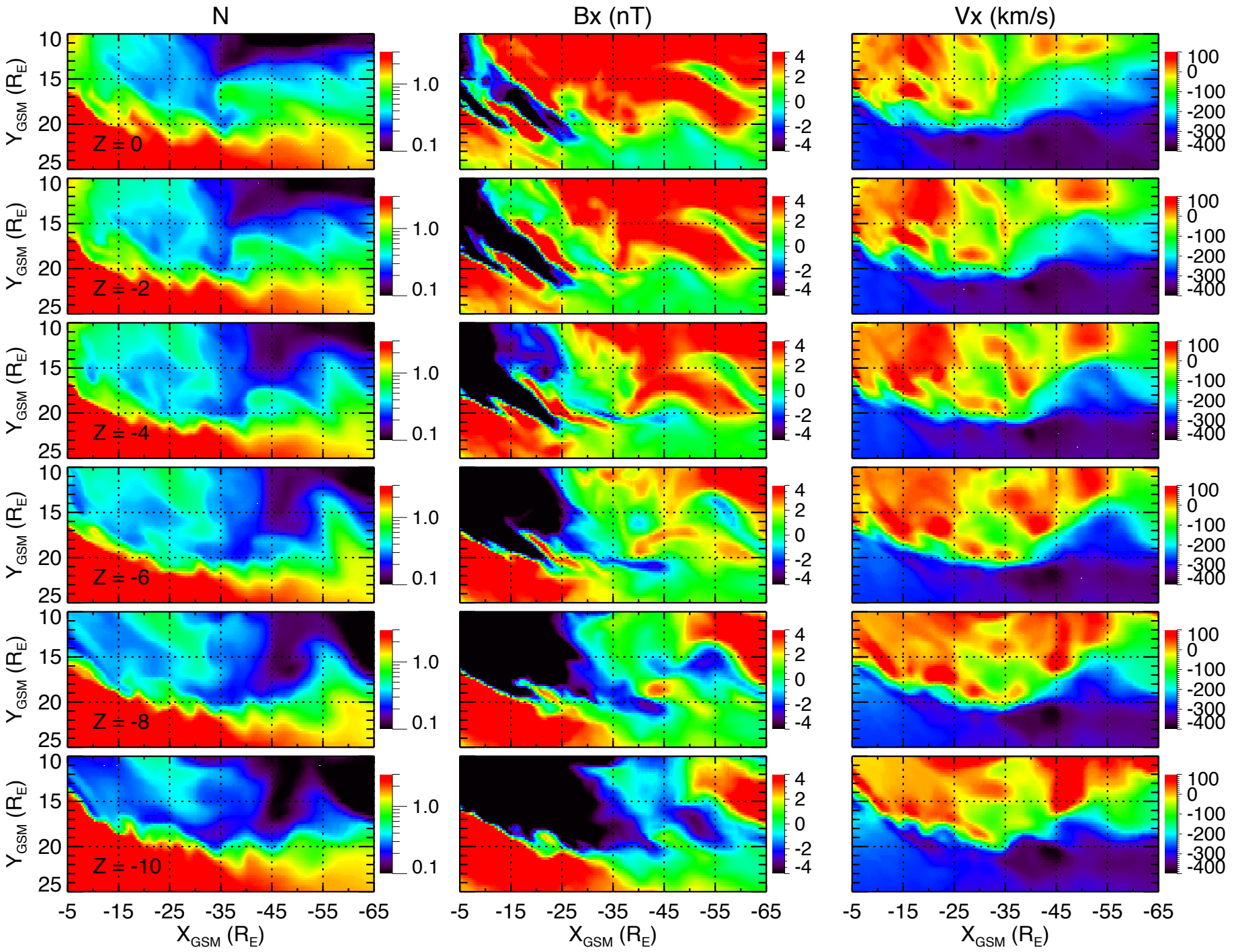

LFM-Merkin, 2014-02-13, t = 06:58
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

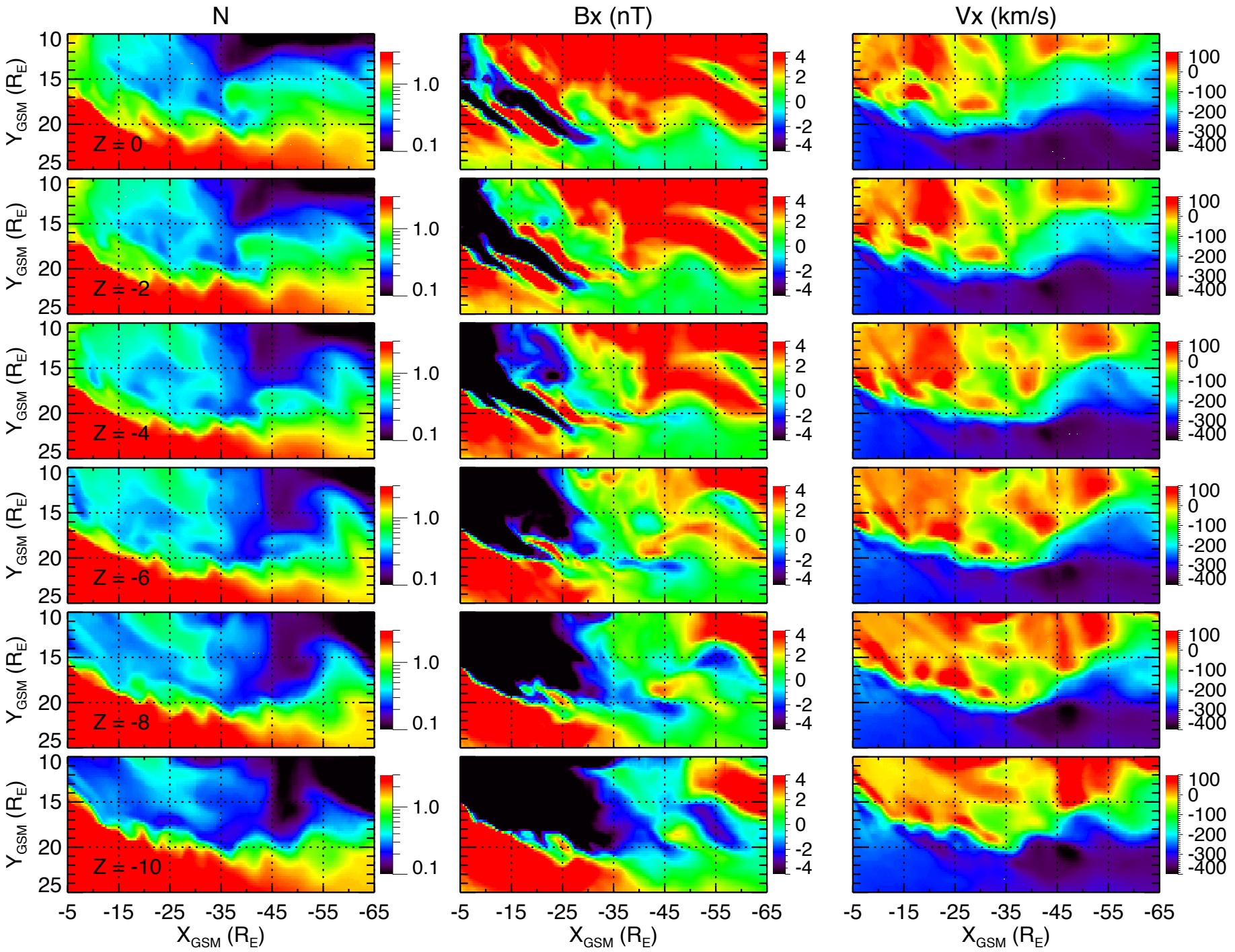

LFM-Merkin, 2014-02-13, t = 06:59
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

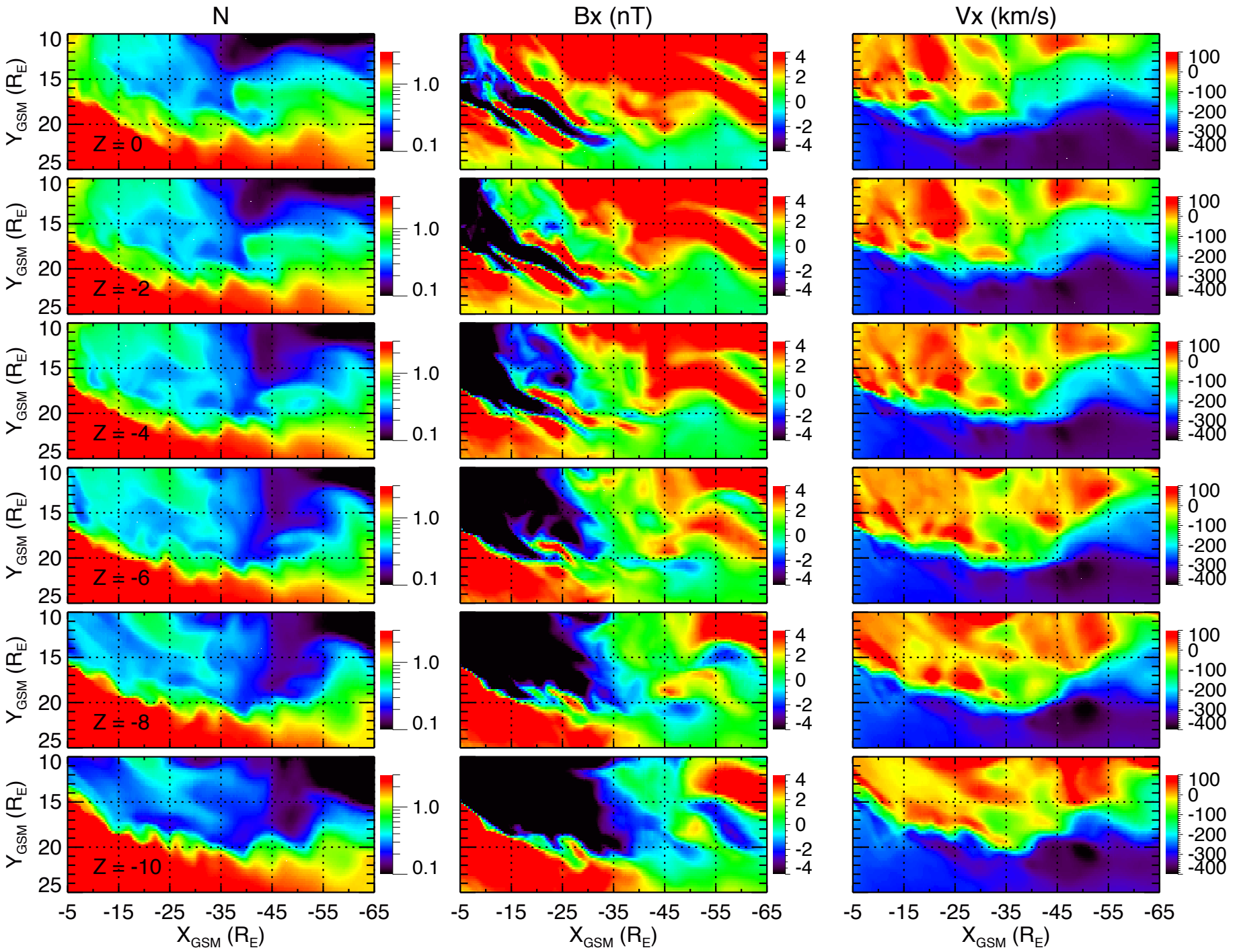

LFM-Merkin, 2014-02-13, t = 07:00
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

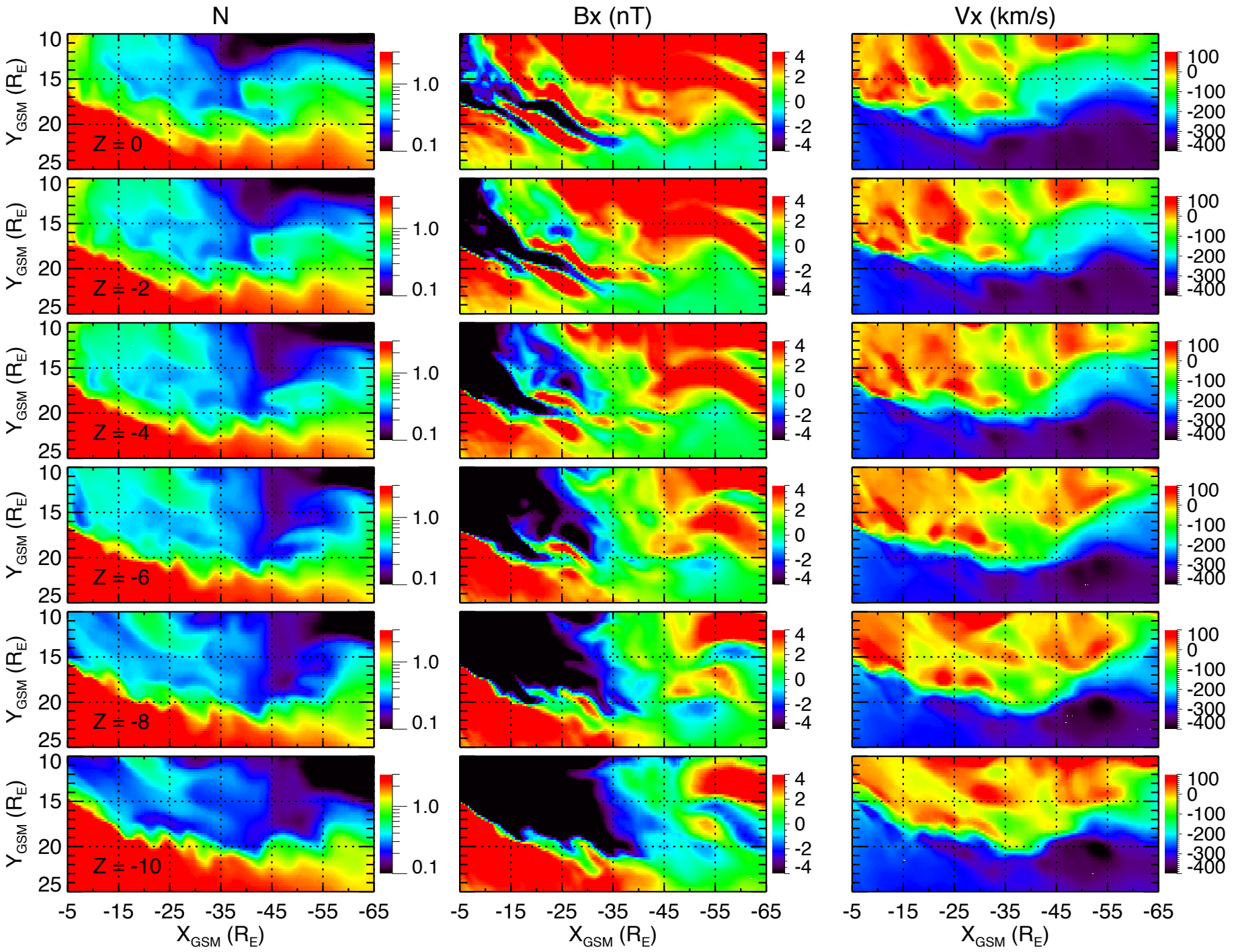

LFM-Merkin, 2014-02-13, t = 07:01
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

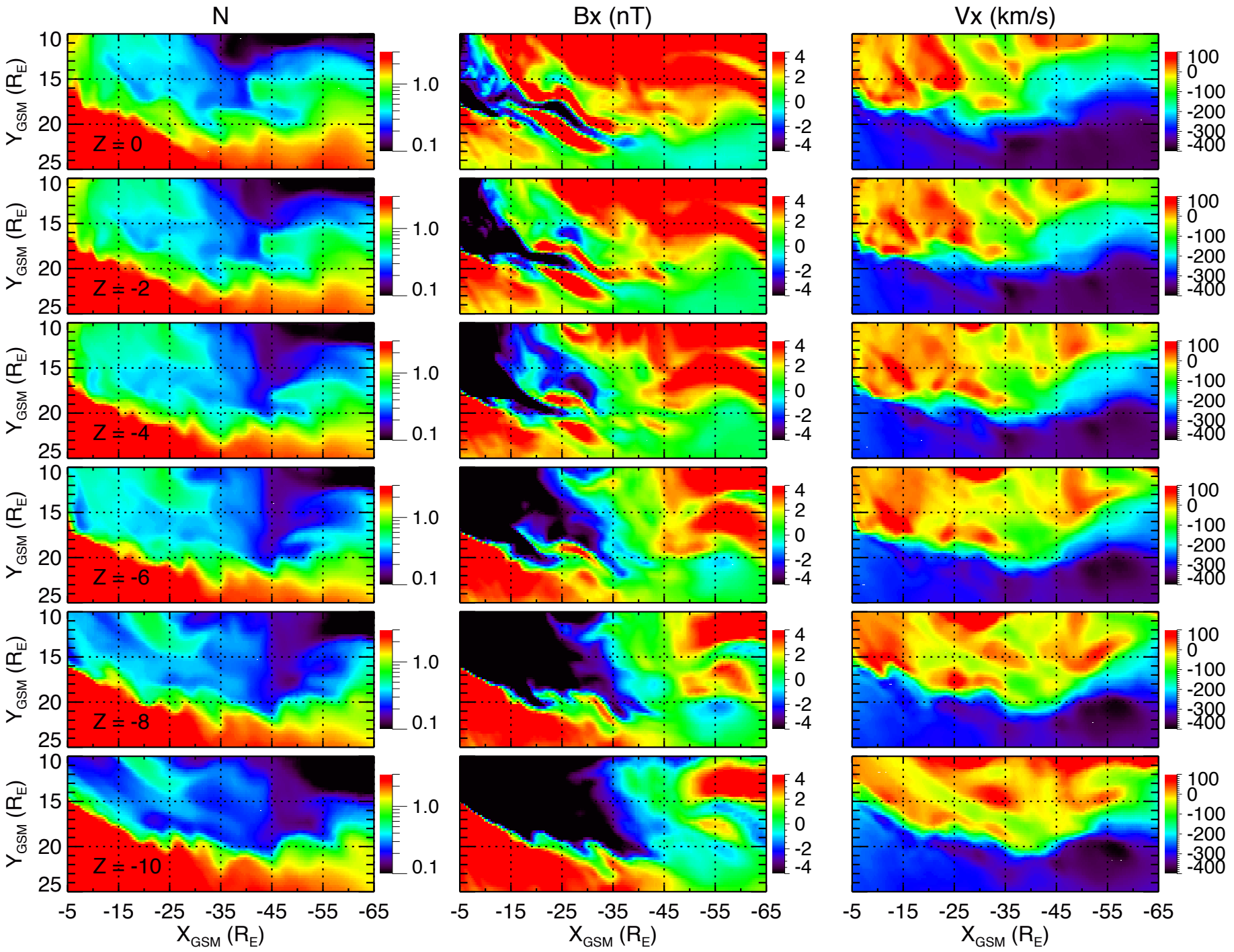

LFM-Merkin, 2014-02-13, t = 07:02
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

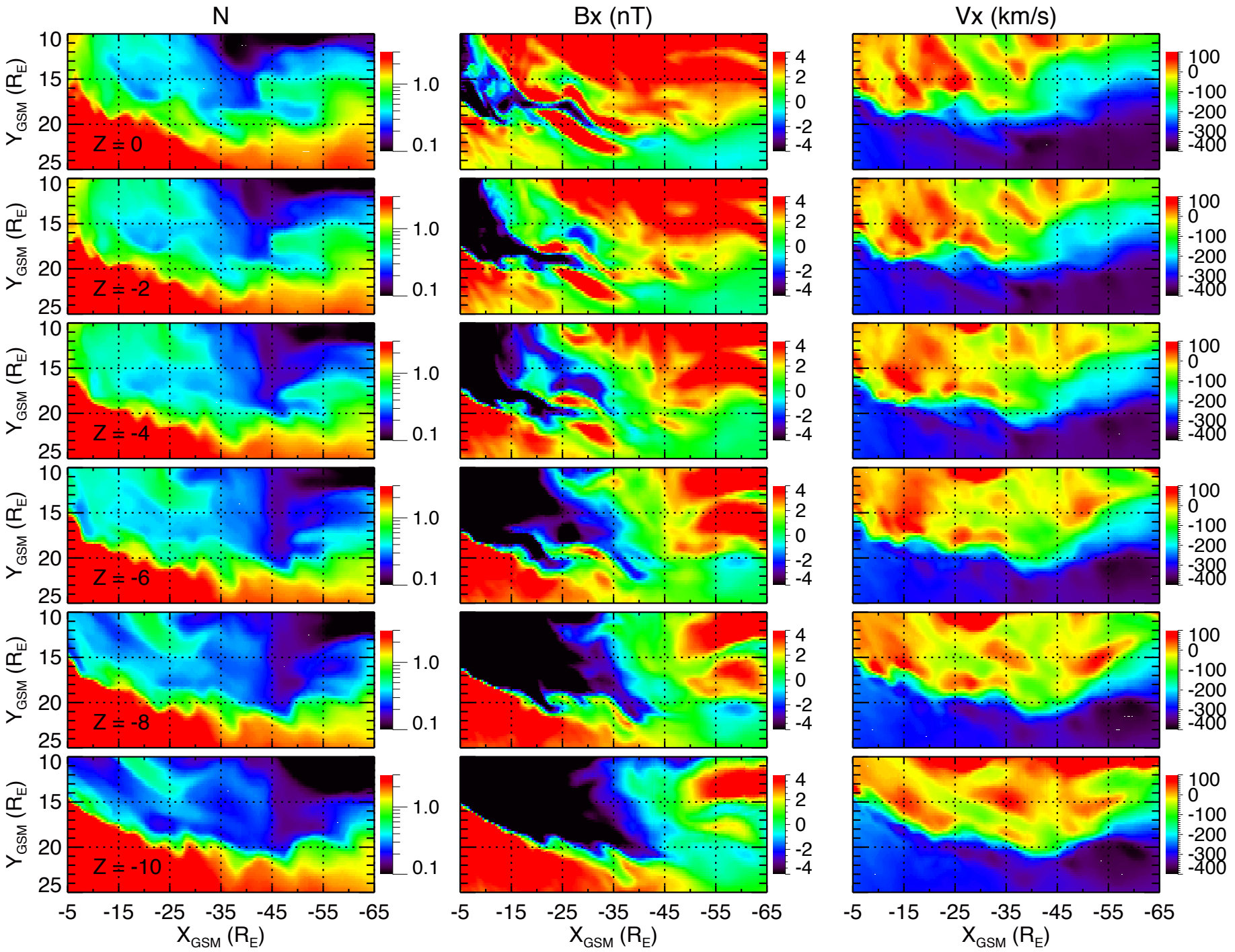

LFM-Merkin, 2014-02-13, t = 07:03
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

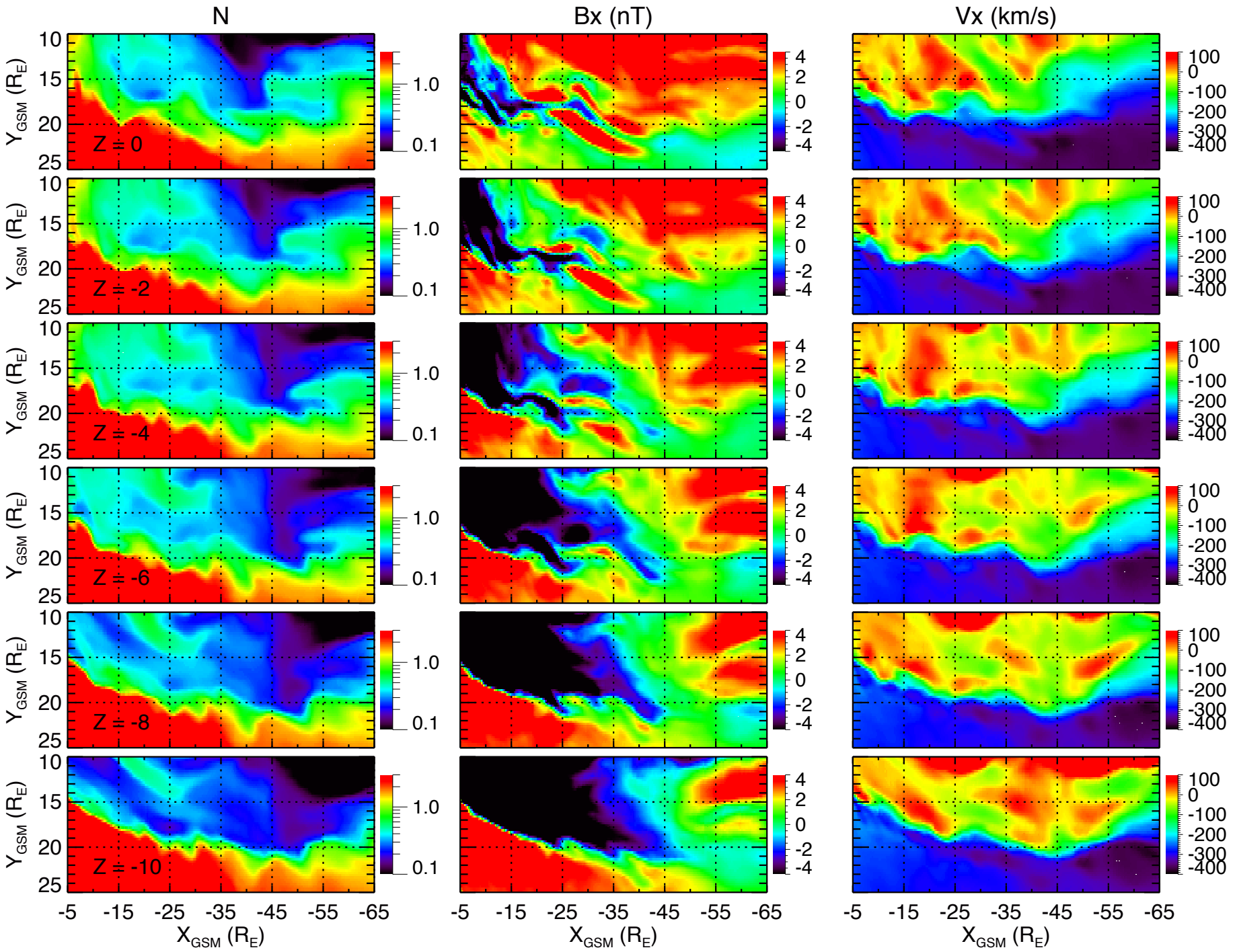

LFM-Merkin, 2014-02-13, t = 07:04
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

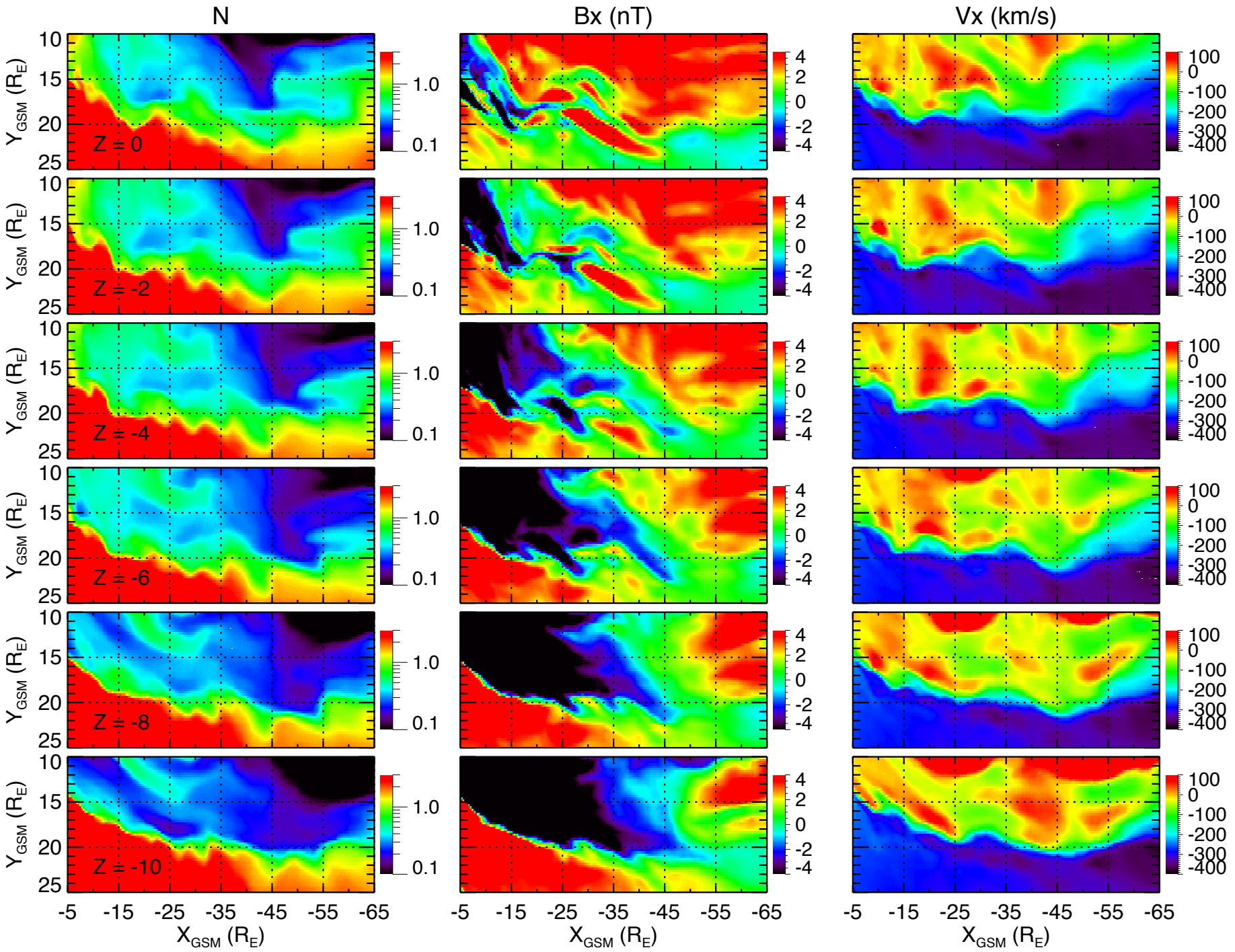

LFM-Merkin, 2014-02-13, t = 07:05
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

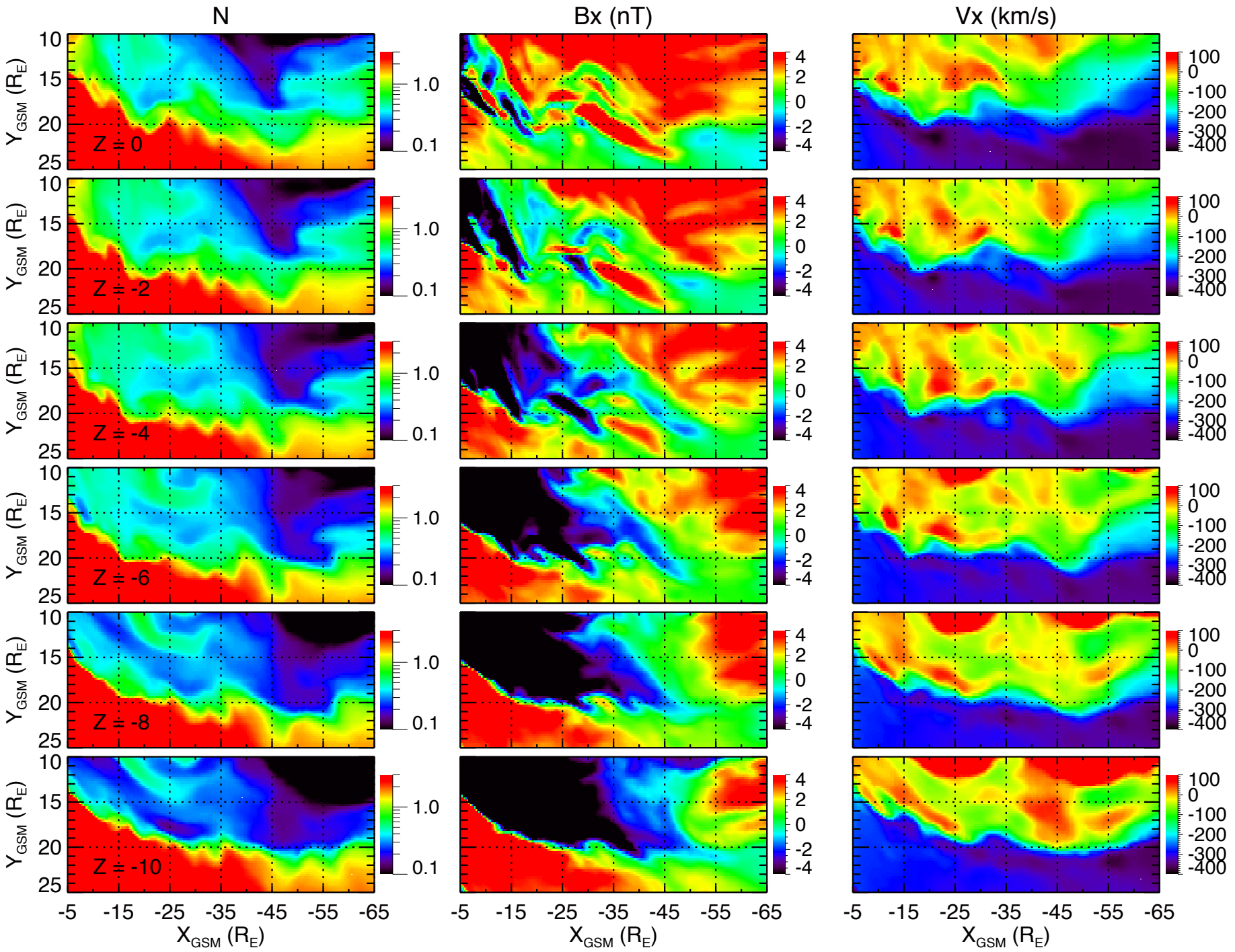

LFM-Merkin, 2014-02-13, t = 07:06
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

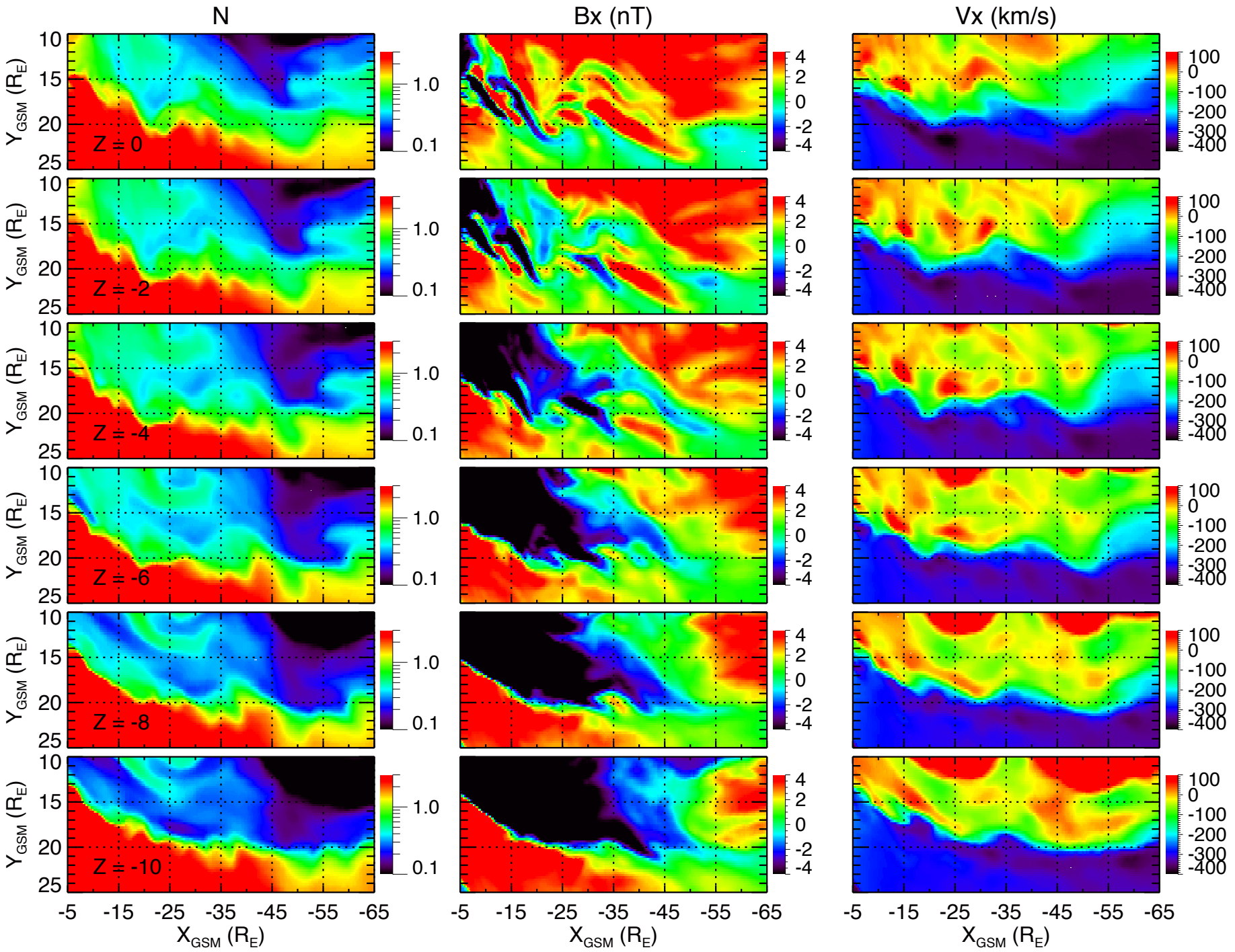

LFM-Merkin, 2014-02-13, t = 07:07
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

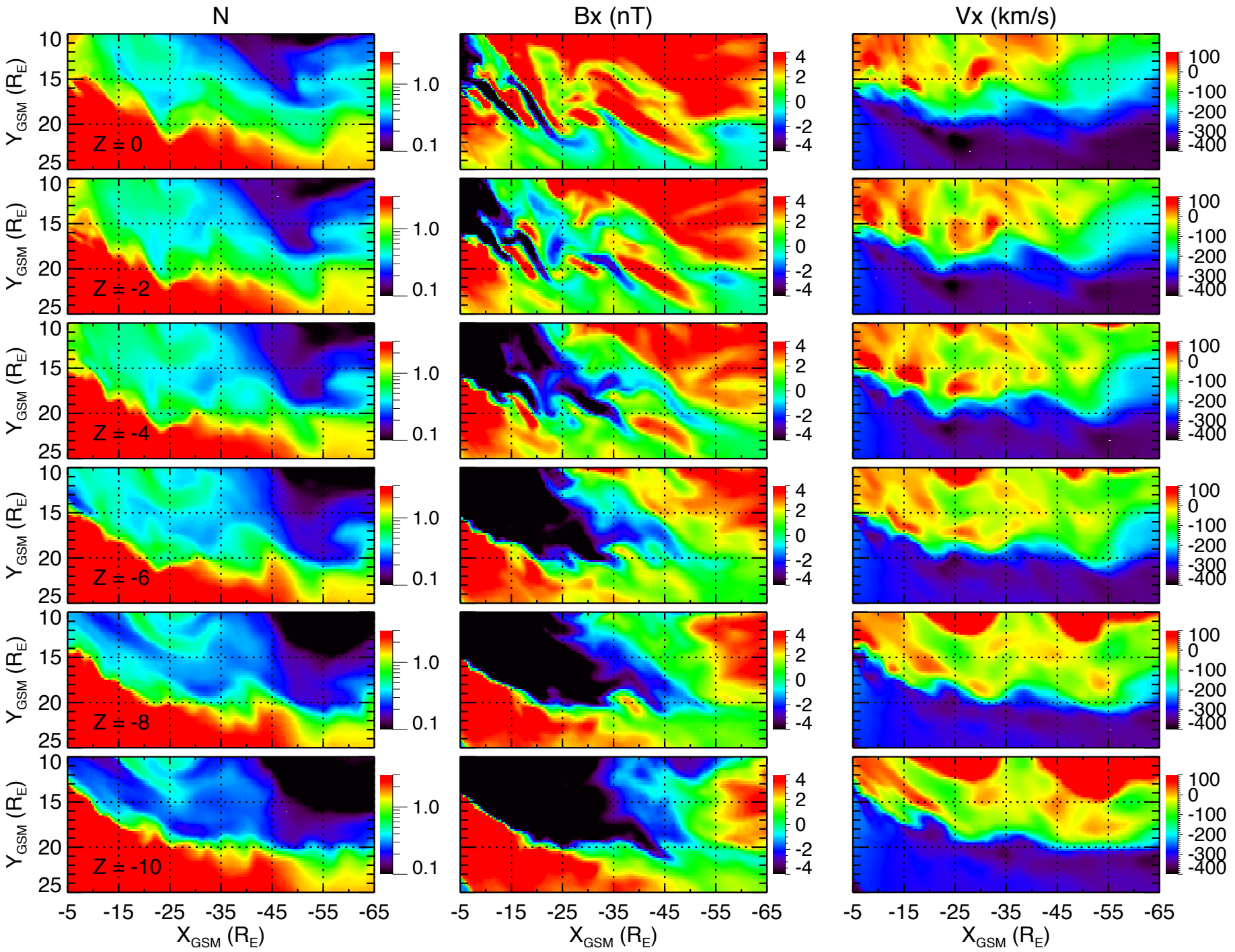

LFM-Merkin, 2014-02-13, t = 07:08
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

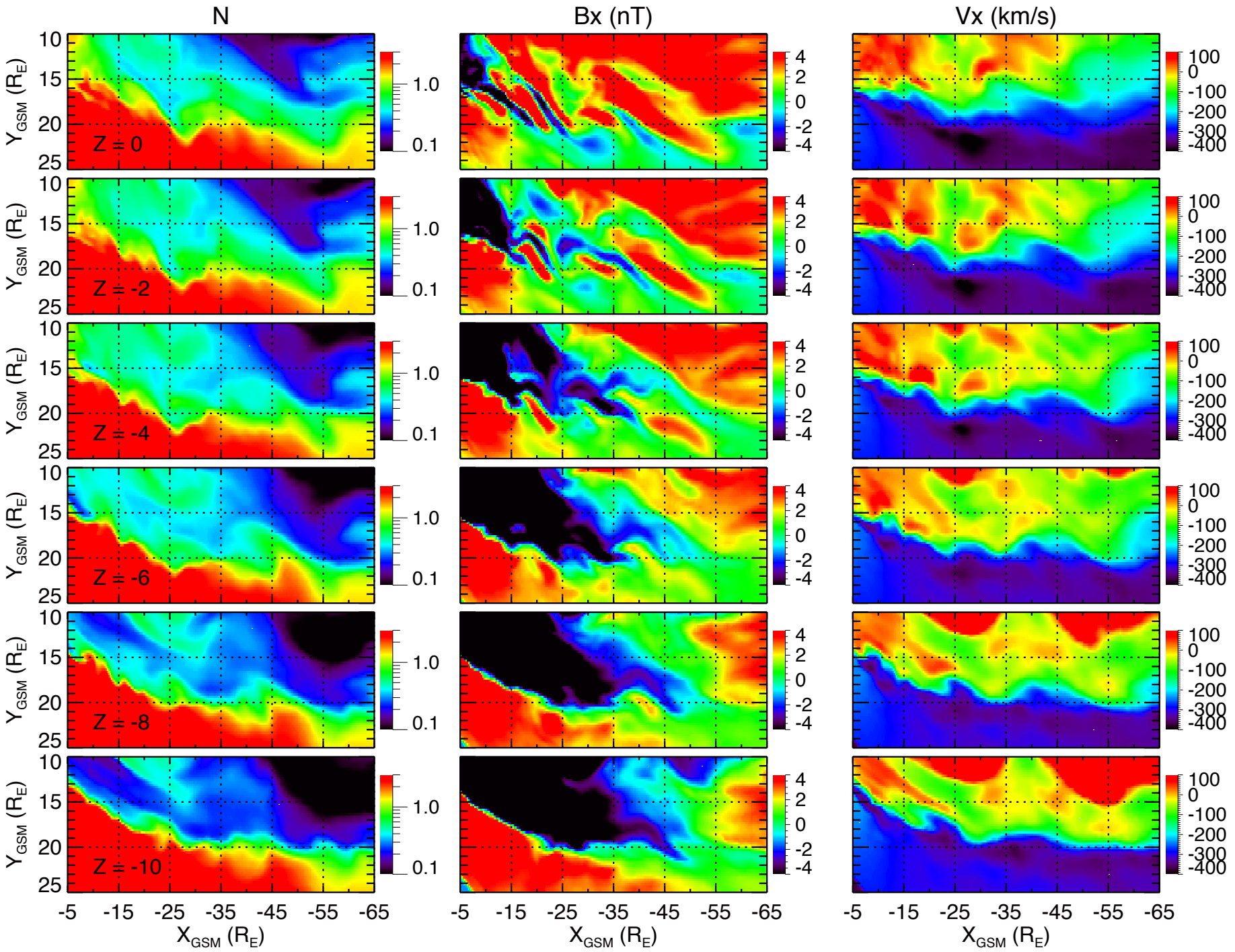

LFM-Merkin, 2014-02-13, t = 07:09
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

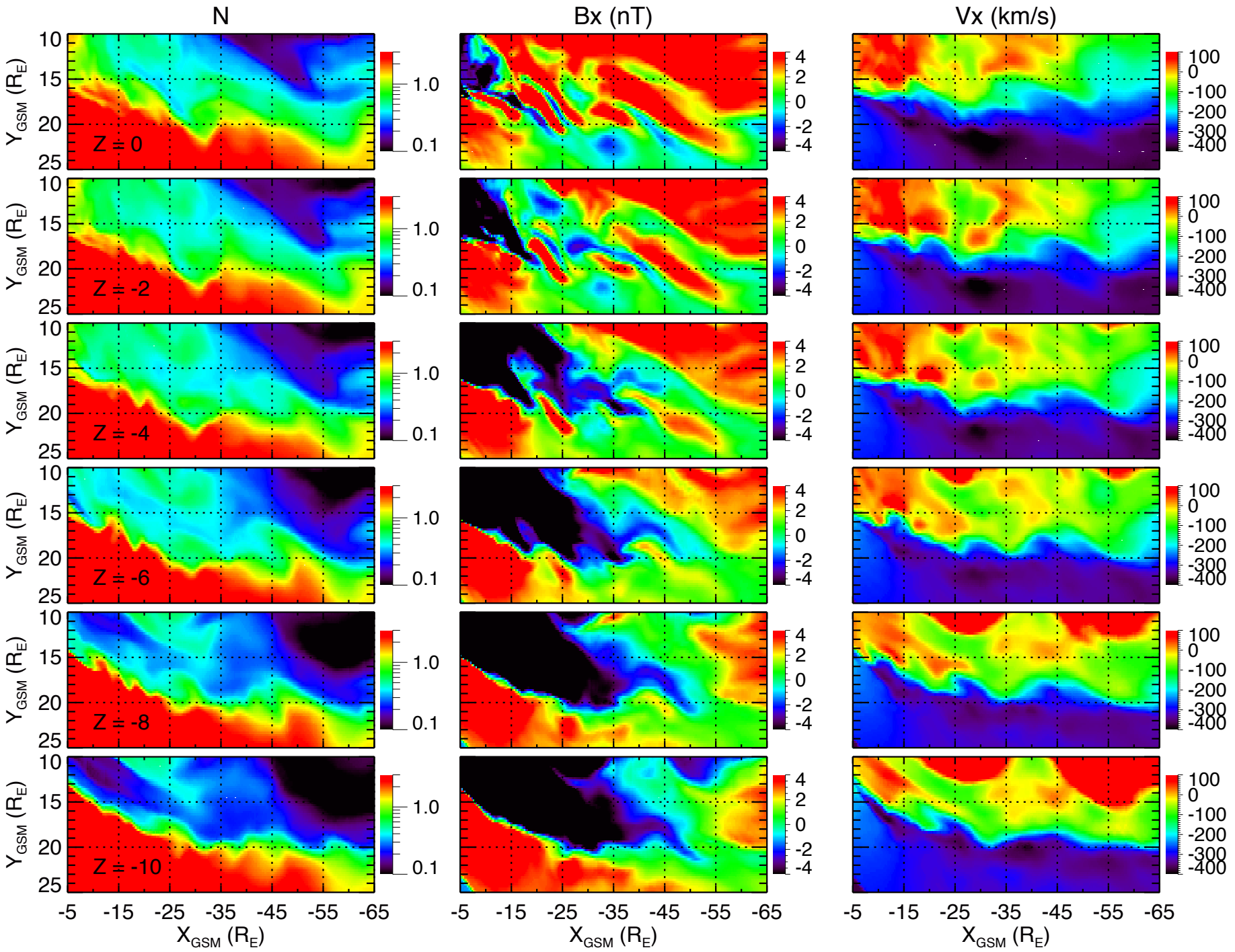

LFM-Merkin, 2014-02-13, t = 07:10
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

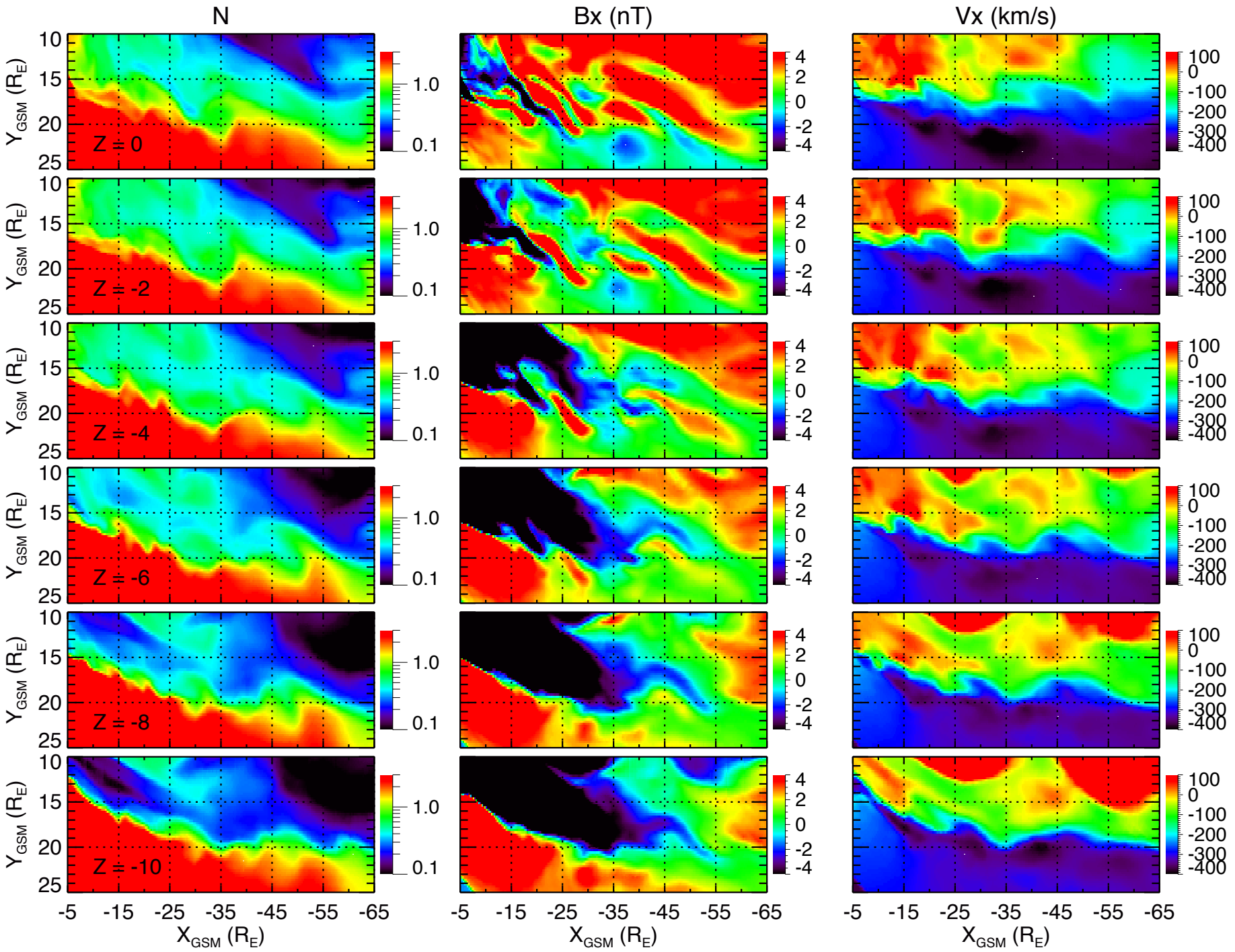

LFM-Merkin, 2014-02-13, t = 07:11
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

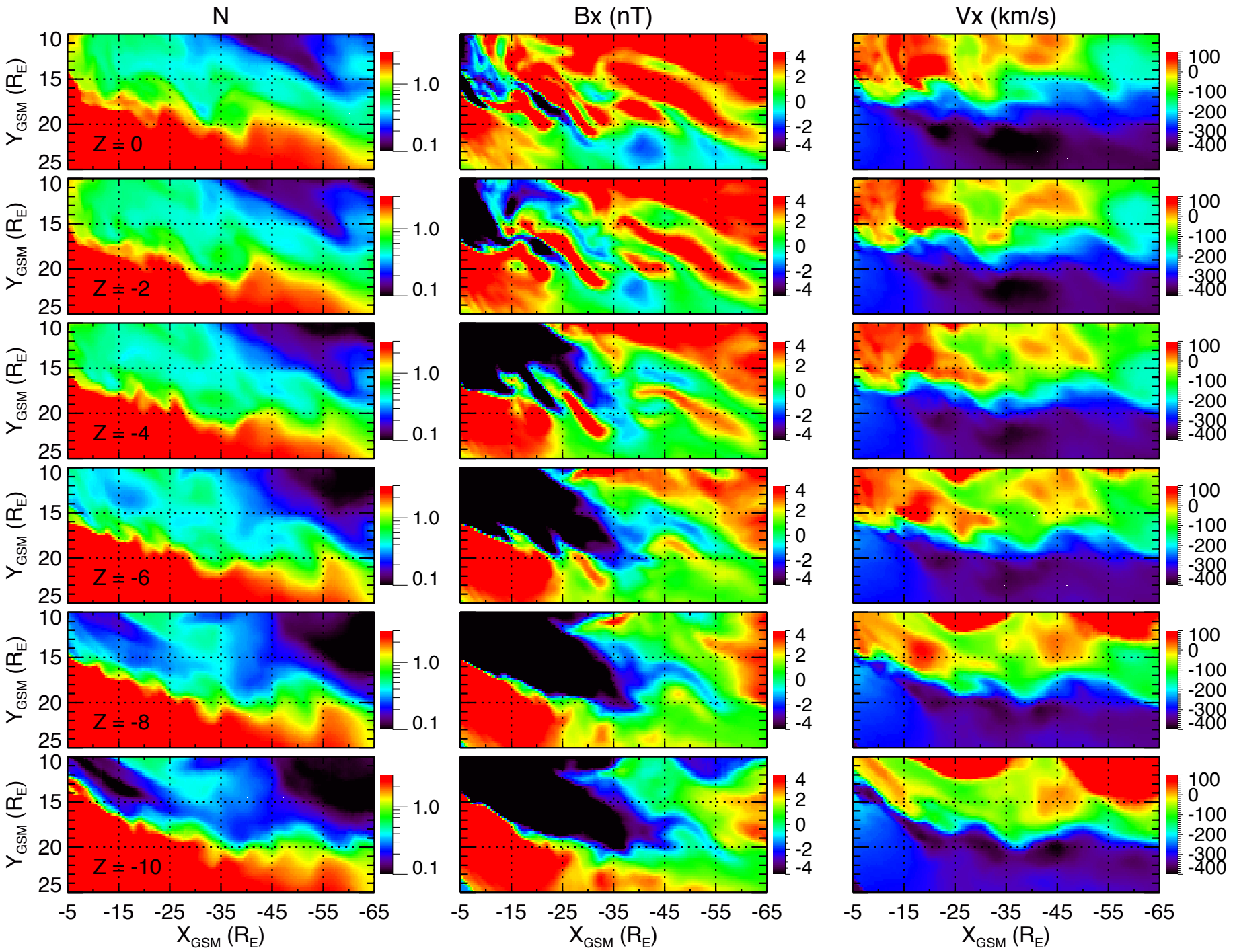

LFM-Merkin, 2014-02-13, t = 07:12
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

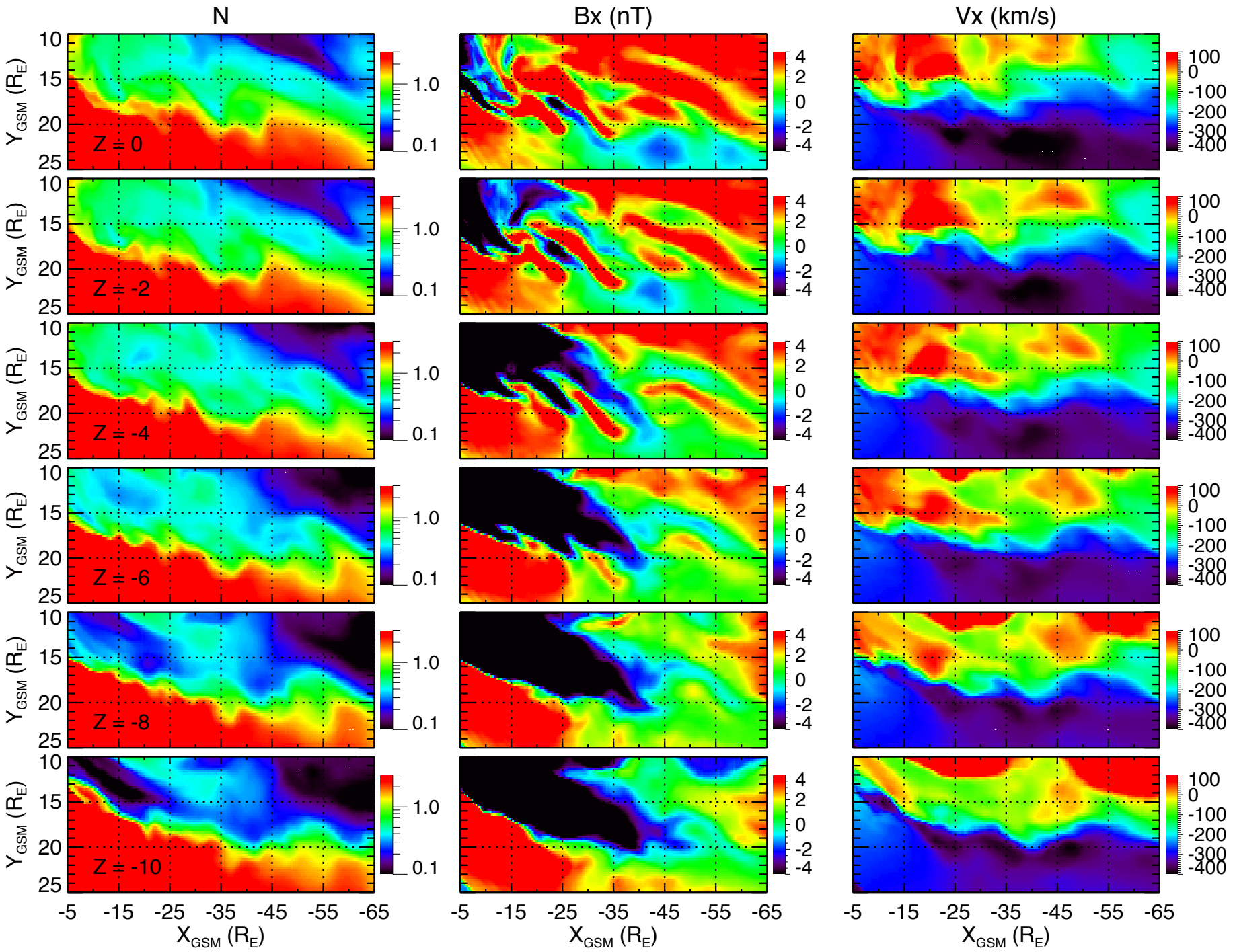

LFM-Merkin, 2014-02-13, t = 07:13
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

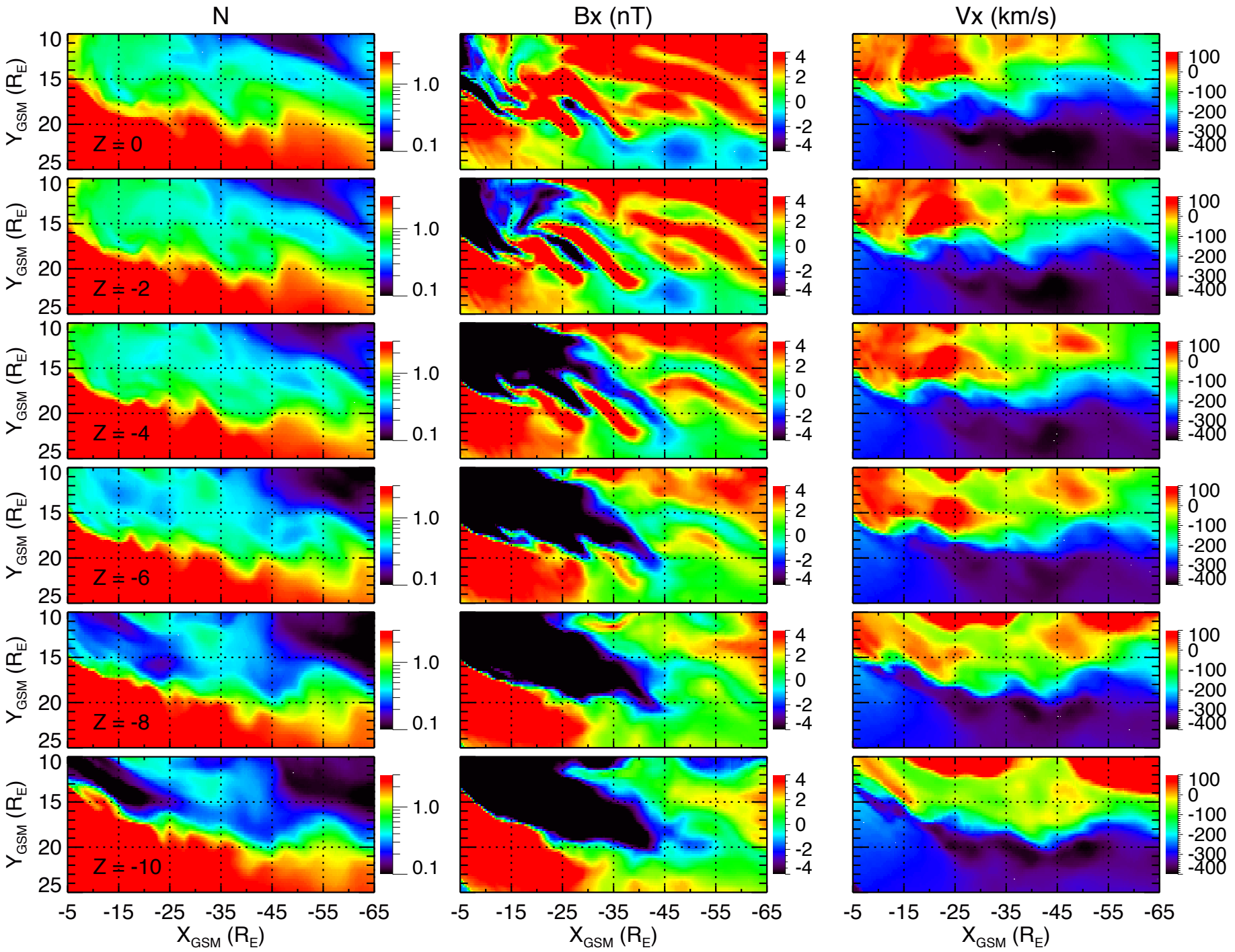

LFM-Merkin, 2014-02-13, t = 07:14
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

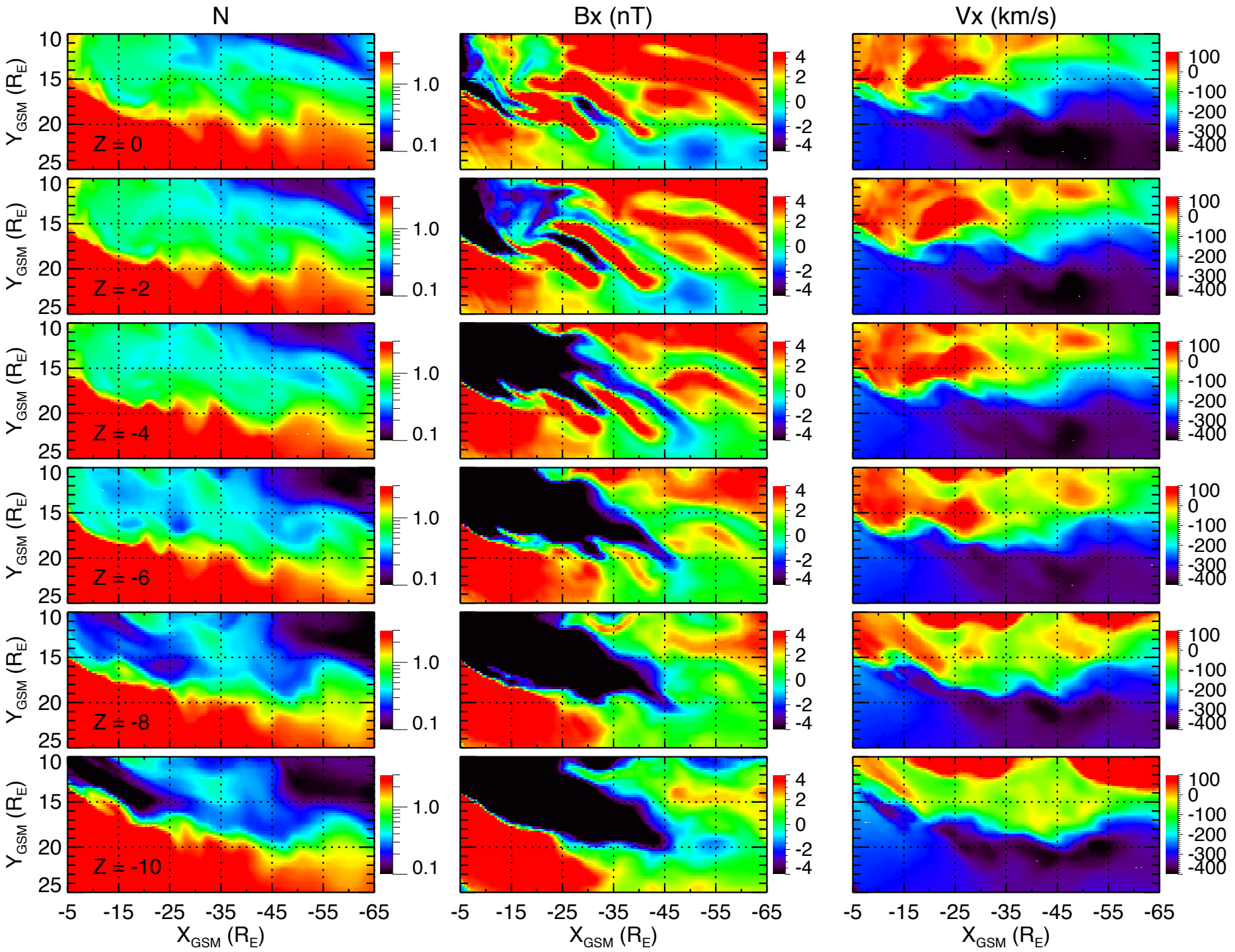

LFM-Merkin, 2014-02-13, t = 07:15
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

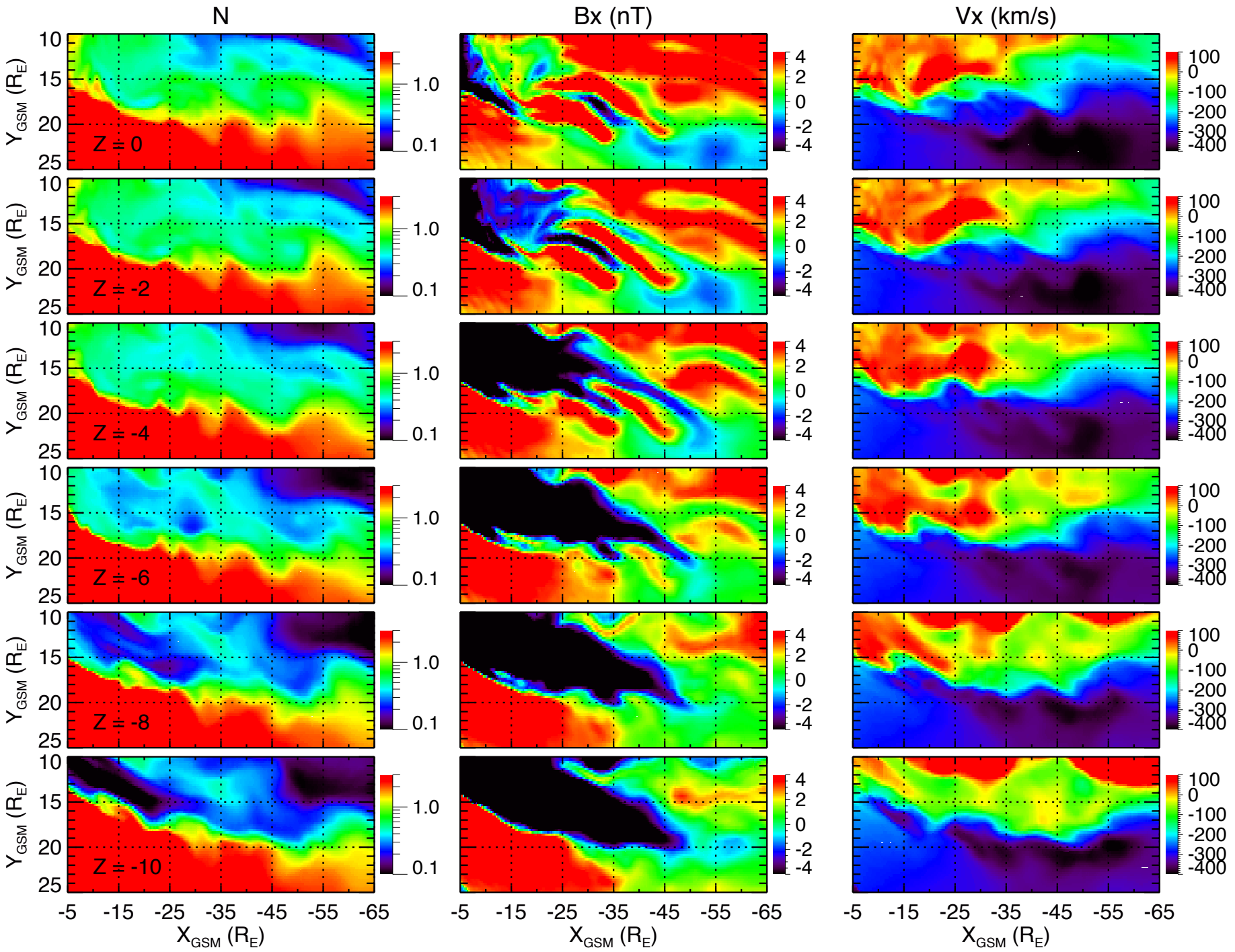

LFM-Merkin, 2014-02-13, t = 07:16
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

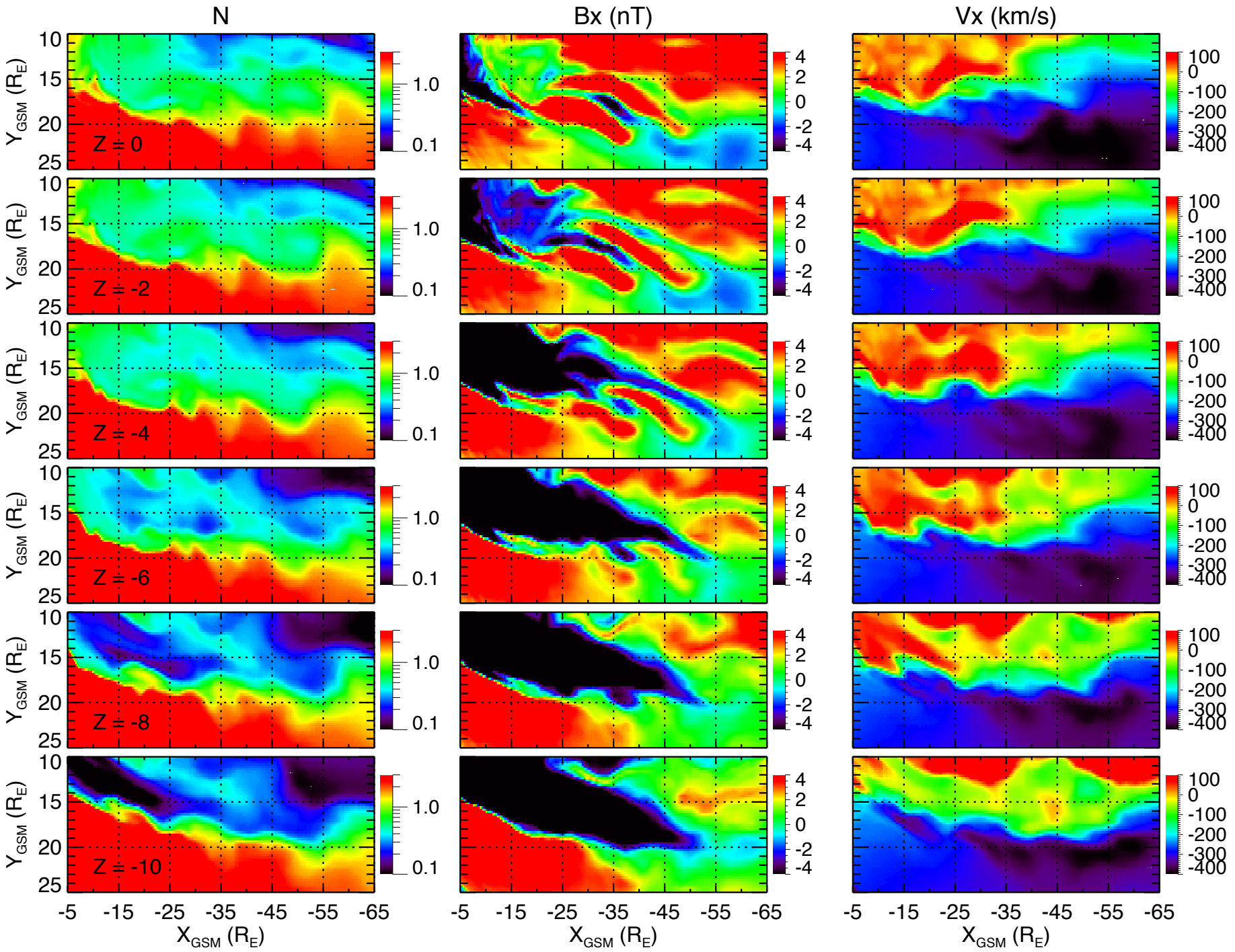

LFM-Merkin, 2014-02-13, t = 07:17
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

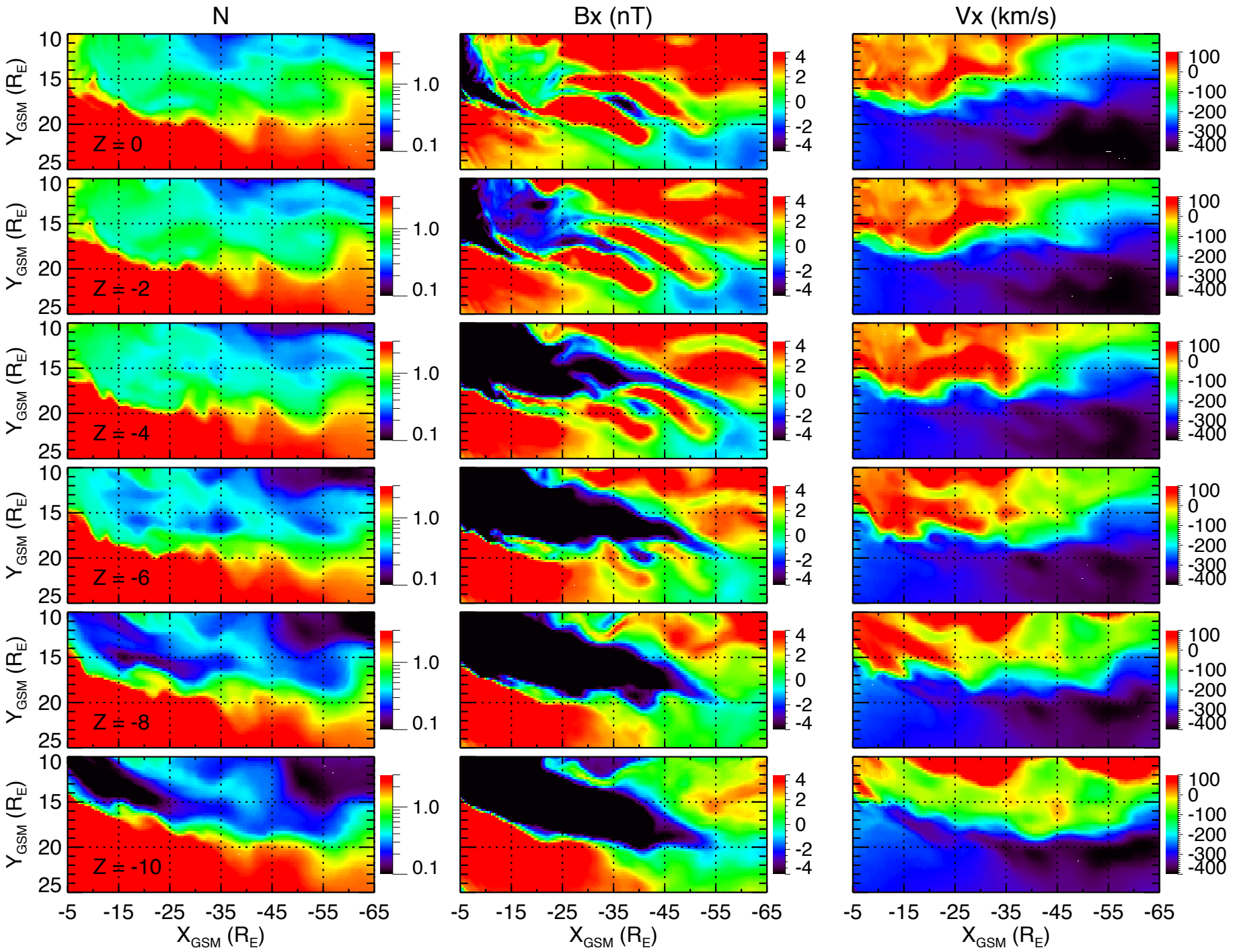

LFM-Merkin, 2014-02-13, t = 07:18
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

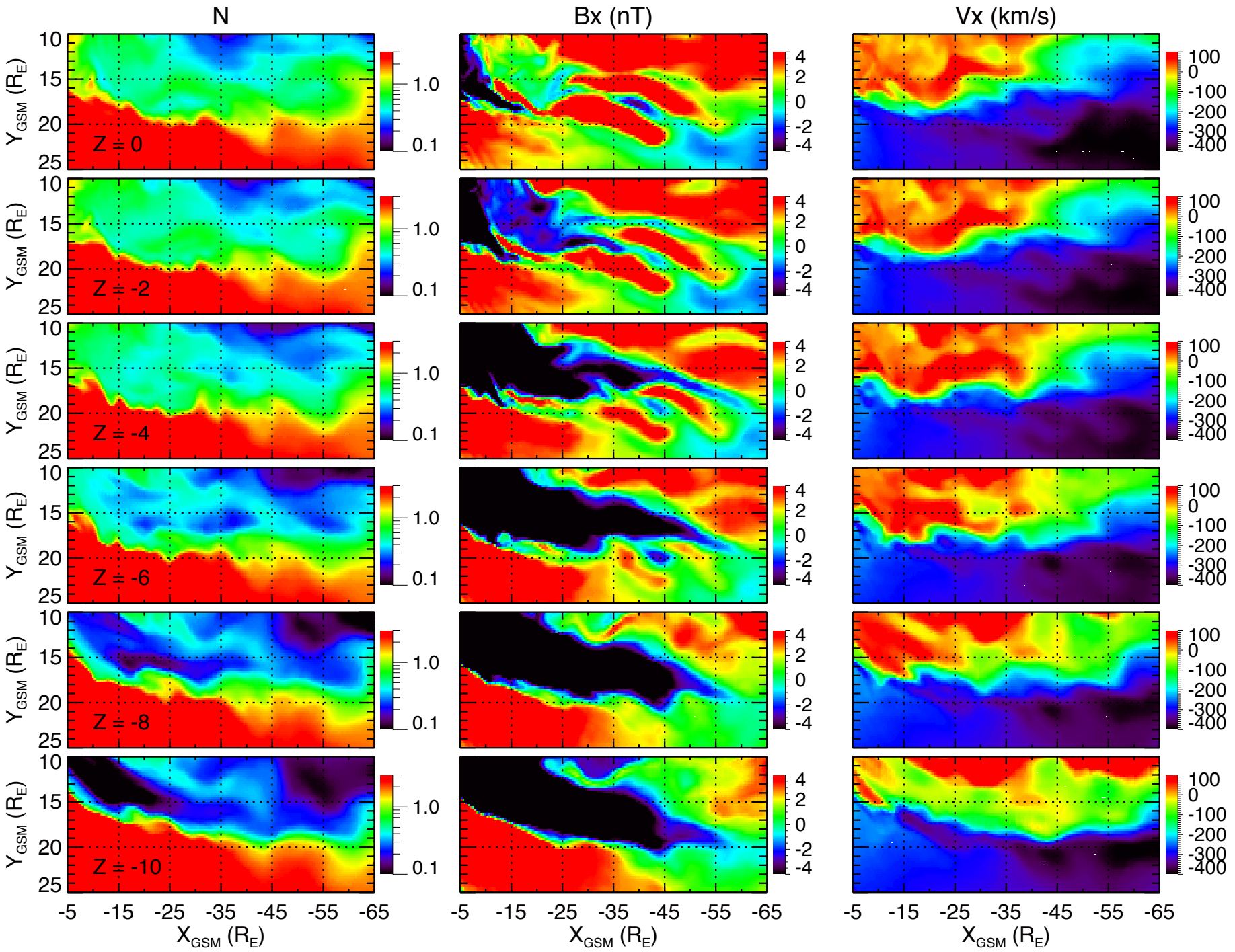

LFM-Merkin, 2014-02-13, t = 07:19
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

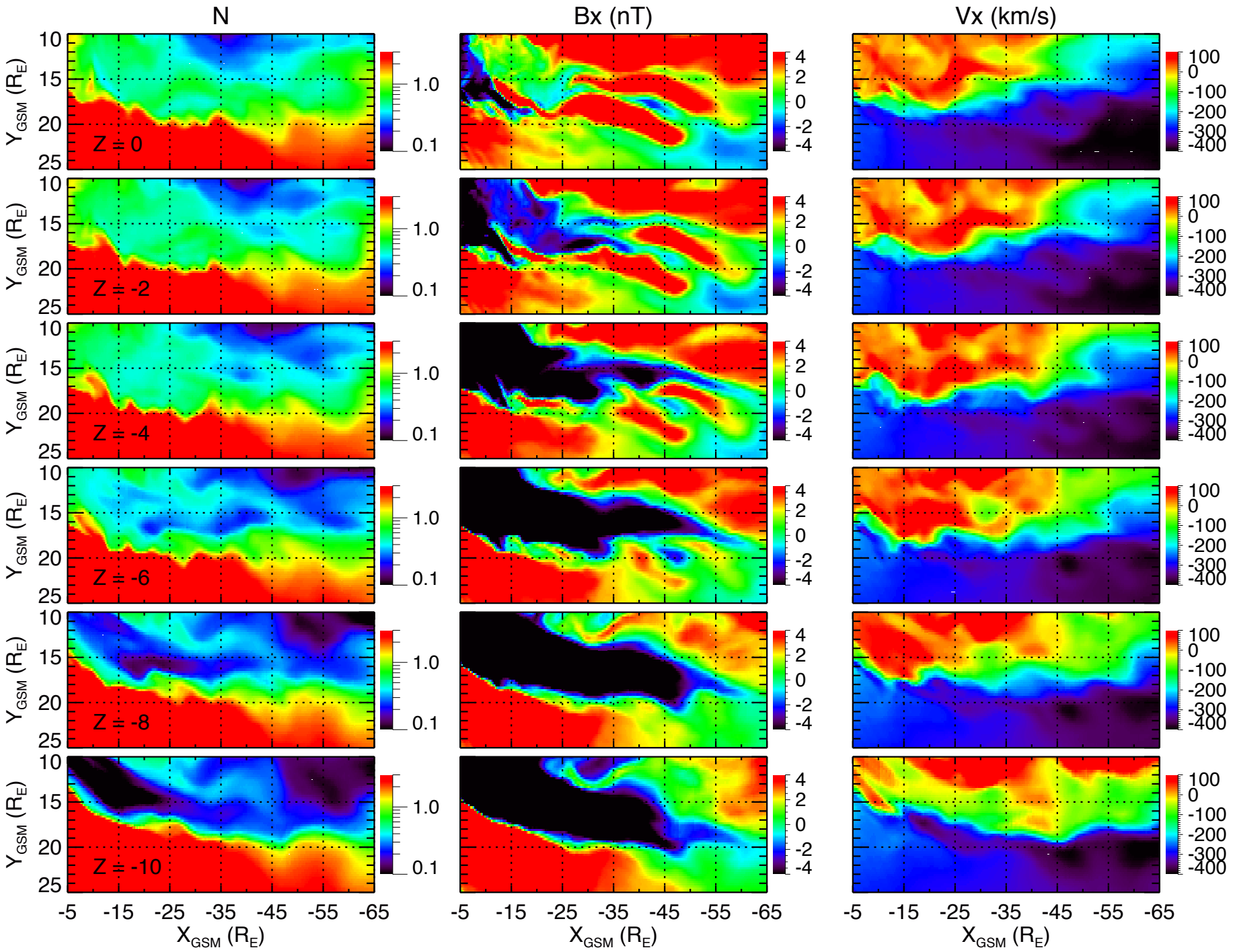

LFM-Merkin, 2014-02-13, t = 07:20
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

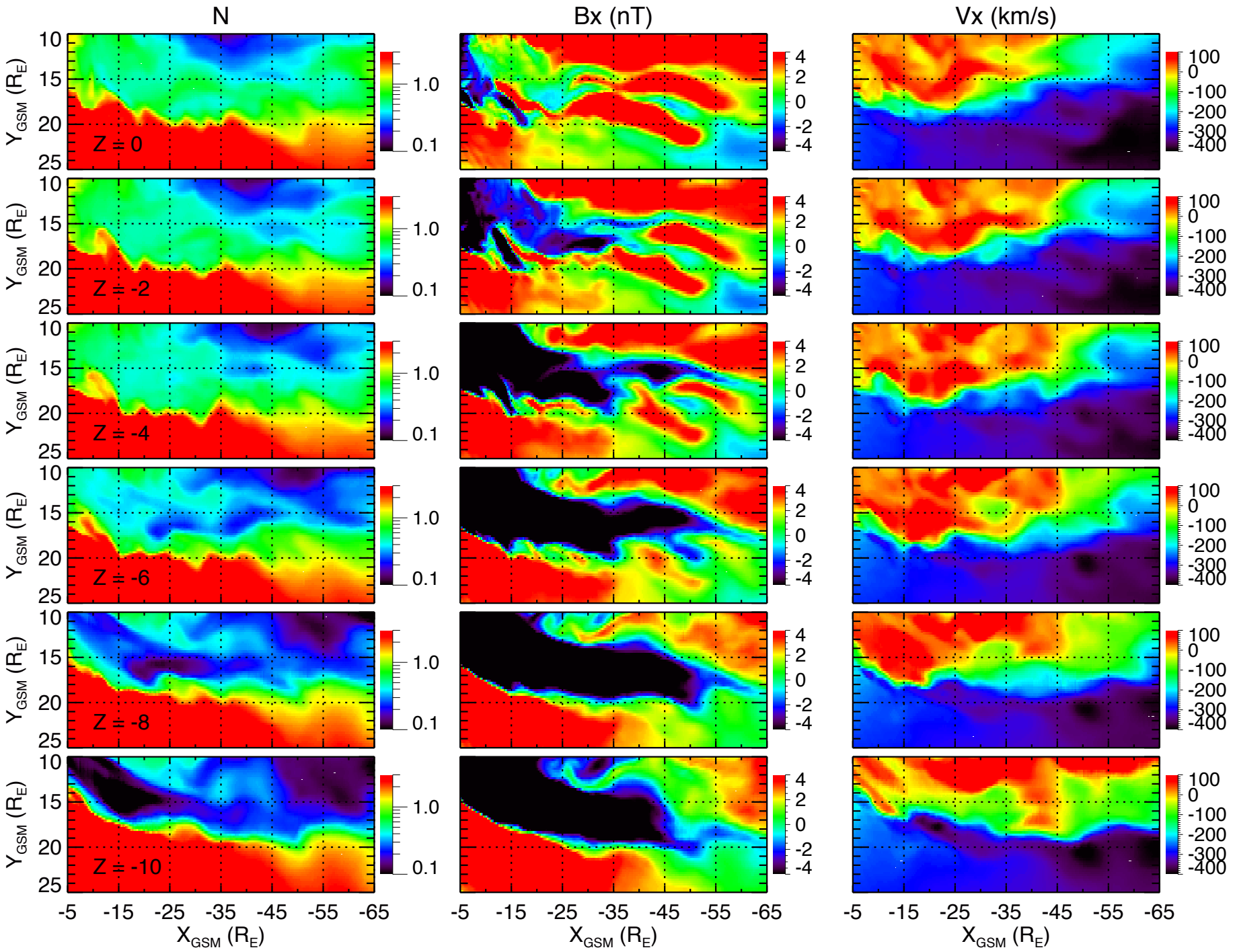

LFM-Merkin, 2014-02-13, t = 07:21
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

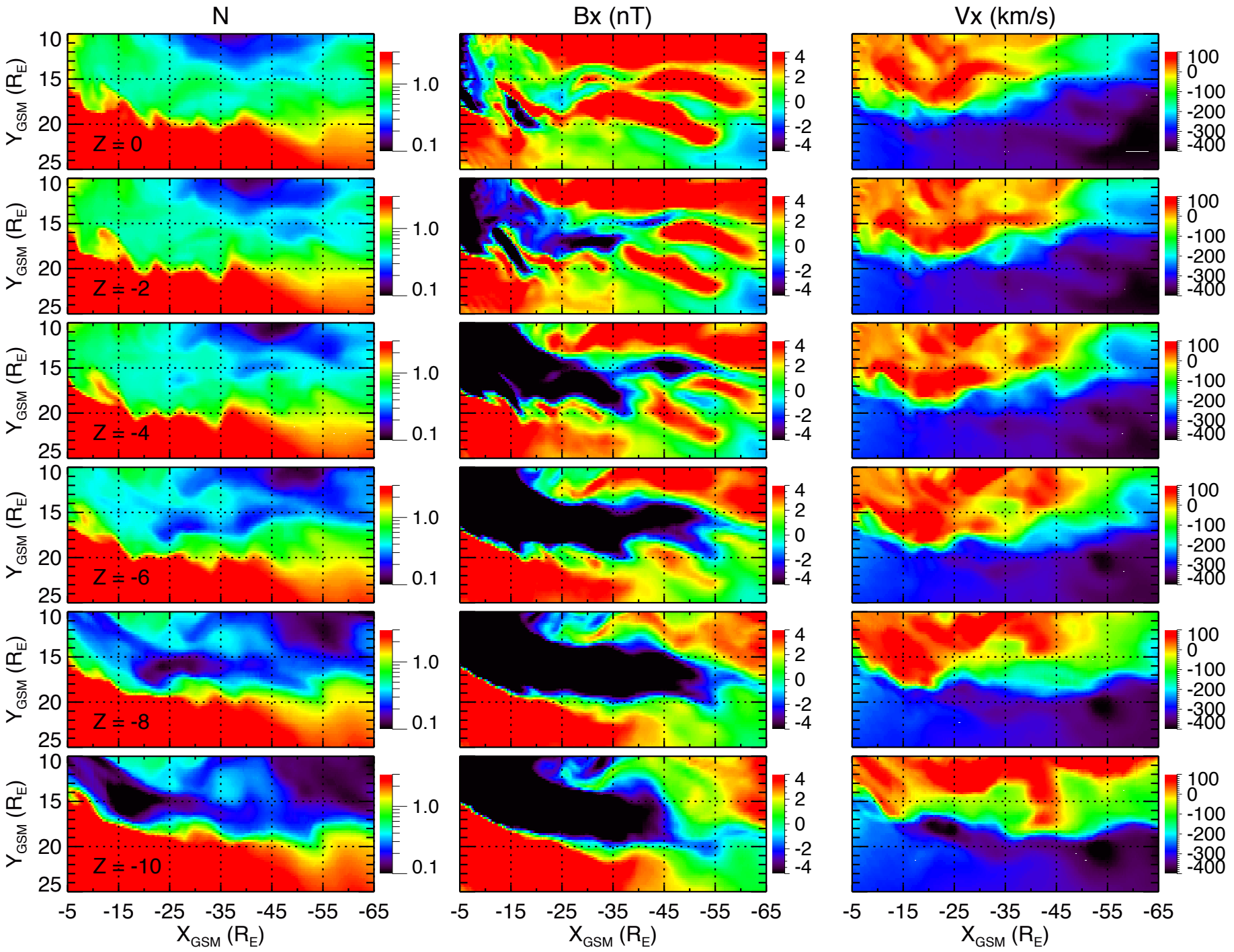

LFM-Merkin, 2014-02-13, t = 07:22
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

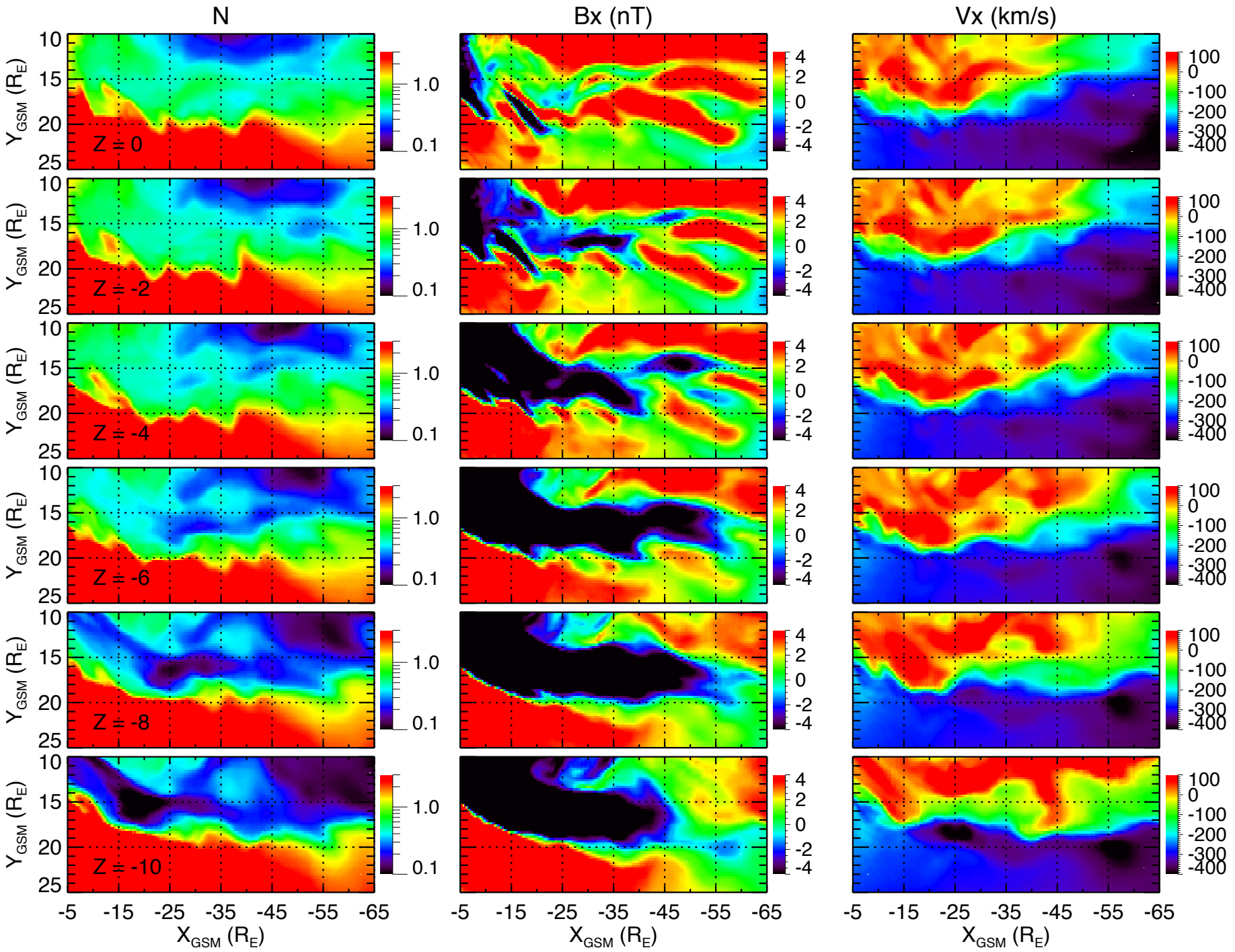

LFM-Merkin, 2014-02-13, t = 07:23
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400

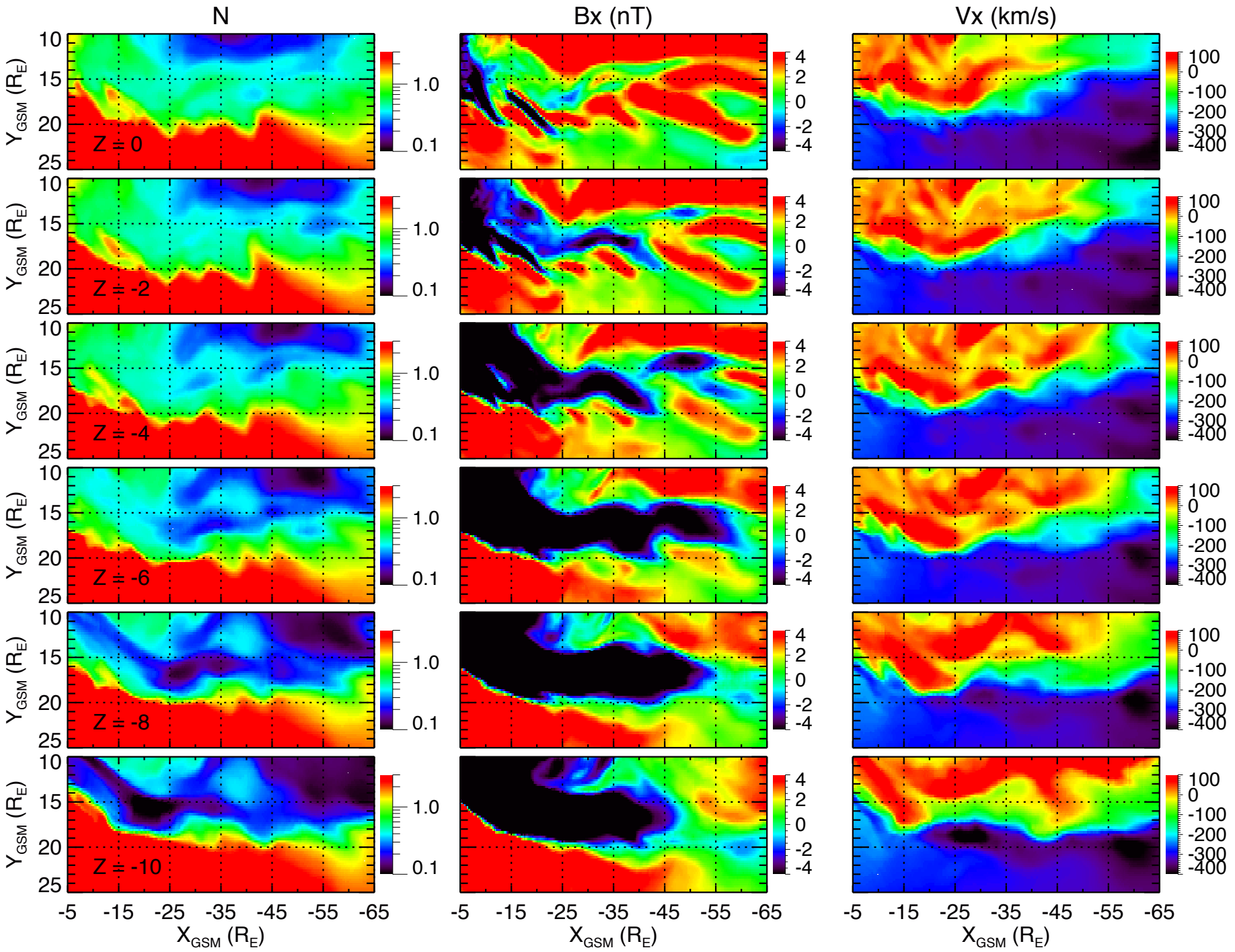

LFM-Merkin, 2014-02-13, t = 07:24
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400


LFM-Merkin, 2014-02-13, t = 07:25
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400


LFM-Merkin, 2014-02-13, t = 07:26
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400


LFM-Merkin, 2014-02-13, t = 07:27
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400


LFM-Merkin, 2014-02-13, t = 07:28
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400


LFM-Merkin, 2014-02-13, t = 07:29
N
Bx (nT)
Vx (km/s)
Z = 0
Z = -2
Z = -4
Z = -6
Z = -8
Z = -10
Y_GSM (R_E)
X_GSM (R_E)
10
15
20
25
-5
-15
-25
-35
-45
-55
-65
1.0
0.1
4
2
0
-2
-4
100
0
-100
-200
-300
-400