

Dear editor:

I am very happy to receive your recommendation and very grateful for your advice. We have followed your comments to revise grammar and language usage of this manuscript. In the resubmitted paper, a new text is emphasis as red text.

The following are the detailed modifies:

1. Line 28: the word “moves ” is added.
2. Line 31: the word “study” is replaced by “ studies”.
3. Line 33: the word “did” is added.
4. Line 35-38: the sentence “The EUV instrument onboard IMAGE satellite was launched in March 2000, which provided a global perspective to the plasmasphere, such as plume, finger, notch and shoulder, and so on, some of plasmaspheric structures observed by EUV (Sandel et al., 2001).” is replaced by “The EUV instrument onboard IMAGE satellite was launched in March 2000, that provided a global perspective of the plasmasphere. Such as plume, finger, notch and shoulder, and so on, were observed by EUV (Sandel et al., 2001).”
5. Line 38: the words “has less study ” is replaced by “ has been less studied”.
6. Line 39: the word “But” is replaced by “However”.
7. Line 45: the word “a” is added.
8. Line 47: the word “ trigger” is replaced by “ it triggers” .
9. Line 67: the word “ The” is deleted.
10. Line 69: the number “15.05” is replaced by “ 15:05” .
11. Line 70: the word “Figure1” is replaced by “ Figure 1 ”
12. Line 74: the word “of” is added.
13. Line 75: the words “keeping and ” are deleted.
14. Line 94: the word “regions” is replaced by “region”.
15. Line 112: the word “over” is replaced by “from”.
16. Line 116: the words “simulation plasmapauses ” is replaced by “ simulated plasmopause”
17. Line 117: the word “particles” is replaced by “particle”.
18. Line 118: the words “indicates that” is added, and the punctuation “,” is deleted.
19. Line 124: the word “Contrary ” is replaced by “In contrast” ,and “better ” is replaced by “more ”.
20. Line 137: the word “origin” is replaced by “original”.
21. Line 142: the sentence “8 June at 12:00 UT to 9 June at 09:00 UT 2001, and every three hours output a snapshot” is replaced by “at 12:00 UT on 8 June to at 09:00 UT on 9 June in 2001 with snapshots every three hours ”.
22. Line 143: the word “origin” is replaced by “original”.
23. Line 145: the word “that” is deleted.
24. Line 164: the word “convection” is replaced by “convect”.
25. Line 169: the words “slightly enhances” is replaced by “is slightly enhanced”.
26. Line 178: the word “is ” is added.
27. Line 183: the word “And” is replaced by “Moreover” .
28. Line 186: the word “become” is replaced by “becomes”, and the punctuation “,” is added.

29. Line 190: the words “event, due to” is replaced by “event is due to”.
30. Line 191: the word “dose” is replaced by “does”.
31. Line 195: the word “Sudden” is replaced by “suddenly”.
32. Line 200: the word “that” is added, and the second punctuation “,” is deleted.
33. Line 221: the sentence “in the before 02:00 MLT sector ” is replaced by “before 02 MLT ”.
34. Line 223: the sentence “The shoulder forming across a at 03:00-06:00 MLT region ” is replaced by “The shoulder is forming across 03-06 MLT”.
35. Line 229-230: the sentence “The conclusions of Goldstein (2002) and Verbanac (2018) verify the simulation of this paper” is replaced by “The simulation of this paper verifies the conclusions of Goldstein (2002) and Verbanac (2018)”.
36. Line 262: the word “And” is deleted, and the word “the” is replaced by “The”.
37. Line 282: the word “that ” is added.
38. Line 289: the words “the fact that” are added, and the word “radial” is replaced by “radially”.
39. Line 290: the sentence “ Reversal of corotation rate with L-shell in post-midnight sector compares with corotation rate in midnight sector.” is replaced by “ The corotation rate in midnight sector decreases with the increasing L-shell, while it increases in pre-dawn sector.”
40. Line 297-298: the sentence “expect to obtain more perfect results compared with EUV observations” is replaced by “ and we expect to obtain more reasonable results”.
41. We add a new author for this paper, and add the sentence “ Wu Yewen gives some suggestions and draws Figure 4 for the paper.” in line 303-304.

You can see the detailed changes in the resubmitted manuscript. If you have any problems, please contact me immediately. I am very grateful for your help. Thank you very much.

Best Regard
Hua Zhang
The 1th author of this manuscript

Dear anonymous Referee1:

I am very happy to receive your recommendation and very grateful for your advice. We have

followed your comments to revise this manuscript. The grammar and language usage of the manuscript is revised again. In the resubmitted paper, new text is emphasis as red text. The Referee Comments is abbreviated to “RC”, and Authors’ Response is abbreviated to “AR”.

The following are the response of comment:

RC :

Minor point: Figure 5 (original Figure 4). The authors agreed that the x-axis is MLT, which makes sense to me. However, the text needs to be changed. E.g., line 213-215: ‘.... corresponding to both given MLT and UT illustrated in the bottom of Fig.5.’

AR :

Line 213-215: the sentence “Outputs are the trajectory (see in Fig.5(a)) and the rotation rate (see in Fig.5(b)) of these test particles corresponding to both given magnetic local time and universal time illustrated in the bottom of Fig.5.” is replaced by “Outputs are the trajectory (see in Fig.5(a)) and the rotation rate (see in Fig.5(b)) of these test particles corresponding to given magnetic local time illustrated in the bottom of Fig.5.”

You can see the detailed changes in the resubmitted manuscript. If you have any problems, please contact me immediately. I am very grateful for your comment. Thank you very much.

Best Regard

Hua Zhang

The 1th author of this manuscript