

Dear Editor,

We are thankful to the referees and the editor for reviewing and helping us to improve this paper. The report of the Anonymous Referee #01 shows acceptance of the paper as it is. However, the manuscript has been improved according to the suggestions of the Anonymous Referee # 3. In the revised manuscript, the modifications are in the bold letters.

Thank You!

Best regards,

Nadia Imtiaz.

Reply to Anonymous Referee #3:-

The author presents a detailed case study for a strong geomagnetic storm (September 2017) and its impact on ionosphere. However, the discussion is a little thin, mainly focusing on the storm-time electro-dynamic variations, and does not address effects due to the dramatic changes in neutral dynamics on the variations of these observed parameters. As pointed out by David et al., 2016, the variations of the neutral wind in the thermosphere can provide notable uncertainties in ionosphere models, and the work by Li et al, 2018 and 2019, trying to explain the observed temperature enhancement in lower thermosphere above mid-latitude (Yuan et al., 2015), have demonstrated considerable neutral wind changes in the thermosphere during the strong geomagnetic storm above middle and low latitude. Therefore, it is important to recognize the role of changing neutral winds on the variations of ionosphere, especially for middle and low latitudes. I hope the author could address this subject in the discussion.

Response: In order to demonstrate the changes in the thermosphere during the strong geomagnetic storm, we have added the response of the thermosphere in the revised manuscript. See the following sections: abstract, data analysis, Results and discussion, conclusion and Figure 6.

Minor Comments:

1. On page 1, in the first sentence of Introduction. Please replace "a known fact" with "well-known".

Response: In the revised manuscript on Page 1, in the first line: "a known fact" has been replaced with "well-known".

2. On page 2, line 5, please replace "presented" with "utilized".

Response: In the revised manuscript, "presented" has been replaced with "utilized".

3. On the same page, line 6, please delete "There are".

Response: In the revised manuscript, "There are" has been deleted.

4. On the same page, line 16, please replace "authors" with "studies".

Response: In the revised manuscript, "authors" has been replaced with "studies".

5. On page 3, line 2, please replace "On the basis of " with "Based upon".

Response: In the revised manuscript, "On the basis of" has been replaced with "Based upon".

6. On the same page, line 15, please delete "under consideration"

Response: In the revised manuscript, "under consideration" has been deleted.