

Response to the Associate Editor:

Comments to the author:

Thank you for the updated version of the manuscript and for your responses to the reviewers' comments. The manuscript can now be accepted after some technical corrections.

Non-public comments to the Author:

Thank you for the updated version of the manuscript and for your responses to the reviewers' comments. Please implement the following corrections before the manuscript can be accepted:

Answer: Thanks for the constructive comments. We have corrected them in our manuscript.

- Line 35-36: Replace “in measuring” by “to measure”.
[It is corrected according to the Associate Editor’s comment. See Line 35-36 in the revised manuscript.]
- Line 96: Replace “in ground” by “at ground”.
[It is corrected according to the Associate Editor’s comment. See Line 96 in the revised manuscript.]
- Caption of figure 2: Replace “in ground” by “at ground”.
[It is corrected according to the Associate Editor’s comment. See Caption of figure 2 in the revised manuscript.]
- Line 153: Replace “was” by “were”.
[It is corrected according to the Associate Editor’s comment. See Line 153 in the revised manuscript.]
- Line 177: Replace “on nighttime” by “on a nighttime”.
[It is corrected according to the Associate Editor’s comment. See Line 177 in the revised manuscript.]
- Line 178-179: Replace “using IRI2000 model” by “using the IRI2000 model”.
[It is corrected according to the Associate Editor’s comment. See Line

178-179 in the revised manuscript.]

- Line 179: Replace “using MSISE90 model” by “using the MSISE90 model”.
[It is corrected according to the Associate Editor’s comment. See Line 179 in the revised manuscript.]
- Line 200: Replace “intergraded” with “integrated”.
[It is corrected according to the Associate Editor’s comment. See Line 200 in the revised manuscript.]
- Line 200: Replace “20200Km” with “20200 km”. (Is the number correct?)
[It is corrected according to the Associate Editor’s comment. See Line 200 in the revised manuscript.]
[Yes, the number is correct.]
- Line 201: Replace “intergraded” with “integrated”.
[It is corrected according to the Associate Editor’s comment. See Line 201 in the revised manuscript.]
- Line 201: Replace “830Km” with “830 km”.
[It is corrected according to the Associate Editor’s comment. See Line 201 in the revised manuscript.]
- Line 229: Remove “of”.
[It is corrected according to the Associate Editor’s comment. See Line 229 in the revised manuscript.]
- Line 230: Replace “The retrieval algorithm could refer in relevant paper (Strickland et al., 1995; Zhang et al., 2004).” by “The retrieval algorithm was described by Strickland et al. (1995) and Zhang et al. (2004).”
[It is corrected according to the Associate Editor’s comment. See Line 230 in the revised manuscript.]
- Line 231: Replace “The brightness of 135.6 nm emission and N2 LBH emission on dayside” by “The brightness of the 135.6 nm emission and the N2 LBH emission on the dayside”.
[It is corrected according to the Associate Editor’s comment. See Line 231 in the revised manuscript.]

- Line 232: Replace “deducting” by “deduct”.
[It is corrected according to the Associate Editor’s comment. See Line 232 in the revised manuscript.]
- Line 233: Replace “in data processing” by “in the data processing”.
[It is corrected according to the Associate Editor’s comment. See Line 233 in the revised manuscript.]
- Line 234: Replace “of deriving” by “for deriving”.
[It is corrected according to the Associate Editor’s comment. See Line 234 in the revised manuscript.]
- Line 234: Replace “135.6” by “135.6 nm”.
[It is corrected according to the Associate Editor’s comment. See Line 234 in the revised manuscript.]
- Line 236: Replace “rose 7” by “rose to 7”.
[It is corrected according to the Associate Editor’s comment. See Line 236 in the revised manuscript.]
- Line 241: Replace “from GUVI website” by “from the GUVI website”.
[It is corrected according to the Associate Editor’s comment. See Line 241 in the revised manuscript.]