We thank the editor for providing valuable comments. Corrections are included in the revised manuscript and the responses are listed below.

Consider changing the title of the second chapter "Materials and methods" to "Data and methods"

- "Materials and methods" is changed into "Data and methods" (Page 3)

Modifying/explaining the statement on page 3 and newly added one in the page 5 (paragraph 140) "... (the model run started from empty ionosphere)...". Please, note that, in general, the ionosphere is never "empty".

- Text added to clarify the statement in page 3 (line 65 onwards)
- Text added (line 143)