

Ann. Geophys. Discuss., referee comment RC2
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Comment on angeo-2022-15

Anonymous Referee #2

Referee comment on "Ionospheric effects of the 5–6 January 2019 eclipse over the People's Republic of China: results from oblique sounding" by Leonid F. Chernogor et al., Ann. Geophys. Discuss., <https://doi.org/10.5194/angeo-2022-15-RC2>, 2022

This paper studied the ionospheric responses to the solar variations during the solar eclipse on January 6, 2019, by using the data of ionospheric oblique sounding from multiple propagation paths. The observation results are basically consistent with the theoretical estimates. There are no special new findings, and the article is too long. In addition, there are too many grammatical errors and redundant words. Therefore, it is suggested that the author should make necessary and sufficient modifications to the manuscript. The main comments are as follows:

1. Although this paper cited a lot of literature, it did not clearly and logically introduce the progress of these studies, but just listed them.

1. It is not necessary to make a very detailed description of the space environment on the day of the eclipse and the reference day. The authors just need to briefly describe that the geomagnetic activity is at a relatively low level before and after the solar eclipse. Therefore, the ionospheric changes can be attributed to the impact of the solar eclipse.

2. It is not necessary to describe the results of each oblique probe in detail, just briefly describe the changes during the eclipse and summarize the common characteristics of these observations.

3. There are too many paragraphs in this article, which need to be allocated more reasonably.

4. There are too many grammatical errors and redundant words. Please refer to the attached PDF file for specific English grammar comments.

Please also note the supplement to this comment:

<https://angeo.copernicus.org/preprints/angeo-2022-15/angeo-2022-15-RC2-supplement.pdf>