

Ann. Geophys. Discuss., author comment AC1 https://doi.org/10.5194/angeo-2021-16-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC1

Fasil Tesema et al.

Author comment on "Types of pulsating aurora: comparison of model and EISCAT electron density observations" by Fasil Tesema et al., Ann. Geophys. Discuss., https://doi.org/10.5194/angeo-2021-16-AC1, 2021

We thank the reviewer for evaluating the manuscript and forwarding valuable comments. Suggestions and comments are included in the revised manuscript and the responses to the comments and suggestions are listed below (in italics):

L110: "stirations" spelling error.

Spelling error corrected

L141: What is meant by "warming up the ionosphere"? Please explain.

• Texts added to clarify this (line 142-143)

L143: "agreement...is good" is highly subjective. What is the definition of "good"? Looking at the plots suggests that "good" is half an order of magnitude. Please define "good" and state what the average difference is of the comparison over the height range of interest.

• We accept the suggestion and correct is through out the manuscript (line 144)

L180: "ionization around" should be "ionization layer around".

Corrected (line 181)

L185: "in to patch" should be "in to a patch".

Corrected (line 186)

L209/21: "very well", please see comment on L143.

Corrected (line 209-210)

L240: "very good agreement", please comment on L143.

Corrected (line 242)

Figure 1: This figure is never introduced in the text. Please do so, or remove it.

• Figure introduced in the text (line 60)

Figures 2, 4 & 6: Please include units on the colour bars.

• Units included on the color bars

Figures 3, 5 & 7: The blue dot is hard or impossible to see in the images. Please use something clearer, e.g. yellow dot or cross.

• Corrected by increasing the size of the dots

Figure 3 caption: "model and EISCAT" should be "model (blue) and EISCAT".

Text added on the caption

Figure 5 caption: "relative auroral intensities" should be "relative auroral intensities (j)" and the end of this sentence should indicate that the red and blue dots can be found in panels "(a-d)".

Text added on the caption