

The authors thank the Editor for the valuable and constructive comments. On behalf of all the co-authors, the first author has addressed all the points raised and uploaded the revised version of the manuscript, together with a tracked-changes version highlighting all modifications.

Editor Comments:

line 151, Typo: wiil -> will

Corrected accordingly in the manuscript

line 219, Please check the cutoff frequency value. The reply to the referee uses a different value.

Corrected accordingly in the manuscript. The correct value is 0.5 Hz.

Figure 4 legend, typo: Red and yellow shadowed area -> Red and yellow shadowed areas

Corrected accordingly in the manuscript.

Figure 5, symbols are too small in the legend. I would make lines for the three first colors.

Corrected accordingly in the manuscript.

line 422, typo: for the other component -> for the other components

Corrected accordingly in the manuscript.

Table 2, units were not corrected following the referee #2 suggestion to "J/kg/K" and "W/m/k".

Corrected accordingly in the manuscript.

Figure 10, blue shade should be in the background, currently is the top layer changing the colors of the figure legends, red and black curves.

Corrected accordingly in the manuscript. Plot has been regenerated and uploaded.

Figure 12, legends and labels are too small, please increase the size of the figure.

Corrected accordingly in the manuscript. Plot has been regenerated and uploaded.

section 6 Data Availability, would suggest to update the sentence as "...is available in the ESA GSF...." -> "...is available in the ESA Planetary Science Archive (PSA) Guest Storage Facility (GSF)..."

Corrected accordingly in the manuscript.