

ESURF – Submission of

“Permafrost in monitored unstable rock slopes in Norway – New insights from rock wall temperature monitoring, geophysical surveying and numerical modelling”

by Etzelmüller et al

Comments to the editor.

Thank you for the detailed review. I have accepted most of the comments in the pdf, if explanations were necessary, I have listed them below. All reference codes from Endnote are updated. We also worked us through the illustrations, especially also with respect to consistency of correct site labelling in text and figures etc.

Figure caption 1: We added: “GST = Mean Ground Surface Temperature. BTS = Bottom Temperature of Snow Cover (see main text)”. We kept the colouring as these are two different values. BTS is an instant value measured at a certain time, the GST is an annual average.

I. 160: PTT I have never heart of as abbreviation, but tried to make consistent:... 😊

I. 198: Do you want us to explain INSAR in detail, or what do you want here? This can become a lengthy explanation, if you mean it is really necessary, I insert a paragraph of course. I think InSAR and the principle around are quite common knowledge now in our community.

I. 433: I inserted a reference to Figure 3 in the previous paragraph, it must have disappeared during a revision

Fig 5d: $mm d^{-1}$ is ok, we mean daily velocity averaged over a month. We have changed the caption accordingly.

Fig. 8 and other resistivity plots: The colour scale is logarithmic. Instead of giving log-values (which would be linear increasing values), we give real values, which is easier for the reader. I added a sentence in the Figure capture, and this is valid for all the colour scales given in relation to resistivity.

Comment “93 is there no statistical relationship as for C, D, and F”:

No, the profile traverses both rock slide and rock glacier, and these are two different landform and movement types, as explained in the discussion. Therefore, no relation, one could do it for each landform separated, but we chose not to.

I. 1056: RST is now explained in line 106. (refraction seismic tomography)

References: We added report numbers for NGU reports (all available as pdf). For citation we used Endnote and Copernicus's style. This style makes no space between several cited works in the text, and is very difficult to change, maybe this can be easily changed when the paper is set for print if accepted, otherwise I have to do this manually.