

Interactive comment on “On the reflectance spectroscopy of snow” by Alexander Kokhanovsky et al.

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The authors thank the reviewer for the constructive comments on the paper. Our answers are given below: 1. We have changed the sequence of the discussions of the measurements at different sites. Therefore, the numbering of figures has not been changed. The data shown in Figure 2 is related to Figure 1. So we prefer the sequence of figures as it stands. 2. Table 1 has been modified according your advices.

Line 42: We have mentioned in the conclusions that one can use just 1 wavelength to find the snow grain size in case of albedo measurements for clean snow. In case of reflectance measurements one needs to perform the measurements at two wavelengths (for clean snow). Line 79: We have added an explanation related to Eq. 7 in the text.

C1

Lines 84, 85, 108, 115, 174, 234, 242, 244,245-248, 267,276, 285-286, 293, 299-301, Figure 4: Done. Lines 194, 204: We have prepared Appendix B to explain the derivations. Lines 236-238: We had the measurements at 5 sites. Each measurement at each site has been performed 5 times and the average spectral curve has been found for all five sites. The text has been modified. Lines 303-308: We agree that we do not retrieve refractive index of dust in this work. However, the extension of this work may lead to such retrievals. So we prefer to keep the text as it stands. Line 319: We have modified the text taking into account your comment. Although we do not provide EAL in the Table. It can be calculated via the grain diameter as described in the paper. Figure 3: The figure is clear and we do not think that the legend is really needed to clarify the discussion. Also we do not see a point in changing the scale. All figures: We do not change the axis OX because different instruments operate in different spectral ranges.

Interactive comment on The Cryosphere Discuss., https://doi.org/10.5194/tc-2018-72, 2018.

C2