

Interactive comment on “Pan-Antarctic map of near-surface permafrost temperatures at 1 km² scale” by Jaroslav Obu et al.

Matvey Debolskiy

mvdebolskiy@alaska.edu

Received and published: 25 June 2019

After a quick glance at the paper, I could provide some comments which are not ordered in any coherent way.

1. The mean absolute error in text is 0.06°C while on Fig.2 it is -0.017°C.
2. It is unclear what do authors mean by "values were set to randomly vary by ± 0.1 between 0.75 and 0.95" in section 2.5 with regards to r_f parameter. Are values drawn from a uniform distribution between 0.75 and 0.95? What is the rationale behind the distribution of r_f ?
3. In section 2.2, it is unclear if the downscaled ERA-interim and ERA-5 near-surface temperatures were debiased towards MODIS record to create a consistent record.

Printer-friendly version

Discussion paper



Since authors mention negative bias caused by data gaps wouldn't filling these gaps with near-surface temperature (which is not equivalent to surface temperature in general) provide additional bias to the record?

4. In the same section (2.2), it is unclear why LST data was averaged to 8 day periods? Since FDD and TDD are essentially numerical integrals it is unclear why 8-day binning would give any advantage.

Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2019-148>, 2019.

[Printer-friendly version](#)[Discussion paper](#)