

## ***Interactive comment on “Vulnerable top-of-permafrost ground ice indicated by remotely sensed late-season subsidence” by Simon Zwieback and Franz J. Meyer***

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We would like to express our gratitude to the three referees for their helpful comments and suggestions, which we believe will help us improve the quality clarity of our manuscript.

We now summarize the key changes we intend to make.

1) We will add new figures / panels.

a) We will also show precipitation observations (despite the large number of missing values).

C1

b) We will study the sensitivity of the late-season subsidence observations to the specification of the late-season period. The associated figure(s) will likely be added to the supplement.

c) We intend to add a panel to Fig. 7 that shows classification results based on thresholding the late-season subsidence. This will make it easier to compare to the independent ground ice map.

2) We will make numerous minor to moderate edits in the text. The most important ones serve to clarify aspects concerning

a) cryostratigraphy and interpretation of late-season subsidence;

b) spatial variability;

c) open questions and future developments.

We provide detailed point-by-point answers in separate documents. There, we describe how we intend to modify the manuscript. Most of the minor edits have already been implemented in an internal revised version of the manuscript because we find it is easier to keep track of them this way.

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Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2020-312>, 2020.

C2