

## ***Interactive comment on “Decadal changes of surface elevation over permafrost area estimated using reflected GPS signals” by Lin Liu and Kristine M. Larson***

### **Anonymous Referee #1**

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The authors use a model to estimate this contribution that was developed by Dr. Liu previously but do not discuss the expected accuracy of such model, although error bars are provided. This is relevant since Table 2 shows that this contribution is more or less constant for the 2004-2015 interval compared to the contribution from segregated ice which exhibits more noticeable variability.

There are minor points that should be addressed, such as: a) this paper does not introduce a new technique, the GNSS IR, but applies it to a different problem

b) references to figure 3 (a-c) should be figure 4

c) i recommend to use a different expression for ground reflector, such as reflecting

C1

surface other suggestions are highlighted in the enclosed pdf.

Please also note the supplement to this comment:

<https://www.the-cryosphere-discuss.net/tc-2017-139/tc-2017-139-RC1-supplement.pdf>

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Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2017-139>, 2017.