

Interactive comment on “Seasonal thaw settlement at drained thermokarst lake basins, Arctic Alaska” by L. Liu et al.

Anonymous Referee #1

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The study examines thaw settlement over drained thermokarst lakes using satellite radar interferometry. The study is very sound, and the paper very well written. Congratulations! I have only a few comments that the authors might want to consider:

- around page 5796, line 11. You mention the potential impact on geomorphology and hydrology, but without details. A bit more details are scattered over the paper at several places, but it would be good to have one clear paragraph dedicated to the relevance of the study in the intro.
- page 5804, line 8. How and how well do you actually know the start and end of the active layer thaw season?
- I might have missed: You could discuss (more) about the spatial differences in results

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over the different drained lakes. What could it tell that the thaw settlement varies? Water content?

- Fig 1b. Try to modify the color scale/figure so that one can also recognize the topography within the drained lake. Would be interesting to see if the spatial variations in thaw settlement are in parts related to topography. Unless the area is REALLY flat. In the latter case give some numbers in the text.

Best regards

Interactive comment on The Cryosphere Discuss., 7, 5793, 2013.

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