

***Interactive comment on “In-situ multispectral and bathymetric measurements over a supraglacial lake in western Greenland using a remotely controlled watercraft” by M. Tedesco and N. Steiner***

**Anonymous Referee #1**

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This is a novel manuscript that uses in-situ data to confirm the (thus far assumed) ability of satellite multispectral data to estimate lake depth. This is important because lake depth has thus far been measured from space with little to no ground-truth. In addition, the manuscript makes the important distinction between different satellite sensors (Landsat and MODIS). Their results lead the way for future researchers to pick the most important satellite bands to be used for lake depth estimation. Since the methods used here are a bit outside of my own research focus I cannot comment on them directly. Indeed, my only general comment is that it would be interesting to see the ex-

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pansion of this work - to lakes that change depth over the melt season and to different lakes altogether. Focusing on one lake is sufficient for this study but not necessarily for all future work to hinge upon. A fuller examination of different lakes etc. would be beneficial to back up the results of this work. I trust that such a manuscript will be forthcoming. In the meantime, the present manuscript is well-presented and needs virtually no changes. My only specific comments are:

1. alpha is not defined anywhere prior to its appearance
2. line 28 pg. 481: italicize "Ad" and add a space between "Ad" and "is"
3. line 5 pg. 485: italicize "g"

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Interactive comment on The Cryosphere Discuss., 5, 479, 2011.

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