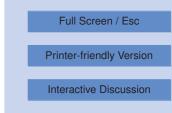**The Cryosphere**
Discussions

Interactive comment on "**Getting around Antarctica: new high-resolution mappings of the grounded and freely-floating boundaries of the Antarctic ice sheet created for the International Polar Year**" *by* **R. Bindschadler et al.**

R. Bindschadler et al.

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Replying on behalf of the authoring team, the paper acknowledges that the method of grounding line delineation using optical imagery is weak for the faster flowing outlet glacier, but to disagree with Rignot, it is neither "inapplicable" nor should it lead to "massive confusion". As Rignot himself stated in earlier exchanges with me when the ASAID project sought to include grounding lines he determined from differential SAR interferometry in the published ASAID product, the grounding lines determined by optical imagery and interferometry are different. Our lengthy discussion in the paper,

supported by Figure 2, emphasizes the difference. One should not infer from Rignot's characterization of the interferometric technique as "exact" that a grounding line so located is stable; his resume is full of useful publications that richly illustrate just the opposite. The grounding line moves on many time scales caused by both variations in tidal amplitude, changing ice thickness and even internal ice temperature. Our respective products can best serve the community by its authors being clear how one product differs from another. For its part, the community needs to recognize these differences and be equally clear in identifying which product, in this case grounding line, it is using, why that selection is the appropriate choice for the use intended and for what time period any particular mapping applies.

Interactive comment on The Cryosphere Discuss., 5, 183, 2011.

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Interactive Discussion

Discussion Paper