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## Interactive comment on "Geometric changes and mass balance of the Austfonna ice cap, Svalbard" by G. Moholdt et al.

## **Anonymous Referee #1**

Received and published: 9 December 2009

This paper does a very nice job bringing together a variety of glaciological data sets, and creates a generally satisfying picture of the present mass balance of the Ausftonna ice cap. While not every data set (e.g. RES ice thickness comparisons using 1983 data) is able to make a substantial contribution to the mass balance change estimates, together they provide a comprehensive picture, and provide confidence in this analysis as a definitive picture of the mass balance of the ice cap. As is pointed out in the discussion section, these measurements set the stage for further investigations of present and future changes driven by calving and glacier surges.

I have no significant editorial comments. I picked up a few of the ones addressed by the previous reviewer, but generally felt that the authors' editing of this paper was of much higher quality than I usually see in papers that I review.

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Interactive comment on The Cryosphere Discuss., 3, 857, 2009.