

Interactive comment on “Freshwater flux to Sermilik Fjord, SE Greenland” by S. H. Mernild et al.

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Anonymous Referee #1

General comments:

Around 85% of the fluxes to Sermilik Fjord came from ice discharge, mainly from the Helheim Glacier. The 85% has been compared to the overall amount of ice discharge from the Greenland Ice Sheet (GrIS). Nearly half of the mass lost from the GrIS originates by surface melting and subsequent freshwater runoff into the ocean. The other half is from iceberg calving and geothermal melting (e.g., Rignot and Kanagaratnam 2006, Lemke et al. 2007).

This has been added til both the Summary and Conclusion Section.

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Specific comments:

1) The manuscript is re-written, and the reference is added. 2) A reference to Figure 1 is added to the manuscript. 3) The manuscript is re-written to make it clearer. 4) No, this is simply to state, that the increase in runoff (1999-2008) was due to a combination of both increasing annual precipitation and mean annual summer air temperature. 5) The manuscript is re-written to make it clearer. 6) The paper has been added to the text related to characteristics of winter cyclone activity in the Northern North Atlantic. 7) Is done.

Interactive comment on The Cryosphere Discuss., 4, 1195, 2010.