

MS 300-323M
4800 Oak Grove Drive
Jet Propulsion Laboratory
Pasadena, CA 91109-8099, U.S.A.
Tel (818) 970-8032
email: eric.larour@jpl.nasa.gov
March 2, 2015

Dear authors:

Thank you for submitting your modifications to the manuscript entitled “**Self-regulation of ice flow varies across the ablation area in South-West Greenland**” for final publication in *The Cryosphere*.

After final revision of the manuscript, I have decided to accept it for publications in *The Cryosphere Discussions* pending technical corrections (see below). The reviewers and Pr. Nienov’s remarks seemed to converge on the issue of clearly referencing past publications that already presented similar results, which was addressed by the authors in the revised manuscript, and the issue of how to interpret the acceleration of S9, and whether it was related to either warming, or just potentially, as indicated by reviewer #2, simple dynamic acceleration due to modifications in the driving stress above the ELA.

One of the issues also was whether this paper should be rejected (reviewer #1) due to the fact that the time series did not seem to add much to existing datasets already presented for outlet glaciers in West Greenland. This was clearly not the case and I believe the authors demonstrated it well in the revision. I believe myself that the new dataset and its combination with borehole pressure observations is a valuable contribution that should be published. In addition the discussion now clearly introduces some of the issues in interpreting these datasets, and what potential links can be identified with warming and ice-flow dynamics.

I would like to apologize for the delay in the decision. This was not an easy one to make, given that reviewer #1 advised for rejection, and I wanted to be sure that I was thorough in the review.

Best regards,

Eric Larour

Sincerely yours,

Dr. Eric Larour,
Editor *The Cryosphere*