

Interactive comment on “A full-Stokes ice flow model for the vicinity of Dome Fuji, Antarctica, with induced anisotropy and fabric evolution” by H. Seddik et al.

H. Seddik et al.

hakime@pop.lowtem.hokudai.ac.jp

Received and published: 4 October 2010

We would like to thank the three reviewers for their very detailed and constructive comments, and to apologise for our very late response. In order to address the crucial point of improving the results for the computed fabric, we had to run many tests, and, due to the full Stokes approach, this was computationally extremely time-consuming. We finally succeeded by increasing the integration time to 100,000 years and adding some numerical diffusion in the fabric evolution equation. The computed fabric now shows a monotonic transition from isotropic conditions at the surface to a strong single maximum at the base, and it agrees well with observational data.

C633

Please see our detailed response to the reviewers' comments in the supplementary PDF document. The comments are marked in blue colour, and we have added tags like [CM1] for easier referencing. Our answers appear in plain black text.

Please also note the supplement to this comment:

<http://www.the-cryosphere-discuss.net/3/C633/2010/tcd-3-C633-2010-supplement.pdf>

Interactive comment on The Cryosphere Discuss., 3, 1, 2009.

C634