

Interactive comment on “Using a composite flow law to model deformation in the NEEM deep ice core, Greenland: Part 1 the role of grain size and grain size distribution on the deformation of Holocene and glacial ice” by Ernst-Jan N. Kuiper et al.

Anonymous Referee #1

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It is well-established that the flow of ice depends strongly on the crystallographic orientation. This paper completely ignores this and attempts to model ice sheet flow based on a dubious composite flow law, which considers only the grain size. I see little value in curve fitting with adjustable parameters to explain ice sheet flow.

Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2018-274>, 2019.