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Interactive comment on "Fabric measurement along the NEEM ice core, Greenland, and comparison with GRIP and NGRIP ice cores" *by* M. Montagnat et al.

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The manuscript presents the fabric data from the NEEM ice core from Greenland for the first time. In such this is an important contribution to understanding of how ice fabric varies in GrIS. This is specially interesting since the TCD article compares the fabric between two other GrIS ice cores taken upstream the NEEM core along the same flow line. Having this unique set of information opens a set of possibilities to do advanced modeling studies of how fabric in ice sheets is distributed and how the dynamical processes within the stress/strain driven changes is influenced by a number of parameters. The development of fabric is one of the problems ice sheet modelling of today are trying to solve in order to optimize their output, and data of fabric, and possible evolution of fabric through the flow line, as presented here is a good first step

towards an improved knowledge within this field.

I need to confess that I am not a specialist in ice fabric / material science and my general view after reading this TCD manuscript Is that the present MS present novel data, and that this data has a potential to advance glaciology one more increment making this data available/known to the wider community. One point of criticism may be that the present TCD MS does not make a deeper analysis of the data at hand, which could be opened up using Figs 2-7.

Although, I understand this may be the first MS in a row of work that later will address the issues shown in the present MS, and that the novelty of the data warrants a publication to present the data, and to make a first assessment of possible directions to continue the work on this data. This can also serve well as an answer on the question of why there is a relative short discussion around a large number of figures attached to the MS.

With this, I see an importance to publish this MS, and expect this to be the first step of a continued work with this data as a base for further elaborations.

Interactive comment on The Cryosphere Discuss., 8, 307, 2014.