

## ***Interactive comment on “Ice flow velocity as a sensitive indicator of glacier state” by Martin Stocker-Waldhuber et al.***

**Martin Stocker-Waldhuber et al.**

[martin.stocker-waldhuber@uibk.ac.at](mailto:martin.stocker-waldhuber@uibk.ac.at)

Received and published: 3 May 2018

Thank you for the immediate response and the clarifications!

On seasonal velocity: According to your answer, we will first add all the other additional text, and then see if there is enough space in the revised manuscript to extend the topic and clarify the link to annual velocities. If not, it might be better to skip the seasonal velocities in this manuscript.

Thank you for the clarification for the focus on mountain glaciers and the greater context, we found it hard in the first version to draw a line here. Now we seem to reach a good and solid state of discussion which we are happy with.

Technical question: Why using a tape and not directly two DGPS positions if you bring

C1

a GPS in the field (i.e. measured the location of the stones each year with a DGPS).

This comes from geodetic measurements (theodolite, tachymeter) and early GPS/DGPS measurements, where reliable coordinates have been available only after post processing back in office, and often the accuracy of the positioning was lower than the tape measurements. One of the philosophies in long term monitoring is not to change techniques more often than necessary, so the tape is still used although during last years (DGPS since 2009) it could have been replaced by DGPS.

Thank you for giving a guideline on variability within the profiles, as well as terminology questions, we will take that as read line for additional information!

---

Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2018-37>, 2018.