

Interactive comment on “Stability and forcing of the Iceland-Faroe inflow of water, heat, and salt to the Arctic” by B. Hansen et al.

Anonymous Referee #1

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In this manuscript the authors address the important issue of what drives the variability of transport of upper ocean waters northwards across the Greenland-Scotland Ridge. They show very elegantly and convincingly that the sea surface height difference across the Ridge forces the inflow, and that drop in SSH is due to the continual removal of water from north of the Ridge. The study highlights the importance of the inflow to the thermohaline circulation and stresses the need for continued observation of the inflow.

Reading this paper was a pleasure; it is well written, logically organized, and the figures are of good quality. There is good reference to the literature and the Discussion places the study into a larger context. It is rare to come across a paper which needs no further revision, but I could find nothing that needed to be changed or added.

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