

Pathways to Denmark Strait: A Lagrangian study in the Iceland Sea.

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The Denmark Strait overflow is one of two main routes by which dense water from the Nordic Seas can enter into the North Atlantic Ocean. Previously the source of dense water provided to the Denmark Strait overflow was thought to be modified North Atlantic Water flowing along eastern Greenland. More recently a potential source of dense water in the Iceland Sea was (re)discovered. Model studies suggest the supply of dense water to the strait might switch between the two sources depending on wind conditions. To provide more insight into the circulation at sill depth upstream of Denmark Strait 25 acoustically tracked floats were released in the Iceland Sea In July 2013 for a two year program. More floats will be deployed in July 2014. In this presentation we will show the preliminary results of the first 11 floats that surfaced.