



# The Supply of Warm Atlantic Water to Nioghalvfjerdsbræen in North East Greenland

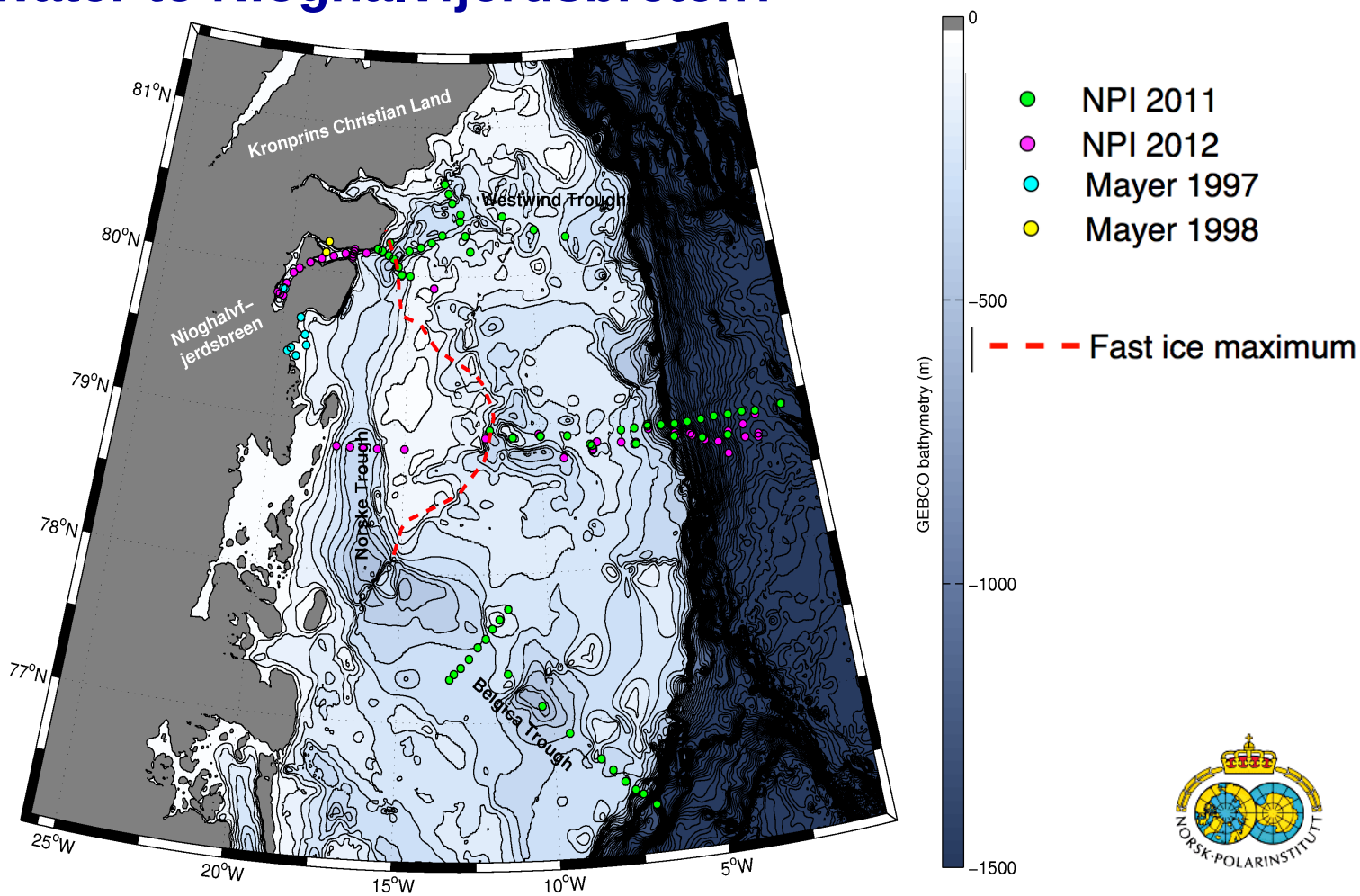
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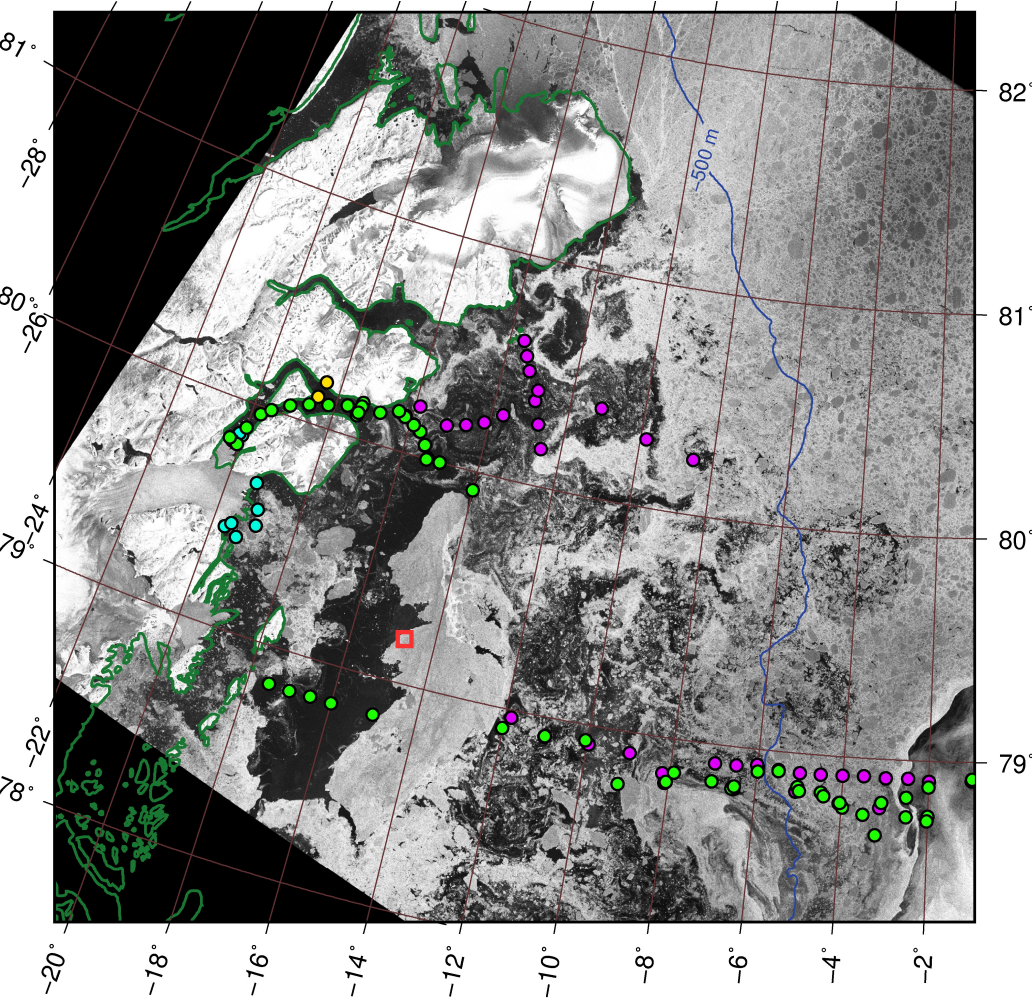
<sup>2</sup>Now at Multiconsult, Tromsø



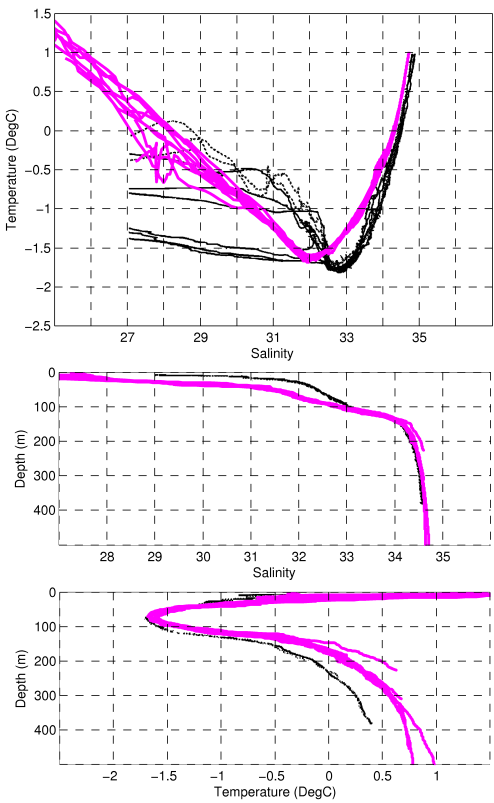
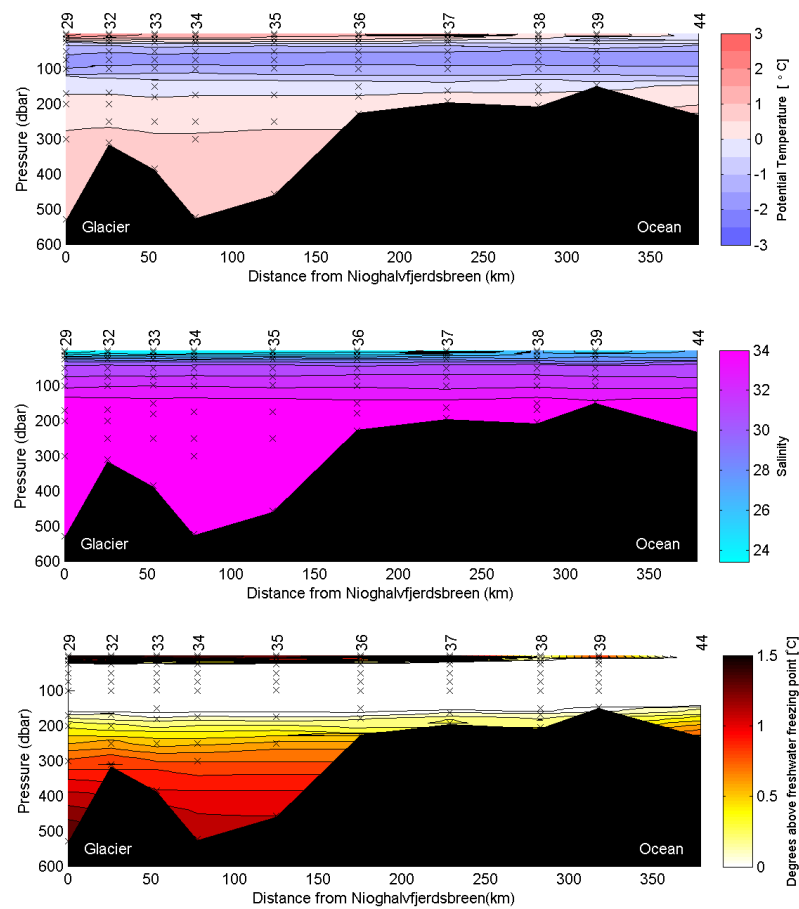
## Which processes control the supply of Atlantic water to Nioghalvfjærdsbreæn?



**Radarsat image showing ice free Dijmphna Sound in September 2012.**

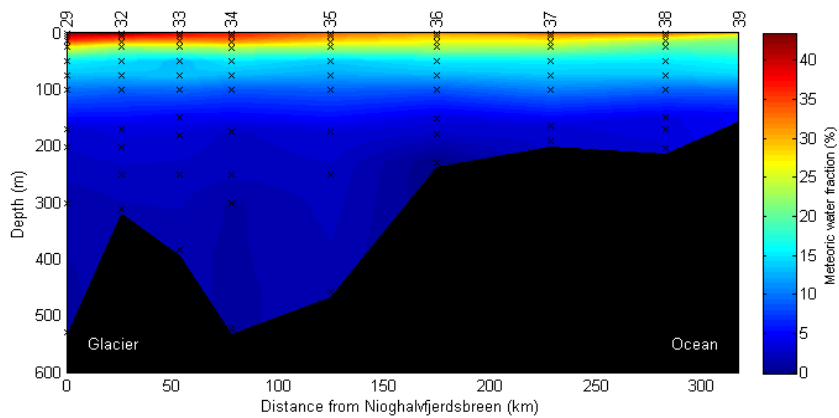


CTDs in Dijmphna Sund show 3-layer stratification featuring warmer water at depth compared with similar profiles from August-September 1997

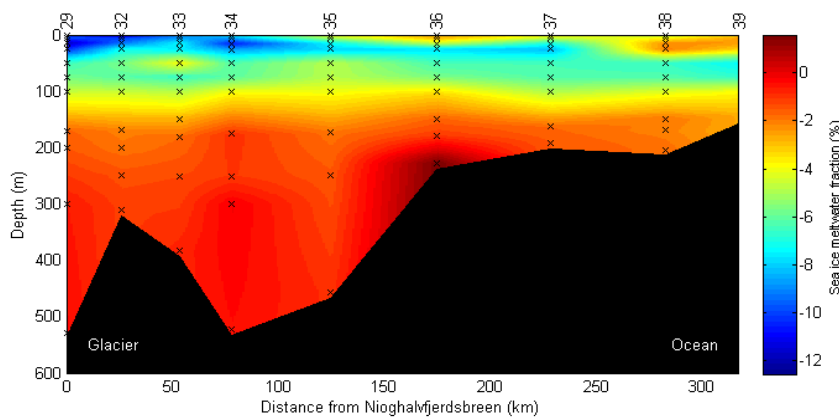


— 1997      — 2012

**Oxygen isotope samples in Dijmphna Sund show very high fractions of runoff at the surface and a net production of sea ice.**



**Runoff**



**Net sea ice meltwater**

