



Under-ice oceanography of the NEW polynya with an Autonomous Underwater Vehicle

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In August 2004 an Autonomous Underwater Vehicle (Autosub-II) was deployed beneath a fast-ice barrier in the NEW polynya region off north-east Greenland. Autosub-II was developed at the National Oceanographic Centre and this highly successful experiment was part of the National Environmental Research Council's 'Autosub Under Ice' program. Autosub-II carried a suite of instruments (CTD, ADCP and Multibeam) and collected novel hydrographic data (T-S and currents) that we use to describe the under-ice oceanography in this traditionally inaccessible region. Sea-ice properties derived from multibeam sonar, including thickness and ice-class are examined with respect to the oceanographic properties.