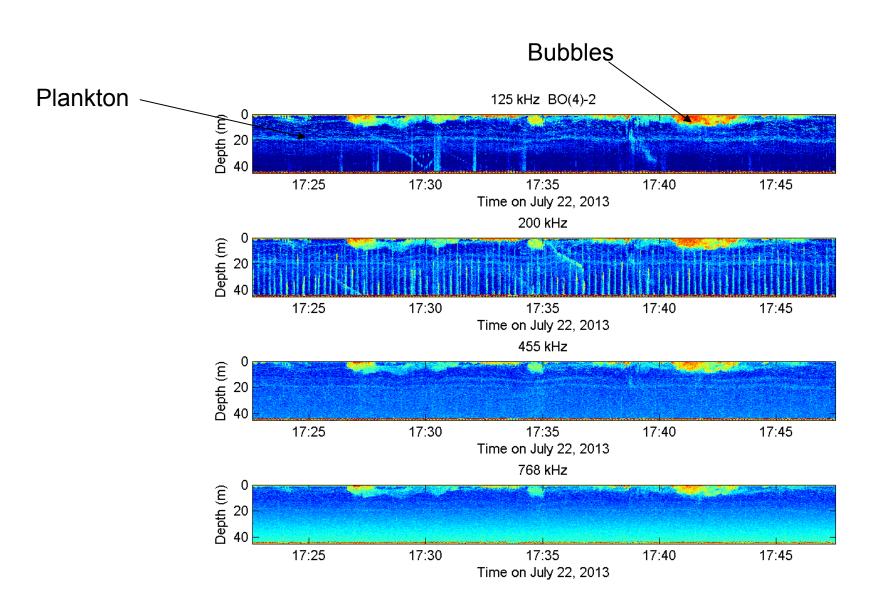
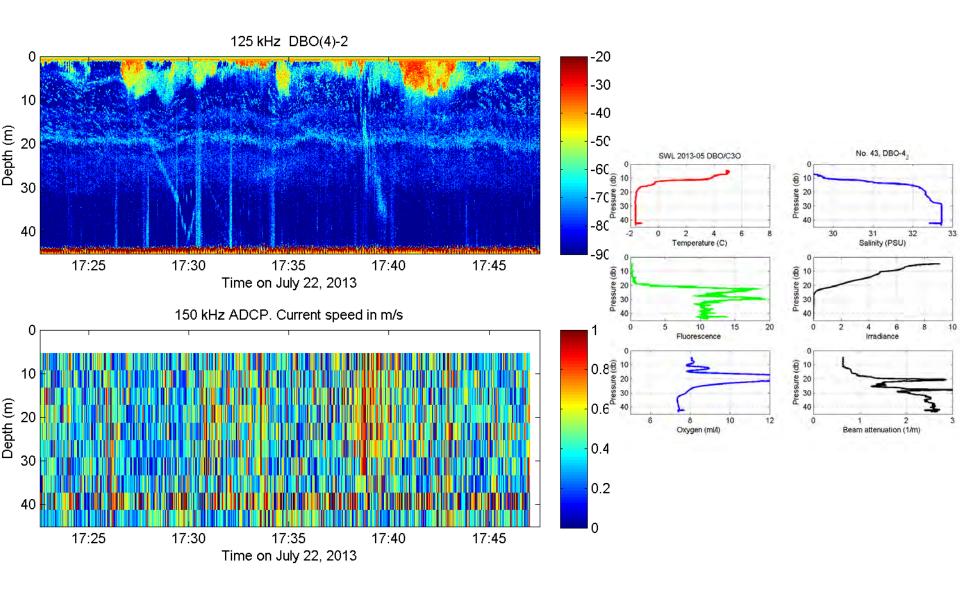
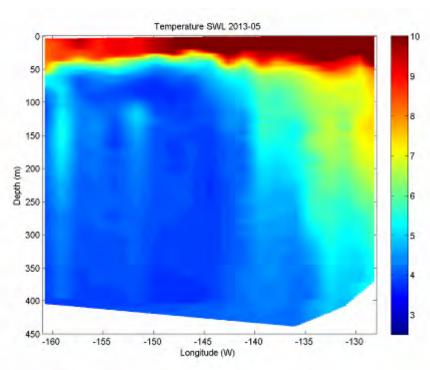


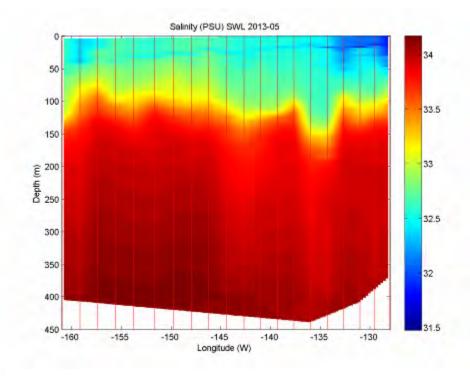
## Acoustical backscatter at 4 frequencies.





## Underway CTD profiles every 6 hours across the Pacific









The Arctic Ocean Tracking Network:
Movement and behaviour of an important
commercial fish species, Greenland halibut
and by-catch species, Greenland shark and
Arctic skate in Cumberland Sound.

Nigel E. Hussey, Iva Peklova, Kevin J. Hedges, Svein Vagle, Jeannette Bedard, Margaret Treble and Aaron T. Fisk

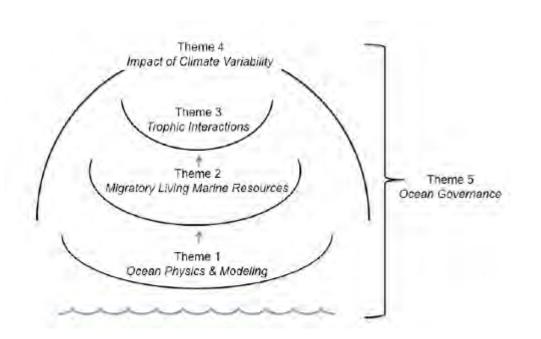








A long term integrative research program which makes use of the latest acoustic and satellite tracking technologies to understand multi-species movements in both a developing and changing ecosystem.

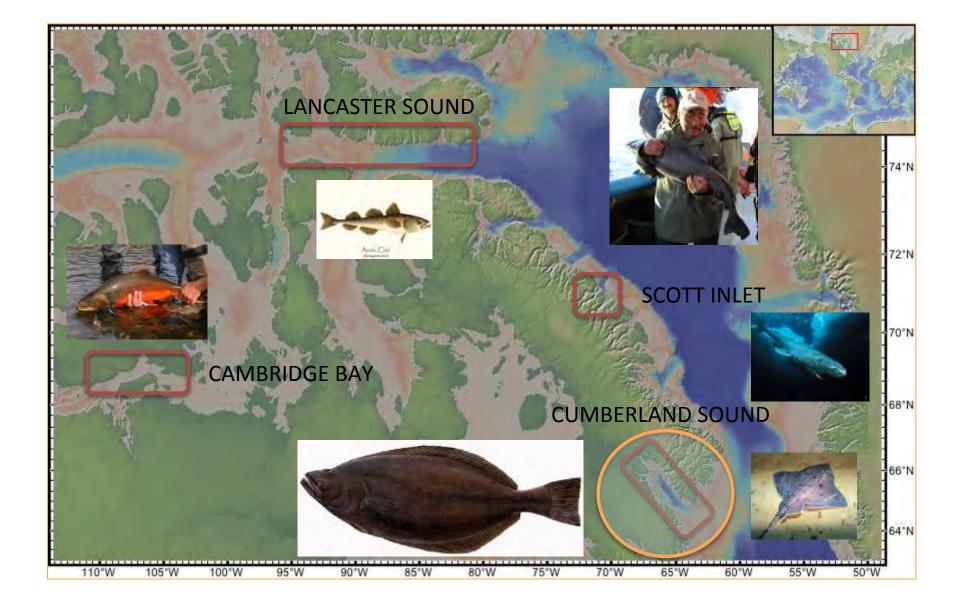










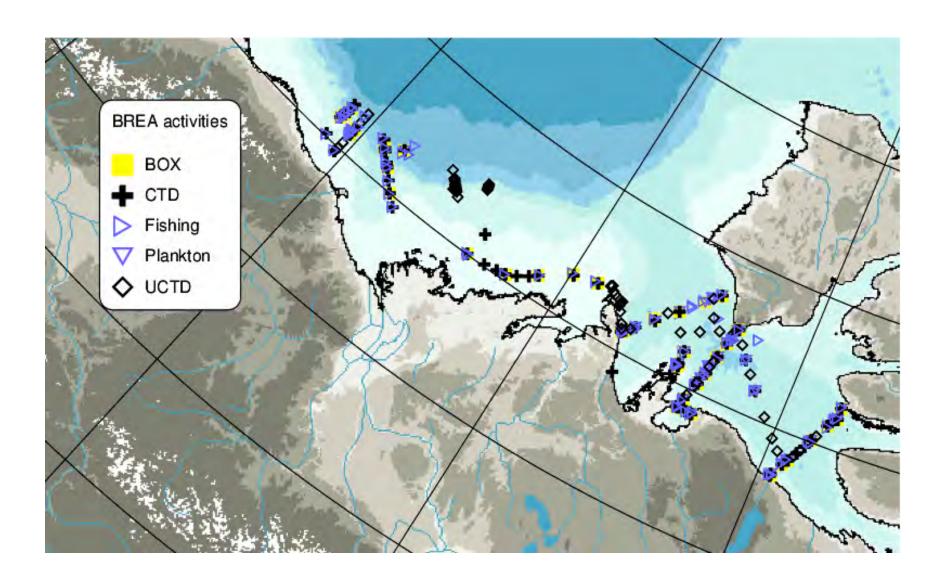


# Beaufort Regional Environmental Assessment – 2013 Marine Fishing component

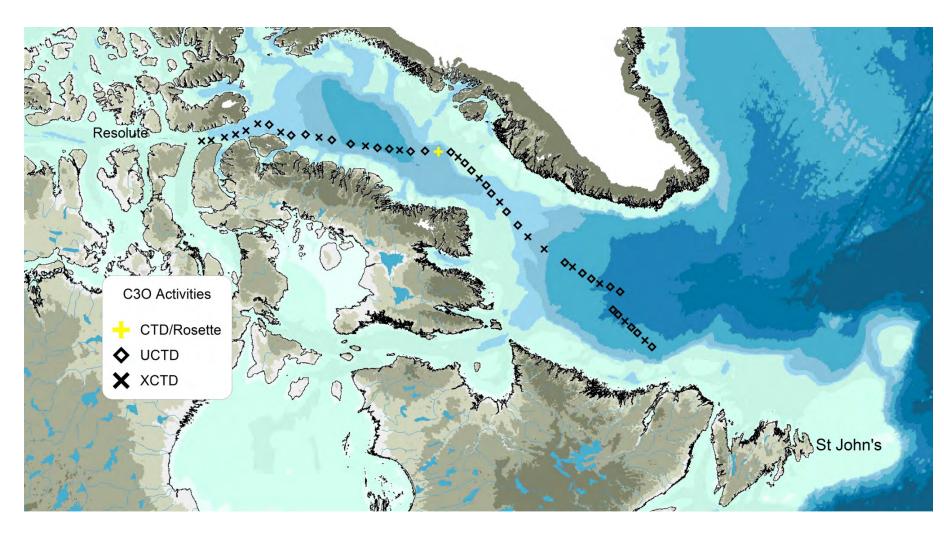
- Year 2 of a 2-3 year field programme
- DFO in partnership with UAF for Yukon-Alaska border sections
- Samples collected using box corer, benthic trawl, mid-water trawl, beam trawl, bongos (oblique tow), multi-plankton sampler (vertical tow), CTD/rosette, underway CTD
- Ship platform is the F/V Frosti, a commercial trawler under contract



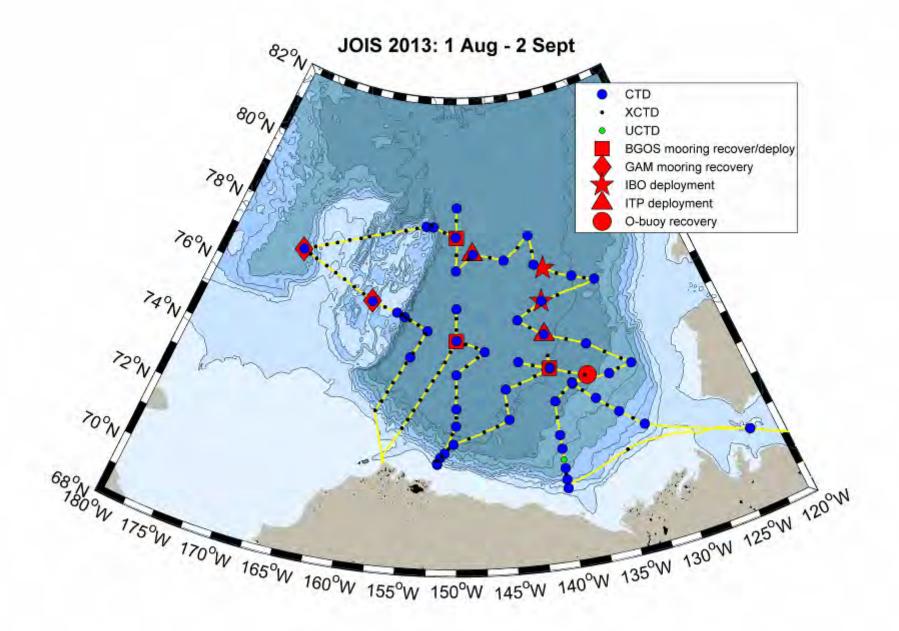
#### Beaufort Regional Environmental Assessment – 2013 Marine Fishing component



### Canada's 3 Oceans – eastern section



Underway measurements only (except for one test rosette)



- 55 CTD/Rosette casts for geochemistry and hydrography
- 16 foredeck rosette casts for gas exchange tracers
- 20 foredeck rosette casts for microbial DNA
- 90 net tows for zooplankton
- 44 weather balloons launched
- 121 XCTDs
- 1 UCTD
- 3 AON-BGOS mooring recoveries and deployments
- 2 GAM mooring recoveries
- 2 ITP deployments
- 2 Ice-Based Observatories (ITP, O-buoy, AOFB, IMBB, ITM, UpTempo)
- 1 O-buoy recovery

Underway sampling (seawater loop, EM ice thickness, bow mounted irradiance)

Distance travelled: 4738 nm

Fuel burned:

Shiptime lost:

- 2 days for crew familiarisation at the beginning of the cruise
- 1.5 days for bereavement evacuation
- 4.6 hours for engine room repairs

