Arctic Observation Programs

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Joint Western Arctic Climate Study

Canada - Japan collaboration, 1999-2007

Hydrographic surveys and mooring program in southern Canada Basin
2002: three ship program
BGEP

Beaufort Gyre Exploration Project, 2003-

Canada – US collaboration

Moorings and hydrographic surveys
Decrease in Pacific-origin waters across the Canada Basin: from SHEBA/JOIS
Then by 2003
During the 1990s:

- Shift of the A/P front
--less Pacific water in the Makarov Basin
- Shallowing of Pacific water in the Canada Basin
Warming of Atlantic-origin waters: in 1998 from SHEBA/JOIS

1997-1998

Depth (m)

550 500 450 400 350 300 250

Theta (°C)

0.4 0.6 0.8 1

1997-1998

Depth (m)

250 300 350 400 450 500 550
and in 2003
2004 Mirai mooring deployments
JWACS and Beaufort Gyre Programs

- 2005 LSSL - Canada Basin
- 2006 Mirai - Baffin Bay
- 2006 LSSL – Nares Strait, Canada Basin
CCGS Amundsen and ArcticNet