

## SOOP Report for 2011

## Canada

<p>a. Programme description: ISDM transmits XBTs from Canadian Navy on the GTS. The sampling performed by the Canadian Navy ships varies with time. Some transects are repeated every year and sometimes coincide or line up approximately with SOOP lines. DFO Canada also operates line sampling programmes in waters around Canada, though these are not part of international SOOP lines. All sampling is described in the table.</p>			
Line	Agency	Sampling programme and target mode (if applicable)	No. of ships
SOOP PX39	Royal Canadian Navy	North Pacific Sampling – no target but usually at least once a year (2 times in 2011)	Unknown
SOOP PX37	Royal Canadian Navy	North Pacific Sampling – no target (1 time in 2011)	Unknown
SOOP PX20	Royal Canadian Navy	North Pacific Sampling – no target (1 time in 2011)	Unknown
SOOP PX40	Royal Canadian Navy	North Pacific Sampling – no target (1 time in 2011)	Unknown
SOOP AX09	Royal Canadian Navy	North Atlantic Sampling – no target (1 time in 2011)	Unknown
SOOP AX20	Royal Canadian Navy	North Atlantic Sampling – no target (1 time in 2011)	Unknown
SOOP AX10	Royal Canadian Navy	North Atlantic Sampling – no target (1 time in 2011)	Unknown
SOOP AX03	Royal Canadian Navy	North Atlantic Sampling – no target, but usually at least once a year (1 time in 2011)	Unknown
Bonavista	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (3 times in 2011)	2
Flemish Cap	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (2 times in 2011)	3

Seal Island	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (2 times in 2011)	2
South East Grand Banks	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (2 times in 2011)	2
Halifax	Fisheries and Oceans Canada	Canadian Atlantic Zone Off-Shelf Monitoring Program, research vessels – 4 times/year (3 times in 2011)	1
Brown's Bank	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (1 time in 2011)	1
Louisbourg	Fisheries and Oceans Canada	Canadian Atlantic Zone Monitoring Program, research vessels – 4 times/year (3 times in 2011)	2
Beachy Island	Fisheries and Oceans Canada	Newfoundland Region Annual Sampling – 1 time / year, time permitting (1 time in 2011)	1
Makkovik Bank	Fisheries and Oceans Canada	Newfoundland Region Annual Sampling – 1 time / year, time permitting (1 time in 2011)	1
AR7W	Fisheries and Oceans Canada	Canadian Labrador Sea Monitoring Program, research vessel (1 time in 2011) [formerly a WOCE line]	1
Line P	Fisheries and Oceans Canada	Canadian Line-P Time Series Program, research vessel – 3 times/year (2 times in 2011)	1

**b. Data management**

Agency	No. of JJVV messages on the GTS in 2011	Location of delayed-mode data
Fisheries and Oceans Canada (ISDM)	1156 JJVV (from 3 Canadian Coast Guard / research ships and several anonymous small research ships and /or Canadian Navy ships)	ISDM, US-NODC

Fisheries and Oceans Canada (ISDM)	1355 KKYY (from 9 Canadian Coast Guard / research ships, 1 fishing vessel and at least one anonymous small research ships and/or Canadian Navy ships)	ISDM, US-NODC
Fisheries and Oceans Canada (ISDM)	4057 KKYY (from 145 Argo floats)	ISDM, USGODAE, IFREMER

**c. Major challenges and difficulties:**

Increasing data volume in other programs requires increasing efforts to visually quality control the data and report on ship performance overall

**d. Research / development / testing:**

**e. Other comments:**

Many of the BATHY reports are from the Canadian Navy ships, but the ships are not identified individually. ISDM continues to produce monthly reports showing maps of BATHYs and TESACs collected and maps of reporting along SOOP lines.