

SOOP Report for 2014

Country = AUSTRALIA

a. Programme description:			
Line	Agency	Sampling programme and target mode (if applicable)	No. of ships
IX01	ABOM	FRX+	1
IX12	ABOM	FRX	4
PX11/IX22	ABOM	FRX	1
PX02	ABOM	FRX	2
IX28	CSIRO	HDX, SST/SSS, pCO ₂ , TCO ₂ , alkalinity, pigments, fluorescence, macronutrients	1
PX30	CSIRO	HDX	2
PX34	CSIRO	HDX	1
	RAN	XBT for operational requirements and or hydrographical surveying	9

b. Data management		
Agency	No. of JJVV messages sent to the GTS in 2014	Location of delayed-mode data
ABOM	2293	US NODC, AODN
CSIRO	982	US NODC, AODN
RAN	0	US NODC, AODN

c. Major challenges and difficulties:

CSIRO reported no major challenges in 2014, but there were minor ship delays for PX30 and PX34. One section of PX30 was missed due to shipping movements, so only 3 PX30 sections completed in 2014.

JJVV messages from RAN ships are not reaching the GTS, due to a long-term communications issue within ABOM. This situation will hopefully be resolved in 2015. Some RAN ships however are failing to submit their data which requires constant monitoring. The Devil XBT System installed on RAN patrol boats is awaiting approval to connect to ship's GPS.

It has proved difficult for ABOM to find suitable ships to sample the PX11/IX22 line, with only one ship occupying this line in recent years. Unfortunately, this ship was decommissioned at the end of 2014, with no obvious replacement ships available.

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

Several timing boxes were built to diagnose differences found in the French SHOM XBT recording systems. The timing box was taken to France to test several MK21 and Turo Devil units and was also used to test a MK21 system and the Turo Devil and Quoll systems at CSIRO. The box has since been sent to Japan for testing of TSK recording systems. The tests show that there are differences in the timing of the systems that vary with software versions. These timing errors can result in depth offsets in the data of up to 2.7m in the systems tested so far. Work is continuing. Development and rollout of the autolauncher system has been delayed.

The Bureau has been developing an in-house BATHY to BUFR conversion process, with XBT BUFR messages expected to be sent to the GTS in early 2015.

e. Other comments:

Persistent electrical interference on XBT profiles discovered by CSIRO on HMAS Sydney. Ship being decommissioned in March 2015 so no further action is being taken.