

data summary

Southern Surveyor Voyage 5/2007



SS 2007/05

“Exploring and characterizing marine ecosystems of the
NW Region”

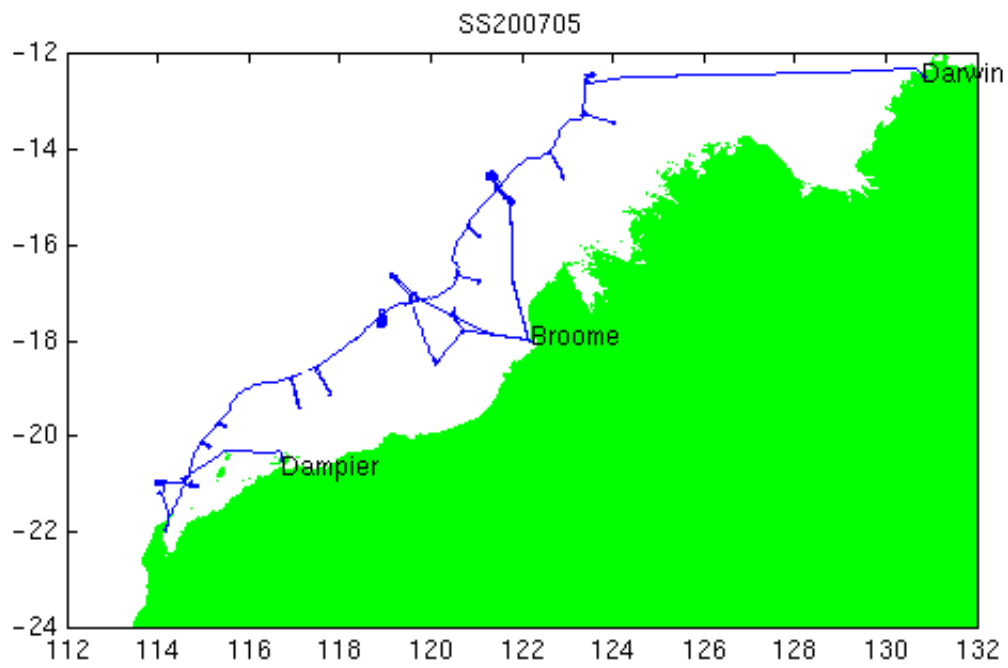
Dr Alan Williams (Chief Scientist Legs 1 & 2), CSIRO
Marine and Atmospheric Research (CMAR), Hobart, Tas
Mr Rudy Kloser (Chief Scientist, Leg 3), CMAR, Hobart,
Tas
Dr Gary Poore, Museum Victoria, Melbourne, Victoria

Leg 1
Dampier—Broome

7 June 2007— 21 June 2007

Leg 2
Broome –Broome
25 June 2007—29 June 2007

Leg 3
Broome-Darwin
29 June 2007—9 July 2007



Underway Data

Navigation data is acquired using the Seapath 200 position and reference unit, which is also differentially corrected by data from the FUGRO DGPS receiver.

The Meteorological data consists of 2 relative humidity and temperature sensors. A barometer, wind sensor, and licor light sensor.

Thermosalinograph data is acquired with a Seabird TSG and remote temperature SBE 3T. Data from a flow meter is also recorded.

Digital depth data is recorded from a Simrad EA500 sounder. Echograms are also recorded using SonarData's Echolog software. Digital depth data can be repacked using SonarData's Echoview software.

See Electronics report for this voyage for instruments used and serial numbers.

Navigation, Meteorological, Thermosalinograph and Depth data are quality controlled by combining all data from hourly recorded files to 10 second values in a netCDF formatted file; the combined data is referred to as "underway data".

A combined file was made on 2 August 2007 by running a Java application, written by Lindsay Pender of CMAR, uwyLogger version 6.5. The data time range is 11:00 7-June-2007—22:37 08-July-2007 (GMT).

Completeness and Data Quality

Position (latitude and longitude); meteorological data (air temperature, humidity, wind speed, wind direction, maximum wind gust, light and atmospheric pressure) and thermosalinograph (salinity and water temperature) data and depth data were evaluated and quality controlled.

Processing Comments

The Data from the Licor Light sensor is named "PAR" in the netcdf file.

Salinity and Water temperature data were rejected when the pumps were down and the flow rate was low through the voyage.

08:27 10-Jun-2007—19:34 10-Jun-2007—Engineers had pumps turned off

18:27 20-Jun-2007—01:47 25-Jun-2007— Broome @wharf

19:55 05-Jun-2007—01:37 06-Jul-2007—tests

05:30 07-Jul-2007—08:24 07-Jul-2007—tests

17:32 07-Jul-2007—23:37 07-Jul-2007—tests

The depth data was re-picked using Sonar Data's echoview software. The sounder determined depth was very bad because of "fiddling" with the threshold onboard—and it wasn't noticed all voyage. Repicking can not be done automatically for a range of days in Echoview and so manual repicking per segment is used which is very time consuming.

Final Underway Data

The navigation, meteorological, thermosalinograph and depth data will be entered into the CMAR Divisional data warehouse.

References

Pender, L., 2000. Data Quality Control flags. http://www.csiro.marine.au/datacentre/ext_docs/DataQualityControlFlags. Pdf

	Processing Agency	Processing Status
Navigation	CMAR	Completed
Meteorological	CMAR	Completed
Thermosalinograph	CMAR	Completed
Depth	CMAR	Completed

Bernadette Heaney

CSIRO Marine and Atmospheric
Research, Hobart, Tasmania, Australia