Cata summary

Southern Surveyor Transit 4/2007





ST 2007/04

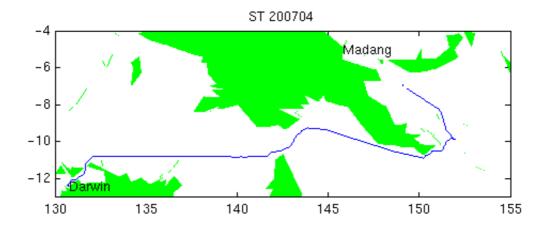
"Exploring Cheshire Seamount"

Dr Chris Yeats, CSIRO Exploration and Mining, Bentley, WA

Dr Richard Arculus, Department of Earch and Marine Sciences, Australian National University, ACT

Darwin—Madang

15 July 2007—24 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 20 August 2007 by running a Java application, written by Lindsay Pender of CMAR, uwyLogger version 6.5. The data time range is 09:14 15-July-2007—03:01 23-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.

The logging Sun computers were switched off due to air conditioning problems on 23-Jul-2007 03:01—06:21.

Processing Comments

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

Salinity data was range checked and filtered, with range paratmeters of 32.5—35.5, and increment mzximum of .2

The depth data was re picked using Sonar Data's echoview software.

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

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