

SS 1/2004

08:00 20 January 2004 Fremantle - 10:00 28 January 2004 Fremantle (Local times)

Data processing completed by
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1. Summary

These notes relate to the production of quality controlled (QC-ed), position, depth and meteorological and thermosalinograph data from RV Southern Surveyor voyage 1/2004.

Position data was acquired using an Ashtech OEM 2 sensor and the Seapath 200 position and motion reference unit. Depth data was acquired with the Simrad EA500. The Divisional Data Librarian can assist with information regarding all other sensors.

2. Voyage details

“Seasonality in community structure, productivity and energy flows in the continental shelf and offshore pelagic environment off southwestern Western Australia”

2.1 Principal Investigator

Dr Tony Koslow

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Processing Notes

3. Processing Notes

3.1 Background Information

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, and other underway variables was remade on 3 February 2004 - by reading data from hourly files returned from the voyage. (Time range 14:00:10 19-Jan-2004 - 06:19:30 28-Jan-2004).

The water depth was “repicked” using echoview software. The depth data was interpolated to 10 second values. The new depths were read back into the netcdf file.

The meteorological data consists of air temperature, humidity, light, atmospheric pressure, wind speed and direction and maximum wind gust.

In April 2004 the uncorrected wind speed and direction values were extracted from the .mer files and “corrected” using ship heading, from the gyro compass and ship speed over ground and ship course over ground from the .gpd files. The resultant wind speed and direction values were added to the ss200401.nc file. The maxWindGustQC flag was set to bad.

The thermosalinograph data consists of water temperature and water salinity.

At one site, three bottle salinity samples were taken and salinity values determined. The salinity bottle data versus instrument salinity comparisons was 0.06 psu difference.

Spikes in the thermosalinograph water temperature data appeared about 04:40 24-Jan-2004; a reason for the spikes has not been determined but it is thought to be caused by a wiring problem. The raw .tsr files were remade after interpolating over the spiked temperature data (fixTsgSpike.m). A netcdf file of position and thermosalinograph data was made using Underway Logger and then the new water temperature data was written to the ss200401.nc file.

Processing Notes

The pump to the thermosalinograph may have been changed causing bubbling in the flow. Salinity data for the later part of the voyage was rejected (27-Jan-2004 09:30 - 28-Jan-2004 06:19:30).

4. Other

The navigation, depth, meteorological and thermosalinograph data will be entered into the data warehouse. Position, depth and meteorological and thermosalinograph data extracted from the underway file is available online.

5. References

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

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