

Processing Notes

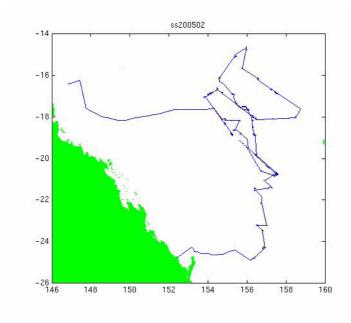
SS 2/2005

10:00 25 January 2005 Bundaberg - 09:30 20 February 2005 Cairns

(Local times)
Data processing completed by
Bernadette Heaney, March 2005
Wind Speed and Direction corrected by
Bernadette Heaney, June 2006

1. Summary

These notes relate to the production of quality controlled (QC-ed), position, depth and meterological and thermosalinograph data from RV Southern Surveyor voyage 2/2005.



Processing Notes

Position data was acquired using 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

"The geology and tectonic evolution of the Mellish Rise off northeast Australia: a key piece in a tectonic puzzle"

2.1 Principal Investigator

Dr Neville Exon

Geoscience Australia, Canberra

3. Processing Notes

3.1 Background Information

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, meterological and thermosalinograph variables was remade on 8 March 2005 - by reading data from hourly files returned from the voyage. (Time range 23:33:10 24-Jan-2005 - 13:49:20 19-Feb-2005).

The water depth was "repicked" using SonarData's Echoview software. The depth data was interpolated to 10 second values. The new depths were read back into the netcdf file.

Processing Notes

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

It was noticed in January 2006 that the uwyLogger progam had not been correcting the wind speed and wind direction data for ships motion. The wind speed and wind direction data were recorrected in June 2006; the data was flagged good, manually adjusted (48). MaxWindGust was set to NaN, and flagged as bad data.

The thermosalinograph data consists of water temperature and water salinity. Salinity values were compared with surface bottle data at CTD locations on the previous voyage. There was good comparison. No offset was added to the underway salinity data.

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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