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## SS 3/2005

10:00 23 Feb 2005 Cairns - 10:00 21 March 2005 Weipa

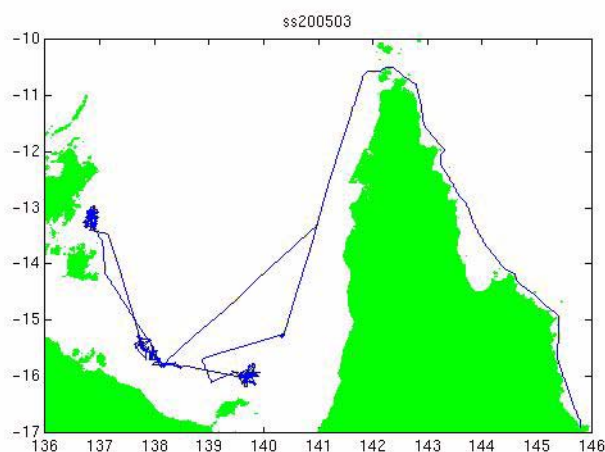
*(Local times)*

*Data processing completed by*  
**Bernadette Heaney, April 2005**

*Wind Speed and Direction re-corrected by*  
**Bernadette Heaney, June 2006**

### 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 3/2005.



## Processing Notes

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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

“Biogeophysical characterization of northern Australia marine ecosystems: assessing biophysical relations, ecosystem biodiversity, and surrogacy”

### 2.1 Principal Investigators

Dr Rodrigo Bustamante and Dr Peter Rothlisberg

CSIRO Marine Research, Cleveland

## 3. Processing Notes

### 3.1 Background Information

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, meteorological and thermosalinograph variables was remade on 7 April 2005 - by reading data from hourly files returned from the voyage and modified. (Time range 03:25:40 23-Feb-2005 - 14:54:20 20-Mar-2005).

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. Some data was flagged as suspect where the bottom depth was accepted but was deeper than visually recorded.

## Processing Notes

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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 program had not been correcting the wind speed and wind direction data for ships motion. The wind speed and wind direction data were rechecked 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. Spikes greater than 0.2 were filtered out of the salinity data.

Salinity bottle samples have been taken for comparison. See Pamela Brodie re the results. No offset has been added to the salinity data.

The gps data from the Seapath recorded anomolous values on 28-Feb-2005 20:30:30 for about 3 minutes. Position status of 1 or 2 recorded in the nmea strings are acceptable. Status 0 produced zero longitude and latitude values and status 6 produces dead reckoning positions. Status 0 values were flagged as bad data and status 6 as recording anomaly.

## 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.

## Processing Notes

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### 5. References

Pender, L., 2000: Data Quality Control Flags. [http://www.csiro.marine.au/datacentre/ext\\_docs/DataQualityControlFlags.pdf](http://www.csiro.marine.au/datacentre/ext_docs/DataQualityControlFlags.pdf)

Bernadette Heaney

CSIRO Marine Research

Hobart, Tas, Australia