

SS 5/2005

10:30 am 30-Apr-2005 Darwin - 07:00 am 28-May-2005 Darwin

(Local times)

Data processing completed by

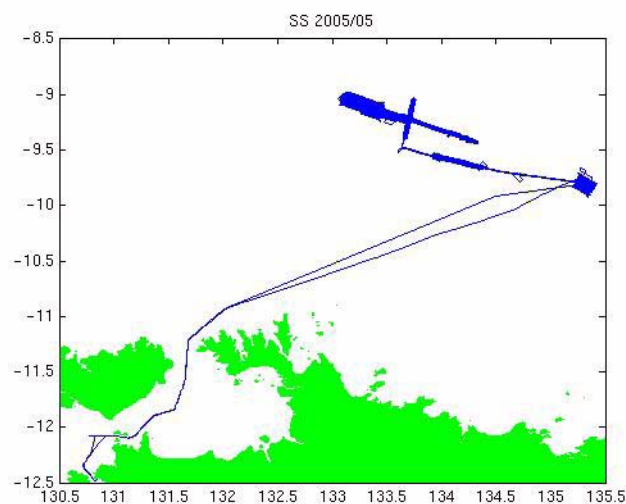
Bernadette Heaney, August 2005

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 5/2005.



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

“Identifying potential natural hydrocarbon Seeps and petroleum resources, including sea floor mapping and classification of Australia’s central northern EEZ”

2.1 Principal Investigators

Dr Graham Logan

Geoscience Australia

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 1 July 2005 - by reading data from hourly files returned from the voyage and modified. (Time range 01:20:00 30-Apr-2005 - 21:39:30 27-May-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. There is a gap in the “processed” depth data, 09:16 11-May-2005 - 19:06 12-May-2005; mostly likely due to the unix logging system being restarted and echolog not reset.

Processing Notes

The meteorological data consists of air temperature, humidity, light, atmospheric pressure, wind speed and direction and maximum wind gust. The atmospheric data was filtered as uwy-Logger introduces spikes in the data, usually occurring prior to a gap in the data set.

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 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. Lindsay Pender produced an offset (-0.0329) and scale (1.0065) which was applied to the conductivity data and the salinity data was re-computed.

Salinity and water temperature data were rejected as the water pump was reported turned off for the following times.

01:30 27-May-2005 - 05:00 27-May-2005

03:35 22-May-2005 - 04:00 22-May-2005

The gps data from the Seapath MRU unit gave no problems.

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

5. References

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

Bernadette Heaney

CSIRO Marine Research

Hobart, Tas, Australia