

SS 1/2007

08:00 24 -Feb-2007 Port Lincoln - 07:30 17-March-2007 Port Lincoln

(Local times)

Data processing completed by
Bernadette Heaney, April 2007

1. Summary

These notes relate to the production of quality controlled (QC-ed), position, meteorological, thermosalinograph and depth data from RV Southern Surveyor voyage 1/2007.

2. Voyage details

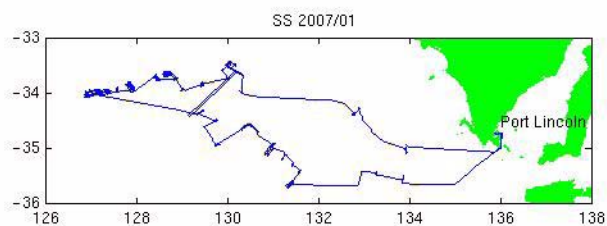
“Bight Basin geological sampling and seepage survey; sampling the Cretaceous section of the Bight Basin, and investigating potential natural hydrocarbon seeps.”

2.1 Principal Investigator

Cameron Mitchell.

Geoscience Australia, Canberra

Processing Notes



3. Processing Notes

3.1 Background Information

Position data was acquired using the Seapath 200 position and motion reference unit (which also is differentially corrected by data from the FUGRO DGPS receiver).

Digital depth data was acquired with the Simrad EA500 sounder. Echograms were also recorded using SonarData's Echolog software. Digital depth data can be repicked using SonarData's Echoview software.

Thermosalinograph data was acquired with a Seabird TSG (S#1777) and remote temperature SBE 3T (S#2621).

Processing Notes

The “Met” station consists of 2 relative humidity and temperature sensors, port (X2030106) and starboard (X20303107). A barometer (465595), wind sensor (R M Young model 05106 Marine Grade) and licor light sensor (UWQ3708).

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, meteorological and thermosalinograph variables was remade on 19-Apr-2007 - by reading data from hourly files returned from the voyage. (Time range 23-Feb-2007 21:06 - 16-Mar-2007 22:29).

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

The thermosalinograph (TSG) data consists of water temperature and water salinity. Data before 24-Feb-2007 08:54 and after 16-Mar-2007 17:06 were set as NaN and bad data flag as there was no water flow through the instrument. Data for 05-Mar-2007 08:46:30 - 08:46:50 were set as bad - presumably a bad spike in the data.

The gps data was recorded from the Seapath MRU unit.

4. Other

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

5. References

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

Processing Notes

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