

## **SS 3/2004**

(Geoscience Australia Bremer Basin Charter)

10:00 9 February 2004 Fremantle - 10:00 24 February 2004 Albany - Leg 1

16:00 24 February 2004 Albany - 9:00 10 March 2004 Hobart - Leg 2

*(Local times)*

*Data processing completed by*  
**Bernadette Heaney, June 2004**

### **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 3/2004.

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**

“Geological framework of the Bremer and Denmark sub-basins, south west Australia”

#### **2.1 Principal Investigators**

Dr Neville Exon

Geoscience Australia

## Processing Notes

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### 3. Processing Notes

#### 3.1 Background Information

Thermosalinograph raw files were modified to interpolate across spikes in temperature values.

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, meteorological (including uncorrected wind speed and direction) and thermosalinograph variables was remade on 7 June 2004 - by reading data from hourly files returned from the voyage and modified .tsr files. (Time range 03:28:20 9-Feb-2004 - 19:38:00 09-Mar-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. The wind speed and direction were re-calculated from uncorrected wind speed and direction, ships heading and ship speed overground and ship course over ground. The maxWindGustQC flag was set to bad.

The thermosalinograph data consists of water temperature and water salinity. Temperature and salinity data was rejected due to the instrument being tested on:

05:09 18-Feb-2004 - 06:13 18-Feb-2004

09:42 20-Feb-2004 - 09:48 20-Feb-2004

15:19 24-Feb-2004 - 15:34 24-Feb-2004

05:13 26-Feb-2004 - 05:17 26-Feb-2004

05:58 29-Feb-2004 - 10:35 29-Feb-2004

## Processing Notes

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At two sites, three bottle salinity samples were taken and salinity values determined.

### 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](http://www.csiro.marine.au/datacentre/ext_docs/DataQualityControlFlags.pdf)

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