

## **SS 3/2003**

08:00 12 April 2003, Brisbane - 12:00 26 April 2003 Cairns (Local times)

*Data processing completed by*  
**Bernadette Heaney, November 2003**

### **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 3/2003.

Position data was acquired using an Ashtech OEM 2 sensor. Depth data was acquired with the Simrad EA500. The Divisional Data Librarian can assist with information regarding all sensors.

### **2. Voyage details**

“A New Mechanism for Supply of Sand to Deep Water: The Eastern Australian Longshore Transport System”

#### **2.1 Principal Investigator**

Associate Professor Ron Boyd,

University of Newcastle

## Processing Notes

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### 3. Processing Notes

#### 3.1 Background Information

Position - GPS -Ashtec OEM sensor - full resolution NMEA strings are recorded in hourly files.

Depth - Simrad EA 500 sounder and EK 500 sounder - full resolution data recorded in hourly files (switched between instruments during voyage). Echolog software produces EK files of datagrams from the sounders. Echograms from the EA500 were used exclusively to “line pick” the bottom.

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, and other underway variables was remade on 14 November 2003 - by reading data from hourly files returned from the voyage. (Time range 22:25:10 11-Apr-2003 to 20:54:40 24-Apr-2003).

Echoview software was used to view the echograms, copy and repick the bottom and quality assess the data. This data was interpolated to 10 second values and read back into the netcdf underway file.

The entire raw meteorological data was not recorded. The 10 second data was derived from the 1 minute averages in the .met files returned from the ship. The meteorological data consists of air temperature, light, atmospheric pressure, wind speed and direction and maximum wind gust.

The raw thermosalinograph .tsg and .tsr files were re-made by Bob Beattie in Hobart with corrected calibration constants. The corrected data was used when re-making the 10 second values. The water temperature and salinity data was quality controlled. Data before the pumps were turned on (06:07:30 13-Apr-2003) and after the pumps were turned off (01:00 24-apr-2003) were not included.

## Processing Notes

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### 4. Other

The 10 second navigation, depth, meteorological and thermosalinograph data will be entered into the data warehouse. Position, depth and meteorological 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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