

## **SS 6/2003**

11:00 5 August 2003 Darwin - 11:00 16 August 2003 Dampier (Local times)

*Data processing completed by*  
**Bernadette Heaney, December 2003 (modified April 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 6/2003.

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 other sensors.

In April 2004 it was decided to reprocess the corrected wind speed and direction data due problems with data from the ship's log which is usually used to recorrect the wind speed and direction data.

### **2. Voyage details**

“INSTANT: International Nustrantara Stratification and Transport Program”

#### **2.1 Principal Investigator**

Dr Susan Wijffels

CSIRO Marine Research

## Processing Notes

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### 3. Processing Notes

#### 3.1 Background Information

A combined underway file for the entire voyage, consisting of 10 second values of position, depth, and other underway variables was remade on 3 December 2003 - by reading data from hourly files returned from the voyage. (Time range 02:00:10 05-Aug-2003 to 19:41:00 14-Aug-2003).

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

In April 2004 the uncorrected wind speed and direction values were extracted from the .mer files and “corrected” using ship heading, from the gyro compass and ship speed over ground and ship course over ground from the .gpd files. The resultant wind speed and direction values were added to the ss200306.nc file. The maxWindGustQC flag was set to bad.

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 thermosalinograph data consists of water temperature and water salinity. Salinity data was filtered allowing a second difference of less than .2.

Bottle salinity samples were taken. Bottle samples taken on 12 August agreed well with the salinity values.

### 4. Other

## Processing Notes

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The 10 second 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)

Bernadette Heaney

CSIRO Marine Research

Hobart, Tas, Australia