data
summary

Southern Surveyor Voyage SS200803

CSIRO

MARINE
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SS200803

Title

"Estimating the effectiveness of spatial closures for deepwater gulper sharks and associated fishery species"

Principal Investigator

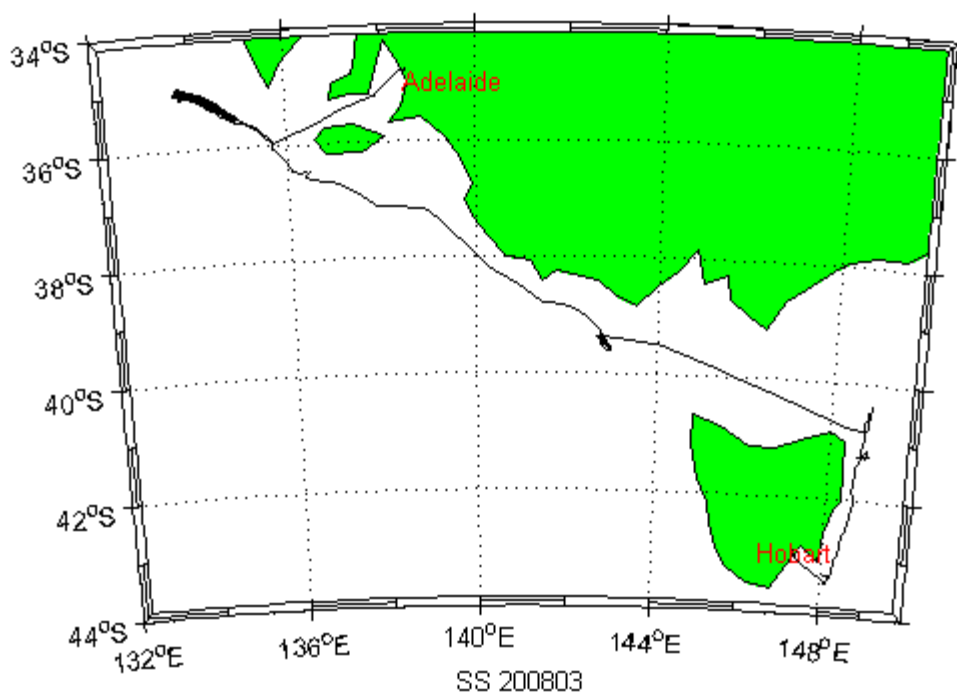Dr Alan William, CSIRO Marine and Atmospheric Research, Hobart

Ports

Adelaide – Hobart

Date

28 February 2008 – 17 March 2008

Voyage Track

SS 200803

Underway Data

Navigation data is acquired using the Seapath 200 position and reference unit, which is also differentially corrected by data from the FUGRO DGPS receiver.

The Meteorological data consists of 2 relative humidity and temperature sensors; a barometer, wind sensor, and licor light sensor.

Thermosalinograph data is acquired with a Seabird TSG and remote temperature SBE 3T. Data from a flow meter is also recorded.

Digital depth data is recorded from a Simrad EA500 sounder. Echograms are also recorded using SonarData's Echolog software. Digital depth data can be repicked using SonarData's Echoview software.

See Electronics report for this voyage for instruments used and serial numbers.

Navigation, Meteorological, Thermosalinograph and Depth data are quality controlled by combining all data from hourly recorded files to 10 second values in a netCDF formatted file; the combined data is referred to as "underway data".

A combined file was made on 7 April 2008 by running a Java application, written by Lindsay Pender of CMAR, uwyLogger version 7.4. The data time range is 28-Feb-2008 00:45:30 – 17-Mar-2008 04:04:30.

Completeness and Data Quality

Position (latitude and longitude); meteorological data (air temperature, humidity, wind speed, wind direction, maximum wind gust, light and atmospheric pressure) and thermosalinograph (salinity and water temperature) data and depth data were evaluated and quality controlled. There is a gap in the data due to a power outage, 10-Mar-2008 18:36 – 21:14.

Processing Comments

A spike in the salinity data was removed 04-Mar-2008 11:20:20.

Salinity and Water temperature data were rejected when the instrument had a problem with tsg comms after a power outage.

10-Mar-2008 17:18:40 – 14-Mar-2008 04:38:40

The depth data was re picked using Sonar Data's echoview software.

Final Underway Data

The navigation, meteorological, thermosalinograph and depth data will be entered into the CMAR Divisional data warehouse.

The following ascii files have been created.

Filename	Parameters	resolution
Ss200803uwy10.csv	latitude, latitudeQC, longitude, longitudeQC, speedOG, speedOGQC, courseOG, courseOGQC, waterDepth, waterDepthQC, airTemp, airTempQC, humidity, humidityQC, windSpeed, windSpeedQC, maxWindGust, maxWindGustQC, windDir, windDirQC, PAR, PARQC, atmPressure, atmPressureQC, waterTemp, waterTempQC, salinity, salinityQC	10 second
Ss200803uwy5min.csv	latitude, latitudeQC, longitude, longitudeQC, speedOG, speedOGQC, courseOG, courseOGQC, waterDepth, waterDepthQC, airTemp, airTempQC, humidity, humidityQC, windSpeed, windSpeedQC, maxWindGust, maxWindGustQC, windDir, windDirQC, PAR, PARQC, atmPressure, atmPressureQC, waterTemp, waterTempQC, salinity, salinityQC	5 minute
Ss200803pdr10.csv	Latitude, longitude, waterDepth	10 second

SS200803

ADCP Data

The Acoustic Doppler Current Profiling data was collected using an RDI vessel mounted Ocean Surveyor with a frequency of 75kHz. RDI's Vessel Mounted Data Acquisition System was used to acquire the data.

Long Term Averaged files returned from the ship were used to process the data for 10-Mar-2008 21:14 to 17-Mar-2008 03:54.

LTA files were reproduced from raw data files for 28-Feb-2008 02:50 to 10-Mar-2008 18:36 as there were no navigation data recorded for 29-Feb-2008. This problem was reported to RDI but there has been no feedback.

Each ensemble time was 5 minutes.

Completeness and Data Quality

Gap in data coverage	Comments
10-Mar-2008 18:36 – 21:14	Power outage

Processing Comments

Data were processed using University of Hawaii's "CODAS" processing system.

The data was calibrated initially with rotate_angle -0.53 and rotate_amplitude 1.0069, then 0.09 and 0.9960, resulting in

	Amplitude	Phase
water track	1.00	-0.00
bottom track	0.9966	-0.0472

Final ADCP Data

The bin depth size was 8 m and number of bins 80, so one file was created for this voyage.

File Name	Bin size	Date Range
SS200803_adcp_A.nc	8 m	28-Feb-2008 02:50:55 – 17-Mar-2008 03:54:27

References

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

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