

AUSTRALIAN HYDROGRAPHIC SERVICE

Royal Australian Navy



SURVEY SUMMARY

INSTRUCTIONS FOR RENDERING

This Survey Summary form should be completed for all data rendered to the Australian Hydrographic Office which is not accompanied by a full written report, Summary Report of Survey (Form AH68) or does not include the corresponding information in associated metadata.

This will provide the minimum information required to manage data within Australia's area of charting interest.

The preferred format of bathymetric data is: full data set, processed, ungridded, as either ascii .xyz, (.dxf), (.dgn), or Hydrographic Transfer Format (.htf, available from the AHS website <http://www.hydro.gov.au>). If these formats are not available, full source data will be accepted.

Any ancillary data such as tides, benchmarks, linework and final levelling heights etc. is also of assistance. If supplying such data, please include positional data of deployed equipment.

Please forward survey data with the completed Survey Summary to:

Hydrographer
Australian Hydrographic Office
Locked Bag 8801
Wollongong
NSW 2500

SURVEY SUMMARY AUSTRALIAN HYDROGRAPHIC SERVICE RAN

General

Survey Title: RV Sonne NZAusPNG transit	Survey ID: SO2152011
Locality: New Zealand to Townsville to PNG	Scale: NA
Survey Dates: 02 to 18 June 2011 (UTC)	Survey Authority: NA
Survey Platform: RV Sonne	Surveyor in Charge and Qualification:
Dr Robin Beaman, BSc, BAntSt(Hons), PhD, SSSI Hydrographic Surveyor Level 1	
School of Earth and Environmental Sciences, James Cook University, PO Box 6811, Cairns QLD 4870, Australia	
Email: robin.beaman@jcu.edu.au	Phone: +61 7 4042 1693

Technical Detail

<u>Horizontal control:</u>	
Datum WGS84 Spheroid WGS84 Projection UTM Zone 55S to Zone 60S	
Transformation methods and parameters used to shift to WGS84 (if applicable)	NA
Positioning system used at base station (if applicable): (eg. AMSA Beacon #, RTK, UHF etc)	Wide area differential GPS
<u>Vertical Control:</u>	
Sounding Datum: Nil tides applied Tide:	
Lat/Long or Port #:: _____ N / S _____ E / W	
Benchmark used and height difference between BM and Datum (if applicable):	NA
Vertical Uncertainty of Benchmark used:	± metres (%)
<u>The following details relate to the conduct of the survey:</u>	
Was the survey systematically controlled following planned survey lines?	No
State the horizontal accuracy achieved and the confidence level (eg. at 39% (1 sigma), 95%, or 99% Confidence Interval for 2D error analysis)	Not assessed
Was full seafloor coverage/insonification achieved?	Yes
Equipment used for seafloor coverage: (Side Scan Sonar, Swathe echosounder etc.)	Swathe echosounder
Were all shoal depths systematically investigated and their least depths determined?	Yes
Sounding equipment used:	Kongsberg Simrad EM120
Echosounder frequency:	12 kHz
Echosounder beamwidth:	1.0° x 1.0° (across x along)
Logging system:	Kongsberg Simrad Neptune B software
Post-cruise editing system:	Caris HIPS/SIPS Version 7.1 HF2 software
State the depth accuracy achieved and the confidence level (eg. at 68% (1 sigma), 95%, or 99% Confidence Interval for 1D error analysis)	Not assessed

Additional Remarks (if applicable please attach as separate sheet)**Tides**

Note that zero tides have been applied to the post-processed data within the Caris HIPS/SIPS project.

Files

Caris HIPS/SIPS project:

\SO2152011 \Fieldsheets (has one fieldsheet and one BASE surface @ 100m resolution for each JD)
\HDCS_Data (converted and cleaned data)
\PreProcess (raw EM120 data for each JD)
\Session (session file used in Caris project)
\SVP (not used)
\Tide (zerotide.tid used in Caris project)

ausbathytopo2009_geotif (background image used in Caris project)

SO2152011_processing_log.xls (used to record processed lines and any comments)

SO2152011_AH68_SurveySummary.doc

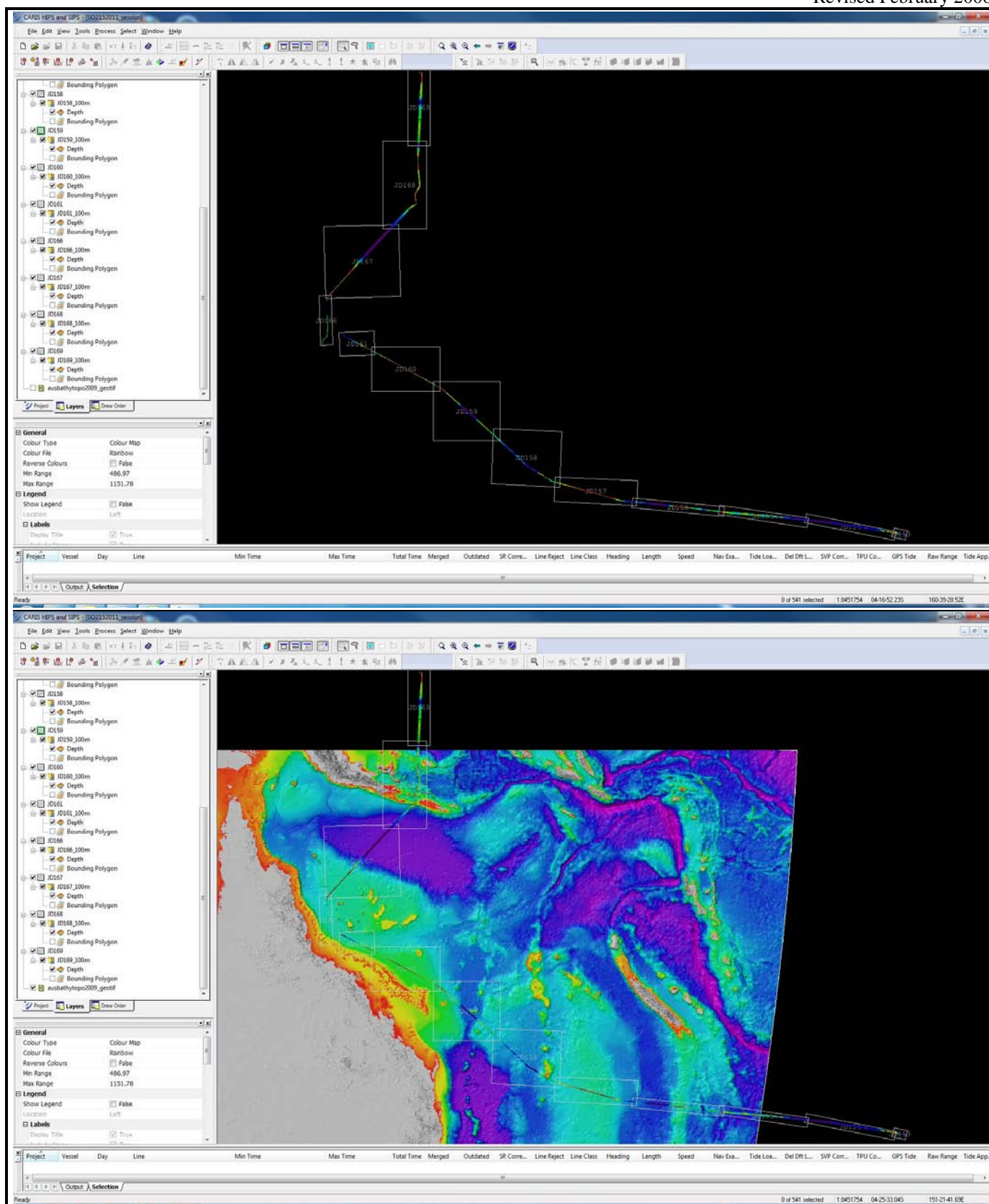


Figure 1. Screen captures from the Caris HIPS/SIPS project \SO2152011 showing RV Sonne data 02-18 Jun 2011.

Guidance on Confidence Levels and Error Ellipse scaling is contained in ICSM Publication No.1 (SP1) or by contacting the QC Section at the Australian Hydrographic Office.

Please forward completed forms, along with the survey data (digital data or fairsheets [if applicable]) to:
Hydrographer, RAN Hydrographic Office, Locked Bag 8801, Wollongong, NSW 2500