

Groupe hydrographique et océanographique de l'Atlantique

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Object : « CARAPASS 2019 » croisee onboard R/V *POURQUOI PAS ?*
Reference : Diplomatic Clearance Ref.:UTN18120120/34.R.431
Attachment : Survey area

1 TASK.

This report presents the bathymetric, geophysical and sedimentological data surveyed in waters under the jurisdiction of Iceland by Shom (French Hydrographic Office) onboard R/V *POURQUOI PAS?* during "CARAPASS 2019" cruise in May 2019.

2 REFERENCES.

All data are referenced to WGS84 datum, in geographical coordinates.
Vertical reference is the mean sea level.

3 OCEANOGRAPHIC DATA.

The configuration for each recorded data is available in log files or in the header of each data file.

Along track data was acquired using:

- A hull mounted thermosalinometer
- Two Vessel-Mounted ADCP at 38 and 150 kHz
- XBT and CTD probes
- Sub-Bottom Profiler

4 HYDROGRAPHIC DATA.

4.1 DATA ACQUISITION.

The survey was conducted using SeaBat 7150 RESON multibeam echosounder. Survey localization is given in appendix 1.

4.2 DATA PROCESSING.

Processing was done using CARIS HIPS&SIPS 9.1.

4.2.1 Sound velocity correction.

Sound velocity profiles were regularly measured (at least every 6 hours) using XBT probes. Soundings were corrected from sound velocity profile effects.

4.2.2 Localization and attitude.

Positioning and attitude was supplied by an inertial navigation system PHINS combined with GNSS system receiving correction from C-nav system.

Accuracy of the ship localization is estimated at 1.00 m at 95%.

4.2.3 Tide correction.

No Tide corrections has been applied to the soundings.

4.2.4 Lever arms.

Data has been corrected from the lever arms of all the sensors.

4.3 ACCURACY

The sounding accuracy in meter at 95% (where D = depth in meter) is better than:

Horizontal: $1 + 0.9\%D$

Vertical: $2 + 1.1\%D$

5 DATA PROVIDED.

- The present report
- Oceanographic data :
 - XBT probes in EDF format (MK21 export data file readable by a word processor)
 - Hull mounted thermosalinometer in ASCII format
 - Vessel-Mounted ADCP in ASCII Format with theirs configuration in ASCII
 - Sub bottom Profiler data in SEG-Y
- Bathymetric data :
 - Soundings in ASCII files (latitude, longitude, depth)

Chief scientist Denis Créach,
Director of groupe hydrographique et océanographique de l'Atlantique
Director of the campaign

APPENDIX: SURVEYED AREA

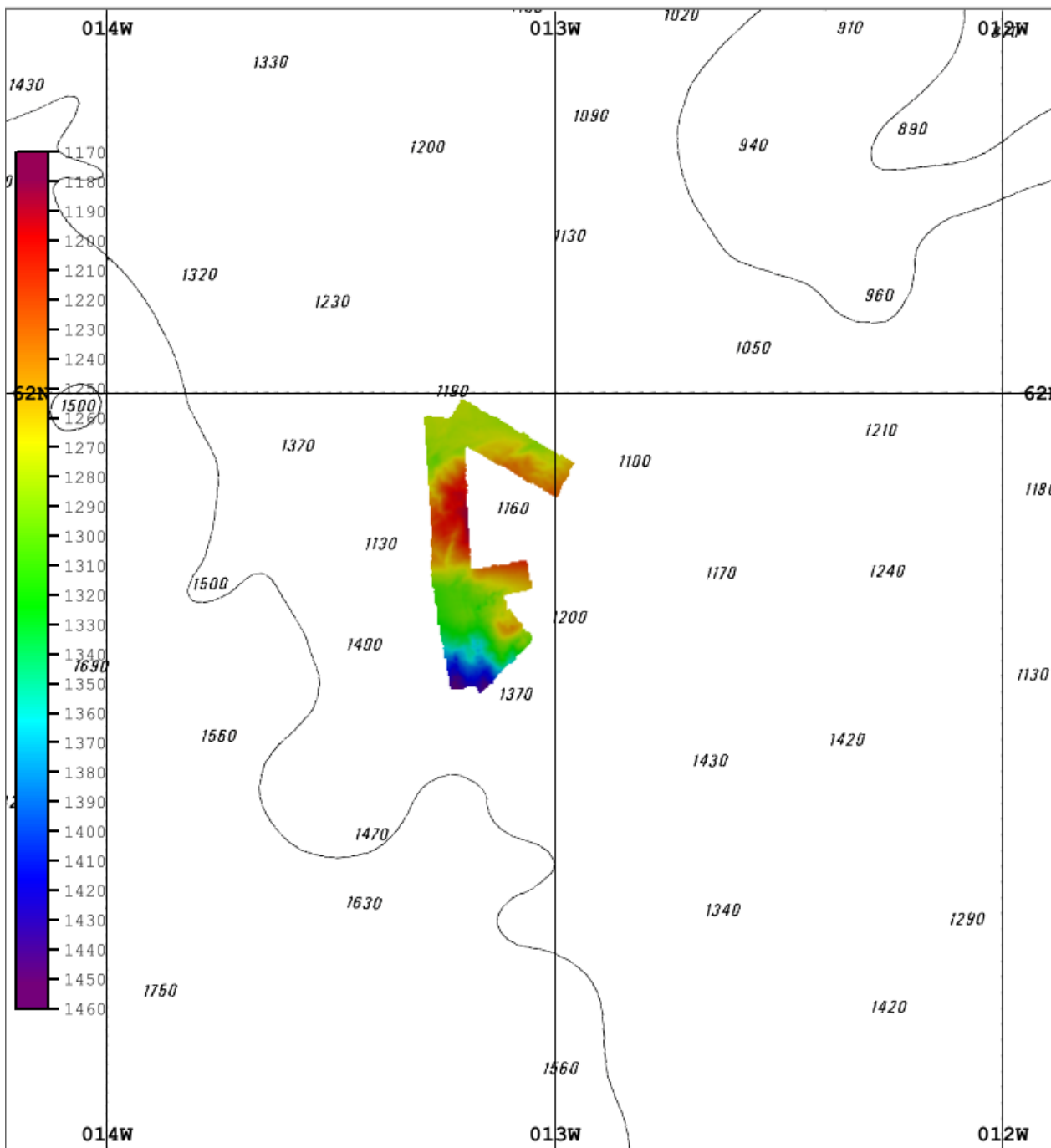


Figure 1 : Data acquired during CARAPASS 2019