RÉPUBLIQUE FRANÇAISE
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SHOM L'océan en référence

Groupe hydrographique et océanographique de l'Atlantique

SURVEY REPORT

OBJECT : « Narval 2022 » cruise onboard R/V *Beautemps-Beaupré*

REFERENCE : Consent from The Directorate of Fisheries(licence no.: 833/2022) du 13/06/22

ATTACHMENT : 1 appendix.

1 TASK.

This report presents the hydrologic data surveyed in waters under the jurisdiction of Norway by Shom (French Hydrographic Office) onboard R/V *Beautemps-Beaupré* during "NARVAL 2022" cruise from August 08th to September 06th, 2022. The data is transferred in accordance with the above-mentioned authorization.

2 REFERENCES.

All data are referenced to WGS84 datum, in geographical coordinates. Vertical reference for bathymetric data is the approximate lower astronomical tide.

3 OCEANOGRAPHIC DATA.

3.1 THERMOSALINOMETER

Onboard thermosalinometer was continuously measuring surface CTD values. Dataset is provided in a single ascii file.

3.2 VESSEL MOUNTED ADCP

A hull-mounted current profiler Workhorse Mariner RDI 150kHz was used. One ascii file is provided for the survey.

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3.3 EXPANDABLE BATHYTHERMOGRAPH AND RAPIDCAST

1 XBT probe (Sippican) was launched during the cruise. The ascii file is provided.

4 BATHYMETRIC DATA.

4.1 DATA ACQUISITION.

The survey was conducted using Kongsberg EM712 multibeam echosounder. Survey localization is given in appendix 1.

4.2 DATA PROCESSING.

Processing was done using CARIS HIPS&SIPS v11.3

4.2.1 Sound velocity correction.

Sound velocity profiles were regularly sampled using XBT probes. Data was corrected from sound velocity profile effects.

4.2.2 Localization and attitude.

Positioning and attitude was supplied by an inertial navigation system HYDRINS combined with GNSS system receiving correction from EGNOS system.

Precision of the ship localization is estimated at 3.00 m at 95%.

4.2.3 Tide correction.

Soundings were corrected from a modelled tide.

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: 3.0 + 1.6%D
Vertical: 0.5 + 0.6%D

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

APPENDIX : SURVEYED AREA

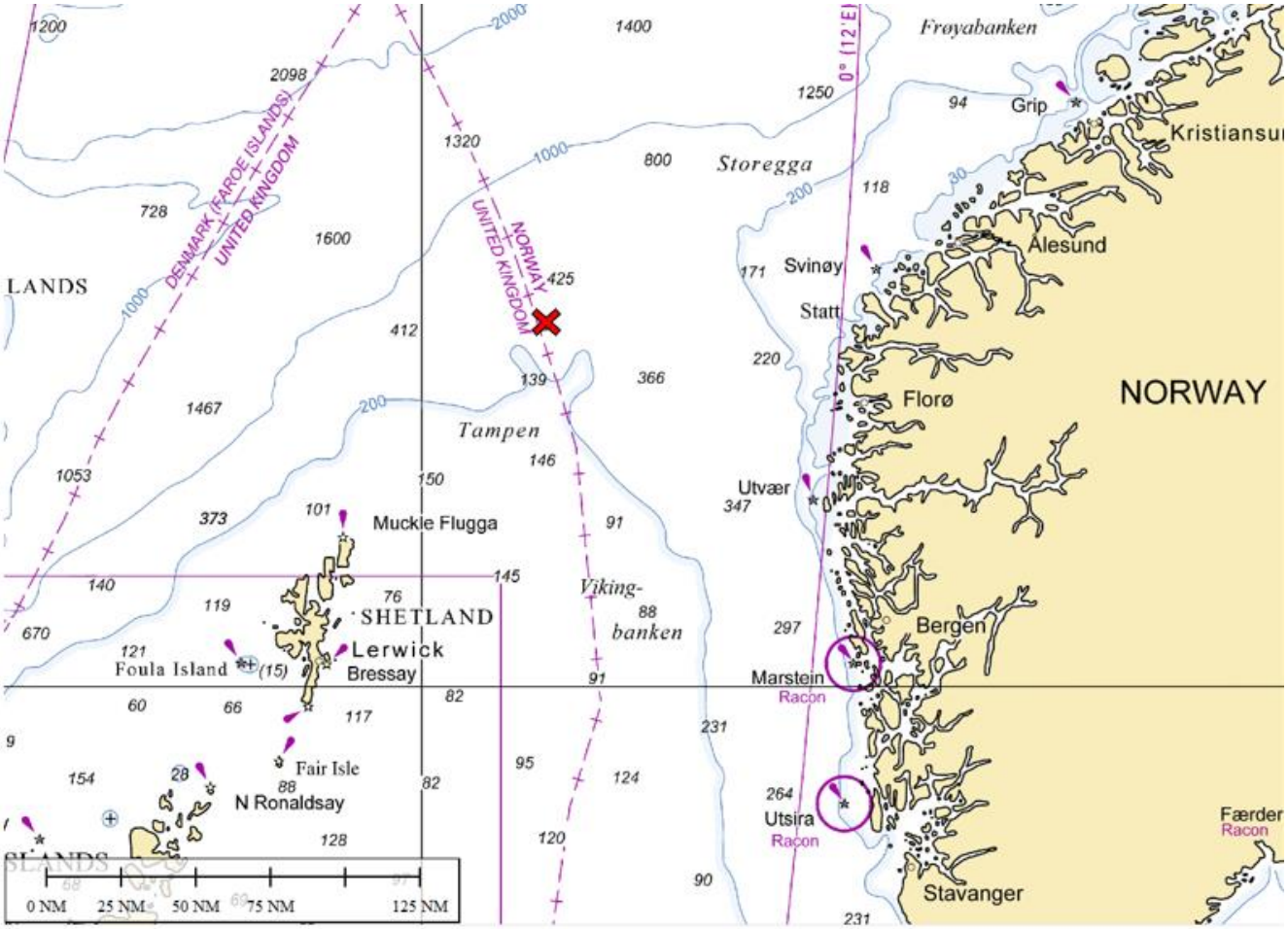

Figure 1: Survey localization

Background: Shom chart 6727 – INT10

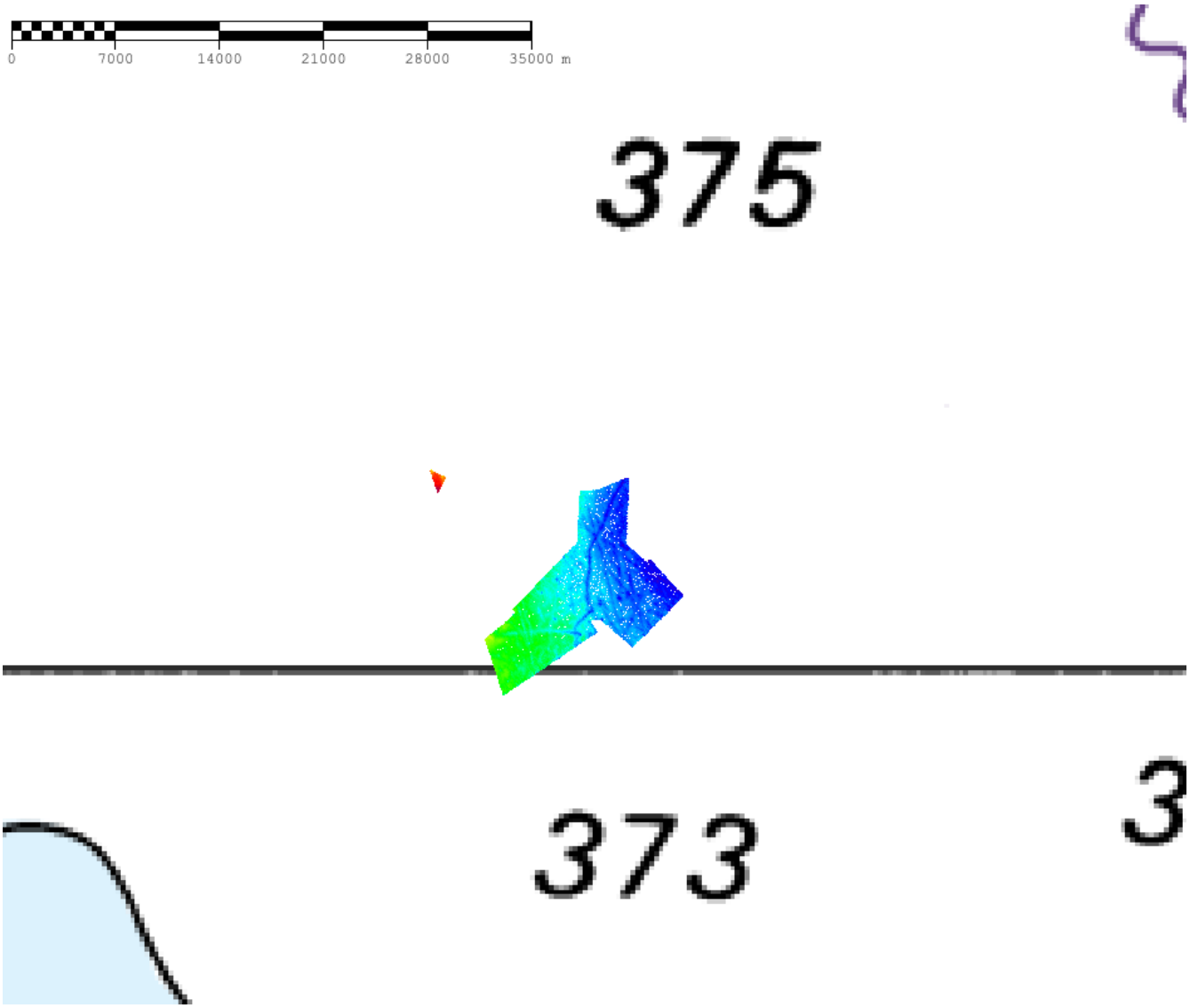

Figure 2: MBES data

Background: Ukho chart 4101 – INT101