

Standard hydrografi

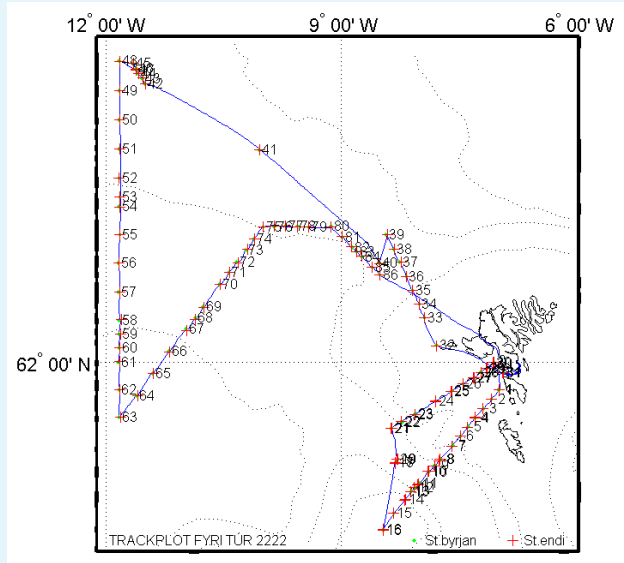
Mooring deployments

Jákup Sverri, cruise nr. 2222

Period: 1-7/6 2022

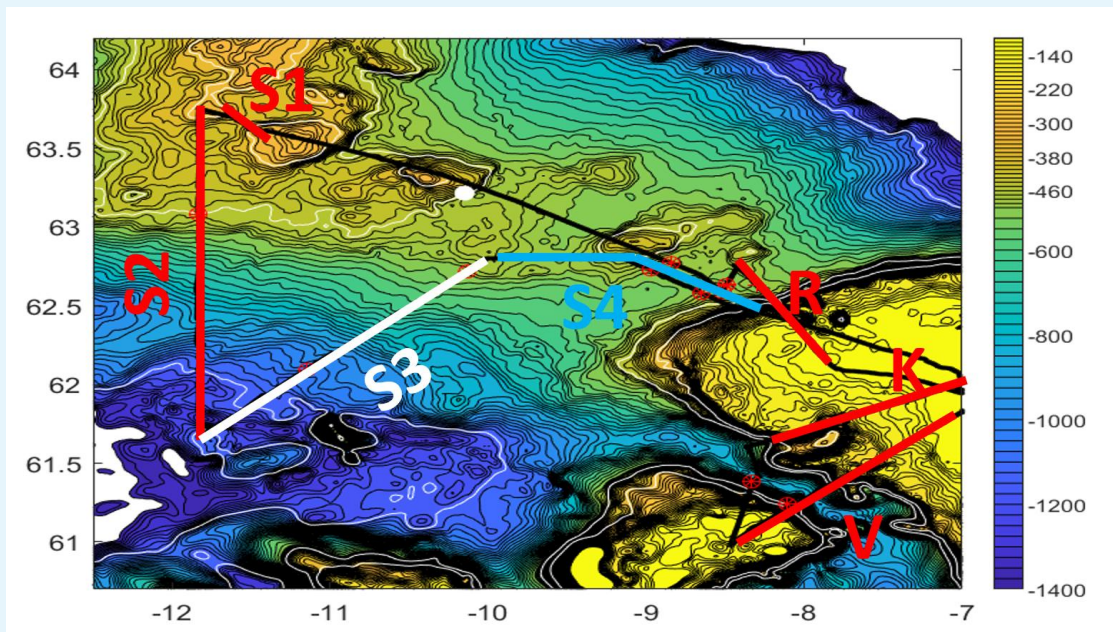
Responsible PI: Karin Margretha H. Larsen

Objectives: *The objectives of the cruise were to deploy current moorings and to monitor hydrographic changes in the ocean around the Faroe Islands. The cruise is also part of the "FARMON 2022" project, the "Exchanges across the Iceland-Faroe Ridge" project and a collaborating project at NCKF, DMI.*



Summary

The cruise is part of the regular investigations along standard hydrographic sections (temperature, salinity, nutrients and CO₂ along sections V, K and R). In addition to this, we deployed currents meters (Acoustic Doppler Current Profilers, ADCPs) in the Faroe Bank Channel and on the Iceland-Faroe Ridge (IFR), and made some additional hydrographic transects on the ridge (see the Figures and Table 1). Additional equipment for sampling harmful man-made chemicals in seawater (from scientists at the University of Rhode Island) were attached to two of the ADCP moorings.



Cruise 2222. Cruise track, with detailed bottom topography (values in meters) and names of hydrographic sections (standard and new) are annotated.

About the cruise

We left Tórshavn harbor on Wednesday 1/6 at 20.00. Standard section V was first taken towards west onto the Faroe Bank. After this, we headed for the Faroe Bank Channel, where two ADCPs (with water samplers) were deployed (NWFB, NWFC). Thereafter, we occupied standard section K towards the Faroes, and came back to Tórshavn harbor on the morning of June 3rd, to bring onboard a large trawl-proof ADCP frame. We left harbor again the same day at noon, and occupied standard section R northwestward onto the IFR, and continued to a central location on the ridge, where an ADCP was moored (IFRG, 4. June, at 0900). We continued towards the so-called *Rosengarten* region where the last ADCP (in the large frame) was deployed (IFRH). When this was safely done, we occupied two long new hydrographic sections across the southern slope of the IFR in order to get cross-sections of overflow. We came back to Tórshavn harbor on Tuesday, 7. June at 10.00.

Samples

Table 1. Measurements and samples during the cruise.

Samples / Data	Overview
Underway Thermosalinograph	Sea surface (6 m) 1/6 until 7/6
CTD stations	84 stations (34 stations along standard sections V, K and R + 4 additional stations in the Faroe Bank Channel and 46 extra stations on the IFR)
CO ₂ , Nutrients and algae	Along section K
Salinity samples	At most CTD stations (in stable water)
WP2 200 µm (50m)	18 stations on sections V and K

Equipment

Sea-Bird 911+ CTD, WP2-net (200 µm), equipment for deployment of ADCP buoys and trawlproof frame, equipment for water samples (bottles, chemicals, etc).

Comments

The water samples will be processed and analyzed during autumn, 2022.

Staff from Havstovan

Hjálmar Hátún (PI)

Regin Kristiansen