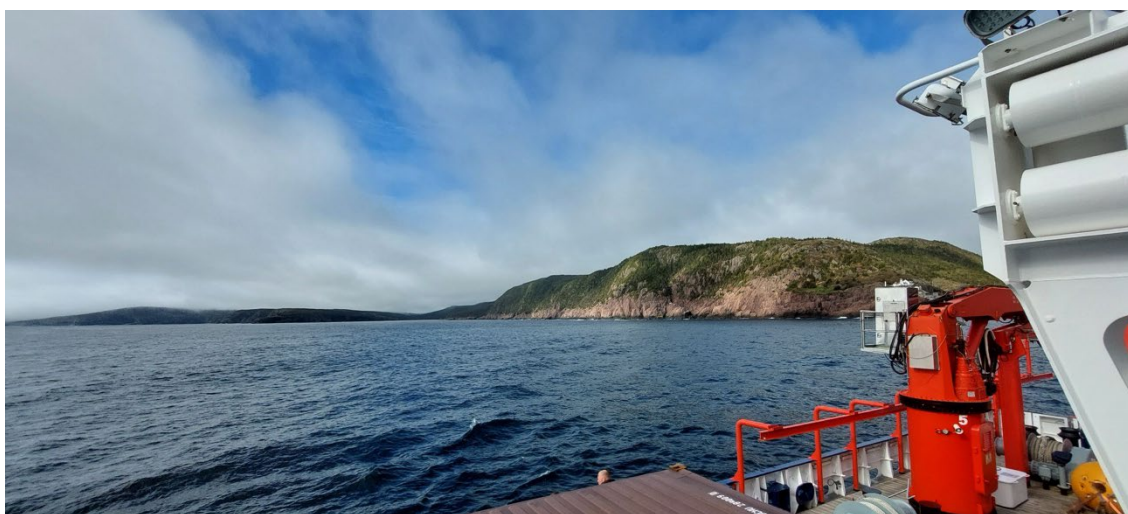




The expedition M129/2 started on Thursday June 6 2024, when the research vessel MARIA S. MERIAN sets sail from St. John's (Canada), and is expected in Reykjavik (Iceland) on the July 6 2024. The scientific and technician team on board consists of 18 people, with fourteen from GEOMAR Helmholtz Centre for Ocean Research Kiel, one from Leibniz-Institut für Ostseeforschung Warnemünde (IOW), one from National Institute for Research and Development of Marine Geology and Geoecology (GeoEcoMar, Romania), and the remaining two from Dalhousie University, Canada.

The primary focus of the cruise is to service the long-term observatories installed in the Labrador Sea, that have been operational since the mid-1990s. These observatories continually measure the hydrography and velocity of the system, allowing us to infer any processes related to the climate in the Northern Hemisphere. Additionally, the data gathered from the cruise will provide a detailed picture of the Labrador Sea's vertical structure in Summer 2024, allowing comparison with similar previous surveys to identify any climate-related changes. This component of the work programme involves the recovery and re-deployment of 11 moorings as well as various CTDs stations. Besides the large-scale circulation observations, we also planned a more dedicated process-study around (sub)-mesoscale features, where ship borne fast sampling devices as well as autonomous underwater gliders will be used. These small-scale processes are important as their vertical structures change quite strongly over a short distance, hence influencing biological, chemical, and physical exchange processes.



RV Maria S Merian leaving St. John's Canada on June 6th 2024, to start the MSM129/2 Expedition in the Labrador Sea (Photo: Lasse Glösen)



After being released from its anchor, the mooring shoals until it reaches the surface. Once spotted on the surface, recovery can start (Photo: Fehmi Dilmahamod)

Since departing from St. John's, we have been steaming steadily for 2.5 days, reaching our fifth CTD station on June 8 at 18:00. At this CTD station, we also checked for the acoustic releases for future mooring deployment, as well as calibrated six oxygen loggers. We completed three additional CTD stations by the morning of June 9. During the day on June 9, we planned to recover two moorings. This operation was however delayed due to the fog in the morning. Luckily, the fog cleared up by noon, and the first mooring recovery started at 12:15. If the weather permits, we aim to recover a second mooring today; otherwise, we will proceed with additional CTD stations.

So far, the weather has been calm but foggy in some instances. Although the sun has been elusive,

all cruise participants have remained free from seasickness and are highly motivated for the tasks ahead. You can track the progress of our cruise and check the current weather on GEOMAR's Beluga web portal at <https://beluga.geomar.de/msm129>.

On behalf of all participants of RV Maria S Merian, best regards.

Fehmi Dilmahamod

Co-chiefscientist MSM129/2