

Expedition MSM-139 GreenHAB
Reykjavík – Reykjavík
Weekly Report No. 1
July 24 – July 27, 2025



On July 24, 2025, we boarded the RV Maria S. Merian. We moved into our cabins and began unloading the containers and setting up the laboratories. In the late afternoon and evening, some found time and went ashore for shopping or sight seeing.



Photo: Nancy Kühne

On July 25, 2025, we set sail at 10:00 a.m. We used the time before departure for safety briefings and drills. After that, we continued unpacking and setting up.

With some rough seas, the days of July 26 and 27, 2025 were also used to prepare the first sampling station and set up the experiments. After many long hours, we are now ready for the first samples and will filter several hundred to thousands of litres of seawater. We will start at 8:00 a.m. on July 28, 2025!

The GreenHAB project and the 18 participants will investigate the impact of climate change on coastal marine ecosystems on Greenland's west coast. Our focus is on phytoplankton and the risk that potentially toxic algae species could spread and establish themselves in the waters. To this end, we will sample the water column and study the biodiversity and activities of plankton organisms. Through experiments with different temperature scenarios, we will investigate the resilience of local plankton communities. We will also take sediment cores to analyse plankton communities from past decades and describe how they have changed from the past to the present. With the help of the experiments, we will assess the potential risks as well as community differences and processes for the future and attempt to make predictions for the sensitive Greenlandic ecosystem.

Best regards from the Irminger Sea, July 27, 2025, 60° 06.15 N / 41° 31.89'

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