1st Weekly Report M186
28 November - 04 December 2022

On the evening of November 28, RV METEOR left the port of Lisbon one day before the scheduled departure. The reason for this was an announced 48-hour strike by the port pilots, which we were able to avoid as a result. Since we only arrived the vessel on Monday morning, this was a day full of challenges and preparations for us and the ship's crew. Two containers still had to be unloaded at the pier as well as the winches set up for the seismic survey. In addition, tests for the OFOS were carried out and the laboratories were already set up. After everything was done and the last participants had arrived on the ship around 5 p.m., RV METEOR could leave the harbor at 8 p.m. and start the transit to our working area around the Azores.

The first days on board were spent setting up the labs and getting familiar with the ship. Presentations on safety and our own research interests and plans were given, and instrument deployments were coordinated together.

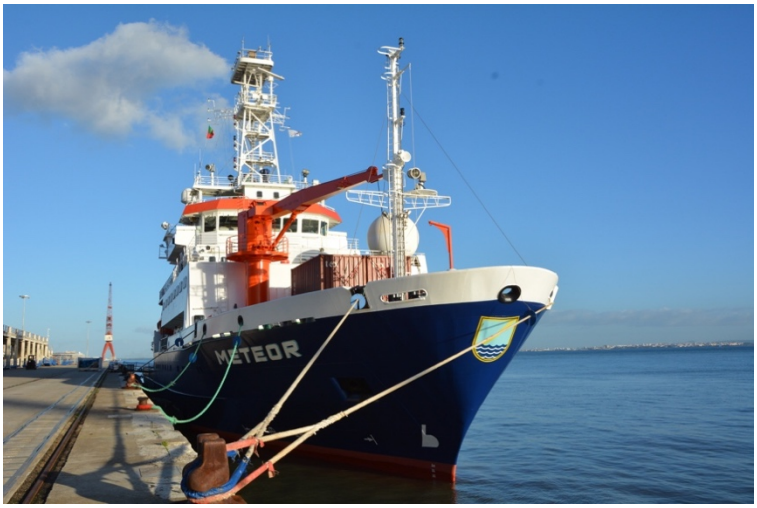

Figure 1 The FS Meteor at the pier in Lisbon harbor Photo: Isabel Diercks

On board are 27 scientists from five research institutions in Germany, Portugal and the USA. The goal of the voyage is to find and explore hydrothermal vents on the Azores Plateau. For this purpose we used 2D seismic, heat flow lance, gravity corer, multicorer, and an OFOS (video).

On Thursday, 01.12.22, the first station was successfully completed and the gravity corer and multicorer were deployed on the Gloria Fault. Thus, the first samples could already be successfully taken and the procedures on deck and in the laboratories could be coordinated for the upcoming work in our main working area. The data collected will be an important complement to the M162 cruise.

We continued our transit to the work area in the early evening. On Friday 02.12.22 we had to make an unscheduled call at the port of Ponta Delgada to hand over air cargo from the previous cruise that could not be discharged in Lisbon. After only 20 minutes we could leave the port again.

An approaching storm forced us to stay in the shelter of São Miguel. The night was used to fill "white spots" in the bathymetric chart. Saturday was still very stormy, but in the morning two successful MUCs could be deployed at a volcanic cone. In the afternoon the deployment of the OFOS had to be cancelled because the wind had increased rapidly again. Afterwards the mapping south of São Miguel was continued.
On Sunday morning (04.12.22) the OFOS dive could be carried out in much better, although still windy conditions at a volcanic cone.

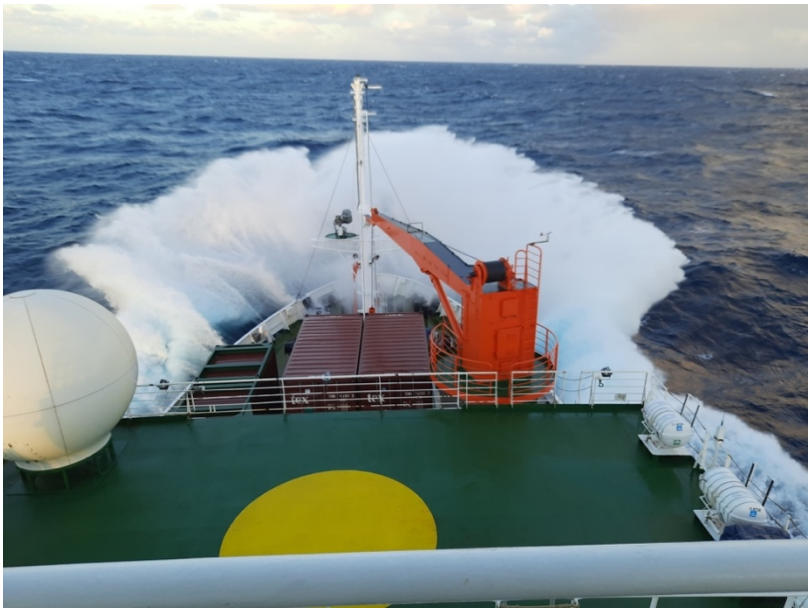

Figure 2: On the transit to the Azores Photo: Arne Warwel

With now good conditions, the 2D seismic could finally be deployed on Sunday afternoon and a first seismic profile could be run in the Hirondelle Basin west of São Miguel. More about this in the next weekly report.

Now we hope for a week with good weather so that we can carry out our work in the actual working area as planned.

With best regards in the name of all participants

Christopher Schmidt
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