2. Weekly Report MSM135
10. - 16. March 2025

At the beginning of the week, on March 10, our research campaign started at the southern exit of the Saronic Gulf. After surveying a sound velocity depth profile, the experienced teams deployed the equipment for reflection seismic measurements, activated the parametric sediment echo sounder and the multibeam echosounder, and the geophysical profile survey began.

The survey profiles first passed the island of Poros into the Methana Basin and then continued north past Methana into the Epidavros Basin, which is bordered to the west by the Peloponnese. These investigations aimed to gain a better understanding of volcanic and hydrothermal processes in the region.

Figure 1: Sediment half-cores from March 12 in lab of Maria S. Merian (Picture H. Jähmlich).

On Wednesday, March 12, all towed equipment was retrieved on deck, and sedimentological sampling around Methana began using the gravity corer. Core recovery was successful at all four stations. In later analyses, volcanic ash layers will be dated and chemically characterized. Even visually, the sediment samples (Figure 1) already offered fascinating insights and were prepared for the next day.

On March 13, a live broadcast took place for the geo show “Unterirdisch” in Tübingen. Thanks to the media team from the Immersive Media Lab cabu:ff at CeOS at Kiel University, both a pre-recorded movie and live interviews were transmitted in HD quality. Meanwhile, the seismic team had already resumed work in the morning, conducting profile surveys in the western Saronic Gulf.

On March 14, the geophysical survey program was completed in the morning. Two more gravity coring stations followed this before transit to Milos began. While the watchkeepers in the hydroacoustic lab remained busy, the seismic team could process additional data and carry out equipment maintenance for a few hours. At around 9 p.m. shipboard time, seismic operations were suspended again, and the profiling surveys of tectonic fault systems and hydrothermal fields began—an ongoing task at present.

We are working close to the coast and enjoy the breathtaking view of the Cyclades island landscape, day and night (Figure 2).

Figure 2: Towed geophysical equipment off Milos by night (picture B. Haimerl).

All participants are doing well and send their greetings home.

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