

# Research Vessel SONNE

SO278: 12.10. – 01.12.2020

Emden – Emden



## 7th and last Weekly Report: 23.11. – 01.12.2020

After the station work of the expedition was finished on Friday, 20 November, R/V SONNE immediately set off on the longer transit back to Germany. During the passage through the Strait of Messina we still had sunny weather, which changed quickly in the Tyrrhenian Sea. There we reached the southwestern edge of a strong depression on Saturday, 21 November, with wind speeds Beaufort 9-10, and gusts of up to 11 and waves 5-6 m high. For the less experienced seafarers this came as a surprise and showed us for the first time on this trip that the Mediterranean can be different than we were used to for the last 5 weeks. On the further transit to the west, however, the sea calmed down after a few hours and the Mediterranean feeling returned at the latest south of the Balearic Islands to the Strait of Gibraltar (Fig. 1). After we reached the Atlantic, we went north along the Iberian Peninsula through the Bay of Biscay into the English Channel to the North Sea.

On Monday afternoon, we plan the transit into the Ems to Emden, where we want to moor in the harbor on the south quay in the evening. The main group of scientists will take a coach to Bremen on Tuesday morning. Tuesday, 01 December is also the official end of the expedition. With 38 gravity corer, 6 CTD, 30 multicorer and 4 minicorer stations, 10 heat flow profiles, 5 OFOS profiles and 11 AUV dives, we have very successfully carried out samples and measurements, investigated new mud volcanoes for the first time, and the sea floor was mapped over more than 3577 nautical miles. We scientists are very happy about the goals we have achieved (Fig. 1) and are returning to land with great results. We also owe the success of the scientific work to the excellent and friendly support from the ship's crew in all areas (nautical, WTD, deck crew, engine and service area, etc.) of the shipping company and the employees of the German Research Fleet Coordination Centre. We would especially like to thank Captain Lutz Mallon and his entire team, who stood by us in all matters.



Fig. 1: Group photo of the scientists during cruise 278 of RV SONNE in the Strait of Gibraltar (© Tabea König).

Everyone is healthy on the 1st of Advent! Greetings one last time on behalf of all participants,

Gerhard Bohrmann (MARUM, Universität Bremen)

Sunday, 29 November 2020

Further reading to the cruise: <https://www.marum.de/Entdecken/Expedition-SO278.html>