



RV METEOR - M178 "HazELNUT"

Emden - Las Palmas, 21.11. - 19.12.2021

5th Weekly Report (13. - 19.12.2021)

We passed through the Strait of Gibraltar early in the morning of December 14th, and continued towards the Canary Islands. Two days later, we received the research permit for the waters surrounding the westernmost island of the Canary Islands: La Palma. However, it quickly became clear to us that we would not be able to implement the new marine mammal protection measures for hydroacoustic surveying that need to be observed in Spanish waters at such short notice. The obligation to take along specially qualified marine mammal observers meant that we were not able to carry out hydroacoustic surveys offshore the active volcano Cumbre Vieja. Such surveying could have made a contribution to the civil protection of the island and future risk analyses. For this reason, we postponed picking up spare parts for the deep-water echo sounder in Las Palmas and headed directly to La Palma. Our permit allowed us to perform water column profiling with a CTD probe (measuring conductivity, temperature, and depth). We completed a total of 9 CTD stations in water depths between 1000 and 3000 m along three profiles around the southern part of La Palma.



Photo 1: Deployment of the CTD rosette off the island of La Palma.

These CTD measurements enabled us to record the outflow of Mediterranean water into the eastern Atlantic at high resolution. The weather conditions were perfect, and we departed the eastern side of La Palma in the morning of 18 December and started the transit to Las Palmas. As planned, the pilot came onboard at 8 a.m. on December 19 and we were moored at the pier at 9 a.m. This marked the end of a very successful and exciting research expedition M178, and we wish to sincerely thank Captain Hammacher and his crew for a successful and unforgettable time aboard RV METEOR.

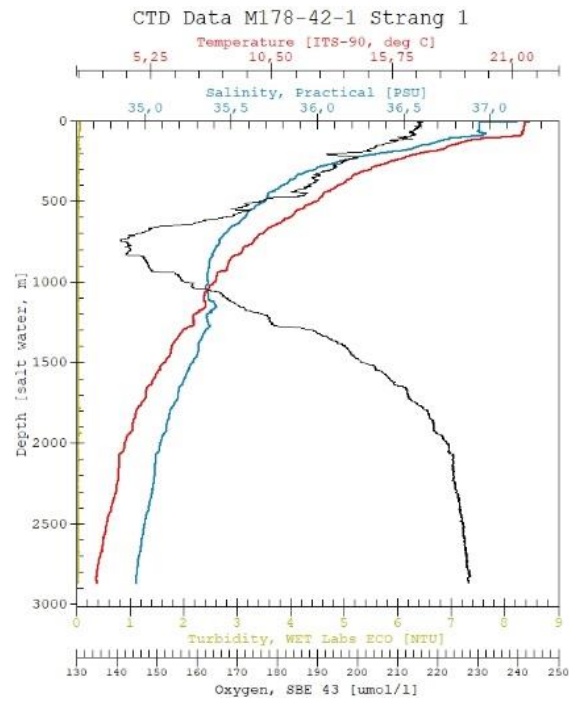


Figure 1: Example of a CTD profile taken west of La Palma.

Our cruise participants provided information about the cruise activities and exciting research questions on the Instagram account of the Center for Ocean and Society (@oceanandsociety). We will continue to share important results through this channel in the future.

All participants are well and send Adventurous Greetings home,

Felix Gross

Kiel University, Center for Ocean and Society

(Chief Scientist M178)