

RV METEOR

M179/1 FjordFlux (GPF 19-1_077)

22.12.2021 – 12.01.2022

Las Palmas – Punta Arenas

1st Weekly Report (22.12. – 26.12.2021)

The goal of the research cruise M179/1 is the scientific exploitation of the approximately 6000 nautical mile transfer trip from Emden to Punta Arenas, where the actual "FjordFlux" expedition begins. In order to stay on schedule, no station work will be done on the transit across the Atlantic, but only "underway" sensor equipment will be used for continuous analysis of the surface water, e.g. hyperspectral radiometers or a FerryBox system. The latter is fed from the ship's seawater system, from which samples are also taken at regular intervals for analysis in the laboratory. The pumped water also flows around so-called SPATT samplers, which are analyzed for the presence of algal toxins after the cruise. The work is carried out by a crew of six scientists from the Institute of Chemistry and Biology of the Marine Environment (ICBM, University of Oldenburg) and the Alfred Wegener Institute in Bremerhaven (AWI).

The actual cruise preparations began well in advance with the packing and shipping of the expedition equipment and culminated in the mandatory PCR test for all cruise participants 72 hours before arrival on the ship. Once this hurdle was cleared, the expedition began early in the morning of December 21 at Bremen Airport, from where we departed for the METEOR in Las Palmas.



The arrival did not leave time for work on the same day, so the unloading of the containers took place after departure on the next day. The installation of the sensors and the preparation of the laboratories extended until December 23. The measurements could start in the afternoon of the same day, after leaving the Spanish exclusive economic zone.

December 24, of course, was all about Christmas. After the work was finished during the day, the crew of the ship prepared a very nice Christmas party, during which there were not only many delicacies to taste on the buffet, but also musical contributions as well as a gift-giving for everyone. Many thanks to the crew and the shipping company Briese for this.

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However, no sooner had the measurements begun than they had to be interrupted again, as the route had to be rescheduled in order to meet the planned arrival date in Punta Arenas even if weather conditions deteriorated. Thus, instead of rounding the Cape Verde exclusive economic zone, a straight passage was made in a southerly direction through Cape Verde, shortening the distance by approximately 200 nautical miles, thus providing a buffer for bad weather. Since our expedition has no diplomatic research permit for this area, work was suspended for two days until the evening of December 26. Thus, the Christmas holidays could be spent comparatively calmly with further preparations, among other things also already concerning the second travel section.

Our cruise participants inform about the research activities and life on board on Twitter (<https://twitter.com/ThoelenClaudia>) and in blog posts (<https://icbm-auf-see.uni-oldenburg.de/>).

All participants are well and send Christmas greetings home.

Jochen Wollschläger

University of Oldenburg, Institute for Chemistry and Biology of the Sea (ICBM)

(Chief Scientist M179/1)