

**TRR 181 Expedition  
SONETT  
RV METEOR M180  
23.02. - 14.04.2022  
Montevideo - Cape Town**

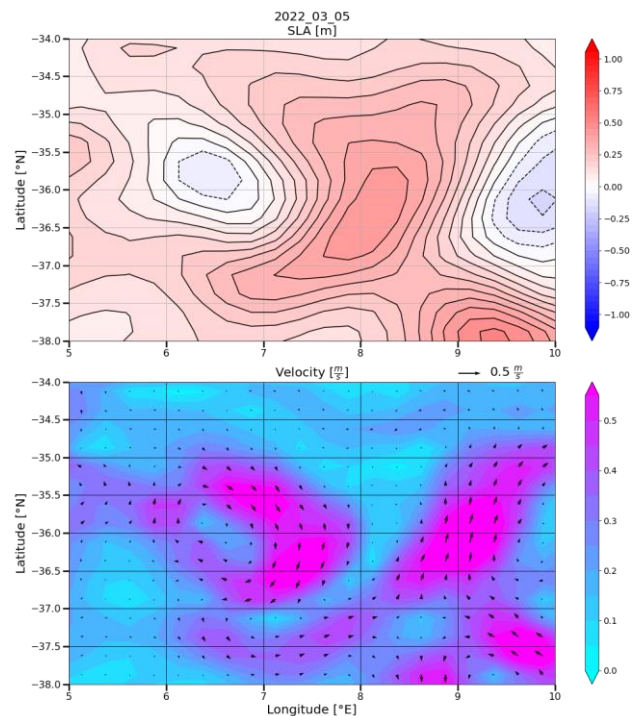


## 2<sup>nd</sup> Weekly Report (28.02. - 06.03.2022)

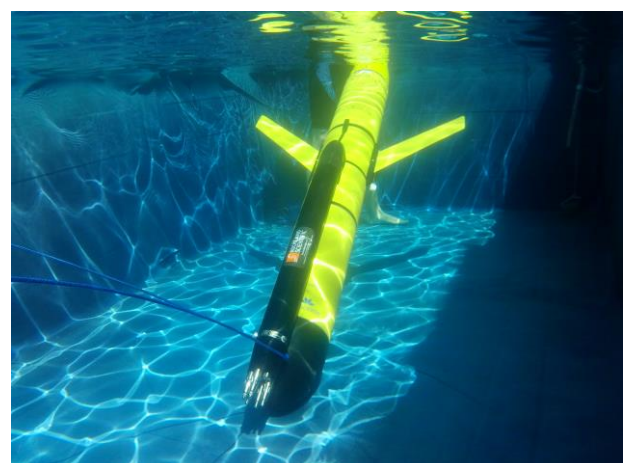
After 12 days at sea, we are still on transit to our working area. The really good news this week was that after 7 days of preventive measures (like wearing masks all the time), everybody on the ship got a negative PCR test on Tuesday, so the METEOR can be considered as Covid-free, and we are able to work together and socialize without any restrictions.

In the face of a war starting in Europe, we decided although we cannot do anything of real help from here, we wanted to show our support to the people in the Ukraine. So, the whole shipboard party, crew and scientists, came together to make a photo that we could share on social media to express our solidarity.

During the transit, we followed the development and progression of the Agulhas rings in our intended working area using satellite altimetry data, and now have picked a pair of two rings, an anticyclonic and a cyclonic eddy, that will be our study site for the next couple of days. We are now approaching the first position for a CTD/LADCP time series station to study the energy fluxes downstream of the eddy pair, and will get there later today. After that, we will repeat the same measurements inside and on the rim of the eddy, to investigate the influence of the eddy on the internal wave field. The long transit allowed us to carefully test our equipment: The two microstructure probes were tested successfully during a few practice deployments, and gliders demonstrated their correct ballasting and response to commands in the test basin on deck.



*Fig. 1: Sea surface height and geostrophic velocity of the eddy pair we picked for our study, from satellite altimetry. Figure: E. Breunig.*



*Fig. 2: Glider during the pre-deployment test in the basin. Photo: H. Renzelmann.*

A touristic highlight of the transit was passing the island of Tristan da Cunha, the remotest permanently inhabited island of the world. Unfortunately it was almost entirely covered in clouds, but we were able to snatch a few sights of the 2000 m high volcano. The rest of the days were filled with training sessions in instrument handling and further preparations, and now everybody is looking forward to finally start our work program tonight!

Kind regards and greetings to all friends, families and colleagues on shore from the scientific party of M180,

Maren Walter  
(University of Bremen)



Photo: S.