Expedition SO286 - IceDivA2 05.11. - 09.12.2021, Emden - Las Palmas 3rd Weekly Report 15. - 21.11.2021



A Tale of two halves

To borrow an expression from football, this week has truly been a "tale of two halves". The first half found us much how we left you previously, with us emerging from shelter along the northern Icelandic coast to proceed along the planned track to our work area 2. This was done in a careful, deliberate manner showing finesse in combining slight track and speed changes to make sure the best possible conditions in each area was met by us. This approach put safety first, while also putting us at station by the only window possible to perform station work on Thursday evening.



Figure 1. Live shot from our Satellite event. Left to right: Denisse Galarza, Katrin Linse, James Taylor, Saskia Brix, Pedro Martinez, Mia Schumacher, Jenny Neuhaus.

Whilst masterfully planned from the Captain and his Officers, it wasn't smooth sailing with periods on Tuesday, Wednesday and Thursday being fairly rough, with max waves of 7 m and max winds of up to 10 Beaufort. Again, this was not to negatively influence the mood and proactive nature of the scientific personnel and ships crew, as we knew we had station work on the horizon and our UN Ocean Decade live satellite event to prepare for.

Tuesday saw us preparing the very last prerecorded material, with Wednesday hosting the

dress rehearsal. Whilst the potential for us to deliver a great satellite event was there

for all to see, so were the challenges of streaming back live in the middle of the Ocean with technical challenges rearing their ugly head...

...we then reached the second half of our week, and what a second half it has been. Early Thursday morning was spent exercising the demons of the previous day solving all technical issues from the previous day, before it was show time! There is an old saying in the theatre "It will be alright on the night" and we are extremely proud of the event that everybody delivered. This event was the culmination of a massive undertaking with an uncountable amount of moving parts and challenges all coming together just at the right moment. To thank everybody individually the way they deserve would require a report the length of the book, but we would sincerely like to thank all those the EBS is being deployed.



Figure 2. The side winch from which

involved, particularly the production team in Frankfurt, the people on land who helped make this technically possible, the panellists that joined the event live, the people on board who contributed in front of the camera and behind the scenes, the "A Cleaner Ocean" event of the UN Ocean Decade for giving us a platform to share, and last but by no means least Briese and RV SONNE.



There was no time for us to sit back, relax, and reflect on what we had achieved, as the second we went off air we were on station, with the CTD going in the water. Once we had received our sound velocity profile from the CTD we began mapping the seafloor, locating an ideal location, with a radius of 4nm, for all our benthic gear. We extended the mapping profile through the night, into the late afternoon Friday, as we waited for the wind to reduce from the 9 Bft severe gale so we could safely deploy our heavy benthic gear. Shortly after 9pm our window open and a very happy scientific team we full pelt into benthic sampling at our 3400 m station with three deployments of the large box corer, two Epibenthic Sledges and two Multiple Corer stations.

Figure 3. Franziska Thiesing (left) and Nicole Gatzemeier (right) deploying the Multinet.

In the extremely earlyhours of Sunday morning we were able to deploy a full programme of our plankton block with two Multinets, one WP2 net, one CTD for eDNA, four Bongo nets. This was made possible with the winds dropping even further to Bft 2 (light breeze) – Bft 4 (moderate breeze). Deployment of gear was so successful we were able to deploy two pieces of extra gear in the form of an Agassiz trawl and our recently rebuilt Epibenthic Sledge "Ursula").

As we sit here writing this on Sunday evening we are waiting on the deployment of three Neuston Catamarans for plastic sampling at approximately 10.30 pm and the ship's own Ocean Floor Observation



Figure 4. Current idyllic working conditions... long may it last.

System (OFOS) in the early hours of Monday morning. We look forward to being able to share the details of those with you in next weeks report, and leave you moving forward with hope that we continue making strides in the scientific programme we came here for.

Sunday November 21st 2021, Labrador Sea,

Saskia Brix & James Taylor Cruise Leader team, Senckenberg am Meer