10,542 m water depth at 44 ° N 150 ° 07:00 18:00 O refuted!

Thank you and goodbye!

The last week ended as exciting as the new week began. "Between the weekly reports" have been mapping the seafloor bathymetry using the EM122 overnight in search of the deepest area in the Kuril-Kamchatka Trench which was supposed to be located in the region covered by our Russian work permit. Melanie Steffen, who did this night shift for us, first saw it, but in the morning it became clear to all of us: there would be no hadal area deeper than 10,000 m water depth near the station region A 11 whatsoever. Accordingly, the bathymetric charts and data in the literature are incorrect and need to be revised (Jamieson, 2015).

Figure 1: Group picture of the scientists on board RV Sonne during the expedition KuramBio II.

Because we wanted to sample a fifth station at hadal depths in the middle of the trench we chose the deepest area in this region and thus could sample once more in > 9500 m depth. We again deployed our devices successfully and now have data for a very good comparison at this great depth.

Comparable to the last very deep station at 9581 m, one could immediately recognize that the diversity of organisms was significantly lower than at abyssal depths, but the abundances of species that occurred in the samples was immense. You had already a look into our full sieves (bivalve molluscs) in the last weekly report from the other very deep station and also already saw the large numbers of „Sea pigs", elpidiid sea cucumbers. Now we had a déjà vu in this last station area and immediately saw these species again in high numbers. Our work in this last station area was completed on

Figure 2: The Agassiz trawl is heaved back on board. After the last, very deep (> 9500 m) station the net is extremely full. These metric tons of mud from the seafloor kept the scientsts busy for the rest of the night and half of the day sieving. (c) Angelika Brandt

Thursday, September 22, at about midnight with the deployment of a multinet. We are now on the way to Yokohama, where we will arrive on Monday morning. The laboratories are now empty again, everything has been packed back into the expedition boxes and these are now already in the containers thanks to Nils Brenke's professional logistic planning.

During the expedition SO250, KuramBio II, we have sampled 106 stations with a standardized deployment of our gear. In total, we have deployed 53.100 m of single-conductor cable and 619.841 m of deep-sea wire during the course of the last six weeks.

In addition to the compulsory weekly reports we also informed the public about our work by means of 42 daily logs in three languages (German, English, Russian) published via the Senckenberg Museum (http://www.senckenberg.de/root/index.php?page_id=5253&blogEntryID=450). Highlights have been posted as well on the website of the University of Hamburg as well as on social media.

Our Access database has recorded 869 numbers for Kautex jars as well as 3123 inventory numbers for sorted samples. We bring very extensive animal material and PCR products home besides wonderful memories.

Now it is time to say thank you, because we have to leave the ship tomorrow. We do this with mixed feelings: one laughing eye (we look forward to our families) and one crying eye (we love the sea, our work, and the team

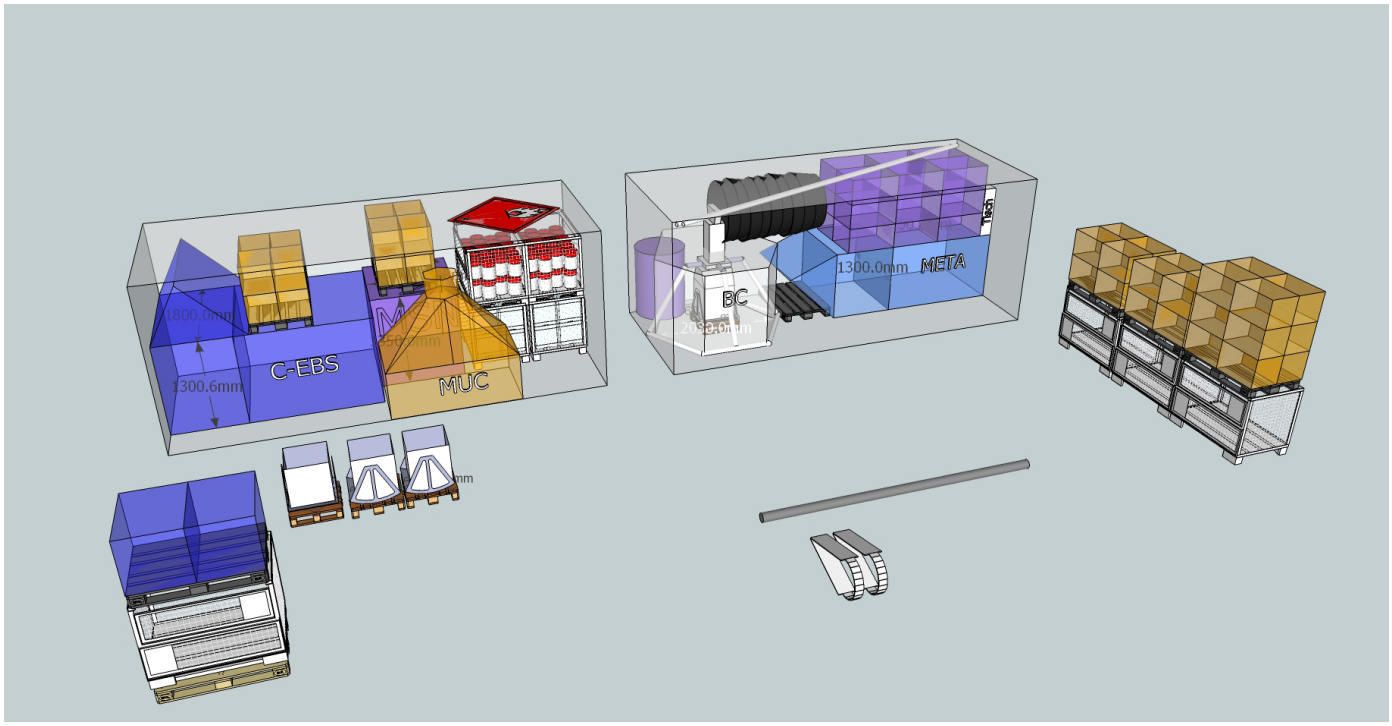

Figure 3: Packing the containers is a logistic enterprise that requires precision. (c) Nils Brenke.

Figure 4: Sunset on the northwestern Pacific Ocean. (c) Torben Riehl

on board). Many thanks to captain Oliver Meyer and the great team on the bridge, on deck, in the engine room, behind the technology and the cooking pot! Thanks also for the very friendly hospitality and helpfulness throughout the journey. Thank you all for your help, professional work, and your kindness.

Dear scientists, colleagues and friends here on board. Without you, your constant and tireless commitment at any time, day or night, your help and support of my work on the yellow deck and your indulgence with me have helped this expedition heaps! We can already look back on a very successful expedition. This was excellent teamwork – thanks a lot!

On behalf of all scientists I thank the Ministry of Education and Research for providing the FS Sonne for this expedition as well as the necessary consumables (03G0250A) and the shipping company Briese for logistics.

Best wishes to you and our family sends - for the last time during the expedition KuramBio II -

Angelika Brandt, Center of Natural History (CeNak), (chief scientist SO250) on behalf of all participants.

Citation: Jamieson, A. (2015): The Hadal Zone. Life in the Deepest Oceans. Oxford University Press, 1-382.