

IOW press release, January 29, 2016

10 years research vessel MARIA S. MERIAN, 50th expedition: Unique samples and data collected on winter cruise

After 23 days at sea the MARIA S. MERIAN arrived back at her home port of Rostock on January 29, 2016. This concludes the first comprehensive winter expedition for investigating matter cycles at the sea floor of the North and Baltic Sea. Under the lead of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW), 16 scientists braved harsh conditions like heavy storms, driving snow, icy temperatures, thick fog and pouring rain to get „to the bottom“ of their research issues regarding the two German seas. They tracked down seafloor life to study its winter activity, investigated, how and which substances are released from the sediment into the water, and hunted for tiny turbulences above the seabed, which play a crucial role in matter cycles, with a special high tech probe.

“What happens at the sediment water transition zone in winter is largely unknown. The samples and data collected on our cruise therefore are especially valuable and their analysis will significantly improve our understanding of the matter cycles in those two marine areas,” comments IOW director Prof. Dr. Ulrich Bathmann, who also headed the KÜNO INTERFACE expedition a chief scientist. KÜNO is the acronym for the research consortium “Küstenforschung Nordsee-Ostsee” funded by Germany’s Federal Ministry of Education and Research.

The 50th jubilee cruise of RV MERIAN, which had been put into service 10 years ago in February 2006, included an extensive and tightly scheduled work programme: Starting on January 6 from the port of Bremerhaven the cruise initially took the crew from study areas in the North Sea into the Skagerrak and the Kattegat. After crossing the Great Belt into the Baltic Sea the expedition headed for stations in the Bays of Lübeck and Mecklenburg, in the Arkona Basin, at the Oder Bank and at the Tromper Wieck. A total of 31 stations in the North and Baltic Sea were included into the programme, at which the marine scientists took samples and conducted measurements in a round-the-clock shift system. They recorded and analysed more than 3500 high-resolution water column profiles, deployed 191 sediment sampling devices and 24 mooring devices, which had to be recovered as well. This was more than originally scheduled ahead of the cruise and definitely more than could be expected of an expedition under harsh winter conditions. (Check for more information on the scientific programme at: <http://bit.ly/1Qex9yS>)

12 of the 16 scientific participants were IOW researchers; another 4 came from the Helmholtz-Zentrum Geesthacht – Centre for Materials and Coastal Research. The team on board was completed by the ship’s non-scientific crew. “Working with the MARIA S. MERIAN crew has been perfectly ‘hand-in-glove’, which has significantly contributed to the success of the jubilee tour,” Bathmann emphasizes. “I was deeply impressed by the ship’s great performance and the cooperation with Captain Ralf Schmidt and his team was excellent,” the IOW director concludes on his first MERIAN expedition on the Baltic Sea.

Weekly reports, photo impressions and blogs of the MARIA S. MERIAN expedition (in German): www.io-warnemuende.de/fs-merian_2016_msm50.html

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Further information on the research consortium “Küstenforschung Nordsee-Ostsee” (KüNO) with the projects “SECOS” and “NOAH” for characterizing sediments and habitats in the North and Baltic Sea: www.deutsche-kuestenforschung.de/home.html

Informationen about the research vessel MARIA S. MERIAN:

www.portal-forschungsschiffe.de/index.php?index=64

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