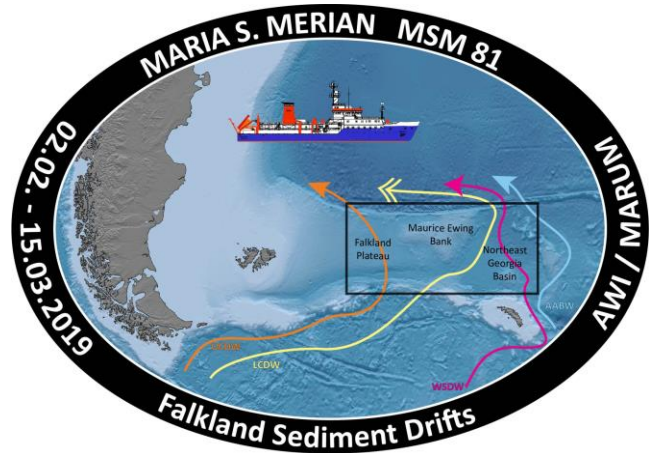


Expedition MSM 81 Valparaiso - Montevideo

**Weekly report No 5
4 March – 10 March 2019**



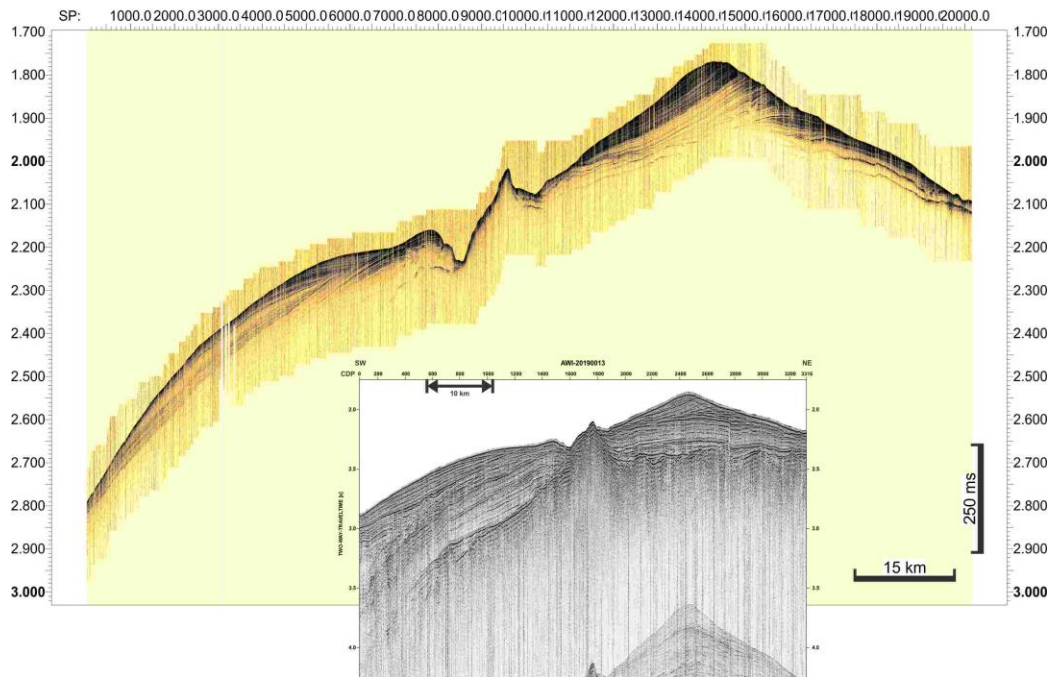
The fifth week of our expedition has begun. Although there remain still about two weeks until we go into harbour in Montevideo we feel that the cruise will come to an end soon. We only have one week left to collect more data. And we still have plenty of ideas for additional surveying, which would fill two or even three weeks. We did not have a chance to work on the southern flank of the Maurice Ewing Bank. The attempt to do that was destroyed by a strong low pressure system. Time is short, so we decide to collect seismic data from the eastern rim of the Maurice Ewing Bank towards the West and there fill knowledge gaps.

While collecting seismic data we also prepare for the following cruise, which will be carried out by colleagues of us. We used a few sunny afternoons to compile the umbilicals, i.e., pressure hoses and electrical cables, needed to run the seismic sources. This has only been possible when our course was favourable relative to the swell and only little water spilled onto the deck.



(Foto: R. Beckmann)

In parallel to our seismic profiling we also gather data about the uppermost ~200 m of the



sedimentary column using the Parasound™ system. This is an ideal supplement to the seismic data (small figure), since the seismic data are less high-resolution than the Parasound™

data (larger figure) even though they image larger depth intervals of the subsurface. The combination of seismic reflection data with Parasound™ data allows conclusions regarding very young sedimentation processes in relation to older tectonic processes.

Cheerful greeting from all participants.

Southwestern Atlantic, March 10 2019, 50° 5.174' S / 45° 44.214' W

Gabriele Uenzelmann-Neben

<https://www.awi.de/en/science/geosciences/geophysics/research-focus/gateways-of-the-southern-ocean.html> under *Effect of opening of Drake Passage on circulation in the South Atlantic*, scroll to *Variations in pathways and intensities of deep and bottom water*

<https://www.awi.de/forschung/geowissenschaften/geophysik/expeditionen.html>