## Weekly Report Nr. 1 SO260/1

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In the morning of January 9, 2018 the RV SONNE entered the port in Buenos Aires, Argentina. A few members of the scientific party arrived at noon onboard the vessel to delegate laboratory space among the scientists and to talk to the ship's command and ship agents. All scientists boarded the RV SONNE on January 10, 2018. Container and transport boxes that were loaded onto the vessel in the shipyard in Emden, Germany, were unloaded with highly appreciated help from the deck personnel. Large equipment was assembled on deck and labs and workspaces were prepared.

After an official opening ceremony on January 11, 2018, an Open Ship Event was carried out on board the RV SONNE organized by the German Embassy in Buenos Aires and the Leitstelle Deutsche Forschungsschiffe. Representatives from the Argentine Ministry of Science (MinCyT), the German Embassy in Buenos Aires, the port authority, and numerous universities and research institutes of Argentina participated in the official opening ceremony (Fig. 1).



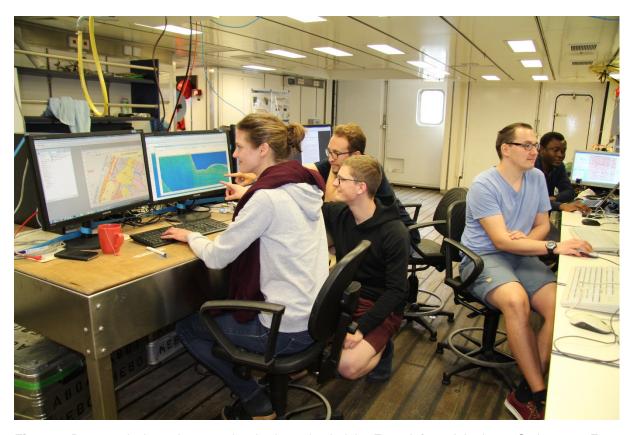


Fig. 1: Left: RV SONNE in the Buenos Aires harbor. Right: Official opening ceremony of the OPEN SHIP Event January 11, 2018 onboard RV SONNE. From left to right: Mariano Jordán (MinCyT), Alejandro Mentaberry (MinCyT), Sabine Kasten (AWI; Chief Scientist SO260), Oliver Meyer (Master RV SONNE), ambassador Jürgen Christian Mertens (German Embassy in Buenos Aires) (Fotos copyright: MinCyT).

Between 11 am and 5 pm the RV SONNE was open to the public, and about 600 visitors toured the ship and were informed on research and life onboard the RV SONNE. The high participation was remarkable, as there are currently summer holidays in Argentina, and with a temperature around 38°C it was one of the warmest days of the summer. Because of the perfect organization by the ship's command, the

German Embassy in Buenos Aires, the Ship agency AMI / Ultramar, as well as the wonderful help of the crew and science party, the event was a great success. We were all impressed by the great interest the visitors showed towards the ship and our research.

In the morning of January 12, 2018 the RV SONNE embarked from Buenos Aires on schedule beginning research expedition SO260; after a 24-hour transit, we arrived at our first work area off Argentina. We are currently running a survey program with multichannel seismics to gain information about the sediment structure on the upper continental margin off Argentina near the Mar del Plata Canyon (Fig. 2).



**Fig. 2:** Data analysis and processing in the seismic lab. *From left to right:* Lena Steinmann, Fynn Warnke, Antoine Thieblemont, Rouven Brune, Opeyemi Ogunleye.

The research activities and investigations within the framework of expedition SO260 focus on the continental margin off Argentina and Uruguay. This area is characterized by complex and dynamic sedimentation processes and presents, due to the Brazil-Malvinas confluence zone (BMCZ) occurring in this area, a key location in global thermohaline circulation. The main research goals of this cruise are to investigate the interaction between bottom water currents and sediment deposition as well as to study and quantify the impact of sedimentary processes on biogeochemical processes and element fluxes in the seabed. Furthermore, sediments deposited in canyons and contourites provide high-resolution archives for paleoceanographic reconstruction.

The atmosphere is fantasctic among the international team of researchers from the Alfred Wegener Institute Helmholtz-Centre for Polar and Marine Research, the

faculties of Geosciences and Biology/Chemistry at the University of Bremen, the MARUM – Center for Marine Environmental Sciences, the Oklahoma State University, the Coastal Carolina University, the Royal Holloway University of London, des Servicio de Hidrografia Naval in Buenos Aires as well as one observer from the Argentine Navy (Dirección de Investigación y Desarrollo, DGUD). After a short introductory phase, all cruise participants are well and look forward to the upcoming collaborative research work.

Greetings from the crew and scientific party of expedition SO260 on the RV SONNE,

Sabine Kasten

**Chief Scientist**