Cruise SO304 with RV Sonne will mainly focus on geoscientific investigations in international waters in the Bay of Bengal, first in the northern part of the Bengal Sedimentary Fan, and then mainly in the shelf canyon and on the shelf within the EEZ of Bangladesh. The cruise was originally planned for 2021, but had to be postponed due to the corona pandemic.

The arrival of the preliminary group on February 19 and the main group on February 20 of the 31 participants went smoothly. However, the container transports had to be rerouted at short notice due to the situation in the Red Sea and it was not clear for a long time whether they would arrive in Colombo on time because of the detour around Africa. Fortunately, despite the tense situation in world shipping, they reached Colombo just before our planned departure on February 21. The handover and loading of the 4 containers from Bremen and 2 supply containers onto the ship was delayed by around 10 hours due to a local strike. In the late afternoon of February 21, FS Sonne was able to leave port and sailed south around the island of Sri Lanka and then in northeasterly direction towards international waters at 8°N.

On board are 31 participants with 11 nationalities, the main group from Germany came from Bremen, Kiel and Cologne, and additional students and scientists from the USA, Sri Lanka and Bangladesh as well as an observer from Bangladesh.

Methodologically, sediment and water sampling with various devices, multi-channel seismic work and the use of various acoustic ship systems such as sediment echo sounder, multibeam sounder and ADCP are on the program. A mooring will also be deployed and retrieved in the shelf canyon.

After a transit of 40 hours, which we used to equip all the laboratories and prepare the deck work, we left the EEZ of Sri Lanka in the afternoon of February 23 and began geophysical work. First of all, the ship's echosounders were switched on to survey the active transport channel supplementing previous data sets. On the night of February 24, the seismic equipment was tested and configured for the various areas of application in the deep sea and shallow water.

The installation of the laboratories and the sediment sampling equipment (gravity corer, multicorer, grab sampler) was completed on the morning of February 25, so that we were able to run a gravity corer station in the thalweg of the active channel. Around noon we left the station and headed north with sediment echo sounder and multibeam at transit speed to map the active channel.

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