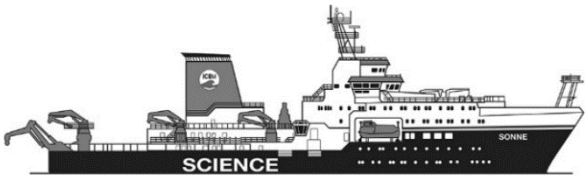

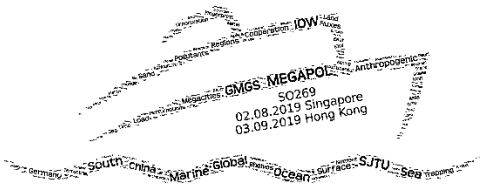

Weekly report 05.08.2019-11.08.2019 SO269 SOCLIS

After four days transit R/V SONNE reached the working area in the morning hours of the 6th August and the scientific work started along the first section (L1), from the deep South China Sea over the continental slope to the shelf in the vicinity of the Pearl River estuary.

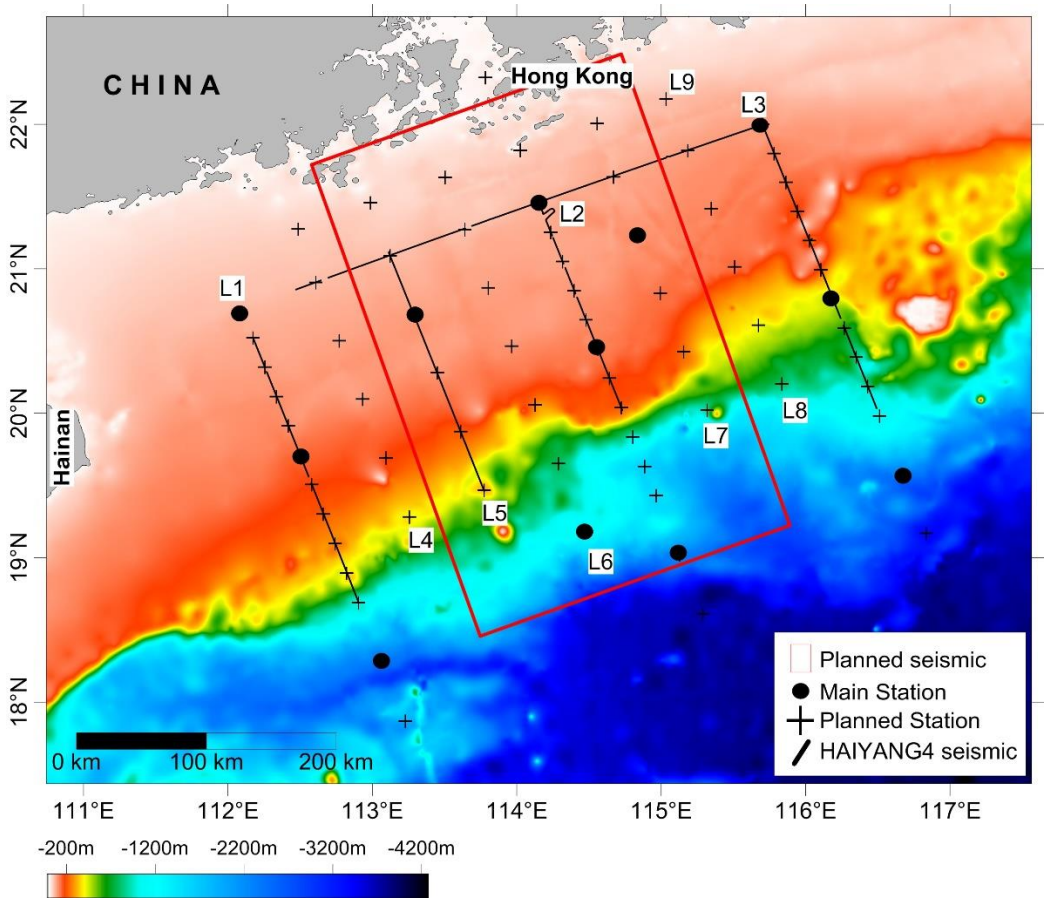

Fig. 1 Working area and planned stations SOCLIS SO269.

The station work began with CTD-Rosette sampling, containing 24 10 L bottles (Fig. 1). Apart from the hydrographic registrations of temperature, salinity, dissolved oxygen concentrations, chlorophyll a, turbidity we have taken discrete samples for several parameters at different depths. However, at some stations, 24 bottles were not sufficient to bring water for all groups on board, and the casts were repeated. We have collected samples for a number of different parameters, like the classical ones for nutrients, particulate and dissolved organic carbon, chlorophyll a, nitrogen isotopes and suspended particles as well as so called emerging pollutants like UV filters, hormones, antibiotics etc. At the northernmost station close to the shelf we had for the first time the opportunity to sample waters originating from the Pearl River, clearly marked by lower salinity, elevated chlorophyll a values and a

high load of suspended matter. After sampling of the water column work continued with gravity corer and multi corer deployments. On the 08.08. work started along line L4. The line was mapped using hydrographic, biogeochemic and hydroacoustic methods and finished by the 9th of August. Again on the northernmost station water from Pearl River occupied the upper water column, and extended more than 12 nautical miles from the coast. Along the entire track currents in the upper water column, thermosalinograph (temperature and salinity) and fluorometer (chlorophyll a) were recorded, as well as Multibeam and Parasound data.

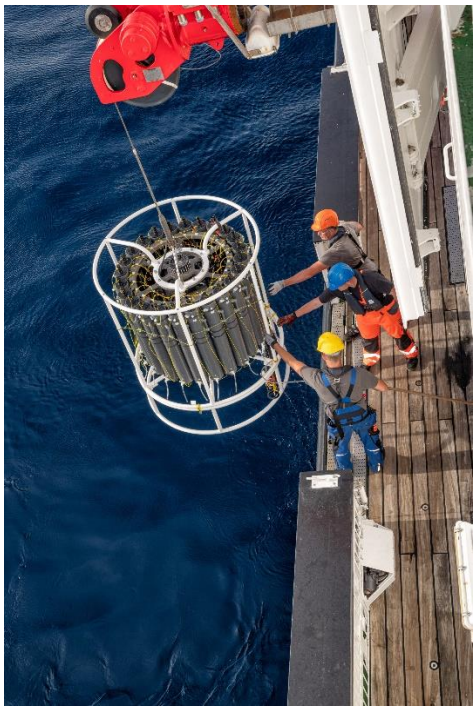

Fig. 2: Water sampling (CTD rosette) and short sediment cores (from multi corer) on SO269 (Photo R. Prien IOW).

Weather and sea conditions were good during the week, the weak winds and only moderate wave height made our swift progress possible. However, from time to time weather fronts passing by and short intensive rainfalls showed us how quickly weather conditions are changing under the monsoon influence.

The joint work of the chinese and german collegues is going well and because of the good relationship to the captain and his crew, the atmosphere on bord is relaxed and very friendly. We all enjoy the tropical weather conditions and send our greetings from board.

On behalf of the scientific participants of SO269,

Joanna Waniek

Leibniz institute for Baltic Sea Research Warnemuende