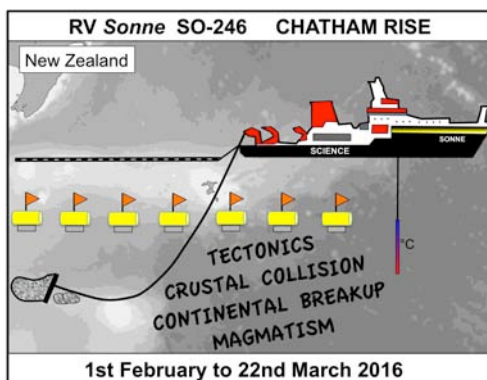


Weekly Letter No. 1 from 07th Feb 2016

An international team of 33 scientists, technician and students – most of them after a more than 40 hours long journey – stepped on board of the RV SONNE in the port of Wellington (New Zealand) on Sunday last week. They joined a ship crew of 32 to set off for a 7-week long research cruise SO246 to Chatham Rise the following day. The day of boarding and most of the following Monday was busily spent with loading and unpacking of 7 containers full of scientific equipment that made the main deck appear like a chaotic storage yard. In addition to the containers, a 30-tons heavy winch had to be carefully lifted from the pier onto the main deck with the support of two heavy-duty cranes. For most of us this ship, which was built and commissioned about 1.5 years ago, is a new experience. Being much larger than its predecessor we are impressed by number of labs, its deck space and storage capacities into which our equipment was easily stored and sorted. After a short delay due to some repair, SONNE departed from Wellington on Monday 1st Feb at 7 pm to start its voyage to our research area of the eastern Chatham Rise. To the joy of everybody, we passed the often storm-beaten Cook Strait between the North Island and South Island of New Zealand at most favourable weather and wind conditions.



Our logo of this voyage



SONNE departs from Wellington Harbour

This voyage has exciting research aims in previously little investigated regions of the vast South Pacific submarine plateaus that form most of the continent of New Zealand. Chatham Rise – about the size of Germany – is one of these plateaus and has presumably undergone a unique development through its geological history. To decipher this rise and its evolution, we deploy a range of geophysical survey methods and a geological sampling technique during this voyage.

Only two days took the track to our working area and to the first deployment of the larger scientific gear. Due to the friendly weather, most preparations of the equipment could be completed. Reinhard Werner's geology group was one of the first to get to work their gear with sampling of rocks from the flanks of seamounts of which most have volcanic origin. While operating the multi-beam echosounder, we made a first exciting discovery of seafloor formations that were not expected in this part of the rise. In a few days. We'll return to this area and will do some more surveying and rock sampling to find out what these caldera-like formations really are. Right now, we are deploying 40 ocean-bottom seismometers along a 430 km long survey profile for investigating the deep Earth's crust of Chatham Rise.

In the next weekly letters, we will tell more about the methods, research goals and first results of the individual groups.

With best regards and wishes from all voyage participants

Karsten Gohl
(Chief Scientist)



Preparation of seismic equipment



Rock samples being investigated