

Research vessel METEOR

M134-2:

Punta Arenas - Valparaiso

Weekly report: 19 – 27 February 2017



After disembarkation of most scientists on Saturday, 18 February 2017 in Punta Arenas, the second leg of the expedition M134 continued with a reduced scientific team of only seven persons. Due to the circumstance that R/V METEOR did not receive a place on the pier in Punta Arenas, all passenger transfers had to be carried out by shuttle boat. The ship left Punta Arenas earlier than planned on Sunday, 19 February at 14.00 hours (local time) sailing west through the Strait of Magellan. The voyage continued on the seaway through the islands of southern Chile providing shelter against strong winds and high waves forecasted for the next days on the open ocean. The two-day passage provided attractive views of the rugged islands (Fig. 1) that we passed safely under the guidance of two pilots. On Tuesday, 21 February at 20.00 hours, we reached the open waters of the 'Golfo de Penas' and commenced with the scientific program a day later after leaving the territorial waters of Chile enclosed by twelve nautical miles.



Fig 1: One out of many rainbows during the cruise passage through the southern islands of Chile (Photo courtesy Christian Rohleder).



Fig 2: Flow-through measurements conducted in the geology laboratory during M134-2 Expedition of RV METEOR.

The main scientific objectives during the second leg are continuous concentration measurements of methane and carbon dioxide in the air along the cruise track to test whether or not the ocean is a source for these greenhouse gases in the region (Fig. 2). Our measurements are complemented by flow-through measurements of carbon dioxide and other gases in the surface waters by an installation set-up by colleagues from GEOMAR employed during the cruises M133 to M135. In addition, bathymetric mapping is carried out along the convergent continental margin off Chile. The measurements had to be stopped on Thursday, 23 February, while bringing the pilots close to the town Ancud located on the northern tip of the island Chiloé. The voyage ended on Sunday morning, 26 February entering the port of Valparaiso. During the port call, six containers have to be unloaded and numerous pieces of airfreight are sent and received followed by an almost complete exchange of the ship's crew.

On behalf of all off-signing scientists I would like to thank captain Rainer Hammacher and his crew for the never ending support at sea,

Heiko Sahling

R/V METEOR Monday, 27 February 2017