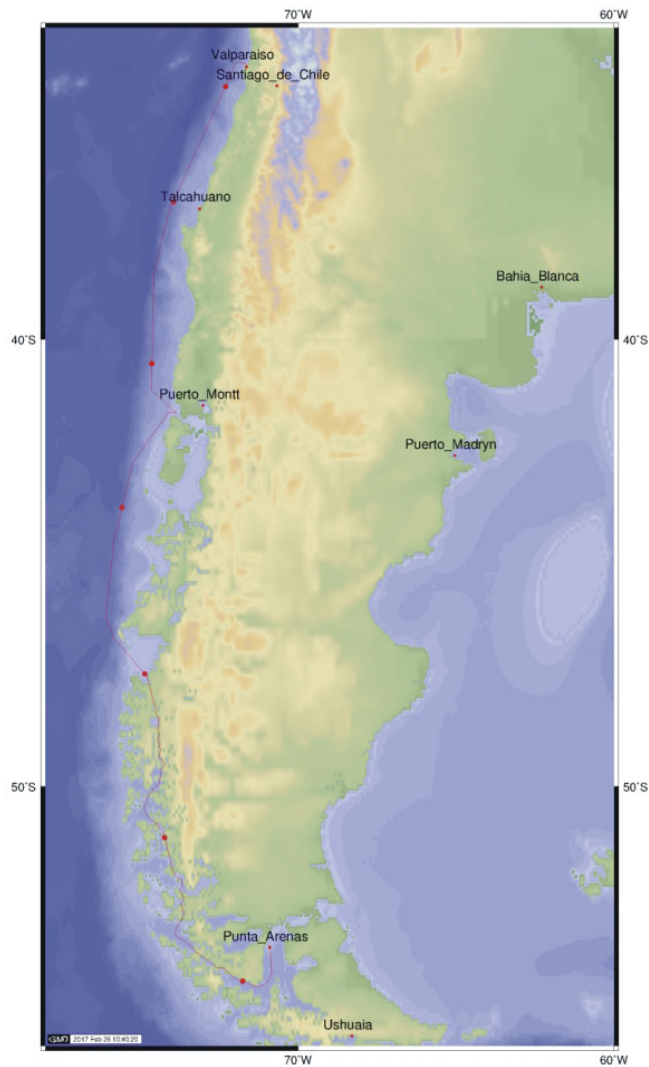


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**Short Cruise Report**  
**R/V METEOR- M 134-2**  
**Punta Arenas - Valparaiso**  
**February 19 – February 26, 2017**  
**Chief Scientist: Heiko Sahling**  
**Captain: Rainer Hammacher**



Cruise track of R/V METEOR M 134-2 (map created by Stefan Seidel).

## **Objectives**

The main scientific objectives during the short second leg of cruise M 134-2 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. 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.

## **Narrative**

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 2 p.m. (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. On Tuesday, 21 February at 8 p.m., 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. 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 had to be unloaded and numerous pieces of airfreight are sent and received followed by an almost complete exchange of the ship's crew.

## **Acknowledgements**

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## Participants

Name	Discipline	Affiliation
Lange, Mirko	ICOS measurements	GeoB
Malnati, Janice	Gas analyses	GeoB
Mickoleit, Anett	Meteorology	DWD
Quadfasel, Detlef	Physical Oceanography	HH
Rohleder, Christian	Meteorology	DWD
Sahling, Heiko	Chief scientist, Leg 2	GeoB
Stange, Nikolas	Hydroacoustics	MARUM

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- HH Experimentelle Ozeanographie, Universität Hamburg, Bundesstr. 53, 20146 Hamburg, Germany
- DWD Deutscher Wetterdienst, Bernhard-Nocht-Str. 76, 20359 Hamburg, Germany

## Stationlist

Station work has not been conducted.