

WHEN THE POLES MELT

Antarctic Expedition



A film by Kai Voigtländer

45 min. / 52 min.

© 2010

A co-production of
Hoferichter & Jacobs GmbH and rbb
in co-operation with ARTE

SYNOPSIS

Pressure ice soars metres into the air, compressed and wedged between kilometres of tabular bergs. In normal years, Pine Island Bay in West Antarctica is nothing but a vast expanse of ice, with just a few outcrops of rock.

The bay covers an area about as large as Germany and is generally inaccessible. Scientists have been trying to enter these waters for decades, but the research vessels were mostly unsuccessful. They were only able to creep along the edge of the pressure ice. Large areas of Pine Island itself have never been explored. There aren't any maps of the region and very little is known about the bay.

Antarctic researchers, however, urgently need information about this inaccessible region. Pine Island Glacier and Thwaites Glacier, two huge rivers of ice, flow into the bay, and they are both contracting at an alarming rate. Each year, they shrink about four kilometres. If these glaciers were to melt completely, sea-levels would rise by as much as one-and-a-half metres – around the world. And if the entire ice rise of West Antarctica collapsed, the seas would rise six metres globally.



In January 2010, 52 geologists, oceanographers and geophysicists set out from New Zealand on the *Polarstern*, an ice-breaker equipped as a floating laboratory. Their destination was West Antarctica. They wanted to find out what was happening in Pine Island Bay. Where does the heat that is causing the ice to melt come from? Is there a subterranean volcanic system concealed under the kilometers of ice? Is it heating the water from below? And how stable is West Antarctica's ice rise?

Filmmaker Kai Voigtländer and cameraman Guido Kilbert accompanied the researchers on the *Polarstern* for 9 weeks. They went along on helicopter trips, and observed how the researchers tried to reconstruct the history of Antarctica's climate from samples of the sea-bed.

When the Poles Melt is a filmic journey to a region that no-one has seen before – an expedition into Antarctica's past. This film dispels the myth of "the eternal ice." For in Pine Island Bay, everything is in flux. Nothing is eternal – except change.



CREW

A film by Kai Voigtländer

Photography:	Guido Kilbert
Editing	Anne Berrini
Visual Effects	Matt Sweetwood
Sound	Sven Piesker
Narrator	John Berwick (English)
Music	Eike Hosenfeld, Moritz Denis
Research	Susanne Klopstock
Production Manager	Peter Effenberg
Head of editorial department rbb	Rainer Baumert
Producer	Olaf Jacobs
Editor rbb	Meyen Wachholz

Special Thanks to

The Alfred Wegener-Institute for Polar und Marine Research, Bremerhaven / Potsdam

and:

Karsten Gohl, Mike Schröder and Gerd Kuhn (AWI Bremerhaven)

Cornelia Spiegel and Norbert Kaul (University Bremen)

Mirko Scheinert (TU Dresden)

Claus-Dieter Hillenbrand and James Smith (British Antarctic Survey)

Marcus Gutjahr (University Bristol)

Kapitän Uwe Pahl and der crew of the FS Polarstern

© 2010

A co-production of Hoferichter & Jacobs GmbH and rbb
in co-operation with ARTE.

PRODUCTION DATES

Shooting period: February – April 2010
Completion: July 2010

Shooting area: West of Antarctica / Pine Island Bay

Shooting format: HD-Cam

Length: 45 / 52 Min.

Language: German / English

Contact



Hoferichter & Jacobs

Film- und Fernsehproduktionsgesellschaft mbH

Berlin – Leipzig - Greifswald

Producer / CEO: Olaf Jacobs
e-mail: info@hoferichterjacobs.de
Tel.: +49 (0)30 / 3087 4560

Press / Marketing: Ringo Rösener
e-mail: r.roesener@hoferichterjacobs.de
Tel.: +49 (0)341 / 2413 850

10119 Berlin – Liniestr. 44
Tel.: +49 (0)30 / 308 745 60
Fax: +49 (0)30 / 308 745 66

04277 Leipzig - Scheffelstr. 31a
Tel.: +49 (0)341 / 2413 850
Fax: +49 (0)341 / 2413 851

17489 Greifswald - Goethestr. 2
Tel.: +49 (0)3834 / 775 228
Fax: +49 (0)3834 / 775 229