

# Polarstern PS 143

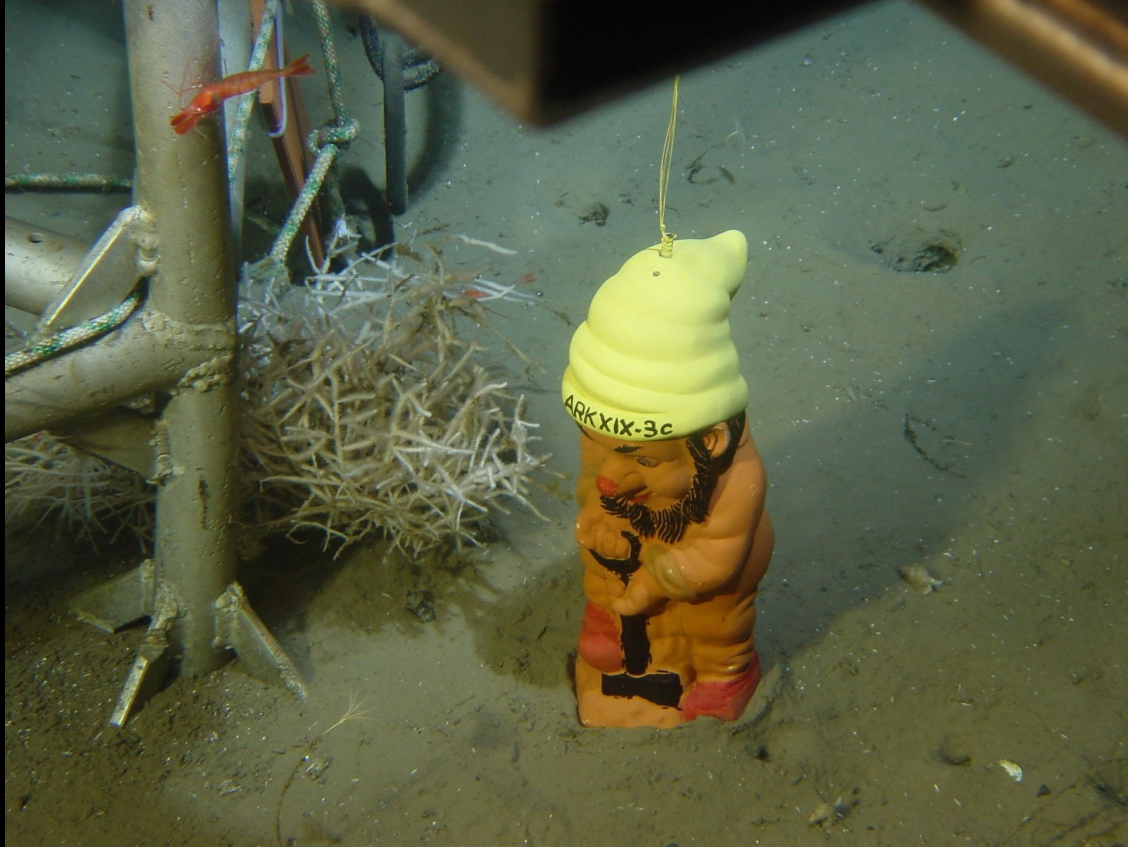
---

Frank and Ronnie in front of the German research vessel Polarstern – before the cruise to the Fram Strait where AWI a quarter of a century ago set up a long-term marine ecology observatory.

Start June 6 to July 8



# Hausgarten



The observatory – called Hausgarten – serves to record and monitor the effects of ongoing large-scale changes on the marine ecosystem. AWI researchers installed a garden gnome with self-deprecating intent. With an international team including 6 HADAL members Polarstern is now on its way to continue the "gardening work"

# Position of Polarstern on July 14

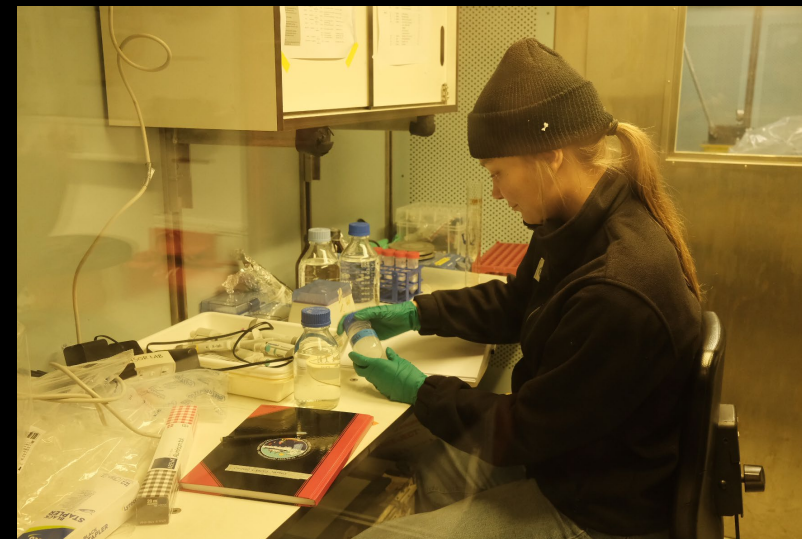




Wenjie collecting water from the CTD

@ R. Glud

# Starting up the work!



@ Yen-Ting

Peter labelling vials for experiments



@ Yen-Ting

Lisbeth preparing solutions before her experiment starts!

# First cores on deck – now the real work starts 😊



@Yen-Ting



@Yen-Ting



@Yen-Ting

Lisbeth and Axel inspecting the sediment cores – are they OK?

# Lab- work!

Lisbeth in the cold container – but where is Yick???



@ Yen-Ting



@ Yen-Ting

Marta with her first sediment – to be analyzed for methylated mercury when back in the lab in Braunschweig - Germany!

# Happiness – despite a torn ligament!

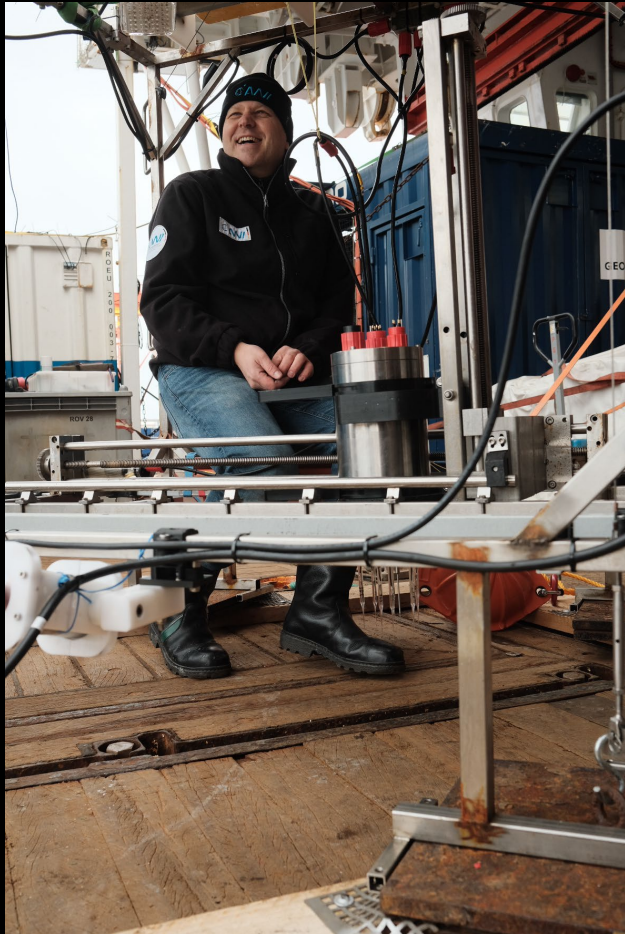


On Friday 14 Ronnie ruptured his ligament in the right arm, in trying to save sediment from falling out of a core!

But thanks to the doctor Petra on board who laid his arm in plaster – he can stay on board – and supervise the young scientists more than do the physical work.

He will need an operation as soon as he is back in Denmark.

# Preparing the profiling lander



@Yen-Ting



@Marta Pérez-Rodríguez



@Yen-Ting

Axel and Frank testing equipment before deployment!

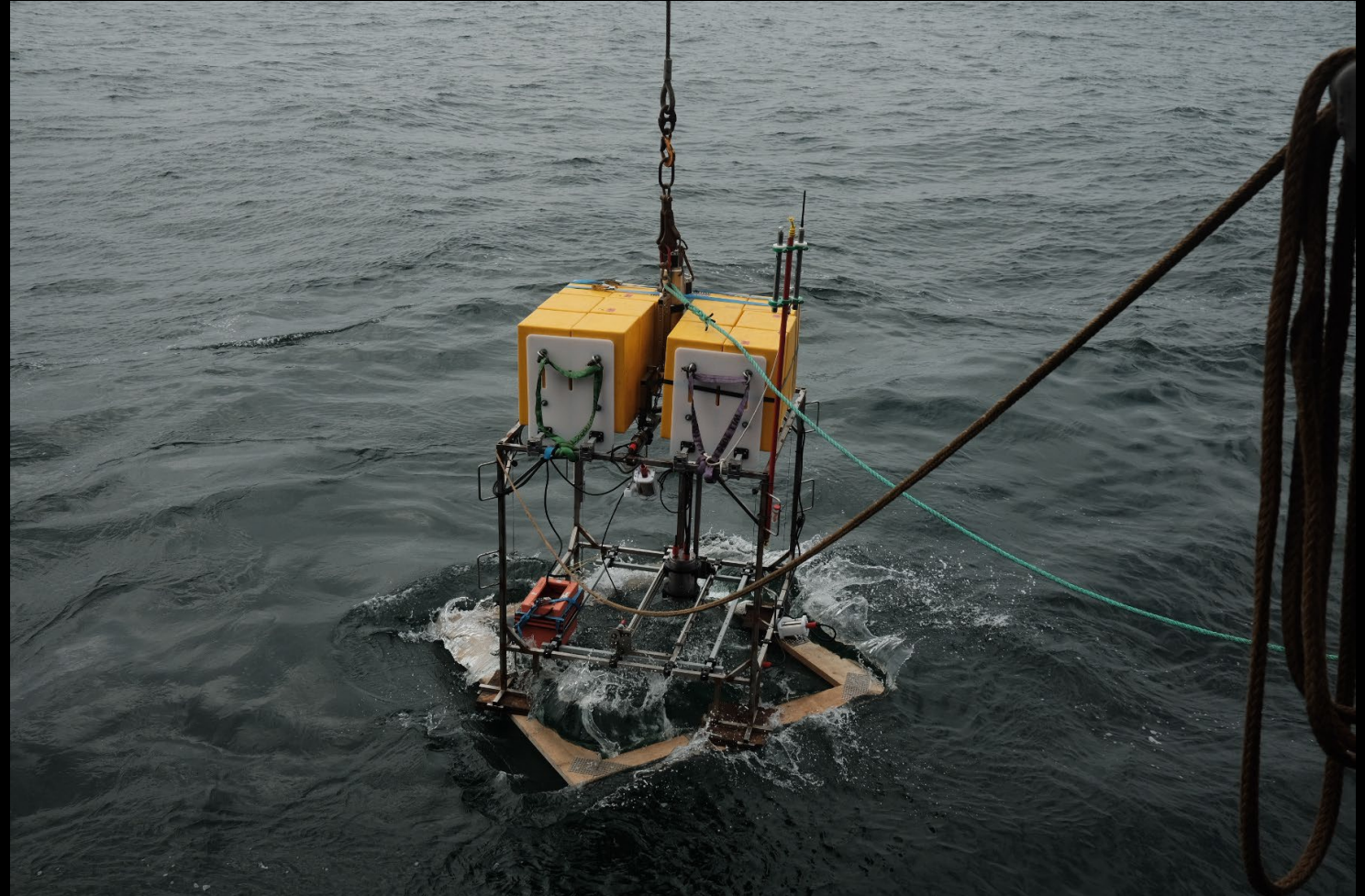


# And in it came!



@ Yen-Ting

Now the lander will be deployed at the sea bottom at the Molloy Deep (5500m) for several days measuring in situ oxygen profiles



@ Yen-Ting

# Heading west – and meeting the ice!



@ Yen-Ting



@ Yen-Ting

# Sediment being sampled!



@ Yen-Ting

Lisbeth and Ronnie  
– taking out  
subcores for  
sulphate reduction



@ Yen-Ting

Apart from sulphate reduction  
Yick is sampling for nematode  
abundance



@ Yen-Ting

# Lab work in the cold container.



@Marta Pérez-Rodríguez

Peter – doing experiments with diatoms in small vials. They will be pressurized – to better understand what is happening to the bacteria under pressure



@ Yen-Ting



@ Yen-Ting

Marta and Peter sharing the space!  
Notice the pressure vessels in the back! They can rotate mimicking the aggregates falling through the water column.



@ Peter Stief

# Working situations.



@ R. Glud

Peter – cutting small sub-core



@ R. Glud

Yick – sorting nematodes in microscope



@ Yen-Ting

Wenjie – enjoying the scenery in a break – and hoping to see a polar bear come by.

# Footprints in the snow.....



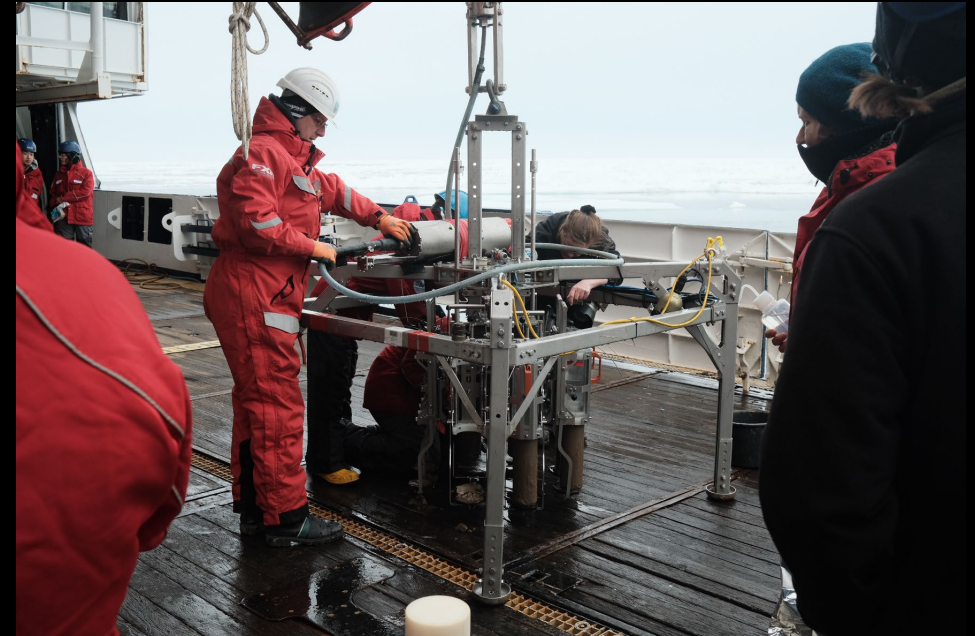
@ Yen-Ting

Curious polar bear watching us!



@ Yen-Ting

# More precious sediment!



@ Yen-Ting



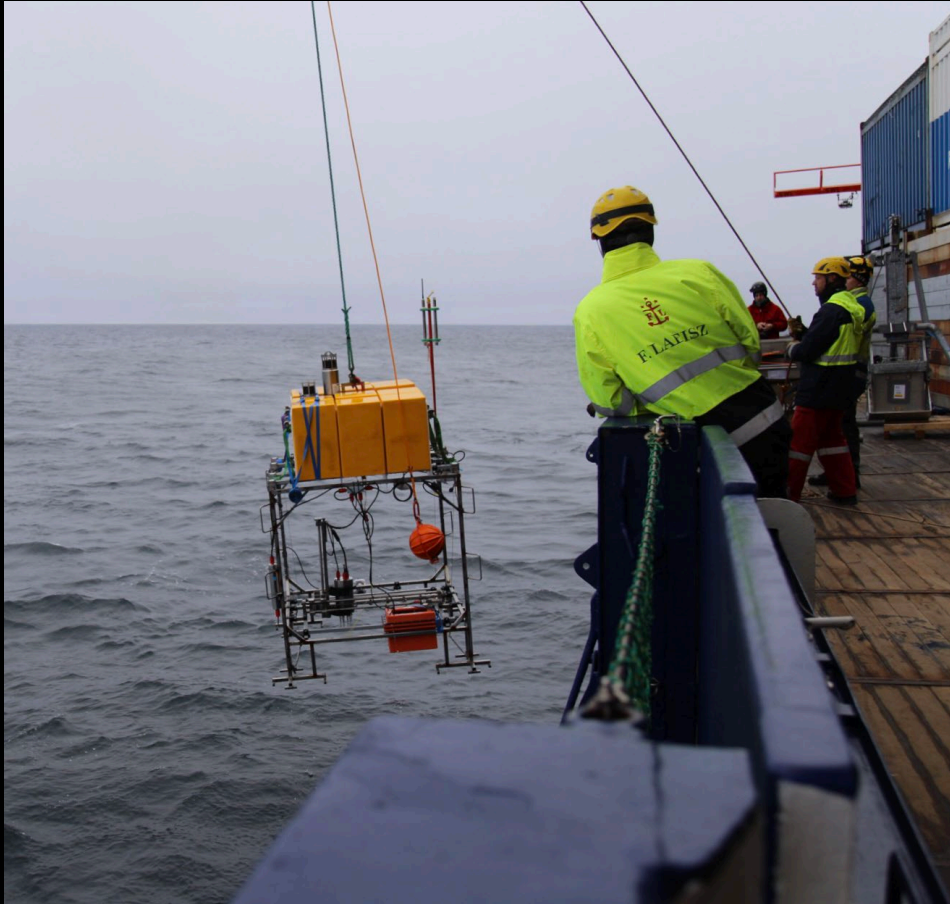
@ Yen-Ting

Lisbeth and Yen-Ting working in the cold room



@ Yen-Ting

# Retrieving lander



@ Wenjie Xiao



@ Wenjie Xiao

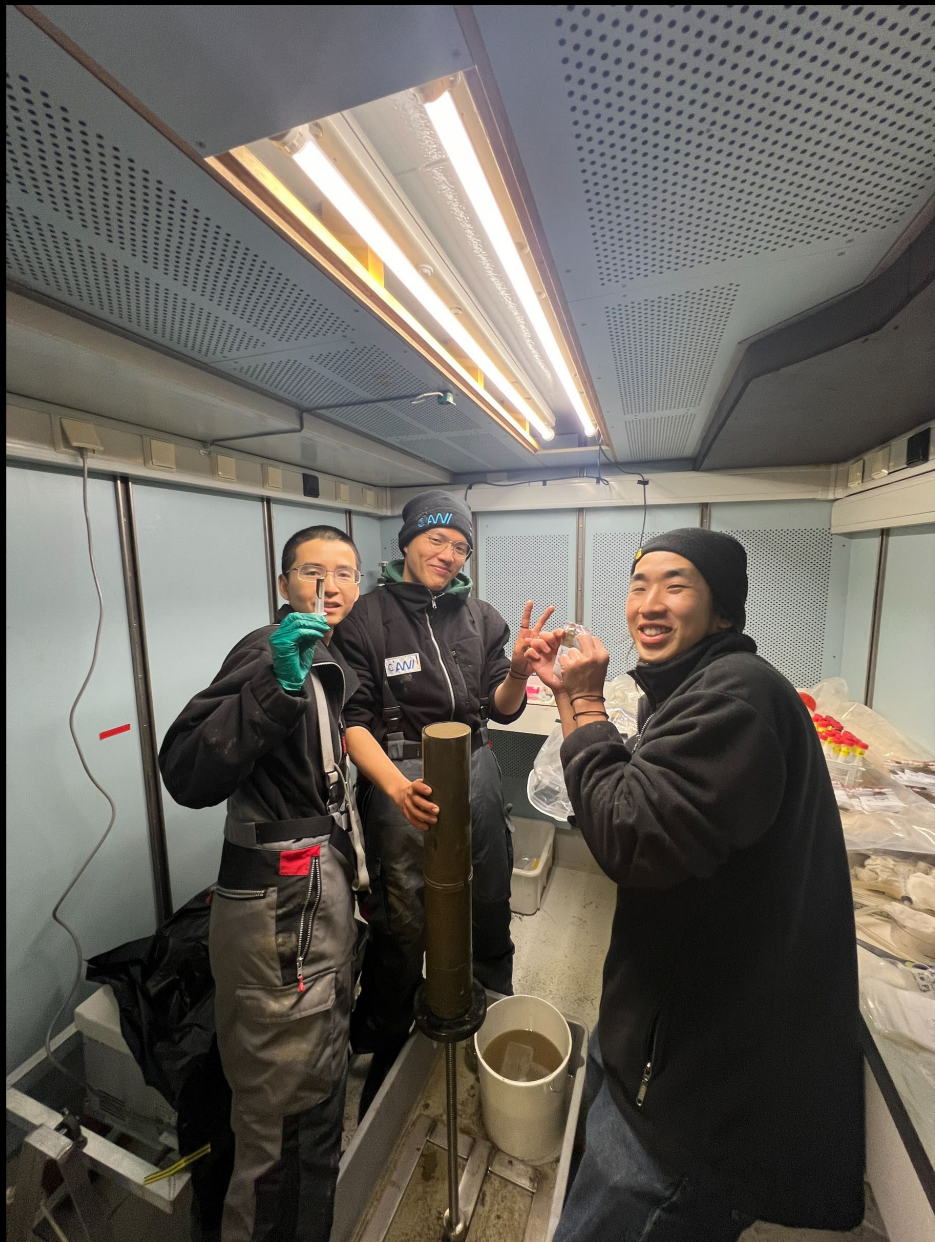
The profiling lander retrieved from Molloy Deep – Frank and Ronnie inspecting the data – YES – 40 oxygen profiles measured at 5500 m depth



@ Wenjie Xiao



# Happy "boys" cutting sediment core!



Wenjie, Yen-Ting and Yick -  
sampling sediment for  
further analysis back home.

Wenjie filtrating water for  
lipid analysis

