

Welcome



GRUAN

ICM-10

Welcome

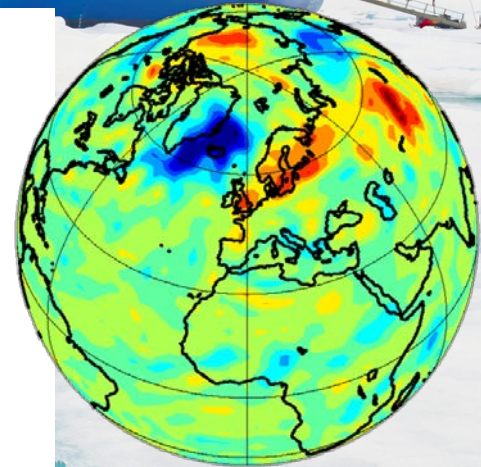
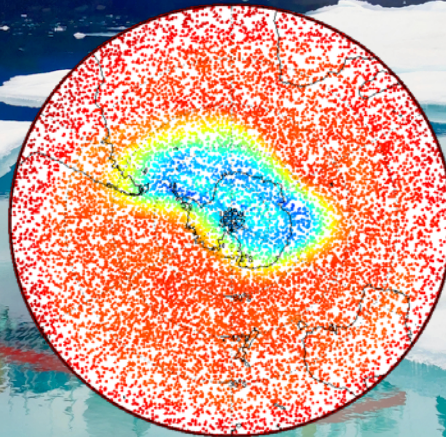


Markus Rex

Section Atmospheric Physics

Understand the role of the polar atmosphere
in the global climate system

- (1) Observations of key polar climate processes
- (2) Development of process models for individual subsystems
- (3) Improvement of their representation in earth system models and analysing polar feedbacks and global links





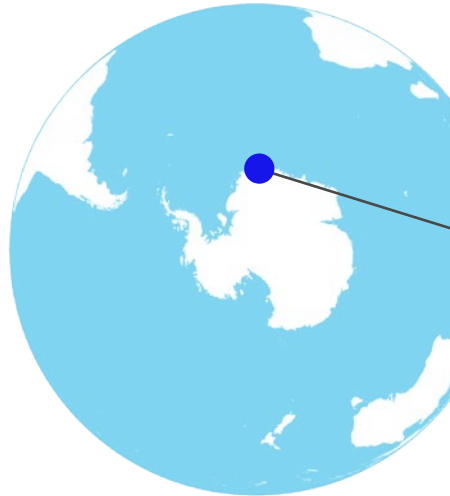
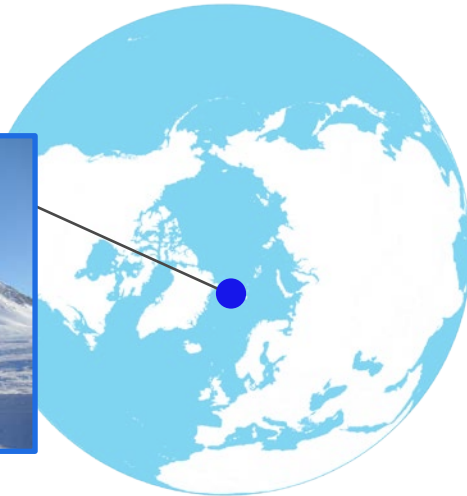
Long term meteorological observatories in the Arctic and Antarctic – AWIPEV and Neumayer

AWI's meteorological observatories



AWI's long-term observatories are strategically located in key regions of climate change and obtain high-quality observational data for the international science community.

AWIPEV



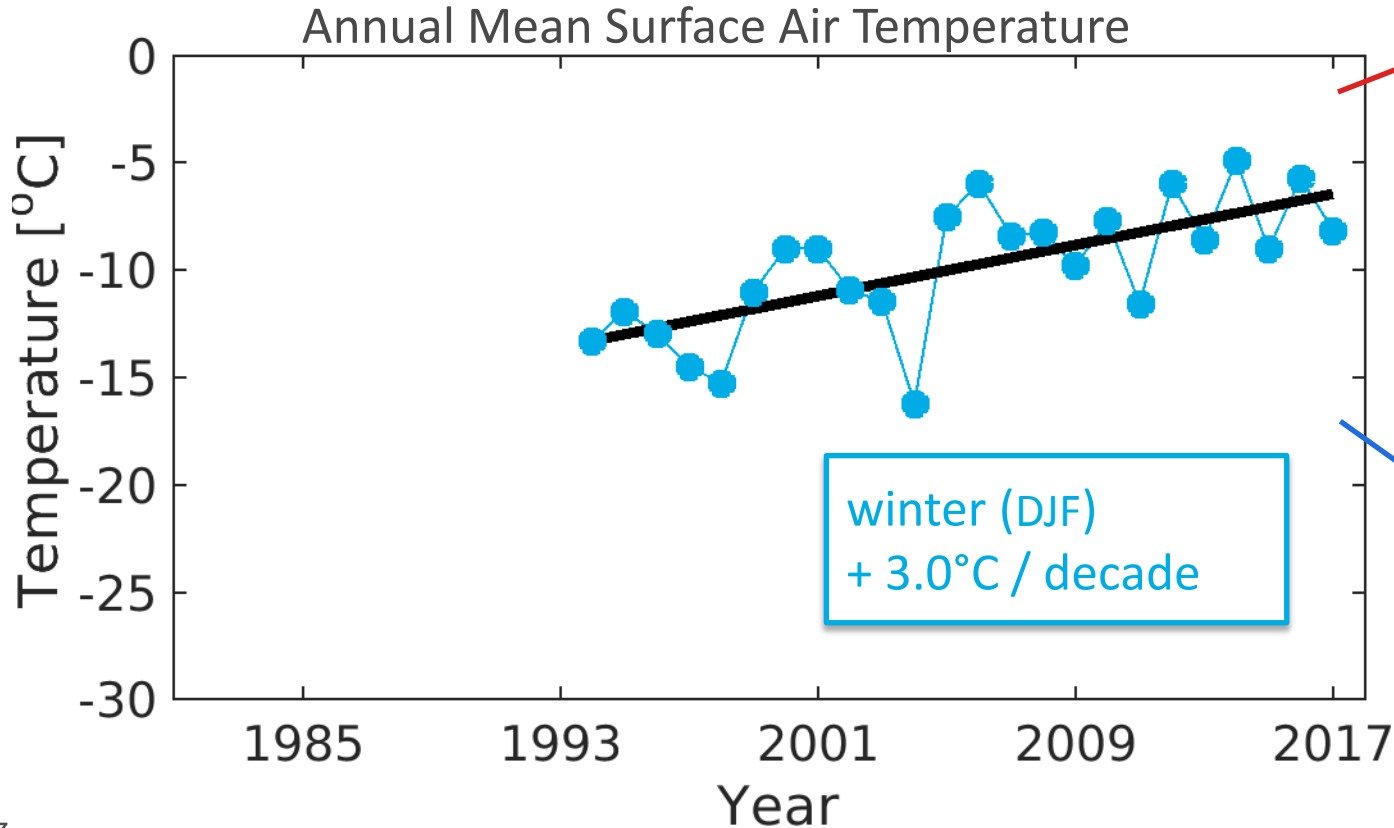
Neumayer-Station III





Nov. 2012: Marion Maturilli (AWI) and Holger Vömel (GRUAN)

Climate change in Arctic and Antarctic



Arctic



Antarctic



Multidisciplinary drifting Observatory for the Study of Arctic Climate

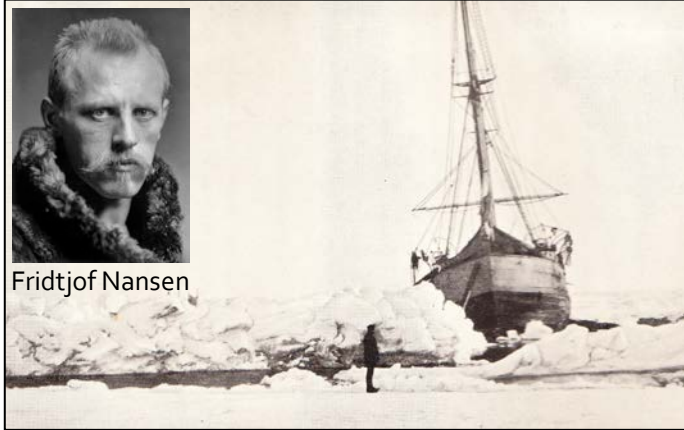
Largest Arctic research expedition ever

- ~140 Mio€ budget
- more than 80 institutions
- 16 nations
- Strong partnership between Germany, Russia, USA, China, UK, Norway, led by AWI



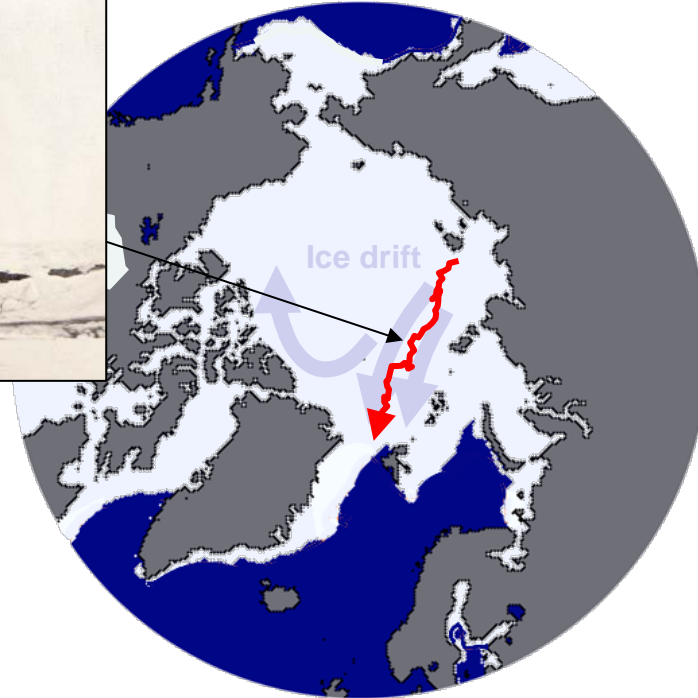
A major international research initiative under IASC to improve the representation of Arctic processes in weather forecast and climate models

Reaching the central Arctic in winter



Fridtjof Nansen

1893-1896: Drift of the Fram



Expedition concept

