

iCLIMATE INTERDISCIPLINARY
CENTRE FOR CLIMATE CHANGE

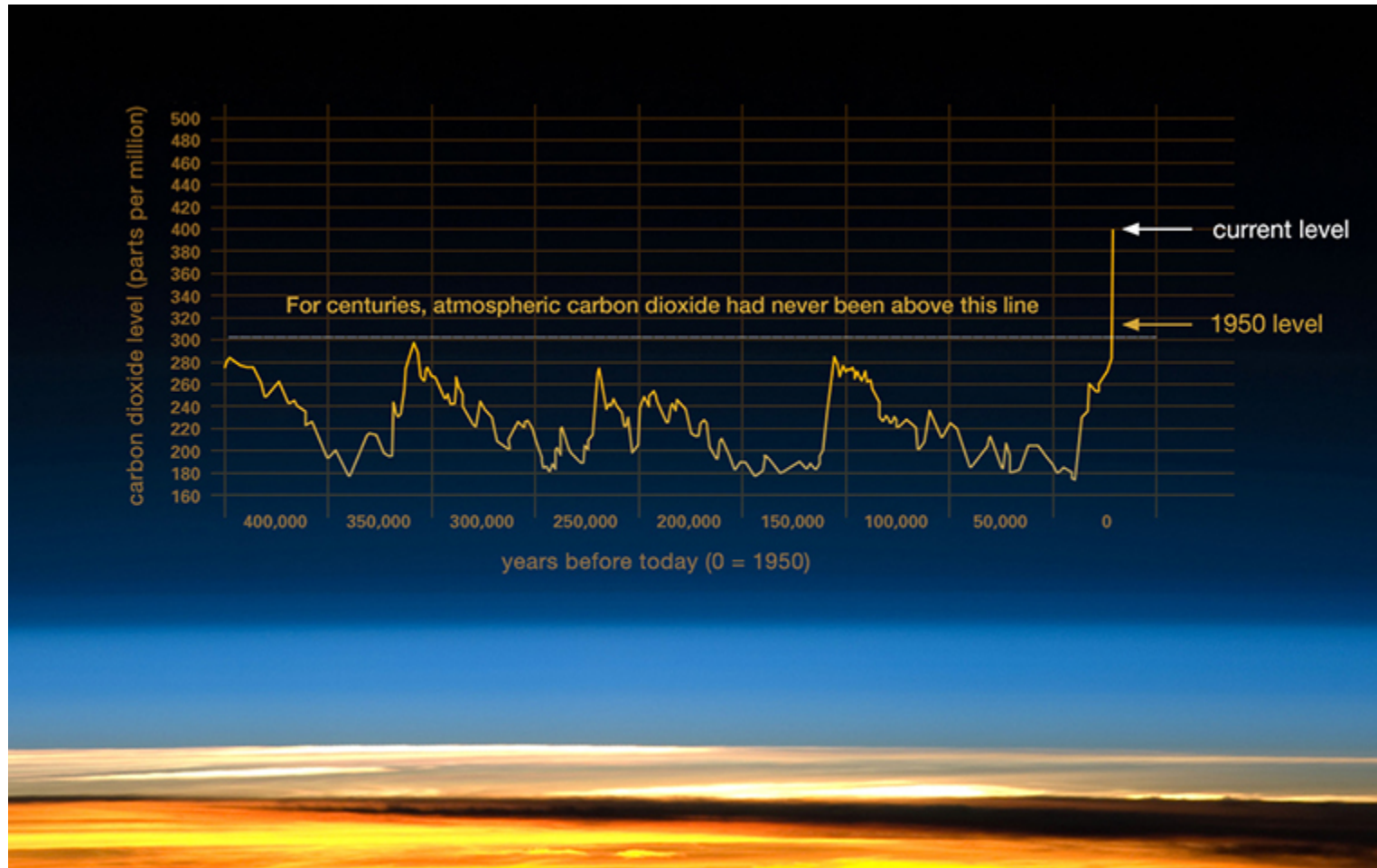
Pillar - Arctic Climate

Professor Henrik Skov, Coordinator

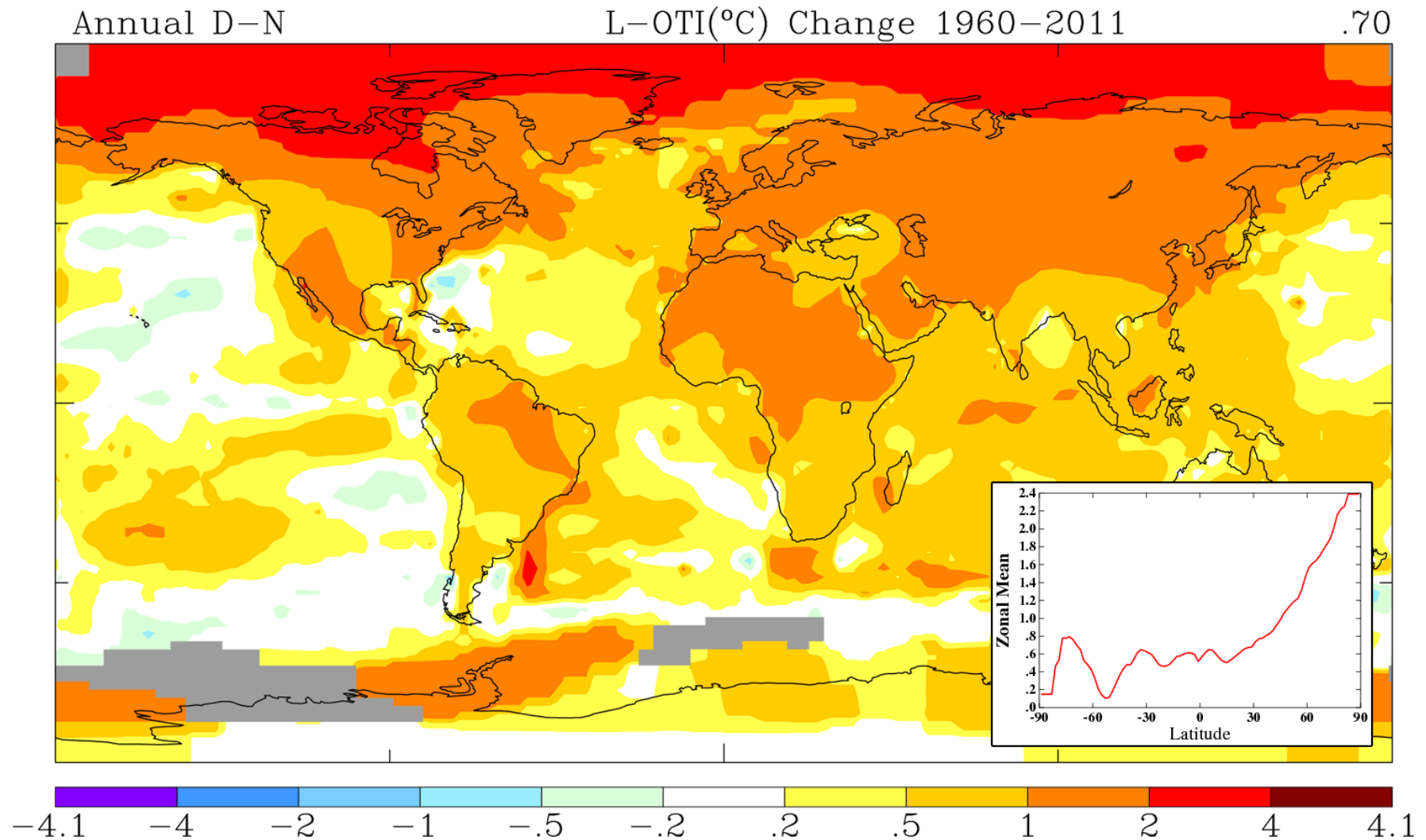
Professor Torben Røjle Christensen, Co-coordinator

Doctor Andreas Hubertus Massling, Co-coordinator

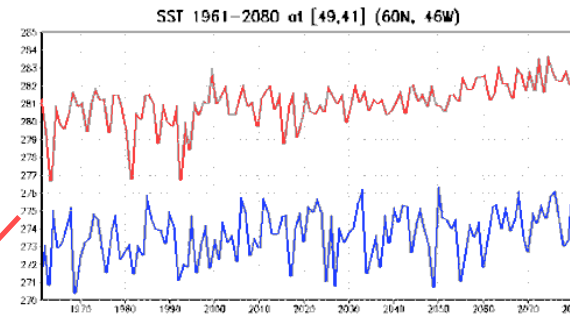
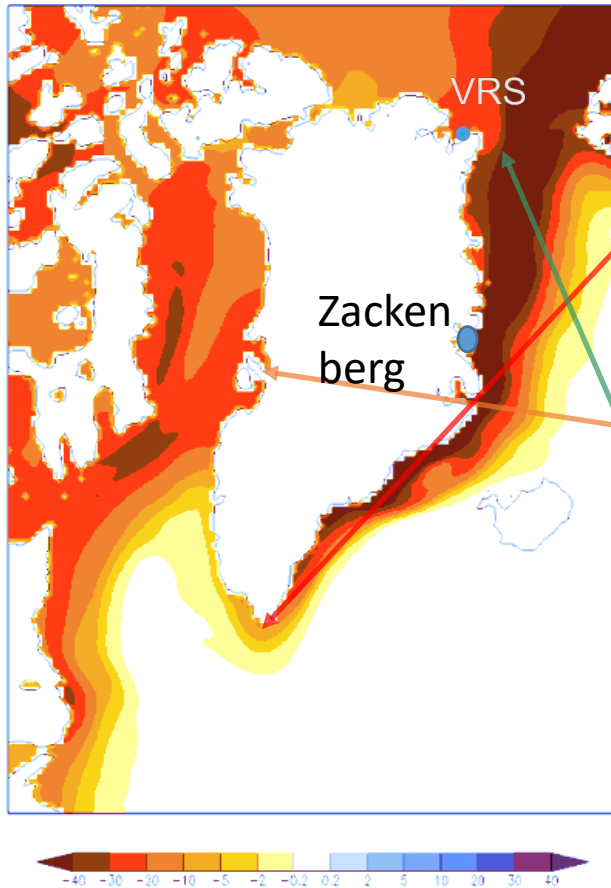
The climate is strongly influenced by human release of CO₂



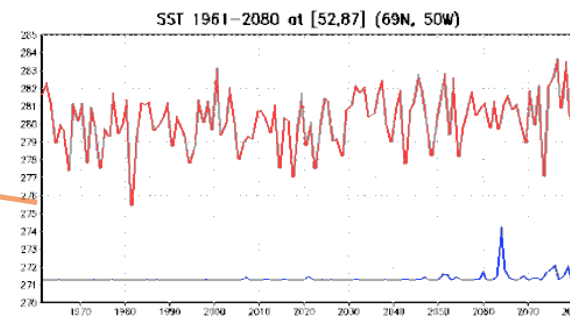
Arctic amplification



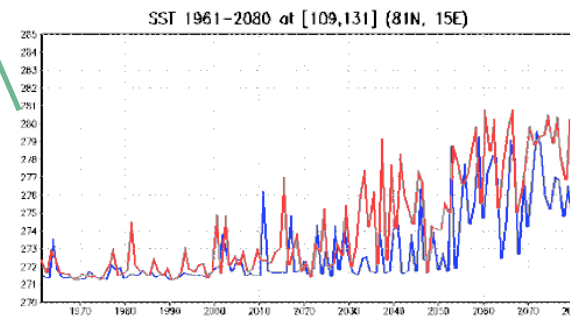
NASA, <https://nsidc.org> downloaded 27th Nov. 2017



3-
4°C



1-
2°C



9-
10°C

8 of 13 tipping point is connected to polar regions presented at the Last PEEEX conference.

Lenton et al., 2008, PNAS

Stendel et al. (2008) Advances in Ecological Research vol 40

Climate change in Arctic has large consequences for:

- Biological systems
- Pollution
- Feedback on climate
- Geo-chemical cycles
- Cryosphere

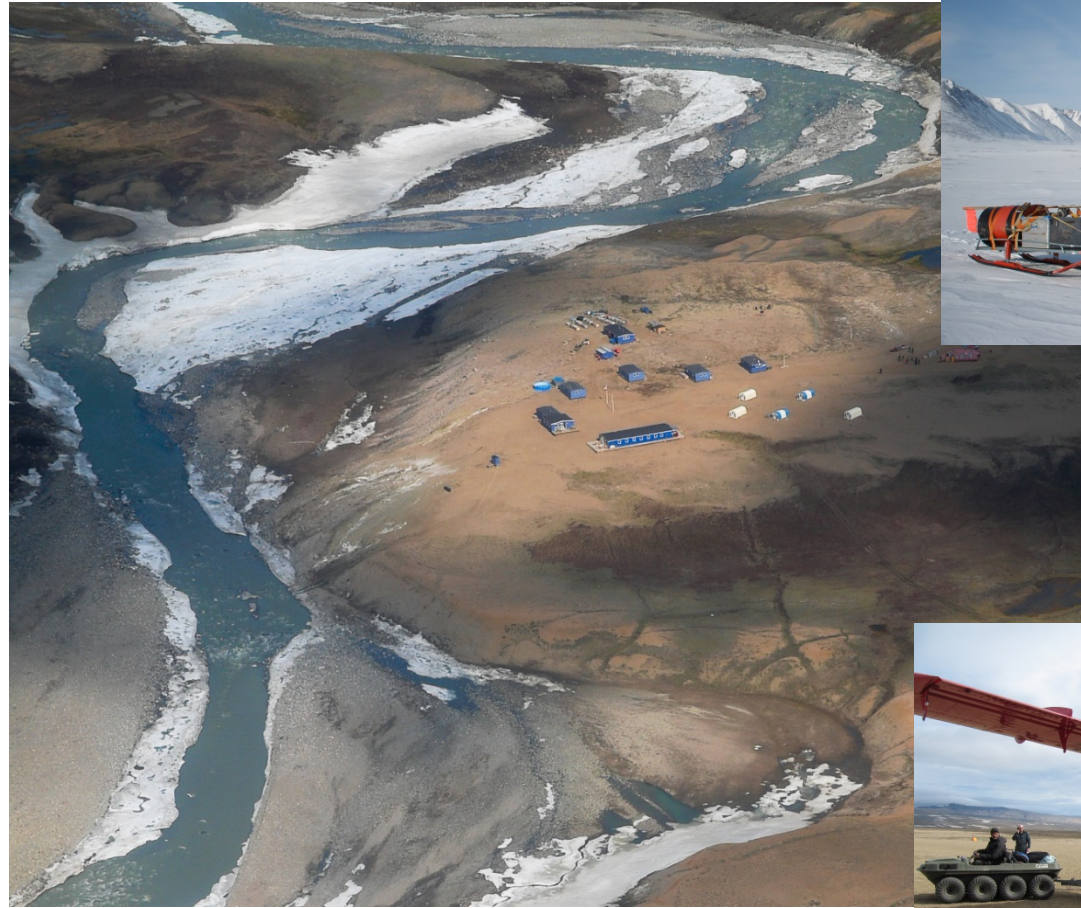
Villum Research Station at 81° N

The aim is to have unique **state-of-the art** research infrastructure in the High Arctic for investigating **climate change** and its **effects** on atmospheric, oceanographic, biological and geological conditions and **processes** in the high Arctic.

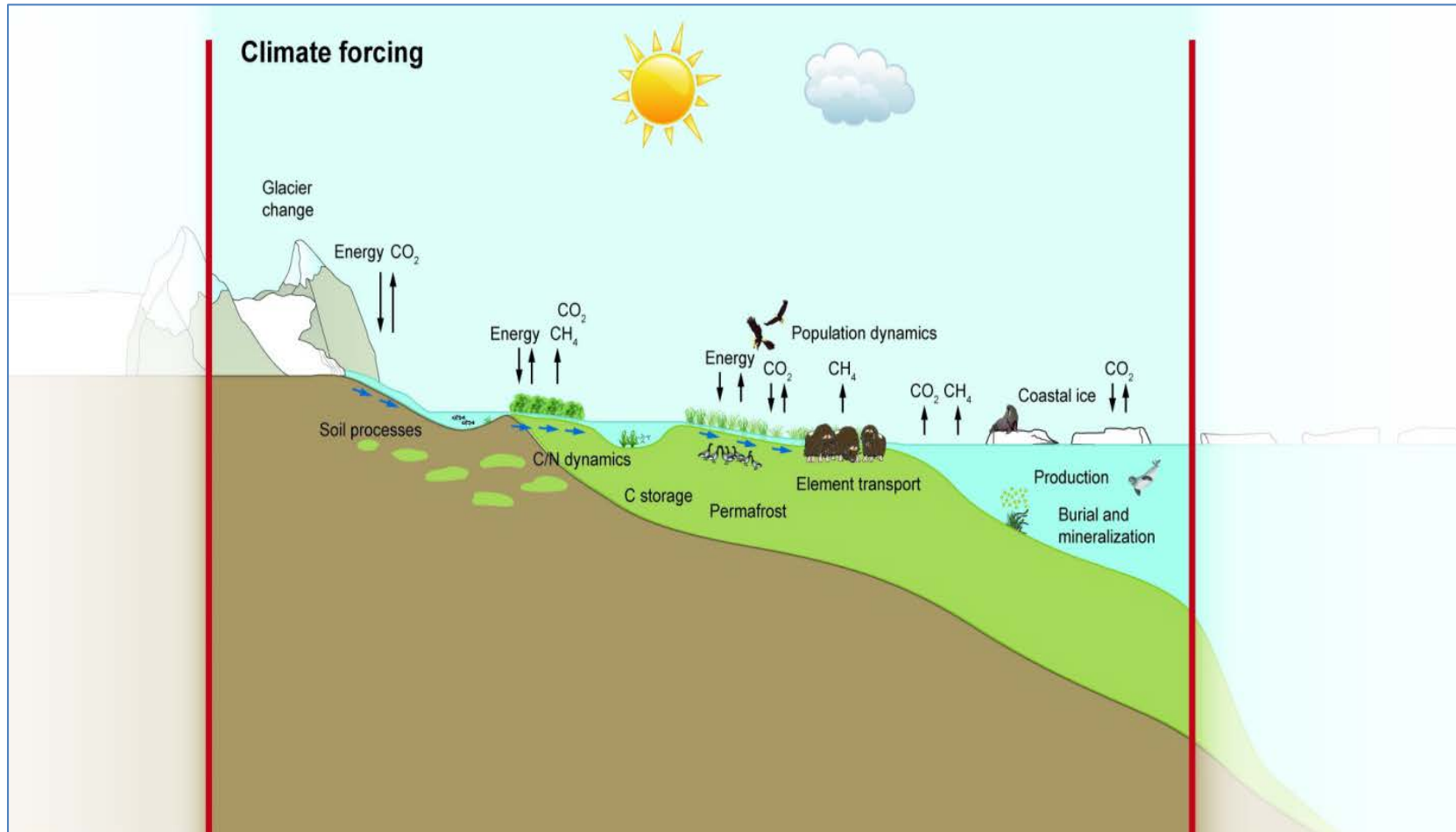


Zackenbergl Research Station, 74°N

Zackenbergl Research Station is a unique infrastructure, facilitating **ecosystem-based research and monitoring** in the High Arctic. Focus is on **climate-change** effects on geophysical, biological and geological **processes** in the High Arctic



The Greenland Ecosystem Monitoring (GEM) realm



Interdisciplinary research and monitoring of ecosystems from the edges of the Greenland Ice Sheet to coastal marine areas.

Acknowledgement

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- Colleagues at AU-ENVS and AU-ARC
- Colleagues at other Danish and at international Research Institutions
- Last but not least PhD. and master students



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