



Welcome to the Bolin Days

November 13

Aula Magna, Stockholm University

09.00–09.30 | Registration and coffee

09.30–11.00 | Session 1 Bolin Centre: Current activities

Chairs of the session: Regina Lindborg, Ilona Riipinen, and Gustaf Hugelius

- Greetings from the Bolin Centre leadership: welcome and practical information
- Ilona Riipinen and Gustaf Hugelius: Bolin Centre's current activities
Anna Lewinschal (MISU, SU): Modelling coordination at the Bolin Centre
Anders Moberg (NG, SU): Bolin Centre Database
Daniel Ospina (Future Earth): 10 New Insights in Climate Science.

11.00–12.00 | Poster viewing and competition (presenters are expected to stand by their posters)

- The poster session will be accompanied by a poster competition.
We invite everyone to participate in selecting the top three posters! To cast your vote, simply use your smartphone to scan the QR codes located on the poster boards. Your assessment will consider various factors including the scientific content (weighted at 20%), the visual design (40%), and the quality of the poster presentation (40%). Registered posters will also be evaluated by pre-assigned poster judges. If you have questions, please feel free to contact Paul Zieger.

12.00–13.00 | Lunch and poster viewing

13.00–14.30 | Session 2 Polar climate variability and interactions

Chairs of the session: Léon Chafik and Volker Brüchert

- **Keynote speaker**
Josefin Ahlkrona (Department of Mathematics, SU): Numerical methods for modelling ice sheets and their interaction with the ocean
- **Invited speakers**
Matt O'Regan (IGV, SU): Telling time – the challenge to proxy-model comparisons of Arctic sea ice in the past
Tirza Weitkamp (IGV, SU): From biology to proxy: understanding modern central Arctic N. pachyderma for accurate palaeoclimate insights
Trusha Naik (IGV, SU): Ocean Meridional Overturning Circulation during the early and middle Miocene – MioMIP1 Model Intercomparison

Gunilla Svenson (MISU, SU): What can we learn about representation of Arctic processes in models using observations?

Felicity Holmes (IGV, SU): Sea-level rise contribution in 2300 from Ryder Glacier in Northern Greenland varies by an order of magnitude depending on future emissions.

14.30–15.00 | Fika

15.00–16.30 | Session 3 Biosphere-atmosphere interactions

Chairs of the session: Stefano Manzoni and Liine Heikkinen

- **Keynote speaker**

Sara Blichner (ACES, SU): Biogenic volatile organic compound (BVOC) feedbacks in Earth System Models

- **Invited speakers**

Anouck Chassaing (ACES, SU): Cloud processing of isoprene and its oxidation products above the Amazon

Sini Talvinen (ACES, SU): Impacts of different cloud types on tree water release (Remote)

Marleen Pallandt (NG, SU): Can we disentangle climate and microbial diversity effects on soil respiration in managed forests?

November 14

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09.00–09.30 | Registration and coffee

09.30–11.00 | Session 4 Recent developments at the Bolin

Centre and future plans

Chairs of the session: Ilona Riipinen and Gustaf Hugelius

- **Ilona Riipinen:** Tellus journal

- **Gustaf Hugelius:** ECR Network development

- **Bolin Fellows presentations:**

Chiara Paleari (NG, SU): Disentangling volcanic and solar activity signals in ice core ^{10}Be concentrations

Jingyuan Li (MISU, SU): Changes in ocean memory under future warming

Marc Fradera-Soler (DEEP, SU): Hot and cold deserts as eco-evolutionary arenas for understanding plant resistance to multiple abiotic stresses

Mohammad Razmjooei (IGV, SU): Improving Arctic Quaternary Geochronology and Paleoceanographic Reconstructions Using Calcareous Nannofossils.

11.00–12.00 | Poster viewing and competition

11.45–12.30 | Exclusive premiere of film about the Arctic

Expedition ARTofMELT, a 25-minute documentary on the science behind and life aboard Oden.

Parallele session (room Polstjärnan, Aula Magna, floor 7)

Highlights:

- Introduction
- Q&A session with Michael Tjernström and Paul Zieger
- Film screening

12.00–12.30 | Lunch and poster viewing

12.30–14.00 | Session 5 From small to large scales of climate

Chairs of the session: Geert Brethouwer and Frederik Schenk

- Invited speakers

Peter D. Heintzman (Centre for Palaeogenetics, IGV, SU): Reconstructing Pleistocene populations and ecosystems with ancient DNA

Claire Ansberque (IGV, SU): Stalagmite-based record of climatic instabilities in the North Atlantic linked to the AMOC weakening c. 8.4 ka

Michael Tjernström (MISU, SU), Paul Zieger (ACES, SU) and the ARTofMELT science team: Results from ARTofMELT, atmosphere-ice-ocean interaction in the Arctic

Birgit Wild (ACES, SU): Plant impacts on soil carbon stabilization in a changing Arctic.

14.00–14.30 | Fika

14.30–16.00 | Session 6 Hydroclimate variability and extremes: Past, present and future

Chairs of the session: Anna Lewinschal and Ramón Fuentes Franco

- Invited keynote speaker

Ulf Büntgen (Department of Geography, University of Cambridge, UK): Contextualising recent (hydro)climate extremes against past natural variability (Remote)

- Invited speakers

Ryan Boukrouche (Department of Astronomy, SU): The impact of water clouds on our future search for life in the Universe: a practical example from a nearby exoplanet

Torben Koenigk (Rossby Centre, SMHI): Using Earth System Models for exploring abrupt changes in a warming climate

Yiheng Du (Hydrology, SMHI): Understanding and Enhancing the Predictability of Hydrological Extremes

Alexandra Hamm (NG, SU): Carbon export through groundwater and its effect on the permafrost carbon feedback.

16.00–16.30 | Concluding remarks, presentation of poster competition winners (Ilona Riipinen and Gustaf Hugelius)

16.30 | Transfer to the National Museum of Science and Technology (Tekniska Museet)

Bolin Centre for Climate Research

A collaboration between Stockholm University, KTH and the Swedish Meteorological and Hydrological Institute
www.bolin.su.se

