



Stockholm  
University

Bolin Centre for Climate Research

A collaboration between Stockholm University, KTH and SMHI

Week 41, 2021

[Click here to read the letter in your browser](#)

The Bolin Centre is a multi-disciplinary consortium of over 400 scientists in Sweden that conducts research and graduate education related to the Earth's climate.



The Bolin Days 2021 - Welcome to register!

[Register for the Bolin Days 2021 here »](#)

The Bolin Days is our annual internal conference for and by our Bolin Centre members. During these days, new climate science results are presented and we meet each other to exchange ideas, share our experiences and find new inspiration. We welcome you to take part in a set of cross-disciplinary sessions organized by our Research Area leaders. You have the opportunity to meet our External Science Advisory Group, there will be a poster exhibition and as usual, a poster competition for PhD students. We start both days with a lunch at 11h00. The Bolin Days ends with a dinner in Aula Magna's Gallery on day two, followed by a pub and a Ceilidh in Geovetenskapens hus.

#### Hybrid event

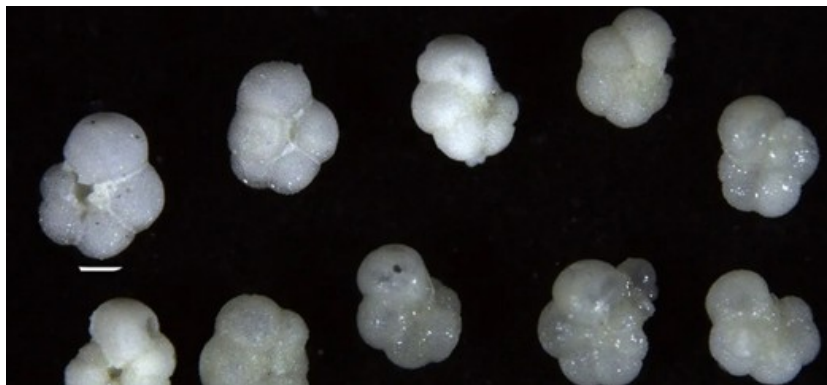
The Bolin Days this year will take place in Aula Magna and Geovetenskapens hus, Stockholm University, and via Zoom.

#### Call for posters and PICO presentations

The Bolin Days 2021 will have its traditional poster exhibition, this year in Geovetenskapens hus. The deadline for submission of poster and PICO presentations is 15 November. [Instructions are found here »](#)

The program for the Bolin Days is under development, and the full program will be available here at a later stage.

Welcome!



Eos article showcasing the Bolin Centre-supported 'Miocene Temperature Portal'

Helen Coxall (Department of geological sciences) and Margret Steinthorsdottir (the Museum of Natural History), together with collaborators from the UK and USA just published an article in the Journal Eos describing their latest collaborative effort to build an interactive platform for cataloguing palaeo ocean temperature proxy data.

[Read the EOS-article here »](#)

This venture is the product of a series of Bolin Centre Research Area 6 (Deep time climate variability) and Research Area 1 (Ocean-atmosphere dynamics and climate) projects focusing on the Miocene as a past warm climate analogue. The Bolin Centre Database experts Rezwan Mohammad and Anders Moberg built the portal, which is now ['live'](#) »

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### New datasets in the Bolin Centre Database

- Linn Karlsson, Radovan Krejci, Makoto Koike, Kerstin Ebell, Paul Zieger (2021). Arctic cloud and aerosol measurements from Zeppelin Observatory, Svalbard, November 2015 to February 2018. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/zeppelin-cloud-aerosol-1>
- Patrick Crill, Martin Wik, Joachim Jansen (2021). Methane concentrations from surface water on the Stordalen Mire, Abisko, Northern Sweden. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/stordalen-mire-ch4-surface-concentration-1>
- Ramona Astrid Alexa Schneider, Robin Blomdin, Ping Fu, Xiangke Xu, Arjen Peter Stroeven (2021). Map and data of glacial landforms and fluvial terraces on the southeastern margin of the Tibetan Plateau. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/schneider-2021-tibet-1>
- Maysoon Lundevall-Zara, Erik Lundevall-Zara, Volker Brüchert (2021). Methane concentrations from Askö shallow inshore areas in the Baltic Sea, June to October 2019. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/lundevall-zara-2021-asko-methane-1>
- Patrick Crill, Martin Wik, Joachim Jansen (2021). Temperatures in subarctic lakes on the Stordalen Mire, Abisko, Northern Sweden. Dataset version 4.0. Bolin Centre Database. <https://doi.org/10.17043/stordalen-lake-temperature-4>
- Gabriel West, Matt O'Regan (2021). Physical properties and age model of sediment core SWERUS-L2-29-GC1 from the Lomonosov Ridge, Arctic Ocean. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/west-2021-1>
- Matt O'Regan (2021). Geochemical XRF core scanning data of marine sediment cores from the Ryder 2019 expedition. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/oden-ryder-2019-sediment-xrf-1>
- Matt O'Regan (2021). Physical properties of marine sediment cores from the Ryder 2019 expedition. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/oden-ryder-2019-sediment-mscl-1>
- Gustaf Hugelius, Julie Loisel, Sarah Chadburn, Robert B. Jackson, Miriam Jones, Glen MacDonald, Maija Marushchak, David Olefeldt, Maara Packalen, Matthias B. Siewert, Claire Treat, Merritt Turetsky, Carolina Voigt, Zicheng Yu (2021). Maps of northern peatland extent, depth, carbon storage and nitrogen storage. Dataset version 2.0. Bolin Centre Database. <https://doi.org/10.17043/hugelius-2020-2>
- Antonio Martínez Cortizas, Lourdes López-Merino, Noemí Silva-Sánchez, Jenny K. Sjöström, Malin E. Kylander (2021). Infrared spectral data of peat and ash from Cruz do Bocelo mire, northwestern Spain. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/martinez-cortizas-2021-bocelo-mire-1>
- Audrey Campeau, Anne L. Soerensen, Karin Eklöf, Staffan Åkerblom, Shengliu Yuan, Holger Hintelmann, Magdalena Bieroza, Stephan Köhler, Tonu Martma, Christian Zdanowicz (2021). Water chemistry and geospatial characteristics of different sub-catchments in the Mackenzie River basin, Canada. Dataset version 2.0. Bolin Centre Database. <https://doi.org/10.17043/campeau-2020-2>
- Julika Zinke, Matthew Salter, Paul Zieger, E. Douglas Nilsson (2021). Laboratory data on the effect of salinity and temperature on sea spray aerosol production. Dataset version 1.0. Bolin Centre Database. <https://doi.org/10.17043/zinke-2021-laboratory-1>

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PhD-day on 4 November - last day to register is today!

Dear PhD students and Postdocs,  
The Bolin Centre Climate Research School is organizing a PhD-day on November 4th

exclusively for PhD-students and postdoctoral researchers. **Last day to register is 15 October.**

This is an opportunity to meet your colleagues and to practice communicating your work with a presentation or poster – or both. There will be a Presentation Competition for regular presentations and the best presentations will be awarded the following amount of money for research:

- 1st price: 20 000 SEK
- 2nd price: 10 000 SEK
- 3rd price: 5 000 SEK

Since we don't know how the situation will be during the fall we are planning to have it as an onsite-venue as well as on Zoom for those who cannot attend in person. Apart from the PhD presentations during the day, there will be a healthy, climate smart lunch as well as a dinner to conclude the event.

Very welcome!

Carmen and Otto

[More information can be found on the Bolin Centre website »](#)

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## World Climate Research Programme calls

The World Climate Research Programme (WCRP) is launching several calls:

[The WCRP Academy Lighthouse Activity is seeking an individual or research group to conduct approximately six months of research and analysis into climate science training opportunities across the globe. Deadline: 1 November »](#)

[WCRP Academy Climate Training Stocktake Survey 2021. Deadline: 26 November »](#)

[Open call for nominations to the Stratosphere-troposphere Processes And their Role in Climate \(SPARC\) Scientific Steering Group. Deadline 21 November »](#)

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## Open call: Demonstrator projects

This is a call for Demonstrator projects – projects that can demonstrate and disseminate technologies for digital transformation and its impact on society. Projects are expected to show novelty, high impact, and wide outreach. Eligible researchers at KTH schools, Stockholm University (SU), and RISE Digital Systems are encouraged to apply. The call opens 1 November.

[Read more on Digital Future's website »](#)

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Förhandsvisning av två utställningar på universitetets konsthall Accelerator den 15 oktober kl 12.00-18.00.

[Läs mer på su.se »](#)

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## Bolin Centre Seminar Series RA8

**Title:** Variation in the thermal tolerance of plants at global and local scales

**Speaker:** Aelys M. Humphreys, Department of Ecology, Environment and Plant Science

**Time:** 20 October, 14h00-15h00

**Location:** William Olsson and Zoom

Temperature has long been considered one of the strongest determinants of plant distribution patterns globally. This is particularly true for cold temperatures because the physiology required to tolerate cold and freezing conditions is complex and assumed to be difficult to evolve. Yet, since their origins in the warm, wet tropics, flowering plants have clearly transitioned to temperate climates multiple times independently. Furthermore, evidence to suggest that cold tolerance can evolve relatively quickly is accumulating. Aelys M. Humphreys will present her ongoing research that addresses this contradiction.

[Read more on the Bolin website »](#)

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## Klimatmodellering uppmärksammas genom årets Nobelpris i fysik

”Det här är ett Nobelpris som är jätteviktigt för den klimatmodellering som vi på SMHI arbetar med och som ligger till grund för samhällets hantering av klimatfrågan”. Så kommenterar Erik Kjellström, SMHIs professor i klimatologi, nyheten om att 2021 års Nobelpris i fysik tilldelats forskning som bidragit till att lägga grunden för kunskapen om jordens klimat och hur det förändras på grund av de mänskliga utsläppen av koldioxid.

[Läs artikeln på SMHIs webbplats »](#)



### Publications

#### Recent Bolin Centre publications

On [bolin.su.se/publications](https://bolin.su.se/publications) you'll find a list of scientific journal publications by Bolin Centre scientists. Here are the most recent ones we have published on the website.

- Olefeldt, D., Heffernan, L., Jones, M.C., Sannel, A.B.K., Treat, C.C. and Turetsky, M.R., 2021. Permafrost Thaw in Northern Peatlands: Rapid Changes in Ecosystem and Landscape Functions, pp. 27–67. In: Canadell, J.G. and Jackson, R.B. (Eds.) 2021: Ecosystem Collapse and Climate Change. 364 pp. Springer. [https://link.springer.com/chapter/10.1007/978-3-030-71330-0\\_3](https://link.springer.com/chapter/10.1007/978-3-030-71330-0_3)
- Ghajarnia, N., Kalantari, Z., & Destouni, G., 2021. Data-Driven Worldwide Quantification of Large-Scale Hydroclimatic Covariation Patterns and Comparison With Reanalysis and Earth System Modeling. *Water Resources Research*, 57(10), e2020WR029377. <https://doi.org/10.1029/2020WR029377>
- Elvidge, A.D., Renfrew, I.A., Brooks, I.M., Srivastava, P., Yelland, M.J., Prytherch, J., 2021. Surface Heat and Moisture Exchange in the Marginal Ice Zone: Observations and a New Parameterization Scheme for Weather and Climate Models. *JGR Atmospheres*. <https://doi.org/10.1029/2021JD034827>
- Haesen, S., Lembrechts, J.J., De Frenne, P., Lenoir, J., Aalto, J., Ashcroft, M.B., Kopecký, M., Luoto, M., Maclean, I., Nijs, I., Niittynen, P., van den Hoogen, J., Arriga, N., Brúna, J., Buchmann, N., Čiliak, M., Collalti, A., De Lombaerde, E., Descombes, P., Gharun, M., Goded, I., Govaert, S., Greiser, C., Grelle, A., Gruening, C., Hederová, L., Hylander, K., Kreyling, J., Kruijt, B., Macek, M., Máliš, F., Man, M., Manca, G., Matula, R., Meeussen, C., Merinero, S., Minerbi, S., Montagnani, L., Muffler, L., Ogaya, R., Penuelas, J., Plichta, R., Portillo-Estrada, M., Schmeddes, J., Shekhar, A., Spicher, F., Ujházyová, M., Vangansbeke, P., Weigel, R., Wild, J., Zellweger, F., Van Meerbeek, K., 2021. ForestTemp – Sub-canopy microclimate temperatures of European forests. *Global Change Biology*. <https://doi.org/10.1111/gcb.15892>
- Blaschek, L. and Pesquet, E. (2021). Phenoloxidases in Plants—How Structural Diversity Enables Functional Specificity. *Frontiers of Plant Science*, <https://doi.org/10.3389/fpls.2021.754601>
- Mason-Jones K., Robinson S., Veen G. F. C., Manzoni S., and W. H. van der Putten (2021). Microbial storage and its implications for soil ecology. *ISME Journal*, <https://doi.org/10.1038/s41396-021-01110-w>

Please send your newly published publication to [bolin@su.se](mailto:bolin@su.se) »

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Oct

#### Bolin Centre Seminar Series RA8

**Title:** Variation in the thermal tolerance of plants at global and local scales

**Date:** Wednesday 20 October

**Time:** 14h00-15h00

**Speaker:** Aelys M. Humphreys, Department of Ecology, Environment

and Plant Science, Stockholm University  
**Location:** William Olsson and Zoom  
[Read more on the Bolin Centre website »](#)

20

Oct

**Arctic Avenue Fall Call 2021**

**Application deadline:** October 20

You are welcome to submit your application!

[Read more on the Bolin Centre website »](#)

21

Oct

**Conference: Climate change, the ocean and its people: Unprecedented challenges, workable solutions and a sustainable future**

The third Ocean Sustainability Bergen Conference is open for registration.

**Time:** 21 October, 13h00-15h45

[Read more »](#)

21

Oct

**Review Seminar: Machine Learning for weather and climate modelling**

**Speaker:** Maura Dewey, PhD student at MISU

**Time:** 21 October, 14h15-15h15

**Zoom-link:** <https://stockholmuniversity.zoom.us/j/62312683248>

[Read more on the Department of Meteorology's website»](#)

27

Oct

**Multifunktionella våtmarker: realistiskt mål eller orealistisk dröm**

Konferensen sammanför forskare, rådgivare och beslutsfattare till en diskussion om mål och medel kring restaurering och nyanläggning av våtmarker. Programmet har en bred ansats, med föredrag från såväl hydrologiska, biogeokemiska, ekologiska som samhällsvetenskapliga perspektiv.

**Deadline för anmälan:** 15 oktober

[Läs mer på Bolincentrets webbplats »](#)

28

Oct

**Seminar: Flying less: How can we go from words to action and reduce our flying at SU?**

Academic flying constitutes a large part of SU:s total carbon emissions. We need to reduce our flying, but how?

Welcome to a seminar about academic flying which aims at giving you facts and inspiration to take on the challenges of reducing flying at SU.

**Location:** De Geersalen (Geoscience building, house Y) and via zoom

**Time:** 28 October, 13h00-15h00

**Deadline to register:** 22 October

[Read more and register for the event »](#)

4

Nov

**CRS PhD-day**

**Time:** 4 November

**Deadline to register:** 15 October

[Read more »](#)

4

Nov

**RA3 zoom series | Perspectives of Hydrology and Water Resources**

**Time:** 4 November 2021, 15h00 - 16h00

**Venue:** Zoom

**Title:** The variability of water storage and fluxes over large tropical river basins from multi-satellite observations and their impacts on the land-ocean continuum

**Speaker:** Fabrice Papa, Institut de Recherche pour le Développement (IRD), LEGOS-France

[Read more on Bolin Centre's website »](#)

15

Nov

**Bolin Centre Seminar Series RA3**

**Title:** Freshwater salinisation – drivers and impacts in river basins around the world

**Date:** Monday 15 November

**Time:** 14h00-15h00

**Speaker:** Josefin Thorslund, researcher in hydrology at the Department of Physical Geography

**Location:** William Olsson and Zoom

[Read more on the Bolin Centre website »](#)

17

Nov

**Workshop: Wikipedia – a source for information and outreach**

**Date:** 17 November 2021, 13h00 -15h00

**Venue:** William-Olsson lecture hall

**Workshop leader:** Olle Terenius, malaria researcher, Uppsala University.

**Who can join:** Students in Climate Research School

**Deadline for application:** 12 November

[Read more and apply »](#)

**Bolin Days 2021 in Aula Magna**

18-19  
Nov

**Date:** 18-19 November, 11h00 - 19h00

**Venue:** Aula Magna & via Zoom

[Read more and register on the Bolin Centre website »](#)

7  
Dec

**Bolin Centre Seminar Series RA7**

**Speaker:** Roland Jansson, professor at the Department of Ecology and Environmental Science, Umeå University

**Time:** 7 December, 14h00-15h00

More info will follow!

## OFFICE STAFF - BOLIN CENTRE AT CAMPUS

Due to COVID-19, the Bolin Centre Office will be irregularly staffed at the University. Like many of you, we work from home. Don't hesitate to get in touch with us via mobile or e-mail.

- Magnus: 076-695 70 78, [magnus.atterfors@su.se](mailto:magnus.atterfors@su.se) (Communications)
- Laila: 072-444 35 25 [laila.islamovic@su.se](mailto:laila.islamovic@su.se) (Communications & coordination)

The **Bolin Centre Weekly News** provides you with a selection of our current activities and latest news and is sent to all members of the Bolin Centre. If you have suggestions that you would like to include or **research that you would like to share** in coming Weekly News, please contact [bolin@su.se](mailto:bolin@su.se).

Editor: Magnus Atterfors

Photo: Martin Jakobsson, Helen Coxall, Jan-Niklas Nuppenau

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