

### **Bolin Centre for Climate Research**

A collaboration between Stockholm University, KTH and SMHI

Week 7, 2020

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The Bolin Centre is a multi-disciplinary consortium of over 350 scientists in Sweden that conducts research and graduate education related to the Earth's climate.



#### New Study Coordinators for the Climate Research School

First a small introduction - we, Carmen Prieto Hierro at Physical Geography/SU and Otto Hermelin at Geological Sciences/SU, are the new Study Coordinators for Climate Research School, CRS at the Bolin Centre for Climate Research. Our 'duty' is to organize, coordinate and administrate courses for PhD students in the CRS and organize activities and events that promote networking between PhD students within the Bolin Centre. Feel free to contact us with any question about the Climate Research School – bolincrs@su.se.





#### Climate Science - a new Climate Research School course



In just a few weeks a new introductory course on Climate Science will be launches by the Climate Research School. Since our PhD-students have a very varied background and research topic this course will present the different research areas within the Bolin Centre. This course could be seen as an introduction to the wide research on climate change that is conducted within the Bolin Center for Climate Research and other entities.

Everyone is welcome, not only PhD-students – a great opportunity to learn more about climate science. Please find the schedule attached. To register, send an email to bolincrs@su.se.



### Increased greenhouse gas emissions as a result of abrupt permafrost thaw

A new research article shows that abrupt permafrost thaw has important consequences for keeping global warming under 1.5 °C. A "sleeping giant" hidden in permafrost soils in northern regions worldwide is waking up and will have important consequences for global warming.

Contacts at the Bolin Centre: gustaf.hugelius@natgeo.su.se, peter.kuhry@natgeo.su.se and britta.sannel@natgeo.su.se.

Do you also have interesting new research that you would like to share? Please contact bolin@su.se.

#### **BOLIN CENTRE EVENTS**

18 FEB Seminar: Methods for analysis of non-stationary hydrological time series

Speaker: Dr. Kristina Potočki\*, CE, University of Zagreb

Time & place: Feb 18 at 12:00-12:45 in the Navarino room, T-house,

level 2, Geoscience buildning

Traditional approach to the hydrological time series analysis usually starts form the assumptions of linearity and stationarity of hydrological processes that often cannot be met. Hydrological time series analysis in time-frequency domain with different signal processing methods, such as short time Fourier transform and wavelet transform, offers a good complementary approach to the traditional statistical analysis. These methods can be used for preliminary analysis of data and uncovering of non-stationary patterns, but also as a preprocessing tool in series black-box modeling. Examples of the wavelet transform application for the analysis and forblack-box modeling of water level, discharge and suspended sediment series are given and results are compared with traditional statistical approach. Detection of trends and cycleson different time scales with presented methods can help uncovering and better understanding of temporal patterns in hydrological time series. Revealed patterns can be then related to the climate change and anthropological impacts on fluvial processes.

# In Swedish | Klimatarenan workshop: Fokus på utsläpp i hela värdekedjan



Welcome to attend The Bolin Centre Climate Arena workshop on March 4th with the theme "Calculations of organizations carbon footprint" - Emissions in the entire value chain (Scope 3)".

When & where: Aula Magna, at 12h00-16h00 (drop-in lunch from 11.00) The workshop will be in Swedish.

The Bolin Centre Climate Arena is a platform where researchers and external partners meet and discuss - and the external partners wants to meet you! We will start the workshop with presentations and end with discussions. The presentations will involve:

- Introduction to climate calculations throughout the whole value chain
- Presentation on Science Based Targets, the Paris Agreement and business perspectives on climate calculations and measures
- Presentations from the ICT sector and the fashion industry

Elisabeth Däcker is the Bolin Centre contact for this project. Please contact Elisabeth if you would like to take part in the workshop and/or if you have any thoughts or questions, <u>elisabeth.dacker@qeo.su.se</u>.



#### **Bolin Centre Seminar Series | Research Area 5**

**Titel:** Reconstructing climate and environmental changes from the Lateglacial to modern times from lake and peat sediments **Speaker:** Minna Väliranta, Environmental Change Research Unit (ECRU), Ecosystems and Environment Research Programme, University of Helsinki, Finland

Time & place: March 4 at 13h00-14h00, Ahlmann Hall, Geoscience Building

Abstract: to be announced. Fika will be served, welcome!



#### **Bolin Centre Seminar Series | Research Area 2**

**Time & place:** March 23 at 13h00–14h00, Ahlmann Hall, Geoscience Building.

Please save the date - more info to come. Fika will be served, welcome!



#### **Bolin Centre Seminar Series | Research Area 3**

**Titel:** Reconstructing glacier-climate interactions from the glacial landform record

**Speaker:** Benjamin Chandler, Department of Physical Geography, Stockholm University

**Time & place:** April 29 at 13h00–14h00, Ahlmann Hall, Geoscience Building.

Abstract: to be announced. Fika will be served, welcome!



#### In Swedish | Klimatfestivalen

I år låter vi Klimatfestivalen växa från tre till fem dagar. Första dagen blir en dag för skollärare med fokus på fortbildning och det lärarmaterial som Bolincentret har tagit fram. Dag två-fyra blir det ordinarie klimatfestival i Geovetenskapens hus. Nytt för i år är att vi sista dagen firar klimatvetenskapen med ett stort event i Kungsträdgården! Dagen erbjuder både vetenskapliga inslag och musikuppträdanden - boka in det i kalendern redan nu.



#### **Bolin Days**

Welcome to this year's Bolin Days. If you are interested in Climate and the Earth Sciences, you are welcome to join us. We offer an interesting scientific programme and lots of fun social events.

#### OTHER EVENTS, INFO, ETC.



#### Reminder - Spring Call deadline February 20

The deadline for the Arctic Avenue Spring Call 2020 is approaching - **February 20.** Specific information for the call and application form is downloadable HERE». Please send the application to the Arctic Avenue Steering Committee by email to <a href="mailto:annika.granebeck@su.se">and kaarina.weckstrom@helsinki.fi</a>. State *Application for Arctic Avenue funding* in the subject heading. Calls are also planned for autumn 2020 and spring 2021.

Welcome with your application!

# C3S User Learning Services training event, Norway/Sweden

Are you interested to discover new climate data? Have you heard about Copernicus Climate Data Store (CDS) and want to learn more about it? Or, you are working with climate services and climate adaptation. Then, this



C3S User Learning Services training event, Norway / Swede

#### Information and registration»



Information from Stockholm University: Data Management Plan – Why write one and how to do it

See the seminar on drafting a Data Management Plan (DMP) – an effective means of gaining control over how research data is managed, stored and located.

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 in coming Weekly News, you are welcome to send these to <a href="mailto:bolin@su.se">bolin@su.se</a>.

Editor: Annika Granebeck

Foto: Martin Jakobsson, SU, Britta Sannel, Eva Dalin

#### Stay updated

Find news and upcoming events at  $\underline{bolin.su.se}$  and follow us on  $\underline{Twitter}$ ,  $\underline{Facebook}$  and  $\underline{YouTube}$ .





