



ECRA: Knowledge for climate action

Newsletter Autumn 2021

Dear Readers,

Two times per year, we have the pleasure to deliver recent updates from the ECRA community and the Brussels network into your inbox. In this newsletter, we point to our **upcoming General Assembly** on 8 and 9 March 2022, which was delayed for a year because of COVID-19. (In March 2021, ECRA organised an online event celebrating its ten-year-birthday, more on this in the next pages).

In cooperation with BlueAction, ECRA organises a series of informal webinars called **Climate Coffees**. Six events took already place, and the series continued in September.

Since July, we have a seat in the Advisory Panel for the European Ocean Observing System (EOOS), and are also active in various activities, e.g., Destination Earth.

We have collected some videos that might be interesting or educational for you or your network.

Read more on all of this, and more, in the next pages.

Our Secretariat is always heppy to get in touch with you, should you have any questions.

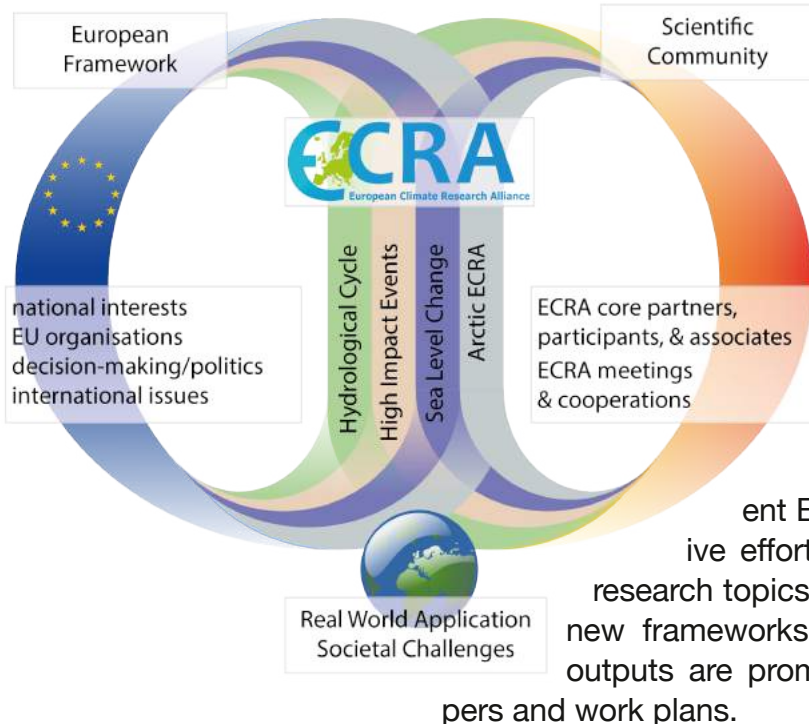
Kind regards,
and see you soon!



Prof. Peter Braesicke, Chair of ECRA
Prof. Len Sheffrey, Co-Chair of ECRA

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What is ECRA?

The European Climate Research Alliance (ECRA) is an association of leading European **research institutions**. ECRA's objective is to **bring together, expand and optimise expertise in climate research through a bottom-up approach**. The initiative is a platform for joint research planning by sharing existing national research capacities and infrastructures. ECRA acts as a unified voice for climate research in Europe.

Collaborative Programmes (CPs) represent ECRA core activities. The CPs are collaborative efforts of ECRA partners, aiming to identify key research topics of high scientific relevance, and to establish new frameworks of coordinated international research. CP outputs are promulgated through publications, i.e. whitepapers and work plans.



CP Arctic [ARC]



CP High Impact Events [HIE]



CP Sea Level Change and Coastal Impacts [SLC]



CP Changes in the Hydrological Cycle [CHC]

Our upcoming ECRA General Assembly

Originally, we planned to welcome you in person at our General Assembly in March 2021 in Brussels. As many things in the time of the current COVID pandemic, we were forced to reshape the event to fit the online format. On 10 March 2021, ECRA celebrated its birthday by hosting the **ECRA 10 years anniversary event**.

We welcomed high-level speakers such as Jean-Eric **Paquet**, Director-General of DG-RTD, European Commission; Connie **Hedegaard**, the Board Chair on the Mission 'Adaptation to Climate Change including societal change'; Michel **Rixen** from the WMO; Carlo **Buontempo** from the ECMWF; and more. The event was kindly moderated by the well-known former BBC weather moderator Peter **Gibbs**.

« We need climate science, in terms of knowledge, but we also need climate science and scientists in terms of impacting on choices made by policy-makers, and the willingness of society to change. Jean-Eric Paquet

« It is immensely impactful what the climate community, the scientific climate community has been achieving over the recent many years. Connie Hedegaard

We invite you to have a look at the key moments, compiled into a 18 minute video on YouTube: youtu.be/blUMYf8kTXQ.

The event website, with more information: ecra-climate.eu/10y.

The theme of the event was **Climate Research: reflecting on the past and planning for the future**, which builds up to our upcoming General Assembly. We plan to welcome you in Brussels, at the Square Brussels venue, on 8 and 9 March 2022! (However, changes due to COVID are possible.)

Extreme events under climate change – understanding, communicating, and managing the risks - The theme of the GA will be extreme events, Climate Change, and how the risks coming with them can be understood by science, communicated between scientists and decision-makers in order to manage the risk.

For the first day (afternoon and evening), we will have high-level keynotes and panel discussion.

The second day will include three parts:

(1) Climate Processes and Research Needs - or: “*What do we know?*” (2) Risk management - or: “*What do we need?*” and (3) Communicating uncertainties - or: “*How can we put things together?*”

Event site: ecra-climate.eu/GA22

Climate Coffees

ECRA and Blue-Action invite colleagues from across the climate science community to join us for a new series of regular online knowledge exchange events.

These relaxed meetings are an opportunity to share ideas, discuss methods and communicate new results.

Second set starting 16 September 2021.
All speakers and topics: ecra-climate.eu/ClimateCoffee
Sign up: coffee@ecra-climate.eu



The Blue-Action project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 727852



ECRA Climate Coffees Series

ECRA, in cooperation with the EU-funded Blue-Action project, continues their cooperation on informal short webinars, where e.g., early-career scientists, experienced leaders of their fields, have a venue to present their research and share and discuss it. The Climate Coffees always take place on Thursdays 11:00 Brussels time, the sessions are open to all. If you have questions or want a slot to **speak yourself**, feel free to contact us at coffee@ecra-climate.eu.

Our Agenda:

16. September: Rasmus Benestad, Norwegian Meteorological Institute, Norway, on the *Norwegian approach to Downscaling*

30. September: Ralf Ludwig, Ludwig-Maximilians-University, Munich; *Impact and attribution of extreme events using large, hydro-meteorological model ensembles*

14. October: Magdalena Mittermeier, Ludwig-Maximilians-University, Munich; *Studying Climate Change Effects on Extreme Weather Patterns using Neural Networks*

28. October: Len Shaffrey, National Centre for Atmospheric Science, University of Reading,

on: *How will climate change affect North Atlantic storms?*

11. November: Lingling Suo, NERSC, Norway, on *Arctic tropospheric warming: drivers and modulators*

Thursday, **25. November** 2021: Tiziano Distanza, University of Pisa (LOCOMOTION project), on: *Exploring synergies and trade-offs of policy interventions under the pressure of rapid climate change*

Thursday, **09. December** 2021: Neven Fuckar, University of Oxford, *On land and population exposure to heatwaves in a changing climate*

Thursday, **23. December** 2021: Dim Coumou, Vrije Universiteit Amsterdam, *Is global warming making summer circulation more persistent?*

Links and Topics of the Spring Coffees were: Marine cold air outbreaks and their predictability (Yulia Polkova), The role of sea ice initialization on the Arctic decadal prediction skill with EC-Earth3 (Tian Tian), Direct winter atmospheric response to Arctic sea-ice loss and its modulation by the QBO (Amélie Simon), and many more! (click here).

ECRA and EOOS

EOOS, the **European Ocean Observing System**, is a coordinating framework designed to align and integrate Europe's ocean observing capacity, promote a systematic and collaborative approach to collecting information on the state and variability of our seas, and underpin sustainable management of the marine environment and its resources.

In May 2021, ECRA was contacted by the EOOS Secretariat in order to join the **EOOS Advisory Committee**. The Chair of ECRA, Prof. Peter **Braesicke** has now accepted this important role in the EOOS ecosystem.

More information about EOOS and the EOOS Advisory Panel can be found [here](#).

Climate Change & Water 2022

From 25 to 27 May 2021, ECRA took part in the Climate Change & Water Conference, hosted and organised by the French Université de Tours. The session of 26 May was co-hosted by ECRA, and our Chair as well as high-level representatives from our Governing Board joined in for presentations, as well as for the panel discussion on "Hydrometeorological Extremes – Prevision and management of impacts". Due to the ongoing pandemic, the conference took place online.

For 2022, the conference is planned to take place as an *in-person meeting* in Tours, France.

Save the date:

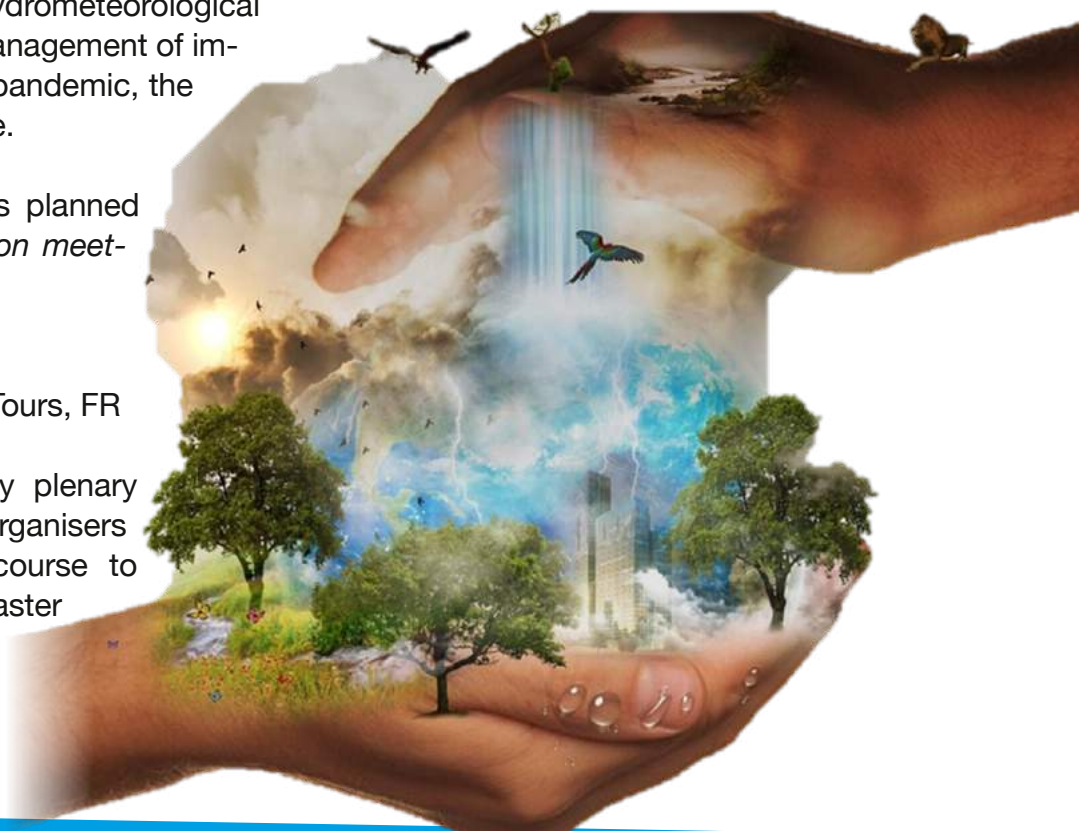
31 May to 2 June 2022, Tours, FR

These days will see mostly plenary sessions. On 30 May, the organisers will host an introduction course to hydrological modelling for master or PhD candidates, or anyone interested.

The state of planning for the conference:
ccw2022.sciencesconf.org

Call deadline extended!

Proposals for papers and posters should be submitted before **December 5** on the conference website of CCW2022



Education: Videos

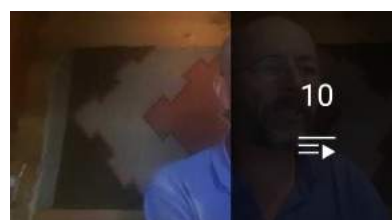
One of ECRA's aims is to educate: We want to share our knowledge and information with early-career and later-stage scientists, and everyone who wants to learn about topics around climate science.



ECRA 10 year - Event Summary (18min)



ECRA 10 year - Personal Stories Video



Recommended Videos

[VIEW FULL PLAYLIST](#)

On our YouTube channel (<https://www.youtube.com/channel/UC5yrpXUilxslI5KGFCv0huw>), you can find an explanatory video about ECRA, and event videos, e.g, a full recording and "best-of" video, and other material of our 10-year anniversary meeting.

Here, you can find selected videos explaining various topics, compiled in a playlist. For example: 'A comprehensive downscaling strategy for climate change adaptation' by Rasmus Benestad.

The ARSINOE project

ARSINOE Climate-Resilient Regions through Systemic Solutions and Innovations

This brand-new Horizon 2020 project called ARSINOE kicked off on 01 October 2021. It is financed by the European Commission with a total budget of 15M€ and is coordinated by the University of Thessaly, Greece. It brings together 41 partners from 15 countries and intends to be a game-changer for shaping pathways to resilience by delivering regional innovation packages that build an ecosystem to develop and implement innovative climate change adaptation measures and solutions across Europe.

The Technical University of Denmark (DTU) and the Ludwig Maximilian University of Munich (LMU) are active members of ECRA - they



jointly deliver climate data to inform climate change adaptation pathways, including state-of-the-art knowledge and climate projections relating to extremes such as droughts, pluvial and fluvial floods, storms and storm surges.

For further information about the project, check out the ARSINOE YouTube video.

The Project Coordinator is Prof. Chrysi Laspidou, University of Thessaly, Greece. Email: laspidou@uth.gr

The PAUL project

ICOS develops a world-class greenhouse gas measurement concept for cities

ICOS has been granted an EU funded project to develop a greenhouse gas measurement system for urban areas. The aim is to bring together and evaluate different measurement approaches, and determine fossil fuel related emissions from the rest of the carbon dioxide in the atmosphere. The 4-year project aims to develop tools and services for cities to execute their climate action plans.

To test the feasibility of different measurement approaches in different areas, three cities of different size have been selected as pilots: Paris, Munich and Zürich. Twelve other cities – Helsinki, Copenhagen, Rotterdam, Antwerp, Krakow, Brno, Heidelberg, Basel, Porto, Barcelona, Rome and Athens, - are joining the city network. The city network and its experts will allow the project to define and design fit-for-purpose services for cities, helping in their aims to reduce fossil fuel emissions and other climate actions.

More information:

<https://www.icos-cp.eu/event/1064>

The PAUL project connects to other European and global frameworks and initiatives:

As other ICOS operations, the PAUL project (*'Pilot Application in Urban Landscapes – towards integrated city observatories for greenhouse gases'*) aims to support the European Green Deal and the Paris Agreement. It is designed to fit in the context of the European Union's Green CO2 Reports, that outline the additional needs to build a future anthropogenic CO₂ Emissions Monitoring & Verification Support (MVS) Capacity.

The PAUL project will work together with the variety of global research initiatives and projects that are actively working on the design and optimisation of observational networks in intense emission areas. The project will also connect closely to the IG3IS initiative of the World Meteorological Organisation that currently compiles good practise guidelines for urban greenhouse gas observations and to similar endeavours for air quality monitoring in cities.

The project will provide a concept for the long-term sustainability of greenhouse gas observations in urban areas.

The CoCliCo project



CoCliCo Coastal ClimateCore Service

This project was launched on 13 October 2021 by Gianmaria Sannino of the ECRA team. Its objective is *"to improve decision-making on coastal risk management and adaptation, by establishing an integrated core service dedicated to coastal adaptation to sea-level rise"*

A web-based, distributed and interoperable open European coastal risk data and mapping web-platform, with existing and new geospatial data relevant to coastal risks and adaptation are the mentioned objectives.

Read more on the Cordis **website**:

<https://cordis.europa.eu/project/id/101003598>

ECRA Personalia

The ECRA Community is a very active community, which also brings occasional changes to the core team members of the ECRA Executive Committee and members of the Collaborative Programmes.

Gianmaria Sannino, after more than six years at ECRA in the position of co-chair in the CP for Sea-Level Change is stepping down.

Alessandro Dell'Aquila is following his footsteps and now represents ENEA and Italy.

Lars H. Smedsrud, longrunning co-chair of the Arctic CP is replaced by **Einar Ólason** from the Norwegian Met Office. He and Thomas Bracegirdle (BAS, UK) are soon starting to be the two co-chairs of the Arctic / Polar CP which will be reconceptualised.

How Will Climate Change Impact North Atlantic Storms?

The Royal Meteorological Society (RMets) has recently published its 14th Climate Science **Briefing Paper** on North Atlantic Storms in relation to Climate Change. The paper - and a

new **podcast** episode on this topic - can be found here:

<https://www.rmets.org/publication/how-will-climate-change-impact-north-atlantic-storms>

ECRA Side Event at COP26



**UN CLIMATE
CHANGE
CONFERENCE
UK 2021**

The 2021 United Nations Climate Change Conference (COP26) took place from Oct 31, 2021 – Fri, Nov 12, 2021.

On Nov 01, ECRA organised a side event with the title

The Journey from Scientific insights to Societal Action.

To tackle climate change effectively, it is important that all levels of society have an understanding of climate change, and its risks and impacts. This session took a journey from new scientific research findings about net-zero futures and climate change impacts, discussing recent developments in communication, education and public engagement, to arrive at policy and action.

The event's speakers were from:
ECRA, the European Climate Research Al-

liance - a network of climate scientists of Europe; **EUA**, the European University Association - representing more than 800 universities and national rectors' conferences in 48 European countries; **CMCC**, the Euro-Mediterranean Center on Climate Change - presenting outcomes of the projects SOCLIMPACT, COACCH and PESETA IV; **IIASA**, the International Institute for Applied Systems Analysis - presenting ENGAGE project results; and last but not least **CPA**, the Climate Psychology Alliance - a network exploring the connection between climate science and the human dimension. Nadine Andrews presented and will also join our General Assembly in March 2021, hosting a workshop on this topic.

The **recording** can be found
at the event site:
<https://www.cop26eusideevents.eu/>

Publications

How to deal successfully with the GDPR in a specific environment that is often international, funded by many resources, having their specific tasks, missions and cultures?

Kolman J. (2019) Several Aspects of GDPR in the World of Research – What Can We Expect?

New Lancet Countdown Policy Brief for Germany continues to show considerable need for action: Germany is not sufficiently prepared for the **health challenges posed by climate change**. Despite a growing awareness among political leaders for the urgency of the situation, concrete measures to avoid climate-related health risks and to combat climate change have yet to be taken.

Press release Helmholtz München

Antarctic sea-ice plays an important role in regulating Earth's energy budget:

Using decades of satellite observations, Finnish and Norwegian scientists calculated the **warming effect caused by changes in the snow and ice cover of the Arctic and Antarctic regions**. The expansion of Antarctic sea-ice between 2000 and 2015 balanced out the melting of the Arctic region by creating a cooling effect, but significant reduction in Antarctic sea-ice during 2016–2018 completely reversed the trend. These results highlight the previously little-known but important role of the Antarctic sea-ice in regulating Earth's energy budget.

Press release FMI

Machine learning helps to **predict blackouts caused by storms**:

Train delays related to adverse weather can also be predicted with good quality training data, a new thesis shows.

News FMI

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For any question...

European Climate Research Alliance

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