



# **Annual Seminar 2023**

## **Programme**

# Monday Agenda

The time displays according to the selected time zone.

## The selected timezone is Europe/London

13:15 to 14:00	<b>Registration and welcome</b>	
13:15 to 13:45	<b>Registration and coffee</b> Weather Room	
13:45 to 14:00	<b>Welcome and opening remarks</b> <a href="#">Video recording</a>	Florence Rabier (ECMWF)
14:00 to 17:15	<b>Session 1: Setting the scene</b> Chair: Bill Bell Co-Chair: Hans Hersbach	
14:00 to 14:15	<b>Seminar walk through</b> <a href="#">Video recording</a>	Bill Bell (ECMWF) Hans Hersbach (ECMWF)
14:15 to 15:00	<b>Introduction to reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Dick Dee (Planet-A consulting)
15:00 to 15:45	<b>Coffee break</b>	
15:45 to 16:30	<b>Cutting-edge climate applications built upon atmospheric reanalysis: a user's perspective</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Chiara Cagnazzo (ECMWF)
16:30 to 17:15	<b>Towards Earth-system reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Patricia de Rosnay (ECMWF)
17:15 to 19:00	<b>Poster session and ice breaker</b>	
17:15 to 17:40	<b>Express poster presentations</b> <a href="#">Video recording</a>	
17:40 to 19:00	<b>Poster session and ice breaker</b>	

# Tuesday

## Agenda

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09:15 to 14:00	<b>Session 2: Overview of reanalysis activities</b> Chair: Tony McNally Co-Chair: Paul Poli	
09:15 to 10:00	<b>Reanalysis activities at the NASA Global Modeling and Assimilation Office</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Amal El Akkraoui (NASA)
10:00 to 10:45	<b>ECMWF reanalysis activities: from research to operations</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Hans Hersbach (ECMWF)
10:45 to 11:15	<b>Group photo and coffee break</b>	
11:15 to 12:00	<b>Ocean and sea-ice reanalyses</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Hao Zuo (ECMWF)
12:00 to 12:45	<b>The Land Surface in Earth System Reanalysis</b> <a href="#">Video recording</a>	Rolf Reichle (NASA Goddard Space Flight Center)
12:45 to 14:00	<b>Lunch</b>	
14:00 to 16:00	<b>Session 2: Overview of reanalysis activities (cont.)</b> Chair: Antje Inness Co-Chair: Patricia de Rosnay	
14:00 to 14:45	<b>The value of global hydrological reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Christel Prudhomme (ECMWF)
14:45 to 15:30	<b>Atmospheric composition reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Kazuyuki Miyazaki (NASA JPL)

15:30 to 16:00	<b>Coffee break</b>	
16:00 to 17:30	<b>Session 2: Overview of reanalysis activities (cont.)</b> Chair: Hans Hersbach Co-Chair: Chiara Cagnazzo	
16:00 to 16:45	<b>Overview of reanalysis activities: Regional Reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Harald Schyberg (Norwegian Meteorological Institute)
16:45 to 17:30	<b>Centennial reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Laura Slivinski (NOAA)

# Wednesday

## Agenda

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09:15 to 11:15	<b>Session 3: Data assimilation methodology</b> Chair: Patrick Laloyaux Co-Chair: Bill Bell	
09:15 to 10:00	<b>Overview of data assimilation methods</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Femke Vossepoel (Delft University of Technology)
10:00 to 10:45	<b>Diversity in reanalysis products and opportunities for collaboration</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Sergey Frolov (NOAA PSL)
10:45 to 11:15	<b>Coffee break</b>	
11:15 to 14:00	<b>Session 4: Observations</b> Chair: Bill Bell Co-Chair: Patricia de Rosnay	
11:15 to 12:00	<b>To what extent are reanalyses actually constrained by observations?</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Tony McNally (ECMWF)
12:00 to 12:45	<b>Data rescue and reprocessing</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Paul Poli (ECMWF/C3S)
12:45 to 14:00	<b>Lunch</b>	
14:00 to 16:00	<b>Session 5: Historical gridded forcing fields</b> Chair: Hans Hersbach Co-Chair: Antje Inness	
14:00 to 14:45	<b>Reconstruction of sea-surface temperature and sea-ice datasets</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Nick Rayner (Met Office)

14:45 to 15:30	<b>Towards consistent representation of the boundary forcing temporal variability in Earth System Reanalyses, reforecasts and climate integrations</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Magdalena Alonso Balmaseda (ECMWF)
15:30 to 16:00	<b>Coffee break</b>	
16:00 to 17:30	<b>Session 6: Validation and inter-comparison of reanalyses</b> Chair: Chiara Cagnazzo Co-Chair: Bill Bell	
16:00 to 16:45	<b>Evaluation of processes and inter-annual variability in global atmospheric reanalyses</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Michaela Hegglin (Forschungszentrum Jülich / University of Reading)
16:45 to 17:30	<b>Evaluation of ocean reanalyses</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Marie Drévillon (Mercator Ocean)
17:30 to 20:30	<b>Annual Seminar dinner</b>	
17:30 to 18:30	<b>Pre-dinner drinks</b>	
18:30 to 20:30	<b>Annual Seminar dinner</b>	

# Thursday Agenda

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09:15 to 14:00	<b>Session 7: Challenges and research</b> Chair: Magdalena Alonso Balmaseda Co-Chair: Patrick Laloyaux	
09:15 to 10:00	<b>Bias in Reanalysis</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Bill Bell (ECMWF)
10:00 to 10:45	<b>Global reanalysis precipitation datasets for hydrological modelling in data scarce regions: A case study of Kenya</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Maureen Wanzala (Welthungerhilfe (WHH))
10:45 to 11:15	<b>Coffee break</b>	
11:15 to 12:00	<b>Palaeoclimate reconstruction using data assimilation: the ModE-RA data set</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Stefan Brönnimann (University of Bern)
12:00 to 12:45	<b>Long coupled Earth System reanalysis with a focus on ocean and sea ice</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	François Counillon (NERSC/UoB)
12:45 to 14:00	<b>Lunch</b>	
14:00 to 16:00	<b>Session 7: Challenges and research (cont.)</b> Chair: Bill Bell Co-Chair: Patrick Laloyaux	
14:00 to 14:45	<b>Reanalysis: the bedrock of machine learning of the Earth system</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Matthew Chantry (ECMWF)

14:45 to 15:30	<b>Exploiting reanalyses in studies and services related to climatic trends</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Adrian Simmons (ECMWF)
15:30 to 16:00	<b>Coffee break</b>	
16:00 to 17:30	<b>Session 7: Challenges and research (cont.)</b> Chair: Patrick Laloyaux Co-Chair: Paul Poli	
16:00 to 16:45	<b>Extremes in reanalysis and observational products</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Markus Donat (Barcelona Supercomputing Center and ICREA)
16:45 to 17:30	<b>On reanalysis production and quality assurance</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Dinand Schepers (ecmwf)



# Friday Agenda

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09:15 to 13:15	<b>Session 8: Towards consistent Earth System Reanalysis</b> Chair: Patricia de Rosnay Co-Chair: Paul Poli	
09:15 to 10:00	<b>Improving land-atmosphere data assimilation coupling in future reanalyses</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Clara Draper (CIRES / NOAA ESRL PSD)
10:00 to 10:45	<b>Integrated carbon cycle in reanalyses</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Anna Agusti-Panareda (ECMWF)
10:45 to 11:15	<b>Coffee break</b>	
11:15 to 12:00	<b>Development of coupled atmosphere-ocean data assimilation: Achievements and a perspective</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Yosuke Fujii (JMA/MRI)
12:00 to 12:45	<b>Exploiting interface observations in a coupled reanalysis system</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Philip Browne (ECMWF)
12:45 to 13:15	<b>Discussion and final remarks</b> <a href="#">Video recording</a>	Hans Hersbach (ECMWF) Paul Poli (ECMWF/C3S)