



Annual Seminar 2025

Programme

Monday Agenda

Agenda time displays according to the selected time zone.

The selected timezone is Europe/London

11:30 to 12:15	Arrival and registration	
	Plenary: Setting the scene	
12:15 to 12:30	Practicalities	Magdalena Alonso Balmaseda (ECMWF)
12:30 to 12:40	Opening	Florence Rabier (ECMWF)
12:40 to 13:10	On the need to constrain Earth System models using observations	Detlef Stammer (University of Hamburg)
13:10 to 13:30	ECMWF strategy and research directions	Andy Brown (ECMWF)
13:30 to 14:00	Forecasting tools for enhanced Decision making in Eastern Africa	Masilin Gudoshava (IGAD Climate Prediction and Applications Centre)
14:00 to 14:20	Coffee break	
14:20 to 14:50	Advancing Weather and Climate Forecasting for Our Changing World	Gilbert Brunet (Former employee of ECC/BoM and Met Office)
14:50 to 15:20	Sub-seasonal Prediction: Advances, Challenges and Opportunities	Frederic Vitart (ECMWF)
15:20 to 15:50	ENSO as a meeting point between weather and climate forecasting	Magdalena Alonso Balmaseda (ECMWF)
15:50 to 16:20	Machine learning as game changer in forecasting: an overview of approaches and applications	Matthew Chantry (ECMWF)
16:30 to 18:30	Drinks reception	

Tuesday Agenda

Agenda time displays according to the selected time zone.

The selected timezone is Europe/London

	Theme 1: Evolving models and data assimilation capabilities	
08:00 to 08:30	The future of Earth system modelling	Peter Dueben (ECMWF)
08:30 to 09:00	Advancing km-scale models underpinning the Destination Earth Digital Twins	Benoît Vannière (ECMWF)
09:00 to 09:30	AI for Climate Modeling: Present and Future	Christopher Bretherton (Allen Institute for Artificial Intelligence (Ai2))
09:30 to 10:00	Coffee break	
10:00 to 10:30	Title TBC	Alistair Adcroft (NOAA)
10:30 to 11:00	Improving the monitoring of vegetation and drought by land surface models through the assimilation of satellite data	Jean-Christophe Calvet (Meteo-France)
11:00 to 11:30	Towards Regional High-Resolution Weather Forecasting with Machine Learning	Ivar Seierstad (MET Norway)
11:30 to 13:00	Lunch and posters	
13:00 to 13:30	Data Assimilation Methodology for Numerical Weather Prediction: A review of significant advancements and prospects for the future	Daryl Kleist (NOAA/NWS/NCEP/Environmental Modeling Center)

13:30 to 14:00	Progress and prospects on coupled data assimilation, for exploitation of interface observations and in support of climate monitoring and weather prediction	Patricia de Rosnay (ECMWF)
14:00 to 14:30	The ERA6 Reanalysis	Bill Bell (ECMWF)
14:30 to 15:00	Coffee break	
15:00 to 15:30	ECMWF's next ensemble reanalysis system for ocean and sea-ice: ORAS6	Hao Zuo (ECMWF)
15:30 to 16:00	Title TBC	Tony McNally (ECMWF)

Wednesday

Agenda

Agenda displayed in selected time zone

The selected timezone is Europe/London

Theme 2: Serving a future society		
08:00 to 08:30	Title TBC	Matthieu Chevallier (ECMWF)
08:30 to 09:00	Services across time scales and components at MeteoSwiss	Christian M. Grams (Federal Office of Meteorology and Climatology, MeteoSwiss)
09:00 to 09:30	Challenges in transforming traditional weather services to the changing needs of society	Renate Hagedorn (DWD)
09:30 to 10:00	Coffee break	
10:00 to 10:30	Great potential for S2S applications and services: examples from Europe and Africa	Erik Kolstad (NORCE Norwegian Research Centre)
10:30 to 11:00	Understanding, predicting and communicating high impact weather events across Africa	Linda Hiron (National Centre for Atmospheric Science (NCAS), Department of Meteorology, University of Reading)
11:00 to 11:30	The Destination Earth Digital Twin for Climate Change Adaptation	Sebastian Milinski (ECMWF)
11:30 to 13:00	Lunch and posters	
13:00 to 13:30	Title TBC	Sarah Jones (DWD)
13:30 to 14:00	The evolution of climate services and future challenges	Chris Hewitt (World Meteorological Organization)
14:00 to 14:30	TBC	
14:30 to 15:00	Coffee break	

15:00 to 15:30	Title TBC	Dorota Jarosinka
15:30 to 16:00	TBC	
16:00 to 16:30	Title TBC	Francois Wakenhut
16:30 to 17:00	TBC	

Thursday Agenda

Agenda time displays according to the selected time zone.

The selected timezone is Europe/London

	Theme 3: Changing sources of predictability across time scales	
08:00 to 08:30	Perspectives on medium-range predictability - Why does a forecast go wrong?	Linus Magnusson (ECMWF)
08:30 to 09:00	Tropical-extratropical teleconnections: the role of midlatitude synoptic systems	Julian Quinting (Karlsruhe Institute of Technology)
09:00 to 09:30	The role of the stratosphere in extended-range prediction	Daniela Domeisen (University of Lausanne / ETH Zurich)
09:30 to 10:00	Coffee break	
10:00 to 10:30	The role of the ocean in predictability at different lead times	Chris Roberts (ECWMF)
10:30 to 11:00	Some outcomes of extreme event attribution	Pascal Yiou (LSCE, IPSL, France)
11:00 to 11:30	Frontiers in subseasonal to decadal prediction: A WCRP perspective	Bill Merryfield (ECCC/CCCma)
11:30 to 13:00	Lunch and posters	
13:00 to 13:30	Representing uncertainties in ensemble forecasts	Martin Leutbecher (ECMWF)
13:30 to 14:00	Title TBC	Christopher O'Reilly (University of Reading)
14:00 to 14:30	Machine-learned weather forecasting with AIFS	Simon Lang (ECMWF)
14:30 to 15:00	Coffee break	

15:00 to 15:30	Seasonal forecasts in a changing climate	Antje Weisheimer
15:30 to 16:00	Tropical Pacific trends in seasonal hindcasts and implications for predictions of the 2020-2022 triple-dip La Niña	Michael Mayer
16:00 to 16:30	Making the impact of climate change on weather and environmental extremes more tangible using storylines	Thomas Jung (AWI)
16:30 to 17:00	Understanding and Evaluating Trust in AI forecasts	Amy McGovern

Friday Agenda

All times are displayed according to the selected time zone.

The selected timezone is Europe/London

	Plenary: Scoping the future of forecasting	
08:00 to 08:30	Seasonal forecasting: models, reanalyses, forcings	Tim Stockdale (ECMWF)
08:30 to 09:00	Title TBC	Francisco Doblas-Reyes (BSC)
09:00 to 09:30	Quantifying trends in extreme weather risk using operational ensemble forecasting systems	Myles Allen (University of Oxford)
09:30 to 10:00	Coffee break	
10:00 to 10:30	TBC	
10:30 to 11:30	Round table discussion	