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
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 ECCC/BoM and Met Office)
14:50 to 15:20	**Sub-seasonal Prediction: Advances, Challenges and Opportunities**	Frederic Vitart (ECMWF)
15:20 to 15:50	**Title TBC**	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

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	Theme 1: Evolving models and data assimilation capabilities	
09:00 to 09:30	**The future of Earth system modelling**	Peter Dueben (ECMWF)
09:30 to 10:00	**Advancing km-scale models underpinning the Destination Earth Digital Twins**	Benoît Vannière (ECMWF)
10:00 to 10:30	**AI for Climate Modeling: Present and Future**	Christopher Bretherton (Allen Institute for Artificial Intelligence (Ai2))
10:30 to 11:00	**Coffee break**	
11:00 to 11:30	**Title TBC**	Alistair Adcroft (NOAA)
11:30 to 12:00	**Improving the monitoring of vegetation and drought by land surface models through the assimilation of satellite data**	Jean-Christophe Calvet (Meteo-France)
12:00 to 12:30	**Towards Regional High-Resolution Weather Forecasting with Machine Learning**	Ivar Seierstad (MET Norway)
12:30 to 14:00	**Lunch and posters**	
14:00 to 14:30	**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)

14:30 to 15:00	**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)
15:00 to 15:30	**The ERA6 Reanalysis**	Bill Bell (ECMWF)
15:30 to 16:00	**Coffee break**	
16:00 to 16:30	**Title TBC**	Hao Zuo (ECMWF)
16:30 to 17:00	**Title TBC**	Tony McNally (ECMWF)

Wednesday Agenda

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	Theme 2: Serving a future society	
09:00 to 09:30	**Title TBC**	Matthieu Chevallier (ECMWF)
09:30 to 10:00	**Services across time scales and components at MeteoSwiss**	Christian M. Grams (Federal Office of Meteorology and Climatology, MeteoSwiss)
10:00 to 10:30	**Challenges in transforming traditional weather services to the changing needs of society**	Renate Hagedorn (DWD)
10:30 to 11:00	**Coffee break**	
11:00 to 11:30	**Great potential for S2S applications and services: examples from Europe and Africa**	Erik Kolstad (NORCE Norwegian Research Centre)
11:30 to 12:00	**Understanding, predicting and communicating high impact weather events across Africa**	Linda Hirons (National Centre for Atmospheric Science (NCAS), Department of Meteorology, University of Reading)
12:00 to 12:30	**The Destination Earth Digital Twin for Climate Change Adaptation**	Sebastian Milinski (ECMWF) Sebastian Milinsky (ECMWF)
12:30 to 14:00	**Lunch and posters**	
14:00 to 14:30	**TBC**	
14:30 to 15:00	**The evolution of climate services and future challenges**	Chris Hewitt (World Meteorological Organization)
15:00 to 15:30	**TBC**	
15:30 to 16:00	**Coffee break**	

16:00 to 16:30	**TBC**
16:30 to 17:00	**TBC**
17:00 to 17:30	**TBC**
17:30 to 18:00	**TBC**

Thursday Agenda

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	Theme 3: Changing sources of predictability across time scales	
09:00 to 09:30	**Perspectives on medium-range predictability – Why does a forecast go wrong?**	Linus Magnusson (ECMWF)
09:30 to 10:00	**Tropical-extratropical teleconnections: the role of midlatitude synoptic systems**	Julian Quinting (Karlsruhe Institute of Technology)
10:00 to 10:30	**The role of the stratosphere in extended-range prediction**	Daniela Domeisen (University of Lausanne / ETH Zurich)
10:30 to 11:00	**Coffee break**	
11:00 to 11:30	**The role of the ocean in predictability at different lead times**	Chris Roberts (ECWMF)
11:30 to 12:00	**Some outcomes of extreme event attribution**	Pascal Yiou (LSCE, IPSL, France)
12:00 to 12:30	**Frontiers in subseasonal to decadal prediction: A WCRP perspective**	Bill Merryfield (ECCC/CCCma)
12:30 to 14:00	**Lunch and posters**	
14:00 to 14:30	**Representing uncertainties in ensemble forecasts**	Martin Leutbecher (ECMWF)
14:30 to 15:00	**Title TBC**	Christopher O'Reilly (University of Reading)
15:00 to 15:30	**Machine-learned weather forecasting with AIFS**	Simon Lang (ECMWF)
15:30 to 16:00	**Coffee break**	

16:00 to 16:30	**Seasonal forecasts in a changing climate**	Antje Weisheimer (ECMWF & University of Oxford)
16:30 to 17:00	**Tropical Pacific trends in seasonal hindcasts and implications for predictions of the 2020-2022 triple-dip La Niña**	Michael Mayer (ECMWF)
17:00 to 17:30	**Making the impact of climate change on weather and environmental extremes more tangible using storylines**	Thomas Jung (AWI)
17:30 to 18:00	**Title TBC**	Amy McGovern (University of Oklahoma)

Friday
Agenda

	Plenary: Scoping the future of forecasting	
09:00 to 09:30	**Title TBC**	Tim Stockdale (ECMWF)
09:30 to 10:00	**Title TBC**	Francisco Doblas-Reyes (BSC)
10:00 to 10:30	**Title TBC**	Myles Allen (University of Oxford)
10:30 to 11:00	**Coffee break**	
11:00 to 11:30	**TBC**	
11:30 to 12:30	**Round table discussion**	