

# **Using ECMWF's Forecasts (UEF2023)**

**Programme** 

### Monday Agenda

The time displays according to the selected time zone.

| 13:00 to 14:15 | Opening   |                                 |
|----------------|---|---------------------------------|
| 13:00 to 14:00 | Registration and coffee   |                                 |
| 14:00 to 14:10 | Welcome<br>Video recording  | Florence Rabier (ECMWF)         |
| 14:10 to 14:15 | Housekeeping  | Becky Hemingway (ECMWF)         |
| 14:15 to 16:10 | Themed session: ECMWF Updates<br>Chair: Becky Hemingway (ECMWF)                 |                                 |
| 14:15 to 14:40 | What does the future hold? Presentation slides Video recording                  | Florian Pappenberger<br>(ECMWF) |
| 14:40 to 15:05 | ECMWF research progress and plan<br>Presentation slides<br>Video recording      | Stephen English (ECMWF)         |
| 15:05 to 15:35 | Coffee break  |                                 |
| 15:35 to 15:45 | Ensemble forecasting: Introducing the theme Presentation slides Video recording | Becky Hemingway (ECMWF)         |
| 15:45 to 16:10 | ECMWF's ensemble forecasts Presentation slides Video recording                  | Simon Lang (ECMWF)              |
| 16:10 to 16:50 | Invited Speaker<br>Chair: Becky Hemingway (ECMWF)                               |                                 |

| 16:10 to 16:50 | Ensemble forecasting with limited-area models: the challenge of the high-resolution Presentation slides Video recording | Chiara Marsigli (DWD) |
|----------------|---|-----------------------|
| 16:50 to 18:30 | Poster session  |                       |
| 16:50 to 18:00 | Poster session and drinks reception in the Weather Room   |                       |

### Tuesday Agenda

The time displays according to the selected time zone.

| 09:00 to 09:40 | Invited speaker Chair: Sarah-Jane Lock (ECMWF)   |   |  |
|----------------|--|---|--|
| 09:00 to 09:40 | Exploiting Ensemble NWP Forecasts Presentation slides Video recording  | Ken Mylne (Met Office)  |  |
| 09:40 to 10:50 | Themed session: Using ensemble models and data<br>Chair: Sarah-Jane Lock (ECMWF)   |   |  |
| 09:40 to 10:00 | Processing ECMWF Ensemble Data for use in Met Office Systems Presentation slides Video recording   | Simon Boardman (Met<br>Office)  |  |
| 10:00 to 10:20 | Can understanding why ensembles are under-dispersive help when forecasting?  Presentation slides   | Isla Finney (Lake Street<br>Consulting Ltd)                                       |  |
| 10:20 to 10:40 | Using expired weather forecasts to supply up to 10 000 years of weather data for renewable modelling Presentation slides Video recording | Petr Dolezal (University of<br>Cambridge)   |  |
| 10:40 to 10:50 | Group photo  |   |  |
| 10:50 to 11:30 | Coffee break   |   |  |
| 11:30 to 14:00 | Themed session: Ensemble forecast applications and products Chair: Milana Vuckovic (ECMWF)   |   |  |
| 11:30 to 11:50 | Clustering technique considering temporal coherence of ensemble members  Presentation slides  Video recording                            | Kosuke Ono (Meteorological<br>research institute, Japan<br>Meteorological Agency) |  |

| 11:50 to 12:20 | The use of ECMWF ensembles within a new seamless blended multi-model version of the Met Office's probabilistic weather pattern forecasting tool Presentation slides Video recording | Robert Neal (Met Office)  |
|----------------|---|---|
| 12:20 to 12:40 | Using ensemble models to provide a deterministic forecast in an operational context  Presentation slides  Video recording   | Alexandre Trajan (Météo-<br>France)   |
| 12:40 to 13:00 | Evaluation of convective storm predictors in mainland Portugal based on ECMWF ensemble and deterministic forecasts Presentation slides Video recording                              | Margarida Belo-Pereira (<br>Portuguese Institute of Sea<br>and Atmosphere (IPMA)) |
| 13:00 to 14:00 | Lunch break   |   |
| 14:00 to 15:20 | Themed session (continued): ECMWF Updates Chair: Becky Hemingway (ECMWF)  |   |
| 14:00 to 14:25 | ECMWF product development Presentation slides Video recording   | Matthieu Chevallier<br>(ECMWF)  |
| 14:25 to 14:50 | ECMWF forecast performance Presentation slides Video recording  | Thomas Haiden (ECMWF)   |
| 14:50 to 15:20 | Coffee break  |   |
| 15:20 to 17:00 | Interactive session   |   |
| 15:20 to 17:00 | User Voice Corner Presentation by Tim Hewson followed by discussions led by ECMWF staff   | Tim Hewson (ECMWF)  |
|                | <u>Presentation slides</u><br><u>Video recording</u>  |   |
| 18:30 to 20:30 | UEF Dinner  |   |
| 18:30 to 20:30 | Côte Brasserie (Reading Town Centre) For pre-registered participants only   |   |

# Wednesday Agenda

The time displays according to the selected time zone.

| 09:00 to 11:10 | Themed session: Ensemble based decision making and impact forecasting Chair: Matthieu Chevallier (ECMWF)  |  |
|----------------|---|--|
| 09:00 to 09:40 | Invited speaker: Probabilistic Hazard Information and Related Proposed Advancements in US Severe Weather Warnings Presentation slides Video recording | Patrick Campbell (University<br>of Oklahoma / CIWRO /<br>NSSL) |
| 09:40 to 10:00 | Approaches for making ensemble forecasting based services more suitable to end-users' needs  Presentation slides  Video recording                     | Matteo Ponzano (Météo-<br>France, Meteorological<br>Services)  |
| 10:00 to 10:20 | Development of heat wave impact-based forecast guidance using multi-model ensemble system  Presentation slides  Video recording                       | Hyun-Cheol Shin (Korea<br>Meteorological<br>Administration)    |
| 10:20 to 10:40 | Assessing the impact of weather forecast uncertainties in crop water stress model predictions Presentation slides Video recording                     | Bachar Tarraf (CNRM, Météo<br>France)                          |
| 10:40 to 11:20 | Coffee break  |  |
| 11:10 to 14:00 | Themed session: Re-forecasting<br>Chair: Chris Roberts (ECMWF)  |  |
| 11:20 to 11:40 | Upgrades to medium/extended range reforecasts and the SEAS6 configuration: an update Presentation slides Video recording                              | Magdalena Alonso<br>Balmaseda (ECMWF)                          |
|                |   |  |

| 11:40 to 11:50 | User presentation: Verifying ECMWF's extended-range (re)forecasts: from large-scale weather to local extremes Presentation slides Video recording         | Dominik Büeler (ETH Zurich)   |
|----------------|---|---|
| 11:50 to 13:00 | Re-forecasting plenary discussion<br>Magdalena Alonso Balmaseda (ECMWF)<br>Frederic Vitart (ECMWF)<br>Tim Hewson (ECMWF)<br>Dominik Büeler (ETH Zurich)   |   |
| 13:00 to 14:00 | Lunch break   |   |
| 14:00 to 16:00 | Themed session: Sub-Seasonal to Seasona<br>Chair: Stijn Vermoote (ECMWF)  | al to Climate   |
| 14:00 to 14:20 | Seasonal forecasts from the Copernicus<br>Climate Change Service (C3S)<br>Presentation slides<br>Video recording  | Anca Brookshaw (ECMWF)  |
| 14:20 to 14:40 | Post-processing of seasonal meteorological forecasts using fuzzy logic; application to the Jucar River Basin District Presentation slides Video recording | Dariana Isamel Avila<br>Velasquez (Universitat<br>Politècnica de València,<br>Institute of Water and<br>Environmental Engineering<br>(IIAMA)) |
| 14:40 to 15:00 | Assessment of ECMWF SEAS5 Skill for monthly rainfall prediciton over Indonesia Presentation slides Video recording  | Robi Muharsyah (Indonesia<br>Agency for Meteorology,<br>Climatology, and Geophysic)   |
| 15:00 to 15:20 | Subs-seasonal to seasonal forecasts for agriculture in Bangladesh Presentation slides Video recording   | Bob Ammerlaan (Weather<br>Impact BV)  |
| 15:20 to 15:25 | Introduction to the Ensemble discussions  | Becky Hemingway (ECMWF)   |
| 15:25 to 16:00 | Coffee break  |   |
| 16:00 to 17:00 | Ensemble discussions  |   |
| 16:00 to 17:00 | Group discussions on the use of ensembles   |   |

# Thursday Agenda

The time displays according to the selected time zone.

| 09:00 to 11:10 | Themed session: Ensembles and Machine Learning Chair: Umberto Modigliani (ECMWF)  |   |
|----------------|---|---|
| 09:00 to 09:20 | Creating skillful and reliable probabilistic forecasts using machine learning Presentation slides Video recording   | Mariana Clare (ECMWF)                         |
| 09:20 to 09:40 | Post-processing high-resolution weather forecasts with deep learning to create operational ensembles  Presentation slides  Video recording  | Forest Cannon<br>(Tomorrow.io)                |
| 09:40 to 10:00 | Boosting forecast of precipitation extremes with machine learning Presentation slides Video recording   | Federico Grazzini<br>(ARPAE-SIMC)             |
| 10:00 to 10:20 | Evaluation of machine-learning models for medium-range forecasts at ECMWF Presentation slides Video recording   | Linus Magnusson<br>(ECMWF)                    |
| 10:20 to 10:40 | CLINT - An Al-enhanced operational demonstrator of sub-seasonal and seasonal forecasting of detection and attribution of heat waves and warm nights  Presentation slides  Video recording | Harilaos Loukos (The<br>Climate Data Factory) |
| 10:40 to 11:00 | Coffee break  |   |
| 11:10 to 13:00 | Themed session: Ensemble forecast application Chair: Umberto Modigliani (ECMWF)   | ons and products                              |

| 11:10 to 11:30 | Analog Ensemble Forecasting System for Low-Visibility Conditions over the Main Airports of Morocco Presentation slides Video recording   | Badreddine Alaoui<br>(DGM (Morocco)) |
|----------------|--|--------------------------------------|
| 11:30 to 11:50 | Is it possible to identify areas at flash flood risk with global rainfall forecasts? A comparative study between ECMWF ensemble and point-scale post-processed rainfall forecasts  Presentation slides Video recording   | Fatima Pillosu (ECMWF)               |
| 11:50 to 12:50 | <ul> <li>Speakers' Corner</li> <li>Meteograms with changing resolution and visibility meteograms - Cihan Sahin</li> <li>ECMWF's convection-related products - Ivan Tsonevsky</li> <li>Precipitation Type including the new freezing drizzle type - Tim Hewson</li> <li>Extended range - Fernando Prates</li> <li>New snow scheme - Gabriele Arduini</li> </ul> |                                      |
|                | Presentation slides Video recording  |                                      |
| 12:50 to 13:00 | Concluding remarks Video recording   | Florian Pappenberger<br>(ECMWF)      |