



# **Workshop on data assimilation: initial conditions and beyond**

**Programme**

# Wednesday

## Agenda

Agenda time displays according to the selected time zone.

**The selected timezone is Europe/London**

	<b>Registration and welcome</b> Gustav-Stresemann-Institut (GSI) Europäische Tagungs- und Bildungsstätte Bonn Langer Grabenweg 68 53175 Bonn-Bad Godesberg	
07:30 to 08:00	<b>Registration</b>	
08:00 to 08:10	<b>Welcome</b> <a href="#">Video recording</a>	Florence Rabier (ECMWF)
	<b>Session 1: Algorithms, Observations, Predictability</b> Chairs: Elias Holm and Marcin Chrust	
08:10 to 08:40	<b>Data Assimilation: Initial conditions and beyond</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Massimo Bonavita (ECMWF)
08:40 to 09:10	<b>On the role of the tropics in global predictability</b> <a href="#">Presentation slides</a>	Nedjeljka Zagar (University of Hamburg)
09:10 to 09:40	<b>Towards higher spatial and temporal resolution data assimilation in ECMWF IFS</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Emiliano Orlandi (ECMWF) Ziga Zaplotnik (ECMWF)
09:40 to 10:00	<b>Coffee break</b>	
10:00 to 10:30	<b>Data assimilation developments at DWD</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Roland Potthast (Deutscher Wetterdienst)

10:30 to 11:00	<b>New error covariances &amp; DA formulations at Météo-France with OOPS</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Loïk Berre (Météo-France)
11:00 to 11:30	<b>HIRLAM data assimilation: current status and vision</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Roger Randriamampianina (Norwegian Meteorological Institute)
11:30 to 12:00	<b>Developments in Data Assimilation and use of Observations at the Met Office</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	David Simonin (UK Met Office)
12:00 to 13:00	<b>Lunch break</b>	
	<b>Session 1 continued: Algorithms, Observations, Predictability</b> Chairs: Sebastien Massart and Alban Farchi	
13:00 to 13:30	<b>Exploiting synergies in Composition and NWP data assimilation</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Antje Inness (ECMWF)
13:30 to 14:00	<b>Coupling Earth System Components in Data Assimilation: Advantages and Key Challenges</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Philip Browne (ECMWF)
14:00 to 14:30	<b>Group photo and coffee break</b>	
14:30 to 15:00	<b>Present and future observational landscape in Numerical Weather Prediction</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Angela Benedetti
15:00 to 15:30	<b>Observation uncertainty and information content</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Sarah Dance (University of Reading)

15:30 to 16:00

**Predictability constraints on  
medium-range weather prediction**

[Presentation slides](#)

[Video recording](#)

George Craig (Meteorological  
Institute, LMU Munich)

16:30 to 18:30

**Poster session**

# Thursday

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**The selected timezone is Europe/London**

07:30 to 08:00	<b>Arrival and registration</b> Gustav-Stresemann-Institut (GSI) Europäische Tagungs- und Bildungsstätte Bonn Langer Grabenweg 68 53175 Bonn-Bad Godesberg	
	<b>Session 2: Hybrid Data Assimilation - Machine Learning</b> Chairs: Ziga Zaplotnik and Emiliano Orlandi	
08:00 to 08:30	<b>Machine learning for data assimilation</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Marc Bocquet (ENPC and ECMWF Fellow)
08:30 to 09:00	<b>Development of an offline and online hybrid model for the Integrated Forecasting System</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Alban Farchi (ECMWF) Marcin Chrust (ECMWF)
09:00 to 09:30	<b>DWD's vision of a fully data-driven data assimilation approach</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Jan Keller (Deutscher Wetterdienst)
09:30 to 10:00	<b>Coffee break</b>	
10:00 to 10:30	<b>Hybrid data assimilation and machine learning</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Alan Geer (ECMWF)
10:30 to 11:00	<b>Machine Learning for Data Assimilation at Météo-France</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Vincent Chabot (Météo France)
11:00 to 11:30	<b>Harmonizing Knowledge: Machine Learning Meets Data Assimilation</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Tijana Janjic (MIDS, KU Eichstaett-Ingolstadt)

11:30 to 12:00	<b>Harnessing machine learning for high resolution data assimilation</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Tomas Landelius (SMHI)
12:00 to 13:00	<b>Lunch break</b>	
	<b>Session 2 continued: Hybrid Data Assimilation - Machine Learning</b> Chairs: Marc Bocquet and Massimo Bonavita	
13:00 to 13:30	<b>Computational Optimizations and Emulation of EDA Perturbed Members and Statistics</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Elias Holm (ECMWF) Wei Pan (ECMWF)
13:30 to 14:00	<b>Merging DA and ML at various degree: examples from DA for Arctic Sea ice and for ocean biogeochemistry</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Alberto Carrassi (University of Bologna)
14:00 to 14:30	<b>Virtual presentation</b>	
14:30 to 15:00	<b>Coffee break</b>	
15:00 to 15:30	<b>RIKEN's activities to integrate DA and AI/ML</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Takemasa Miyoshi (RIKEN)
15:30 to 16:00	<b>AI-DOP: Learning a medium-range weather forecast directly from observations</b> <a href="#">Presentation slides</a> <a href="#">Video recording</a>	Mihai Alexe (ECMWF)
16:00 to 17:00	<b>Panel discussion</b>	