

Artificial Intelligence and Earth Observation: from Innovation to Services

9 March 2026

08:00 *Registration & Check-in*

09:30 Session 1: Welcome and Introduction

SESSION OBJECTIVE

This welcome session will provide a high-level policy and programmatic introduction to the workshop, setting the scene for ensuing specific sessions.

CHAIR

— Michel Rixen, Programme Officer, Earth Observation, DG DEFIS, European Commission

SPEAKERS

- Michel Rixen, Programme Officer, Earth Observation, DG DEFIS, European Commission: Welcome and introduction (10 mins)
- Christoph Kautz, Director Space Policy, Satellite Navigation and Earth Observation, DG DEFIS, European Commission: Keynote Address (10 mins)
- Thomas Skordas, Deputy Director-General, DG CNECT, European Commission: Keynote Address (10 mins)

10:00 *Coffee Break & Demonstrations*

10:30 Session 2: The AI/ML Revolution

SESSION OBJECTIVE

The session will look at how AI is transforming Copernicus and Destination Earth (DestinE) data into powerful, real-time intelligence through advanced AI/ML models, which improve decision-making for a more climate-resilient and sustainable Europe. It will serve as an introduction to opportunities and challenges, beyond the hype.

CHAIR

— Mauro Facchini, Head of Unit, Earth Observation, DG DEFIS, European Commission

SPEAKERS

- “The European AI strategy”, Gaspard Demur, Deputy Head of Unit, AI Innovation and Policy Coordination - EU AI Office, DG CNECT, European Commission (10 mins)
- Keynote “Modelling and monitoring the Earth System: the AI revolution”, Matthew Chantry, Strategic Lead for Machine Learning, European Centre for Medium-Range Weather Forecasts (30 mins)
- “The AI Revolution in EO data processing”, Luca Girardo, Copernicus and Destination Earth Advanced Infrastructure Services Manager, European Space Agency (10 mins)
- “The AI Revolution in oceanography”, Quentin Gaudel, ML systems architect, Mercator Ocean International (10 mins)

Panel discussion: The AI/ML revolution at national level

- Isabelle Benezeth, Ministry of Research and Innovation, France
- Andrea Taramelli, Associate Professor, IUSS University, Italy

12:00 *Lunch & Demonstrations*

14:00 Session 3: Big Data and HPC

SESSION OBJECTIVE

The session will highlight the role of high-quality AI-ready datasets, efficient workflows and tools and investment in high-performance computing power as building blocks for scalable, more complex and accurate development, training and deployment of AI models.

CHAIR

— Babis Tsitlakidis, Head of Sector, Destination Earth, High Performance Computing and Applications, DG CNECT, European Commission

SPEAKERS

- “An End-to-End AI Stack for Weather and Climate: From Big Data to Product Delivery”, Tiago Quintino, Head of Software Development section, European Centre for Medium-Range Weather Forecasts (15 mins)
- “Redefining Earth Observation: embeddings as the next data layer for AI ready EO ecosystems”, Jędrzej Bojanowski, Director of EO Data Science and Products, CloudFerro (15 mins)
- “AI Factories and the Commission’s AI Innovation Package”, Juan Pelegrin, Head of Sector, AI Factories, High Performance Computing and Applications, DG CNECT, European Commission (15 mins)

Panel discussion with speakers and:

- Miruna Stoicescu, AI for Digital Solutions Lead, EUMETSAT
- Luca Girardo, Destination Earth & Copernicus Advanced Infrastructure Services Manager, European Space Agency

15:30 *Coffee Break & Demonstrations*

16:00 Session 4: User Needs and Trustworthy AI

SESSION OBJECTIVE

The session will address the traceability of user needs, and if, when & how they determine the use of AI/ML in products and services from Copernicus and Destination Earth.

CHAIR

— Mark Dowell, KCEO Team Lead, KCEO-JRC, European Commission

SPEAKERS

- “Using AI for Prioritizing policy-driven EO Product Requirements”, Miguel Vallejo Orti, Project Officer, KCEO-JRC, European Commission (10 mins)

Panel discussion 1: Use of AI in implementing services to close specific user needs gaps

- Ruben Pirotska, Coordinator of CEMS, German Federal Office of Civil Protection and Disaster Assistance (BBK)
- Antoine Guion, Research Engineer in Air Quality Modeling and Forecasting, French National Institute for Industrial Environment and Risks (INERIS)
- Matteo Mattiuzzi, Expert Copernicus Land Monitoring Service, European Environment Agency

Panel discussion 2: Implementing trustworthy and ethical AI solutions

- Stefanie Lumnitz, Policy Officer, Climate & Planetary Boundaries, DG RTD, European Commission
- Hannah Kofler, Product Manager Image Processing and Data Science, Constellr
- Alistair Francis, Co-founder and Partner, Asterisk labs

17:25 *Wrap-up*

CHAIR

Daniel Draghicescu, Policy Officer for Destination Earth, High Performance Computing and Applications, DG CNECT, European Commission

17:30 *End*

10 March 2026

08:00 *Registration & Check-in*

09:30 Session 5: Digital Twins and AI

SESSION OBJECTIVE

The session will examine the distinctive roles and impacts of Digital Twins and AI-powered demonstrators in advancing technological innovation and building cutting-edge solutions.

CHAIR

— Bertrand Le Saux, Policy Officer for Destination Earth and AI Applications, High Performance Computing and Applications, DG CNECT, European Commission

SPEAKERS

- “AI Earth system component modeling”: Sara Hahner, Scientist for Machine Learning, European Centre for Medium-Range Weather Forecasts (15 mins)
- “Leveraging AI in the EU Digital Twin Ocean for Next-Generation Ocean Apps”: Alain Arnaud, Director Digital Ocean Department, Mercator International (15 mins)
- “An Earth Observation-Driven Digital Twin for Ice Sheets”: Stef Lhermitte, Professor, KU Leuven (15 mins)

10:30 *Coffee Break & Demonstrations*

11:00 Session 6: AI in Action

SESSION OBJECTIVE

The session will discuss the challenges faced by companies that commercialise AI solutions based on Earth Observation and the opportunities created by projects and entrepreneurship activities leading to wider EO and Copernicus adoption.

CHAIR

— Vasileios Kalogirou, Space Downstream R&I Officer, EU Agency for the Space Programme

SPEAKERS

— “EUSPA introduction and AI Week outputs”, Fiammetta Diani, Head of Market Downstream and Innovation, EU Agency for the Space Programme (10 mins)

Panel discussion

- Betty Charalampopoulou, EARSC Board of Directors, President and CEO GEOSYSTEMS HELLAS S.A.
- Conrad Bielski, Chief Technology Officer, Riscognition
- Fran Martin, Geospatial Product & Project Lead, EarthPulse
- Danijela Ristic-Durrant, Senior R&D Project Manager, OHB-DS
- Machi Simeonidou, Managing Director, AgroApps

12:30 *Lunch & Demonstrations*

14:00 Session 7: Research and Innovation

SESSION OBJECTIVE

The session will focus on latest research trends in Artificial Intelligence for Earth Observation and transition pathways to operations for EO services.

CHAIR

— Massimo Ciscato, Head of Sector, Space Research, HaDEA, European Commission

SPEAKERS

- Opening Remarks: Marko Curavic, Head of Unit, Space Research Unit, HaDEA, European Commission (5 mins)
- Keynote “Latest Trends in AI Research for EO”, Begüm Demir, Full Professor, TU Berlin (15 mins)

Panel discussion: From Research to Innovation

- Begüm Demir, Full Professor, Technische Universität Berlin
- Yann Guichoux, Founder & President, eOdyn
- Francois De Vielleville, Chief Technology Officer, AGENIUM SPACE
- Tom Hengl, Director & Co-founder, OpenGeoHub Foundation
- Ioannis Papoutsis, Assistant Professor, National Technical University of Athens
- Ana Oliveira, Chief Technology Officer, +Atlantic

15:30 *Coffee Break & Demonstrations*

16:00 Session 8: Digital Transformation of Earth Observation Services

SESSION OBJECTIVE

The aim of this session will be to discuss the future of Earth observation, digital services and the role they can play, together with research and innovation, towards a new paradigm for competitiveness and resilience in the next Multiannual Financial Framework.

CHAIR

— Vincent-Henri Peuch, Director for Engagement with the EU, European Centre for Medium-Range Weather Forecasts

SPEAKERS

— Keynote: “Digital Twins for Climate: from research and innovation to novel operational services”, Jenni Kontkanen, Development Manager in Digital Twin Technologies, CSC - IT Center for Science (10 mins)

Panel discussion with speaker and:

- Babis Tsitlakidis, Head of Sector, Destination Earth, High Performance Computing and Applications, DG CNECT, European Commission
- Elisabeth Hamdouch, Deputy Head of Unit, Earth Observation, DG DEFIS, European Commission
- Aurélien de Truchis, Vice-President, Data Sciences, Kayrros
- Peter Salamon, Head, Copernicus Emergency Management Service, DG JRC, European Commission
- Franz Immler, Head of Sector, Environmental Observations, DG RTD, European Commission

17:25 *Wrap-up*

CHAIR

Michel Rixen, Programme Officer, Earth Observation, DG DEFIS, European Commission

17:30 *End*

DEMONSTRATIONS

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During All Breaks (Coffee and Lunch)

Demo 1 - Copernicus Emergency Management Service (CEMS)

- Location: Demo Room
- Peter Salamon, JRC

Demo 2 - CDSE AI capabilities

- Location: Demo Room
- Dennis Clarijs, VITO, Belgium

Demo 3 - AI & VHR imaging

- Location: Demo Room
- Pierre-olivier Vanberg, AeroSpaceLab

Demo 4 - Operational AI services on DestinE Platform

- Location: Demo Room
- Luca Girardo and Sébastien Tétaud, ESA & Sergey Sukhanov, FlyPix

Demo 5 - The weather Forecast-in-a-Box

- Location: Hall or Demo room
- Tiago Quintino, ECMWF

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During All Breaks (Coffee and Lunch)

Demo 1 - Downscaling CAMS Reanalysis for High-resolution Air Quality Mapping

- Location: Demo Room
- Antoine Guion, INERIS, France

Demo 2 - GLONET & OceanBench: AI-based Ocean Forecasting System and Validation Framework

- Location: Demo Room
- Quentin Gaudel and Pierre-Yves Le Traon, Mercator Ocean International

Demo 3 - AI4FloodDamage

- Location: Demo Room
- Ruben Piroska, BBK, Germany

Demo 4 - Prototype Digital Twin for Ice Sheets

- Location: Demo Room
- Stef Lhermitte, KU Leuven, Belgium

Demo 5 - The Observia Copernicus Chatbot

- Location: Hall or Demo room
- Matteo Mattiuzzi, EEA