

GEO Data Technology Workshop

Agenda

Vienna, Austria / 23-25 April 2019 #GEOdatatech



DAY 1 / 23 APRIL

9:00

Welcome and Introduction

Shirish Ravan
UNOOSA

Gilberto Camara
GEO Secretariat

9:30

1. Setting the scene (part 1)

Moderator: Shirish Ravan, UNOOSA

Results-oriented GEO and GEOSS Vision
Gilberto Camara, GEO Secretariat (20 mins)

10:00

CEOS Open Data Cube: lessons learned and way forward
Brian Killough, NASA (20 mins)

10:30

Coffee break / Poster Session
(30 mins)

11:00

2. Setting the scene (part 2)

Moderator: Steven Ramage, GEO Secretariat

GEOSS Platform: State of the art and perspectives
Joost van Bemmelen, ESA (45 mins)

11:30

Space4Water Portal
Nina Kicking, UNOOSA (15 mins)

12:00

GRID3 Project
Lorant Czar, UNFPA (15 mins)

Digital Earth
Guo Huadong, China (20 mins)

12:30

13:00

Lunch break (no host)
(1 hour)

13:30

< What is the state of EO data technology today, and where is it going?



“Water conservation and resources management represent some of the most critical environmental issues currently facing humankind. The GEO Data Technology Workshop is a great forum to discuss the sharing of earth observation data and ways to generate knowledge from it.”

Nina Kicking,
UNOOSA

13:30

Lunch break (no host)
(1 hour)

14:00

3. Data and Information Needs and Challenges for GEO Engagement Priorities

Moderator: Steven Ramage, GEO Secretariat

14:30

Sendai Framework for Disaster Risk Reduction: UNISDR Global Risk Assessment Framework
Adam Fysh, UNISDR (20 mins)

15:00

United Nations 2030 Agenda for Sustainable Development: New technologies for the Sustainable Development Goals
Robert Chen, SDSN TreNDs, CIESIN (20 mins)

Paris Climate Agreement: Earth observations for improving greenhouse gas reporting
Jean Ometto, INPE Brazil (20 mins)

15:30

Coffee break (no host)
(30 mins)

16:00

4. Data and Information Needs and Challenges for GEO Work Programme Activities

Moderator: Craig Larlee, GEO Secretariat

16:30

Biodiversity: GEO Biodiversity Observation Network (GEOBON)
Letitia Navarro, iDiv (15 mins)

17:00

Land Degradation: GEO Land Degradation Neutrality Initiative (GEO LDN)
Antje Hecheltjen & Fabian Loew, GIZ (15 mins)

Streamflow Forecasting: GEO Global Water Sustainability Initiative (GEOGLOWS)
Julia Wagemann, ECMWF (15 mins)

17:30

Mercury: GEO Global Observation System for Mercury (GOS4M)
Sergio Cinniriella for Nicola Pirrone, CNR (15 mins)

Water Quality: AQUAWATCH
Steven Greb, University of Wisconsin–Madison (15 mins)

18:00

Oceans: GEO Blue Planet
Paul DiGiacomo, NOAA (15 mins)

< How can Earth observation data and technology advance global frameworks on climate, disasters and sustainable development?

< What are the key data and information needs of GEO Work Programme activities?



Burning questions? Go to [slido.com](https://www.slido.com), enter code #GEO and select the relevant session to ask questions for the moderator's consideration - in advance or live.

DAY 2 / 24 APRIL

9:00	<p>5. In situ Earth observations Moderator: Douglas Cripe, GEO Secretariat</p> <p>Improvements on Data Providers metadata for search engines Mikko Strahlendorff, Finnish Meteorological Institute (15 mins)</p> <p>In-situ data workflow using OGC Sensor Web Enablement (SWE) Bartolomeo Ventura, Eurac Research (15 mins)</p> <p>Water Quality In Situ Database Andrew Tyler and Peter Hunter, University of Stirling (15 mins)</p> <p>SOC (Soil Organic Carbon) data Rik van der Bosch, ISRIC (15 mins)</p>	< What are the needs and challenges of handling in situ data, and what should GEO's role be with respect to in situ data management?
10:30	<p>Group Photo / Coffee break / Poster Session (30 mins)</p>	
11:00	<p>6. Satellite-based Earth observations Moderator: Rob Woodcock, CSIRO</p> <p>CEOS Infrastructure and Services for EO Data Provision Brian Killough, NASA (20 mins)</p> <p>Land Surface Imaging: CEOS Analysis Ready Data Andreia Siqueira, Geoscience Australia (20 mins)</p> <p>Perspectives of the Copernicus Programme Daniel Quintart, European Commission Copernicus (20 mins)</p> <p>User-centric Collaboration Environments and Future Data Architectures Günther Landgraf, ESA (20 mins)</p> <p>Production of Analysis Ready Data Grega Milcinski, Sinergise (20 mins)</p>	< What are the opportunities and challenges facing the data community in relation to satellite-based Earth observation data and technology?
13:00	<p>Lunch break (no host) (1 hour)</p>	
13:30		

13:30

Lunch break (no host)
(1 hour)

14:00

7. Cloud computing for Big Earth observation data

Moderator: Douglas Cripe, GEO Secretariat

Earth Observation Data Centre

Wolfgang Wagner, Vienna University of Technology (15 mins)

14:30

ECMWF Climate Data Store: lessons learned and way forward/ Users Requirements Survey

Julia Wagemann, ECMWF (25 mins)

15:00

Spatio Temporal Assets Catalogs, STAC

Matthias Mohr, University of Münster (15 mins)

Challenges in interoperability and harmonization in Cloud Computing for Earth observation

Edzer Pebesma, University of Münster (15 mins)

15:30

Earth Science on the Cloud

Aimee Barciauskas, Development Seed (15 mins)

16:00

Coffee break (no host)
(30 mins)

16:30

8. GEOSS-related technologies

Moderator: Gilberto Camara, GEO Secretariat

Pilot # 1: Knowledge Hub

Gilberto Ribeiro, INPE; Rik Baeyens & Paola De Salvo, GEO Secretariat (20 mins)

17:00

Pilot #2: GEOSS Evolution

Ivan De Loatch & Stefano Nativi, GEOSS Evolve (15 mins)

17:30

Pilot #3: ESA Thematic Exploitation Platform (TEP) GEO Hazards

Pedro Gonçalves, TerraDue (15 mins)

Pilot #4: Machine learning using Amazon Web Services (AWS)

Karine Ferreira, INPE Brazil (15 mins)

18:00

What have we learned and where are we going in cloud computing for big Earth observation data?

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“The GEO community is investing in open data, open source tools, and cloud-based processing; unlocking unprecedented new science and putting earth insights closer to decisions.”

Aimee Barciauskas,
Development Seed

< What technologies should the GEO community leverage to accomplish its mandate and vision?

DAY 3 / 25 APRIL

9:00

9. Special Session on Copernicus DIAS

Moderator: Daniel Quintart (European Commission)

OndaDIAS

Guido Vingione and Mario D'Alessio, Serco (15 mins)

9:30

Sobloo

Wendy Carrara, Capgemini (15 mins)

CREODIAS

Alex Cesarz, CREODIAS, and Maciej Krzyzanowski, CLOUDFERRO (15 mins)

10:00

Mundi

Gerhard Triebnig, EOX IT Services, and Jean Baptiste Lavedrine, ATOS (15 mins)

Wekeo

Laia Romero, Mercator Océan, and Michael Schick, Eumetsat (15 mins)

10:30

Coffee break & Poster Session

(30 mins)

11:00

10. Innovative approaches and societal impact

Moderator: Steven Ramage, GEO Secretariat

AWS: lessons learned and way forward

Jed Sundwall, AWS (15 mins)

11:30

Digital Earth Africa

Trent Kershaw, Geoscience Australia (15 mins)

ESRI cloud technologies for big Earth observation data analytics

Steve Kopp, ESRI (15 mins)

12:00

Japan DIAS

Mamoru Miyamoto (15 mins)

National Research & Education Networks:

Infrastructure support for global cloud computing

Chris Atherton, GÉANT, and Andres Steijaert, SURFnet (15 mins)

12:30

Lunch break (no host)

(1 hour)

13:00

13:30

< What are the key DIAS features that can help the GEO community reach its goals?

What technological innovations in Earth observations are positively impacting societies?

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“The GEO Data Technology Workshop not only serves as a forum for practitioners, but also for policy and decision makers to understand state-of-the-art developments in Earth observations to provide insights for their work.”

Steven Ramage,
GEO Secretariat

13:30

11. Innovation from Small Medium and Micro Enterprises

Moderator: Steven Ramage, GEO Secretariat

14:00

European Earth observation online services (eoMALL)

Emmanuel Pajot, EARSC (15 mins)

Geosystems Hellas

Betty Charalampopoulou (15 mins)

14:30

EO in Africa: the view from Ethiopia

Tesfaye Korme, GeoSAS Consulting (15 mins)

EO in Africa: the view from Ghana

Steven Adusah, Farmerline (15 mins)

15:00

EO in Africa: the view from South Africa

Jens Hiestermann, GTI (15 mins)

15:30

Coffee break (no host)

(30 mins)

16:00

12. Data Ethics and Governance

Moderator: Douglas Cripe, GEO Secretariat

16:30

Foteini Zampati, GODAN (15 mins)

Tom Orrell, DataReady / GPSDD (15 mins)

Kevin Pomfret, UN-GGIM Legal and Policy Framework Committee (15 mins)

17:00

Jean Dusart, European Commission (15 mins)

Robert Chen, SDSN TreNDs, CIESIN (15 mins)

17:30

13. Closing remarks

Gilberto Camara, GEO Secretariat

18:00

< What innovations are we seeing from the commercial sector that support GEO's mission?

< What are the governance and institutional issues that should be considered in the transition to the digital economy?



www.earthobservations.org
www.geoportal.org