

GEO Data Technology Workshop: the Era of Big EO Data

23-25 April 2019 / Vienna, Austria / UNOOSA

#GEOdatatech

Draft Agenda

Version 10: 01 April 2019

Day 1: Tuesday 23 April

| Time | Session | Moderator |
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| 9.00-9.30 | 1. Welcome and Introduction UNOOSA Mr Shirish Ravan GEO Secretariat GEO Secretariat Director | |
| 9.30-10.30 | 2. Setting the Scene Results-oriented GEO and GEOSS Vision (20 min) Gilberto Camara, GEO Secretariat Director CEOS Open Data Cube: lessons learned and way forward (20 min) Brian Killough, NASA | Shirish Ravan (UNOOSA) |
| 10.30-11.00 | Coffee (No Host) | |
| 11.00-12:00 | 2. Setting the Scene (Cont) GEOSS Platform: State of the art and perspectives (45 min) Joost van Bemmelen, ESA Space4Water Portal UNOOSA (15 min) Nina Kickinger | Steven Ramage (GEO SEC) |
| 12.00 -13.00 | GRID3 Project, UNFPA (15 min) Lorant Czarán Digital Earth (20 min) Guo Huadong, China | |
| 13.00-14.00 | Lunch (No-host) | |

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| 14.00-15.30 | <p>3. Data and Information Needs and Challenges for GEO Engagement Priorities</p> <p>Sendai Framework for Disaster Risk Reduction: UNISDR Global Risk Assessment Framework (20 min) Adam Fysh, UNISDR</p> <p>United Nations 2030 Agenda for Sustainable Development: New technologies for the Sustainable Development Goals (20 min) Robert Chen, SDSN TreNDs, CIESIN</p> <p>Paris Climate Agreement: Earth observations for improving greenhouse gas reporting (20 min) Jean Ometto, INPE Brazil</p> | Steven Ramage (GEO SEC) |
| 15.30-16.00 | Coffee Break (No-host) | |
| 16.00-18.00 | <p>4. Data and Information Needs and Challenges for GEO Work Programme Activities</p> <p>Biodiversity: GEO Biodiversity Observation Network (GEOBON) (15 min) Letitia Navarro, iDiv</p> <p>Land Degradation: GEO Land Degradation Neutrality Initiative (GEO LDN) (15 min) Antje Hecheltjen & Fabian Loew, GEO LDN Co-Chairs, GIZ</p> <p>Streamflow Forecasting: GEO Global Water Sustainability Initiative (GEOGLOWS) (15 min) Julia Wagemann, ECMWF</p> <p>Mercury Monitoring: GEO Global Observation System for Mercury (GOS4M) (15 min) Nicola Pirrone, CNR</p> <p>Water Quality: AQUAWATCH (15 min) Steven Greb, University of Wisconsin–Madison</p> <p>Blue Planet (15 min) Paul di Giacomo</p> | Craig Larlee (GEO SEC) |

Day 2: Wednesday 24 April

| Time | Session | Moderator |
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| 9.00- 10.30 | <p>5. In-situ Earth observations</p> <p>Improvements on Data Providers metadata for search engines Mikko Strahlendorff, Finnish Meteorological Institute (15min)</p> <p>In-situ data workflow using OGC Sensor Web Enablement (SWE) Bartolomeo Ventura, Eurac Research (15min)</p> <p>Water Quality In-situ Database Andrew Tyler, Peter Hunter, University of Stirling (15min)</p> <p>SOC (Soil Organic Carbon) data Rik van der Bosch, ISRIC (15 min)</p> | Douglas Cripe (GEO SEC) |
| 10.30-11.00 | Coffee Break (No-host) | |
| 11.00-13.00 | <p>6. Satellite-based Earth observations</p> <p>Chair: Rob Woodcock, CSIRO</p> <p>CEOS Infrastructure and Services for EO Data Provision Brian Killough, NASA (20min)</p> <p>Land Surface Imaging: CEOS Analysis Ready Data Andreia Siqueira, Geoscience Australia (20min)</p> <p>Perspectives of the Copernicus Programme Daniel Quintart, EC Copernicus (20min)</p> <p>User-centric Collaboration Environments and Future Data Architectures Günther Landgraf, ESA (20min)</p> <p>Production of Analysis Ready Data Grega Milcinski, Sinergise (20min)</p> | Rob Woodcock (CEOS) |
| 13.00-14.00 | Lunch (No-host) | |
| 14.00-16.00 | <p>7. Cloud computing for Big Earth observation data: lessons learned</p> <p>Earth Observation Data Centre Wolfgang Wagner, Vienna University of Technology (15 min)</p> <p>ECMWF Climate Data Store: lessons learned and way forward/ Users Requirements Survey Julia Wagemann, ECMWF (15 min)</p> <p>Spatio Temporal Assets Catalogs, STAC Matthias Mohr, University of Münster (15 min)</p> | Douglas Cripe (GEO SEC) |

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| | <p>Challenges in interoperability and harmonization in Cloud Computing for Earth observation Edzer Pebesma, University of Münster (15 min)</p> <p>Development Seed (15 min) Aimee Barciaskas</p> | |
| 16.00-16.30 | Coffee Break (No-host) | |
| 16.30-18.00 | <p>8.GEOSS-related technologies</p> <p>Pilot # 1: Knowledge Hub Gilberto Ribeiro, INPE; Rik Baeyens & Paola De Salvo, GEO Secretariat (15 min)</p> <p>Pilot #2: GEOSS Evolution Ivan De Loatch, Max Craglia & Stefano Nativi, GEOSS Evolve (15 min)</p> <p>Pilot #3: ESA Thematic Exploitation Platform (TEP) GEO Hazards Pedro Gonçalves, TerraDue (15 min)</p> <p>Pilot #4: Machine learning using Amazon Web Services (AWS) Karine Ferreira, INPE (15 min)</p> | Gilberto Camara (GEO SEC) |

Day 3: Thursday 25 April

| Time | Session | Moderator |
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| 9.00 -10.30 | <p>9. Special Session on Copernicus DIAS</p> <p>Moderator Daniel Quintart</p> <p>OndaDIAS (15 min) Guido Vingione (Serco) Mario D’Alessio (Serco)</p> <p>Sobloo (15 min) Wendy Carrara Amaury de Feynol</p> <p>CREODIAS (15 min) Alex Cesarz (CREODIAS) Maciej Krzyzanowski (CLOUDFERRO)</p> | Daniel Quintart (European Commission) |

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| | <p>Mundi (15 min) Gerhard Triebnig (EOX IT Services) Jean Baptiste Lavedrine (ATOS)</p> <p>Wekeo (15 min) Laia Romero(Mercator - Océan) Michael Schick (Eumetsat)</p> | |
| 10.30 - 11.00 | Coffee Break (No-host) | |
| 11.00-12.30 | <p>10. Innovative approaches and societal impact</p> <p>AWS: lessons learned and way forward (15 min) Jed Sundwall, AWS</p> <p>Digital Earth Africa (15 min) Trent Kershaw, Geoscience Australia</p> <p>ESRI cloud technologies for big Earth observation data analytics (15 min) Steve Kopp, ESRI</p> <p>Japan DIAS (15 min) Mamoru Miyamoto</p> <p>National Research and Education Networks (NRENs): (15 min) Infrastructure support for global cloud computing Chris Atherton, GÉANT and Andres Steijaert, SURFnet</p> | Steven Ramage (GEO SEC) |
| 12.30-13.30 | Lunch (No-host) | |

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| 13.30-15.30 | <p>11. Innovation from Small Medium and Micro Enterprises</p> <p>European Earth observation online services (eoMALL) (15 min) Emmanuel Pajot (EARSC)</p> <p>Geosystems Hellas (15 min) Betty Charalampopoulou</p> <p>EO in Africa: the view from Ethiopia (15 min) Dr Tesfaye Korme (GEO SAS)</p> <p>EO in Africa: the view from Ghana (15 min) Steven Adusah, Farmerline</p> <p>EO in Africa: the view from South Africa (30 min) Jens Hiestermann - (GTI) Andiswa Silinga - (GEMINI)</p> | Steven Ramage (GEO SEC) |
| 15.30 -16.00 | Coffee Break | |
| 16.00-17.50 | <p>12. Data Ethics and Governance</p> <p>Foteini Zampati, (15 min) Global Open Data for Agriculture and Nutrition (GODAN)</p> <p>Robert Chen, CIESIN (15 min)</p> <p>Tom Orrell, DataReady / GPSDD (15 min)</p> <p>Imraan Saloojee, South African Space Agency (SANSA) (15 min)</p> <p>Kevin Pomfret, UN-GGIM Legal and Policy Framework Committee (15 min)</p> <p>Jean Dusart, European Commission (15 min)</p> | Doug Cripe (GEO SEC) |
| 17.50-18.00 | <p>13. Closing remarks</p> <p>Gilberto Camara, GEO Secretariat Director</p> | Gilberto Camara (GEO Secretariat Director) |