OGC Innovation Program and Testbed-14 demo day

CLIENT TO WCS-EO 1.1 & REST FOR SWATH COVERAGE

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MEEO's Testbed-14 Threads

- **Thread 1**: Modeling, Portrayal, and Quality of Service (**MoPoQ**)
- Information Registries & Semantic Enablement
- Application Schema Modeling and Conversion
- Portrayal
- MapML
- Quality of Service & Experience (QoSE)
- Machine Learning, Deep Learning & Artificial Intelligence
- LiDAR Point Cloud Data Handling

- **Thread 2**: Earth Observation & Clouds (**EOC**)
- Swath Data and the Climate Forecast Convention
- Exploitation Platform

- **Thread 3**: Next Generation Services (**NextGen**)
- Next Generation OGC Web Services, Federated Clouds, Security & Workflows
- Complex Feature Handling
- CityGML and Augmented Reality

- **Thread 4**: Compliance (**CITE**)
- Compliance and Interoperability Testing

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MEEO's Testbed-14 Deliverables

- Compliance (CITE)
  - 2 ERs, 4 Components
- Earth Observation & Clouds (EOC)
  - 4 ERs, 14 Components

1 ER (contribution to D007)
1 Component (D137)

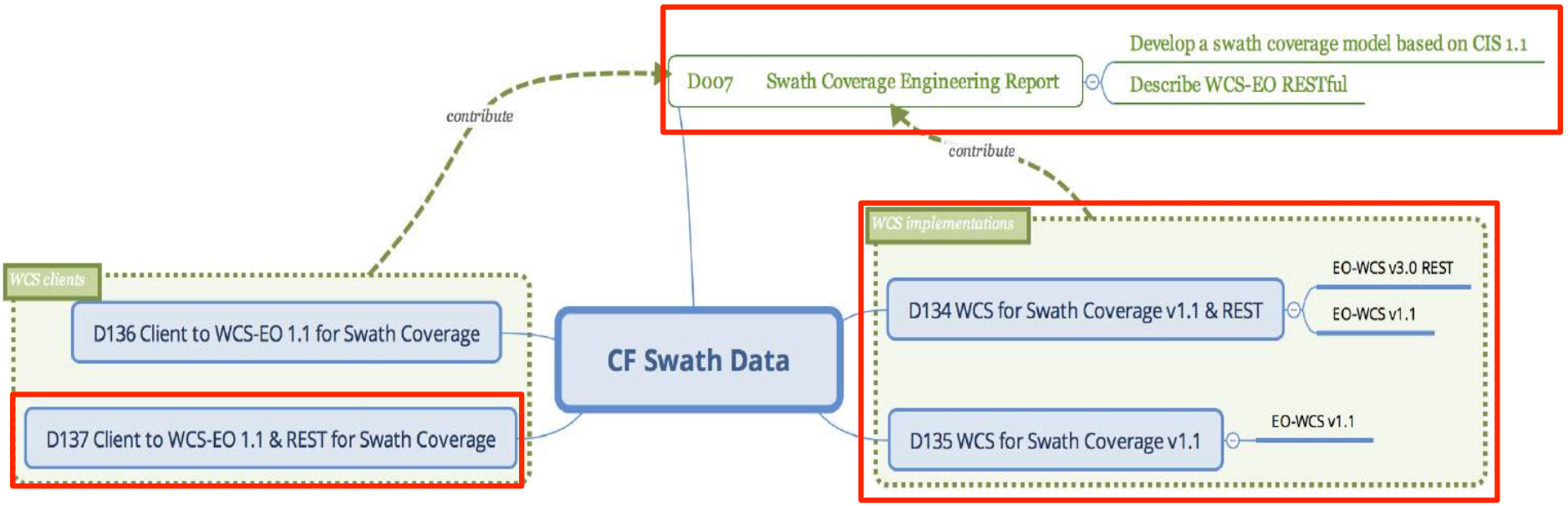

Figure 23. CF-compliant Swath Data deliverables

WCS server for SWATH data (in-kind contribution)

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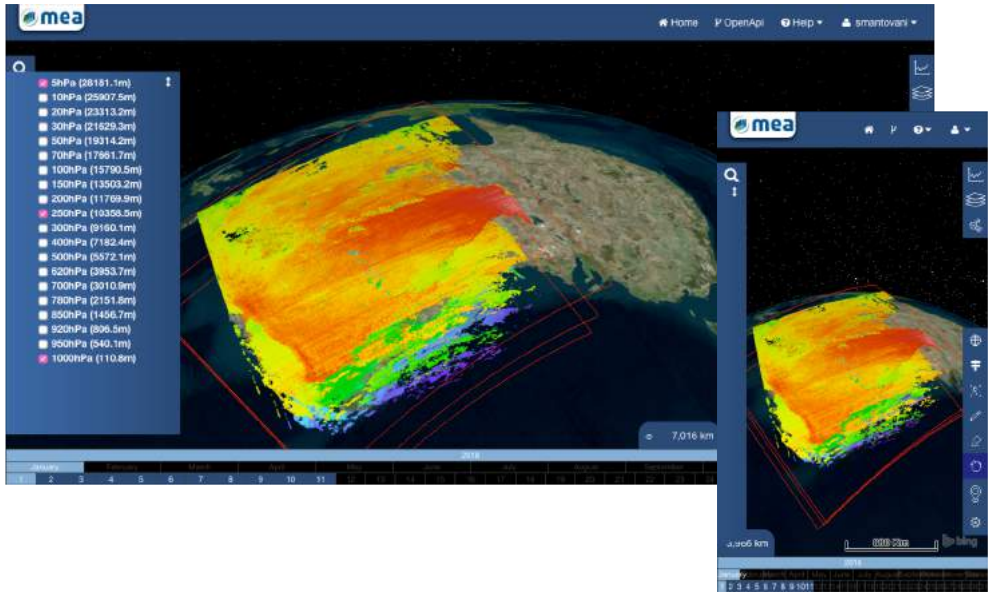
MEEO's Component Implementation Deliverable

- *D137* - Client to WCS-EO 1.1 & REST for Swath Coverage:
  - Description:
    - Swath Coverage Client to access data provided by D134 and D135 components (CloudSat and VIIRS)
    - Swath Coverage Client to use RESTfull interface defined via OpenAPI definition
    - In-kind implementation of WCS server for MODIS and VIIRS SWATH data

MEEO's Component Implementation Deliverable

- *Demo*
  - *Access to CloudSat data (@EOX, @ASU)*
  - *Access to VIIRS data (@GMU, @MEEO)*
  - *Access to MODIS data (@MEEO)*
- The testbed14 client is accessible at this link

webGIS



API

Conclusions

- *Swath data are heterogeneous*
- *OGC makes sense*
  - *WCS-EO specifications*
    - *The specification should support both machine-to-machine (e.g. automatized discovery,)and human interfaces (e.g. webGIS data discovery, access, visualization)*
    - *OpenAPI is suitable option to provide a standardized interface*
  - *WCS-EO implementation*
    - *Server side*
    - *Client side*