

# → EARTH OBSERVATION FOR SUSTAINABLE DEVELOPMENT

Climate Resilience

**Webinar Series on how to use Earth  
Observation to tackle Climate Change**

*Webinar 06: How-to' Session: Using the EO4SD  
CR Platform to access EO data (hands-on)*

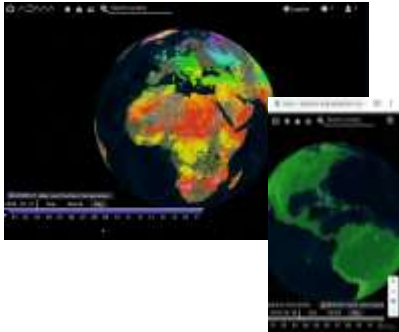
*2) EO4SD CR Platform Interfaces*

*Anestis Trypitsidis, Research Associate & PM, NOA*



## Provision of three different easy-to-use interfaces

### explorer



- **User centric**
- Data access
- **E-collaboration**

### Jupyter



- For scientist
- **Coding** environment
  - **Processing** resources
  - **Results publication** and / or download

### APIs



- For developers
- **APIs**
  - **OGC** interfaces

### Plugin



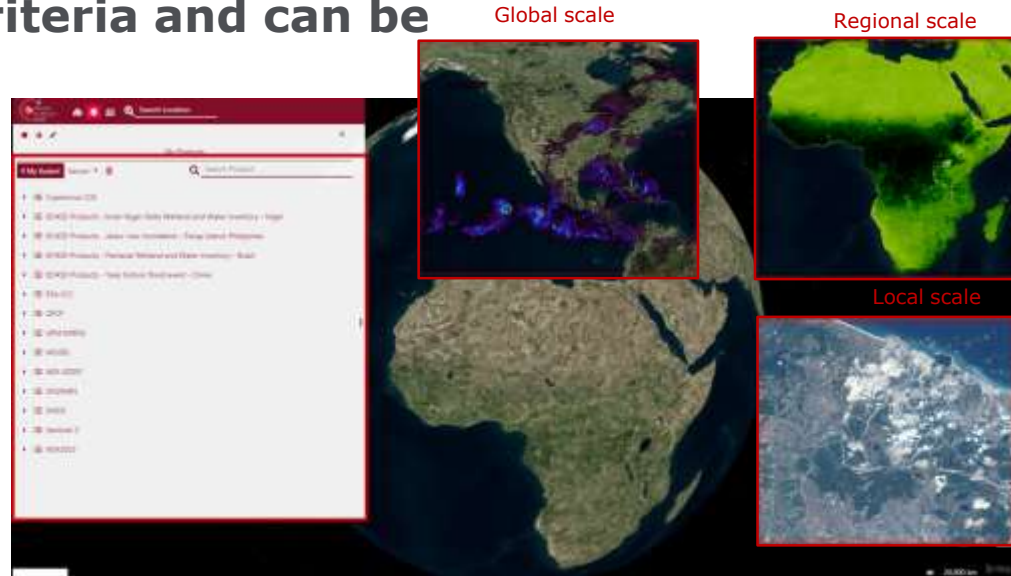
- For GIS users

**Data can be discovered considering thematic, geographic and temporal search criteria and can be displayed in a number of ways;**

- visualized via a 3D globe through the **Web Explorer** (at global, regional and local scale)
- extracted and processed via **Jupyter Notebooks**, inbuilt processing services and
- via dedicated **Application Programming Interfaces (APIs)**



and finally downloaded, both original data and / or processing results.

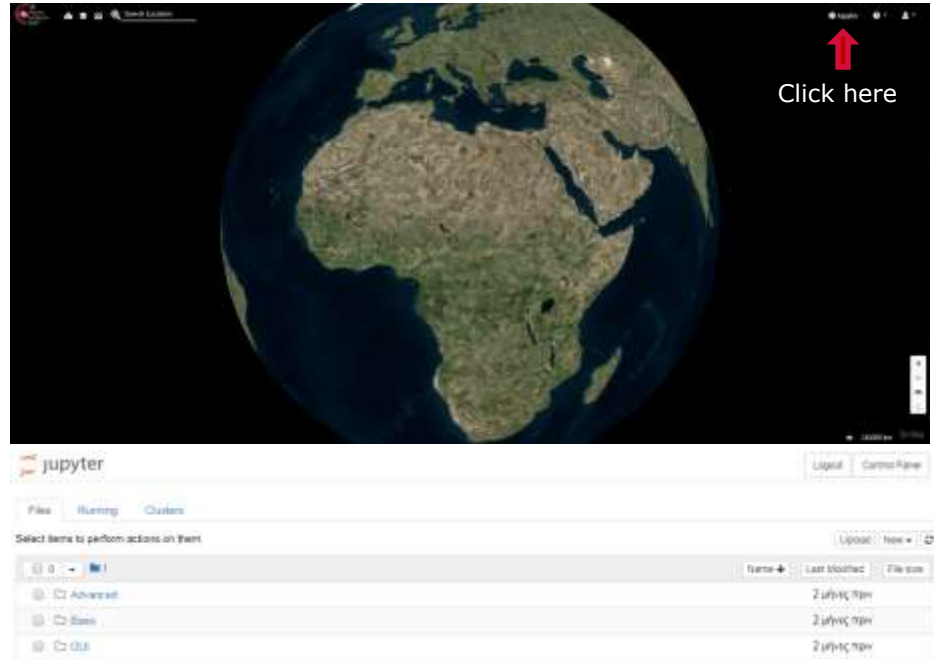


## Data access and analysis through the EO4SD CR Jupyter Notebook

Data can be extracted and processed via Jupyter Notebook that is an incredibly powerful tool for interactively developing and presenting data results

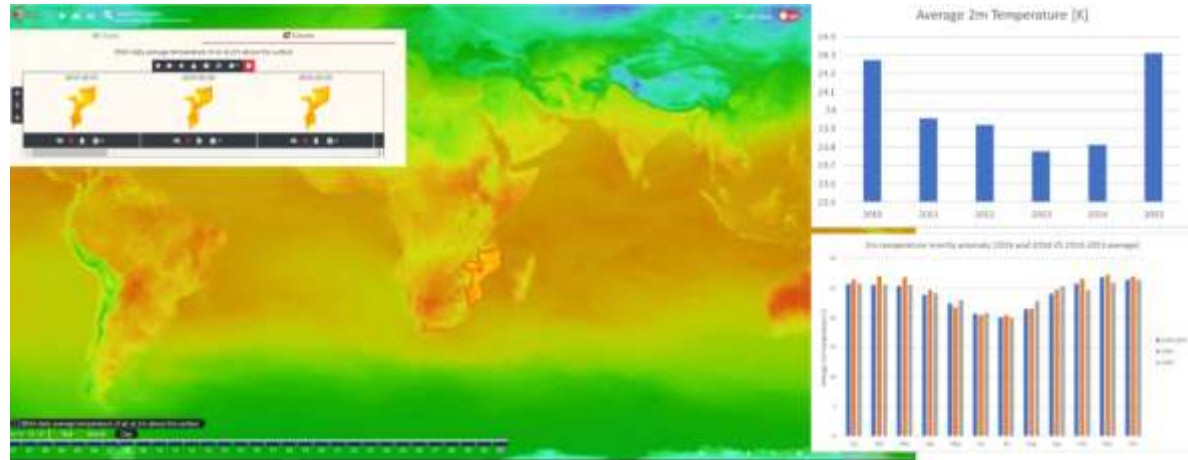
The Jupyter Notebook enables users to author notebook documents that include:

- Live code
- Interactive widgets
- Plots
- Narrative text
- Equations
- Images
- Video



## Data access via dedicated Application Programming Interfaces (APIs)

- EO-based data in terms of Essential Climate Variables (ECVs) can be made accessible via Python API and Web Processing Service (WPS) answering specific user needs
- Data can be provided in map and time-series formats, allowing for images and time-series data to be easily probed and overlaid seamlessly



Geographic and temporal aggregated 2m temperature data provided to CCKP as displayed on the EO4SD CR platform (<https://explorer-eo4sdcr.adamplatform.eu/>). The full temperature data time series provided, including temperature variability and averages, making it possible to compare different time periods.

## Data access via QGIS plugin

- User provides
  - Dataset
  - area of interest
  - time range
- Data are loaded within QGIS
- To finalize the analysis

