EO4SD WEBINAR SUMMARY

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

This document presents a short summary of and key lessons from the European Space Agency's Earth Observation for Sustainable Development (EO4SD) Climate Resilience Cluster's recent webinar **"'How to' Session: Using the EO4SD CR Platform to access EO data"**. The webinar, the sixth in a series of seven held by the EO4SD Climate Resilience Cluster in June and July 2020, consisted of a hands-on session and guided tutorial in which participants were familiarised with the user interface of the dedicated data access platform deployed under the ESA EO4SD CR initiative. Additionally, participants gained knowledge about the types of EO-based climate data available through the platform.

Stefano presented the origin of the EO4SD CR platform and explained the logic behind it, citing a need for climate services that include a screen of climate indicators and assessment of climate change risks. Additionally, Stefano introduced ADAM – an online, cross-domain application and software platform that facilitates the access to a large volume and variety of global, EO-based, environmental data. Rather than serving as a generic data access platform, ADAM's primary benefit is its ability to make all essential datasets readily available in a singly dynamic, adaptable and progressive platform. Dedicated interfaces can then be developed for specific needs such as in the fields of education, agriculture, and cultural heritage.

STEFANO NATALI
Space Business Manager at SISTEMA, GmbH

Anestis talked through the interfaces available throught the EO4SD CR platform and discussed how data can be obtained considering thematic, geographic and temporal search criteria. The EO4SD CR Web Explorer visualises data as a 3D globe, and can be shown at a global, regional and local scale. Data can also be extracted and processed via the Jupyter Notebook, and via dedicated Application Programming Interfaces (APIs).

ANESTIS TRYPITSIDIS
Research Associate, NOA

Global scale

Regional scale

Local scale
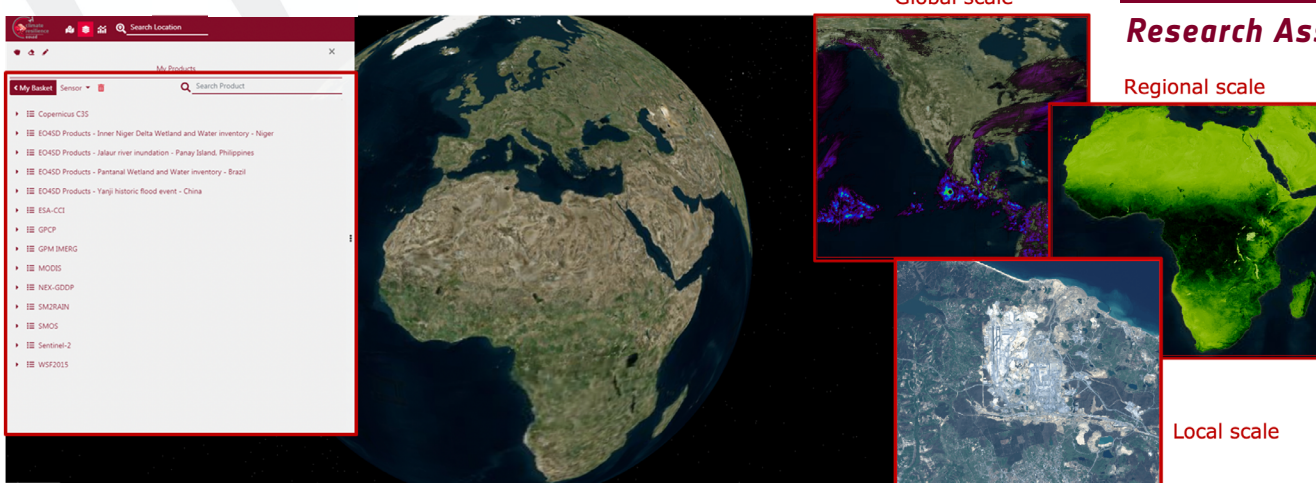
Screenshots of the EO4SD CR Platform

Dora then provided hands-on guidance for using the EO4SD CR Platform interface. Using the EO4SD homepage as a starting point, she walked through how to add a geographical polygon in order to create a time series analysis, and accessing the data via the discovery tab. Later in the presentation, Dora spoke on visualising and analysing EO data for point-locations. For step by step guidance for the EO4SD CR Platform user interface, please find links to the webinar recording and accompanying slides below.

DORA PERROU

Research Associate, NOA

Finally, Anestis returned again to speak on the EO-based data offered through the EO4SD CR Platform including satellite-based products, climate model data (reanalysis and projected), climate indicators, and other customised EO4SD products. He explained that the data discovery tab allows the user to easily filter the provided climate indexes and future indicators to be developed for IFIs. In the final portion of the presentation, Anestis walked participants through several exercises that could prove beneficial to their work. These included how to access the EO4SD CR platform, add data collections including precipitation, temperature, and soil moisture, create and extract time series from points (plot/images/csv), and create and extract time series from polygons (image/tifs).

RESOURCES

Further Reading:

· **EO4SD CR Capacity Building Material** here.

· **EO4SD CR Platform** here.

Full webinar recording available here.
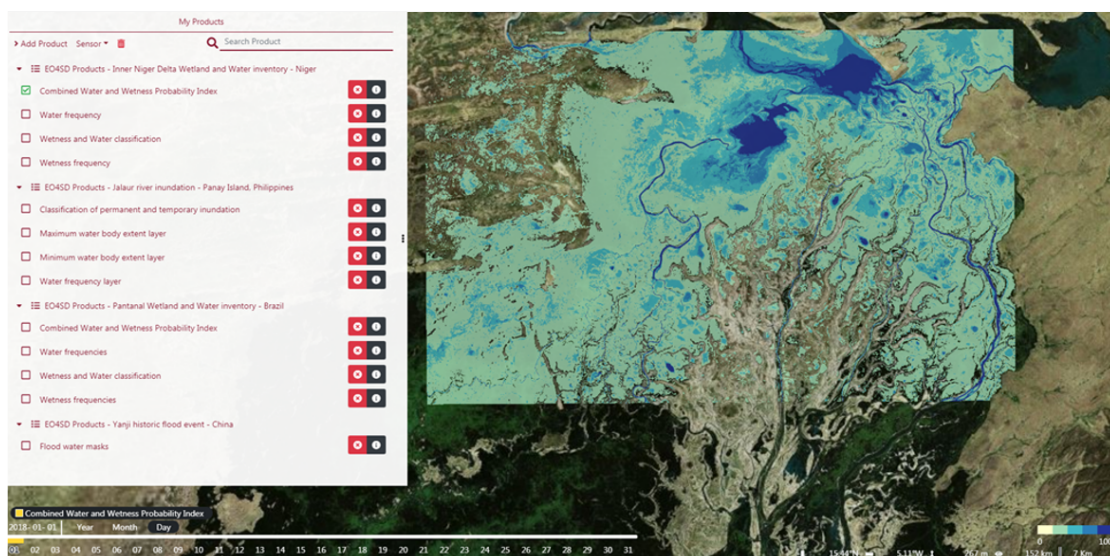
Screenshot of EO4SD CR customised product - Combined Water and Wetness Probability Index for Inner Niger Delta

Key Takeaways

· **The EO4SD Climate Resilience cluster project has deployed a web-based platform to provide climate action programmes with enhances climate risk management capabilities allowing users to explore the data and apply on demand analytics.**

· **Data from the EO4SD CR Platform can be discovered considering thematic, geographic and temporal search criteria and can be displayed in a number of ways.**

· **Available EO data and products include satellite-based products, model data, climate indicators, and customised EO4SD products.**

"The idea of providing the stakeholders and potential users with a platform stems from climate resilience needing a large amount of global data where the time dimension plays a fundamental role."

- Stefano Natali, SISTEMA, GmbH

For more information about the EO4SD Climate Resilience Cluster, visit the website here: http://eo4sd-climate.