

A satellite map of a river delta, likely the Amazon, showing a complex network of waterways and green land. The map is used as a background for the entire page.

Data Producers

Why CEOS Analysis Ready Data?

CEOS Analysis Ready Data (CEOS-ARD) are satellite data that have been processed to a minimum set of requirements and organized into a form that allows immediate analysis, with a minimum of additional user effort and interoperability both through time and with other datasets.

Users of EO data typically invest a large proportion of their effort into data preparation. Furthermore, many satellite data users lack the expertise, infrastructure and internet bandwidth to efficiently and effectively access, pre-process, and utilize the growing volume of space-based data for local, regional, and national decision-making.

Increase Uptake

Unprecedented availability of computing power and tools are transforming the world. Data analysis, statistics, and machine learning – all are being made easier through the availability of free and open programming modules and tools. Data providers must also take steps to ease the access and use of data, and CEOS-ARD provides a framework.

Increase Impact

New and emerging users of satellite data benefit greatly from assistance with pre-processing and data preparation, and who is better placed to provide this than the data producers themselves? Making data easier to access and use will increase its impact and accelerate the growth of this user base.

The 2030 Agenda for Sustainable Development, Sendai Framework for Disaster Risk Reduction 2015-2030, and Paris Climate Agreement are global challenges that require global data. Satellite data provides a unique perspective for these challenges – one that many new users can be expected to be looking toward for their information needs in these contexts. Increasing data accessibility and usability will increase societal impact on a global scale.

Stay Relevant

Users want answers to their questions, and they want them fast. Agile technology places an emphasis on rapid results and iterative improvement. If data is not available for use straight away, it will likely be left behind. For continued relevance, data should be easy to use, access, and fit seamlessly into work flows and future data architectures – all of which are properties of CEOS-ARD.

Resource Efficiency

Optimize the use of valuable resources. Instead of having highly skilled scientists do pre-processing work, focus their efforts on good science.

Enable Interoperability

CEOS-ARD is a starting point for interoperability with data/information from other data producers. The integration and combination of consistent and comparable data provides new avenues for analysis – greatly increasing information density.