

Analysis Ready Data as addressed by the Committee on Earth Observation Satellites: CARD4L

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Abstract

Analysis Ready Data (ARD) products are enabling users to get first hand satellite data that are 'ready to use' for a wide range of applications, facilitating time-series analysis and multi-sensor interoperability. The Committee on Earth Observation Satellites (CEOS) is playing a leading role in the development of ARD in proposing the CEOS Analysis Ready Data for Land (CARD4L) initiative.

The rationale behind this initiative is to enable users to access products that have already been processed to a certain level. This will allow users to carry out immediate analysis on the data and to address a variety of applications without the extra time and cost that is associated with data pre-processing steps.

Countries and international organizations have expressed a desire for support from CEOS to facilitate access to and processing of satellite data into CEOS Analysis Ready Data for Land (CARD4L) products. Systematic and regular provision of CARD4L compliant products is expected to greatly reduce the burden on global satellite data users and, as a direct consequence, boost data use. The provision of this data is possible through many options including systematic processing and distribution, processing on hosted platforms, and processing via toolkits provided to users. The expectation is that a range of ARD data products compliant with the CARD4L specifications will be produced. For instance, CARD4L has the potential to be an important enabler of the Open Data Cube (ODC) initiative. Through CARD4L, users will be able to locate products that are suitable for ingestion into Data Cubes, and will have confidence that these different CARD4L products will limit as far as possible barriers to interoperability between data sources. The aim of the presentation is to give an overview on the work already developed by the CEOS community on the CARD4L framework, to introduce the processes and steps that Earth Observation (EO) data providers can undertake to deliver CARD4L compliant products, as well as the steps that CEOS LSI-VC have planned to develop the CARD4L initiative further.

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