Open Data cube Summary

- The Open Data Cube (ODC) is an open source solution for **accessing**, **managing**, and **analysing large quantities of Geographic Information System (GIS) data** - namely Earth Observation (EO) data. It presents a common **analytical framework** composed of a series of **data structures and tools** which facilitate the organization and analysis of large gridded data collections.
- The Open Data Cube was developed for the analysis of temporally-rich earth observation data.
- The ODC core serves as a layer between satellite data and end user applications.
- The ODC can handle data from any satellite data provider
- Format : Analysis Ready Data (ARD)

Common Applications/Tools

• **Command Line Tools**: A tool used by programmers/developers to interface with the ODC.

• **Open Data Cube Explorer**: A visual and interactive web application that lets users explore their inventory of available

data.

• **Open Data Cube Stats**: An optimized means of defining and executing advanced analysis on ODC system. This tool is oriented towards scientists.

• **Jupyter Notebooks**: Research documents centered around techniques in EO sciences. A notebook contains executable code detailing examples of how the data cube is used in a research setting, and therefore is an invaluable reference material for new users.

• **Open Geospatial Consortium (OGC) Web Services**: Adapters that can connect non-ODC applications to the ODC.