

The Descartes Labs Catalog

Find and incorporate data into the platform

The Descartes Labs Catalog is a repository for georeferenced images. Use the Catalog to discover existing raster products, search the images contained in them, and manage your own products and images.

Catalog API

The catalog is modeled on the following core concepts, each of which is represented by its own class in the API.

Images represented by class `Image`

An image contains data for a shape on earth, as specified by its georeferencing. An image references one or more files that contain the binary data conforming to the band declaration of its product.

Bands represented by class `Band`

A band is a 2-dimensional slice of raster data in an image. A product must have at least one band and all images in the product must conform to the declared band structure.

For example, an optical sensor will commonly have bands that correspond to the red, blue, and green visible light spectrum, which can be rastered together to create an RGB image.

Products represented by class `Product`

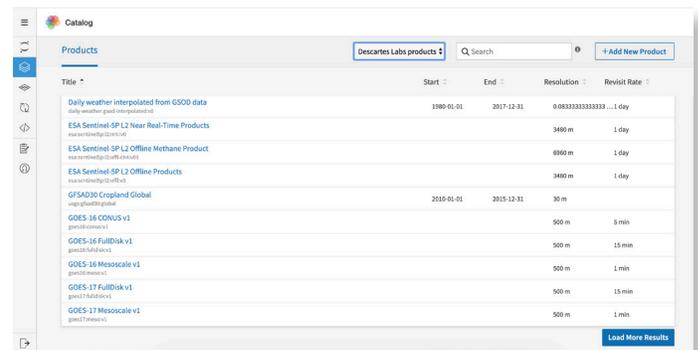
A product is a collection of images that share the same band structure. Images in a product can generally be used jointly in a data analysis, as they are expected to have been uniformly processed with respect to data correction, georegistration, and so on.

A raster product can contain any sort of image data as long as it's georeferenced.

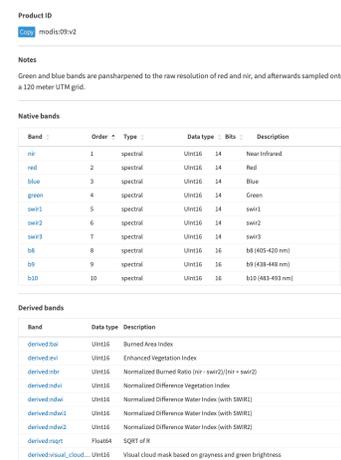
The Catalog API can be found as Python package `descarteslabs.catalog`

Catalog UI

All raster products uniquely available or owned by a user are shown in Catalog. You have the option to toggle between “Descartes Labs products” as well as “My products”.



Clicking on a layer's entry will open a dedicated page that shows all the associated metadata of the product. The Product ID is used to search for imagery programmatically in the Python client.



The Catalog page for MODIS Aqua Terra

The product's band information is displayed here, including if they are native to the platform or sensor.

All associated metadata about the bands are listed as well, in terms of band type, data type and a short description of the band. Clicking a band provides more information specific to that band.

The derived bands often reflect common layers used in geospatial analysis, including an NDVI band. This information is available programmatically in our Python client as well, though the Catalog interface is a great way to “discover” data.