Data Handling and Visualization

Sentinel-1, Sentinel-2 & Sentinel-3
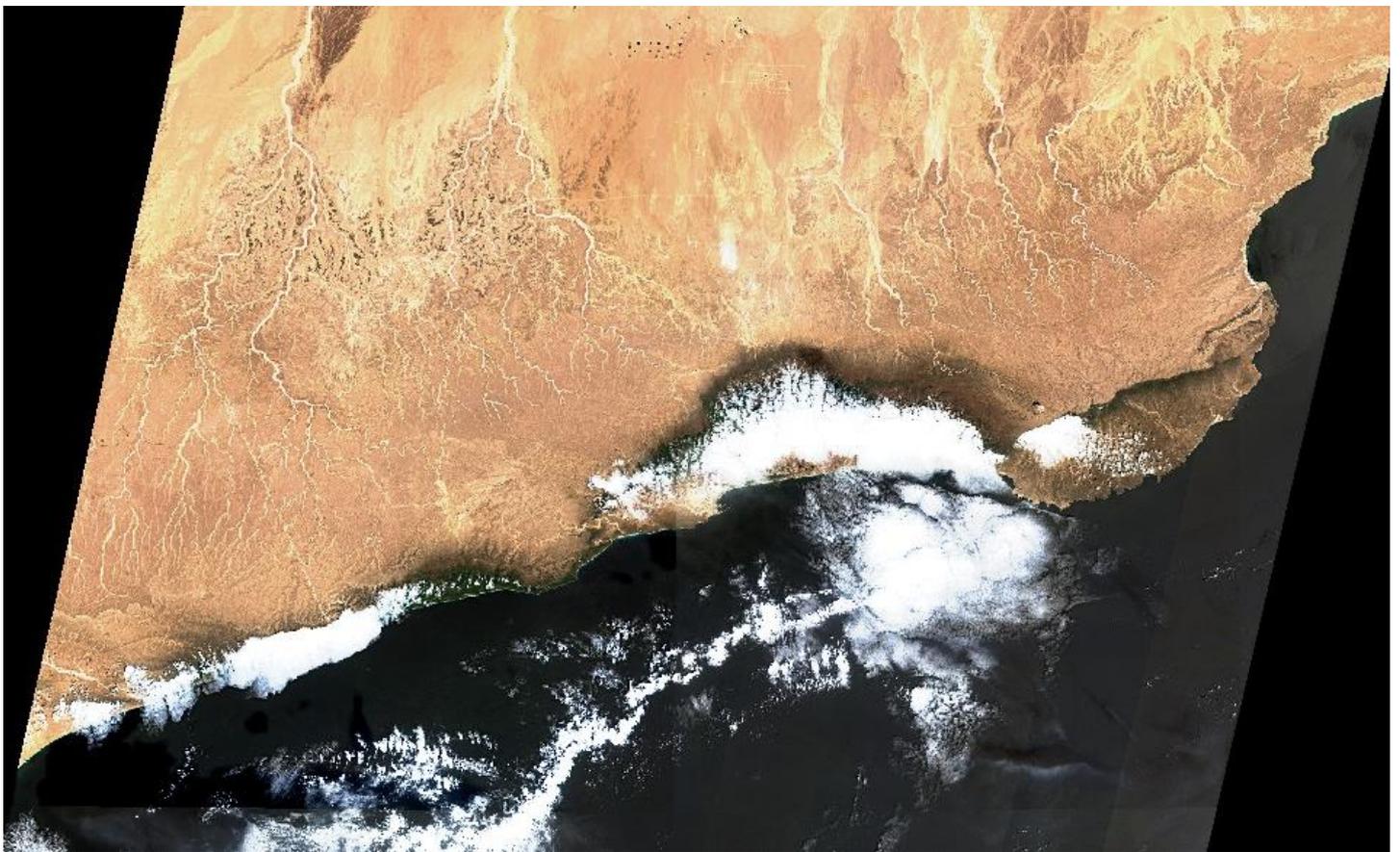
PART2: Access to Sentinel Data

Zamzam AL Rawahi

z.alrawahi@met.gov.om

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Copernicus Hub

The Copernicus Open Access Hub provides **complete**, **free** and **open** access to Sentinel-1, Sentinel-2, Sentinel-3 and Sentinel-5P Products.

1. Accessing the Copernicus Open Access Hub:

1.1   Go to the Copernicus Hub:
     https://scihub.copernicus.eu/

1.2   Click on the **Open Hub** button to redirect you the graphical interface.

1.3   Login or register to create your account.
Note: An account is needed to: download the data, see past searches and to view your Cart.

2. Searching for dataset

1. Use the Search tool in the top left part of the screen.
2. Open the advanced search panel is shown by clicking on the "Advanced Search" icon.

In this step-by-step tutorial we will show how to use the advanced search menu for :

- Sentinel-3 OLCI image,
- Acquired on 05 March 2023
- Over North Oman

3. **Select AOI by use** the curser to center and zoom the display to the north of Oman.
4. Draw a rectangle over the AOI with the right button of your mouse.
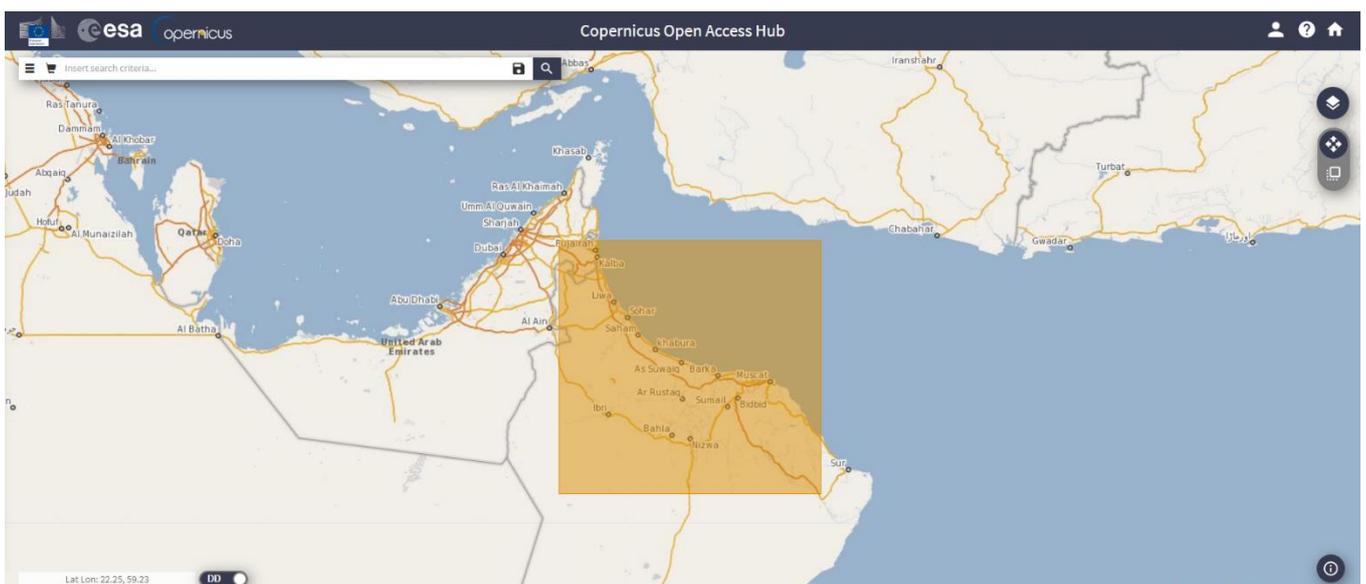
5. **Display the Advanced Search Menu:**

- Sensing Period: 2023-03-05 to 2023-03-05.
  Note it is in format yyyy/mm/dd.
- Mission: Sentinel-3
- Product Type: OLCI
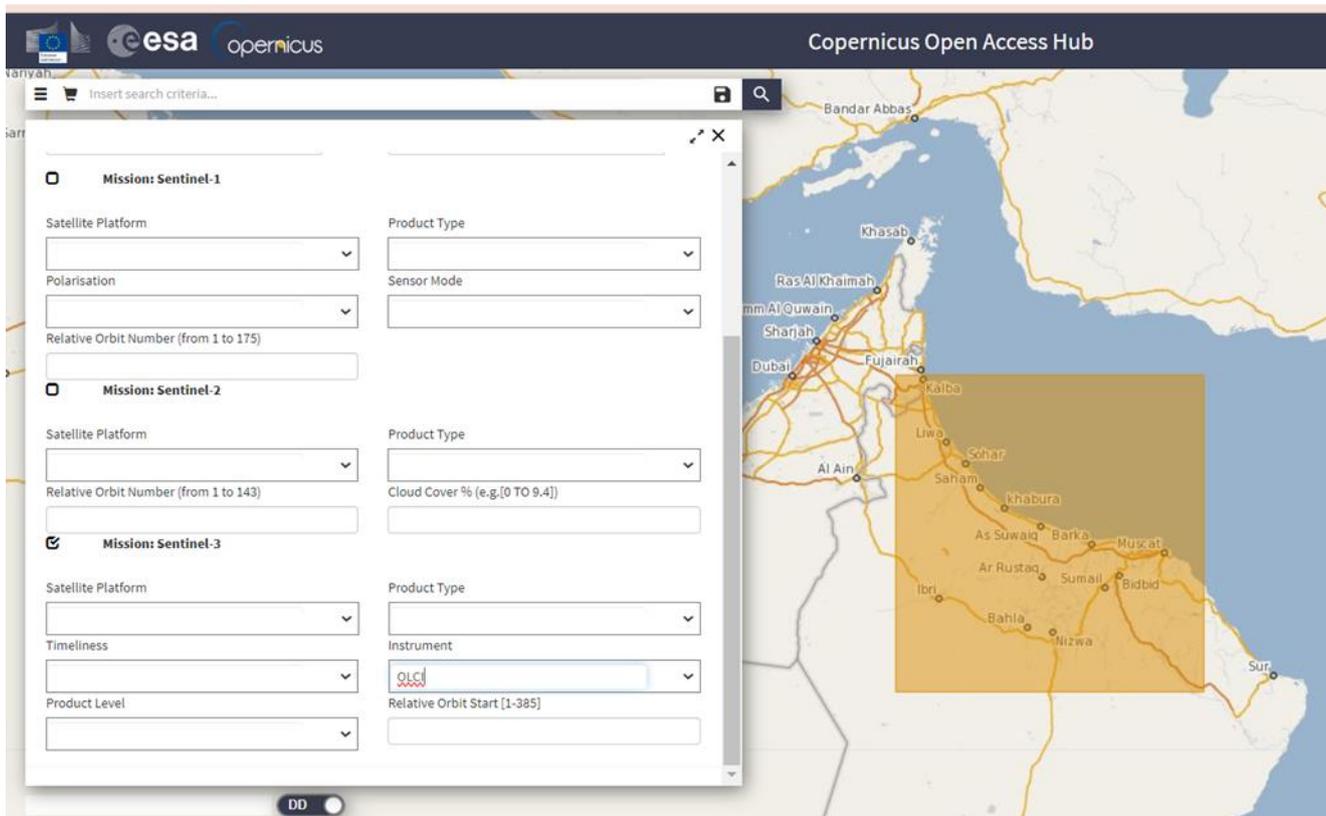
6. Click Search, you will get results of different images.
7. Choose any image that cover your AOI.
8. Click on the **download** icon.
9. Now repeat the same steps for Sensing Period: 2021- Oct – 02 to 2021-Oct – 05

Note : The online products can be download directly, while the offline it will take around 1hr and then it will be available online on your car.

Extra step: Fast Image Display

1. Unzip the downloaded file.

   - A collection of files contained within a folder

   - a metadata file named xfdumanifest.xml

   - NetCDF file of subset product

2. Open Snap Software.

3. To open sentinel 3 product:

   - Drag and drop the whole folder into the "Products View".

   - Drag and drop the xfdumanifest.xml-file into the "Products View"

   - Choose "File-> Open Product", navigate to the xfdumanifest.xml file and click "Open Product"

   - Choose "File->Import->Optical Sensors ->SENTINEL-3", navigate to the xfdumanifest.xml file and click "Open Product".

4. Right click on the file-> RGB -> true Color RGB