

Public Sources of Sentinel Imagery

Alaskan Satellite Facility

<https://asf.alaska.edu/>

Imagery: Sentinel-1 is available via ASF (note not Sentinel-2) – SLC, GRD and ARD products are available globally.

Accessibility: Access is free, with an API option, available with no data limit, though no cloud compute environment is available. The temporal latency can be relatively long, 'within 3 days'. Lots of other additional datasets are available from ASF.

SciHub

<https://scihub.copernicus.eu/>

Imagery: Sentinel-1 (SLC and GRD) and Sentinel-2 (L1C and L2A) are available from Scihub, with global coverage.

Accessibility: As SciHub is an ESA source it is considered as a source of truth for completeness, and where many of the other platforms pull their data from. This means this source is one of the quickest to publish imagery (within 1 day). The data is free to, and accessible via API, though limits on bulk downloading exist. No compute environment is available.

Google Earth Engine.

<https://earthengine.google.com/>

Imagery: Both Sentinel-1 (ARD) and Sentinel-2 (L1C and L2A) can be accessed via google earth engine, the data available is global.

Accessibility: Google earth engine is a freely available service for certain users such as researchers, but also has a commercial service at cost. A basic level of javascript is required to access the data via the code editor, tutorials are available. An environment in which analysis can be applied to the data is available, which has fast processing of imagery and is scalable. Lots of additional datasets are also available beyond those of Copernicus.

Google Cloud Platform

<https://cloud.google.com/>

Imagery: Google cloud platform gives access to Sentinel-2 L1C data only. Data is available globally.

Accessibility: Google cloud provides access to a fast compute environment, with access to pre-packaged tools for processing and analysis as well as API access. The data has a latency of 1-2 days after being published by ESA. There is a cost associated with Google Cloud in terms of both Egress and Compute.

Earth on AWS

<https://aws.amazon.com/earth/>

Imagery: Sentinel-1 (though only GRD) and Sentinel-2 (L1C and L2A) are available from Earth on AWS, these datasets are only available from 2016 onwards, the data available is global.

Accessibility: Earth on AWS provides access to a fast compute environment with access to pre-packaged tools for processing and analysis, as well as API access. The datasets are provided as both

STAC and COG enabling efficient cloud access and streaming. The data comes from ESA only hours after being published. There is a cost associated with use of AWS in terms of both egress and compute.

Planetary Computer (Microsoft)

<https://planetarycomputer.microsoft.com/>

Imagery: Access to higher level products S1 (GRD) and S2 (L2A), globally from 2016 onwards.

Accessibility: Microsoft Planetary Computer hosts data on it's cloud infrastructure, enabling access to fast compute environment with pre-packaged tools for processing and analysis as well as API access (for S2 but not for S1). Datasets are available via STAC and COG, making them efficient for integration into other products and streaming. There is a cost associated with the Planetary Computer for both egress and compute.