Norwegian Ministry of Climate and Environment | NICFI Norway's International Climate and Forest Initiative | KSAT KONGSBERG SATELLITE SERVICES | planet. | AIRBUS

NICFI DATA PROGRAM
USER GUIDES

THIRD PARTY PARTICIPANTS

1. What do I have access to through this program?

You can access high-resolution (<5m) basemaps (mosaics) of the world's tropics. Through this program, you can:

- View the (visual) tropical basemaps in Planet Explorer and Basemap Viewer platform.
- Download the (analysis-ready) tropical basemaps via Planet Explorer, Basemap Viewer, API, and/or integrations.
- Stream the (visual) tropical basemaps through WMTS or XYZ tile services, including to leading applications like ArcGIS and QGIS, for advanced analyses.

2. I thought I had access to tropical mosaics. What is a basemap?

Planet selects the best pixels from daily imagery and transforms them into visually consistent and scientifically accurate mosaics to produce Planet's Basemap product offering. Put simply, there is no difference between a basemap and a mosaic optimized for time-series analysis. Any mention of basemaps in the user guide and delivery platforms is the same offering as the mosaics offered through this program.

3. What are the technical specifications of the available products?

The tropical basemap specifications are as follows:

- Area: Global Tropic regions
- Spatial Resolution: 4.77m per pixel
- Spectral Resolution:
    - Visual: R, G, B (3-band)
    - Analysis-Ready: R, G, B, NIR (4-band)
- Temporal Resolution:
    - Archive (December 2015 - August 2020): Bi-Annual
    - Monitoring (September 2020 - Onwards): Monthly

*There will be a measured rollout of the archive mosaics:

- 2018-2020 archive mosaics available today
- 2017-2018 archive mosaics available 22 November 2020
- 2015-2017 archive mosaics available 22 December 2020

Learn more with the Addendum to Basemaps Product Specification.

4. Where and how can I access the products?

You can access the products through your Planet account. Your Planet account gives you access to Planet's platform, which includes access to Planet's APIs and web applications.

You will find the basemap series that you have access to on Planet's platform. The series under this plan are the PS Tropical Normalized Analytic Biannual and PS Tropical Normalized Analytic Monthly series. Within each series, there are basemaps at specific cadences that you have access to. Each basemap within the series is called planet_medres_normalized_analytic_date. The date in the name will change based on which date you are looking at.

You can also view the products through NICFI's Purpose Allies, such as Global Forest Watch and UN Environment.

5. How can I view the Basemaps in Planet's web applications?

You can view basemaps in two of Planet's web applications: Planet Explorer and Basemaps Viewer by logging in with your Planet account.

You can use Planet Explorer to view the tropical basemaps and analyze the tropical basemaps in the browser, including enhancing pixels and applying spectral indices. Find out more about Planet Explorer, and all the ways you can view and analyze the tropical basemaps within it, by reading the user guide:
https://developers.planet.com/docs/apps/explorer/

You can use Basemaps Viewer to view the tropical basemaps, download basemap quads, and find out which daily scenes were used to create the basemap. Find out more about Basemaps Viewer by reading the user guide:
https://developers.planet.com/docs/apps/basemapsviewer/

6. How can I download the Basemaps?

You can download the tropical basemaps from Planet's web applications, applications program interface, or via integrations if you are logged in with your Planet account.

To download a small subset of the tropical basemaps (called basemap quad(s)), we recommend working through the web application Basemaps Viewer. For more detailed instructions on downloading basemap quad(s), please read the user guide:
https://developers.planet.com/docs/apps/basemapsviewer/

To download the full tropical basemaps (or a large subset thereof - e.g., many basemap quads), we recommend working through Planet's API. For more detailed instructions, please read the user guide at https://developers.planet.com/docs/basemaps/ or refer to the API reference at https://developers.planet.com/docs/basemaps/reference/

Another way to download the basemaps over an area of your choosing is to use the Planet python client. The link to install this is here:
https://github.com/planetlabs/planet-client-python

7. How can I stream the Basemaps to another application?

Planet's API Tile Service and Basemap Tile Service make it easy to visualize the Planet tropical basemaps in desktop or web mapping applications that support either XYZ or WMTS protocol. These services offer a low-friction way for web developers and GIS analysts to interact with and derive value from the basemaps without the need for further image processing.

You can stream the tropical basemaps through your Planet account. Authentication is achieved by providing a valid API_Key as a query parameter to all tile requests.

To learn more about using Planet's tile services to stream the Basemaps, please see the user guide here: https://developers.planet.com/docs/basemaps/tile-services/

Streaming links can be found by adding your API key as a parameter to the link below. Once your API key is added, this link will allow selection of WMTS and XYZ URLs for streaming the mosaics: http://api.planet.com/basemaps/v1/services?api_key=

8. How can I open the Basemaps in my QGIS, ArcGIS, or Google Earth Engine account?

You can open the Basemaps in your external GIS software accounts through Planet's GIS integrations. Planet Integrations enable desktop GIS application users to quickly discover and

stream Planet Basemaps within both QGIS and ArcGIS Pro. In ArcGIS Pro, users can download all or a subset of their basemaps. QGIS does not yet permit basemap download, but will by the end of year 2020. QGIS also allows users to stream their surface reflectance basemaps in false color such as NDVI. Streaming basemaps in false color is not yet available in ArcGIS Pro, but will be by the end of year 2020. Planet has also launched a Google Earth Engine integration available for Scenes, and available for Basemaps at the end of the year.

To discover, stream, and download the Planet tropical basemaps in QGIS, access and learn more about the plug-in here: https://developers.planet.com/docs/integrations/qgis/
(And learn more about QGIS integrations with relevant platform workbooks, like UN-FAO's SEPAL platform, here.)

To discover, stream, and download the Planet tropical basemaps in ArcGIS, access and learn more about the plug-in here: https://developers.planet.com/docs/integrations/arcgis/

To discover, stream, and download Planet imagery (and soon tropical basemaps) in Google Earth Engine, access and learn more about the plug-in here:
https://developers.planet.com/docs/integrations/gee/

9. What can I do with the data? Are there any restrictions?

The data is provided under a CC-NC-Alike license in support of the NICFI Purpose. The full licensing agreement is provided and signed in your Planet account, and also available here.

The Purpose of this license is to provide you with access to Planet's proprietary Platform and associated Content (tropical basemaps) for the primary purpose of *reducing and reversing loss of tropical forests, contributing to combating climate change, conserving biodiversity, contributing to forest regrowth, restoration and enhancement, and facilitating sustainable development*. All use must be non-commercial, or not in the primary pursuit of profit.

Under these terms and in support of this Purpose, you may access, download, use, display, create derivative products, and distribute the tropical basemaps.

10. What if I need further technical support?

If you need further support with the NICFI tropical forest & climate data program, please contact KSAT here: nicfi-servicedesk@ksat.no