



# Access to ESA's Planet Missions Terms of Applicability

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## 1 General

Within the Third Party Mission scheme, ESA provides to Earth Observation users data from non-ESA missions, so-called Third Party Missions, to complement the data from ESA EO missions and to support and build up the scientific user community for those data in Europe.

A Third Party Mission (TPM) is a mission

- that is operated by any legal body, governmental or non-governmental entity other than ESA or
- for which ESA assumes some formal responsibility towards the mission operator or to which ESA contributes financially, usually through sharing of Ground Segment facilities or operations cost or
- for which ESA assumes a data distribution responsibility, usually towards European Users, but sometimes towards a worldwide user community for a subset of the geographic coverage of this mission.

The implementation of a new Third Party Mission follows a Selection Procedure approved by the Program Board on Earth Observation in 2004. This procedure evaluates a yearly list of Third Party Candidate Missions according to a set of criteria (e.g. European User benefits and excellence, accessibility etc.). In order to gain access to the TPM data, ESA establishes co-operation schemes with the owners/operators of the Third Party Missions. In these co-operation schemes, one option foresees to provide ground segment support to the TPM owner/operator in exchange for access to the TPM data (e.g. share acquisition or archiving facilities or support respective operations).

Since 2012, the RapidEye Satellite System (5 identical earth observation satellites, capable of collecting over 4 million km<sup>2</sup> of 5 m resolution, 5-band color imagery every day) has been a part of the Third Party Missions Program. Since the start of RapidEye's commercial operations in February 2009 it has amassed over 5 Billion square kilometers in its archive. In mid 2019, PlanetScope and SkySat data have been added to Earthnet programme as Third Party Mission under evaluation and promoted as official TPM in February 2022

Within the ESA CAT-1 TPM Scheme, Planet offers the ESA CAT-1 community:

- Access to the entire RapidEye (level L3A Ortho products), PlanetScope (level 1B Basic and level 3B Ortho products) and Skysat (level 2B Basic, level 3B Ortho and level 3B Consolidated products) satellite imagery archive (<https://www.planet.com/explorer>) and to new data to be acquired from PlanetScope and Skysat satellite
- Standard Delivery of products within 3 days after proper order submission to the data provider

## 2 Data Accessibility Conditions

### Archive products (RapidEye, PlanetScope, SkySat)

- The Planet satellite data archive consists of more than 5 Billion square kilometers all over the world.
- Planet is doing regular updates of the PlanetScope and SkySat archive coverage via new tasking, so that Europe is available cloud-free (< 5%) with data not older than 3 years and Africa cloud free (< 5%) with data not older than 5 years.
- The standard delivery to the users shall be online via Planet Explore catalogue on secure http within three (3) business days from order submission (dependent from order size). On a case-by-case basis, Planet will provide products on media. An email will be sent to the user to notify data availability. The retention time for data download will be 30 days.
- ESA Cat-1 users have the possibility to search Planet data by area of interest, date, cloud cover threshold with an online catalogue and ordering system already existing within Planet.

### SkySat Tasking and PlanetScope monitoring products

- Delivery of tasking products can be completed within 24 hours after the image acquisition.
- The image products will be delivered via Planet Explore Platform on secure http, unless otherwise specified. Since the Planet constellations can access any area on earth within one day, all Worldwide Areas of interest waiting to be scheduled will be considered for inclusion in the schedule each day.
- Thanks to the daily global coverage of PlanetScope constellation, no order request has to be submitted to ask for new acquisitions of PlanetScope data for monitoring activity: the products will be available for access and download on Planet Explorer online catalogue as soon as acquired.
- In case of request for SkySat tasking products, the tasking request form needs to be submitted to Planet in order to produce a feasibility study and to verify if the acquisition is possible. Planet will deliver the Products in a manner agreed upon by the Parties, via Planet Explorer Platform or via API
- Order requests for new acquisition shall be sent to Planet at least 5 working days before the desired acquisition window should start.

## 3 Data users

- Only users located in the territory of ESA Member States (including Canada), in the European Commission Member States and in China as part of the Dragon cooperation programme, except users located in an “Embargoed Jurisdiction”<sup>1</sup> or “Sanctioned Persons”<sup>2</sup>, are eligible to access Planet satellite data for ESA and/or ESA approved science and application development projects. Planet reserves the right, in its sole discretion, to accept or reject any order based on Planet’s regulatory requirements.
- Planet reserves the opportunity to reject the project proposal if the Area of Interest crosses over a red zone, a region with restrictions and potential limitations for the sensing data access.

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<sup>1</sup> “Embargoed Jurisdiction” means a country, region, territory or government with respect to which the U.S. government imposes a trade or investment embargo.

<sup>2</sup> “Sanctioned Person” means any legal entity or individual with respect to which or whom U.S. citizens are generally forbidden to transact under economic sanctions including, without limitation, a person on the List of Specially Designated Nationals and Blocked Persons.

## 4 Assignment and usage of quota

A user requesting access to Planet products in the frame of the TPM shall submit a project proposal to ESA.

The distribution of RapidEye and Skysat satellite imagery is done by square kilometers.

For PlanetScope, the Data Vouchers are defined, corresponding to a maximum number of square kilometers that can be ordered and downloaded by the project (up to 5 different users) in a maximum period of 12 months (this duration cannot be extended) starting from the project proposal acceptance date. Each Data Voucher includes PlanetScope tile view streaming access for a total of 20,000 tiles per calendar month during the project period. Available data Vouchers are:

- Up to 6.000 km<sup>2</sup>
- Up to 12.500 km<sup>2</sup>
- Up to 30.000 km<sup>2</sup>
- Up to 60.000 km<sup>2</sup>

During the project submission, the user shall specify his need as

- **Type of data:**

- RapidEye Ortho product
- PlanetScope Basic Scene and Ortho Scene (ortho visual or ortho analytic)
- SkySat Basic scene, Ortho Scene (Visual Ortho, SkySat Pansharpened Multispectral Ortho, Analytic DN Ortho, Panchromatic DN Ortho, Analytic Ortho Scene) and Consolidated Product (Visual Ortho, SkySat Pansharpened Multispectral Ortho, Analytic DN Ortho, Panchromatic DN Ortho)

- **Order type**

- Archive
- New tasking/monitoring

- **Area of Interest**, the number of square kilometers.

The order can be a single polygon or multipolygon (composed by several AOIs).

- RapidEye: the overall amount of sqkms shall be greater than the minimum order size of 4.000 km<sup>2</sup>
- Skysat: the overall amount of sqkms shall be greater than the minimum order size of 300 km<sup>2</sup> for archive, 25 km<sup>2</sup> for new acquisition (only for new acquisition, 25 km<sup>2</sup> is the minimum AOI of each polygon). Providing a shape file is mandatory.

- **Time of interest**

- Only for SkySat, this information is mandatory otherwise access to data is not granted.

To quantify the number of sqkm needed and the availability over the Area of Interest, the user is invited to check the Planet Catalogue for RapidEye and SkySat data at <https://www.planet.com/explorer/>: an email needs to be sent to [earthnet@planet.com](mailto:earthnet@planet.com) for the creation of the user account with a request for 5 days viewing access to AOI's and TOI's for data supply by ESA.

Due to the daily global coverage of PlanetScope constellation, there is no need to verify the availability of the PlanetScope desired data (both archive and new acquisition for monitoring) in Planet Explorer online catalogue since the data are almost certainly there. During the evaluation process, the scientific content of a submitted project proposal is evaluated by ESA against the data requirements of the PI and a respective quota will be assigned to the project.

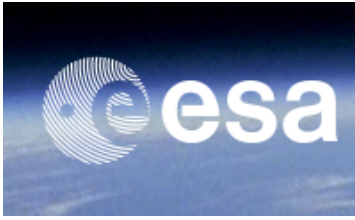
### **Archive, new tasking and monitoring products**

If the project is accepted by ESA, the user shall order the archive products directly through the Planet Explorer catalogue (at <https://www.planet.com/explorer/>). The PI shall be contacted by Planet to confirm the Planet user account entitled for the ordering and which will be promoted with ordering/download permissions and loaded with enough spendable credits in order to get the archive products corresponding to the quota assigned to the project.



The same approach is applicable to PlanetScope monitoring data and SkySat new tasking data: the only difference is that the data are not available at acceptance stage but only after the acquisition.

The quota shall be consumed within a year from assignment. After the validity period of 1 year, ESA reserves the right to remove the credits.



## 5 Data Access

Archive RapidEye, PlanetScope and SkySat products from 2012 onward can be discovered and selected by using the Planet Explorer online tool at <https://www.planet.com/explorer/>.

The product names used in the platform are slightly different with respect to the official ones. Following table provide the mapping:

Official Product Name	Item type in Planet Explorer	Asset type in Planet Explorer (product option)
<b>RapidEye Ortho</b>	<ul style="list-style-type: none"> <li>• RapidEye Ortho Tile</li> </ul>	
<b>PlanetScope Basic</b>	<ul style="list-style-type: none"> <li>• 4-band PlanetScope Scene</li> <li>• 3-band PlanetScope Scene</li> </ul>	<ul style="list-style-type: none"> <li>• basic_analytic</li> <li>• basic_analytic_dn</li> </ul>
<b>PlanetScope Ortho</b>	<ul style="list-style-type: none"> <li>• 4-band PlanetScope Scene</li> <li>• 3-band PlanetScope Scene</li> </ul>	<ul style="list-style-type: none"> <li>• analytic,</li> <li>• analytic_sr</li> <li>• analytic_dn</li> </ul>
<b>SkySat Basic</b>	<ul style="list-style-type: none"> <li>• SkySat Visual,</li> <li>• SkySat Analytic,</li> <li>• SkySat Panchromatic</li> <li>• SkySat Pansharpened Multispectral</li> </ul>	<ul style="list-style-type: none"> <li>• basic_analytic_dn</li> <li>• basic_panchromatic_dn</li> </ul>
<b>SkySat Ortho</b>	<ul style="list-style-type: none"> <li>• SkySat Visual,</li> <li>• SkySat Analytic,</li> <li>• SkySat Panchromatic</li> <li>• SkySat Pansharpened Multispectral</li> </ul>	<ul style="list-style-type: none"> <li>• analytic</li> <li>• ortho_visual,</li> <li>• ortho_pansharpened</li> <li>• ortho_panchromatic_dn</li> </ul>
<b>SkySat Consolidated</b>	<ul style="list-style-type: none"> <li>• SkySat Collect</li> </ul>	<ul style="list-style-type: none"> <li>• ortho_visual,</li> <li>• ortho_analytic_dn,</li> <li>• ortho_pansharpened</li> <li>• ortho_panchromatic_dn</li> </ul>

Archive RapidEye level 3A products older than 2012 are not into the Planet Explorer online tool but they can however be requested without using the catalogue. If a user is interested in older data (prior 2012), the request can be submitted via email directly to [orders@planet.com](mailto:orders@planet.com), providing Time and Area of Interest: data will be selected manually by Planet and sent back to the user for the verification.