

This text presents the data policy for the data subset called the “Original Products” (i.e., **the 1 km resolution products**) provided by the PROBA-V Exploitation Phase (“PROBA-V”) ESA Element of the European Earth Watch Programme

And

The data policy of the PROBA-V Belgian national exploitation programme, for the data subset called “Medium Resolution Products” (i.e., **the 300 m and 100 m resolution products**).

Original Products (ESA Earth Watch)

The production, archiving, and provision to the user community of the following, so-called **Original Products**, fall under the responsibility of ESA.

Table 1: PROBA-V Earth Watch Element products. All are kilometric ground resolution. These are called "Original Products" in the PROBA-V Earth Watch Declaration. TOA: Top Of Atmosphere, i.e., no atmospheric correction applied. TOC:Top Of Canopy, i.e., atmospherically corrected.

Product	format	projection	bands	pixel status map	region of interest
L1C	HDF5/Geotiff	unprojected	all 4	included	specifiable
L2A km	HDF5/Geotiff	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOA km	HDF5/Geotiff	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOC km	HDF5/Geotiff	Lat/lon (WGS84)	all 4	included	specifiable
S10 TOC km	HDF5/Geotiff	Lat/lon (WGS84)	all 4 + NDVI	included	specifiable

The data policy for the Original Products will be ‘free and open’. These products are standard, customisable products.

Medium Resolution Products (national)

The production, archiving, and provision to the user community of the following **Medium Resolution Products** fall under the responsibility of the Belgian national exploitation programme.

Table 2: PROBA-V Medium Resolution Products. All are at 300 m and 100 m resolution (except for the SWIR channel: 600 m and 200 m, respectively).

Product	format	projection	bands	pixel status map	region of interest
L2A 300 m	HDF5	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOA 300 m	HDF5	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOC 300 m	HDF5	Lat/lon (WGS84)	all 4	included	specifiable
S10 TOC 300 m	HDF5	Lat/lon (WGS84)	all 4 + NDVI	included	specifiable
L2A 100 m	HDF5	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOA 100 m	HDF5	Lat/lon (WGS84)	all 4	included	specifiable
S1 TOC 100 m	HDF5	Lat/lon (WGS84)	all 4 + NDVI	included	specifiable
S5 TOA 100 m	HDF5	Lat/lon (WGS84)	All 4	included	specifiable
S5 TOC 100 m	HDF5	Lat/lon (WGS84)	All 4 + NDVI	included	specifiable

The Medium Resolution Products are all at 300 m and 100 m spatial resolution, (except for the SWIR channel, 600 m and 200 m, respectively). These products can be customised with the following options:

- HDF4 or GeoTIFF format instead of HDF5. (Many former SPOT-Vegetation customers are used to HDF4 and may want to continue to receive products in this format)
- stitching of granules for small Regions of Interest.
- Clipping the granules of L1C products to a very specific, rectangular region of interest. Instead of receiving entire granules covering the region of interest and a small part outside the region of interest, the user will receive only the pixels he is interested in. So the granules at the edge of the Region of Interest are clipped.
- Selection of specific bands, e.g. only the RED band

Nominal Delivery is the product delivery to the user within 72 hours after downlink of the last required dataset in Kiruna. Nominal Delivery is on a best effort basis, i.e., provided that the order handling capacity and the hardware capacity of the ground segment is not overloaded.

Near Real Time Delivery is when the delivery is guaranteed within the above mentioned 72 hours timeframe.

The Original Products will always be delivered Nominally.

The Medium Resolution Products can be delivered Nominally, but in that case only products older than 1 month can be ordered. The 1 month is motivated by the fact that vegetation parameters only change considerably over a 1 month period. Medium Resolution Products can also be delivered in Near Real Time. In that case, products older or younger than 1 month can be ordered and the delivery time of 72 hours (after downlink of the last required dataset) is guaranteed. Table 3 summarises the possible delivery schemes.

Table 3: Delivery schemes.

	Nominal		Near Real Time	
	delivery time	age of product	delivery time	age of product
Original Products	<72 hours, best effort	any age	(*)	(*)
Medium Resolution Products	<72 hours, best effort	>1 month	<72 hours, guaranteed	any age

(*) : Does not exist. Service not provided.

International Charter on Space and Major Disasters

An official call for Original Products or Medium Resolution Products by the International Charter on Space and Major Disasters (<http://www.disasterscharter.org/home>) is subsequently referred to as Charter. The service provider can be either ESA or the Belgian national programme, depending on the product asked for.

PROBA-V Earth Watch Partners

The PROBA-V Earth Watch Partners are Belgium and Luxemburg. The Data Policy for the PROBA-V Earth Watch Partners is also valid for:

- all institutional users of Belgium and Luxemburg.
- all research projects (research only!) of which the Prime Investigator is based in Belgium or Luxemburg.

and, provided that these entities are officially recognised by:

For Belgium: BELSPO

For Luxemburg : Luxinnovation

If such a recognised entity wants to use products for commercial purposes, the permission of both BELSPO and Luxinnovation is required.

Scientific Use

All products may be used for scientific purposes. If a user wants to use products for scientific purposes only, he/she can get the required products under special, more favourable conditions (see Table 4). The use of products for research projects that are entirely funded by ESA (e.g. DUE, VAE, EOEP, GSC, if funded by ESA only) falls under Scientific Use.

The use of products by EC research projects (FP7, Horizon2020, including research (partially) funded by the EC in view of Copernicus) also falls under Scientific Use, provided they are not and will not be used for other than research purposes (no simultaneous operational use, no operational use afterwards).

All Scientific Use projects have to indicate the total amount of products required.

If the total amount of products for Scientific Use (ESA funded project or not, including project extensions, options, etc.) exceeds 400 Gigabyte, then the approval by VITO, BELSPO and Luxinnovation is required.

In case Original Products are used for projects that are entirely funded by ESA, ESA decides whether the products are accepted as Scientific Use. In all other cases, Scientific Use has to be approved by both BELSPO and Luxinnovation.

In order to widen the scope of Scientific Use, properly motivated requests to deviate from any condition of Scientific Use can be introduced at the Programme Scientist of the PROBA-V programme. This Programme Scientist will judge whether the request can be met and he/she will formulate a recommendation to BELSPO and Luxinnovation. BELSPO and Luxinnovation will finally decide. Considering and answering such a request is on a voluntary basis, both by the Programme

Scientist and by BELSPO and Luxinnovation. As long as the user does not get an answer in writing, the normal conditions apply.

Data policy

The data policy described here is restricted to PROBA-V products, i.e., this data policy does not apply for any product that is based on data originating from the SPOT-Vegetation instruments. The SPOT-Vegetation data policy remains as before.

The data policy described here is only applicable to data and products for which it is theoretically possible, using a reverse algorithm, to reconstruct any of the Original Products or any of the Medium Resolution Products.

Order of handling priority:

1. Charter
2. Any paying user, Full cost High (for details, contact VITO)
3. Any paying user, Full cost Medium (for details, contact VITO)
4. Any paying user, Full cost Low (for details, contact VITO)
5. Programme Partner
6. Copernicus Use
7. Scientific Use
8. Other

Table 4: PROBA-V data policy. See text for explanations and conditions for the different types of users. Blue rows: ESA Earth Watch programme. Green rows: Belgian national programme.

Product	Delivery Time	User				
		Charter	Programme Partner	Copernicus	Scientific	Other
L2A 1 km	Nominal	Free	Free	Free	Free	Free
S1 TOA+TOC 1 km	Nominal	Free	Free	Free	Free	Free
S10 TOC 1 km	Nominal	Free	Free	Free	Free	Free
L1C TOA raw resolution	Nominal	Free	Free	ML cost L	HMT cost	Full cost L
S1 TOA+TOC 300 m	Nominal	Free	Free	ML cost L	HMT cost	Full cost L
S10 TOC 300 m	Nominal	Free	Free	ML cost L	HMT cost	Full cost L
L2A 100 + 300 m	NRT	HMT cost	Free	ML cost H	Full cost L	Full cost H
S1 TOA+TOC 300 m	NRT	HMT cost	Free	ML cost H	Full cost L	Full cost H
S10 TOC 300 m	NRT	HMT cost	Free	ML cost H	Full cost L	Full cost H
S1 TOA+TOC 100 m	Nominal	Free	Free	ML cost L	HMT cost	Full cost L
S5 TOC 100 m	Nominal	Free	Free	ML cost L	HMT cost	Full cost L
S1 TOA+TOC 100 m	NRT	HMT cost	Free	ML cost H	Full cost L	Full cost H
S5 TOC 100 m	NRT	HMT cost	Free	ML cost H	Full cost L	Full cost H

List of abbreviations

BELSPO	Belgian Science Policy
DUE	Data User Element
EC	European Commission
EOEP	Earth Observation Envelope Programme
ESA	European Space Agency
FP7	European Commission Seventh Framework Programme
GeoTIFF	Geospatial Tagged Image File Format
GSC	GMES Space Component
HDF	Hierarchical Data Format
HMT	The cost of the required manpower (Hours) + Media + Transport
Luxinnovation	Luxemburg National Agency for Innovation and Research
ML	Multi License
NRT	Near Real Time
PROBA-V	Project for On-Board Autonomy - Vegetation
SPOT	Système Pour l'Observation de la Terre
TOA	Top of Atmosphere
TOC	Top of Canopy
VAE	Value Adding Element