IPERLITE Data Policy

04 November 2026

IPERLITE data are free and open to registered users worldwide, published about approximately 1 week after acquisition; new acquisitions are requested through an approved project proposal and are best effort.

1. Scope

This policy covers all data and products from the CSIMBA hyperspectral instrument on the IPERLITE mission, flown on the NAHLA satellite, produced by the Flemish Institute for Technological Research (VITO) with funding from the European Space Agency and the Belgian Science Policy Office.

Item	Value
Satellite and instrument	NAHLA satellite (Aerospacelab VSP-150 platform), CSIMBA payload
Launch	28 November 2025, Falcon 9, Transporter-15, Vandenberg
Orbit altitude	510 km
Ground sampling distance	20 m
Swath	80 km
Spectral range	465–900 nm, 133 bands
Daily downlink	18.75 GB, about 17,500 km^2 of hyperspectral coverage
Mission lead	VITO, funded by the European Space Agency and the Belgian Science Policy Office

2. Products and distribution

Both L1C and L2A products are published as open collections on the Terrascope platform about five to six days after acquisition; Each collection is described in the SpatioTemporal Asset Catalog (STAC) and has its own Digital Object Identifier and citation text.

Product	Content	Format	Collection	Digital Object Identifier
Level-1C	Top-of-atmosphere reflectance, 133 spectral band layers, 20	Cloud Optimized GeoTIFF, one file per band	terrascope-iperlite-l1c-cog-v1	10.71570/55r6-b082

Product	Content	Format	Collection	Digital Object Identifier
	m ground sampling distance			
Level-2A	Top-of-canopy reflectance, 133 spectral band layers, 20 m ground sampling distance	Cloud Optimized GeoTIFF, one file per band	terrascope-iperlite-l2a-cog-v1	10.71570/gy4d-7390

Both collections cover latitudes from 56° south to 75° north, each product also contains solar and view angle layers (azimuth and zenith), a DIMAP metadata file, a colour quick look and preview image, a GDAL VRT data cube file, and a KML contour file. Collection metadata is also published in INSPIRE format.

Data quality. IPERLITE is an in-orbit demonstrator. Calibration and validation of the CSIMBA instrument are still improving, so radiometric, spectral and geometric accuracy may change as the work progresses. Users are advised to check the quality information provided with each product and consult the IPERLITE Fact Sheet for an overview of the known issues and limitations.

Versioning and reprocessing. Products may be reprocessed when calibration or processing algorithms improve. Each reprocessing is released as a new collection version with its own Digital Object Identifier.

3. Access and tasking

Who may use the data. Any registered user, anywhere in the world, including commercial users.". Registration requests are reviewed manually to verify that each account belongs to a real person. Use of the data is free of charge.

Personal data. Registration details are used only to manage user accounts, review acquisition requests and contact users about the mission. They are processed in line with the EU General Data Protection Regulation and the VITO/Terrascope privacy policy.

Archive access. Registered users can search and download the archive once registered. No project proposal is needed to download data already acquired.

Requesting a new acquisition over a region of interest. Users need to describe their project/proposal and region of interest on the IPERLITE User Acquisition Request Form.

1. The user registers and submits a ticket with the project description and region of interest.
2. The request is reviewed and approved.
3. The satellite is tasked on a best-effort basis.
4. The resulting data become available to all users, about one week after acquisition.

5. Users whose acquisition request is approved commit to share their results with VITO within one year of the acquisition: publications, feedback on data quality, success stories, outreach material or proofs of concept. All other users are encouraged to do the same.

4. Tasking priorities and acquisition commitments

Since the mission is an in-orbit demonstrator, all tasking is best effort. The acquisition date depends on cloud-cover forecasts, weather and orbit, spacecraft constraints so no acquisition date or success is guaranteed.

Requests are reviewed and prioritised by VITO in consultation with the European Space Agency and the Belgian Science Policy Office, in this order:

1. Crisis and civil security requests.
2. Scientific and non-profit projects, assessed on scientific merit, the suitability of IPERLITE data for the project, and feasibility.
3. Other requests, in the order they are received.

When requests compete for the same orbit, the higher-priority request is acquired first. VITO aims to review each request within five to ten working days and inform the user of the decision. If a request is not approved, the user is told the reason and, where possible, offered an alternative, such as existing archive data or a revised region or period.

5. Terms of use

Licence. All IPERLITE products are released under the Creative Commons Attribution 4.0 International licence (CC-BY-4.0), as declared in both Terrascope collections. The European Space Agency and the Belgian Science Policy Office are the licensors; VITO NV is producer, processor and host. Users may copy, redistribute and adapt the data with attribution.

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Attribution and citation. Cite the collection used, with its Digital Object Identifier: Level-1C https://doi.org/10.71570/55r6-b082, Level-2A https://doi.org/10.71570/gy4d-7390. Format: ESA, BELSPO, & VITO NV. (2026). Collection title, Version 1. Flemish Institute for Technological Research.

User commitment. With the use of the data, users commit to share results within one year of their data request: publications, feedback on data quality, success stories, outreach material and proofs of concept.

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