Access to GEOSAT-1 & -2 as ESA's Third Party Mission

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.

Since 2016, the GEOSAT-1 & -2 (former Deimos-1 &-2) imagery products are part of the Third Party Missions Program.

Within the ESA CAT-1 TPM Scheme, ESA offers to the CAT-1 user community the following service provided by GEOSAT:

➢ Delivery to Category-1 worldwide Users of on-demand GEOSAT-1 and GEOSAT-2 products (archiving and/or new tasking products) for category-1 use

➢ Standard tasking option: new acquisition order finalized 3 working days before sensing time

➢ Standard delivery option: product delivery within 1-3 working days after ordering/sensing time

2   Data Accessibility Conditions

The data available as part of the ESA TPM are the following, as archive and tasking:

- ▢   GEOSAT-1 products are available as:
    - o   L1R (Geopositioned)
    - o   L1T (Orthorectified)

    Delivered in False Colors (R, G, NIR) or Natural Colors (R, G, Synthetic Blue)

- ▢   GEOSAT-2 products are available as:
    - o   L1 pan-sharpened; 4-Bands, Natural colors or False colors
    - o   L1 Panchromatic
    - o   L1 Multispectral
    - o   L1 Bundle (PAN+MS)
    - o   L1 Stereo Pair (two acquisitions of the same target)

    All products are delivered as ortho-ready L1B (PAN resolution 1m, MS resolution 4m) or orthorectified L1C (PAN resolution 0.75 m, MS resolution 3m). Pan-sharpened 4-Bands and Bundle are also delivered as super-resolution orthorectified L1D products (PAN resolution 0.40 m, MS resolution 1.6m)

Tasking order form shall be finalized at least 3 working days before sensing time

The minimum order sizes are the following:

Products	Minimum order size
GEOSAT-2 archive products	25 km²
GEOSAT-2 new acquisitions	100 km²
GEOSAT-1 archive products	6000 km²
GEOSAT-1 new acquisitions	10000 km²

The full archive is accessible at https://catalogue.geosat.space/cscda/extcat/ .

3   Data users

- ▢   Access to data can be provided by ESA to worldwide users, but GEOSAT can introduce further limitation or even rejection of the order (In this case GEOSAT will interact with users to find the best possible solution), based on applicable security regulations or feasibility study of the acquisition.
- ▢   No geographic restrictions on Area of Interests (AOI) unless ESA defines otherwise. But GEOSAT can introduce further limitation or even rejection of the order (In this case GEOSAT will interact with users to find the best possible solution)

4 Assignment and usage of quota

Assignment of quota

During the project submission, the user shall specify his need as a number of km^2 for tasking and/or archive between the available products. The user requests the Mission/Instrument/dataset of interest and specifies the details:

Mission	Instrument	dataset	details
GEOSAT-1	SLIM-6	GEOSAT-1 Level 1	• user specifies the number of km2 of "standard archive" and "new acquisitions"
GEOSAT-2	HiRAIS	GEOSAT-2 L1B (ortho-ready) and L1C (Ortho)	• Panchromatic, Multispectral, Pan- Sharpened, Bundle • Processing Level: L1B, L1C • Resolution: ortho-ready PAN 1m, MS, 4m; Ortho PAN 0.75m, MS, 4m • user specifies the number of km2 of "standard archive" and "new acquisitions"
		GEOSAT-2 L1D (super-resolution)	• Pan- Sharpened, Bundle • Processing Level: L1D • Resolution: PAN 0.4m, MS, 1.6m • user specifies the number of km2 of "standard archive" and "new acquisitions"
		GEOSAT-2 Stereo-pair	• two acquisitions of the same target performed from different viewpoints • Pan- Sharpened, Panchromatic • user specifies the number of km2 of "standard archive" and "new acquisitions"

ESA, then, evaluates the scientific content of a submitted project proposal against the data requirements of the PI and a respective quota will be assigned to the project. ESA tries to support as many high-quality and innovative projects as possible within the quota limit available, therefore only a limited amount of products can be made available to each project.

The assigned quota is valid for one year after reception of the Final acceptance mail. This validity period can be extended if requested by the user for particular reasons.

Usage of quota

The PI (and Co-PIs if any) is allowed to order the products from GEOSAT within the limit of the quota assigned by ESA.

The ordering is done directly through GEOSAT by following the procedure received by EOHelp@esa.int after final acceptance of the project.

The PI (and Co-PIs if any) is not strictly constrained to order exactly the products corresponding to the quota assigned to his project.
In case the PI (and Co-PIs if any) intends to order something different than the quota (but within the list of available products above), he should take into consideration that the products are not equivalent between them. A quota for a certain amount of km^2 for one dataset doesn't consume the quota in the same way than the same amount of km^2 for a different dataset.
PIs (and Co-PIs if any) willing to order something different than the quota (but within the list of available products above) are invited to contact GEOSAT prior to submit the order in order to evaluate the impact on the quota.