



GEODES







toulouse métropole

THE INFORMATION PORTAL
& DATA EARTH OBSERVATION PLATFORM
OF CNES



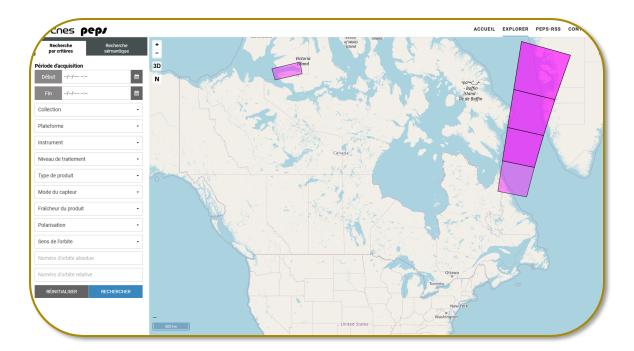
GEODES TEAM

MARCH 2025

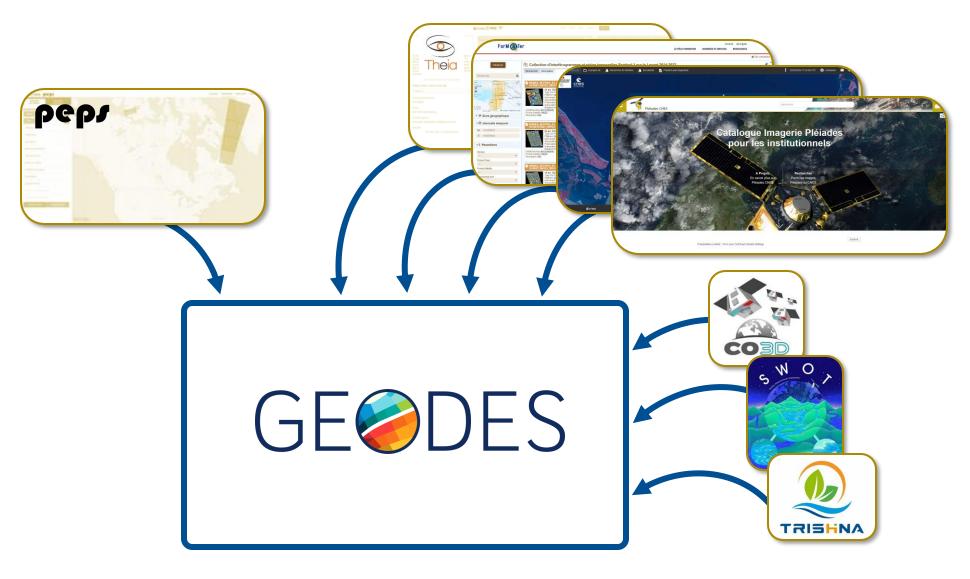


peps

- Nearly 10 years of Copernicus data distribution thanks to the Collaborative Ground Segment
- 10000+ registered users from France and around the world







GEODES: ONE PORTAL & ONE PLATFORM

COMMUNICATION PORTAL



DATA & SERVICES PLATFORM







SERVICE CATALOG

ALL

PUBLICS ET PRIVATE ACTORS

DATA TERRA & CNES PROJECTS

SERVICES POUR TOUS

SERVICES POUR LES COMMUNAUTÉS

SERVICES AVANCÉS



DÉCOUVERTE &

EXPLORATION

- · Découverte et recherche de données
- · Portail de valorisation
- · Visualisation de la donnée
- · Téléchargement de données





SCIENCE &

EXPLOITATION

- · Gestion des catalogues et des données
- · Reporting
- · Gestion des quotas
- · Hypervision

DONNEES OT

EO Missions from CNES





Next: PWH, SWOT, CO3D, MICROCARB ...

CDS Data Terra / CNES

Theia

OSO



Next:





Copernicus missions

S1 (A/B), S2 (A/B)





Continuité de service PEPS

Commercial data

Next: PNEO, ...

In partnership with Data Terra

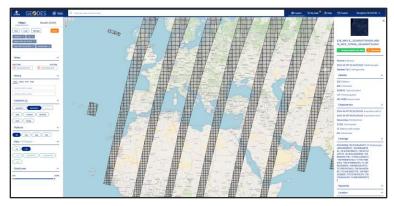
FEDERATION & INTEROPERABILITY TO SUPPORT SCIENCE & INNOVATION







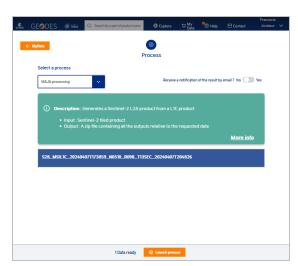
FIRST SERVICES SUPPORTED IN GEODES



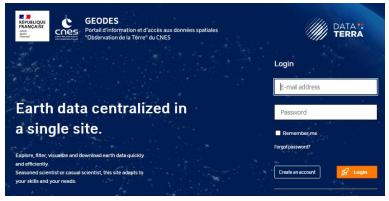
WEB AND STAC INTERFACE



DOWNLOAD



ON-DEMAND PROCESSING



AUTHENTICATION & ACCESS MANAGEMENT



DATALABS

25 Pb 43+ millions products

Sentinel 1 (A/B)

Sentinel 2 (A/B/C) Spot World Heritage







CDSE (ESA) **Acquisition Engine (CNES)** Look for newly published Sentinel products Download the new products Check the data integrity (checksum, specific metadata, ...) Store the data files on CNES Datalake Add the product to the catalogue and make it available to end-users Sentinel-1 SLC, GRD & OCN Sentinel 2 L1C Sentinel 3 SRAL



GEODES Catalogue

- Sentinel-1 SLC, GRD & OCN
- Sentinel 2 L1C
- Sentinel 3 SRAL

Copernicus data

Downstream products

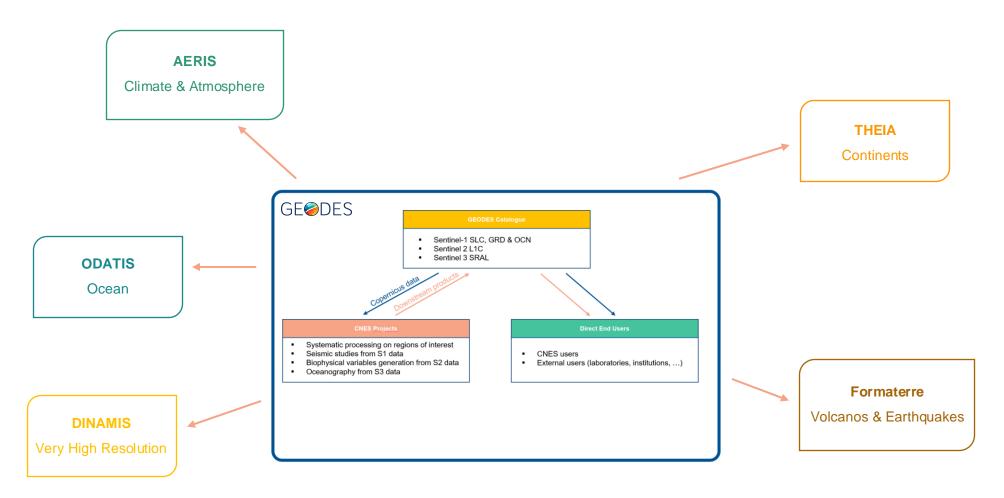
CNES Projects

- Systematic processing on regions of interest
- Seismic studies from S1 data
- Biophysical variables generation from S2 data
- Oceanography from S3 data

Direct End Users

- CNES users
- External users (laboratories, institutions, ...)





GEODES acts as an access point for national research portals (IR Data Terra)



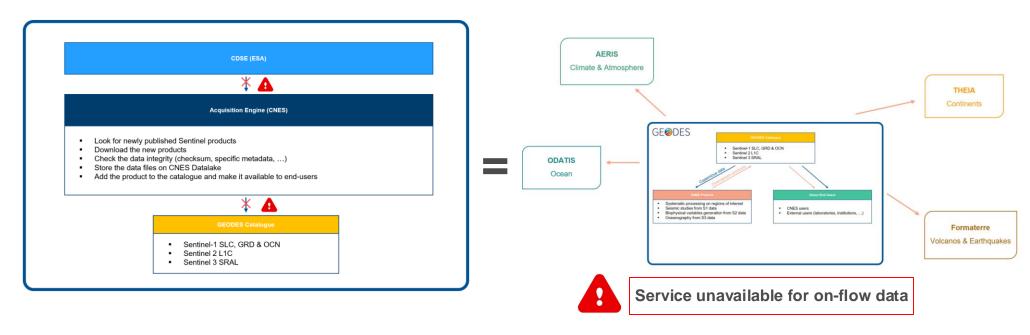




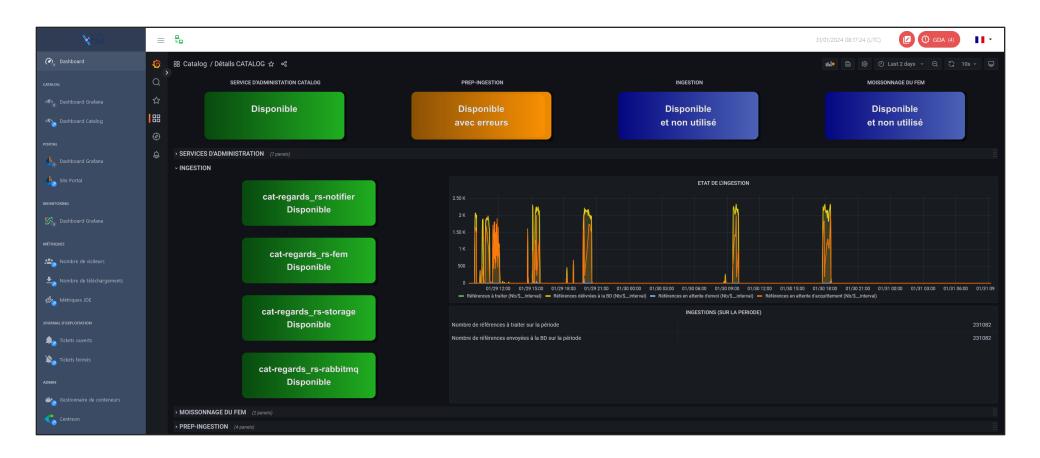
Some advantages of storing Copernicus data at CNES:

- Data is close to processing chains
- Data is close to users
- CNES can manage dedicated quota and rights to ensure users and partners can access data with as little restrictions as possible
- Allows for a hybrid setup where data is stored at CNES and processed on a private Cloud server

Risks to be considered:









What is much appreciated:

- Overall well rounded service with a steady data access
- Great support : reactive helpdesk
- Sufficient quota and bandwidth to allow fast distribution of data to end-users

What would be awesome to have:

An improved communication process for technical matters impacting CollGS partners.

Observation → the CDSE Event page does not provide enough information for technical centers.

Proposal → direct communication (email) on :

- Network modifications (IP addresses, ...)
- Major API upgrades
- Products format changes
- ...

The email list used to ask for annual CollGS activity reports could be used for such technical communications.



Project Managers
For any CollGS related topic





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