



COPERNICUS

Le programme
et ses Relais locaux

Cerema Sud Ouest
Dominique HEBRARD



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Journée COTITIA, Toulouse, 11 février 2019



Le programme

Une réponse européenne aux besoins globaux

✓ D'observation et surveillance de la Terre

- ❖ gestion de l'environnement
- ❖ réduction des impacts du changement climatique
- ❖

✓ De gestion des crises, des risques de sécurité et des désastres naturels ou artificiels



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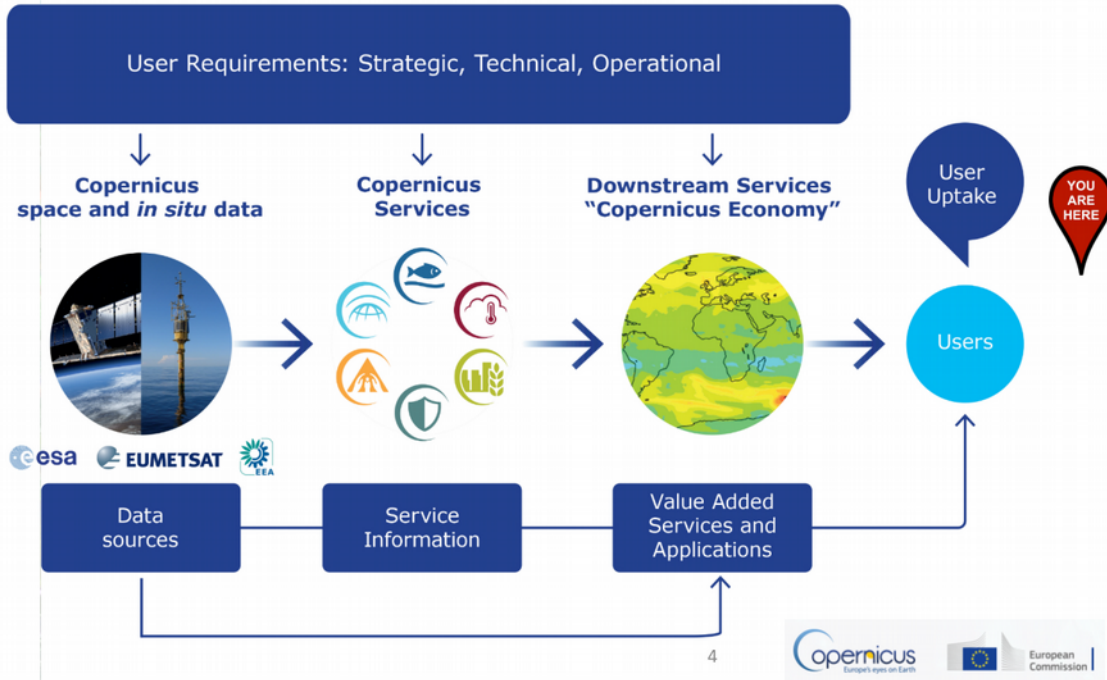


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Piloté par les utilisateurs





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COPERNICUS, OBSERVATIONS SPATIALES – SENTINELS



SENTINEL-1:
9-40m resolution
revisite 6 jours

*S1-A and B en
orbite*

- Orbite polaire
- image radar nuit et jour
- Tout temps



SENTINEL-2:
10-60m resolution
revisite 5 jours

*S2-A en Orbite
S2-B en orbite*

- Orbite polaire
- Imageur multispectral
- 13 bandes spectrales
- Fauchée 290 km



SENTINEL-3:
300-1200m resolution
revisite <2 jours

*S3-A en Orbite
S3-B Q4 2017*

- Orbite polaire
- Altimétrie
- Imageur multispectral

S4,5,6.. et des missions contributrices



Data
Access

COPERNICUS SERVICES

*Monitoring the State of the
Earth System Environment**



*... Six cross-cutting
Thematic Services*

En résumé

des données d'observation spatiales

✓ **et in-situ, des informations, des services sur l'environnement européen et global de la meilleure qualité possible**

✓ **en accès libre et gratuit...**

✓ **avec une garantie de continuité à long terme**



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La donnée

**10 Po de données
supplémentaires à
stocker chaque
année**



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La dissémination

La réponse de la commission

Les Copernicus Data and Information Access Services DIAS



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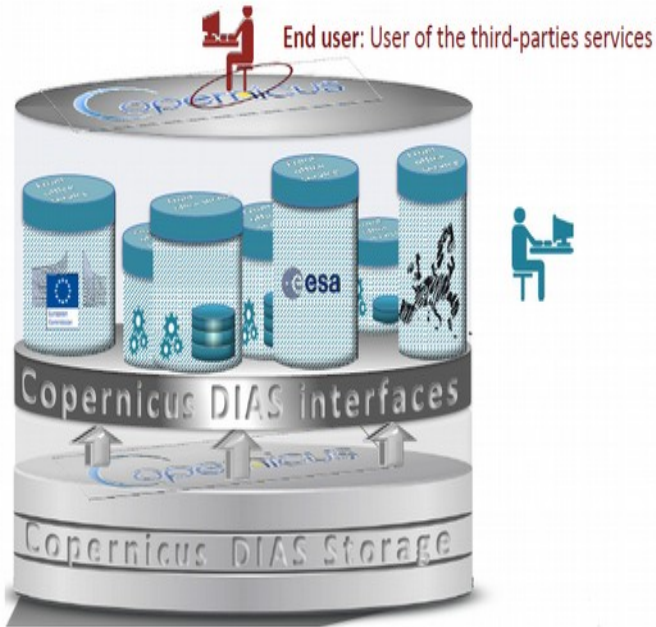


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Les DIAS



- ✓ Faciliter l'accès aux données et aux informations de Copernicus
- ✓ Fournir aux entités publiques et privées un environnement Cloud évolutif pour le traitement des données, la création de services et produits à valeur ajoutée.

Who?

THE DIAS & WHERE TO REACH THEM

CREODIAS

WWW.CREODIAS.EU

sobloo

WWW.SOBLOO.EU

mundi
WEB SERVICES

WWW.MUNDIWEBSERVICES.COM

ONDA

WWW.ONDA-DIAS.EU

WEKEO
BY COPERNICUS

WWW.WEKEO.EU

20 June 2018: Launch of the 5 DIAS in Baveno



Data
Access

Copernicus, LES RELAISET ACADEMIES



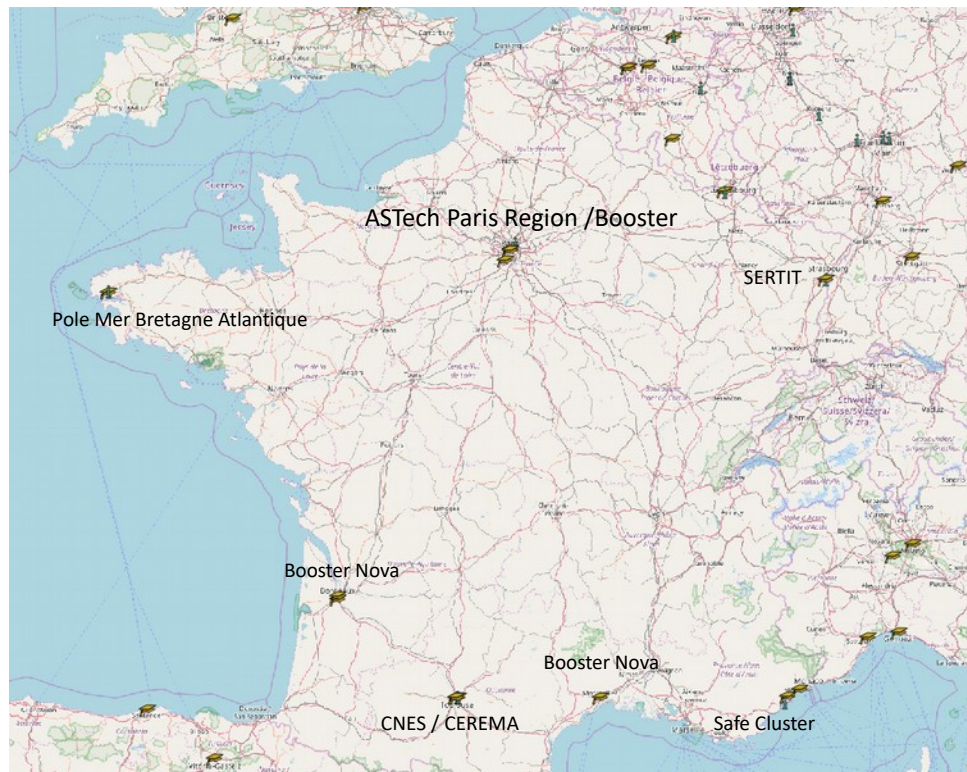
En appui aux utilisateurs



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Copernicus, LES RELAIS

- 63 relais / 7 relais français





Copernicus

Copernicus, LES ACTIONS DES RELAIS

- Communications, information, formation sur l'utilisation du spatial pour les territoires



Présentation



Information



Documentation



Echanges bonnes pratiques



Formation



ApplicationsThématiques



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— Accès aux données

<https://scihub.copernicus.eu/dhus/>

Copernicus Open Access Hub

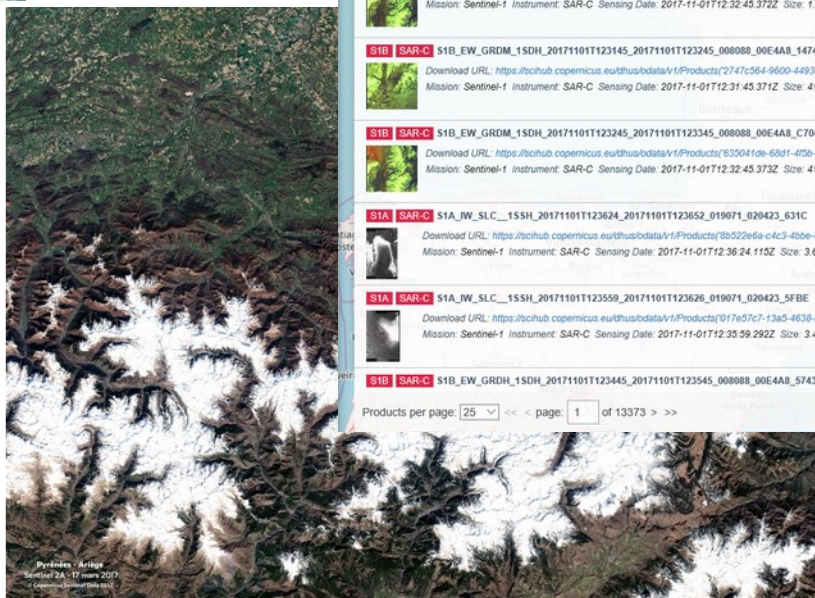
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Display 1 to 25 of 334311 products. Order By: Ingestion Date ↓

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Download URL: https://scihub.copernicus.eu/dhus/bdats/v1/Products/a8f8cca-08b9-4610-ad12-42c7d266441/\$v	Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2017-11-01T12:32:45.372Z Size: 1.02 GB
	S1B SAR-C S1B_EW_GRDM_1SDH_20171101T123245_20171101T123345_008088_00E4A8_C704
Download URL: https://scihub.copernicus.eu/dhus/bdats/v1/Products/635041de-66d1-470b-b40c-913af6dde319/\$	Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2017-11-01T12:31:45.371Z Size: 412.63 MB
	S1A SAR-C S1A_IW_SLC__1SSH_20171101T123624_20171101T123652_019071_020423_631C
Download URL: https://scihub.copernicus.eu/dhus/bdats/v1/Products/8b522e6a-c4c3-4bbe-8022-2a960c393e99/\$	Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2017-11-01T12:36:24.115Z Size: 3.67 GB
	S1A SAR-C S1A_IW_SLC__1SSH_20171101T123559_20171101T123626_019071_020423_SFBE
Download URL: https://scihub.copernicus.eu/dhus/bdats/v1/Products/017e57c7-13a5-463b-b677-48e6ea2081d3/\$	Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2017-11-01T12:35:59.292Z Size: 3.41 GB
	S1B SAR-C S1B_EW_GRDM_1SDH_20171101T123445_20171101T123545_008088_00E4A8_5743

Products per page: 25 << page: 1 of 13373 >> CLOSE





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— Accès aux données

<https://scihub.copernicus.eu/dhus/>

Copernicus Open Access Hub

Insert search criteria...

Display 1 to 25 of 334311 products. Order By: Ingestion Date ↓

Request Done: (beginPosition [2017-10-01T00:00:00Z TO 2017-11-01T23:59:59Z] AND endPosition [2017-10-01T00:00:00Z TO 2017-11-01T23:59:59Z]) AND(ingestionDate [2017-10-01T00:00:00Z TO 2017-11-01T23:59:59Z]) AND (platformname [Sentinel-1] OR (platformname [Sentinel-2]))

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S1A SAR-C S1A_IW_SLC_1SSH_20171101T123559_20171101T123626_019071_020423_SFBE

Download URL: <https://scihub.copernicus.eu/dhus/bdata/v1/Products/017e57c7-13a5-463b-b677-48e6ea20815d>/s Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2017-11-01T12:35:59.292Z Size: 3.41 GB

S1B SAR-C S1B_EW_GRDM_1SDH_20171101T123445_20171101T123545_008088_00E4A8_5743

Products per page: 25 << page: 1 of 13373 >> CLOSE

ATELIER TECHNIQUE 10h45 et 11h30





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COPERNICUS, LES ACTIONS DES RELAIS

– Accès aux services

Ecosystems

Biodiversity

Agriculture

Forestry

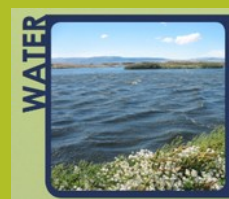
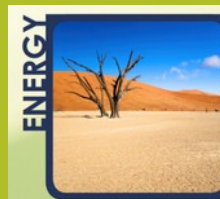
Energy

Natural Resources

Water

Urban planning

Global



Pan-European

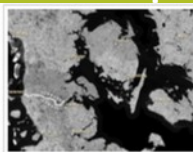
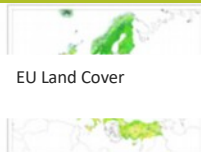


Image Mosaics



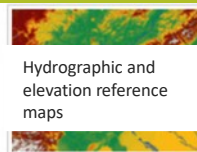
EU Land Cover

CORINE Land Cover



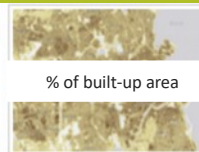
Specific land cover info

High Resolution Layers



Hydrographic and elevation reference maps

Reference Data



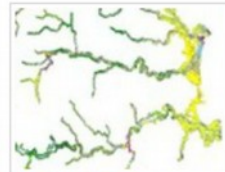
% of built-up area

Related Pan-European products

Local



Urban Atlas



Riparian Zones



Natura 2000 (N2K)



Copernicus

COPERNICUS, LES ACTIONS DES RELAIS

– Accès aux services

Ecosystems

Biodiversity

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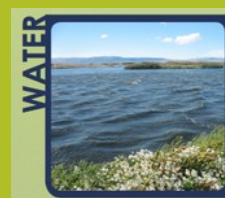
Energy

Natural Resources

Water

Urban planning

Global



Pan-European



ATELIER TECHNIQUE 10h45 et 11h30

Local



Urban Atlas



Riparian Zones



Natura 2000 (N2K)



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COPERNICUS, SERVICE GESTION DE CRISES

**Disaster
Emergency
Situations**

**Humanitarian
Crises**



Risk & Recovery Mapping:

- Reference Maps
- Pre-disaster Situation Maps
- Post-disaster Situation Maps

Rapid Mapping:

- Reference Maps
- Delineation Maps
- Grading Maps

Early Warning:

- Floods: EFAS
- Forest Fires: EFFIS

EFAS = European Flood Awareness System;
EFFIS=European Forest Fire Information System



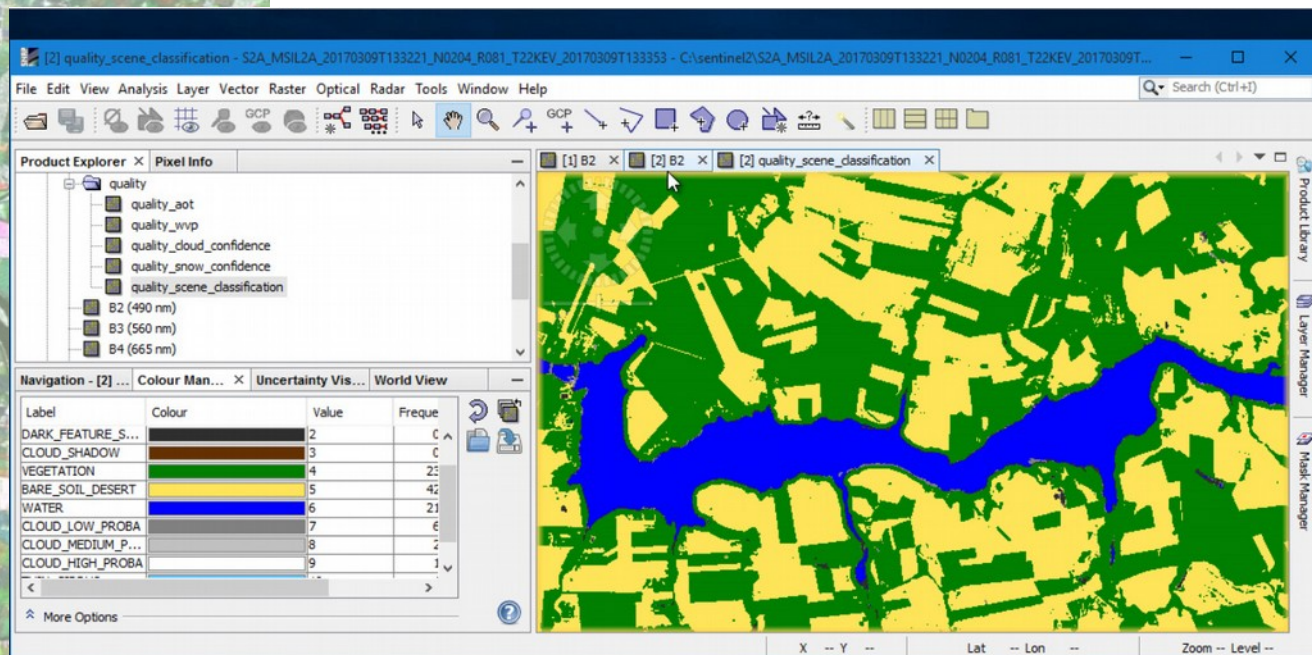
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– Informations sur les outils

<http://step.esa.int/main/toolboxes/snap/>

SNAP
DIAS
RUS
TEP
....





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C O P E R C I C U S

MERCI DE VOTRE ATTENTION



Copernicus Relai CNES/CEREMA

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