# LOCAL COPERNICUS DEMONSTRATOR IN BRITTANY

A working group to democratize data and services from Copernicus and make Brittany a territory for experimentation and demonstration of space applications.

# The challenge

Since 2015, the French Regions have been given additional responsibilities and must establish a regional planning and sustainable development scheme. Thus, to be fully informed about their territory and to efficiently manage its planning, local authorities need data, knowledge and tools. At the same time, earth observation data, including Copernicus and Sentinel data, remains underutilized: its use has so far been limited to specific projects, without real regional coordination. Local public authorities using geolocation data are aware of this potential and would like to take advantage of this dynamic. This results in two challenges for users: to integrate earth observation data, tools and techniques with their commonly used data and tools; and, more generally, to become active agents of these technological and technical evolutions.

## The space based solution

The space based solution consists in proposing operational demonstrators available on the Breton geographic data sharing platform "GeoBretagne" that has already been used by a large community of territorial managers for 10 years. Data and products resulting from Copernicus Programme and space applications, previously unexploited in this platform, would



First meeting of the working group across 5 cities (Brest, Lannion, Lorient, Rennes, Vannes).

be integrated with other data.

The originality of the initiative lies in the joint construction of demonstrators: a working group was set up within the GeoBretagne partnership, the Remote Sensing working group. It is currently made up of about twenty volunteers (territory managers, service managers, geomaticians) and led by GIS BreTel. The group aims at sharing knowledge and experiences, as well as codesigning space based services that respond to end-users needs. The first meeting of the Remote Sensing working group took place in January 2018 across 5 cities, and led to the proposal of an action plan.

#### **Benefits to Citizens**

The working group operates at two levels. The first is data and services dedicated to end-users access, providing them:

- Reliable and regularly updated data/ indicators/products with homogeneous acquisition methods for the region and consistent with the INSPIRE directive;
- Demonstration space to get to know and make known the space based solutions to their little-aware pairs.

have rather low expectations for space applications because of a fast-moving landscape. They ask for a place to discuss use cases at their own pace, using their business vocabulary in order to build their own strategy that will combine remote sensing with their daily applications."

Fabrice PHUNG (GeoBretagne)



An example of a demonstrator on GeoBretagne showing Copernicus product (imperviousness) compare to local land-use.

Credit: Contains modified Copernicus Sentinel data [2015]

The second level relates to users' ownership, allowing them:

- To have a resource and exchange centre to share experiences and practices, be they successes or disappointments that are also instructive;
- To join a network of users, remote sensing experts and support structures (in Brittany or in national and European networks);

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- For mutual needs, to share the costs and reduce risks when setting up operational services or joint pilot projects;
- To be more than just consumers of data/ products/services, to take part in their elaboration, and thus to be a voice alongside other communities of space authorities.

#### Outlook to the future

The aim is to propose a regional variation of Copernicus for regional managers, which will be both a data platform, providing products and services and a place for experimentation. This will give the end-users' community more ownership over these new tools and will contribute to a favourable environment for the use of Copernicus data and products, and more generally space applications in Brittany.

### Acknowledgements

Project officers of GeoBretagne: Fabrice PHUNG and Stéphane MEVEL-VIANNAY

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All people involved in the working group and in the partership GeoBretagne.

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