

Centre wallon de Recherches agronomiques

Unit 6 - 'Earth observation' division

Brokerage Event (Cluster 6) Metz, 25-03-2025



Activities

Earth observation monitoring:

- Crops (Winter wheat, potato)
- Grasslands
- Forests
- Optical satellite images
 - multispectral (Sentinel-2)
 - Hyperspectral (Prisma, EnMap)
- SAR (Sentinel-1)
- Orthos
- UAVs (MS/HS)
- · Field level sensors and observations
- Biomass, quality, nitrogen status monitoring...









On-going projects

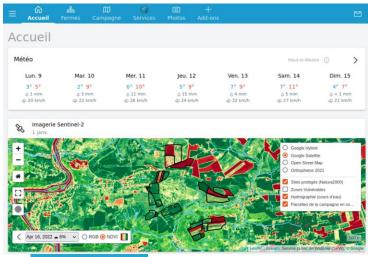
PRW139 project aims at improving the collaborative **BELCAM** (www.belcam.info) platform

- Improvement of already available products (e.g. nitrogen status in winter wheat / potato, winter cover biomass monitoring)
- Development of new products
- Improvement of the platform's ergonomics and development of a mobile version ('Agri-en-Poche')











FAST project aims to create and improve the digital nutrient management tool for sustainable agriculture (CAP regulation).

- Enhancement of the nitrogen fertilization tool for arable crops
- Research and integration of tools for nitrogen fertilization in grasslands
- Research and integration of tools for phosphorus and potassium fertilization
- Testing of the application by farmers
- Review of connected field notebooks for potential integration into the tool"

On-going projects

Spaghyti project aims at assessing the relevance of hyperspectral imagery for the développement of applications:



Nitrogen status



(a)biotic stress









The **SaveCrops4EU** project aims to design and develop a preoperational Earth Observation digital twin component on the Destination Earth (DESP) service platform.

The project focuses on crop stress management (water, nitrogen, etc.) through various case studies.

CRA-W is responsible for a case study (needs assessment, product validation) focused on nitrogen management.

On-going projects



SUNSHINE project aims at the development of the co-designed Decision Support System(DSS) W@llHerbe for:



- Farmers: Optimized management of grassland parcels (grazing calendar, rationing tools)
- Public authorities: Monitoring in the context of natural disasters



The project relies on both Earth Observation (EO) data and modeling

also lays the groundwork for a **reference regional observatory** for grass growth monitoring.

The **FLUCART** project aims to establish an updated mapping of natural areas in Belgium and analyze the exposure dynamics of industrial and hobby poultry farms to low and highly pathogenic avian influenza (AI) viruses.

It leverages the unit's expertise in geodata management through the provision of harmonized environmental data













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THE team

Partners (sample)

Universities / research Centres

























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