

# European e-Infrastructure for Extreme Data Analytics in Sustainable Development

## The Facts

- Agriculture is a, literally, vital industry. Not only important for nourishment, but also a key determinant of health, economic and political stability; employment; business and biological ecosystems; and society.
- Because of its importance, most attention focuses on productivity but it is essential to have a global view in order to address environment sustainability problems.
- During the project, EUXDAT will be in contact with scientific communities, in order to identify new trends and datasets, for guiding the evolution of the e-Infrastructure. The final result of the project will be an integrated e-Infrastructure which will encourage end users to create new applications for sustainable development.

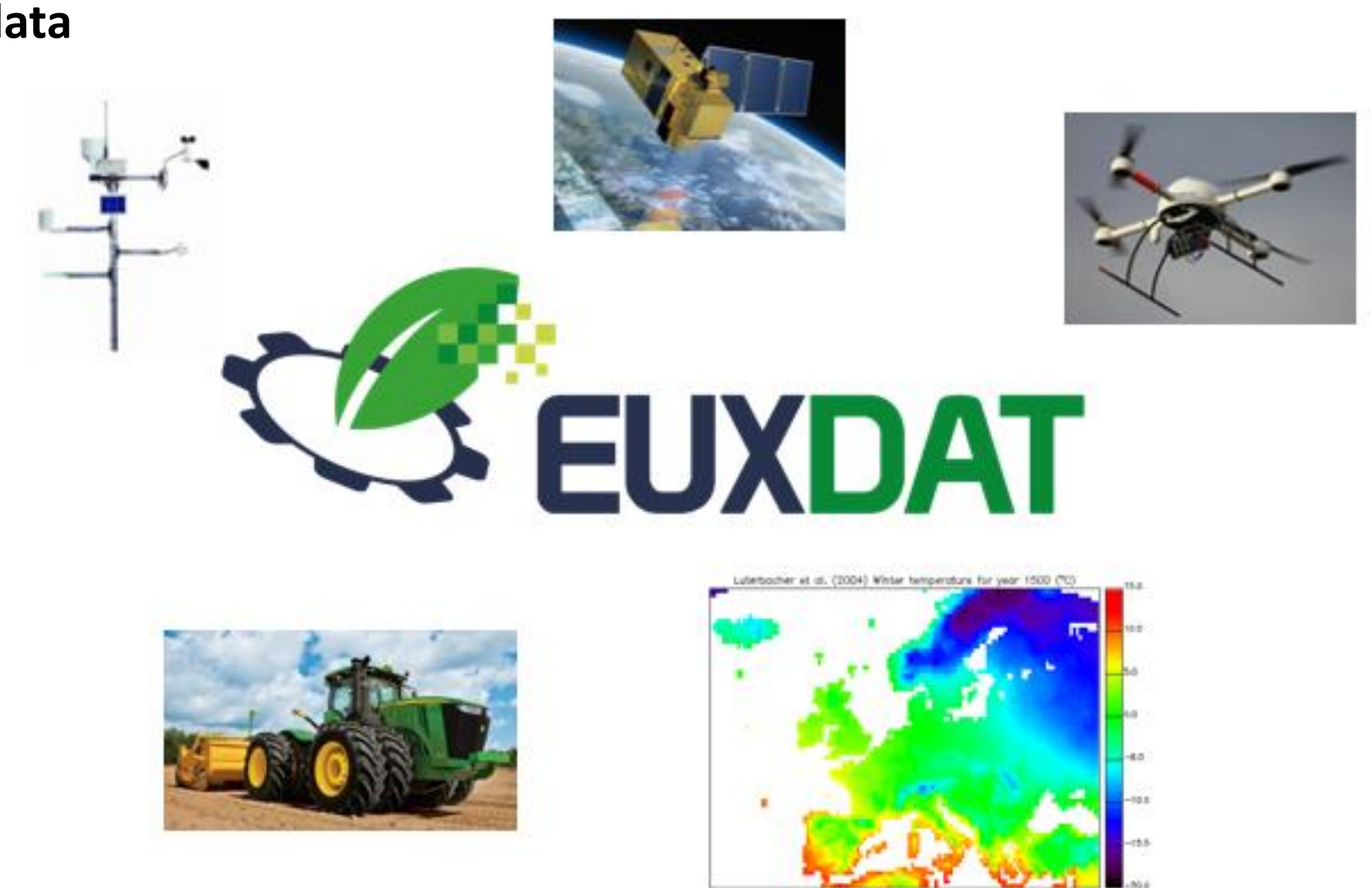
## The Approach

- The frontend provides monitoring information, visualization, different parallelized data analytic tools and enhanced data and processes catalogues, enabling Exascale level Large Data Analytics-as-a-Service.
- EUXDAT will include a large set of data connectors (UAVs, Copernicus, field sensors, etc.), for scalable analytics.
- EUXDAT aims at optimizing data and resources usage. In addition to a mechanism for supporting data management linked to data quality evaluation, EUXDAT proposes a way to orchestrate tasks execution, identifying whether the best target is a HPC center or a Cloud provider.
- It will use monitoring and profiling information for taking decisions based on trade-offs related to cost, data constraints, efficiency and resources availability.

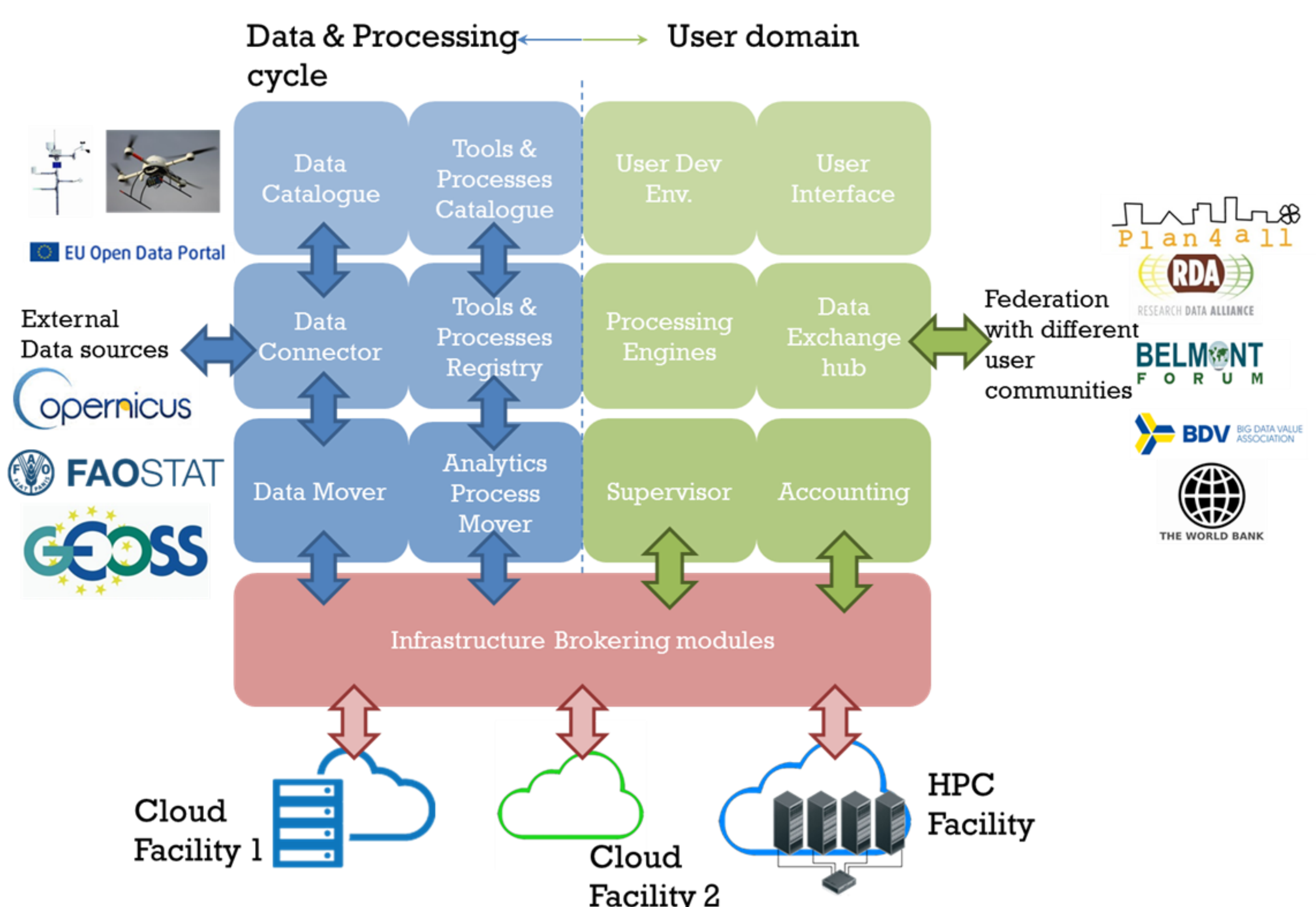
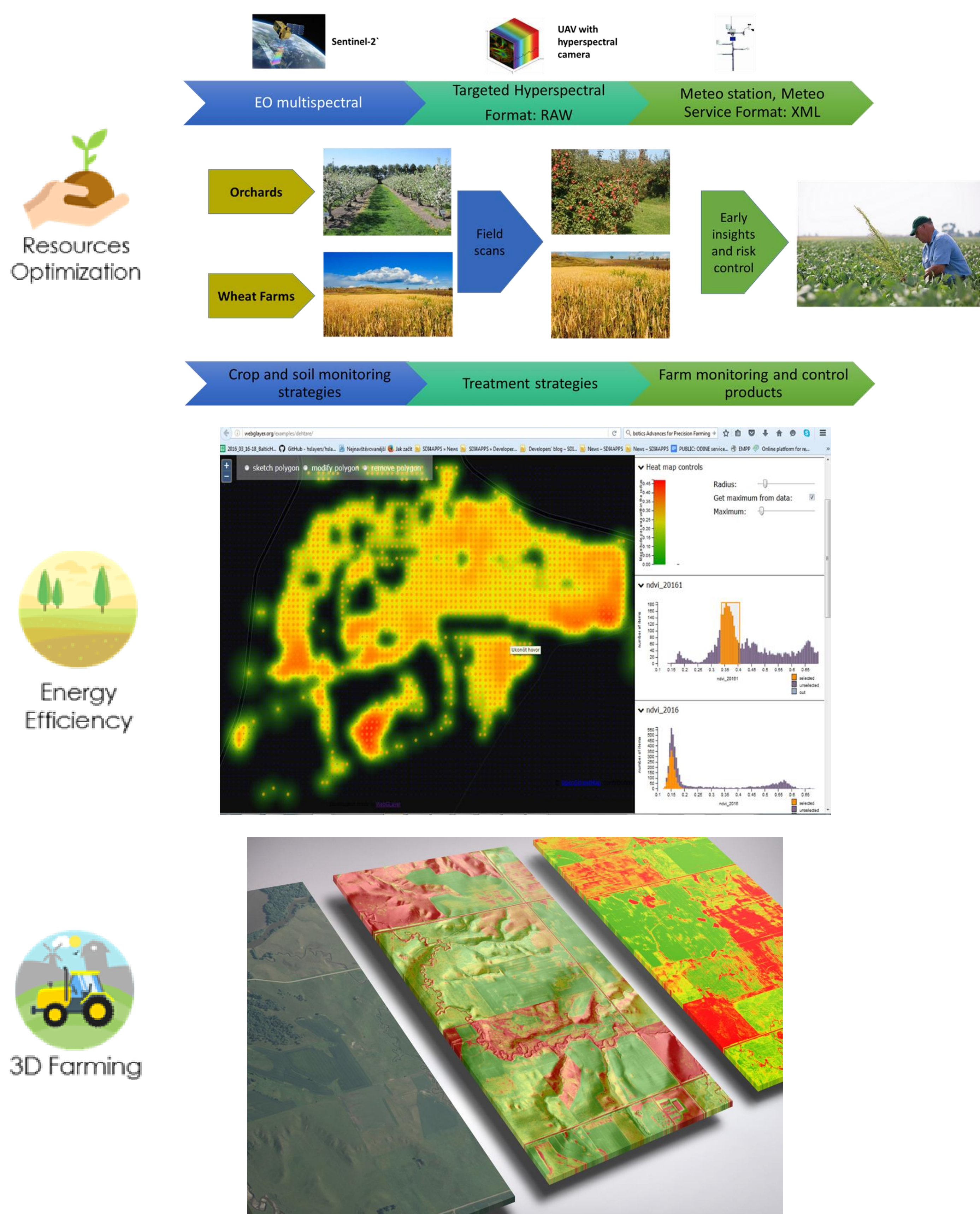
## Team



## Characterization for cumulative co-exposure



## Pilots – Integration of EUXDAT HPC infrastructure (CERTH-IBO)



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