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Towards an european e-infrastructure for plant phenotyping

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In recent years, technological progress has been made in **plant phenomics** (major improvements concerning imaging and sensor technologies). Various initiatives have helped to structure the european phenotyping landscape (EMPHASIS, EPPN) and enable researchers to use facilities, resources and services for plant phenotyping across Europe.

The **EGI-ACE project** has given us the opportunity to develop data services and build a federated and interoperable e-infrastructure allowing researchers to share and analyze phenotyping data. Access to the services operated by the EGI Federation made it possible to set up this infrastructure.

We have taken advantages of the **EGI Cloud service** to host the open-source *Phenotyping Hybrid Information System PHIS* (Neveu et al, 2019; www.phis.inra.fr). The information system is connected with the **EGI Check-In** service for federated authentication.

We also plan to use other services provided by the EGI-ACE project, such as **DataHub**, the distributed storage service and **Deep Hybrid DataCloud** the deep learning and machine learning portal for the EOSC.

The European plant phenotyping community will benefit from this e-infrastructure. **Early adopter users** are researchers using the phenotyping platforms at UCPH, UHEL and other universities participating in the **NordPlant hub** (a climate and plant phenomics university hub for sustainable agriculture and forest production in future Nordic climates) and researchers from the French plant phenomic Infrastructure **PHENOME-EMPHASIS**.

Any relevant links

Topic

EOSC Compute Platform

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