PESAa at the heart of your projects

The PESAa platform is open to public organizations and/or to private companies for the use of equipment and services in research, R&D in the context of research contracts, collaborative projects or services

For each intervention on the platform, an agreement is set up according to the legal models used classically at Inra. A cost estimate is established, taking into account the cost of the Inra staff required for the experiments, the specific operational costs and the management expenses.

INRA SCIENCE & IMPACT

The UR SOLS makes available its expertise to serve your needs for improving the knowledge of your soils, of their properties and biogeochemical functioning (water transfer and N_2O pgreenhouse gas emissions) on agricultural systems at various spatial scales.

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EXPERIMENTAL FACILITIES ENVIRONMENTAL METROLOGY REMEDIATION

PIVOTS

www.plateformes-pivots.eu

PIVOTS is a coordinated set of experimental and analytical platforms dedicated to the development of environmental engineering and metrology for activities with a high consumption of natural resources. Along the entire value chain, it brings together public and private-sector actors in monitoring the quality of the environment and the sustainable management of natural resources (soil, subsurface, surface water, groundwater, sediment, air).

With the support of:

This operation is co-financed by the European Union. Europe is committed to the Center-Val de Loire region with the European Regional Development Fund.

EXPERIMENTAL FACILITIES ENVIRONMENTAL METROLOGY REMEDIATION

PIVOTS

PESAa
Platform on «Soil – Atmosphere» Exchanges of agricultural soils

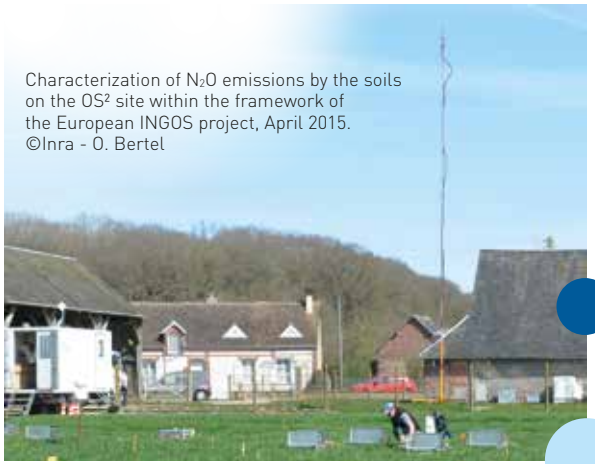
Agro-environmental equipment, support for experimentation and acquisition of agro-environmental references on soil functions and services, especially gaseous and hydric exchanges between the soils, the water and the atmosphere.

INRA SCIENCE & IMPACT

Agro-environmental equipment for experimentation and acquisition of agro-environnemental references

A precision irrigation facility will be installed on an experimental plot of Inra at Nouzilly (37).
©Inra - J. Weber

The **PESAa** platform is dedicated to the characterization of the physical (water retention, structural stability, soil structure, ...) and biological properties of soils (nitrification, denitrification,...), of their hydrological functioning and of their greenhouse gas production. It may likewise engage experimentations in relation to their waterflow and biogeochemical operations, in the laboratory (especially under rainfall simulation) and, in situ, on Inra sites (Ardon-45, Nouzilly-37) or on your own experimental sites.



Characterization of N_2O emissions by the soils on the OS² site within the framework of the European INGOS project, April 2015.
©Inra - O. Bertel

Applications of PESAa

- Characterization of the physical and biological properties of soils,
- Experimentations under simulated rain,
- Tests of differentiated irrigation within an agricultural plot, taking into account the water requirements of the plants and the local properties of the soils,
- Measures of the soil N_2O emissions – Evaluation of attenuation measures for N_2O emissions.

Available means of study...

- Rainfall simulator,
- Laboratory facilities for the characterisation of the physical properties of soils,
- Analyzers of gaseous samples,
- Manual measurement chambers for N_2O emissions from soils,
- Numerical tools for the analysis of the spatial soil functioning (GIS, geostatistics).

...and in the future

- High-precision irrigation facility on the experimental plot at the Inra site of Nouzilly (37),
- Automated chambers for continuous measurements of N_2O emissions. Accessible in 2019 on experimental electrified sites,
- Micro-meteorological measurement device for N_2O emissions on ecosystems, usable on electrified sites.