



AGRHYS: an observatory of the critical zone in the context of high anthropogenic pressures (intensive livestock farming); research issues.

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The Observatory for Research on Environment AgrHyS(AgroHydroSystems) is located in a catchment area of intensive farming in Britain. This is a twin site (Kerbernez and Naizin) monitoring since 1976, and where various measures were greatly strengthened since 2000, and have special characteristics: classical variables (rainfall, flow rates), major elements in daily frequency; CFC to measure response time; level of groundwater and dissolved elements in 70 piezometers, nutrients etc..

- The issue of response time in these systems constrained by strong anthropogenic pressures and non-equilibrium status is central.
- The role of biogeochemical hot spot as are the wetlands concerning the dynamics of DOC (source), NO₃ (sink) or phosphorus (source / sink) is a privileged object of study.
- The massive amount of input modifies the conditions of storage, processing and chemical erosion.
- The characterization of the inputs is a problem specific to these systems
- Recently the inclusion of the atmospheric phase of C and N cycles has completed the issue at stake