BIOS "LTER ForAustria"

environment **umwelt**bundesamt[©]

BOKU



Highly instrumented forested research sites cluster Austria

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Overview

From an Austrian perspective which forest research questions are visionary and important?

Which questions require special infrastructure to be tackled?

How can previous infrastructure investments and existing sites best be used?

How can Austria efficiently position itself in the European Research Area and global research by concentrating resources and expertise?

In the project, Austrian key institutions will deal with these questions targeted at a strategic conceptual paper with detailed proposals

The project **capitalizes on a co-operative process** between operators of the most important forest research infrastructures, namely the University of Natural Resources and Life Sciences (**BOKU**), the Environment Agency Austria (**UBA**) and the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (**BFW**).

It is entirely in line with the (i) organization and thematic streamlining of the Austrian ecosystem research community (LTER-Austria White Paper); (ii) structures and processes designing the European Research Area; and (iii) strategic intentions of the institutional association BIOS Science Austria.



LTER Klausen-Leopoldsdorf at a glance

- Forest site with low background immission (part of the ICP Forests network)
- Forest and soil types are typical for the Flysch Zone
- Measurement devices for climate, total deposition, soil water fluxes and chemistry, bioindication, biomonitoring and biodiversity
- Models for total depositon, water and element fluxes
- Sampling, logistics, high quality laboratory analyses, data storage
- Whole year access, data transfer, technical maintenance, etc.



LTER Rosalia at a glance

- Forested catchment with high background immission
- Forest and soil types are typical for the Limestone Alps
- *Karst catchment with high priority for drinking water

LTER Zöbelboden at a glance

- •Measurement devices for climate, air quality, total deposition, soil water fluxes and chemistry, bioindication, biomonitoring and biodiversity
- *Models for total deposition, water and element fluxes
- **Sampling, logistics**, high quality laboratory analyses, semantic data storage
- Whole year access, power supply, data transfer, technical maintenance, field hut, etc.

- Forested catchment with high background immission
- Forest and soil types are typical for Silicate Bedrock
- •Measurement devices for climate, fully automated greenhouse gas fluxes, irrigation system, total deposition, soil water and nutrient fluxes, root monitoring, bioindication, biomonitoring and biodiversity
- Models for total deposition, water and element fluxes
- Sampling, logistics, high quality laboratory analyses, data storage
- Whole year access, power supply, data transfer, technical maintenance, field station, on site laboratory etc.

The strategic process

Development of a catalogue of research topics for the site cluster

Infrastructure task force elaborating options for joint operation

Joint lobbying through site registration and mutual involvement in strategic networks

Consideration of national stakeholders and processes as well as framework conditions set by the EC

TARGET:

Securing key infrastructures in a long-term perspective (> 10 years)

Joint efforts towards concerted national contributions to the ERA



