

Dynamics of Soil Processes (DSP)

In this project, we investigate climate change and management effects on dynamics of soil state variables, such as soil temperature, moisture, organic matter content and nutrient content. The resulting future exchange of greenhouse gases between terrestrial ecosystems and the atmosphere as a function of climate change are studied. We further investigate feedback mechanisms within terrestrial ecosystems using factorial model experiments. A regional focus are permafrost-affected soils in the Arctic. We are currently using the land surface scheme JSBACH 3.0 but are interested in new model developments, too.