# CANDY
### Windows Version

## Introduction in multi-year simulations of nitrogen and carbon turnover (examples)

CARBON AND NITROGEN DYNAMICS
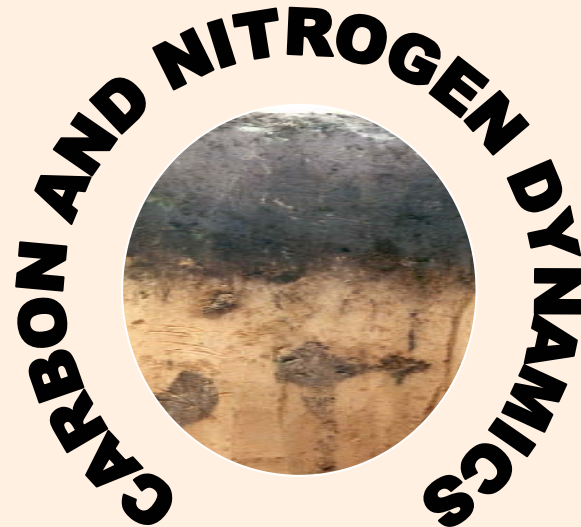
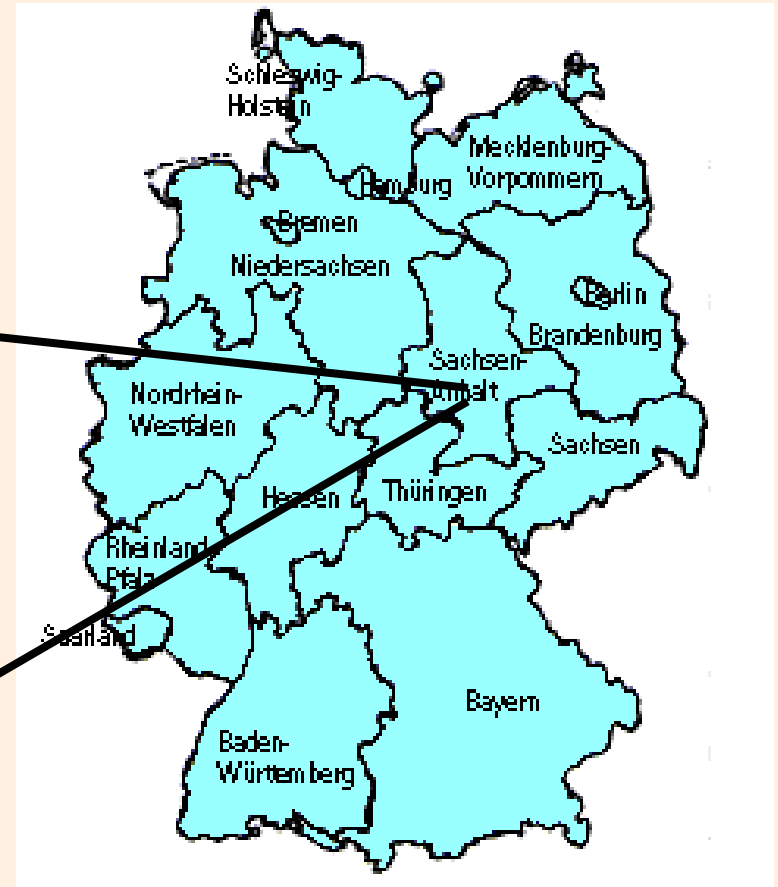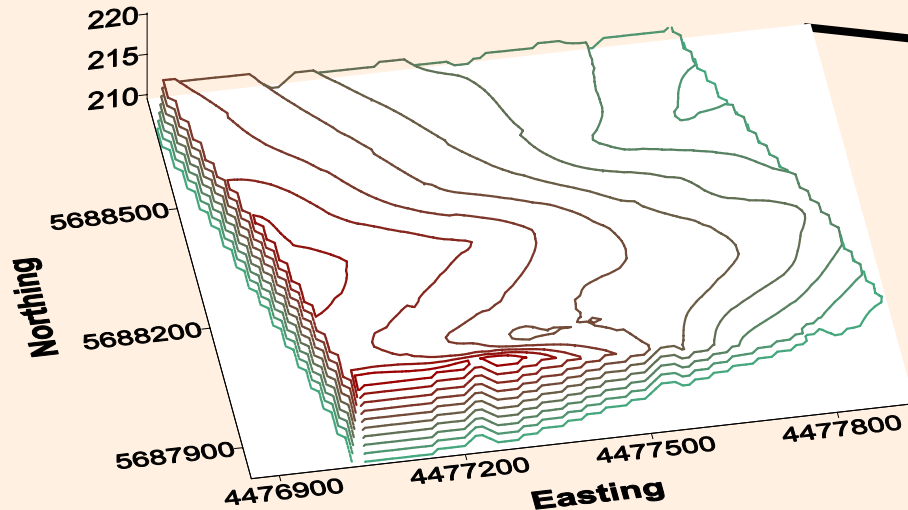*M. Puhlmann und U. Franko, mpuhlm@bdf.ufz.de*

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*M. Puhlmann and U.Franko, mpuhlm@bdf.ufz.de*
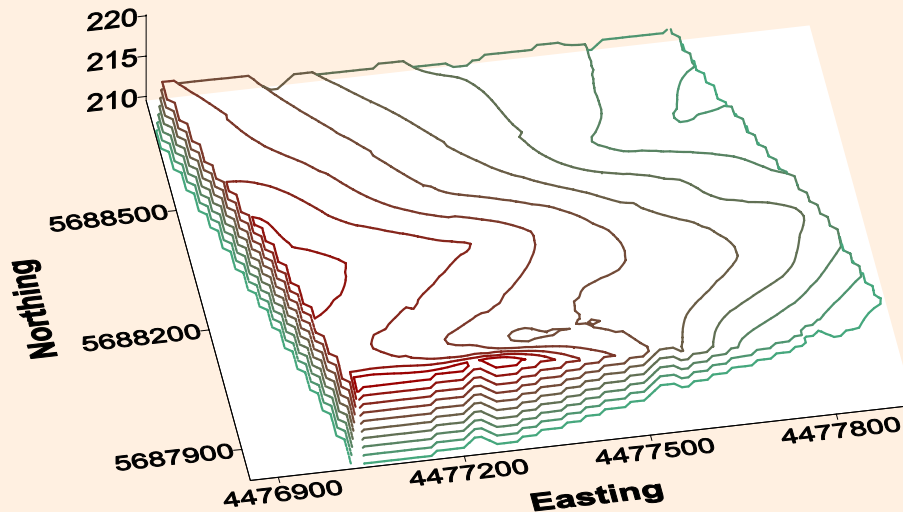
# Background information (site, objectives)
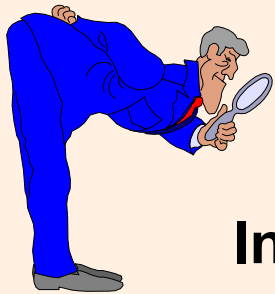


## Investigated field

# Background information (site, objectives)

Elevation map



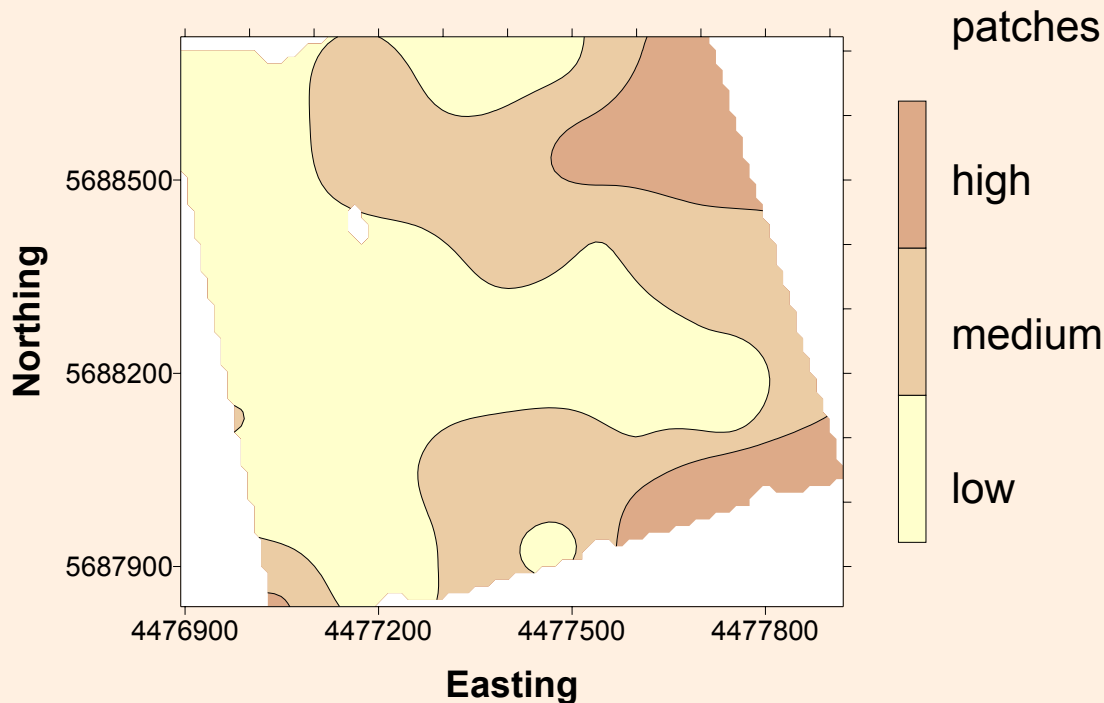- Chernozem area of Saxony-Anhalt
- loess soil
- soil type = loam
- $\varnothing$ clay content = 20%
- $\varnothing$ temp. = 8.8
- $\varnothing$ precip. = 520 mm

# Background information (site, objectives)

Map of
decomposable carbon



patches

high

medium

low

Developing strategies to optimize nitrogen fertilization and carbon input for the three areas

# Provide climate data, defining a simulation object, input of management data and experimental values

Please take the manual and go to the page *'Example with comments'*

Follow the instruction in the manual for part 1: *Introduction in the user interface (data input)*

If you have any question don't hesitate do ask!

# Starting a standard simulation, evaluating results

Go to part 2: *Standard simulation*

We will guide you through a standard simulation and the evaluationg of results (video projector).

# Starting a simulation by using shape files

Go to part 3: *Multi-year simulation of nitrogen and carbon turnover by using shape files*

We will guide you through a simulation started from the *MapView* window (video projector).

# Developing strategies for nitrogen fertilization

Go to part 4: *Developing management strategies for N-fertilization*

We will guide you through the *N-prognosis module* (video projector).

# Developing strategies to optimize the organic carbon input

Go to part 5: *Developing management strategies to optimize the organic carbon input*

We will give you some suggestions about possibilities to evaluate the organic carbon level and the organic carbon input (video projector/manual).

Do you have further questions?

If you decide to work with the CANDY model,
don't hesitate to contact us:
ufranko@bdf.ufz.de
mpuhlm@bdf.ufz.de.

Thank you for your interest in the CANDY model
and your attention.