



# Evaluation of the INSEA forestry scenario model

I N T E G R A T E D   S I N K   E N H A N C E M E N T   A S S E S S M E N T



I N S E A  
P A R T N E R S

Rupert Seidl (BOKU)

Oskar Franklin (IIASA)

Werner Rammer (BOKU)

Florian Kraxner (IIASA)

Michael Obersteiner (IIASA)

Manfred J. Lexer (BOKU)



**University of Natural Resources  
and Applied Life Sciences, Vienna**  
Department of Forest and Soil  
Sciences



**Forestry  
Program**

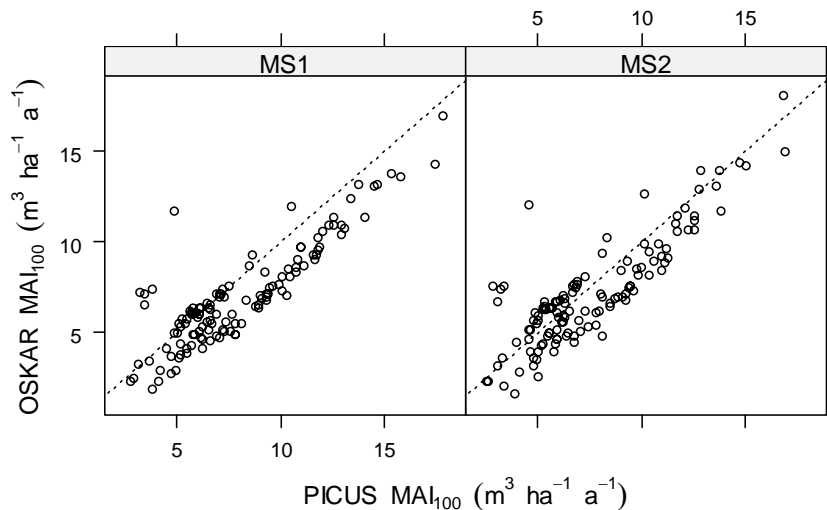
# goal and main questions

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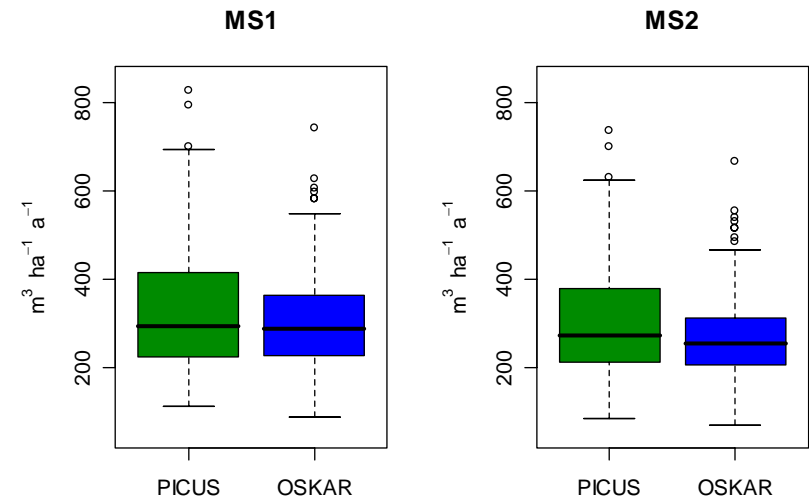
- **objective:** evaluation of INSEA forestry scenario model (OSKAR)
- **method:** model comparison experiment
  - PICUS v1.42: hybrid forest patch model, resolution: individual tree
  - 3 management strategies
- **material:** forest inventory plots (*here analog to entities of cont. scale simulations*)
  - extended ecological gradient, central Europe (200m-1.700m asl.)
  - 40 inventory plots
  - 4 tree species
- **hypothesis:** the OSKAR model...
  - ...is consistently simulating forest production
  - ...has realistic response to different management regimes

# (selected) results

## total productivity



## thinned volume



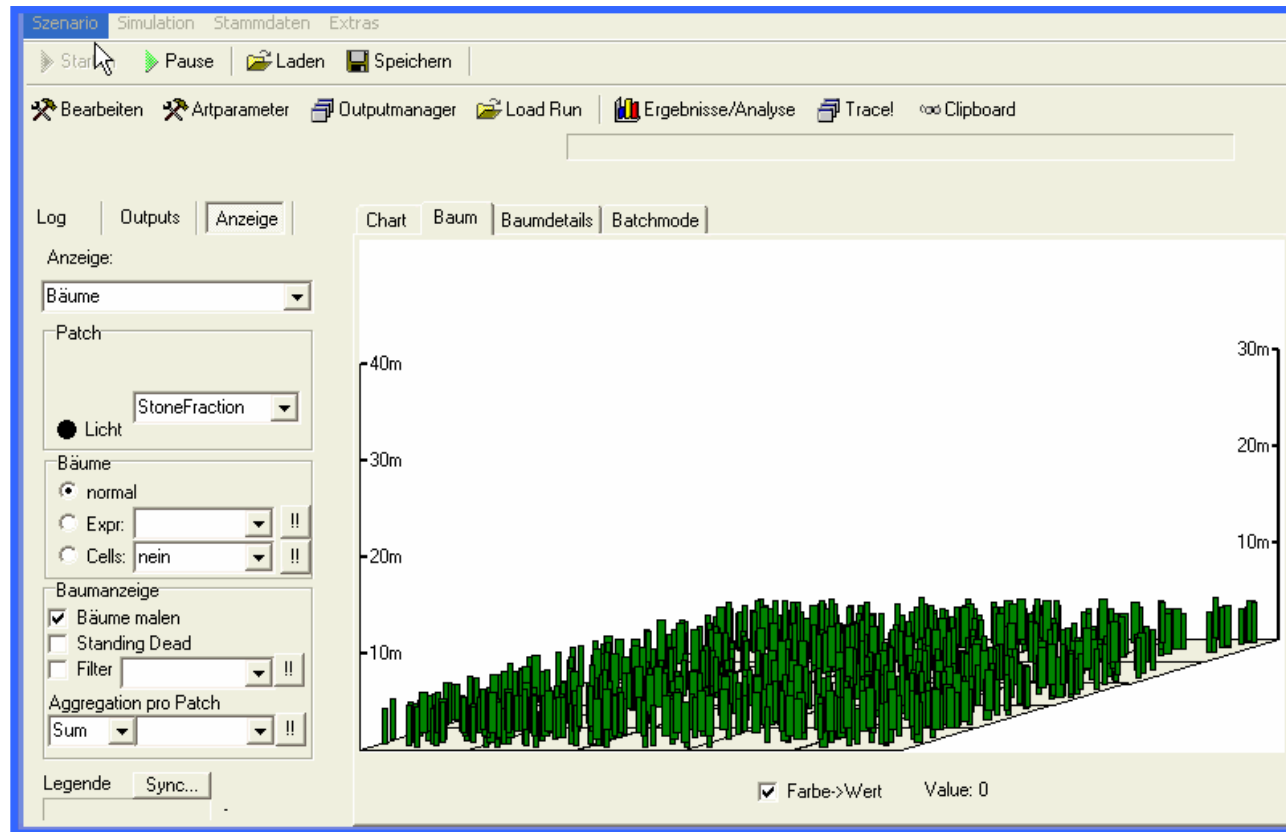
- management strategy MS1: thinning from below, high frequency
- management strategy MS2: thinning from above, less interventions

# conclusions

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- overall very good agreement of models wrt productivity and management effects
  
- input data of crucial importance for results
  - NPP -> relates directly to simulated forest C storage
  - current state of forest: structure of importance for management
  - spatial heterogeneity of forests (and subsequently management) vs. resolution of data
  
- OSKAR model robust approach to assess forest sector C budget

# INSEA forestry: plot level modelling



**forest at work: sequestering carbon...**