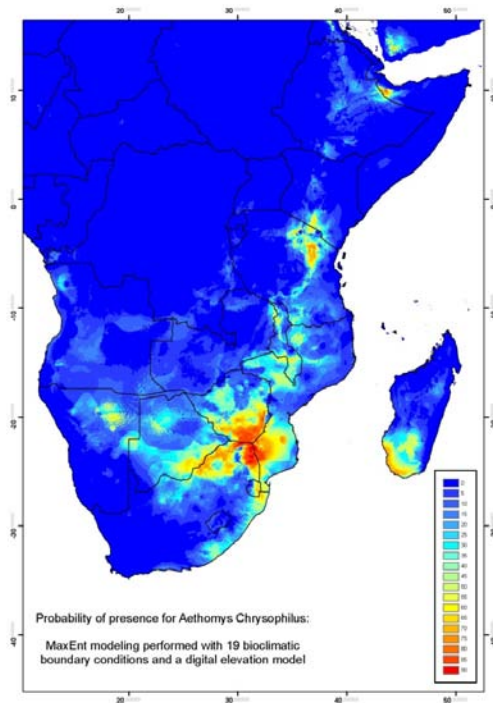
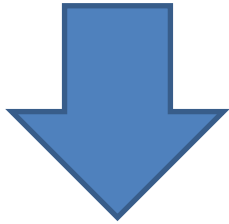


Application of Spatial Modeling Approaches and Techniques within an Ecological Framework



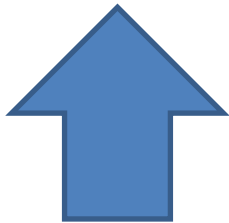
Ullrich von Bramann (Technische Universität Braunschweig)
Alicia V. Linzey (Indiana University of Pennsylvania)
Antje Schwalb (Technische Universität Braunschweig)
Stephan van Gassel (Freie Universität Berlin)

55 presence locations for *A. Ineptus*
36 presence locations for *A. Chrysophilus*

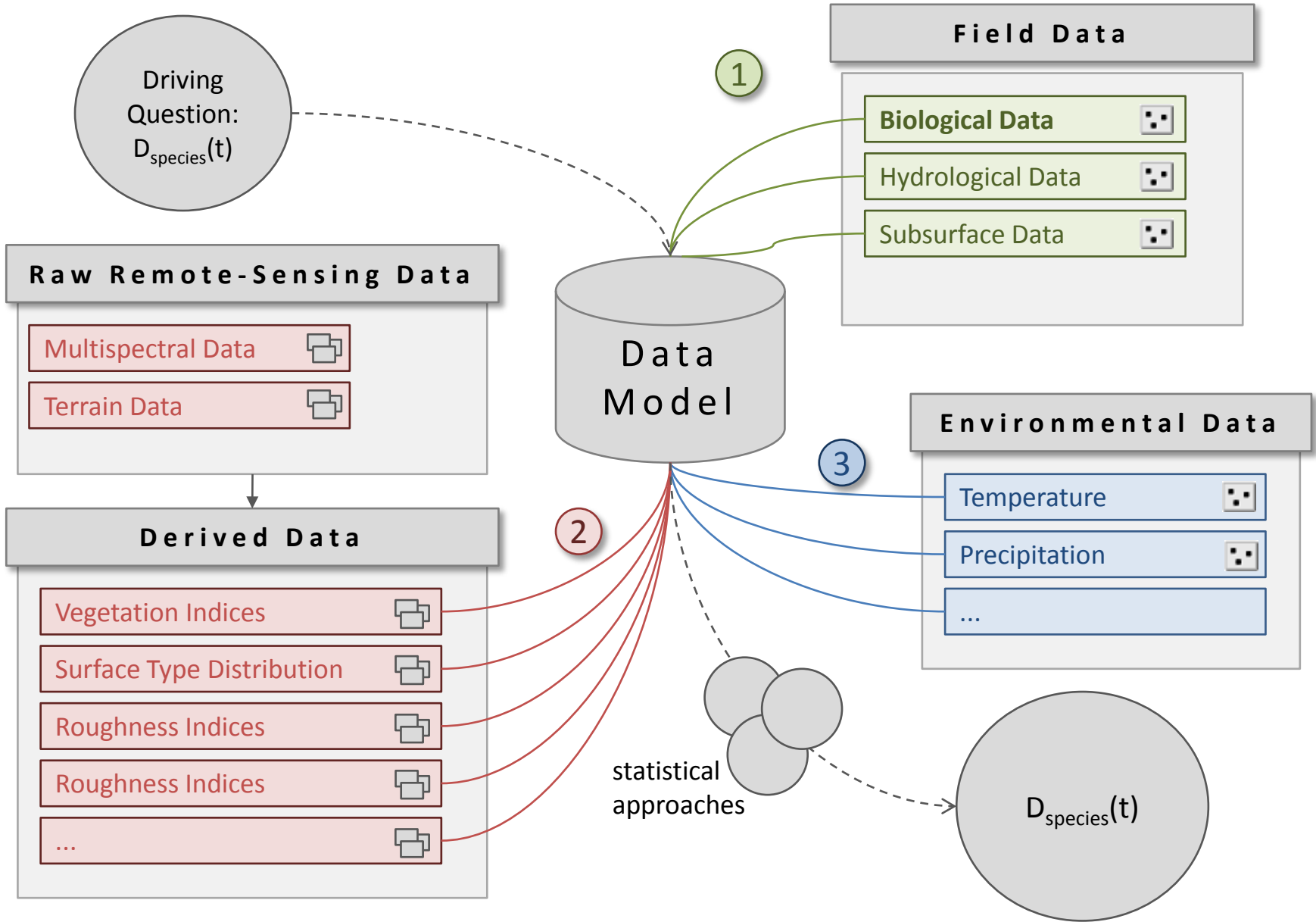


Species-Distribution Modeling

Anthropogenic and climatic influences on an ecosystem

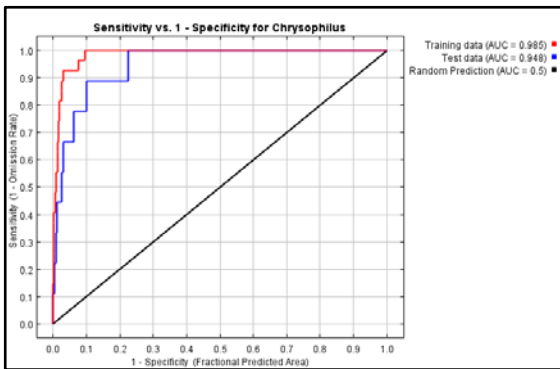


19 bioclimatic variables (temperature and precipitation derivatives)
Digital elevation model (SRTM/ASTER)



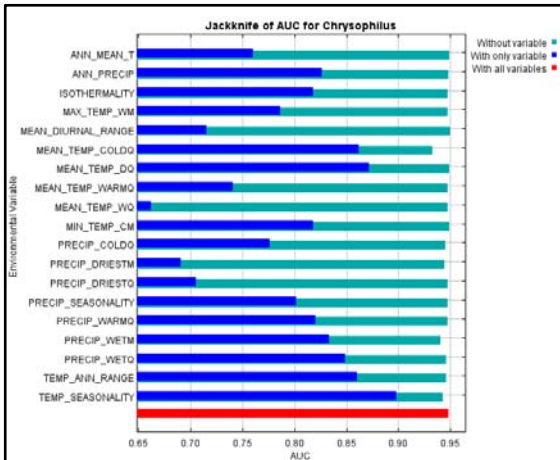
Resilience

Evaluation of the model's predictive power



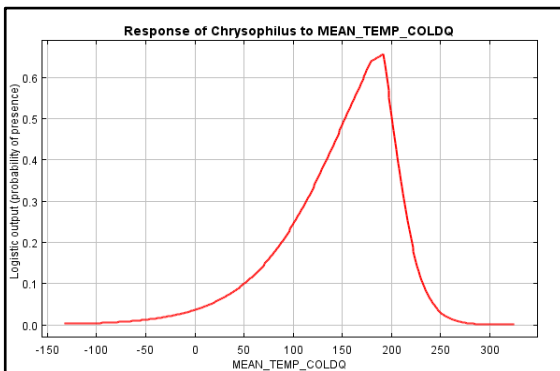
Contribution

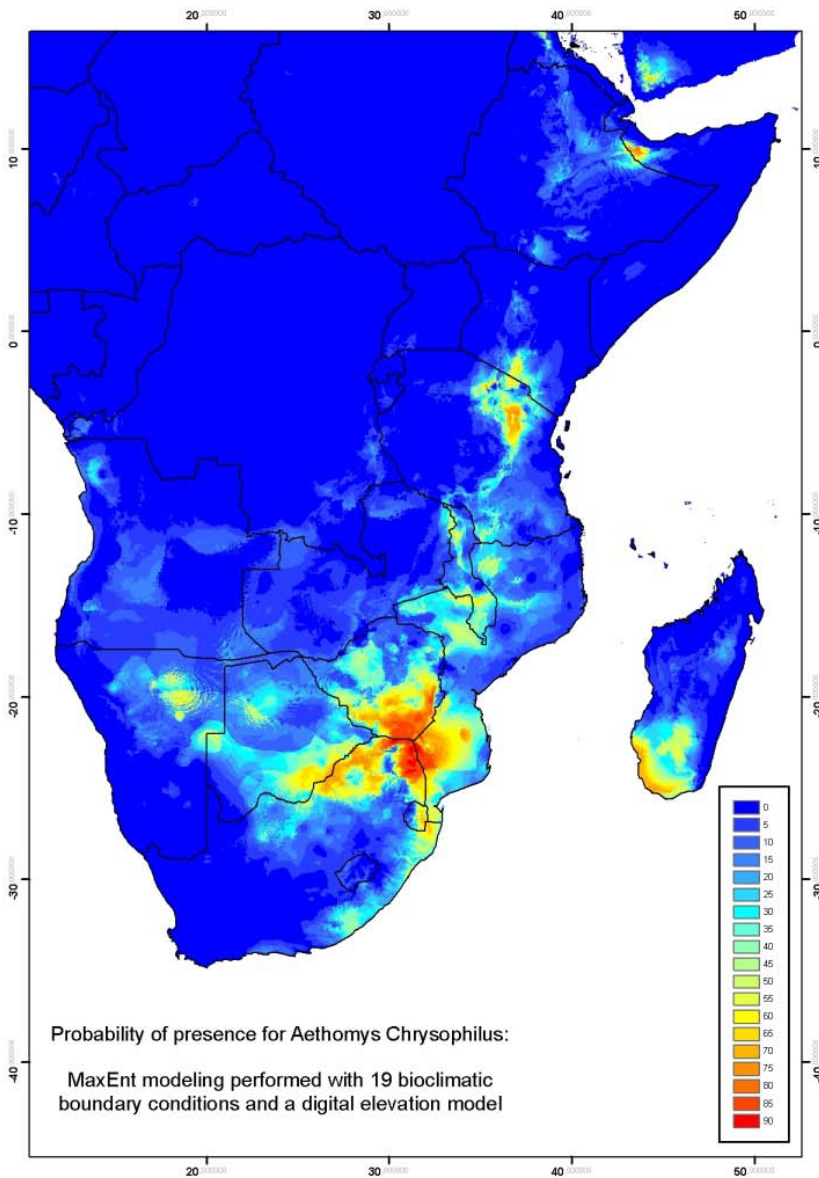
Identification of contributing variables



Analysis

In-Detail analysis of the significant variables





Current Status:

Static Modeling for two species successfully implemented
 Identification of temperature as a significant factor

Outlook:

Definition of variable interdependencies
 Development of relation functions
 Modeling of discrete time-steps
 Full GIS and GDBM implementation