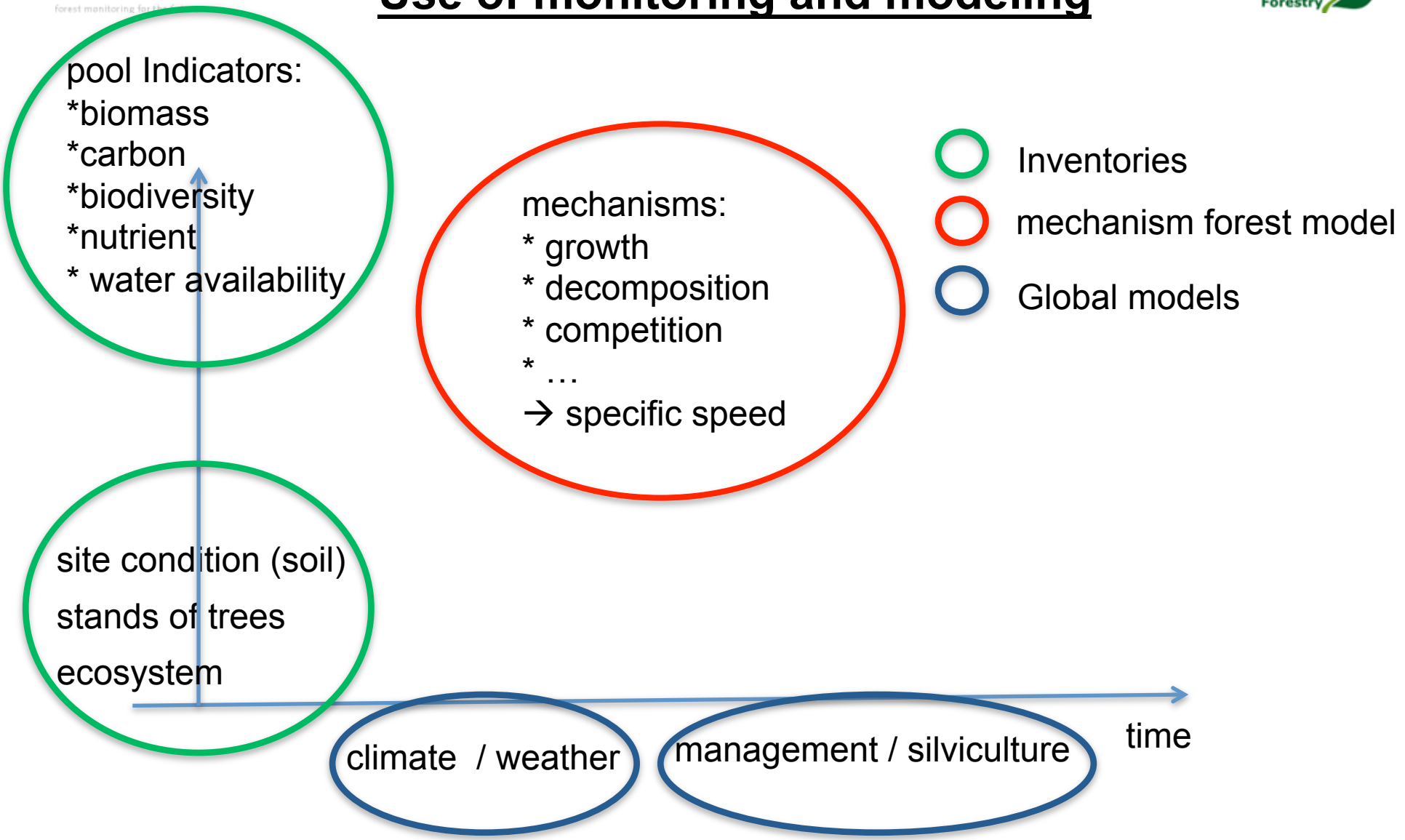
climate model integration

Integration of Metomodels into FutMon

FutMon final Workshop 21 June 2011

Konstantin Olschofsky

Use of monitoring and modeling



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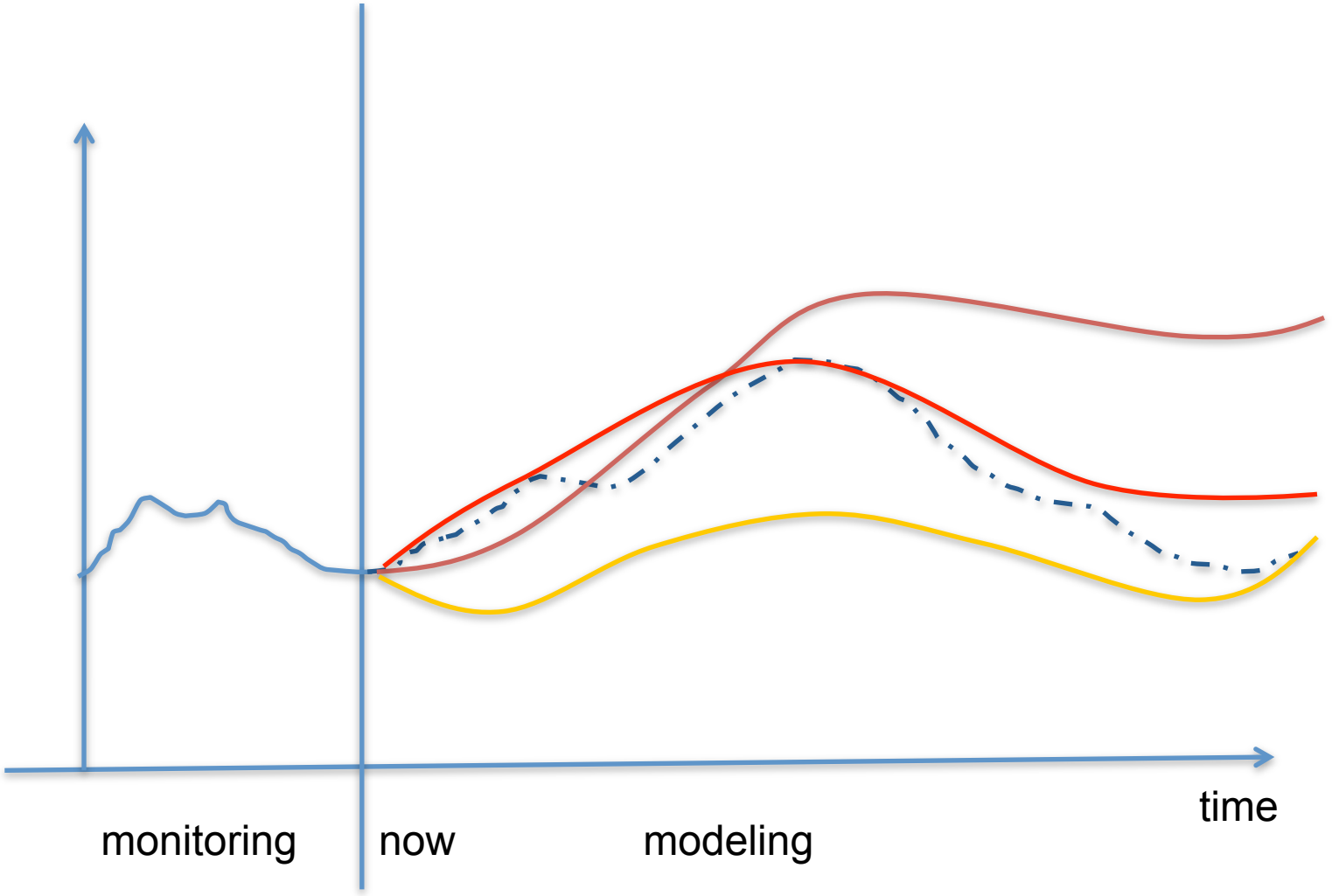
Scenarios versus Predictions



Aim of modeling and benefit from FutMon

- calibration and adaptation of local models
- estimation of growth and trends for GHG reporting
- investigation of different forest management strategies
- management adaptation strategies
- estimation of risks and adaptation mechanism
- verification of sustainability
- combination with other data sources for extrapolation

→ FutMon provides the basic data for pan European modeling applications, witch are able to answer upcoming social questions.

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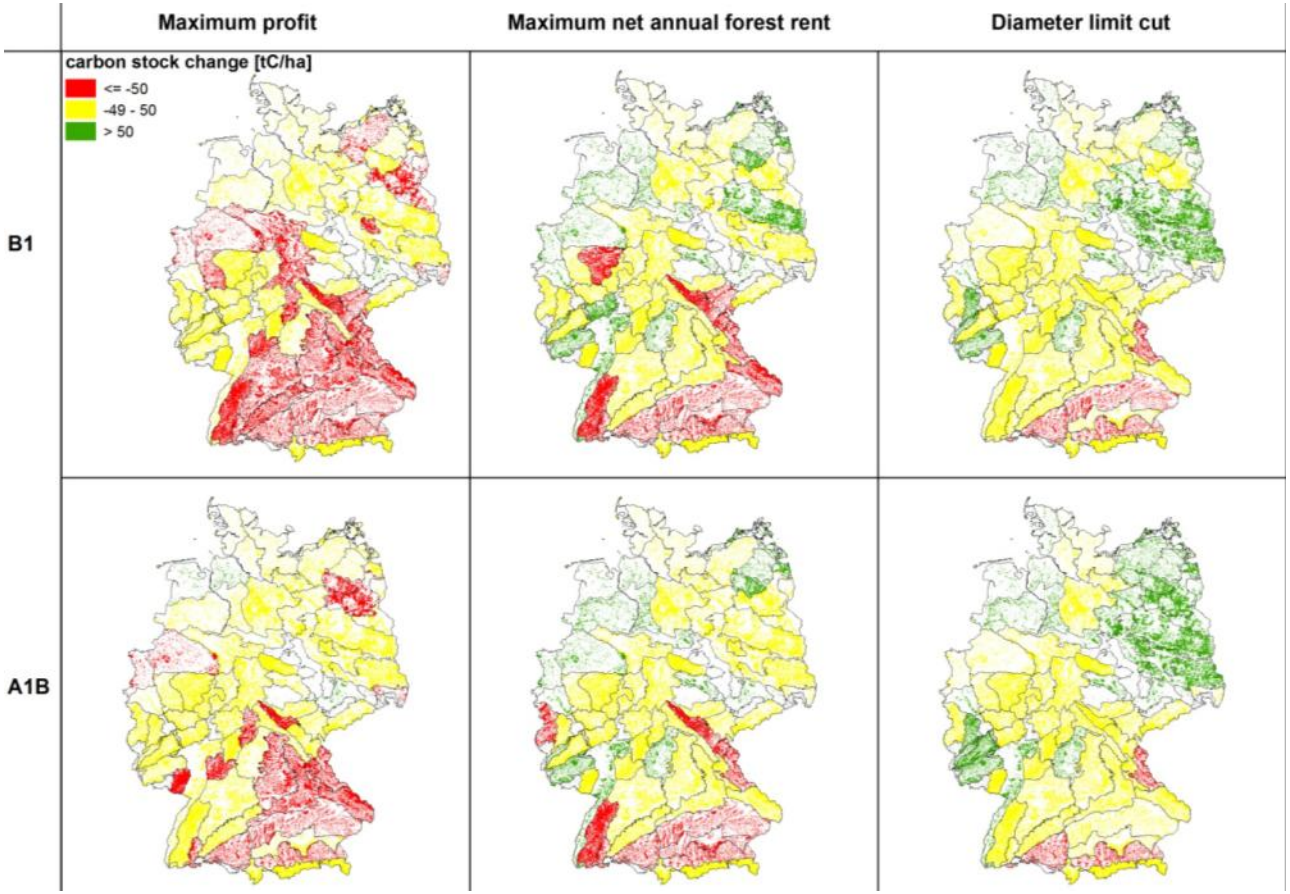
Interaction of future climate and human needs



[Köhl et al. 2010 http://www.cbmjournal.com/content/5/1/8]

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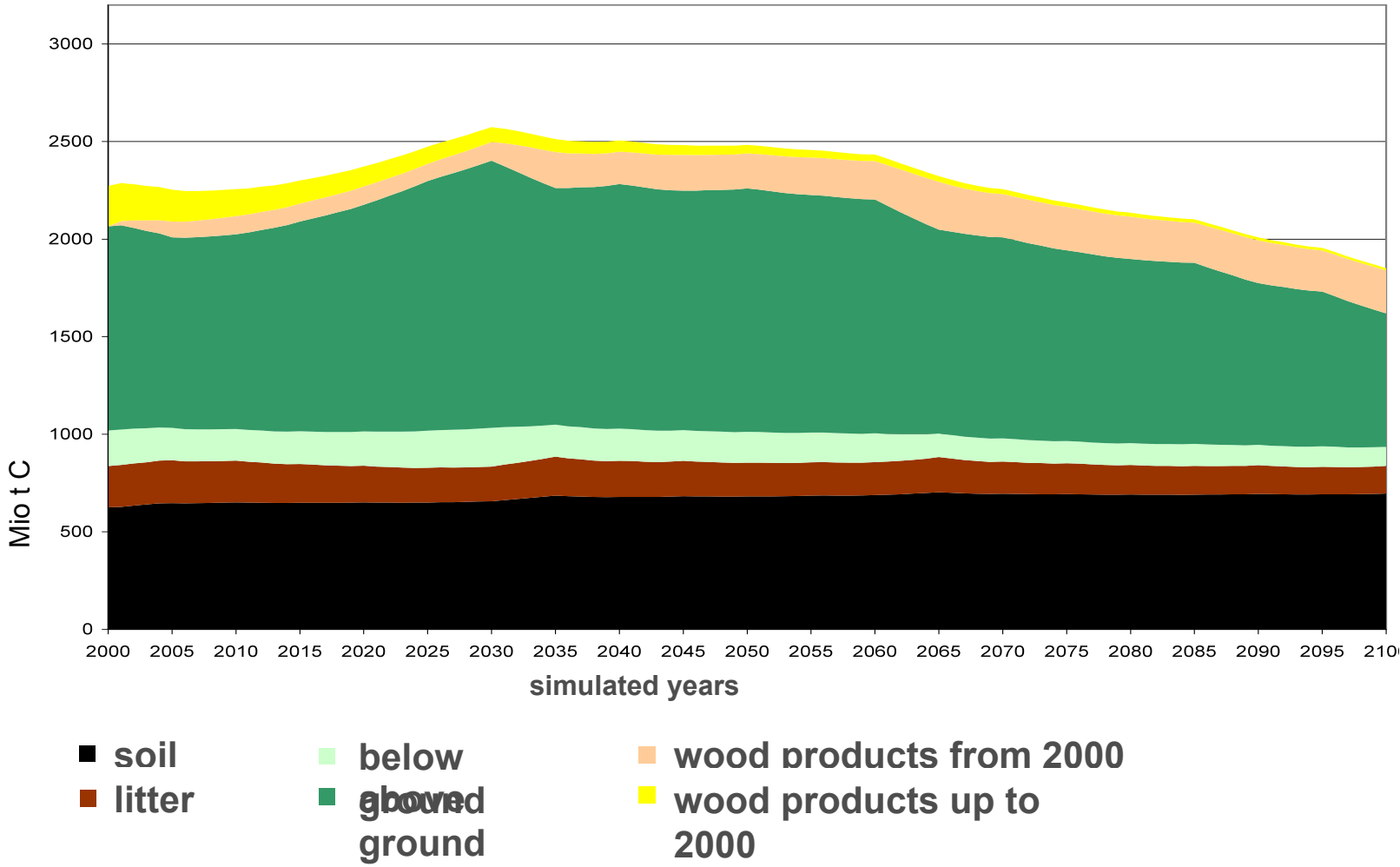
Institute for World Forestry

maximising profit



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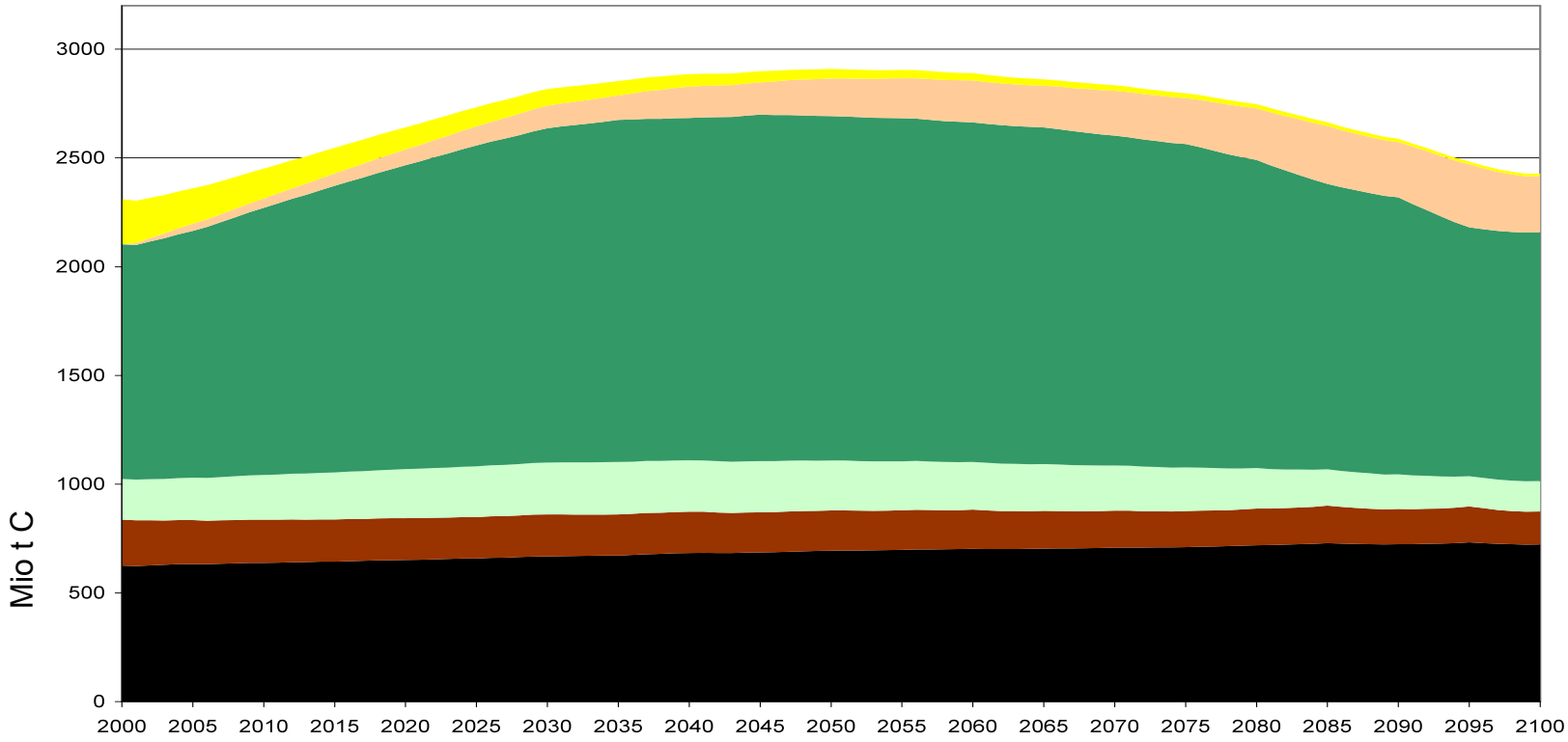
maximising net yield



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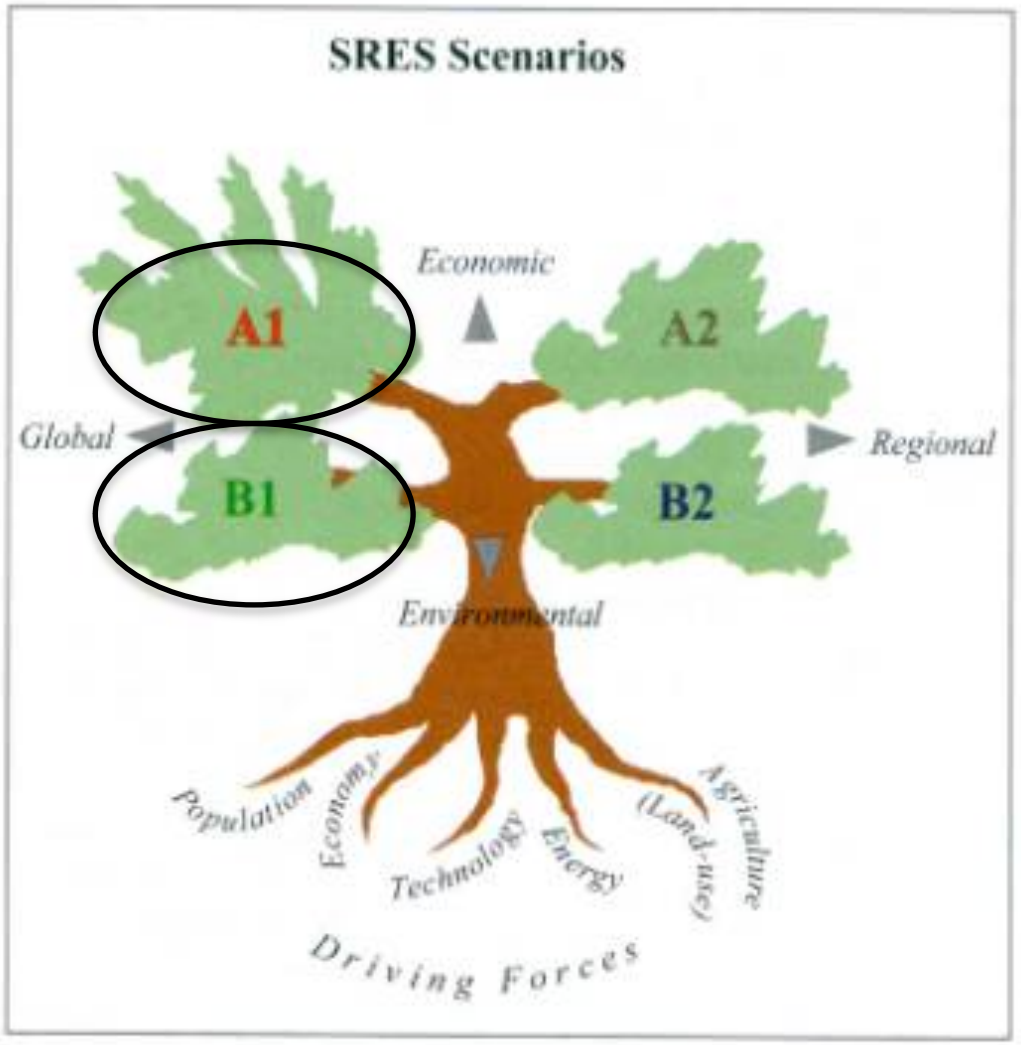
Climate models:



ECHAM

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CLM

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FutMon_CLM

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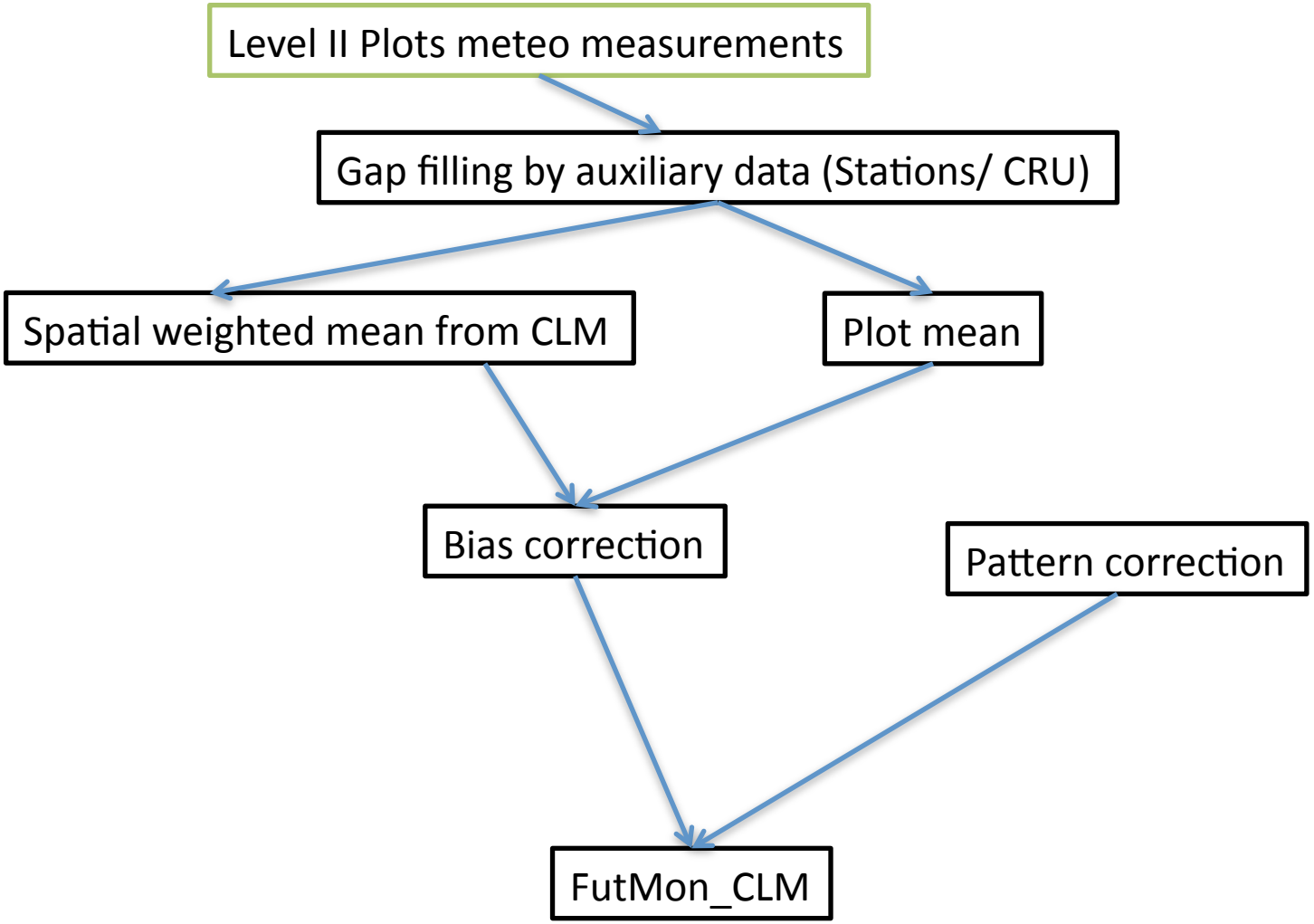
Methodology of regionalization :



Results:

- meteo regionalization is possible
- Level II basis for transfer to Level 1, NFI ….
- meteo data is one main factor for extrapolation
- forest sites having specific local climate
- no general trend was observed, regional approaches are needed

Outcome and findings:

- Integration of climate data allows modeling of scenarios
- FutMon results can be used to facilitate international reporting needs and forest management decisions
- Climate data can be now easily integrated, but the needs for scenarios on future needs of the society on forest should be defined to support decision processes.