



DOFOCO – Do Forest Cool the Earth

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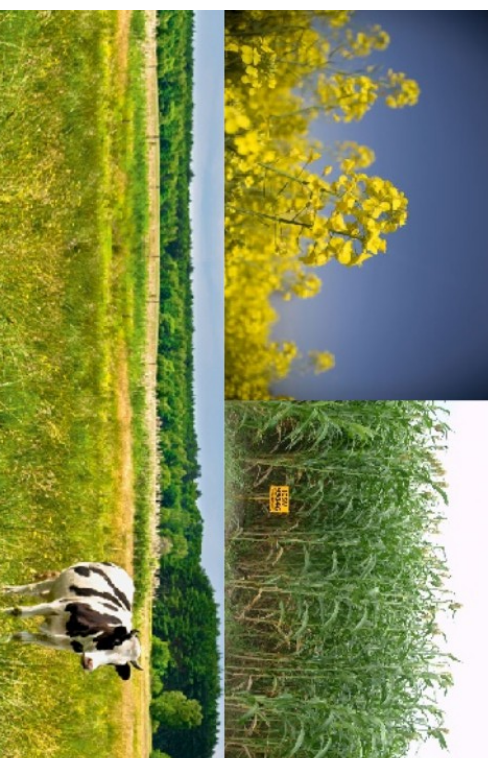
Kim Naudts

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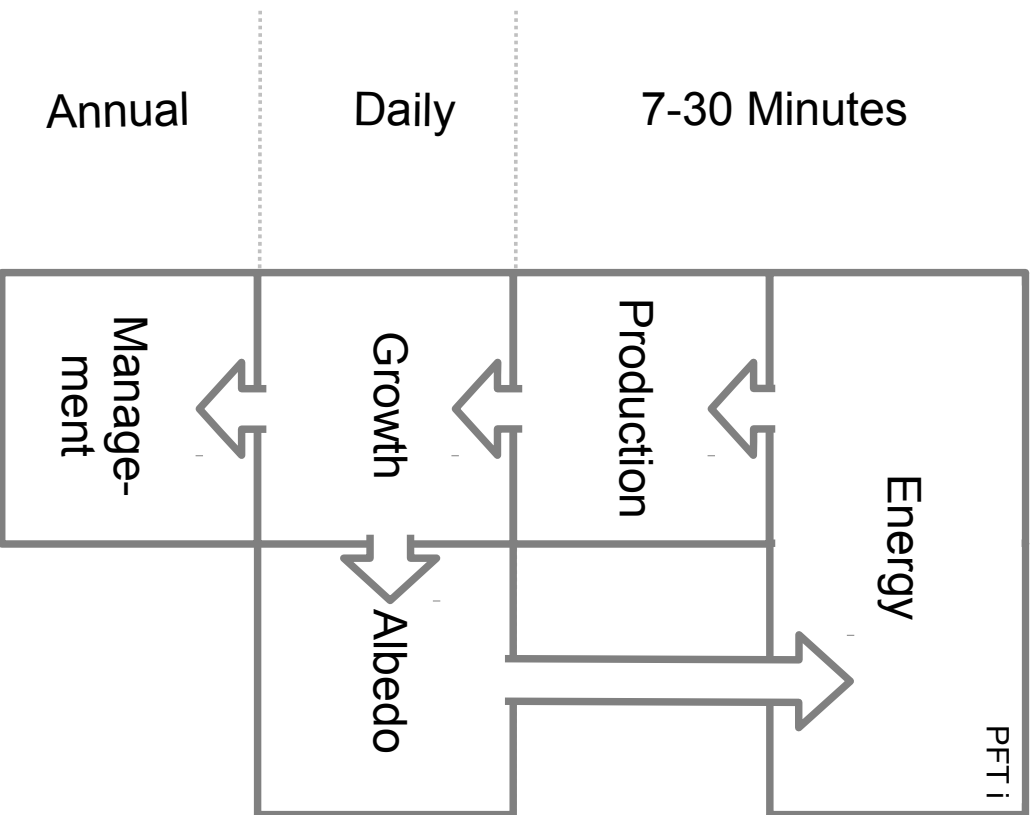
Aim: The **overall goal of DOFOCO** is to quantify and understand the role of forest management in mitigating climate change. Specifically, the current focus on the carbon cycle will be replaced with a total climate impact approach.



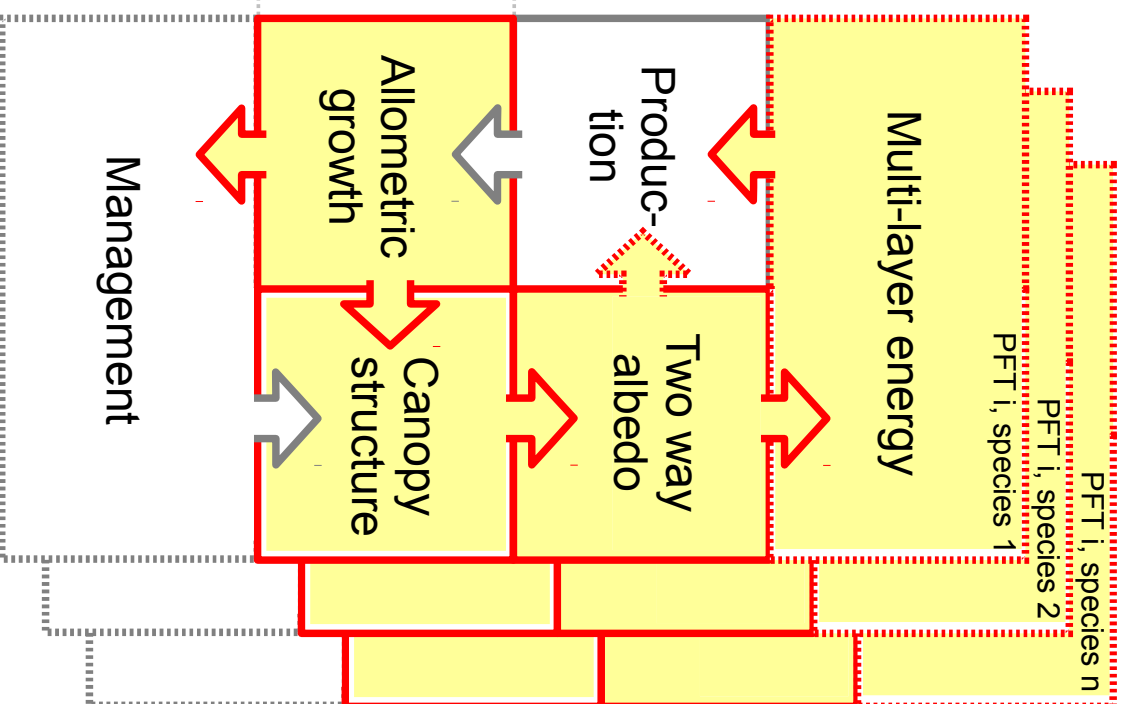
Conceptual shortcomings to the current version(s):

- land-atmosphere interaction only through LAI
- surface area forest/bare soil is changing but not the forest itself
- no tree diameter (management & canopy) or height (roughness)
- no different management systems
- PFTs instead of species

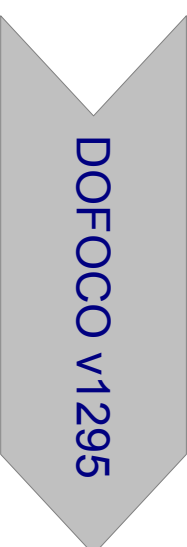
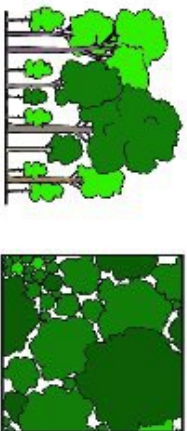
TRUNK r1170



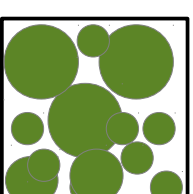
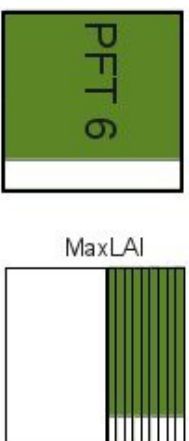
DOFOCO r1295



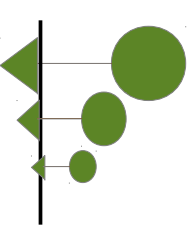
Real world



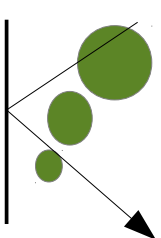
LAI & GPP



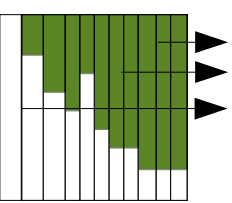
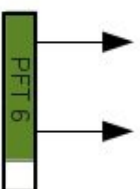
NPP & biomass



Albedo



Energy budget



- Discretisation of biophysical (energy budget & albedo) and biogeochemical (allocation) processes
- Integration of Sechiba and Stomate
- Level of interest to stakeholders

