Picus to Landis-II Biomass Succession - Lac Saint-Jean
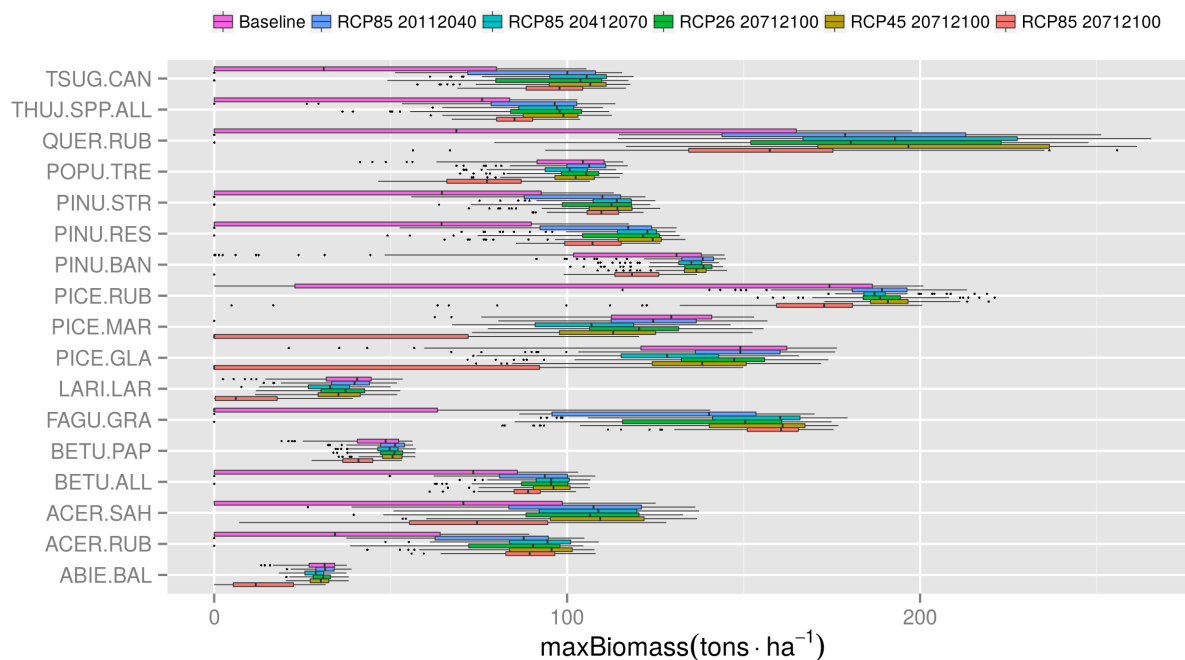
Dominic cyr

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Updated on Sep 15 2015

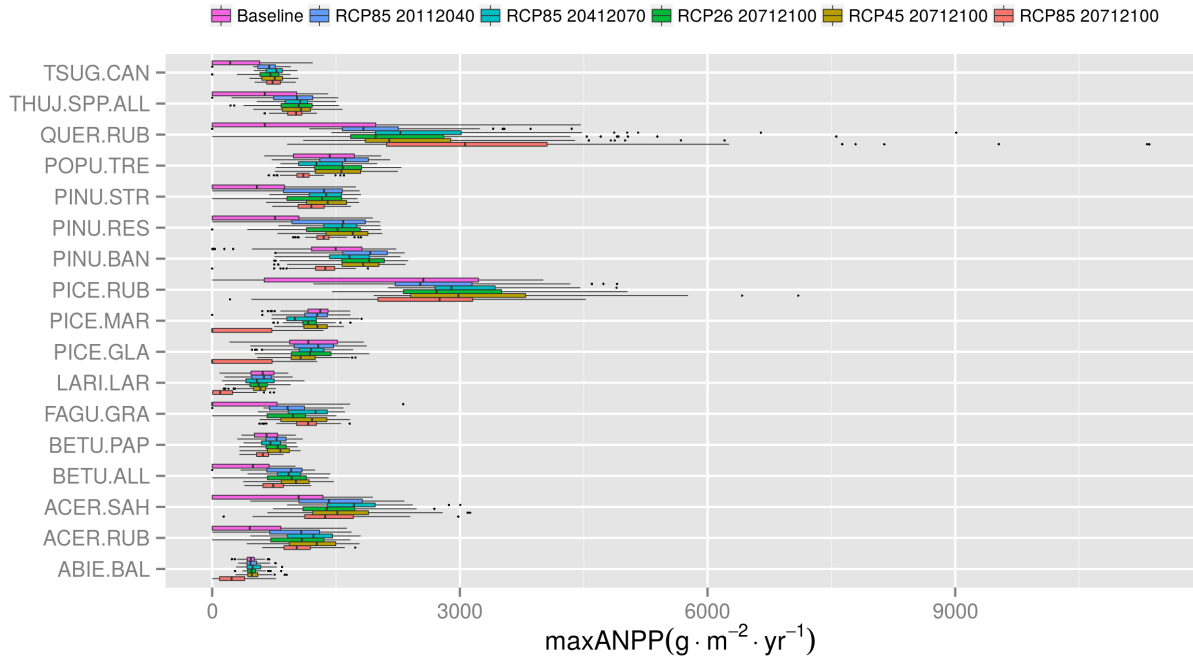**Landis-II - Biomass succession - Dynamic inputs**

The following three figures show how parameter values derived from Picus outputs are distributed among land types for maximum aboveground biomass (**maxAGB**), maximum annual net primary productivity (**maxANPP**), and species establishment probabilities (**SEP**) are distributed. Those parameters are called *dynamic inputs* because they can vary through the course of one simulation, to account for the effect of climate change, for instance.

Much of the succession dynamics simulated by LANDIS-II depends from those values, in interaction with landscape configuration, initial conditions, disturbances and static species parameters such as longevity, seed dispersal distances, etc.
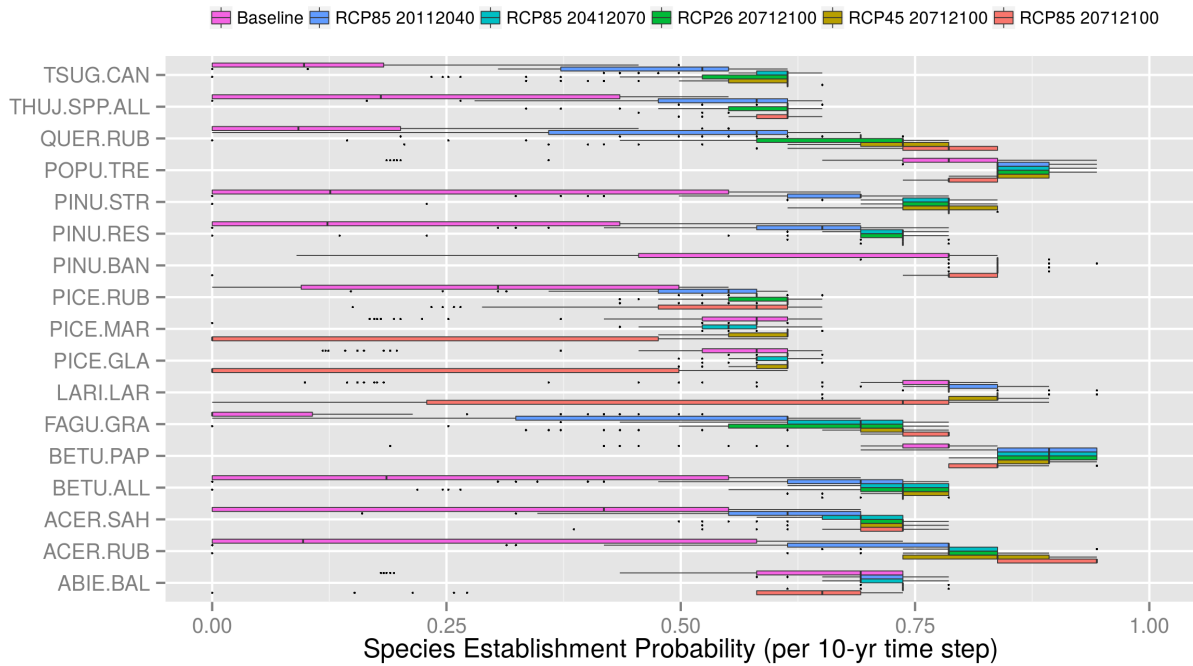

Distribution of maxAGB among land types (N=89)
Lac Saint-Jean

Distribution of maxANPP among land types (N=89)
Lac Saint-Jean

Legend: Baseline, RCP85 20112040, RCP85 20412070, RCP26 20712100, RCP45 20712100, RCP85 20712100

$\text{maxANPP}(g \cdot m^{-2} \cdot yr^{-1})$

Distribution of SEP among land types (N=89)
Lac Saint-Jean

Legend: Baseline, RCP85 20112040, RCP85 20412070, RCP26 20712100, RCP45 20712100, RCP85 20712100

Species Establishment Probability (per 10-yr time step)

Picus raw outputs

The following figure illustrates Picus outputs for each species and all land types. The parameter values illustrated above are directly derived from those simulation outputs, and translated into

More details available here

Simulations are started from bare ground, allowing only one species at the time and are ran for 250 years.

Pure stand growth as simulated by Picus
in 89 land types - Lac Saint-Jean