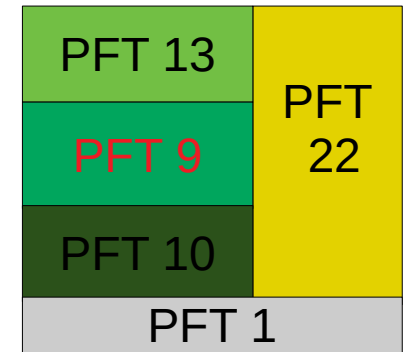


What evaluation across scale means ?

Remote sensing product

GPP: -15%



50-100 Km²

Regional ?

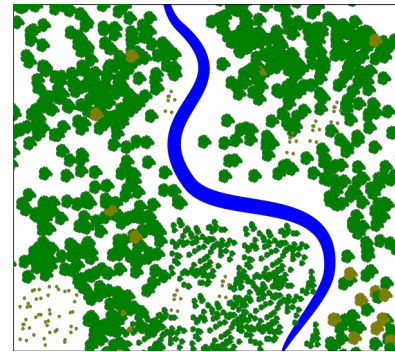
- Land cover
- Forest cover
- Species cover
- Vegetmax

What evaluation across scale means ?

NFI based product

Remote sensing product

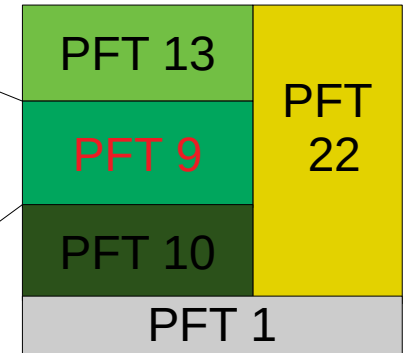
GPP: -15%



1-10 Km²

Landscape ?

- Residence time
- Forest management
- Age Class (new PFT)
- Mortality
- Recruitment



50-100 Km²

Regional ?

- Land cover
- Forest cover
- Species cover
- Vegetmax

What evaluation across scale means ?

Flux tower measurement

NFI based product

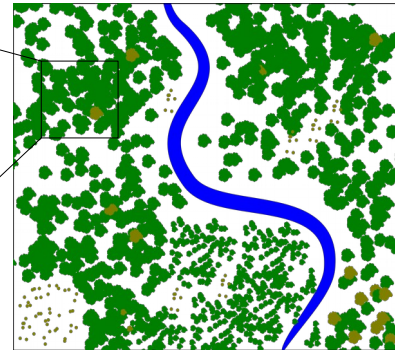
Remote sensing product



25-100 m²

Stand ?

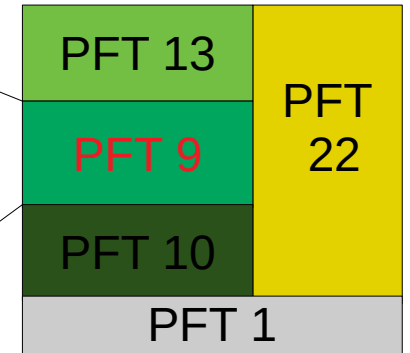
- Tree competition for :
- Light
 - Nitrogen
 - Water



1-10 Km²

Landscape ?

- Residence time
- Forest management
- Age Class (new PFT)
- Mortality
- Recruitment



50-100 Km²

Regional ?

- Land cover
- Forest cover
- Species cover
- Vegetmax

GPP: -15%

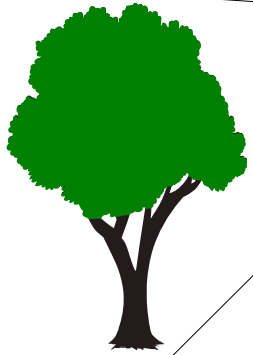
What evaluation across scale means ?

Licor measurement

Flux tower measurement

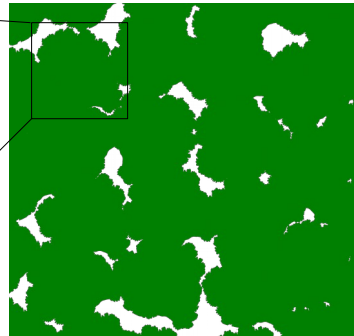
NFI based product

Remote sensing product



Tree ?

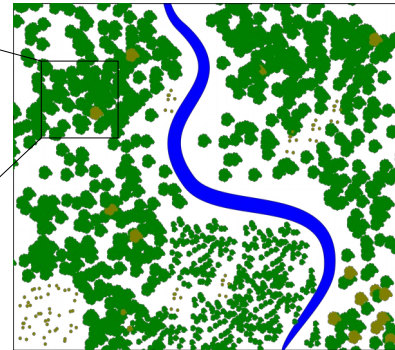
- Farqhar model : -20%
- Leaf characteristic
- Stomatal conductance model
- Pipe model



25-100 m²

Stand ?

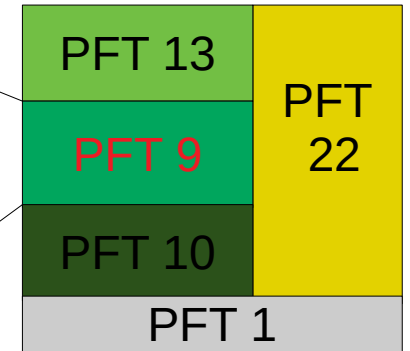
- Tree competition for :
- Light
 - Nitrogen
 - Water



1-10 Km²

Landscape ?

- Residence time
- Forest management
- Age Class (new PFT)
- Mortality
- Recruitment



50-100 Km²

Regional ?

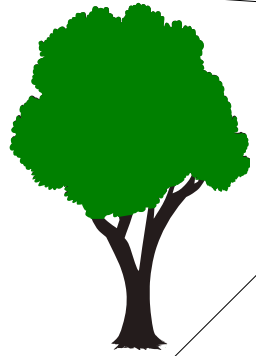
- Land cover
- Forest cover
- Species cover
- Vegetmax

GPP: -15%

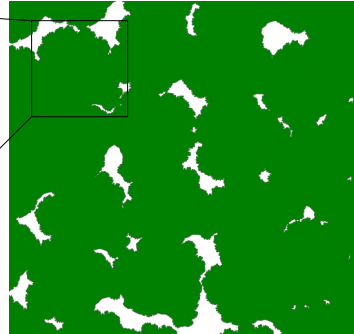
This concept can be adapted to different scale

Licor XXXX measurement

Flux tower measurement



Tree ?



25-100 m²

Stand ?

Processes scale

Spatial scale

- Farqhar model : -20%
- Leaf characteristic
- Stomatal conductance model
- Pipe model

- Tree competition for :
- Light
 - Nitrogen
 - Water

A sequential evaluation from GPP to rotation length

- 1- When a step is validated, the associated processes cannot be tuned anymore !
- 2- Small scale steps need to be validated before the large ones.
- 3- **Constraint parameters** cannot be manually or statistically tuned
- 4- Reduce as much as possible the tuning **parameters**

