

Biomass and carbon stocks of tropical African forests: synthesis and perspectives

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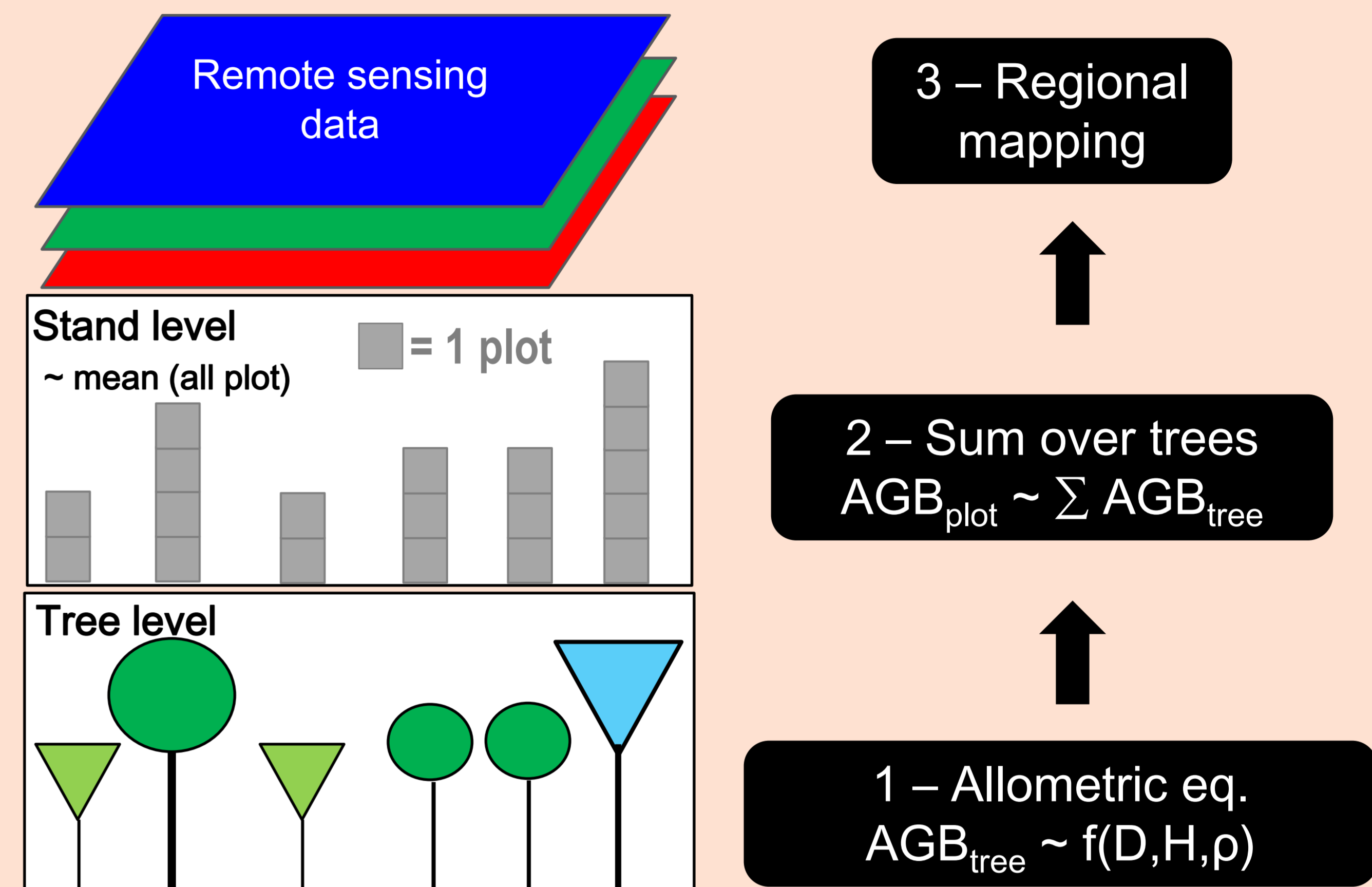
1. Context

Tropical forests contain **50 % of carbon stocks** (Pan *et al.* 2011). Deforestation and degradation of these forests contribute to **12 %** of annual global emissions (van der Werf *et al.* 2009).

The implementation of **REDD+** (Reducing Emissions from Deforestation and forest Degradation) depends on the estimation of the **biomass and carbon stocks** contained in tropical forests.

The **aim** of this study is to present the current state of knowledge on the **estimation of biomass and carbon stocks** contained in **tropical African forests** and to identify priorities for **future research**.

2. Methods to estimate biomass and carbon stocks



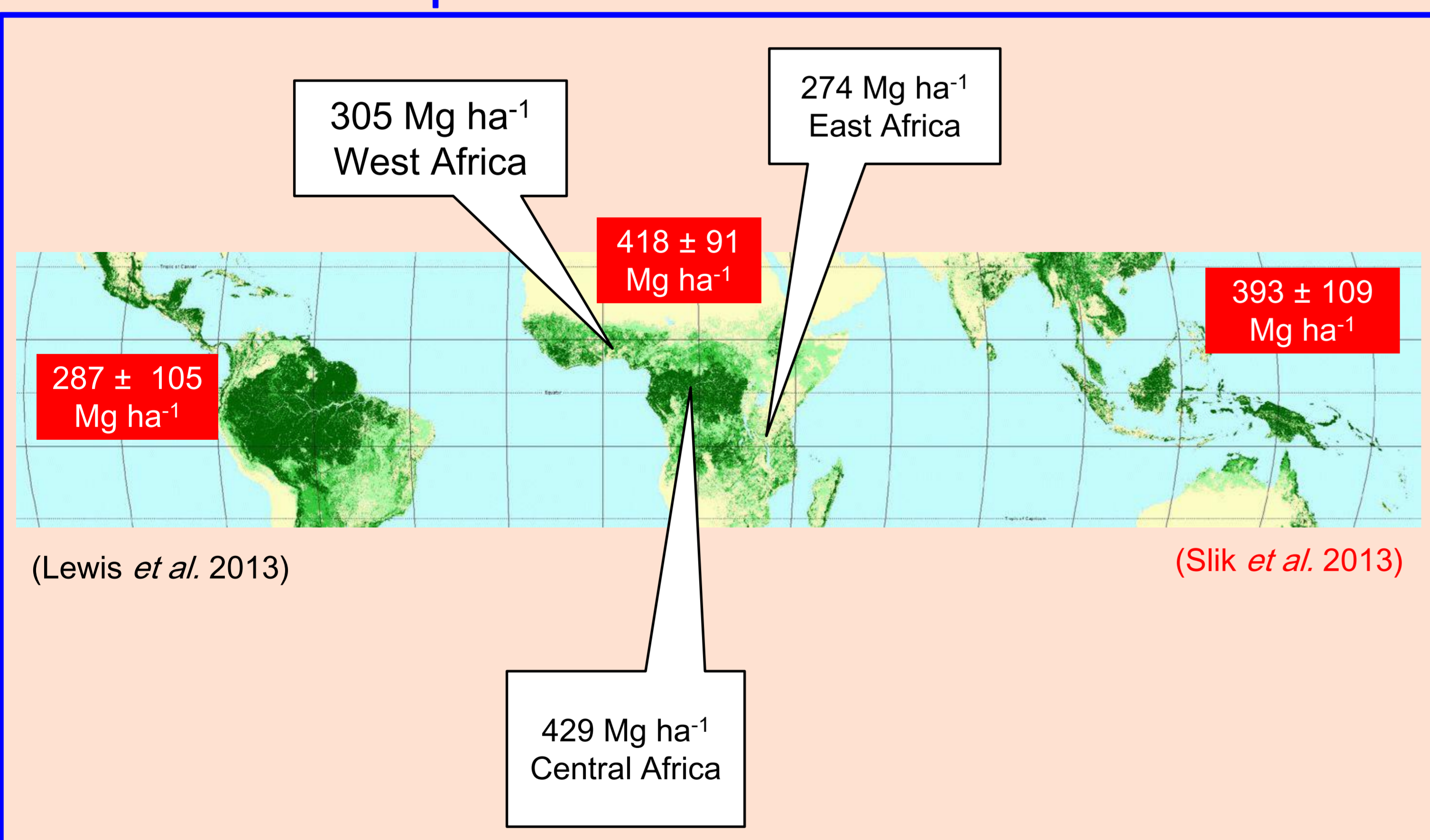
3. Biomass and carbon stocks in tropical African forests

Tree level

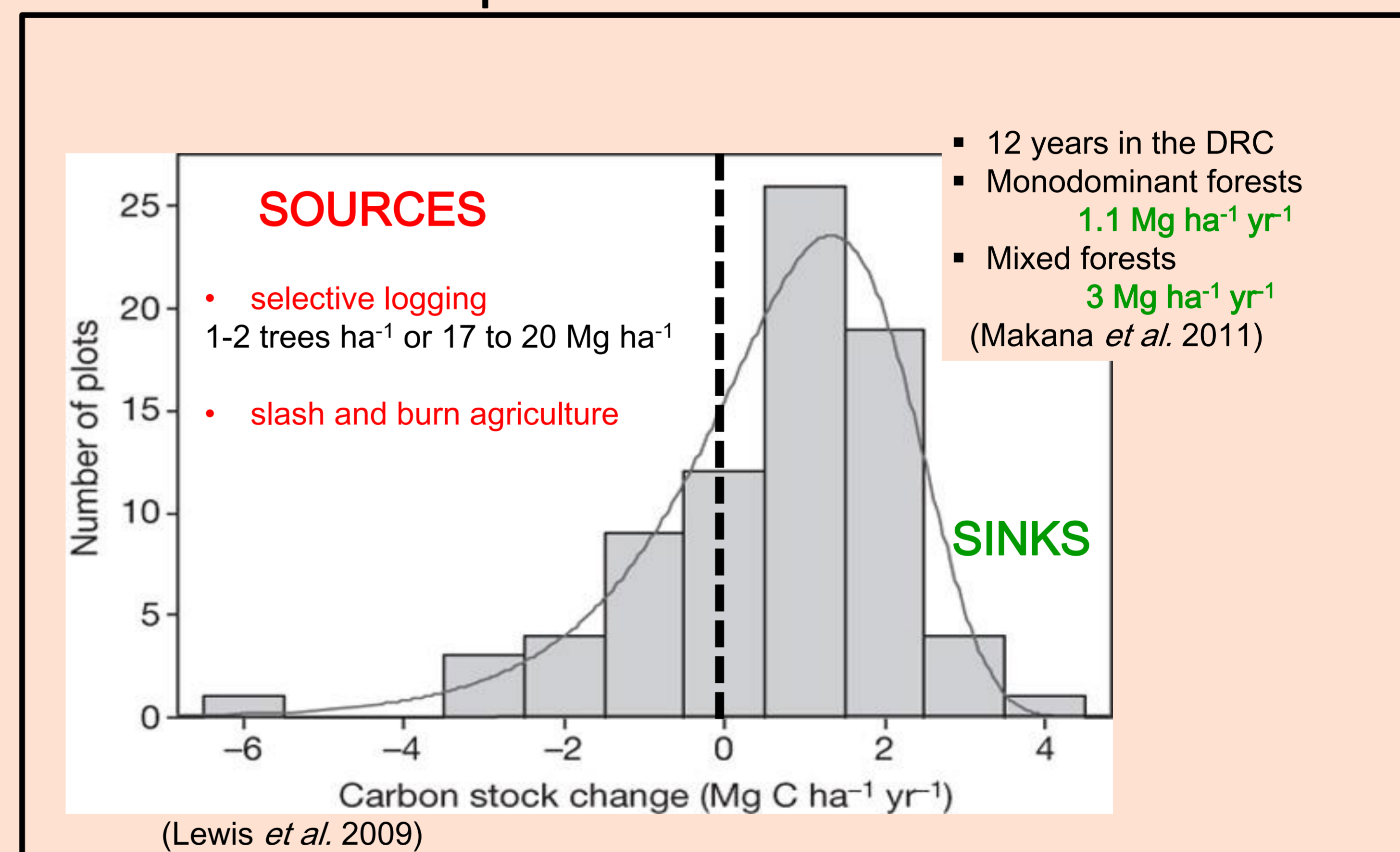


Stand level

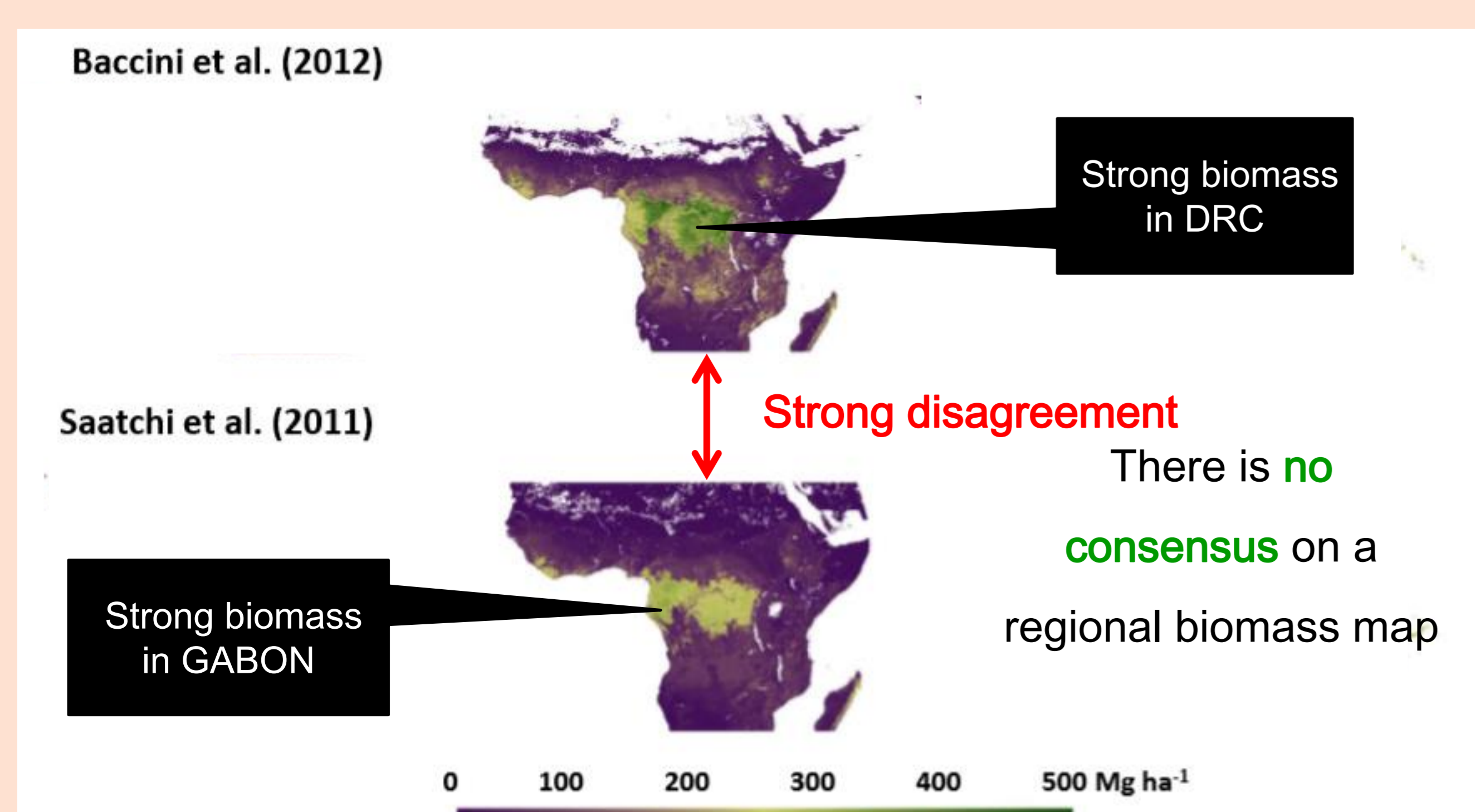
Spatial variation of biomass



Temporal variation of biomass



Regional level



4. Conclusion and perspectives

- UNCERTAINTIES** on biomass and carbon stocks in tropical African forests
 - Lack of both **forest inventory data** over large spatial scale and **appropriate allometric models**
- NEED FOR REFERENCE SITES** (both allometry and forest inventory) to provide accurate biomass estimates for an effective implementation of the REDD +

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