

## ***Interactive comment on “The global forest above-ground biomass pool for 2010 estimated from high-resolution satellite observations” by Maurizio Santoro et al.***

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Our team compared the growing stock volume from the GlobBiomass map against 1800 in-situ plots from the Romanian Forest National Inventory and using 104 large (1 ha) sites. For the NFI data, the comparison was carried out at both, Permanent Sample Plot - PSP level (500m<sup>2</sup>) and at NFI Grid node level (i.e., using the averaged PSP volume over the 6ha corresponding to each grid node). A grid node is the center of a square (250m x 250m) with 4 PSP as vertices.

We observed a large discrepancy between the European FRA based assessment (-8%, Paragraph 585) and our results regardless of the method used (i.e., NFI PSP, NFI

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grid node, Large sites). The difference between the mapped values and the in-situ data reached RMSE% errors between 50%-70%. The map sub-estimates the in-situ volumes by 30 m<sup>3</sup> (oak forests) to 345 m<sup>3</sup> (beech forests).

It would be interested to understand/discuss to what extent the GlobBiomass map may be used to estimate regional or national stocks over biomes that support high biomass values.

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