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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Across many savanna regions (Africa, Australia, Brazil (cerrado)), there are a number of environmental gradients (e.g., temperature, precipitation, evapotranspiration) that impact on the allocation of biomass to both the above and below ground components. The species diversity also varies and these savannas are, in some areas, dominated by coniferous rather than broadleaved species, which allocate biomass differently. There are also variations according to long term environmental conditions (e.g., drought, persistent fires). Over large areas in these environments, one or just a few Biomass Expansion Factors might be applied and this may lead to errors in the biomass esti-

mation. It seems that there is potential for more studies to link the BCF to a range of environmental controls and thereby provide a more targeted assessment of BCF and concurrently improve the estimates of AGB. A similar approach might be undertaken for wood density. This research will advance as we move forward regardless because of requirements and interests but there are opportunities for studies to be put in place earlier given the global need for biomass information.

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