The comparison with remote sensing NPP estimation (MODIS) reveals that TBA is able to capture the broad spatial patterns of NPP reasonably well (Fig. XXb), despite of an underestimation at Andean region and a small overestimation in the northwest/central basin region. On the other hand, PFTA presents a widespread and prominent overestimation for this variable (Fig. Xxa), except for the underestimation, likewise TBA, at the Andean region. The higher concordance with MODIS data of the TBA when compared to PFTA can also be seen in Fig. Xxc, which shows a grid-by-grid cell performance comparison between CAETÊ and MODIS.

The CAETÊ model simulated for Amazon basin a total annual NPP of 122.28 PgCyr⁻¹ for PFTA and of 76.05 PgCyr⁻¹ for TBA; in its turn, MODIS estimated a value of 74.61 PgCyr⁻¹ for the same variable. Thus, the value simulated by CAETÊ in its trait-based version is much closer to the value estimated by MODIS, which, together with the comparisons related to the above-ground carbon stock, evidences the ability of the TBA approach to better represent key biogeochemical variables.