

Interactive comment on “River logjams cause frequent large-scale forest die-off events in Southwestern Amazonia” by Umberto Lombardo

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This is an interesting paper that documents an important process. I do not wish to add much to the suggestions for revisions already posted by Simon Dixon. I find it intriguing that the accumulation of large wood and associated overbank flow and channel avulsion described here is occurring in the tropics, where the combination of high rates of wood decay and high discharge per unit area/high fluvial transport capacity for wood are more likely to limit large wood accumulations. Analogous channel blocking, overbank flow, and avulsion have been inferred or documented for rivers in temperate latitudes, including the Red River of Louisiana (Triska 1984) or the Black Swamp of Ohio's Maumee River (Wohl, 2014) during the 19th century and contemporary side channels such as those in Canada's Slave River (Kramer et al., 2017). Channel blockage by very large, persistent accumulations of wood is likely to have been much more

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common in temperate-latitude rivers prior to intensive timber harvest and channel engineering. The stratigraphic signature of these sites in the Bolivian Amazon could provide a template for investigating floodplain stratigraphy in environments with suitable conditions that might have experienced this type of wood accumulation and channel instability in the past.

References

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