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## Geomorphological adjustments in a partial avulsion: the Peixe River, Brazil

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The avulsions cause intense transformations in the fluvial landscape of meandering rivers. However, the morphometric and sedimentological adjustments during this process are still poorly understood. The Peixe River, located in the southeastern region of Brazil, has a partial avulsion, established with an avulsion channel of 14 km long, which remains for more than 48 years. In this study, we investigated variations in the sinuosity and width channels with remote sensing, as well as sedimentological features in channel banks of the parental channel with sampling in fieldwork. The sinuosity analyses showed between the years 1985 and 2020 a subtle increase in the avulsion channel (1.11-1.15), followed by a decrease in the parental channel (2.00-1.67). The decrease and increase in the mean width in, respectively, the parental channel (40.7-33.6m  $\pm$ 0.5m) and the avulsion channel (26.4-31.1m  $\pm$ 0.5m) between the years 2011 and 2020 resulted in a recent and approximated equivalence of width between the channels. The bank channel deposits in a segment, which includes the parental channel, were discriminated in the top and bottom layers. The top layer, which has coarser sediments and a lower concentration of organic matter than the bottom layer, showed a significant increase in muddy sediments and organic matter in the avulsion reach (t-test, homogeneous variance, p-value = 0.0013 and 0.048, respectively). Therefore, morphometric and sedimentological parameters evidence recent reorganizations of the drainage network and in the depositional model of the floodplain due to the development of partial avulsion.