THE INFLUENCE OF ECOHYDROLOGICAL AND BIOGEOMORPHOLOGICAL SEASONALITY IN NON-PERENNIAL RIVERS

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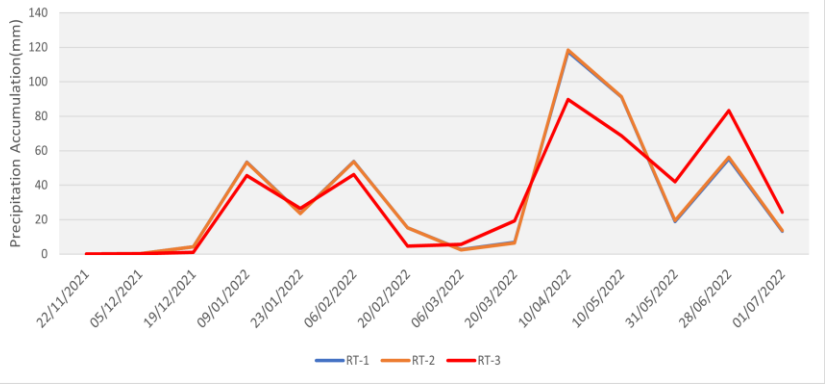
Introduction

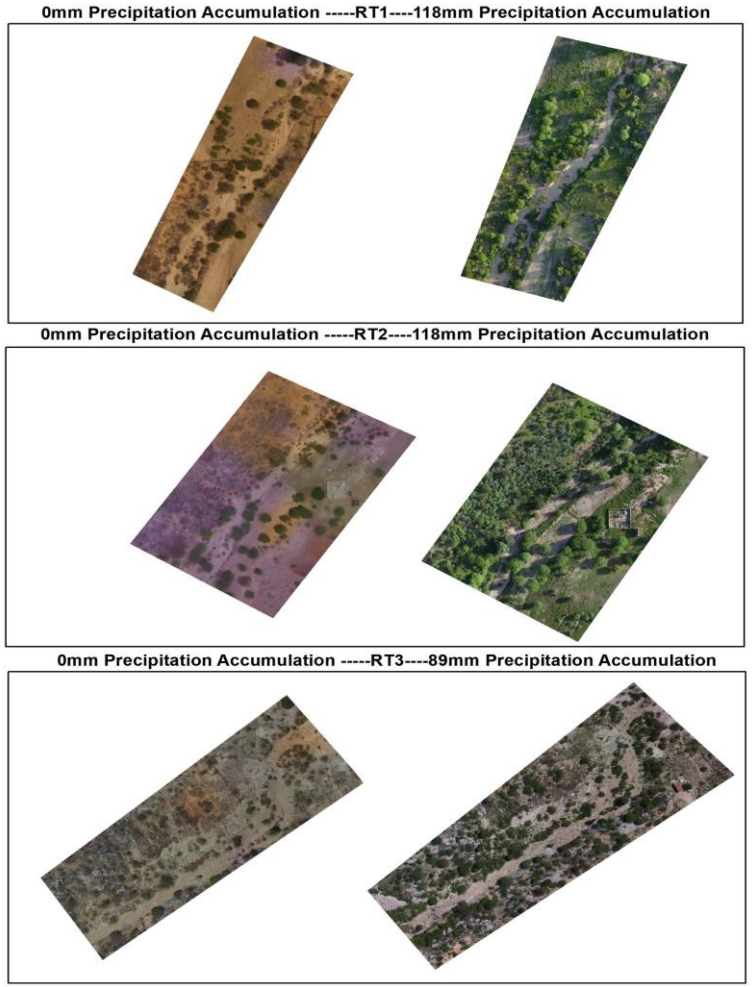
The interaction between riparian vegetation growth and river evolution is characterized by complex nonlinear feedback. When dealing with non-perennial rivers, this interaction presents growth patterns directly affected by the temporality of the flow, which controls water availability.

The present work evaluated how ecohydrological and bio-geomorphological seasonality affects the morphology of non-perennial sandy channels in Northeast Brazil. For this purpose, DEMs and orthomosaics, generated from five UAV surveys in three stretches of the basin that present a different hydrological behavior between October 2021 and September 2022, were analyzed, allowing the analysis of morphological changes in the coverage of the watershed. Simultaneously, we installed field quadrants to monitor the coverage and growth of some riparian vegetation species of some geomorphic units of the stretches.

Precipitation Accumulation

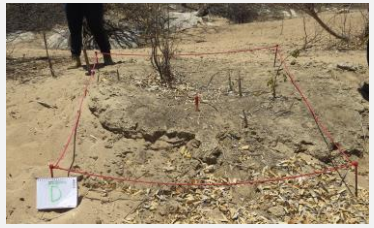


Orthomosaics



Monitoring of riparian vegetation

December2021-**RT1** **Bar-** April 2022




December2021-**RT2** **Bar-** April 2022


December2021-**RT3** **Bed-** April 2022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