TAPAJO S HYDRAULIC SLOPE AT THE CONFLUENCE WITH THE AMAZON FROM COMBINED SATELLITE ALTIMETRIC DATA

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At the confluence of the Tapajos river with the Amazon, the hydraulic control of the Tapajos river from downstream Amazon water levels forbids any computation of a stage-discharge rating curve. Satellite altimetry data provide continuous along-strike measurements of the heights of the Tapajos. These measurements evidence the space and time variations of the slope: 1) a flattening of the slope towards the confluence, 2) change of slope and curvature with time (slope being steeper at low waters. Stage-discharge relationship estimated from these slope measurements are compared with in-situ gauging data collected during successive field campaigns.