

Sediment and elemental accumulation rates in the Krishna River Basin,India

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Abstract

Rates of sedimentation cores collected from the Krishna River basin in India were determined by the excess²¹⁰Pb technique. An average rate of 5.5 mm year⁻¹, obtained for the entire basin, is higher than the computed erosion rate (0.17 mm year⁻¹), suggesting local sources (bank erosion, etc.) for the sediments. The high rates prevalent in the estuarine zone reflect rapid sedimentation due to flocculation. The deposition rates of major and minor elements in the Krishna River basin during the last 10–50 years are considerably higher than those of the estuarine or Bay of Bengal sediments.