



Abstract Details

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Title: Chemical biomarkers as indicators of organic matter preservation in coastal margins

Abstract:

River-dominated margins are dynamic regions that receive inputs of carbon derived from both terrestrial and marine sources. In these environments, the input of vascular plant-derived organic matter from land is significant, and marine primary productivity is high due to high nutrient inputs associated with riverine discharge. Major rivers (and associated deltaic environments) provide the dominant pathway for the input of terrestrial organic carbon to marine sediments and play a disproportionately important role in transporting terrestrial materials to the ocean. Approximately 40% of the fresh water and particulate materials entering the ocean are transported by the ten largest rivers, which includes the Mississippi. Rivers act as natural integrators of surficial processes, including human activities, within their drainage basins. Approximately 60% of total suspended matter and 66% of the total dissolved solids transported from the conterminous U.S. to the ocean is carried by the Mississippi, the largest river in North America. It has been estimated that 80% of the organic carbon preserved in marine sediments occurs in

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Co-Authors

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