Source, fate and turnover of terrestrial organic matter in rivers and estuaries

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Rivers are now thought to export ~2GT of carbon from terrestrial ecosystems per year. New studies are probing the age of riverine organic matter in order to determine the sources and ages of watershed organic carbon delivered to river systems. Case studies will be provided on the age of riverine organic carbon from disparate rivers including tropical, high latitude, and temperate systems. Finally, mechanisms which are responsible for the removal of organic carbon pools will be addressed with an emphasis on how these mechanisms might preferentially 'age' organic carbon pools during fluvial transport to the ocean.