

School of Geosciences

- fourth-largest tidal range in the world – up to 14 meters
- roughly 700,000 cubic meters of sediment are added to the bay every year








mpv/dm-esMdm

low tide



River Sée

An aerial photograph of the Mont-Saint-Michel area in Normandy, France. The image shows a complex network of rivers and a large tidal flat area. The River Sée is a prominent feature in the upper right, flowing towards the center. The River Sélune is located in the lower right, flowing towards the center. The River Couesnon is in the lower left, flowing towards the center. The Mont-Saint-Michel is a large, dark, irregularly shaped landmass in the center-left. The surrounding area is a patchwork of green fields and brown roads. A small 'N' is visible near the center of the image, indicating North.

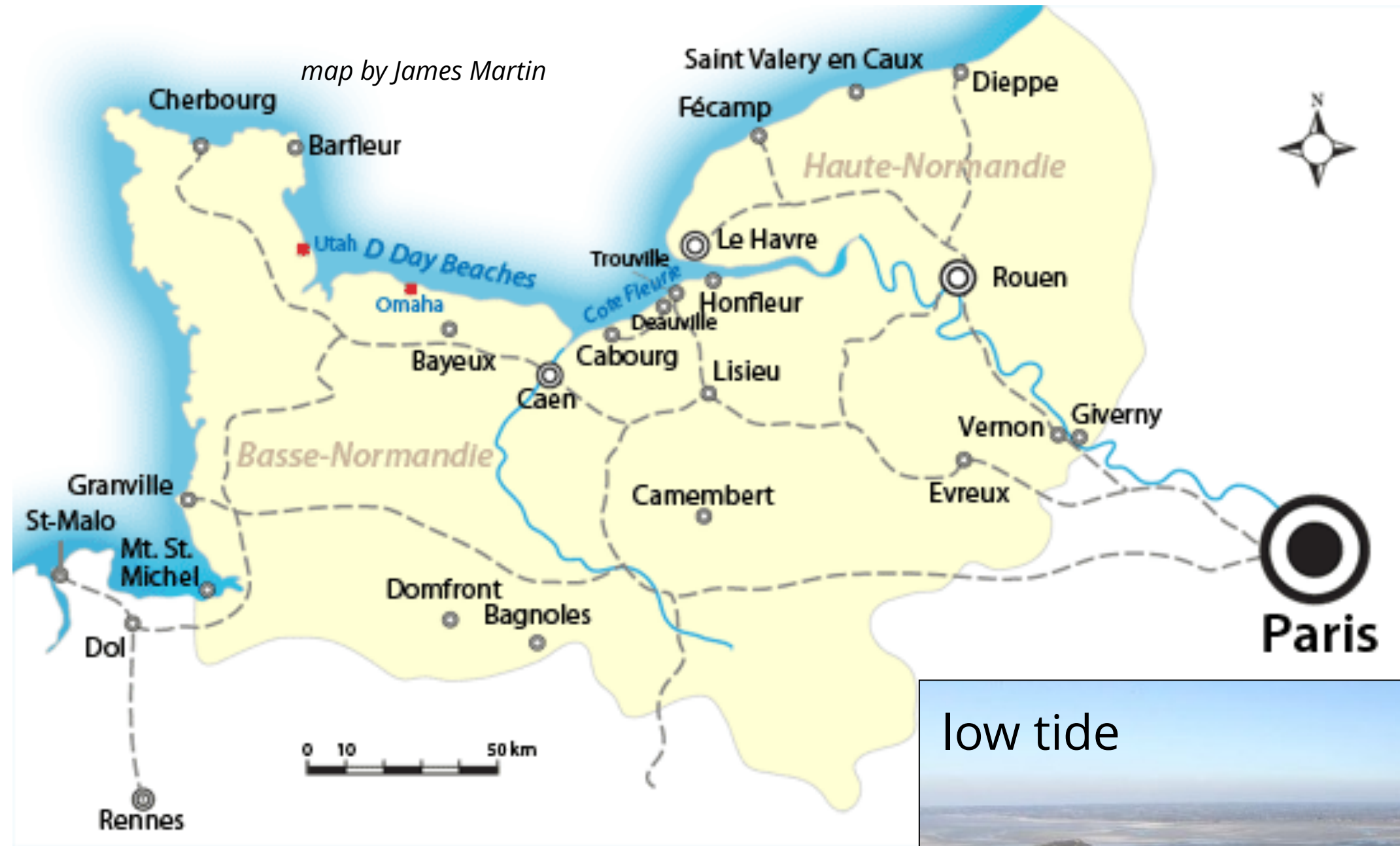
River Sélune

Mont-Saint-Michel

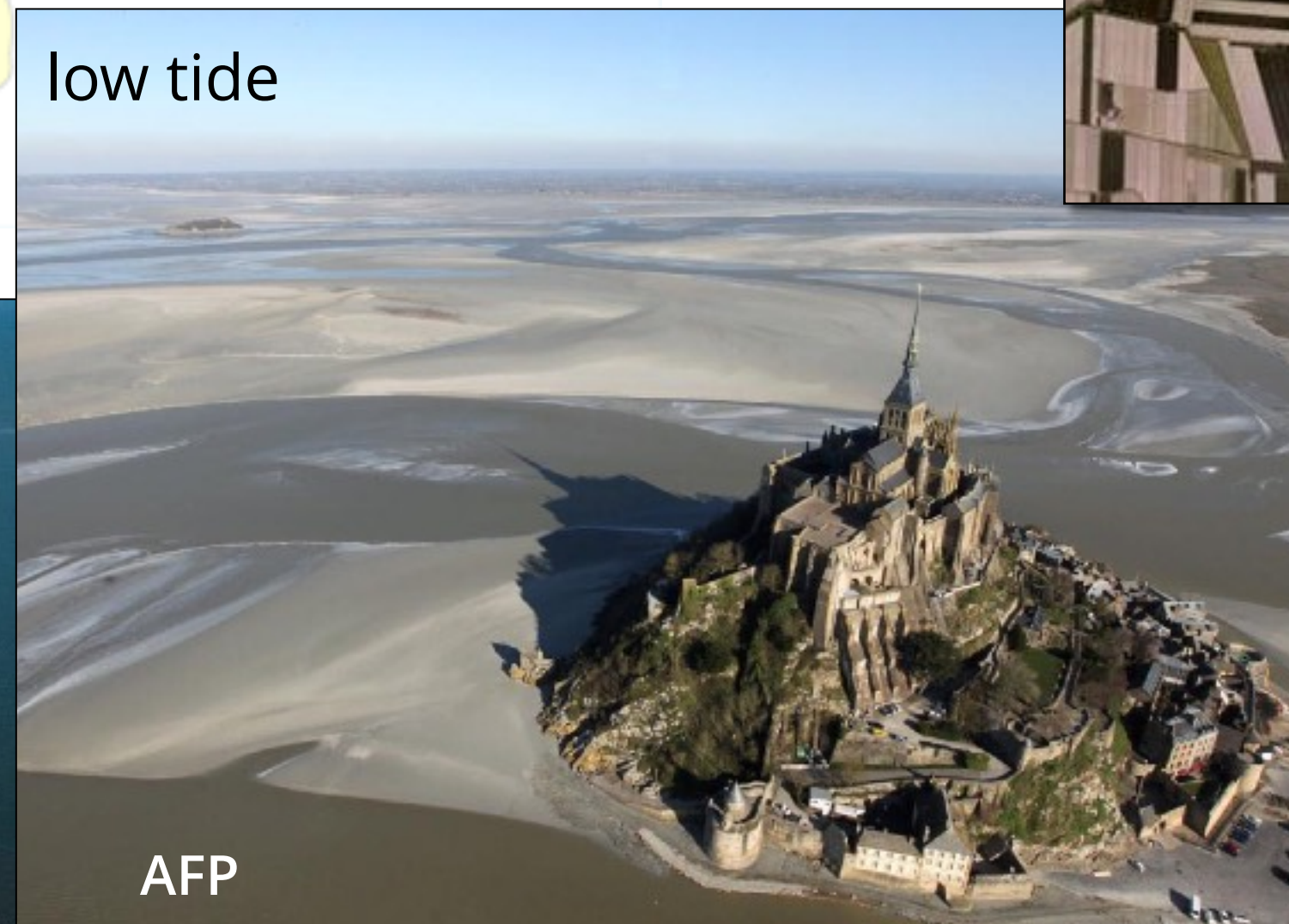
**River
Couesnon**

Physical modeling: laboratory models

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low tide



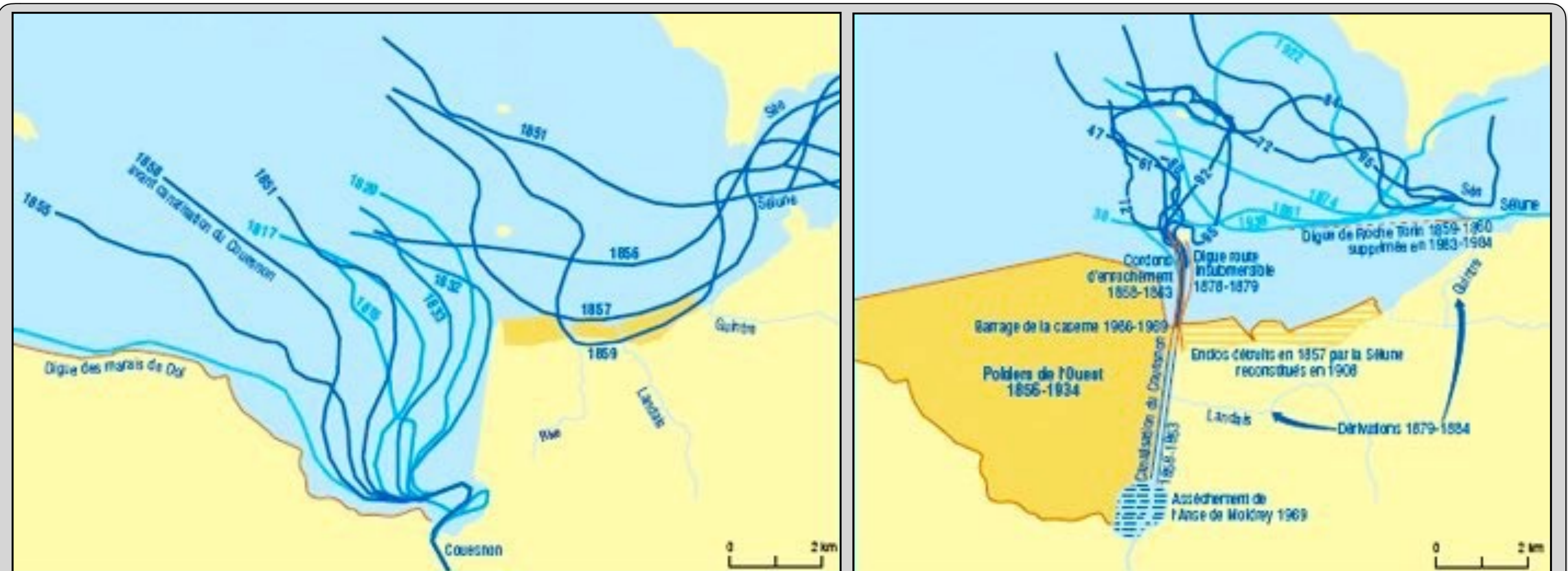
AFP



high tide

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Physical modelling: laboratory models



1805/1859: the 3 rivers flow freely

1860/1995: weak flow from the Couesnon river

- 1850's: Rivers Sée and Sélune were eroding the agricultural area south of where they entered the bay, and a dike was constructed to force their flow further north.
- River Couesnon was completely controlled and "canalised" all the way out beyond Mont Saint-Michel itself
- in 1969, a dam was built across the Couesnon that effectively ended the power of the river to flush sediment out into the bay