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Case histories of sandy beach erosion caused by return to the coastal equilibrium profile

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Accelerated beach erosion and retreat of sandy beaches is a major concern in many coastal areas of the Mediterranean. It has been demonstrated that beach erosion is often related with mankind modification of the river drainage system and/or exploitation of coarse grained sediments deposited on the river banks. There are cases, however, where beach retreat is not induced by human interference but rather due to the long-term tendency of the coastal system in reaching the equilibrium after a phase of beach progradation at river mouths. This study reports evidence that recent and/or ongoing retrogradation of foreshore-shoreface depositional systems at Volturno river mouth and Amalfi coast (Southwest Italy) may be interpreted as a trend in returning back to "normal conditions" of the costal budget after major periods of enhanced slope erosion and flood-dominated transfer of sediments towards the coastline