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COASTAL TRANSGRESSION OVER PEAT ENVIRONMENTS IN A  
GENERALLY PROGRADATIONAL SETTING (ORINOCO DELTA,  
VENEZUELA).

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The Orinoco Delta in eastern Venezuela is building rapidly onto a shallow shelf. As a major river, the Orinoco transports large amounts of mostly fine-grained sediments; additional sediment arrives by longshore current from the south. Peat occurs throughout the delta with most widespread accumulations in the northern part of the lower delta plain. Peat deposits also occur directly at the shore where the interaction between clastic and peat sedimentation can be observed in a coastal setting with high clastic input.

In spite of the progradational setting, the coastline is receding over a stretch of approximately 40 km. Peat marshes and swamps, made up of autochthonous peat formed by ferns, grass, and forest, are overridden by beach sand. The coastline has moved inland by at least two kilometers. In several localities allochthonous peat is in turn deposited on the beach sand in thin local lenses that are being incorporated in the sand. The result is the juxtaposition of autochthonous peat, beach sand, and allochthonous peat within a thin stratigraphic section representing a very short time interval.

This case demonstrates that transgressive surfaces, even if they can be traced over tens of kilometers, may represent only "local" phenomena, and cannot necessarily be interpreted as indicators of the major process characteristic of a given region which is the progradation of a delta.