Supplementary Material

# Glossary

*barrier island* detached coastal landform parallel to the mainland with dune systems

*compound dunes* overlapping or superimposed combined dunes of the same type

*ebb delta*  sandbars at the outer seaward margin of tidal inlets

*eddy*  circular current of water

*facies* Sum of all primary organic and inorganic characteristics of a deposit at one location

*Holocene transgression* landward migration of the shoreline as a consequence of glacier ice melt and rising sea levels that occurred around 11,500 years ago during the Holocene

*tidal inlet* narrow exchange channel connecting the open sea with a lagoon

*intertidal zone* at high tide flooded area which is above the water level during low tide

*littoral drift* movement of entrained grains in the direction of the longshore current

*mesotidal* tidal range between 2 m and 4 m

*microtidal* tidal range between < 2 m

*scour* gradually formed hole in sediments as a consequence of continuous water movement

*subaquatic dunes* underwater dunes

*subtidal* constantly submerged zones close to the shore

*swash-bar* nearly horizontal shore parallel ridge formed on the intertidal beach or on a tidal flat due to the landward transport of sediment by waves