

Climate change will have pervasive effects on the world's coasts, but at broad scales these changes have typically proven difficult to analyse in a systematic manner. This paper explores an outcome-driven deductive methodology for geomorphological analysis that recognises the nonlinearity of coastal morphology and organises current knowledge and understanding using fuzzy logic concepts. Building on recent large-scale coastal investigations and with reference to a case study of the East Anglian coast, U.K., the methodology defines the active coastal system using a flexible generic classification and integrates expert opinion, using the notion of possibility, as a basis for the assessment of potential future geomorphological response to changes in sea level and sediment supply. Preliminary results for the East Anglian coast suggest that the constraining of the active coastal system by sea defences is already having, and will continue to be, a significant influence on coastal evolution irrespective of the rate of sea-level rise. Therefore, significant potential exists to guide future coastal evolution toward preferred outcomes by using this approach as a component of adaptive shoreline management. This methodology could be applied to a wide range of problems both in geomorphology and other subjects.