



Study on transgression characteristics during late Pleistocene in the central region of the northern Jiangsu plain

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Transgression occurred frequently in east coast of China during the Quaternary. Study on the late Pleistocene transgressions could provide a reference for us to predict the sea-land interaction under different amplitude of climate changes in the future. Therefore, the studies on the transgression characteristics in the late Pleistocene are attracting more attentions. However, so far understandings are not uniform on the characteristics of the transgression in the Northern Jiangsu Basin during late Pleistocene, such as times of occurrence, the relative strength, mechanism, etc. In this study we choose the central region of the northern Jiangsu plain as the study region, where sedimentary environment is relatively stable, deposition is continuous in late Pleistocene, and select multiple drilling holes as the research object. OSL and AMS14C dating are used to obtain the Late Pleistocene time scale in this area. We constructed the evolution of regional sedimentary environment by foraminifera, sedimentary characteristics and stratigraphy sequences. The results reveal that the scope and intensity of transgression during the MIS5 are more larger than those in the MIS3, which consistent with the dating results of the adjacent seas by other researchers.