



## Characteristics change of the emergence period length of Dongting Lake beach after Three-Gorge Project

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**Abstract:** Dongting Lake, China's second-largest freshwater lake, is located in northeastern Hunan Province and has a beach of about 2 275 square kilometers in dry season. The length of emergence period of the beach is important for the plant and animal communities and their populations on the beach. This paper aims to contrast the characteristics change of the length of emergence period of the beach after Three-gorge Project's construction by analyzing the waterlevel data of 6 main hydrologic stations in Dongting Lake area from 1956 to 2007. The results show that: (1) the length of emergence changes dramatically at low level beach, changes to a certain degree at medium level beach, and basically remains the same at high level beach. (2) The length of emergence period of low-level beach from January to May was shorten. (3) Little changes on the length of emergence period the beach were found from July to September. (4) The length of emergence low and medium level beach from October to November lengthen markedly.

**Keywords:** Dongting Lake; Three-gorge Project; lake beach