

Is the water level during dry season in Poyang Lake really lower than before?

Xiaolong Liu (1,3), Meixiu Yu (2,3), Yong Shi (3), Zhenyu Luan (3), and Dafang Fu (1)

(1) Southeast University, Nanjing, China, (2) Hohai University, Nanjing, China, (3) Nanjing Hydraulic Research Institute, Nanjing, China

The Poyang Lake, the largest freshwater lake in China, has attracted world wide attentions in recent years due to it being dammed or not at the Lake's outlet. It was reported that the Poyang Lake water levels have been declining significantly in dry seasons, which resulted in severe water supply, irrigation and ecological flow requirement problems. The purpose of the study was to answer the question that the water level of the Poyang Lake during dry season is really lower than before or not. Based on topographical data, and long-term hydrological and meteorological data from 1950 to 2016, the relationship between the Poyang Lake and the Yangtze River before and after the completion of the Three Gorges Dam, the relationship between the Poyang Lake and its Five major tributaries (Ganjiang River, Fuhe River, Xinjiang River, Raohe River and Xiushui River), and as well as sand mining contributions to the water level in dry seasons of the Poyang Lake were investigated respectively.