Residual pore pressure analysis of Shuping landslide in Three Gorges Reservoir, China

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Shuping landslide is one of the most active landslides located in the Three Gorges Reservoir after the first impoundment in June 2003[1]. Since then continuous deformation has been occurring in the landslide. It is important and very difficult to reasonably calculate the stability of Shuping landslide because dam reservoir impoundment changes the geological environment. Currently, there is no effective groundwater phreatic line determination method. A simple and applicable calculation method worked out by the residual pore pressure[2-4], used in Japan, is adopted to calculate the safety factor of the Shuping landslide. We demonstrated that the field measurements of groundwater phreatic line are in good agreement with the calculated results.

References:


