

2nd International Conference on

NATURAL HAZARDS AND DISASTER MANAGEMENT

July 26-27, 2018 Melbourne, Australia

The distribution and origin of paleo-dammed lakes in the upper Jinsha River, SE Tibetan Plateau**Jian Chen**

China University of Geosciences, China

Numerous studies have indicated that natural processes can form different types of natural lakes, including landslide-dammed lakes (usually formed by collapses, landslides, or debris flows jointly damming rivers), glacier-ice lakes, moraine lakes and volcanic lakes. In the Zhongzan-Batang segment of the upper Jinsha River in the southeast of the Tibetan Plateau, there are eight old landslide dams, with nearby associations of relict landslides, lacustrine sediments and fluvial sediments. Associations of this kind provide key evidence for identifying the lacustrine sediments as landslide-dammed lake deposits. The ¹⁴C ages of 12 samples and the OSL ages of 9 samples showed that the landslide-dammed lake deposits formed during a period of about 122 AD-1100 AD, corresponding to the time of the late Donghan Dynasty to the middle of the Song Dynasty. Landslides that formed the landslide-dammed lake deposits are inferred to be due to earthquakes triggered by active faults.

jianchen@cugb.edu.cn