Lake Changes and Impacts over the Tibetan Plateau

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The Tibetan Plateau has more than 1,400 lakes larger than 1 km^2, which have expanded rapidly in recent decades due to a warmer and wetter climate and accelerated glacier ablation. Simulations also show that these inland lakes will continue to expand in the future under different climate scenarios. This presentation will report on the spatial and temporal characteristics of lake expansion on the Tibetan Plateau over the past 50 years, future trends, and threats to ecosystems and infrastructure.

The Himalayan region is dotted with tens of thousands of glacial lakes, and in the context of global warming, glacier mass loss and retreat are accelerating, and glacial lakes are expanding rapidly. The underwater ice mass loss due to glacial lake expansion is not accounted for in traditional geodetic methods, leading to a significant underestimation of glacier mass loss in the Himalayas and even on a global scale. This presentation will report on the progress of hidden mass loss from lake-terminating glaciers in the greater Himalaya.

11 Aug 2023

11:30 a.m.

Conference Room, 3/F, Mong Man Wai Building

Zoom Link (Mixed-mode)

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