Reply on RC1

Xiangyang Dou et al.

Author comment on "Spatio-temporal evolution of glacial lakes in the Tibetan Plateau over the past 30 years" by Xiangyang Dou et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-354-AC1, 2022

Dear reviewer,

Thank you for reviewing our manuscript. We carefully re-evaluate the novelty and originality of our study, especially by comparing with other published studies, i.e. Wang et al. (2020). Actually, novelty of a study is always the first and the most important thing to evaluate before conducting any research. The overall objective of our research project is to reveal the spatio-temporal evolution of glaciers and glacial lakes in Tibetan Plateau and their response to climate change. We intended to use other published glacial lake inventories, but we found that there is a lack of high-resolution multi-temporal inventory of glacial lakes covering the whole Tibetan Plateau after through literature review. There are some inventories have high temporal resolution but only covers small regions, while some other inventories covering larger area of Tibetan Plateau but only from one or two periods (i.e. Wang et al., 2020), see the Introduction and Discussion (5.1 Comparison with other glacial lake datasets) for details. This gap motivates us to spend more than one year to collect data and develop methods to create a new inventory, which we believe is more complete, accurate and higher temporal resolution (covering three periods for the whole Tibetan Plateau).

We provide more evidences and responses to your concerns as follows. We hope you can recheck our study.

Thank you again for reviewing the manuscript.

Best regards,

Xuanmei Fan on behalf of all coauthors

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Please also note the supplement to this comment: