



*Supplement of*

## **Recent large-inland-lake outbursts on the Tibetan Plateau: processes, causes, and mechanisms**

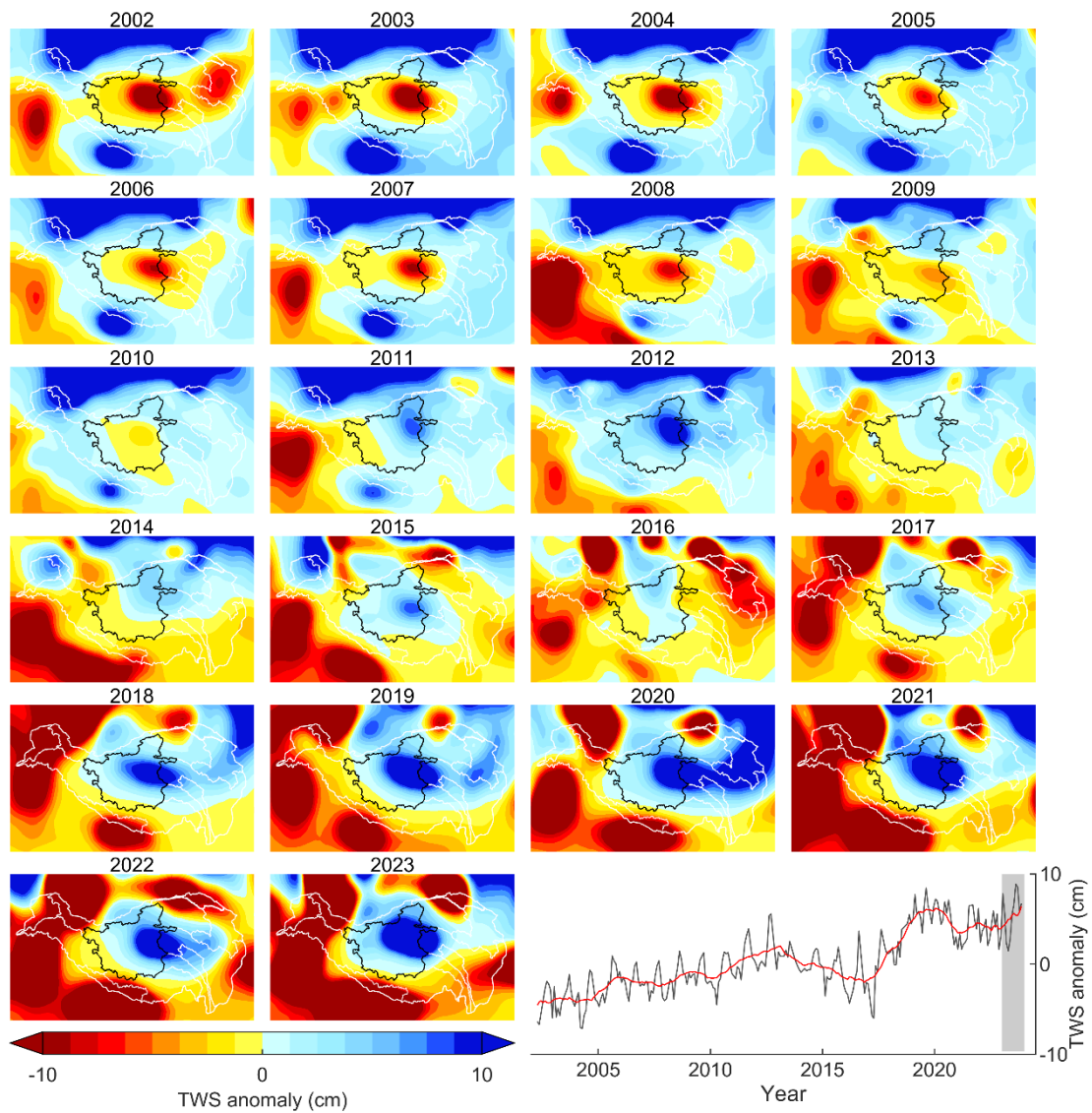
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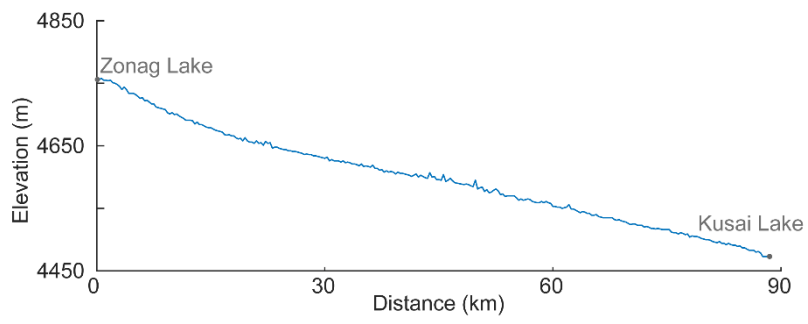
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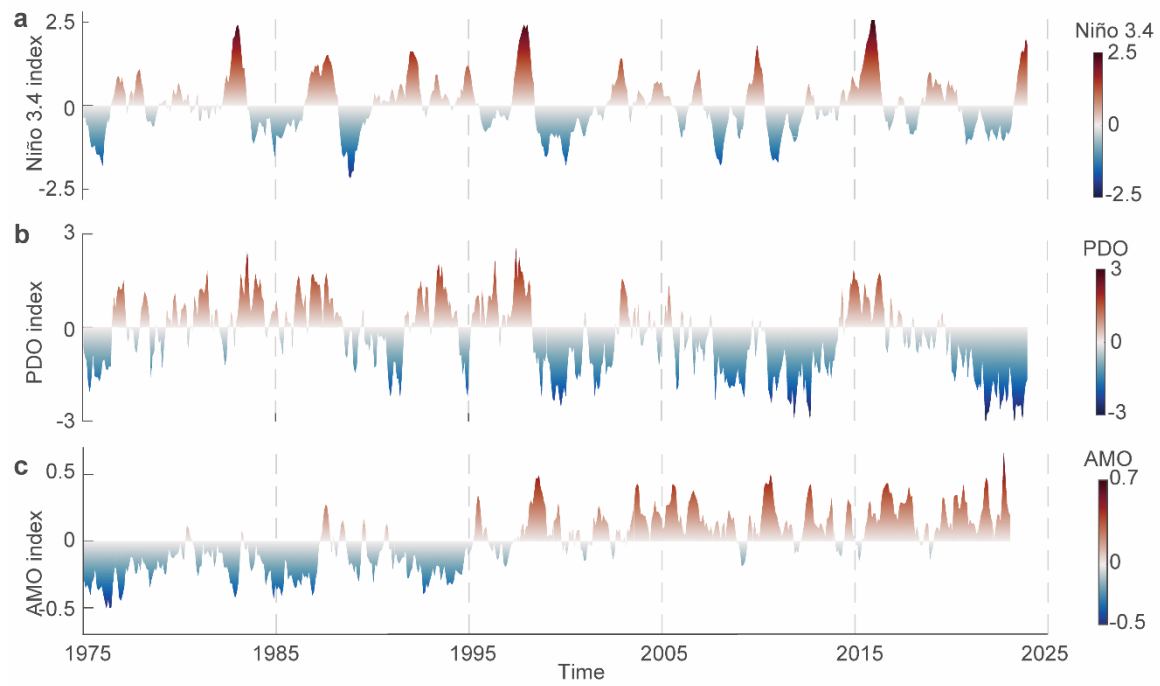
Figures S1 to S3



**Figure S1.** The change in terrestrial water storage (TWS) in September, derived from GRACE data, between 2003 and 2023. Time series of total TWS anomaly in the Inner Tibetan Plateau (the area enclosed by the black line) was shown. The red curve shows the smoothed variation by use of a one-year sliding window.



**Figure. S2.** The terrain gradient of river channel from Zonag Lake to Kusai Lake



**Figure. S3.** (a) Niño 3.4 index, the data is obtained from [https://psl.noaa.gov/gcos\\_wgsp/Timeseries/Nino34](https://psl.noaa.gov/gcos_wgsp/Timeseries/Nino34). (b) AMO index, the data is obtained from <https://psl.noaa.gov/data/timeseries/AMO>. (c) PDO index, the data is obtained from <https://www.ncei.noaa.gov/access/monitoring/pdo>.