

Supplement of

Duration of vegetation green-up response to snowmelt on the Tibetan Plateau

Jingwen Ni^{1,2,3}, Jin Chen⁴, Yao Tang^{1,2,3}, Jingyi Xu^{1,2,3,5}, Jiahui Xu^{1,2,3}, Linxin Dong^{1,2,3}, Qingyu Gu^{1,2,3}, Bailang Yu^{1,2,3}, Jianping Wu^{1,2,3}, Yan Huang^{1,2,3}

¹Key Laboratory of Geographic Information Science, Ministry of Education, East China Normal University, Shanghai 200241, China

²School of Geographic Sciences, East China Normal University, Shanghai 200241, China

³Key Laboratory of Spatial-temporal Big Data Analysis and Application of Natural Resources in Megacities, Ministry of Natural Resources, Shanghai, 200241, China

⁴State Key Laboratory of Earth Surface Processes and Resource Ecology, Beijing Normal University, Beijing 100875, China

⁵Zhejiang Tiantong Forest Ecosystem National Observation and Research Station, School of Ecological and Environmental Sciences, East China Normal University, Shanghai 200241, China

Correspondence to: Yan Huang (yhuang@geo.ecnu.edu.cn)

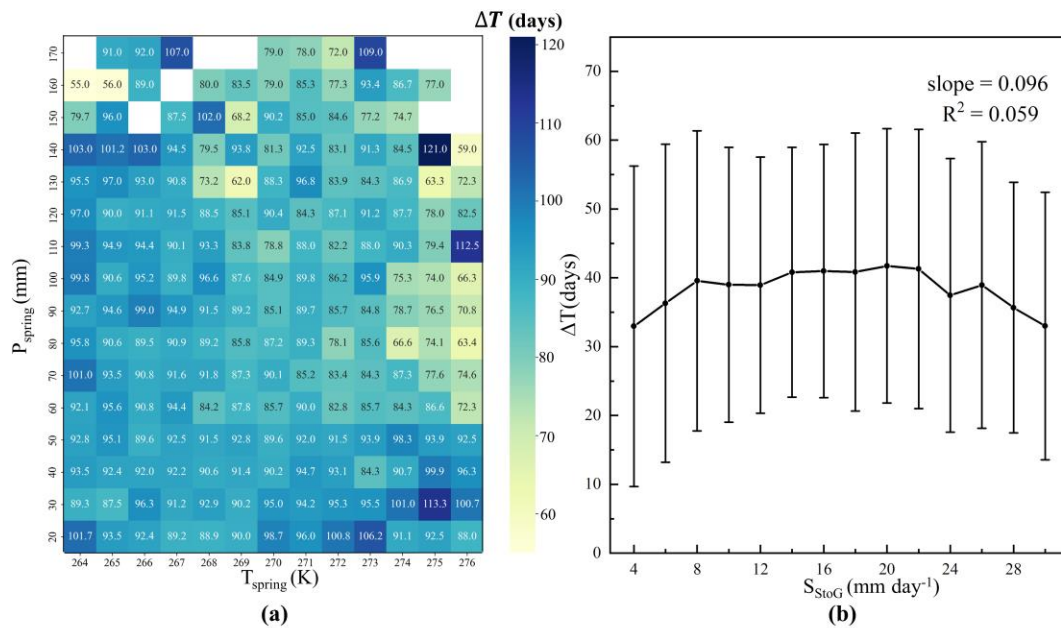


Figure S1: Variations in ΔT calculated from SOMHMA across regions with differing (a) spring mean temperature (T_{spring}), spring total rainfall (P_{spring}), and (b) daily snowmelt from T_{SOM} to T_{GU} (S_{StoG}). In (b), points represent the mean ΔT , while error bars denote one standard deviation. The slope and R² value reflect the coefficient and precision of the linear regression, respectively, with a significance level of 0.01.

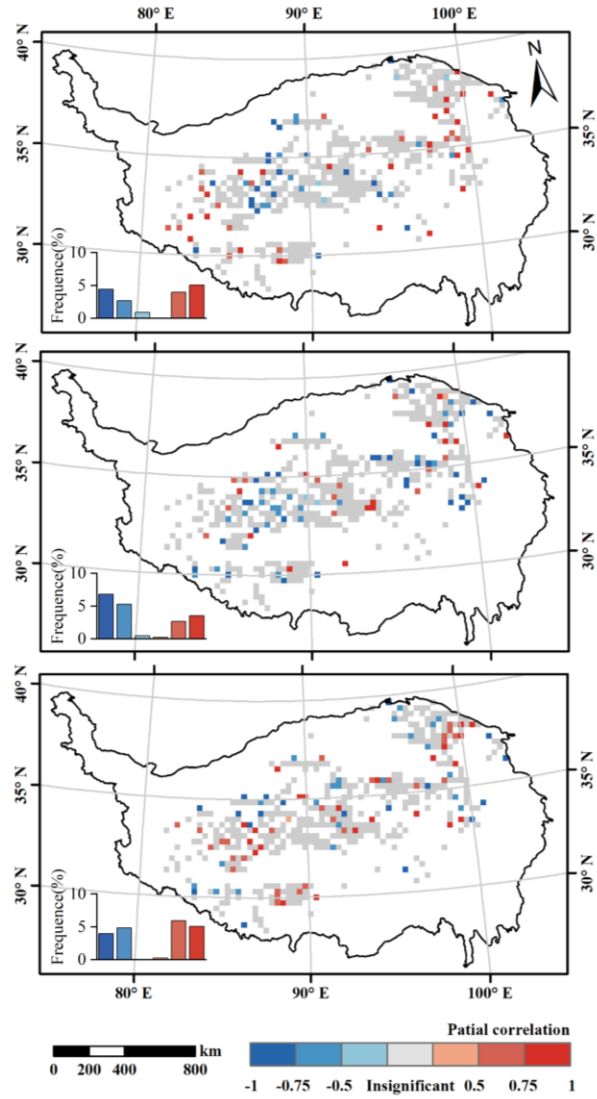


Figure S2: Spatial distribution of the partial correlation between ΔT calculated from SOMHMA and (a) spring mean temperature ($R_{\Delta T \& T_{spring}}$), (b) spring total rainfall ($R_{\Delta T \& P_{spring}}$), and (c) daily snowmelt from T_{SOM} to T_{GU} ($R_{\Delta T \& S_{StoG}}$).

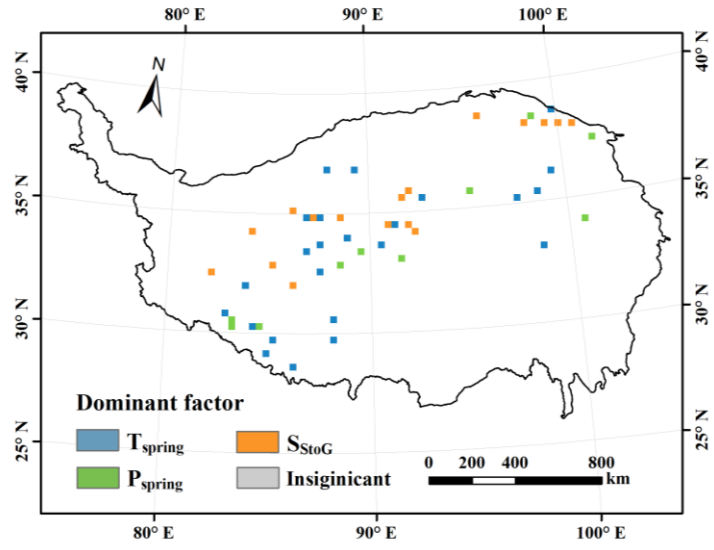


Figure S3: Spatial distribution of dominant factor of ΔT calculated from SOMHMA