

Supplementary Figures

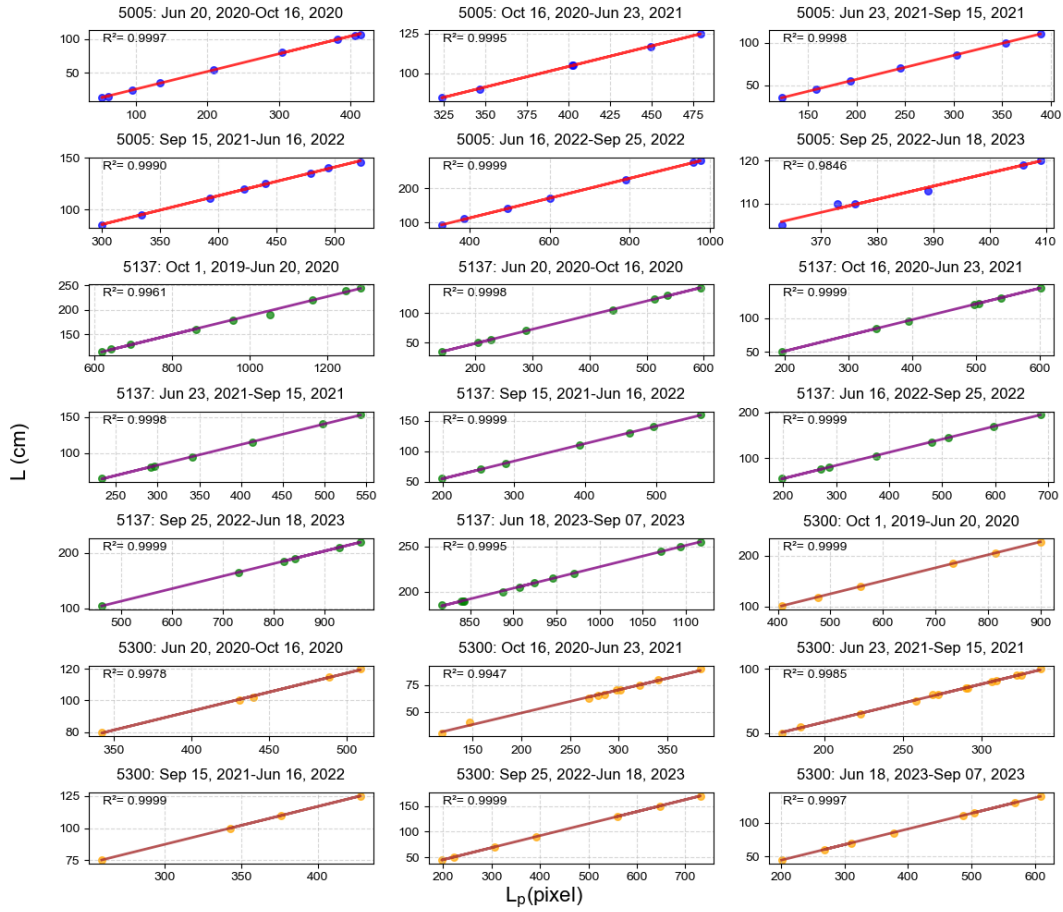


Figure S1 Linear relationship between L_p and L for each monitoring period at each monitoring site.

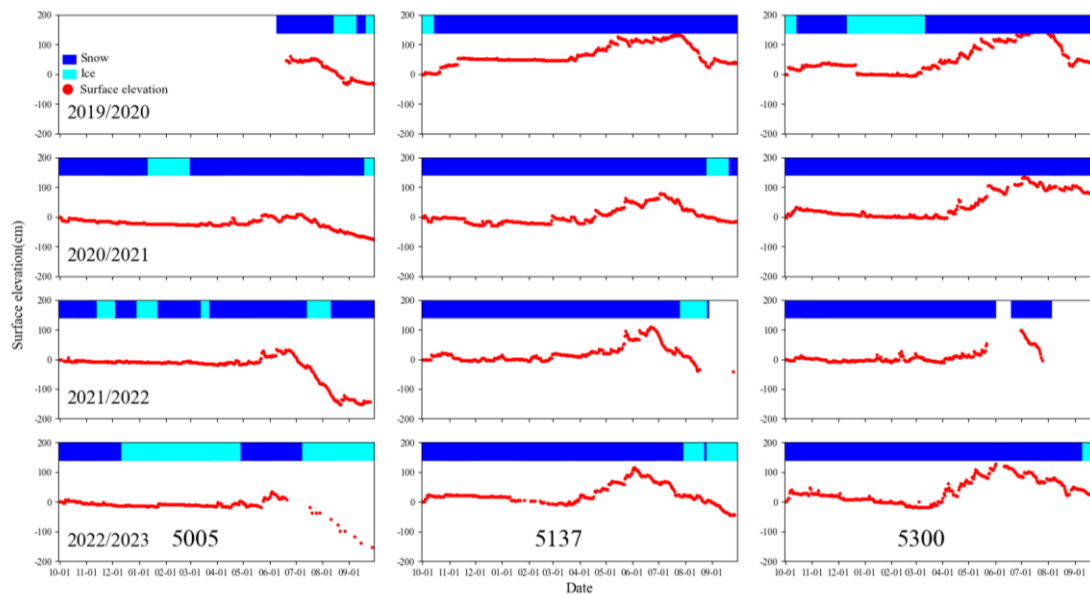


Figure S2 The surface elevation changes at three locations on the Kangxiwa Glacier and their evolutions of snow and bare ice surface conditions.

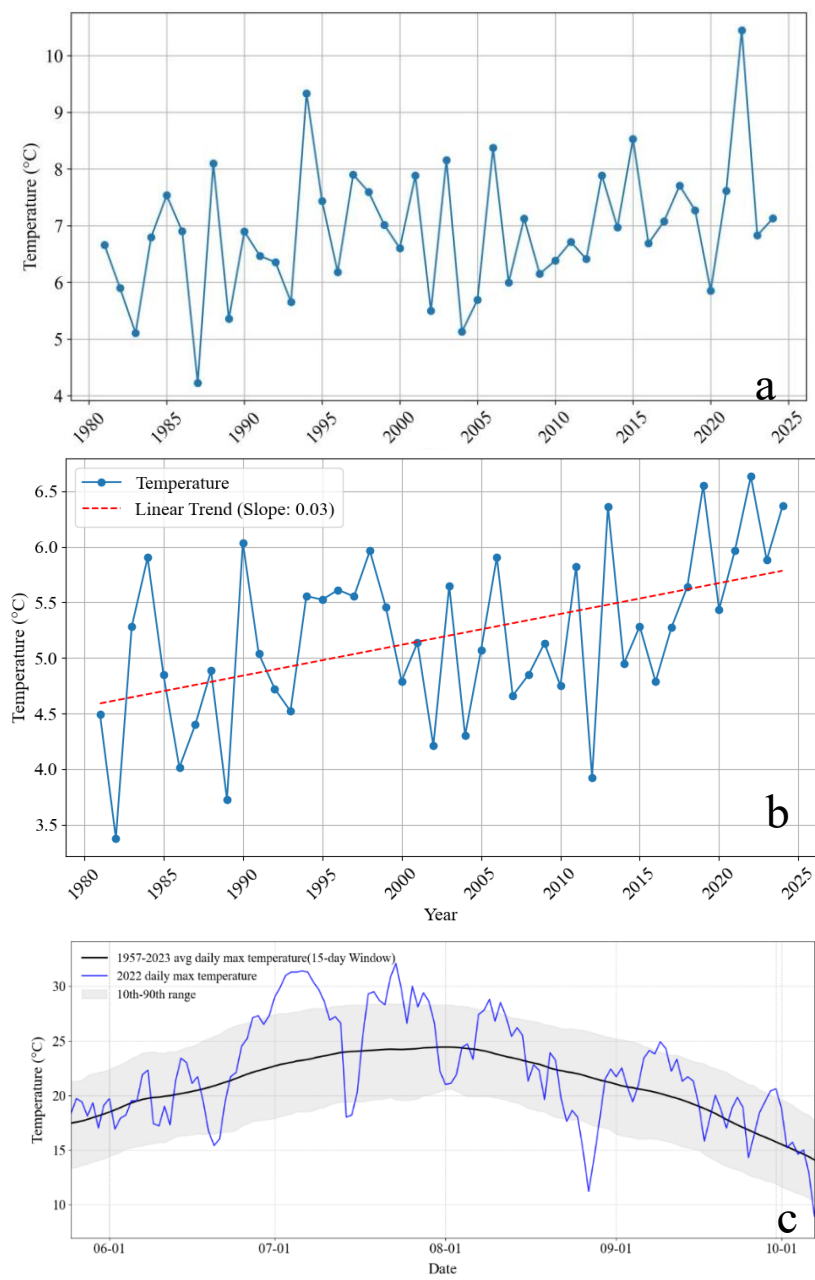


Figure S3 Variation of mean EAR-land air temperature in July(a) and July-September (b) at the corresponding grid of Kangxiwa Glacier during the period from 1981 to 2024. (c) Comparison of June-September daily max air temperature in 2022 with the 1957-2023 mean at Taxkorgan.