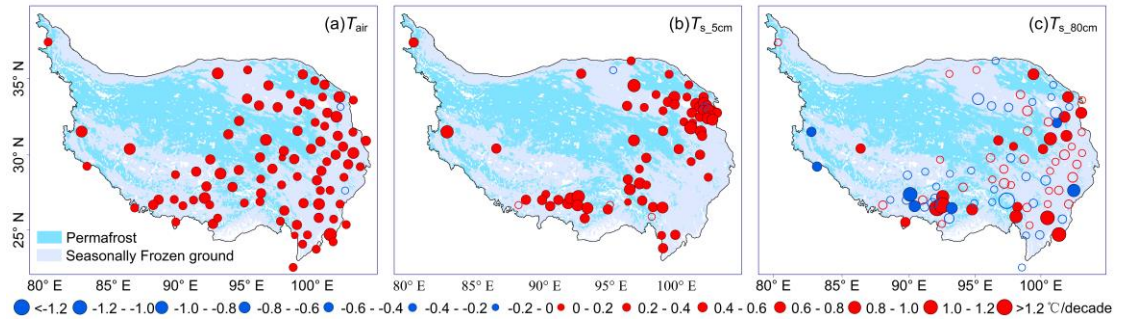
1   **Supplementary Materials**

4   **Fig. S1.** Spatial patterns of trends in air temperature and soil temperatures at depths of 5 cm and 80cm

5   over the period 1981–2021.

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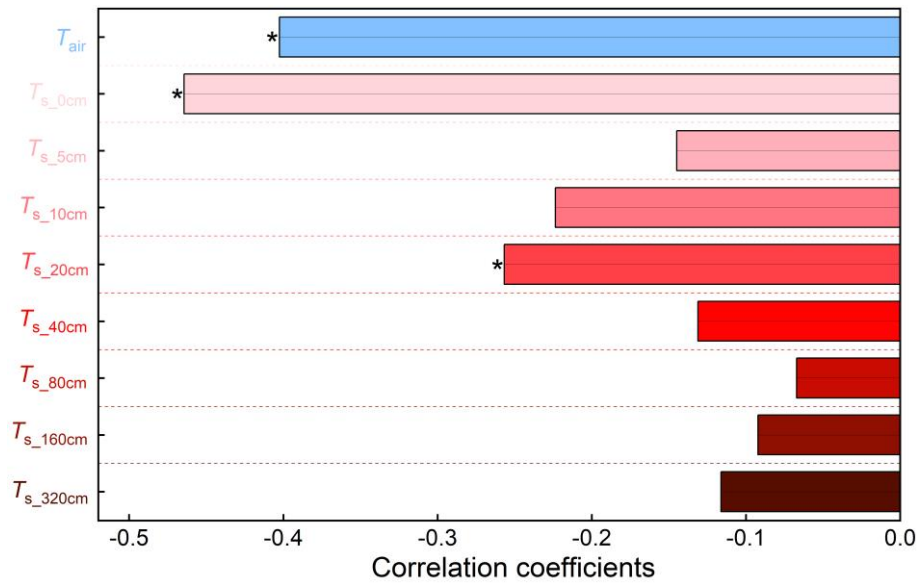
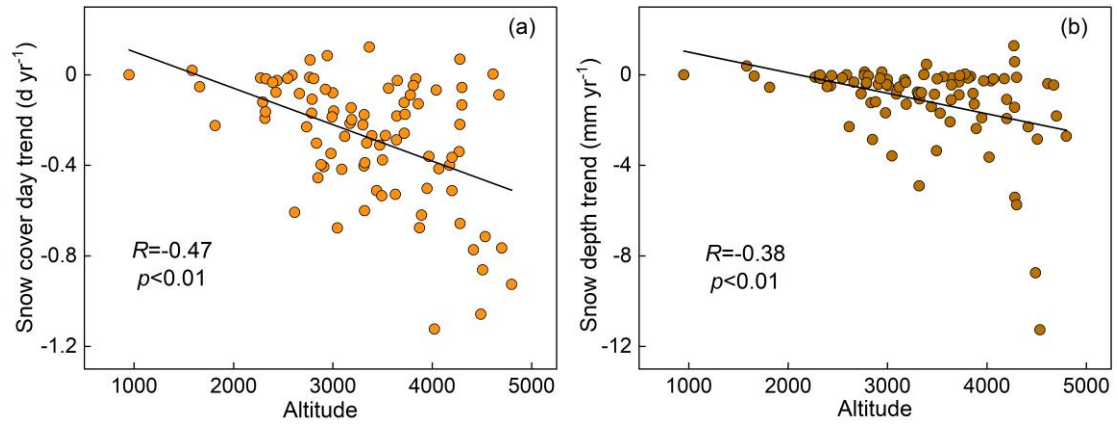


Fig. S2. Correlations between trends and average annual series for air temperature and layered soil

temperature over the period 1981–2021.

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39 **Fig. S3.** The relationships between the trends in (a) snow-cover duration and (b) snow depth with

40 altitude.

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