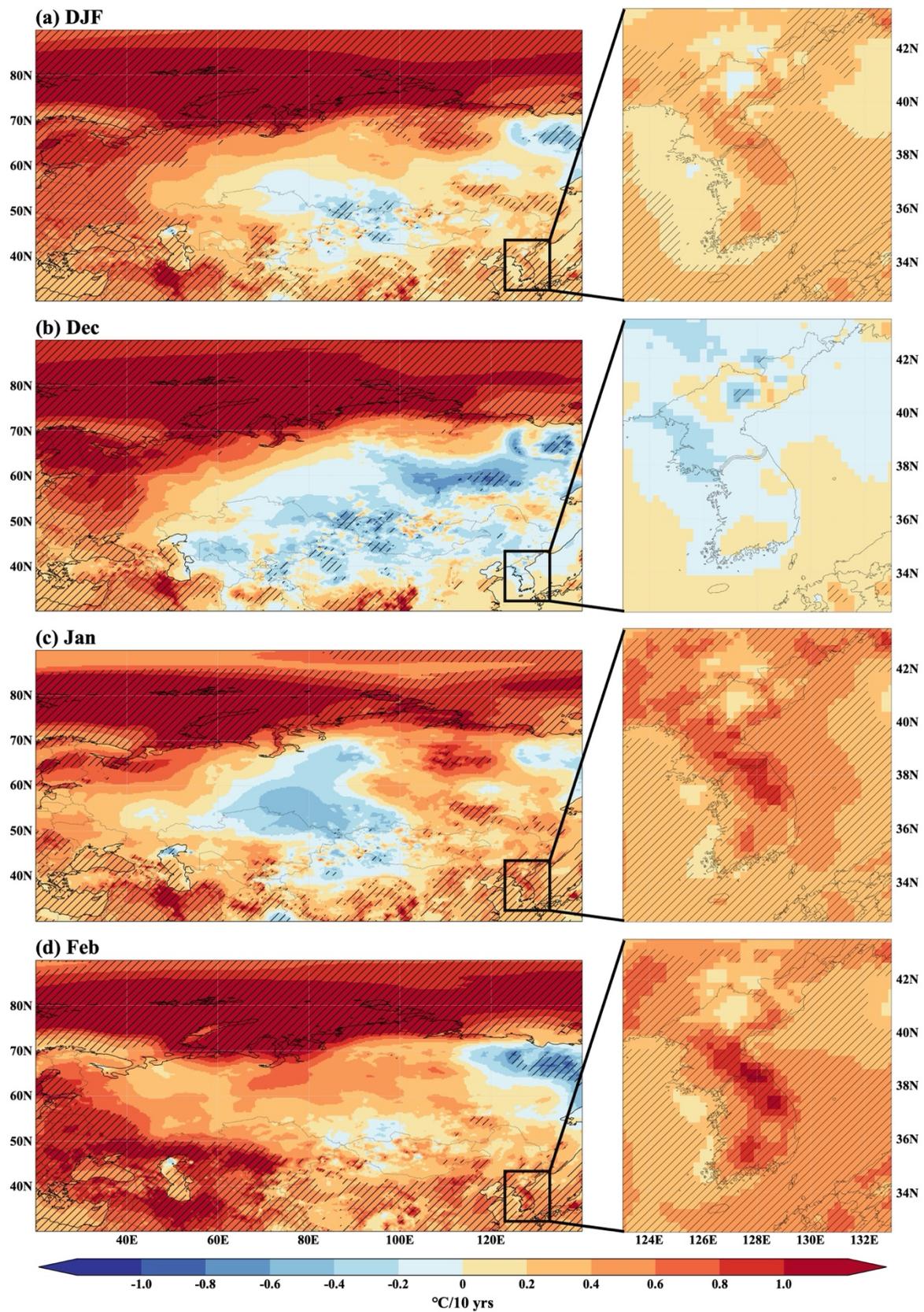
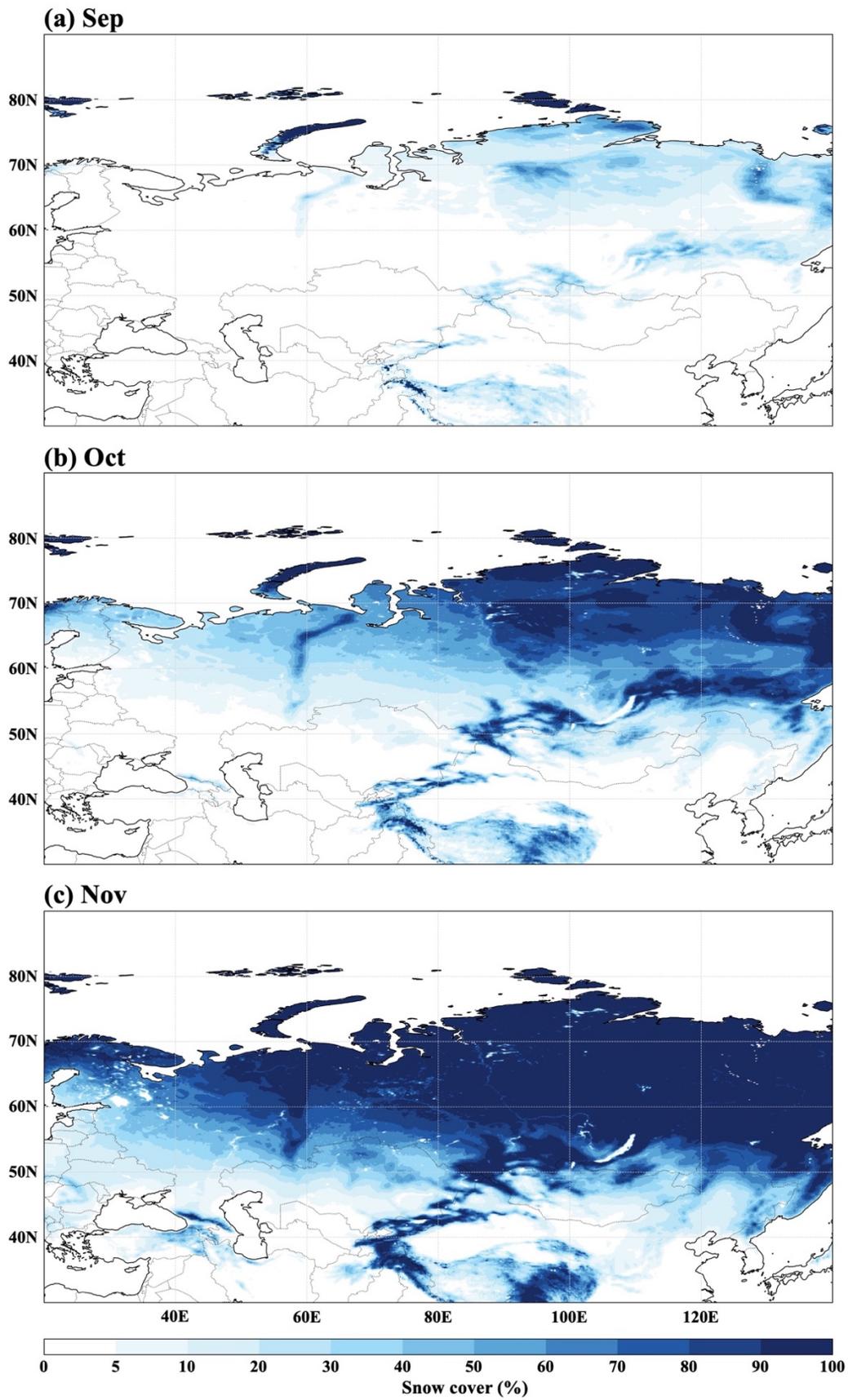


**Figure S1:** Total number of cold days in South Korea over the forty-six years of 1978/79 to 2023/24 during (a) winter (DJF), (b) December, (c) January, and (d) February. Black arrow in (a) indicates *Daegwallyeong* station.



**Figure S2:** Linear regression trends of ERA5 2m temperature (°C/10 yrs) from Dec 1978 to Feb 2024. (a-d) show the trends for (a) DJF average, (b) December, (c) January, and (d) February. Hatched areas are statistically significant at the 90% confidence level.



**Figure S3:** Climatology of snow cover across the Eurasian continent for (a) September, (b) October, and (c) November (%).