



MINISTRY OF ECOLOGY
AND NATURAL RESOURCES OF
THE REPUBLIC OF KAZAKHSTAN

Republican State Enterprise
«KAZHYDROMET»

**SEASONAL BULLETIN
OF THE WINTER SEASON 2025–2026**

*Anomalies of average monthly air temperature and monthly
precipitation in Kazakhstan*

RELEVANT

- The winter season of 2025–2026 was warm, the average monthly air temperature was above normal by +1.9 °C, however, in the west and far east of the country, the air temperature was around normal.
- Precipitation over the winter was characterized by a **lack of precipitation in most of the country.**

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ANOMALIES OF MEAN MONTHLY AIR TEMPERATURE

In the annual course of the average air temperature, **the winter season of 2025–2026** was characterized by a positive anomaly that exceeded the climatic norm by +1.9 °C.

There is an increase in excess of the positive air temperature anomaly towards warmer winter conditions and underlines the steady nature of the changes, especially in the last decade (Fig.1).

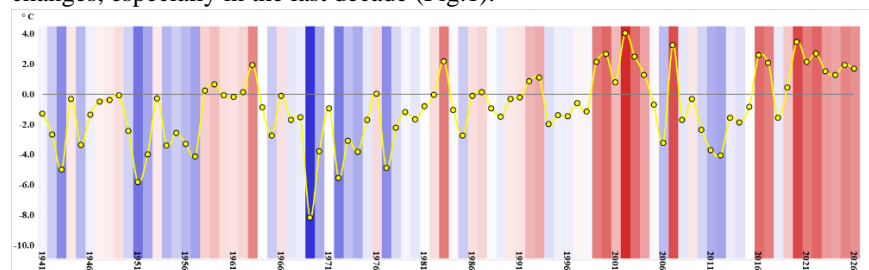


Figure 1 – Time series of air temperature anomalies (°C) in winter season, averaged across the territory of Kazakhstan for the period 1941–2026. Anomalies are calculated relative to the baseline period 1991–2020.

In the winter season of 2025–2026, an air temperature anomaly above +1 °C prevailed throughout Kazakhstan, reaching 4.4 °C in the Turkestan region (Fig. 2). The territory of the Mangystau region and the far east of the country were characterized by temperatures around normal. During this season, 142 meteostations located in all regions of the country entered the «warm» grade with a probability of not exceeding 75–95 %. Temperature anomalies corresponding to the category «extremely warm» with a probability of not exceeding 95-100% were recorded at the meteostations Zhalanash, Mynzhytki, Almaty OGMS, Ulken Almaty lake (Almaty region).

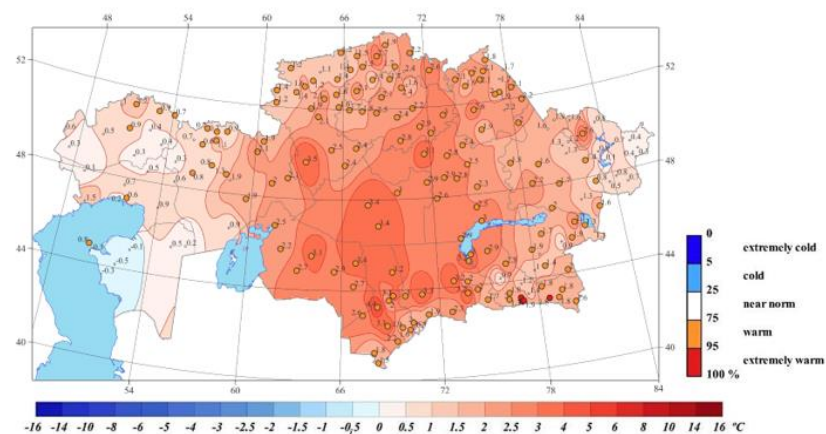
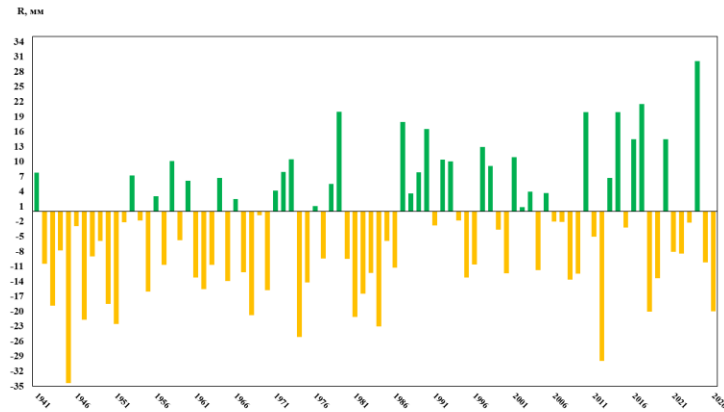


Figure 2 – Spatial distribution of anomalies of mean monthly air temperature (°C), (relatively to the norms for the period 1991–2020) and distribution of probabilities of non-exceedance of air temperature in winter season 2025–2026, the period 1941–2026

MONTHLY PRECIPITATION

The winter season of 2025–2026 in the country was characterized by a shortage of precipitation and amounted to -20 mm relative to the norm.

The dynamics of precipitation anomalies indicates significant interannual variability throughout the study period. The amount of precipitation varies with a constant decrease and increase from the climatic norm (Fig. 3).



Figures 3 – Time series of precipitation anomalies in winter season (%) spatially averaged across the territory of Kazakhstan for the period 1941–2026.

1941–2026.

Anomalies are calculated relative to the baseline period 1991–2020

In the winter season of 2025–2026, precipitation amounts below 80 % of the climatic norm were observed in almost all regions of the country, except for the Mangystau and Pavlodar regions (Fig. 4). Precipitation exceeding 120 % of the climatic norm was recorded mainly in the western part of the Atyrau region, throughout the Mangystau and Pavlodar regions, and locally in the Akmola, Karaganda, Kyzylorda, and Turkestan regions. According to data from the Taipak, Kuygan, Moiynkum, and Kordai meteorological stations, 5 % extremes corresponding to the «extremely dry» category were recorded.

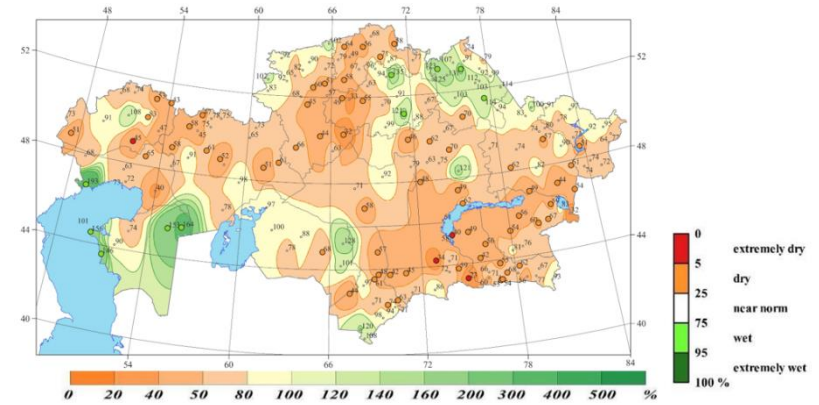


Figure 4 – Spatial distribution of precipitation (in % of the norm, the period 1991–2020) and distribution of probability of non-exceedance of precipitation (the period 1941–2026)