



**MINISTRY OF ECOLOGY
AND NATURAL RESOURCES OF
THE REPUBLIC OF KAZAKHSTAN**

**Republican State Enterprise
«KAZHYDROMET»**

**EXPRESS MONITORING
according to the climate of the territory of
Kazakhstan in JANUARY 2026**

Anomalies of average monthly air temperature and monthly precipitation in Kazakhstan

Astana 2026

RELEVANT

- In January 2026, the average monthly air temperature was **both above and below the climatic norm.**
- Precipitation in January 2026 was **below the climatic norm.**

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ANOMALIES OF MEAN MONTHLY AIR TEMPERATURE

In the annual course of average monthly air temperatures, **January 2026** did not exhibit sharp anomalies, exceeding the climatic norm by $+0.74\text{ }^{\circ}\text{C}$. Similar deviations from the norm have been repeatedly observed throughout the entire period of observations.

In the first half of the observation period (1940s–1980s), negative anomalies predominated, often exceeding $-3\text{ }^{\circ}\text{C}$, reflecting the colder climatic conditions of January in the mid-20th century.

Since the late 1980s, a consistent warming trend has been observed, accompanied by periodic negative deviations. From the 2000s onwards, positive anomalies have become more frequent and intense.

The presented illustration clearly demonstrates the shift of Kazakhstan's climate system toward warmer January conditions and highlights the persistent nature of these changes, especially over the past two decades (Fig. 1).

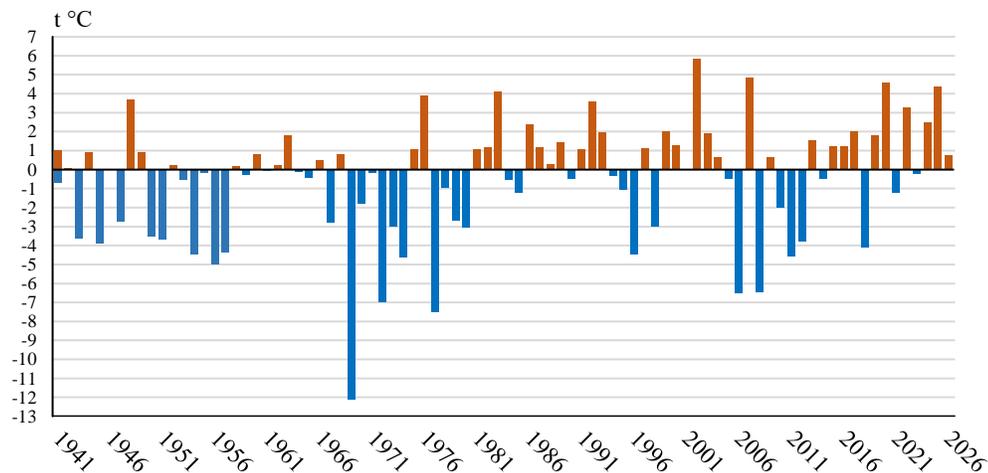


Figure 1 – Time series of annual air temperature anomalies ($^{\circ}\text{C}$), averaged across the territory of Kazakhstan for the period 1941–2026 years.

Anomalies are calculated relative to the baseline period 1991–2020 years.

In January, the average monthly air temperature across the country was both above and below the norm. (Fig 2). Positive anomalies ranging from 1.0 to $4.9\text{ }^{\circ}\text{C}$ were mainly observed in the central, eastern, and southern parts of the country. The highest anomalies were recorded at the Aul No. 4 and Kuigan meteorological stations ($4.9\text{ }^{\circ}\text{C}$) in the Almaty region. The negative anomalies were observed in the northern and western regions of Kazakhstan (ranging from -1.0 to $-2.9\text{ }^{\circ}\text{C}$). The lowest anomalies were recorded at the Yavlenka and Chkalovo meteorological stations in the North Kazakhstan region ($-2.8\text{ }^{\circ}\text{C}$).

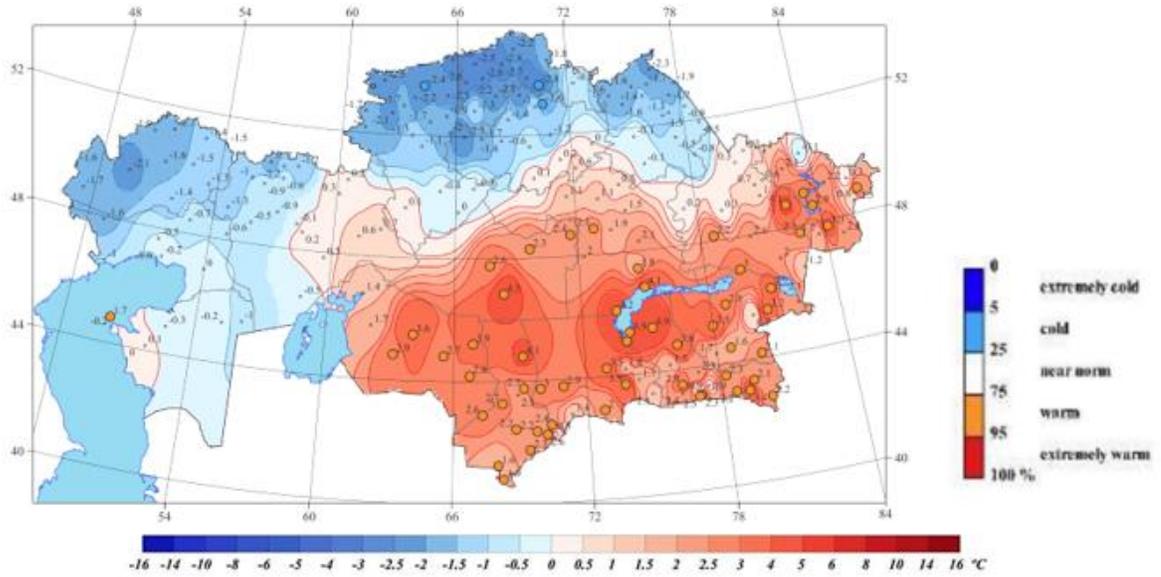


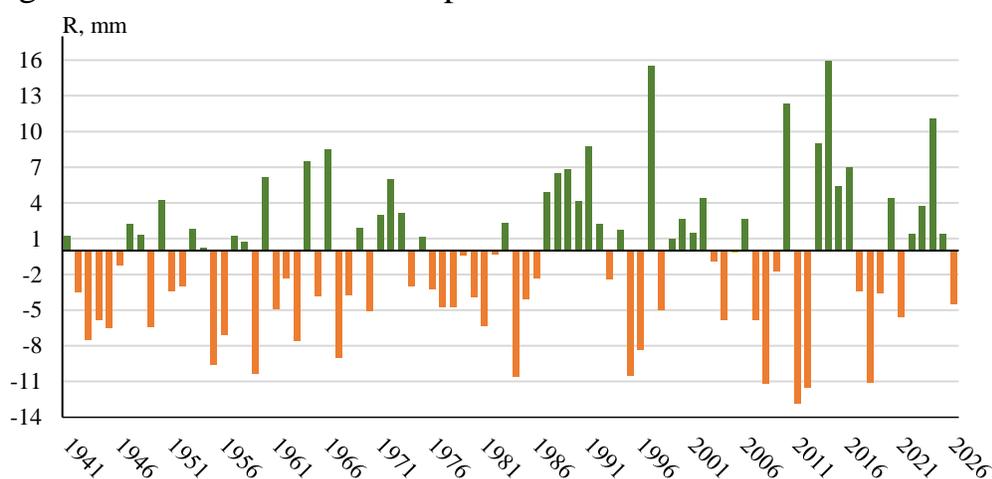
Figure 2 – Spatial distribution of anomalies of mean monthly air temperature (°C), (relatively to the norms for the period 1991–2020 years) and distribution of probabilities of non-exceedance of air temperature in January 2026 year, the period 1941–2026 years.

MONTHLY PRECIPITATION

Following a prolonged four-year period of positive anomalies, **January 2026** was marked by below-normal precipitation in the annual precipitation cycle, with an anomaly of -4.52 mm.

In the first half of the period (1940s–1980s), precipitation anomalies were predominantly negative. Since the late 1980s, the distribution of anomalies has shifted toward more frequent positive values; however, in subsequent decades, individual years with pronounced precipitation deficits have persisted (Fig. 3).

Fluctuations in the indicator, both negative and positive, have shown a persistent character throughout the entire observation period.



Figures 3 – Time series of annual anomalies (%) spatially averaged across the territory of Kazakhstan for the period 1941–2026 years.

Anomalies are calculated relative to the baseline period 1991–2020 years.

In terms of annual precipitation by month, January 2026 was characterized by an uneven distribution of precipitation across the territory (Fig. 4).

Excess precipitation of 120–200 % or more was observed in the western and eastern parts of the western Kazakhstan region. In the northern part of the country, elevated values were recorded across most of Pavlodar and North Kazakhstan regions, as well as locally in the Akmola region. Localized areas of excessive moisture were noted in the central districts of the Karaganda and Ulytau regions, in the far north of the East Kazakhstan region, and in the foothill areas of the Almaty, Zhambyl, and Zhetysu regions. Particularly pronounced excess precipitation was observed in the south of the Turkestan region and across a large part of the Kyzylorda region.

The highest amount of precipitation was recorded at the Ganyushkino meteorological station (western part of Atyrau region) – 32.3 mm, corresponding to 376 %

of the norm. This value falls into the "extremely wet" category, with a non-exceedance probability of 95–100 %.

At the same time, in several regions of the country, precipitation amounted to less than 80 % of the norm, locally dropping below 20 % and even 10 % of the norm. A precipitation deficit was observed in the northern and central parts of the western Kazakhstan region, in the northwestern and southern districts of the northern region, as well as in the northern and southern districts of the Karaganda and Ulytau regions. In the eastern region, lower values were mainly recorded in the foothill and mountainous areas, as well as in the south of the East Kazakhstan and Abai regions. In the southern part of the country (Almaty, Zhambyl, and Zhetysu regions), a precipitation deficit was observed across most of the territory.

According to data from eight meteorological stations, in the southern part of the East Kazakhstan region, in the central districts of the Zhetysu region (also near Alakol lake), near Balkhash lake (Almaty region), as well as in the southern parts of the Zhambyl and West Kazakhstan regions, no precipitation was recorded throughout the month. As a result, January in these areas fell within the 5 % of extremely dry months.

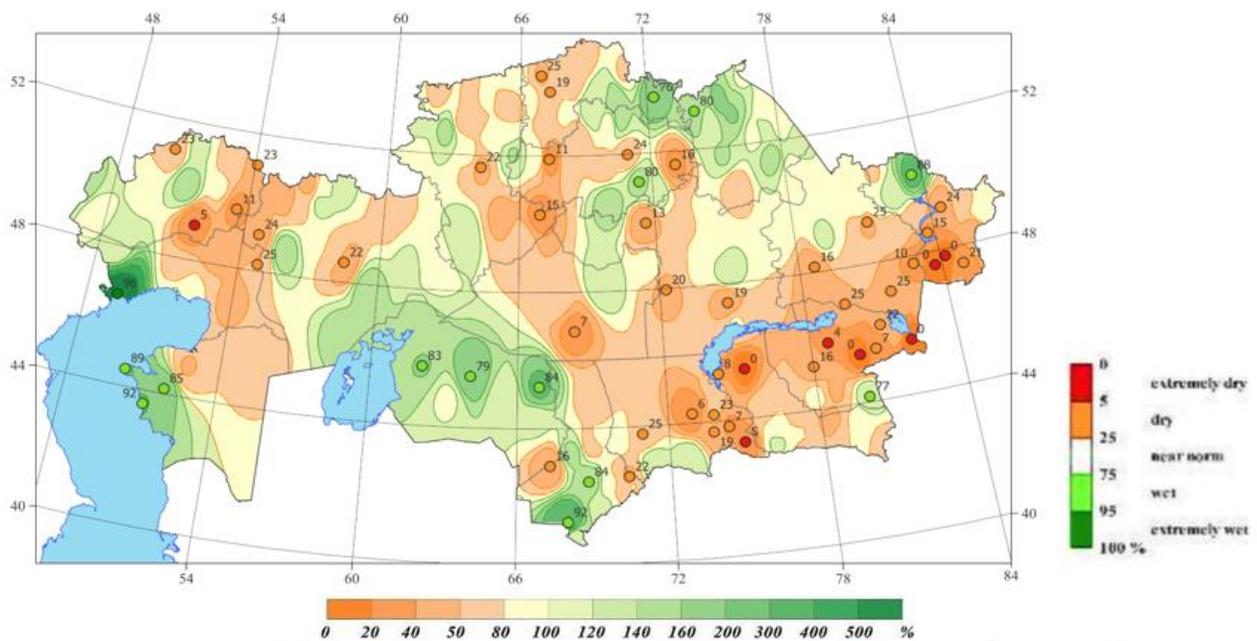


Figure 4 – Spatial distribution of precipitation (in % of the norm, the period 1991–2020 years) and distribution of probability of non-exceedance of precipitation (the period 1941–2026 years)