weatherwalay

DATA INSIGHTS

Pakistan's Winter Anomaly: A Deep Dive into Temperature Patterns (1–12 January 2026)

www.weatherwalay.com

1. Introduction

This report presents an analysis of the temperature conditions across Pakistan during the first 12 days of January 2026, highlighting a widespread winter anomaly. The observed temperatures were compared to the long-term climatological averages (1991–2020), revealing significant deviations from the normal temperature patterns. The following sections summarize the key temperature patterns across different stations and discuss the contributing factors to the observed anomalies. Overall, there was a pattern of below-normal daytime temperatures in most regions, while nighttime temperatures were relatively warmer in several areas, especially during the early part of the period.

2. Regional Temperature Patterns

Across Pakistan, the most notable trend was the below-normal daytime temperatures observed at most stations. Many regions, especially in central and northern parts of the country, experienced significant reductions in daytime heating. This was due to factors such as persistent cloud cover, fog, and cooler air inflows. In contrast, nighttime temperatures exhibited more variability. Most of the regions saw warmer-than-normal nights, while some places like Daharki and HasilPur experienced colder-than-normal nights.

While daytime temperatures remained suppressed across the country, certain regions, including parts of Punjab and Sindh, reported below-normal maximum and mean temperatures during the day, contributing to cooler-than-usual conditions overall.

3. Observed Temperature Variations Across Pakistan in January 2026: A Comparison with Historical Averages (1991–2020)

During the first 12 days of January 2026, temperature conditions across much of Pakistan exhibited a distinct and coherent anomaly structure when compared with the 1991–2020 climatological baseline. The observed anomalies indicate a clear divergence between nighttime and daytime thermal behavior across the majority of monitoring locations. Minimum temperatures were predominantly above the long-term average, indicating relatively warmer nighttime conditions across most stations. Positive minimum temperature anomalies were evident at several locations in Punjab and adjoining regions, suggesting reduced nocturnal cooling during this period. Only a limited number of stations recorded slightly below-normal minimum temperatures, and these departures were generally weak in magnitude.

In contrast, maximum temperatures were consistently below climatological norms across nearly all stations, with several locations exhibiting substantial negative anomalies. This widespread suppression of daytime temperatures strongly influenced the overall thermal regime. Consequently, mean temperatures also remained below normal at almost all locations, closely mirroring the behavior of maximum temperatures and indicating that reduced daytime heating outweighed the effect of warmer nights. Overall, the temperature regime during early January 2026 was characterized by mild nights and anomalously cool days, resulting in negative mean temperature anomalies over much of the region.

Stations	Min (°C)	Anamoly (°C)	Max (°C)	Anamoly (°C)	Mean (°C)	Anamoly (°C)
Lahore	8.34	0.74	14.3	-4.08	10.75	-2.55
Faisalabad	7.97	3.07	11.81	-6.69	9.94	-1.96
Jaffarabad	8.23	2.43	17.69	-4.91	12.29	-1.91
Mianwali	7.12	2.42	12.4	-6.4	9.14	-2.66
HasilPur	5.2	-0.8	18.65	-7.35	9.49	-3.81
Gulgasht, Multan city	6.29	0.59	13.79	-5.91	9.73	-3.27
Daharki, Sindh	6.37	-0.72	16.9	-5.7	10.4	-4.5
Hiran Minar	7.39	-0.31	11.23	-7.167	8.94	-4.06

Table no 1: *This table compares the actual observed temperatures against the 1991 to 2020 normals, showing the temperature deviations (anomalies)*

4. Contributing Factors

- **Cloud Cover and Atmospheric Conditions:**

Persistent cloud cover, especially in early January, inhibited daytime warming and reduced heat loss at night, keeping daytime temperatures lower and nighttime temperatures relatively warmer.

- **Fog and Haze:**

Fog and haze trapped cooler air near the surface, limiting solar radiation and contributing to sustained low daytime temperatures, particularly in northern and central regions.

- **Clearer Skies and Drier Air:**

As the period progressed, clearer skies and drier air allowed nighttime temperatures to drop further, but the overall trend remained dominated by suppressed daytime warming.

5. Implications for Weather Monitoring

The winter anomaly observed in January 2026 highlights the importance of continuous monitoring of temperature trends. Even with relatively mild nighttime temperatures, the significant cooling during the day can have serious impacts on agriculture, energy use, and public health. Regional advisories for cold-related impacts should be issued during prolonged periods of suppressed daytime temperatures.

6. Conclusion

January 2026 experienced a notable winter cooling episode across Pakistan, characterized by below-normal daytime temperatures and above-normal nighttime temperatures. These deviations from the climatological norms reflect the influence of a large-scale weather system and underscore the importance of monitoring temperature patterns to assess the potential impacts on various sectors, including agriculture, energy demand, and public health.

weatherwalay

Pakistan's First Private Weather Company

GET IT ON Google Play

Download on the App Store