

Government of Pakistan

Pakistan Meteorological Department Pakistan Monthly Climate Summary February 2025

In brief

- The national mean monthly temperature of 15.67 °C for Pakistan was significantly warmer by +2.07 °C than the country-average of 13.60 °C and ranked 8th highest Mean temperature in past 65 years.
- The daytime (maximum) temperature (23.05 °C) at country-level also happened to be significantly warmer by +2.57 °C than the country-average of 20.49 °C and ranked 10th highest mean maximum during the past 65 years.
- The country-level nighttime (minimum) temperature of 8.28 °C too was significantly warmer by +2.07 °C than the countrywide average of 6.20 °C.
- The hottest day of the month was observed at Mithi (Sindh) on 26th February when it recorded a maximum temperature of 37.0 °C. Whereas the same station, proved to be the warmest place with a mean monthly maximum temperature of 33.2 °C.
- The coldest night temperature of -8.0 °C of the month was recorded at Kalat (Balochistan) on 1st February Whereas, the station Gupis happened to be the coldest place with mean monthly minimum temperature of -4.3 °C.
- The national area-weighted rainfall of 20.0 mm was slightly below average with a negative anomaly of -19% in February-2025.
- The heaviest one-day rainfall of 83.0 mm occurred at Muzaffarabad City (AJK) on 28th February. Whereas, the station Dir (KP) has been the wettest place with monthly total of 182.0 mm.
- The El Niño–Southern Oscillation (ENSO) has shifted to La Niña with sea surface temperatures (SSTs) being around -0.6 °C over the central equatorial Pacific Ocean.
- The Indian Ocean Dipole (IOD) is turning to neutral phase.

Table-1: National Weather Extremes during February 2025

Hottest day	37.0 °C	at Mithi (Sindh) on 26 th
Coldest day	2.5 °C	at Malam Jabba (KP) on 20 th
Coldest night	-8.0 °C	at Kalat (Balochistan) on 1st
Warmest night	22.0 °C	at Karachi Airport (Sindh) on 28 th
Wettest day	83.0 mm	at Muzaffarabad City (AJK) on 28 th
Wettest month	182.0 mm	at Dir (KP)

Synoptic Summary

In the month of February, the Western Disturbance (WDs) is the most significant synoptic feature. There were four back-to-back (WDs) entered through western & Northern parts of the country and gripped over KP, Punjab, GB, Kashmir and North/Northwest Balochistan during 1-5, 8-12, 14-21 & 24-28 February, which caused light to moderate rainfall in the first three spells and heavy to very heavy rainfall, isolated hailstorm and snow falls in the last week of the month over hills in KP, GB, Kashmir, Punjab, North/West Balochistan, whereas some light intensity rainfall occurred at few places in Upper Sindh and Makran coast during the period. On the other hand, southern Sindh and southern Balochistan remained dry during the month. Rest of the days remained under the dry continental air over the country.

Table-2: New Temperature Records Set in February 2025

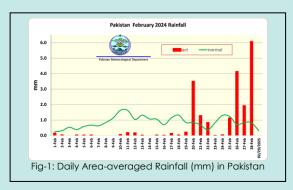
S No Stations	Stations	Weather Darameters	Nev	v Record	Old	Record	No of years	
	Stations	Weather Parameters	Value	Date	Value	Date	examined.	
1	LAHORE, AIRPORT	Hottest night Temperature (°C)	16.2	27/Feb/2025	15.7	11/Feb/1995	65	

Table-3: Significant Winds

Date	Station	Max Wind Knots
27/2025	Mangla	30
19/2025	Lahore AP	34
20/2025	Lahore AP	30

Rainfall: Slightly below Average across the country.

Climatologically, February is considered as an average rainy month with rainfall contribution to the national annual total and season Jan-Mar (JFM) being 8.4% and 33.5%, respectively. During the month, Pakistan experienced couple of rain spells of moderate intensity after a dry span of about 25 days. The daily area-averaged rainfall is shown in Fig-1. The February 2025 with 20.0 mm rain was **slightly below average** with an anomaly of **-19%** for Pakistan as a whole. On regional scale, a diverse situation has been observed i.e. a worst dry situation prevailed in Sindh with only 0.2 mm (**-97%**) have recorded **extremely below-average** rainfall (the driest one with 0.0 mm has been eleven times in different years during the past 65 years).



Balochistan with 11.5 mm (-39%) experienced below-average rainfall, KP with 56.9 mm (-15%) recorded slightly below average rainfall, Punjab with 21.3 mm (-08%) and AJK with 87.1mm (+05%) were recorded near average rainfall. The GB with 24.4mm (+31%) was the only region exhibited an above average rainfall (Table-4). The heaviest one-day rainfall of 83.0 mm occurred at Muzaffarabad (AJK) on 28th February. Whereas the station Dir (KP) has been the wettest place with monthly total 182.0 mm (Table-1).

Table-4: February 2025 Area Weighted Rainfall

<u> </u>												
Region	Rank (of 65y)	Normal (mm)	Average (mm)	Departure (percent)	Comment							
Pakistan	29	24.9	20.0	-19								
Azad Jammu & Kashmir	40	83.2	87.1	5								
Balochistan	31	18.8	11.5	-39								
Gilgit Baltistan	49	18.7	24.4	31								
Khyber Pakhtunkhwa	26	66.8	56.9	-15								
Punjab	40	23.2	21.3	-8								
Sindh	15	5.3	0.2	-97								

[RANK RANGES FROM 1 (LOWEST) TO 65 (HIGHEST) IN TERMS OF YEARS FROM 1961]

February 2025 Rainfall maps

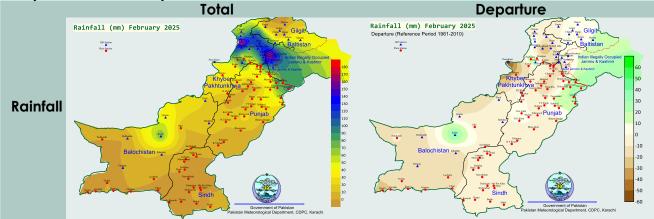


Fig. 2. February-2025 spatial rainfall distribution and departure from normal

Barring the wettest station Dir (KP), some other stations have recorded notable rainfalls, i.e. Garhi Dupatta 170.3 mm, Muzaffarabad City 156.9 mm, Muzaffarabad Airport 143.1 mm, Balakot 136.0 mm, Murree 135.1 mm, Rawalakot 123.5 mm, Pattan 122.0 mm, Malam Jabba 113.0 mm, Kakul 111.0 mm, Kalam 102.0 mm, Lower Dir 99.0 mm, Mirkhani 95.8 mm, Cherat 95.0 mm, Narowal 94.8 mm, Kotli 88.0 mm, Gujrat 86.0 mm and Saidu Sharif 82.0 mm.

The stations: Karachi A/P, Larkana, Shaheed Benzirabad, Rohri, Mohn Jo Daro, Khairpur, Lasbela, Nokkundi and Turbat, recorded only traces of rainfall during the month, while the stations Hunza, Badin, Chhor, Hyderabad A/P, Mithi, Padidan, Thatta, Dadu, Mirpur Khas, Tando Jam, Sakrand, Gawadar, Jiwani, Panjgur, Pasni, Ormara, Faisal Base and Masroor remained absolutely dry with no rain during the month.

Table 5: Warmer-than-average Temperatures across the country.

o. Wallier mail average remperatores deless me essinity.										
Area Averaged Temperatures (°C) in February 2025 and anomalies from normal 1961-1990										
Desires	Maximun	n Temperature	Minimum	Temperature	Mean Temperature					
Regions	Actual	Anomaly	Actual	Anomaly	Actual	Anomaly				
Pakistan	23.05	+2.57	8.28	+2.07	15.67	+2.07				
Azad Jammu & Kashmir	15.69	+3.56	2.80	+1.84	9.24	+2.69				
Balochistan	23.34	+2.70	8.30	+1.95	15.81	+1.96				
Gilgit-Baltistan	11.94	+3.30	-0.56	+1.16	5.72	+2.24				
Khyber Pakhtunkhwa	18.30	+2.49	4.42	+0.74	11.38	+1.63				
Punjab	24.45	+2.16	9.98	+2.61	17.24	+2.05				
Sindh	29.57	+2.03	13.11	+2.73	21.35	+2.44				

Area Average Mean Temperatures

The February 2025 national mean temperature of 15.67 °C was significantly warmer than the country-average of 13.60 °C with a notable anomaly of +2.07 °C and ranked 8th highest mean temperature during the past 65 years (record is 17.79 °C in 2006). The situations are similar on regional scale i.e. Sindh with 21.35°C (+2.44 °C), AJK with 9.24 °C (+2.69 °C), Punjab with 17.24°C (+2.05 °C) and GB with 5.72°C (+2.24) ranked the 6th, 7th, 8th & 9th highest mean temperatures respectively in February during the past 65 years (the record being 23.02°C, 10.97°C, 19.05°C & 7.49°C respectively all in Feb 2006). The regions Balochistan with 15.81 °C (+1.96 °C) and KP with 11.38 °C (+1.63 °C) too exhibited significantly warmer than average mean temperatures (Table-5, Fig.3 lower panel). The mean temperature anomalies ranged from -0.3 °C to +3.4 °C in the country with those being considerably higher over western Balochistan, lower Sindh and GB.

Area Average Maximum temperatures

The country-level monthly mean maximum (daytime) temperature of 23.05 °C was also well above average (+2.57 °C) than the country average of 20.49 °C and ranked the 10th highest mean maximum in February during the past 65 years (the record is 25.37°C in 2006). Similarly on regional scale; AJK with 15.69 °C (+3.56 °C) and GB with 11.94 °C (+3.30 °C) both ranked 7th highest of the month during the past 65 years (the records are 16.71 °C in 2006 & 13.05°C in 2016 respectively), Punjab with 24.45 °C (+2.16 °C) and Sindh with 29.57°C (+2.03°C) both recorded the 10th highest (records are 26.48°C & 31.37°C respectively both in 2006). The regions KP with 18.30°C (+2.49 °C) and Balochistan with 23.34°C (+2.70°C) both also recorded notably warmer than average temperatures (Table-5, Fig-3 upper panel). The mean maximum temperature anomalies remained positive in all stations and ranged from +0.4 °C to +5.0 °C in the country with those being considerably higher over AJ&K.

Area Average Minimum temperatures

The country's monthly mean minimum (night-time) temperature (8.28 °C) has also been notably warmer, by +2.07 °C, than average 6.20 °C and ranked 8th highest mean minimum temperature (the record is 10.39°C in 2006). A similar trend of a notable positive anomalies was found across the regions: Punjab with 9.98 °C (+2.61 °C) ranked the 5th highest (record is 11.59 °C 2006), AJK with 2.80°C (+1.84 °C) ranked the 7th highest (record is 5.17°C in 2006), Sindh with 13.11 °C (+2.73 °C)

ranked the 8th highest (record is 14.62°C in 2006) and Balochistan with 8.30°C (+1.95°C) ranked the 10th highest mean minimum temperature in the month during the past 65 years. The regions GB with -0.56°C (+1.16°C) and KP with 4.42°C (+0.74°C) both experienced warmer than average minimum temperatures in the month. (Table-5, Fig-3, middle panel). The mean minimum temperature anomalies ranged from -2.0°C to +4.1°C in the country with those being considerably higher over Sindh and western Balochistan.

The hottest day of the month was 37.0 °C recorded at Mithi (Sindh) on 26th February. Coincidently the same place happened to be the warmest place with 33.2 °C average maximum temperature during the month. The lowest night (minimum) temperature of the month was -8.0 °C recorded at Kalat (Balochistan) on 1st February, whereas the station Gupis proved to be the coldest place with -4.3 °C average night (minimum) temperature.

February 2025 Temperature maps

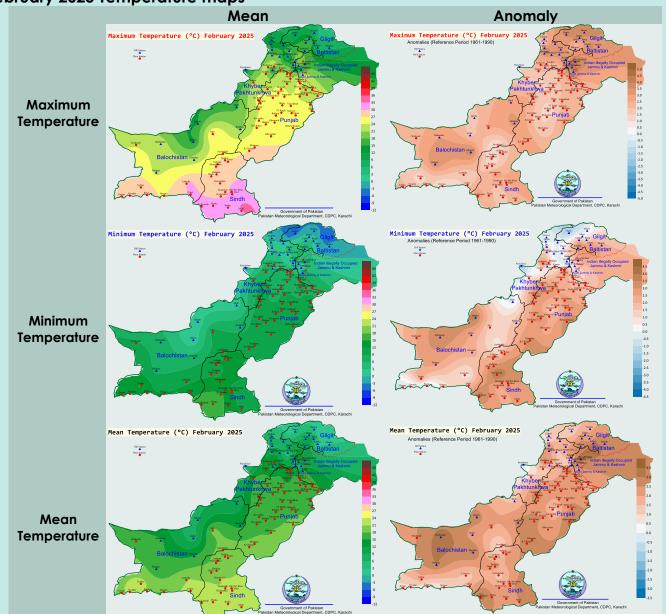


Fig. 3. February-2025 Temperatures (Maximum, Minimum & Mean) and their anomalies.

CIJ.	Pressure	(mb)	Vapour (mb)	Precipitation				
Station	Station Level			emperature Maximum		Pressure	Total (mm)	
>	856.9	1529.8	6.2	12.3	0.1	5.1	68.6	9.0
Drosh	856.9	1521.9	5.8	10.7	1.0	4.6	74.4	7.4
S	978.7	1017.2	15.4	23.7	7.1	9.2	72.6	4.0
Peshawar	973.8	1016.0	13.1	19.8	6.3	8.7	47.1	6.4
	830.7	1538.0	4.6	11.9	-2.7	5.0	31.0	1.0
Parachinar	827.2	1506.5	4.7	10.9	-1.8	4.6	76.5	5.6
	958.1	1017.0	15.0	21.5	8.4	7.5	71.0	5.0
Rawalpindi	956.4	1015.7	12.3	19.2	5.4	8.6	79.7	7.1
	993.7	1015.7	17.6	24.9	10.1	11.1	9.6	3.0
Sargodha	993.4	1015.0	14.8	22.4	7.1	10.4	24.5	5.5
	987.9	1015.3	16.7	24.2	9.1	10.4	45.1	5.0
Jhelum	987.5			24.2	7.9	10.0	52.8	6.3
		1015.1	14.7					
Sialkot	985.6	1015.5	15.9	23.0	8.8	11.8	74.9	4.0
	985.2	1015.1	14.0	20.7	7.4	10.9	48.5	5.7
Zhob	858.5	1487.7	9.5	17.3	1.6	4.4	20.0	3.0
	858.6	1487.3	8.0	14.6	1.5	5.2	25.0	2.4
D.I.Khan	995.2	1015.4	17.5	24.6	10.4	11.7	22.1	4.0
	994.7	1015.0	14.8	22.2	7.3	9.7	15.0	4.1
_ahore	990.3	1015.3	17.7	24.2	11.1	11.9	54.7	5.0
Lanore	989.7	1014.9	15.7	22.1	9.4	10.5	30.3	5.3
Overthe	844.1	1531.0	8.8	14.7	2.9	5.0	39.5	6.0
Quetta	841.5	1507.6	6.2	12.8	-0.9	5.7	49.5	6.6
	1000.8	1015.2	17.9	24.8	10.9	12.1	14.5	2.0
Multan	1000.6	1015.2	15.5	23.3	7.8	10.3	11.1	2.9
	891.8	1501.5	14.2	20.5	7.9	5.6	20.0	3.0
Barkhan	891.7	1496.8	12.0	17.9	6.4	5.8	21.2	1.9
	935.6	1012.3	16.6	23.8	9.3	5.4	0.0	0.0
Nokkundi					9.5 6.2			
	937.1	1015.0	14.1	21.6		6.5	7.6	1.0
Dalbandin	919.5	1510.4	15.5	23.0	8.0	7.0	1.0	1.0
	919.7	1504.3	12.3	20.4	4.6	6.1	16.3	1.5
Jacobabad	1008.6	1015.2	18.7	26.0	11.2	11.9	3.0	1.0
	1008.1	1014.6	17.8	25.2	10.3	10.0	6.9	0.7
Khanpur	1004.4	1014.8	18.9	27.3	10.5	13.2	3.0	1.0
(Halipol	1004.1	1014.5	15.8	24.2	7.4	10.1	5.3	1.4
Paniaur	905.7	1514.7	15.8	23.3	8.3	8.7	0.0	0.0
Panjgur	905.6	1507.7	12.7	19.6	5.7	4.2	16.5	1.5
/lo = al aux	879.1	1514.8	15.0	22.5	7.4	6.3	6.4	1.0
Khuzdar	877.3	1487.0	12.0	18.8	5.2	3.0	29.9	1.7
	1011.4	1014.7	21.3	29.8	12.8	14.5	0.0	0.0
Sh. Benazirabad	1011.3	1015.0	17.8	27.2	8.4	11.9	3.3	0.2
	1009.0	1015.6	20.5	27.1	13.8	17.1	0.0	0.0
Jiwani	1008.6	1015.1	20.0	25.1	14.9	14.8	31.0	0.9
	1014.9	1015.5	20.3	28.4	12.2	14.3	0.0	0.0
Pasni								
	1013.4	1014.2	19.6	26.5	13.4	13.4	21.5	0.6
Hyderabad	1009.2	1014.1	22.9	29.9	15.9	11.9	0.0	0.0
	1010.4	1014.5	20.7	27.7	13.7	11.0	4.3	0.9
Chhor	1013.2	1013.9	21.8	32.0	11.6	14.9	0.0	0.0
C. II 101	1013.2	1013.8	19.0	29.3	8.5	10.4	3.6	0.3
Karachi	1012.0	1014.7	23.5	30.5	16.5	13.6	0.0	0.0
Karachi	1012.1	1014.8	20.4	27.9	13.0	12.2	10.4	1.0
Noto: The fir	st row against	each statio		tains the ac	tual values	while second	row for norr	nal va

Table 7: February 2025 extreme values

CTATION	Mean	Temp	erature ((°C)	Ter	Temperature (°C)				Highest (mm & knots)			
STATION	Highest	Date	Lowest	Date	Highest	Date	Lowest	Date	Rain	Date	Wind Speed	Date	
Drosh	9.4	24	3.7	20	16.4	24	-1.0	21	24.0	26	8.0	03	
Peshawar	17.3	23	13.5	05*	28.0	09	4.4	06	34.0	20	8.0	04	
Parachinar	7.5	23	1.8	10*	17.0	23	-4.5	26	31.0	26	8.0	1*	
Rawalpindi	17.6	24	12.3	06	25.2	9*	4.5	02	34.0	28	20.0	01	
Sargodha	20.4	18	15.0	04	28.4	24	6.6	06	4.6	25	4.0	19*	
Jhelum	19.5	24	13.0	20	28.3	17	6.2	21	17.0	20	12.0	27	
Sialkot	19.3	26	12.0	20	26.5	18	5.1	14	33.7	28	10.0	27	
Zhob	13.3	28	6.0	19	21.5	26	-1.5	05	11.0	25	8.0	16	
D.I.Khan	20.0	15	15.5	06*	29.0	15	6.5	6*	10.0	25	6.0	12	
Lahore	21.0	26	14.3	04	27.5	17*	7.5	3*	30.2	28	8.0	20*	
Quetta	14.5	25	3.5	01*	19.0	23	-4.0	02	13.0	22	26.0	25*	
Multan	20.4	24*	15.4	02	28.0	18	7.0	02	11.5	28	14.0	25	
Barkhan	18.4	15	9.8	04	24.5	14	3.0	04	11.0	28	6.0	16*	
Nokkundi	23.3	25	8.8	02	30.0	23	0.0	02	0.0	00	14.0	19	
Dalbandin	20.0	23	7.8	01	29.0	23	1.0	01	1.0	28	12.0	26	
Jacobabad	21.3	28	16.5	01*	29.0	17*	8.0	1*	3.0	19	8.0	24	
Khanpur	22.7	24	14.5	06	31.7	14	4.4	06	3.0	20	6.0	11*	
Panjgur	19.3	22	8.3	01	27.5	18	1.0	02	0.0	00	16.0	21	
Khuzdar	19.3	26	9.0	01	27.0	14	0.5	01	6.0	28	6.0	11*	
Sh.Benazirabad	27.3	28	16.3	06	35.0	28	6.5	5*	0.0	00	16.0	28	
Jiwani	23.0	26	16.8	03	30.5	17*	10.0	2*	0.0	00	16.0	28	
Pasni	24.0	17	15.8	01	32.5	17	7.0	1*	0.0	00	16.0	28	
Hyderabad	26.8	19	17.8	05	34.8	14	10.0	05	0.0	00	18.0	19	
Chhor	25.5	17*	17.3	01	35.5	26	5.5	6*	0.0	00	12.0	28	
Karachi	26.4	18	19.4	01*	33.5	17	10.5	06	0.0	00	14.0	28	

^{*} means value occurred multiple times

<u>Note</u>

Monthly Climate Summary is produced by Pakistan Meteorological Department, Climate Data Processing Centre, Karachi to provide the main features of weather events occurred in the country during the month. The summary contains detailed data information of 25 climate stations of Pakistan. The extremes & analysis is based on 110 numbers of stations. The information in the summary is based on real time data and/or electronic reports, therefore, the above results can be considered only preliminary. Climate Summaries are usually published in the first week of each month. Long term average for rainfall is for 1961-2010 (50 years) while normal period for temperature is 1961-1990 (30 years). The records mentioned for area-weighted rainfall and area average temperatures have been examined for the past 65 years i.e. from 1961-2025.

Contact

Director, Climate Data Processing Centre, Pakistan Meteorological Dept Meteorological Complex, Gulistan e Jauhar, Block #5, Karachi-75290 Webpage: http://www.pmd.gov.pk/cdpc/home.htm; Email: info.cdpc@pmd.gov.pk

Published on March 4, 2025