Government of Pakistan
Pakistan Meteorological Department

Pakistan's Monthly Climate Summary
May, 2022

In brief

- National rainfall for the month of May 2022 was 48.4% largely below normal.
- May 2022 rainfall remained largely below normal over all parts of the country with Balochistan (-91%), Sindh (-91%), GB (-59%), Punjab (-46%), AJK (-37%) & KP (-25%).
- The wettest day of the month in the country was 3rd May, when Malam Jabba (KP) recorded 42.0mm of rainfall and also proved to be the wettest place with highest monthly total rainfall of 105.1mm in May 2022. Many stations in Punjab, Sindh and Balochistan have reported nil or only traces of rainfall.
- The national mean monthly temperature of May 2022 for Pakistan as a whole was 30.93 °C, being 2.17 °C warmer than monthly-average of 28.77 °C. It was the fifth warmest mean temperature since 1961. The highest mean temperature is 32.09 recorded in 2000.
- The mean maximum (daytime) temperature at country-level was 38.53 °C, being 2.21 °C warmer than average of 36.33 °C.
- The nighttime (minimum) temperature was 23.32 °C, being 2.17 °C warmer than country-average of 21.15 °C, which stands as fifth warmest night temperature in May since 1961. The ever warmest night temperature in May is 24.47°C recorded in 2000.
- The hottest day of the month was at Jacobabad (Sindh) when it recorded 51.0 °C temperature on 14th May 2022.
- The coldest temperature of 3.0 °C of the month was recorded at Kalam (KP) on 5th and 24th.
- The neutral Indian Ocean Dipole (IOD) event persisted during the month.
- La Niña remained active in the tropical Pacific but slowly getting weakened during May 2022.

National weather extremes during May 2022

Hottest day	51.0 °C	at Jacobabad (Sindh) on the 14th
Coldest day	12.5 °C	at Astore (GB) on the 20th
Coldest night	3.0 °C	at Kalam (KP) on the 5th & 24th
Warmest night	32.5 °C	at D.G.Khan (Punjab) on the 20th
Wettest day	42.0 mm	at Malamjabba (KP) on the 3rd
Wettest month	105.1 mm	at Malamjabba (KP)

Synoptic Summary

A trough persisted over GB for the whole month. Low pressure prevailed over KP from 16th to 17th of the month. Another low pressure prevailed over Northwest Balochistan with movement to Northeast Balochistan from 1st to 14th of the month. A seasonal low formed over North and
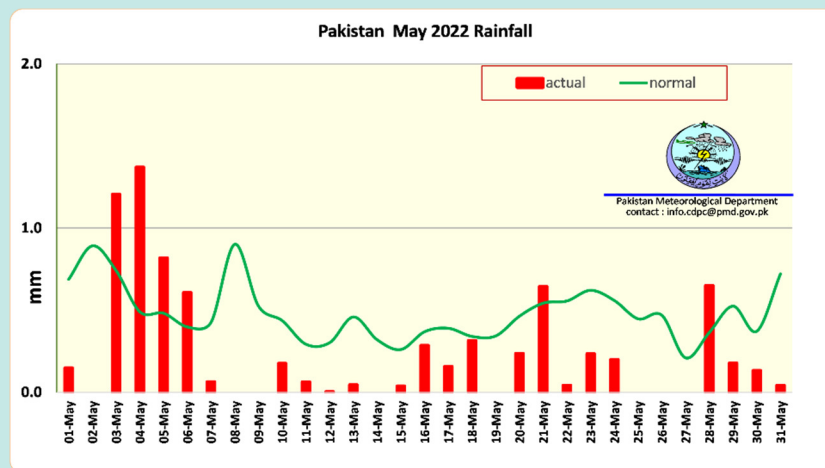
Northwest Balochistan from 15th till end of the month. A trough remained over Northern Areas of Punjab from 3rd to 5th of the month then moved away eastwards. Another trough formed over Southern Area of Punjab from 3rd to 7th then converted into heat low which remained till 15th Another low pressure remained over Southern Areas of Punjab from 21st to 22nd then converted it to trough from 23rd to 24th. Low pressure formed over upper Sindh from 17th to 20th again merged from 24th then less marked on 28th of the month.

May, 2022 area-weighted rainfall

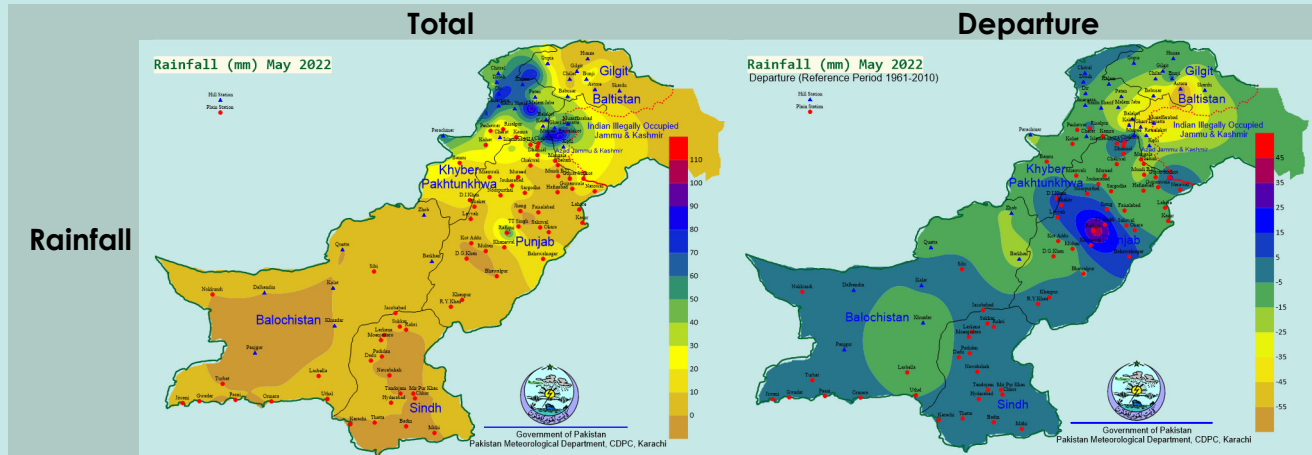|	Rank (of 62)	Normal (mm)	Average (mm)	Departure (percent)	Comment
Pakistan	08	14.8	7.7	-48.4	----
Azad Jammu & Kashmir	16	60.4	38.2	-36.7	----
Balochistan	04	6	0.5	-90.9	4th driest (driest ever is 0.0 in 1978 & 1984)
Gilgit Baltistan	22	27.5	11.2	-59.2	----
Khyber Pakhtunkhwa	22	43.4	32.3	-25.4	----
Punjab	17	15.6	8.4	-46.2	----
Sindh	21	2.9	0.3	-90.5	----

Rank ranges from 1 (lowest) to 62 (highest)

Rainfall, largely below average over the country.

During May 2022, some light rainfall events were experienced. May 2022 rainfall was 48.4% below average for Pakistan. The May 2022 is found to be a deficient-rain month with only 7.7mm (area-weighted) rain against its normal of 14.8mm. On average, the May 2022 rainfall contribution is of the order of 13.7% and 2.6% only to the Pre-Monsoon (AMJ) and annual rainfall respectively.

May 2022 rainfall maps

Total — Rainfall (mm) May 2022

Departure — Rainfall (mm) May 2022, Departure (Reference Period 1961-2010)

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On regional scale, all the regions/provinces witnessed extremely dry conditions during the month. The least rainfall occurred in the province of Sindh (0.3mm/-91%). Situation in the other regions was not very different as Balochistan (0.5mm/-91%, 4th driest May in the region), GB (11.2mm/-59%), Punjab (8.4mm/-46%), AJK (38.2/-37%) & KP (32.3mm/-25%) all experienced extremely dry conditions. The wettest day of the month in the country was 3rd May, when Malamjabba (KP) recorded 42.0mm of rainfall and is proved to be wettest place with monthly total rainfall of 105.1mm. The other significant monthly total rain recorded were Rawalakot 99.1mm, Murree 86.0mm, Kalam 82.4mm, Dir 80.0mm, Lower Dir 72.0mm, Drosh 65.8mm, Parachinar 61.0mm. The stations; Jhang, Multan, Badin, Chhor, Hyderabad, Karachi, Mithi, Shaheed Benazirabad, Padidan, Rohri, Sukkur, Thatta, Mirpur Khas, Tando Jam, Sakrand, Khairpur, Dalbandin, Gawadar, Jiwani, Kalat, Nokkundi, Panjgur, Pasni, Turbat, Ormara and Zhob remained absolutely dry with no rain during the month. Whereas the stations; Bahawalpur, D. G. Khan, Kasur, Kot Addu, Rahim Yar Khan, Sahiwal, Hunza, Larkana, Dadu, Khuzdar and Quetta reported only traces of rainfall.
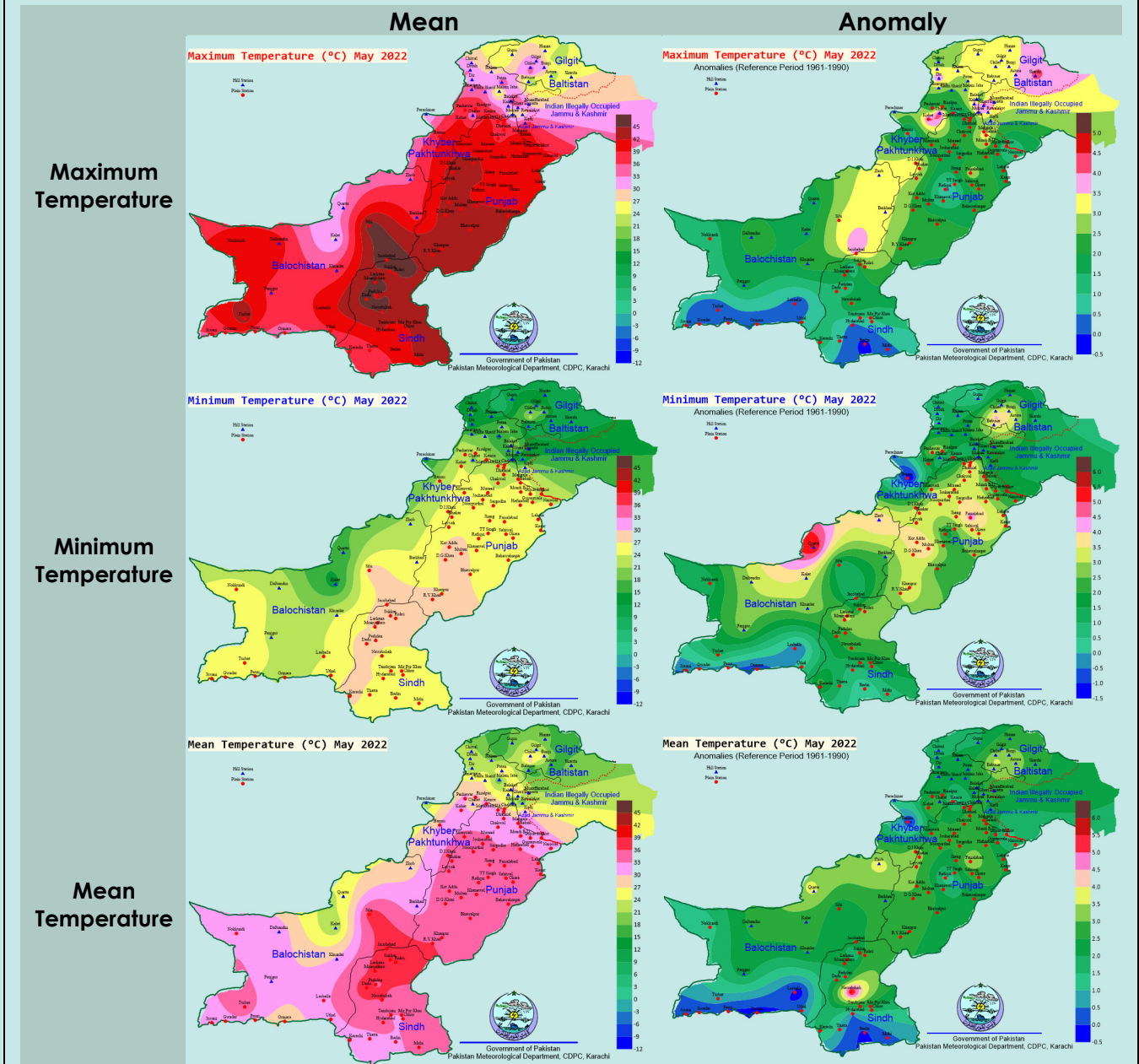
Temperatures– Extreme warm temperatures observed over the country.

The national mean monthly temperature of May 2022 for Pakistan as a whole was 30.93 °C, being 2.17 °C warmer than average of 28.77 °C and as such stands as the fifth warmest May on record since 1961 (The ever warmest mean temperature is 32.09 °C recorded in 2000). Similarly on regional scale, May 2022 stands in first tenth warmest month in all regions i.e. AJK with 23.88 °C, Balochistan with 30.76 °C, GB with 21.36 °C, KP with 27.72 °C, Punjab with 33.77 °C and Sindh with 34.76 °C. The mean temperature anomalies in GB (+2.73 °C), AJK (+2.65 °C), Punjab (+2.55 °C), KP (+2.42 °C), Balochistan (+1.83 °C) and Sindh (+1.60 °C) showed warmer than average temperatures for the month.

The May 2022 mean maximum (daytime) temperature of 38.53 °C at country-level now stands as the seventh warmest mean maximum temperature being 2.21 °C warmer than average of 36.33 °C. The average night (minimum) temperature of 23.32 °C, being 2.17 °C warmer than country-average of 21.15 °C, during the month and ranks as the fifth warmest mean minimum since 1961.

The mean temperature anomalies of May 2022 lie between -0.5 to 5.8 °C in the country. The Mean Maximum temperature anomalies were -0.1 to 4.5 °C in the country. The maximum temperature anomalies over north-east Balochistan, KP and AJK were considerably higher. The hottest day of the month was at Jacababad (Sindh) when it recorded 51.0 °C temperature on 14th May. The coldest temperature of 3.0 °C of the month was recorded at Kalam (KP) on 5th & 24th May 2022.

May 2022 Temperature maps

May 2022 Monthly Averages & Normals

Station	Pressure (mb)		Temperature (°C)			Vapour (mb)	Precipitation	
	Station Level	Sea Level	Mean	Maximum	Minimum	Pressure	Total (mm)	Days
Drosh	848.3	1446.5	24.2	32.2	16.1	11.4	65.8	11
	852.0	1472.7	22.5	29.4	15.4	9.1	67.0	10.2
Peshawar	964.8	1000.8	30.4	38.8	22.0	17.3	19.7	4
	962.7	1002.0	29.1	36.6	21.5	16.1	23.8	7.2
Parachinar	825.7	1474.2	21.5	29.3	13.7	9.4	61.0	6
	827.0	1466.1	19.7	26.6	12.9	9.6	73.5	11.9
Rawalpindi	945.6	1000.6	30.4	36.9	23.8	14.4	41.8	6
	946.6	1002.2	27.5	35.6	20.1	14.5	34.1	8.3
Sargodha	978.6	998.4	33.9	41.2	26.6	20.3	16.9	3
	981.3	1001.8	31.5	39.7	23.5	17.3	19.1	6.1
Jhelum	973.3	998.8	33.0	41.5	24.5	19.5	5.8	3
	975.4	1001.5	30.5	38.4	22.6	16.0	27.3	7
Sialkot	971.8	999.8	31.3	39.0	23.5	19.1	56.0	4
	973.8	1001.8	30.0	37.9	22.1	15.8	25.7	5.8
Zhob	851.0	1415.0	28.7	35.5	21.9	6.3	0.0	0
	853.8	1433.8	25.5	32.8	18.2	9.4	16.9	1.7
D.I.Khan	979.4	998.1	34.2	42.2	26.1	21.2	24.0	2
	982.4	1001.0	31.2	39.0	23.4	17.7	17.0	3.4
Lahore	975.8	999.2	33.5	40.3	26.7	17.7	6.4	1
	977.6	1001.2	31.7	38.9	24.5	16.7	20.8	5.7
Quetta	838.2	1466.5	24.6	32.1	17.2	4.1	0.0	0
	837.8	1466.3	21.6	30.8	12.4	9.9	5.5	2.8
Multan	984.7	998.1	35.3	42.1	28.5	17.1	0.0	0
	987.4	1000.9	32.8	40.8	24.8	17.9	11.5	2.5
Barkhan	882.8	1434.4	31.2	38.2	24.1	5.9	4.0	1
	885.4	1459.3	28.7	35.1	22.1	11.4	20.3	2.4
Nokkundi	925.6	997.7	32.5	40.2	24.8	5.5	0.0	0
	928.6	1001.4	31.2	39.4	24.0	11.5	0.3	0.2
Dalbandin	910.4	1457.6	31.9	40.3	23.3	7.8	0.0	0
	912.1	1473.0	29.6	37.7	19.2	8.5	1.6	0.8
Jacobabad	991.8	997.9	37.3	47.0	27.6	23.4	3.0	1
	994.4	1000.7	35.2	43.4	26.9	18.2	3.1	0.8
Khanpur	988.1	997.8	35.1	43.4	26.9	21.8	8.0	1
	991.1	1000.8	32.7	41.7	23.6	19.0	4.9	1.2
Panjgur	896.5	1452.0	30.8	38.1	23.4	11.3	0.0	0
	899.4	1476.4	28.9	36.5	21.3	8.1	2.5	0.3
Khuzdar	871.2	1449.9	30.6	37.1	24.0	7.6	0.0	0
	871.5	1450.3	27.9	35.0	20.6	4.5	13.2	1.5
Nawabshah	995.4	998.6	36.3	45.7	26.8	24.2	0.0	0
	998.3	1001.9	34.1	43.7	24.5	23.9	1.5	0.4
Jiwani	996.2	1002.6	29.5	34.5	24.3	29.9	0.0	0
	998.1	1004.4	29.6	34.2	25.1	28.4	0.2	0.1
Pasni	1002.1	1002.7	29.4	35.5	23.3	29.8	0.0	0
	1002.9	1003.6	29.1	35.4	24.3	27.6	0.7	0.1
Hyderabad	995.6	1000.4	34.4	41.9	26.9	25.9	0.0	0
	998.6	1002.5	33.4	41.4	26.1	24.5	4.6	0.5
Chhor	999.8	1000.5	34.5	42.7	26.3	27.3	0.0	0
	1001.7	1002.3	33.2	41.8	24.6	23.5	7.2	0.5
Karachi	999.6	1002.2	32.4	36.7	28.1	30.5	0.0	0
	1001.8	1004.3	30.8	35.3	26.2	28.4	0.2	0.1

Note: The first row against each station contains the actual values while second row for normal values

May 2022 extreme values

STATION	Mean Temperature (°C)				Temperature (°C)				Highest (mm & knots)			
	Highest	Date	Lowest	Date	Highest	Date	Lowest	Date	Rain	Date	Wind Speed	Date
Drosh	27.9	2	14.6	4	38.0	26	9.9	5	19.8	4	14	24*
Peshawar	33.2	16	23.7	4	43.7	13	18.5	5*	9.0	3	20	30
Parachinar	24.3	19	17.2	1	32.5	19	10.3	1	20.0	21	10	4
Rawalpindi	34.9	16	25.9	4	42.3	14	18.5	18	14.0	18	35	3
Sargodha	37.2	16	28.2	24	47.2	14	21.5	24	14.0	28	8	3*
Jhelum	38.2	16	28.1	4	47.0	14	21.6	24*	3.0	4	18	19
Sialkot	35.1	16	23.8	24	44.8	15	16.8	24	40.0	24	10	4
Zhob	31.0	1	24.8	3	40.0	1*	18.0	5	0.0	0	17	22
D.I.Khan	38.0	15	29.5	24	48.5	15	22.0	6*	17.0	5	10	3
Lahore	37.0	14	26.6	24	45.2	15	21.4	24	6.0	24	26	22
Quetta	29.0	10	21.5	4	35.5	9*	13.0	24	0.0	0	34	2
Multan	38.8	15	30.7	24	47.3	12*	25.2	5	0.0	0	18	2
Barkhan	34.5	13	26.8	5	41.0	14	19.0	5	4.0	17	8	3*
Nokkundi	35.8	9*	27.8	23	45.0	25	19.5	23*	0.0	0	24	22
Dalbandin	34.5	9*	28.5	23	43.5	13*	19.0	24	0.0	0	14	22*
Jacobabad	39.8	14	31.5	4	51.0	14	24.0	4*	3.0	4	8	5
Khanpur	38.9	15	29.0	4	47.2	1	20.5	4	8.0	4	10	29
Panjgur	33.0	10*	27.0	16	41.0	10*	19.0	24	0.0	0	18	15
Khuzdar	32.3	13*	29.3	3*	39.5	19*	22.5	24	0.0	0	12	21*
Nawabshah	39.0	14	32.5	4	50.5	14	24.0	4	0.0	0	20	2
Jiwani	31.5	23	27.0	7	38.0	13	22.0	5*	0.0	0	16	1
Pasni	32.5	13	27.5	7	41.5	13	21.0	7	0.0	0	26	2*
Hyderabad	36.9	1	31.9	5	46.7	13	25.0	5*	0.0	0	24	16
Chhor	36.5	13	32.7	3	47.0	13	24.5	5*	0.0	0	18	15*
Karachi	35.8	14	30.6	5	42.8	14	26.6	5	0.0	0	18	2*

* means value occurred multiple times