Pakistan's Monthly Climate Summary
June, 2022

In brief

- National rainfall for the month of June 2022 was largely (+68%) above normal.
- June 2022 rainfall was largely above normal over all parts of the country; Balochistan (+47.6%), GB (+86%), Punjab (+110.9%), AJK (+37.2%) & KP (+57.1%) except Sindh where it remained slightly below normal (-13.9%).
- The wettest day of the month in the country was 21st June, when Jhang (Punjab) recorded 97.5mm of rainfall which coincidently proved to be the wettest place with highest monthly total of 230.1mm in June 2022. A number of stations in Sindh and Balochistan have reported nil or only traces of rainfall.
- The national mean monthly temperature of June 2022 for Pakistan as a whole was 31.33 °C, being 0.47°C cooler than monthly-average of 31.80 °C.
- The mean maximum (daytime) temperature at country level was 38.48 °C, being 0.38 °C cooler than average of 38.86 °C.
- The nighttime (minimum) temperature was 24.19 °C, being 0.49 °C cooler than country-average of 24.68 °C.
- The hottest day of the month was at Jacobabad (Sindh) when it recorded 49.0 °C temperature on 4th & 5th June 2022.
- The coldest temperature of 5.0 °C of the month was recorded at Kalam (KP) on 3rd June 2022.
- The neutral Indian Ocean Dipole (IOD) persisted during the month.
- The La Niña conditions have been persisting through almost 3rd year, one of the rare phenomena being described as Triple-dip La Niña and is likely to prevail through this summer.

National weather extremes during June 2022

Hottest day	49.0 °C	at Jacobabad (Sindh) on the 4th & 5th
Coldest day	12.0 °C	at Murree (Punjab) on the 21st
Coldest night	5.0 °C	at Kalam (KP) on the 3rd
Warmest night	33.5 °C	at Bahawalnagar (Punjab) on the 30th at Nokkundi (Balochistan) on the 26th
Wettest day	97.5 mm	at Jhang (Punjab) on the 21st
Wettest month	230.1 mm	at Jhang (Punjab)

Synoptic Summary

The seasonal/heat low, a predominant summer synoptic feature, found persisting over the southern Pakistan areas. On the other hand, a trough of low prevailed over Gilgit Baltistan (GB) from 1st to 7th day of the month. Another low pressure area formed over Northern areas of Punjab on 8th but persisted only for 2 days before reducing to trough on 10th and merged

with the already existing trough over Gilgit Baltistan on 11th. This trough-low seesaw pattern persisted till 24th. The most important feature was penetration of moist currents from the North Arabian Sea into eastern Parts of the country from mid of the month till 22nd June which resulted in well-above pre-monsoon rains across the country.

New weather Record Set in June 2022

S No	STATION	Weather Paramter	New Record Value	New Record date	Old Record Value	Old Record Date
1	Barkhan	Coldest Day temperature (°C)	26.0	21/06/2022	26.5	15/06/2009
2	Bahawalpur	Coldest Day temperature (°C)	29.6	21/06/2022	30.1	22/06/2017
3	Garhi Dupatta	Coldest Day temperature (°C)	19.5	21/06/2022	20.6	21/06/1996
4	Islamabad (Old AP)	Coldest Day temperature (°C)	23.0	21/06/2022	25.5	25/06/2015
5	Islamabad ZP	Coldest Day temperature (°C)	23.0	21/06/2022	25.3	18/06/2008
6	Jhelum	Coldest Day temperature (°C)	25.4	21/06/2022	25.5	03/06/2008
7	Kakul	Coldest Day temperature (°C)	16.5	21/06/2022	19.0	24/06/1974
8	Kotli	Coldest Day temperature (°C)	21.9	21/06/2022	22.0	25/06/1974
9	Muree	Coldest Day temperature (°C)	12.0	21/06/2022	13.0	17/06/2009
10	Muzaffarabad	Coldest Day temperature (°C)	20.0	21/06/2022	20.0	17/06/2009
11	Rahim Yar Khan	Coldest Day temperature (°C)	30.2	21/06/2022	31.7	16/06/2009
12	Saidu Sharif	Coldest Day temperature (°C)	20.0	21/06/2022	20.3	18/06/2001
13	Bunji	Hottest Day temperature (°C)	43.3	30/06/2022	43.3	30/06/2001
14	Zhob	Coldest day temperature (°C)	22.5	21/06/2022	23.0	24/06/1974
		Hottest Night temperature (°C)	29.5	29/06/2022	29.0	23/06/2002
		Coldest Night temperature (°C)	12.5	22/06/2022	13.0	10/06/2008
15	Sukkur AP	Coldest Night temperature (°C)	19.5	22/06/2022	19.5	07/06/2009
		Wettest Month Rain (mm)	97.0	Jun-2022	29.0	Jun-2021
		Heaviest Rainfall in 24 hours (mm)	82.0	20/06/2022	28.0	16/06/2013

June, 2022 area-weighted rainfall

	Rank (of 62)	Normal (mm)	Average (mm)	Departure (percent)	Comment
Pakistan	53	18.5	31.1	68	10th highest (record 88.2 mm in 2007)
Azad Jammu & Kashmir	51	63	86.5	37.2	12th highest (record 172.4 mm in 1971)
Balochistan	52	9.1	13.4	47.6	11th highest (record 114.0 mm in 2007)
Gilgit Baltistan	52	10.8	20	86	11th highest (record 48.2 mm in 1996)
Khyber Pakhtunkhwa	51	36	56.5	57.1	12th highest (record 82.9 mm in 2008)
Punjab	56	29.4	62.1	110.9	7th highest (record 93.6 mm in 2007)
Sindh	40	10.2	8.8	-13.9	-----

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

Rainfall, largely above average over the country.

During June 2022, a widespread rain spell was experienced for over a week, 14-22 June with some other minor sporadic small events. June 2022 rainfall was 68% above average for Pakistan. After four consecutive months of deficient-rain, June 2022 happened to be an excessive-rain month with 31.1mm (area-weighted) rain against its normal of 18.5mm. On average, the June 2022 rainfall contribution is of the order of 55.6% and 10.5% only to the Pre-Monsoon (AMJ) and annual rainfall respectively.

June 2022 rainfall Graph and maps

Pakistan June 2022 Rainfall

Rainfall
Total — Rainfall (mm) June 2022
Departure — Rainfall (mm) June 2022 Departure (Reference Period 1961-2010)

On regional scale, all the regions/provinces witnessed excessive rain during the month except Sindh where it was slightly below average with (8.8mm/-13.9%). Balochistan (13.4mm/+47.6%), GB (20.0mm/+86%), Punjab (62.1mm/+110.9%), AJK (86.5/+37.2%) & KP (56.5mm/+57.1%) all experienced wetter than normal conditions. The wettest day of the month in the country was 21st June, when Jhang (Punjab) recorded 97.5mm of rainfall which coincidently proved to be the wettest place with monthly total 230.1mm. The other significant monthly-total rains recorded were Rawalakot 207.5mm, Islamabad (old Airport) 194.6mm, Lahore Airport 144.3mm, Murree 135.5mm, Islamabad (Zero Point) 133.4mm, Garhi Dupatta 132.7mm, Risalpur 130mm, Jhelum 128.2mm, Kotli 126.4mm, Barkhan 118mm, Lower Dir 116mm, Multan City 112.8mm, D. G. Khan 110mm, Bhakkar 102mm And Noorpur Thal 100mm. The stations; Badin, Hyderabad, Mithi, Sh. Benazirabad, Padidan, Moen Jo Daro, Dadu, Dalbandin, Gawadar, Jiwani, Kalat, Nokkundi, Pasni, Quetta, Turbat and Ormara remained absolutely dry with no rain during the month.

Temperatures– Cooler-than Normal temperatures observed over the country.

The national mean monthly temperature of June 2022 for Pakistan as a whole was 31.33 °C, being 0.47 °C cooler than average of 31.80 °C. Similarly on regional scale AJK recorded 25.10 °C, Balochistan 31.5 °C, GB 22.57 °C, KP 28.81 °C, Punjab 33.53 °C and Sindh 34.26 °C. The mean temperature anomalies; GB (-1.17 °C), AJK (-0.26 °C), Punjab (-0.66 °C), KP (-1.01°C) and Balochistan (-0.54 °C) all recorded cooler than average temperatures, except Sindh (+0.21 °C) being little warmer than average temperature for the month.

The June 2022 mean maximum (daytime) temperature of 38.48 °C was recorded at country-level being 0.38 °C cooler than average of 38.86°C. The average night (minimum) temperature of 24.19 °C, being 0.49 °C cooler than country-average of 24.68 °C, during the month.

The mean temperature anomalies of June 2022 lie between ±4.5 °C in the country. The Mean Maximum temperature anomalies were ±2.8 °C in the country. The maximum temperature anomalies over most northern areas of Punjab & adjoining AJK and Eastern Sindh were considerably higher. The hottest day of the month was at Jacobabad (Sindh) when it recorded 49.0 °C temperature on 4th & 5th June. The coldest temperature of 5.0 °C of the month was recorded at Kalam (KP) on 3rd June 2022.

June 2022 Temperature maps
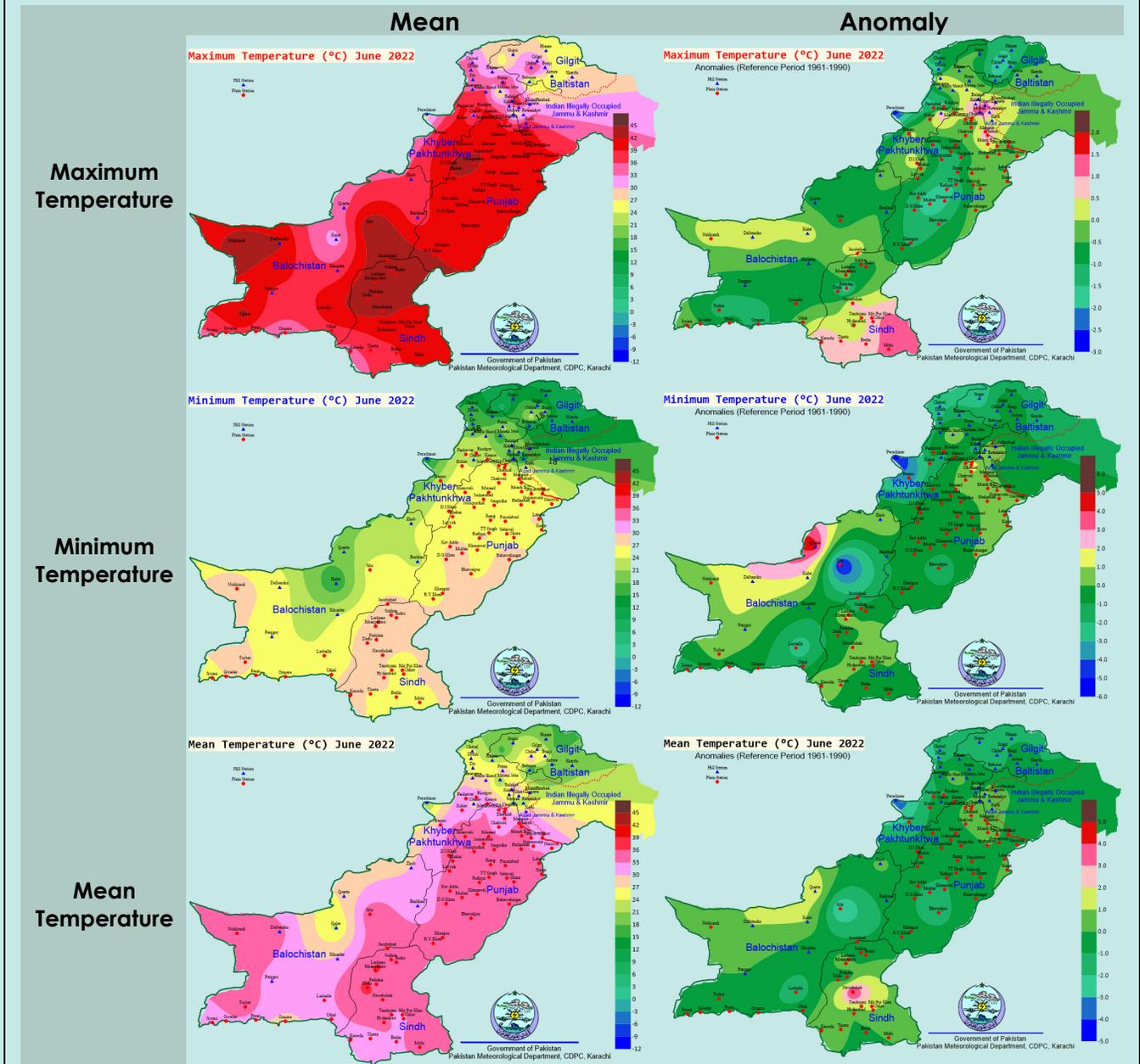
June 2022 Monthly Averages & Normals

Station	Pressure (mb)		Temperature (°C)			Vapour (mb)	Precipitation	
	Station Level	Sea Level	Mean	Maximum	Minimum	Pressure	Total (mm)	Days
Drosh	847.1	1433.6	26.2	34.0	18.3	11.7	31.2	5
	846.7	1427.6	28.3	35.8	20.8	9.6	19.7	4.9
Peshawar	963.0	998.7	31.8	40.3	23.4	20.7	59.5	3
	956.5	995.4	33.0	40.2	25.4	20.0	12.1	4
Parachinar	822.7	1443.9	20.5	28.0	13.0	8.7	28.0	5
	821.8	1428.6	23.8	30.7	16.9	11.2	49.3	8.8
Rawalpindi	943.9	998.6	31.7	38.0	25.3	15.3	194.6	6
	942.0	996.7	30.5	38.4	23.5	19.1	70.1	8.2
Sargodha	977.3	997.1	34.7	41.8	27.6	23.3	22.9	1
	977.0	995.7	34.2	41.6	26.8	22.9	33.4	6
Jhelum	971.7	997.1	33.8	41.6	26.0	22.4	128.2	9
	971.0	996.4	32.9	40.2	25.7	21.5	57.1	7.7
Sialkot	970.2	998.1	32.3	39.3	25.3	21.6	65.6	6
	969.2	996.8	32.1	39.2	25.0	21.7	73.0	7.7
Zhob	850.6	1411.1	30.1	36.4	23.7	9.7	37.0	3
	850.0	1406.8	29.9	36.9	22.8	12.2	14.7	2.5
D.I.Khan	978.1	996.8	34.0	41.8	26.1	25.0	79.0	4
	976.9	995.7	33.7	41.1	26.3	23.6	22.2	3
Lahore	974.7	998.1	33.8	39.8	27.8	21.6	88.7	4
	973.1	996.4	33.6	39.9	27.2	22.9	51.3	6.1
Quetta	836.0	1441.5	27.6	34.6	20.5	5.8	0.0	0
	834.3	1424.2	26.1	35.4	16.8	10.8	1.5	0.9
Multan	983.9	997.4	34.3	40.4	28.1	22.7	56.2	4
	982.5	995.8	35.4	42.2	28.6	23.7	15.1	2.4
Barkhan	882.2	1426.8	30.3	37.4	23.2	11.1	118.0	6
	881.4	1421.8	31.1	37.7	24.4	15.4	43.0	3.6
Nokkundi	923.2	994.4	35.5	42.8	28.1	6.0	0.0	0
	924.1	995.0	34.6	42.9	27.5	11.8	0.0	0
Dalbandin	907.9	1436.3	34.1	42.5	25.7	9.7	0.0	0
	907.0	1431.3	33.3	41.3	22.4	8.5	0.6	0.2
Jacobabad	990.7	996.8	36.1	44.7	27.5	27.6	14.0	1
	989.6	995.4	37.0	44.5	29.5	24.5	3.0	0.4
Khanpur	987.5	997.2	34.2	41.4	26.9	28.3	26.2	3
	986.2	995.9	34.8	42.7	27.0	24.9	3.4	0.8
Panjgur	895.1	1440.5	31.7	38.6	24.8	13.8	4.0	1
	896.5	1438.9	31.8	39.5	24.2	9.1	4.0	0.2
Khuzdar	869.7	1434.8	30.6	37.3	23.8	6.2	2.2	1
	866.5	1411.0	31.4	38.1	24.3	6.0	12.6	1.3
Nawabshah	994.3	997.5	35.9	43.9	27.9	26.9	0.0	0
	993.2	997.0	35.6	43.7	27.6	29.9	2.8	0.3
Jiwani	994.4	1000.7	29.8	34.0	25.5	33.1	0.0	0
	992.9	999.2	30.6	34.3	26.9	32.4	0.9	0.1
Pasni	1000.3	1000.8	29.9	34.4	25.3	33.6	0.0	0
	998.3	999.0	30.0	35.2	26.8	32.1	0.4	0
Hyderabad	994.5	999.2	34.2	40.1	28.2	28.4	0.0	0
	993.9	997.9	34.1	40.2	28.0	29.3	6.3	0.7
Chhor	998.6	999.3	34.1	41.0	27.2	29.7	4.0	1
	997.3	997.9	33.6	40.3	26.9	29.1	18.4	1.2
Karachi	998.2	1000.8	32.2	35.7	28.6	33.0	21.6	1
	997.0	999.5	31.7	35.2	28.1	31.8	6.7	0.9

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

June 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	33.7	30	14.9	22	43.4	30	9.5	23	13.2	22	16	19
Peshawar	35.5	15	22.1	22	45.5	15	15.0	22	57.0	22	18	9
Parachinar	24.0	19	16.0	25	33.5	30	8.5	27	17.0	22	10	12*
Rawalpindi	36.0	15	21.9	21	43.5	15	16.9	19	75.0	22	38	18
Sargodha	38.3	08	25.4	22	46.3	7	17.5	22	22.5	22	10	16
Jhelum	38.4	15	24.4	21	46.8	7	19.0	22	53.0	22	10	9
Sialkot	36.8	15	23.7	21	44.3	6	19.3	19	32.5	19	8	12*
Zhob	35.5	29	19.3	21	41.5	29*	12.5	22	20.0	21	13	16*
D.I.Khan	37.0	15	24.0	22	46.0	6*	17.5	22	64.0	21	12	11
Lahore	37.9	7*	24.9	21	44.8	6	21.2	21	40.0	18	14	12
Quetta	33.0	30	21.5	02	40.5	30	13.5	2	0.0	0	30	17*
Multan	38.4	28	25.5	21	45.2	5*	20.0	22	19.9	18	24	16
Barkhan	34.0	29	20.8	21	41.5	9*	15.5	21	36.0	26	6	10*
Nokkundi	40.5	26	30.8	1*	47.5	26*	23.0	22	0.0	0	22	21
Dalbandin	38.8	26*	29.5	21*	47.0	29	21.0	22	0.0	0	14	12*
Jacobabad	38.5	1*	29.8	22	49.0	4*	23.0	23	14.0	20	12	21
Khanpur	37.5	29	26.0	21*	45.8	3	21.0	22	12.0	21	26	13
Panjgur	34.3	26	29.0	03	42.5	26	22.0	3	4.0	13	28	9
Khuzdar	33.3	29	27.5	23	41.5	29	21.5	19	2.2	13	8	12
Nawabshah	37.5	3*	33.5	22	47.0	3*	26.0	6	0.0	0	20	9
Jiwani	31.0	4*	28.8	7*	36.5	4	24.5	8	0.0	0	12	3*
Pasni	31.0	28	28.5	01	35.5	14*	23.5	1	0.0	0	26	19*
Hyderabad	37.0	26	32.3	09	45.3	2	26.0	7	0.0	0	22	9*
Chhor	36.5	26	32.4	16	45.0	26	25.2	14	4.0	22	16	7*
Karachi	34.8	24	30.6	07	40.0	24	23.0	23	21.6	23	18	7

* Means value occurred multiple times