



Pakistan's Monthly Climate Summary JANUARY, 2022

In brief

- The first widespread rainy spell occurred in all six administrative regions during 4 to 8 January 2022. Two more consecutive rainfall spells occurred in Punjab, KP, AJK, Balochistan during 18 to 26 January.
- Heavy snowfall were recorded at hilly areas during the month.
- Windstorm occurred in Karachi & south Balochistan on 21 & 22 of the month.
- January 2022 rainfall was largely above normal over all the six administrative regions.
- January 2022 rainfall was 177.9 above average for Pakistan as a whole and ranked second wettest January on record during last 62 years. AJK (88.6%), GB (152.3%), Balochistan (166%), KP (120.6%) & Punjab (257.6%) all experienced excessive rainfall.
- The wettest day of the month in the country was 5th January, when Pasni (Balochistan) recorded 115.0 mm of rainfall, whereas the wettest place was Malam Jabba with highest monthly total of 218.6 mm. The driest month was found to be 2.6mm at Nokkundi.
- The national mean monthly temperature of January 2022 for Pakistan as a whole was 11.20 °C, being 0.23 °C warmer than monthly-average.
- The mean maximum (day) temperature at country-level was 17.46 °C, being 0.88 °C cooler than average of 18.34 °C.
- The night (minimum) temperature was 4.93 °C, being 1.28 °C warmer than country-average of 3.66 °C.
- The hottest day of the month was at Mithi (Sindh) when it recorded 32.5 °C temperature on 31st January 2022.
- The coldest temperature of -13.5 °C of the month was recorded at Kalam (KP) on 11th and 12th January 2022.
- The neutral Indian Ocean Dipole (IOD) event persisted during the month.
- La Niña remained active in the tropical equatorial Pacific during January 2022.

National weather extremes during January 2022

Hottest day	32.5 °C	at Mithi (Sindh) on the 31 st
Coldest day	-1.0 °C	at Astore (GB) and Kalat (Balochistan) on the 12 th
Coldest night	-13.5 °C	at Kalam (KP) on the 11 th & 12 th
Warmest night	21.0 °C	at Karachi (Sindh) on the 21 st
Wettest day	115.0 mm	at Pasni (Balochistan) on the 5 th
Wettest month	218.6 mm	at Malam Jabba (KP)

Synoptic Summary

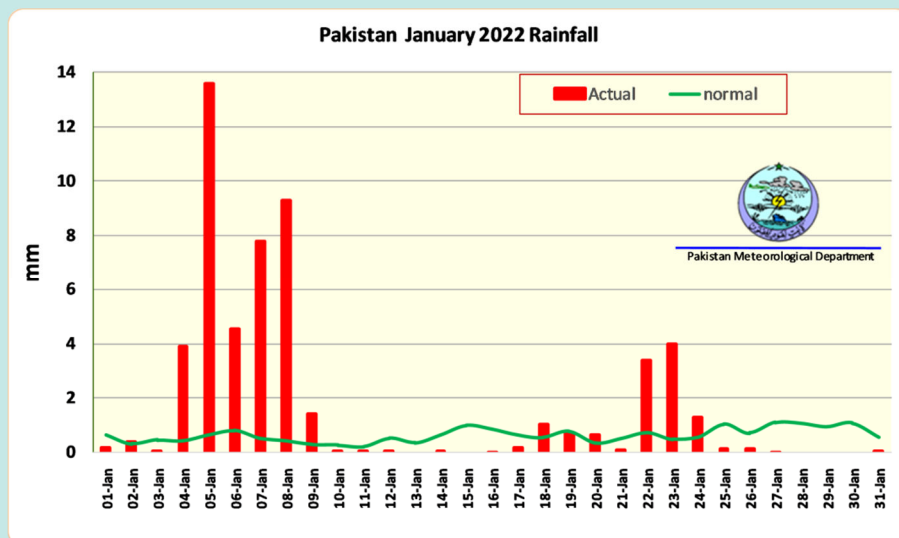
A westerly trough was found persisting over Gilgit Baltistan (GB) and adjoining areas of Kashmir from 1st January which prevailed over there almost entire month. On the other hand, a low-pressure area formed over northwest Balochistan but lessened into a trough over there on 3rd January and continued to persist through a week. Very next day, a secondary westerly low-pressure developed over the North Arabian Sea and adjoining Balochistan coast bringing season's first heavy rainy spell over south Balochistan. A fresh westerly low-pressure developed over east Iran on 17th January, moved towards northwest Balochistan the next day and continued to persist over there through the whole month. The trough-low pattern prevailed over upper Khyber Pakhtunkhwa (KP) during 2nd & 3rd week of the month gradually merging with predominantly existing trough over GB. Towards the month's end, a fresh low-pressure area developed over northeast Balochistan and the adjoining parts.

January, 2022 area-weighted rainfall

	Rank (of 62)	Norma l (mm)	Average (mm)	Departure (percent)	Comment
Pakistan	61	18.9	52.7	177.9	2 nd highest (record highest is 55.9mm in 1992)
Azad Jammu & Kashmir	56	52.6	99.2	88.7	7 th highest (record highest is 149.3mm in 1992)
Balochistan	60	18.1	48.2	166.3	3 rd highest (record highest is 51.8mm in 1970)
Gilgit Baltistan	58	17.6	45	155.6	5 th highest (record highest is 78.4mm in 2009)
Khyber Pakhtunkhwa	58	45.5	100.4	120.6	5 th highest (record highest is 134.7mm in 1992)
Punjab	62	15.6	55.7	258	Highest (record highest was 51.8mm in 1992)
Sindh	62	2.8	23.4	728.5	Highest (record highest was 18.4mm in 1992)

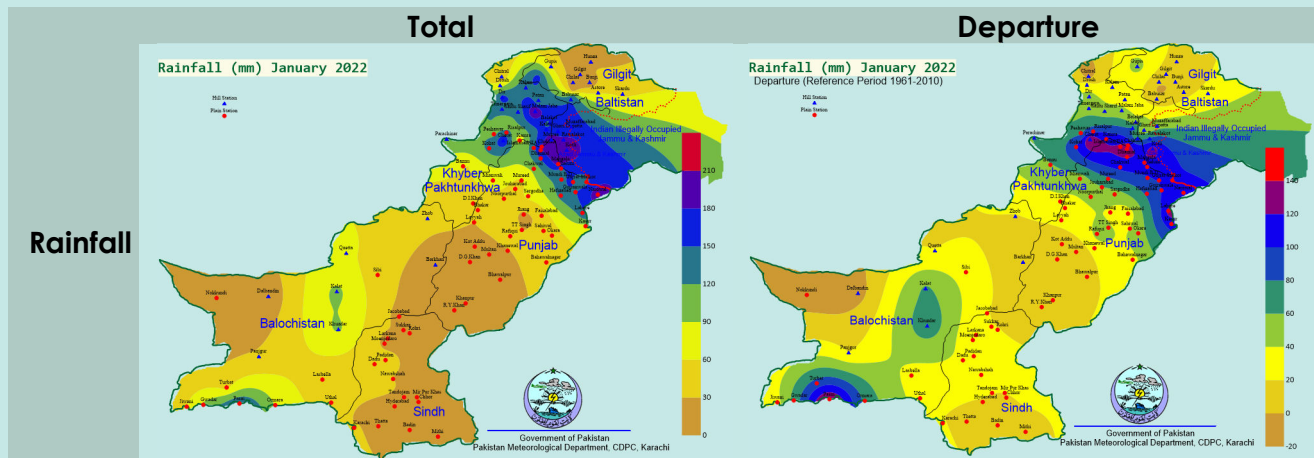
Rank ranges from 1 (lowest) to 62 (highest)

Rainfall – largely above average over the country.



During January 2022, a couple of rainfall events occurred during the month. January 2022 rainfall was 177.9% largely above average for Pakistan as a whole and ranked second wettest January on record for the country during 1961-2022. Climatologically, the month of January happens to be around an average wetted month of the year across Pakistan. However the January 2022 was the second wettest month with 52.7 mm rain (area-weighted) against its normal 18.9mm. On average, the January rainfall contribution is of the order of 70.8% and 17.7% to the Winter (JFM) and annual rainfall respectively.

January 2022 rainfall maps



On regional scale, all the regions/provinces witnessed largely wet conditions. The highest rainfall occurred in the province of KP (100.4mm/120.6%) cumulative of three rainfall spells in the whole month. Situation in the other regions was not very different as AJK (99.1mm/88.6%), Punjab (55.7mm/257.6%) Balochistan (48.2mm/166%), GB (44.4mm/152.3%) & Sindh (23.3mm/726.7%) all experienced extremely wet conditions. The wettest day of the month in the country was 5th January, when Pasni (Balochistan) recorded 115.0 mm of rainfall, whereas the wettest place was Malam Jabba with highest monthly total rainfall of 218.6 mm. The driest month was found to be 2.6mm at Nokkundi.

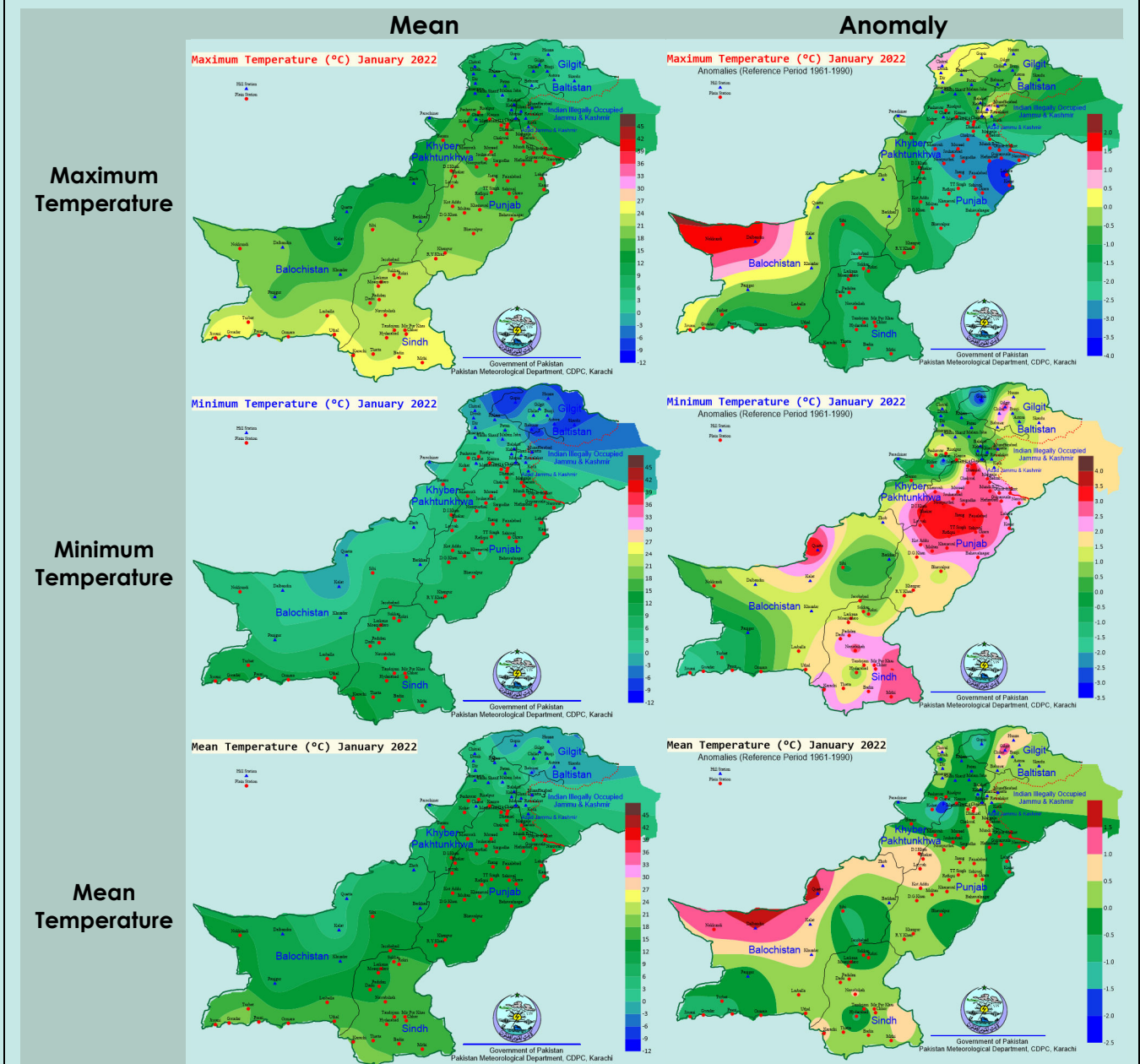
Temperatures– Warmer night temperatures, cooler day temperatures and slightly warmer mean temperatures observed over the country.

The national mean monthly temperature of January 2022 for Pakistan as a whole was 11.20 °C, being 0.23°C warmer than average. On regional scale, Balochistan (+0.35 °C), GB (+0.30) and Sindh (+0.05 °C) recorded warmer than average while AJK (-0.19 °C), KP (-0.30 °C) and Punjab (-0.02 °C) recorded negative anomaly for the month.

The mean maximum (day) temperature in January 2022 at country-level was 17.46 °C, being 0.88°C cooler than average of 18.34 °C. The night (minimum) temperature was 4.93°C, being 1.28 °C warmer than country-average of 3.66 °C.

The mean temperature anomalies of January were $\pm 2.0^\circ$ Cover most parts of the country. The Mean Maximum & Minimum temperature anomalies were $\pm 3.5^\circ$ Cover most parts of the country. The minimum temperature anomalies over Northern Punjab, Eastern Sindh, Northwest Balochistan and Central parts of GB were considerably higher. The hottest day of the month was at Mithi (Sindh) when it recorded 32.5 °C temperature on 31st January. The coldest temperature of -13.5 °C of the month was recorded at Kalam (KP) on 11th & 12th January 2022.

January 2022 Temperature maps



January 2022 Monthly Averages & Normals

Station	Pressure (mb)		Temperature (°C)			Vapour	Rainfall	
	Station Level	Sea Level	Mean	Maximum	Minimum	Pressure (mb)	Total (mm)	Days
Drosh	856.2	1523.2	4.2	9.5	-1.1	4.6	76.8	9
	858.4	1535.3	4.6	9.2	0.1	4.3	48.6	6.1
Peshawar	979.2	1018.3	10.6	16.9	4.2	9.6	110.5	9
	975.8	1018.3	11.3	18.5	4.1	7.9	30.8	4.4
Parachinar	827.9	1511.0	3.4	9.9	-3.1	4.3	114.8	11
	828.3	1514.7	4.0	10.2	-3.0	4.1	47.6	2.9
Rawalpindi	958.2	1017.9	10.9	15.6	6.2	9.0	185.9	8
	958.5	1018.2	10.4	17.6	3.1	7.9	59.2	6.2
Sargodha	992.3	1014.4	12.5	17.6	7.4	11.7	59.5	5
	995.6	1017.4	12.1	19.9	4.3	9.4	16.8	4.1
Jhelum	988.6	1016.4	12.4	17.3	7.4	11.6	145.8	8
	989.7	1017.6	12.8	19.3	5.5	9.4	37.4	5.7
Sialkot	986.5	1016.8	11.5	16.0	6.9	11.6	142.1	8
	987.2	1017.5	11.6	18.2	5.1	10.1	41.8	5
Zhob	858.7	1488.7	6.7	12.7	0.6	5.5	36.0	5
	860.1	1500.5	5.9	12.8	-1.0	4.7	20.0	1.7
D.I.Khan	995.9	1016.4	13.2	18.9	7.4	10.8	47.5	6
	996.8	1017.3	12.4	20.1	4.4	8.8	11.4	3.5
Lahore	991.3	1016.9	12.3	16.1	8.4	11.7	131.9	8
	991.9	1017.4	13.2	19.6	6.7	9.7	22.9	4.8
Quetta	842.7	1518.5	5.4	10.6	0.1	5.5	73.8	10
	842.8	1519.0	4.1	10.8	-2.7	5.0	64.0	5.9
Multan	1001.8	1016.5	13.1	18.9	7.3	11.0	10.2	3
	1003.1	1018.0	12.9	20.9	5.0	9.3	8.2	2
Barkhan	890.9	1486.6	10.1	16.1	4.0	5.9	21.0	5
	893.2	1508.0	10.2	16.2	4.1	5.2	13.9	1.3
Nokkundi	936.4	1014.5	12.6	20.5	4.6	4.4	2.6	1
	938.5	1017.8	11.4	18.8	3.9	6.2	8.4	0.6
Dalbandin	920.5	1506.8	10.8	19.1	2.6	6.9	8.0	3
	921.6	1513.8	9.8	16.6	1.9	6.0	24.9	1
Jacobabad	1009.8	1016.5	14.6	20.3	8.8	11.7	25.0	4
	1010.8	1017.4	15.1	22.5	7.7	9.2	3.6	0.5
Khanpur	1005.4	1016.1	13.6	21.0	6.1	11.3	16.8	3
	1006.5	1017.3	13.2	21.7	4.7	9.2	3.8	1.1
Panjgur	906.1	1508.0	10.1	17.0	3.3	6.9	35.0	4
	906.9	1516.7	10.6	17.3	3.9	3.8	15.8	1.6
Khuzdar	877.8	1498.6	10.7	17.0	4.4	5.9	93.9	4
	877.9	1496.8	10.7	17.1	3.2	2.8	22.1	1.4
Nawabshah	1012.8	1016.2	15.8	22.8	8.6	11.6	29.5	2
	1013.8	1017.7	15.3	24.3	6.2	10.6	2.5	0.1
Jiwani	1009.6	1016.3	18.1	24.1	12.0	12.9	55.0	4
	1010.4	1016.9	19.0	24.1	13.9	13.1	22.0	1.5
Pasni	1015.8	1016.4	17.2	22.8	11.5	12.7	185.0	2
	1015.1	1015.9	18.3	25.1	12.1	12.3	23.8	1.4
Hyderabad	1010.4	1015.5	17.4	23.2	11.5	12.1	20.1	2
	1018.4	1016.9	18.1	24.8	11.4	10.1	2.0	0.5
Chhor	1014.7	1015.4	16.6	24.8	8.4	11.9	24.5	3
	1015.4	1016.0	16.2	26.6	5.7	9.0	1.1	0.3
Karachi	1013.0	1015.8	18.8	24.8	12.8	11.7	28.5	2
	1013.9	1016.8	18.1	25.9	10.8	10.6	10.8	0.7

Note: The first row against each station contains the actual values while second row for normal values of 1971-2000.

January 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	6.6	30	1.0	07	14.7	30	-2.9	13	31.4	8	15	16
Peshawar	14.0	18	7.3	06	22.0	18	1.8	13	26.3	8	4	3*
Parachinar	6.0	14	0.4	4*	14.0	14	-7.0	25	20.0	23	8	1*
Rawalpindi	13.2	20	8.4	17	19.4	31	3.8	28	85.0	8	16	8
Sargodha	14.8	30	8.1	16	23.3	30	4.8	15	21.9	23	6	3
Jhelum	14.7	10	9.5	19	22.8	2	3.3	51	62.2	8	8	7*
Sialkot	13.1	31	9.6	13	20.4	31	2.6	1	53.7	8	4	8*
Zhob	10.8	30	3.0	23	19.0	30	-3.5	25	15.0	22	13	31
D.I.Khan	15.5	30	10.0	07	24.5	30	5.5	2*	21.0	8	10	24
Lahore	14.9	30	10.0	16	22.0	30	5.3	2	49.6	8	8	7
Quetta	10.5	4*	-1.3	22	19.5	28	-5.0	24*	17.0	5	24	3*
Multan	16.6	31	10.5	07	24.1	31	4.7	24	4.0	6	8	9*
Barkhan	14.0	31	6.3	07	21.5	31	0.5	10	6.0	8*	6	22
Nokkundi	17.5	04	7.0	22	26.0	30	-0.5	23*	1.5	19	22	21
Dalbandin	17.1	19	4.8	23	26.5	28	-3.0	23*	4.0	7	10	21*
Jacobabad	17.8	31	11.5	08	25.5	31	5.0	10	15.0	5	4	4*
Khanpur	17.4	31	10.7	07	27.5	31	2.5	26	8.0	7	10	21
Panjgur	15.3	31	4.8	23	24.5	31	-1.5	23	29.0	5	26	20*
Khuzdar	15.0	30	6.8	04	24.0	30	2.0	3*	46.3	7	12	21*
Nawabshah	19.0	31	13.3	5*	28.5	31	5.8	25	28.1	7	12	22*
Jiwani	21.3	03	14.3	08	26.5	20*	6.0	25	27.0	5	32	21
Pasni	20.8	31	15.5	10*	29.0	31	9.0	24	115.0	5	24	4
Hyderabad	22.4	31	14.2	11	32.3	31	8.0	10*	13.2	5	20	21
Chhor	20.7	21	14.4	08	28.0	28*	4.0	27	13.5	7	12	21
Karachi	24.5	21	15.6	09	30.1	31	9.0	24	20.7	5	24	21

* mean value occurred multiple times, ** The maximum value extracted from the wind speed measure at 00, 03, 06 12 and 18 UTC.

New Weather records set in January 2022

Record highest monthly total rainfall (mm)				Record highest 24-hours rainfall (mm)				
Station	New	Old	year	Station	New	Date	Old	Date
Rawalpindi	185.9	166.9	1954	Padidan	25.3	05/01/22	23.9	27/01/92
Pasni	185.0	171.2	1935	Jhelum	62.2	08/01/22	57.0	06/01/21
Lahore AP	151.8	105.9	1981	Rawalpindi	85.0	08/01/22	66.7	15/01/96
Jhelum	145.8	145.0	1950	Moen-Jo-Daro	16.0	07/01/22	9.0	13/01/20
Sialkot AP	142.1	121.7	1953	Ormara	60.0	05/01/22	49.5	14/01/96
Lahore City	131.9	121.2	1981	Lahore AP	74.0	08/01/22	56.6	06/01/21
Ormara	90.0	80.3	1970	Sukkur AP	16.0	05/01/22	13.0	13/01/20
Gupis	56.8	48.0	2009	Chhor	13.5	07/01/22	7.6	29/01/35
Lasbella	40.0	36.1	1944					
Sukkur AP	30.0	15.9	2019					
Sh.Banazeeerabad	29.5	28.5	1981					
Chhor	24.5	9.9	1940					

Note

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).

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