



Pakistan's Monthly Climate Summary April, 2021

Overview

- National rainfall for the month of April 2021 was below normal (-29.4%).
- Large deficit of monthly rainfall over all six administrative regions was observed.
- Sindh (-47.5%), Balochistan (-26.5%), GB (-31%), KP (-25.8%), Punjab (-34.8%) & AJK (-29.4%) all got below normal rains.
- The wettest place of the month in the country was Balakot (KP) with 152 mm rainfall.
- The wettest day of the month in country was 22nd at Balakot (KP) 66 mm rain.
- The national mean monthly temperature of April 2021 was 0.69 °C warmer than average and ranked as 20th warmest month on record.
- The mean maximum temperature at country-level was 0.76 °C warmer than average.
- The mean minimum temperature was 17.55 °C, being 0.64 °C warmer than average.
- The country hottest day was 4th April at Sh. Benazirabad with 45.5 °C temperature.
- The coldest temperature of -3.0 °C was recorded at Kalam (KP) on the 3rd April 2021.
- Karachi airport recorded the 2nd hottest day in the month with maximum temperature of 43.6 (on 3rd April) after 74 years.
- The Indian Ocean Dipole (IOD) and El Nino-Southern Oscillation (ENSO) both were neutral in April 2020.

National weather extremes during April 2021

Hottest day	45.5 °C	at Sh. Benazirabad (Sindh) on the 4 th
Coldest day	6.5 °C	at Kalam (KP) on the 6 th
Coldest night	-3.0 °C	at Kalam (KP) on the 3 rd
Warmest night	27.7 °C	at Multan Airport (Punjab) on the 28 th at Multan City (Punjab) on the 29 th
Wettest day	66.0 mm	at Balakot (KP) on the 22 nd
Wettest month	152.0 mm	at Balakot (KP)

Synoptic Summary

There were lying two troughs, one over Khyber Pakhtunkhwa (KP) plus adjoining areas and the other over southeast Balochistan in beginning of the month which persisted for following two days. On 4th April, the former then accentuated into a low-pressure area and persisted through the following three days, while the latter persisted over the same location. The KP low again turned into a trough on 8th April and prevailed till 16th April, while, the SE-Balochistan trough after shifting to north Balochistan turned into a low on 14th April and persisted till 23rd April. The KP trough then shifted to Gilgit-Baltistan (GB), accentuated into a low for short period on 18th April, again weakened into a

trough the next day and persisted over there till the end April except shaping as a low for a brief period on 25th April. The north-Balochistan low, on the other hand persisted through the end of the month.

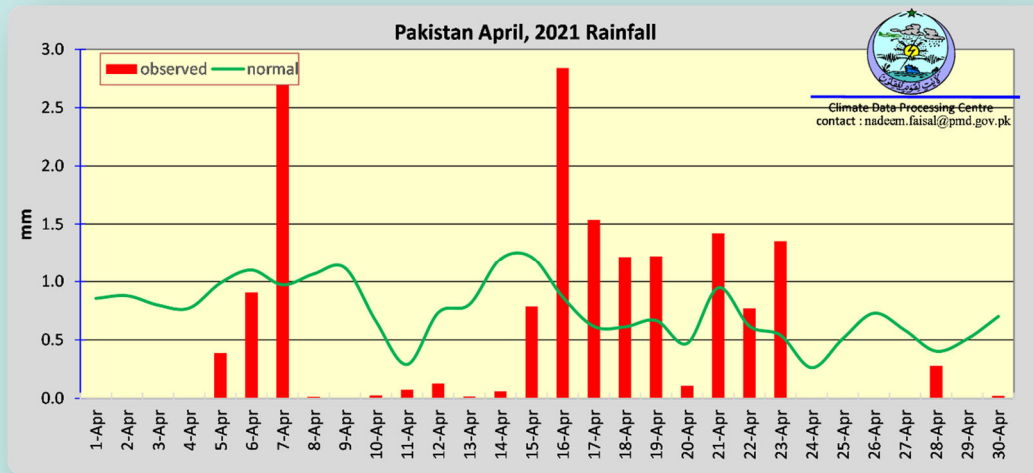
April 2021 area-weighted rainfall

	Rank (of 61)	Normal (mm)	Average (mm)	Departure (percent)	Comment
Pakistan	13	22.5	15.9	-29.4	----
Azad Jammu & Kashmir	17	79.6	56.0	-29.6	----
Balochistan	32	10.8	8.0	-26.5	----
Gilgit-Baltistan	31	36.1	24.9	-31.0	----
Khyber-Pakhtunkhwa	19	74.4	55.2	-25.8	----
Punjab	24	20.6	13.4	-34.8	----
Sindh	35	3.1	1.6	-47.5	----

Rank ranges from 1 (lowest) to 61 (highest).

Rainfall – Below normal rainfall over country

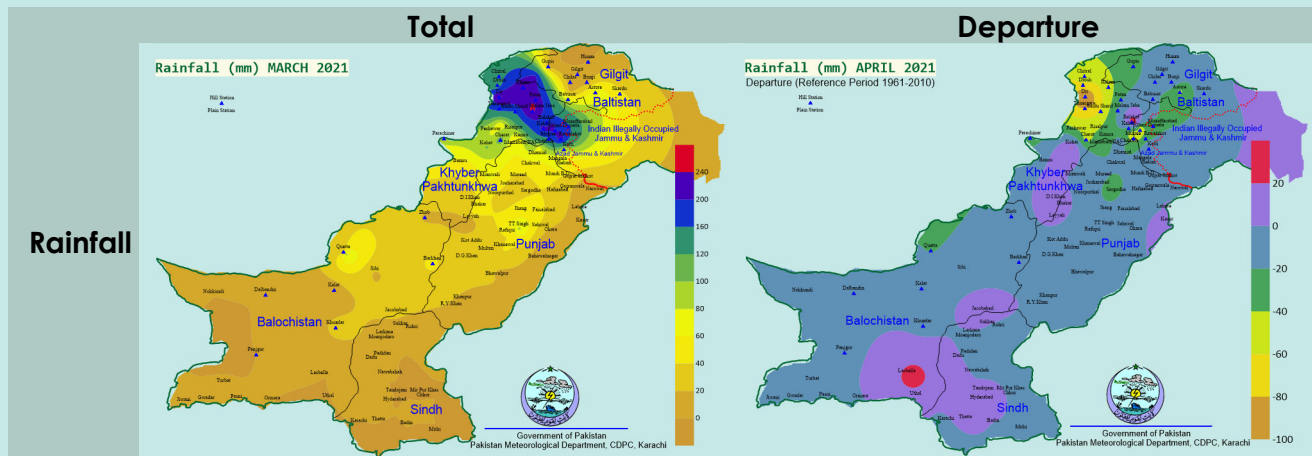
During April 2021, two significant rainfall events had occurred. The first spell lasted for only three days (5-7 April) while the second spell was relatively longer duration, 15- 23 April and brought substantial rainfall to major parts of country. The month of April has rainfall contribution of the order of 40% and 8% to the pre-monsoon season (AMJ) and annual rainfall respectively. April 2021 National rainfall was only 15.9 mm against its normal rain of 22.5 mm being 29.4% below normal.



On regional scale, large deficit of monthly rainfall were observed over all six administrative regions. Sindh (-48%), Balochistan (-27%), GB (-31%), KP (-26%), Punjab (-35%) & AJK (-30%) all got well-below normal rains. The wettest day of the month in country was 22nd, when Balakot (KP) recorded 66 mm of rain and same location was

the wettest place recording 152.0 mm rainfall during the month. The other chief amounts of month's rainfall were: Kalam (134.6 mm), Rawalakot (130 mm), Pattan (127.2 mm), Muzaffarabad (126.6 mm) and Malam Jabba (116 mm).

April 2021 rainfall maps

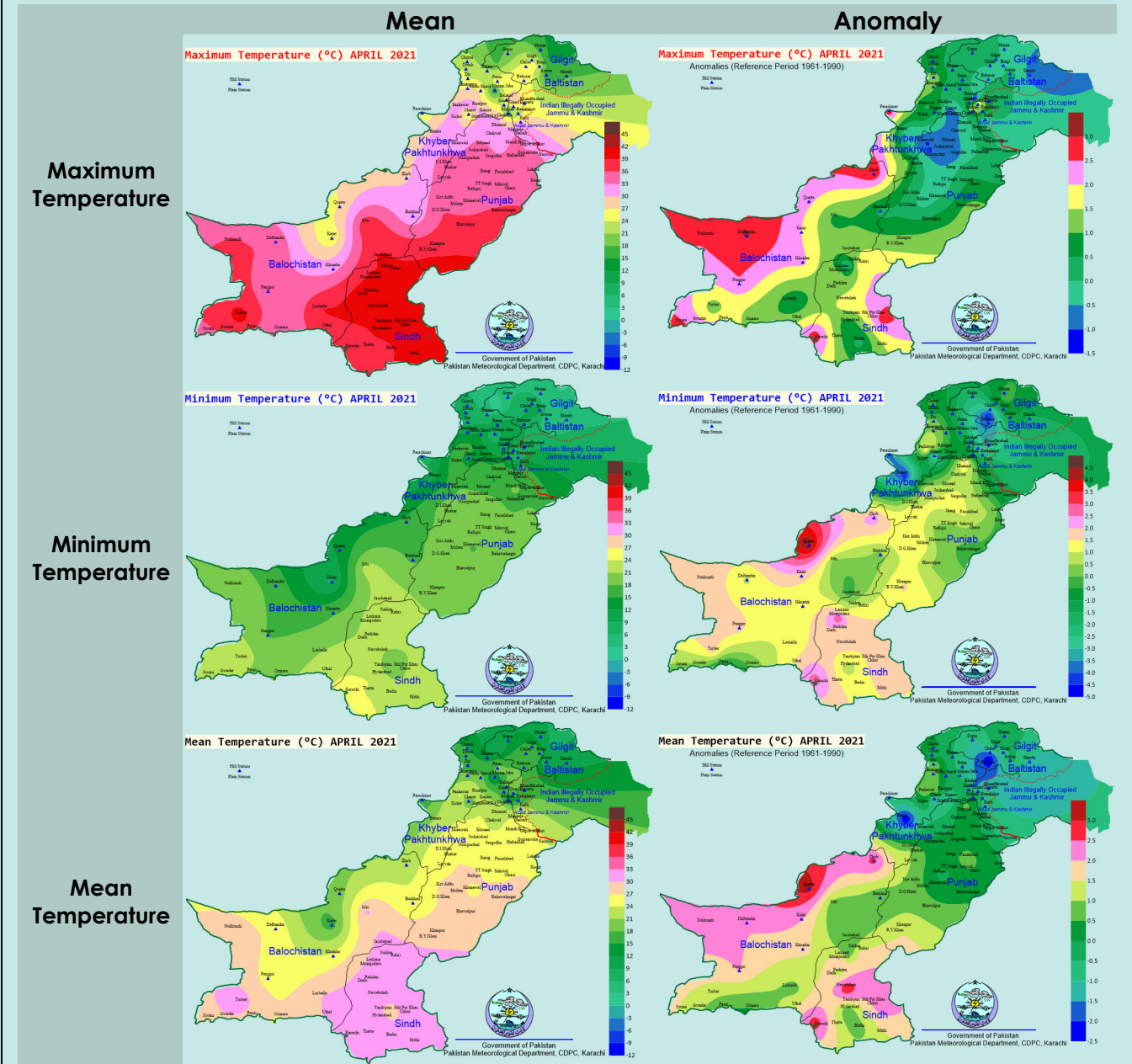


Temperatures – Abnormal warming

The national mean monthly temperature of April 2021 for Pakistan as a whole was 25.32 °C, being 0.69 °C warmer than monthly-average, placing it the 20th warmest month on record. The mean maximum (day) temperature at country-level was 33.11 °C, being 0.76 °C warmer than average of 32.35 °C. The night (minimum) temperature was 17.55 °C, being 0.64 °C warmer than country-average of 16.91 °C. On regional basis, all provinces recorded significantly warmer than normal monthly mean temperatures. The mean temperature anomalies of April were ± 2 °C over major parts of the country.

Mean Maximum temperatures anomalies were 0-2 °C over major parts of the country, importantly these being of relatively higher order around 3 °C and more prominent over western Balochistan and parts of Sindh, specially over Karachi Metropolitan area. The mean minimum temperature anomalies for the month were ± 2 °C over major parts of country with anomalies over Sindh & Western Balochistan regions being much higher than remaining parts of country. The hottest day of the month was at Sh. Benazirabad (Sindh) when it recorded 45.5 °C temperature on 4th April 2021. The coldest temperature of -3.0 °C of the month was recorded at Kalam (KP) on 3rd April 2021.

April 2021 Temperature maps



April 2021 Monthly Averages & Normals

Station	Pressure (mb)		Temperature (°C)			Vapour (mb)	Precipitation	
	Station Level	Sea Level	Mean	Maximum	Minimum	Pressure	Total (mm)	Days
Drosh	853.8	1501.7	15.9	23.0	9.3	6.4	49.2	8
	853.6	1496.3	16.8	23.6	10.7	7.9	99.2	12
Peshawar	973.6	1010.7	24.3	31.9	16.7	13.9	20.2	7
	967.4	1007.7	23.4	30.6	16.5	15.2	50.4	9.3
Parachinar	828.2	1506.5	13.9	24.1	6.0	11.8	71.0	11
	826.5	1487.3	15.4	21.3	8.5	8.5	96.5	13.5
Rawalpindi	953.5	1010.3	23.2	30.0	16.9	11.1	39.4	5
	950.6	1007.3	22.8	30.2	15.4	13.4	63.1	9.2
Sargodha	985.5	1006.2	27.1	34.5	20.1	15.8	5.4	2
	986.0	1006.9	26.6	34.2	18.4	15.8	29.6	6.9
Jhelum	982.0	1008.4	25.5	33.3	17.5	14.6	20.8	4
	980.3	1006.8	25.4	33.0	17.8	15.1	36.0	8
Sialkot	979.9	1008.8	24.5	32.8	16.1	13.5	14.5	4
	978.0	1006.5	25.2	32.4	17.2	15.0	33.0	6.1
Zhob	857.3	1479.1	22.2	29.6	15.5	8.3	19.0	3
	856.3	1468.5	20.4	27.2	13.2	8.2	31.2	3.1
D.I.Khan	988.8	1008.2	27.1	34.4	19.5	16.3	37.0	4
	987.0	1006.5	26.3	33.5	18.5	15.8	24.1	5.6
Lahore	984.4	1008.6	27.0	34.0	20.0	12.8	18.5	2
	982.3	1006.3	27.2	34.0	20.0	14.8	22.3	6.3
Quetta	842.5	1512.3	20.5	26.9	12.8	4.7	4.0	3
	839.9	1487.3	17.7	25.3	8.6	8.8	22.2	3.9
Multan	994.3	1008.6	28.6	35.3	20.8	13.8	2.7	1
	992.4	1006.3	27.8	35.6	19.5	15.6	14.6	4
Barkhan	889.6	1493.4	23.9	30.5	17.5	7.5	25.0	3
	887.3	1480.0	23.6	29.6	17.0	9.3	37.3	3.3
Nokkundi	931.7	1005.3	29.1	36.3	20.5	5.4	0.5	0
	931.8	1008.3	26.9	34.2	18.6	10.5	2.3	0.5
Dalbandin	915.9	1502.3	28.0	35.5	16.7	9.7	0.0	0
	914.9	1488.8	25.6	31.9	14.3	8.0	5.7	1
Jacobabad	1001.3	1007.5	31.0	39.4	22.1	14.7	12.0	3
	999.4	1005.6	30.9	38.2	22.3	15.2	2.1	0.7
Khanpur	997.3	1007.3	29.2	38.2	20.1	16.4	3.6	2
	995.7	1005.8	28.5	37.1	18.4	15.3	3.1	1.1
Panjgur	901.5	1493.7	26.8	33.7	17.8	12.6	0.0	0
	901.8	1493.4	24.8	31.5	16.4	6.4	8.6	0.9
Khuzdar	876.0	1494.6	25.2	32.0	17.6	7.0	8.2	2
	873.9	1470.7	23.7	29.9	16.1	4.1	17.1	1.7
Nawabshah	1004.1	1007.4	31.7	41.1	21.4	18.1	1.0	1
	1002.7	1007.3	30.2	39.6	19.5	19.7	2.6	0.2
Jiwani	1002.6	1009.1	28.7	34.4	22.1	26.0	0.0	0
	1002.2	1008.5	26.9	31.9	21.9	22.7	4.6	0.2
Pasni	1008.5	1009.1	27.6	35.2	19.3	20.1	0.0	0
	1007.4	1008.1	26.5	33.0	20.8	21.8	1.2	0.1
Hyderabad	1002.6	1007.4	31.6	39.5	23.7	15.5	17.0	1
	1002.6	1006.6	30.7	38.8	23.0	17.7	5.1	0.4
Chhor	1006.6	1007.3	32.2	41.8	22.1	17.3	0.0	0
	1005.5	1006.1	30.4	39.6	20.2	17.3	1.6	0.3
Karachi	1005.8	1008.4	30.9	37.1	25.1	22.9	0.0	0
	1005.3	1008.0	28.3	34.5	22.5	22.2	3.2	0.2

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

April 2021 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	22.7	28	9.7	6	30.3	28	5.5	7	11.4	7	16	3*
Peshawar	31.4	30	19.9	7	38.5	29	11.5	3	10.0	15	22	1
Parachinar	18.8	30	10.4	25	29.5	10	4.0	16	40.0	18	15	1
Rawalpindi	30.3	29	17.4	22	38.0	28	11.8	3	11.5	23	34	1
Sargodha	33.6	28	23.0	7	42.0	28	14.2	7	2.6	23	15	1
Jhelum	31.6	29	21.0	22	41.3	29	11.1	3	7.2	23	14	1
Sialkot	31.0	28*	18.6	22	40.5	28*	11.3	3	6.0	23	14	1
Zhob	27.4	28*	13.9	16	35.5	28*	11.0	21	11.0	16	15	4*
D.I.Khan	35.1	29	19.0	16	44.0	29	15.0	23	26.0	17	14	22
Lahore	33.5	28	21.3	23	41.0	29	13.6	23	15.7	23	16	1
Quetta	25.0	27	15.5	7	31.5	27	6.5	1	2.0	16	30	17*
Multan	35.6	29	22.5	20	44.1	29	14.3	7	2.0	7	18	16
Barkhan	28.0	29	17.4	20	35.5	27	13.5	16*	12.0	21	4	4*
Nokkundi	34.4	29	23.4	1	40.5	28	14.5	1*	0.5	15	20	14
Dalbandin	32.1	27*	23.6	15	39.5	28	11.0	1	0.0	0	10	4*
Jacobabad	35.0	27	27.6	20	44.5	27	19.5	8	10.0	16	12	23
Khanpur	34.4	29	24.1	20	44.0	27	12.6	1	1.4	21	24	16
Panjgur	30.5	27	21.6	1	38.0	27	13.7	1	0.0	0	16	14*
Khuzdar	27.6	25	23.1	19	35.0	4	15.5	1	7.0	28	18	15
Nawabshah	34.8	27	29.1	7*	45.5	4	19.0	8*	1.0	16	20	15
Jiwani	30.8	29	27.0	10*	38.0	1*	19.0	8	0.0	0	12	3*
Pasni	31.9	1	26.3	5	42.0	2	17.0	13	0.0	0	22	30
Hyderabad	34.4	26	28.9	14	42.6	4	21.0	1	17.0	19	28	4
Chhor	34.6	26	29.9	14	45.0	26	14.5	1	0.0	0	12	22
Karachi	33.4	1	28.5	14	43.6	3	21.0	2	0.0	0	14	5*

* means value occurred multiple times

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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Published on 3rd May, 2021