



Pakistan's Monthly Climate Summary October, 2020

Overview

- National rainfall for the month of October was 99% below normal.
- October 2020 ranked as driest month on record since 1961 equaling the previous record rain-deficient month in 2007.
- Major parts of the country had not even recorded single drop of rainfall during the whole month
- Kalam recorded maximum amount of 19mm monthly rainfall.
- Pakistan mean temperature was below normal at $-0.18\text{ }^{\circ}\text{C}$.
- Pakistan mean maximum temperature was $0.11\text{ }^{\circ}\text{C}$ lower than average.
- National mean minimum temperature was $0.34\text{ }^{\circ}\text{C}$ cooler than average.

National weather extremes

Hottest day	42.5 °C	at Sh. Benazirabad (Sindh) on the 11 th
Coldest day	9.0 °C	at Hunza (GB) on the 25 th
Coldest night	-4.0 °C	at Kalat (Balochistan) on the 13 th
Warmest night	28.0 °C	at Karachi Airport (Sindh) on the 18 th
Wettest day	13.0 mm	at Kalam (KP) on the 14 th
Wettest month	19.2 mm	at Kalam (KP)

Synoptic Summary

With the start of the month, a low-pressure area was found located over Kashmir with another low over South Punjab and a shallow low over South Balochistan. The conditions by and large remained so through the entire first week, till 7th Oct with a fresh low developed over Khyber Pakhtunkhwa (KP). The low-pressure area over KP then got weekend into a trough but the one over Balochistan and south Punjab persisted till 10 Oct. The trough over KP was again found strengthened into a low that persisted for following three days and another significant feature, a depression (strong low-pressure area) developed over southeast India on 13th Oct. The following day, low over KP found weekend into a trough over there and depression tracked towards the East-central Arabian Sea and weekend into a well-marked low.

The conditions persisted through the following 3 days. The well-marked low over the East-central Arabian Sea accentuated into depression again on 18th Oct and a feeble low was spotted over southeast Sindh with low over KP and Kashmir found persisting. The mentioned synoptic features over Pakistan areas persisted till 22 Oct and depression over east-central

Arabian Sea moved westward first over central Arabian Sea and then further west/southwestward. The insignificant low over KP-Kashmir areas and a feeble low/trough over southeast Sindh persisted throughout the following week until dry-continental air taken over the country on 30-31 Oct.

Rainfall

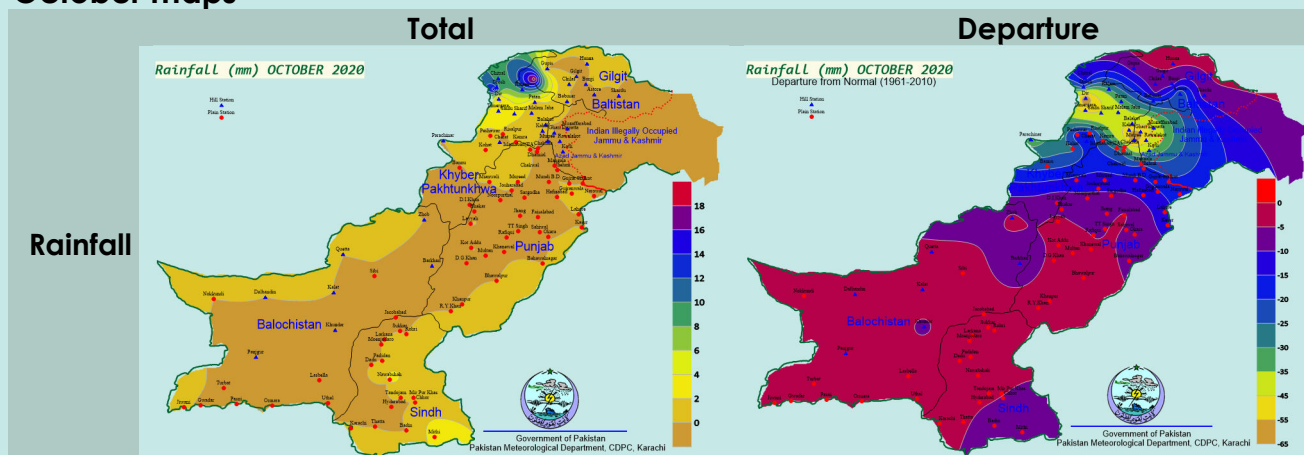
October 2020 was the driest month on record since 1961 equaling the previous record rain-deficient month in 2007. The national rainfall for the month was largely deficient, 97% below normal contrasting with the previous month of September 2020 which was one of the rainiest month with 89% above average rain recorded. Major parts of the country had not even recorded single drop of rainfall during the whole month except very few parts of upper KP region. The significant monthly total rainfalls were 19mm at Kalam, 15mm at Mirkhani, 11mm at Drosh & 8mm at Chitral. It is pertinent to note that three driest October during last sixty years happened in past five years, the other two were 2016 & 2017.

October area-weighted rainfall

	Rank (of 60)	Normal (mm)	Average (mm)	Departure (percent)	Comment
Pakistan	01	8.0	0.2	-97.3	Driest month on record
Azad Jammu & Kashmir	03	26.5	2.2	-91.6	One of the driest month on record
Balochistan	01	3.0	0.0	-100.0	Driest month on record
Gilgit Baltistan	02	8.8	0.1	-99.1	One of the driest month on record
Khyber Pakhtunkhwa	02	26.4	1.3	-95.2	One of the driest month on record
Punjab	01	8.1	0.0	-99.9	Driest month on record
Sindh	01	4.3	0.0	-100.0	Driest month on record

Rank ranges from 1 (lowest) to 60 (highest).

October maps



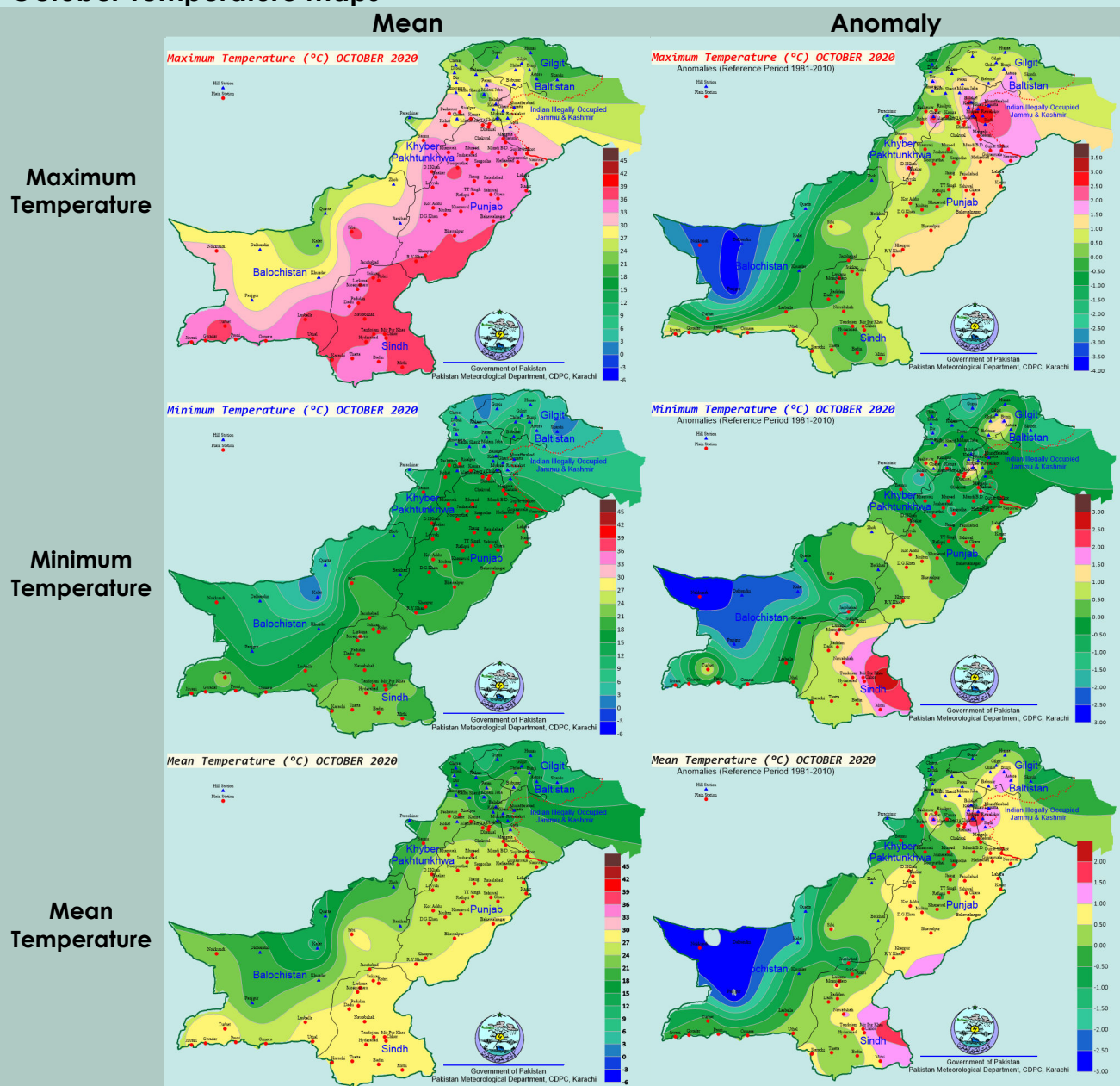
Temperatures

The national mean temperature for Pakistan as a whole was 0.18 °C cooler than average for October. The mean maximum (day) temperature of the country was 0.11 °C lower than average. The night's temperatures (minimum) for October were lower than country average at -0.34 °C.

The monthly mean temperature of all the regions were warmer than averages except Balochistan, which recorded -1.16°C anomaly. The mean temperature anomalies of October were $\pm 1^{\circ}\text{C}$ over major parts of the country except western parts of Balochistan province where it were 2-3 $^{\circ}\text{C}$ lower than average.

Mean Maximum temperatures were near average over major parts of the country except western parts of Balochistan and AJK & adjoining areas where it stood below & above average respectively. The mean minimum temperature for the month was above average over Sindh by 2-3 $^{\circ}\text{C}$ and below averages over Balochistan whereas in remaining parts of country it was near average.

October Temperature maps



October Monthly Averages & Normals

Station	Pressure (mb)		Temperature (°C)			Vapour (mb)	Precipitation	
	Station Level	Sea Level	Mean	Maximum	Minimum	Pressure	Total (mm)	Days
Drosh	853.9	1502.3	17.5	26.3	10.4	7.1	11.0	5
	855.3	1515.5	18.3	26.7	11.6	7.0	31.1	5.1
Peshawar	972.8	1009.9	23.3	32.4	15.3	16.9	0.8	0
	970.1	1010.5	22.9	31.6	15.9	16.0	19.0	3.2
Parachinar	826.6	1490.8	13.0	21.0	7.8	7.4	0.0	0
	829.4	1516.1	16.3	23.3	8.8	7.3	31.8	5.8
Rawalpindi	952.9	1009.7	23.6	32.2	15.8	13.6	0.0	0
	952.9	1010.9	21.8	30.9	14.0	15.0	29.8	3.8
Sargodha	----	----	----	----	----	----	----	--
	989.4	1010.6	25.1	33.5	17.4	18.1	9.7	1.9
Jhelum	981.7	1008.3	24.1	34.3	15.9	18.4	0.0	0
	983.5	1010.3	23.8	32.7	16.6	17.8	18.5	3.3
Sialkot	979.3	1008.1	24.5	32.6	16.7	19.0	0.0	0
	981.8	1010.6	23.3	31.2	16.2	18.8	18.2	2.2
Zhob	857.4	1479.9	21.0	27.8	12.6	4.9	0.0	0
	859.0	1494.9	20.4	28.0	12.1	7.8	6.0	0.9
D.I.Khan	988.4	1007.9	26.1	35.0	17.4	18.6	0.0	0
	990.3	1009.9	24.8	33.2	17.1	17.8	5.8	1.6
Lahore	984.3	1008.4	26.7	33.5	20.0	16.5	0.0	0
	985.9	1010.2	25.4	32.8	18.5	18.1	14.8	2
Quetta	844.0	1528.9	15.0	23.3	5.2	3.7	0.0	0
	843.0	1518.6	15.8	25.5	4.7	6.2	6.5	1.1
Multan	994.1	1008.4	27.1	34.4	19.5	16.9	0.0	0
	996.1	1010.2	25.8	34.4	18.2	18.3	5.2	0.9
Barkhan	889.1	1487.1	22.9	30.4	15.7	6.5	0.0	0
	891.3	1505.1	22.7	29.8	16.0	9.4	8.9	0.5
Nokkundi	935.7	1011.4	22.4	30.4	13.7	3.9	0.0	0
	935.6	1010.5	24.7	33.1	16.0	8.2	0.3	0.1
Dalbandin	919.6	1520.1	20.8	29.5	9.8	6.3	0.0	0
	918.4	1533.8	23.0	31.4	10.5	5.8	0.1	0.2
Jacobabad	1002.1	1008.4	27.7	34.7	18.4	18.7	0.0	0
	1003.4	1009.7	27.7	35.1	20.2	18.8	2.2	0.1
Khanpur	997.6	1007.7	26.7	35.9	17.6	20.3	0.0	0
	999.4	1009.6	25.7	34.7	16.5	18.6	2.6	0.5
Panjgur	904.6	1510.8	20.2	27.2	12.1	5.7	0.0	0
	904.8	1513.1	22.9	30.3	14.0	5.8	2.8	0.3
Khuzdar	877.5	1506.7	22.5	29.6	14.3	5.3	0.0	0
	876.5	1494.7	22.7	29.9	13.8	3.7	7.4	0.5
Nawabshah	1005.0	1008.3	28.8	38.2	20.0	19.5	0.0	0
	1006.3	1010.2	27.6	37.1	18.2	20.6	4.9	0.1
Jiwani	1003.0	1009.5	28.3	34.6	19.5	15.1	0.0	0
	1004.7	1011.1	27.1	32.7	21.5	24.2	1.5	0.2
Pasni	1008.8	1009.4	28.6	35.0	19.3	13.6	0.0	0
	1009.3	1010.2	27.1	33.7	20.2	20.6	3.4	0.1
Hyderabad	1002.8	1007.7	29.7	36.3	23.0	17.5	0.0	0
	1005.8	1009.7	29.0	36.8	22.4	18.7	2.9	0.2
Chhor	1007.0	1007.7	29.5	38.2	21.6	21.0	0.0	0
	1008.7	1009.5	28.0	37.3	18.5	19.4	6.2	0.4
Karachi	1005.7	1008.4	29.6	36.2	22.7	19.3	0.0	0
	1008.0	1010.3	27.9	35.1	21.4	21.0	2.3	0.3

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

Extreme values of month

STATION	Mean Temperature (°C)				Temperature (°C)				Highest (mm & knots)			
	Highest	Date	Lowest	Date	Highest	Date	Lowest	Date	Rain	Date	Wind Speed	Date
Drosh	25.1	23	16.1	1	35.2	22	10	30	14.4	1	15	28
Peshawar	30.5	11*	23.3	1	38.6	20	18.0	1	28.0	2	6	4
Parachinar	19.8	11	13.5	4	30.0	11	8.0	5	14.0	4	3	1*
Rawalpindi	30.1	12	23.9	1	36.7	21*	19.1	30	33.0	5	18	26
Sargodha	----	--	----	--	----	--	----	--	----	--	----	--
Jhelum	31.5	12*	25.8	26	38.5	17	20.3	29*	17.8	7	8	6
Sialkot	31.6	19	27.3	4	36.8	19*	21.3	29	9.0	4	8	8
Zhob	29.8	9	23.8	30	35.5	14	17.5	27*	0.0	0	15	30
D.I.Khan	34.0	14	24.0	1	41.0	17	22.5	1*	70.0	2	6	28
Lahore	33.9	18	25.9	4	38.2	18	24.0	4	48.1	4	6	51
Quetta	25.0	5*	18.6	26	32.0	4*	9.5	26*	0.0	0	20	28*
Multan	34.5	13	25.1	1	40.0	13	22.4	1	52.1	1	14	25
Barkhan	29.6	20	24.8	29	36.5	20	18.0	28	2.0	1	4	1
Nokkundi	32.3	5*	25.4	30	39.5	5	17.0	24	0.0	0	22	1*
Dalbandin	32.1	6	23.5	30	39.5	6*	13.0	27	0.0	0	10	22
Jacobabad	34.4	14	30.4	1	39.0	14	24.0	1	1.0	1	4	15
Khanpur	34.3	14	27.5	1	41.3	21	23.0	1*	10.5	1	6	2*
Panjgur	28.8	7	22.9	30	36.5	6*	18.0	5*	0.0	0	20	30
Khuzdar	30.0	11	25.4	26	36.0	9*	18.5	30	0.0	0	4	1*
Nawabshah	35.4	22	29.4	4	44.0	24	24.0	30	12.2	1	12	25
Jiwani	33.0	23	28.5	2*	41.5	23	21.5	29	0.0	0	16	23
Pasni	32.5	23	27.1	28	41.0	23	20.5	25	0.0	0	14	6*
Hyderabad	33.5	21	28.4	4	41.0	22*	25.0	1*	13.0	1	22	27
Chhor	34.1	22	29.0	4	40.5	22*	24.0	1	83.0	1	8	1*
Karachi	32.6	13*	29.8	29	38.5	22	25.8	28	0.0	0	18	7

* 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 Pakistan weather events occurred in Pakistan during the month. The summary contains detail 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 results contained above 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 while normal period for temperature is 1981-2010.

Contact

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

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