

TEMPERATURE REGIME DURING JUNE, 2012

Temperature plays vital role in the growth and development of crops. Thermal regime in this month showed mostly warming trend in the agricultural plains of the country.

Mean daily temperature remained normal to above normal by 1 to 3°C in the agricultural plains of lower KPK, Potohar region and agricultural plains of central and southern Punjab. Whereas it remained below normal by 1-2°C at upper KPK represented by Peshawar and high elevated plains of Gilgit Baltistan and Quetta valley. Mean daily temperature ranged 32- 34°C in Khyber Pakhtoonkhawa, 31-35°C in Potohar region and 35-36°C in the remaining agricultural plains of Punjab. In Sindh it ranged 33 to 36°C, 19 to 24°C in Gilgit Baltistan region and it was observed 24°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.

The day time temperature represented by mean maximum remained normal to above normal by 1-3°C in most of the agricultural plains of the country except Gilgit Baltistan region and Quetta valley where it dropped by 2 to 3°C below normal. The highest maximum temperature in the agricultural plains of the country was recorded as 46.2 °C at Sargodha and Multan each.

The night time temperature represented by mean minimum remained normal to above normal by 1-2°C in most of the agricultural plains of Punjab and remained below normal at KPK, Rawalpindi division in Potohar region and Gilgit Baltistan region where by 2-3°C. The lowest minimum temperature was recorded as 7.6°C at Skardu.

Maximum number of stress days with maximum temperature greater or equal to 35°C and R.H less than or equal to 30% was observed 30 at Kamra, followed by 22 days Jhelum, 13 days at Lahore and so on. Maximum number of stress days with maximum temperature greater or equal to 40°C and R.H less than or equal to 30% was observed 21 at Jhelum, followed by 13 days at Lahore, 9 days at Multan and so on. The data indicates that the thermal stress condition in most of the agricultural plains in the country is more severe than previous season and any delay in monsoon rains may produce moisture stress to the standing crops.

Agricultural soils showed cooler trend in the shallow as well as deep layers but the drop was observed more significant at shallow and intermediate layers (major root zone). In Rawalpindi, Faisalabad, Tandojam and Quetta regions soil temperature dropped below normal in spite of warming trend of the atmosphere. The drop in soil temperature was more significant in the soils of Faisalabad than remaining regions.

From the general analysis of soil behavior it has been observed that although this June remained comparatively warmer and drier than the previous Kharif season but soil temperature data reveal that soil moisture condition is still in satisfactory range, which may be further improved due to coming monsoon season.

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STATION	TEMPERATURE (°C)					NUMBER OF STRESS DAYS WITH		
	DAILY	MAXIMUM		MINIMUM		MINIMUM TEMP ≤ 0°C	MAX. TEMP ≥ 35°C & R.H. ≤ 30 %	MAX. TEMP ≥ 40°C & R.H. ≤ 30 %
	MEAN	MEAN	HIGHEST	MEAN	LOWEST			
PESHAWAR	32.5 (33.1)	40.8 (40.4)	44.6 (49.0)	24.1 (25.7)	20.8 (13.0)	0	07	07
D.I. KHAN	34.2 (34.2)	42.3 (41.5)	45.5 (50.0)	26.1 (26.8)	22.0 (16.0)	0	05	05
KAMRA	30.9 ---	39.0 ---	44.0 ---	22.8 ---	21.0 ---	0	30	04
RAWALPINDI	30.8 (31.2)	39.7 (38.7)	45.0 (46.0)	21.9 (23.7)	16.0 (15.0)	0	05	04
JHELUM	34.9 (33.2)	43.2 (40.5)	46.8 (49.0)	26.6 (25.8)	21.0 (18.0)	0	22	21
SARGODHA	35.4 (34.2)	42.9 (41.7)	46.2 (51.0)	27.9 (26.7)	23.5 (16.0)	0	05	05
LAHORE	35.3 (33.9)	41.8 (40.4)	45.0 (48.0)	28.7 (27.4)	24.0 (18.0)	0	13	13
FAISALABAD	34.5 (33.7)	41.7 (40.5)	45.0 (48.0)	27.3 (26.9)	22.5 (17.0)	0	00	00
MULTAN	35.9 (35.5)	42.2 (42.3)	46.2 (49.0)	29.6 (28.6)	26.2 (20.0)	0	09	09
KHAN PUR	35.0 (34.8)	42.0 (42.5)	44.5 (48.0)	28.0 (27.2)	24.5 (13.0)	0	00	00
QUETTA	24.3 (25.6)	32.4 (35.3)	34.4 (41.3)	16.1 (15.9)	11.6 (5.0)	0	00	00
ROHRI	36.2 (36.0)	43.6 (43.6)	46.0 (50.0)	28.8 (28.4)	25.0 (19.0)	0	00	00
TANDOJAM	33.0 (33.4)	38.6 (38.9)	43.5 (43.4)	27.3 (27.7)	26.0 (24.6)	0	00	00
GILGIT	23.5 (24.8)	32.6 (34.3)	37.5 (43.5)	14.3 (15.2)	8.0 (5.1)	0	00	00
SKARDU	18.9 (21.0)	26.3 (28.4)	33.6 (40.0)	11.4 (13.7)	7.6 (4.0)	0	00	00

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (CM)					
		5	10	20	30	50	100
RAWALPINDI	8.AM	27.9 (30.0)	36.8 (29.3)	29.8 (30.5)	30.2 (31.1)	29.6 (30.5)	27.2 (27.2)
	2.PM	38.0 (43.4)	35.2 (38.3)	31.8 (33.1)	30.8 (31.3)	29.6 (30.2)	27.2 (27.3)
	5.PM	36.6 (40.3)	34.6 (38.4)	31.9 (34.6)	30.8 (32.3)	37.8 (30.3)	27.2 (27.3)
FAISALABAD	8.AM	31.2 (33.8)	31.1 (33.3)	32.6 (35.0)	33.4 (35.8)	32.9 (36.2)	30.7 (33.7)
	2.PM	42.6 (48.1)	38.9 (43.9)	33.0 (37.5)	33.4 (36.2)	32.7 (35.9)	30.7 (33.8)
	5.PM	41.6 (44.9)	39.8 (43.1)	36.6 (39.2)	34.1 (37.0)	32.6 (36.1)	30.7 (32.8)
TANDOJAM	8.AM	32.4 (33.2)	33.4 (33.9)	34.1 (34.3)	34.1 (35.3)	33.4 (34.5)	30.6 (34.4)
	2.PM	36.1 (39.1)	36.3 (36.9)	35.0 (35.0)	34.0 (35.2)	33.6 (34.4)	30.8 (32.7)
	5.PM	37.3 (39.9)	37.8 (38.2)	35.5 (36.1)	34.1 (35.4)	33.5 (34.4)	30.7 (32.8)
QUETTA	8.AM	23.7 (24.5)	23.5 (23.8)	26.1 (26.3)	20.1 (27.3)	25.8 (26.7)	24.8 (23.2)
	2.PM	35.0 (44.1)	31.5 (35.6)	27.3 (28.1)	20.3 (27.0)	25.8 (26.6)	24.9 (23.3)
	5.PM	34.8 (41.0)	32.6 (36.8)	29.2 (30.8)	21.5 (27.6)	25.8 (26.6)	25.0 (23.2)