

TEMPERATURE REGIME DURING JULY, 2012

Temperature plays vital role in the growth and development of crops. Thermal regime in this month remained normal to above normal in most of the agricultural planes of the country. It is mainly due mostly clear skies and below normal rain reported in the agricultural planes of the country during the month.

Mean daily temperature remained normal above normal by 1-3°C in most of the agricultural planes of KP and Punjab and it remained mostly normal in the agricultural plains of GB, Sindh and high elevated agricultural plains of Balochistan represented by Quetta. Mean daily temperature was observed 33°C in Khyber Pakhtoonkhawa, ranged 32-33°C in Potohar plateau, in remaining parts of Punjab it ranged 33 to 35°C, in Sindh it ranged 32 to 35°C, in Gilgit Baltistan region it ranged 24 to 27°C and it was rounded to 27°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.

The day time temperature represented by mean maximum also remained normal to above normal by 1-4°C in most of the agricultural plains of the country mainly due to dry weather/clear skies during day time in the agricultural plains for most of the days during the month. The highest maximum temperature in the agricultural planes of the country was recorded 46.0°C at D.I.Khan.

The night time temperature represented by mean minimum remained normal in the agricultural plains of KP and Sindh, above normal by 1-3°C in most of the agricultural planes of Punjab and observed below normal by 1-4°C in Quetta valley and GB region. The lowest minimum temperature was recorded 12.5°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 for whole month at Peshawar due to dry weather/clear skies observed during the month followed by 15 days at Quetta, 4 days at Skardu 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 16, observed at Peshawar, followed by 3 days at Kamra, 2 days at Rawalpindi and so on.

Agricultural soils showed normal to warmer trend in most of the agricultural plains of the country. Agricultural soils showed mostly normal to above normal trend in the rainfed Potohar region and Quetta valley both at shallow as well as at deep layers. The rise was observed more significant at Potohar than Quetta. In the agricultural soils of central Punjab represented by Faisalabad, soil temperature was observed 2-3°C below normal both at shallow and deep layers. Whereas as at lower Sindh represented by Tandojam, agricultural soils showed normal to warmer trend at major root zone and remained normal to below normal at deep layers.

From the general analysis of soil behavior it is concluded that soil moisture has condition is better at irrigated plains but show some deficiency at rainfed Potohar region and Quetta valley due to below normal rains received during the month. Coming monsoon rains may improve soil moisture condition in the coming month.

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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	33.2 (32.2)	39.7 (37.7)	44.2 (50.0)	26.6 (26.6)	28.6 (18.3)	0	31	16
D.I. KHAN	32.9 (32.7)	39.3 (38.5)	46.0 (49.0)	26.4 (26.9)	21.5 (18.6)	0	0	0
KAMRA	31.5 ---	37.5 ---	37.5 ---	25.4 ---	20.5 ---	0	0	3
RAWALPIND	32.6 (29.7)	38.9 (35.0)	45.0 (44.4)	26.2 (24.3)	22.0 (17.8)	0	0	2
JHELUM	32.5 (30.9)	38.4 (35.9)	45.5 (47.0)	26.6 (25.8)	21.5 (19.4)	0	1	1
SARGODHA	33.2 (32.5)	38.4 (37.8)	45.7 (47.0)	27.9 (27.2)	22.4 (18.0)	0	0	0
LAHORE	33.0 (31.5)	38.3 (36.1)	44.3 (48.0)	27.7 (26.9)	22.8 (20.0)	0	0	0
FAISALABAD	33.3 (32.1)	38.6 (37.1)	44.8 (47.0)	27.9 (27.1)	22.5 (19.0)	0	0	0
MULTAN	34.9 (33.9)	40.4 (39.2)	45.2 (47.2)	29.4 (28.7)	23.7 (21.1)	0	0	1
KHAN PUR	35.0 (33.6)	40.0 (39.9)	44.1 (46.7)	29.9 (27.3)	25.0 (17.0)	0	0	0
QUETTA	27.4 (27.9)	35.6 (35.9)	38.2 (41.1)	16.5 (19.9)	16.5 (9.0)	0	15	0
ROHRI	35.2 (34.4)	41.9 (40.8)	45.0 (47.0)	28.5 (27.9)	26.0 (17.5)	0	0	0
TANDOJAM	32.1 (31.6)	37.3 (36.3)	40.0 (39.8)	26.9 (26.9)	26.0 (24.8)	0	0	0
GILGIT	27.3 (27.5)	37.2 (36.1)	40.5 (45.0)	17.3 (18.8)	14.5 (12.0)	0	1	0
SKARDU	24.3 (24.0)	32.6 (31.4)	36.4 (41.0)	15.9 (16.7)	12.5 (8.0)	0	4	0

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (cm)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	29.9 (28.8)	30.7 (28.8)	32.3 (30.0)	32.8 (30.7)	32.0 (30.5)	30.2 (28.5)
	2 PM	38.1 (37.9)	35.8 (34.8)	33.7 (31.6)	33.6 (30.7)	32.0 (33.7)	30.2 (38.5)
	5 PM	37.4 (36.2)	35.8 (35.2)	33.9 (32.8)	33.5 (31.4)	32.0 (30.3)	30.2 (28.5)
	8 AM	31.6 (32.8)	31.6 (32.5)	33.2 (34.2)	33.3 (35.1)	33.1 (35.4)	31.6 (34.5)
FAISALABAD	2 PM	38.9 (43.2)	36.9 (40.3)	34.4 (36.6)	33.4 (35.4)	32.9 (35.5)	31.6 (34.5)
	5 PM	38.0 (31.4)	37.3 (40.3)	35.3 (37.8)	33.9 (36.1)	32.8 (35.5)	31.6 (34.5)
	8 AM	32.2 (32.3)	33.5 (32.9)	34.6 (33.4)	34.5 (35.1)	34.0 (34.3)	31.3 (33.0)
TANDOJAM	2 PM	38.8 (37.5)	36.6 (36.0)	35.4 (34.8)	34.3 (34.6)	33.8 (34.2)	31.5 (33.1)
	5 PM	39.8 (38.7)	38.0 (37.2)	35.8 (35.5)	34.5 (34.8)	33.9 (34.2)	31.5 (33.1)
	8 AM	27.2 (25.8)	27.0 (25.8)	29.7 (29.8)	23.5 (29.2)	29.2 (28.7)	28.2 (25.9)
QUETTA	2 PM	39.6 (42.0)	35.2 (36.2)	30.7 (29.8)	23.7 (28.7)	29.2 (28.4)	28.4 (25.8)
	5 PM	39.9 (41.0)	37.0 (37.7)	32.3 (31.5)	24.5 (29.5)	29.1 (28.5)	28.5 (25.9)