

TEMPERATURE REGIME DURING SEPTEMBER, 2012

Temperature plays vital role in the growth and development of crops. Thermal regime in this month remained cooler than normal in most of the agricultural plains of the country. The main reason for this trend is the cloudy/rainy weather which prevailed in most parts of the country during the month.

Mean daily temperature remained normal to below normal by 1 to 2°C in all agricultural plains of the country. Mean daily temperature ranged 27 to 29°C in Khyber Pakhtoonkhawa, 26 to 28°C in Potohar plateau, 29 to 30°C in remaining parts of Punjab, 30 to 31°C in agricultural plains of Sindh, 18 to 22°C in Gilgit Baltistan region and it was observed 20°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.

The day time temperature represented by mean maximum also remained below normal by 1-3°C in all agricultural plains of the country. The highest maximum temperature in the agricultural plains of the country was recorded 42°C at Rohri.

The night time temperature represented by mean minimum showed mixed trend in the country. It remained normal to slightly below normal by 1°C in the agricultural plains of KP, Potohar region, Lahore in Punjab, Tandojam in lower Sindh and Skardu in Gilgit Baltistan. Whereas it remained above normal by 1-2°C in most of the agricultural plains of Punjab, upper Sindh represented by Rohri and high elevated agricultural plains of Balochistan represented by Quetta. The lowest minimum temperature was recorded 6.1°C at Skardu.

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 only a single day in Skardu and number of stress days with maximum temperature greater or equal to 40°C and R.H. less than or equal to 30% was nil in all agricultural plains of the country due to cloudy/rainy atmosphere observed there.

Agricultural soils showed mostly normal to cooler trend in most of the agricultural areas of the country except Potohar region represented by Rawalpindi division and Quetta valley where soil temperature remained below normal at major root zone but normal to slightly above normal (by 1°C) at deep layers. In Faisalabad and Tandojam region, soil temperature at root zone as well as in deep layers remained normal to below normal. In shallow layers the drop in temperature was more pronounced than deep layers.

From the general analysis of soil behavior in this month, it is concluded that moisture has penetrated more in deep layers as compared to the previous months which indicates that the situation of available soil moisture content has improved much due to above normal rains in most of the agricultural plains during the month. Overall condition of moisture content is satisfactory for sowing of coming wheat and other seasonal crops and vegetables especially in rainfed areas of the country. Therefore farmers are advised to cultivate Rabi crops well in time so that soil moisture stored due to monsoon rains in September may be fully utilized especially in rainfed areas of the country.

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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	26.9 (28.9)	31.6 (35.0)	36.5 (43.0)	22.2 (22.7)	18.0 (13.3)	0	0	0
D.I. KHAN	28.6 (30.2)	33.9 (36.7)	38.7 (44.0)	23.3 (23.8)	18.8 (15.8)	0	0	0
KAMRA	26.2 ---	30.7 ---	37.0 ----	21.7 ----	18.0 ---	0	0	0
RAWALPINDI	26.5 (27.0)	32.4 (33.5)	36.0 (38.1)	20.6 (20.6)	17.0 (13.3)	0	0	0
JHELUM	28.5 (29.0)	33.6 (35.0)	36.8 (41.0)	23.4 (23.0)	19.4 (15.0)	0	0	0
SARGODHA	29.5 (30.0)	34.0 (36.3)	38.7 (42.0)	24.9 (23.7)	22.4 (14.4)	0	0	0
LAHORE	28.9 (29.7)	33.5 (35.0)	36.2 (43.0)	24.3 (24.4)	20.7 (16.7)	0	0	0
FAISALABAD	29.3 (29.7)	34.3 (35.7)	38.5 (43.0)	24.2 (23.7)	21.0 (16.0)	0	0	0
MULTAN	30.4 (31.0)	35.0 (37.2)	40.3 (43.0)	25.8 (24.9)	22.7 (16.7)	0	0	0
KHAN PUR	30.3 (30.1)	35.2 (37.0)	40.1 (43.0)	25.3 (23.1)	22.0 (14.8)	0	0	0
QUETTA	20.4 (21.1)	28.4 (31.4)	34.0 (38.3)	12.3 (10.9)	6.5 (-0.6)	0	0	0
ROHRI	31.2 (31.4)	35.8 (38.0)	42.0 (43.3)	26.5 (24.9)	24.0 (16.5)	0	0	0
TANDOJAM	29.8 (31.1)	34.6 (36.8)	38.0 (45.0)	24.9 (25.3)	21.5 (18.0)	0	0	0
GILGIT	21.5 (22.1)	28.1 (31.6)	38.0 (40.6)	14.9 (12.7)	9.0 (4.4)	0	0	0
SKARDU	17.6 (19.5)	24.0 (27.0)	36.4 (37.7)	11.1 (12.0)	6.1 (2.6)	0	1	0

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (cm)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	25.1 (25.0)	25.4 (25.2)	26.5 (26.7)	26.9 (27.5)	27.5 (28.0)	28.0 (27.7)
	2 PM	30.5 (32.3)	28.7 (30.4)	28.0 (27.8)	27.7 (27.6)	27.5 (27.8)	28.0 (27.7)
	5 PM	29.7 (30.6)	28.5 (30.7)	28.3 (28.8)	27.5 (28.1)	27.5 (27.9)	28.0 (27.4)
FAISALABAD	8 AM	27.6 (29.4)	27.7 (29.2)	29.3 (31.2)	30.2 (32.3)	30.7 (33.6)	30.7 (33.2)
	2 PM	33.6 (41.2)	32.2 (38.3)	30.8 (34.1)	30.2 (32.6)	30.5 (32.1)	30.7 (33.2)
	5 PM	32.6 (38.0)	32.4 (37.2)	31.4 (35.2)	30.7 (33.8)	30.5 (33.2)	30.7 (33.2)
TANDOJAM	8 AM	28.3 (30.1)	30.1 (31.3)	32.1 (31.9)	31.9 (33.5)	32.1 (33.2)	30.7 (32.5)
	2 PM	36.4 (37.4)	33.5 (34.9)	33.2 (33.2)	31.7 (33.4)	31.9 (33.0)	30.9 (32.3)
	5 PM	36.3 (37.1)	33.0 (35.9)	33.5 (34.2)	31.9 (33.7)	32.0 (33.1)	30.1 (32.3)
QUETTA	8 AM	19.4 (17.6)	19.8 (19.1)	23.5 (23.0)	18.0 (24.6)	24.6 (24.9)	26.4 (24.7)
	2 PM	30.9 (38.9)	28.4 (30.9)	24.8 (24.5)	18.1 (24.3)	24.5 (25.0)	26.5 (24.6)
	5 PM	30.3 (35.3)	28.9 (32.7)	26.3 (26.5)	19.1 (24.7)	24.4 (24.9)	26.5 (24.6)