

TEMPERATURE REGIME DURING JANUARY 2012

Temperature plays vital role in the growth and development of crops. Thermal regime in this month remained normal or below normal in most of the agricultural plains of the country, except at Sargodha in central Punjab where it remained above normal.

Mean daily temperature remained normal to below normal in most of the agricultural plains of the country by 1-2°C except at Sargodha in central Punjab where it remained above normal (by 2°C). Mean daily temperature ranged 10 - 11°C in Khyber Pakhtoonkhawa, 8 to 11°C in Potohar plateau, in remaining parts of Punjab it ranged 11-13°C, in Sindh it was rounded to 15°C, in Gilgit Baltistan region it ranged -3 to 3°C and was observed 1°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 below normal by 1-2°C in most of the agricultural plains except Quetta valley where it dropped up to 4°C. Whereas in high elevated areas of Gilgit it was observed above normal by 1°C The highest maximum temperature in the agricultural plains of the country was recorded 28.5°C at Tandojam region of lower Sindh. The night time temperature represented by mean minimum remained normal to below normal by 1 to 3°C in most of the agricultural plains of the country. Whereas in Lahore and Sargodha the night time temperature remained above normal by 1-2°C. The lowest minimum temperature was recorded -13.1°C at Skardu.

Number of stress days with minimum temperature less than or equal to 0°C was observed throughout the month in Skardu , 30 days in Gilgit, 28 days in Quetta valley, 18 days in Kamra and 03 days in Rawalpindi division. Number of stress days with maximum temperature greater or equal to 30°C or 40°C and R.H. less than or equal to 30% was nil in all agricultural plains of the country .

Agricultural soils showed normal to below normal trend in most agricultural areas of the country in shallow as well as in deep soils. In Rawalpindi and Faisalabad division soil temperature remained mostly normal to below normal at root zones as well as in deep layers. In Tandojam region almost the same trend was observed but sharp drop was observed in shallow layers up to 5°C. In Quetta region soil temperature at root zone as well as in deep layers remained normal to below normal. In deep layers temperature remained normal and in some depths including shallow layers it remained below normal.

From the general analysis of soil behavior in this month, it is concluded that moisture content is satisfactory in most of the agricultural soils of the country including both rainfed and irrigated areas due to satisfactory rainfall during the month. The situation of soil moisture will further improve due to expected rains during February.

TEMPERATURE REGIME DURING JANUARY, 2012

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	9.7 (11.2)	16.8 (18.3)	22.0 (26.5)	2.6 (4.0)	0.5 (-3.9)	0	0	0
D.I. KHAN	11.2 (12.2)	19.2 (20.3)	23.5 (28.9)	3.2 (4.2)	1.5 (-3.0)	00	0	0
KAMRA	7.9 ---	15.4 ---	22.5 ---	0.4 ---	-2.5 ---	18	0	0
RAWALPINDI	9.5 (10.1)	17.0 (17.7)	21.0 (26.1)	2.0 (2.6)	-0.5 (-4.0)	3	0	0
JHELUM	10.6 (12.3)	19.4 (19.7)	23.5 (26.1)	1.8 (5.0)	1.4 (-2.0)	0	0	0
SARGODHA	12.5 (11.9)	19.9 (20.2)	24.0 (26.1)	5.1 (3.6)	2.5 (-3.3)	0	0	0
LAHORE	12.8 (12.8)	18.1 (19.8)	21.5 (28.0)	7.5 (5.9)	4.4 (-2.0)	0	0	0
FAISALABAD	11.8 (11.8)	19.5 (19.4)	22.5 (26.1)	4.1 (4.1)	1.0 (-4.0)	0	0	0
MULTAN	12.3 (12.7)	19.8 (21.0)	23.2 (28.3)	4.8 (4.5)	1.8 (-3.9)	0	0	0
KHAN PUR	12.6 (13.1)	21.2 (21.8)	24.0 (29.4)	4.0 (4.4)	0.2 (-3.3)	0	0	0
QUETTA	1.2 (3.7)	6.7 (10.8)	17.5 (23.6)	-4.3 (-3.4)	-10.5 (-18.3)	28	0	0
ROHRI	15.2 (15.6)	21.6 (22.8)	24.5 (31.0)	8.7 (8.4)	5.0 (-4.0)	0	0	0
TANDOJAM	15.0 (16.6)	23.5 (24.2)	29.5 (29.2)	6.4 (9.0)	3.5 (4.7)	0	0	0
GILGIT	3.4 (3.3)	10.4 (9.3)	14.0 (16.4)	-3.7 (-2.7)	-7.0 (-10.0)	30	0	0
SKARDU	-3.1 (-2.4)	3.5 (3.1)	6.5 (13.1)	-9.6 (-7.8)	-13.1 (-21.0)	31	0	0

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (CM)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	6.3 (5.3)	6.9 (6.6)	8.4 (8.8)	9.6 (9.5)	10.7 (11.3)	13.4 (14.3)
	2 PM	12.2 (12.3)	10.3 (10.4)	9.3 (9.2)	9.7 (9.9)	10.7 (11.2)	13.4 (14.2)
	5 PM	11.1 (11.7)	10.3 (10.8)	9.5 (9.8)	9.8 (10.2)	10.7 (11.2)	13.4 (14.3)
FAISALABAD	8 AM	6.8 (7.5)	8.0 (8.4)	10.6 (11.2)	12.2 (12.9)	13.7 (14.6)	16.4 (17.3)
	2 PM	17.2 (19.4)	14.8 (16.7)	12.1 (13.1)	12.2 (12.9)	13.6 (14.5)	16.4 (17.2)
	5 PM	16.2 (16.9)	15.5 (16.5)	13.2 (14.5)	12.6 (13.7)	13.6 (14.3)	16.4 (17.2)
TANDOJAM	8 AM	12.7 (14.8)	13.6 (16.1)	*** (17.4)	18.0 (19.9)	19.3 (20.6)	21.2 (22.5)
	2 PM	17.0 (22.6)	17.4 (19.8)	*** (18.0)	17.8 (19.7)	19.4 (20.5)	21.4 (22.5)
	5 PM	18.7 (23.0)	19.1 (21.5)	*** (19.4)	17.9 (20.0)	19.3 (20.5)	21.4 (22.6)
QUETTA	8 AM	0.3 (0.7)	1.7 (1.7)	3.7 (3.5)	-0.4 (4.9)	5.5 (5.9)	8.7 (9.6)
	2 PM	6.7 (9.6)	5.6 (6.6)	4.0 (4.3)	-0.4 (4.8)	5.7 (5.9)	9.1 (9.5)
	5 PM	7.3 (8.5)	6.9 (7.6)	4.8 (5.5)	-0.1 (5.0)	5.6 (5.9)	9.0 (9.5)