

DECADAL AGROMET BULLETIN OF PAKISTAN



1st Decade April, 2012



Regional Agromet Centre, Tandojam, located in lower Sindh

**NATIONAL AGROMET CENTRE (NAMC)
PAKISTAN METEOROLOGICAL DEPARTMENT
SECTOR H-8/2, ISLAMABAD**

[http://www.pmd.gov.pk/WFF/weather for farmers](http://www.pmd.gov.pk/WFF/weather%20for%20farmers)

Phone: +92-51-9250592 email: dirnamc@yahoo.com

Meteorological conditions during 3rd decade of March, 2012

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						Sunshine Duration (hours)	Wind Speed (km/hr)	R.H (%)	ETo (mm/day)
		Normal	Actual	Dep	Tmin Dep	Tmax Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	TANDOJAM	0.0	0.0	0.0	-1.2	-1.0	26.1	29.7	29.2	27.3	25.9	25.7	24.1	109.7	2.5	46	4.6
2	SAKRAND ☆	0.1	0.0	-0.1	-2.1	-0.9	24.7	35.3	33.3	***	27.1	27.4	25.8	103.9	4.4	42	4.8
3	ROHRI	0.6	0.0	-0.6	-0.9	-1.3	26.5	32.8	31.8	27.4	26.6	24.8	25.4	91.6	5.0	36	4.9
4	USTA MUHAMMAD	0.5	0.0	-0.5	-0.9	-1.1	24.8	32.6	31.6	27.6	26.0	25.4	24.7	***	1.7	40	4.0
5	QUETTA	0.9	0.2	-0.7	-1.3	-0.6	13.8	20.1	18.3	14.5	8.1	12.7	12.9	88.2	7.2	29	4.1
6	KHANPUR	0.5	0.0	-0.5	-1.0	-2.9	23.4	25.9	25.1	24.9	24.9	25.0	24.1	82.4	5.9	42	4.6
7	MULTAN	1.2	0.0	-1.2	-0.6	0.4	24.4	***	***	***	***	***	***	79.4	3.7	40	4.1
8	LAHORE	1.7	TR	-1.7	-1.9	0.4	23.6	27.6	26.0	24.0	21.9	***	20.3	86.8	4.7	38	4.2
9	FAISALABAD	0.6	TR	-0.6	-0.3	0.2	23.2	30.9	28.1	23.8	22.1	21.5	20.4	83.5	5.2	39	4.3
10	SARGODHA	1.0	TR	-1.0	-0.7	1.3	24.1	30.0	27.2	24.2	23.3	23.1	21.6	88.1	3.0	39	3.8
11	JHELUM	1.6	1.0	-0.6	-1.6	1.6	22.7	26.6	24.6	22.2	20.9	21.0	***	62.0	3.6	36	3.6
12	RAWALPINDI	2.7	2.4	-0.3	-0.6	0.6	20.4	24.3	21.3	19.1	18.6	17.6	17.1	71.0	2.3	40	3.1
13	D I KHAN	0.8	1.0	0.2	-2.0	0.7	22.1	***	***	***	***	***	***	77.0	2.2	42	3.6
14	PESHAWAR	2.4	7.0	4.6	-2.0	1.4	20.8	24.6	21.5	20.2	19.5	18.4	18.1	62.4	1.8	50	2.9
15	SKARDU	0.5	TR	-0.5	-0.2	-2.2	9.1	***	***	***	***	***	***	54.3	1.9	44	1.7
16	GILGIT	0.2	3.7	3.5	1.0	-0.8	14.6	***	***	***	***	***	***	57.5	9.3	40	3.6

Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. And "% Dep" is calculated by the formula; **Dep divided by Normal multiplied by 100**. Tmin & Tmax stands for minimum and maximum temperatures respectively. ETo stands for reference crop evapotranspiration. *** stands for no data and (☆) indicates the station with five years climatic (normal) data for computing departures.

Past Weather (21st to 31st March, 2012):

Light to moderate rain reported from the agricultural plains of KPK, Punjab, Northern Balochistan, Kashmir & Gilgit Baltistan during the period. However dry weather is reported from the agricultural plains of Sindh during the period.

1.1 Punjab

Light rainfall reported from most of the agricultural plains of northern and central Punjab during the decade, chief amount received at Murree, Islamabad and Bhakkar (Fig. 1.a). Decadal maximum temperature raised above normal by 0.2°C and minimum temperature dropped below normal by 1.0°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.1 km/hr, 39 %, and 4.0 mm/day respectively (Fig 3-4).

1.2 Sindh

Mainly dry weather is reported from the entire agricultural plains of Sindh during the decade. Decadal maximum temperature and minimum temperature both dropped below normal by 1.1°C & 1.4°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.0 km/hr, 41 %, and 4.8 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

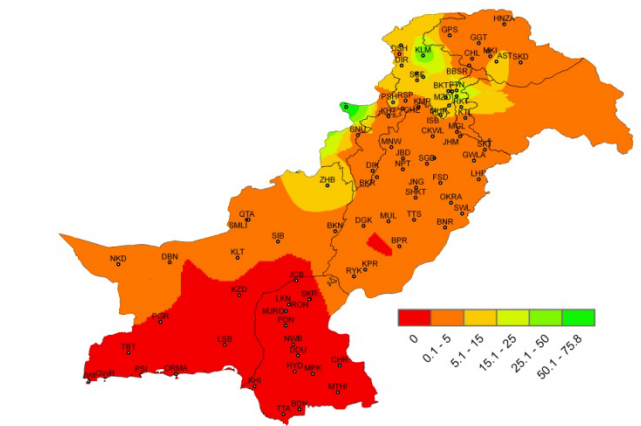
Light to moderate rainfall reported from most of the agricultural plains of KPK; chief amount received at Parachinar, Kalam, Dir and Kakul etc. Decadal maximum temperature raised above normal by 1.1°C and minimum temperature dropped below normal by 2.0°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 2.0 km/hr, 46 %, and 3.3 mm/day respectively.

1.4 Balochistan

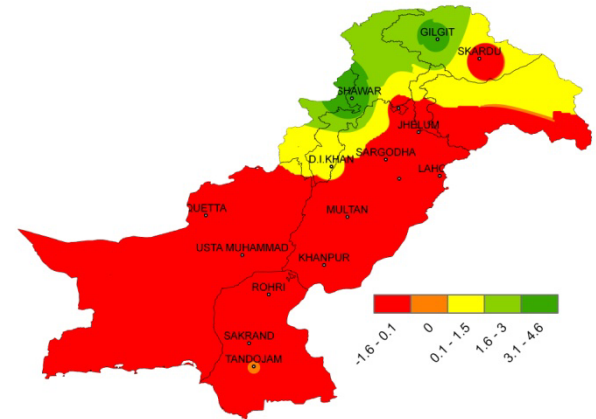
Mainly dry weather is reported from most of the agricultural plains of the province except Quetta, Zhob and Barkhan etc where light rainfall occurred. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 1.1 & 0.9°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.5 km/hr, 35 %, and 4.1mm/day respectively.

1.5 Gilgit Baltistan and Azad Jammu & Kashmir

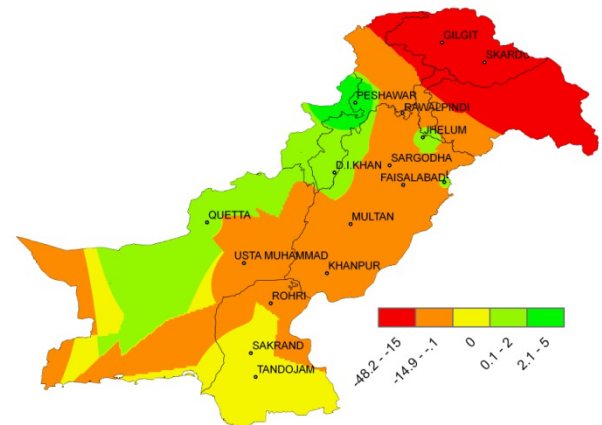
Rainfall in reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Garhi Dopatta, Astore, Pattan and Gupis etc. In Gilgit Baltistan region; decadal maximum temperature dropped below normal by 1.5°C while decadal minimum temperature raised above normal by 0.4°C. Whereas mean values of wind speed, relative humidity and ETo were recorded as 5.6 km/hr, 42 %, and 3.0 mm/day respectively.



a) Actual rainfall



b) Departure of rainfall from Normal



c) Departure of rainfall from Previous Decade

Figure.1: Rainfall distribution during previous decade in “mm”

2 (a) Past Weather for Major Agricultural Plains (21st to 31st March, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 2.4 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 40%. Mean night temperature was 12.1°C while day temperature recorded as 28.6°C with 71.0 hours bright sunshine duration. Wind speed recorded as 2.3 Km/hr with mean direction westerly. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

Wheat (Chakwal-97): Good condition at Shooting stage

2.2 RAMC, Tandojam (Lower Sindh)

No rainfall reported during the decade however weather remained cloudy for 2 days average relative humidity recorded as 46%. Mean night temperature was 16.5°C while day temperature recorded as 35.6°C with 109.7 hours bright sunshine duration. Wind speed recorded as 2.5 Km/hr with mean direction north-westerly. Presently only one crop (irrigated conditions) is grown at the station as detailed below.

Wheat (TD-I): Good condition, harvested on 31st March, 2012.

2.3 RAMC, Faisalabad (Central Punjab)

Rainfall reported as Trace (indeterminate amount) during the decade, weather remained cloudy for the entire period and average relative humidity recorded as 39%. Mean night temperature was 15.3°C while day temperature recorded as 31.0°C with 83.5 hours bright sunshine duration. Wind speed recorded as 5.2 Km/hr with mean direction north-westerly. Presently two crops (irrigated conditions) are grown at the station as detailed below.

Wheat: Very good condition, Milk-Maturity stage completed.
Sugarcane: Good condition, Tillering stage completed.

2.4 RAMC, Quetta (Northern Balochistan)

Rainfall reported as 0.2 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 29%. Mean night temperature was 5.9 °C while day temperature recorded as 21.7°C with 88.2 hours bright sunshine duration and wind speed recorded as 7.2 Km/hr with mean direction southerly. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

Wheat (Local): Good condition at Shooting stage.

2.5 RAMC, Usta Muhammad (Eastern Balochistan)

No rainfall reported during the decade however weather remained cloudy for 4 days and average relative humidity recorded as 40%. Mean night temperature was 16.1°C while day temperature recorded as 33.5°C. Wind speed recorded as 1.7 Km/hr with mean direction southerly. Presently two crops (irrigated conditions) are grown at the station as detailed below.

Wheat (Lasani): Good condition at Wax-Maturity stage.
Mustard: Good condition, Harvesting in process.

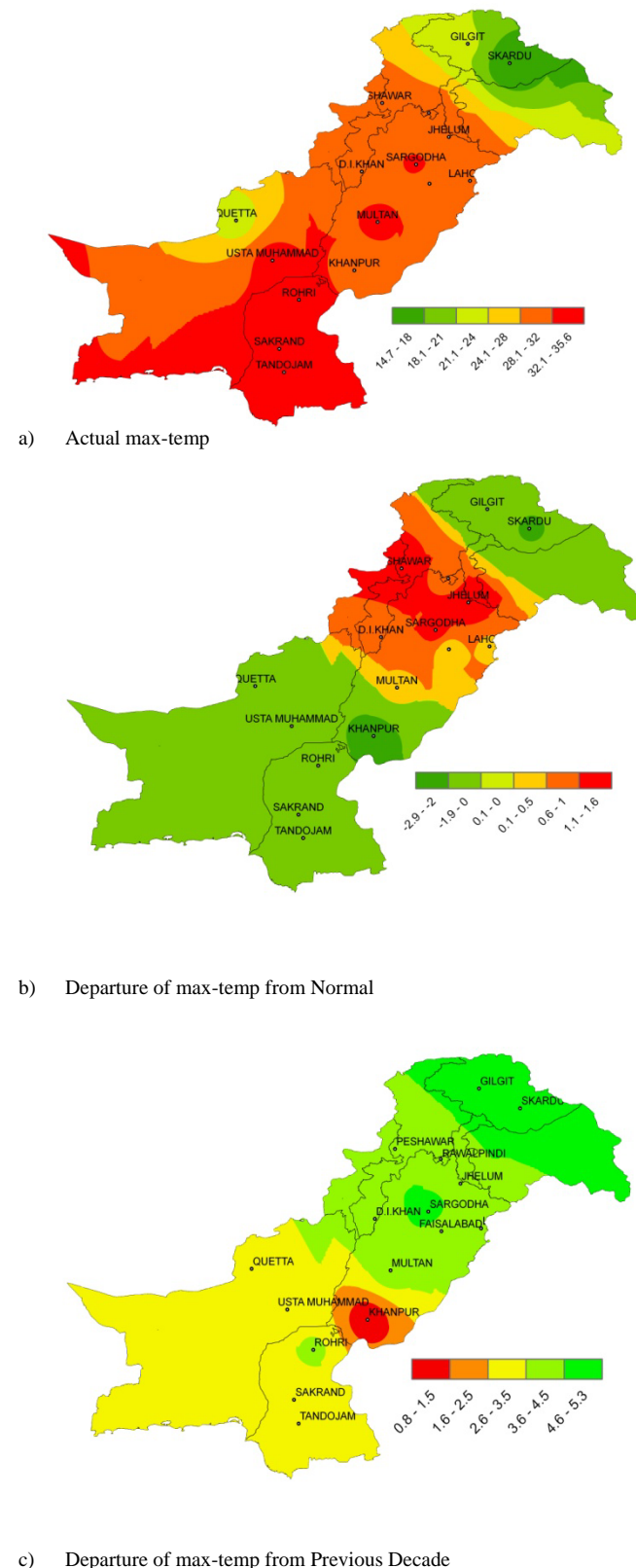


Figure.2: Maximum Temperature distribution during previous decade in “°C”

2(b) Past Weather for sub regional Agricultural Plains (21st to 31st March, 2012)

2.6 Rohri

During the decade no rainfall occurred however weather remained cloudy for 6 days and average relative humidity recorded as 36 %. Mean night temperature was 19.1°C while day temperature recorded as 26.5°C with 91.6 hours bright sunshine duration. Wind speed recorded as 5.0 Km/hr with mean direction north-easterly.

2.7 Skardu

During the decade rainfall occurred as Trace (indeterminate amount), weather remained cloudy for 4 days and average relative humidity recorded as 44 %. Mean night temperature was 3.5 °C while day temperature recorded as 14.7°C with 54.3 hours bright sunshine duration. Wind speed recorded as 1.9 Km/hr with mean direction westerly.

2.8 Multan

During the decade no rainfall occurred however weather remained cloudy for 6 days and average relative humidity recorded as 40 %. Mean night temperature was 16.3°C while day temperature recorded as 32.4°C with 79.4 hours bright sunshine duration. Wind speed recorded as 3.7 Km/hr with mean direction northerly.

2.9 Lahore

Rainfall reported as Trace (indeterminate amount) during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 38%. Mean night temperature was 16.8°C while day temperature recorded as 30.4°C with 86.8 hours bright sunshine duration. Wind speed recorded as 4.7 Km/hr with mean direction north-westerly.

2.10 Peshawar

Rainfall reported as 7.0 mm during the decade, weather remained cloudy for the entire period and average relative humidity recorded as 50%. Mean night temperature was 12.6 °C while day temperature recorded as 28.9°C with 62.4 hours bright sunshine duration. Wind speed recorded as 1.8 Km/hr with mean direction westerly.

2.11 Khanpur

During the decade no rainfall occurred however weather remained cloudy for 7 days and average relative humidity recorded as 42 %. Mean night temperature was 15.8°C while day temperature recorded as 30.9°C with 82.4 hours bright sunshine duration. Wind speed recorded as 5.9 Km/hr with mean direction north-easterly.

2.12 Sargodha

Rainfall reported as Trace (indeterminate amount) during the decade, however weather remained cloudy the entire period and average relative humidity recorded as 39 %. Mean night temperature was 15.8°C while day temperature recorded as

32.3°C with 88.1 hours bright sunshine duration. Wind speed recorded as 3.0 Km/hr with variable direction.

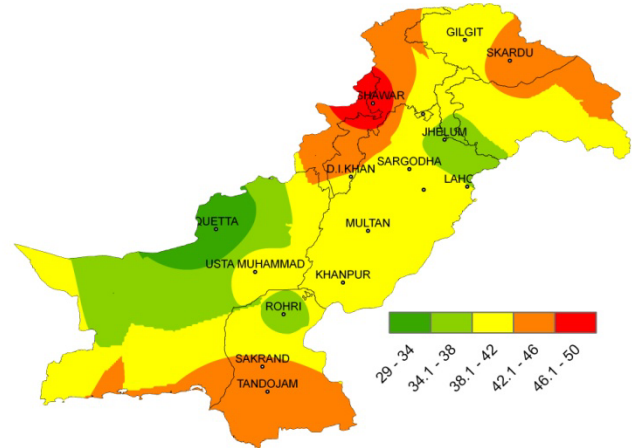


Figure.3: Relative Humidity in percentage

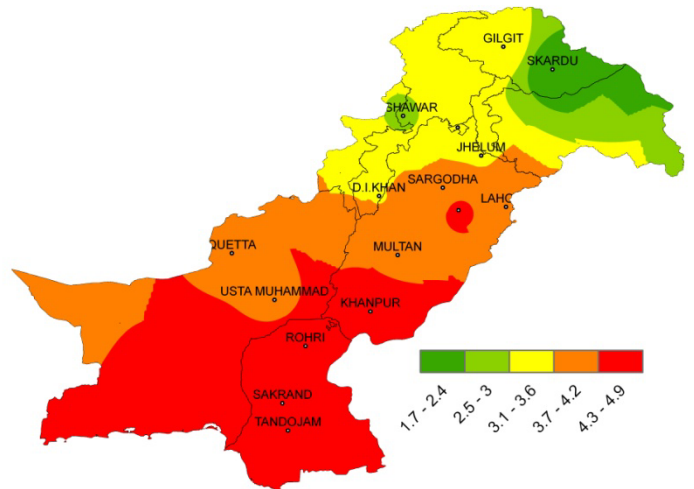


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

2.13 Gilgit.

Rainfall reported as 3.7 mm during the decade however weather remained cloudy for the entire period and average relative humidity recorded as 40 %. Mean night temperature was 7.9°C while day temperature recorded as 21.3 °C with 57.5 hours bright sunshine. Wind speed recorded as 8.3 Km/hr with mean direction *north-westerly*.

2.14 Jhelum

Rainfall reported as 1.0 mm during the decade however weather remained cloudy for the entire period and average relative humidity recorded as 36 %.Mean night temperature was 13.9°C while day temperature recorded as 31.5°C with 62.0 hours bright sunshine duration. Wind speed recorded as 3.6 Km/hr with mean direction *south westerly*.

2.15 D.I. Khan

Rainfall reported as 1.0mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 42%. Mean night temperature was 13.5°C while day temperature recorded as 30.7°C with 77.0 hours bright sunshine duration. Wind speed recorded as 2.2 Km/hr with mean direction *southerly*.

2.16 Sakrand

No rainfall reported during the decade however weather remained cloudy for 7 days average relative humidity recorded as 42%. Mean night temperature was 14.9°C while day temperature recorded as 34.5°C with 103.9 hours bright sunshine duration. Wind speed recorded as 4.4 Km/hr with mean direction *north westerly*.

3. Ten days Weather advisory for Farmers (1st to 10th April, 2012)

3.1 Temperature Forecast:

Temperatures are likely above normal (2-4°C) in most of the agricultural plains of the country during the period.

3.2 Rain Forecast:

- ❖ **Punjab:** Mainly dry weather is expected during the decade.
- ❖ **Khyber Pakhtoonkhawa:** Mainly dry weather is expected during the decade. However thunderstorm/rain is expected at isolated places of Malakand and Hazara divisions during the 2nd half of the decade.
- ❖ **Sindh:** Mainly dry weather is expected during the decade.
- ❖ **Balochistan:** Mainly dry weather is expected during the decade.
- ❖ **Kashmir & Gilgit-Baltistan:** Isolated tunderstorm/Rain is expected in Gilgit-Baltistan & Kashmir on 2nd, 5th & 6th April 2012.

3.3 Wind Forecast:

Windy conditions likely to prevail in most of the agricultural plains of the country in the afternoon with dust raising winds in the lower half of the country during the period.

3.4 Advisory for Farmers:

- ❖ Wheat crop is growing in wax to full maturity in the upper half of the agriculture plains and at full maturity in most of the lower half of the country. Harvesting/Threshing is in progress in the agricultural plains of Sindh and adjoining areas of South Punjab and Eastern Balochistan. The expected dry weather is suitable for in time maturity/harvesting of the crop. Therefore farmers are advised to harvest the full matured crop so that in time cultivation of the coming cotton crop may be possible.