



GOVERNMENT OF PAKISTAN
PAKISTAN METEOROLOGICAL DEPARTMENT
 (National Drought Monitoring Centre)
Islamabad

FORTNIGHTLY DROUGHT WATCH BULLETIN

(1-15 September, 2024)

1. Actual Rainfall Analysis during First Fortnight of September 2024

The light to moderate rainfall was reported over most parts of the country during the first fortnight of September 2024. The northeastern parts of Punjab, Potohar and Kashmir received the major amount of rainfall. The spatial distribution of the rainfall is shown in Figure No.1 and the chief amounts of rainfall recorded at distinct stations of Pakistan during the period 1-15 September, 2024 are shown in Table-1 below;

Rainfall Table

S. No	Station	Rainfall (mm)	S. No	Station	Rainfall (mm)
1.	Islamabad (Zero Point)	109.6	6.	Mithi	79.0
2.	Sialkot Airport	92.0	7.	Rawalakot	72.0
3.	Garhi Dupatta	91.8	8.	Murree	71.0
4.	Narowal	80.7	9.	Islamabad, Airport	70.2
5.	Lahore (City)	79.8	10.	Chaklala Airbase	66.0

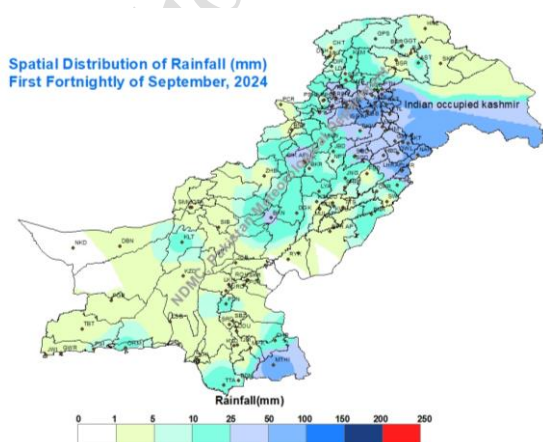


Figure 1: Spatial distribution of rainfall (mm)

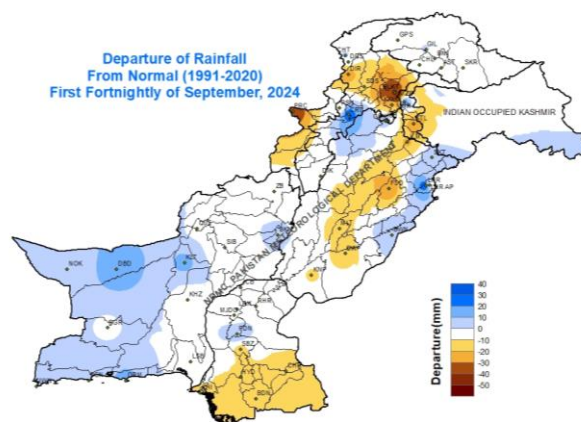


Figure 2: Departure of rainfall (mm)

2. Departure of Rainfall during First Fortnight of September 2024

Figure 2 depicts the Percentage Departure of rainfall from the Normal (1991-2020) during first fortnight. Below normal rainfall was received over most parts of the country. However, central and western parts of Balochistan, eastern Punjab, Paddidan (Sindh) and Cherat, Chitral (Khyber Pakhtunkhwa) received above normal rainfall during the first fortnight of September 2024.

Normal (1991-2020) distribution of rainfall (mm) during the first fortnight of September rainfall is shown in Figure 3. The normal rainfall across most of the Pakistan ranges from 10 to 30 (mm). Whereas the normal for Kashmir and adjoining regions of Khyber Pakhtunkhwa and Pothohar ranging from 31 to 90 (mm).

Normal distribution of temperature is shown in Figure 4 during first fortnight of September 2024, using the mean temperature data for the period 1991-2020.

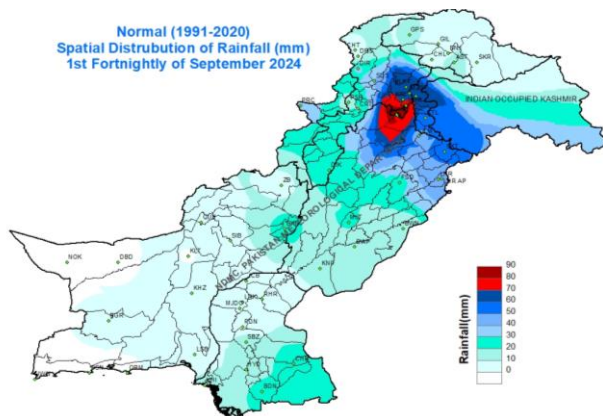


Figure 3: Normal distribution of rainfall (mm)

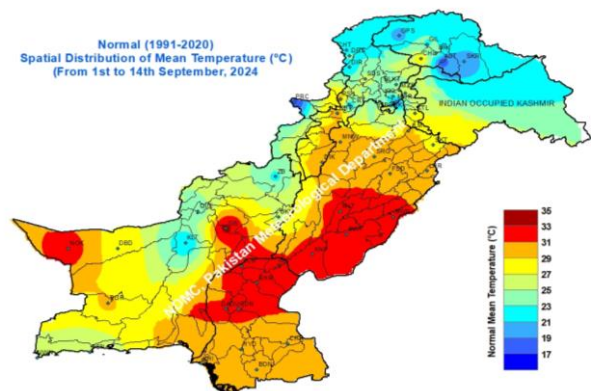


Figure 4: Normal distribution of mean Temperature (°C)

3. Mean Temperature Analysis during the First fortnight of September 2024

The spatial distribution of mean Temperature (°C) during the first fortnight of September is shown in Figure 5.

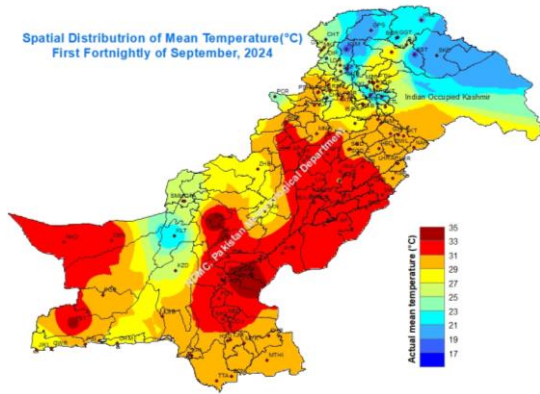


Figure 5: Spatial distribution of Mean Temperature (°C)

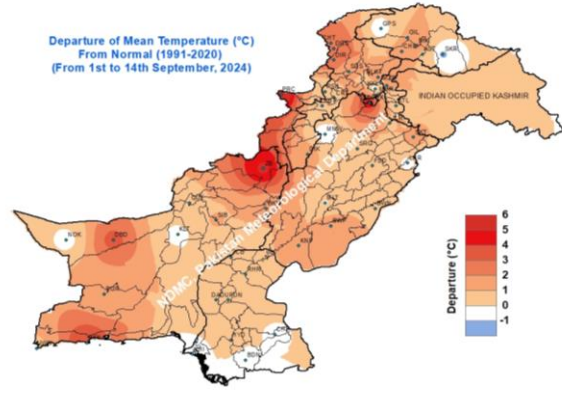


Figure 6: Departure of Mean Temperature (°C) from Normal (1991-2020)

Highest mean temperature has been recorded at central and southern Punjab, upper Sindh, western Balochistan (Nokundi, Dalbandin, Sibbi, Punjgur) and lower KP, while moderate temperatures were observed in the rest of the parts of the country.

4. Departure of Temperature during the First Fortnight of September 2024

The Figure 6 illustrates the departure of mean temperature from normal (1991-2020) during first fortnight of September 2024. Overall temperatures remained above normal across most of the country and ranged between 1 - 5 °C. The highest temperatures were observed over Zhob, Shirani, Dalbandin and Gwadar districts.

5. Length of Consecutive Dry Days

The length of dry spell is calculated from the day receiving less than one (1) mm of rainfall. The spatial distribution of the Consecutive Dry Days (CCD) is shown in Figure 7. Highest number of consecutive dry days are observed at Nokundi and Dalbandin districts, while rest of the Balochistan and few parts of Sindh and southern Punjab, also experienced the 20-40 consecutive dry days spells.

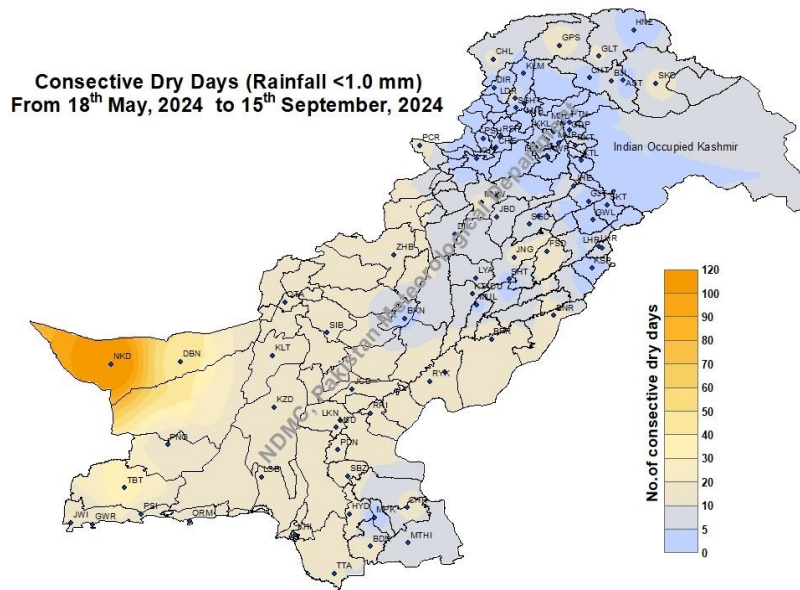


Figure 7: Spatial distribution of Dry Days Spell

6. Drought Situation Analysis

Normal to below normal rainfall is received over most parts of the country during the first fortnight of the September 2024 except central and southwestern Balochistan, few eastern parts of Punjab and Peshawar division. The temperature remained above than normal by 1-3 °C, over most parts of the country. The length of the consecutive dry days remained more focused over Dalbandin and Nokundi region. Keeping in view in the above climatic conditions, all stake holders are advised to keep eye on the latest weather advisories and plan the disaster risk reduction (DRR) in accordance with the prevailing climatic conditions.