



Outlook for October 2025

1. Current Meteorological Conditions

Rainfall during September showed marked regional variability. Sindh and coastal Balochistan experienced well above normal rainfall, while the rest of the country received normal to below normal amounts. A heavy rainfall spell from 7 to 10 September particularly impacted Sindh, triggering urban and flash flooding across much of the province. Meanwhile, temperatures remained near to above normal in most parts of the country, with the highest positive anomaly observed in Gilgit-Baltistan (Table 1).

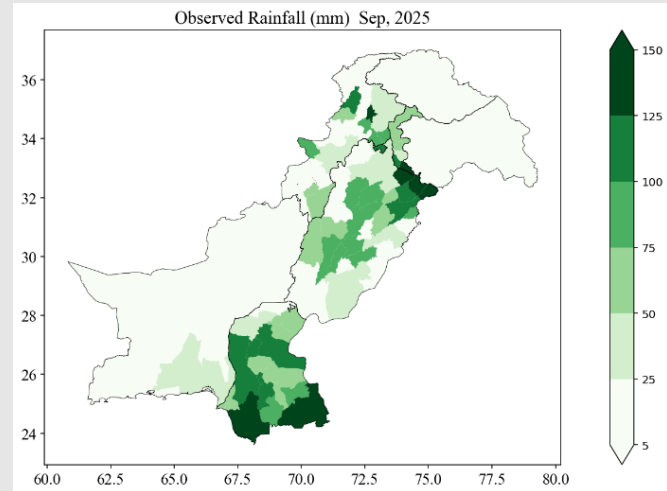


Figure 1: Observed rainfall (mm), September 2025

Table 1: Summary of September 2025 Observed Rainfall and Temperature

Region	Total Rainfall (mm)	Normal* Rainfall (mm)	Rainfall Departure (%)	Mean Temp (°C)	Anomaly (°C)
Pakistan	41.1	43.3	-4.3	28.3	+1.1
AJK	58.5	110.8	-47.2	26.1	+1.2
Balochistan	7.5	6.6	+17.6	29.0	+1.5
Gilgit-Baltistan	5.4	18.5	-70.6	24.6	+3.4
Khyber Pakhtunkhwa	42.9	58.2	-25.2	26.6	+1.4
Punjab	67.46	75.18	-10.3	29.3	+0.5
Sindh	60.9	24.3	+151.1	30.7	-0.3

* Normal Period (1991 – 2020)

2. Monthly Rainfall Outlook:

The Multi-Model Ensemble (MME) based monthly outlook is derived from the outputs of nine global seasonal prediction models with optimal skill. The output of the selected models is used to generate operational outlooks for monthly and seasonal rainfall and temperature. The state of the global earth system suggests that, the El Niño–Southern Oscillation (ENSO), currently in a marginally negative phase, is expected to persist in this state during the forecast month. Similarly, the negative phase of the Indian Ocean Dipole (IOD) is also likely to continue through October. Based on this analysis, overall, a tendency for **near-normal* to below normal** rainfall is anticipated in most parts of the country. The northern half is likely to experience below-normal rainfall, with the highest deficits expected over Khyber Pakhtunkhwa, Kashmir, Gilgit-Baltistan, and northern Punjab. In contrast, nearly normal rainfall is expected over the southern half, including most areas of Sindh, Balochistan, and southern Punjab, during October 2025 (Figure 2, 3).

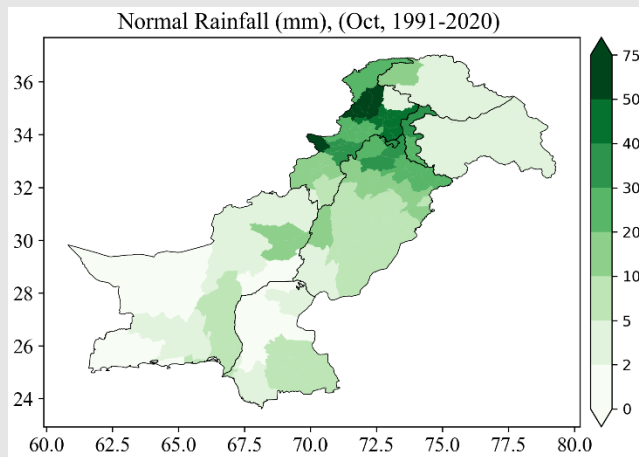


Figure 2: Normal (1991-2020) rainfall for October

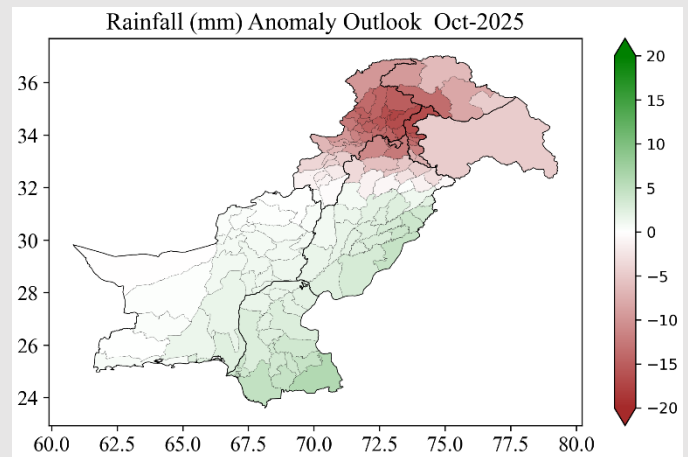


Figure 3: Monthly rainfall anomaly for October 2025

The probabilistic rainfall outlook reflects a consensus among all models used in the ensemble. The tercile probability forecast (Figure 4) indicates that most ensemble members predict the likelihood of near-normal to below normal rainfall in southern parts of the country. The northern areas, including Khyber Pakhtunkhwa, Kashmir, Gilgit-Baltistan, northern Balochistan and Punjab are likely to receive below normal rainfall during October 2025.

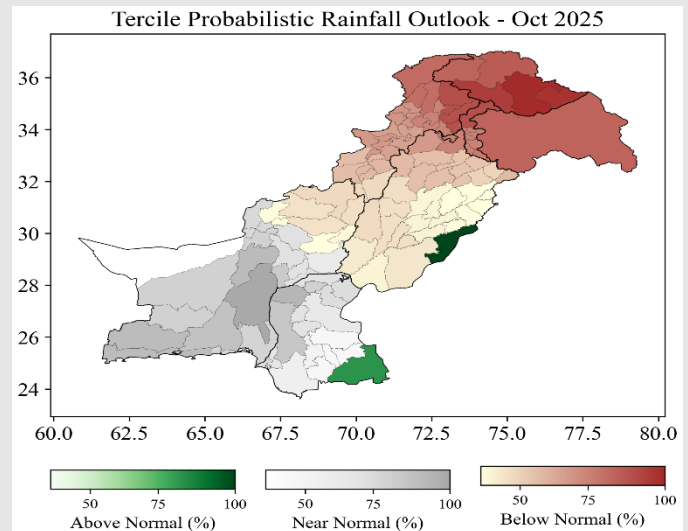


Figure 4: Probabilistic rainfall outlook for October 2025

* Normal = 30-years average climatology

3. Monthly Temperature Outlook:

Mean temperatures are expected to remain **above normal*** nationwide, with maximum departure over eastern parts of Gilgit-Baltistan during October 2025 (Figure 5, 6).

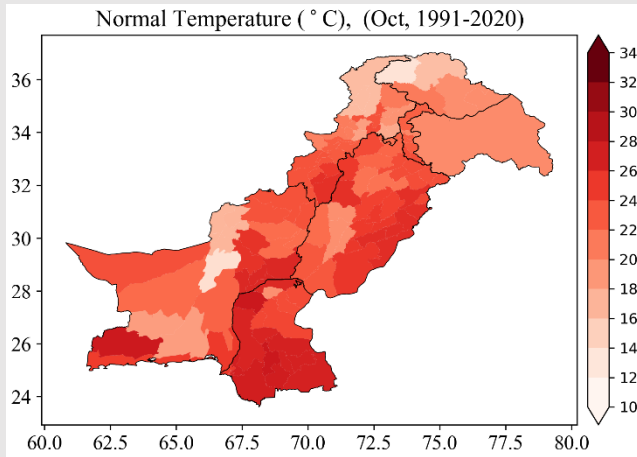


Figure 5: Normal (1991 - 2020) temperature for October

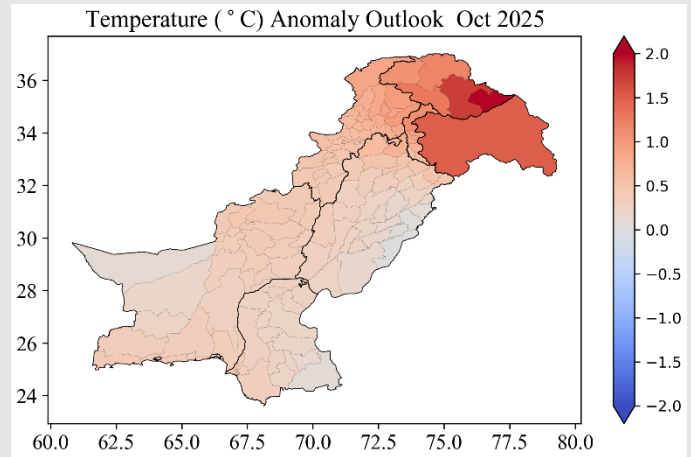


Figure 6: Monthly temperature anomaly outlook for October 2025

The tercile probabilistic temperature outlook (Figure 7) indicates that the majority of the models agree on the above-normal temperatures over most parts of the country with maximum likelihood over northern parts (Gilgit-Baltistan, Kashmir, northern Khyber Pakhtunkhwa and northern Punjab) during the forecast month. Moreover, northwestern parts of Balochistan are likely to experience below normal temperature during October 2025.

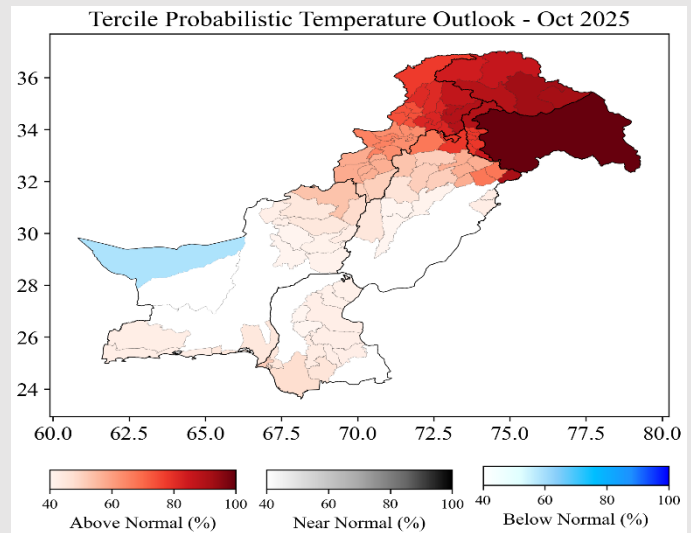


Figure 7: Probabilistic temperature outlook for October 2025

4. Impacts:

- Isolated showers / hails/ windstorm may disrupt the harvesting activities of Kharif crops.
- Warm and humid environment would support the breeding of Dengue larva in the country. Dengue outbreak due to stagnant water is likely in inundated areas.
- Above-normal temperatures in upper glaciated regions may increase the risk of GLOF events at vulnerable locations.
- Lower river inflows are likely due to the retreat of monsoon rains and reliance on base flows, possibly stressing irrigation supplies.
- Dry conditions alongside above-normal temperatures heightens the risk of smog formation in urban centers of plain areas of the country.
- A decline in air quality may result in smog formation in the plains of the country, posing health risks for sensitive groups, particularly children and the elderly.
- Above normal temperature may affect livestock health and fodder availability in some areas.

Note: The seasonal outlook is updated monthly in the first week of the month. The forecast reliability varies with location, time of year, and global ocean/atmospheric conditions. It provides general trends using probabilities rather than precise predictions and compares expected conditions to historical averages. For better decision-making, it should be used alongside short-term forecasts and other climate data.