

Outlook for July 2025

1. Current Meteorological Conditions

Near normal rainfall was recorded across the country during the month of June. The monsoon onset occurred in the last week of the month, bringing a widespread rainfall spell, particularly over the northern and eastern regions i.e. Punjab and Sindh, where above normal rainfall was recorded. A few isolated heavy downpours and incidents of flash and urban flooding were also reported during this period. Below normal rainfall was recorded in Gilgit-Baltistan, Khyber Pakhtunkhwa and Balochistan. Additionally, above-normal temperatures prevailed nationwide (Table 1), with the most significant departures observed over Gilgit-Baltistan and Khyber Pakhtunkhwa.

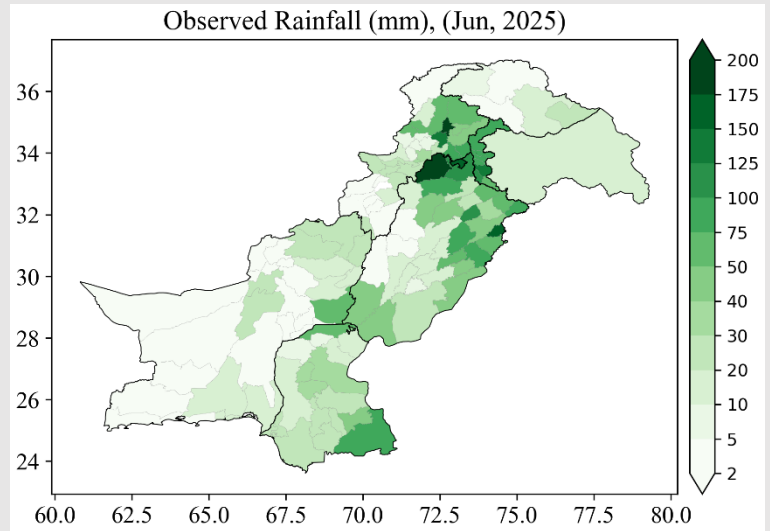


Figure 1: Observed rainfall (mm), Jun 2025

Table 1: Average / Anomaly of June 2025 rainfall and temperature

Region	Total Rainfall (mm)	Normal Rainfall (mm)	Rainfall Departure (%)	Mean Temp (°C)	Anomaly (°C)
Pakistan	35.8	35.2	1.6	31.9	+1.0
AJK	108.2	106.1	2.0	30.2	+0.8
Balochistan	5.9	14.0	-57.7	32.1	+0.9
Gilgit-Baltistan	6.8	16.8	-59.2	25.5	+2.0
Khyber Pakhtunkhwa	34.6	48.6	-28.8	30.1	+1.4
Punjab	70.7	56.6	24.9	33.3	+0.6
Sindh	25.3	9.4	170.1	35.5	+0.5

2. Monthly Rainfall Outlook for Jul 2025:

The monthly and seasonal outlook is derived from the outputs of eight global seasonal prediction models with optimal skill. The output of the selected models is used to generate operational forecasts for monthly and seasonal rainfall and temperature using the Multi-Model Ensemble (MME) technique. The prevailing neutral phase of the El Niño Southern Oscillation (ENSO), is expected to persist, alongside a neutral phase of the Indian Ocean Dipole (IOD). Based on this analysis, overall, a tendency for **near-normal*** to **slightly above normal** rainfall is anticipated across the country. However, western parts of Gilgit-Baltistan and upper Khyber Pakhtunkhwa are likely to experience **normal to slightly below-normal** rainfall during the forecast month (Figure 2, 3).

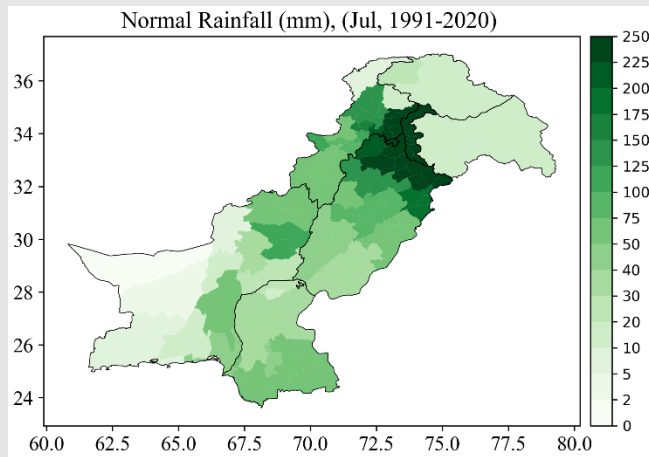


Figure 2: Normal (1991-2020) rainfall for Jul

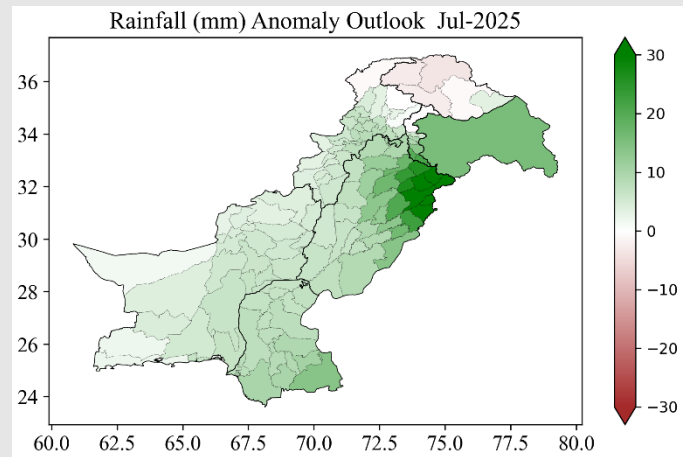


Figure 3: Monthly rainfall anomaly for Jul 2025

The probabilistic rainfall outlook reflects a consensus among all models used in the ensembles. The tercile probability forecast (Figure 4) indicates that most ensemble members predict the likelihood of near-normal to above normal rainfall in most parts of the country. Northern Punjab, Kashmir, southern Khyber Pakhtunkhwa, northern and southwestern Balochistan are likely to receive above normal rainfall, whereas, Sindh and the adjoining areas of Punjab and Balochistan as well as northern Khyber Pakhtunkhwa may get near normal rainfall during July 2025.

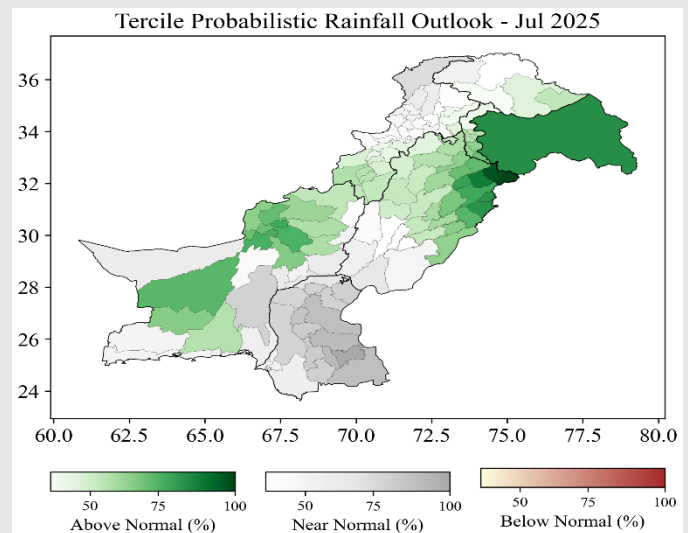


Figure 4: Probabilistic rainfall outlook for Jul 2025

* Normal = 30-years average climatology

3. Monthly Temperature Outlook:

Mean temperatures are expected to remain **above normal*** over northern and western parts of the country whereas, eastern Punjab and eastern Sindh which remain under the influence of Monsoon rains are expected to experience near normal to slightly below normal temperature during July 2025 (Figure 5, 6).

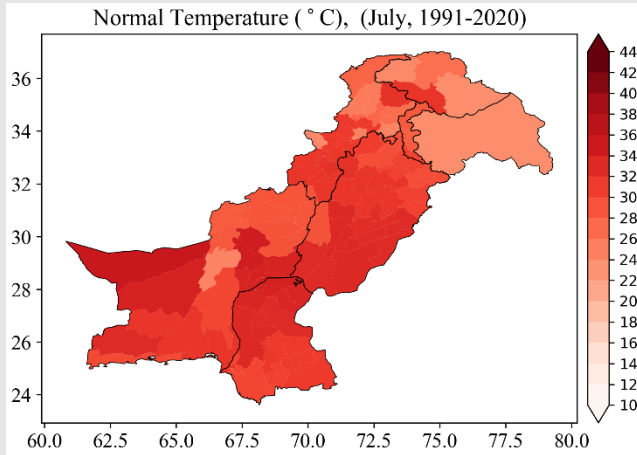


Figure 5: Normal (1991 - 2020) temperature for Jul

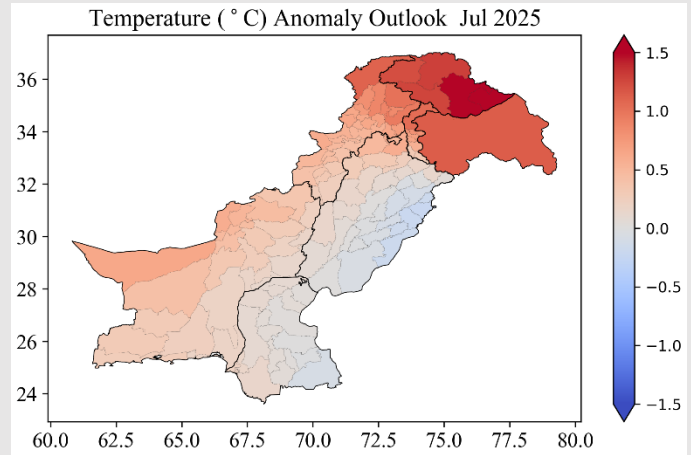


Figure 6: Monthly temperature anomaly outlook for Jul 2025

The tercile probabilistic temperature outlook (Figure 7) indicates that the majority of the models agree on the above-normal temperatures across northern and western parts of the country with maximum likelihood over northern Khyber Pakhtunkhwa, Gilgit-Baltistan and adjoining parts of Kashmir. The eastern parts are likely to experience near normal temperatures during the forecast month.

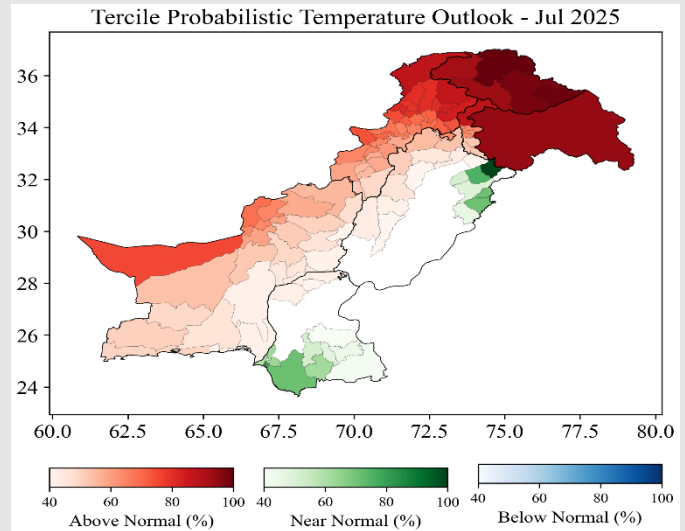


Figure 7: Probabilistic temperature outlook for Jul 2025

4. Impacts:

- Although the general outlook for the rainfall is normal to slightly above normal but the possibility of an extreme rainfall events such as gust, microscale downpour, tornadoes and hail cannot be ruled out.
- Heavy rainfall events may cause urban flooding in metropolitan areas as well as flash flooding in hill torrent areas of Koh-e-Suleman, AJK, and KP with chances of landslides, mudslides and rock falls in hilly areas.
- Rainfall will also replenish water reservoirs and groundwater resources.
- Occasional strong winds, dust storm, and hailstorm may affect the seasonal crops and public property.
- Anticipated higher temperatures in high-altitude regions are expected to accelerate snowmelt in the northern areas which may replenish water reservoirs.
- Above normal temperatures over the glaciated regions will cause snow melt that may contribute in glacier related hazards such as GLOF.

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.