

Pakistan Meteorological Department



Monthly Drought Bulletin For the Month of November, 2025

Highlights

- Overall, most parts of the country received below-normal rainfall during the month.
- Temperatures remained below normal up to -4°C across most parts of KPK, Gilgit baltistan, Northren Punjab and Baluchistan reflecting colder-than-usual conditions.
- For December 2025, below-normal rainfall is generally expected across most parts of the country, with the largest deficits likely in northern Punjab, Khyber Pakhtunkhwa, Kashmir, and Gilgit-Baltistan.
- Mean temperatures are expected to remain above normal across the country during December 2025, with the highest positive departures likely over Gilgit-Baltistan, Kashmir and parts of northern Khyber Pakhtunkhwa.
- In light of the weather forecast for December 2025, disaster management authorities are advised to proactively plan and implement Disaster Risk Management (DRM) measures—particularly in drought-affected areas of Balochistan.

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1. Monthly Rainfall and Temperature Analysis for the Month of November, 2025

During the month, below normal rainfall was observed over the country. The spatial distribution of rainfall is illustrated in Figure 1, while the major recorded amounts are detailed in Table 1.

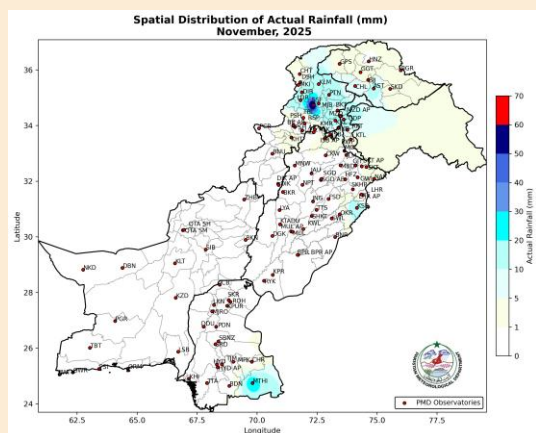


Figure 1: Spatial Distribution of rainfall

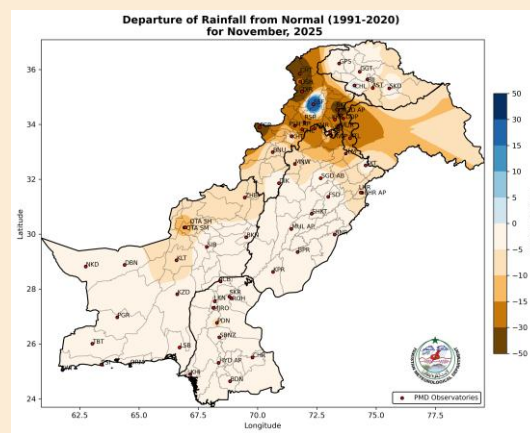


Figure 2: Departure of rainfall from Normal

Figure 2 illustrates the deviation of rainfall from the normal (1991-2020). Overall, Most parts of KPK, Northren Punjab and Baluchistan experienced below-normal rainfall.

Table-1: Chief amount of rainfall recorded across Pakistan during the month of November, 2025

S. No	Station	Rainfall (mm)	S. No	Station	Rainfall (mm)
1.	SAIDUSHARIF	61.0	11.	MUZAFFARABADAIRPORT	11.9
2.	MITHI	22.0	12.	RAWALAKOT	10.0
3.	LOWERDIR	20.0	13.	ISLAMABAD,ZEROPOINT	10.0
4.	KAKUL	20.0	14.	MALAMJABBA	8.0
5.	KASUR	19.0	15.	CHILAS	8.0
6.	G.DOPATTA	18.0	16.	BALAKOT	8.0
7.	DIR	16.0	17.	MUZAFFARABADCITY	6.0
8.	PATTAN	15.0	18.	DROSH	5.2
9.	KALAM	13.0	19.	SIALKOTCANTT	5.0
10.	ASTORE	13.0	20.	ISLAMABAD,AIRPORT	5.0

Figure 3 illustrates the spatial distribution of mean temperatures recorded at PMD stations during November 2025, highlighting significant regional variations across the country. Most regions experienced mean temperatures ranging between 11°C and 21°C. Relatively lower temperatures, between 7°C and 17°C, were observed over parts of Balochistan, upper Khyber Pakhtunkhwa, and

Gilgit-Baltistan. In contrast, higher temperatures prevailed across Sindh, Punjab, and southern to southwestern Balochistan, with mean values ranging from 21°C to 27°C.

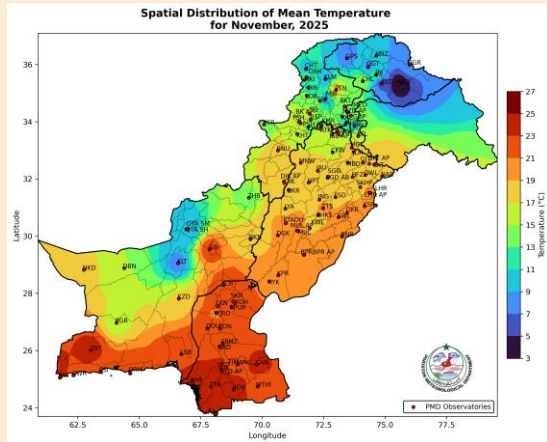


Figure 3: Monthly Mean Temperature (°C)

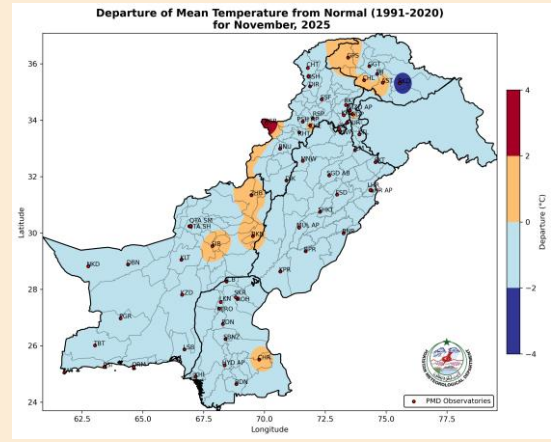


Figure 4: Monthly Departure from Normal Temperature

Figure 4 illustrates the deviation of mean temperatures from the normal (1991-2020), indicating that most parts of the country experienced below-normal temperatures up to -4°C. Figures 5 and 6 present the monthly normal rainfall and mean temperature for November, based on the 1991-2020 reference period.

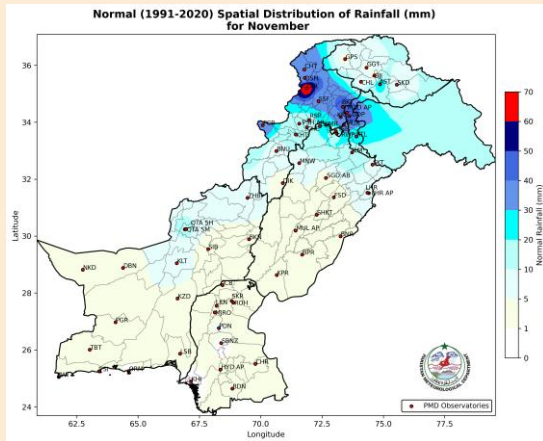


Figure 5: Monthly Normal Rainfall (mm)

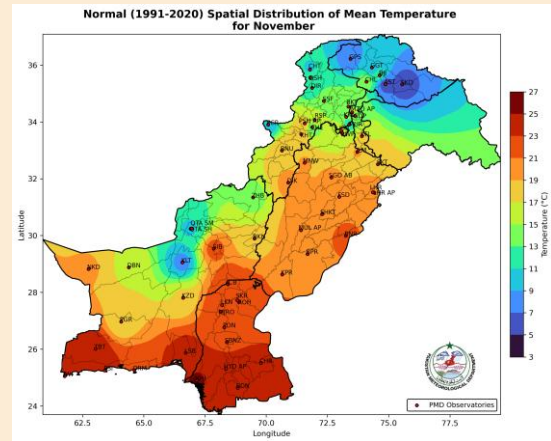


Figure 6: Monthly Normal Mean Temperature (°C)

2. Comparison of Actual to Normal Monthly Rainfall for November, 2025

Figure 7 presents a comparison of actual rainfall with the historical normal (1991-2020) for November 2025, shown separately for different regions: Khyber Pakhtunkhwa [Figure 7(a)], Sindh

[7(b)], Punjab [7(c)], Balochistan [7(d)], Gilgit-Baltistan, and Azad Jammu & Kashmir [7(e)]. The graphs indicate that rainfall during the month remained below-normal across the country.

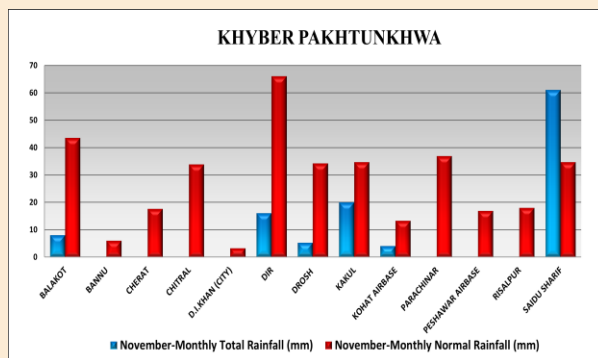


Figure 7a

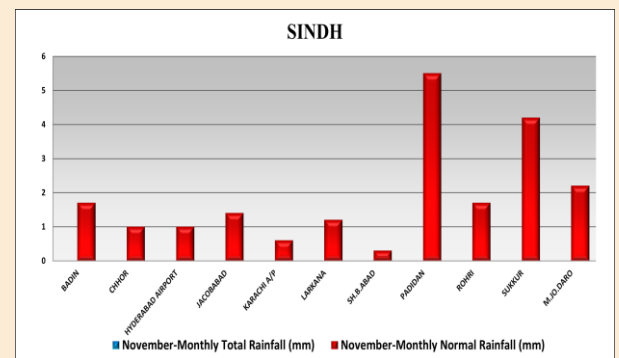


Figure 7b

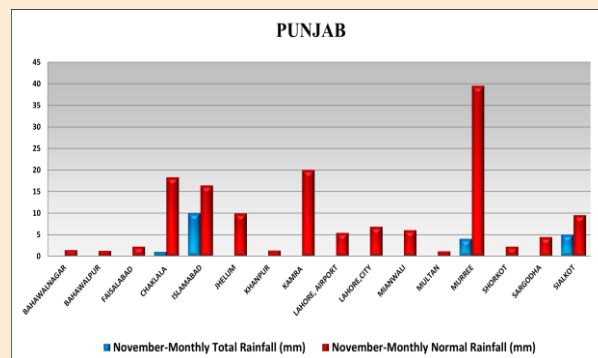


Figure 7c

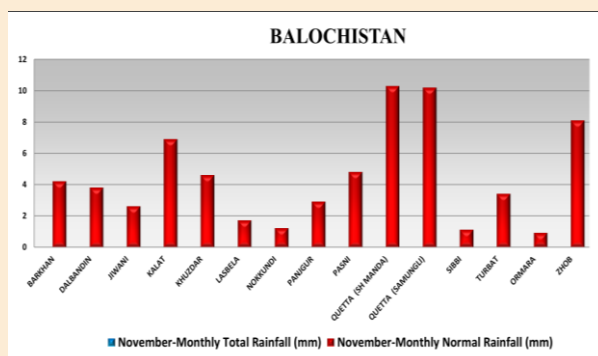


Figure 7d

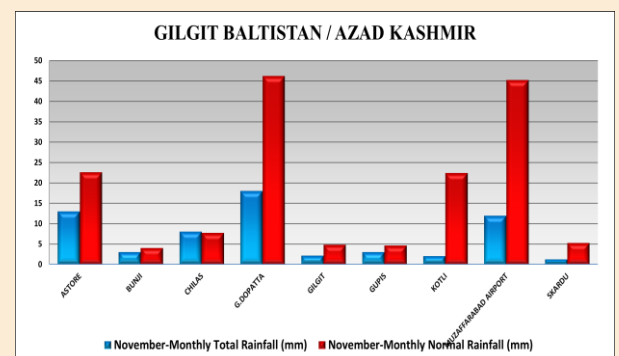


Figure 7e

3. Normalized Difference Vegetation Index (NDVI)

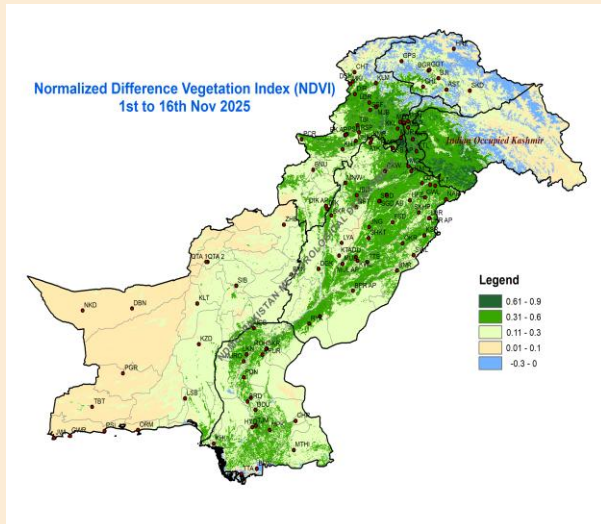


Figure 8: NDVI

Figure 8 presents the Normalized Difference Vegetation Index (NDVI) values for the period 1–16 November, 2025. Higher NDVI values are observed across AJK, Punjab, Khyber Pakhtunkhwa, and along the Indus Basin, reflecting extensive vegetation cover in these regions. These conditions indicate healthy plant growth supported by adequate chlorophyll accumulation. In contrast, persistently low rainfall in Balochistan has resulted in low or deficient NDVI values, highlighting reduced vegetation activity and stressed environmental conditions.

4. Land Surface Temperature (LST)

Figure 9 depicts the Land Surface Temperature (LST) distribution for the period of 01–08 November, 2025. During this period, south Punjab, Sindh, and Balochistan experienced elevated daytime temperatures, with average values ranging between 30°C and 40°C, indicating warmer-than-usual surface heating across these regions.

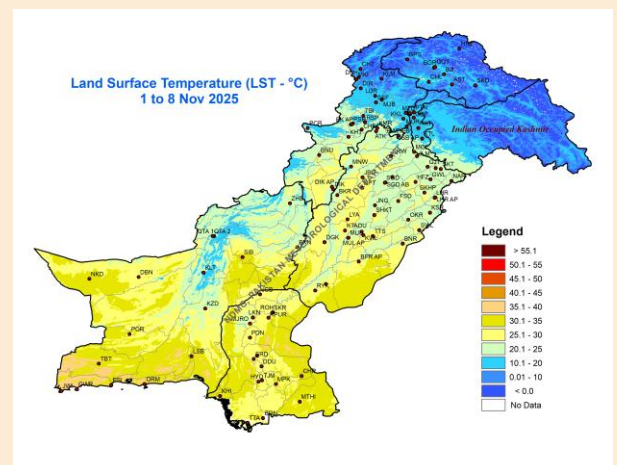


Figure 9: Land Surface Temperature (°C)

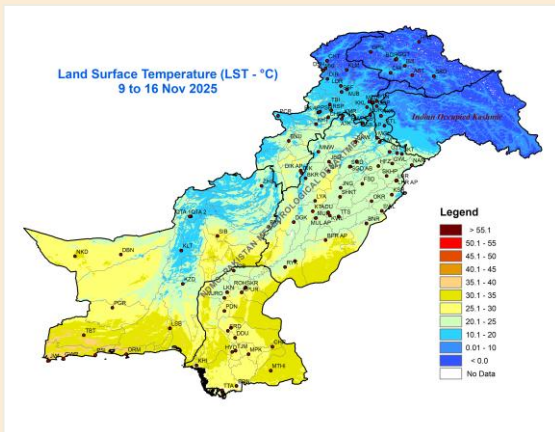


Figure 10: Land Surface Temperature (°C)

Figure 10 illustrates the Land Surface Temperature (LST) conditions from 09 to 16 November 2025. During this period, a slight decrease in temperatures was observed compared to the previous week in western Balochistan, parts of Sindh, and southern Punjab.

5. Temperature Vegetation Dryness Index (TVDI)

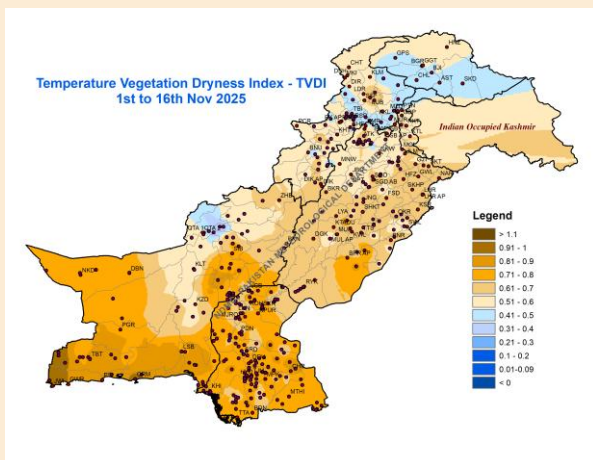


Figure 11: TVDI

Figure 11 presents the Temperature Vegetation Dryness Index (TVDI), derived from MODIS datasets MOD13A2 (NDVI) and MOD11A2 (LST). The TVDI Index highlights moderate dry-like conditions in Sindh province and Balochistan particularly in the western parts of Balochistan. These elevated TVDI values reflect early signs of dryness and emerging soil moisture deficits in the region.

6. Length of Consecutive Dry Days up to November 30, 2025

Figure 12 presents the maximum length of Consecutive Dry Days (CDD) across the country. The longest dry spells were observed at Jiwani (314 days), Dalbandin (275 days), and Nokkundi (263 days), indicating prolonged periods without significant rainfall in these areas. In contrast, many other parts of the country experienced shorter CDD durations, mainly due to the occurrence of intermittent rainfall events during the season.

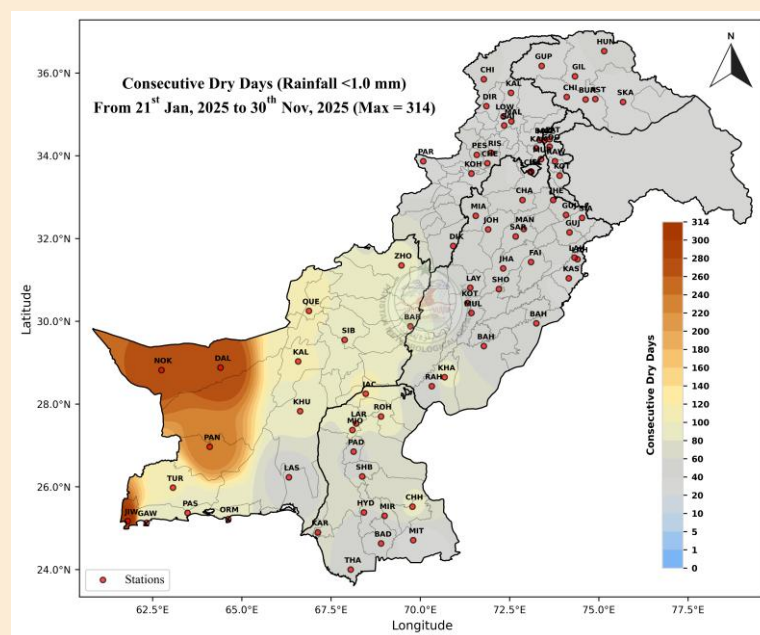


Figure 12: No. of consecutive dry days

7. Drought Monitor for the Month of November, 2025

Based on the analysis of multiple drought-monitoring indicators and ground-based observations from meteorological stations across the country, the spatial drought status for November 2025 is presented in Figure 13.

The results show that mild to moderate drought-like conditions persist across the western parts of Balochistan, primarily due to significantly below-normal or absent summer monsoon rainfall in these areas. These prolonged dry conditions have contributed to reduced soil moisture, stressed vegetation, and emerging hydrological deficits.

In contrast, most other regions of the country received adequate rainfall during the preceding months, enabling normal moisture conditions and sufficient water availability to meet agricultural and domestic demands for at least the next 1 to 2 months. This relative moisture stability is reflected across Punjab, Sindh, Khyber Pakhtunkhwa, Gilgit-Baltistan, and Azad Jammu & Kashmir.

Overall, the drought situation remains localized, with the most critical concern concentrated in western Balochistan, requiring close monitoring and preparedness actions by relevant authorities.

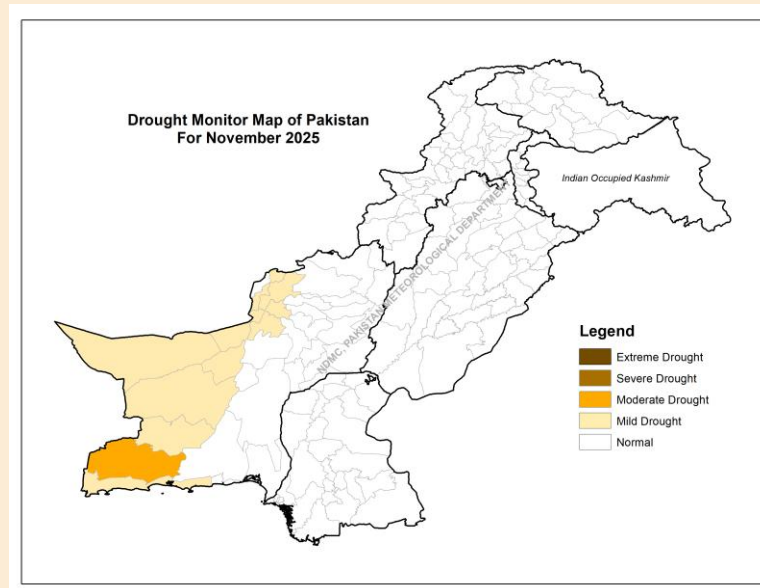


Figure 13: Drought Monitor of Pakistan for the month of November, 2025

8. Water Availability/ Dams Flow Data:

During the month, water inflow, outflow and levels of the Mangla, Tarbela, Khanpur, Rawal, Simly and dams are shown in Figure 14. The water levels at the major reservoirs, Tarbela and Mangla, stand at 1,495 feet and 1218.6 feet respectively.

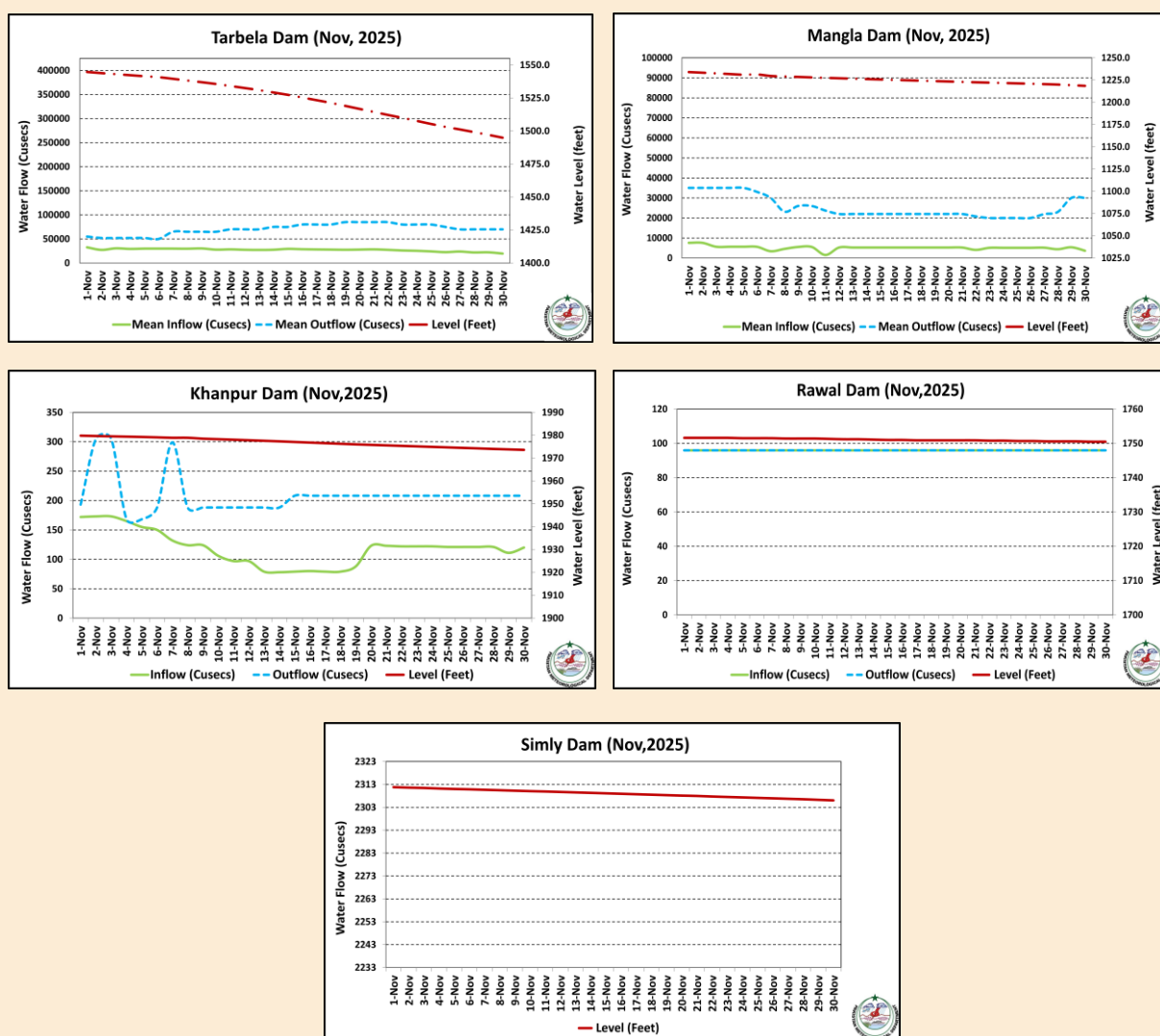


Figure 14: Water inflow, outflow and level of Rawal, Khanpur, Tarbela, Simly and Mangla Dams, November, 2025

9. Weather Outlook for December, 2025

For December 2025, overall, a general tendency for below-normal rainfall is expected across most regions of the country. The most pronounced rainfall deficits are likely in northern Punjab, large parts of Khyber Pakhtunkhwa, as well as Kashmir and Gilgit-Baltistan.

10. Drought Outlook for December, 2025

Below-normal rainfall and above-normal temperatures during December are likely to sustain the ongoing drought-like conditions over the western and southwestern parts of Balochistan. However, any rainfall associated with expected westerly weather systems may provide partial relief to some extent.

In contrast, the remainder of the country benefited from substantial monsoon rainfall, and major reservoirs currently hold adequate water levels. As a result, overall hydro-meteorological conditions across most regions are expected to remain normal throughout the month.

11. Crop Condition & Advice for Farmers

- Previous rainfall spells have slightly improved soil moisture in upper and central Punjab, as well as in parts of northeastern Sindh. However, dryness persists in most areas of Balochistan and southern Sindh.
- Sowing of Rabi crops, particularly wheat, has begun in several regions. Timely rainfall will be beneficial for early sowing activities.
- Farmers are advised to monitor weather forecasts regularly to plan irrigation schedules and harvesting operations efficiently.
- Judicious utilization of available water resources is recommended, especially in areas experiencing below-normal rainfall and declining soil moisture.

People and all concerned departments are advised to make efforts to save water and promote its judicious use to mitigate any adverse impacts of drought