



Preliminary Precipitation and Temperature Summary Monsoon Season (June - September 2025)

Highlights

Precipitation over the country as a whole during monsoon season (June – September, 2025) was 90.0% of the normal precipitation of the season. Most parts of the country recorded above normal maximum and minimum temperature.

Onset and Withdrawal of Monsoon

The normal Monsoon onset and withdrawal date in Nepal is 13th June and 2nd October respectively. In Nepal, four months period from June to September is considered as Monsoon season. Monsoon entered into eastern Nepal fifteen days earlier than normal onset day on 29th of May and withdrew from eastern Nepal on 10th October delayed by eight days. The duration of Monsoon was 135 days, which was twenty-three days longer than normal Monsoon period (112 days). The dates of onset and withdrawal of monsoon over Nepal are shown in Figure 1.

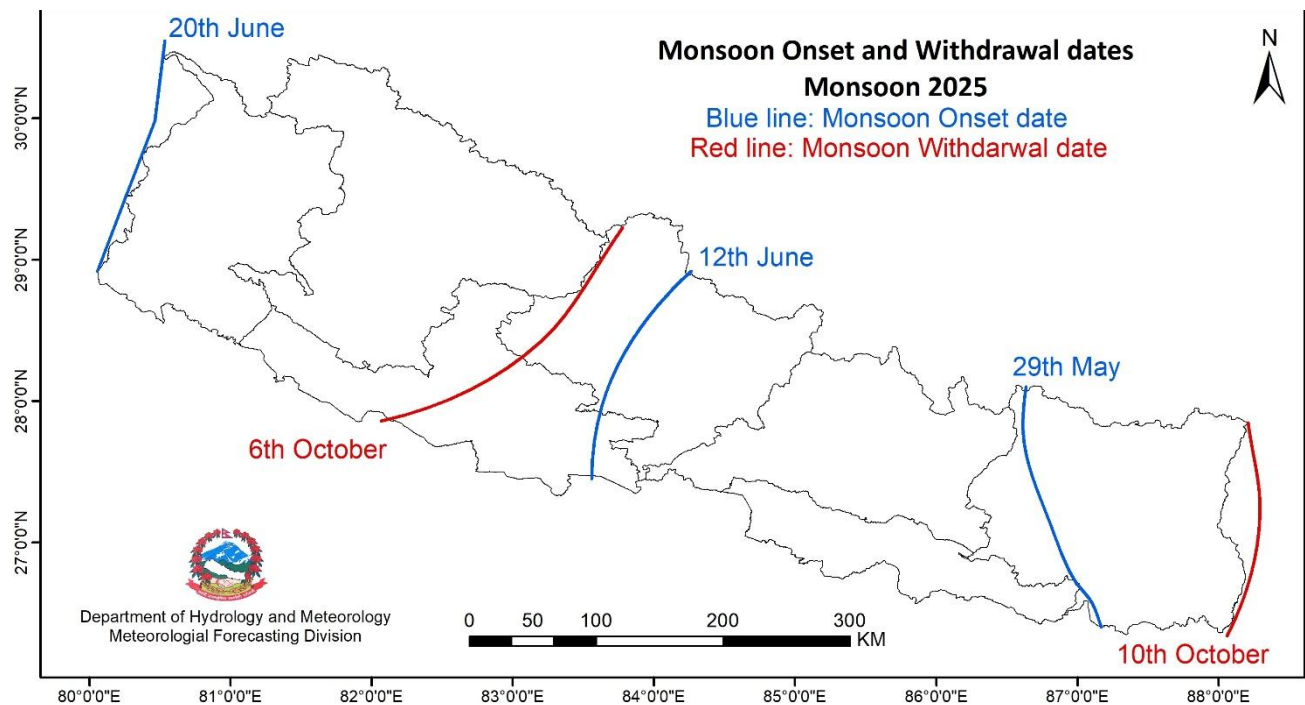


Figure 1: Monsoon onset and withdrawal date in 2025.

Precipitation

Most parts of the country recorded precipitation between 1000 and 1500 mm, while some areas in Gandaki Province, Bagamati Province and Koshi Province received precipitation above 2000 mm (Figure 2). Most parts of the country recorded near-normal to above normal precipitation (Figure 3). However, Madhesh Province, southern and eastern part of Koshi Province, southern part of Bagamati Province, few parts of Gandaki Province, Lumbini province, Karnali Province and Sudurpaschim Province recorded below normal precipitation.

Highest seasonal precipitation of 4588.6 mm was recorded at Lumle station while the highest percentage of normal precipitation of 159.8% was recorded at Charikot station (Annex 1). Lowest seasonal precipitation of



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156.1 mm was recorded at Jomsom station while the lowest percentage of normal precipitation of 46.2% was recorded at Rampur station. The highest daily precipitation of 267.6 mm was recorded at Bhairahawa Airport station on 15th September. Based on the average of 120 stations shown in figure 3, Nepal received 90.0% of the normal precipitation of the season. In general, less than 90% of normal precipitation is considered as below normal, 90 to 110% is considered as near normal, and more than 110% of normal precipitation is considered as above normal precipitation for the season.

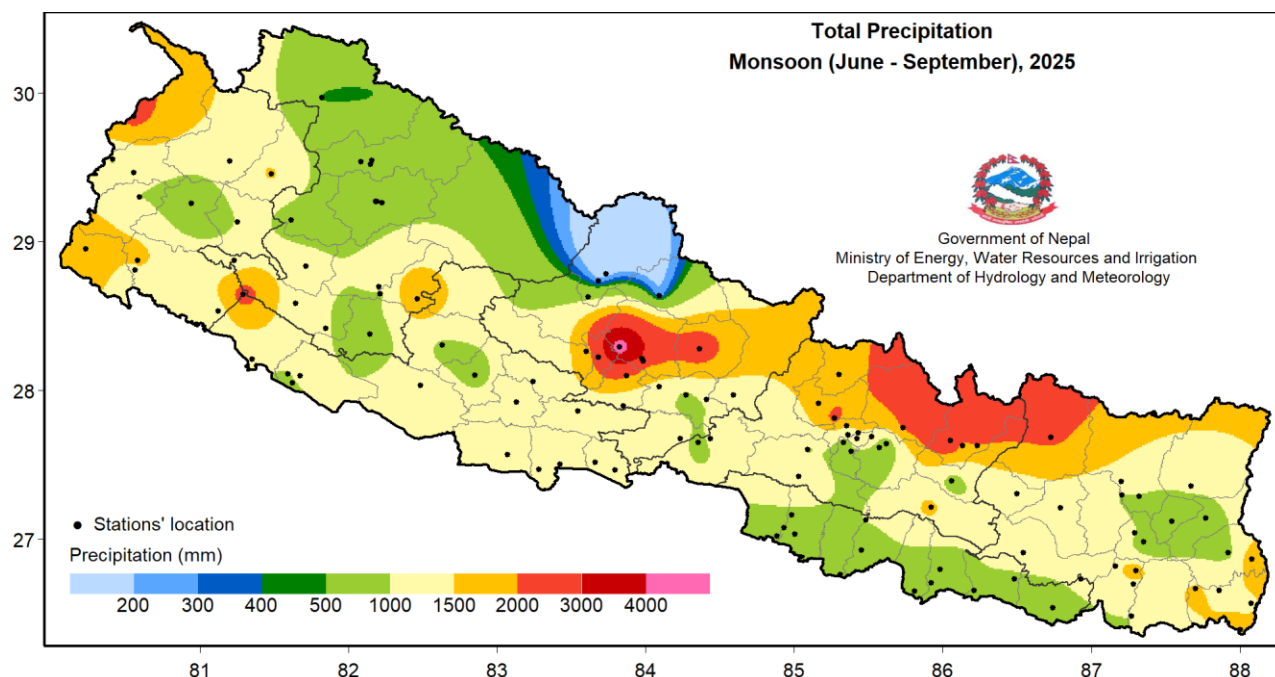


Figure 2: Total precipitation in Monsoon 2025

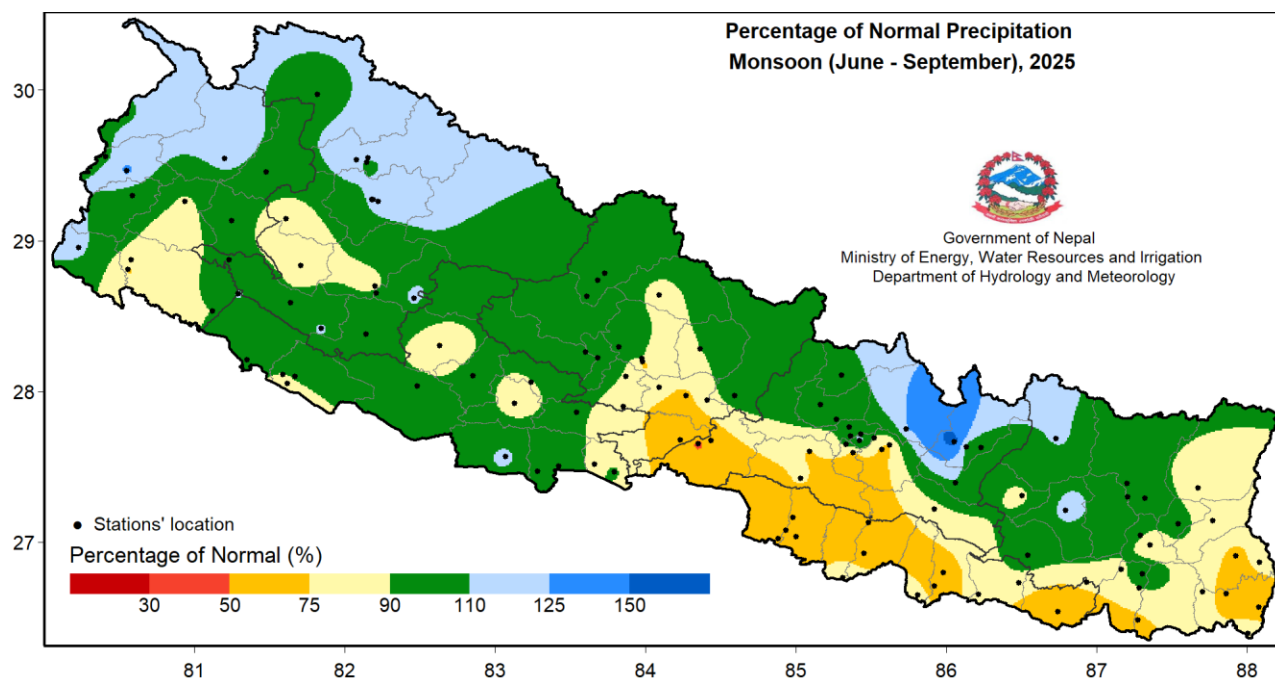


Figure 3: Percentage of normal precipitation in Monsoon 2025



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The temporal distribution of the seasonal cumulative average of daily precipitation shows that precipitation remained near normal during the first month of the season and it remained below normal in the rest of the season (Figure 4). Madhesh Province and the southern part of Lumbini Province experienced fewer rainy days as the number of rainy days (precipitation ≥ 1 mm) ranging from of 36 to 48 days, whereas most stations in the Hilly region (the central part of Nepal between the northern mountains and southern plains) recorded more than 66 rainy days (Figure 5). Over the recent four years, three years along with 2025 have shown a negative precipitation anomaly in Monsoon season. The country averaged total precipitation of Monsoon 2025 was lower than in 2024 (Figure 6).

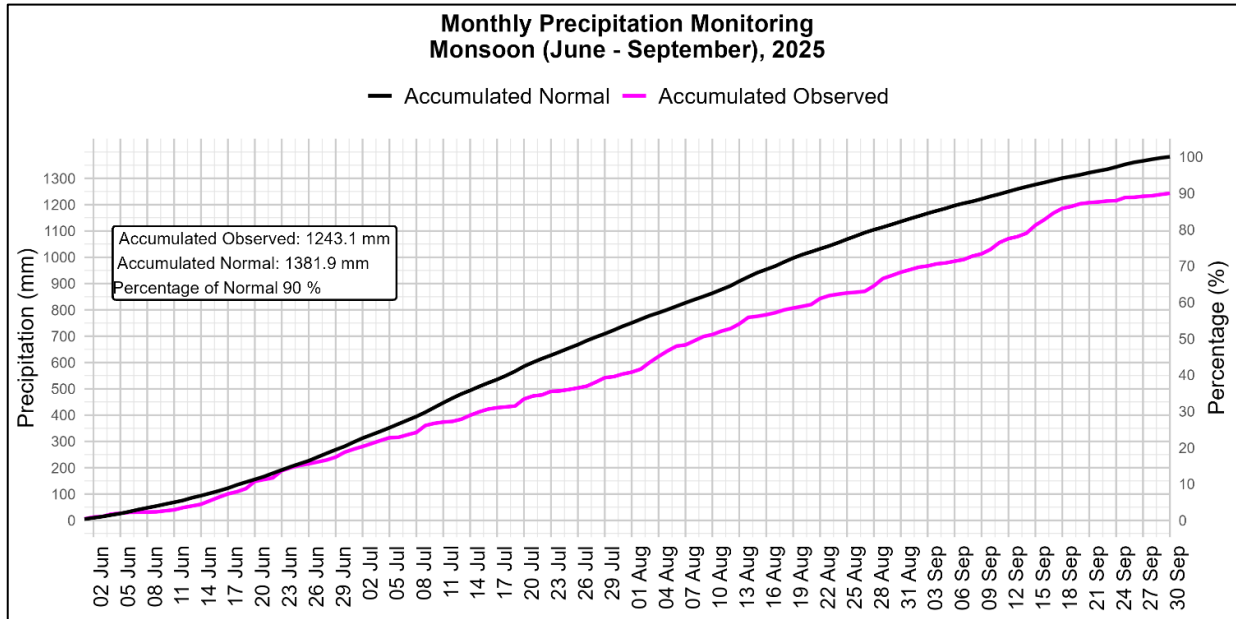


Figure 4: Cumulative average of daily normal and observed precipitation during Monsoon 2025

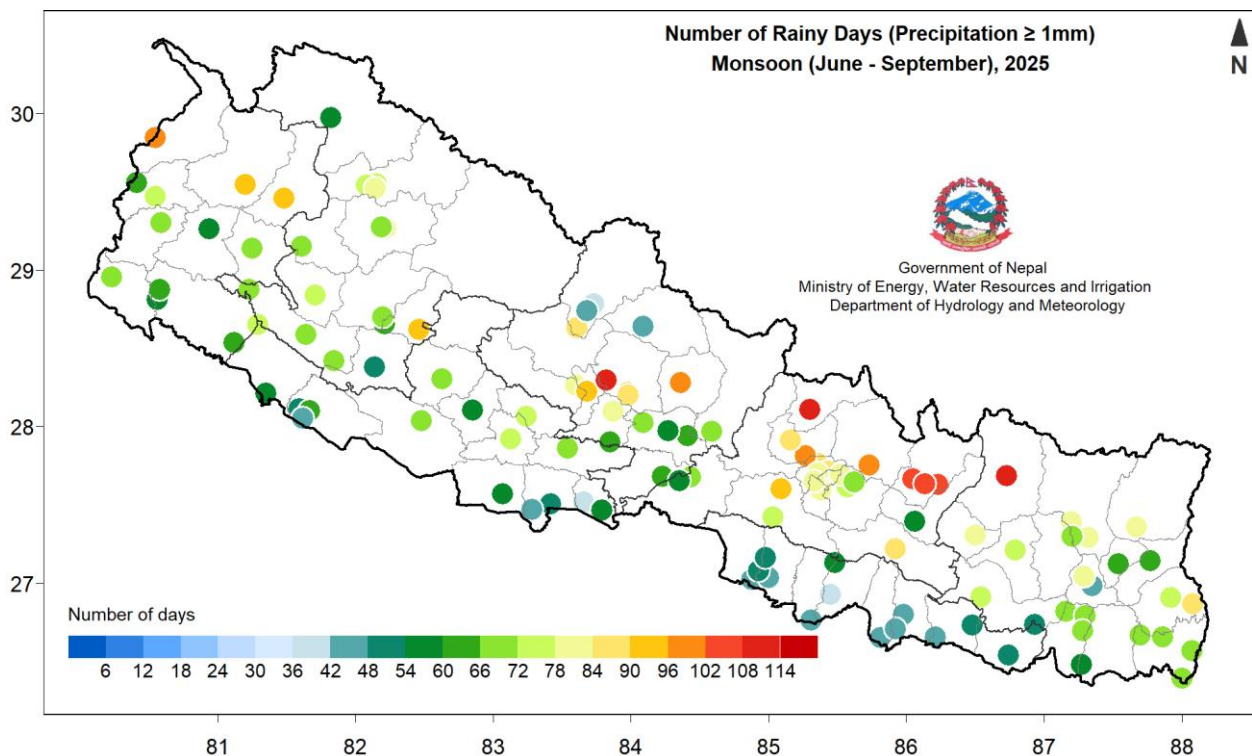


Figure 5: Number of rainy days during Monsoon 2025



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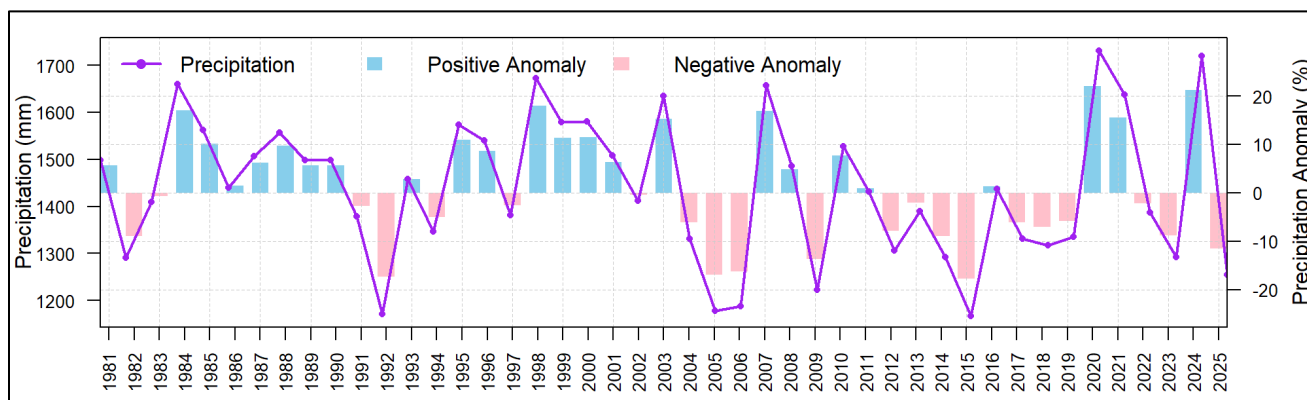


Figure 6: All Nepal seasonal total precipitation of Monsoon Season from 1981 to 2025 (average of 103 stations)

Maximum Temperature

Maximum temperature of Terai remained above 33°C across most parts (Figure 7). Most parts of the country recorded near-normal to above normal maximum temperature while a few parts across all provinces recorded below normal maximum temperature (Figure 8).

Birganj station and Lukla Airport station recorded the highest and lowest seasonal average maximum temperature of 35.9°C and 19.0°C respectively. Similarly, the highest seasonal anomaly of 2.7°C was recorded at Buddhanilakantha station and the lowest of -2.6°C was recorded at Charikot station (Annex 1). The highest daily maximum temperature of 42.6°C was recorded at Birganj station on 14th June and the lowest daily maximum temperature of 9.9°C was recorded at Humde Station on 3rd June. The country averaged maximum temperature of Monsoon shows warmer conditions in last four years (Figure 9).

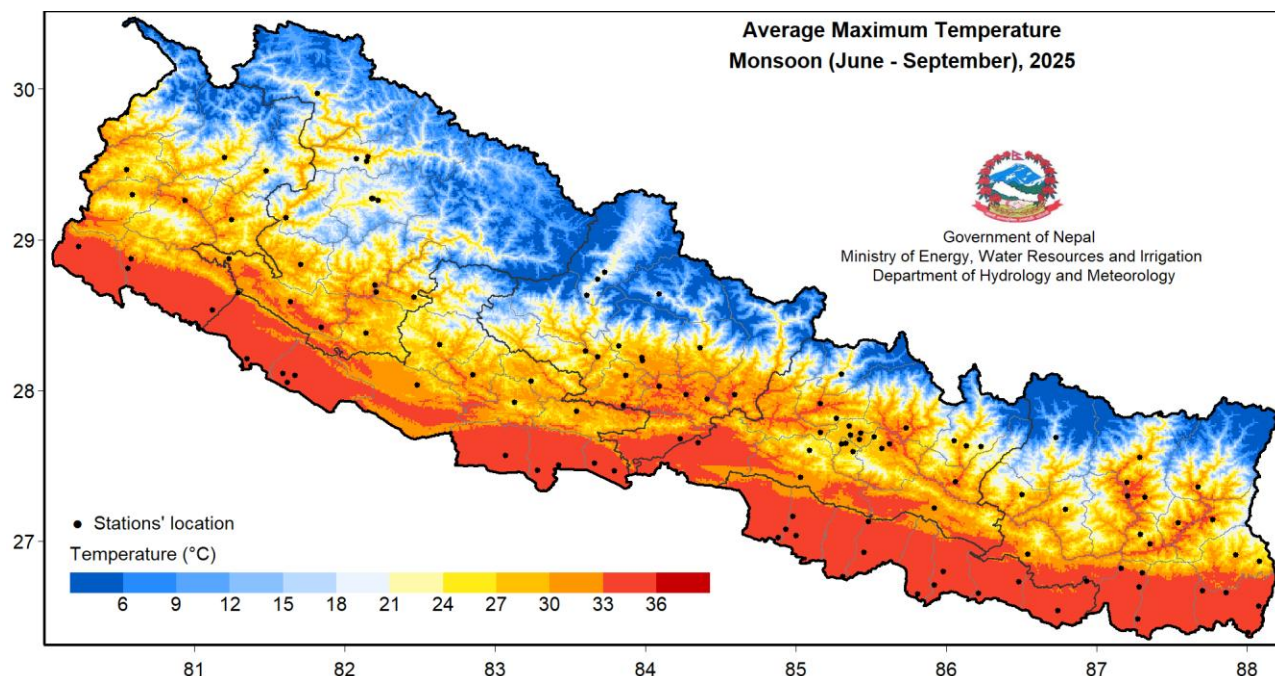


Figure 7: Maximum Temperature in Monsoon 2025.



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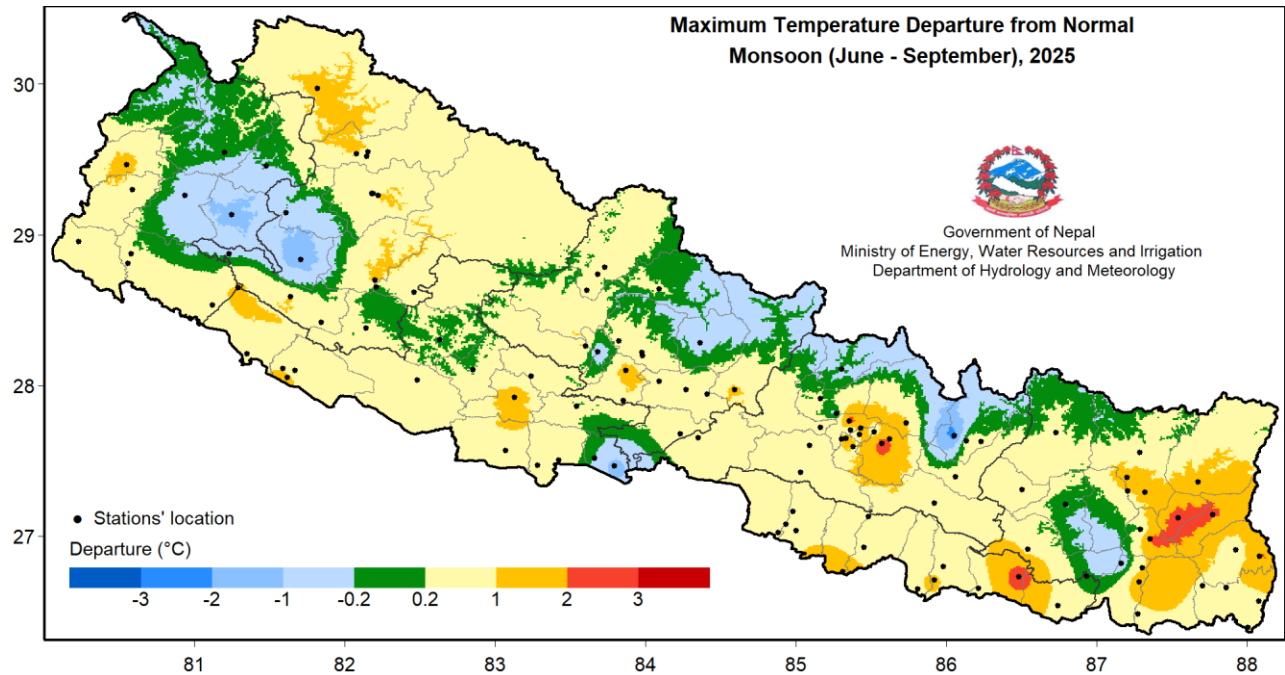


Figure 8: Departure from normal maximum temperature in Monsoon 2025.

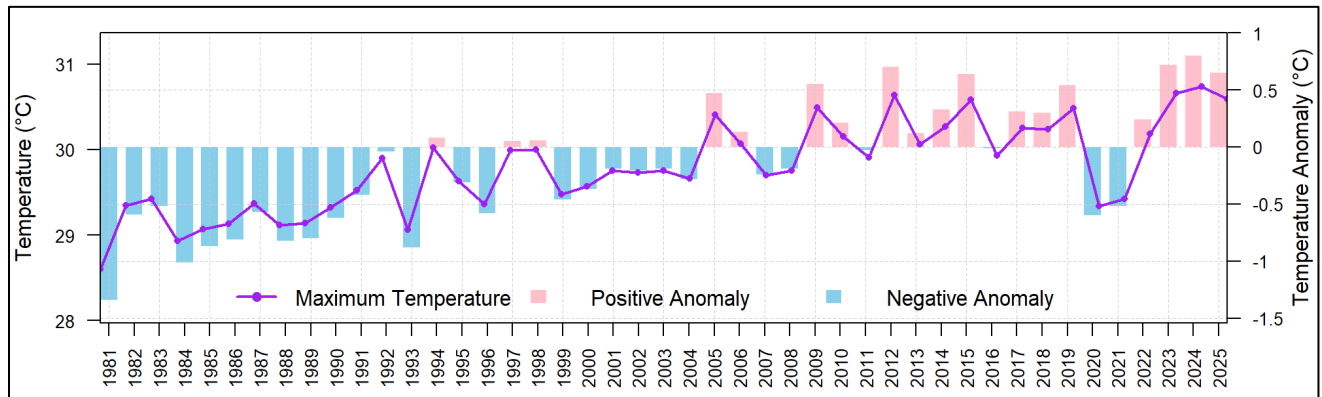


Figure 9: All Nepal seasonal average maximum temperature of Monsoon Season from 1981 to 2025 (average of 62 stations)

Minimum Temperature

The minimum temperature in the most part of Terai remained above 24°C, reaching over 27°C across few parts of Madhesh Province (Figure 10). Most parts of the country recorded above normal minimum temperature while few parts across Sudurpaschim Province, Karnali Province, Lumbini Province, Gandaki Province and Bagamati Province recorded below normal temperature (Figure 11).

Birganj station and Humde station recorded the highest and lowest seasonal average minimum temperature of 27.5°C and 9.8°C respectively. Similarly, the highest seasonal anomaly of 4.6°C was recorded at Baitadi Gothlalapani station and the lowest anomaly of -6.4°C was recorded at Tikapur station (Annex 1). The highest daily minimum temperature of 32.6°C was recorded at Lumbini station on 12th June while the lowest daily maximum temperature of 1.8°C was recorded at Darchula station on 15th June. The country's average minimum temperature in Monsoon shows warmer conditions in last fourteen years including 2025 (Figure 12).



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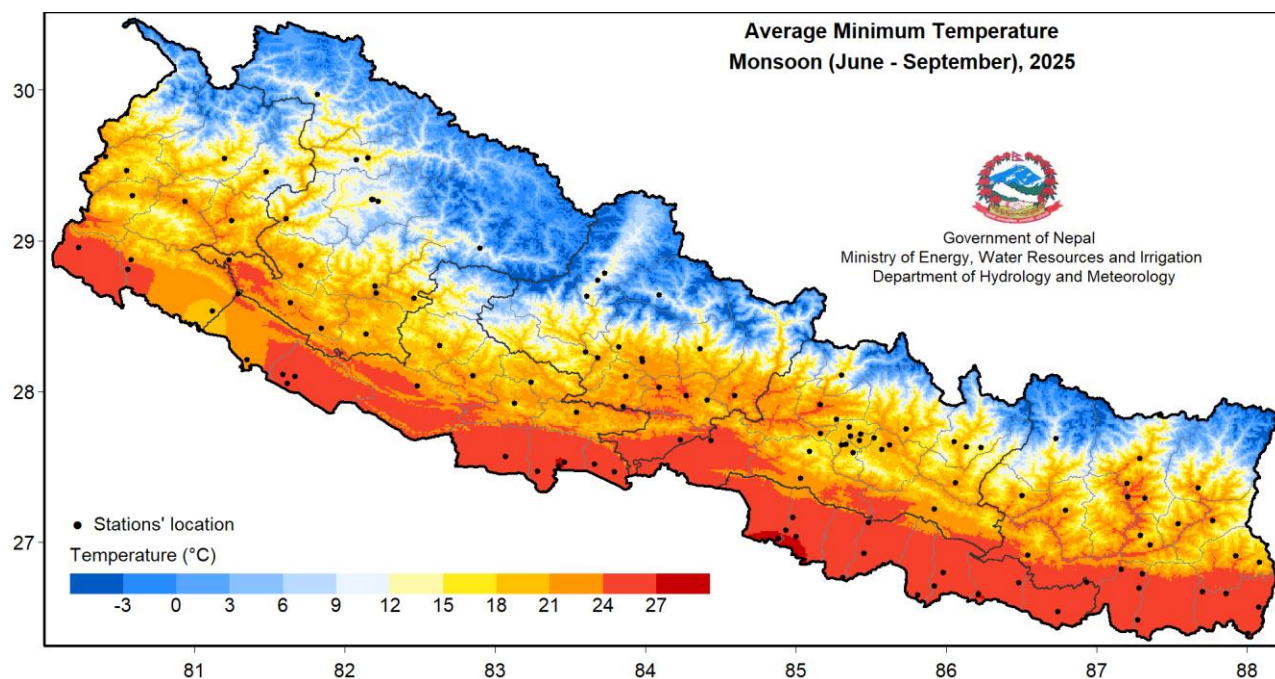


Figure 10: Minimum Temperature in Monsoon 2025

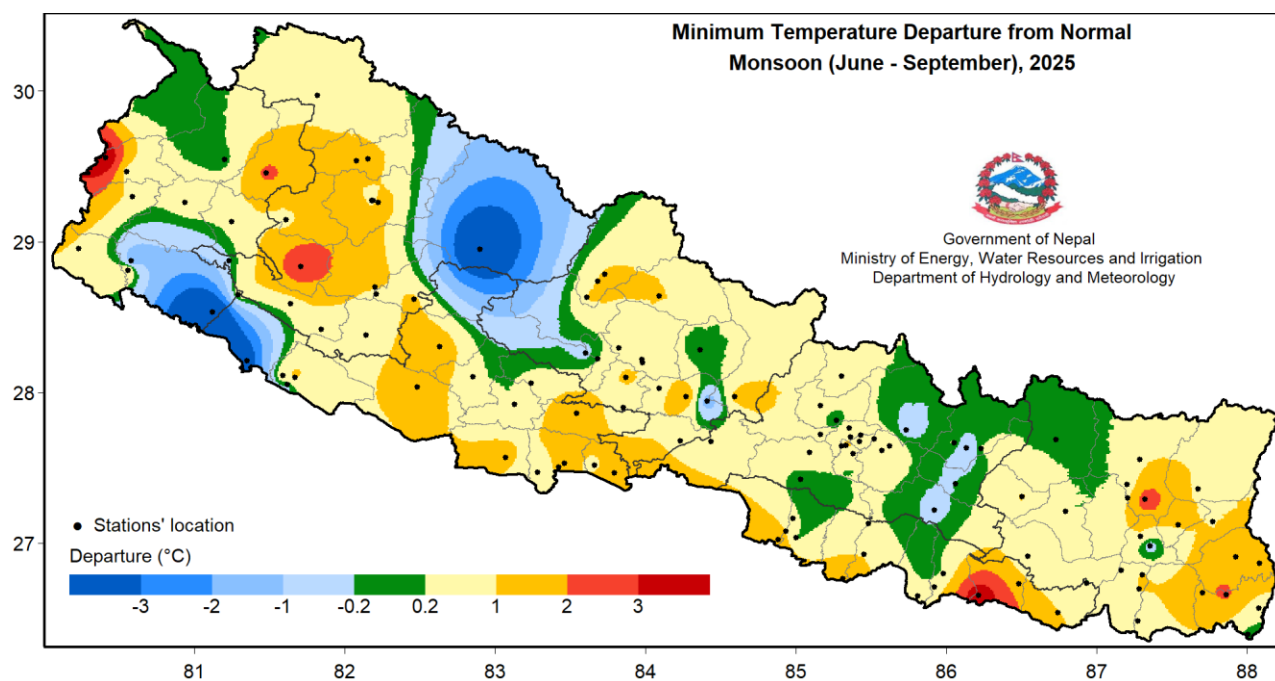


Figure 11: Departure from normal minimum temperature in Monsoon 2025



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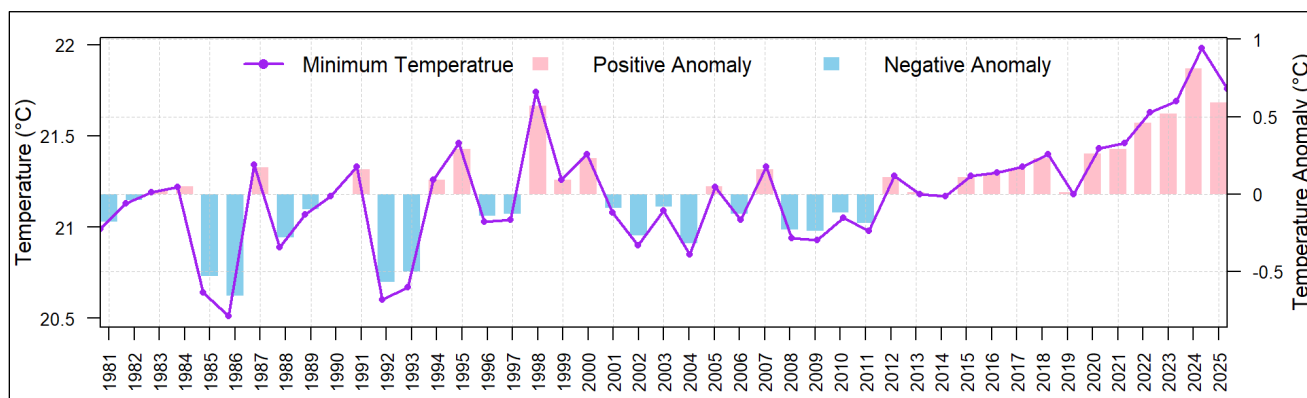


Figure 12: All Nepal seasonal average minimum temperature of Monsoon Season from 1981 to 2025 (average of 59 stations)

Diurnal Temperature Range

Most parts of the country recorded diurnal temperature range (DTR) between 6°C and 10°C. However, some stations in the Bagmati Province, Karnali Province and Sudurpaschim Province experienced higher DTRs above 14°C. (Figure 13).

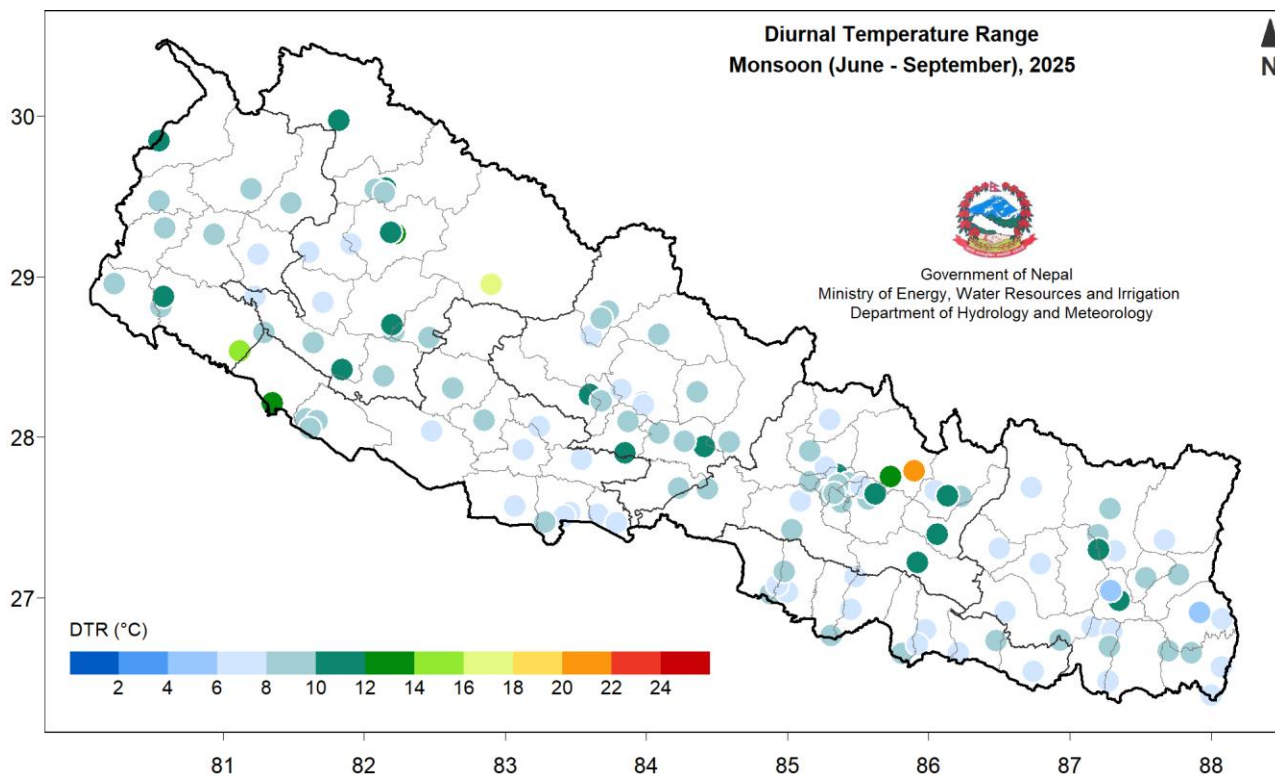


Figure 13: Diurnal temperature range in Monsoon 2025



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Drought

Moderate drought condition (below normal precipitation by 25-50%) was observed over most parts of Madhesh Province and few parts of Koshi Province, Bagamati province and Gandaki Province (Figure 2). A drought is defined as moderate, severe and extreme as given in the table below.

Table 1: Drought category

S.N.	Percentage of normal precipitation (%)	Drought category
1	50 - 75	Moderate drought
2	30 - 50	Severe drought
3	< 30	Extreme drought

Historical record break

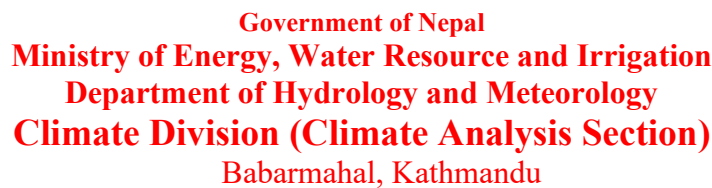
Several stations broke the previous record of ever-recorded extremes of precipitation and maximum temperature (Table 2 & 3).

Table 2: List of station breaking the ever-recorded highest daily precipitation in Monsoon 2025.

S.N.	Station Name	District	Record break daily precipitation (mm)/Date	Previous highest precipitation (mm)/Date
1	Bhairahawa Airport	Rupandehi	267.6/2025-09-15	266.5/1998-08-03

Table 3: List of stations breaking the ever-recorded highest daily maximum temperature in Monsoon 2025.

S.N.	Station Name	District	Record break maximum temperature (°C)/Date	Previous highest maximum temperature (°C)/Date
1	Taplejung	Taplejung	30.0/2025-07-24	29.7/2018-07-19
2	Lete	Mustang	32.5/2025-07-25	29.0/2016-04-05



Sudurpashchim Province										Bagmati Province															
Station	Latitude	Longitude	Elevation	Precipitation		Temperature				Station	Latitude	Longitude	Elevation	Precipitation		Temperature									
				Total (mm)	Normal	PoN (%)	Maximum		Minimum					Total (mm)	Normal	PoN (%)	Maximum		Minimum						
							Average (°C)	Normal	DFN (°C)								Average (°C)	Normal	DFN (°C)	Average (°C)	Normal	DFN (°C)			
Baitadi (Gothalapani)	29.56	80.41	1352	969.9	912.5	106.3	-	28.7*	-	19.8	15.2*	4.6	Bahrabise	27.79	85.90	884	-	2303.6	-	-	31.8*	-	-	21.2*	-
Bajura (Martadi)	29.46	81.48	1598	1573.3	1508.4	104.3	27.6	27.8*	-0.2	19.4	17.1*	2.3	Bhaktapur	27.68	85.42	1315	1232.3	1055.5	116.8	30.9	30*	0.9	21.3	20.3*	1.0
Chainpur (Bajhang)	29.55	81.2	1405	982.2	976.90	100.5	29.0	27.8	1.2	21.2	18.4	2.8	Bharatpur	27.68	84.43	216	1115.4	744.3*	63.9	-	34.2*	-	26.0	25.4*	0.6
Chisapani (Karnali)	28.65	81.29	201	2317.9	2071.2	11.9	33.9	32.6	1.3	25.7	25.1	0.6	Buddhanilkantha	27.76	85.35	1378	1515.5	662.2*	91.2	30.3	27.6*	2.7	20.1	19.2*	0.9
Dadeldhura	29.30	80.59	1879	999.3	1003.6	99.6	25.7	25	0.7	17.5	16.8	0.7	Changu Narayan	27.72	85.43	1502	1448.4	1347.8	107.5	29.6	28.1*	1.5	19.6	19.1*	0.5
Darchula New	29.84	80.55	945	2249.8	2076.3*	108.4	32.4	32.4*	0.0	22.1	21.8*	0.3	Charikot	27.67	86.05	1904	2845.5	1781.2	159.8	22.7	25.3*	-2.6	16.2	15.9*	0.1
Dhangadhi (Attariya)	28.81	80.56	184	1194.6	1618	73.8	34.5	33.8	0.7	26.4	25.3	1.1	Chautara	27.75	85.73	1552	2046.1	1654.0	123.7	29.8	28.7*	1.1	17.6	18.2*	-0.1
Dipayal (Doti)	29.26	80.94	563	662.3	762.8	86.8	34.0	34.6	-0.6	24.2	23.5	0.7	Daman	27.60	85.09	2265	963.9	1301*	74.1	22.5	22.1*	0.4	14.7	13.8*	0.9
Godavari(West)	28.88	80.58	280	1735.6	2061.8	84.2	33.9	33.5	0.4	23.3	24.9	-1.6	Dhulikhel	27.62	85.57	1543	841.7	1156.9	72.8	28.3	25.7	2.6	18.7	17.8	0.9
Mahendra Nagar	28.85	80.23	197	1920.4	1658.1	115.8	34.1	33.9	0.2	25.9	25.1	0.8	Dhunde	28.11	85.30	1993	1732.2	665.1*	104.0	23.7	23.9*	-0.2	16.6	15.8*	0.8
Mangsen	29.14	81.25	1310	1013.1	1037.3	97.7	28.2	29.5*	-1.3	20.6	20.1*	0.5	Dhumabi	27.72	85.16	991	-	1278.4	-	31.3	30.5	0.8	22.1	21.6	0.5
Patan new	29.47	80.55	1292	1336.7	880.3*	129.1	29.8	28.4*	1.4	20.5	19.9*	0.6	Godavari	27.59	85.38	1927	946.2	1331.2	71.1	27.0	26.0	1.0	18.0	17.8	0.2
Tikapur	28.54	81.12	149	1263.0	1396.6	90.4	34.6	34	0.6	19.1	25.1	-6	Hetauda N.F.I.	27.42	85.03	452	1533.9	1967.5	78.0	32.7	32.5	0.2	23.1	23.3	-0.2
Karnali Province										Jiri															
Chaurjhari Tar	28.65	82.21	863	932.5	952.2	97.93	32.2	32.4	-0.2	22.6	22.2	0.4	Kabre	27.63	86.13	1755	1870.0	858.3*	100.6	26.8	26.2*	0.8	16.5	17.7*	-1.2
Dalekh	28.84	81.71	1394	1176.9	1421.7	82.78	27.5	29.3	-1.8	20.1	17.2	2.9	Kakani	27.81	85.27	2030	2188.2	2346.7	93.2	22.5	22.9	-0.4	15.7	16.0	-0.3
Dipal Gaun	29.26	82.22	2422	735.4	631.5	116.5	27.5	26.3	1.2	15.3	13.6	1.7	Kathmandu Airport												

Note: The normal period for precipitation and temperature is defined as 1991 to 2020. An asterisk () indicates locations where normal data are unavailable; in such cases, the values are averaged over the available data period.*