

Fig 1: Isochrones of the advance of southwest monsoon 2025.

2. Weather over West Bengal during June 2025

- a. **Rainfall Distribution:** Cumulative rainfall over West Bengal during June 2025 was 307.9 mm, which is above normal (departure from normal 4%) than the long period average. District-wise actual and departure from normal rainfall for June are depicted in Fig.2a. Normal to above normal rainfall activity occurred over Kolkata, Howrah, South 24 Paraganas, North 24 Paraganas, Hooghly, West Midnapore, Jhargram, Bankura, Purulia, West Bardhaman, East Bardhaman, and Birbhum of Gangetic West Bengal and Malda of Sub Himalayan West Bengal. Below-normal rainfall occurred over the rest of the districts of West Bengal.
- b. **Temperature:** The mean maximum temperature with departure from normal for June 2025 is depicted in Fig.2b. The Mean Maximum temperatures were below normal by about 1°C at most of the places over south Bengal and near normal over north Bengal. The mean minimum temperature with departure from normal for June 2025 is depicted in Fig.2c. The mean minimum temperatures were near normal at most of the places over West Bengal. The monthly average of daily mean temperature with departure from normal for April 2025 is depicted in Fig.2d. The monthly mean temperatures were near normal at most of the places over West Bengal.
- c. **Significant meteorological feature:**

Three low pressure area observed over North Bay of Bengal and adjoining coastal states in the month of June, 2025 which leads widespread light to moderate rainfall over West Bengal with heavy to very heavy rainfall activity over some districts of West Bengal. A low-pressure area was formed over Southwest Bangladesh and adjoining Gangetic West Bengal on 17 June, it became a well-marked low-pressure area over Gangetic West Bengal & neighbourhood on 18th June, moved slowly northwestward and lay over northeast Jharkhand & adjoining Gangetic West Bengal on 19 June 2025. Another low-pressure area was formed over the Northwest Bay of Bengal and adjoining coastal areas of Odisha and West Bengal on 26 June 2025 and it became less marked on 27 June. Third low-pressure area has formed over the North West Bay of Bengal and adjoining West Bengal and Bangladesh Coast on 29 June 2025.

Significant weather during June 2025:

Isolated Heavy to very heavy rain (07-20cm) with isolated extremely heavy rain (>20cm) occurred over Purulia, Bankura & Jhargram districts and Isolated Heavy rain (07-11) cm occurred over West Midnapore district of South Bengal and Isolated Heavy to very heavy rain (07-20cm) occurred over the districts of North Bengal on 19 June 2025. Isolated Heavy to very heavy rain (07-20cm) with isolated extremely heavy rain (>20cm) occurred over Purulia district of South Bengal on 20 June 2025. Scattered Heavy to very heavy rain (07-20cm) with isolated extremely heavy rain (>20cm) occurred over Darjeeling, Kalimpong, Jalpaiguri, Alipurduar, Coochbehar districts of North Bengal on 24 June 2025. Stationwise distribution of Heavy/Very Heavy/Extremely Very heavy rainfall during month of June.2025 is shown in Fig. 3.



Regional Meteorological
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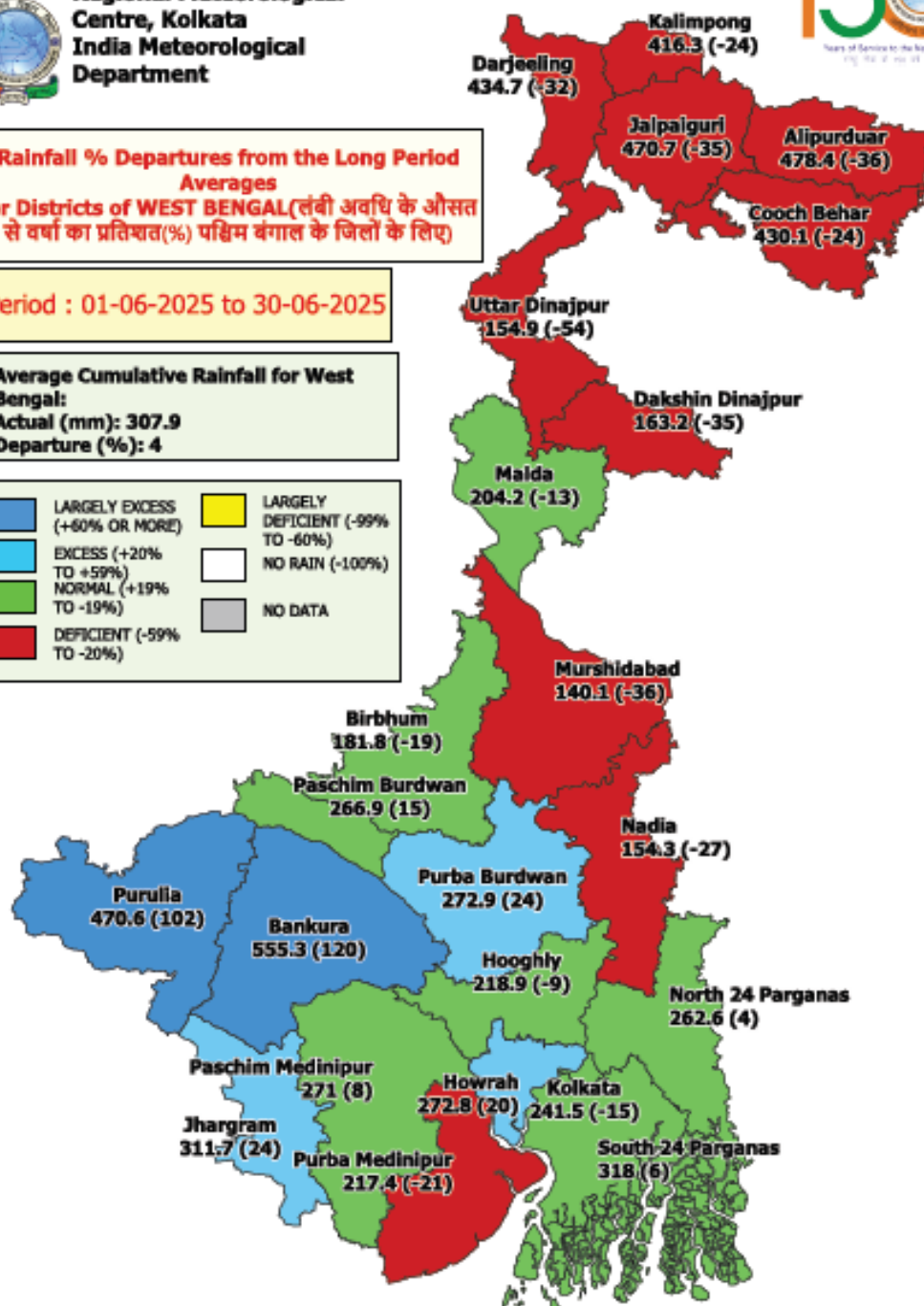


**Rainfall % Departures from the Long Period
Averages
for Districts of WEST BENGAL (लंबी अवधि के औसत
से वर्षा का प्रतिशत(%) पश्चिम बंगाल के जिलों के लिए)**

Period : 01-06-2025 to 30-06-2025

**Average Cumulative Rainfall for West
Bengal:
Actual (mm): 307.9
Departure (%): 4**

	LARGELY EXCESS (+60% OR MORE)		LARGELY DEFICIENT (-99% TO -60%)
	EXCESS (+20% TO +59%)		NO RAIN (-100%)
	NORMAL (+19% TO -19%)		NO DATA
	DEFICIENT (-59% TO -20%)		



N.B. Quantity within the bracket represents % departure for past 24 hrs for respective district and quantity outside represents the realized rainfall

Fig 2a: Rainfall distribution for June 2025

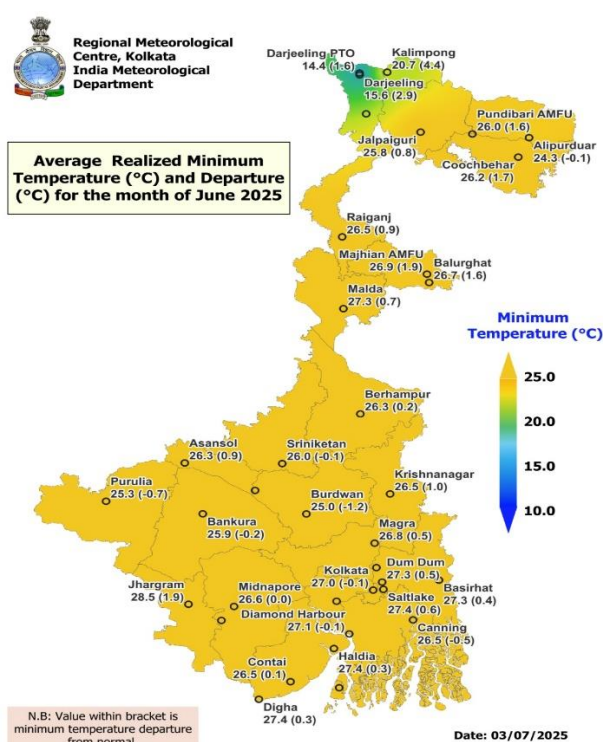
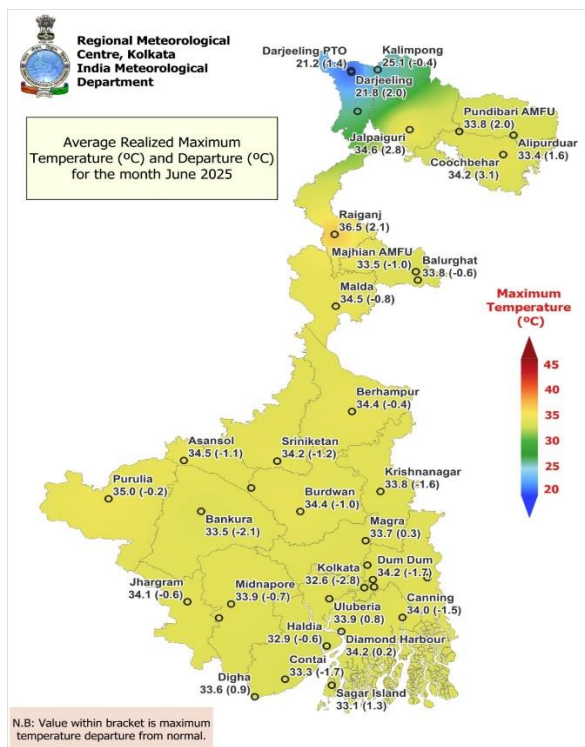


Fig.2b Mean maximum temperature for June,25 Fig. 2C Mean minimum temperature for June,25.

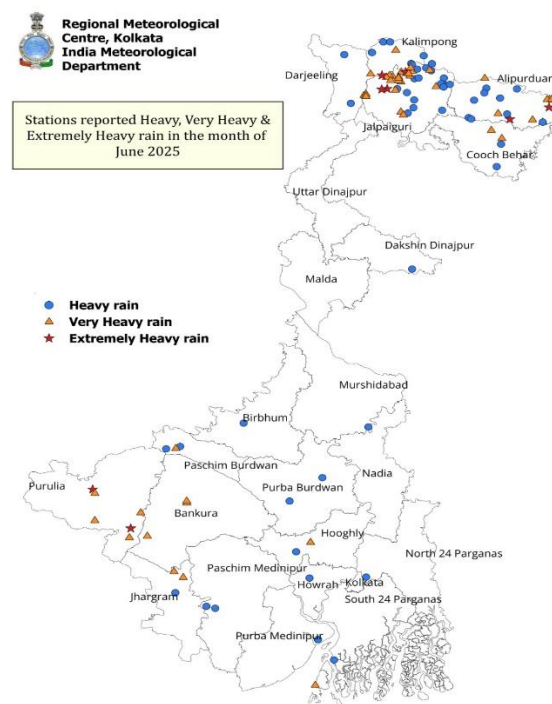
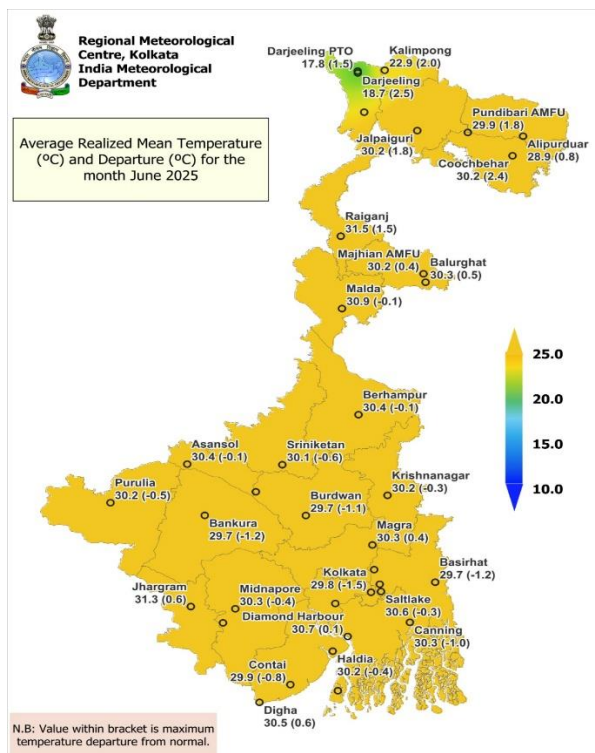


Fig.2d Mean temperature for June,25

Fig.3 Distribution of Heavy/Very Heavy/Extremely Heavy rainfall during month of June.2025

3. Monthly Rainfall Outlook for July 2025

Monthly rainfall over the country as a whole during July 2025 is most likely to be above normal ($>106\%$ of the long period average (LPA)). The LPA of rainfall over the country as a whole during July, based on data from 1971-2020, is about 280.4 mm.

The probabilistic forecast for the spatial distribution of tercile rainfall categories (above normal, normal and below normal) over the country for July 2025 is shown in Fig.4. Most parts of the country are likely to experience normal to above-normal rainfall. Western part and coastal districts of South Bengal are likely to receive normal to slightly above rainfall and remaining parts of South Bengal and districts of North Bengal likely to receive below normal rainfall during the month July 2025. There is no signal by the model over the white shaded areas within the land region of the country.

Normal to above-normal rainfall can significantly benefit agriculture and water resources, but it also brings potential risks such as flooding, mudslides, surface transport disruptions, public health challenges, and ecosystem damage. To manage these risks effectively, it is essential to reinforce infrastructure, utilize IMD's early warnings, enhance surveillance and conservation efforts, and establish robust response systems in vulnerable sectors.

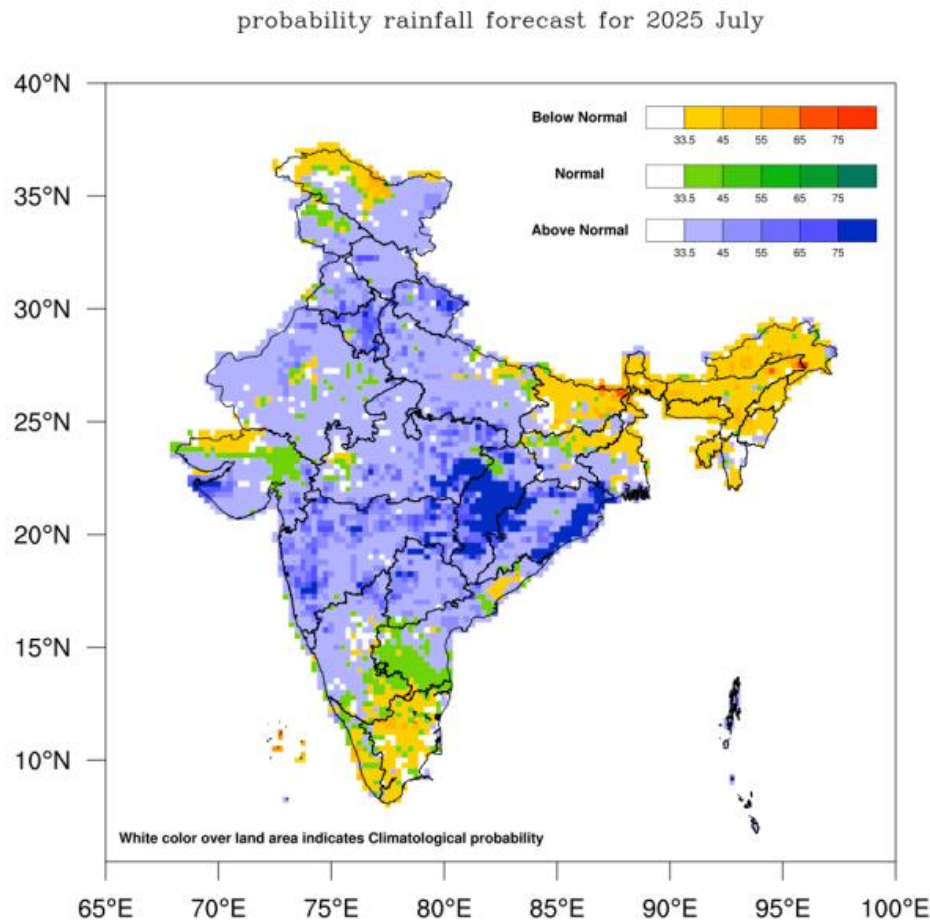


Fig4: Probability forecast of tercile categories* (below normal, normal, and above normal) of rainfall over India during July 2025. There is no signal by the model over the white shaded areas within the land region of the country.

*Tercile categories have equal climatological probabilities of 33.33% each.

4. Probabilistic Forecast of Temperature for July 2025

Fig.5 and Fig.6 show forecast probabilities of the maximum and minimum temperatures, respectively, for July 2025. During July 2025, monthly average maximum temperatures are expected to be below normal in South Bengal and above normal in North Bengal. In July 2025, the monthly average minimum temperatures are expected to be slightly above normal over many parts of West Bengal. There is no signal by the model over the white shaded areas within the land region of the country.

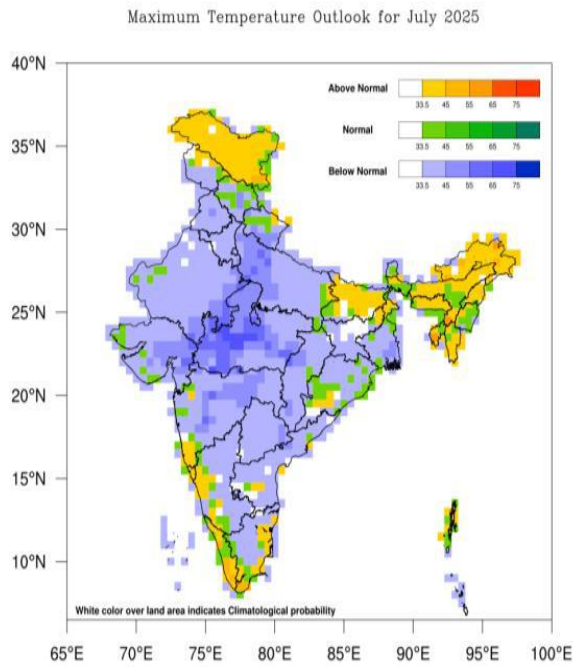


Fig 5: Probability forecast of Maximum Temperature for July 2025.

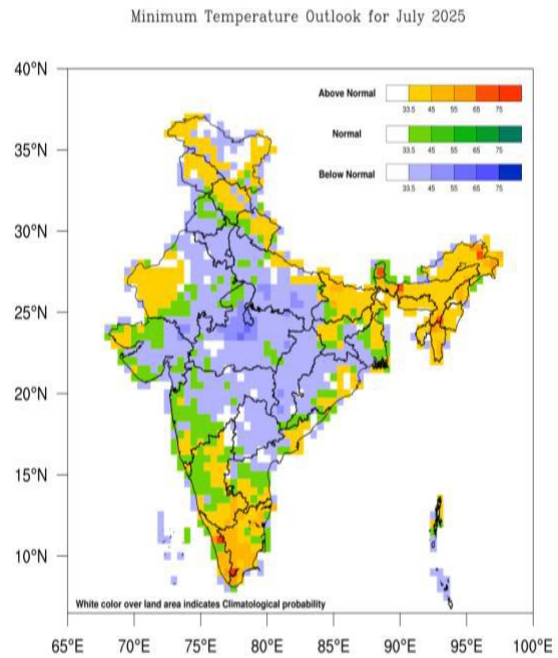


Fig. 6: Probability forecast of Minimum Temperature for July 2025.