



Dated: 03-07-2025

Current Weather Status and Extended Range Forecast for Gujarat region, Saurashtra-Kutch and Diu, Daman, Dadra Nagar Haveli for next two weeks

 $(03^{rd}$ July to 16^{th} July 2025)

1. Salient Observed Features for week ending 03rd July 2025

- ***** Weather realised during last 24hours:
- ✤ Monsoon was active Gujarat region.
- Extremely heavy rainfall occurred at isolated places in the district of North Gujarat region namely Banaskantha.
- Very heavy rainfall occurred at isolated places in the districts of Gujarat region namely Banaskantha, Sabarkantha, Mehsana and Surat.
- Heavy rainfall occurred at isolated places in the districts of Gujarat region namely Sabarkantha, Banaskantha, Mehsana, Kheda, Tapi, Dang, Surat and Vadodara.
- Rainfall occurred at mostplaces over Gujarat region; at many places over Saurashtra; at isolated places over Kutch.
- * No Heat wave condition was observed across the state during the week.
- (i) Analysis of Weekly overall Rainfall distribution during the week ending on 02nd July 2025 and Season's Rainfall Scenario (1st June 02nd July 2025):
 - The rainfall analysis shows that the weekly (for 26th June to 02nd July 2025) cumulative rainfall in % departure from its long period average (LPA) was in large excess category for Gujarat region (+53%) and excess category for Saurashtra-Kutch (+48%). Seasonal cumulative rainfall % departure during 01st June to 02nd July was in large excess category for both Gujarat Region (+106%) and Saurashtra-Kutch (+98%). The meteorological sub division–wise rainfall for week and season are given in **Fig. 1**.



Legend

Large Excess [60% or more] 🚪 Excess [20% to 59%] 🚪 Normal [-19% to 19%] 📕 Deficient [-59% to -20%] 📙 Large Deficient [-99% to -60%] 🗍 No Dat

NOTES :

a) RainFall figures are based on operation data.

b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).

c) Percentage Departures of rainfall are shown in brackets.

Fig. 1: Statewise Weekly and Seasonal cumulative rainfall (normal, actual and departure).

(ii) Temperature Scenario (past 24 hours):

Maximum temperatures remained near normal to below normal during most of the days of the week.

2. Large Scale Features:

- Currently, Neutral El Niño–Southern Oscillation (ENSO) conditions prevail over the Equatorial Pacific Ocean. Forecasts from the latest Monsoon Mission Climate Forecast System (MMCFS) and other climate models suggest that these neutral conditions likely to persist till the end of the monsoon season.
- Currently, neutral Indian Ocean Dipole (IOD) conditions are being observed over the Indian Ocean. The model forecast indicates a possible transition to negative IOD conditions during the coming months.
- At present, neutral Indian Ocean Dipole (IOD) conditions are observed over the Indian Ocean. The latest MMCFS forecast indicates that weak negative IOD conditions are likely to develop during the monsoon season.
- Madden-Julian Oscillation (MJO) is currently in phase 2 with an amplitude less than 1. The model forecasts indicate that MJO is likely to make a loop in phase 2 during first half of the week with the same amplitude. Thereafter, it is indicated to move eastwards across phases 3,4 and 5 during the remaining days of the forecast period

3. Forecast for next two weeks:

(i) Weather systems & associated Precipitation:

Week 1 (03rd July to 09 July 2025):

- The monsoon trough at mean sea level continues to pass through Bikaner, Sheopur, Khajuraho, Daltonganj, Digha and thence east southeastwards to northeast Bay of Bengal.
- ✤ A cyclonic circulation lies over central parts of west Rajasthan and another over Northeast Madhya Pradesh in lower tropospheric levels.
- ✤ A trough runs from northeast Arabian Sea to northwest Bay of Bengal across central India lower & middle tropospheric levels tilting southwestwards with height.

Under the influence of the above weather systems and other synoptic conditions in coming days:

- Heavy to very heavy rains at isolated places very likely over Gujarat Region during 03 July & 05 to 8 July and over Saurashtra-Kutch on 03 July 2025.
- Heavy rain very likely at isolated places over Gujarat Region and Saurashtra-Kutch during 03 July to 09 July 2025.
- Light thunderstorms accompanied with gusty winds speed reaching 30-40 Kmph are also very likely over Gujarat State during 03rd July to 07th June, 2025.

Fig. 2 and 3 respectively depict districtwise heavy rainfall an thunderstorm warning maps.



Fig. 2: Districtwise Heavy Rainfall warning maps for Gujarat during week 1 (03-07-25 to 07-07-



Fig. 3: Districtwise Thunderstorm Warning maps of Gujarat during 02-07-25 to 07-07-2025

Week 2 (10 July to 16 July 2025):

- Monsoon trough is likely to be near normal or north of its normal position during the week. As a result, fairly widespread to widespread rainfall with isolated heavy falls likely over many parts of central India during many days of the week.
- Due to off-shore trough along the west coast, fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely along west coast during most days of the week.
- Overall, near normal rainfall activity is likely over most parts of central India.

Overall, above normal rainfall activity is likely over most parts of Gujarat State during the week (Fig. 4).



Fig. 4: Rainfall distribution and anomaly over Gujarat during the week 2

(ii) Temperature forecast & heat wave warning:

Week 1 (03 July to 09 July 2025):

Maximum Temperature:

• No large change in maximum temperature during the week very likely over the region. Due to enhanced rainfall activity they are likely to remain below normal by 2-4 deg Celsius over most parts of Gujarat Region, and some parts of Saurashtra-Kutch; and upto 2 deg C over remaining parts of Gujarat region and Saurashtra-Kutch. They are likely in the range of 30-32 deg C over most parts of Gujarat Region & Saurashtra and in the range of 28-30 deg C over extreme southern parts of Gujarat region (**Fig. 5**).

Heat Wave and Hot & Humid weather warnings:

• There is no probability of heat wave conditions over the State during the week.



Fig. 5: Maximum temperature distribution and anomaly over Gujarat during week-1

Week 2 (10 July to 16 July 2025):

Maximum Temperatures:

• Due to continuation of enhanced rainfall activity during week two also, maximum temperatures are likely to remain below normal by upto 2 deg C over the state. They are likely to be in the range of 30-32 deg C over entire Gujarat except some isolated pockets of Gujarat Region and Saurashtra-Kutch-where they are likely to be in the range of 32-34 deg C (**Fig. 6**).

Heat Wave and Hot & Humid weather warnings:

• There is no probability of heat wave conditions over the State during the week.



Fig. 6: Maximum temperature distribution and anomaly over Gujarat during week-2

4. <u>Extended range outlook for Cyclogenesis for week 1 (04-07-2025 to 10-07-2025) and week 2 (11-07-2025 to 17-07-2025):</u>

Considering large-scale environmental features and model guidance, it is inferred that:

1. Considering various large-scale environmental features and model guidance, it is inferred that, 1. The existing upper-air cyclonic circulation over north Odisha adjoining Gangetic West Bengal is likely to persist for 24 hours with a slow west-northwestward movement. 2. There is a likelihood of the formation of another upper-air cyclonic circulation over North Bay of Bengal and adjoining coastal West Bengal & Bangladesh around 6th July. It is likely to move westnorthwestwards across Gangetic West Bengal and adjoining north Odisha, Jharkhand, and east Madhya Pradesh during the subsequent 3-4 days. However, there is no likelihood of its further intensification. 3. There is no probability of cyclogenesis during week 2. However, there is a likely development of an upper-air cyclonic circulation over the north Bay of Bengal and adjoining coastal West Bengal-Odisha and Bangladesh during the week. (**Fig. 7**).



Fig. 7: Graphical Cyclogenesis over the north Indian Ocean during next two weeks

*The next extended range Bulletin will be issued on 10-07-2025.