

PRESS RELEASE
New Delhi, 30th March 2020



भारत सरकार
Government of India
पृथ्वीविज्ञानमंत्रालय (एम. ओ. ई. एस.)
Ministry of Earth Sciences (MoES)
भारत मौसम विज्ञानविभाग
INDIA METEOROLOGICAL DEPARTMENT

**Seasonal Outlook for Temperatures during
April to June, 2020**

Highlights

- The April-May-June (AMJ) seasonal average maximum temperatures are likely to be warmer than normal by 0.5°C to 1°C over some of the meteorological subdivisions of northwest India and western peninsular India.
- The April-May-June (AMJ) seasonal average minimum and mean temperatures are also likely to be warmer than normal by 0.5°C to 1°C over most of the subdivisions of northwest, west, central, east and western peninsular India.
- Frequency of heat waves in the core heat wave (HW) zone is likely to be slightly above normal during the season.

1. Background

Since 2016, India Meteorological Department (IMD), Ministry of Earth Sciences (MoES) has been issuing seasonal forecast outlooks for subdivision scale temperatures over the country for both hot and cold weather seasons based on the Monsoon Mission Coupled Forecasting System (MMCFS) Model indigenously developed by the Ministry. IMD has now prepared a Seasonal outlook for the subdivision averaged temperatures during the upcoming season of April to June 2020 and the same is presented here. The model forecasts are based on March 2020 initial conditions.

2. Forecast for the AMJ Season (April to June 2020)

Fig.1, Fig.2 & Fig.3 show the sub-divisional forecasts for averaged maximum, minimum and mean temperature anomalies (departures from the long term normal) respectively for April to June 2020 (AMJ) season.

The season averaged maximum temperatures (**Fig.1**) are likely to be warmer than normal by 0.5°C to 1°C over East and West Rajasthan, West Madhya Pradesh, Gujarat, Konkan and Goa, Madhya Maharashtra, Marathwada, North and South Interior Karnataka, Coastal Karnataka, Rayalaseema and Kerala. Rest of the country is likely to experience normal maximum temperatures (Departure from normal within -0.5 °C and 0.5 °C).

The season averaged minimum temperatures (**Fig.2**) are likely to be warmer than normal by more than 1°C over East and West Rajasthan and Gujarat region. It is likely to be warmer than normal by 0.5 °C to 1 °C over Punjab, Haryana, Chandigarh and Delhi(HCD), East and West Uttar Pradesh, East and West Madhya Pradesh, Chhattisgarh, Jharkhand, Orissa, Saurashtra and Kutch, Konkan and Goa, Madhya Maharashtra, Marathwada, Vidharbha, North and South Interior Karnataka, Coastal Karnataka, Rayalaseema and Kerala. Rest of the country is likely to experience normal minimum temperatures (Departure from normal within -0.5 °C and 0.5 °C).

The season averaged mean temperatures (**Fig.3**) are likely to be warmer than normal by more than 1° C over East and West Rajasthan. It is likely to be warmer than normal by 0.5 °C to 1 °C over Haryana, Chandigarh and Delhi(HCD), East and West Madhya Pradesh, Chhattisgarh, Gujarat region, Saurashtra and Kutch, Konkan and Goa, Madhya Maharashtra, Marathwada, Vidharbha, North and South Interior Karnataka, Coastal Karnataka, Rayalaseema and Kerala. Rest of the country is likely to experience near normal mean temperatures (Departure from normal within -0.5 °C and 0.5 °C).

There is about 40% probability of maximum temperatures in the Core HW zone during April to June 2020 to be above normal. (Fig.4). Core HW zone covers the states of Punjab, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Orissa and Telangana and meteorological subdivisions of Marathwada, Madhya Maharashtra and Coastal Andhra Pradesh. This in turn suggests that slightly above normal frequency of heat wave conditions likely in the core HW zone during the season.

3. ENSO conditions in the Pacific Ocean

Currently, warm ENSO-neutral conditions are prevailing over the equatorial Pacific Ocean. The latest MMCFS forecast indicates that the ENSO-neutral conditions are likely to continue during the entire forecast period

4. Extended Range Forecast Services

IMD also provides extended range forecasts (7 –day averaged forecasts for the next four weeks) of maximum and minimum temperatures over the country updated every week. This is based on the Multi-model ensemble dynamical Extended Range Forecasting System currently operational at IMD, New Delhi. The forecasts are available through IMD website (www.mausam.imd.gov.in).

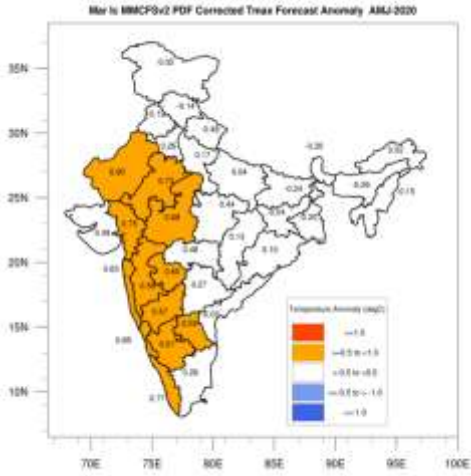


Fig.1. Forecast of Subdivision averaged Maximum Temperature Anomaly for April to June 2020

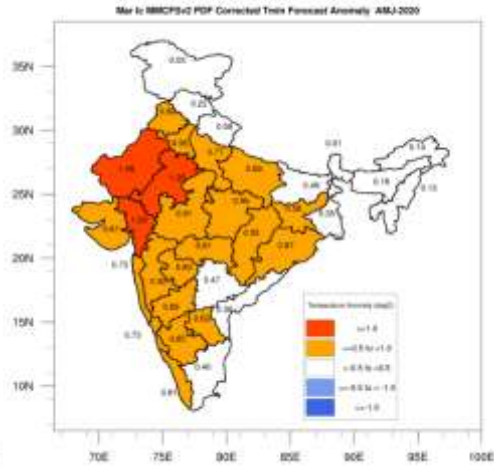


Fig.2. Forecast for Subdivision averaged Minimum Temperature Anomaly for April to June 2020

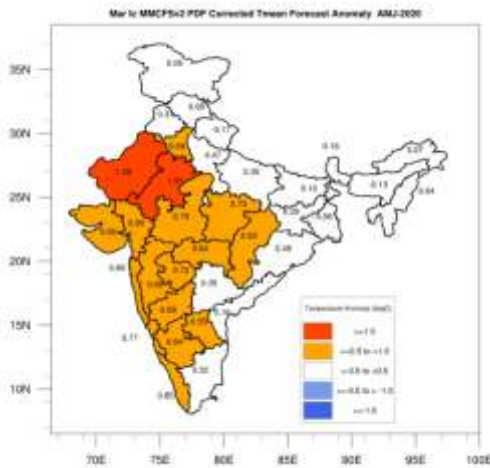


Fig.3. Forecast of Subdivision averaged Mean Temperature Anomaly for April to June 2020.

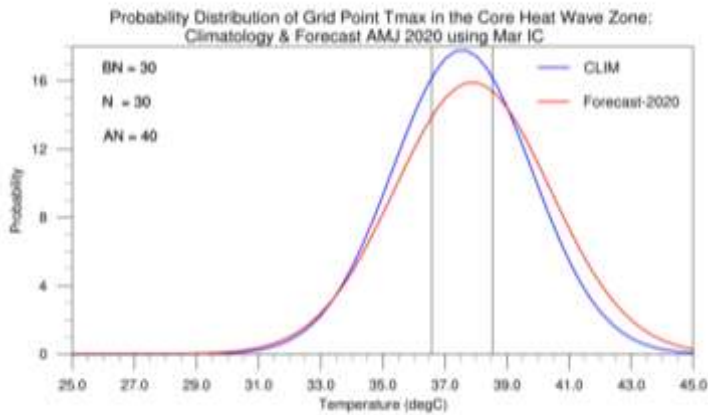


Fig.4. Climatological probability distribution of maximum temperatures during April to June 2020 over the Core Heat wave Zone (CHZ) along with forecast probability distribution of the same for April to June 2020.