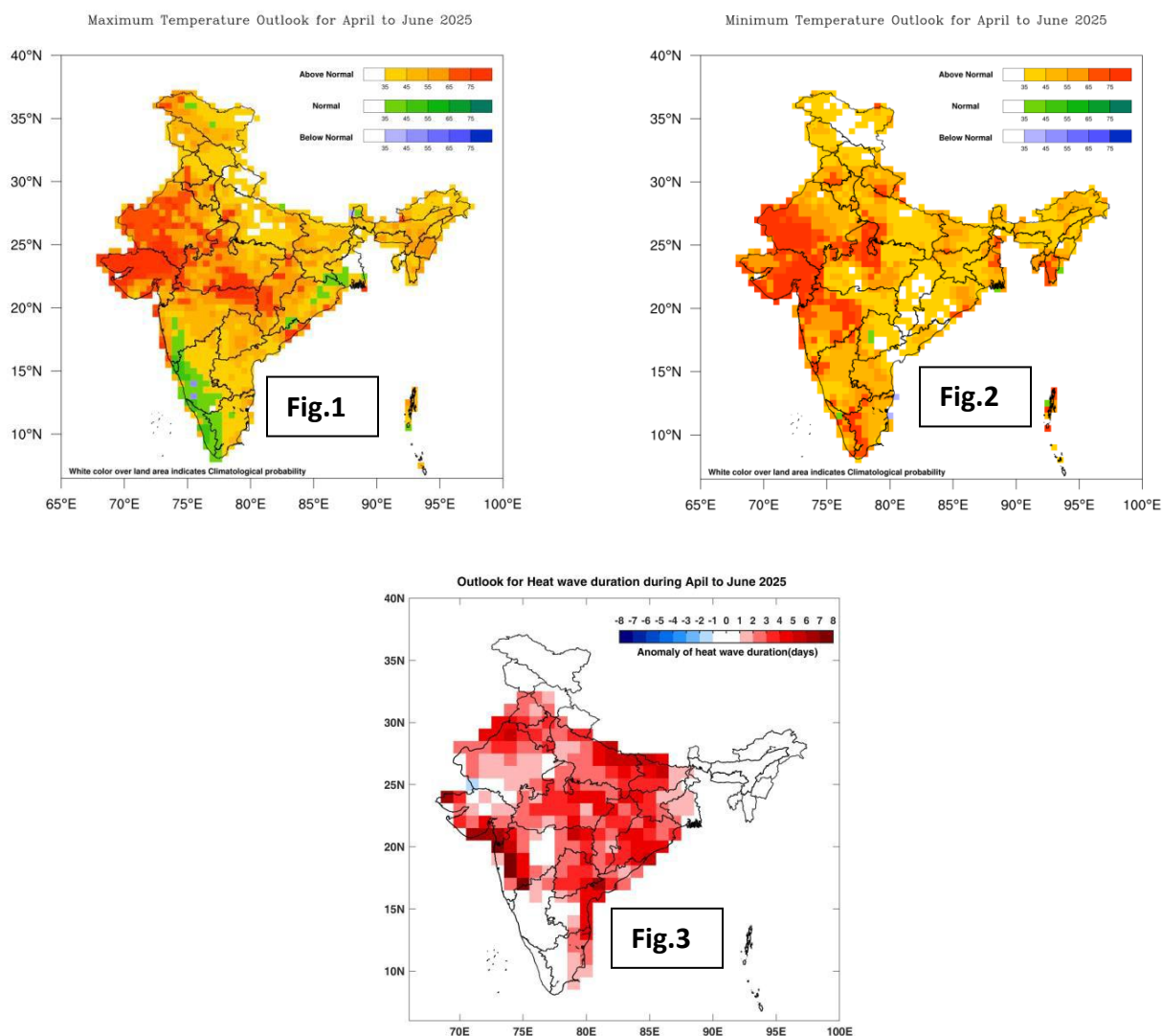


Seasonal Outlook for April to June 2025 (AMJ 2025) and Monthly Outlook for April 2025

The updated Seasonal Outlook (April to June 2025) for Maximum and Minimum temperature and anomaly of heat wave duration (in days) along with monthly outlook of Maximum and Minimum temperature, anomaly of heat wave duration (in days) and Rainfall for the month of April 2025 was issued by India Meteorological Department (IMD) on 31.03.2025. A summary of the outlook for Maharashtra is presented below.

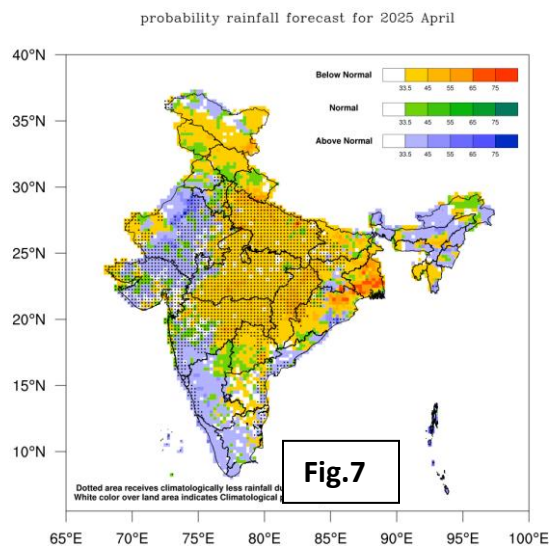
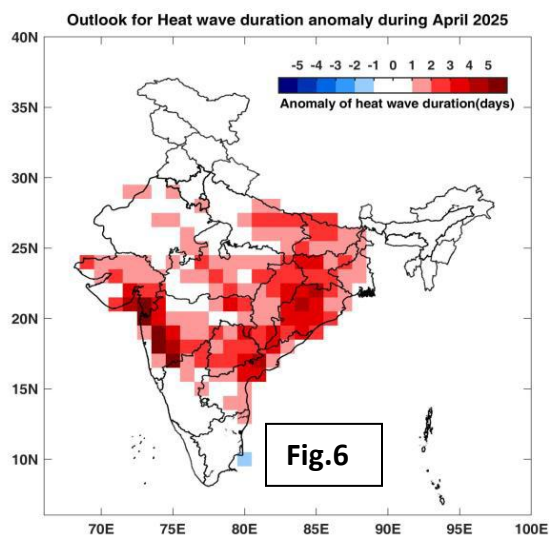
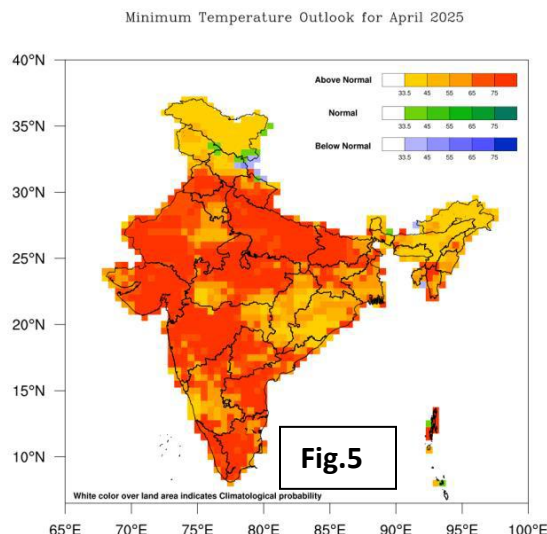
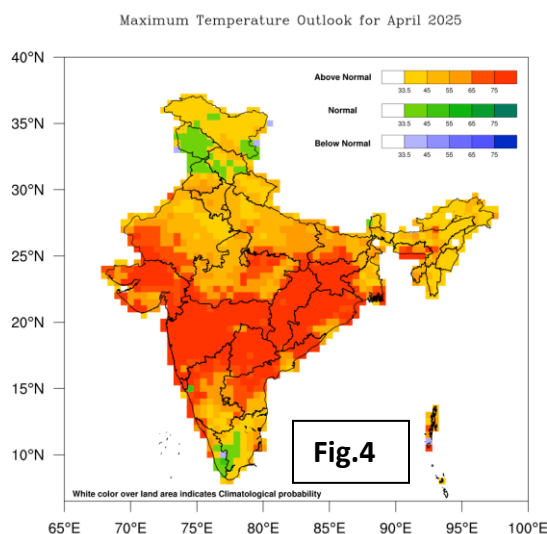
(a) Seasonal Temperature outlook and Heatwave outlook for April to June (AMJ) 2025



Probability forecasts for the maximum and minimum temperatures during the April to June (AMJ) 2025 hot weather season are shown in **Fig.1** and **Fig.2**, respectively. The probability forecast for maximum

temperatures indicates that above-normal maximum temperatures are most likely over most parts of Maharashtra except a few pockets of South Madhya Maharashtra where normal maximum temperatures are most likely. The probability forecast for the minimum temperatures indicates that during the hot weather season (AMJ), above-normal minimum temperatures are likely over most parts of Maharashtra. The anomaly (deviation from normal) forecast for the number of heatwave days over the country for the season April to June (AMJ) 2025 is shown in Fig 3. During AMJ hot weather season, above normal number of heatwave days are likely to occur over most parts of North Konkan, Madhya Maharashtra and parts of Marathwada.

(b) Monthly Temperature outlook, Heatwave outlook and Rainfall outlook for April 2025:



Probability forecasts for the maximum and minimum temperatures during April 2025 are shown in **Fig.4** and **Fig.5**, respectively. During April 2025, above-normal maximum temperatures and above normal minimum temperatures are likely over most parts of Maharashtra. The anomaly forecast for the number of heatwave days over the country for April 2025 is shown in **Fig 6**. During April 2025, above-normal number of heatwave days are likely over most parts of Maharashtra. The probabilistic forecast for the spatial distribution of tercile rainfall categories (above normal, normal and below normal) over Maharashtra is shown in **Fig.7**. Normal to above-normal rainfall is likely over many parts of South Konkan and South Madhya Maharashtra. Normal rainfall is expected over parts of North Konkan and Marathwada and Below Normal Rainfall over most parts of North Madhya Maharashtra and Vidarbha.

(c) Sea Surface Temperature (SST) conditions over the Pacific and the Indian Oceans:

Currently, the El Niño-Southern Oscillation (ENSO) condition is transitioning from weak La Niña condition to an ENSO-neutral state with above-average SSTs in the eastern and far western Pacific Ocean and below-average SSTs in the central Pacific Ocean. The latest MMCFS forecast indicates that neutral ENSO conditions are likely to continue in the upcoming season.

Currently, neutral Indian Ocean Dipole (IOD) conditions persist over the Indian Ocean. The latest MMCFS forecast indicates that neutral IOD conditions are likely to continue during the upcoming season.

(d) Impacts and Action suggested :

During heatwaves, elevated temperatures pose significant risks, especially for vulnerable populations like the elderly, children, and those with pre-existing health conditions, who are more susceptible to heat-related illnesses such as heat exhaustion and heatstroke. Additionally, prolonged periods of extreme heat can lead to dehydration and strain infrastructure such as power grids and transportation systems. To address these challenges, anticipatory actions as per guidelines of National and State Disaster Management Authorities and heat action plans may be taken. This includes providing access to cooling centres, issuing heat advisories, and implementing strategies to alleviate urban heat island effects in affected areas etc. among others.