

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 23 April 2018

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- High waves originated from remote locations are likely to continue over coastal waters of West coast, especially Kerala, Lakshadweep, south Tamilnadu during next 12 hours and along the east coast and western coast of Andaman & Nicobar Islands during next 48 hours.
- A fresh Western Disturbance is likely to cause scattered to fairly widespread precipitation over Western Himalayan region and isolated rainfall over northern plains from 26th April. Isolated Dust storms/ Thunderstorms, squalls/Hailstorms are likely over Western Himalayan region and adjoining plains of northwest India from 26th April.
- A brief occurrence of heat wave conditions is likely over Gujarat state during next 48 hours and Vidarbha during 25th and 26th April.
- Day maximum temperatures are likely to remain above 40°C over parts of central and adjoining eastern India and parts of Telangana, Rayalaseema and Interior Tamilnadu.
- Thunderstorm observed at isolated places over Assam & Meghalaya, Gangetic West Bengal, Odisha, Tripura, Interior Karnataka, Coastal Andhra Pradesh and Kerala from 0830 hours IST of yesterday to 0830 hours IST of today.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Rain/thundershowers at most places over Arunachal Pradesh; at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka; at a few places over Sub Himalayan West Bengal & Sikkim and at isolated places over Gangetic West Bengal, Odisha, Rayalaseema, North Interior Karnataka, Coastal Karnataka and Kerala.
- Maximum temperature departures as on 22.04.2018: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Konkan & Goa; at a few places over Saurashtra & Kutch, Madhya Maharashtra, Vidarbha, Odisha, Coastal Karnataka, North Interior Karnataka, Telangana and Tamilnadu & Puducherry. They were appreciably below normal (3.1°C to 5.0) at a few places over West Rajasthan; at isolated places over Arunachal Pradesh, Assam & Meghalaya and below normal (1.6°C to 3.0°C) at most places over

Jammu & Kashmir, East Rajasthan; at many places over Punjab and Haryana, Chandigarh & Delhi; at a few places over West Bengal & Sikkim and at isolated places over West Uttar Pradesh and near normal over rest of the country. Yesterday, the highest maximum temperature of 44.3°C was recorded at Bramhapuri (Vidarbha) over the plains of the country.

- Minimum temperature departures as on 23.04.2018: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over West Bengal & Sikkim; at a few places over Assam & Meghalaya, Odisha and at isolated places over Telangana, North Interior Karnataka and Tamilnadu & Puducherry. They are appreciably below normal (3.1°C to 5.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over Rajasthan; at isolated places over Madhya Pradesh and East Uttar Pradesh and below normal (1.6°C to 3.0°C) at many places over Bihar; at a few places over Punjab and Rayalaseema and at isolated places over West Uttar Pradesh, Gujarat, Madhya Maharashtra and Konkan & Goa and near normal over rest parts of the country.

Weather Warning during next 5 days (IMD)

- 23 April (Day 1): Thunderstorm accompanied with squall and hail very likely at isolated places over Odisha. Thunderstorm accompanied with gusty winds very likely at isolated places over south Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Tripura, north Coastal Andhra Pradesh, Telangana, Rayalaseema, Coastal Karnataka, South Interior Karnataka, Tamilnadu and Kerala. Heat wave conditions very likely to prevail in one or two pockets over Saurashtra & Kutch. Based on the forecast generated by INCOIS, rough to very rough sea conditions are very likely to prevail along & off West Bengal, Odisha and West coast of Andaman & Nicobar Islands. Also, sea conditions are likely to continue to remain rough to very rough over Lakshadweep area, Karnataka, Kerala and south Tamilnadu coasts and rough along Maharashtra coasts during next 12 hours.
- 24 April (Day 2): Thunderstorm accompanied with squall very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with gusty winds very likely at isolated places over Chhattisgarh, Odisha, South Interior Karnataka and Kerala. Heat wave conditions very likely to prevail in one or two pockets over Saurashtra & Kutch and Gujarat region. Based on the forecast generated by INCOIS, rough to very rough sea conditions are likely to prevail along & off West Bengal, Odisha and West coast of Andaman & Nicobar Islands. Fishermen are advised not to venture into the Sea along & off these areas.
- 25 April (Day 3): Thunderstorm accompanied with squall very likely at isolated places over Sub Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with gusty winds very likely at isolated places over Tamilnadu. Heat wave conditions very likely to prevail in one or two pockets over Vidarbha.
- 26 April (Day 4): Thunderstorm accompanied with squall and hail likely at isolated places over Sub Himalayan West Bengal & Sikkim. Thunderstorm accompanied with squall likely at isolated places over Uttarakhand. Thunderstorm accompanied with gusty winds likely at isolated places over Jammu & Kashmir, Himachal Pradesh, Punjab, Bihar, Jharkhand and

Gangetic West Bengal. Dust storm/thunderstorm likely at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh and north Rajasthan. Heat wave conditions very likely to prevail in one or two pockets over Vidarbha.

- 27 April (Day 5): Thunderstorm accompanied with squall and hail likely at isolated places over Himachal Pradesh, Uttarakhand and Sub Himalayan West Bengal & Sikkim. Thunderstorm accompanied with squall likely at isolated places over Jammu & Kashmir, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Gangetic West Bengal. Thunderstorm accompanied with gusty winds likely at isolated places over Punjab, East Uttar Pradesh, Bihar and Jharkhand.
- The weather outlook for the period of seven days *i.e* 23 to 30 April 2018 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Sub Himalayan West Bengal & Sikkim, Gangetic West Bengal, Odisha, South Interior Karnataka, North Interior Karnataka, Coastal Karnataka, Rayalaseema, Kerala and North eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Vidarbha region

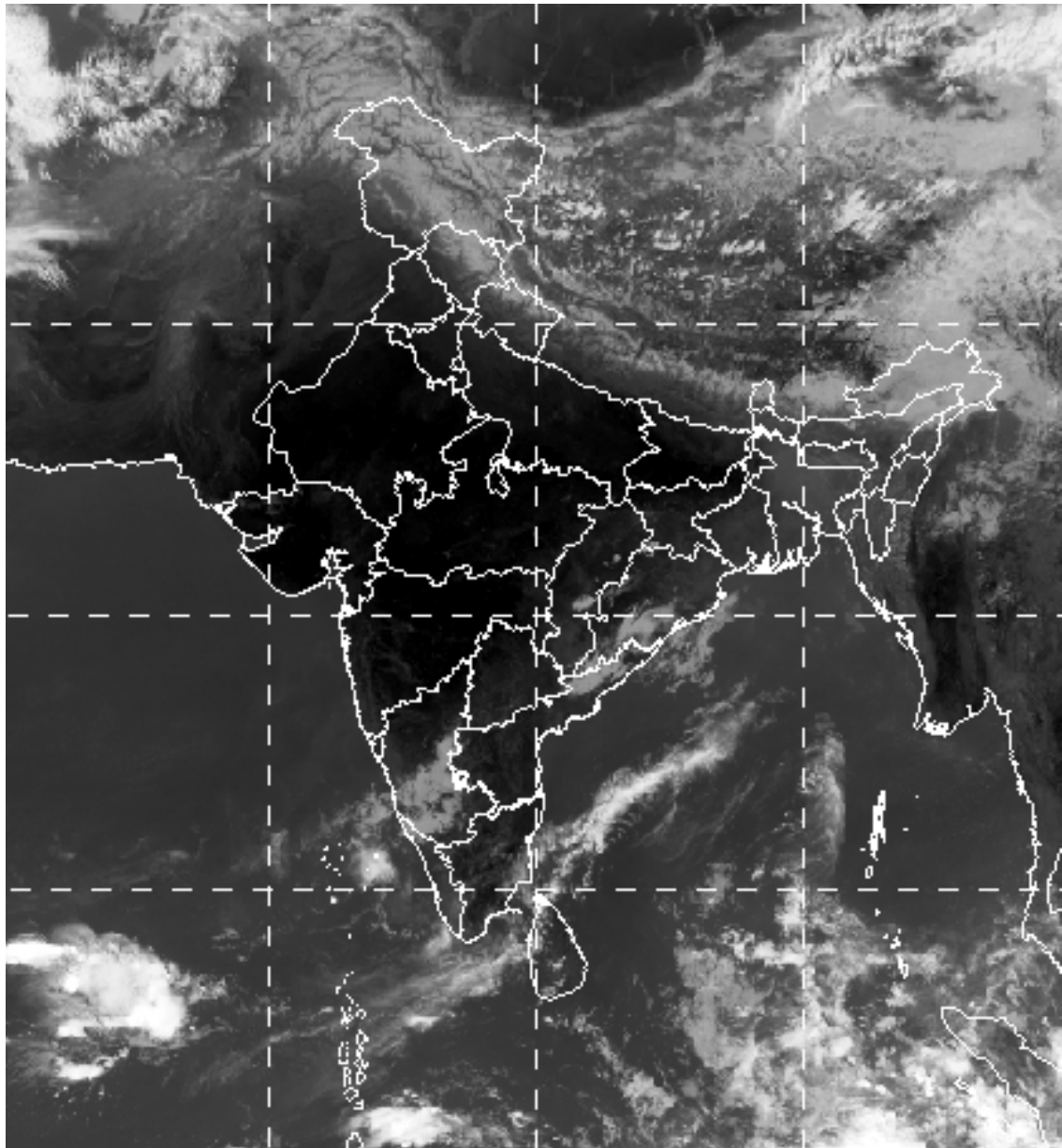
Weather condition

Dry and hot weather observed in Vidarbha region in Maharashtra state during past few days. Maximum temperature across the week was 0.8 °C above normal . Minimum temperature across the week was 3.8°C above normal.

Contingency measure:

- Heat wave conditions very likely to prevail in one or two pockets over Vidharbha during 23-26 April. Under the prevailing very hot weather condition, summer crops (groundnut, sunflower, sesame, greengram etc.)/vegetables be irrigated at 6 to 7 days interval, irrigating in the early morning or evening hours.
- Frequent light irrigation coupled with basin mulching is advisable in orange orchards to reduce heat impact. Spraying of potassium nitrate (10 g/litre of water) on pea sized fruits of mandarin orange (ambia bahar) is advisable to reduce fruit drop due to heat impact. In sweet lime spray of NAA 2 g + Urea 1 kg per 100 litres of water is advisable to reduce fruit drop problem, spray may be repeated after 15 days. Under the prevailing very hot and dry weather conditions, spraying of antitranspirant (Kaolin 5 to 7%) may be undertaken to minimize water loss in crops.
- Make provision of thatches made of cotton/pigeonpea stalks/green shade net to individual young plantation. In gardens water early in the morning to prevent heat scald and for this, use drip irrigation instead of sprinklers. Avoid treating the crops/orchards with fertilizer. Also avoid disturbing uncracked soil surface during a heat wave as it will worsen the situation by releasing the trapped moisture.

- Provide proper ventilation and heat protection in the animal/poultry sheds. Applying gunny bags/grass on roof of shed with sprinkling of water is advisable to reduce heat impact. Possibly restrict working/grazing of farm/draught animals to morning and evening hours. Undertake the necessary precautions to help reduce the incidence of fires at the farm under the prevailing very hot and dry weather conditions. Avoid in-situ burning of crop residues.



**Figure: 1. Latest available satellite picture as on 23 April 2018 at 0230 Hrs (IST).
(Source: IMD).**

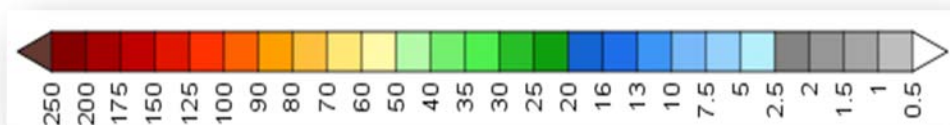
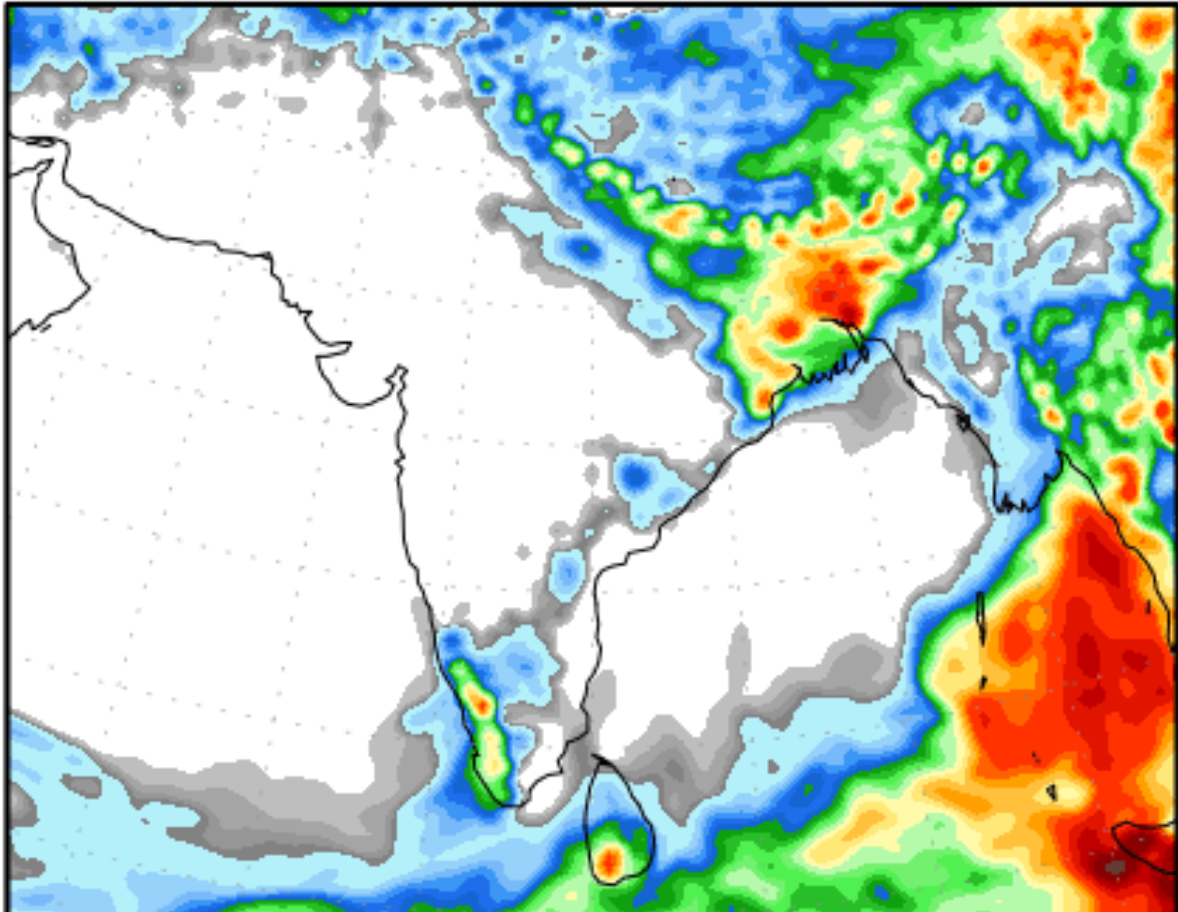


Figure: 2. Precipitation forecast for 23 to 30 April 2018 (Source: NOAA NCEP).