

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 14 May 2018**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- The western disturbance as a trough in midtropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along long 65° E and north of 30° N. A northsouth trough runs from a cyclonic circulation over central Pakistan & neighbouring Rajasthan and Punjab to north Madhya Maharashtra in lower levels. Another cyclonic circulation lies over northern parts of West Bengal and neighbourhood in lower levels. Under the influence of these systems; scattered to widespread precipitation with isolated squall/ gusty winds very likely over western Himalayan region during next 48 hours and over adjoining plains during next 24 hours. Scattered to fairly widespread rain/thundershowers with isolated squall/gust winds very likely over east, northeast India and south Peninsula during next 2-3 days.
- A low pressure area has formed over southwest Arabian Sea & neighbourhood and associated cyclonic circulation extends upto 4.5 km above mean sea level. It is likely to move west northwest towards Gulf of Adan & adjoining areas and likely to concentrate into a depression during next 48 hours. It is not likely to affect Indian region, However fishermen are advised not to venture into southwest Arabian Sea.
- Thunderstorm observed at a few places over East Uttar Pradesh and at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tripura, West Bengal & Sikkim, Madhya Maharashtra, Karnataka, Coastal Andhra Pradesh, Rayalaseema, Kerala and Tamilnadu & Puducherry from 0830 hours IST of yesterday to 0830 hours IST of today.
- Yesterday, heat Wave conditions were observed at one or two pockets over East Madhya Pradesh.
- 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 observed at most places over Uttarakhand, East Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; at many places over Himachal Pradesh, Coastal & South Interior Karnataka, Chhattisgarh & Kerala; at a few places over Jammu & Kashmir, West Uttar Pradesh, East Madhya Pradesh, Odisha,

North Interior Karnataka and Rayalaseema; at isolated places over Haryana, Chandigarh & Delhi, Punjab, West Madhya Pradesh, Madhya Maharashtra, Telangana, Coastal Andhra Pradesh, Lakshadweep and Andaman & Nicobar Islands.

- Maximum temperature departures as on 13.05.2018: Maximum temperatures were appreciable above normal (3.1°C to 5.0°C) at isolated places over East Madhya Pradesh; above normal (1.6°C to 3.0°C) at many places over Uttarakhand; at a few places over Himachal Pradesh, Punjab, East Rajasthan, West Madhya Pradesh, Gujarat and Andaman & Nicobar Islands; at isolated places over Gangetic West Bengal, Odisha, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra and Coastal Karnataka and near normal over rest of the country.
- Yesterday, the highest maximum temperature of 45.7°C was recorded at Nowgong (East Madhya Pradesh).
- Minimum temperature departures as on 14.05.2018: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan; above normal (1.6°C to 3.0°C) at most places over Marathwada; at a few places over Gujarat & Madhya Maharashtra; at isolated places over Jammu & Kashmir, east Rajasthan, West Madhya Pradesh and Tamilnadu & Puducherry. They are markedly below normal (5.1°C or less) at isolated places over Uttar Pradesh & Gangetic West Bengal; appreciably below normal (3.1°C to 5.0°C) at most places over Bihar; at many places over Chhattisgarh and rest Uttar Pradesh; at a few places over Gangetic West Bengal & Odisha; at isolated places over Haryana, Chandigarh & Delhi, north Coastal Andhra Pradesh and Kerala; below normal (1.6°C to 3.0°C) at a few places over Punjab, East Madhya Pradesh & Coastal Karnataka and near normal over rest of the country.

#### **Weather Warning during next 5 days (IMD)**

- 14 May (Day 1): Thunderstorm accompanied with squall & hail (wind speed reaching 50-70 kmph) very likely at isolated places over Jammu & Kashmir, Himachal Pradesh and Uttarakhand. Thunderstorm accompanied with squall (wind speed reaching 50-70 kmph) very likely at isolated places over Odisha and Gangetic West Bengal. Thunderstorm accompanied with gusty winds very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub Himalayan West Bengal & Sikkim, Jharkhand, Bihar, Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab, south Madhya Maharashtra, Marathwada, Vidharbha, Chhattisgarh, Coastal Andhra Pradesh, Telangana, Rayalaseema, Tamilnadu & Puducherry, Karnataka, Kerala and Lakshadweep. Heavy rain very likely at isolated places over Sub Himalayan West Bengal & Sikkim, Tamilnadu & Puducherry, South Interior Karnataka and Kerala. Heat wave conditions very likely at one or two places over Madhya Pradesh. Duststorm very likely at isolated places over Rajasthan.
- 15 May (Day 2): Thunderstorm accompanied with squall & hail (wind speed reaching 50-70 kmph) very likely at isolated places over Uttarakhand. Thunderstorm accompanied with squall (wind speed reaching 50-70 kmph) very likely at isolated places over Jammu & Kashmir, Himachal Pradesh and Gangetic West Bengal. Thunderstorm accompanied with gusty winds very likely at isolated places over East Uttar Pradesh, Assam & Meghalaya,

Nagaland, Manipur, Mizoram & Tripura, Sub Himalayan West Bengal & Sikkim, Odisha, Bihar, Chhattisgarh, Coastal Andhra Pradesh, Telangana, South Interior Karnataka, Kerala and north Tamilnadu. Heavy rain very likely at isolated places over Assam & Meghalaya and Sub Himalayan West Bengal & Sikkim. Heat wave conditions very likely at some places over West Madhya Pradesh, one or two places over East Madhya Pradesh & Vidharbha. Duststorm very likely at isolated places over Rajasthan.

- 16 May (Day 3): Thunderstorm accompanied with squall (wind speed reaching 50-70 kmph) very likely at isolated places over Gangetic West Bengal. Thunderstorm accompanied with gusty winds very likely at isolated places over Sub Himalayan West Bengal & Sikkim, Odisha, South Interior Karnataka and Kerala. Heavy rain very likely at isolated places over Assam & Meghalaya. Heat wave conditions very likely at some places over Vidharbha & West Madhya Pradesh, one or two places over East Madhya Pradesh.
- 17 May (Day 4): Thunderstorm accompanied with gusty winds very likely at isolated places over Sub Himalayan West Bengal & Sikkim. Heavy rain very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka. Heat wave conditions very likely at some places over Vidharbha & West Madhya Pradesh, one or two places over East Madhya Pradesh.
- 18 May (Day 5): Heavy rain very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka. Heat wave conditions very likely at some places over Vidharbha and at one or two places over West Madhya Pradesh.

## **Agricultural activities (AICRPAM-CRIDA)**

### **Vidarbha region of Maharashtra**

#### **Weather condition**

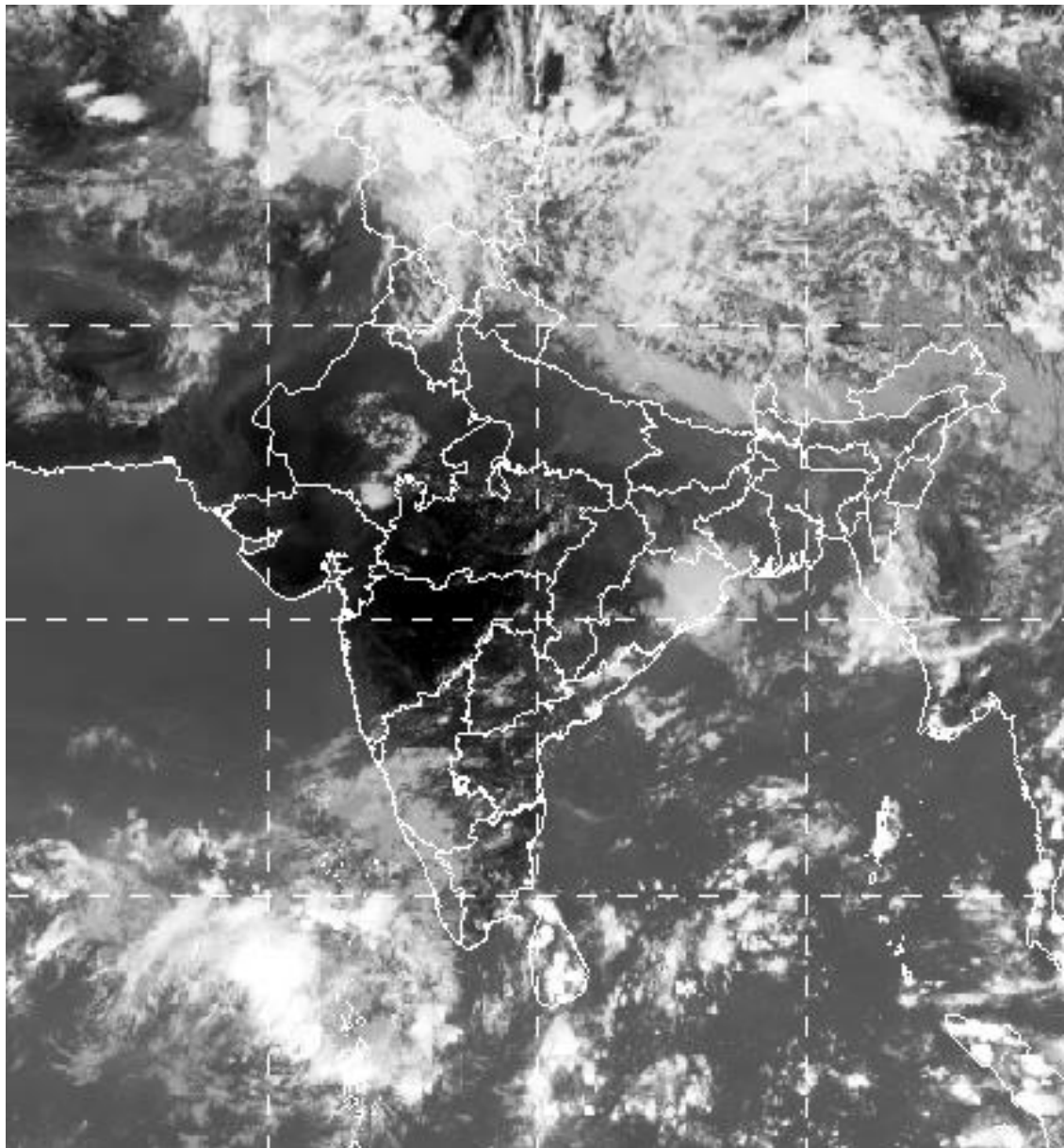
Dry weather prevailed over Vidarbha during past week. Maximum temperature across the week was 1.3 °C above normal . Minimum temperature across the week was 2.3°C above normal. On May 11 the highest maximum temperature of 47.3°C was recorded at Chandrapur and of 46.3°C at Bramhapuri.

#### **Contingency measure:**

- Heat wave conditions very likely to prevail at some places over Vidarbha during 13-17 May. Maintain adequate moisture in the soil profile to reduce the impact of heat stress on summer crops with irrigation schedule at about 6 days interval, irrigating in the early morning or late afternoon.
- Frequent light irrigation coupled with basin mulching (2 to 3 inch layer of organic mulch over the root zone and a few inches away from the trunk) is advisable in orange and mango orchards to reduce solar heat stress. Provide thatches/shading made of cotton/pigeonpea

stalks/green shade net to young fruit plantation and nurseries to reduce heat stress impact. Spraying of antitranspirant (Kaolin 5 to 7%) may be undertaken to minimize water loss in crops/orchards. Wherever possible water bodies may be covered or treated with anti-evaporant sprays to check evaporation losses.

- 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. Restrict working/grazing of farm/draught animals to morning and evening hours and give them plenty of water to drink. 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 14 May 2018 at 0230 Hrs (IST).  
(Source: IMD).**