

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

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

### **Daily Crop Weather Information as on 16 June 2020**

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

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

- Southwest Monsoon has further advanced into some more parts of West Madhya Pradesh, most parts of East Madhya Pradesh, and some more parts of East Uttar Pradesh.
- The Northern Limit of Monsoon (NLM) now passes through Lat.23°N/Long.60°E, Kandla, Ahmedabad, Indore, Raisen, Khajuraho, Fatehpur, Bahraich and Lat.28°N/Long.81.5°E.
- A cyclonic circulation lies over East Uttar Pradesh & neighbourhood and extends upto 3.6 km above mean sea level and a trough runs from northwest Rajasthan to the cyclonic circulation over East Uttar Pradesh across south Haryana and West Uttar Pradesh and extends upto 0.9 km above mean sea level. Under the influence of these two systems: i) Scattered heavy to very heavy falls and isolated extremely heavy falls over Konkan & Goa during next 2 days and isolated heavy to very heavy falls over Madhya Maharashtra during next 2 days. ii) Rainfall intensity over East India is likely to increase and isolated heavy to very heavy rainfall is likely over the region during 17th-19th June, 2020 and isolated heavy to very heavy rainfall is likely over Sub-Himalayan West Bengal & Sikkim during next 5 days. iii) Widespread rainfall with isolated heavy falls likely to continue over Assam & Meghalaya and Tripura & Mizoram during next 5 days with isolated heavy to very heavy falls over west Assam & Meghalaya during next 3 days.
- A Low Pressure Area is likely to form over north Bay of Bengal & neighbourhood around 19th June.
- The images showing the latest satellite picture in the figure. 1.

#### **Main Weather Observations (IMD)**

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha,

Chhattisgarh, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Andaman & Nicobar Islands, East Uttar Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Telangana; at a few places over Uttarakhand, West Madhya Pradesh, Saurashtra & Kutch, and Interior Karnataka; at isolated places over West Uttar Pradesh, Haryana, Himachal Pradesh, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Gujarat Region, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

- Extremely Heavy rainfall observed at isolated places over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall Himachal Pradesh, East Rajasthan, Konkan & Goa and Vidarbha; heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha, Jharkhand, Bihar, East Uttar Pradesh, Uttarakhand, Madhya Pradesh, Gujarat State, Madhya Maharashtra, Marathwada, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & South Interior Karnataka and Kerala & Mahe.
- Yesterday, Heat wave conditions observed in isolated pockets over West Rajasthan.
- Thunderstorm observed (from 1730 hours IST yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, East Uttar Pradesh, Jharkhand, Odisha, East Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa, Saurashtra & Kutch, Telangana, Gangetic west Bengal, Coastal Andhra Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- Maximum Temperature Departures as on 15-06-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over west Rajasthan; at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Punjab; at many places over Haryana, Chandigarh & Delhi; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Sub-Himalayan west Bengal & Sikkim, Konkan & Goa, Lakshadweep and Coastal Andhra Pradesh & Yanam; and at isolated places over West Madhya Pradesh and Rayalaseema; They were appreciably below normal (-3.1°C to -5.0°C) at many places over Vidarbha and East Madhya Pradesh and below normal (-1.6°C to -3.0°C) at many places over Gujarat region, East Uttar Pradesh and Marathawada; at a few places over Odisha and at isolated places over Bihar, Chhattisgarh, Jharkhand, Gangetic west Bengal and Andaman & Nicobar Islands 1

and near normal over rest parts of the country. Yesterday, The highest Maximum temperature of 46.2°C was reported at Bikaner (West Rajasthan).

- Minimum Temperature Departures as on 16-06-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan; at isolated places over Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over East Rajasthan, Rayalaseema and Andaman & Nicobar Islands; at a few places over Haryana, Chandigarh & Delhi, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal; at isolated places over Gujarat State, Assam & Meghalaya and South Interior Karnataka. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Vidarbha; at a few places over Marathwada and Chhattisgarh; at isolated places over West Madhya Pradesh and near normal over rest parts of the country. The lowest minimum temperature of 20.6°C was reported at Tiruppattur (Tamil Nadu, Puducherry & Karaikal) over the plains of the country

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

- 16 June (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls very likely at isolated places over Konkan & Goa; heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Coastal Karnataka; heavy rainfall at isolated places over East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Gujarat Region, Marathwada, Telangana, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Madhya Maharashtra, Marathwada and Konkan & Goa and with lightning at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State and Coastal & North Interior Karnataka. Heat wave conditions very likely at isolated places over West Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea. Squally Weather (wind speed reaching 45-55 kmph) along & off Lakshadweep areas & Kerala-Karnataka-Goa-

Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.

- 17 June (Day 2): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; heavy to very heavy rainfall at isolated places over West Bengal & Sikkim, Assam & Meghalaya and Madhya Maharashtra; heavy rainfall at isolated places over East Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Arunachal Pradesh, Gujarat Region, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Madhya Maharashtra, Marathwada and Konkan & Goa and with lightning at isolated places over East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat State. Heat wave conditions very likely at isolated places over West Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and north & adjoining central Bay of Bengal. Squally Weather (wind speed reaching 45-55 kmph) along & off Lakshadweep areas & Kerala-Karnataka-Goa-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- 18 June (Day 3): Heavy to very heavy rainfall at isolated places over Bihar, Jharkhand, Odisha, West Bengal & Sikkim, Assam & Meghalaya and Konkan & Goa; heavy rainfall at isolated places over Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Gujarat State, Madhya Maharashtra and Coastal Karnataka. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Uttarakhand and with lightning at isolated places over East Uttar Pradesh and Gujarat State. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) along & off Maharashtra-South Gujarat coasts. Fishermen are advised not to venture into sea over these areas.
- 19 June (Day 4): Heavy to very heavy rainfall at isolated places likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim; heavy rainfall at isolated places over East Madhya Pradesh, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State, Konkan & Goa and Coastal

Karnataka. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and East Rajasthan and with lightning at isolated places over East Uttar Pradesh. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) along & off South Gujarat coasts. Fishermen are advised not to venture into sea over these areas.

- 20 June (Day 5): Heavy to very heavy rainfall at isolated places likely over Odisha and Nagaland, Manipur, Mizoram & Tripura; heavy rainfall at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Gujarat State, Konkan & Goa, Kerala & Mahe and Coastal Karnataka. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) along & off South Gujarat coasts. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 16 to 24 June 2020 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

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

### **Gujarat**

#### **Weather condition:**

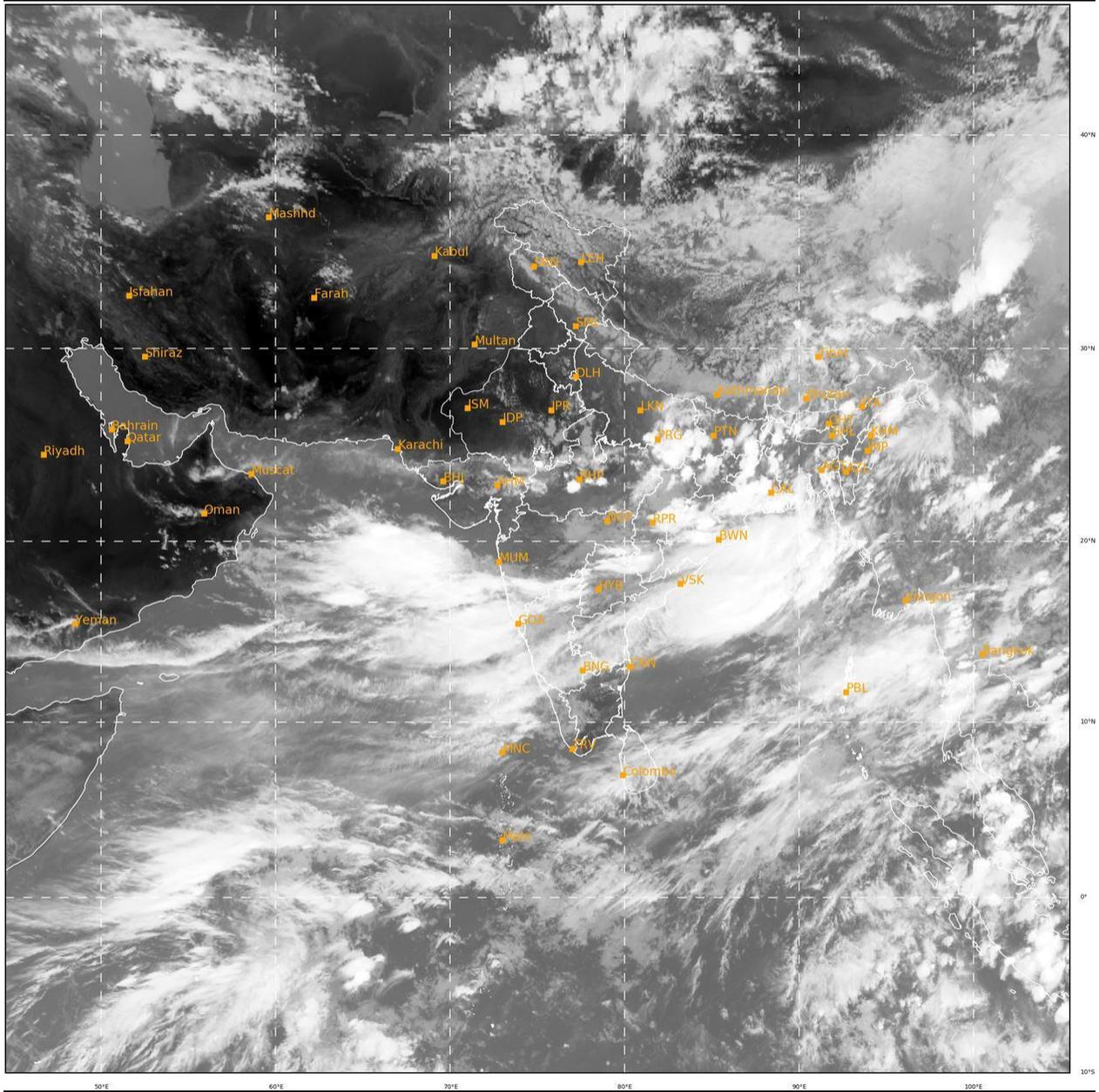
The actual maximum temperature was 2.3 °C and Actual minimum temperature was 0.9 °C lower as compared to its normals. Total BSS was 41.2 hrs. with an average of 5.9 hrs. The daily average evaporation and wind speed was 6.9 mm and 6.0 km/hr respectively. The daily average RH during morning and afternoon was 79.9% and 49.6% respectively.

### Contingency measure:

- Land preparation for sowing of *Kharif* crops is recommended. Purchase certified seed for *Kharif* crops only from authorized dealer. Seed treatment with mercuric fungicide like Thiram, Captan etc., is recommended before sowing of crops.
- Cotton: If irrigation facility available, sown cotton. cotton can sown at 120 cm x 45 cm spacing. Purchase certified seed for *Kharif* crops only from authorized dealer. In greengram, yellow mosaic virus is transmitted by whitefly. For effective control of whitefly infestation spray imidacloprid 3ml per 10 liter water.
- Brinjal: Fruit and Shoot borer: If infestation found install 40 pheromone trap. Change lure at 21 day interval. And spray Diclorovos 76 EC 7 ml or Deltamethrin 1% + Triazophos 36% EC 10 ml in 10 lit water.
- Vegetable Crop: Growth: Thrips and Mite: Due to hot and dry condition if mite and thrips incidence occurs spray Methyl-o-dematone 25 EC 10 ml in 10 lit water.
- MANGO: Harvest mature fruit and send to market after grading.
- Papaya: Protect the papaya fruits using gunny bags under high temperature condition. Apply irrigation at fruit development stage.
- Cattle: Under present weather condition keep animals in sheds during noon hours, provide plenty of cool water mixed with minerals for drinking and shower the animals with cold water two to three times in a day. Vaccination should be done for Brucellosis of cattle.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
L1C Mercator

16-06-2020/(0900 to 0926) GMT  
16-06-2020/(1430 to 1456) IST

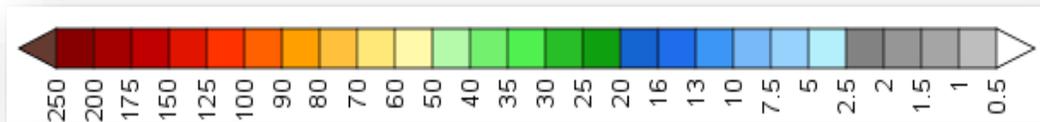
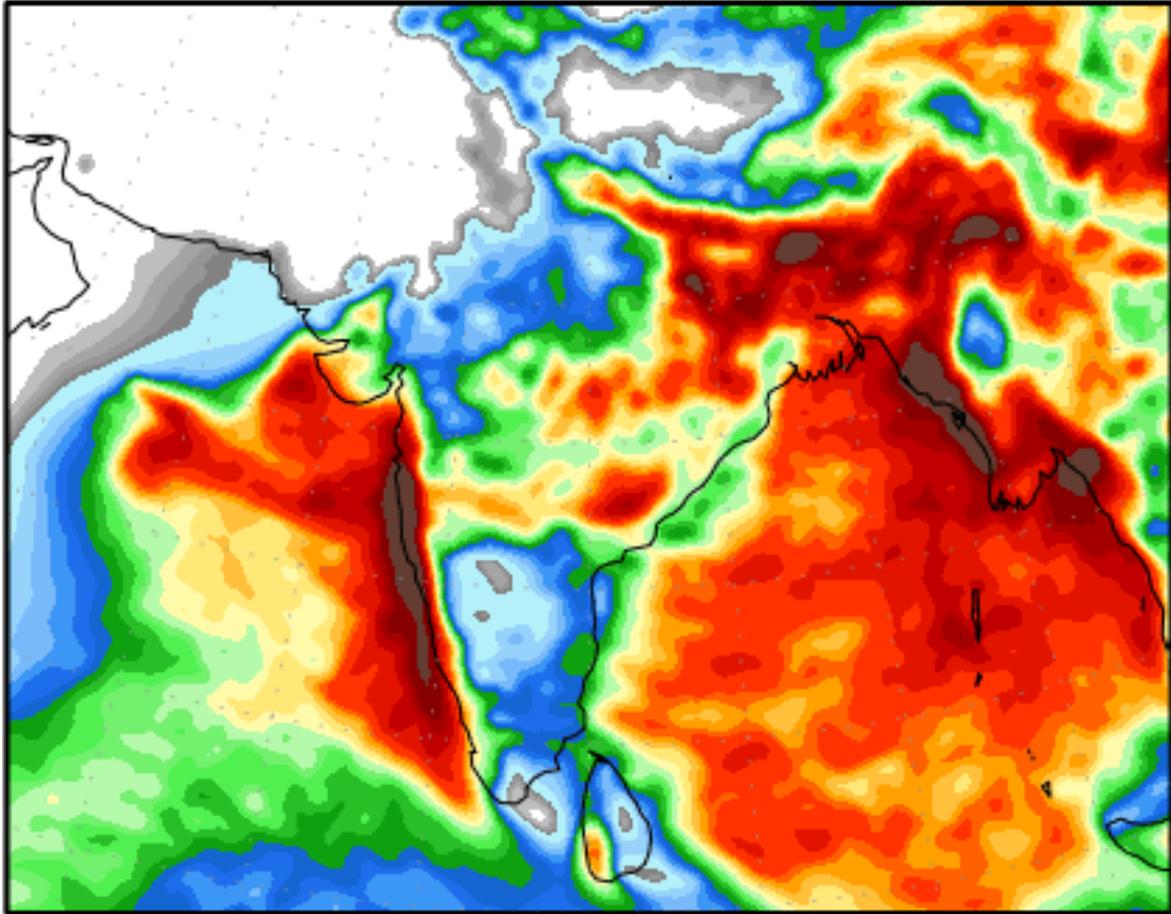


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IMD, DELHI

**Figure: 1. Latest available satellite picture as on 16 June 2020 at 1456 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 16 to 24 June 2020 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*