

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

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

### **Daily Crop Weather Information as on 22 August 2019**

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

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

- The Low Pressure Area now lies over southeast Uttar Pradesh & neighbourhood with the associated cyclonic circulation extends upto 7.6 km above mean sea level tilting southwestwards with height. The north-south trough now runs from the centre of above Low Pressure area over southeast Uttar Pradesh & neighbourhood to Coastal Andhra Pradesh across Odisha extending upto 0.9 km above mean sea level. Under the Influence of these, fairly widespread to widespread rainfall with isolated heavy falls very likely over East Uttar Pradesh, Madhya Pradesh and Odisha during next 48 hours.
- Under the influence of convergence of lower level westerlies, Kerala is likely to experience isolated heavy to very heavy rainfall on today and isolated heavy rainfall during subsequent 3 days.
- Western end of the monsoon trough at mean sea level continues to run close to foothills of Himalayas and the eastern end now passes through Bahraich, centre of Low Pressure Area over southeast Uttar Pradesh & neighbourhood, Jamshedpur, Digha and thence southeastwards to eastcentral Bay of Bengal.
- The images showing the latest satellite picture in figure. 1.

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

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over East Uttar Pradesh; at many places over East Madhya Pradesh, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at a few places over Uttarakhand, Maharashtra, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and at isolated places over Haryana, Chandigarh & Delhi, Bihar, West Bengal & Sikkim, East Rajasthan, Saurashtra & Kutch, West Madhya Pradesh, Vidarbha, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Yesterday, heavy rainfall was observed at isolated places over Coastal Andhra Pradesh & Yanam.

- Thunderstorm observed (from 1130 hours IST of yesterday to 0530 hours IST of today): at isolated places over Uttarakhand, West Bengal & Sikkim, East Uttar Pradesh, East Rajasthan, Bihar, Odisha, Madhya Pradesh, Telangana, Chhattisgarh, Coastal Andhra Pradesh, Karnataka, Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal.
- Maximum temperature departures as on 21-08-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Chhattisgarh and at isolated places over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh and Jharkhand; above normal (1.6°C to 3.0°C) at most places over Himachal Pradesh, West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa and North Interior Karnataka; at many places over Assam & Meghalaya, Rajasthan, Odisha and Coastal Andhra Pradesh & Yanam; at a few places over Punjab, Madhya Maharashtra, Vidarbha and South Interior Karnataka and at isolated places over Haryana, Chandigarh & Delhi, Gujarat state, Marathwada, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at a few East Uttar Pradesh; at isolated places over East Madhya Pradesh and below normal (-1.6°C to -3.0°C) at a few places over Lakshadweep and Andaman, & Nicobar Islands and near normal over rest parts of the country.
- Minimum temperature departures as on 21-08-2019: Minimum temperatures were above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over Bihar and Nagaland, Manipur, Mizoram & Tripura; at a few places over Uttarakhand and Odisha; at isolated places over East Rajasthan, Gujarat state, Vidarbha, Gangetic West Bengal, Coastal Andhra Pradesh, Telangana and Kerala. They were below normal (-1.6°C to -3.0°C) at many places over Himachal Pradesh; at a few places over Jammu & Kashmir; at isolated places over East Madhya Pradesh and near normal over rest parts of the country.

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

- 22 August (Day 1): Heavy to very heavy rainfall very likely at isolated places over Odisha and Kerala and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal & South Interior Karnataka, Lakshadweep and Telangana. Thunderstorm accompanied with lightning very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha and Jharkhand. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, south & central Bay of Bengal, Lakshadweep & Andaman & Nicobar Islands and Kerala coast. Fishermen are advised not to venture into these areas.

- 23 August (Day 2): Heavy rainfall very likely at isolated places over East Uttar Pradesh, Madhya Pradesh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand and Bihar. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, south & central Bay of Bengal, Andaman & Nicobar Islands and Kerala coast. Fishermen are advised not to venture into these areas.
- 24 August (Day 3): Heavy rainfall very likely at isolated places over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Odisha, Chhattisgarh, Assam & Meghalaya, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Gangetic West Bengal, Jharkhand and Bihar. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, south & central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 25 August (Day 4): Heavy rainfall very likely at isolated places over Haryana, Chandigarh & Delhi, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, West Bengal & Sikkim, Odisha and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Bihar, Jharkhand and Gangetic West Bengal. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 26 August (Day 5): Heavy to very heavy rainfall likely at isolated places over East Rajasthan and heavy rainfall at isolated places over East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Gangetic West Bengal, Jharkhand, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Bihar, Jharkhand and Gangetic West Bengal. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea. Fishermen are advised not to venture into these areas.

The weather outlook for the period of seven days i.e., 22 August to 30 August 2019 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thunder shower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamil Nadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### Marathwada

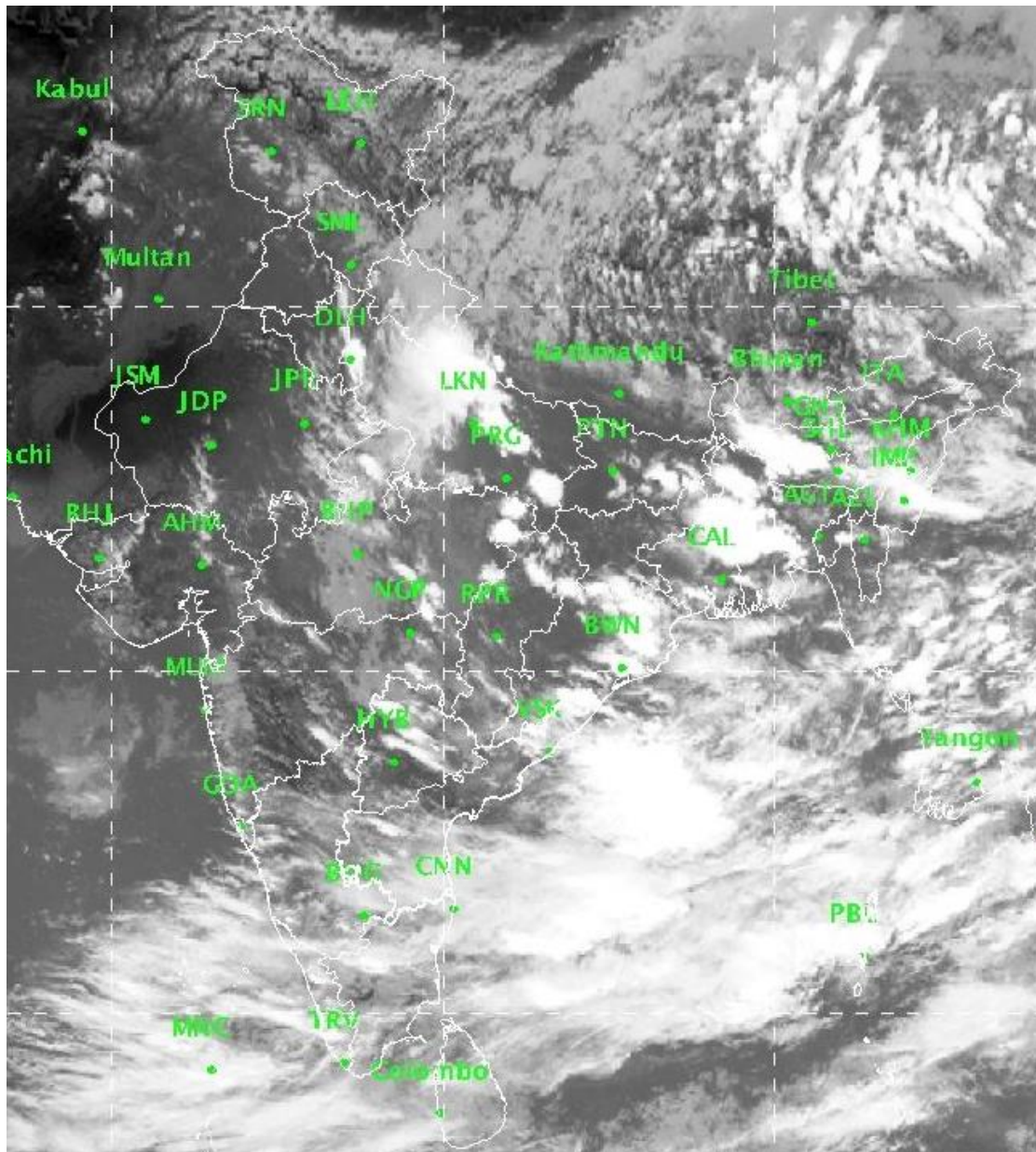
#### Weather condition:

Very light to moderate rainfall received in isolated places in Marathwada state during past few days. The maximum temperature was ranged between 31-33°C and minimum temperature was ranged between 21-23° C

#### Contingency measure:

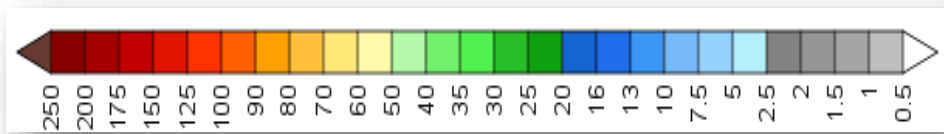
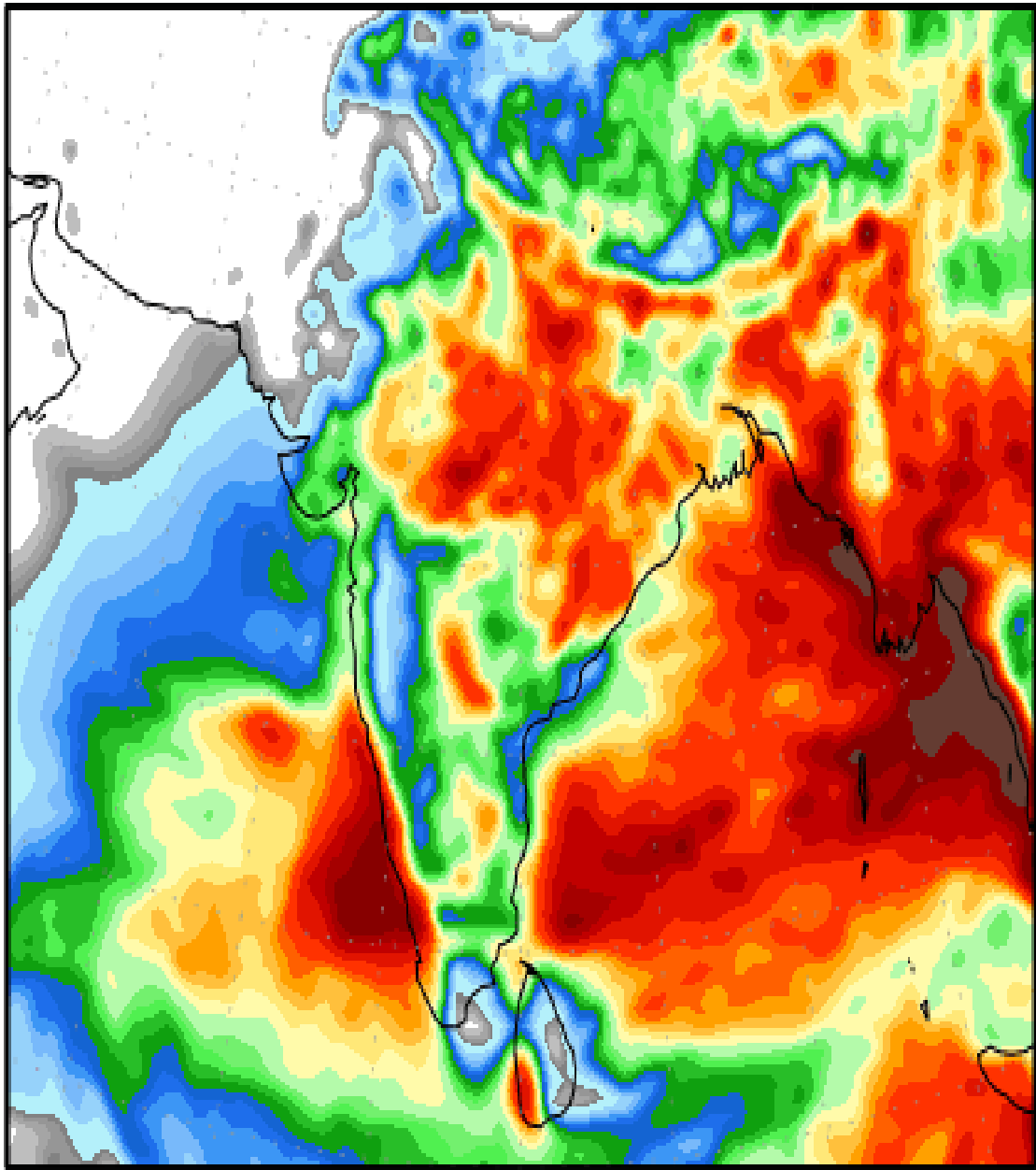
- Cotton: To control pink bollworm in cotton crop take a spray of Profenophos 40 % + Cypermethrin 4% @ 400 ml per acre during clear weather condition. For management of aphids in cotton crop take a spray of flonicamid 50 WG @ 60 gm Buprofezin 25 SC @ 400 ml per acre during clear weather condition. If yellowing of leaves is observed in cotton crop take a spray of micronutrients grade ? II @ 0.5 % and 19:19:19 @ 2% during clear weather condition.
- Field crops: Pigeonpea: collect and destroy infected plant parts due to leaf roller in pigeonpea crop. Spray 5 % Neem cake extract to control leaf roller in pigeonpea crop during clear weather condition. Black gram / Green gram : To control aphids in black gram / green gram crop take a spray of Dimethoate 30 % @ 240 ml per acre during clear weather condition. Maize : For management of fall armyworm in maize crop take a spray of Thiamethoxam 12 % + Lambda ? cyhalothrin 9.5 ZC @ 100 ml or Spinetoram 11.7 SC @ 80 ml per acre during clear weather condition. Apply the nitrogen as per recommendation. Soybean : To control attack of leaf eating caterpillar and stem borer in soybean crop take a spray of Chlorantraniliprole 60 ml per acre or Thiamethoxam 12.6 % + Lambda Cyhalothrine 9.5 % 50ml per acre during clear weather condition. To survey tobacco leaf eating caterpillar use two Pheromone traps per acre. Also use 20 ?T? shaped bird perches per acre. *Kharif* sorghum To control attack of stem borer in sorghum crop soil application of Carbofuran 3 % @ 3 kg per acre should be done. Pearl millet: Weed management should be done in pearl millet crop. Sugarcane: To control attack of stem borer in sugarcane crop take a spray of Chlorpyrifos 20 % @ 30 ml per 10 liter of water. Turmeric : Soil application of metarhizium anisopliae @ 4 kg per acre should be done for management of white grubs in turmeric crop. To control leaf spot disease in turmeric crop take a spray of Mancozeb @ 25 g per 10 liter of water along with sticker during clear weather condition. Citrus : Mrugbahar citrus orchard is in flower initiation to flowering stage do not spray any insecticide in citrus orchard. If insecticide sprayed in citrus orchard it will affect pollination.

- Fruits: Pomegranate Management practices should be adopted for management of disease in pomegranate orchard. Sapota Weed management should be done in sapota orchard. Banana To control of Sigatoka disease in banana orchard take a spray of Propiconzole 10 ml + Sticker 10 ml per 10 liter of water. Mango Weed management should be done in mango orchard. Grape Spraying of fungicide should be done in grape orchard to control the fungal disease. Custard apple Weed management should be done in custard apple orchard.
- Vegetables: Spraying of insecticide should be done in Okra, Cowpea, Bitter gourd. Weed management should be done in vegetable crops. Due to dry spell attack of sucking pest may increase in brinjal and okra vegetable crop. To control take a spray of Fenprothrin 30 % @ 3 ml per 10 liter of water.
- Animal husbandry: In all parts of Marathwada region the satisfactory rainfall has occurred as a result the pasture is available for grazing. Thus it is recommended to have de-worming to all age groups of sheep and goats and the cow and buffalo calves first time taking for grazing on newly grazing pasture. Fodder crop For management of fall armyworm in fodder maize crop take a spray of Thiamethoxam 12 % + Lambda ? cyhalothrin 9.5 ZC @ 100 ml or Spinetoram 11.7 SC @ 80 ml per acre during clear weather condition.
- Mulberry sericulture: For management of thrips infestation on mulberry, instead of using any chemical insecticide use bio-fungicide verticilium laccani at 40 gm per 10 liter of water (residues of chemical insecticide are hazardous to silkworm growth and development).



**Figure: 1. Latest available satellite picture as on 22 August 2019 at 14:00 Hrs (IST).**

**(Source: IMD).**



**Figure: 2. Precipitation forecast for 22 August to 30 August 2019 (Source: NOAA NCEP).**