

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

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

### **Daily Crop Weather Information as on 13 August 2019**

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

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

- The monsoon trough at mean sea level now passes through Firozpur, Patiala, Badaun, Varanasi, Daltonganj, Jamshedpur and thence south-southeastwards to the centre of Low Pressure Area over northwest Bay of Bengal and adjoining West Bengal & north Odisha coast.
- The Low Pressure Area lies over northwest Bay of Bengal and adjoining West Bengal & north Odisha coast and associated cyclonic circulation extends upto 7.6 km above mean sea level tilting southwestward with height. It is likely to become more marked during next 24 hours.
- Under the influence of this Low Pressure Area, heavy to very heavy rainfall with extremely heavy falls at isolated places is likely over Chhattisgarh & Vidarbha on 13th, East Madhya Pradesh on 13th & 14th, West Madhya Pradesh & East Rajasthan on 14th & 15th.
- Light to moderate rainfall at most places is very likely along west coast with isolated heavy to very heavy falls over Kerala during next 24 hours, Konkan & Goa on 13th & 14th. Rainfall activity over Kerala, Karnataka and Konkan & Goa is likely to decrease significantly from 15th August onwards.

The images showing the latest satellite picture in figure. 1.

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

- Rain/Thunder showers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Uttarakhand, Odisha, Gangetic West Bengal and Kerala; at many places over Andaman & Nicobar Islands, Konkan & Goa and Coastal Karnataka; at a few places over Punjab, Bihar, Sub-Himalayan West Bengal & Sikkim, North Interior Karnataka and Madhya Maharashtra and at isolated places over Jammu & Kashmir, Himachal Pradesh, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Assam & Meghalaya, Madhya Pradesh, Chhattisgarh, Marathawada, Telangana, Coastal Andhra Pradesh, Saurashtra & Kutch, South Interior Karnataka and Lakshadweep.

- Thunder storm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at a few places over Assam Meghalaya and Odisha; at isolated places over East Uttar Pradesh, Haryana, Chandigarh & Delhi, Bihar, West Bengal & Sikkim, Punjab, Jammu & Kashmir, West Madhya Pradesh, Coastal Karnataka, Tamil Nadu & Pondicherry.
- Maximum temperature departures as on 12-08-2019: Maximum temperatures were markedly above normal ( 5.1°C or more) at a few places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at many places over Bihar and at isolated places over East Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh; at a few places over Vidarbha, North Interior Karnataka and Konkan & Goa and at isolated places over Madhya Pradesh and Gujarat State and near normal over rest parts of the country.
- Minimum temperature departures as on 12-08-2019: 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 Himachal Pradesh, Uttarakhand, Rayalaseema and Coastal Andhra Pradesh & Yanam; at a few places over Punjab, East Uttar Pradesh, Bihar, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal and at isolated places over Jammu & Kashmir, West Uttar Pradesh, Haryana, Chandigarh & Delhi, Arunachal Pradesh, East Rajasthan, Chhattisgarh, East Madhya Pradesh, Gangetic West Bengal, Telangana, North Interior Karnataka and Nagaland, Manipur, Mizoram & Tripura. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at isolated places over Saurashtra & Kutch, Odisha, Kerala & Mahe and Marathawada and near normal over rest parts of the country.

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

- 13 August (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over East Madhya Pradesh, Vidarbha and Chhattisgarh; Heavy to very heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, ghat areas of Madhya Maharashtra, Konkan & Goa, Odisha, Telangana and Kerala & Mahe and Heavy rainfall at isolated places over Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Gujarat region, Marathawada, Coastal & South Interior Karnataka and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning very likely at isolated places over Sub-Himalayan West Bengal & Sikkim. Strong winds, speed reaching 45-55 kmph, are likely to prevail over southwest, central and north Arabian Sea, north and west central Bay of Bengal and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts, Lakshadweep and comorin area, Tamil Nadu coast and Andaman & Nicobar Islands. Squally weather likely to prevail over

West Bengal, Odisha and Bangladesh coasts. Fishermen are advised not to venture into these areas.

- 14 August (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over East Rajasthan and Madhya Pradesh; Heavy to very heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, Vidarbha, ghat areas of Madhya Maharashtra, Telangana and Konkan & Goa and Heavy rainfall at isolated places over Jammu & Kashmir, Himachal Pradesh, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Gujarat region, Chhattisgarh, Andaman & Nicobar Islands, Coastal & South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Sub-Himalayan West Bengal & Sikkim. Strong winds, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 15 August (Day 3): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over East Rajasthan; Heavy to very heavy rainfall at isolated places over Uttarakhand and West Madhya Pradesh and Heavy rainfall at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Gujarat region, Konkan & Goa, Andaman & Nicobar Islands, Coastal Karnataka and Kerala & Mahe. Strong winds, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 16 August (Day 4): Heavy rainfall likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Andaman & Nicobar Islands. Strong winds, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 17 August (Day 5): Heavy rainfall likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Andaman & Nicobar Islands. Strong winds, speed reaching 45-55 kmph, are 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.*, 13 August to 21 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)

### **Punjab**

#### **Weather condition:**

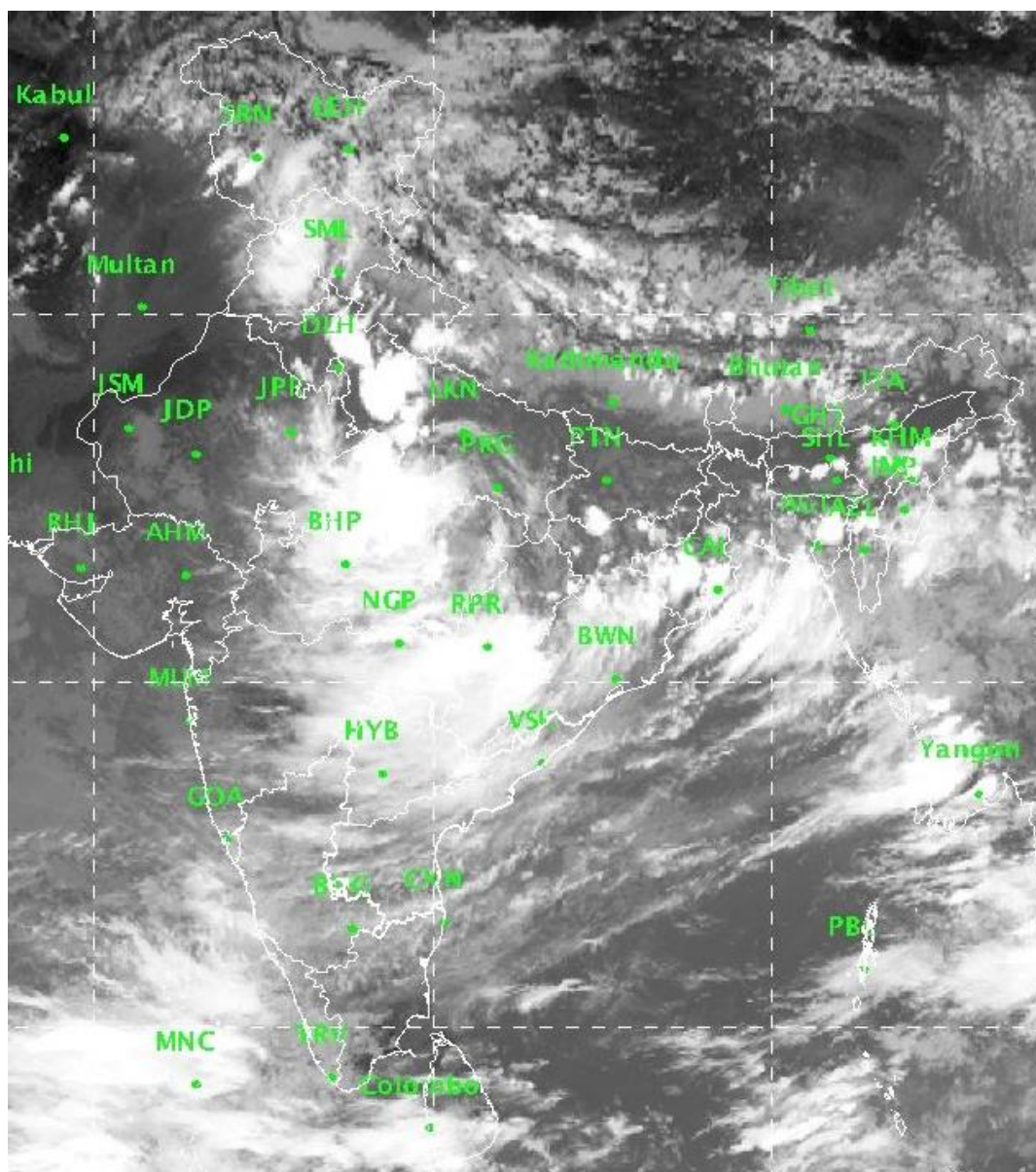
Very light rainfall received in isolated places in Punjab state during past few days. The maximum temperature was ranged between 31-36°C and minimum temperature was ranged between 27-29°C

#### **Contingency measure:**

- Cloudy and rainy weather is likely to prevail in the coming days. Weather parameters are likely to remain as follows: Maximum Temperature 30-39 °C, Minimum Temperature 26-29 °C. Wind speed 6-12 km/h. Weather based Advisories:
- Field Crops: Rice: Apply irrigation to paddy crop, two days after the ponded water has infiltrated into the soil. Care should be taken that the field does not develop cracks. Apply third dose of nitrogen (1/3) 42 days after transplanting. Eradicate the weeds growing on paddy field. To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses. Basmati: To the basmati crop, apply urea in two equal splits at 3 and 6 weeks after transplanting. ? Rogue out and destroy foot rot infected plants from the field. Cotton: In view of rainfall, apply only need based irrigation to cotton crop. Apply remaining half dose of nitrogen at flowering stage. Eradicate the weeds like kanghi buti, peeli buti, puth kanda etc growing on cotton field bunds, waste lands, road side and irrigation channels/canals to avoid further spread of whitefly to cotton field. Drain out the stagnant rain water from cotton field. Maize: Do not allow the rain water to stand in the main maize crop as this crop is highly sensitive to standing water and promotes bacterial stalk rot. Apply second dose of nitrogen (37 or 25 kg per acre, respectively for the long and medium/short duration cultivars) at knee high stage. ? For control of weeds, use atrazine 50 WP as pre-emergence application @ 500g per acre on light textured soils and @ 800 g per acre on heavy textured soils. Atrazine can also be sprayed 10 days after sowing maize for controlling weeds.
- Vegetables: Drain out the stagnant rain water from fields. Complete sowing of all the cucurbits, okra, rainy season tomato varieties, brinjal, cowpeas and early varieties of cauliflower. Prevailing weather is favorable for the development and spread of fruit rot in chilli. Farmers are advised to give 3-4 sprays of Folicur @ 250 ml of Indofil M-45 or blitox 50 WP @ 750 gm/acre at 10 days interval during clear weather.

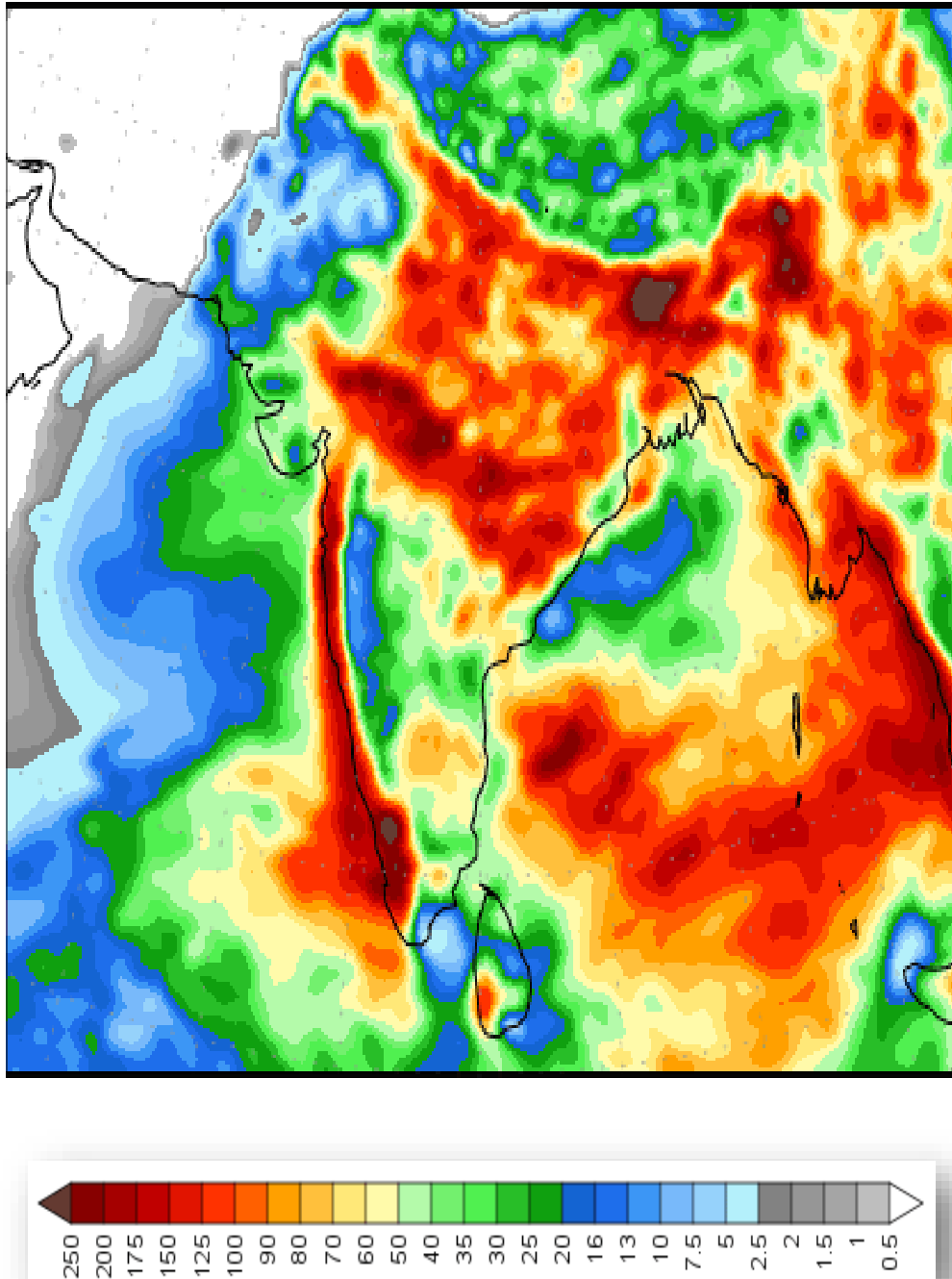
- Fruit Plants: Drain out the stagnant rain water from orchards and basins of the fruit plants. Fix fruit fly traps (16 traps per acre) in guava to protect the rainy season guava fruits from fruit fly. Preparation of field for planting of new evergreen fruit plants can be initiated during this period. Manually remove the large weeds such as congress grass, bhang etc. from orchards and adjoining areas.





**Figure: 1. Latest available satellite picture as on 13 August 2019 at 13:00 Hrs (IST).**

**(Source: IMD).**



**Figure: 2. Precipitation forecast for 13 August to 21 August 2019 (Source: NOAA NCEP).**