

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

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

### **Daily Crop Weather Information as on 21 May 2019**

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

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

- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 5°N/Long. 81°E, Lat. 7°N/Long. 88°E, Car-Nicobar and Lat. 13°N/Long. 99°E. Conditions are favourable for further advance of Southwest Monsoon into some more parts of South Bay of Bengal, North Andaman Sea & Andaman Islands during next 2-3 days.
- The Western Disturbance as a trough in mid & upper tropospheric levels now seen as a cyclonic circulation over north Pakistan & adjoining Jammu & Kashmir with a trough aloft at 5.8 km above mean sea level roughly along Long. 72°E to the north of Lat. 32°N has moved away eastwards. Another western disturbance as a cyclonic circulation at 3.1 km above mean sea level lies over Iran and neighborhood. It is likely to cause fairly widespread to widespread precipitation over Western Himalayan region and isolated to scattered rain/thundershowers over adjoining plains during 22nd to 23rd May. Thunderstorm accompanied with gusty wind over Western Himalayan region and Duststorm/Thunderstorm accompanied with gusty wind over adjoining plains are also likely during the same period.
- Heat wave conditions likely in isolated to some pockets over Vidarbha, Madhya Maharashtra, Marathawada, Telangana, Rayalaseema and Tamilnadu during next 3 days and in isolated pockets over parts of East, West and South India during next 48 hours.
- The images showing the latest satellite picture in figure. 1.

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

- Rain/Thundershowers observed (from 0830 IST of yesterday to 0830 hours IST of today): at many places over Andaman & Nicobar, Arunachal Pradesh, Assam & Meghalaya and Gangetic West Bengal and at isolated places over Jammu & Kashmir, Himachal Pradesh, Haryana. Chandigarh & Delhi, Chhattisgarh, North Interior Karnataka, Coastal Karnataka, Kerala, Telangana and Nagaland, Manipur, Mizoram & Tripura. Thunderstorms observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Himachal

Pradesh, Assam & Meghalaya, West Bengal & Sikkim, Odisha, East Rajasthan, Rayalaseema, North Interior Karnataka and Kerala.

- Yesterday, Heat Wave Conditions were observed in some part of Madhya Maharashtra and in isolated pockets over Vidarbha and Telangana.
- Maximum temperature departures as on 20.05.2019: Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Madhya Maharashtra; appreciably above normal (3.1°C to 5.0°C) at many places over North Interior Karnataka, Rayalaseema and Jharkhand; at a few places over Telangana, Tamilnadu & Puducherry and Gangetic West Bengal and at isolated places over Vidarbha and East Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Kerala and Bihar; at many places over Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Chhattisgarh and South Interior Karnataka; at a few places over Saurashtra & Kutch, Assam & Meghalaya, West Madhya Pradesh and Odisha and Gujarat Region, Himachal Pradesh, Uttar Pradesh and Andaman & Nicobar. They were appreciably above normal (-3.1°C to -5.0°C) at a few Places over Jammu & Kashmir, West Rajasthan and Haryana Chandigarh & Delhi and at isolated places over Coastal Andhra Pradesh and near normal over rest of the country.
- Yesterday, the highest maximum temperature of 45.9°C recorded at Bramhapuri (Vidarbha).
- Minimum temperature departures as on 21.05.2019: Minimum temperatures are Markedly above normal (5.1°C or More) at isolated places over Vidarbha; appreciably above normal (3.1°C to 5.0°C) at isolated places over Madhya Maharashtra, Telangana, and Rayalaseema; above normal (1.6°C to 3.0°C) at most places over North Interior Karnataka; at many places over Kerala; at few places over Gangetic West Bengal and South Interior Karnataka at isolated places over Bihar Assam & Meghalaya, Odisha, Tamilnadu & Puducherry, West Rajasthan and Gujarat State; They are below normal (-1.6°C to -3.0°C) at a few places over Himachal Pradesh and isolated Places over Haryana, Chandigarh & Delhi, East Uttar Pradesh and Madhya Pradesh and near normal over rest parts of the country.

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

- 21 May (Day 1): Thunderstorm & lightning accompanied with gusty winds (30-40 kmph) at isolated places very likely over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Telangana, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Rayalaseema, South Interior Karnataka, Tamilnadu & Puducherry and Kerala. Duststorm/Thunderstorm accompanied with gusty winds (30-40 kmph) at isolated places very likely over Rajasthan. Heat Wave Conditions in some parts very likely over Vidarbha and Madhya Maharashtra and

in isolated pockets very likely over Gujarat region, Chhattisgarh, Odisha, Marathawada, Telangana, Rayalaseema and Tamilnadu & Puducherry.

- 22 May (Day 2): Thunderstorm & lightning accompanied with squall (50-60 kmph) at isolated places very likely over Sub Himalayan West Bengal & Sikkim; with gusty winds (30-40 kmph) at isolated places over Chhattisgarh, Gangetic West Bengal, Rayalaseema, South Interior Karnataka and Kerala. Duststorm/Thunderstorm accompanied with gusty winds (30-40 kmph) at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi and Rajasthan. Heavy rain at isolated places very likely over Andaman & Nicobar Islands, Arunachal Pradesh and Assam & Meghalaya. Heat Wave Conditions in some parts very likely over Vidarbha and Madhya Maharashtra and in isolated pockets over Gujarat region, Chhattisgarh, Odisha, Marathawada, Telangana, Rayalaseema and Tamilnadu & Puducherry. Strong wind, speed reaching 40-50 kmph, very likely along & off Tamilnadu & Puducherry, Andhra Pradesh, West Bengal and Odisha coasts. Fishermen are advised not to venture into Sea over these areas.
- 23 May (Day 3): Thunderstorm & lightning accompanied with squall (50-60 kmph) at isolated places very likely over Sub Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with gusty winds (40-50 kmph) at isolated places over Jammu & Kashmir, Himachal Pradesh and Telangana; with gusty winds (30-40 kmph) at isolated places over Chhattisgarh, Gangetic West Bengal, South Interior Karnataka and Tamilnadu & Puducherry.
- Duststorm/Thunderstorm accompanied with gusty winds (30-40 kmph) at isolated places very likely over Uttarakhand, Punjab, Rajasthan and Haryana, Chandigarh & Delhi.
- Heavy to very heavy rain at isolated places very likely over Assam & Meghalaya; heavy rain at isolated places over Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh. Heat Wave Conditions in some parts very likely over Madhya Maharashtra and in isolated pockets over Vidarbha, Marathawada, Telangana, Rayalaseema, North Interior Karnataka and Tamilnadu & Puducherry. Strong wind, speed reaching 40-50 kmph likely along & off West Bengal and Odisha coasts, Andhra Pradesh and Tamilnadu. Fishermen are advised not to venture into Sea over these areas.
- 24 May (Day 4): Thunderstorm & lightning accompanied with gusty winds (40-50 kmph) at isolated places likely over South Interior Karnataka; with gusty winds (30-40 kmph) at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry. Duststorm/Thunderstorm accompanied with gusty winds (30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh. Heavy to very heavy rain at isolated places very likely over Assam & Meghalaya and

Nagaland, Manipur, Mizoram & Tripura; heavy rain at isolated places over Andaman & Nicobar Islands. Heat Wave Conditions in isolated pockets likely over Vidarbha, Telangana and North Interior Karnataka. Strong wind, speed reaching 40-50 kmph, very likely along & off West Bengal and Odisha coasts, Andhra Pradesh and Tamilnadu. Fishermen are advised not to venture into Sea over these areas.

- 25 May (Day 5): Thunderstorm & lightning accompanied with gusty winds (40-50 kmph) at isolated places likely over South Interior Karnataka; with gusty winds (30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim and Kerala. Heavy rain at isolated places likely over Andaman & Nicobar Islands, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat Wave Conditions in isolated pockets likely over Telangana and Vidarbha. Strong wind, speed reaching 40-50 kmph, very likely along & off West Bengal and Odisha coasts, Andhra Pradesh and Tamilnadu. Fishermen are advised not to venture into Sea over these areas.
- The weather outlook for the period of seven days *i.e* 21 to 28 May 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Jammu & Kashmir, Himachal Pradesh, Haryana, Chandigarh & Delhi, Chhattisgarh, West Bengal & Sikkim, Gangetic West Bengal, East Rajasthan, Odisha, Rayalaseema, Telangana, North Interior Karnataka, Coastal Karnataka, Kerala, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

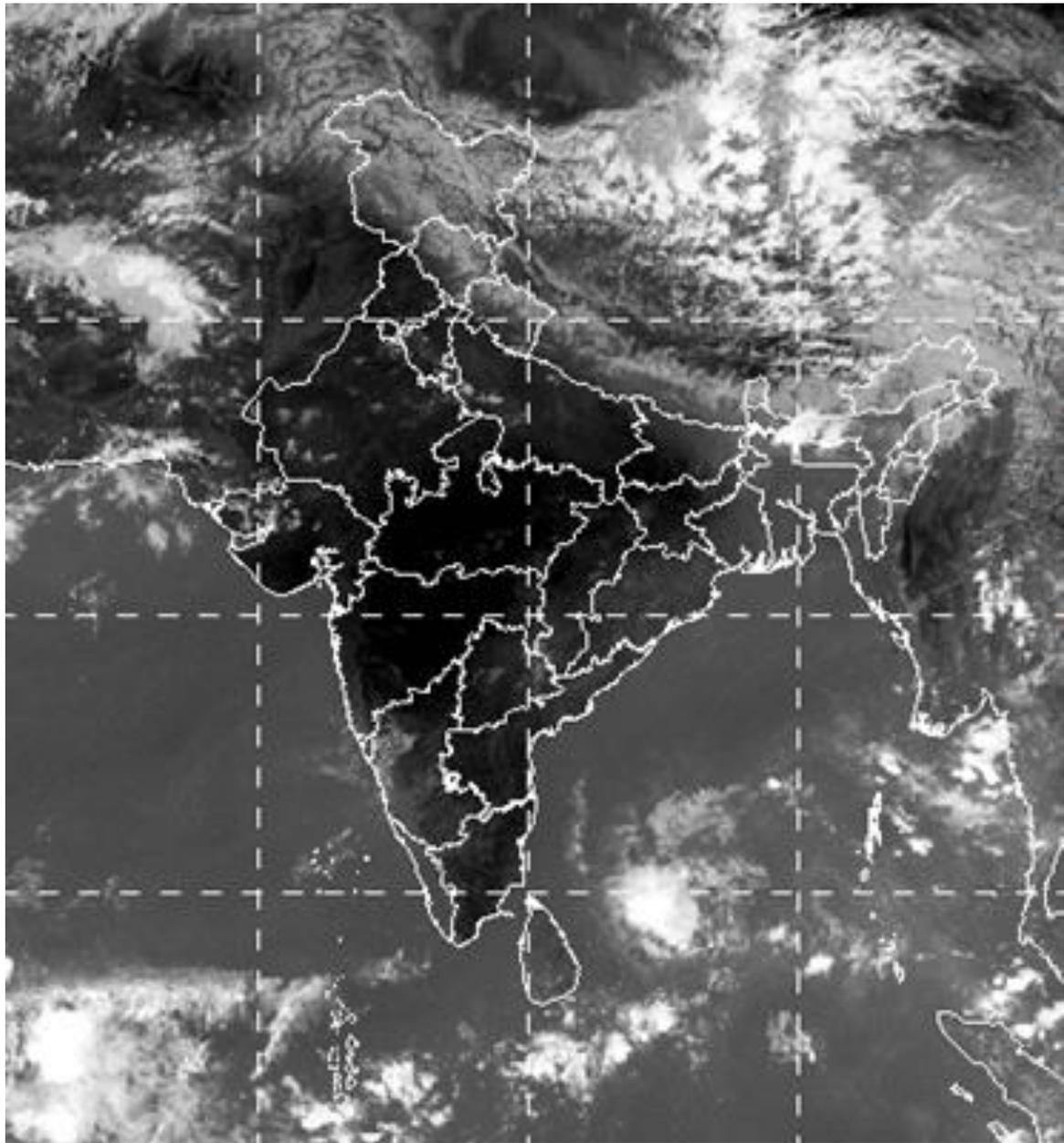
### **Punjab**

#### **Weather condition:**

Cloudy and dry weather prevailed in Punjab state during past few days. Average maximum temperature 41.2 °C and minimum temperature 23.6°C, respectively.

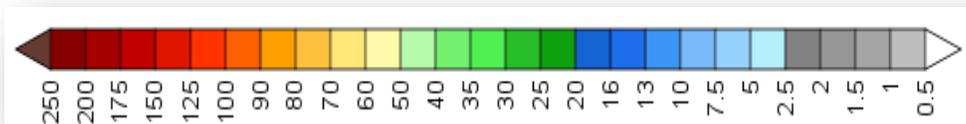
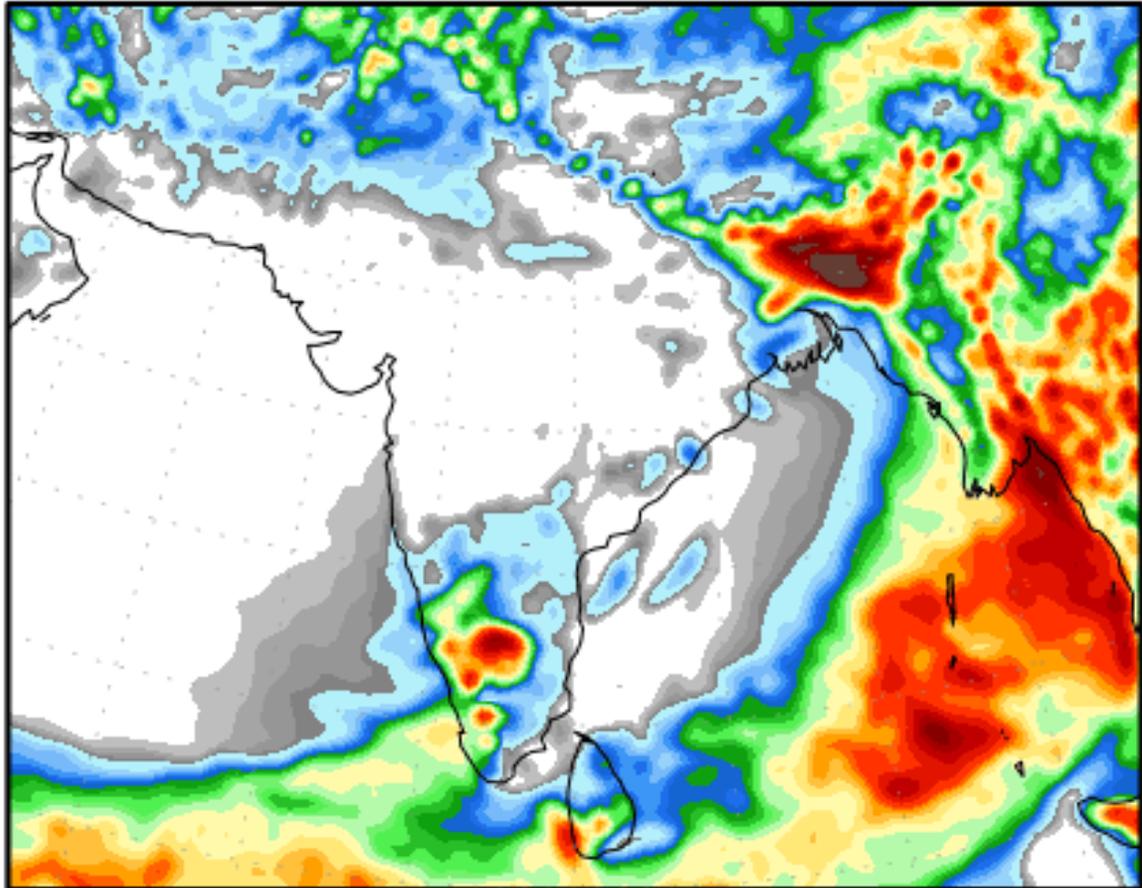
#### **Contingency measure:**

- Rice: Select short duration varieties of rice. Farmers can sow the nursery of recommended varieties of rice i.e. PR 126, PR 127, PR 122, PR 123, PR 124, PR 121, PR 113, PR 114 during second fortnight of this month.
- Cotton: 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.
- Sugarcane: Farmers can apply 65 kg urea to ratoon crop. Apply paddy straw or rice husk or sugarcane trash @ 20-25 q/acre between the rows of sugarcane to reduce soil temperature and moisture loss. For the management of early shoot borer in sugarcane, use Tricho-cards having 20,000 eggs of *Corcyra cephalonica* parasitized (seven days old) by *Trichogramma chilonis* per acre at 10 days interval.
- Vegetables: Irrigate vegetable crops at weekly intervals depending upon soil and climate conditions. Harvest fruits of bhindi, bottle gourd, cucumber, bitter gourd, sponge gourd, tinda, summer squash when green and tender. Harvest the onion and garlic bulbs. Cure under shade and store them in a dry place. Fruit and shoot borer of brinjal should be controlled by spraying 100 ml Sumicidin 20 EC or 200 ml Ripcord 10 EC or 160 ml Decis 2.8 EC in 100-125 litres of water per acre. For the control of powdery mildew in cucurbit, spray the crop with Karathane 50-80 ml/acre at the appearance of powdery patches on the leaves. Avoid sprays of sulphur or copper based fungicide on cucurbits.
- Fruit plants: For management of physiological fruit drop in mango, spray of 2,4-D sodium salt of horticulture grade can be done @ 10 g in 500 litres of water. To manage fruit fly in peach and plum fruits, fix PAU fruit fly traps @ 16 traps per acre. To check zinc deficiency in citrus, spray the affected trees with 0.47 zinc sulphate (4.7g/litre of water) solution, without addition of lime, to spring flush.



**Figure: 1. Latest available satellite picture as on 21 May 2019 at 0230 Hrs (IST).**

**(Source: IMD).**



**Figure: 2. Precipitation forecast for 21 to 28 May 2019 (Source: NOAA NCEP).**