

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

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

### **Daily Crop Weather Information as on 24 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 48 hours.
- Fairly widespread to widespread rainfall with isolated heavy/very heavy falls are likely over Assam, Meghalaya and Tripura during next 48 hours. Under the influence of a Western Disturbance lying over northeast Afghanistan and adjoining Pakistan, fairly widespread to widespread precipitation likely over Western Himalayan region and isolated to scattered rain/thundershowers over adjoining plains during next 24 hours. Thunderstorm accompanied with gusty winds over Western Himalayan region and Duststorm/Thunderstorm accompanied with gusty winds over adjoining plains are also likely during the same period.
- Heat wave conditions in some parts to severe heat wave conditions in isolated pockets likely over Vidarbha during next 2-3 days. Heat wave conditions in some pockets over northeast Madhya Pradesh and in isolated pockets over East Uttar Pradesh, Madhya Maharashtra, Telangana, Marathwada, Chhattisgarh during next 4-5 days and over Jharkhand and Odisha from tomorrow.
- The images showing the latest satellite picture in 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 Jammu & Kashmir, Himachal Pradesh, Punjab , Sub-Himalayan West Bengal, Arunachal Pradesh and Assam & Meghalaya; at many places over Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands; at a few places over Haryana, Chandigarh & Delhi, West Rajasthan, Interior Karnataka and Kerala and at isolated places over Uttarakhand, West Madhya Pradesh, Uttar Pradesh, Jharkhand, Odisha, Konkan & Goa and Tamilnadu & Puducherry. Extremely heavy rainfall observed at isolated places over Tripura. Thunderstorms observed (from 0530 hours to 0830 hours IST of today): at isolated

places over Jammu & Kashmir, West Rajasthan, East Uttar Pradesh, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- Yesterday, heat Wave Conditions were observed in some part of Vidarbha and in isolated pockets over East Uttar Pradesh, East Madhya Pradesh, Marathwada and Madhya Maharashtra.
- Maximum temperature departures as on 23.05.2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Vidarbha, Madhya Maharashtra and Kerala; at isolated places over East Madhya Pradesh and North Interior Karnataka; above normal (1.6°C to 3.0°C) at most places over East Uttar Pradesh, Marathawada and Lakshadweep; at many places over West Uttar Pradesh, Rayalaseema and Telangana; at a few places over West Madhya Pradesh, Gujarat region and Coastal Karnataka and at isolated places over Saurashtra & Kutch, Tamilnadu & Puducherry and Andaman & Nicobar Islands. They were markedly below normal (-5.1°C or less ) at many places over Jammu & Kashmir and Himachal Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim; below normal (-1.6°C to -3.0°C) at many places over Punjab and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Haryana, Chandigarh & Delhi, Gangetic West Bengal, Odisha and Coastal Andhra Pradesh and near normal over rest of the country.
- Yesterday, the highest maximum temperature of 46.3°C was recorded at Bramhapuri (Vidarbha) and Adilabad (Telangana).
- Minimum temperature departures as on 24.05.2019: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over East Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at a few places over West Madhya Pradesh and at isolated places over West Rajasthan and Vidarbha; above normal (1.6°C to 3.0°C) at most places over Marathawada and Jharkhand; at many places over Chhattisgarh, Gangetic West Bengal and Uttarakhand; at a few places over East Rajasthan, Madhya Maharashtra, Odisha, East Uttar Pradesh and Tamilnadu & Puducherry and at isolated places over Gujarat state and West Uttar Pradesh. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Himachal Pradesh; below normal (-1.6°C to -3.0°C) at most places over Punjab and Haryana, Chandigarh & Delhi; at a few places over Assam & Meghalaya and at isolated places over Jammu & Kashmir and near normal over rest parts of the country.

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

- 24 May (Day 1): Thunderstorm & lightning accompanied with gusty winds (40-50 kmph) at isolated places very likely over South Interior Karnataka and Tamilnadu; with gusty winds (30-40 kmph) at isolated places over Kerala, North Interior

Karnataka, Rayalaseema, Telangana, Madhya Pradesh, Chhattisgarh, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Assam & Meghalaya and Nagaland, Manipur, Mizoram and with duststorm and gusty winds (30-40 kmph) at isolated places over Punjab, Uttar Pradesh, Rajasthan and Haryana, Chandigarh & Delhi. Heavy to very heavy rain at isolated places very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and heavy rain at isolated places over South Interior Karnataka. Heat Wave Conditions in many parts to severe heat wave conditions in isolated pockets over Vidarbha; in some parts over northeast Madhya Pradesh and in isolated pockets over Telangana, Madhya Maharashtra, Marathwada, Chhattisgarh and East Uttar Pradesh.

- 25 May (Day 2): Thunderstorm & lightning accompanied with gusty winds (40-50 kmph) at isolated places very likely over South Interior Karnataka and Tamilnadu ;with gusty winds (30-40 kmph) at isolated places over Kerala, Rayalaseema, Telangana, Sub-Himalayan West Bengal & Sikkim, Bihar, Assam & Meghalaya and Nagaland, Manipur, Mizoram. Heavy rainfall at isolated places very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka. Heat Wave Conditions in many parts to severe heat wave conditions in isolated pockets over Vidarbha; in some parts over northeast Madhya Pradesh and in isolated pockets over Telangana, Madhya Maharashtra, Marathwada, Chhattisgarh, Odisha, Jharkhand and East Uttar Pradesh.
- 26 May (Day 3): Thunderstorm & lightning accompanied with gusty winds (40-50 kmph) at isolated places very likely over South Interior Karnataka and Tamilnadu ;with gusty winds (30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim and thunderstorm and lightning at isolated places over Odisha. Heavy rainfall at isolated places very likely over north interior Tamilnadu and South Interior Karnataka. Heat Wave Conditions in some parts over Vidarbha and northeast Madhya Pradesh and in isolated pockets over Telangana, Madhya Maharashtra, Marathwada, Chhattisgarh, Odisha, Jharkhand and East Uttar Pradesh. Strong winds speed reaching 35-45 kmph likely over northeast Arabian Sea off north Gujarat Coast. Fishermen are advised not to venture into this area.
- 27 May (Day 4): Thunderstorm and lightning at isolated places likely over Odisha. Heat Wave Conditions in some parts over Vidarbha and northeast Madhya Pradesh and in isolated pockets over Telangana, North Interior Karnataka, Coastal Andhra Pradesh, Madhya Maharashtra, Marathwada, Chhattisgarh, Odisha, Jharkhand and East Uttar Pradesh. Strong winds speed reaching 35-45 kmph likely over northeast Arabian Sea off north Gujarat Coast. Fishermen are advised not to venture into this area.
- 28 May (Day 5): Thunderstorm & lightning accompanied with gusty winds (30-40 kmph) at isolated places likely over Gangetic West Bengal, Odisha, Jharkhand and

Bihar. Heavy rainfall at isolated places likely over Andaman & Nicobar Islands and Sub-Himalayan West Bengal & Sikkim. Heat Wave Conditions in some parts likely over Vidarbha and northeast Madhya Pradesh and in isolated pockets over Telangana, North Interior Karnataka, Coastal Andhra Pradesh, Madhya Maharashtra, Marathwada, East Uttar Pradesh, Jharkhand, Chhattisgarh and Odisha. Strong winds speed reaching 35-45 kmph likely over northeast Arabian Sea off north Gujarat Coast. Fishermen are advised not to venture into this area..

- The weather outlook for the period of seven days *i.e* 24 to 31 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, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Uttar Pradesh, Sub-Himalayan West Bengal, West Madhya Pradesh, Jharkhand, Odisha, Konkan & Goa, Interior Karnataka, Kerala, Tamilnadu & Puducherry, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### Himachal Pradesh

#### Weather condition:

Light rainfall received in Himachal Pradesh state during past few days. The maximum temperature ranged between 24.5 to 30.0°C and minimum temperature ranged between 12.5 to 17.0°C which was below normal by 0.8 to 4.9°C and 1.2 to 6.1 °C respectively.

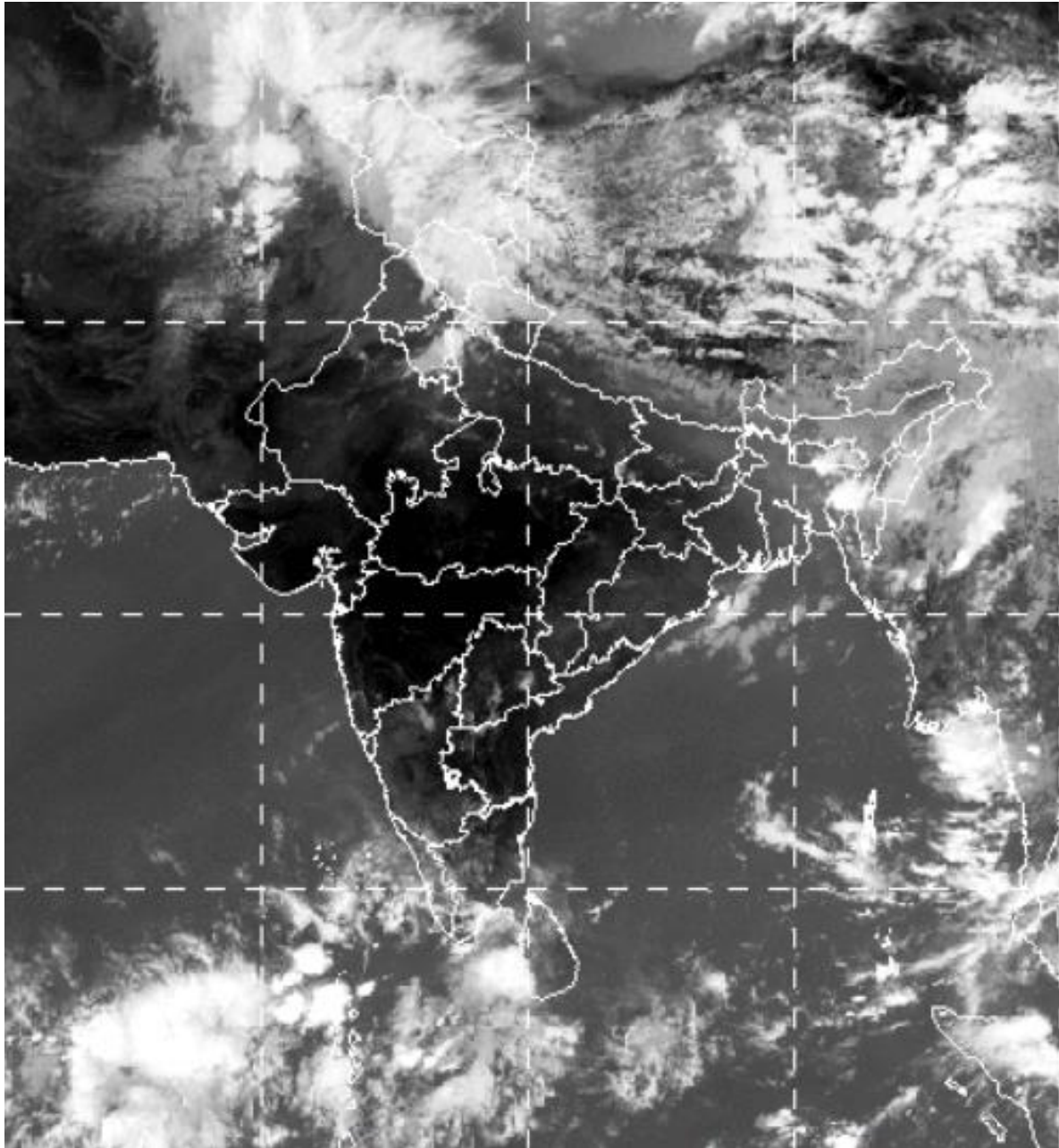
#### Contingency measure:

- Rabi crops: In Mid and high hill regions Advised harvesting of wheat on clear days and store the grains at appropriate (12 %) moisture.
- Kharif crop preparation: Do deep ploughing of fields after harvesting of Rabi crops. It helps in destroying the eggs and pupating stages of insects and weed seeds. After harvesting of rabi crops farmers are advised to test their soil from certified agencies and to do laser leveling in their field if required. Sowing of green manure crop is advised where harvesting of rabi crop is over. For green manuring cluster bean, daincha, senai, lobia etc may be sown and ensure proper moisture for proper germination and growth of the crop. Deep ploughing of fields after harvesting of rabi crops is advised so that eggs and pupating stages of insects and weed seeds are destroyed.

- Rice nursery: Time is approaching for sowing of Paddy nursery sowing after 20th May. Treat seed with Bavistin for fungal diseases.
- Pulses: Advised to intercultural operation and weed free in moong and mash in irrigated areas advised. In rainfed region ensure proper moisture.
- Fodder crops: Advised to sowing of fodder maize along with cowpeas and soybean in irrigated areas. Directed to spray glyphosate 1% solutions in the grasslands/pastures having lantana bushes with 2-3 leaves stage. For Ageratum, erigeron, bidens and parthenium in grasslands, spray 2-4-D @ 60 ml in 30 litre of water in one kanal. Ensure spray during morning and evening in low wind conditions. Avoid spray near to crop lands where crop ready for harvest. In mid hill regions one cut of berseem can be taken.
- Vegetable crops: Irrigation in Vegetables crops after ensuring the rains. Optimum moisture level should be maintained in cucurbitaceous crops by light and frequent irrigation as dry conditions may lead to poor pollination and thus drop in yield of the crop.
- Radish, turnip, onion ginger, turmeric, colocasia, elephant foot, leafy vegetables: & peas: High temperature expected, farmers are advised for harvesting of mature vegetables at morning and evening and after harvesting of crops keep it in the shade In lower regions, start sowing of cucurbits crops in this week. For the control of downy mildew in garlic spray Diathane M 45 2.5 g or Bavistin 1 g per litre.
- Poly house agriculture: It is optimum time for nursery sowing of Tomato, Brinjal, chilies and capsicum crops in poly house. Cucurbits plantation may be done in polytubes under the polyhouse.
- Livestock: Ensure cleanliness in cows having advanced pregnancy to avoid mastitis. Monitor the animals for FMD and advised Protect calves against parasites, get them dewormed with piperazine liquid @ 4 ml/kg body weight, first at 10 days of age, then 15 days and then monthly upto three months of age and then quarterly upto one year of age. Vaccination. Ecto-parasite attack is expected in this weather for control spray Butox @ 2ml per litre in cowshed Give mixture of hay & green fodder.
- Horticulture: In mango orchard, start monitoring for mango hopper and destroy infected inflorescence if mango malformation is found. Apply alkathene or sticky grease band 15-20 cm wide on mango plants to control upward movement of mango mealy bug. If Mango plant hopper may attack, for control spray, BUPROFEZIN 25% SC 1-2 ml per litres of water Or DELTAMETHRIN 2.8% EC 0.03 to 05% solution. Pomegranate fruit is in flowering stage and anar butter fly is the major problem in this weather for control spray cypermethrin 10 EC @ 1 ml per litre of water at 15 days interval. In litchi fruit borer is appearing for control spray cypermethrin 10 EC

@ 1 ml per litre of water at 15 days interval. TEA: It is optimum time to resume picking in tea at 8 days interval to maintain the quality and productivity.

- Mushrooms: Maintain room temperature 18-22o C and relative humidity around 85% for successful cultivation.
- Floriculture: Transplant the bulbs of gladiolus and rajnigandha. It is optimum time for raising nursery of summer annuals like gladiolus, portulaca, gomphrina and china aster etc . Weather is conducive for appearance of aphids in rose, for control spray rogur @1 ml per litres of water.



**Figure: 1. Latest available satellite picture as on 24 May 2019 at 0230 Hrs (IST).**

**(Source: IMD).**

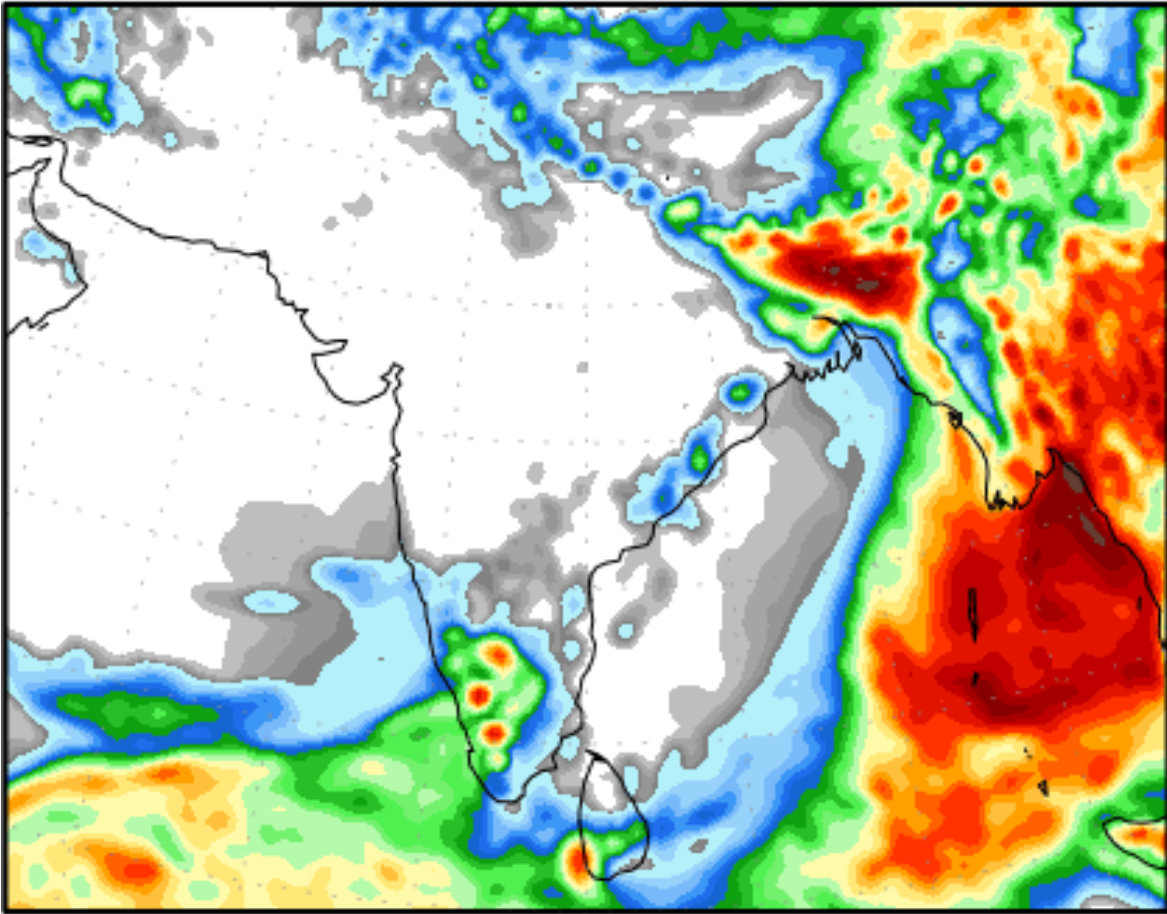


Figure: 2. Precipitation forecast for 24 to 31 May 2019 (Source: NOAA NCEP).