

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

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

### **Daily Crop Weather Information as on 10 April 2020**

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

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

- The present Western Disturbance is likely to move away east-northeastwards, causing isolated rain/snow over higher reaches of Ladakh, Himachal Pradesh and Uttarakhand during next 24 hours. Isolated thunderstorm and hailstorms are also likely over Uttarakhand during this period.
- A fresh Western Disturbance is very likely to affect Western Himalayan region (Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Uttarakhand) from 13th April. The peak activity due to this system is likely on 14th April when the Western Himalayan Region is likely to experience scattered to fairly widespread rain/snow with isolated thunderstorms/hailstorms, gusty winds & lightning.
- Due to confluence between southwesterly & easterly winds at lower levels, scattered to fairly widespread rainfall/thunderstorm accompanied with hailstorm, lightning & gusty/squally winds very likely over parts of Sub-Himalayan West Bengal & Sikkim and northeast India during next 3 days. Also, isolated rain/thundershowers with lightning & gusty winds likely over Gangetic West Bengal, south Odisha and south Chhattisgarh during next 2-3 days.
- Under the influence of the low level trough/Wind Discontinuity, isolated to scattered rain/thundershowers with lightning & gusty winds occurred over Tamilnadu, Kerala, Telangana and Andhra Pradesh during past 3-4 days. Isolated heavy rains and hailstorms also occurred over Tamilnadu and Telangana during the period. The severity of thunderstorms are likely to reduce from today. However, isolated thunderstorm with lightning, hailstorms & gusty winds are likely to continue over Telangana during next 24 hours and thunderstorm with lightning & gusty winds over Coastal Andhra Pradesh, Tamilnadu and Kerala during next 48 hours.
- Heat Wave conditions are likely to develop in isolated pockets of Gujarat state during 12th-13th April.
- 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 Sub-Himalayan West Bengal & Sikkim; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal; at a few places over Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka and Kerala & Mahe and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Telangana and Andaman & Nicobar Islands.
- Heavy rainfall occurred at isolated places in Tamil Nadu and Coastal Andhra Pradesh.
- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Chhattisgarh, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 09-04-2020: Maximum temperature were appreciably above normal (3.1°C to 5.0°C) at isolated places over Assam, Meghalaya, ; above normal (1.6°C to 3.0°C) at many places over Tamil Nadu, Lakshadweep; at a few places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan and at isolated places over West Rajasthan. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Haryana, Chandigarh & Delhi and north Odisha; below normal (-1.6°C to -3.0°C) at a few places over Punjab and Chhattisgarh and at isolated places over Saurashtra, East Madhya Pradesh and Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.3°C was reported at Akola (Vidharbha).
- Minimum Temperature Departures as on 10-04-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan and Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over Gujarat region; at isolated places over East Rajasthan, Himachal Pradesh, Saurashtra & Kutch and Madhya Maharashtra. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Rayalaseema; at isolated places over East Uttar Pradesh and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Telangana; at many places over Haryana, Chandigarh & Delhi and Sub-Himalayan West Bengal & Sikkim; a few places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Bihar, South Interior Karnataka and Tamil nadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya and near normal over rest parts of the

country. The lowest minimum temperature of 14.8°C recorded at Karnal (Haryana) over plains of the country.

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

- 10 April (Day 1): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand, Sub-Himalayan West Bengal & Sikkim and Telangana; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and with lightning at isolated places over Gangetic West Bengal, Vidarbha, Chhattisgarh, Marathwada, Madhya Maharashtra, Kerala & Mahe, Rayalaseema and Karnataka.
- 11 April (Day 2): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya. Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim and with lightning at isolated places over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana, Bihar, Odisha, Marathwada and Madhya Maharashtra.
- 12 April (Day 3): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning likely at isolated places over Arunachal Pradesh, Marathwada and Madhya Maharashtra. Heat Wave conditions very likely in isolated pockets over Saurashtra & Kutch.
- 13 April (Day 4): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30- 40 kmph) likely at isolated places over Telangana and with lightning at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab, Vidarbha and East Madhya Pradesh. Heat Wave conditions likely in isolated pockets over Gujarat state.
- 14 April (Day 5): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Uttarakhand; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over

south Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Telangana and Coastal Andhra Pradesh & Yanam and with lightning at isolated places over Vidarbha, Punjab, Haryana, Chandigarh & Delhi, Gangetic West Bengal, Bihar and Jharkhand.

- The weather outlook for seven days i.e., 10 to 18 April 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)**

### **Himachal pradesh**

#### **Weather condition:**

The maximum and minimum temperature ranged between 21.0 to 24.5 °C and 6.5 to 11.0 °C which was below normal by 0.1 to 2.3 °C and 1.4 to 5.8 °C, respectively. 10.8 mm rainfall was received during the week against the normal of 16.2 mm. The relative humidity varied between 39-80% and sunshine hours between 1.5-11 hrs/day with variable sky conditions (Octa 2-8). The evaporation rate varied 1.8-4.4 mm per day.

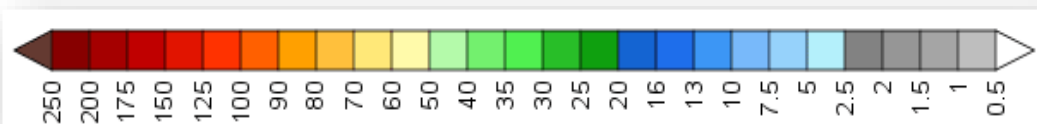
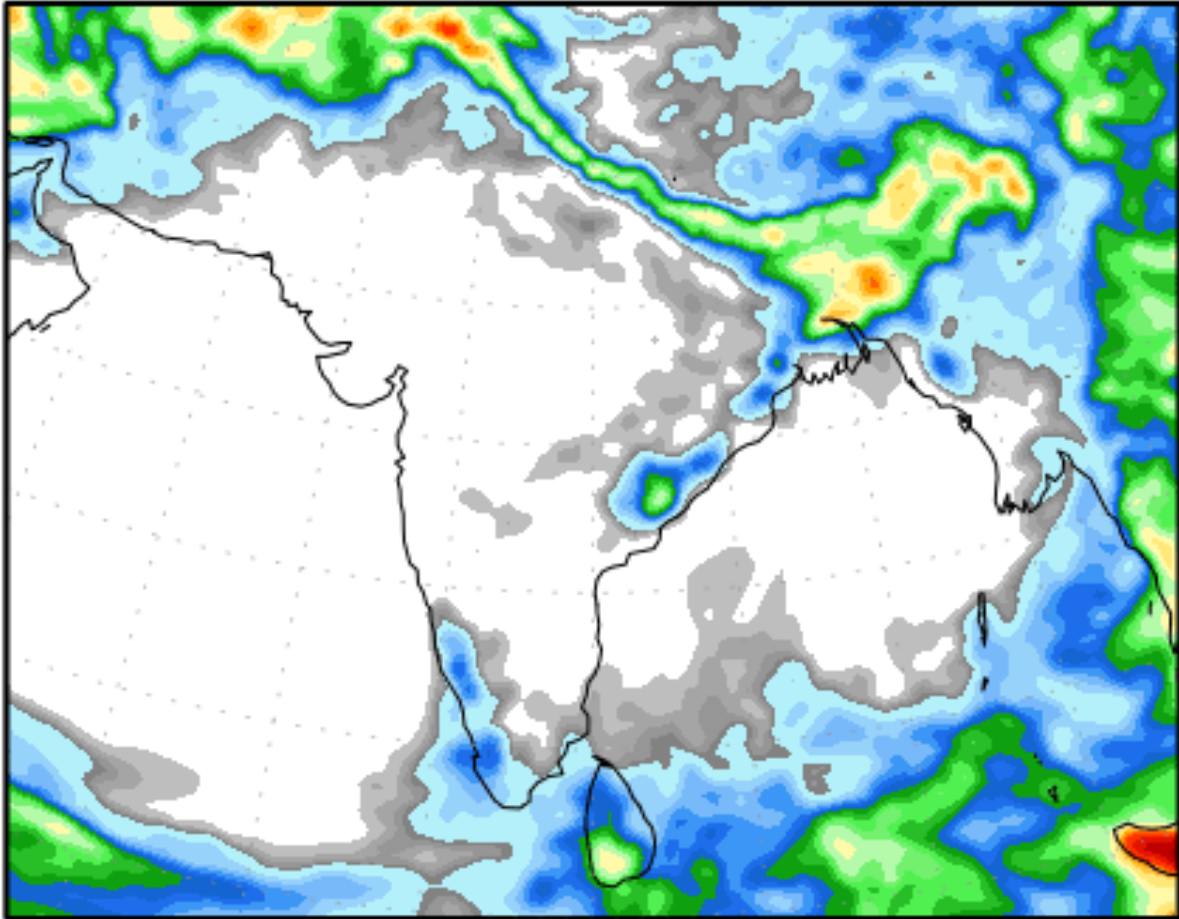
#### **Contingency measure:**

- **RABI CROPS:** Farmers are advised for harvesting of the matured mustard when 75-80 percent of the pods (Siliqua) turn parchment brown in colour is the right time for harvest. Over mature crop cause loss of grains due to scattering. Attack of painted bug more if crop is kept in the field for long time after harvest. Harvesting of timely sown wheat crop is advised in lower regions. Harvested crops should be properly tied to avoid being carried away by winds. Adequate drying of harvested grains before storage should be done.
- **FODDER CROPS:** Advised to sow in March chari and bajra for summer green fodder. Spray glyphosate 1% solutions in the grasslands/pastures having lantana bushes with 2-3 leaves stage.
- **PULSES:** In lower regions sowing of green gram and black gram can be done in second fortnight of March Pod borer in the gram crop, installation of Pheromone trap @ 3-4 traps per acre is advised if flowering has reached 10-15%. T shaped bird perches in and around crop field to be installed for controlling insect population.
- **VEGETABLE CROPS:** Rainfall expected Skip irrigation in Vegetables .Installation of bird perches in tomato crop is advised to control fruit borer insect.
- **ONION:** In onion crop against attack of thrips Spraying of Carbaryl @ 2 grams per litre of water with sticky material (Tipol 1.0 gram /litre) is advised. Purple

blotch is expected for control spraying of Diethane M - 45 @ 3 grams per litre of water with sticky material (Tipol 1.0 gram /litre) advised. Onion crop against attack of thrips. Spraying of Carbaryl @ 2 gram/ litre of water with sticky material (Tipol 1.0 gram /litre) is advised.

- OTHER VEGETABLES: Sowing of French bean, cluster bean, summer radish is advised.
- POTATO: Infection of blight may occur in potato and tomato. Constant monitoring is advised. If symptoms appears then spray of Carbandizam @ 1.0 gm / litre of water or Dithane-M-45 @ 2.0 gm / litre of water is recommended.
- POLY HOUSE AGRICULTURE: It is optimum time for sowing of cole crops in polyhouses. It is optimum time for nursery sowing of Tomato, Brinjal, chillies and capsicum crops in poly house. Cucurbits plantation may be done in polytubes under the polyhouse.
- TEA: Apply fertilizers @ 18 kg ammonium sulphate, 22 kg Single super phosphate (SSP) and 3 kg Muriate of potash (MOP) per kanal area. The large trees causing shadow may be lopped so that enough sunshine can be received by tea plants.
- LIVESTOCK: Do not allow the water to stagnate in the cow shed. Ensure cleanliness in cows having advanced pregnancy to avoid mastitis. Monitor the animals for FMD and advised Vaccination. Ecto-parasite attack is expected in this weather for control spary Butox @ 2ml per litre in cowshed Give mixture of hay & green fodder.
- MUSHROOMS: Maintain room temperature 18-22°C and relative humidity around 85 per cent for successful cultivation. Fungal Disease: Bavistin @ 0.05%.





**Figure:2. Precipitation forecast for 10 to 18 April 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.*