

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

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

### **Daily Crop Weather Information as on 01 February 2021**

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

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

- The Western Disturbance as a cyclonic circulation at 3.1 km above mean sea level lies over Afghanistan & neighbourhood with a trough aloft with its axis at 5.8 km above mean sea level roughly along Long. 60°E to the north of Lat. 32°N is very likely to affect Western Himalayan Region from 02nd February and the plains of Northwest India from 03rd February. Under its influence, Scattered to fairly widespread light to moderate rain/snow with isolated thunderstorm, lightning & hail very likely over Western Himalayan region during 03rd-05th February.
- Gradual rise in Minimum temperatures very likely over most parts of Northwest and adjoining Central India during next 3-4 days and the Cold Day and Cold Wave conditions prevailing over most parts of north west India is likely to abate during next 24 hours.
- Interaction between this Western Disturbance and lower level southeasterlies from the Bay of Bengal is likely to cause: i) Isolated to fairly widespread light to moderate rain/thundershowers with isolated lightning & hail over plains of Northwest India during 03rd-05th February; ii) over Madhya Pradesh during 04th-05th February and over East Uttar Pradesh, Bihar and Jharkhand during 05th-06th February, 2021.
- Dense to Very Dense Fog in isolated to some pockets very likely over Uttar Pradesh during next 2 days and Dense Fog in isolated pockets over Bihar, during next 4 days and over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 3 days and decrease in spatial distribution and intensity thereafter.
- 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 isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Coastal Andhra Pradesh & Yanam and interior Tamilnadu.

- Rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) (1 cm or more): Kakinada-2.
- Fog observed (at 0830 hours IST of today): Very Dense Fog in many pockets over East Uttar Pradesh and in isolated pockets over West Uttar Pradesh. Dense Fog in many pockets over Bihar and in isolated pockets over Sub-Himalayan West Bengal & Sikkim. Moderate fog in isolated pockets over Meghalaya.
- Cold Wave to Severe Cold Wave conditions observed in some pockets over East Madhya Pradesh, Bihar and West Bengal & Sikkim; in isolated pockets over Punjab, East Uttar Pradesh and Odisha and Cold Wave conditions in isolated pockets over Haryana, West Uttar Pradesh, West Madhya Pradesh and Saurashtra & Kutch.
- Yesterday, Severe Cold Day conditions observed in some pockets over Bihar and Sub-Himalayan West Bengal & Sikkim and Cold Day conditions in isolated pockets over Uttar Pradesh and East Madhya Pradesh.
- Maximum Temperature Departures as on 31-01-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over West Rajasthan; at a few places over Himachal Pradesh, East Rajasthan and Coastal Karnataka and at isolated places over Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch, Konkan & Goa, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Sub-Himalayan West Bengal & Sikkim and Bihar; at isolated places over East Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Gangetic West Bengal; at isolated places over East Madhya Pradesh and West Uttar Pradesh; below normal (-1.6°C to -3.0°C) at many places over Jharkhand and Odisha; at a few places over West Madhya Pradesh and Telangana and at isolated places over Madhya Maharashtra and Vidarbha and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.1°C was reported at Vengurla (Konkan & Goa) over the country.
- Minimum Temperature Departures as on 01-02-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Andaman & Nicobar Islands and at isolated places over North Interior Karnataka, Telangana and Coastal Andhra Pradesh & Yanam; above normal (1.6°C to 3.0°C) at most places over Marathwada & Coastal Karnataka; at many places over Madhya Maharashtra and Kerala & Mahe; at a few places over Himachal Pradesh, West Rajasthan and Tamilnadu, Puducherry & Karaikal. They are markedly below normal (-5.1°C or less) at a few places over Bihar, East Madhya Pradesh, West

Bengal & Sikkim and north Odisha; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, East Uttar Pradesh and Saurashtra & Kutch; appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Uttar Pradesh, East Rajasthan; below normal (-1.6°C to -3.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Himachal Pradesh, Uttarakhand and Gujarat region and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 3.0°C reported at Umaria (East Madhya Pradesh) over the plains of the country.

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

- 01 February (Day 1): Dense to Very Dense Fog in some pockets very likely over East Uttar Pradesh; in isolated pockets over West Uttar Pradesh Sub-Himalayan West Bengal & Sikkim and Dense Fog in isolated pockets over Uttarakhand, Bihar, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Day to Severe Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Bihar and Cold Day conditions in isolated pockets over West Uttar Pradesh. Cold Wave to Severe Cold Wave conditions in isolated pockets very likely over Bihar and Odisha and Cold Wave conditions in isolated pockets over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Madhya Pradesh, north Chhattisgarh, Jharkhand, and West Bengal & Sikkim. Thunderstorm accompanied with lightning at isolated places very likely over Coastal Andhra Pradesh & Yanam. Strong Winds (speed reaching 40-50 kmph) very likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 02 February (Day 2): Dense to Very Dense Fog in isolated pockets very likely over Uttar Pradesh and Dense Fog in isolated pockets over Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Day to Severe Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Bihar. Cold Wave to Severe Cold Wave conditions in isolated pockets very likely over Odisha and Cold Wave conditions in isolated pockets over East Uttar Pradesh, Bihar, Jharkhand and West Bengal & Sikkim. Strong Winds (speed reaching 40-50 kmph) very likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 03 February (Day 3): Dense Fog in isolated pockets very likely over East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Day conditions in isolated pockets very likely over East Uttar Pradesh. Cold Wave conditions in isolated pockets

very likely over Odisha. Thunderstorm accompanied with lightning & hail at isolated places very likely over Jammu & Kashmir, Ladakh, GilgitBaltistan, Muzaffarabad, Himachal Pradesh and with lightning at isolated places over Punjab and Haryana & Chandigarh & Delhi. Strong Winds (speed reaching 40-50 kmph) very likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.

- 04 February (Day 4): Dense Fog in isolated pockets likely over Bihar. Cold Wave conditions in isolated pockets likely over Odisha. Thunderstorm accompanied with lightning & hail at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh& Delhi, West Uttar Pradesh and north Rajasthan and with lightning at isolated places over East Uttar Pradesh and East Madhya Pradesh.
- 05 February (Day 5): Thunderstorm accompanied with lightning & hail at isolated places likely over Uttarakhand, West Uttar Pradesh, Madhya Pradesh and with lightning at isolated places over East Uttar Pradesh and Chhattisgarh.
- The weather outlook for seven days i.e., 01 February to 09 February 2021 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)

### **Jharkhand**

#### **Weather condition:**

During this week maximum and minimum temperature range between 20.5 to 27.5 °C and 3.3 to 7.5 °C respectively. Maximum and minimum actual average temperatures are 24.4 °C and 5.2 °C, whereas normal maximum and minimum temperature are 23.2 °C and 8.3 °C respectively.

#### **Contingency measure:**

- **General:** On the basis of rain forecast after two days, farmers should avoid irrigation in any crops/vegetables and after possible rain urea may be broadcasted in various crops/vegetables as per their requirement at optimum soil moisture. Farmers having assured irrigation facility and wish to cultivate summer vegetables may proceed for sowing. Seeds of cucurbitaceous plant like sponge gourd, Bottle gourd, pumpkin, water melon, musk melon etc. may be sown in pit. Farmers having meagre irrigation facility may proceed for green gram cultivation.
- **Rapeseed:** Crops are now approaching the maturity stage. Harvest the crops when siliqua turns into bright yellow color and dry the harvested crop in the sun for 2-3 days before threshing.
- **Green Gram:** Farmers wish to cultivate green gram may proceed with recommended variety. For 1 acre of land 12 kg seeds are required.
- **Summer Rice:** Farmers wishing to cultivate summer rice may sow the seed immediately after preparation of the nursery-bed. 20 kg seeds and 10 dismil area of nursery bed is needed for transplanting of seedlings in one acre. Before sowing, seed must be treated with Bavistin + Thiram (1 gram + 1 gram) per kg of seed and apply 1 quintal FYM along with 5 kg Urea, 20 kg S.S.P. and 2 kg Muriate of Potash in nursery bed. Farmers have already sown the seed in nursery bed, may broadcast urea in 10 - 12 days old seedlings @ 2 kg per 10 dismil of nursery bed, so that after 10-15 days these seedlings may be transplanted in the main field and also maintain the soil moisture of nursery bed.
- **Potato:** In early potato, which is approaching maturity stage within 7-10 days, remove the upper leaves of the plant. Removing of leaves helps in hardening of the tuber and its skin. After digging of early potato, if having assured irrigation facility, sow the seeds of different summer vegetables after preparation of the field. In case of meagre irrigation facility may proceed for green gram cultivation.

- **Bottle Gourd:** Farmers wishing to cultivate summer vegetables, especially cucurbitaceous plant like sponge gourd, Bottle gourd, pumpkin, water melon, musk melon etc. may sow the seeds of these vegetables in pit and maintain the distance between two pits according to the nature of the plant. 4- 5 seeds should be sown in each peat and the distance between two peats should be on an average 2-3 meters. A light irrigation should be provided before seeding and peat should be covered by straw to maintain heat and moisture. Farmers, who have already raised the seedlings in polythene bag, may transplant the seedlings in main field @ 2-3 seedlings per pit. A light irrigation is needed after transplanting of seedlings and peat should be covered by straw to maintain heat and moisture.
- **Mango:** It is the time of bearing flowers in Mango and Litchi plant. To keep the plant healthy, spray the insecticide Chlorpyrifos (@ 2 ml. per liter of water) along with the fungicide Bavistin (@ 1 gm per liter of water). For vigorous flowering & fruiting, PGR Miraculan may be mixed in the solution @ 1 ml per liter of solution.
- **Fresh Water:** Sell the matured fishes of such ponds, where the water dried up completely in February month. However, in those ponds, where water remain all around the year, add cow dung and lime in the pond as a natural foods and alternative feeds may also be added like Rice Bran and Mustard cake (each of 5 kg per day per acre area of pond).

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

01-02-2021/(0830 to 0856) GMT  
01-02-2021/(1400 to 1426) IST

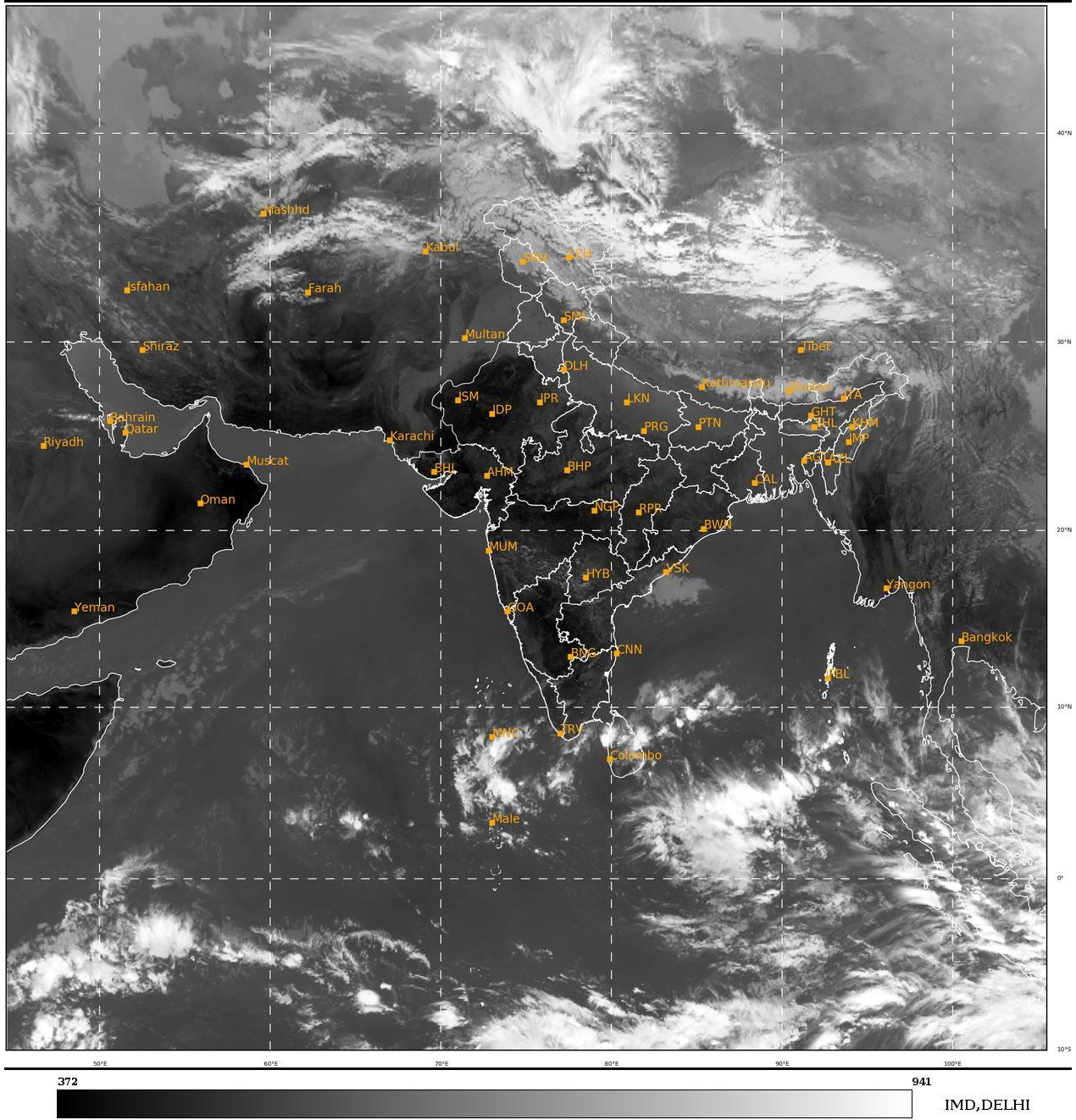
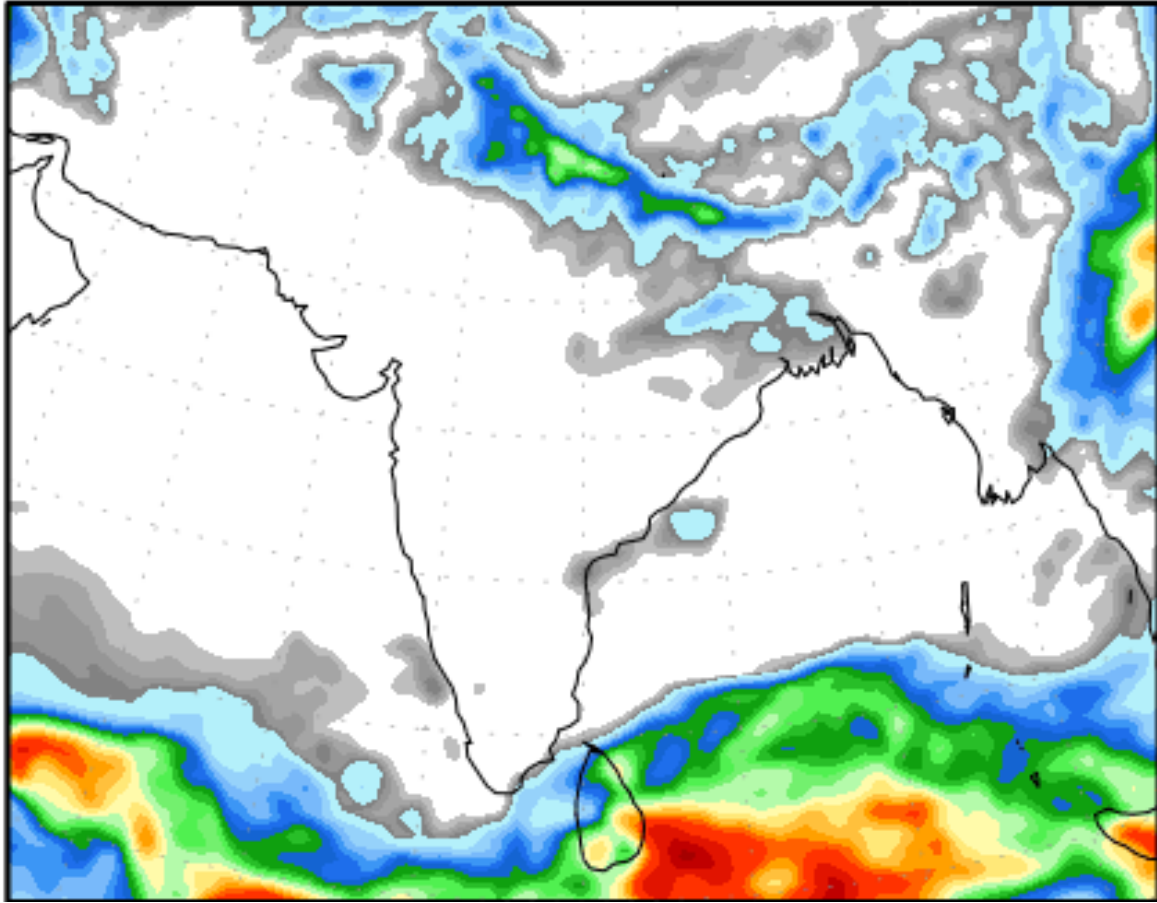


Figure: 1. Latest available satellite picture as on 01 February 2021 at 1426 Hrs (IST).  
(Source: IMD).



**Figure:2. Precipitation forecast for 01 to 09 February 2021 (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.*