

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

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

### **Daily Crop Weather Information as on 08 February 2022**

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

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

- The Western Disturbance as cyclonic circulation lies over north Pakistan & neighbourhood with its axis at 3.1 km above mean sea level. The induced cyclonic circulation lies over northeast Rajasthan & neighbourhood in lower tropospheric levels. Under its influence; isolated light rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh during next 24 hours.
- A fresh Western Disturbance as a trough in middle & upper tropospheric westerlies runs along Long. 58°E to the north of Lat. 30°N. Under its influence, an induced cyclonic circulation likely to form over West Rajasthan & neighbourhood by tonight; it is very likely to cause: 1. Scattered to fairly widespread light/moderate rainfall/snowfall with thunderstorm & lightning over Western Himalayan Region (over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand) during night of 08th and on 09th February, 2022. 2. Scattered to fairly widespread rainfall likely over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and north Rajasthan on 09th February. 3. Scattered to fairly widespread light/moderate rainfall very likely over West Bengal-Sikkim & Jharkhand and isolated rainfall likely over Bihar & Odisha on 09th & 10th February, 2022.
- Dense Fog Conditions very likely in isolated/some parts in night/morning hours over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, north Rajasthan, Assam-Meghalaya and Nagaland-Manipur-Mizoram-Tripura during next 2 days and over West Bengal-Sikkim & Odisha during next 24 hours.
- Cold Day Conditions very likely in isolated pockets over East Uttar Pradesh during next 24 hours and abate thereafter.
- The images showing the latest satellite picture in the figure. 1.

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

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Andaman & Nicobar Islands; at a few

places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe.

- Fog observed (at 0830 hours IST of today): Dense to Very Dense Fog in isolated pockets over East Uttar Pradesh; Moderate to Dense Fog in isolated pockets over West Uttar Pradesh, West Rajasthan and Sub-Himalayan West Bengal & Sikkim; Shallow to Moderate Fog in isolated pockets over Uttarakhand, Punjab, Delhi, Bihar and Saurashtra & Kutch.
- Severe Cold Day conditions prevailed at most places of Terai region of East Uttar Pradesh.
- Minimum Temperature Departures (as on 08-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Haryana-Chandigarh-Delhi and West Rajasthan; above normal (1.6°C to 3.0°C) at a few places over Saurashtra & Kutch, Marathwada and Tamilnadu, Puducherry & Karaikal; at isolated places over East Rajasthan, Gujarat Region, Madhya Maharashtra and Kerala & Mahe. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Bihar and Assam & Meghalaya; below normal (-1.6°C to -3.0°C) at many places over Jharkhand; at a few places over East Uttar Pradesh, East Madhya Pradesh, West Bengal & Sikkim, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Odisha and Nagaland, Manipur, Mizoram & Tripura and near normal over rest parts of the country. Today, the lowest minimum temperature of 6.1°C is reported at Pantnagar (Uttarakhand) over the plains of the country.
- Maximum Temperature Departures (as on 07-02-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh; above normal (1.6°C to 3.0°C) at a few places over Haryana, Chandigarh & Delhi, West Rajasthan, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Rajasthan, West Madhya Pradesh and Madhya Maharashtra. They were markedly below normal (-5.1°C or less) at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over East Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar; at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Gangetic West Bengal and Andaman & Nicobar Islands; at isolated places over Assam & Meghalaya; below normal (-1.6°C to -3.0°C) at many places over Saurashtra & Kutch and Konkan & Goa; at isolated places over West Uttar Pradesh and Coastal

Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.7°C was reported at Palakkad (Kerala & Mahe) over the country.

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

- 08 February (Day 1): Cold day conditions in isolated pockets very likely over East Uttar Pradesh. Dense Fog in some parts very likely over East Uttar Pradesh and in isolated pockets over Punjab, Haryana, West Uttar Pradesh, north Rajasthan, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 09 February (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Madhya Pradesh, Jharkhand and Chhattisgarh. Dense Fog in isolated pockets very likely over Punjab, Haryana, West Uttar Pradesh, north Rajasthan, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 10 February (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Jharkhand and Tamilnadu, Puducherry & Karaikal.
- 11 February (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Tamilnadu, Puducherry & Karaikal.
- 12 February (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 08 Feb to 16 Feb 2022 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)**

#### **Marathwada**

#### **Weather condition:**

From 29.01.2022 to 04.02.2022 during this week Weather condition of Parbhani center no rainfall was recorded. The Maximum temperature was range from 26.6 to 33.4 0C and minimum temperature range from 5.5 to 10.6 0C. Relative humidity (RH-I) ranged between 78 % - 88 % and relative humidity (RH-II) recorded was 17 % to 22 % The wind speed varied 2.1 to 4.1 km/hr.

#### **Contingency measure:**

- Rabi Sorghum: For management of sugary disease in Rabi sorghum take a spray of Carbendazim @ 10 gm per 10 liter of water. Infestation of stem borer and fall

armyworm may observed in Rabi sorghum for management take a spray of Thiamethoxam 12.6 % + Lambda cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 liter of water.

- Summer Groundnut: If sowing of summer groundnut was not done it should be completed in first week of February. Seed treatment with Thiram @3 gm or Carbendazim @ 2.5 gm or Tricoderma @ 5 gm per Kg seed should be done, after that make use of Rhizobium liquid and PSB @ 10 ml per Kg seed, after seed treatment dry the seed in shade before sowing.
- Safflower: Infestation of Aphids may observed in safflower for management of take a spray of Dimethoate 30 % @ 13 ml or Acephate 75 % @ 15 gram per 10 liter of water. For management of leaf spot disease in safflower take a spray of Mancozeb + Carbendazim compound fungicide @ 20 gm per 10 liter of water.
- Chickpea: Due to decrease in minimum temperature flower dropping may observed in chickpea for management take a spray of Urea @2% (200 gm per 10 liter of water) where the gram crop is in flowering condition. If infestation of pod borer is observed in chickpea crop for management make use of T shaped bird perches @ 20 per acre and two pheromone traps per acre. take a spray of 5 % NSKE or Emamectin Benzoate 5 % @ 4.5 gm or Chlorantraniliprole 18.5% @ 3 ml or Flubendiamide 20% @ 5 gm per 10 liter of water.
- Wheat: Irrigation management should be applied during grain filling stage (80 to 85 DAS) in timely sown wheat crop. For the control of field rats in wheat crop prepare a mixture with 1 part Zinc Phosphide + 1 part Jaggery + 50 parts wheat flour and edible oil. Apply this mixture in the burrows and close them.
- Summer soybean: Due to forecast of decrease in minimum temperature light irrigation should be applied in summer soybean crop. For management of sucking pests (whiter fly and jassid) in summer soybean make use of yellow sticky traps @ 15 to 20 per acre and take a spray of 5% NSKE. If infestation is more then take spray of Thiamethoxam 12.6% + Lambda Cyhalothrin 9.5% ZC @ 2.5 ml or Betacyfluthrin 8.49% + Imidaclopride 19.81% @ 7 ml per 10 liter of water. If summer soybean crop is of 20 to 25 days old and if nutrient deficiency is observed then take a spray of micro nutrients i.e. Microla RCF (Grade-2) @ 50 to 75 ml per 10 liter of water.
- Sugarcane: Plantation of seasonal sugarcane crop can be done upto 15th February. For management of stem borer in Sugarcane crop take a spray of Chlorpyriphos 20% @ 25 ml or chlorantraniliprole 18.5 % @ 4 ml per 10 liter of water. For management of white fly in sugarcane take a spray Dimethoate 30% EC 36 ml per 10 liter of water.
- Turmeric: Harvesting of turmeric crop is generally start in the month of

February, stop irrigation the crop 15 days before harvesting.

- Banana: Give support to the bunch of banana with the help of Bamboo sticks. Remove and destroy dried and infected leaves from the orchard.
- Mango: For protection of inflorescence in Mango dusting of 300 mesh sulfur should be done so that powdery mildew and blight can be control. Jassids may observed in Mango orchard for management take a spray of Dimethoate 30% @ 13ml or Buprofezin 25% @ 20 ml or Thiamethoxam 25% 2 gm per 10 liter of water.
- Grape: For management of powdery mildew in grapes make use of sulphur (40 SC) formulation @ 3 ml per liter of water.
- Citrus: Due to forecast of decrease in minimum temperature mulching should be done in citrus orchard. Irrigate the orchard during evening. Take a spray of 00:00:50 @ 15 gm per liter of water.
- Pomegranate: Cracking may observed in pomegranate due to difference in maximum and minimum temperature. To protect the fruits from cracking proper irrigation management should be done in pomegranate orchard. irrigate the orchard during evening i.e. after 4 pm to reduce the coldness in orchard.
- Floriculture: Due to forecast of decrease in minimum temperature apply irrigation during evening to protect the floriculture crop from cold injury.
- Vegetable: For management of thrips in onion take a spray of Profenophos @ 1 ml or Fipronil @1 ml per liter of water.
- Fodder Crop: Irrigation management should be done in fodder crops as per requirement
- Mulberry sericulture: Attack of Bihar hairy caterpillar is generally observed in winter season in mulberry field. 200 - 300 larvae are observed feeding on leaves of mulberry. To control it instead of insecticide use, mechanical control should be adopted. For mechanical control manually collect infected plant parts and larvae and destroy them by dipping them in kerosene.
- Animal husbandry: To protect the animals from low temperature apply curtains of gunny bags to poultry, Sheep and Goat animal shed to protect the animals from cold, during early morning. Make use electric bulbs in poultry shed. Heavy tick infection has been observed on the live stock. Hence it is recommended to follow integrated tick management. It includes cleaning of entire shade and burning of tick eggs outside the shade. Spraying of neem ark (NSKE) 5% on the animal body and in the shade. Above operation shall be followed three times consecutively at weekly interval.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
L1C Mercator

08-02-2022/(0800 to 0826) GMT  
08-02-2022/(1330 to 1356) IST

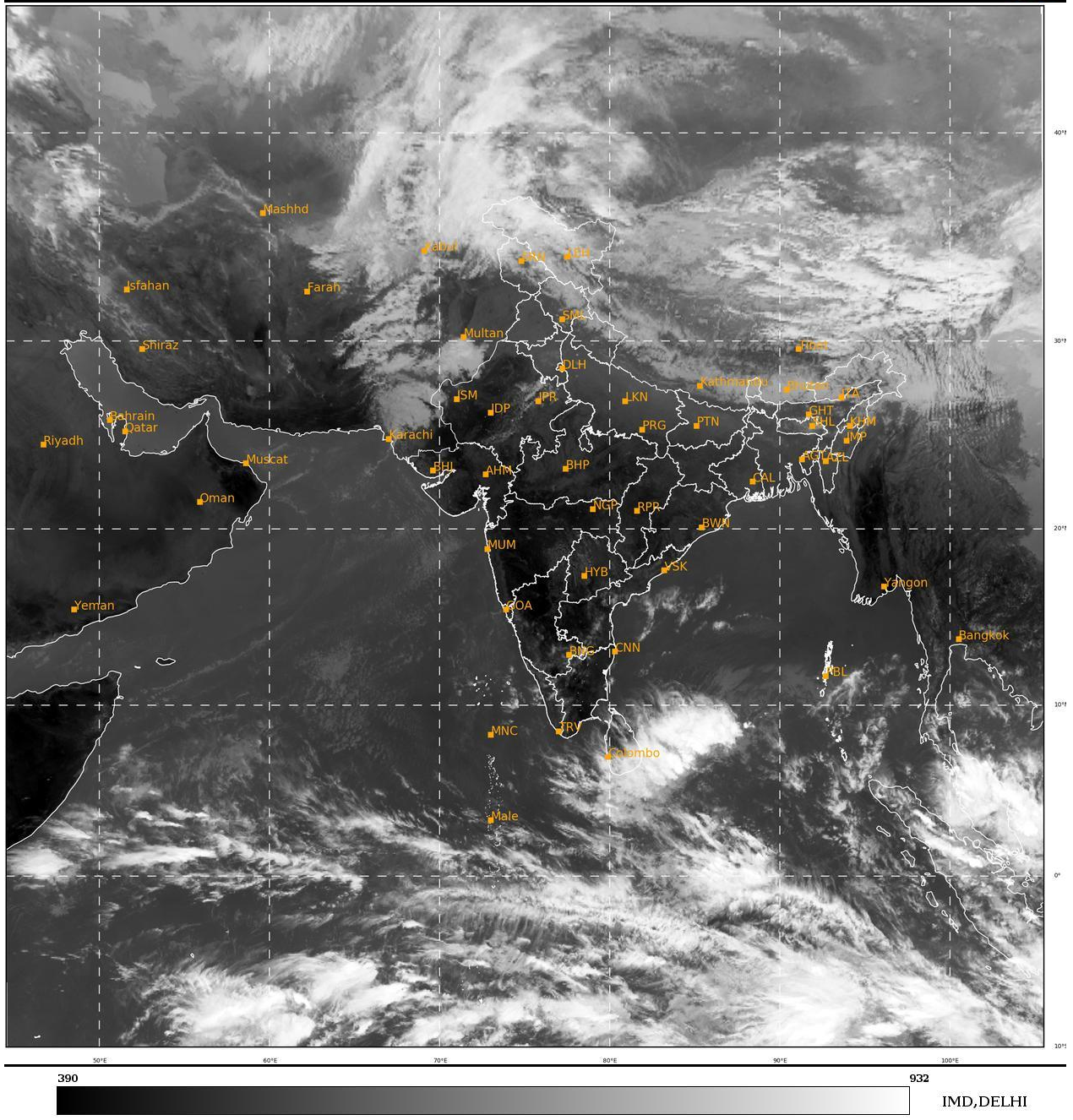
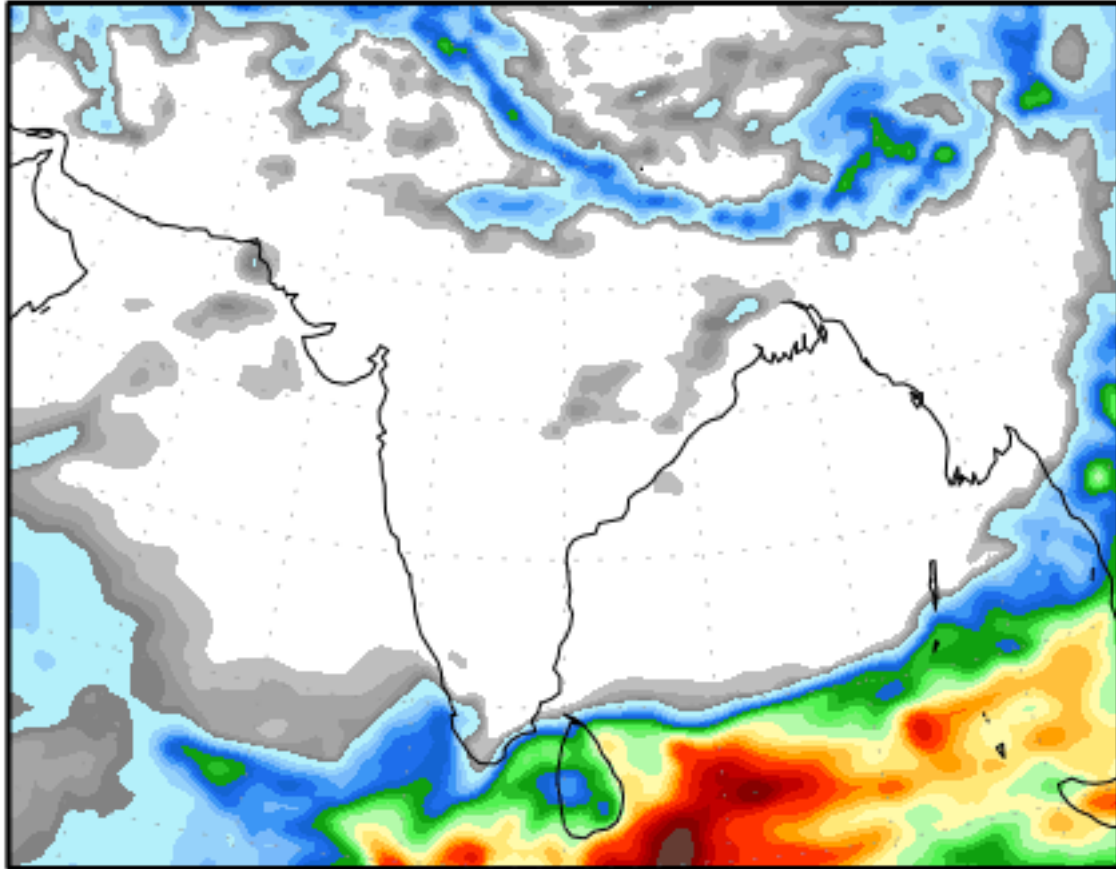


Figure: 1. Latest available satellite picture as on 08 Feb 2022 at 1356 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 08 Feb to 16 Feb 2022 (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.*