

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

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

### **Daily Crop Weather Information as on 02 December 2021**

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

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

- The Low Pressure Area over Southeast Bay of Bengal and adjoining Andaman Sea now lies as a Well Marked Low Pressure area over the same region. Associated cyclonic circulation extends upto mid-tropospheric levels. It is likely to move west-northwestwards and concentrate into a Depression over southeast Bay of Bengal during next 12 hours and further intensify into a Cyclonic Storm over Central Bay of Bengal during subsequent 24 hours. Thereafter, it is likely to move northwestwards, intensify further and reach near north Andhra Pradesh Odisha coasts by the morning of 04th December, 2021. Under its influence, heavy rainfall very likely over Andaman & Nicobar Islands on 02nd December; heavy to very heavy rainfall over north Coastal Andhra Pradesh and coastal Odisha during 03rd - 05th; over Gangetic West Bengal during 04th-06th. Isolated extremely heavy falls also likely over coastal Odisha and north Coastal Andhra Pradesh on 04th December.
- Fishermen warning: Fishermen are advised not to venture into Andaman Sea on 2nd December 2021, over southeast & adjoining east-central Bay of Bengal on 2nd & 3rd December, over west-central & adjoining northwest Bay of Bengal and along & off north Andhra Pradesh - Odisha during 3rd - 5th and along & off - West Bengal coasts during 3rd - 6th December 2021.
- A cyclonic circulation lies over Eastcentral Arabian sea and a trough in lower levels runs from Southeast Arabian Sea to Kutch across this cyclonic circulation. A Western Disturbance lies as a trough in mid & upper tropospheric westerlies roughly along Long. 63°E to the north of Lat. 12°N. Under the influence of these systems:
  - i) Isolated to scattered rainfall very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh, Delhi, Uttar Pradesh, Rajasthan and Madhya Pradesh on 02nd December. Isolated thunderstorm/lightning also likely over Uttar Pradesh, Madhya Pradesh and Rajasthan on 02nd December.
- The images showing the latest satellite picture in the figure. 1.

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

- Rainfall/Thundershowers observed (from 0830 hours IST to 1730 hours IST of Yesterday): at many places over Gujarat Region, Konkan & Goa, Madhya Maharashtra and Andaman & Nicobar Islands; at a few places over Saurashtra & Kutch and Tamilnadu, Puducherry & Karaikal and at isolated places over West Madhya Pradesh, Marathawada and Lakshadweep.
- Fog observed (at 0530 hours IST of today): Moderate fog observed in isolated pockets over Tripura and Shallow fog observed in isolated pockets over Uttarakhand, Delhi and West Uttar Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): NIL.
- Minimum Temperature Departures (as on 01-12-2021): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Rayalaseema and South Interior Karnataka; at many places over Punjab, Konkan & Goa, Marathwada and Uttarakhand; at a few places over West Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over East Rajasthan, Gujarat state and North Interior Karnataka; at many places over East Rajasthan, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Madhya Pradesh, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and Sub-Himalayan West Bengal & Sikkim; at a few places over Coastal Andhra Pradesh & Yanam and at isolated places over Kerala & Mahe, Odisha and Gangetic West Bengal and near normal over rest parts of the country. Yesterday, the Lowest minimum temperature of 8.9°C was reported at Amritsar (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 01-12-2021): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; at many places over Sub-Himalayan West Bengal & Sikkim and at isolated places over Gangetic West Bengal, Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at many places over Gujarat State, Madhya Maharashtra, West Madhya Pradesh; at a few places over Konkan & Goa and Himachal Pradesh; and at isolated places over East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over Haryana, Chandigarh & Delhi; at a few places over Punjab and Andaman & Nicobar Islands and at isolated places over West Uttar Pradesh; below normal (-1.6°C to -3.0°C) at many places over Uttarakhand and at isolated places over East Uttar Pradesh, East Madhya Pradesh, Coastal Karnataka and

Rayalaseema and near normal at rest parts of the country. Yesterday, the highest maximum temperature 33.6°C was reported at Alapuzha and Kozikode (Kerala & Mahe).

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

- 02 December (Day 1): Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, north Madhya Maharashtra and Gujarat Region. Thunderstorm accompanied with lightning & gusty winds (40-50 kmph gusting to 60 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Himachal Pradesh, Uttar Pradesh, East Rajasthan, Madhya Pradesh and Gujarat Region. Squally winds speed reaching 50-60 kmph gusting to 70 kmph over southeast & adjoining east-central Bay of Bengal, Andaman & Nicobar Islands & Andaman Sea on 02nd December. Sea condition would become very rough to High over southeast & adjoining eastcentral Bay of Bengal, Andaman & Nicobar Islands & Andaman Sea. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely over Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 03 December (Day 2): Heavy to very heavy rainfall very likely at isolated places over north Coastal Andhra Pradesh and Heavy rainfall likely at isolated places over Odisha. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Gale winds speed reaching 65-75 kmph gusting to 85 kmph very likely to prevail over central Bay of Bengal from the early morning of 3rd December. Sea condition will be rough to very rough over along & off North Andhra Pradesh - Odisha coast from the mid-night of 3rd December. Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to commence along & off North Andhra Pradesh - Odisha coast from the mid-night of 3rd December. Fishermen are advised not to venture into these areas.
- 04 December (Day 3): Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over north Coastal Andhra Pradesh & Yanam and Coastal Odisha and heavy rainfall likely at isolated places over Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Gangetic West Bengal and with lightning at isolated places over Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Gale winds speed reaching 90-100 kmph gusting to 110 kmph likely to prevail over northwest

& adjoining west-central Bay of Bengal from the morning of 4th December. Sea condition would be High over central Bay of Bengal and High to very High over west-central & adjoining northwest Bay of Bengal. Squally wind speed reaching 70-80 kmph gusting to 90 kmph along & off North Andhra Pradesh - Odisha coast from 4th Afternoon. Squally wind speed reaching 45-55 kmph gusting to 65 kmph also likely to commence along & off West Bengal coast from 4th December morning and become Gale wind speed reaching 60-70 kmph gusting to 80 kmph from the evening of 4th December for the subsequent 12 hours. Fishermen are advised not to venture into these areas.and

- 05 December (Day 4): Heavy to very heavy rainfall likely at isolated places over Coastal Odisha and Gangetic West Bengal and heavy rainfall likely at isolated places over Tamilnadu, Puducherry & Karaikal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & gusty wind (40-50kmph) likely at isolated places over Gangetic West Bengal; with lightning at isolated places over Himachal Pradesh, Punjab, Haryana, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally wind speed reaching 60-70 kmph gusting to 80 kmph along & off north Odisha-West Bengal coasts and Northwest bay of Bengal. Sea condition would be High over northwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 06 December (Day 5): Heavy to very heavy rainfall likely at isolated places over Gangetic West Bengal and Assam & Meghalaya and heavy rainfall likely at isolated places over north coastal Odisha, Tamilnadu, Puducherry & Karaikal and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & gusty wind (40-50kmph) likely at isolated places over Gangetic West Bengal; with lightning at isolated places over Himachal Pradesh, Punjab, Haryana, Bihar, Jharkhand, Uttar Pradesh, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally wind speed reaching 40-50 kmph gusting to 60 kmph over Northwest bay of Bengal and along & off West Bengal coast. Sea condition would be rough to very rough over northwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 02 Dec to 10 Dec 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)

### Marathwada

#### Weather condition:

From 26.11.2021 to 02.12.2021 during this week Weather condition of Parbhani center no rainfall was recorded. The Maximum temperature was range from 26.9 to 31.0 0C and minimum temperature range from 11.3 to 17.7 0C. Relative humidity (RH-I) ranged between 62-94% and relative humidity (RH-II) recorded was 20-42% The wind speed varied 2.0 to 5.9 km/hr.

#### Contingency measure:

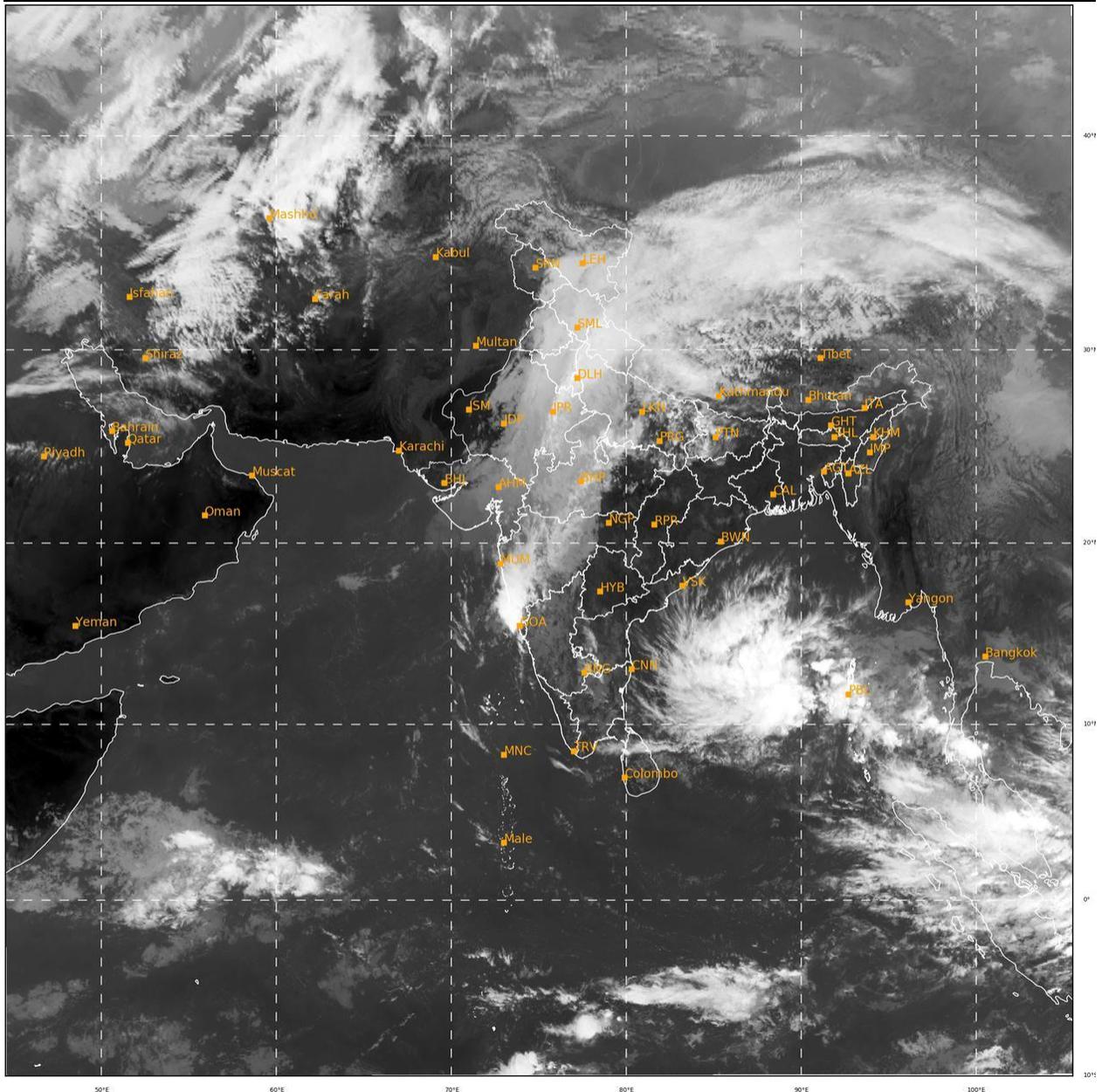
- Cotton: For management of pink bollworm in cotton install pink bollworm Pheromone trap @ 5 per acre. Initially take a spray of 5 % NSKE, if infestation is more take a spray of Profenofos 50 % @ 400 ml or Profenofos 40 % + Cypermethrin 4 % (Complex insecticide) @ 400 ml per acre during clear weather condition. As per forecast of light rainfall picking of cotton should be done as early as possible and store it at safe places.
- Pigeon pea: For management of tur pod borer take a spray of Emamectin Benzoate 5 SG 4.5 gm or Flubendimide 39.35 SC 3 ml or Chlorantraniliprole 18.5 SC 3 ml per 10 liter of water during clear weather condition. For management of flower drop take a spray of NAA @ 3 ml per 10 liter of water during clear weather condition. If Phytophthora blight is observed in pigeon pea for management drenching and spraying of Metalaxyl 4% + Mancozeb 64% WP @ 25 gm per 10 liter of water on stem should be done during clear weather condition.
- Chickpea: Due to cloudy weather condition during last few days If infestation of pod borer is observed in timely sown chickpea crop take a spray of 5 % NSKE or Quinalphos 25% EC @ 20 ml or Emamectin Benzoate 5 % @ 4.5 gm per 10 liter of water.
- Wheat: Late sowing of Irrigated Wheat crop can be done up to 15 December. Make use of Niphad-34, PBN-142 (Kailas), HD-2501, HD-2833 variety for late sowing of irrigated wheat. The recommended dose of fertilizer for late sowing of irrigated wheat is 80:40:40 Kg NPK/ha. Half dose of nitrogen and total amount of phosphorus and potash should be applied at the time of sowing.
- Turmeric: Due to continuous cloudy weather during last few days infestation of leaf spot disease may observed in turmeric crop, for management of leaf spot disease in Turmeric crop take a spray of Azoxystrobin 18.2% + Difenoconazole 11.4% @ 10 ml + 5 ml Sticker per 10 liter of water. For management of Rhizome fly in turmeric take a spray of Quinalphos 25 % @ 20 ml or Diamethoate 30 % @

10 ml per 10 liter of water along with sticker with an interval of 15 days. Cover the rhizome with the help of soil. (As label claim was not given by Central Insecticides Board for Rhizome fly in turmeric the research recommendation of university is mentioned here). Rabi sorghum For management of stem borer and fall armyworm in timely sown Rabi Sorghum crop 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 during clear weather condition.

- Safflower: Due to cloudy weather condition infestation of aphids may observed in Safflower crop. For management take a spray of Dimethoate 30 % @ 13 ml or Acephate 75 % @ 10 gram per 10 liter of water during clear weather condition.
- Banana: Give support to banana trees with the help of bamboo sticks. Removed dried and infected leaves from banana orchard.
- Custard apple: As per forecast of thunderstorm accompanied with lightning rain and gusty wind harvesting of mature custard apple fruits should be done as early as possible.
- Citrus: Due to cloudy weather condition For management of leaf minor in citrus take a spray of 5% NSKE or imidacloprid 17.8% @ 2.5 ml per 10 liter of water. If infestation of mites is observed in citrus orchard, for management take a spray of Dicofol 18.5 EC @ 2 ml or Propargite 20 EC @ 1 ml or Ethion 20 EC @ 2 ml or water soluble Sulphur @ 3 g per liter of water. As per requirement take another spray after an interval of 15 days.
- Pomegranate: There must be proper staking or plant support system to support fruit laden branches. If early Mrug bahar has will taken fruits may have attained full maturity with significant rind and aril colour. The fruits may be harvested to avoid dropping and fungal spots.
- Vegetable: Weeding and irrigation management should be done in transplanted vegetable crops (Chilli, brinjal, Ladies finger). Harvesting and grading of mature vegetable crops should be done before sending to market. Due to cloudy weather condition during last few days attack of sucking pests may observed in vegetable crops, For management of Sucking pests in vegetable crops (Chilli, brinjal, Ladies finger.) take a spray of Pyriproxyfen 5 % + Fenpropathrin 15 % @ 10 ml or Dimethoate 30 % @ 13 ml per 10 liter of water during clear weather condition.
- Floriculture: Harvesting of mature flower should be done. Irrigate the floriculture crop as per requirement.
- Animal: Apply curtains of gunny bags to poultry, Sheep and Goat animal shed to protect the animals from cold, during early morning in future.

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

02-12-2021/(0730 to 0757) GMT  
02-12-2021/(1300 to 1327) IST

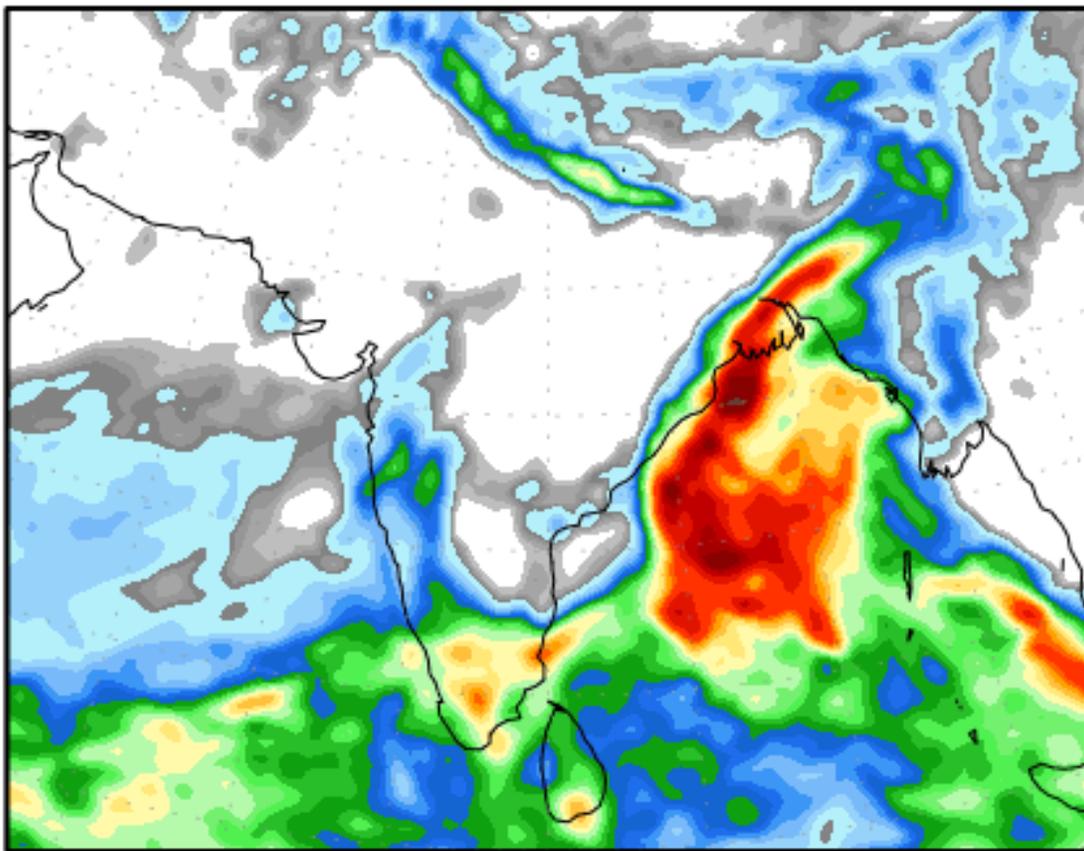


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IMD, DELHI

Figure: 1. Latest available satellite picture as on 02 Dec 2021 at 1327 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 02 Dec to 10 Dec 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.*