

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

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

### **Daily Crop Weather Information as on 18 December 2020**

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

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

- No significant change in minimum and maximum temperatures over parts of Northwest India during next 2-3 days and rise by 2-3°C in minimum temperatures and 4-5°C in maximum temperatures during subsequent 3 days. Fall in minimum temperatures by 3-4°C over parts of Central & East India during next 2-3 days and no significant change thereafter. Fall in minimum temperatures by 2-3°C over Maharashtra during next 2 days and rise by 2-4°C thereafter.
- Under its influence,
  - (i) Cold Wave to Severe Cold Wave conditions at a few places very likely over Punjab, Haryana & Chandigarh, Uttar Pradesh and Rajasthan and Cold Wave conditions at isolated places over Jammu division, Himachal Pradesh, Uttarakhand and Madhya Pradesh on 18th & 19th December, 2020 and decrease thereafter
  - (ii) Cold Day to Severe Cold Day conditions very likely in some pockets over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh and Cold Day conditions in isolated pockets over Jammu division, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan and West Madhya Pradesh during next 24 hours and decrease thereafter.
  - (iii) Dense Fog in isolated pockets very likely over Himachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days.
  - (iv) Ground Frost at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan during next 2 days.
- Strong surface wind speed reaching 10-20 kmph very likely to prevail over parts of Northwest India during next 2 days.
- 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 many places over Andaman & Nicobar Islands, Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal and Lakshadweep; at a few places over Kerala

& Mahe; at isolated places over Rayalaseema, Coastal Andhra Pradesh, Assam & Meghalaya, Sikkim and South Interior Karnataka.

- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Tamil Nadu and Kerala & Mahe.
- Fog observed (at 0830 hours IST of today): Dense to very Dense Fog in some pockets over Punjab and Dense Fog in isolated pockets over Himachal Pradesh and Tamil Nadu and Moderate fog in isolated pockets over Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and South Interior Karnataka.
- Today, Severe Cold Wave conditions observed at isolated places over East Rajasthan and Cold Wave conditions at a few places over Punjab, Haryana and Chandigarh; at isolated places over Jammu division, Rajasthan, Saurashtra & Kutch, East Uttar Pradesh and Delhi.
- Yesterday, Severe Cold Day conditions were observed at most places over West Uttar Pradesh; at many places over Haryana, Chandigarh & Delhi; at a few places over Punjab and at isolated places over West Rajasthan. Cold Day conditions were also observed at a few places over Punjab and West Rajasthan; at isolated places over Haryana, East Rajasthan, West Madhya Pradesh, Jammu division and Himachal Pradesh.
- Maximum Temperature Departures as on 17-12-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Konkan & Goa, Marathwada and Coastal Karnataka; at many places over North Interior Karnataka, Odisha and Telangana; at isolated places over Madhya Maharashtra and Coastal Andhra Pradesh & Yanam. They were markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh & Delhi and West Uttar Pradesh; at many places over West Uttar Pradesh and West Rajasthan; at a few places over Punjab and Uttarakhand; appreciably below normal (-3.1°C to -5.0°C) at most places over Gujarat Region, East Rajasthan and East Uttar Pradesh; at many places over Saurashtra & Kutch and East Madhya Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at isolated places over Himachal Pradesh and Sub-Himalayan West Bengal & Sikkim; below normal (-1.6°C to -3.0°C) at many places over Bihar and Tamil Nadu, Puducherry & Karaikal; at a few places over Andaman & Nicobar Islands; at isolated places over Kerala & Mahe and and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.8°C was reported at Karwar (Coastal Karnataka) over the country.
- Minimum Temperature Departures as on 18-12-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Coastal Karnataka; at a few places over Assam & Meghalaya, Odisha, Chhattisgarh, Vidarbha, Madhya

Maharashtra, Marathawada and Telangana; at isolated places over Arunachal Pradesh, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most place over North Interior Karnataka and Rayalaseema; at many places over Gangetic West Bengal; at a few places over Andaman & Nicobar Islands, South Interior Karnataka, Kerala & Mahe and Konkan & Goa; at isolated places over Sub-Himalayan West Bengal & Sikkim. They are markedly below normal (-5.0°C or less) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at a few places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Saurashtra & Kutch; at isolated places over Madhya Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Bihar and Uttarakhand; at isolated places over Gujarat region and near normal over rest parts of the country. The lowest minimum temperature of -0.3°C reported at Churu (West Rajasthan) over the plains of the country.

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

- 18 December (Day 1): Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Cold Wave to Severe Cold Wave conditions at many places very likely over Punjab, Haryana, Chandigarh & Delhi; at a few places over West Uttar Pradesh; at isolated places over East Uttar Pradesh and Rajasthan and Cold Wave conditions at isolated places over Jammu division, Himachal Pradesh, Uttarakhand and Madhya Pradesh. Cold Day to Severe Cold Day conditions at many places very likely over Haryana, Chandigarh & Delhi; at a few places over Punjab & West Uttar Pradesh and Cold Day conditions at isolated places over Jammu division, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan and West Madhya Pradesh. Dense fog very likely in isolated pockets over Himachal Pradesh, Punjab, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Ground Frost at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan.
- 19 December (Day 2): Thunderstorm accompanied with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Cold Wave to Severe Cold Wave conditions at many places very likely over Punjab, Haryana, Chandigarh & Delhi; at a few places over West Uttar

Pradesh; at isolated places over East Uttar Pradesh and Rajasthan and Cold Wave conditions at isolated places over Jammu division, Himachal Pradesh, Uttarakhand, Bihar and Madhya Pradesh. Cold Day conditions at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh. Dense fog very likely in isolated pockets over Himachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Ground Frost at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan.

- 20 December (Day 3): Thunderstorm accompanied with lightning very likely at isolated places over Lakshadweep. Cold Wave conditions at a few places very likely over Punjab, Haryana, Chandigarh & Delhi and at isolated places over Uttar Pradesh, Rajasthan, Bihar and Madhya Pradesh.
- 21 December (Day 4): Dense fog likely in isolated pockets over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh.
- 22 December (Day 5): Dense fog likely in isolated pockets over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan and Uttar Pradesh.
- The weather outlook for seven days i.e., 18 December to 26 December 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)

### **Konkan region**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 0.0 to 9.2 Bright sunshine hours was recorded during last week. During last week 7.9 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 28.5 to 34.0 and 16.8 to 21.6 oC respectively. Wind velocity ranged from 1.3 to 2.6 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

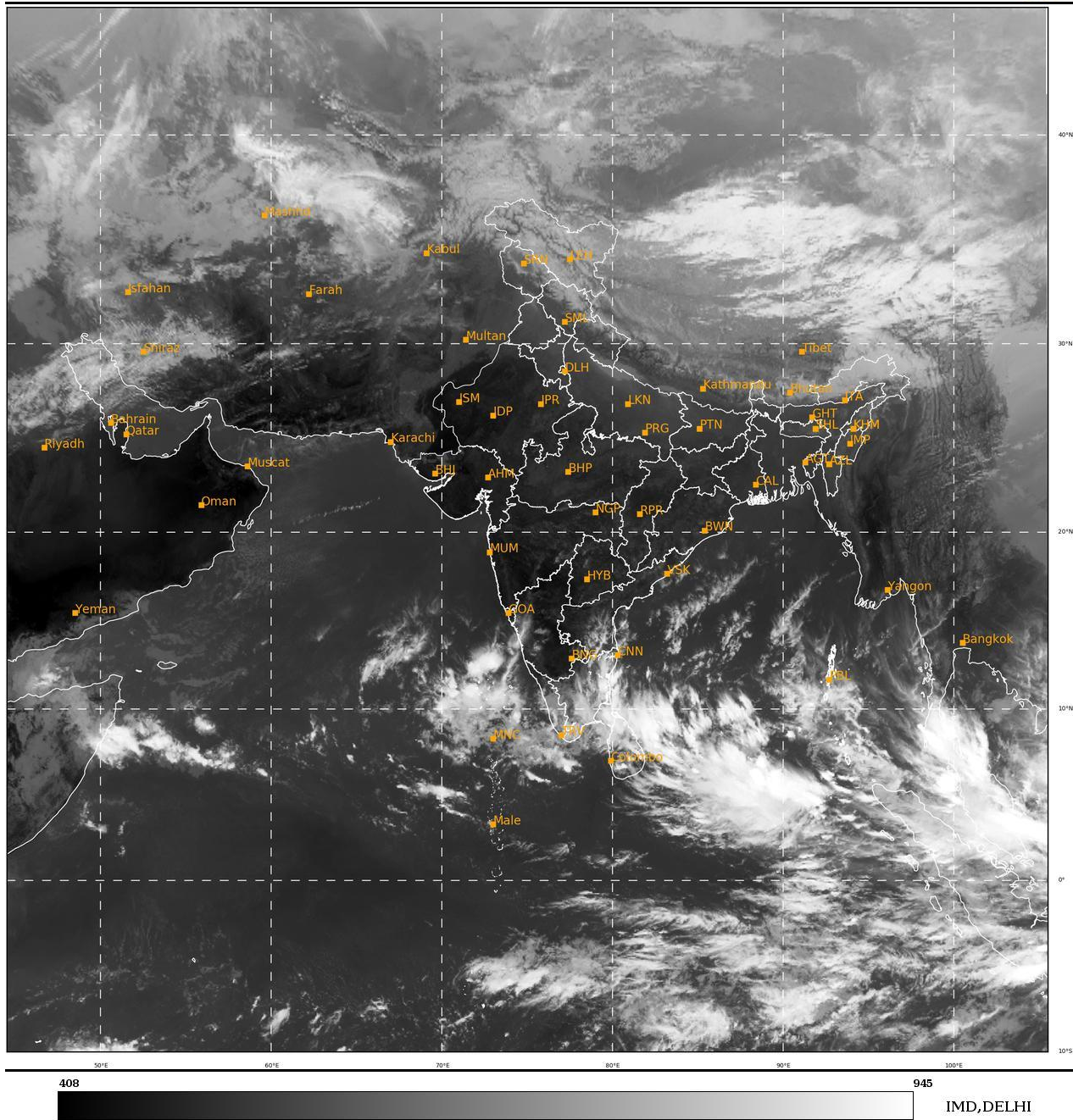
- Lablab bean: There is possibility of incidence of Leaf eating caterpillar on lablab bean, if incidence is noticed spray Cypermethrin 25% EC @ 10 ml per 10 liter of water.
- Mango: Occurrence of rainfall from 12th to 14th December, 2020, create cloudy and humid weather which favors development of anthracnose disease in mango. It is advised to undertake precautionary spray of carbendazim 12% + mancozeb 63% combination fungicide @ 10 gm per 10 liter in water for control of disease. There is possibility incidence of hoppers, midge fly and powdery mildew disease on mango inflorescence. For management of pest and disease, spray of Imidacloprid 17.8% SL @ 6 ml per 10 liter of water before the flower opening to avoid the adverse effect on pollinators. Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew disease.
- Cashewnut: Occurrence of rainfall from 12th to 14th December, 2020, create cloudy and humid weather which favors development of anthracnose disease in cashewnut, it is advised to undertake precautionary spray of 0.2% Mancozeb @ 20 g per 10 liters of water for control of disease. There is possibility for incidence of tea mosquito bug and thrips on inflorescence of cashewnut, to protect the cashew inflorescence from pest incidence, spray Profenophos 50% EC @ 10 ml per 10 liter of water. (The insecticide is not under label claim).
- Arecanut: For 3-year-old arecanut palm apply 2nd split dose 160 g urea and 125 g muriate of potash per tree. by digging circular ring about 1 meter from base of tree and fill the circular ring with soil after application of fertilizer. Apply 1/3rd and 2/3rd of abovementioned fertilizers dose per tree for 1 and 2-years old arecanut plantation, respectively. Harvest the fully ripe nut when nuts get orange colour and sundry for 40 to 45 days. nuts are turned over at regular interval to ensure uniform drying provide irrigation to arecanut orchard at 6-8 days interval.

- Brinjal, tomato: There is possibility for incidence of wilt disease in newly planted vegetable crop, if incidence is noticed, drenching the seedlings with Trichoderma 5 gms or Carbendazim 1 gm per liter of water.
- Okra: There is possibility of incidence of flea beetle on okra, if incidence is noticed spray Dimethoate 30%EC @ 10 ml per 10 liter of water.
- Cabbage: There is possibility of incidence of Alternaria Leaf Spot on cabbage, if incidence is noticed spray copper oxychloride 25 gms per 10 liter of water.

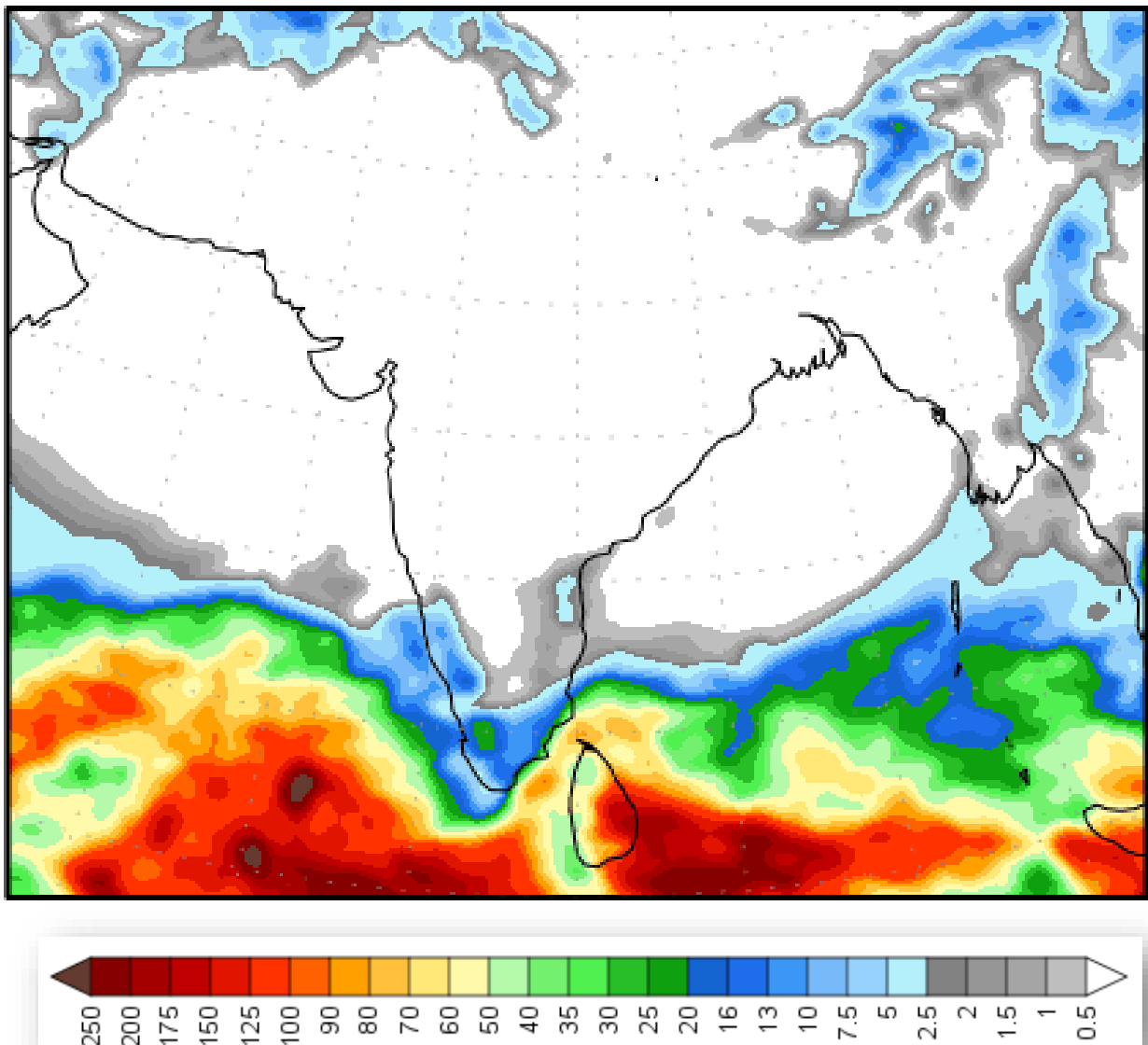


SAT : INSAT-3D IMG  
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 LIC Mercator

18-12-2020/(0830 to 0856) GMT  
 18-12-2020/(1400 to 1426) IST



**Figure: 1. Latest available satellite picture as on 18 December 2020 at 1426 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 18 to 26 December 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.*