

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

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

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

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

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

- The Western Disturbance as a trough in mid-tropospheric westerlies runs roughly along Long. 62°E to the north of Lat. 25°E. Under its influence: fairly widespread to widespread rain/snowfall over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh and isolated rain/snowfall over Uttarakhand during 11th-12th December, 2020. Isolated to scattered rainfall also very likely over Haryana & Chandigarh and Punjab during same period. Due to high moisture feeding from Arabian Sea to northwest India at lower & mid tropospheric levels, isolated heavy rain/snow also very likely over Jammu & Kashmir, Gilgit-Baltistan, Muzaffarabad on 11th December, 2020.
- Thunderstorm accompanied with lightning & hail likely at isolated places over Jammu, Himachal Pradesh and Punjab on 11th December; over Uttarakhand on 12th December and over Madhya Maharashtra on 11th & 12th December. Thunderstorm accompanied with lightning at isolated places over Haryana, Chandigarh & Delhi on 11th & 12th December.
- Dense to very dense fog in isolated pockets very likely over Uttar Pradesh on 10th, 12th, 13th & 14th Dec; Dense fog in isolated pockets very likely over Bihar, Odisha, West Bengal & Sikkim and Tripura on 10th & 11th December; over Punjab, Haryana, Chandigarh & Delhi and Uttarakhand on 13th & 14th December, 2020.
- 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 Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Tamil Nadu, Puducherry & Karaikal and Lakshadweep and at isolated places over Himachal Pradesh, Punjab, Bihar, Andaman & Nicobar Islands, Assam & Meghalaya, Konkan & Goa, Karnataka, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and Rayalaseema.
- Fog observed ( 0530 hours IST to 0830 hours IST of today): Very dense fog in isolated pockets over West Uttar Pradesh; in some pockets over East Uttar Pradesh and

Punjab; Dense fog in some pockets over Gangetic West Bengal and in isolated pockets over Bihar, Odisha, Sub-Himalayan West Bengal and Meghalaya and Tripura.

- Maximum Temperature Departures as on 09-12-2020: Maximum temperatures were markedly above normal (5.0°C or more) at a few places over East Rajasthan and East Madhya Pradesh and at isolated places over West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan, Haryana, Chandigarh & Delhi, Uttarakhand, Chhattisgarh, Odisha and Jharkhand; at a few places over Gujarat, Konkan & Goa, Vidarbha and Punjab; and at isolated places over Madhya Maharashtra and Telangana; above normal (1.6°C to 3.0°C) at most places over Marathwada; at many places over Assam & Meghalaya and Kerala & Mahe and at a few places over Coastal Andhra Pradesh & Yanam, North Interior Karnataka, Rayalseema and Coastal Karnataka. They were markedly below normal (-5.0°C or less) at many places over Nagaland, Manipur, Mizoram & Tripura and Bihar and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and East Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at isolated places over Tamil Nadu, Puducherry & Karaikal and Himachal Pradesh; below normal (-1.6°C to -3.0°C) at a few places over West Bengal & Sikkim and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C was reported at Mumbai/Santacruz (Konkan & Goa) over the plains of the country.
- Minimum Temperature Departures as on 10-12-2020: Minimum temperatures are markedly above normal (5.0°C or more) at a few places over East Rajasthan, Saurashtra & Kutch, West Madhya Pradesh and Madhya Maharashtra and at isolated places over West Rajasthan, East Madhya Pradesh, East Uttar Pradesh and Konkan & Goa; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, Haryana, Chandigarh & Delhi, Gujarat Region and Marathwada; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Coastal & North Interior Karnataka and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at most places over Vidarbha; at many places over Kerala & Mahe and Sub-Himalayan West Bengal & Sikkim; at a few places over Lakshadweep, Tamil Nadu, Puducherry & Karaikal, Odisha, Jharkhand and Gangetic West Bengal and at isolated places over Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and near normal over rest parts of the country. The lowest minimum temperature of 6.8°C reported at Pachmarhi (West Madhya Pradesh) over the plains of the country.

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

- 10 December (Day 1): Thunderstorm with lightning very likely at isolated places over Kerala & Mahe and Lakshadweep. Dense to very dense fog very likely in isolated pockets over Uttar Pradesh and dense fog in isolated pockets over West Rajasthan, Bihar, West Bengal, Odisha, Mizoram & Tripura and Assam & Meghalaya.
- 11 December (Day 2): Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm accompanied with lightning & hail very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab and Madhya Maharashtra and thunderstorm accompanied with lightning at isolated places over Haryana, Chandigarh & Delhi and West Madhya Pradesh. Dense to very dense fog very likely in isolated pockets over East Uttar Pradesh and dense fog in isolated pockets over Bihar, West Bengal, Odisha and Mizoram & Tripura.
- 12 December (Day 3): Thunderstorm accompanied with lightning & hail very likely at isolated places over Uttarakhand and Madhya Maharashtra and thunderstorm accompanied with lightning at isolated places over Haryana, Chandigarh & Delhi and Madhya Pradesh. Dense to very dense fog very likely in isolated pockets over Uttar Pradesh and dense fog in isolated pockets over north Rajasthan, northwest Madhya Pradesh, West Bengal and Odisha.
- 13 December (Day 4): Thunderstorm accompanied with lightning likely at isolated places over East Madhya Pradesh. Dense to very dense fog likely in isolated pockets over Uttar Pradesh and dense fog in isolated pockets over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and West Rajasthan.
- 14 December (Day 5): Dense to very dense fog likely in isolated pockets over Uttar Pradesh and dense fog in isolated pockets over Uttarakhand, Punjab and Haryana, Chandigarh & Delhi.
- The weather outlook for seven days i.e., 10 December to 18 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 7.8 to 9.8 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 32.8 to 34.0 and 11.0 to 16.5°C respectively. Wind velocity ranged from 1.8 to 2.5 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

- Groundnut: Provide irrigation to groundnut crop at 10-12 days interval.
- Mango: There is possibility incidence of hoppers and powdery mildew disease on flower bud stage in mango. To protect the inflorescence from pest and powdery mildew diseases, if protective spray has not taken at vegetative flush and flower bud initiation stage , then undertake precautionary spray of Lambda cyhalothrin 5%EC @ 6 ml + hexaconazole @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water at flower bud initiation stage and for protection of vegetative flush from hoppers and diseases, spray deltamethrin 2.8%EC @ 10 ml + fungicide combination (carbendazim 12% + mancozeb 63%) @ 10 gm per 10 liter in water. Due to cloudy weather for protection against anthracnose disease, spray carbendazim 12% + mancozeb 63% combination fungicide @ 10 gm per 10 liter in water.
- Cashewnut: There is possibility of tea mosquito bug and thrips incidence on inflorescence of cashewnut, if protective spray has not taken at flowering, then undertake precautionary spray to protect the cashew inflorescence from tea mosquito bug and thrips incidence, spray Profenophos 50% EC @10 ml per 10 liter of water. (The insecticide is not under label claim).
- Arecanut: 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. 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.
- Brinjal: There is possibility of incidence of mites on brinjal, if incidence is noticed, spray Dicofol 18.5%EC @1.5 ml per liter of water or dust the Sulphur powder (300

mesh) on the lower side of the leaves. Provide irrigation to brinjal crop at 6-8 days interval.

- Cucurbitaceous crops: Apply 2nd split dose of nitrogen @10 gm urea per vine to cucurbitaceous crop at one month after planting. Follow weeding and give earthing up at the time of fertilizer application.
- Watermelon: There is possibility of incidence of hoppers and aphids in watermelon crop, if incidence is noticed on watermelon, spray dimethoate 30%EC @10 ml per 10 liter of water. For management of sucking pest, place yellow sticky paper into field.
- Chilli: There is possibility of incidence of leaf curl disease in chilli which is transmitted by thrips, white flies and mites which results into curling of leaves and stunted growth of plant. For management spray 10% cow urine and Azadirachtin 10000 PPM @ 3 ml per liter of water, alternatively at 7 days interval. Install blue sticky trap in field. Provide irrigation to chilli crop at 6-8 days interval.
- Poultry: Protect the poultry birds from low temperature by providing curtains and electric bulbs during night time.

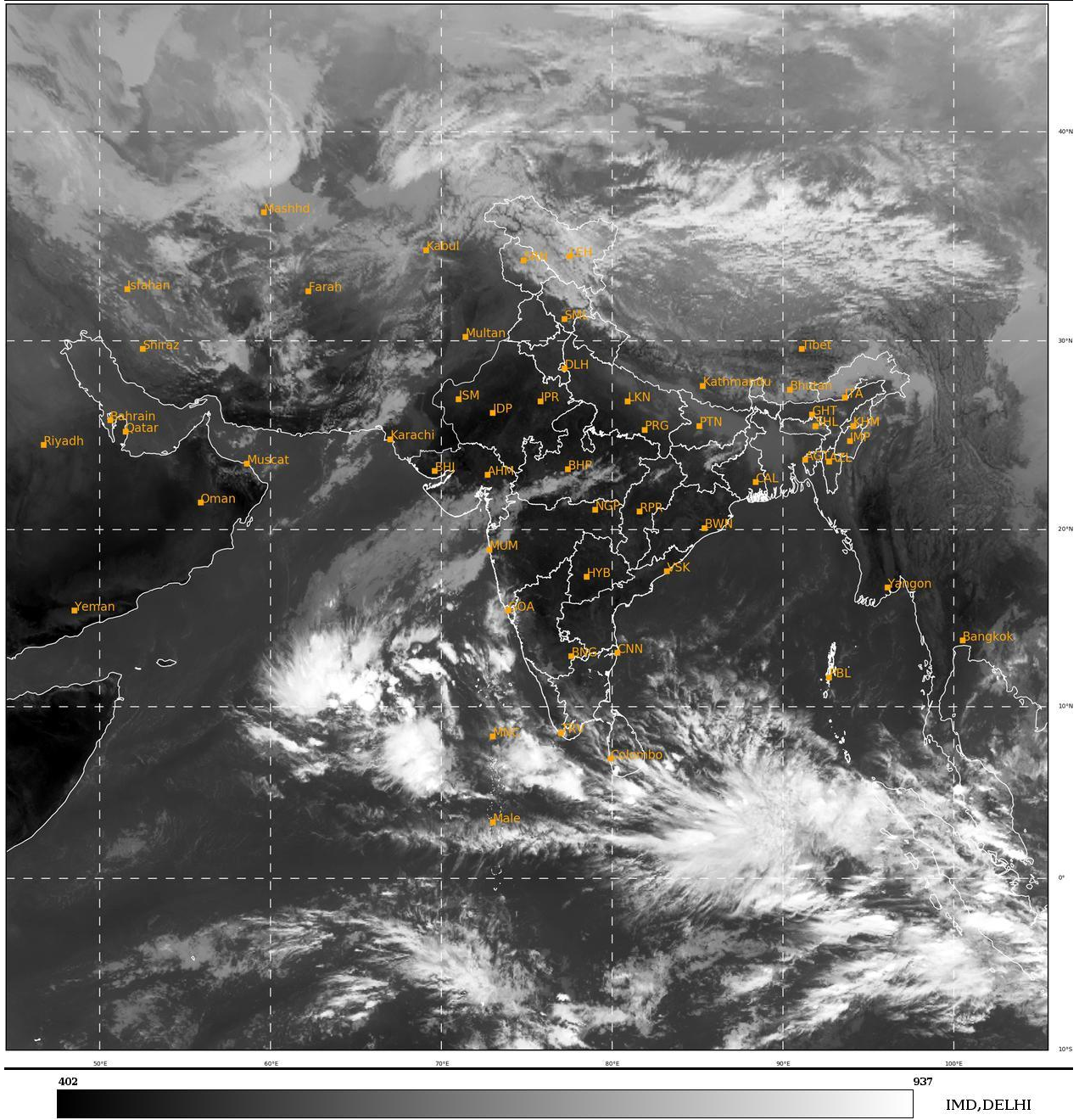
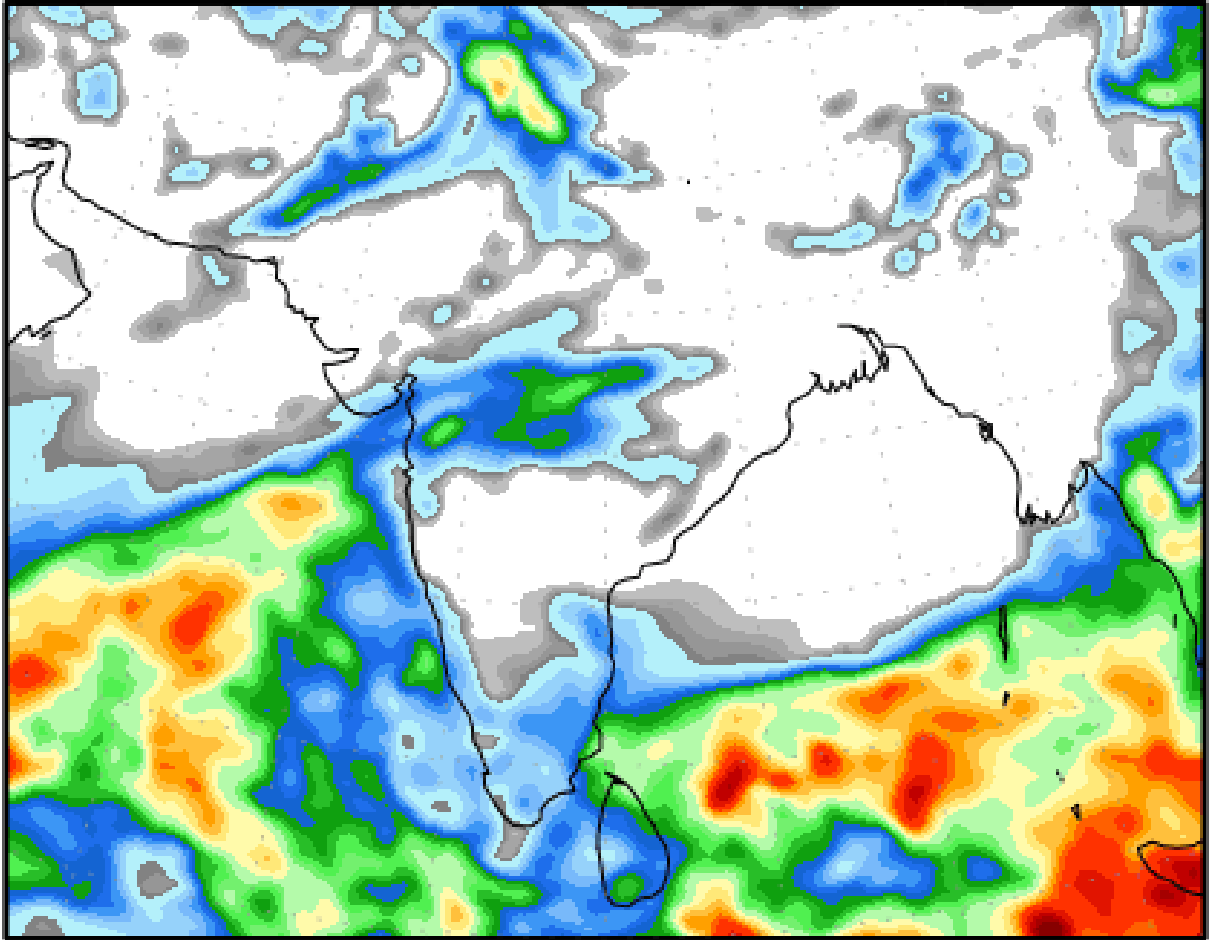


Figure: 1. Latest available satellite picture as on 10 December 2020 at 1357 Hrs (IST).  
(Source: IMD).



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