

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 15 January 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Due to the prevalence of dry north/northwesterly winds, minimum temperatures very likely to fall by 2-4°C over most parts of Northwest India during next 2 days. Hence, Dense to very dense fog at isolated/few pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, north Rajasthan, Sub-Himalayan West Bengal & Sikkim and Bihar during next 3 days. Cold Wave/Severe Cold Wave conditions at isolated pockets also very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan and East Madhya Pradesh during next 2 days. Cold Day conditions at isolated pockets also very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar during next 2-3 days.
- A cyclonic circulation lies over southwest Bay of Bengal off Tamilnadu coast in mid tropospheric levels and a trough runs from cyclonic circulation over central parts of South Arabian Sea and adjoining Equatorial Indian Ocean to Comorin area in lower tropospheric levels. Under its influence; i) Scattered to fairly widespread rainfall with moderate thunderstorm & lightning very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep area during next 2 days and reduction in rainfall activities over these regions thereafter.
- Conditions are becoming favourable for cessation of Northeast Monsoon rains over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and adjoining areas of coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka around 19th January, 2021.
- 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 Tamilnadu, Puducherry & Karaikal; at a few places over Lakshadweep and at isolated places over Sub-Himalayan West Bengal & Sikkim and South Interior Karnataka.

- Rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) (4 cm or more): Nagapattinam -9; Ramanathapuram -8; Papanasam, Thiruthurai poondt, Manimutharu and Maninmuthar -7 each, Manimitharu, Mandapam, Thalaiganayer -6 each; Muthupet, Tiruvarur, Srivaikuntan, Kayalapattinam and Pandavaiyar -5 each; Ambansammudran, Cheranmahadevi, Thanjavur, Tuticorin, Tirupoondt, Pattiukottai and Kodaikanal - 4 each.
- Heavy rainfall recorded at isolated places over Tamilnadu, Puducherry & Karaikal.
- Today, Cold Wave conditions in isolated pockets over West Uttar Pradesh, East Rajasthan and Madhya Pradesh, Gangetic West Bengal and Odisha.
- Yesterday, Cold day to severe cold day conditions observed in isolated pockets over Punjab, Bihar and East Uttar Pradesh and Cold day conditions in isolated pockets over Haryana & Chandigarh.
- Fog observed (at 0830 hours IST of today): Dense to very dense Fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, northwest Rajasthan, Bihar, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal; Moderate Fog in isolated pockets over Jammu, Kashmir, Himachal Pradesh, Uttarakhand, West Bengal & Sikkim, Odisha, Jharkhand, West Madhya Pradesh, Coastal Andhra Pradesh and Tripura.
- Visibility reported (at 0830 hours IST of today) (200 metre or less): Ludhiana, Patiala, Ambala, Karnal, Ganganagar, Hamirpur, Lucknow, Kanpur and Coonoor-25 each; Amritsar, Bareilly, Bahraich, Fursatganj, Sultanpur, Barabanki, Gaya, Bhagalpur, Purnea, Tejpur, Dhubri and Kodaikanal-50 each; Pantnagar, Hissar, Meerut, Aligarh, Ridge, Daltonganj, North Lakhimpur, Jorhat, Cooch Behar and Kailashahar-200 each.
- Maximum Temperature Departures as on 14-01-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh, Rajasthan and Konkan & Goa and at isolated places over Uttarakhand; above normal (1.6°C to 3.0°C) at most places over Marathawada; at many places over Vidarbha; at a few places over Jammu, Kashmir, Ladakh, Gilgistan, Baltistan & Muzaffrabad, Gujarat State, Telangana, Coastal Karnataka and Coastal Andhra Pradesh & Yanam; at isolated places over Madhya Maharashtra & North Interior Karnataka. They were markedly below normal (-5.1°C or less) at many places over Punjab and Bihar; at a few places over East Uttar Pradesh, Haryana, Chandigarh & Delhi and Tamilnadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at a few places over Andaman, Nicobar Islands, Gangetic West Bengal, West Uttar Pradesh, East Madhya Pradesh, Rayalaseema, South Interior

Karnataka, and Kerala & Mahe; at isolated places over Assam & Meghalaya, Odisha and Lakshadweep and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.8°C was reported at Mangalore (Coastal Karnataka) over the country.

- Minimum Temperature Departures as on 15-01-2021: Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan and Marathawada; at a few places over Madhya Maharashtra, Andaman & Nicobar Islands and Coastal Karnataka; at isolated places over Uttarakhand, Coastal Andhra Pradesh & Yanam and North Interior Karnataka; above normal (1.6°C to 3.0°C) at many places over Telangana, South Interior Karnataka and Kerala & Mahe; at a few places over Tamil Nadu, Puducherry & Karaikal, Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa and Lakshadweep; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Punjab and Haryana, Chandigarh & Delhi. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh; at a few places over East Rajasthan, Vidarbha and Saurashtra & Kutch; at isolated places over Gangetic West Bengal, Gujarat region and Rayalaseema. Today, the lowest minimum temperature of 3.4°C reported at Khajuraho (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 15 January (Day 1): Heavy Rainfall at isolated places very likely over Tamilnadu, Puducherry & Karaikal.
- Thunderstorm accompanied with lightning at isolated places very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- Dense to Very Dense Fog at a few places very likely over Punjab, Haryana, Chandigarh & Delhi and East Uttar Pradesh; at isolated places over West Uttar Pradesh, north Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; dense fog in isolated pockets over Nagaland, Manipur, Mizoram & Tripura.
- Cold Day conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar.
- Cold Wave to Severe Cold wave conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi; Cold Wave conditions in isolated pockets

over Uttar Pradesh, East Madhya Pradesh, Rajasthan, Gangetic West Bengal and Odisha.

- 16 January (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- Dense to Very Dense Fog at a few places very likely over Punjab, Haryana, Chandigarh & Delhi and East Uttar Pradesh; at isolated places over West Uttar Pradesh, north Rajasthan, Bihar and Sub-Himalayan West Bengal & Sikkim; dense fog in isolated pockets over Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- Cold Day conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar.
- Cold Wave to Severe Cold wave conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi; Cold Wave conditions in isolated pockets over Uttar Pradesh, East Madhya Pradesh and Rajasthan.
- 17 January (Day 3): Dense to very Dense Fog at isolated places very likely over Bihar; Dense fog at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, northwest Rajasthan and Assam & Meghalaya.
- Cold Day conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and Bihar.
- 18 January (Day 4): Dense fog at isolated places likely over Punjab, Haryana, Chandigarh & Delhi and northwest Rajasthan.
- 19 January (Day 5): Dense fog at isolated places likely over Punjab, Haryana, Chandigarh & Delhi and northwest Rajasthan.
- The weather outlook for seven days i.e., 15 to 23 January 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 8.1 to 9.2 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 30.5 to 33.5

and 11.4 to 14.5 oC respectively. Wind velocity ranged from 1.7 to 2.3 km and wind was blowing from south westerly Direction.

Contingency measure:

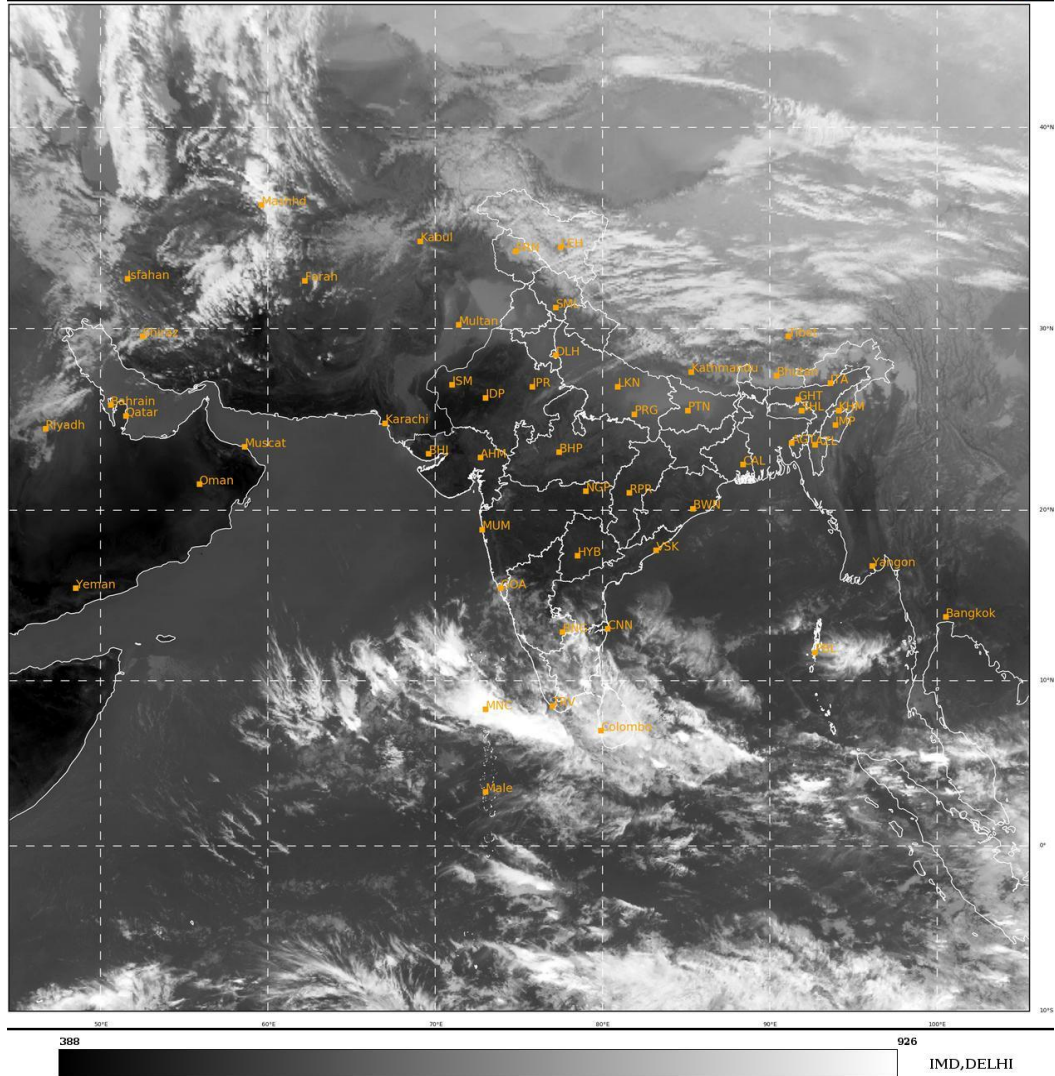
- Lablab bean/ Cowpea:Due to forecast for light rain with cloudy weather condition, there is possibility of incidence of aphids on lablab, cowpea crop which develop into growth of black fungus on leaves and inflorescence. If incidence is noticed, spray Dimethoate 30%EC@12 ml per 10 liter of water during clear weather.
- Mango:Due to forecast for light rain with cloudy weather condition, there is possibility for anthracnose disease on mango, for protection against anthracnose disease, spray carbendazim 12% + mancozeb 63% combination fungicide @ 10 gm per 10 liter in water during clear weather. Due to forecast for light rain with cloudy weather condition, there is possibility incidence of hoppers and powdery mildew disease on flower bud stage in mango. To protect the flower bud from pest and powdery mildew diseases, spray Lambda cyhalothrin 5%EC @ 6 ml + hexaconazole @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water during clear weather. 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 during clear weather. The recommended dose of insecticides is applicable for manually operating sprayer.
- Cashewnut:Due to forecast for light rain with cloudy weather condition, there is possibility of incidence of tea mosquito bugs and thrips on the inflorescence of cashewnut, to protect the cashew inflorescence, spray Profenophos 50% EC @10 ml per 10 liter of water during clear weather. here is possibility of incidence of tea mosquito bugs and thrips on the fruits of cashewnut, to protect the cashew during fruit bearing stage, spray Lambda cyhalothrin 5% EC @ 6 ml or Acetamiprid 20%SP @ 5 gms per 10 liter of water during clear weather. (insecticide is not under label claim).
- Brinjal:There is possibility of incidence of shoot and fruit borer on Brinjal, if incidence is noticed, collect and destroy all infected shoots and fruits and spray Fenvalerate @10 ml or Deltamethrin 2.8% EC @ 10 ml per 10 liter of water during clear weather.
- Chilli, Brinjal, Tomato:Due to forecast for light rain with cloudy weather condition, there is possibility of incidence of hoppers, white flies and aphids in

brinjal chilli, tomato crop. If incidence is noticed, spray dimethoate 30%EC @10 ml per 10 liter of water during clear weather. Also use yellow sticky cards in field to attract the sucking pests.

- Cabbage: Due to forecast for cloudy weather, there is possibility of incidence of anthracnose disease in cabbage crop. If incidence is noticed, spray Copper oxychloride 2.5 gm of per liter of water during clear weather.
- Water melon: Due to forecast for cloudy weather, 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 during clear weather. For management of sucking pest, place yellow sticky paper into field. There is possibility for incidence of fruit fly on watermelon. For effective control of fruit fly, install cue lure 'Rakshak' trap @ 2 nos. per acre at the time of initiation of flowering.
- Cucurbitaceous crop: Due to forecast of cloudy weather and increase in humidity, there is possibility of incidence of downy mildew in cucurbitaceous vegetables, if incidence noticed, remove and destroy infected leaves and spray Mancozeb 75% WP @ 2.5 gm or Copper oxychloride 50%WP @ 2 gm per litre of water during clear weather at an interval of 10 to 15 days. There is possibility of fruit drops in the citrus, hence advised to spray 2,4-D @ 1 ppm solution.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

15-01-2021/(1000 to 1026) GMT
15-01-2021/(1530 to 1556) IST



**Figure: 1. Latest available satellite picture as on 15 January 2021 at 1530 to 1556 Hrs (IST).
(Source: IMD).**

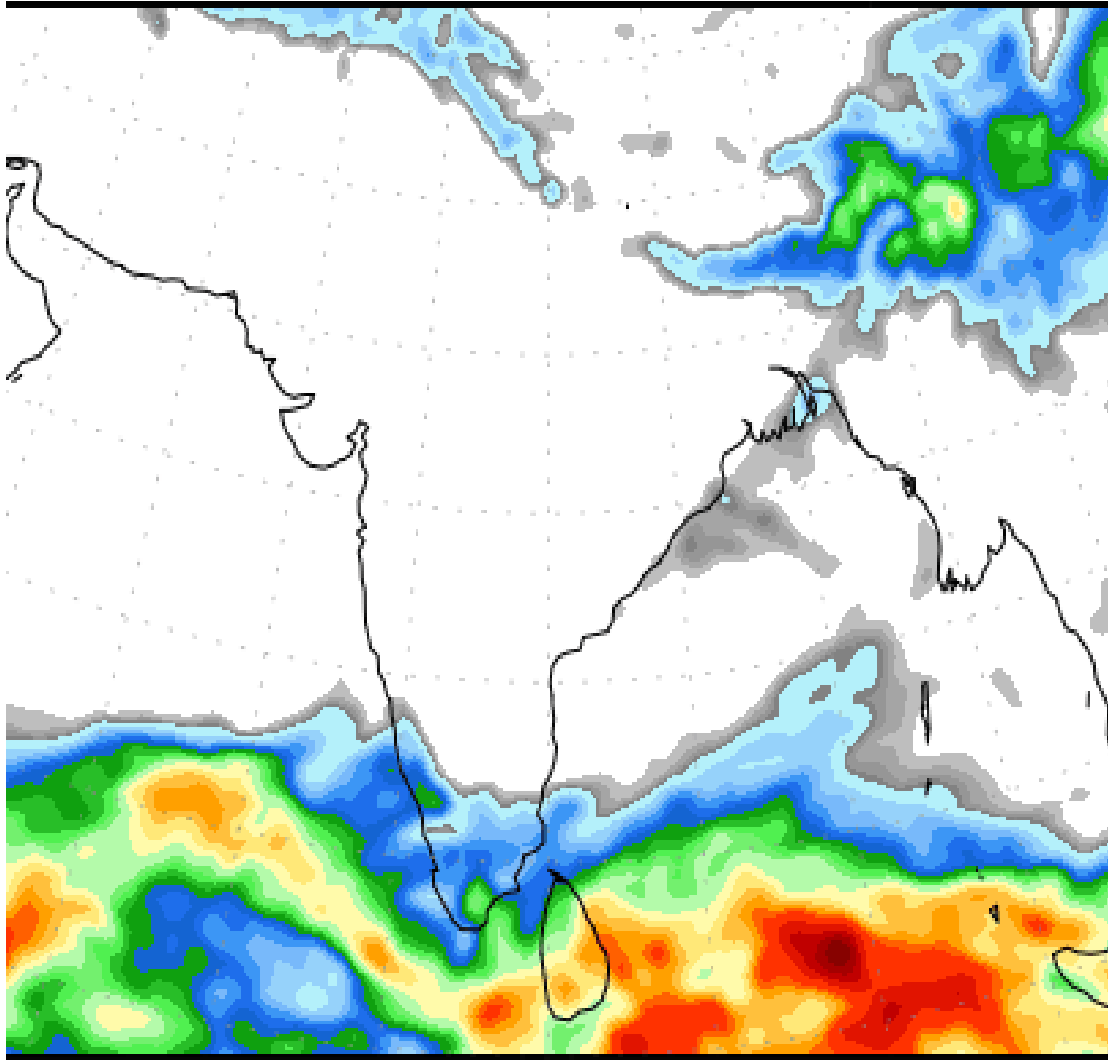


Figure:2. Precipitation forecast for 15 to 23 January 2021 (Source: NOAA NCEP).

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