

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 13 January 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Under the influence of the cyclonic circulation over Comorin area & adjoining Maldives area in lower tropospheric levels, scattered to fairly widespread rainfall with isolated heavy falls and moderate thunderstorm & lightning very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep during next 24 hours and significant decrease in rainfall activity over these regions thereafter.
- Due to the prevalence of dry north/northwesterly winds, minimum temperatures very likely to remain below normal over most parts of Northwest India during next 3-4 days. Hence, Cold Day/Severe Cold Day conditions very likely to continue in many pockets over Punjab and Haryana, Chandigarh & Delhi and in some pockets of Uttar Pradesh and Uttarakhand during next 3 days. Cold Wave/Severe Cold Wave conditions likely in many pockets over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh; in some pockets East Rajasthan and in isolated pockets over West Rajasthan during next 3-4 days. Ground Frost is also very likely in isolated pockets over Uttarakhand, Punjab, Haryana & Chandigarh, West Uttar Pradesh and north Rajasthan during next 2 days.
- Dense to Very Dense Fog conditions at isolated places very likely over Northwest India during next 4-5 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 most places over Lakshadweep; at many places over Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal; at a few places over Kerala & Mahe and at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Andaman & Nicobar Islands.
- Extremely heavy rainfall observed at isolated places over Tamil Nadu.

- Yesterday, Cold Day to Severe Cold Day conditions were observed in some pockets over Haryana & Chandigarh and Uttar Pradesh and Cold Day conditions in many pockets over Punjab; in isolated pockets over Delhi.
- Cold Wave conditions observed in many pockets over Punjab, Haryana, Chandigarh & Delhi; in some pockets over East Rajasthan; in isolated pockets over West Rajasthan.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Lakshadweep.
- Fog observed (at 0830 hours IST of today): Dense to Very Dense Fog in some pockets over East Uttar Pradesh and Haryana, Chandigarh & Delhi; in isolated pockets over West Uttar Pradesh and Dense Fog in some pockets over Sub-Himalayan West Bengal & Sikkim; in isolated pockets over Himachal Pradesh, Uttarakhand, Punjab and Assam & Meghalaya.
- Maximum Temperature Departures as on 12-01-2021: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh and Konkan & Goa; appreciably above normal (3.1°C to 5.0°C) at many places over Jharkhand, Odisha, Marathwada and Telangana; at a few places over Vidarbha; at isolated places over Jammu, Kashmir, Ladakh, Gilgistan, Baltistan & Muzaffrabad, Gangetic West Bengal, Saurashtra & Kutch, Madhya Maharashtra and Chhattisgarh; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Coastal Andhra Pradesh & Yanam and Coastal Karnataka; at isolated places over West Rajasthan, East Madhya Pradesh and Gujarat Region. They were markedly below normal (-5.1°C or less) at many places over Haryana, Chandigarh & Delhi and West Uttar Pradesh; at a few places over East Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; appreciably below normal (-3.1°C to -5.0°C) at many places over Punjab and Bihar; at a few places over Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal; at isolated places over West Madhya Pradesh, Assam & Meghalaya and South Interior Karnataka; below normal (-1.6°C to -3.0°C) at many places over Kerala & Mahe and Lakshadweep; at isolated places over Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.4°C was reported at Ratnagiri (Konkan & Goa) over the country.
- Minimum Temperature Departures as on 13-01-2021: Minimum temperatures are markedly above normal (5.1°C or more) at few places over Assam & Meghalaya and Odisha; at isolated places over Nagaland, Manipur, Mizoram & Tripura; appreciably above normal (3.1°C to 5.0°C) at most places over Konkan & Goa,

Marathwada and Coastal Karnataka; at many places over Sub-Himalayan West Bengal and Madhya Maharashtra; at a few places over Andaman & Nicobar Island, Arunachal Pradesh, Telangana and Tamilnadu, Puducherry & Karaikal; at isolated places over Jharkhand and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at many places over Vidarbha, Coastal Andhra Pradesh & Yanam and Kerala & Mahe; at a few places over Himachal Pradesh, Uttarakhand, Gangetic West Bengal, Chhattisgarh, Gujarat Region, South Interior Karnataka and Rayalaseema. They are markedly below normal (-5.1°C or less) at few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at isolated places over East Rajasthan; appreciably below normal (- 3.1°C to -5.0°C) at a few places over Haryana, Chandigarh & Delhi, East Uttar Pradesh and East Madhya Pradesh; at isolated places over West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over West Uttar Pradesh and Bihar; at a few places over West Rajasthan; at isolated places over Punjab. The lowest minimum temperature of 0.2°C reported at Ganganagar (West Rajasthan) over the plains of the country

Weather Warning during the next 5 days (IMD)

- 13 January (Day 1): Heavy rainfall at isolated places very likely over Tamilnadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Dense to Very Dense Fog conditions at a few places very likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh; at isolated places over Assam & Meghalaya and Dense Fog at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha and Nagaland, Manipur, Mizoram & Tripura. Cold Wave to Severe Cold Wave conditions in many pockets very likely over Punjab and Haryana, Chandigarh & Delhi; in some pockets over East Rajasthan; in isolated pockets over West Rajasthan and Cold Wave conditions in some pockets over Uttar Pradesh; in isolated pockets over Madhya Pradesh. Cold Day to Severe Cold Day conditions in many pockets very likely over Punjab and Haryana, Chandigarh & Delhi; in some pockets over Uttarakhand and Uttar Pradesh. Ground Frost very likely in isolated pockets over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan. Squally Weather (wind speed reaching 45-55 kmph) very likely over Southeast Arabian Sea, Lakshadweep-Maldives area, Comorin and Kerala coast. Fishermen are advised not to venture into these areas.
- 14 January (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Lakshadweep. Dense to Very Dense Fog conditions at a few

places very likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and Dense Fog at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura. Cold Wave to Severe Cold Wave conditions in some pockets very likely over Punjab, Haryana, Chandigarh & Delhi and East Rajasthan; in isolated pockets over West Rajasthan and Cold Wave conditions in some pockets over Uttar Pradesh. Cold Day to Severe Cold Day conditions in many pockets very likely over Punjab and Haryana, Chandigarh & Delhi; in some pockets over Uttarakhand and Uttar Pradesh. Ground Frost very likely in isolated pockets over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan. Squally Weather (wind speed reaching 45-55 kmph) very likely over Southeast Arabian Sea, Lakshadweep-Maldives area. Fishermen are advised not to venture into these areas.

- 15 January (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Lakshadweep. Dense to Very Dense Fog conditions at a few places very likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and Dense Fog at isolated places over north Rajasthan, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Wave to Severe Cold Wave conditions in some pockets very likely over Punjab, Haryana, Chandigarh & Delhi and East Rajasthan; in isolated pockets over West Rajasthan and Cold Wave conditions in some pockets over Uttar Pradesh. Cold Day to Severe Cold Day conditions in many pockets very likely over Punjab and Haryana, Chandigarh & Delhi; in some pockets over Uttarakhand and Uttar Pradesh.
- 16 January (Day 4): Dense to Very Dense Fog conditions at isolated places likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and Dense Fog at isolated places over north Rajasthan, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Wave to Severe Cold Wave conditions in some pockets likely over Punjab and Haryana, Chandigarh & Delhi; in isolated pockets over Rajasthan and Cold Wave conditions in isolated pockets over Uttar Pradesh. Cold Day conditions in isolated pockets likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh.
- 17 January (Day 5): Dense to Very Dense Fog conditions at isolated places likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and Dense Fog at isolated places over north Rajasthan, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- The weather outlook for seven days i.e., 13 to 21 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)

Kerala

Weather condition:

In Vellanikkara, the maximum temperature ranges from 30.5 to 33.9 Deg C, minimum temperature ranges from 20.5 to 23.4 Deg C. Morning relative humidity ranges from 068% to 095% and afternoon relative humidity ranges from 048% to 059%. Wind speed ranges from 1.6 to 12.3 km/h. Evaporation ranges from 4.0 to 5.8 mm. Sunshine hours range from 2.1 to 9.4 hours. 5cm morning soil temperature ranges from 25.1 to 27.5 Deg C and afternoon soil temperature ranges from 32.6 to 38.3 Deg C.

Contingency measure:

- Rice(Mundakan)- Milky stage- Bacterial Leaf blight- As a prophylactic measure, spray 20 gram Pseudomonas in one litre of water. To control the spread of Bacterial Leaf blight in paddy, spray 6 g of Streptocycline in 30 litre of water. Sheath Blight- To control sheath blight disease in rice, spray 4 gram of (Trifloxystrobin +Tebuconazole) mixture in ten litres of water. Glume discolouration- During the 50% panicle emergence stage, there is a chance of glume discolouration in rice. To control this, spray 2 gram Kocide per litre.
- Banana- Sigatoka disease- If there is sigatoka disease is seen in banana, as a prophylactic measure, spray 1% Bordeaux mixture.
- Pepper- Slow wilt- To control the slow wilt disease in pepper, drench with three gram Copper Oxy Chloride (COC) per one litre of water in to the basin of each plant.
- Vegetables (Bhindi)- Green leaf hopper- There is a chance of green leaf hopper attack in bhindi. Spray 2 g thiamethoxam per ten litre of water.
- Animal Husbandry Vaccinate animals against foot and mouth disease and hemorrhagic septicemia.

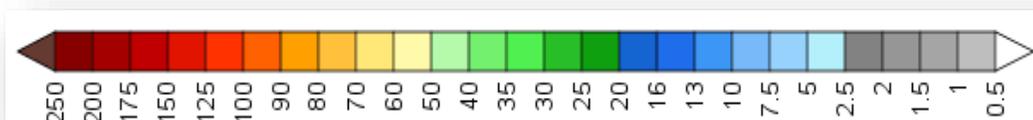
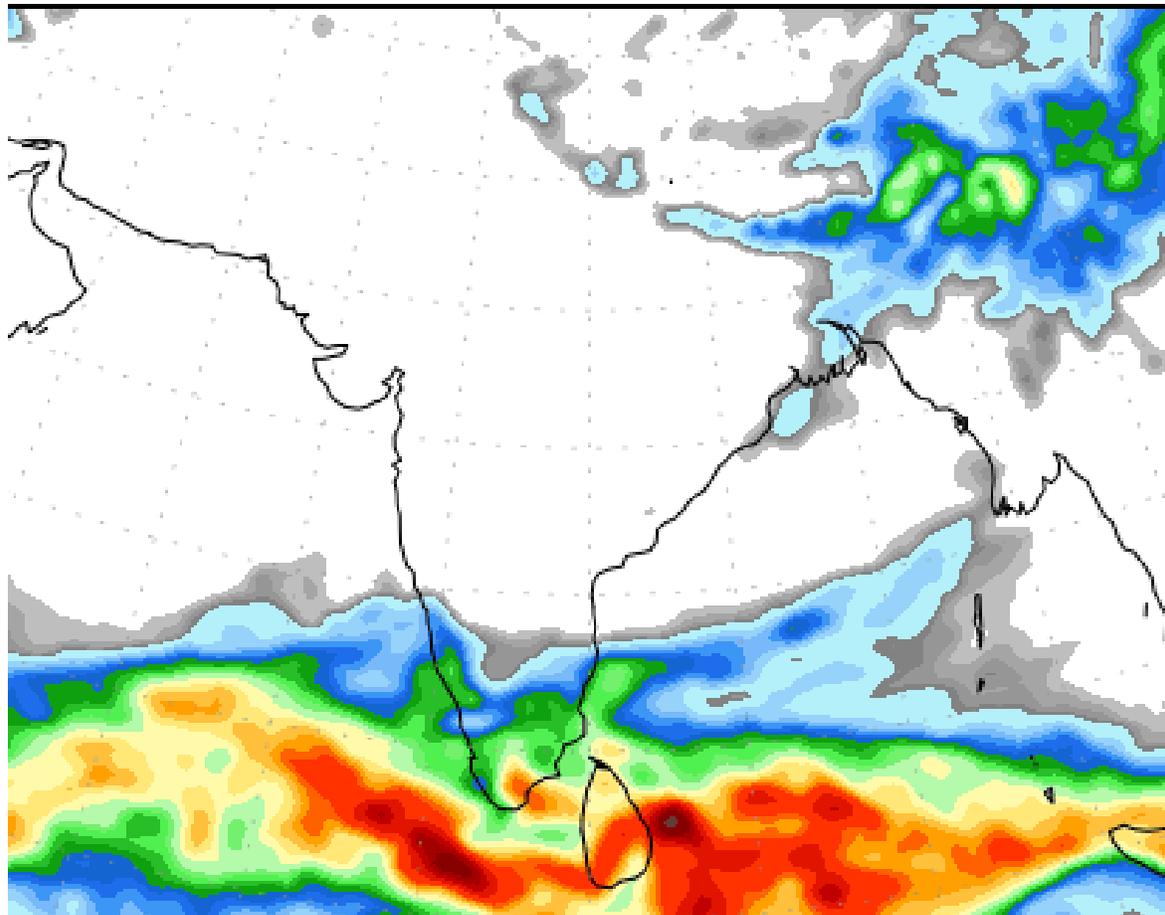


Figure:2. Precipitation forecast for 13 to 21 January 2021 (Source: NOAA NCEP).

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