

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 28 January 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Isolated to scattered light/moderate rainfall very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland-Manipur-Mizoram-Tripura on 31st January and 01st Feb. Isolated thunderstorms/lightning is also very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland-Manipur-Mizoram-Tripura during next 24 hrs.
- Isolated light rainfall very likely over Tamil Nadu and Kerala during next 4 days and over Coastal Andhra Pradesh-Yanam during next 48 hrs.
- Light isolated rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 5 days.
- Surface winds (15-25 kmph) likely over Punjab, Haryana, Delhi and Uttar Pradesh during next 4 days.
- Under the influence of a fresh active Western Disturbance & its induced cyclonic circulation; fairly widespread to widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region during 02nd-04th Feb. Isolated heavy rainfall/snowfall also likely over Jammu, Kashmir, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh on 03rd Feb.
- Scattered to fairly widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh, Delhi & Uttar Pradesh during 02nd-04th Feb.
- Due to confluence between westerlies and easterlies at lower tropospheric levels; scattered to fairly widespread light/moderate rainfall with isolated hailstorms likely over Bihar, Jharkhand, West Bengal & Sikkim on 03rd & 04th and over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 04th & 05th Feb.
- Cold Wave, Fog and Cold Day Warning:
- No significant change in minimum temperatures very likely over most parts of Northwest & Central India during next 24 hrs and gradual rise by 4-6°C thereafter.
- No significant change in minimum temperatures very likely over East India during next 3 days and fall by 2-4°C thereafter.

- No significant change in minimum temperatures very likely over Gujarat during next 2 days and rise by 2-4°C thereafter.
- Maximum temperatures are very likely to rise by 3-5°C over most parts of Northwest & Central India till 2nd February and fall thereafter.
- Cold wave conditions in isolated pockets very likely over Punjab, Haryana-Chandigarh, West Uttar Pradesh and Rajasthan during next 24 hrs and abate thereafter. Cold day conditions in isolated pockets very likely over Uttar Pradesh and East Rajasthan during next 24 hours and abate thereafter.
- Cold Day to Severe Cold Day conditions in isolated pockets very likely over Madhya Pradesh, Vidarbha and Chhattisgarh during next 24 hrs and gradually abate thereafter. Cold wave conditions in isolated pockets very likely over Madhya Pradesh & Odisha during next 2 days; over Vidarbha and Chhattisgarh during next 24 hrs and gradually abate thereafter.
- Dense Fog conditions in isolated pockets in night/morning hours very likely over Uttarakhand, East Uttar Pradesh, Assam & Meghalaya and Nagaland during next 48 hrs and abate thereafter.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Arunachal Pradesh and Assam & Meghalaya; at a few places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- Thunderstorm accompanied lightning observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Arunachal Pradesh.
- Severe Cold Day conditions in many parts prevailed over East & adjoining West Uttar Pradesh; Cold Day conditions in most parts with Severe Cold Day in isolated pockets over Madhya Pradesh and Cold Day conditions in some parts over Bihar and Vidarbha; in isolated pockets over East Rajasthan.
- Cold Wave conditions in many parts with Severe Cold Wave in isolated pockets prevailed over West Madhya Pradesh and Vidarbha; Cold Wave to Severe Cold Wave conditions in isolated pockets over East Rajasthan and Cold Wave conditions in many parts over East Madhya Pradesh; in isolated pockets over Punjab, Haryana, Saurashtra & Kutch and north Marathwada.

- Fog observed (at 0830 hours IST of today): Dense to Very Dense Fog in isolated pockets over Uttarakhand and Moderate to Dense Fog in isolated pockets over East Uttar Pradesh.
- Minimum Temperature Departures (as on 28-01-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Andaman & Nicobar Islands; at isolated places over Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over South Interior Karnataka; at isolated places over Coastal Andhra Pradesh & Yanam. They are markedly below normal (-5.1 or less) at many places over West Madhya Pradesh and Vidarbha; at a few places over East Madhya Pradesh; at isolated places over East Rajasthan and Telangana; appreciably below normal (3.1°C to 5.0°C) at most places over Marathwada; at many places over Jharkhand; at a few places over Sub-Himalayan West Bengal & Sikkim, Chhattisgarh and Gujarat State; at isolated places over Himachal Pradesh, Gangetic West Bengal and Odisha; below normal (-1.6°C to -3.0°C) at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, Assam & Meghalaya, Arunachal Pradesh and Madhya Maharashtra; at isolated places over East Rajasthan and near normal over rest parts of the country. The Lowest minimum temperature of 1.8°C reported at Sikar & Bhilwara (East Rajasthan) over the plains of the country.
- Maximum Temperature Departures (as on 27-01-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at isolated places over JammuKashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at most places over East Uttar Pradesh; at many places over Madhya Pradesh and West Uttar Pradesh; at a few places over Vidarbha, Nagaland, Manipur, Mizoram & Tripura and Bihar; at isolated places over East Rajasthan, Gujarat Region, Uttarakhand and Telangana; appreciably below normal (- 3.1°C to -5.0°C) at most places over Jharkhand and Chhattisgarh; at many places over Haryana, Chandigarh & Delhi, Madhya Maharashtra, Marathwada and Assam & Meghalaya; at a few places over Himachal Pradesh, West Bengal & Sikkim, Odisha and North Interior Karnataka; at isolated places over Saurashtra & Kutch; below normal (-1.6°C to -3.0°C) at many places over Punjab and Rayalaseema; at isolated places over Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 35.8°C reported at Alapuzha (Kerala).

Weather Warning during the next 5 days (IMD)

- 28 January (Day 1): Dense Fog very likely in isolated pockets over Uttarakhand, East Uttar Pradesh, Assam & Meghalaya and Nagaland , Manipur, Mizoram & Tripura. Cold Day to Severe Cold Day conditions very likely in some parts of Madhya Pradesh; in isolated pockets over East Uttar Pradesh and Cold Day conditions in isolated pockets over West Uttar Pradesh, East Rajasthan, Vidarbha, Chhattisgarh and Bihar. Cold Wave to Severe Cold Wave conditions very likely in some parts of West Madhya Pradesh; in isolated pockets over East Rajasthan and Cold Wave conditions in some parts of East Madhya Pradesh; in isolated pockets over Punjab, HaryanaChandigarh, West Uttar Pradesh, West Rajasthan, Vidarbha, Chhattisgarh and Odisha. Thunderstorm accompanied with Lightning very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland , Manipur, Mizoram & Tripura.
- 29 January (Day 2): Dense Fog very likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Day conditions in isolated pockets likely over East Uttar Pradesh, Madhya Pradesh and Bihar. Cold Wave conditions in isolated pockets likely over East Rajasthan, Madhya Pradesh, Chhattisgarh and Odisha.
- 30 January (Day 3): Cold Wave conditions in isolated pockets likely over East Rajasthan, Madhya Pradesh and Odisha.
- 31 January (Day 4):No weather warning.
- 1 February (Day 5):No weather warning.
- The weather outlook for seven days i.e., 28 Jan to 05 Feb 2022 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)

Himachal Pradesh

Weather condition:

The maximum and minimum temperature ranged between 7.0 to 13.5 °C and 0.5to 5.0 °C which was below normal by 1.1 to 7.6 °C and 1.6 to 5.1 °C, respectively. 67.0 mm rainfall was received during the week against the normal of 32.9 mm. The relative humidity varied between 61-100 % and sunshine hours between 0.0-6.0 hrs/day with variable sky conditions (Octa 4-8). The evaporation rate varied 1.3-2.0 mm per day.

Contingency measure:

- Rabi Crops: Wheat: In wheat crop where weeds are 2-3 leaves stage, spray isoproturon @ 70 g or Vesta @ 16 g per 30 litres of water in one kanal for the control of weeds.
- Storage of Grains: Grains should be properly dried to right moisture level before storing. Godowns should be properly cleaned by removing all the grains and other storage matter of previous crop.
- Mustard: Thinning and weeding is recommended in timely sown mustard crop. Keeping in view of relative humidity farmers are advised for monitoring of mustard crop against attack of white rust. If infection is high than spraying of Dithane - M -45 @ 2 gram/ litre of water of water is advised. Keeping in view of weather, farmers are advised for monitoring of mustard crop against aphid attack.
- Fodder Crops: Intercultural operations on already sown berseem, lucerne and oats for fodder of Rabi season also advised. The lantana weeds in the grasslands may be cut so that regenerated growth during September can be sprayed with 1% glyphosate for its control.
- Vegetable Crops: Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- Onion & Garlic: Sowing of garlic and onion is advised. Farmers are advised to monitor their fields regularly. Spray of Imidacloprid 17.8 % SC@ 1.0 ml/3 lit of water is recommended against white flies and other sucking pests in all crop and vegetables when sky is clear.
- Radish & Turnip: Thinning of turnip, carrot and radish is advised. Maintain a plant to plant distance of 7 -10 cm.
- Cabbage & Cauliflower: Advised to complete transplanting of seedlings of cabbage, cauliflower, knoll khol and broccoli are advised. Mix well rotten FYM prior to transplanting. The downy mildew is expected in cruciferous vegetables, for control spray redomil M -Z @ 25 g per litres of water at 15 days interval.
- Potato: Farmers are advised to start earthing -up in potato if crop has attained a height of 15 -22 cm. If so required, the practice may be repeated after 15 days . Due to high relative humidity, infection of blight may occur in potato and tomato. Constant monitoring is advised. If symptoms appears than spray of Carbandizam @ 1.0 gm / litre of water or Dithane - M -45 @ 2.0 gm / litre of water is recommended.
- Poly House Agriculture: Advised tomato, cucumber and capsicum sowing and transplanting. For control of powdery mildew, aphids and spodoptera spray

recommended chemicals. Keep yellow sticky trap in polyhouse and after transplanting drench plant with imidachlorpid. Leaf spot/blight is expected in shimla mirch and tomato for control spray tilt 1ml per liters of water.

- Tea: Training, skiffing and cleaning work can be completed in the tea orchards. Do lopping of the tree in the tea orchards to have more sunlight. The skiffed material may be used to prepare compost so that it could be applied in next season.
- Livestock: Ecto-parasite attack is expected in this weather for control spray Butox @ 2 ml per litre in cowshed Give mixture of hay & green fodder. The weather is suitable for the attack of pink eye disease in newly born calves, for control prepare the solution of 1% boric acid in boiled water and wash eyes at regular interval of three hours. Give mixture of hay & green fodder. Advised not to allow animals to eat lantana these days. Dry bedding may be provided to save the animals from cold. Young calves must be kept in the sheds during nights.
- Poultry: Make sure to deworm your older flocks every month against round-worms. Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds. For precautionary measures spray formaline 40% @ 1litre in 9 litres of water in outside or surrounding of farm. Provide vitamin A and vitamin B-complex with water. Ensure proper space for egg laying of birds and provide 14- to 16 hours light including day light. Normal feeding schedule should be continued and add mineral in the diet if stress is seen.
- Mushrooms: Dingri can be sown in closed room, maintain temperature of 25-28 degree Celsius and relative humidity of 80-85 % for good crop. Advised ti fill compost bags with span for button mushrooms.
- Horticulture: Keep the basins of the plants free from weeds. The new growth appearing below bud union may be cut. If a termite outbreak appears on the trees, spray Chlorpyriphos 20 EC @ 3ml/l. Monitor foliar pest on plants of Citrus species. Spray Chlorantraniliprole 18.5SC @ 0.4 ml/l or lambdacyhalothrin 4.90CS @0.8 ml/l for pomegranate butterfly. Advised recommended spray of chemicals for control of citrus canker. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area. Advised planting of strawberry. Wrapping of plastic sheets around mango trunk should be done for preventing climbing of young mealy bugs. Apply grease to seal any cracks in the polythene sheets.If the stem borer problem is there in spray insecticide or control them with applying kerosene oil. Keep the basins of the plants free from weeds. Prepare the pits for planting the winter plants like peacunnut, walnut, almond plum and peach. In peach gum is coming out from

tree trunk, for control bordeaux paint may be applied in the affected area.

- Fruit Trees: Sowing of mango, litchi, guava, papaya, pecanut and kagzi lime is recommended under these weather conditions. Air layering of litchi, guava, kagzi lime and lemon is recommended. Side veneer grafting in mango and inverted T-budding in citrus is recommended. Transplanting of seedlings of rough lemon (Khatti) in the nursery beds, if not done during July. Weeding in nursery is recommended.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator

28-01-2022/(0800 to 0827) GMT
28-01-2022/(1330 to 1357) IST

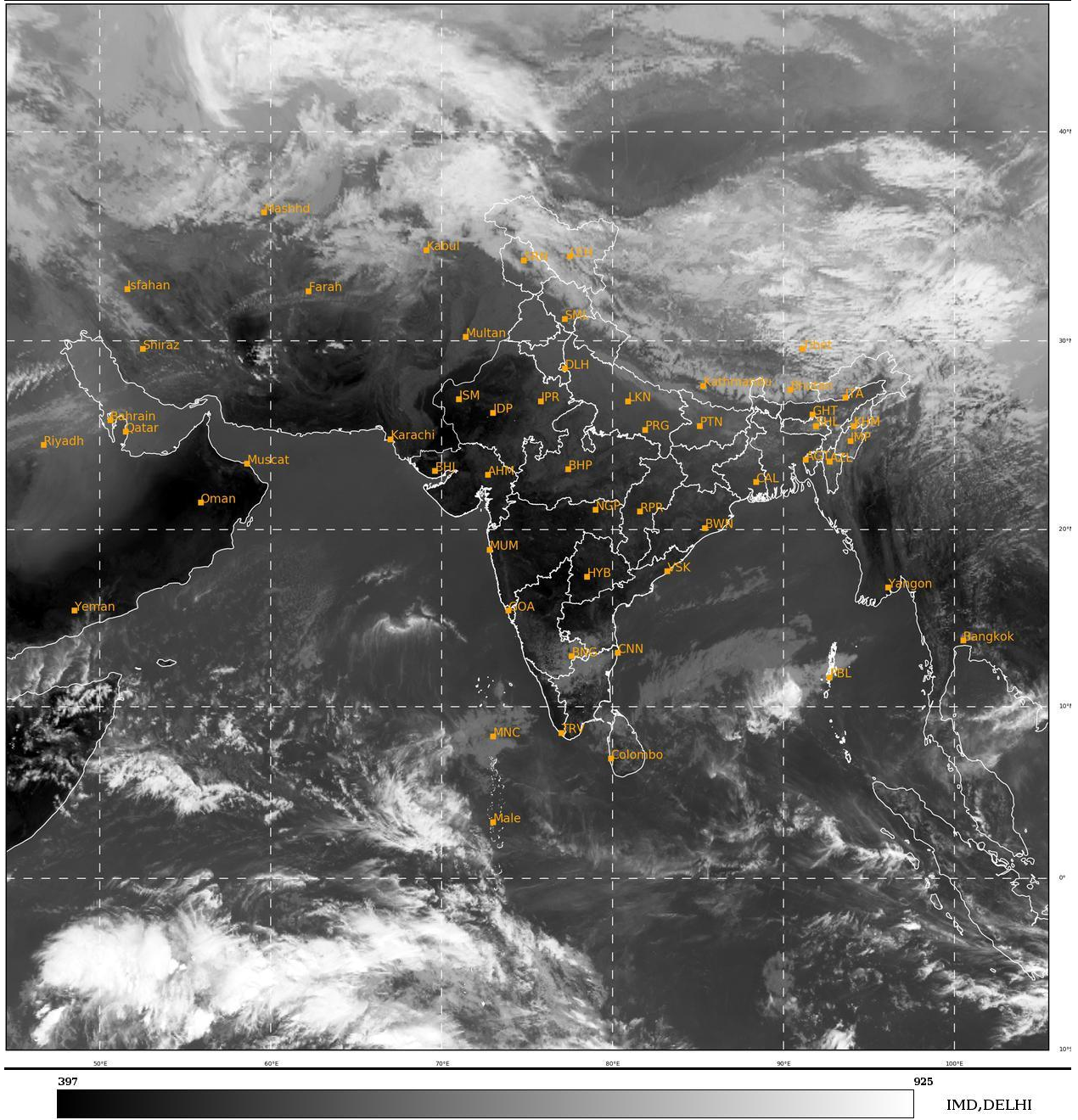


Figure: 1. Latest available satellite picture as on 28 Jan 2022 at 1357 Hrs (IST). (Source: IMD).

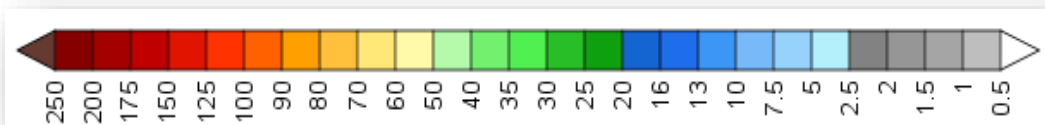
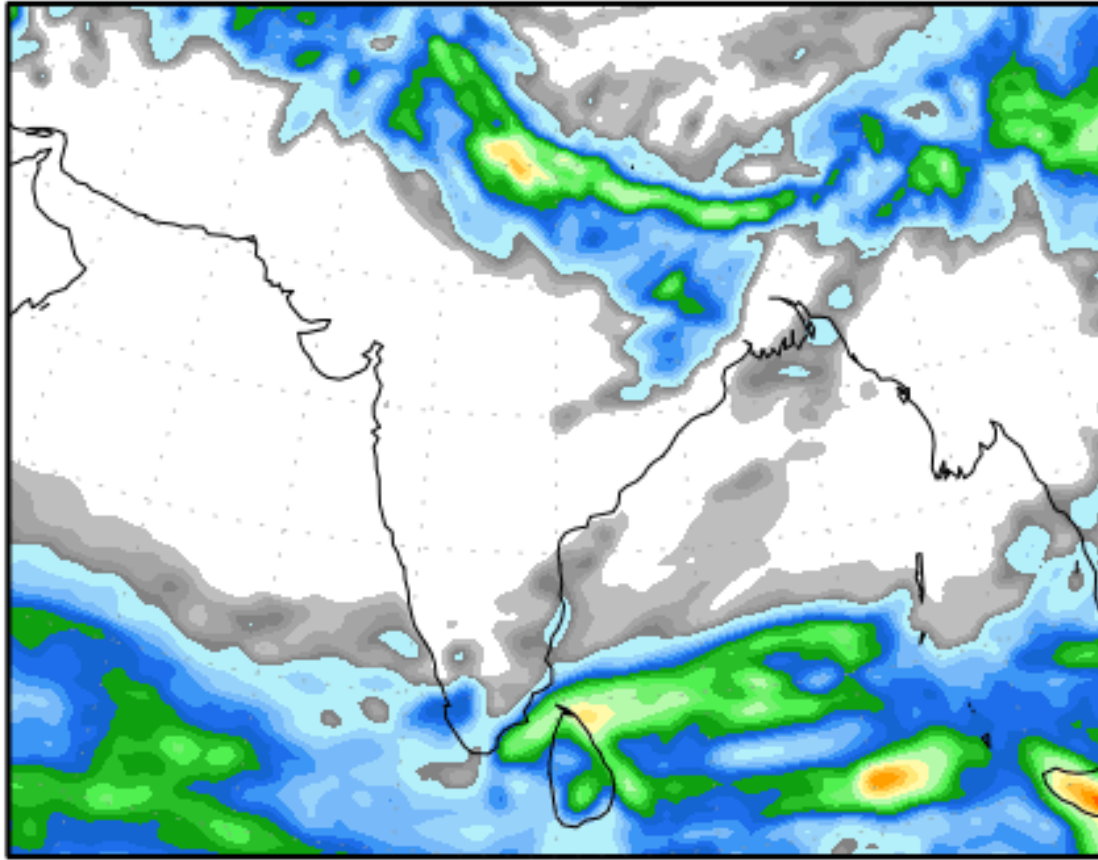


Figure:2. Precipitation forecast for 28 Jan to 05 Feb 2022 (Source: NOAA NCEP).

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