

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 24 December 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Wet spell over northwest and central & adjoining east India:
- The Western Disturbance as a trough in westerlies now runs roughly along Long.60°E to the north of Lat. 27°N in lower tropospheric level. The induced cyclonic circulation lies over northeast Rajasthan & neighbourhood in lower tropospheric level. Under the influence of these systems Isolated rainfall/snowfall very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 24th & 25th and over Himachal Pradesh on 24th December.
- A fresh Western Disturbance and its induced cyclonic circulation is very likely to influence northwest India from 26th and central India from 27th December.
- Under its influence;
 - 1) Light/moderate scattered to fairly widespread rainfall/snowfall very likely over Western Himalayan Region on 26th to 29th December, 2021.
 - 2) Light/moderate scattered to fairly widespread rainfall is very likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and isolated rainfall over Rajasthan on 26th to 29th December.
 - 3) Isolated to scattered rainfall over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha and West Bengal & Sikkim during 27th to 29th December.
 - 4) Isolated Hailstorm also likely over Jammu division and lower Himachal Pradesh on 26th & 27th and over Uttarakhand on 27th & 28th December, 2021.
- Minimum Temperatures, Cold Wave and Fog:
 - 1) Minimum Temperatures are above normal by 2-4°C over many parts of Jammu & Kashmir, Punjab, Rajasthan, Gujarat state; below normal by 2-4°C over many parts of Uttar Pradesh, Gangetic West Bengal, Odisha, East Madhya Pradesh and near normal over most parts of rest parts of the country.
- Gradual rise in minimum temperatures by 2-4°C very likely over most parts of Northwest, East & Central India during next 2 days and no significant change thereafter.

- Dense fog in the morning hours in isolated pockets very likely over Northeast India on 25th & 26th December.
- No Cold Wave Conditions likely to prevail over the country during next 7 days.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Andaman & Nicobar Islands; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Bihar, Jharkhand, Gangetic West Bengal and at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Arunachal Pradesh and Assam & Meghalaya.
- Fog observed (at 0830 hours IST of today): Shallow to moderate fog in isolated pockets over Punjab, Himachal Pradesh, Delhi, East Uttar Pradesh, Gujarat State, Konkan & Goa, North Interior Karnataka, Coastal Andhra Pradesh, Jharkhand, Gangetic West Bengal, Assam & Meghalaya and Nagaland, Manipur.
- Minimum Temperature Departures (as on 24-12-2021): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan; at a few places over Saurashtra & Kutch and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over East Rajasthan; at a few places over Punjab, Haryana, Chandigarh & Delhi and Konkan & Goa and at isolated places over Gujarat Region, West Madhya Pradesh and Bihar. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Odisha and at isolated places over Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at most places over Lakshadweep; at many places over Interior Karnataka; at a few places over East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Bihar and Gangetic West Bengal and at isolated places over Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Today, the Lowest minimum temperature of 4.8°C reported at Shahjahanpur (West Uttar Pradesh) over the plains of the country.
- Maximum Temperature Departures (as on 23-12-2021): Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over East Rajasthan; at a few places over West Rajasthan, Himachal Pradesh, Madhya Pradesh, Vidarbha and South Interior Karnataka and at isolated places over Haryana, Chandigarh & Delhi, Madhya Maharashtra, North Interior Karnataka, Telangana, Rayalaseema and Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Assam & Meghalaya. They were below normal (-1.6°C to -3.0°C) at a few places

over Gangetic West Bengal and at isolated places over East Uttar Pradesh, Saurashtra & Kutch, Konkan & Goa, Odisha and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 33.5°C was reported at Cannur (north Kerala).

Weather Warning during the next 5 days (IMD)

- 24 December (Day 1): Dense fog in isolated pockets very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & hail at isolated places very likely over Sub-Himalayan West Bengal & Sikkim.
- 25 December (Day 2): Dense fog in isolated pockets very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & hail at isolated places very likely over Assam & Meghalaya.
- 26 December (Day 3): Thunderstorm accompanied with lightning & hail at isolated places very likely over Jammu division and Himachal Pradesh.
- 27 December (Day 4): Thunderstorm accompanied with lightning & hail at isolated places likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand and with lightning at isolated places over Madhya Pradesh.
- 28 December (Day 5): Thunderstorm accompanied with lightning & hail at isolated places likely over Uttarakhand and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chattisgarh, Madhya Maharashtra and Marathwada.
- The weather outlook for seven days i.e., 24 Dec to 01 Jan 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)

Gujarat

Weather condition:

The actual maximum temperature was 2.5°C and actual minimum temperature was 1.0 °C lower as compare to its normals. Total BSS was 58.0 hrs. with an average of 8.3 hrs. The daily average evaporation and wind speed was 3.2 mm and 4.1 km/hr respectively. The daily average RH during morning and afternoon was 78.1 % and 38.4 % respectively.

Contingency measure:

- Wheat: Vegetative : Apply irrigation at CRI stage. If require, gap filling should be

done. Apply recommended dose of top dressing of nitrogenous fertilizer. Carried out weeding and inter-culturing operations.

- Mustard: Reproductive : For control of powdery mildew of mustard, spray sulfur 80 WP 25 g or Dinocap 48 EC 5 ml or Hexaconazole 5 EC 5 ml per 10 liter water. spray should be done after 15 days interval according to intensity of disease. Inter-culturing and weeding is advised in late sown mustard.
- Tobacco (Rustica) : Gap filling, inter-culturing and hand weeding in established transplanted crop is advised.
- Cotton: Harvesting: Pick the cotton during morning hours before evaporation of dew for better quality.
- Chilli: For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Tomato: There is possibility of incidence of spotted wilt virus, spray Carbendenzim (50 % WP) 5 g in 10 liter water at 10 to 12 days interval.
- Castor : boll development: Semi looper : Apply supplementary dose of nitrogen @ 40 kg/ha in form of urea. Spray Quinalphos 20 ml in 10 liters of water at 15 days interval.
- Vegetable Crop: Growth: Due to variable weather farmers are advised to constant monitoring against attack of pest and disease in vegetable crop, if symptom observed, take protection measures as per recommendation when sky remain clear.
- Cattle: Keep animal shed hygienic and clean to avoid flies and mosquitoes. Disease (like, Anthracis, milk fever and Brucellosis) infected animals to regular check-up and regular vaccination for the animal.

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

24-12-2021/(0800 to 0827) GMT
 24-12-2021/(1330 to 1357) IST

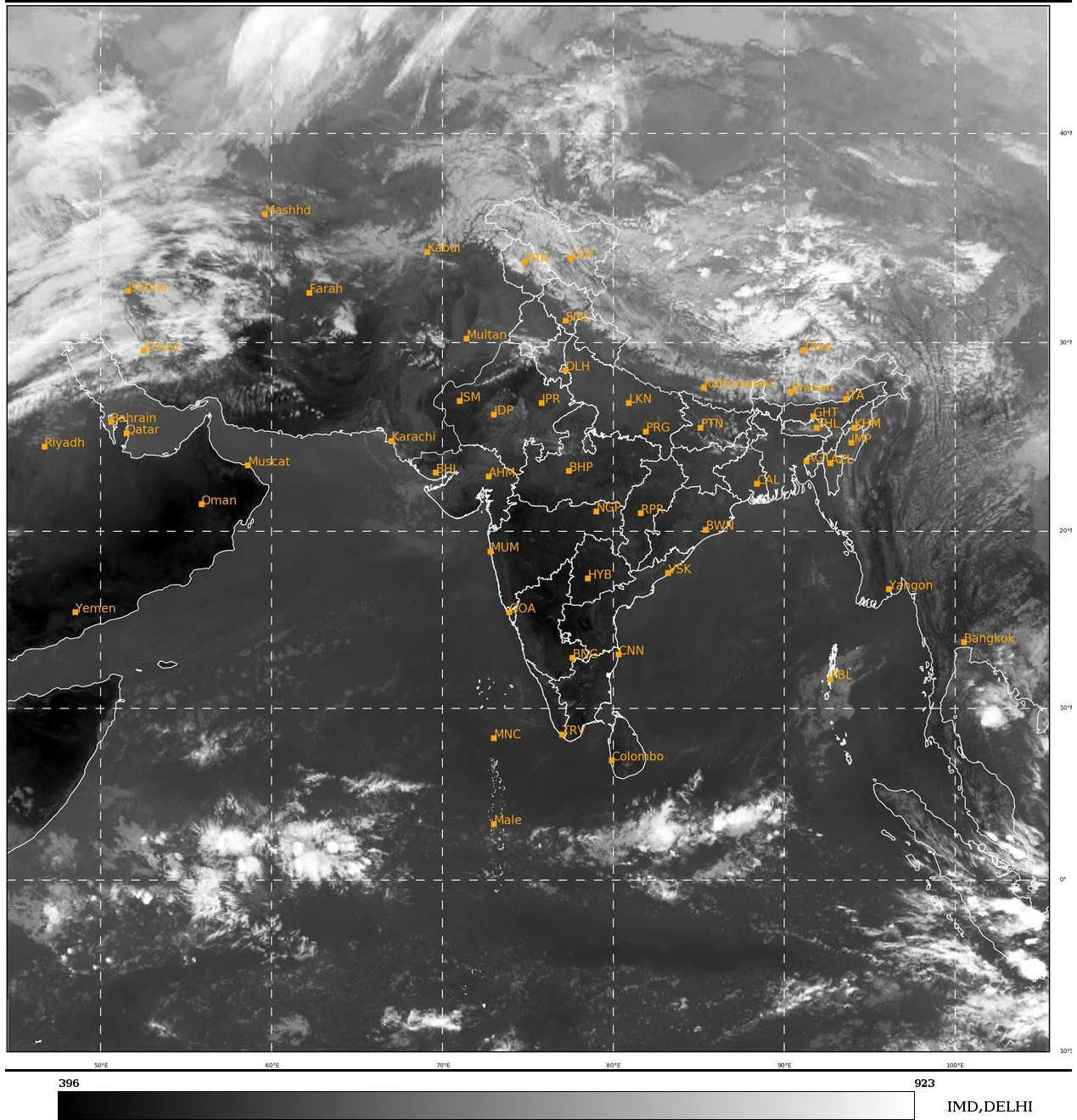


Figure: 1. Latest available satellite picture as on 24 Dec 2021 at 1357 Hrs (IST). (Source: IMD).

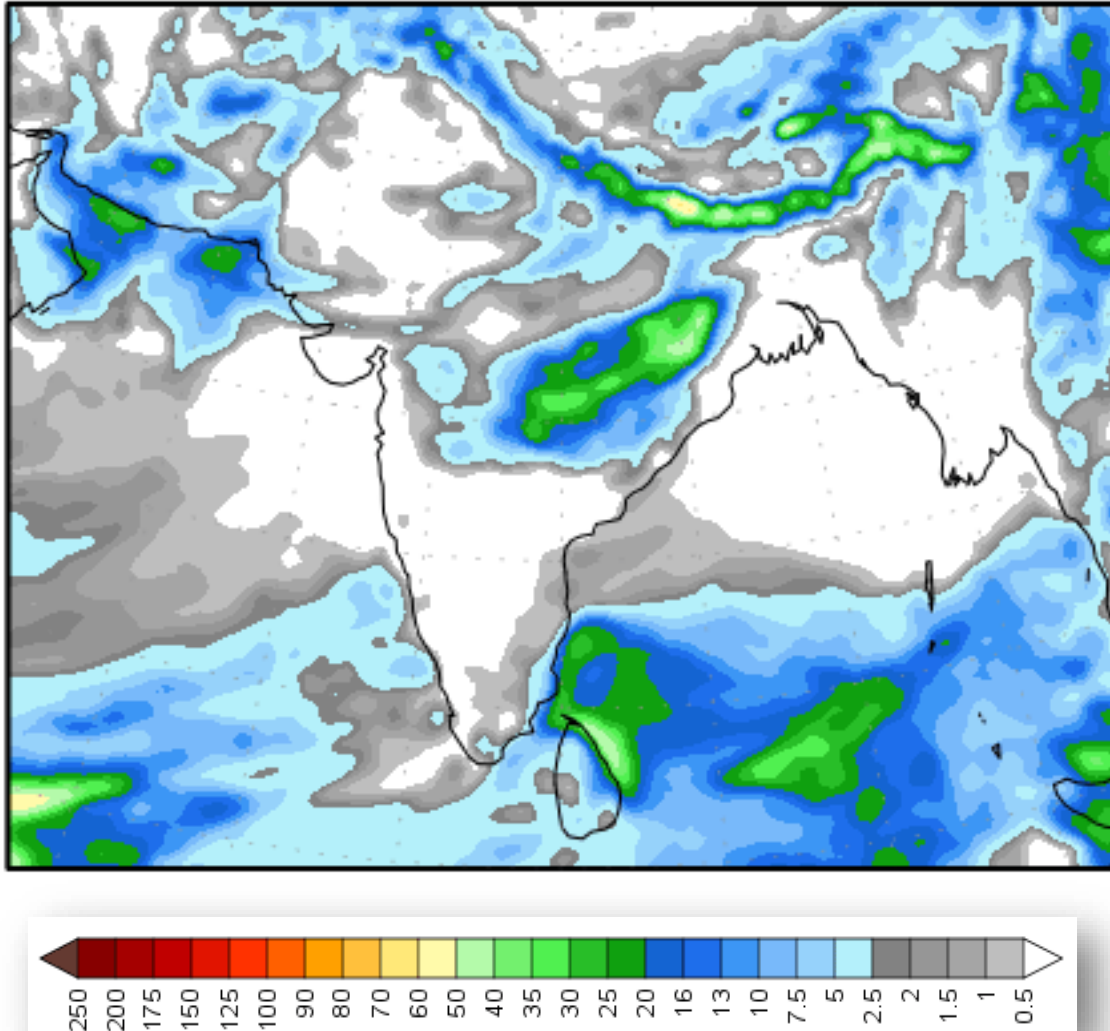


Figure:2. Precipitation forecast for 24 Dec to 01 Jan 2022 (Source: NOAA NCEP).

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