

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 08 December 2021

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Significant Weather Features (IMD)

- A feeble Western Disturbance seen as a trough in mid tropospheric westerlies roughly along Long. 73°E to the north of Lat. 29°N. With the gradual eastwards movement of the trough, fall in minimum temperatures by 2-4°C very likely over most parts of Northwest, west and Central India leading to cold wave conditions over north Rajasthan during next 3 days.
- A trough in easterlies runs from Southwest Bay of Bengal to central parts of north Bay of Bengal in lower levels. With the westwards movement of the trough, rainfall activity is likely to increase over east peninsular coast during 08th-09th December and over Odisha on 09th December. Isolated heavy rainfall activity is likely over coastal Tamilnadu on 08th & 09th and over Coastal Andhra Pradesh on 09th December, 2021.
- Dense fog very likely in isolated pockets over Northeast India during next 2 day.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Arunachal Pradesh; and at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikala and Kerala & Mahe.
- Fog observed (at 0830 hrs IST of today): Shallow to Moderate Fog observed in isolated pockets over South Interior Karnataka, East Uttar Pradesh, East Madhya Pradesh, Bihar, Gangetic West Bengal, Assam & Meghalaya and Tripura.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Nil.
- Minimum Temperature Departures (as on 08-12-2021): Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Saurashtra & Kutch; at isolated places over East Madhya Pradesh, Vidarbha and Bihar; appreciably above normal (3.1°C to 5.0°C) at most places over Coastal Andhra

Pradesh & Yanam; at many places over Odisha, Gangetic West Bengal, Jharkhand, Chhattisgarh; at a few places over Gujarat Region, Marathawada, Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Madhya Maharashtra, Telangana, Rayalseema, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal; at many places over Sub-Himalayan West Bengal & Sikkim, West Madhya Pradesh, Konkan & Goa, Andaman & Nicobar Islands; at isolated places over Punjab, Uttarakhand, West Uttar Pradesh, South Interior Karnataka and near normal over rest parts of the country. Today, the Lowest minimum temperature of 4.5°C reported at Churu (West Rajasthan) over the plains of the country.

- Maximum Temperature Departures (as on 07-12-2021): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Telangana and Coastal Andhra Pradesh & Yanam; at isolated places over Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Assam & Meghalaya, Rayalaseema and Rayalaseema; at a few places over West Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim; at isolated places over Odisha, Saurashtra & Kutch, Interior Karnataka and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Himachal Pradesh, Gangetic West Bengal and West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over Coastal Karnataka; at a few places over East Rajasthan, Gujarat region and Andaman & Nicobar Islands; at isolated places over Madhya Maharashtra and East Madhya Pradesh and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 35.2°C was reported at Alapuzha (Kerala).

Weather Warning during the next 5 days (IMD)

- 08 December (Day 1): Cold wave conditions very likely at isolated places over north Rajasthan. Dense fog very likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heavy rainfall very likely at isolated places over coastal Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal.
- 09 December (Day 2): Cold wave conditions very likely at isolated places over north Rajasthan. Dense fog very likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning very likely

at isolated places over Tamil Nadu, Puducherry & Karaikal, Rayalaseema and Coastal Andhra Pradesh & Yanam.

- 10 December (Day 3): Cold wave conditions very likely at isolated places over north Rajasthan. Thunderstorm accompanied with lightning very likely at isolated places over Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam.
- 11 December (Day 4): Nil.
- 12 December (Day 5): Heavy rainfall likely at isolated places over Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 08 Dec to 16 Dec 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)

Gujarat

Weather condition:

The actual maximum temperature was 0.6 °C lower and actual minimum temperature was 2.1 °C higher as compare to its normals. Total BSS was 49.0 hrs. with an average of 7.0 hrs. The daily average evaporation and wind speed was 2.9 mm and 3.2 km/hr respectively. The daily average RH during morning and afternoon was 83.0 % and 53.0 % respectively.

Contingency measure:

- Soil should be prepared by horizontal and vertical tractor ploughing for the rabi crops. Prepare the land for wheat sowing. Select the varieties like GW-322, GW-273, GW-496, GW-366, GW-451 for timely sowing and varieties like Lok-1, GW-173 for for late sowing. Sowing of wheat @ 22.5 cm spacing using seed rate @ 100 -120 kg/ha. Application of 60 kg Nitrogen and 60 kg Phosphorus per hectare as basal fertilizer dose.
- Mustard: vegetative : Irrigate the crop after 30 DAS. Apply top dressing of remain 50 % dose of nitrogen after next day of irrigation. Inter-culturing and hand weeding should be done in early sown mustard.
- Tobacco (Rustica) : Gap filling, inter-culturing and hand weeding in established transplanted crop is advised.
- Paddy: Paddy : Harvest mature crop and keep in the field for sun dry. Threshing

and winnowing of harvested dry paddy and send to market.

- 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.
- Castor: boll development: Semi looper : Apply supplementary dose of nitrogen @ 40 kg ha⁻¹ 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.
- Mango: Farmers are advised to clean the orchards by removing dead plant debris from the field.
- 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

08-12-2021/(0830 to 0857) GMT
 08-12-2021/(1400 to 1427) IST

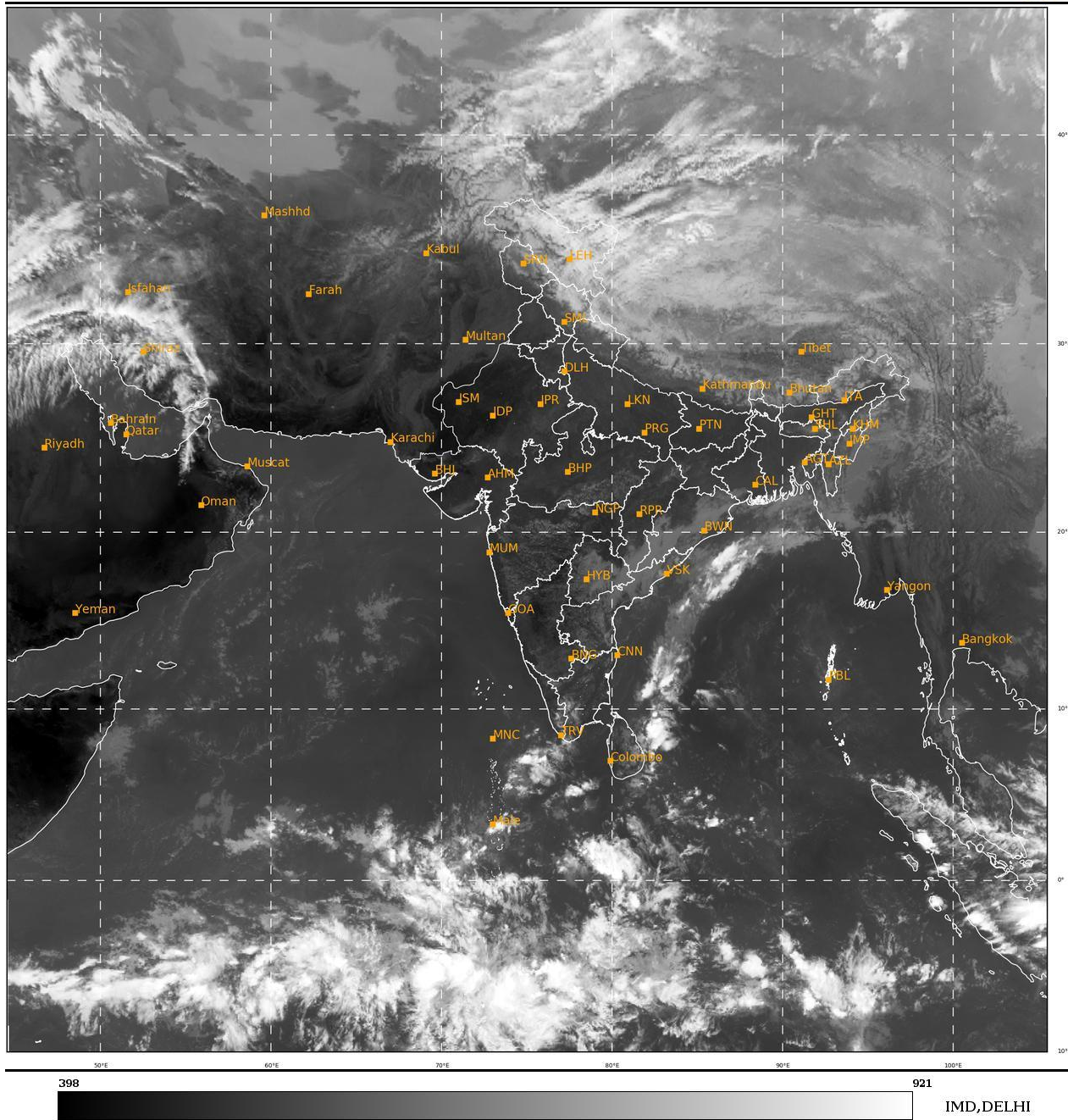


Figure: 1. Latest available satellite picture as on 08 Dec 2021 at 1427 Hrs (IST). (Source: IMD).

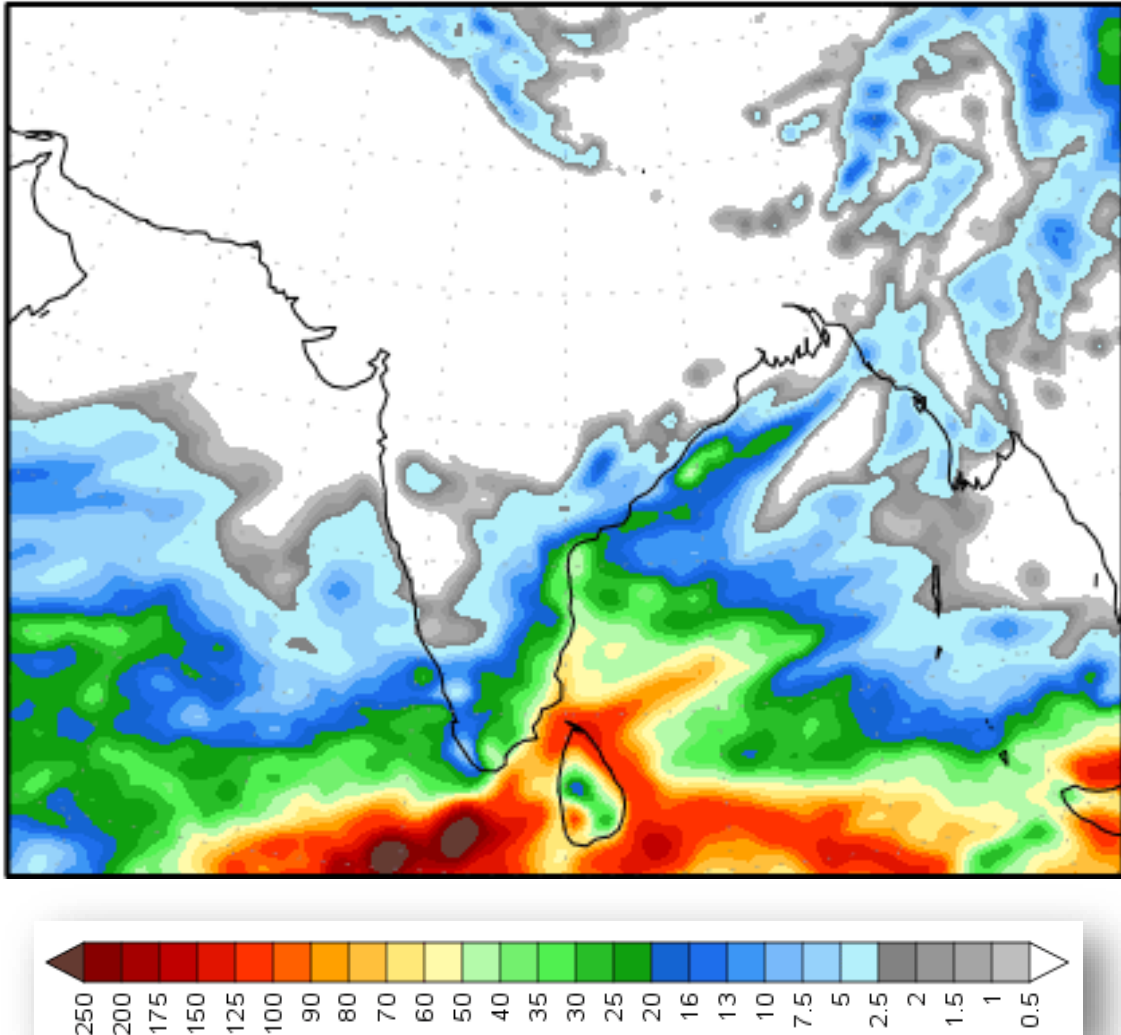


Figure:2. Precipitation forecast for 08 Dec to 16 Dec 2021 (Source: NOAA NCEP).

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