

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 30 January 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Dry northwesterly winds over plains of North India & adjoining parts of central India are likely to prevail during next 2-3 days. Under its influence:
 - (i) Cold Wave conditions in isolated/some pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh and Kutch region during next 2 days and decrease in spatial distribution and intensity thereafter.
 - (ii) Dense to Very Dense Fog in isolated/some pockets very likely over East Uttar Pradesh during next 3 days and Dense Fog in isolated pockets also very likely over Punjab, Haryana, Chandigarh & Delhi, Rajasthan, West Uttar Pradesh, Odisha during next 2 days and decrease in spatial distribution and intensity thereafter.
 - (iii) Cold Day to Severe Cold Day conditions in isolated/some pockets very likely over East Uttar Pradesh and Bihar and Cold Day conditions over Madhya Pradesh during next 2-3 days.
- A fresh Western Disturbance is likely to affect Western Himalayan Region from 31st January night onwards. Under its influence, isolated to scattered rain/snow with moderate thunderstorm & lightning likely over the region during 01st-02nd February, 2021.
- Another Western Disturbance, in quick succession, very likely to affect Western Himalayan Region from 02nd February and plains of Northwest India from 03rd February. Scattered to fairly widespread light to moderate rain/snow with isolated thunderstorm & hail is likely over Western Himalayan region during 03rd-05th February.
- Under the influence of interaction between southwesterlies associated with this Western Disturbance and lower level southeasterlies from the Bay of Bengal, isolated to fairly widespread light to moderate rain/thundershowers with isolated thunderstorm activity is likely over the plains of Northwest India & adjoining Central India during 03rd-06th with maximum intensity on 04th February, 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 a few places over Odisha and Andaman & Nicobar Islands and at isolated places over Arunachal Pradesh, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh and Tamil Nadu.
- Thunderstorm observed (during 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Odisha.
- Fog observed (at 0830 hours IST of today): Dense to Very Dense Fog in many pockets over East Uttar Pradesh; Very Dense Fog in isolated pockets over Sub-Himalayan West Bengal; Moderate to Dense Fog in isolated pockets over Bihar and Moderate Fog in isolated pockets over Uttarakhand and West Uttar Pradesh. Today, Cold Wave to Severe Cold Wave conditions in isolated places over Saurashtra & Kutch and East Madhya Pradesh and Cold Wave conditions in isolated places over West Madhya Pradesh and Bihar.
- Yesterday, Severe Cold Day conditions observed in most pockets over East Uttar Pradesh; in some pockets over Bihar and in isolated pockets over West Uttar Pradesh and Cold Day conditions in some pockets over Madhya Pradesh and in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad.
- Maximum Temperature Departures as on 29-01-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Assam & Meghalaya; at many places over Arunachal Pradesh and at isolated places over Coastal Andhra Pradesh & Yanam. They were markedly below normal (- 5.1°C or less) at most places over East Uttar Pradesh; at many places over Jharkhand; at a few places over Madhya Pradesh, Bihar, West Uttar Pradesh, Odisha, Gangetic West Bengal and Chhattisgarh and at isolated places over Nagaland, Manipur, Mizoram & Tripura; appreciably below normal (-3.1°C to -5.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim and Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Saurashtra & Kutch; below normal (-1.6°C to -3.0°C) at most places over Haryana, Chandigarh & Delhi and East Rajasthan; at many places over Gujarat Region, Madhya Maharashtra and Vidarbha and at a few places over Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.2°C was reported at Mangalore (Coastal Karnataka) over the country.

- Minimum Temperature Departures as on 30-01-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Telangana and Andaman & Nicobar Islands and at isolated places over Odisha and Tamil Nadu, Puducherry & Karaikal ; above normal (1.6°C to 3.0°C) at many places over North Interior Karnataka, Chhattisgarh and Coastal Andhra Pradesh & Yanam; at a few places over Madhya Maharashtra, Marathwada and Rayalseema; at isolated places over South Interior Karnataka. They are markedly below normal (-5.1°C or less) at many places over East Madhya Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, East Rajasthan, West Madhya Pradesh and Bihar; appreciably below normal (- 3.1°C to -5.0°C) at many places over Uttarakhand, Haryana, Chandigarh & Delhi and Uttar Pradesh; at a few places over Himachal Pradesh; below normal (- 1.6°C to -3.0°C) at a few places over Jharkhand and Gujarat Region and at isolated places over Konkan & Goa and Vidarbha and near normal over rest parts of the country. Today, the lowest minimum temperature of 0.5°C is reported at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 30 January (Day 1): Dense to Very Dense Fog in some pockets very likely over East Uttar Pradesh; in isolated pockets over SubHimalayan West Bengal & Sikkim and Dense Fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Bihar, west Assam and Odisha. Cold Day to Severe Cold Day conditions in some pockets very likely over East Uttar Pradesh; Cold Day conditions in some pockets with Severe Cold Day in isolated pockets over Bihar and Cold Day conditions in isolated pockets over West Uttar Pradesh and Madhya Pradesh. Cold Wave to Severe Cold Wave conditions in some pockets very likely over Punjab; in isolated pockets over East Rajasthan and East Madhya Pradesh and Cold Wave conditions in some pockets over Haryana, Chandigarh & Delhi and in isolated pockets over Uttar Pradesh, West Rajasthan, West Madhya Pradesh, Chhattisgarh, Bihar and Kutch region. Ground Frost conditions at isolated places very likely over Uttarakhand, Punjab, Haryana, north Rajasthan and East Madhya Pradesh.
- 31 January (Day 2): Dense to Very Dense Fog in isolated pockets very likely over East Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim and Dense Fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Bihar, west Assam and Odisha. Cold Day to Severe Cold Day conditions in isolated pockets very likely over East Uttar Pradesh; Cold Day conditions in some pockets with Severe Cold Day in isolated pockets over Bihar and Cold Day

conditions in isolated pockets over Madhya Pradesh. Cold Wave conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Odisha and Kutch region.

- 01 February (Day 3): Dense to Very Dense Fog in isolated pockets very likely over Sub-Himalayan West Bengal & Sikkim and Dense Fog in isolated pockets over East Uttar Pradesh and Bihar. Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Bihar. Cold Wave conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, East Madhya Pradesh and Odisha. Thunderstorm accompanied with lightning at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad. Strong Winds (speed reaching 40-50 kmph) very likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 02 February (Day 4): Dense Fog in isolated pockets likely over Bihar. Cold Day conditions in isolated pockets likely over Bihar. Thunderstorm accompanied with lightning at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh. Strong Winds (speed reaching 40-50 kmph) likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 03 February (Day 5): Thunderstorm accompanied with lightning & hail at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Uttarakhand and with lightning at isolated places over Punjab and north Haryana & Chandigarh. Strong Winds (speed reaching 40-50 kmph) likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 30 January to 07 February 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)

Assam

Weather condition:

Weather during the last week was mainly clear. Daily average maximum temperature was 23.6°C which was 1.1 above normal and the average daily minimum temperature was 9.4°C which was 1.3 below normal for the week. Total BSSH was 35.3hrs with an average of 5.9 hrs. The daily average evaporation rate was 1.0 mm/day and the average daily wind speed during the week 1.0 kmph. Daily average RH during morning and afternoon hour was 100% and 59.5% respectively.

Contingency measure:

- Boro rice (transplanting): Farmers are advised to maintain standing water of 5±2 cm depth in the boro rice fields. Insert around 7-8 numbers of bamboo T perches per bigha of land of paddy. It will act as a resting place for predatory birds that will devour insect larvae and egg masses.
- Potato (Tuber formation): To control red ant and other soil insects, Thimet 10G should be applied in the soil during earthing up @ 2-3 kg per bigha. Alternatively, application of Chlorantraniliprole 18.5% SC in the furrows is effective against the pest. Application of mustard oil cake @ 20 kg/bigha at the time of earthing up reduces red ant and white ant infestation to a great extent.
- Okra (Land preparation): Taking advantage of the predicted very light rainfall on 20th and 21st January, land preparation may be started for okra cultivation. Collect seeds of recommended varieties like Pusa Sawani, Arka Anamika, Parvani Kranti or other local varieties for sowing from this week. About 2 kg seeds are required for sowing one bigha of land.
- Poultry birds (Avian Cholera): Vaccinate the 1 month old ducklings with cholera vaccine in order to immunize them against avian cholera. Install gunny bags or plastic sheath curtains on the side walls of shed to reduce wind chilling effect. Care should be taken not to restrict ventilation.
- Fishery (various): As there is a gradual drop in the water level in pond during this post-monsoon season, the fishery owners may go for partial harvesting of marketable sized fish (>700gm). Measures should be taken to prevent Epizootic Ulcerative Syndrome (EUS) in fish by following dip treatment of fishes in 500 ppm potassium permanganate solution.

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

30-01-2021/(0800 to 0827) GMT
30-01-2021/(1330 to 1357) IST

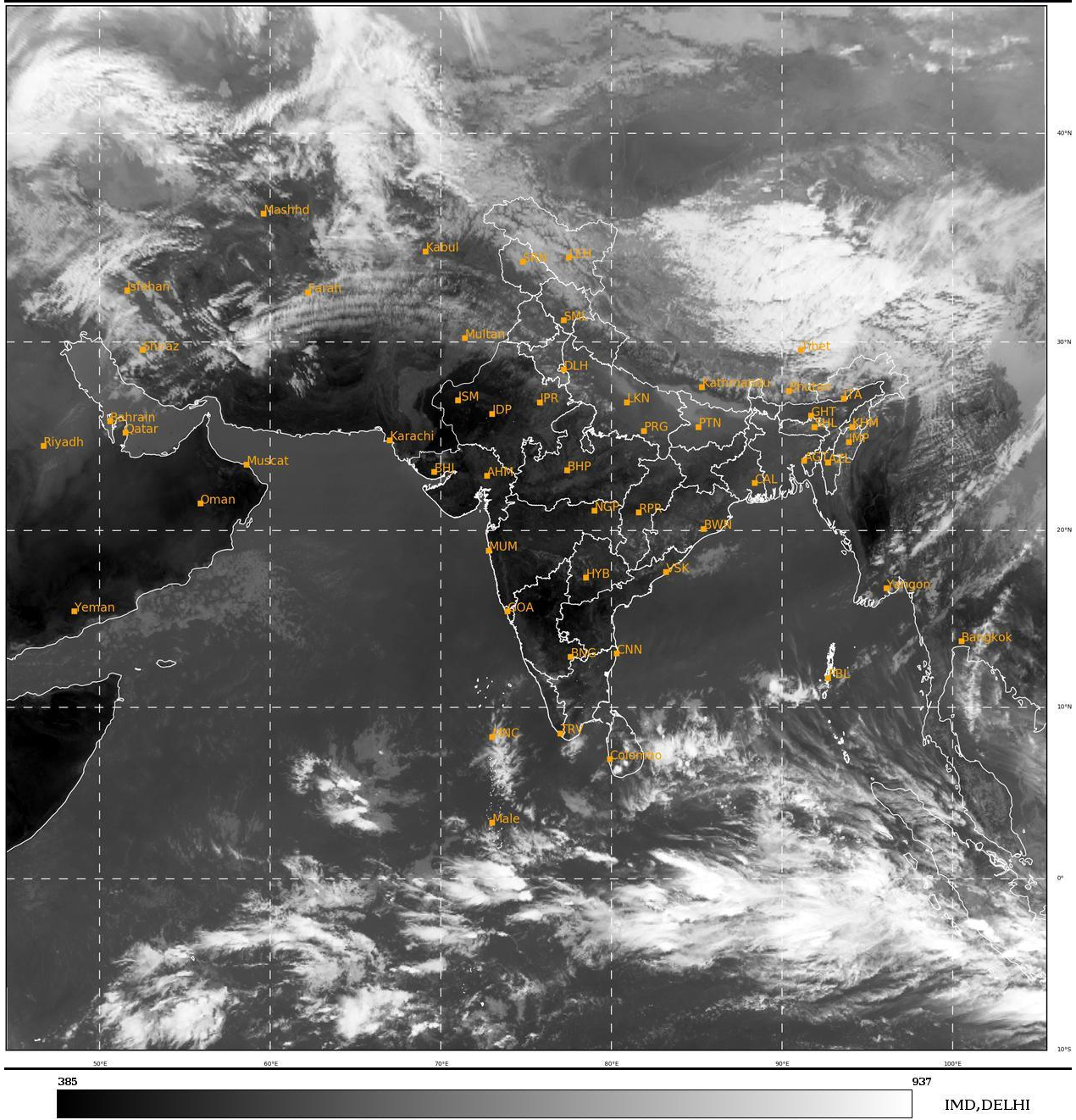


Figure: 1. Latest available satellite picture as on 30 January 2021 at 1357 Hrs (IST).
(Source: IMD).

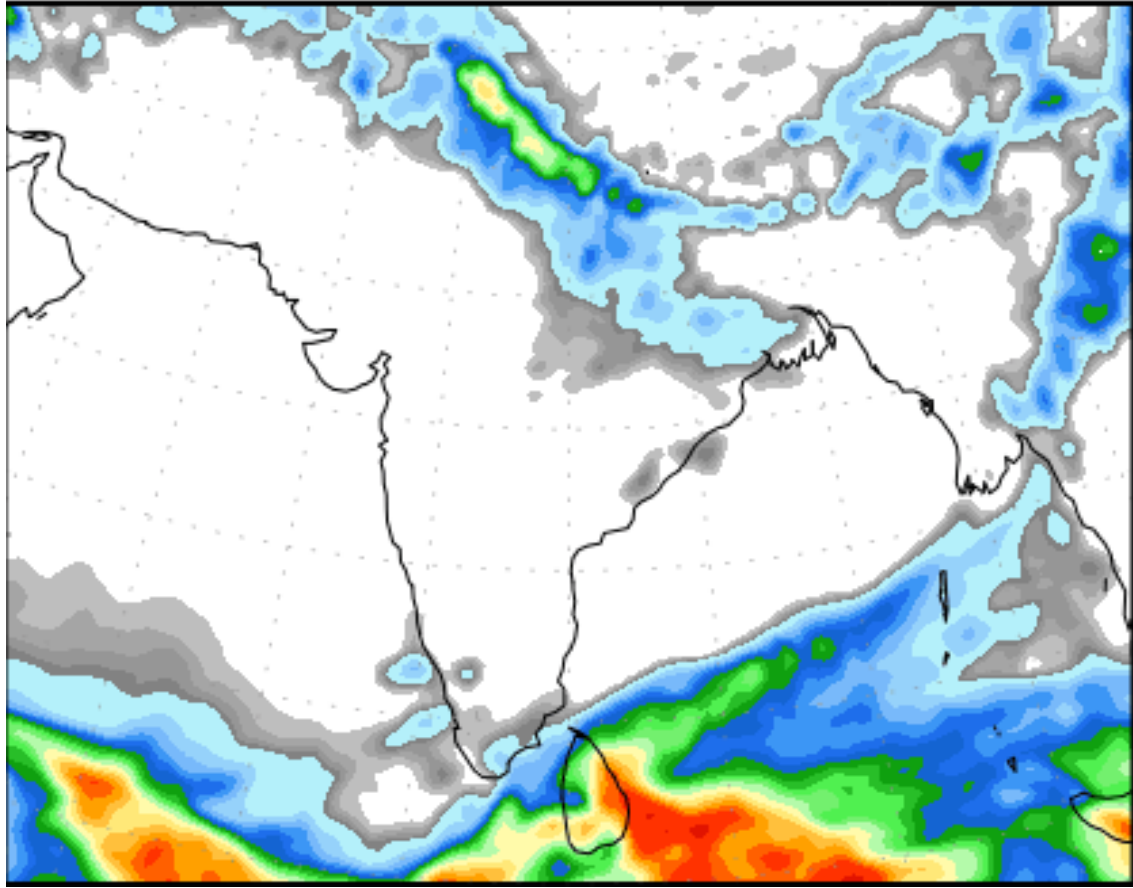


Figure:2. Precipitation forecast for 30 Jan to 07 February 2021 (Source: NOAA NCEP).

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