

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 02 February 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A Western Disturbance (WD) as a trough in middle & upper tropospheric levels runs along Long.58°E to the north of Lat.28°N. Under its influence, an induced cyclonic circulation/Low is very likely to form over West Rajasthan & neighbourhood by tonight. High moisture feeding from Arabian Sea and Bay of Bengal to northwest India at lower & middle tropospheric levels is very likely to begin from today night till 03rd February, 2022.
 - i) Fairly widespread to widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region during 02nd to 04th February. Isolated hailstorm likely over Himachal Pradesh on 02nd & 03rd and over Uttarakhand on 03rd & 04th February, 2022.
 - ii) Isolated heavy rainfall/snowfall also very likely over Himachal Pradesh on 03rd and over Uttarakhand on 03rd & 04th February, 2022.
 - iii) Scattered light rainfall very likely over Punjab, Haryana & Chandigarh on 02nd; fairly widespread to widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh, Delhi and Uttar Pradesh 03rd & 04th February with its peak intensity on 03rd February, 2022.
- The WD and its induced Cyclonic Circulation/Low is very likely to move east-northeastwards during subsequent two days, as a result there will be high moisture feeding from Bay of Bengal to East & adjoining northeast India on 03rd & 04th February, 2022 due to confluence between westerlies and southeasterlies from the Bay of Bengal at lower tropospheric levels.
 - i) Fairly widespread to widespread light/moderate rainfall with thunderstorm/lightning likely over Bihar & Jharkhand on 03rd & 04th and over West Bengal & Sikkim and Odisha on 04th with possibility of isolated hailstorm over the region 04th February. Isolated heavy rainfall also likely over Bihar, Jharkhand and West Bengal & Sikkim on 04th February, 2022.
 - ii) Widespread light/moderate rainfall with thunderstorm/lightning likely over northeast India on 04th & 05th February, 2022. Isolated heavy rainfall/snowfall likely over Arunachal Pradesh & heavy rainfall over west Assam & Meghalaya on 04th February, 2022.

- Under the influence of a fresh Western Disturbance; isolated to scattered rainfall/snowfall very likely over Western Himalayan Region on 06th & 07th February, 2022.
- Cold day to severe cold day conditions in isolated pockets very likely over East Uttar Pradesh and Cold day conditions over West Uttar Pradesh during next 12 hours and abate thereafter.
- Dense Fog conditions in isolated pockets in night/morning hours very likely over East Uttar Pradesh, Bihar, West Bengal & Odisha during next 24 hours; over Punjab, Haryana, Chandigarh & Delhi and Rajasthan on 05th & 06th February, 2022.
- 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 most places over Assam & Meghalaya, Arunachal Pradesh; at many places over Sub-Himalayan West Bengal & Sikkim & Nagaland, Manipur, Mizoram & Tripura and at isolated places over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam and Kerala & Mahe.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Assam & Meghalaya and at isolated places over Arunachal Pradesh.
- Cold Day to Severe Cold Day conditions prevailed in isolated pockets over Uttar Pradesh.
- Fog observed (at 0830 hours IST of today): Dense to very Dense Fog in many parts over East Uttar Pradesh; in some parts over Punjab; in isolated pockets over Haryana-Chandigarh; Moderate to Dense Fog in isolated pockets over Uttarakhand and Shallow to Moderate Fog in isolated pockets over Himachal Pradesh, Delhi, West Uttar Pradesh, northwest Rajasthan, Bihar, West Bengal & Sikkim, Odisha, Tripura and Gujarat state.
- Minimum Temperature Departures (as on 02-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at many places over Kerala & Mahe; at a few places over West Rajasthan, Madhya Pradesh, Gujarat Region and South Interior Karnataka; at isolated places over Haryana, Chandigarh & Delhi, Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal. They are appreciably below normal (- 3.1°C to -5.0°C) at a few places over Andaman & Nicobar Islands; at isolated places over Konkan & Goa; below normal (- 1.6°C to -3.0°C) at most

places over Vidarbha; at many places over Sub-Himalayan West Bengal & Sikkim and Marathwada; at a few places over Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra and North Interior Karnataka; at isolated places over East Uttar Pradesh, Bihar, Odisha and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. The Lowest minimum temperature of 5.0°C reported at Amritsar (Punjab) and Sikar (East Rajasthan) over the plains of the country.

- Maximum Temperature Departures (as on 01-02-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over East Rajasthan and Coastal Karnataka; at a few places over West Rajasthan, Madhya Pradesh, Vidarbha and Kerala & Mahe and at isolated places over Jammu & Kashmir, Himachal Pradesh, Telangana, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands. They were markedly below normal (-5.1 or less) at a few places over Assam & Meghalaya and at isolated places over Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; appreciably below normal (-3.1°C to -5.0°C) at a few places over Uttarakhand and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Saurashtra & Kutch and near normal over rest parts of the country. Yesterday, the Highest maximum temperature of 36.2°C was reported at Punalur (Kerala) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 2 February (Day 1): Dense to Very Dense Fog in isolated pockets very likely over East Uttar Pradesh and Dense Fog in isolated pockets over Bihar, West Bengal & Sikkim and Odisha. Cold Day to Severe Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Cold Day conditions in isolated pockets over West Uttar Pradesh. Thunderstorm accompanied with lightning & hail at isolated places very likely over Himachal Pradesh. Strong Winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Northeast Arabian Sea and along & off north Gujarat coast. Fishermen are advised not to venture into these areas.
- 3 February (Day 2): Heavy rainfall/snowfall at isolated places very likely over Himachal Pradesh and Uttarakhand and heavy rainfall/thundershowers at isolated places over Punjab, Haryana Chandigarh and northwest Uttar Pradesh. Thunderstorm accompanied with lightning and hail at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Chhattisgarh and with lightning at isolated places over Rajasthan, East Madhya Pradesh, Bihar, Jharkhand, West Bengal & Sikkim and Odisha. Strong Winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over

Northeast Arabian Sea and along & off north Gujarat coast. Fishermen are advised not to venture into these areas.

- 4 February (Day 3): Heavy rainfall/snowfall at isolated places likely over Uttarakhand and Arunachal Pradesh and heavy rainfall at isolated places over Bihar, Jharkhand, West Bengal & Sikkim and west Assam & Meghalaya. Thunderstorm with lightning and hail at isolated places likely over Uttarakhand, Bihar, Jharkhand, West Bengal & Sikkim, Odisha and Assam & Meghalaya and with lightning at isolated places over Uttar Pradesh, Chhattisgarh, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura. Dense Fog in isolated pockets very likely over Punjab, Haryana-Chandigarh-Delhi and West Rajasthan.
- 5 February (Day 4): Thunderstorm with lightning at isolated places likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Dense Fog in isolated pockets very likely over Punjab, Haryana-Chandigarh-Delhi and Rajasthan.
- 6 February (Day 5): No Weather Warning.
- The weather outlook for seven days i.e., 02 Feb to 10 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)

Tamil nadu

Weather condition:

With respect to daily rainfall, rainfall occurred dry weather prevailed over Tamil Nadu on 23.01.2022, at isolated places over Tamil Nadu on 24.01.2022, 25.01.2022 and 26.01.2022 during this week. Minimum temperature range of 20°C - 26°C prevailed over the state except Kodaikanal and Uthagamandalam (04°C - 10°C) during the period under report. Maximum temperature range of 29°C - 35°C prevailed over the state except Kodaikanal and Uthagamandalam (16°C - 21°C) during the period under report. Maximum temperature: 33.8°C (normal 32.4°C), minimum temperature: 22.0°C (normal 17.8°C), rainfall: 0.0 mm (normal 2.0 mm). The maximum and minimum temperature was 1.4°C and 4.2°C above normal respectively and the rainfall was 2.0 mm below normal across the week. General weather situation in Tamil Nadu:

Contingency measure:

- Block level forecast: Wind speed of 8-31 kmph is predicted for next five days. Very light rainfall is predicted for next five days.
- Irrigated crops: Water management -Based on the crop stage and local weather,

Irrigation may be given.

- Rainfed and Irrigated crops: All the stage -Farmers are advised to go for crop specific Plant protection and nutrient spray
- Cotton: Boll development to harvest stage-Prevail weather favours Aphid infestation. Spray Thiamethoxam 25% WG 100 g/ha (or) Imidacloprid 17.8% SL 100 -125 ml/ha. Prevail weather favours Whitefly incidence. Spray Acetamiprid 20% SP 100 g/ha (or) Chlorpyrifos 20% EC 1250 ml/ha Prevail weather favours Pink bollworm incidence. Spray Spraying any one of the following insecticides: Phosalone 35% EC 2000 ml/ha (or) Triazophos 40 EC 2.5l/ha
- Paddy: Tillering and panicle initiation stage Prevailed weather is conducive for Leaf folder and Stem borer. So farmers are advised to spray Azadirachtin 0.03% 1000ml/ha. (or) Chlorontrinirole 18.5%SC @ 150g/ha. (or) Thiamethoxam 25% WG @ 100g/ha.
- Chilli: Flowering and fruiting stage-Increasing day temperature favours thrips. Spray Imidacloprid 17.8 % SL @3.0 ml/10 lit. Prevailing weather is conducive for Gram caterpillar @ Emamectin benzoate 5 % SG @ 4 g/10 lit.
- Coconut: All stages -Rugose Spiralling whitefly is noticed in the prevailed weather condition. Application of water, maida solution as spray in order to increase the population of Encarsia parasitic. Also keep yellow stick trap.
- Jasmine: Flowering stage -Prevailing weather is conducive for Blossom midge. Spray Thiamethoxam 2.5% WG @ 0.75 g/litre (or) Novaluron 3ml/lit. of water.
- Citrus: Citrus Canker-The prevailing weather condition is conducive for incidence of citrus canker disease, spray of Copper oxychloride (COC) @ 0.3% followed by 4 sprayings with Streptocyclin 100 ppm + COC @ 0.3 % at monthly intervals after pruning.
- Livestock: Chick Summer Management in Poultry: Heat stress in poultry especially broilers lead to huge economic loss.
- Signs of Heat stress: Less feed intake. Poor growth rate.
- High mortality: Management: Long axis of the poultry house should be in east-west direction. Poultry house should have a width not more than 22-25 ft-to allow ample ventilation. Wet gunny bags should be arranged on the sides of the poultry house to prevent the entry of direct sun-rays into the shed. Feeding should be done in cool hours of the day. Vitamin C supplementation should be done. Cool drinking water should be provided. Addition of B-complex vitamins and electrolytes in the water will help to overcome the Heat Stress. Space allowance to the birds may be increased to 20% to reduce stocking density.

- Dairy animals: Farmers may provide 30-50 gram of mineral mixture per animal to improve the production and health status. To avoid parasitic infestation in dairy animals farmers are advised to deworm and detick the animals in nearby veterinary dispensary.
- Common Fish: Farmers are advised to measure the pond water pH daily and apply dolomite lime at 150 kg/ ha may be applied at a weekly interval. Farmers are advised to add 1-3% of fish oil in daily fish feed to enhance the feed intake and fat content supplements.

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

02-02-2022/(0800 to 0827) GMT
02-02-2022/(1330 to 1357) IST

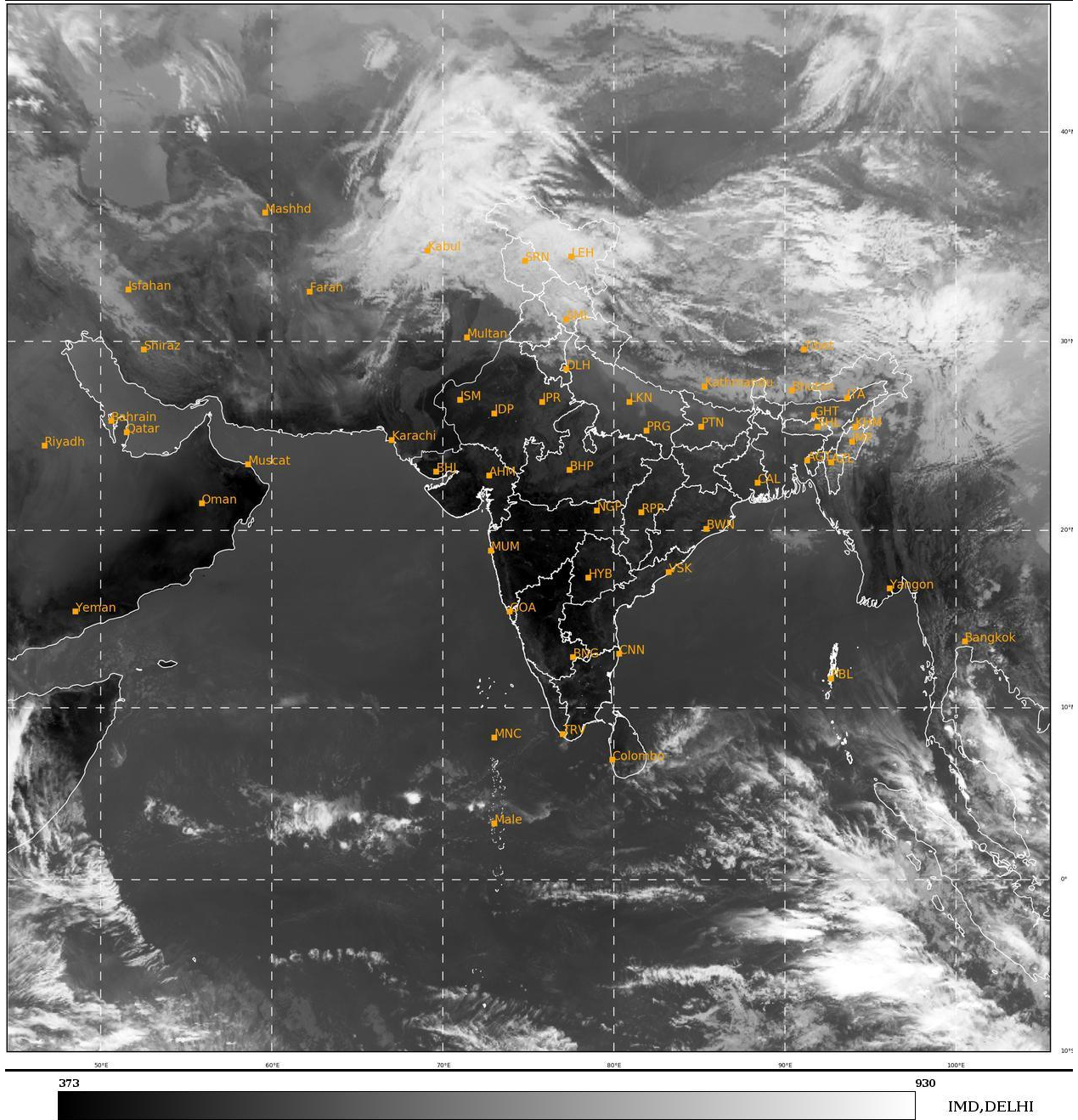


Figure: 1. Latest available satellite picture as on 02 Feb 2022 at 1357 Hrs (IST). (Source: IMD).

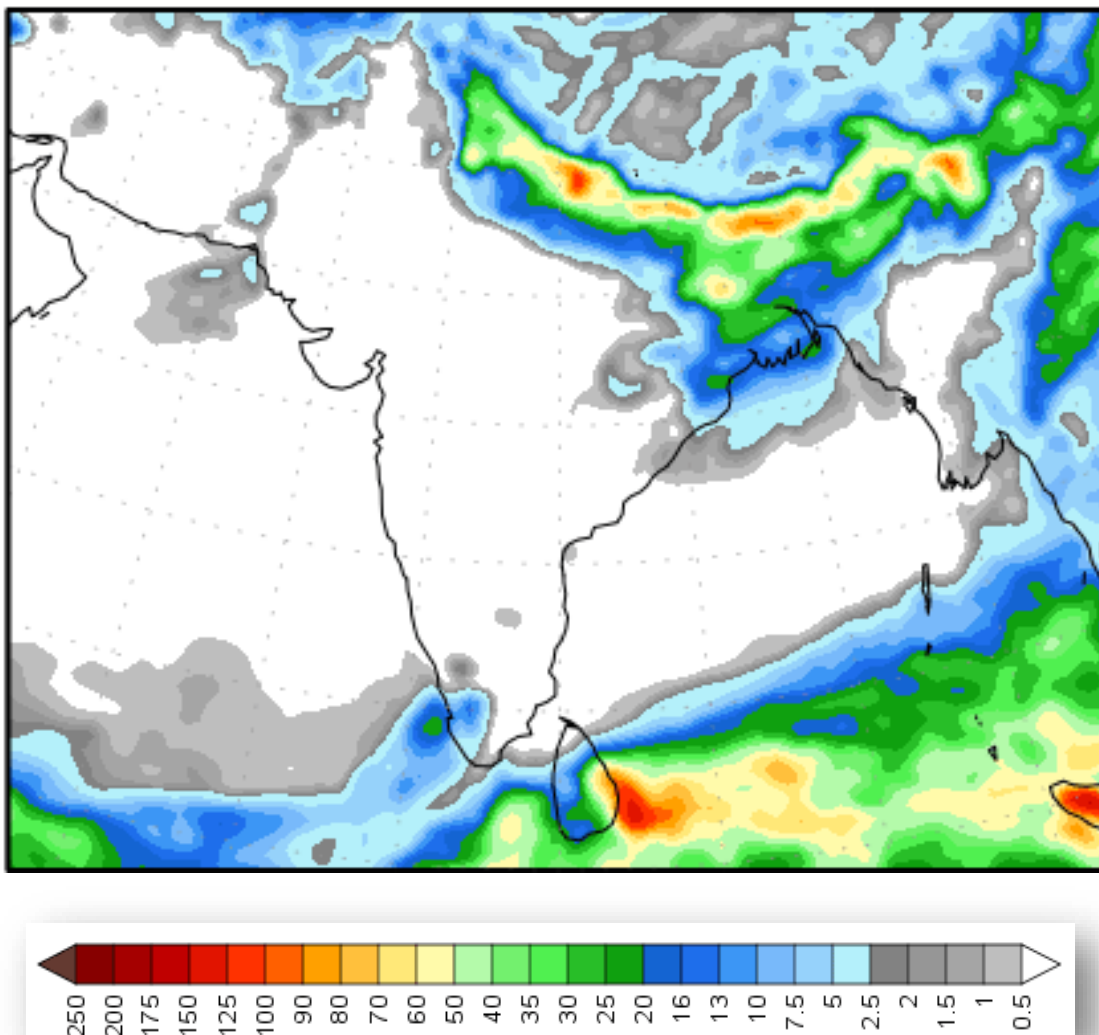


Figure:2. Precipitation forecast for 02 Feb to 10 Feb 2022 (Source: NOAA NCEP).

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