

All India Coordinated Research Project on Agrometeorology
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Daily Crop Weather Information as on 03 January 2022

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Significant Weather Features (IMD)

- Two consecutive active Western Disturbances (03-05 January 2022 and 06-09 January 2022) very likely to affect Northwest & adjoining central India during next 7 days.
- A Western Disturbance as a trough in westerlies in middle tropospheric levels runs roughly along Long. 50°E to the north of Lat. 30°N. Under its influence, an induced cyclonic circulation very likely to form over West Rajasthan & neighbourhood on 05th January, 2022. In addition high moisture feeding from Arabian Sea is very likely over northwest India mainly on 04th & 05th January, 2022. Under its influence:
 - i) Fairly widespread to widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region during 03rd to 05th January. Isolated heavy rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 04th & and isolated heavy to very heavy on 05th January; and isolated heavy rainfall/snowfall also likely over Himachal Pradesh & Uttarakhand on 05th January.
 - ii) Isolated Hailstorm very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 04th and over Uttarakhand on 05th January, 2022.
 - iii) Scattered to fairly widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, West Uttar Pradesh and West Madhya Pradesh during 04th to 06th January.
 - iv) Isolated heavy rainfall is very likely over Punjab on 05th January.
 - v) Isolated thunderstorm activity accompanied with Hailstorm very likely over over Punjab, Haryana and Rajasthan on 05th January.
- Thereafter, another intense Western Disturbance is very likely to affect Northwest India from the night of 06th January onwards. Under its influence, an induced cyclonic circulation very likely to form over southwest Rajasthan & neighbourhood on 07th January, 2022. High moisture feeding from Arabian Sea is

also very likely over northwest India mainly on 07th & 08th January, 2022. Under its influence:

- i) Scattered rainfall/snowfall very likely over Western Himalayan Region on 6th January. Its intensity & distribution is very likely to increase thereafter with fairly widespread to widespread light/moderate rainfall/snowfall over the region during 07-09 January (with its peak intensity on 07th & 08th). Isolated heavy rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 07th & 08th and over Himachal Pradesh & Uttarakhand on 08th January.
- ii) Scattered to fairly widespread light/moderate rainfall/thunderstorm over plains of northwest & adjoining central India during 07-09 January with isolated hailstorm likely over Punjab, Haryana, Rajasthan Uttar Pradesh and West Madhya Pradesh on 07th & 08th January.
- No Cold Wave Conditions likely over North India during next 7 days.
- 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 a few places over Andaman & Nicobar Islands and at isolated places over Tamil Nadu, Puducherry & Karaikal.
- Heavy rainfall observed at isolated places over Tamil Nadu, Puducherry & Karaikal.
- Fog observed (at 0830 hours IST of today): Dense to very dense fog is reported at many pockets of East Uttar Pradesh; Shallow to Moderate fog at many places over Delhi, Bihar, Sub-Himalayan West Bengal and Nagaland, Manipur, Mizoram and Tripura and at isolated pockets over West Uttar Pradesh, Punjab, north Madhya Pradesh, Jharkhand and Assam & Meghalaya.
- Minimum Temperature Departures (as on 03-01-2022): Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Saurashtra & Kutch; appreciably above normal (3.1°C to 5.0°C) at most places over Gujarat Region; at many places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad and Madhya Maharashtra; at a few places over Konkan & Goa and Coastal Karnataka and at isolated places over Kerala & Mahe, Tamil Nadu Puducherry & Karaikal, West Madhya Pradesh and East Rajasthan; above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar Islands, Vidarbha, Rayalaseema and Marathwada; at a few places over Himachal Pradesh, West Rajasthan, Sub-Himalayan West Bengal & Sikkim, Telangana and Coastal Andhra

Pradesh & Yanam and isolated places over Odisha, North Interior Karnataka and East Madhya Pradesh. They are below normal (-1.6°C to -3.1°C) at many places over Haryana, Chandigarh & Delhi and isolated places over Uttar Pradesh, Gangetic West Bengal and and near normal over rest parts of the country. Today, the Lowest minimum temperature 3.4°C is reported at Churu (West Rajasthan) over the plains of the country.

- Maximum Temperature Departures (as on 02-01-2022): Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at isolated places over Assam & Meghalaya and Arunachal Pradesh; above normal (1.6°C to 3.0°C) at most places over Uttarakhand and Coastal Karnataka; at many places over Konkan & Goa and Kerala & Mahe; at a few places over Saurashtra & Kutch, Nagaland, Manipur, Mizoram and Tripura and Sub-Himalayan West Bengal & Sikkim; at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Gujarat Region, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Bihar; at isolated places over East Uttar Pradesh, Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at many places over East Madhya Pradesh and Jharkhand and and at isolated places over Odisha and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 36.1°C was reported at Mangalore(Coastal Karnataka).

Weather Warning during the next 5 days (IMD)

- 03 January (Day 1): Dense to very dense fog in isolated pockets very likely over Uttar Pradesh and dense fog in isolated pockets over Assam & Meghalaya and Tripura. Thunderstorm accompanied with lightning at isolated places very likely over Arunachal Pradesh, west Assam & Meghalaya and Nagaland. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into this area.
- 04 January (Day 2): Dense to very dense fog in isolated pockets very likely over East Uttar Pradesh and dense fog in isolated pockets over Assam & Meghalaya and Tripura. Heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm accompanied with lightning & hail at isolated places very likely over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad and Himachal Pradesh. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into this area.

- 05 January (Day 3): Heavy to very heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; heavy rainfall/snowfall at isolated places over Himachal Pradesh, Uttarakhand and heavy rainfall at isolated places over north Punjab. Thunderstorm accompanied with lightning & hail at isolated places very likely over Uttarakhand, Haryana, Chandigarh & Delhi, Punjab and Rajasthan and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Uttar Pradesh and West Madhya Pradesh.
- 06 January (Day 4):Thunderstorm accompanied with lightning & hail at isolated places likely over West Madhya Pradesh and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Madhya Pradesh and Gujarat State.
- 07 January (Day 5): Heavy rainfall/snowfall at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad.Thunderstorm accompanied with lightning & hail at isolated places likely over Rajasthan and Madhya Pradesh with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi, Punjab and West Uttar Pradesh.
- The weather outlook for seven days i.e., 03 Jan to 11 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)

Tamil nadu

Weather condition:

With respect to daily rainfall, rainfall occurred at dry weather prevailed over Tamil Nadu on 24.12.2021, 25.12.2021, 26.12.2021, 27.12.2021 and 28.12.2021, at isolated places over Tamil Nadu on 29.12.2021 and 30.12.2021 during this week.→ Minimum temperature range of 15°C-24°C prevailed over the state except Kodaikanal and Uthagamandalam (05°C-10°C) during the period under report. → Maximum temperature range of 28°C-32°C prevailed over the state except Kodaikanal and Uthagamandalam (19°C-23°C) during the period under report. →Maximum temperature: 31.7°C (normal 30.8°C), minimum temperature: 20.0°C (normal 18.8°C), rainfall: 0.0 mm (normal 7.1 mm). The maximum and minimum temperature was 0.9°C and 1.2°C above normal respectively and the rainfall was 7.1 mm below normal across the week. General weather situation in Tamil Nadu:

Contingency measure:

- Irrigated crops -Water management-Based on the crop stage and weather prevail in the local, Irrigation may be given.
- Rainfed and Irrigated crops-All the stage -Decrease in Temperature, increase in Relative humidity compared to last week favour for disease incidence. Spraying of fungicide is must. Intercultural operation Mulching is recommended to increase infiltration, decreased runoff and greater soil water availability.
- Pulses -Flowering to pod development stage- High Relative humidity with dew favours powdery mildew incidence. To control spray Carbendazim 500 g or wettable sulphur 1500g/ha or Propiconazole 500 ml/ha at initiation of the disease and 10 days later. High humidity favours leaf spot disease development. Spray Carbendazim 500 g/ha or Mancozeb 1000g /ha at initiation of the disease and 10 days later. Prevail weather favours pod borer incidence. To control spray Chlorantraniliprole 18.5% SC 100ml/ha.
- Cotton -Square to flowering stage - Prevail weather favours Aphid infestation. Acetamiprid 20% SP 50 g/ha (or) Azadirachtin 0.03% EC 500 ml/ha. Prevailed weather is conducive for stem weevil. So farmers are advised to apply of Neem cake @ 250 kg/ha (or) drenching collar region with chloropyriphos 50EC @1200ml/ha. Secondary infestation of stem weevil, wilt appears. To control spot drench with 0.05 % Benomyl or 0.1 % Carbendazim
- Paddy- Tillering 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. Nursery-Prevailed weather is conducive for Rice case worm. To control Dislodge the cases by passing a rope and drain water. Collect the cases and destroy. Spray Quinalphos 25 EC 80 ml
- Sorghum-Vegetative to harvest stage-Cool moist weather with free water on leaf, low night temperature favours leaf blight. To control spray mancozeb 2g/ litre.
- Chilli -Vegetative to flowering stage- Increasing day temperature favours thrips. Spray Imidacloprid 17.8 % SL @3.0 ml/10 lit.
- Coconut - All the stage -High wind speed may damage the crop; Drainage and earthing up may be practiced to avoid lodging.

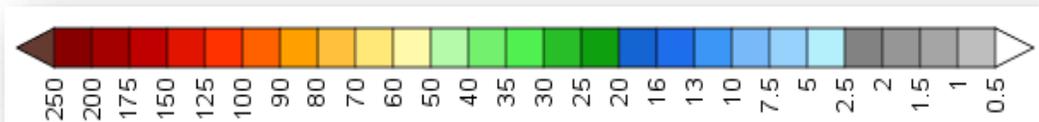
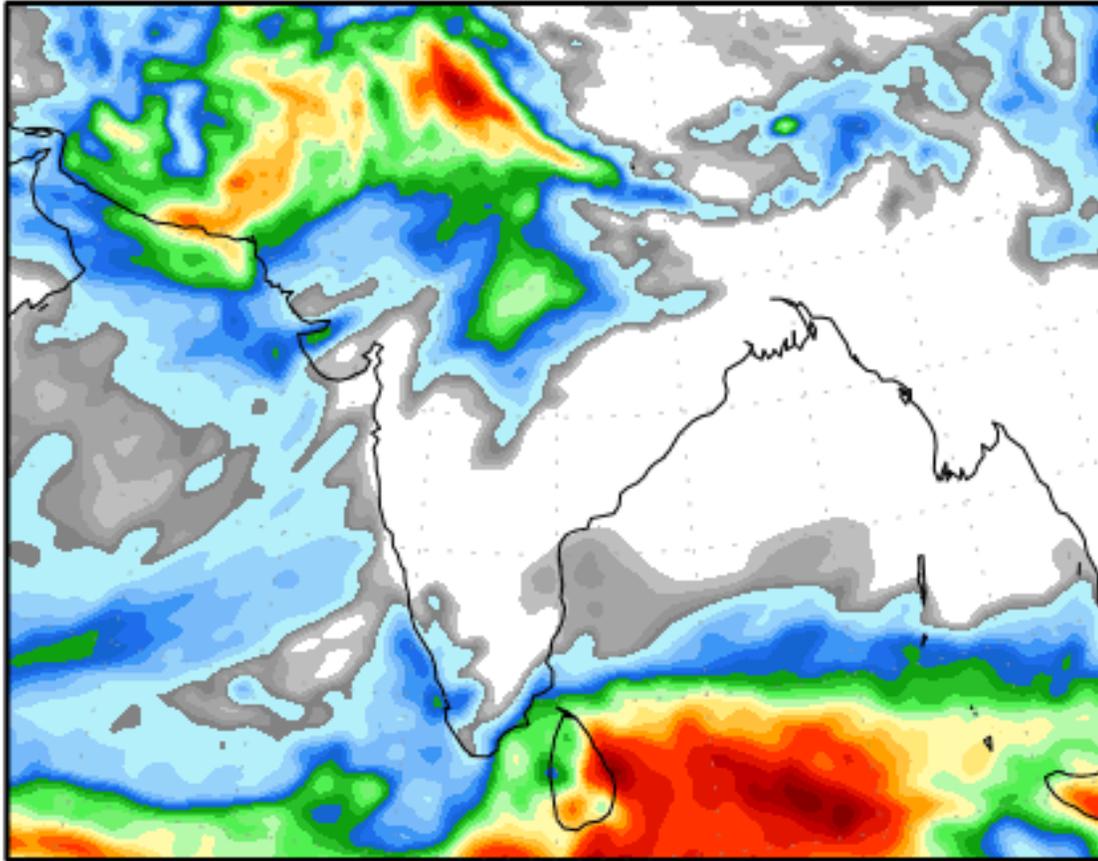


Figure:2. Precipitation forecast for 03 Jan to 11 Jan 2022 (Source: NOAA NCEP).

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