

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 24 January 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Western Disturbance as a cyclonic circulation lies over Punjab & neighbourhood in lower tropospheric levels with a trough aloft in mid & upper tropospheric levels along Long. 75°E to the north of Lat. 32°N.
- A cyclonic circulation lies over Jharkhand & neighbourhood at lower tropospheric levels.
- A trough runs from cyclonic circulation over Punjab to cyclonic circulation over Jharkhand at lower tropospheric levels.
- A fresh Western Disturbance is very likely to affect Western Himalayan Region from 29th January, 2022. Under the influence of above systems:
 - i) Isolated to Scattered light rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 24th and light isolated rainfall/snowfall on 25th January and dry weather thereafter for subsequent 3 days.
 - ii) Isolated light rainfall very likely over Punjab, Haryana & Chandigarh and Uttar Pradesh during next 24 hours and dry weather thereafter.
 - iii) Scattered to fairly widespread light/moderate rainfall very likely over Sub-Himalayan West Bengal & Sikkim during 24th-26th and isolated rainfall thereafter.
 - iv) Isolated light rainfall very likely over Bihar, Jharkhand, Gangetic West Bengal and Odisha on 24th & 25th January and isolated light rainfall over Andaman & Nicobar Islands during next 5 days.
 - v) Scattered to Fairly widespread light/moderate rainfall very likely over Northeast India during 24th-27th January.
 - vi) Under the influence of a fresh Western Disturbance from 29th January, 2022, light isolated to scattered rainfall/snowfall is likely over Western Himalayan Region from 29th to 31st January, 2022.
- Dense to very Dense fog conditions in night/morning hours very likely in isolated pockets over Punjab & West Uttar during next 2 days; Dense fog conditions in isolated pockets very likely over north Rajasthan and Jharkhand

during next 24 hours; over West Bengal & Sikkim on 26th January; over Haryana-Chandigarh-Delhi, East Uttar Pradesh, Bihar, Assam & Meghalaya & Tripura during next 2 days and over Odisha during next 3 days.

- Cold day to Severe Cold day conditions very likely in some pockets over West Madhya Pradesh during next 3 days and in isolated pockets over Rajasthan & Gujarat Region during next 24 hours; over Punjab, Haryana-Chandigarh-Delhi and East Madhya Pradesh during next 3 days; and over Uttarakhand, West Uttar Pradesh & Saurashtra & Kutch during next 2 days.
- Cold wave to severe Cold wave conditions very likely in isolated pockets over Saurashtra & Kutch during next 2 days and over Rajasthan on 27th & 28th and Cold wave conditions very likely in isolated pockets over Punjab, Haryana-Chandigarh during 25th-29th; over Gujarat Region during next 4 days over Rajasthan during next 5 days; over West Uttar Pradesh during 27th-29th; over north Madhya Maharashtra on 26th & 27th and over East Uttar Pradesh on 28th & 29th on January, 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 Jammu & Kashmir, Gilgit Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Gangetic West Bengal, Odisha and Nagaland, Manipur, Mizoram & Tripura; at many places over Jharkhand ;at a few places over Bihar, West Uttar Pradesh, Chhattisgarh and Assam & Meghalaya and at isolated places over Haryana, Chandigarh & Delhi, East Uttar Pradesh, Konkan & Goa, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh Tamil Nadu and Andaman & Nicobar Islands.
- Cold Day to Severe Cold Day conditions prevailed in some parts of Himachal Pradesh, West Madhya Pradesh, Haryana-Chandigarh and Uttarakhand and Cold Day conditions in isolated pockets over East Madhya Pradesh, West Uttar Pradesh, Rajasthan, Jammu division.
- Thunderstorm accompanied with lightning (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Uttar Pradesh.
- Fog observed (at 0830 hours IST of today): Dense to very Dense Fog in isolated pockets of Himachal Pradesh, Uttarakhand, Haryana, West Uttar Pradesh, Chhattisgarh, Madhya Maharashtra, Jharkhand and Assam & Meghalaya; Shallow to Moderate Fog in isolated pockets of East Uttar Pradesh & Odisha and Shallow

Fog in isolated pockets of Punjab, West Rajasthan, Delhi, Bihar, East Madhya Pradesh, Gangetic West Bengal and Tripura.

- Minimum Temperature Departures (as on 24-01-2022): Minimum temperatures are markedly above normal (5.1 or more) at isolated places over East Madhya Pradesh, Bihar and Tamil Nadu, Puducherry & Karaikal; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab, East Uttar Pradesh, Jharkhand; at many places over Uttarakhand, Chhattisgarh and Coastal Andhra Pradesh; at a few places over Himachal Pradesh and Gangetic West Bengal and at isolated places over Odisha; above normal (1.6°C to 3.0°C) at many places over Assam & Meghalaya and Rayalaseema; at a few places over Haryana, Chandigarh & Delhi and West Uttar Pradesh and at isolated places over Sub-Himalayan West Bengal & Sikkim, Telangana and Madhya Maharashtra. They are appreciably below normal (3.1°C to 5.0°C) at many places over Gujarat State and at isolated places over East Rajasthan and Konkan & Goa and below normal (-1.6°C to -3.0°C) at most places over Andaman & Nicobar Islands; at many places over Marathwada; at a few places over West Rajasthan and East Madhya Pradesh and at isolated places over Vidarbha and Kerala & Mahe and near normal over rest parts of the country. Today, the Lowest minimum temperature of 4.0°C is reported at Sikar (West Rajasthan) over the plains of the country.
- Maximum Temperature Departures (as on 23-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Tamilnadu, Puducherry & Karaikal; at isolated places over Coastal Andhra Pradesh & Yanam; above normal (1.6°C to 3.0°C) at many places over South Interior Karnataka; at a few places over Rayalaseema and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at most places over Himachal Pradesh and Punjab; at many places over Uttarakhand, Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, Gujarat region and Jharkhand; at a few places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Saurashtra & Kutch and Gangetic West Bengal; at isolated places over Madhya Maharashtra, Marathawada, Konkan & Goa and Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Bihar; at a few places over Sub-Himalayan West Bengal & Sikkim, Vidarbha and Odisha; at isolated places over East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh and North Interior Karnataka; at a few places over Nagaland, Manipur, Mizoram & Tripura, Telangana and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C was reported at Madurai (Tamil Nadu)

Weather Warning during the next 5 days (IMD)

- 24 January (Day 1): Dense to Very Dense Fog in isolated pockets very likely over Punjab and West Uttar Pradesh and Dense Fog in isolated pockets over Haryana-Chandigarh-Delhi, East Uttar Pradesh, Bihar, Jharkhand, Odisha, north Rajasthan, Assam & Meghalaya and Tripura. Cold Day conditions in some pockets with Severe Cold Day in isolated pockets very likely over West Madhya Pradesh; Severe Cold Day conditions in isolated pockets over Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and Cold Day conditions in isolated pockets over Uttarakhand, Rajasthan, East Madhya Pradesh and Gujarat State. Severe Cold Wave conditions in isolated pockets very likely over Saurashtra & Kutch and Cold Wave conditions in isolated pockets over Rajasthan and Gujarat Region.
- 25 January (Day 2): Dense to Very Dense Fog in isolated pockets very likely over Punjab and West Uttar Pradesh and Dense Fog in isolated pockets over Haryana-Chandigarh-Delhi, East Uttar Pradesh, Bihar, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Tripura. Cold Day conditions in some pockets with Severe Cold Day in isolated pockets very likely over West Madhya Pradesh; Severe Cold Day conditions in isolated pockets over Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and Cold Day conditions in isolated pockets over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh and Saurashtra & Kutch. Severe Cold Wave conditions in isolated pockets very likely over Saurashtra & Kutch and Cold Wave conditions in isolated pockets over Punjab, Haryana-Chandigarh, Rajasthan, West Madhya Pradesh, Madhya Maharashtra and Gujarat Region.
- 26 January (Day 3): Dense Fog in isolated pockets very likely over Odisha. Cold Day conditions in some pockets with Severe Cold Day in isolated pockets very likely over West Madhya Pradesh and Cold Day conditions in isolated pockets over Punjab, Haryana-Chandigarh-Delhi and East Madhya Pradesh. Severe Cold Wave conditions in isolated pockets very likely over Rajasthan and Cold Wave conditions in isolated pockets over Punjab, Haryana-Chandigarh, West Uttar Pradesh, West Madhya Pradesh, Madhya Maharashtra and Gujarat State.
- 27 January (Day 4): Cold Day conditions in some pockets with Severe Cold Day in isolated pockets likely over West Madhya Pradesh and Cold Day conditions in isolated pockets over Punjab and Haryana-Chandigarh-Delhi. Severe Cold Wave conditions in isolated pockets likely over Rajasthan and Cold Wave conditions in isolated pockets over Punjab, Haryana-Chandigarh, Uttar Pradesh, West Madhya Pradesh and Gujarat Region.

- 28 January (Day 5): Cold Wave conditions in isolated pockets likely over Punjab, Haryana Chandigarh, Uttar Pradesh, Rajasthan and West Madhya Pradesh.
- The weather outlook for seven days i.e., 24 Jan to 01 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)

Maharashtra-Vidarbha

Weather condition:

Weekly average means (03 MW) at AICRPAM Akola centre: T max 26.1°C (normal 30.0°C), T min 11.4°C (normal 12.2°C). RH I 90% (normal 70 %), RH II 53% (normal 29 %). Evaporation rate 3.0 mm (normal 4.6 mm), Wind speed 1.2 km/hr (normal 4.3 km/hr) and BSH 6.5 hrs (normal 8.47.9 hrs). The maximum temperature across the week was 3.8°C below normal with a deviation of -10.4 to -1.2 °C from normal. The minimum temperature across the week was 0.8°C below normal with a deviation of -2.3 to +0.2°C from normal.

Contingency measure:

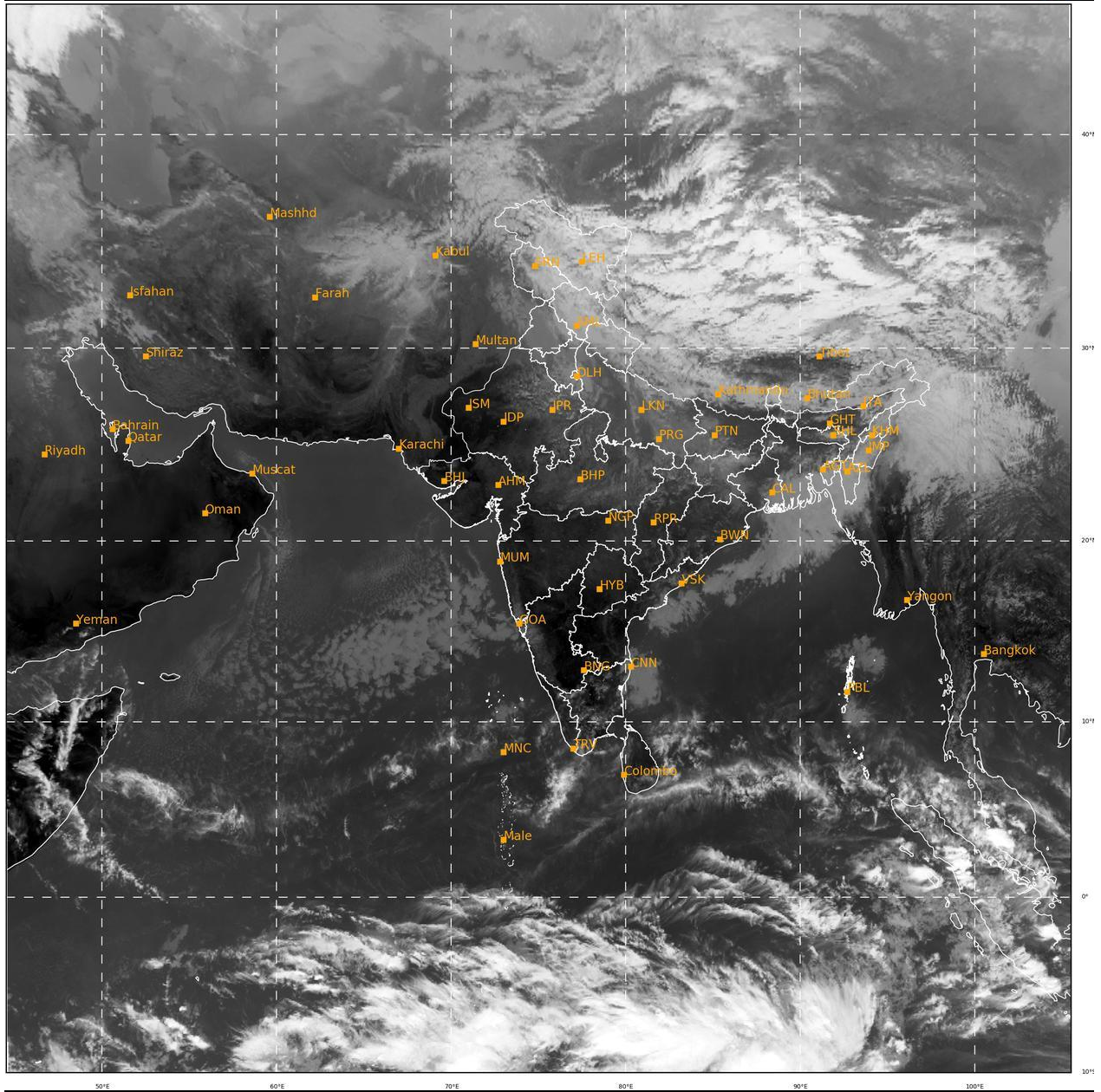
- Block-level forecast (Akola) indicates the prevalence of mainly dry weather forecast during 21-25 January and no significant change in minimum temperature during the next 3 days. After completion of picking, terminate the crop immediately. Ratooning should be discouraged and Infested/unopened/poorly opened bolls on plants should be destroyed to avoid carryover of the pest (PBW) to the next season.
- Undertake the harvest of mature pigeon pea crop as early as possible and store the harvested crop in a safe place. With an assured irrigation facility, sowing of summer groundnut (TAG 24) can normally be undertaken from the second fortnight of January onwards when the optimum temperature range for germination prevails (minimum temperature >15°C).
- Sowing of summer groundnut can normally be undertaken up to the first week of February.
- Sowing of summer sunflower can normally be undertaken from last week January to the first week of February. Seed treatment with Trichoderma 4g/kg is advisable.
- For monitoring pod borer in late sown chickpea install pheromone trap (Helilure) @ 5 nos./ ha. Place bird perches above crop canopy at regular intervals in the field @ 8 to 10 /acres to attract predatory birds. For control of infestation (1 to 2

caterpillar per meter row length or 5% pod damage) undertake spray of azadirachtin 300 ppm @ 50 ml per 10 liters of water and ETL based spray of Quinalphos 25 EC 20 ml or Emamectin benzoate 5 SG @ 3 g or Chlorantraniliprole 18.5 SC @ 2.5 ml per 10 lit of water.

- In areas with insufficient soil moisture ensure irrigation preferably with a sprinkler to chickpea at pod formation stage for better productivity. Avoid flooding or waterlogging to check the incidence of root rot.
- Irrigation should be stopped before 10-15 days of maturity stage in Mrig bahar bearing trees of Nagpur mandarin and sweet oranges. The matured fruits are picked and marketed properly after grading. Soil moisture stress imposed for induction of flowering for ambia bahar in orange be released by 15 January initiating irrigation followed by manuring/fertilization and basin mulching with about 2-inch thick layer of organic residues. To moderate the impact of cold weather across these periods application of organic mulches in tree basins/soil surface, covering of nursery and young fruit plants with thatches of straw, creating air blanket of smoke in orchards by burning dried weeds/wood, etc., and light irrigation during evening hours is advisable.
- It is advisable to keep the animals in a closed shelter and take special care of young cattle to protect them from cold during night/early morning. The shelter floor should be covered with straw litter which provides thermal mulch. Protect poultry birds/chicks from cold winds by hanging a curtain/clothing from outside the poultry shed. Use of electric bulbs (5-6 hrs) for heat is advisable.

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

24-01-2022/(0800 to 0827) GMT
24-01-2022/(1330 to 1357) IST



414

932

IMD, DELHI

Figure: 1. Latest available satellite picture as on 24 Jan 2022 at 1357 Hrs (IST). (Source: IMD).

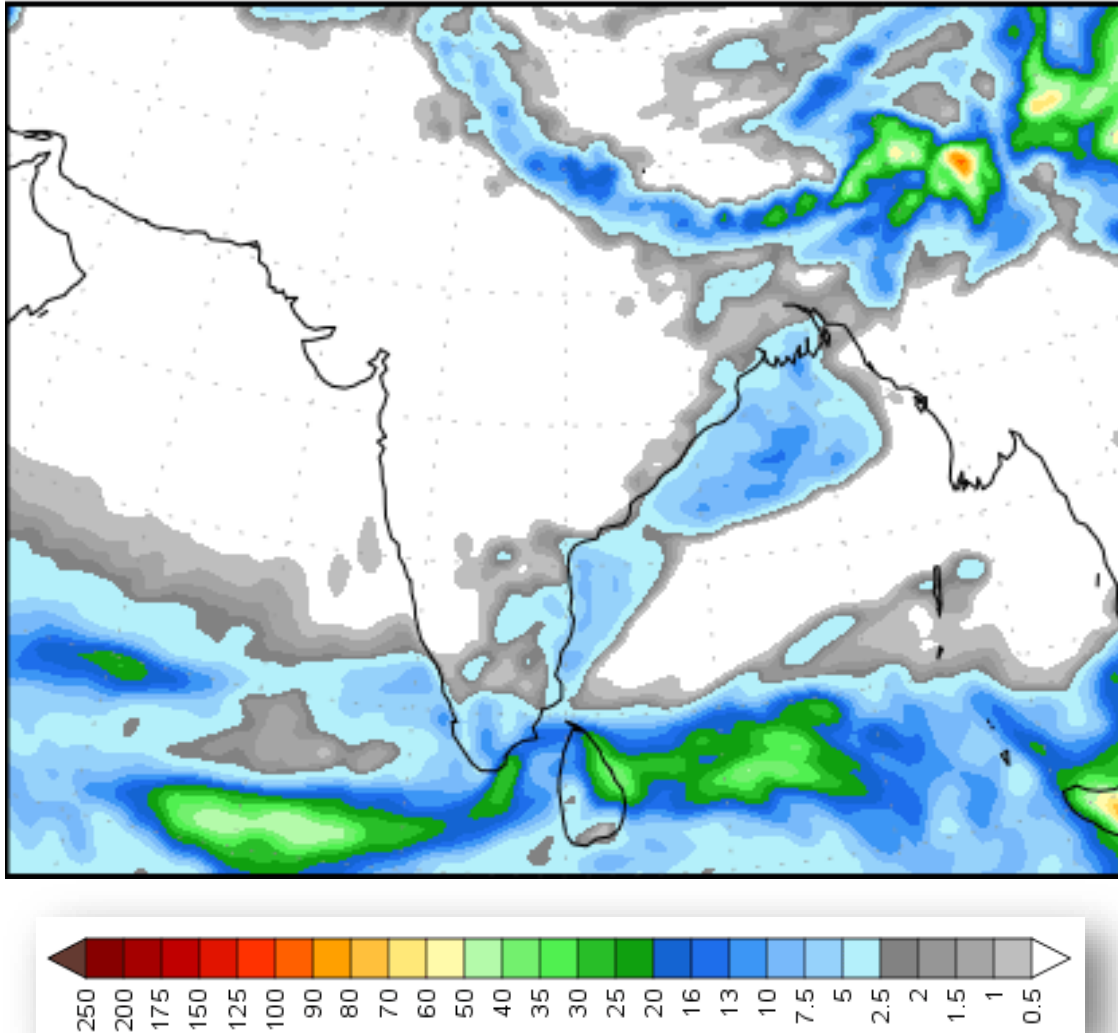


Figure:2. Precipitation forecast for 24 Jan to 01 Feb 2022 (Source: NOAA NCEP).

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