

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 31 March 2022

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Significant Weather Features (IMD)

- Heat Wave conditions Forecast:
- Heat wave to severe heat wave conditions in many parts very likely to continue over West Rajasthan on 31st March & in some parts on 01st April; in some parts over East Rajasthan & Madhya Pradesh and in isolated pockets over West Uttar Pradesh on 31st March. It is likely to reduce spatially and in terms of intensity over these areas during 01st-04th April with Heat wave conditions in isolated pockets over these areas during the same period.
- Isolated Heat Wave conditions very likely over Himachal Pradesh on 31st March & 01st April; over south Haryana & Delhi & East Uttar Pradesh on 31st March; over Madhya Maharashtra, interior Odisha on 31st March & 01st April; over Telangana on 01st & 02nd April; over Vidarbha, Chhattisgarh, SaurashtraKutch, Jharkhand & Marathwada during 31st March-03rd April and over Gujarat region on 01st-04th April, 2022.
- Rainfall Forecast & Warnings:
- Under the influence of a north-south trough from East Uttar Pradesh to Northwest Bay of Bengal and strong southwesterly winds from Bay of Bengal to northeastern states at lower tropospheric levels; fairly widespread to widespread light/moderate rainfall with thunderstorm/lightning (40-50 kmph) very likely over Assam-Meghalaya; with thunderstorm/lightning/gusty winds (30-40 kmph) over Nagaland-Manipur-Mizoram-Tripura and with thunderstorm/lightning over Arunachal Pradesh on 31st March & 01st April.
- Isolated heavy rainfall likely over Assam-Meghalaya & Arunachal Pradesh during 31st March, 01st, 03rd & 04th April and over Sub-Himalayan West Bengal-Sikkim on 03rd & 04th April; 2022. Under the influence of trough/wind discontinuity over south Peninsular India,
- Light to moderate isolated/scattered rainfall very likely over Kerala-Mahe, Tamil Nadu-Puducherry-Karaikal and South Interior Karnataka during next 5 days.

- Isolated thunderstorm/lightning activity also very likely over Tamil Nadu-Puducherry-Karaikal, Lakshadweep, Rayalaseema & South Interior Karnataka on 31st March and over Kerala & Mahe during next 5 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 most places over Arunachal Pradesh; at many places over Assam & Meghalaya; at a few places over Sub-Himalayan West Bengal-Sikkim and Nagaland-Manipur-Mizoram-Tripura and at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Bihar.
- Heavy rainfall observed at isolated places over Assam-Meghalaya.
- Heat Wave to Severe Heat Wave conditions observed in most parts of West Rajasthan; in many parts of Himachal Pradesh; in some parts of Haryana and Delhi and Heat Wave conditions in some parts of East Rajasthan and Madhya Pradesh and in isolated pockets of Jammu Division and Uttar Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Sub-Himalayan West Bengal & Sikkim.
- Maximum Temperature Departures (as on 30-03-2022): Maximum temperatures were markedly above normal (5.1°C or more) at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, West Rajasthan and Himachal Pradesh; at many places over Uttarakhand and West Uttar Pradesh; at a few places over East Rajasthan and Madhya Pradesh; at isolated places over East Uttar Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Chhattisgarh, Vidarbha and Jharkhand; at many places over Telangana and Marathwada; at a few places over Bihar; at isolated places over Saurashtra-Kutch and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Gujarat region and Madhya Maharashtra; at many places over Konkan-Goa and Rayalaseema; at a few places over Odisha, Coastal Andhra Pradesh & Yanam and Tamil Nadu-Puducherry-Karaikal; at isolated places over Kerala-Mahe. They were below normal (-1.6°C to -3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura and Assam-Meghalaya and near normal over rest parts of the country.
- Yesterday, the highest maximum temperature of 44.2°C was reported at Chandrapur (Vidarbha) over the country. Andaman-Nicobar Islands

- Minimum Temperature Departures (as on 31-03-2022): Minimum temperatures are markedly above normal (5.1°C or more) at a few places over West Rajasthan and at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, East Rajasthan and Bihar; appreciably above normal (3.1°C to 5.0°C) at most places over Gangetic West Bengal; at many places over East Uttar Pradesh; at a few places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and at isolated places over Punjab, Uttarakhand, Madhya Pradesh, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Odisha; above normal (1.6°C to 3.0°C) at most places over Rayalaseema; at a many places over Odisha; at a few places over Jammu-Kashmir-Ladakh-GilgitBaltistan-Muzaffarabad, Gujarat Region, Vidarbha, Coastal Karnataka, Telangana, Tamil Nadu Puducherry & Karaikal, Jharkhand and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Konkan & Goa and Madhya Maharashtra and near normal over rest parts of the country.
- Today, the lowest minimum temperature of 15.9°C is reported at Nasik and Pune (Madhya Maharashtra) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 31 March (Day 1): Heat wave to severe heat wave conditions very likely in many parts of West Rajasthan; in some parts of East Rajasthan; in isolated pockets over West Uttar Pradesh; Heat wave conditions in many parts with severe heat wave conditions in isolated pockets over East Madhya Pradesh; Heat wave conditions in some parts with severe heat wave conditions in isolated pockets over West Madhya Pradesh; heat wave conditions in isolated pockets over Himachal Pradesh, south Haryana-Delhi, East Uttar Pradesh, Saurashtra-Kutch, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Madhya Maharashtra and Marathawada. Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) at isolated places very likely over Assam-Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places very likely over NagalandManipur-Mizoram-Tripura and with lightning at isolated places over Arunachal Pradesh, Tamil Nadu-Puducherry-Karaikal, Kerala-Mahe, Lakshadweep, South Interior Karnataka and Rayalaseema. Heavy rainfall at isolated places very likely over Assam-Meghalaya and Arunachal Pradesh.
- 01 April (Day 2): Heat wave to severe heat wave conditions very likely in some parts of West Rajasthan; in isolated pockets over East Rajasthan; Heat wave conditions in some parts very likely over Madhya Pradesh and in isolated pockets over Himachal Pradesh, West Uttar Pradesh, Gujarat State, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Madhya Maharashtra, Marathawada and Telangana. Thunderstorm accompanied with lightning, gusty winds (speed

reaching 40-50 kmph) at isolated places very likely over Assam-Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places very likely over Nagaland-Manipur-Mizoram-Tripura and with lightning at isolated places over Arunachal Pradesh and Kerala-Mahe. Heavy rainfall at isolated places very likely over Assam-Meghalaya and Arunachal Pradesh.

- 02 April (Day 3): Heat wave conditions in some parts very likely over West Rajasthan and Madhya Pradesh and in isolated pockets over West Uttar Pradesh, East Rajasthan, Gujarat State, Vidarbha, Chhattisgarh, Jharkhand, Marathawada and Telangana. Thunderstorm accompanied with lightning at isolated places very likely over Andaman-Nicobar Islands and Kerala-Mahe.
- 03 April (Day 4): Heat wave conditions in some parts likely over Madhya Pradesh and in isolated pockets over Rajasthan, West Uttar Pradesh, Gujarat Region and Vidarbha. Thunderstorm accompanied with lightning at isolated places likely over Andaman-Nicobar Islands, Sub-Himalayan West Bengal & Sikkim and Kerala-Mahe. Heavy rainfall at isolated places likely over Sub-Himalayan West Bengal-Sikkim, Assam-Meghalaya and Arunachal Pradesh.
- 04 April (Day 5): Heat wave conditions in some parts likely over West Madhya Pradesh and in isolated pockets over Rajasthan, West Uttar Pradesh, Gujarat Region and East Madhya Pradesh. Thunderstorm accompanied with lightning at isolated places likely over Sub-Himalayan West Bengal & Sikkim and Kerala-Mahe. Heavy rainfall at isolated places likely over Sub-Himalayan West Bengal-Sikkim, Assam-Meghalaya and Arunachal Pradesh.
- The weather outlook for seven days i.e., 31 Mar to 08 Apr 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)

Himachal pradesh

Weather condition:

The maximum and minimum temperature ranged between 27.0 to 29.0 °C and 12.5 to 16.5 °C which was above normal by 6.3 to 9.2 °C and 2.1 to 6.4 °C, respectively. No rainfall was received during the week against the normal of 30.9 mm. The relative humidity varied between 20-72 % and sunshine hours between 8.0-10.5 hrs/day with variable sky conditions (Octa 0-4). The evaporation rate varied 4.2-6.0 mm per day.

Contingency measure:

- Rabi Crops: Wheat: In wheat crop where weeds are 2-3 leaves stage, spray

isoproturon @ 70 g or Vesta @ 16 g per 30 litres of water in one kanal for the control of weeds.

- Storage of Grains: Grains should be properly dried to right moisture level before storing. Godowns should be properly cleaned by removing all the grains and other storage matter of previous crop.
- Mustard: Thinning and weeding is recommended in timely sown mustard crop. Keeping in view of relative humidity farmers are advised for monitoring of mustard crop against attack of white rust. If infection is high than spraying of Dithane - M -45 @ 2 gram/ litre of water of water is advised. Keeping in view of weather, farmers are advised for monitoring of mustard crop against aphid attack.
- Fodder Crops: Intercultural operations on already sown berseem, lucerne and oats for fodder of Rabi season also advised. The lantana weeds in the grasslands may be cut so that regenerated growth during September can be sprayed with 1% glyphosate for its control.
- Vegetable Crops: Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- Onion & Garlic: Sowing of garlic and onion is advised. Farmers are advised to monitor their fields regularly. Spray of Imidacloprid 17.8 % SC@ 1.0 ml/3 lit of water is recommended against white flies and other sucking pests in all crop and vegetables when sky is clear.
- Cabbage & Cauliflower: Advised to complete transplanting of seedlings of cabbage, cauliflower, knoll khol and broccoli are advised. Mix well rotten FYM prior to transplanting. The downy mildew is expected in cruciferous vegetables, for control spray redomil M -Z @ 25 g per litres of water at 15 days interval.
- Potato: Farmers are advised to start earthing -up in potato if crop has attained a height of 15 -22 cm. If so required, the practice may be repeated after 15 days . Due to high relative humidity, infection of blight may occur in potato and tomato. Constant monitoring is advised. If symptoms appears than spray of Carbandizam @ 1.0 gm / litre of water or Dithane - M -45 @ 2.0 gm / litre of water is recommended.
- Poly House Agriculture: Advised tomato, cucumber and capsicum sowing and transplanting. For control of powdery mildew, aphids and spodoptera spray recommended chemicals. Keep yellow sticky trap in polyhouse and after transplanting drench plant with imidachlorpid. Leaf spot/blight is expected in shimla mirch and tomato for control spray tilt 1ml per liters of water.
- Tea: Training, skiffing and cleaning work can be completed in the tea orchards. Do lopping of the tree in the tea orchards to have more sunlight. The skiffed

material may be used to prepare compost so that it could be applied in next season.

- **Livestock:** Ecto-parasite attack is expected in this weather for control spray Butox @ 2 ml per litre in cowshed Give mixture of hay & green fodder. The weather is suitable for the attack of pink eye disease in newly born calves, for control prepare the solution of 1% boric acid in boiled water and wash eyes at regular interval of three hours. Give mixture of hay & green fodder. Advised not to allow animals to eat lantana these days. Dry bedding may be provided to save the animals from cold. Young calves must be kept in the sheds during nights.
- **Poultry:** Make sure to deworm your older flocks every month against round-worms. Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds. For precautionary measures spray formaline 40% @ 1litre in 9 litres of water in outside or surrounding of farm. Provide vitamin A and vitamin B-complex with water. Ensure proper space for egg laying of birds and provide 14- to 16 hours light including day light. Normal feeding schedule should be continued and add mineral in the diet if stress is seen.
- **Horticulture:** Keep the basins of the plants free from weeds. The new growth appearing below bud union may be cut. If a termite outbreak appears on the trees, spray Chlorpyriphos 20 EC @ 3ml/l. Monitor foliar pest on plants of Citrus species. Spray Chlorantraniliprole 18.5SC @ 0.4 ml/l or lambdacyhalothrin 4.90CS @0.8 ml/l for pomegranate butterfly. Advised recommended spray of chemicals for control of citrus canker. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area. Advised planting of strawberry. Wrapping of plastic sheets around mango trunk should be done for preventing climbing of young mealy bugs. Apply grease to seal any cracks in the polythene sheets.If the stem borer problem is there in spray insecticide or control them with applying kerosene oil. Keep the basins of the plants free from weeds. Prepare the pits for planting the winter plants like peacunnut, walnut, almond plum and peach. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area.
- **Fruit Trees:** Sowing of mango, litchi, guava, papaya, pecanut and kagzi lime is recommended under these weather conditions. Air layering of litchi, guava, kagzi lime and lemon is recommended. Side veneer grafting in mango and inverted T-budding in citrus is recommended. Transplanting of seedlings of rough lemon (Khatti) in the nursery beds, if not done during July. Weeding in nursery is recommended.

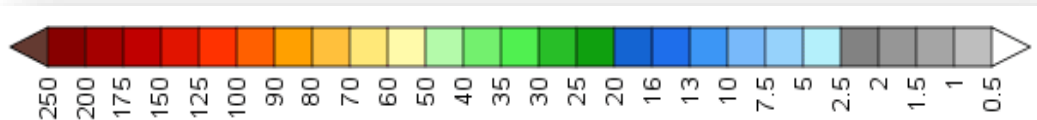
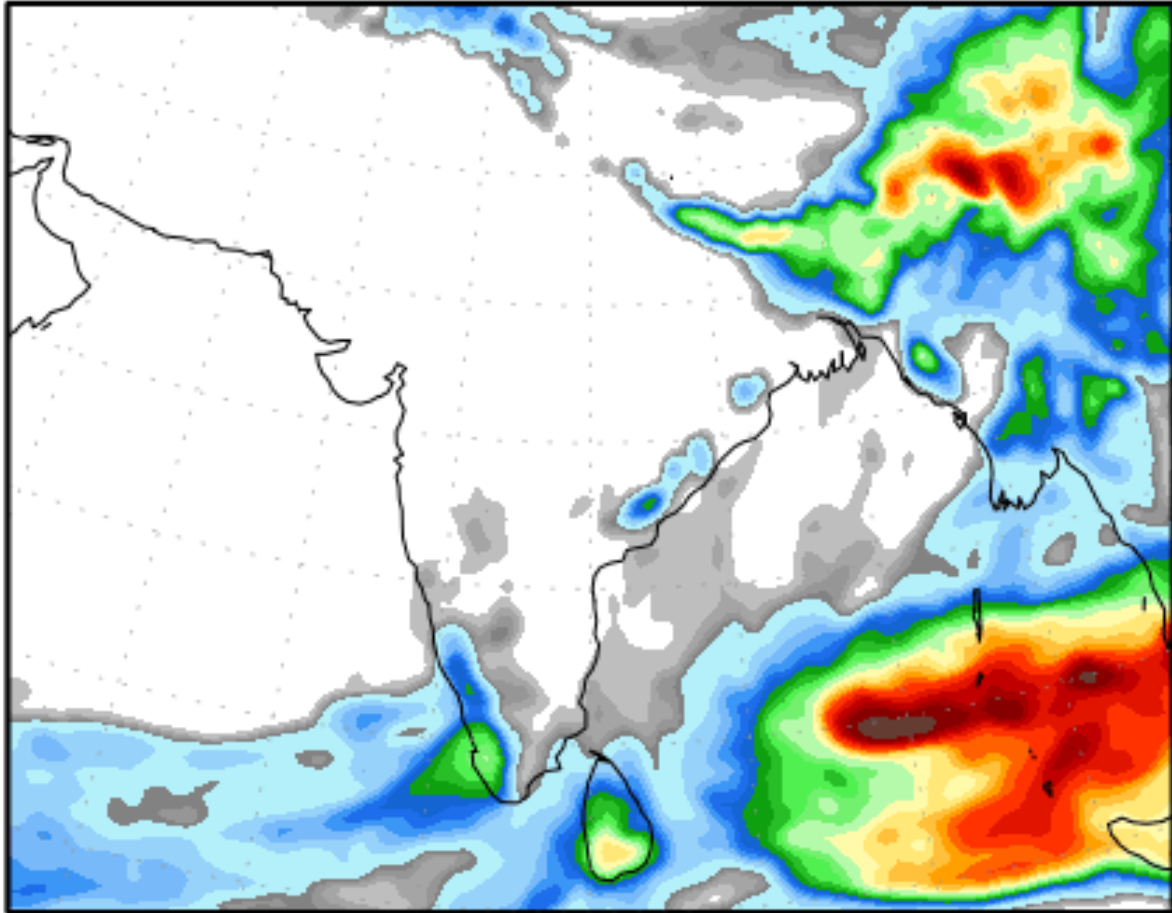


Figure:2. Precipitation forecast for 31 Mar to 08 Apr 2022 (Source: NOAA NCEP).

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