

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 19 March 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A trough in westerlies at 5.8 km above mean sea level runs from Southwest Rajasthan to Northeast Arabian Sea across Saurashtra & Kutch. Two cyclonic circulations, one over southeast Rajasthan & neighbourhood and another over Vidarbha & neighbourhood in lower tropospheric levels. Under the influence of these systems:
 - (i) Isolated to scattered rainfall with thunderstorm, lightning and gusty winds (speed reaching 30-40 kmph) very likely over Madhya Pradesh, Madhya Maharashtra, Marathwada and Vidarbha during next 3 days.
 - (ii) Isolated hailstorm also very likely over Madhya Pradesh and Vidarbha on 19th March and over Marathwada on 19th & 20th March, 2021.
- Under the influence of an active Western Disturbance likely to affect Northwest India from the night of 20th March, 2021:
 - (i) Fairly widespread to widespread rainfall/snowfall with isolated thunderstorm/lightning likely over the Western Himalayan Region and isolated to scattered light to moderate rainfall over the plains of Northwest India during 21st-23th March. Isolated heavy rainfall/snowfall also likely over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh on 22nd & 23rd March, 2021.
 - (ii) Isolated hailstorm also likely over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh on 21st; over Uttarakhand on 22nd & 23rd; over Punjab, Haryana, Chandigarh & Delhi and Rajasthan on 22nd March.
- No heat wave conditions very likely over the country during next 5 days.
- 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 isolated places over Arunachal Pradesh, Odisha, West Uttar Pradesh, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Rajasthan,

Madhya Pradesh, Vidarbha, Chhattisgarh, Marathwada, Madhya Maharashtra, Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe.

- Hailstorm recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Madhya Pradesh and Vidarbha and thunderstorm at isolated places over Rajasthan, Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, North Interior Karnataka and Vidarbha.
- Maximum Temperature Departures as on 18-03-2021: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Arunachal Pradesh and Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan and at isolated places over East Madhya Pradesh and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at many places over Haryana, Chandigarh & Delhi, Jharkhand, East Rajasthan and Uttar Pradesh; at a few places over West Madhya Pradesh, Saurashtra & Kutch, West Bengal & Sikkim, Odisha and Coastal Karnataka; at isolated places over Gujarat region, Bihar, Konkan & Goa, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Vidarbha; below normal (-1.6°C to -3.0°C) at a few places over Telangana, Rayalaseema and South Interior Karnataka; at isolated places over North Interior Karnataka and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.1°C was reported at Khandwa (West Madhya Pradesh) over the country.
- Minimum Temperature Departures as on 19-03-2021: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over West Rajasthan and East Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Haryana, Chandigarh & Delhi and Madhya Maharashtra; at a few places over Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Marathwada, West Madhya Pradesh and Chhattisgarh and at isolated places over East Rajasthan; above normal (1.6°C to 3.0°C) at most places over Coastal Karnataka; at many places over Jharkhand and East Uttar Pradesh; at a few places over Kerala & Mahe, Bihar, Sub-Himalayan West Bengal & Sikkim, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Andaman & Nicobar Islands and Gujarat state and at isolated places over Odisha. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Rayalseema and at isolated places over Gangetic West Bengal; below normal (-1.6°C to -3.0°C) at many places over South Interior Karnataka, Nagaland, Manipur, Mizoram & Tripura and Telangana; at a few places over Tamil Nadu, Puducherry & Karaikal; at isolated

places over Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Today, the lowest minimum temperature of 12.8°C is reported at Pantnagar (Uttarakhand) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 19 March (Day 1): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Madhya Pradesh, Vidarbha and Marathwada; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, Chhattisgarh and Madhya Maharashtra and with lightning at isolated places over Rajasthan, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe. Squally weather (wind speed reaching 40-50 kmph) very likely over Southwest Bay of Bengal. Fishermen are advised not to venture in this area.
- 20 March (Day 2): Thunderstorm with lightning & hail very likely at isolated places over Marathwada; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Madhya Maharashtra and with lightning at isolated places over East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal, & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Telangana and Kerala & Mahe.
- 21 March (Day 3): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; with lightning & hail at isolated places over Himachal Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over East Rajasthan and with lightning at isolated places over Punjab, West Rajasthan, Madhya Pradesh, Vidarbha, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe.
- 22 March (Day 4): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and East Rajasthan; with lightning & hail at isolated places over West Rajasthan; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Uttar Pradesh and Telangana and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Madhya Maharashtra,

Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. Heavy rainfall/snowfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh.

- 23 March (Day 5): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Uttarakhand; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan and Telangana and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Rajasthan, Madhya Maharashtra, Marathwada, Konkan & Goa and Kerala & Mahe. Heavy rainfall/snowfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh.
- The weather outlook for seven days i.e., 19 Mar to 27 March 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 8.8 to 10.4 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 32.8 to 39.3 and 13.7 to 18.9 oC respectively. Wind velocity ranged from 2.9 to 3.9 km and wind was blowing from south westerly Direction.

Contingency measure:

- Mango: Due to forecast for light rainfall on 20th March 2020, harvest the mature mango fruits by observing rainfall situation before 10 am in the morning and after 16 pm in the evening with the help on mango harvester at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue disease and from heat. withhold irrigation one month before fruit are ready for harvesting. Do not spray any insecticides/fungicides 8 days before harvesting of mango fruits. To prevent incidence of post-harvest diseases fruit rot on fruits, place the fruits in hot water of 52oC for 10 minutes and then keep for ripening. Use C.F.B. (corrugated fiber box) for packing. Transport of harvested fruits should be done preferably during night hours. There is forecast for light rainfall at isolated places

on 20th March, 2021, there is possibility of incidence of anthracnose disease on fruits of mango, if rainfall received then undertake the protective spraying for anthracnose disease, spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 liter of water. Due to forecast for decrease in humidity during next five days, to minimize the pre-mature fruit drop of mango, as per availability of water, apply 100 liter /tree at weekly or 150 to 200 liter/ tree at 15 days interval from pea to arecanut fruit size also use straw mulch. Due to forecast of light rainfall at isolated places on 20th March, 2021, hence to protect the egg size mango fruits from raindrop, cover the fruits with paper bag. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag. There is possibility for incidence of fruit fly on mango fruits. Collect and destroy all fallen fruits and install Rakshak fruit fly trap developed by University @ 2 traps per acre. In orchard where mango is in inflorescence and fruit setting stage

- Cashewnut: There is possibility of incidence of tea mosquito bugs and aphids on the fruits of cashewnut, to protect the cashew during fruit bearing stage, spray Lambda cyhalothrin 5% EC @ 6 ml or Acetamiprid 20% SP @ 5 gms per 10 liter of water during clear weather. (insecticide is not under label claim). There is possibility for incidence of cashew apple and nut borer, if incidence is noticed spray Profenophos 50% EC @ 15 ml per 10 liter of water.
- Lablab bean: Due to forecast of light rainfall at isolated places on 20th March, 2021, harvest mature lablab bean pod and dry it in sunlight and then follow threshing and stored dried grain at dry and safe place.
- Water melon: There is possibility of incidence of hoppers and aphids in watermelon crop, if incidence is noticed on watermelon, spray dimethoate 30% EC @ 10 ml per 10 liter of water during clear weather. For management of sucking pest, place yellow sticky paper into field. There is possibility for incidence of blight disease on water melon, if incidence is noticed, remove and destroy infected leaves and spray Mancozeb 75% WP @ 25 gm or Coper oxychloride 50% WP @ 20 gms per 10 liters of water at an interval of 10 to 15 days.
- Okra: Due to forecast for decrease in humidity, provide irrigation to okra crop at 4-5 days interval. There is possibility of incidence of aphids and shoot and fruit borer on okra, if incidence is noticed, collect and destroy all infected shoots and fruits and spray Cypermethrin 25% EC @ 3 ml or Lambda cyhalothrin 5% EC @ 6 ml per 10 liter of water. Also install pheromone traps into field for monitoring pest.

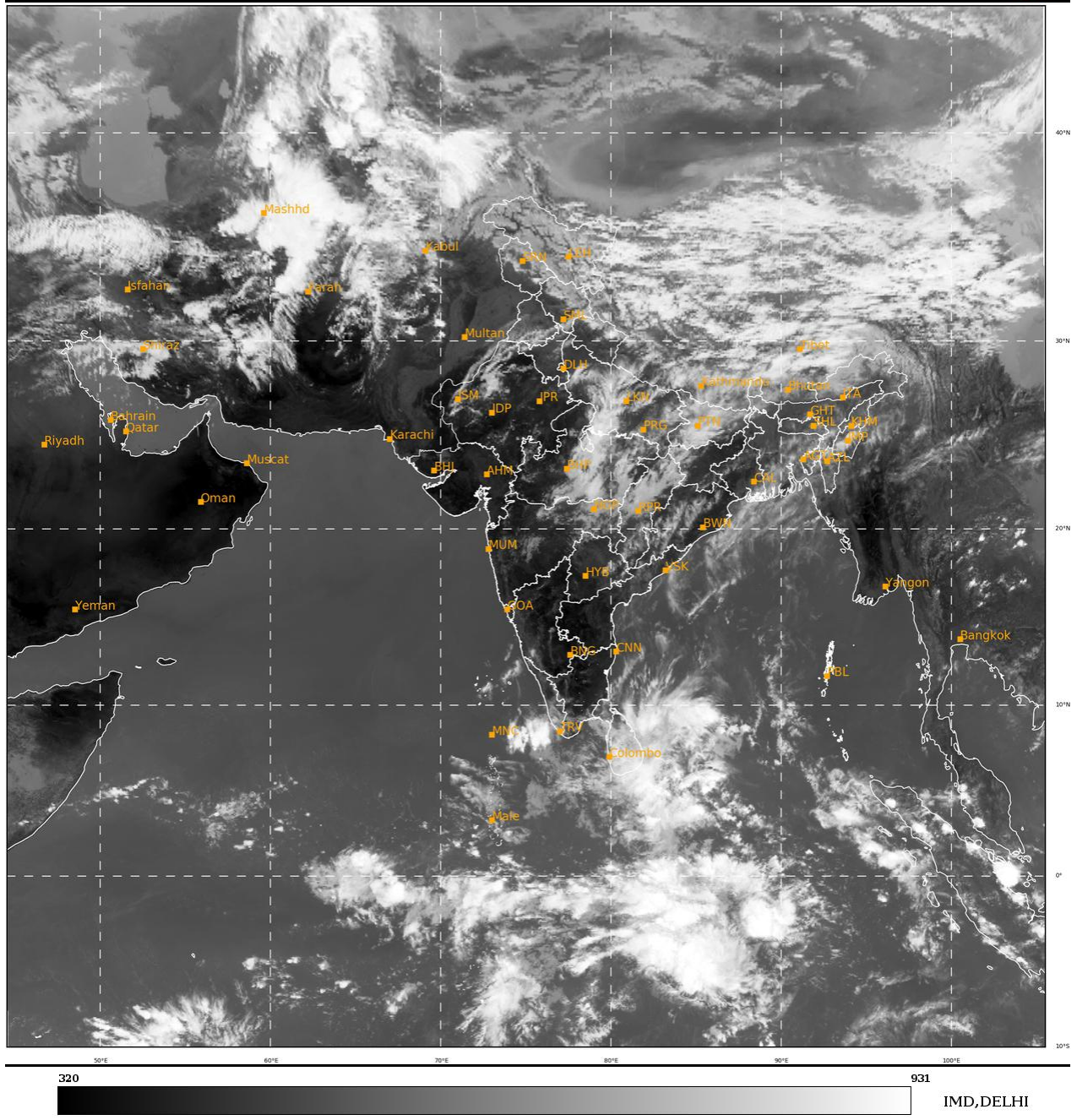


Figure: 1. Latest available satellite picture as on 19 March 2021 at 1357 Hrs (IST). (Source: IMD).

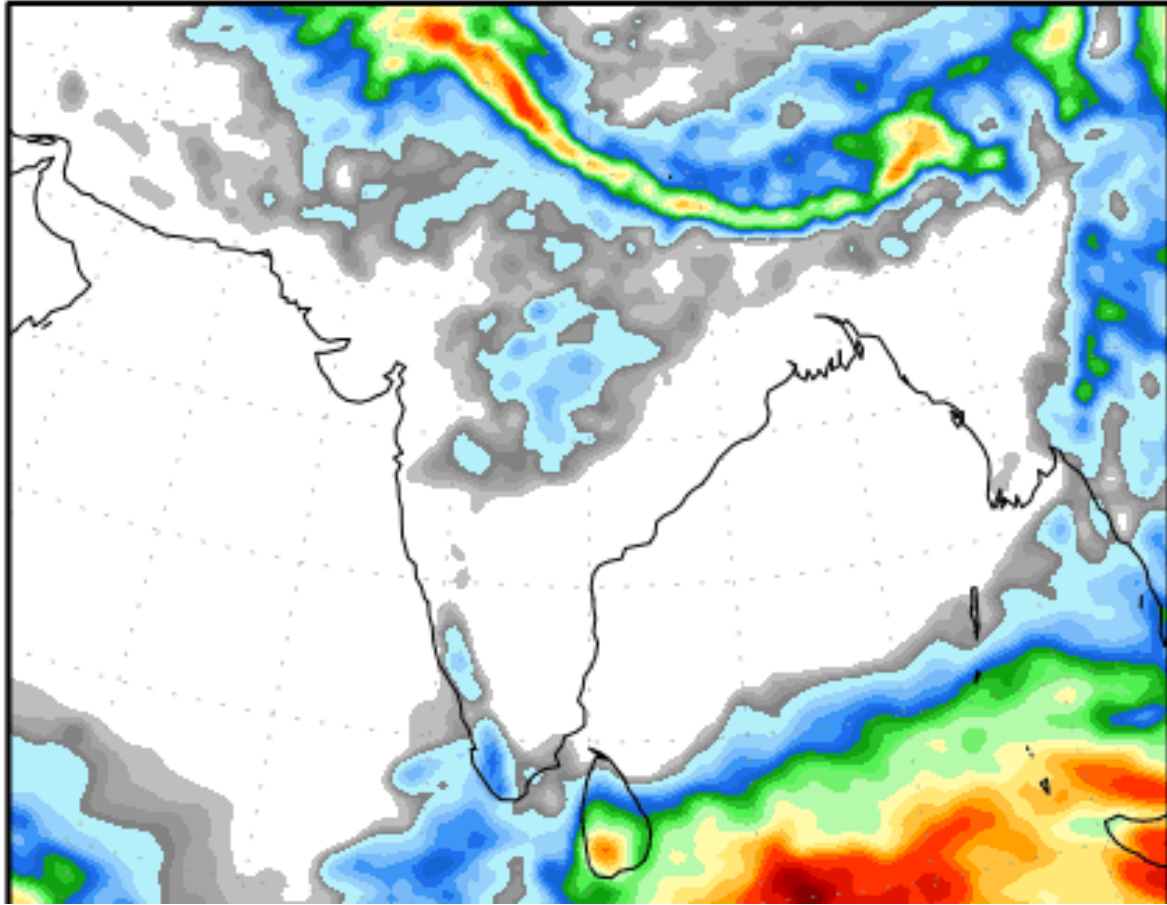


Figure:2. Precipitation forecast for 19 to 27 March 2021 (Source: NOAA NCEP).

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