

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 22 March 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Western Disturbance as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long 64°E to the north of Lat 17°N. An induced cyclonic circulation lies over northwest Rajasthan & neighbourhood at lower levels and likely to move over Punjab & neighbourhood by tomorrow, the 23 March. There is moisture incursion from north Arabian Sea over northwest India at lower & middle tropospheric levels and is likely to continue till tomorrow, the 23 March, 2021. Under the influence of all these meteorological features:
 - (i) Fairly widespread to widespread rainfall/snowfall and thunderstorm & lightning very likely over Western Himalayan Region (Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand) during 22 to 23 March. Isolated hailstorm very likely over Himachal Pradesh on 22 & 23 and Uttarakhand during 22 to 24 March. Isolated heavy rainfall/snowfall also likely over Jammu, Kashmir, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh on 22 & 23 March, 2021.
 - (ii) Fairly widespread to widespread rainfall and thunderstorm & lightning very likely over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh on 22nd & 23rd March and isolated to scattered over Rajasthan during 22nd-23rd March. Isolated hailstorm very likely over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and East Rajasthan during 22-23 March and over West Rajasthan on 22nd March.
- Two cyclonic circulations, one over Southeast Madhya Pradesh and another over Coastal Karnataka in lower levels. Under the influence of these circulations:
 - (i) Rainfall at isolated places very likely over most parts of Central, West India & South peninsular India during next 3 days.
 - (ii) Thunderstorm & lightning at isolated places likely over parts of Central & West India during next 3 days. Isolated hailstorm is also likely over parts of Madhya Pradesh, Vidarbha, Madhya Maharashtra and Marathwada on 23rd 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 most places over Jammu, Kashmir, Ladakh, GilgitBaltistan and Muzaffarabad; at many places over Himachal Pradesh; at a few places over Punjab, Arunachal Pradesh and Kerala & Mahe and at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Uttarakhand, Haryana, Chandigarh & Delhi, West Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathawada, Karnataka and Tamilnadu, Puducherry & Karaikal.
- Hailstorm observed (0830 hours IST of yesterday to 0830 hrs IST of today) at isolated places over West Rajasthan, Vidarbha and Madhya Maharashtra and duststorm at isolated places over West Rajasthan.
- Thunderstorm observed (0530 hours IST to 0830 hrs IST of today) at isolated places over Haryana, Chandigarh & Delhi, West Madhya Pradesh and Vidharbha.
- Maximum Temperature Departures as on 21-03-2021: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at most places over West Rajasthan; at many places over Nagaland, Manipur, Mizoram & Tripura, Haryana, Chandigarh & Delhi and Uttarakhand; at a few places over Himachal Pradesh; at isolated places over West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch and East Rajasthan; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh; at many places over East Uttar Pradesh, Bihar, Arunachal Pradesh and Gujarat Region; at a few places over Coastal Karnataka; at isolated places over Madhya Pradesh, Konkan & Goa, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at isolated places over Vidarbha, Madhya Maharashtra, Marathawada, Rayalaseema, Telangana and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.0°C was reported at Churu (West Rajasthan) over the country.
- Minimum Temperature Departures as on 22-03-2021: minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan and Uttarakhand; at a few places over East Rajasthan and Haryana, Chandigarh & Delhi and at isolated places over Punjab, East Uttar Pradesh, Madhya Pradesh and Gujarat State; above normal (1.6°C to 3.0°C) at most places over Himachal

Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura and at isolated places over West Uttar Pradesh, Madhya Maharashtra, Assam Meghalaya, Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands. They are below normal (-1.6°C to -3.0°C) at most places over South Interior Karnataka; at a few places over Kerala & Mahe and at isolated places over Vidharbha, Telangana and Rayalaseema and near normal over rest parts of the country. Today, the lowest minimum temperature of 13.5°C is reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 22 March (Day 1): Thunderstorm with lightning, hail & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Uttarakhand, Punjab and Rajasthan; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over West Uttar Pradesh, Haryana, Chandigarh & Delhi, Vidarbha, with lightning & hail at isolated places over Himachal Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, east Assam, Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam and Karnataka. Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh. Duststorm (speed reaching 40-50 kmph) very likely at isolated places over West Rajasthan.
- 23 March (Day 2): Thunderstorm with lightning, hail & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over East Rajasthan; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand, West Uttar Pradesh, Punjab and Haryana, Chandigarh & Delhi, Madhya Pradesh, Vidarbha, Madhya Maharashtra and Marathawada with lightning & hail at isolated places over Himachal Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Rajasthan and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, Chhattisgarh, Goa, Coastal & South Interior Karnataka. Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh.

- 24 March (Day 3): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Vidarbha and Kerala & Mahe and with lightning likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra and Marathawada.
- 25 March (Day 4): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe and with lightning likely at isolated places over SubHimalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya.
- 26 March (Day 5): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe and with lightning likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- The weather outlook for seven days i.e., 22 Mar to 30 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)

Jharkhand

Weather condition:

During this week 12.4 mm rainfall has been received. Maximum and minimum temperature range between 30.8 to 33.6°C and 12.6 to 15.2°C respectively. Maximum and minimum actual average temperatures are 32.4°C and 13.9°C, whereas normal maximum and minimum temperature are 32.0 °C and 15.8°C respectively.

Contingency measure:

- General: Due to previous days rain, sufficient soil moisture is present in the field. Farmers may utilize this soil moisture in sowing or transplanting of different vegetables immediately. Harvest different rabi crops as and when it attains the proper harvesting stage. After harvesting plough the field immediately. After ploughing, avoid planking to destroy the weeds and pests in open soil. After harvesting of crop, farmers may proceed for summer vegetable cultivation, if having assured irrigation facility. In case of meagre irrigation facility proceed for green gram cultivation. At present, the crops like tomato, chilli, capsicum etc. may be attacked by viral disease (leaf curl disease) and the vector of this disease is white fly. To control the disease spray the insecticide Karate or Kungfu @ 2 ml. per liter of water.

- Green Gram: Farmers having at least 1 - 2 irrigation facility may proceed for green gram cultivation after harvesting of rabi crops. 12 kg seeds are required for one acre and before sowing, seed must be treated with Rhizobium culture.
- Wheat: In standing crop, if the weed Phalaris minor (Genhu ka mama) and ear head affected with loose smut disease (in which ear head appears black and does not bear any grain) appears, destroy them carefully.
- Rice: After 25-30 days of transplanting, broadcast urea as per requirement of the crop only after weeding.
- Bottle Gourd: Those cucurbitaceous vegetables had achieved vigorous growth needs support of bamboo or any other woody material, so that leaves and fruits of the plant remain untouched with soil. If the crops are attacked by powdery mildew disease (in which white powder appears on stem and leaves) may be controlled by spraying of Karathen @ 1 ml. per liter of water. In some patches crops are attacked by viral (leaf curl) disease and the vector of the virus is white fly. To control the disease spray the insecticide Karate/Kungfu @ 2 ml per liter of water
- Onion: At present, onion and garlic crops are badly attacked by insects and disease. Spray the insecticide Kantaf or Sitara (1 ml per liter of water) along with fungicide Dithane M.-45 @ 1.5 gm per liter water.

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

22-03-2021/(0800 to 0827) GMT
22-03-2021/(1330 to 1357) IST

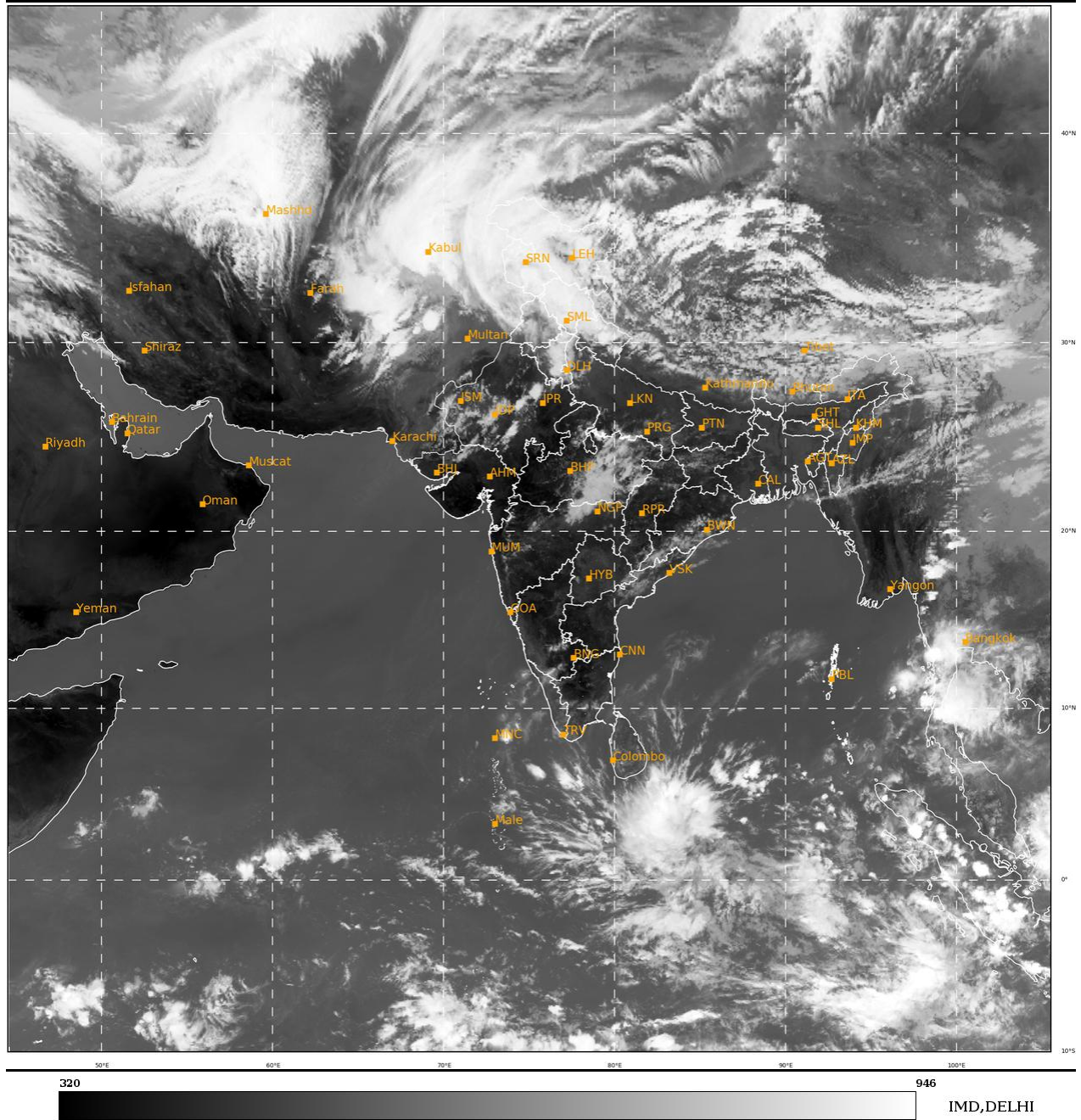


Figure: 1. Latest available satellite picture as on 22 March 2021 at 1357 Hrs (IST). (Source: IMD).

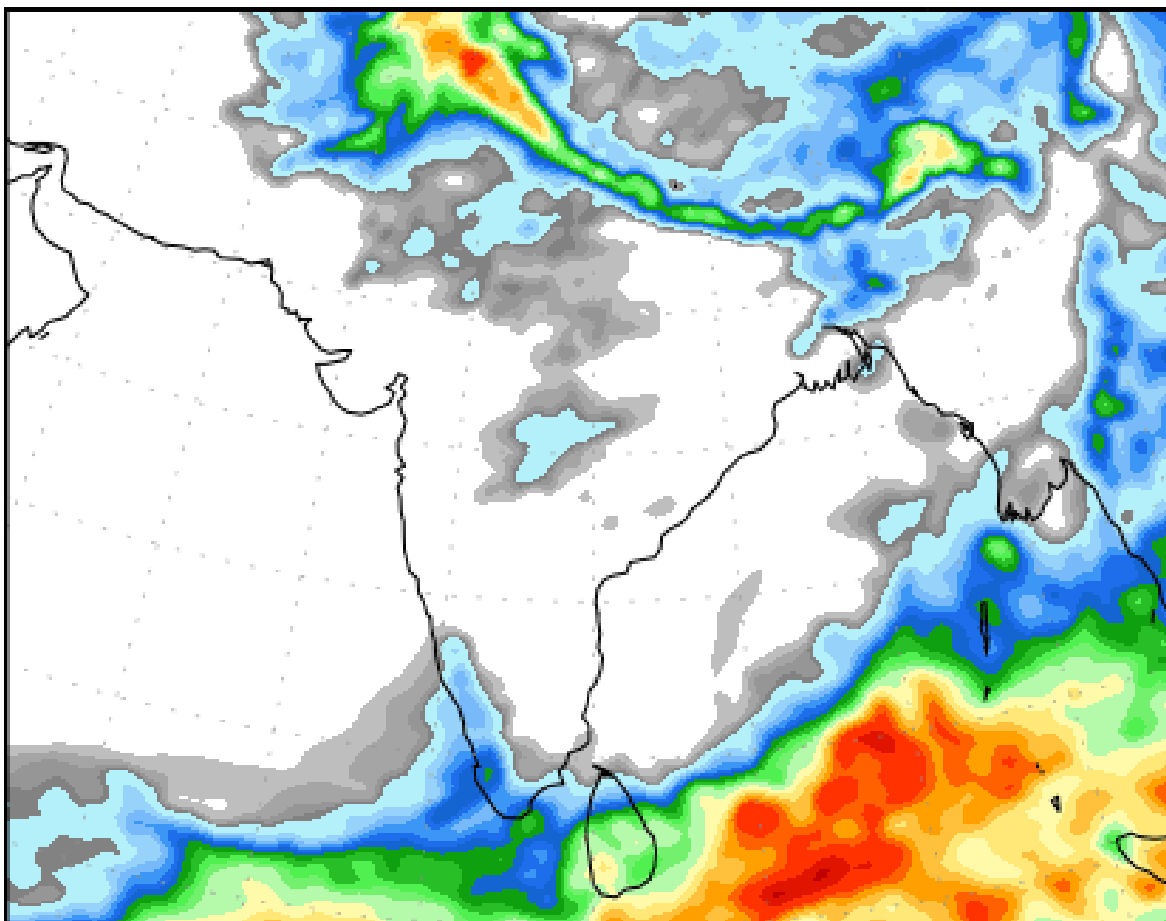


Figure 2. Precipitation forecast for 22 to 30 March 2021 (Source: NOAA NCEP).

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