

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 20 May 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well marked low pressure area over east Rajasthan and adjoining west Madhya Pradesh has further weakened into a Low pressure area and lay centred at northwest Madhya Pradesh & neighbourhood at 0530hours IST of today, the 20 May 2021. It is very likely to move northeastwards and weaken gradually during next 12 hours. The remnant of the system is very likely to move further northeastwards to Uttar Pradesh during the next 24 hours.
- A Western Disturbance lies as a cyclonic circulation over Jammu & Kashmir between 3.1 & 3.6 km above mean sea level with trough aloft at 5.8 km above mean sea level roughly along longitude 71°E to the north of latitude 27°N.
- The low pressure area (remnant of Cyclonic Storm “Tauktae”) would interact with the above Western Disturbance. In addition, high moisture feeding from Arabian Sea is also likely over northwest India. As a result, fairly widespread to widespread rainfall activity likely over Uttar Pradesh & Uttarakhand; and isolated to scattered rainfall over rest parts of northwest India. Heavy to very heavy rainfall at isolated places also likely over Uttarakhand and heavy rainfall at isolated places over West Uttar Pradesh on 20th May. Rainfall activity is very likely to decrease significantly over the region from 21st May, 2021.
- Due to southerly/southwesterly winds from Bay of Bengal over northeast India and cyclonic circulation over Assam at lower levels, fairly widespread to widespread rainfall with isolated heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and northeastern states during 20 to 21 May, 2021.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hrs IST to 1730 hours IST of yesterday): at most places over Uttar Pradesh, Uttarakhand, Konkan & Goa; at many places over Assam & Meghalaya, Arunachal Pradesh, East Rajasthan, Madhya Pradesh and Madhya Maharashtra; at a few places over Nagaland, Manipur, Mizoram & Tripura, West Rajasthan and at isolated places over

Andaman & Nicobar Island, Haryana, Chandigarh & Delhi, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at many places over East Uttar Pradesh, at a few places over East Rajasthan, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chhattisgarh, Vidarbha; at isolated places over Odisha, Gangetic West Bengal, Madhya Maharashtra, Telangana, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- Maximum Temperature Departures as on 19-05-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar Islands; at a few places over West Bengal & Sikkim and at isolated places over Tamil Nadu, Puducherry & Karaikal and Odisha. They are markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Uttarakhand and Punjab; at many places over Gujarat Region and Madhya Maharashtra; at a few places over Marathwada; at isolated places over Jharkhand; appreciably below normal (- 3.1°C to -5.0°C) at most places over North Interior Karnataka; at many places over Assam & Meghalaya, Bihar and Vidarbha; at a few places over Arunachal Pradesh, Saurashtra & Kutch and Telangana; below normal (-1.6°C to -3.0°C) at most places over Chhattisgarh and Coastal Karnataka; at many places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Kerala & Mahe; at a few places over South Interior Karnataka and Lakshadweep and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.0°C reported at Nalgonda (Telangana) over the plains of the country.
- Minimum Temperature Departures as on 19-05-2021: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh; above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over Odisha and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (- 5.1°C or less) at many places over East Rajasthan; at a few places over West Rajasthan and Haryana, Chandigarh & Delhi; appreciably below normal (-3.1°C to -5.0°C) at most places over East Madhya Pradesh; at many places over a few places over West Uttar Pradesh and Gujarat Region; at a few places over West Madhya Pradesh, Vidarbha and Telangana; at isolated places over Saurashtra & Kutch; below normal (-1.6°C to -3.0°C) at most places over Konkan & Goa; at

many places over Coastal Karnataka and Bihar; at a few places over Chhattisgarh; at isolated places over Assam & Meghalaya, Jharkhand near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 15.8°C reported at Erinpura/Jawai Dam Site (West Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 20 May (Day 1): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Himachal Pradesh, Uttarakhand, Jharkhand, Assam & Meghalaya, Gangetic West Bengal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy to Very Heavy Rainfall at isolated places very likely over Uttarakhand and Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, West Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southeast Bay of Bengal & adjoining South Andaman Sea. Fishermen are advised not to venture into these areas. Fishermen are advised not to venture into these areas.
- 21 May (Day 2): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jharkhand, Gangetic West Bengal, Odisha, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Vidarbha, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy Rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands and Assam & Meghalaya. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea, Southwest & adjoining West central Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh coasts; East central Bay of Bengal and adjoining South Andaman Sea. Fishermen are advised not to venture into these areas.
- 22 May (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West

Rajasthan, Bihar and Kerala & Mahe and with lightning at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places likely over Andaman & Nicobar Islands. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea. Squally wind (speed reaching 45-55 kmph gusting to 65 kmph) likely over Southwest & adjoining Westcentral Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh coasts, East central Bay of Bengal and adjoining Andaman Sea. Fishermen are advised not to venture into these areas.

- 23 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West Rajasthan and Kerala & Mahe and with lightning at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands. Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to prevail over Southwest Arabian Sea, 45-55 kmph gusting to 65 kmph likely over Southwest & adjoining Westcentral Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh-south Odisha coast, 55-65 kmph gusting to 75 kmph likely over East central Bay of Bengal and adjoining Andaman Sea. Fishermen are advised not to venture into these areas.
- 24 May (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West Rajasthan and Kerala & Mahe and with lightning at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands. Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to prevail over Southwest Arabian Sea, 45-55 kmph gusting to 65 kmph likely over Southwest & adjoining Westcentral Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh-south Odisha coast, 55-65 kmph gusting to 75 kmph likely over East central Bay of Bengal and adjoining Andaman Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 20 May to 28 May 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)

Gujarat

Weather condition:

The actual maximum temperature was 0.1 °C lower and the actual minimum temperature was 1.4 °C higher as compare to their normal. Total BSS was 72.5 hrs. with an average of 10.4 hrs. The daily average evaporation and wind speed was 9.3 mm and 4.7 km/hr respectively. The daily average RH during morning and afternoon was 70.4 % and 32.9 % respectively.

Contingency measure:

- Weeding, interculturing and irrigation should be done in summer crops like pearl millet, green gram, cow pea, okra etc. if required.
- Summer greengram :For effective control of whitefly infestation and other sucking pest infestation observed spray neem oil @ 50ml/15 liter or Imidachlopride 17.8 SL @ 5ml/15 liter or Acetamiprid 20% SP @ 3 g/15 liter. Use 10 pheromone trap per acre for management of sucking pest.
- Brinjal: Growth: Fruit and Shoot borer: If infestation found install 40 pheromone trap. Change lure at 21 day interval. And spray Diclorovos 76 EC 7 ml or Deltamethrin 1% + Triazophos 36% EC 10 ml in 10 lit water. Uproot and burn little leaf diseases infected brinjal plant and spray any systemic insecticide.
- Chilli : For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Banana : Apply irrigation at an interval of 4 to 5 days as per requirement of crop in summer season. Spraying with zinc sulphate 0.5% or ferrous sulphate 0.2% in banana crop at flowering stage for improving quality and yield.
- Mango: Reduction of high temperature effect of mango fruits can be managed by irrigating the orchard. Install nauroji fruit fly trap @ 10 trap per hector in mango orchard nearby to sapota orchard.
- Cattle: Keep animal shed hygienic and clean to avoid flies and mosquitoes. Due to starting of summer season, it is ensure that animals get drinkable water round the clock, if not possible than after give adlib water atleast 4 - 5 time in a day. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. FMD vaccination should be done.

20-05-2021/(0830 to 0857) GMT
20-05-2021/(1400 to 1427) IST

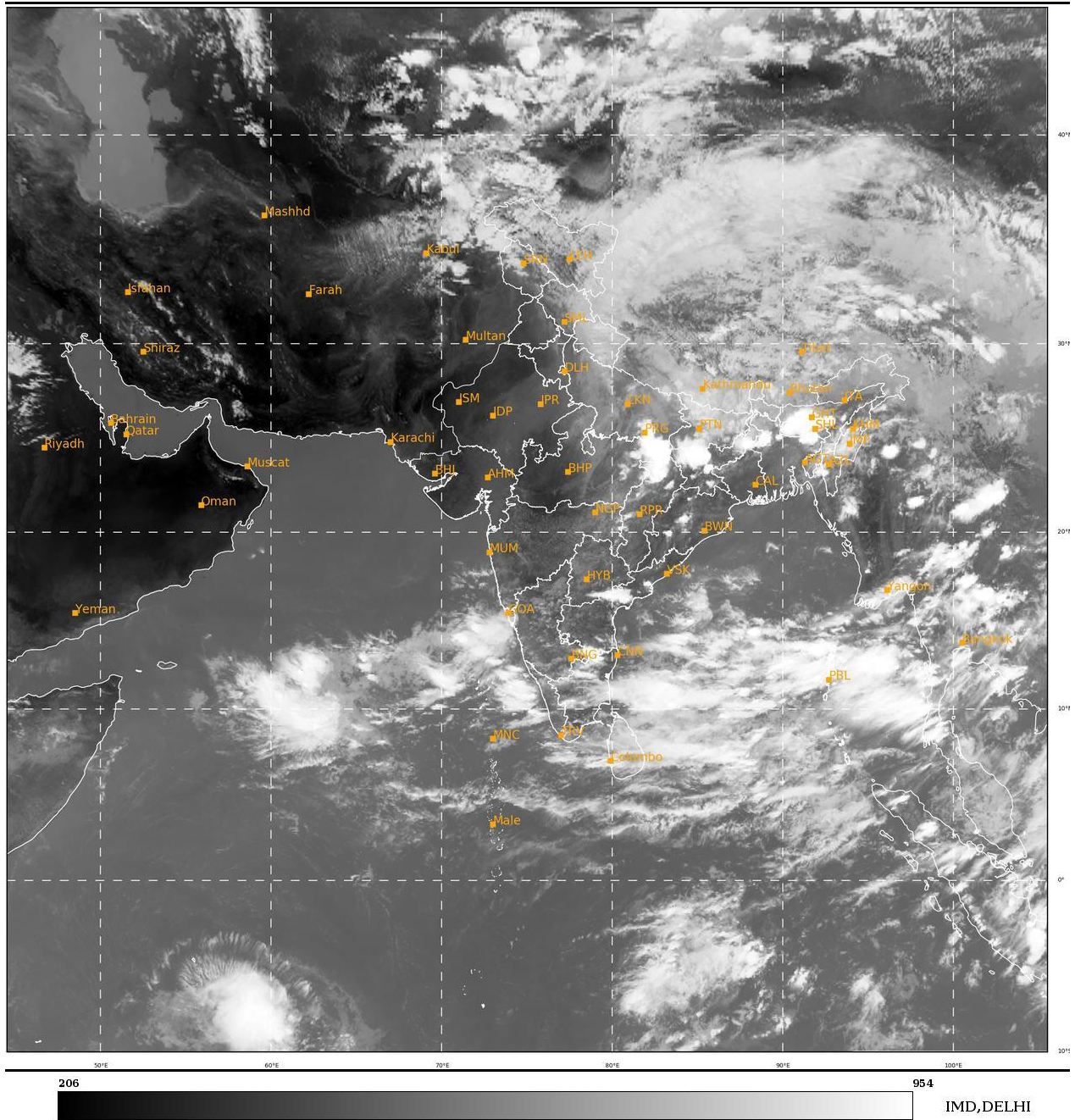


Figure: 1. Latest available satellite picture as on 20 May 2021 at 1427 Hrs (IST). (Source: IMD).

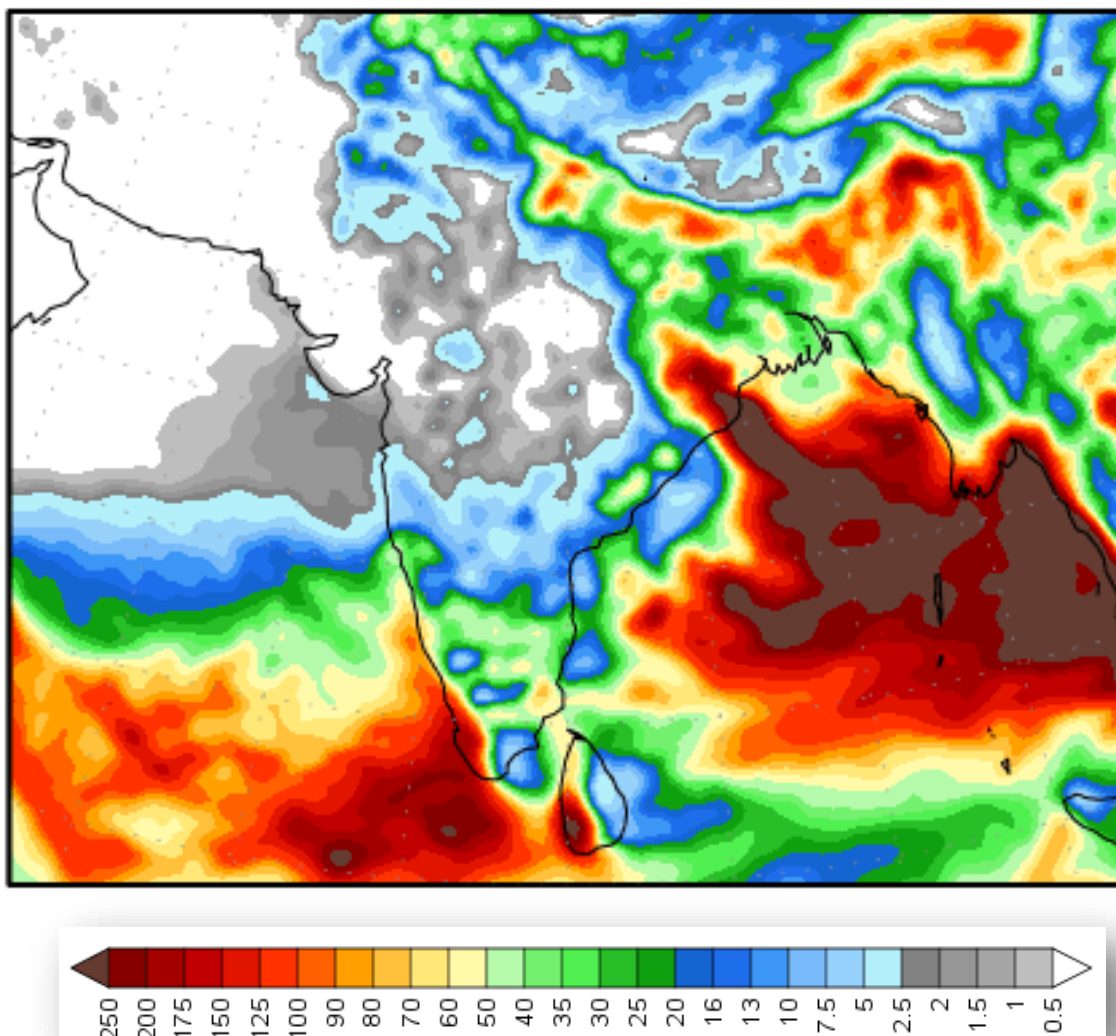


Figure:2. Precipitation forecast for 20 May to 28 May 2021 (Source: NOAA NCEP).

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