

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 21 May 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A cyclonic circulation lies over central parts of south Uttar Pradesh & neighbourhood extending upto 3.1 km above mean sea level; the Western Disturbance as a trough in mid-tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along longitude 75°E to the north of latitude 27°N. Under its influence: (i) Isolated to scattered rainfall/thunderstorm very likely over Uttarakhand, Uttar Pradesh and Bihar on 21st may.
- A Low Pressure Area is very likely to form over north Andaman Sea & adjoining eastcentral Bay of Bengal around 22nd May, 2021. It is very likely to intensify into a cyclonic storm by 24th May 2021. It very likely to move northwestwards and reach Odisha-West Bengal Coast around 26th May morning.
- 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, Arunachal Pradesh and Assam & Meghalaya on 21st May, 2021.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 to 1730 hours IST of yesterday): at most places over Uttarakhand, Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Madhya Pradesh, Jharkhand, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Tripura, south Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe, Lakshadweep, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at a few places over Haryana, Chandigarh & Delhi, Bihar and Jharkhand and isolated places over West Rajasthan, East Uttar Pradesh, Odisha, Chattisgarh,

Assam & Meghalaya, Tripura, Coastal & South Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

- Maximum Temperature Departures as on 20-05-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at isolated places over Assam & Meghalaya, Tripura and coastal Odisha. They were markedly below normal (-5.1°C or less) at most places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh; at a few places over Bihar and Vidarbha and at isolated places over West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over Himachal Pradesh, Punjab, East Rajasthan, Madhya Maharashtra, Marathwada, Coastal & North Interior Karnataka and rest Vidarbha; at many places over Gujarat Region and Telangana; at a few places over Chhattisgarh and Rayalaseema; at isolated places over South Interior Karnataka; below normal (-1.6°C to -3.0°C) at isolated places over Saurashtra & Kutch, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.6°C was reported at Jaisalmer (West Rajasthan) over the plains of the country.
- Minimum Temperature Departures as on 20-05-2021: Minimum temperatures were over above normal (1.6°C to 3.0°C) at most places over Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim; at many places over Odisha; at a few places over Gangetic West Bengal and at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Interior Karnataka, Coastal Andhra Pradesh, Chhattisgarh and Nagaland and Manipur, Mizoram & Tripura. They were markedly below normal (-5.1°C or less) at most places over East Rajasthan, Haryana, Chandigarh & Delhi; at many place over West Uttar Pradesh; at a few places over West Madhya Pradesh and at isolated places over West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at many places over Gujarat region & Vidarbha; at a few places over East Madhya Pradesh, Telangana & Rayalaseema and at isolated place over Punjab, Himachal Pradesh, East Uttar Pradesh, Coastal Karnataka and Tamilnadu; below normal (-1.6°C to -3.0°C) at most places over Konkan & Goa and at isolated places over Kerala & Mahe. Yesterday, the lowest minimum temperature of 17.5°C was reported at Narnaul (Haryana) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 21 May (Day 1): 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 Haryana, Chandigarh & Delhi, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Telangana, Rayalaseema and Kerala & Mahe and with lightning at isolated places over Uttarakhand, Punjab, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places very likely over Andaman & Nicobar Islands and Heavy Rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka and Kerala & Mahe. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) very 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 2): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands and West Rajasthan; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Telangana, Rayalaseema and Kerala & Mahe and with lightning at isolated places over Bihar, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places very likely over Andaman & Nicobar Islands and Heavy Rainfall at isolated places over Kerala & Mahe. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) very 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 3): Thunderstorm with lightning & squall (speed reaching 50-60 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 Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places likely over

Andaman & Nicobar Islands and Kerala & Mahe. 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 4): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Andaman & Nicobar Islands and Kerala & Mahe and with lightning at isolated places over Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. 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.
- 25 May (Day 5): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Andaman & Nicobar Islands and Kerala & Mahe and with lightning at isolated places over Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. 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., 21 May to 29 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)

Marathwada

Weather condition:

At Parbhani centre: 13 May to 20 May (SMW 20) during this period total 3.0 mm rainfall was recorded. The Maximum temperature was range from 36.6 to 40.8 0C and minimum temperature range from 23.0 to 29.6 0C. Relative humidity (RH-I) ranged between 46 to 75% and relative humidity (RH-II) recorded was 17 to 41%. The wind speed varied 3.8 to 12.4 km/hr.

Contingency measure:

- Cotton: Select fertile soil with good moisture holding capacity for sowing of cotton crop. Good drainage and aeration are also essential as the crop cannot stand excessive moisture and water logging. Avoid sandy, saline and water logged soils. The depth of soil should be 60 to 100 cm having pH 5.5 to 8.5.
- Pigeon pea: Select fertile and well drained loamy soils. Well drained, alluvial and loamy soils are good for pigeonpea cultivation. The saline-alkaline and water logged soils are unfit for its cultivation. The depth of soil should be 30 to 45 cm having pH 6.5 to 7.5.
- Black gram/Green Gram: A well drained loamy to sandy loam soil should be selected for cultivation of black gram and green gram crop. Light and waterlogged soils are not suitable for this crop.
- Ground nut: Well-drained sandy and sandy loam soils should be selected for cultivation of groundnut crop. Light soil helps in easy penetration of pegs and their development and also harvesting. Clay or heavy soils are not suitable for this crop.
- Maize: Select medium to heavy fertile soil with well drainage for sowing of maize crop.
- Summer Groundnut: Now days harvesting operations carried out in timely sown Summer groundnut crop. Due to Forecast of Thunderstorm accompanied with Lightning and Rain at isolated places , storage of harvested crop should be done at safe places. Precaution should be done so that the harvested pods may not damage due to rain. If infestation of sucking pests (Thrips, Aphids, Jassids) is observed in late sown groundnut crop, take a spray of imidacloprid 17.8% @ 2 ml or Thiamethoxam 12.6 % + Lambda Cyhalothrin 9.5 % @ 3 ml per 10 liter of water. Spraying should be taken during Clear weather condition and low wind speed.
- Turmeric: Now a days boiling, drying, polishing operations carried out in turmeric crop. Due to Forecast of Thunderstorm accompanied with Lightning and Rain at isolated places, Turmeric crop should not be stored in open place.
- Banana: Select soil having good drainage, adequate fertility and deep, rich loamy soil are most preferred for banana cultivation. Ill drained poorly aerated and

nutritionally deficient soils are not suitable for banana.

- Mango: Select alluvial soils with good amount of organic matter. Soil should be slightly acidic. Poorly drained soils should be avoided. For management of stem borer in old mango orchard remove the dried old branches from the tree. If infection is observed on tree collect the grubs from holes with the help of metal wired hook and apply petrol cotton swab or Chloropyriphos solution (2 ml per liter of water) swab and close the holes with mud or cow dung.
- Grape: For management of thrips in Grape orchard take a spray of 5% NSKE or Spinosad 45% @ 2.5 ml or Fipronil 80% @ 0.6 ml or Emamectin Benzoate 5% @ 4 ml per 10 liter of water, Spraying should be taken during Clear weather condition and low wind speed. If nutrient deficiency is observed in Grape orchard take spray of 00:00:50 @ 15 Gram per liter of water during clear weather condition.
- Custard apple: Select sandy loam soils, well-drained soil without heavy clay or rock is required. The pH of soil should be 6.5 to 8. Avoid heavy soil having water logging condition. For management of stem borer in old Custard apple orchard remove the dried old branches from the tree. If infection is observed on tree collect the grubs from holes with the help of metal wired hook and apply petrol cotton swab or Chloropyriphos solution (2 ml per liter of water) swab and close the holes with mud or cow dung.
- Vegetable: Select the soil as per vegetable crop to be cultivated for sowing of Kharif vegetables. For management of fruit and shoot borer in Brinjal take a spray of 5% NSKE or Chlorantraniliprole 18.5% SC @ 4 ml or Chlorpyriphos 20% EC @ 20 ml or Emamectin Benzoate 5% SG @ 4 gram or Fenpropathrin 30% EC @ 5 ml or Spinosad 45% SC @ 3 ml per 10 liter of water during clear weather condition.
- Animal: Provide balanced ration and ample amount of water to the animals, this helps to reduce heat stress in summer and maintains milk production. Give protein and energy rich feed stuff like different oil cakes & grinded grain in early morning and late evening to the animals with 20-25 gm mineral mixture. This reduces summer stress as well as maintains milk production.
- Floriculture: Due to Forecast of Thunderstorm accompanied with Lightning and Rain at isolated places harvesting of mature flowers should be done.

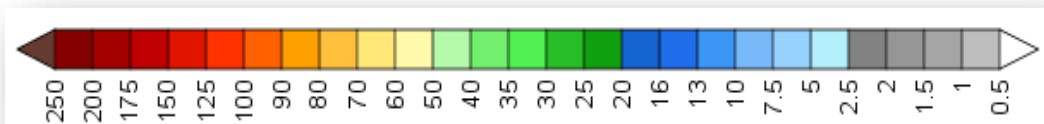
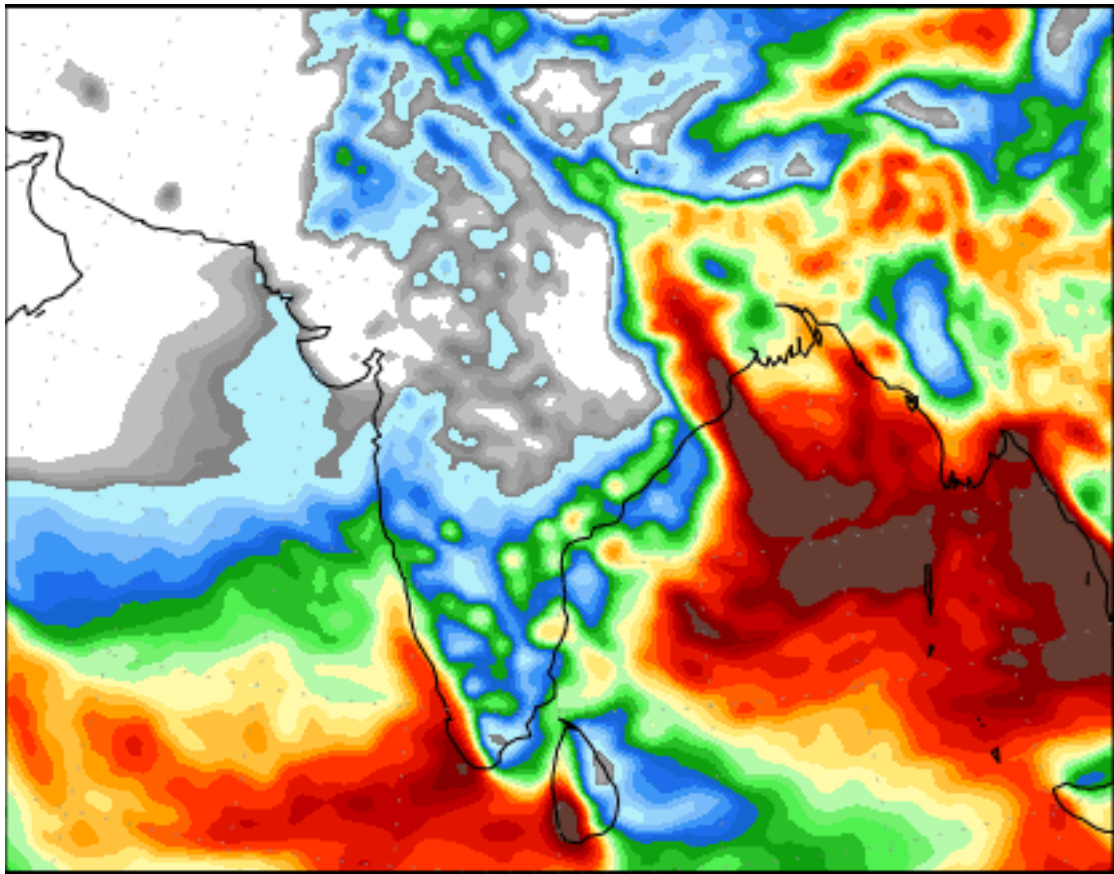


Figure:2. Precipitation forecast for 21 May to 29 May 2021 (Source: NOAA NCEP).

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