

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 12 August 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Monsoon trough lies to the north of its normal position. Western end of the monsoon trough is very likely to remain north of its normal position during next 5 days. However, its Eastern end is likely to shift gradually southwards from 15th August onwards.
- A cyclonic circulation lies over west Bihar & neighbourhood at lower tropospheric levels. It is likely to persist during next 48 hours and become less marked thereafter.
- Strong lower level southwesterly winds from the Bay of Bengal to Northeast India is likely to continue during next 4 days.
- A cyclonic circulation is likely to form over westcentral and adjoining northwest Bay of Bengal around 15th August and may lead to formation of a Low Pressure Area over the same region during subsequent 48 hours.
- Under the influence of these systems:
 - (i) Current spell of widespread rainfall activity with isolated heavy to very heavy falls very likely to continue over Northeast India and Sub-Himalayan West Bengal & Sikkim during 12th-15th August and reduction thereafter. Isolated extremely heavy falls also likely over Assam & Meghalaya during 12th & 13th and over Sub-Himalayan West Bengal & Sikkim on 12th August.
 - (ii) Fairly widespread to widespread rainfall with isolated heavy falls very likely to continue over East Uttar Pradesh & Bihar during 12th-14th August and reduction thereafter. Isolated very heavy falls are likely over East Uttar Pradesh & Bihar on 12th August.
 - (iii) Scattered to Fairly widespread rainfall very likely over Western Himalayan Region during next 5 days. Isolated heavy rainfall over Himachal Pradesh & Uttarakhand during 13th-15th August.
 - (iv) Under the influence of likely formation of cyclonic circulation over westcentral and adjoining northwest Bay of Bengal around 15th August and subsequent formation of a Low Pressure Area during next 48 hours, fairly widespread rainfall activity is likely over Odisha, Coastal Andhra Pradesh,

Telangana, Vidarbha, and Chhattisgarh. Isolated heavy to very heavy falls are likely over Odisha during 15th-17th and isolated heavy falls over Coastal Andhra Pradesh during 15th-17th.

- Subdued rainfall very likely over rest parts of the country.
- 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 Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Konkan & Goa, Coastal Karnataka and Kerala & Mahe; at many places over Andaman & Nicobar Islands, Assam & Meghalaya, Jharkhand, East Uttar Pradesh, Chhattisgarh and Lakshadweep; at a few places over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Odisha, Uttarakhand, Himachal Pradesh, Gujarat Region, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Interior Karnataka and at isolated places over West Uttar Pradesh, Punjab, Haryana, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Vidarbha, Telangana and Rayalseema.
- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over Meghalaya; Very Heavy Rainfall at isolated places over East Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Odisha and South Interior Karnataka.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, East Uttar Pradesh, Bihar, West Bengal & Sikkim, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 11-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Telangana; at many places over Coastal Andhra Pradesh & Yanam; at a few places over Vidarbha and Chhattisgarh; at isolated places over West Madhya Pradesh, Madhya Maharashtra, Marathwada, Odisha and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Uttarakhand and Konkan & Goa; at many places over Himachal Pradesh, Punjab, West Uttar Pradesh, Gangetic West Bengal and Gujarat state; at a few places over Interior Karnataka; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan &

Muzaffarabad and Rajasthan. They were below normal (-1.6°C to -3.0°C) at a few places over East Uttar Pradesh and Andaman & Nicobar Islands; at isolated places over East Madhya Pradesh and Arunachal Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.0°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 12-08-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over Uttarakhand; at many places over Rayalaseema and Coastal Andhra Pradesh & Yanam; at a few places over Uttar Pradesh, Gangetic West Bengal, Odisha and Telangana; at isolated places over Himachal Pradesh, Punjab, West Rajasthan, Jharkhand, Madhya Pradesh, Gujarat state and Vidarbha. They are below normal (-1.6°C to -3.0°C) at a few places over Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.5°C is reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 12 August (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over East Uttar Pradesh, Bihar and Arunachal Pradesh and heavy rainfall at isolated places over Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea; Squally weather (speed 40-50 kmph gusting to 60 kmph) over Westcentral, Southwest & adjoining Southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- 13 August (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy rainfall at isolated places over East Uttar Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea; Squally weather (speed

40-50 kmph gusting to 60 kmph) over Southwest & adjoining Southeast Bay of Bengal and along & off Tamilnadu-Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.

- 14 August (Day 3): Heavy to very heavy rainfall very likely at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Bihar, Odisha, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Jharkhand, Gangetic West Bengal, Odisha and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest, Westcentral and Northeast Arabian Sea and along & off Gujarat coast; Squally weather (speed 40-50 kmph gusting to 60 kmph) over Southwest & adjoining Southeast Bay of Bengal and along & off Tamilnadu-Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- 15 August (Day 4): Heavy rainfall likely at isolated places over Uttarakhand, East Uttar Pradesh, Odisha, Assam & Meghalaya, SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over East Uttar Pradesh, Chhattisgarh, Odisha, Marathwada and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest, Westcentral and Northeast Arabian Sea and along & off Gujarat coast; Squally weather (speed 40-50 kmph gusting to 60 kmph) over Southwest & adjoining Southeast Bay of Bengal and along & off Tamilnadu-Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- 16 August (Day 5): Heavy to very heavy rainfall likely at isolated places over Odisha and heavy rainfall at isolated places over Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh and Marathwada. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea; Squally weather (speed 40-50 kmph gusting to 60 kmph) over Southwest & adjoining Southeast Bay of Bengal and along & off Tamilnadu-Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 12 Aug to 20 Aug 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)

Jammu

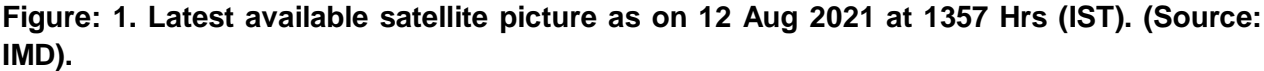
Weather condition:

Mainly partially cloudy to clear weather prevailed during this week with 25.2 mm rainfall in 2 rainy days. The maximum temperature remain above normal by 1-20C and was recorded in the range between 32.5 to 35.8 0C. The minimum temperature also remain mainly above normal by 1 to 40C and was recorded in the range between 23.4 to 28.6 0C. The morning and evening relative humidity observed in the range of 73 to 90 % and 54 to 92 %, respectively. The total evaporation observed 42.4 mm and bright sunshine during this period remain in the range of 3.3 to 9.4hrs.

Contingency measure:

- Paddy: Tillering Strengthen bunds to retain rain water. Monitor transplanted/ sown crop for attack of thread worm, if observed, apply carbofuran 3G @ 20kg/ha during clear weather. In normal transplanted rice crop if the crop is 25-30 days old Apply of 2nd dose of nitrogenous fertilizer as top dressing after receipt of rain. To control weeds Spray Bispyribac-sodium@25gm ai in 500lts of water/ha in 25-30 days old conventionally transplanted crop during clear weather. Maize Early vegetative/ knee high Due to rain in past days and further chances of rain, do not allow water to stagnate in fields. To control stem borer, apply Cartap hydrochloride/Carbofuran granules @ 5 gm/plant during clear weather. To control, fall army worm, apply Chlorantraniliprole 18.5 SC (Coragen) @ 7.5ml/kanal or Thiomethoxam @ 0.4ml/lit in whorl during clear weather. Pulses: Kharif Mash Germination/ early vegetative Make arrangement to drain out excess rain water from the fields. Top dress nitrogenous fertilizer after receipt of rain.
- Kharif Fodder (maize+ cowpea+charri) & bajra: Early vegetative Drain out excess rain water from the fields. Top dress nitrogenous fertilizer after receipt of rain.
- Floriculture: Chrysanthemum Marigold Cutting preparation/ Transplanting Nursery raising/ Sowing Drain out excess rain water from the fields. Transplanting of Chrysanthemum in the beds for cut/loose flower production is recommended during clear weather where water is not stagnated in fields. Transplanting of (var. desi gutti) for diwali flower catch/sale is recommended after receipt of rain.

- Vegetables: Brinjal Okra Turmeric Cucurbits Fruiting Fruiting Vegetative Fruiting Apply sesbania @ 2kg/kanal in fallow fields. Do not allow rain water to stand in the fields. Postpone irrigation, plant protection measures as well as application of fertilizers. Pluck infected fruits and shoots, if noticed in field and bury them. Keep the fields weed free with proper drainage facilities. Earthing up and weed free conditions are recommended. Give proper support and cushion to the plants and fruits respectively. Avoid direct contact of cucurbits fruit with soil.
- Sericulture: Mulberry Cocoon crop Tree plantation Harvested cocoons Make arrangement to drain out excess rain water from the fields. Mulberry saplings can be transplanted. Postpone application of fertilizers till weather gets clear. Apical cut must be given at a height of 175 -180 cm. Prune established mulberry trees at basal crown height. Cocoon harvested during April month (if not sold) should be loosely packed in muslin cloth bags. The bags should be kept in wire mesh covered racks to avoid rodent and fungal attack till sale of the crop.
- Horticulture: Plantation Rainy season plantation for new orchard and gap filling can be undertaken. Mushroom Milky mushroom Oyster mushroom Spawn Fruit initiation Spawning may be done for milky mushroom. Relative humidity is perfect for spawning. In case of earlier spawning, case the bags. Pinch 2 mm diameter holes in full run spawn bags of oyster mushroom.
- Apiculture: Protect bee colonies from rains by reducing the entrance. Give need based sugar feeding. Protect bee hive from ants.
- Fisheries: Culture fisheries Capture fisheries Yearlings/ Fingerlings/fry Farmers should check the outlet and water level of the pond in order to avoid the escape out of fish live-stock from ponds. Apply screen to the outlet. Fishermen should be careful while netting operations in the wild, especially rivers.
- Poultry: Vaccinate chicks against new castle disease and gumbroo disease. Spread clean litter material uniformly in the poultry house at thickness of 2-3 inches. protect chicks from direct contact with rain.
- Live stock: Dairy animals/ Sheep & Goat Provide adequate amount of fresh cool and clean drinking water to the animals at frequent intervals to save animals from heat stroke. Keep all the animals under shade and if possible provide coolers to cross bred cattles during the day time. Supplementary mineral mixture should be given regularly to the milking and pregnant animals. If not vaccinated yet, get the animals vaccinated against foot and mouth and Gal Gotu diseases. Sheep and goat should be allowed to graze/browse during cooler parts of the day i.e. morning and evening. *Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field.



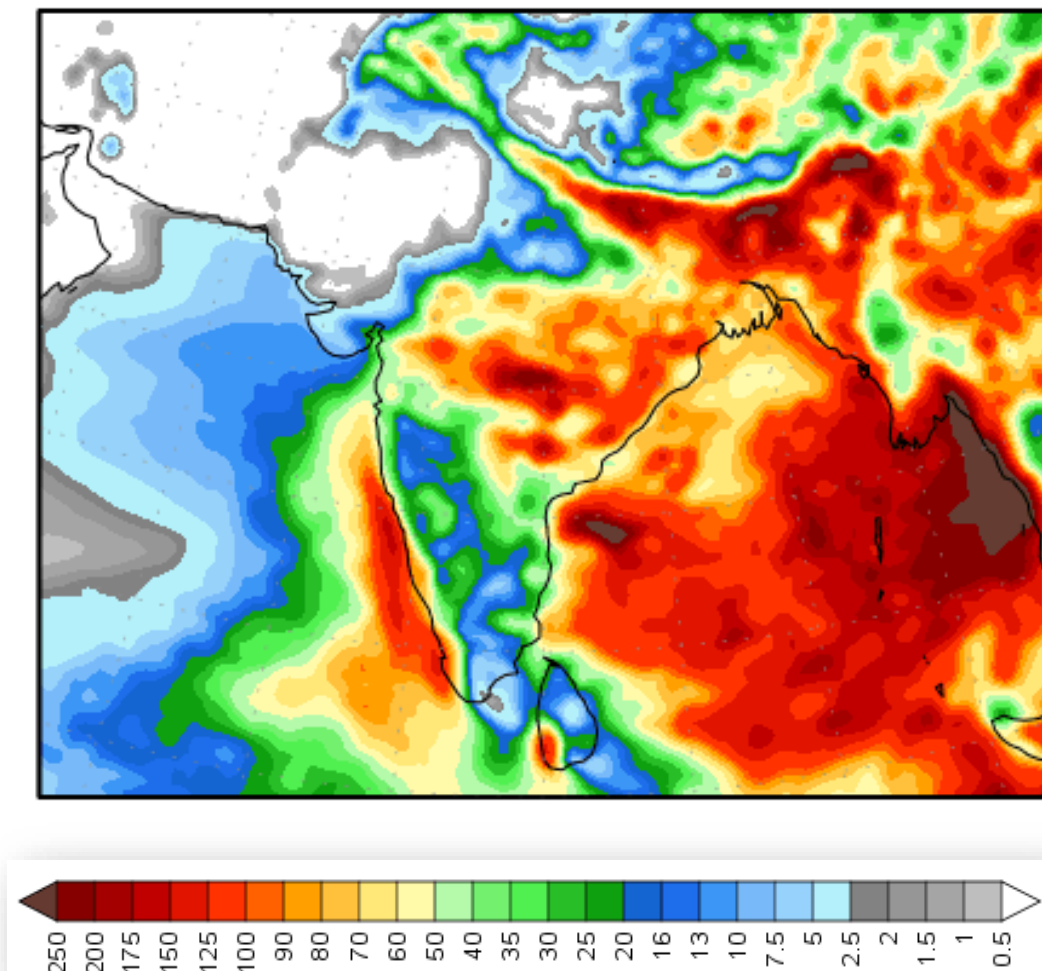


Figure:2. Precipitation forecast for 12 Aug to 20 Aug 2021 (Source: NOAA NCEP).

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