

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 28 Jul 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well Marked Low Pressure Area over south Bangladesh and adjoining North Bay of Bengal & West Bengal now lies over coastal Bangladesh & adjoining West Bengal. The associated cyclonic circulation extends upto mid tropospheric levels. It is likely to move westwards across West Bengal, Jharkhand and Bihar during next 48 hours.
- The western end of the Monsoon trough at mean sea level passes through north of its normal position while its western end passes along normal position. A cyclonic circulation lies over north Pakistan & adjoining Punjab in the lower levels. A line of convergence runs from the above cyclonic circulation over north Pakistan & adjoining Punjab to south Gujarat across West Rajasthan at 3.1 km above mean sea level.
- Under their influence of the above systems:
 - (i) Current spell of Widespread rainfall activity with isolated heavy to very heavy falls very likely to continue over Jammu and Kashmir, Himachal Pradesh, Uttrakhand, Punjab, Haryana and Uttar Pradesh till 30th July and reduction thereafter. Isolated extremely heavy falls are likely over Himachal Pradesh today on 28th July and over Uttarakhand on 28th-29th July.
 - (ii) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over Odisha, Gangetic West Bengal, Jharkhand, and Bihar during 28th-30th July and over East Madhya Pradesh and Chhattisgarh during 28th-31st July. Isolated extremely heavy falls are likely over Gangetic West Bengal on 28th & 29th July, over Jharkhand on 29th and 30th July and over Chhattisgarh on 30th July and over East Madhya Pradesh on 31st July.
 - (iii) Widespread rainfall with isolated heavy to very heavy falls likely to continue over East Rajasthan and West Madhya Pradesh during 28th July to 1 August. It is likely to increase from 30th July. Isolated extremely heavy falls are likely over West Madhya Pradesh on 1st August.

(iv) Fairly widespread to widespread rainfall with isolated heavy falls very likely over Konkan & Goa, Ghat areas of Madhya Maharashtra during 28th July to 1st August.

- 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 Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Gujarat Region and Madhya Maharashtra; at a few places over Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya and Interior Karnataka and at isolated places over West Rajasthan, Saurashtra & Kutch, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over East Uttar Pradesh; Very Heavy Rainfall at isolated places over Uttarakhand, Punjab, Chhattisgarh, Madhya Pradesh and Gangetic West Bengal and Heavy Rainfall at isolated places over Jammu & Kashmir, Himachal Pradesh, Haryana, Delhi, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Jharkhand, Odisha, Mizoram and Madhya Maharashtra.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Gangetic West Bengal; at a few places over East Uttar Pradesh and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi, Punjab, Rajasthan, East Rajasthan, East Madhya Pradesh, Jharkhand, Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya.
- Maximum Temperature Departures as on 27-07-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Arunachal Pradesh and Assam & Meghalaya and at isolated place over Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.1°C) at many places over Coastal Andhra Pradesh & Yanam and Telangana; at a few places over Konkan & Goa, Andaman

& Nicobar Islands and Tamil Nadu, Puducherry & Karaikal; at isolated places over gangetic West Bengal, Vidarbha, Marathwada, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Punjab and Haryana, Chandigarh & Delhi; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh; at a few places over Himachal Pradesh, Bihar, Odisha and Lakshadweep and at isolated places over Jharkhand, Gujarat State, North Interior Karnataka and Nagaland, Manipur, Mizoram & Tripura and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.7°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 28-07-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Arunachal Pradesh; at isolated places over Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Coastal Andhra Pradesh & Yanam; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Assam & Meghalaya; at isolated places over Saurashtra & Kutch. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Jharkhand; below normal (-1.6°C to -3.0°C) at a few places over Haryana, Chandigarh & Delhi and East Uttar Pradesh; at isolated places over East Madhya Pradesh, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.8°C is reported at Khargone (West Madhya Pradesh).

Weather Warning during the next 5 days (IMD)

- 28 July (Day 1): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Himachal Pradesh, Uttarakhand and Gangetic West Bengal; Heavy to Very Heavy Rainfall at isolated places over Punjab, Haryana, Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand and Odisha and Heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest, North and Central Arabian Sea and along & off Gujarat-Maharashtra coasts; (speed 40-50 kmph gusting to 60 kmph) over Northeast & Central Bay of

Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coast. Fishermen are advised not to venture into these areas.

- 29 July (Day 2): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Uttarakhand, Jharkhand and Gangetic West Bengal; Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Punjab, Haryana, East Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Bihar and Odisha and Heavy rainfall at isolated places over East Rajasthan, West Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands and Coastal Andhra Pradesh & Yanam. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest, North and Central Arabian Sea and along & off Gujarat-Maharashtra coasts; (speed 40-50 kmph gusting to 60 kmph) over Northeast & Central Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coast. Fishermen are advised not to venture into these areas.
- 30 July (Day 3): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Jharkhand and Chhattisgarh; Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh and Odisha and Heavy rainfall at isolated places over Punjab, Haryana, West Uttar Pradesh, West Rajasthan, Vidarbha, Bihar, Gangetic West Bengal, Assam & Meghalaya, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Bihar and Coastal Andhra Pradesh & Yanam. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest, North and Central Arabian Sea and along & off Gujarat-Maharashtra coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 31 July (Day 4): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places likely over East Madhya Pradesh; Heavy to Very Heavy Rainfall at isolated places over East Uttar Pradesh, East Rajasthan, West Madhya Pradesh and Chhattisgarh and Heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, West Uttar Pradesh, Vidarbha, Jharkhand, Odisha, Madhya Maharashtra and Konkan & Goa. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest, North and Central Arabian Sea and

along & off Gujarat-Maharashtra coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.

- 01 August (Day 5): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over West Madhya Pradesh; Heavy to Very Heavy Rainfall at isolated places over East Uttar Pradesh, East Rajasthan and East Madhya Pradesh and Heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, West Uttar Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra and Konkan & Goa. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest, North and Central Arabian Sea and along & off Gujarat-Maharashtra coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 28 Jul to 05 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)

Gujarat

Weather condition:

The actual maximum temperature was 1.8 °C and the actual minimum temperature was 1.5 °C higher as compare to their normals. Total BSS was 24.7 hrs. with an average of 3.5 hrs. The daily average evaporation and wind speed was 3.5 mm and 5.7 km/hr respectively. The daily average RH during morning and afternoon was 88.9 % and 71.3 % respectively.

Contingency measure:

- Pearl millet: Vegetative : Carry out gap filling/thinning and apply recommended top dressing dose of nitorgen fertilizer. Carry out hand weeding and interculturing operations. Farmers are advised to select any variety for sowing of Green gram-GM-3, GM-4, GM-5, K-851, Black gram-T-9, GU-1, Cowpea-Gujarat cowpea-1,2,4, Pusa falguni, Pigeon pea-Vaishali, GT-100, GTH-1, BHSR-711.
- Tobacco: Nursery preparation :Carry out nursery bed preparation for raising the seedlings of bidi tobacco varieties like Anand-119, Anand- 2, GT- 4, GT-5 GABTH-2, GABT-11, ABT-10, MRGTH-1 for kharif cultivation.
- Paddy: Transplanting: For transplanting (TP) of paddy, Field should be puddle either with power tiller/mini tractor/bullock just before TP. Level the puddle land. Give root deep treatment with Bio-fertilizer or apply with manure. Transplant younger seedling at 20 cm x 15 cm spacing. Use 2-3 seedlings per hill for TP.
- 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.
- Mango: Farmers are advised to clean the orchards by removing dead plant debris and prepare for excess water drain out from the field. It is the best time for plantation of fruit orchard.
- Cattle: Vaccinate the animals against outbreaks of diseases like Foot & Mouth disease (FMD), Haemorrhagic Septicaemia (H.S.) and Black quarter (B.Q.) during onset of monsoon. Keep animal indoor in rainy condition. Keep fodder at safe place to avoid spoilage from rainfall. Spray phenyl in the animal shed to avoid flies and mosquitos.

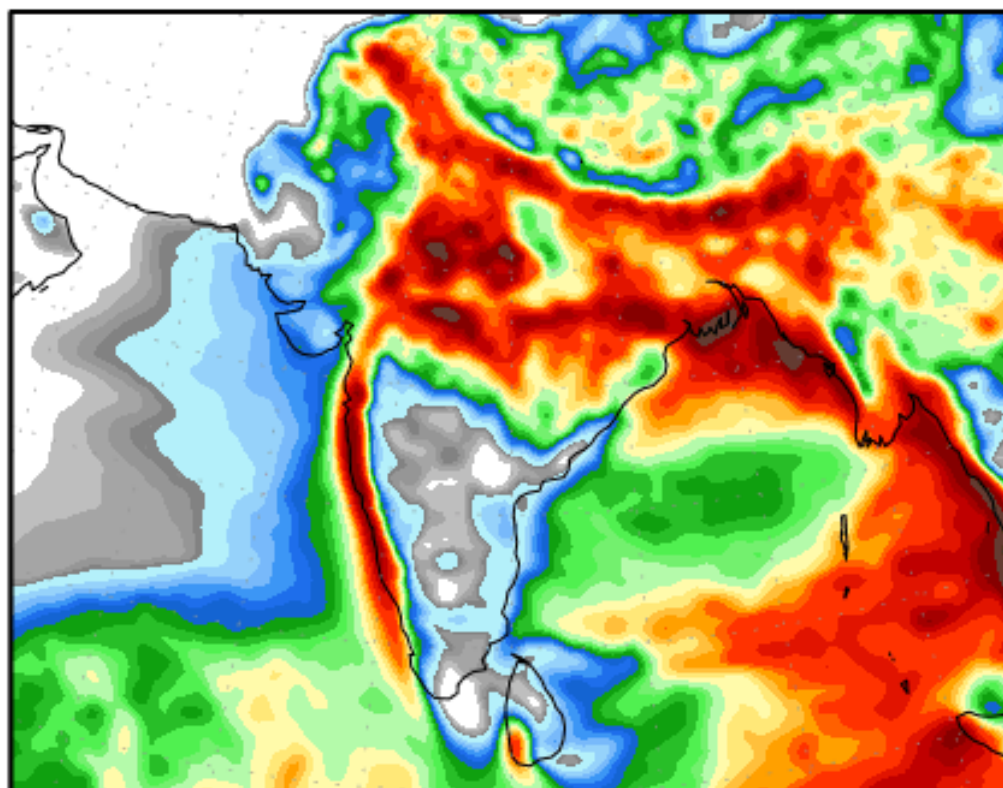


Figure:2. Precipitation forecast for 28 Jul to 05 Aug 2021 (Source: NOAA NCEP).

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