

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 16 August 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The western end of the Monsoon trough lies close to the foothills of the Himalayas and Eastern end is near its normal position. The Western end of the monsoon trough is very likely to remain north of its normal position during next 3-4 days.
- A cyclonic circulation lies over Westcentral & adjoining Northwest Bay of Bengal off south Odisha-north Andhra Pradesh extending upto upper tropospheric levels tilting southwestwards with height. Under its influence, a low pressure area is likely to form over Northwest & adjoining Westcentral Bay of Bengal off Odisha-north Andhra Pradesh coasts during next 24 hours.
- Under the influence of the above systems:
 - i) Fairly widespread to widespread rainfall activity with isolated heavy falls very likely to continue over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 4-5 days. Isolated heavy to very heavy falls very likely over Assam & Meghalaya on 16th & 17th; Arunachal Pradesh on 17th and Nagaland, Manipur, Mizoram & Tripura on 16th August, 2021.
 - ii) Fairly widespread to widespread rainfall activity very likely over Gangetic West Bengal, Odisha, Bihar, Jharkhand, Coastal Andhra Pradesh, Telangana, Madhya Pradesh, Chhattisgarh and Vidarbha during next 5 days. Isolated heavy falls very likely over Coastal Andhra Pradesh on 17th; Telangana on 18th & 19th; over Jharkhand on 16th, 17th & 18th; over Bihar on 16th; over Gangetic West Bengal on 16th & 17th; over Sub-Himalayan West Bengal & Sikkim during 16th-20th; over Madhya Pradesh from 17th to 19th; over Chhattisgarh and Vidarbha from 16th to 18th August. Isolated heavy to very heavy falls also very likely over Coastal Andhra Pradesh on 16th; Odisha and Telangana on 16th & 17th; Vidarbha on 18th August, 2021.
 - iii) Fairly widespread to widespread rainfall activity very likely over Maharashtra (except Vidarbha area) during next 3 days till 19th August with reduction thereafter. Isolated heavy falls very likely over these areas during 16th and 17th Aug and Isolated heavy to very heavy falls very likely on 19th August. ♦ Subdued

rainfall very likely to continue over northwest India and Gujarat during next 4 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 Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka and Lakshadweep; at many places over Arunachal Pradesh, Assam & Meghalaya, Odisha, Jharkhand, Bihar, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Marathawada, Chhattisgarh, North Interior Karnataka and Kerala & Mahe; at a few places over Gangetic West Bengal, Uttarakhand, Madhya Maharashtra, Vidarbha and Rayalaseema and at isolated places over East Uttar Pradesh, Haryana, Punjab, Madhya Pradesh, Gujarat Region, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places over East Uttar Pradesh and heavy rainfall at isolated places over Bihar, Chhattisgarh, Telangana, South Interior Karnataka, Andaman & Nicobar Islands, Arunachal Pradesh, Jharkhand, Marathawada, Odisha, Coastal Andhra Pradesh and Konkan & Goa.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, West Uttar Pradesh, Jharkhand, Chhattisgarh, Bihar, West Bengal & Sikkim, Odisha and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 15-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Madhya Pradesh, Odisha and Vidarbha; at isolated places over East Uttar Pradesh, Gangetic West Bengal and Jharkhand; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh, Saurashtra & Kutch, Marathwada and Telangana; at many places over Himachal Pradesh, Uttarakhand and East Rajasthan; at a few places over Haryana, Chandigarh & Delhi, Gujarat Region, Chhattisgarh, Coastal Andhra Pradesh & Yanam, North Interior Karnataka and Kerala & Mahe; at isolated places over Punjab, West Rajasthan and Konkan & Goa. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at a few places over Jammu &

Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 39.5°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 16-08-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over East Uttar Pradesh; at a few places over West Uttar Pradesh and at isolated places over Madhya Pradesh, Gangetic West Bengal, Odisha, Saurashtra & Kutch and West Rajasthan. They are below normal (-1.6°C to -3.0°C) at many places over Himachal Pradesh and Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.0°C reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 16 August (Day 1): Heavy to very heavy rainfall very likely at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya and Odisha; heavy rainfall at isolated places over Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra, Marathawada, Rayalaseema, North Interior Karnataka. Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) very likely at isolated places over Telangana and with lightning at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest and Westcentral Arabian Sea. Squally weather (speed 40-50 kmph gusting to 60 kmph) over Westcentral Bay of Bengal off Andhra Pradesh coast and southeast Bay of Bengal & adjoining north Andaman Sea. Fishermen are advised not to venture into these areas.
- 17 August (Day 2): Heavy to very heavy rainfall very likely at isolated places over Telangana, Arunachal Pradesh, Assam & Meghalaya, Odisha and heavy rainfall at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam and North Interior Karnataka. Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) very likely at isolated places over Telangana and with

lightning at isolated places over East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Madhya Maharashtra, Marathwada and Coastal Andhra Pradesh & Yanam. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest and Westcentral Arabian Sea. Squally weather (speed 40-50 kmph gusting to 60 kmph) over Westcentral Bay of Bengal off Andhra Pradesh coast and southeast Bay of Bengal & adjoining north Andaman Sea. Fishermen are advised not to venture into these areas.

- 18 August (Day 3): Heavy to very heavy rainfall very likely at isolated places over Madhya Maharashtra, Marathwada, Vidarbha and heavy rainfall at isolated places over Madhya Pradesh, Chhattisgarh, Uttarakhand, East Uttar Pradesh, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, south Gujarat region, Konkan & Goa and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Jharkhand, Madhya Pradesh, Madhya Maharashtra, Marathwada and Telangana. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 19 August (Day 4): Heavy rainfall likely at isolated places over Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Madhya Pradesh, south Gujarat region and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Tamilnadu, Puducherry & Karaikal and Telangana. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 20 August (Day 5): Heavy rainfall likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, south Gujarat region and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 16 Aug to 24 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 0.0 to 3.7 Bright sunshine hours was recorded during last week. During last week 89.8 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 27.5 to 29.0 and 22.0 to 24.3 oC respectively. Wind velocity ranged from 8.8 to 10.5 km and wind was blowing from south westerly Direction.

Contingency measure:

- General advise:Due to forecast for light to moderate during next five days, complete the intercultivation operation in rice, finger millet, groundnut crop also paclobutrazol application in Mango, fertilizer application in cashew and arecanut orchard
- SMS advisory:Keep bunds weed free to remove the alternate host plant of major pest of rice crop helps to reduce the incidence of army worm, blue beetle and leaf folder etc
- Kharif rice:Due to forecast for light to moderate rainfall, maintain optimum water level of 5 cm in transplanted rice field by repairing the bunds.Apply second split dose of nitrogenous fertilizer @870 gms urea/guntha to rice crop at 30 to 40 days after transplanting when intensity of rainfall is low.Due to intermittent rainfall and cloudy weather condition, there is possibility of incidence of blue beetle and caseworm on low land rice, hence observe crop regularly for infestation of pest. If incidence of blue beetle is noticed on rice crop, spray Quinalphos 25% EC @ 20 ml or Triazophos 40%EC@ 12.5 ml or Lambda cyhalothrin 5%EC @ 5 ml per 10 liter of water during clear weather (no rainfall). If incidence of rice case worm is noticed on rice crop, then flood the field with water followed by dragging the rope to dislodge the cases and drain out water from field. Collect the cases and destroy then maintain the water level of 5 cm in the field with fresh water.Due to intermittent rainfall and cloudy weather, there is possibility of incidence of leaf folder in transplanted rice crop, hence observe crop regularly for infestation of pest. for control of leaf folder apply Cartap hydrochloride 4% granule @7.5 kg or Chlorantraniliprole 0.4% granule @ 4 kg or Fipronil 0.3% granule @8.3 kg per acre

in moist soil. Due to forecast of intermittent rainfall and cloudy weather condition will cause for incidence of brown plant hopper in lowline area where stagnation of water is observed. Hence observe crop regularly for infestation of pest. If incidence of brown plant hopper is observed above threshold level (5-10 hopper/hill), spray Acephate 75%WP @ 2.25 g or Fipronil 5% SC @ 2 ml or Imidacloprid 17.8% SL @ 0.2 ml per liter of water. Make provision for replacing stagnated water with fresh water for every 2-3 days. Precaution should be taken to spray the insecticide on stem of rice plant. Due to intermittent rainfall, increase in temperature and humidity, there is possibility of incidence of army worm in upland rice field. Hence observe crop regularly for infestation of pest. Install bird's perches @ 3-4 / acre. Keep bunds in rice field weed free. If incidence of army worm is observed above threshold level (1 larva / hill), spray Dichlorovos 76 WSC 13 ml per 10 liter of water during evening hours or in early morning when wind blows calm. Precaution should be taken to spray the insecticide on stem of rice plant. Due to intermittent rainfall, there is possibility of incidence of army worm in rice nursery and transplanted rice field where water stress condition is observed, hence observe crop regularly for infestation of pest. Keep bunds weed free. If possible, make provision to stagnated water in field for 1-2 days. If incidence is noticed, dust the Chlorpyrifos 1.5% DP powder during wind blows calm as per requirement. (Note: insecticide is not under label claim for the army worm incidence on rice crop)

- Finger millet: Due to forecast for light to moderate rainfall, follow weeding in finger millet crop at one month after transplanting as per requirement and apply second split dose of nitrogenous fertilizers @ 870 gms urea/guntha to finger millet. Due to intermittent rainfall, there is possibility of incidence of army worm in finger millet and proso millet field where water stress condition is observed, hence observe crop regularly for infestation of pest. Keep bunds weed free. and if incidence is noticed, dust the Chlorpyrifos 1.5% DP powder during wind blows calm. (Note: insecticide is not under label claim for the army worm incidence on rice crop).
- Mango: Due to forecast for light to moderate rainfall and possibility for increase in rainfall activity after 15th August, 2021, complete the paclobutrazol application in mango orchard. Apply paclobutrazol for regular flowering to the mango trees having age of 10 years and above. Before application, first measure east-west and north-south diameter of the tree canopy and average it and then calculate dose @ 3 ml per meter diameter of tree canopy. Mix this quantity of paclobutrazol in 3 to 5 lts. of water. Apply this solution uniformly in 25 to 30 holes at uniform

distance with 10 to 12 cm depth in circular fashion at half distance of tree cover (just inside the manuring ring) from the base of tree. For making hole crowbar can be used. Ensure the drenching of uniform quantity in each hole and closed or plug hole after application. Before application of paclobutrazol make area weed free. apply paclobutrazol by observing low intensity of rainfall.

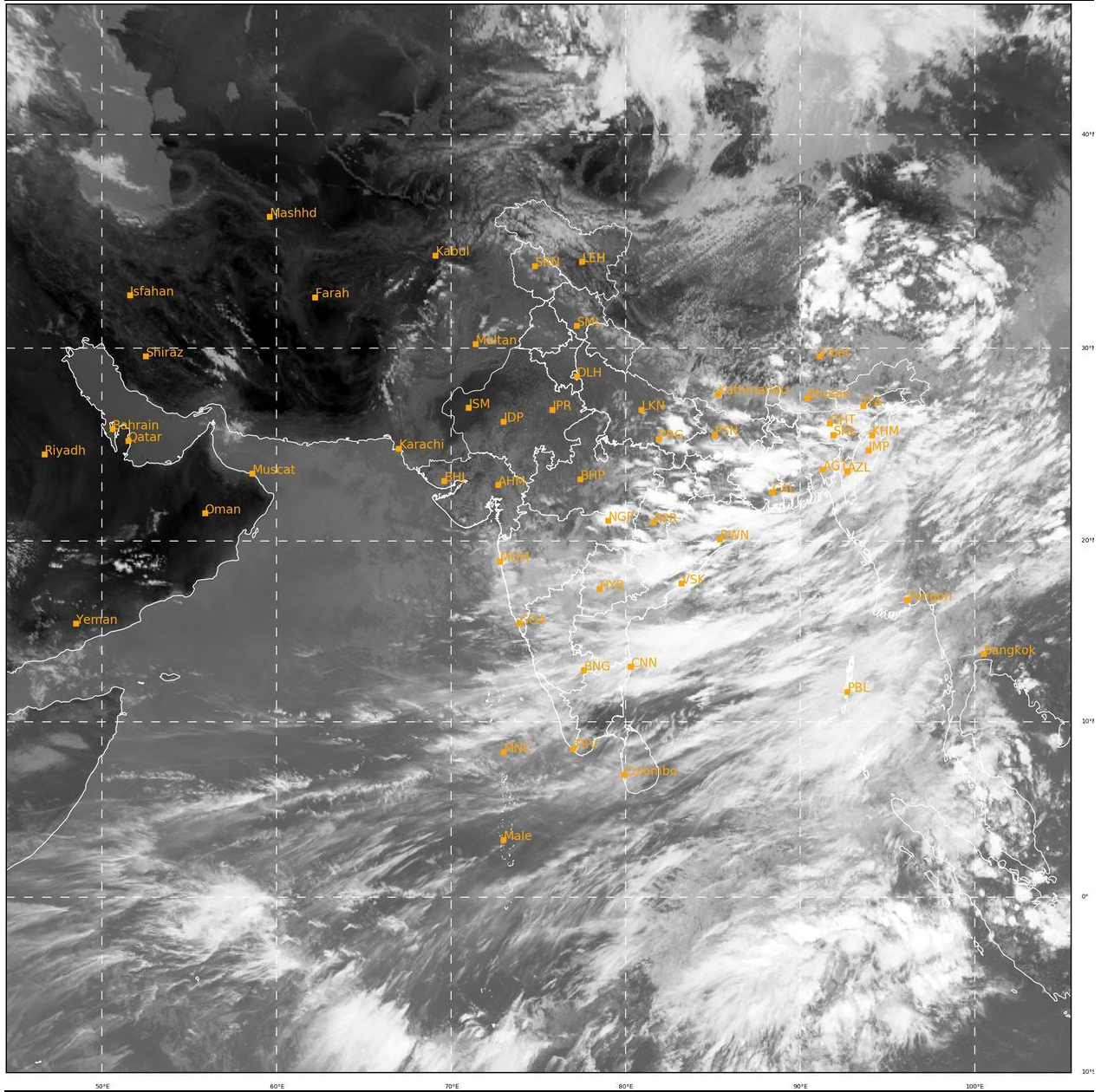
- Cashewnut: Due to forecast for light to moderate rainfall, carry out the fertilizer application in cashew orchard. For above 4-year-old cashewnut tree apply 40 kg FYM, 2 kg urea, 1.5 kg single super phosphate and 500 g muriate of potash per tree by digging circular ring just inside the spread of tree and fill the circular ring with soil after application of fertilizer. Apply 1/4th, 1/2 and 3/4th of abovementioned fertilizers dose per tree for 1, 2 and 3-year-old cashew plantation, respectively. Note: Apply fertilizers when the intensity of rainfall is low.
- Arecanut: Due to forecast for light to moderate rainfall, start the fertilizer application in arecanut orchard. For 3-year-old arecanut palm apply 1st split dose of 10 kg F.Y.M./compost along with 12 kg green manures + 160 g urea + 500 g single super phosphate + 125 g muriate of potash per tree by digging circular ring about 1 meter from base of tree and fill the circular ring with soil after application of fertilizer. Apply 1/3rd and 2/3rd of above-mentioned fertilizers dose per tree for 1 and 2-years old arecanut plantation, respectively. For minimizing fruit cracking in arecanut, apply 600g micro nutrients (60 g Boron, 300 g Zinc, 60g Manganese, 120 g Iron and 30g Copper) Apply fertilizers when the intensity of rainfall is low.
- Vegetable crop: There is possibility for incidence of fruit fly on fruits of cucurbitaceous crops. For effective control of fruit fly, install cue lure ?Rakshak? trap @ 2 nos. per acre at the time of initiation of flowering. There is possibility of incidence of red pumpkin beetle on cucumber, bitter gourd, snake gourd, bottle gourd, red pumpkin and ridge gourd etc. cucurbitaceous crops. If incidence is noticed, spray Dimethoate 30%EC @ 15 ml per 10 liters of water during clear weather (no rainfall).
- Okra: Apply 2nd split dose of nitrogen @ 700 gms urea per guntha to okra crop at two months after sowing. There is possibility of incidence of aphids and shoot and fruit borer on okra, if incidence is noticed, collect and destroy all infected shoots and fruits and spray Cypermethrin 25% EC @ 3 ml or Lambda cyhalothrin 5%EC @ 6 ml per 10 liter of water. Also install pheromone traps into field for monitoring pest.
- Chilli, Brinjal, Tomato: Due to forecast for cloudy weather condition, there is

possibility of incidence of hoppers, white flies and aphids in brinjal chilli, tomato crop. If incidence is noticed, spray dimethoate 30%EC @15 ml per 10 liter of water during clear weather.

- Tuber crops: Due to forecast for light to moderate rainfall, apply second split dose of nitrogen to tuber crop. Follow weeding and give earthing up at the time of fertilizer application.
- Turmeric: Due to forecast for light to moderate rainfall, complete the split application of nitrogen fertilizer followed by earthing up in turmeric crop if not done earlier.

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

16-08-2021/(0800 to 0827) GMT
16-08-2021/(1330 to 1357) IST



223

944

IMD, DELHI

Figure: 1. Latest available satellite picture as on 16 Aug 2021 at 1357 Hrs (IST). (Source: IMD).

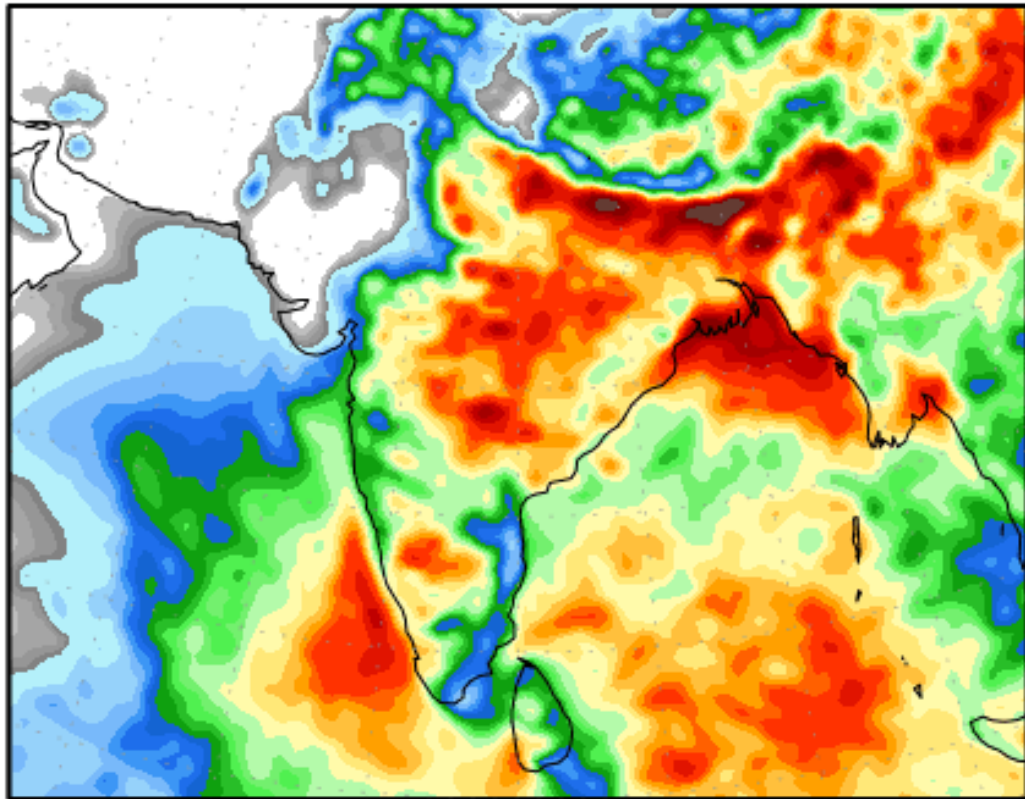


Figure:2. Precipitation forecast for 16 Aug to 24 Aug 2021 (Source: NOAA NCEP).

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