

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 25 July 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The monsoon trough at mean sea level lies close to its normal position & extends upto 1.5 Km above mean sea level. It is very likely to shift close to foothills of Himalayas from 26th July, 2020.
- A cyclonic circulation lies over Jharkhand & neighbourhood extending upto mid tropospheric level. Another cyclonic circulation lies over southwest Uttar Pradesh & neighbourhood at mid tropospheric level. These systems are very likely to merge during next 24 hours.
- A Western Disturbance as a cyclonic circulation at 3.1 km above mean sea level lies over western parts of Afghanistan & neighbourhood.
- Under the influence of the above meteorological conditions: i) Fairly widespread to widespread rainfall with isolated heavy falls most likely to occur over Northeast & adjoining East India (Bihar, Sub-Himalayan West Bengal & Sikkim) during next 2 days. Widespread rainfall with isolated heavy to very heavy falls also likely to occur over the region on 27th & 28th July, 2020. Isolated extremely heavy falls also very likely over Assam & Meghalaya on 28th July, 2020. ii) Light to moderate isolated/scattered rainfall very likely over most parts of northwest India till 26th July. Its intensity & distribution very likely to increase with fairly widespread to widespread rainfall with isolated heavy to very heavy falls over the same region during 27th-28th July, 2020.
- Intense thunderstorm & lightning potential zone: Moderate to severe thunderstorm & lightning at isolated places very likely over Saurashtra & Kutch, Himachal Pradesh, north Interior Karnataka, Chhattisgarh, Uttar Pradesh, Madhya Pradesh and Jammu division during 12 hours
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Uttarakhand, Konkan & Goa, Kerala & Mahe and Lakshadweep; at

many places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Madhya Maharashtra and Gangetic West Bengal; at a few places over Andaman & Nicobar Islands, Himachal Pradesh, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Telangana; at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Karnataka, Rayalaseema, Vidarbha, Madhya Pradesh, Chhattisgarh, Odisha, Gujarat region and Tamil Nadu, Puducherry & Karaikal.

- Heavy rainfall observed at isolated places over East Rajasthan, Madhya Maharashtra and Konkan & Goa.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Haryana, Chandigarh & Delhi, Himachal Pradesh, West Uttar Pradesh, Rajasthan, Gujarat State, Bihar, Jharkhand, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, North Interior Karnataka, Telangana and Rayalaseema.
- Maximum Temperature Departures as on 24-07-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Gujarat state and Madhya Pradesh; at isolated places over West Rajasthan and Kerala & Mahe; above normal (1.6°C to 3.0°C) at many places over Coastal & North Interior Karnataka; at a few places over Andaman & Nicobar Islands; at isolated places over West Uttar Pradesh and Gangetic West Bengal. They were markedly below normal (-5.1°C or less) at isolated places over East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim and Tamil Nadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C)at a few places over Odisha and at isolated places over Assam & Meghalaya, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema and Haryana, Chandigarh & Delhi and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.4°C was reported at Barmer (West Rajasthan).
- Minimum Temperature Departures as on 24-07-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Gujarat State; at a few places over Madhya Maharashtra and Kerala & Mahe; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, East Rajasthan and South Interior Karnataka. They were below normal (-1.6°C to -3.0°C) at many places over Vidarbha; at a few

places over Tamil Nadu, Puducherry & Karaikal; at isolated places over Madhya Pradesh, Telangana and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 18.6°C was reported at Chandrapur (Vidarbha) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 25 July (Day 1): Heavy to very heavy rainfall at isolated places very likely over Gujarat State and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightening very likely at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally weather (wind speed reaching 40-50 kmph) over Eastcentral Arabian sea and along & off Karnataka-Maharashtra coasts. Fishermen are advised not to venture into Sea over these areas.
- 26 July (Day 2): Heavy rainfall at isolated places very likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Assam & Meghalaya, Gujarat State and Konkan & Goa. Thunderstorm accompanied with lightening very likely at isolated places over Uttarakhand, Uttar Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally weather (wind speed reaching 40-50 kmph) over Eastcentral Arabian sea and along & off Maharashtra-south Gujarat coasts. Fishermen are advised not to venture into Sea over these areas.
- 27 July (Day 3): Heavy to very heavy rainfall at isolated places likely over Uttarakhand, Uttar Pradesh, Bihar and Assam & Meghalaya; heavy rainfall at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Madhya Pradesh, West Bengal & Sikkim, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim and Assam & Meghalaya. Strong Wind (speed reaching 50-60 kmph) likely over Southwest &

adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.

- 28 July (Day 4): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places likely over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Assam & Meghalaya, Telangana and Rayalaseema. Strong Wind (speed reaching 50-60 kmph) likely over Southwest & adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these area.
- 29 July (Day 5): Heavy to very heavy rainfall at isolated places likely over Uttarakhand, Uttar Pradesh, Bihar, West Bengal & Sikkim, Arunachal Pradesh, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; heavy rainfall at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, east Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, Andaman & Nicobar Islands and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Assam & Meghalaya, Telangana, Rayalaseema, south Interior Karnataka and Odisha. Strong Wind (speed reaching 50-60 kmph) likely over Southwest & adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- The weather outlook for seven days i.e., 25 July to 02 Aug 2020 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)

Maharashtra-Marathwada

Weather condition:

At Parbhani centre: 16July to 22 July. (SMW 29) during this period 17.4 mm rainfall was recorded. The Maximum temperature was range from 29.0 to 34.0 °C and minimum temperature range from 21.0 to 24.5 °C. Relative humidity (RH I) ranged between 72 to 93% and relative humidity (RH II) recorded was 65 to 77%. The wind speed varied between 2.7 to 4.2 km/hr.

Contingency measure:

- Cotton: For management of sucking pest (Aphids, Jassids) in cotton crop. Take a spray of 5 % NSKE or Thiamethoxam 25 % @ 40 gm when infestation is less and Clothianidin 50 % @ 30 gm per acre during clear weather condition. If infestation is more than spray Flonicamid 50 % @ 60 gm per acre during clear weather condition. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.
- Pigeon pea: For management of stem fly in pigeonpea take a spray of 5 % NSKE during clear weather condition. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.
- Black/Green gram: For management of aphids in black gram / green gram crop take a spray of 5% NSKE or Dimethoate 30 EC @ 12 ml per 10 liter of water during clear weather condition. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.
- Soybean: For management of Chlorosis in soybean crop precaution should be taken that the field should be in wapsa condition. Take a spray of 0.5 to 1 % Ferrous sulphate or EDTA Chelated mix Micronutrient Grade (II) @ 500 g per 100 liter of water during clear weather condition. For management of leaf eating caterpillar stem pest in soybean crop take a spray of Phrofenophos 50% @ 400 ml or Thiamethoxam 12.6 % + Lambda cyhalothrin 9.5 % (Complex insecticide) @ 50 ml per acre during clear weather condition. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.
- *Kharif* sorghum: Top dressing of Nitrogen @ 40 kg N per hectore should be done one month after sowing of *Kharif* Sorghum. For management of stem borer in *Kharif* sorghum apply Carbofuran 3 % Granular @ 8 kg per acre in whoral of plant. For management of fall armyworm in *Kharif* sorghum crop take alternate spray of Thiamethoxam 12.6% + Lambda cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @

4 ml per 10 liter of water during clear weather condition. The insecticide should be spray in the whorl of plant. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.

- Maize: For management of fall armyworm in maize crop take a spray of Thiamethoxam 12.6 % + Lambda ? cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 liter of water during clear weather condition. Precaution should be taken so that water may not stagnate in crop. Management practices should be done to drain out excess amount of water from crop.
- Banana: Top dressing of Nitrogen i.e. 50 gm per plant should be done in newly planted banana orchard. Remove the suckers from banana orchard. After rainfall precaution should be taken so that water may not stagnate in orchard. Management practices should be done to drain out excess amount of water from orchard.
- Mango: After rainfall precaution should be taken so that water may not stagnate in orchard. Management practices should be done to drain out excess amount of water from orchard.
- Grape: Remove the sprouting in grape orchard. Nipping should be done in grape orchard. After rainfall precaution should be taken so that water may not stagnate in orchard. Management practices should be done to drain out excess amount of water from orchard.
- Custard apple: After rainfall precaution should be taken so that water may not stagnate in orchard. Management practices should be done to drain out excess amount of water from orchard.
- Vegetable: Transplanting of Tomato, Chili, Brinjal etc. should be done. Harvesting of mature vegetable crops should be done. Precaution should be taken so that water may not stagnate in newly planted vegetable crops. Management practices should be done to drain out excess amount of water from crop.
- Animal Husbandry: Vaccination is essentially important to prevent livestock from infectious disease especially in rainy season. But, apart from this, it is advisable for de-worming, balanced diet feeding along with the use of herbal medicines in proportion after its identification and confirmation for boosting the immunity in the animals. Accordingly, a mixture of Ashwagandha i.e. Withania somnifera (10 gm), Manjistha i.e. Rubia cordifolia (8 gm), Tulsi i.e. Ocimum sanctum (5 gm), Taravata / Tarota i.e. Casia auriculata (8 gm) and Mango Seed Kernel i.e. Mangifera indica (12 gm); all these ingredients in defined proportion should be mixed with 1 liter of water and boiled till it is reduced to half (500 ml). water should be mixed to make the extract (filtered liquid) to 1 liter after removing the substrate. Thus, prepared extract

should be prescribed as 15 -30 ml/animal/day (Cow, Buffalo, Horse etc.), 10-15 ml/animal/day (Goat, Sheep, Calf etc.) and chicks (5 ml/100 chicks / day), growers (10 ml/100 chicks/day) and layers and broilers (15 ml/100 chicks/day) for improving the immunity in animals as well as poultry.

SAT : INSAT-3D IMG
IMC_TIR1 10.8 um
L1C Mercator

25-07-2020/(0730 to 0756) GMT
25-07-2020/(1300 to 1326) IST

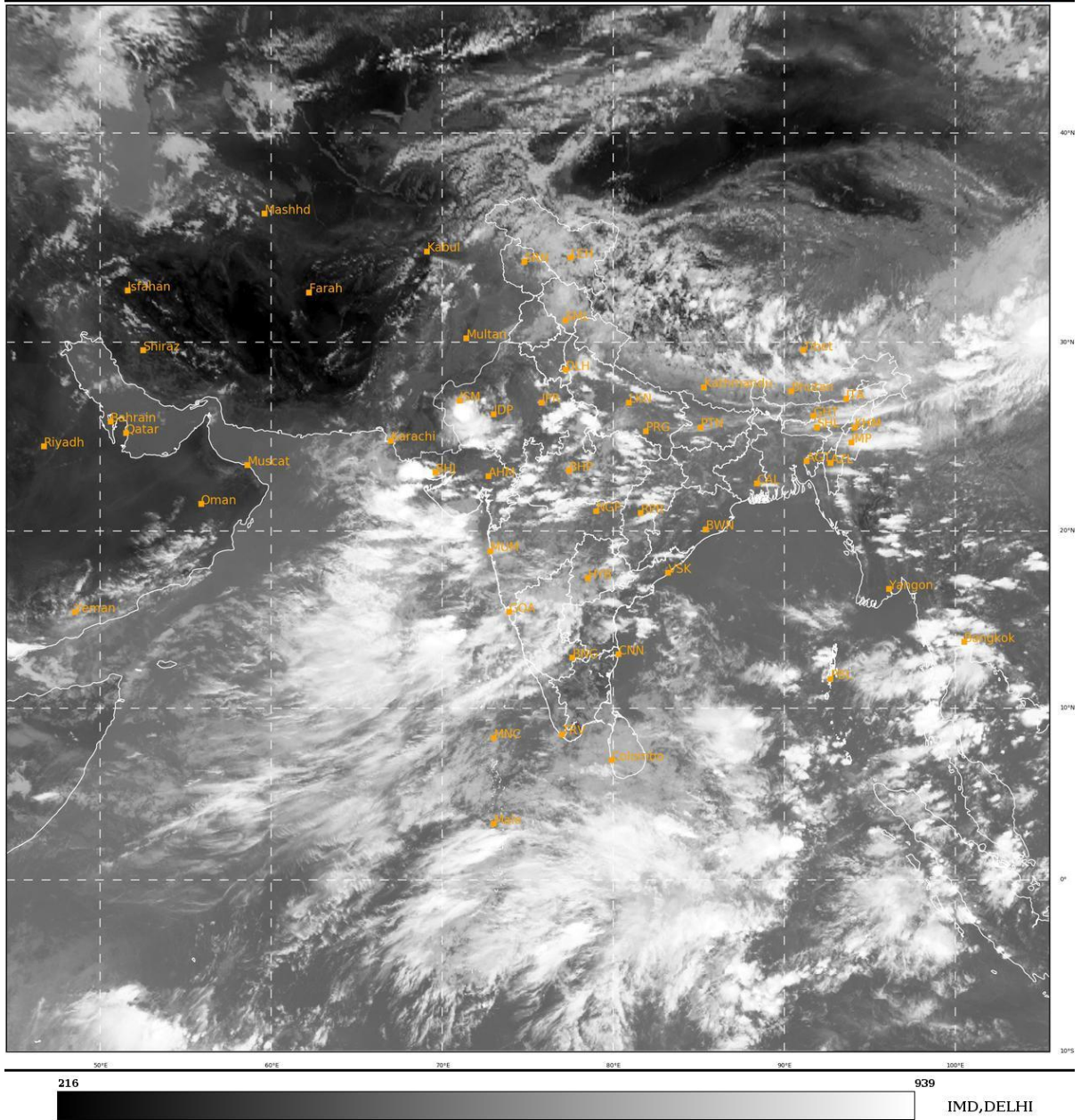


Figure: 1. Latest available satellite picture as on 25 July 2020 at 1326 Hrs (IST). (Source: IMD).

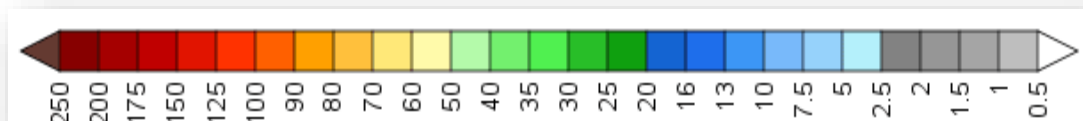
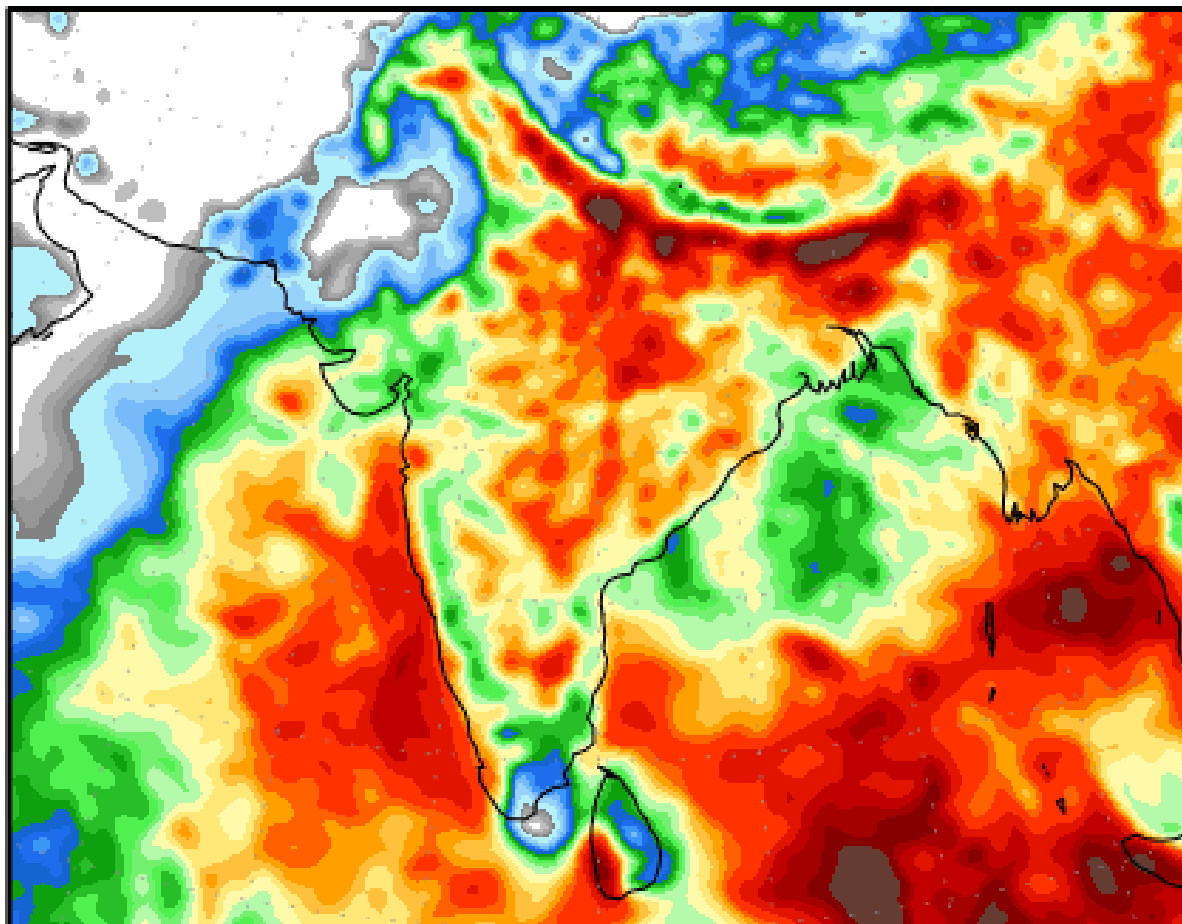


Figure:2. Precipitation forecast for 25 July to 02 Aug 2020 (Source: NOAA NCEP).

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