

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 09 September 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- An off-shore trough at mean sea level runs from south Maharashtra coast to north Kerala coast. The east-west shear zone runs roughly along 13°N across the peninsular India at 3.1 km above mean sea level and a cyclonic circulation lies over Eastcentral Arabian Sea off Karnataka coast between 1.5 km and 5.8 km above mean sea level. Under their influence: i) Fairly widespread to widespread rainfall with isolated heavy falls, thunderstorm & lightning very likely over Peninsular India during next 4-5 days. ii) Heavy to very heavy rainfall at isolated places very likely over Coastal Karnataka during 10th-13th; South Interior Karnataka during 09th-12th; Kerala & Mahe during 09th-11th and Tamilnadu, Puducherry Karaikal on 09th September, 2020. Extremely heavy rainfall at isolated places also very likely over Coastal & South Interior Karnataka on 11th September, 2020.
- The western part of the monsoon trough lies north of its normal position and the eastern end lies near to its normal position. A cyclonic circulation lies over Gangetic West Bengal and neighbourhood in lower tropospheric levels. Under their influence. i) Fairly widespread rainfall with isolated thunderstorm & lightning very likely over Northeast and adjoining East India. Heavy rainfall at isolated places also very likely over Sub-Himalayan West Bengal & Sikkim during next 5 days; Odisha on 09th and over Northeast India during next 4-5 days.
- Under the influence of likely formation of a low pressure area over Westcentral Bay of Bengal off Andhra Pradesh coast around 13th September, rainfall distribution and intensity very likely to increase over Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Vidarbha and adjoining areas from 12th September onwards.
- Moderate thunderstorm with lightning very likely at isolated places over East Uttar Pradesh, Bihar, Jharkhand, Odisha, Chhattisgarh, Vidarbha, Madhya Pradesh, Rayalseema and Tamilnadu, Puducherry & Karaikal during next 12 hours.

- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at most places over Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Andaman & Nicobar Islands, Gangetic West Bengal, Jharkhand and North Interior Karnataka; at a few places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Odisha, Bihar, Konkan & Goa, Madhya Maharashtra, Vidarbha, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and at isolated places over Uttar Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Rajasthan, Madhya Pradesh, Gujarat Region, Marathwada, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Telangana.
- Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places observed over Sub-Himalayan West Bengal & Sikkim; heavy to heavy rainfall at isolated places over Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Gangetic West Bengal, Bihar, East Rajasthan, East Madhya Pradesh, Konkan & Goa, Chhattisgarh, Rayalaseema, North Interior Karnataka and Lakshadweep.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at isolated places over East Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Bihar, Jharkhand, West Bengal, & Sikkim, Tripura, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Madhya Maharashtra, Marathawada, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal. and Interior Karnataka.
- Maximum Temperature Departures as on 08-09-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over East Uttar Pradesh and Madhya Pradesh; at a few places over Himachal Pradesh, Bihar, Odisha and Chhattisgarh; above normal (1.6°C to 3.0°C) at most places over Gujarat, Konkan & Goa, Gangetic West Bengal, Vidarbha, Marathwada, and Telangana; at many places over Madhya Maharashtra, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Rayalaseema and Coastal Andhra Pradesh & Yanam; at isolated places over West Rajasthan, Coastal & North Interior Karnataka, Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands. They were below normal (-1.6°C to -3.0°C) at a few places over

Lakshadweep and at isolated places over Assam & Meghalaya and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.2°C was reported at Bikaner (West Rajasthan).

- Minimum Temperature Departures as on 09-09-2020: Minimum temperatures are above normal (1.6°C to 3.0°C) at most Places over Uttarakhand and Gujarat Region; at many places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Marathwada, Telangana, Jharkhand and Sub-Himalayan West Bengal & Sikkim; at a few places over East Uttar Pradesh, Bihar, Vidarbha, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; at isolated places over Assam & Meghalaya, Himachal Pradesh, East Rajasthan, South Interior Karnataka and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. The lowest minimum temperature of 19.4°C reported at Mandla (East Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 09 September (Day 1): Heavy to very heavy rainfall very likely at isolated places over South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Madhya Maharashtra, Konkan & Goa, Rayalaseema, Coastal Karnataka and Lakshadweep. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, East Rajasthan, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea; (speed reaching 40-50 kmph) over Gulf of Mannar and Comorin area. Squally Weather (wind speed reaching 40-50 kmph) over Southeast & Eastcentral Arabian Sea and along & off Kerala coast and Lakshadweep area; over Eastcentral & Southwest Bay of Bengal and along & off Tamil Nadu coast. Fishermen are advised not to venture into these areas.
- 10 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala & Mahe; heavy rainfall at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, North Interior

Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea; (speed reaching 40-50 kmph) over Gulf of Mannar and Comorin area. Squally Weather (wind speed reaching 40-50 kmph) over Southeast & Eastcentral Arabian Sea and Lakshadweep area; over Eastcentral & Southwest Bay of Bengal and along & off Tamil Nadu coast. Fishermen are advised not to venture into these areas.

- 11 September (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Coastal Karnataka; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over South Interior Karnataka; heavy to very heavy rainfall at isolated places over Assam & Meghalaya and Kerala & Mahe; heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea; (speed reaching 40-50 kmph) over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 12 September (Day 4): Heavy to very heavy rainfall likely at isolated places over Coastal & South Interior Karnataka; heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, North Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand, Gangetic West Bengal, Assam

& Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat State. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea and Westcentral Bay of Bengal. Fishermen are advised not to venture into these areas.

- 13 September (Day 5): Heavy to very heavy rainfall likely at isolated places over Konkan & Goa and Coastal Karnataka; heavy rainfall at isolated places over Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Gujarat Region, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat State. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea and Westcentral Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 09 to 17 Sep 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-Konkan

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 0.0 to 5.6 Bright sunshine hours was recorded during last week. During last week 122.4 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 27.0 to 29.6 and 23.0 to 23.8 oC respectively. Wind velocity ranged from 2.1 to 7.5 km and wind was blowing from south westerly Direction.

Contingency measure:

- **General advice:** Due to forecast for light to moderate rainfall and increase in temperature, provide irrigation to coconut, arecanut, sapota, vegetable crops fields and fruit crop nurseries
- **Kharif rice:** Due to forecast of light to moderate rainfall, maintain the optimum water level of 5 cm in late varieties which is in tillering to panicle initiation stage and early varieties which is in flowering to grain filling stage and 5-10 cm in the midlate rice varieties which is in flowering to grain filling stage by arranging water from nearby available external water source. Apply 3rd split dose of nitrogen @ 17 kg urea per acre to the midlate varieties of rice which is in flowering stage during clear weather. Due to intermittent rainfall, increase in temperature 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. Alter the stagnated water with fresh water after every 2-3 days. If incidence of rice case worm is noticed on rice crop, then if external source of irrigation is available 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. If required spray cartap hydrochloride 50%SP @12 gms per 10 liter of water. Due to forecast of intermittent rainfall and cloudy weather and humid condition during next five days will cause for incidence of brown plant hopper in lowline area where stagnation of water is observed also dense planting and field of heavy dose of nitrogen fertilizers application, hence observe crop regularly for infestation of pest. If incidence of brown plant hopper is observed above threshold level (5-10 hopper/hill), spray Thiomethoxam 25%WG @ 2 gms or Acephate 75%WP @ 22.5 g or Fipronil 5% SC @ 20 ml or Imidacloprid 17.8% SL @ 2 ml per 10 liter of water during clear weather (no rainfall). 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 early rice varieties, hence observe crop regularly for infestation of pest. Install bird's perches @3-4 / acre. If incidence of army worm is observed above threshold level (1larvae /hill), dust Chlorpyrifos 1.5% DP powder @ 8 kg per acre during evening hours or in early morning when wind blows calm. (Note: insecticide is not under label claim)

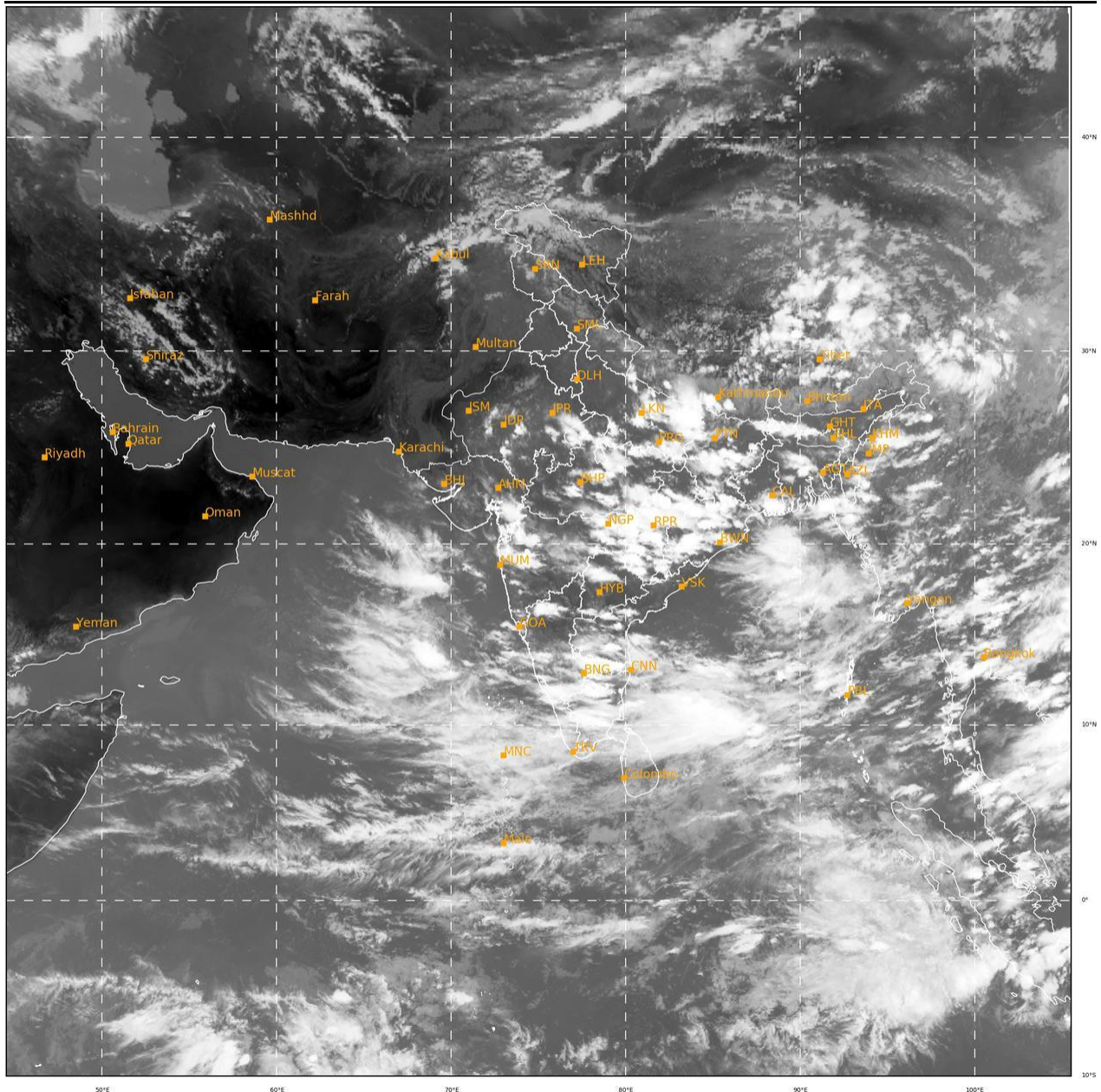
- **Finger millet:** Due to prevailing rainfall condition from last 15 days leads to increase in humidity in area of finger millet having poor drainage favor infestation of foot rot fungal disease in finger millet. The infected portion of stem becomes soft and dark brown in colour. For control of disease, spray Hexaconazole 5%EC @15 ml per 10 lit of water near to base of stem.
- **Mango:** Due to forecast of intermittent rainfall and increase in temperature which is congenial for vegetative flush in mango, for protection of vegetative flush of mango from hoppers and midge fly incidence, spray Deltamethrin 2.8%EC @ 9 ml per 10 liter of water during clear weather (no rainfall). (before insecticide application, clean orchard by removing weeds, diseased infected branches). There is possibility for incidence of shoot borer in newly planted mango orchard, if incidence is noticed, spray Monocrotophos 36%SL @ 11 ml per 10 liter of water during clear weather (no rainfall). There is possibility for incidence of fungal diseases causes dieback of

branches in mango. If incidence is noticed cut the infected branch portion 2-3 inches below infection point and apply bordo paste to cut portion and take a spray of 1% bordomixture or Copper oxychloride 2.5 gm per liter of water onto entire branches and stem portion of mango tree during clear weather (no rainfall)

- **Cashewnut:** Due to cloudy and humid weather condition, there is possibility of incidence of tea mosquito bug on new flush of cashewnut. If incidence is noticed spray Monocrotophos 36%SL @ 15 ml or Lambda cyhalothrin 5%EC @ 6 ml per 10 liter during clear weather (no rainfall). (before insecticide application, clean orchard by removing weeds, diseased infected branches). There is possibility for incidence of fungal diseases causes dieback of branches in cashewnut. If incidence is noticed cut the infected branch portion 2-3 inches below infection point and apply bordo paste to cut portion and take a spray of 1% bordomixture or Copper oxychloride 2.5 gm per liter of water onto entire branches and stem portion of cashewnut tree during clear weather (no rainfall).
- **Coconut:** Due to intermittent rain and increase in temperature, provide irrigation to coconut orchard. Clean coconut orchard by removing all dried leaves and other dead waste to maintain good sanitation. For above five year old coconut palm, Apply 750 gms urea and 667 gms of muriate of potash as 2nd split dose. Apply 1/5th, 2/5th, 3/5th and 4/5th of above-mentioned fertilizer dose per tree for 1, 2, 3 and 4-year-old coconut plantation, respectively. Apply fertilizers when the intensity of rainfall is low. To control the attack of red palm weevil on coconut, collect and destroy the grubs from hole appear on infected trunk. Apply bordopaste to infected part. Install pheromone trap in orchard
- **Arecanut:** Due to intermittent rain and increase in temperature, provide irrigation to arecanut orchard to avoid splitting and drop of arecanut due to water stress. Clean arecanut orchard by removing all dried leaves and other dead waste to maintain good sanitation.
- **Milch animals/Goat:** Due to forecast for thunderstorm along with lightning at isolated places over district, Keep farm animals at safe place and away from open water, pond or river. Vaccination against Haemorrhagic Septicemia (H.S) disease in goat under supervision of veterinary officers is advocated. Preserve the available green fodder by adopting silage method which helps to feed animals during the period when green fodder is not available. For this, sprinkle the prepared solution of 2 kg jaggery + half kg urea + 2kg salt in 5-6 liter of water onto 100kg finely chopped grasses. then this treated grass is filled layer wise in plastic silos readily available in market. Keep the silos in shade to protect from rain and heat. In this way, the feed is ready within 2-3 months to feed the farm animals.

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

09-09-2020/(0900 to 0926) GMT
09-09-2020/(1430 to 1456) IST



232

951

IMD, DELHI

Figure: 1. Latest available satellite picture as on 09 September 2020 at 1456 Hrs (IST).
(Source: IMD).

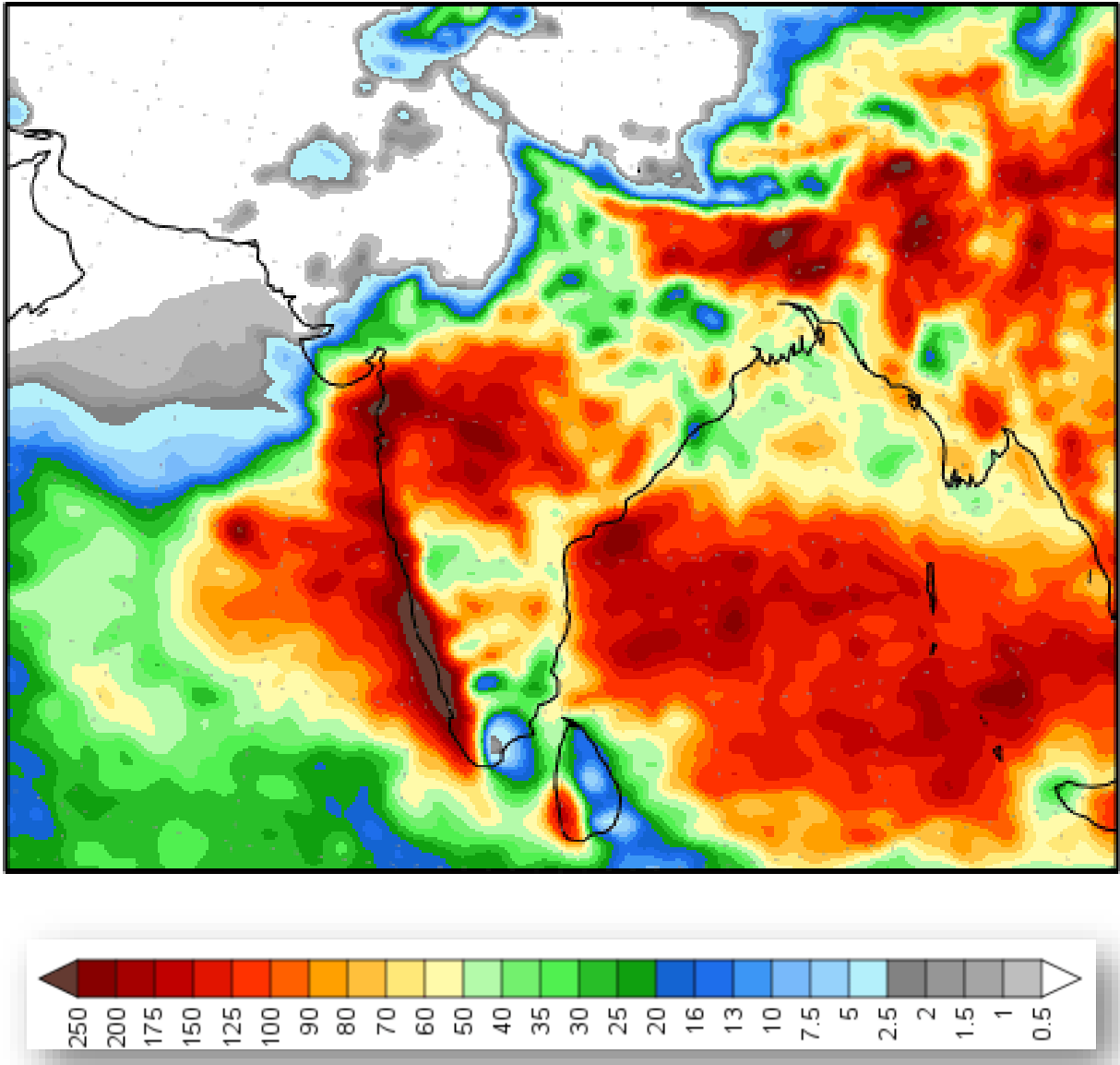


Figure:2. Precipitation forecast for 09 to 17 Sep 2020 (Source: NOAA NCEP).

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