

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 18 September 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Western end of the Monsoon Trough lies close to the foothills of the Himalayas and its eastern end lies north of its normal position.
- An east-west shear zone runs roughly along Latitude 16°N across peninsular India in mid tropospheric levels and a cyclonic circulation lies over Telangana & adjoining Vidarbha in lower tropospheric levels. Under its influence, fairly widespread to widespread rainfall with isolated heavy falls very likely over Coastal Andhra Pradesh & Yanam, Telangana, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal & North Interior Karnataka and Kerala & Mahe during next 2 days. Also, heavy to very heavy falls likely over Madhya Maharashtra, Konkan & Goa and Marathawada today, the 18th September, 2020.
- Under the influence of likely formation of a Low Pressure Area over Northeast Bay of Bengal, fairly widespread to widespread rainfall with Isolated heavy to very heavy falls likely over Andaman & Nicobar Islands during 18th-20th; over Odisha, Coastal Andhra Pradesh & Yanam, Chhattisgarh & Telangana during 19th-21st September.
- Also subsequent strengthening of lower level winds along the West Coast due to formation of Low Pressure Area over Northeast Bay of Bengal, fairly widespread to widespread rainfall with Isolated heavy to very heavy falls likely over Konkan & Goa, Karnataka and Kerala during 19th-21st September, 2020. Isolated extremely heavy falls also likely over Konkan & Goa and Coastal Karnataka on 20th-21st and over South Interior Karnataka on 21st September, 2020.
- Due to convergence of strong moist winds in lower tropospheric levels from Bay of Bengal, fairly widespread to widespread rainfall with heavy to very heavy falls also likely over Sub-Himalayan West Bengal & Northeastern state during 21st-22nd September. Isolated extremely heavy falls also likely over Sub-Himalayan West Bengal & Sikkim on 22nd September.
- Moderate thunderstorm with lightning very likely at isolated places over East Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand, Odisha, Vidarbha, West Bengal & Sikkim, Gujarat Region, Madhya Pradesh, Coastal Andhra Pradesh & Yanam and

Telangana during next 12 hours. Thundersquall (speed 50-60 kmph) accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands during next 24 hours.

- 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, Arunachal Pradesh, West Bengal & Sikkim, Jharkhand, Konkan & Goa, Madhya Maharashtra, Marathawada, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Assam & Meghalaya, Rayalaseema and Interior Karnataka; at a few places over Nagaland, Manipur, Mizoram & Tripura, Bihar, West Madhya Pradesh, Gujarat region, Vidarbha, Chhattisgarh and Telangana and at isolated places over Odisha, East Uttar Pradesh, Uttarakhand, Rajasthan, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal.
- Heavy to very heavy rainfall observed at Gangetic West Bengal, Jharkhand, Bihar, Gujarat region, Telangana and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra, Marathawada, Rayalaseema, Konkan & Goa, North Interior Karnataka and Andaman & Nicobar Islands.
- Thunderstorm observed (from 2030 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Jharkhand, Chhattisgarh, West Bengal & Sikkim, East Madhya Pradesh, Telangana, Rayalaseema, Marathwada and Tripura.
- Maximum Temperature Departures as on 17-09-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Jharkhand; at many places over Uttarakhand, Madhya Pradesh, Odisha and Gangetic West Bengal; at a few places over Himachal Pradesh, Punjab, Rajasthan and Uttar Pradesh and at isolated places over Haryana, Chandigarh & Delhi and Vidarbha; above normal (1.6°C to 3.0°C) at most places over Chhattisgarh; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at many places over Assam & Meghalaya; at a few places over Sub-Himalayan West Bengal & Sikkim and Madhya Maharashtra and at isolated places over Konkan & Goa and Kerala & Mahe and were near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.4°C was reported at Churu (West Rajasthan).

- Minimum Temperature Departures as on 18-09-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, Rajasthan and Haryana, Chandigarh & Delhi; at a few places over Himachal Pradesh, Uttar Pradesh and West Madhya Pradesh; at isolated places over Gujarat and East Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Uttarakhand; at many places over Odisha; at a few places over Madhya Maharashtra and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Bengal & Sikkim and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at isolated places over Assam & Meghalaya and near normal over rest parts of the country. The lowest minimum temperature of 18.4°C reported at Mandla (East Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 18 September (Day 1): Heavy to very heavy rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Madhya Maharashtra, Marathwada and Konkan & Goa and heavy rainfall at isolated places over West Madhya Pradesh, Bihar, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, south Gujarat region, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka and Kerala & Mahe. Thundersquall (speed 50-60 kmph) accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands; thunderstorm with lightning at isolated places over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Madhya Maharashtra, Marathawada, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea, along & off Kerala-Karnataka coasts and Lakshadweep area, Gulf of Mannar and Andaman Sea. Squally Weather (speed reaching 45-55 kmph) along & off south Maharashtra-Goa coasts. Fishermen are advised not to venture into these areas.
- 19 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, Madhya Maharashtra, Konkan & Goa, Kerala & Mahe and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Chhattisgarh, Odisha, south Gujarat region, Marathawada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and North Interior Karnataka. Thundersquall (speed 50-60 kmph) accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands; thunderstorm with

lightning at isolated places over East Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Gujarat region, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Central, Southeast & Southwest Arabian Sea, along & off Kerala-Karnataka coasts and Lakshadweep area, Gulf of Mannar, Southeast Bay of Bengal and Andaman Sea. Squally Weather (speed reaching 45-55 kmph) along & off Maharashtra-Goa coasts. Fishermen are advised not to venture into these areas.

- 20 September (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Coastal Karnataka and Kerala & Mahe; heavy to very heavy rainfall with extremely heavy falls at isolated places over south Konkan & Goa; heavy to very heavy rainfall at isolated places over Odisha, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka and heavy rainfall at isolated places over Chhattisgarh, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, south Gujarat Region, Marathwada, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thundersquall (speed 50-60 kmph) accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands; thunderstorm with lightning at isolated places over East Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Gujarat region, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) very likely over South, Eastcentral & adjoining Westcentral Bay of Bengal, Andaman Sea and along & off Kerala-Karnataka coasts and Lakshadweep area; (speed reaching 45-55 kmph) over Central, Southeast & Southwest Arabian Sea, Gulf of Mannar and along & off West Bengal-Odisha coasts. Squally Weather (speed reaching 45-55 kmph) along & off Maharashtra-Goa coasts. Fishermen are advised not to venture into these areas.
- 21 September (Day 4): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Coastal Karnataka and Kerala & Mahe; heavy to very heavy rainfall with extremely heavy falls at isolated places over South Interior Karnataka and south Konkan & Goa; heavy to very heavy rainfall at isolated places over Chhattisgarh, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and North Interior Karnataka and heavy rainfall at isolated places over Madhya Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, south Gujarat Region, Telangana and Tamil Nadu,

Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Chhattisgarh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema and Interior Karnataka. Strong Wind (speed reaching 50-60 kmph) likely along & off Kerala-Karnataka coasts and Lakshadweep area; (speed reaching 45-55 kmph) over Central, Southeast & Southwest Arabian Sea, Gulf of Mannar, South, Eastcentral & adjoining Westcentral and North Bay of Bengal and along & off West Bengal-Odisha coasts. Squally Weather (speed reaching 45-55 kmph) along & off Maharashtra-Goa coasts. Fishermen are advised not to venture into these areas.

- 22 September (Day 5): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Coastal Karnataka and Konkan & Goa and heavy rainfall at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathawada, Telangana, Interior Karnataka and Kerala & Mahe. Thunderstorm with lightning likely at isolated places over Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka. Strong Wind (speed reaching 45-55 kmph) likely over Central, Southeast & Southwest Arabian Sea, along & off Kerala-Karnataka coasts, Lakshadweep area and along & off West Bengal-Odisha coasts. Squally Weather (speed reaching 45-55 kmph) along & off Maharashtra-Goa coasts. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 18 to 26 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)

Tamil Nadu

Weather condition:

Maximum temperature: 35.4°C (normal 37.1°C), minimum temperature: 25.1°C (normal 23.3°C), rainfall: 0.0 mm (normal 18.3 mm). The Maximum temperature was 1.7°C below normal, minimum temperature was 1.8°C above normal and rainfall was 18.3 mm below

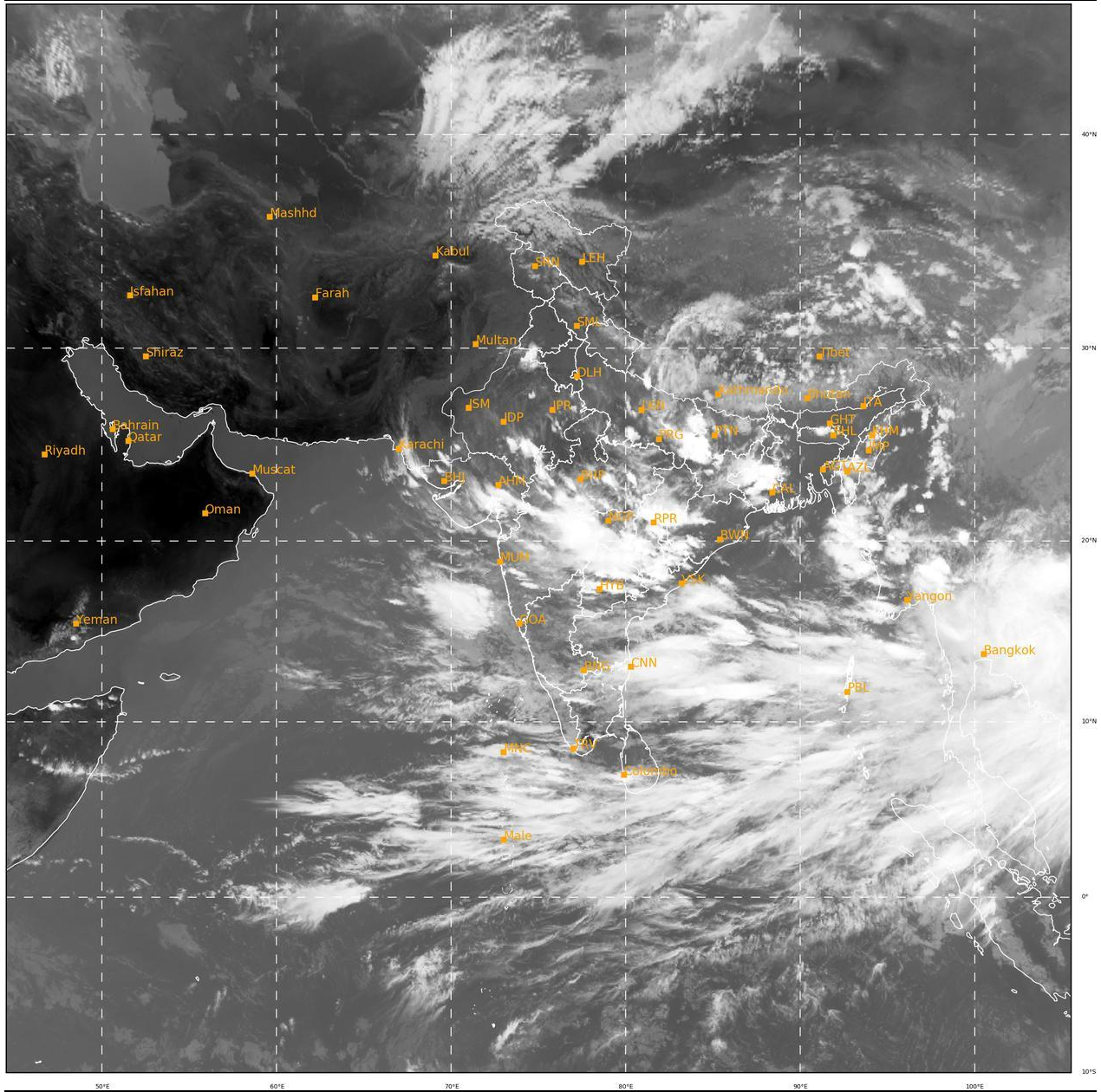
normal across the week. General weather situation in Tamil Nadu: Maximum temperature range of 26°C - 37°C prevailed over the state except Kodaikanal and Uthagamandalam (16°C - 20°C) during the period under report. Minimum temperature range of 21°C - 28°C prevailed over the state except Kodaikanal and Uthagamandalam (11°C - 14°C) during the period under report. With respect to daily rainfall, rainfall occurred at many places over Tamil Nadu on 10.9.2020, at isolated places over Tamil Nadu from 11.9.2020 to 13.9.2020 and 15.9.2020, at a few places over Tamil Nadu on 14.9.2020, during this week.

Contingency measure:

- Irrigated crops: Irrigation: No rainfall is predicted for next five days. Irrigation may be provided to the crops.
- Brinjal: Fruiting stage: Prevailed weather condition induced Shoot and fruit borer incidence. To control spray Azadirachtin 0.03 % WSP (300 ppm) 5.0 g/lit. (or) Emamectin benzoate 5 % SG @ 4 g/10 lit. Input - Seed- Farmers are requested to kept ready with inputs such as seeds and fertilizer.
- Cotton: Irrigated condition- Farmers are advised to go for bund trimming, levelling and bring the field into good tilth condition by rotavator. Growing varieties/ hybrids which are resistant to major pests and diseases and short duration should be selected. Rainfed condition- Soil and moisture conservation practices viz., ridges and furrows across the slope, broad bed furrow, basin silting, compartmental bunding etc. should be followed.
- Rice: Panicle Initiation to harvest stage -Weather prevailed is conducive for Stem borer incidence. To control spray Chlorantraniliprole 18.5% SC 150 ml/ha and Azadirachtin 0.03% 1000 ml/ha.
- Sugarcane: Vegetative to Tillering- Weather is conducive for Early shoot Borer. ETL: 15% dead heart. To control Spray Chlorpyrifos 1000 ml a sticker like Teepol (250 ml / 500 l of water) can also be added to make the solution stick on to the surface of the crop and it is preferable to use high volume sprayer to be most effective. Sugarcane intercropped with Daincha recorded the lowest early shoot borer incidence.
- Coconut: All stages- Rugose Spiralling whitefly is noticed in the prevailed weather condition. Application of water, maida solution as spray in order to increase the population of Encarsia parasitic. Also keep yellow stick trap.
- Banana: All the stages: Panama Wilt: Symptoms- wilting and a light yellow colouring of the lower leaves, most prominent around the margins. They eventually turn a bright yellow colour with dead leaf margins. Remedies - Soil drenching of Carbendazim 0.1 per cent solution around the pseudostem at bimonthly intervals

starting from five months after planting or Soil drenching of neem seed extract and apply neem cake. Wind speed is expected to be 20km/hr. in the coming week. Propping to be done for the banana.

- Rice: Panicle Initiation to harvest stage- Weather prevailed is conducive for Stem borer incidence. To control spray Chlorantraniliprole 18.5% SC 150 ml/ha and Azadirachtin 0.03% 1000 ml/ha.
- Groundnut Pod development: Weather prevailed is conducive for leaf miner incidence. ETL: 1 larvae/meter row. Spray Dimethiate 30 EC 660 ml/ha. Outlook Rainfall forecast Normal rainfall is expected during the week from 19th to 25th August 2020



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IMD, DELHI

Figure: 1. Latest available satellite picture as on 18 September 2020 at 1526 Hrs (IST).
(Source: IMD).

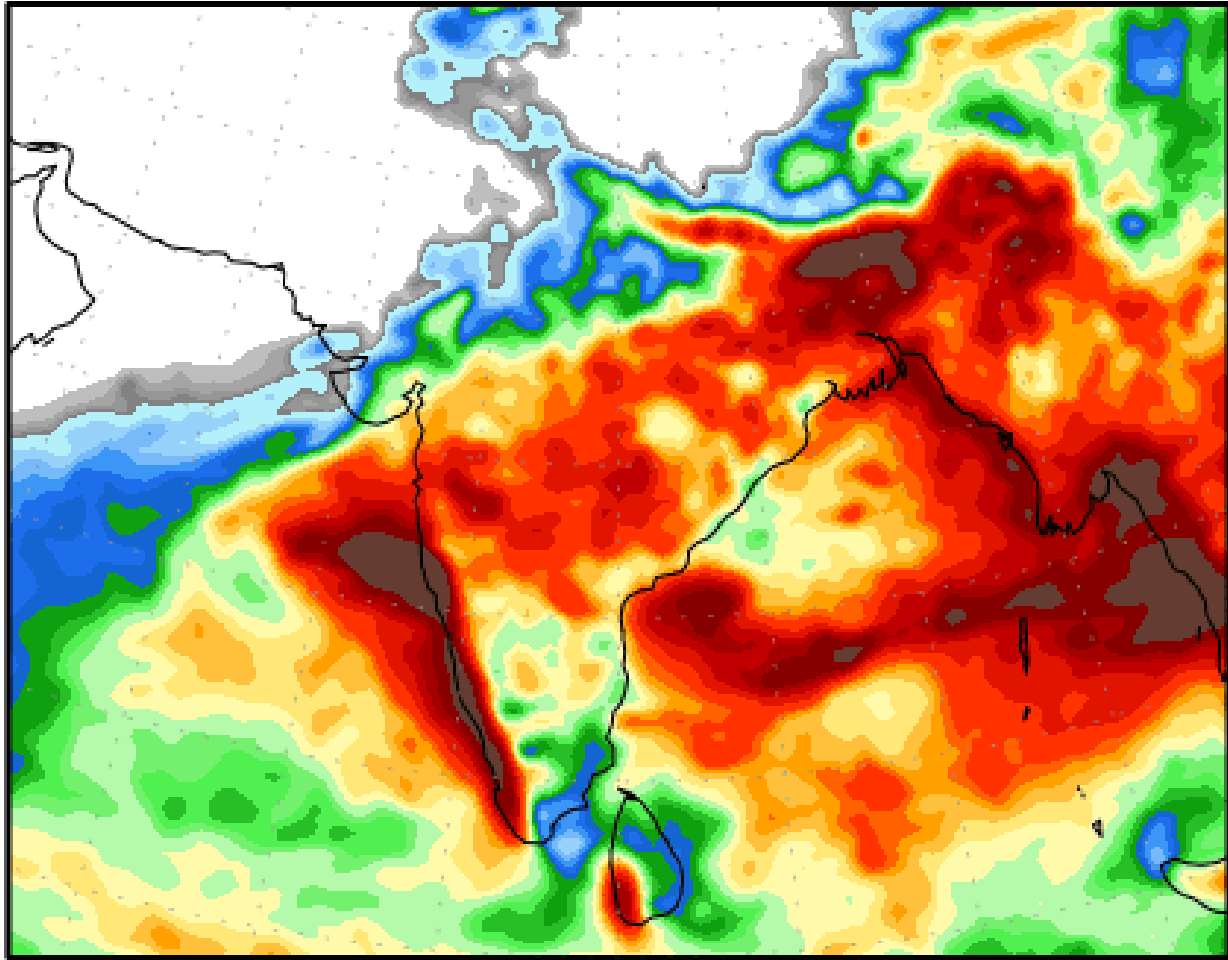


Figure:2. Precipitation forecast for 18 to 26 Sep 2020 (Source: NOAA NCEP).

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