

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 18 May 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Very Severe Cyclonic Storm “Tauktae” (pronounced as Tau’Te) over Saurashtra moved north-northeastwards, weakened into a Severe Cyclonic Storm and lay centred at 0830 hours IST of today, the 18th May, 2021 over Saurashtra near latitude 21.6°N and longitude 71.3°E, about 10 km east of Amreli, 130 km south-southwest of Surendranagar and 210 km southwest of Ahmedabad; it is very likely to move north-northeastwards and weaken gradually into a cyclonic storm during next 03 hours and into a Depression by today evening; the remnant of the system is very likely to move north-eastwards across Rajasthan to West Uttar Pradesh during 19-20 May. Under its influence, rainfall at most places with heavy to very heavy falls at isolated places very likely over Gujarat region and Saurashtra on 18th May and rainfall at many places with heavy to very heavy falls at isolated places very likely over south Rajasthan on 18th & heavy falls at isolated places very likely over north Rajasthan on 19th May.
- Tidal wave above astronomical tide of about 1-2 meter (m) over Anand & Amreli, Gir Somnath, Diu, Bhavnagar and of about 1 m over Bharuch, southern parts of Ahmedabad, Surat, Navsari, Valsad is likely to inundate coastal areas during next 06 hours.
- Remnants of the above system and its interaction with the approaching Western Disturbance is likely to cause fairly widespread to widespread rainfall/thunderstorms over Western Himalayan Region and adjoining plains of Northwest India during 19-20 May along with isolated heavy to very heavy rainfall over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi and West Uttar Pradesh on 19th May and heavy rainfall at isolated places over Punjab on the same day. Isolated extremely heavy falls also likely over Uttarakhand on 19th May, 2021.
- 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, Konkan & Goa, Gujarat state, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya; at a few places over Bihar, Nagaland, Manipur, Mizoram & Tripura, Rayalaseema and South Interior Karnataka; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal.
- Heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over Konkan & Goa and Saurashtra & Kutch; heavy to very heavy rainfall at isolated places over Gujarat Region; heavy rainfall at isolated places over East Madhya Pradesh and Assam & Meghalaya.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, Bihar, Jharkhand, East Madhya Pradesh, Gujarat State, Konkan & Goa, Coastal Andhra Pradesh & Yanam. and Tamil Nadu, Puducherry & Karaikal. Thundersquall observed at isolated places over Bihar.
- Maximum Temperatures Departures as on 17-05-2021: Maximum temperatures are markedly above normal (5.1°C or more) at isolated places over Saurashtra & Kutch; appreciably above normal (3.1°C to 5.0°C) at a few places over Andaman & Nicobar Islands and Gangetic West Bengal; at isolated places over Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0 °C) at many places over Punjab; at a few places over Himachal Pradesh and Bihar; and at isolated places over Sub-Himalayan West Bengal & Sikkim. They are markedly below normal (-5.1°C or less) at most places over Madhya Maharashtra; at many places over West Madhya Pradesh, East Rajasthan and Vidarbha; at a few places over East Madhya Pradesh and East Uttar Pradesh and at isolated places over Jharkhand; appreciably below normal (-3.1°C to -5.0°C) at many places over West Uttar Pradesh, Marathawada, North Interior Karnataka and Telangana; at a few places over Assam & Meghalaya, Haryana, Chandigarh & Delhi, Chhattisgarh, Coastal Andhra Pradesh and Gujarat Region; at isolated places over Coastal Karnataka and Kerala & Mahe; below normal (-1.6°C to -3.0°C) at many places over

Uttarakhand; at a few places over South Interior Karnataka and Rayalaseema and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Odisha, Lakshadweep and Odisha, Rajasthan; at isolated places over West Madhya Pradesh and near normal over rest parts of the country. Today, the highest Maximum Temperature of 42.2°C reported at Durg (Chhattisgarh).

- Minimum Temperature Departures as on 18-05-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over SubHimalayan West Bengal & Sikkim; at isolated places over Bihar; above normal (1.6°C to 3.0°C) at most places over Uttarakhand and Gangetic West Bengal; at a few places over West Rajasthan, Odisha, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands; at isolated places over Madhya Maharashtra. They are markedly below normal (-5.1°C or less) at most places over East Rajasthan and West Madhya Pradesh; at isolated places over East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Telangana; at isolated places over East Uttar Pradesh, Gujarat Region and Konkan & Goa; below normal (-1.6°C to -3.0°C) at a few places over Saurashtra & Kutch, Coastal Karnataka and Lakshadweep; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Assam & Meghalaya, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.5°C is reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 18 May (Day 1): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Rajasthan; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over West Madhya Pradesh; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Jharkhand, West Bengal & Sikkim and Assam & Meghalaya and with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places very likely over Gujarat state and south Rajasthan and Heavy Rainfall at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Sub-Himalayan West

Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Konkan & Goa. Gale Wind (speed reaching 100-110 kmph gusting to 120 kmph) likely to prevail over Amreli, Bhaunagar, Botad; speed reaching 90-100 kmph gusting to 110 kmph over Sundernagar, Rajkot, Anand, south Ahmadabad; speed reaching 60-70 kmph gusting to 80 kmph over Diu, Gir Somnath, Junagarh, Kheda, Bharuch, Jamnagar, Porbandar and Morbi during next 06 hours and gradually decrease thereafter. Squally wind (speed reaching 45-55 kmph gusting to 65 kmph) likely over Dadra & Nagar Haveli, Daman, Valsad, Navsari, Surat districts and speed reaching 35-45 kmph gusting to 55 kmph over Devbhoomi Dwarka and Kutch during next 06 hours and gradually decrease thereafter; speed reaching 45-55 kmph gusting to 65 kmph over south Rajasthan from evening of 18th till 19th early morning. Gale Wind (speed reaching 90-100 kmph gusting to 110 kmph) likely to prevail over Gulf of Khambat & adjoining Northeast Arabian Sea during next 06 hours. It is very likely to reduce thereafter. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) over South Arabian Sea, Lakshadweep area and along & off Kerala-Karnataka-Maharashtra coasts. Sea conditions will be very rough to high over Gulf of Khambat & adjoining Northeast Arabian Sea and along & off south Gujarat, Daman & Diu, Dadra & Nagar Haveli coasts and rough to very rough along & off north Maharashtra coast during next 12 hour and improve gradually thereafter. Fishermen are advised not to venture into these areas.

- 19 May (Day 2): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Haryana, Chandigarh & Delhi and Rajasthan; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over East Uttar Pradesh, East Rajasthan and West Madhya Pradesh; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Bihar, Jharkhand and West Bengal & Sikkim and with lightning at isolated places over Punjab, East Madhya Pradesh, Vidarbha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Uttarakhand; Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Assam & Meghalaya and Heavy Rainfall at isolated places over Punjab, East Uttar Pradesh, north Rajasthan, Sub-Himalayan West Bengal &

Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.

- 20 May (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands and Assam & Meghalaya and with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Telangana, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places very likely over Uttarakhand and Heavy Rainfall at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 21 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and Odisha and with lightning at isolated places over Himachal Pradesh, Chhattisgarh, Assam & Meghalaya, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Heavy Rainfall at isolated places likely over Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea, Southeast Bay of Bengal & adjoining South Andaman Sea. Fishermen are advised not to venture into these areas.
- 22 May (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and West Rajasthan and with lightning at isolated places over Chhattisgarh, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands. Squally wind (speed reaching

40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea, Southwest & adjoining Westcentral Bay of Bengal and along & off Tamil Nadu-Andhra Pradesh coasts; Southeast Bay of Bengal & adjoining South Andaman Sea. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 18 May to 26 May 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)

Maharashtra-Vidarbha

Weather condition:

Weekly average means (19 MW) at AICRPAM Akola centre: T max 41.2°C (normal 42.4°C), T min 26.5°C (normal 27.0°C). RH I 46 % (normal 42 %), RH II 18% (normal 18 %). Evaporation rate 12.8 mm (normal 15.6 mm), Wind speed 4.5 km/hr (normal 11.7 km/hr) and BSH 8.0 hrs (normal 9.6 hrs). Maximum temperature across the week was 1.2°C below normal with a deviation of -1.9 to +0.1°C from normal. Minimum temperature across the week 0.5°C below normal with a deviation of -1.3 to +0.6°C from normal.

Contingency measure:

- The forecast (IMD) indicates a thunderstorm accompanied by lightning during 13-17 May very likely to occur at isolated places over Vidarbha region. In view of forecasted rain undertake harvest of matured sesame and greengram and store the produce at safe place. In view of forecasted isolated light to medium rain during 13-17 May, take into account the soil moisture conditions and local weather condition in planning irrigation in summer, fruit and vegetable crops. Ensure protection of farm animals during thunderstorm/lightning.
- Undertake summer deep ploughing of harvested fields is advisable to expose the hibernating insects, larvae/pupa to sun and predator birds. Avoid pre -monsoon sowing of cotton crop. Early sown (pre-monsoon) crop bears the reproductive structures like squares and flowers early. Pink bollworm moths emerging from dormant population of previous season lay eggs on these squares and flowers thus early sown crop supports completion of new seasons first generation of pink bollworm, which spreads to timely sown crop.
- During kernel development stage of groundnut , ensure sufficient moisture in the soil profile to reduce the impact of heat stress, irrigating in the early morning or late evening. Consider local current weather condition in planning need based

irrigation. Under prevailing evaporative demand apply irrigation at an interval of 6 to 7 days. Maintain adequate moisture in the soil profile during seed development to reduce the impact of heat stress irrigating in the early morning or late evening. Consider local current weather condition in planning irrigation.

- In later sown crop at capsule development stage of sesame and grain development stage of greengram , maintain adequate moisture in the soil profile to reduce the impact of heat stress irrigating in the early morning or late evening. Plant moisture inadequacy during summer may cause bark cracking/splitting in orange orchards. So to protect against fungal or other pathogen entry smear Bordeaux paste (1:1:10) on 1 to 1.5 meter trunk height. Considering irrigation facility and market response, cultivation of vegetables like bitter gourd, tinda, ridge gourd, smooth gourd, bottle gourd, ginger, turmeric, coriander, etc can be initiated during this period.

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

18-05-2021/(0800 to 0827) GMT
18-05-2021/(1330 to 1357) IST

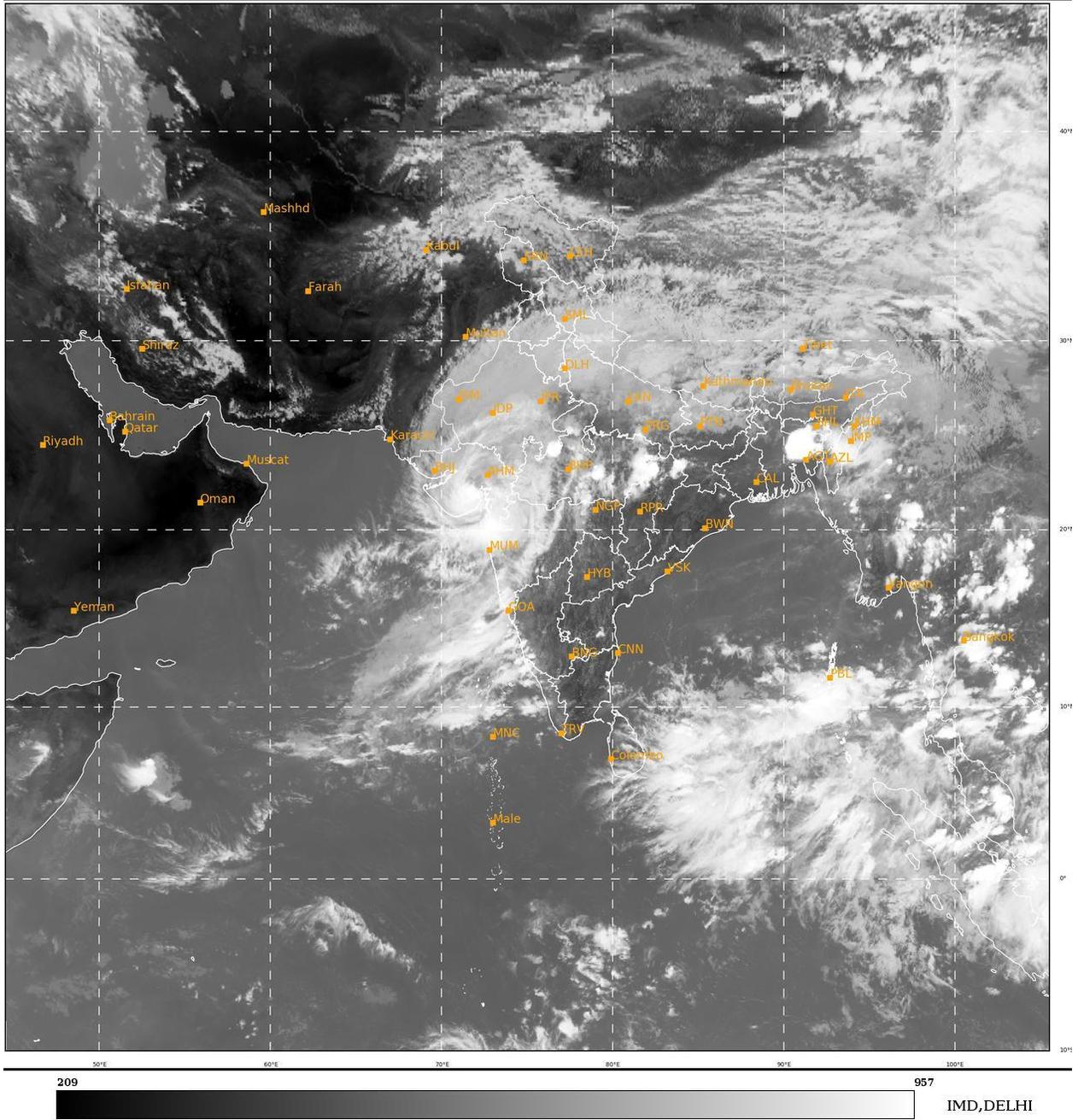


Figure: 1. Latest available satellite picture as on 18 May 2021 at 1357 Hrs (IST). (Source: IMD).

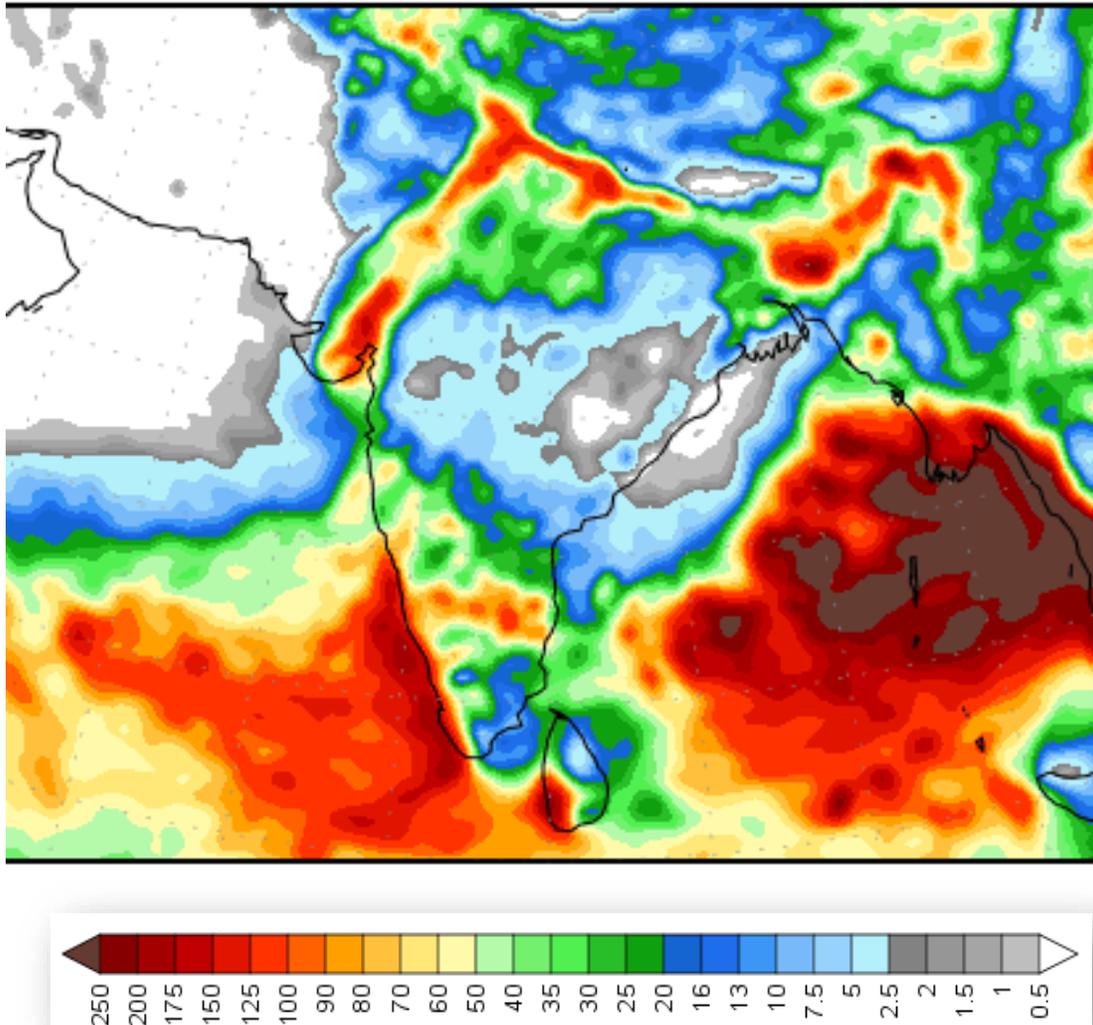


Figure:2. Precipitation forecast for 18 May to 26 May 2021 (Source: NOAA NCEP).

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