

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 13 Jun 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Advance of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 20°N/ Long. 60°E, Lat. 20°N/ Long. 70°E, Dahanu, Pune, Gadag, Bengaluru, Puducherry, Lat. 14°N/ Long. 84°E, Lat. 17.0°N/ Long. 87°E, Lat. 20.0°N/89.5°E, Lat. 22.0°N/90°E, Lat. 25.0°N/89°E, Siliguri and 27.50°N/88°E.
- Conditions are favorable for further advance of monsoon into some parts of north Arabian sea, remaining parts of Konkan, some parts of Gujarat state, most parts of Madhya Maharashtra, entire Karnataka and Tamil Nadu, some parts of Telangana, Andhra Pradesh, Westcentral & northwest Bay of Bengal during next 24 hours.
- Conditions would continue to become favorable for further advance of monsoon into some more parts of north Arabian Sea, Gujarat state, some parts of Marathwada, some more parts of Telangana, Andhra Pradesh, most parts of Bay of Bengal, entire Sub-Himalayan West Bengal & Sikkim, some parts of Odisha, Gangetic West Bengal, Jharkhand and Bihar during subsequent 3 days.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of strong southwesterly winds from Bay of Bengal to northeast & adjoining east India in lower tropospheric levels:
 - I) Isolated heavy to very heavy rainfall very likely over Arunachal Pradesh, Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim during next 5 days and heavy rainfall over Nagaland, Manipur, Mizoram & Tripura during 14th-17th June. Isolated extremely heavy rainfall also likely over Assam & Meghalaya during 13th-17th June.
 - II) Isolated heavy rainfall likely over Chhattisgarh during 15th-17th June.
- Under the influence of strong westerly winds along the west coast in lower tropospheric levels:
 - I) Isolated heavy rainfall very likely over Kerala & Mahe on 16th; over Coastal Karnataka on 13th and over Telangana during 13th-14th June, 2022.

II) Isolated heavy to very heavy rainfall likely over Konkan & Goa during next 2 days. Heat wave warnings: Heat wave conditions in isolated pockets very likely over south Haryana & Delhi, Southeast Uttar Pradesh, north Odisha, Jharkhand and adjoining areas of south Bihar on 13th June, 2022.

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

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Coastal Karnataka, Kerala & Mahe and Lakshadweep; at a few places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya; at isolated places over Jammu-Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Gujarat State, West Madhya Pradesh, Vidarbha, Konkan & Goa, Madhya Maharashtra, North Interior Karnataka, Bihar, Tamilnadu, Puducherry & Karaikal and Nagaland, Manipur, Mizoram, Tripura.
- Heavy rainfall recorded (from 0830 hours IST to 1730 hours IST of yesterday) at isolated places over Coastal Karnataka and Kerala & Mahe.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Gujarat, Konkan & Goa, Marathwada, Telangana, Coastal Andhra Pradesh & Yanam, Chhattisgarh, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal
- Yesterday, heat wave conditions prevailed in some pockets over Delhi and in isolated pockets over south Haryana, Jharkhand, Southeast Uttar Pradesh, Southwest Bihar and north Odisha.
- Maximum Temperature Departures (as on 12-06-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Punjab, Haryana, Chandigarh & Delhi and Jharkhand; at many places over Uttarakhand and East Uttar Pradesh; at a few places over Odisha and at isolated places over Gangetic West Bengal, Coastal Andhra Pradesh and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Telangana and Bihar; at a few places over Himachal Pradesh, Rayalaseema and Chhattisgarh and at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, West Rajasthan, West Uttar Pradesh, East Madhya Pradesh, Saurashtra & Kutch and Andaman & Nicobar Islands. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over West Madhya Pradesh and Vidarbha; below normal (-1.6°C to -3.0°C) at a few places over Assam & Meghalaya and at isolated places over East Rajasthan, Gujarat Region and Sub-Himalayan West Bengal & Sikkim

and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.8°C was reported at Delhi (Ridge).

- Minimum Temperature Departures (as on 12-06-2022): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Haryana, Chandigarh & Delhi; at isolated places over Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over Jharkhand; at many places over Odisha, Nagaland, Manipur, Mizoram & Tripura and Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; at a few places over Rajasthan, Telangana, West Bengal & Sikkim and Coastal Andhra Pradesh & Yanam. They were below normal (-1.6°C to -3.0°C) at isolated places over Himachal Pradesh, Konkan & Ga, Coastal Karnataka, Vidarbha and Madhya Pradesh and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 20.4°C was reported at Seoni (East Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 13 June (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Konkan & Goa; heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Telangana, Coastal Karnataka. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Chhattisgarh; with lightning/gusty winds (speed 30-40 kmph) at isolated places over East Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and Telangana and with lightning at isolated places over Bihar, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Gujarat state, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Duststorm/Thunderstorm/gusty winds (speed 30-40 kmph) at isolated places very likely over West Rajasthan. Heat wave conditions in isolated pockets very likely over Himachal Pradesh, Uttarakhand, Punjab, south Haryana & Delhi, Southeast Uttar Pradesh, north Odisha, Jharkhand and adjoining areas of south Bihar. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off south Gujarat, Maharashtra, Goa, Karnataka, Kerala coasts, adjoining southeast, eastcentral and northeast Arabian sea, Lakshadweep area; westcentral Bay of Bengal off Andhra Pradesh coast. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west & westcentral Arabian Sea. Fishermen are advised not to venture into these seas.

- 14 June (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Nagaland, Manipur, Mizoram, Tripura, Konkan & Goa, Telangana. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over Gangetic West Bengal, Jharkhand, Coastal Andhra Pradesh & Yanam, Telangana and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, Gujarat state, Madhya Maharashtra, Marathwada, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off south Maharashtra, Goa, Karnataka coasts, adjoining eastcentral Arabian sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west & westcentral Arabian Sea. Fishermen are advised not to venture into these seas.
- 15 June (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Chhattisgarh. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Jharkhand, Gangetic West Bengal; with lightning, gusty winds (speed 30-40 kmph) at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana and with lightning at isolated places over Jammu-Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, Karnataka, Tamilnadu, Puducherry, Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off south Maharashtra, Goa, Karnataka coasts, adjoining eastcentral Arabian sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west & westcentral Arabian Sea. Fishermen are advised not to venture into these seas.
- 16 June (Day 4): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Chhattisgarh, Kerala & Mahe and Uttarakhand. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over

Jharkhand, Gangetic West Bengal; with lightning, gusty winds (speed 30-40 kmph) at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana and with lightning at isolated places over Jammu-Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, Karnataka, Tamilnadu, Puducherry, Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off south Maharashtra, Goa, Karnataka coasts, adjoining eastcentral Arabian sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west & westcentral Arabian Sea. Fishermen are advised not to venture into these seas.

- 17 June (Day 5): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Chhattisgarh, Kerala & Mahe and Uttarakhand. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Jharkhand, Gangetic West Bengal; with lightning, gusty winds (speed 30-40 kmph) at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana and with lightning at isolated places over Jammu-Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, Karnataka, Tamilnadu, Puducherry, Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off south Maharashtra, Goa, Karnataka coasts, adjoining eastcentral Arabian sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west & westcentral Arabian Sea. Fishermen are advised not to venture into these seas.
- The weather outlook for seven days i.e., 13 Jun to 21 Jun 2022 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)

Marathwada

Weather condition:

At Parbhani centre: 04 to 10 June (SMW 23) during this period total 11.8 mm rainfall was recorded. The Maximum temperature was range from 32.4 to 42.4 0C and minimum temperature range from 21.3 to 28.9 0C. Relative humidity (RH I) ranged between 37-74% and relative humidity (RH II) recorded was 15-48%. The wind speed varied between 4.2 to 11.1 km/hr.

Contingency measure:

- Soybean: For rainfed cultivation use intercropping of soybean + Pigeonpea 2:1 or 4:2 and for irrigated condition use Soybean + cotton 1:1 or 2:1 intercropping should be use in soybean crop. Preparatory tillage operations should be done as early as possible for sowing of soybean crop.
- Kharif Sorghum: Kharif sorghum + Soybean 2:4 or 3:6 intercropping system should be use in Kharif sorghum crop keep 45 cm distance between two rows. Kharif sorghum + Pigeonpea 3:3 or 4:2 intercropping is beneficial. If soybean, green gram, black gram such types of short duration crops are selected for intercropping use 2:4 intercropping system. Preparatory tillage operations should be done as early as possible for sowing of Kharif Sorghum.
- Pearl millet: Intercropping of pearl millet + pigeonpea 2:1, 3:3 or 4:2 should be used in pearl millet crop. Preparatory tillage operations should be done as early as possible for sowing of Pearl millet.
- Sugarcane: Intercultural operations should be done in sugarcane crop.
- Turmeric: While selecting inter crop in turmeric, precaution should be taken that the crop must be short duration e.g. Chilli, Coriander etc. Intercropping of maize in turmeric should be strictly prohibited because it results decrease in yield.
- Citrus: If fertilizer application was not done For Mrig bahar in Citrus, apply 400:400:400 gram NPK per plant in sweet orange and 500:500:500 gram NPK per plant in Mandarin orange. Due to Forecast of Thunderstorm accompanied with Lightning and light to moderate rain and gusty wind (30-40 Kmph) at isolated places provide mechanical support to small plants.
- Pomogranate: If fertilizer application was not done For Mrig bahar in Pomegranate fertiliser application @ 300:250:250 gram NPK per plant should be done. Due to Forecast of Thunderstorm accompanied with Lightning and light to moderate rain and gusty wind (30-40 Kmph) at isolated places provide mechanical support to small plants.
- Sapota: If fertilizer application was not done Fertiliser application @ 500:500:500 gram NPK per plant should be done in Sapota orchard. Due to Forecast of Thunderstorm accompanied with Lightning and light to moderate rain and gusty wind (30-40 Kmph) at isolated places provide mechanical support to small plants.

- Vegetable: As per availability of water sowing of seeds (Brinjal, Tomato, Chilli etc.) on raised bed should be done for preparation of seedlings of vegetable crops. Due to Forecast of Thunderstorm accompanied with Lightning and light to moderate rain and gusty wind (30-40 Kmph) at isolated places harvesting of mature vegetable crops should be done as early as possible and store them at safe places. In view of thunderstorm accompanied with gusty winds, provide staking in vegetables.
- Floriculture: As per availability of water sowing of seeds on raised bed should be done for preparation of seedlings of floriculture crops. Due to forecast of Thunderstorm accompanied with Lightning, gusty wind (30-40 Km/Hr) and Rain at isolated places harvesting of mature flowers should be done.
- Fodder: For cultivation of maize as a fodder crop select varieties like African Tall, Manjri, Composite, Gangasafed, Vijay etc. Animal Due to Forecast of Thunderstorm accompanied with Lightning and light to moderate rain and gusty wind (30- 40 Kmph) at isolated places, During lighting don't stand nearer to trees. Keep animals away from Tractors and other metal farm equipments. Keep animals away from open water, ponds and rivers. Don't allow animals to congregate under trees.
- Mulberry sericulture: Sericulture farmers who planted Mulberry with cuttings may face big gaps in next year upto 20-25 % under EGS it is compulsory by government of Maharashtra to maintain 90 % plantation on second year. It is due to the reason farmers need to go Mulberry sapling plantation of 3 months old. After plantation drip irrigation reduce the gaps in the field and improve the crop stand for better leaf yield.

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

13-06-2022/(0800 to 0826) GMT
13-06-2022/(1330 to 1356) IST

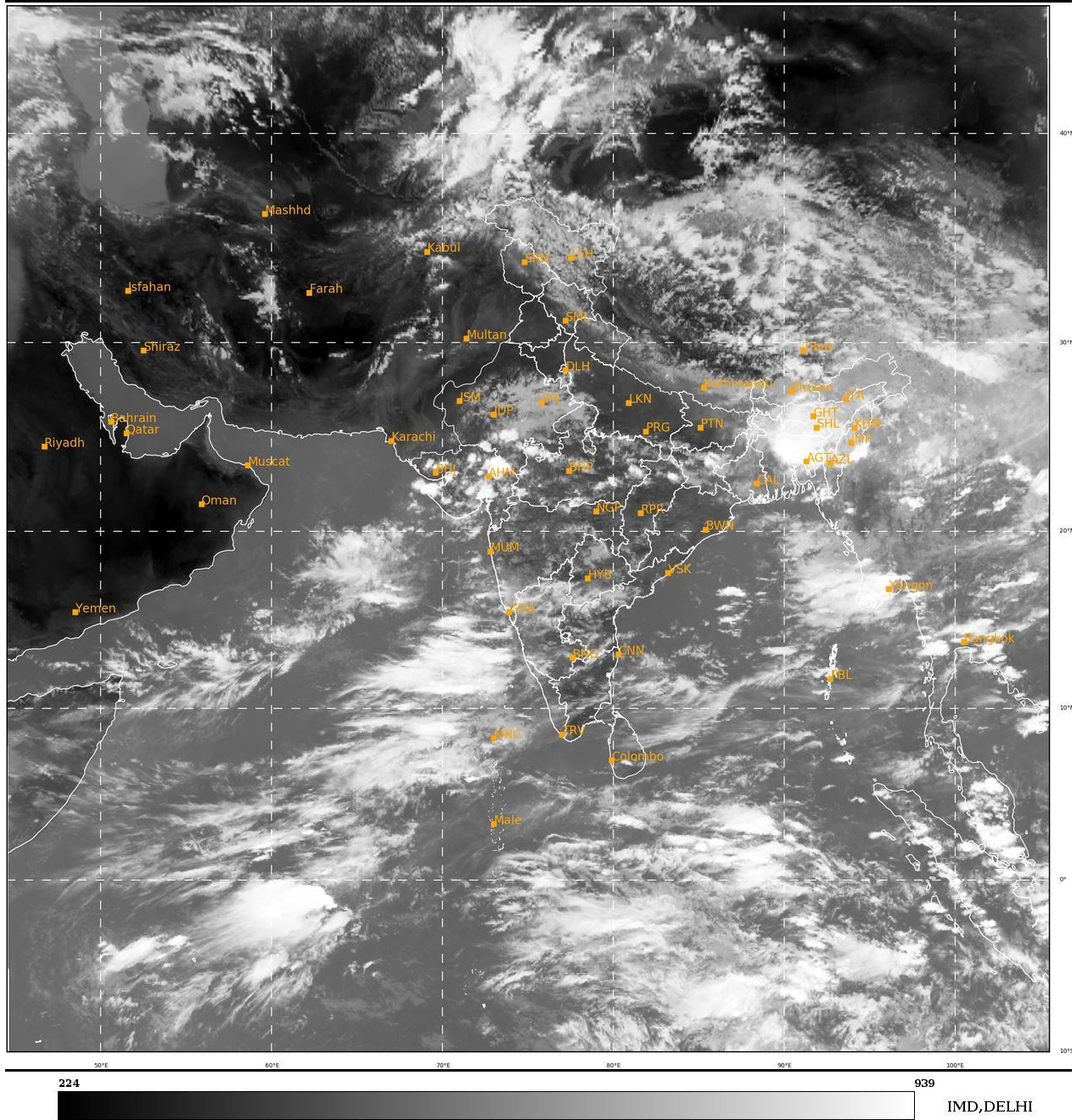


Figure: 1. Latest available satellite picture as on 13 Jun 2022 at 1356 Hrs (IST). (Source: IMD).

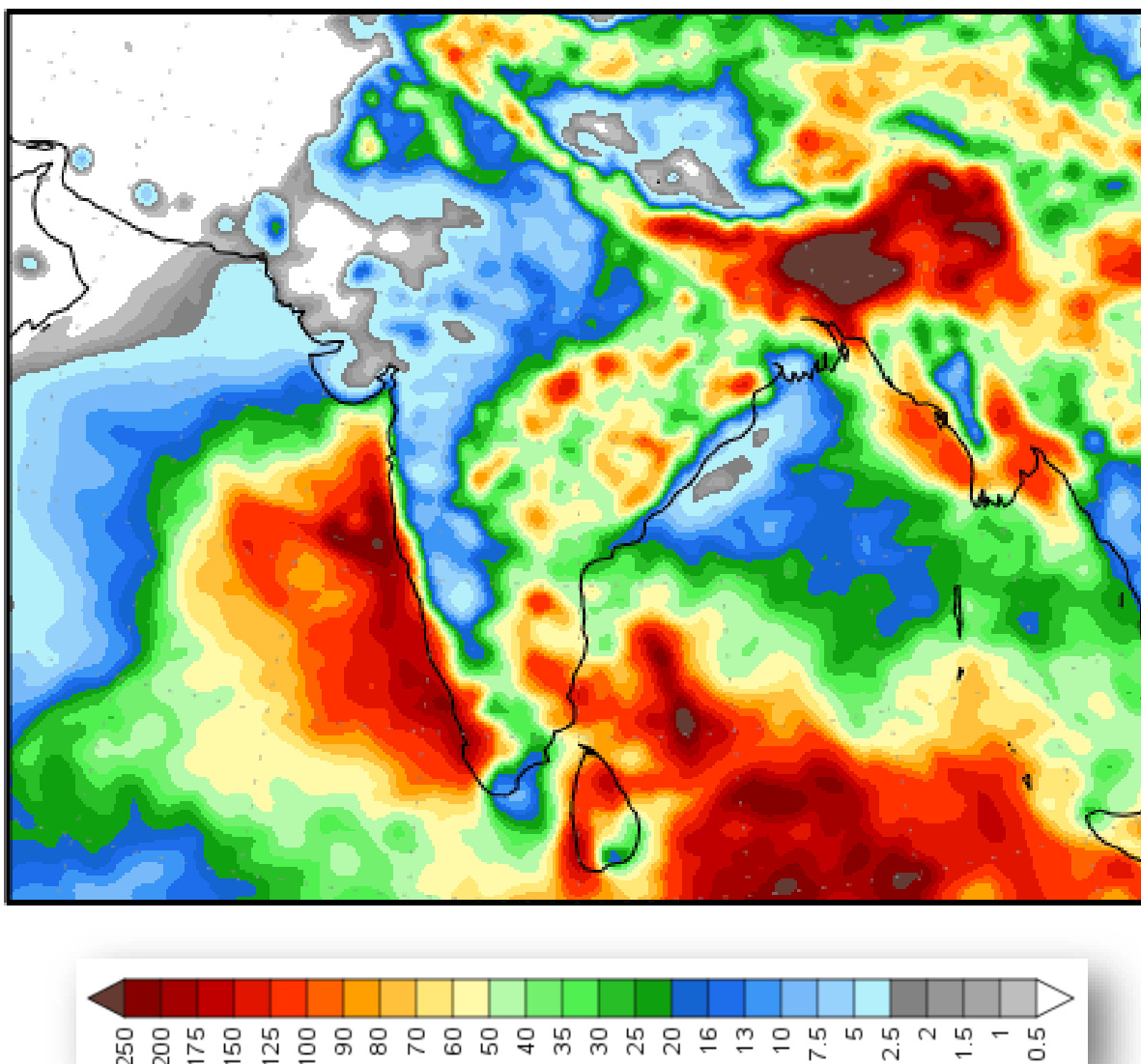


Figure:2. Precipitation forecast for 13 Jun to 21 Jun 2022 (Source: NOAA NCEP).

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