

All India Coordinated Research Project on Agrometeorology
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Daily Crop Weather Information as on 29 May 2021

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Significant Weather Features (IMD)

- The northern limit of Southwest Monsoon continues to pass through 5°N/72°E, 6°N/75°E, 8°N/80°E, 12°N/85°E, 14°N/90°E and 17°N/94°E. Conditions are likely to become favourable for onset of Southwest Monsoon over Kerala around 31st May 2021.
- Under the influence of a Cyclonic Circulation over East Uttar Pradesh & neighbourhood extending upto 4.5 km above mean sea level; scattered to fairly widespread rainfall likely with isolated thunderstorm, lightning & gusty wind over Bihar and East Uttar Pradesh and isolated heavy to very heavy rainfall over Bihar during next 24 hours.
- Due to strengthening of southerly winds, fairly widespread to widespread rainfall activity with isolated heavy falls very likely over Northeastern states and adjoining East India from 30th May, 2021.
- A Western Disturbance as a cyclonic circulation lies over north Pakistan & neighbourhood in lower tropospheric levels with a trough aloft in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along longitude 66°E to the north of latitude 28°N; a cyclonic circulation lies over Punjab & neighbourhood and a trough runs from this cyclonic circulation to northeast Rajasthan in lower tropospheric levels. Under their influence; isolated to scattered rainfall/thunderstorm activity likely over Western Himalayan Region & adjoining plains of Northwest India during next 4-5 days.
- A trough runs from southeast Madhya Pradesh & neighbourhood to south Tamil Nadu across Vidarbha, Telangana and Rayalaseema and a cyclonic circulation lies over Eastcentral Arabian Sea off Karnataka coast in lower tropospheric levels. Under their influence and other favourable meteorological conditions; scattered to fairly widespread rainfall/thunderstorm likely over Karnataka and Kerala & Mahe and isolated to scattered rainfall/thunderstorm over remaining parts of south Peninsular India during next 4-5 days. Isolated heavy rainfall likely over Kerala & Mahe during next 5 days; Coastal Karnataka on 29th May & 02nd June;

North Interior Karnataka on 29th May; South Interior Karnataka on 02nd June; Coastal Andhra Pradesh on 30th & 31st May.

- Scattered Heat Wave conditions with isolated severe heat wave very likely over West Rajasthan on 29th and scattered heat wave conditions on 30th. Isolated heat wave conditions also likely over East Rajasthan, south Punjab, south Haryana and Vidarbha on 29th & 30th.
- 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 Bihar, Sub-Himalayan west Bengal & Sikkim and Lakshadweep; at many places over East Uttar Pradesh, Andaman & Nicobar Islands and Kerala & Mahe; at a few places over Jharkhand, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Odisha, Assam & Meghalaya, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Heavy Rainfall recorded (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 East Uttar Pradesh and Bihar; heavy to very heavy rainfall at isolated places over Kerala & Mahe and heavy rainfall at isolated places over Sub-Himalayan west Bengal & Sikkim and Coastal Karnataka.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hrs IST today): at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, West Madhya Pradesh, Marathawada, North Interior Karnataka, Bihar and Jharkhand.
- Maximum Temperature Departures as on 28-05-2021: Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at many places over Assam & Meghalaya; at a few places over Arunachal Pradesh and West Rajasthan and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam and above normal (1.6°C to 3.0°C) at a few places over Himachal Pradesh and Punjab and at isolated places over Kerala & Mahe. They were markedly below normal (-5.1°C or less) at most places over East Uttar Pradesh, Bihar; at many places over Jharkhand; at a few places over Sub-Himalayan west Bengal & Sikkim and Chattisgarh; appreciably below normal (-

3.1°C to -5.0°C) at a few places over West Uttar Pradesh, North Interior Karnataka and Andaman & Nicobar Islands and at isolated places over Gangetic West Bengal, Telangana and West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over Uttarakhand; at many places over south Interior Karnataka and Marathwada; at a few places over Gujarat Region, Madhya Maharashtra and Rayalaseema and at isolated places over Haryana, Chandigarh & Delhi and East Rajasthan and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 47.3°C was reported at Ganganagar (West Rajasthan) over the country.

- Minimum Temperature Departures as on 29-05-2021: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh, Punjab and West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; above normal (1.6°C to 3.0°C) at a few places over Haryana, Chandigarh & Delhi, Uttarakhand, Arunachal Pradesh, Assam & Meghalaya, Odisha and Coastal Andhra Pradesh & Yanam; at isolated places over East Rajasthan, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Madhya Maharashtra. They are markedly below normal (-5.1°C or less) at most places over East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over East Uttar Pradesh; at isolated places over Telangana; below normal (-1.6°C to -3.0°C) at many places over West Uttar Pradesh, West Madhya Pradesh and Coastal Karnataka; at isolated places over Jharkhand, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal and near normal over rest of the country. Today, the lowest minimum temperature of 20.3°C is reported at Fatehgarh (West Uttar Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 29 May (Day 1):): Thunderstorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over West Madhya Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, East Rajasthan, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Himachal Pradesh, West Uttar Pradesh, West Madhya Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

Thunderstorm/Duststorm (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Heat Wave conditions in some pockets with Severe Heat Wave in isolated pockets very likely over West Rajasthan and Heat Wave conditions in isolated pockets over south Punjab, south Haryana, East Rajasthan and Vidarbha. Heavy to Very Heavy Rainfall at isolated places very likely over Bihar and Heavy Rainfall at isolated places over Andaman & Nicobar Islands, Coastal & North Interior Karnataka and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over Andaman Sea; wind speed 40-50 kmph over Southwest & Westcentral Arabian Sea; Comorin & Lakshadweep areas; south Sri Lanka coast and along & off Kerala coast . Fishermen are advised not to venture into these areas.

- 30 May (Day 2): Thunderstorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over West Madhya Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, East Rajasthan, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Uttar Pradesh, Chhattisgarh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Heat Wave conditions very likely in some pockets over West Rajasthan; in isolated pockets over south Punjab, south Haryana, East Rajasthan and Vidarbha. Heavy Rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) very likely over Northwest & adjoining Northeast Arabian Sea and Southwest & Westcentral Arabian Sea; Comorin & Lakshadweep areas; south Sri Lanka coast and along & off Kerala coast . Fishermen are advised not to venture into these areas.
- 31 May (Day 3): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, Vidarbha, Gangetic West Bengal, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-

Baltistan & Muzaffarabad, Himachal Pradesh, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) very likely over Northwest & adjoining Northeast Arabian Sea and Southwest Arabian Sea; Lakshadweep and along & off Kerala coast. Fishermen are advised not to venture into these areas.

- 01 June (Day 4): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, Vidarbha, Jharkhand, West Bengal & Sikkim, Odisha, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) likely over Northwest & adjoining Northeast Arabian Sea and Southwest Arabian Sea; Lakshadweep and along & off Kerala coast. Fishermen are advised not to venture into these areas.
- 02 June (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, Vidarbha, Jharkhand, West Bengal & Sikkim, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Himachal Pradesh, East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

Thunderstorm/Duststorm (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall likely at isolated places over Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas

- The weather outlook for seven days i.e., 28 May to 05 Jun 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 (21 MW) at AICRPAM Akola centre: T max 40.4°C (normal 42.2°C), T min 24.0°C (normal 28.0°C). RH I 50 % (normal 50 %), RH II 25% (normal 21 %). Evaporation rate 13.1 mm (normal 16.0 mm), Wind speed 7.6 km/hr (normal 14.5 km/hr) and BSH 7.3 hrs (normal 9.2 hrs). Maximum temperature across the week was 1.8°C below normal with a deviation of -5.1 to -0.2°C from normal. Minimum temperature across the week 1.4°C below normal with a deviation of -5.1 to -0.3°C from normal.

Contingency measure:

- The forecast (IMD) indicates thunderstorm accompanied with lightning at isolated places during 27-29 May and isolated rain during 30-31 May is very likely to occur over Vidarbha. In view of forecasted rain continue harvesting of matured summer groundnut, sesame and sunflower and ensure safe placement of harvested produce to protect from sudden rain/thunderstorm. Also undertake harvesting of matured/market ready vegetables, fruits (mango), sapota etc. and ensure safe storage. For the ensuing kharif season ensure the availability of seeds as per the crop/cultivar planning and ensure other inputs (fertilizers / biofertilizers) in advance.
- For use of own seeds for crop like soybean to test seed viability conduct a simple germination test. 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 season's first generation of pink bollworm, which spreads to timely sown crop.

- Undertake digging of pits (1x1x1m) at recommended spacing for planting new orchards (orange, mango, sapota, custard apple, aonla, and guava). Leave the pits exposed to the sun for a period of about 15 days. Afterwards fill the pits up to 10-15 cm above surface level with mixture of 1 part FYM, 2 part soil, 2 kg single super phosphate and 100 g chlorpyrifos powder. Planting shall be undertaken upon receipt of sufficient monsoon rains.
- For control of early and late blight in tomato undertake spray of mancozeb 75%WP@ 25 g OR propineb 70% @ 30g OR co-formulation of azoxystrobin 18.2% + difenoconazole 11.4% @ 10 ml per 10 litres of water. 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.
- Ensure sufficient feed and medication for livestock to last through prevailing disruption. Provide proper ventilation and heat protection in the animal/poultry sheds. Hang curtains around the shed and sprinkle it with water. Applying gunny bags/grass on roof of shed with sprinkling of water to reduce heat impact. Possibly restrict working/grazing of farm/draught animals to morning and evening hours and provide access to plenty of drinking water. Vaccination of susceptible farm animals against foot-and-mouth disease (FMD) is advisable.

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

29-05-2021/(0830 to 0857) GMT
29-05-2021/(1400 to 1427) IST

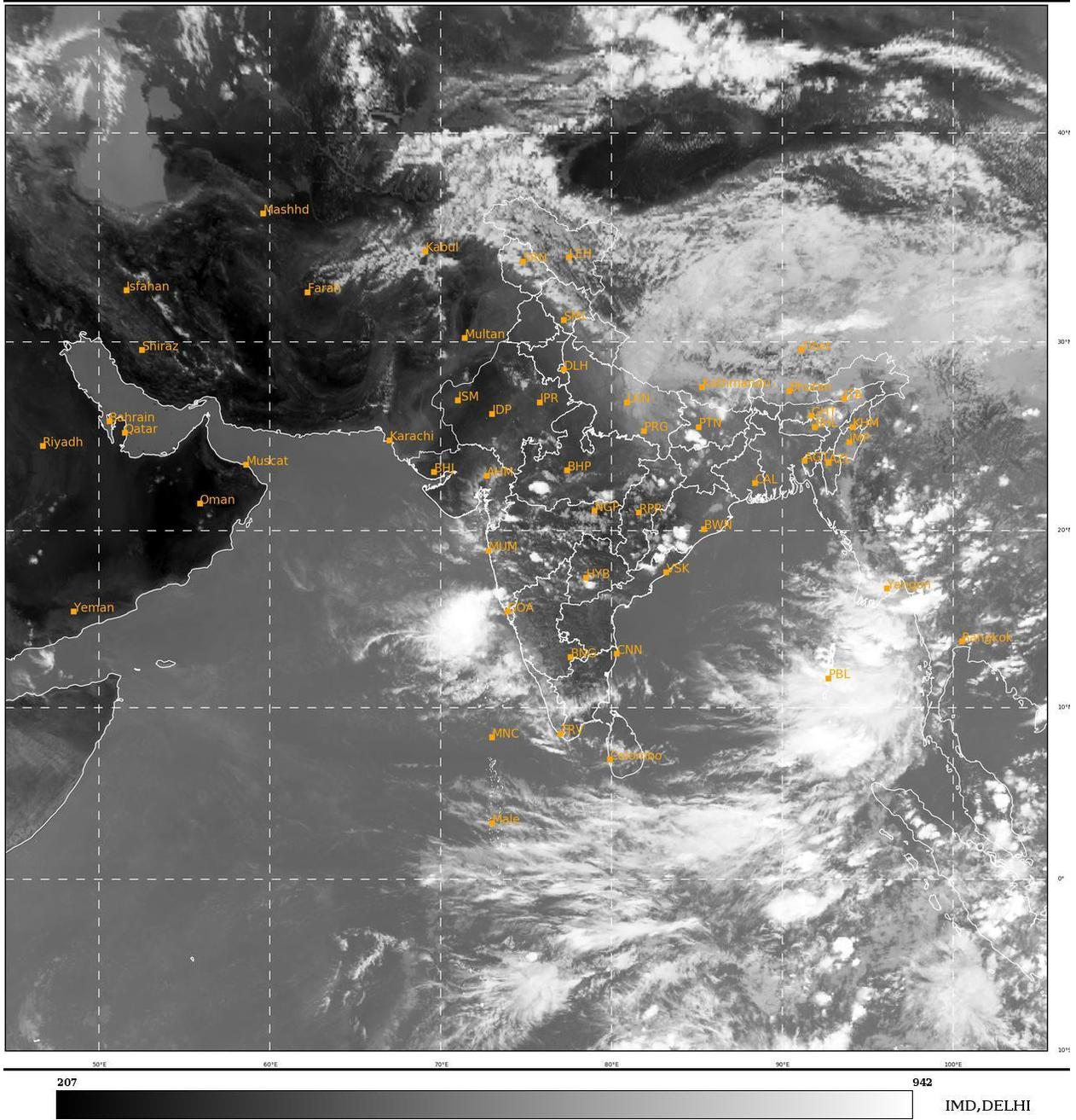


Figure: 1. Latest available satellite picture as on 29 May 2021 at 1427 Hrs (IST). (Source: IMD).

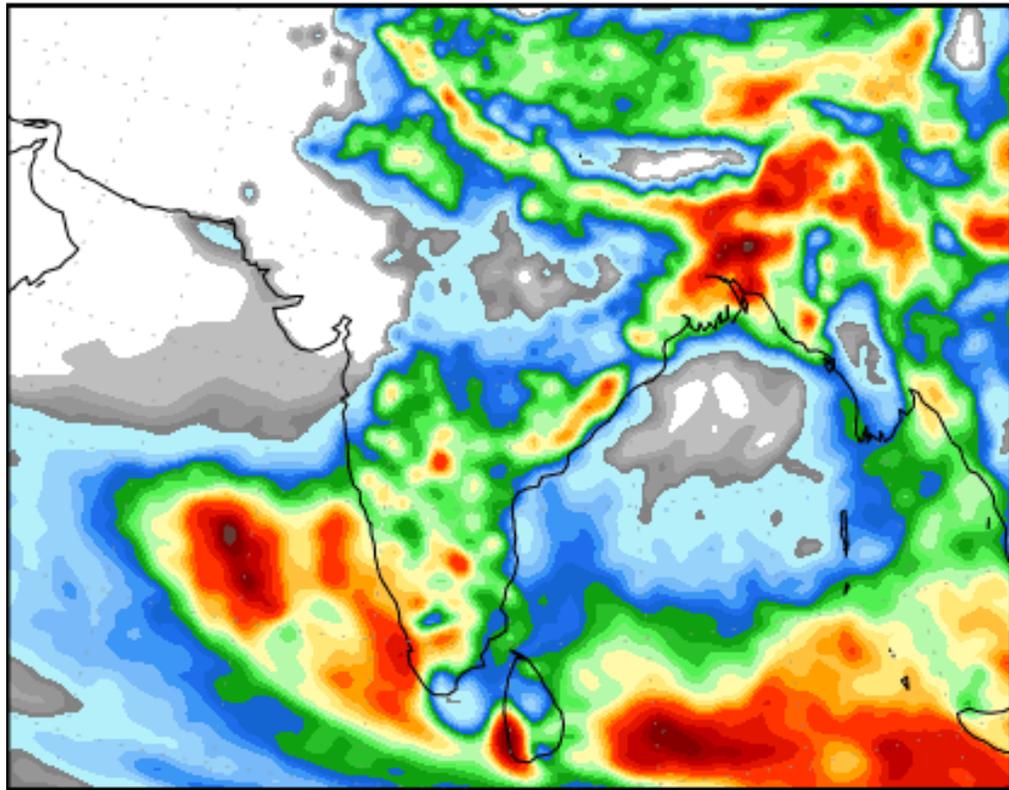


Figure:2. Precipitation forecast for 29 May to 06 Jun 2021 (Source: NOAA NCEP).

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