

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 29 March 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Under the influence of strong lower level south-westerlies from the Bay of Bengal and other favourable meteorological conditions:
 - (i) fairly widespread rainfall with thunderstorm/thundersquall/lightning at isolated places are very likely over Northeast India during 29th March-02nd April with maximum activity during 30th-31st March.
 - (ii) Isolated heavy falls Very likely over Assam & Meghalaya on 29th & 31st March; over Nagaland, Manipur, Mizoram & Tripura during 29th-31st March and over Arunachal Pradesh during 30th March-01st April. Isolated heavy to very heavy falls also likely over Assam & Meghalaya on 30th March. (iii) It may cause landslides and inundation of low lying areas at isolated places over south Assam, Meghalaya, Tripura and Mizoram during 30th March-01st April.
- A cyclonic circulation lies over Southeast Bay of Bengal & neighbourhood and extends upto 4.5 km above mean sea level. Under its influence, a Low Pressure Area is likely to form over Southeast Bay of Bengal & adjoining South Andaman Sea during next 48 hours. It is likely to become more marked over North Andaman Sea & neighbourhood during subsequent 24 hours. Under its influence;
 - (i) Widespread rainfall with thunderstorm, lightning & gusty wind is likely over Andaman & Nicobar Islands during next 5 days. Isolated heavy to very heavy falls also likely over Andaman & Nicobar Islands during 30th March-01st April, 2021.
 - (ii) Fishermen are advised not to venture into Southeast Bay of Bengal & adjoining south Andaman Sea on 30th & 31st March and over Andaman Sea & adjoining areas of Bay of Bengal on 01st & 02nd April, 2021.
- Heat Wave Conditions very likely in some pockets with severe heat wave conditions in isolated pockets over West Rajasthan and heat wave conditions in isolated pockets over East Rajasthan, Saurashtra & Kutch and Madhya Pradesh on 29th & 30th March and over Vidarbha on 30th March and over Odisha during 30th March-01st April, 2021.

- Dust raising Strong Surface Winds (speed reaching 30-40 kmph) are very likely over Rajasthan, Punjab, Haryana, Delhi and Uttar Pradesh during 30th March-01st April.
- 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 hours IST of today): at many places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; at a few places over Himachal Pradesh and Kerala & Mahe and at isolated places over Konkan & Goa, Karnataka, Tamilnadu, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Thunderstorm observed (from 1730 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka and Kerala & Mahe.
- Heat Wave Conditions were observed in most pockets with severe heat wave conditions in isolated pockets over West Rajasthan and heat wave conditions in many pockets over Saurashtra & Kutch and in isolated pockets over north Gujarat region.
- Maximum Temperature Departures as on 28-03-2021: Maximum temperatures were markedly above normal (5.1°C or more) at most places over West Rajasthan; at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, East Rajasthan, Gujarat, Arunachal Pradesh and Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Madhya Pradesh, Uttarakhand and Sub-Himalayan West Bengal & Sikkim; at isolated places over Konkan & Goa and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh, Bihar, Jharkhand, Vidarbha and Nagaland, Manipur, Mizoram & Tripura; at many places over Odisha, Chhattisgarh and Marathawada; at a few places over Telangana and at isolated places over Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at isolated places over Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.8°C was reported at Barmer (West Rajasthan) over the country.
- Minimum Temperature Departures as on 29-03-2021: Minimum temperatures are markedly above normal (5.1°C or more) at most places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and West Rajasthan; at many places

over Himachal Pradesh and Punjab; at a few places over East Rajasthan; at isolated places over Uttarakhand and Haryana, Chandigarh & Delhi; appreciably above normal (3.1°C to 5.0°C) at isolated places over Madhya Pradesh, Uttar Pradesh and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at many places over Konkan & Goa, West Bengal & Sikkim and Coastal Karnataka; at a few places over Gujarat and Odisha and at isolated places over Madhya Maharashtra, Marathwada, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at a few places over Vidarbha and at isolated places over Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe and near normal over rest parts of the country. Today, the lowest minimum temperature of 14.6°C reported at Raisen (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 29 March (Day 1): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands and Kerala & Mahe and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Lakshadweep and Karnataka. Heavy rainfall very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat Wave Conditions very likely in some pockets with severe heat wave conditions in isolated pockets over West Rajasthan and heat wave conditions in isolated pockets over Madhya Pradesh, Gujarat, East Rajasthan and Haryana. Strong winds (speed reaching 35-45 kmph) very likely due to temporary thunderstorm over central parts of South Bay of Bengal and over Southeast Arabian Sea. Fishermen are advised not to venture into these areas.
- 30 March (Day 2): Thunderstorm with lightning, hail and squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning and gusty winds (speed reaching 30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands and Arunachal Pradesh and with lightning at isolated places over Kerala & Mahe. Heavy to very heavy rainfall very likely at isolated places over Assam & Meghalaya and heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Andaman

& Nicobar Islands. Heat Wave Conditions very likely in some pockets with severe heat wave conditions in isolated pockets over West Rajasthan and heat wave conditions in isolated pockets over Madhya Pradesh, Vidarbha, Odisha, Saurashtra & Kutch, East Rajasthan and Haryana. Strong winds (wind speed reaching 35-45 kmph) very likely over Southeast Bay of Bengal & adjoining south Andaman Sea and over Southeast Arabian Sea. Strong winds (speed reaching 40-50 kmph) over Northwest Bay of Bengal and along & off Odisha-West Bengal coasts. Fishermen are advised not to venture into these areas.

- 31 March (Day 3): Thunderstorm with lightning and gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning and gusty winds (speed reaching 30-40 kmph) at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Kerala & Mahe. Heavy to very heavy rainfall very likely at isolated places over Andaman & Nicobar Islands and heavy rainfall at isolated places over Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim. Heat Wave Conditions very likely in isolated pockets over Odisha. Squally weather (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely over south Andaman Sea & adjoining Southeast Bay of Bengal. Strong winds (speed reaching 40-50 kmph) over Northwest Bay of Bengal and along & off Odisha-West Bengal coasts. Fishermen are advised not to venture into these areas.
- 01 April (Day 4): Thunderstorm with lightning and gusty winds (speed reaching 40-50 kmph) likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; with lightning and gusty winds (speed reaching 30-40 kmph) likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Assam & Meghalaya and Kerala & Mahe. Heavy rainfall likely at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim. Heat Wave Conditions likely in isolated pockets over Odisha. Squally weather (wind speed reaching 45-55 kmph gusting to 65 kmph) likely over Andaman Sea & adjoining areas of Southeast & Westcentral Bay of Bengal. Fishermen are advised not to venture into these areas.
- 02 April (Day 5): Thunderstorm with lightning and gusty winds (speed reaching 30-40 kmph) likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Odisha and Kerala & Mahe. Squally weather (wind speed reaching 50-60 kmph gusting to 70 kmph) likely over Andaman Sea

& adjoining areas of Bay of Bengal. Fishermen are advised not to venture into these areas

- The weather outlook for seven days i.e., 29 Mar to 06 April 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)

Himachal Pradesh

Weather condition:

The maximum and minimum temperature ranged between 18.0 to 26.5 °C and 8.5 to 12.2 °C which was mostly above normal by 1.8 to 6.7 °C and 0.8 to 2.9 °C, respectively. 17.4 mm rainfall was received during the week against the normal of 30.9 mm. The relative humidity varied between 24-89 % and sunshine hours between 0.0-9.0 hrs/day with variable sky conditions (Octa 2-8). The evaporation rate varied 2.0-4.6 mm per day.

Contingency measure:

- Rabi Crops: Wheat: In wheat crop if symptoms of termite appear than application of Chlorpyriphos 20 EC @ 2.0 litre should be done with irrigation In areas where symptoms of yellow rust are appears in the wheat crop in the form of yellow powder/stripes on the leaves or susceptible varieties then the farmers are advised to spray the fungicides with the appearance of the symptoms. These are tilt (Propiconazole) 25 EC/folicure (Tebuconazole) 25 EC/bayletan 25 WP @ 0.1% i.e. 30ml or 30 g per 30 litres of water per kanal and repeat the spray after 15 days interval.
- Pulses: For pod borer in the gram crop, installation of Pheromone trap @ 3-4 traps per acre is advised if flowering has reached 10-15%. T shaped bird perches in and around crop field to be installed for controlling insect population. Intercultural operations are recommended.To prevent scorching disease in gram and lentil, treat the seeds with Dithane M-45 (2.5 gm / kg of seeds).
- Mustard: For pod borer in the gram crop, installation of Pheromone trap @ 3-4 traps per acre is advised if flowering has reached 10-15%. ?T? shaped bird perches in and around crop field to be installed for controlling insect population. Stored Grains: The grains should be dried properly to bring down moisture level below 12 % before storage.Weather is conducive for attack of stored grains pests like rice weevil, lesser grain borer and rice moth. In Grain store bins put one pouch of celhpos (3g) or quickphos (12g) or Fumino pouch in a wet cloth in the middle of bin and keep the bin airtight for some time.

- Fodder Crops: Intercultural operations on already sown berseem, lucerne and oats for fodder of Rabi season also advised.
- Vegetable Crops: For the control of soil borne insects viz. white grubs, cutworms, red ants etc. mix chlorpyrifos 20 EC with sand (2 litre in 25 kg sand for one hectare area) and incorporate the mixture into soil before sowing of potato or transplanting of vegetable crops. Vegetables may also be protected from frost bites.
- Cauliflower And Other Vegetables: Keep cauliflower fields weed free. keep broccoli, late cauliflower, cabbage and tomatoes weed free. For monitoring of fruit borer, top borer and diamond backed moth in cauliflower and cabbage, apply Pheromone traps @ 3-4 / acre and if the outbreak is more visible, spray with recommended chemical when sky is clear.
- Onion And Other Vegetables: Onion crop against attack of thrips. Spraying of Carbaryl @ 2 gram/ litre of water with sticky material (Tipol 1.0 gram /litre) is advised. Onion crop against infection of purple blotch should also be done. Need based spraying of Diethane M -45 @ 3 grams per litre of water with sticky material (Tipol 1.0 gram /litre) are advised. Intercultural operations of radish, carrot, turnip, palak and methi carrot, broccoli, lettuce can be done. For the control of damping off disease in vegetable crop spray recommended chemical. For control of powdery mildew in peas, spray celfex@25 g per 10 litres of water or karathane@5 ml per 10 litres of water. For pod borer in pea and fruit borer in tomato, installation of pheromone traps @ 3-4 traps per acre is advise. Sowing of spinach, coriander, fenugreek may be done in present weather conditions. Foliar spray of 20 kg urea per acre may be done to maintain foliage health.
- Poly House Agriculture: Nursery preparation should be done for chili, tomato and brinjal crops in poly house. Prepare seedling of early cucurbitaceous crops in small polythene bags in poly houses. Make preparation for sowing of green coriander, raddish turnip in next month .To prepare seedling of early cucurbitaceous crops, seedling may be prepared in small polythene bags in poly houses.
- Livestock: Monitor the animals for FMD and advised Vaccination. Feed pregnant and lactating cows and buffaloes with balance feed including mineral mixture. Also keep the cowshed clean and do not allow the water to stagnate in the cow shed. Feed well-chaffed legumes mixed with wheat-straw in the ratio of 10:1. Deworming of calves should be continued against ascaris with piperazine liquid 4ml/10 kg body weight. Give them vitamin A concentrate 1ml daily in milk for three days, to be repeated after a month. While feeding animals on dry

roughages, provide 40 g mineral mixture to every milk giving cow or buffalo.

- Poultry: Protect the birds from cold as temperature is expected to fall in next week. Attack of Diarrhea and coccidiosis expected so, consult the nearby veterinarian. In case of poultry, save them from cold winds by providing curtains so that temperature of shed does not fall below 16°C. Provide artificial heat to chicks. Increase energy contents of ration by 5-8 per cent. Also add coccidiostats in the ration, to prevent its occurrence. Provide 15-16 hrs. of light in the sheds.
- Mushroom: Mushroom can be sown in closed room, maintain temperature of 25-28°C and relative humidity of 80-85% for good crop. Advised to fill compost bags with span for button mushrooms. Maintain the temperature of room of 22-24°C where Span bags kept for mushroom production. Where mushroom has started maintain temperature of the room 16-18 for good crop.
- Horticulture: Start monitoring for mango hopper and destroy infected inflorescence if mango malformation is found. For the attack of leaf miner in Citrus. For its control, spray 10 ml Matasystox or Malathion 10 ml in 10 litre of water. For the control of Citrus canker spray Streptocycline Sulphate 500 ppm solution. Remove the shoots below the graft or bud unions. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area. In present weather, wrapping of plastic sheets around mango trunk should be done for preventing climbing of young (nymphs) mealy bugs. Apply grease to seal any cracks in the polythene sheets.
- Apiculture: The temperature has fallen and expected to fall further, so give the winter packing immediately to colonies. Check the colonies for nectar and Give artificial food to honey bees as there is scarcity of flowers during these days. And keep colonies in sun on clear day.
- Fisheries: It is time to clear the stock. It is time to disinfect the fish tank by draining out the water and exposing the bottom floor of the tank to direct sunlight.
- Folriculture: For the control of blue beetle in roses and balsam, spray endosulphon @0.1% or cypermethrin @0.05%. Training and pruning as well as intercultural operations of rose should be done in present weather conditions. Apply Bavistin paste in the cut portion to protect the crop Weather is conducive for attack of mites in carnation, for control spray cypermethrin @ 0.05% in 15 days interval against attack of fungal diseases. Rotting disease in marigold crop is monitored. The flowers affected with aphids, spray malathion @0.05% for the control. Advised light and frequent irrigation.

SAT : INSAT-3D IMG
 IMG_TIR1 10.8 um
 L1C Mercator

29-03-2021/(0800 to 0826) GMT
 29-03-2021/(1330 to 1356) IST

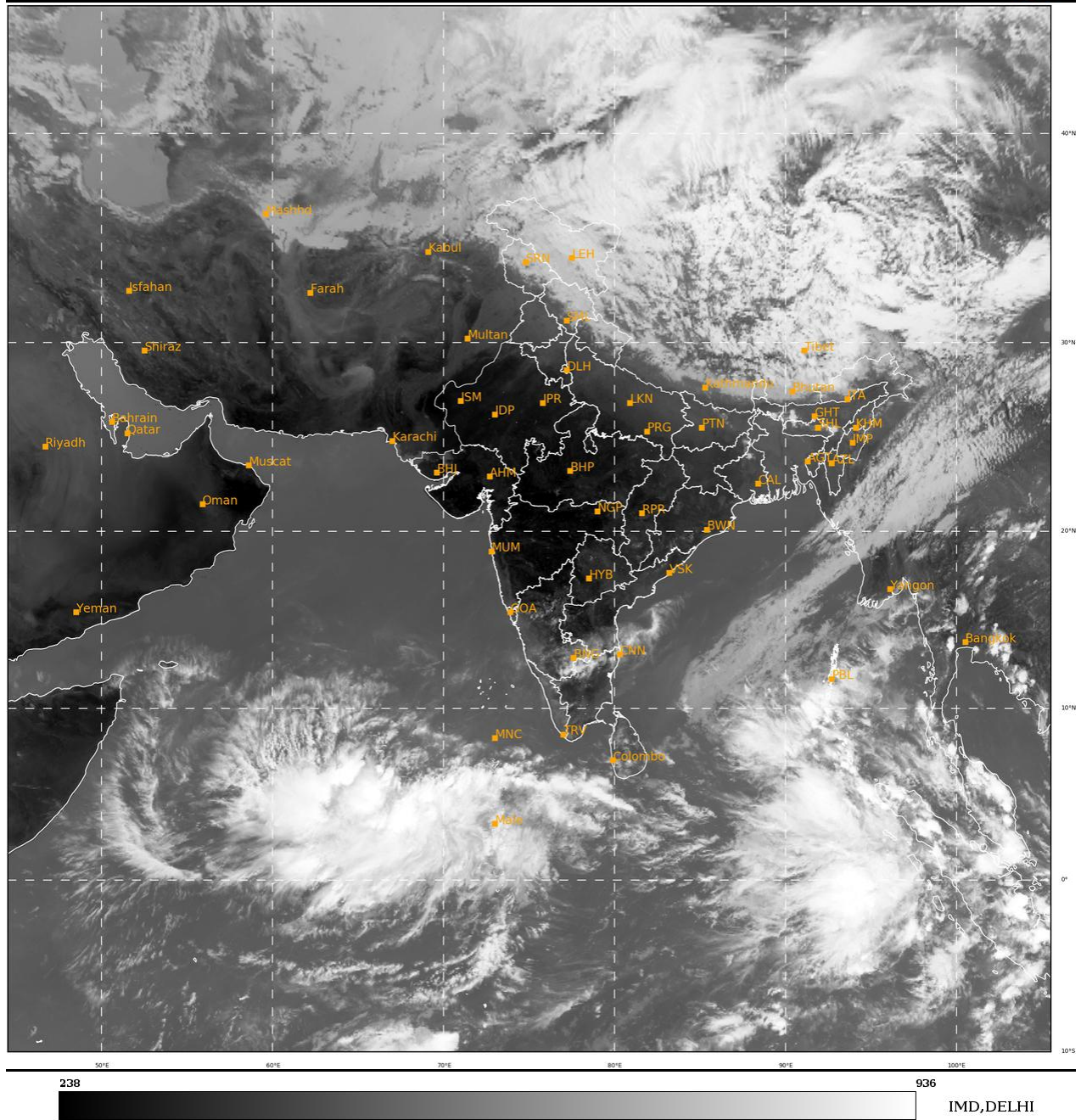


Figure: 1. Latest available satellite picture as on 29 March 2021 at 1356 Hrs (IST). (Source: IMD).

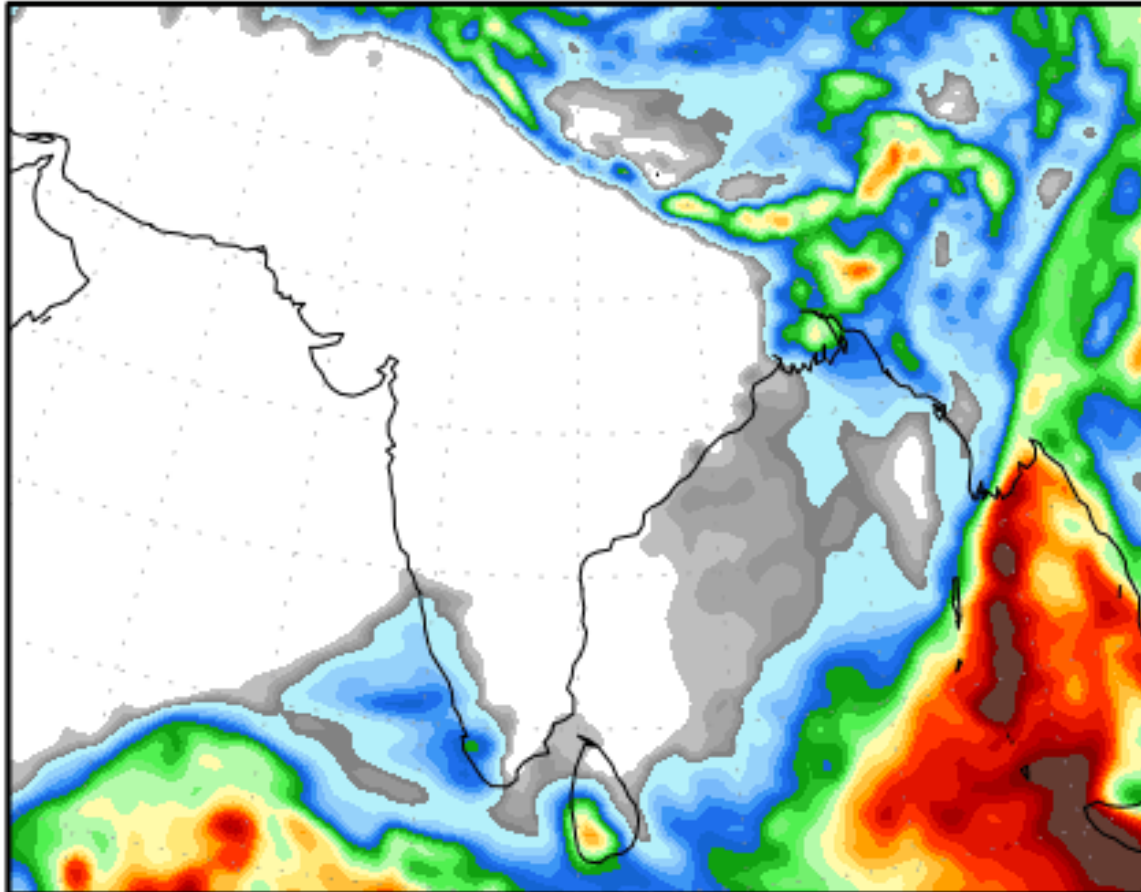


Figure:2. Precipitation forecast for 29 Mar to 06 Apr 2021 (Source: NOAA NCEP).

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