

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 12 April 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Heat Wave Forecast & Warnings:
- Heat Wave conditions to severe heat wave conditions in isolated pockets very likely over HaryanaDelhi & Punjab on 12th April and heat wave conditions in isolated pockets over Himachal Pradesh on 12th; Madhya Pradesh on 12th & 13th; Bihar on 13th & 14th; Jharkhand during 12th to 14th; West Uttar Pradesh on 12th, 15th & 16th; West Rajasthan on 12th, 14th, 15th & 16th; East Rajasthan during 14th to 16th and over Gujarat State on 16th April, 2022.
- Rainfall Forecast & Warnings:
- Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:
 - i) Fairly widespread to widespread rainfall accompanied with thunderstorm/lightning very likely over Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Assam-Meghalaya and Nagaland-ManipurMizoram-Tripura during next 5 days.
 - ii) Isolated heavy to very heavy rainfall likely over Assam-Meghalaya & Arunachal Pradesh during 14th to 16th and heavy rainfall likely over the same region on 13th April and over Sub-Himalayan West Bengal & Sikkim on 13th April, 2022.
- Under the influence of the cyclonic circulation over south Tamil Nadu upto middle tropospheric levels;
 - i) Light fairly widespread/widespread rainfall accompanied with thunderstorm/lightning very likely over Kerala-Mahe & Lakshadweep & isolated/scattered rainfall over Tamilnadu-Puducherry-Karaikal, Coastal Andhra Pradesh, Coastal & Interior Karnataka during next 5 days.
 - ii) Isolated heavy to very heavy rainfall very likely over Tamil Nadu-Puducherry-Karaikal & Kerala on 12th and isolated heavy rainfall on 13th & 14th April, 2022.
- Squally Weather (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Gulf of Mannar, Comorin area, along & off Tamil Nadu Coast and over

Southeast Arabian Sea & Lakshadweep Area and along & off Kerala-Karnataka coasts on 12th & 13th April. Fishermen are advised not to venture into these areas.

- Under the influence of Western Disturbance; light to moderate isolated/scattered rainfall likely over Western Himalayan Region during 12th to 16th April with maximum intensity on 13th & 14th April and isolated rainfall also likely over Punjab on 12th & 13th and northwest Rajasthan & north Haryana on 13th April, 2022. Isolated thunderstorm/lightning/gusty winds (speed 30-40 kmph) also likely over Jammu-Kashmir, Himachal Pradesh & Punjab on 12th & 13th and over Uttarakhand on 13th & 14th and over Haryana on 13th April, 2022. Isolated thunderstorm/dust-storm/lightning/gusty winds (speed 30-40 kmph) also likely over northwest Rajasthan on 13th April, 2022.
- Dust Raising winds (speed 30-40 kmph) very likely over southern parts of Rajasthan, Punjab & Haryana on 12th & 13th April, 2022.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over KeralaMahe; at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Sub-Himalayan West Bengal Sikkim and Assam-Meghalaya, Lakshadweep and Tamil Nadu-Puducherry-Karaikal and at isolated places over Gangetic West Bengal, Odisha, Andaman-Nicobar Islands, Arunachal Pradesh and North Interior Karnataka.
- Heavy rainfall observed at isolated places over Assam-Meghalaya, Nagaland, Kerala-Mahe and Tamilnadu.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Kerala-Mahe, Tamil Nadu, Puducherry & Karaikal, Nagaland-Manipur-Mizoram-Tripura, Odisha, Assam & Meghalaya and Lakshadweep.
- Yesterday, Heat wave to severe heat wave conditions were observed over many parts of Jammu division, Himachal Pradesh, Punjab and Haryana & Delhi and in isolated pockets over Rajasthan; Heat wave condition in some pockets of Madhya Pradesh and in isolated pockets of Jharkhand and East Uttar Pradesh.
- Maximum Temperature Departures (as on 11-04-2022): Maximum temperatures were markedly above normal (5.1°C or more) at many places over Jammu & Kashmir, Himachal Pradesh and Haryana, Chandigarh & Delhi; at a few places over Punjab and at isolated places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at any places over Uttarakhand, Uttar Pradesh, West Madhya

Pradesh, East Rajasthan and Jharkhand and at isolated places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at a few places over Vidarbha and at isolated places over Madhya Maharashtra, Odisha and Gangetic West Bengal. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Kerala & Mahe, Tamil Nadu-Puducherry-Karaikal, Sub-Himalayan West Bengal & Sikkim and Bihar and at isolated places over Assam & Meghalaya; below normal (-1.6°C to -3.0°C) at a few places over Nagaland-Manipur-Mizoram-Tripura and at isolated places over Telangana and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.5°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures (as on 12-04-2022): Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Himachal Pradesh, Punjab and East Rajasthan and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana, Chandigarh & Delhi and West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand; at a few places over Uttar Pradesh and West Madhya Pradesh and at isolated places over Saurashtra & Kutch, Madhya Maharashtra, Marathwada and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Jharkhand; at a few places over Gujarat Region, Coastal Karnataka, Odisha and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Assam & Meghalaya. They are below normal (-1.6°C to -3.0°C) at isolated places over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 15.7°C is reported at Jalgaon (Madhya Maharashtra) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 12 April (Day 1): Heat wave to severe heat wave conditions in isolated pockets very likely over Haryana-Delhi and Punjab and heat wave conditions in isolated pockets over Madhya Pradesh, Himachal Pradesh, West Uttar Pradesh, West Rajasthan, Gangetic West Bengal and Jharkhand. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over Jammu-Kashmir Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam-Meghalaya, Nagaland, Mizoram, Manipur & Tripura, Lakshadweep and Kerala & Mahe and with lightning over Himachal Pradesh, West Bengal-Sikkim, Konkan-Goa, Madhya Maharashtra, Marathawada, Karnataka, Odisha and Tamil Nadu, Puducherry & Karaikal. Heavy to very heavy rainfall at isolated places very likely over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally Weather

(wind speed reaching 40-50 kmph gusting to 60 kmph) very likely over Southeast Arabian Sea, along & off KeralaKarnataka coasts, Lakshadweep area, Tamilnadu coast, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.

- 13 April (Day 2): Heat wave conditions in isolated pockets very likely over Madhya Pradesh, Bihar and Jharkhand. Thunderstorm accompanied with lightning/gusty winds & hail (speed 40-50 kmph) at isolated places very likely over SubHimalayan West Bengal-Sikkim; with lightning/gusty winds (speed 30-40 kmph) over Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Assam-Meghalaya, Nagaland, Mizoram, Manipur & Tripura and Kerala & Mahe and with lightning over Jammu Division, Himachal Pradesh, Gangetic West Bengal, Arunachal Pradesh, Karnataka, Lakshadweep, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning/duststorm (speed 30-40 kmph) at isolated places very likely over West Rajasthan. Heavy rainfall at isolated places very likely over Assam-Meghalaya, Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally Weather (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely over Southeast Arabian Sea, along & off Kerala coast, Lakshadweep area, Tamilnadu coast, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 14 April (Day 3): Heat wave conditions in isolated pockets very likely over Rajasthan, Jharkhand and Bihar. Thunderstorm accompanied with lightning/gusty winds & hail (speed 30-40 kmph) at isolated places very likely over SubHimalayan West Bengal-Sikkim; with lightning/gusty winds (speed 40-50 kmph) over Odisha and AssamMeghalaya; with lightning/gusty winds (speed 30-40 kmph) over Telangana and Kerala & Mahe and with lightning over Uttarakhand, Gangetic West Bengal, Chhattisgarh and Tamil Nadu, Puducherry & Karaikal. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and Arunachal Pradesh and heavy rainfall at isolated places over Kerala & Mahe.
- 15 April (Day 4): Heat wave conditions in isolated pockets likely over West Uttar Pradesh and Rajasthan. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over AssamMeghalaya; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Telangana and Rayalaseema and with lightning over Chhattisgarh, West Bengal-Sikkim, Odisha and Kerala-Mahe. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and Arunachal Pradesh.

- 16 April (Day 5): Heat wave conditions in some parts likely over Rajasthan and in isolated pockets over Gujarat state and West Uttar Pradesh. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Telangana and Rayalaseema and with lightning over Chhattisgarh, Gangetic West Bengal, Odisha, Jharkhand and Kerala-Mahe. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and Arunachal Pradesh.
- The weather outlook for seven days i.e., 12 Apr to 20 Apr 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)

Himachal pradesh

Weather condition:

The maximum and minimum temperature ranged between 28.5 to 30.0 °C and 15.0 to 16.5 °C which was above normal by 5.2 to 6.4 °C and 2.7 to 3.9 °C, respectively. No rainfall was received during the week against the normal of 16.2 mm. The relative humidity varied between 17-70 % and sunshine hours between 10.0-11.0 hrs/day with variable sky conditions (Octa 0-2). The evaporation rate varied 4.5-8.0 mm per day.

Contingency measure:

- Rabi Crops: Wheat: Temperature is increasing so advised to arrange irrigation in wheat crop in milking and grain filling stage if rains not took place. Keep inspecting your crop for yellow rust. In areas where symptoms of yellow rust are appears in the wheat crop in the form of yellow powder/stripes on the leaves then the farmers are advised to spray Tilt @ 1ml per liter of water with the appearance of the symptoms. For chemical weed control in wheat, spray Vesta @ 16 g or clodinafop @ 24 g (10WP) or 16 g (15 WP) per kanal after 35-40 days of sowing i.e. 2-3 leaf stage of weed. After 2-3 days of clodinafop spray, apply 2,4-D @ 50 gm/Kanal. Use 30 litres of water for making a solution for one hectare. 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. Weeding, hoeing and irrigation should be done in crop as per the requirement. Weather conditions are congenial for infection, development and spread of yellow rust disease therefore monitor the crop. If disease is noticed in the field, apply Tilt 25 EC (Tilt) or Markzole 25 EC (propiconazole) @ 200 ml in 200 L of water per acre.

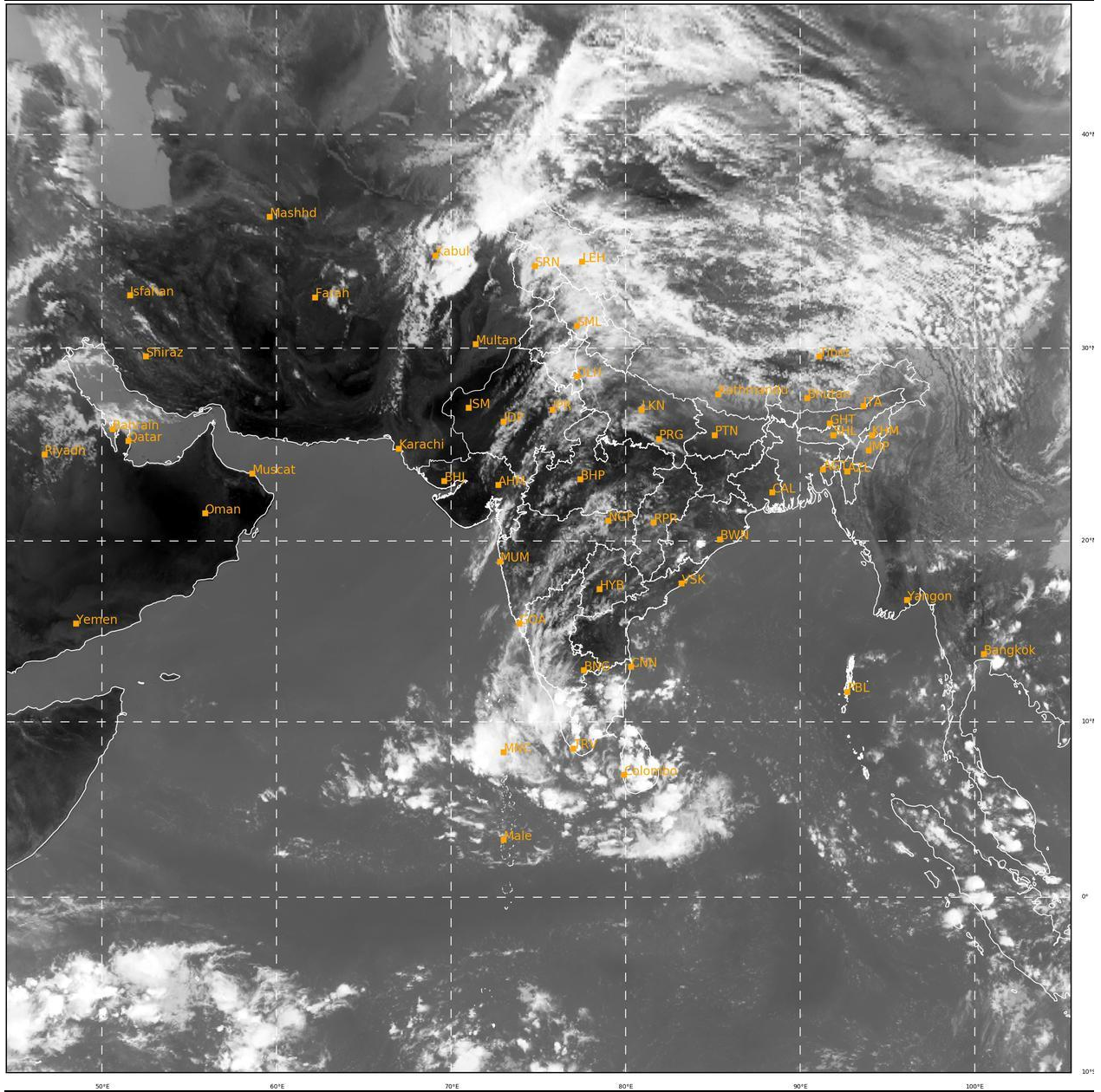
- Mustard: Farmers are advised for monitoring of mustard crop against attack of white rust, aphids and painted bug attack. If infection is high than spraying of Dithane-M-45 @ 2 gram/ litre of water of water is advised.
- Pulses: Sowing moong and mash in irrigated areas advised. In rainfed region ensure proper moisture before sowing for optimum germination. Farmers are advised for sowing of Arkel variety of Pea, Spacing: 60X7.5 cm. Farmers are advised for sowing of main season crop of pea. Recommended varieties are GS-10, AS-10, Him palam matar-1, SP-6 etc. Pulse crop are ready for harvest, after proper sun drying store at proper grain moisture. Field preparation should be started for early pea and farmers are advised to do arrangement for quality seeds. Treat the seed with Bavistin 50 WP (2.5 g/kg of seed) before sowing.
- Pea Crop: Keep monitoring of pod borer in the pea crop, install/place 2-3 pheromone trap per bigha. Spray 2% (20 gram in one litre) solution of urea or potassium sulphate in pea crop, this leads to increases in number of pods and also prevents the crop from frost.
- Fodder Crops: The hay making process should be started and grasses may cut before flowering and dry during sunny days. Sowing of fodder crops such as oats and Lucerne is advised. Intercultural operations on already sown berseem, lucerne and oats for fodder of rabi season are advised.
- Vegetables: In vegetables and other crops there are chances of termites so farmers are advised to go for the spray of chlorpyrifos 20 EC @ 4.0 millilitre per litre of water. Sowing of frenchbean, coriander, okra is advised. At the time of sowing, add about 100 qwell rotten FYM, 156 kg IFFCO (12:32:16), 50kg MOP and 25 60 kg urea per ha in okra and 200 q FYM and 313 kg IFFCO and 25 kg urea in French bean. Pre emergence spray of Lasso @ 3.0 litre per 750 lt. is advised. It is the best time to grow nursery, so farmers are advised to go for the seed sowing of tomato, capsicum, cucumber, brinjal, chilli etc. But before sowing the seeds should be treated with Bavistin 2.5 grams per kg of seed so that the crop can be protected from harmful diseases. For the control of this diseases spray Mencozeb @ 2.5 gram per litre of water.
- Cauliflower: Farmers in high hilly areas are advised to prepare nursery of late group of cole crops. Recommended varieties of cauliflower is Snowball group and recommended varieties of Broccoli is Lucky, KTS-1 etc. Harvest mature cauliflower crops to avoid damage due to rise in temperature and direct sunlight (flower develop purple coloration) in the mid hills.
- Tomato: Prepare nursery for summer vegetables like tomato (varieties like Anshul, Abhimanyu, US-920, Palam Tomato Hybrid-1), Brinjal, Capsicum (Paladin) and early crop of cucumber (Cucumber varieties like 6125, Log Green

etc.) in poly tunnel or in poly trays.

- Onion: Do Weeding and hoeing of onion and garlic. In onion and garlic crop, farmers should go for spray of fertilizer 19:19:19 @ 2 g/Litre in proper soil moisture.
- Polyhouse: Optimum time for sowing of cauliflower, cabbage, tomato and capsicum in nursery beds. About 70 cm of distance should be kept between two beds to carry out intercultural operations such as watering, weeding, etc. Polyhouse should be kept closed to maintain temperature. Clean the polyhouse and prepare beds for vegetative nursery for the sowing of seeds of cauliflower, cabbage, tomato, capsicum and cucumber. To avoid mortality of seedlings due to damping off, drenching of the beds three weeks before sowing with Bavistin (15-20g/10 litres of water) is recommended.
- Potato: Potato crop should be monitored continuously to prevent the attack of late blight disease. Do the grading of potatoes before sending them to the market. Farmers are advised to go for sowing of potato crop with seed rate of 1.5-2 q/bigha recommended varieties are kufri Jyoti and kufri chandermukhi. The first symptoms of late blight in the field are small, light to dark green, circular to irregular-shaped water-soaked spots. These lesions usually appear first on the lower leaves. Lesions often begin to develop near the leaf tips or edges, where dew is retained the longest. This can be identified by blackish/brown lesions on leaves and stems that may be small at first and appear water-soaked or have chlorotic borders but expand rapidly and the entire leaf becomes necrotic. For the control of this disease go for the spray of Dithane @ 2.5 gram per litre of water as suggested by agricultural scientists.
- Mushrooms: Fungal Disease: Bavistin @.05% for mushroom cultivation (Dhingri), the room temperature should be 22-24 degree Celsius, spray water to maintain humidity up to 80-85%. When there is fruiting in button mushroom maintain room temperature up to 16-18 degree Celsius. Rice husk is best for the cultivation of mushroom. Dingri can be sown in closed room and fill compost bags with span for button mushrooms.

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

12-04-2022/(0800 to 0827) GMT
12-04-2022/(1330 to 1357) IST



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IMD, DELHI

Figure: 1. Latest available satellite picture as on 12 Apr 2022 at 1357 Hrs (IST). (Source: IMD).

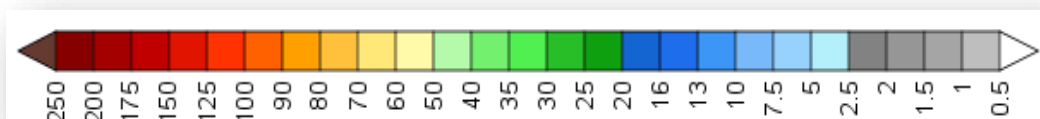
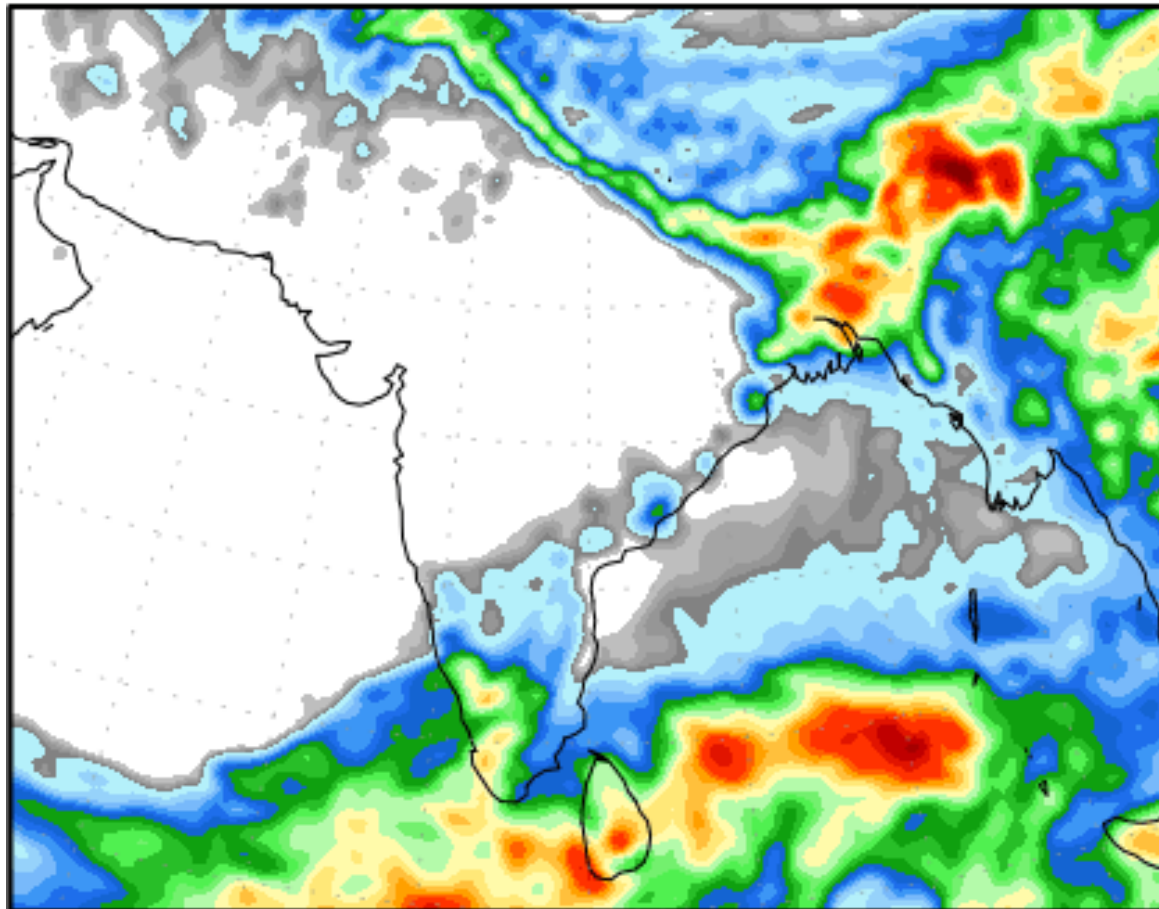


Figure:2. Precipitation forecast for 12 Apr to 20 Apr 2022 (Source: NOAA NCEP).

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