

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 02 March 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Weather Systems and associated forecast & warnings:
 1. A Low Pressure Area lies over Central parts of South Bay of Bengal and adjoining Equatorial Indian Ocean. It is likely to become Well Marked Low Pressure Area during next 24 hours and concentrate into Depression during subsequent 24 hours. It is very likely to move west-northwestwards towards Sri Lanka coast during next 24 hours and then towards Tamil Nadu Coast during subsequent 24 hours. Under its influence:
- Fairly widespread to widespread rainfall with isolated thunderstorm/lightning activity very likely over Tamil Nadu-Puducherry-Karaikal during 02nd to 06th March; scattered to fairly widespread rainfall with isolated thunderstorm/lightning activity over south Coastal Andhra Pradesh, Rayalaseema & KeralaMahe during 04th & 06th March, 2022.
- Isolated Heavy to Very Heavy rainfall very likely over Tamil Nadu-Puducherry-Karaikal during 03rd to 05th March with Extremely Heavy rainfall on 04th March and isolated heavy rainfall on 06th March. Isolated heavy rainfall also very likely over south Coastal Andhra Pradesh and Rayalaseema on 04th & 05th March, 2022.
- Strong winds (40-50 kmph gusting to 60 Kmph) very likely over Southwest & adjoining Southeast Bay of Bengal, along & off Tamil Nadu-south Andhra Pradesh coasts, Gulf of Mannar and Comorin Area on 02nd March; Strong winds (45-55 kmph gusting to 65 Kmph) very likely over Southwest & adjoining Westcentral Bay of Bengal, along & off Tamil Nadu-south Andhra Pradesh coasts, Gulf of Mannar on 03rd March; Squally weather (45-55 kmph gusting to 65 Kmph) very likely over Westcentral & adjoining Southwest Bay of Bengal, along & off north Tamil Nadu-Andhra Pradesh coasts on 04th & 05th March; Strong winds (40-50 kmph gusting to 60 Kmph) very likely over north Tamil Nadu-south Andhra Pradesh coasts on 06th March, 2022. Fishermen are advised not to venture into these areas.
- 2. A fresh Western Disturbance as a trough in middle tropospheric westerlies runs along Long. 64°E to the north of Lat. 26°N with an induced cyclonic circulation

over Southwest Rajasthan & Pakistan in lower tropospheric levels. Under their influence:

- Fairly widespread to widespread light/moderate rainfall/snowfall with isolated thunderstorm/lightning very likely over Jammu-Kashmir & Himachal Pradesh on 02nd & 03rd March and scattered activity over Uttarakhand on 03rd March.
- Isolated light rainfall with thunderstorm/lightning very likely over Punjab, Haryana-Chandigarh-Delhi and northeast Rajasthan on 02nd & 03rd March; over northwest Rajasthan on 02nd and over West Uttar Pradesh on 03rd March, 2022.
- Strong surface Winds (speed 25-35 kmph) very likely to prevail over Haryana-Chandigarh-Delhi & Rajasthan on 04th March and over most parts of plains of northwest India on 05th March, 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 JammuKashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at many places over Andaman & Nicobar Islands ; at a few places over Sub-Himalayan West Bengal & Sikkim and at isolated places over Himachal Pradesh, Uttarakhand, Punjab, East Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand and Gangetic West Bengal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jharkhand, West Madhya Pradesh, Odisha and Andaman & Nicobar Islands.
- Maximum Temperature Departures (as on 01-03-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand; at isolated places over Saurashtra & Kutch and Tamil Nadu-Puducherry-Karaikal; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Gujarat Region, Assam & Meghalaya, Arunachal Pradesh, Vidarbha, Coastal Karnataka and Kerala; at a few places over Odisha and at isolated places over West Rajasthan, Madhya Maharashtra, Coastal Andhra Pradesh-Yanam and Lakshadweep. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Jammu-Kashmir-Ladakh-GilgitBaltistan-Muzaffarabad; at isolated places over East Uttar Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Jharkhand; at isolated place over West Madhya Pradesh, Gangetic West Bengal and Andaman-Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.5°C was reported at Nalgonda (Telangana) over the country.

- Minimum Temperature Departures (as on 02-03-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Saurashtra-Kutch; above normal (1.6°C to 3.0°C) at isolated places over Gujarat Region, Madhya Pradesh and Gangetic West Bengal. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Coastal Andhra Pradesh-Yanam and Rayalaseema; below normal (-1.6°C to -3.0°C) at most places over Tamil Nadu-Puducherry-Karaikal; at many places over HaryanaChandigarh-Delhi; at isolated places over Telangana and Kerala-Mahe and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.5°C reported at Khajuraho (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 02 March (Day 1): Thunderstorm accompanied with lightning, hail & gusty winds(30-40 kmph) at isolated places very likely over northwest Rajasthan; with lightning & hail at isolated places over Punjab and with lightning at isolated places over Andaman & Nicobar Islands, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana, northeast Rajasthan and Tamil Nadu-Puducherry-Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & adjoining Southeast Bay of Bengal, along & off Tamil Nadu-south Coastal Andhra Pradesh coasts, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 03 March (Day 2): Heavy to very heavy rainfall at isolated places very likely over Tamil Nadu-Puducherry-Karaikal. Thunderstorm accompanied with lightning at isolated places very likely over Jammu-Kashmir-Ladakh-Gilgit-BaltistanMuzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana and Tamil Nadu-Puducherry-Karaikal. Strong Winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest & adjoining Westcentral Bay of Bengal, along & off Tamil Nadu-south Coastal Andhra Pradesh coasts and Gulf Of Mannar. Fishermen are advised not to venture into these areas.
- 04 March (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Tamil Nadu-Puducherry-Karaikal and heavy rainfall at isolated places over south Coastal Andhra Pradesh and Rayalaseema. Thunderstorm accompanied with lightning at isolated places very likely over south Coastal Andhra Pradesh-Yanam, Rayalaseema, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & adjoining Southwest Bay of Bengal, along & off north Tamil Nadu-Coastal Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.

- 05 March (Day 4): Heavy to very heavy rainfall at isolated places likely over Tamil Nadu-Puducherry-Karaikal and heavy rainfall at isolated places over south Coastal Andhra Pradesh and Rayalaseema. Thunderstorm accompanied with lightning at isolated places likely over south Coastal Andhra Pradesh-Yanam, Rayalaseema, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe. Squally Weather (speed 45-55 kmph gusting to 65 kmph) likely over Westcentral & adjoining Southwest Bay of Bengal, along & off north Tamil Nadu-Coastal Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- 06 March (Day 5): Heavy rainfall at isolated places likely over Tamil Nadu-Puducherry-Karaikal. Thunderstorm accompanied with lightning at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad, Himachal Pradesh, south Coastal Andhra Pradesh-Yanam, Rayalaseema, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely along & off north Tamil Nadu-south Coastal Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 02 Mar to 10 Mar 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 7.8 to 10.3 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 29.8 to 36.0 and 11.8 to 15.0 oC respectively. Wind velocity ranged from 2.5 to 3.5 km and wind was blowing from south westerly Direction.

Contingency measure:

- General advisory: In mango, shaking of panicles in mango where fruit setting was completed to remove dried male flowers is suggested before spraying
- SMS advisory: Due to forecast for decrease in humidity, to minimize the premature fruit drop of mango, as per availability of water, apply 100 liter /tree at weekly or 150 to 200 liter/ tree at 15 days interval from pea to arecanut fruit size
- Rabi Summer rice: Maintain optimum water level of 2.5- 5 cm upto 30 DAT. For control of weeds in transplanted rice, follow weeding in rice field at 15-20 DAT as

per requirement

- Pulse crop: To avoid splitting of matured pods of cowpea, mung, Chickpea pulse crop, carry out harvesting of matured pulses during morning hours
- Due to forecast for gradual rise in temperature, provide irrigation to lablab bean, cowpea crop where crop is in flowering to pod filling stage
- Groundnut: Due to forecast for gradual rise in temperature, provide irrigation to groundnut crop at 10-12 days interval
- Green gram: Complete the sowing of summer green gram crop
- Mango: Due to forecast for gradual rise in temperature and decrease in humidity, possibility for pre-mature fruit drop in mango, to minimize fruit drop, as per availability of water, apply 100 liter / tree at weekly or 150 to 200 liter / tree at 15 days interval from pea to arecanut fruit size also use straw mulch. To minimize the pre-mature fruit drop and increasing the production and quality improvement of mango fruits, spray 1 % Potassium nitrate at pea marble and arecanut size stage of mango fruits. The pre-harvest bagging with newspaper bag of size 25 X 20 cm at marble to egg stage as per recommendation of D.B.S.K.K.V. helps to protect the fruits from rain water, fruit fly incidence, sun scorching and improves quality and spot less fruit in mango. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag. There is possibility for incidence of fruit fly on mango fruits of egg size. Collect and destroy all fallen fruits and install ?Rakshak fruit fly trap? developed by University @ 2 traps per acre. Observed mango Inflorescence and fruits regularly for hoppers, thrips insect and powdery mildew disease, if incidence is noticed, then undertake spraying. For protection against powdery mildew disease, spray wettable Sulphur 80% @ 20 gm per 10 liter of water. Avoid use of same fungicide for spraying. There is possibility incidence of thrips on mango, if incidence is noticed, spray Spinosad 45%SC @ 2.5 ml per 10 liter of water. If incidence is severe, then take second spray of Thiomethoxam 25%WG @ 2 gm per 10 liter of water. There is possibility incidence of hoppers, midge fly on mango inflorescence. For management of pest, spray of Imidacloprid 17.8% SL @ 6 ml or Buprofezin 25%SC @ 20 ml per 10 liter of water. To protect the mustard size fruits of mango from hoppers as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam 25%WG @ 1 gm per 10 liter of water and fifth spray (15 days after 4th spray) of Dimethoate 30%EC @ 10 ml or Lambda cyhalothrin 5%EC @ 6 ml per 10 liter of water.
- Mango: Due to forecast for gradual rise in temperature and decrease in humidity, provide irrigation to newly planted mango orchard @ 30 liters of water twice at 7 days interval (1 years old), 15 days interval (2 years old) and one-month interval

to 3 years old tree. New growth below graft union should be removed regularly.

- Cashewnut: There is possibility of incidence of tea mosquito bug and thrips on inflorescence and nut of cashewnut. If incidence is noticed spray Profenophos 50% EC @ 10 ml or Lambda cyhalothrin 5% EC @ 6 ml or Acetamiprid 5 gms per 10 liter of water at nut stage. (The insecticide is not under label claim). Due to forecast for gradual rise in temperature and decrease in humidity, provide irrigation to newly planted cashewnut orchard @ 15 liters of water at weekly intervals. New growth below graft union should be removed regularly.
- Coconut: Due to clear sky and decrease in humidity, provide irrigation to first four years old coconut orchard at 4 to 5 days interval and for above four years old orchard provide irrigation at 6 to 7 days interval. Apply 40 liter of water per day to fully grown coconut tree by drip irrigation. also use straw mulch to reduce evaporation losses. Provide shed to newly planted coconut orchard. Apply 3rd split dose of fertilizers of 5 kg neem cake, 750 gm urea and 667 gm muriate of potash in circular basin to above five-year-old coconut palm. Apply 1/5th, 2/5th, 3/5th and 4/5th of above-mentioned fertilizer dose per tree for 1, 2, 3 and 4-year-old coconut plantation, respectively. Apply micro nutrients (zinc, boron, molybdenum and copper) 200 gms per plant at the time of 2nd or 3rd split dose of fertilizer. Provide irrigation immediately after fertilizer application.
- Water melon: Due to forecast for gradual rise in temperature, provide irrigation to water melon crops at 4-5 days interval regularly and on alternate day in drip irrigation. Cover the water melon fruits with paddy straw or grasses to protect fruits from sunlight.
- Tomato: There is possibility of incidence of fruit borer on tomato crop, for management of pest install Helilure pheromone trap @ 8 nos. per acre at flowering stage of crop. provide irrigation to vegetable crops at 5-6 days interval
- Okra: Complete the sowing of summer okra crop. At the time of ploughing mix well decomposed FYM @ 150 kg/guntha into soil. Sow the seed at a spacing of 45 x 30 cm. Apply 700 gms urea, 3 kg single super phosphate and 800 gms muriate of potash per guntha Provide light irrigation immediate after sowing
- Animal husbandry: There is possibility of increase in temperature, provide clean, hygienic and plenty amount of drinking water to farm animals.

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

02-03-2022/(0800 to 0827) GMT
02-03-2022/(1330 to 1357) IST

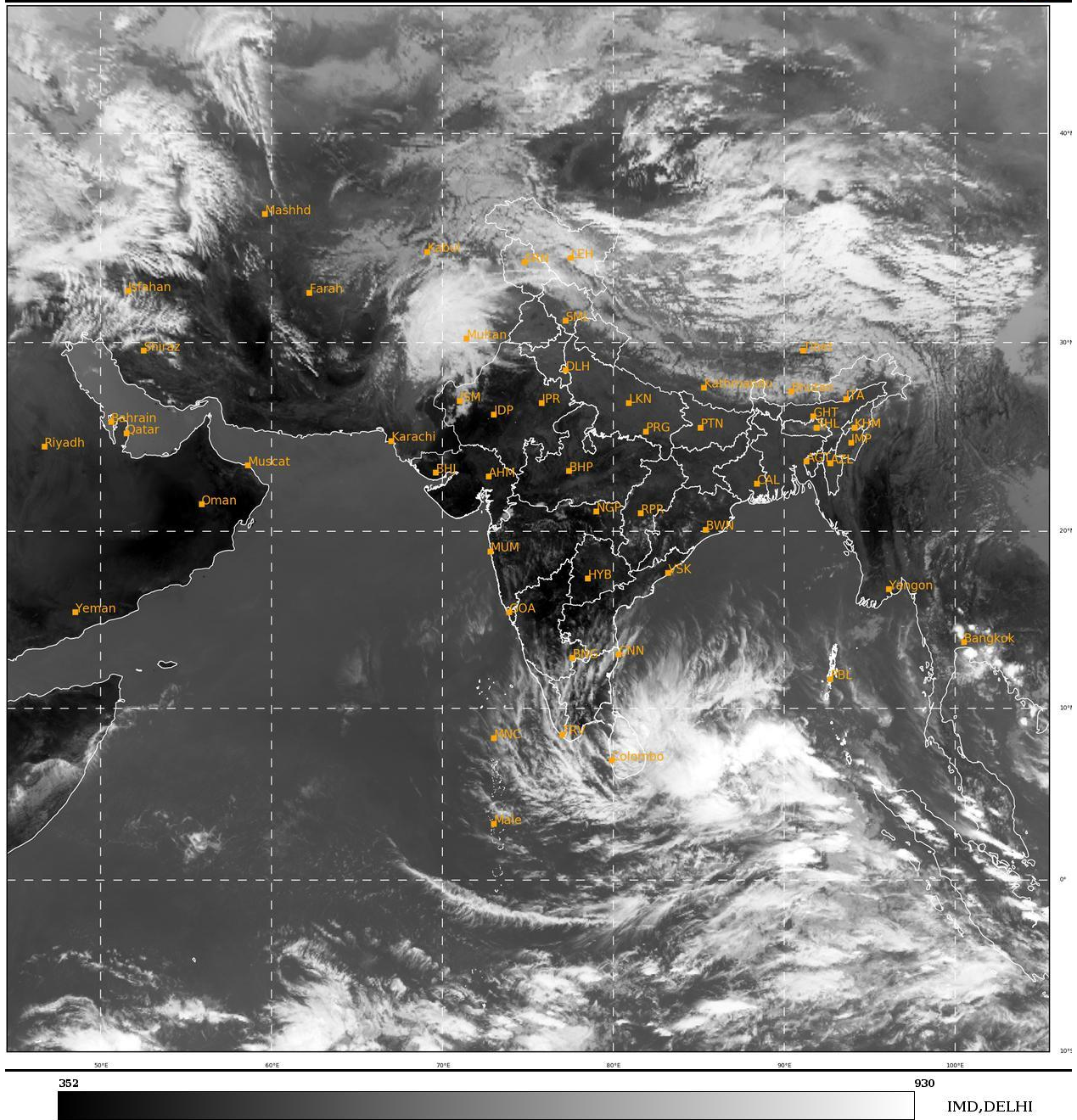


Figure: 1. Latest available satellite picture as on 02 Mar 2022 at 1357 Hrs (IST). (Source: IMD).

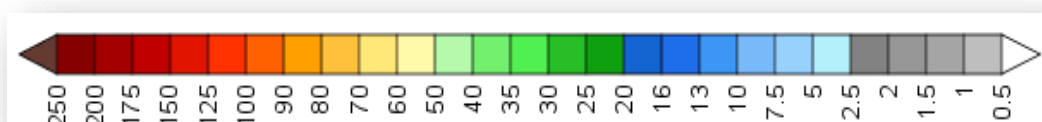
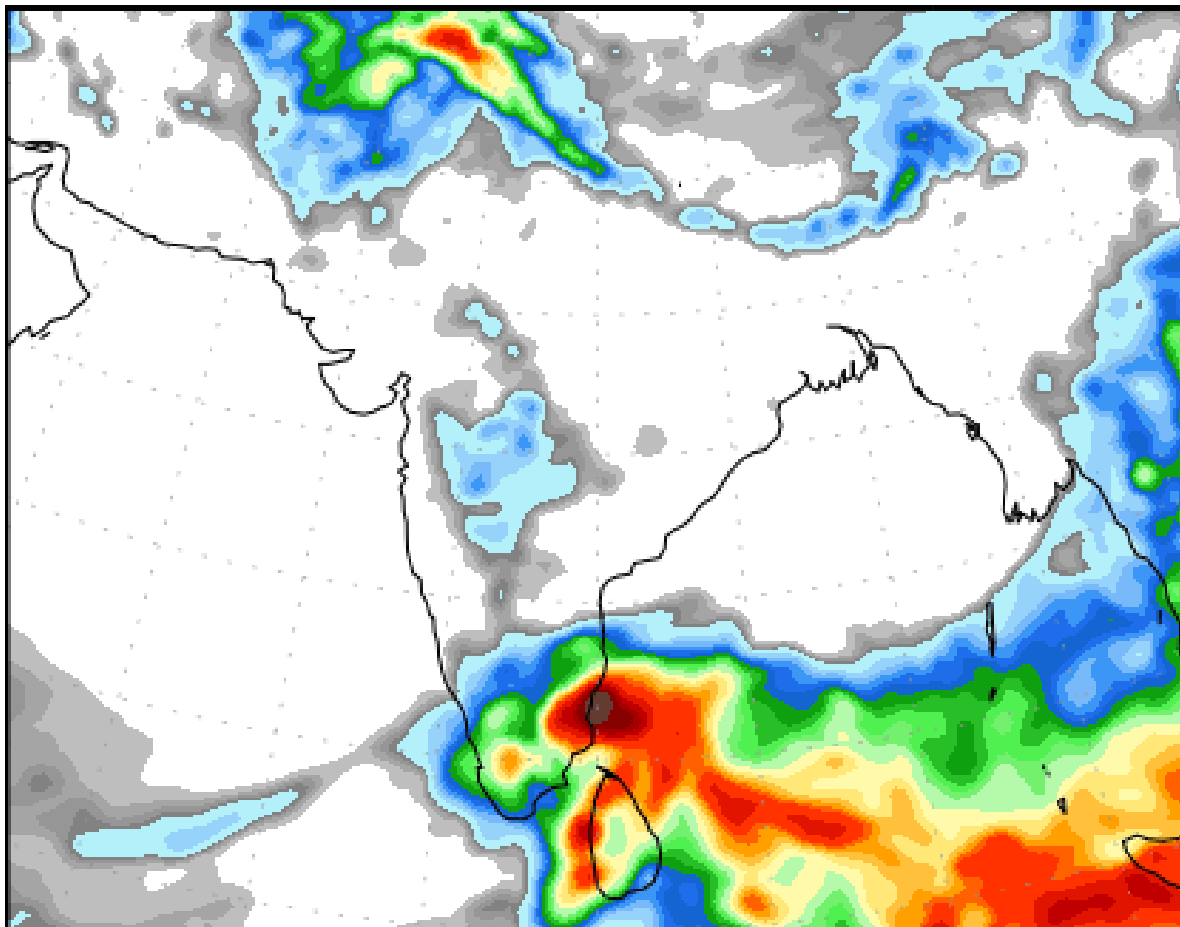


Figure:2. Precipitation forecast for 02 Mar to 10 Mar 2022 (Source: NOAA NCEP).

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