

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

Daily Crop Weather Information as on 03 December 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Deep Depression over Westcentral & adjoining South Bay of Bengal moved north-northwestwards with a speed of 30 kmph during past 06 hours, and lay centered at 0830 hours IST of today, 03rd December, 2021, over Westcentral Bay of Bengal near Lat 14.0°N/Long 86.0°E, about 480 km south-southeast of Vishakhapatnam (Andhra Pradesh), 600 km south-southeast of Gopalpur (Odisha) and 700 km south-southwest of Paradip (Odisha). It is likely to move northwestwards and intensify into a Cyclonic Storm during next 06 hours. It is likely to reach westcentral Bay of Bengal off north Andhra Pradesh–south Odisha coasts by tomorrow, the 04th December morning. Thereafter it is likely to recurve north-northeastwards and move along Odisha coast during the subsequent 24 hours with a maximum sustained wind speed of 80-90 kmph gusting to 100 kmph.
- Rainfall warning:
3rd Dec.: Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places over north coastal Andhra Pradesh and south coastal Odisha.
4th Dec.: Light to moderate rainfall at most places with heavy to very heavy rainfall & extremely heavy falls at isolated places very likely over south coastal Odisha and north coastal Andhra Pradesh and heavy to very heavy rainfall at isolated places over north coastal Odisha & adjoining interior districts and also over coastal districts of Gangetic west Bengal.
5th Dec.: Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places likely over Gangetic West Bengal & north Odisha and heavy rainfall at isolated places over Assam & Meghalaya, Mizoram and Tripura.
6th Dec.: Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places likely over Assam & Meghalaya, Mizoram and Tripura and heavy rainfall at isolated places over west Bengal.
- Fishermen Warning: Fishermen are advised not to venture into westcentral and adjoining southeast & eastcentral Bay of Bengal on 3rd December, over west-

central & northwest Bay of Bengal and along & off north Andhra Pradesh - Odisha- West Bengal coasts during 3rd - 5th December 2021.

- The Western Disturbance now seen as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 70°E to the north of Lat. 15°N. Under its influence, light isolated rainfall/snowfall very likely over Western Himalayan Region; and light isolated rainfall over Punjab, Haryana, Chandigarh & Uttar Pradesh on today, the 03rd December, 2021.
- Another Western Disturbance likely to affect Northwest India from the night of tomorrow, the 04th December. It is very likely to cause scattered to fairly widespread rainfall/snowfall very likely over Jammu- Kashmir- Ladakh- Gilgit-Baltistan- Muzaffarabad, Himachal Pradesh and Uttarakhand during 04th to 06th December. Isolated light rainfall very likely over Punjab, Haryana, Chandigarh, Delhi and West Uttar Pradesh on 05th December.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Lakshadweep; at many places over Andaman & Nicobar Islands, Uttarakhand and North Interior Karnataka; at a few places over Himachal Pradesh, West Madhya Pradesh, Gujarat region, Konkan & Goa, Madhya Maharashtra and Coastal & South Interior Karnataka and at isolated places over Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi, East Madhya Pradesh, East Rajasthan, Saurashtra & Kutch, Marathawada, Vidarbha, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- Rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy rainfall at isolated places over Tamilnadu.
- Fog observed (at 0830 hours IST of today): Shallow fog in isolated pockets over Punjab, Haryana, Delhi, East Madhya Pradesh and East Uttar Pradesh. Visibility: Amritsar, Delhi (Safdarjung & Palam), Karnal, Fursatganj, Varanasi and Khajuraho-500 metre each.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Madhya Pradesh and Tamilnadu, Puducherry & Karaikal.
- Minimum Temperature Departures (as on 03-12-2021): Minimum temperatures are markedly above normal (5.1°C or more) at many places over Himachal Pradesh, Uttarakhand and Uttar Pradesh; at a few places over East

Madhya Pradesh and at isolated places over Madhya Maharashtra and Marathwada; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at many places over Haryana, Chandigarh & Delhi and Interior Karnataka; at a few places over West Madhya Pradesh, Vidarbha and Telangana; at isolated places over Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Coastal Karnataka, Rayalaseema and Chhattisgarh; at many places over Nagaland, Manipur, Mizoram & Tripura, Odisha and Kerala & Mahe; at a few places over Arunachal Pradesh, West Bengal & Sikkim and Coastal Andhra Pradesh & Yanam; at isolated places over Konkan & Goa and Assam & Meghalaya. They are below normal (-1.6°C to -3.0°C) at a few places over Saurashtra & Kutch; at isolated places over Andaman & Nicobar Islands and near normal over rest parts of the country. Today, the Lowest minimum temperature of 7.4°C reported at Churu (West Rajasthan) over the plains of the country.

- Maximum Temperature Departures (as on 02-12-2021): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over West Bengal & Sikkim and Jharkhand; at a few places over Telangana and Kerala & Mahe and at isolated places over Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at most places over Gujarat Region; at many places over Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Maharashtra, West Madhya Pradesh, Saurashtra & Kutch and Konkan & Goa; at a few places over West Rajasthan and Himachal Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Marathwada; at a few places over Vidarbha and Andaman & Nicobar Islands and at isolated places over West Uttar Pradesh and East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Punjab and Coastal Karnataka; at a few places over North Interior Karnataka and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 31.2°C was reported at Forbesganj (Bihar).

Weather Warning during the next 5 days (IMD)

- 03 December (Day 1): Heavy to very heavy rainfall very likely at isolated places over north Coastal Andhra Pradesh and south Odisha. Thunderstorm accompanied with lightning very likely at isolated places over Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Squally wind speed reaching 55-65 kmph gusting to 75 kmph likely to prevail over Westcentral and adjoining Southeast & Eastcentral Bay of Bengal during next

06 hours. Gale wind speed reaching 70-80 kmph gusting to 90 kmph likely to prevail over Westcentral & adjoining Northwest Bay of Bengal from today evening. Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to commence along & off North Andhra Pradesh–Odisha coasts from the mid-night of 3rd December. Sea condition would be high over central Bay of Bengal and rough to very rough over Westcentral and adjoining Southeast & Eastcentral Bay of Bengal and along & off North Andhra Pradesh–Odisha coasts from the mid-night of 3rd December. Fishermen are advised not to venture into these areas.

- 04 December (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over north Coastal Andhra Pradesh and Odisha; heavy to very heavy rainfall at isolated places over Gangetic West Bengal and heavy rainfall at isolated places over Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Gangetic West Bengal and with lightning at isolated places over Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Gale winds speed reaching 90-100 kmph gusting to 110 kmph over northwest & adjoining west-central Bay of Bengal from 4th evening for the subsequent 12 hours and speed reaching 80-90 kmph gusting to 100 kmph along & off North Andhra Pradesh–Odisha coasts from 4th evening. Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to commence along & off West Bengal coast from 4th December evening. Sea condition will be High to very High over west-central & northwest Bay of Bengal from the early morning of 4th December and along & off North Andhra Pradesh–Odisha coasts from 4th Afternoon. It will be rough to very rough along & off West Bengal coast from 4th morning and very rough to High from the same evening for the subsequent 12 hours. Fishermen are advised not to venture into these areas.
- 05 December (Day 3): Heavy to very heavy rainfall very likely at isolated places over north Odisha and Gangetic West Bengal and heavy rainfall likely at isolated places over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Gangetic West Bengal and with lightning at isolated places over Punjab, Haryana, Chandigarh, West Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Gale wind speed reaching 60-70 kmph gusting to 80 kmph likely to commence along & off West

Bengal coast from the morning of 5th December for the subsequent 12 hours. Squally winds speed reaching 45-55 kmph gusting to 65 kmph over northwest Bay of Bengal and along & off Odisha coast. Fishermen are advised not to venture into these areas.

- 06 December (Day 4): Heavy to very heavy rainfall likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and heavy rainfall likely at isolated places over Gangetic West Bengal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Kerala & Mahe, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Dense fog likely in isolated pockets over Punjab and Haryana, Chandigarh & Delhi.
- 07 December (Day 5): Thunderstorm accompanied with lightning likely at isolated places over Kerala & Mahe. Dense fog likely in isolated pockets over Punjab and Haryana, Chandigarh & Delhi.
- The weather outlook for seven days i.e., 03 Dec to 11 Dec 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 temperature ranged between 17.0 to 20.0 °C which was above normal by 0.5 to 2.0 °C and minimum temperature ranged between 5.5 to 8.5 °C which was below normal by 1.3 to 2.3 °C. No rainfall was received during the week against the normal of 6.4 mm. The relative humidity varied between 36-79 % and sunshine hours between 0-9 hrs/day with variable sky conditions (Octa 0-8). The evaporation rate varied 2.6-2.7 mm per day.

Contingency measure:

- Rabi Crops: Wheat: Advised wheat sowing in lower regions. The Seed should be cleaned and graded thoroughly before sowing. Shriveled & small wheat grains and weed seeds should be removed. In termites infected soils, treat the seed with 4 ml Chlorpyrifos 20 EC/kg of seed and dry it and then treat it with Bavistin or Vitavax 2.5g/kg of the seed. Late sowing of wheat crop should be completed. Against fungal disease, seed treatment with 2.5 g Bavistin or Savin / Kg of seed should be done before sowing. In the early planted wheat crop where weeds are 2-3 leaves stage, spray isoproturon @ 70 g or Vesta @ 16 g per 30 litres of water in

one kanal for the control of weeds.

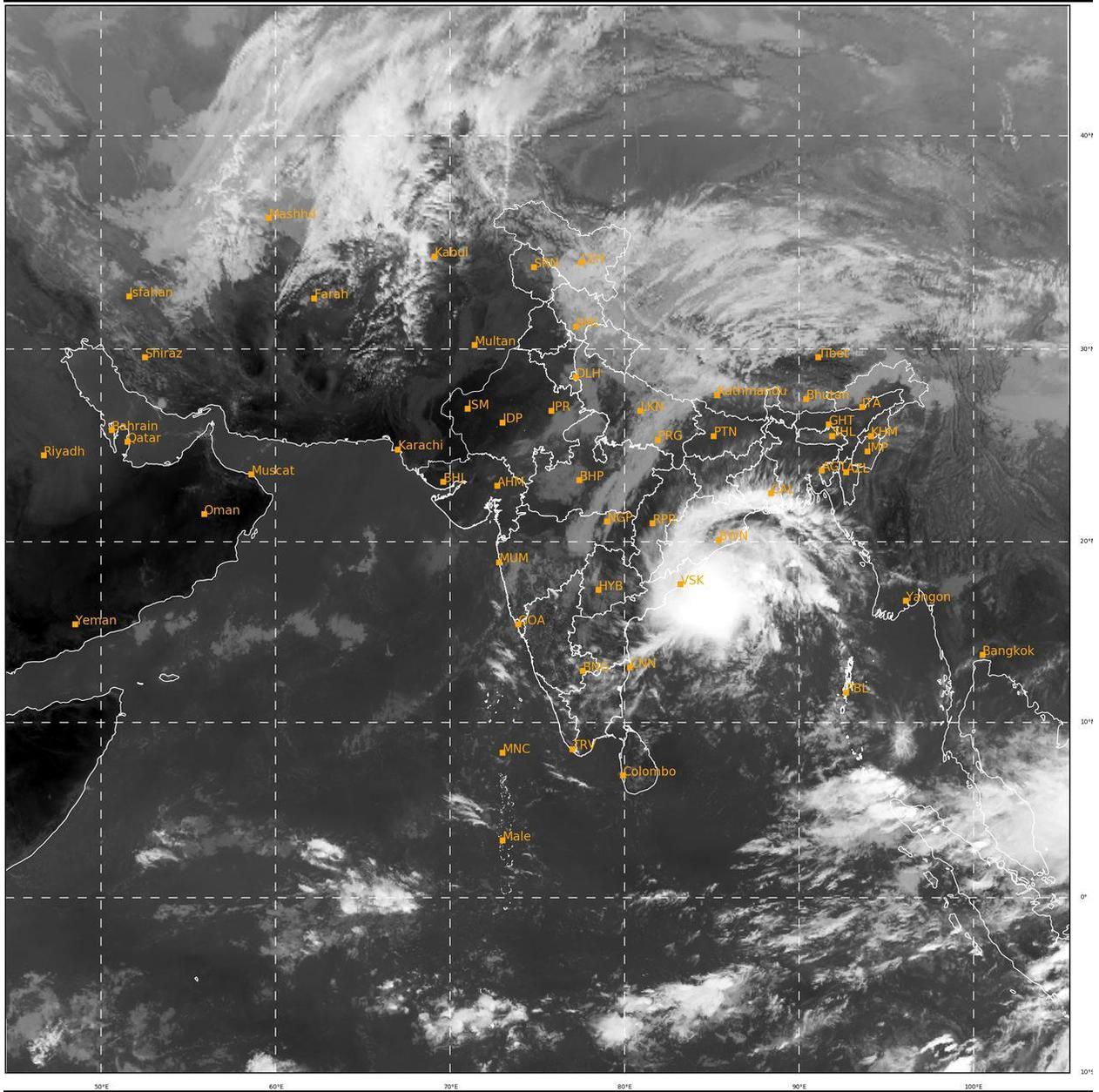
- Storage of Grains: Grains should be properly dried to right moisture level before storing. Godowns should be properly cleaned by removing all the grains and other storage matter of previous crop.
- Mustard: Thinning and weeding is recommended in timely sown mustard crop. Keeping in view of relative humidity farmers are advised for monitoring of mustard crop against attack of white rust. If infection is high than spraying of Dithane-M-45 @ 2 gram/ litre of water of water is advised. Keeping in view of weather, farmers are advised for monitoring of mustard crop against aphid attack.
- Fodder Crops: Complete sowing of berseem, lucerne and oats for fodder of rabi season is advised. Mix seed of gobhi sarson with oats to have nutritious production of fodder during first-cut is advised.
- Vegetable Crops: Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- Onion & Garlic: Sowing of garlic and onion is advised.
- Radish & Turnip: Thinning of turnip, carrot and radish is advised. Maintain a plant to plant distance of 7-10 cm.
- Cabbage & Cauliflower: Advised to complete transplanting of seedlings of cabbage, cauliflower, knoll khol and broccoli are advised. Mix well rotten FYM prior to transplanting.
- Poly House Agriculture: Open the side and top for temperature control. Advised tomato, cucumber and capsicum sowing and transplanting. For control of powdery mildew, aphids and spodopetra spray recommended chemicals. Keep yellow sticky trap in polyhouse and after transplanting drench plant with amidochloropid. Leaf spot/blight is expected in shimla mirch and tomato for control spray tilt 1ml per liters of water.
- Tea: Training, skiffing and cleaning work can be completed in the tea orchards. Do lopping of the tree in the tea orchards to have more sunlight. The skiffed material may be used to prepare compost so that it could be applied in next season.
- Livestock: Ecto-parasite attack is expected in this weather for control spray Butox @ 2 ml per litre in cowshed Give mixture of hay & green fodder. The weather is suitable for the attack of pink eye disease in newly born calves, for control prepare the solution of 1% boric acid in boiled water and wash eyes at regular interval of three hours. Give mixture of hay & green fodder. Advised not to allow animals to eat lantana these days. Dry bedding may be provided to save the

animals from cold. Young calves must be kept in the sheds during nights.

- Poultry: Make sure to deworm your older flocks every month against roundworms. Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds. For precautionary measures spray formaline 40% @ 1litre in 9 litres of water in outside or surrounding of farm. Provide vitamin A and vitamin B-complex with water. Ensure proper space for egg laying of birds and provide 14 to 16 hours light including day light. Normal feeding schedule should be continued and add mineral in the diet if stress is seen.
- Mushrooms: Maintain room temperature 18-22°C and relative humidity around 85% for successful cultivation.
- Horticulture: Keep the basins of the plants free from weeds. The new growth appearing below bud union may be cut. If a termite outbreak appears on the trees, spray Chlorpyrifos 20 EC @ 3ml/l. Monitor foliar pest on plants of Citrus species. Spray Chlorantraniliprole 18.5 SC @ 0.4 ml/l or lambdacyhalothrin 4.90 CS @0.8 ml/l for pomegranate butterfly. Advised recommended spray of chemicals for control of citrus canker. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area.

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

03-12-2021/(0800 to 0827) GMT
03-12-2021/(1330 to 1357) IST



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931

IMD, DELHI

Figure: 1. Latest available satellite picture as on 03 Dec 2021 at 1357 Hrs (IST). (Source: IMD).

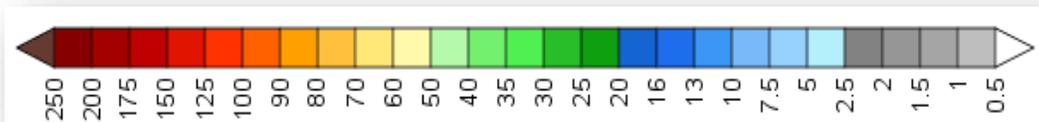
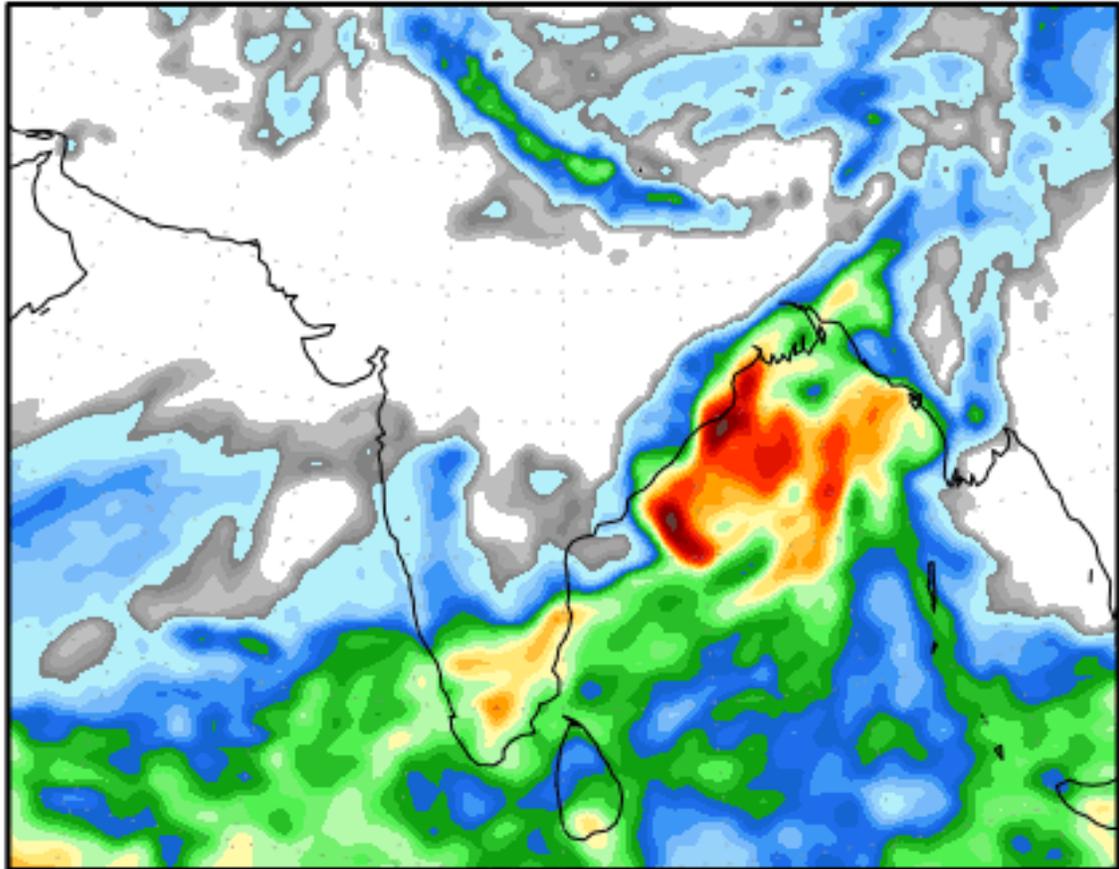


Figure:2. Precipitation forecast for 03 Dec to 11 Dec 2021 (Source: NOAA NCEP).

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