

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

Daily Crop Weather Information as on 29 January 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Dry northwesterly winds over plains of North India & adjoining parts of central India are likely to prevail during next 2-3 days.
- Under their influence:
 - (i) Cold Wave to Severe Cold Wave conditions in isolated/some/many pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Rajasthan and Uttar Pradesh during next 3 days and decrease in spatial distribution and intensity thereafter. Cold Wave conditions in isolated pockets very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand and Madhya Pradesh during next 2 days; over Himachal Pradesh during next 24 hours and over Bihar during 31st Jan-03rd Feb.
 - (ii) Ground Frost conditions in isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan during next 2 days.
 - (iii) Dense to Very Dense Fog in isolated/some/many pockets very likely over Punjab and Haryana, Chandigarh & Delhi during next 24 hours; over Uttar Pradesh during next 2 days and over Bihar during next 3 days and decrease in spatial distribution and intensity thereafter. Dense Fog in isolated pockets also very likely over north Madhya Pradesh, north Chhattisgarh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 24 hours and over Odisha during next 3 days.
 - (iv) Cold Day to Severe Cold Day conditions in isolated/some/many pockets very likely over Uttar Pradesh and Bihar during next 5 days; and Madhya Pradesh during next 2 days.
- A fresh Western Disturbance is likely to affect Western Himalayan Region from 31st January night onwards. Under its influence, isolated to scattered rain/snow with moderate thunderstorm & lightning likely over the region during 01st-02nd February, 2021.
- 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 a few places over Chhattisgarh; at isolated places over Jharkhand, Bihar, East Madhya Pradesh, Vidarbha, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh and Jharkhand.
- Fog observed at 0830 hours IST of today: Dense to very dense fog in isolated pockets of Punjab, Haryana, Uttarakhand, Uttar Pradesh and north Madhya Pradesh and Moderate to Dense fog in isolated pockets over Delhi, Bihar, Assam and Tripura.
- Today, Cold Wave to Severe Cold Wave conditions observed in some pockets over Uttar Pradesh and East Rajasthan; in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Rajasthan and Saurashtra & Kutch and Cold Wave conditions in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and Madhya Pradesh.
- Yesterday, Severe Cold Day conditions were observed in many pockets over East Uttar Pradesh; in isolated pockets over northwest Jharkhand; Cold Day to Severe Cold Day conditions in some pockets over West Uttar Pradesh and Bihar; in isolated pockets over East Madhya Pradesh and Cold Day conditions in isolated pockets over Haryana and West Madhya Pradesh.
- Maximum Temperature Departures as on 28-01-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Assam & Meghalaya; at a few places over Himachal Pradesh, Arunachal Pradesh, Chhattisgarh, Odisha, Marathwada and Coastal Andhra Pradesh & Yanam; at isolated places over Vidarbha and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at most places over East Uttar Pradesh; at isolated places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, Jharkhand, East Madhya Pradesh and Nagaland, Manipur, Mizoram & Tripura; appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar; at many places over West Madhya Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Gujarat Region; at isolated places over West Bengal & Sikkim, East Rajasthan and Saurashtra & Kutch; below normal (-1.6°C to -3.0°C) at isolated places over Punjab, Uttarakhand, Konkan & Goa, Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the

country. Yesterday, the highest maximum temperature of 35.3°C was reported at Cannur (Kerala) over the country.

- Minimum Temperature Departures as on 29-01-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Chhattisgarh, Coastal Andhra Pradesh & Yanam and Telangana; at isolated places over Odisha, Vidarbha, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at most places over North Interior Karnataka; at many places over Marathwada; at a few places over Jharkhand, Madhya Maharashtra and Rayalaseema; at isolated places over Kerala & Mahe. They are markedly below normal (-5.1°C or less) at a few places over East Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Madhya Pradesh and Saurashtra & Kutch; appreciably below normal (-3.1°C to -5.0°C) at many places over Haryana, Chandigarh & Delhi and Gujarat Region; at a few places over Konkan & Goa; at isolated places over Himachal Pradesh, Punjab, West Rajasthan, Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at most places over Bihar; at many places over East Uttar Pradesh; at a few places over Uttarakhand, Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; at isolated places over West Uttar Pradesh and South Interior Karnataka and near normal over rest parts of the country. The lowest minimum temperature of 1.2°C reported at Narnaul (Haryana) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 29 January (Day 1): Dense to Very Dense Fog in some pockets very likely over Uttar Pradesh; in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, Bihar and Dense Fog in isolated pockets over north Madhya Pradesh, north Chhattisgarh, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold Day to Severe Cold Day conditions in many pockets very likely over Uttar Pradesh; Cold Day conditions in some pockets with Severe Cold Day in isolated pockets over Bihar and Cold Day conditions in isolated pockets over Madhya Pradesh. Cold Wave to Severe Cold Wave conditions in many pockets very likely over Punjab and Haryana, Chandigarh & Delhi; in some pockets over East Rajasthan; in isolated pockets over West Rajasthan and Cold Wave conditions in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh and Saurashtra & Kutch. Ground Frost conditions at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal

Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan. Thunderstorm accompanied with lightning at isolated places very likely over Jharkhand and Odisha.

- 30 January (Day 2): Dense to Very Dense Fog in some pockets very likely over Uttar Pradesh; in isolated pockets over Bihar and Dense Fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi and Odisha. Cold Day to Severe Cold Day conditions in some pockets very likely over Uttar Pradesh; Cold Day conditions in some pockets with Severe Cold Day in isolated pockets over Bihar and Cold Day conditions in isolated pockets over Madhya Pradesh. Cold Wave to Severe Cold Wave conditions in isolated pockets very likely over Rajasthan; Cold Wave conditions in some pockets with Severe Cold Day in isolated pockets over Punjab and Haryana, Chandigarh & Delhi and Cold Wave conditions in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Bihar and Saurashtra & Kutch. Ground Frost conditions at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan. Thunderstorm accompanied with lightning and hail at isolated places very likely over Arunachal Pradesh.
- 31 January (Day 3): Dense to Very Dense Fog in isolated pockets very likely over Bihar and Dense Fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Odisha. Cold Day to Severe Cold Day conditions in some pockets very likely over Uttar Pradesh and Cold Day conditions in some pockets with Severe Cold Day in isolated pockets over Bihar. Cold Wave conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, East Madhya Pradesh and Bihar.
- 01 February (Day 4): Dense Fog in isolated pockets likely over Uttar Pradesh and Nagaland, Manipur, Mizoram & Tripura. Cold Day conditions in isolated pockets likely over Uttar Pradesh and Bihar. Cold Wave conditions in isolated pockets likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar. Strong Winds (speed reaching 40-50 kmph) likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 02 February (Day 5): Dense Fog in isolated pockets likely over Uttar Pradesh and Nagaland, Manipur, Mizoram & Tripura. Cold Day conditions in isolated pockets likely over Uttar Pradesh and Bihar. Cold Wave conditions in isolated pockets likely over Uttar Pradesh and Bihar. Strong Winds (speed reaching 40-50 kmph)

likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 29 January to 06 February 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)

Jammu

Weather condition:

Mainly clear to partially cloudy weather prevailed during this week 3.8 mm rainfall in one rainy day. Both maximum and minimum temperatures remained below normal by 1 to 3 0C and ranged from 14.0 to 19.6 0C and 3.0 to 8.6 0C, respectively. The morning and afternoon relative humidity remained in the range of 83 to 97 % and 53 to 93 %, respectively. The evaporation and sunshine remained in the range of 0.8 to 2.0 mm/day and 0.0 to 8.1 hrs, respectively.

Contingency measure:

- Wheat Late sown Normal sown Tillering Jointing (45-60Days) . In late sown wheat crop, Apply urea @ 2.5 kg/kanal as 1st top dressing. Apply 2, 4-D ethyl ester @ 500 ml/ ha in 500 to 600 litres of water at optimum soil moisture to control broad leaved weeds and to control narrow leaved weeds apply Metribuzin @ 200 gm ai./ha in 500 to 600 litres of water in optimum soil moisture in 30-35 days old crop to control weeds. In normal sown crop, Routine monitor of zinc deficiency is recommended. If young to middle leaves develop yellow patches between the mid-vein and edge of the leaf and extend lengthways towards the tip and base of the leaf. farmers are advised to spray 0.2% zinc sulphate hepta hydrate ($ZnSO_4 \cdot 7H_2O$).
- Rabi pulses: Gram Lentil Pea Branching Early Vegetative stage (tender leaf) Vegetative stage Avoid water stagnation in field to prevent wilt and blight attack. Apply bavistin/carbendazim @ 3gm/litre of water, if attack of wilt or blight is observed in crop. Hoeing and weeding is recommended. Hoeing and weeding is recommended.
- Oilseeds: Mustard Flowering/pod formation Temperature and RH is favorable to alternaria blight attack. Spray mancozeb @ 0.25% to control alternaria blight. Spray in the evening to protect pollination.
- Floriculture: Marigold Chrysanthemum Gladiolus Tuberosa/ Rose Nursery/ Transplanting Harvesting vegetative Nursery raising of hybrid marigold can be done. Transplanting of nursery of pusa narangi gainda is recommended. Heading back of chrysanthemum and application of FYM is recommended. Earthing up is recommended. Hoeing and weeding is recommended at optimum soil moisture during clear day.
- Vegetables: Tomato/brinjal/ chillies Cucumber/ bottlegourd/ bittergourd/ pumpkin Nursery under protection Nursery management in poly bags under

protected structures Prepare fields for solanaceous and cucurbitaceous vegetable crops. Apply FYM @ 10qntl/kanal at the time of field preparation along with recommended dose of chemical fertilizers Keep nursery area weed free and spray bavistin @ 1gm/lit as prophylactic spray against post damping off disease. Raise cucurbits properly in the poly bags under protected structures

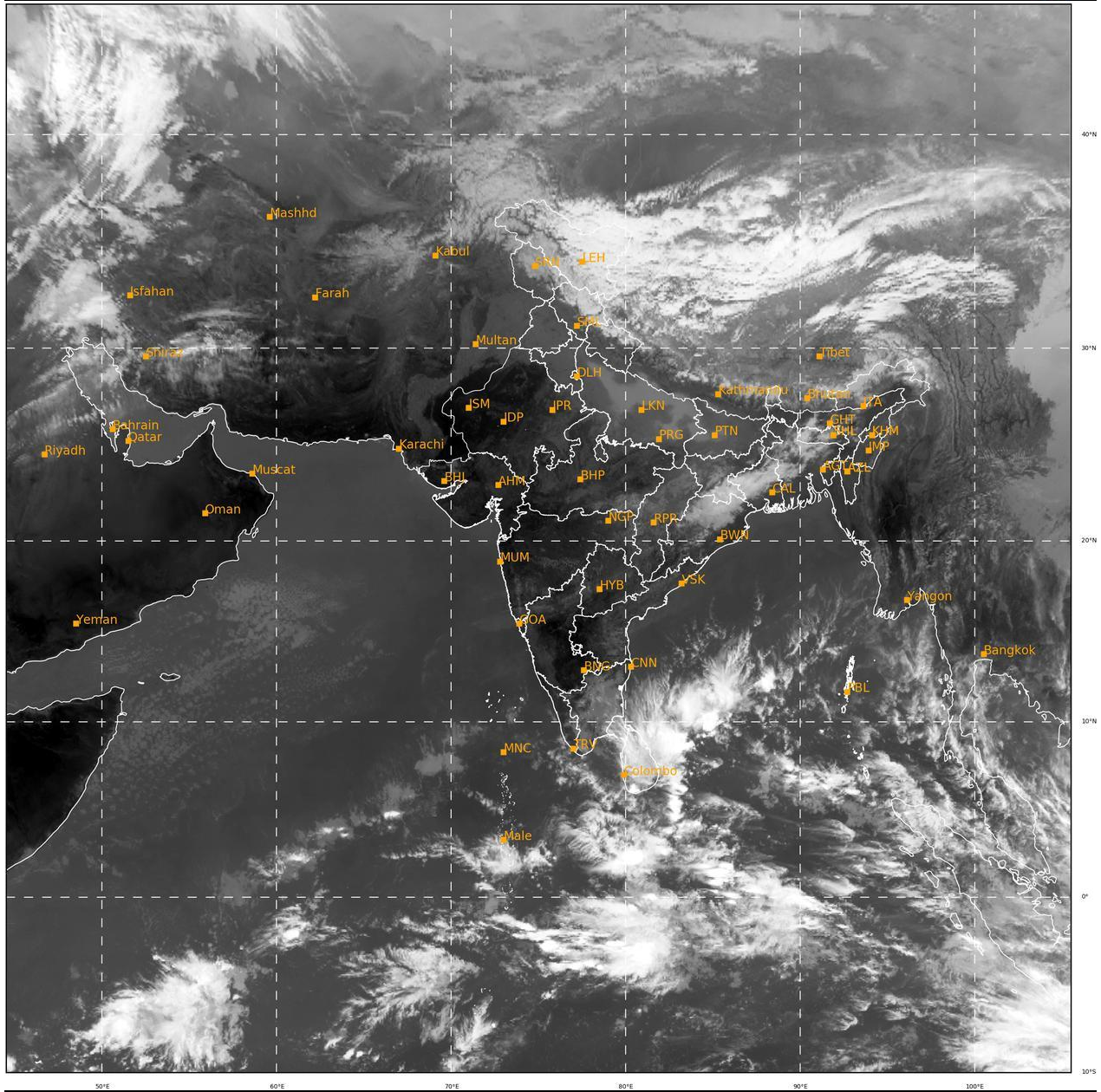
- Horticulture: Mango/ Citrus Young Bearing Protect plants from cold and frost. Provide thatches prepared from Sarkanda or any other locally available material, however, it should be kept open on eastern side to allow sufficient sun shine and air for the plant Remove and destroy infected dried shoots. Keep the area clean. Spray copper oxychloride @ 3gm/lit of water to control dieback and canker in citrus. Apply alkathene or sticky grease band on mango plants to control upward movement of mango mealy bug or Mix methyl parathion dust @ 250mg /tree in mango to control mealy bug.
- Button mushroom: (A bispora) Oyster mushroom Spawn run Fruiting Spawn arrangement Before spawning, check the moisture, pH and ammonia in the compost. Maintain temperature from 16 to 18°C in the cropping room, if fruit bodies are coming out. Maintain temperature from 23 to 24°C in the cropping room, if the bags are under spawn run condition. Provide proper ventilation in the cropping room. Maintain 1000-1500 ppm CO₂ during fruiting. spray 0.05% chlorothalonil, if any competitive mould is visible in the cropping bag. Maintain hygiene condition in & around the cropping room. Winter species of oyster mushroom may be grown.
- Sericulture: Mulberry Cocoon crop Tree plantation Chawki /late age rearing Avoid irrigation for next 15 days. First disinfection of rearing appliances should be conducted with either 2% formalin or 5% bleaching powder solution. After disinfection keep the appliances in sun.
- Apiculture: Protect bee colonies from extreme climatic conditions through reduced entrance and proper packing. Maintain adequate reserves of honey and pollen in the bee colony. Stimulating feeding of sugar, syrup should be given for expansion of brood area, if needed at the start of the month. Sulphur dusting should be continued at fortnight interval.
- Fisheries: Fingerlings Farmers should not further add any manure/fertilizer/feed for some days in case of appearance of algal bloom in the fish pond. Remove algal bloom by the addition of fresh water in to the fish pond.
- Poultry: Cover the poultry shed with gunny bags in order to protect the birds from cold weather. Avoid hurdling of chicks. Proper ventilation should be maintained in poultry rooms. There should be a good source of light and heat in

poultry houses. Proper hygiene should be maintained. Well-insulated windows can act as a sun trap during winters. Adequate clean drinking water should be available all the time. Provide starter feed for first 14 days and provide finisher feed from 15th day till sale. Give vaccination against IPD & Gumbroo disease to 7 & 14 days chick.

- Live stock: Dairy animals/ Sheep & Goat Protect the pregnant and milch animals from cold and feed them mineral mixture regularly. Do not allow animals to leave khurli early in morning directly to open area. Give special care to young calves as they are more sensitive to pneumonia. Use dry gunny bags as bedding material for protection against low night temperatures. Provide hay of green forage like stala, lobia, maize, jowar and bajra etc. with kadbi and other green grasses to the milch animals in order to enhance milk production and also to prevent from bloat (aafara). To avoid cracking or fissuring of teats in cold dry weather, clean the teats with warm water and apply ghee or butter after every milking. *Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field

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

29-01-2021/(0800 to 0826) GMT
29-01-2021/(1330 to 1356) IST



383

921

IMD, DELHI

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

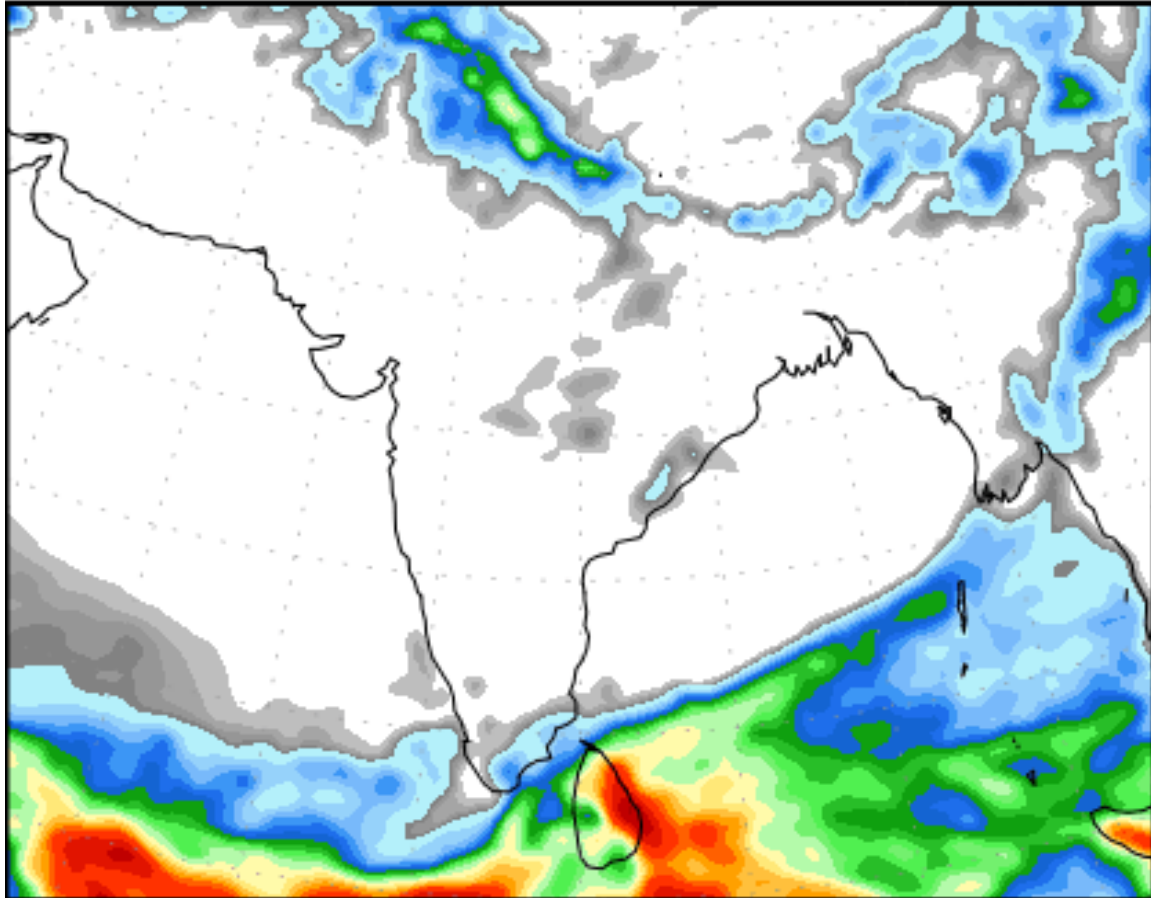


Figure:2. Precipitation forecast for 29 Jan to 06 February 2021 (Source: NOAA NCEP).

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