

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 04 December 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Cyclonic Storm 'JAWAD' (Pronounced as JOWAD) over Westcentral Bay of Bengal moved nearly northwards with a speed of 06 kmph during past 06 hours and lay centered at 0830 hrs IST of today, the 04th December 2021, over Westcentral Bay of Bengal near Lat. 16.4°N and Long. 84.8°E, about 210 km east-southeast of Vishakhapatnam (Andhra Pradesh), 320 km south of Gopalpur (Odisha), 390 km south-southwest of Puri (Odisha) and 470 km southsouthwest of Paradip (Odisha). It is likely to weaken gradually and move nearly northwards during next 12 hours and then north-northeastwards along Odisha coast reaching near Puri around 5th December noon as a Deep Depression. Subsequently, it is likely to weaken further and continue to move northnortheastwards along Odisha coast towards West Bengal coast.
- Rainfall warning:
4th Dec.: Light to moderate rainfall at most places with heavy to very heavy rainfall & extremely heavy falls at isolated places very likely over coastal Odisha; heavy to very heavy rainfall at isolated places over north Coastal Andhra Pradesh, interior Odisha and 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 south Assam & Meghalaya, Mizoram and Tripura.
6th Dec.: Light to moderate rainfall at many places with heavy rainfall at isolated places likely over Assam & Meghalaya, Mizoram and Tripura. Fishermen Warning
- Fishermen are advised not to venture into westcentral & northwest Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coasts on 04th & 05th December 2021.
- A Western Disturbance as trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long. 58°E to the north of Lat. 30°N. It is likely to cause scattered to widespread rainfall/snowfall likely

over Jammu- Kashmir- Ladakh- Gilgit- Baltistan- Muzaffarabad, Himachal Pradesh and Uttarakhand during 04th to 06th Dec. Isolated rainfall/snowfall likely over Jammu- Kashmir- Ladakh- Gilgit- Baltistan- Muzaffarabad on 5th December. Isolated light rainfall very likely over Punjab, Haryana, Chandigarh, Delhi 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 many places over Odisha and South Interior Karnataka; at a few places over Himachal Pradesh, Uttarakhand, North Interior Karnataka, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Vidarbha, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Marathwada, Rayalaseema, Coastal Karnataka and Tamilnadu, Puducherry & Karaikal.
- Fog observed (at 0830 hrs IST of today): Dense fog in isolated pockets over East Uttar Pradesh and Shallow to Moderate fog in isolated pockets over Delhi, Uttar Pradesh, Bihar, Jharkhand and East Madhya Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Madhya Pradesh, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- Minimum Temperature Departures (as on 04-12-2021): Minimum temperatures are markedly above normal (5.1°C or more) at most places over Gangetic West Bengal; at many places over Punjab; at a few places over Himachal Pradesh, East Madhya Pradesh, Bihar and Madhya Maharashtra; appreciably above normal (3.1°C to 5.0°C) at most places over Jharkhand and Marathwada; at many places over Uttar Pradesh, Madhya Maharashtra, Karnataka and Nagaland, Manipur, Mizoram & Tripura; at a few places over Haryana, Chandigarh & Delhi, Gujarat state, Sub-Himalayan West Bengal & Sikkim and Rayalaseema; at isolated places over West Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Uttarakhand, Chhattisgarh and Odisha; at many places over Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe, Konkan & Goa and Vidarbha; at a few places over Andaman & Nicobar Islands, Rajasthan, Telangana and Coastal Andhra Pradesh and Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad and near normal over rest parts

of the country. Today, the Lowest minimum temperature of 7.6°C is reported at Churu (West Rajasthan) over the plains of the country.

- Maximum Temperature Departures (as on 03-12-2021): 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 Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Punjab, Rayalaseema, South Interior Karnataka, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Telangana, Coastal Andhra Pradesh & Yanam and Gangetic West Bengal. They were markedly below normal (-5.1°C or less) at a few places over East Rajasthan and at isolated places over West Madhya Pradesh, Saurashtra & Kutch and Madhya Maharashtra; appreciably below normal (-3.1°C to -5.0°C) at a many places over Gujarat Region; at a few places over Himachal Pradesh, East Madhya Pradesh, Vidarbha and Marathwada and at isolated places over East Uttar Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at isolated places over Uttarakhand, North Interior Karnataka and Kerala & Mahe and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 34.8°C was reported at Cannur(Kerala & Mahe).

Weather Warning during the next 5 days (IMD)

- 04 December (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over coastal Odisha; Heavy to very heavy rainfall at isolated places over north Coastal Andhra Pradesh, interior Odisha and coastal districts of Gangetic West Bengal and heavy rainfall at isolated places over interior Tamilnadu and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Gale winds (speed reaching 70-80 kmph gusting to 90 kmph) prevails over Westcentral Bay of Bengal. It would gradually decrease becoming 60-70 kmph gusting to 80 kmph over northwest and adjoining Westcentral Bay of Bengal by mid-night of today. It would decrease further becoming 50-60 gusting to 70 kmph from the morning of 5th December over northwest Bay of Bengal. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely to prevail along & off North Andhra Pradesh-Odisha coasts during next 12 hours. It will gradually increase becoming 55-65 gusting to 75 kmph till tomorrow morning. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely to commence along & off West Bengal coast from today evening. High Sea conditions likely to prevail over westcentral & adjoining northwest Bay of Bengal

during next 12 hours. It is likely to be Very Rough over northwest & adjoining west-central Bay of Bengal from today midnight. Rough to Very Rough Sea conditions will prevail along & off North Andhra Pradesh-Odisha & West Bengal coasts. Fishermen are advised not to venture into these areas.

- 05 December (Day 2): Heavy to very heavy rainfall very likely at isolated places over north Odisha and Gangetic West Bengal and heavy rainfall at isolated places over south Assam & Meghalaya, Mizoram & Tripura, interior Tamilnadu and Kerala & Mahe. Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Dense fog very likely in isolated pockets over north Punjab. Squally winds speed reaching 50-60 kmph gusting to 70 kmph from the morning of 5th December over northwest Bay of Bengal. Squally winds 50-60 kmph gusting to 70 kmph along & off North Andhra Pradesh-Odisha coasts from 5th morning till afternoon. It would decrease thereafter gradually. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) also likely along & off West Bengal coast till the evening of 5th December and gradually decrease thereafter. Sea Conditions likely to be Very Rough over northwest & adjoining west-central Bay of Bengal till evening of 5th December and improve thereafter. Rough to Very Rough Sea conditions will prevail along & off North Andhra Pradesh - Odisha & West Bengal coasts till 5th December evening. Fishermen are advised not to venture into these areas.
- 06 December (Day 3): Heavy rainfall very likely at isolated places over Gangetic West Bengal, south Assam & Meghalaya, Mizoram & Tripura and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Dense fog very likely in isolated pockets over Punjab and Haryana, Chandigarh & Delhi. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely along & off West Bengal coast. Fishermen are advised not to venture into these areas.
- 07 December (Day 4): No weather warning.
- 08 December (Day 5): Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam.

- The weather outlook for seven days i.e., 04 Dec to 12 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)

Tamil nadu

Weather condition:

Maximum temperature: 29.0°C (normal 30.7°C), minimum temperature: 23.0°C (normal 20.4°C), rainfall: 157.5mm (normal 29.2 mm). The maximum and minimum temperature was 1.7°C and 2.6°C below & With respect to daily rainfall, rainfall occurred at most places over Tamil Nadu from 26.11.2021 to 30.11.2021 during this week. → Minimum temperature range of 19°C-25°C prevailed over the state except Kodaikanal and Uthagamandalam (10°C-11°C) during the period under report. → Maximum temperature range of 24°C-33°C prevailed over the state except Kodaikanal and Uthagamandalam (14°C-18°C) during the period under report. → above normal respectively and rainfall was 128.3 mm above normal across the week. General weather situation in Tamil Nadu:

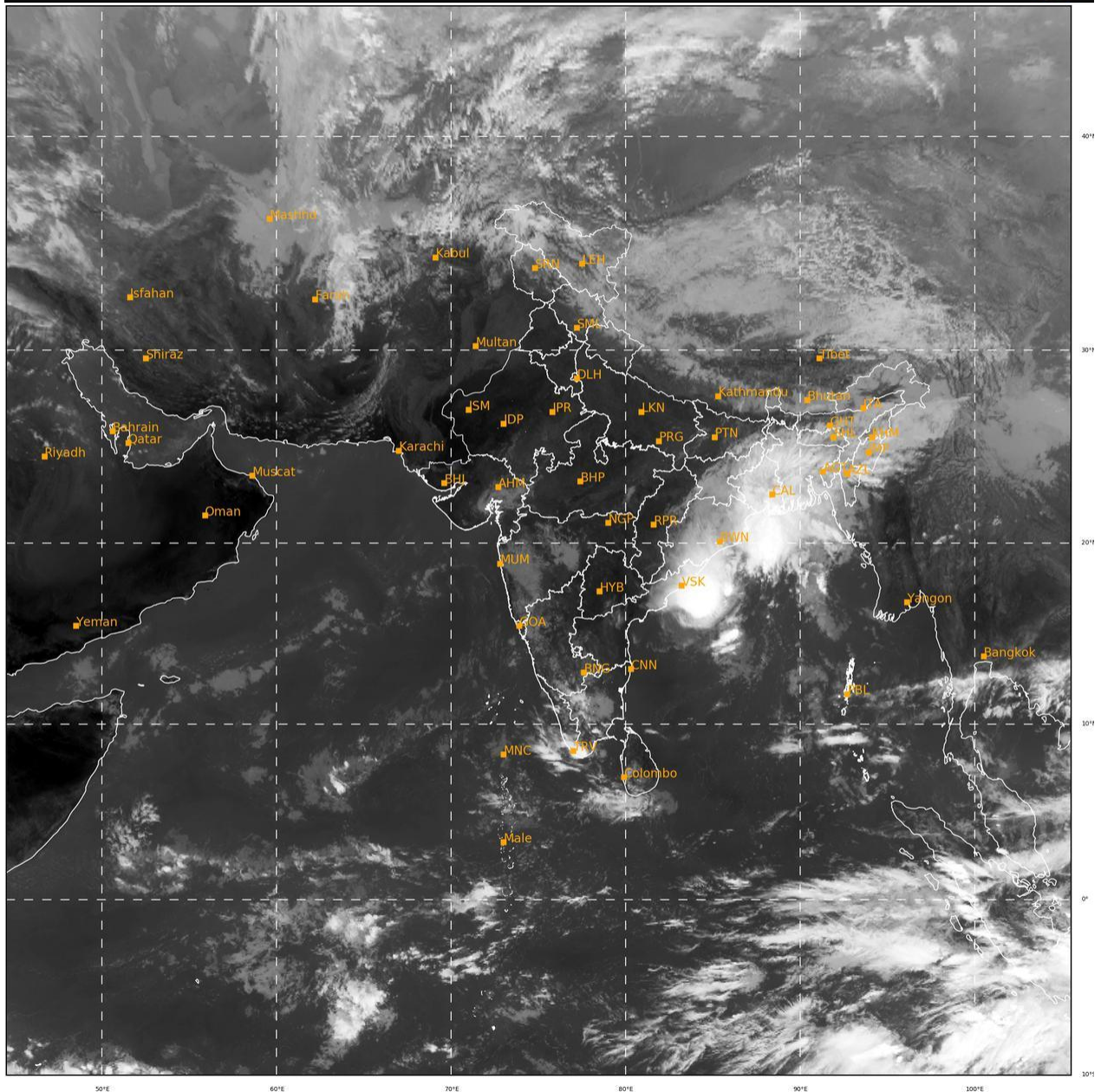
Contingency measure:

- Irrigated crops -Water management -As Light to moderate rainfall at most places is predicted for next five days. Postponed the irrigation for coming five days.
- Rainfed and Irrigated crops- All the stage - Provide the drainage facilities to avoid water logging in the field. Based on the location specific weather, spraying of pesticide, herbicide and application of fertilizer is recommended.
- Intercultural operation -Mulching is recommended to increase infiltration, decreased runoff and greater soil water availability. Maize 40-45 DAS- Even though rainfall splash helps to control the pest incidence. Farmers are advised to monitor the Fall army worm incidence regularly. If Fall army worm incidence noticed with the prevailed weather. To control spray any one of the following insecticides / biopesticide (use manually operated or battery-operated high-volume knapsack sprayer only with a spray volume of 500 lit. /ha.) Emamectin Benzoate 5 SG @4grams for 10 litre of water. or Spinetoram 11.7 SC @ 5 ml/10 lit or Novaluron 10 EC @ 10 ml/10 lit.
- Vegetative to tasseling stage -Low temperature (21-33°C); High relative humidity (90 per cent) and drizzling Downy mildew / Crazy top chance for incidence. If noticed, Rogue out downy mildew infected plants. Spray metalaxyl + mancozeb @ 1000 g.

- Cotton -Vegetative stage -High humidity; Intermittent rains; Moderate temperature of 25-28° C favorable for Leaf blight. To control spray Mancozeb or Copper oxychloride at 2kg/ha at the intimation of the disease. Two to three sprays may be given at 15 days interval.
- Sorghum- Vegetative to harvest stage- Rain (30-50mm/week), Cool moist weather with free water on leaf, low night temperature favours leaf blight. To control spray mancozeb 2g/ litre. Low temperature favours spore germination, rainy weather favours onset of disease associated with late planting favours for Rust incidence, if notice spray mancozeb @ 1 kg/ha. Repeat fungicidal application after 10 days.
- Chilli -Vegetative stage - Continues rain / high intensity rain result to water logged condition Damping off may occur, to control following measures to be adopted. Soil drenching with Copper oxychloride 2.5g/litre. Symptoms - The pathogen attacks the collar region of seedlings on the surface of soil. The collar portion rots and ultimately the seedlings collapse and die.
- Livestock - December month Disease Risk Forecast Peste des petits ruminants ? Goat and sheep -Very High Risk Management measures: Vaccination of susceptible animals of above 3 months old age. Restriction on animal movement, strict biosecurity measures and proper disposal of carcass. Goat- Management practices for rainy season: 1. Animals should be treated for ectoparasites before and throughout the rainy season. 2. Worm burden is more common in rainy season. Therefore, deworming should be done before the onset of rainy season. 3. Animal's shed should be free from water logging conditions as it may cause bacterial infections especially mastitis. Daily disinfection of floor should be done. 4. Green fodders should be fed to the animals after proper drying which will prevent enteritis. 5. Animals should be allowed for grazing only during sunny hours. 6. Concentrate feed should be stored in a clean, damp free room to prevent mould attack.
- Coconut - High wind speed may damage the crop; Drainage and earthing up may be practiced to avoid lodging.
- Fisheries- Inland fish -Farmers are advised to reduce the pond water level and the inlet may fix with 5- and 15-mm wire mesh to avoid the entry of predatory fishes Common Fish -By viewing the rain forecast fish farmers the morning and evening feeding may be delayed one hour. To avoid feed wastage, farmers are advised to feed the fishes using feeding nets. Farmers are advised to avoid feeding of fungal infected feeds during rainy season to avoid disease incidents in fishes.

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

04-12-2021/(0800 to 0827) GMT
04-12-2021/(1330 to 1357) IST



417

937

IMD, DELHI

Figure: 1. Latest available satellite picture as on 04 Dec 2021 at 1357 Hrs (IST). (Source: IMD).

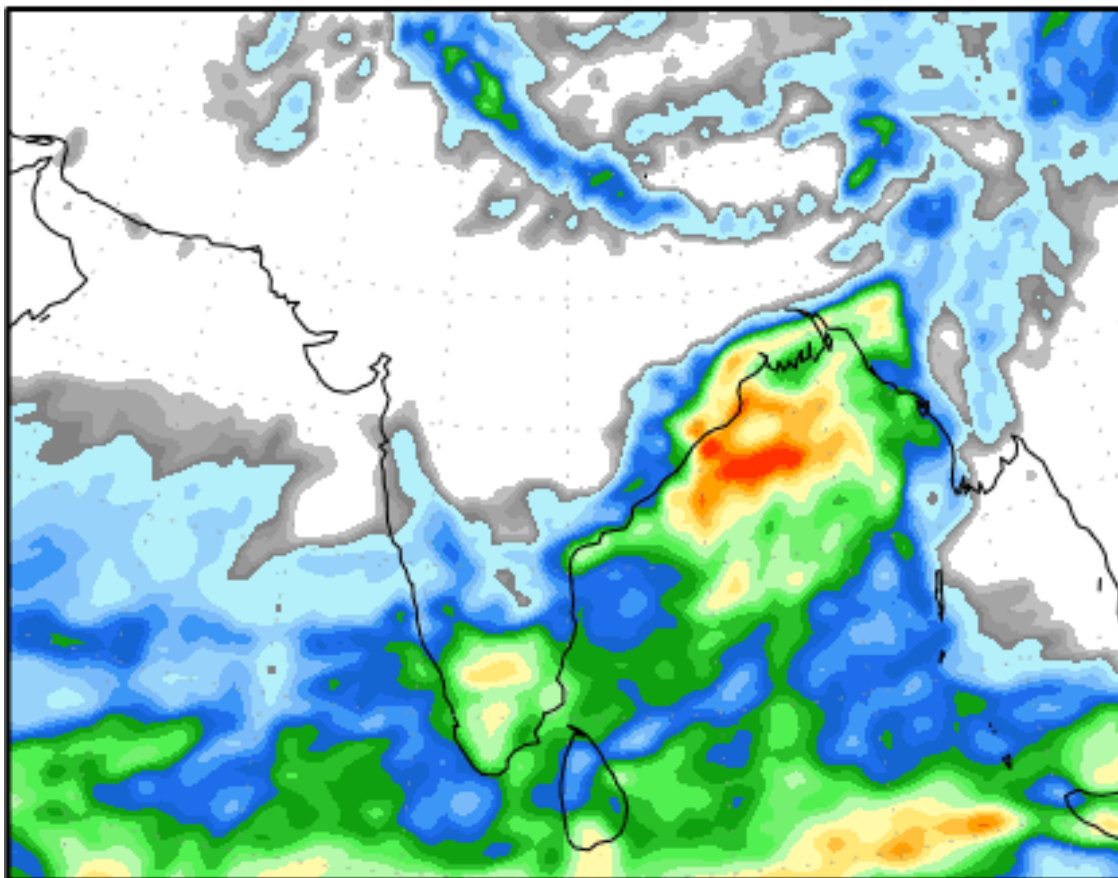


Figure:2. Precipitation forecast for 04 Dec to 12 Dec 2021 (Source: NOAA NCEP).

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