

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 01 December 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A cyclonic circulation lies over Southeast & adjoining Eastcentral Arabian sea and a trough in lower levels runs from this cyclonic circulation to Kutch. A Western Disturbance lies as a trough in mid & upper tropospheric westerlies roughly along Long. 63°E to the north of Lat. 15°N. Under the influence of these systems:
i) Scattered to widespread rain/thunderstorm with isolated heavy to very heavy rainfall accompanied with thunderstorms & lightning at isolated places very likely over Gujarat Region, north Madhya Maharashtra and north Konkan on 01st December. ii) Isolated to scattered rainfall very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh, Delhi, Uttar Pradesh, Rajasthan and Madhya Pradesh during 01st-02nd December. Isolated thunderstorm/lightning also likely over Uttar Pradesh on 02nd and over Madhya Pradesh and Rajasthan on 01st & 02nd December.
- A low pressure area lies over central parts of Andaman Sea & neighbourhood. It is likely to move west-northwestwards and concentrate into a Depression over southeast & adjoining east-central Bay of Bengal by tomorrow, the 02nd December and intensify into a Cyclonic Storm over central parts of the Bay of Bengal during the subsequent 24 hours. Subsequently, it is likely to move northwestwards, intensify further and reach near north Andhra Pradesh- Odisha coasts around 04th December morning. Under its influence, heavy to very heavy rainfall very likely over Andaman & Nicobar Islands during 01st-02nd December; over north Coastal Andhra Pradesh on 03rd & 04th; over coastal Odisha during 03rd-05th; over Gangetic West Bengal during 04th-05th. Isolated extremely heavy falls also likely over coastal Odisha and north Coastal Andhra Pradesh on 04th December.
- Fishermen warning:
- Fishermen are advised not to venture into Andaman Sea on 1st – 2nd December 2021, over southeast & adjoining east-central Bay of Bengal on 2nd & 3rd December, over west-central & adjoining northwest Bay of Bengal and along & off

north Andhra Pradesh - Odisha- West Bengal coasts during 3rd - 5th December 2021.

- 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 Coastal Karnataka, Lakshadweep and Andaman & Nicobar Islands; at many places over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe; at a few places over Konkan & Goa, Rayalaseema and Interior Karnataka and at isolated places over West Madhya Pradesh, Gujarat State, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh and Telangana.
- Rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy rainfall at isolated places over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- Fog observed (at 0830 hours IST of today): Shallow fog observed in isolated pockets over Punjab, Delhi and East Uttar Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Andaman & Nicobar Islands, Tamilnadu and Kerala.
- Minimum Temperature Departures (as on 01-12-2021): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Rayalaseema and South Interior Karnataka; at many places over Punjab, Konkan & Goa, Marathwada and Uttarakhand; at a few places over West Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over East Rajasthan, Gujarat state and North Interior Karnataka; at many places over East Rajasthan, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Madhya Pradesh, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and Sub-Himalayan West Bengal & Sikkim; at a few places over Coastal Andhra Pradesh & Yanam and at isolated places over Kerala & Mahe, Odisha and Gangetic West Bengal and near normal over rest parts of the country. Today, the Lowest minimum temperature of 8.9°C is reported at Amritsar (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 30-11-2021): Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Assam & Meghalaya; at many places over Himachal Pradesh, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; at a few places over Sub-Himalayan West Bengal & Sikkim and at isolated places over West Rajasthan, Konkan & Goa and Tamil

Nadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at most places over Madhya Maharashtra and Marathwada; at many places over West Madhya Pradesh; at a few places over East Rajasthan, Vidarbha, East Madhya Pradesh and Andaman & Nicobar Islands and at isolated places over East Uttar Pradesh, Gangetic West Bengal, Saurashtra & Kutch, Odisha and West Uttar Pradesh and near normal at rest parts of the country. Yesterday, the highest maximum temperature 35.8°C was reported at Vengurla (Konkan & Goa) over the country.

Weather Warning during the next 5 days (IMD)

- 01 December (Day 1): Heavy to very heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, Gujarat region, north Konkan and north Madhya Maharashtra and Heavy rainfall at isolated places over Saurashtra & Kutch. Thundersquall accompanied with lightning & gusty winds (speed reaching 50-60 kmph) very likely at isolated places over Andaman & Nicobar Islands and thunderstorm accompanied with lightning at isolated places over Rajasthan, West Madhya Pradesh, Gujarat state, north Madhya Maharashtra and Konkan & Goa. Squally winds speed becoming 45-55 kmph gusting to 65 kmph very likely over Andaman Sea, Andaman & Nicobar Islands and adjoining southeast Bay of Bengal. Sea condition will be rough to very rough over Andaman Sea, along & off Andaman & Nicobar Islands and adjoining southeast Bay of Bengal. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Eastcentral & adjoining Northeast Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 02 December (Day 2): Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands and Gujarat Region. Thunderstorm accompanied with lightning & gusty winds (40-50 kmph gusting to 60 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Himachal Pradesh, Uttar Pradesh, East Rajasthan, Madhya Pradesh and Gujarat Region. Squally winds speed reaching 50-60 kmph gusting to 70 kmph over southeast & adjoining east-central Bay of Bengal, Andaman & Nicobar Islands & Andaman Sea on 02nd December. Sea condition would become very rough to High over southeast & adjoining eastcentral Bay of Bengal, Andaman & Nicobar Islands & Andaman Sea. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely over Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into these areas.

- 03 December (Day 3): Heavy to very heavy rainfall very likely at isolated places over north Coastal Andhra Pradesh and Heavy rainfall likely at isolated places over Odisha. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Gale winds speed reaching 65-75 kmph gusting to 85 kmph very likely to prevail over central Bay of Bengal from the early morning of 3rd December. Sea condition will be rough to very rough over along & off North Andhra Pradesh – Odisha coast from the mid-night of 3rd December. Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to commence along & off North Andhra Pradesh – Odisha coast from the mid-night of 3rd December. Fishermen are advised not to venture into these areas.
- 04 December (Day 4): Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over north Coastal Andhra Pradesh & Yanam and Coastal Odisha and heavy rainfall likely at isolated places over Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) 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 likely to prevail over northwest & adjoining west-central Bay of Bengal from the morning of 4th December. Sea condition would be High over central Bay of Bengal and High to very High over west-central & adjoining northwest Bay of Bengal. Squally wind speed reaching 70-80 kmph gusting to 90 kmph along & off North Andhra Pradesh – Odisha coast from 4th Afternoon. Squally wind speed reaching 45-55 kmph gusting to 65 kmph also likely to commence along & off West Bengal coast from 4th December morning and become Gale wind speed reaching 60-70 kmph gusting to 80 kmph from the evening of 4th December for the subsequent 12 hours. Fishermen are advised not to venture into these areas.
- 05 December (Day 5): Heavy to very heavy rainfall likely at isolated places over Coastal Odisha and Gangetic West Bengal and heavy rainfall likely at isolated places over Tamilnadu, Puducherry & Karaikal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning & gusty wind (40-50kmph) likely at isolated places over Gangetic West Bengal; with lightning at isolated places over Himachal Pradesh, Punjab, Haryana, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally wind speed reaching 60-70 kmph gusting to 80 kmph along &

off north Odisha-West Bengal coasts and Northwest bay of Bengal. Sea condition would be High over northwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 01 Dec to 09 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)

Maharashtra-Vidarbha

Weather condition:

Weekly average means (47 MW) at AICRPAM Akola centre: T max 32.1°C (normal 30.8°C), T min 20.4°C (normal 13.0°C). RH I 86 % (normal 72 %), RH II 52 % (normal 29 %). Evaporation rate 4.6 mm (normal 4.2 mm), Wind 2.1 km/hr (normal 3.1 km/hr) and BSH 5.4 hrs (normal 8.3 hrs). Maximum temperature across the week was 1.3°C above normal with a deviation of -0.6 to +2.1°C from normal. Minimum temperature across the week 7.4° above normal with a deviation of +5.5 to +9.4°C from normal.

Contingency measure:

- Block level forecast (Akola) indicates prevalence mainly dry weather during 25 to 29 November. Undertake clean picking of burst bolls properly dry and keep the picked produce variety wise. Use cotton bags instead of gunny or plastic bags for picking and storing of cotton to avoid contamination of the lint. At boll formation stage, inspect for presence and damage of pink bollworm by plucking 20 green bolls per acre from randomly selected plants. If infestation is 5 to 10% undertake spray of thiodicarb 75% WP@ 25g OR Profenofos 50% EC @ 30 ml OR indoxacarb 15.8% EC @ 10 ml per 10 litres of water.
- To manage the initial incidence of pod borer (*Helicoverpa*) pigeon pea at flowering stage/pod formation (3/plant or 5 to 10% pod damage) undertake first spray of 5% NKSE OR Azadirachtin 300 PPM @ 50 ml per 10 litres of water. Subsequently to control incidence of pod borer undertake spray of Emamectin benzoate 5% SG @ 3 g OR Lambda cyhalothrin 5% EC @ 10 ml OR Chlorantraniliprole 18.5% SC @ 2.5 ml per 10 litres of water.
- Apply top dressing of nitrogen fertilizer @ 40 kg N/ha to 25-30 days old rabi sorghum/ rabi maize crop at adequate soil moisture. Monitor for incidence of sap sucking aphids particularly in irrigated / late sown safflower crop and for above ETL level incidence (30% infested plants) undertake spray of dimethoate

30% EC @ 13 ml per 10 litres of water. Need based protective irrigation is advisable in earlier sown chickpea. For delayed sowing of irrigated wheat (November 15-December 15) use varieties ? PDKV Sardar (AKAW 4210-6), AKAW 4627, AKW-1071(Purna), AKW-381, HI 977. Follow seed treatment in wheat with vitavax 75 % WP @ 2.5 g / kg seed. Also, seed treatment with Azotobacter and PSB @ 25 g each / kg seed treatment is advisable. Use 150kg / ha seed rate for late sowing. Use fertilizer @ 40:40:40 kg NPK/ha at wheat sowing and remaining N @ 40 kg/ha at 18-20 days stage at first irrigation.

- For higher productivity protective irrigation is advisable in mustard. In case of availability of one irrigation schedule it at flowering stage, for availability of two irrigations schedule it at 30 days and flowering stage, for availability of three irrigations schedule it at 25 to 30 days interval in mustard.
- During this time on Mrig Bahar (June flowering) Nagpur mandarin & Sweet orange (Mosambi) trees should be watered by drip irrigation or double ring method, For one year old tree apply 8 litres/day/tree; for 4 years tree apply 36 litres/day/tree; for 8 years old tree apply 85 litres/day/tree and 10 to 25 years tree apply 105 litres/day/tree.
- Transplanting of brinjal, tomato, cabbage cauliflower and seed sowing of radish, carrot, leafy vegetables can be initiated during this period.
- Screening of farm livestock, draught/milch animals for diseases be considered and they be vaccinated for foot and mouth disease (FMD).

01-12-2021/(0830 to 0857) GMT
01-12-2021/(1400 to 1427) IST

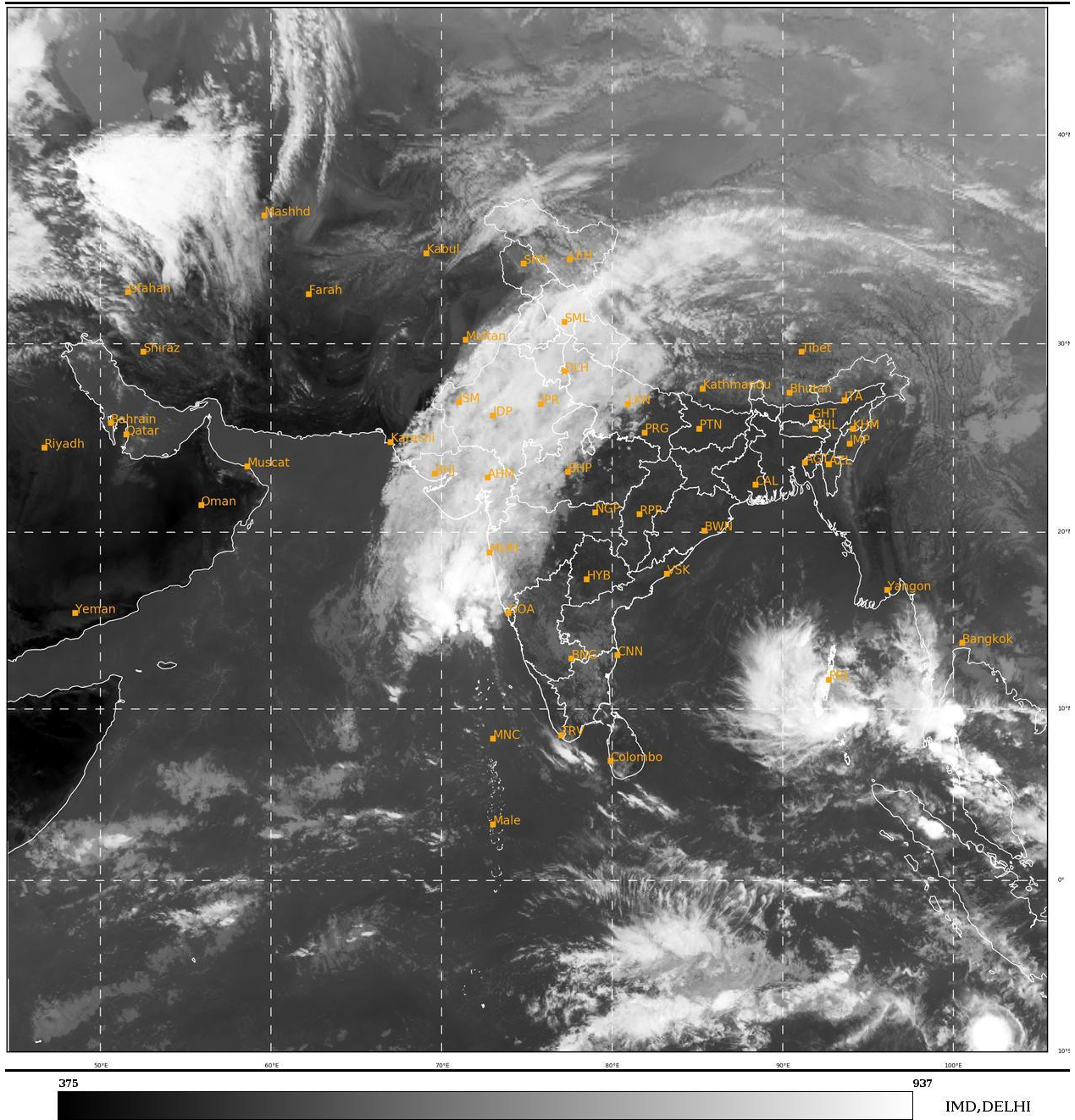


Figure: 1. Latest available satellite picture as on 01 Dec 2021 at 1427 Hrs (IST). (Source: IMD).

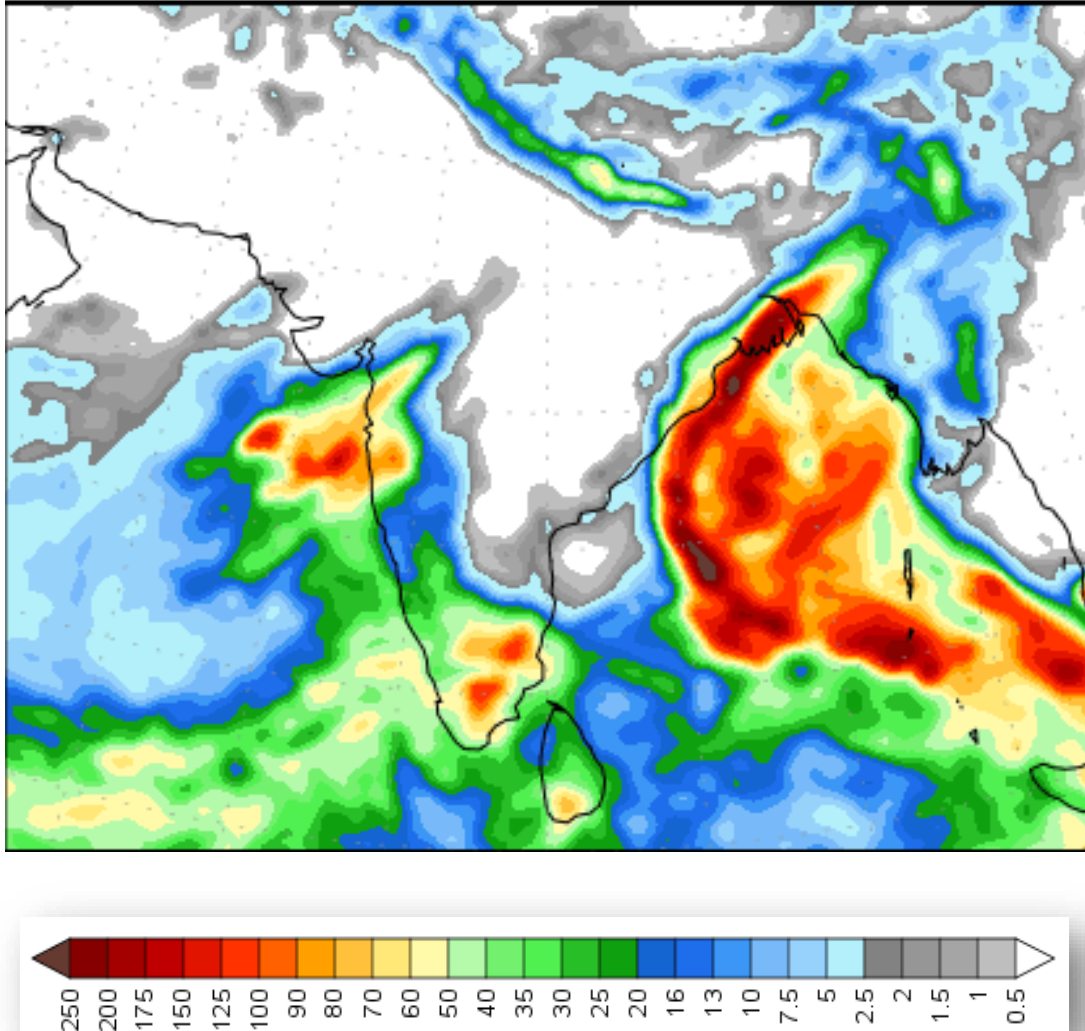


Figure:2. Precipitation forecast for 01 Dec to 09 Dec 2021 (Source: NOAA NCEP).

Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.