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

Daily Crop Weather Information as on 18 November 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well Marked Low Pressure Area over Southwest & adjoining Westcentral Bay of Bengal off north Tamil Nadu-south Andhra Pradesh coasts has concentrated into a Depression over Southwest Bay of Bengal off north Tamilnadu coast and lay centred at 0830 hours IST of today, the 18th November, 2021, near Lat. 11.0°N/Long. 82.3°E, about 310 km southeast of Chennai and 290 km east-southeast of Puducherry and 270 km east-northeast of Karaikal. It is very likely to move west-northwestwards and cross north Tamilnadu & adjoining south Andhra Pradesh coasts around Chennai by the early morning of 19th November, 2021.
- The other Low Pressure Area over Eastcentral Arabian Sea off Maharashtra coast moved west-northwestwards and lies over Eastcentral Arabian Sea. It is likely to move west-southwestwards away from west coast of India and become more marked during next 48 hours.
- A trough runs from the cyclonic circulation associated with the above Low Pressure Area over Eastcentral Arabian Sea to southwest Madhya Pradesh across north Maharashtra at lower tropospheric level.
- Rainfall warning:
- 18th November: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy falls at isolated places very likely over Tamil Nadu, Puducherry & Karaikal, heavy to very heavy rainfall and extremely heavy falls at isolated places over adjoining districts of Rayalaseema and heavy to very heavy rainfall at isolated places over south coastal Andhra Pradesh & south interior Karnataka.
- 19th November Light to moderate rainfall at most places with heavy to very heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal and coastal Andhra Pradesh and heavy rainfall at isolated places over Rayalaseema and Karnataka.
- Wind warning: Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to prevail over southwest & adjoining west-central Bay of Bengal and along

& off Tamil Nadu, Puducherry and adjoining south Andhra Pradesh coasts during next 24 hours and decrease gradually thereafter.

- Sea condition: Sea condition will be rough to very rough over southwest & adjoining west-central Bay of Bengal and along & off Tamil Nadu, Puducherry and adjoining south Andhra Pradesh coasts during next 24 hours and decrease gradually thereafter.
- Fishermen Warning: Fishermen are advised not to venture into southwest & adjoining west-central Bay of Bengal and along & off Tamil Nadu, Puducherry and adjoining south Andhra Pradesh coasts during next 24 hours
- 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 Tamilnadu, Puducherry & Karaikal; at many places over North Interior Karnataka; at a few places over Andaman & Nicobar Islands and at isolated places over Konkan & Goa, Madhya Maharashtra and Coastal Andhra Pradesh & Yanam.
- Fog observed (at 0830 hrs IST of today): Shallow fog observed at isolated places over Punjab, Delhi and East Uttar Pradesh. Visibility (500 metre or less): Amritsar, Ludhiana, Delhi (Safdarjung, Palam), Kanpur, Fursatganj and Varanasi-500 each.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over East Rajasthan, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Marathawada and Konkan & Goa.
- Minimum Temperature Departures as on 18-11-2021: Minimum temperatures are markedly above normal (5.1°C or more) at most places over Madhya Maharashtra, Marathwada and Vidarbha; at a few places over Telangana and Gujarat; at isolated places over West Madhya Pradesh and Chhattisgarh; appreciably above normal (3.1°C to 5.0°C) at many places over Konkan & Goa; at a few places over East Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Karnataka; at isolated places over Rayalaseema; above normal (1.6°C to 3.0°C) at many places over Uttarakhand; at a few places over East Rajasthan and Odisha and at isolated places over West Uttar Pradesh and Tamilnadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Haryana, Chandigarh & Delhi; at isolated places over West Rajasthan; below normal (-1.6°C to -3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim

and near normal over rest parts of the country. Today, the Lowest minimum temperature of 5.6°C is reported at Churu (East Rajasthan) over the plains of the country.

Maximum Temperature Departures as on 17-11-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Vidarbha; at many places over Arunachal Pradesh and Assam & Meghalaya; at a few places over Sub-Himalayan West Bengal & Sikkim and at isolated places over East Madhya Pradesh, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. They were appreciably below normal (-3.1°C to -5.0°C) at many places over East Rajasthan and at isolated places over East Uttar Pradesh; below normal (-1.6°C to -3.0°C) at most places over West Rajasthan and Saurashtra & Kutch; at many places over Madhya Maharashtra, at a few places over Gujarat Region, West Uttar Pradesh, Gangetic West Bengal and West Madhya Pradesh and at isolated places over Odisha and near normal at rest parts of the country. Yesterday, the highest maximum temperature 34.5°C was reported at Mumbai SCZ (Konkan & Goa).

Weather Warning during the next 5 days (IMD)

18 November (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Tamilnadu, Puducherry & Karaikal; Heavy to very heavy rainfall with extremely heavy falls at isolated places over adjoining districts of Rayalaseema; Heavy to very heavy rainfall at isolated places over south Coastal Andhra Pradesh and South Interior Karnataka, and heavy rainfall at isolated places over Telangana, Coastal & North Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over East Rajasthan, West Madhya Pradesh, Marathwada, Madhya Maharashtra, Konkan & Goa, Telangana, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Rayalaseema, Karnataka and Coastal Andhra Pradesh & Yanam. Strong surface winds (speed 40-50 kmph) very likely over coastal districts of north Tamilnadu. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely to prevail over Southwest & adjoining Westcentral Bay of Bengal, along & off Tamilnadu-Puducherry-south Andhra Pradesh coasts and Gulf of Mannar. Rough to Very Rough Sea conditions very likely to prevail over the same region. Fishermen are advised not to venture into these areas. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Eastcentral Arabian Sea along & off Gujarat-Maharashtra-Goa-Karnataka coasts. Fishermen are advised not to venture into these areas.

- 19 November (Day 2): Heavy to very heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam and heavy rainfall at isolated places over Kerala & Mahe, Telangana, Rayalaseema and Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over East Rajasthan, West Madhya Pradesh, Marathwada, Madhya Maharashtra, Konkan & Goa, Telangana, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Rayalaseema, Karnataka and Coastal Andhra Pradesh & Yanam. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely to prevail over Southwest & adjoining Westcentral Bay of Bengal, along & off Tamilnadu-Puducherry-south Andhra Pradesh coasts, Gulf of Mannar, Comorin area and Maldives area. Fishermen are advised not to venture into these areas. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Eastcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 20 November (Day 3): Heavy rainfall likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Madhya Maharashtra, Konkan & Goa, Telangana, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Rayalaseema, Karnataka and Coastal Andhra Pradesh & Yanam. Strong winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over central Arabian Sea. Fishermen are advised not to venture into these areas.
- 21 November (Day 4): Thunderstorm accompanied with lightning likely at isolated places over Madhya Maharashtra, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Strong winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over central Arabian Sea. Fishermen are advised not to venture into these areas.
- 22 November (Day 5): Heavy rainfall likely at isolated places over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Madhya Maharashtra, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Strong winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over central Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 18 Nov to 26 Nov 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)

Punjab

Weather condition:

The maximum temperature during the week ranged between 28.0-28.6°C and minimum temperature ranged between 11.6-12.6 °C. The morning and evening relative humidity during the week varied between 88-95 and 23-36 %, respectively. The sunshine hours during the week ranged between 5.8-6.6 hrs/day. The evaporation rate ranged between 1.6-2.4 mm day-1. Daily average wind speed varied from 0.7-2.6 kmhr-1.

Contingency measure:

- Weather based Advisories:
- Field Crops: Farmers are advised not to burn paddy straw but plough it in the field.
- Wheat: Farmers are advised to start sowing of wheat varieties PBW 869, PBW 824, PBW 803, Sunehri (PBW 766), PBW 1 Chapati, DBW 222, DBW 187, HD 3226, Unnat PBW 343, Unnat PBW 550, PBW 1 Zinc, PBW 725, PBW 677, HD 3086, WH 1105, HD 2967 and durum wheat WHD 943 and PDW 291 under irrigated conditions. Treat 40 Kg seed with Raxil easy/ orius @13 ml (dissolve in 400 ml of water) or Tebuseed or Seedex or Exzole @ 40 g Or vitavax power @120 g or vitavax @ 80g. In termite infested fields, treat the seed with 1 g Cruiser 70 WS or 2 ml Neonix 20 FS or 4 ml Dursban/Ruban/Durmet 20 EC per kg seed and dry in shade. Seed treated with Neonix also controls smuts of wheat.
- Oilseeds: Transplanting of gobhi sarson is more profitable during the period than direct sowing. Use 60 days old seedlings of gobhi sarson (GSL-1) but for gobhi sarson hybrid hyola PAC 401 use 35-40 days old seedlings. It is optimum time for sowing of Raya varieties RCH 1, PHR 126, Giriraj, RLC 3, PBR 357, RLM 619, PBR 91, PBR 97 and African sarson PC 6. If sowing of Gobhi Sarson is likely to be delayed to November or mid December, then prepare the fine seed bed for sowing of nursery of gobhi sarson with 400 gram of seed for transplanting in one acre. Eight marla (200 sq m) is sufficient for transplanting in one acre.
- Sugarcane: For management of sugarcane pyrilla, use chlorpyriphos 20EC@600ml/acrein 400lt of water. Baru weed being alternate host of mite, remove it if growing around the sugarcane fields to prevent mite spread.
- Vegetables: It is the time for transplanting of late season varieties of cauliflower. It is best time for sowing of spinach, fenugreek, coriander, radish, turnip and main season varieties of pea i.e. Punjab 89 and Mithi Phali. This time is accurate for transplanting of tomato, brinjal, chilli and capsicum for early and higher yield.

Sowing of nursery of onion should be done @ 4 to 5 kg seed to raise seedlings for transplanting in an acre. · Use healthy disease free potato seed for planting. Disinfect the tuber with Emesto Prime @ 83 ml or Monceren @ 250 ml in 100 litres of water for 10 minutes to check black Scurf.

- Fruits: Regularly remove the suckers arising from the rootstock portion of the newly planted fruit plants and these plants should be supported with sticks to keep them erect post rainy season. For management of canker in citrus, spray streptocycline 50 g + 25 g copper sulphate in 500 litres of water per acre or Bordeaux mixture (2:2:250) during this month. The incidence of mango malformation can be reduced with spray of NAA (Naphthalene acetic acid) @ 100 in 500 litres of water per acre. Dissolve NAA in 200 ml of alcohol first. Powdery mildew in ber can be managed with spray of wettable sulphur @ 2.5 g per litre of water and black spot disease in ber can be managed with spray of Bordeaux mixture (2:2:250) during this month. For weed suppression, to reduce fruit drop and for better fruit yield, apply paddy straw mulch (5.0 ton per acre) after application of second split of urea in ber orchards. Juvenile orchards can be inter-cropped with rabi season crops such as wheat, barley, gram, peas etc.
- Animal Husbandary: In order to protect the animals from changed weather conditions, proper management should be carried out. For this the shed floor should be kept dry and clean along with a proper bedding of straw etc. Debudding and deworming should be carried out in younger animals. Foot and mouth disease vaccination need to be done if not carried out earlier. Animal should be fed according to the requirements of their age. The animals who are to calve within 15-20 days, they should be separated from other animals and should not be fed calcium or mineral mixture. Expert veterinary advice should be sought in case of any difficulty in calving. Compounded feed formula for animals should be changed according to the green fodder offered.

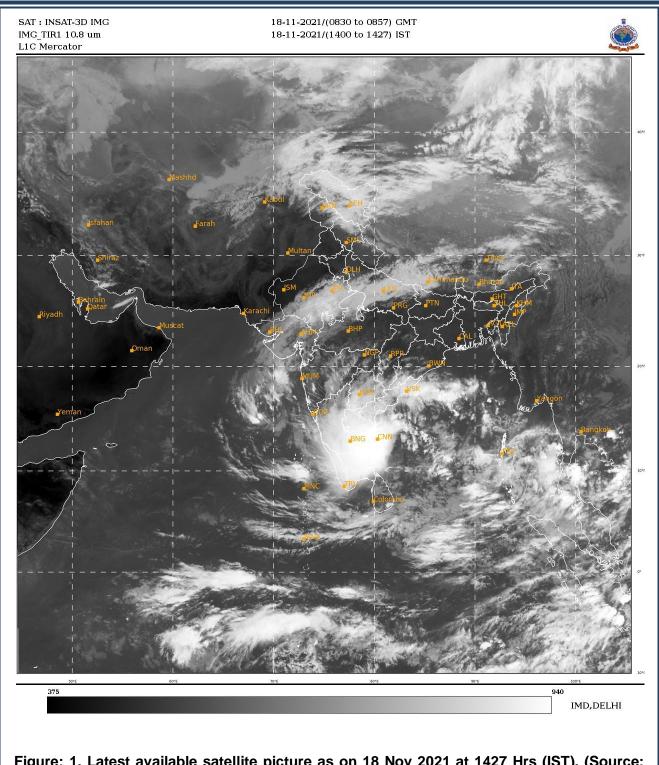
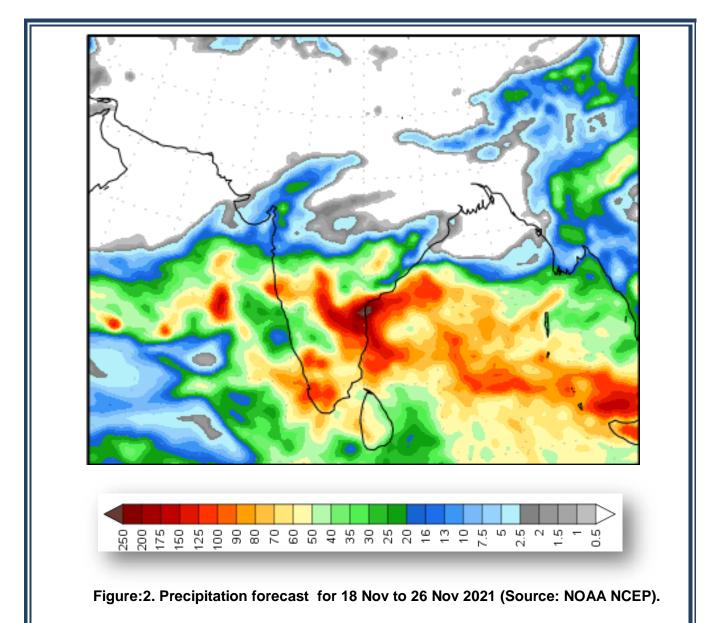


Figure: 1. Latest available satellite picture as on 18 Nov 2021 at 1427 Hrs (IST). (Source: IMD).



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