

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 21 November 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well Marked Low Pressure Area over Southwest Arabian Sea & neighbourhood persists. The associated cyclonic circulation extending upto 4.5 km above mean sea level also persists. It is very likely to move west-northwestwards and concentrate into a Depression during next 24 hours. Since the system is away from the Indian coast it will not cause any adverse weather over Indian region.
- Under the influence of the cyclonic circulation over Equatorial Indian Ocean and adjoining Southeast Bay of Bengal, a low pressure area has formed over Equatorial Indian Ocean and adjoining central parts of South Bay of Bengal. Associated cyclonic circulation extends upto mid tropospheric level. It is likely to concentrate into a depression over Southwest Bay of Bengal during next 48 hours and intensify further during subsequent 48 hours. It is very likely to move west-northwestwards towards Srilanka-south Tamil Nadu coast and reach near Tamil Nadu & Puducherry coast on 25th November, 2020.
- Under the influence of above system, rainfall activity over south Peninsula very likely to increase from 23rd November with fairly widespread to widespread rainfall accompanied with thunderstorm & lightning is very likely over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during 24th & 25th November, 2020 and scattered to fairly widespread rainfall accompanied with thunderstorm & lightning is very likely over south coastal Andhra Pradesh and Rayalaseema and Isolated to scattered rainfall accompanied with thunderstorm & lightning is very likely over Telangana and South Interior Karnataka during the same period. isolated extremely rainfall likely over Tamil Nadu, Puducherry & Karaikal on 24th & 25th November, 2020. Isolated heavy rainfall activity very likely over Kerala & Mahe during the same period and over South Interior Karnataka, South coastal Andhra Pradesh and Rayalaseema on 25th November, 2020.
- Cold wave at isolated places is likely over Saurashtra & Kutch during next 24 hours.
- 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 most places over Chhattisgarh; at many places over Gangetic West Bengal; at a few places over Andaman, Nicobar Islands, Arunachal Pradesh, Jharkhand, Odisha, Coastal Karnataka and Kerala & Mahe and at isolated places over Assam & Meghalaya, East Madhya Pradesh, Vidarbha, Telangana, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): Gangetic West Bengal, Coastal Karnataka, Kerala, Jharkhand and Marathwada.
- Dense to Moderate fog observed (0830 hours IST of today) (Visibility in meters); at isolated pockets over Himachal Pradesh, West Madhya Pradesh, East Uttar Pradesh, Jharkhand, Odisha, Gangetic West Bengal and Kerala & Mahe. Visibility: Shajapur and Alapuzha -25 m; Sundernagar -50 m; Fursatganj, Jamshedpur, Chandbali, Kolkata and Kochin -500 m.
- Maximum Temperature Departures as on 20-11-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Odisha and Marathwada; at a few places over Andaman & Nicobar Islands and at isolated places over Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over North Interior Karnataka and Telangana; at many places over Chhattisgarh, Madhya Maharashtra and Kerala; at a few places over Rayalseema, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Tamil Nadu, Puducherry & karaikal; at isolated places over Konkan & Goa. They were appreciably below normal (-3.1°C to - 5.0°C) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and below normal (-1.6°C to -3.0°C) at most places over Rajasthan, Punjab, Gujarat Region, Haryana, Chandigarh & Delhi and Utter Pradesh; at many places over Himachal Pradesh and Madhya Pradesh and at a few places over Uttrakhand, Sub-Himalayan West Bengal & Sikkim, Bihar and Saurashtra & Kutch and are near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.4°C was reported at Balasore (Odisha).
- Minimum Temperature Departures as on 21-11-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Chhattisgarh; at many places over Gangetic West Bengal, Jharkhand, Odisha, Chhattisgarh and Madhya Maharashtra; at a few places over Bihar, Vidarbha and Sub-Himalayan West Bengal & Sikkim and at isolated places over Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at many places over Telangana and Marathwada; at a few places over Andaman & Nicobar Islands, Konkan & Goa, Lakshadweep and Coastal Karnataka and at isolated

places over Coastal Andhra Pradesh. They are appreciably below normal (-3.1°C to - 5.0°C) at many places over Saurashtra & Kutch; at a few places over Haryana, Chandigarh & Delhi, Himachal Pradesh, Uttarakhand and Rajasthan and at isolated places over West Madhya Pradesh; below normal (- 1.6°C to - 3.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, East Uttar Pradesh, North Interior Karnataka and Gujarat region and at isolated places over Kerala & Mahe and Rayalaseema are near normal over rest parts of the country. The lowest minimum temperature of 5.5°C reported at Churu (West Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 21 November (Day 1): Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands. Thunderstorm with lightning very likely at isolated places over Odisha, Arunachal Pradesh, northeast Assam, Tripura and Andaman & Nicobar Islands. Cold wave very likely at isolated places over Kutch. Dense fog very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura. Strong winds (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely to prevail over Southwest & adjoining Westcentral Arabian Sea and central parts of South Bay of Bengal. Fishermen are advised not to venture into these areas and those who are at sea are advised to return to the coast.
- 22 November (Day 2): Thunderstorm with lightning very likely at isolated places over Andaman & Nicobar Islands, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh. Dense fog very likely at isolated places over Odisha and Nagaland, Manipur, Mizoram & Tripura. Strong winds (wind speed reaching 45-55 kmph gusting to 65 kmph) very likely to prevail over Southwest & adjoining Westcentral Arabian Sea and central parts of South Bay of Bengal. Fishermen are advised not to venture into these areas and those who are at sea are advised to return to the coast.
- 23 November (Day 3): Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad., Himachal Pradesh, Uttarakhand, Andaman & Nicobar islands, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense fog very likely at isolated places over Odisha and Nagaland, Manipur, Mizoram & Tripura. Strong winds (wind speed reaching 45-55 kmph gusting to 65 kmph) likely to prevail over Southwest and adjoining Westcentral Bay of Bengal along &

off Tamil Nadu coast and Gulf of Mannar. Fishermen are advised not to venture into these areas and those who are at sea are advised to return to the coast.

- 24 November (Day 4): Heavy to very rainfall with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal; heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places over Coastal Andhra Pradesh & Yanam and Kerala & Mahe. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Strong winds (wind speed reaching 55-65 kmph gusting to 75 kmph) likely to prevail over Southwest and adjoining Westcentral Bay of Bengal along & off Tamil Nadu-south Andhra coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.
- 25 November (Day 5): Heavy to very rainfall at a few places with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal; heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka and Kerala & Mahe. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Strong winds (wind speed reaching 45-55 kmph gusting to 65 kmph) likely to prevail over Southwest and adjoining Westcentral Bay of Bengal along & off Tamil Nadu-south Andhra-Kerala coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 21 to 29 November 2020 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 22.4-26.8°C and minimum temperature ranged between 9.2-14.6°C. The morning and evening relative humidity during the week varied between 69-97 and 31-70%, respectively. The sunshine hours

during the week ranged between 0.0-9.1 hrs/day. The evaporation rate ranged between 1.2-2.0 mm day⁻¹. Daily average wind speed varied from 1.1-9.2 kmhr⁻¹

Contingency measure:

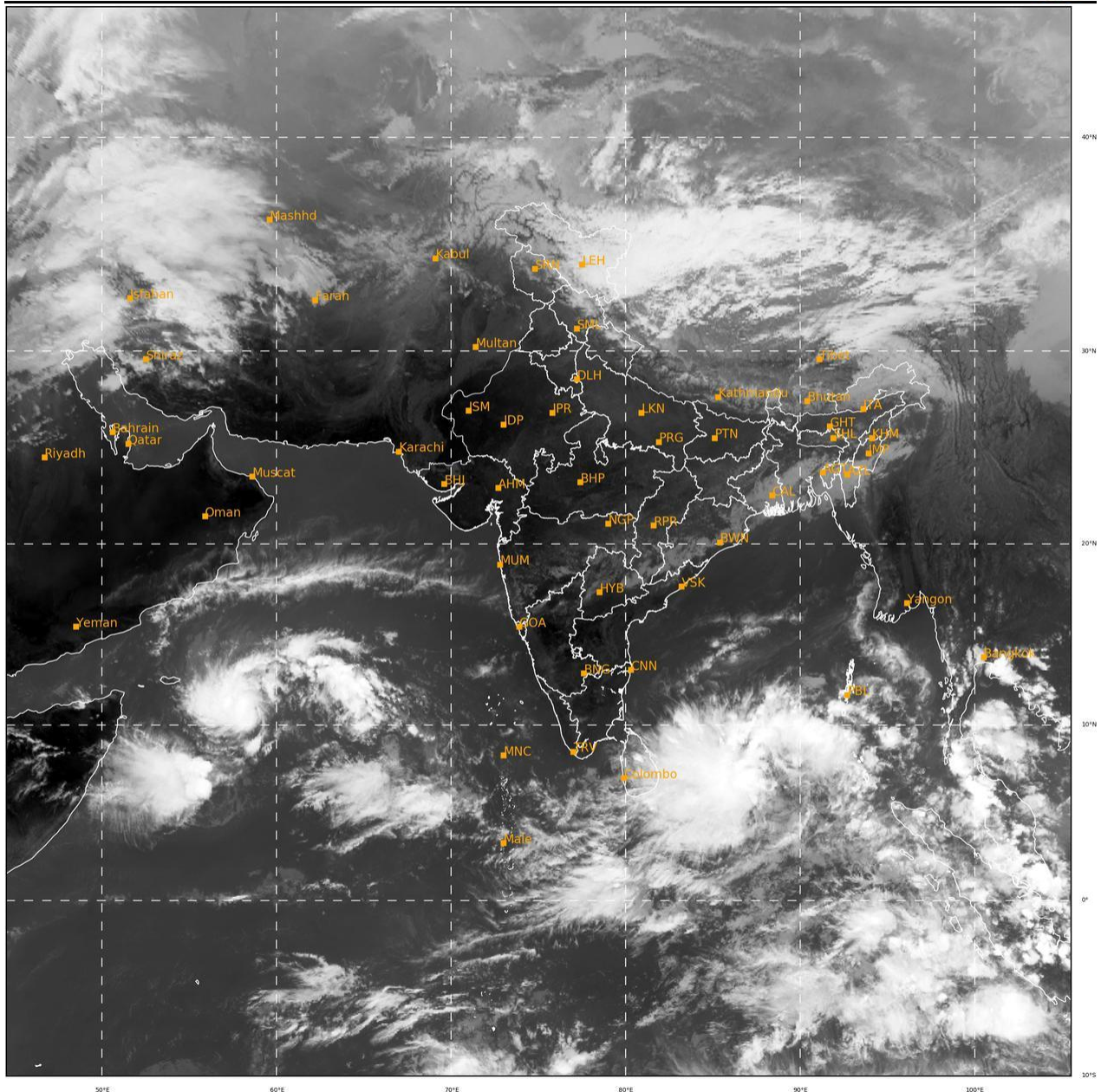
- Crop Conditions and Contingency Plan: Generally, crops are in good condition.
- General Advisory in View of COVID -19: Farmers are requested to follow social distancing and regularly wash hands with soap and water for 20 seconds. · Do not exchange implements with fellow workers or farmers. · Take proper diet. · Sanitize the implements and machinery before use. If anyone feels fever, cough and difficulty in breathing he or she should consult a doctor. All farmers and farm workers are requested to download Aarogya Setu mobile application in their mobile phone
- Agromwt Advisories: Sowing of rabi crops should also be completed as soon as possible.
- Field Crops Wheat: It is optimum time to sow wheat variety Unnat PBW 550. Farmers are advised to complete sowing of long duration varieties of wheat like Unnat PBW 343, PBW 1 Zn, PBW 725, PBW 677, HD 3086, WH 1105, PBW 621, HD 2967, WHD 943 and PDW 291 during the period. · Prefer to use happy seeder for the sowing of wheat crop. · For control of loose smut of wheat, 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. · Farmers of sub-mountainous areas can sow yellow rust resistant varieties like PBW 725, Unnat PBW 550, PBW 752 and PBW 660 during this time.
- Oilseeds: Transplanting of Gobhi sarson and African sarson is more profitable during the period than direct sowing. Use 60 days old seedlings of gobhi sarson (GSL-1) and 30 days old seedling of African sarson but for gobhi sarson hybrid hyola PAC 401 use 35-40 days old seedlings. To early sown raya and gobhi sarson, apply 45 kg urea per acre with first irrigation.
- Vegetables: It is optimum time to sow root crops like radish, turnip and carrot. Use 2 kg seed for turnip and 4 kg seed for carrot and radish per acre. Before sowing, treat the seed with Captan or Thiram @ 3 g per kg of seed. It is the optimum time for transplanting of nursery of tomato, brinjal. Complete sowing of peas and hand hoeing should be done to control weeds. Complete sowing nursery of onion hybrid POH-1 and varieties PRO-7, Punjab Naroya, PYO-1 and PWO-2. Rogue out virus affected potato plants from seed plots. Spray potato crop with Indofil M-45/Mass M-45/Markzeb/Antracol/ Kavach @ 500- 700 g or Copper Oxychloride 50 WP/Mark

copper @ 750- 1000 g/acre in 250- 350 litres of water during the period before the appearance of late blight of potato followed by 5 more sprays at 7 days interval.

- Fruits: The harvesting of Daisy variety of mandarin should be completed during the period; otherwise, the delay in harvesting will result in drying up of juice vesicles. For the control of fruit drop prior to ripening of ber fruits, give second spray of NAA (Naphthalene acetic acid @15g /500 liters of water) during the period. NAA should be dissolved in a small quantity of alcohol or spirit and then the required volume of water should be added.

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

21-11-2020/(0800 to 0827) GMT
21-11-2020/(1330 to 1357) IST



376

952

IMD, DELHI

Figure: 1. Latest available satellite picture as on 21 November 2020 at 1357 Hrs (IST). (Source: IMD).

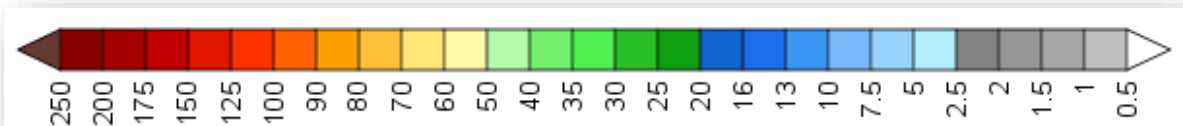
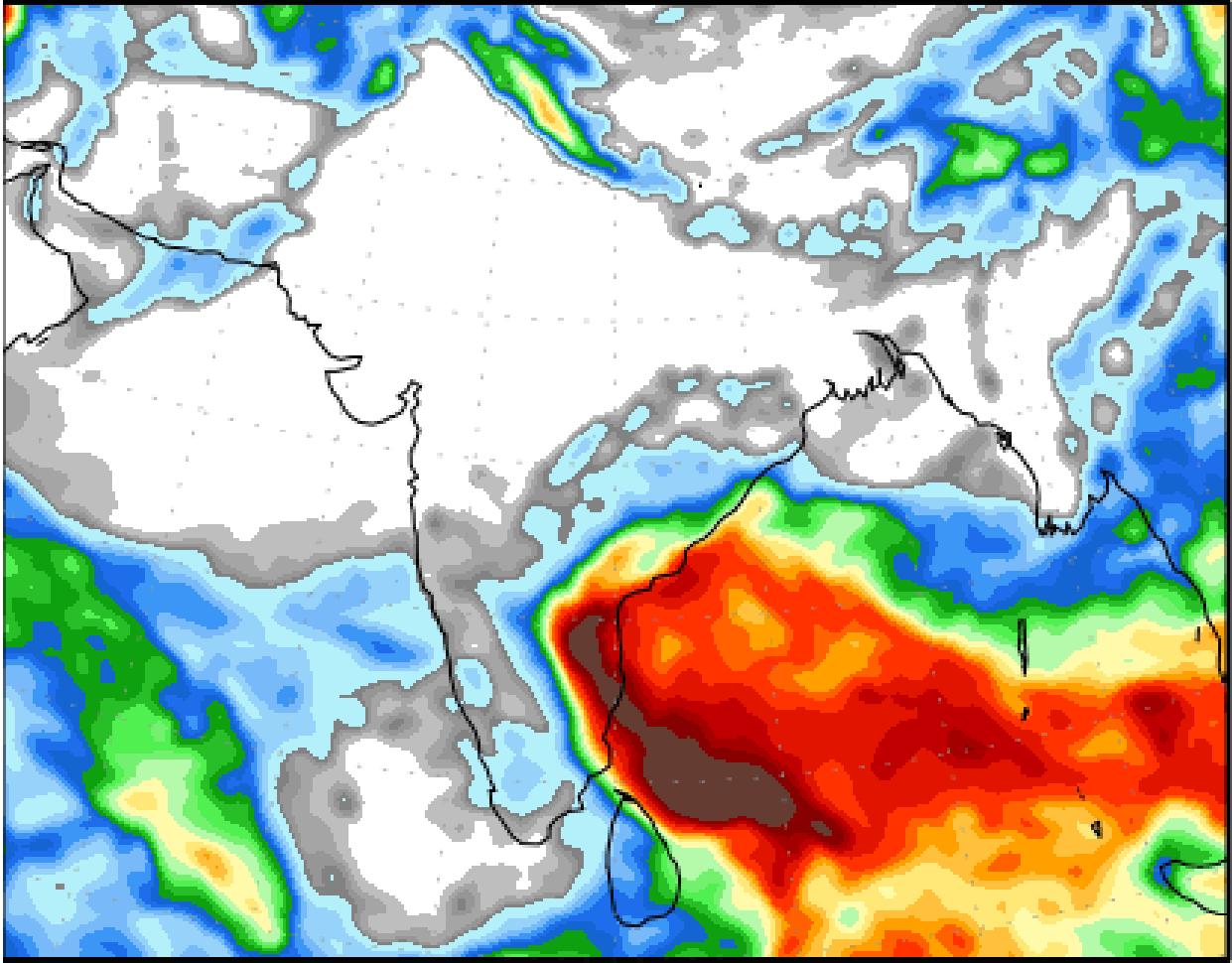


Figure:2. Precipitation forecast for 21 to 29 November 2020 (Source: NOAA NCEP).

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.