

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 22 October 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The withdrawal line of the Southwest Monsoon continues to pass through Lat. 27°N/Long.90°E, Cooch Behar, Sriniketan, Ranchi, Pendra Road, Mandla, Narsinghpur, Indore, Vallabh Vidyanagar, Porbandar, Lat.21°N/Long.65°E and Lat.21°N/Long.60°E.
- Conditions continue to remain favourable for further withdrawal of Southwest Monsoon from remaining parts of Jharkhand, Madhya Pradesh and Gujarat, some parts of Chhattisgarh, Odisha and north Maharashtra during next 3-4 days.
- The Well Marked Low Pressure Area over Westcentral Bay of Bengal & neighbourhood has concentrated into a Depression over Northwest & adjoining Westcentral Bay of Bengal and lay centred at 0830 hrs IST of today, the 22nd October, 2020 near Latitude 18.7°N & Longitude 87.0°E about 180 km south-southeast of Paradip (Odisha), 350 km south-southeast of Sagar Islands (West Bengal) and 490 km south-southwest of Khepupara (Bangladesh). It is very likely to intensify further into a Deep Depression during next 24 hours. It is very likely to move north-northeastwards and cross West Bengal & adjoining Bangladesh coast as a Deep Depression between Sagar Islands (West Bengal) and Khepupara (Bangladesh) by 23rd October afternoon.
- Under the influence of above systems: Fairly widespread to widespread rainfall with isolated heavy fall very likely over Coastal Odisha and Gangetic West Bengal on 22nd & 23rd and over Northeast India from 22nd to 24th October, 2020. Isolated very heavy rainfall is also likely over coastal Odisha and south Assam & Meghalaya today and over West Bengal during 22nd-23rd October, 2020. Also, isolated Heavy to very heavy rainfall with extremely heavy falls over Tripura on 22nd and Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya on 23rd October, 2020.
- Fishermen are advised not to venture into Westcentral Bay of Bengal today; North Bay of Bengal during 22nd-23rd; along & off north Andhra Pradesh-south Odisha coasts today; along & off north Odisha-West Bengal-Bangladesh coasts during 22nd-23rd October, 2020.

- 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 Nagaland, Manipur, Mizoram & Tripura and Coastal Karnataka; at many places over Konkan & Goa, South Interior Karnataka, Kerala & Mahe, Rayalseema; at a few places over Saurashtra & Kutch, Odisha, Madhya Maharashtra, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands and Lakshadweep and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Rajasthan, Gujarat Region, West Madhya Pradesh, Vidarbha, Marathwada, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and Telangana.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, Odisha and Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Nagaland and Manipur, Mizoram & Tripura.
- Maximum Temperature Departures as on 21-10-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Arunachal Pradesh, at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Assam & Meghalaya; at isolated places over Tamil Nadu, Puducherry & Karaikal, above normal (1.6°C to 3.0°C) at most places over Bihar, at many places over West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and West Rajasthan; at a few places over Himachal Pradesh, East Uttar Pradesh, West Madhya Pradesh, Vidarbha and Haryana, Chandigarh & Delhi, at isolated places over Gangetic West Bengal, Saurashtra & Kutch, Gujarat Region and Odisha. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Coastal Andhra Pradesh & Yanam and below normal (-1.6°C to -3.0°C) at most places over Coastal Karnataka and Rayalseema; at many places over North Interior Karnataka, at a few places over Telangana and at isolated places over Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.0°C was reported at Phalodi and Barmer (West Rajasthan).
- Minimum Temperature Departures as on 22-10-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at many places over East Rajasthan; at a few places

over West Rajasthan and above normal (1.6°C to 3.0°C) at most places over Gujarat Region, Bihar, Jharkhand, Sub-Himalayan west Bengal & Sikkim, Madhya Maharashtra, and Marathwada; at many places over Saurashtra & Kutch, Arunachal Pradesh, Assam & Meghalaya, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Konkan & Goa and Andaman & Nicobar; at a few places over Himachal Pradesh, East Uttar Pradesh, Odisha, Vidarbha, Chhattisgarh and Rayalseema and at isolated places over East Madhya Pradesh, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Telangana and near normal over rest parts of the country. Today, the lowest minimum temperature of 14.5°C is reported at Amritsar (Punjab) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 22 October (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Tripura; heavy to very heavy rainfall very likely at isolated places over Gangetic West Bengal, Odisha and Assam & Meghalaya and heavy rainfall at isolated places over Rayalseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and north Kerala & Mahe. Thunderstorm with lightning very likely at isolated places over West Madhya Pradesh, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Madhya Maharashtra, Konkan & Goa, Marathawada, north Coastal Andhra Pradesh & Yanam, Rayalseema, Coastal & South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 40-50 kmph gusting 60 kmph) over North & adjoining Central Bay of Bengal and along & off north Andhra Pradesh coast and Eastcentral Arabian Sea; (speed reaching 45-55 kmph gusting 65 kmph) along & off Odisha-West Bengal-Bangladesh coasts. Sea Condition will be rough to very rough over North & adjoining Central Bay of Bengal and along & off north Andhra Pradesh-Odisha -West Bengal-Bangladesh coasts. Fishermen are advised not to venture into these areas.
- 23 October (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; heavy to very heavy rainfall at isolated places over Gangetic West Bengal and heavy rainfall at isolated places over Odisha, Coastal & South Interior Karnataka and north Kerala & Mahe. Thunderstorm with lightning very likely at isolated places over Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Rayalseema, Coastal & South Interior Karnataka, Kerala & Mahe and Tamil

Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 50-60 kmph gusting 70 kmph) over North & adjoining Central Bay of Bengal and along & off north Odisha-West Bengal-Bangladesh coasts. Sea Condition will be rough to very rough over North & adjoining Central Bay of Bengal and along & off north Odisha-West Bengal-Bangladesh coasts. Fishermen are advised not to venture into these areas.

- 24 October (Day 3): Heavy rainfall very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Karnataka. Thunderstorm with lightning very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal & South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- 25 October (Day 4): Heavy rainfall likely at isolated places over Coastal and South Interior Karnataka. Thunderstorm with lightning likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- 26 October (Day 5): Heavy rainfall likely at isolated places over Nagaland, Manipur, Mizoram & Tripura and Coastal & South Interior Karnataka. Thunderstorm with lightning likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 22 to 30 October 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)

Maharashtra-Vidarbha

Weather condition:

Weekly average means (42 MW) at AICRPAM Akola centre: T max 32.9 °C (normal 33.3°C), T min 21.4°C (normal 18.1°C). RH I 89% (normal 78 %), RH II 57% (normal 37%). Evaporation rate 4.2 mm (normal 4.8 mm), Wind speed 1.3 km/hr (normal 3.6 km/hr) and BSH 5.5 hrs (normal 7.9 hrs). Maximum temperature across the week was 0.4°C below normal with a deviation of -2.3 to +1.1°C from normal. Minimum temperature across the week 3.3°C above normal with a deviation of 2.6 to 3.9°C from normal.

Contingency measure:

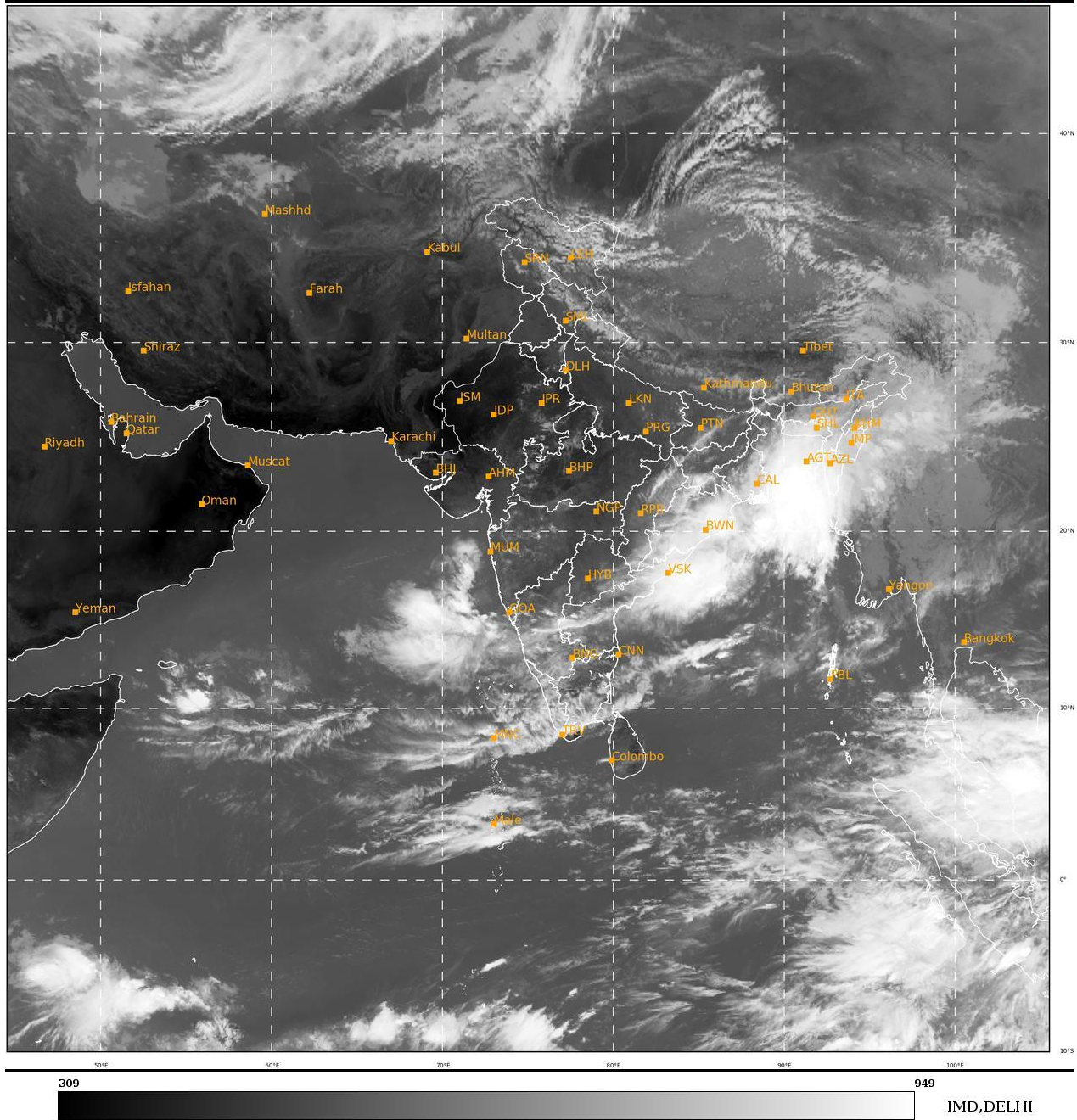
- IMD forecast indicates isolated light to moderate rains with spatial distribution at one to two places on 20, 21, 22 October while dry during 23-24 October. Farmers are advised to regular supervision of crop field should be carried out for any incidence of pests or diseases. Undertake plant protection sprays/measures in clear & calm weather in case of infestation of pest or disease increased in cloudy weather. Follow safety measures and use protective aids while handling and spraying pesticides. Undertake intercultural operations (weeding/hoeing) in cotton/pigeonpea to control weeds and improve surface tilth for better rain water conservation. Drain out excess water from crop fields and orchards under rainfall situation.
- The threshing of soybean for seed purpose may be done when the seed moisture is about 13 to 15%. Farmers are advised to thresh the soybean at 350 to 400 RPM thresher to avoid the loss of seed germination. Farmers are advised to store soybean seed preferably in Jute bags only up to 5 feet stacking. Further the bags should be inter-changed in order to reduce the moisture level (10 to 12%) in all the bags.
- Picking of cotton from bursting bolls should be done and store the harvested cotton at safe place. Spray Carbendazim @ 20 g per 10 lit to avoid infestation of fungal diseases in cotton crop due to cloudy weather and high humidity. Spray of Streptocycline @ 1 g + copper oxychloride 50 WP @ 25 g per 10 lit is recommended for management of Bacterial blight in cotton.
- In pigeonpea install pheromone traps at a distance of 50 m@ 5/ha for monitoring of Helicoverpa. Also it is observed that leaves of the plant becomes yellowish due to excess rainfall. For the management, take a spray of 19:19:19 soluble fertilizers @ 40-50 gm per 10 liter of water.
- Possibly sowing of rainfed chickpea (Jaki 9218, PDKV Kanchan, Vijay, Vishal, ICCV-2, and ICCV-10) be completed this week. Wilt resistant varieties include JAKI 9218, Vishal, ICCV-2, ICCV-10 etc. Irrigated chickpea can normally be sown by October

end or latest by 10 November. Seed treatment with Rhizobium + PSB (each 25 g / kg seed) and biofungicide Trichoderma @ 4 g per kg seed is advisable. Recommended fertilization for rainfed sole crop is @ 20:40:40 kg NPK/ha at sowing.

- Possibly sowing of rainfed rabi sorghum (PKV Kranti) and rainfed linseed (PKV-NL-260, NL-97) be completed by this week.
- For control of fruit sucking moth in orange, dispose all fallen and decaying fruits which attract the moths, create smoke late evening by burning dry grasses and leaves which can repel and drive away the pest. Set up light traps and food lures (pieces of fruits) to attract adult moths. For control of fruit sucking moth in orange, dispose all fallen and decaying fruits which attract the moths, create smoke late evening by burning dry grasses and leaves which can repel and drive away the pest. Set up light traps and food lures (pieces of fruits) to attract adult moths.
- During second fortnight of October there is chance of attack of powdery mildew disease on chilli crop, for its prevention spray the chilli crop with Sulphur (water soluble) @ 25 gm/10 ltr of water. Sowing of coriander, spinach, fenugreek, radish, carrot, dolichos bean and ivy gourd can be undertaken during this period.
- Ensure protection of farm animals during thunderstorm/lightning. Also Screening of farm livestock, draught/milch animals for diseases be considered and they be vaccinated for foot and mouth disease (FMD).

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator

22-10-2020/(0800 to 0827) GMT
22-10-2020/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 22 October 2020 at 1357 Hrs (IST).
(Source: IMD).**

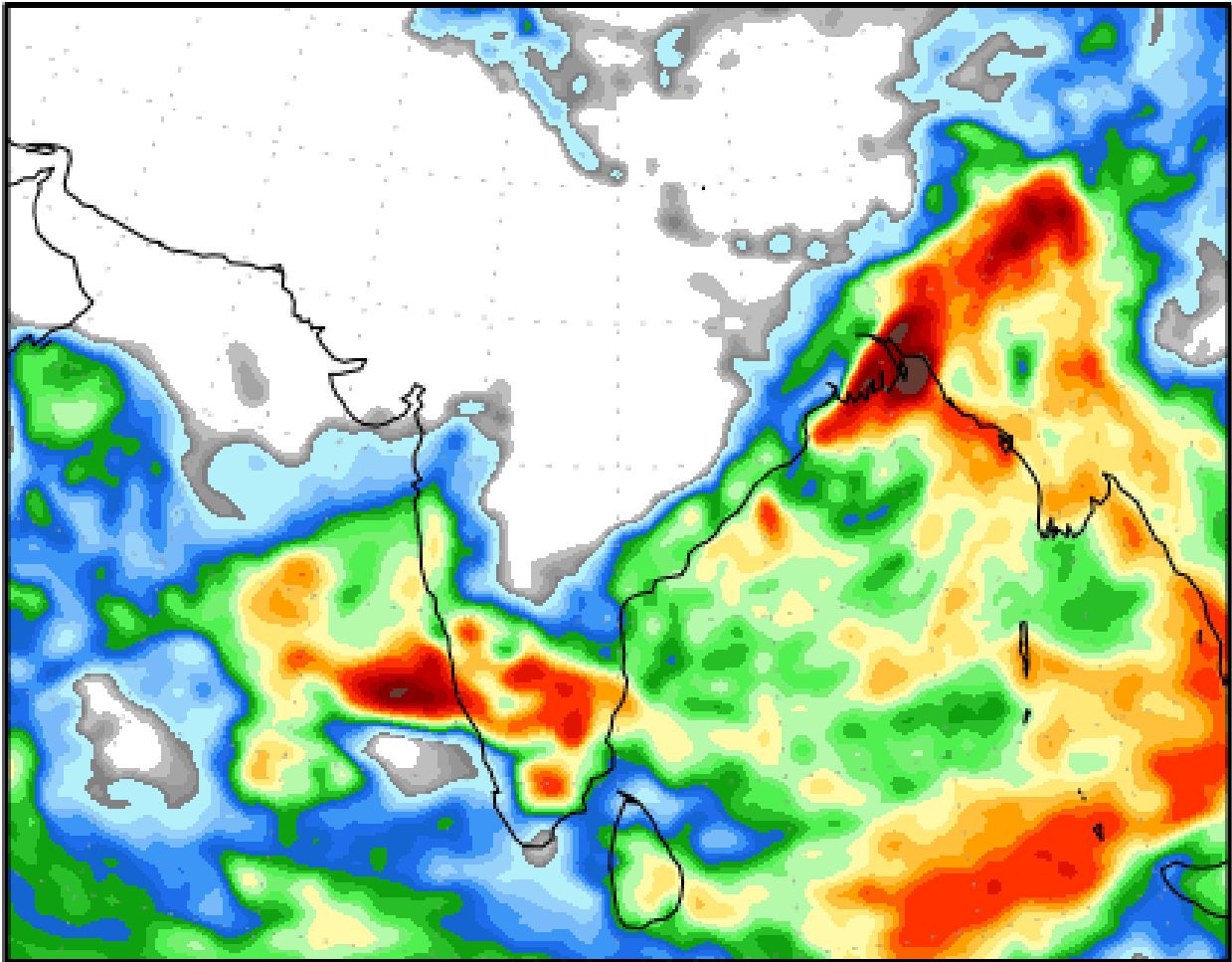


Figure:2. Precipitation forecast for 22 to 30 October 2020 (Source: NOAA NCEP).

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.