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

# **Daily Crop Weather Information as on 20 October 2020**

Attention: Rajiv Maheshwari, OSD, ICAR

## **Significant Weather Features (IMD)**

- The withdrawal line of the Southwest Monsoon continues to pass through Lat. 28°N/Long.83°E, Faizabad, Fatehpur, Nowgong, Rajgarh, Ratlam, Vallabh Vidyanagar, Porbandar, Lat. 21°N/Long.65°E and Lat. 21°N/Long.60°.
- Conditions are becoming favourable for further withdrawal of Southwest Monsoon from remaining parts of Uttar Pradesh, Bihar, northern parts of West Bengal and Sikkim, Jharkhand, remaining parts of of Madhya Pradesh, northern parts of Chhattisgarh, remaining parts of Gujarat state and north Arabian Sea, parts of central Arabian Sea and northern parts of Maharashtra during next 2-3 days.
- Under the influence of cyclonic circulation over central parts of Bay of Bengal & neighbourhood, a Low pressure area has formed over the same region with associated cyclonic circulation extends upto 7.6 km above mean sea level. It is likely become more marked. It is likely to move initially northwestwards during next 48 hours and then north-northeastwards during subsequent 3 days. Under the influence of this system:
- Fairly widespread to widespread rainfall with isolated heavy falls very likely over Coastal Andhra Pradesh, Rayalaseema, Telangana, Odisha during next 3 days; over Gangetic West Bengal on 22nd and over Northeast India from 22nd to 24th October, 2020. Heavy to very heavy rainfall at isolated places also very likely over Coastal Andhra Pradesh on 20th; over Odisha on 22nd October, 2020. Also, isolated Heavy to very heavy rainfall with extremely falls over Nagaland, Manipur, Mizoram & Tripura on 23rd and over Assam & Meghalaya on 24th October, 2020.
- Fishermen are also advised not to venture into central parts of Bay of Bengal during 20th-21st and over northern parts of central Bay of Bengal and adjoining north Bay of Bengal during 22nd-23rd and over northeast & adjoining northwest Bay of Bengal on 24th October, 2020.

- Fairly widespread to widespread rainfall with isolated heavy falls very likely over Karnataka during next 2-3 days; over Tamilnadu, Puducherry & Karaikal during next 2 days and over Kerala & Mahe 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 1730 hours IST of today): at most places over Coastal Andhra Pradesh & Yanam; at many places over Andaman & Nicobar Islands, Rayalaseema, Kerala & Mahe, Telangana and North Interior Karnataka; at a few places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha, Madhya Maharashtra, Marathawada, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal and at isolated places over Assam & Meghalaya, Gujarat state, West Bengal & Sikkim, Rajasthan, West Madhya Pradesh, Konkan & Goa, Vidarbha, Chhattisgarh and Coastal Karnataka.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Gangetic West Bengal, Odisha, West Rajasthan, West Madhya Pradesh, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Marathwada, Chhattisgarh, Telangana, Rayalaseema, Tamil Nadu and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 19-10-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and East Madhya Pradesh; at isolated places over Uttar Pradesh, West Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura and West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at most places over Punjab and Bihar; at many places over Uttarakhand and Jharkhand; at a few places over Haryana, Chandigarh & Delhi, West Rajasthan, Vidarbha, Odisha, Telangana, Assam & Meghalaya, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and at isolated places over South Interior Karnataka and Coastal Andhra Pradesh & Yanam. They were below normal (-1.6°C to -3.0°C) at many places over Saurashtra & Kutch; at a few places over East Rajasthan and at isolated places over Gujarat region, Madhya Maharashtra and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, The highest maximum temperature of 37.8°C was reported at Churu (West Rajasthan).
- Minimum Temperature Departures as on 20-10-2020: Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Gujarat, East

Rajasthan and West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at many places over Sub-Himalayan West Bengal & Sikkim, Chhattisgarh, Vidarbha and West Rajasthan; at a few places over Arunachal Pradesh, Gangetic West Bengal, East Madhya Pradesh and Assam & Meghalaya and at isolated places over Odisha; above normal (1.6°C to 3.0°C) at many places over Madhya Maharashtra, Marathawada, Telangana and Rayalaseema; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Interior Karnataka, and Lakshadweep and at isolated places over Uttar Pradesh, Konkan & Goa, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at a few places over Haryana, Chandigarh & Delhi; at isolated places over Punjab and near normal over rest parts of the country. The lowest minimum temperature of 12.6°C reported at Hissar (Haryana) over the plains of the country

#### Weather Warning during the next 5 days (IMD)

- 20 October (Day 1): Heavy to very heavy rainfall very likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Odisha, Telangana, Karnataka and Kerala & Mahe. Thunderstorm with lightning very likely at isolated places over Vidarbha, West Madhya Pradesh, Gangetic West Bengal, Odisha, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 40-50 kmph gusting 60 kmph) very likely over central parts of Bay of Bengal. Fishermen are advised not to venture into these areas.
- 21 October (Day 2): Heavy rainfall very likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam, Madhya Maharashtra, south Konkan & Goa, Telangana, Rayalaseema, Mizoram, Tamil Nadu, Puducherry & Karaikal and Karnataka. Thunderstorm with lightning very likely at isolated places over Vidarbha, Gangetic West Bengal, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 40-50 kmph

- gusting 60 kmph) very likely over central parts of Bay of Bengal. Fishermen are advised not to venture into these areas.
- 22 October (Day 3): Heavy to very heavy rainfall very likely at isolated places over Odisha and heavy rainfall at isolated places over Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana, Coastal Karnataka, Coastal Andhra Pradesh & Yanam and Rayalaseema. Thunderstorm with lightning very likely at isolated places over Gangetic West Bengal, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 40-50 kmph) very likely over northern parts of central Bay of Bengal and adjoining northeast & northwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 23 October (Day 4): Heavy to very heavy rainfall with extremely falls at isolated places likely over Nagaland, Manipur, Mizoram & Tripura; heavy to very heavy rainfall at isolated places over Assam & Meghalaya; heavy rainfall at isolated places over Odisha and Coastal Karnataka. Thunderstorm with lightning likely at isolated places over Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Squally Wind (speed reaching 40-50 kmph) likely over northern parts of central Bay of Bengal and adjoining northeast & northwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 24 October (Day 5): Heavy to very heavy rainfall with extremely falls at isolated places likely over Assam & Meghalaya and heavy to very heavy rainfall at isolated places over Nagaland, Manipur, Mizoram & Tripura. Thunderstorm with lightning likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Squally Wind (speed reaching 40-50 kmph) likely over Northeast Bay of Bengal and adjoining northwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 20 to 28 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)**

# Punjab

#### Weather condition:

The maximum temperature during the week ranged between 33.4-35.0°C and minimum temperature ranged between 17.4-19.0 °C. The morning and evening relative humidity during the week varied between 90-93 and 28-40 %, respectively. The sunshine hours during the week ranged between 6.0-9.4 hrs/day. The evaporation rate ranged between 3.4-4.0 mm day-1. Daily average wind speed varied from 1.4-2.5 kmhr-1.

### **Contingency measure:**

- IMD WEATHER FORECAST: Clear weather is likely to prevail in the coming days. Weather parameters are likely to remain as follows: Maximum Temperature will remain 34.0-35.0 °C and Minimum Temperature 17.0-18.0 °C.
- 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
- AGROMET ADVOSIRIES: As clear weather is expected during coming days, Farmers are advised to do harvesting of crops accordingly
- FIELD CROPS WHEAT: Farmers are advised to make arrangements of sowing of wheat varieties Unnat PBW 343, Unnat PBW 550, PBW 1 Zinc, PBW 725, PBW 677, HD 3086, WH 1105, PBW 621, HD 2967 and durum wheat WHD 943 and PDW 291 under irrigated conditions.
- OILSEEDS: ·It is optimum time for the sowing of Gobhi Sarson varieties GSC 7, GSC 6, Hyola PAC 401, GSL 2 and GSL 1. Farmers can start sowing of Raya varieties Giriraj, RLC 3, PBR 357, RLM 619, PBR 91, PBR 97.
- SUGARCANE: For management of sugarcane pyrilla, use chlorpyriphos20EC@600ml/acre in 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 best time for sowing of late season cauliflower, carrot, broccoli, Chinese cabbage, spinach. The climatic conditions are ideal for sowing early

varieties of potato. Complete sowing of ?desi? varieties of radish (Punjab Safed Mooli-2), turnip (L-1) and carrot (Punjab Black Beauty and PC 161). To control brinjal shoot and fruit borer, spray 3-4 times at 14 days interval using 100 lt of water per acre with  $80\ ml$  Coragen 18.5SC or 80g Proclaim 5SG. Do not ratio nthe brinjal crop. FRUITS · Apply the second dose of urea 500g and SSP 1250 g and 750 g muriate of potash fertilizers per plant (Fully grown) in guava orchards. For management of mango malformation, prune the malformed shoots of mango tree and destroy them, spary 100 g Napthalene Acetic Acid in 500 liters of water per acre. Dissolve NAA in 100-150 ml alcohol before mixing in water.

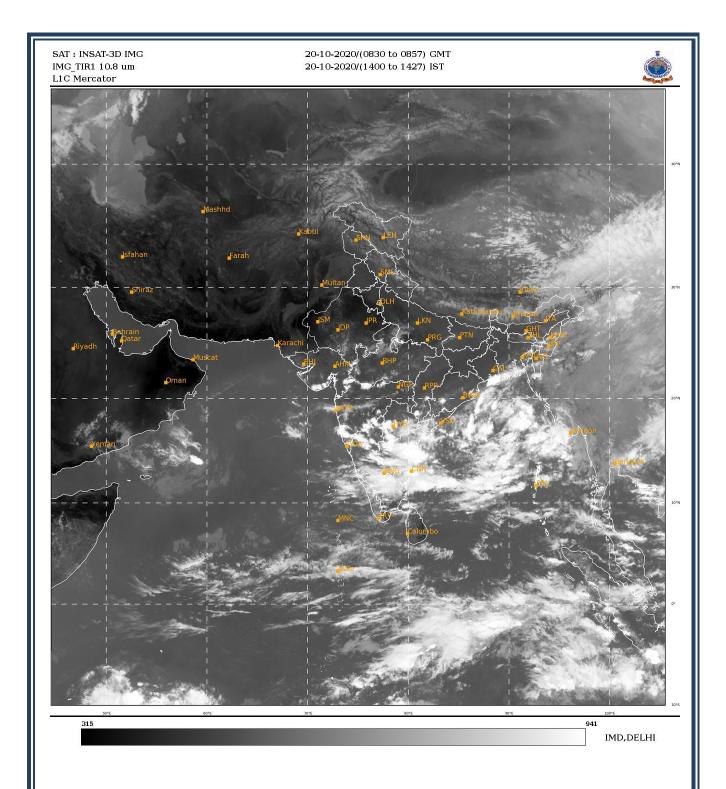
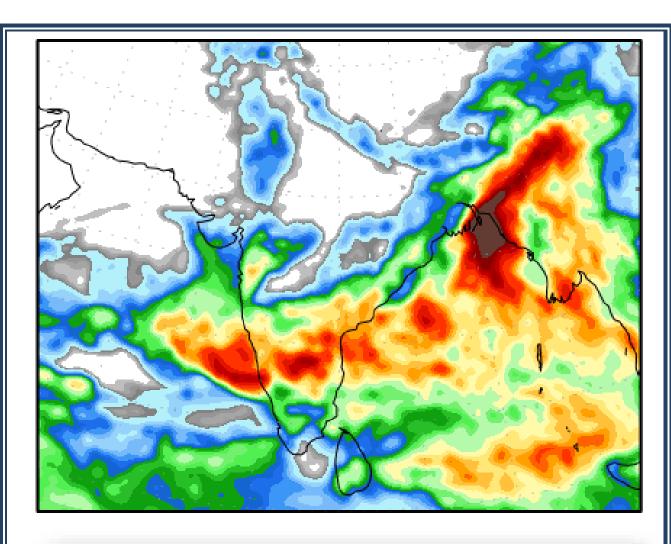


Figure: 1. Latest available satellite picture as on 20 October 2020 at 1427 Hrs (IST). (Source: IMD).



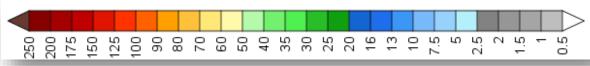


Figure: 2. Precipitation forecast for 20 to 28 October 2020 (Source: NOAA NCEP).

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, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.