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

# **Daily Crop Weather Information as on 23 November 2020**

Attention: Rajiv Maheshwari, OSD, ICAR

#### Significant Weather Features (IMD)

- The Depression over southwest & adjoining southeast Bay of Bengal moved northwestwards with a speed of 25 kmph during past 06 hours and lay centered at 0830 hours IST of 23rd November, 2020 over the same region near Latitude 9.5°N and Longitude 84.2°E, about 550 km east-southeast of Puducherry and 590 km southeast of Chennai. It is very likely to intensify into a cyclonic storm during next 24 hours. It is very likely to move northwestwards and cross Tamil Nadu and Puducherry coasts between Karaikal and Mamallapuram around 25th November 2020 afternoon as a severe cyclonic storm with a wind speed of 100-110 kmph gusting to 120 kmph.
- Under its influence, the rainfall activity is likely to increase over south peninsular India from today the 23rd November onwards with fairly widespread to widespread rainfall/thunderstorm activity over Tamil Nadu, Puducherry & Karaikal during 24th to 26th November and over south Coastal Andhra Pradesh, Rayalseema and Telangana during 25th to 26th November, 2020. Isolated extremely heavy rainfall activity also very likely over Tamil Nadu & Puducherry during 24th & 25th and over south Coastal Andhra Pradesh & Rayalseema on 25th & 26th and over Telangana on 26th November, 2020.
- Fishermen are advised not to venture into southwest and adjoining westcentral & southeast Bay of Bengal, Gulf of Mannar and along & off Tamil Nadu, Puducherry and south Andhra Pradesh coasts during 23rd to 25th November. Also the fishermen out at the Sea are advised to return to the coast and avoid the above sea areas.
- The Cyclonic Storm "GATI" over north Somalia moved nearly westwards with a speed of about 08 kmph during past 06 hours and lay centered at 0830 hrs IST of 23rd November 2020 over the same region near Latitude 10.5° N and Longitude 49.7°E, about 180 km westsouthwest of Ras Binnah (Somalia). It is very likely to move nearly westwards and weaken gradually into a Deep Depression during next 03 hours and into a depression during subsequent 06 hours. Since the system is away from Indian coast, no adverse weather will be caused by this system over

- Indian coast. However fishermen are advised not to venture into Gulf of Aden and southwest Arabian Sea along & off north Somalia coast till evening of today.
- 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 a many places over Arunachal Pradesh; at a few places over Andaman & Nicobar islands and at isolated places over Assam & Meghalaya, Nagaland, Manipur & Tripura, Mizoram, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal.
- Thunder Storm with Lightening observed (0830 hrs IST of yesterday to 0830 hrs IST Today): Arunachal Pradesh.
- Moderate to Dense fog observed (during 0830 hours IST of yesterday to 0830 hours IST of today) (Visibility in meters;) in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, East Utter Pradesh and Assam & Meghalaya. Visibility: Gulmarg-200, Ludhiyana-500, Fursatganj-500 and Shillong-500.
- Maximum Temperature Departures as on 22-11-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh & Yanam, Rayalseema and Kerala & Mahe; at many places over North Interior Karnataka, Madhya Maharashtra and Telangana; at a few places over Tamil Nadu, Puducherry & Karaikal and Chhattisgarh and at isolated places over Konkan & Goa. They were appreciably below normal (-3.1°C to 5.0°C) at many places over Bihar and East Utter Pradesh; at a few places over West Madhya Pradesh and below normal (-1.6°C to -3.0°C) at most places over West Utter Pradesh and West Madhya Pradesh; at many places over Himachal Pradesh, Punjab, Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, East Rajasthan and Haryana, Chandigarh & Delhi; at a few places over Gangetic west Bengal, West Rajasthan, Andaman & Nicobar Islands and Assam & Meghalaya and at isolated places over Odisha and were near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.2°C was reported at Sholapur (Madhya Maharashtra).
- Minimum Temperature Departures as on 23-11-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Madhya Maharashtra and Marathwada; above normal (1.6°C to 3.0°C) at many places over North Interior Karnataka; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Telangana, Andaman & Nicobar

and Lakshadweep; at isolated places over Rayalseema. They are markedly below normal () at isolated places over Bihar; appreciably below normal (-3.1°C to -5.0°C) at most places over Haryana, Chandigarh & Delhi; at many places over West Utter Pradesh, East Utter Pradesh, Gangetic West Bengal, Saurashtra & Kutch and east madhya Pradesh; at isolated places over Jharkhand and below normal (-1.6°C to -3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura and East Rajasthan; at many places over Gujarat Region and Vidarbha; at a few places over Sub-Himalayan west Bengal & Sikkim, Assam & Meghalaya, West Rajasthan, West Madhya Pradesh, Chhattisgarh, Odisha and Tamil Nadu, Puducherry & Karaikal and are near normal over rest parts of the country. Today, the lowest minimum temperature of 5.6°C is reported at Churk (East Utter Pradesh) and at Pant Nagar (Uttrakhand) over the plains of the country

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

- 23 November (Day 1): Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalseema and Tamil Nadu, Puducherry & Karaikal. Cold Day very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi. Cold Wave conditions very likely at isolated places over East Rajasthan. Dense fog very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura and Moderate fog at isolated places over Odisha, Arunachal Pradesh and Assam & Meghalaya. Squally weather (wind speed reaching 45-55 kmph gusting to 65 kmph) is very likely to prevail over Southwest and adjoining Westcentral & Southeast Bay of Bengal and along & off Tamil Nadu-south Andhra Pradesh coasts. Sea condition is very likely to be rough to very rough over Southwest & adjoining Westcentral & Southeast Bay of Bengal and along & off Tamil Nadu-Puducherry and south Andhra Pradesh coast and Gulf of Mannar. Fishermen are advised not to venture into these areas and those at sea are advised to return to the coast.
- 24 November (Day 2): Heavy to very rainfall with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Coastal Andhra Pradesh & Yanam and Rayalaseema. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalseema and Kerala & Mahe. Dense fog very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura and Moderate fog

at isolated places over Odisha, Arunachal Pradesh and Assam & Meghalaya. Squally weather (wind speed reaching 65-75 kmph gusting to 85 kmph) likely to prevail over Southwest & adjoining Westcentral Bay of Bengal and (wind speed reaching 55-65 kmph gusting to 75 kmph) along & off Tamil Nadu and adjoining south Andhra Pradesh coasts and Gulf of Mannar. Sea conditions is likely to be High over Southwest & adjoining Westcentral Bay of Bengal and along & off Tamil Nadu and Puducherry coasts and Very Rough along & off south Andhra Pradesh coast and Gulf of Mannar. Fishermen are advised not to venture into these areas.

- 25 November (Day 3): Heavy to very rainfall at a few places with extremely heavy falls likely at isolated places over Tamil Nadu, Puducherry & Karaikal; Heavy to very rainfall with extremely heavy falls at isolated places over Coastal Andhra Pradesh & Yanam and Rayalaseema; heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places over Telangana, South Interior Karnataka and Kerala & Mahe. Thunderstorm/hailstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and Himachal Pradesh and thunderstorm with lightning at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka and Kerala & Mahe. Squally weather (wind speed reaching 100-110 kmph gusting to 120 kmph) likely to prevail over Southwest Bay of Bengal and along & off coastal districts of north Tamil Nadu and Puducherry and (wind speed reaching 65-75 kmph gusting to 85 kmph) over adjoining Westcentral Bay of Bengal and along & off south south Andhra Pradesh coast, Gulf of Mannar and along & off south Tamil Nadu coast. Sea conditions is likely to be Very High over Southwest & adjoining Westcentral Bay of Bengal and along & off north Tamil Nadu Puducherry coasts and High along & off south Tamil Nadu & south Andhra Pradesh coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.
- 26 November (Day 4): Heavy to very rainfall with extremely heavy falls likely at isolated places over Coastal Andhra Pradesh & Yanam, Telangana and Rayalseema and heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places over Chhattisgarh, Odisha, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Marathwada, Coastal

- Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- 27 November (Day 5): Heavy rainfall likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 23 November to 01 December 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)**

## Gujarat

#### Weather condition:

The actual maximum temperature was 0.4 °C lower and Actual minimum temperature was 2.5 °C higher as compared to its normal. Total BSS was 59.2 hrs. with an average of 8.5 hrs. The daily average evaporation and wind speed was 3.1 mm and 2.6 km/hr respectively. The daily average RH during morning and afternoon was 79.0 % and 39.6 % respectively.

## **Contingency measure:**

- Wheat: Sowing: Sowing of GW 496, GW 503, GW 273, GW 322, GW 173, GADW-3, GJW-463 @ 22.5 cm spacing using seed rate @ 100 -120 kg/ha. Application of 60 kg Nitrogen and 60 kg Phosphorus per hectare as basal fertilizer application should be recommended. Mustard: vegetative: Irrigate the crop after 30 DAS. Apply top dressing of ramain 50 % dose of nitrogen after next day of irrigation. Interuculturing and hand weeding should be done in early sown mustard.
- Paddy: Maturity: Harvest mature crop and keep in field for sun drying.
- Gram: Sowing: Select variety like Dahod yellow ,GG-1, 2, 5 or ICCC-4 and sow at 30 x 10 cm spacing @ 60 kg /ha seed rate.
- Tobacco: Gap filling, inter-culturing and weeding is advised.
- Cotton: Reproductive: For control of pink boll worm infestation install the pheromone trap @ 16 per hectare. Apply carbaryl 50% WTP 40 gm in 10 liters of water to avoid pink boll worm in cloudy condition.

- Castor: boll development: Semi looper: Apply supplementary dose of nitrogen @ 40 kg ha-1 in form of urea. Carryout inter-culturing and weeding operations. Spray Quinalphos 20 ml in 10 liters of water at 15 days interval.
- Vegetables: Flowering/Reproductive: For the control of White fly/Aphid Spray neem seed extract 500 ml or neem seed oil 50 ml in 10 liter of water at 15 days interval (4 sprays) or acetamiprid 20 % SP@ 5.0 gm/10 lit of water at 15 days interval.
- Tomato: Vegetative Growth: there is possibility of incidence of spotted wilt virus, spray Carbendenzim (50 % WP) 5 g in 10 liter water at 10 to 12 days interval.
- Cattle: Keep animal shed hygienic and clean to avoid flies and mosquitoes. Disease (like, Anthraces, milk fever and Brucellosis) infected animals to regular check-up and regular vaccination for the animal.



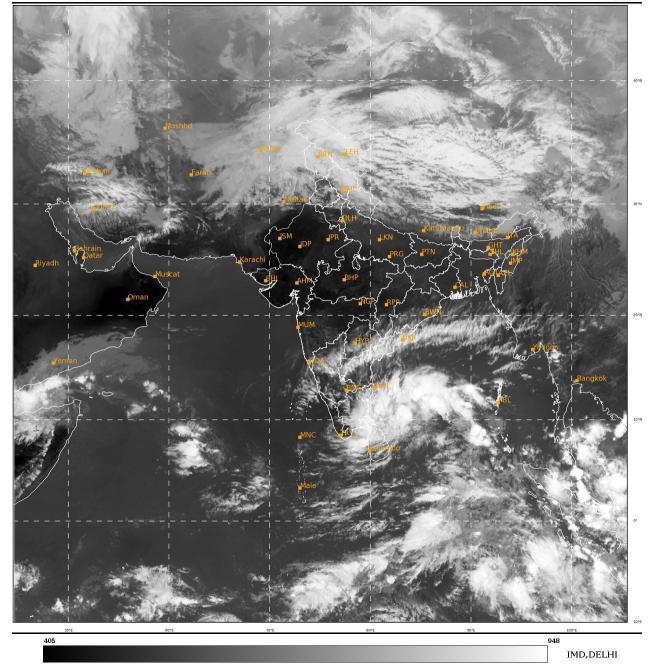


Figure: 1. Latest available satellite picture as on 23 November 2020 at 1357 Hrs (IST). (Source: IMD).

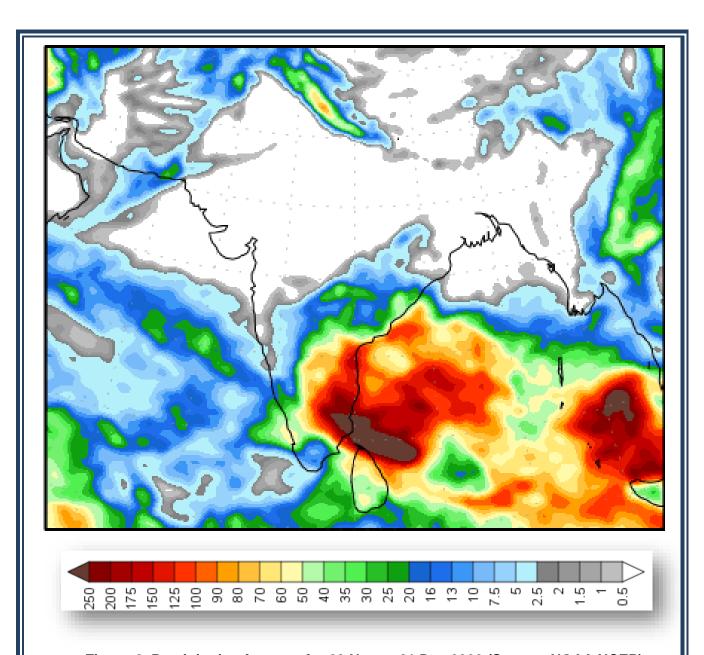


Figure: 2. Precipitation forecast for 23 Nov to 01 Dec 2020 (Source: NOAA NCEP).

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