

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 22 October 2021**

**Attention: Rajiv Maheshwari, OSD, ICAR**

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

- The Southwest monsoon withdrawal line continues to pass through Lat. 27.0°N/Long. 92.0°E, Kohima, Silchar, Krishnanagar, Baripada, Malkangiri, Nalgonda, Bagalkote, Vengurla, Lat. 16.0°N/Long. 65.0°E and Lat. 16.0°N/Long. 60.0°E. Conditions are becoming favourable for further withdrawal of Southwest Monsoon from remaining parts of Northeast India; entire north Bay of Bengal; remaining parts of West Bengal; some parts of Central Bay of Bengal; remaining parts of Odisha; some parts of Andhra Pradesh; some more parts of Telangana; entire Goa; some more parts of Karnataka and some more parts of Central Arabian Sea around 23rd October.
- With likely setting in of northeasterly winds in the lower tropospheric levels over Bay of Bengal and extreme south Peninsular India, the Southwest Monsoon is likely to withdraw from entire country around 26th October, 2021. Simultaneously, the Northeast Monsoon rains are also likely to commence over Southeast Peninsular India from around 26th October, 2021.
- A cyclonic circulation lies over Comorin area and a trough runs from the cyclonic circulation to Eastcentral Arabian sea off Karnataka coast in lower tropospheric levels. Under their influence, light to moderate fairly widespread to widespread rainfall with isolated heavy falls and thunderstorm & lightning very likely over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal during 22nd-26th and isolated very heavy rainfall over Tamilnadu, Puducherry & Karaikal on 25th-26th and over Kerala & Mahe on 25th October, 2021.
- A Western Disturbance seen as cyclonic circulation over East Afghanistan & neighbourhood at 3.1 km above mean sea level with a trough aloft in mid tropospheric levels roughly along Long. 63°E to the north of Lat. 32°N. An induced cyclonic circulation lies over central Pakistan & neighbourhood in lower levels and under its influence, an induced Low Pressure Area very likely to form over the same region during next 24 hours. Under the influence of these systems and high moisture feeding from Arabian Sea over parts of northwest India in lower levels:

i) Light to moderate scattered to widespread rainfall with thunderstorm, gusty winds (speed 30-40 kmph) & lightning very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh & Punjab during 22nd-24th with isolated heavy rainfall & hailstorm on 23rd October, 2021.

ii) Light to moderate isolated to scattered rainfall with thunderstorm, gusty winds (speed 30-40 kmph) & lightning very likely over Uttarakhand, Haryana, Chandigarh & Delhi and Rajasthan during 23rd-24th with hailstorm at isolated places over West Rajasthan on 23rd October, 2021.

- The images showing the latest satellite picture in the figure. 1.

### **Main Weather Observations (IMD)**

- Rainfall/Thundershowers observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at most places over Coastal Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; at many places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim and South Interior Karnataka; at a few places over Nagaland, Manipur, Mizoram & Tripura and Lakshadweep and at isolated places over Coastal Andhra Pradesh & Yanam and Rayalseema.
- Heavy Rainfall (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at isolated places over Arunachal Pradesh, South Interior Karnataka, Tamil Nadu, Kerala and Rayalaseema.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at isolated places over Rayalaseema, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 21-10-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at Konkan & Goa and above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh & Yanam; at many places over Jammu Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Himachal Pradesh and Odisha; at a few places over Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands and at isolated places over Kerala & Mahe, Telangana, East Madhya Pradesh and Gangetic West Bengal. They were appreciably below normal (- 3.1°C to -5.0°C) at isolated places over Saurashtra & Kutch and West Madhya Pradesh and below normal (-1.6°C to -3.0°C) at many places over Gujarat Region; at a few places over Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya and Arunachal Pradesh and near normal at rest parts of the country. Yesterday, The

maximum temperature was recorded 36.5°C at Tondi (Tamilnadu, Puducherry & Karaikal).

- Minimum Temperature Departures as on 22-10-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Uttarakhand and Rayalseema; at many places over Himachal Pradesh, Coastal Andhra Pradesh & Yanam and South Interior Karnataka; at a few places over Uttar Pradesh, Bihar, Gangetic West Bengal, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Rajasthan and at isolated places over Odisha and Kerala & Mahe. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Vidarbha; below normal (-1.6°C to -3.0°C) at many places over East Madhya Pradesh and at isolated places over Saurashtra & Kutch and West Madhya Pradesh and near normal over rest parts of the country. Today, the lowest minimum temperature of 12.0°C is reported at Mandla (East Madhya Pradesh) over the plains of the country

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

- 22 October (Day 1): Heavy rainfall very likely at isolated places over Kerala & Mahe, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) very likely at isolated places over Punjab; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally weather (wind speed reaching 40-50 kmph) very likely over Eastcentral Bay of Bengal & adjoining North Andaman Sea. Fishermen are advised not to venture into these areas.
- 23 October (Day 2): Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh and heavy rainfall over Punjab, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning, hail & gusty winds (speed 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Punjab and West Rajasthan; with lightning & gusty winds (speed 30-40 kmph) at isolated places over Haryana, Chandigarh & Delhi; with lightning at isolated places over East Rajasthan, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

- 24 October (Day 3): Heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed 30-40 kmph) very likely at isolated places over Punjab and West Rajasthan and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- 25 October (Day 4): Heavy to very heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- 26 October (Day 5): Heavy to very heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- The weather outlook for seven days i.e., 22 Oct to 30 Oct 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)

### Jammu

#### Weather condition:

Mainly clear weather prevailed during this week with no rainfall. Both maximum and minimum temperatures remained above normal by 1 to 4°C and was recorded in the range of 31.0 to 35.2 °C and 16.2 to 21.0 °C. The morning and evening relative humidity were observed between 65 to 98 % and 35 to 65 %, respectively. The total evaporation during this week was observed 41.8 mm and bright sunshine in the range of 2.9 to 9.5 hrs per day.

#### Contingency measure:

- Paddy: Semi-fine/ Basmati Early sown Basmati Late sown Harvesting/ Threshing Physiological maturity Hard dough Shift threshed crops immediately to safer places and postpone harvesting due to chances of rainfall, if not harvested yet. Drain out irrigation/ rain water where the grains turn golden in colour. Postpone irrigation in late transplanted crop due to chances of rain.

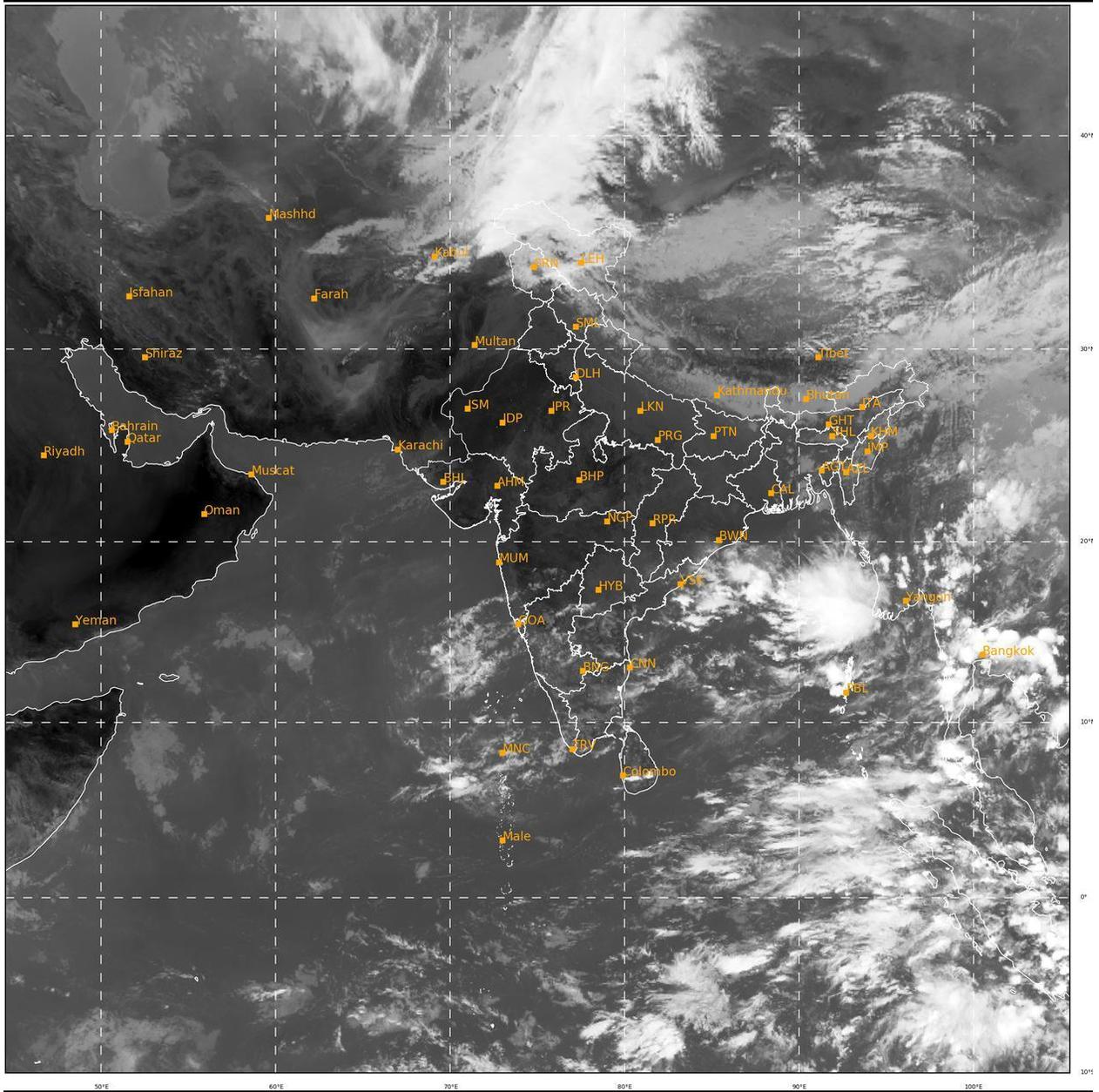
- Maize: Post harvest Shift harvested/dehusked crop immediately to safer places. Clean and disinfect stores. Plug all holes, cracks, crevices with cement.
- Oilseed Mustard (Irrigated): Toria Sowing Vegetative (Irrigated) Postpone sowing till rain is over. Thereafter sowing is recommended at optimum soil moisture. Postpone application of split dose of Nitrogen till weather gets clear.
- Rabi pulses (Chickpea/Pea/ Lentil ): Land preparation/ Sowing Due to chances of rainfall, postpone sowing till weather gets clear.
- Fodder (Berseem): Irrigated Sowing Due to chances of rainfall, postpone sowing till weather gets clear.
- Floriculture: Chrysanthemum Marigold Rooted Cutting Vegetative Give first pinching followed by hoeing of field after receipt of rain. First pinching is recommended.
- Vegetables: Turmeric Cabbage/ cauliflower/ knol khol/brocoli Radish/ carrot Kale Coriander, fenugreek /Spinach Potato Vegetative Transplanting Sowing Transplanting Sowing Sowing Do not allow rain water to stagnate in fields Postpone sowing as well as transplanting till weather gets clear.
- Horticulture: Mango /Guava/ Citrus Young/Bearing Postpone application of chemical plant protection measures till weather gets clear. Keep the area clean. Remove the congress grass from the orchard field of bunds of the field. Remove tying material from bud/graft union. Stock sprouts from all the budded or grafted plants may be removed carefully after every ten days. Remove dead and dried wood from mango trees.
- Oyster Mushroom: Button mushroom Fruiting Compost preparation As the humidity will remain in required limits avoid spraying of water in cropping rooms. Book the spawn. Maintain temperature +20C in the cropping room. Spray malathion 0.01% and chlorothalonil 0.05% at weekly intervals for insect pest control. Compost preparation may be started in the plains of Jammu. Book spawn from a reliable laboratory. Clean and sterilize the cropping room.
- Sericulture: Mulberry Cocoon crop Tree plantation Chawki / late age rearing Individual leaf plucking for feeding of silkworms should be resorted without damaging the branches/ twigs of the mulberry tree. Appropriate leaf as per the age of the silkworm should be fed four times a day with a interval of four hours gap. Proper care should be taken during moulting. Windows of the rearing rooms should be kept open for allowing cross ventilation.
- Apiculture: Protect the bees from rain by reducing the entrance of boxes. Prepare colonies for upcoming winter season.
- Poultry: There should be a good source of light and heat. Proper hygiene should

be maintained. Proper ventilation should be there. There should not be huddling of chicks, maintain the temperature of 37°C. Vaccinate the chicks against infectious bursal disease (IBD, Gumbroo) disease. Deworm the birds.

- Live stock: Dairy animals, Sheeps and Goats Deworming of all livestock needs to be done against helminths using fenbendazole or closantel. Calcium should be supplemented in the diet of dairy animal as rice straw feeding leads to depletion of Ca levels in the blood thereby reduces milk yield and general health condition.
- Fisheries: Fingerling/advanced fingerlings Add regular supplementary food on daily basis @ 2-3% of total fish biomass (estimated) present in the pond. Keeping the water quality condition in mind, apply lime @ 20-25kg /ha/month and manure @ 1000kg/ha. \*Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

22-10-2021/(0800 to 0826) GMT  
22-10-2021/(1330 to 1356) IST

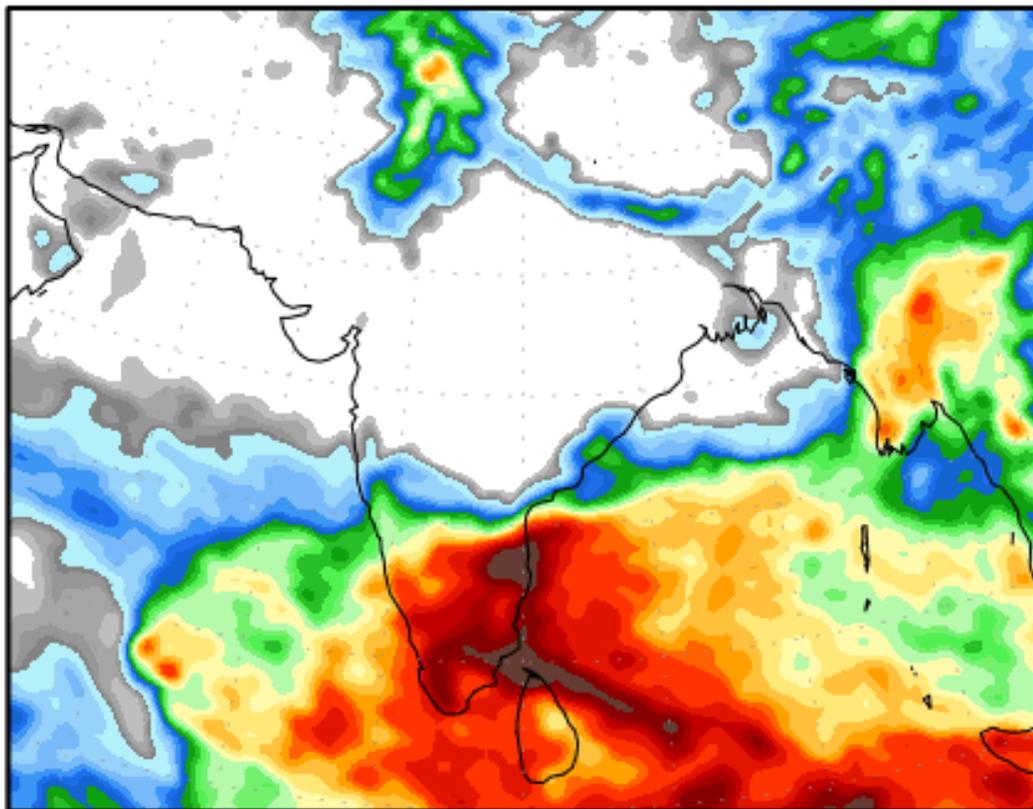


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IMD, DELHI

Figure: 1. Latest available satellite picture as on 22 Oct 2021 at 1356 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 22 Oct to 30 Oct 2021 (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.*