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

Daily Crop Weather Information as on 23 October 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Southwest Monsoon has further withdrawn from remaining parts of Northeast India, West Bengal, Odisha; entire north Bay of Bengal and Goa; some parts of Andhra Pradesh; remaining parts of Telangana and some more parts of Karnataka and Central Arabian Sea. The Southwest Monsoon Withdrawal Line now passes through Lat 18.5°N/Long 94°E and Lat 18.5°N/Long 90°E, Kalingapatnam, Nandigama, Kurnool, Gadag, Majali, Lat 15°N/Long 65°E and Lat 15°N/Long 60°E.
- 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 Lakshadweep area & neighbourhood. Under its 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 and South Interior Karnataka during 23rd-24th October, 2021. Under the influence of likely setting in of northeasterly winds in the lower tropospheric levels over Bay of Bengal and extreme south Peninsular India; light to moderate fairly widespread to widespread rainfall with isolated heavy falls and thunderstorm & lightning very likely over Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and South Interior Karnataka during 25th-27th. Isolated very heavy falls are also likely over Tamilnadu, Puducherry & Karaikal during 25th-27th and over Kerala & Mahe on 26th October, 2021.
- The Western Disturbance now seen as a cyclonic circulation over north Pakistan and adjoining Afghanistan at 3.1 km above mean sea level with a trough aloft with its axis at 5.8 km above mean sea level roughly along Long. 68°E to the north of Lat. 25°N. An induced cyclonic circulation lies over central Pakistan & adjoining Punjab and northwest Rajasthan in lower levels. 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 40-50 kmph) & lightning very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh & Punjab during 23rd-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 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 yesterday to 0830 hrs IST of today): at most places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad; at many places over Sub-Himalayan West Bengal, South Interior Karnataka and Kerala & Mahe; at a few places over Tamilnadu, Puducherry & Karaikal and Rayalaseema and at isolated places over and Himachal Pradesh, Coastal Karnataka, Coastal Andhra Pradesh, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands.
- Heavy to very heavy rainfall observed (from 0830 hrs IST yesterday to 0830 hrs IST of today): at isolated places over Kerala & Mahe.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Kerala & Mahe and at isolated places over Rayalaseema, Coastal Andhra Pradesh & Yanam and Coastal & South Interior Karnataka.
- Maximum Temperature Departures as on 22-10-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Kerala & Mahe; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Odisha and Coastal Andhra Pradesh & Yanam; at a few places over Gangetic West Bengal, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya, East Madhya Pradesh, Vidharbha, Telangana and Konkan & Goa. They were appreciably below normal (-3.1°C to 5.0°C) at a few places over Saurashtra & Kutch and at isolated places over West Madhya Pradesh and below normal (-1.6°C to -3.0°C) at many places over Gujarat Region; at a few places over Rajasthan; at isolated places over East Uttar Pradesh

- and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, The maximum temperature 36.4°C was reported at Kavali (Coastal Andhra Pradesh & Yanam).
- Minimum Temperature Departures as on 23-10-2021: Minimum temperatures are markedly above (5.0°C or more) at many places over Punjab appreciably above normal (3.1°C to 5.0°C) at a few places over Haryana, Chandigarh & Delhi and at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, West Madhya Pradesh, South Interior Karnataka and Coastal Andhra Pradesh; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, Tamilnadu, Puducherry & Karaikal; at a few places over Gangetic West Bengal, Uttrakhand and at isolated places over East Madhya Pradesh, Saurashtra & Kutch and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Vidarbha & Marathwada 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)

- 23 October (Day 1): Heavy to very heavy rainfall very likely at isolated places over Kerala & Mahe; Heavy rainfall/snowfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh and heavy rainfall over Punjab, Rayalaseema, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning, hail & gusty winds (speed 40-50 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 Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Squally weather (wind speed 40-50 kmph) over Southeast Arabian Sea along & off Kerala coast.
- 24 October (Day 2): Heavy rainfall very likely over South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Lakshadweep

- and Kerala & Mahe. Squally weather (wind speed 40-50 kmph) over Southeast Arabian Sea along & off Kerala coast.
- 25 October (Day 3): Heavy to very heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Rayalaseema, Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- 26 October (Day 4): Heavy to very heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and heavy rainfall at isolated places over Coastal Andhra Pradesh and South Interior Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over Rayalaseema, Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Squally weather (wind speed 40-50 kmph) over Southwest Bay of Bengal along & off Tamilnadu coast and Gulf of Mannar.
- 27 October (Day 5): Heavy to very heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Squally weather (wind speed 40-50 kmph) over Southwest Bay of Bengal along & off Tamilnadu coast and Gulf of Mannar.
- The weather outlook for seven days i.e., 23 Oct to 31 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)

Jharkhand

Weather condition:

During this week 36.2 mm rainfall has been received. Maximum and minimum temperature range between 30.5 to 33.4 °C and 20.5 to 24.6°C respectively. Maximum and minimum actual average temperatures are 31.7 °C and 22.1 °C, whereas normal maximum and minimum temperature are 28.5 °C and 17.4°C respectively.

Contingency measure:

- Rice: Avoid harvesting of matured crops till weather favours and also maintain water drainage in the field. Crops at milking stage are susceptible to the attack of the insect Gundhi bug. To control the insects, dusting of any insecticide (dust) @ 10 kg per acre is recommended. The alternative method (in the case of unavailability of the insecticides), is of dusting coal / wood ash mixed with kerosin oil. In lowland, maintain the bunds of field to keep the crop submerged.
- Wheat: Farmers wishing to cultivate Rainfed wheat may arrange improved seed and fertilizer & manures. Select one of the recommended varieties like K-1317, HD-3171, HI- 1612, Birsa gehun-3 etc. 40 kg seeds, 80 kg Urea, 75 kg SSP and 15 kg Muriate of Potash are required for cultivation in one acre.
- Mustard: Farmers who wish to cultivate mustard crop, may manage improved variety of seed, recommended for this region like Shiwani, Pusa Bold, Pusa mustard etc. 3 kg seeds and 70 kg Urea, 130 kg SSP and 25 kg Muriate of Potash are required for cultivation in one acre.
- Chick Pea: Farmers wishing to cultivate chickpea (gram) crop, may manage the
 recommended seed varieties. Select one of the variety, For deshi (indegenious)
 Pusa-372, KWR108, KGP-59, Birsa chana-3 and for Kabuli variety H.K.-9431, Kak2 etc. 30 kg seeds for deshi variety and 40 kg seeds for Kabuli type varieties are
 required for cultivation in one acre.
- Field Pea: Farmers wishing to cultivate field pea crop, may select one of the recommended varieties of pea for this region are H.U.D.P.-15, Dantewada matar-1, V.L. 42 etc. 40 kg seeds are required for sowing in 1 acre.
- LENTIL: Farmers wishing to cultivate lentil crop, may use one of the recommended varieties like H.U. L.- 57, W.B.L.-77, K.L.S.-218 etc. 12kg seeds are required for cultivation in one acre.

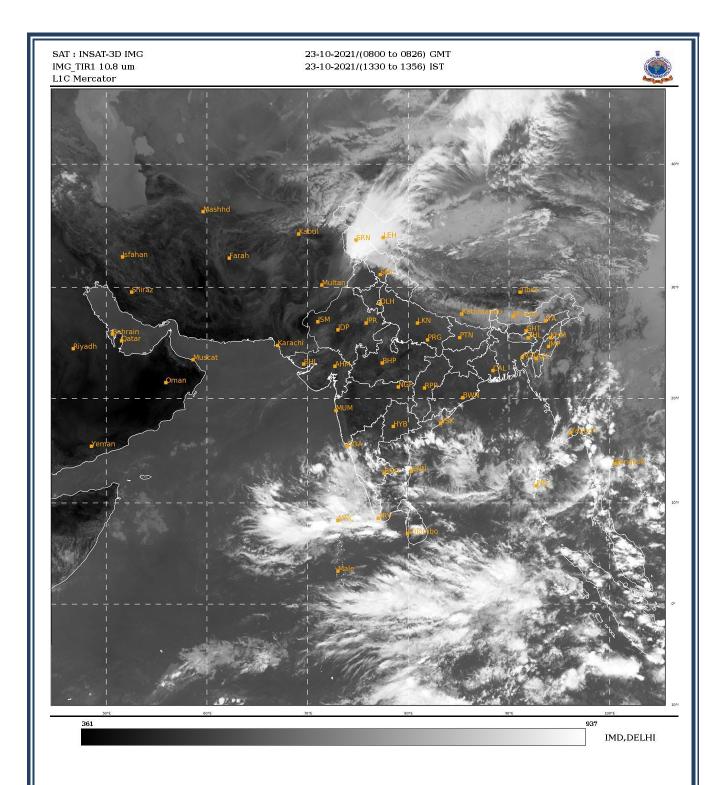


Figure: 1. Latest available satellite picture as on 23 Oct 2021 at 1356 Hrs (IST). (Source: IMD).

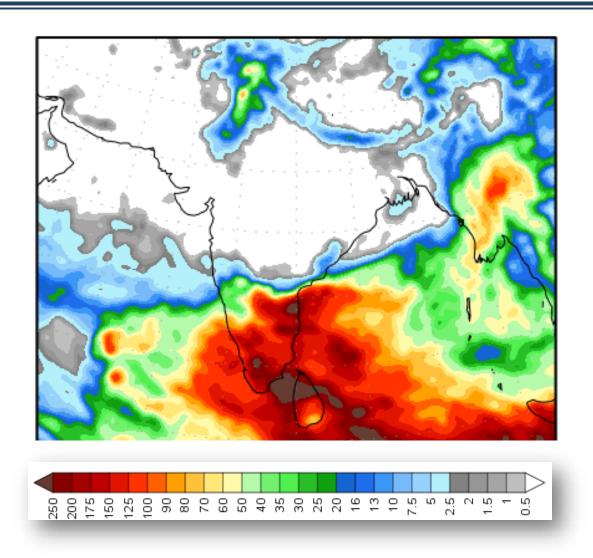


Figure: 2. Precipitation forecast for 23 Oct to 31 Oct 2021 (Source: NOAA NCEP).

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