

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 23 August 2019

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Significant Weather Features (IMD)

- The cyclonic circulation lies over northwest Bay of Bengal off Odisha-West Bengal coasts between 1.5 & 4.5 km above mean sea level. Under its influence, a low pressure area is likely to form over Odisha & neighbourhood during next 36 hours and is likely to move northwestwards. Under such conditions, rainfall activity likely to increase over eastern parts of India during next 2 days and central India during 24th-26th August.
- Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over Odisha, Chhattisgarh, Jharkhand during next 2 days and over Madhya Pradesh, Gujarat, Rajasthan during 24th-26th August.
- Under the influence of convergence of lower level westerlies, Kerala and Coastal Karnataka is likely to experience heavy rainfall at isolated places during next 3 days.
- Western end of the monsoon trough at mean sea level continues to run close to foothills of Himalayas and eastern end now passes through Bareilly, Bahraich, Patna, Bankura, Digha and thence southeastwards to east-central Bay of Bengal. The western end of the monsoon trough likely to shift southward during next 2-3 days.
- The images showing the latest satellite picture in figure. 1

Main Weather Observations (IMD)

- Rain/Thunder showers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands, East Uttar Pradesh, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Jharkhand, Gangetic West Bengal, Bihar, Telangana, Rayalaseema, Interior Karnataka, Chhattisgarh, Vidarbha, Uttarakhand and Nagaland, Manipur, Mizoram & Tripura; at a few places over Odisha, Marathawada, Assam & Meghalaya, West Uttar Pradesh, Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal and at isolated places over Madhya Maharashtra, Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir, Punjab, Haryana, Chandigarh & Delhi and Gujarat.

- Heavy rainfall observed at isolated places over East Uttar Pradesh, Assam & Meghalaya and Coastal & South Interior Karnataka.
- Thunderstorm observed (from 2030 hours IST of yesterday to 0830 hours IST today): at isolated places over Jammu & Kashmir, Punjab, East Uttar Pradesh, Chhattisgarh, Odisha, Assam & Meghalaya, Rayalaseema and Tamil Nadu & Puducherry.
- Maximum temperature departures as on 22-08-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at most places over Konkan & Goa, North Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Odisha; at many places over Bihar, Arunachal Pradesh, Jharkhand, Gujarat, West Rajasthan, Madhya Maharashtra, Chhattisgarh and Telangana; at a few places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh and Vidarbha; and at isolated places over Coastal Andhra Pradesh, Jammu & Kashmir and East Madhya Pradesh; Marathawada, Coastal Karnataka, and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over West Uttar Pradesh; at isolated places over East Uttar Pradesh and below normal (-1.6°C to -3.0°C) at many places over places over Tamil Nadu, Puducherry & Karaikal and Uttarakhand; at isolated places over Kerala and Andaman & Nicobar Islands and near normal over rest parts of the country.
- Minimum temperature departures as on 23-08-2019: Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at a few places over Bihar; at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttarakhand, Rajasthan, West Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura and Vidarbha. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Jammu & Kashmir, East Uttar Pradesh and West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at isolated places over East Madhya Pradesh, Telangana, Odisha, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and near normal over rest parts of the country.

Weather Warning during next 5 days (IMD)

- 23 August (Day 1): Heavy to very heavy rainfall very likely at isolated places over Odisha; Heavy rainfall at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & South Interior Karnataka, Tamil Nadu and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Bihar and Gangetic West Bengal. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea,

southeast Bay of Bengal, north Andaman Sea and Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.

- 24 August (Day 2): Heavy to very heavy rainfall very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha and Coastal Karnataka; Heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Gujarat region, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over West Bengal & Sikkim, Jharkhand and Bihar. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, southeast & west-central Bay of Bengal, north Andaman Sea and Andaman & Nicobar Islands. Squally weather is likely to prevail over Odisha. Fishermen are advised not to venture into these areas.
- 25 August (Day 3): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over West Madhya Pradesh; Heavy to very heavy rainfall at isolated places over East Rajasthan, Gujarat region and Coastal Karnataka; Heavy rainfall at isolated places over West Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Andaman & Nicobar Islands, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, southeast & west-central Bay of Bengal, north Andaman Sea, Andaman & Nicobar Islands and along & off Konkan coast. Squally weather is likely to prevail over Odisha. Fishermen are advised not to venture into these areas.
- 26 August (Day 4): Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over Gujarat region; Heavy to very heavy rainfall at isolated places over East Rajasthan and Saurashtra & Kutch; Heavy rainfall at isolated places over West Rajasthan, West Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand. Strong winds, speed reaching 45-55 kmph, are likely to prevail over south-west Arabian Sea, southeast Bay of Bengal, north Andaman Sea, Andaman & Nicobar Islands and along & off Gujarat-Konkan coasts. Fishermen are advised not to venture into these areas.
- 27 August (Day 5): Heavy to very heavy rainfall likely at isolated places over Gujarat; Heavy rainfall at isolated places over West Rajasthan, Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand. Strong winds, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea, southeast Bay of Bengal, north Andaman Sea, Andaman &

Nicobar Islands and along & off Gujarat-Konkan coasts. Fishermen are advised not to venture into these areas.

- The weather outlook for the period of seven days *i.e.*, 23 to 31 August 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamil Nadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Punjab

Weather condition:

Very light to very heavy rainfall is received in Punjab state during past few days. The maximum temperature was ranged between 33-34°C and minimum temperature was ranged between 25-26°C.

Contingency measure:

- Cloudy weather is likely to prevail in the coming days. There are chances of rainfall on 23-08-2019. Weather parameters are likely to remain as follows: Maximum Temperature 32-35 °C, Minimum Temperature 24-26 °C. Wind speed 3-10 km/h.

Weather based Advisories:

Field Crops:

- RICE: Apply irrigation to paddy crop, two days after the ponded water has infiltrated into the soil. Care should be taken that the field does not develop cracks. Urea is to be applied with the help of leaf colour chart, apply 25 kg urea/acre only if 6 leaves out of 10 are lighter than shade no 4 of leaf colour chart. Eradicate the weeds growing on paddy field. To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses.
- BASMATI: To the basmati crop, apply urea in two equal splits at 3 and 6 weeks after transplanting. Rogue out and destroy foot rot infected plants from the field.
- COTTON: Drain out the stagnant rain water from cotton field. Spray against whitefly should be done when population reaches 6 adults/leaf in the upper canopy

of the plant before 10 AM. Give first spray of PAU neem extract @ 1200 ml or neem based biopesticide, nimbecidine/achook @ 1 litre/acre. If high incidence of whitefly adults was observed, spray the crop with Ulala 50 WG (flonicamid) @ 80 g or Polo/Ruby/Craze/Ludo/Shoku 50 WP (diafenthiuron) @ 200 g or Osheen 20 SG (dinotefuran) @ 60 g/acre. If high incidence of whitefly nymphs observed, spray the crop with Lano 10 EC (pyriproxyfen) @ 500 ml or Oberon/Voltage 22.9 SC (spiromesifen) @ 200 ml/acre. To control Jassid in cotton, spray Ulala 50 WG @80 g or Osheen 20 SG @ 60 g or Actara/Extrasuper/Dotara 25 WG @ 40 g or Imidacel/Markdor 17.8 SL or Confidor 200 SL @ 40 ml in 150 litres of water per acre.

- MAIZE: Do not allow the rain water to stand in the main maize crop as this crop is highly sensitive to standing water and promotes bacterial stalk rot. Apply second dose of nitrogen (37 or 25 kg per acre, respectively for the long and medium/short duration cultivars) at knee high stage.
- VEGETABLES: It is the optimum time for transplanting of rainy season tomato and early cauliflower. Prevailing weather is favourable for the development and spread of fruit rot in chilli. Farmers are advised to give 3-4 sprays of Folicur @ 250 ml of Indofil M-45 or blitox 50 WP @ 750 gm/acre at 10 days interval during clear weather.
- FRUIT PLANTS: Drain out the stagnant rain water from orchards and basins of the fruit plants. Fix fruit fly traps (16 traps per acre) in guava to protect the rainy season guava fruits from fruit fly. Preparation of field for planting of new evergreen fruit plants can be initiated during this period. Manually remove the large weeds such as congress grass, bhang etc. from orchards and adjoining areas

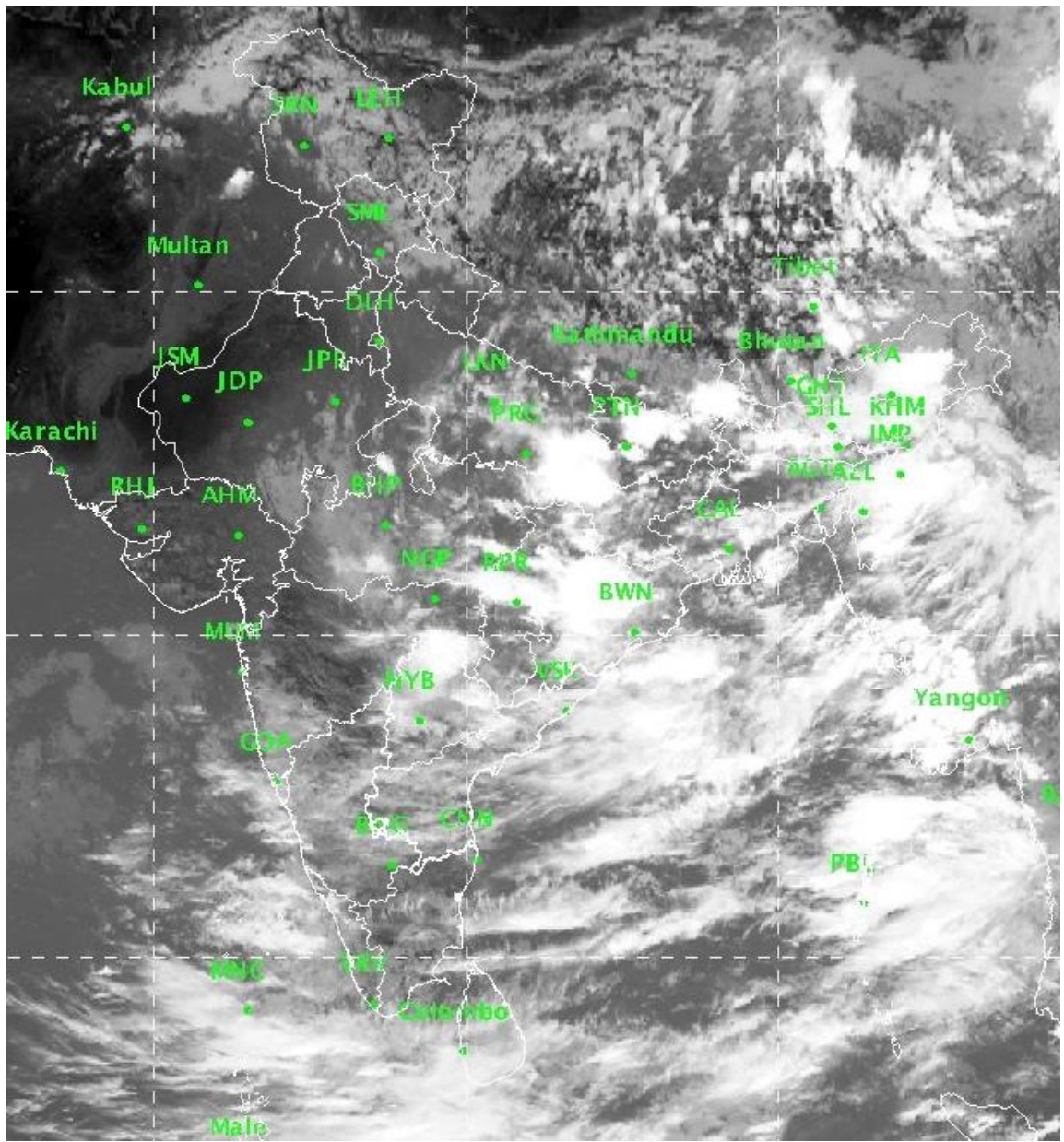


Figure: 1. Latest available satellite picture as on 23 August 2019 at 1300Hrs (IST).

(Source: IMD).

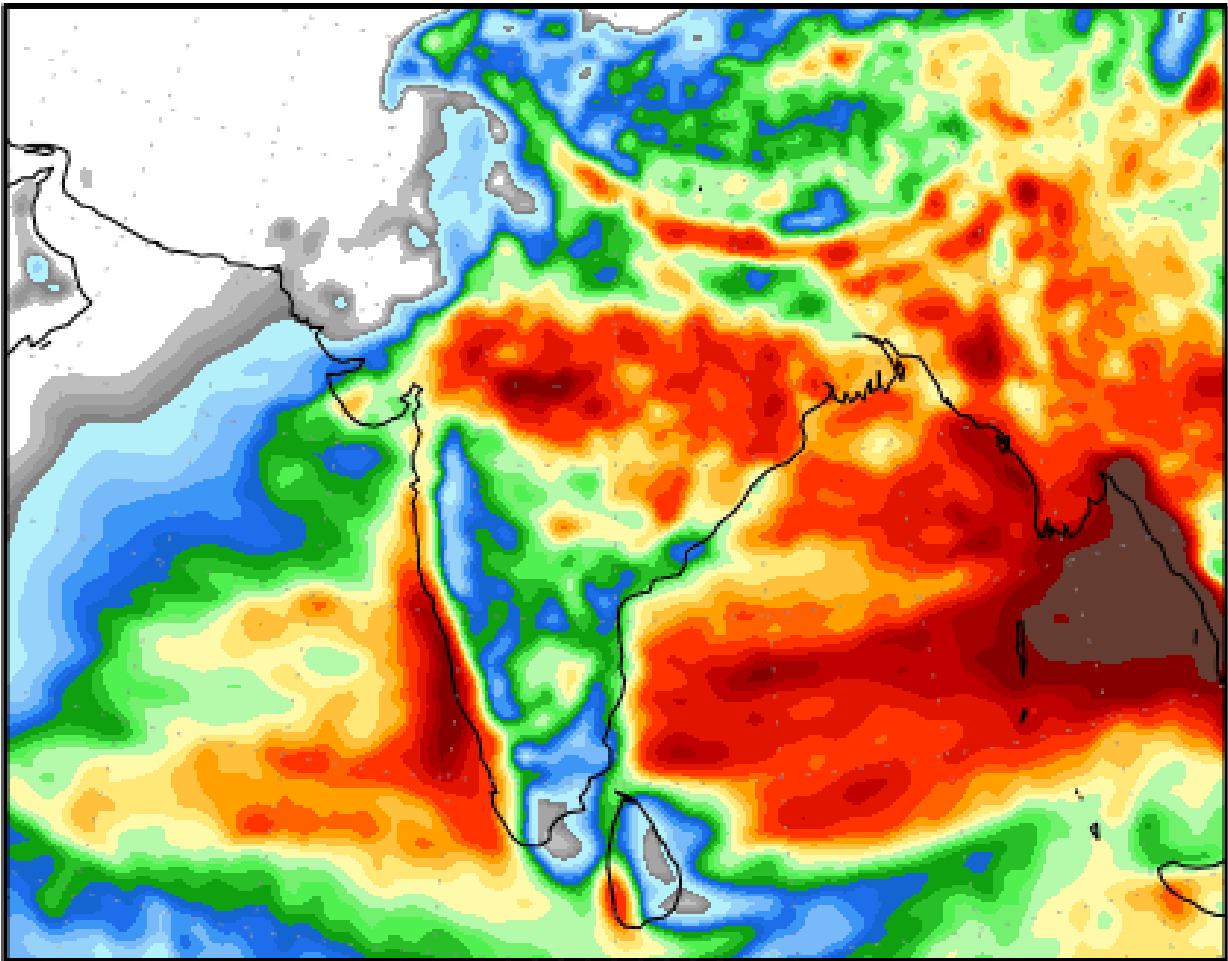


Figure:2. Precipitation forecast for 23 to 31 August 2019 (Source: NOAA NCEP).