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

Daily Crop Weather Information as on 31 July 2019

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A Low Pressure Area lies over central parts of north Madhya Pradesh and neighbourhood. Monsoon trough continues to run south of its normal position with this Low Pressure Area and another cyclonic circulation over southwest Rajasthan & neighbourhood lying embedded in it.
- The cyclonic circulation over West Rajasthan is likely to become less marked by today leading to gradual northward shift in the western end of the monsoon trough. However, likely persistence of the cyclonic circulation associated with the Low Pressure Area could maintain eastern part of the monsoon trough in its near normal position during next 2-3 days.
- A fresh Low Pressure Area is likely to develop over northeast Bay of Bengal around 04th August.
- Under the above scenario, Fairly widespread to widespread rainfall with isolated heavy to very heavy falls are likely over Odisha, south Chhattisgarh, south Madhya Pradesh, Gujarat, Maharashtra and Telangana during next 2-3 days. Isolated extremely heavy falls are also likely over southeast Madhya Pradesh, Vidarbha, ghat areas of Madhya Maharashtra and Gujarat during next 24 hours.
- Enhanced rainfall activity is likely over Punjab, Haryana, Chandigarh, Delhi, West Uttar Pradesh and Western Himalayan region during next 2-3 days.

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

Main Weather Observations (IMD)

• Rain/Thundershowers observed (from 0830 hrs IST to 1730 hours IST of yesterday): at most places over Chhattisgarh, Vidarbha, Konkan & Goa, Madhya Maharashtra and North Interior Karnataka; at many places over Uttarakhand, Himachal Pradesh, West Madhya Pradesh, Gujarat, Coastal Karnataka, Odisha, Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura; at a few places over Arunachal Pradesh, Jharkhand, East Madhya Pradesh, Marathwada and Telangana and at

isolated places over Haryana, Chandigarh &Delhi, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

- Yesterday, heavy to very heavy rainfall observed at isolated places over Vidarbha and heavy rainfall at isolated places over Konkan &Goa and Madhya Maharashtra.
- Thunder storm observed (from 0830 hours IST yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Punjab, Assam & Meghalaya and Saurashtra & Kutch.
- Maximum temperature departures as on 30-07-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Kerala & Mahe; at isolated places over Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Jammu & Kashmir, West Rajasthan, Bihar and Lakshadweep; at isolated places over Gangetic West Bengal and East Madhya Pradesh. They were markedly below normal (-5.1°C or less) at many places over Vidarbha and Marathwada; at isolated places over Madhya Maharashtra; appreciably below normal (-3.1°C to -5.0°C) at a few places over Saurashtra & Kutch, West Madhya Pradesh, Chhattisgarh, Jharkhand and Arunachal Pradesh; at isolated places over Telangana; below normal (-1.6°C to -3.0°C) at most places over Gujarat Region; at many places over Himachal Pradesh and North Interior Karnataka; at a few places over Odisha and Konkan & Goa; at isolated places over Uttarakhand, Assam & Meghalaya and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.4°Cwas recorded at Madurai (Tamil Nadu).
- Minimum temperature departures as on 30-07-2019: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Jammu & Kashmir; above normal (1.6°C to 3.0°C) at most places over Punjab; at many places over Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe; at a few places over Himachal Pradesh, Rajasthan and Assam & Meghalaya and at isolated places over Gangetic West Bengal, Odisha and Tamil Nadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to-5.0°C) at isolated places over Madhya Pradesh and below normal (-1.6°C to -3.0°C) at many places over Marathawada and Chhattisgarh; at a few places over Saurashtra & Kutch, Vidarbha and Telangana and near normal over rest parts of the country.

Weather Warning during next 5 days (IMD)

• 31 July (Day 1): Heavy to very heavy rainfall at isolated places very likely over Konkan & Goa, Madhya Maharashtra, Gujarat region, Madhya Pradesh and Vidarbha and heavy rainfall at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, south Rajasthan, Sub-Himalayan West Bengal & Sikkim,

Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Saurashtra & Kutch, Telangana and Coastal Karnataka. Strong winds, speed reaching 40-50 kmph, are likely to prevail over north, central and southwest Arabian Sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.

- 01 August (Day 2): Heavy to very heavy rainfall at isolated places very likely over south Konkan & Goa, Gujarat region and southeast Rajasthan and heavy rainfall at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, southwest Rajasthan, Assam & Meghalaya, Chhattisgarh, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra and Coastal Karnataka. Strong winds, speed reaching 40-50 kmph, are likely to prevail over north, central and southwest Arabian Sea, central Bay of Bengal and along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- 02 August (Day 3): Heavy to very heavy rainfall at isolated places likely over Gujarat and Konkan & Goa and heavy rainfall at isolated places over Coastal Karnataka, Madhya Maharashtra, Madhya Pradesh, East Rajasthan, Uttar Pradesh, Punjab, Haryana, Chandigarh, Odisha and Assam & Meghalaya. Strong winds, speed reaching 40-50 kmph, are likely to prevail over north, central and southwest Arabian Sea, central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 03 August (Day 4): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Konkan & Goa; Heavy to very heavy rainfall at isolated places over Madhya Maharashtra, Gujarat and Odisha and heavy rainfall at isolated places over Kerala & Mahe, Coastal & South Interior Karnataka, West Madhya Pradesh, East Rajasthan, Gangetic West Bengal and Jharkhand. Strong winds, speed reaching 40-50 kmph, are likely to prevail over north, central and southwest Arabian Sea and central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 04 August (Day 5): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Konkan & Goa; Heavy to very heavy rainfall at isolated places over Madhya Maharashtra, Gujarat and Odisha and heavy rainfall at isolated places over Kerala & Mahe, Coastal & South Interior Karnataka, West Madhya Pradesh, East Rajasthan, Gangetic West Bengal and Jharkhand. Strong winds, speed reaching 40-50 kmph, are likely to prevail over north, central and southwest Arabian Sea and central Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for the period of seven days *i.e.*, 31 July to 08 August 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from http://monsoondata.org/wx2/*) rain/thunder shower 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)

Kerala

Weather condition:

Light to rather heavy rainfall received in isolated places in Kerala state during past few days. The maximum temperature was ranged between 25-31°C and minimum temperature was ranged between 20-31°C

Contingency measure:

- Rice(Virippu)- Tillering stage- Bacterial Leaf blight- To control Bacterial Leaf blight in paddy, mix 20 g of cow dung in one litre of water and spray the cow dung slurry by mixing with 20g of pseudomonas in one litre of water.
- Banana- Bunch emergence stage- Sigatoka disease- Due to the monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, Spray Pseudomonas 20g/litre. In case of severe attack spray 1 gm Bavistin by mixing it with gum in 1 litre of water on lower surface of leaf.
- Pepper -Foot rot- Due to continuous rain, there is a chance of foot rot in pepper. Add 2 kg Trichoderma to a mixture of 90 kg FYM and 10 kg Neem cake and kept for two weeks with sufficient moisture. Add 2.5 kg of this mixture to each matured vine to control foot rot of pepper. Severely affected pepper vines should be sprayed with and soil should be drenched with 1% Bordeaux mixture or 20 g Pseudomonas fluorescence or 2.5 g copper oxychloride or 2 g copper hydroxide in one litre of water.
- Vegetables(cowpea) Aphids- There is a chance of aphids in cowpea. Apply 2% neem oil emulsion or apply 20 g verticillium lecanii per one litre of water in 10 days intervals. If aphid attack is severe, apply 3 ml Imidacloprid or 2 g Thiamethoxam per 10 litre of water. Animal Husbandry- Keep the cattle shed and premises clean to avoid mosquito breeding. (CAADECCS, KVASU, Mannuthy).

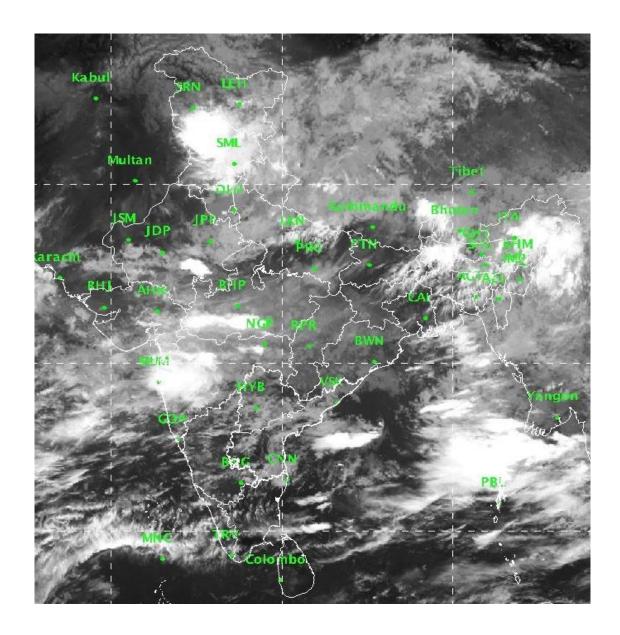


Figure: 1. Latest available satellite picture as on 31 July 2019 at 7:30 Hrs (IST). (Source: IMD).

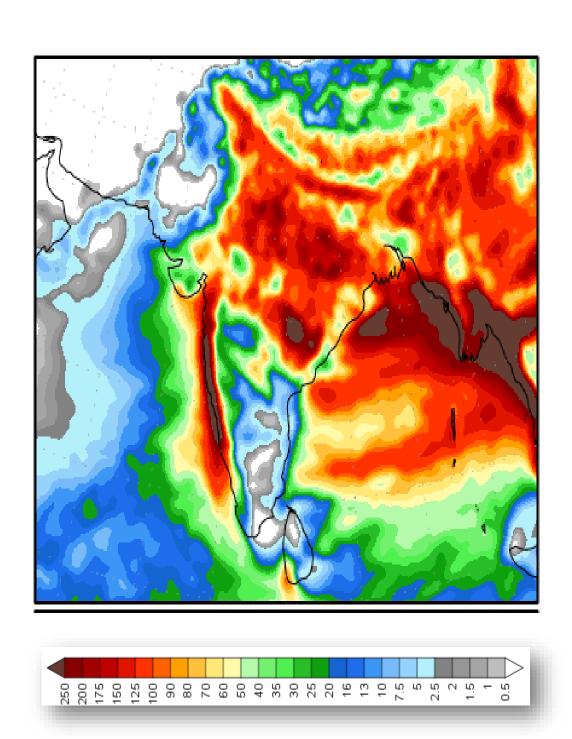


Figure: 2. Precipitation forecast for 31 July to 08 August 2019 (Source: NOAA NCEP).