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

Daily Crop Weather Information as on 11 August 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The low pressure area over northwest Madhya Pradesh & neighbourhood is very likely to move northwestwards and merge with the monsoon trough during next 24 hours.
- The monsoon trough is in its near normal position with the above low pressure area embedded in it.
- Also, an east-west shear zone passes across central India in the mid-tropospheric levels tilting southwards with height.
- A fresh low pressure area is likely to form over Northwest Bay of Bengal & neighbourhood around 13th August.
- Under the above scenario, (i) Fairly widespread to widespread rainfall with heavy to very heavy rainfall at isolated places very likely over major parts of northwest India (Western Himalayan region, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and East Rajasthan) during 11th-12th August. (ii) Fairly widespread to widespread rainfall with heavy to very heavy rainfall at isolated places are also very likely over parts of Madhya Pradesh and Gujarat region during 11th-14th August with likely further enhancement of rainfall intensity over north Gujarat and southwest Madhya Pradesh on 13th & 14th August.
- Strength of monsoon westerlies over southern parts of Arabian Sea has reduced and Is likely to reduce further during next 4 days. Under this scenario, rainfall activity is very likely to reduce further over Kerala and Karnataka during next 4 days.
- Moderate to Severe thunderstorm accompanied with lightning very likely at isolated places over northeast Rajasthan and western parts of Uttar Pradesh.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

 Rain/Thundershowers observed (from 0830 hours IST to 1730 hrs IST of yesterday): at most places over Konkan & Goa, Coastal Karnataka, Telangana, Kerala & Mahe and Lakshadweep; at many places over Jammu & Kashmir, Ladakh, Punjab, East Rajasthan, Gujarat State, East Madhya Pradesh, West Bengal & Sikkim, Madhya Maharashtra, Marathwada and Vidarbha; at a few places over Uttarakhand, Himachal Pradesh, Haryana, Chandigarh & Delhi, Odisha & North Interior Karnataka and at isolated places over West Rajasthan, Uttar Pradesh, West Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal.

- Yesterday Heavy rainfall recorded at isolated places over Himachal Pradesh, Arunachal Pradesh and Coastal Karnataka.
- Thunderstorm observed (1730 hours IST of yesterday to 0530 hrs IST of today): Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Marathwada and Madhya Pradesh.
- Maximum Temperature Departures as on 10-08-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over East Madhya Pradesh, Odisha and south Gangetic West Bengal; above normal (1.6°C to 3.0°C) at a few paces over Jharkhand and at isolated places over Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttar Pradesh, West Rajasthan, Saurashtra & Kutch, West Madhya Pradesh, Chhattisgarh, rest Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Telangana and at a few places over Coastal Karnataka; below normal (-1.6°C to -3.0°C) at a few places over Coastal Andhra Pradesh & Yanam, Marathwada, Vidarbha and Kerala & Mahe and at isolated places over Uttarakhand, Assam & Meghalaya, Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.0°C was reported at Jaisalmer (West Rajasthan).
- Minimum Temperature Departures as on 10-08-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Bihar, Punjab, Jammu & Kashmir, Ladakh and Gilgit-Baltistan, Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura; at a few places over Saurashtra & Kutch, Madhya Pradesh, Uttar Pradesh, Konkan & Goa and Madhya Maharashtra and at isolated places over Gangetic West Bengal. They were below normal (-1.6°C to -3.0°C)at a few places over Telangana and at isolated places over Vidarbha, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the lowest minimum

temperature of 18.2°C was reported at Hassan (South Interior Karnataka) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 11 August (Day 1): Heavy to very heavy rainfall very likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan and West Madhya Pradesh and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Konkan & Goa, Coastal & South interior Karnataka and Kerala & Mahe. Moderate to Severe thunderstorm accompanied with lightning very likely at isolated places over Uttar Pradesh; Moderate thunderstorm accompanied with lightning at isolated places over Bihar; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh and Delhi, Rajasthan, West Madhya Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & West Central Arabian Sea; Squally weather (speed reaching 40-50 kmph) likely along & off Goa- Karnataka-Kerala coasts and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 12 August (Day 2): Heavy to very heavy rainfall very likely at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Gujarat region and heavy rainfall at isolated places over Himachal Pradesh, West Madhya Pradesh, Vidarbha, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Saurashtra & Kutch, ghat areas of Madhya Maharashtra and Konkan & Goa. Moderate to Severe thunderstorm accompanied with lightning very likely at isolated places over Uttar Pradesh; with lightning at isolated places over Haryana, Chandigarh and Delhi, Rajasthan, Bihar and Jharkhand. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & West Central Arabian Sea. Fishermen are advised not to venture into these areas.
- 13 August (Day 3): Heavy rainfall at a few places with very heavy falls likely at isolated places over East Rajasthan; Heavy to very heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh and Gujarat region and heavy rainfall at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, West Madhya Pradesh, Vidarbha, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Assam &

- Meghalayan, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, ghat areas of Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam and Telangana.
- 14 August (Day 4): Heavy to very rainfall with extremely heavy falls likely at isolated places over Gujarat region; Heavy rainfall at a few places with very heavy falls at isolated places over East Rajasthan; Heavy to very heavy rainfall at isolated places over Madhya Pradesh, Chhattisgarh, Saurashtra & Kutch and Konkan & Goa and heavy rainfall at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Vidarbha, Bihar, Jharkhand, Odisha, Assam & Meghalayan, Nagaland, Manipur, Mizoram & Tripura, ghat areas of Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam and Telangana.
- 15 August (Day 5): Heavy to very Heavy rainfall with extremely heavy falls likely at isolated places over Rajasthan, Chhattisgarh, Odisha and Coastal Andhra Pradesh & Yanam; Heavy rainfall at a few places with very heavy falls at isolated places over Gujarat region; Heavy to very heavy rainfall at isolated places over Konkan & Goa and heavy rainfall at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Saurashtra & Kutch, Vidarbha, Bihar, Jharkhand, Odisha, Assam & Meghalayan, Nagaland, Manipur, Mizoram & Tripura, ghat areas of Madhya Maharashtra, Madhya Pradesh and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam and Telangana.
- The weather outlook for seven days i.e., 11 to 19 Aug 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)

South Karnataka

Weather condition:

State actual rainfall for during 23rd July to 29th July 2020 was 41.0 mm as against the normal of 62.0 mm with(-) 34% departure. Whereas, SIK received36.0 mm of rainfall as against the normal of 19.0mm leading to (+)92% departure. State actual rainfall for during 1st June to 29thJuly2020 was 429.0 mm as against the normal of 454.0 mm with (-)

5 % departure. Whereas SIK received 236.0 mm of rainfall as against the normal of 139.0 mm leading to (+) 69% departure.

Contingency measure:

- Agriculture crop: General: Maintaining a social distance at every step of the way, from 3-4 feet from person to person at rest, during food intake, during PACK products, while unloading / carrying. All farm equipment stores are open. Parents must maintain a distance of 4 feet from each other when purchasing seed, fertilizer and chemicals in these stores. ¬Farmers are advised to take up Ploughing or passing the cultivator in the areas where rainfall received and it should be taken up across the slope, it improves infiltration and conservation of rain water but also avoids soil erosion.
- Two cropping systems: With deep soil, two cropping systems can be adopted in areas where rainfall falls evenly throughout the 5-6 months. Farmers who follow two cropping systems can take two crops in the dry land region a year if they are willing to pay more to protect the falling rain. If the first crop is late, bean and horse gram can be taken as a mixed crop instead of millet. Strengthen bunds to bring down runoff and to maximize conservation of rain water in situ Mango: If sufficient water is available, irrigation can be given at 15-20 days interval starting from fruit setting till maturity.
- Leaf hopper and Powdery mildew disease incidence is more before flowering and immediately after fruit formation to manage spraying of Carbaryl, 50WP @4g/litre of water or Imidachlorprid @ 0.3ml/ litre of water for management of leaf hopper. Spray Lamda Cyhalothrin 5EC @ 0.5 ml/ litre of water or sulphur dust (SULTAF) 80 W @3g/litre of water against the Powdery mildew diseases. If the incidence of Leaf hopper is severe spray Azadirachtin (10,000 PPM) @ 7.0 ml/ litre of water.
- Animal Husbandry: Dairy: Livestock management during summer: Silage, hay and crop residues may be used for cattle feed when shortage of green fodder. Apply 4-6 inch thick thatch as a roofing material. Water can be used for spraying the floor and roof of shelter Periodically water spray during peak hot hours lowers the temperature and consequently reduces the heat load on animals Proper ventilation should be maintained for free circulation of air in the sheds Clean drinking water be provided to animals and water troughs should be regularly cleaned Drinking water of 60 lts. of water/day/animal is required. π Animals may be allowed for grazing early in morning or later in evening.

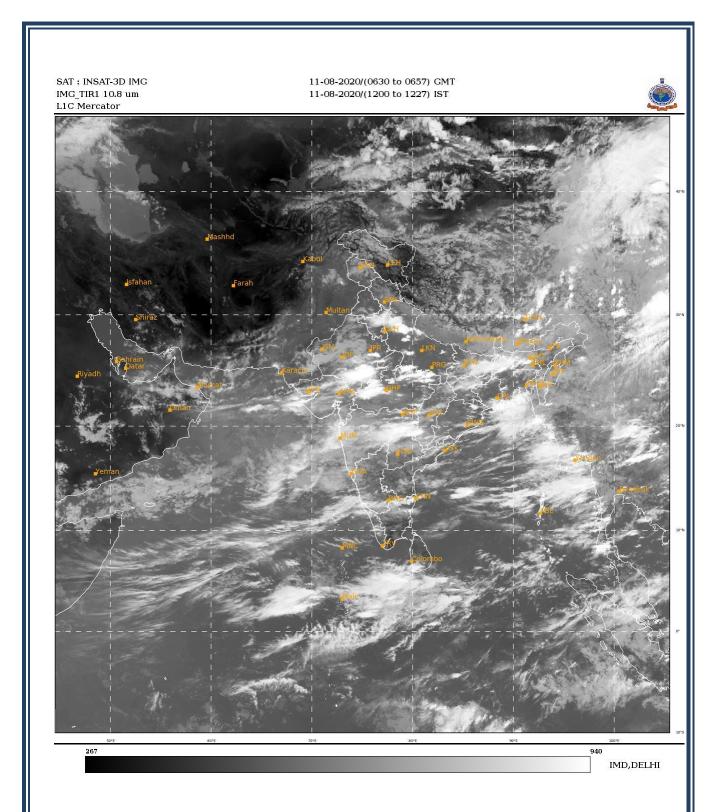
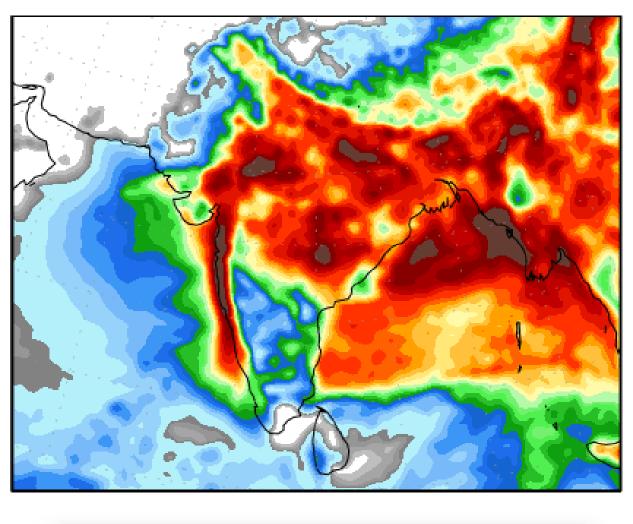


Figure: 1. Latest available satellite picture as on 11 August 2020 at 1227 Hrs (IST). (Source: IMD).



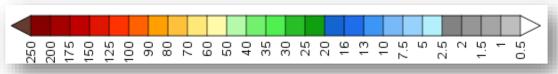


Figure: 2. Precipitation forecast for 11 to 19 Aug 2020 (Source: NOAA NCEP).

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