

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 10 July 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The western end of monsoon trough lies north of its normal position and its eastern end runs close to the foothills of the Himalayas. In addition, convergence of south westerly/southerly winds from Bay of Bengal at lower tropospheric levels very likely to continue over northeast & east India during next 3-4 days.
- Under its influence, fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Uttarakhand, Himachal Pradesh, northern parts of Punjab, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim and northeastern states during next 4-5 days. Isolated extremely heavy falls are also very likely over Uttarakhand and West Uttar Pradesh on 11th & 12th; East Uttar Pradesh during 10th to 12th; Bihar on 10th & 11th; Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya Arunachal Pradesh and during 10th to 11th July, 2020.
- Intense thunderstorm & lightning potential zone: Moderate to intense thunderstorm & lightning very likely over Uttar Pradesh, Bihar, Jharkhand, Rayalaseema, Telangana, South Coastal Andhra Pradesh, Kerala & Mahe, Coastal Karnataka, Vidarbha, West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Arunachal Pradesh, Assam & Meghalaya, Bihar, Madhya Maharashtra, Coastal Karnataka, Kerala & Mahe and Chhattisgarh; at many places over Nagaland, Manipur, Mizoram & Tripura, North interior Karnataka, Rayalaseema, Gujarat state and west Bengal & Sikkim; at a few places over East Uttar Pradesh and at isolated places over Himachal Pradesh, Uttarakhand, Madhya Pradesh, Vidarbha, Marathwada, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and East Rajasthan;

- Heavy to very rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday) at isolated places over Arunachal Pradesh and heavy rainfall over Assam & Meghalaya.
- Thunderstorm observed (from 1730 hours IST yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Madhya Pradesh, Telangana, Rayalaseema, Coastal Andhra Pradesh & Yanam and Gangetic West Bengal.
- Maximum Temperature Departures as on 09-07-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh; at many places over Gangetic West Bengal, Odisha and Uttarakhand; at a few places over East Madhya Pradesh, Telangana and Kerala & Mahe; and at isolated places over West Madhya Pradesh and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Arunachal Pradesh; at a few places over Assam & Meghalaya and Bihar; below normal (-1.6°C to -3.0°C) at many places over East Uttar Pradesh and Bihar; at a few places over Coastal Karnataka, Rayalaseema and East Rajasthan and at isolated places over Haryana, Chandigarh & Delhi, Punjab, Chhattisgarh, North interior Karnataka and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 41.5°C was reported at Bikaner (West Rajasthan).
- Minimum Temperature Departures as on 09-07-2020: Minimum temperatures were above normal (1.6°C to 3.0°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, East Madhya Pradesh and Chhattisgarh; at a few places over Uttarakhand, West Madhya Pradesh, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya and at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Gujarat state, East Rajasthan, Madhya Maharashtra and Kerala & Mahe. They were below normal (-1.6°C to -3.0°C) at a few places over Coastal Andhra Pradesh & Yanam and Vidarbha and at isolated places over Tamil Nadu, Puducherry & Karaikal and Odisha and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 18.4°C was reported at Alwar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 10 July (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over East Uttar Pradesh, Bihar, Arunachal Pradesh; heavy to very heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh and Nagaland, Manipur, Mizoram & Tripura and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Gangetic West Bengal, Odisha, Konkan & Goa, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Moderate to severe thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Bihar and thunderstorm accompanied with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) likely over Southwest and Westcentral Arabian Sea and (speed reaching 40-50 kmph) likely over Eastcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.
- 11 July (Day 2): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Assam & Meghalaya; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over Uttarakhand, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; heavy to very heavy rainfall at isolated places over Himachal Pradesh, Punjab and Nagaland, Manipur, Mizoram & Tripura and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi, Konkan & Goa, Rayalseema, Coastal & South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Moderate to severe thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh and Bihar and thunderstorm accompanied with lightning at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada and Tamil Nadu, Puducherry &

Karaikal. Strong Wind (speed reaching 50-60 kmph) likely over Southwest and Westcentral Arabian Sea; (speed reaching 40-50 kmph) likely over North & Eastcentral Arabian Sea and Gujarat coast. Fishermen are advised not to venture into sea over these areas.

- 12 July (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places over Uttarakhand and Uttar Pradesh; heavy to very heavy rainfall at isolated places over Himachal Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and heavy rainfall at isolated places over Punjab, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalseema, Coastal & South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Moderate to severe thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh and thunderstorm accompanied with lightning at isolated places over Uttarakhand, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada and Tamilnadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) likely over Southwest and Westcentral Arabian Sea; (speed reaching 40-50 kmph) likely over North & Eastcentral Arabian Sea and Gujarat coast. Fishermen are advised not to venture into sea over these areas.
- 13 July (Day 4): Heavy to very heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh and Assam & Meghalaya and heavy rainfall at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Assam & Meghalaya, Madhya Maharashtra, Marathwada and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.
- 14 July (Day 5): Heavy to very heavy rainfall at isolated places over Uttar Pradesh and Assam & Meghalaya and heavy rainfall at isolated places over Uttarakhand, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Thunderstorm

accompanied with lightning at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Assam & Meghalaya, Madhya Maharashtra, Marathwada and Tamilnadu, Puducherry & Karaikal. Strong Wind (speed reaching 50-60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.

- The weather outlook for seven days i.e., 10 to 18 July 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 25th June to 1st July 2020 was 47.0 mm as against the normal of 56.0 mm with (-) 16 % departure. Whereas, SIK received 50.0 mm of rainfall as against the normal of 10.0 mm leading to (+) 411 % departure. State actual rainfall for during 1st January to 1st July 2020 was 307.0 mm as against the normal of 328.0 mm with (-) 6 % departure. Whereas SIK received 258.0 mm of rainfall as against the normal of 210.0 mm leading to 22 % 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. Animals may be allowed for grazing early in morning or later in evening.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator

10-07-2020/(0530 to 0557) GMT
10-07-2020/(1100 to 1127) IST

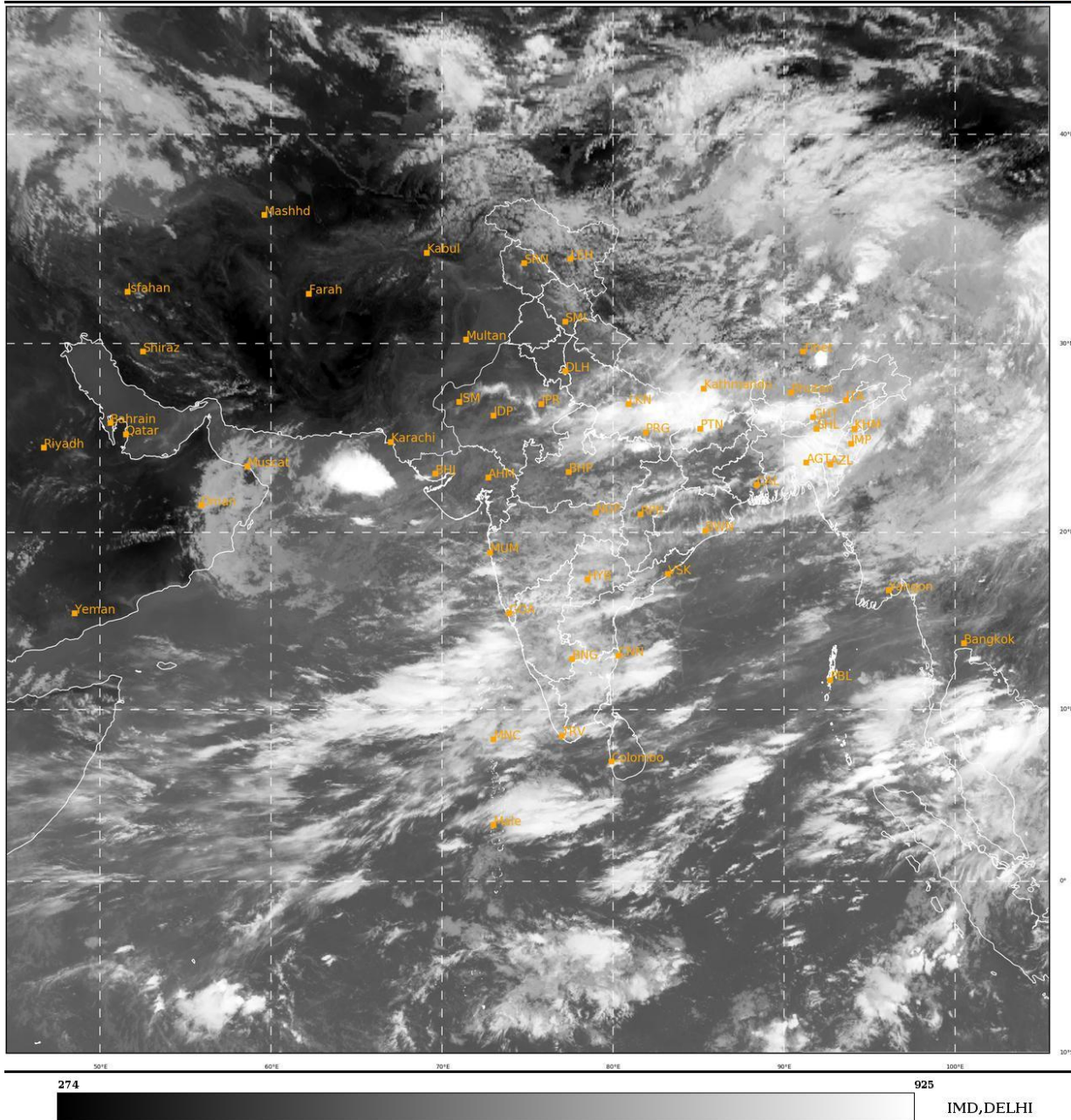


Figure: 1. Latest available satellite picture as on 10 July 2020 at 1127 Hrs (IST). (Source: IMD).

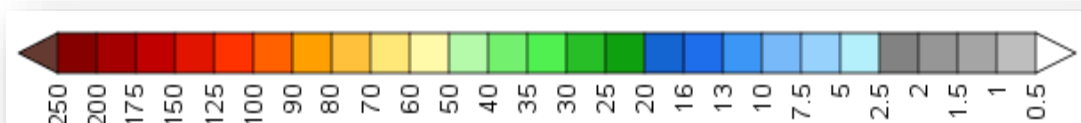
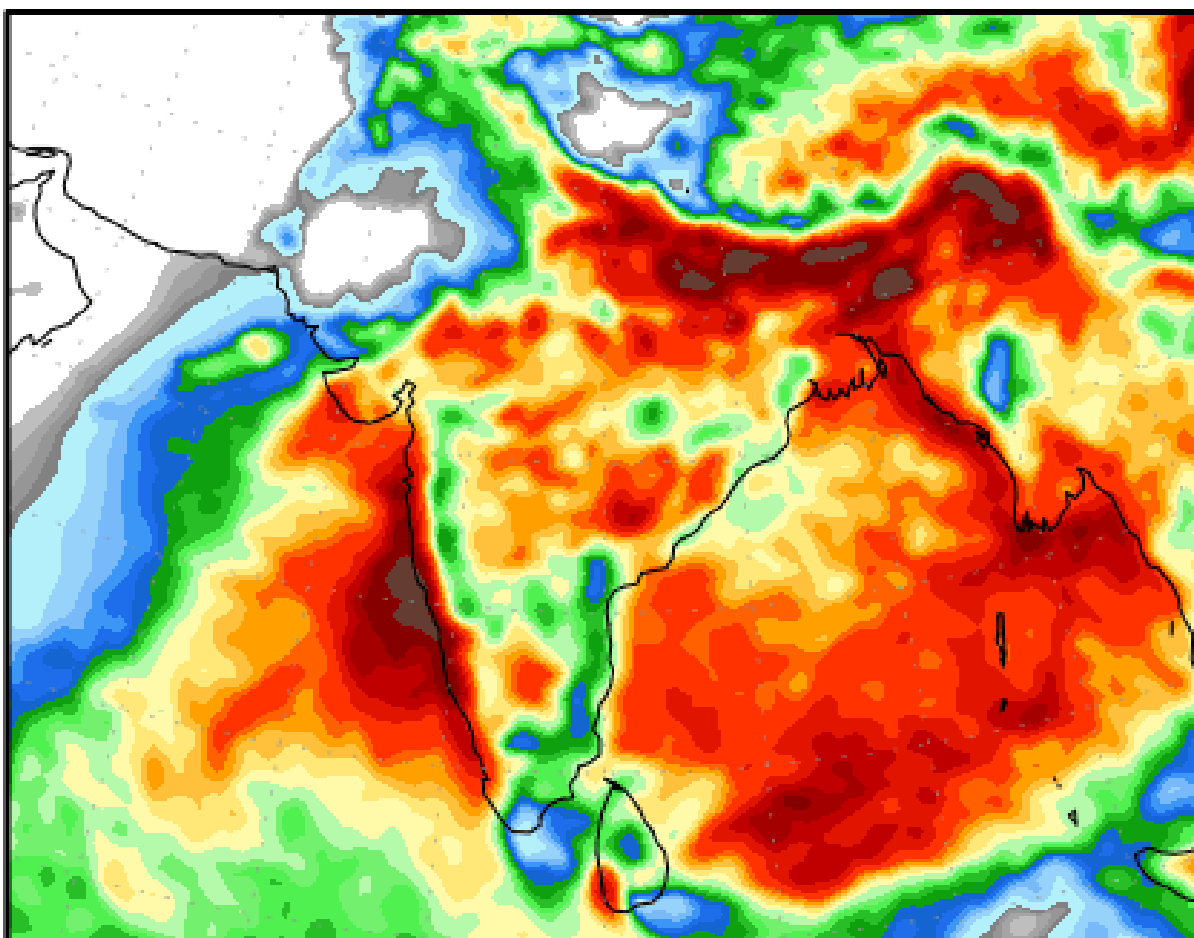


Figure:2. Precipitation forecast for 10 to 18 July 2020 (Source: NOAA NCEP).

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