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

## **Daily Crop Weather Information as on 07 Jul 2021**

Attention: Rajiv Maheshwari, OSD, ICAR

#### **Significant Weather Features (IMD)**

- The Northern Limit of southwest monsoon (NLM) continues to pass through Lat. 26°N / Long. 70°E, Barmer, Bhilwara, Dholpur, Aligarh, Meerut, Ambala and Amritsar.
- The moist easterly winds in lower level from Bay of Bengal likely to establish gradually over parts of eastern India from 08th July onwards. It is likely to spread into northwest India covering Punjab and north Haryana by 10th July. Accordingly, southwest monsoon likely to advance over remaining parts of West Uttar Pradesh, some more parts of Punjab, Haryana and Rajasthan and Delhi around 10th July.
- Under the influence of these conditions:
  - (i) Scattered to widespread rainfall with isolated heavy falls very likely over Central India (Madhya Pradesh, Vidarbha, Chhattisgarh) from 8th July onwards and isolated very heavy rainfall also very likely over Vidarbha and Chhattisgarh on 08th; West Madhya Pradesh on 11th and East Madhya Pradesh on 10th July.
  - (ii) Scattered to widespread rainfall very likely over Northwest India from 9th July onwards and isolated heavy rainfall also very likely over Uttarakhand, Himachal Pradesh and Uttar Pradesh from 9th; over East Rajasthan from 10th July onwards.
- Due to strengthening of Southwest Monsoon over Arabian Sea and likely formation of a Low Pressure Area over Westcentral Bay of Bengal around 11th July; enhanced rainfall activity very likely along the west coast from 09th July onwards. Widespread rainfall with isolated heavy to very heavy falls very likely over Konkan & Goa, Madhya Maharashtra, Coastal & South Interior Karnataka and Kerala & Mahe during 09th -11th July. Isolated heavy falls are also very likely over Odisha, Coastal Andhra Pradesh and Telangana during 09th-11th July.
- Due to revival of Southwest Monsoon from 8th July; rainfall intensity and distribution very likely to decrease over Northeast India (Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura) from 9th July onwards.

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

#### **Main Weather Observations (IMD)**

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura, many places over Arunachal Pradesh, Bihar, Interior Karnataka and Lakshadweep; at a few places over Gangetic west Bengal, Konkan & Goa, Vidarbha, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka and Kerala & Mahe and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttrakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat region, Madhya Maharashtra, Marathawada, Telangana, Chhattisgarh and Tamil Nadu, Puducherry & Karaikal.
- Heavy to very heavy rainfall recorded at isolated places over Arunachal Pradesh, Tripura, Sub-Himalayan West Bengal & Sikkim and heavy rainfall at isolated places over Bihar, East Uttar Pradesh, Konkan & Goa, Chhattisgarh, Rayalaseema, Assam & Meghalaya, Tamil Nadu, Puducherry & Karaikal and South Interior Karnataka.
- Heat wave to severe Heat wave observed at isolated pockets over northwest Madhya Pradesh and Heat Wave observed in isolated pockets over Punjab and Uttar Pradesh.
- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hrs IST of today):Uttrakhand, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Sub- Himalayan West Bengal & Sikkim, Jharkhand, Odisha, West madhya Pradesh, East Rajasthan, Madhya Maharashtra, Telangana, Interior Karnataka, Rayalseema, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Assam & Meghalaya, East Uttar Pradesh and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 06-07-2021: Maximum temperatures were markedly above normal (5.1°C to more) at many places over Vidarbha; at a few places over West Uttar Pradesh, at isolated places over East Uttar Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at many places over Uttrakhand, Gujarat Region, Madhya Pradesh, Marathwada, West Uttar Pradesh and Bihar; at a few places over Kerala & Mahe and at isolated places over East Rajasthan; above normal (3.1°C to 5.0°C) at most places over Himachal Pradesh, Haryana, Chandigarh & Delhi, West Rajasthan, Saurashtra & Kutch, Telangana and Madhya Maharashtra; at many places over Jharkhand, Gangetic west Bengal, Assam & Meghalaya, Odisha, Rayalseema and Karnataka

- state; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands; at isolated places over Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.3°C was reported at Jhansi (West Uttar Pradesh).
- Minimum Temperature Departures as on 07-07-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at a few places over Haryana, Chandigarh & Delhi; at isolated places over Vidarbha and Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Himachal Pradesh, Uttarakhand, Gujarat region and Sub-Himalayan West Bengal & Sikkim; at a few places over Rajasthan, Odisha, Chhattisgarh, Vidarbha, Marathawada; at isolated places over Uttar Pradesh, Madhya Maharashtra, Gangetic West Bengal, Telangana, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country.

## Weather Warning during the next 5 days (IMD)

- 07 July (Day 1): Heavy to Very Heavy Rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and Heavy Rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka, and Tamilnadu, Puducherry & Karaikal . Thunderstorm with gusty wind (speed reaching 30-40 kmph) very likely at isolated places over East Rajasthan, Andaman & Nicobar Islands; with lightning very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal, & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heat Wave conditions very likely in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, and Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian sea. Fishermen are advised not to venture into these areas.
- 08 July (Day 2): Heavy to Very Heavy Rainfall very likely at isolated places over Vidharbha and Chattisgarh and Heavy Rainfall at isolated places over Uttarakhand, East Madhya Pradesh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya

,Arunachal Pradesh, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe . Thunderstorm with gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Andaman & Nicobar Islands; with lightning very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heat Wave conditions very likely in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, and Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian sea; Southeast Arabian Sea along & off Kerala & Karnataka coasts & Lakshadweep area; south Bay of Bengal and south Andaman Sea. Fishermen are advised not to venture into these areas.

- 9 July (Day 3): Heavy to Very Heavy Rainfall very likely at isolated places over Konkan & Goa, Coastal & South Interior Karnataka, Kerala & Mahe and Heavy Rainfall at isolated places over Uttarakhand, East Madhya Pradesh, Vidharbha, Chattisgarh, Bihar, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram Tripura, Madhya Maharashtra, Marathwada, Telangana, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with gusty wind (speed reaching 40- 50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with gusty wind (speed reaching 30- 40) Kmph at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Rajasthan; with lightning very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and south Andaman Sea. Fishermen are advised not to venture into these areas.
- 10 July (Day 4): Heavy to Very Heavy Rainfall likely at isolated places over East Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, ghat areas of Madhya Maharashtra, Coastal & South Interior Karnataka, Kerala & Mahe and

Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Vidharbha, Chattisgarh, Odisha, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal. Thundersquall (speed reaching 50-60 kmph) likely at isolated places over Andaman & Nicobar Islands. Thunderstorm with gusty wind (speed reaching 30-40 Kmph) at isolated places over East Rajasthan; with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Gangetic West Bengal, Odisha, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and south Andaman Sea. Fishermen are advised not to venture into these areas.

11 July (Day 5): Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand, West Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, ghat areas of Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe and Heavy Rainfall at isolated places over Himachal Pradesh, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidharbha, Chattisgarh, Odisha, Gujarat region, Marathwada, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thundersquall (speed reaching 50-60 Kmph) likely at isolated places over Andaman & Nicobar Islands. Thunderstorm with gusty wind (speed reaching 30-40 Kmph) at isolated places over East Rajasthan; with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Gangetic West Bengal, Odisha, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over West Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and south Andaman Sea. Fishermen are advised not to venture into these areas.

• The weather outlook for seven days i.e., 07 Jul to 15 Jul 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)**

#### Marathwada

#### Weather condition:

At Parbhani centre: 25 June to 01 July (SMW 26) during this period total 35.3 mm rainfall was recorded. The Maximum temperature was range from 29.8 to 34.9 0C and minimum temperature range from 20.8 to 24.9 0C. Relative humidity (RH-I) ranged between 76-87% and relative humidity (RH-II) recorded was 49-73 %. The wind speed varied 2.3 to 7.5km/hr.

## **Contingency measure:**

- Cotton: Inter culture operations should be done in timely sown. Cotton crop for weed management. Sowing of cotton can be done up to 15th July. The areas where sowing was not done, sowing should be done after receipt of sufficient amount of rainfall (75-100 mm) and adequate soil moisture. Seed treatment must be done before sowing of cotton crops.
- Soybean: Don't hurry for sowing where sufficient amount of rainfall (75-100 mm) was not received. Sowing of Soybean can be done up to 15th July. Sowing should be done after receipt of sufficient amount of rainfall and adequate soil moisture is available. Seed treatment must be done before sowing of Soybean crops.
- Pigeon pea: Inter culture operations should be done in timely sown. Pigeonpea crop for weed management. Sowing of pigeonpea can be done up to 15th July. The areas where sowing was not done, sowing should be done after receipt of sufficient amount of rainfall (75-100 mm) and adequate soil moisture. Seed treatment must be done before sowing of pigeonpea crops.
- Black/Green gram: Inter culture operations should be done in timely sown. Black gram/Green gram crop for weed management. Sowing of Black gram/Green gram can be done up to 07th July. The areas where sowing was not done, sowing should be done after receipt of sufficient amount of rainfall (75- 100 mm) and adequate soil moisture. Seed treatment must be done before sowing of Black gram/Green gram crops.
- Ground nut: Inter culture operations should be done in timely sown. Groundnut crop for weed management. Sowing of Groundnut can be done up to 07th July. The areas where sowing was not done, sowing should be done after receipt of sufficient amount of rainfall (75-100 mm) and adequate soil moisture. Seed treatment must be done before sowing of Groundnut crops.
- Maize: The areas where sowing was not done, sowing should be done after receipt of sufficient amount of rainfall (75-100 mm) and adequate soil moisture.

Sowing of Maize can be done up to end of July. Seed treatment must be done before sowing of Maize crops.

- Banana: Weed management should be done in newly planted Banana orchard.
- Mango: Weed management should be done in newly planted Mango orchard.
- Grape: Remove tillers from grape orchard. Thinning of leaves and pinching should be done in grape orchard.
- Custard Apple: Weed management should be done in Custard apple.
- Vegetable: Transplanting of 45 days old seedlings of vegetable crops (Brinjal, Tomato, Chilli etc.) should be done at the places where rainfall was received by considering soil moisture.
- Floriculture: Sowing of Floriculture crops should be done at the places where rainfall was received by considering soil moisture.
- Animal: At the onset of rainy season milch cows and Buffaloes should not be solely fed on lush green pasture or cereal green fodder to avoid.
- Mulberry Sericulture: It is need of todays cropping pattern. There is increase in the cultivation area of Soybean by 15 to 20 lakh ha. Parbhani, Nanded, Jalna and Hingoli are major cotton and Soybean growing districts in Maharashtra. Farmers may think seasonally and go for 1 to 1.5 acre Mulberry plantation, because in comparison with cotton and Soybean sericulture farmer earning better money Rs. 3.0 Lakh per acre and from 1.5 ha. earning minimum of Rupees 5 Lakh per year.

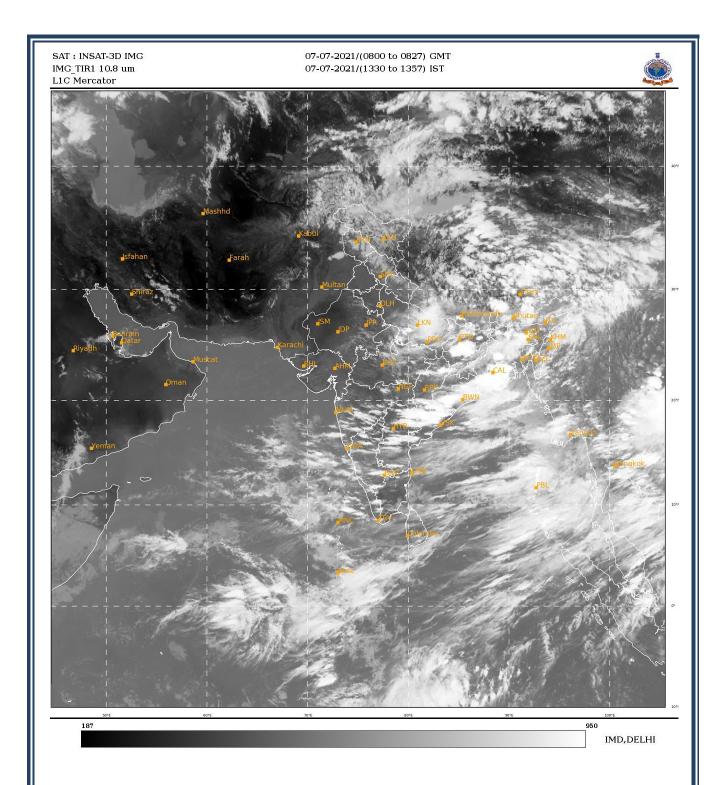


Figure: 1. Latest available satellite picture as on 07 Jul 2021 at 1357 Hrs (IST). (Source: IMD).

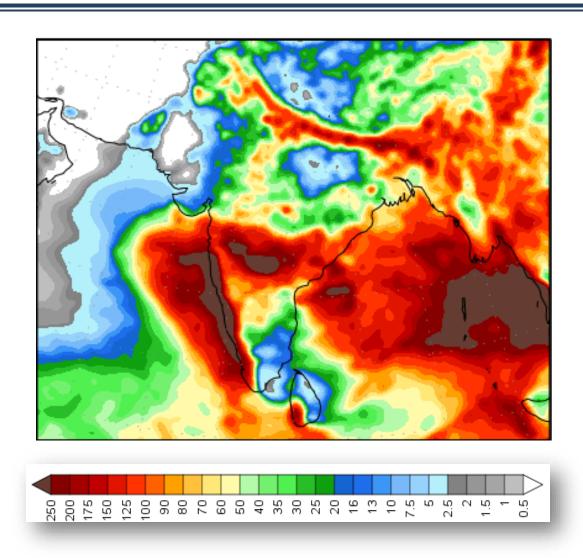


Figure: 2. Precipitation forecast for 07 Jul to 15 Jul 2021 (Source: NOAA NCEP).

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