

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 10 May 2021**

**Attention: Rajiv Maheshwari, OSD, ICAR**

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

- Under the influence of a Western Disturbance and its interaction with easterly winds at lower levels; scattered to widespread rainfall/thundershower very likely over Western Himalayan Region and scattered to fairly widespread rainfall/thunderstorms is likely over plains of Northwest India during 10th-15th May, 2021 with maximum intensity during 11th-13th May. Isolated heavy rainfall is also likely over Himachal Pradesh and Uttarakhand on 12th & 13th May, 2021. Isolated hailstorm also likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi on 12th & 13th and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Rajasthan on 12th. Isolated duststorm also likely over Rajasthan during 10th-13th.
- Under the influence East-West trough from Punjab to Sub-Himalayan West Bengal and a trough in westerlies roughly along longitude 87°E to the north of latitude 23°N in lower tropospheric levels; scattered to widespread rainfall/thunderstorm activity is very likely over East and Northeast India during next 4-5 days. Isolated heavy rainfall is also likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 10th & 11th; Arunachal Pradesh on 11th; Sub Himalayan West Bengal & Sikkim during 10th-13th; Gangetic West Bengal during 10th-13th and Odisha on 11th & 13th May, 2021. Isolated very heavy rainfall is also likely over Assam & Meghalaya during next 24 hours.
- Under the influence of North-South trough/wind discontinuity from Vidarbha to Kerala coast in lower levels; light/moderate scattered to fairly widespread rain/thunder is very likely over Kerala & Mahe, Lakshadweep and Coastal & South Interior Karnataka and isolated to scattered rain/thundershower over rest parts of south Peninsular India during next 4-5 days. Isolated heavy rainfall is also likely over Kerala & Mahe during 10th-12th & 14th; Coastal Karnataka on 10th & 12th; Tamil Nadu, Puducherry & Karaikal on 10th & 14th May, 2021.
- No heat wave conditions are likely over any part of the country during next 4-5 days.
- 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 Gangetic West Bengal and Assam & Meghalaya; at many places over Chhattisgarh, Bihar, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe and Lakshadweep; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Madhya Pradesh, Vidarbha, Jharkhand, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim and Odisha and at isolated places over Uttar Pradesh, Rajasthan, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka and Puducherry & Karaikal and Andaman & Nicobar Islands.
- Heavy Rainfall recorded at isolated places over Odisha, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal.
- Thunderstorm/Hailstorm/Duststorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Thunderstorm at many places over Uttarakhand, Haryana, Chandigarh & Delhi, Punjab, Chhattisgarh, Jharkhand, Gangetic West Bengal, Madhya Maharashtra and North Interior Karnataka; at isolated places over Jammu, Kashmir, Ladakh Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Rajasthan, Uttar Pradesh, Madhya Pradesh, Vidarbha, Marathwada, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Hailstorm at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi and Marathwada. Duststorm at isolated places over West Rajasthan.
- Maximum Temperature Departures as on 09-05-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region and Konkan & Goa; at a few places over Jammu, Kashmir, Ladakh Gilgit-Baltistan & Muzaffarabad, Saurashtra & Kutch and Kerala & Mahe; at isolated places over Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or more) at most places over Chhattisgarh; appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar; at a few places over Gangetic west Bengal and Vidarbha; at isolated places over East Uttar Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at most places over Himachal Pradesh and North Interior Karnataka; at many places over Sub-Himalayan west Bengal & Sikkim, East Madhya Pradesh and Vidarbha; at a few places over west Uttar Pradesh, South Interior Karnataka and Andaman & Nicobar Islands; at isolated places over

Telangana, Coastal Andhra Pradesh & Yanam and west Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.6°C was reported at Jaisalmer (West Rajasthan).

- Minimum Temperature Departures as on 10-05-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Gujarat Region; at a few places over Saurashtra & Kutch and Marathwada; at isolated places over East Rajasthan, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. They are markedly below normal (-5.0°C or less) at isolated places over East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Gangetic West Bengal; at isolated places over East Uttar Pradesh, West Madhya Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at most places over Jharkhand and Chhattisgarh; at many places over Bihar and Vidarbha; at a few places over Himachal Pradesh; at isolated places over West Uttar Pradesh, West Madhya Pradesh and Assam & Meghalaya and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.2°C is reported at Gorakhpur (East Uttar Pradesh) over the plains of the country.

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

- 10 May (Day 1): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand; with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy to very heavy rainfall very likely at isolated places over Assam & Meghalaya and Heavy rainfall at isolated places over SubHimalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally Weather (wind speed reaching 40-50 kmph) very likely along & off Kerala coast and over Southwest Arabian Sea and adjoining Southeast

Arabian Sea & Equatorial Indian Ocean. Fishermen are advised not to venture into these areas.

- 11 May (Day 2): Thunderstorm with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Bihar and Gangetic West Bengal; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana and Kerala & Mahe; with lightning at isolated places over Uttar Pradesh, East Madhya Pradesh, Vidarbha, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these areas.
- 12 May (Day 3): Thunderstorm with lightning, hail & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Gangetic West Bengal; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, West Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Telangana and Kerala & Mahe; with lightning at isolated places over Chhattisgarh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Hailstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over Himachal Pradesh, Uttarakhand, West Bengal & Sikkim, Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala & Mahe. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these areas.

- 13 May (Day 4): Thunderstorm with lightning, hail & gusty winds (speed reaching 40-50 kmph) likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh and Uttarakhand; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Telangana and Kerala & Mahe; with lightning at isolated places over East Madhya Pradesh, Gujarat Region, Coastal Andhra Pradesh & Yanam, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy rainfall likely at isolated places over Himachal Pradesh, Uttarakhand, West Bengal & Sikkim and Odisha. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest Arabian Sea, Southeast Arabian Sea & adjoining Maldives area. Fishermen are advised not to venture into these areas.
- 14 May (Day 5): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Rajasthan, Chhattisgarh, Telangana and Kerala & Mahe; with lightning at isolated places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Madhya Pradesh, Vidarbha, Coastal Andhra Pradesh & Yanam, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest Arabian Sea, Southeast Arabian Sea & adjoining Maldives area. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 10 May to 18 May 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)**

### **Maharashtra-Vidarbha**

#### **Weather condition:**

Weekly average means (18 MW) at AICRPAM Akola centre: T max 40.2°C (normal 42.4°C), T min 25.1°C (normal 26.6°C). RH I 38 % (normal 40 %), RH II 16 % (normal 16 %). Evaporation rate 11.0 mm (normal 14.6 mm), Wind speed 3.1 km/hr (normal 9.9 km/hr) and BSH 6.8 hrs (normal 9.2 hrs). Maximum temperature across the week was 2.2°C below normal with a deviation of -5.1 to 0.0°C from normal. Minimum

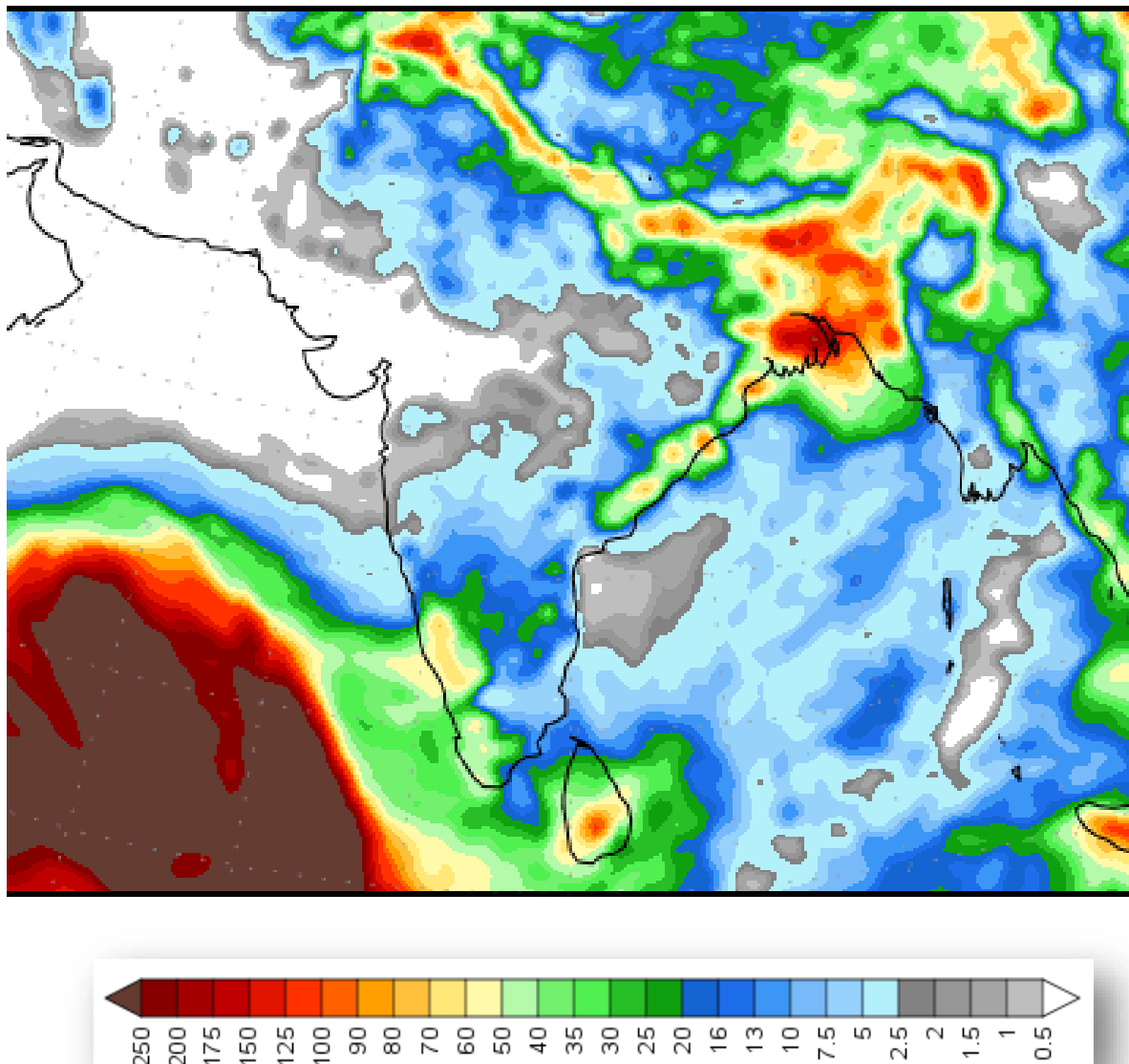


temperature across the week 1.5°C below normal with a deviation of -4.0 to +0.8°C from normal.

### Contingency measure:

- The forecast (IMD) indicates thunderstorm with lightning and gusty wind (speed reaching 30-40 kmph) during 06-07 May and thunderstorm accompanied with lightning during 08-10 May very likely to occur at isolated places over Vidarbha. Farmers are advised to strictly follow the health advisory set out by the health officials for self, family and farm laborers during the prevailing health anxiety situation due to corona virus. Adequate personal safety measures as advised to be taken for everyone during farm operations and also at market place.
- In view of forecasted isolated light to medium rains during 06-10 May, take into account the soil moisture conditions and local weather condition in planning irrigation in summer, fruit and vegetable crops. Ensure protection of farm animals during thunderstorm/lightning. Summer deep ploughing of harvested fields is advisable to expose the hibernating insects, larvae/pupa to sun and predator birds. For control of tikka disease in groundnut, undertake spray of Chlorothalonil 75%WP @ 20g OR Propiconazole 25% EC 10 ml OR Tebuconazole 25.9% EC @ 10 ml per 10 litres of water. Depending upon the severity of disease if needed second spray can be undertaken after 15 days alternating the fungicide.
- For control of sesamum phyllody, remove and destroy infected plants. To control vector- jassids, undertake spray of quinalphos 25% @ 20 ml per 10 litres of water. Pod formation stage is a critical period in green gram when irrigation is a must, take into account the soil moisture conditions and local weather condition in planning irrigation in green gram. Avoid water stagnation/over irrigation. In summer green gram crop to manage the pod borer & white fly by undertake spray of Indoxacarb 15.8% EC @ 6 to 7 ml per 10 litres of water.
- In summer months mulching around tree trunk up to 5-10 cm is advisable with wheat straw, paddy straw or uprooted weeds to moderate soil thermal regime/evaporation and economize irrigation water which helps in reducing fruit crop and retain succulence. Incidence of aphids, thrips, whitefly and spider mites observed in brinjal crop, for the management spray should be undertaken 2 weeks after planting with Dimethoate 30% EC @10 ml or Quinalphos 25% EC @20 ml or thiometon 25% EC @10 ml per 10 liters of water. For management of top shoot and fruit borer spraying should be taken of cypermethrin 25 % EC@ 30 ml in 10 litre of water. Ensure protection of farm animals during thunderstorm/lightning.





**Figure:2. Precipitation forecast for 10 May to 18 May 2021 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*