

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

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

### **Daily Crop Weather Information as on 18 April 2020**

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

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

- Under the influence of Western Disturbance, fairly widespread to widespread rain/thundershowers over Western Himalayan Region and isolated to scattered rain/thundershowers over adjoining plains of northwest India likely to continue during next 24 hours and decrease thereafter. Isolated hailstorm also likely over Western Himalayan region during next 24 hours.
- Due to the convergence of strong moist winds from the Bay of Bengal, Northeast India and Sub-Himalayan West Bengal & Sikkim are very likely to experience fairly widespread to widespread rainfall/thundershowers during next 7 days with some reduction on 20th April. Scattered to fairly widespread rainfall/thunderstorm activity likely to occur over Gangetic West Bengal during the same period and over Odisha on 22nd April.
- Isolated heavy rainfall, thundersqualls & hailstorms are also very likely over Northeastern states during next 7 days and over West Bengal & Sikkim during 21st-22nd April.
- Maximum temperatures in the range of 40-42°C are likely to prevail over parts of Telangana, Rayalaseema and North Interior Karnataka during next 2-3 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 Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Assam & Meghalaya; at many places over Uttarakhand, Punjab, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; at a few places over Haryana, Chandigarh & Delhi, Bihar, East Uttar Pradesh and Coastal & North Interior Karnataka; at isolated places over Arunachal Pradesh, West Rajasthan, West Uttar Pradesh, Madhya Pradesh, Jharkhand, Odisha, Gangetic West Bengal, Telangana, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.

- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): at isolated places over Himachal Pradesh, Uttarakhand, Punjab, West Rajasthan, Haryana, Chandigarh & Delhi, Bihar, Uttar Pradesh, Madhya Pradesh, Odisha, Gangetic West Bengal & Sikkim, Assam & Meghalaya, Telangana, North Interior Karnataka and Kerala & Mahe.
- Maximum Temperature Departures as on 17-04-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Assam & Meghalaya, Chhattisgarh, Saurashtra & Kutch and Konkan & Goa ; above normal (1.6°C to 3.0°C) at most places over Jharkhand, Marathwada and Lakshadweep; at many places over East Madhya Pradesh and Vidarbha; at a few places over East Rajasthan, Odisha, West Madhya Pradesh, Coastal Karnataka, Rayalaseema and Kerala & Mahe and at isolated places over West Rajasthan, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Bihar, Gangetic West Bengal, Madhya Maharashtra and Andaman & Nicobar Islands . They were markedly below normal (-5.1°C or less) at most places over Jammu & Kashmir and Ladakh; at a few places over Himachal Pradesh; at isolated places over Punjab and Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at isolated places over Sub-Himalayan West Bengal & Sikkim, Gujarat region and Telangana and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.8°C was reported at Akola (Vidarbha).
- Minimum Temperature Departures as on 18-04-2020: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over East Rajasthan and West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand; at isolated places over Gujarat state, East Madhya Pradesh and Madhya Maharashtra; above normal (1.6°C to 3.0°C) at most places over Konkan & Goa and Marathwada; at many places over West Rajasthan, East Uttar Pradesh, Jharkhand, Chhattisgarh and Coastal Karnataka; at a few places over South Interior Karnataka, Kerala & Mahe, West Uttar Pradesh, Bihar and Gangetic West Bengal; at isolated places over Haryana, Chandigarh & Delhi, Vidarbha, Odisha, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands. They are below normal (-1.6°C to -3.0°C) at many places over Himachal Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad; at isolated places over Assam & Meghalaya and near normal over rest parts of the country. The lowest minimum temperature of 16.9°C reported at Fatehgarh (East Uttar Pradesh) and Ludhiana (Punjab) over plains of the country.

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

- 18 April (Day 1): Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya; with lightning & squall (speed reaching 50-60 kmph) at isolated places over Nagaland, Manipur, Mizoram & Tripura and West Bengal & Sikkim. Thunderstorm accompanied 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 winds (speed reaching 40-50 kmph) at isolated places over Jharkhand and Odisha; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Punjab, East Uttar Pradesh, East Madhya Pradesh, Arunachal Pradesh, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Madhya Maharashtra and with lightning at isolated places over Haryana, Chandigarh & Delhi, West Madhya Pradesh, Chhattisgarh, Bihar, Andaman & Nicobar Islands, Telangana and Karnataka. Heavy rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya. Dust/Thunderstorm accompanied with gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Rajasthan. Squally weather (wind speed 45-55 kmph) likely to prevail over northwest Bay of Bengal off West Bengal-Odisha coasts. Fishermen are advised not to venture into these areas.
- 19 April (Day 2): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Madhya Maharashtra; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Assam & Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Bengal & Sikkim, Marathawada and Coastal Andhra Pradesh & Yanam and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Vidarbha, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Telangana and Karnataka. Dust/Thunderstorm accompanied with gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- 20 April (Day 3): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Chhattisgarh, Madhya Maharashtra and Marathawada; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Bihar, Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Bengal & Sikkim and Odisha and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarkhand, Vidarbha, Andaman & Nicobar Islands, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & South Interior Karnataka and Kerala & Mahe.
- 21 April (Day 4): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) likely at isolated places over West Bengal & Sikkim; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Assam & Meghalaya and Jharkhand; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Bihar, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Madhya Maharashtra, Marathwada and Coastal & South Interior Karnataka. Heavy rainfall likely at isolated places over West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- 22 April (Day 5): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) likely at isolated places over Sub-Himalayan West Bengal & Sikkim; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Gangetic West Bengal and Odisha; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and with lightning at isolated places over Bihar, Jharkhand, Coastal & South Interior Karnataka and Kerala & Mahe. Heavy rainfall likely at isolated places over West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya.
- The weather outlook for seven days i.e., 18 to 26 April 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)

### **Maharashtra**

#### **Weather condition:**

Weekly average means (15 MW) at AICRPAM Akola Centre: T max 41.1 °C (normal 40.5 °C), T min 26.2 °C (normal 22.9 °C). RH I 42% (normal 38%), RH II 13% (normal 16%). Evaporation rate 11.2 mm (normal 12.3 mm), Wind speed 2.7 km/hr (normal 7.8 km/hr) and BSH 9.3 hrs (normal 9.2 hrs). Maximum temperature across the week was 0.7 °C above normal. Minimum temperature across the week was 3.6 °C above normal. In Vidarbha subdivision rainfall from 1 Mar-14 April amounted to 30.0 mm (+124%). Akola district recorded 2.8 mm rains during the same period.

#### **Contingency measure:**

- Forecast suggests prevalence of mainly dry weather during 14-18 April. 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. Adequate precautions be followed during crop protection in handling of inputs and washing of equipment and personal safety.
- Taking advantage of available soil moisture deep summer ploughing of harvested fields to expose the hibernating insects, larvae/pupa to sun and predator birds is advisable. For control of leaf miner, thrips and jassids in groundnut undertake spraying of lambdacyhalothrin 5% @ 4 ml OR quinalphos 25% @ 28 ml per 10 litres of water.
- Undertake light earthing up at peg initiation stage for effective peg penetration and to facilitate for increased pod development. Under prevailing evaporative demand (9-10 mm/day) apply irrigation at an interval of 7 to 8 days, irrigating in the early morning or evening hours. In onion to control thrips and fungal diseases like wilting and leaf spot undertake spraying of quinolphos 25% EC 12 ml + mancozeb 75 % WP @ 25 gm + sandovit sticker 50 ml per 10 liters of water. Undertake need based timely irrigation to orange orchards with amba bahar fruit bearing, wherever possible follow drip irrigation. Basin mulching with organic residues is advisable to conserve soil moisture, maintain thermal regime.
- Make provision of shade/thatches (made of harvested cotton/pigeonpea stalks or dried grass or green net) to individual young/new plantation. For control of mango hoppers undertake spray of buprofezine 25%SC @ 10ml OR deltamethrin 2.8% EC@ 5ml OR imidachloprid 17.8% SL @ 4ml OR lambda cyhalothrin 5%EC

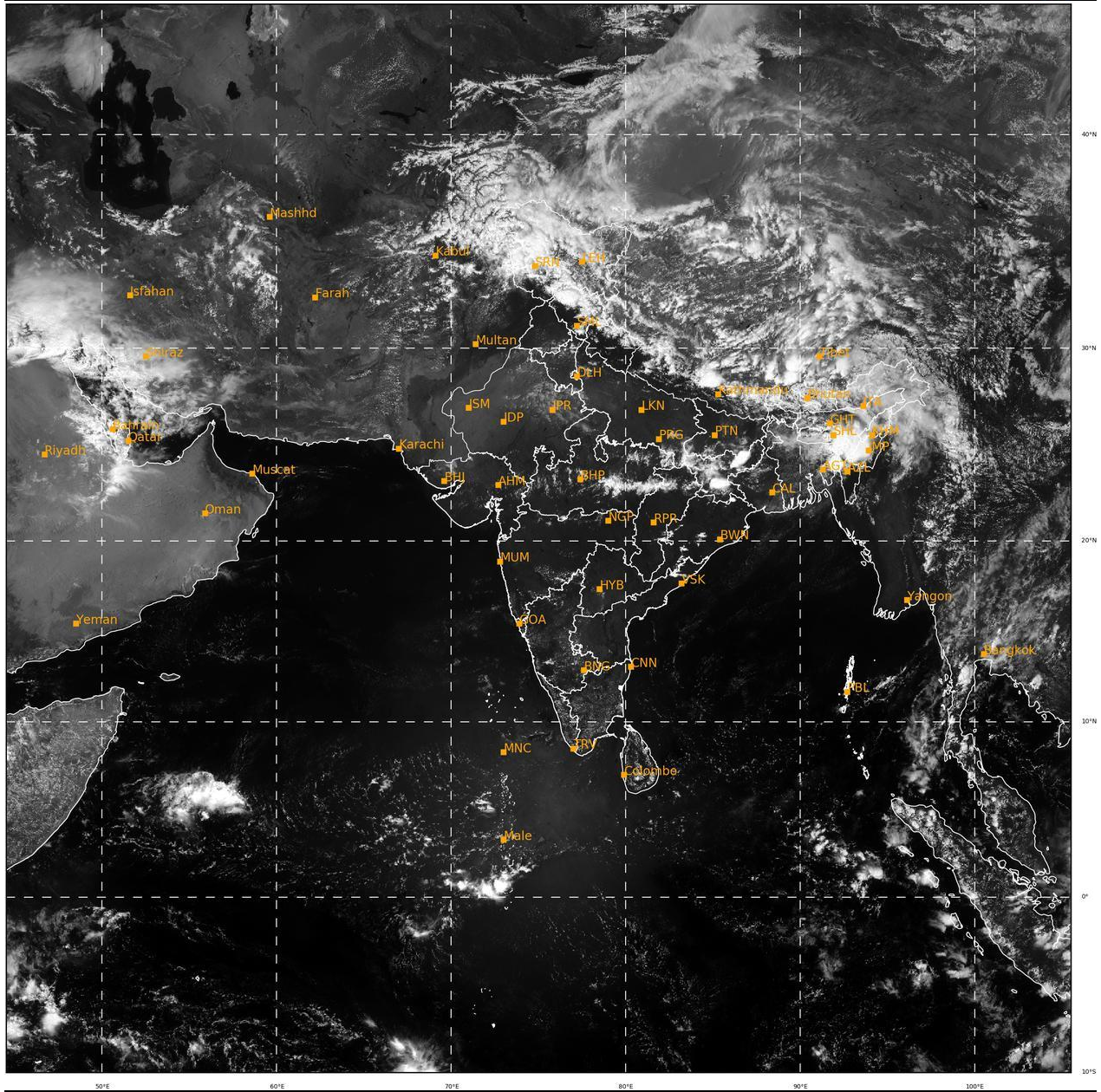
@ 5ml per 10 litres of water, on trunk region, branches, new vegetative flush, inflorescence.

- Cultivation of summer vegetables like bitter gourd, tinda, ridge gourd, smooth gourd, bottle gourd, cowpea, clusterbean, coriander, etc. can be initiated during this period. Ensure sufficient feed, drinking water and medication for livestock to last through prevailing short disruption. Vaccination of susceptible farm animals against foot-and-mouth disease (FMD) is advisable.



SAT : INSAT-3D IMG  
Visible Count 0.65 um  
LIC Mercator

18-04-2020/(0730 to 0757) GMT  
18-04-2020/(1300 to 1327) IST

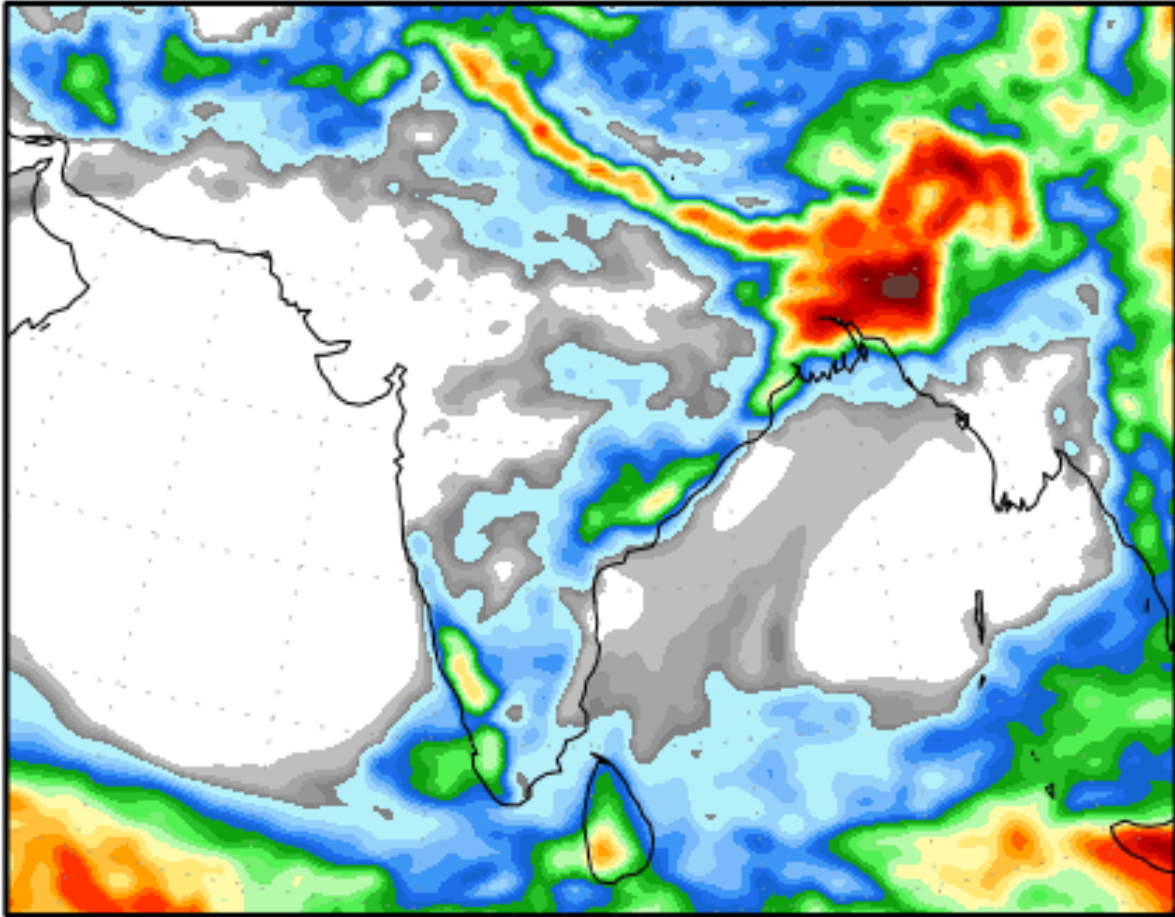


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Figure: 1. Latest available satellite picture as on 18 April 2020 at 1327 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 18 to 26 April 2020 (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.*