

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

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

### **Daily Crop Weather Information as on 19 April 2021**

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

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

- Under the influence of a Western Disturbance; fairly widespread to widespread rainfall/snowfall likely over Western Himalayan Region (Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarkhand) during 20th-22nd April and isolated to scattered rainfall along with thunderstorm & gusty winds likely over adjoining plains of Northwest India during the same period. Isolated hailstorm also likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Punjab on 20th and over Uttarakhand on 20th & 21st April. Isolated heavy rainfall also likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 20th & 21st April and Himachal Pradesh on 21st April. Isolated Dust Storm also likely over Rajasthan on 20th April.
- Due to wind convergence and moisture feed from Bay of Bengal in lower tropospheric levels; scattered to fairly widespread rainfall activity very likely over Northeast India during next 2 days along with isolated heavy rainfall over Arunachal Pradesh on today.
- No significant heat wave condition likely over 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 hrs IST of today): at most places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Arunachal Pradesh; at many paces over Sub-Himalayan west Bengal & Sikkim, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Karnataka; at a few places over Uttarakhand, Odisha, North Interior Karnataka, Kerala & Mahe and Lakshadweep and and at isolated places over Himachal Pradesh, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal.

- Thunderstorm observed (from 2030 hours IST of yesterday to 0830 hrs IST of today): at isolated places over Uttarakhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Coastal & North Interior Karnataka, Odisha, Lakshadweep and Coastal Andhra Pradesh & Yanam. Hailstorm observed at isolated places over West Bengal & Sikkim (Cooch Behar, Jalpaiguri, Gangtok), Uttarakhand (Mussoorie, Nainital) and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thundersquall (wind speed reaching 60 kmph) observed at isolated places over Odisha (Paradip).
- Maximum Temperature Departures as on 18-04-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Saurashtra & Kutch and Konkan & Goa; at a few places over Assam & Meghalaya, Gujarat Region and Coastal Karnataka; at isolated places over Vidarbha and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Himachal Pradesh and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at many places over Kerala & Mahe, at a few places over Haryana, Chandigarh & Delhi, Sub-Himalayan West Bengal & Sikkim and Bihar and at isolated places over East Uttar Pradesh, Gangetic West Bengal, west Rajasthan and Telangana and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.1°C was reported at Bramhapuri (Vidarbha).
- Minimum Temperature Departures as on 19-04-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over West Rajasthan and North Interior Karnataka; at a few places over Sub-Himalayan west Bengal, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Rayalseema; at isolated places over west Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.1°C) at many places over Himachal Pradesh; at isolated places over Odisha; below normal (-1.6°C to -3.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and Coastal Karnataka; at a few places over Haryana, Chandigarh & Delhi, Gangetic West Bengal & Sikkim and Telangana; at isolated places over East Madhya Pradesh, East Rajasthan and Kerala & Mahe and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.1°C is reported at Hissar (Haryana, Chandigarh & Delhi) over the plains of the country.

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

- 19 April (Day 1): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over West Rajasthan; with lightning &

gusty wind (speed reaching 30-40 kmph) at isolated places over Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Lakshadweep and Tamilnadu, Puducherry & Karaikal. Heavy rainfall very likely at isolated places over Arunachal Pradesh.

- 20 April (Day 2): Thunderstorm with lightning, hail & gusty wind (speed 40-50 kmph) very likely at isolated places over Punjab and Uttarakhand; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Haryana, Chandigarh & Delhi; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Uttar Pradesh and Kerala & Mahe; with lightning at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Lakshadweep and Tamilnadu, Puducherry & Karaikal. Heavy rainfall very likely at isolated places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad. Duststorm/Thunderstorm with gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan.
- 21 April (Day 3): Thunderstorm with lightning, hail & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Uttarakhand; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Jharkhand and Kerala & Mahe and with lightning at isolated places over East Rajasthan, Vidarbha, Chhattisgarh, Bihar, Odisha, Coastal Andhra Pradesh & Yanam, Telangana and Lakshadweep. Heavy rainfall very likely at isolated places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh.
- 22 April (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and with lightning at isolated places over Vidarbha, Chhattisgarh, Bihar, Gangetic

West Bengal, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam and Lakshadweep.

- 23 April (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Gangetic West Bengal, Odisha and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Vidarbha, Chhattisgarh, Assam & Meghalaya and Coastal Andhra Pradesh & Yanam.
- The weather outlook for seven days i.e., 19 Apr to 27 April 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 (15 MW) at AICRPAM Akola centre: T max 39.1°C (normal 40.5°C), T min 21.9°C (normal 22.9°C). RH I 44 % (normal 38 %), RH II 17% (normal 16 %). Evaporation rate 11.1 mm (normal 12.3 mm), Wind speed 3.1 km/hr (normal 7.8 km/hr) and BSH 6.3 hrs (normal 9.2 hrs). Maximum temperature across the week was 1.4°C below normal with a deviation of -3.9 to +1.3°C from normal. Minimum temperature across the week 0.9°C below normal with a deviation of -6.4 to +1.8°C from normal.

#### **Contingency measure:**

- The forecast (IMD) indicates thunderstorm accompanied with lightning very likely to occur at isolated places during 15-17 April and prevalence of dry weather remain during 18-19 April over Vidarbha. Undertake deep summer ploughing of harvested fields to expose the hibernating insects, larvae/pupa to sun and predator birds are advisable. In view of forecasted isolated light to medium rains during 15-17 April, take into account the soil moisture conditions and local weather condition in planning irrigation in summer, fruit and vegetable crops.
- Undertake light earthing up at peg initiation stage of groundnut for effective peg penetration and to facilitate for increased pod development. Ensure sufficient soil moisture during groundnut peg penetration stage. For management of sap sucking pest- thrips, aphids and jassids- in groundnut undertake spraying of Imidacloprid 17.8 % EC @ 2.5 ml OR lambda cyhalothrin 5% @ 6 ml OR

quinalphos 25% @ 14 ml per 10 litres of water. For control of tikka disease in groundnut undertake spray of Chlorothalonil 75%WP @20 g 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.

- Undertake need based inter-culture operation in sunflower and keep the crop weed free up to 45 days, being critical period of crop-weed competition. Judging a clear weather, undertake timely spray for control of jassids/thrips in sunflower by using Imidacloprid 17.8 % @ 2.0 ml in 10 liters of water. Take into account the soil type and soil moisture status in planning need based irrigation in sesame. 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. In green gram, flowering and pod formation stages are critical periods when irrigation is a must. Avoid water stagnation/over irrigation.
- Ensure safe storage of harvested wheat crop in view of forecasted isolated rains during 15-17 April. Plant moisture inadequacy during summer may cause bark cracking/splitting in orange orchards. So to protect against fungal or other pathogen entry smear Bordeaux paste (1:1:10) on 1 to 1.5 meter trunk height.
- Summer vegetables like bitter gourd, tinda, ridge gourd, smooth gourd, bottle gourd, cowpea, clusterbean, coriander, etc. can be initiated during this period.
- Undertake need based spray for onion and garlic for control of sucking pests and fungal disease by spraying of quinalphos 25 % EC 12 ml + mancozeb 25 g + sandovit stickers in 10 liters of water.
- Ensure protection of farm animals during thunderstorm/lightning. Ensure availability of sufficient feed/forage, proper grazing time (morning/evening), provision of enough water as well as shelter during summer heat conditions for farm livestock. For livestock green feed during ensuing summer, undertake sowing of forage crops (fodder maize-African tall, fodder sorghum-Pusa chari, MP Chari, SSG 898), provided irrigation is available at later stages.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

19-04-2021/(0730 to 0756) GMT  
19-04-2021/(1300 to 1326) IST

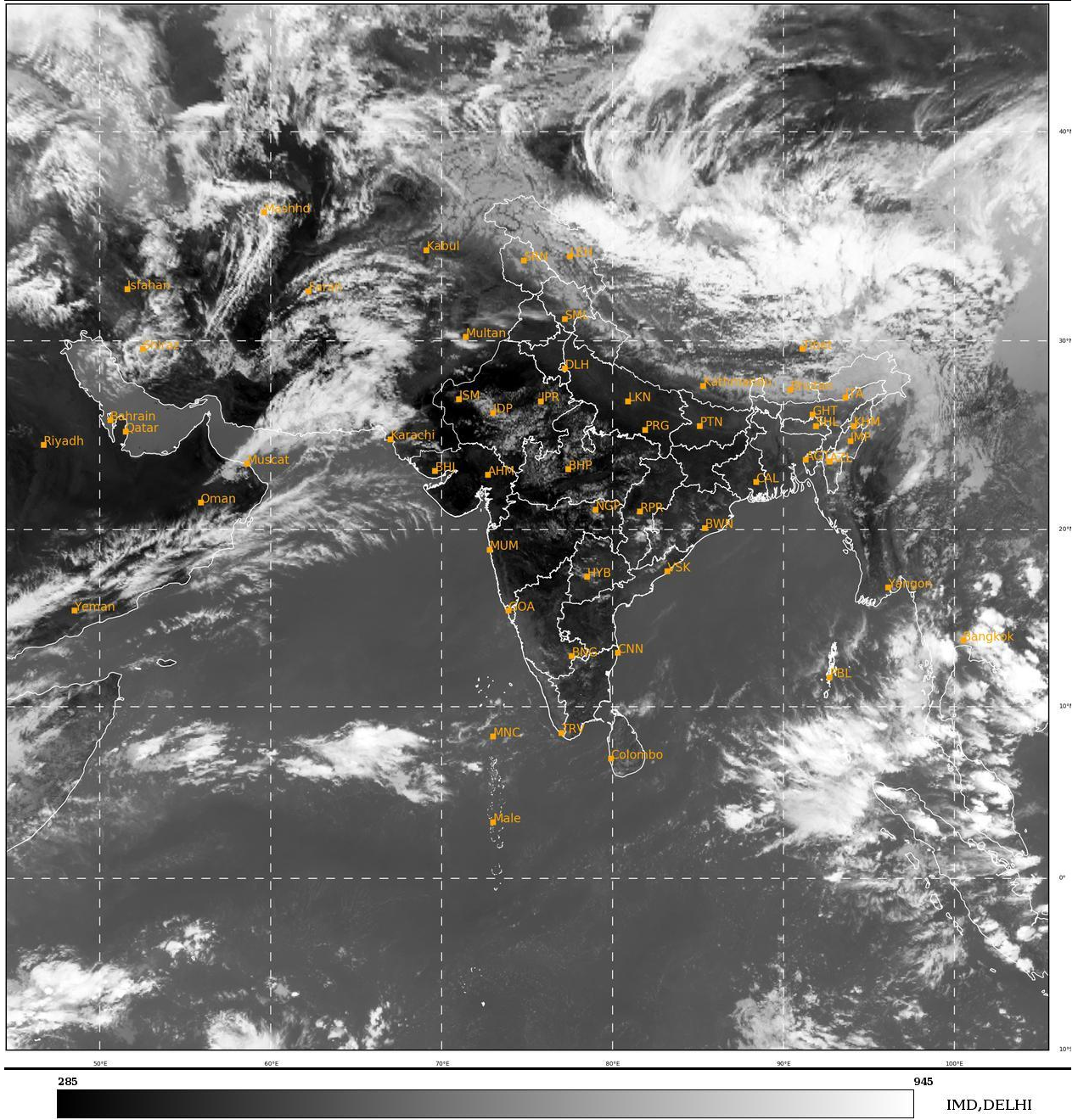
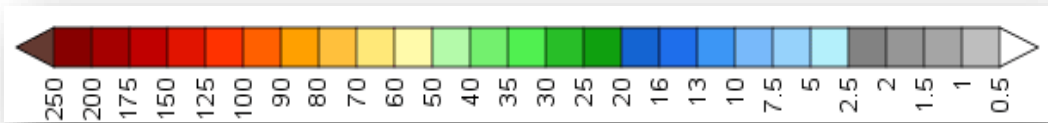
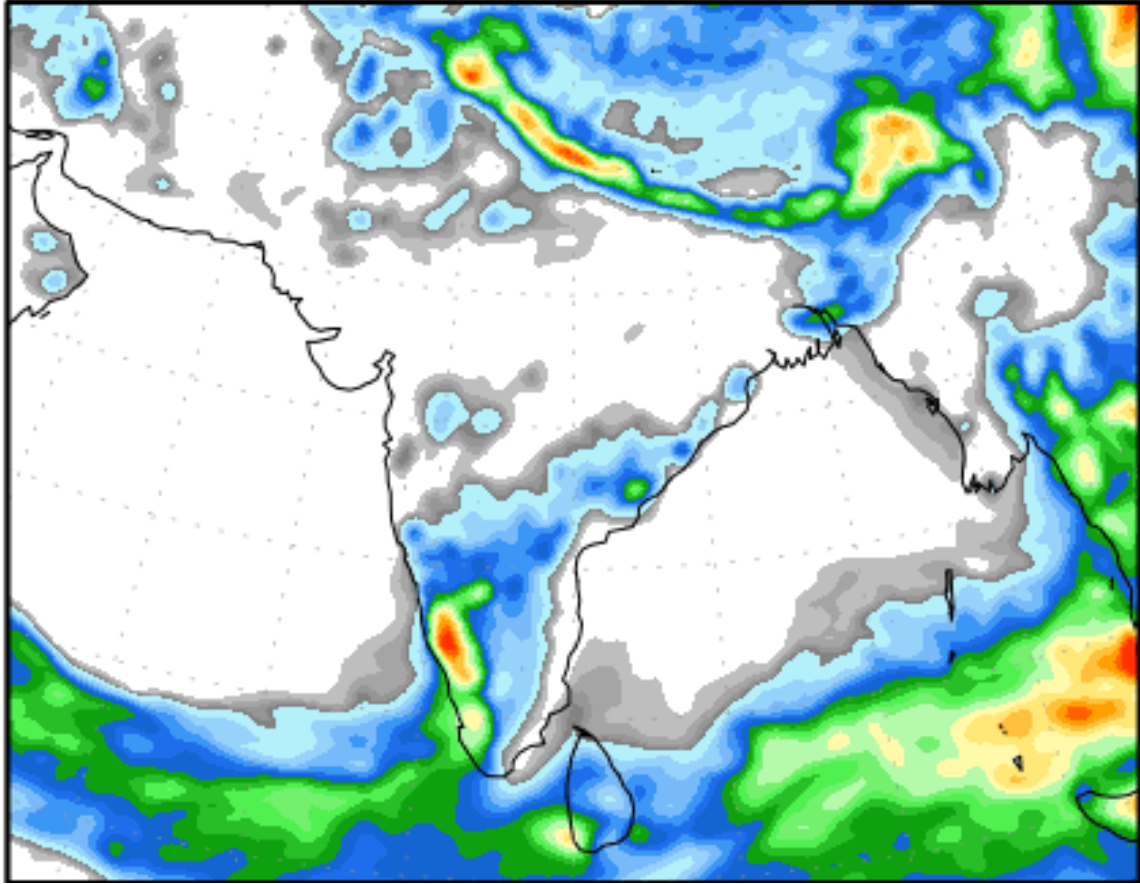


Figure: 1. Latest available satellite picture as on 19 April 2021 at 1326 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 19 to 27 Apr 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.*