

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

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

### **Daily Crop Weather Information as on 16 April 2021**

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

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

- The Western Disturbance now seen as a cyclonic circulation over north Pakistan & neighbourhood between 3.1 & 5.8 km above mean sea level with the induced cyclonic circulation over northwest Rajasthan & neighbourhood in lower levels. Under the influence of these systems:
  - i) Fairly widespread to widespread rainfall with thunderstorm, lightning & gusty winds (30-40 kmph) over Western Himalayan Region during 16th-17th April. Isolated hailstorm likely over Himachal Pradesh on 16th and over Uttarakhand on 16th & 17th April. Isolated heavy rainfall also very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on today, the 16th April.
  - ii) Isolated light rainfall with thunderstorm, lightning & gusty winds (30-40 kmph) over adjoining plains of Northwest India during 16th-17th April. Isolated hailstorm also likely over Punjab and Haryana, Chandigarh & Delhi on 16th April. Duststorm at isolated places likely over West Rajasthan on 16th April and over East Rajasthan on 17th April, 2021.
- Under the influence of moisture feed from Bay of Bengal in lower tropospheric levels; fairly widespread to widespread rainfall activity very likely over Northeast India during next 4 days. Thunderstorm, lightning & gusty winds (30-40 kmph) very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 16th-20th April with possibility of isolated heavy falls over Arunachal Pradesh and Assam & Meghalaya during 16th-20th April. Isolated hailstorm also likely over Arunachal Pradesh and Assam & Meghalaya on today, the 16th April, 2021.
- 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 many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Arunachal Pradesh and Assam & Meghalaya; at a few places over Andaman & Nicobar Islands and at isolated places over Himachal Pradesh,

Uttarakhand, Punjab, Haryana, Sub-Himalayan West Bengal & Sikkim, Chhattisgarh, Lakshadweep, Madhya Maharashtra, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): at isolated places over Tamilnadu, Puducherry, & Karaikal, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Chattisgarh and Madhya Maharashtra.

- Heat Wave conditions were observed in isolated pockets over Haryana & Delhi.
- Maximum Temperature Departures as on 15-04-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh; at a few places over Nagaland, Manipur, Mizoram & Tripura; at isolated places over Himachal Pradesh and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at many places over Konkan & Goa; at a few places over Arunachal Pradesh and Gangetic West Bengal; at isolated places over West Madhya Pradesh, Saurashtra & Kutch, Bihar and Odisha. They were markedly below normal (-5.1°C or less ) at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffrabad; at isolated places over Vidarbha; appreciably below normal (-3.1°C to -5.0°C) at many places over Rayalaseema; at a few places over East Madhya Pradesh, Chhattisgarh, Telangana, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and Andaman & Nicobar islands; below normal (-1.6°C to -3.0°C) at many places over Coastal Andhra Pradesh & Yanam; at a few places over Karnataka; at isolated places over Kerala & Mahe and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.4°C was reported at Banda (East Uttar Pradesh).
- Minimum Temperature Departures as on 16-04-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Jharkhand; at a few places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, West Uttar Pradesh and Gangetic West Bengal; at a few places over Himachal Pradesh, East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, East Rajasthan and Saurashtra & Kutch. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Vidarbha; at a few places over Telangana and below normal (-1.6°C to -3.0°C) at many places over East Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal; at a few places over Haryana, Chandigarh & Delhi, West Madhya Pradesh and Marathwada and at isolated places Madhya Maharashtra, Odisha and Kerala & Mahe and near normal over rest parts of the

country. Today, the lowest minimum temperature of 17.4°C is reported at Fatehgarh (East Uttar Pradesh) over the plains of the country.

- Minimum Temperature Departures as on 14-04-2021: Minimum temperatures were markedly above normal (5.1°C or more) at a few places over Gujarat Region; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Sub-Himalayan west Bengal & Sikkim; at isolated places over West Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over West Rajasthan; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Himachal Pradesh, East Rajasthan, Saurashtra & Kutch, Konkan & Goa, Bihar, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands and at isolated places over East Uttar Pradesh and Gangetic West Bengal. They were appreciably below normal (- 3.1°C to -5.0°C) at many places over Telangana; at isolated places over Madhya Maharashtra and below normal (-1.6°C to -3.0°C) at a few places over East Madhya Pradesh and at isolated places over Odisha and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 17.0°C was reported at Medak (Telangana) over the plains of the country.

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

- 16 April (Day 1): Thunderstorm with lightning, hail & squally wind (speed reaching 50-60 kmph) at isolated places over Assam & Meghalaya and Tripura; with lightning, hail & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over SubHimalayan West Bengal & Sikkim; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi and Punjab; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Jharkhand, Nagaland, Manipur, Mizoram and East Rajasthan; with lightning & hail at isolated places over Arunachal Pradesh; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh Gangetic West Bengal, Andaman & Nicobar Islands and Kerala & Mahe and with lightning at isolated places over West Madhya Pradesh, Bihar, Odisha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy rainfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Assam & Meghalaya and Arunachal Pradesh. Duststorm/Thunderstorm with gusty winds (speed reaching 30-40 kmph) at isolated places over West Rajasthan. Squally wind

(speed reaching 40-50 kmph) very likely over Southeast & Eastcentral Bay of Bengal.

- 17 April (Day 2): Thunderstorm with lightning, hail & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Uttarakhand; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Assam & Meghalaya; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, Punjab, Jharkhand, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and with lightning at isolated places over Bihar, Andaman & Nicobar Islands, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam and Lakshadweep. Heavy rainfall very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya. Duststorm/Thunderstorm with gusty winds (speed reaching 40-50 kmph) likely at isolated places over East Rajasthan.
- 18 April (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jharkhand, West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Arunachal Pradesh, Andaman & Nicobar Islands, Kerala & Mahe and Lakshadweep. Heavy rainfall very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- 19 April (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over SubHimalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and with lightning at isolated places over Arunachal Pradesh, Kerala & Mahe and Lakshadweep. Heavy rainfall likely at isolated places over Arunachal Pradesh.
- 20 April (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Himachal Pradesh and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Odisha, Assam & Meghalaya, Kerala & Mahe and Lakshadweep.
- The weather outlook for seven days i.e., 16 Apr to 24 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)

### **Konkan region**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 1.7 to 9.7 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 31.6 to 37.3 and 18.9 to 21.2 oC respectively. Wind velocity ranged from 3.6 to 4.8 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

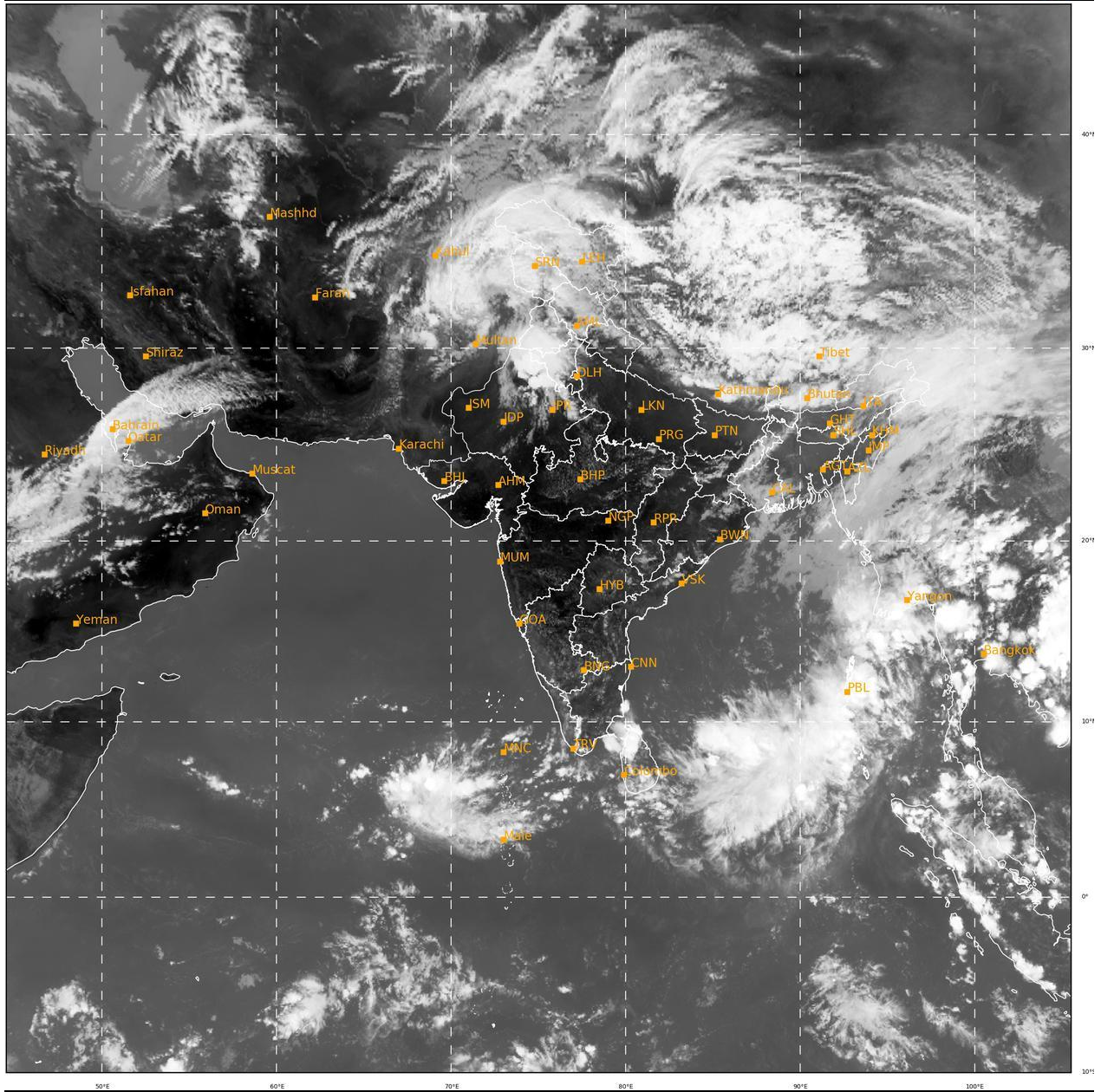
- General advisory:Due to forecast of thunderstorm along with lightning and rain at isolated places over district from 11th to 13th April, 2021, keep farm animals at safe place and away from open water, pond or river. Also harvest and stored the matured pulse crop at protective and safe place
- SMS:Due to forecast of very light rainfall from 10th to 14th April, 2021, hence to protect the mango fruits from rain water and fruit fly incidence, cover the fruits with paper bag
- Mango:There is forecast for partly cloudy weather and very light rainfall from 10th to 14th April, 2021, harvest the matured mango fruits by observing rainfall situation in the morning and in the evening with the help on mango harvester at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue disease and from heat. withhold irrigation one month before fruit are ready for harvesting. Do not spray any insecticides/fungicides 8 days before harvesting of mango fruits.To prevent incidence of post-harvest diseases fruit rot on fruits, place the fruits in hot water of 52oC for 10 minutes and then keep for ripening. Use C.F.B. (corrugated fiber box) for packing. Transport of harvested fruits should be done preferably during night hours.There is forecast for cloudy weather and very light rainfall from 10th to 14th April, 2021, there is possibility of incidence of anthracnose disease on fruits of mango, if rainfall received then undertake the protective spraying for anthracnose disease, spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 liter of water.Due to forecast of very light rainfall at isolated places from 10th to 14th April, 2021, hence to protect the mango fruits from rain water and fruit fly incidence, cover the fruits with paper bag. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag.Due to forecast for cloudy weather, there is possibility for incidence of fruit fly on mango fruits. Collect and destroy all fallen fruits and

install ?Rakshak fruit fly trap? developed by University @ 2 traps per acre. Due to forecast for cloudy weather, there is possibility for incidence of hopper in orchard where mango is in inflorescence and fruit development stage. If incidence is noticed, spray Dimethoate 30%EC @ 10 ml or Lambda cyhalothrin 5%EC @ 6 ml or Imidacloprid 17.8%SL @3 ml per 10 liter of water during clear weather (no rainfall).

- Cashewnut: Due to forecast for very light rainfall at isolated places from 10th to 14th April, 2021, harvest the matured nuts during clear weather and sundry for 7 to 8 days to bring down moisture content and then stored in dry places
- Lablab bean/Cowpea: Due to forecast of very light rainfall at isolated places from 10th to 14th April, 2021, harvest matured lablab bean, cowpea crop and keep for drying at safe and protective place
- Brinjal, Chilli, Tomato: Due to forecast of very light rainfall at isolated places from 10th to 14th April, 2021, harvest the matured vegetables and stored at safe and protective place. Due to forecast for very light rain with cloudy weather condition, there is possibility of incidence of hoppers, white flies and aphids in brinjal chilli, tomato crop. Use yellow sticky cards in field to attract the sucking pests (1 trap/Guntha). If required, spray dimethoate 30%EC @10 ml per 10 liter of water during clear weather.

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

16-04-2021/(0800 to 0826) GMT  
16-04-2021/(1330 to 1356) IST

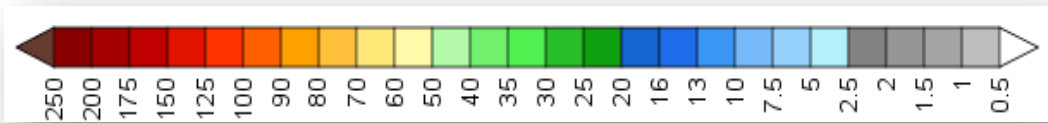
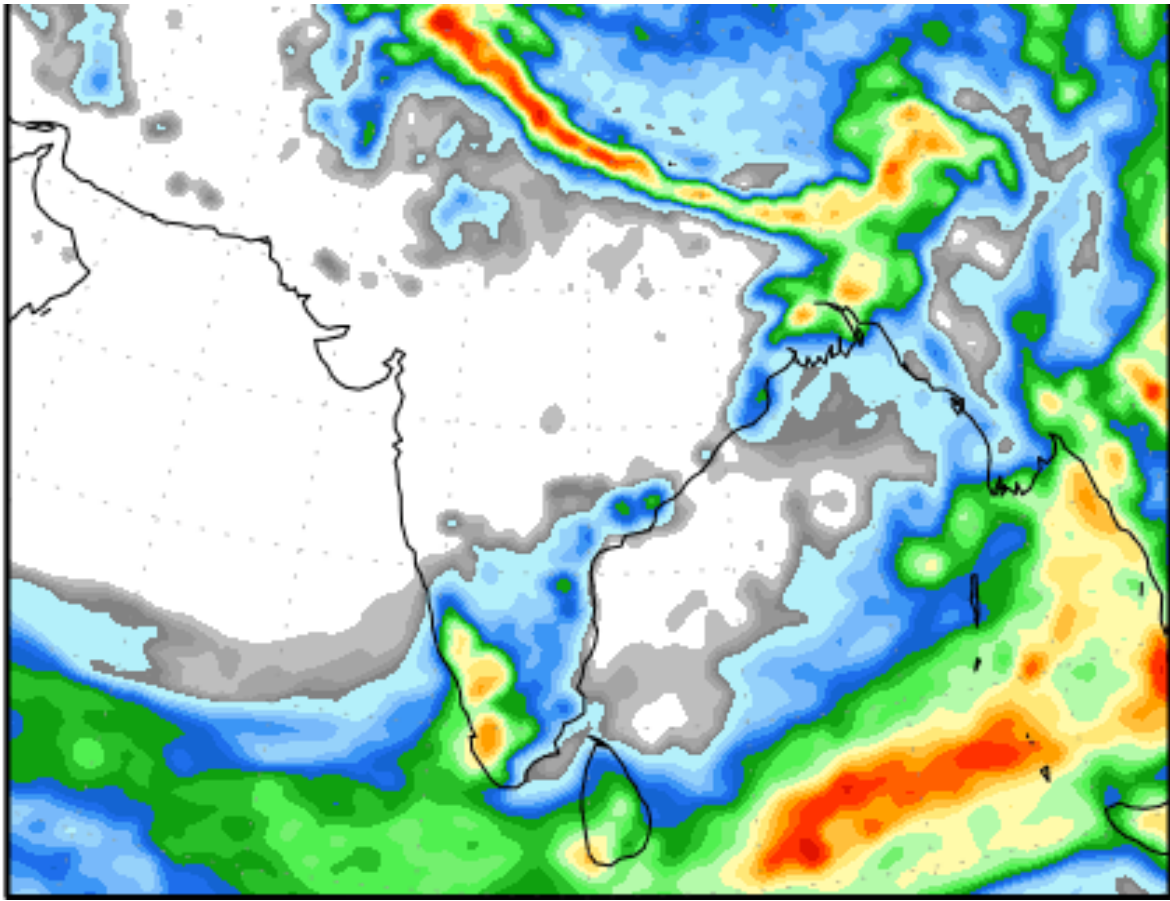


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Figure: 1. Latest available satellite picture as on 16 April 2021 at 1356 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 16 to 24 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.*