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

Daily Crop Weather Information as on 17 April 2020

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Significant Weather Features (IMD)

- A Western Disturbance lies as a cyclonic circulation between 3.1 km & 3.6 km above mean sea level over northeast Afghanistan and neighbourhood with a trough aloft with its axis at 5.8 km above mean sea level running roughly along longitude 65°E to the north of latitude 26°N. An induced cyclonic circulation at 0.9 km above mean sea level lies over central Pakistan & neighbourhood. Under its influence, fairly widespread to widespread rain/thundershowers likely over Western Himalayan Region and isolated to scattered rain/thundershowers likely over adjoining plains of northwest India on 17th & 18th April and decrease thereafter. Isolated hailstorm also likely over Western Himalayan region during 17th & 18th April 2020.
- Due to the convergence of strong moist winds from the Bay of Bengal, Northeast India (Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura) and Sub-Himalayan West Bengal & Sikkim are very likely to experience fairly widespread to widespread rainfall/thundershowers during next 7 days with varying intensity. Adjoining parts of eastern states (Bihar and West Bengal) are also likely to experience similar weather on a few days during this period. Isolated heavy rainfall, thundersqualls & hailstorms are also very likely over these regions during the same period.
- 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 Sub-Himalayan West Bengal & Sikkim; at many places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; at a few places over Gangetic West Bengal, North Interior Karnataka and Andaman & Nicobar Islands; at isolated places over Jammu & Kashmir, West Rajasthan, Chhattisgarh, south Madhya Maharashtra, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, West Bengal & Sikkim, Chhattisgarh, North Interior Karnataka, Kerala, Madhya Maharashtra, Tamil Nadu, Assam, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands.
- Maximum Temperature Departures as on 16-04-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Himachal Pradesh, Saurashtra & Kutch and east Assam; above normal (1.6°C to 3.0°C) at many places over Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh and Kerala; at a few places over Uttarakhand, Punjab, West Rajasthan, Jharkhand, Konkan & Goa and Coastal Karnataka and at isolated places over Uttar Pradesh, Vidarbha and south Tamil Nadu. They were below normal (-1.6°C to -3.0°C) at a few places over East Bihar and at isolated places over Jammu & Kashmir, Gilgit-Baltistan, Muzaffarabad, Ladakh and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.9°C was reported at Akola (Vidarbha).
- Minimum Temperature Departures as on 17-04-2020: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over West Rajasthan and West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at many places over West Uttar Pradesh, East Rajasthan and Gujarat region; a few places over Jammu & Kashmir, Gilgit-Baltistan, Muzaffarabad, Ladakh, Himachal Pradesh and Uttarakhand; at isolated places over East Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over Jharkhand; many places over Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada; at isolated places over Bihar, Odisha, South Interior Karnataka and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at isolated places over Assam & Meghalaya and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.9°C was reported at Churk (East Uttar Pradesh) over plains of the country.

Weather Warning during the next 5 days (IMD)

• 17 April (Day 1): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated

places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Uttarakhand; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Arunachal Pradesh and Madhya Maharashtra and with lightning at isolated places over Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, East Madhya Pradesh, Odisha, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Dust/Thunderstorm accompanied with gusty winds(speed reaching 30-40 kmph) very likely at isolated places over Rajasthan. Heavy rainfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. 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.

- 18 April (Day 2): Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya. Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Nagalnad, Manipur, Mizoram & Tripura and West Bengal & Sikkim. Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand and Arunachal Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana and Madhya Maharashtra and with lightning at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Marathwada, Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Heavy rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam. 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 3): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Madhya Maharashtra and Telangana; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, Chhattisgarh, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Marathwada and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan,

Muzaffarabad, Himachal Pradesh, Uttarakhand, West Madhya Pradesh, Vidarbha, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Dust/Thunderstorm accompanied with gusty winds(speed reaching 30-40 kmph) likely at isolated places over Rajasthan. Heavy rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh.

- 20 April (Day 4): Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) likely at isolated places over Bihar; with lightning, hail & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Chhattisgarh, Madhya Maharashtra, Marathawada and Telangana; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Karnataka and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarkhand West Madhya Pradesh, Vidarbha, Arunachal Pradesh, Konkan & Goa, Rayalaseema and Tamilnadu, Puducherry & Karaikal.
- 21 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 30-40 kmph) at isolated places over Bihar, Jharkhand, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Rayalaseema, Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Heavy rainfall likely at isolated places over West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya.
- The weather outlook for seven days i.e., 17 to 25 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)

Haryana

Weather condition:

The maximum temperature during the week ranged between 31.0-39.0 °C and minimum temperature ranged between 13.0-22.4 °C. Maximum and minimum temperatures were above the normal with exceptions. The morning and evening relative humidity during the week varied between 46-86 and 16-35%, respectively. The sunshine hours during the week ranged between 6.0-9.2 hrs/day. The evaporation rate during the week ranged between 4.1-5.7 mm/day. Daily average wind speed varied from 2.6-4.3 kmph.

Contingency measure:

- Weather Forecast: Weather likely to be variable. Due to partial WD, chances of light rainfall with thunderstorm/ lightening on 31st March at isolated places. In remaining days, weather will be dry with partly cloudy condition. General advised: In view of variable weather, farmers are advised to apply irrigation and chemical spray as per crop need in rabi crops.
- Wheat: Irrigate the crop as per its requirement. Keep monitoring for rust and smut.
- Mustard/Raya: Keep variable weather in mind during harvesting and threshing of mustard/other oilseed crops.
- Fodder/Barseem: Apply irrigation accordance of crop need.
- Vegetables/Fruits: Apply need based irrigation in vegetable crops. Keep vigil for insect-pest and diseases and follow proper weed control measures. Fishery Maintain good amount of water in pond to save fishes from variable weather.
- Live stock management: Protect the animals from variable weather conditions and provide proper ventilation and dry bedding. Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily along with animal feed/fodder, green fodder to keep them healthy.

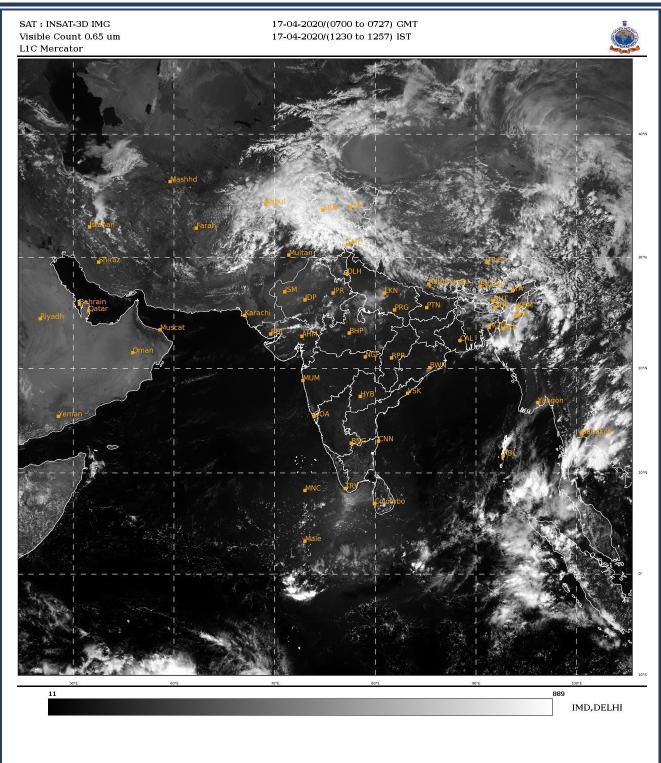


Figure: 1. Latest available satellite picture as on 17 April 2020 at 1357 Hrs (IST). (Source: IMD).

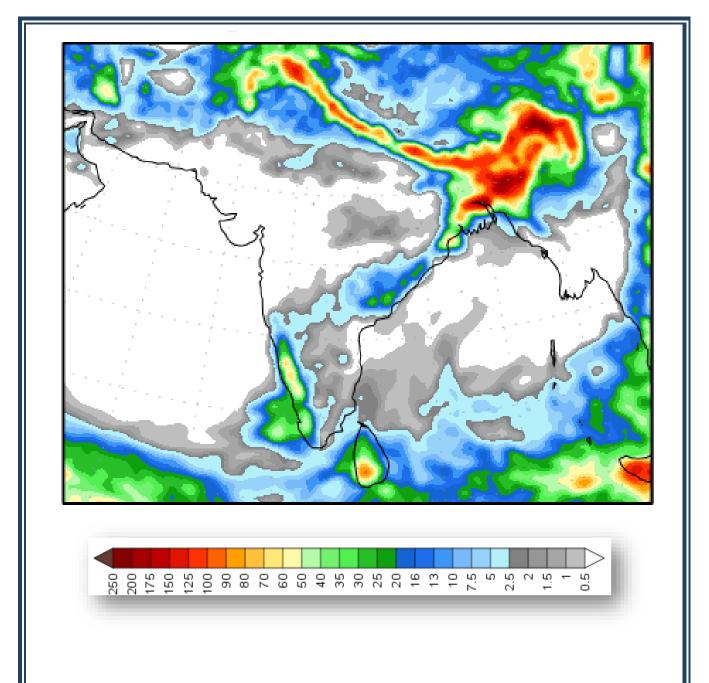


Figure: 2. Precipitation forecast for 17 to 25 April 2020 (Source: NOAA NCEP).

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