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

Daily Crop Weather Information as on 09 April 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A fresh Western Disturbance is likely to affect Western Himalayan region on 09th & 10th April. An induced cyclonic circulation is likely to form over Central Pakistan & neighbourhood during next 24 hours. Under its influence, isolated to scattered rain/snow is likely over Western Himalayan Region and isolated rain/thundershowers likely over Punjab, Haryana, Chandigarh, Delhi and Rajasthan on 09th & 10th April. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir during next 24 hours.
- Due to confluence between southwesterly & easterly winds at lower tropospheric levels, scattered to fairly widespread rainfall/thunderstorm accompanied with lightning & gusty/squally winds very likely over parts of northeast India mainly during next 3 days. Also, isolated to scattered rain/thundershowers with lightning & gusty winds likely over West Bengal & Sikkim, Odisha, Chhattisgarh and Jharkhand during next 2-3 days.
- Under the influence of the lower level trough/Wind Discontinuity, isolated to scattered rain/thundershowers with lightning & gusty winds are very likely over parts of southern Peninsula during next 48 hours.
- Hailstorm likely over Sub-Himalayan West Bengal & Sikkim during next 48 hours, over parts of southern peninsula during next 24 hours and over parts of northeast India on 11th April.
- Heat Wave conditions are likely to develop over parts of Gujarat state around 11th April.
- 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 Arunachal Pradesh; at a few places over Odisha, Assam & Meghalaya, West Bengal & Sikkim, Chhattisgarh and Coastal Andhra Pradesh & Yanam; at isolated places over Jammu & Kashmir, Ladakh, Gilgit,

Baltistan, Himachal Pradesh, Uttarakhand, Nagaland, Manipur, Mizoram & Tripura, East Rajasthan, East Uttar Pradesh, East Madhya Pradesh, Jharkhand, Telangana, Rayalaseema, Saurashtra & Kutch, Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

- Heavy rainfall observed at isolated places over Tamilnadu.
- Hailstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Uttarakhand, Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Telangana and interior Tamil Nadu; thunderstorms at isolated places over East Madhya Pradesh, Jharkhand, West Bengal & Sikkim, Saurashtra & Kutch, Odisha, Coastal Andhra Pradesh and Kerala.
- Maximum Temperature Departures as on 08-04-2020: Maximum temperature were appreciably above normal (3.1°C to 5.0°C) at isolated places over Meghalaya; above normal (1.6°C to 3.0°C) at most places over Lakshadweep; at a few places over south Tamilnadu and at isolated places over Assam, West Madhya Pradesh, Gangetic West Bengal, Konkan & Goa, Coastal Andhra Pradesh and Kerala. They were appreciably below normal (-3.1°C to -5.0°C) at at a few places over Himachal Pradesh, at isolated places over Haryana, Chandigarh & Delhi and north Odisha; below normal (-1.6°C to -3.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan, Punjab and Chhattisgarh and at isolated places over Saurashtra, East Madhya Pradesh and Madhya Maharashtra and near normal over rest parts of the country. The highest maximum temperature of 41.6°C was reported at Malegaon (Madhya Maharashtra).
- Minimum Temperature Departures as on 09-04-2020: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over West Rajasthan, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Gujarat state and Lakshadweep; at isolated places over East Madhya Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Odisha; at a few places over Haryana, Chandigarh & Delhi and Jharkhand; at isolated places over Himachal Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Madhya Maharshtra, Konkan & Goa; at isolated places over Punjab, Uttar Pradesh, Gangetic West Bengal and Vidarbha and near normal over rest parts of the country. Today, the lowest minimum temperature of 13.5°C recorded at Karnal (Haryana) over plains of the country.

Weather Warning during the next 5 days (IMD)

- 09 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) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal; with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Arunachal Pradesh, Odisha, Chhattisgarh, Jharkhand, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Gangetic West Bengal and South Interior Karnataka. Heavy rainfall very likely at isolated places over north Coastal Andhra Pradesh & Yanam and Telangana.
- 10 April (Day 2): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Telangana; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over South Interior Karnataka and with lightning at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Odisha, Vidarbha, Chhattisgarh, Marathawada, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- 11 April (Day 3): Thunderstorm accompanied with lightning & hail very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura and with lightning at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Vidarbha, Chhattisgarh, Marathawada and Madhya Maharashtra. Heat Wave conditions likely in isolated pockets over Saurashtra & Kutch.
- 12 April (Day 4): Thunderstorm accompanied with lightning likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Marathwada and Madhya Maharashtra. Heat Wave conditions likely in some pockets over Saurashtra & Kutch and in isolated pockets over Gujarat region.
- 13 April (Day 5): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Telangana and Coastal Andhra Pradesh and with lightning at isolated places over Vidarbha, Chhattisgarh, South Interior Karnataka, Marathwada and Madhya Maharashtra.

- Heat Wave conditions likely in some pockets over Saurashtra & Kutch and in isolated pockets over Gujarat region.
- The weather outlook for seven days i.e., 09 to 17 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)

Assam

Weather condition:

The maximum temperature during the week ranged between 28.0-31.0 °C and minimum temperature ranged between 11.6-16.4 °C. The morning and evening relative humidity during the week varied between 72-88 and 29-62%, respectively. The sunshine hours during the week ranged between 1.8-11.8 hrs/day. The evaporation rate during the week ranged between 3.2-4.6 mm day-1. Daily average wind speed varied from 2.4-5.3 kmhr-1.

Contingency measure:

- IMD WEATHER FORECAST: Generally cloudy sky with one or two spells of rain or thundershowers during 13-14 March 2020 and after mainly clear sky after 16 March is expected. Weather parameters are likely to remain as follows: Maximum Temperature 23-27 °C, Minimum Temperature 10-12 °C.
- CROP CONDITIONS AND CONTINGENCY PLAN: Generally, Rabi crops are in good condition, but at some places lodging has occurred due to high speed wind and rain which occurred during current and last week.
- WEATHER BASED ADVISORIES: As dry weather is expected during coming days, farmers can apply pesticides if needed.
- FIELD CROPS: WHEAT: Regularly monitor the wheat crop for yellow rust to detect the initial foci of infection only spot application surrounding the infected should be done with 0.1% Caviet/Opera/Tilt /Shine area /Bhumper/Markzole/Stilt/Compass. To produce karnal bunt free seed of wheat, give single spray of 200 ml Tilt per acre using 200 litres of water at ear emergence stage. To control armyworm on wheat, spray the crop with 400 ml of Ekalux 25 EC using 80-100 litres of water. ? To control aphid on wheat spray 20 gm of Actara/ Taiyo 25WG using 80-100 litres of water per acre. Before applying any insecticide check the population on Aphid as due to rains in previous days their population might have decreased below ETL.
- OILSEEDS: For white rust of mustard, protect the crop by spraying Ridomil Gold @ 250g in 100 litres of water per acre. If needed, repeat the spray after 20 days

interval. To control aphid on mustard, survey the crop and when the population of aphid reached at ETL, spray the crop with Actara 25 WG @ 40gm or Metasystox 25 EC or Rogor 30 EC @400 ml or Dursban/Coroban 20 EC @ 600 ml using 80-125 litres of water. Before applying any insecticide check the population on Aphid as due to rains in previous days their population might have decreased below ETL.

- VEGETABLES: Sowing of okra and cucurbits can be done during the period. It is also a suitable to transplant the crops like tomato, brinjal, chilli and plug tray/polythene raised nursery of cucurbits to the main field.
- FRUIT PLANTS: The protective covers erected to protect the plants against cold/frost should be removed. ? To control citrus psylla and citrus leaf miner, spray 200 ml Crocodile/Confidor 17.8 SL (imidacloprid) or 160g Actara 25 WG (thiamethoxam) in 500 litres of water on spring flush. To check foot rot of citrus (gummosis), drench the affected trees with 25 g Curzate M-8 in 10 litres of water per tree. Application of sodium hypochlorite (5%) @ 50ml per tree in 10 litres of water can also be done on the main trunk and on soil surface under the canopy of trees.

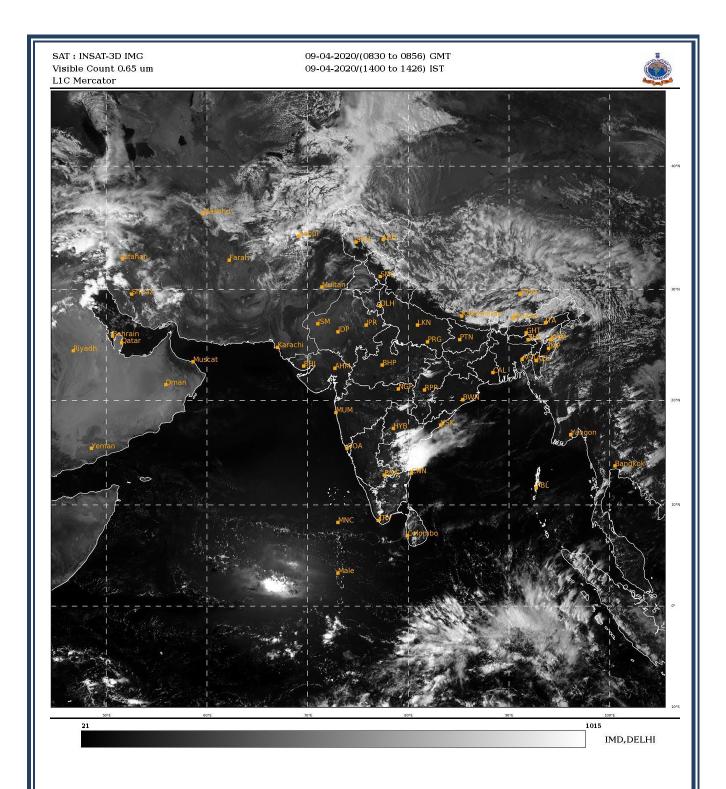
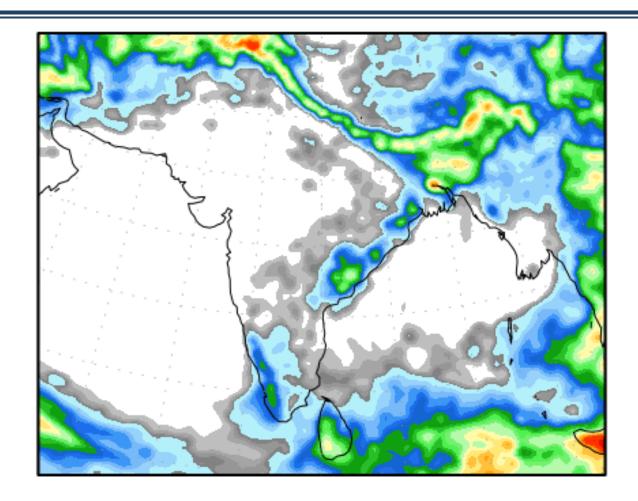


Figure: 1. Latest available satellite picture as on 09 April 2020 at 1426 Hrs (IST). (Source: IMD).



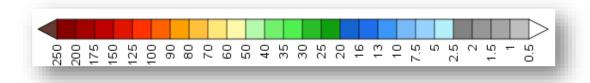


Figure: 2. Precipitation forecast for 09 to 17 April 2020 (Source: NOAA NCEP).

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