

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 04 May 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Due to strong southeasterly/easterly wind condition in the lower levels likely during 4th-6th May over northern plains of India along with fresh moisture incursion from both Arabian Sea and Bay of Bengal, scattered to fairly widespread rain/thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) likely over this region during the period with peak activity on 4th & 5th May when isolated thundersquall likely over the region. Western Himalayan region (Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh and Uttarakhand) also likely to experience fairly widespread to widespread rain/thundershowers accompanied with isolated hail, lightning & gusty winds (speed 30-40 kmph) during 4th-6th May and significant reductions of thunderstorm and rainfall activity over these regions from 7th May onwards.
- Ongoing intense thunderstorm activity over Northeast India & adjoining Eastern states also likely to continue during next 4 days and significant reductions of thunderstorm and rainfall activity over these regions thereafter.
- Yesterday, maximum Temperature of 44-45°C was recorded over some parts of Vidarbha and at isolated pockets of southwest Madhya Pradesh and further analysis shows isolated Heat wave conditions likely to develop & prevail over Vidarbha, Marathawada and southwest Madhya Pradesh during 2-3 days.
- The low pressure area over south Andaman Sea and adjoining southeast Bay of Bengal and associated cyclonic circulation extending upto mid-tropospheric levels persist. However, its intensification is likely to get further delayed due to pronounced variation in local convection and slight increase in vertical wind shear over the region. It is likely to become well marked over southeast Bay of Bengal and neighbourhood around 7th May and concentrate into a depression during subsequent 24 hours over the same region. It is likely to move gradually northwestwards upto 7th May, 2020.
- 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 0530 hours IST of today): at most places over Punjab; at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Rajasthan and Nagaland, Manipur, Mizoram & Tripura ; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Odisha, Chhattisgarh, Uttar Pradesh, Madhya Pradesh, Interior Karnataka, Telangana, Rayalaseema and Coastal Andhra Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at many places over Punjab, Haryana, Chandigarh & Delhi and at isolated places over Rajasthan, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, Uttar Pradesh, Odisha, Telangana, Coastal Andhra Pradesh & Yanam, Karnataka, Kerala & Mahe and Madhya Pradesh.
- Maximum Temperature Departures as on 03-05-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at few places over Arunachal Pradesh and at isolated place over Assam & Meghalaya and East Rajasthan; above normal (1.6°C to 3.0°C) at most places over Marathwada and Lakshadweep; at many places over Gujarat region and Madhya Maharashtra; at a few places over SubHimalayan west Bengal & Sikkim, Saurashtra & Kutch, Konkan & Goa, Telangana and Kerala & Mahe and at isolated places over West Rajasthan and Tamil Nadu, Puducherry & Karaikal . They were markedly below normal (-5.1°C or less) at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi and West Uttar Pradesh and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Punjab, East Uttar Pradesh and Gangetic West Bengal; appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar and Jharkhand; at a few places over Odisha and at isolated places over Chhattisgarh and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at isolated places over South Interior Karnataka and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 44.9°C was reported at Akola (Vidarbha).
- Minimum Temperature Departures as on 03-05-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan; at a few places over East Rajasthan; at isolated places over Marathwada; above normal (1.6°C to 3.0°C) at most places over Gujarat region, Konkan & Goa, Madhya Maharashtra and Lakshadweep; at a few places over Saurashtra & Kutch and Andaman & Nicobar Islands; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand,

Rayalaseema, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Gangetic West Bengal and Odisha; below normal (-1.6°C to -3.0°C) at a few places over East Uttar Pradesh, Jharkhand and Chhattisgarh; at isolated places over Bihar and East Madhya Pradesh and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 16.2°C was reported at Fatehgarh (East Uttar Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 04 May (Day 1): Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand, Himachal Pradesh, East Uttar Pradesh, Rajasthan, Odisha and Telangana; with lightning & squall (speed reaching 50-60 kmph) at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Bihar and West Bengal & Sikkim; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Madhya Pradesh, Chhattisgarh, Jharkhand, Andaman & Nicobar Islands, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Kerala & Mahe and with lightning at isolated places over Interior Karnataka and Tamil Nadu, Puducherry & Karikal. Heavy rainfall likely at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat wave likely at isolated pockets over Vidarbha and Marathwada. Squally winds, speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail over south Andaman Sea and adjoining southeast Bay of Bengal. Sea condition will be rough to very rough over south Andaman Sea and adjoining southeast Bay of Bengal. The fishermen are advised not to venture into these areas.
- 05 May (Day 2): Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Himachal Pradesh and Odisha; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Madhya Pradesh, Chhattisgarh and Telangana; with lightning & squall (speed reaching 50-60 kmph) at isolated places over Punjab, Bihar, Gangetic West Bengal,

Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Jharkhand and Sub-Himalayan West Bengal & Sikkim; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Rajasthan, Andaman & Nicobar Islands and Arunachal Pradesh and with lightning at isolated places over Vidarbha, Coastal Andhra Pradesh & Yanam and Karnataka. Heavy rainfall likely at isolated places over Uttarakhand, West Uttar Pradesh, Gangetic West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat wave likely at isolated pockets over Vidarbha and Marathwada. Squally winds, speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over south Andaman Sea and neighbourhood. Sea condition will be rough to very rough over south Andaman Sea and neighbourhood. The fishermen are advised not to venture into these areas.

- 06 May (Day 3): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Chhattisgarh, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana and South Interior Karnataka and with lightning at isolated places over Madhya Pradesh, Bihar, Jharkhand, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Coastal & North Interior Karnataka and Kerala & Mahe. Heavy to very heavy rainfall likely at isolated places over Gangetic West Bengal. Squally winds, speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over southeast Bay of Bengal and adjoining south Andaman Sea. Sea condition will be rough to very rough over southeast Bay of Bengal and adjoining south Andaman Sea. The fishermen are advised not to venture into these areas.
- 07 May (Day 4): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Gangetic West Bengal Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana and South Interior Karnataka and with lightning at isolated places over Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Coastal & North Interior Karnataka and Kerala & Mahe. Squally winds, speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over southeast Bay of Bengal and adjoining south Andaman Sea. Sea condition will be rough to very rough

over southeast Bay of Bengal and adjoining south Andaman Sea. The fishermen are advised not to venture into these areas.

- 08 May (Day 5): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Gangetic West Bengal Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka and with lightning at isolated places over Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Coastal & North Interior Karnataka and Kerala & Mahe. Squally winds, speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over southeast Bay of Bengal and adjoining south Andaman Sea. Sea condition will be rough to very rough over southeast Bay of Bengal and adjoining south Andaman Sea. The fishermen are advised not to venture into these areas. Kindly visit
- The weather outlook for seven days i.e., 04 to 12 May 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 (17 MW) at AICRPAM Akola centre: T max 41.0 °C (normal 42.2 °C), T min 27.0 °C (normal 25.4 °C). RH I 39% (normal 37 %), RH II 15% (normal 15%). Evaporation rate 13.9 mm (normal 14.1 mm), Wind speed 6.4 km/hr (normal 8.8 km/hr) and BSH 10.1 hrs (normal 9.7 hrs). Maximum temperature across the week was 1.2°C below normal and the minimum temperature was 1.6°C above normal. In Vidarbha subdivision rainfall from 1 Mar-27 April amounted to 33.7 mm (+102%). Akola location recorded 23.4 mm rains during the same period. Rise in maximum temperature by 2-3 degree Celsius likely over central India during next 2-3 days. Temperatures more than 40.0°C is recorded at many places in Vidarbha.

Contingency measure:

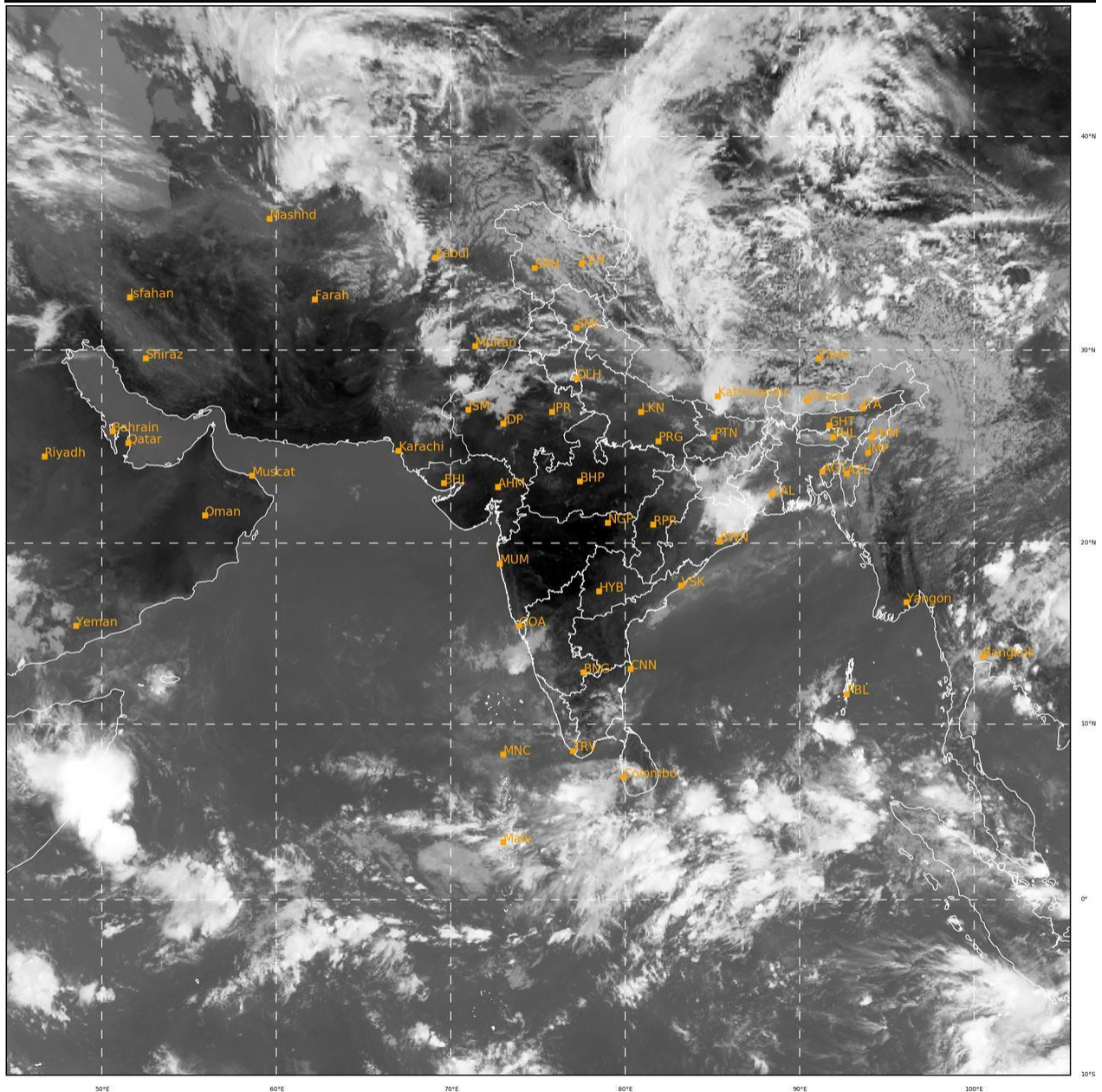
- Farmers are advised to strictly follow the health advisory set out by the health officials for self, family and farm laborers during the prevailing health anxiety situation due to corona virus.
- Adequate personal safety measures as advised to be taken for everyone during farm operations and also at market place. Adequate precautions be followed

during crop protection in handling of inputs and washing of equipment and personal safety.

- Deep summer ploughing of harvested fields to expose the hibernating insects, larvae/pupa to sun and predator birds is advisable. Undertake need based timely irrigation to orange orchards with ambia bahar fruit bearing, wherever possible follow drip irrigation. Basin mulching with organic residues is advisable to conserve soil moisture, maintain thermal regime.
- Spraying of NAA 1gm (10PPM) or GA 1.5gm (15PPM) + Urea 1kg (1%) + Carbendazim 100gm (0.1%) in 100 litter of water on pea sized fruits of mandarin orange (ambia bahar) and sweet lime is advisable to reduce fruit drop due to heat impact. At an interval of 15 days alternat spay including GA or NAA is advisable. Make provision of shade/thatches (made of harvested cotton/pigeonpea stalks or dried grass or green net) to individual young/new plantation.
- 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. 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 availability of sufficient feed/forage, proper working/grazing time (morning/evening), provision of enough drinking water as well as shelter with proper ventilation and periodic water sprinkling during summer heat conditions for farm/draught livestock. Undertake the necessary precautions to help reduce the incidence of fires at the farm under the prevailing very hot and dry weather conditions. Avoid in-situ burning of crop residues.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

04-05-2020/(0600 to 0627) GMT
04-05-2020/(1130 to 1157) IST



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931

IMD, DELHI

Figure: 1. Latest available satellite picture as on 04 May 2020 at 1157 Hrs (IST). (Source: IMD).

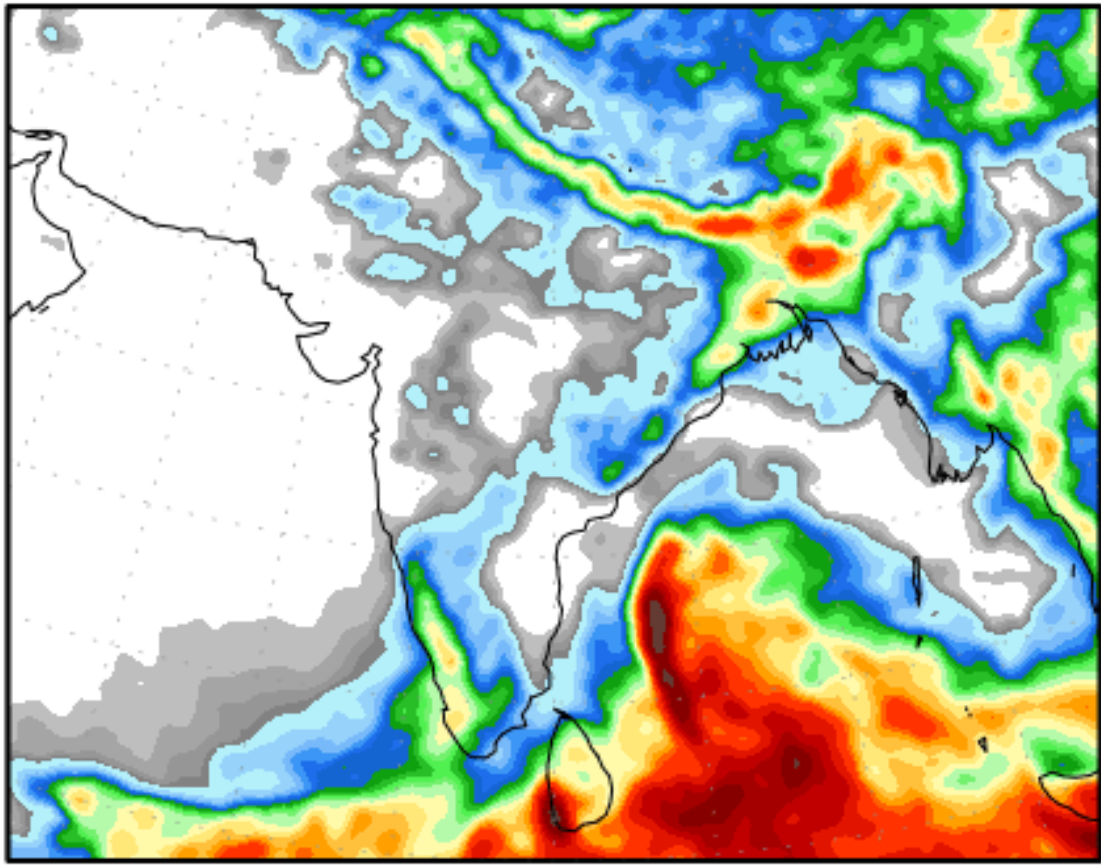


Figure:2. Precipitation forecast for 04 to 12 May 2020 (Source: NOAA NCEP).

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