

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

Daily Crop Weather Information as on 18 April 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Heat wave warning:
- Heat wave conditions in isolated pockets very likely to prevail over Jammu Division, Himachal Pradesh, Uttar Pradesh & Bihar on 18th; over Punjab, Haryana-Chandigarh-Delhi, north Rajasthan, Madhya Pradesh, Vidarbha & Gangetic West Bengal on 18th & 19th and over Jharkhand during 18th-20th April, 2022. It is likely to abate thereafter due to approaching Western Disturbance, wind conditions and cloudiness over some parts of these areas.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of cyclonic circulation over Southwest Bay of Bengal off north Tamil Nadu coast in lower tropospheric levels:
 - i) Scattered to fairly widespread rainfall accompanied with thunderstorm/lightning/gusty winds very likely over Kerala-Mahe during next 5 days and isolated to scattered rainfall accompanied with thunderstorm/lightning/gusty winds over Tamilnadu-Puducherry-Karaikal, Karnataka, Andhra Pradesh and Telangana during next 5 days.
 - ii) Isolated heavy rainfall very likely over Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe on 18th April, 2022.
- Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:
 - i) Fairly widespread/widespread rainfall accompanied with thunderstorm/lightning/gusty winds very likely over Arunachal Pradesh, Assam-Meghalaya, Nagaland-Manipur-Mizoram-Tripura & SubHimalayan West Bengal & Sikkim during next 5 days.
 - ii) Isolated heavy rainfall likely over Assam-Meghalaya during next 5 days. Thundersquall (wind speed reaching 50-60 kmph) & Hailstorm at isolated places also very likely over Assam-Meghalaya & Nagaland-Manipur-Mizoram-Tripura & Sub-Himalayan West Bengal & Sikkim on 19th April, 2022.
- Isolated to scattered rainfall thunderstorm/lightning/gusty winds very likely over Bihar, Jharkhand, Gangetic West Bengal & Odisha during next 5 days.

- Under the influence of a Western Disturbance:
 - i) Light scattered to fairly widespread rainfall accompanied with isolated thunderstorm/lightning/gusty winds very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad and Himachal Pradesh during next 5 days and over Uttarakhand during 20th-22nd April. Light isolated rainfall likely over Punjab during next 5 days; Haryana-Chandigarh-Delhi during 19th-22nd April, 2022.
 - ii) Duststorm at isolated places very likely over Punjab on 18th; West Uttar Pradesh on 20th & 21st; East Uttar Pradesh on 21st and Rajasthan during 18th-21st April, 2022.
 - iii) Strong/dust raising winds (speed reaching 25-35 kmph) very likely at isolated places over Punjab, Haryana-Chandigarh-Delhi, north Rajasthan and West Uttar Pradesh on 19th & 20th April, 2022.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Arunachal Pradesh and Assam-Meghalaya; at many places over Kerala-Mahe, Nagaland-Manipur-Mizoram-Tripura; at a few places over Sub-Himalayan West Bengal & Sikkim, Tamilnadu, Puducherry & Karaikal and Interior Karnataka and at isolated places over Chhattisgarh, Gangetic West Bengal, Odisha, Coastal Karnataka, Coastal Andhra Pradesh, Telangana and Rayalaseema.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Tamilnadu, Puducherry & Karaikal and at isolated places over Arunachal Pradesh, Nagaland-Manipur-Mizoram-Tripura, Assam & Meghalaya, Chhattisgarh, Karnataka, Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe.
- Hailstorm observed at isolated places over Sub-Himalayan West Bengal & Sikkim and Telangana.
- Yesterday, Heat wave conditions were observed in isolated pockets over northern parts of West Rajasthan, West Jharkhand, Himachal Pradesh, Haryana and Delhi.
- Heavy rainfall observed at isolated places over Assam & Meghalaya, Tamilnadu and Kerala.
- Maximum Temperature Departures (as on 17-04-2022): Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Himachal Pradesh and at isolated places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at most places over East Rajasthan and Punjab; at many places

over Haryana, Chandigarh & Delhi, Jharkhand and Bihar; at a few places over Nagaland-Manipur-Mizoram-Tripura, Uttar Pradesh, Rajasthan and Saurashtra & Kutch; at isolated places over Gangetic West Bengal; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, Chhattisgarh and Coastal Karnataka; at a few places over Vidarbha; at isolated places over; at isolated places over Coastal Andhra Pradesh & Yanam and Assam & Meghalaya. They were below normal (-1.6°C to -3.0°C) at many places over Rayalaseema, North & South Interior Karnataka and at a few places over Tamilnadu-Puducherry-Karaikal and at isolated places over Rayalaseema and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.2°C was reported at Chandrapur & Brahamapuri (Vidharbha) and Bikaner(West Rajasthan).

- Minimum Temperature Departures (as on 18-04-2022): Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Rajasthan; appreciably above normal (3.1°C to 5.0°C) at a few places over Bihar and Himachal Pradesh and at isolated places over East Uttar Pradesh and West Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Jharkhand; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Coastal Andhra Pradesh Yanam and Marathawada; at a few places over Nagaland-Manipur-Mizoram-Tripura, West Bengal & Sikkim, East Madhya Pradesh, Vidarbha and Gujarat State and at isolated places over West Uttar Pradesh, Odisha and Rayalaseema. They are below normal (-1.6°C to -3.0°C) at many places over Kerala & Mahe; at a few places over Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal and at isolated places over Madhya Maharashtra & Andaman & Nicobar Islands and near normal over rest parts of the country.
- Today, the lowest minimum temperature of 18.5°C reported at Ludhiana (Punjab) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 18 April (Day 1): Heat wave conditions in isolated pockets very likely over Jammu division, Himachal Pradesh, Punjab, Haryana Chandigarh-Delhi, Rajasthan, Uttar Pradesh, Vidarbha, Madhya Pradesh, Bihar, Jharkhand and Gangetic West Bengal. Thunderstorm accompanied with lightning, hail/gusty winds (speed 40-50 kmph) at isolated places very likely over Assam Meghalaya, Nagaland-Mizoram-Manipur-Tripura, Sub-Himalayan West Bengal & Sikkim; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Telangana, Kerala-Mahe and with lightning at isolated places over Arunachal Pradesh, Gangetic West Bengal, Odisha, south Chhattisgarh, Coastal Andhra Pradesh, Rayalaseema, Karnataka and Tamil Nadu-Puducherry-Karaikal.

Thunderstorm/Duststorm at isolated places very likely over Rajasthan and Punjab. Heavy rainfall at isolated places very likely over Assam-Meghalaya, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe. 19 April (Day 2): ♦ Heat wave conditions in isolated pockets very likely over Punjab, Haryana-Chandigarh-Delhi, Rajasthan, Vidarbha, Madhya Pradesh, Jharkhand and Gangetic West Bengal. Thunderstorm accompanied with lightning, hail & squall (speed 50-60 kmph) at isolated places likely over Assam-Meghalaya, Nagaland-Mizoram-Manipur-Tripura; with lightning, hail/gusty winds (speed 40-50 kmph) at isolated places very likely over Sub-Himalayan West Bengal & Sikkim; with lightning & hail/gusty winds (speed 30-40 kmph) at isolated places very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Punjab, Telangana, Kerala-Mahe and with lightning at isolated places over Arunachal Pradesh, Himachal Pradesh, south Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Karnataka, Coastal Andhra Pradesh, Rayalaseema and Tamil Nadu-Puducherry-Karaikal. Thunderstorm accompanied with lightning/Duststorm at isolated places very likely over Rajasthan. Heavy rainfall at isolated places very likely over Assam-Meghalaya.

- 20 April (Day 3): Heat wave conditions in isolated pockets very likely over Jharkhand. Thunderstorm accompanied with lightning, hail /gusty winds (speed 30-40 kmph) at isolated places very likely over Uttarakhand; with lightning/gusty winds (speed 40-50 kmph) at isolated places over Assam-Meghalaya, Nagaland-Mizoram-Manipur-Tripura, Gangetic West Bengal; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Gujarat state, Jharkhand, Telangana and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Bihar, south Chhattisgarh, Karnataka, Coastal Andhra Pradesh and Rayalaseema and Kerala-Mahe. Thunderstorm accompanied with lightning/Duststorm at isolated places very likely over Rajasthan and West Uttar Pradesh. Heavy rainfall at isolated places very likely over Assam-Meghalaya.
- 21 April (Day 4): Thunderstorm accompanied with lightning & squall (speed 50-60 kmph) at isolated places likely over Uttarakhand; with lightning/gusty winds (speed 40-50 kmph) at isolated places over Assam-Meghalaya, Gangetic West Bengal; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha, Jharkhand, Gujarat state, Konkan & Goa, Madhya Maharashtra, Marathawada and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Gujarat state, Sub-Himalayan West

Bengal & Sikkim, Bihar, Odisha, south Chhattisgarh, Coastal Andhra Pradesh, Telangana and Kerala-Mahe. Thunderstorm accompanied with lightning/Duststorm at isolated places very likely over West Rajasthan and Uttar Pradesh. Heavy rainfall at isolated places likely over Assam-Meghalaya.

- 22 April (Day 5): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Assam-Meghalaya, with lightning/gusty winds (speed 30-40 kmph) at isolated places over Uttarakhand, Konkan & Goa, Madhya Maharashtra, Marathwada and with lightning at isolated places over Himachal Pradesh, East Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Jharkhand, Odisha, south Chhattisgarh, Coastal Andhra Pradesh, Karnataka, Telangana and Kerala-Mahe. Heavy rainfall at isolated places likely over Assam-Meghalaya.
- The weather outlook for seven days i.e., 18 Apr to 26 Apr 2022 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:

Weather during the last week was cloudy. Daily average maximum temperature was 25.3 °C which was 2.7°C above normal and the average daily minimum temperature was 18.8°C which was 0.1°C above normal for the week. Total BSSH was 7.5 hrs with an average of 1.9 hrs/day. The daily average evaporation rate was 1.3 mm/day and the average daily wind speed during the week was 2.1 kmph. Daily average RH during morning and afternoon hour was 97.6% and 80.3% respectively.

Contingency measure:

- Boro rice (Panicle Initiation): Spraying of pesticides may be advocated if symptoms of white earhead may be observed in the boro rice crop at booting stage during fair weather condition. It is advised to spray Flubendiamide 39.35 SC (@ 1.25 ml per 10 lit of water) under fair weather condition against the pest. Generally, about 55-65 lit of water is required for spraying in one bigha area of land.
- Kharif Maize (knee high stage): Farmers can go for first top dressing with Urea @ 4.5 kg per bigha in maize crop which are at knee high stage. About 2-3 days prior to application of the fertilizer go for weeding followed by light hoeing between the rows.

- Summer Green gram/ Black gram (vegetative stage): Go for weeding in green gram and black gram crops at 20-25 days after sowing. Make provision for small drains at required interval in crop field to drain out the excess water.
- Banana (Land preparation): Planting of banana suckers may be continued for establishment of new banana orchard. For planting pit size should be of 45cm length, 45cm breadth and 45cm deep. Spacing between rows and plants should be maintained at 1.8m x 1.8m for dwarf; 2.1m x 2.1m for medium tall and 2.4m x 2.4m for tall cultivar. Before planting dip the root portion of the corms in slurry containing 4 parts of clay soil and 5 parts of water followed by sprinkling of fungicides (Bavistin @ 10g per corms). Before planting, fill up the pit by applying 12kg compost or FYM, 120g Urea, 200g SSP and 275g MOP.
- Colocasia (planting): Planting of small size corms or setts cut from large size corms of colocasia crop may be started. Apply adequate amount of organic matter and wood ash and mixed thoroughly following 2-3 time ploughing for better crop establishment.
- Assam Lemon (Planting): Farmers can go for nursery raising of the cuttings (stem/leaf-bud/air layering) of Assam lemon. Stem cutting may be raised in polyethylene bags under partial shade condition. For transplanting the cuttings in the main field during May to August, pits of 0.5m x 0.5m size with a spacing of 3m x 3m should be prepared now and refilled with soil-manure mixture (1:1) and then allowed to settle.
- Fodder crop (planting): Taking advantage of predicted rainfall, rooted slips of grasses like Hybrid Napier, Setaria, Guinea and Para in upland areas may be planted to meet the fodder needs of livestock.
- With prevailing hot weather condition, provide sufficient feed/forage, cold water, shelter from heat and follow proper grazing time (morning/evening) for farm/milch animals. Also give them protein-fat bypass supplement and mineral mixture in diet.

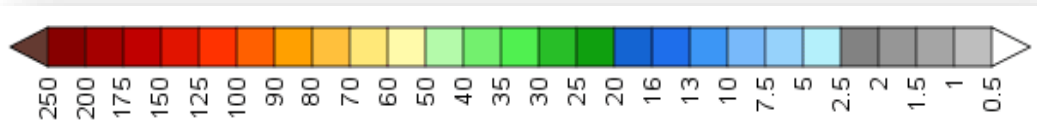
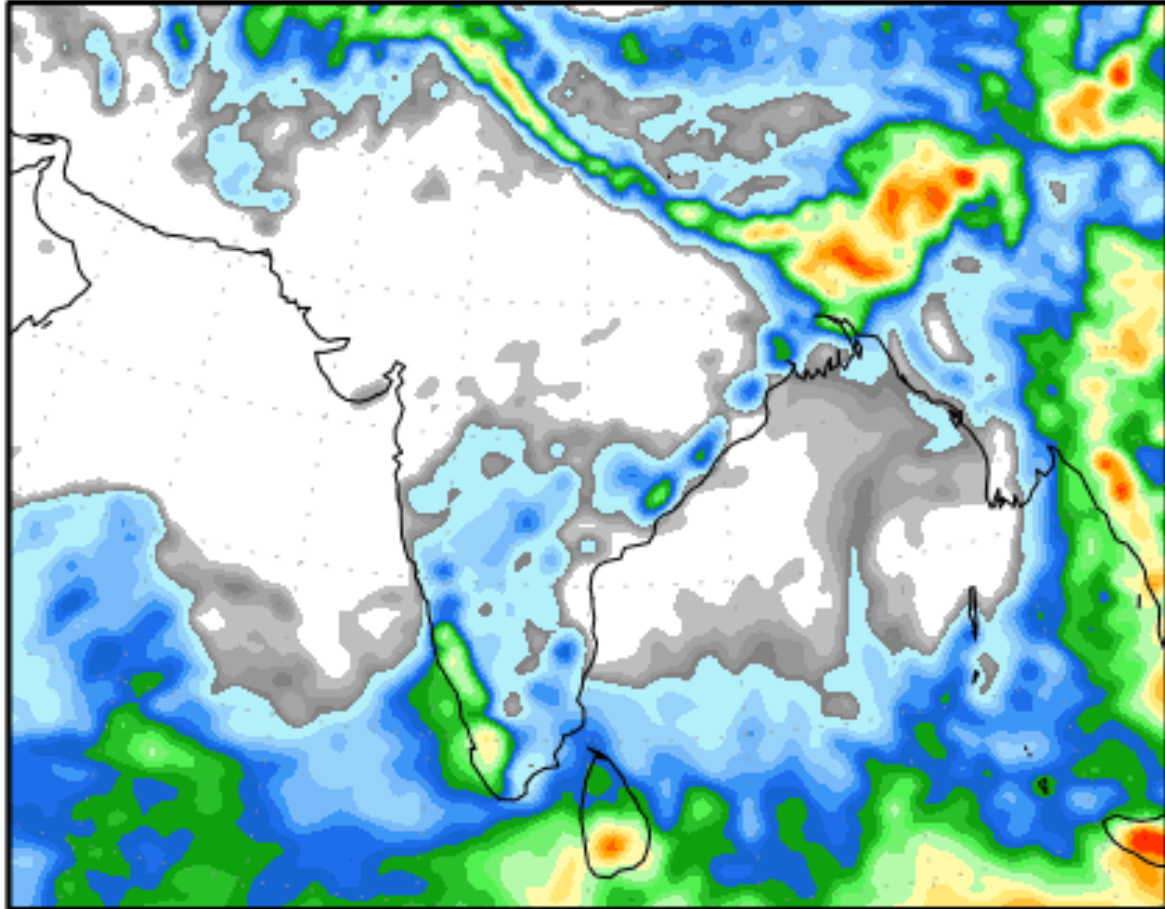


Figure:2. Precipitation forecast for 18 Apr to 26 Apr 2022 (Source: NOAA NCEP).

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