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

**Daily Crop Weather Information as on 13 April 2022** 

# Attention: Rajiv Maheshwari, OSD, ICAR

### Significant Weather Features (IMD)

- Heat wave warning:
- Heat wave conditions in isolated pockets over East Madhya Pradesh on 13th, 16th & 17th; Bihar on 13th & 14th; Jharkhand during 13th to 15th; West Rajasthan during 15th to 17th; Gujarat State on 15th &16th; Haryana-Delhi, West Uttar Pradesh, East Rajasthan & West Madhya Pradesh on 16th & 17th and over Punjab on 17th April, 2022.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:

i)Fairly widespread to widespread rainfall accompanied with thunderstorm/lightning very likely over Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Assam-Meghalaya and Nagaland-ManipurMizoram-Tripura during next 5 days.

ii) Isolated heavy rainfall likely over Arunachal Pradesh and Assam-Meghalaya during next 5 days; over Sub-Himalayan West Bengal & Sikkim on 13th & 14th and over Nagaland-Manipur on 17th April. Isolated heavy to very heavy rainfall also likely over Assam-Meghalaya during 13th-15th; over Arunachal Pradesh during 14th-16th April, 2022.

• Under the influence of the cyclonic circulation over Southeast Arabian Sea & adjoining Kerala upto middle tropospheric levels:

i) Light to moderate fairly widespread/widespread rainfall accompanied with thunderstorm/lightning very likely over Kerala-Mahe & Lakshadweep and isolated/scattered rainfall over TamilnaduPuducherry-Karaikal, Coastal Andhra Pradesh and Karnataka during next 5 days.

ii) Isolated heavy to very heavy rainfall very likely over ghat areas of Tamil Nadu & over Kerala on 13th and heavy rainfall over south Tamil Nadu on 14th & over Kerala on 14th & 15th April, 2022.

iii) Squally Weather (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Gulf of Mannar, Comorin area, along & off Tamil Nadu Coast and over

Southeast Arabian Sea along & off Kerala coast & Lakshadweep Area on 13th & 14th April. Fishermen are advised not to venture into these areas.

- Under the influence of Western Disturbance over north Pakistan & neighbourhood at lower tropospheric levels; light to moderate isolated/scattered rainfall very likely over Western Himalayan Region during 13th to 16th April. Isolated thunderstorm/lightning also likely over Jammu-Kashmir on 13th and over Himachal Pradesh & Uttarakhand on 13th & 14th April, 2022. Isolated thunderstorm/dust-storm/lightning/gusty winds (speed 30-40 kmph) also likely over northwest Rajasthan on 13th April, 2022.
- Dust Raising winds (speed 30-40 kmph) very likely over parts of West Rajasthan on 13th April, 2022.
- Strong winds (speed 25-35 kmph) very likely over parts of Uttar Pradesh on 14th 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 Kerala-Mahe and Lakshadweep; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, SubHimalayan West Bengal & Sikkim and Assam-Meghalaya; at a few places over Tamilnadu-Puducherry-Karaikal and at isolated places over Himachal Pradesh, Odisha, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Karnataka and Andaman & Nicobar Islands.
- Heavy to very Rainfall observed at isolated places over Tamil Nadu-Puducherry-Karaikal and heavy rainfall at isolated places over Kerala-Mahe.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Kerala & Mahe and at isolated places over Jammu & Kashmir, Assam & Meghalaya, Odisha, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- Yesterday, Heat wave conditions were observed in some parts of East Madhya Pradesh, Ganganagar area of Northwest Rajasthan and in Daltonganj area of Jharkhand.
- Maximum Temperature Departures (as on 12-04-2022): Maximum temperatures were markedly above normal (5.1°C or more) at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over East

Madhya Pradesh; at many places over Punjab and Jharkhand; at isolated places over West Uttar Pradesh, West Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at most places over Haryana-Chandigarh-Delhi; at a few places over Gangetic West Bengal, Odisha, Vidarbha and Konkan & Goa; at isolated places over Rajasthan, East Uttar Pradesh and Gujarat Region. They were markedly below normal (-5.1°C or less) at isolated places over Sub-Himalayan West Bengal & Sikkim and Tamil Nadu-Puducherry-Karaikal; appreciably below normal (-3.1°C to -5.0°C) at a few places over Kerala & Mahe; at isolated places over Bihar; below normal (-1.6°C to -3.0°C) at isolated places over Telangana, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and near normal over rest parts of the country.

- Yesterday, the highest maximum temperature of 44.8°C was reported at Daltonganj (Jharkhand).
- Minimum Temperature Departures (as on 13-04-2022): Minimum temperatures are markedly above normal (5.1°C or more) at most places over Punjab; at a few places over Himachal Pradesh and Uttarakhand; at isolated places over JammuKashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttar Pradesh and Rajasthan; appreciably above normal (3.1°C to 5.0°C) at a few places over East Madhya Pradesh, Vidarbha, Chhattisgarh and Marathwada; at isolated places over Haryana, Chandigarh & Delhi, West Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at most places over Jharkhand; at many places over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal and North Interior Karnataka; at a few places over Odisha, Madhya Maharashtra and Coastal Andhra Pradesh & Yanam; at isolated places over Gujarat Region, Telangana and Tamil Nadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Lakshadweep; below normal (-1.6°C to -3.0°C) at isolated places over Kerala & Mahe and and near normal over rest parts of the country.
- Today, the lowest minimum temperature of 18.2°C is reported at Bhilwara (East Rajasthan) over the plains of the country.

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

 13 April (Day 1): Heat wave conditions in isolated pockets very likely over East Madhya Pradesh, Bihar and Jharkhand. Thunderstorm accompanied with lightning/gusty winds & hail (speed 40-50 kmph) at isolated places very likely over Sub-Himalayan West BengalSikkim; with lightning/gusty winds (speed 30-40 kmph) over Assam-Meghalaya, Nagaland-Mizoram-Manipur-Tripura and Kerala-Mahe and Lakshadweep and with lightning over Jammu Division, Himachal Pradesh, Uttarakhand, Bihar, Odisha, Gangetic West Bengal, Arunachal Pradesh, Karnataka, Vidarbha, Madhya Maharashtra, Marathwada and ghat areas of Tamil Nadu-Puducherry-Karaikal. Heavy to very heavy rainfall at isolated places very likely over Assam-Meghalaya, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe and heavy rainfall at isolated places over Sub-Himalayan West Bengal-Sikkim and Arunachal Pradesh. Squally Weather (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely over Southeast & adjoining East central Arabian Sea, along & off Kerala-south Karnataka coasts, Lakshadweep area, south Tamilnadu coast, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.

- 14 April (Day 2): Heat wave conditions in isolated pockets very likely over Jharkhand and Bihar. Thunderstorm accompanied with lightning/gusty winds & hail (speed 40-50 kmph) at isolated places very likely over Sub-Himalayan West BengalSikkim; with lightning/gusty winds (speed 40-50 kmph) over Assam-Meghalaya and Gangetic West Bengal and Odisha; with lightning/gusty winds (speed 30-40 kmph) over Kerala-Mahe and with lightning over Himachal Pradesh, Arunachal Pradesh, Uttarakhand, Chhattisgarh, Nagaland-Mizoram-ManipurTripura, Lakshadweep and ghat areas of Tamil Nadu-Puducherry-Karaikal. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and Arunachal Pradesh and heavy rainfall at isolated places over SubHimalayan West Bengal-Sikkim, Tamil Nadu-Puducherry-Karaikal and Kerala-Mahe. Squally Weather (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely over Southeast & adjoining East central Arabian Sea, along & off Kerala-south Karnataka coasts, Lakshadweep area, south Tamilnadu coast, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 15 April (Day 3): Heat wave conditions in isolated pockets very likely over West Rajasthan, Jharkhand and Gujarat State.Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Assam-Meghalaya; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Kerala-Mahe and with lightning over Chhattisgarh, Gangetic West Bengal, Odisha, Nagaland-MizoramManipur-Tripura, Coastal Andhra Pradesh-Yanam, Telangana and ghat areas of Tamil Nadu-Puducherry-Karaikal. Heavy to very heavy rainfall at isolated places very likely over Assam-Meghalaya and Arunachal Pradesh.
- 16 April (Day 4): Heat wave conditions in isolated pockets likely over south Haryana, West Uttar Pradesh, Rajasthan, Madhya Pradesh and Gujarat state. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at

isolated places likely over Kerala-Mahe and with lightning over Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh-Yanam, Telangana and Rayalaseema. Heavy to very heavy rainfall at isolated places likely over Arunachal Pradesh and heavy rainfall at isolated places over Assam-Meghalaya.

- 17 April (Day 5): Heat wave conditions in isolated pockets likely over south Haryana, Punjab, West Uttar Pradesh, Rajasthan and Madhya Pradesh. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Kerala-Mahe and with lightning over Jharkhand, Gangetic West Bengal, Odisha, Andaman-Nicobar Islands, Coastal Andhra Pradesh-Yanam, Telangana and Rayalaseema. Heavy rainfall at isolated places likely over Assam-Meghalaya, Arunachal Pradesh and Nagaland-Manipur-Mizoram-Tripura.
- The weather outlook for seven days i.e., 13 Apr to 21 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)**

### Gujarat

### Weather condition:

The actual maximum temperature was 2.0 °C and actual minimum temperature was 2.0 °C higher as compared to their normals. Total BSS was 65.3 hrs. with an average of 9.3 hrs. The daily average evaporation and wind speed was 8.4 mm and 3.5 km/hr respectively. The daily average RH during morning and afternoon was 83.9 % and 24.4 % respectively.

### **Contingency measure:**

- Summer greengram: Keep crop weed free till 45 days of sowing. 2 to 3 interculturing and hand weeding is advised or apply Imazethapyr 10 % SL 75 g a.i./ha. at 15 to 20 days of sowing. Apply irrigation as per soil moisture condition and requirement of crop.
- Pearl millet : Carry out inter-culturing and weeding at 15-20 days after sowing. If necessary, second inter-culturing and weeding should be done 30-35 DAS. Apply irrigation as per soil moisture condition and requirement of crops
- Tobacco: Harvest the mature leaves by curing or priming method and keep it for sun dry. Collect well dried leaves in morning hours and store in safe place.
- Chilli : To control thrips, carry out spray of neem seed oil 30 to 50 ml in 10 liter of

water. In case of heavy attack, spray of spinosad 3 ml per 10 liter of water.

- Castor : Capsule Maturity : Carefully harvest the matured capsule from the castor plants.
- Vegetables : Flowering/ Reproductive : For the control of White fly/Aphid spray neem seed extract 500 ml or neem seed oil 50 ml in 10 liter water at 15 days interval (4 sprays) or Acetamiprid 20 % SP@ 5.0 gm/10 liter water at 15 days interval.
- Cattle: Give daily 30 to 40 g mineral mixture to animals in summer. Animal shelter should be well ventilated in summer. If the roof is made of iron or sheet, paint the top surface of roof with white color or make layer of dry fodder on the roof, which can reduce the direct heating to animals. Bathing animals two to three times in a day especially at noon hours during summer for protect them from heat and maintain milk production.

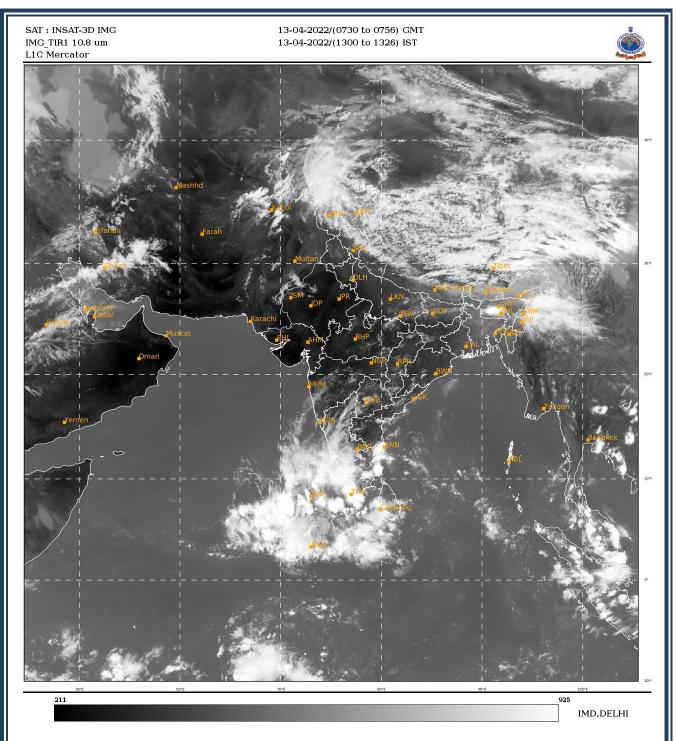
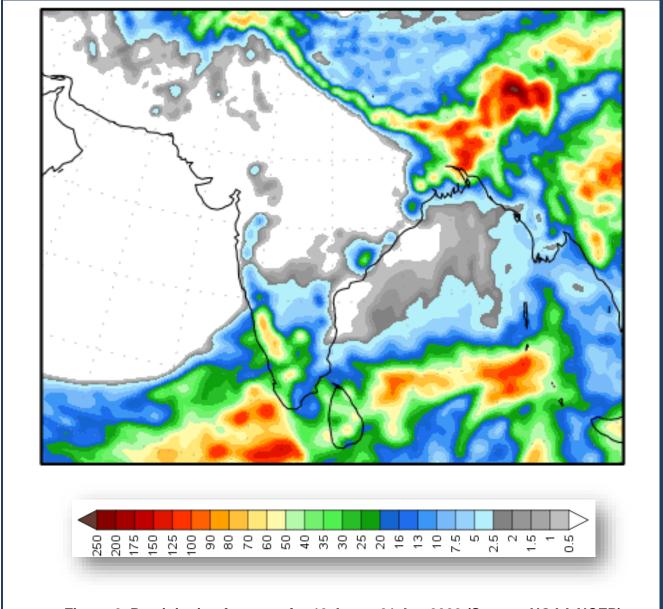


Figure: 1. Latest available satellite picture as on 13 Apr 2022 at 1326 Hrs (IST). (Source: IMD).



#### Figure: 2. Precipitation forecast for 13 Apr to 21 Apr 2022 (Source: NOAA NCEP).

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