

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

**Daily Crop Weather Information as on 22 April 2022**

**Attention: Rajiv Maheshwari, OSD, ICAR**

**Significant Weather Features (IMD)**

- 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/widespread rainfall with thunderstorm/lightning/gusty winds (speed 30-40 kmph) very likely over Arunachal Pradesh, Assam-Meghalaya, Nagaland-Manipur-Mizoram-Tripura and Sub-Himalayan West Bengal & Sikkim during next 5 days.
  - ii) Isolated heavy rainfall likely over Sikkim on 22nd; over Assam-Meghalaya during 22nd-24th April & over Arunachal Pradesh on 23rd & 24th April and isolated hailstorm/squall (speed 50-60 kmph) also likely over Assam-Meghalaya and Sub-Himalayan West Bengal-Sikkim on 22nd April, 2022.
  - iii) Isolated to scattered rainfall with thunderstorm/lightning/gusty winds(speed 30-40 kmph) very likely over Chhattisgarh & Odisha during next 5 days; over Vidarbha & Gangetic West Bengal during next 2 days; over Bihar & Jharkhand during next 24 hours. Isolated hailstorm also likely over Jharkhand & Odisha on 22nd April.
- Under the influence of the Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long.71°E to the north of Lat.30°N:
  - i) Light isolated to scattered rainfall accompanied with isolated thunderstorm/lightning very likely over Jammu-Kashmir-Ladakh-Gilgit-BaltistanMuzaffarabad, Himachal Pradesh during next 2 days and over Uttarakhand during next 24 hours.
- A fresh feeble Western Disturbance very likely to affect Western Himalayan Region from the night of 24th April, 2022. Under its influence, Light isolated to scattered rainfall accompanied with isolated thunderstorm/lightning very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 25th & 26th April.

- Under the influence of a trough from North Interior Karnataka to Gulf of Mannar in lower tropospheric levels: Isolated to scattered rainfall accompanied with thunderstorm/lightning/gusty winds very likely over Kerala-Mahe, Tamil Nadu-Puducherry-Karaikal, Karnataka, Coastal Andhra Pradesh & Telangana during next 5 days. Isolated heavy rainfall likely over south Tamilnadu & south Kerala on 22nd April, 2022.
- Heat wave conditions very likely to prevail in isolated pockets over Gujarat state during next 5 days; over southwest Uttar Pradesh during 23rd-26th; over southeast Uttar Pradesh during 24th-26th; over Madhya Pradesh on 25th & 26th and over Rajasthan & Vidarbha on 26th 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 Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at many places over Assam-Meghalaya, Nagaland, Manipur, Mizoram & Tripura Haryana, Chandigarh & Delhi, Chhattisgarh and North Interior Karnataka at a few places over Himachal Pradesh, Punjab, West Bengal & Sikkim, South Interior Karnataka and Kerala & Mahe at isolated places over Andaman & Nicobar Islands, Rajasthan Saurashtra & Kutch, Odisha, Jharkhand, Vidarbha, East Madhya Pradesh, Telangana, 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-Ladakh-Gilgit-Baltistan-Muzaffarabad, northwest Rajasthan, Assam-Meghalaya, Nagaland, Manipur, Mizoram & Nagaland, Kerala-Mahe, Tamilnadu, Telangana, Interior Karnataka, Chhattisgarh, Odisha, West Bengal & Sikkim, Jharkhand, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi and Saurashtra & Kutch.
- Yesterday, no Significant Heat wave conditions prevailed.
- Maximum Temperature Departures (as on 21-04-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Konkan & Goa and at isolated places over Assam & Meghalaya and Arunachal Pradesh; above normal (1.6°C to 3.0°C) at many places over East Madhya Pradesh, Vidarbha and Jharkhand; at a few places over Gujarat State and Kerala & Mahe and at isolated places over Rayalaseema. They were markedly below normal (-5.1°C or less) at most places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad; appreciably below normal (-3.1°C to -5.0°C) at a few places over

West Madhya Pradesh and at isolated places over Bihar and Sub-Himalayan West Bengal & Sikkim and below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at many places over Haryana, Chandigarh & Delhi and Gangetic West Bengal; at a few places over Punjab, West Uttar Pradesh and Andaman & Nicobar Islands and at isolated places over East Rajasthan, East Uttar Pradesh, Coastal Andhra Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $45.4^{\circ}\text{C}$  was reported at Chandrapur (Vidarbha).

- Minimum Temperature Departures (as on 22-04-2022): Minimum temperatures are markedly above normal ( $5.1^{\circ}\text{C}$  or more) at isolated places over East Madhya Pradesh; appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at a few places over East Uttar Pradesh and at isolated places over West Rajasthan and Gangetic West Bengal; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at most places over Marathwada; at many places over Sub-Himalayan West Bengal & Sikkim, Uttarakhand, Punjab, Madhya Maharashtra and Nagaland, Manipur, Mizoram & Tripura; at a few places over Assam & Meghalaya, Konkan & Goa and Kerala & Mahe and at isolated places over Gujarat State, Vidarbha, Telangana, Odisha, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal. They are below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and South Interior Karnataka; at a few places over West Madhya Pradesh and at isolated places over East Rajasthan and near normal over rest parts of the country. Today, the lowest minimum temperature of  $18.4^{\circ}\text{C}$  is reported at Seoni (East Madhya Pradesh) over the plains of the country.

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

- 22 April (Day 1): Thunderstorm accompanied with lightning, hail & squall (speed 50-60 kmph) at isolated places very likely over Assam-Meghalaya; with lightning, hail & gusty winds (speed 40-50 kmph) at isolated places over SubHimalayan West Bengal-Sikkim and Odisha; with lightning, hail & gusty winds (speed 30-40 kmph) at isolated places over Jharkhand; with lightning/gusty winds (speed 40-50 kmph) at isolated places over Uttarakhand, Chhattisgarh, Gangetic West Bengal, Nagaland-Manipur-Mizoram-Tripura and Kerala-Mahe; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Arunachal Pradesh, Vidarbha, Madhya Maharashtra, Marathwada, Konkan-Goa and Telangana and with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Bihar, Karnataka, Tamilnadu-Puducherry-Karaikal and Lakshadweep. Heavy rainfall at isolated places very likely over Sikkim, Assam-Meghalaya, south Tamilnadu-Puducherry-Karaikal and south Kerala. Heat wave conditions in isolated pockets very likely over Gujarat State.

- 23 April (Day 2): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Chhattisgarh, Assam-Meghalaya and Nagaland-Manipur-Mizoram-Tripura; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Arunachal Pradesh, Telangana and Kerala-Mahe and with lightning at isolated places over Vidarbha, Madhya Maharashtra, Konkan-Goa, West Bengal-Sikkim, Odisha, Coastal Andhra Pradesh-Yanam, Karnataka and Tamilnadu-Puducherry-Karaikal. Heavy rainfall at isolated places very likely over Assam-Meghalaya and Arunachal Pradesh. Heat wave conditions in isolated pockets very likely over Gujarat State and southwest Uttar Pradesh.
- 24 April (Day 3): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Sub-Himalayan West Bengal-Sikkim and Assam-Meghalaya; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Nagaland-Manipur-Mizoram-Tripura and Telangana and with lightning at isolated places over Chhattisgarh, Konkan & Goa and Kerala-Mahe. Heat wave conditions in isolated pockets very likely over Gujarat State and Uttar Pradesh. Heavy rainfall at isolated places very likely over Assam-Meghalaya and Arunachal Pradesh.
- 25 April (Day 4): Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Assam-Meghalaya and with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad, Himachal Pradesh, Chhattisgarh, Telangana, Rayalaseema and Kerala-Mahe. Heat wave conditions in isolated pockets likely over Madhya Pradesh, Jharkhand, Gujarat State and Uttar Pradesh.
- 26 April (Day 5): Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Assam-Meghalaya and with lightning at isolated places over Chhattisgarh, Telangana, Rayalaseema and Kerala-Mahe. Heat wave conditions in isolated pockets likely over Vidarbha, Madhya Pradesh, Jharkhand, Rajasthan, Gujarat State and Uttar Pradesh.
- The weather outlook for seven days i.e., 22 Apr to 30 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 1.1 °C and actual minimum temperature was 2.0 °C higher as compared to their normals. Total BSS was 65.9 hrs. with an average of 9.4 hrs. The daily average evaporation and wind speed was 7.3 mm and 3.9 km/hr respectively. The daily average RH during morning and afternoon was 84.6 % and 24.7 % respectively.

### **Contingency measure:**

- Summer pearl millet : Apply remained half amount of nitrogen (60 kg) as top dressing after weeding and thinning at 30 days after sowing. Irrigate the crop according to soil type and climatic condition.
- 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. To control aphid, spray imidacloprid 17.8 SL 3 ml or thiamethoxam 25 WG @ 3 and to control white fly, spray acephate 75 SC 15 g 10 liter of water in summer mungbean crop.
- Brinjal: Growth: Fruit and Shoot borer: If infestation found install 40 pheromone trap. Change lure at 21 day interval. And spray Diclorovos 76 EC 7 ml or Deltamethrin 1% + Triazophos 36% EC 10 ml in 10 lit water. Uproot and burn little leaf diseases infected brinjal plant and spray any systemic insecticide.
- Chilli : For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Castor : Capsule Maturity : Carefully harvest the matured capsule from the castor plants.
- 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.



SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

22-04-2022/(0830 to 0856) GMT  
22-04-2022/(1400 to 1426) IST

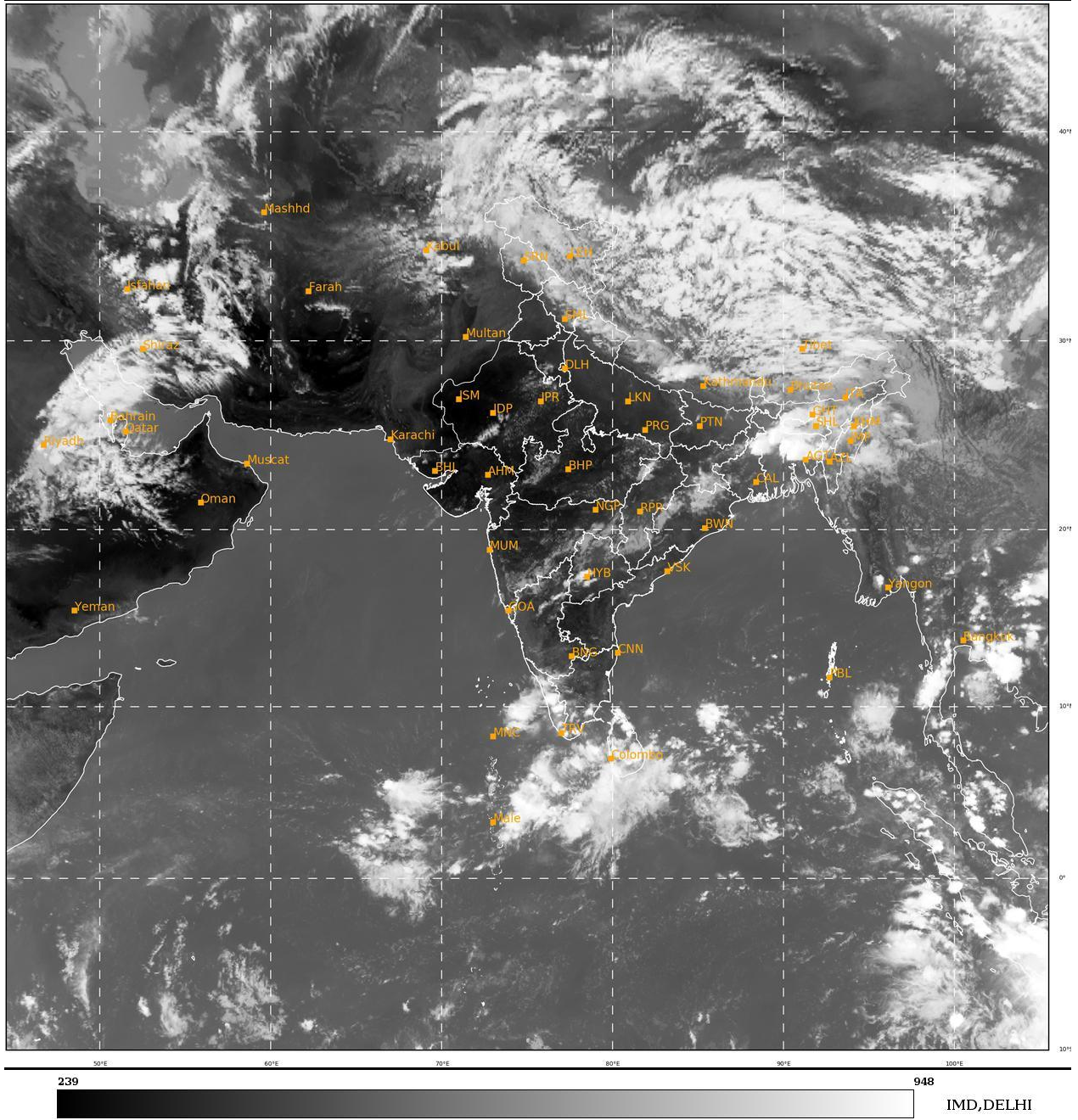
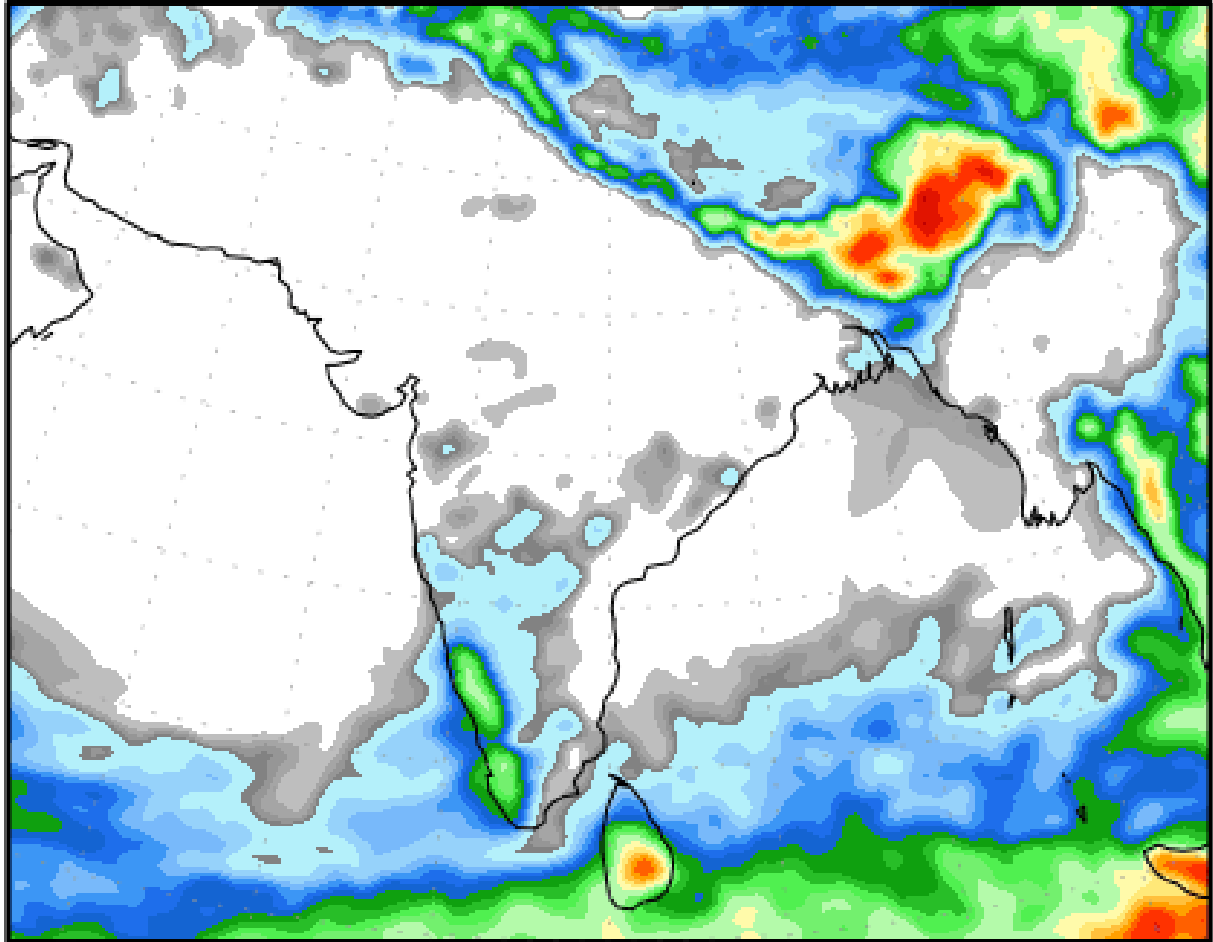


Figure: 1. Latest available satellite picture as on 22 Apr 2022 at 1426 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 22 Apr to 30 Apr 2022 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*