

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 23 May 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Rainfall/thunderstorm Forecast & Warnings
- A Western Disturbance as a cyclonic circulation lies over north Pakistan extending upto middle tropospheric levels. An induced Low Pressure Area lies over northwest Rajasthan and an east-west trough runs from this induced Low Pressure Area to north Bangladesh in lower tropospheric levels. Under the influence of these systems:
- Fairly widespread to widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand; scattered to fairly widespread rainfall activity over Punjab, Haryana, Uttar Pradesh and isolated to scattered rainfall activity over Rajasthan, north Madhya Pradesh during 23rd-24th with peak rainfall intensity on 23rd May and gradual reduction from tomorrow, the 24th May, 2022.
- Isolated Thundersquall (50-60 kmph) activity also very likely over Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and East Rajasthan today.
- Isolated hailstorm also likely over Himachal Pradesh & Uttarakhand on 23rd & 24th; over Punjab, northwest Madhya Pradesh on 23rd May, 2022. Isolated heavy rainfall also likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand today.
- Duststorm activity at isolated places very likely over Rajasthan today.
- Scattered to fairly widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds likely over Bihar, Jharkhand, Gangetic West Bengal and Odisha during next 2 days and reduce thereafter to isolated light rainfall over the region.
- Isolated heavy rainfall also likely over Odisha on 24th May, 2022.
- Scattered to fairly widespread light/moderate rainfall very likely over Assam-Meghalaya and Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim and isolated to scattered rainfall over Arunachal Pradesh during next 5 days.

- Scattered to fairly widespread rainfall with thundersquall/lightning/gusty winds very likely over Andaman & Nicobar Islands during next 3 days and isolated heavy rainfall is also likely on 23rd May.
- Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph likely over Eastcentral Bay of Bengal & adjoining north Andaman Sea and southwest Bay of Bengal along & off Sri Lanka coast during next 2 days.
- Strong winds of 40-50 kmph gusting to 60 kmph likely over northeast Arabian Sea along and off north Gujarat coast, south west Arabian Sea, northwest Arabian Sea during next 2 days.
- Heat wave warnings:
- No heat wave condition is likely to develop over any parts of the country during next 5 days except over West Rajasthan, where isolated heat wave conditions are likely on 26th & 27th May.
- 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, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Coastal Karnataka, Kerala & Mahe, Lakshadweep; at many places over Andaman & Nicobar Islands, Sub-Himalayan west Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura; at a few places over Assam & Meghalaya, Arunachal Pradesh and at isolated places over Bihar, Jharkhand, Odisha, Gangetic West Bengal, Vidarbha, Chhattisgarh, Konkan & Goa, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu, Kashmir, Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Punjab, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Chhattisgarh, Jharkhand, Assam & Meghalaya and Odisha.
- Isolated heavy rainfall observed over Haryana and Coastal Karnataka.
- Maximum Temperature Departures (as on 22-05-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over West Rajasthan and at isolated places over Himachal Pradesh. They were markedly below normal (-5.1 or less) at isolated places over Odisha, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar and Interior Karnataka; at many places over Gangetic West Bengal, Madhya Maharashtra and Rayalaseema; at a few places over East Uttar Pradesh and at

isolated places over Madhya Pradesh and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Jharkhand; at many places over Marathawada; at a few places over Coastal Karnataka and at isolated places over Uttarakhand, East Rajasthan, Gujarat State and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.2°C was reported at Phalodi (West Rajasthan).

- Minimum Temperature Departures (as on 23-05-2022): Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over Saurashtra-Kutch and at a few places over Vidarbha. They are markedly below normal (-5.1 or less) at most places over Haryana, Chandigarh & Delhi, West Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Himachal Pradesh, Uttarakhand, Punjab; below normal (-1.6°C to -3.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Bihar, Odisha, Coastal Karnataka; at isolated places over north Rajasthan, Madhya Pradesh, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, North Interior Karnataka, Telangana, Rayalaseema, Kerala-Mahe, Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 15.2°C reported at Delhi-Ridge (Delhi) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 23 May (Day 1): Heavy rainfall at isolated places very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Lakshadweep and Andaman & Nicobar Islands. Thundersquall accompanied with lightning/gusty winds (speed 50-60 kmph) & hail at isolated places very likely over Uttarakhand, Punjab; thundersquall accompanied with lightning/gusty winds (speed 50-60 kmph) at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Andaman & Nicobar Islands; thunderstorm with lightning/gusty winds (speed 40-50 kmph) & hail at isolated places over Himachal Pradesh, northwest Madhya Pradesh; with lightning/gusty winds (speed 40-50 kmph) at isolated places over East Madhya Pradesh; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand, Bihar, West Bengal & Sikkim and with lightning at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Odisha, Tamilnadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Dust storm/thunder squall/gusty winds (speed 40-50 kmph) at isolated places very likely over Rajasthan. Squally weather ((wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea, Lakshadweep area, north Andaman Sea and adjoining east central Bay of Bengal. Strong winds (of 40-50 kmph gusting to 60 kmph likely over

northeast Arabian Sea along and off north Gujarat coast, south west Arabian Sea, north west Arabian Sea, south west Bay of Bengal along & off Sri Lanka coast. Fishermen are advised not to venture into these areas.

- 24 May (Day 2): Heavy rainfall at isolated places very likely over Odisha. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) & hail at isolated places very likely over Himachal Pradesh, Uttarakhand; with lightning/gusty winds (speed 40-50 kmph) at isolated places over Bihar, Odisha, Jharkhand, East Madhya Pradesh; gusty winds (speed 30-40 kmph) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Andaman & Nicobar Islands, West Madhya Pradesh, Chhattisgarh, Gangetic West Bengal and with lightning at isolated places over Vidarbha, Tamilnadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over north Andaman Sea and adjoining east central Bay of Bengal. Strong winds of 40-50 kmph gusting to 60 kmph likely over northeast Arabian Sea along and off north Gujarat coast, south west Arabian Sea, north west Arabian Sea, south west Bay of Bengal along & off Sri Lanka coast. Fishermen are advised not to venture into these area.
- 25 May (Day 3): Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over Jharkhand, Andaman & Nicobar Islands, Gangetic West Bengal and with lightning at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Lakshadweep and Kerala & Mahe. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea. Fishermen are advised not to venture into this area. 26 May (Day 4): Thunderstorm accompanied with lightning at isolated places likely over East Madhya Pradesh, Vidarbha, Chhattisgarh, Lakshadweep and Kerala & Mahe. Heat wave conditions in isolated pockets likely over West Rajasthan.
- 27 May (Day 5): Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over East Rajasthan and with lightning at isolated places likely over Vidarbha, Chhattisgarh, Gangetic West Bengal, Lakshadweep and Kerala & Mahe. Duststorm/thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over West Rajasthan Heat wave conditions in isolated pockets likely over West Rajasthan
- The weather outlook for seven days i.e., 23 May to 31 May 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)

Madhya Pradesh

Weather condition:

Tmax.: 47-48°C at Khajuraho and Gwalior districts - Tmin.: 20°C at Seoni district - Rainfall: Maximum rainfall of 10 mm in Mandla district - Day temp.: 2-5°C above normal over the state - Night temp.: 1-2°C above normal over the state - Heat wave, gusty winds condition persist during previous week in the state

Contingency measure:

- General Advisory · The fallow field should be deep ploughed once in three years. Soil samples to be collected for soil nutrient analysis. The samples will be send to soil testing lab. of the state Department of agriculture. · Due to extreme rise in day temperature, Irrigate summer crops , vegetables, nurseries, fodder crops and orchards at weekly intervals during early morning or in late evening hours. Due to rise in day temperature, pesticide spray should be applied in late evening hours
- Mung/Urd/Summer soybean: (Branch to Flower Initiation): Irrigation applied at 4-5 days intervals. Spray of Imidacloprid (17.8 SL) at 0.5-1.5 ml/litre of water for controlling sucking pests (whiteflies). Rogue out the plants with appearance of mosaic leaves symptoms . Other pod sucking bugs observed should be control by spray of Pyrethroid chemicals, however monitoring is required (pest population above economic threshold level)as these chemicals also affect the natural enemies.
- Sugarcane (Rabi sown at Node formation) Irrigation applied at weekly intervals. Fertilizer application, earthing followed by irrigation in rabi sown canes. · Intercrop with mung/urd bean pulses also need irrigation and sucking pest control as mentioned above. Control of early shoot borer in rabi sown canes.
- Vegetables: Irrigation applied at weekly intervals among all the vegetables and nursery. Apply residue mulch in between the rows to avoid excess removal of soil water through evaporation. In Brinjal, spray of Quinalphos 25 EC at 1.5-2 ml/litre water or Spinosad 45 %SC at 10 ml ai/ha for control of fruit and shoot borers. Spray should be done during late evening hours
- Okra, Cucurbits, Chilli: Rogue out the mosaic plants. Spray of Imidacloprid (17.8 SL) at 0.5-1.5 ml/litre of water for controlling whiteflies.
- Fruit crops: As day temperature is very high, fruit trees should be irrigated regularly. Pomegranate, sapota and lemon at fruit formation stage. Apply irrigation at 4-5 days intervals. This will rise in humidity under the canopy that

resulted in less cracking of fruits.

- Animal Husbandry: Immunization to cattle against foot and mouth disease, and deworm them. Vaccinate poultry birds to prevent Ranikhet disease Irrigation of fodder maize, jowar or lobia pulse crop at 4-5 days interval Fodder should be given during early morning or late evening hours when air temperature is low. Add nutritive supplements in the diets of dairy and poultry animals , as eating habits reduced during high temperature Apply water on the roof of both poultry and dairy animals, and installation of air coolers in their sheds to lower down the air temperature.

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

23-05-2022/(0830 to 0857) GMT
23-05-2022/(1400 to 1427) IST

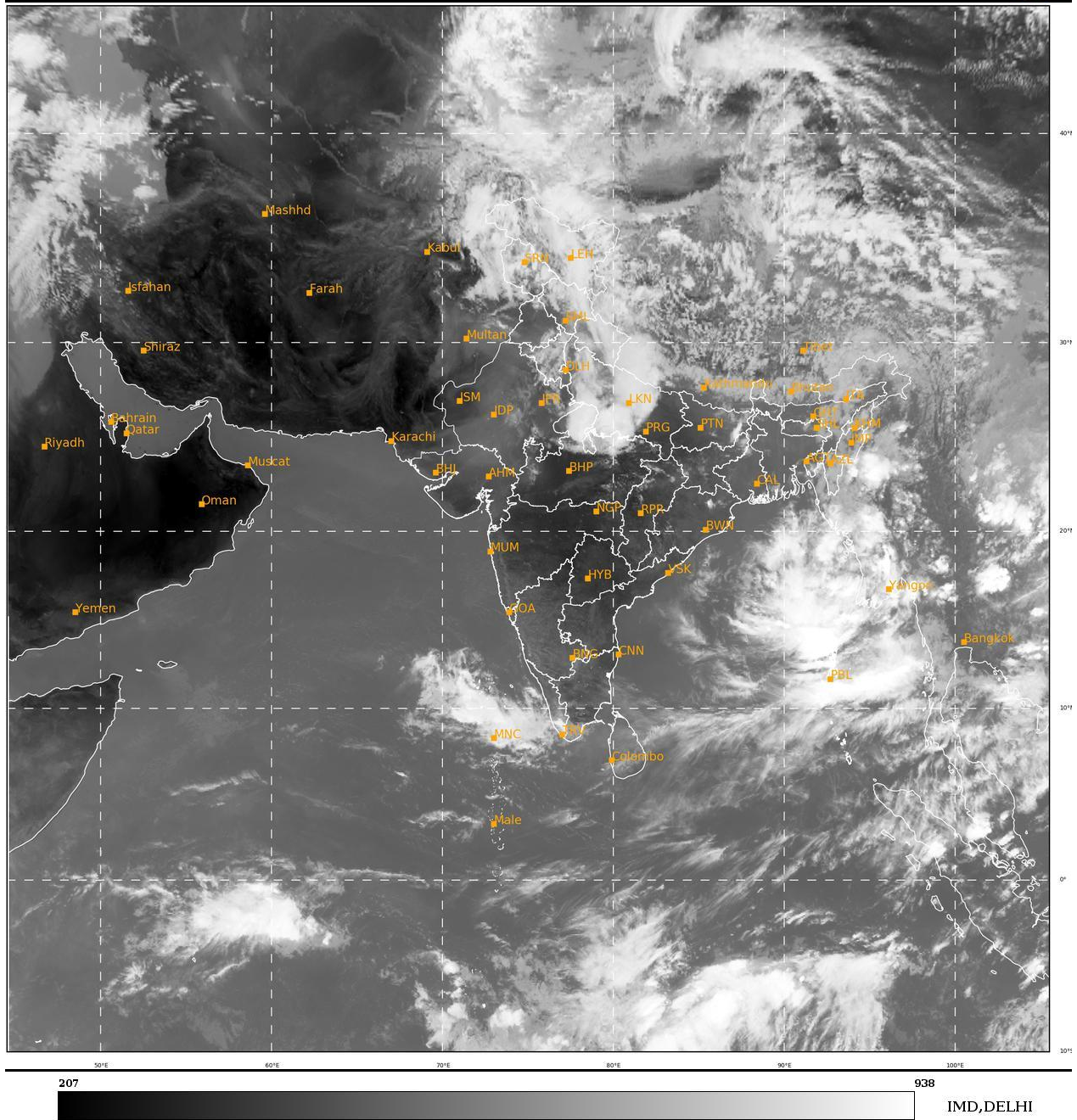


Figure: 1. Latest available satellite picture as on 23 May 2022 at 1427 Hrs (IST). (Source: IMD).

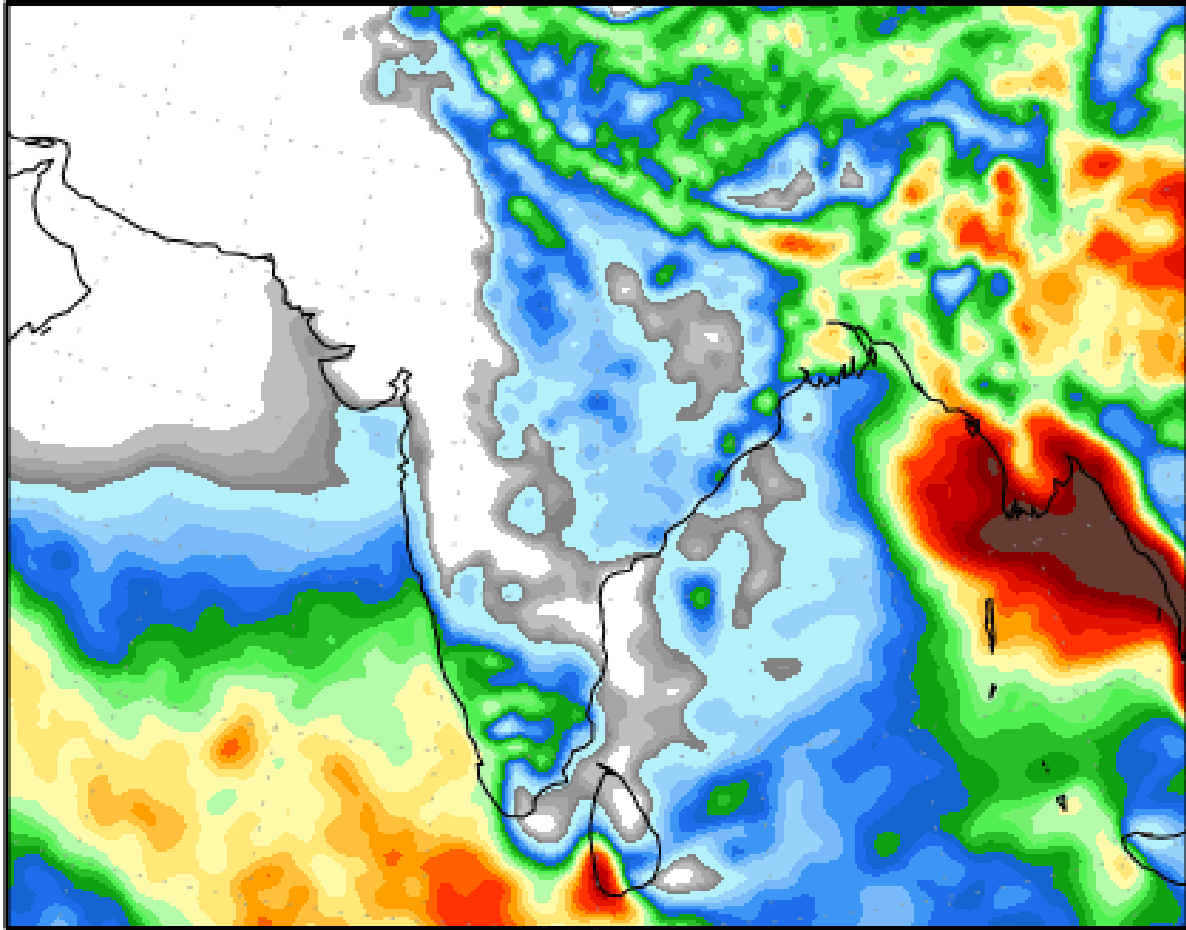


Figure:2. Precipitation forecast for 23 May to 31 May 2022 (Source: NOAA NCEP).

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