

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 02 July 2022**

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

#### **Significant Weather Features (IMD)**

- **Advance of Southwest Monsoon:**
- The Southwest Monsoon has further advanced into remaining parts of North Arabian Sea, Gujarat and Rajasthan today, the 02nd July 2022. Thus, the Southwest Monsoon has covered the entire country today, the 02nd July 2022, against the normal date of 08th July (6 days before the normal date of covering the entire India).
- The monsoon trough passes through Bikaner, Alwar, Hardoi, Daltonganj, Shantiniketan and thence eastwards to Northeast Bay of Bengal and extends upto 0.9 km above mean sea level.
- Rainfall/thunderstorm Forecast & Warnings:
- Widespread rainfall with thunderstorm/lightning very likely over Konkan & Goa, Coastal Karnataka and Kerala & Mahe and scattered to fairly widespread rainfall activity over Gujarat State, Madhya Maharashtra and Interior Karnataka during next 5 days.
- **Isolated heavy rainfall very likely over Gujarat State, Konkan & Goa, Coastal Karnataka and Kerala & Mahe during next 5 days;** over Madhya Maharashtra during 04th-06th; South Interior Karnataka on 02nd, 04th, 05th & 06th; Tamil Nadu, Puducherry & Karaikal on 02nd, 05th & 06th July, 2022.
- **Isolated heavy to very heavy rainfall also very likely over Konkan & Goa on 02nd & 04th and Coastal Karnataka on 02nd & 06th and over Gujarat Region, Madhya Maharashtra & Kerala-Mahe on 05th & 06th July, 2022. Isolated extremely heavy rainfall also likely over Konkan & Goa on 05th & 06th July, 2022.**
- Fairly widespread/widespread rainfall with isolated thunderstorm/lightning very likely over Central India (Madhya Pradesh, Chhattisgarh and Vidarbha) during next 5 days.
- Isolated heavy rainfall very likely over West Madhya Pradesh on 02nd, 05th & 06th July and East Madhya Pradesh & Chhattisgarh during next 5 days.
- **Isolated heavy to very heavy rainfall also very likely over Chhattisgarh during 03rd-06th;** Vidarbha on 05th; East Madhya Pradesh on 06th July; 2022. Isolated extremely heavy rainfall also likely over Chhattisgarh on 05th July, 2022.

- Fairly widespread/widespread rainfall with thunderstorm/lightning very likely to continue over Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days.
- Isolated heavy rainfall very likely over Sub-Himalayan West Bengal on 02nd, 05th & 06th; Jharkhand & Gangetic West Bengal on 02nd & 03rd; Bihar during 02nd-04th July and Odisha during next 5 days. Isolated heavy to very heavy rainfall also likely over Odisha during 02nd-05th July, 2022.
- Isolated heavy rainfall very likely over Himachal Pradesh & Uttarakhand on 02nd, 03rd, 05th & 06th July; West Rajasthan on 02nd & 06th; East Rajasthan on 05th & 06th; Punjab, Haryana-Chandigarh & Rajasthan on 06th July and Uttar Pradesh on 05th & 06th July, 2022.
- Isolated heavy to very heavy rainfall also very likely over East Rajasthan on 02nd and Uttarakhand on 05th & 06th and Himachal Pradesh on 06th July, 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 Vidarbha, Jharkhand, West Bengal & Sikkim, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Gujarat State, Madhya Maharashtra, Telangana, Interior Karnataka and Coastal Andhra Pradesh & Yanam; at a few places over Uttarakhand, Bihar, Arunachal Pradesh, Assam & Meghalaya, Marathawada, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Uttar Pradesh.
- Extremely heavy rainfall at isolated places occurred over Gujarat Region; heavy to very heavy rainfall at isolated places occurred over Konkan & Goa, Nagaland, East Rajasthan, Telangana and Coastal Karnataka and heavy rainfall at isolated places over Bihar, Odisha, Gangetic West Bengal, Jharkhand, East UP, HP, West Rajasthan, MP, Saurashtra & Kutch, Madhya Maharashtra, Chhattisgarh, Rayalaseema, CAP, South Interior Karnataka and Kerala & Mahe. ♦ Thunderstorm observed (from 0830 hours IST to 1430 hours IST of today): at isolated places over West Rajasthan, Uttarakhand, Gujarat State, East Madhya Pradesh, East Uttar Pradesh, Chhattisgarh, Vidarbha, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures (as on 01-07-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many place over Gangetic West

Bengal; above normal (1.6°C to 3.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Jharkhand; at a few places over Bihar, Odisha, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, East Madhya Pradesh and Coastal Andhra Pradesh & Yanam. They were markedly below normal (- 5.1°C or more) at many places over Haryana, Chandigarh & Delhi; at a few places over Rajasthan; appreciably below normal (- 3.1°C to -5.0°C) at a few places over West Uttar Pradesh; at isolated places over Konkan & Goa; below normal (-1.6°C to -3.0°C) at most places over Punjab; at many places over Coastal Karnataka; ; at a few places over Kerala & Mahe; at isolated places over Himachal Pradesh and Gujarat and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.8°C was reported at Madurai (Tamilnadu).

- Minimum Temperature Departures (as on 02-07-2022): Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at isolated places over Himachal Pradesh; above normal (1.6°C to 3.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Rajasthan; below normal (-1.6°C to -3.0°C) at a few places over Konkan & Goa; at isolated places over Haryana, Chandigarh & Delhi, Madhya Pradesh, Telangana, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.0°C is reported at Seoni (East Madhya Pradesh) over the plains of the country.

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

- 02 July (Day 1): Heavy to very heavy rainfall at isolated places very likely over East Rajasthan, Odisha, Gujarat Region, Konkan & Goa and Coastal Karnataka and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, West Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm accompanied & lightning at isolated places very likely over Himachal Pradesh, Punjab, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Coastal

Andhra Pradesh & Yanam, Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

- Strong winds of 50-60 kmph gusting to 70 kmph very likely over Southwest Arabian Sea and adjoining Westcentral Arabian Sea. Squally winds (wind speed 40-50 kmph gusting to 60 kmph) very likely along and off Gujarat coast, Gulf of Mannar, Comorin area & adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these seas.
- 03 July (Day 2): Heavy to very heavy rainfall at isolated places very likely over Chhattisgarh and Odisha and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Gujarat state, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka and Kerala & Mahe. ♦ Thunderstorm accompanied & lightning at isolated places very likely over Himachal Pradesh, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. ♦ Strong winds of 50-60 kmph gusting to 70 kmph very likely over Southwest Arabian Sea and adjoining Westcentral Arabian Sea. Squally winds (wind speed 40-50 kmph gusting to 60 kmph) very likely along and off Gujarat coast, Gulf of Mannar, Comorin area & adjoining Southeast Arabian Sea, north Coastal Andhra Pradesh, Odisha & West Bengal coasts. Fishermen are advised not to venture into these seas.
- 04 July (Day 3): Heavy to very heavy rainfall at isolated places very likely over Chhattisgarh, Odisha and Konkan & Goa and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Bihar, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Gujarat state, Madhya Maharashtra, Coastal & South Interior Karnataka and Kerala & Mahe.
- Thunderstorm accompanied & lightning at isolated places very likely over Himachal Pradesh, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka and Kerala & Mahe.
- Strong winds of 50-60 kmph gusting to 70 kmph very likely over Southwest Arabian Sea and adjoining Westcentral Arabian Sea. Squally winds (wind speed 40-50 kmph gusting to 60 kmph) very likely along and off Gujarat-Maharashtra-Karnataka-Kerala coasts, Lakshadweep area, Gulf of Mannar, Comorin area & adjoining Southeast Arabian Sea, north Coastal Andhra Pradesh, Odisha & West Bengal coasts. Fishermen are advised not to venture into these seas.

- 05 July (Day 4): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Chhattisgarh and Konkan & Goa; heavy to very heavy rainfall at isolated places over Uttrakhand, Vidarbha, Odisha, Gujarat Region, Madhya Maharashtra and Kerala & Mahe and heavy rainfall at isolated places over Himachal Pradesh, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Saurashtra & Kutch, Marathwada, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 01 July to 09 July 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 and minimum temperature were 0.5 °C higher as compared to their normals. Total BSS was 33.4 hrs. with an average of 4.8 hrs. The daily average evaporation and wind speed was 5.6 mm and 6.4 km/hr respectively. The daily average RH during morning and afternoon was 86.4 % and 56.9 % respectively..

#### Contingency measure:

- Weather based Advisories:
- Before sowing of monsoon crops, soil samples and water should be tested from the field as per the recommended method. For early sowing of monsoon crops, plow the land and prepare the soil with compost FYM as recommended. Purchase certified seed for kharif crops only from authorized dealer. Seed treatment with mercuric fungicide like Thiram, Captan etc.is recommended before sowing of crops. Inter-culturing and weeding is advised in early sown kharif crops. 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 liter 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.
- Banana : Apply irrigation at an interval of 4 to 5 days as per requirement of crop in summer season. After cutting the flower at the end of the banana, make a solution of 500 gm cow dung slurry + 7.5 gm urea + 7.5 gm potassium sulphate fertilizer and tie the end of the bunch in the bag. To prepare seedling for planting of vegetable crops like chilli, tomato, brinjal in monsoon season.
- Cattle: Keep animal shed hygienic and clean to avoid flies and mosquitoes. It is ensure that animals get drinkable water round the clock, if not possible than after give water at least 4 - 5 time in a day. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. FMD vaccination should be done.

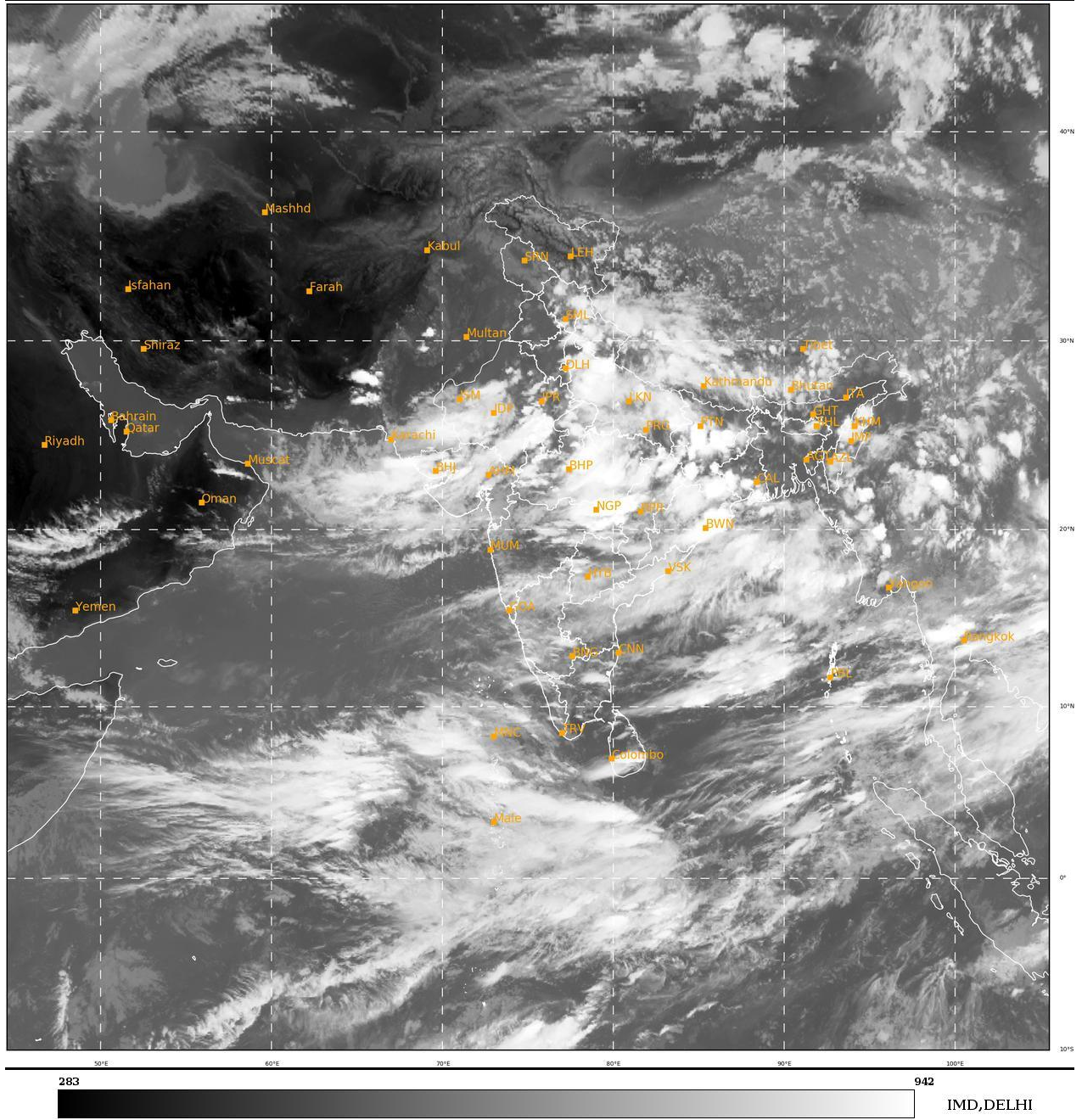
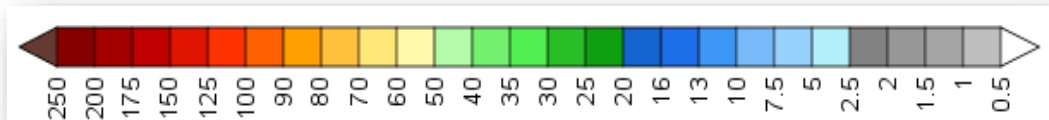
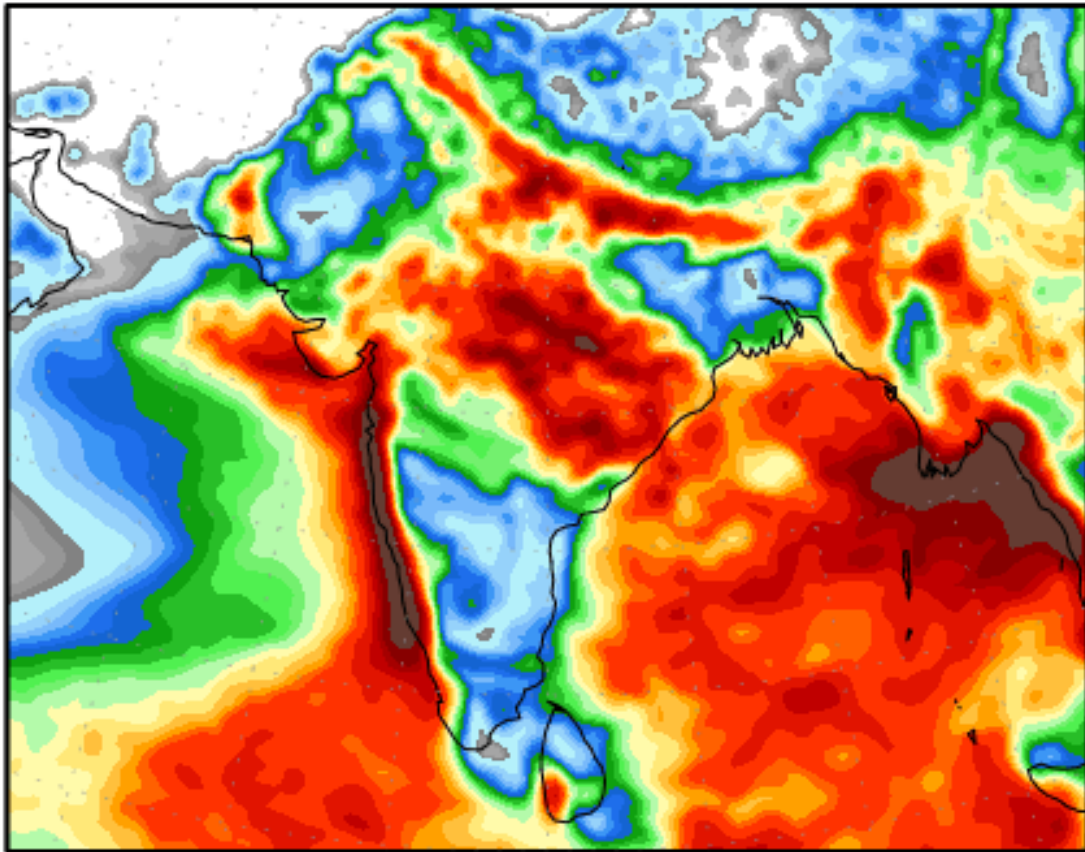


Figure: 1. Latest available satellite picture as on 02 July 2022 at 1726 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 01 July to 09 July 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.*