

# All India Coordinated Research Project on Agrometeorology

## CRIDA, Santoshnagar, Hyderabad – 500 059

### Daily Crop Weather Information as on 23 September 2021

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

#### Significant Weather Features (IMD)

- Monsoon trough lies to the south of its normal position and likely to remain so during next 5 days.
- A cyclonic circulation lies over south Chhattisgarh & neighbourhood and extends upto middle tropospheric levels. It is very likely to move westnorthwestwards across Madhya Pradesh during next 3 days.
- A cyclonic circulation lies over southwest Rajasthan & neighbourhood at lower tropospheric levels and likely to persist during next 2 days.
- A cyclonic circulation lies over Myanmar coast & adjoining Gulf of Martaban and extends upto middle tropospheric levels. It is likely to move northwestwards and emerge into Northeast & adjoining Eastcentral Bay of Bengal. Under its influence, a Low Pressure Area is likely to form over the same region around 24th evening. It is very likely to move westnorthwestwards towards Odisha coast during subsequent 48 hours. Weather forecast and Warning:
  - i) Fairly widespread to widespread rainfall with isolated heavy falls very likely over East Rajasthan, West Madhya Pradesh, Gujarat state, Konkan & Goa and Coastal Andhra Pradesh during next 5 days. Isolated very heavy falls is also likely over Gujarat Region on 25th & 26th; Saurashtra & Kutch on 26th & 27th and over Coastal Andhra Pradesh on 26th September, 2021.
  - ii) Due to likely formation of Low Pressure Area over Northeast & adjoining Eastcentral Bay of Bengal around 24th evening and its westnorthwestwards movement, a fresh spell of heavy rainfall likely over Odisha and Gangetic West Bengal from 26th September, 2021.
  - iii) Scattered to fairly widespread rainfall with isolated heavy falls very likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana on today, the 23rd September. Isolated very heavy rainfall likely over Punjab on today, the 23rd September, 2021.
  - iv) Rainfall activity is likely to increase over Kerala & Mahe with fairly widespread rainfall & isolated heavy falls from 25th September, 2021.
- The images showing the latest satellite picture in the figure. 1.

## Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands, Gangetic West Bengal, Jharkhand, Himachal Pradesh, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Karnataka and Lakshadweep; at many places over Sub- Himalayan West Bengal & Sikkim, Odisha, Uttarakhand, Jammu & Kashmir, Rajasthan, Telangana and North Interior Karnataka; at a few places over Nagaland, Manipur Mizoram & Tripura, Bihar, West Uttar Pradesh, West Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and at isolated places over Arunachal Pradesh, Assam & Meghalaya, East Uttar Pradesh, East Madhya Pradesh, Saurashtra & Kutch, Rayalaseema and Tamilnadu, Puducherry & Karaikal.
- Heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely heavy rainfall at isolated places over East Uttar Pradesh very heavy rainfall at isolated places over Gujarat Region, East Rajasthan, Haryana, Punjab and heavy rainfall at isolated places over West Uttar Pradesh, Jharkhand, Odisha, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Tamilnadu, West Madhya Pradesh, North Interior Karnataka, Telangana and Himachal Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Punjab, Himachal Pradesh, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Gujarat State, West Madhya Pradesh, Marathwada, North Interior Karnataka, Gangetic West Bengal, Telangana, Chhattisgarh, Vidarbha, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Odisha.
- Maximum Temperature Departures as on 22-09-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Arunachal Pradesh; at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura and ;Sub-Himalayan West Bengal & Sikkim and at isolated places over Madhya Pradesh. They were markedly below normal (-5.0°C or less) at a few places over Haryana, Chandigarh & Delhi and West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over Punjab; at many places over Gangetic West Bengal; at a few places over Himachal Pradesh, Gujarat region and Konkan & Goa; at isolated places over Telangana and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at many places over East Rajasthan, Marathawada and Jharkhand; at a few places over Madhya Maharashtra and North Interior

Karnataka and Odisha and near normal over rest parts of the country. yesterday, the highest maximum temperature of 37.4°C was reported at Madurai(Tamilnadu).

- Minimum Temperature Departures as on 23-09-2021: Minimum temperatures are markedly above normal (5.0°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 Uttarakhand, Punjab, Gujarat State, Madhya Pradesh, Tamil Nadu, Puducherry & Karaikal and Sub-Himalayan West Bengal & Sikkim and at isolated places over Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at isolated places over Gangetic West Bengal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.0 °C reported at Bulsar (Gujarat Region) over the plains of the country.

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

- 23 September (Day 1): Heavy to very heavy rainfall very likely at isolated places over Punjab and Gujarat State and heavy rainfall at isolated places over Uttarakhand, Haryana, Jammu & Kashmir, Himachal Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, North Chhattisgarh, Konkan & Goa, Madhya Maharashtra, South Interior Odisha, Jharkhand, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea, Andaman Sea & adjoining Eastcentral Bay of Bengal and Andhra Pradesh coast. Fishermen are advised not to venture into these areas.
- 24 September (Day 2): Heavy rainfall likely at isolated places over South Uttar Pradesh, Rajasthan, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Telangana, Andaman & Nicobar Islands, Gujarat state and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal,

Gujarat state, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea, Andaman Sea & adjoining Eastcentral Bay of Bengal. Fishermen are advised not to venture into these areas.

- 25 September (Day 3): Heavy to very heavy rainfall very likely at isolated places over Gujarat Region and heavy rainfall at isolated places over South Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Saurashtra & Kutch, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Odisha, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 26 September (Day 4): Heavy to very heavy rainfall likely at isolated places over Gujarat State, Coastal Odisha and Coastal Andhra Pradesh & Yanam and heavy rainfall at isolated places over East Rajasthan, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Chhattisgarh, Andaman & Nicobar Islands, Gangetic West Bengal, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Lakshadweep and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) likely over the Southwest & Westcentral Arabian Sea, Gulf of Mannar & Comorin area. Fishermen are advised not to venture into these areas.
- 27 September (Day 5): Heavy to very heavy rainfall likely at isolated places over Saurashtra & Kutch and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Gangetic West Bengal, South Odisha and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Gangetic West Bengal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) likely over the

Southwest & Westcentral Arabian Sea, Gulf of Mannar & Comorin area. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 23 Sep to 01 Oct 2021 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)**

### **Tamil Nadu**

#### **Weather condition:**

With respect to daily rainfall, rainfall occurred at isolated places over Tamil Nadu from 17.09.2021 and 19.09.2021, at a few places over Tamil Nadu on 18.09.2021 and 22.09.2021, at many places over Tamil Nadu on 20.09.2021 and 21.09.2021, during this week. – Minimum temperature range of 18°C - 22°C prevailed over the state except Kodaikanal and Uthagamandalam (10°C - 12°C) during the period under report. – Maximum temperature range of 31°C - 38°C prevailed over the state except Kodaikanal and Uthagamandalam (20°C - 29°C) during the period under report. – Maximum temperature: 38.5°C (normal 37.2°C), minimum temperature: 26.1°C (normal 23.0°C), rainfall: 31.2 mm (normal 15.4 mm). The maximum and minimum temperature were 1.3°C and 3.1°C above normal respectively and rainfall was 15.8 mm below normal across the week. General weather situation in Tamil Nadu:

#### **Contingency measure:**

- Block level Weather forecast : Thunderstorm with moderate rain is likely to occur at a few places from Day 1 (22.09.2021) to Day 3 (24.09.2021). Thunderstorm with moderate rain is likely to occur at many places on Day 4 (25.09.2021). Thunderstorm with heavy rain is likely to occur at isolated places on Day 5 (26.09.2021). 9-20 km/hr. wind speed is predicted for block level
- Irrigated crops: Water management: Postponed the irrigation. However, based on the weather prevail in the particular location irrigation scheduling to be planned.
- Rainfed crops: Field preparation: For conserving soil and water under rainfed conditions adopt soil and water conservation practices like broad bed and furrow, compartmental bunding and ridges and furrows for the dryland crops to be raised during the ensuing north east monsoon season. Use tractor drawn bund former, ridger and broad bed and furrow former for covering more area in a short time. Input arrangements may be made for the ensuing northeast monsoon

sowing. Seed treatment Adoption of sowing operation using the recent rainfall, farmers are advised to practice the seed treatment with chemicals like, Bevistin 2 g/ kg of seed followed (24 hrs later) bio fertilizer treatment viz., rhizobium 3 pkts for pulses; azospirillum 3 pkts for cereals and millets with phosphobacteria 3 pkts using rice gruel as sticking agent. Seed hardening To increases the speed of germination and germination percentage under rainfed situation seed hardening is must. Sorghum -2% Potassium dihydrogen phosphate (or) - 2 % Potassium chloride Soaking time - 16 hours Cotton - 2 % Potassium chloride. Soaking time - 10 hours ( 2% - Dissolve 20 gm of salt in 1000 ml of water. Soak 1 kg of seed in 650 ml of this solution and dry back to original moisture.)

- Pulses, black gram, green gram: 100 ppm Zinc sulphate, 100 ppm Manganese sulphate. Dissolve 1000 mg of salt in 1000 ml of water. Soak 1 kg of seed in 350 ml of the solution for 3 hours and dry back to original moisture or weight.
- Selection of varieties: For sowing during the ensuing northeast monsoon season under rainfed conditions select drought tolerant and pest and disease resistant varieties. KC 3 & K12 in Cotton, CoH(M) 6 in Maize, K 8 and K 12 in Sorghum, Vamban 6 & 8 in Black gram, CO 7 & CO 8 in Green gram are suitable for rainfed conditions.
- Chilli: Nursery preparation: Inputs such as seeds & fertilizer may be kept ready for the sowing based on the rainfall distribution. Incorporate the neem cake in the soil to protect the seedlings from pest and diseases.
- Dry land cultivation: Crop residue recycling: In order to improve the soil quality recycles the residues of harvested crops of maize, sorghum and pulses. Use rotovator or rotoasher for cutting the residues into small pieces and incorporate them into the soil.
- Banana: Bunch development and harvest stage: High wind speed may damage the crop; hence farmers are requested to provide support to bunch (propping).

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

23-09-2021/(0800 to 0826) GMT  
23-09-2021/(1330 to 1356) IST

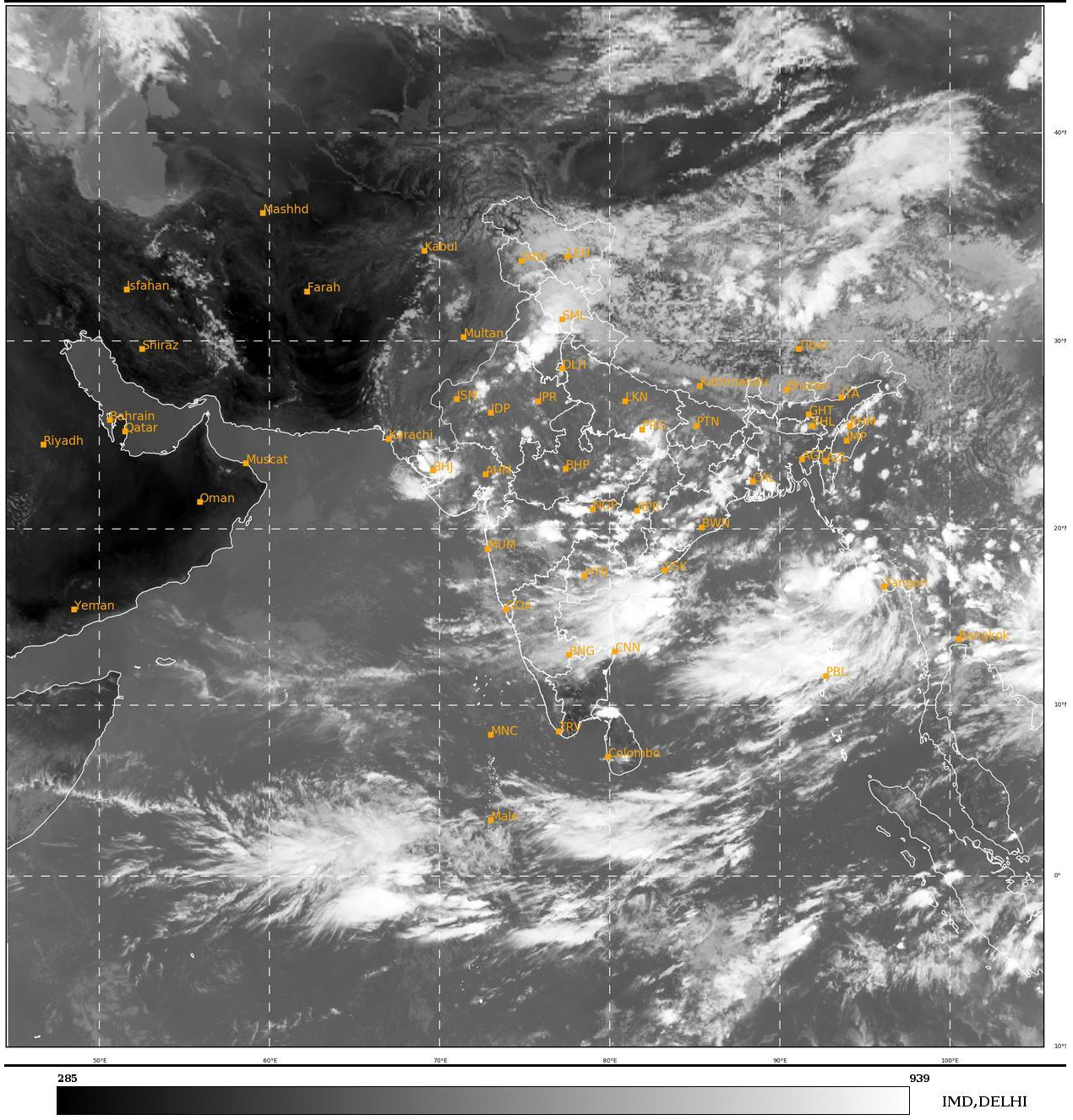
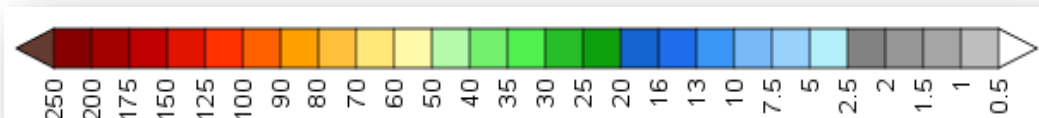
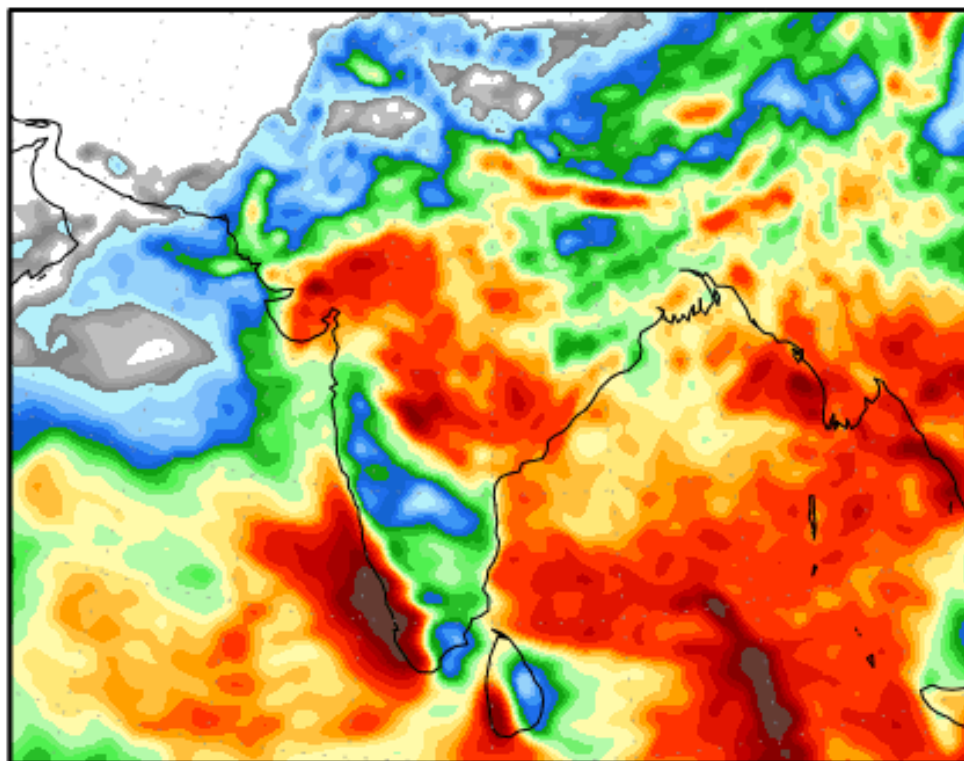


Figure: 1. Latest available satellite picture as on 23 Sep 2021 at 1356 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 23 Sep to 01 Oct 2021 (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.*