

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

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

### **Daily Crop Weather Information as on 28 August 2021**

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

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

- The Low Pressure Area over Northwest adjoining Westcentral Bay of Bengal off south Odisha-north Andhra Pradesh coasts with the associated cyclonic circulation extending upto 5.8 km above mean sea level tilting southwestwards with height persists. It is likely to move west-northwestwards across Central & West India during next 4-5 days.
- The monsoon trough at mean sea level now passes through Ferozpur, Delhi, Gwalior, Sidhi, Jharsuguda, Centre of Low pressure area over Northwest adjoining Westcentral Bay of Bengal off south Odisha-north Andhra Pradesh coasts and thence southeastwards to Eastcentral Bay of Bengal and extends upto 0.9 km above mean sea level. Western end of the monsoon trough is likely to shift further southwards during next 48 hours and run to south of its normal position. The eastern end now runs to south of its normal position. Entire monsoon trough is very likely to run to the south of its normal position from 30th August for subsequent 2 days and shift northwards thereafter.
- The east-west shear zone now runs roughly along Latitude 15°N between 3.1 km & 7.6 km above mean sea level tilting southwards with height. It is likely to persist and move slightly northwards during next 2-3 days. The off-shore trough at mean sea level runs from Karnataka coast to Kerala coast.
- Due to above meteorological conditions:
  - (i) Fairly widespread to widespread rainfall activity with isolated heavy falls very likely over Odisha, Andhra Pradesh during 28th-31st; Chhattisgarh during 28th-30th; Madhya Pradesh 29th-31st and East Rajasthan during 30th August-01st September. Isolated heavy to very heavy falls are very likely over Vidarbha & Marathwada on 30th; Telangana on 29th & 30th; North Madhya Maharashtra on 31st; North Konkan & Gujarat Region on 31st August and 01st September and Saurashtra & Kutch on 01st September.
  - (ii) Widespread rainfall activity with isolated heavy falls very likely over Northeast India during next 24 hours and reduction thereafter. Isolated heavy to

very heavy falls are very likely over Sub-Himalayan West Bengal & Sikkim during next 24 hours and reduction thereafter.

(iii) Fairly widespread to widespread rainfall activity with isolated heavy falls are very likely over Rayalaseema and North Interior Karnataka during next 2 days. Isolated heavy to very heavy falls are likely over Coastal & South Interior Karnataka, ghat areas of Tamilnadu and Kerala & Mahe on 28th & 29th August.

(iv) Fairly widespread to widespread rainfall activity with isolated heavy falls very likely to continue over Uttarakhand during next 5 days with isolated heavy to very heavy rainfall with extremely heavy falls during next 24 hours.

(v) Light/moderate scattered rainfall activity likely over rest parts of Northwest India during 28th-31st August.

- 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, Arunachal Pradesh, West Bengal & Sikkim, Odisha, Uttarkhand, Himachal Pradesh, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Bihar, Konkan & Goa, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal and at isolated places over Uttar Pradesh, Haryana, Punjab, Madhya Pradesh, Gujarat state, Marathwada and Vidarbha.
- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Very Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Odisha and Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Arunachal Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Andaman & Nicobar Islands, Konkan & Goa, Telangana, Coastal & South Interior Karnataka, Kerala & Mahe 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, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Odisha, Chattisgarh, West Bengal & Sikkim, Jharkhand, Bihar, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam.

- Maximum Temperature Departures as on 27-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at isolated places over Gujarat; above normal (1.6°C to 3.0°C) at most places over Vidarbha; at many places over Punjab, Haryana, Chandigarh & Delhi, East Rajasthan and Chhattisgarh; at a few places over Madhya Pradesh, Madhya Maharashtra and Konkan & Goa; at isolated places over West Uttar Pradesh, West Rajasthan, Odisha, Gangetic West Bengal and Telangana. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over East Uttar Pradesh and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at many places over Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; at isolated places over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.5°C was reported at Ganganagar (West Rajasthan).
- Minimum Temperature Departures as on 28-08-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Haryana, Chandigarh & Delhi; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Rajasthan, Madhya Pradesh and Saurashtra & Kutch. They are below normal (-1.6°C to -3.0°C) at isolated places over Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.0°C is reported at Bulsar (Gujarat Region) over the plains of the country.

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

- 28 August (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Uttarakhand; heavy to very heavy rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Coastal & South Interior Karnataka, ghat areas of Tamil Nadu and Kerala & Mahe and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, north Konkan, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Lakshadweep. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Odisha and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal

Pradesh, Assam & Meghalaya, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea; Southeast Arabian Sea and along & off south Karnataka-Kerala coasts and Lakshadweep area; Westcentral Bay of Bengal and along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.

- 29 August (Day 2): Heavy to very heavy rainfall very likely at isolated places over Telangana, Coastal & South Interior Karnataka, ghat areas of Tamil Nadu and Kerala & Mahe and heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, north Konkan, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Vidarbha, Jharkhand, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea; Southeast Arabian Sea and along & off south Karnataka-Kerala coasts and Lakshadweep area; Westcentral Bay of Bengal and along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.
- 30 August (Day 3): Heavy to very heavy rainfall very likely at isolated places over Vidarbha, Marathwada and Telangana and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Chhattisgarh, Gujarat Region, north Madhya Maharashtra, north Konkan, Coastal Andhra Pradesh & Yanam, Karnataka, ghat areas of Tamil Nadu and Kerala & Mahe. 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, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea; Southeast Arabian Sea and along & off south Karnataka-Kerala coasts and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 31 August (Day 4): Heavy to very heavy rainfall very likely at isolated places over Gujarat Region, north Madhya Maharashtra and north Konkan and heavy rainfall

at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Saurashtra & Kutch, Marathwada, Coastal Andhra Pradesh & Yanam and Telangana. 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, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

- 01 September (Day 5): Heavy to very heavy rainfall very likely at isolated places over Gujarat state and north Konkan and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra. 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, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 28 Aug to 05 Sep 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)**

### **Gujarat**

#### **Weather condition:**

The actual maximum temperature was 0.8 °C lower and the actual minimum temperature was 0.9 °C higher as compare to their normals. Total BSS was 11.7 hrs. with an average of 1.7 hrs. The daily average evaporation and wind speed was 2.5 mm and 4.6 km/hr respectively. The daily average RH during morning and afternoon was 90.4 % and 68.7 % respectively.

#### **Contingency measure:**

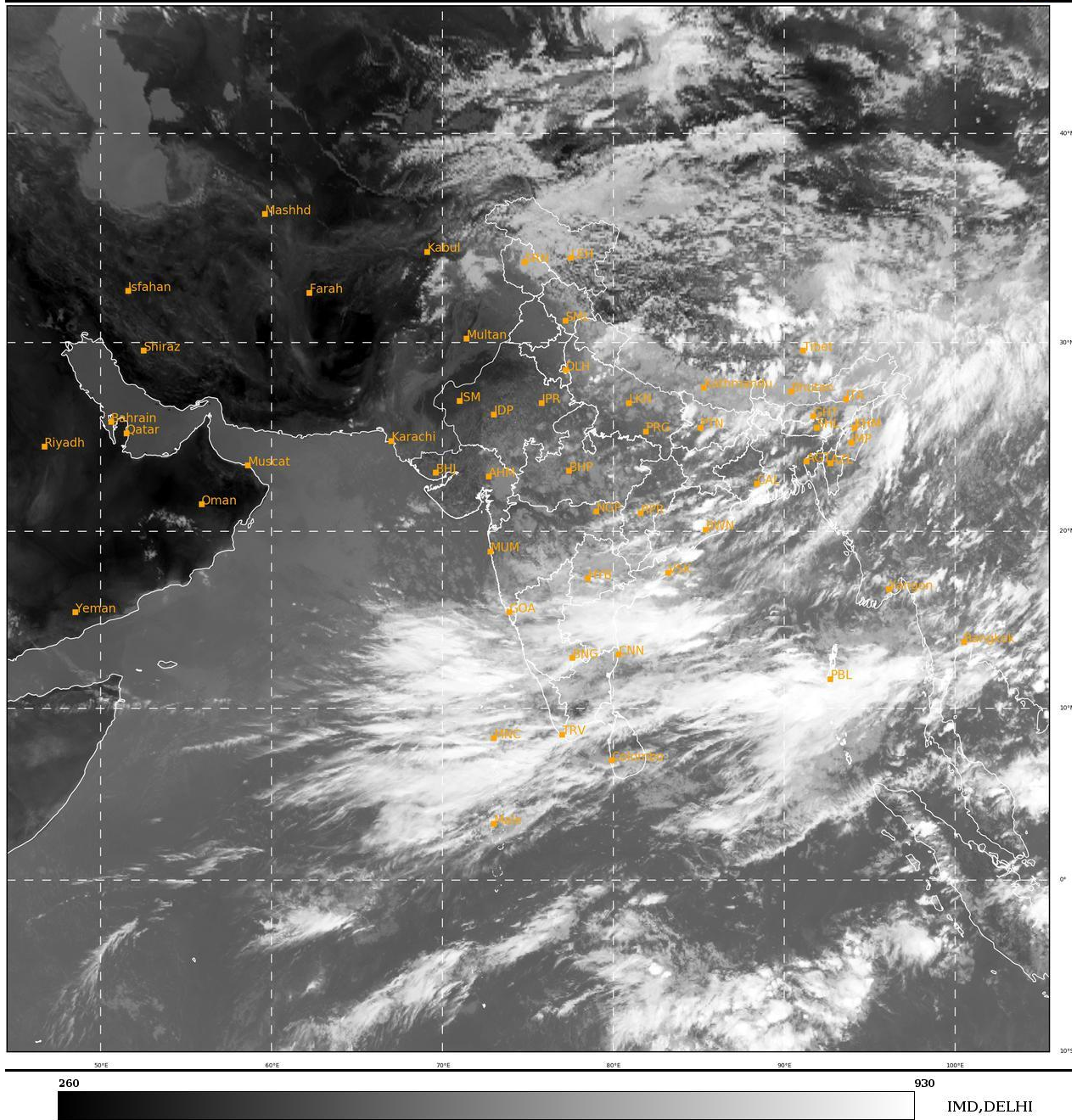
- Irrigate all kharif crop according to need of the crop due to long dry spell.
- Pearl millet : Flowering/ grain filling : Irrigate the crop if crop need water. Protect the crop from bird damage.

- Tobacco : Nursery preparation :Carry out nursery bed preparation for raising the seedlings of bidi tobacco varieties like Anand-119, Anand- 2, GT- 4, GT-5 GABTH-2, GABT-11, ABT-10, MRGTH-1 for kharif cultivation. Weeding in tobacco nursery is advised. Preapare land for tobacco transplanting. Carry out transplanting of seedlings of tobacco crop at recommdoned spacing (90 cm x 75 cm or 105 cm x 90 cm).
- Paddy : Vegetative : Apply carbofuran 3 G 33 kg per hectare after drain out water from the field for control of stem borer. Hand weeding should be done.
- 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.
- Vegetable Crop: Growth: Due to variable weather farmers are advised to constant monitoring against attack of pest and disease in vegetable crop, if symptom observed, take protection measures as per recommendation when sky remain clear.
- Mango : Farmers are advised to clean the orchards by removing dead plant debris and prepare for excess water drain out from the field. It is the best time for plantation of fruit orchard.
- Cattle: Provide adequate fodder and keep the animals in clean shed. Give stored fodder balanced mineral mixture in diet. Protect shed from rain and wind. Care should be taken in rainy days for cattle and stored dry fodder.

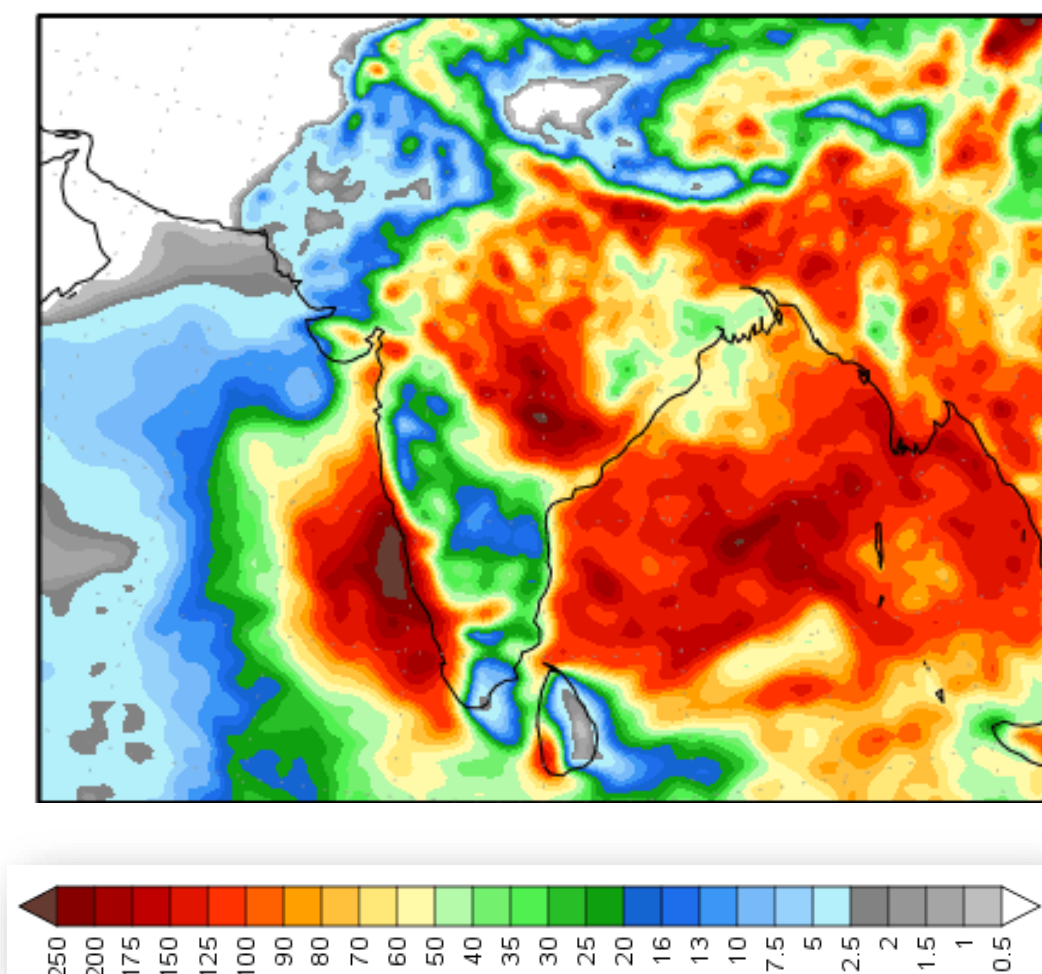


SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

28-08-2021/(0730 to 0756) GMT  
28-08-2021/(1300 to 1326) IST



**Figure: 1. Latest available satellite picture as on 28 Aug 2021 at 1326 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 28 Aug to 05 Sep 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.*