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

### **Daily Crop Weather Information as on 24 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 Low Pressure Area has formed over eastcentral Bay of Bengal and neighbourhood and associated cyclonic circulation extends upto mid tropospheric levels tilting southwest wards with height. It is very likely to become more marked during next 12 hours. It is likely to move west-northwest wards towards Odisha coast during next 48 hours.
- A cyclonic circulation lies over northeast Madhya Pradesh & adjoining south Uttar Pradesh and extends upto mid tropospheric levels.
- A cyclonic circulation lies over Saurashtra & neighbourhood and extends upto mid tropospheric levels. Weather forecast and Warning:
  - i) Due to Low Pressure Area over Eastcentral Bay of Bengal and its likely west-northwest wards movement towards Odisha coast during next 48 hours, a fresh spell of heavy rainfall likely over Odisha and north Coastal Andhra Pradesh from 26th September, 2021. Fairly widespread to widespread rainfall with isolated heavy falls very likely over Odisha, Coastal Andhra Pradesh & Yanam and Telangana during 25th 28th September, 2021. Isolated very heavy falls is also very likely over Odisha on 26th & 27th and over Coastal Andhra Pradesh & Yanam on 26th September, 2021.
  - ii) Fairly widespread to widespread rainfall with isolated heavy falls very likely over East Rajasthan, West Madhya Pradesh, Gujarat state and Konkan & Goa during next 5 days. Isolated very heavy falls is also very likely over Gujarat Region on 25th, 26th & 27th; over Saurashtra & Kutch on 26th & 27th September, 2021.
  - iii) Rainfall activity is very likely to increase over Kerala & Mahe with fairly widespread to widespread rainfall and isolated heavy falls from 25th September, 2021 and over Lakshadweep area from 26th 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, Haryana, Chandigarh & Delhi, Punjab, Himachal Pradesh, Konkan & Goa, Marathawada, Chhattisgarh, Coastal Karnataka; at many places over Gangetic West Bengal, East Uttar Pradesh, Gujarat state, Madhya Maharashtra, Vidarbha, Telangana, North Interior Karnataka, Lakshadweep at a few places over Arunachal Pradesh, Nagaland, Manipur Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Odisha, Jharkhand, West Uttar Pradesh, Jammu & Kashmir, Rajasthan, Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamilnadu, South Interior Karnataka, Kerala & Mahe and at isolated places over Bihar and Assam & Meghalaya.
- Heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Very Heavy rainfall at isolated places over Punjab, Gujarat state, Haryana , Himachal Pradesh, East Uttar Pradesh and Andaman & Nicobar Islands and heavy rainfall at isolated places over West Uttar Pradesh, Madhya Pradesh, Rajasthan, Tamilnadu, Puducherry &karaikal and Telangana.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Uttrakhand, Haryana, Chandigarh, Jammu Division, Punjab, West Rajasthan, East Madhya Pradesh, Gujarat State, East Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, Odisha, Gangetic West Bengal, Assam & Meghalaya, Vidarbha, Telangana, North Interior Karnataka, Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 23-09-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Assam & Meghalaya, at isolated places over Tamilnadu, Puducherry & karaikal and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Kerala & Mahe and Nagaland, Manipur, Mizoram & Tripura; at a few places over Gangetic West Bengal; at isolated places over East Madhya Pradesh. They were markedly below normal (-5.0°C or less) at most places over Himachal Pradesh; at a few places over Punjab and West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at a few places over Haryana, Chandigarh & Delhi, Marathwada and Telangana; at isolated places Gujarat State; below normal (-1.6°C to -3.0°C) at a few places over East Rajasthan, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and at isolated places over West Madhya Pradesh, Uttar Pradesh and Odisha and near normal over rest

- parts of the country. Yesterday, the highest maximum temperature of 36.8°C was reported at Madurai (Tamilnadu).
- Minimum Temperature Departures as on 24-09-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Rajasthan; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim; at a few places over Assam & Meghalaya and at isolated places over Himachal Pradesh, Gujarat State, and Madhya Maharshtra. They were below normal (-1.6°C to -3.0°C) at isolated places over Gangetic West Bengal, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.5°C reported at Bulsar (Gujarat Region) over the plains of the country.

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

- 24 September (Day 1): Heavy to very heavy rainfall very likely at isolated places over Saurashtra & Kutch and Heavy rainfall at isolated places over Uttar Pradesh, Rajasthan, Madhya Pradesh, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Andaman & Nicobar Islands, Gujarat region and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) likely over the Southwest & Westcentral Arabian Sea, North & Eastcentral Bay of Bengal, Andaman sea, Southwest & adjoining Southeast Bay of Bengal, Gulf of mannar & Comorin area. Strong wind ( wind speed 40-50 kmph gusting to 60 kmph) very likely over Gujarat coast. Fishermen are advised not to venture into these areas.
- 25 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over Gujarat Region and heavy rainfall at isolated places over Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Odisha, 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, Madhya Pradesh, Vidarbha, Chattisgarh, Jharkhand, Gangetic West Bengal, 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) likely over the Southwest & Westcentral Arabian Sea, North & Eastcentral Bay, West Bengal-Odisha-Andhra Pradesh coasts, Andaman sea, Southwest and adjoining Bay, Gulf of mannar & Comorin area. Fishermen are advised not to venture into these areas.
- 26 September (Day 3): Heavy to very heavy rainfall very likely at isolated places over Gujarat State, 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, Telangana, Kerala & Mahe and Lakshadweep. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe, Lakshadweep and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea, Northwest & West central Bay of Bengal, West Bengal-Odisha-Andhra coasts. Strong wind ( wind speed 40-50 kmph gusting to 60 kmph) very likely over Gujarat coast, Southwest & adjoining Southeast Bay of Bengal, Gulf of mannar & Comorin and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 27 September (Day 4): Heavy to very heavy rainfall likely at isolated places over Gujarat State and Odisha; heavy rainfall at isolated places over Uttrakhand, West Madhya Pradesh, Vidarbha, Gangetic West Bengal, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Chhattisgarh, Andaman & Nicobar Islands, Telangana, Kerala & Mahe and Lakshadweep. Thunderstorm accompanied with lightning likely at isolated places over Haryana, West Uttar Pradesh, East Rajasthan, 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. Strong wind (wind speed 45-65 kmph gusting to 70 kmph) very likely over Northeast & Westcentral Bay of Bengal, West Bengal-Odisha-Andhra coasts. (wind speed 40-50 kmph gusting to 60 kmph) very likely over Gujarat coast, Southwest & adjoining Southeast Bay of Bengal, Gulf of mannar & Comorin area. Fishermen are advised not to venture into these areas.
- 28 September (Day 5): Heavy rainfall likely at isolated places over Uttarakhand, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Odisha, Gujarat state, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra

Pradesh & Yanam, Telangana and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Haryana, West Uttar Pradesh, East Rajasthan, 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. Strong wind (wind speed 40-50 kmph gusting to 60 kmph) very likely over Gujarat coast. Fishermen are advised not to venture into these areas.

• The weather outlook for seven days i.e., 24 Sep to 02 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)**

#### Maharastra-Vidarbha

#### Weather condition:

Weekly average means (38 MW) at AICRPAM Akola centre: T max 30.3°C (normal 32.5°C), T min 22.9°C (normal 22.4°C). RH I 90 % (normal 85 %), RH II 68 % (normal 56 %). Evaporation rate 2.6 mm (normal 4.8 mm), Wind 2.5 km/hr (normal 6.1 km/hr) and BSH 3.2 hrs (normal 6.2 hrs). Maximum temperature across the week was 2.2°C below normal with a deviation of -4.4 to -0.5°C from normal. Minimum temperature across the week 0.5° above normal with a deviation of -0.2 to +1.8°C from normal.

#### Contingency measure:

- Block level forecast (Akola) indicates widespread (at most places) light to
  moderate rainfall during 23-24 September and scattered (few places) light to
  moderate rainfall during 25-26 September and fairly widespread (at many places)
  light to moderate rainfall on 27 September. Warning includes thunderstorm
  accompanied with lightning at isolated places during 23-24 September. With
  forecast of light to moderate rainfall during next five days, farmers are advised to
  drain out excess water from standing crop fields/vegetable fields and orchards
  immediately.
- Farmers are advised to monitor the crop regularly for insect incidence and use
  the suitable recommended control measures thereof in the initial stage itself.
  Follow safety precautions while handling and spraying insecticides. While
  planning plant protection spray undertake spray during clear weather on a nonrainy day with rain free period during spray and at least 6 hours after spray.
- Foliar spray of 2% Urea (200 g Urea +10 litre water) at cotton flowering stage and

2% DAP at cotton boll development stage is advisable after current spell of rains for better productivity. Undertake spray of alpha NAA 4.5% SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton, after current spell of rains. Keep close watch on moths of pink bollworm in pheromone traps in cotton fields. With 8 to 10 adult moth observed in trap over 3 consecutive days, undertake spray of 5% NSKE OR Azadirachtin 1500 ppm @ 50 ml per 10 litres of water to manage the initial incidence of pink boll worm. If pink boll worm infestation crosses ETL level undertake spray of Profenophos 50 EC @ 30ml or Indoxacarb 14.5 SC @ 5ml or Emamectin benzoate 5 SG @ 5g per 10 litres of water. As the early maturing soybean varieties (JS 95-60, JS 20-34, JS 93-05, NRC 130 etc.) are nearing maturity It is advised to harvest the crop timely at change in pod colour (physiological maturity) in order to minimize the yield losses due to shattering, seed deterioration or possible risk of vivipary (in pod germination) in maturing pods due to rains at maturity.

- Install pheromone traps @ 5/ha in pigeon pea for monitoring of Helicoverpa. Monitor for presence of eggs & small larvae in pigeon pea. At silking to kernel blister stage for mild incidence of maize army worm use of insecticides may not be feasible instead undertake mechanical picking of egg larvae masses & its destruction regularly. Sowing of rainfed rabi sorghum (PKV Kranti, Phule Yashoda, Maldandi) can be undertaken during last week of September to first fortnight of October.
- Early sowing of safflower (PKV-Pink (AKS-311), AKS-207 and Nari-non spiny (NH-1)) during last week of September to first week of October escapes the damage caused by aphid incidence, however, avoid sowing during heavy rain forecast period. For above, seed treatment with Azatobacter+ PSB (each 25 g / kg seed) and biofungicide Trichoderma @ 4 g per kg seed is advisable.
- For management of citrus psylla in orange orchard, undertake two sprays of imidacloprid 17.8% @ 5.0 ml per 10 liters of water at an interval of 15 days, after current spell of rains.
- For rabi season cultivation undertake nursery sowing of tomato, brinjal, cabbage, cauliflower and sowing of spinach, fenugreek, radish, and carrot, dolichos bean and ivy gourd. Ensure sufficient feed and medication for livestock to last through any intermittent disruption. Ensure the milking cow/buffalo has adequate constant access to clean drinking water and quality feed daily.

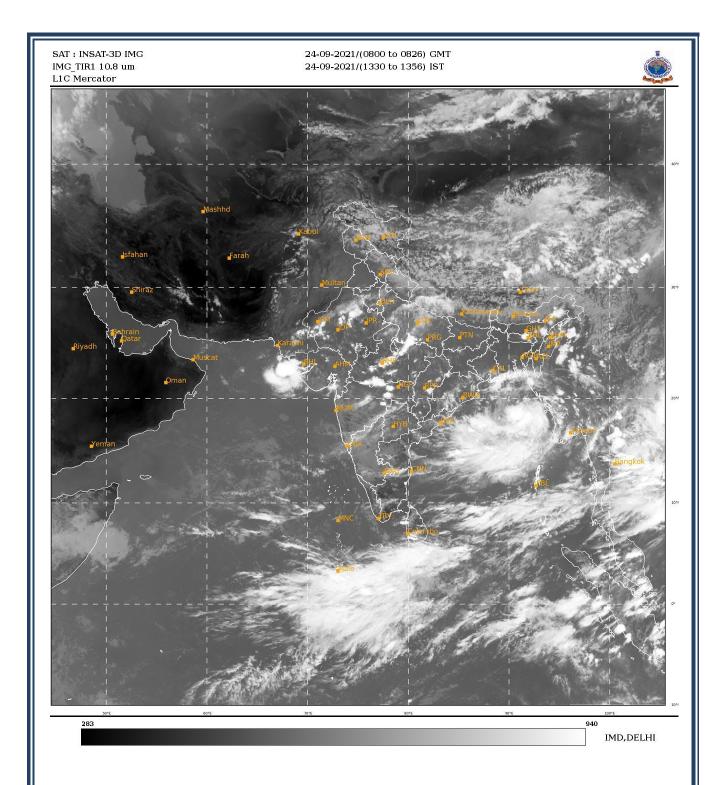


Figure: 1. Latest available satellite picture as on 24 Sep 2021 at 1356 Hrs (IST). (Source: IMD).

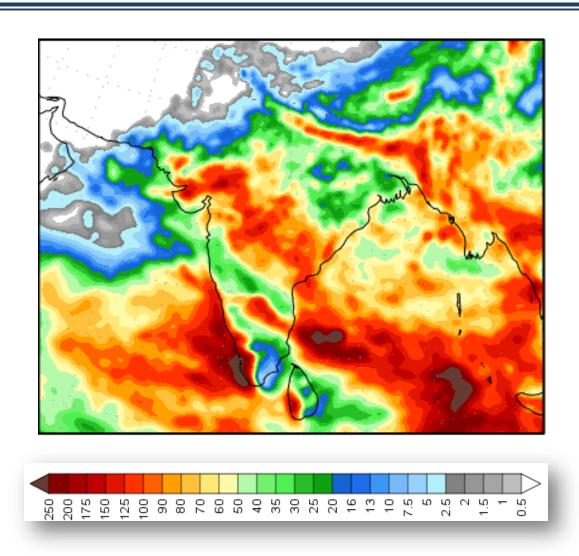


Figure: 2. Precipitation forecast for 24 Sep to 02 Oct 2021 (Source: NOAA NCEP).

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