

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

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

### **Daily Crop Weather Information as on 18 September 2021**

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

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

- A Low Pressure Area lies over northwest Madhya Pradesh & adjoining East Rajasthan. It is likely to become less marked during next 24 hours.
- A cyclonic circulation lies over Eastcentral Bay of Bengal & adjoining northeast Bay of Bengal and extends upto mid tropospheric levels tilting south-westwards with height. It is very likely to move west-northwestwards and reach Northwest Bay of Bengal off north Odisha West Bengal coasts during next 12 hours and then move west-northwestwards during subsequent 2-3 days.
- The monsoon trough lies south of its normal position. It is very likely to remain south of its normal position during next 5 days.
- Weather forecast and Warning:
  - (i) Under the influence of the Low Pressure Area and its associated cyclonic circulation; fairly widespread rainfall with isolated heavy falls are likely over Gujarat Region, Rajasthan and West Madhya Pradesh during next 24 hours. Rainfall activity over Gujarat State is likely to increase from 19th September. Widespread rainfall with isolated heavy to very heavy falls are likely over Gujarat State and East Rajasthan during 19th-21st September, 2021.
  - (ii) Fairly widespread rainfall with isolated heavy falls very likely over Uttarakhand and Himachal Pradesh during 19th-21st September. Light to moderated isolated/scattered rainfall activity likely over rest parts of northwest India during next 5 days.
  - (iii) Rainfall activity is likely to increase over Odisha & Gangetic West Bengal with fairly widespread to widespread rainfall & isolated heavy falls over Odisha & Gangetic West Bengal from 18th to 20th September, 2021.
- The images showing the latest satellite picture in the figure. 1.

#### **Main Weather Observations (IMD)**

- Rainfall/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Arunachal Pradesh; at many places over East Uttar Pradesh, East Madhya Pradesh, Bihar, Odisha, Sub-Himalayan West Bengal

& Sikkim and Nagaland, Manipur, Mizoram & Tripura; at a few places over Gujarat state, Assam & Meghalaya, West Uttar Pradesh, West Madhya Pradesh, Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal and at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Rajasthan, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Jharkhand and Lakshadweep.

- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over West Rajasthan, West Madhya Pradesh, Vidarbha, Odisha, Bihar, East Uttar Pradesh, West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Telangana.
- Maximum Temperature Departures as on 19-09-2021: Maximum temperatures were appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at most places over Coastal Andhra Pradesh & Yanam; at many places over Coastal & South Interior Karnataka, Rayalaseema, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; at a few places over Nagaland, Manipur, Mizoram & Tripura and Gangetic West Bengal; at isolated places over Odisha, Telangana and Konkan & Goa. They were markedly below normal ( $-5.1^{\circ}\text{C}$  or less) at a few places over East Uttar Pradesh and Gujarat region; at isolated places over West Madhya Pradesh and West Uttar Pradesh; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at many places over East Rajasthan; at isolated places over Saurashtra & Kutch, West Rajasthan, Haryana, Chandigarh & Delhi, East Madhya Pradesh and Vidarbha; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at many places over Chhattisgarh; at isolated places over Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $40.5^{\circ}\text{C}$  was reported at Jaisalmer (West Rajasthan).
- Minimum Temperature Departures as on 17-09-2021: Minimum temperatures were appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at a few places over West Rajasthan; at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh and Saurashtra & Kutch; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at many places over Uttarakhand and Tamil Nadu, Puducherry & Karaikal; at a few places over Coastal Andhra Pradesh & Yanam; at isolated places over Punjab, East Rajasthan, Madhya Pradesh, Madhya Maharashtra, Konkan & Goa and Lakshadweep. They were below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at a few places over East Uttar Pradesh and near normal over rest parts of the country.

Yesterday, the lowest minimum temperature of 18.5°C was reported at Bulsar (Gujarat Region) over the plains of the country.

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

- 18 September (Day 1): Heavy rainfall very likely at isolated places over Rajasthan, West Madhya Pradesh, West Bengal & Sikkim, Odisha, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Rajasthan, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, 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.
- 19 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over East Rajasthan, Gujarat Region and Tamilnadu, Puducherry & Karaikal and heavy rainfall at isolated places over Uttarakhand, West Rajasthan, Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Odisha and Saurashtra & Kutch. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Rajasthan, Jharkhand, Madhya Maharashtra, 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.
- 20 September (Day 3): Heavy to very heavy rainfall likely at isolated places over East Rajasthan and Gujarat state and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Konkan & Goa and Telangana. Thunderstorm accompanied with lightning likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- 21 September (Day 4): Heavy to very heavy rainfall likely at isolated places over Gujarat state and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa and Telangana. Thunderstorm accompanied with lightning 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, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.

- 22 September (Day 5): Heavy to very heavy rainfall likely at isolated places over Gujarat state and West Rajasthan and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Vidarbha, Konkan & Goa, Madhya Maharashtra, Marathwada, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar islands. Thunderstorm accompanied with lightning likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Coastal Andhra Pradesh & Yanam, Telangana and Madhya Pradesh.
- The weather outlook for seven days i.e., 18 Sep to 26 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)

### **Maharashtra-Vidarbha**

#### **Weather condition:**

Weekly average means (37 MW) at AICRPAM Akola centre: T max 30.7°C (normal 32.1°C), T min 23.2°C (normal 22.5°C). RH I 89 % (normal 85 %), RH II 69 % (normal 57 %). Evaporation rate 3.5 mm (normal 4.8 mm), Wind 3.5 km/hr (normal 7.3 km/hr) and BSH 2.8 hrs (normal 6.3 hrs). Maximum temperature across the week was 1.4°C below normal with a deviation of -3.1 to -0.3°C from normal. Minimum temperature across the week 0.8° above normal with a deviation of +0.1 to +1.1°C from normal.

#### **Contingency measure:**

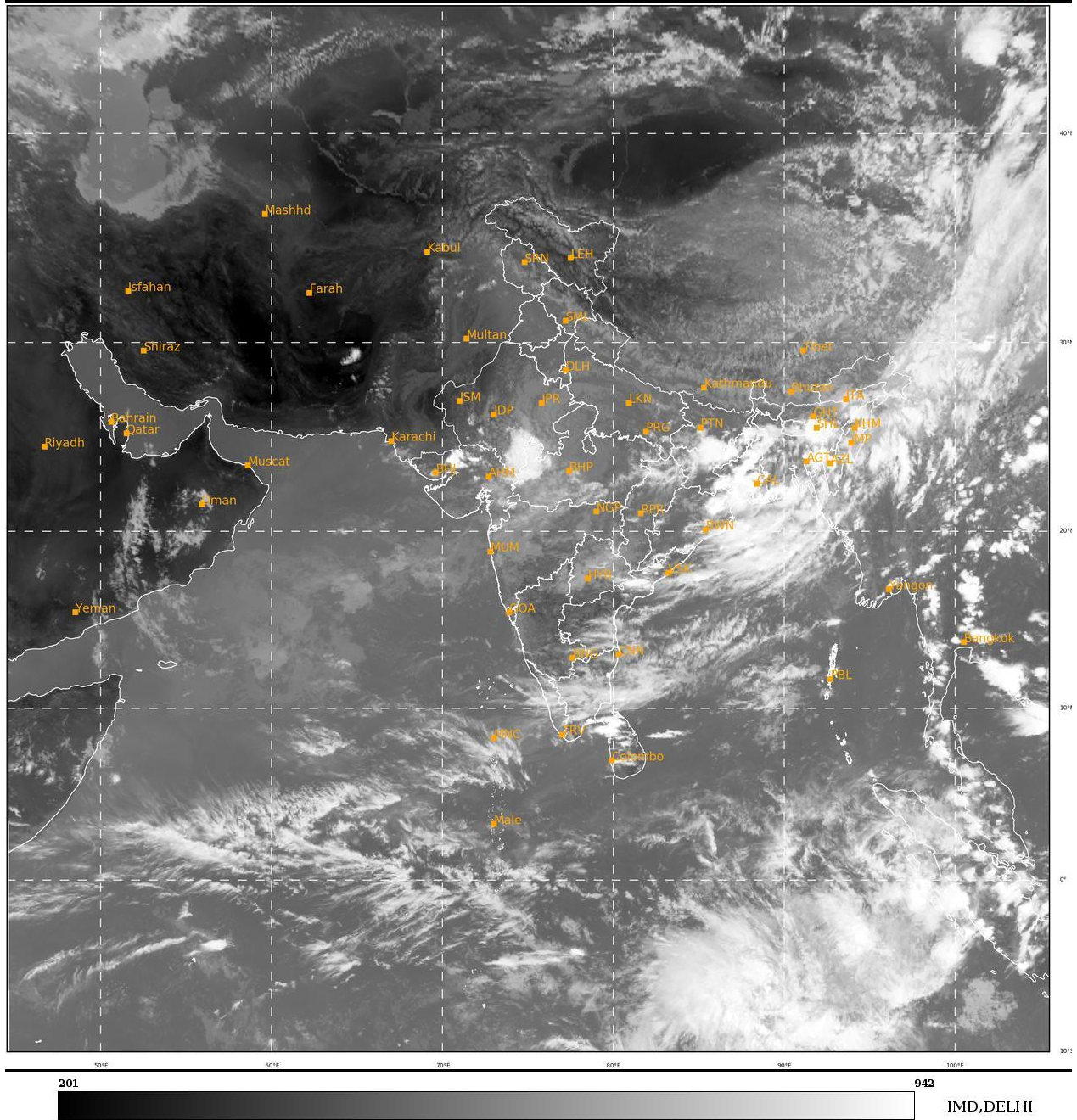
- Block level forecast (Akola) indicates light to moderate rainfall very likely to occur at isolated places during 16-20 September. Farmers are advised to monitor the crop regularly for insect incidence and use the suitable recommended control measures thereof in the initial stage itself. Follow safety precautions while handling and spraying insecticides. While planning plant protection spray undertake spray during clear weather on a non-rainy day with rain free period during spray and at least 6 hours after spray. In long duration crops like cotton and pigeonpea in fields infested with weeds due to recent rain spells undertake hoeing/weeding to avoid weed competition. Foliar spray of 2% Urea (200 g Urea +10 litre water) at cotton flowering stage and 2% DAP at boll development stage is advisable for better productivity.
- In case symptoms of para wilt are observed in cotton field, drench the plants with carbendazim 50%WP @ 25 g + Urea 100 g in 10 litres of water during clear weather. Keep close watch on moths of cotton 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 quinalphos 25% AF @ 20 ML OR Thiodicarb 75 WP @ 20g OR Profenophos 50 EC @ 30ml or Indoxacarb 14.5 SC @ 5ml or Emamectin benzoate 5 SG @ 5g OR Chlorpyrifos 50% EC @ 25 ml 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 viability deterioration or possible risk of vivipary (in pod germination) in maturing pods due to rains at maturity.

- In medium/long duration or late sown soybean varieties for control of the gram pod borer (*H. armigera*) using insect-specific pheromone trap (Helilure) and spraying of recommended chemicals like Indoxacarb 15.8% EC @ 6 to 7 ml per 10 litres of water is advisable.
- Due to congenial weather wilting/blight symptoms are observed in kharif pigeonpea, for control undertake drenching with copper oxychloride 50%WP@25g OR captan 75%WP @ 20 g in 10 litres of water. For control of incidence of Phytophthora blight (stem rot or stem blight) observed in pigeonpea undertake spray of Fosetyl AL 80% WP@ 20 g in 10 litres of water. Install pheromone traps @ 5/ha for monitoring of Helicoverpa. Monitor for presence of eggs & small larvae.
- Undertake harvest of matured black gram crop judging the local weather conditions. Keep the harvested produce protected in safer place. Threshing should be carried out when the pods are fully dried. 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.
- For management of citrus psylla in orange orchard, undertake spray of Thiomethoxam 25% WG 1 g or imidacloprid 17.8% 1.5 to 2.0 ml per 10 liters of water during clear weather.
- 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. Use scratching brush to remove external skin parasites and avoid secondary infection in farm animals. Ensure sanitization and keep livestock stall areas clean to reduce the risk of external parasite infestation.

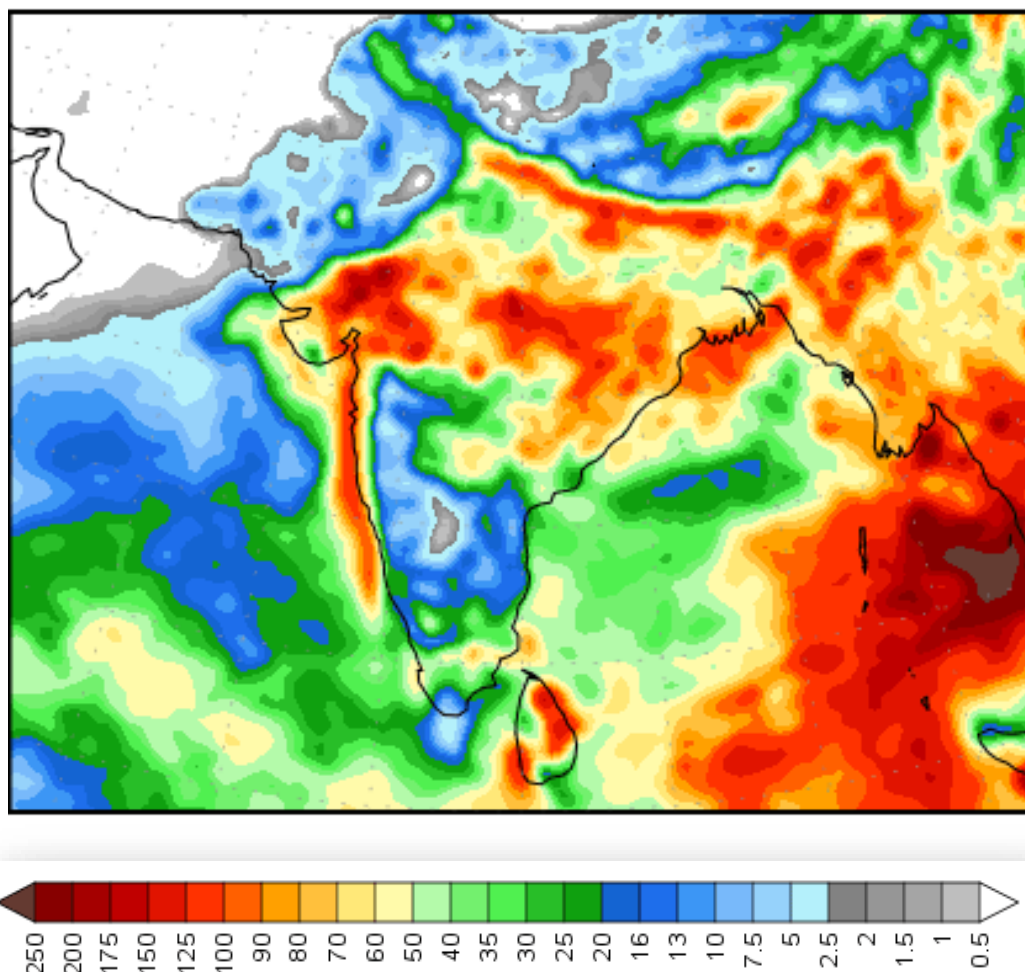


SAT : INSAT-3D IMG  
 IMG\_TIR1 10.8 um  
 L1C Mercator

18-09-2021/(0800 to 0826) GMT  
 18-09-2021/(1330 to 1356) IST



**Figure: 1. Latest available satellite picture as on 18 Sep 2021 at 1356 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 18 Sep to 26 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.*