

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 15 September 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A Well marked Low Pressure Area lies over central parts of north Madhya Pradesh and neighborhood. It is very likely to move west-northwestwards during next 2 days and weaken thereafter.
- A cyclonic circulation over lies south Gujarat Region & neighbourhood in lower tropospheric levels.
- The monsoon trough lies south of its normal position. It is very likely to remain south of its normal position during next 3 days.
- A Cyclonic Circulation likely to develop over north Bay of Bengal on 17th September, 2021. It is likely to move west-northwestwards towards Odisha- West Bengal coast during subsequent 3 days. Weather forecast and Warning:
 - i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Gujarat State, West Madhya Pradesh , East Uttar Pradesh and East Rajasthan during 15th-17th; over East Madhya Pradesh, Gangetic West Bengal, Odisha, Bihar, Jharkhand on 15th and reduction thereafter. Isolated extremely heavy falls also likely over East Uttar Pradesh on 16th September.
 - ii) Scattered to fairly widespread rainfall very likely over northwest India (excluding Jammu, Kashmir & Ladakh and Himachal Pradesh) during 15th to 17th September. Isolated heavy rainfall over Uttarakhand, West Uttar Pradesh on 15th; Over Haryana on 16th; over West Rajasthan on 17th & 18th September. Isolated very heavy falls also very likely over Uttarakhand and west Uttar Pradesh on 16th, September 2021. iii) Rainfall activity is likely to increase over Odisha & Gangetic West Bengal with fairly widespread to widespread rainfall & isolated heavy falls over above areas on 18th & 19th 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 Gangetic West Bengal, Odisha, Jharkhand, Bihar, East Madhya Pradesh, Gujarat State, Konkan & Goa, Vidarbha,

Chhattisgarh, Coastal Karnataka, and Lakshadweep; at many places over SubHimalayan West Bengal, Andaman & Nicobar Islands, East Uttar Pradesh, East Rajasthan, West Madhya Pradesh and Kerala & Mahe; at a few places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Uttar Pradesh, Uttarakhand, West Rajasthan, Madhya Maharashtra and Interior Karnataka and at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan, Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Arunachal Pradesh, , Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely heavy rainfall at isolated places over Gangetic West Bengal, East Madhya Pradesh; Very heavy rainfall at isolated places over Chhattisgarh, Odisha Jharkhand, Gujarat State, Madhya Maharashtra and heavy rainfall at isolated places over West Madhya Pradesh and Vidarbha.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Odisha; at isolated places over Jammu Division, East Rajasthan, Uttar Pradesh, Odisha, Bihar, Haryana, Chandigarh & Delhi, Vidarbha, Gujarat State, Madhya Pradesh, Chhattisgarh, Jharkhand, Gangetic west Bengal, Assam & Meghalaya and Telangana.
- Maximum Temperature Departures as on 14-09-2021: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Arunachal Pradesh and Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at isolated places over Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan, Muzaffarabad, Himachal Pradesh and Kerala & Mahe; at isolated places over Uttarakhand, Uttar Pradesh and Telangana. They were markedly below normal (-5.1°C or less) at a few places over Gangetic West Bengal; appreciably below normal (-3.1°C to -5.0°C) at most places over Jharkhand; at many places over Bihar and Odisha; at a few places over Gujarat state; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh and Rajasthan; at a few places over Andaman & Nicobar Islands and Vidarbha; at isolated places over Haryana, Chandigarh & Delhi, Madhya Maharashtra and Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 39.8°C was reported at Madurai (Tamilnadu).
- Minimum Temperature Departures as on 15-09-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Himachal Pradesh, Punjab,

Uttarakhand, Rajasthan, West Madhya Pradesh, Rayalseema, Tamilnadu, Puducherry & Karaikal, Madhya Maharashtra, Assam & Meghalaya and SubHimalayan West Bengal & Sikkim and at isolated places over Jammu & Kashmir, Saurashtra & Kutch, East Madhya Pradesh, East Uttar Pradesh, Odisha, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar islands. They are below normal (-1.6°C to -3.0°C) at a few places over Gangetic West Bengal and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.0°C is reported at Khargaon (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 15 September (Day 1): Heavy to very heavy rainfall at isolated places very likely over East Uttar Pradesh, Madhya Pradesh, Gangetic West Bengal and Gujarat State and heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, Chhattisgarh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, south Assam, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Strong surface wind (speed reaching 30-40 kmph) very likely at isolated places over Uttar Pradesh, Haryana, Chandigarh & Delhi and northeast Rajasthan. Strong wind (speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea and along & off north Maharashtra coasts. Fisherman are advised not to venture into these areas.
- 16 September (Day 2): Heavy to very heavy rainfall with Extremely heavy falls at isolated places very likely over East Uttar Pradesh and heavy to very heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh and Gujarat State and heavy rainfall at isolated places over Haryana, Chandigarh & Delhi, East Madhya Pradesh, Andaman & Nicobar Islands, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning very likely at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Strong surface wind (speed reaching 30-40 kmph) very likely at isolated places over Uttar Pradesh, Haryana, Chandigarh & Delhi and northeast Rajasthan. Strong wind (speed 40-50 kmph to gusting 60 kmph) very

likely over the Southwest & Westcentral Arabian Sea. Fisherman are advised not to venture into these areas.

- 17 September (Day 3): Heavy rainfall at isolated places very likely over East Uttar Pradesh, Rajasthan, West Madhya Pradesh, Sub-Himalaya West Bengal & Sikkim, Gujarat State, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning very likely at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Strong wind (speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea. Fisherman are advised not to venture into these areas.
- 18 September (Day 4): Heavy rainfall at isolated places likely over Rajasthan, Sub-Himalaya West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Tamilnadu, Puducherry & Karaikal. Strong wind (speed 40-50 kmph to gusting 60 kmph) likely over Eastcentral Bay of Bengal & adjoining north Andaman sea. Fisherman are advised not to venture into these areas.
- 19 September (Day 5): Heavy rainfall at isolated places likely over Gangetic West Bengal, Odisha, Gujarat Region and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over East Madhya Pradesh, Chhattisgarh and Tamilnadu, Puducherry & Karaikal. Strong wind (speed 40-50 kmph to gusting 60 kmph) likely over Eastcentral Bay of Bengal & adjoining north Andaman sea. Fisherman are advised not to venture into these areas.
- The weather outlook for seven days i.e., 15 Sep to 23 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)

Punjab

Weather condition:

The maximum temperature during the week ranged between 29.6-33.4°C and minimum temperature ranged between 25.0-27.6 °C. The morning and evening relative humidity during the week varied between 73-92 and 64-86%, respectively. The sunshine hours

during the week ranged between 0.0-7.3 hrs/day. The evaporation rate ranged between 1.4-5.0 mm day⁻¹. Daily average wind speed varied from 1.3-7.8 kmhr⁻¹.

Contingency measure:

- Weather based Advisories:
- Field Crops Rice: · To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses. If the symptoms of disease appears, then spray 150 ml Pulsor or 26.8 g Epic or 80 g Nativo or 200 ml Amistar Top or Tilt or Folicur/Orius in 200 litres of water per acre after weather clears up. · Rouge out and destroy foot rot infected plants from Basmati fields. To manage rodent pests in rice crop, cover all the holes during evening and next day place 10 -10 gm bait of zinc phosphide inside these fresh holes at 6 inches depth. To get better results adopt this practice in whole village at same time. To protect the crop from false smut, spray 500 g Kocide or 400 ml Galileo way in 200 litres of water per acre after weather clears up.. When the leaf folder damage reaches 10 per cent (ETL), this pest can be controlled by spraying 20 ml Fame 480 SC or 60 ml Coragen 18.5 SC or 170 g Mortar 75 SG or one litre of Coroban/Durmet/Force 20 EC or 80 ml neem based biopesticide, Ecotin in 100 litres of water per acre after weather clears up.
- Cotton: Eradicate the weeds growing on cotton field bunds, waste lands, road side and irrigation channels/canals to avoid further spread of whitefly to cotton field. Regular surveillance of whitefly on cotton should also be done. To control pink bollworm, Use Sticka/Delta traps with at least 10 micro litre of gossyplure and place it at 15 cm above crop canopy. Replace the lure after 15 days and use 1 trap/ha after weather clears up.
- Sugarcane: For management of sugarcane pyrrilla, use chlorpyrifos 20EC @ 600ml/acre in 400lt of water. Baru weed being alternate host of mite, remove it if growing around the sugarcane fields to prevent mite spread.
- Maize: Control maize borer by spraying 30ml Coragen 18.5SC in 60 litres of water per acre after weather clears up. Trichogramma, a bioagent can also be used as recommended by PAU. To manage fall armyworm on grain crop, spray the crop with Coragen 18.5 SC (@ 0.4 ml or Delegate 11.7 SC @ 0.5 ml or Missile 5 SG @ 0.4 g per litre of water after weather clears up. Direct the spray nozzle towards the whorl, for its effective control.
- Vegetables: It is the time for sowing of mid season varieties of cauliflower. Punjab Broccoli-1 and Palam Samridhi varieties of cauliflower can also be sown. It is right time for sowing PC161, Punjab Carrot Red and Punjab Black Beauty varieties of carrot. Prevailing weather is favourable for fruit rot and die back

disease in chilli. Protect the crop by spraying 250 ml Folicur or 750 g Indofil M 45 or Blitox in 250 litres of water per acre after weather clears up. To check fruit and shoot borer attack in brinjal, spray 80 ml Coragen 18.5 SC or 80 g Proclaim 5SG in 100-125 litres of water per acre after weather clears up.

- Fruits: Planting of evergreen fruit plants such as citrus, guava, mango, litchi, papaya, bael, sapota, pomegranate etc. can be done in this season. Planting should be done properly for better success. As heavy rainfall is expected during next 2-3 days, farmers are advised to make proper channels to drain out the excessive water from orchards. Do not allow the water to stagnate around the tree trunks. Keep the basin of the plants slightly higher than rest of orchard soil. Apply white wash mixture containing copper sulphate on the main trunks of fruit trees to protect them from diseases. Regularly remove the suckers arising from the rootstock portion of the newly planted fruit plants and these plants should be supported with sticks to keep them erect during rainy season.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator

15-09-2021/(0800 to 0827) GMT
15-09-2021/(1330 to 1357) IST

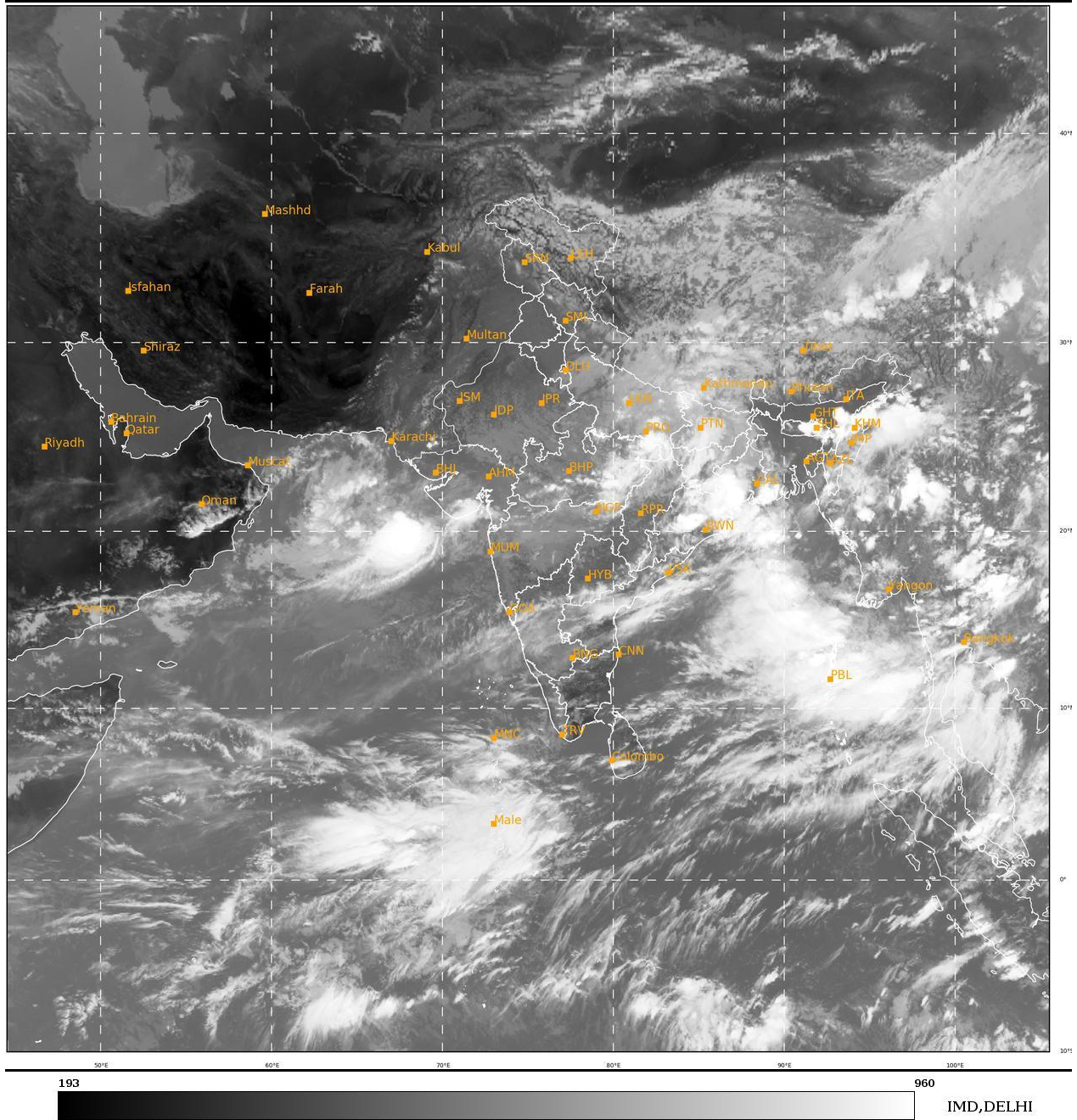


Figure: 1. Latest available satellite picture as on 15 Sep 2021 at 1357 Hrs (IST). (Source: IMD).

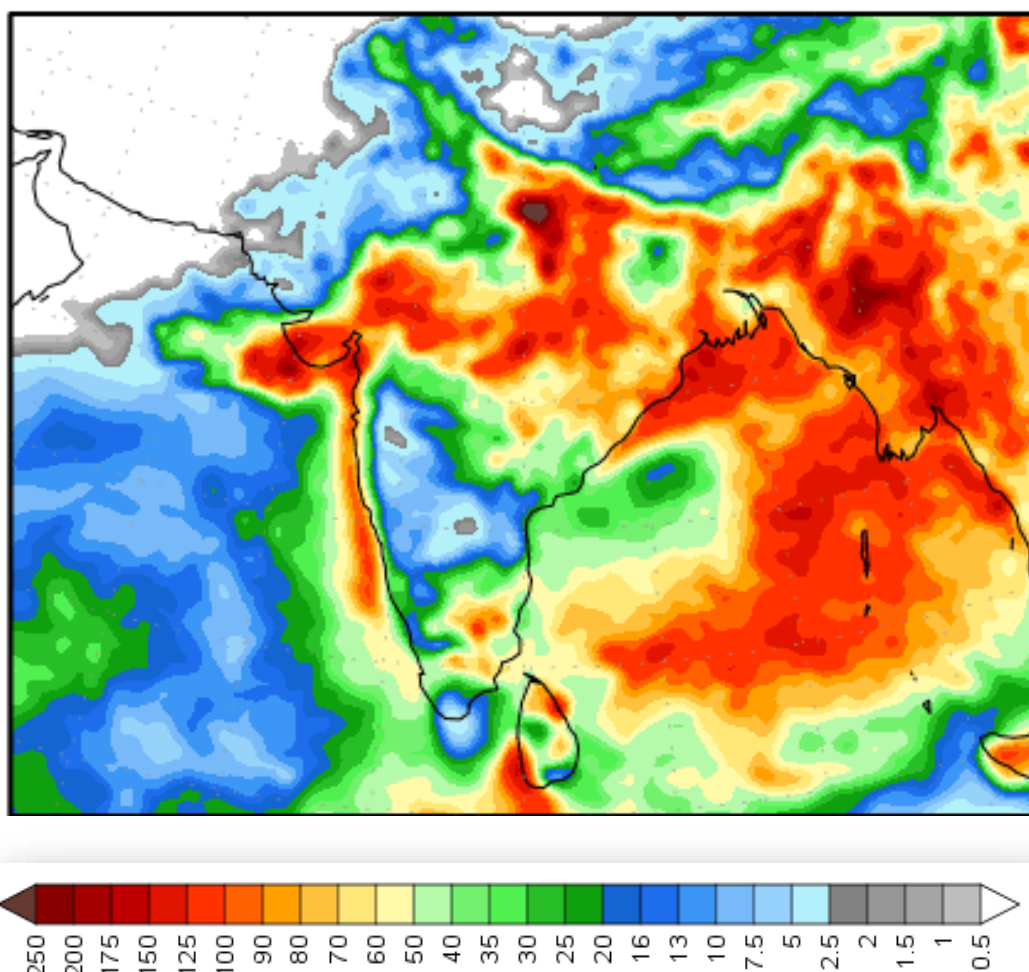


Figure:2. Precipitation forecast for 15 Sep to 23 Sep 2021 (Source: NOAA NCEP).

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.