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

# **Daily Crop Weather Information as on 22 September 2020**

# Attention: Rajiv Maheshwari, OSD, ICAR

# **Significant Weather Features (IMD)**

- The Low Pressure Area lies over north Chhattisgarh & neighbourhood with associated cyclonic circulation extending upto midtropospheric levels. It is likely to move west-northwestwards during next 2 days and thence northeastwards towards Uttar Pradesh.
- The monsoon trough at mean sea level lies south of its normal position.
- A trough runs from south Maharashtra to Sub-Himalayan West Bengal & Sikkim in middle tropospheric levels across the cyclonic circulation associated with Low Pressure Area over north Chhattisgarh between 3.1 & 5.8 km above mean sea level. Under the influence of the above systems: i) Fairly widespread to widespread rainfall with Isolated heavy to very heavy falls very likely over Madhya Pradesh, Madhya Maharashtra, Marathwada on 22nd; over Konkan & Goa on 22nd-23rd; over West Uttar Pradesh on 23rd; over East Uttar Pradesh on 23rd24th and over Bihar on 23rd-25th September, 2020. ii) Isolated extremely heavy rainfall also very likely over Konkan & Goa on 22nd and over East Uttar Pradesh on 23rd September, 2020.
- Due to strong moist wind convergence from Bay of Bengal at lower tropospheric levels: i) Widespread rainfall with isolated heavy to very heavy falls over Arunachal Pradesh on 22nd; over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya on 22nd-24th September. ii) Isolated extremely heavy rainfall also very likely over Sub-Himalayan West Bengal & Sikkim on 22nd and over Assam & Meghalaya on 22nd-23rd September.
- Moderate thunderstorm with lightning very likely at isolated places over Madhya Pradesh, East Uttar Pradesh, Bihar, Jharkhand, Gujarat state, Maharashtra, Coastal Andhra Pradesh & Yanam, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 12 hours.
- The images showing the latest satellite picture in the figure. 1.

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

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Bihar, Jharkhand, Vidarbha, Chhattisgarh, Odisha, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Madhya Pradesh, Madhya Maharashtra, Marathwada, Telangana, Saurashtra & Kutch, Interior Karnataka and Andaman & Nicobar Islands; at a few places over East Uttar Pradesh, Rayalseema, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal and at isolated places over Himachal Pradesh, Uttarakhand and Gujarat region.
- Extremely heavy rainfall observed at isolated places over Konkan & Goa; heavy to very heavy rainfall over Gujarat region, Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka and Assam & Meghalaya and heavy rainfall over Madhya Pradesh, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Telangana, Jharkhand, Odisha, Tripura, Tamil Nadu, Kerala and South Interior Karnataka.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Uttarakhand, Madhya Maharashtra, Marathwada, Gujarat, Vidarbha, Konkan & Goa, Chhattisgarh, East Uttar Pradesh, Madhya Pradesh, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Jharkhand and Odisha.
- Maximum Temperature Departures as on 21-09-2020: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Uttarakhand and at isolated places over Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab and Uttar Pradesh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Assam & Meghalaya, Arunachal Pradesh and West Rajasthan; above normal (1.6°C to 3.0°C) at many places over East Rajasthan, Haryana, Chandigarh & Delhi and Madhya Pradesh and at isolated places over Gujarat and Konkan & Goa. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Rayalaseema; at a few places over Coastal Karnataka, Coastal Andhra Pradesh & Yanam and Chhattisgarh and at isolated places over Telangana and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at many places over Interior Karnataka, Vidarbha and Marathwada; at a few places over Gangetic West Bengal, Odisha and Kerala & Mahe and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Bihar, Jharkhand, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal and

- near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.5°C was reported at Jaisalmer (West Rajasthan).
- Minimum Temperature Departures as on 22-09-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Haryana, Chandigarh & Delhi and Uttarakhand; at a few places over East Rajasthan and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Rajasthan, West Madhya Pradesh, Saurashtra & Kutch and Bihar; above normal (1.6°C to 3.0°C) at most places over Punjab and West Uttar Pradesh; at many places over Madhya Maharashtra, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands; at a few places over East Uttar Pradesh and Bihar and at isolated places over Gujarat region and Assam & Meghalaya. They are below normal (-1.6°C to -3.0°C) at isolated places over Tamil Nadu, Puducherry & Karaikal, Odisha, Chhattisgarh and Vidarbha and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.5°C was reported at Khargone (West Madhya Pradesh) over the plains of the country.

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

22 September (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Sub-Himalaya West Bengal & Sikkim; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over Assam & Meghalaya and Konkan & Goa; heavy to very heavy rainfall at isolated places over Madhya Pradesh, Arunachal Pradesh, Madhya Maharashtra and Marathwada and heavy rainfall at isolated places over Uttar Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, north Coastal Andhra Pradesh & Yanam, north Telangana, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm with lightning at isolated places very likely over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea, Gulf of Mannar and along & off Kerala-Karnataka-Maharashtra coasts & adjoining Eastcentral Arabian Sea and Lakshadweep & Comorin areas; Westcentral Bay of Bengal and

- along & off West Bengal & Odisha coasts & adjoining north Bay of Bengal. Fishermen are advised not to venture into these areas.
- 23 September (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places over Assam & Meghalaya and East Uttar Pradesh; heavy to very heavy rainfall at isolated places over West Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Gujarat region and Konkan & Goa and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, East Madhya Pradesh, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning at isolated places very likely over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Madhya Maharashtra, Marathwada and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea, Maharashtra coasts & adjoining Eastcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 24 September (Day 3): Heavy to very heavy rainfall at isolated places over East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and heavy rainfall at isolated places over Gujarat region, Madhya Maharashtra, Konkan & Goa and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning at isolated places very likely over Uttarakhand, Uttar Pradesh, East Rajasthan, Bihar and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 25 September (Day 4): Heavy to very heavy rainfall at isolated places over Bihar and heavy rainfall at isolated places over East Uttar Pradesh, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Telangana. Thunderstorm with lightning at isolated places very likely over East Uttar Pradesh, Odisha, Coastal Andhra Pradesh & Yanam and Rayalseema. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 26 September (Day 5): Heavy rainfall at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm with lightning at isolated places very likely over Odisha and Rayalseema. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.

• The weather outlook for seven days i.e., 22 to 30 Sep 2020 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)**

# **West Bengal**

#### Weather condition:

Weather conditions during the 37th week at Mohanpur, West Bengal: Maximum temperature: 32.0 to 35.0 °C, minimum temperature: 26.0 to 27.3 °C, bright sun shine hours: 1.4 to 9.0 hours, Morning-time relative Humidity: 89 to 97%, after noon-time R.H: 65 to 97%, weekly total pan evaporation: 14.7 mm, total weekly rainfall: 20.2 mm and average daily wind speed is around 0.01 km/h.

#### **Contingency measure:**

- *Kharif* Rice- Rainfall is expected in coming days. At this stage, attack of Brown spot & Blast may be found. Apply Carbendazim + Mancozeb 2.5g/lit. of water at 10-12 days interval. Stem borer and rice hispa may also be found at this time. Apply Chlorapyriphos 2.5ml/ Triazophos 2ml per lit. of water.
- Cabbage & Cauliflower: Start seed sowing of early variety of cabbage (e.g. Pride of India, Pusa early, Kranti etc.) & cauliflower (e.g. Jawhar moti, Bharat Jyoti, Early banaras etc.) @ 4gm/ katha.
- Vegetables: Under high humidity and cloudy condition, combined attack of Downy mildew and Mosaic may be seen in bitter gourd and pointed gourd. Present temperature and humidity conditions are congenial for the rapid spread of thrips and mites leading to the leaf curling in chilli. As a control spray Diafenthiuron @ 0.75g per litre of water at 7-10 days interval.

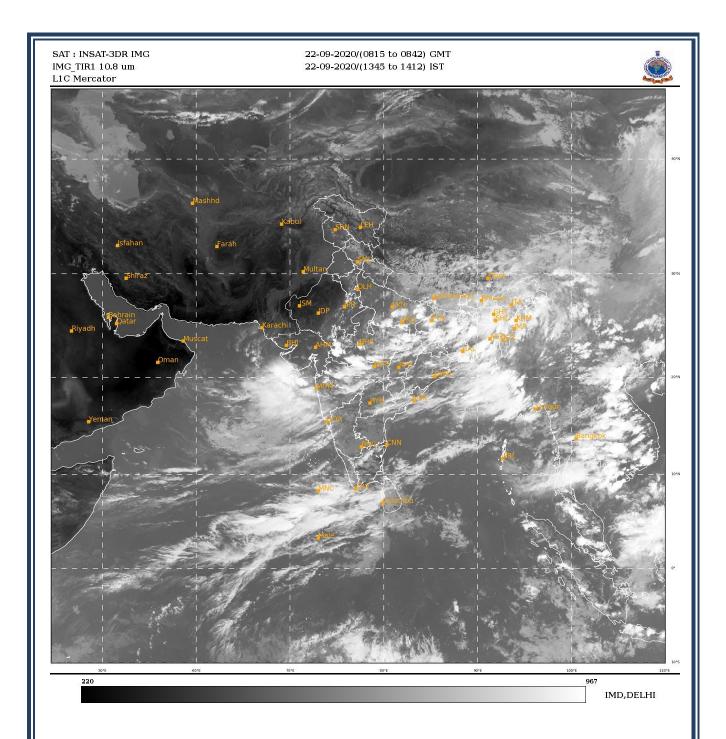
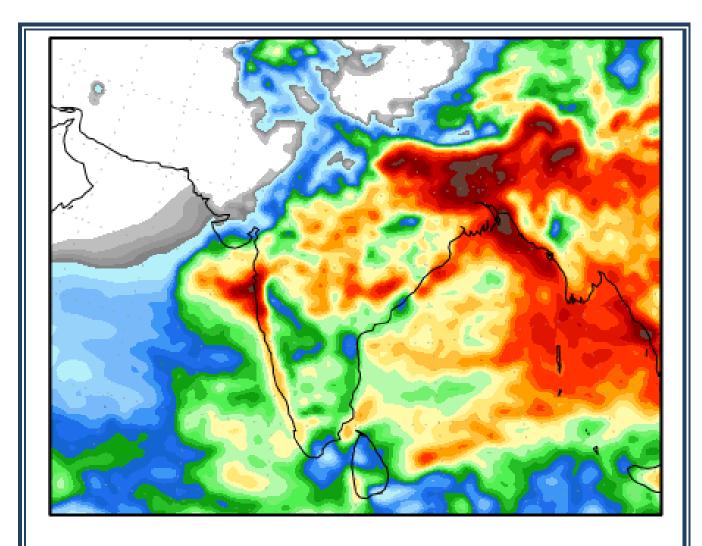


Figure: 1. Latest available satellite picture as on 22 September 2020 at 1526 Hrs (IST). (Source: IMD).



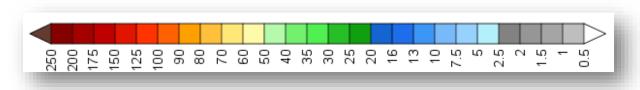


Figure: 2. Precipitation forecast for 22 to 30 Sep 2020 (Source: NOAA NCEP).

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