

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

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

### **Daily Crop Weather Information as on 17 October 2020**

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

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

- The withdrawal line of the Southwest Monsoon continues to pass through Lat. 28°N/Long.83°E, Faizabad, Fatehpur, Nowgong, Rajgarh, Ratlam, Vallabh Vidyanagar, Porbandar, Lat. 21°N/ Long.65°E and Lat. 21°N/ Long.60°.
- The Well Marked Low Pressure Area over Eastcentral & adjoining Northeast Arabian Sea has concentrated into a Depression and lay centred at 0830 hours IST of today, the 17th October 2020 over Eastcentral & adjoining Northeast Arabian Sea near latitude 17.8°N and longitude 69.0°E, about 380 km southsouthwest of Veraval (Saurashtra-Gujarat), 440 km west-northwest of Mumbai and 1600 km east-northeast of Salalah (Oman). It is very likely to move nearly westwards during next 48 hours and weaken gradually thereafter. As the system is very likely to move away from the Indian coast, no adverse weather associated with this system is very likely over the west coast of India. However, Light to moderate rainfall at a few places with isolated heavy falls very likely over coastal districts of Saurashtra & Kutch during next 24 hours. Fishermen warning prevails over Central & North Arabian Sea as specified below:
  - (i) Fishermen are advised not to venture into Eastcentral & adjoining Northeast Arabian Sea on 17th October and over Central & Northwest Arabian Sea on 18th October, 2020.
- A fresh Low pressure area likely to form over central Bay of Bengal around 19th October. It is likely to become more marked during subsequent 24 hours. Under its influence, heavy to very heavy rainfall is likely at isolated places over Odisha, Telangana and Coastal Andhra Pradesh on 20th October and heavy rainfall at isolated places over the rest of the Tamil Nadu, Coastal Andhra Pradesh and Telangana during 17th-21st and over Odisha during 19th-21st October, 2020.
- 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 Andaman & Nicobar Islands and Lakshadweep; at many places over Vidarbha, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Kerala & Mahe; at a few places over Odisha, Saurashtra & Kutch, Konkan & Goa and Telangana and at isolated places over Assam & Meghalaya, Gangetic West Bengal, Jharkhand, Rajasthan, Madhya Pradesh, Gujarat Region, Madhya Maharashtra, Marathwada, Chhattisgarh, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Odisha, Vidharbha, Chhattisgarh and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 16-10-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Assam & Meghalaya; at a few places over Himachal Pradesh, West Bengal & Sikkim, Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal; at isolated places over Uttarakhand, Jharkhand and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at most places over Bihar; at many places over Punjab, East Uttar Pradesh and East Madhya Pradesh; at a few places over Saurashtra & Kutch; at isolated places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Madhya Pradesh and Odisha. They were markedly below normal ( -5.1°C or less) at a few places over Madhya Maharashtra; appreciably below normal (-3.1°C to -5.0°C) at most places over North Interior Karnataka; at isolated places over Coastal Karnataka; below normal (-1.6°C to -3.0°C) at isolated places over Vidarbha, Telangana, Marathwada and Konkan & Goa and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.4°C was reported at Barmer (West Rajasthan) and Bhuj & Rajkot (Saurashtra & Kutch).
- Minimum Temperature Departures as on 17-10-2020: Minimum temperatures are markedly above normal (5.1°C or more) at many places over East Rajasthan and Gujarat Region; at a few places over West Madhya Pradesh; at isolated places over Madhya Maharashtra; appreciably above normal (3.1°C to 5.0°C) at most places over Saurashtra & Kutch; at many places over West Rajasthan, East Madhya Pradesh, Bihar and Nagaland, Manipur, Mizoram & Tripura; at a few places over Vidarbha, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; at isolated places over Uttarakhand, West Uttar Pradesh, Jharkhand and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Assam &

Meghalaya; at many places over East Uttar Pradesh and Marathwada; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Chhattisgarh, Odisha, Telangana, Tamil Nadu, Puducherry & Karaikal and Lakshadweep; at isolated places over Konkan & Goa, Coastal Andhra Pradesh & Yanam and Rayalaseema. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Haryana, Chandigarh & Delhi; below normal (-1.6°C to -3.0°C) at isolated places over Punjab and near normal over rest parts of the country. The lowest minimum temperature of 14.7°C reported at Hissar (Haryana) over the plains of the country.

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

- 17 October (Day 1): Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana and north Tamil Nadu. Thunderstorm with lightning very likely at isolated places over Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Manipur, Mizoram, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 45-55 kmph gusting to 65 kmph) likely to prevail over Eastcentral and adjoining Northeast Arabian Sea; 25-35 kmph gusting to 45 kmph along & off south Gujarat & north Maharashtra coasts. Sea condition will be rough to very rough over Eastcentral and adjoining Northeast Arabian Sea and rough along & off south Gujarat & north Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 18 October (Day 2): Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning very likely at isolated places over Chhattisgarh, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 45-55 kmph gusting to 65 kmph) likely to prevail over Central and adjoining Northwest Arabian Sea; speed reaching 40-50 kmph over Andaman Sea. Sea condition will be rough to very rough over Central and Northwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 19 October (Day 3): Heavy rainfall very likely at isolated places over Odisha, Andaman & Nicobar Islands, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning very likely at isolated places over Madhya Maharashtra,

Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 45-55 kmph) likely over Eastcentral Bay of Bengal and Andaman Sea; speed reaching 40-50 kmph along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.

- 20 October (Day 4): Heavy to very heavy rainfall likely at isolated places over Odisha, Telangana and Coastal Andhra Pradesh & Yanam and heavy rainfall at isolated places over Andaman & Nicobar Islands, Marathwada, Rayalaseema, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 45-55 kmph) likely over Andaman Sea and Westcentral Bay of Bengal & along & off north Tamil Nadu coast; speed reaching 40-50 kmph along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.
- 21 October (Day 5): Heavy rainfall likely at isolated places over Odisha, Andaman & Nicobar Islands, Madhya Maharashtra, Telangana, Coastal Andhra Pradesh & Yanam, North Interior Karnataka and north Tamil Nadu. Thunderstorm with lightning very likely at isolated places over Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Squally Wind (speed reaching 40-50 kmph) likely along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 17 to 25 October 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)**

### **Assam**

#### **Weather condition:**

Weather during the last week was mainly clear to partly cloudy. Daily average maximum temperature was 32.0°C which was 0.8°C above normal and the average daily minimum temperature was 24.7°C which was 1.3°C above normal for the week. Total BSSH was 20.0 hrs with an average of 3.3 hrs. The daily average evaporation rate was 2.0 mm/day and the average daily wind speed during the week 1.3 kmph. Daily average RH during morning and afternoon hour was 96% and 81% respectively.

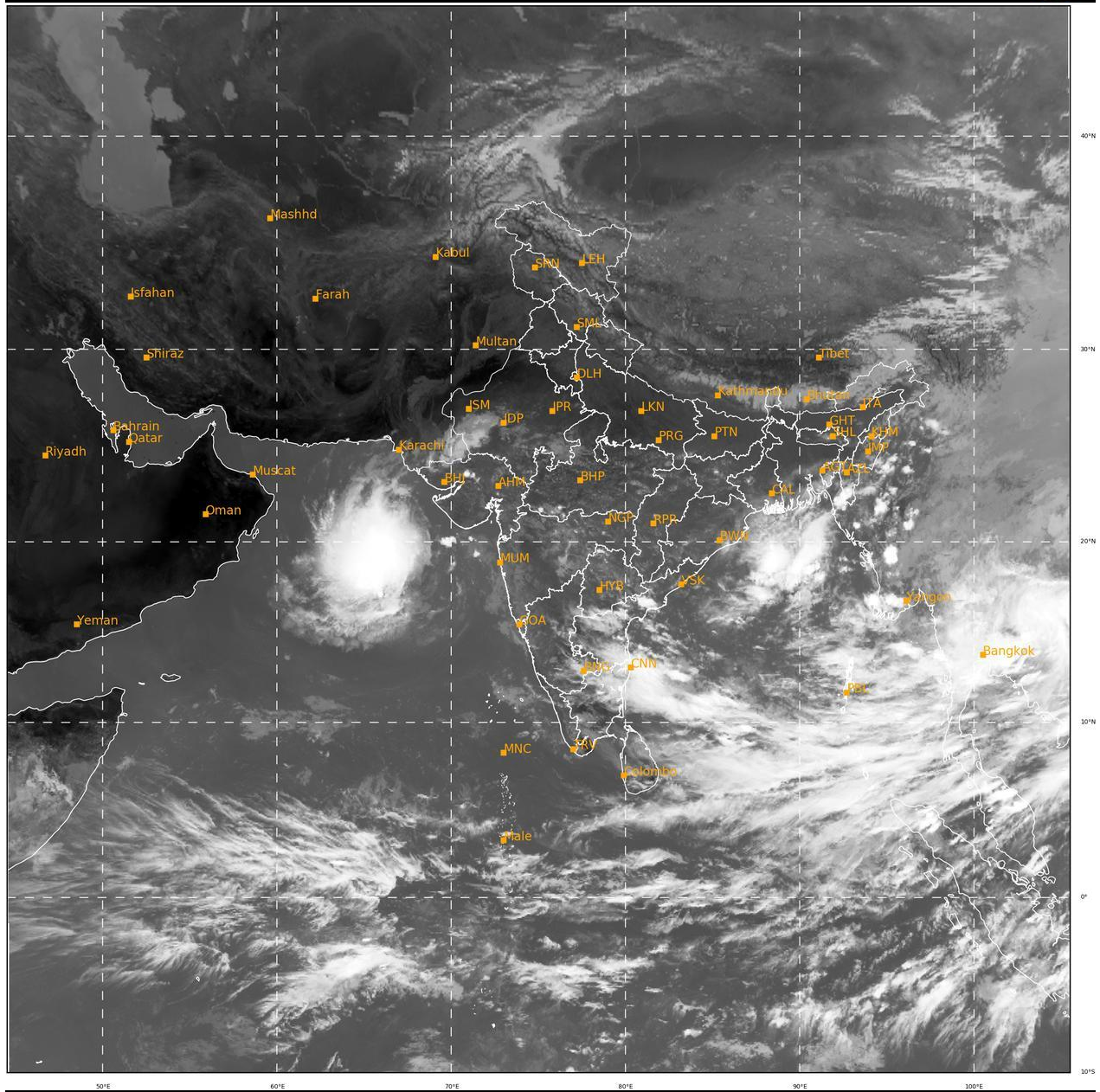
### Contingency measure:

- Sali rice:- The crop is mainly in flowering stage in most of the region. Farmers are advised to go for need based weeding and monitoring of incidence and spread of disease and other pests. Due to relatively less rainfall occurs during the past week, need based irrigation may be provided to the crop at critical stages such as during the flowering in paddy.
- Kharif pulses (green and black gram):- The crop is in vegetative stage. Go for thinning operation in greengram in order to maintain sufficient amount of plant population and spacing. One weeding at 20-25 days after sowing is highly recommended to avoid crop-weed competition.
- Potato (land preparation):- Select well drained sandy loam and loam soils rich in organic matter for potato cultivation. Field should be ploughed thoroughly to obtain a good tilth with furrows at 50cm interval. The optimum time for planting is mid-October to mid-November. Farmers may initiate land preparation from 9th October onwards for early crop. Collect tubers of the recommended early varieties viz., Kufri Chandramukhi, Kufri Sindhuri, Kufri Megha etc.
- Toria (Land preparation):- Land preparation for toria cultivation may be initiated. The optimum sowing period is mid- October to mid-November. However, early sowing escape aphid attack in toria. Select recommended cultivars like- M-27, TS-36, TS-38, TS-46 etc. for toria cultivation.
- Tomato (Nursery bed preparation):- Select sunny area with well drained light to rich in organic matter for nursery raising bed. Bring the soil to fine tilth and prepare the bed 1m width and of convenient length and raise it to 10-15cm above ground level. Before sowing drenching of soil 0.1% solution of Carboxin and after drying thoroughly mix Malathion 5% dust @ 20g per 10 square meter area to protect the seedlings from soil borne insects. Collect seeds of recommended varieties viz., Punjab Chuhara, S-12, Punjab Keshri, Sioux, Arka Alok, arka Abha etc.
- Cole crops (Cauliflower, Cabbage, knolkhol, broccoli):- Farmers may go for sowing of mid-season crop of cauliflower and broccoli, cabbage and knol-khol seeds in nursery seed bed. Prepare the nursery bed of 1m width and convenient length with fine tilth and raised it to 10-15cm above ground level. Thoroughly mix the soil with malathion 5% dust @ 20g/ 10m<sup>2</sup> in order to protect the seedlings from soil borne insects and also drench the bed with 0.1% solution of captan to make soil free from diseases. Collect varieties like- Improved Japanese, Pusa Synthetic, Pusa Snowball for cauliflower cultivation; Green sprouting medium for broccoli cultivation; Golden acre, Pride of India, Pusa Mukta etc. for cabbage cultivation and White Vienna for knoll-khol cultivation.

- Pumpkin (sowing of seeds):- For spring harvest of pumpkin crop, farmers may go for the sowing of seeds of pumpkin within September to October month. Well drained sandy to moderately heavy soil rich in organic matter with pH 6.0-6.5 is more favorable. The recommended varieties are- Arka Suryamukhi, Arka Chandan and other local cultivars. During final land preparation apply basal dose of 3-4 ton FYM, 22 kg Urea, 66 kg SSP and 18 kg MOP in per bigha land and mix thoroughly in the soil. Depending upon the requirement, apply CaO (quick lime) @ 4.5 kg per bigha to neutralize the soil pH.

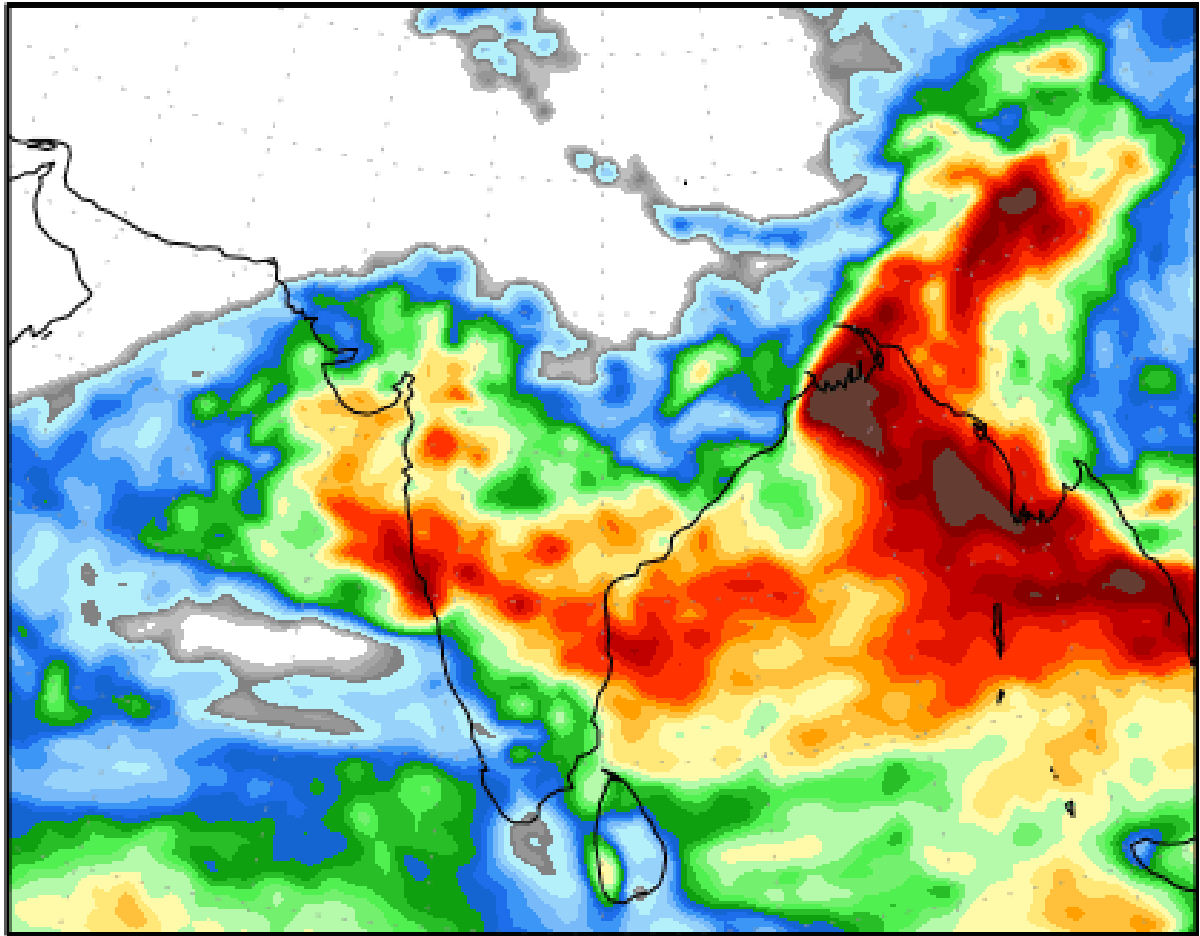
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17-10-2020/(0800 to 0827) GMT  
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**Figure: 1. Latest available satellite picture as on 17 October 2020 at 1357 Hrs (IST).  
(Source: IMD).**



**Figure:2. Precipitation forecast for 17 to 25 October 2020 (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.*