

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 01 October 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Numerical Weather Prediction models consensus indicate, establishment of westerly & northwesterly winds at lower & middle tropospheric levels over northwest India and development of lower level anti-cyclonic circulation over the region from 5th Oct 2021. Under its influence, drastic reduction in moisture and absence of rainfall over extreme northwestern parts of India is very likely. Thus conditions are very likely to be favourable for commencement of withdrawal of southwest monsoon from some parts of northwest India from around 6th October 2021.
- The Cyclonic storm 'Shaheen' over northeast Arabian Sea & neighbourhood moved west-northwestwards with a speed of about 20 kmph during past 06 hours and lay centred at 0830 hrs IST of today, the 1st October, 2021, over central parts of north Arabian Sea, near latitude 23.2°N and longitude 64.9 °E, about 440 km west-northwest of Devbhoomi Dwarka (Gujarat), about 490 km east-southeast of Chabahar Port (Iran) and 660 km east-southeast of Muscat (Oman). It is very likely to further intensify into a Severe Cyclonic Storm during the next 12 hours and move west-northwestwards skirting Makran coast during next 36 hours. Thereafter it is likely to re-curve westsouthwestwards towards Gulf of Oman and weaken gradually. The system is moving away from Indian coast.
- A Low Pressure Area over southwest Bihar & neighbourhood and the associated cyclonic circulation extends upto 7.6 km above mean sea level.
- A cyclonic circulation lies over central parts of south Bay of Bengal and extends upto 3.1 km above mean sea level.
- The trough in easterly from above cyclonic circulation to Tamilnadu coasts and extends upto 3.1 km above mean sea level. Under the influence of the above systems:
 - i) Isolated heavy to very heavy falls very likely at isolated places over Bihar and Sub-Himalayan West Bengal & Sikkim on 1st, 2nd & 03rd and over southeast Uttar Pradesh on 01st & 02nd. Heavy rainfall also very likely at isolated places over Jharkhand and north Chhattisgarh on 01st October, 2021.

ii) Rainfall activity is likely to increase over south Peninsular India from today the 01st October onwards with heavy to very heavy falls at isolated places very likely over Tamilnadu, Kerala, Lakshadweep and south Interior Karnataka during 01st-05th October. Isolated extremely heavy rain also very likely over south Tamilnadu on 01st & 02nd October, 2021.

- Fishermen are advised not to venture into northeast Arabian Sea and along & off Gujarat coast during next 12 hours and over north & adjoining central Arabian Sea along & off Pakistan-Makran coasts and Gulf of Oman till 4th October morning.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (0830 hrs IST of yesterday to 0830 hrs IST of today): at most places over Saurashtra & Kutch, Bihar, Jharkhand and Kerala & Mahe; at many places over Chhattisgarh, Gangetic West Bengal, Andaman & Nicobar Islands, Konkan & Goa, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Lakshadweep; at a few places over Himachal Pradesh, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam and Coastal Karnataka at isolated places over Jammu & Kashmir, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, East Madhya Pradesh, Vidarbha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya, Gujarat Region, Madhya Maharashtra, Marathwada, Telangana and Rayalaseema.
- Heavy Rainfall recorded (0830 hrs IST of yesterday to 0830 hrs IST of Today) : Heavy to very heavy rainfall at isolated places over Gangetic West Bengal, Tamil Nadu, Bihar Jharkhand, South Interior Karnataka and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, Saurashtra & Kutch, Uttar Pradesh, madhya Pradesh, Coastal Andhra Pradesh & Yanam and Odisha.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Uttarakhand, Jharkhand, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Saurashtra & Kutch, Madhya Pradesh, Jharkhand, Odisha and Gangetic West Bengal, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 30-09-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Assam & Meghalaya and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan

& Muzaffarabad and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over Vidarbha, Madhya Maharashtra and Sub-Himalayan West Bengal & Sikkim and at isolated places over West Uttar Pradesh, Telangana and Coastal Andhra Pradesh & Yanam. They were markedly below normal (-5.1 or less) at a few places over Bihar and at isolated places over Saurashtra & Kutch and Gangetic West Bengal; appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Rajasthan; below normal (-1.6°C to -3.0°C) at most places over East Rajasthan, Gujarat region and Jharkhand; at a many places over Rayalaseema; at a few places over Odisha and Chhattisgarh and at isolated places over West Madhya Pradesh and East Uttar Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.5°C was reported at K. Paramathy (Tamilnadu, Puducherry & Karaikal).

- Minimum Temperature Departures as on 01-10-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at many places over Haryana, Chandigarh & Delhi; at a few places over East Rajasthan and at isolated places over West Rajasthan; above normal (1.6°C to 3.0°C) at most places over East Uttar Pradesh, West Madhya Pradesh, Himachal Pradesh and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at many places over Sub-Himalayan West Bengal & Sikkim, Telangana, Rayalaseema, Andaman & Nicobar Islands, Uttarakhand and East Madhya Pradesh; at a few places over Assam & Meghalaya, Gujarat State, Marathwada, Vidarbha and South Interior Karnataka and at isolated places over Madhya Maharashtra, North Interior Karnataka and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at isolated places over Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.5°C is reported at K. Parmathy (Tamilnadu, Puducherry & Karaikal) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 01 October (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Tamilnadu, Puducherry and Karaikal and heavy to very heavy rainfall at isolated places over East Uttar Pradesh and Bihar and Heavy rainfall at isolated places over Uttarakhand, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Telangana, Interior Karnataka,

Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Gale wind (speed reaching 75-85 kmph gusting to 95 kmph) over northeast & adjoining northwest Arabian Sea. it would gradually becoming 85-95 kmph gusting to 105 kmph over northwest & adjoining northeast Arabian sea and adjoining Pakistan – Makran coasts from today evening. Squally wind speed reaching 40-50 kmph gusting to 60 along & off north Gujarat Coast. Sea condition will be ‘High’ over Northeast & adjoining northwest Arabian Sea; high to very high over north Arabian Sea and along & off Pakistan -Makran Coast and rough to very rough along & off north Gujarat coast. Strong wind (speed reaching 40-50 kmph gusting to 60 kmph) over south & adjoining central Bay of Bengal. Fishermen are advised not to venture into these areas.

- 02 October (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Tamilnadu, Puducherry and Karaikal and Heavy to very heavy rainfall at isolated places over Bihar and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal & South Interior Karnataka, Kerala & Mahe and Lakshadweep. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Telangana, Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Gale wind speed reaching 100-110 kmph gusting to 120 kmph over northwest & adjoining northeast Arabian sea and adjoining Pakistan – Makran coasts. Sea condition will be High to very high over North Arabian Sea along & off Pakistan – Makran coasts. Strong wind (speed reaching 40-50 kmph gusting to 60 kmph) over south & adjoining central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 03 October (Day 3): Heavy to very heavy rainfall at isolated places over Assam & Meghalaya, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy rainfall at isolated places over Uttarakhand, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal & South Interior Karnataka and Lakshadweep. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, East Uttar Pradesh, West Madhya Pradesh, Odisha, Madhya Maharashtra, Marathwada, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Gale wind speed reaching 80-90 kmph gusting to 100 kmph over northwest Arabian sea and

adjoining Gulf of Oman. Sea condition will be High over northwest Arabian sea and adjoining Gulf of Oman. Strong wind (speed 40-50 kmph to gusting 60 kmph) likely over Comorin area and Gulf of Mannar, southwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- 04 October (Day 4): Heavy to very heavy rainfall at isolated places over South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Madhya Maharashtra, Coastal Karnataka and Lakshadweep. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, Madhya Maharashtra, Marathwada, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Strong wind (speed 40-50 kmph to gusting 60 kmph) likely over Comorin area and Gulf of Mannar. Fishermen are advised not to venture into these areas.
- 05 October (Day 5): Heavy to very heavy rainfall at isolated places over South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy rainfall at isolated places over Madhya Maharashtra, Coastal Karnataka and Lakshadweep. Thunderstorm accompanied with lightning at isolated places over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Strong wind (speed 40-50 kmph to gusting 60 kmph) likely over Comorin area and Gulf of Mannar. Fishermen are advised not to venture into these area
- The weather outlook for seven days i.e., 01 Oct to 09 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)

Kerala

Weather condition:

In Vellanikkara, the maximum temperature ranges from 24.6 to 33.7 Deg C, minimum temperature ranges from 22.4 to 24.8 Deg C. Morning relative humidity ranges from 093% to 098% and afternoon relative humidity ranges from 055% to 088%. Wind speed ranges from 1.3 to 3.1 km/h. Evaporation ranges from 1.5 to 4.0 mm. Sunshine hours range from 0.0 to 9.2 hours. 5 cm morning soil temperature ranges from 25.8 to 28.0 Deg C and afternoon soil temperature ranges from 27.2 to 36.5 Deg C.

Contingency measure:

- Rice(Virippu): Harvesting stage: First paddy crop (Virippu) is in Harvesting

stage.

- Rice (Mundakan): Land preparation: Land preparations for mundakan paddy can be started in kole paddy field, apply lime during nursery preparation. Seed treatment with pseudomonas can be done before sowing. (10 gram of pseudomonas for one kg of paddy seeds.) Rice case worm- During rainy season, there is a chance of rice case worm in paddy field. To control this 25 kg sawdust or rice husk ash mixed with one litre kerosene (for 1 acre) can be spread after draining the field.
- Arecanut: Mahali: Keep the field clean. Destroy completely affected trees. As a prophylactic measure, spray 1% Bordeaux mixture or two gram Copper oxychloride with stickers at 40-45 days interval.
- Turmeric: Leaf Blotch (*Taphrina maculans*): As a prophylactic measure, spray 2ml hexaconazole (Contaf) or 1 ml Propiconazole (Tilt) or 2.5 g copper oxychloride (Blitox or Blue copper) or 2 gram SAAF dissolved in one litre of water. Spraying can be continued at fortnightly intervals depending upon the intensity of the disease.
- Ginger: Shoot borer: There is a chance of shoot borer in ginger and turmeric. Spray 20 g Beauveria per one litre of water to control stem borer. Rhizome rot- During rainy season, apply mixture of 15 gram bleaching powder and 250 gram lime in to the basin of three meter square bed to avoid the spreading of rhizome rot in ginger.
- Animal Husbandry: Sun dry the cattle feed frequently to avoid fungal growth. Take precautions to avoid ecto parasitic infestation.

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

01-10-2021/(0800 to 0827) GMT
01-10-2021/(1330 to 1357) IST

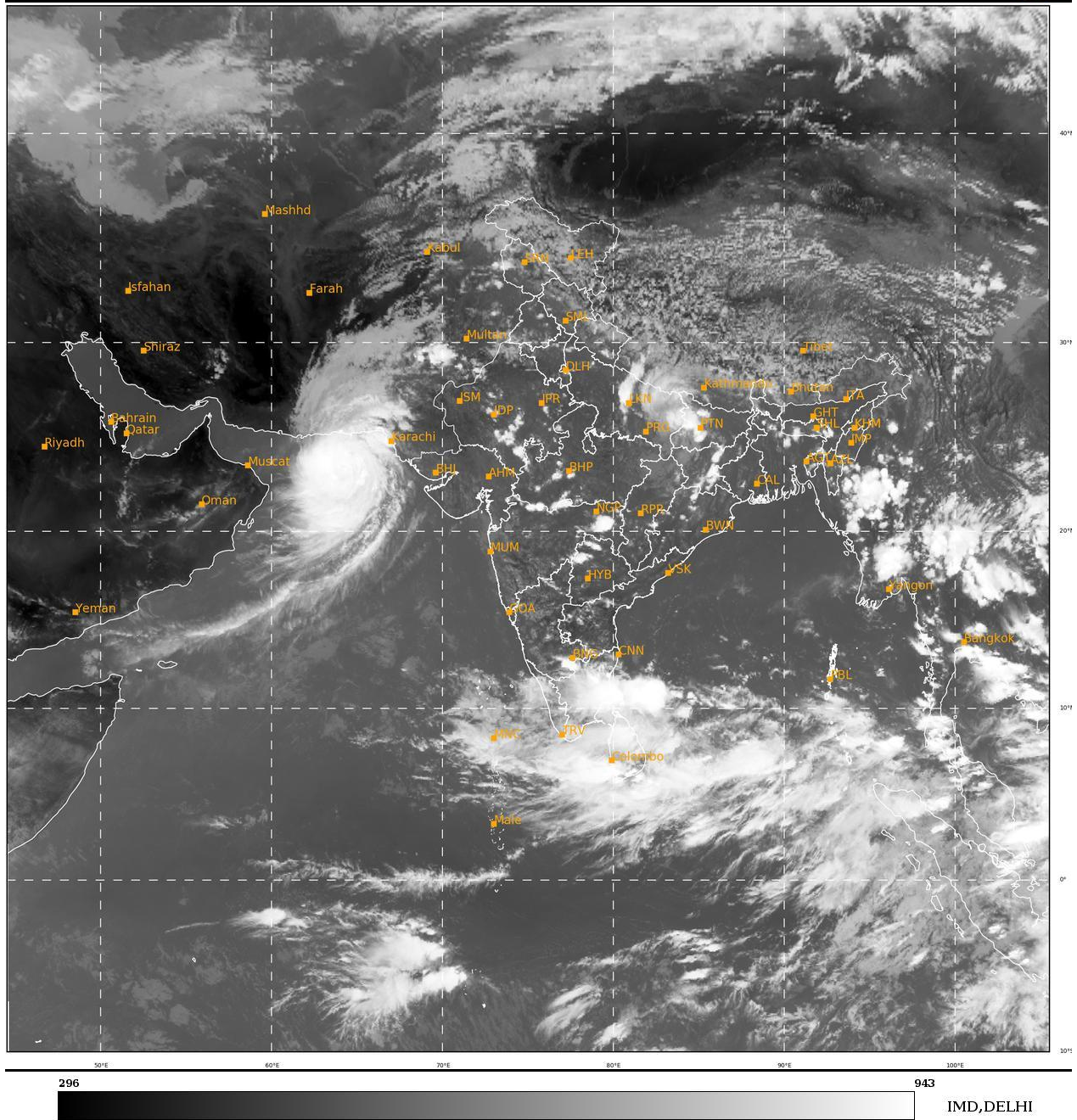


Figure: 1. Latest available satellite picture as on 01 Oct 2021 at 1357 Hrs (IST). (Source: IMD).

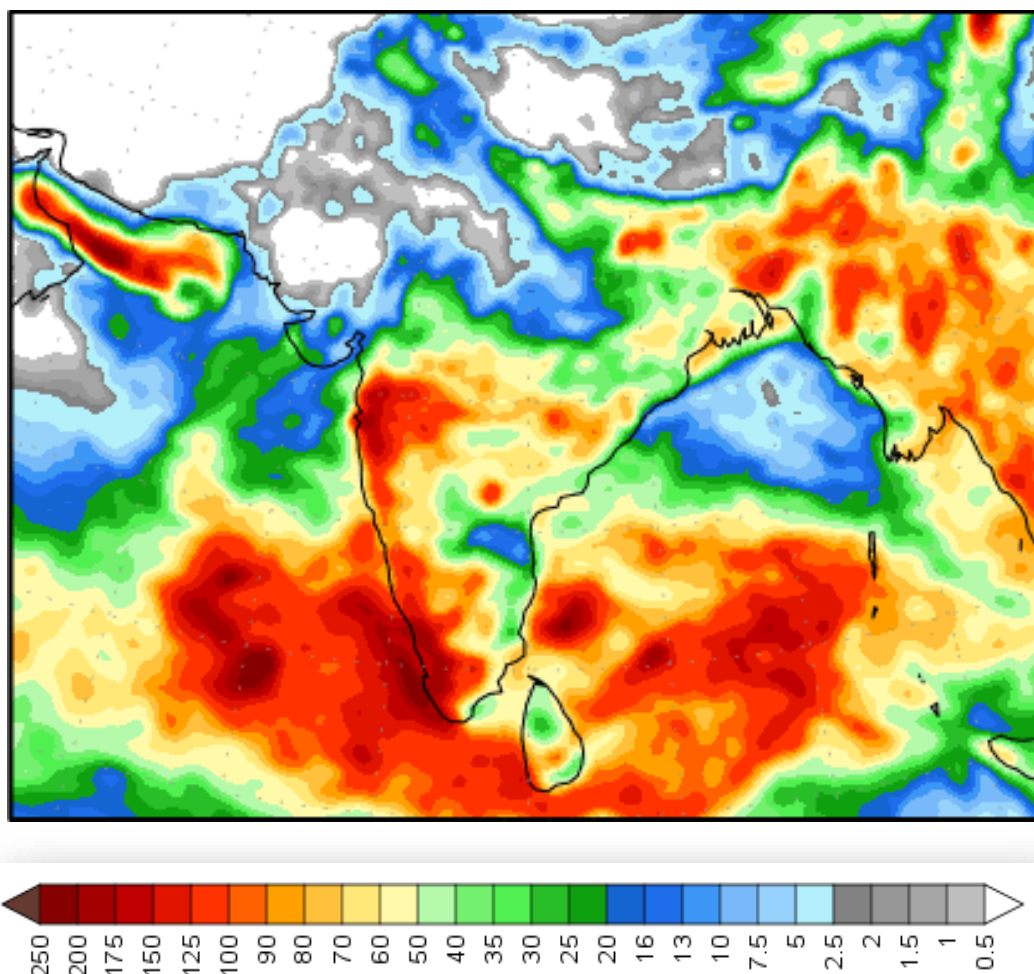


Figure:2. Precipitation forecast for 01 Oct to 08 Oct 2021 (Source: NOAA NCEP).

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