

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 01 September 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The monsoon trough at mean sea level now passes to the south of its normal position. The eastern end of the monsoon trough is very likely to shift gradually northwards from tomorrow, the 2nd September and the western end is very likely to shift northwards from 3rd September onwards.
- A cyclonic circulation lies over south Gujarat Region & neighbourhood at extends upto middle tropospheric levels. It is likely to move west-northwestwards during next 3 days and become less marked thereafter.
- A trough runs from cyclonic circulation over south Gujarat Region & neighbourhood to northwest Uttar Pradesh across East Rajasthan at lower tropospheric levels. It is likely to become less marked during next 2 days.
- A shear zone in middle tropospheric levels likely to develop over south Peninsular India from 04th September.
- Due to above meteorological conditions:
 - (i) Fairly widespread to widespread rainfall activity with
 - a) isolated extremely heavy falls very likely over south Gujarat region and Saurashtra & Kutch during next 24 hours;
 - b) isolated very heavy falls very likely over north Konkan and Haryana, Chandigarh & Delhi on 01st and over Gujarat State on 2nd September;
 - c) Isolated heavy falls are likely over north Madhya Maharashtra during next 24 hours; south Rajasthan on 01st & 02nd and Saurashtra & Kutch on 03rd September.
 - (ii) Rainfall activity over south peninsular and West India is very likely to increase from 03rd September when Fairly widespread to widespread rainfall activity with isolated heavy falls very likely over Coastal Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Karnataka during 04th-05th September.
 - (iii) Rainfall activity over Northeast India (Assam & Meghalaya, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura) is very likely to remain subdued over the region from 02nd September onwards.
- 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 Nagaland, Manipur, Mizoram & Tripura, East Rajasthan, Gujarat state, Coastal Karnataka and Konkan & Goa; at many places over Uttarakhand, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha, Chhattisgarh, , Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Odisha, Telangana, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Andaman & Nicobar Islands and Lakshadweep ; at a few places over Himachal Pradesh, West Rajasthan, West Uttar Pradesh, East Madhya Pradesh, Gangetic West Bengal, Jharkhand, Assam & Meghalaya, North Interior Karnataka, Rayalseema and Tamil Nadu, Puducherry & Karaikal and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, East Uttar Pradesh, Bihar and South Interior Karnataka.
- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely heavy rainfall at isolated places over Haryana and Gujarat Region; very heavy rainfall at isolated places over Delhi, West Madhya Pradesh, Tripura, Saurashtra & Kutch and Rayalseema and heavy rainfall at isolated places over Rajasthan, Coastal Andhra Pradesh, West Uttar Pradesh and Telangana.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Gujarat Region, West Bengal & Sikkim, Assam & Meghalaya, Vidarbha, Tripura, Chhattisgarh, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 31-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over East Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh; at a few places over Odisha, Gangetic West Bengal, Arunachal Pradesh and Chhattisgarh; at isolated places over West Rajasthan, West Madhya Pradesh, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at a few places over Haryana, Chandigarh & Delhi; appreciably below normal (-3.1°C to -5.0°C) at many places over Telangana; at a few places over Konkan & Goa, Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands; at isolated places over Madhya Maharashtra and Marathwada; below normal (-1.6°C to -3.0°C) at a few places over East Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-

Baltistan & Muzaffarabad, Punjab, Uttarakhand, West Uttar Pradesh and Gujarat Region. Yesterday, the highest maximum temperature of 39.5°C was reported at Barmer (West Rajasthan).

- Minimum Temperature Departures as on 01-09-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over Uttarakhand; at a few places over West Rajasthan, West Madhya Pradesh and Marathwada; at isolated places over East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, East Madhya Pradesh, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at isolated places over Haryana, Chandigarh & Delhi, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam. Today, the lowest minimum temperature of 18.5°C is reported at Bidar (North Interior Karnataka) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 01 September (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Gujarat State; heavy to very heavy rainfall at isolated places over Haryana, Chandigarh & Delhi and north Konkan and heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, Rajasthan, northwest Madhya Pradesh, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, north Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Punjab, Uttar Pradesh, Haryana, Chandigarh & Delhi, Rajasthan, Vidarbha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally weather wind speed (40-50 kmph to gusting 60) very likely over Northeast Arabian Sea and along & off north MaharashtraGujarat coasts. Fisherman are advised not to venture into these areas.
- 02 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over Gujarat State and heavy rainfall at isolated places over Rajasthan, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Punjab, Uttar Pradesh, Haryana, Chandigarh & Delhi, Rajasthan, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally weather wind speed (40-50 kmph to

gusting 60) very likely over Northeast Arabian Sea and along & off north MaharashtraGujarat coasts. Fisherman are advised not to venture into these areas.

- 03 September (Day 3): Heavy rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Odisha, Rayalseema, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- 04 September (Day 4): Heavy rainfall likely at isolated places over Uttarakhand, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Telangana and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Coastal & South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Rayalaseema and Coastal Andhra Pradesh & Yanam.
- 05 September (Day 5): Heavy rainfall likely at isolated places over Uttarakhand, East Madhya Pradesh, Vidarbha, Chhattishgarh, Odisha, Konkan & Goa, Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Telangana and Coastal Andhra Pradesh & Yanam. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Coastal & South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Rayalaseema and Coastal Andhra Pradesh & Yanam. Squally weather wind speed (40-50 kmph to gusting 60) very likely over Southeast Arabian Sea and along & off Kerala coast and Lakshadweep area. Fisherman are advised not to venture into these areas.
- The weather outlook for seven days i.e., 01 Sep to 09 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)

Himachal Pradesh

Weather condition:

The maximum and minimum temperature ranged between 22.5 to 27.0 °C and 18.5 to 21.5 °C which was almost above normal by 1.0 to 1.1 °C and 0.8-2.5 °C, respectively. 66.4

mm rainfall was received during the week against the normal of 125.4 mm. The relative humidity varied between 84-97 % and sunshine hours between 0.0-7.5 hrs/day with variable sky conditions (Octa 2-8). The evaporation rate varied 2.4-4.2 mm per day.

Contingency measure:

- Kharif Crops: Rice: Farmers are advised to make bund for conserving rain water in the field. Bund should be higher and wider so that more rain water can be conserved in the field.
- Maize: Hoeing and weeding should be done in it to improve the root growth and save the water consumption. Spray recommended herbicides to control fall army worms attack.
- Pulses: Advised to intercultural operation and weed free in moong and mash in irrigated areas advised. In rainfed region ensure proper moisture. For weed control in leguminous crops, sprinkle 3 liters or stomp 4.5 liters according to per hectare within 48 hours.
- Fodder Crops: Advised to sowing of fodder maize along with cowpeas and soybean in irrigated areas. Chari bajra for fodder sowing may be completed. In mid hill region root slips of setaria, hathi grass may be planted in grasslands. Advised to sowing of fodder maize along with cowpeas and soybean in irrigated areas.
- Vegetable Crops: Ensure proper drainage in field in view of rainfall.
- Bhindi & Frenchbean: Monitoring of lady finger crop against attack of mite is advised. Weed control in bhindi and frenchbean is advised.
- Tomato, Chilli, Capsicum and Brinjal: Shoot and fruit borer in brinjal and tomato crops, expected. Install pheromone trap @25 per hectare If pest population is high, spraying of recommended chemicals is advised when sky is clear. Constant monitoring of the chilli crop against attack of mites is advised. Advised to transplant of nursery crop on field with healthy seedlings. Damping off disease expected in seedling raising of tomato, brinjal, chilles and capsicum etc. Drenching of seedbeds with recommended chemical.
- Poly House Agriculture: Open the side and top for temperature control. During rains top and side bent should be closed. Advised nursery sowing of Tomato, Brinjal, chillies and capsicum crops in poly house. Cucurbits plantation may be done in polytubes under the polyhouse. Mites expected in polyhouse. For control of mites in polyhouse spray recommended chemicals.
- Agro Forestry: Nursery of medicinal plants viz. aswagandha, tulsi, digitalis, jangli bhindi and agarkara can be grown in the fields. Plantation of beunce can also be done. Trees saplings grown in the polythene bags may be shifted into the

fields.

- Tea: Advised picking in tea at 8-10 days interval to maintain the quality and productivity. Monitor for mites and Milli bug expected in the orchards, for control of milli bug spray recommended chemicals.
- Livestock: High temperature expected. Protects animals from high temperature stress with splash water on their body 2-3 times a day. Milk the animals at cooler place. Monitor the animals for FMD and advised protect calves against parasites, get them dewormed with piperazine liquid @ 4 ml/kg body weight, first at 10 days of age, then 15 days and then monthly upto three months of age and then quarterly upto one year of age. Vaccination. Ecto-parasite attack is expected in this weather for control spray Butox @ 2ml per litre in cowshed Give mixture of hay & green fodder.
- Mushrooms: Maintain room temperature 18-22oC and relative humidity around 85% for successful cultivation.
- Horticulture: Spray micro nutrients of zinc, copper, manganese, iron and boron in mango, grape, citrus and guava orchards. If a termite outbreak appears on the trees, sprinkle recommended chemicals. Monitor foliar pest on plants of Citrus species. Spray approved medicine for pomegranate butterfly and fruit borer insect in pomegranate and litchi by dissolving in water.
- Apiculture: Insert the brood chamber without frame for ensuring aeration. Dust sulphur on sealed brood in the colony and not on larvae to control mites attack on honeybees. Also insert empty frame /combs for egg laying to the queen as the population starts builds up. For protection from ants, put the legs of apiary into water so that ants could not attack apiary. Keep the colonies in shady places and sprinkle water if possible to reduce the heat as temperature rising high in the region.
- Water Storage: Farmers are advised make arrangement for storing rain water in pond made in the field. This water can be used for irrigation in the crops at suitable time during dry spell. Mulch material may also be arranged to use during dry spell. Farmers are also advised to increase the amount of potash it helps in minimizing the losses due to the moisture stress during dry spell. In rain fed areas, use of mulches is beneficial for conservation of moisture in the soil. Farmers are advised to do proper arrangement for storing rain water at one portion in the field. This water can be used for irrigation in the crops at suitable time during dry spell.

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

01-09-2021/(0800 to 0827) GMT
01-09-2021/(1330 to 1357) IST

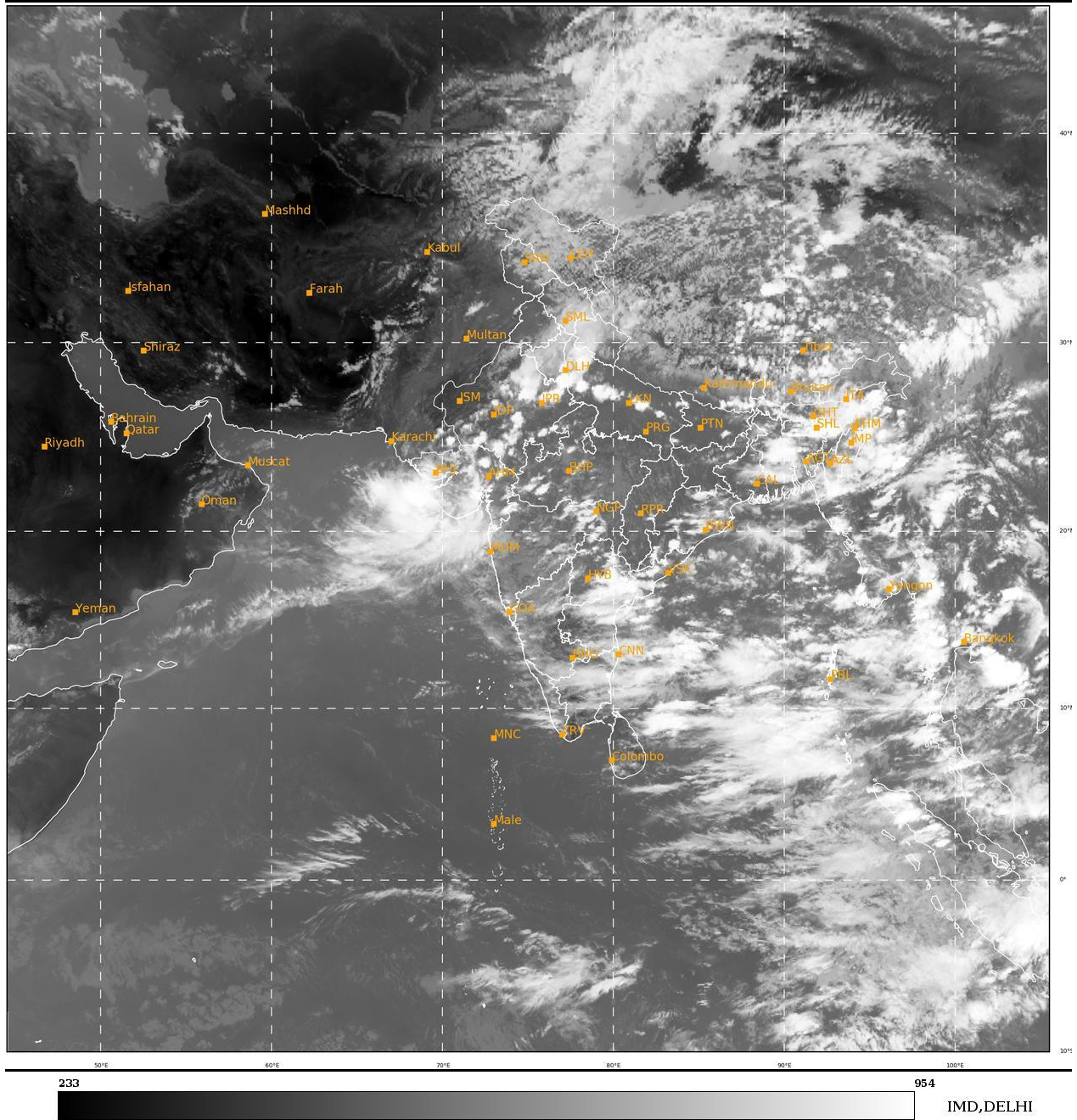


Figure: 1. Latest available satellite picture as on 01 Sep 2021 at 1357 Hrs (IST). (Source: IMD).

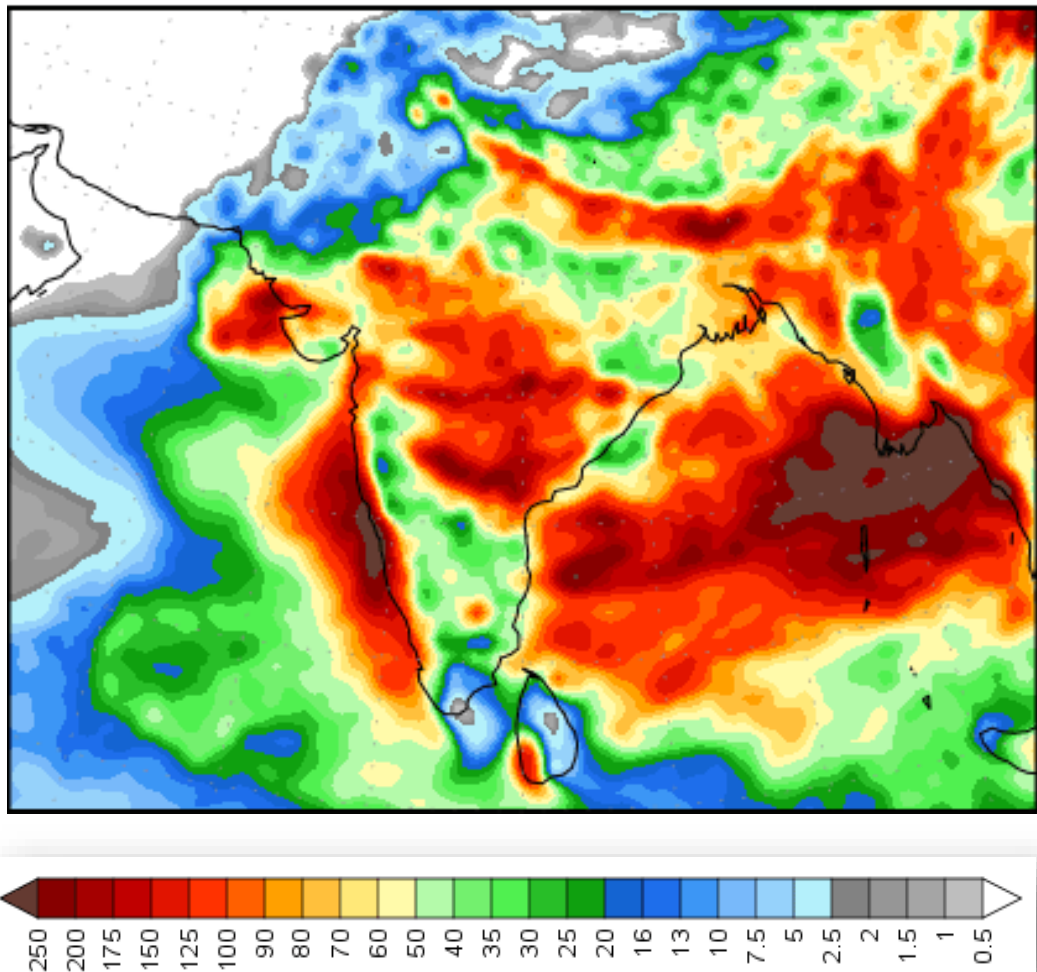


Figure:2. Precipitation forecast for 01 Sep to 09 Sep 2021 (Source: NOAA NCEP).

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