

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 19 September 2019

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The east-west shear zone now runs roughly along latitude 15°N across south peninsula between 1.5 km & 5.8 km above mean sea level. Also there are two cyclonic circulations embedded in this, one over Rayalaseema & neighborhood and the other over east-central Arabian Sea & adjoining Karnataka, Goa and Maharashtra.
- A low pressure area is very likely to form over East-central Arabian Sea and adjoining areas of northeast Arabian Sea, north Konkan & south Gujarat coast by tomorrow. It is likely to move west-northwestwards and concentrate into a Depression during the subsequent 48 hours.
- Yesterday, fairly widespread rainfall with isolated heavy to very heavy and extremely heavy falls occurred over north Tamil Nadu and heavy to very heavy falls over Rayalaseema. Isolated heavy to very heavy rainfall is likely to continue over north Tamil Nadu and Rayalaseema during next 24 hours. Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Konkan & Goa, Madhya Maharashtra during 19-21st Sept (with probable isolated extremely heavy falls over north Konkan on 19th & 20th Sept). Fairly widespread to widespread rainfall with isolated heavy to very heavy falls are also likely over Gujarat during 20th-22nd Sept with isolated extremely heavy falls over Saurashtra on 21st and 22nd September.
- The images showing the latest satellite picture in figure. 1

Main Weather Observations (IMD)

- Rain/Thunder showers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over East Uttar Pradesh, Konkan & Goa, Madhya Maharashtra, Marathwada, Kerala & Mahe, Karnataka, Rayalaseema, Coastal & North Interior Karnataka and Andaman & Nicobar Islands; at many places over Jharkhand, Odisha, South Interior Karnataka, Madhya Pradesh, Telangana, Coastal Andhra Pradesh & Yanam; at a few places over Himachal Pradesh, Gujarat region, West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram &

Tripura, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and at isolated places over Jammu & Kashmir, Uttarakhand, Bihar, Saurashtra & Kutch, Assam & Meghalaya, Chhattisgarh and East Rajasthan.

- Heavy to very heavy rainfall with extremely heavy falls recorded at isolated places over Tamil Nadu, Puducherry & Karaikal; Heavy to very heavy rainfall recorded at isolated places over Andaman & Nicobar Islands, East Uttar Pradesh and Rayalaseema and Heavy rainfall at isolated places over Konkan & Goa, Himachal Pradesh, Chhattisgarh, Punjab and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, East Uttar Pradesh, Bihar, Assam & Meghalaya, Madhya Pradesh, West Rajasthan, Gujarat State, Konkan & Goa, Madhya Maharashtra, Vidarbha, Odisha, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Maximum temperature departures as on 18-09-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir and at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over West Rajasthan, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh; over Sub-Himalayan West Bengal & Sikkim and at isolated places over Kerala and Odisha. They were Markedly below normal (-5.1 or less) at a few places over East Uttar Pradesh and at isolated places over East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over North Interior Karnataka; at a few places over Marathawada and Rayalaseema and at isolated places over Vidarbha, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands and Coastal Andhra Pradesh; below normal (-1.6°C to -3.0°C) at most places over Telangana and at a few places over West Madhya Pradesh and Telangana and near normal over rest of the country.
- Minimum temperature departures as on 19-09-2019: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at few places over Sub-Himalayan West Bengal & Sikkim and at isolated places over Uttarakhand; above normal (1.6°C to 3.0°C) at most places over West Rajasthan; at a few places over Jammu & Kashmir, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Odisha and Lakshadweep and at isolated places over Himachal Pradesh, East Madhya Pradesh, North Interior Karnataka, Arunachal Pradesh and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at isolated places over East Uttar Pradesh, Konkan & Goa, Marathwada, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country.

Weather Warning during next 5 days (IMD)

- 19 September (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Konkan & Goa; heavy to very heavy rainfall at isolated places over Andaman & Nicobar Islands, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Gujarat state, Marathwada, Telangana, Karnataka, Kerala & Mahe, Himachal Pradesh, Uttarakhand, Punjab and East Uttar Pradesh. Thunderstorm accompanied with lightning very likely to occur at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Jharkhand, Gangetic West Bengal and Odisha. Squally weather likely to prevail over southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- 20 September (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Konkan & Goa; Heavy to very heavy rainfall likely at isolated places over Gujarat state and Madhya Maharashtra and heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Andaman & Nicobar Islands and Coastal Karnataka. Thunderstorm accompanied with lightning very likely to occur at isolated places over Odisha. Strong winds, speed reaching 40-50 kmph, likely to prevail over east-central & adjoining northeast Arabian Sea and south Gujarat & north Maharashtra coasts. Squally weather likely to prevail over southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- 21 September (Day 3): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Saurashtra & Kutch; Heavy to very heavy rainfall likely at isolated places over Gujarat region and Konkan & Goa and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Coastal Karnataka. Strong winds, speed reaching 45-55 kmph gusting to 65 kmph, likely to prevail over northeast & adjoining east-central Arabian Sea and Gujarat & Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 22 September (Day 4): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Saurashtra & Kutch; Heavy to very heavy rainfall likely at isolated places over Andaman & Nicobar Islands and heavy rainfall at isolated places over East Rajasthan, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Strong winds, speed reaching 45-55 kmph gusting to 65 kmph, likely to prevail over northeast & adjoining east-central Arabian Sea and Gujarat & Maharashtra coasts. Fishermen are advised not to venture into these areas.

- 23 September (Day 5): Heavy to very heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Kerala & Mahe, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, East Madhya Pradesh, Vidarbha, Chhattisgarh and Odisha. Strong winds, speed reaching 45-55 kmph gusting to 65 kmph, likely to prevail over northeast & adjoining east-central Arabian Sea and Gujarat coast. Fishermen are advised not to venture into these areas.
- The weather outlook for the period of seven days *i.e.*, 19 to 27 September 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thunder shower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamil Nadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Chhattisgarh

Weather condition:

Very light to heavy rainfall is received in Chhattisgarh state during past few days. The maximum temperature was ranged between 29-32°C and minimum temperature was ranged between 24-26°C.

Contingency measure:

- General: In rice crop, hoppers and stem borer should be monitored. If stem borer adult is more than one/sq.m. then Carbofuran@ 33kg. or Fartera@ 10 kg./ha should be broadcast. For monitoring of stem borer in rice crop, Pheromone trap should be used @ 2-3 nos/acre and @ 8-10 nos/acre for controlling insects. Phorate insecticide should not be used for Brown Plant Hopper infested rice fields. For control of BPH, Imidachloprid 125 ml or Ithipros+ Imidacholprid@ 150 ml insecticide should be sprayed in 200 litres water/ acre. Short duration rice is in flowering stage. If 50% of flowering occurring then farmers are advised for application of third dose of Nitrogen fertilizer. Blast disease in rice is observed in many rice fields (boat like spots/ lesions), Tricyclazole fungicide @ 0.6 grams / litre water can be sprayed.

Bacterial Leaf Blight (BLB) in rice fields can be controlled by draining off water from rice fields. After 3-4 days, 25 Kg. Potash per hectare can be broadcast for control.

- Fruits & Vegetables: Cucurbitaceous vegetables particularly pointed gourd (Parval) is vulnerable to fruit rotting and drying. Fields should be kept clean and Metalaxyl+ Mancozeb @2.5 grams per litre should be sprayed or copper oxychloride COC @ 4 gram per litre should be sprayed. Mid-duration cauliflower vegetable plantation should be completed. Fungicide and systemic insecticide root treatment should be done before planting. Pruning work in fruit trees plantation should be completed at the earliest. For avoiding the fruit shedding in papaya crop, Nephthalene Acetic Acid (NAA) should be sprayed @ 20 ppm.
- Animal husbandry: In Irrigation areas for feeding animals during the last week of September, farmers are advised to go for sowing preparations for folder crops. Due to high temperature and humidity dehydration there can be problems in animals. Therefore the more salty water should be given to dairy shed should be kept dry and clean. In September months goats & sheep should be given Entoroctosimia Vaccine at the age of 6-10 weeks to lambs against the disease .

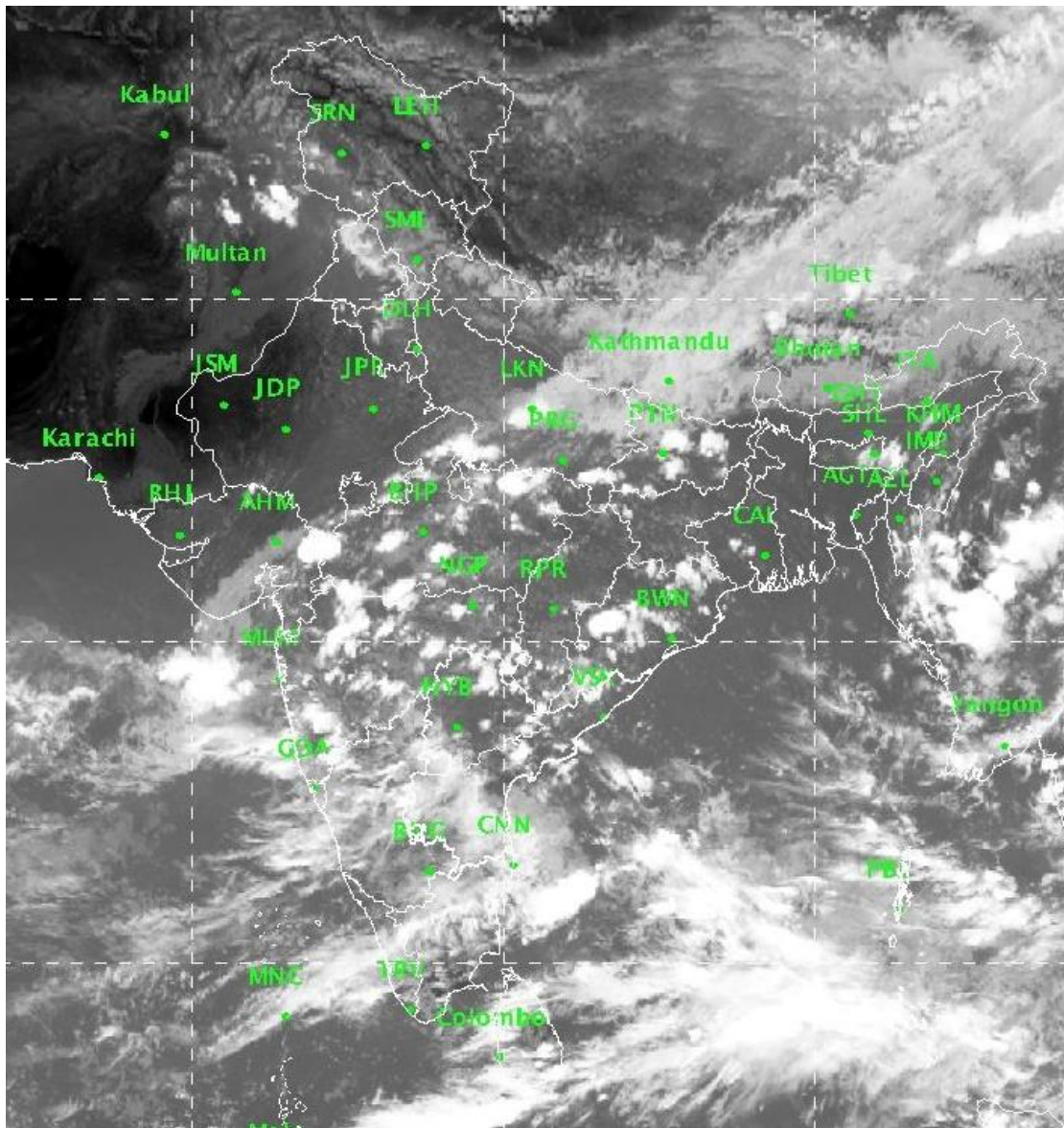


Figure: 1. Latest available satellite picture as on 19 September 2019 at 1330Hrs (IST).

(Source: IMD).

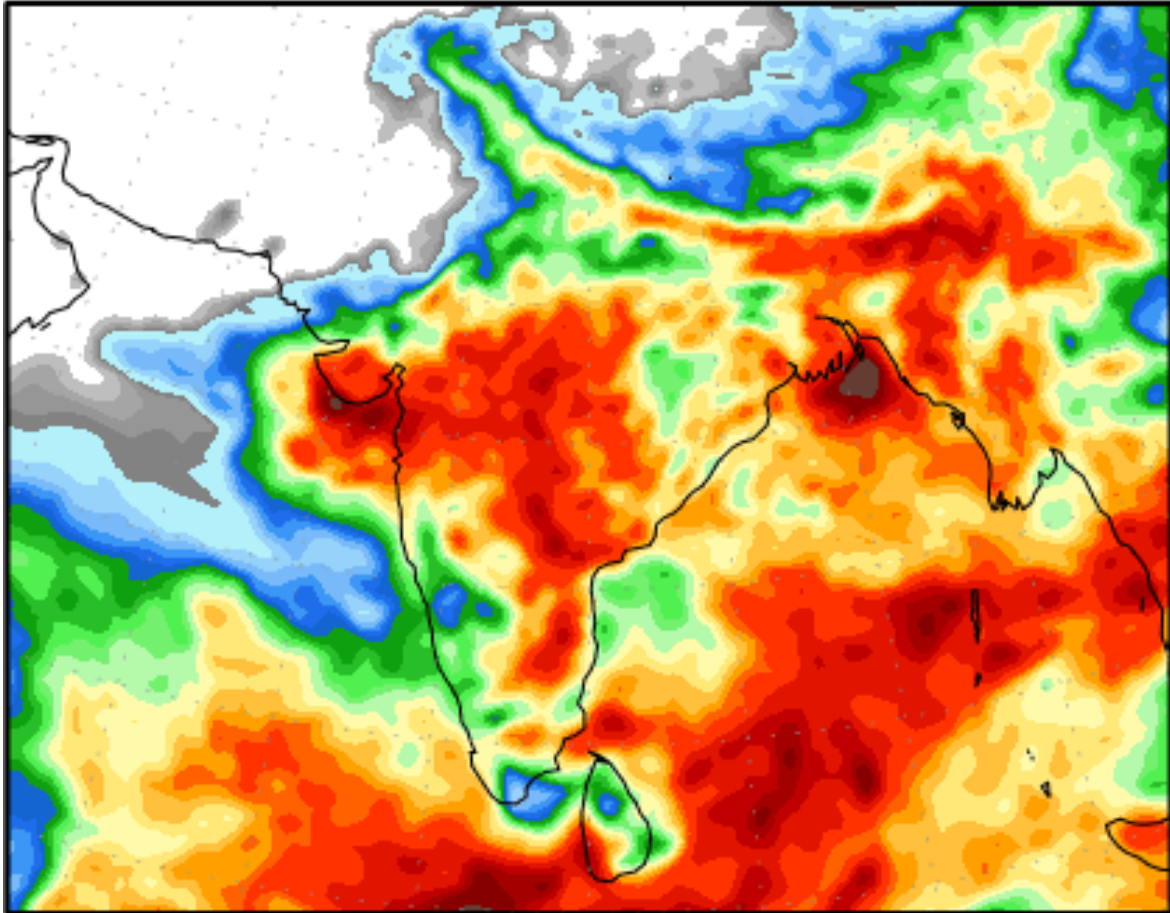


Figure:2. Precipitation forecast for 19 to 27 September 2019 (Source: NOAA NCEP).