

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 19 July 2019

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The southwest monsoon has further advanced into remaining parts of West Rajasthan and thus has covered the entire country today, the 19th July, 2019.
- The western end of monsoon trough at mean sea level is near its normal position and its eastern end is south of its normal position.
- An east-west shear zone runs roughly along Latitude 15.0°N between 4.5 & 5.8 km above mean sea level.
- Under the influence of shear zone and strong winds at lower levels over southern parts of West Coast, active to vigorous monsoon conditions with widespread rainfall with heavy to very heavy at a few places and extremely heavy falls at isolated places are very likely to occur over Kerala & Mahe and Coastal & South Interior Karnataka mainly during 19th-22nd July.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rain/Thunder showers observed (from 0830 hours IST yesterday to 0830 hours IST of today): at most places over Konkan & Goa, Kerala & Mahe, Andaman & Nicobar Islands and Lakshadweep; at many places over Uttarakhand and Haryana, Chandigarh & Delhi; at a few places over Jammu & Kashmir, Himachal Pradesh, West Uttar Pradesh, Bihar, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Coastal & Interior Karnataka, Odisha and Coastal Andhra Pradesh & Yanam and at isolated places over Rajasthan, Jharkhand, Gujarat state, East Uttar Pradesh, Madhya Pradesh, Assam & Meghalaya, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Marathwada, Vidarbha, Punjab, Gangetic West Bengal and Madhya Maharashtra.
- Rain/Thunder showers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Himachal Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Coastal

Karnataka, Kerala & Mahe, Andaman & Nicobar Islands and Lakshadweep; at many places over Jammu & Kashmir, Jharkhand, Odisha, Interior Karnataka, Tamil Nadu & Puducherry and Nagaland, Manipur, Mizoram & Tripura; at a few places over Haryana, Chandigarh & Delhi, East Rajasthan, Gangetic West Bengal, Assam & Meghalaya, Vidarbha, Marathwada and East Madhya Pradesh and at isolated places over Uttarakhand, West Rajasthan, East Uttar Pradesh, Bihar, Gujarat, Madhya Maharashtra, Rayalaseema and Telangana.

- Heavy to very heavy rainfall observed at many places over Kerala & Mahe; at isolated places over Konkan & Goa and South Interior Karnataka. Heavy rainfall observed at isolated places over Haryana, Chandigarh & Delhi, Odisha, Lakshadweep, Coastal Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Jammu & Kashmir, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Konkan & Goa, Chhattisgarh, Coastal & North Interior Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala, Jharkhand, Odisha and West Bengal & Sikkim.
- Maximum temperature departures as on 18-07-2019: Maximum temperatures were markedly above normal (5.1°C or more) at most places over Vidarbha; at many places over Madhya Pradesh; at a few places over Madhya Maharashtra, Marathwada and Telangana; at isolated places over Gangetic West Bengal and Odisha; appreciably above normal (3.1°C to 5.0°C) at most places over Jharkhand and Nagaland, Manipur, Mizoram & Tripura; at many places over Sub-Himalayan West Bengal & Sikkim, East Uttar Pradesh, Bihar, Assam & Meghalaya, Chhattisgarh, Gujarat and North Interior Karnataka; at a few places over Rajasthan and isolated places over West Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Konkan & Goa; at many places over Uttarakhand, Arunachal Pradesh, Coastal Karnataka, South Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema. They were markedly below normal (-5.1°C or less) at isolated places over Haryana, Chandigarh & Delhi; appreciably below normal (-3.1°C to -5.0°C) at a few places over Kerala; below normal (-1.6°C to -3.0°C) at most places over Lakshadweep; at a few places over Andaman & Nicobar Islands and at isolated places over Jammu & Kashmir and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.8°C was recorded at Bikaner (West Rajasthan).
- Minimum temperature departures as on 19-07-2019: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Gujarat region, West Rajasthan and Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Bihar; at many places over Jharkhand, West Bengal & Sikkim and Vidarbha; at

a few places over Assam & Meghalaya and Madhya Maharashtra and at isolated places over East Uttar Pradesh, Odisha, Telangana, Uttarakhand, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at isolated places over Jammu & Kashmir, Himachal Pradesh, Haryana, Chandigarh & Delhi, East Rajasthan and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country.

Weather Warning during next 5 days (IMD)

- 19 July (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Kerala & Mahe and South Interior Karnataka and Heavy to very heavy rainfall with extremely heavy falls at isolated places over Coastal Karnataka; Heavy to very heavy rainfall at a few places over Konkan & Goa and Lakshadweep; at isolated places over Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Vidarbha, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Marathawada, Coastal Andhra Pradesh, Rayalaseema, Telangana and North Interior Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Odisha and Gangetic West Bengal. Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest and central Arabian Sea, along & off Maldives area, Comorin area, Lakshadweep, Gulf of Mannar, South Bay Of Bengal, Gujarat coast and Kerala coast. Fishermen are advised not to venture into these areas.
- 20 July (Day 2): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Kerala & Mahe and South Interior Karnataka and Heavy to very heavy rainfall with extremely heavy falls at isolated places over Coastal Karnataka; Heavy to very heavy rainfall at a few places over Lakshadweep; at isolated places over Konkan & Goa and heavy rainfall at isolated places over Vidarbha, East Rajasthan, Andaman & Nicobar Islands, Gujarat Region, Marathawada, Coastal Andhra Pradesh, Telangana, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and North Interior Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over Odisha. Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest and central Arabian Sea, along & off Maldives area, Comorin area, Lakshadweep, Gulf of Mannar, Gujarat coast and Kerala coast. Fishermen are advised not to venture into these areas.
- 21 July (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Kerala & Mahe and South Interior Karnataka and Heavy to very heavy rainfall with extremely heavy falls at isolated places over Coastal Karnataka; Heavy to very heavy rainfall at a few places over Lakshadweep; heavy rainfall at isolated places over West Madhya Pradesh, Himachal Pradesh,

Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Gujarat Region, Konkan & Goa, Marathawada, Telangana, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and North Interior Karnataka. Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest & central Arabian Sea. Fishermen are advised not to venture into these areas.

- 22 July (Day 4): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Kerala & Mahe and Coastal & South Interior Karnataka; Heavy to very heavy rainfall at isolated places over Lakshadweep; heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and North Interior Karnataka. Thunderstorm accompanied with lightning likely at isolated places over Odisha. Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest & central Arabian Sea. Fishermen are advised not to venture into these areas.
- 23 July (Day 5): Heavy to very heavy rainfall at isolated places over Coastal & South Interior Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, North Interior Karnataka, Konkan & Goa, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Odisha. Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest & central Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for the period of seven days *i.e.*, 19 to 27 July 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)

Uttar Pradesh

Weather condition:

Very light to rather heavy rainfall received in isolated places in Uttar Pradesh state during past few days. The maximum temperature was ranged between 28-37°C and minimum temperature was ranged between 24-27° C

Contingency measure:

- Paddy: Transplantation of rice should be taken up regularly. If farmers are not raised nursery till today, SRI method could be used by short duration rice viz; Govind, Manhar, Narandra-80, NDR-97, Pant-12, IR-50, Ashwani, Shakat -4, and Baranideep . Seed should be treated with Streptocycline 4.0 g with 45 lt. water for 35 kg seed soaking for the control of bacterial blight. 2.0% solution of N with 2% potash should be spray after 15 days in light soils on standing nursery. Weeding should be completed and damaged bund should be prepare around the paddy field. Harvest rain water in the field.
- Maize: Drain out excess rain water.
- Sorghum: Sowing of sorghum should be taken up at clear sky, seed should be treated with 2.5 g Thiram or 2.0 g Agro-san G.N @ 3.0 g /kg of seed composite varieties like Varsha, CSV-13.,15, SPB -1388, Vijeta and Hybrid varieties are CSH-16, 9, 14, 18, 13 and CSH-23. To ensure good stand 12-15 kg seed/ ha. the seed should be sown in rows 45 cm apart a depth of 3-4 cm. The seed should be purchased from a reliable source if assured irrigation available. Drain out excess rain water.
- Pigeonpea: Sowing of long duration varieties such as Bahar, Amar, Narendra Arhar-1, Azad, Pusha-9 , and Narendra Arhar-2 at clear sky. Treated seed always should be used. Drain out excess rain water. Green / black gram Sowing Favorable weather condition for sowing of green gram. Suitable varieties are Pant moong-1, 3, 4, Narendra moong-1, 4, PDM-11, Malveeya jyoti, Samrat, Malveeya janchetna, Malveeya janpriya, Malveeya Jagrati, Asha, Meha, MH-2-15, and TM-9937 for the purpose. Sowing of long duration black gram varieties as, Shekar-1, Shekar-2, Azad U-3 and WBU-108 with 12-15 kg/ha treated seed. Drain out excess rain water. Ground nut :Sowing of short duration varieties as TG-37A, CSMG-84-1, CSMG-884, G-201 and MA-10. With 70-75 kg/ha treated seed with 50 cm apart line sowing using 20:30:45 NPK and 250 kg Zypsum and 4.0 kg Boron /ha if not have soil testing report. Drain out excess rain water.

- Brinjal/Chilies: Plantation of new seedling should be taken up on ridge. Pick up mature fruits on standing crop. Drain out excess rain water.
- MP Chari/Mucchari /Pearl-millet: Cutting should be done at knee height. Sowing of SSG-988-898, PC-23 ,SSG-59 -3 and MP chari @ 30-40 kg seeds /ha. Light irrigation applied after 20 days of sowing. Sowing should be Pearl-millet varieties such as Raj-171, L-72 and L-74 done.
- Animal/Birds: Bathing should be taken up at morning and evening before milking. Drinking water should be given thrice a day. Balanced diet should be given for milch animal and vaccinate Foot and Mouth disease and if need concerned near veterinary hospital.

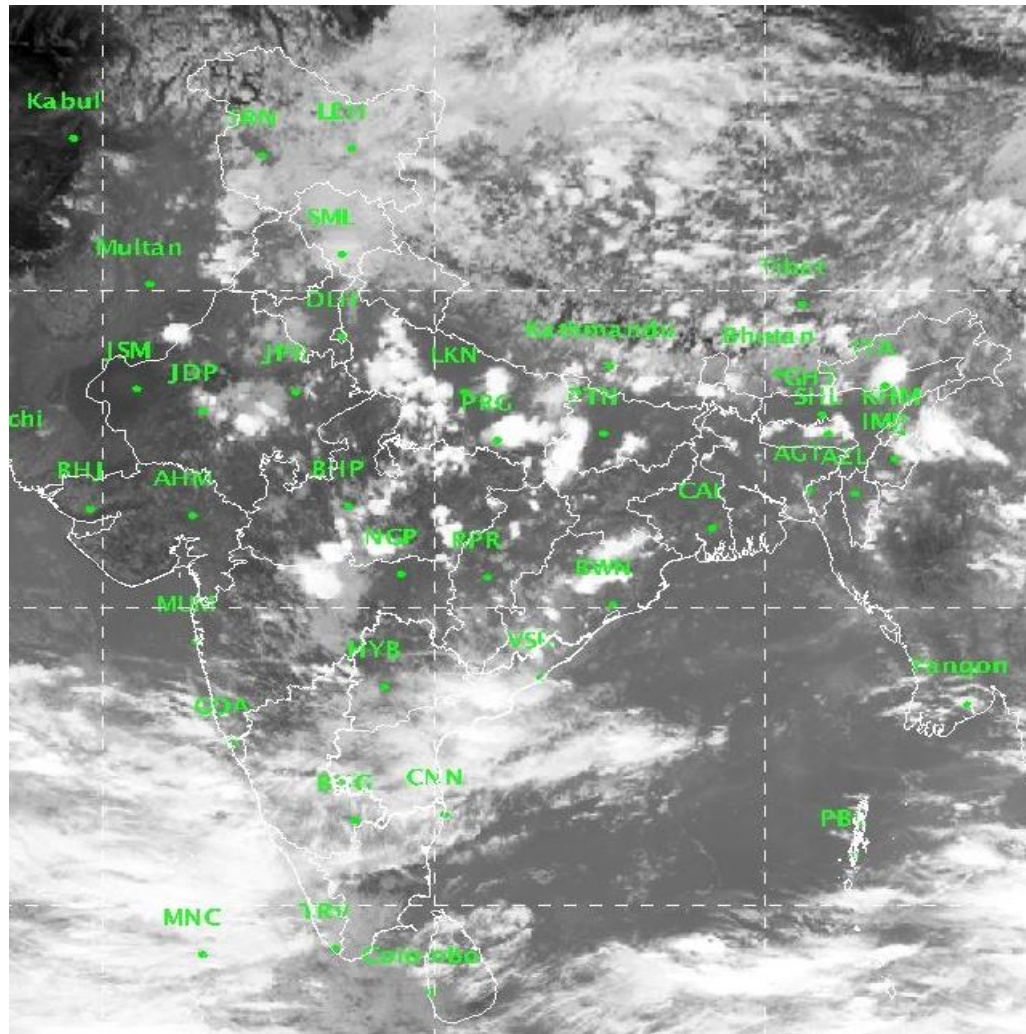


Figure: 1. Latest available satellite picture as on 19 July 2019 at 13:30 Hrs (IST).

(Source: IMD).

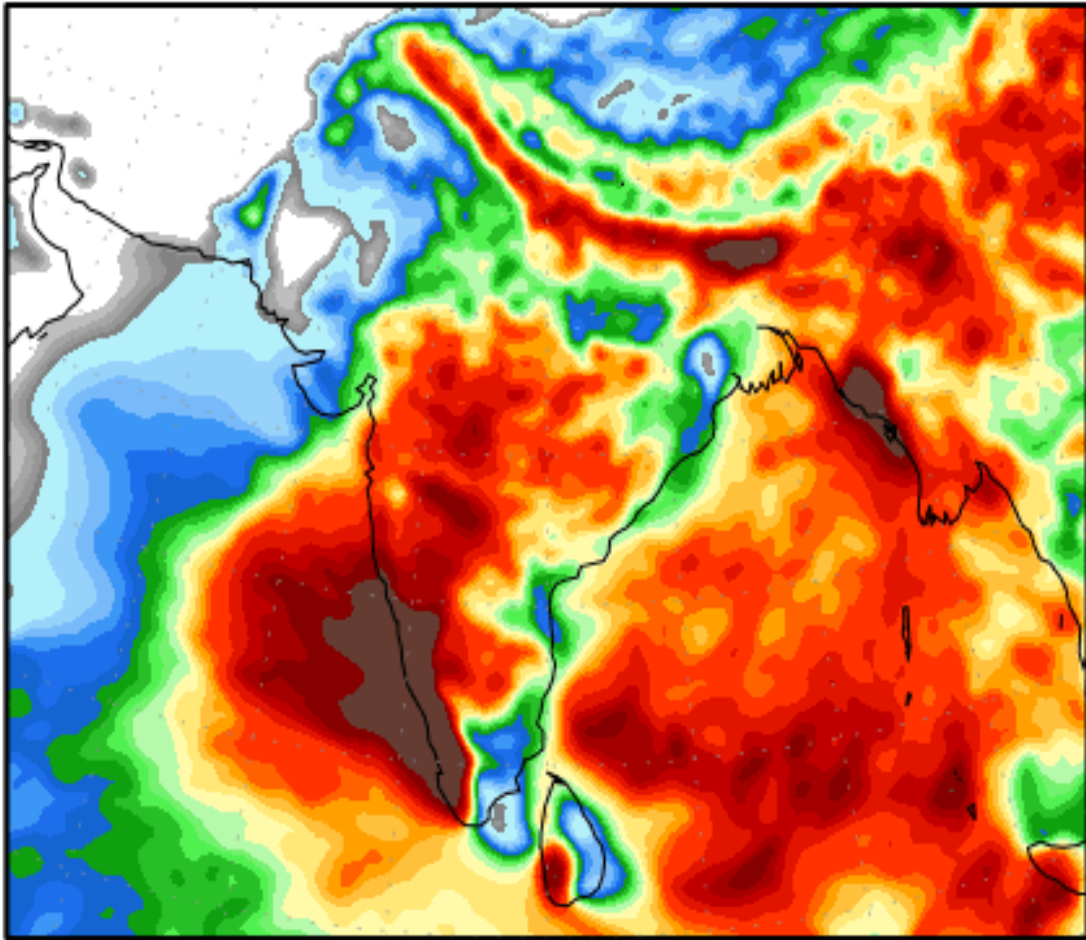


Figure: 2. Precipitation forecast for 19 to 27 July 2019 (Source: NOAA NCEP).