

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 31 May 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The northern limit of Southwest Monsoon continues to pass through 5°N/72°E, 6°N/75°E, 8°N/80°E, 12°N/85°E, 14°N/90°E and 17°N/94°E. ♦ As per the latest meteorological indications, the southwesterly winds could strengthen further gradually from 01st June, resulting in likely enhancement in rainfall activity over Kerala. Hence the monsoon onset over Kerala is likely to take place around 03rd June 2021.
- Due to strengthening of lower level southwesterly winds, fairly widespread to widespread rainfall activity with isolated heavy falls very likely over Northeastern states during next 5 days.
- The Western Disturbance as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along longitude 72°E to the north of latitude 30°N persists. Lower level moisture incursion from north Arabian Sea to the plains of Northwest India taking place and is very likely to continue during next 3-4 days. Under its influence; no significant change in maximum temperatures very likely during next 5 days. Also, isolated to scattered rainfall/thunderstorm activity likely over Western Himalayan Region & adjoining plains of Northwest India during next 4-5 days.
- The cyclonic circulation over Eastcentral Arabian Sea off Karnataka coast at 3.1 km above mean sea level persists and is likely to meander over the region during next 5 days. Southwesterly winds are also likely to strengthen during next 2-3 days. Under the influence of these and other favourable meteorological conditions; scattered to fairly widespread rainfall/thunderstorm likely over Karnataka and Kerala & Mahe and isolated to scattered rainfall/thunderstorm over remaining parts of south Peninsular India during next 4-5 days. Isolated heavy rainfall likely over Kerala & Mahe during next 5 days; Coastal Karnataka on 01st-03rd June and South Interior Karnataka on 02nd & 03rd June.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday):at many places over Jharkhand, Assam & Meghalaya, Arunachal Pradesh, Coastal Karnataka and Andaman & Nicobar Islands; at a few places over Bihar, Sub-Himalayan West Bengal & Sikkim, Vidarbha and Kerala & Mahe; at isolated places over West Rajasthan, Gangetic West Bengal, East Uttar Pradesh, Chhattisgarh, East Madhya Pradesh, Madhya Maharashtra, Rayalseema, Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha and Tamilnadu, Puducherry & Karaikal.
- Heat Wave conditions were observed in some pockets over West Rajasthan. ♦ Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hrs IST today): at a few places over Madhya Maharashtra; at isolated places West Rajasthan, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Marathwada, Chhattisgarh, Konkan & Goa, Jharkhand, Odisha, Bihar, West Bengal & Sikkim, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, and Coastal Karnataka.
- Maximum Temperature Departures as on 30-05-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan, & Muzaffarabad, West Rajasthan and Assam & Meghalaya; at a few places over Coastal Andhra Pradesh & Yanam and at isolated places over Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at most places over East Uttar Pradesh and Jharkhand; at many places over Bihar, Marathwada and North Interior Karnataka; at a few places over East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over Punjab & West Uttar Pradesh; at many places over Uttrakhand, East Rajasthan, West Madhya Pradesh, Madhya Maharashtra and Telangana; at a few places Haryana, Chandigarh & Delhi, Gujarat region, Odisha and Andaman & Nicobar Islands; at isolated places over Himachal Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.5°C was reported at Churu (West Rajasthan) over the country.
- Minimum Temperature Departures as on 30-05-2021: Minimum temperatures were markedly above normal (5.1°C or more) at isolated places over Saurashtra & Kutch and West Rajastha; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, Chhattisgarh and Lakshadweep; at a few places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, and Odisha; at isolated places over and Coastal Andhra

Pradesh & Yanam and East Rajasthan . They were markedly below normal (-5.1°C or less) at most places over Gujarat Region and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Punjab and at isolated places over East Uttar Pradesh; below normal (- 1.6°C to -3.0°C) at many places over Uttarakhand and Telangana; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha and South Interior Karnataka and at isolated places over Andaman & Nicobar Islands, West Uttar Pradesh, Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and near normal over rest of the country. Yesterday, the lowest minimum temperature of 19.5°C was reported at Chapra (Bihar) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 31 May (Day 1): Thunderstorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Madhya Maharashtra, Marathwada, Konkan & Goa, Telangana and Kerala & Mahe and with lightning at isolated places over Himachal Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over West Rajasthan. Heavy to Very Heavy Rainfall at isolated places very likely over Assam & Meghalaya and Heavy Rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) very likely over Eastcentral, Northwest, Southwest Arabian Sea, Comorin area and Southeast Arabian Sea off Kerala coast. Fishermen are advised not to venture into these areas.
- 01 June (Day 2): Thunderstorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, Marathwada, Telangana and Kerala & Mahe and with lightning at isolated places over Himachal Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar, Gangetic West

Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over West Rajasthan. Heavy to Very Heavy Rainfall at isolated places very likely over Assam & Meghalaya and Heavy Rainfall at isolated places over Uttarakhand, SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) very likely over Northwest & Southwest Arabian Sea. Fishermen are advised not to venture into these areas.

- 02 June (Day 3): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Telangana and Kerala & Mahe and with lightning at isolated places over Himachal Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall at isolated places likely over Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) likely over Northwest & Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 03 June (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over East Rajasthan, Jharkhand, Telangana and Kerala & Mahe and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall at isolated places likely over Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) likely over Northwest & Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 04 June (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over East Rajasthan, Jharkhand, Telangana and

Kerala & Mahe and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over West Rajasthan. Heavy Rainfall at isolated places likely over Assam & Meghalaya and Kerala & Mahe. Squally Weather (wind speed 40-50 kmph) likely over Northwest & Southwest Arabian Sea. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 31 May to 08 Jun 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 25.0 to 31.2 °C and 14.2 to 18.4 °C which was below normal by 0.6 to 4.3 °C and 0.7 to 4.5 °C, respectively. 8.4 mm rainfall was received during the week against the normal of 18.7 mm. The relative humidity varied between 23-69 % and sunshine hours between 3.0-12.0 hrs/day with variable sky conditions (Octa 0-7). The evaporation rate varied 2.2-9.0 mm per day.

Contingency measure:

- Kharif Crops: Do deep ploughing of fields after harvesting of rabi crops. It helps in destroying the eggs and pupating stages of insects and weed seeds. After harvesting of rabi crops farmers are advised to test their soil from certified agencies and to do laser leveling in their field if required.
- Rice Nursery: Time for sowing of Paddy nursery and ensure proper soil moisture before nursery sowing and treat the seed before nursery sowing with bavistin @2.5 gm per kg of seed.
- Maize: Maize sowing is approaching also make arrangement for seed and herbicide for weed control.
- Pulses: Advised to inter-cultural operation and weed free in moong and mash in irrigated areas advised. In rain fed region ensure proper moisture.
- Fodder Crops: Advised to sowing of fodder maize alongwith cowpeas and soybean in irrigated areas. Directed to spray glyphosate 1% solutions in the grasslands/pastures having lantana bushes with 2-3 leaves stage. For Ageratum,

erigeron, bidens and parthenium in grasslands, spray 2- 4-D @ 60 ml in 30 litre of water in one kanal. Ensure spray during morning and evening in low wind conditions. Avoid spray near to crop lands where crop ready for harvest. In mid hill regions one cut of berseem can be taken.

- Vegetable Crops: High temperature expected, farmers are advised for harvesting of mature vegetables at morning and evening and after harvesting of crops keep it in the shade .If no rains are received light and frequent irrigation in morning and evening other wise lead to poor pollination and thus drop in yield of the crop.
- Okra & Frenchbean: Sowing of early crop of ladies finger advised. Seed rates should be 10-15 kilogram per acre. Optimum soil moisture level should be maintained in cucurbitaceous crops as dry conditions may lead to poor pollination and thus drop in yield of the crop. Advised sowing of frenchbean in the field. Monitor of lady finger crop against attack of mite is advised. Sowing of spinach, coriander, fenugreek may be done in present weather conditions.
- Poly House Agriculture: It is optimum time for nursery sowing of Tomato, Brinjal, chillies and capsicum crops in poly house.Cucurbits plantation may be done in polytubes under the polyhouse.. For control of mites in polyhouse spray 10ml Prorazite 57 EC or Spiromeciphen 22.9 SC 10litres of water.Donot harvest vegetable atleast for seven days of the spray. Sowing of green coriander, raddish & turnip.
- Tea: Advised picking in tea at 8-9 days interval to maintain the quality and productivity. Monitor for mites and Milli bug in the orchards, for control of milli bug spray recommended chemicals.
- Livestock: To protect animals from high temp stress splash water on their body 2-3 times a day. Milk the animals during 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.
- Poultry: To protect animals from high temp stress splash water on their body 2-3 times a day. Milk the animals during 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: Mango plant hopper expected , for control spray, recommended chemicals. Apply alkathene or sticky grease band 15-20 cm wide on mango plants to control upward movement of mango mealy bug.
- Agro Forestry: Optimum time for sowing of seeds of babul, subabul, khair, amla and prosopis in polythene bags for raising nursery. The saplings of eucalyptus and bamboo may be transfer to polythene bags.

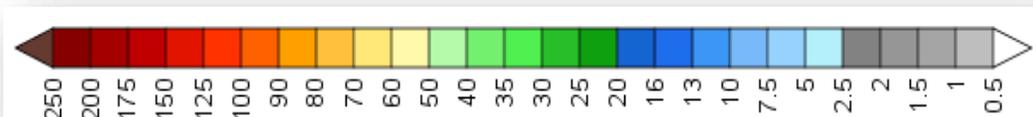
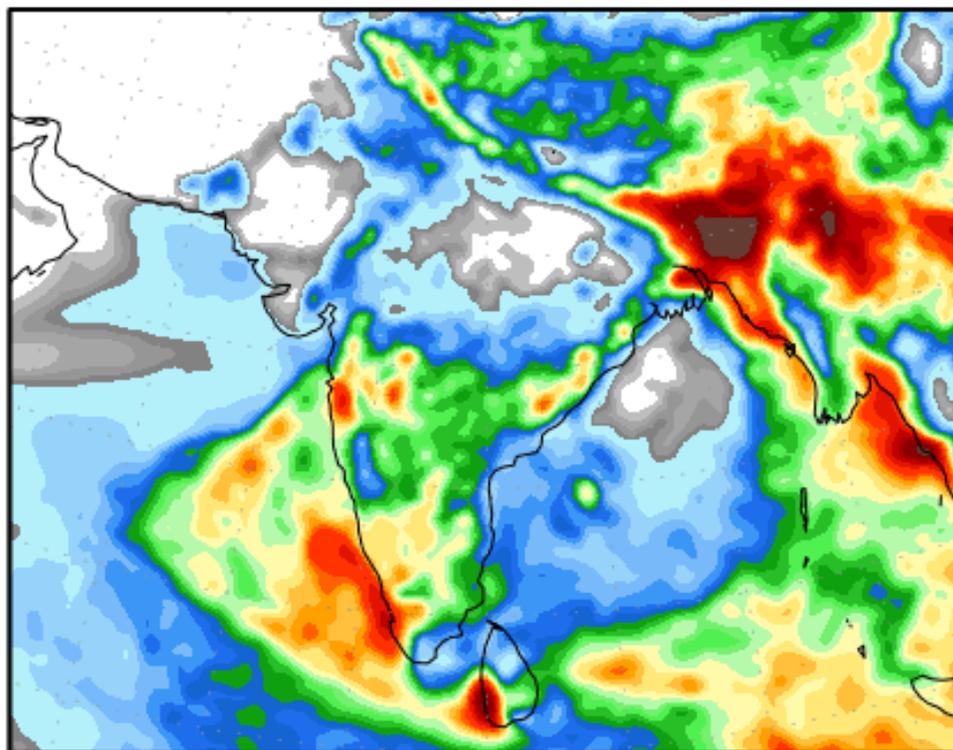


Figure:2. Precipitation forecast for 31 May to 08 Jun 2021 (Source: NOAA NCEP).

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