

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 22 July 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A Low Pressure Area lies over Northwest Bay of Bengal & neighbourhood. It is likely to move west-northwestwards along the monsoon trough during next 2-3 days. Under its influence, fairly Widespread to widespread rainfall with isolated heavy to very heavy falls very likely over east and adjoining central India during 22nd-24th July with reduction thereafter. Isolated extremely heavy falls also likely over Telangana, south Chhattisgarh and Vidarbha on today, the 22nd July, 2021.
- An off-shore trough at mean sea level runs from south Gujarat coast to Kerala coast. It is likely to persist during next 2-3 days. Under its influence, fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely to continue over west coast during next 2-3 days with reduction thereafter. Isolated extremely heavy falls also very likely over Konkan & Goa & adjoining Ghat areas of Madhya Maharashtra and Coastal Karnataka on today, the 22nd July.
- The western end of monsoon trough at mean sea level has moved slightly southward but still runs north of its normal position. It is likely to shift to the normal position during next 3 days. Its eastern end now runs south of its normal position dipping to eastcentral Bay of Bengal. Under its influence, fairly widespread to widespread rainfall with isolated heavy falls very likely over Himachal Pradesh and Uttarakhand on 22nd and 23rd and enhanced rainfall activity with isolated heavy to very heavy falls on 25th and 26th July over these areas. Scattered to fairly widespread rainfall over plains of northwest India during next 3 days with enhanced rainfall activity thereafter with isolated heavy to very heavy falls over Uttar Pradesh on 25th & 26th July.
- Increase in rainfall activity over northeast India likely from 26th July onwards with fairly widespread to widespread rainfall with isolated heavy to very heavy falls over these areas
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands,, Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Telangana, Karnataka, Coastal Andhra Pradesh & Yanam, Rayalseema, Kerala & Mahe, Sub-Himalayan West Bengal & Sikkim and Odisha; at many places over Lakshadweep, Himachal Pradesh, Uttar Pradesh, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; at a few places over West Madhya Pradesh, Punjab, Haryana, Chandigarh & Delhi, Gangetic West Bengal, Gujarat region, Arunachal Pradesh and at isolated places over Rajasthan, Saurashtra & Kutch and Tamilnadu, Puducherry & Karaikal.
- Heavy Rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over East Uttar Pradesh, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra and Telangana; Very Heavy Rainfall at isolated places over Uttarakhand, Gujarat Region, Tamilnadu, Puducherry & Karaikal, Vidarbha and Coastal Karnataka and Heavy Rainfall at isolated places over Himachal Pradesh, Chhattisgarh, West Uttar Pradesh, East Rajasthan, Marathawada, Assam & Meghalaya, Odisha, Kerala & Mahe and Coastal Andhra Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Rajasthan, Vidarbha, Bihar, Jharkhand, Odisha, East Uttar Pradesh, Konkan & Goa, Madhya Maharashtra, East Madhya Pradesh, Chhattisgarh and Gangetic West Bengal.
- Maximum Temperature Departures as on 21-07-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya and at isolated places over Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; above normal (1.6°C to 3.1°C) at isolated places over East Rajasthan, Saurashtra & Kutch, Odisha, Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Telangana and Coastal Andhra Pradesh & Yanam and at isolated places over West Uttar Pradesh and North Interior Karnataka; appreciably below normal (-3.1°C to -5.0°C) at most places over Vidarbha and Rayalaseema and at isolated places over Uttarakhand, Marathwada and South Interior Karnataka; below normal (-1.6°C to -3.0°C) at many places over East Uttar Pradesh, Konkan & Goa, Madhya Maharashtra and

Chhattisgarh; at a few places over Odisha and at isolated places over Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.3°C was reported at Churu (West Rajasthan).

- Minimum Temperature Departures as on 22-07-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over East Rajasthan and West Madhya Pradesh; at a few places over Sub-Himalayan West Bengal & Sikkim and Saurashtra & Kutch. They are below normal (-1.6°C to -3.0°C) at most places over Telangana and Coastal Andhra Pradesh & Yanam; at a few places over Coastal Karnataka; at isolated places over Jammu, Kashmir, West Rajasthan, East Uttar Pradesh, East Madhya Pradesh and Madhya Maharashtra and near normal over rest parts of the country

Weather Warning during the next 5 days (IMD)

- 22 July (Day 1): Heavy to Very Heavy Rainfall at a few places with Extremely Heavy Falls very likely at isolated places over Telangana; Heavy to Very Heavy Rainfall with Extremely heavy falls at isolated places over Vidarbha, Chhattisgarh, Konkan & Goa, Ghat Areas of Madhya Maharashtra and Coastal Karnataka; Heavy to Very Heavy Rainfall at isolated places over Madhya Pradesh, Odisha, Marathwada, Coastal Andhra Pradesh & Yanam, Interior Karnataka and Kerala & Mahe. and Heavy rainfall at isolated places over Himachal Pradesh, Uttarkhand, Uttar Pradesh, East Rajasthan, Jharkhand, West Bengal & Sikkim, Gujarat Region, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & squall (speed 50-60 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed 30-40 kmph) at isolated places over Telangana and with lightning at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Rayalaseema. Strong winds (speed 50-60 kmph gusting to 70 kmph) very likely along & off Maharashtra-Goa coasts and Southeast Bay of Bengal; (speed 40-50 kmph gusting to 60 kmph) over Southwest & Westcentral Arabian Sea; North Arabian Sea and along & off Gujarat coast; Southeast Arabian Sea and along & off Karnataka-Kerala coasts & Lakshadweep area; Southwest & adjoining Central Bay of Bengal & Andaman Sea and Andhra Pradesh coast. Fishermen are advised not to venture into these areas.
- 23 July (Day 2): Heavy to Very Heavy Rainfall very likely at a few places over Konkan & Goa; Heavy to Very Heavy Rainfall at isolated places over Madhya

Pradesh, Vidarbha, Chhattisgarh, Odisha, Ghat Areas of Madhya Maharashtra, Telangana, Coastal & South Interior Karnataka and Kerala & Mahe and Heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Gujarat region, Marathwada, Coastal Andhra Pradesh & Yanam, North Interior Karnataka Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty wind (speed 30-40 kmph) very likely at isolated places over Telangana and with lightning at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Rayalaseema. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian Sea; North Arabian Sea and along & off Gujarat Maharashtra-Goa coasts; Southeast Arabian Sea and along & off Karnataka-Kerala coasts & Lakshadweep area; North Arabian Sea and along & off West Bengal and Odisha coasts; South & adjoining Central Bay of Bengal & Andaman Sea and south Tamilnadu & Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.

- 24 July (Day 3): Heavy to Very Heavy Rainfall very likely at isolated places over West Madhya Pradesh, Gujarat region and Konkan & Goa and Heavy rainfall at isolated places over West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Odisha, Saurashtra & Kutch, Ghat areas of Madhya Maharashtra, Telangana, Coastal & South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, West Rajasthan and Telangana. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian Sea; North Arabian Sea and along & off Gujarat Maharashtra-Goa coasts; Southeast Arabian Sea and along & off Karnataka-Kerala coasts & Lakshadweep area; North Arabian Sea and along & off West Bengal and Odisha coasts; South & adjoining Central Bay of Bengal & Andaman Sea and south Tamilnadu & Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- 25 July (Day 4): Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand, West Uttar Pradesh, Gujarat state and Konkan & Goa and Heavy rainfall at isolated places over Himachal Pradesh, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Ghat areas of Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Bihar and Telangana. Strong winds (speed 40-50 kmph gusting to 60

kmph) likely over Southwest & Westcentral Arabian Sea; North Arabian Sea and along & off GujaratMaharashtra-Goa coasts; Southeast Arabian Sea and along & off Karnataka-Kerala coasts & Lakshadweep area; North Arabian Sea and along & off West Bengal and Odisha coasts; South & adjoining Central Bay of Bengal & Andaman Sea and south Tamilnadu & Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.

- 26 July (Day 5): Heavy to Very Heavy Rainfall likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh and Assam & Meghalaya and Heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, East Madhya Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Konkan & Goa, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & squall (speed 50-60 kmph) likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Himachal Pradesh, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Bihar, Jharkhand, Gangetic West Bengal and Telangana. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian Sea; North Arabian Sea and along & off GujaratMaharashtra-Goa coasts; Southeast Arabian Sea and along & off Karnataka-Kerala coasts & Lakshadweep area; North Arabian Sea and along & off West Bengal and Odisha coasts; South & adjoining Central Bay of Bengal & Andaman Sea and south Tamilnadu & Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 22 Jul to 30 Jul 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 25.0 to 32.4 Deg C, minimum temperature ranges from 21.3 to 25.1 Deg C. Morning relative humidity ranges from 093% to 099% and afternoon relative humidity ranges from 074% to 099%. Wind speed ranges from 0.5 to 1.7 km/h. Evaporation ranges from 0.9 to 2.9 mm. Sunshine hours range from 0.0 to 5.2 hours. 5 cm morning soil temperature ranges from 23.4 to 28.1 Deg C and afternoon soil temperature ranges from 25.1 to 31.7 Deg C.

Contingency measure:

- Paddy (virippu): Tillering stage- Bacterial Leaf blight- To control and prevent Bacterial Leaf blight in paddy, dissolve 20 g of cow dung in one litre of water and spray the supernatant liquid by mixing with 20g of pseudomonas in one litre of water.
- Coconut: Management: 25 to 50 kilogram of organic manure can be applied per one matured palm during rainy season by opening the coconut basin.
- Banana: Blast and pitting disease- Ensure drainage facilities in low land banana plantations. Appearance of small sunken brown spots on matured fruits is the symptom of blast and pitting disease. To prevent the disease, cut and remove dried leaves from the garden and protect the bunches with bunch cover. If the disease is occurring regularly and bunch maturing coincides with rainy season, spray fungicide like azoxystrobin 0.5 milli litre or tebuconazole + trifloxystrobin (Nativo) 0.5 gram per litre of water within one month of bunch emergence. Nutmeg- Leaf fall- As a precautionary measure to manage leaf fall during rainy season, spray 1% bordeaux mixture.
- Ginger and Turmeric- Soft 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 soft rot in ginger and turmeric.
- Cucurbitaceous Vegetables: Downy mildew- Due to high relative humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. Spray 2.5gm Mancozeb per one litre of water under the leaves. Vegetables (Cowpea & chilly)- Anthracnose disease- During rainy season, there is a chance of Anthracnose disease in Cowpea and chilly. As a prophylactic measure, apply 1% Bordeaux mixture or spray pseudomonas 20 gm per litre.
- Animal Husbandry- Don't allow the animals to water logged areas to avoid foot lesions.(caadeccs, kvasu, Mannuthy)

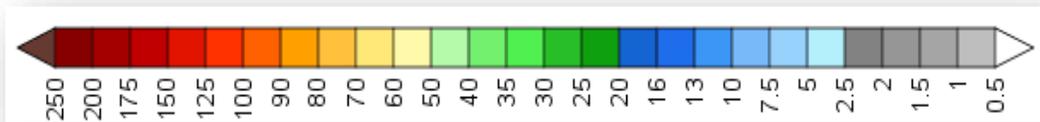
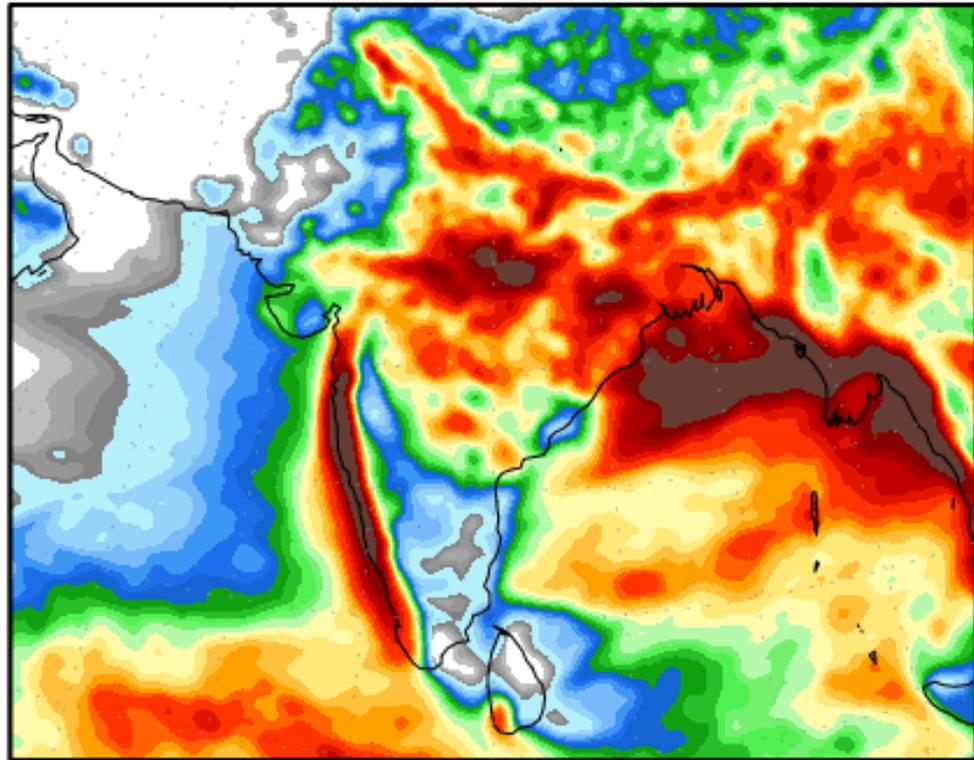


Figure:2. Precipitation forecast for 22 Jul to 30 Jul 2021 (Source: NOAA NCEP).

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