

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 12 May 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Heat wave warnings
- i) Heat Wave at most places with severe heat wave conditions at isolated places likely over West Rajasthan during 12th to 14th and heat wave conditions at most places on 15th & 16th May, 2022.
- ii) Heat Wave at isolated/at a few places likely over East Rajasthan & West Madhya Pradesh during 12th to 16th May, 2022. iii) Heat Wave at isolated likely over Gujarat State, Jammu & Kashmir on 12th & 13th; West Uttar Pradesh during 14th-16th; south Haryana-Delhi, south Punjab during 12th-16th; East Madhya Pradesh & Vidarbha during 13th to 16th May, 2022.
- The Deep Depression (remnant of cyclonic storm 'ASANI') over coastal Andhra Pradesh remained practically stationary during last 6 hours and weakened into a Depression over the same region and lay centred at 0530 hours IST of today, the 12th May, 2022 near latitude 16.2°N and longitude 80.9°E, close to West of Machilipatnam. It is likely to hover around the same region and weaken further into a Well Marked Low Pressure Area during next 12 hours. Warnings associated with Cyclonic Storm 'Asani':

(i) Rainfall warning

12th May: Light to moderate rainfall at many places with heavy rainfall at isolated places is likely over coastal Andhra Pradesh and Rayalaseema. Light to moderate rainfall at a few places over coastal areas of Odisha and West Bengal.

- (ii) Fishermen Warning
 - Total suspension of fishing operations over Westcentral Bay of Bengal and over northwest Bay of Bengal during next 12 hours.
 - Fishermen are advised not to venture into Westcentral Bay of Bengal along and off Andhra Pradesh and Odisha coasts and Northwest Bay of Bengal on 12th May.

Rainfall/thunderstorm Forecast & Warnings

- i) Widespread light/moderate rainfall with thunderstorm/lightning/gusty winds with heavy to very heavy rainfall very likely over Northeast India during next 5 days.

- Fairly widespread light/moderate rainfall likely over Kerala-Mahe & Lakshadweep with isolated heavy falls over KeralaMahe during next 5 days.
- Widespread light/moderate rainfall likely over Coastal Andhra Pradesh and Rayalaseema with heavy to very heavy rainfall over Rayalaseema on today and significant decrease in intensity & distribution thereafter.
- Isolated to scattered rainfall likely over Telangana, Coastal & Interior Karnataka, Tamilnadu, Puducherry, Karaikal during next 5 days.
- Isolated thunderstorm/lightning/gusty winds over Kerala-Mahe during next 5 days.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830-1730 hours IST of yesterday): at most places over Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh and Rayalaseema; at many places over Chhattisgarh and Kerala & Mahe; at a few places over Interior Karnataka and Telangana and at isolated places over Himachal Pradesh, East Uttar Pradesh, Odisha, Tamilnadu, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Yesterday, Heat Wave conditions observed at most parts of West Rajasthan; at a few places over West Madhya Pradesh and at isolated pockets over East Rajasthan.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at many places over Himachal Pradesh, Gangetic West Bengal and Coastal Andhra Pradesh & Yanam and at isolated places over Uttarakhand, East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Odisha, Andaman Nicobar Island, Rayalaseema and Kerala & Mahe.
- Maximum Temperature Departures (as on 11-05-2022): Maximum temperatures were markedly below normal (5.1 or more) at most places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at most places over Rajasthan; at many places over Gujarat State and at a few places over Haryana, Chandigarh & Delhi and West Madhya Pradesh; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh and Punjab; at a few places over Marathwada and at isolated places over Konkan & Goa and East Madhya Pradesh. They were markedly below normal (- 5.1 or less) at most places over Coastal Andhra Pradesh & Yanam, Rayalaseema; at many places over Telangana, Karnataka; at a few places over Tamilnadu, Puducherry & Karaikal and at isolated places over Kerala & Mahe; appreciably below normal (- 3.1°C to -

5.0°C) at many places over Gangetic West Bengal and Chhattisgarh; at a few places over Odisha and at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at many places over Jharkhand; at a few places over Andaman & Nicobar Islands and at isolated places over East Uttar Pradesh and Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 46.5°C was reported at Barmer (West Rajasthan).

- Minimum Temperature Departures (as on 11-05-2022): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, Himachal Pradesh, Marathawada, at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, West Uttar Pradesh, Madhya Maharashtra; above normal (1.6°C to 3.0°C) at most places over Haryana, Chandigarh-Delhi, Vidarbha, Saurashtra-Kutch, East Uttar Pradesh, Bihar; at many places over Rajasthan, Sub-Himalayan West Bengal Sikkim, Assam & Meghalaya, Telangana; at a few places over Coastal & North Interior Karnataka, and at isolated places over Gujarat Region, Madhya Pradesh, Jharkhand, Odisha and Nagaland, Manipur, Mizoram & Tripura. They were below normal (-1.6°C to -3.0°C) at most places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 19.2°C reported at Rentachintala (Coastal Andhra Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 12 May (Day 1): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Gangetic West Bengal; gusty winds (speed 30-40 kmph) at isolated places over Chhattisgarh, Kerala-Mahe and with lightning at isolated places over Bihar, Jharkhand, Telangana, Karnataka, Tamilnadu, Puducherry & Karaikal, Assam-Meghalaya, Nagaland-Manipur-Mizoram-Tripura and Arunachal Pradesh. Heavy to very heavy rainfall at isolated places very likely over Assam-Meghalaya, Nagaland-Manipur-Mizoram-Tripura and heavy rainfall at isolated places over Coastal Andhra Pradesh, Rayalaseema, Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh and Kerala & Mahe. Heat wave conditions in most parts with severe heat wave conditions in isolated pockets very likely over West Rajasthan; Heat wave conditions in some parts over East Rajasthan and in isolated pockets over West Madhya Pradesh. Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail along & off Krishna, East & West Godavari districts of Andhra Pradesh and Yanam of Puducherry during next 12 hours. Squally wind speed

reaching 45-55 kmph gusting to 65 kmph is prevailing around the system center and adjoining westcentral Bay of Bengal during next 12 hours. Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along & off adjoining districts of coastal Andhra Pradesh during the same period. Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail off Odisha coast during next 12 hours. Sea condition is likely to be very rough to rough over westcentral & adjoining northwest Bay of Bengal during 12 hours.

- 13 May (Day 2): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Gangetic West Bengal, Kerala-Mahe and with lightning at isolated places over Bihar. Heavy to very heavy rainfall at isolated places very likely over Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Assam-Meghalaya and heavy rainfall at isolated places over Kerala & Mahe and Nagaland-Manipur-Mizoram-Tripura. Heat wave conditions in most parts with severe heat wave conditions in isolated pockets very likely over West Rajasthan; Heat wave conditions in some parts over East Rajasthan and in isolated pockets over Madhya Pradesh, Vidarbha, south Punjab and south Haryana-Delhi. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over Northeast Arabian Sea & adjoining Gujarat coast and Gulf of Mannar, Comorin area & adjoining Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 14 May (Day 3): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Kerala-Mahe and /gusty winds (speed 30-40 kmph) at isolated places over Gangetic West Bengal and Andaman & Nicobar Islands. Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Assam-Meghalaya and heavy rainfall at isolated places over Kerala & Mahe, Andaman & Nicobar Islands and Nagaland-Manipur-Mizoram-Tripura. Heat wave conditions in most parts with severe heat wave conditions in isolated pockets likely over West Rajasthan; Heat wave conditions in some parts over East Rajasthan and in isolated pockets over Madhya Pradesh, Vidarbha, southwest Uttar Pradesh, south Punjab and south Haryana-Delhi. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) likely over Northeast Arabian Sea & adjoining Gujarat coast. Fishermen are advised not to venture into these areas.
- 15 May (Day 4): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Kerala-Mahe and /gusty winds (speed 30-40 kmph) at isolated places over Andaman & Nicobar Islands. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and heavy rainfall at isolated places over Kerala & Mahe, Andaman & Nicobar Islands, Sub-

Himalayan West Bengal-Sikkim and Arunachal Pradesh,. Heat wave conditions in most parts likely over West Rajasthan; Heat wave conditions in some parts over East Rajasthan and in isolated pockets over Madhya Pradesh, Vidarbha, southwest Uttar Pradesh, south Punjab and south Haryana-Delhi. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) likely over Northeast Arabian Sea & adjoining Gujarat coast. Fishermen are advised not to venture into these areas.

- 16 May (Day 5): Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Kerala-Mahe and /gusty winds (speed 30-40 kmph) at isolated places over Andaman & Nicobar Islands. Heavy to very heavy rainfall at isolated places likely over Assam-Meghalaya and heavy rainfall at isolated places over Kerala & Mahe, Andaman & Nicobar Islands, Sub-Himalayan West Bengal-Sikkim and Arunachal Pradesh,. Heat wave conditions in most parts likely over West Rajasthan; Heat wave conditions in some parts over East Rajasthan and in isolated pockets over Madhya Pradesh, Vidarbha, southwest Uttar Pradesh, south Punjab and south Haryana-Delhi. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) likely over Northeast Arabian Sea & adjoining Gujarat coast. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 12 May to 20 May 2022 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)

Gujarat

Weather condition:

The actual maximum temperature was 0.1°C lower and actual minimum temperature was 1.9°C higher as compared to their normals. Total BSS was 73.2 hrs. with an average of 10.5 hrs. The daily average evaporation and wind speed was 8.8 mm and 5.7 km/hr respectively. The daily average RH during morning and afternoon was 84.3 % and 32.4 % respectively.

Contingency measure:

- Summer pearl millet : Irrigate the crop according to soil type and climatic conditions.
- Summer greengram : For effective control of whitefly infestation and other sucking pest infestation observed spray neem oil @ 50ml/15 liter or Imidachlopride 17.8 SL @ 5ml/15 liter or Acetamiprid 20% SP @ 3 g/15 liter. Use

10 pheromone trap per acre for management of sucking pest.

- Brinjal: Growth: Fruit and Shoot borer: If infestation found install 40 pheromone trap. Change lure at 21 day interval. And spray Diclorovos 76 EC 7 ml or Deltamethrin 1% + Triazophos 36% EC 10 ml in 10 lit water. Uproot and burn little leaf diseases infected brinjal plant and spray any systemic insecticide.
- Chilli : For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Banana : Apply irrigation at an interval of 4 to 5 days as per requirement of crop in summer season. Spraying with zinc sulphate 0.5% or ferrous sulphate 0.2% in banana crop at flowering stage for improving quality and yield.
- Mango: Reduction of high temperature effect of mango fruits can be managed by irrigating the orchard. Install nauroji fruit fly trap @ 10 trap per hector in mango orchard nearby to sapota orchard.
- Cattle: Give daily 30 to 40 g mineral mixture to animals in summer. Animal shelter should be well ventilated in summer. If the roof is made of iron or sheet, paint the top surface of roof with white color or make layer of dry fodder on the roof, which can reduce the direct heating to animals. Bathing animals two to three times in a day especially at noon hours during summer for protect them from heat and maintain milk production. Give cool and clean drinking water thrice in a day.



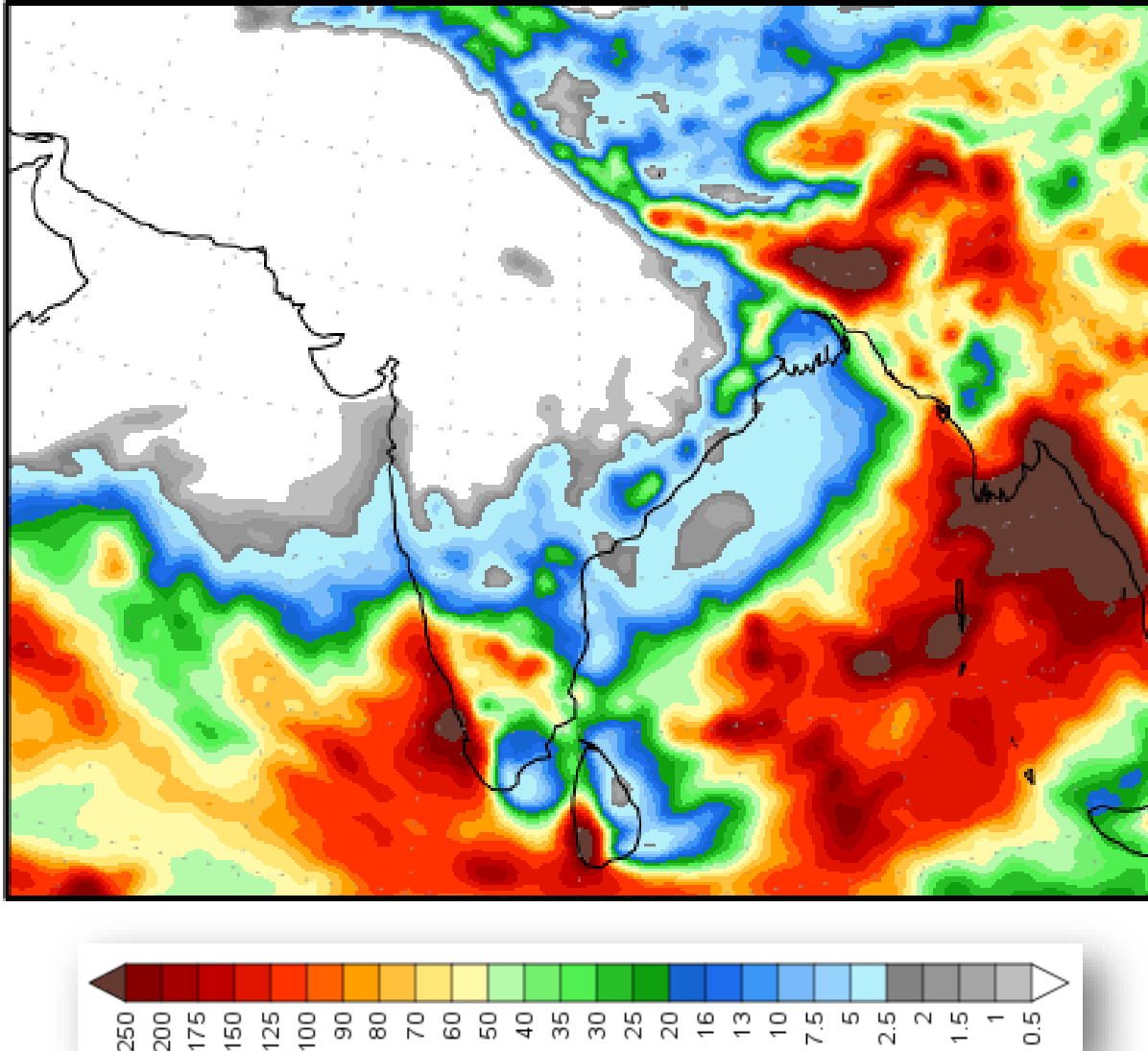


Figure:2. Precipitation forecast for 12 May to 20 May 2022 (Source: NOAA NCEP).

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