

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

Daily Crop Weather Information as on 22 May 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Southwest Monsoon has further advanced into some more parts of Southwest Bay of Bengal; most parts of Southeast Bay of Bengal; some parts of Eastcentral Bay of Bengal and entire Andaman Sea and Andaman & Nicobar Islands today, the 22nd May, 2021. The northern limit of Southwest Monsoon now passes through 5°N/80°E, 10°N/85°E, 13°N/90°E and 16°N/94.5°E.
- Under the influence of the cyclonic circulation over Southeast & adjoining Central Bay of Bengal, a Low Pressure Area has formed over Eastcentral Bay of Bengal with associated cyclonic circulation extending upto mid tropospheric levels. It is very likely to concentrate into a Depression over Eastcentral Bay of Bengal by tomorrow, the 23rd May morning. It is very likely to move north-northwestwards, intensify into a Cyclonic Storm by 24th May and further into a Very Severe Cyclonic Storm during subsequent 24 hours. It would continue to move north-northwestwards, intensify further and reach north Bay of Bengal near West Bengal and adjoining north Odisha & Bangladesh coasts around 26th May morning. It is very likely to cross West Bengal and adjoining north Odisha & Bangladesh coasts around evening of 26th May, 2021. Under the influence of the above system: (i) Rainfall Warning: Isolated heavy to very heavy rainfall likely over Odisha on 25th and Jharkhand & Sub-Himalayan West Bengal & Sikkim on 26th; isolated heavy to very heavy rainfall with extremely falls over Odisha on 26th and Gangetic West Bengal on 25th & 26th May, 2021. (ii) Fishermen Warning: The fishermen are advised not to venture into southeast & eastcentral Bay of Bengal, Andaman Sea and along & off Andaman & Nicobar Islands during 22nd-24th May; into central Bay of Bengal from 23rd- 25th May and into north Bay of Bengal and along & off West Bengal - Odisha - Bangladesh coasts from 24th - 26th May. Those who are out in the Deep Sea are advised to return to the coast by 23rd May.
- A Western disturbance as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along longitude 72°E to the north of latitude 27°N. Under its influence, thunderstorm and lightning

accompanied with isolated rainfall likely over Western Himalayan Region and plains of Northwest India during next 24 hours and weather likely to remain dry over the region thereafter.

- Strong surface winds (30-40 kmph) likely over Uttar Pradesh during 24th & 25th May, 2021.
- 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, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Lakshadweep; at many places over Haryana, Chandigarh & Delhi, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Karnataka; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Bihar, Jharkhand, Gangetic West Bengal, Odisha and Tamil Nadu, Puducherry & Karaikal and at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Marathwada and Telangana.
- Heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places over North Interior Karnataka and heavy rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Thunderstorm/Hailstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Thunderstorm at a few places over Haryana, Chandigarh & Delhi, Bihar, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema and Jharkhand and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Rajasthan, East Uttar Pradesh, Odisha, Chattisgarh, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Tripura, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Hailstorm at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and West Rajasthan.
- Maximum Temperature Departures as on 21-05-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at many places over Assam & Meghalaya and Gangetic West Bengal. They were markedly below normal (-5.1°C or less) at most

places over Haryana, Chandigarh & Delhi and Uttar Pradesh; at many places over Bihar; at a few places over Arunachal Pradesh, East Madhya Pradesh and Rayalaseema, Andaman & Nicobar Islands and Vidarbha and at isolated places over Punjab and West Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Uttarakhand; at many places over East Rajasthan & Chhattisgarh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Vidarbha and Tamil Nadu, Puducherry & Karaikal; at isolated places over South Interior Karnataka; below normal (-1.6°C to -3.0°C) at many places over Kerala & Mahe, Lakshadweep, North Interior Karnataka, Odisha, Gujarat Region; at a few places over Sub-Himalayan West & Sikkim and Coastal Andhra Pradesh & Yanam and at isolated places over Saurashtra & Kutch, Madhya Maharashtra, Assam & Meghalaya and Coastal Karnataka and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.6°C was reported at Chandrapur (Vidarbha) over the plains of the country.

- Minimum Temperature Departures as on 22-05-2021: Minimum temperatures are over above normal (1.6°C to 3.0°C) at a few places over West Bengal & Sikkim; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Saurashtra & Kutch. They are markedly below normal (-5.1°C or less) at many places over Haryana, Chandigarh & Delhi; at a few place over East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over Rayalaseema; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh and Coastal Andhra Pradesh & Yanam; at a few places over East Madhya Pradesh and Telangana; at isolated place over West Madhya Pradesh, West Rajasthan, Vidarbha, Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at many places over East Uttar Pradesh; at a few places over Himachal Pradesh, Chhattisgarh and Coastal & South Interior Karnataka; at isolated places over Uttarakhand, Bihar, Jharkhand, Gujarat Region and Kerala & Mahe and near normal over rest of the country. Today, the lowest minimum temperature of 17.5°C is reported at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 22 May (Day 1): Thunderstorm with lightning & squall (speed reaching 50-60 kmph gusting 70 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over East Rajasthan; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Gangetic West Bengal, Coastal Andhra

Pradesh & Yanam, Telangana, Rayalaseema and Kerala & Mahe and with lightning at isolated places over Vidarbha, Chhattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thundersquall/Duststorm (wind speed reaching 50-60 kmph) very likely at isolated places over West Rajasthan. Heavy to Very Heavy Rainfall at isolated places very likely over Andaman & Nicobar Islands and Heavy Rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka and Kerala & Mahe. Squally wind (speed reaching 50-60 kmph gusting to 70 kmph) very likely to prevail over and around Andaman & Nicobar Islands, Andaman Sea & adjoining eastcentral and southeast Bay of Bengal. Sea Conditions will be rough to very rough over Andaman Sea & adjoining eastcentral Bay of Bengal. Fishermen are advised not to venture into these areas. Tidal waves (of height 1-2 m) very likely to inundate low lying areas of Andaman & Nicobar Islands.

- 23 May (Day 2): Thunderstorm with lightning & squall (speed reaching 40-50 kmph gusting to 70 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West Rajasthan, Sub-Himalayan West Bengal and Kerala & Mahe and with lightning at isolated places over East Rajasthan, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall at isolated places very likely over Andaman & Nicobar Islands and Kerala & Mahe. Squally wind (speed reaching 55-65 kmph gusting to 75 kmph) very likely to prevail over eastcentral Bay of Bengal and adjoining north Andaman Sea. Sea Conditions will be rough to very rough over Andaman Sea & adjoining eastcentral Bay of Bengal. Fishermen are advised not to venture into these areas. Tidal waves (of height 1-2 m) very likely to inundate low lying areas of Andaman & Nicobar Islands.
- 24 May (Day 3): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe and with lightning at isolated places over Bihar, Odisha, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall at isolated places very likely over Andaman & Nicobar Islands and Kerala & Mahe. Gale wind (speed reaching 65-75 kmph gusting to 85 kmph) very likely to prevail over major parts

of central Bay of Bengal; Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) very likely over north Bay of Bengal and along & off Odisha-West Bengal-Bangladesh coasts. Sea Conditions will be High to Very High over major parts of central Bay of Bengal, north Bay of Bengal and along & off Odisha-West Bengal-Bangladesh coast. Fishermen are advised not to venture into these areas.

- 25 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Jharkhand; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands and Kerala & Mahe and with lightning at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Coastal & South Interior Karnataka and Lakshadweep. Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places likely over Gangetic West Bengal; Heavy to Very Heavy Rainfall at isolated places over Odisha and Kerala & Mahe and Heavy Rainfall at isolated places over Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Gale wind (speed reaching 65-75 kmph gusting to 85 kmph) very likely to prevail over major parts of central Bay of Bengal; Squally wind (speed reaching 50-60 kmph gusting to 70 kmph) very likely over north Bay of Bengal and along & off Odisha-West Bengal-Bangladesh coasts. Sea Conditions will be High to Very High over major parts of central Bay of Bengal, north Bay of Bengal and along & off Odisha-West Bengal-Bangladesh coast. Fishermen are advised not to venture into these areas.
- 26 May (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Kerala & Mahe and with lightning at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Karnataka and Lakshadweep. Heavy to Very Heavy Rainfall at a few places with Extremely Heavy Falls at isolated places likely over Gangetic West Bengal; Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places over Odisha; Heavy to Very Heavy Rainfall at isolated places over Jharkhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and Heavy Rainfall at isolated places over Bihar and Coastal & South Interior Karnataka. Gale wind (speed reaching 60-70 kmph gusting to 80 kmph) very likely over north Bay of Bengal and along & off West Bengal & adjoining Odisha-Bangladesh coasts. Sea Conditions will be High to Very High

over major parts of central Bay of Bengal, north Bay of Bengal and along & off Odisha-West Bengal-Bangladesh coast. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 22 May to 30 May 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)

South Karnataka

Weather condition:

State actual rainfall for during 13th May 2021 to 19th May 2021 was 43.0 mm as against the normal of 18.0 mm with (+) 136 % deviation. Whereas SIK 25.0 mm of rainfall as against the normal of 23.0 mm leading to (+) 10 % deviation. State actual rainfall for during 1st January to 19th May 2021 was 172.0 mm as against the normal of 84.0 mm with (+) 104 % deviation. Whereas SIK received 150.0 mm of rainfall as against the normal of 108.0 mm leading to (+) 39 % deviation.

Contingency measure:

- Under double cropping the short duration crops of first crop are as follows:
- Sesamum : Navile-1, T-7 Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84,178
- Field bean: HA 1, 2, 3→ Seeds may be procured in advance and store for pre monsoon season sowing of Cowpea, Sesamum, Fieldbean etc. Time for application tank silt to increase soil fertility. Average Rainfall in April and May months are 36 mm and 93 mm respectively. Hence, cowpea, sesame, black gram and green gram are recommended for the sowing the above crops during May month.
- Agricultural implements and seeds may be kept ready for sowing of crops. Taken up summer plough to expose the soil to kill the different stages of insect and weeds. Krithika rainstar starts from May 11th and remains upto May 24th. The normal rainfall of Krithika rainstar is 48.6 mm. & Animals may be allow for grazing early in morning or later in evening.
- Poultry: Poultry management during summer: Average maximum temperature 33-36 oC and Average Relative Humidity→ Drinking water of 60 lts. of water/day/animal is required. Clean drinking water be provided to animals and water troughs should be regularly cleaned Proper ventilation should be maintained for free circulation of air in the sheds Periodically water spray

during peak hot hours lowers the temperature and consequently reduces the heat load on animals . Apply 4-6 inch thick thatch as a roofing material. Water can be used for spraying the floor and roof of shelter. Incidence of Leaf hopper severe to spray Azadirachtin (10,000 PPM) @ 7.0 ml/ litre of water.

- Dairy: Livestock management during summer: – Spray Lambda Cyhalothrin 5EC@ 0.5 ml/ litre of water or sulphur dust (SULTAF) 80 W @3g/litre of water against the Powdery mildew diseases.
- Mango : Leaf hopper and Powdery mildew disease incidence is more during before flowering and immediately after fruit formation to manage spraying of Carbaryl, 50WP @4g/litre of water or Imidachlorprid @ 0.3ml/ litre of water for management of leaf hopper. Fruit drop can be controlled by spraying Naphthalene acetic acid (NAA) @ 20 ppm twice at an interval of 15 days during the early stage (peanut stage/marble stage) of fruit development stage. If sufficient water is available, irrigation can be given at 15-20 days interval starting from fruit setting till maturity. Provide irrigation, as the fruits are in marble stage, this will helps for the better development of fruits. In already harvested fields the farmers are advised to remove the half cutted stubbles of pigeon pea from their fields. This will avoid multiplication and spreading of sterility mosaic disease
- Black gram: Karagao-3, T-9, Rashmi(LBG-625) < 50 % , Average Wind speed < Pedestrian fans may be used to increase air flow during low wind sunny days. Ensure proper cross ventilation to avoid ammonia accumulation Distribute feed n cooler parts of the day (early morning and in the evening hours). Water tank and lines may be covered with gunny bags to provide cool water –5 km/hr.

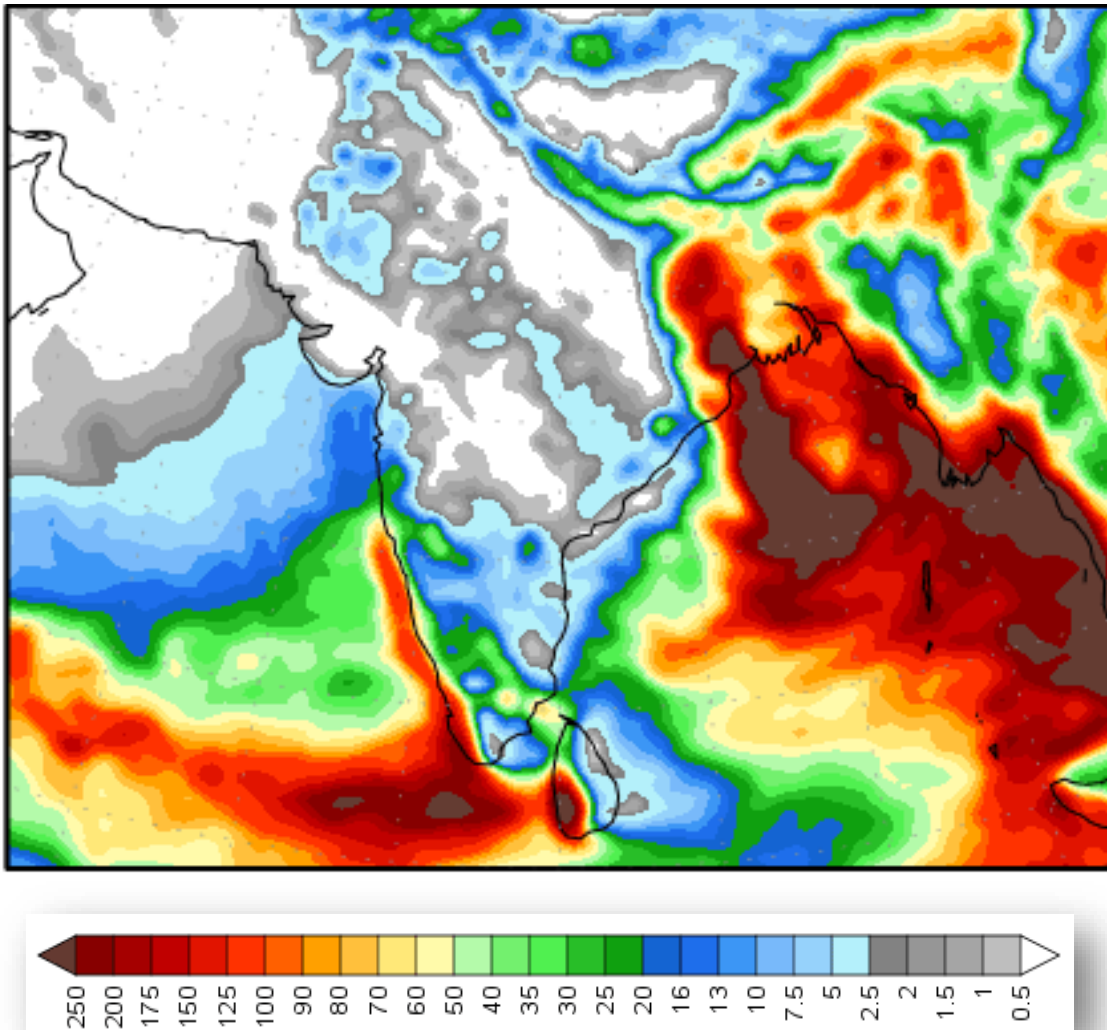


Figure:2. Precipitation forecast for 22 May to 30 May 2021 (Source: NOAA NCEP).

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