

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 07 December 2020

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Significant Weather Features (IMD)

- A cyclonic circulation lies over Gulf of Mannar and another cyclonic circulation lies over Southeast Arabian Sea & adjoining Maldives area extending upto 3.1 km above mean sea level. Under the influence of above systems, fairly widespread to widespread rainfall with isolated heavy falls and moderate thunderstorm & lightning very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep during next 24 hours.
- Under the influence of a fresh Western Disturbance, scattered to fairly widespread precipitation very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh during 07th-09th and isolated precipitation over Uttarakhand during 08th-09th December, 2020. Isolated heavy rain/snow also very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad on 08th December, 2020.
- Dense fog in isolated pockets very likely over Punjab, Uttar Pradesh, Haryana, Chandigarh & Delhi, Uttarakhand, Odisha, West Bengal, Bihar, Manipur, Mizoram & Tripura and Assam & Meghalaya during 07th & 8th December, 2020.
- 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 Tamil Nadu, Puducherry & Karaikal; and Kerala & Mahe; at many places over Rayalaseema and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Andaman & Nicobar Islands, South Interior Karnataka and Coastal Andhra Pradesh & Yanam; at a few places over Arunachal Pradesh, South Interior Karnataka and south Coastal Andhra Pradesh; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Assam & Meghalaya, Lakshadweep and Andaman & Nicobar Islands.
- Fog observed at 0830 hours IST of today: Dense to very dense fog in isolated pockets over Haryana, Chandigarh & Delhi and West Uttar Pradesh, Bihar and Sub-

Himalayan West Bengal & Sikkim and Moderate to dense fog in isolated pockets over northwest Rajasthan, East Uttar Pradesh and Gangetic West Bengal.

- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- Maximum Temperature Departures as on 06-12-2020: Maximum temperatures were markedly above normal (5.1°C & more) at a few places over Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over East Rajasthan and Jharkhand; at a few places over West Rajasthan, Gujarat and Odisha and at isolated places over Haryana, Chandigarh & Delhi, Vidarbha and Telangana; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Konkan & Goa and Chhattisgarh; at a few places over Marathawada and at isolated places over Gangetic West Bengal, Madhya Maharashtra and Kerala & Mahe. They were below normal (-1.6°C to -3.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim, Rayalaseema and Bihar and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C was reported at Karwar (Coastal Karnataka).
- Minimum Temperature Departures as on 07-12-2020: Minimum temperatures are markedly above normal (5.1°C or more) at most places over Punjab; at a few places over West Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at most places over Coastal Karnataka and Rayalaseema; at many places over Himachal Pradesh and East Rajasthan; at a few places over Madhya Pradesh and Assam & Meghalaya; at isolated places over West Uttar Pradesh, Bihar, Gangetic West Bengal, north Coastal Odisha and Saurashtra & Kutch and above normal (1.6°C to 3.0°C) at most places over East Uttar Pradesh, Interior Karnataka, south Coastal Andhra Pradesh & Yanam, Lakshadweep, Sub-Himalayan & West Bengal & Sikkim and Jharkhand; at a few places over Tamilnadu, Puduchery & Karikal and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Kerala & Mahe and Andaman & Nicobar Islands and near normal over rest parts of the country. Today, the lowest minimum temperature of 6.7°C reported at Fatehgarh (East Uttar Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 07 December (Day 1): Heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Thunderstorm with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, south Coastal Andhra Pradesh, Rayalseema, South Interior Karnataka, Kerala & Mahe and Lakshadweep. Dense fog very likely at isolated places over Punjab, Uttar Pradesh, Haryana, Chandigarh & Delhi, Uttarakhand, Odisha, West Bengal, Bihar, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- 08 December (Day 2): Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad. Thunderstorm with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, south Coastal Andhra Pradesh, Rayalseema, Kerala & Mahe and Lakshadweep. Dense fog very likely at isolated places over Punjab, Uttar Pradesh, Haryana, Chandigarh & Delhi, Uttarakhand, Bihar, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- 09 December (Day 3): Nil.
- 10 December (Day 4): Nil.
- 11 December (Day 5): Nil.
- The weather outlook for seven days i.e., 07 December to 15 December 2020 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)

Jammu

Weather condition:

Mainly clear weather prevailed during this week with 8.0 mm rainfall in one rainy day. Both maximum and minimum temperatures remains variable and remains in the range of 22.6 to 25.0 0C and 6.2 to 9.4 0C, respectively. The morning and evening relative humidity was observed in the range of 87 to 97 % and 37 to 68%, respectively. The total evaporation observed 14.0 mm and sunshine in the range of and 5.2 to 8.4 hrs during this period.

Contingency measure:

- Wheat Late sown Sowing/emergence Farmers may go for sowing of wheat varieties: (WH-1021, PBW-590, PBW-373, Raj-3077, Raj-3765 DBW-16) . Before sowing treat the

seed with carboxin/carbendazim @ 2g/kg or tebuconazole @ 1.25g/kg of seed to reduce seed borne diseases. Apply full DAP, MOP and ZnSO₄ along with 50% urea as basal dose at the time of sowing.

- Rabi pulses Chickpea Lentil Branching Sowing/germination Nipping is recommended in 3-4 week old chickpea crop. Hoeing & weeding is recommended in 20 days old crop Oilseed Gobi sarson Mustard (Early/normal sown Toria Vegetative vegetative pod formation Hoeing, weeding and thinning is recommended in 30 days old. Apply 1st dose of nitrogen fertilizer as top dressing in early sown crop. Give hoeing, weeding, thinning as well as application of 1st dose of nitrogen fertilizer as top dressing in early sown crop. Install delta sticky traps (5/kanal), if aphid attack is observed. Fodder (Berseem) Irrigated Vegetative/first Cut Apply urea as top dressing after each cut.
- Horticulture Mango/ Citrus/ Guava Young/Bearing Protect young plants from low temperature. Remove the stock sprout, suckers and water sprout from budded/grafted plants. Flood mango orchards to kill the eggs of mealy bugs. Spray 200ppm NAA against mango malformation. Mix methyl parathion dust @ 250 mg /tree to control mealy bug.
- Vegetables Onion Leafy vegetables Turnip / carrot Cole crops Potato Nursery raising vegetative/ first cut 3-4 leaves Transplanting Tuberculosis Cover All the nursery beds with straw to maintain moisture and retain heat for proper germination Give shallow hoeing to crops like spinach, coriander and fenugreek after every cut and apply urea @ 1kg/kanal. Earthing up is recommended to protect the crops from direct sunlight. Apply urea @ 1-1.5 kg/kanal during clear weather. Spray malathion/cypermethrin @ 1ml/lt water for management of saw fly. Select quality curds and knobs for seed production. Weeding and hoeing is recommended. Go for earthing-up as the crop attains height of 15-22 cm. Give first top dress of Nitrogen fertilizer. To control late blight of potato, spray prophylactic spray of Dithane M-45 @ 2.5gm/lt of water.
- To control Potato virus, uproot virus affected plants which are bushy with yellow colored cup shaped leaves and bury them Button mushroom (A bispora) Oyster mushroom Spawned bags Spawned bags Spray chlorothalonil 0.05%, if growth of competitor mould is observed. Maintain strict vigilance. Maintain temperature from 16°C to 18°C and relative humidity to 85%-90% in the cropping room. Provide proper ventilation in the cropping room. Maintain proper hygienic conditions in and around growing rooms. Get compost samples analysed for moisture, pH and presence of ammonia before spawning. Maintain proper humidity in the cropping room.

- Floriculture: Chrysanthemum Winter season annuals Rose Marigold Gladiolus Freesia Bud initiation Seedlings/flowering Post flowering Vegetative Planting/ Sprouting Planting . Stake the plants. Spray bavistin or DM-45 @ 1gm/lt or 2gm/lt respectively to keep away fungal diseases. Give hoeing to 20-25 days old crop. Pruning is recommended to remove old flowering shoots so as to enhance the growth of new shoots. Pinching of 20-30 days old crop is recommended. Do not give irrigation to sprouted corm because of sufficient moisture in soil. Planting of corms in the field is recommended.
- Sericulture: Mulberry Silkworm crop Tree plantation Post Harvest Prepare basins around mulberry trees. Remove dead wood from mulberry plants. Cocoons harvested during October should be loosely packed in muslin cloth bags. The bags should be kept in wire mesh covered racks to avoid rodent attack till marketing. Cocoon bags should be kept in well ventilated rooms to avoid dampness.
- Fisheries: Fingerling/ advanced fingerlings Apply regular supplementary feed on daily basis @ 2-3% of estimated total fish biomass in the pond. In case of appearance of algal bloom in the fish pond, farmers should not further add any manure/fertilizer/feed for some days. Remove algal bloom by the addition of fresh water in to the fish pond.
- Apiculture Give artificial sugar feeding in the ratio of 2:1. Migrate colonies to areas having floral resources (near toria/vegetable crops). Spray chloropyriphos around boxes of apiary for protection from termites or put the leg of these beehives stand in water pot
- Live stock: Dairy animals Sheep & Goat Put some bedding material like puaal etc. to keep animals warm. Do not allow animals to leave khurli early in morning directly to open area. Always offer clean water and feed them in clean khurli (mangers). Provide hay of green forage like stala, lobia, maize, jowar and bajra etc. with kadbi and other green grasses to the milch animals in order to enhance milk production and also to prevent from bloat (afara). Supplement concentrates in the diet of sheep and goat in order to acclimatize to cold condition.
- Poultry Well-insulated windows can act as a sun trap during winters. Provide good source of light and heat in poultry houses . Maintain proper hygiene should in poultry houses. *Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field

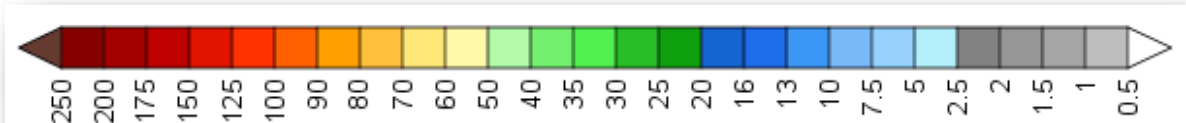
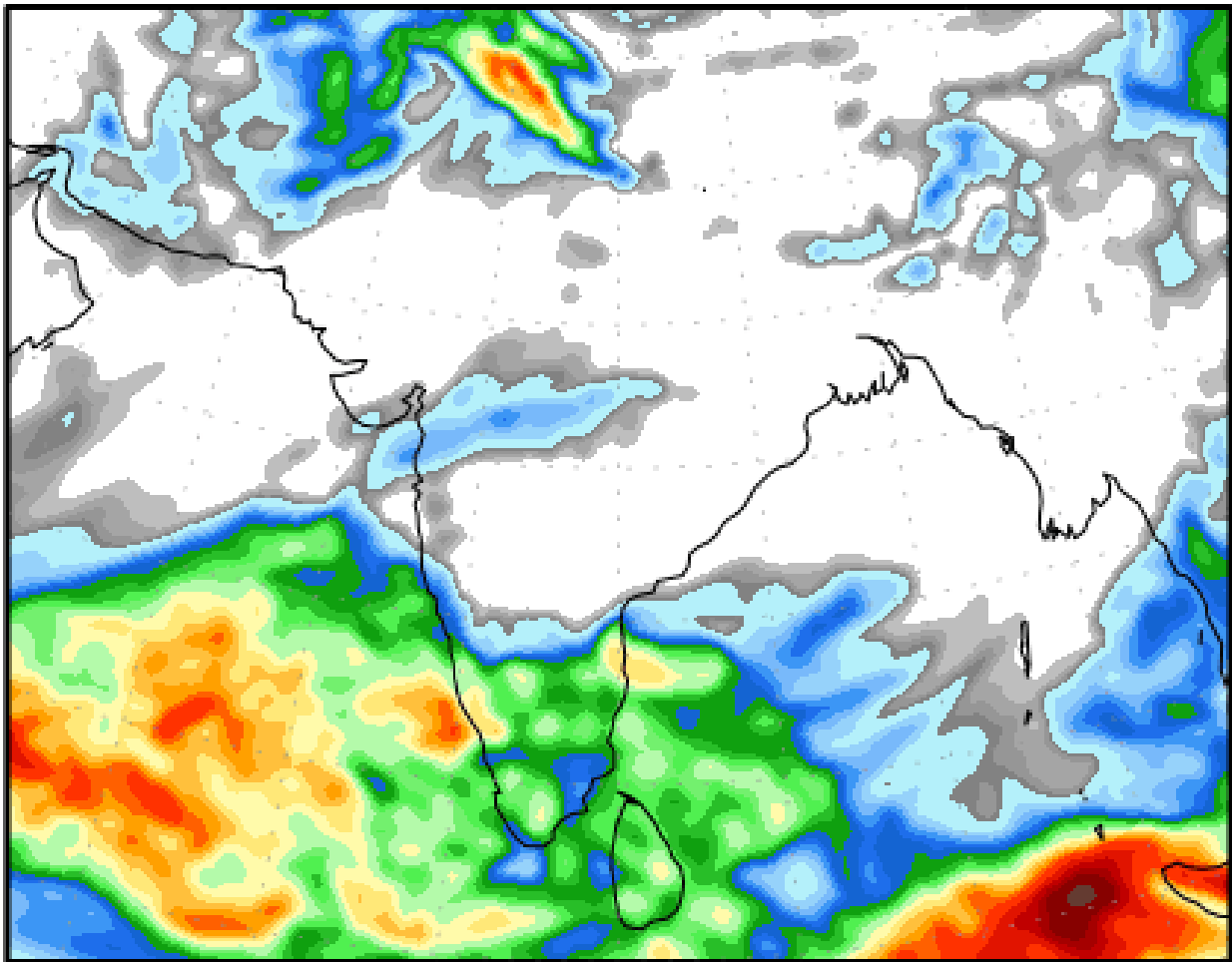


Figure:2. Precipitation forecast for 07 to 15 December 2020 (Source: NOAA NCEP).

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