

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 04 December 2020**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- The Deep Depression over Gulf of Mannar close to Ramanathapuram District coast remains practically stationary during past six hours and lay centered at 0530 hrs IST of 04th December over Gulf of Mannar near Lat. 9.1°N and Long. 78.6°E close to Ramanathapuram District coast, about 40 km southwest of Ramanathapuram, 70 km west-southwest of Pamban and 160 km northeast of Kanniyakumari. The associated wind speed is about 55-65 kmph gusting to 75 kmph. The Deep Depression is likely to move west-southwestwards and cross Ramanathapuram and adjoining Thoothukudi districts during next 06 hours with wind speed of 50-60 gusting to 70 kmph. It is very likely to weaken further into a Depression (wind speed 40-50 kmph gusting to 60 kmph) during next 12 hours.
- Under the influence of the above system:
  - i) Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places very likely over Tamil Nadu & Puducherry today, the 4th December and heavy to very heavy rainfall at isolated places on 05th December.
  - ii) Heavy to very heavy rainfall at isolated places very likely over Kerala & Mahe on 04th & 05th December.
  - iii) Heavy rainfall at isolated places very likely over south Coastal Andhra Pradesh and Rayalseema on 04th & 05th December; South Interior Karnataka on 04 December, Lakshadweep on 05th-6th December and Tamil Nadu, Puducherry and Kerala on 6th December.
- Fishermen are advised not to venture into Gulf of Mannar & adjoining southwest Bay of Bengal and along & off south Tamilnadu coast, north Sri Lanka & south Kerala coasts and LakshadweepMaldives area & adjoining southeast Arabian Sea during next 24 hours.
- The images showing the latest satellite picture in the figure. 1.

## Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at most places over Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; at many places over Kerala & Mahe; at a few places over Rayalaseema and at isolated places over Coastal Andhra Pradesh & Yanam and South Interior Karnataka.
- Heavy Rainfall recorded (from 0830 hrs IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places over Tamil Nadu, Puducherry & Karaikal and very heavy rainfall at isolated places over Andaman & Nicobar Islands.
- Fog observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): dense to very dense fog at isolated places over West Uttar Pradesh and moderate to dense at most places over Punjab; at many places over East Uttar Pradesh; at a few places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Delhi, Bihar, Sikkim and Assam & Meghalaya.
- Maximum Temperature Departures as on 03-12-2020: Maximum temperatures were markedly above normal (1.6°C to 3.0°C) at many places over West Rajasthan; at isolated places over East Rajasthan; appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Madhya Pradesh and Jharkhand; at isolated places over Vidarbha, Gujarat and Odisha; above normal (1.6°C to 3.0°C) at a few places over Himachal Pradesh, Konkan & Goa, Chhattisgarh, West Bengal & Sikkim and Assam & Meghalaya and at isolated places over Haryana, Chandigarh & Delhi, Madhya Maharashtra and West Uttar Pradesh. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Tamil Nadu, Puducherry & Karaikal; at isolated places over Rayalaseema and Kerala & Mahe; below normal (-1.6°C to -3.0°C) at a few places over Bihar; at isolated places over Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.4°C was reported at Mahuva (Saurashtra & Kutch).
- Minimum Temperature Departures as on 04-12-2020: Minimum temperatures are markedly above normal (5.0°C or more) at a few places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at a few places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Coastal & South Interior Karnataka; at many places over Uttarakhand, East Rajasthan, Rayalseema, Sub-

Himalayan West Bengal & Sikkim and Arunachal Pradesh; at a few places over Himachal Pradesh, Gujarat state and Tamil Nadu, Puducherry & Karaikal and at isolated places over Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, East Madhya Pradesh and Uttar Pradesh. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Odisha; below normal (-1.6°C to -3.0°C) at a few places over Marathwada and at isolated places over Telangana and Madhya Maharashtra and near normal over rest parts of the country. Today, the lowest minimum temperature of 6.6°C was reported at Churk (East Uttar Pradesh) over the plains of the country.

### **Weather Warning during the next 5 days (IMD)**

- 04 December (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal; heavy to very heavy rainfall at isolated places over Kerala & Mahe and heavy rainfall at isolated places over south Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands, Rayalseema and South Interior Karnataka. Thunderstorm with lightning very likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Rayalaseema, Lakshadweep, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense to very dense fog very likely at isolated places over Uttar Pradesh and Dense fog at isolated places over Odisha. Squally Winds (speed reaching 50-60 kmph gusting to 70 kmph) very likely to prevail along & off south Tamil Nadu coast (Kanniyakumari, Tirunelveli, Thoothukudi and Ramanathapuram districts) during next 12 hours and would gradually decrease to 40-50 kmph gusting to 60 kmph by night. Squally Winds (speed reaching 35-45 kmph gusting to 55 kmph) along & off south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah district) from tonight for subsequent 12 hours and over LakshadweepMaldives areas & adjoining Southeast Arabian Sea from early morning of 5th December. Sea Condition very likely to be rough to very rough over Gulf of Mannar & adjoining Southwest Bay of Bengal, along & off south Tamil Nadu & west Sri Lanka coast during next 24 hours and over Comorin area & adjoining Southeast Arabian Sea, Lakshadweep-Maldives areas and along & off Kerala coast by tonight. Fishermen are advised not to venture into these areas.
- 05 December (Day 2): Heavy to very heavy rainfall very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and heavy rainfall at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Rayalseema and Lakshadweep. Thunderstorm with lightning very likely

at isolated places over Andaman & Nicobar Islands, Lakshadweep, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense to very dense fog very likely at isolated places over Uttar Pradesh and Dense fog at isolated places over Odisha, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya. Squally Winds (speed reaching 35-45 kmph gusting to 55 kmph) over Lakshadweep-Maldives areas & adjoining Southeast Arabian Sea. Sea Condition very likely to be rough to very rough over Comorin area, Lakshadweep-Maldives areas, adjoining Southeast Arabian Sea and along & off Kerala coast. Fishermen are advised not to venture into these areas.

- 06 December (Day 3): Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Thunderstorm with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Dense to very dense fog very likely at isolated places over Uttar Pradesh and Dense fog at isolated places over Odisha, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya. Sea Condition very likely to be rough to very rough over Comorin area, Lakshadweep-Maldives areas, adjoining Southeast Arabian Sea and along & off Kerala coast. Fishermen are advised not to venture into these areas.
- 07 December (Day 4): Thunderstorm with lightning likely at isolated places over Kerala & Mahe.
- 08 December (Day 5): Heavy rainfall/snowfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Heavy rainfall at isolated places over Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Kerala & Mahe and Lakshadweep.
- The weather outlook for seven days i.e., 04 December to 12 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)**

### **Kerala**

#### **Weather condition:**

In Vellanikkara, the maximum temperature ranges from 31.2 to 33.8 Deg C, minimum temperature ranges from 21.2 to 23.8 Deg C. Morning relative humidity ranges from 066% to 095% and afternoon relative humidity ranges from 051% to 070%. Wind speed

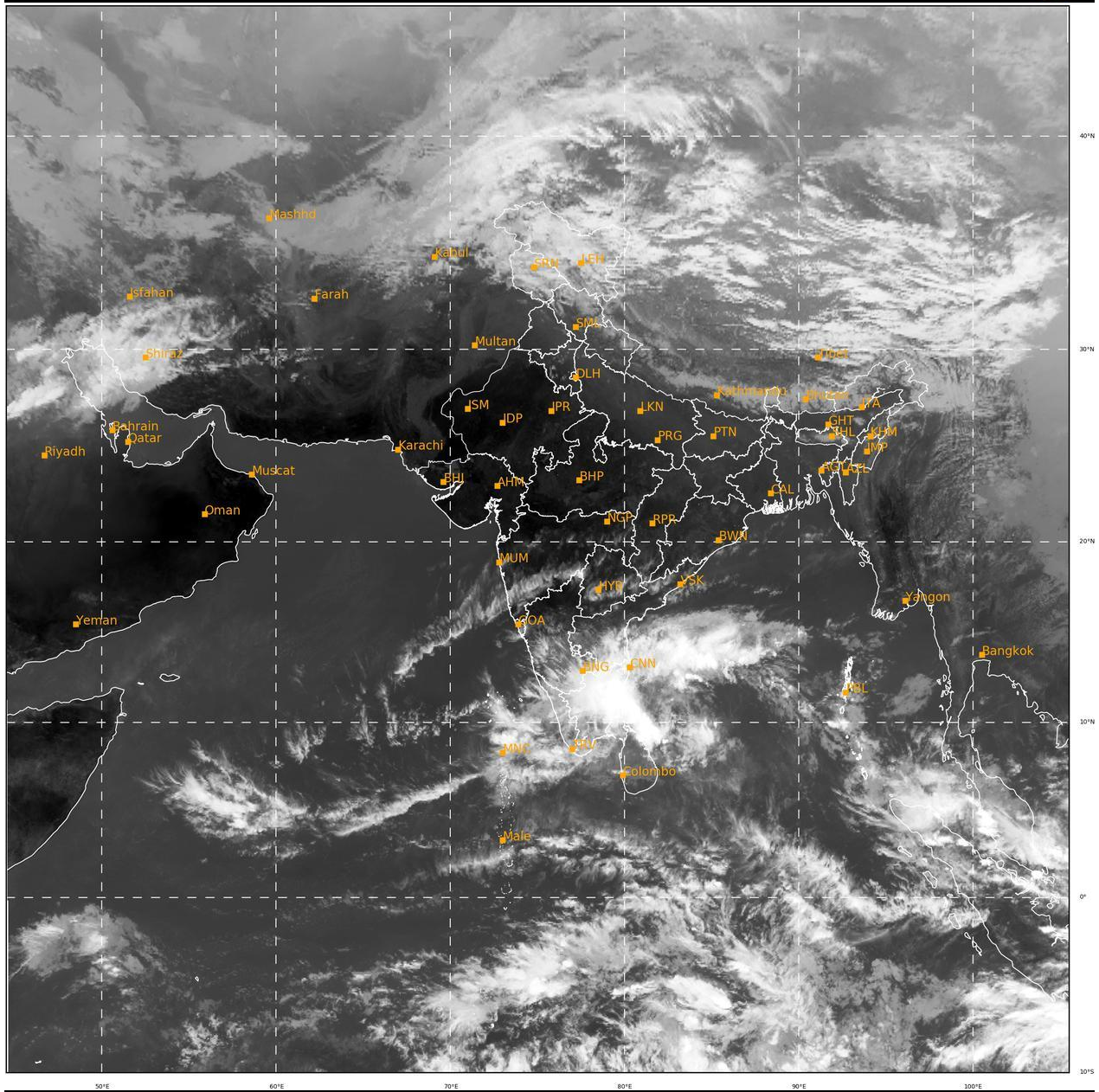
ranges from 1.0 to 8.5 km/h. Evaporation ranges from 1.8 to 6.0 mm. Sunshine hours range from 2.9 to 9.9 hours. 5cm morning soil temperature ranges from 25.1 to 26.9 Deg C and afternoon soil temperature ranges from 31.4 to 35.6 Deg C.

### Contingency measure:

- Rice(Mundakan)- Panicle initiation- Bacterial Leaf blight- As a prophylactic measure, spray 20 gram Pseudomonas in one litre of water. To control the spread of Bacterial Leaf blight in paddy, spray 6 g of Streptocycline in 30 litre of water. Leaf folder- There is a chance of leaf folder attack in mundakan Paddy. It can be controlled by using trichogramma cards (2CC per one acre). Cut the cards in to small pieces and fix in different regions of the field. If the attack is severe, spray Chlorantraniliprole @ 3ml per ten litre of water. Brown Plant Hopper (BPH)- There is a chance of Brown plant hopper attack in rice. Spray 2 g Thiamethoxam per ten litre of water. Sheath Blight- To control sheath blight disease in rice, spray 4 gram Trifloxystrobin +Tebuconazole in ten litre of water.
- Banana- Rhizome Weevil- There is a chance of Rhizome Weevil attack in banana. As a precaution apply 250 gram neem cake per pit. Propping can be followed to reduce the damage due to high wind speed.
- Tomato- White fly- There is a chance of white fly attack in tomato. Apply 2% neem oil garlic emulsion or spray 20g Lecanicillium lecanii per one litre of water in ten days intervals.
- Animal Husbandry- 1. Take precautions to avoid ecto parasitic infestation. 2. If fever, shivering, brown coloured urine, off feed etc. are noticed, consult veterinary doctor immediately.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

04-12-2020/(0800 to 0827) GMT  
04-12-2020/(1330 to 1357) IST

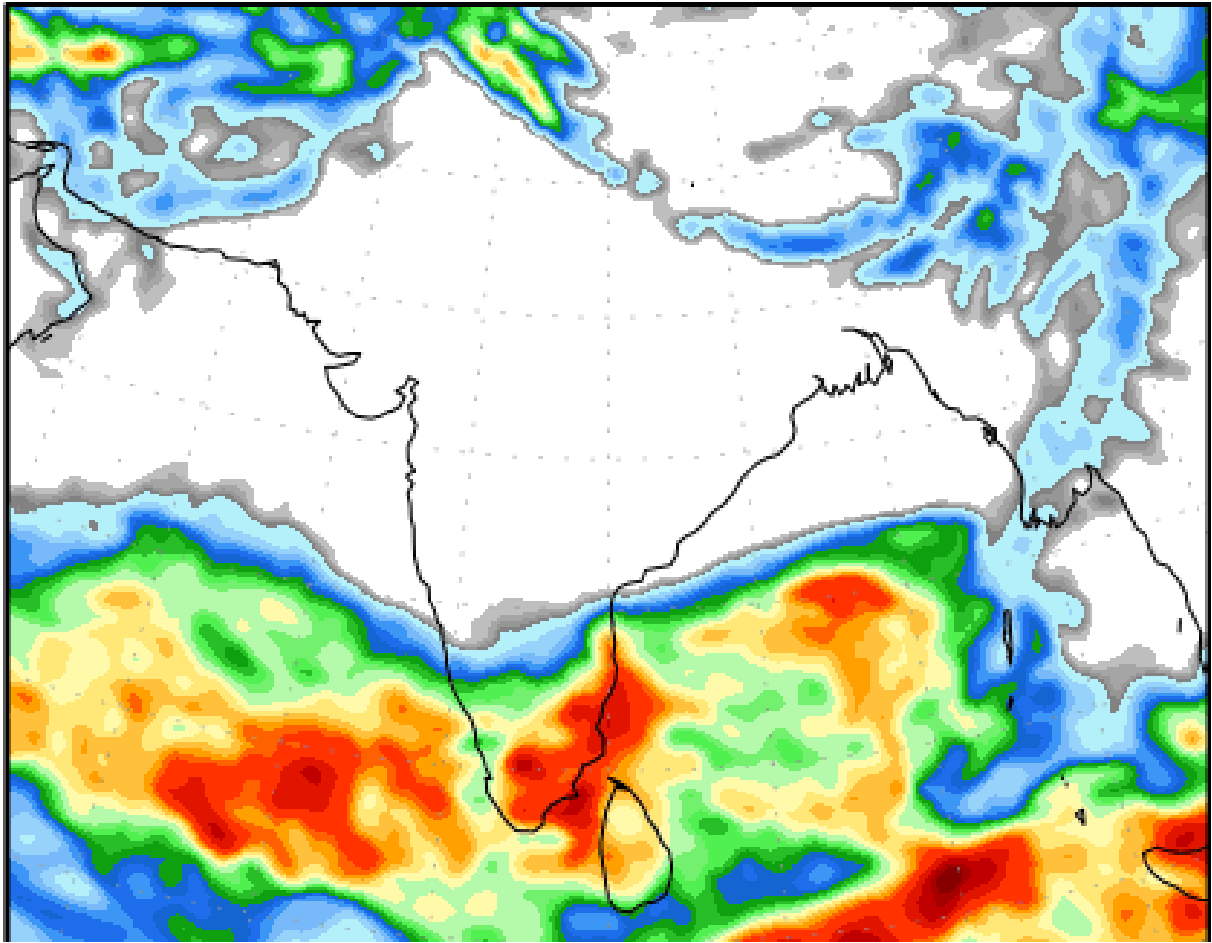


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IMD, DELHI

**Figure: 1. Latest available satellite picture as on 04 December 2020 at 1357 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 04 to 12 December 2020 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*