

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

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

### **Daily Crop Weather Information as on 30 January 2019**

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

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

- A Western Disturbance along with its induced cyclonic circulation is likely to cause fairly widespread to widespread rain/snow over Western Himalayan region today and tomorrow and isolated to scattered rain/thundershowers over plains of northwest India during next 3 days. Isolated hailstorm/ thunderstorms are also likely over Western Himalayan Region and adjoining plains of northwest India on today and tomorrow.
- Subsequently, a fresh western disturbance is likely to affect western Himalayan region from 4th February and northern plains from 5th February. This system is likely to cause fairly widespread to widespread rain/snow with isolated heavy rain / snowfall over Western Himalayan region on 5th & 6th February and scattered to fairly widespread rainfall over the northern plains during 05th - 07th February.
- Cold wave to severe cold wave conditions prevailed in many parts over Madhya Pradesh; in some parts over interior parts of Maharashtra and Odisha and at isolated pockets over Chhattisgarh; Cold wave conditions are likely to continue over these areas for one /two days more day and abate thereafter, in view of the likely changes in the wind pattern.
- Cold day conditions continued in parts of central & adjoining northern parts of interior peninsula. These conditions have abated from northwest India since yesterday. Cold day conditions are likely to continue over Madhya Pradesh & Chhattisgarh for 2 more days and over Vidarbha for one day.
- The images showing the latest satellite picture in figure. 1.

#### **Main Weather Observations (IMD)**

- Rain/Snow observed ( from 0830 hrs IST to 0830 hrs IST of today): Rain/snow occurred at isolated places over Jammu & Kashmir. Rain/thundershowers observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): Rain/thundershowers occurred at many places over Arunachal Pradesh; at a few places over Assam & Meghalaya and at isolated places over Tamilnadu & Puducherry and Nagaland,

Manipur, Mizoram & Tripura. Yesterday, Cold Day conditions observed at most places over Madhya Pradesh and Vidarbha. Dense fog observed at isolated places over Sub- Himalayan West Bengal & Sikkim; Moderate fog at isolated places over Jammu & Kashmir, Punjab, Delhi, East Uttar Pradesh, Assam & Meghalaya and Marathwada. Visibility: Jalpaiguri-50 M; Gulmarg & Safdarjung- 200 M each; Ludhiana, Palam, Fursatganj, Majbat, Haflong and Aurangabad-500 M each.

- Maximum temperature departures as on 29.01.2019: Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Himachal Pradesh and at isolated places over Arunachal Pradesh, Assam & Meghalaya, Coastal Karnataka, Kerala and Tamilnadu & Puducherry. They were markedly below normal (-5.1°C or less) at most places over West Madhya Pradesh; at many places over East Madhya Pradesh and Vidarbha; at a few places over Telangana and Chhattisgarh; at isolated places over Rayalaseema; appreciably below normal (-3.1°C to -5.0°C) at most places over East Rajasthan, East Uttar Pradesh, Bihar, Gangetic West Bengal and Gujarat and at isolated places over Odisha; below normal (-1.6°C to -3.0°C) at many places over North Interior Karnataka; at a few places over Haryana, Chandigarh & Delhi, West Uttar Pradesh and Coastal Andhra Pradesh and isolated places over Jammu & Kashmir, Uttarakhand, Sub-Himalayan West Bengal & Sikkim, West Rajasthan, Marathwada, Madhya Maharashtra and South Interior Karnataka and near normal over rest parts of the country.
- Yesterday, the highest maximum temperatures of 35.0°C was recorded at Karwar (Coastal Karnataka) over the plains of the country.
- Minimum temperature departures as on 30.01.2019: Minimum temperatures are markedly below normal (- 5.1 or less) at most places over Vidarbha; at many places over Madhya Pradesh, Chhattisgarh & Marathwada; at a few places over East Rajasthan, Odisha, Madhya Maharashtra and Telangana; at isolated places over Gangetic West Bengal; appreciably below normal (-3.1°C to -5.0°C) at most places over Jharkhand; at a few places over Haryana, Chandigarh & Delhi, Bihar and Sub-Himalayan West Bengal & Sikkim and at isolated places over West Uttar Pradesh; below normal (-1.6°C to -3.0°C) at most places over Gujarat region; at a few places over East Uttar Pradesh, Konkan & Goa, North Interior Karnataka and Lakshadweep; at isolated places over West Rajasthan and Rayalaseema. They are appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan and Tamilnadu & Puducherry; above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir, South Interior Karnataka and Kerala; at isolated places over Himachal Pradesh, Punjab, Assam & Meghalaya, Saurashtra & Kutch, Coastal Andhra Pradesh, Coastal Karnataka and Andaman & Nicobar Islands and near normal over rest parts of the country.
- The lowest minimum temperature of 1.6°C recorded at Bhilwara (East Rajasthan) over the plains of the country.

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

- 30 January (Day 1): Cold wave conditions in some parts with Severe Cold wave conditions in isolated pockets very likely over Madhya Pradesh & Vidarbha; Cold wave conditions in some parts over Odisha and Cold wave conditions in isolated pockets over Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Marathwada and Telangana. Cold day conditions very likely in some pockets over Madhya Pradesh & Vidarbha and in isolated pockets over Madhya Maharashtra & Chhattisgarh. Thunderstorm accompanied with hailstorm at isolated places very likely over Jammu & Kashmir, Himachal Pradesh, Punjab, and West Rajasthan. Dense fog very likely at isolated places over Sub-Himalayan West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Ground frost conditions very likely at a few places over Madhya Pradesh.
- 31 January (Day 2): Thunderstorm accompanied with hailstorm at isolated places very likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan. Cold wave conditions in isolated pockets very likely over East Madhya Pradesh, Vidarbha, Chhattisgarh and Odisha. Cold day conditions very likely in isolated pockets over East Madhya Pradesh and Chhattisgarh. Dense fog very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Sub-Himalayan West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 01 February (Day 3): Thunderstorm accompanied with hailstorm at isolated places very likely over Haryana, Chandigarh & Delhi. Dense fog very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan and West Uttar Pradesh. Cold wave conditions very likely in isolated pockets over Gujarat State. Sub-Himalayan West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 02 February (Day 4): Dense fog likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan and West Uttar Pradesh. Cold wave conditions likely in isolated pockets over Gujarat State.
- 03 February (Day 5): No weather warning.
- The weather outlook for the period of seven days *i.e.* 30 January to 06 February 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Tamilnadu & Puducherry and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### South Karnataka

#### Weather condition:

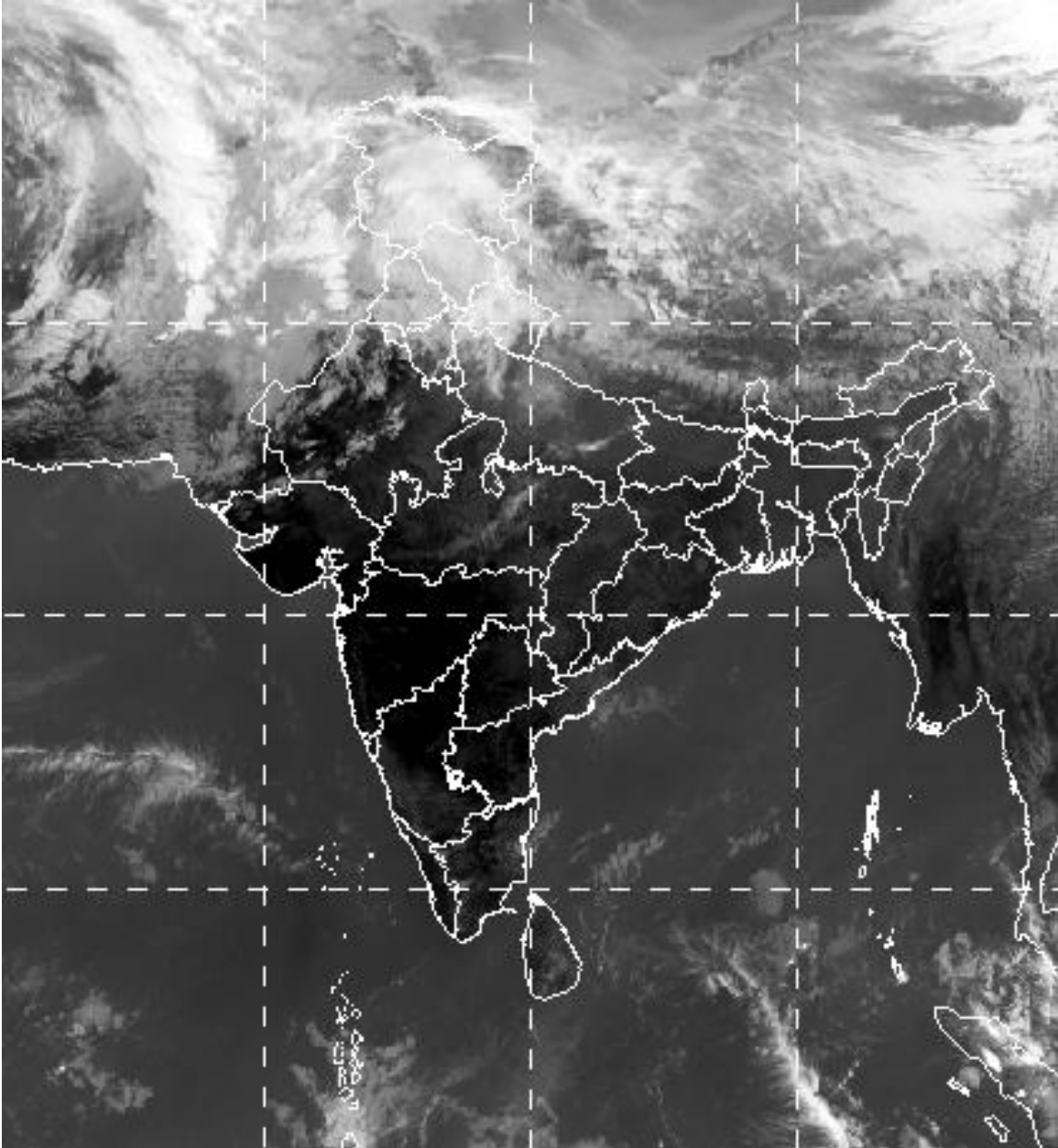
Light rainfall received in isolated places in Tamil Nadu state during past few days. The maximum temperature was 0.6 °C above normal and the rainfall was 1.3 mm below normal.

#### Contingency measure:

- General: Light rainfall is expected in coming days. Derived products. Agricultural vigour is moderate during last week (50 % greenness and 50% under senescence) Standardized Precipitation Index for last four week was mildly dry.
- Disease incidence: Prevailing temperature and high humidity is favorable for disease incidence. So, farmers are advised to monitor the crop and adopt prophylactic measure at the suitable time. Irrigation. Irrigate the crops as per irrigation scheduling of the crop as needed. Irrigate the crops as per irrigation scheduling of the crop as needed.
- - Drought mitigation: Foliar spray of 1% KCL is recommended to over the drought situation. Rice - Tillering stage & Panicle initiation stage - Prevailing weather condition is favorable for Brown leaf spot incidence. Spray Mancozeb (2.0g/lit) for 2 to 3 times at 10 - 15 day intervals. Spray preferably during early hours or afternoon at flowering and post - flowering stages. Application of carbendazim in the field is also advisable.
- Rice: Prevailing weather condition is favorable for Leaf folder incidence. Farmers are advised to spray any one of the following insecticides, Phosalon 35 EC@1500 ml/ha or Phosphamidon 40 SL@1250ml/ ha or Azadirachtin 0.03%@1000 ml/ha. Cotton - boll formation to boll bursting stage. In the prevailing weather, there is incidence of mealy bug. Spray neem oil 2% or NSKE 5% or fish oil rosin soap 25g/litre of water or chemical based insecticide of dimethoate or profenophos 2 ml/lit may be adopted as an alternative.
- Chilies: Vegetative to flowering stage - The expected weather is conducive for the incidence of thrips. The affected plants show symptoms of crinkling and upward curling of leaves and elongation of petiole. For controlling this sprays Imidachloprid 17.8 % SL @ 3 ml/ 10 l of water (or) Dimethoate 30 % EC @1.0 ml/lit. In the prevailing weather, there is incidence of Mite. to control spray Dimethoate 30 % EC @1.0 ml/lit or Quinalphos 25 % EC @ 1.5 ml/lit. Flower initiation stage - In order to meet the nutrient requirement spray 1% solution of 19:19:19 fertilizer. As flower

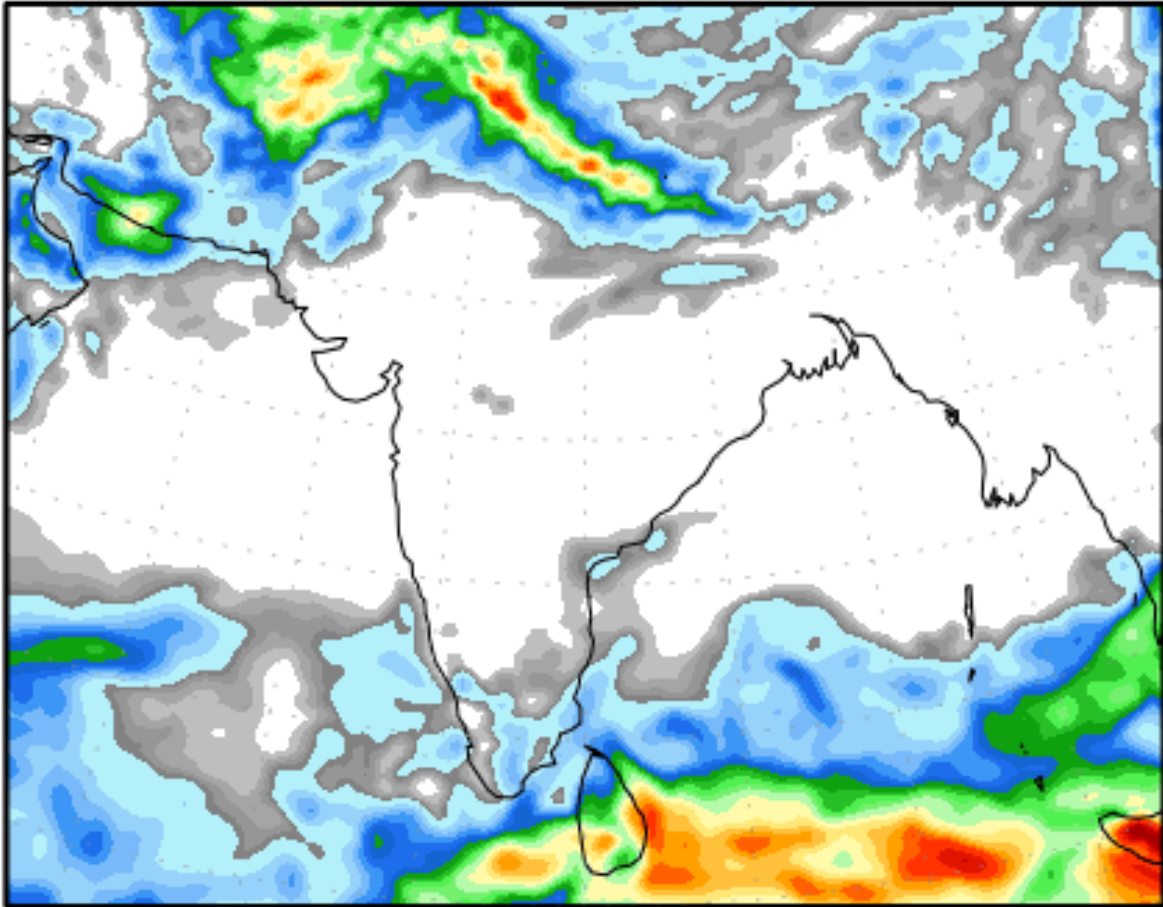
initiation stage is an important stage in chilli spray growth regulators namely NAA 10 mg/ l and triacontanol 1.25 mg/ l for improving fruit set.

- Banana & sugarcane: Bunch development stage - As wind speed with 12-20 km/hr is expected in the coming days provide support for banana and do propping for sugarcane.
- Groundnut: Peg formation - The expected weather is conducive for the incidence of leaf minor- ETL: 1 larvae/ meter row. Apply any one of the insecticides. Dimethiate 30 EC 660 ml/ha (or) Malathion 50 EC 1.25 l/ha.
- Sunflower: Heading stage. The expected weather having low cloud cover and moderate to high humidity are conducive for the incidence of head borer. To control the pest, spray 5% Neem oil or 5% Neem Seed Kernel extract before egg laying.
- Sesame: Pod development stage. Prevailing weather condition is favorable for Sesamum phyllody incidence. To control vector, spray Monocrotophos 36 or Dimethoate 30 EC 500 ml/ha.



**Figure: 1. Latest available satellite picture as on 30 January 2019 at 0230 Hrs (IST).  
(Source: IMD).**





**Figure: 2. Precipitation forecast for 30 January to 06 February 2019 (Source: NOAA NCEP).**