

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

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

### **Daily Crop Weather Information as on 01 May 2019**

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

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

- The Extremely Severe Cyclonic Storm 'FANI' (pronounced as 'FONI') over Westcentral & adjoining Southwest Bay of Bengal, moved northwestwards with a speed of about 10 kmph in last 06 hours and lay centred at 0530 hrs IST of 01st May, 2019 over Westcentral & adjoining Southwest Bay of Bengal, near Latitude 13.9°N and Longitude 84.0°E, about 680 Km south-southwest of Puri (Odisha) and 430 km south-southeast of Vishakhapatnam (Andhra Pradesh). It is very likely to move northwestwards during next 12 hours and thereafter recurve north-northeastwards and cross Odisha Coast between Gopalpur and Chandbali, to the south of Puri around 3rd May afternoon with maximum sustained wind of speed 175-185 Kmph gusting to 205 Kmph.
- The images showing the latest satellite picture in figure. 1.

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

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at many places over Arunachal Pradesh, Assam & Meghalaya, Jammu & Kashmir and at isolated places over Himachal Pradesh and Sub- Himalayan West Bengal & Sikkim. Thunderstorms observed at isolated places over Assam & Meghalaya, West Bengal & Sikkim, Jharkhand, Himachal Pradesh, Jammu & Kashmir, Haryana, West Rajasthan, Telangana, Rayalaseema, South Interior Karnataka and Kerala from 1130 hours IST of yesterday to 0830 hours IST of today. Heavy rainfall observed at isolated places over Sub- Himalayan West Bengal & Sikkim.
- Yesterday, Heat wave conditions observed at many places with Severe Heat wave at isolated places over Vidarbha. Heat wave to severe heat conditions observed at isolated places over East Uttar Pradesh and heat wave at isolated places over East Madhya Pradesh.
- Maximum temperature departures as on 30.04.2019: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh and East Uttar Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places

over Vidarbha; at many places over West Uttar Pradesh and East Madhya Pradesh; at a few places over Punjab and Haryana , Chandigarh & Delhi and at isolated places over Bihar, Jharkhand, Gangetic West Bengal and Marathwada; above normal (1.6°C to 3.0°C) at most places over East Rajasthan and West Uttar Pradesh; at a few places over Gujarat Region and West Rajasthan and at isolated places over Telangana. They were markedly below normal (5.1°C or more) at many places over Jammu & Kashmir; at isolated places over Assam & Meghalaya and Arunachal Pradesh; below normal(-1.6°C to -3.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim and near normal over rest of the country.

- The highest maximum temperature of 47.2°C was recorded at Banda (East Uttar Pradesh).
- Minimum temperature departures as on 30.04.2019: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Jammu & Kashmir, Jharkhand, Chhattisgarh and Sub-Himalayan West Bengal & Sikkim; at a few places over West Rajasthan and Bihar; at isolated places over Vidarbha and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at many places over Saurashtra & Kutch, Madhya Maharashtra, Marathwada, Coastal & North Interior Karnataka, Tamilnadu & Puducherry, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands; at a few places over Himachal Pradesh, Madhya Pradesh, Odisha and Telangana and isolated places over East Uttar Pradesh, Punjab, Gujarat region, East Rajasthan, Konkan & Goa, Coastal Andhra Pradesh and Assam & Meghalaya. They were below normal (-1.6°C to -3.0°C) at isolated places over West Uttar Pradesh and near normal over rest parts of the country.

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

- 01 May (Day 1): Gale wind speed reaching 165-175 Kmph gusting to 195 kmph over westcentral & adjoining southwest Bay of Bengal off north Tamilnadu & Puducherry and south Andhra Pradesh coasts. Sea condition is phenomenal over westcentral Bay of Bengal neighbourhood and phenomenal sea conditions over SW Bay & adjoining westcentral BOB and along & off north Tamilnadu Puducherry and south Andhra Pradesh coasts. Fishermen are advised not to venture into these areas. Thunderstorm & lightning accompanied with hail, gusty wind ( 40-50 kmph) at isolated places very likely over Himachal Pradesh and Uttarakhand; with gusty wind (speed 40-50 kmph) at isolated places over Coastal Andhra Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jammu & Kashmir and Sub-Himalayan West Bengal & Sikkim; with gusty wind (wind speed 30-40 kmph) at isolated places over Odisha and Gangetic West Bengal. Duststorm/Thunderstorm accompanied with lightning & gusty wind ( 30-40 kmph) at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Rajasthan. Heavy rain very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya. Heat Wave Conditions very likely in many parts with isolated severe

heat wave over Vidarbha. Heat wave to severe heat wave in some parts over West Madhya Pradesh; Heat Wave Conditions at some parts over East Madhya Pradesh and in isolated pockets over Uttar Pradesh and Marathwada.

- 02 May (Day 2): Gale wind, speed reaching 160-170 kmph gusting to 190 kmph and phenomenal sea conditions likely over westcentral & adjoining southwest Bay of Bengal off north Tamilnadu & Puducherry and south Andhra Pradesh coasts. Phenomenal sea conditions likely over westcentral Bay of Bengal and over northwest Bay of Bengal. Rough to very rough sea conditions very likely along & off north Andhra Pradesh, Odisha and West Bengal coasts. Squally wind speed reaching 40-50 Kmph gusting to 60 Kmph is very likely to commence along & off north Andhra Pradesh, Odisha and West Bengal coasts. Fishermen are advised not to venture into these areas. Thunderstorm & lightning accompanied with hail, gusty wind ( 40-50 kmph) at isolated places very likely over Himachal Pradesh and Uttarakhand; with squall (wind speed 50-60 kmph) at isolated places over Gangetic West Bengal and East Uttar Pradesh; with gusty wind ( speed 40-50 kmph) at isolated places over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; with gusty wind (speed 30-40 kmph) at isolated places over Jammu & Kashmir, Bihar and Jharkhand. Duststorm/Thunderstorm accompanied with lightning & gusty wind ( 30-40 kmph) at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh. Heavy to very Heavy rain very likely at isolated places over Coastal Andhra Pradesh and south coastal Odisha; heavy rain very likely at isolated places over Assam & Meghalaya. Heat Wave Conditions at some parts over Vidarbha and in isolated pockets over West Madhya Pradesh.
- 03 May (Day 3): Gale wind, speed reaching 160-170 kmph gusting to 190 kmph and phenomenal sea conditions likely over westcentral & adjoining southwest Bay of Bengal off north Tamilnadu & Puducherry and south Andhra Pradesh coasts. Phenomenal sea conditions likely over westcentral Bay of Bengal and over northwest Bay of Bengal. Rough to very rough sea conditions very likely along & off north Andhra Pradesh, Odisha and West Bengal coasts. Squally wind speed reaching 60-70 Kmph gusting to 85 Kmph is very likely to commence along & off north Andhra Pradesh, Odisha & West Bengal coasts and become 170-180 kmph gusting to 200 kmph over Odisha coast and 90-100 Kmph gusting to 115 Kmph over adjoining districts of north Andhra Pradesh. Fishermen are advised not to venture into these areas. Thunderstorm & lightning accompanied with hail, gusty wind ( 40-50 kmph) at isolated places very likely over Uttarakhand; with squall (wind speed 70-80 kmph) at isolated places over Gangetic West Bengal; with squall (wind speed 50-60 kmph) at isolated places over Bihar, Jharkhand and Sub- Himalayan West Bengal & Sikkim; with squall (wind speed 40-50 kmph) at isolated places over East Uttar Pradesh; with gusty winds ( speed 40-50 kmph) at isolated places over Arunachal Pradesh; with gusty winds (wind speed 30-40 kmph) at isolated places

over Jammu & Kashmir and Himachal Pradesh. Duststorm/Thunderstorm accompanied with lightning & gusty wind ( 40-50 kmph) at isolated places very likely over West Uttar Pradesh. Heavy to very heavy rain with extremely heavy falls very likely at isolated places over Odisha; Heavy to very heavy rain at a few places over north Coastal Andhra Pradesh; heavy rain likely at isolated places over Assam & Meghalaya , West Bengal and Nagaland, Manipur, Mizoram & Tripura. Heat Wave Conditions in isolated pockets over Vidarbha.

- 04 May (Day 4): Gale wind, speed reaching 165-175 kmph gusting to 195 kmph and phenomenal sea conditions likely over westcentral & adjoining southwest Bay of Bengal and along & off Andhra Pradesh, Odisha and West Bengal coasts. Phenomenal sea conditions likely over northwest Bay of Bengal. Rough to very rough sea conditions very likely along & off Odisha and West Bengal coasts. Squally wind speed reaching 90-100 Kmph gusting to 115 Kmph is very likely to commence over adjoining districts of north Andhra Pradesh, along & off West Bengal coasts. Fishermen are advised not to venture into these areas. Thunderstorm accompanied with lightning & squall (wind speed 70-80 kmph) at isolated places very likely over Gangetic West Bengal; with squall (wind speed 50-60 kmph) at isolated places over Bihar, Jharkhand and Sub-Himalayan West Bengal & Sikkim; with gusty winds ( speed 30-40 kmph) at isolated places over Uttarakhand. Heavy to very heavy rainfall at a few places with extremely heavy falls likely at isolated places over Gangetic West Bengal and north Odisha; heavy rain very likely at isolated places over Jharkhand, Assam & Meghalaya and Arunachal Pradesh. Heat Wave Conditions in isolated pockets over Vidarbha.
- 05 May (Day 5): Squally winds (wind speed 50-60 Kmph gusting to 70 Kmph) are very likely to commence along & off north Odisha & West Bengal coasts and Assam & Meghalaya. Thunderstorm accompanied with lightning & squall (wind speed 70-80 kmph) at isolated places very likely over Gangetic West Bengal; with squall (wind speed 50-60 kmph) at isolated places over Bihar, Jharkhand and Sub-Himalayan West Bengal & Sikkim; with gusty winds (wind speed 30-40 kmph) at isolated places over Uttarakhand. Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over Gangetic West Bengal and north Odisha; heavy rain very likely at isolated places over Jharkhand, Assam & Meghalaya and Arunachal Pradesh. Heat Wave Conditions in isolated pockets over Vidarbha.
- The weather outlook for the period of seven days *i.e* 01 to 08 May 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Jammu & Kashmir, Himachal Pradesh, Haryana, West Rajasthan, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Telangana, Rayalaseema, South Interior Karnataka, Kerala and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### Himachal Pradesh

#### Weather condition:

Light rainfall received in Himachal Pradesh state during past few days. The maximum temperature ranged between 27.0 to 30.5°C which was above normal by 0.7 to 2.8°C and minimum temperature ranged between 13.5 to 18.5°C which was below normal by 0.2 to 2.9 °C, respectively.

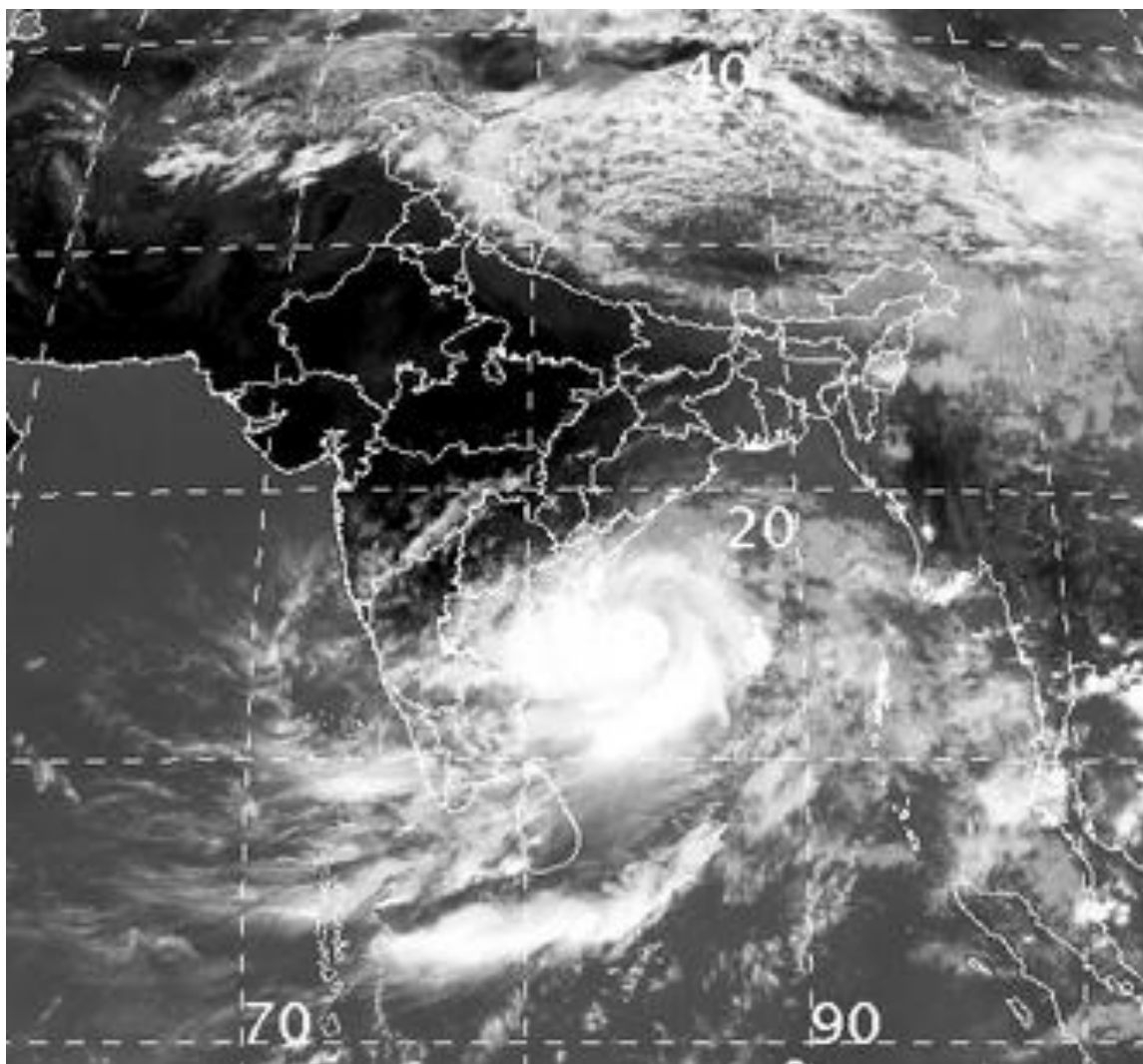
#### Contingency measure:

- **Fruit Crop:** When the weather gets heated, complete the grafting work in apple nursery. Farmers are advised to make a layer of grass mulching of six inch thickness in the basins of temperate fruits. This mulch will help in soil moisture conservation and moderating of soil temperature. It will convert into FYM in due course of time. When the weather gets heated, complete the grafting work in apple nursery. In mango and citrus, during flowering irrigation should be avoided for good fruit setting. Constant monitoring of mango mealy bug and leaf hopper are advised. For control of peach leaf curl spray metasystox @1ml per litre + blitox @3g per litre of water.
- **Vegetables:** In lower regions, start sowing of cucurbits crops in this week. Seed should be treated with captan or thiram @ 2 gram/kg of seed before sowing. Use well decomposed FYM 10-12 ton/acre in the field at the time of ploughing. Cucurbitaceous crops, if attack of red pumpkin beetle is found than, spraying of Diclorvos 76 EC (DDVP) @ 1 gram per litre of water is advised. For Leaf feeders in cole crop Spray of Spinosad @1 ml \ 3 litre of water when Sky remains clear. The downy mildew is expected in cruciferous vegetables, for control spray redomil M-Z @ 25 g per litres of water at 15 days interval. The downy mildew is expected in cruciferous vegetables, for control spray redomil M-Z @ 25 g per litres of water at 15 days interval. Powdery mildew expected in peas spray celfex@25 g per 10 litres of water or karathane@5 ml per 10 litres of water. Thrips attack in onion sown earlier is expected for control spraying of Imidacloprid @ 0.5 ml per litre of water with sticky material (Tipol 1.0 gram /litre) should be done when sky remains clear.
- **Onion, Pea, Cauliflower:** Sowing/podding/Cord development In lower area apply 2nd dose of nitrogen in Tomato, Capsicum, Gourd, Chilli etc. In middle areas transplant ready nursery of summer vegetables like Tomato, Capsicum, Gourd, Chilli etc. in the well prepared fields. Sowing of Bhindi, Arvi etc may be done in

prepared fields. Spray sulfax in pea to control the powdery mildew. To control the larvae in cole crops spray Melathion @ 1ml/liters of water.

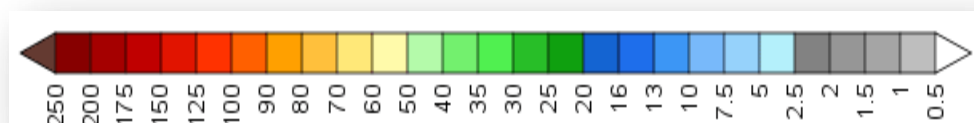
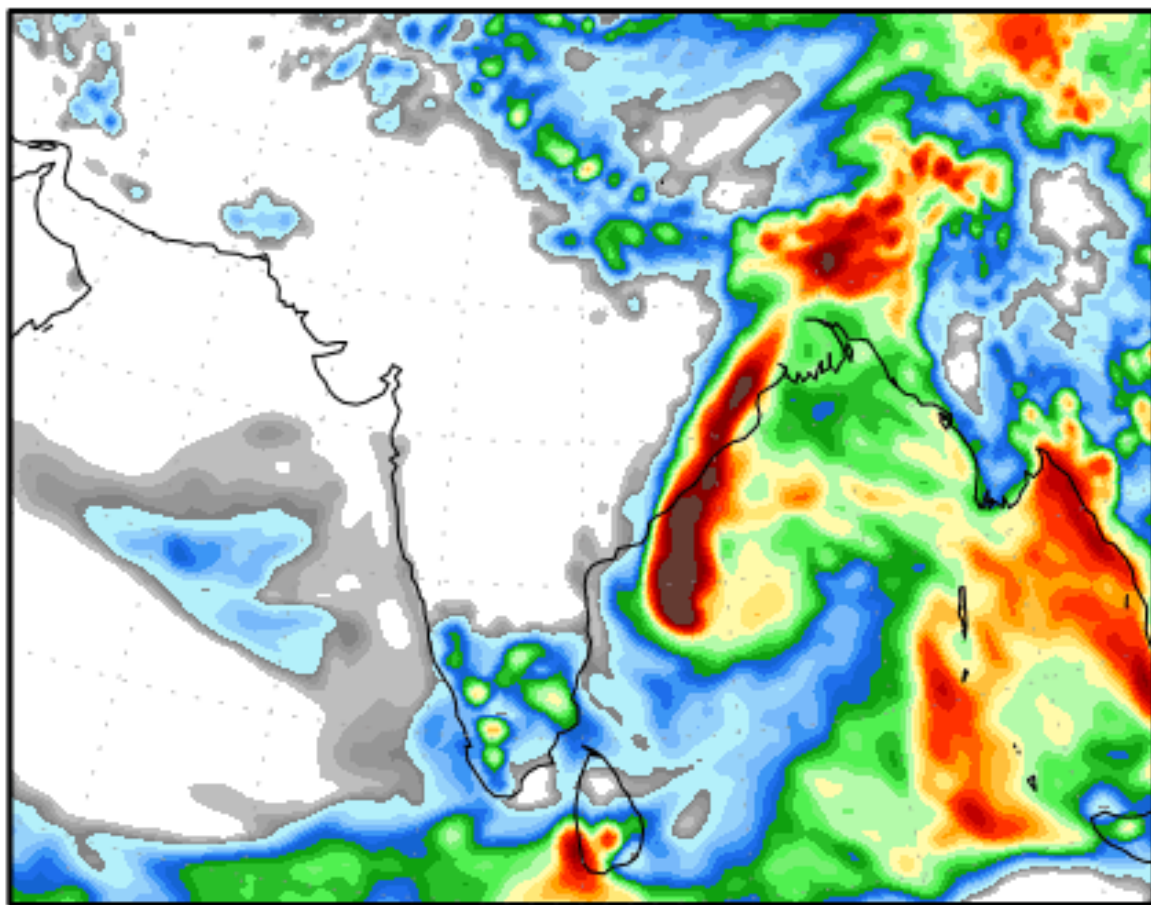
- Potato: Infection of blight may occur in potato and tomato. Constant monitoring is advised. If symptoms appears than spray of Carbandizam @ 1.0 gm / litre of water or Dithane-M-45 @ 2.0 gm / litre of water is recommended. Do weeding in potato.
- Livestock: For milch animals follow schedule of 1 kg feed+50 g mineral mixtures per 2 litres of milk. Protect calves against parasites, get them dewormed with piperazine liquid @ 4 ml/kg body weight, first at 10 days of age, then 15 days and then monthly upto three months of age and then quarterly upto one year of age vaccination. Ecto-parasite attack is expected in this weather for control spary Butox @ 2ml per litre in cowshed Give mixture of hay & green fodder. More than 30oC can cause heat stress in animals which results in reduced grazing of grass & feeds, reduction in milk production & breeding process. So farmers are advised to provide proper shade & water to the animals during the hot season. to reduce the heat struck effects.
- Poly House Agriculture: To avoid mortality of seedlings due to damping off, drenching of the beds three weeks before sowing with Bavistin (15-20g/10 litres of water) is recommended. It is optimum time for nursery sowing of Tomato, Brinjal, chillies and capsicum crops in poly house. Cucurbits plantation may be done in polytubes under the polyhouse. Sowing of green coriander, radish, turnip. Compile well-decomposed FYM at the time of bed preparation and the surface beds should be smooth and well leveled.





**Figure: 1. Latest available satellite picture as on 01 May 2019 at 0230 Hrs (IST).**

**(Source: IMD).**



**Figure: 2. Precipitation forecast for 01 to 08 May 2019 (Source: NOAA NCEP).**