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

Daily Crop Weather Information as on 12 February 2019

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A fresh western disturbance approaching the Indian region is likely to induce a low pressure area over West Rajasthan and neighbourhood by 14th February. Also, the likely interaction of the system with tropical easterlies may cause fairly widespread to widespread rain/snow with isolated hailstorms over western Himalayan regions during 13th to 15th February. Isolated heavy rain/snow likely over Jammu & Kashmir and Himachal Pradesh on 14th February.
- Scattered to fairly widespread rain/thundershowers and isolated hailstorms are also likely over plains of northwest India and central India mainly during 14th & 15th February. Isolated heavy rains likely over northern parts of Punjab and Haryana & Chandigarh on 14th Feb. The rainfall activity is likely to shift towards eastern India from 15th February.
- Strong winds speed reaching 30-40 kmph gusting to 50 kmph is likely to occur over plains of northwest India and adjoining central India on 14th February.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rain/snow observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): Rain/snow observed at isolated places over Jammu & Kashmir. Rain/thundershowers observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): Rain/thundershowers observed at isolated places over Coastal Andhra Pradesh, South Interior Karnataka and Lakshadweep.
- Moderate fog observed at isolated places over Haryana, Delhi, Uttar Pradesh, Goa, Assam & Meghalaya and Andaman & Nicobar Islands at 0830 hours IST of today. Visibility: Panjim-200 M; Delhi (Safdarjung), Delhi (Ridge), Delhi (Palam), Hisar, Agra, Fursatganj, Majbat and Car Nicobar-500 M each.
- Maximum temperature departures as on 11.02.2019: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Arunachal Pradesh; at many

places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra; at a few places over Gujarat Region, Vidarbha, Coastal & North Interior Karnataka, Tamilnadu and Kerala; at isolated places over Konkan & Goa, Marathawada and Saurashtra & Kutch. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at most places over Haryana, Chandigarh & Delhi and East Rajasthan; at many places over West Rajasthan, Madhya Pradesh and East Uttar Pradesh; at a few places over West Bengal & Sikkim, Odisha and Chhattisgarh; at isolated places over Bihar and Coastal Andhra Pradesh and near normal over rest parts of the country.

- Yesterday, the highest maximum temperature of 35.8°C was recorded at Kozhikode (Kerala) over the country.
- Minimum temperature departures as on 12.02.2019: Minimum temperatures are appreciably below normal (-3.1°C to -5.0°C) at many places over Odisha; at a few places over East Madhya Pradesh, Chhattisgarh and Gangetic West Bengal; at isolated places over Vidarbha and below normal (-1.6°C to -3.0°C) at many places over Bihar and Jharkhand; at a few places over Saurashtra & Kutch and Nagaland, Mizoram, Manipur & Tripura and at isolated places over Jammu & Kashmir, Himachal Pradesh, East Uttar Pradesh, East Rajasthan and West Madhya Pradesh. They are appreciably above normal (3.1°C to 5.0°C) at most places over Marathawada; at many places over Madhya Maharashtra; at isolated places over Kerala and Tamilnadu & Puducherry; above normal (1.6°C to 3.0°C) at most places over Punjab, North Interior Karnataka; at many places over Uttarakhand, Haryana, Chandigarh & Delhi, West Rajasthan, Lakshadweep, South Interior Karnataka and Andaman & Nicobar islands; at a few places over Andhra Pradesh and Telangana and near normal over rest parts of the country.
- The lowest minimum temperature of 4.5°C recorded at Khajuraho (East Madhya Pradesh) over the plains of the country.

Weather Warning during next 5 days (IMD)

- 12 February (Day 1): No weather warning.
- 13 February (Day 2): Thunderstorm accompanied with hailstorm and gusty winds at isolated places very likely over Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, north Rajasthan and West Madhya Pradesh.
- 14 February (Day 3): Heavy rain/snow at isolated places very likely over Jammu & Kashmir and Himachal Pradesh. Heavy rain at isolated places very likely over Punjab and Haryana & Chandigarh. Thunderstorm accompanied with hailstorm and gusty winds at isolated places likely over Jammu & Kashmir, Himachal Pradesh,

Uttarakhand, Punjab, Haryana, Uttar Pradesh, north Rajasthan and Madhya Pradesh.

- 15 February (Day 4): Thunderstorm accompanied with hailstorm and gusty winds at isolated places likely over Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Jharkhand, Vidarbha, Chhattisgarh and Telangana. Thunderstorm accompanied with lightning at isolated places likely over Bihar, West Bengal & Sikkim and Odisha.
- 16 February (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Bihar, West Bengal & Sikkim and Odisha. Thunderstorm accompanied with gusty winds at isolated places likely over south Kerala and south Tamilnadu. Cold wave conditions at isolated places likely over north Madhya Maharashtra.
- The weather outlook for the period of seven days *i.e* 12 to 19 February 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from http://monsoondata.org/wx2/)* rain/thundershower may occur over Jammu & Kashmir, Coastal Andhra Pradesh, South Interior Karnataka and Lakshadweep. (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 12.5 to 18.5°C and minimum temperature between 1.0 to 7.5°C which were below normal by 0.3 to 3.1°C and 2.4 to 4.8°C, respectively.

Contingency measure:

• Rabi Crops: In areas where symptoms of yellow rust are appears in the wheat crop in the form of yellow powder/stripes on the leaves or susceptible varieties then the farmers are advised to spray the fungicides with the appearance of the symptoms. Apply mulch and well rotten FYM on these crops. For the control of downy mildew in garlic spray Diathane M 45 2.5 g or Bavistine 1 g per litre. In onion crop against attack of thrips. Spraying of Carbaryl @ 2 grams per litre of water with sticky material (Tipol 1.0 gram /litre) is advised. Purple blotch is expected for control spraying of Diethane M -45 @ 3 grams per litre of water with sticky material (Tipol 1.0 gram /litre) advised.

- Vegetable Crops: Thinning and weeding is recommended in timely sown mustard crop. For pod borer in the gram crop, installation of Pheromone trap @ 3-4 traps per acre is advised if flowering has reached 10-15%. T shaped bird perches in and around crop field to be installed for controlling insect population. Intercultural operations on already sown berseem ,lucerne and oats for fodder of Rabi season also advised. Weeding and hoeing in all crops and vegetables should be done for optimum growth. For shoot and fruit borer in brinjal and tomato crops, infested fruits and shoots should be collected and buried inside the soil. Also install pheromone trap @25 per hectare If pest population is high, spraying of spinosad 48 EC @ 1 ml /4 litres of water is advised when sky is clear. In present weather conditions, rouging of viral infested crop should be done in chilli. Infected crop should be uprooted and buried in the soil. After rouging, spraying of Imidacloprid @ 0.3 ml per litre of water is advised to control the vector.
- Dairy Animals: Temperature is falling and a cold wave has gripped the area, so protect the newly born calves and animals from cold, naval ill and pneumonia Feed pregnant and lactating cows and buffaloes with balance feed including mineral mixture. Also keep the cowshed clean and do not allow the water to stagnate in the cow shed. Provide dry bedding to animals and save them from cold winds. Increase energy contents of concentrate mixture by adding 5-10 per cent more of cereal grains. Feed well-chaffed legumes mixed with wheat-straw in the ratio of 10:1. Deworming of calves should be continued against ascaris with piperazine liquid 4ml/10 kg body weight. New-born calves need special care against severe winters as they are susceptible to pneumonia. So keep them warm by providing dry bedding and protection against cold winds. Give them vitamin A concentrate 1ml daily in milk for three days, to be repeated after month. While feeding animals on dry roughages, provide 40 g mineral mixture to every milk giving cow or buffalo.

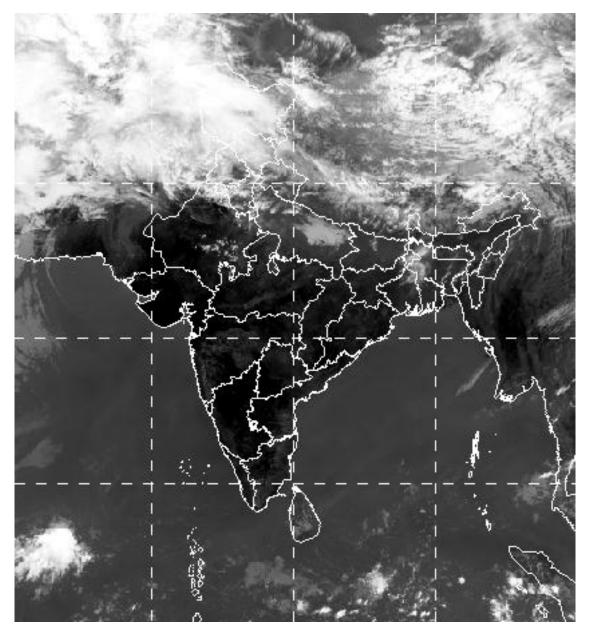
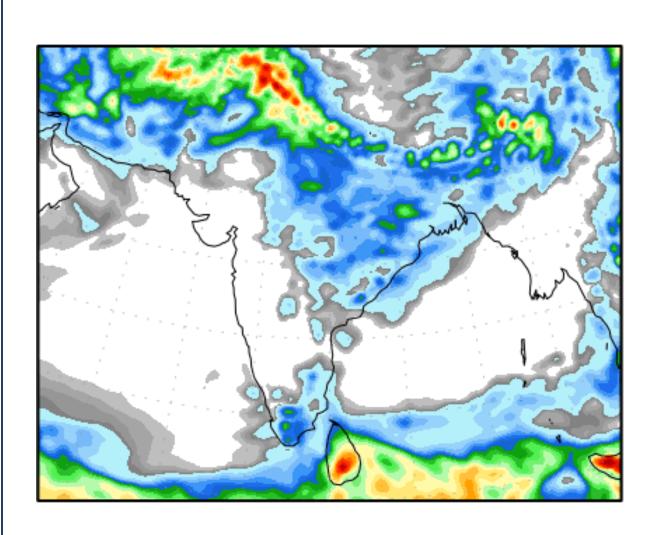


Figure: 1. Latest available satellite picture as on 12 February 2019 at 0230 Hrs (IST). (Source: IMD).



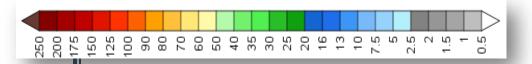


Figure: 2. Precipitation forecast for 12 to 19 February 2019 (Source: NOAA NCEP).