

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 03 February 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Western Disturbance now seen as a cyclonic circulation over Afghanistan & neighbourhood at 3.1 km above mean sea level with a trough aloft in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 60°E to the north of Lat. 30°N. It is likely to cause isolated to scattered rain/snow over the Western Himalayan Region on 4th February. However, moist easterly winds in the lower levels from the Bay of Bengal are likely to interact with cold and dry westerly winds in the mid & upper levels resulting in isolated to scattered rainfall/thundershowers over Central and East India during 4th-5th February. Isolated hailstorm/thunderstorm are also likely over East Madhya Pradesh and Chhattisgarh on 04th February.
- A feeble fresh Western Disturbance is likely to affect Western Himalayan Region from the night of 06th February. Again, moist easterly winds in the lower levels from the Bay of Bengal are likely to interact with cold and dry westerly winds in the mid & upper levels resulting in scattered to fairly widespread rainfall/thundershowers over East India and isolated to scattered rainfall/thundershowers over Central India during 06th-07th February. Isolated hailstorm/thunderstorm are also likely over Chhattisgarh on 06th & 07th February.
- Current cold wave and dense fog conditions over Punjab is very likely to reduce from 04th night.
- 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 isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Vidarbha, Chhattisgarh and Marathawada.
- Very dense fog observed in some parts over Punjab at 0830 hours IST of today.

- Visibility recorded at 0830 hours IST of today (in metres): Ambala and Patiala- 25 each; Ludhiana and Pantnagar- 50 each.
- Yesterday, cold day conditions were observed at isolated places over south Madhya Pradesh.
- Cold wave conditions observed in most parts with a severe cold wave in isolated parts over Punjab and cold wave conditions in some parts over Haryana.
- Maximum Temperature Departures as on 02-02-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir and Tamilnadu, Puducherry & Karaikal; at isolated places over Konkan & Goa and Lakshadweep. They were markedly below normal (-5.1°C or less) at isolated places over Himachal Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over East Madhya Pradesh and Vidarbha; at a few places over West Madhya Pradesh, Odisha and Sub-Himalayan West Bengal & Sikkim; at isolated places over Madhya Maharashtra and Arunachal Pradesh; below normal (-1.6°C to -3.0°C) at most places over West Madhya Pradesh; at many places over Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Jharkhand, Bihar, Gangetic West Bengal and Assam & Meghalaya; at a few places over Marathwada, Telangana, Chhattisgarh and Coastal Karnataka; at isolated places over Gujarat and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.5°C was recorded at Punalur (Kerala).
- Minimum Temperature Departures as on 03-02-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Madhya Maharashtra and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh & Yanam and Lakshadweep; at many places over Telangana and at isolated place over Gujarat, Konkan & Goa, Kerala & Mahe, and Tamil Nadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.0°C) at most places over Jharkhand; at many places over Jammu & Kashmir and Gangetic West Bengal; at a few places over Himachal Pradesh, Punjab, East Uttar Pradesh, East Madhya Pradesh, Bihar, Chhattisgarh and Assam & Meghalaya; at isolated places over Haryana, Chandigarh & Delhi, East Rajasthan and Odisha; below normal (-1.6°C to -3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Sub-Himalayan West Bengal & Sikkim and West Madhya Pradesh and near normal over rest parts of the country. The lowest minimum temperature of 2.4°C recorded at Amritsar (Punjab) over plains of the country.

Weather Warning during the next 5 days (IMD)

- 03 February (Day 1): Dense fog in some parts with very dense fog in isolated parts very likely over Punjab; dense to very dense fog in isolated parts over Haryana & Chandigarh and dense fog in isolated parts over Odisha. Cold wave conditions are very likely in isolated parts over Punjab.
- 04 February (Day 2): Dense fog very likely in isolated parts over Punjab and Haryana, Chandigarh & Delhi. Cold wave conditions are very likely in isolated parts over Punjab. Thunderstorm accompanied with hail/lightning very likely at isolated places over East Madhya Pradesh and Chhattisgarh and with lightning at isolated places over Vidarbha, Odisha and Jharkhand.
- 05 February (Day 3): No Weather Warning.
- 06 February (Day 4): Dense fog likely in isolated parts over Punjab and Haryana, Chandigarh & Delhi. Thunderstorm accompanied with hail/lightning likely at isolated places over Chhattisgarh and with lightning at isolated places over Gangetic West Bengal, Odisha and Jharkhand.
- 07 February (Day 5): Dense fog likely in isolated parts over Punjab and Haryana, Chandigarh & Delhi. Thunderstorm accompanied with hail/lightning likely at isolated places over Chhattisgarh and with lightning at isolated places over Gangetic West Bengal, Odisha and Jharkhand.
- The weather outlook for the period of seven days i.e., 03 to 11 Feb 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)

Punjab

Weather condition:

The maximum temperature during the week ranged between 12.6-19.2 °C and minimum temperature ranged between 5.0-10.4 °C. The morning and evening relative humidity during the week varied between 85-97 and 46-90%, respectively. The sunshine hours during the week ranged between 0.0-6.9 hrs/day. The evaporation rate was 0.6-1.0 mm day⁻¹. Daily average wind speed varied from 1.7-3.6 kmhr⁻¹.

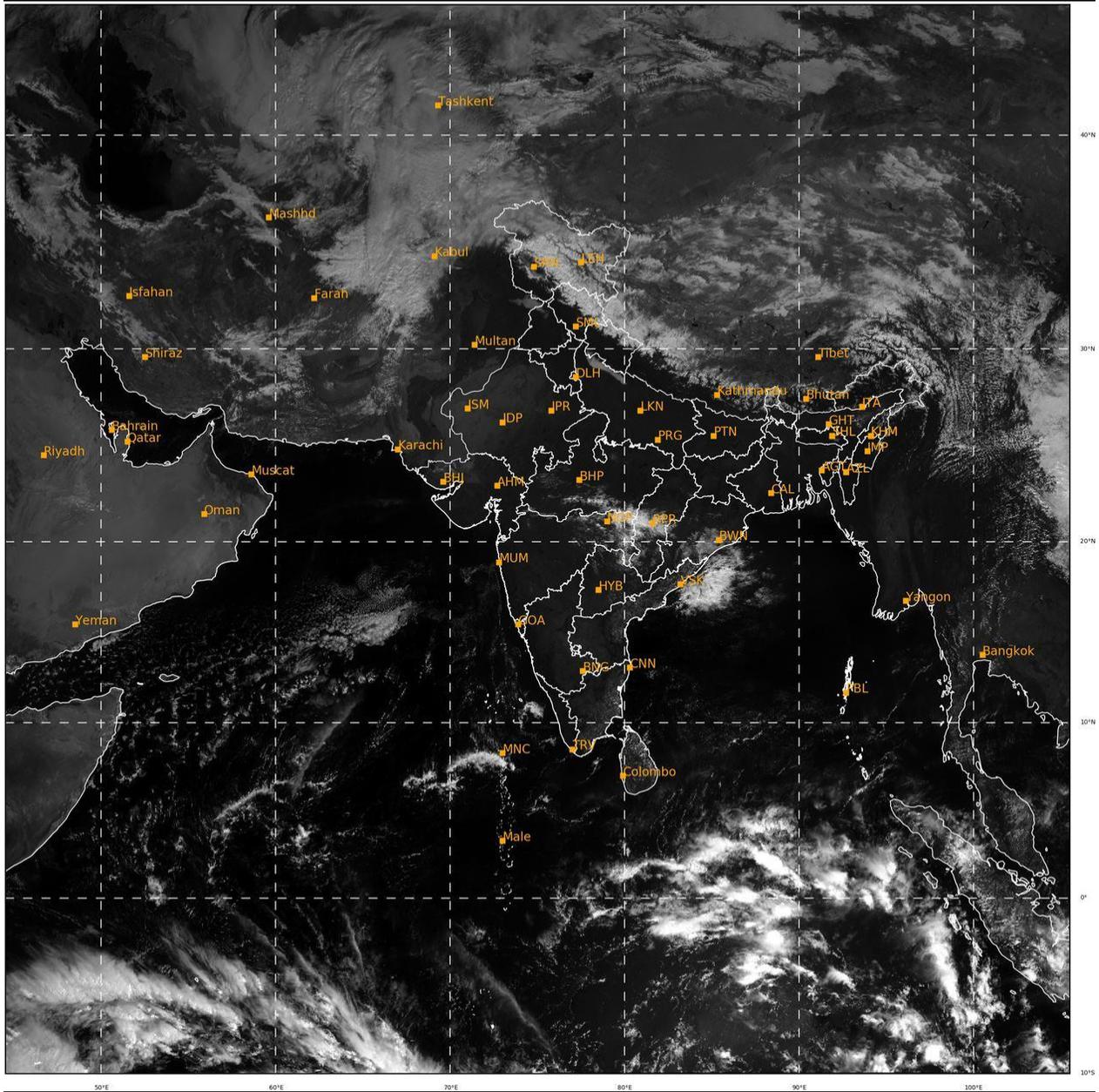
Contingency measure:

- Cloudy and rainy weather is likely to prevail except on 14 and 15th January 2020. Weather parameters are likely to remain as follows: Maximum Temperature 15-18°C, Minimum Temperature 5-7°C.

- **FIELD CROPS: WHEAT:** Skip irrigation as rainfall is predicted. Apply the second dose of N with first irrigation to late sown wheat. Use only recommended dose of weedicide for effective control of Phalaris minor in wheat crop. If yellowing of leaves appears due to manganese deficiency in wheat crop, spray the crop with manganese sulphate. If symptoms of sulphur deficiency noticed, broadcast one quintal gypsum/acre followed by light irrigation or if the soil is in proper moisture condition, this may be mixed by hoeing.
- **OILSEEDS:** Avoid irrigation to sarson /Raya as rainfall already occurred in many parts of Punjab and is also expected during the coming days.
- **VEGETABLES:** Protect the nursery as well as vegetable crops like tomato, brinjal and chilli from chilling wind and cold weather. It is the best time to transplant seedlings of onion in the field. Farmers are advised to regularly monitor the potato crop if symptoms of late blight are observed in the field then protect the crop by spraying Indofil M-45/Mass M-45/Markzeb/Kavach @ 500-750g using 250-350 litres of water per acre at 7 days interval. If the disease is noticed in the field during these days, spray the crop with systemic fungicides viz Ridomil Gold / CurzateM-8/ Section/Melody Duo @700g or Equator Pro @200 ml or Revus @ 250 ml in 250-350 liters of water per acre. Viral diseases of potato may appear in the seed crop. To produce virus-free seed, uproot and destroy the virus-infected plants along with potato tubers. Prevailing weather is favourable for the development and spread of fruit rot in chilli. Farmers are advised to give 3-4 sprays of Folicur @ 250 ml of Indofil M-45 or blitox 50 WP @ 750 gm/acre at 10 days interval during clear weather. To manage potato scurf, prevent drying of soil by regular irrigation from tuberization to maturity.
- **FRUIT PLANTS:** Protect the young evergreen fruit plants from cold weather. Prepare thatches and apply light irrigations to protect young fruit plants. Pruning of deciduous fruit trees like peach, plum and pear should be carried out during the period. Apply well-rotted farmyard manure to all deciduous fruit plants. It is time to plan & layout for the establishment of new deciduous orchards viz. Pear, peach, plum, grapes etc. To check physiological fruit drop in ber, spray Naphthalene Acetic Acid (NAA) @ 15g per 500 liters of water per acre. Dissolve NAA in alcohol before mixing in water.

SAT : INSAT-3D IMG
Visible Count 0.65 um
L1C Mercator

03-02-2020/(0600 to 0626) GMT
03-02-2020/(1130 to 1156) IST



18

587

IMD, DELHI

Figure: 1. Latest available satellite picture as on 03 February 2020 at 1156 Hrs (IST).
(Source: IMD).

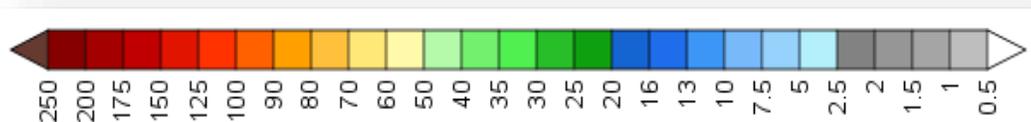
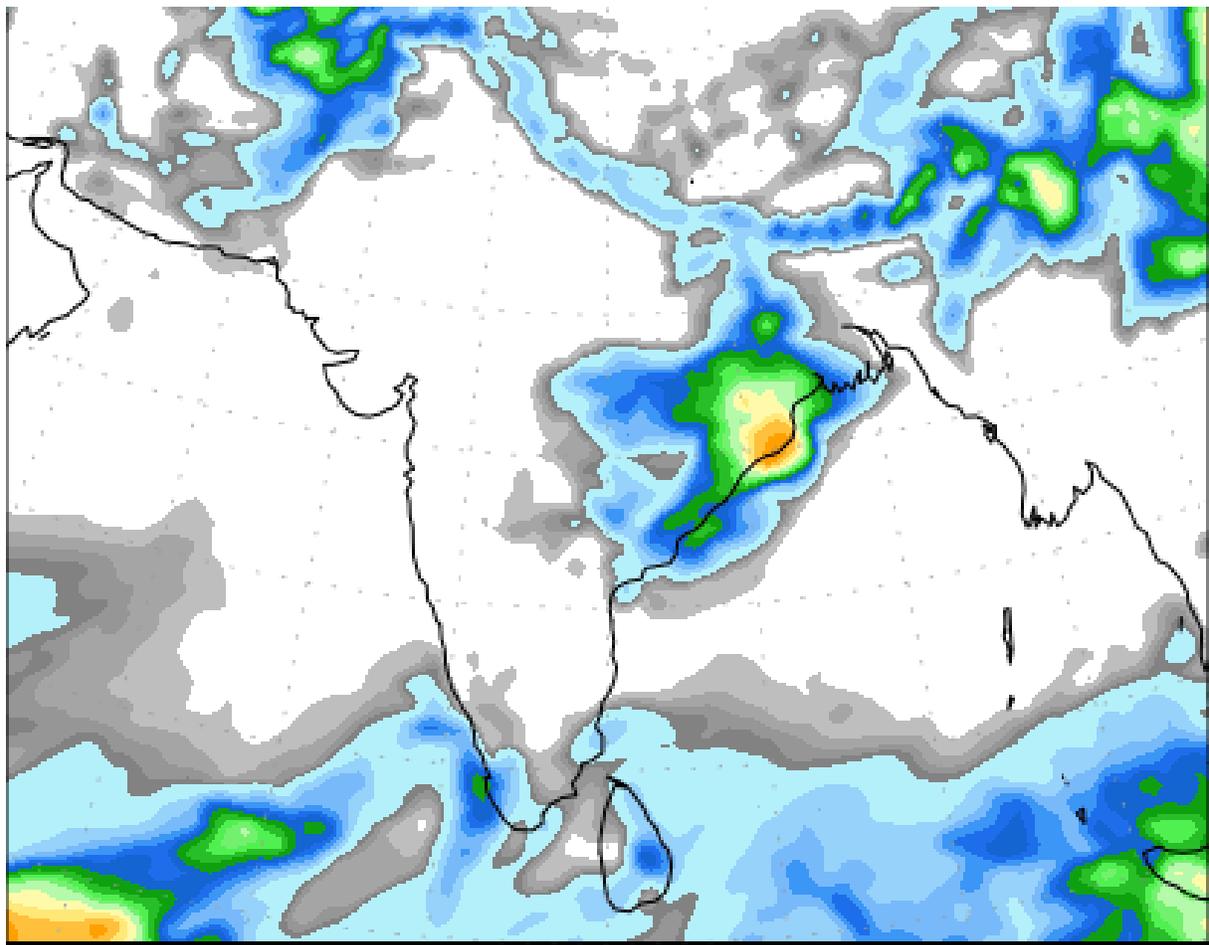


Figure:2. Precipitation forecast for 03 to 11 Feb 2020 (Source: NOAA NCEP).

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