

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 02 January 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Yesterday, under the influence of warm moist easterlies, less than 10°C below normal maximum temperatures have been reported only in isolated pockets over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh. Below normal maximum temperature departures have increased by 4-6°C over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar. Cold Day conditions have abated from entire Bihar and severe cold day conditions have reduced into cold day conditions over northern parts of Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh. Further improvement in Cold Day/cold wave conditions and its abatement is very likely during next 24 hours.
- Fog conditions has drastically improved over Punjab, Haryana, Chandigarh, Delhi, north Rajasthan, north Madhya Pradesh and West Uttar Pradesh. Under the influence of low level easterlies, dense fog conditions are unlikely to prevail over these regions during next 3-4 days.
- Under the influence of the westerly trough and interaction with lower level easterlies, scattered to fairly widespread rainfall accompanied with thunderstorms, lightning and hail is also likely in major parts of northwest and Central India during 01st to 04th January and over east India during 02nd to 04th January, 2020
- 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 isolated places over Madhya Pradesh, Vidarbha and Telangana.
- Fog observed at 0530 hours IST of today: Dense to Very Dense Fog observed in isolated pockets over Punjab, West Rajasthan and East Uttar Pradesh and Moderate Fog in isolated pockets over Haryana, Chandigarh & Delhi and West Uttar Pradesh.

- Visibility recorded at 0530 hours IST of today (200 meter or less): Ganganagar and Churu-25 each; Amritsar, Sultanpur and Varanasi-50 each; Patiala, Hissar, Delhi (Palam), Bikaner, Jaisalmer, Agra, Bareilly, Bahraich and Lucknow-200 each.
- Yesterday, Severe Cold Wave conditions were observed in many pockets over East Uttar Pradesh and at isolated places over North Madhya Pradesh and Cold Wave conditions in isolated pockets over Punjab, Odisha, North Rajasthan, Saurashtra & Kutch, Bihar and Gangetic West Bengal.
- Yesterday, Severe cold day conditions were observed in most pockets over Haryana & Delhi, south Uttar Pradesh and north Madhya Pradesh; in many pockets over Rajasthan and in isolated pockets over north Punjab and Jammu and Cold day conditions in most pockets over north Uttar Pradesh; in many pockets over south Madhya Pradesh; in some pockets over Chandigarh and rest parts of Punjab and in isolated pockets over Bihar and rest parts of Rajasthan.
- Maximum Temperature Departures as on 31-12-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and North Interior Karnataka; at a few places over Andaman & Nicobar Islands, Rayalseema and Tamil-Nadu, Puducherry & Karaikal and at isolated places over Madhya Maharashtra and Kerala & Mahe. They were markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan and East Madhya Pradesh; at many places over Punjab, West Rajasthan and West Madhya Pradesh and at isolated places over Vidarbha and Bihar; appreciably below normal (-3.1°C to -5.0°C) at most places over Saurashtra & Kutch; at a few places over Gujarat region and Uttarakhand and at isolated places over Himachal Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at many places over Gangetic West Bengal and Marathwada; at a few places over Jammu & Kashmir, Konkan & Goa, Jharkhand and Chhattisgarh and at isolated places over Telangana and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.4°C was recorded at Mangalore (Coastal Karnataka).
- Minimum Temperature Departures as on 31-12-2019: Minimum temperatures were markedly above normal (5.1°C or more) at isolated places over Telangana; appreciably above normal (3.1°C to 5.0°C) at many places Marathawada; at a few places over Madhya Maharashtra and Andaman & Nicobar Islands and at isolated places over Rayalaseema, Kerala and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Coastal Karnataka; at a few

places over West Madhya Pradesh and at isolated places over East Madhya Pradesh, Vidarbha, Interior Karnataka, Odisha and Sub-Himalayan West Bengal & Sikkim. They were markedly below normal (-5.1°C or less) at a few places over East Uttar Pradesh and at isolated places over East Rajasthan and Saurashtra & Kutch; appreciably below normal (-3.1°C to -5.0°C) at many places over Bihar and Jharkhand and at isolated places over West Rajasthan and Gangetic West Bengal; below normal (-1.6°C to -3.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over West Uttar Pradesh, Punjab and Chhattisgarh and at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 0.2°C was recorded at Bahraich (Uttar Pradesh) over plains of the country.

Weather Warning during next 5 days (IMD)

- 02 January (Day 1): Cold day conditions to severe cold day conditions very likely in isolated pockets over Uttarakhand. Thunderstorm accompanied with hail & lightning very likely at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Madhya Pradesh, Jharkhand, Gangetic West Bengal and Odisha and with lightning very likely at isolated places over Chhattisgarh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Telangana. Heavy rainfall at isolated places very likely over Chhattisgarh.
- 03 January (Day 2): Cold day conditions to severe cold day conditions very likely in isolated pockets over Uttarakhand. Thunderstorm accompanied with hail & lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, West Bengal & Sikkim and Odisha and with lightning likely at isolated places over Punjab, Chhattisgarh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam. Heavy rainfall/snow at isolated places likely over Jammu & Kashmir and heavy rain at isolated places over Nagaland, Manipur, Mizoram & Tripura.
- 04 January (Day 3): Dense fog at isolated places likely over Haryana, Chandigarh & Delhi. Thunderstorm accompanied with hail & lightning likely at isolated places over Sub-Himalayan West Bengal & Sikkim and with lightning very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura. Heavy rain at isolated places likely over Nagaland, Manipur, Mizoram & Tripura.
- 05 January (Day 4): Dense fog at isolated places likely over Haryana, Chandigarh & Delhi.

- 06 January (Day 5): Cold wave conditions likely in isolated pockets over Madhya Pradesh. Dense fog at isolated places likely over East Uttar Pradesh and Bihar. Thunderstorm accompanied with hail & lightning very likely at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand and West Rajasthan and with lightning likely at isolated places over Haryana, Chandigarh and Delhi.
- The weather outlook for the period of seven days i.e., 02 Jan 2020 to 10 Jan 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)

Andhra Pradesh

Weather condition:

Dry weather prevailed over Coastal Andhra Pradesh and Rayalaseema. The maximum temperatures were 26.4-32.9°C and minimum temperatures were 17.9-23.8°C in Coastal Andhra Pradesh and maximum temperatures were 24-32.2°C and minimum temperatures were 16.5-22.1°C in Rayalaseema.

Contingency measure:

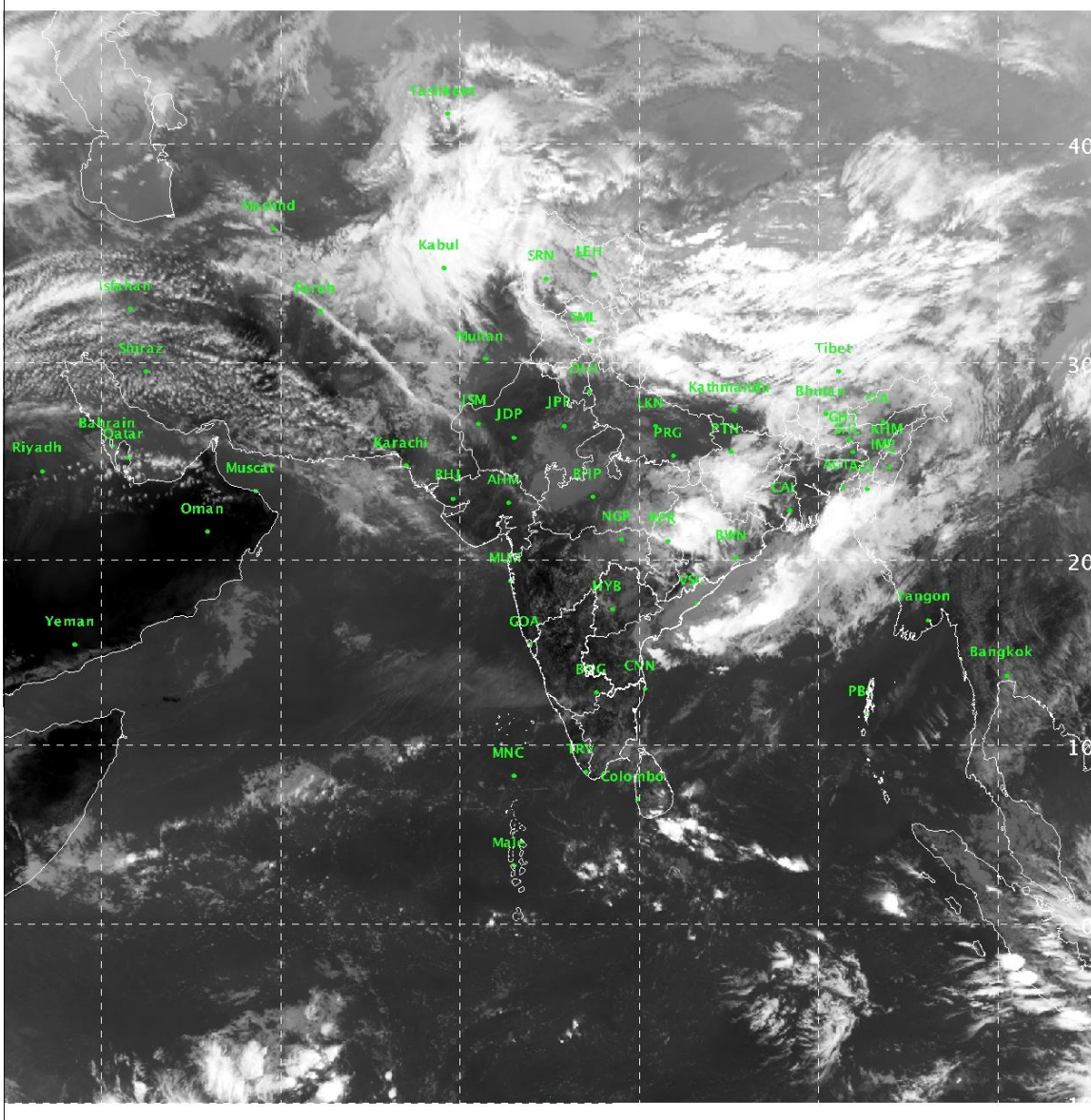
- Groundnut: Present weather conditions are favourable for leaf minor, spodoptera and sucking pest incidence in groundnut. For control of leaf minor and spodoptera to spray chlorpyrifos 2.5 ml/l or quinalphos 2 ml/l of water. Farmers are advised to go for the spraying of Monochrotophos@1.6 ml/l or Imidacloprid 0.3ml/l or Dimethoate @ 2 ml/l for control of sucking pests in groundnut.
- Rice: The present weather conditions are favourable for brown plant hopper and blast incidence in paddy. To control for BPH to spray buprofezin 1.6 ml/l or acephate @ 1.5 ml./L of water. For blast control to spray tricyclazole @ 0.6 grams/L or isoprothiolane 1.5 ml/l of water.
- Maize: Farmers are advised to monitor incidence of fall army worm in maize by arranging 10 pheromone traps per acre. If the trap catch is more than 10, they are advised to spray neem oil @ 5ml/L of water. Based on the intensity of the pest they can go for spraying of Thiodicarb@2g or Imamectinbenzoate @ 0.4 g or Chlorantriliniprole @ 0.4 ml per liter of water. Bengal gram: The Prevailing weather conditions are favorable for Helicoverpha and spodoptera exigua,

colletotrichum blight and wet root rot is observed in Bengal gram crop. Farmers are advised to spray Thiodicarb 1.5 grams or Acephate 1.5 grams or quinalphos 2ml/l. Colletotrichum blight control to spray hexaconazol 400, proficonazol 300 ml and wet root rot control to spray carbendazim, mancozeb 400 grams/acre. Pigeon pea: The present weather conditions are favorable for incidence of spotted pod borer and helicoverpa in redgram. Farmers are advised to go for spraying of Thiodicarb @1.5 g./L or quinalphos 2 ml/l or spinosad 0.3 ml/l or acephate1.5 gm/l or of water.

- Cotton: The present weather conditions are favourable for pink ball worm and sucking pest incidence. The pink boll worm incidence cause rosette flower and boll shedding. For control to spray chloripyriphos @2.5 ml/l or prophenophos @2ml/l or Thiodicarb@1.5 g/l. To control sucking pest incidence to spray rogar 2 ml/l.
- Pomegranate: The present weather conditions are favourable for bacterial leaf blight, fruit sucking moth and fruit borer incidence. To control bacterial leaf blight first spray cupper oxychloride @ 3gm/l and streptocycline @0.5gm/l after 10 days interval spray carbendazim @ 1gm/l and streptocycline @0.5gm/l. For control of fruit sucking moth to keep florescence bulb 1/hectare for attraction of moths. Moths are nocturnal they attract light at night time so easy to collect and destruction of adult moths at night time. To control spray dimethoate or prophenophos @2ml/l.
- Ber: Fruit fly incidence is observed in ber. Farmers are advised to go for control fruit fly to keep methyl uzanol traps @ 6-8 /acre to trap the fruit fly.
- Guava: Fruit fly incidence is observed and causes more sevier damage at fruit development stage guava. Farmers are advised to go for control fruit fly to keep methyl uzanol traps @ 6-8 /acre to trap the fruit fly.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

02-01-2020/09:00 GMT
02-01-2020/14:30 IST



IMD/Delhi

Figure: 1. Latest available satellite picture as on 02 January 2020 at 1430 Hrs (IST).
(Source: IMD).

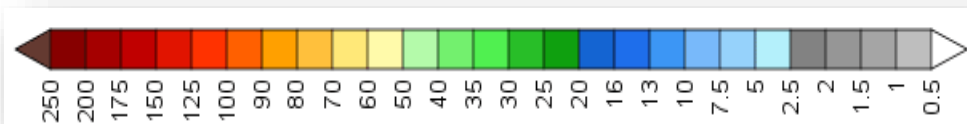
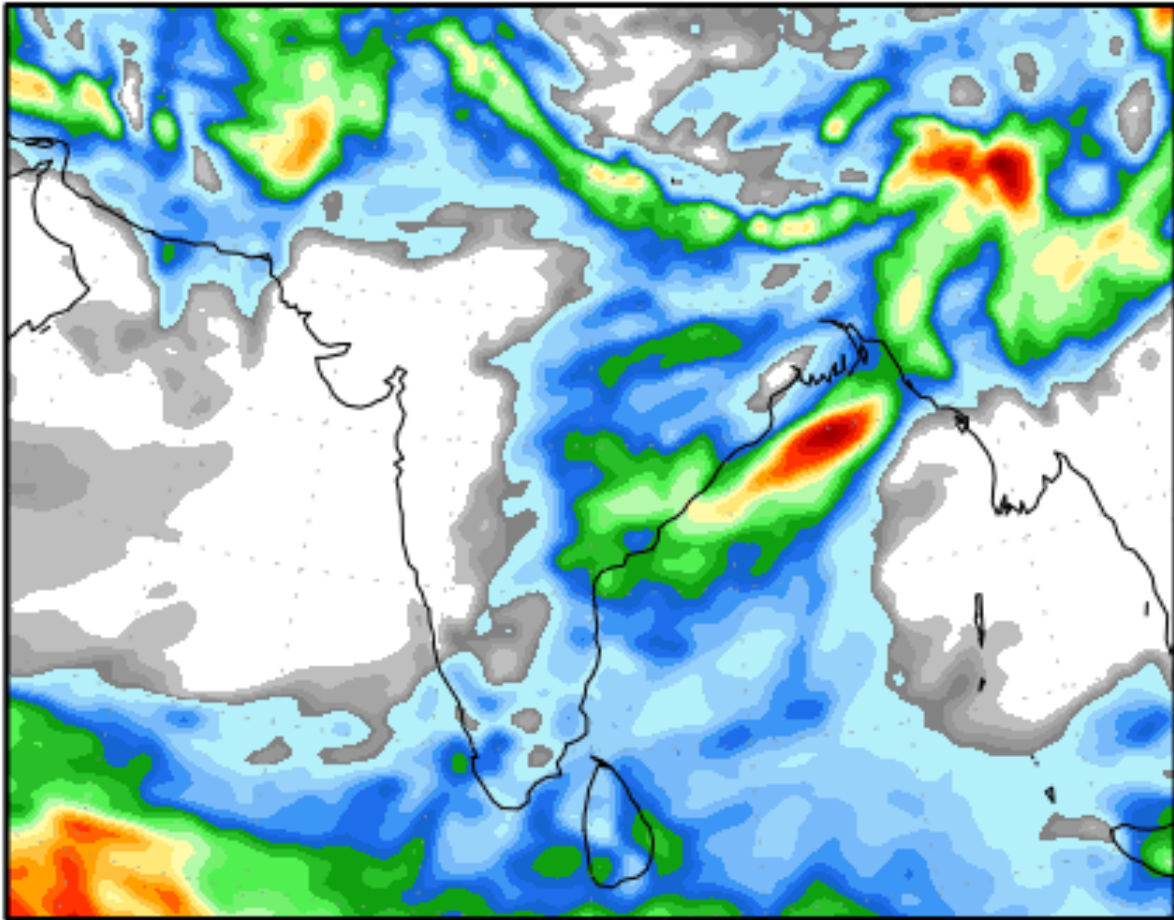


Figure:2. Precipitation forecast for 02 Jan to 10 Jan 2020 (Source: NOAA NCEP).

Disclaimer: The predictability of weather depends on many factors which are dynamic in nature. 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 to 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.