

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 10 January 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Northeast monsoon rains have ceased over Tamil-Nadu, Puducherry & Karaikal, Kerala & Mahe & adjoining areas of Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka from today, the 10th January, 2020.
- A Western Disturbance as a cyclonic circulation lies over Iran & neighbourhood at 3.1 Km above mean sea level, under its influence an induced cyclonic circulation very likely to develop over West Rajasthan & neighbourhood at lower tropospheric levels on 13th January, 2020. System is very likely to move eastward and start affecting northwest India from 11th January, 2020 night onwards with peak intensity on 13th. Under its influence, fairly widespread to widespread precipitation is very likely to occur over Western Himalayan region on 12th & 13th with possibility of isolated heavy fall over Jammu & Kashmir on 12th & 13th and over Himachal Pradesh & Uttarakhand on 13th January, 2020.
- Light to moderate scattered/fairly widespread rain/thundershower very likely over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, and Rajasthan on 13th with possibility of isolated heavy falls over north Punjab and north Haryana & Chandigarh.
- Isolated thunderstorm along with hail & lightning is also likely over Western Himalayan region, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan on 13th January, 2020.
- A fresh Western Disturbance in quick succession is likely to affect Western Himalayan & plains of northwest India during 15th to 17th with peak intensity of precipitation on 16th January, 2020.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rain/Thunder showers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Arunachal Pradesh; at a few places over Odisha, Jharkhand, Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Uttarakhand, Bihar, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya.

- Cold Wave conditions in some pockets with Severe Cold Waves in isolated places observed over Haryana and Rajasthan; Cold Wave to Severe Cold Wave conditions in isolated pockets over Jammu & Kashmir and Himachal Pradesh; Cold Wave conditions in some pockets over West Madhya Pradesh and in isolated pockets over Punjab and East Madhya Pradesh.
- Very dense fog observed in isolated pockets over Uttarakhand and north Madhya Pradesh; Dense fog in isolated pockets over Himachal Pradesh, Haryana, Delhi, East Uttar Pradesh and Madhya Maharashtra at 0830 hours IST of today.
- Visibility recorded at 0830 hours IST of today (in metres): Pantnagar, Kanpur, Datia and Tikamgarh-25 each; Mahabaleshwar, Mandi, Palam, Hardoi, Hamirpur and Sundernagar-50 each; Aligarh, Bahraich, Fursatganj, Fatehpur, Satna, Dhubri, Kailashahar and Agartala-200 each.
- Yesterday, cold Day to Severe Cold Day conditions were recorded in isolated pockets over Haryana, Chandigarh & Delhi and Uttar Pradesh and Cold Day conditions in isolated pockets over Punjab and north Rajasthan.
- Maximum Temperature Departures as on 09-01-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Lakshadweep; at many places over South Interior Karnataka and Rayalaseema; at a few places over Coastal Karnataka & North interior Karnataka, Andaman & Nicobar Islands, Kerala & Mahe and Tamil-Nadu, Puducherry & Karaikal; at isolated places over Coastal Andhra Pradesh & Yanam and Telangana. They were markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh & Delhi; at many places over Arunachal Pradesh, Uttarakhand and Madhya Pradesh; at a few places over Uttar Pradesh and East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over Punjab and Gujarat region; at many West Rajasthan, Vidarbha, Chhattisgarh, Jharkhand and Gangetic West Bengal; below normal (-1.6°C to -3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Jammu & Kashmir, Himachal Pradesh and Assam & Meghalaya; at isolated places over Odisha, Sub-Himalayan West Bengal & Sikkim near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.2°C was recorded at Cannur (Kerala).
- Minimum Temperature Departures as on 10-01-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Odisha and Nagaland, Manipur, Mizoram & Tripura; at a few places over Madhya Maharashtra; at isolated places over Bihar, Assam & Meghalaya, Kerala & Mahe and Lakshadweep; above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh & Yanam, Telangana and North Interior Karnataka; many places

over Andaman & Nicobar Islands; at a few places over Jharkhand, Coastal Karnataka and Rayalaseema; at isolated places over Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal. They are markedly below normal (-5.1°C or less) at a few places over West Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Jammu & Kashmir and East Rajasthan; at a few places over Himachal Pradesh, West Rajasthan, East Madhya Pradesh and Vidarbha; below normal (-1.6°C to -3.0°C) at many places over Uttarakhand, Haryana, Chandigarh & Delhi and Gujarat. The lowest minimum temperature of 1.1°C recorded at Hissar (Haryana) over plains of the country.

Weather Warning during next 5 days (IMD)

- 10 January (Day 1): Cold day conditions in some pockets with Severe Cold day in isolated pockets very likely over West Madhya Pradesh; Cold day conditions in some pockets over East Madhya Pradesh and in isolated pockets over Uttarakhand, Punjab, north Haryana, Uttar Pradesh, Chhattisgarh, Bihar and Sub-Himalayan West Bengal & Sikkim. Cold Wave conditions in some pockets very likely over West Madhya Pradesh and in isolated pockets over Uttarakhand, north Rajasthan and East Madhya Pradesh. Dense to very dense fog very likely in isolated pockets over Uttarakhand, Punjab and Haryana, Chandigarh & Delhi; dense fog in isolated pockets over Himachal Pradesh, north Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Ground frost in isolated pockets very likely over north Rajasthan.
- 11 January (Day 2): Cold day conditions in some pockets over West Madhya Pradesh and in isolated pockets over Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar and Sub-Himalayan West Bengal & Sikkim. Cold Wave conditions in isolated pockets very likely over West Madhya Pradesh. Dense fog very likely in isolated pockets over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 12 January (Day 3): Heavy rain/snow likely at isolated places over Jammu & Kashmir. Thunderstorm accompanied with hail & lightning likely at isolated places over Jammu & Kashmir. Dense fog in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 13 January (Day 4): Heavy rain/snow likely at a few places over Jammu & Kashmir and Himachal Pradesh and at isolated places over Uttarakhand, Punjab and north Haryana. Thunderstorm accompanied with hail & lightning likely at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab,

Haryana, Chandigarh & Delhi and West Rajasthan. Dense fog likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- 14 January (Day 5): Dense fog likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- The weather outlook for the period of seven days i.e., 10 to 18 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)

Rajasthan

Weather condition:

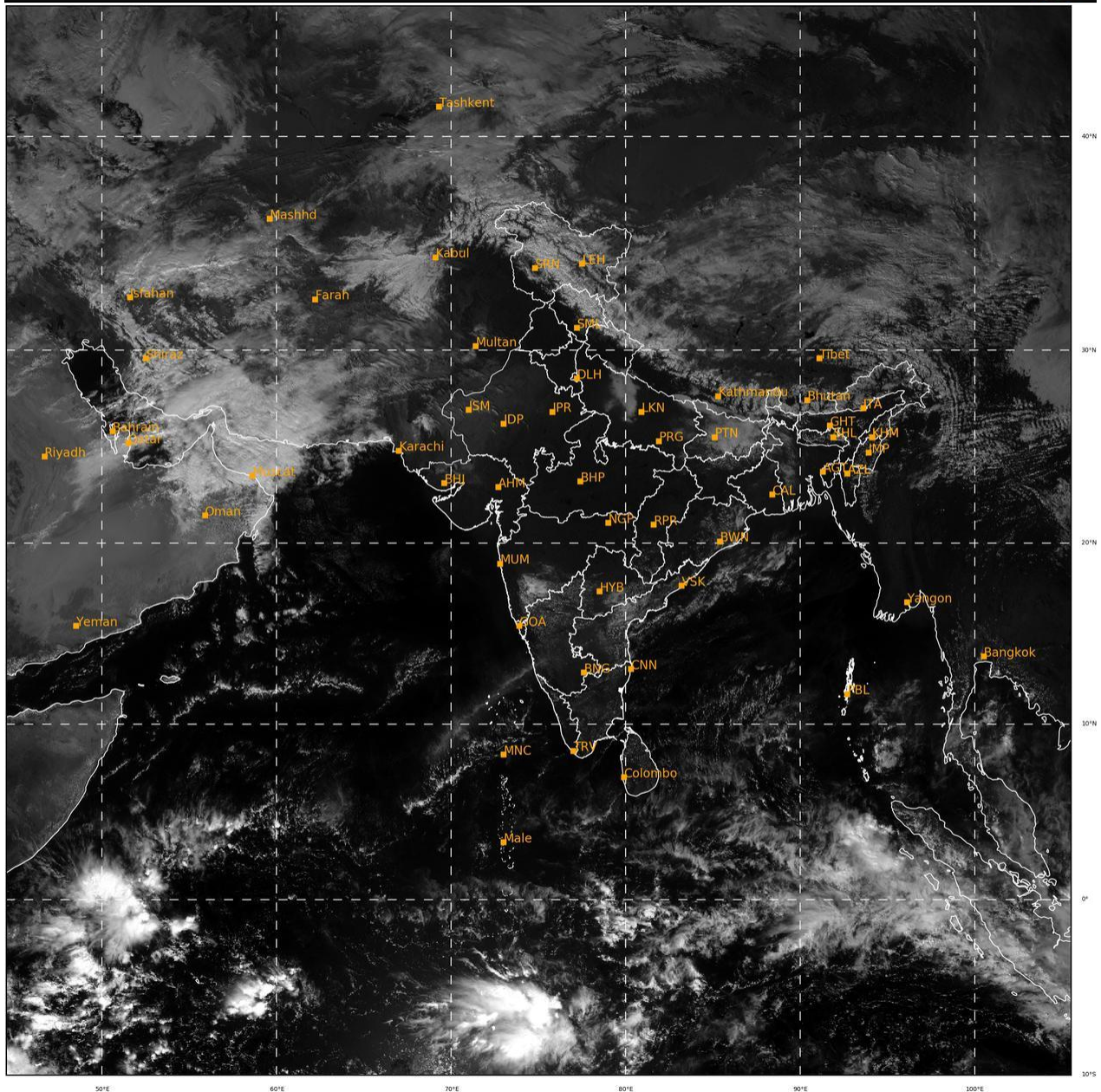
State: Cloudy weather and light rainfall was recorded in Ganganagar, Bikaner & Churu district due to western disturbance. Ganganagar received 15.4 mm rainfall on 6-1-2020. Mount Abu was recorded as coldest place (3 degree C) during the week. At centre: The max. temp. range from 20.0 to 25.0 °C with mean value of 21.2 °C which was 2.1 °C below the normal value. The min. temp. range from 5.0 to 10.0 with mean value of 5.5 which was 0.4°C above normal. The wind velocity ranges from 0.8 to 5.3 with mean value of 2.4 km/hr. The BSSH ranges from 0.8 to 7.8 with mean value of 4.8 hrs. The mean evaporation was 2.0 mm.

Contingency measure:

- Keeping in view of possibility of cold wave during next five days, Farmers are advised to protect nurseries, orchard of new fruit crop and other high value crop by cold barrier or covering by crop residues.
- Looking to cold waves in the state, mustard crop should be sprayed with 0.1 % sulphuric acid or apply irrigation or produce smoke in the fields for the protection against frost. To control aphid dusting of methyl parathion 2% or malathion 5% dust@ 20-25 kg /ha.
- Gram crop should be sprayed with 0.1 % sulphuric acid or apply irrigation or produce smoke in the fields for the protection against frost.
- Pea crop should be sprayed with 0.1 % sulphuric acid or apply irrigation or produce smoke in the fields for the protection against frost. Spraying of 2 % urea is advised for proper growth of pods in the pea crop.
- Looking to the sudden dip in minimum temperature take suitable protection measures to protect poultry birds and livestock.

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

10-01-2020/(0800 to 0827) GMT
10-01-2020/(1330 to 1357) IST



15

559

IMD, DELHI

Figure: 1. Latest available satellite picture as on 10 January 2020 at 1357 Hrs (IST).
(Source: IMD).

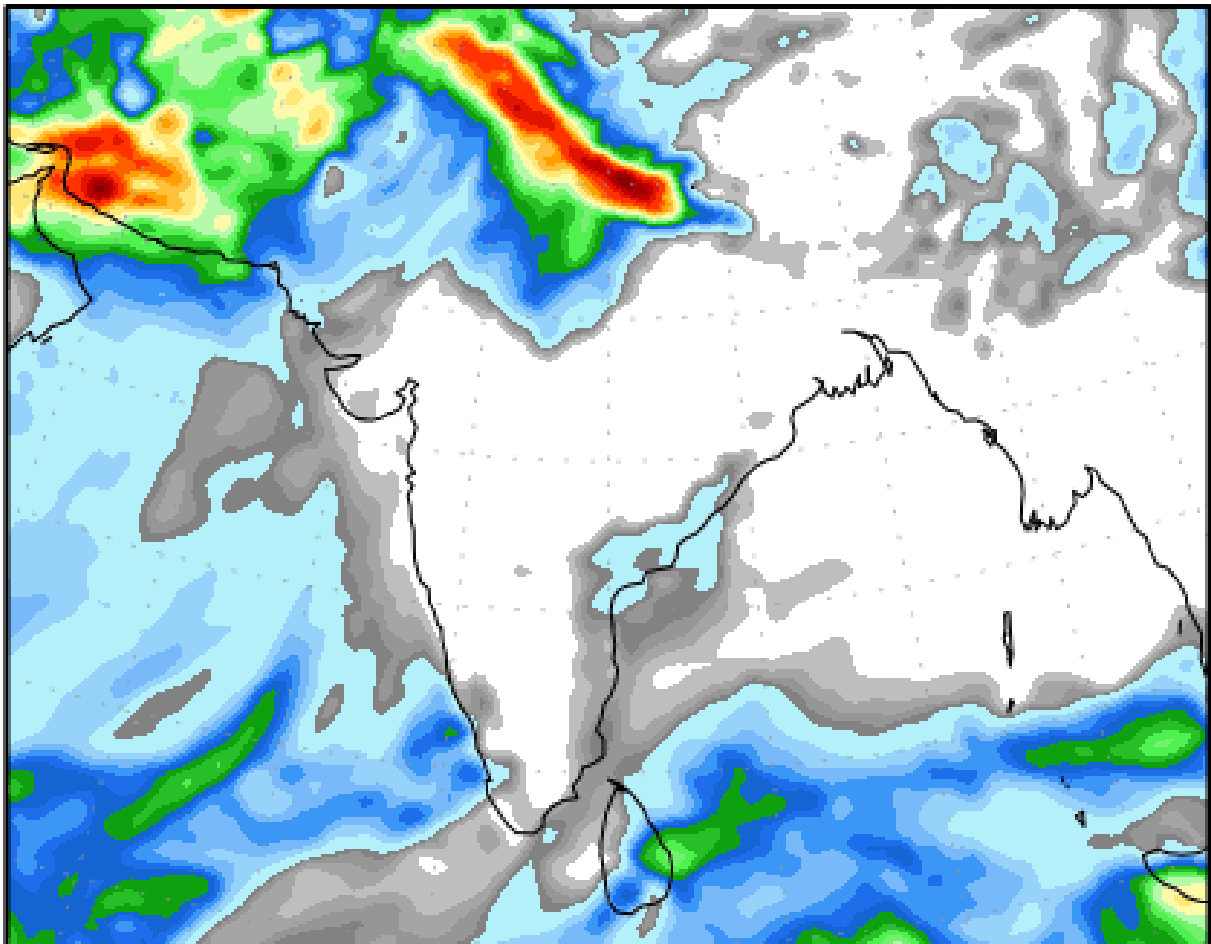


Figure:2. Precipitation forecast for 10 Jan to 18 Jan 2020 (Source: NOAA NCEP).

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