

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 08 December 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Under the influence of the Western Disturbance as a trough roughly along Long. 60°E to the north of Lat. 25°N and likely moisture feeding from Arabian Sea over northwest Himalayas at mid-tropospheric levels, scattered to fairly widespread rain/snowfall very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh during 08th-09th and isolated rain/snowfall over Uttarakhand during 08th-09th December, 2020. Isolated heavy rain/snow is very likely over Kashmir, Gilgit-Baltistan, Muzaffarabad on 08th December, 2020.
- In quick succession, a fresh Western Disturbance and its induced cyclonic circulation very likely to cause fairly widespread to widespread rain/snowfall over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh and isolated to scattered rain/snowfall over Uttarakhand during 11th-12th December, 2020. Isolated to scattered rainfall also very likely over Haryana & Chandigarh and Punjab during same period. Due to high moisture feeding from Arabian Sea to northwest India at lower & mid tropospheric levels, isolated heavy rain/snow very likely over Jammu & Kashmir, Gilgit-Baltistan, Muzaffarabad on 11th & 12th and over Himachal Pradesh on 12th December, 2020.
- Thunderstorm accompanied with lightning & hail likely at isolated places over Punjab on 11th and thunderstorm accompanied with lightning at isolated places over Haryana & Chandigarh on 11th & 12th December, 2020.
- Very Dense fog in isolated pockets very likely over Uttar Pradesh and Dense fog in isolated pockets over Punjab and Haryana, Chandigarh & Delhi in the morning hours of 09th December, 2020. Dense fog in isolated pockets over Mizoram & Tripura and Assam & Meghalaya during next 5 days and over Bihar & West Bengal during next 2-3 days.
- 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 most places over Rayalaseema, South Interior Karnataka, Tamil Nadu,

Puducherry & Karaikal and Lakshadweep; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Kerala & Mahe and at isolated places over Sub-Himalayan West Bengal & Sikkim and Coastal Andhra Pradesh & Yanam.

- Fog observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Dense to Very Dense Fog at many places over East Uttar Pradesh; in some pockets over West Uttar Pradesh, Bihar and Gangetic West Bengal and in isolated pockets over Haryana, Chandigarh & Delhi, West Rajasthan, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and Moderate to Dense Fog in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Odisha and Nagaland, Manipur, Mizoram & Tripura.
- Maximum Temperature Departures as on 07-12-2020: Maximum temperatures were markedly above normal (5.1°C or more) at most places over Jharkhand; at a few places over East Rajasthan and Madhya Pradesh; at isolated places over Gangetic West Bengal; appreciably above normal (3.1°C to 5.0°C) at most places over Konkan & Goa; at many places over West Rajasthan, Saurashtra & Kutch and Odisha; at a few places over Himachal Pradesh, Punjab, Gujarat Region and Vidarbha; at isolated places over Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over Uttarakhand and Chhattisgarh; at many places over Haryana, Chandigarh & Delhi, Marathwada, Telangana and North Interior Karnataka; at a few places over Madhya Maharashtra and Kerala & Mahe; at isolated places over Coastal Andhra Pradesh & Yanam. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Sub-Himalayan West Bengal & Sikkim and Tamil Nadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at a few places over Rayalaseema; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.5°C was reported at Vengurla (Konkan & Goa).
- Minimum Temperature Departures as on 08-12-2020: Minimum temperatures are markedly above normal (5.1°C or more) at a few places over West Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Bihar; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab, Karnataka and Rayalaseema; at many places over Himachal Pradesh, East Rajasthan and West Madhya Pradesh; at a few places over East Uttar Pradesh, East Madhya Pradesh, Gujarat Region and Gangetic West Bengal; at isolated places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, Saurashtra & Kutch, Madhya Maharashtra and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at most places over Uttarakhand, Jharkhand and Lakshadweep; at many places over Odisha, Tamil Nadu, Puducherry & Karaikal and Kerala; at a few places over Sub-Himalayan &

West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Coastal Andhra Pradesh & Yanam; at isolated places over Andaman & Nicobar Islands and near normal over rest parts of the country. The lowest minimum temperature of 7.7°C reported at Hissar (Haryana) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 08 December (Day 1): Heavy rainfall/snowfall very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Dense to very dense fog very likely in isolated pockets over Uttar Pradesh and dense fog in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Bihar, West Bengal, Mizoram & Tripura and Assam & Meghalaya.
- 09 December (Day 2): Thunderstorm with lightning very likely at isolated places over Kerala & Mahe and Lakshadweep. Dense fog very likely in isolated pockets over Uttar Pradesh, Bihar, Sub-Himalayan West Bengal, Mizoram & Tripura and Assam & Meghalaya.
- 10 December (Day 3): Thunderstorm with lightning very likely at isolated places over Kerala & Mahe. Dense fog very likely in isolated pockets over Bihar, Mizoram & Tripura and Assam & Meghalaya.
- 11 December (Day 4): Heavy rainfall/snowfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad. Thunderstorm accompanied with lightning & hail likely at isolated places over Punjab and thunderstorm accompanied with lightning at isolated places over Haryana & Chandigarh. Dense fog likely in isolated pockets over Mizoram & Tripura and Assam & Meghalaya.
- 12 December (Day 5): Heavy rainfall/snowfall likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh. Thunderstorm accompanied with lightning likely at isolated places over Punjab and Haryana & Chandigarh. Dense fog likely in isolated pockets over Mizoram & Tripura and Assam & Meghalaya.
- The weather outlook for seven days i.e., 08 December to 16 December 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)

Maharashtra-Vidharbha

Weather condition:

Weekly average means (48 MW) at AICRPAM Akola centre: T max 30.7°C (normal 30.7°C), T min 13.4°C (normal 12.5 °C). RH I 79% (normal 70 %), RH II 31% (normal 30 %). Evaporation rate 4.8 mm (normal 4.2 mm), Wind speed 2.3 km/hr (normal 3.2 km/hr) and BSH 7.5 hrs (normal 8.4 hrs). Maximum temperature across the week was 0.1°C above normal with a deviation of -3.1 to +1.7°C from normal. Minimum temperature across the week 1.0°C above normal with a deviation of -1.8 to 2.7°C from normal.

Contingency measure:

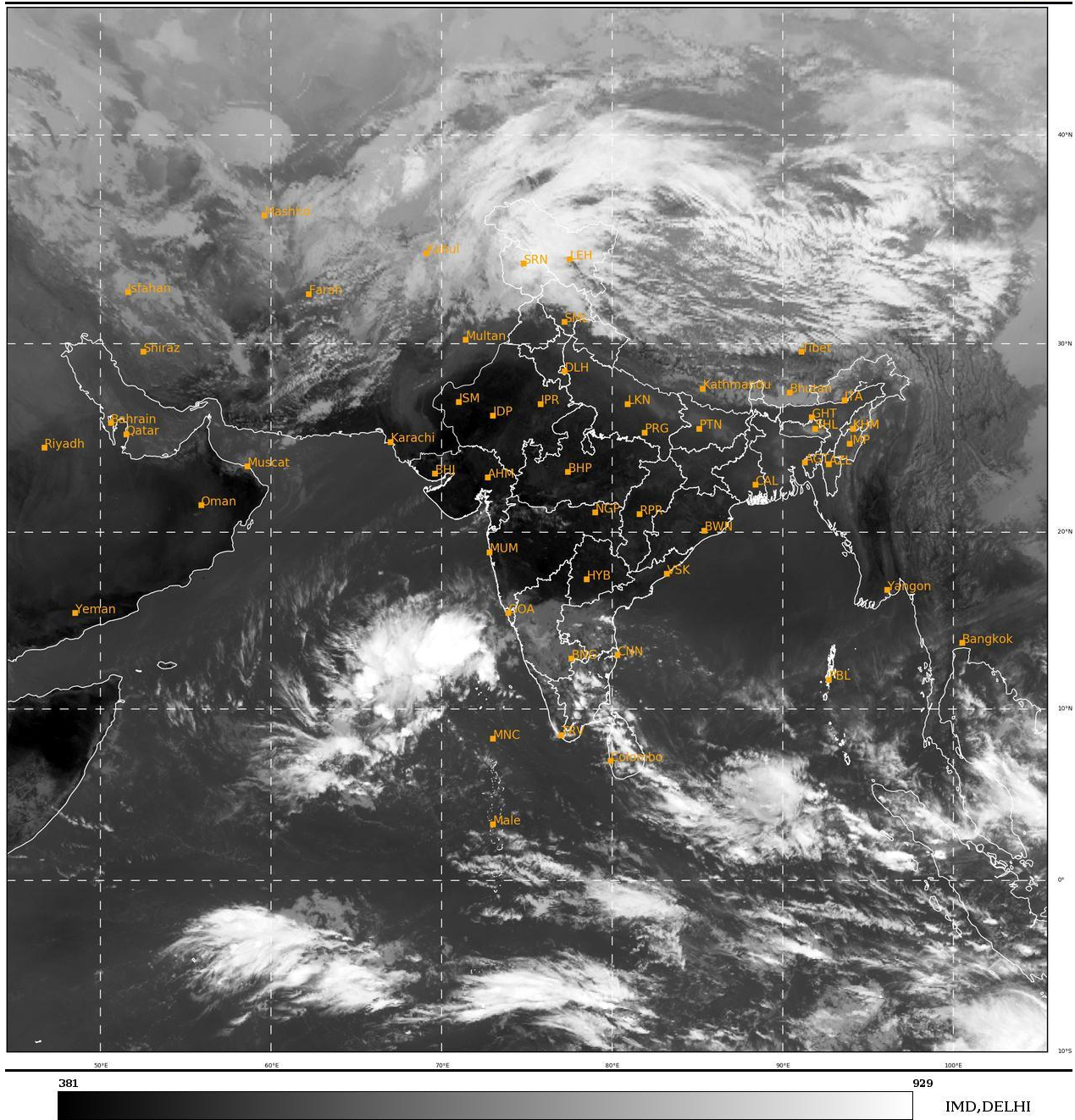
- The forecast suggests mainly dry weather will remain for next five days over Vidharbha. In timely sown irrigated wheat crop, top dressing of nitrogenous fertilizer (@ 50 kg per hectare) 20-25 days after sowing (CRI stage) at the time of irrigation is advisable.
- For delayed sowing of irrigated wheat (November 15-December 15) use varieties PDKV Sardar (AKAW 4210-6), AKW-1071(Purna). Follow seed treatment with Carbendazim @ 2.5 g / kg seed. Also, seed treatment with Azotobacter and PSB @ 25 g each / kg seed treatment is advisable. Use fertilizer @ 40:40:40 kg NPK/ha at sowing and remaining N @ 40 kg/ha at 18-20 days stage at first irrigation.
- To manage the initial incidence of pod borer (*Helicoverpa*) at vegetative stage in Chickpea, install erect bird perches @ 20/ha randomly in the field to encourage predation by insectivorous birds. Monitor for incidence of *Helicoverpa* for above ETL level incidence (1-2 pod borer per plant or 5 % damage crops) undertake first spray of 5% NKSE OR Azadirachtin 300 PPM @ 50 ml per 10 litres of water OR Azadirachtin 1500 PPM @ 25 ml OR HaNPV (1x10⁹ POB/ml) 500 LE/ha, OR quinalphos 25%EC @ 20 ml OR Emamectin benzoate 5% SG @ 3 g OR Chlorantraniliprole 18.5 % SG @ 2.5 g per 10 litres of water. *Gonocephalum* spp. Causes damage to chickpea crop at germination phase. To control take a spray of Chlorpyrifos 20 % @ 25 ml per 10 L of water.
- In cotton avoid further extended growth after multiple picking. Remaining plant parts should be collected and destroy properly after final picking.
- Prevailing weather conditions of partly cloudiness and lower night time temperature are congenial for pod borer incidence in pigeonpea. To manage the incidence of pod borer (*Helicoverpa*) at flowering stage/pod formation (3/plant or 5 to 10% pod damage) undertake spray first spray of 5% NKSE OR Azadirachtin 300 PPM @ 50 ml

per 10 litres of water OR Azadirachtin 1500 PPM @ 25 ml OR HaNPV (1x10⁹ POB/ml) 500 LE/ha, OR quinolphos 25%EC @ 20 ml OR Thiodicarb 75% WP @ 20 g per 10 litres of water.

- White flies on brinjal crop suck the juice from leaves and secrete the liquid which helps fungal growth. Hence for the control of white fly take a spray of Diafenthiuron 50 % WP@ 12 gm or Fenpropathrin 30 % @ 3.5 ml per 10 liter of water.
- In the guava orchard, collect rotted fruits and destroy it. Harvesting of mature fruits at proper time should be done.
- For milch animals fodder sowing can be initiated of Lucerne and Berseem grass during this period. Due to deficiency of minerals in goat, may affect productivity. So ensure about goat diet/ration which should contain balanced amount of minerals, vitamins and proteins.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

08-12-2020/(0800 to 0827) GMT
08-12-2020/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 08 December 2020 at 1357 Hrs (IST).
(Source: IMD).**

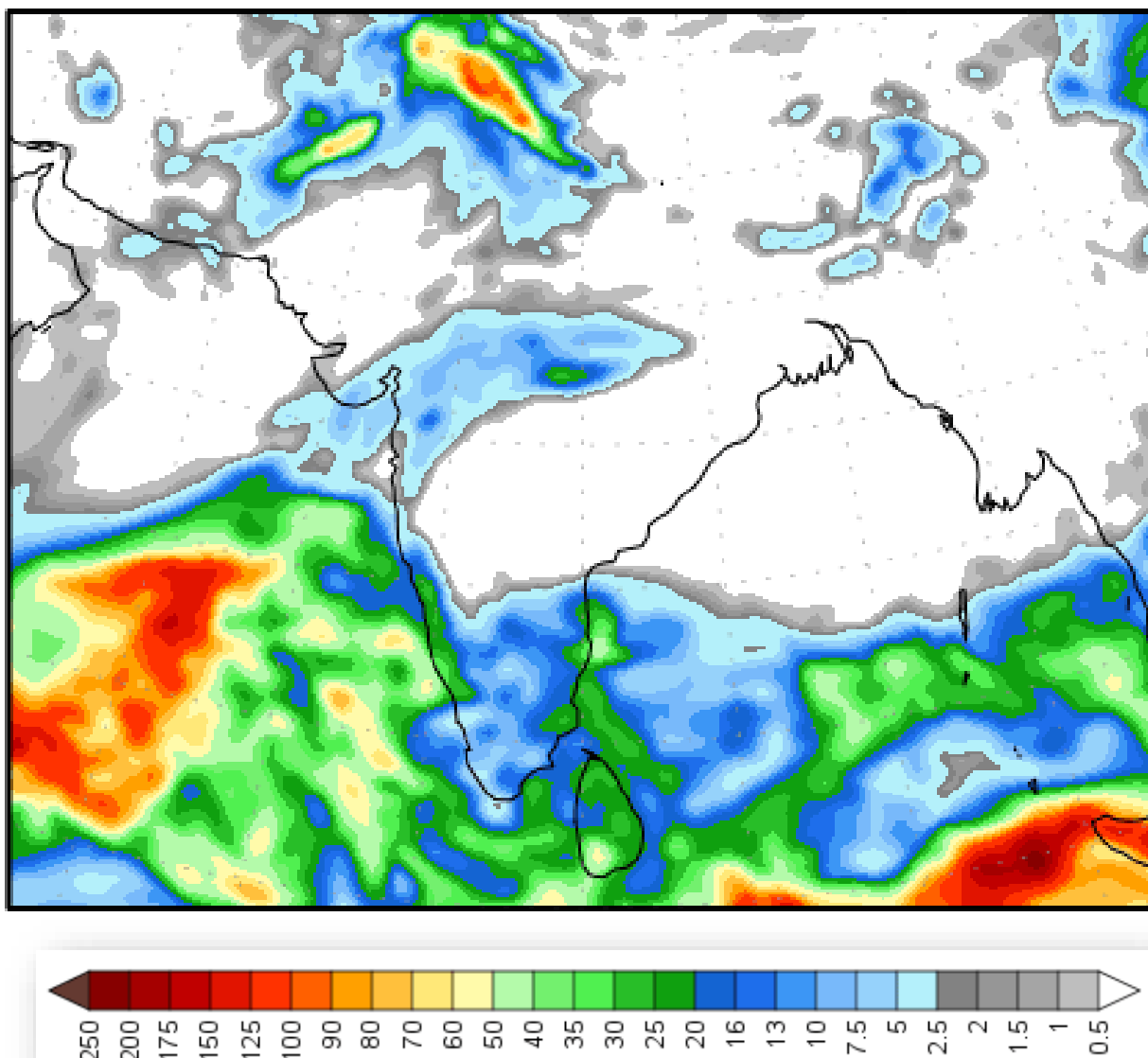


Figure:2. Precipitation forecast for 08 to 16 December 2020 (Source: NOAA NCEP).

Disclaimer: The predictability of weather depends on many dynamic factors. 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 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.