

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 08 February 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A fresh feeble Western Disturbance as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along longitude 55°E to the north of latitude 31°N. Under its influence, isolated rainfall/snowfall likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 08th & 09th; over Himachal Pradesh on 09th and over northern parts of Uttarakhand on 09th & 10th February, 2021.
- Dense fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh in the morning hours of 9th & 10th February, 2021.
- Gradual rise by 2-4°C in minimum temperatures likely over Northwest India during next 4-5 days. Hence, no Cold Wave Conditions will occur over these regions. However, Cold Wave conditions is very likely to occur in isolated pockets over south Madhya Pradesh, Chhattisgarh and Odisha on 08th February, 2021 and abate thereafter.
- 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 Assam & Meghalaya and Andaman & Nicobar Islands.
- Heavy rainfall observed at isolated places over Andaman & Nicobar Islands.
- Thunderstorm recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya.
- Fog observed (at 0830 hours IST of today): Dense to very dense fog in isolated pockets over Punjab and dense fog in isolated pockets over Haryana and Moderate Fog in isolated pockets over Delhi and Uttar Pradesh.
- Maximum Temperature Departures as on 07-02-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand and Konkan & Goa and at a few places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad and Himachal Pradesh; above normal (1.6°C to

3.0°C) at many places over Assam & Meghalaya, West Rajasthan, Coastal Karnataka and Kerala & Mahe; at a few places over Arunachal Pradesh and Gujarat Region and at isolated places over Tamilnadu, Puducherry & Karaikal, Saurashtra & Kutch and Coastal Andhra Pradesh & Yanam. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over North Interior Karnataka; at many places over Haryana, Chandigarh & Delhi, Madhya Maharashtra, Gangetic West Bengal and South Interior Karnataka; at a few places over Sub-Himalayan West Bengal, Telangana, Marathawada and Andaman & Nicobar Islands and at isolated Uttar Pradesh, East Rajasthan, Bihar, Odisha, Chhattisgarh, Vidarbha and Nagaland, Manipur, Mizoram & Tripura and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.7°C was reported at Mangalore/Panambur (Coastal Karnataka) over the country.

- Minimum Temperature Departures as on 08-02-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Andaman & Nicobar Islands and at isolated places over Uttarakhand; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh. They are appreciably below normal (-3.1°C to -5.0°C) at many places over East Madhya Pradesh, Vidarbha, Marathawada; at a few places over East Rajasthan, Odisha, Rayalaseema and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Madhya Maharashtra; below normal (-1.6°C to -3.0°C) at many places over East Uttar Pradesh, West Bengal & Sikkim, South Interior Karnataka; at a few places over Haryana, Chandigarh & Delhi and Gujarat state; at isolated places over Assam & Meghalaya, West Uttar Pradesh, Bihar, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. The lowest minimum temperature of 4.0°C reported at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 08 February (Day 1): Dense Fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh. Cold Wave conditions in isolated pockets very likely over south Madhya Pradesh, Chhattisgarh and Odisha. Strong Winds (speed reaching 45-55 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.

- 09 February (Day 2): Dense Fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh. Strong Winds (speed reaching 45-55 kmph) very likely over Gulf of Mannar, and Comorin area. Fishermen are advised not to venture into these areas.
- 10 February (Day 3): No weather warning.
- 11 February (Day 4): No weather warning.
- 12 February (Day 5): No weather warning.
- The weather outlook for seven days i.e., 08 to 16 February 2021 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-Vidarbha

Weather condition:

Weekly average means (05 MW) at AICRPAM Akola centre: T max 30.4°C (normal 31.1°C), T min 12.4°C (normal 12.5°C). RH I 61% (normal 63 %), RH II 27% (normal 25 %). Evaporation rate 5.3 mm (normal 5.2 mm), Wind speed 1.4 km/hr (normal 4.4 km/hr) and BSH 7.4 hrs (normal 8.5 hrs). Maximum temperature across the week was 0.7°C below normal with a deviation of -2.7 to 1.0°C from normal. Minimum temperature across the week 0.1°C below normal with a deviation of -2.5 to 3.3°C from normal.

Contingency measure:

- The forecast (IMD) indicates light rain at isolated places on 05 February and mainly dry weather remain during 06-08 February over Vidarbha.
- With prevalence of dry weather undertake need based irrigation in late sown chickpea crop. Ensure irrigation preferably with sprinkler at pod formation stage for better productivity. Avoid over irrigation/water stagnation to prevent the incidence of root rot. For management of pod borer (*Helicoverpa*) in chickpea undertake first spray with 5% NKSE OR Azadirachtin 1500 PPM @ 25 ml OR HaNPV (1x10⁹ POB/ml) 500 LE/ha, OR quinolphos 25%EC @ 20 ml per 10 litres of water. Fifteen days after first spray in chickpea if needed undertake second spray with Emamectin benzoate 5% SG @ 3 g OR Ethion 50% EC @ 25ml OR Flubendiamide 20%

WG @ 5 g OR Chlorantraniliprole 18.5 % SG @ 2.5 g per 10 litres of water.

- In timely sown irrigated wheat ensure irrigation at flowering (65-70 days stage). In late sown irrigated wheat ensure adequate soil moisture at late jointing stage (45-50 days) for better productivity.
- On completion of pickings terminate the cotton crop by uprooting stalks. Uprooted cotton stalks may be used for compost making using suitable microbial cultures OR roto- slashed in the field. Deep ploughing of harvested cotton fields to expose the insect larvae and pupa to sun and predator birds are advisable.
- Ensure irrigation at seed formation/seed filling stage (80 days stage) in irrigated safflower. Avoid over irrigation/water stagnation to prevent incidence of safflower wilt. In late sown safflower for control of above ETL level incidence (30% infested plants) of aphids undertake spray with dimethoate 30% EC @ 10 ml per 10 litres of water.
- With assured irrigation facility, sowing of summer groundnut (TAG 24) can normally be undertaken up to first week of February when optimum temperature range for germination prevails (minimum temperature >15°C). Preferably BBF sowing with sprinkler irrigation is advisable for summer groundnut. Seed treatment with Trichoderma 5g/kg seed and rhizobium and PSB (each 250g / 10-15 kg seed) is advisable. Recommended fertilizer dose @ 25:50:30 kg NPK per hectare is advisable for summer groundnut. If gaps are seen across germinated groundnut field they could be filled by fresh sowing within ten days time.
- Normal sowing of summer sesame (AKT 101, PKV-NT-11) and summer sunflower can normally be undertaken up to first week of February. Seed treatment with Trichoderma 4g/kg is advisable. In citrus orchards, continue drip irrigation at the rate of 9-40, 60-96 and 108-137 litres per day for 1-4, 5-7, 8 years and above trees old respectively. Follow irrigation with double ring method or square method if there is no drip system. Irrigate orchard at 7 to 10 days interval.
- With prevailing dry weather need based protective irrigation is advisable in vegetables. Cultivation of cowpea (Pusa Rituraj, a bushy variety) for vegetable purpose (in 40-45 days) can be undertaken during this period. Other recommended varieties include Pusa Phalguni, Pusa Do-Fasali.
- For summer okra planting use ridge and furrow layout with 45x30 cm spacing with seed rate of 10 to 15 kg/ha. Recommended varieties include Pragati ,Arka Anamika, Pusa Makhmali, Parbhani Kranti and Phule

Vibhakta. Cultivation of cluster bean, cucumber, gourd, radish, coriander and fenugreek can be initiated during this period. Undertake spray for fruit borer in Brinjal with 4% NKSE@ 50 ml OR Cypermethrin 25 % EC @ 5 ml per 10 liter of water.

- Keep close vigil to detect any unusual poultry bird death. In view of bird flu scare follow a set of do's and don'ts issued by the local health department. For livestock green feed, with availability of irrigation water, undertake sowing of forage crops (fodder maize African tall, fodder sorghum- Pusa chari, MP Chari, SSG 898). In sheep and goat preventive vaccination for Bulkandi disease (Rinderpest) is advisable.

SAT : INSAT-3D IMG
 IMG_TIR1 10.8 um
 L1C Mercator

08-02-2021/(0800 to 0827) GMT
 08-02-2021/(1330 to 1357) IST

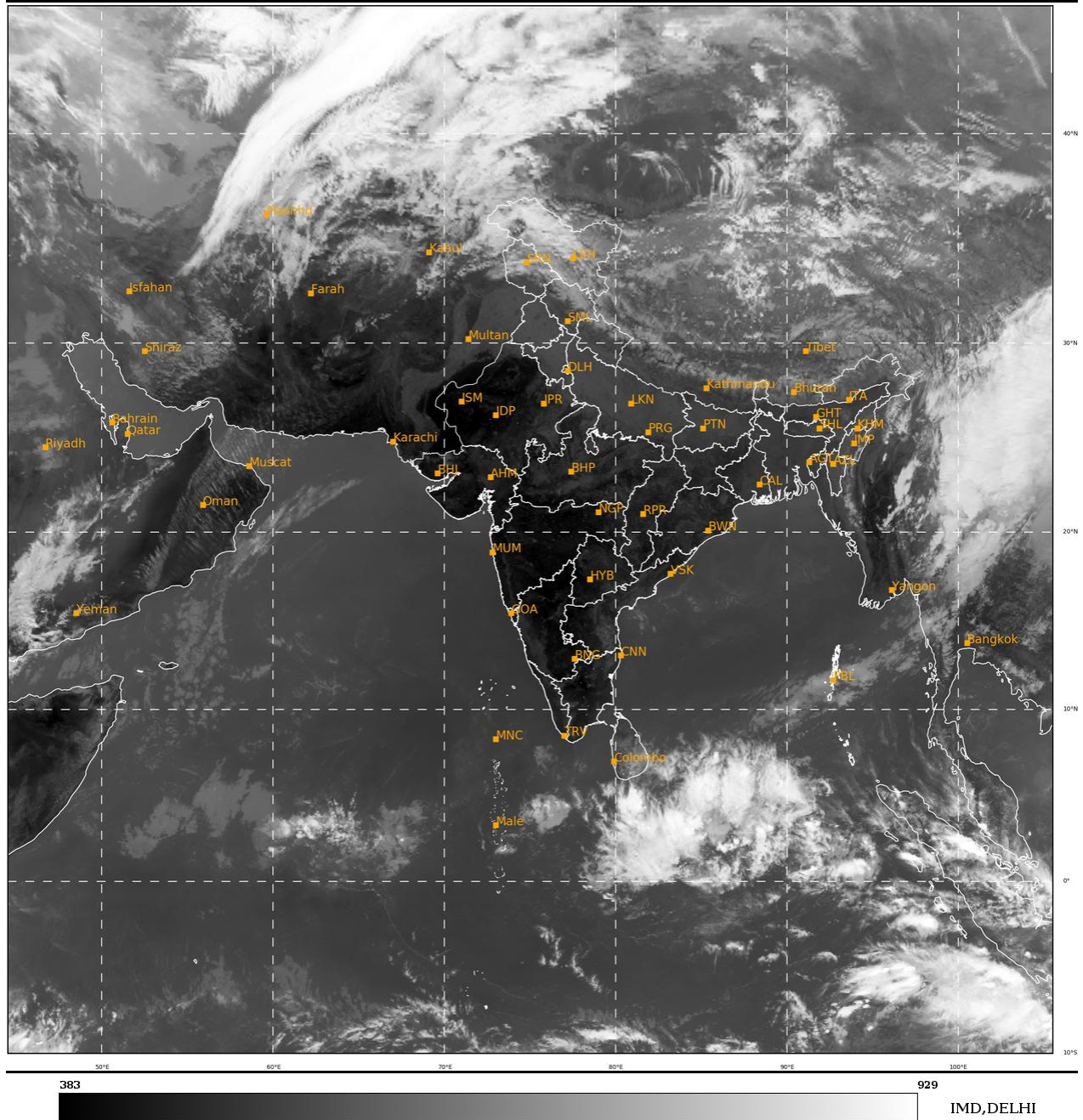


Figure: 1. Latest available satellite picture as on 08 February 2021 at 1357 Hrs (IST). (Source: IMD).

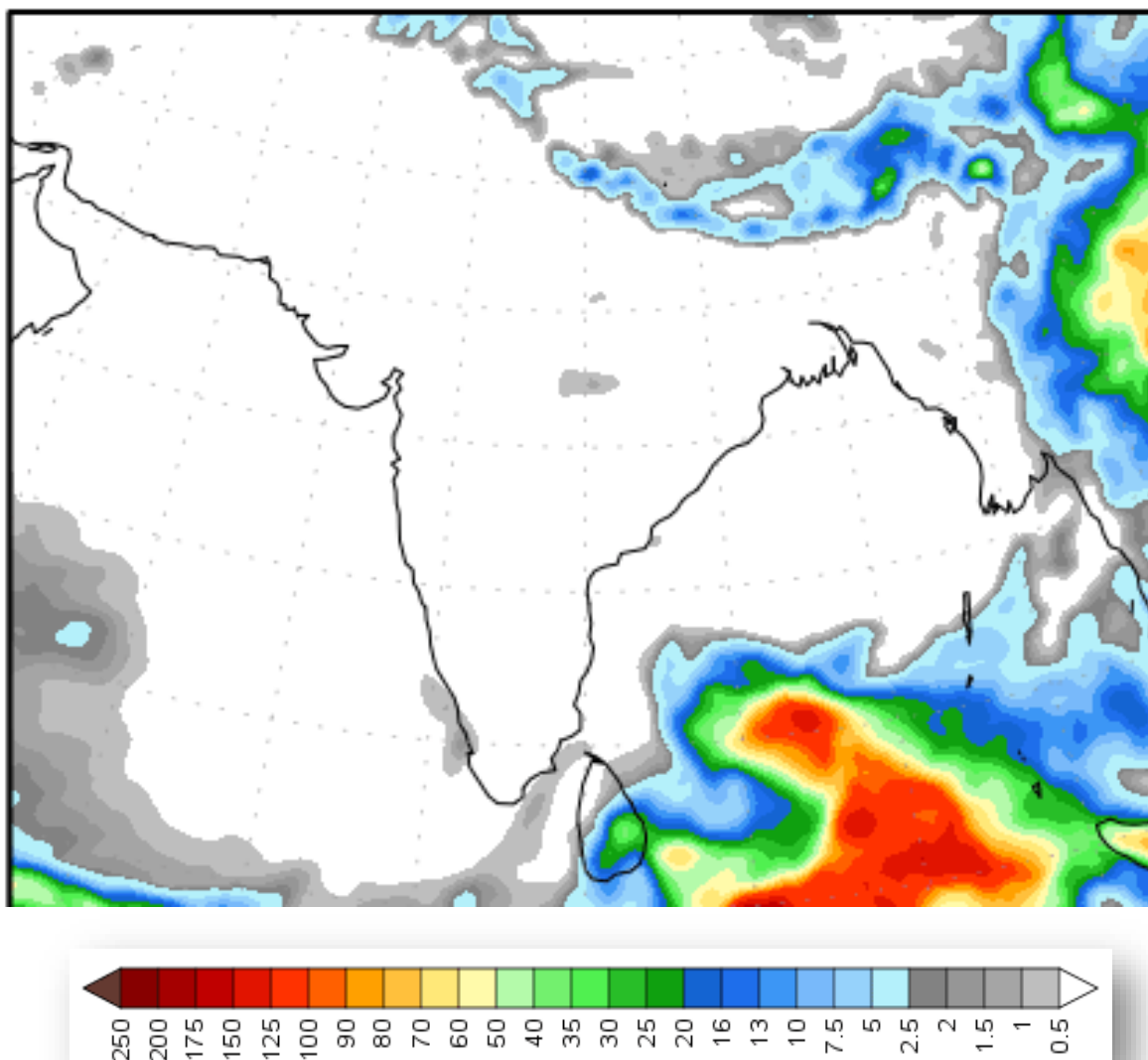


Figure:2. Precipitation forecast for 08 to 16 February 2021 (Source: NOAA NCEP).

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