

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 28 February 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Weather Systems and associated forecast & warnings:
 1. A trough in lower tropospheric westerlies runs along Long. 89°E to the north of Lat.22°N. Under its influence:
- Isolated to scattered rainfall with isolated thunderstorm/lightning over Bihar, Sub-Himalayan West Bengal-Sikkim, Chhattisgarh, Arunachal Pradesh, northeast Assam and Nagaland during next 24 hours.
 2. The cyclonic circulation over south Andaman Sea & adjoining Equatorial Indian Ocean over lower & middle tropospheric levels persists. It is very likely to move west-northwestwards and under its influence, a Low Pressure Area is very likely to form over Southeast Bay of Bengal during next 24 hours and is likely to move further towards Sri Lanka coast during subsequent 48 hours. Under its influence:
- Fairly widespread to widespread light/moderate rainfall with thunderstorm, lightning & gusty winds (30-40 kmph gusting to 50 Kmph) very likely over Andaman & Nicobar Islands on 28th February & 01st March. Isolated heavy rainfall also very likely over Nicobar Islands on 28th February, 2022.
- Fairly widespread light/moderate rainfall with thunderstorm/lightning with isolated Heavy to Very Heavy rainfall very likely over Tamilnadu-PuducherryKaraikal on 03rd & 04th March, 2022. Isolated heavy falls also likely over Rayalaseema on 04th March, 2022.
- Squally winds (40-50 kmph gusting to 60 Kmph) very likely over south Andaman Sea & adjoining Southeast Bay of Bengal on 28th February, over Southeast Bay of Bengal & adjoining south Andaman Sea on 01st March; over Southwest & adjoining Southeast Bay of Bengal on 02nd March; over Southwest Bay of Bengal, Gulf of Mannar and along & off Tamilnadu coast on 03rd March and over Southwest Bay of Bengal and along & off north Tamilnadu-south Coastal Andhra Pradesh coasts on 04th March 2022. Fishermen are advised not to venture into these areas.

3. The Western Disturbance as a trough in middle & upper tropospheric westerlies runs along Long.60°E to the north of Lat. 30°N. it is very likely to cause isolated light rainfall/snowfall over Western Himalayan Region on 28th February & 01st March, 2022.

4. A fresh Western Disturbance is very likely to influence northwest India 02nd March, 2022. It is very likely to cause scattered to fairly widespread light/moderate rainfall/snowfall over Jammu-Kashmir & Himachal Pradesh; isolated light rainfall/snowfall over Uttarakhand and isolated light rainfall over adjoining plains of northwest India on 02nd & 03rd March, 2022.

- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands; at many places over Arunachal Pradesh; at a few places over Gangetic West Bengal and at isolated places over Assam & Meghalaya, Bihar, Jharkhand, East Madhya Pradesh, Chhattisgarh, Tamil Nadu and Kerala.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Bihar, Chhattisgarh, East Madhya Pradesh and Gangetic West Bengal. Hailstorm observed at isolated places over Chhattisgarh, Gangetic West Bengal and Jharkhand.
- Minimum Temperature Departures (as on 28-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Gujarat region; at a few places over Andaman-Nicobar Islands; at isolated places over Madhya Pradesh and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at most places over East Uttar Pradesh, Bihar; at a few places over Chhattisgarh, Kerala & Mahe and Vidarbha and at isolated places over East Rajasthan. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and at a few places over Haryana-Chandigarh-Delhi; below normal (-1.6°C to -3.0°C) at many places over Himachal Pradesh, Coastal Andhra Pradesh-Yanam, Rayalaseema and South Interior Karnataka; at isolated places over West Rajasthan and Tamil Nadu-Puducherry-Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.1°C reported at Amritsar (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 27-02-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Coastal Karnataka; at isolated places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at a few places over West Madhya Pradesh, Vidarbha, Arunachal Pradesh

and Kerala-Mahe; at isolated places over East Madhya Pradesh, Gujarat Region, Odisha and Tamil Nadu-Puducherry-Karaikal. They were markedly below normal (-5.1°C or less) at a few places over Jharkhand; appreciably below normal (-3.1°C to -5.0°C) at isolated places over SubHimalayan West Bengal-Sikkim; below normal (-1.6°C to -3.0°C) at a few places over Chhattisgarh, Gangetic West Bengal, Andaman & Nicobar Islands, Telangana, Rayalaseema and South Interior Karnataka; at isolated place over Coastal Andhra Pradesh-Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.5°C was reported at Punalur (Kerala) over the country.

Weather Warning during the next 5 days (IMD)

- 28 February (Day 1): Heavy rainfall at isolated places very likely over Nicobar Islands. Thunderstorm accompanied with lightning & gusty winds (speed 40-50 kmph) at isolated places very likely over Andaman & Nicobar Islands and with lightning at isolated places over Arunachal Pradesh, northeast Assam and Nagaland. Squally Weather (speed 40-50 kmph gusting to 60 kmph) very likely over south Andaman Sea & adjoining Southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- 01 March (Day 2): Thunderstorm accompanied with lightning & gusty winds (speed 40-50 kmph) at isolated places very likely over Andaman & Nicobar Islands. Squally Weather (speed 40-50 kmph gusting to 60 kmph) very likely over Southeast Bay of Bengal & adjoining south Andaman Sea. Fishermen are advised not to venture into these areas.
- 02 March (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and West Rajasthan. Squally Weather (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & adjoining Southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- 03 March (Day 4): Heavy to very heavy rainfall at isolated places likely over TamilnaduPuducherry-Karaikal. Thunderstorm accompanied with lightning at isolated places very likely over Jammu-KashmirLadakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, TamilnaduPuducherry-Karaikal and Kerala-Mahe. Squally Weather (speed 40-50 kmph gusting to 60 kmph) likely over Southwest Bay of Bengal, Gulf Of Mannar and along & off Tamilnadu coast. Fishermen are advised not to venture into these areas.
- 04 March (Day 5): Heavy to very heavy rainfall at isolated places likely over TamilnaduPuducherry-Karaikal and heavy rainfall at isolated places over Rayalaseema. Thunderstorm accompanied with lightning at isolated places very

likely over south Coastal Andhra Pradesh-Yanam, Rayalaseema, Tamilnadu-Puducherry-Karaikal and Kerala-Mahe. Squally Weather (speed 40-50 kmph gusting to 60 kmph) likely Southwest Bay of Bengal and along & off north Tamil Nadu-south Coastal Andhra Pradesh coasts . Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 28 Feb to 08 Mar 2022 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)

Gujarat

Weather condition:

The actual maximum temperature was 0.5 °C and actual minimum temperature was 0.7 °C higher as compared to their normals. Total BSS was 68.4 hrs. with an average of 9.8 hrs. The daily average evaporation and wind speed was 4.6 mm and 2.4 km/hr respectively. The daily average RH during morning and afternoon was 83.4 % and 37.4 % respectively.

Contingency measure:

- Wheat: grain filling/milking : Termite : To control termite apply chlorpyrifos 20 EC 2 to 2.5 liter/ha with irrigation water.
- Mustard : Maturity/Harvesting : Harvest the mature crop and keep it in the field for sun dry. Protect the harvested crop from birds.
- Pearl millet: Prepare the land by doing by 2-3 ploughing with cultivator to pulverize the soil. Apply 10 t/ha well decomposed FYM. Procure seeds of varieties of pearl millet crop select hybrid varieties like GHB-538, 558, 719, 732, 744, 905 etc.
- Tobacco: Harvest the mature leaves by curing or priming method and keep it for sun dry.
- Gram: Pod development : Apply irrigation, if required. Spray Neem oil @ 50ml/15 liter or Beuvaria bassiana @ 50g/15 liter in clear weather condition for management of Helicoverpa caterpillars.
- Chilli : For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Tomato: There is possibility of incidence of spotted wilt virus, spray Carbendenzim (50 % WP) 5 g in 10 liter water at 10 to 12 days interval.

- Potato: Late blight : To control late blight, spray Chlorothalonil fungicide 75 WP 25 g in 10 liter of water in clear weather condition.
- Castor: To control capsule borer, spray neem seed kernal powder (5% extract) 500 g or Beauveria bassiana or Verticillium lecanii fungus powder 40 g in 10 liter of water.
- Vegetables: Flowering/ Reproductive : For the control of White fly/ Aphid spray neem seed extract 500 ml or neem seed oil 50 ml in 10 liter water at 15 days interval (4 sprays) or Acetamiprid 20 % SP@ 5.0 gm/10 liter water at 15 days interval.
- Cattle: Keep animal shed hygienic and clean to avoid flies and mosquitoes. Keep the animals indoor at night time for protecting against extreme cold wind. Disease (like, Anthracis, milk fever and Brucellosis) infected animals to regular check-up and regular vaccination for the animal.

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

28-02-2022/(0800 to 0827) GMT
28-02-2022/(1330 to 1357) IST

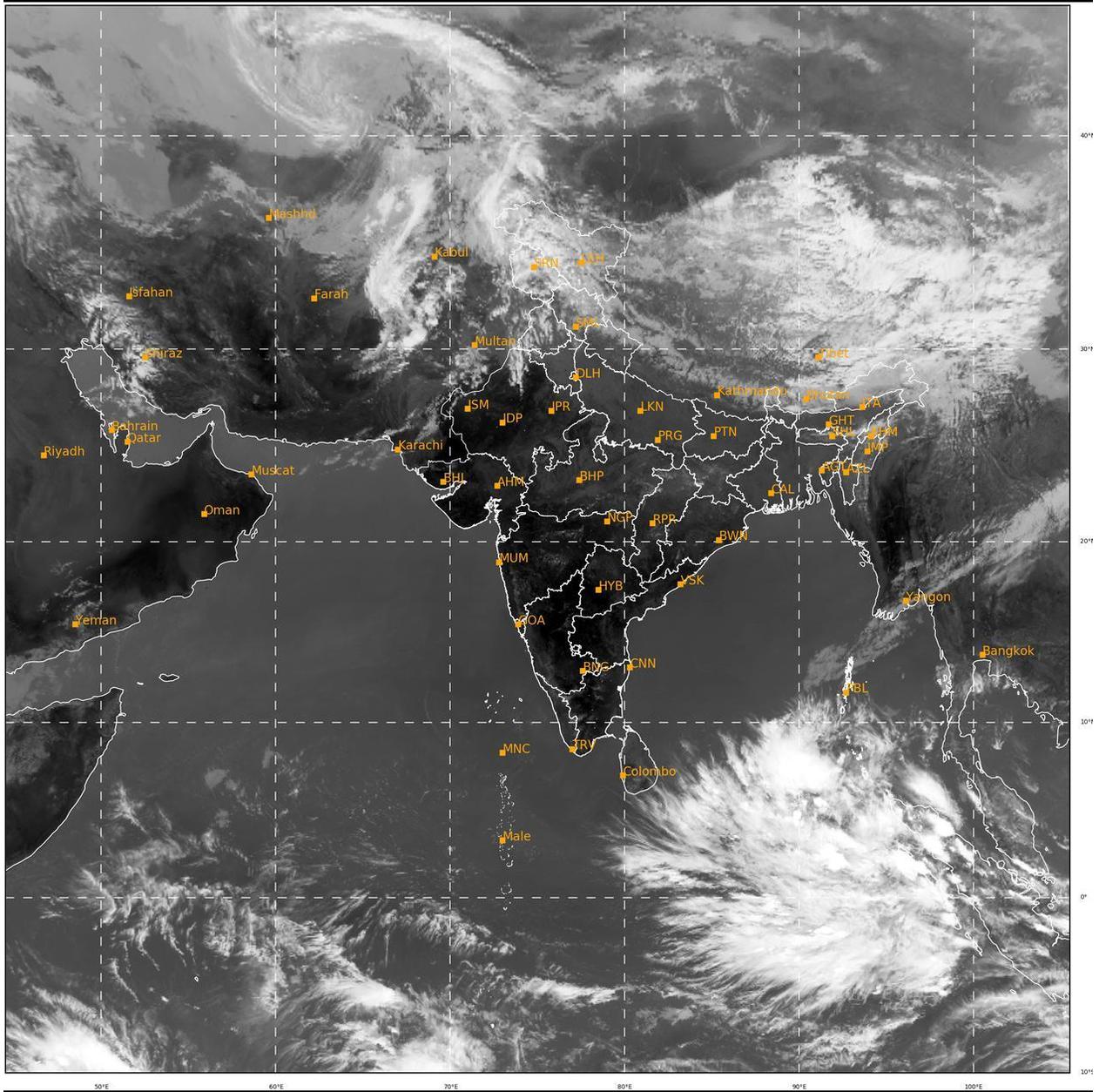


Figure: 1. Latest available satellite picture as on 28 Feb 2022 at 1357 Hrs (IST). (Source: IMD).

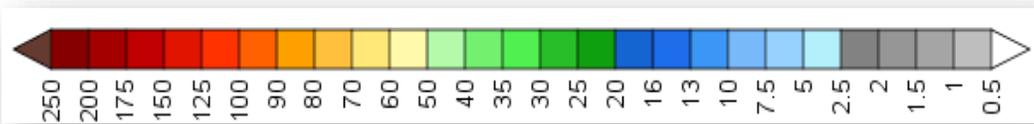
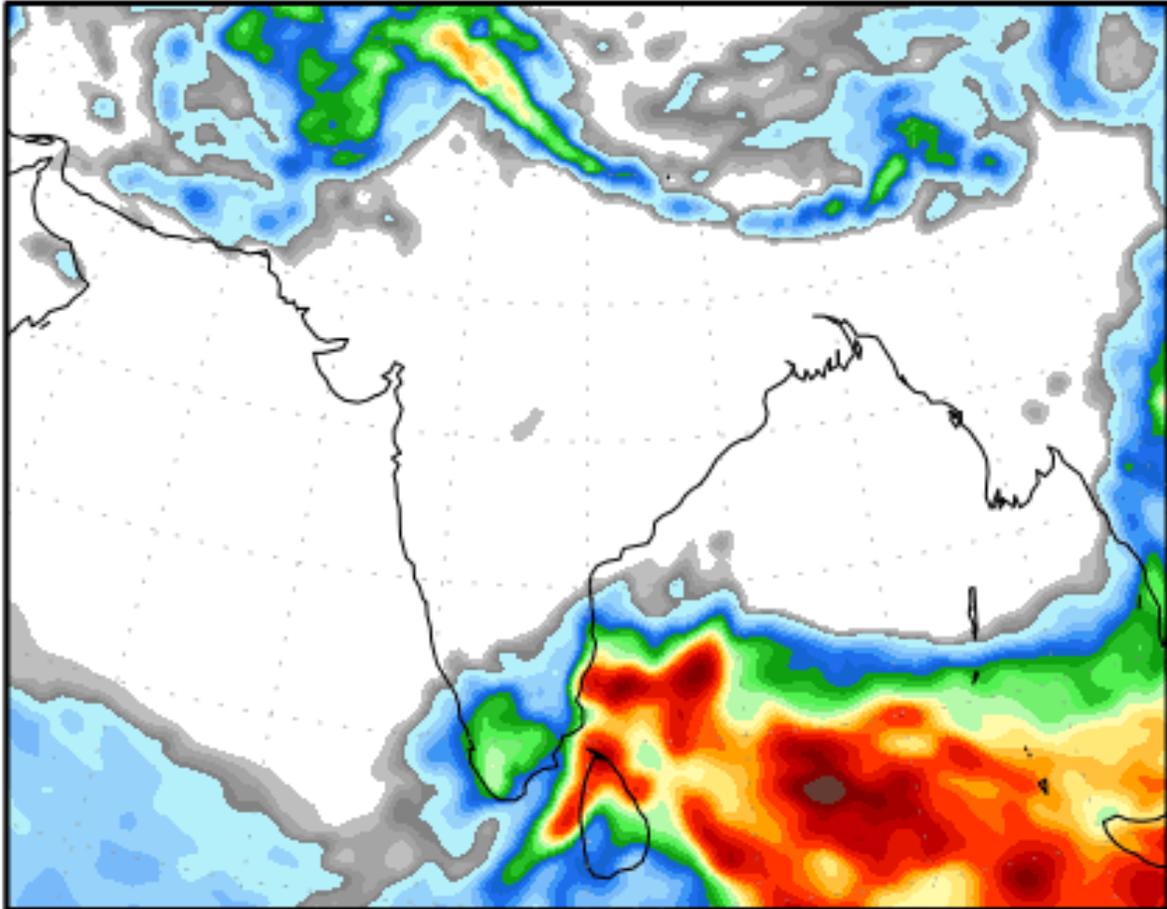


Figure:2. Precipitation forecast for 28 Feb to 08 Mar 2022 (Source: NOAA NCEP).

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