

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 30 November 2021**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- A cyclonic circulation lies over southeast Arabian Sea & adjoining Maldives-Lakshadweep areas extends upto middle tropospheric levels and a trough at mean sea level runs from this cyclonic circulation to Eastcentral Arabian Sea off Karnataka coast extending upto lower tropospheric level.
- A Low Pressure Area is likely to form over Eastcentral Arabian sea off Maharashtra coast around 01st December, 2021.
- A fresh active Western Disturbance as a trough in mid-latitude westerlies at middle & upper tropospheric levels is likely to affect Northwest & adjoining Central India from the night of 30th November, 2021 and its interaction with lower level trough in easterlies winds. Under their influence;
- Fairly widespread to widespread rain/thunderstorm with isolated heavy to very heavy rainfall likely over Gujarat State on 01st December and isolated heavy rainfall over Gujarat Region on 02nd December. Isolated heavy rainfall also likely over north Konkan and Madhya Maharashtra on 01st December.
- Thunderstorm accompanied with lightning at many places likely to occur over the above region with possibilities of isolated hailstorm.
- Isolated to scattered rainfall accompanied with thunderstorm/lightning likely over West Madhya Pradesh, East Rajasthan, Haryana, West Uttar Pradesh during 01st-02nd with maximum activity on 02nd December. Isolated heavy rainfall likely over southeast Rajasthan on 02nd December.
- Scattered to fairly widespread rainfall/snowfall accompanied with isolated thunderstorm/lightning likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad, Uttarakhand and Himachal Pradesh during 01st-03rd December with maximum activity on 02nd December. Isolated heavy rainfall/snowfall likely over Uttarakhand on 02nd December.
- A Low Pressure Area is likely to form over south Andaman Sea by tomorrow, the 30th November. It is likely to move west-northwestwards and concentrate into a Depression over Southeast & adjoining Eastcentral Bay of Bengal during subsequent 48 hours.

- Under its influence, isolated heavy to very heavy rainfall likely over Andaman & Nicobar Islands during 30th November-02nd December.
- Rainfall activity likely to increase with isolated heavy to very heavy rainfall over north Coastal Andhra Pradesh and Odisha from the night of 03rd December for subsequent 48 hours.
- Rainfall activity over Tamil Nadu, south Coastal Andhra Pradesh and Rayalaseema has decreased significantly during past 24 hours and very likely to continue to decrease further during next 48 hours.
- The images showing the latest satellite picture in the figure. 1.

### **Main Weather Observations (IMD)**

- Rainfall/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at a few places over Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and at isolated places over South Interior Karnataka and Coastal Andhra Pradesh & Yanam.
- Heavy rainfall (from 0830 hours IST to 0830 hours IST of yesterday): Nil.
- Thunderstorm observed (from 0830 IST of yesterday to 0530 hours IST today): at isolated places over Kerala & Mahe, Rayalaseema, Lakshadweep and Tamil Nadu, Puducherry & Karaikal.
- Minimum Temperature Departures (as on 29-11-2021): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over North Interior Karnataka; at many places over Telangana and Rayalaseema; at a few places over West Rajasthan, West Uttar Pradesh and Coastal Andhra Pradesh & Yanam; at isolated places over Gujarat State; above normal (1.6°C to 3.0°C) at most places over Coastal & South Interior Karnataka; at many places over Haryana, Chandigarh & Delhi and East Rajasthan; at a few places over Andaman & Nicobar Islands, East Uttar Pradesh, Bihar and Madhya Maharashtra; at isolated places over Punjab, West Bengal & Sikkim. West Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; at isolated places over Gangetic West Bengal, Lakshadweep. They were below normal (-1.6°C to -3.0°C) at a few places over Vidarbha; at isolated places over East Madhya Pradesh and Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the Lowest minimum temperature of 7.0°C was reported at Hissar (Haryana) over the plains of the country.
- Maximum Temperature Departures (as on 29-11-2021): Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Assam & Meghalaya; at a few places over Himachal Pradesh, West Rajasthan, Saurashtra & Kutch, Konkan

& Goa, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Gujarat Region and Andaman & Nicobar Islands. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Madhya Maharashtra and North Interior Karnataka and at isolated places over Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at a few places over Marathwada, Telangana, Rayalaseema, Kerala & Mahe and Lakshadweep and at isolated places over East Uttar Pradesh and West Madhya Pradesh and near normal at rest parts of the country. Yesterday, the highest maximum temperature 34.6°C was reported at Vengurla (Konkan & Goa) over the country.

### **Weather Warning during the next 5 days (IMD)**

- 30 November (Day 1): Heavy to very heavy rainfall very likely at isolated places over Andaman & Nicobar Islands and Heavy rainfall at isolated places over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Gujarat state, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Lakshadweep and Tamil Nadu, Puducherry & Karaikal. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) very likely over South Andaman Sea & adjoining Southeast Bay of Bengal, Southeast & adjoining Eastcentral Arabian Sea and along & off Kerala-Karnataka-Goa coasts and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 01 December (Day 2): Heavy to very heavy rainfall very likely at isolated places over Andaman & Nicobar Islands and Gujarat state and heavy rainfall at isolated places over Konkan & Goa and Madhya Maharashtra. Thunderstorm accompanied with lightning & squall (50-60 kmph gusting to 70 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Rajasthan, West Madhya Pradesh, Gujarat state, Madhya Maharashtra, Konkan & Goa, Marathawada, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely over Southeast and adjoining Eastcentral Bay of Bengal & Andaman Sea. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over Eastcentral & adjoining Northeast Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into these areas.

- 02 December (Day 3): Heavy rainfall/snowfall likely at isolated places over Uttarakhand and heavy rainfall at isolated places over Andaman & Nicobar Islands, East Rajasthan and Gujarat Region. Thunderstorm accompanied with lightning & gusty winds (40-50 kmph gusting to 60 kmph) likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Haryana, East Rajasthan, Madhya Pradesh, Gujarat state, Madhya Maharashtra, Marathawada, Konkan & Goa and Kerala & Mahe. Squally winds (speed reaching 50-60 kmph gusting to 70 kmph) likely over Central and adjoining Southeast Bay of Bengal. Squally winds (speed reaching 45-55 kmph gusting to 65 kmph) likely over Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 03 December (Day 4): Heavy to very heavy rainfall likely at isolated places over north Coastal Andhra Pradesh and Heavy rainfall likely at isolated places over Odisha. Thunderstorm accompanied with lightning likely at isolated places over East Uttar Pradesh, Gujarat state, East Madhya Pradesh, Kerala & Mahe and Coastal Andhra Pradesh & Yanam. Squally weather (speed reaching 50-60 kmph gusting to 70 kmph) likely over west-central and adjoining north-west Bay of Bengal and along and off north Andhra Pradesh coast. Squally winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over Eastcentral Arabian Sea and along & off south Gujarat-north Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 04 December (Day 5): Heavy to very heavy rainfall likely at isolated places over north Coastal Andhra Pradesh and Odisha and Heavy rainfall likely at isolated places over Gangetic West Bengal, Jharkhand. Thunderstorm accompanied with lightning likely at isolated places over Gangetic West Bengal, Jharkhand, Odisha, Bihar, Chhattisgarh and north Coastal Andhra Pradesh & Yanam. Squally winds (speed reaching 50-60 kmph gusting to 70 kmph) likely over northwest and adjoining westcentral Bay of Bengal and along & off Odisha-north Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 30 Nov to 08 Dec 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)**

### **Gujarat**

### Weather condition:

The actual maximum temperature was 0.5°C lower and actual minimum temperature was 5.2°C higher as compare to its normals. Total BSS was 42.0 hrs. with an average of 6.0 hrs. The daily average evaporation and wind speed was 3.3 mm and 4.4 km/hr respectively. The daily average RH during morning and afternoon was 83.9 % and 50.0 % respectively.

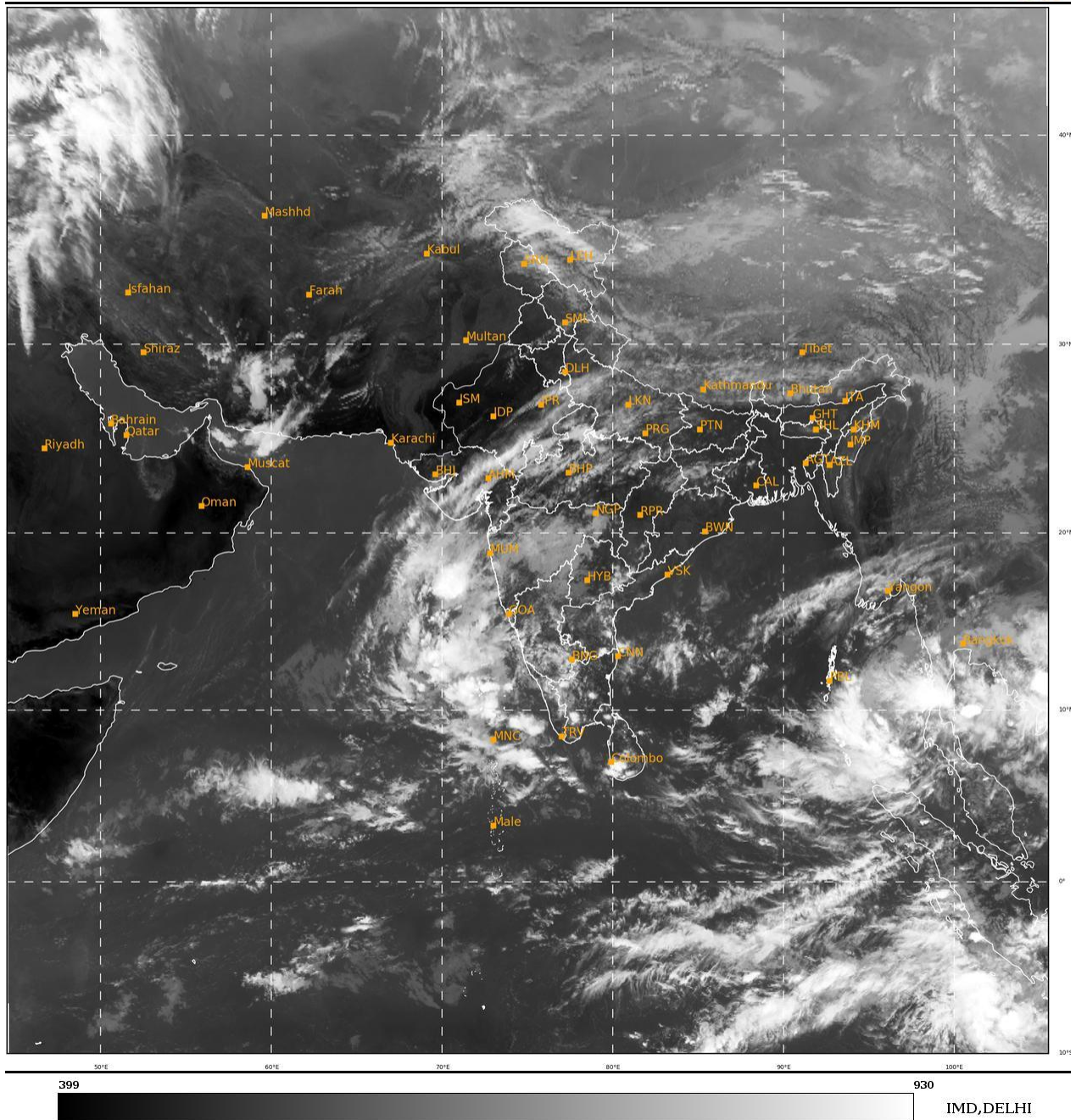
### Contingency measure:

- Soil should be prepared by horizontal and vertical tractor ploughing for the rabi crops. Prepare the land for wheat sowing. Select the varieties like GW-322, GW-273, GW-496, GW-366, GW-451 for timely sowing and varieties like Lok-1, GW-173 for late sowing. Sowing of wheat @ 22.5 cm spacing using seed rate @ 100 -120 kg/ha. Application of 60 kg Nitrogen and 60 kg Phosphorus per hectare as basal fertilizer dose.
- Mustard : vegetative : Irrigate the crop after 30 DAS. Apply top dressing of remain 50 % dose of nitrogen after next day of irrigation. Inter-culturing and hand weeding should be done in early sown mustard.
- Tobacco : Gap filling, inter-culturing and hand weeding in established transplanted crop is advised.
- Paddy : Paddy : Harvest mature crop and keep in the field for sun dry. Threshing and winnowing of harvested dry paddy and send to market.
- 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.
- Castor : boll development: Semi looper : Apply supplementary dose of nitrogen @ 40 kg ha<sup>-1</sup> in form of urea. Spray Quinalphos 20 ml in 10 liters of water at 15 days interval.
- Vegetable Crop: Growth: Due to variable weather farmers are advised to constant monitoring against attack of pest and disease in vegetable crop, if symptom observed, take protection measures as per recommendation when sky remain clear.
- Mango : Farmers are advised to clean the orchards by removing dead plant debris from the field.
- Cattle : Keep animal shed hygienic and clean to avoid flies and mosquitoes. Disease (like, Anthracis, milk fever and Brucellosis) infected animals to regular check-up and regular vaccination for the animal.

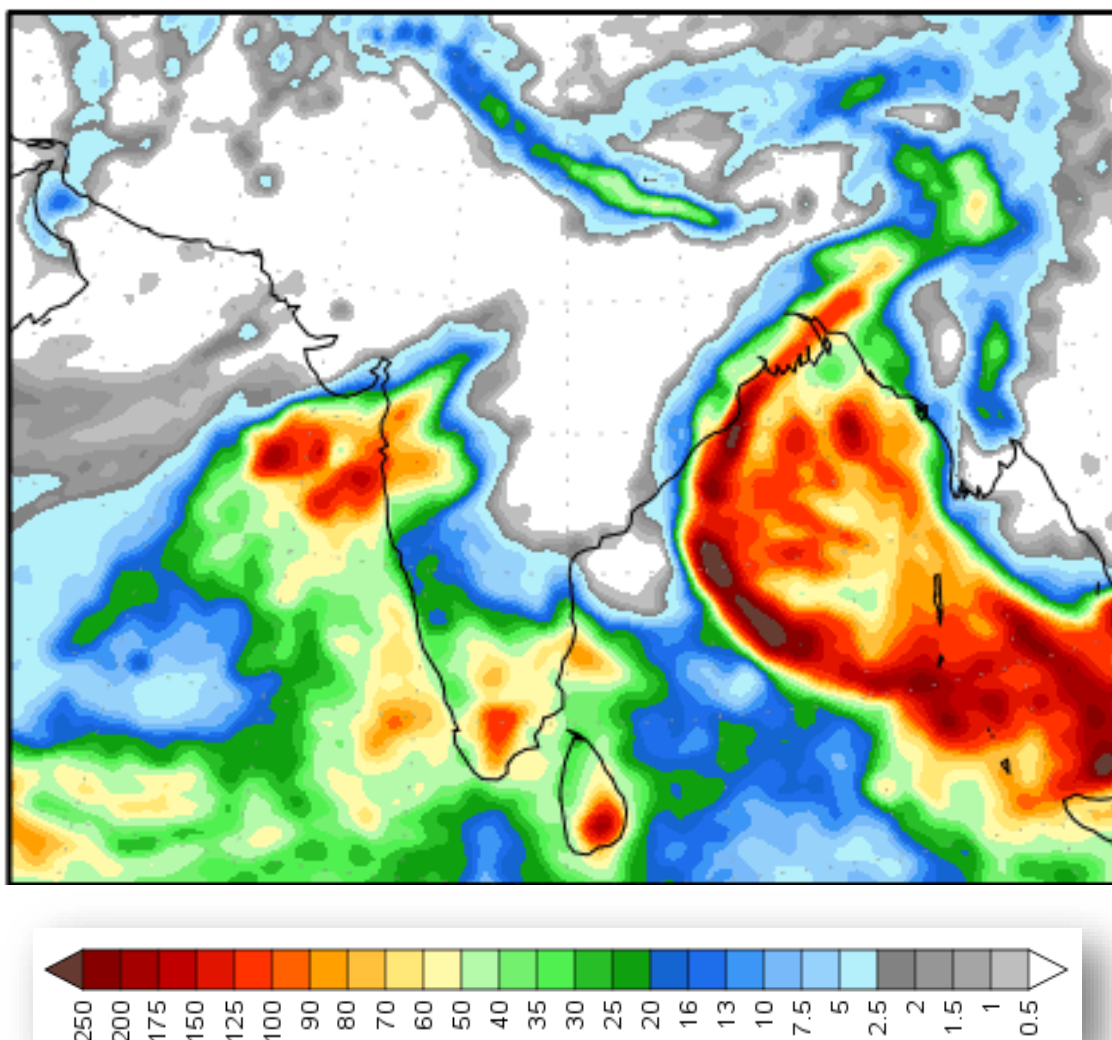


SAT : INSAT-3D IMG  
 IMG\_TIR1 10.8 um  
 LIC Mercator

30-11-2021/(0800 to 0826) GMT  
 30-11-2021/(1330 to 1356) IST



**Figure: 1. Latest available satellite picture as on 30 Nov 2021 at 1356 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 30 Nov to 08 Dec 2021 (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.*