

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 19 December 2018

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The feeble western disturbance as a cyclonic circulation lies over eastern parts of Jammu & Kashmir and neighbourhood and another western disturbance lies over Afghanistan & neighborhood. These western disturbances are moving across higher latitudes and likely to cause isolated rain/snow over high reaches of Jammu & Kashmir during next 48 hours.
- There is no significant change likely in wind pattern over plains of northwest India. Under this scenario, minimum temperatures continue to prevail below normal by 3-4° C over some parts of plains of northwest India and adjoining central & west India leading to cold wave and ground frost conditions over some parts of northwest India during next 3 days. The cold wave also likely to extend over some parts of north Maharashtra and east India during next 2-3 days.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rainfall observed (from 0830 hours IST of Yesterday to 0830 hrs IST of today): Rain/thundershower observed at most places over Andaman & Nicobar Islands, Gangetic West Bengal, Assam & Meghalaya and Odisha; at many places over Sub - Himalayan West Bengal & Sikkim and at isolated places over Bihar, Jharkhand, Coastal Andhra Pradesh, North Interior Karnataka, Arunachal Pradesh, Tripura, Mizoram and Manipur.
- Dense to very dense fog observed at isolated places over Chhattisgarh, Bihar and Dense fog observed at isolated places over Jharkhand, Odisha, West Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim in the morning hours. Visibility(Meter): Raipur & Purnea - 50 and Baghdogra, Daltonganj, Jharsuguda & Bareilly-200.
- Cold wave conditions observed at a few places over Rajasthan and West Madhya Pradesh and isolated over Punjab, Haryana and East Madhya Pradesh and Cold day conditions observed at isolated places over West Madhya Pradesh.

- Maximum temperature departures as on 18-12-2018: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Tamilnadu & Puducherry and Himachal Pradesh; above normal (1.6°C to 3.0°C) at isolated places over Jammu & Kashmir, Uttarakhand, Punjab, Gujarat Region, South Interior Karnataka and Kerala. They were markedly below normal (-5.1°C or less) at most places over Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Odisha, Chhattisgarh and Telangana and at isolated places over Bihar, Mizoram and Coastal Andhra Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Madhya Pradesh and isolated places over Rajasthan, Saurashtra & Kutch, Haryana and Madhya Maharashtra; below normal (-1.6°C to -3.0°C) at most places over Rajasthan, Konkan & Goa, Coastal Karnataka, Kerala and Uttar Pradesh; at a few places over North Interior Karnataka, Coastal Andhra Pradesh, Saurashtra & Kutch and near normal over rest of the country.
- Yesterday, the highest maximum temperature of 34.1°C was recorded at Vengurla (Konkan & Goa), Shirali & Mangalore (Coastal Karnataka) over the country.
- Minimum temperature departures as on 19-12-2018: Minimum temperatures are appreciably below normal (-3.1°C to -5.0°C) at a few places over Rajasthan, East Madhya Pradesh and Saurashtra & Kutch and at isolated places over Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Vidharbha, Madhya Maharashtra, South Interior Karnataka and Marathwada; below normal (-1.6°C to -3.0°C) at most places over West Madhya Pradesh and Gujarat region; at a few places over Jammu & Kashmir and Telangana and at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Vidarbha, Gangetic West Bengal, Kerala and Tamilnadu & Puducherry. They are markedly above normal (5.1°C or more) at isolated places over Himachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; appreciably above normal (3.1°C to 5.0°C) at isolated places over Bihar and Odisha; above normal (1.6°C to 3.0°C) at a few places over Assam & Meghalaya, Tamilnadu & Puducherry at isolated places over East Uttar Pradesh, Telangana, Rayalaseema, Coastal Karnataka, South Interior Karnataka, Andaman & Nicobar Islands and Bihar and near normal over rest of the country.
- The lowest minimum temperature of 0.5°C is recorded at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during next 5 days (IMD)

- 19 December (Day 1): Dense fog at isolated places very likely over Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, East Vidarbha and Chhattisgarh. Cold wave condition is very likely at a few places with severe cold wave at isolated places over Rajasthan; Cold wave condition at a few places over West Madhya Pradesh; at isolated places over Punjab, Haryana, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Gujarat, region,

Saurashtra & Kutch and North Madhya Maharashtra. Cold day condition is very likely at isolated places over West Madhya Pradesh. Ground frost condition is very likely at isolated places over West & East Rajasthan, West & East Madhya Pradesh.

- 20 December (Day 2): Dense fog at isolated places very likely over Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, East Vidarbha and Chhattisgarh. Cold wave condition is very likely at a few places with severe cold wave at isolated places over Rajasthan; Cold wave condition at a few places over West Madhya Pradesh; at isolated places over Punjab, Haryana, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Gujarat, region, Saurashtra & Kutch and North Madhya Maharashtra. Cold day condition is very likely at isolated places over West Madhya Pradesh. Ground frost condition is very likely at isolated places over West & East Rajasthan and West & East Madhya Pradesh.
- 21 December (Day 3): Heavy rainfall likely at isolated places over south coastal Tamilnadu. Dense fog at isolated places very likely over Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold wave condition is very likely at a few places with severe cold wave at isolated places over Rajasthan; Cold wave condition at a few places over West Madhya Pradesh; at isolated places over Punjab, Haryana, West Uttar Pradesh, East Madhya Pradesh and Vidarbha. Cold day condition is very likely at isolated places over West Madhya Pradesh. Ground frost condition is very likely at isolated places over West & East Rajasthan, West & East Madhya Pradesh.
- 22 December (Day 4): No Weather Warning.
- 23 December (Day 5): No Weather Warning.
- The weather outlook for the period of seven days *i.e* 19 to 26 December 2018 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Coastal Andhra Pradesh, North Interior Karnataka, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Andhra Pradesh

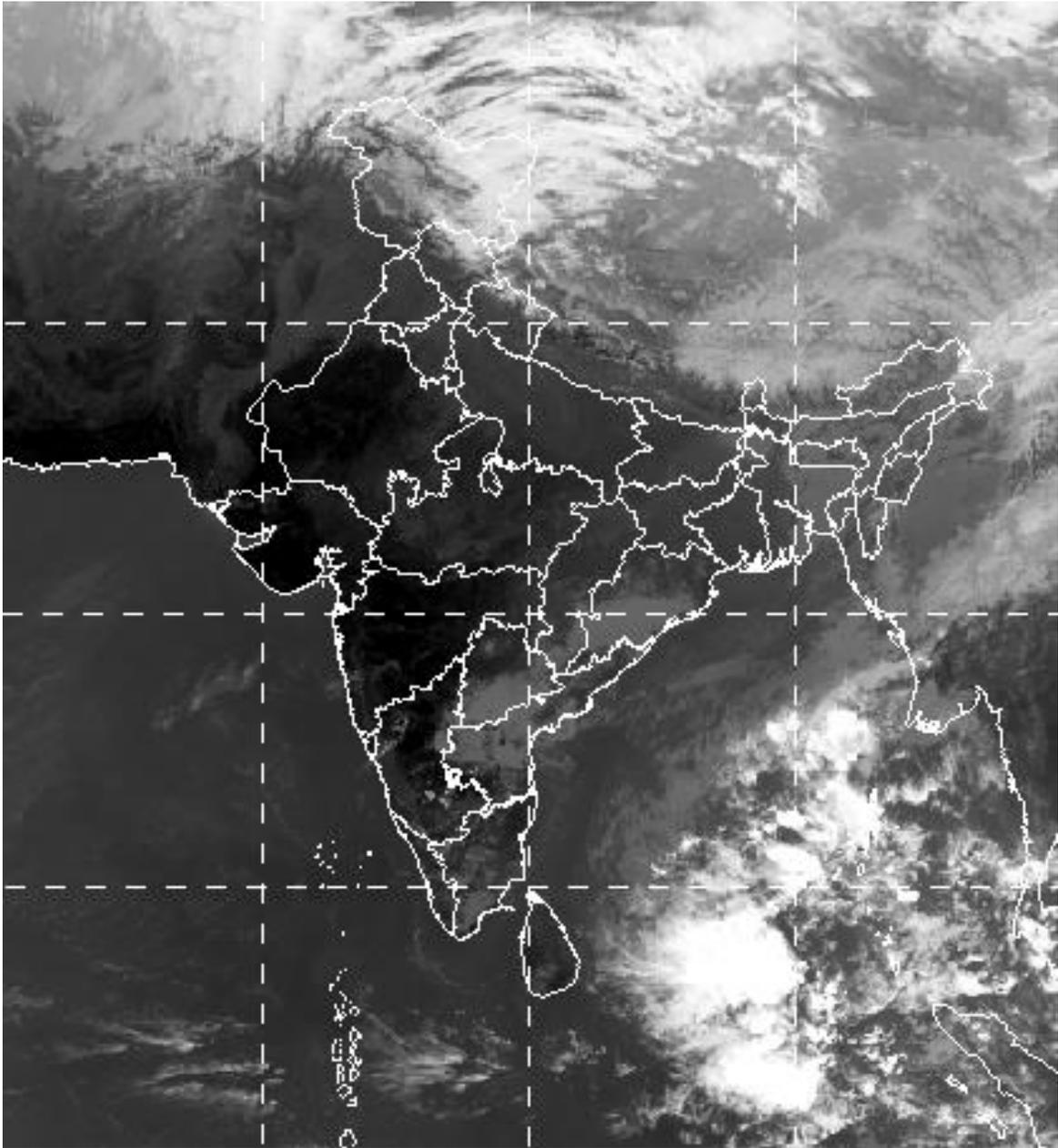
Weather condition

Light rainfall occurred in Vishakhapatnam, Nellore and Kurnool districts and mainly dry weather prevailed in Andhra Pradesh state during past few days. In the state during rabi season 10.27 lakh ha (44%) as against the normal area of 23.43 lakh ha and it accounts for 98% of the normal area of 10.49 lakh ha.

Contingency measure:

- The severe cyclonic storm " Pethai" is expected to make landfall near Kakinada - Tuni, off AP coast. Farmers of Coastal AP, especially East Godavari, West Godavari, Vishakhapatnam, Vizianagaram, Srikakulam are advised to postpone harvesting of rice crop. Already harvested/threshed crop should be protected by transportation to safe places/covering with poly sheets. Farmers are advised to provide propping for banana and papaya plantations. Keep the drains open to drain out rainwater from fields immediately after downpour.
- Farmers of West and East Godavari, Krishna, Guntur, Prakasam are advised to take up sowing of greengram and blackgram under upland and rice fallows after cessation of cyclonic rains upto second fortnight of December. They are advised to select high yielding and YMV resistant varieties of Blackgram like LBG 787, LBG 752, TBG 104, GBG 1 and Greengram viz., LGG 460, TM 96-2, IPM 2-14. Treat the seed with Imidacloprid 5g/kg or Thiomethaxam @5g/kg before sowing. → Fall army worm incidence is noticed in Jowar crop in Kurnool, Prakasam, Ananthapuramu and Kadapa districts.
- Farmers are advised to take up spraying of Emamectin Benzoate @ 0.5 g/l or Lamda cyahaloethrin@1ml/ l of water for control of fall army worm. Incidence of Leaf folder, stem borer, BPH incidence observed in late kharif sown rice crop in scarce rainfall zone. Farmers are advised to take up spraying of Chloropyrifos @2.5ml/l + Diclorovos @1 ml/l or acephate @ 1.5 g/l or cartap hydrochloride @ 1.5 g/l of water for control of leaf folder and stem borer; Acephate@1.5 g/l or Bufrofuzin@1.6ml/l or Thiomethaxam @0.2g/l for control of BPH.
- Incidence of fall army worm is observed in maize crop in Ananthapuramu, Chittoor, Kadapa, Kurnool, Srikakulam, Vizianagaram, West Godavari, Krishna, Guntur, Prakasam districts. Farmers of Rayalaseema districts are advised to take up spraying of Emamectin Benzoate @ 0.5 g/l or Lamda cyahaloethrin@1ml/ l of water for control of fall army worm.

- Farmers of Coastal AP are advised to take up spraying after cessation of current cyclonic rainfall. Incidence of sucking pests noticed in greengram, blackgram and rabi groundnut crops in Kurnool and Krishna districts. Farmers are advised to spray monochrotophos@1.6 ml/l or acephate@1.5g/l or acetamiprid @ 0.2g/l for control.
- Farmers are advised to monitor the pink boll worm incidence, observe rosette flowers and sampling of green bolls regularly. If incidence is noticed spraying of Quinalphos@ 2ml/lit or Chlorpyrifos@ 2.5 ml/ lit or Thiodicarb @1g/lit is recommended. Destroy rosette flowers and remove the dropped squares, dried flowers and premature bolls to suppress the pest population periodically.



**Figure: 1. Latest available satellite picture as on 19 December 2018 at 0230 Hrs (IST).
(Source: IMD).**

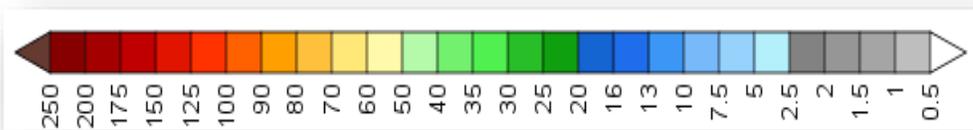
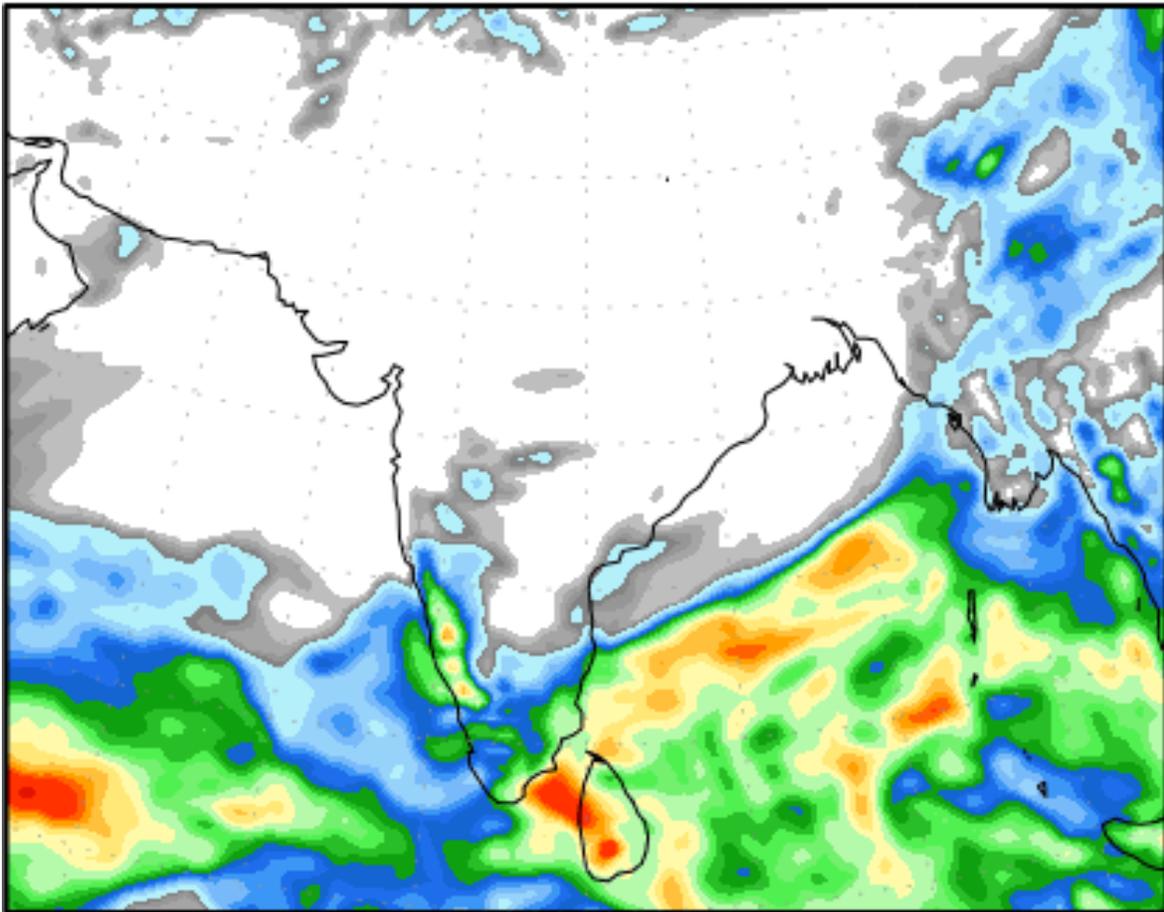


Figure: 2. Precipitation forecast for 19 to 26 December 2018 (Source: NOAA NCEP).