

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

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

### **Daily Crop Weather Information as on 16 October 2021**

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

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

- The Southwest Monsoon withdrawal line continues to pass through Lat. 27.0°N/Long. 92.0°E, Kohima, Silchar, Krishnanagar, Baripada, Malkangiri, Nalgonda, Bagalkote, Vengurla, Lat. 16.0°N/Long. 65.0°E and Lat. 16.0°N/Long. 60.0°E.
- A Low Pressure Area lies over north Coastal Andhra Pradesh & adjoining Westcentral Bay of Bengal. It is likely to become less marked during next 24 hours. The above Low Pressure Area/remnant cyclonic circulation is likely to move generally northwestwards towards west Uttar Pradesh. Under its influence, isolated heavy rainfall very likely over north Coastal Andhra Pradesh and Chhattisgarh on 16th; over south Odisha during 16th-18th; over Vidarbha on 16th & 17th and over Madhya Pradesh on 17th & 18th October, 2021.
- A Western Disturbance lies as a cyclonic circulation over southern parts of Afghanistan & neighbourhood in lower levels with a trough aloft in midtropospheric westerlies roughly along Long. 64°E to the north of Lat. 20°N. Due to interaction between the Western Disturbance and strong lower level easterlies associated with the above remnant cyclonic circulation:
  - i) Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is very likely over Uttarakhand during 17th-19th; over Himachal Pradesh and Uttar Pradesh during 17th-18th; over Haryana & Chandigarh and East Rajasthan on 17th October. Isolated extremely heavy falls are also likely over Uttarakhand and West Uttar Pradesh on 18th October, 2021.
  - ii) Thunderstorm & lightning at a few places is likely over Northwest India during 17th-18th October. Isolated hailstorm also likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh on 17th and Uttarakhand on 17th & 18th October, 2021.
  - iii) Strong Surface winds (30-40 kmph) likely over Uttar Pradesh on 17th & 18th October, 2021. iv) Dry weather is likely over the region from 19th October, 2021.
- The other Low Pressure Area lies over Southeast Arabian Sea off Kerala coast. It is likely to become less marked during next 24 hours. Under its influence, Isolated

heavy to very heavy rainfall very likely over South Interior Karnataka, Telangana and Tamilnadu, Puducherry & Karaikal on 16th October. Isolated extremely heavy falls are also likely over Kerala & Mahe today, the 16th October, 2021.

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

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

- Rainfall/Thundershowers observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at most places over Andaman & Nicobar Islands and Gangetic West Bengal; at many places over Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Kerala & Mahe and Lakshadweep; at a few places over Odisha, Jharkhand and Telangana and at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, East Uttar Pradesh, East Madhya Pradesh, Konkan & Goa, Marathawada, Vidarbha, Chhattisgarh, Coastal Karnataka, Rayalaseema and Tamilnadu, Puducherry & Karaikal.
- Heavy Rainfall observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places over Odisha and Coastal Andhra Pradesh & Yanam and Heavy rainfall at isolated places over Andaman & Nicobar Islands, Vidarbha, Jharkhand, Coastal & South Interior Karnataka, Telangana, Kerala and Tamil Nadu.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Jharkhand, Chhattisgarh, Assam & Meghalaya, Odisha, Gangetic West Bengal, Vidarbha, Konkan & Goa, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Telangana and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 15-10-2021: Maximum temperatures were markedly above normal (5.1°C or more) at most places over Assam & Meghalaya; at many places over Uttarakhand; at isolated places over Sub-Himalayan West Bengal and Arunachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh; at a few places over Bihar and Nagaland, Manipur, Mizoram & Tripura; at isolated places over West Uttar Pradesh, Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Jharkhand; at many places over Coastal Karnataka and East Uttar Pradesh; at a few places over East Madhya Pradesh, Odisha, Coastal Andhra Pradesh & Yanam; at isolated places over Gujarat State and Telangana. They were below normal (-1.6°C to -3.0°C) at many places over

Andaman & Nicobar Islands; at isolated places over West Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.0°C was reported at Bhuj (Saurashtra & Kutch).

- Minimum Temperature Departures as on 16-10-2021: Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Bihar and East Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Chhattisgarh and Sub-Himalayan West Bengal & Sikkim; at a few places over Himachal Pradesh; at isolated places over Punjab, Uttar Pradesh, Vidarbha and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Jharkhand; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Uttarakhand, Nagaland, Manipur, Mizoram & Tripura, Odisha and Tamilnadu, Puducherry & Karaikal; at a few places over Marathawada, Telangana, Rayalaseema and Kerala & Mahe; at isolated places over Haryana, Chandigarh & Delhi, West Madhya Pradesh and Madhya Maharashtra. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Rajasthan; below normal (-1.6 to -3.0) at many places over Gujarat Region; at isolated places over Saurashtra & Kutch and near normal over rest parts of the country. Today, the lowest minimum temperature of 13.2°C reported at Sikar (East Rajasthan) over the plains of the country.

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

- 16 October (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Kerala & Mahe; Heavy to very heavy rainfall at isolated places over South Interior Karnataka, Telangana and interior Tamilnadu and heavy rainfall at isolated places over Lakshadweep, Gangetic West Bengal, Vidarbha, Chhattisgarh, Odisha, Andaman & Nicobar Islands, north Coastal Andhra Pradesh and Marathawada. Thunderstorm accompanied with lightning & gusting wind (speed reaching 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Odisha, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Lakshadweep and Telangana. Squally weather (wind speed reaching 40-50 kmph) very likely over Westcentral Bay of Bengal off north Andhra Pradesh coast and Southeast Arabian Sea adjoining Lakshadweep

area off Kerala coast, Maldives-Comorin areas and Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.

- 17 October (Day 2): Heavy to very heavy rainfall very likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana & Chandigarh, East Rajasthan, Uttar Pradesh and Gangetic West Bengal and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Madhya Pradesh, Vidarbha, Jharkhand, Odisha, Telangana, interior Tamilnadu and Kerala & Mahe. Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) likely at isolated places over Uttarakhand; with lightning & hail over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh; with lightning & squall (speed 50-60 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh; with lightning & gusty winds (speed 40-50 kmph) at isolated places over East Uttar Pradesh, East Rajasthan and Gangetic West Bengal; with lightning & gusty winds (speed 30-40 kmph) at isolated places over West Rajasthan and West Madhya Pradesh and with lightning at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Lakshadweep, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally weather (wind speed reaching 40-50 kmph) very likely over Southeast Arabian Sea adjoining Lakshadweep area off Kerala coast, Maldives-Comorin areas, Gulf of Mannar and North Bay of Bengal along & off West Bengal-Bangladesh coasts. Fishermen are advised not to venture into these areas.
- 18 October (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Uttarakhand; Heavy to very heavy rainfall with extremely heavy falls at isolated places over West Uttar Pradesh; Heavy to very heavy rainfall at isolated places over Himachal Pradesh, East Uttar Pradesh and Gangetic West Bengal and heavy rainfall at isolated places over Haryana, Chandigarh & Delhi, Odisha, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh and Assam & Meghalaya. Thunderstorm accompanied with lightning, hail & squall (speed reaching 50-60 kmph) likely at isolated places over Uttarakhand; with lightning & gusty winds (speed 40-50 kmph) at isolated places over Gangetic West Bengal; with lightning & gusty winds (speed 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and West Madhya Pradesh and with lightning at isolated places over Jammu &

Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, East Uttar Pradesh, East Madhya Pradesh, Jharkhand, Odisha, Bihar and Sub-Himalayan West Bengal & Sikkim. Squally weather (wind speed reaching 40-50 kmph) very likely over North Bay of Bengal along & off West Bengal-Bangladesh coasts. Fishermen are advised not to venture into these areas.

- 19 October (Day 4): Heavy to very heavy rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya and heavy rainfall at isolated places over Uttarakhand, Gangetic West Bengal, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) likely at isolated places over Gangetic West Bengal and with lightning at isolated places over Uttarakhand, East Uttar Pradesh, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim, Bihar and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed reaching 40-50 kmph) likely over North Bay of Bengal along & off West Bengal-Bangladesh coasts. Fishermen are advised not to venture into these areas.
- 20 October (Day 5): Heavy rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand, Sub-Himalayan West Bengal & Sikkim and Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 16 Oct to 24 Oct 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 (41 MW) at AICRPAM Akola centre: T max 34.3°C (normal 33.8°C), T min 22.3°C (normal 19.9°C). RH I 88 % (normal 79 %), RH II 49 % (normal 41 %). Evaporation rate 3.8 mm (normal 4.9 mm), Wind 0.9 km/hr (normal 3.5 km/hr) and BSH 7.8 hrs (normal 7.8 hrs). Maximum temperature across the week was 0.6°C above normal with a deviation of -0.2 to +3.9°C from normal. Minimum temperature across the week 2.5° above normal with a deviation of +0.7 to +3.8°C from normal.

### Contingency measure:

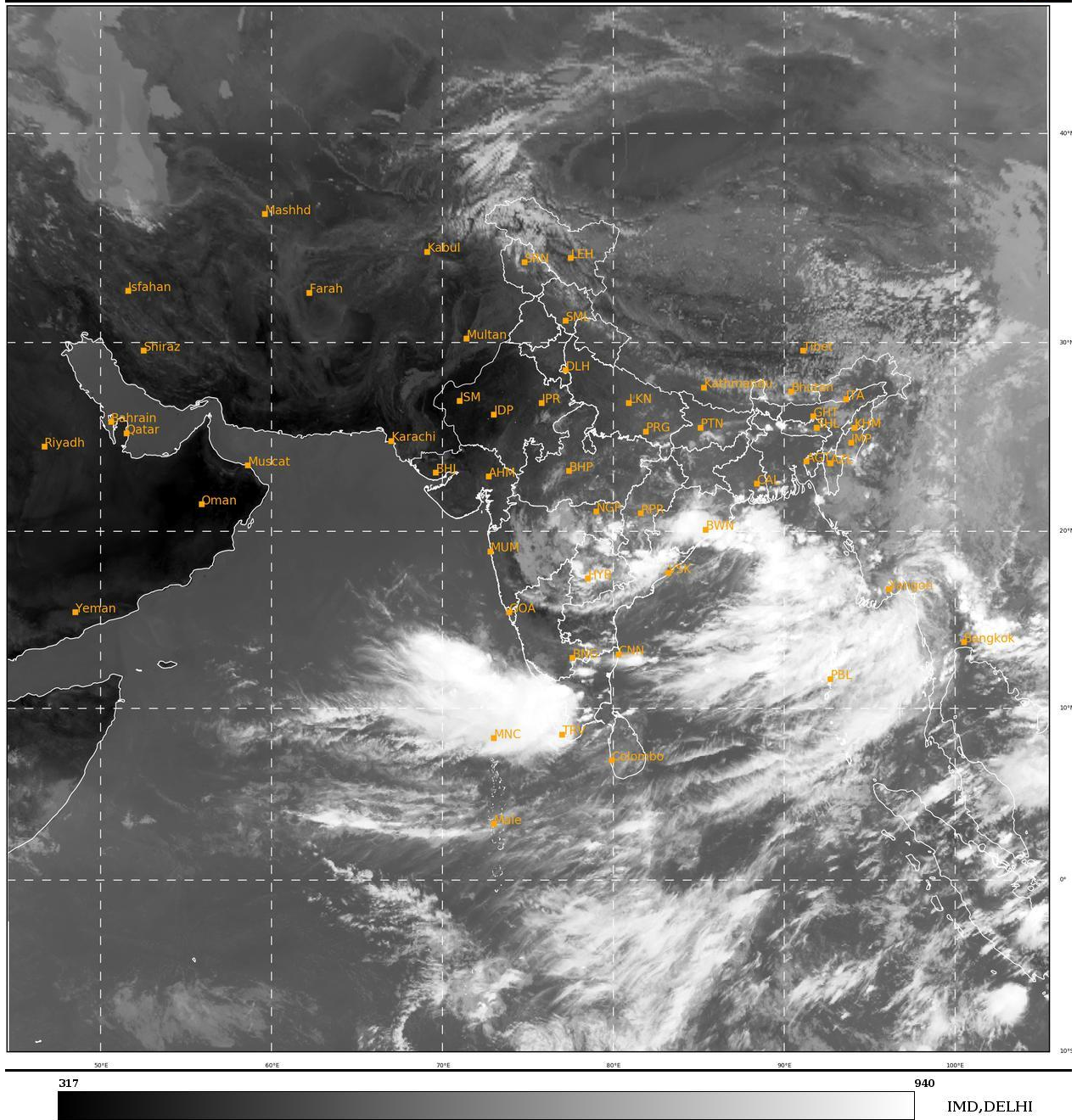
- Block level forecast (Akola) indicates dry weather during 14-16 October and light to moderate rainfall with thunderstorm and lightning at isolated places during 17-18 October. Farmers are advised to monitor cotton and pigeon pea crop regularly for insect incidence and use the suitable recommended control measures thereof in the initial stage itself. Follow safety precautions while handling and spraying insecticides. Taking advantage of mainly clear weather conditions, undertake picking of burst bolls in early/timely sown cotton and harvest matured soybean crop. Keep the harvested produce in safer place. To avoid the rotting of matured cotton bolls from outer side due to recent continuous rainfall period, it is advised to undertake the spray of propiconazole 25 EC@10 ml or propineb 70 WP@ 25 -30 g in 10 litres of water. For control of for internal rotting of cotton bolls, spray Copper Oxychloride 50 wp 25 g + Streptomycin 2 g per 10 litres of water. Foliar spray of 2% DAP at cotton boll development stage is advisable for better productivity. Keep close watch on moths of pink bollworm in pheromone traps in cotton fields. With 8 to 10 adult moth observed in trap over 3 consecutive days, undertake spray of 5% NSKE OR Azadirachtin1500 ppm @ 50 ml per 10 litres of water to manage the initial incidence of pink boll worm. If pink boll worm infestation crosses ETL level undertake spray of Profenophos 50 EC @ 30ml or Indoxacarb 14.5 SC @ 5ml or Emamectin benzoate 5 SG @ 5g per 10 litres of water. Thresh the already harvested produce as per the convenience after sun drying and keep in safer place.
- For likely use of soybean for seed purpose in the next season, it is advised to thresh the soybean at 13 to 15% seed moisture content and at 350 to 400 RPM thresher to avoid the loss of seed germination. For storage soybean seed moisture should not be more than 12%.
- For control of incidence of Phytophthora blight (stem rot or stem blight) observed in pigeonpea undertake spray of Fosetyl AL 80% WP@ 20 g in 10 litres of water. Install pheromone traps @ 5/ha for monitoring of Helicoverpa and also monitor for presence of eggs & small larvae in pigeonpea. Erect bird perches randomly in the pigeonpea field to encourage predation by insectivorous birds.
- Complete sowing of rainfed rabi sorghum (PKV Kranti, Phule Yashoda, Maldandi) preferably by 15 October. Before sowing of sorghum, seed treatment with Azatobacter + PSB (each 25 g / kg seed) and bio-fungicide Trichoderma @ 4 g per kg seed is advisable. Generally recommended seed rate for rabi sorghum is 10 kg/ha maintaining 45 cm x15 cm spacing.



- Under irrigated condition safflower (PKV-Pink (AKS-311), AKS-207 and Nari-non spiny (NH-1)) can preferably be sown till October end. Before safflower sowing, seed treatment with Azatobacter + PSB (each 25 g / kg seed) and biofungicide Trichoderma @ 4 g per kg seed is advisable.
- Adopt intercropping with linseed, Chickpea. Undertake Intercropping system of Safflower + Chickpea 6:3 ratio or Safflower + Linseed 3:3 ratio. Complete sowing of rainfed chickpea (Jaki 9218, PDKV Kanchan, Vijay) preferably by 15 October. Wilt resistant varieties include JAKI 9218, Vishal, ICCV-2, ICCV-10 etc. Before chickpea sowing, seed treatment with Rhizobium + PSB (each 25 g / kg seed) and biofungicide Trichoderma @ 4 g per kg seed is advisable. Feasible intercropping system includes chickpea+rabi sorghum (6:2).
- For control of fruit sucking moth in orange, dispose all fallen and decaying fruits which attract the moths, create smoke late evening by burning dry grasses and leaves which can repel and drive away the pest. Set up light traps and food lures (pieces of fruits) to attract adult moths. Undertake nursery sowing of onion (white onion varieties: Akola safed, Phule safed, Yashoda, Bhima Shweta; Red onion varieties: Pusa Red, Niphad 53, Agrifound light red, N 2-4-1, Arka Pragti).
- Ensure sufficient feed and medication for livestock. Ensure the milking cow/buffalo has adequate constant access to clean drinking water and quality feed daily.

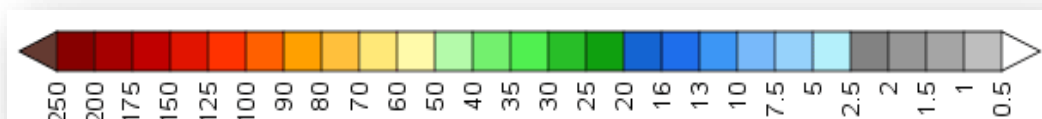
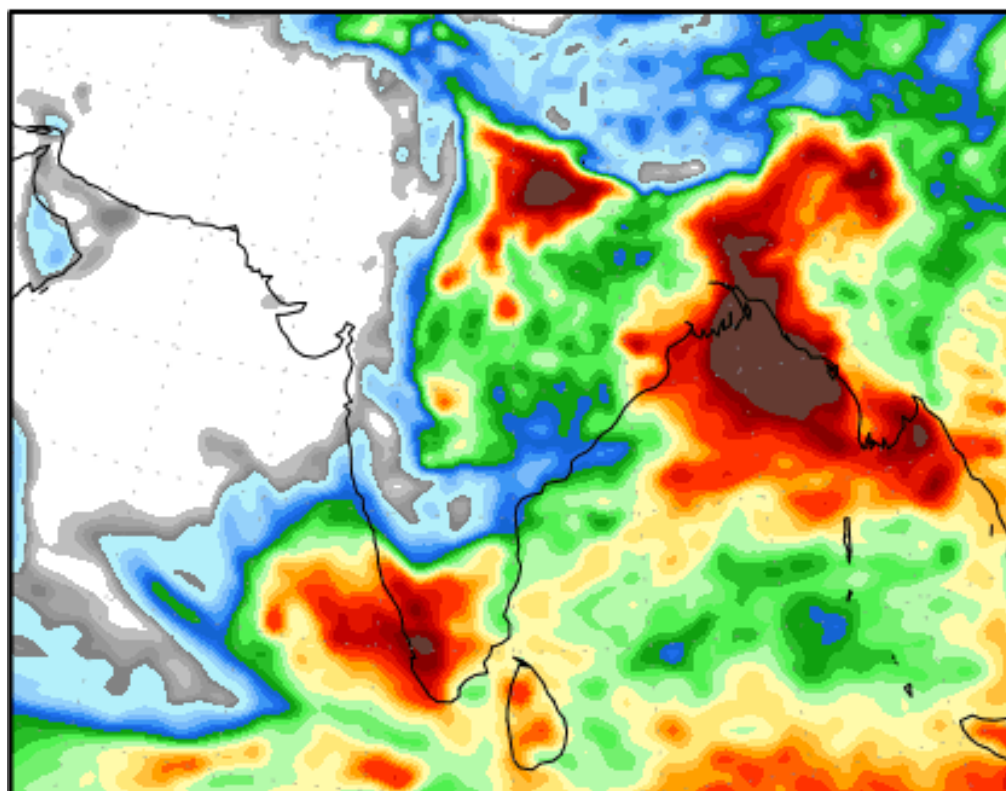
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16-10-2021/(0800 to 0826) GMT  
16-10-2021/(1330 to 1356) IST



**Figure: 1. Latest available satellite picture as on 16 Oct 2021 at 1356 Hrs (IST). (Source: IMD).**





**Figure:2. Precipitation forecast for 16 Oct to 24 Oct 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.*