

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 21 September 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Monsoon trough lies to the south of its normal position and likely to remain so during next 5 days.
- A Low Pressure Area lies over southern parts of Gangetic West Bengal & neighbourhood with the associated cyclonic circulation extends upto middle tropospheric levels tilting southwestwards with height. It is likely to weaken gradually during next 48 hours and move west-northwestwards as a cyclonic circulation across north Odisha, north Chhattisgarh & north Madhya Pradesh during subsequent 3 days.
- A cyclonic circulation lies over East Rajasthan & neighbourhood at lower tropospheric levels and likely to persist during next 3 days. Weather forecast and Warning:
 - i) Fairly widespread to widespread Rainfall with Isolated very heavy falls are likely over Gangetic West Bengal & Odisha on 21st; isolated heavy falls on 22nd September, 2021 and decrease in rainfall activity thereafter.
 - ii) Fairly widespread to widespread rainfall with Isolated heavy falls are likely over East Rajasthan & Gujarat Region during 21st-25th and over West Rajasthan on 21st & 22nd September, 2021.
 - iii) Scattered to fairly widespread rainfall with isolated heavy falls very likely over Uttarakhand during 21st-25th and over Himachal Pradesh, Punjab & Haryana during 21st-22nd September, 2021.
 - iv) Fairly widespread to widespread Rainfall with Isolated heavy falls are likely over East Madhya Pradesh, Vidarbha & Chhattisgarh till 24th September and decrease thereafter.
 - v) A cyclonic circulation likely to develop over Eastcentral & adjoining Northeast Bay of Bengal around 25th September. It is likely to move westnorthwestwards and reach Odisha coast during subsequent 48 hours. Under its influence; a fresh spell of heavy rainfall likely over Odisha and adjoining areas from 26th September, 2021.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST of Yesterday - 0830 hours IST of Today): at most places over Andaman & Nicobar Islands, Konkan & Goa, Marathawada, Vidarbha, Telangana and Gujarat Region; at many places over Nagaland, Manipur, Mizoram Tripura, Gangetic West Bengal, Odisha, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Madhya Pradesh, Chhattisgarh, North Interior Karnataka and Lakshadweep; at a few places over Assam & Meghalaya, Jharkhand, Bihar, East Uttar Pradesh, Uttarakhand, Punjab, Rajasthan, East Madhya Pradesh, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Tamilnadu, Puducherry & Karaikal and at isolated places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, West Uttar Pradesh, Haryana, Chandigarh & Delhi, Saurashtra & Kutch, Rayalaseema, Kerala & Mahe.
- Heavy rainfall observed (from 0830 hours IST of Yesterday - 0830 hours IST of Today): Extremely Heavy rainfall at isolated places over Gangetic West Bengal; Very heavy rainfall at isolated places over Konkan & Goa, Vidarbha, East Madhya Pradesh and Gujarat Region and heavy rainfall at isolated places over Himachal Pradesh, Punjab, Uttarakhand, Odisha, West Madhya Pradesh, East Rajasthan, Bihar, East Uttar Pradesh, Chhattisgarh, Marathawada, Interior Karnataka, Telangana, Rayalseema, Tamilnadu and Assam.
- Thunderstorm observed (from 0830 hours IST of Yesterday - 0830 hours IST of Today): at isolated places over Jammu & Kashmir, Himachal Pradesh, West Rajasthan, Punjab, Haryana, Vidarbha, Gangetic West Bengal, Telangana, East Uttar Pradesh, Uttarakhand, Jharkhand, Gujarat Region, Madhya Pradesh, Bihar, Chhattisgarh, Odisha, Telangana, Coastal Andhra Pradesh & Yanam, Coastal North Tamilnadu and South Interior Karnataka.
- Maximum Temperature Departures as on 20-09-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Assam & Meghalaya and at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Arunachal Pradesh; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Uttarakhand and Kerala & Mahe; at a few places over East Uttar Pradesh, Konkan & Goa, Coastal & North Interior Karnataka, Telangana, Rayalaseema, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal, Lakshadweep and Sub-Himalayan West Bengal & Sikkim and at isolated places over Odisha. They were markedly below normal (-5.0°C or less) at a few places over Vidarbha and at isolated places over East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at many places over Gujarat Region;

at a few places over Andaman & Nicobar Islands and at isolated places over Madhya Pradesh, Gangetic West Bengal and Telangana; below normal (-1.6°C to -3.0°C) at isolated places over Saurashtra & Kutch and Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.9°C was reported at Kavali (Coastal Andhra Pradesh).

- Minimum Temperature Departures as on 21-09-2021: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh and West Rajasthan; above normal (1.6°C to 3.0°C) at most places over Uttarakhand; at a many places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Kerala & Mahe and Sub Himalayan West Bengal & Sikkim; at a few places over East Uttar Pradesh and Madhya Pradesh; at isolated places over East Rajasthan, Gujarat Region and Rayalseema. They are below normal (-1.6°C to -3.0°C) at a many places over Tamil Nadu, Puducherry & Karaikal; at isolated places over Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Islands and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C reported at Khargone (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 21 September (Day 1): Heavy to very heavy rainfall very likely at isolated places over East Madhya Pradesh, Gujarat Region, Gangetic West Bengal and Odisha; heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, North Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, South Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea; Northwest Bay of Bengal along & off West Bengal-Odisha coasts,

Eastcentral Bay of Bengal and north Andaman sea. Fishermen are advised not to venture into these areas.

- 22 September (Day 2): Heavy rainfall very likely at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gujarat Region, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Telangana and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 23 September (Day 3): Heavy rainfall very likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Madhya Maharashtra, Marathwada and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) very likely over the Southwest & Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 24 September (Day 4): Heavy rainfall likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Gujarat Region and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- 25 September (Day 5): Heavy rainfall likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Andaman & Nicobar Islands, Gujarat Region, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.

- The weather outlook for seven days i.e., 21 Sep to 29 Sep 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 2.3 °C lower and the actual minimum temperature was 1.2 °C higher as compare to their normals. Total BSS was 14.1 hrs. with an average of 2.0 hrs. The daily average evaporation and wind speed was 2.6 mm and 4.2 km/hr respectively. The daily average RH during morning and afternoon was 94.3 % and 84.4 % respectively.

Contingency measure:

- Pearl millet : Grain filling/maturity : Protect the crop from bird damage.
- Tobacco : Weeding in tobacco nursery is advised. Preapare land for tobacco transplanting. Carry out transplanting of seedlings of tobacco crop at recommeded spacing (90 cm x 75 cm or 105 cm x 90 cm). Gap filling, inter-culturing and hand weeding in established transplanted crop is advised. Drain out excess rain water from the filed.
- 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 : Vegetative Growth : Cercospora leaf spot disease is caused by cercospora fungus. For controlling of this disease Mencozeb 75% WP 25gm in 10 lit of water should be sprayed. If disease severity is higher, do second spray after 15 days.
- 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 and prepare for excess water drain out from the field. It is the best time for plantation of fruit orchard.
- Cattle: Provide adequate fodder and keep the animals in clean shed. Give stored fodder balanced mineral mixture in diet. Protect shed from rain and wind. Care should be taken in rainy days for cattle and stored dry fodder.

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

21-09-2021/(0830 to 0857) GMT
 21-09-2021/(1400 to 1427) IST

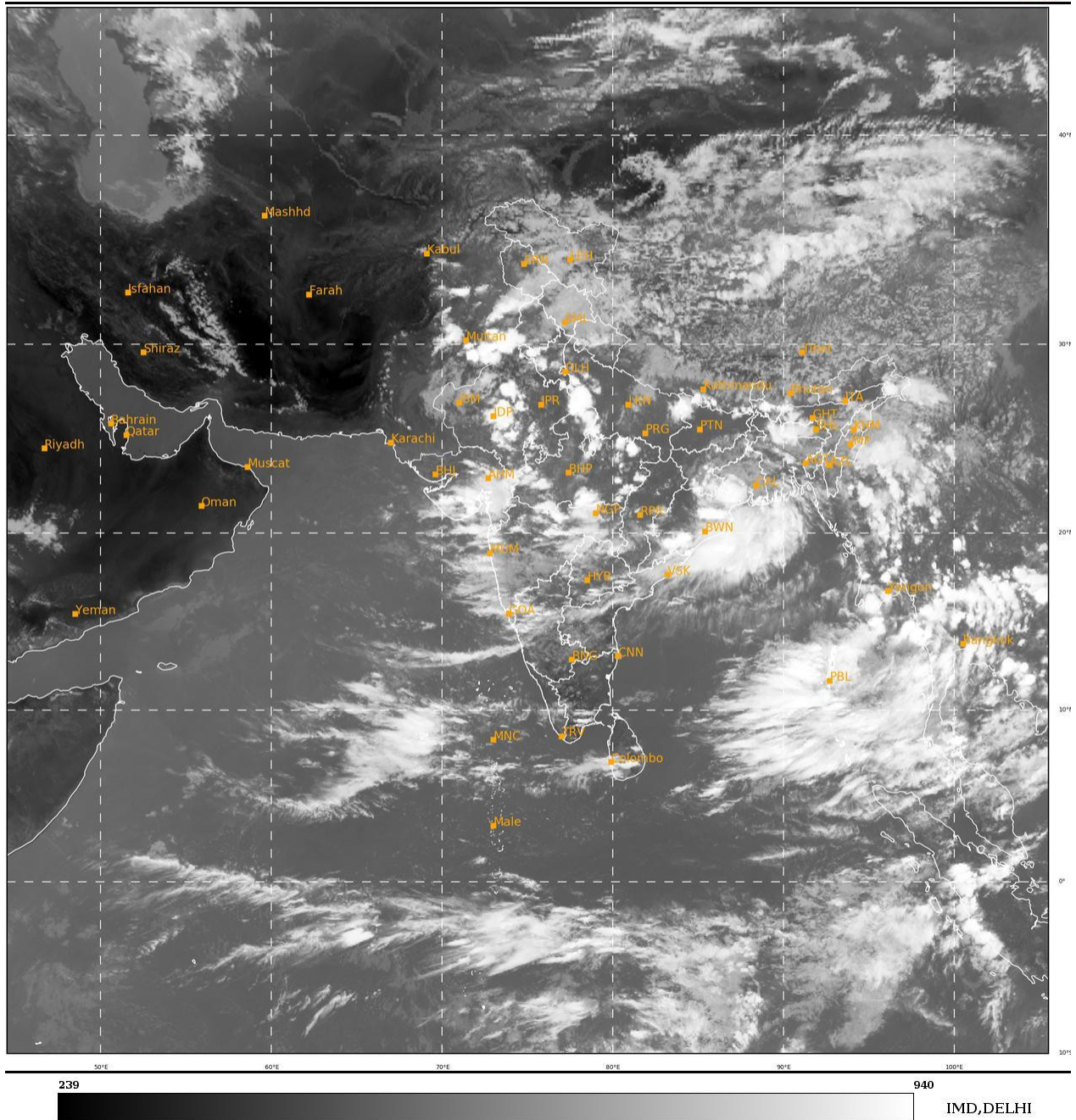


Figure: 1. Latest available satellite picture as on 21 Sep 2021 at 1427 Hrs (IST). (Source: IMD).

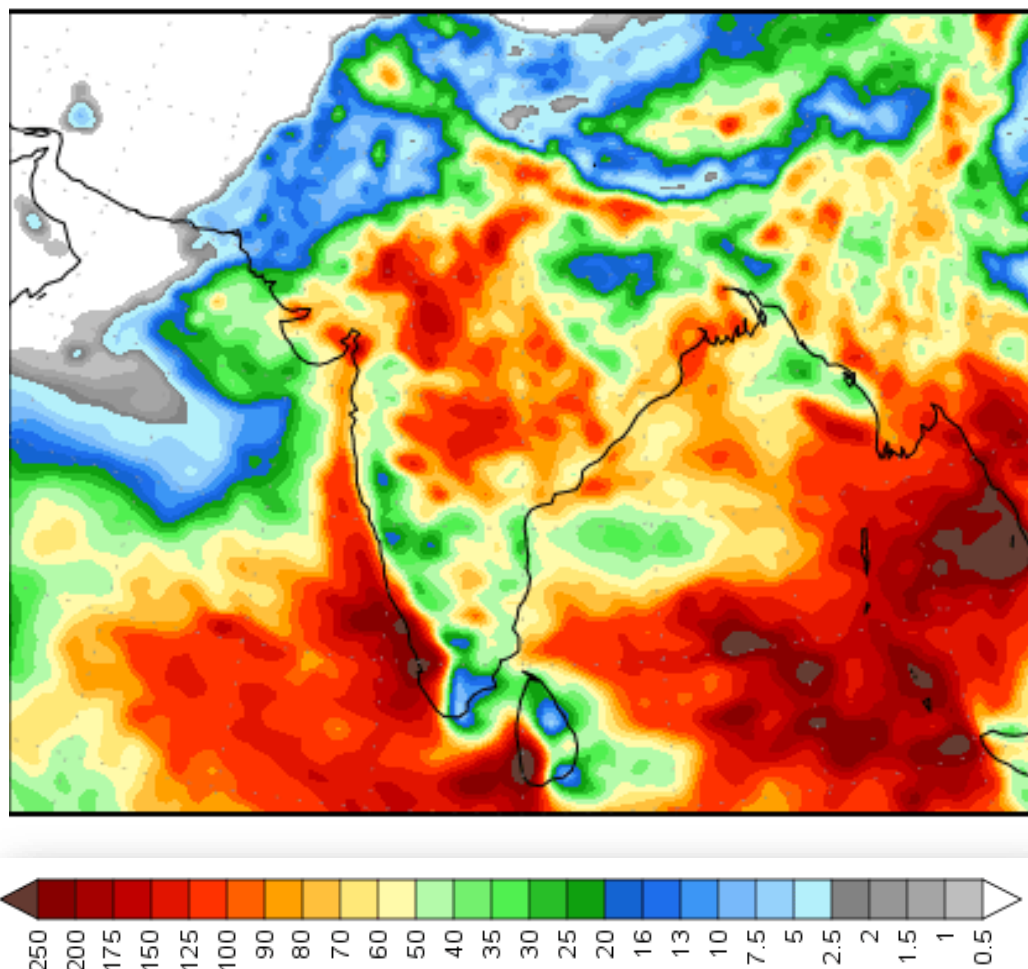


Figure:2. Precipitation forecast for 21 Sep to 29 Sep 2021 (Source: NOAA NCEP).

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