

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 23 August 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The western end of the monsoon trough lies to the south of its normal position and the eastern end lies to the north of its normal position. The western end is very likely to shift gradually northwards from 24th August and eastern end is likely to shift southwards from 26th August. A cyclonic circulation lies over northwest Rajasthan & neighbourhood in lower tropospheric levels. Strong southerly/southwesterly winds from Bay of Bengal to northeast India very likely to continue to prevail till 25th August, 2021.
- Due to above meteorological conditions:
 - i) Widespread rainfall activity with isolated heavy to very heavy falls very likely to continue over Northeast India, Sub-Himalayan West Bengal & Sikkim till 27th August. Isolated extremely heavy falls also likely over Assam & Meghalaya during 23rd to 25th August, 2021. Fairly widespread to widespread rainfall activity with isolated heavy falls very likely to continue over Bihar, East Uttar Pradesh and Uttarakhand till 27th August.
 - ii) Scattered to fairly widespread rainfall activity with isolated heavy falls over Tamilnadu and Kerala & Mahe on 23rd, 26th & 27th August. iii) Subdued rainfall is very likely over rest parts of country covering plains of northwest India, central India and remaining parts of Peninsular India including Maharashtra and Gujarat till 27th August outside Rajasthan, where dry weather is likely from 25th to 27th August.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Arunachal Pradesh, SubHimalayan West Bengal & Sikkim, Himachal Pradesh, Punjab, Kerala & Mahe and South Interior Karnataka; at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Coastal & North Interior Karnataka, Lakshadweep and Andaman & Nicobar Island; at a few places over Haryana,

Chandigarh & Delhi, Rajasthan, East Uttar Pradesh, Vidarbha, Bihar, Gangetic West Bengal, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal, Gujarat region, Madhya Maharashtra and Konkan & Goa and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Saurashtra & Kutch, Odisha, Marathawada and Coastal Andhra Pradesh & Yanam.

- Heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over Meghalaya; Very Heavy Rainfall at isolated places over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Bihar, North Interior Karnataka, East Uttar Pradesh, Kerala & Mahe, Rajasthan, Coastal Andhra Pradesh & Yanam, Telangana, Punjab and Haryana.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hrs IST of today): at many places over East Uttar Pradesh; at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Punjab, Haryana, East Rajasthan, Bihar, Interior Karnataka, Rayalaseema, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 22-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Gangetic West Bengal; at isolated places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, Jharkhand, Odisha, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Telangana and Kerala & Mahe; at a few places over Andaman & Nicobar Islands, Bihar, Rayalaseema and West Madhya Pradesh and at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Coastal Andhra Pradesh & Yanam and Lakshdweep. They were markedly below normal (-5.1°C or less) at a few places over Himachal Pradesh; at isolated places over Arunachal Pradesh, Punjab, West Rajasthan and Tamil Nadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at a few places over Haryana, Chandigarh & Delhi and Sub-Himalayan West Bengal & Sikkim; at isolated places over East Rajasthan and Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.4°C was reported at Agra (West Uttar Pradesh).
- Minimum Temperature Departures as on 23-08-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many place over West Uttar Pradesh; at a few places over Sub-Himalayan West Bengal & Sikkim, East Rajasthan, East Uttar

Pradesh, Madhya Pradesh and Odisha; at isolated places over Assam & Meghalaya, Nagaland Mizoram Manipur & Tripura, Gangetic West Bengal, Haryana, Chandigarh, Bihar, Telangana, Vidarbha, Saurashtra & Kutch and Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at a few places over Tamil Nadu, Puducherry & Karaikal and Rayalaseema and at isolated places over Andaman & Nicobar Islands, Madhya Maharashtra and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.0°C reported at Khargone (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 23 August (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Bihar, Arunachal Pradesh, Kerala & Mahe, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, East Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 24 August (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Bihar and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 25 August (Day 3): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Bihar and Odisha. Thunderstorm accompanied with lightning very

likely at isolated places over Uttarakhand, Uttar Pradesh, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

- 26 August (Day 4): Heavy to very heavy rainfall likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and SubHimalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Bihar, Odisha, Kerala & Mahe and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 27 August (Day 5): Heavy to very heavy rainfall likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and SubHimalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Bihar, Odisha, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 23 Aug to 31 Aug 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)

Jharkhand

Weather condition:

Good rainfall i.e 133.0 mm has been received during this week against the normal rainfall i.e. 73.6 mm. Maximum and minimum temperature range between 31.5 to 36.8 °C and 22.4 to 26.4°C respectively. Maximum and minimum actual average temperatures

are 33.6°C and 24.3°C, whereas normal maximum and minimum temperature are 28.8°C and 22.8°C respectively.

Contingency measure:

- General: Farmers wish to cultivate early potato or table pea, should manage improved seeds, fertilizers & manures etc. In fallow upland field, farmers may proceed for sowing of Horse gram and Niger during favorable weather. Maintain optimum water drainage in crops/vegetables field and bunds of rice field to remain stagnate water. In late sown crops, Inter - culture operation must be performed in 15-20 days old crops to control weeds followed by broadcasting of urea as per the requirement of the crops. If different crops are attacked by the insect Bihar Hairy caterpillar, it must be controlled immediately. At initial stage these caterpillar may simply controlled either by hand picking or by dusting of ash mixed with kerosin oil. But when the insect population is high then spray any systemic insecticide like Spinosed (@ 0.5 ml per liter of water) or Emidachlorprid (@ 1 ml per liter of water) during clear weather and Tipol or Sandovit may be mixed in the solution, otherwise the solution must be prepared in soap water.
- Finger millet: Broadcast urea @ 18 kg per acre in 20-25 old crops after weeding. Spray the fungicide Beam @ 3 gm per 5 liter of water during clear weather against blast disease.
- Maize: Broadcast urea @ 30 kg per acre in 25 - 30 days old (late sown) and 60 days old (Timely sown) crops after weeding. Due to attack of stem borer, upper leaves of the plant start to change its colour (ie. Green to white). To control the insect immediately spray the insecticide Emacetin @ 1 gm per liter of water during clear weather. Don't enter in the field if the crop is at teaseling stage, otherwise fertilization will be disturbed. It is the time of watch and ward where the crops are at grain filling stage. Alternative methodology is to tag shining wire around the field, which repels the birds.
- Paddy transplanting: Broadcast urea @ 20 kg per acre in 20-25 days old transplanted crop. However, before urea broadcasting, weeding is must. Farmers are requested to look after their crops because prevailing weather is favorable for the attack of various pests. Broadcasting of granular insecticide like Kartaf Hydrochloride 4 G @ 10-12 kg per acre) protects the crops against various insects. However, at the time of broadcasting of granular insecticide, stagnated water in the field is essential.
- Horse Gram: Farmers wishing to cultivate Horse gram may select improved varieties like V.L.G.-19, Indira kulthi-1 or Birsa kulthi-1. 8 -10 kg of seed is

required for sowing in 1 acre. After field preparation, sow the seed in line at a distance of 30 cm. (Row to row) and 10 cm. (Plant to plant). Before sowing, seeds must be treated with Rhizobium culture.

- Niger: Farmers wishing to cultivate Niger may select improved varieties like Birsa niger-1, Birsa niger- 2, Birsa niger-3, Pooja-1 etc. 2- 2.5 kg of seed is required for sowing in 1 acre. After preparing the field, sow the seed in line at a distance of 30 cm (Row to row) and 15 cm. (Plant to plant). Farmers who wish to sow the seed by broadcasting method must have to increase the seed rate (3.5 kg per acre).

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

23-08-2021/(0800 to 0827) GMT
23-08-2021/(1330 to 1357) IST

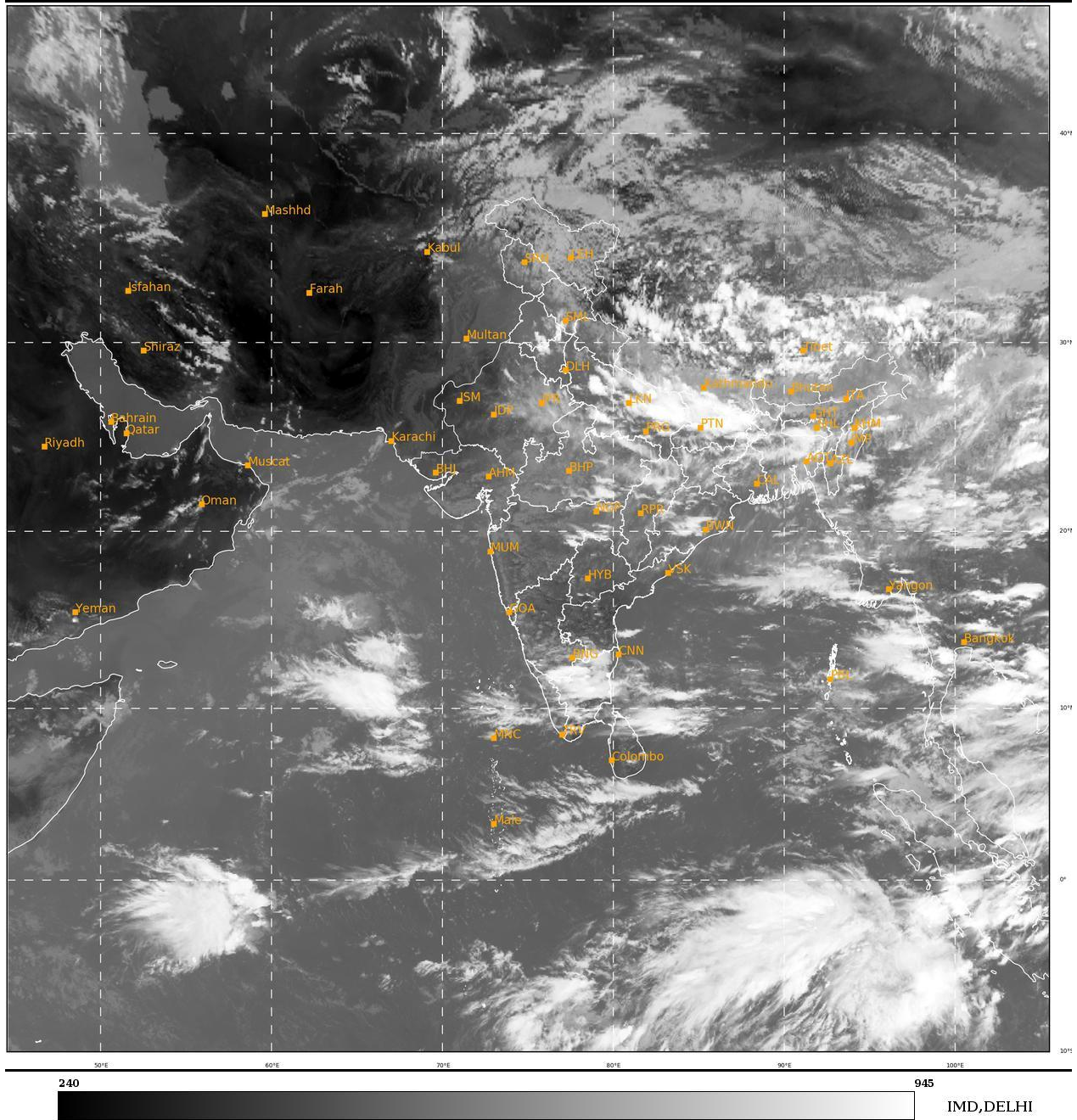


Figure: 1. Latest available satellite picture as on 23 Aug 2021 at 1357 Hrs (IST). (Source: IMD).

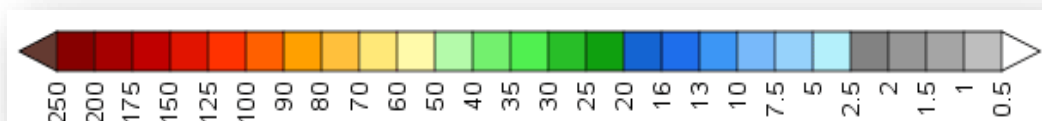
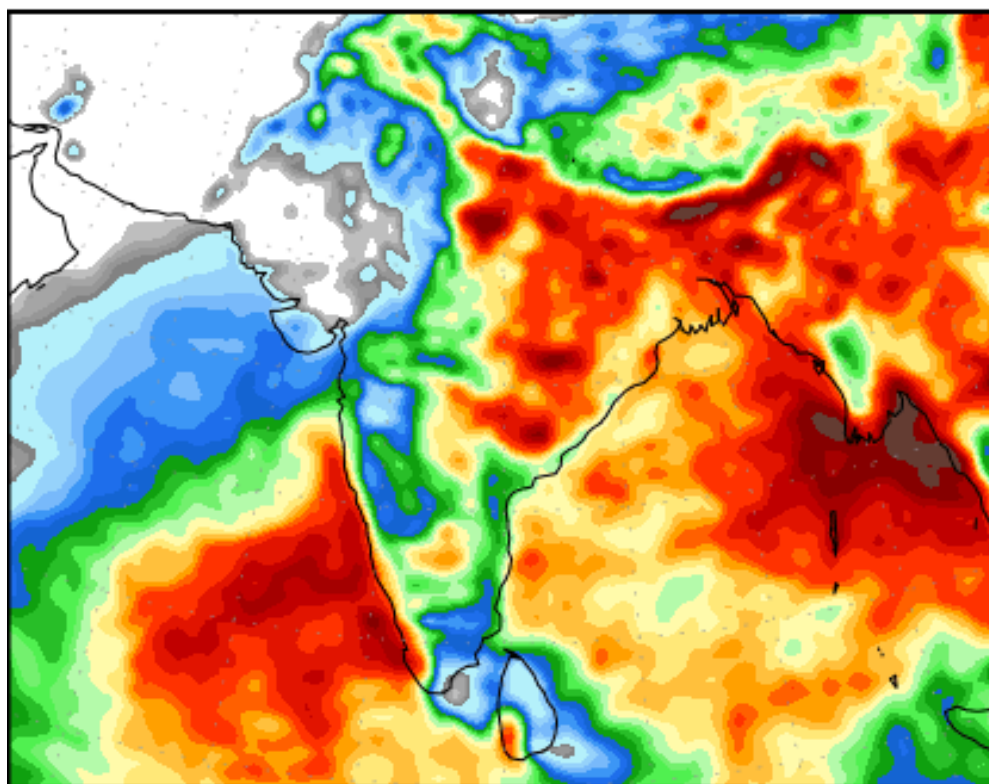


Figure:2. Precipitation forecast for 23 Aug to 31 Aug 2021 (Source: NOAA NCEP).

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