

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 13 Jul 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- In association with the continued prevalence of moist easterly winds from the Bay of Bengal in the lower levels since past 4 days, enhanced cloud cover and scattered to fairly widespread rainfall, the southwest monsoon has further advanced into remaining parts of the country including Delhi, remaining parts of Uttar Pradesh, Punjab, Haryana and Rajasthan. Thus, the Southwest Monsoon has covered entire country on 13th July, against the normal date of 08th July.
- Under the influence of these conditions, scattered to widespread to widespread rainfall very likely over parts of Northwest India during next 3 days and isolated heavy to very rainfall very likely over Uttarakhand, West Uttar Pradesh during next 5 days; over Himachal Pradesh on 13th, 14th & 17th; over Haryana and West Rajasthan on 13th; over East Rajasthan on 14th, 15th & 17th and over East Uttar Pradesh during 14th-17th July, 2021.
- A Low Pressure Area lies over Saurashtra coast & neighbourhood and an east-west shear zone runs in middle levels across Central India and strong westerly winds are prevailing along the west coast. Under the influence of these conditions:
 - i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely along the west coast, adjoining inland areas and peninsular India during next 4 days.
 - ii) Isolated extremely heavy falls also very likely over Saurashtra & Kutch on 13th; over Konkan & Goa during 13th-15th; over Madhya Maharashtra on 13th & 14th July, 2021.
- Moderate to severe thunderstorm with lightning very likely over Punjab, Haryana, north Rajasthan, West Uttar Pradesh and Bihar during next 24 hours. This may cause injuries leading to casualties to people and animals staying outdoors.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Gangetic West Bengal, Uttarkhand, Himachal Pradesh, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at a many places over Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan west Bengal & Sikkim, Odisha, Jharkhand, Gujarat State, Chhattisgarh, Coastal Andhra Pradesh & Yanam and South Interior Karnataka; at a few places over Haryana, Chandigarh & Delhi and West Rajasthan and at isolated places over Uttar Pradesh, Bihar, East Rajasthan, Madhya Pradesh and Tamilnadu, Puducherry & Karaikal.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): very heavy to extremely heavy rainfall recorded over isolated places over Himachal Pradesh and heavy to very heavy rainfall at a few places over Konkan & Goa and Madhya Maharashtra and at isolated places over Telangana, Coastal Andhra Pradesh & Yanam and heavy rainfall is recorded at isolated places over Coastal Karnataka, Marathwada, Gujarat State, Kerala & Mahe and Assam & Meghalaya.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Delhi; at a few places over Uttar Pradesh, West Rajasthan, east madhya Pradesh, Chhattisgarh, Saurashtra & Kutch and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Himachal Pradesh, Punjab, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, West madhya Pradesh, Konkan & Goa, Andaman & Nicobar Islands, Jharkhand, Odisha, Gangetic West Bengal, Telangana and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 12-07-2021: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Arunachal Pradesh; above normal (1.6°C to 3.1°C) at most places over Bihar, Sub-Himalayan west Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat Region; at many places over West Rajasthan, West Uttar Pradesh, Odisha and West Madhya Pradesh; at isolated places over East Rajasthan, Gangetic West Bengal and Vidarbha and at isolated places over Madhya Maharashtra. They were markedly below normal (-5.1°C or less) at many places over Himachal Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at many places over Coastal Andhra Pradesh & Yanam; at isolated places over

Rayalseema; below normal (-3.1°C to -5.0°C) at most places over Coastal Karnataka; at many places over Telangana; at a few places over Interior Karnataka, Konkan & Goa and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.5°C was reported at Jaisalmer (West Rajasthan).

- Minimum Temperature Departures as on 13-07-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over East Rajasthan, Madhya Pradesh, Lakshadweep and Sub-Himalayan West Bengal & Sikkim and at isolated places over Uttar Pradesh, Madhya Maharashtra, Kerala & Mahe, Bihar, Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They are **below normal** (-1.6°C to -3.0°C) at a few places over Konkan & Goa, Coastal Karnataka and Telangana and at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Assam & Meghalaya and Andaman & Nicobar Islands and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.5°C is reported at Phulbani (Odisha).

Weather Warning during the next 5 days (IMD)

- 13 July (Day 1): Heavy to Very Heavy Rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over south Saurashtra & Kutch and ghat area of Madhya Maharashtra; Heavy to very heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Assam & Meghalaya, south Gujarat Region, Telangana, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Haryana, West Uttar Pradesh, West Rajasthan, south Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds ($30-40\text{ kmph}$) very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; with lightning at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Rayalaseema. Squally Weather (speed $45-55\text{ kmph}$ gusting to 65 kmph) very likely over central & Southwest Arabian sea; Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Strong wind (speed $40-50\text{ kmph}$)

gusting to 60 kmph) very likely over Westcentral & Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- 14 July (Day 2): Heavy to Very Heavy Rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over ghat area of Madhya Maharashtra; Heavy to very heavy rainfall at isolated places over south Gujarat Region, Telangana and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Southeast Rajasthan, Vidarbha, Southwest Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over central & Southwest Arabian sea; Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely over Westcentral & Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 15 July (Day 3): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to very heavy rainfall at isolated places over ghat area of Madhya Maharashtra and Karnataka and **heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, Southeast Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Bihar, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over central & Southwest Arabian sea; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely over along & off Goa-Karnataka-Kerala coasts. Westcentral & Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- 16 July (Day 4): Heavy to Very Heavy Rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Coastal Karnataka and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, ghat area of Madhya Maharashtra, Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Bihar, West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over central & Southwest Arabian sea; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely over along & off Goa-Karnataka-Kerala coasts. Westcentral & Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 17 July (Day 5): Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Coastal Karnataka and heavy rainfall at isolated places over East Rajasthan, Madhya Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, ghat area of Madhya Maharashtra, Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Gangetic West Bengal, Odisha and Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over central & Southwest Arabian sea; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely over along & off Goa-Karnataka-Kerala coasts. Westcentral & Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 13 Jul to 21 Jul 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:

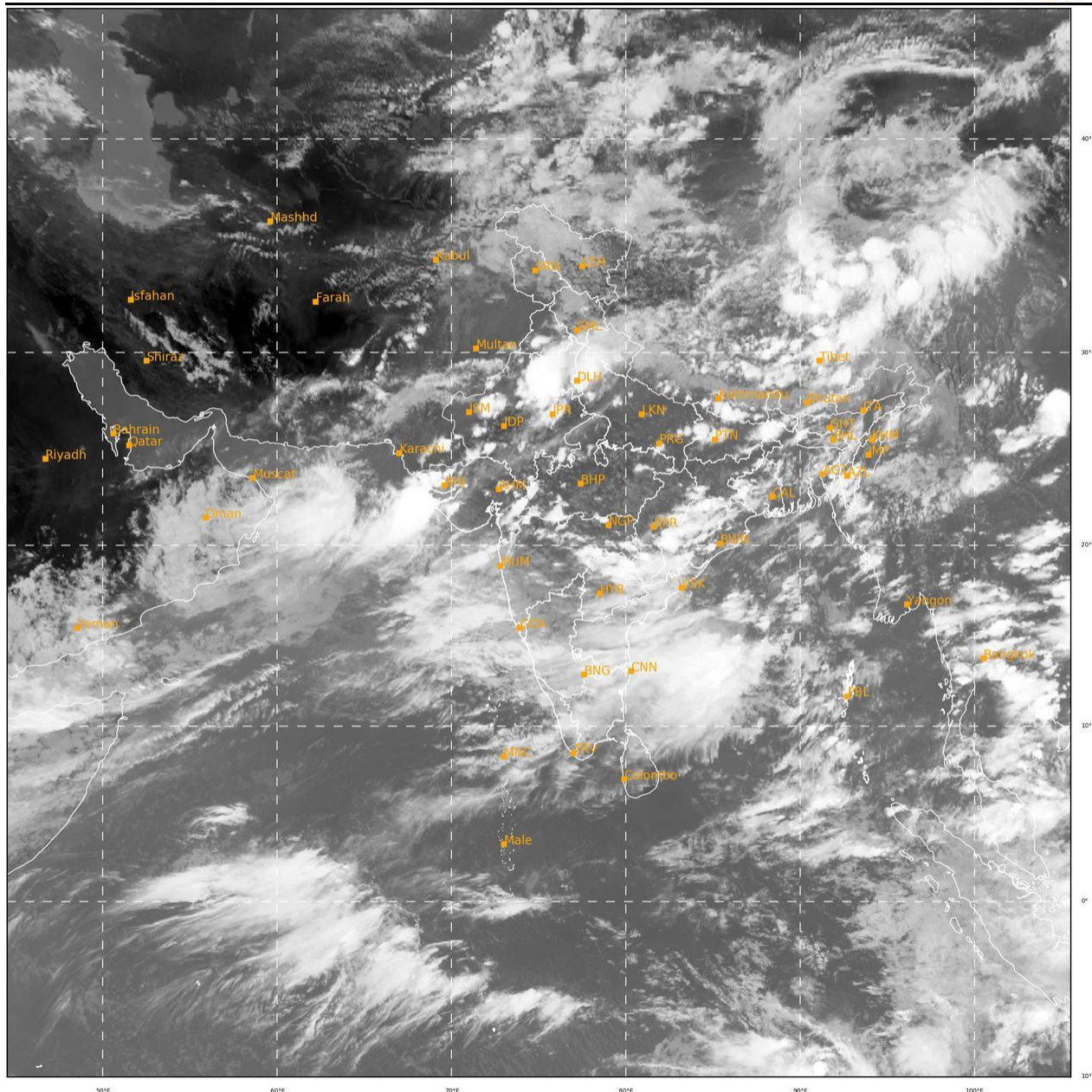
The actual maximum temperature was 2.1 °C and the actual minimum temperature was 1.5 °C higher as compare to their normals. Total BSS was 64.3 hrs. with an average of 9.2 hrs. The daily average evaporation and wind speed was 6.8 mm and 7.2 km/hr respectively. The daily average RH during morning and afternoon was 81.9 % and 51.9 % respectively.

Contingency measure:

- Land preparation for kharif crops. Purchase certified seed for kharif crops only from authorized dealer. Seed treatment with mercuric fungicide like Thiram, Captan etc.is recommended before sowing of crops.
- Pearl millet : Sowing of kharif pearl millet should be done with the onset of monsoon when sufficient rainfall received for sowing. Seed rate should be 4 kg/ha with 45 x 10 cm spacing. Select varieties like GHB-538, 558, 577, 719, 732, 744 for kharif sowing. The field should be ploughed once or twice followed by harrowing to create fine tilth. Farmers are advised to select any one variety for sowing of Green gram-GM-3, GM-4, GM-5, K-851, Black gram-T-9, GU-1, Cowpea-Gujarat cowpea-1,2,4, Pusa falguni, Pigeon pea-Vaishali, GT-100, GTH-1, BHSR-711.
- Cotton: If irrigation facility available, sown cotton. cotton can sown at 120 cm x 45 cm spacing.
- 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.
- Vegetable Crop: Growth: Thrips and Mite: Due to hot and dry condition if mite and thrips incidence occurs spray Methyl-o-dematone 25 EC 10 ml in 10 lit water.
- Papaya : Protect the papaya fruits using gunny bags under high temperature condition.
- 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: Vaccinate the animals against outbreaks of diseases like Foot & Mouth disease (FMD), Haemorrhagic Septicaemia (H.S.) and Black quarter (B.Q.) during onset of monsoon. Keep animal indoor in rainy condition. Keep fodder at safe place to avoid spoilage from rainfall.

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

13-07-2021/(0930 to 0956) GMT
13-07-2021/(1500 to 1526) IST



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IMD, DELHI

Figure: 1. Latest available satellite picture as on 13 Jul 2021 at 1526 Hrs (IST). (Source: IMD).

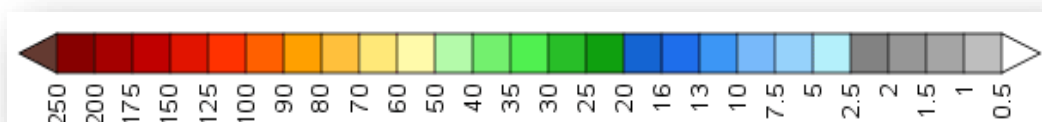
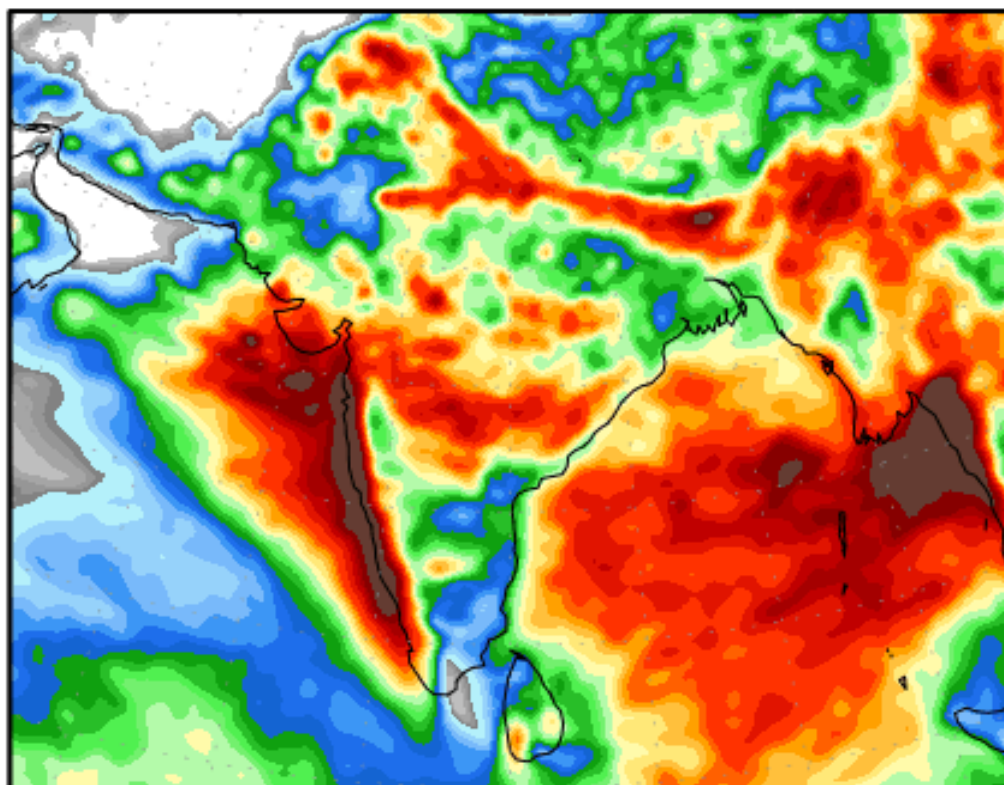


Figure:2. Precipitation forecast for 13 Jul to 21 Jul 2021 (Source: NOAA NCEP).

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.