

# All India Coordinated Research Project on Agrometeorology

## CRIDA, Santoshnagar, Hyderabad – 500 059

### Daily Crop Weather Information as on 23 June 2020

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

#### Significant Weather Features (IMD)

- Southwest Monsoon has further advanced into remaining parts of north Arabian Sea, most parts of Kutch, some more parts of Gujarat region, Madhya Pradesh and Uttar Pradesh and some parts of Uttarakhand.
- The Northern Limit of Monsoon (NLM) now passes through Lat. 25°N/Long. 68°E, Ahmedabad, Shajapur, Fatehpur, Lat. 29°N/Long. 80°E, Rudraprayag and Lat. 32°N/Long. 79°E.
- Conditions are becoming favourable for further advance of southwest monsoon into remaining parts of Gujarat, Madhya Pradesh, Uttar Pradesh, entire Western Himalayan Region, Haryana, Chandigarh & Delhi, most parts of Punjab and some parts of Rajasthan during next 48 hours.
- The cyclonic circulation lies over interior Odisha and neighbourhood between 2.1 km & 5.8 km above mean sea level tilting southwestwards with height.
- The trough at mean sea level runs from northwest Rajasthan to northwest Bay of Bengal across northeast Rajasthan, north Madhya Pradesh, northern parts of Chhattisgarh, southern parts of Jharkhand and northern parts of Odisha at lower tropospheric levels..
- Fairly widespread to widespread rainfall with isolated heavy to very heavy rainfall very likely to continue over northeast & adjoining east India during next 5 days. Isolated extremely heavy rainfall is also likely over Sub-Himalayan West Bengal & Sikkim during 25th-26th June and over Assam & Meghalaya during 25th-27th June, 2020.
- Fairly widespread to widespread rainfall with isolated heavy to very heavy rainfall likely over parts of south peninsular India during next 5 days. Isolated extremely heavy rainfall also likely over Kerala & Mahe during 26th-27th June.
- Fairly widespread to widespread rainfall activity with isolated heavy to very heavy falls also very likely over Uttarakhand and Uttar Pradesh during next 4-5 days. Isolated heavy to very heavy rainfall also likely over remaining parts of Western Himalayan Region and plains of north west India during 24th-25th June.
- 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 Chhattisgarh, East Madhya Pradesh, Vidarbha, Bihar, West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal & North Interior Karnataka, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands; at many places over East Uttar Pradesh, East Rajasthan, Jharkhand, Odisha, Assam & Meghalaya and South Interior Karnataka; at a few places over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Telangana, Rayalseema, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi and Gujarat region.
- Heavy to very heavy rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Chhattisgarh and Andaman & Nicobar islands and heavy rainfall at isolated places over West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, East Rajasthan, Saurashtra & Kutch, Konkan & Goa, East Madhya Pradesh, Vidharbha, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Odisha, Chhattisgarh, Telangana, Coastal Karnataka, Coastal Andhra Pradesh & Yanam Tamilnadu, Puducherry & Karaikal and Lakshadweep.
- Maximum Temperature Departures as on 22-06-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya and at isolated places over Saurashtra & Kutch, Coastal Andhra Pradesh, Rayalaseema and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at most places over West Rajasthan; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, North Interior Karnataka and Nagaland, Manipur, Mizoram & Tripura; at a few places over Himachal Pradesh, Gangetic West Bengal, Konkan & Goa and Madhya Maharashtra and at isolated places over East Rajasthan, Sub-Himalayan West Bengal & Sikkim, Odisha, West Madhya Pradesh, Vidarbha and Tamil Nadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over East Madhya Pradesh and Chhattisgarh and at isolated places over Uttarakhand, Punjab and Haryana, Chandigarh & Delhi and below normal (-1.6°C to -3.0°C) at most places over East Uttar Pradesh and Telangana; at many places over Jharkhand; at a few

places over Bihar and West Uttar Pradesh and at isolated places over Coastal Karnataka and Kerala & Mahe. Yesterday, the highest Maximum temperature of 43.8°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 23-06-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Himachal Pradesh; at a few places over West Rajasthan and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over Punjab, Uttarakhand, Gujarat region and Sub-Himalayan West Bengal & Sikkim; at a few places over Haryana, Chandigarh & Delhi, Gangetic West Bengal, Andaman & Nicobar Islands and Rayalseema and at isolated places over Lakshadweep, Bihar, Odisha and Tamil Nadu, Puducherry & Karikal. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Vidarbha and Chhattisgarh; below normal (-1.6°C to -3.0°C) at many places over Telangana; at a few place over East Madhya Pradesh, Coastal Karnataka and Rayalseema and at isolated places over East Rajasthan and West Madhya Pradesh and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.4°C was reported at Chandrapur (Vidarbha) over the plains of the country.

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

- 23 June (Day 1): Heavy to very rainfall at isolated places very likely over West Madhya Pradesh, Chhattisgarh and Assam & Meghalaya and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karikal. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over Eastcentral Arabian Sea. Squally Weather (wind speed reaching 40-50 kmph) over Southwest Bay of Bengal. Fishermen are advised not to venture into sea over these areas. 24 June (Day 2): Heavy to very heavy rainfall at isolated places very likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya;

heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Madhya Pradesh, Bihar, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over Eastcentral Arabian Sea. Squally Weather (wind speed reaching 40-50 kmph) over Southwest Bay of Bengal. Fishermen are advised not to venture into sea over these areas.

- 25 June (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Sub-Himalayan West Bengal & Sikkim and Heavy to very heavy rainfall with extremely heavy falls at isolated places over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Coastal & North Interior Karnataka, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh & Yanam and Rayalaseema. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over Eastcentral Arabian Sea and Lakshadweep area. Fishermen are advised not to venture into sea over these areas.
- 26 June (Day 4): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Kerala & Mahe; Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Assam & Meghalaya; heavy rainfall at a few places with very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall at isolated places over East Uttar Pradesh, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, Rayalaseema and North Interior Karnataka. Thunderstorm accompanied with lightning likely at isolated places

over Jharkhand, Gangetic West Bengal, Odisha and Rayalseema. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over Kerala coast, Lakshadweep area and south Tamil Nadu coast. Fishermen are advised not to venture into sea over these areas.

- 27 June (Day 5): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Kerala & Mahe; Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over East Uttar Pradesh, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and heavy rainfall at isolated places over Uttarakhand, West Bengal & Sikkim, Rayalaseema, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm accompanied with lightning likely at isolated places over Jharkhand, Gangetic West Bengal and Rayalseema. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over Kerala coast and Lakshadweep area. Squally Weather (wind speed reaching 40-50 kmph) over Karnataka coast. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 23 June to 01 July 2020 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)

### **Tamil Nadu**

#### **Weather condition:**

Maximum temperature: 39.0°C (normal 37.5°C), minimum temperature: 26.5°C (normal 24.8°C), rainfall: 0.0 mm (normal 0.8 mm). The Maximum temperature was 1.5°C above normal, minimum temperature was 1.7°C above normal and rainfall was 0.8 mm below normal across the week. General weather situation in Tamil Nadu: Maximum temperature range of 30°C - 41°C prevailed over the state except Kodaikanal and Uthagamandalam (18°C - 20°C) during the period under report. Minimum temperature range of 23°C - 31°C prevailed over the state except Kodaikanal and Uthagamandalam (10°C - 14°C) during the period under report. With respect to daily rainfall, rainfall

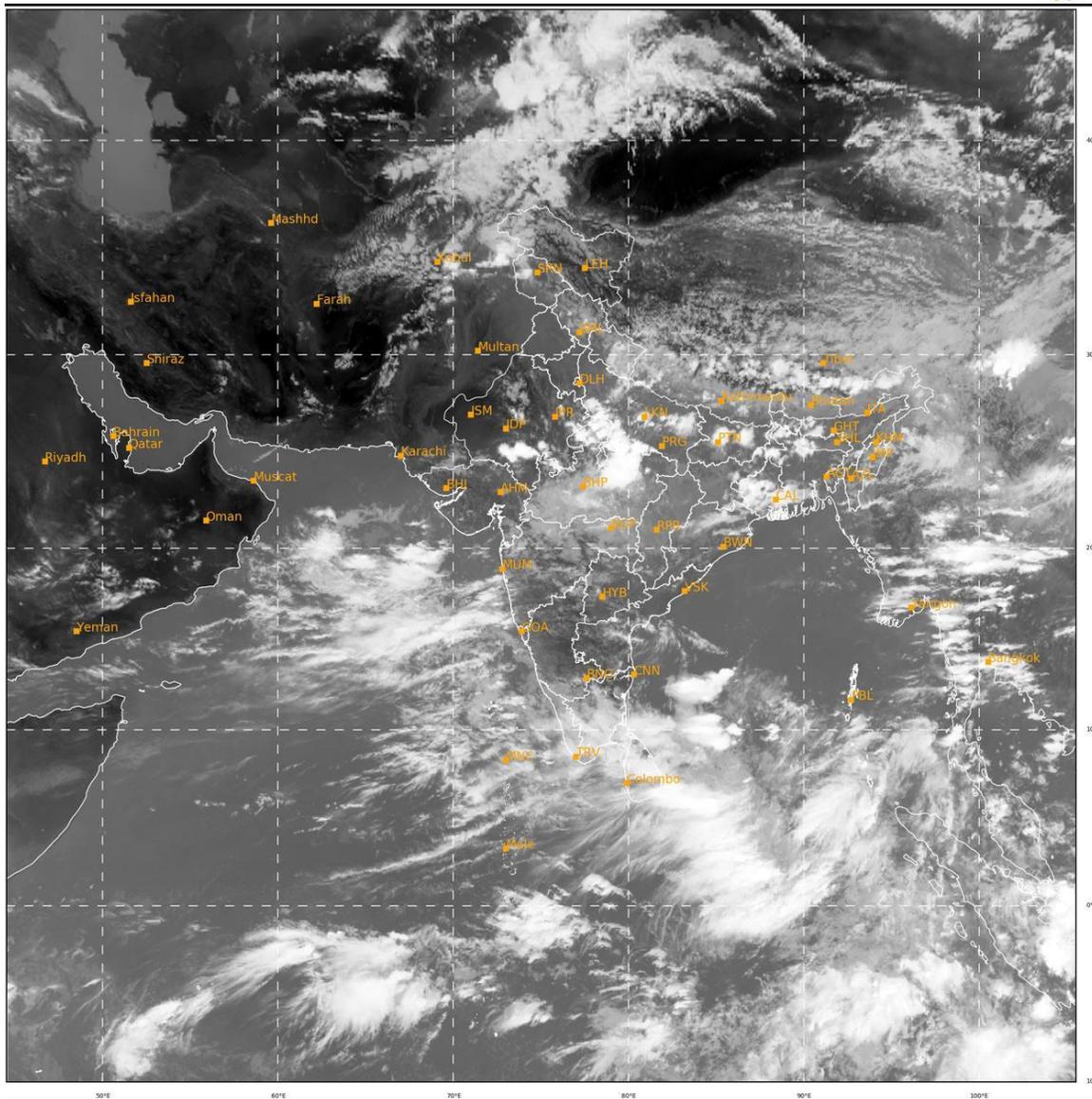
occurred at isolated places over Tamil Nadu from 11.6.2020 and from 13.6.2020 to 16.6.2020, at a few places over Tamil Nadu on 12.6 .2020 during this week.

### Contingency measure:

- Agromet advisories in relation to the anticipated weather have very light rainfall, very high cloud cover, morning Relative Humidity-high and evening Relative Humidity-low.
- Irrigated crops -Irrigation- Very light to light rainfall is expected for Virudhunagar and Thoothukudi districts, so crops to be irrigated if needed. Light to moderate rainfall is expected for Tirunelveli district, postpone the irrigation.
- Flower crop - Maligai: Flowering stage - Prevailing weather is favorable for bud worm incidence. To control the spray any one of the chemical Thiochlorid (Alanto) 240SC @ 1 ml/litre or Spinosad (Tracer) @ 0.5 ml/lit or Spray Profenophos 25EC @ 2 ml/lit or Spray neem seed kernel extract 5 %. Prevailing weather is favorable for leaf webber incidence. For controlling this pest spray imidachloprid 2ml/lit. (or) dimethoate 2 ml/ lit. (or) neem oil @ 3 ml/l of water.0
- Citrus- Fruiting stage- The prevailing weather condition is conducive for incidence of citrus canker disease, spray of Streptomycin sulphate 500-1000 ppm; or Phytomycin 2500 ppm or Copper oxychloride 0.2% at fortnight intervals. Prune badly infected twigs before the onset of monsoon. Spray application of NSKE 5% t control Citrus leaf miner.
- Rice- Tillering stage- The prevailing weather condition is conducive for Bacterial leaf blight incidence. Severe winds, which cause wounds and over fertilization are suitable factors for the development of the disease. Spray neem oil 3% or NSKE 5% (or) fresh cowdung extract for the control of bacterial blight. (Dissolve 20 g cowdung in one litre of water; allow to settle and sieve. Use supernatant liquid starting from initial appearance of the disease and another at fortnightly interval. Two sprays of Copper hydroxide 77 WP@1.25 kg/ha 30 DAP & 45 DAP.
- Cotton- Boll formation stage- Spray 40 ppm NAA at 60 and 90 days after sowing on the crop to prevent early shedding of buds and squares and to increase the yield. (40 mg of NAA dissolved in one litre of water will give 40 ppm.).
- Banana- All the stages- Wind speed 16-18km/hr. Bamboo or casuarinas poles which have effective life of 3-4 years are commonly used for propping. To prevent the tall tree from the wind damage

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

23-06-2020/(0800 to 0827) GMT  
23-06-2020/(1330 to 1357) IST

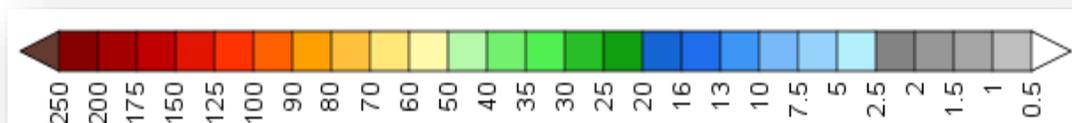
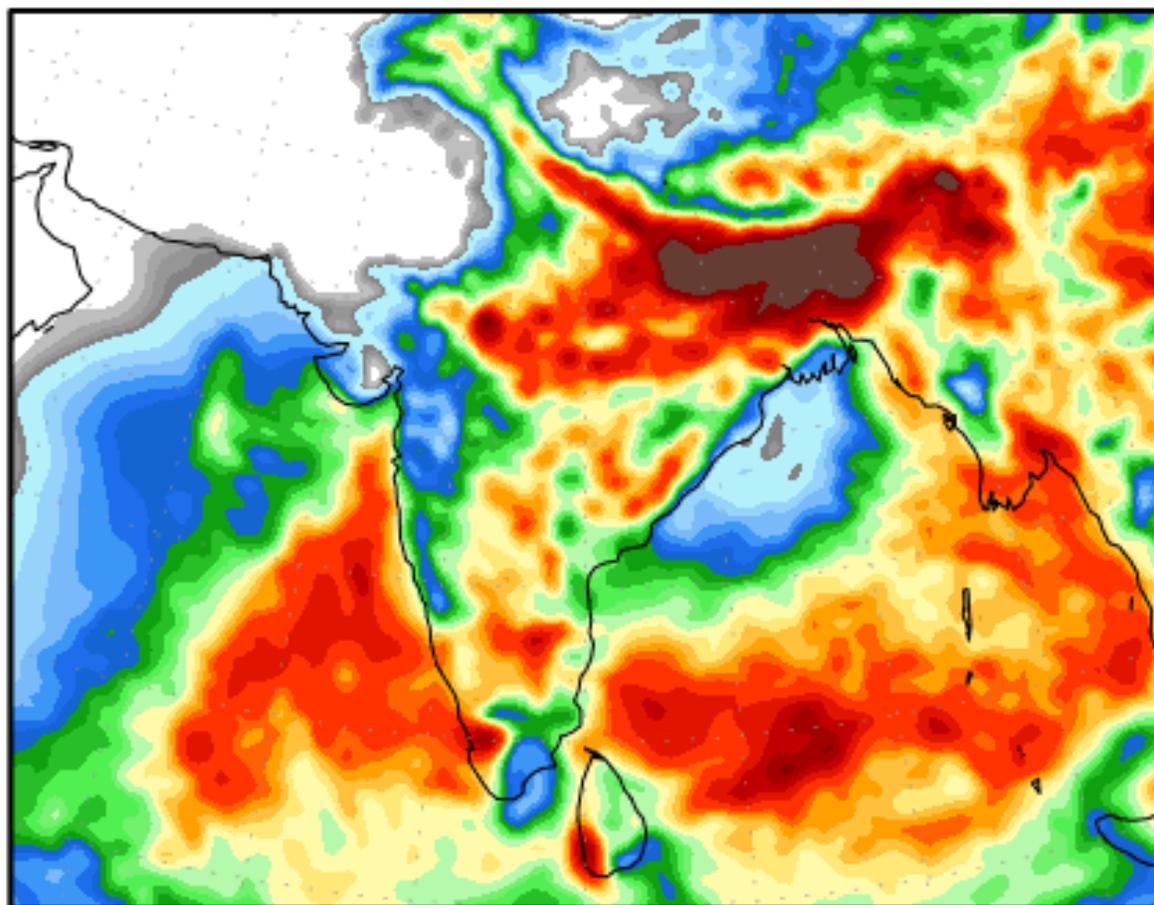


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IMD, DELHI

Figure: 1. Latest available satellite picture as on 23 June 2020 at 1357 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 22 June to July 01 2020 (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.*