

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 21 Jun 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Advance of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Baroda, Shivpuri, Rewa, Churk, 27.0°N/84°E.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of off shore trough & strong westerly winds along the west coast in lower tropospheric levels:
 - o Fairly widespread/ widespread rainfall with thunderstorm/lightning very likely over Karnataka, Konkan & Goa, Kerala & Mahe and Lakshadweep and scattered to fairly widespread rainfall likely over Madhya Maharashtra, Marathwada, Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal during next 5 days.
 - o Isolated heavy rainfall very likely over Konkan & Goa, Coastal & South Interior Karnataka and Gujarat Region during next 5 days; ghat areas of Madhya Maharashtra during 22nd-25th; North Interior Karnataka, Kerala on 21st, 24th & 25th; Saurashtra on 25th, Coastal Andhra Pradesh & Telangana during 21st & 22nd June, 2022. Isolated Very heavy rainfall also likely over Konkan & Goa during next 5 days; over coastal Karnataka during 21st-24th June.
- Under the influence of Western Disturbance at middle tropospheric levels and strong southwesterly winds from Arabian Sea to northwest India at lower tropospheric levels:
 - o Fairly widespread to widespread rainfall with thunderstorm/lightning very likely to continue over Western Himalayan region (Jammu, Kashmir, Ladakh, Gilgit- Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand); scattered to fairly widespread rainfall over adjoining plains (Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh & Rajasthan) during next 24 hours and reduce thereafter.
 - o Isolated heavy rainfall likely over northwest Rajasthan, Jammu & Kashmir, Himachal Pradesh & Punjab on 21st June. Isolated hailstorm also likely over Uttarakhand today.

- o Scattered to fairly widespread rainfall with thunderstorm/lightning very likely over Madhya Pradesh, Vidarbha and Chhattisgarh during next 5 days. Isolated heavy rainfall very likely over West Madhya Pradesh on 21st; East Madhya Pradesh, Vidarbha & Chhattisgarh during 21st-25th June.
- Under the influence of southerly/southwesterly winds from Bay of Bengal to Northeast & adjoining East India:
 - o Widespread rainfall very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 5 days. Isolated heavy rainfall likely to continue over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim during next 5 days and over Arunachal Pradesh & Nagaland, Manipur, Mizoram & Tripura during 23rd-25th June.
 - o Fairly widespread to widespread rainfall with thunderstorm/lightning very likely to continue over Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days. Isolated heavy rainfall likely over Gangetic West Bengal on 21st, Bihar & Jharkhand during 23rd-25th and over Odisha during 21st-25th June, 2022.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, Telangana, Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Himachal Pradesh, Uttarakhand, Punjab, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada and Coastal Andhra Pradesh & Yanam; at a few places over Haryana, Chandigarh & Delhi, West Rajasthan, Bihar, Jharkhand, Gujarat Region, Madhya Maharashtra, Interior Karnataka and Tamilnadu, Puducherry & Karaikal and at isolated places over Uttar Pradesh, Andaman & Nicobar Islands, Saurashtra & Kutch and Rayalaseema.
- Yesterday, Isolated extremely heavy rainfall occurred over Sub-Himalayan West Bengal, Assam & Meghalaya, Gujarat Region, Konkan & Goa; very heavy rainfall over Bihar, Sikkim, Coastal Andhra Pradesh, Telangana and heavy rainfall over West Rajasthan, Coastal Karnataka, Tamilnadu, Kerala, Chhattisgarh, Gangetic West Bengal, Odisha, Vidarbha and Madhya Pradesh.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Himachal Pradesh,

Uttarakhand, Haryana, Chandigarh, Saurashtra & Kutch, Punjab, Rajasthan, Madhya Pradesh, Vidarbha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, Chhattisgarh, Coastal Odisha, Bihar, West Bengal & Sikkim, Assam & Meghalaya, Marathwada, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal.

- Maximum Temperature Departures (as on 20-06-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Telangana, Kerala & Mahe and Andaman & Nicobar Islands and at isolated places over Gujarat State, Madhya Maharashtra and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Rajasthan and at isolated places over Haryana, Chandigarh & Delhi and Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Konkan & Goa and at isolated places over Himachal Pradesh, Punjab, West Uttar Pradesh and Gujarat Region; below normal (-1.6°C to -3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Uttarakhand, East Uttar Pradesh, Chhattisgarh, Rayalaseema and Assam & Meghalaya and at isolated places over Odisha and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 41.4°C was reported at Dehri (Bihar).
- Minimum Temperature Departures (as on 21-06-2022): Minimum temperatures are above normal (1.6°C to 3.0°C) at isolated places over Gujarat state and West Bengal & Sikkim. They are markedly below normal (-5.1°C or less) at a few places over Rajasthan and at isolated places over Himachal Pradesh and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Punjab and Haryana, Chandigarh & Delhi and at isolated places over West Madhya Pradesh, Telangana and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Uttarakhand and Konkan & Goa; at a few places over Vidarbha, Odisha and Bihar and at isolated places over Uttar Pradesh, Gangetic West Bengal, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C reported at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 21 June (Day 1): Heavy to very heavy rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Coastal Karnataka and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab,

northwest Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Odisha, Assam & Meghalaya, Gujarat Region, Telangana, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning & hail at isolated places very likely over Uttarakhand and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Marathwada, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central and adjoining south east Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka, north Kerala coasts, Lakshadweep area and north coastal Andhra Pradesh. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over east central Arabian Sea, north Gujarat and adjoining north east Arabian Sea, Comorin area, Gulf of Mannar. Fishermen are advised not to venture into these seas.

- 22 June (Day 2): Heavy to very heavy rainfall at isolated places very likely over Konkan & Goa and Coastal Karnataka and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Gujarat Region, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana and South Interior Karnataka. Thunderstorm accompanied with lightning at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Marathwada, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka, Lakshadweep area. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over north Gujarat and adjoining north east Arabian Sea, Comorin area, Gulf of Mannar. Fishermen are advised not to venture into these seas.

- 23 June (Day 3): Heavy to very heavy rainfall at isolated places very likely over Konkan & Goa and Coastal Karnataka and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Madhya Maharashtra and Interior Karnataka. Thunderstorm accompanied with lightning at isolated places very likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off Maharashtra, Goa coasts, Lakshadweep area. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these seas.
- 24 June (Day 4): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Gujarat Region, Coastal Karnataka and Konkan & Goa and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Madhya Maharashtra, Kerala & Mahe and Interior Karnataka. Thunderstorm accompanied with lightning at isolated places likely over northeast Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off Maharashtra, Goa, Karnataka, Kerala coasts, Lakshadweep area. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these seas.
- 25 June (Day 5): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Gujarat Region and Konkan & Goa and heavy rainfall at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Saurashtra & Kutch, Madhya Maharashtra, Kerala & Mahe and Karnataka. Thunderstorm accompanied with lightning at isolated places likely over northeast Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off Maharashtra, Goa, Karnataka, Kerala coasts, Lakshadweep area. Strong winds of 50-60 kmph gusting to 70 kmph likely

over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these seas.

- The weather outlook for seven days i.e., 21 Jun to 29 Jun 2022 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 (24 MW) at AICRPAM Akola centre: T max 37.1°C (normal 37.8°C), T min 23.2°C (normal 25.8°C). RH I 62 % (normal 70 %), RH II 30 % (normal 42 %). Evaporation rate 6.4 mm (normal 10.5 mm), Wind 5.8 km/hr (normal 12.8 km/hr) and BSH 5.3 hrs (normal 7.1 hrs). Maximum temperature across the week was 0.7°C below normal with a deviation of -4.6 to +2.4°C from normal. Minimum temperature across the week -2.6°C below normal with a deviation of -5.5 to -0.1°C from normal.

Contingency measure:

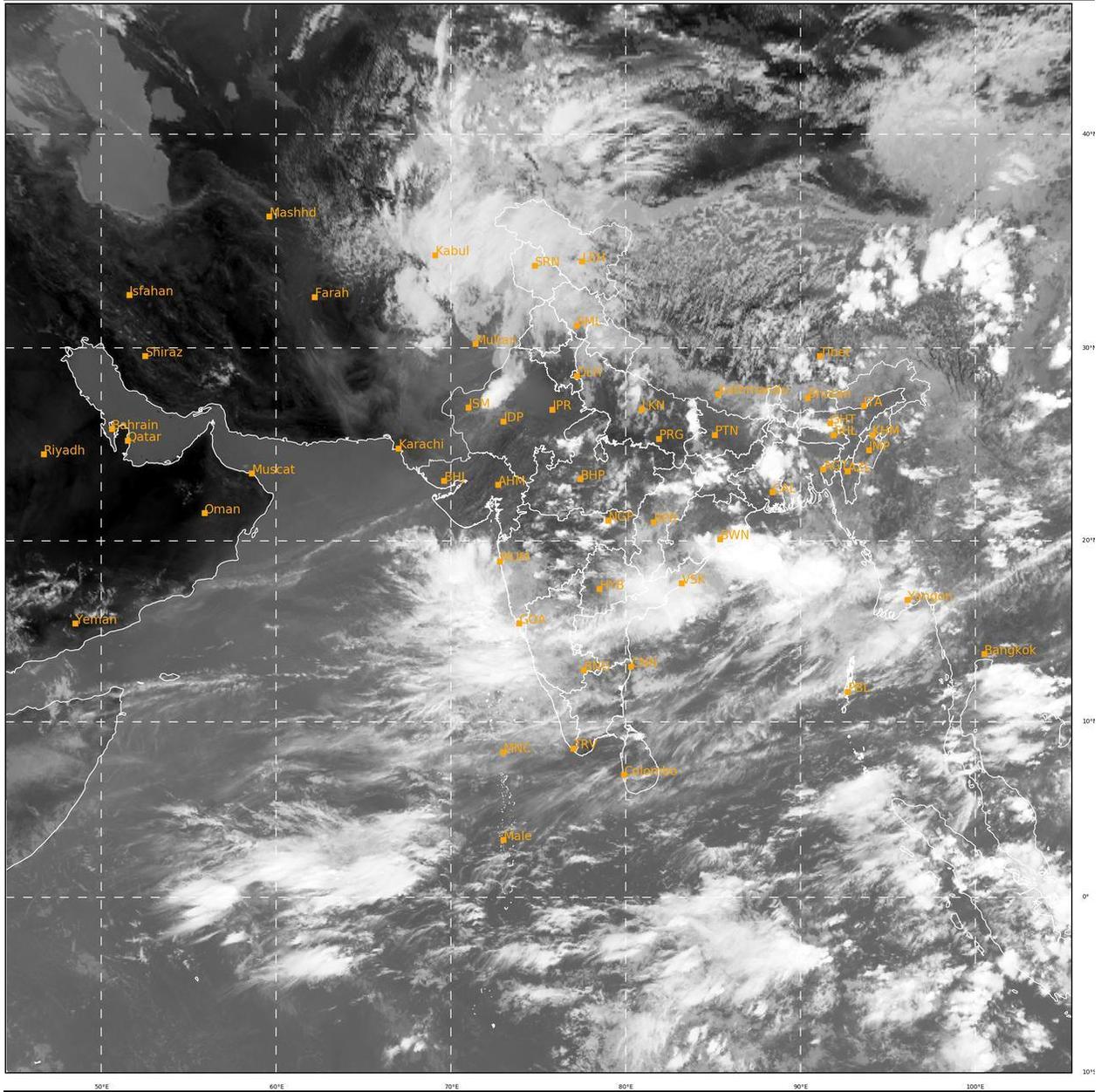
- Block level forecast (Akola) indicates light to moderate rainfall very likely to occur at many places (fairly widespread) during 17-19 June and at few places (scattered) during 20-21 June with warning of thunderstorm with lightning during 17-19 June and on 21 June. Sowing of kharif crops should be undertaken only when there is sufficient ongoing moisture for germination in the soil, when about 75-100 mm monsoon rainfall has occurred across two to three days. Avoid sowing under insufficient soil moisture condition. All remaining preparatory tillage of fields for kharif sowing should be completed immediately. For effective in situ moisture conservation, preparatory tillage operations should be along the contour and across the field slope.
- Ensure the availability of biofertilizers for soybean, pigeon pea, green gram and black gram seed treatment before sowing (Rhizobium + PSB @25 gm and Tricoderma + Thiram @ 4 gm per kg seed). For use of own seeds for crop like soybean to test seed viability conduct a simple germination test well in advance.
- Crop rotation to be followed in cotton fields that were heavily infested with pink bollworm during last season to break the life cycle of pink bollworm. In kharif planning for cotton crop recommended deshi varieties include AKA-5, AKA-7 and AKA-8 with seed rate of 12 to 15kg/ha and spacing of 60 x 15 cm. American improved varieties include AKH-081 (60x15cm with seed rate 15 to 20 kg/ha), AKH-09-5 (Suvarna Shubhra), PKV Rajat and AKH 8828 (60x30cm with seed rate

10 to 12 kg/ha). Cotton deshi hybrid PKVDH-1, PKV-Suvarna is recommended with seed rate @ 3.0 to 3.5 kg/ha and spaced at 60x45 cm. Recommended Bt cotton varieties may also be preferred.

- Pigeon pea varieties to be chosen as per the soil type are - early duration varieties for medium soil type (TAT-10, ICPL 87, AKT-8811), medium duration varieties for medium to heavy soil type (BSMR-736, PKV Tara, BSMR-853) and long duration varieties for heavy soil type (ICPL-87119, C-11).
- Recommended green gram varieties are PKV- green gold, PKV mug-8802, PKV-AKM-4 and for black gram PKV udid-15, TAU-1, TAU-2 and PDKV black gold (AKU-10-1). Under rainfed condition feasible risk minimizing intercropping systems include cotton + green gram/black gram (1:1), soybean + pigeon pea (4:2, 6:2, 5:1), pigeon pea + green gram/black gram (2:4), sorghum+greengram/pigeonpea (3:3) and cotton+sorghum+pigeonpea+sorghum (3:1:1:1), cotton+soybean+pigeonpea+soybean (3:2:2:2).
- For the ensuing kharif season ensure the availability and registration of improved varieties of new fruit trees from government nursery and ensure other inputs (fertilizers / biofertilizers) in advance. Dug pits (1x1x1m), for planting new orchards (orange, mango, sapota, custard apple, aonla, and guava), that were kept exposed to sun heat past days may be filled up to 10-15 cm above surface level with mixture of 1 part FYM, 2 part soil, 2 kg single super phosphate and 100 g chlorpyrifos powder. Planting shall be undertaken upon receipt of sufficient monsoon rains.
- Undertake nursery seed sowing of vegetables like chilli, tomato and brinjal for kharif transplanting. Seed treatment with bio-fungicide Trichoderma is advisable. As forecast warning includes thunderstorm with lightning very likely to occur at isolated places, keep farm animals indoor during thunderstorm/lightning.

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

21-06-2022/(0800 to 0826) GMT
21-06-2022/(1330 to 1356) IST



260

951

IMD, DELHI

Figure: 1. Latest available satellite picture as on 21 Jun 2022 at 1356 Hrs (IST). (Source: IMD).

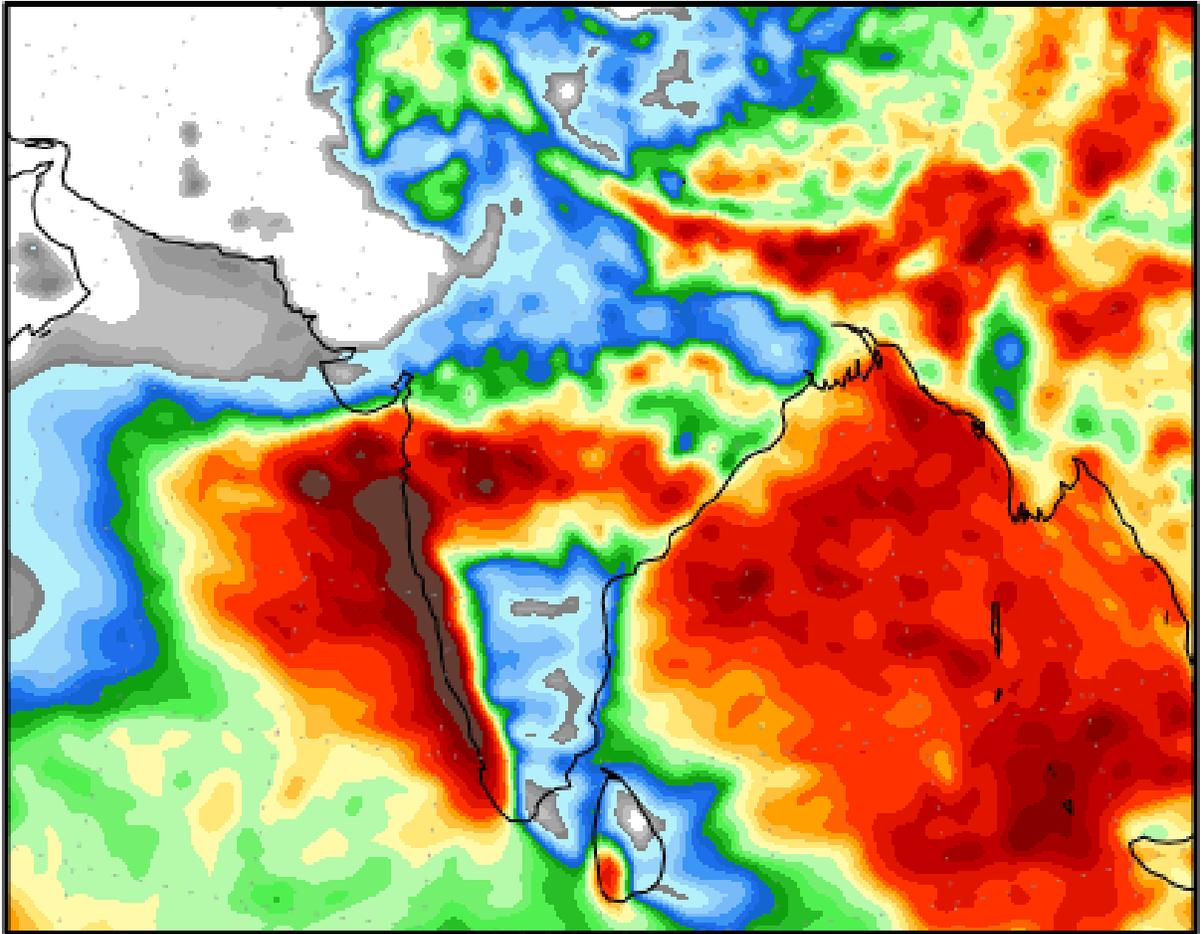


Figure:2. Precipitation forecast for 21 Jun to 29 Jun 2022 (Source: NOAA NCEP).

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