

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 14 Jun 2022

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Significant Weather Features (IMD)

- Advance of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 21°N/ Long. 60°E, Lat. 21°N/ Long. 70°E, Diu, Nandurbar, Jalgaon, Parbhani, Bidar, Tirupati, Puducherry, Lat. 14°N/ Long. 84°E, Lat. 17.0°N/ Long. 87°E, Lat. 20.0°N/89.5°E, Lat. 22.0°N/90°E, Lat. 25.0°N/89°E, Balurghat and Supaul, 26.50°N/86°E.
- Conditions are favorable for further advance of Southwest monsoon into some more parts of north Arabian sea, some more parts of Gujarat state, some parts of south Madhya Pradesh, entire Madhya Maharashtra, Marathwada, Karnataka and Tamil Nadu, some parts Vidarbha and Telangana, some more parts of Andhra Pradesh, Westcentral & northwest Bay of Bengal, some parts of Odisha, Gangetic West Bengal, Jharkhand, entire Sub-Himalayan West Bengal and some more parts of Bihar during subsequent 2-3 days.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of strong southwesterly winds from Bay of Bengal to northeast & adjoining east India in lower tropospheric levels:
 - i) Isolated heavy to very heavy rainfall very likely over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim during next 5 days and heavy rainfall over Nagaland & Manipur during 15th-18th June. Isolated extremely heavy rainfall also likely over Arunachal Pradesh on 15th & 16th June and over Assam & Meghalaya during next 5 days.
 - ii) Rainfall activity likely to increase over Bihar, Jharkhand, Odisha and Gangetic West Bengal with fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds during next 5 days. Isolated heavy rainfall likely over Bihar during 16th-18th; over Jharkhand on 16th & 17th June.
 - iii) Isolated heavy rainfall likely over East Madhya Pradesh on 15th & 16th & over Chhattisgarh during 15th-17th June.
- Under the influence of an off-shore trough and westerly winds along the west coast in lower tropospheric levels: Isolated heavy rainfall very likely over Coastal

Andhra Pradesh on 15th & 18th; Telangana on 14th & 15th; Rayalaseema on 14th & 18th; Coastal & South Interior Karnataka on 17th & 18th; Tamilnadu, Puducherry & Karaikal on 15th, 17th & 18th and Kerala & Mahe during 15th-18th June, 2022.

- Under the influence of Western Disturbances and lower level easterlies:
 - i) Fairly widespread to widespread rainfall over Western Himalayan region and scattered to fairly widespread rainfall over Punjab, Haryana, Chandigarh & Delhi & East Uttar Pradesh during 16th-18th June.
 - ii) Isolated heavy rainfall likely over Jammu, Kashmir, Ladakh, Gilgit- Baltistan & Muzaffarabad during 16th-18th; Himachal Pradesh & Uttarakhand on 16th & 17th, north Punjab on 16th June.
- 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 Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe, Lakshadweep; at many places over Konkan & Goa, Coastal Karnataka, ; at a few places over Marathwada, Telangana, West Rajasthan, Gujarat state, Madhya Maharashtra and at isolated places over East Rajasthan, Gangetic West Bengal, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Haryana, Chandigarh & Delhi, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka, Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Rajasthan, West Madhya Pradesh, Saurashtra & Kutch, Tamilnadu, Puducherry & Karaikal, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Chhattisgarh, Assam & Meghalaya, Coastal Karnataka and Nagaland, Manipur, Mizoram & Tripura.
- Yesterday, heat wave conditions prevailed in isolated pockets over north Odisha, Delhi, Jharkhand, Southeast Uttar Pradesh, Southwest Bihar.
- Isolated heavy to very heavy rainfall occurred over Assam, Sub-Himalayan West Bengal & Sikkim and heavy rainfall over Meghalaya, Mizoram, Tripura, Madhya Maharashtra, Gujarat State and Telangana.
- Maximum Temperature Departures (as on 13-06-2022): Maximum temperatures were markedly above normal (5.0°C or more) at many places over Uttarakhand,

Jharkhand; at a few places over Himachal Pradesh, Punjab; at isolated places over East Uttar Pradesh, Odisha; appreciably above normal (3.1°C to 5.0°C) at most places over Haryana, Chandigarh & Delhi; at many places over Kerala & Mahe, West Uttar Pradesh, Bihar; at a few places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over Madhya Maharashtra; at a few places over Telangana, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands and at isolated places over Konkan & Goa, Bihar. They were markedly below normal (-5.0°C or less) at isolated places over East Rajasthan, West Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Arunachal Pradesh, Assam & Meghalaya; at a few places over SubHimalayan West Bengal & Sikkim, Gujarat Region; below normal (-1.6°C to -3.0°C) at isolated places over Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.8°C was reported at Banda (East Uttar Pradesh).

- Minimum Temperature Departures (as on 14-06-2022): Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Rajasthan; (appreciably above normal (3.1°C to 5.0°C) at most places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Jharkhand; at a few places over Odisha and at isolated places over Vidarbha, Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Chhattisgarh; at a few places over Sub-Himalayan West Bengal & Sikkim, Telangana, Rayalaseema; at isolated places over Madhya Pradesh. They are below normal (-1.6°C to -3.0°C) at a few places over Rajasthan and at isolated places over Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.0°C is reported at Aurangabad (Marathwada) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 14 June (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Telangana, Rayalaseema. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Rajasthan, Bihar, Odisha, Gujarat state, Madhya Maharashtra, Marathwada, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Heat Wave conditions in isolated pockets very likely over East

Uttar Pradesh, Bihar, Jharkhand. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea and adjoining east central Arabian Sea, coastal Andhra Pradesh and adjoining west central Bay of Bengal, south west and adjoining south east Bay of Bengal. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.

- 15 June (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over East Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Uttarakhand; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, East Rajasthan, Bihar, Odisha, Madhya Maharashtra, Marathwada, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over off Kerala and Karnataka coasts and Lakshadweep area. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.
- 16 June (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall at isolated places over Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Himachal Pradesh, Uttarakhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Tamilnadu,

Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea, off Kerala and Karnataka coasts. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.

- 17 June (Day 4): 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 Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Bihar, Jharkhand, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea, off Kerala and Karnataka coasts, along and off Gujarat coast, north east Arabian Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.
- 18 June (Day 5): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Bihar, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off Gujarat coast, north east Arabian Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and

adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 14 Jun to 22 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)

Jharkhand

Weather condition:

Daily maximum and minimum temperature ranged from 34.5 to 38.5 and 23.6 to 28.4 °C, respectively. Weekly maximum and minimum temperature were 36.7 and 26.0°C against its normal value of 35.6 and 23.8 °C, respectively.

Contingency measure:

- General: At optimum soil moisture condition, farmers may plough their field across the slope, strengthened the bund accordingly, construct small water harvesting structure (Dobha) at lower portion of the land, dug the pit for plantation of fruit or timber seedling. For timely sowing of different kharif crops, farmers have to manage improved quality of seed, fungicide for seed treatment, insecticide against termites, Rhizobium culture for pulse crop seed treatment, manures and fertilizers etc.
- Rice: Farmers having assured irrigation facility may proceed for raising of rice seedlings. Seedlings must be raised phase wise (3 - 4 phases) at the interval of 3-4 days, so that suitable seedlings may be available at the time of transplanting. Select long duration varieties for Don-1 field and medium duration variety for Don- 2 field.
- Pigeon Pea (Red Gram/Arhar): Recommended varieties of Arhar (Pigeon pea) are Birsa Arhar-1, I.P.A. -203, Upas and Bahar. 8 kg of seeds are needed for the cultivation in one acre.
- Black Gram: Recommended varieties of Urd are Birsa Urad-1, W.B.U.-109, Pant U-31. 12 kg of seeds are required for the cultivation in one acre.
- Sorghum (Jowar/Great Millet): Recommended varieties of Jowar are CSV-1616, CSV-17, CSH-16 etc. 5.0 kg of seeds are required for the cultivation in one acre. Green fodder will also be available for cattle if cultivating jowar.
- Finger Millet: Recommended varieties of Marua are A.-404, Birsa Marua - 2, Birsa Marua -3, G.P.U.- 28, G.P.U.-67, V.L.-149 etc. 3.5 - 4.0 kg of seeds are required for the cultivation in one acre.

- Rice: For direct seeding of rice, select recommended varieties like Birsa Vikas Dhan 110 & 111, Vandana, Lalat, Sahbhagi, IR-64 (DRT-1) etc. To keep the field weed free, spray weedicide Pretilachlor @ 4 ml per liter of water after 2 ? 3 days of sowing.
- Soyabean: Recommended varieties of soybean are Birsa Safed Soybean-2, Birsa Soybean - 1, R.A.U.S. - 5, R. K. S. -18 etc. 30-32 kg of seeds are required for the cultivation in one acre.
- Maize: Medium duration variety of the crops like P.M.H.-3, Malviya sankar makka, BAUMH-3, Suwan composite- 1, HQPM-1, Vinay etc. may be sown for green cobs and short duration varieties like Birsa maize-1, Birsa vikas maize-2, Priya, BAUMH-05, Vivek sankar makka etc. for grain purpose. After 2 ? 3 days of sowing, spray weedicide Utraziner @ 4 gm per liter of water.
- Groundnut: Recommended varieties of Ground nut are Birsa Bold, Girnar - 3, Birsa ground nut -3 and Birsa ground nut -4. 50 kg grains (seeds) of Birsa Bold variety and 30-35 kg grains (seeds) of rest varieties are needed for the cultivation in one acre.

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

14-06-2022/(0800 to 0826) GMT
14-06-2022/(1330 to 1356) IST

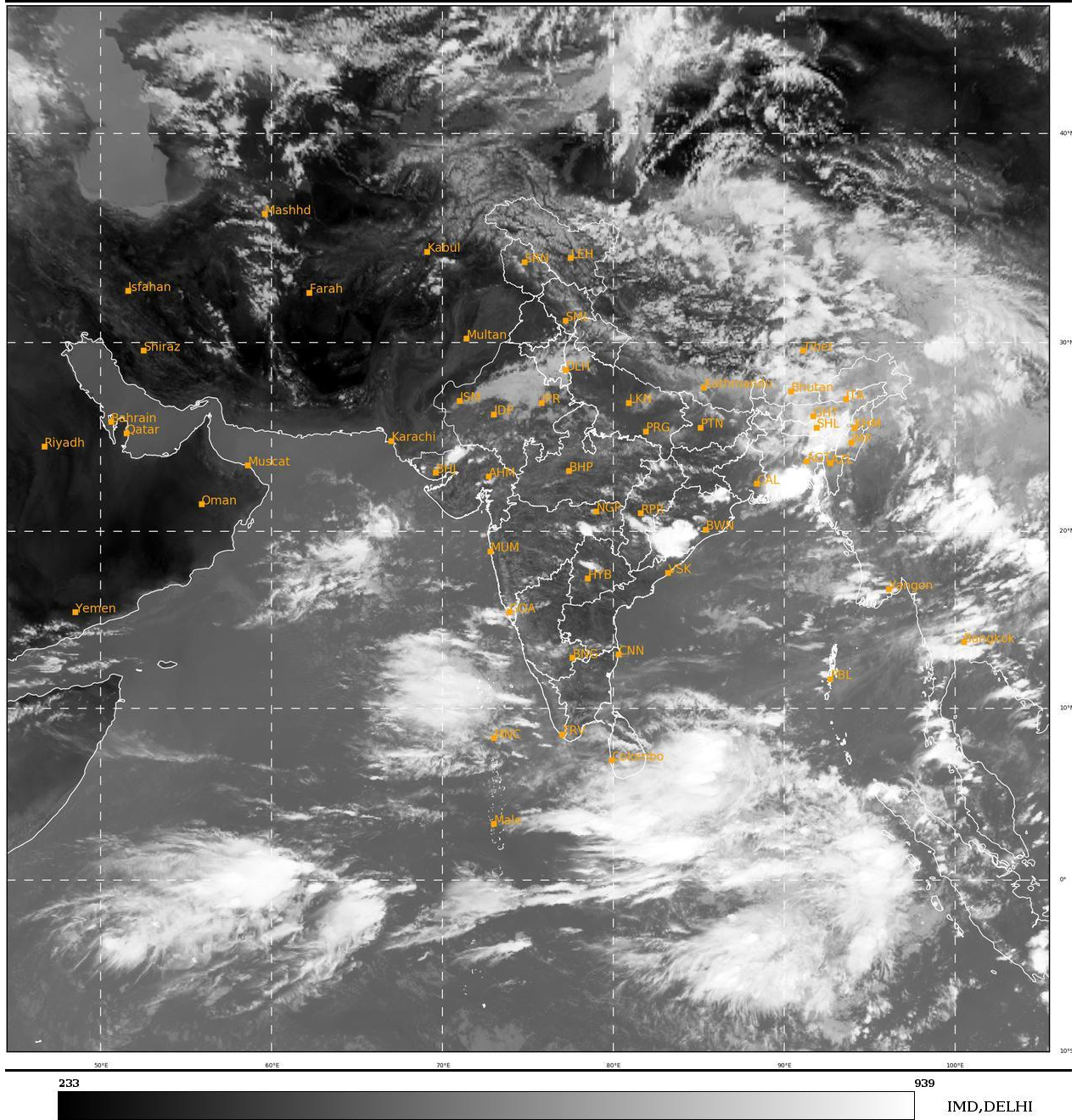


Figure: 1. Latest available satellite picture as on 14 Jun 2022 at 1356 Hrs (IST). (Source: IMD).

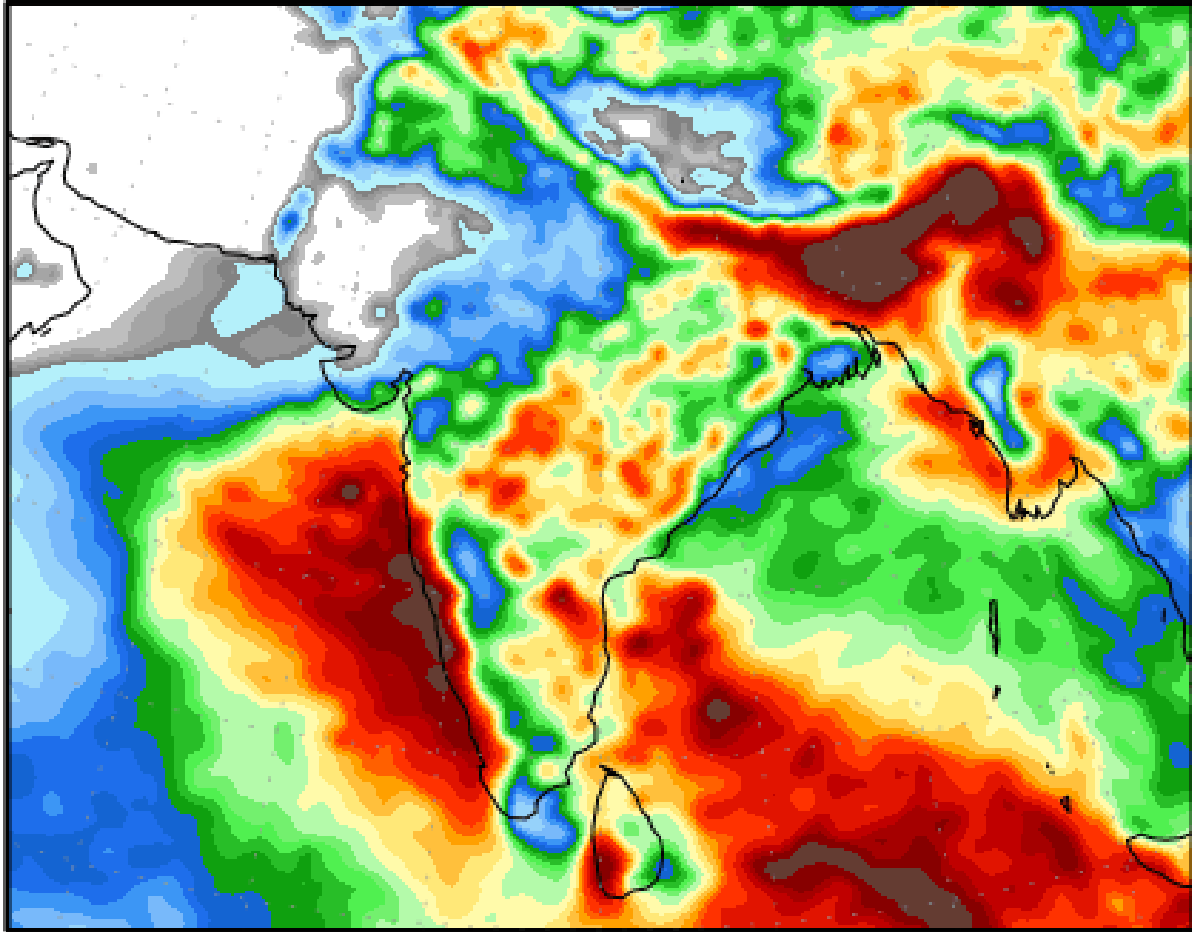


Figure:2. Precipitation forecast for 14 Jun to 22 Jun 2022 (Source: NOAA NCEP).

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