

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 27 June 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Southwest Monsoon has covered the entire country yesterday, the 26th June 2020.
- The trough at mean sea level runs from Punjab to east Bihar across Haryana & Uttar Pradesh.
- Due to shift of trough northwards and convergence of strong southerly/south-westerly winds from Bay of Bengal over northeast & adjoining east India, widespread rainfall with isolated heavy to very heavy rainfall very likely to continue over northeast & adjoining east India during next 2 days. Isolated extremely heavy rainfall is also likely over Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya on 27th June.
- Fairly widespread to widespread rainfall with isolated heavy to very heavy rainfall likely over parts of south peninsular India during next 3-4 days. Isolated extremely heavy rainfall also likely over Kerala & Mahe on 27th June.
- Fairly widespread to widespread rainfall activity with isolated heavy to very heavy falls also very likely over East Uttar Pradesh during next 3-4 days. Isolated heavy to very heavy rainfall also likely over West Uttar Pradesh during 28-29th June.
- Thunderstorm accompanied with lightning very likely at a few places over East Uttar Pradesh, Bihar and Jharkhand during next 3-4 days.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Arunachal Pradesh, Assam & Meghalaya, SubHimalayan West Bengal & Sikkim and Kerala & Mahe; at many places over East Uttar Pradesh, East Madhya Pradesh and Bihar; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, West Madhya Pradesh, Odisha and Lakshadweep; at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Coastal Andhra

Pradesh & Yanam, Madhya Maharashtra, Konkan & Goa, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.

- Yesterday, Heavy rainfall observed at isolated places over Odisha.
- Thunderstorm observed (from 1730 hours IST yesterday to 0530 hours IST of today): at isolated places over West Uttar Pradesh, Assam & Meghalaya, Jharkhand, Chhattisgarh, Odisha, Madhya Pradesh, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Bengal & Sikkim, Jharkhand, Madhya Maharashtra, Marathwada and Gangetic West Bengal.
- Maximum Temperature Departures as on 26-06-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Chhattisgarh; at a few places over Odisha and Madhya Maharashtra; at isolated places over Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places Vidarbha, Konkan & Goa and Interior Karnataka; at many places over Uttarakhand and Telangana; at a few places over Gujarat, Marathwada and Rayalaseema; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Rajasthan, Kerala & Mahe and Tamil Nadu & Puducherry, Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at most places over Bihar; at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Haryana, Chandigarh & Delhi and East Uttar Pradesh; at isolated places over Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at many places over Assam & Meghalaya; at a few places over Lakshadweep and at isolated places over Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 42.2°C was reported at Bikaner (West Rajasthan).
- Minimum Temperature Departures as on 26-06-2020: Minimum temperatures were above normal (1.6°C to 3.0°C) at most places over Gujarat Region; at many places over Konkan & Goa and Telangana; at a few places over Uttarakhand, East Rajasthan, Saurashtra & Kutch, West Madhya Pradesh and Madhya Maharashtra; at isolated places over Haryana, Chandigarh & Delhi, West Rajasthan, East Madhya Pradesh, Chhattisgarh, Kerala & Mahe, Andaman & Nicobar Islands, Odisha and Gangetic West Bengal. They were below normal (-1.6°C to -3.0°C) at a few places over East Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 21.6°C was reported at Churk (East Uttar Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 27 June (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Sub-Himalayan West Bengal & Sikkim; Heavy rainfall at a few places with very heavy to extremely heavy falls at isolated places very likely over Kerala & Mahe; heavy to very heavy rainfall at isolated places with extremely heavy falls very likely over Assam & Meghalaya and Bihar; Heavy rainfall at a few places with very heavy falls at isolated places very likely over East Uttar Pradesh; heavy to very heavy rainfall at isolated places over Arunachal Pradesh and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Chhattisgarh, Jharkhand, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Telangana, North Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm accompanied with lightning very likely at a few places over East Uttar Pradesh, Bihar and Jharkhand and at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Karnataka. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & Westcentral Arabian Sea. Squally Weather (wind speed reaching 40-50 kmph) over north Andaman Sea, Southeast & Eastcentral Arabian Sea and along & off Lakshadweep areas and Kerala-Karnataka coasts. Fishermen are advised not to venture into sea over these areas.
- 28 June (Day 2): Heavy rainfall at a few places with very heavy falls at isolated places very likely over Bihar; heavy to very heavy rainfall at isolated places over Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Coastal Karnataka and heavy rainfall at isolated places very likely over Uttarakhand, Chhattisgarh, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Telangana, Rayalaseema, Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at a few places over East Uttar Pradesh, Bihar and Jharkhand and at isolated places over West Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal Odisha, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema and Karnataka. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) very likely over north Arabian Sea and along & off Gujarat coast. Squally Weather

(wind speed reaching 40-50 kmph) very likely over north Andaman Sea. Fishermen are advised not to venture into sea over these areas.

- 29 June (Day 3): Heavy to very heavy rainfall at isolated places likely over North Interior Karnataka and heavy rainfall at isolated places likely over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Bihar, Andaman & Nicobar Islands, Assam & Meghalaya, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at a few places over East Uttar Pradesh, Bihar and Jharkhand and at isolated places over West Uttar Pradesh, Coastal Andhra Pradesh & Yanam and Rayalaseema. Strong Wind (wind speed reaching 50-60 kmph) likely over Southwest & Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) likely over north Arabian Sea and along & off Gujarat coast. Squally Weather (wind speed reaching 40-50 kmph) likely over north Andaman Sea. Fishermen are advised not to venture into sea over these areas.
- 30 June (Day 4): Heavy rainfall at isolated places likely over East Rajasthan, Madhya Pradesh, Andaman & Nicobar Islands, Assam & Meghalaya, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Karnataka. Thunderstorm accompanied with lightning likely at a few places over Bihar and Jharkhand and at isolated places over Rayalaseema. Strong Wind (wind speed reaching 50-60 kmph) likely over Southwest & Westcentral Arabian Sea. Squally Weather (wind speed reaching 40-50 kmph) likely over north Andaman Sea. Fishermen are advised not to venture into sea over these areas.
- 01 July (Day 5): Heavy rainfall at isolated places likely over East Rajasthan, West Madhya Pradesh, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Coastal Andhra Pradesh & Yanam Odisha, Vidarbha and coastal Karnataka. Thunderstorm accompanied with lightning likely at a few places over Bihar and Jharkhand and at isolated places over Rayalaseema. Strong Wind (wind speed reaching 50-60 kmph) likely over Southwest & Westcentral Arabian Sea. Squally Weather (wind speed reaching 40-50 kmph) likely over north Andaman Sea. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 27 June to 05 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)

Chhattisgarh

Weather condition:

(a) General rainfall/weather situation in the entire State A total of 156.8mm of rainfall was recorded during the week as against the normal of 64.6 mm at Agromet observatory of IGKV, Raipur. District wise average rainfall as on 24 June, 2020 received from IMD is as follows Balod 275.6 (114.3, +141 % Large Excess), Baloda Bazar 184.6 (95, +93% Large Excess), Balrampur 211.6 (130.1, +63% Large Excess), Bastar 214.9 (163.2, 32% Excess), Bemetara 201.2 (111.8, +80% Large Excess), Bijapur 253.7 (139.1, +82% Large Excess), Bilaspur 231.4 (113.8, +103% Large Excess), Dantewada 285.9 (118.3, +119% Large Excess), Dhamtari 274.7 (106.7, + 157% Large Excess), Durg 261.8 (118.1, +122 % Large Excess), Gariyaband 241 (140, 72% Large Excess), Janjgir 171.4 (103.7, 65% Large Excess), Jashpur 287.7 (171.9, +67% Large Excess), Kabirdham 115.6 (92.3, +25% Excess), Kanker 265.2 (129.3, +105% Large Excess), Kondagaon 345.7 (136.3, +154% Large Excess), Korba 360.8 (120.3, +200% Large Excess), Koriya 236.2 (125.7, +88% Large Excess), Mahasamund 333.50 (125.3, +166% Large Excess), Mungeli 173.8 (95.8, +81% Large Excess t), Narayanpur 258.4 (131, +97% Large Excess l), Raigarh 252.1 (152.8, +65% Large Excess), Raipur 237.6 (114.2, +108 % Large Excess), Rajnandgaon 260.6 (108.6+140,% Large Excess), Sukma 229.7 (126, +82% Large Excess), Surajpur 401 (116,+246% Large Excess), Surguja 166 (157.4,-+5% Normal), Chhattisgarh State 251.5 (126.9, +98% Large Excess)

*Figures out side the parenthesis indicates average district-wise rainfall revived during current year as on reporting date and figures within the parenthesis indicates normal rainfall, its percentage and rainfall situation in respective districts.

Contingency measure:

- Weather Based Agro-advisories Looking into the normal onset of monsoon the farmers of CG plains are advised to go for preparation of their farm accordingly for kharif crops. The SW monsoon is activated over entire Chhattisgarh state.
- Farmers are advised for field preparation and arrangement of seeds of their crops, fertilizers etc. Farmers are generally taking rice crop and other kharif oilseed and pulses etc. as per rainfed agriculture. The disease and pest resistant varieties are available in Chhattisgarh Rajya Beej avam Vikas nigam limited and also in IGKV farm. These are the varieties which are less infested by plant diseases and insects. Therefore, farmers should select the appropriate resistant varieties for their farms. Farmers must apply the fertilizers as per soil health and soil testing. Due to unnecessary use of fertilizers, fertility of soil and soil health is affected adversely.

- Farmers are advised to register for meghdoot apps at <http://play.google.com/store/apps/details?id=com.ass.meghdoot> and get crop and weather information through this.
- General: 1. For rice crop sowing, biasi and transplanting are two common practices. In addition to it, SRI technique and rice crop line seeding can also be adopted. (i) Biasi method: In this practice on the onset of monsoon, rice crop seeds are being broadcast in the fields. For covering the seeds desi plough and light plough is run in the fields. When the crop reaches 30-35 days of age and rainwater is collected upto the height of 15-20 cms then beusheing (biasi) is being done by running bullockdrawn plough in the standing crop.
- Saghan Chalai: Due to the operation of biasi, many rice seedlings are killed. Due to this number of seedlings become very less per unit area. For compensating this, it is advised to the farmers to go for sowing of thrice the seed rate of rice in 1/20th area. At the time of chalai operation, extra seedlings should be uprooted from this area and should be planted at the less dense area. This will help in compensating the plant population for bumper production. In case there is insufficient rainwater at the time of biasi, then fertilizers should be applied after weeding operation. (ii) Transplanting method: If in the nursery area the plants are turning yellow due to shortage of nitrogen, then urea should be applied @ 10-15 gram urea per sq. meter. At the time of planting, farmers are advised that nursery roots should be kept dipped in the water. The appropriate time of planting is the day of uprooting of seedlings from the nursery. In this method, nursery is being prepared in approximately 1/10 portion of the fields. After 20-30 days of nursery is achieved, transplanting is done of the seedlings in puddle fields. The main field is prepared by filling the water and by puddling the field. Field should be well leveled and should maintain proper tilth condition. This type of method is followed under assured irrigated condition or where the assured rainwater is available. (iii) SRI method: The selected field for SRI should be cultivated 2-3 times and brought into proper pulverized condition. The nursery should be prepared with width of 1 m and 10 m length and height of 15 cms. Drainage and irrigation channel should be prepared on the sides. In the prepared nursery, 50 Kg. NADEP should be mixed and should be leveled. In every nursery bed, 500 gram treated seed should be sown and again it should be covered with Compost or FYM. There should be 4 beds (40 sq. meter) in one acre. For this, seed rate of 2 Kg. seed is sufficient. (iv) Line sowing: Line sowing can be done after field preparation. Line sowing can be done by seed cum fertilizer drill in lines in well pulverized field. In the levelled fields, seed sowing should be done at a distance of 20 cms through tractor drawn seed drill, Indira seed drill, Nari

plough, Bhoramdev seed drill and nari plough. The seed depth should not be more than 3-4 centimeters. Calibration of seed drill is required for perfect maintaining of seed rate. Calibration must be done before sowing operation. 2. The production technique for major kharif crops is as follows: S. No. Crop name Seed rate Seed treatment (with name of fungicide etc.) and rate Remarks 01 Paddy (rice) Transplanting: 30-40 Kg./ ha. Biasi and Broadcast method: 100-120 Kg./ ha. Line sowing: 80-90 Kg./ ha. Lehi method: 90-100 Kg./ ha. SRI method: 6-8 Kg./ ha. Hybrid: 15 Kg. Saaf super 2 gram/ litre Samleshwari- Drought resistant Aditya- Blast resistant Annada-Drought resistant Danteshwari- Gallmidge resistant Poornima-Drought resistant Indira Barani Dhan-1: Stem Borer and blight resistant Karma Mahsuri- Blast resistant Kranti- Coarse grain and high yielding potential IGKV R-2: Sheath blight resistant IGKV R-1244: BPH and stemborer resistant Mahamaya- Coarse grain and gallmidge resistant 02 Soybean 65 Kg./ ha. Vitavex 3 gram / Kg. seed If germination percentage or purity is less, seed rate should be increased.

- Varieties: Js 93-05, J.S. 9752, J.S. 335, J.S. 95-60, RKS-18 Chhattisgarh Soya-1 03 Maize Hybrid : 15-20 Kg./ ha. Composite: 20-25 Kg./ ha. Fungicide 2 gram/ kg. seed and after that Azospirillum and PSB culture @ 5-10 gram/ Kg. seed *Kharif* maize should be sown during June second fortnight to July first fortnight. In case of double cropping under rainfed situation, sowing should be completed by June end. 04 Arhar 15-20 Kg./ ha. Thiram 3 gram/ Kg. seed and after that Rhizobium culture and PSB culture @ 5-10 gram/ kg.
- seed Varieties: Rajiv Lochan, Asha, TJT-501, GTH-1JKM-189, Vipula, GT-101, AKT-881, BSMR-736, JKM-7, GT-100, JA-4, Jagriti, Pragati, UPAS-120, BDN-2, Number-148, C11, Prabhat, Laxmi 05 Minor millets Ragi: 10-12 Kg./ ha. Kodo: 8-10 Kg./ h. Kutki: 5-6 Kg./ ha. Barnyard Millet: 12-15 Kg./ ha.
- Azotobacter and PSB Bio-fertilizers Ragi : PR-2020, VL-149, Champavati, GPU-28 Kodioo: JK-41., JK-48, GPUK-3, Indira Kodo-1 Barnyard Millet: VL 29, K-1 Kutki: JK-8, BG-1

27-06-2020/(0630 to 0657) GMT
27-06-2020/(1200 to 1227) IST

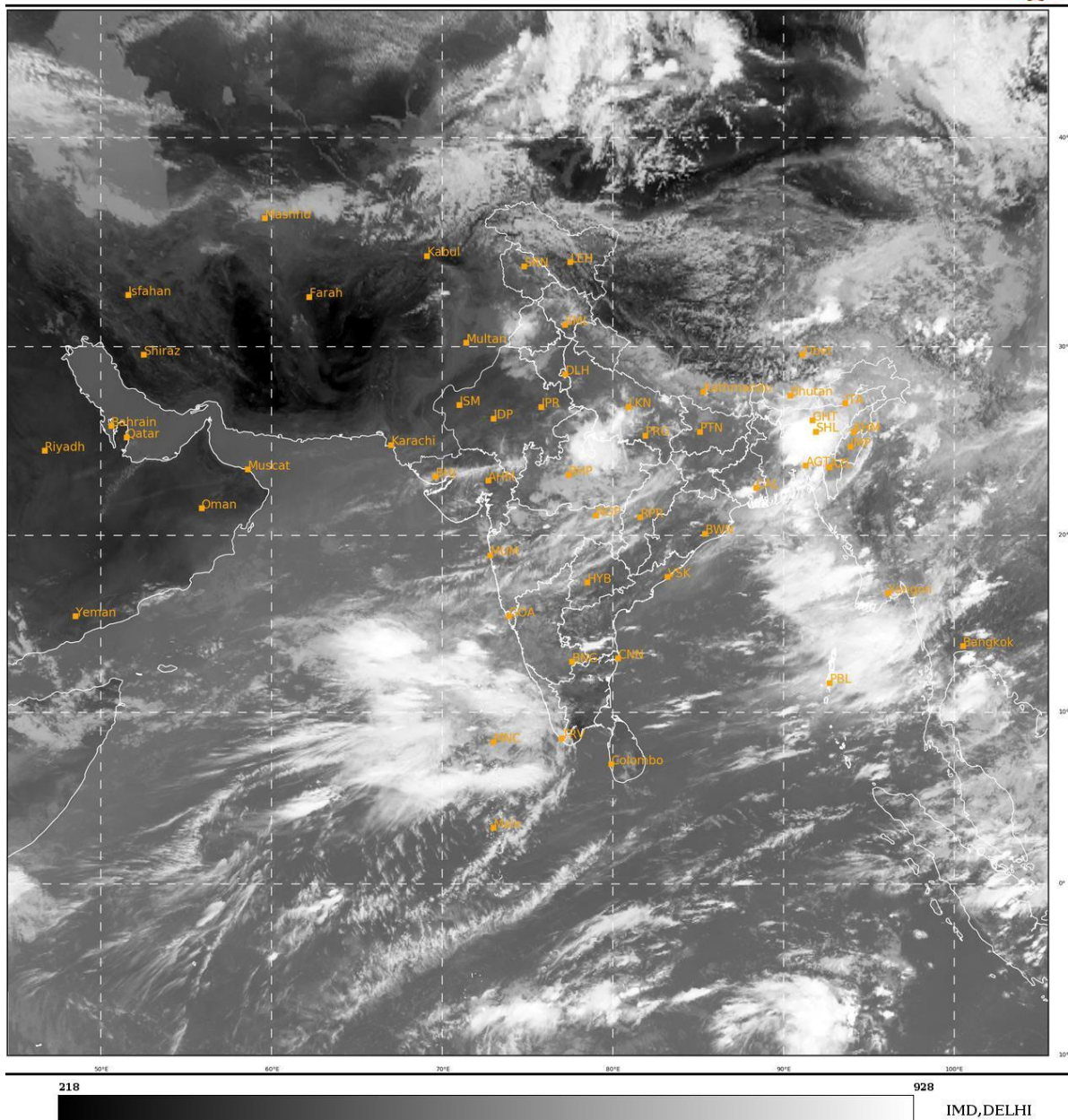


Figure: 1. Latest available satellite picture as on 2 June 2020 at 1227 Hrs (IST). (Source: IMD).

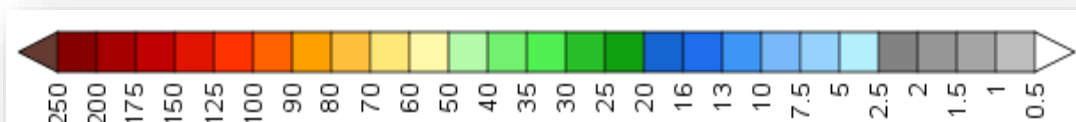
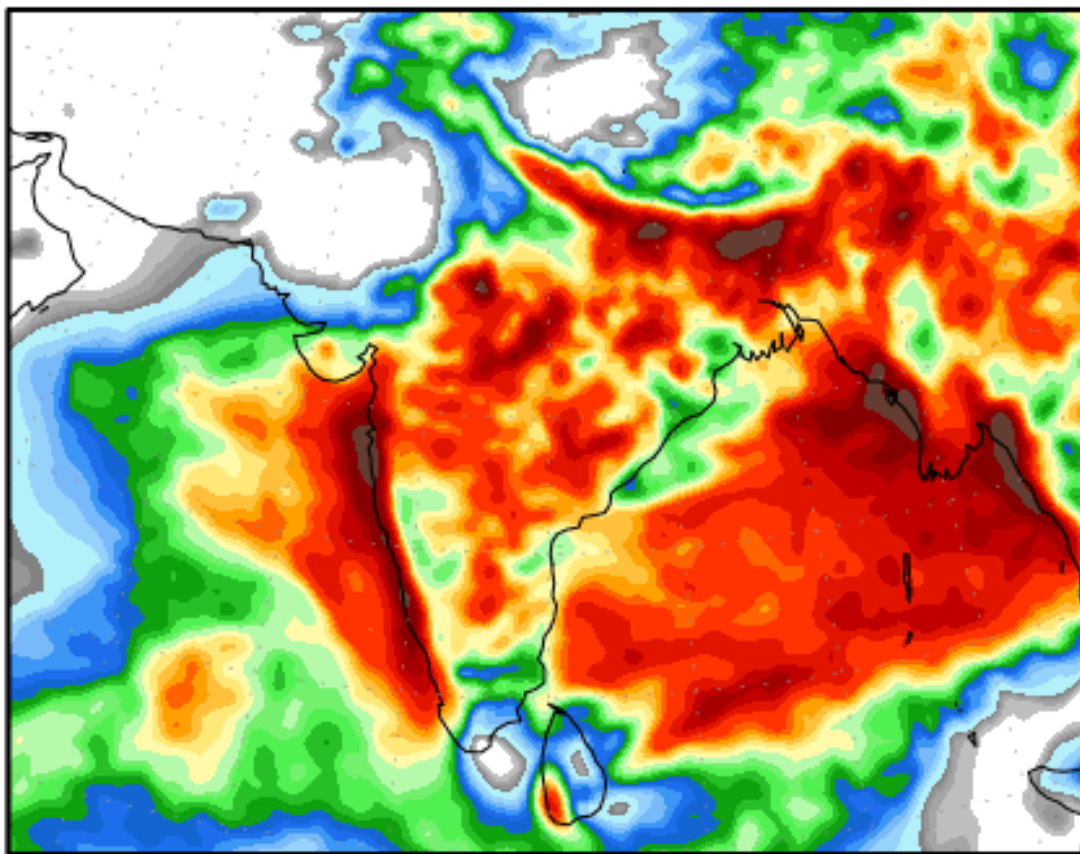


Figure:2. Precipitation forecast for 27 June to 05 July 2020 (Source: NOAA NCEP).

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