

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 12 Jul 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The northern Limit of southwest monsoon (NLM) continues to pass through Lat. 26°N / Long. 70°E, Barmer, Bhilwara, Dholpur, Aligarh, Meerut, Ambala and Amritsar.
- Conditions are favourable for further advance of southwest Monsoon over Delhi, remaining parts of West Uttar Pradesh, some more parts of Punjab, Haryana and Rajasthan today, the 12th July. Conditions are also becoming favourable for further advance of southwest Monsoon over remaining parts of the country during the subsequent 48 hours.
- Under the influence of these conditions, fairly widespread to widespread rainfall very likely over parts of Northwest India during next 2 days and isolated heavy rainfall very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, north Haryana and northwest Uttar Pradesh during next 2 days; over southeast Rajasthan during next 5 days. Isolated very heavy rainfall also very likely over Himachal Pradesh and Uttarakhand on 12th July, 2021.
- The Low Pressure Area lies over westcentral & adjoining Northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts and an east-west shear zone runs in middle levels across Central India. Consequently, lower level westerly winds have strengthened along the west coast. Under the influence of these condition:
 - i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely along the west coast and adjoining Peninsular India and it is very likely to continue during next 5 days.
 - ii) Isolated extremely heavy falls also very likely over Konkan & Goa during 12th-15th and over Telangana on 12th. Isolated heavy to very heavy falls also very likely over Gujarat state, Madhya Maharashtra, Coastal Andhra Pradesh, Telangana, Coastal & South Interior Karnataka and Kerala & Mahe during next 2 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 Konkan & Goa, Coastal Karnataka, Arunachal Pradesh and Andaman & Nicobar Islands; at many places over Jharkhand, Telangana, Gangetic West Bengal and Kerala & Mahe; at a few places over Saurashtra & Kutch, Madhya Maharashtra, Bihar, Odisha, Chhattisgarh, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and North Interior Karnataka and at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Punjab, Madhya Pradesh, Rajasthan, West Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Marathwada, Rayalseema and Tamil Nadu, Puducherry & Karaikal.
- Heavy rainfall recorded (from 0830 hours IST to 1730 hours IST of yesterday): Heavy Rainfall recorded at isolated places over Telangana.
- Heat Wave conditions were observed in isolated pockets over West Rajasthan.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0530 hrs IST of today): at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Uttarakhand, West Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh, Gujarat State, Marathwada, Coastal Andhra Pradesh & Yanam, West Bengal & Sikkim and Odisha.
- Maximum Temperature Departures as on 11-07-2021: Maximum temperatures were markedly above normal (5.1°C or more) at a few places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan and East Madhya Pradesh; at isolated places over Haryana, Chandigarh & Delhi, Gujarat state, West Madhya Pradesh, Odisha and Assam & Meghalaya; above normal (1.6°C to 3.1°C) at most places over Chhattisgarh; at a few places over Himachal Pradesh and West Bengal & Sikkim; at isolated places over East Uttar Pradesh. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Coastal Andhra Pradesh & Yanam and Rayalaseema; at a few places over Tamilnadu, Puducherry & Karaikal, Telangana and North Interior Karnataka; below normal (-1.6°C to -3.0°C) at many places over Coastal & South Interior Karnataka; at isolated places over Kerala & Mahe and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.8°C was reported at Bikaner (Rajasthan).
- Minimum Temperature Departures as on 11-07-2021: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, Haryana, Chandigarh & Delhi, Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Rajasthan; at a few places over Himachal Pradesh and at

isolated places over Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Uttar Pradesh; at many places over Uttarakhand, Bihar, Chhattisgarh and Sub-Himalayan West Bengal & Sikkim; at a few places over Gujarat state, Gangetic West Bengal, Odisha, Jharkhand and Coastal Andhra Pradesh & Yanam and at isolated places over Madhya Maharashtra. They were below normal (-1.6°C to -3.0°C) at many places over Andaman & Nicobar Islands, Lakshadweep and Tamil Nadu, Puducherry & Karaikal; at a few places over Konkan & Goa and Telangana and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 18.0°C was reported at Rajnandgaon (Chhattisgarh).

Weather Warning during the next 5 days (IMD)

- 12 July (Day 1): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Konkan & Goa and Telangana; Heavy to very heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Gujarat state, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, West Uttar Pradesh, Rajasthan, Vidarbha, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi and Andaman & Nicobar Islands and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & Southwest Arabian sea; Southeast, Eastcentral & Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Lakshadweep area, Westcentral & South Bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.
- 13 July (Day 2): Heavy to Very Heavy Rainfall very likely over Gujarat state, Madhya Maharashtra, Konkan & Goa, Telangana and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Rajasthan, Vidarbha, Chhattisgarh, Sub-Himalayan West

Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) very likely at isolated places over Andaman & Nicobar Islands and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Bihar and Telangana. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & Southwest Arabian sea; Southeast, Eastcentral & Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Southeast & adjoining Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- 14 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 over Saurashtra & Kutch, Madhya Maharashtra and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Gujarat Region, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttar Pradesh, Rajasthan, Bihar and Gangetic West Bengal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & Southwest Arabian sea; Southeast, Eastcentral & Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Southeast & adjoining Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 15 July (Day 4): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to Very Heavy Rainfall over Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra and Coastal & South Interior Karnataka and heavy rainfall at isolated places over Uttarakhand, East Rajasthan, Bihar, Arunachal Pradesh, Gujarat state, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim and Tamil Nadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & Southwest Arabian sea; Southeast, Eastcentral & Northeast Arabian Sea and along & off

Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Southeast & adjoining Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.

- 16 July (Day 5): Heavy to Very Heavy Rainfall at isolated places likely over Konkan & Goa, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Uttarakhand, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Madhya Maharashtra, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Saurashtra & Kutch, Bihar, Jharkhand, West Bengal & Sikkim, Madhya Maharashtra, Konkan & Goa, Marathawada, Vidarbha, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe, Karnataka and Tamil Nadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely over Westcentral & Southwest Arabian sea; Southeast, Eastcentral & Northeast Arabian Sea and along & off Gujarat-Maharashtra-Goa-Karnataka-Kerala coasts; Southeast & adjoining Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 12 Jul to 20 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)

Assam

Weather condition:

Weather during the last week was mainly cloudy. Daily average maximum temperature was 33.5°C which was 1.1°C above normal and the average daily minimum temperature was 25.4°C which was 0.2°C above normal for the week. Total BSSH was 25.1 hrs with an average of 4.2 hrs/day. The daily average evaporation rate was 2.9 mm/day and the average daily wind speed during the week was 1.9 kmph. Daily average RH during morning and afternoon hour was 94.7% and 72.7%, respectively.

Contingency measure:

- Sali rice (Main field preparation): Farmers may continue main field preparation by thoroughly ploughing the field 4 to 5 times followed by harrowing and laddering. Apply FYM or compost @ 13 quintals in per bigha land and mix thoroughly. During final land preparation apply recommended fertilizer dose Urea, SSP and MOP at the rate of 18kg, 17kg and 9kg for semi dwarf varieties and 6kg, 8kg and 2kg for tall varieties. To control infestation of stem borers in the sali rice seedlings in nursery bed, spray Fipronil @ 7.5 ml per 10 lit of water under fair weather condition. Before transplanting in main field go for root dip treatment by uprooted seedlings in a solution of Flubendiamide or Chlorpyrifos (1 ml/lit of water) along with 10 g urea for 3 hours as a protective measure against stem borer, gall midge and hoppers.
- Kharif Maize (Vegetative stage): Infestation of stem borer may be observed in kharif maize. To control the pest, apply fenitrothion 50EC solution prepared by mixing 1.0 lit chemical in 200-250 litres of water for spraying in 7.5 bigha land. Light hoeing and earthing up should be done as and when necessary. Maintain adequate drainage channel of 25cm width, 15 cm deep at 6m distance to drain out excess amount of rain water from crop field.
- Sugarcane (Shoot borer): Due to favourable weather infestation of shoot borer in sugarcane crop may be observed. For traditional control of the population of borer pest, make a frequent visit to crop field and collect the egg masses wherever may found in leaves and destroy them. The infestation may also be checked by burning and burying the infested canes. Application of chemical pesticides may be avoided during the cloudy weather condition.
- Summer vegetables (Plant protection measures): To control fruit and shoot borer and Jassids pests infestation in Okra crop, apply spray of solution of Malathion @ 2ml/ lit water during fair weather condition. In addition, high humidity coupled

with light to moderate level of rainfall during the past week may cause incidence of fruit fly and leaf hopper in gourds. As a preventive measure, prepare a solution of Emamectin Benzoate 4.5g along with 100g jaggery mixed in 10 litres of water and spray thoroughly in the crops at an interval. However spraying may be withheld during the rainy weather condition.

- Sesamum (Land preparation): Sowing of sesamum seeds may be done from July to first fortnight of August. Maintain a spacing of 30cm and 15cm between rows and columns. Seed rate of 550g is recommended for sowing one bigha area. During final land preparation apply FYM or compost @ 1350kg in per bigha land and mix thoroughly. During final land preparation apply whole quantity of Urea, SSP and MOP at the rate of 9kg, 17kg and 5kg at the time of sowing. Seeds should be treated with Carbendazim or Captan @ 2g per kg seeds against stem rot and phytophthora blight.
- Livestock (Various): To protect the goats and sheep from Contagious Ecthyma disease, immunize them at 6-8 weeks of age with vaccines after proper consultation with a veterinary doctor. Furthermore, in consultation with local veterinarian, care should be taken to provide proper de-worming medicine along with mixtures of essential body salts so as to cure the farm animals from appetite loss disorders.
- Poultry (various): For backyard poultry rearing select the improved variety like Kamrupa, Vanraja, Rainbow roaster etc. as these improved species can lay more number of eggs within a short period of time. Vaccination (RDF1) of layer poultry birds against the Ranikhet in one week old chicks and against Gumboro disease in two weeks old chicks may be carried out.

12-07-2021/(0800 to 0827) GMT
12-07-2021/(1330 to 1357) IST

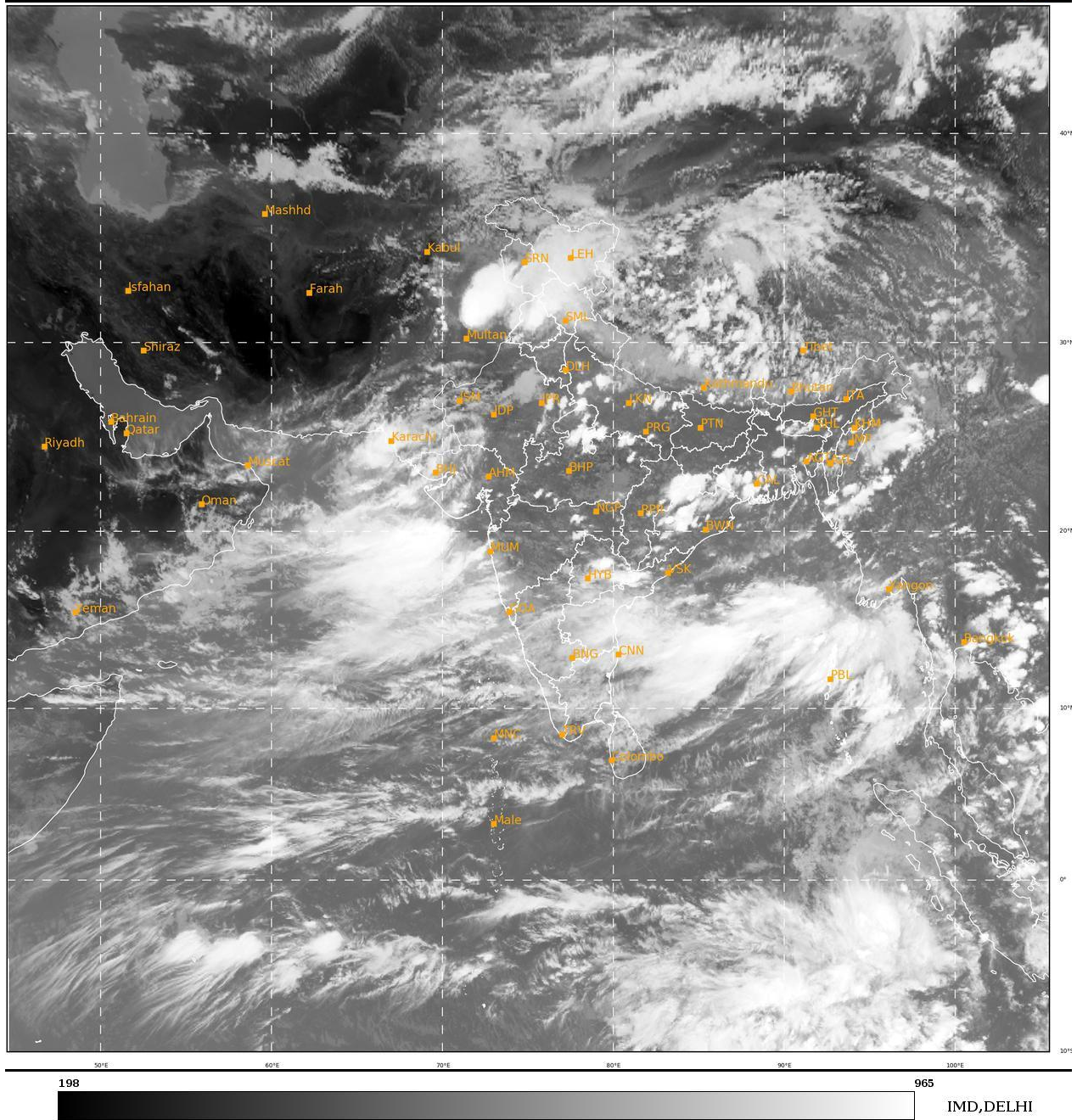


Figure: 1. Latest available satellite picture as on 12 Jul 2021 at 1357 Hrs (IST). (Source: IMD).

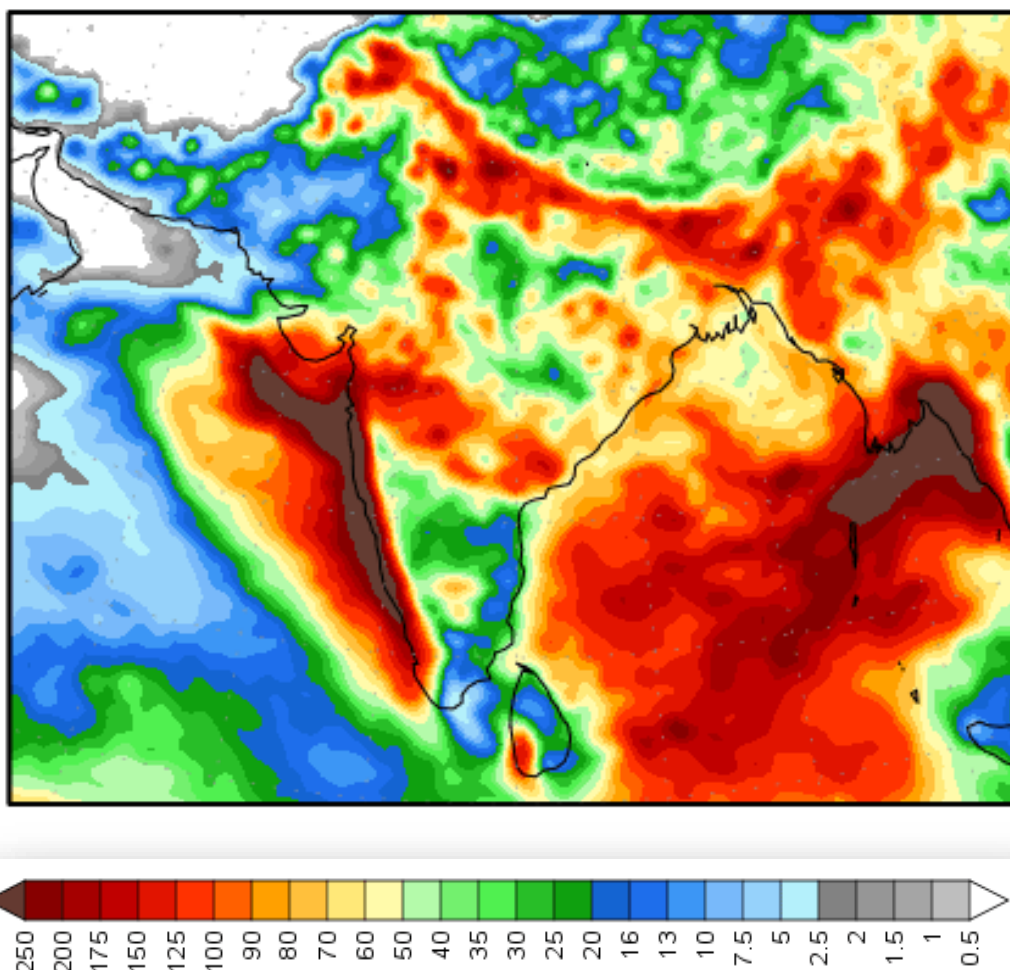


Figure:2. Precipitation forecast for 12 Jul to 20 Jul 2021 (Source: NOAA NCEP).

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