

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 01 June 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Southwest Monsoon has set in over Kerala today, the 1st June, 2020, coinciding with its normal date.
- The Northern Limit of Monsoon (NLM) now passes through Lat.12°N/Long.60°E, Lat.12°N/Long.70°E, Cannur, Coimbatore, Kanyakumari, Lat.8°N/Long.86°E, Lat.11°N/Long.90°E, Lat.14°N/Long.93°E and Lat.16°N/Long.95°E.
- The Depression over Eastcentral & adjoining Southeast Arabian Sea moved nearly northwards with a speed of 07 kmph during past 03 hours and lay centred at 0830 hours IST of today, the 01st June, 2020 near latitude 13.2°N and longitude 71.4°E, about 360 km southwest of Panjim (Goa), 670 km south-southwest of Mumbai (Maharashtra) and 900 km south-southwest of Surat (Gujarat). It is very likely to intensify into a Deep Depression over Eastcentral & adjoining Southeast Arabian Sea during next 12 hours and intensify further into a Cyclonic Storm over Eastcentral Arabian Sea during the subsequent 24 hours. It is very likely to move nearly northwards initially till 02nd June morning and recurve north-northeastwards and cross north Maharashtra and south Gujarat coasts between Harihareshwar (Raigarh, Maharashtra) and Daman during evening/night of 03rd June, 2020.
- Under the influence of the Depression, light to moderate rainfall at most places with isolated heavy falls very likely over Lakshadweep area, north Kerala and coastal Karnataka, today the 1 st June. Light to moderate rainfall at most places with isolated heavy to very heavy falls at isolated places very likely over south Konkan & Goa on 01st June. Light to moderate rainfall at most places with isolated heavy to very heavy falls very likely over Konkan & Goa on 02nd June and over south Konkan & Goa on 03rd June. Light to moderate rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at isolated places over north Konkan and north Madhya Maharashtra on 03rd & 04th June. Light to moderate rainfall at most places with isolated heavy to very heavy falls very likely over south Gujarat state, Daman, Diu, Dadra & Nagar Haveli on 03rd June and with heavy to very heavy falls at a few places and

extremely heavy falls at isolated places over south Gujarat state, Daman, Diu, Dadra & Nagar Haveli and on 04th June.

- Fishermen are advised not to venture into southeast Arabian Sea, Lakshadweep area and along & off Kerala coast during next 48 hours; eastcentral Arabian Sea and along & off Karnataka-Goa coasts till 3 rd June; eastcentral Arabian Sea along & off Maharashtra coast and northeast Arabian Sea along & off Gujarat coast during 3rd – 4th June.
- Current spell of rain/thunderstorm over northwest India likely to reduce from tonight with isolated activities continue to occur over the region during 1st and 2nd June. A fresh spell of scattered to fairly widespread rain/thunderstorm likely over northwest India including Delhi from 3rd June except Punjab, Himachal Pradesh and Jammu-Kashmir where it is likely to be isolated.
- 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 Uttarakhand; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi and North Interior Karnataka; at a few places over Punjab, Arunachal Pradesh, Chhattisgarh and Rayalaseema; at isolated places over East Uttar Pradesh, East Madhya Pradesh, West Bengal & Sikkim, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka, Telangana, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Lakshadweep and Andaman & Nicobar Islands.
- Heavy rainfall occurred at isolated places over Uttarakhand and Assam & Meghalaya.
- Thunderstorm observed (from 1130 hours IST of yesterday to 0530 hours IST of today): at isolated places over Uttarakhand, Assam & Meghalaya, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Punjab, East Madhya Pradesh, Odisha, Gangetic West Bengal, Telangana, Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Haryana, Chandigarh & Delhi, West Rajasthan, Jharkhand, Telangana, Madhya Maharashtra, Marathwada, Vidarbha, Konkan & Goa, Interior Karnataka and Kerala & Mahe.
- Maximum Temperature Departures as on 31-05-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Madhya Maharashtra, East Madhya Pradesh, Coastal Karnataka and Rayalaseema; above

normal (1.6°C to 3.0°C) at a few places over Saurashtra & Kutch, Konkan & Goa, Vidarbha, Interior Karnataka and Kerala & Mahe; at isolated places over Gujarat region, Marathwada, West Madhya Pradesh, Assam & Meghalaya and Andaman & Nicobar Islands. They were markedly below normal (-5.0°C or less) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh; at many places over East Rajasthan; at isolated places over West Rajasthan and Sub-Himalayan West Bengal & Sikkim ; appreciably below normal (-3.1°C to -5.0°C) at many places over Chhattisgarh; at a few places over Bihar; at isolated places over Gangetic West Bengal, Jharkhand, Odisha and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at a few places over Lakshadweep and at isolated places over Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.0°C reported at Khargone and Mandla (Madhya Pradesh).

- Minimum Temperature Departures as on 01-06-2020: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Gujarat and South Interior Karnataka; at isolated places over Andaman & Nicobar Islands, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. They are markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh & Delhi; at isolated places over Himachal Pradesh, Vidarbha, Telangana and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Jharkhand, West Uttar Pradesh, West Rajasthan and Punjab; at a few places over West Madhya Pradesh and Marathawada; at isolated places over East Rajasthan, Assam & Meghalaya and East Uttar Pradesh; below normal (- 1.6°C to -3.0°C) at most places over Uttarakhand, at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad; at a few places over Konkan & Goa and Odisha; at isolated places over Madhya Maharashtra, Rayalaseema and Gangetic West Bengal and near normal over rest parts of the country. The lowest minimum temperature of 19.1°C reported at Ambala (Haryana) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 01 June (Day 1): Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Bihar, Jharkhand, West Bengal & Sikkim and Kerala & Mahe; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh,

Chhattisgarh, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep; with lightning at isolated places over West Uttar Pradesh, Vidarbha and Arunachal Pradesh. Heavy to very heavy rainfall likely at isolated places over Konkan & Goa, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalseema, North & South Interior Karnataka and Lakshadweep. Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over eastcentral Arabian Sea along & off Karnataka-Goa coasts and speed reaching 40-50 kmph gusting to 60 kmph over Lakshadweep area and along & off Kerala coast and Eastcentral & adjoining southeast Arabian Sea. Sea conditions are very likely to be Very Rough to High over eastcentral & adjoining southeast Arabian Sea and along & off Karnataka-Goa coasts. Fishermen are advised not to venture into southeast & eastcentral Arabian Sea, Lakshadweep area and along & off Kerala-Karnataka-Goa coasts.

- 02 June (Day 2): Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over West Bengal & Sikkim and Kerala & Mahe; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Rajasthan, Madhya Pradesh, Vidarbha, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana and Coastal & North Interior Karnataka; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Rayalseema, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to very heavy rainfall at isolated places over Madhya Maharashtra and Coastal Karnataka and heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Telangana, North & South Interior Karnataka, Kerala & Mahe and Lakshadweep. Squally wind speed reaching 60-70 kmph gusting to 80 kmph is likely to prevail over eastcentral Arabian Sea and along & off south Maharashtra coast; speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over Eastcentral & adjoining southeast Arabian Sea and along & off Karnataka-Goa coasts and speed reaching 40-50 kmph gusting to 60 kmph over Lakshadweep area and along & off

Kerala coast and . Sea conditions are very likely to be Very Rough to High over eastcentral & adjoining southeast Arabian Sea and along & off Karnataka-Goa coasts. Fishermen are advised not to venture into southeast & eastcentral Arabian Sea, Lakshadweep area and along & off Kerala-Karnataka-Goa coasts.

- 03 June (Day 3): Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Rajasthan; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat state; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chhattisgarh, Jharkhand, Arunachal Pradesh, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places over Madhya Maharashtra and Konkan & Goa; Heavy to very heavy rainfall at isolated places over West Madhya Pradesh and Gujarat state and heavy rainfall at isolated places over East Rajasthan, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Karnataka. Squally wind speed reaching 105-115 kmph gusting to 125 kmph is likely to prevail over eastcentral & northeast Arabian Sea and along & off Maharashtra coast; speed reaching 90-100 kmph gusting to 110 kmph is likely to prevail over Valsad, Navsari districts of Gujarat; 80-90 kmph gusting to 100 kmph along & off Ratnagiri, Sindhudurg districts of Maharashtra and 70-80 kmph gusting to 90 kmph along & off Surat and Bharuch districts of south Gujarat from evening. Sea conditions are very likely to be Very Rough to High over northeast Arabian Sea along & off Gujarat coast. Fishermen are advised not to venture into eastcentral Arabian Sea along & off Karnataka-Goa-Maharashtra and northeast Arabian Sea along & off Gujarat coasts.
- 04 June (Day 4): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 40-50 kmph) at isolated places over Himachal Pradesh; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Haryana, Chandigarh & Delhi, Uttar Pradesh and Rajasthan; with lightning & gusty winds (speed reaching 30- 40 kmph) at isolated places over Punjab, Vidarbha, Bihar, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat state; with lightning at isolated places over Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal. Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places over

Gujarat region and Madhya Maharashtra; Heavy to very heavy rainfall at a few places over Konkan & Goa and at isolated places over Rajasthan and Saurashtra & Kutch and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- 05 June (Day 5): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 40-50 kmph) at isolated places over Himachal Pradesh; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Uttarakhand; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Haryana, Chandigarh & Delhi and Uttar Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Rajasthan, Chhattisgarh, Bihar, Gangetic West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning at isolated places over Madhya Pradesh, Vidarbha, Jharkhand, Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal. Heavy rainfall at isolated places likely over Uttarakhand, East Rajasthan, Assam & Meghalaya, Konkan & Goa and Kerala & Mahe.
- The weather outlook for seven days i.e., 01 to 09 June 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)

Maharashtra-Konkan

Weather condition:

Atmospheric condition was clear during morning hours around Dapoli during last week. Therefore 9.8 to 11.4 of Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 33.0 to 35.4 and 22.0 to 24.0 °C respectively. Wind velocity ranged from 5.5 to 7.2 km and wind was blowing from easterly Direction.

Contingency measure:

- **Precautionary measure regarding dessert locust:** Prepare big trenches around the field to restrict the entry of locust in field. Create smoke during night hours in the area where locust take rest on shrubs. Spray neem based insecticide azadirachtin 1500 PPM @ 30 ml or 5% neem extract per 10 liter of water as a precautionary measure. Prepare bait using rice husk mixing insecticide fipronil

5%SC @3 ml per 20 kg of rise husk and place in different area in the field. If severe incidence of locust observed, spray any one of insecticide recommended by Central insecticide board, which includes chlorpyriphos 20%EC @ 24ml, chlorpyriphos 50%EC @ 10 ml, deltamethrin 2.8 %EC @ 10 ml, fipronil 5%SC@ 2.5ml, lambda cyhalothrin 5%EC @ 10 ml per 10 liter of water. Spray the insecticide during late night or early in the morning on the bushes where locusts are gathered.

- **Kharif rice:** There is forecast of rainfall from 1st to 3rd June,2020, it is advise to go for sowing of rice nursery. The farmers are advise to give 3% brine solution treatment to the seed those who are using their own reserved seed for preparing rice nursery. Prepare 3% brine solution by mixing of 300 gms of common salt in 10 liters of water while preparing solution take care that it will be sufficient to dip all quantity of seed in solution. Remove the chaffy seeds that float on water and collect the rice seeds which settle at bottom of the bucket. Wash it with clean water for 3 to 4 times and shed dry for 48 hrs. Follow seed treatment with thiram fungicide @2.5/kg seed before sowing. Apply 1 kg urea and 3 kg SSP and 0.8 kg of MOP per guntha on nursery bed at the time of sowing. Sow the seeds in row 7-8 cm apart and at 1-2 cm depth and cover with soil. To reduce weed intensity, apply oxadiagyl 6% EC @ 3 ml. per liter of water uniformly on wet nursery beds
- **Finger millet:** For raising finger millet nursey select the well drain soil. plough the nursery area and bring the soil to fine tilth, add FYM@250 kg per guntha area. Prepare raised bed of 120 cm. breadth at bottom and 90 cm. on top along the slope of land. Convenient length of raised bed should be kept according to the land slope. Recommended seed rate for finger millet is 2 to 2.5 kg per acre. Prepare nursery on 4 guntha area to transplant seedlings on 1acre area. Dapoli-1, Dapoli safed-1 (Konkan safed-1) and Dapoli-2 finger millet varieties are recommended by Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli for cultivation in Konkan region during *Kharif*.
- **Mango:** Clean mango orchard by removing all lorathus and dried branches to maintain good sanitation in orchard. if lorathus infestation is large the cut the infested branch and apply bordopaste on cut portion of tree. Due to increase in rate of evaporation, provide irrigation to newly planted mango orchard.
- **Coconut:** For control of rhinoceros beetle, clean coconut orchard by removing all dried leaves and other dead waste to maintain good sanitation. Since breeding of the pest occur in FYM pits, hence dust the FYM pits near to orchard with chlorpyriphos 1.5% powder at 2 months interval. Extract the adult beetle from infected palm crown using GI hooks and fill this infected crown with 25 gms of

chlorpyrifos 1.5% powder and sand mixture in 1:1 proportion. Also install the pheromone traps into orchard. Due to increase in rate of evaporation, provide irrigation to coconut orchard.

- **Arecanut:** Clean the arecanut orchard by removing dry leaves and infected inflorescence to maintain good sanitation in orchard. spray 1 % bordon mixture on to crown region. Repeat the spray 3 to 4 time at interval of one month. Due to increase in rate of evaporation, provide irrigation to arecanut orchard.
- **Okra:** For cultivation of okra crops, select well drain fertile soil. prepare land with help of plough and cultivator. mix 6 tonnes / acre of well decomposed FYM in soil at the time of land preparation. prepare ridges and furrow at 60 cm.
- **Milch animals:** There is possibility of increase in temperature, provide adequate quantity of clean and cold water to farm animals for drinking and wash the pregnant buffalo daily. For pregnant farm animals, provide 2.5 kg Concentrate + 15 to 20 kg green fodder + 5 to 7 kg roughages per day and for milking farm animals, provide 1 to 1.5 kg Concentrate + 15 to 20 kg green fodder + 4 to 5 kg roughages per day.
- **Poultry:** For boiler poultry bird 1st three week provide boiler starter and 4 to 6 week old bird provide boiler finisher as per their daily requirement. Also for reducing the cholesterol content, feed the birds with 1.5% black jeera powder or 0.5% turmeric powder or 1% ginger powder along with feed. There is possibility of increase in temperature, hence in poultry shed, increase the water pot and provide adequate and clean water for drinking. Also, feed should be given in the morning or evening hours.

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

01-06-2020/(0900 to 0926) GMT
01-06-2020/(1430 to 1456) IST

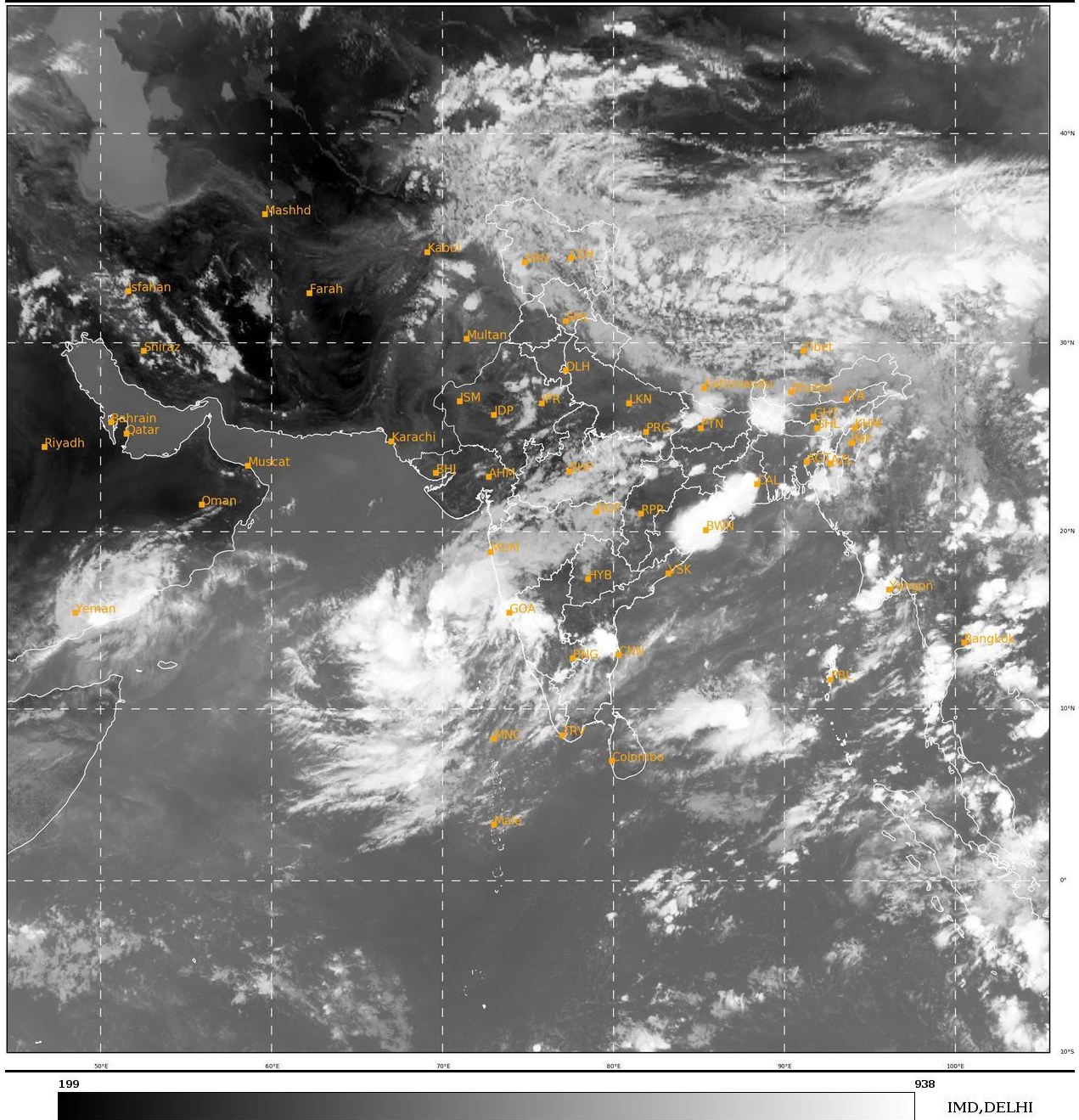


Figure: 1. Latest available satellite picture as on 01 June 2020 at 1456 Hrs (IST). (Source: IMD).

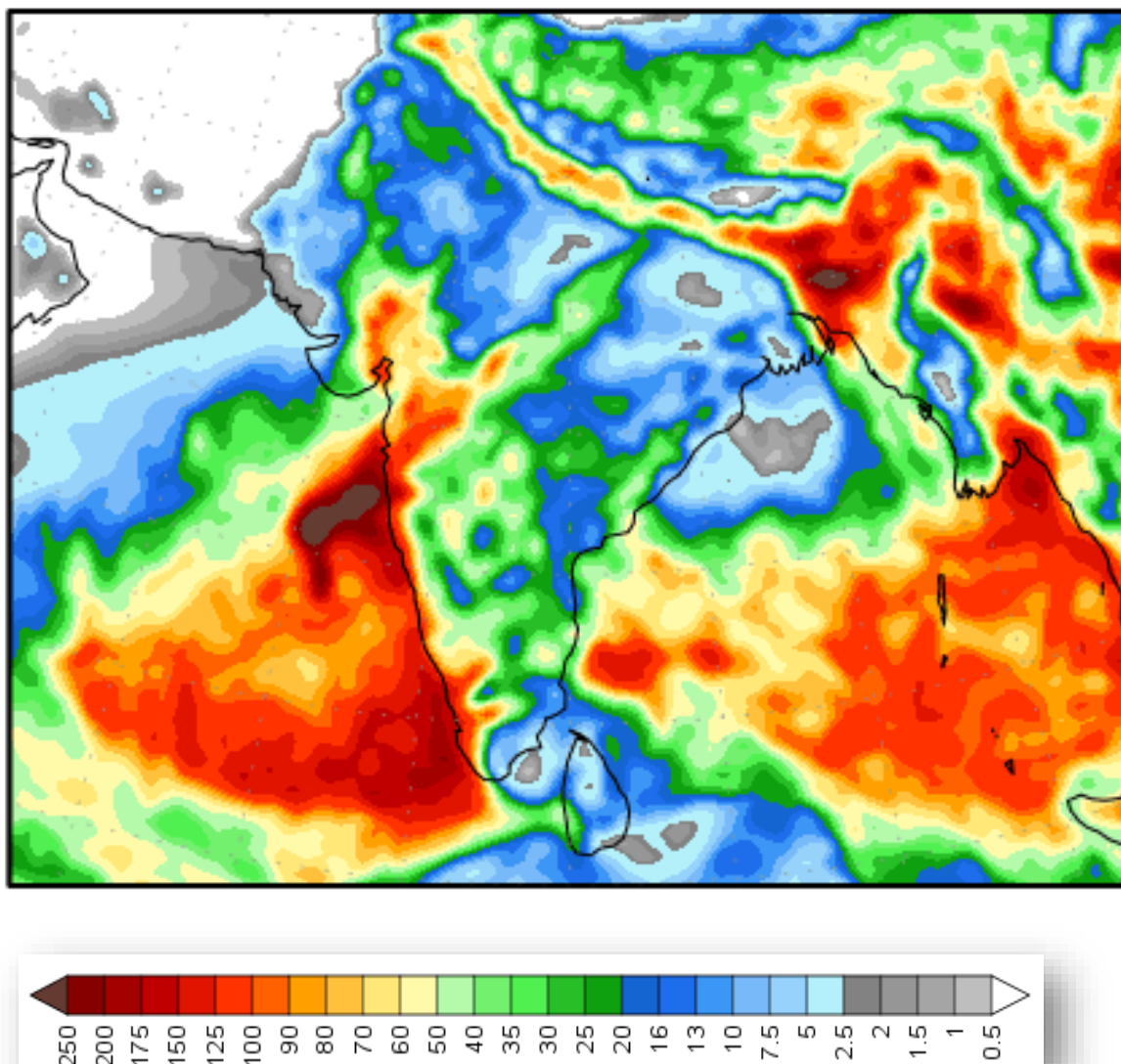


Figure:2. Precipitation forecast for 01 to 09 June 2020 (Source: NOAA NCEP).

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.