

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 14 June 2019

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Very Severe Cyclonic Storm 'VAYU' (pronounced as VAA'YU) over northeast and adjoining east central Arabian Sea moved west-northwestwards with a speed of about 06 kmph in last six hours and lay centered at 0530 hours IST of today, the 14th June, 2019 near Lat. 21.0°N and Long. 68.5°E over northeast & adjoining east central Arabian Sea, about 130 km southwest of Porbandar (Gujarat), 185 km west of Veraval (Gujarat) and 250 km west of Diu. This system is moving west-northwestwards skirting the Saurashtra coast affecting Porbandar & Devbhoomi Dwarka with wind speed 60-70 kmph gusting to 80 kmph and Gir Somnath and Junagarh with wind speed 40-50 kmph gusting to 60 kmph. It is very likely to continue to affect these districts during next 12 hours and wind speed over these districts is very likely to decrease gradually thereafter.
- Fishermen are advised not to venture into north Arabian Sea and along & off Gujarat coast till 15th June and into east central Arabian Sea and along & off Maharashtra coast on 13th June.
- Northern Limit of Monsoon (NLM) now passes through Lat. 13°N/Long. 60°E, Lat. 13°N/Long. 70°E, Mangalore, Mysore, Salem, Cuddalore, Lat. 14°N/Long. 86°E, Lat. 20°N/Long. 90°E, Agartala, Lumding, Passighat and Lat. 29°N/Long. 97°E.
- Conditions are becoming favourable for further advance of Southwest Monsoon into some more parts of central Arabian Sea, Karnataka, remaining parts of Tamilnadu, some more parts of central Bay, north & south Bay and some more parts of northeast India and some parts of north Bengal and Sikkim in 2-3 days.
- Northern Limit of Monsoon (NLM) continues to pass through Lat. 12°N/Long. 60°E, Lat. 12°N/Long. 70°E, Kannur, Madurai, Lat. 12°N/Long. 83°E, Lat. 14°N/Long. 86°E, Lat. 17°N/Long. 89°E, Lat. 20°N/Long. 91°E, Aizwal, Lat. 24°N/Long. 93°E and Lat. 25°N/Long. 95°E.
- The images showing the latest satellite picture in 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 Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Konkan & Goa, Lakshadweep, Coastal Karnataka and Kerala; at many places over Madhya Maharashtra and Saurashtra & Kutch; at a few places over East Madhya Pradesh, Odisha, Marathawada, North Interior Karnataka and Gujarat Region and at isolated places over East Rajasthan, West Madhya Pradesh, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, West Bengal & Sikkim, Chhattisgarh, Arunachal Pradesh, South Interior Karnataka and Tamilnadu & Puducherry
- Heavy to very heavy rainfall observed at isolated places over Saurashtra & Kutch; heavy at a few places over Coastal Karnataka and at isolated places over Madhya Maharashtra and Andaman & Nicobar Islands.
- Rainfall at 0830 hours IST of today (3 cm or more) are: Talala-16, Sutrapada-15; Karwar & Car Nicobar-9 each; Mahabaleshwar & Bhavnagar- 8 each; Shirali, Mangalore, Port Blair & Vanthli-7 each; Tezpur and Long Islands-6 each; Lumding, Veraval, Vengurla, Goa, Honavar and Kozhikode-5 each; Amreli and Thrissur-4 each; Majbat, Aizal, Kailashahar, Mahuva, Matheran, Pendra road, Cannur, Hut bay and Mormugao-3 each.
- Thunderstorm observed (from 1130 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Kerala, Chhattisgarh, Himachal Pradesh, Gujarat Region, North Interior & Coastal Karnataka, Madhya Pradesh, Chhattisgarh, Odisha, Coastal Andhra Pradesh, Tamil Nadu, Nagaland, Manipur, Mizoram & Tripura and Assam & Meghalaya.
- Yesterday, Heat Wave Conditions observed in isolated pockets over West Rajasthan, West Madhya Pradesh, Vidarbha, Telangana and Coastal Andhra Pradesh & Yanam.
- Maximum temperature departures as on 13-06-2019: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Assam & Meghalaya and at isolated places over Telangana and Arunachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Jharkhand; at many places over Vidarbha, Coastal Andhra Pradesh & Yanam, Chhattisgarh, Sub-Himalaya West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; at a few places over Uttarakhand, East Madhya Pradesh and Bihar and at isolated places over West Rajasthan, West Madhya Pradesh and Tamilnadu & Puducherry; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi; at many places over Marathawada and Gangetic West Bengal; at a few places over Kerala & Mahe and Rayalaseema and at isolated places over Konkan & Goa, Madhya Maharashtra, East Uttar Pradesh, North Interior Karnataka

and Odisha. They were markedly below normal (-5.1°C or less) at isolated places over East Rajasthan and Saurashtra & Kutch; appreciably below normal (-3.0°C to -1.6°C) at a few places over Gujarat Region and Andaman & Nicobar and Jammu & Kashmir and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 48.0°C was recorded at Phalodi (West Rajasthan).

- Minimum temperature departures as on 14-06-2019: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Bihar and Sub-Himalayan West Bengal & Sikkim; at a few places over West Rajasthan, Chhattisgarh and Vidarbha; at isolated places over West Madhya Pradesh and Coastal Andhra Pradesh; above normal (1.6°C to 3.0°C) at most places over Gangetic West Bengal; at many places over Telangana and East Uttar Pradesh; at a few places over Rayalaseema and Uttarakhand; at isolated places over West Uttar Pradesh, Odisha, Assam & Meghalaya, North Madhya Maharashtra, Kerala and Tamilnadu & Puducherry. They are below normal (-1.6°C to -3.0°C) at a few places over East Madhya Pradesh and Saurashtra & Kutch; at isolated places over South Madhya Maharashtra and near normal over rest parts of the country

Weather Warning during next 5 days (IMD)

- 14 Jun (Day 1): Thunderstorm accompanied with lighting and gusty winds (30-40 Kmph) at isolated places very likely over Madhya Pradesh, Chhattisgarh, Bihar. Coastal Andhra Pradesh, Jharkhand, West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal; with dust storm & gusty winds (30-40 Kmph) at isolated places over Rajasthan.
- Heavy rainfall at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamilnadu & Puducherry, Konkan & Goa, Saurashtra & Kutch, Coastal & South Interior Karnataka, Kerala and Andaman & Nicobar Islands.
- Heat wave in isolated pockets over West Madhya Pradesh, Vidarbha, Gangetic West Bengal, Coastal Andhra Pradesh, Jharkhand and Telangana.
- Gale winds speed of the order of 120-130 kmph gusting to 145 kmph very likely over north Arabian Sea. Gale wind speed of the order of 60-70 kmph gusting to 80 kmph very likely over Gujarat coast during next 12 hours and decrease gradually thereafter. It is very likely to be 40-50 kmph gusting to 60kmph over northern parts of east central Arabian Sea. Strong wind speed of the order of 45-55 kmph is very likely over northwest Bay of Bengal. The Sea condition is Phenomenal over north Arabian sea and over northern parts of east central Arabian sea during next 12 hours. The sea condition is rough to high over rest part of east central part of Arabian sea. Fishermen are advised not to venture into north Arabian Sea, along & off Gujarat coast and along & off Maharashtra coast. Total Suspension of Fishing Operations.

- 15 Jun (Day 2): Thunderstorm accompanied with lighting and gusty winds (30-40 Kmph) at isolated places very likely over Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Jammu & Kashmir, Odisha and Tamilnadu, Puducherry & Karaikal; with dust storm & gusty winds (30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi and Rajasthan.
- Heavy rainfall at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh, Tamilnadu & Puducherry, Konkan & Goa, Coastal & South Interior Karnataka, Kerala and Sub-Himalayan West Bengal & Sikkim.
- Heat wave in isolated pockets over West Madhya Pradesh, Vidarbha, Gangetic West Bengal, Coastal Andhra Pradesh, Jharkhand and Telangana.
- Gale winds speed of the order of 100-110 kmph gusting to 125 kmph very likely over north Arabian Sea, along & off Gujarat coast. Squally wind speed of the 50-60 kmph gusting to 70 kmph very likely over to Gujarat coast. Strong wind speed of the order of 45-55 kmph is very likely over west central Bay of Bengal. The Sea condition is Phenomenal over north Arabian sea. The sea condition is rough to very rough over rest part of east central parts of Arabian sea. Fishermen are advised not to venture into north Arabian Sea and along & off Maharashtra coast. Total Suspension of Fishing Operations.
- 16 Jun (Day 3): Thunderstorm accompanied with lighting, hail and gusty winds (40-50 kmph) at isolated places very likely over Himachal Pradesh and Uttarakhand; with gusty winds (30-40 kmph) at isolated places over Jammu & Kashmir, Madhya Pradesh, Chhattisgarh, Vidarbha, Telangana, Rayalaseema, Coastal Andhra Pradesh, Jharkhand and Odisha; with dust storm & gusty winds (30-40 kmph) at isolated places over Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi and Rajasthan.
- Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim. Heavy rainfall at isolated places over Assam & Meghalaya, Arunachal Pradesh, Konkan & Goa and Coastal Karnataka.
- Heat wave conditions in isolated pockets very likely over Telangana.
- Gale winds speed of the order of 80-90 kmph gusting to 100 kmph very likely over north Arabian Sea, along & off Gujarat coast. Squally wind speed of the 45-55 kmph gusting to 65 kmph very likely over to Gujarat coast. Strong wind speed of the order of 45-55 kmph is very likely over central Bay of Bengal, 35-45 kmph over southwest Bay of Bengal. The Sea condition is Phenomenal over north Arabian sea. Fishermen are advised not to venture into north Arabian Sea and along & off Maharashtra coast. Total Suspension of Fishing Operations.

- 17 Jun (Day 4): Thunderstorm accompanied with lighting, hail and gusty winds (40-50 kmph) at isolated places very likely over Himachal Pradesh and Uttarakhand; with gusty winds (30-40 kmph) at isolated places over Jammu & Kashmir, East Madhya Pradesh, Bihar, Gangetic West Bengal, Chhattisgarh, Vidarbha, Rayalaseema, Coastal Andhra Pradesh, Jharkhand and Odisha; with dust storm & gusty winds (40-50 kmph) at isolated places over Rajasthan; with dust storm & gusty winds (30-40 kmph) at isolated places over Uttar Pradesh, Punjab and Haryana, Chandigarh & Delhi.
- Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim. Heavy rainfall at isolated places over Assam & Meghalaya, Arunachal Pradesh, Konkan & Goa, Andaman & Nicobar Islands and Coastal Andhra Pradesh.
- Strong wind speed of the order of 35-45 kmph is likely over west central and south Bay of Bengal, 35-45 kmph over southwest Bay of Bengal. The Sea condition is Phenomenal over north Arabian sea. Fishermen are advised not to venture into north Arabian Sea and along & off Maharashtra coast. Total Suspension of Fishing Operations.
- 18 Jun (Day 5): Thunderstorm accompanied with lighting and gusty winds (30-40 kmph) at isolated places very likely over Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Bihar, Gangetic West Bengal, Chhattisgarh, Vidarbha, Coastal Andhra Pradesh, Jharkhand and Odisha; with dust storm & gusty winds (40-50 kmph) at isolated places over Rajasthan; with dust storm & gusty winds (30-40 kmph) at isolated places over Uttar Pradesh, Punjab and Haryana, Chandigarh & Delhi.
- Heavy rainfall at isolated places over Kerala, Konkan & Goa, Madhya Maharashtra, South Interior Karnataka, Andaman & Nicobar Islands and Coastal Andhra Pradesh.
- Strong wind speed of the order of 35-45 kmph is likely over west central and south Bay of Bengal, 35-45 kmph over southwest Bay of Bengal
- The weather outlook for the period of seven days *i.e* 14 to 22 June 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamilnadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Assam

Weather condition:

Light to moderate rainfall received in Assam state during past few days. The maximum temperature was ranged between 28-32°C and minimum temperature was ranged between 24-26°C.

Contingency measure:

- Farmers are advised to collect information on varieties, sources of seeds and seed selection. This information can be procured from KVK.
- Additionally, farmers practicing rice-rice double cropping can select short to medium duration varieties like Satya and Basundhara. Manohar Sali, Biraj, Solpona etc is recommended for post flood transplanting. Jalashree and Jalkunwari recommended for chronically flood affected areas
- Seed bed: Land should be thoroughly puddled and seed beds of 10 m length and 1.25 m breadth should be prepared with 30 cm gap in between the beds. The length of the bed may vary according to convenience.
- Seed treatment and seed rate: Seeds should be put in plain water, stirred well, sunk seeds selected and the floated ones rejected. After selection, the seeds should be soaked directly in either Mancozeb/Captan/Carbendazim @ half spoon/kg seed/lit of water for 24 hours. One liter of fungicide solution is required to treat 1 kg of seed. Treated seeds should be kept for incubation for 48 hrs. 5 kg of seeds are required for transplanting 1 bigha land. Well germinated seeds are to be sown @ 650 g to 1 kg per bed depending on grain size. Requirement of seeds for transplanting one bigha of main field is 5 kg.
- Manures and fertilizers: In each seed bed 20-30 kg cow dung/compost, 80 g urea, 80 g SSP and 40 g MOP is to be applied and mixed well with the soil.
- In Sugarcane, a light earthing up should be given to fill trenches/furrows within 45 to 60 days after planting. Spread of stem borer can be checked by burying/burning of infested canes.
- Papaya seedlings may be planted from the month of April to June. Prepare pits of 45cm x 45cm x 45cm at a spacing of 1.8 m x 1.8 m. The recommended varieties are

Washington, Ranchi, Halflong, Solo Papayas etc. Ensure proper drainage to drain excess water.

- In Fishery prepare the fingerling rearing tanks and nurseries by cleaning them and applying agricultural lime at the rate of 65-70 gm per sq m for raising fingerlings. Apply cow dung at the rate of 500 gm per sq m at least 15 days ahead of releasing fingerlings into the tanks.

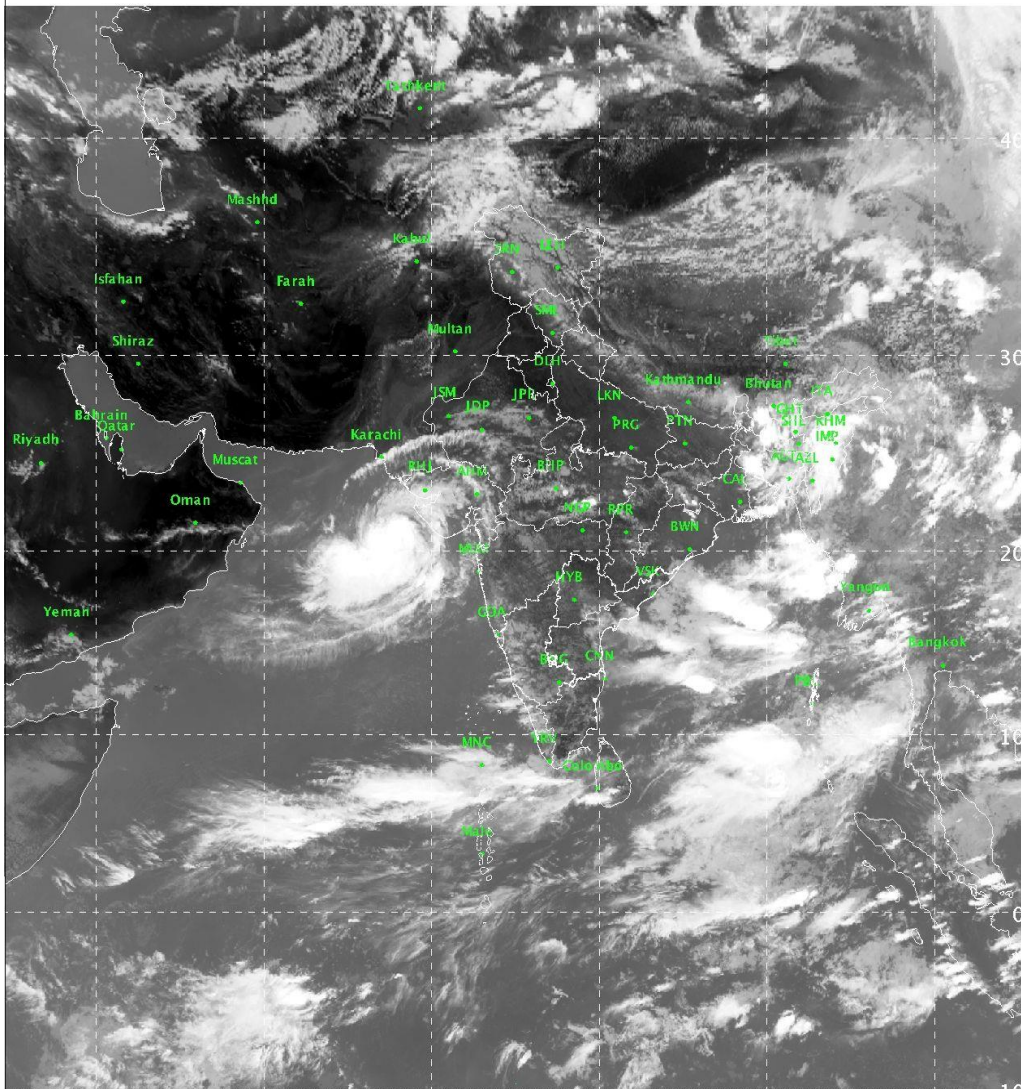
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

14-06-2019/08:30 GMT

14-06-2019/14:00 IST



IMD/Delhi

Figure: 1. Latest available satellite picture as on 14 June 2019 at 1415 Hrs (IST).

(Source: IMD).

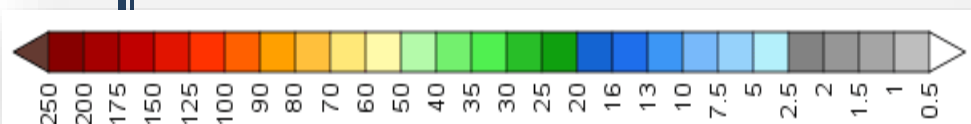
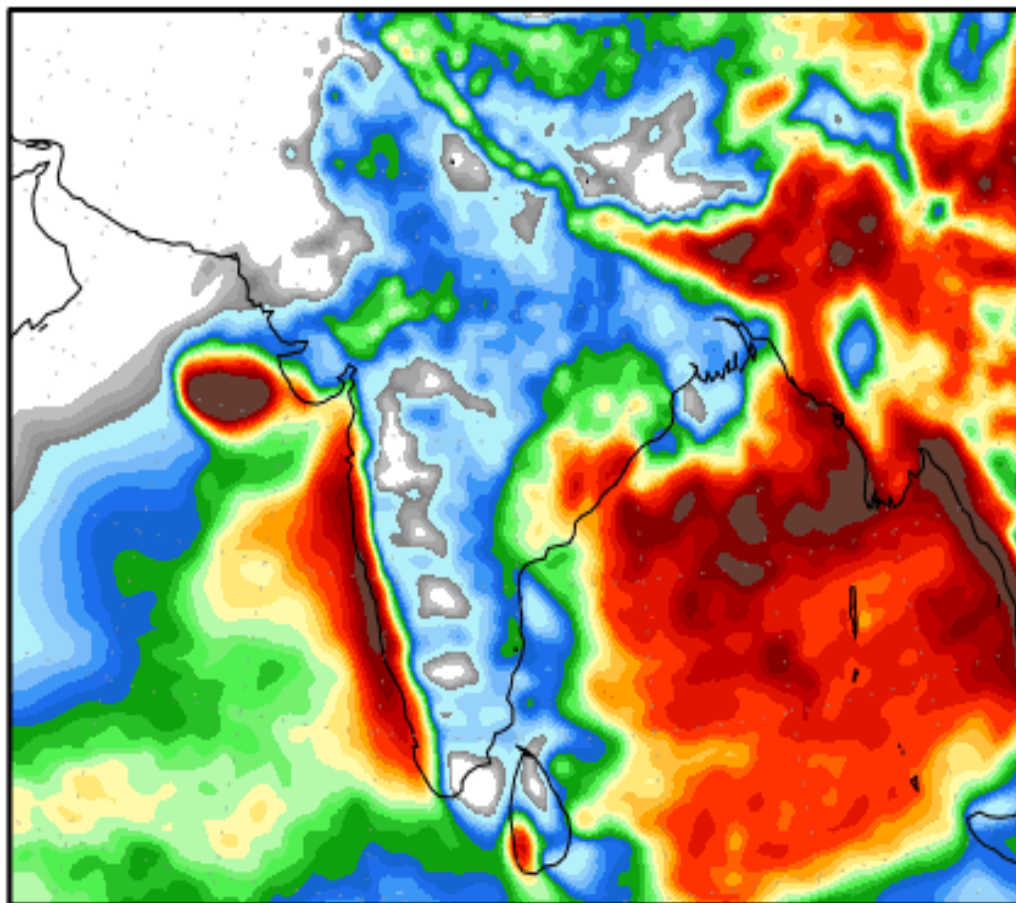


Figure: 2. Precipitation forecast for 14 to 22 June 2019 (Source: NOAA NCEP).