



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

14 OCTOBER 2020 (WEDNESDAY)  
[FOR THE PERIOD 14.10.2020 – 18.10.2020]



## DISCLAIMER

Under the Agro-meteorological Information System Development Project, Agromet Advisory Service Bulletins at National & Sixty Four (64) districts have been prepared on experimental basis. These bulletins are being displayed through the website of Department of Agricultural Extension for valuable comments/ suggestions from all concerned.

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## ISSUED BY

Agro-Meteorological Information Systems  
Development Project  
Department of Agricultural Extension (DAE)  
Ministry of Agriculture  
In collaboration with Bangladesh  
Meteorological Department

## **Special Agromet Advisories for CORONA virus (COVID-19) transmission in Bangladesh**

Farmers and all other farm managements are advised to follow the guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19). Precautions and safety measures should be taken up to prevent the Carona virus spread. Simple measures include social distancing, maintaining personal hygiene by washing hands with soap, wearing of face mask, drink hot water, stay at home and cleaning of implements and machinery. Farmers should not work in a group; consult with a doctor in case of any symptom. Please stay at home does not visit the field until it is very necessary.

### **Salient Weather Conditions**

The axis of monsoon trough runs through Bihar, West Bengal to Assam across central part of Bangladesh. Monsoon is less active over Bangladesh and weak to moderate over North Bay. . As per the weather forecast received from the Bangladesh Meteorological Department (BMD) during next 24 hours, light Rain/thunder showers accompanied by temporary gusty wind is likely to occur at one or two places over Rajshahi, Mymensingh, Dhaka, Khulna, Barishal, Chattogram & Sylhet divisions. Weather may remain mainly dry with temporary partly cloudy sky elsewhere over the country. Temperature: Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, little change is likely.

As per the medium range weather forecast, monsoon rainfall is likely to be less in most of the districts and as a result only trace to light rainfall is expected. Farmers are advised to apply need based irrigation and also apply fertilisers and pesticides as per the recommendations and as per the requirements. Salient agromet advisories issued for different crops in various districts are as follows.

## **Salient Agromet Advisories**

### **Aman Paddy**

- Partly cloudy sky and trace to light rainfall is expected. Humidity will decrease. Apply irrigation according to requirement.
- Start chemical spraying of pesticide as per needed.
- The maximum water utilization for rice crop is in panicle initiation stage (amount 25% of total water requirement of crop.) Due to shortage of water crop production may severely affected. Therefore farmers are advised to go for impounding field required level of water.
- Provide irrigation & keep the rice land up to 3-4 inches water from panicle initiation stage to hard dough stage.
- There is chance of Gandhi bug and Brown plant hopper attack. For Gandhi bug spray Carbaryl 50 WP@2g/liter of water. Avoid excess irrigation in the field otherwise base will be rotten. Where early transplanted paddy found 80% maturity, harvest and transfer it to safe place immediately. Spray Buprofezin 25% SC@106ml/bigha for BPH attack. Maintain proper distance within the farmers during spraying.
- As per weather forecasting there is chance of trace to light rainfall, therefore the farmers are advised to continuously monitor the field. If any symptoms of Brown Plant Hoppers ( BPH) insects

are found, than should go for spray of insecticides ((Isoprocarb @ 2.5g per litrewate. or Imidachloprid @ 2.5g per litrewater) only in clear weather and when there is no forecasting of rains.

- Due to occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha if there is 5% dead tiller or 1% dead inflorescence.
- Where luxurious growth of plants, at tillering stage, is found ,there is chance of sheath blight attack may take place due humid weather and water stagnation. Spray Hexaconazol @ 1ml//litre water, or Tebuconazol @ 1ml/litre water. Regular inspection should be continued for disease attack observation
- There is chance of considerable BLB attack due to high temperature and humidity, As the spore spread by air and water, drain out all the water, if any, and apply potash fertilizer. Follow community spraying otherwise infection cannot be controlled.-To control the disease it is advised to make fertilizer management and spray Thiovit+Potash. Avoid excess urea application.
- Where Tillering is complete and panicle has started,apply one hand weeding inside the field and also in the bund area, to make ensure proper solarisation inside the row.
- Where Tillering is complete and panicle has started there is chance of attack of leaf roller
- Spray Malathion @ 2ml. per litre water or Chlorpyriphos@2ml/liter of water or Endosulfun@1.5ml/liter of water.
- There is a chance of attack of leaf folder /rice hispa in seedling and tillering stage. If there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed, the farmers are advised to spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water.
- There is chance of Gandhi bug and Brown plant hopper attack. For Gandhi bug spray Carbaryl 50 WP@2g/liter of water. Avoid excess irrigation in the field otherwise base will be rotten. Where early transplanted paddy found 80% maturity, harvest and transfer it to safe place immediately. Spray Buprofezin 25% SC@106ml/bigha for BPH attack. Maintain proper distance within the farmers during spraying.
- Light trap should be used for control of insects. Light trap should be placed at some distance from the crop and bulb should be lightened from evening 06.30 PM to 10.30 PM and collected insects should be destroyed in the morning hours.

### Vegetables

- **Cucumber:** Apply 18 kgs Urea/bigha at around 20-25 days after sowing of the plants. If you notice Irregular brown spots on the leaves, sometimes with yellow edges, it may be Alternaria Leaf Blight. Spray Tricyclazole 75WP @ 0.6 ml per liter of water at clear weather condition
- There is chance of fungal wilting due to heavy rain and high humidity in early winter vegetables. Drain out water from field. During clear weather drenching the soil around the base with [Streptocyclin@0.1g/liter](#) of water.
- **Brinjal:** Bacterial wilting- Wilting starts at the top when the plant starts flowering and fruit setting and eventually the whole plant shows wilt symptoms Cure: Infected plants must be eradicated. Roots of the seedlings must be treated (2.5gm carbendazim + 2 ml Teramycin capsule/litre water) before planting. Bleaching powder (3kg/acre) can be applied with irrigation water
- **Tomato: Late Blight:** Water-soaked lesion is seen in edges of leaves. Later on, leaves dries up. Nowadays late blight is first seen in the stem then it spreads to the leaves. Cure 1) Precaution must be taken during the initial infection stage. 2) Spray 2.5-gram Metalaxyl + Mancozeb/lit of water 3) Mix 3 gram Trichoderma with per kg of seed during seed treatment. 4) Avoid excess nitrogen fertilizer and close spacing of plants

- **Tomato :Bacterial wilting-** Wilting starts at the top when the plant starts flowering and fruit setting and eventually the whole plant shows wilt symptoms. Start treatment with the healthy plants. Infected plants can not be recovered, uproot the infected plants and place inside the soil with little Bleaching powder. Cure: Infected plants must be eradicated. Roots of the seedlings must be treated (2.5gm carbendazim + 2 ml Teramycin capsule/litre water) before planting. Bleaching powder (3kg/acre) can be applied with irrigation water.
- **Cabbage/Cauliflower:** Downy mildew: First brown spot appear in the lower side of the leaves, and the upper side of the infected portion becomes yellowish. Later on, the spots enlarged and destroy the whole leaf. This disease is present in seeds and other parts of the leaves. Cure: 1) Mix 3-gram Thiram with per kg of seed during seed treatment. 2) Spray 2.5 gram Metalaxyl + Mancozeb/lit of water
- **Bitter gourd & Pointed gourd:** At vegetative growth and under the present weather condition, attack of Downy mildew may be seen in the field. Mancozeb or Chlorothalonil 2 g/lit twice at 10 days interval may be sprayed to manage the attack.
- **Winter/Rabi vegetables:** Good drainage for seedbed and direct-seeded plots, 2) Adapting raised seedbed practice, 3) Use systemic fungicide Thiophanate methyl 70 % WP @2 gram/lit with a sticker to avoid fungal diseases.
- Early planted winter vegetables are in vegetative to flowering. Avoid water stagnation in the bed. Keep the field weed free. For preventing wilting apply any copper fungicide at the base.
- Apply need based irrigation in vegetable crops followed by mulching.
- Keep vigil for attack of insect and pest and spreading of diseases and manage the weed in the field.

#### Horticultural crops

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- The current weather is congenial for fruit blight and fruit rot disease in pomegranate, to control, spray Mancozeb 600g and Carbendazim 100 g @ 200 litre of water. To control thrips in pomegranate, spray Spinosad 2.5 SC @ 10 ml per 10 liters of water.
- Use fruit fly trap to control fruit fly damage in guava orchards and cucurbits. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection.
- To control fruit blight and fruit rot disease in pomegranate, spray Mancozeb 600g and Carbendazim 100 g @ 200 litre of water.

#### Banana

- Rake up the accumulated mud from the root zone of banana for better aeration.
- Plantation of banana crop should be done
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. Cut and burn all severely affected leaves. Spray 1% Bordeaux mixture with sticker soon after the appearance of symptoms (5 to 6 sprays at fortnightly intervals). Spray 1% petroleum based mineral oils. Spray 0.1% carbendazim or 0.2% Mancozeb alternatively @ fortnightly intervals. Spray Azoxystrobin, Tebuconazole, Difenconazole (0.1%).
- There is a chance of erwinia rot in banana due to heavy rainfall in this season. As a precaution, apply lime in the banana basin or bleaching powder in the irrigation channels. To enhance the

disease resistance, drench the basin with Pseudomonas @ 20g per litre of water. Affected plants can be protected by drenching the basin with 5 g bleaching powder or 3 g Copper oxychloride or 2g Copper hydroxide per one litre of water

- Severely affected plants should be cut and removed to prevent the spread of disease

#### **Beetle vine:**

- Strengthen the fencing of boundary of betel vine so that the boundary cannot be broken due to strong wind and thunderstorm.
- No spraying of copper fungicide for control of foot and root rot should be given until all the water will removed
- Keep the drainage channels clean and arrange proper aeration in the betel vine gardens.
- Pluck muddy leaves from the lower parts of betel nut plants.
- Farmers can continue to plant the cuttings of betel vine in the main field. Select disease free cuttings and before planting treat them with Bordeaux mixture 0.5% and Streptocycline 500 ppm for half an hour. Before planting, drenching of soil with Mancozeb 75 WP (2.5 gram per litre of water) is advocated.
- In this time and under the prevailing weather, foot rot and stem rot diseases affected plants start to die. So, affected plants and its branches have to deposit in particular hole or burning and never deposit beetle vine waste in irrigated water sources like channel /pond.
- Apply irrigation.

#### **Sugarcane:**

- During the month, sugarcane plant. in grand growth stage
- All the plant protection measures should be done after the current spells of rainfall.
- Need based intercultural operations and earthing should be done.
- Irrigation can be given at weekly interval (for medium type of soil). In heavy soils, 10-15 days interval.
- If water scarcity is the there irrigate the crop in alternate row, to save the water. Drip irrigation can save the water up 40 per cent per cent.
- Application of sulphur in the form of Gypsum @ 500 kg /ha to sulphur deficient soils to increase the cane yield and juice quality.
- There is a chance to whitefly infestation in water stagnated fields of sugarcane. To control, spray monocrotophos @1.6 ml/litre of water or dimethoate @ 1.7 ml/ litre of water for two times in 10 days intervals and while spaying ensure that entire the plant should get wet.
- Proper drainage system in the sugarcane fields should be maintained to minimize outbreaks of Pyrilla pests
- There is a chance for early shoot borer incidence in sugarcane, famers are advised to spray Chlorpyrifos@2.5ml/L or Monochrotophos@1.6ml/L for control.
- To control red rot disease in sugarcane, avoid water stagnation in the field and removing of the affected plants should be practiced.
- To minimize infestation of top shoot borer in sugarcane, spray Lamba cyhalothrin @2ml/litre of water.
- Apply irrigation.

## **Cotton**

- Continue sowing of cotton
- Complete seed sowing at tith conditioned land considering seed rate 2 kg/33 decimal.
- Maintain row to row distance 25-35 inches and seed to seed distance 10-15 inches.
- High yielding varieties like CB-12, DM-2, Rupali and Suvro may be chosen for sowing.
- As there is a forecast of humid weather conditions, there may be increase in population of insect pest of cotton. Farmers are advised to install pest specific pheromone traps in the fields for monitoring the insect. If sucking pest's population is above ETL, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 litre or Trizophos 40 EC @ 1.0 ml/litre of water is advised against all type of borers after the current spell of rainfall.
- Due to variable weather conditions, high humidity and favourable temperature for the chances or infestation of white fly. Farmers are advised to keep vigil on leafhopper, thrips white fly infestation. If infestation of white fly above to the economical threshold level (ETL) than 400 ml dimethoate (rogor) 30 E.C. or 500 ml oxydemeton-methyl 25 E.C. (metasystox) spray of 1 liter Nimbecidine mixed with 250 liter water per acre, when sky remain clear.
- For control of leafhopper infestation the spray 40 ml imidacloprid (Confidor) 200SL mixed with 120-150 liter water per acre, during clear weather.
- Apply irrigation.

## **Rapeseed & mustard**

- The optimum time of sowing of mustard is middle of October to middle of November. Early sowing helps in escaping the attack of aphids. Advise for land preparation and seed collection. Farmers are advised to prepare their lands and apply lime at least 21 days prior to sowing of seeds and also collect improved varieties of rapeseed and mustard from authentic sources.

## **Livestock**

- Protect the animals from variable weather conditions and provide proper ventilation and dry bedding. Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily along with animal feed/fodder, green fodder to keep them healthy Hygiene should be maintained around cattle shed.
- The present weather condition is favorable for infestation of round worm, flukes and tapeworms. De-worming may be done under recommendation and supervision of authorized practitioner.
- Protect cattle from sun.
- Vaccinate the livestock for Black Quarter and foot and mouth diseases.
- It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to any cattle, goats,
- To prevent the livestock from worm infestations, it is advised to give Piperzine or Mebendazole at recommended dose after proper consultation with veterinary doctor.
- Always allow them to graze in dry land area.

## **Poultry**

- There is chance of fungal attack due to high humidity, keep the poultry house dry and clean and apply lime with litter
- In poultry farms, appropriate space should be kept @ 1 sq. ft. per broiler and 2-2.5 sq. ft./ layer.
- Follow proper vaccination at proper interval

- There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Spray water on poultry shade during hot weather condition. Viral ganboro disease infection may be high due to high temperature and humidity. Early cautionary and vaccination are prevented measures.

### **Fishery**

- Maintain good amount of water in pond to save fishes from variable weather.
- Apply lime for cleaning the water.
- To avoid insect infestation in nursery ponds, apply soap oil emulsion (a mixture of cheap soap @ 2.5 kg and kerosene oil @ 13 litter per bigha of pond) and apply gently in nursery ponds
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond.
- Select healthy, diseases free breeds of fishes from authentic sources after consulting with fishery officials. Before releasing, the fingerlings should be treated with Potassium permanganate (@ 3-5%.
- To keep in touch with local fisheries office for more information.

## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 09 AM on 14 October 2020) and maximum temperature on 13 October, minimum temperature on 14 October 2020 is given below:

Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)	Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)
Dhaka	Dhaka	Trace	34.6	25.9	Rajshahi	Rajshahi	00	35.4	26.5
	Tangail	00	36.0	25.4		Ishurdi	00	35.6	26.8
	Faridpur	00	35.6	26.5		Bogura	00	35.2	27.0
	Madaripur	00	35.3	26.0		Badalgachhi	00	35.0	25.8
	Gopalganj	00	35.2	25.8		Tarash	00	36.0	27.5
	Nikli	00	35.2	xx					
Mymensingh	Mymensingh	00	35.5	26.8	Rangpur	Rangpur	00	35.2	26.0
	Netrokona	01	34.7	27.0		Dinajpur	00	36.1	24.3
						Sayedpur	00	35.5	25.8
Chattogram	Chattogram	00	36.0	26.8		Tetulia	00	35.3	<u>22.5</u>
	Sandwip	00	35.3	26.5		Dimla	00	34.6	25.0
	Sitakunda	02	xx	25.3		Rajarhat	00	34.5	24.5
	Rangamati	01	<u>36.5</u>	25.8	Khulna	Khulna	00	35.8	27.0
	Cumilla	08	35.7	24.5		Mongla	00	35.1	27.2
	Chandpur	00	35.9	27.0		Satkhira	00	35.2	27.5
	M.Court	00	35.0	26.0		Jashore	04	34.4	26.0
	Feni	00	36.0	25.0		Chuadanga	00	36.0	26.2
	Hatiya	00	34.2	26.2		Kumarkhali	<u>42</u>	35.0	27.0
	Cox's Bazar	00	34.2	26.5					
Kutubdia	00	34.0	26.2	Barishal		Barishal	00	35.3	26.4
Teknaf	00	34.8	24.3			Patuakhali	00	35.9	26.9
						Khepupara	00	35.0	26.5
Sylhet	Sylhet	00	36.1	26.6		Bhola	00	36.3	26.8
	Srimangal	00	35.2	24.5					

### Highlights:

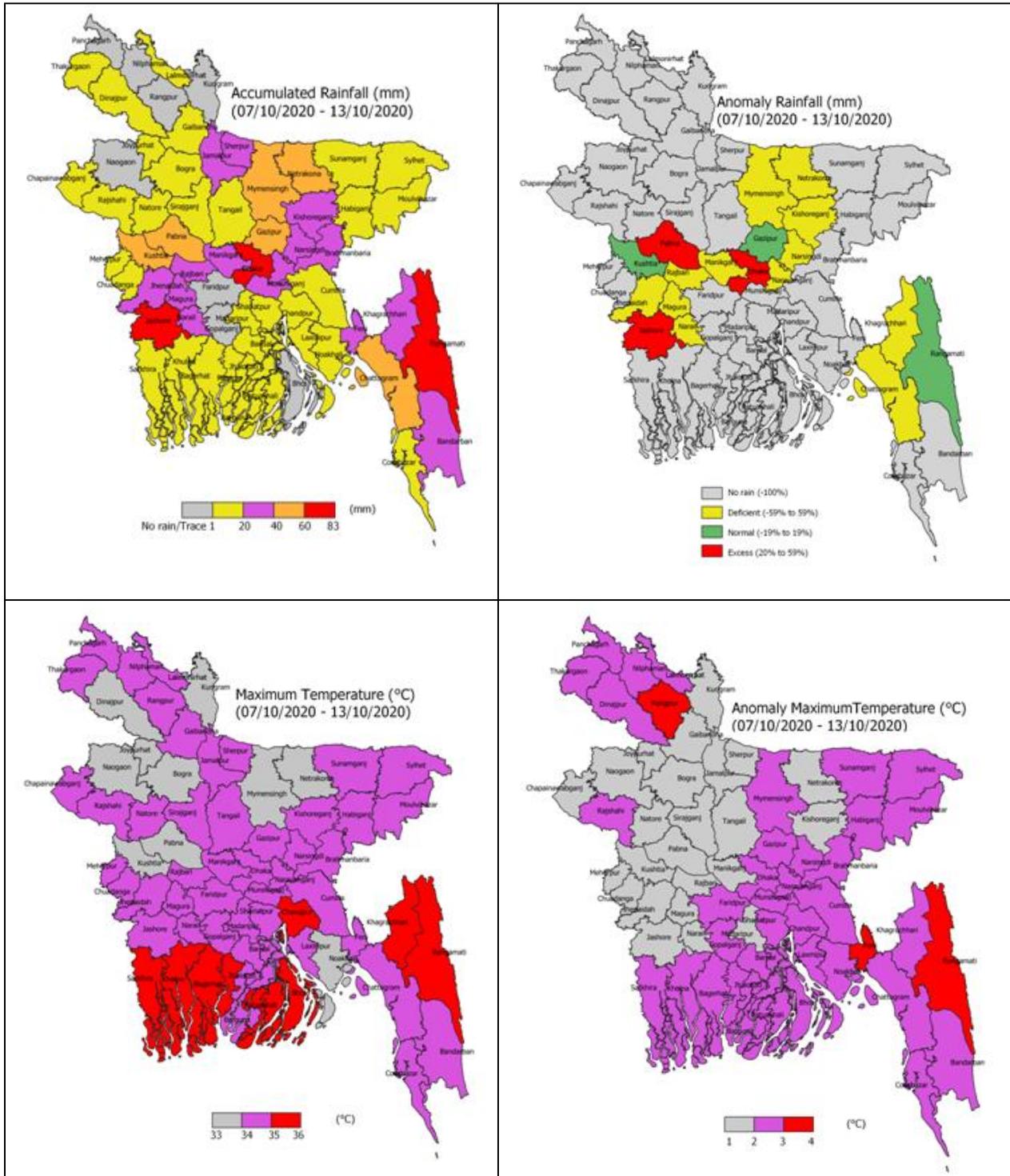
- Country average bright sunshine hour was 4.45 hours per day during last week.
- Country average free water loss during the previous week was 2.78 mm per day.

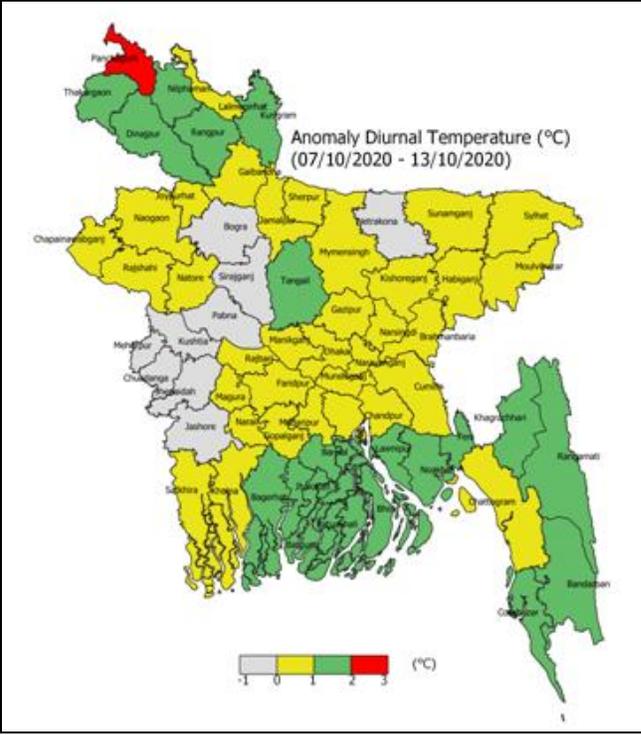
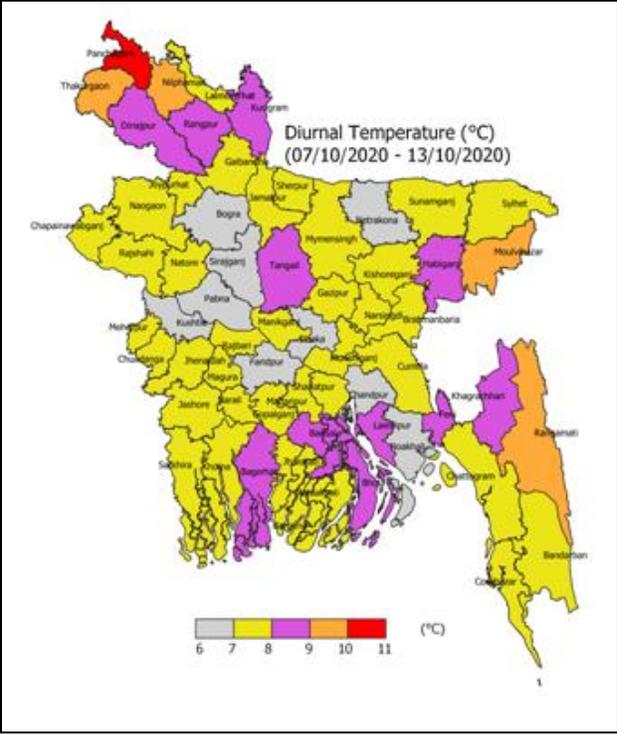
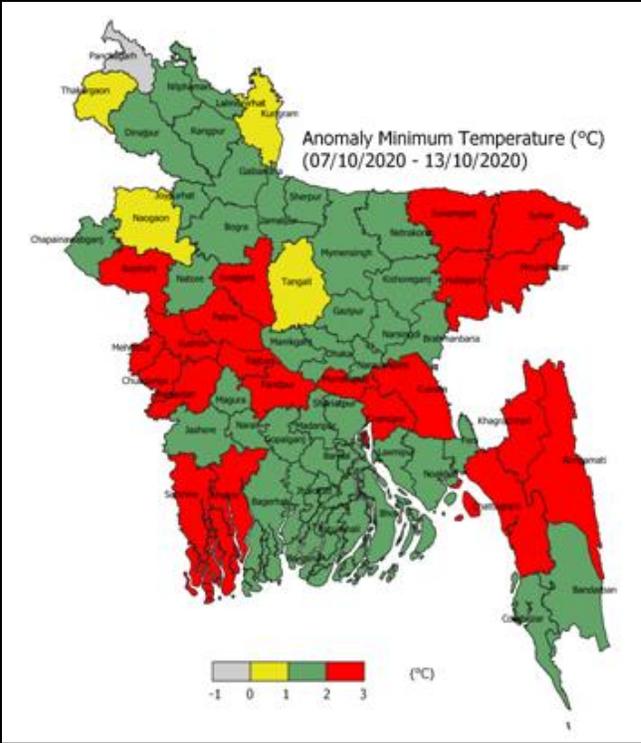
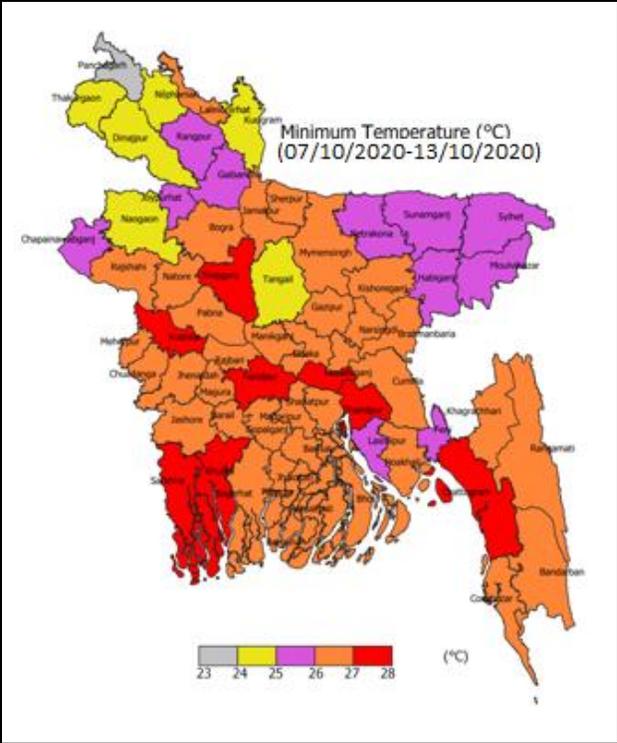
### Weather Forecast Valid for 24 Hours commencing 06 PM Today:

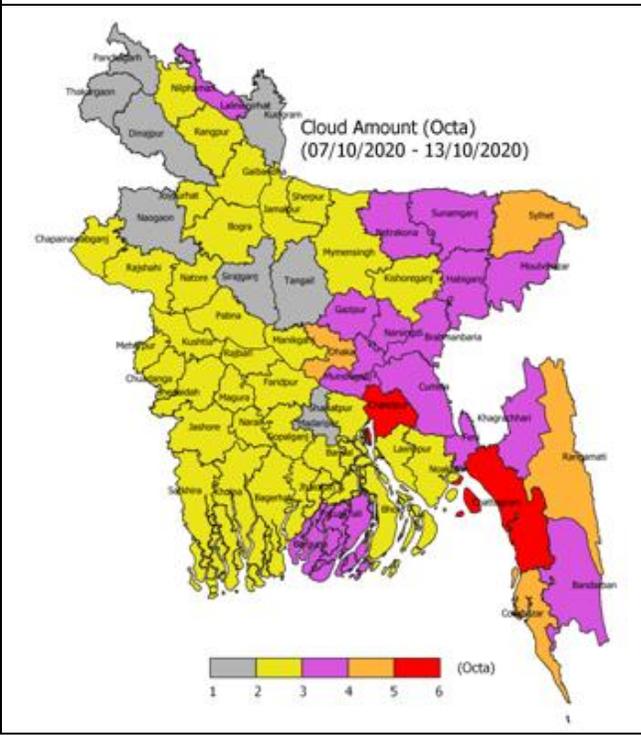
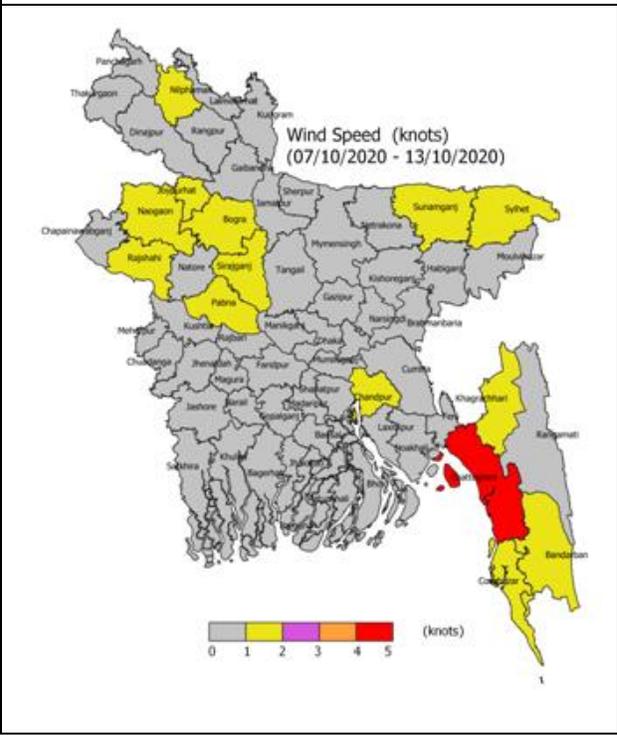
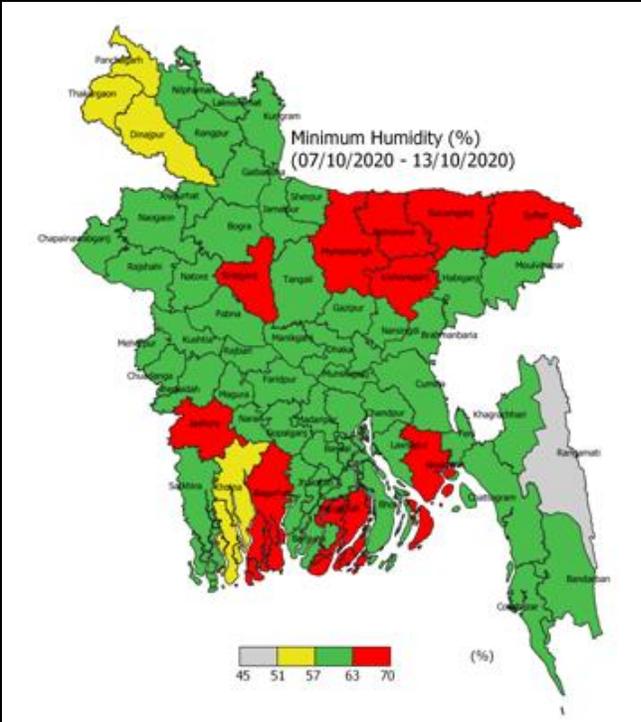
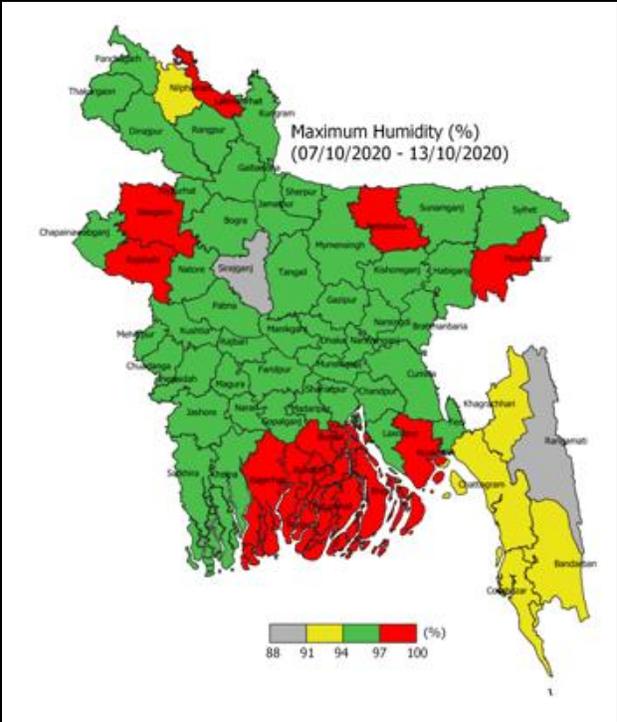
**Forecast:** Rain/thunder showers accompanied by temporary gusty wind is likely to occur at one or two places over Rajshahi, Mymensingh, Dhaka, Khulna, Barishal, Chattogram & Sylhet divisions. Weather may remain mainly dry with temporary partly cloudy sky elsewhere over the country.

**Temperature:** Day and night temperature may remain nearly unchanged over the country.

## Spatial Distribution of weather parameters for the Week ending 13 October 2020





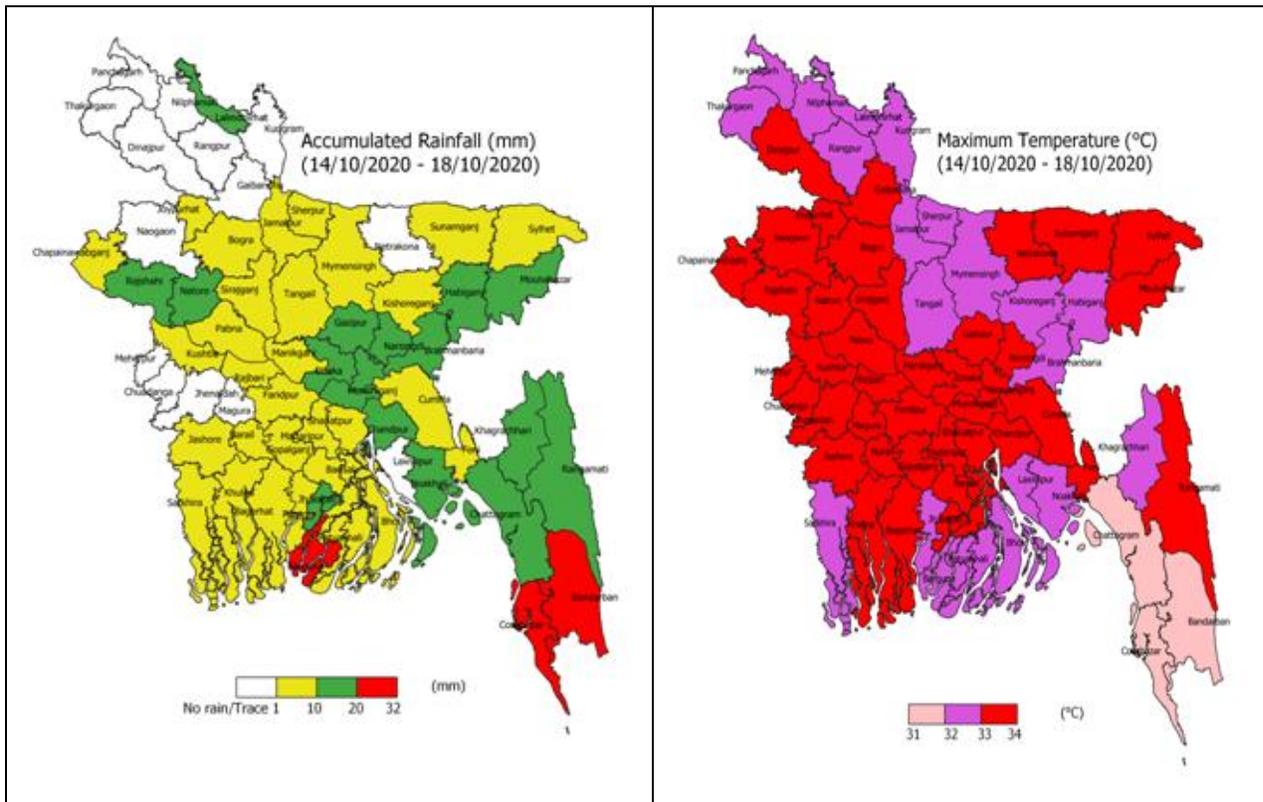


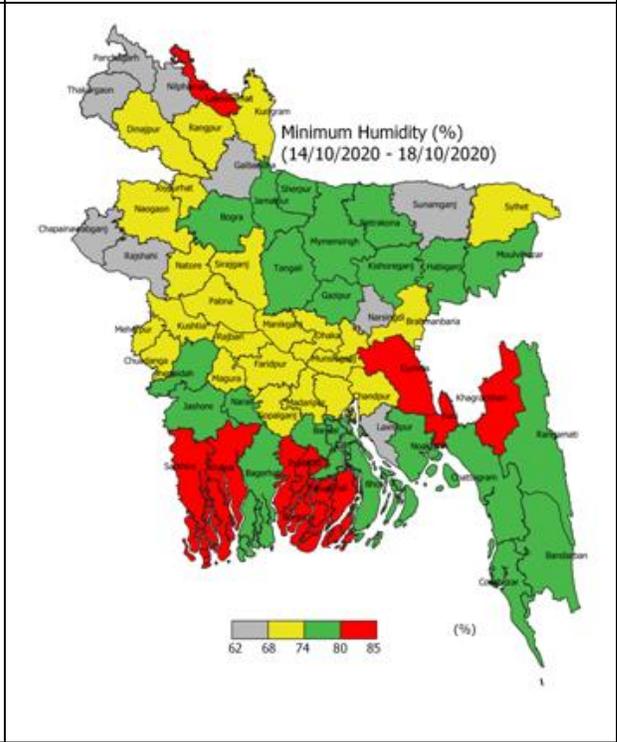
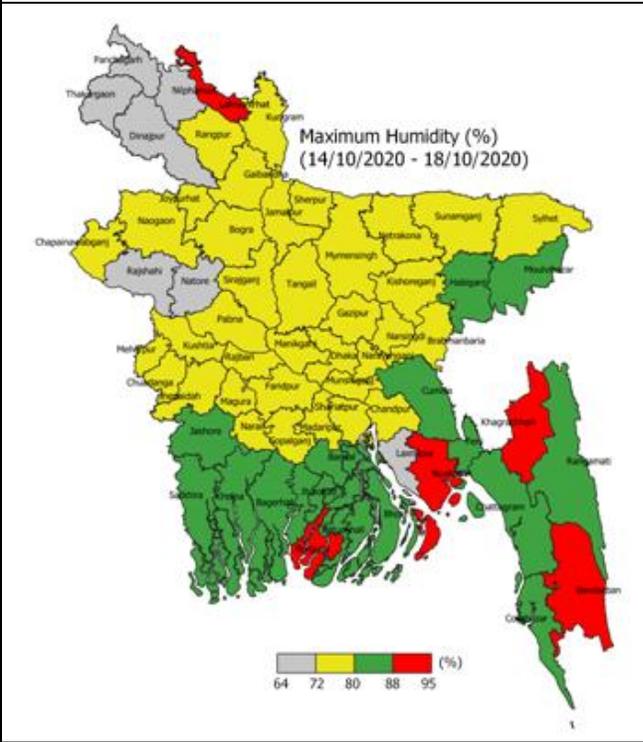
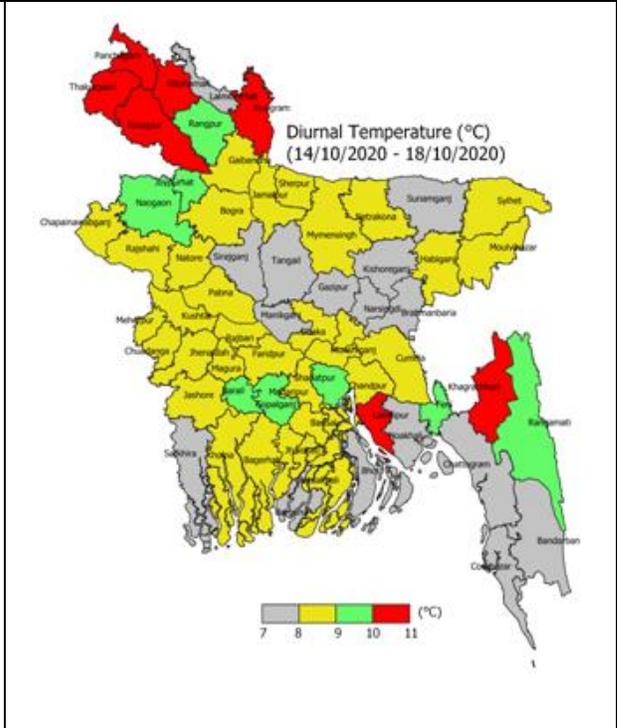
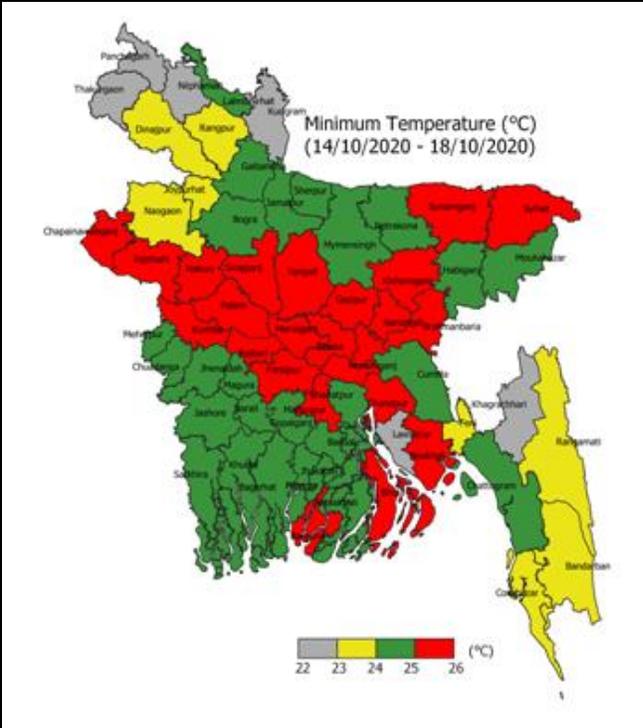
### Weather Forecast and Advisory for the Period of 08.10.2020 to 14.10.2020

Bright sunshine hour is likely to be from 4.50 to 5.50 hours per day during this week. Average free water loss is likely to be from 3.00 to 4.00 mm per day during this week.

- Light (04-10mm/day) to moderate(11-22 mm/day) rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Chattogram, Sylhet, Dhaka, Mymensingh, Khulna, Rajshahi and Barishal divisions and at few places over Rangpur division with chances of moderately heavy (23-43 mm/day) falls at places over the country during this period.
- Day and night temperature may slightly fall over the country during this period.

### **District Wise Quantitative Weather Forecast for next Five days from 14October-18 October'2020**

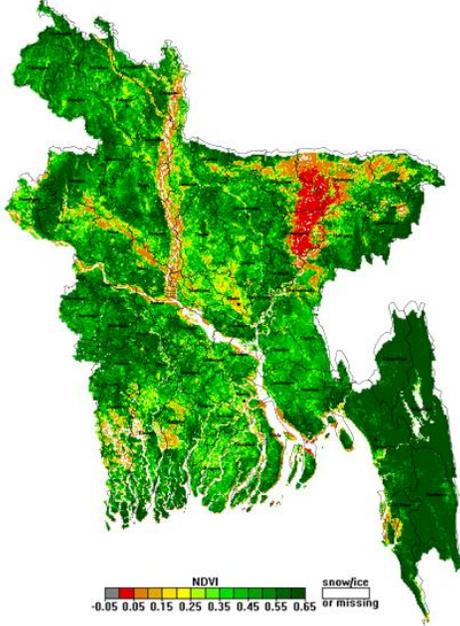




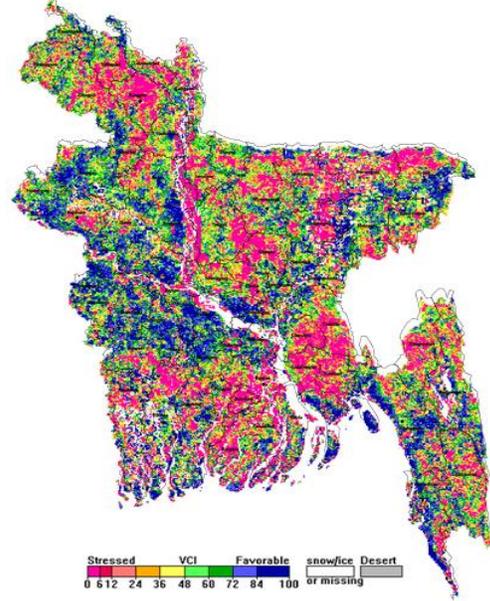


# Different Satellite Products over Bangladesh

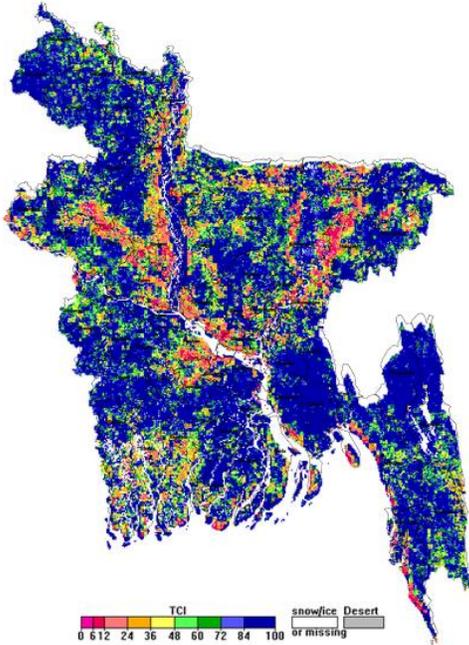
NOAA/VIIRS BLENDED NDVI composite for the week No. 40 (29 September -05 October) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED VCI composite for the week No. 40 (29 September -05 October) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED TCI composite for the week No. 40 (29 September -05 October) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED VHI composite for the week No. 40 (29 September -05 October) over Agricultural regions of Bangladesh

