Weekly Weather Summery

08-14 August 2021

1. Rainfall

Southwest monsoon conditions were active in some days of this week. Southwest quarter had received some showers during some days of the week. However, more rainfall had been reported from interior parts of Rathnapura, Kegalle and Nuwara-Eliya districts (Fig 1). Further, rainy weather was continuing in Southwestern parts on 08th, 09th, 11th and 12th August while afternoon thunder showers had reported in Eastern parts of the country. An isolated afternoon showers occurred in North-central parts, Batticaloa and Ampara districts on 10th August.

Moderate showers had been reported from Badulla district on 09th August. Fairly widespread showers had received in Batticaloa district on 09th and scattered showers reported on 08th as well as 12th August. Very heavy rainfall had been reported from Kandy district on 08th as well as 12th August.

Fairly heavy, heavy and very heavy rainfall had been reported from hydro catchment areas which are located in western slope of the central hills on 11th August. Moderate to fairly heavy rainfall with isolated heavy rainfall had been reported on 08th as well. Except of 10th August, showers were reported from hydro catchment areas during this week.

Except of 10th, showers had been received throughout the week in Nuwara-Eliya district. Except of 14th, some showers had reported from Gampaha and Kaluthra districts and rainy condition were enhanced on 08th as well as 09th August. Moderate to fairly heavy showers had been reported from Rathnapura district on 08th too.

Highest daily (24 hour) rainfall, 152.9 mm was reported from Handessa (Kandy district) on 12th August. Highest weekly total rainfall, 373.7 mm was reported from Wewelthalawa (Kegalle district) rain gauge during this week.

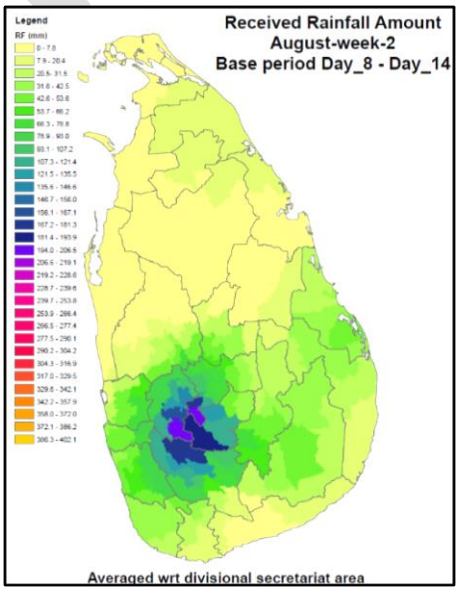


Figure 1: Total rainfall (mm) during the week

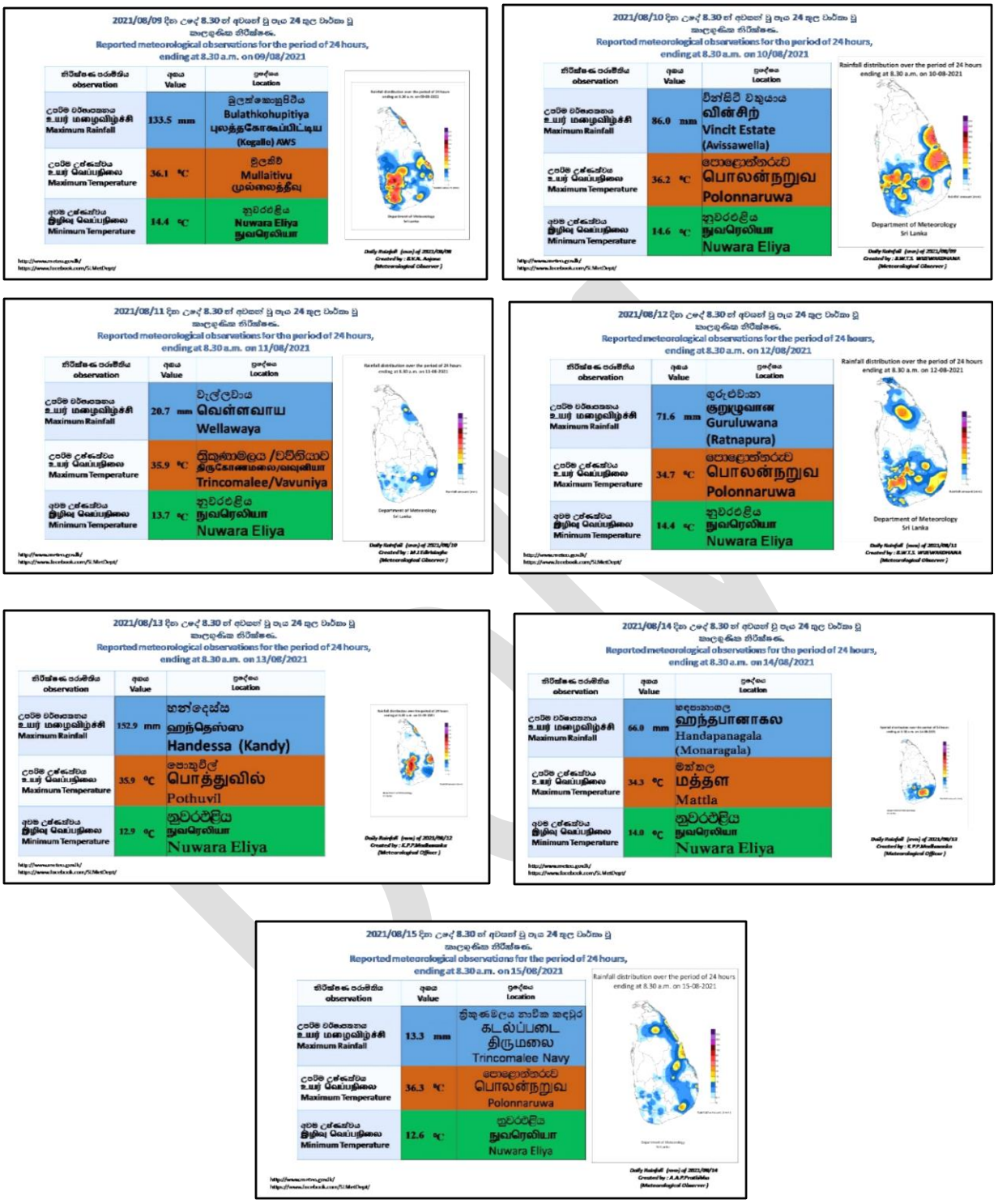


Figure 2. Daily Rainfall (mm) and maximum and minimum temperatures (^{0}C) during the week.

Main Meteorological Stations	Rainfall (mm)
Anuradhapura	0.0
Badulla	83.6
Bandarawela	79.6
Batticaloa	47.3
Colombo	24.8
Galle	7.3
Hambanthota	0.0
Jaffna	3.4
Monaragala	90.6
Katugasthota	57.3
Katunayake	2.6
Kurunagala	1.6
MahaIlluppallama	0.8
Mannar	1.4
Polonnaruwa	0.0
Nuwara Eliya	48.2
Pothuvil	53.7
Puttalam	0.3
Rathmalana	31.1
Rathnapura	143.6
Trincomalee	3.2
Vavuniya	36.9
Mattala	0.3

Hydro-Catchment Areas	
Station	**Rainfall (mm)**
Castlereigh	164.0
Norton	349.9
Maussakele	132.8
Canyon	261.6
Laksapana	342.8
Upper kotmalee	121.0
Kotmalee	170.1
Victoriya	7.0
Randenigala	0.0
Rantambe	0.0
Bowatenna	1.2
Ukuwela	63.7
Samanala Wewa	0.0
Kukuleganga	123.0
Maskeliya	192.4

Rain Gauge Stations	
Station	**Rainfall (mm)**
Weweltalawa	373.7
Holmwood	356.2
Watawala	317.1
Guruluwana	274.5
Vincit Estate	237
Handessa	214.3
Karagala	178
Undugoda	165.9
Helboda North	158
Moralioya	154.9
Kotagala Rosita	148.6
Aranayeke	139.1
Weweltalawa	373.7
Holmwood	356.2

Table 1: Total weekly Rainfall (mm) at Main Meteorological stations, Hydro-catchment areas and some rain gauge stations during the week.

2. Temperature

2.1 Maximum temperature

The highest day time (maximum) temperature, 36.3 ^{0}C was reported from Polonnaruwa on 14th August (Fig 3.a). Nuwara Eliya was reported its highest maximum temperature 20.2^{0}C, on 11th August. Except of a 08th and 12th, above normal maximum temperatures had reported in many stations throughout the week (Fig 3.b). Weekly highest positive anomaly of maximum temperature, 4.6^{0}C reported at Hambantota on 14th. And weekly lowest negative anomaly of maximum temperature, 3.6^{0}C at Rathnapura on 12th August.

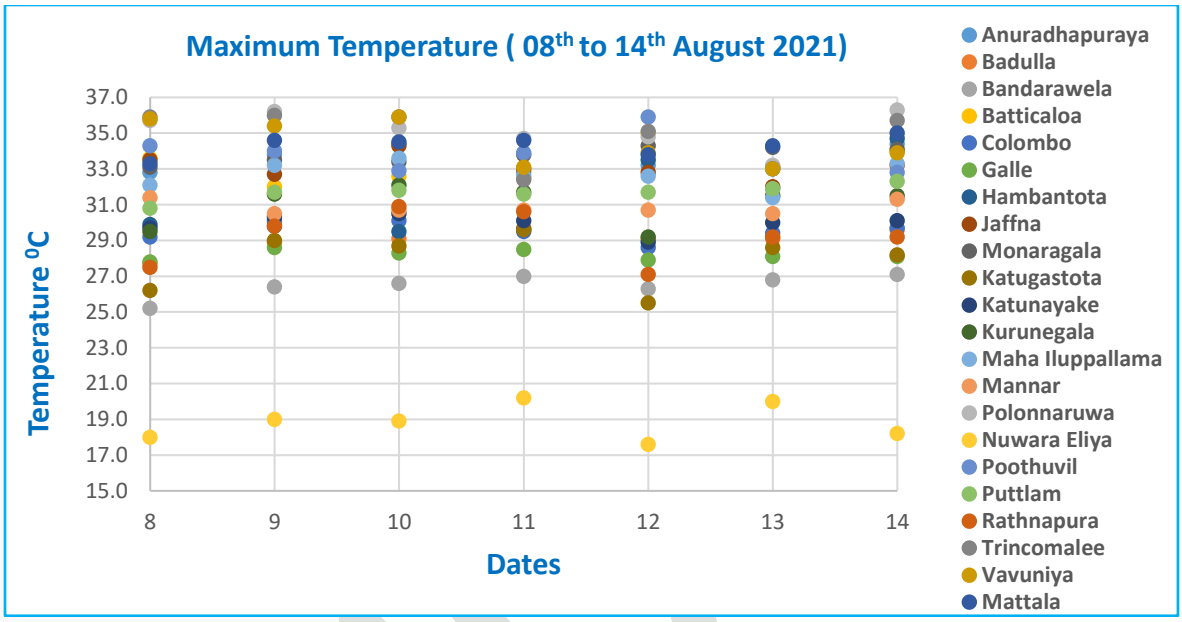


Fig 3.a: maximum temperature

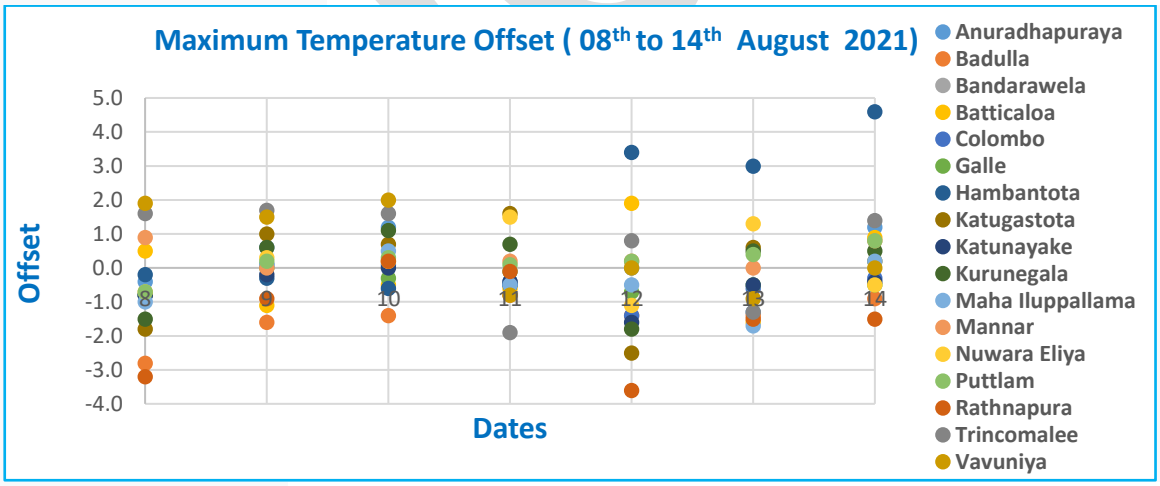


Fig 3.b: maximum temperature anomaly

Figure 3. Maximum temperatures (^{0}C) and anomalies (^{0}C) during the week

2.2 Minimum temperature

The weekly lowest minimum temperature, 12.9 ^{0}C was reported as usual from Nuwara-Eliya station on 13th August. The weekly highest minimum temperature 28.0 ^{0}C, was reported at polonnaruwa on 11th (Fig 4.a). Above normal minimum temperatures had been reported from many main Meteorological stations during this week (Fig 4.b). Highest positive anomaly of minimum temperature 2.5 ^{0}C was reported at Rathmalana on 12th August. Lowest negative anomaly of minimum temperature, 1.2 ^{0}C was reported at Batticaloa on 10th August.

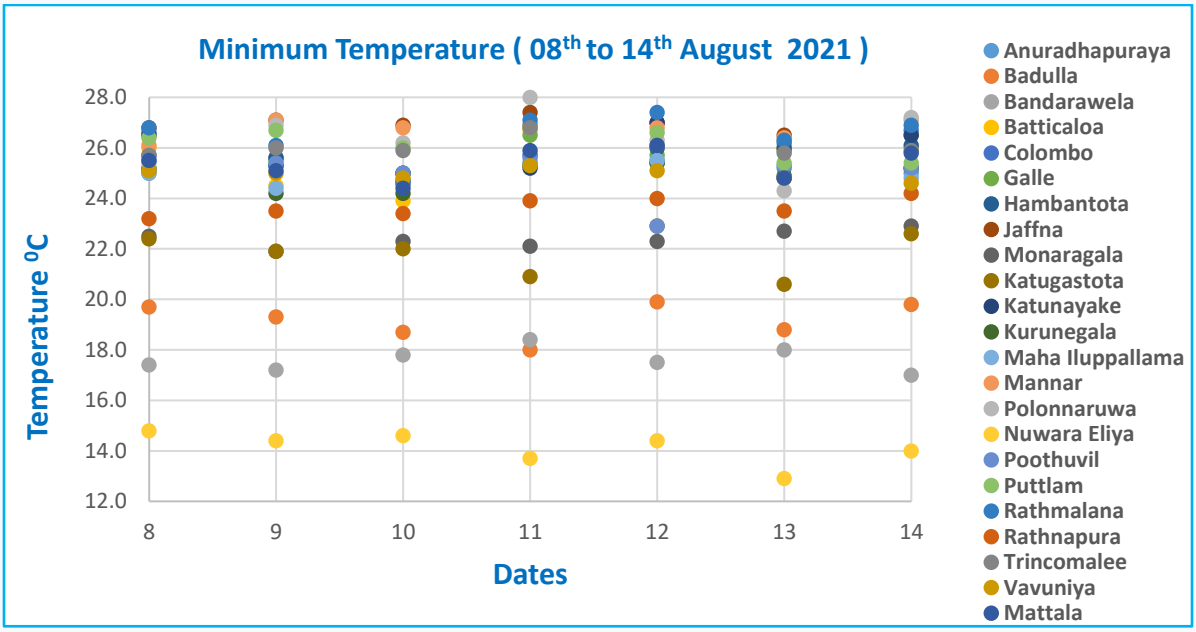


Fig 4.a: minimum temperature

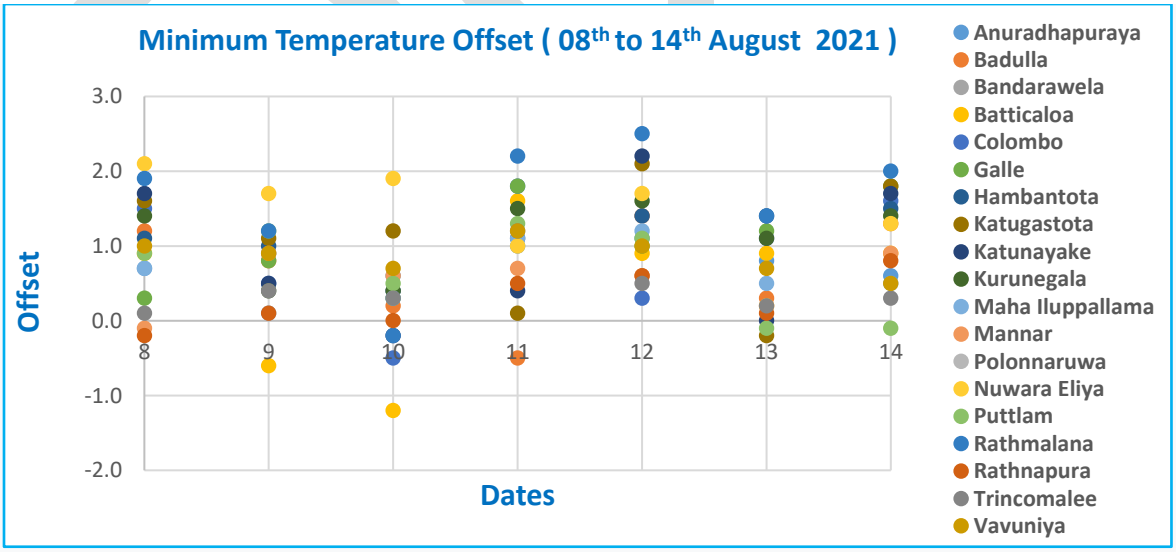


Fig 4.b: anomaly of minimum temperature

Figure 4. Minimum temperatures (^{0}C) and anomalies (^{0}C) during the week

3. Wind

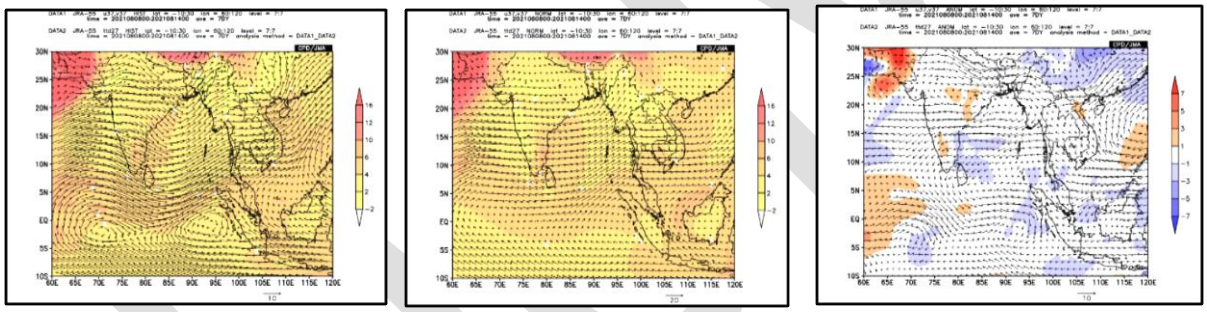
Light to moderate or moderate southwesterly, surface winds were prevailed over the Island during this week. Except of 14th August, moderate Southwesterly pressure gradient was prevailed in between Colombo and Trincomalee where it was steep. And steep pressure gradient was appeared in-between Colombo and Jaffna, on 09th and 14th August too.

Upper winds at 850hPa:

Fresh westerly to Northwesterly winds were prevailed over the country till 11th August. And it was changed as westerly, strong over the Island at 850hpa during the latter part of this week. Mild cyclonic circulations were exist over northern part of Bay of Bengal and China Sea.

Northwesterly weekly average observed winds were prevailed over the island (Figure 5.a) at 850hpa during this week. North-westerly to Westerly climatological (Figure 5.b) wind pattern is prevailed over the Island at 850hpa during this week. There was Northeasterly, slightly moist wind anomaly (Figure 5.c) was prevailed over northern parts of the country at 850hpa.

Observed Climatology Anomaly



(a) **(b)** **(c)**

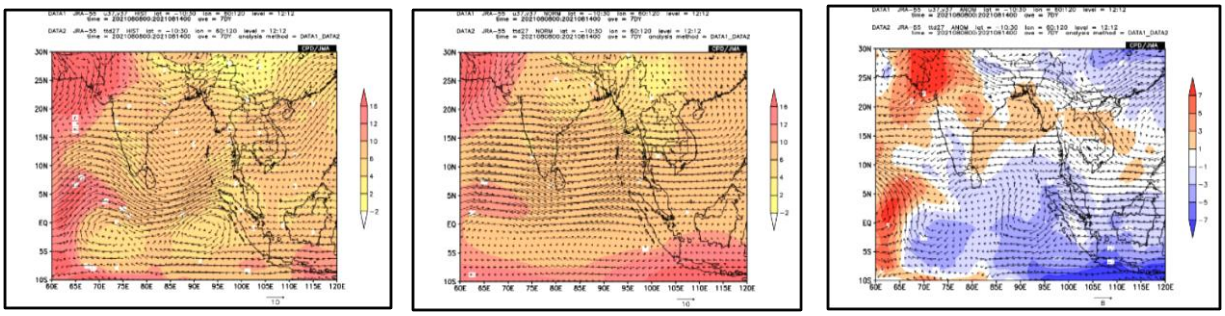
***Figure 5: wind pattern with dewpoint departures at 850hpa**

Upper winds at 700hPa:

Moderate or fresh Westerly to Northwesterly winds were prevailed over the Island at 700hpa during this week. Mild cyclonic circulations were exsist over northern part of Bay of Bengal and China Sea.

North, North-westerly, dry weekly averaged observed winds were prevailed over the country during this week (Figure 6.a). Northwesterly dry climatological (Figure 6.b) winds are prevailed at 700hPa level during this week. Easterly slightly moist wind anomaly (Figure 6.c) was prevailed over the southern half of the country at 700hpa.

Observed Climatology Anomaly



(a) (b) (c)

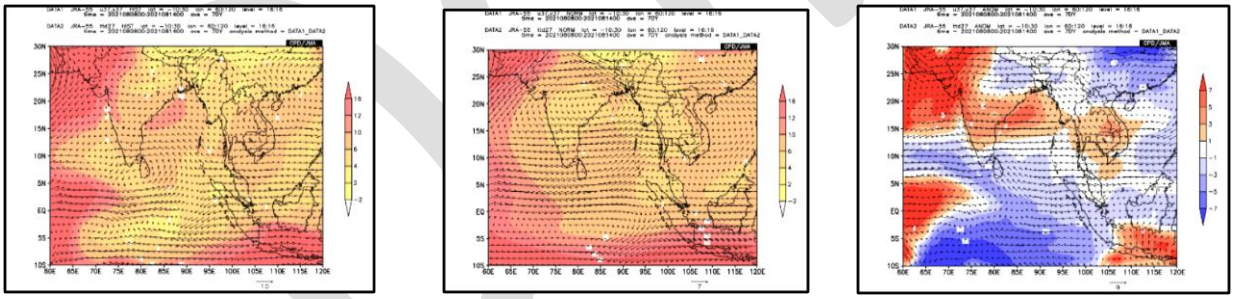
***Figure 6: wind pattern with dewpoint departures at 700hpa**

Upper winds at 500hPa:

Light easterly, winds were changed to light to moderate Westerly to Southwesterly over the country 11th August onwards. Mild cyclonic circulations were appeared at the Central Bay of Bengal and China Sea 10th onwards.

Cyclonic, dry weekly average observed (Figure 7.a), winds were over the island during this week at 500hpa. The climatological wind pattern is Northwesterly and dry (Figure 7.b). However, southeasterly to easterly moist wind anomaly (Figure 7.c) was prevailed over the Island at 500hpa during this week.

Observed Climatology Anomaly



(a) (b) (c)

***Figure 7: wind pattern with dewpoint departures at 500hpa**

Remarks: *Figure 5, 6 & 7: source "ITACS"-products of Japan Meteorological Agency

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Rainfall (mm)	Winds (knots)	Pressure distribution (hpa)	Pressure gradient (hpa)
Light : 00-12.5	Light :00-05	Even :0.0-0.4	Mild : 1.0-1.9
Light to moderate: 12.5-25.0	Light to moderate :05-10	Fairly even: 0.5-0.9	Moderate : 2.0-2.9
Moderate : 25.0-50.0	Moderate :10-15		Steep : 3.0-3.9
Fairly heavy : 50.0-100.0	Fresh :15-20		Very steep :4.0-4.9
Heavy : 100.0-150.0	Strong :20-30		
Very heavy : 150 and over	Very strong :30 and over		