

Weekly Weather Summery

08 -14 August 2020

1. Rainfall

Southwest monsoon conditions were continued during this week. Showers were continued in southwestern parts until 11th August. And there was light to moderate and moderate showers were reported in Jaffna district on 08th and in Uva province and Potuvil (Batticaloa district) on 11th. There were light showers in Southwest quarter 11th onwards. Low level convergence was in Jaffna area on 08th and 09th.

Low pressure area was formed near Philippines on 07th and it had organized in to a tropical depression on 09th. However, it had intensified in to a severe tropical storm Mekkhala on 09th and it was across China on 11th. Large scale wind patterns were weakening due to its landfall.

The highest daily recorded rainfall 87.5mm, was reported at Pimbura hospital (Kaluthara district) on 08th August. Hydro-catchment areas in the south-western slope of central hills were received moderate rainfalls until 11th August. Highest weekly total rainfall 184.8mm, was received at Canyon and it's including on 08th and 09th consecutive two days fairly heavy rainfall.

According to the DMC situation report, some families were damaged due to high winds at Hambantota (on 10th and 11th), Batticaloa (on 11th) and Kandy (on 10th and 12th) districts. Slight dry weather was experienced in some parts of dry zone during this week too.

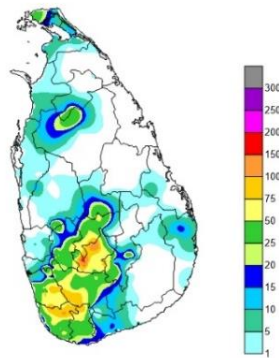


Figure 1: Total rainfall (mm) during the week

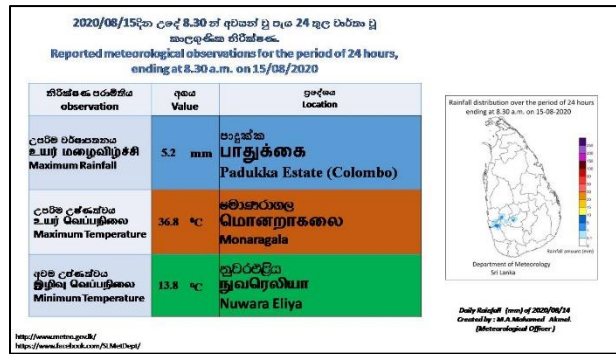
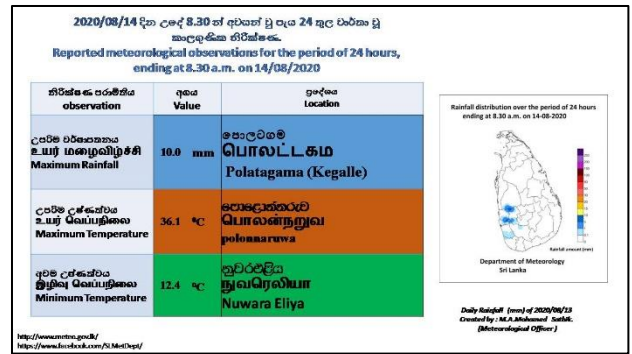
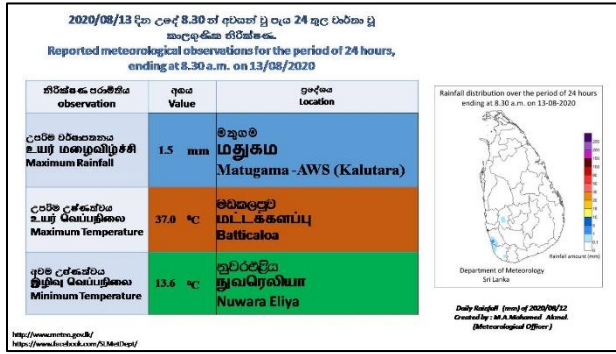
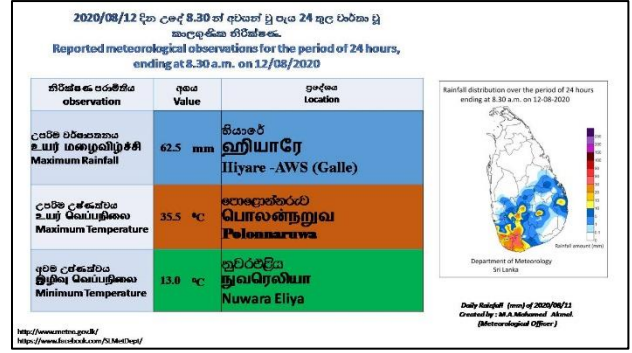
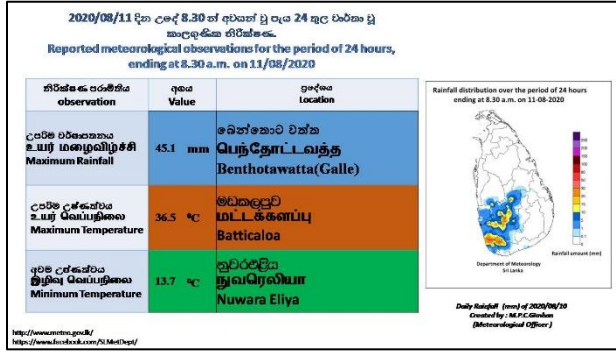
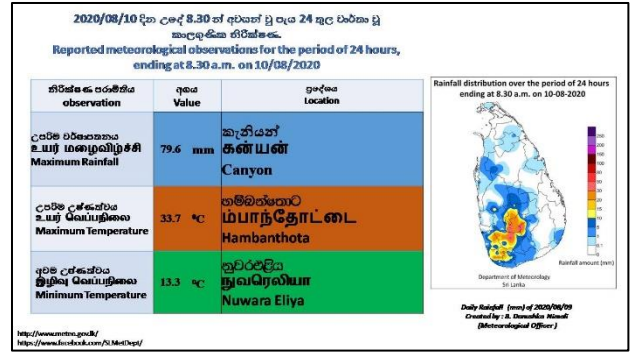
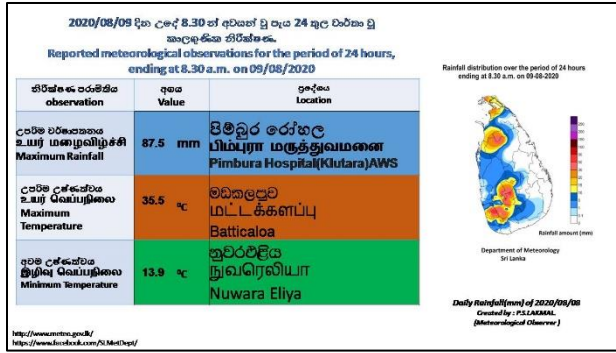


Figure 2. Daily Rainfall (mm) and maximum and minimum temperatures (⁰C) during the week.

Main Meteorological Stations	Rainfall (mm)
Anuradhapura	5.2
Badulla	33.2
Bandarawela	15.4
Batticaloa	10.1
Colombo	0.6
Galle	46.3
Hambanthota	6.6
Jaffna	20.5
Monaragala	1.0
Katugasthota	39.9
Katunayake	1.4
Kurunagala	5.7
MahaIlluppallama	0.2
Mannar	4.1
Polonnaruwa	0.0
Nuwara Eliya	44.2
Pothuvil	0.0
Puttalam	2.4
Rathmalana	5.2
Rathnapura	64.8
Trincomalee	0.5
Vavuniya	9.0
Mattala	3.3

Hydro-Catchment Areas	
Station	Rainfall (mm)
Castlereigh	146.0
Norton	180.8
Maussakele	154.4
Canyon	184.8
Lakshapana	125.3
Upper Kotmale	54.9
Kotmale	76.8
Victoriya	4.7
Randenigala	1.1
Rantambe	0.0
Bowatenna	15.4
Ukuwela	24.9
Samanala Wawa	8.5
Kukuleganaga	97.0
Maskeliya	84.0

Rain Gauge Stations	
Station	Rainfall (mm)
Gurudiyapotha Tea Factory	82.5
Vithanakanda Estate	84.5
Sogama	86.0
Lookandura	89.2
Kotagala Rosita	90.6
Ambewela	91.1
Dellawa Tea Factory	92.5
Deniyaya	93.5
Laxapana Tea Factory	96.0
Dunkeld Estate Factory	97.0
Batuwanagala	98.5
Vogan Estate	101.8
Pimbura Hospital	105.5
Hiniduma	115.5
Helboda North	145.7

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

2. Temperature

The highest day time (maximum) temperature, 37.0 °C was reported from Batticaloa main meteorological station on 12th and further same station was reported it on 08th and 10th August (Figure 3.a). Highest maximum temperature was reported at Polonnaruwa on 11th and 13th. Highest maximum temperature was reported at Hambantota and Monaragala on 09th and 14th August respectively. Nuwara Eliya was reported its highest maximum temperature 20.2°C, on 14th August.

Below normal maximum temperatures were reported in many stations on 08th and 09th August (fig 3.b). Below normal maximum temperature was reported at Puttalam, Anuradhapura, Mannar, Vavuniya, MahaIlluppallama, Galle and Katunayake in almost all days during this week. Highest maximum temperature anomaly 3.9°C, was reported at Batticaloa on 12th August.

The lowest minimum temperature 12.4°C, was reported as usual from Nuwara-Eliya station on 14th August. The minimum temperature was reported in between 12.0 °C to 14.0°C at NuwaraEliya (Fig 3.c) throughout the week. Above normal minimum temperatures were received at all most all stations on 08th and 11th August. Except of few stations, above normal minimum temperatures were received at other all stations throughout the week. Above normal minimum temperatures were reported at Colombo, Katunayake, Rathmalana, Hambantota and Katugastota throughout the week (Fig 3.d).

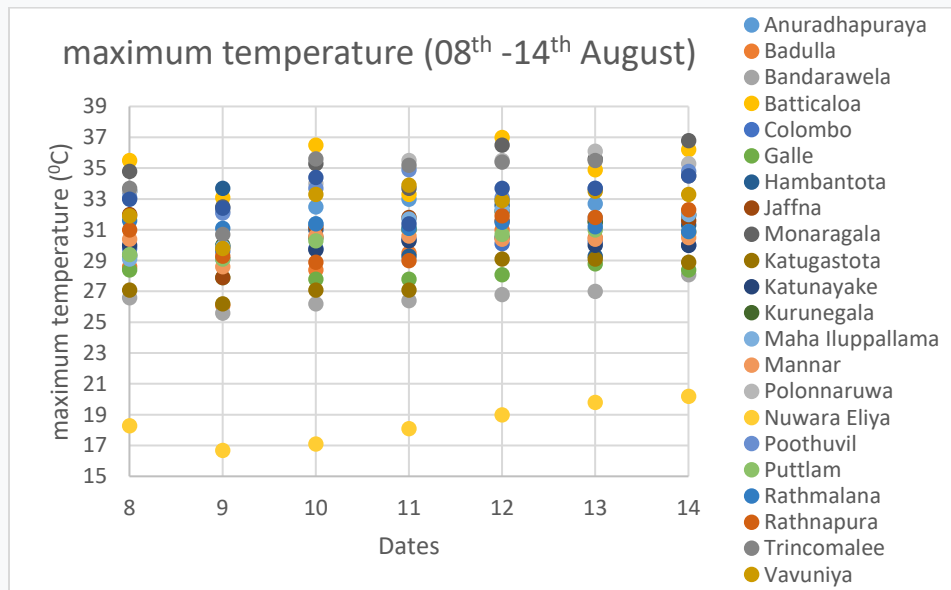


Fig 3.a: maximum temperature

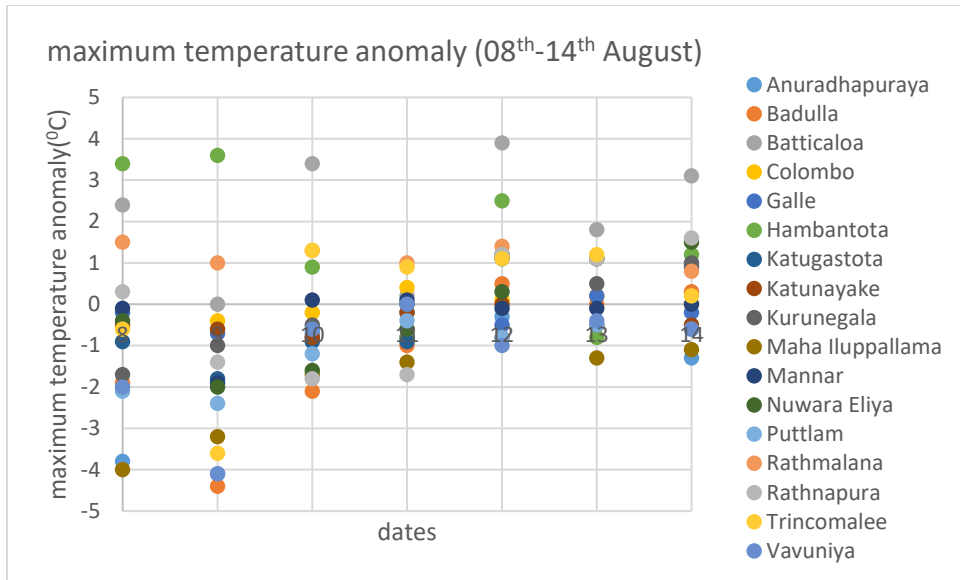


Fig 3.b: anomaly of maximum temperature

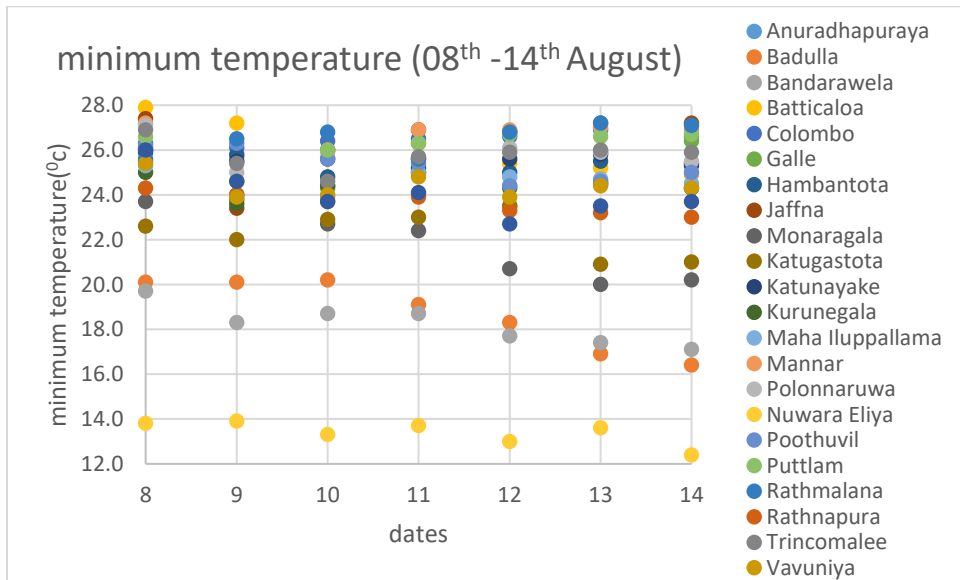


Fig 3.c: minimum temperature

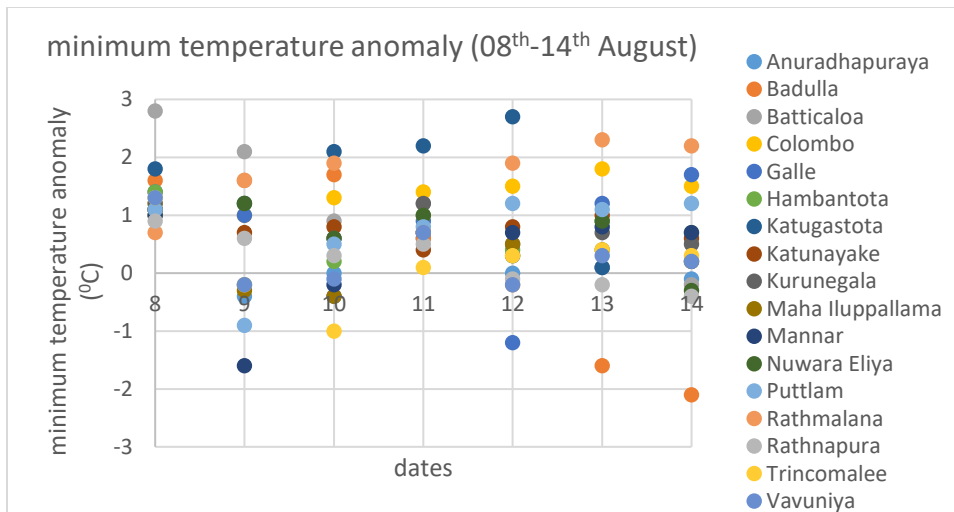


Fig 3.d: anomaly of minimum temperature

Figure 3. Maximum and minimum temperatures (°C) and offsets (°C) during the week

3. Wind

Southwesterly light to moderate or moderate surface winds were prevailed during this week. There was moderate Southwesterly pressure gradient across the Island throughout the week.

Upper winds at 850hPa:

Generally, strong Northwesterly (25-35kts) to Westerly winds were prevailed over the Island during this week.

North westerly to Westerly weekly average winds were prevailed over the island (Figure 4.a) at 850hpa during this week. Northwesterly climatological (Figure 4.b) wind pattern is prevailed over the Island during this week. Westerly to Northwesterly wind anomaly was slightly moist in Eastern parts, while the near normal moist condition was continuing in Western parts (Figure 4.c) at 850hpa during this week.

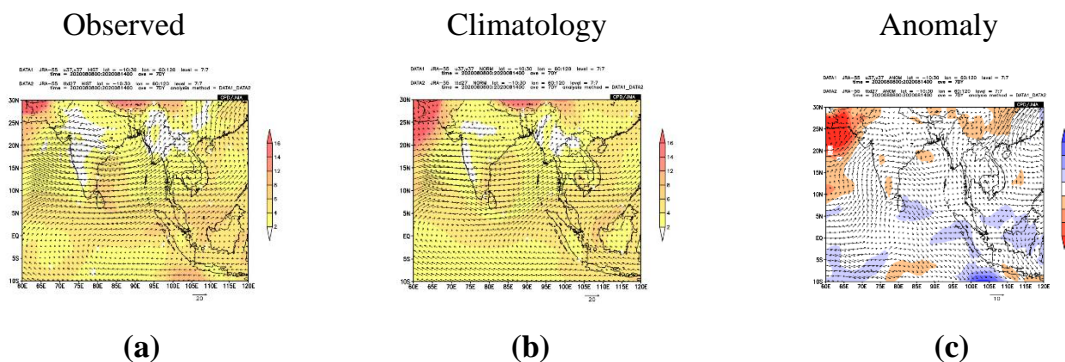


Figure 4: wind pattern with dewpoint departures at 850hpa

Upper winds at 700hPa:

Westerly winds (15-25kts) were prevailed over the Island during this week.

Weekly averaged Observed winds were Westerly (Figure 5.a) and Northwesterly climatological (Figure 5.b) winds are prevailed at 700hPa level during this week. Southwesterly to westerly slightly moist wind anomaly (Figure 5.c) was prevailed over the Island at 700hpa during this week.

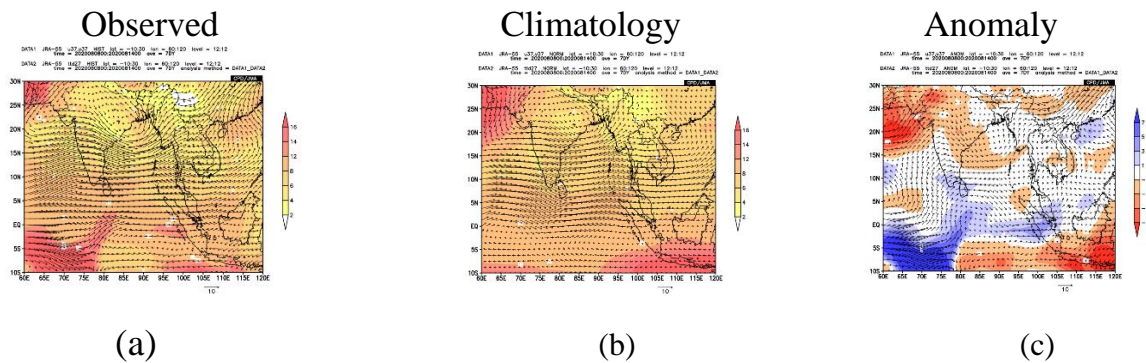


Figure 5: wind pattern with dewpoint departures at 700hpa

Upper winds at 500hPa:

Westerly to Southwesterly (10-20kts) winds were prevailed until 11th and it was changed to northwesterly thereafter. Mild cyclonic circulation was located in vicinity of Northern part of Sri Lanka on 08th August.

The weekly observed (Figure 6.a) winds were Westerly to Northwesterly over the island. And anticyclonic circulation over the Arabian sea with ridge axis around 18N at 500hpa during this week. The climatological wind pattern is Northwesterly to Westerly (Figure 6.b). And anticyclonic circulation over Northwest Indian coast with East-West oriented ridge axis around 20N as well. However, Westerly to Northwesterly wind anomaly (Figure 6.c) was prevailed over the Island at 500hpa during this week.

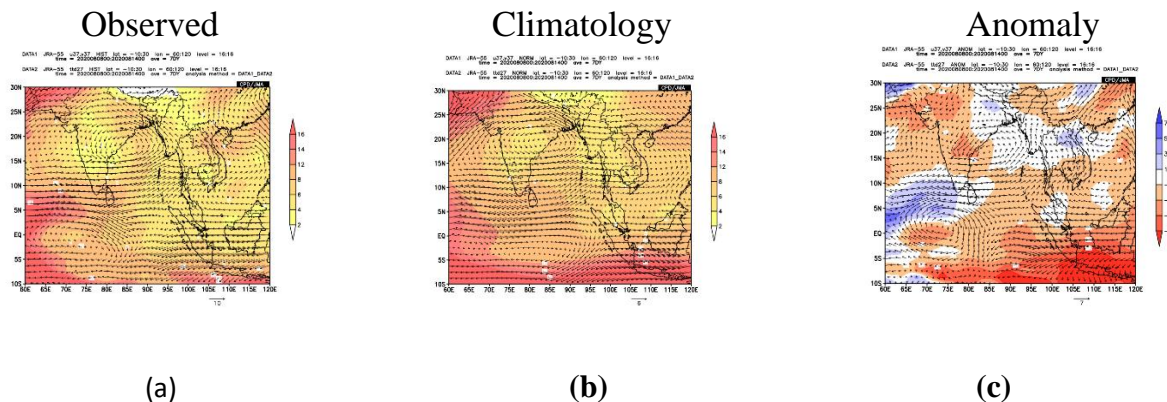


Figure 6: wind pattern with dewpoint departures at 500hpa