

15-21 July 2020

1. Rainfall

Generally weak Southwest monsoon conditions were prevailed during the week. But heavy thunder showers were reported on 19th and 20th July due to low - level disturbance. And fairly heavy showers were reported particularly in hydro catchment stations and some fairly widespread showers were reported in Central, North central and Uva provinces and Hambantota district on 18th July. The weekly highest rainfall was reported from Dehiovita (Kegalle district) on 20th July and it was 219.00mm. Showers were continued in Southwestern parts on 21st July and 171.5mm, highest rainfall was reported at Katunayake. Three consecutive days rainy conditions were enhanced due to atmospheric disturb condition over most parts of the Island. Madden Julian Oscillation was strongly active in phase 2 during this week.

Figure 1 illustrates weekly total rainfall distribution while figure 2 shows daily rainfall distributions.

TOTAL RAINFALL FROM 15TH TO 21ST JUNE 2019

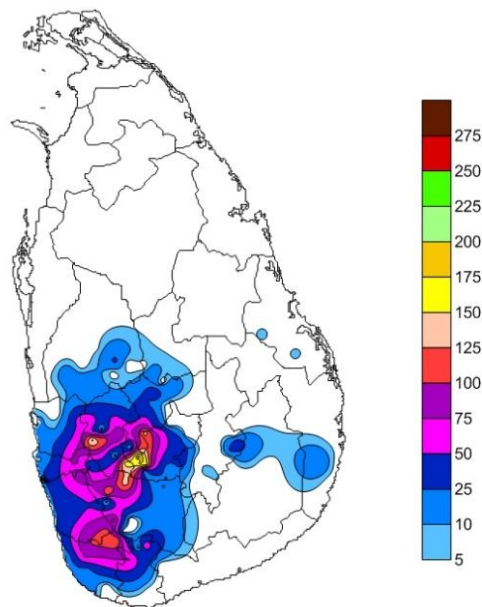


Figure 1: Total rainfall (mm) during the week

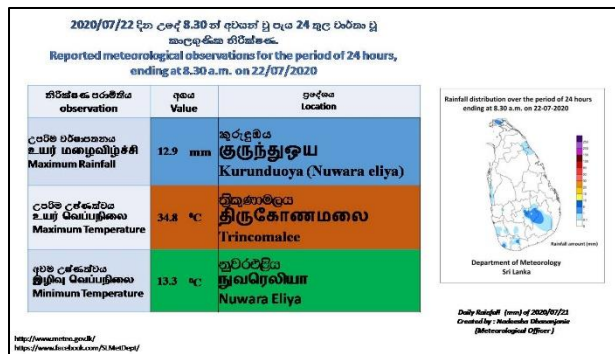
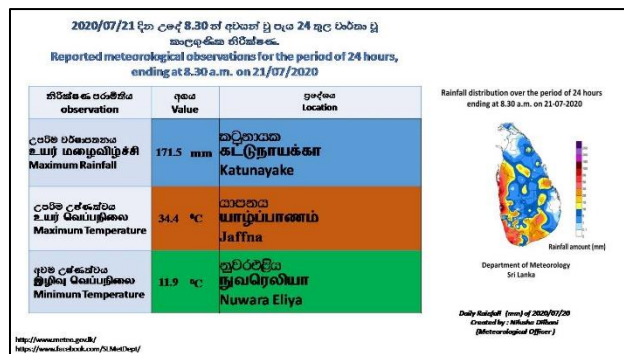
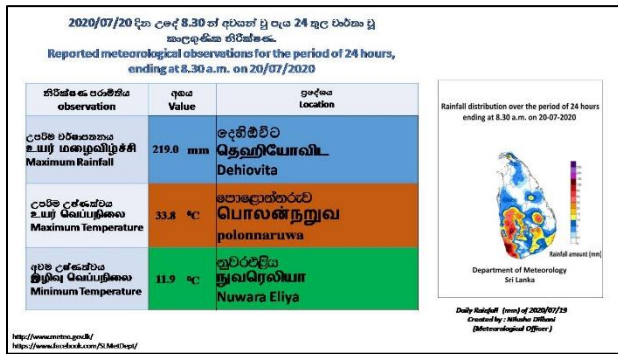
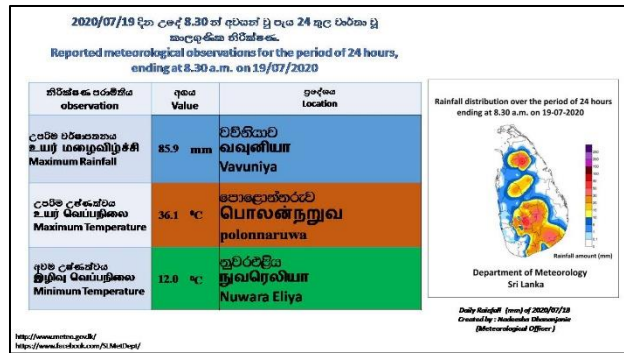
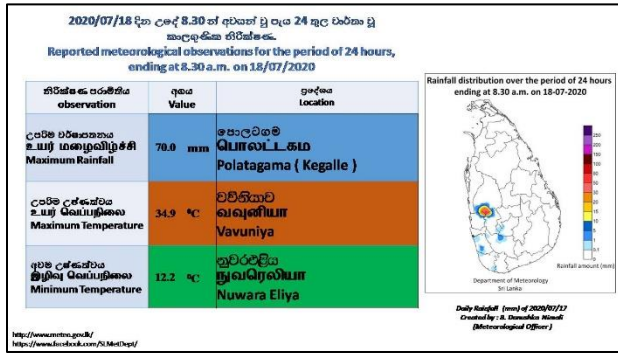
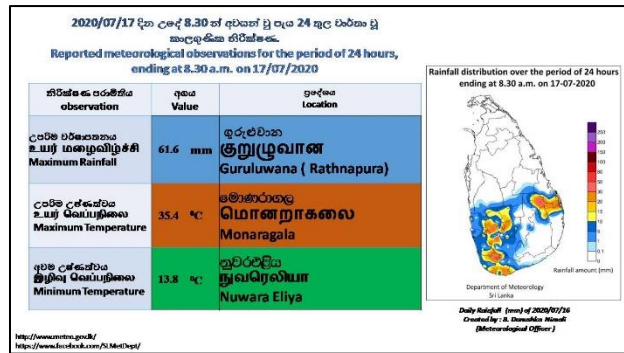
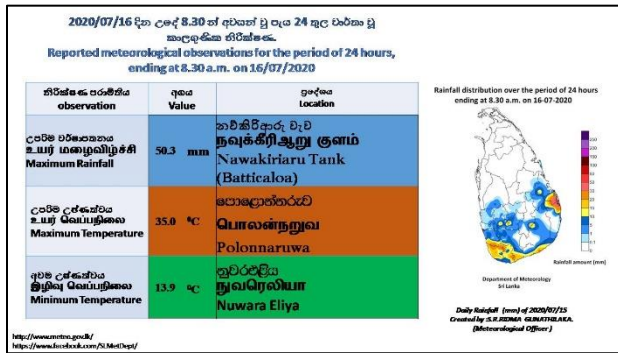


Figure 2. Daily Rainfall (mm) and maximum and minimum temperatures (0C) during the week.

Main Meteorological Stations	Rainfall (mm)
Anuradhapura	5.3
Badulla	46.4
Bandarawela	35.9
Batticaloa	23.2
Colombo	111.8
Galle	195.2
Hambanthota	50.8
Jaffna	8.8
Monaragala	68.6
Katugasthota	34.4
Katunayake	189.1
Kurunagala	20.9
Maha Illuppallama	22.7
Mannar	0.9
Polonnaruwa	3.6
Nuwara Eliya	36.0
Pothuvil	15.5
Puttalam	81.3
Rathmalana	150.6
Rathnapura	88.6
Trincomalee	0.0
Vavuniya	88.9
Mattla	32.3

Hydro-Catchment Areas	
Station	Rainfall (mm)
Castlereigh	83.5
Norton	78.7
Maussakele	39.0
Canyon	69.3
Lakshapana	124.4
Upper Kotmale	108.5
Kotmale	91.8
Victoriya	37.2
Randenigala	62.2
Rantambe	50.6
Bowatenna	15.6
Ukuwela	73.3
Samanala Wawa	55.0
Kukuleganaga	93.0
Maskeliya	49.2

Other Rainfall Stations	
Station	Rainfall (mm)
Dehiwala	197.8
Guruluwana	190.2
Moraliya-Oya	177.0
Kalutara	167.0
Polatagama	154.4
Vogan	154.0
Poddiwela	148.4
Watawala	146.5
Kalatuwawa	128.0
Mathugama	120.1

Table-01 Total Rainfall (mm) at Main Meteorological stations, hydro catchment areas and other rainfall stations during the week.

2. Temperature

The highest day time (maximum) temperature, 36.1⁰C was reported from Polonnaruwa main meteorological station on 19th July and two more days (16th & 20th) it was reported highest maximum temperature (Fig 3.a). Monaragala, Jaffna, Vavuniya and Trincomalee were reported highest maximum temperature during the other days. Nuwara Eliya was reported highest maximum temperature on 15th and 20th as 21.8⁰C during this week. The maximum temperature was above normal in many stations except of 21st July (Fig 3.b). Nuwara-Eliya was reported above normal maximum temperatures throughout the week except of 16th.

The lowest minimum temperature was 11.9⁰C and it was reported as usual from Nuwara-Eliya station on 20th and 21st July (Fig 3.c). The minimum temperature was above normal all in all stations on 15th & 16th July (Fig 3.d). Below normal minimum temperatures were reported on 21st except of Badulla and Batticaloa stations.

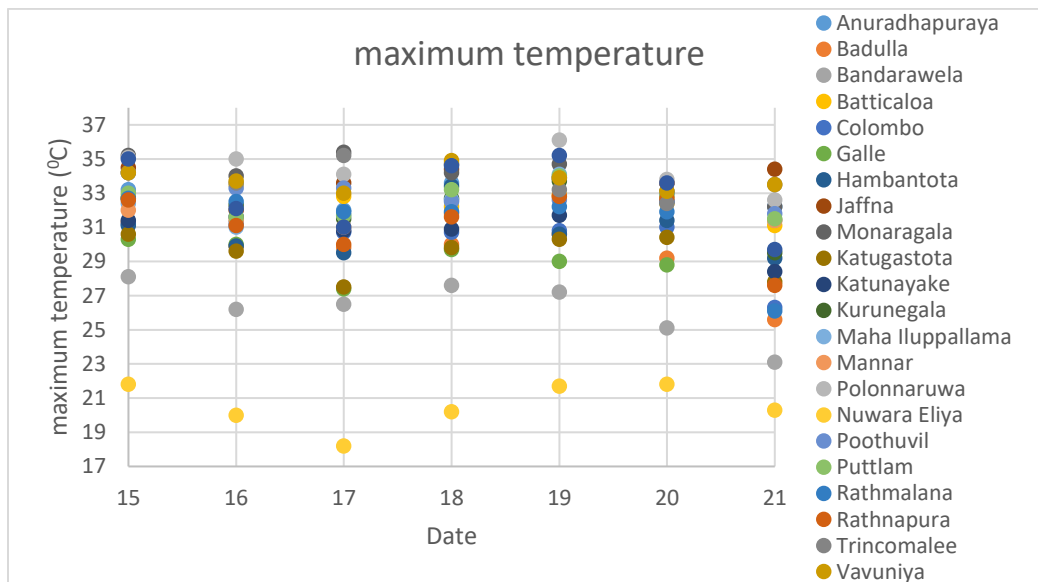


Fig 3.a: maximum temperature

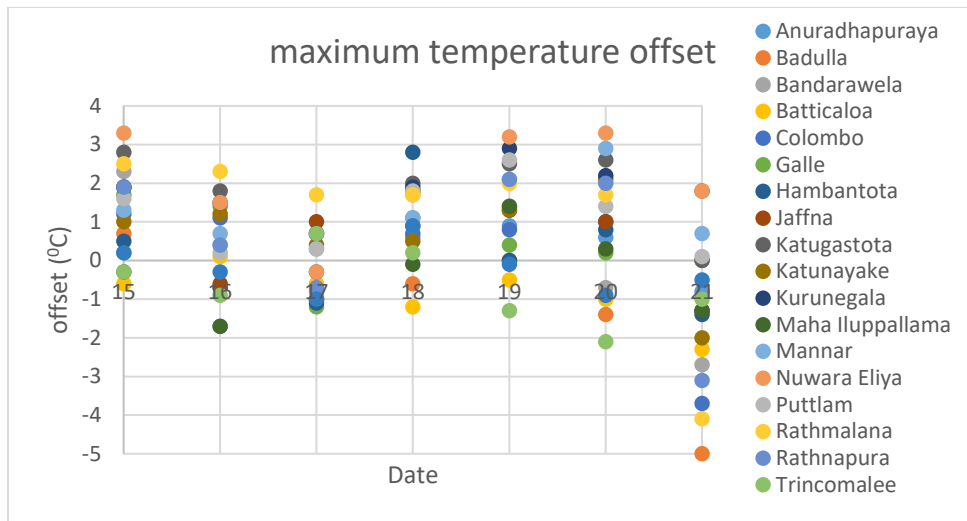


Fig 3.b: maximum temperature offset

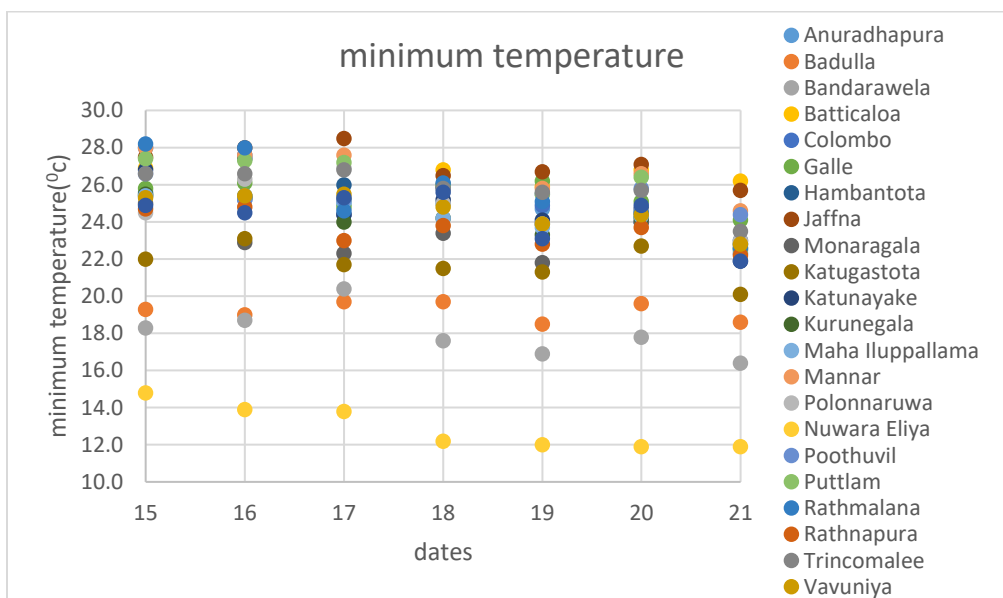


Fig 3.c: minimum temperature

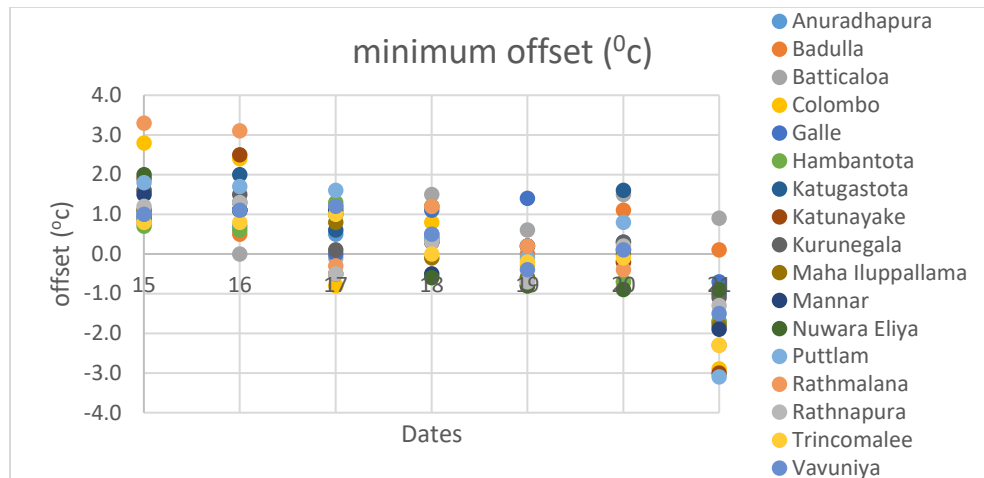


Fig 3.d: minimum temperature offset

3. Wind

There was moderate or mild Southwesterly pressure gradient over the Island except of 19th and 21st July. Southwesterly light to moderate surface winds were prevailed during this week except of 19th and 20th where it was variable and southerly to Southwesterly respectively.

Upper winds at 850hPa:

Westerly to Southwesterly/10-15kts winds were over the Island till 17th and it was changed to Northwesterly 17th onwards except of 19th where it was variable.

Weekly average wind condition was North-westerly to Southwesterly and Northwest-Southeast oriented trough axis over the island (Figure 4.a) at 850hPa during this week. Climatological (Figure 4.b) wind pattern was west-northwesterly at 850hPa pressure level. There was Northeasterly wind anomaly (Figure 4.c) with similar moisture content prevailed over the country during this week.

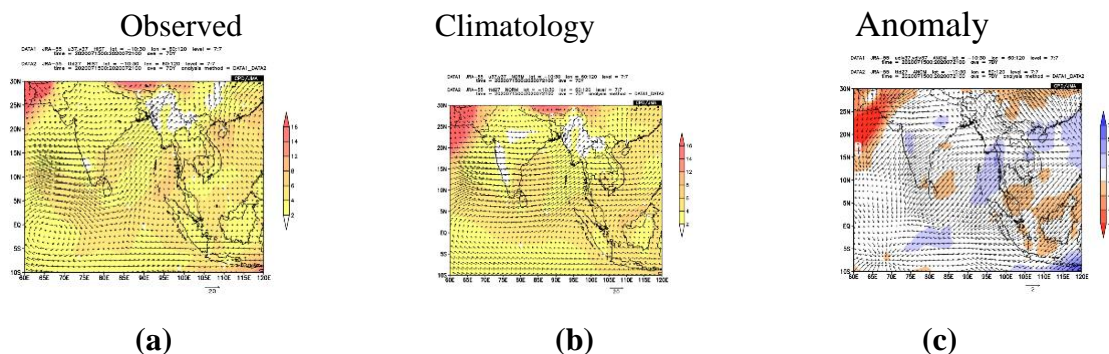


Figure 4: wind pattern with dewpoint departures at 850hpa

Upper winds at 700hPa:

Westerly to Southwesterly (10-15kts) winds were prevailed over the Island during the first part of the week and it was changed to the Northwesterly (05-10kts) 17th July onwards. It was changed to Easterly and South South-easterly/05-15kts on 19th and 20th respectively.

Weekly averaged Observed winds were Northwesterly to South westerly and Northwest-southeast oriented trough axis was prevailed over the island (Figure 5.a). Climatological (Figure 5.b) winds are Northwesterly over the island at 700hPa. There was easterly wind anomaly (Figure 5.c) and similar moisture condition at 700hpa during this week.

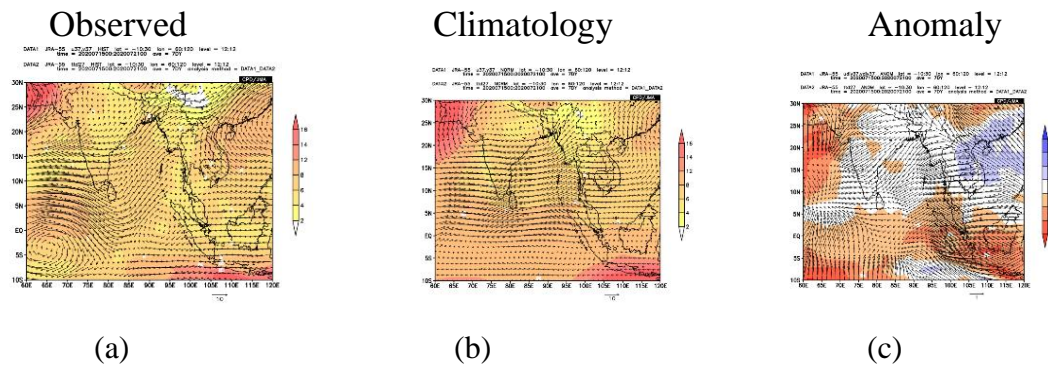


Figure 5: wind pattern with dewpoint departures at 700hpa

Upper winds at 500hPa:

Southeasterly (10-20kts) winds were over the Island throughout the week except of 15th.

The weekly climatological wind pattern is West-northwesterly, dry (Figure 6.b) and weekly observed wind pattern (Figure 6.a) was Southeasterly, slightly dry at 500hpa during the 3rd week of July. However, easterly dry wind anomaly (Figure 6.c) was prevailed at 500hpa during this week.

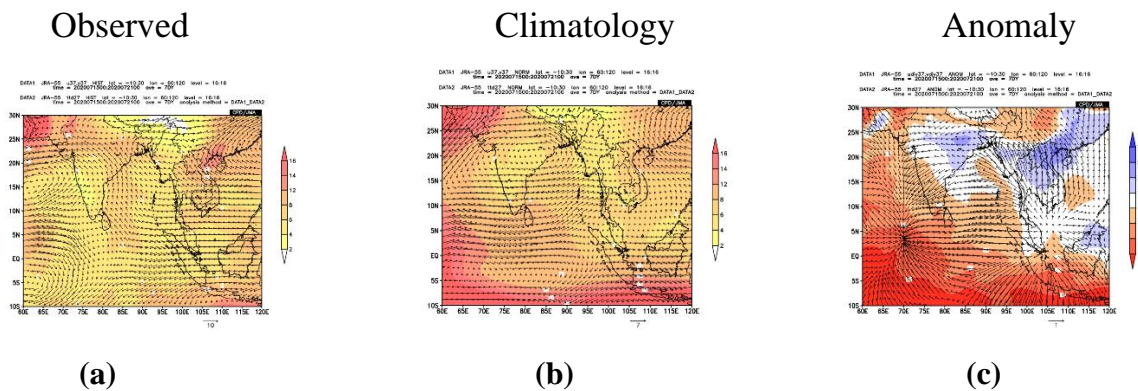


Figure 6: wind pattern with dewpoint departures at 500hpa