Weekly Weather Summery

8-14 July 2020

1. Rainfall

Westerly or Southwesterly (05- 15kts)low-level winds were prevailed over the country during this week. Generally, there was mild or moderate southwesterly pressure gradient over the Island throughout the week except of 09th July where it was fairly even pressure distribution. Afternoon and evening thunder showers were prominent during this week except of some showers in Southwestern and Galle district on 11th and 14th respectively. However fairly heavy (more than 50mm) rainfalls of 89.3mm and 76.0mm were received at Anuradhapura and Polonnaruwa meteorological station on 09th respectively and considerable showers were reported in Northcentral, Eastern, Uva, Central and Sabaragamuwa provinces. The reported highest rainfall was 89.3mm on 09th at Anuradhapura. Rainy condition was decreased during last two days of the week. Figure 1 represents reported daily highest rainfall and highest maximum and minimum temperatures in Sri Lanka. Figure 2 represents total rainfall at main meteorological stations, catchment areas and reported highest total rainfall at some stations during the week.

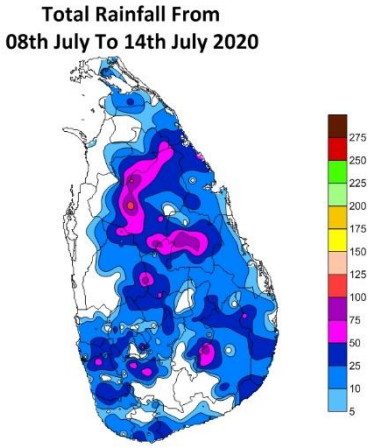
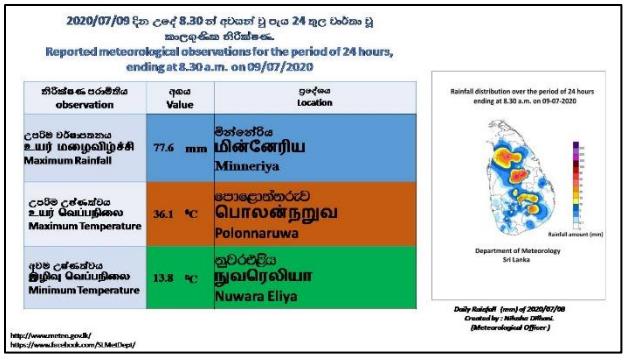
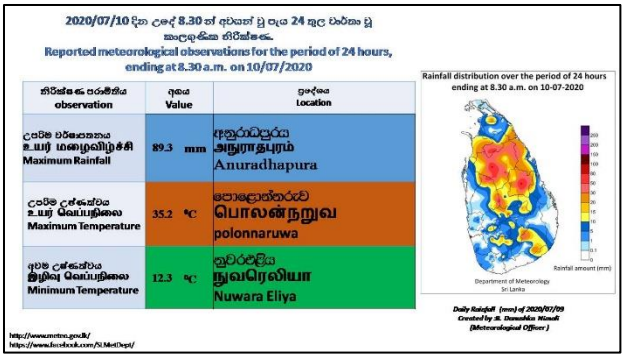
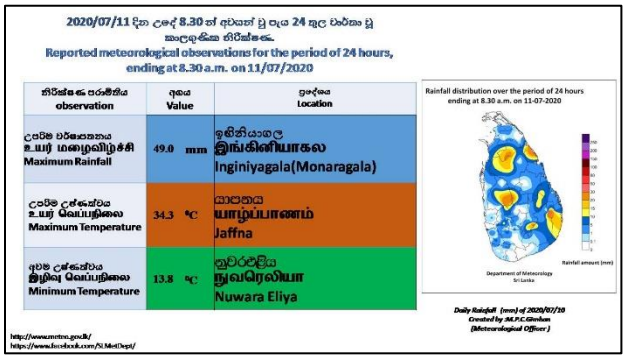
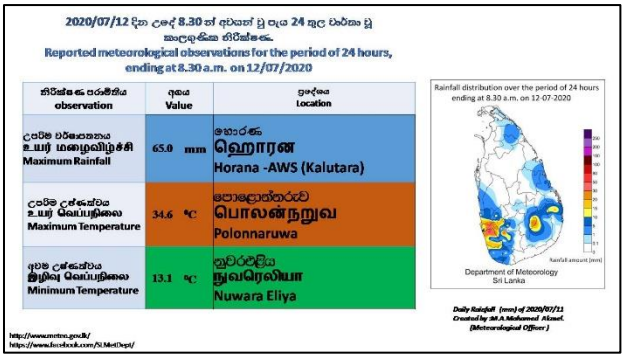


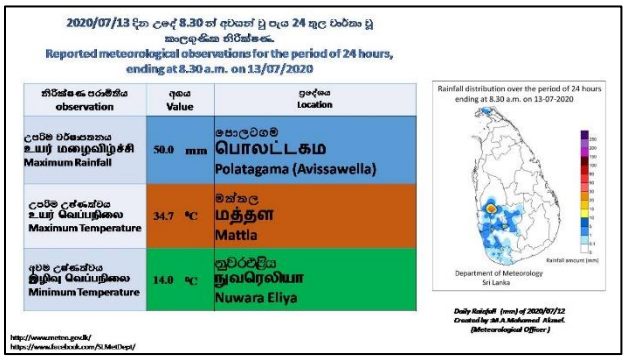
Figure 1: Total rainfall (mm) during the week

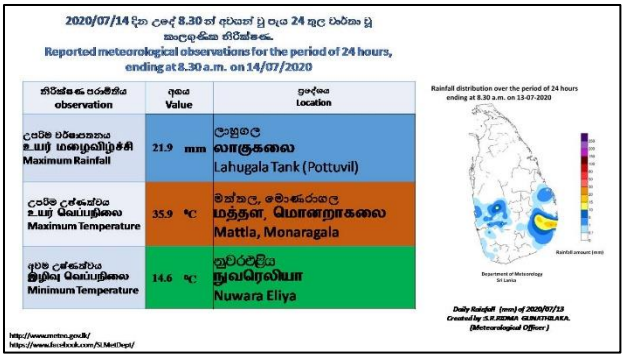












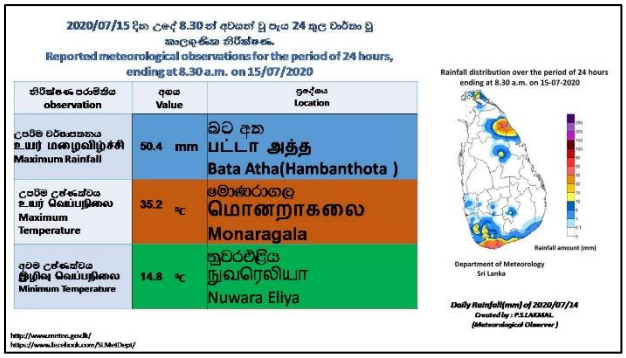


Figure 2. Daily Rainfall (mm) and maximum and minimum temperatures (^{0}C) during the week.

Main Meteorological Stations	Rainfall (mm)
Anuradhapura	124.8
Badulla	24.1
Bandarawela	43.3
Batticaloa	13.1
Colombo	24.3
Galle	19
Hambanthota	29.5
Jaffna	5.3
Monaragala	36.8
Katugasthota	39.4
Katunayake	5.8
Kurunagala	51.1
MahaIlluppallama	65.9
Mannar	7.8
Polonnaruwa	76.5
Nuwara Eliya	16.6
Pothuvil	36.6
Puttalam	1.4
Rathmalana	19.8
Rathnapura	64.7
Trincomalee	10.4
Vavuniya	73.4
Mattala	10.7

Hydro-Catchment Areas	
Station	**Rainfall (mm)**
Castlereigh	8.5
Norton	23.7
Maussakele	17.2
Canyon	15.3
Lakshapana	123.5
Upper Kotmale	6
Kotmale	11.7
Victoriya	31.2
Randenigala	4.3
Rantambe	21.1
Bowatenna	22.2
Ukuwela	45.6
Samanala Wawa	18
Kukuleganaga	60
Maskeliya	10

Rain Gauge Stations	
Station	**Rainfall (mm)**
Palugasdamana	86.5
Mahagalkadawala	80.5
Minneriya	77.6
Madatugama	74.4
Dodangaslanda	69.2
Huruliwawa	63
Ulukkulam	59
Yakawawa	58.6
Kandalama	58.3
Pelwehera	57.2
Shettikulam	55.5
Diyabeduma	54.3
Bata Atha	50.4
Polatagama	50
Inginiyagala	49

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, 36. 2^0C was reported from Polonnaruwa main meteorological station on 08th July and further same station was reported daily highest maximum temperature on 09th and 11th (Figure 3.a). Jaffna, Mattala and Monaragala were reported highest maximum temperature during the other days. Nuwara Eliya was reported its highest maximum temperature on 09th as 22.6^0C during this week.

The maximum temperature was above normal in many stations on 08th, 09th and 14th July (fig 3.b). NuwaraEliya was reported 4.1^0C above normal maximum temperatures on 09th and it was the highest offset during this week. Bandarawela, Colombo, Galle, Katugastota, Katunayake, Mannar, Nuwara Eliya and Rathmalana were reported above normal maximum temperatures during this week.

The lowest minimum temperature was 12.3^0C and it was reported as usual from Nuwara-Eliya station on 11th July. The minimum temperature was reported in between 10 ^{0}C to 15^0C at NuwaraEliya and in between 16^0C to 21^0C at Badulla and Bandarawela stations throughout the week (Fig 3.c). Bandarawela, Hambantota, Jaffna, Galle, Kurunegala and Rathmalana were reported above normal minimum temperatures thought the week. The above normal minimum temperatures were reported in many stations on 08th, 13th and 14th while the few stations were reported slightly below normal minimum temperatures during this week (Fig 3.d).

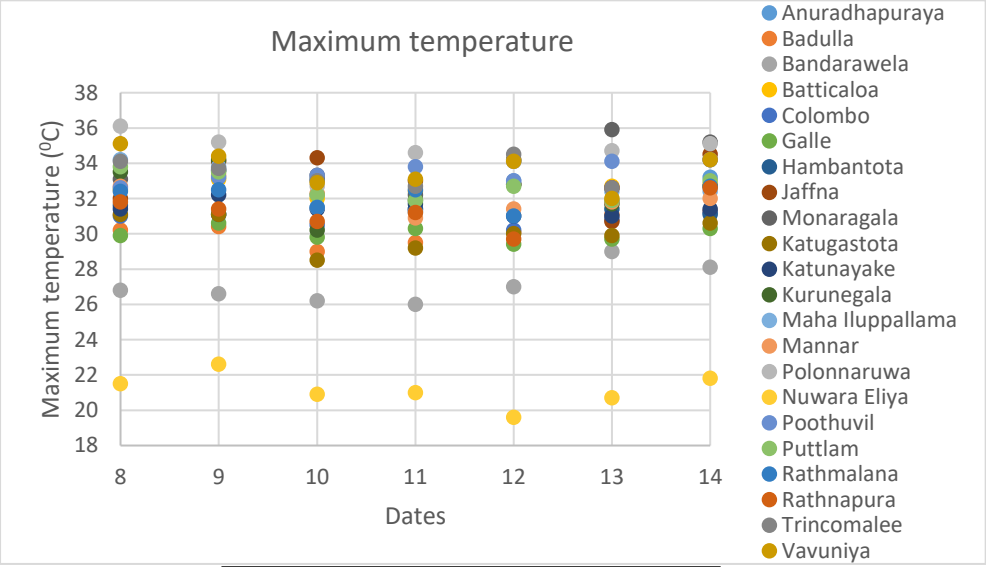


Fig 3.a: maximum temperature

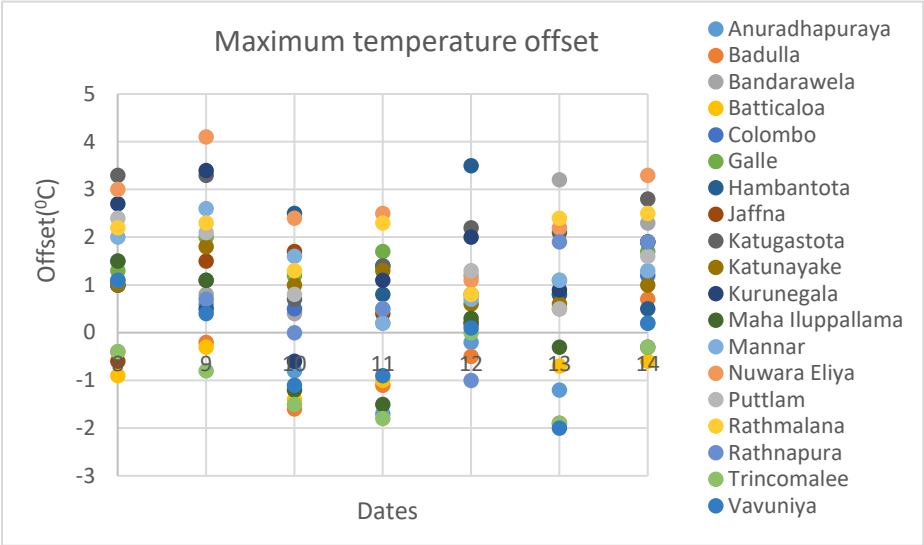


Fig 3.b: maximum temperature offset

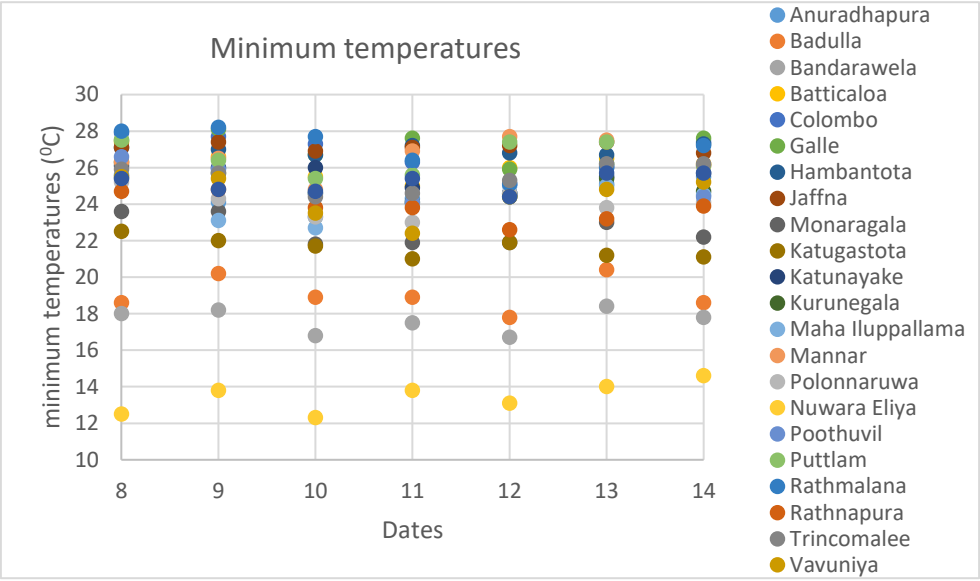


Fig 3.c: minimum temperature

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

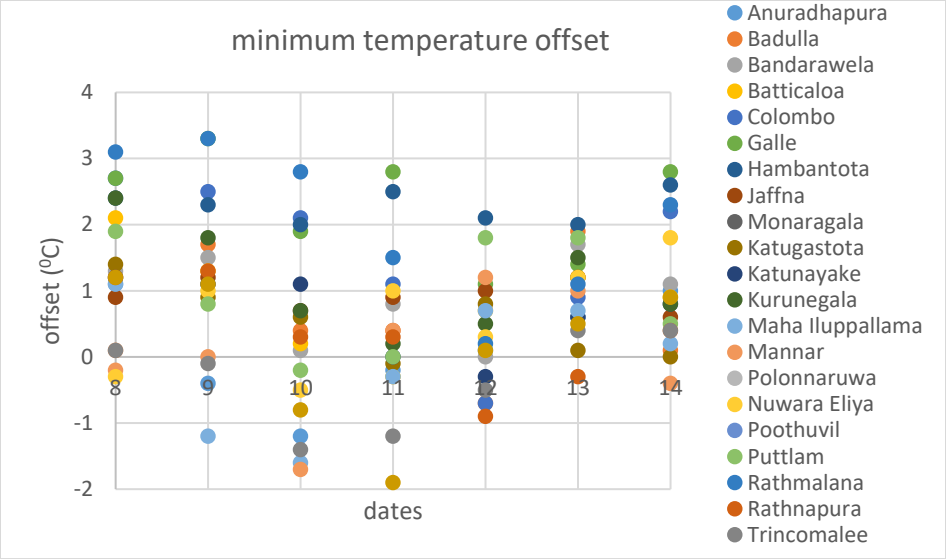


Fig 3.d: minimum temperature offset

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

3. Wind

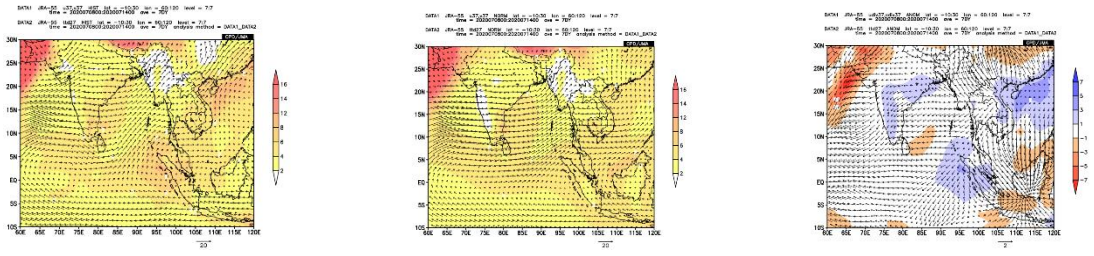
Westerly to Southwesterly light to moderate surface winds were prevailed during this week.

Upper winds at 850hPa:

Westerly to Southwesterly (10-20 kts) winds were prevailed over the Island except of 08th July where it was Northwesterly to Westerly.

Northwesterly to westerly weekly average wind condition was prevailed over the island (Figure 4.a) at 850hpa during this week. And climatological (Figure 4.b) wind pattern was Westerly. There was Easterly wind anomaly (Figure 4.c) and moisture conditions were similar to the climatological values at 850hpa during this week.

Observed Climatology Anomaly



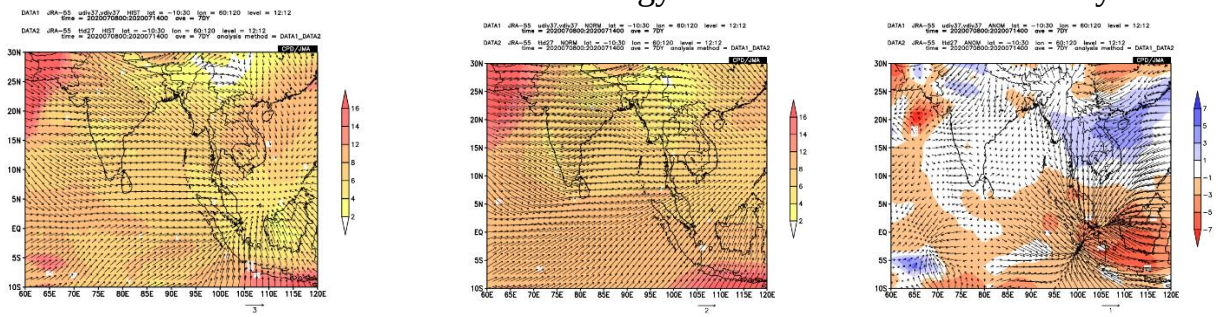
(a) (b) (c)

Figure 4: wind pattern with dewpoint departures at 850hpa

Upper winds at 700hPa:

Westerly to Southwesterly winds (10-15kts) were prevailed over the Island until middle part of the week and North westerly to westerly (10-15kts) winds were observed in remaining days. Northwesterly to westerly weekly averaged Observed winds (Figure 5.a) and Northwesterly climatological (Figure 5.b) winds at 700hPa level were slightly dry over the island. And there was calm or variable climatologically similar wind anomaly (Figure 5.c) was prevailed at 700hpa during this week.

Observed Climatology Anomaly



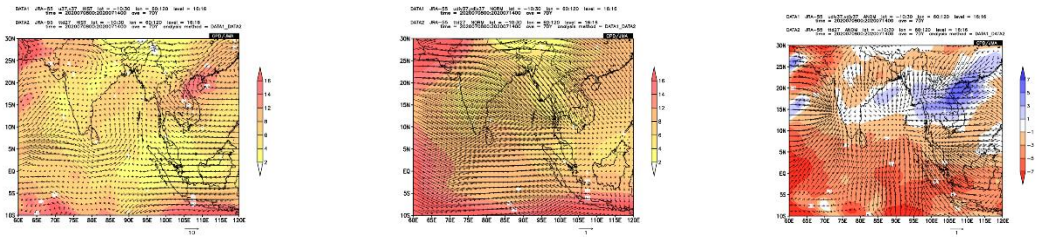
(a) (b) (c)

Figure 5: wind pattern with dewpoint departures at 700hpa

Upper winds at 500hPa:

Northeasterly to Easterly (05-10kts) winds were prevailed during the first two days of the week and it was changed to Southerly to Southwesterly (05-10kts) 10th July onwards except of 12th July where it was Northwesterly to Northerly on only. The weekly observed (Figure 6.a) winds were North westerly to westerly and mild circulation was over the island during this week. The climatological wind pattern is Northwesterly to westerly and dry (Figure 6.b) at 500hpa. However, Easterly slightly dry South-Southwesterly wind anomaly (Figure 6.c) was at 500hpa during this week.

Observed Climatology Anomaly



(a) (b) (c)

Figure 6: wind pattern with dewpoint departures at 500hpa