Weekly Weather Summery

15-21 December 2019

1. Rainfall

North-east monsoon conditions were prevailed over the country and this was a week with extreme rainfall generally wide spread, particularly over the eastern half of the country.

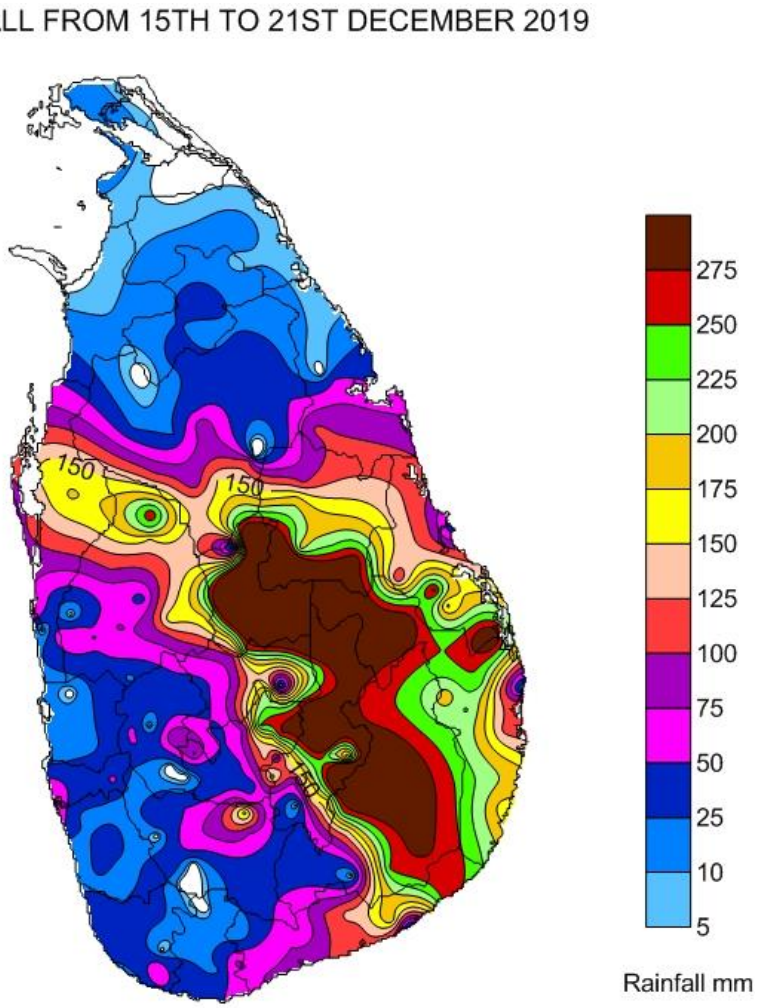
Showery condition in the eastern half of country has enhanced specially after 18th and significant amount of rainfalls were received at many places in Polonnaruwa, Mathale, Badulla, Monaragala and Ampara districts including very heavy rainfalls. DoM has clearly forecasted three days before the event that was on 15th day that the enhancement of rainy and windy condition expected from 17th.

According to the DMC records nearly 51146 people from 13 districts affected by this extreme weather. Puttalam, Ampara and Anuradhapura districts were the most affected areas. 43 reservoirs/ tanks have opened the sluice gates. Other than the damaged caused by flood incidents and minor landslides there were 42 houses also damaged by the strong winds associate with heavy rain in Anuradhapura area.

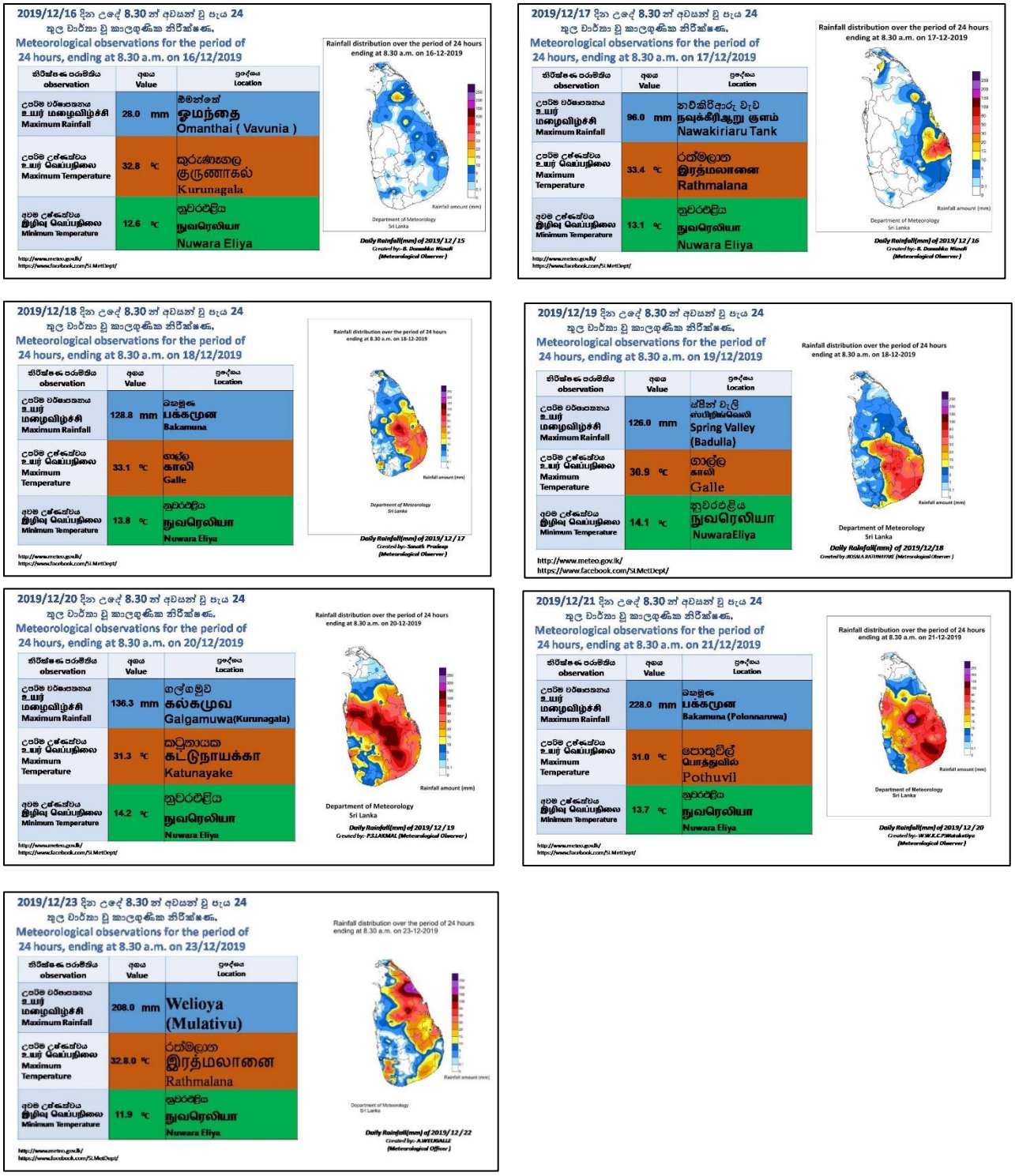
The highest daily recorded rainfall of 228 mm was recorded at Bakamuna area on 20th and the highest weekly total amount of 539.7mm was reported at Elahara in Polonnaruwa district during the week.

Hydro-catchment areas in the Eastern slope of the central hills were received much amount of rainfalls during the week with Bowatenna reservoir received 519.2mm. Victoriya, Randenigala, Rantambe reservoirs also received more than 200 mm rainfall in this week. But hydro-catchments in Western slope of the central hills not received considerable amount of rainfall.

Figure



1: Total rainfall (mm) during the week



2019/12/16 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 16/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	28.0 mm	මීමන්තේ ஓமந்தை Omanthai (Vavunia)
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	32.8 °C	කුරුණෑගල குருணாகல் Kurunagala
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	12.6 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 16-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/15
Created by:- B. Dassaka Niwali (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/17 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 17/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	96.0 mm	නාවකිරිආරු වැව நவுக்கிரியாறு குளம் Nawakiriaru Tank
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	33.4 °C	රත්මලාන இரத்மலானை Rathmalana
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	13.1 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 17-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/16
Created by:- B. Dassaka Niwali (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/18 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 18/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	128.8 mm	බකමුණ பக்கமுன Bakamuna
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	33.1 °C	ගාල්ල காலி Galle
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	13.8 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 18-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/17
Created by:- Sanath Pradeep (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/19 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 19/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	126.0 mm	ස්පිරිං වැලි ஸ்பிறிங்வெலி Spring Valley (Badulla)
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	30.9 °C	ගාල්ල காலி Galle
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	14.1 °C	නුවරඑළිය நுவரெலியா NuwaraEliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 18-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/18
Created by:-KUSUMA KARUNARATHNE (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/20 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 20/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	136.3 mm	ගල්ගමුව கல்கமுவ Galgamuwa(Kurunagala)
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	31.3 °C	කටුනායක கட்டுநாயக்கா Katunayake
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	14.2 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 20-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/19
Created by:- P.S.I.AKMAL (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/21 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 21/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	228.0 mm	බකමුණ பக்கமுன Bakamuna (Polonnaruwa)
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	31.0 °C	පොතුවිල් பொத்துவில் Pothuvil
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	13.7 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 21-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/20
Created by:- W.M.K.C.P.Watukaliya (Meteorological Observer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

2019/12/23 දින උදේ 8.30 න් අවසන් වූ පැය 24 තුල වාර්තා වූ කාලගුණික නිරීක්ෂණ.
Meteorological observations for the period of 24 hours, ending at 8.30 a.m. on 23/12/2019

නිරීක්ෂණ පරාමිතිය observation	අගය Value	ප්‍රදේශය Location
උපරිම වර්ෂාපතනය உயர் மழைவிழ்ச்சி Maximum Rainfall	208.0 mm	Welioya (Mulativu)
උපරිම උෂ්ණත්වය உயர் வெப்பநிலை Maximum Temperature	32.8.0 °C	රත්මලාන இரத்மலானை Rathmalana
අවම උෂ්ණත්වය இழிவு வெப்பநிலை Minimum Temperature	11.9 °C	නුවරඑළිය நுவரெலியா Nuwara Eliya

Rainfall distribution over the period of 24 hours ending at 8.30 a.m. on 23-12-2019
Rainfall amount (mm)
Department of Meteorology Sri Lanka
Daily Rainfall(mm) of 2019/12/22
Created by:- A.MUSHAALLE (Meteorological Officer)
http://www.meteo.gov.lk/
https://www.facebook.com/Sl.MetDept/

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

Main Meteorological Stations	Rainfall (mm)
Anuradhapura	23.5
Badulla	199.8
Bandarawela	156
Batticaloa	102.4
Colombo	32.1
Galle	18.4
Hambanthota	118.1
Jaffna	11.6
Monaragala	256.3
Katugasthota	84.6
Katunayake	17.7
Kurunagala	88.3
Maha Illuppallama	85.1
Mannar	0.8
Polonnaruwa	216.6
Nuwara Eliya	135.5
Pothuvil	196.4
Puttalam	136.1
Rathmalana	73.9
Rathnapura	36.5
Trincomalee	52.5
Vavuniya	13.4
Mattla	132.9

Hydro-Catchment Areas	
Station	**Rainfall (mm)**
Castlereigh	27.5
Norton	31.1
Maussakele	37
Canyon	26.1
Laksapana	32.9
Upper kotmalee	47.7
Kotmalee	42.5
Victoriya	215
Randenigala	279.4
Rantambe	267.4
Bowatenna	519.2
Ukuwela	114
Samanala Wewa	102.5
Kukuleganga	46
Maskeliya	33.6
Neboda	36.8

Rain Gauge Stations	
Station	**Rainfall (mm)**
Elahara	539.7
Bakamuna	478.7
Canawarella	462
Lower Spring Valley	402.2
Girandurukotte	401.2
Ledger estate	369
Ulhitiya	352.9
Nawakiriaru Tank	319.4
Pelwehera	314.2
Manaragala water supply	312.2
Mahaoya	310
Kandaketiya	303.4
Galoola	301
Mabadowa	298
Kandalama	295.7
Aralaganwila	291.5
Padiyathalawa	287.1

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

2. Temperature

Maximum temperatures were mostly above normal over the island during most days of this week except few places where were significantly below normal in 20th day as approximately 07^0C below normal at Rathnapura, 05^0C below normal at Katugastota, Kurunegala and Katunayake; 04^0C below normal at Hambantota and Puttalam; 03^0C below normal at Badulla, Colombo, Nuwara-Eliya and Ratmalana; 02^0C below normal at Batticaloa, Maha-Iluppallama and Mannar. It was 03ºC below normal at Nuwara-Eliya from 15th to 20th days too.

The highest value of maximum temperature was reported from Ratmalana as 33.4ºC in 16th day.

Minimum temperatures were mostly above normal at most meteorological stations during the week.

Minimum temperatures at Nuwara-Eliya varies between 11.9ºC and 14.2ºC during the week and the lowest (minimum) temperature 11.9^0C was reported on 21st day.

It was 03^0C above normal at Nuwara-Eliya in 18th to 22nd days, Anuradhapura at 20th day, Hambanthota at 22nd day, Rathmalana at 19th days and at Vavuniya in 18th and 20th days.

3. Wind

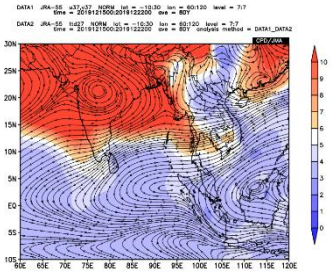
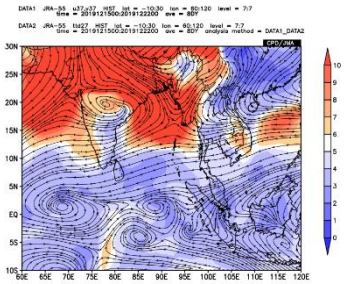
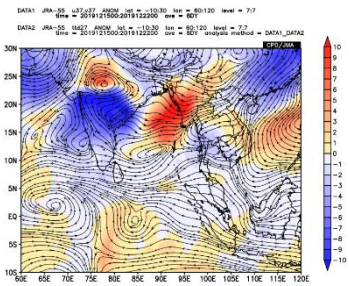
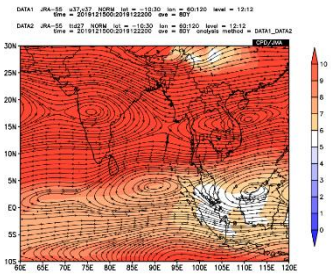
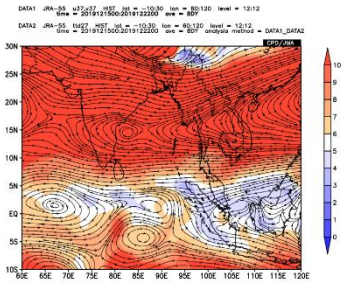
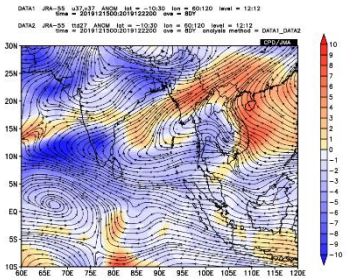
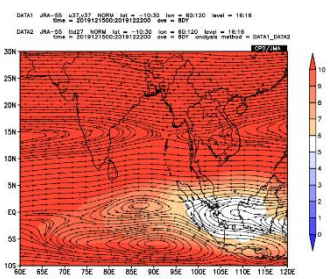
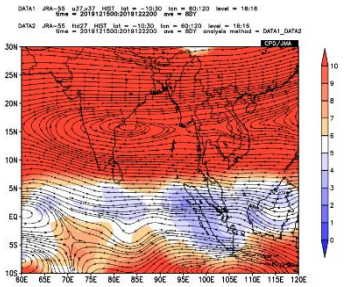
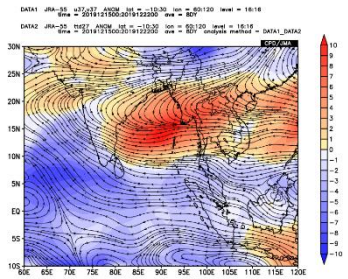
Surface wind was calm or variable in direction and wind speed was (05-20) kmph over the country in first three days. Then it became North-easterly or variable with the speed of (05-20) kmph in last four days of the week. Wind speed has recorded as 50 kmph in Pothuvil main Meteorological station at the 18th day morning.

Winds at 850hPa were mostly East-north easterly and wind speeds were (05-15) Knots.it was less than the climatological average speeds. Direction was more north easterly in climatology. winds came from Pacific Ocean across the Bay of Bengal during the week and the moisture condition was slightly higher than the climatology. East-west oriented ridge axis over the northern part of the Indian land mass persisted similar to its climatological position during the week.

Winds at 700hPa level were mostly easterly in direction during the week and speeds were (05-15) knots. It was less than the climatological average speeds. There is a

slight deviation in direction from climatology and the seasonal anti-clockwise circulation in East-west oriented trough axis to the South-east of the island has moved southward from its seasonal position. It caused higher moisture amount over Sri Lankan region than in climatology in this week. East-west oriented ridge axis over the northern part of the Indian land mass moved southward from its climatological position.

Winds at 500hPa were mostly easterly and wind speeds were (05-15) Knots.it was greater than the climatological average speeds. This week wind came from Pacific Ocean across the Bay of Bengal and the moisture condition was slightly higher. East-west ridge axis over the southern part of the Indian land mass remained it's seasonal position with respect to the climatology. South-easterly wind anomaly can be seen over the country.

Level	Wind and Dew point departure		
	Climatological Pattern	Weekly Pattern	Anomaly Pattern
850hPa			
700hPa			
500hPa