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Weekly Hydro- Meteorological Report for Sri Lanka

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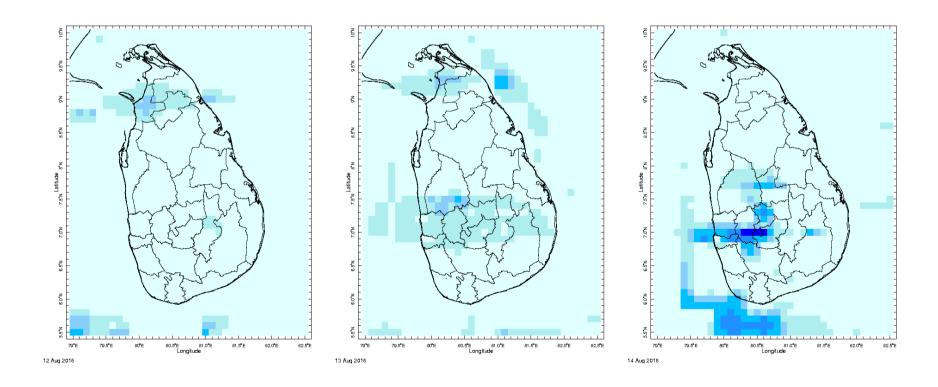
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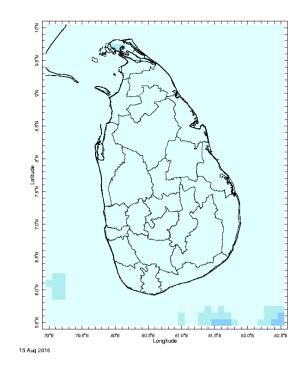
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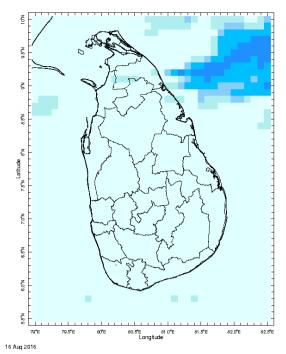
MONITORING

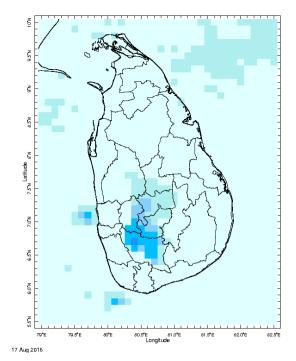
Daily Rainfall Monitoring

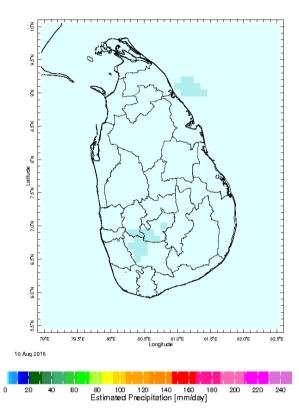
The following figures show the satellite observed rainfall in the last 7 days in Sri Lanka.







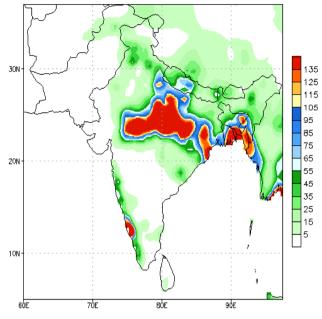




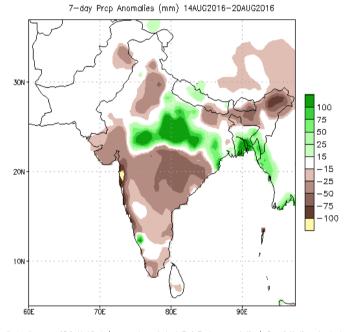
Weekly Rainfall Monitoring

The following figures show the total satellite observed rainfall in the last week in Sri Lanka. The figure in the left is the total 7-day rainfall from NOAA Climate Prediction Center (CPC) Unified Precipitation Analysis and the figure in the right is the total 7-day rainfall from CPC RFE 2.0 Satellite Rainfall Estimates. The bottom two figures are the respective anomalies.



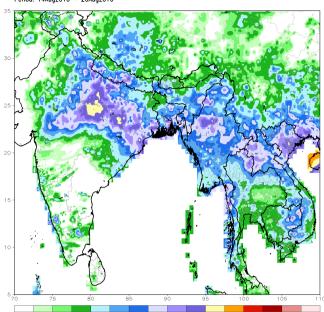


Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis

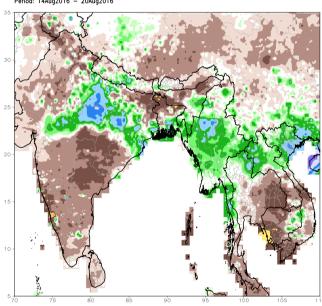


Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis Climatology (1981-2010)

RFE2 7—Day Total Rainfall (mm) Period: 14Aug2016 – 20Aug2016

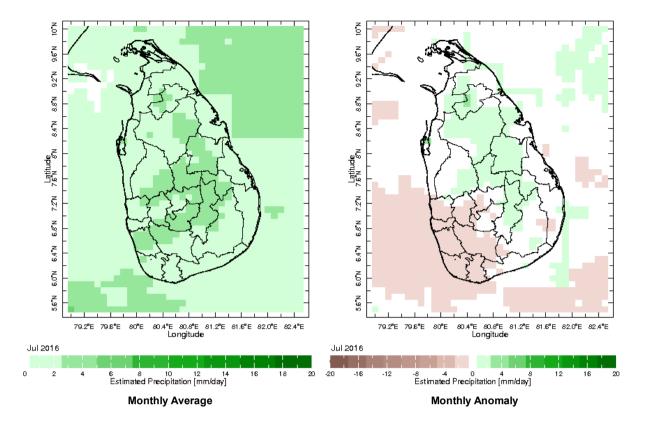


RFE2 7—Day Total Rainfall Anomaly (mm) Period: 14Aug2016 — 20Aug2016

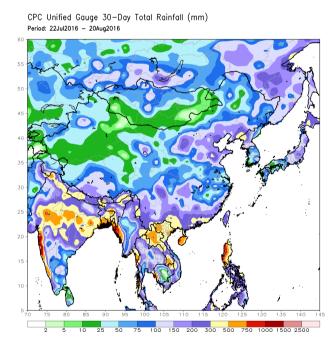


Monthly Rainfall Monitoring

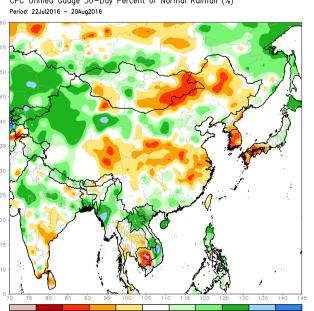
The figure in the left shows the average observed rainfall in the previous month. The rainfall anomaly in the previous month is shown in the figure to the right. The brown color in the anomaly figure shows places which received less rainfall than the historical average while the green color shows places with above average rainfall. Darker shades show higher magnitudes in rainfall



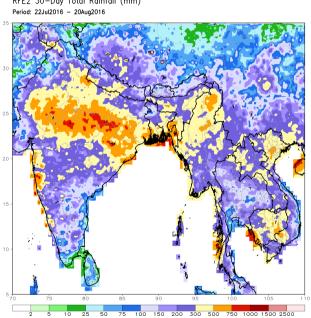
The figure in the top-left shows the total rainfall in the past 30 days from CPC Unified Precipitation Analysis while the figure in the top-right shows the total rainfall for the same period from RFE 2.0 Satellite Rainfall Estimates. The bottom two figures show the percentage of rainfall received in the past 30 days compared to normal rainfall in this period.



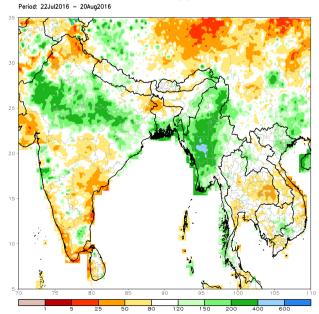
CPC Unified Gauge 30-Day Percent of Normal Rainfall (%) Period: 22Jul2016 - 20Aug2016

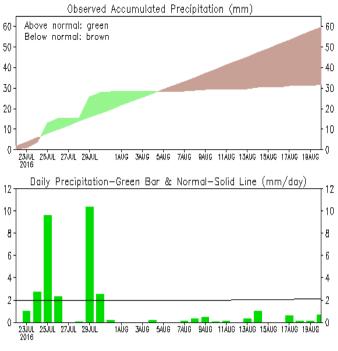


RFE2 30-Day Total Rainfall (mm)



RFE2 30-Day Percent of Normal Rainfall (%)

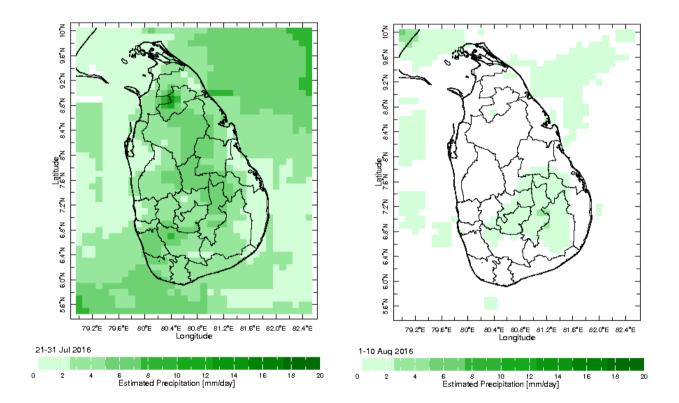




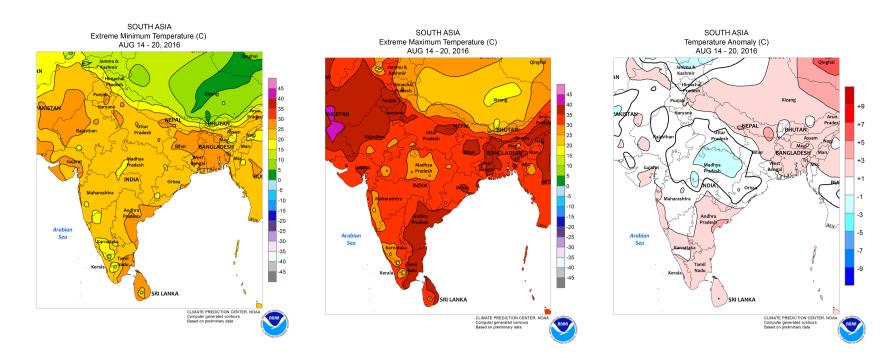
Sri-Lanka

Data Source: CPC (Gauge-Based) Unified Precipitation (Climatology 1981-2010) (updated on 00Z20AUG2016)

Dekadal (10 Day) Satellite Derived Rainfall Estimates

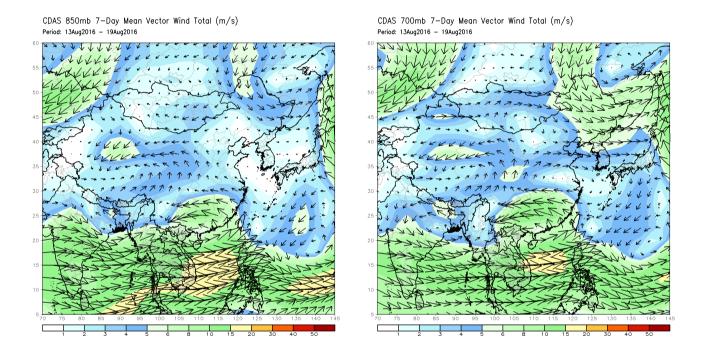


Weekly Temperature Monitoring

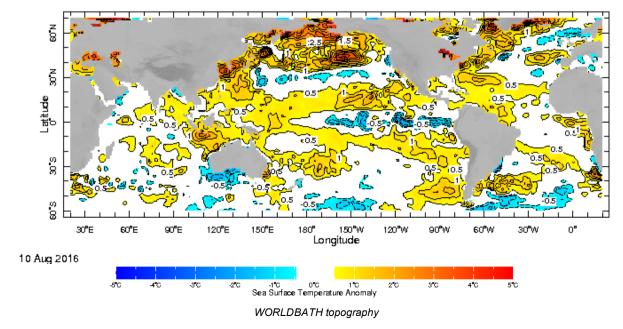


Weekly Wind Monitoring

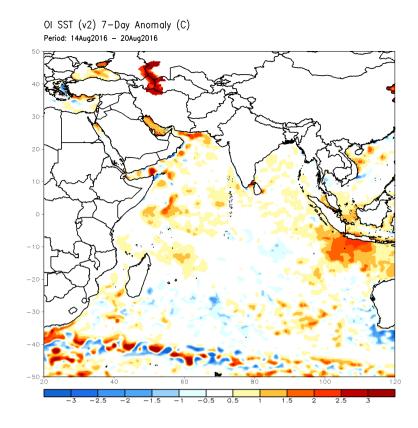
The following figures show the mean vector wind total of the past 7 days near Sri Lanka at two levels. The figure on the left shows 850 mb (~1500 m) level and the figure on the right shows 700 mb (~3000 m) level.



Weekly Average SST Anomalies

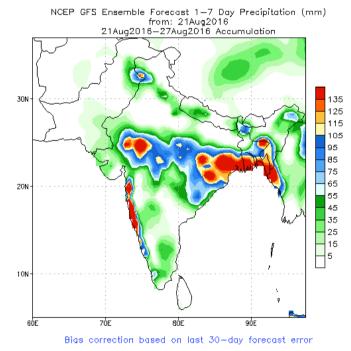


Weekly average Sea Surface Temperature (SST) anomaly in the world from NOAA NCEP

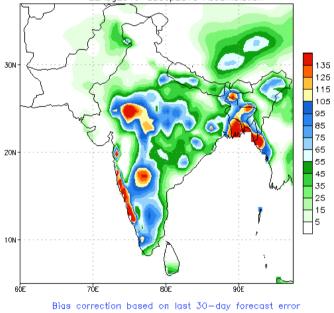


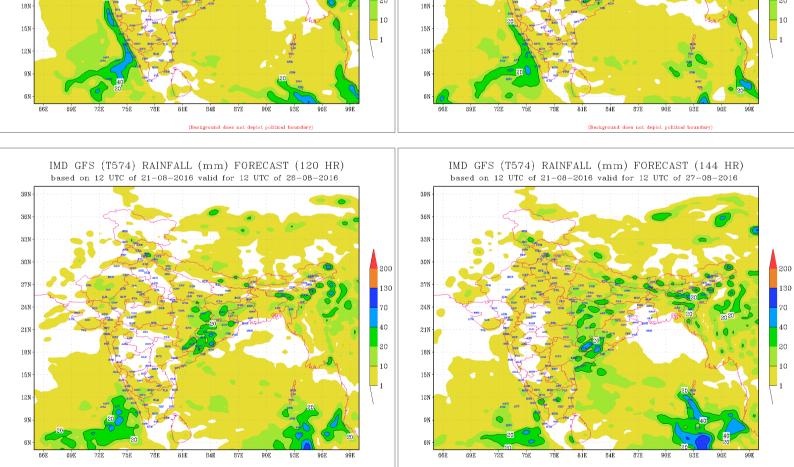
PREDICTIONS

NCEP GFS 1-14 Day prediction



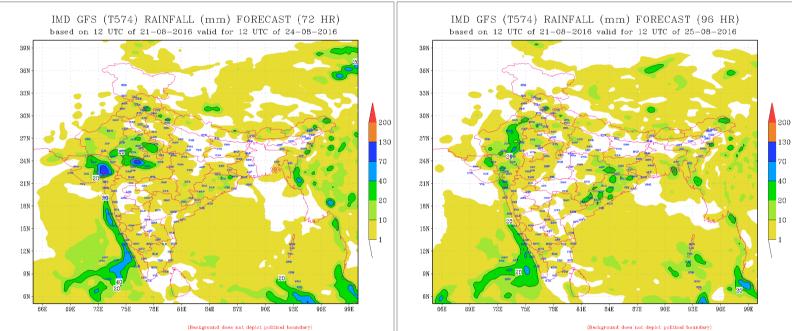


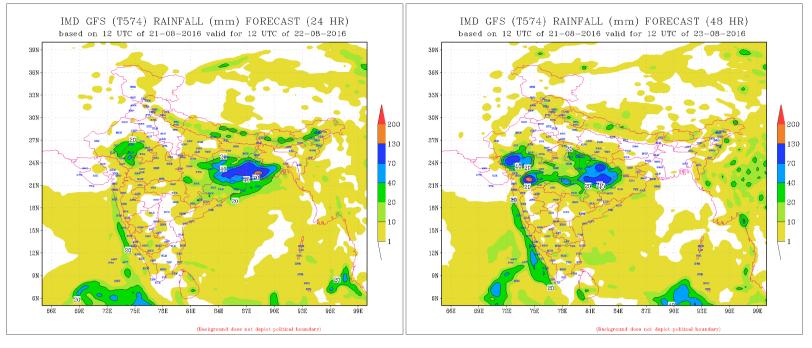


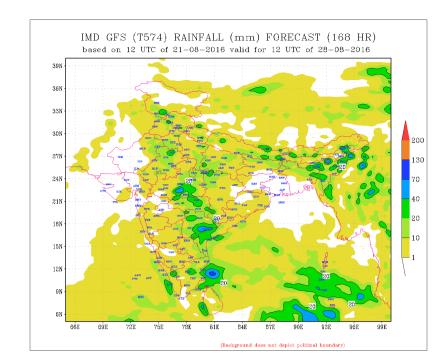


(Background does not depict political boundary

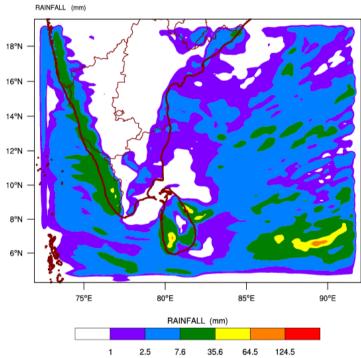
(Background does not depict political boundary)





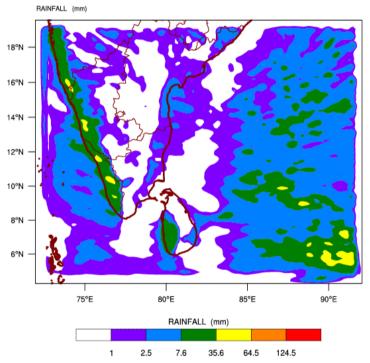


WRF Model Forecast (from IMD Chennai)



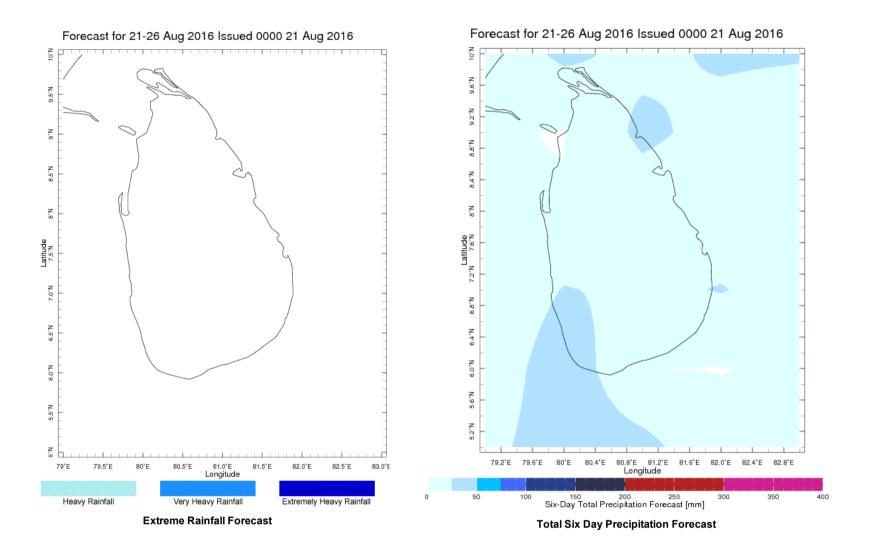
WRF MODEL FORECAST (48 HR.) RAINFALL(mm)\ based on 00 UTC of 21-08-2016 valid for 03 UTC of 23-08-2016

WRF MODEL FORECAST (72 HR.) RAINFALL(mm)\ based on 00 UTC of 21-08-2016 valid for 03 UTC of 24-08-2016



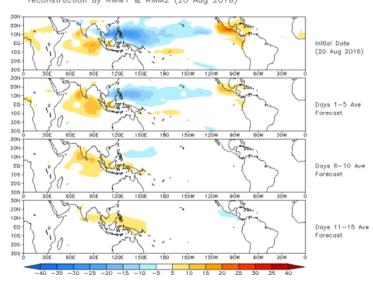
Weekly Rainfall Forecast from IRI

Total rainfall forecast from the IRI for next six days is provided in figures below. The figure to the left shows the expectancy of heavy rainfall events during these six days while the figure to the right is the prediction of total rainfall amount during this period.



Madden Julian Oscillation (MJO) related Outgoing Longwave Radiation (OLR) Forecast

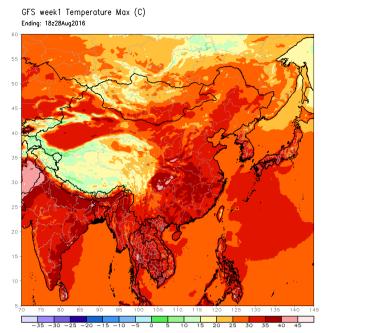
The Outgoing Longwave Radiation (OLR) is a proxy for rainfall. This can be used to identify convective rain clouds based on the MJO phase. Violet and Blue shading indicates enhanced tropical weather and Orange shading indicates suppressed conditions. The following figure shows the forecasts of MJO associated anomolous OLR for the next 15 days from the Constructed Analogue (CA) model forecasts.

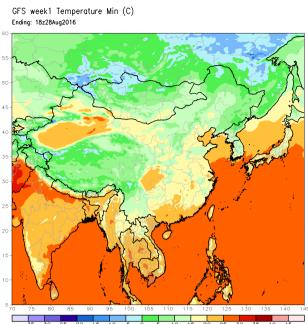


OLR prediction of MJO-related anomalies using CA model reconstraction by RMM1 & RMM2 (20 Aug 2016)

Weekly Temperature Forecast

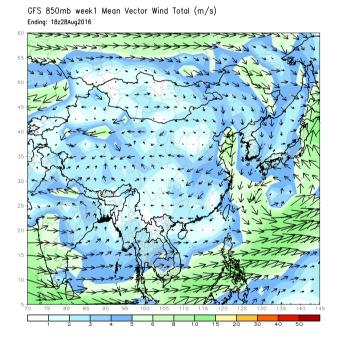
Weekly Minimum and Maximum Temperature prediction from the GFS model (from NOAA CPC)



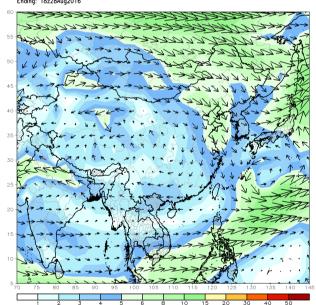


Weekly Wind Forecast

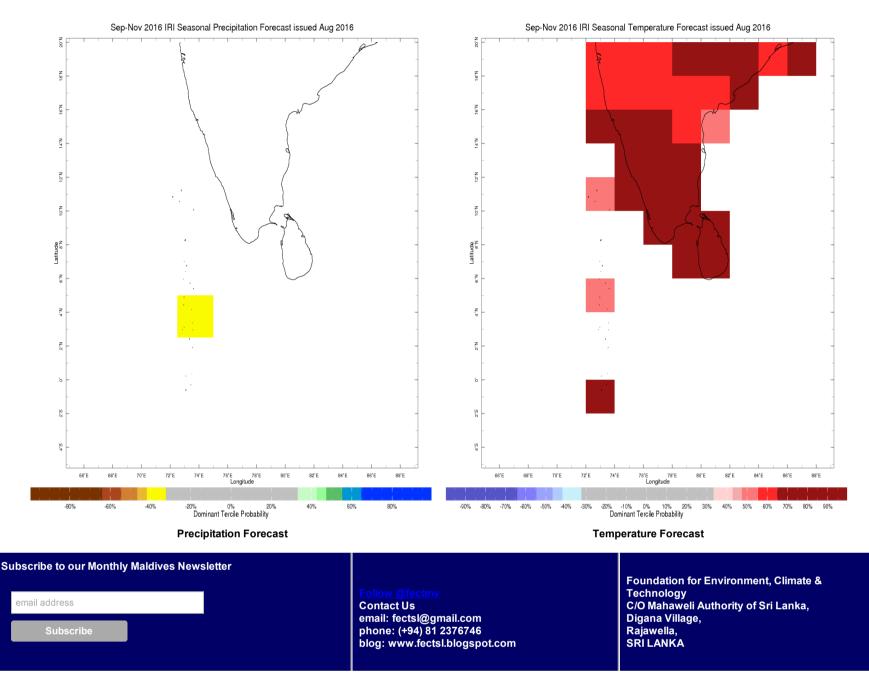
Weekly mean vector wind total prediction from the GFS model at 850 mb (left) and 700 mb (right) levels. (from NOAA CPC)



GFS 700mb week1 Mean Vector Wind Total (m/s) Ending: 18z28Aug2016



Seasonal Rainfall and Temperature Forecast



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