



Weekly Hydro- Meteorological Report for Sri Lanka

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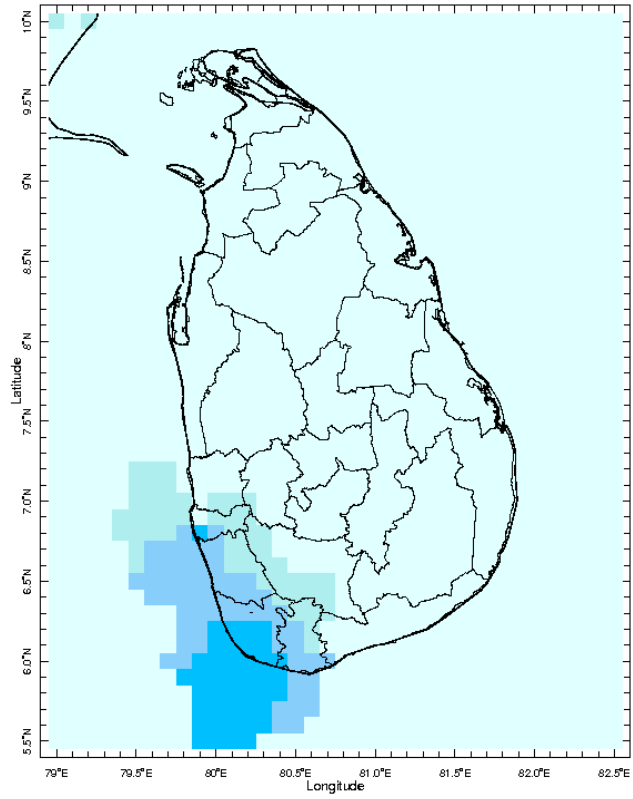
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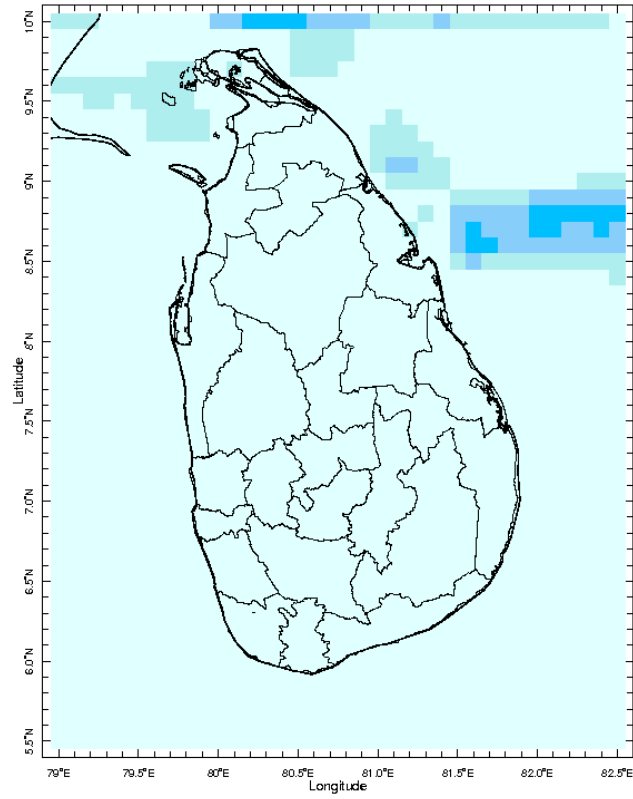
MONITORING

Daily Rainfall Monitoring

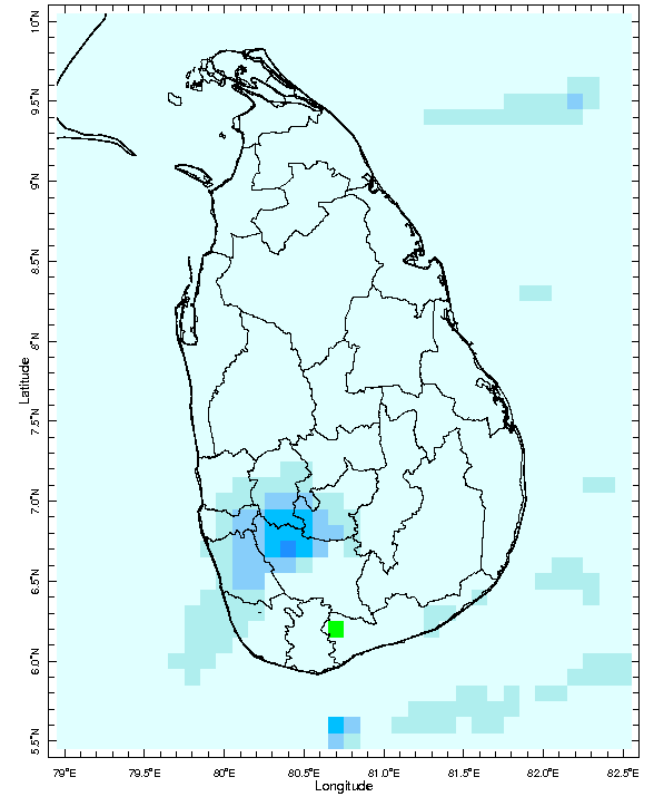
The following figures show the satellite observed rainfall in the last 7 days in Sri Lanka.



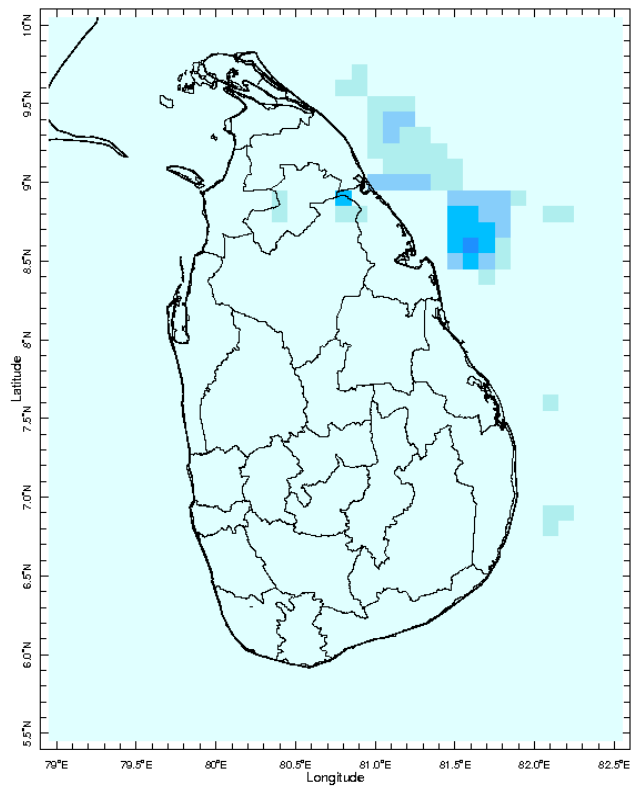
10 Sep 2016



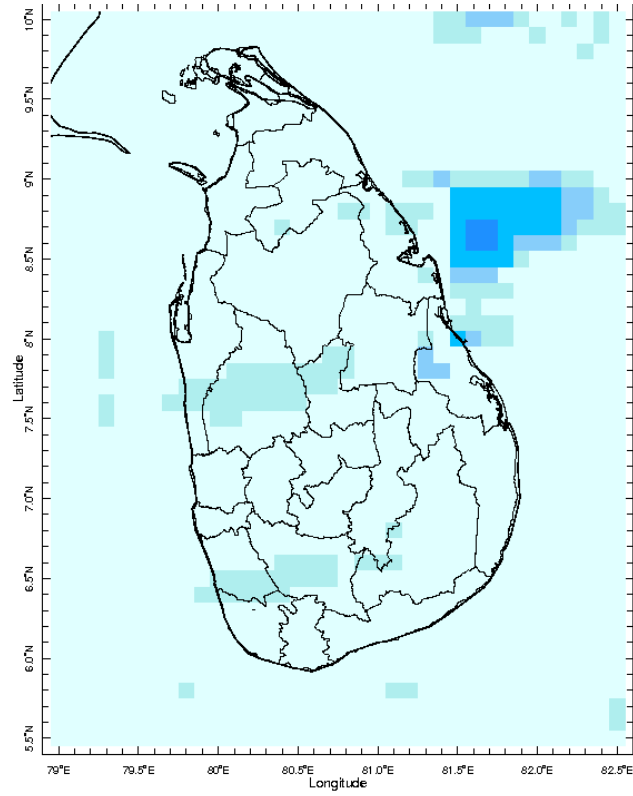
11 Sep 2016



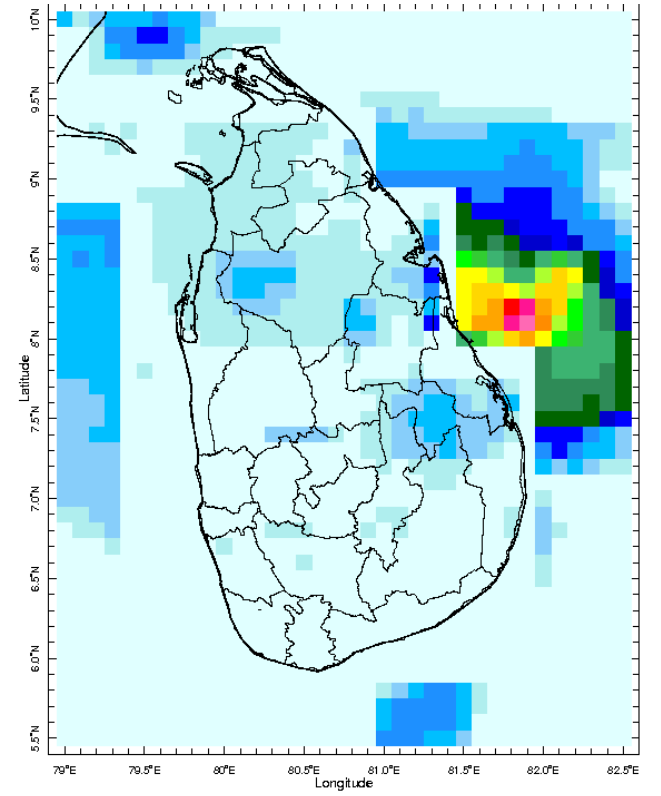
12 Sep 2016



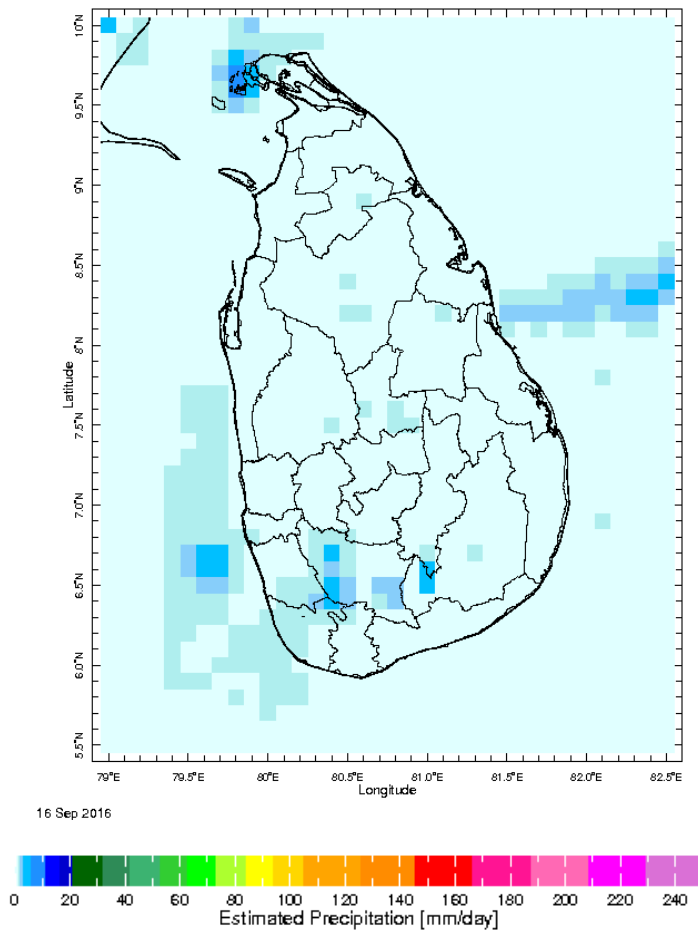
13 Sep 2016



14 Sep 2016



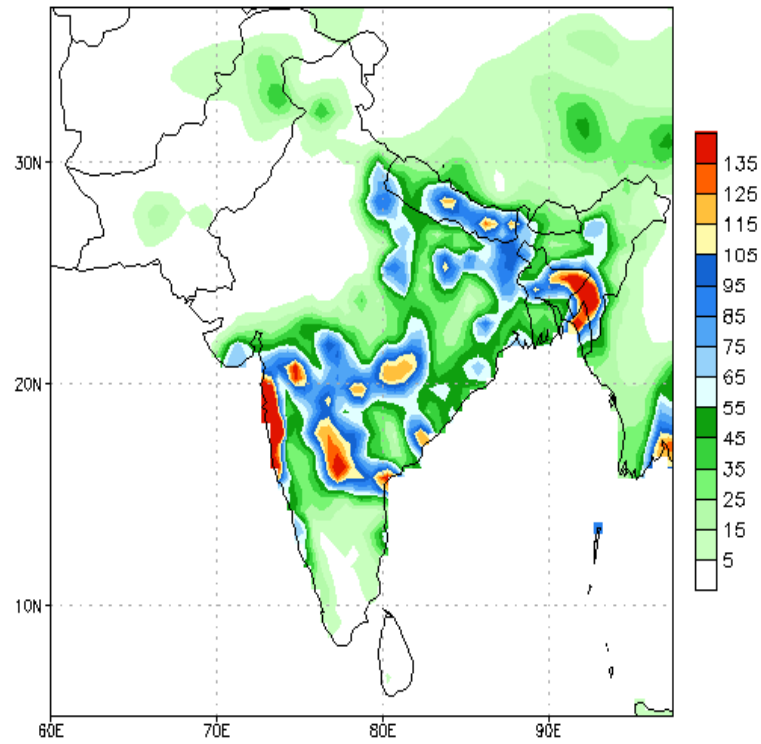
15 Sep 2016



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.

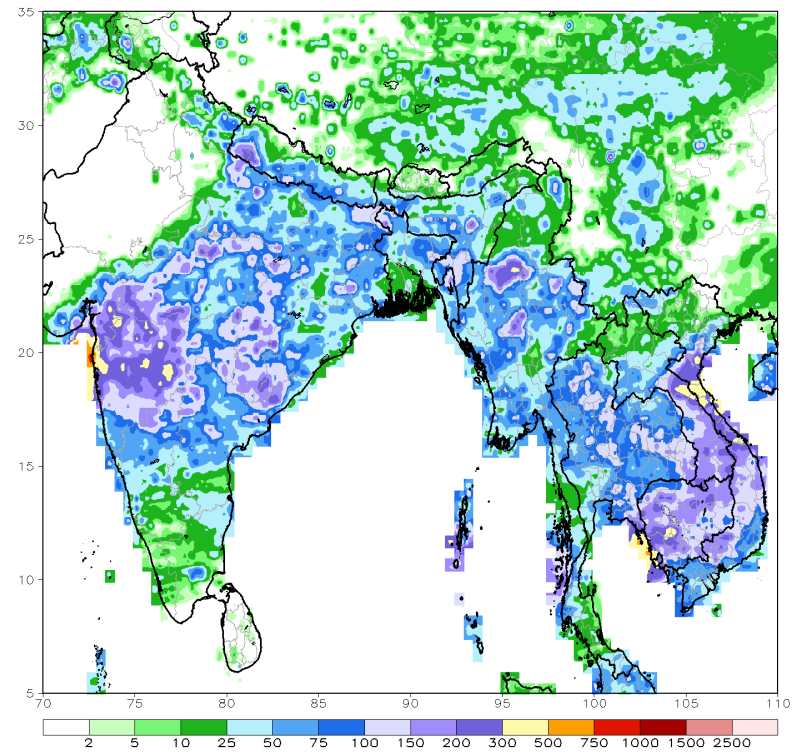
7-day Accumulated Prop. (mm) 11SEP2016-17SEP2016



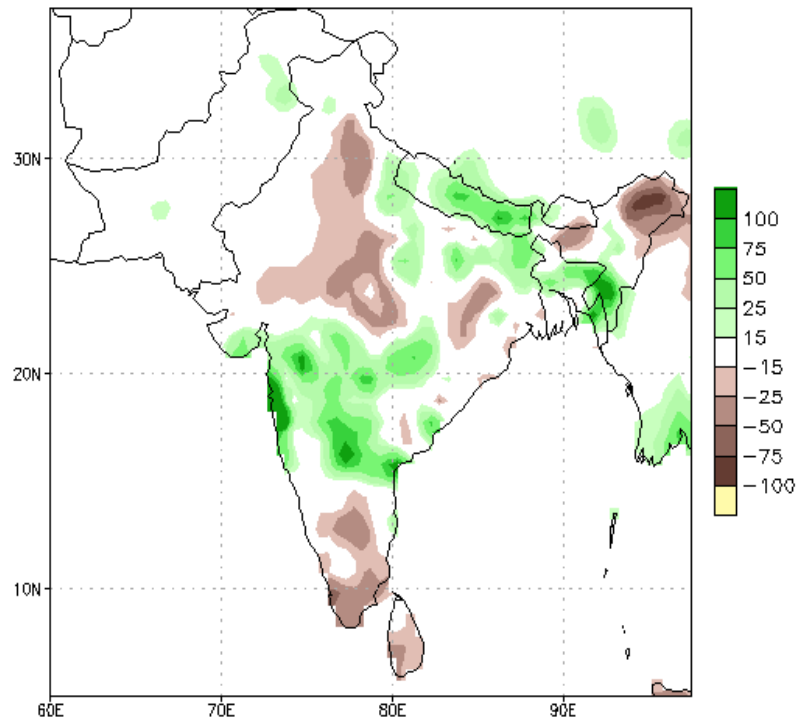
Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis

RFE2 7-Day Total Rainfall (mm)

Period: 11Sep2016 - 17Sep2016



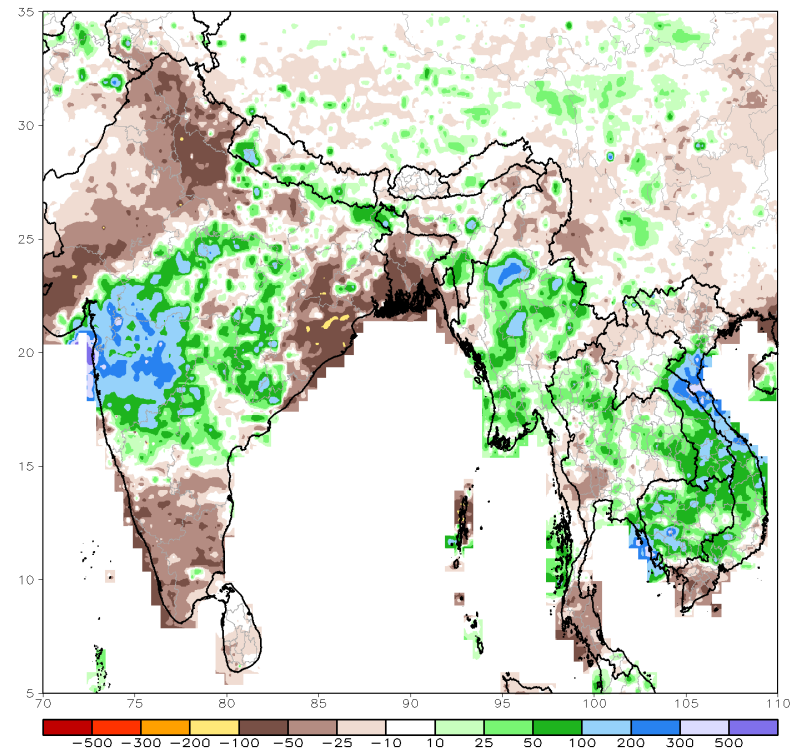
7-day Prep Anomalies (mm) 11SEP2016–17SEP2016



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

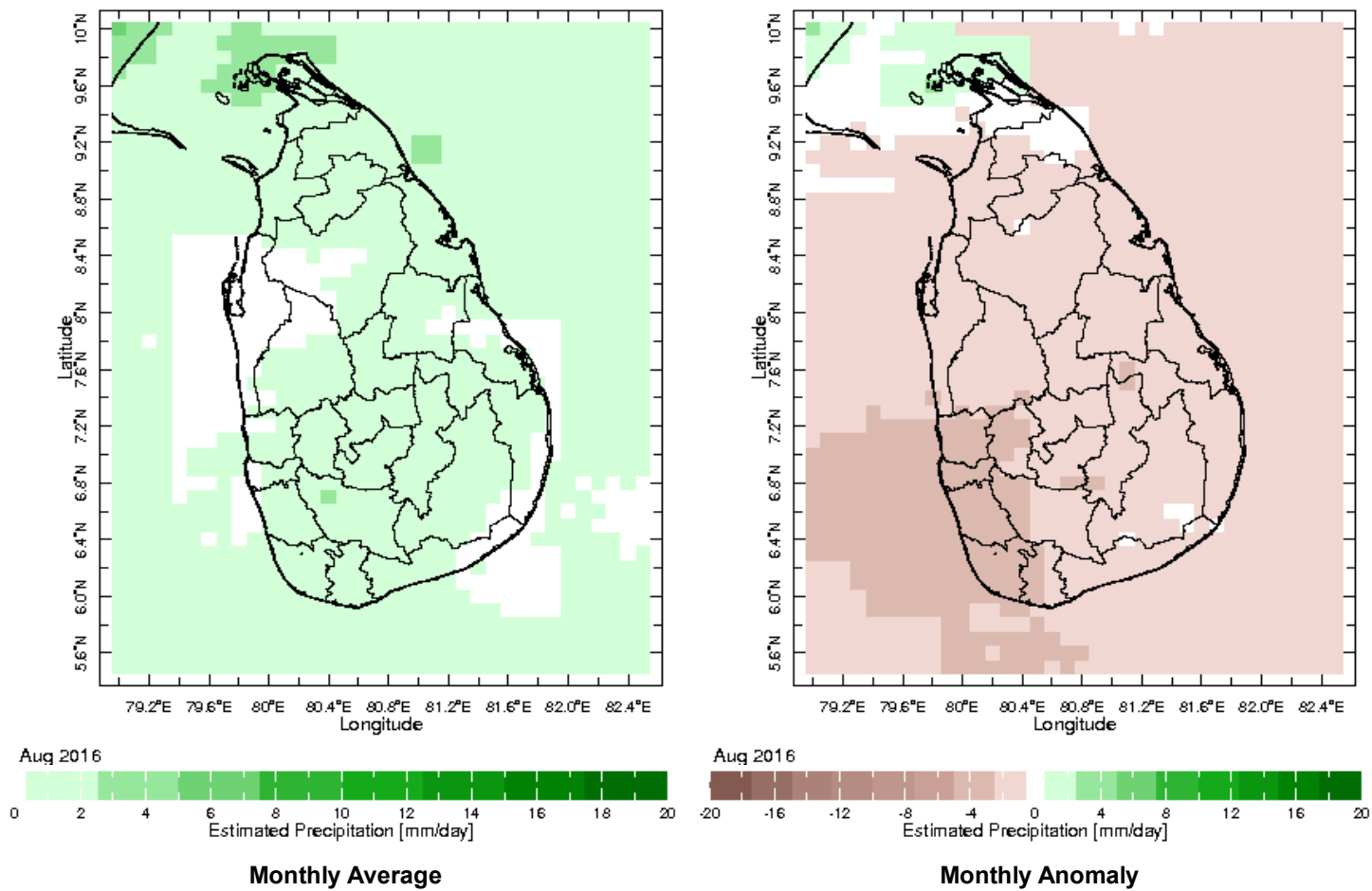
RFE2 7-Day Total Rainfall Anomaly (mm)

Period: 11Sep2016 – 17Sep2016



Monthly Rainfall Monitoring

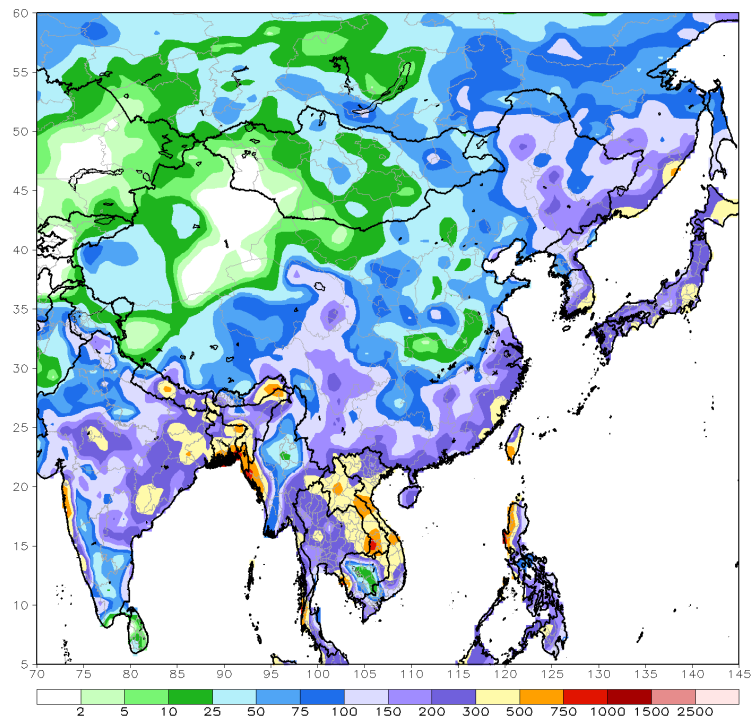
The figure in the left shows the average observed rainfall in the previous month. The rainfall anomaly in the previous month is shown in the figure to the right. The brown color in the anomaly figure shows places which received less rainfall than the historical average while the green color shows places 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.

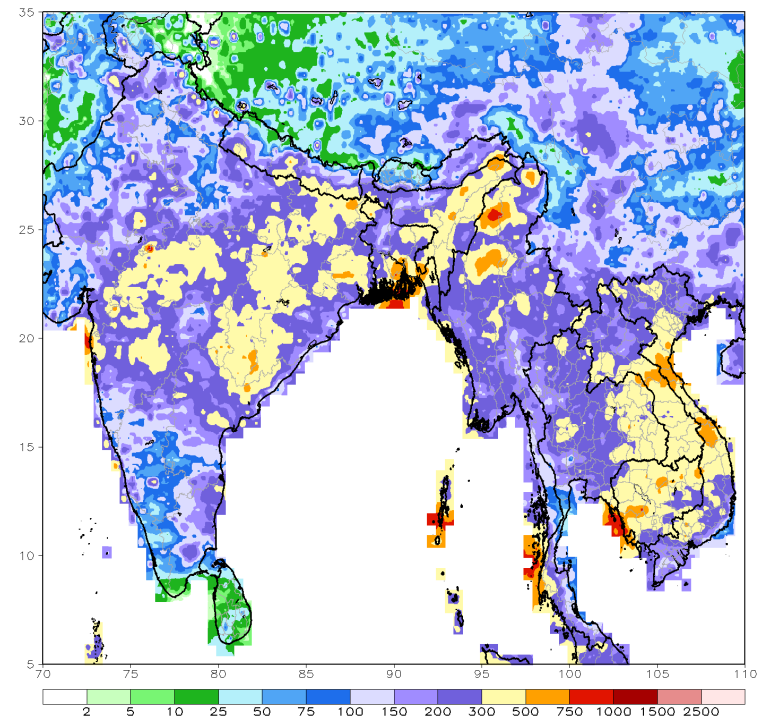
CPC Unified Gauge 30-Day Total Rainfall (mm)

Period: 19Aug2016 - 17Sep2016

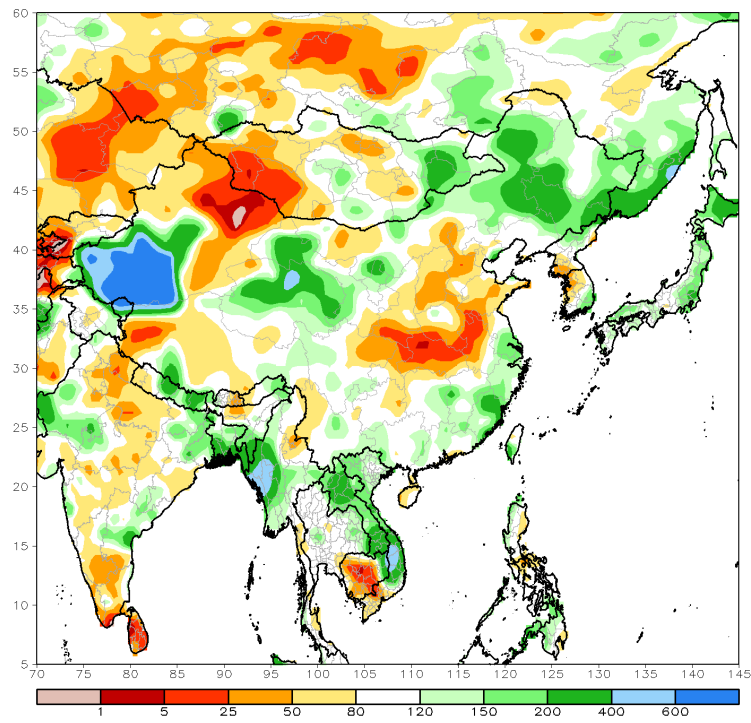


RFE2 30-Day Total Rainfall (mm)

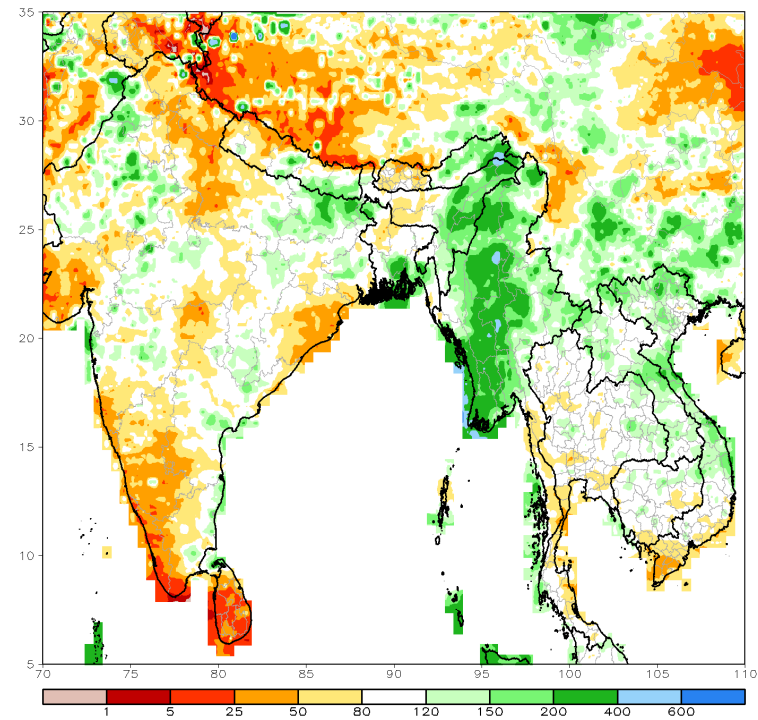
Period: 19Aug2016 - 17Sep2016



CPC Unified Gauge 30-Day Percent of Normal Rainfall (%)
Period: 19Aug2016 - 17Sep2016

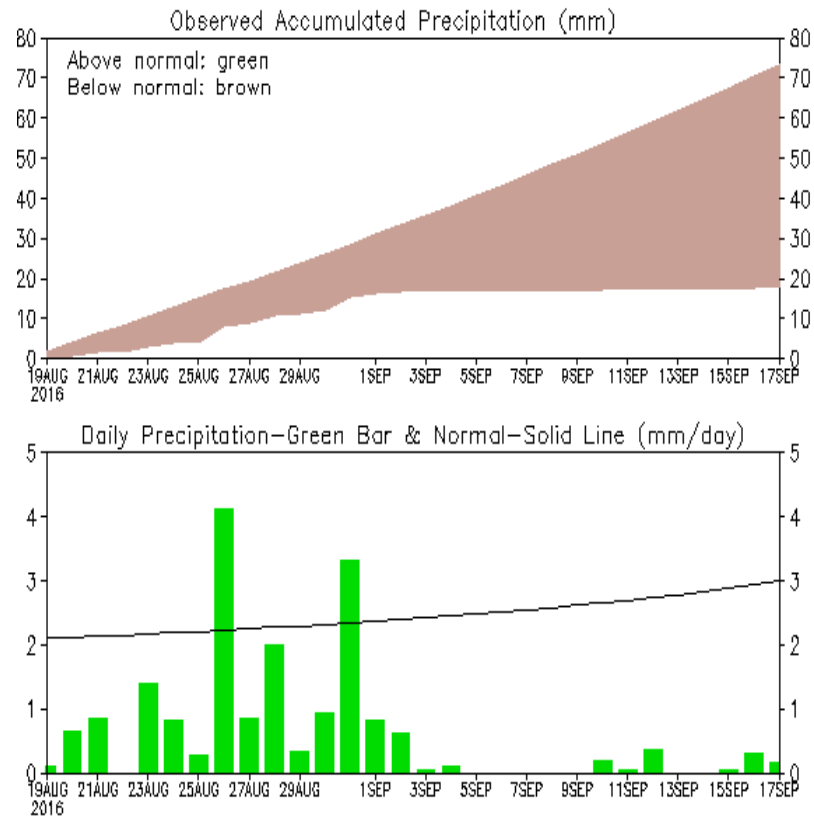


RFE2 30-Day Percent of Normal Rainfall (%)
Period: 19Aug2016 - 17Sep2016



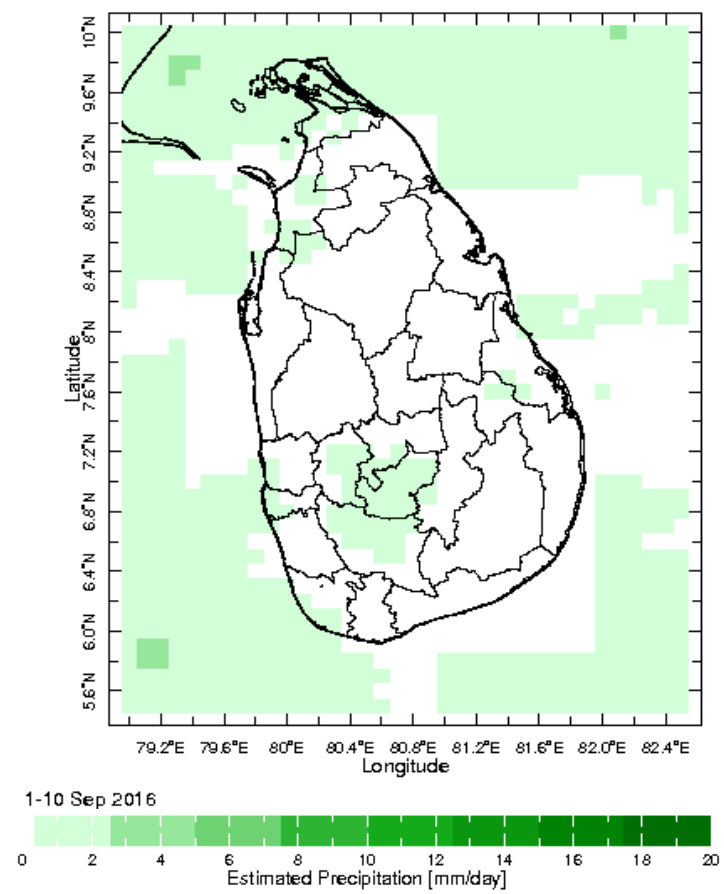
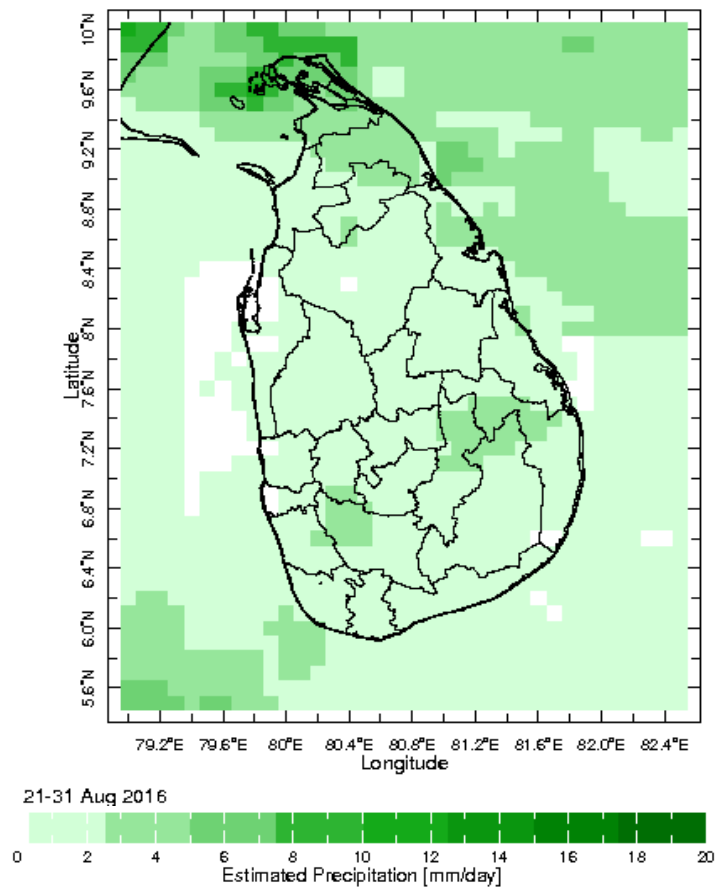
The following figure shows the observed accumulated rainfall (top) and daily observed rainfall (bottom) in Sri Lanka in the last 30 days.

Sri-Lanka



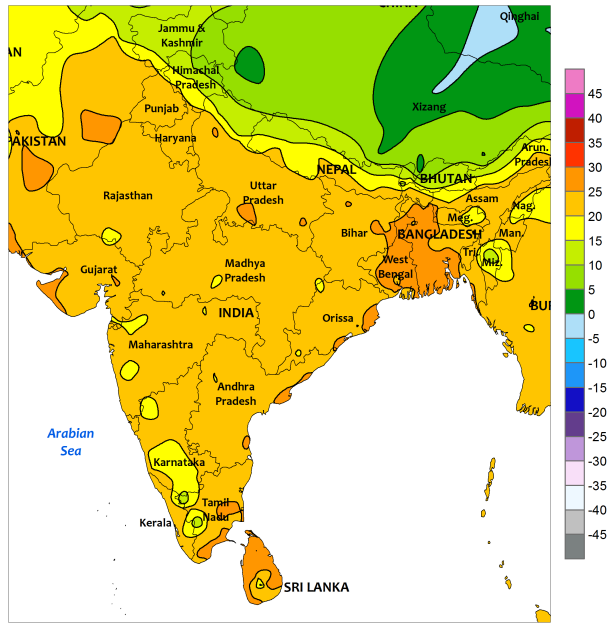
Data Source: CPC (Gauge-Based) Unified Precipitation (Climatology 1981–2010)
(updated on 00Z17SEP2016)

Dekadal (10 Day) Satellite Derived Rainfall Estimates



Weekly Temperature Monitoring

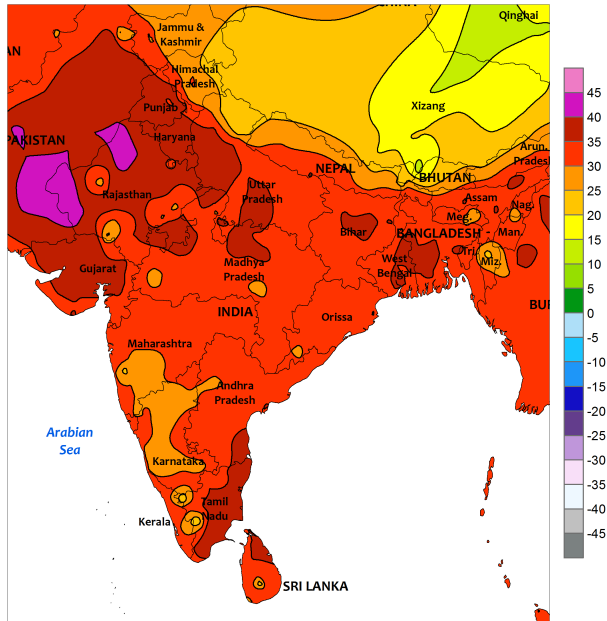
SOUTH ASIA
Extreme Minimum Temperature (C)
SEP 11 - 17, 2016



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



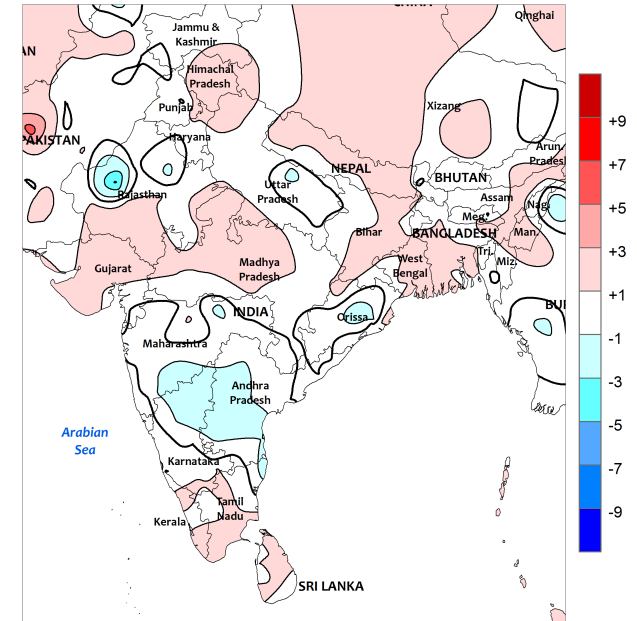
SOUTH ASIA
Extreme Maximum Temperature (C)
SEP 11 - 17, 2016



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTH ASIA
Temperature Anomaly (C)
SEP 11 - 17, 2016



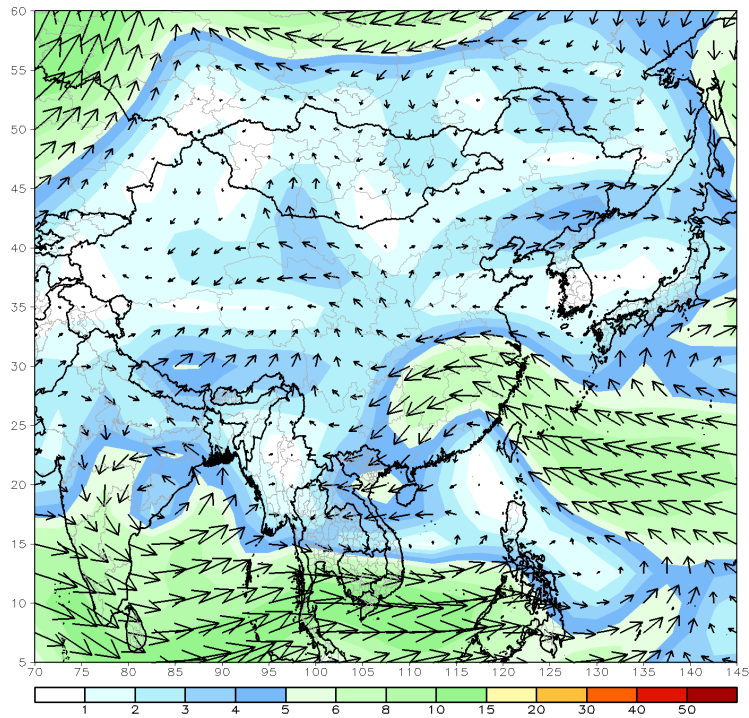
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



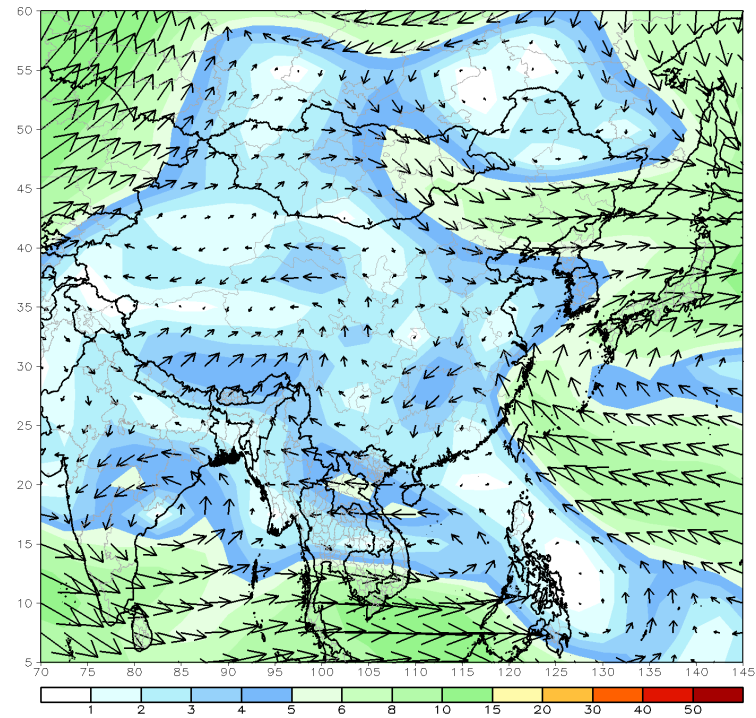
Weekly Wind Monitoring

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.

CDAS 850mb 7-Day Mean Vector Wind Total (m/s)
Period: 10Sep2016 - 16Sep2016



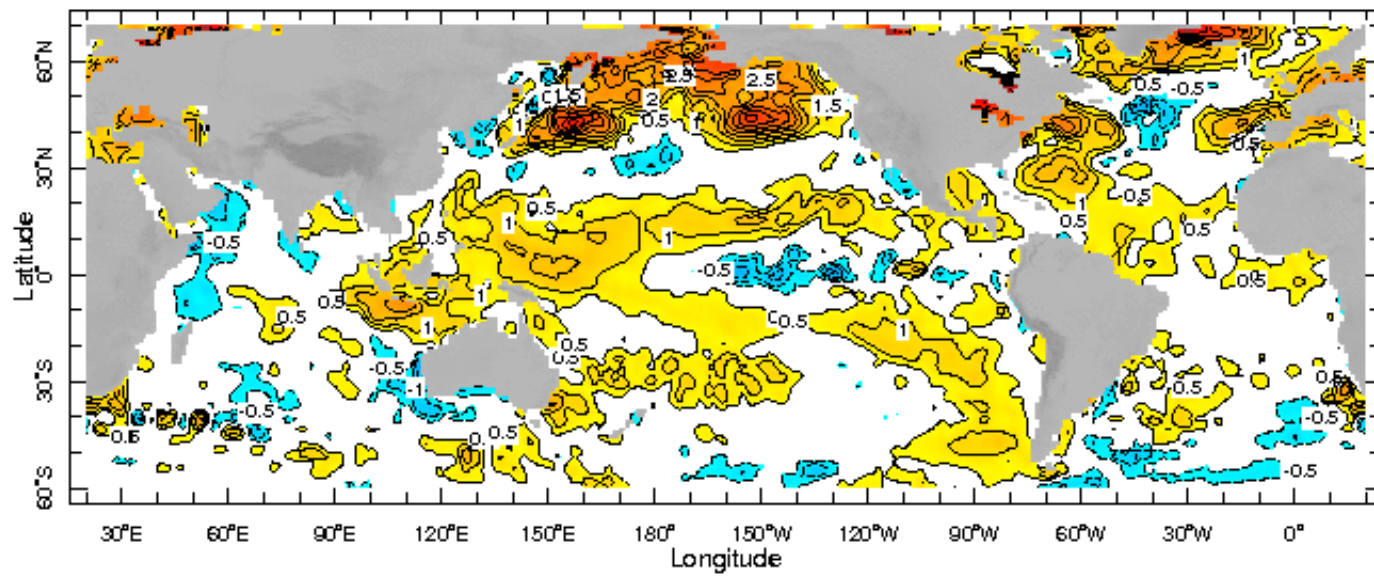
CDAS 700mb 7-Day Mean Vector Wind Total (m/s)
Period: 10Sep2016 - 16Sep2016



Weekly Average SST Anomalies

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

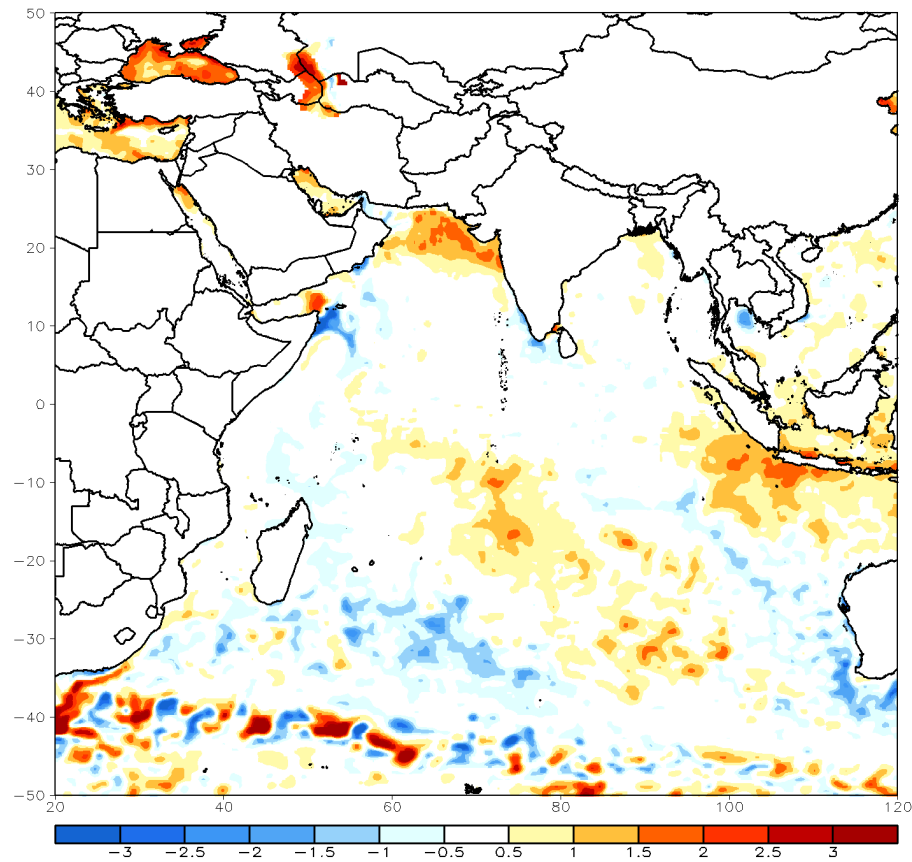




Optimum Interpolated Sea Surface Temperature Anomaly in the Indian Ocean from NOAA CPC

OI SST (v2) 7-Day Anomaly (C)

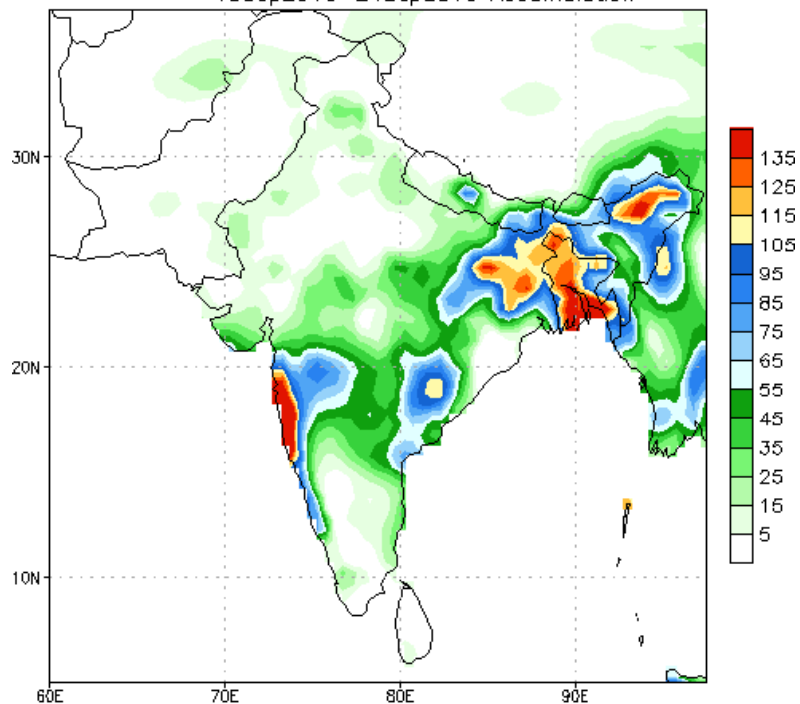
Period: 11Sep2016 - 17Sep2016



PREDICTIONS

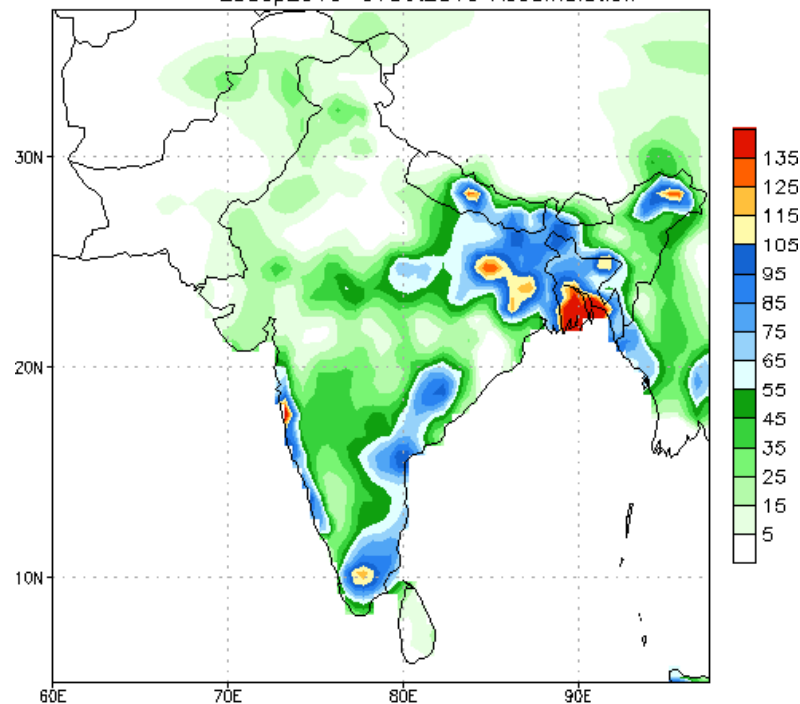
NCEP GFS 1- 14 Day prediction

NCEP GFS Ensemble Forecast 1-7 Day Precipitation (mm)
from: 18Sep2016
18Sep2016-24Sep2016 Accumulation



Bias correction based on last 30-day forecast error

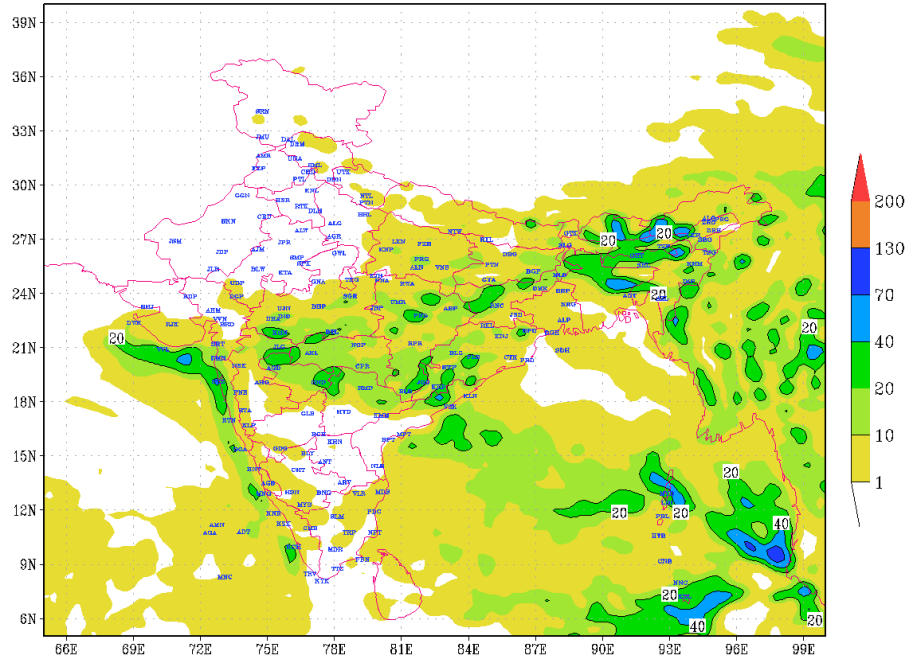
NCEP GFS Ensemble Forecast 8-14 Day Precipitation (mm)
from: 18Sep2016
25Sep2016-01Oct2016 Accumulation



Bias correction based on last 30-day forecast error

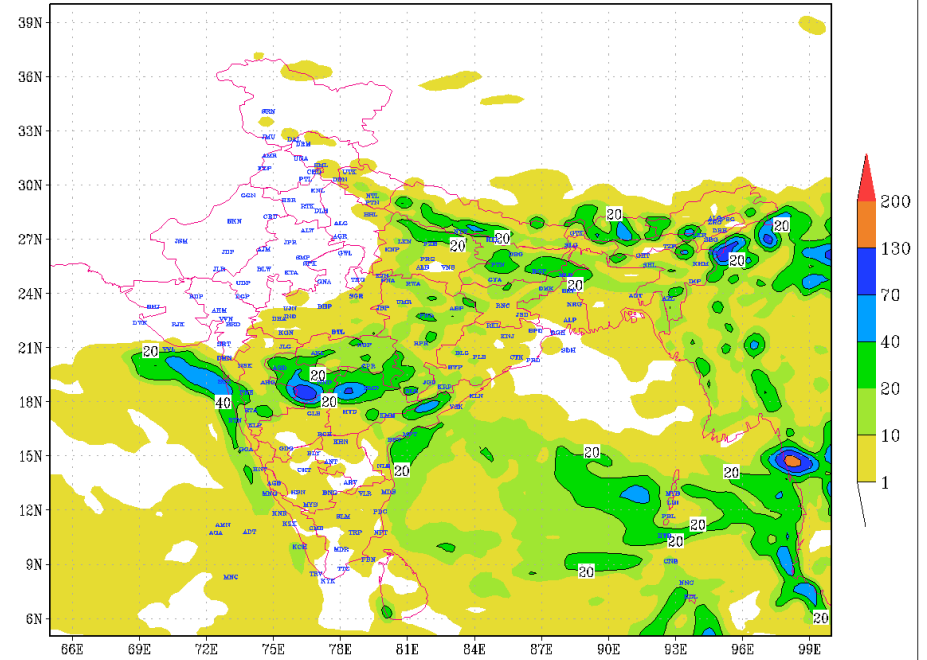
IMD GFS (T574) Model Rainfall Forecast from RMSC New Delhi, India

IMD GFS (T574) RAINFALL (mm) FORECAST (24 HR)
based on 00 UTC of 19-09-2016 valid for 00 UTC of 20-09-2016



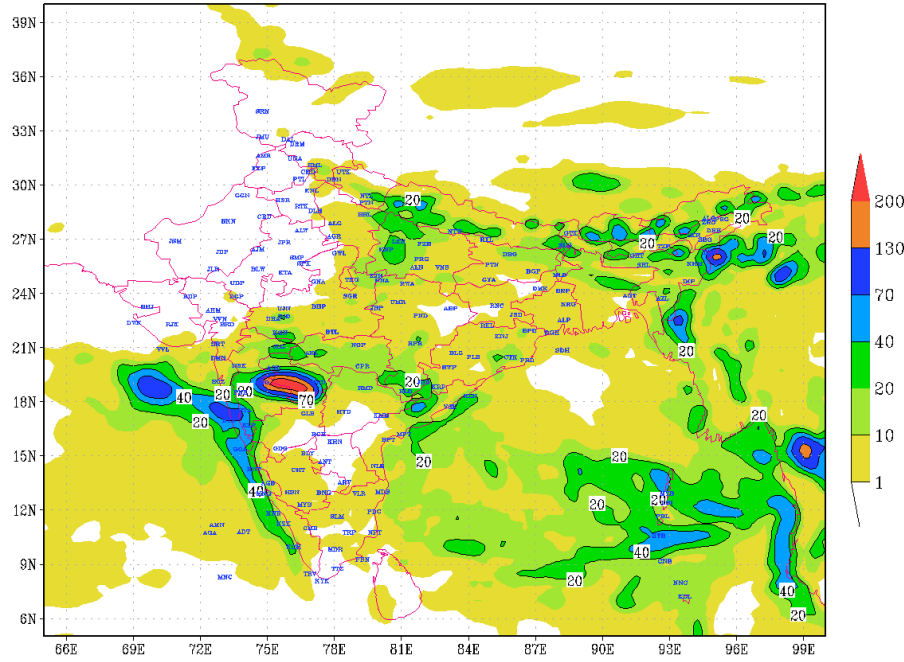
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (48 HR)
based on 00 UTC of 19-09-2016 valid for 00 UTC of 21-09-2016



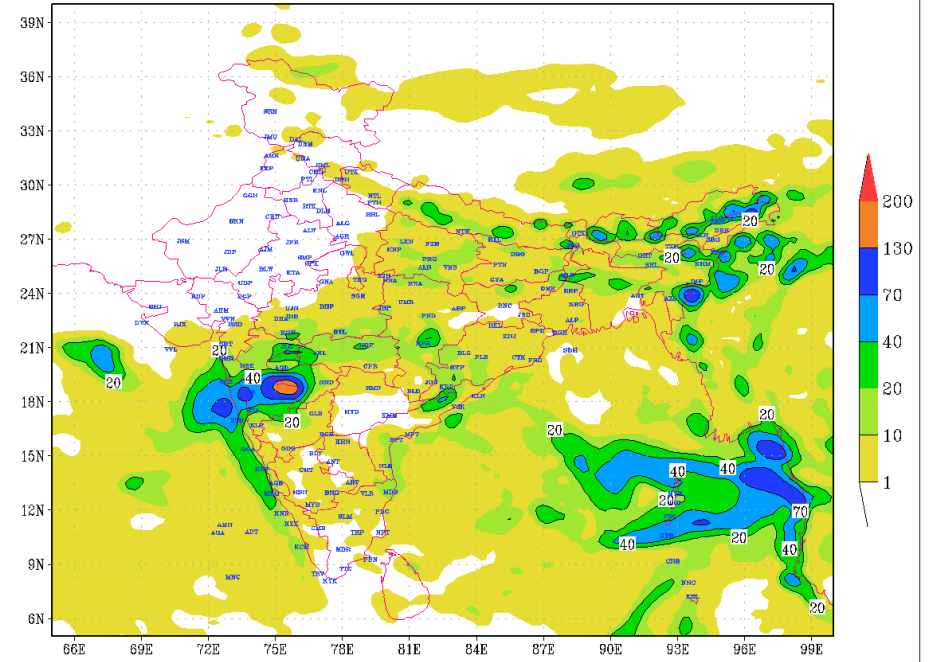
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (72 HR)
based on 00 UTC of 19-09-2016 valid for 00 UTC of 22-09-2016



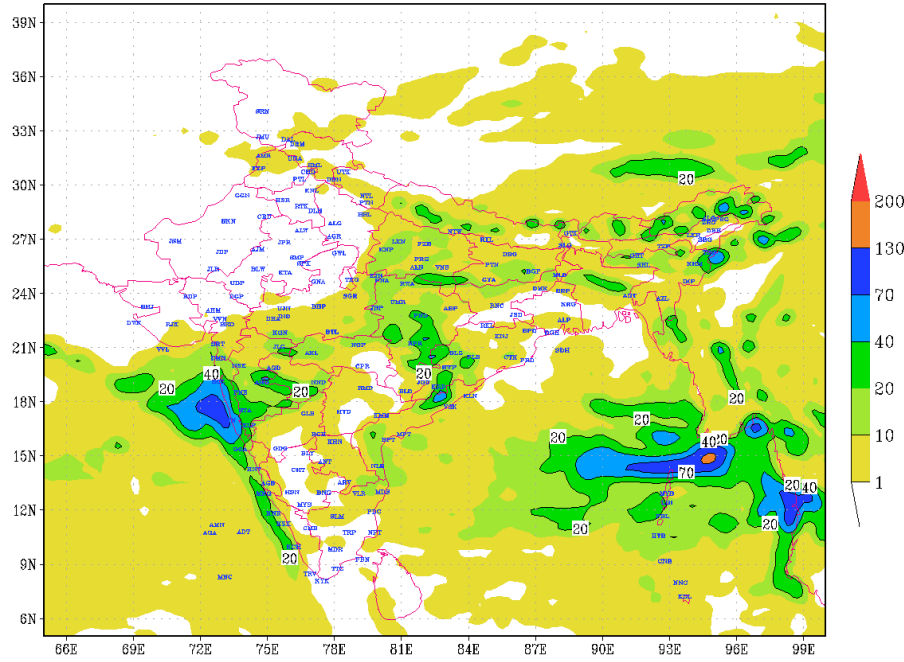
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (96 HR)
based on 12 UTC of 18-09-2016 valid for 12 UTC of 22-09-2016



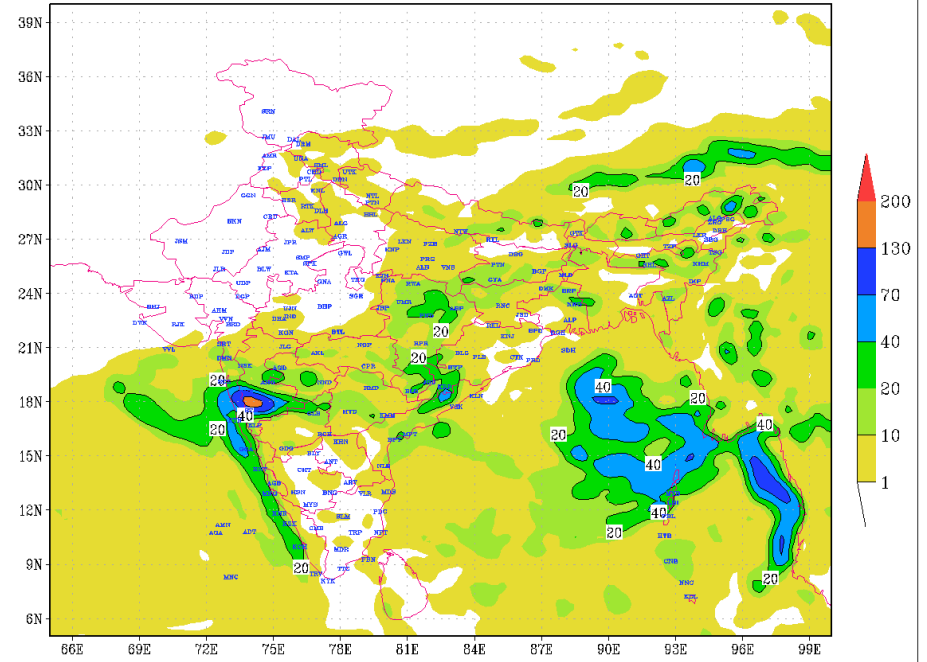
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (120 HR)
based on 12 UTC of 18-09-2016 valid for 12 UTC of 23-09-2016



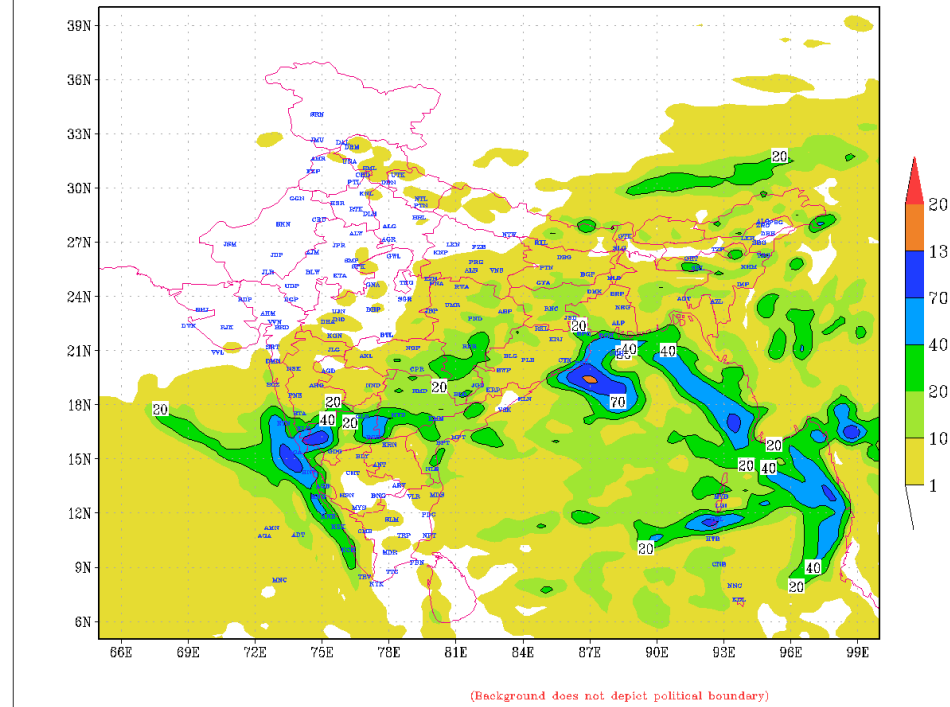
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (144 HR)
based on 12 UTC of 18-09-2016 valid for 12 UTC of 24-09-2016



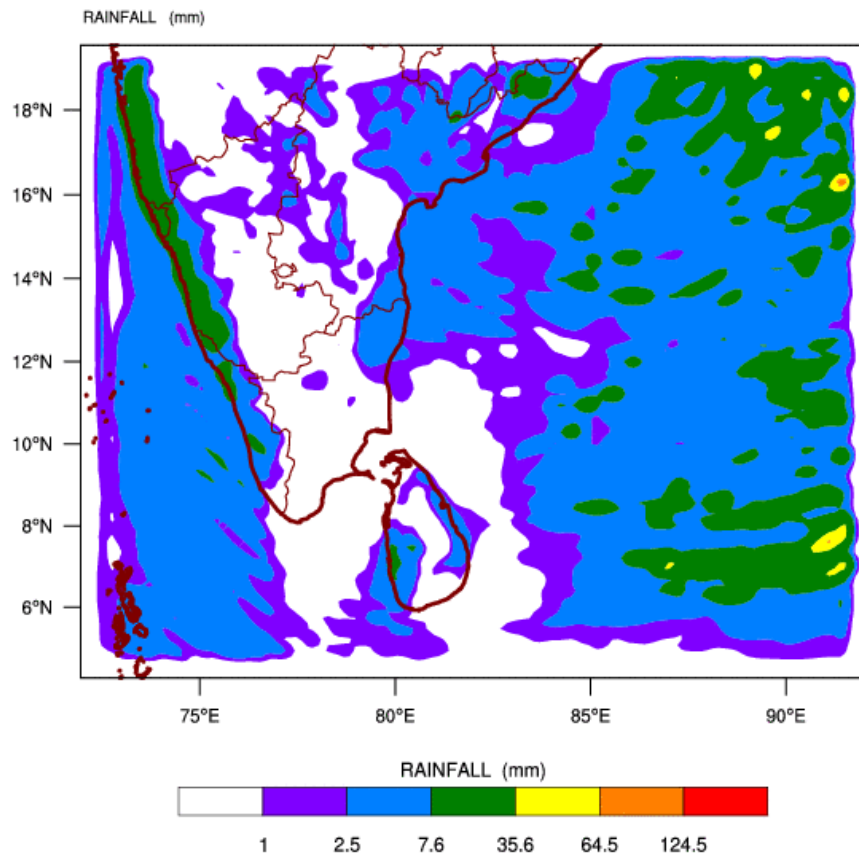
(Background does not depict political boundary)

IMD GFS (T574) RAINFALL (mm) FORECAST (168 HR)
based on 12 UTC of 18-09-2016 valid for 12 UTC of 25-09-2016

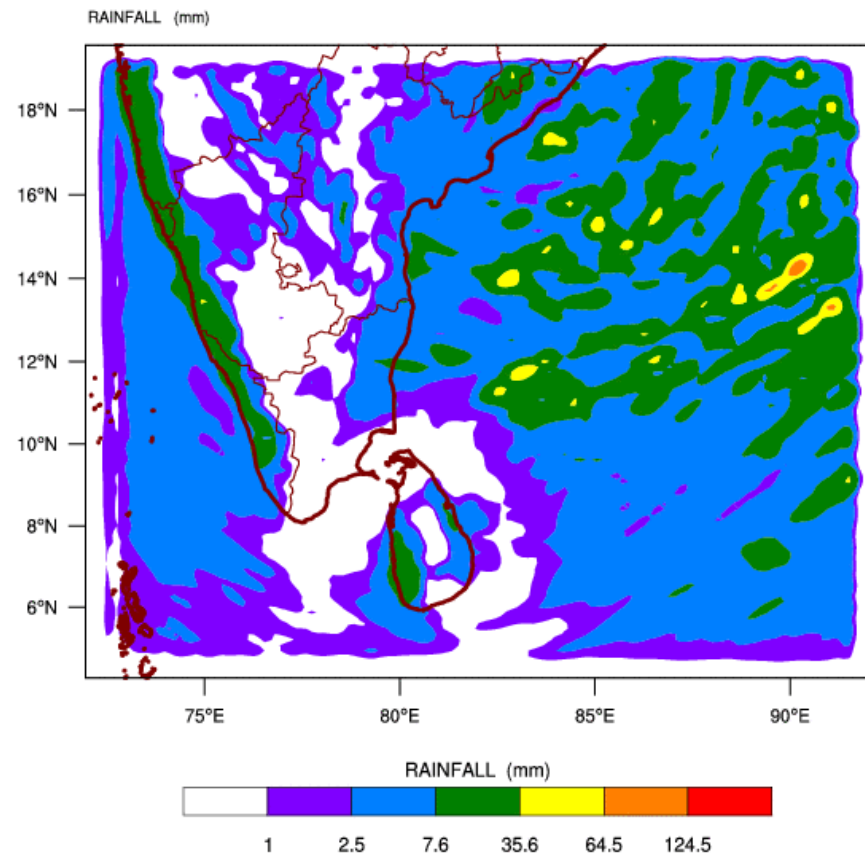


WRF Model Forecast (from IMD Chennai)

WRF MODEL FORECAST (48 HR.) RAINFALL(mm)\
based on 00 UTC of 18-09-2016 valid for 03 UTC of 20-09-2016



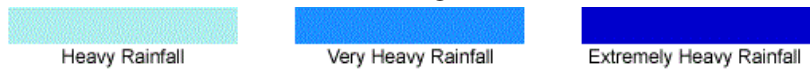
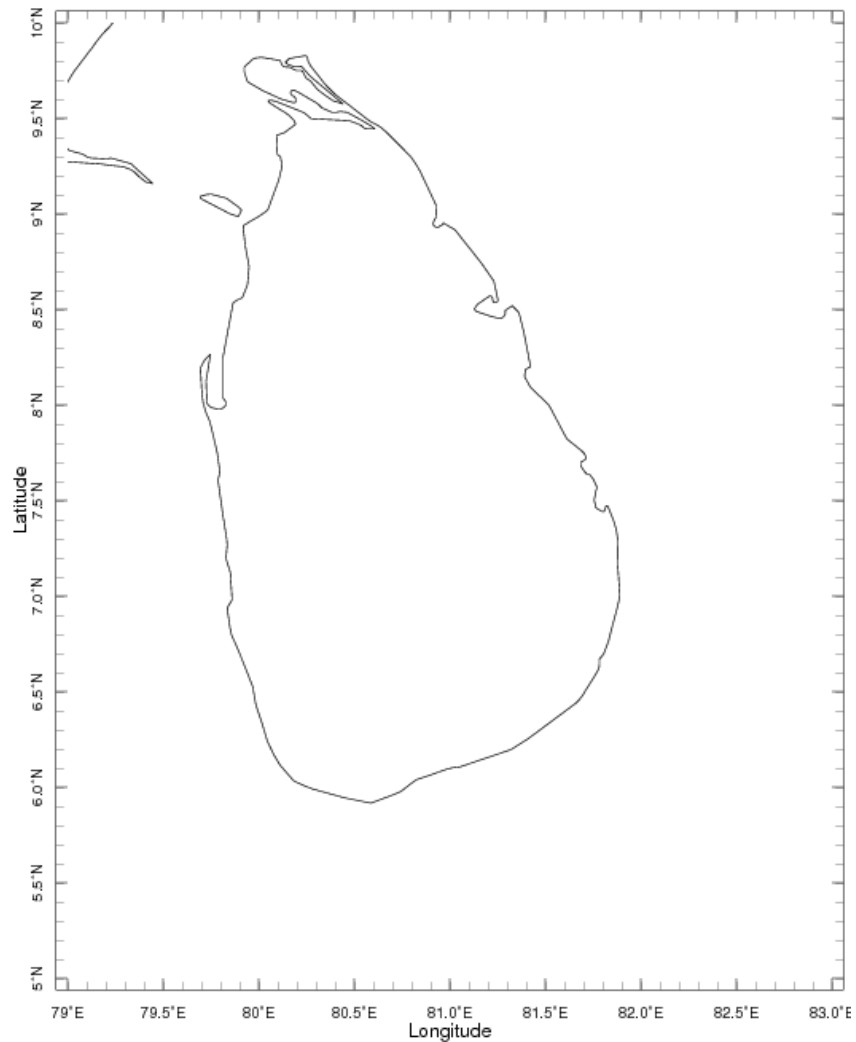
WRF MODEL FORECAST (72 HR.) RAINFALL(mm)\
based on 00 UTC of 18-09-2016 valid for 03 UTC of 21-09-2016



Weekly Rainfall Forecast from IRI

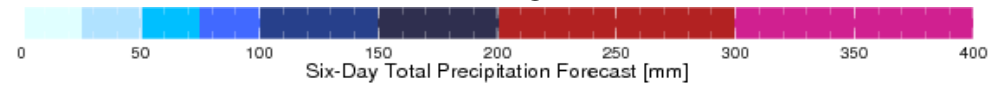
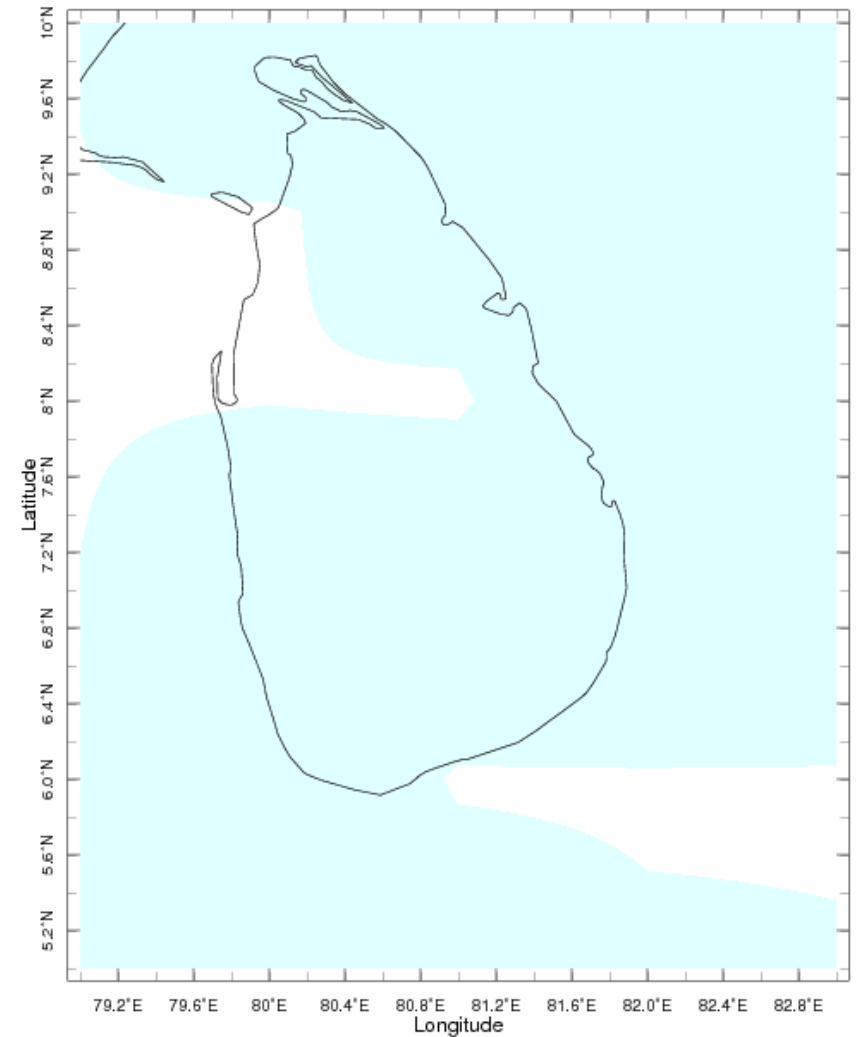
Total rainfall forecast from the IRI for next six days is provided in figures below. The figure to the left shows the expectancy of heavy rainfall events during these six days while the figure to the right is the prediction of total rainfall amount during this period.

Forecast for 16-21 Sep 2016 Issued 0000 16 Sep 2016



Extreme Rainfall Forecast

Forecast for 16-21 Sep 2016 Issued 0000 16 Sep 2016

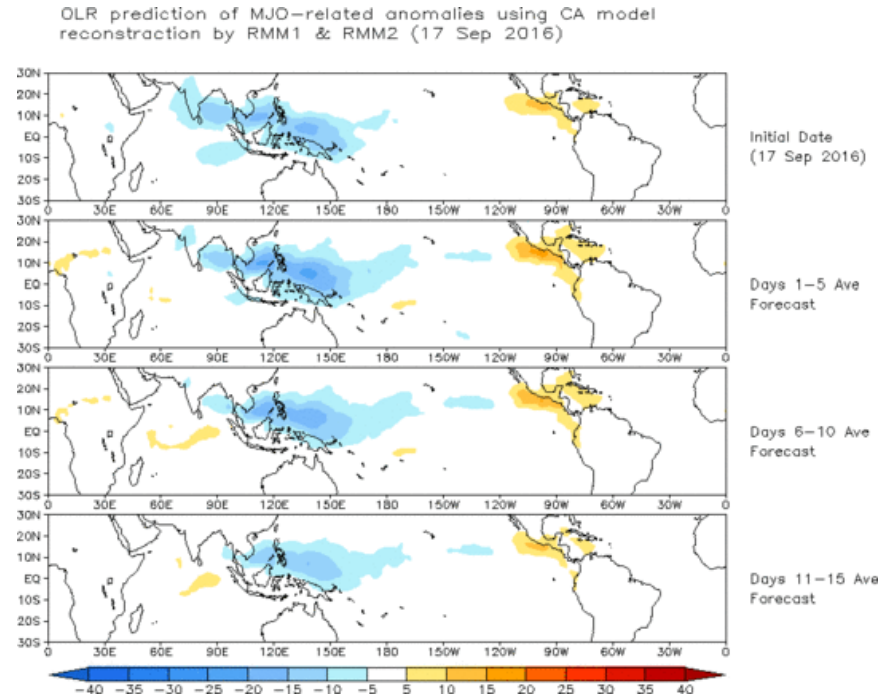


Total Six Day Precipitation Forecast

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

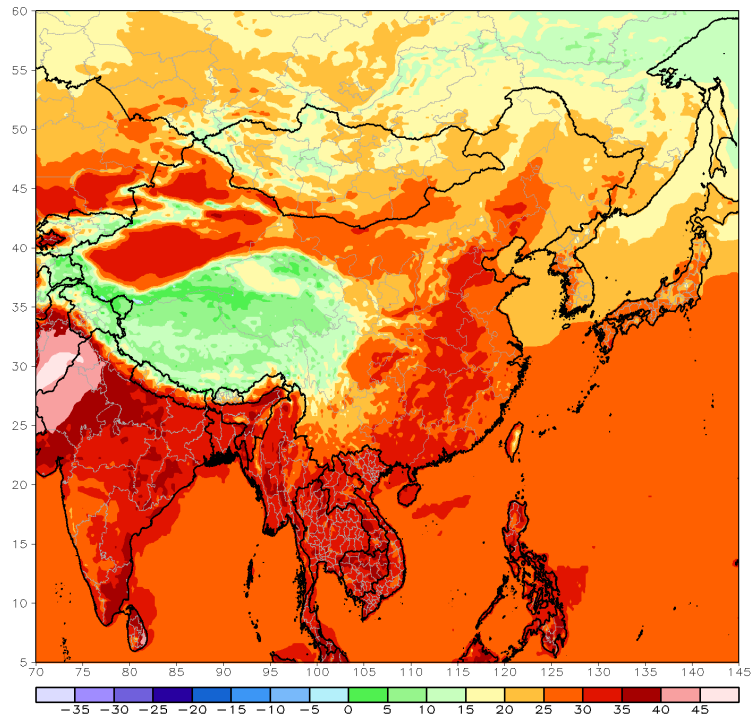
enhanced tropical weather and Orange shading indicates suppressed conditions. The following figure shows the forecasts of MJO associated anomolous OLR for the next 15 days from the Constructed Analogue (CA) model forecasts.



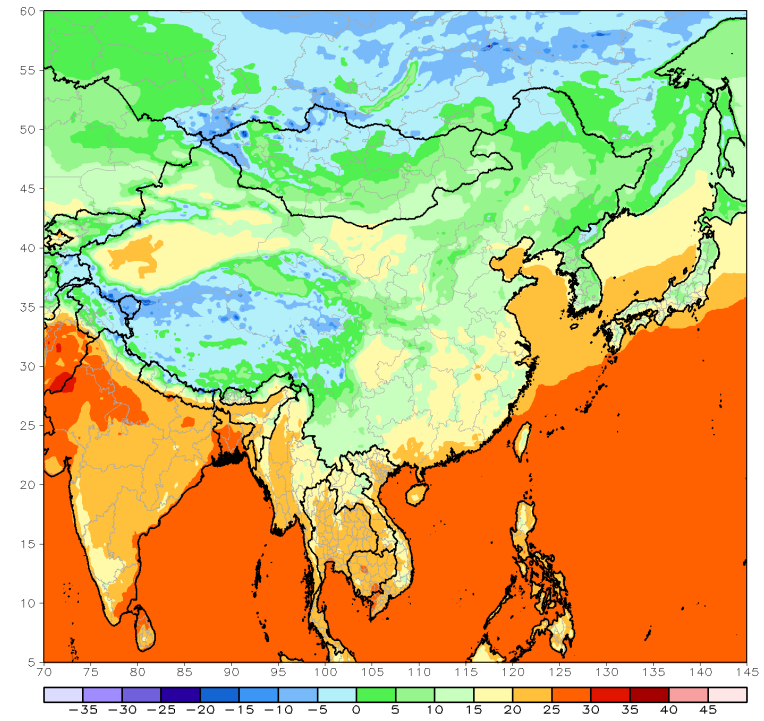
Weekly Temperature Forecast

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

GFS week1 Temperature Max (C)
Ending: 00z26Sep2016



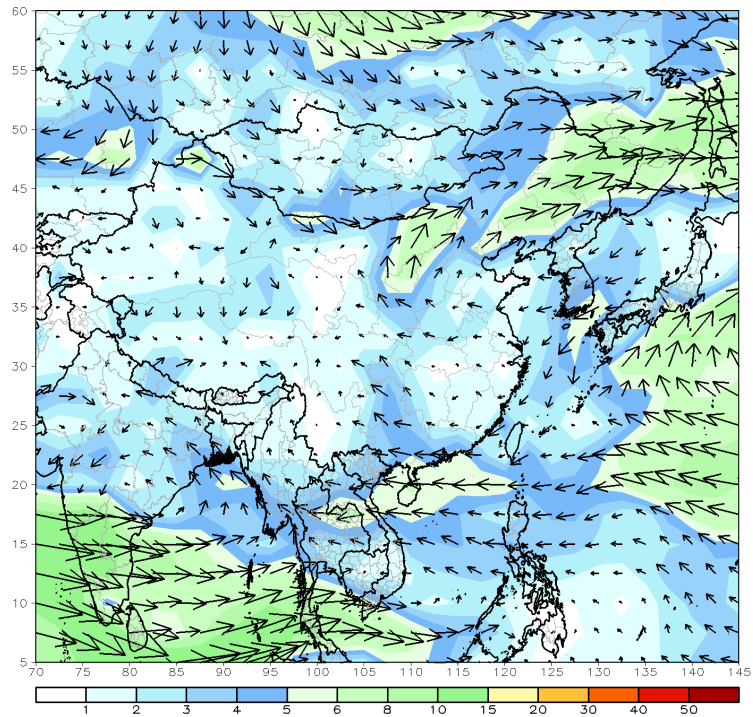
GFS week1 Temperature Min (C)
Ending: 00z26Sep2016



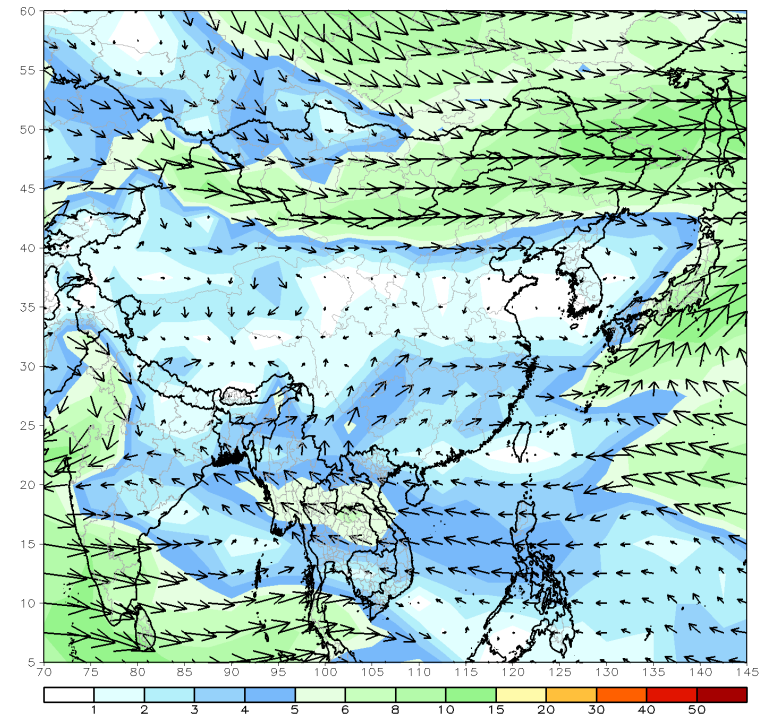
Weekly Wind Forecast

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

GFS 850mb week1 Mean Vector Wind Total (m/s)
Ending: 00z26Sep2016

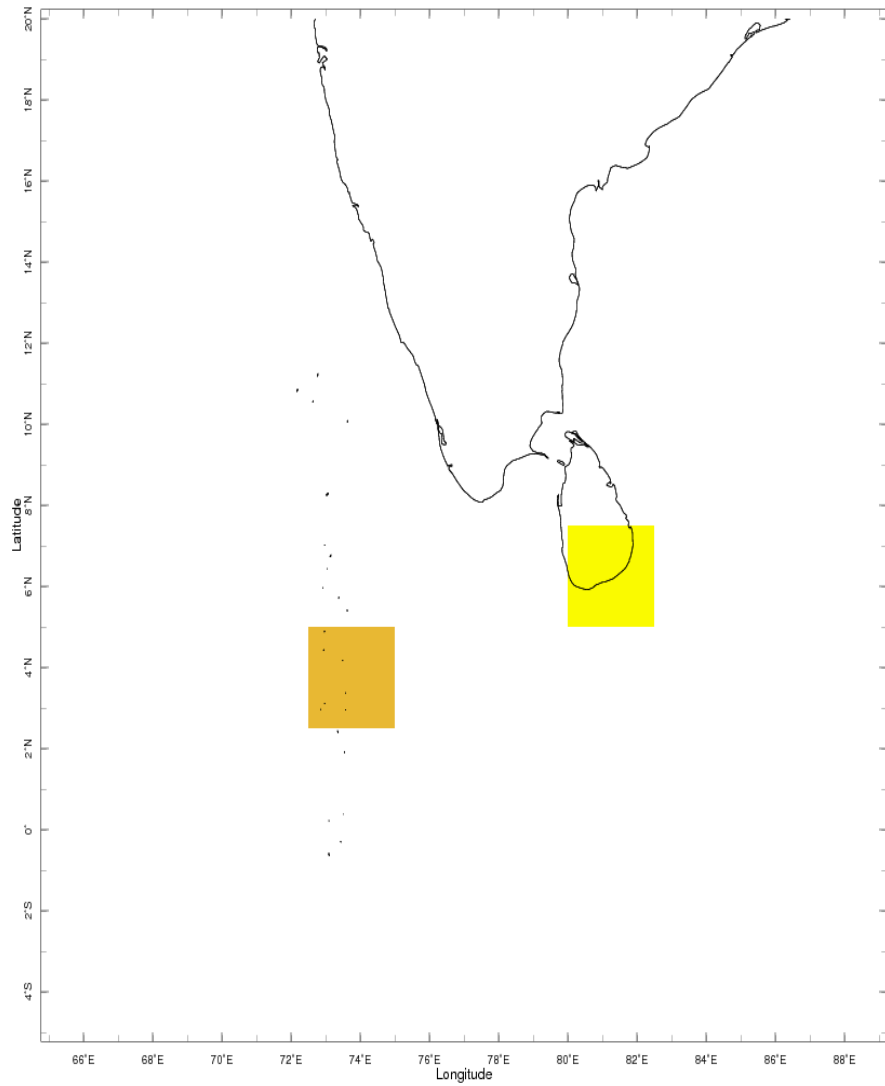


GFS 700mb week1 Mean Vector Wind Total (m/s)
Ending: 00z26Sep2016

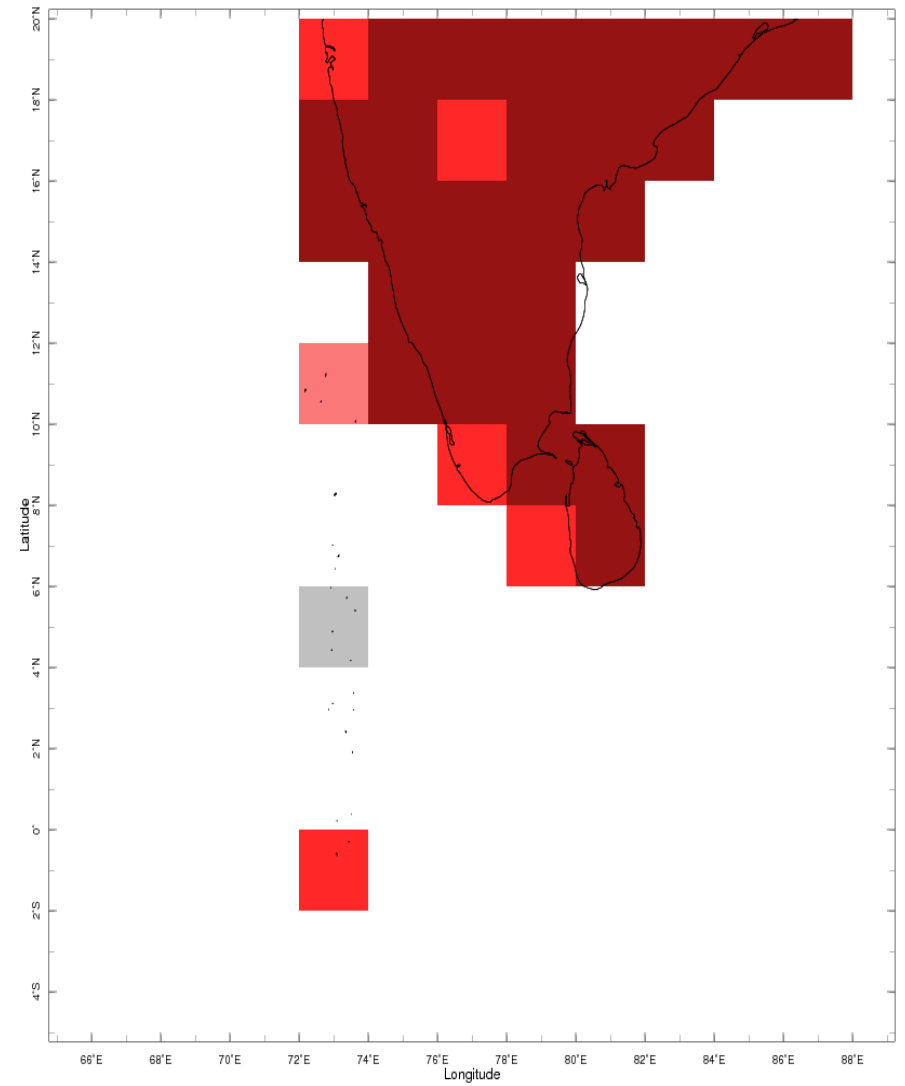


Seasonal Rainfall and Temperature Forecast

Following is the latest seasonal precipitation and temperature prediction for the next 3 months by the IRI. The color shading indicates the probability of the most dominant tercile -- that is, the tercile having the highest forecast probability. The color bar alongside the map defines these dominant tercile probability levels. The upper side of the color bar shows the colors used for increasingly strong probabilities when the dominant tercile is the above-normal tercile, while the lower side shows likewise for the below-normal tercile. The gray color indicates an enhanced probability for the near-normal tercile (nearly always limited to 40%).



Precipitation Forecast



Temperature Forecast

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