FECT Foundation for Environment Climate and Technology
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Experimental Climate Monitoring and Prediction

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5 February 2015

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January 15, 2015

PACIFIC SEAS STATE

During December 2014 through early January 2015 the SST exceeded thresholds for weak Niño conditions, although only some of the atmospheric variables indicate an El Niño pattern. Most of the ENSO prediction models indicate weak El Niño conditions during the December-February season in progress, continuing through most or all of northern spring 2015.

(Text Courtesy IRI)

INDIAN OCEAN STATE

Neutral SST was observed in the sea around Sri Lanka.

MJO STATE

MJO is in phase 7 therefore shall slightly suppress rainfall in Sri Lanka.

Highlights

Monitoring and Predictions:

Roughly entire country received rainfall during the past week averaging up to 20 mm. Some rainfall can be further expected between 6th to 10th February but thereafter a dry condition can be expected all over the country.

Summary

Monitoring

***Weekly Monitoring*:** On 28th rainfall was observed in western and south-west regions of the country averaging up to 10 mm. On 29th heavy rainfall was observed in Colombo and Kalutara areas around 30 mm while central and southern regions also received rainfall around 10mm. On the 31st Ratnapura area received rainfall around 30 mm and during 1st to 2nd February Moneragala and Badulla areas received heavy rainfalls around 30 mm. On 3rd entire country received rainfall averaging up to 10 mm with higher precipitation in north-eastern coast of the island averaging around 50 mm.

***Monthly Monitoring*:** During January an average rainfall of 2 mm to 5 mm was observed in western, southern, sabaragamuwa and uva regions. Highest rainfall in January was observed in areas Kalutara and Ratnapura. Decadal rainfall average was slightly increased during 21st to 31st January compared with 11th to 20th January.

Predictions

14 day prediction:NOAA NCEP models predict that the entire country shall receive rainfall during 4th to 10th February exceeding 35 mm. Rainfall is expected to cease during 11th to 17th February.

IMD WRF &IRI Model Forecast: According to the IMD WRF model, on 6th February rainfall can be observed in most parts of the country except Hambantota. On that day central and eastern regions shall receive rainfall around 35 mm. Rainfall is expected to decrease on 7th February but Galle and Ratnapura areas shall receive rainfall around 35 mm. IRI model predicts that rainfall can be expected in southern,western,eastern and central regions of the island during 4th to 9th February.

Seasonal Prediction: As per IRI Multi Model Probability Forecast for February to April, the total 3 month precipitation shall be climatological. The 3 month average temperature has more than 60% likelihood of being in the above-normal tercile during this period.

Inside this Issue

[1] International Research Institute for Climate and Society, Earth Institute at Columbia University, New York.
[2] These interpretations of hydro-meteorological conditions for the Mahaweli basins are provided for the use of the WMS/MASL.

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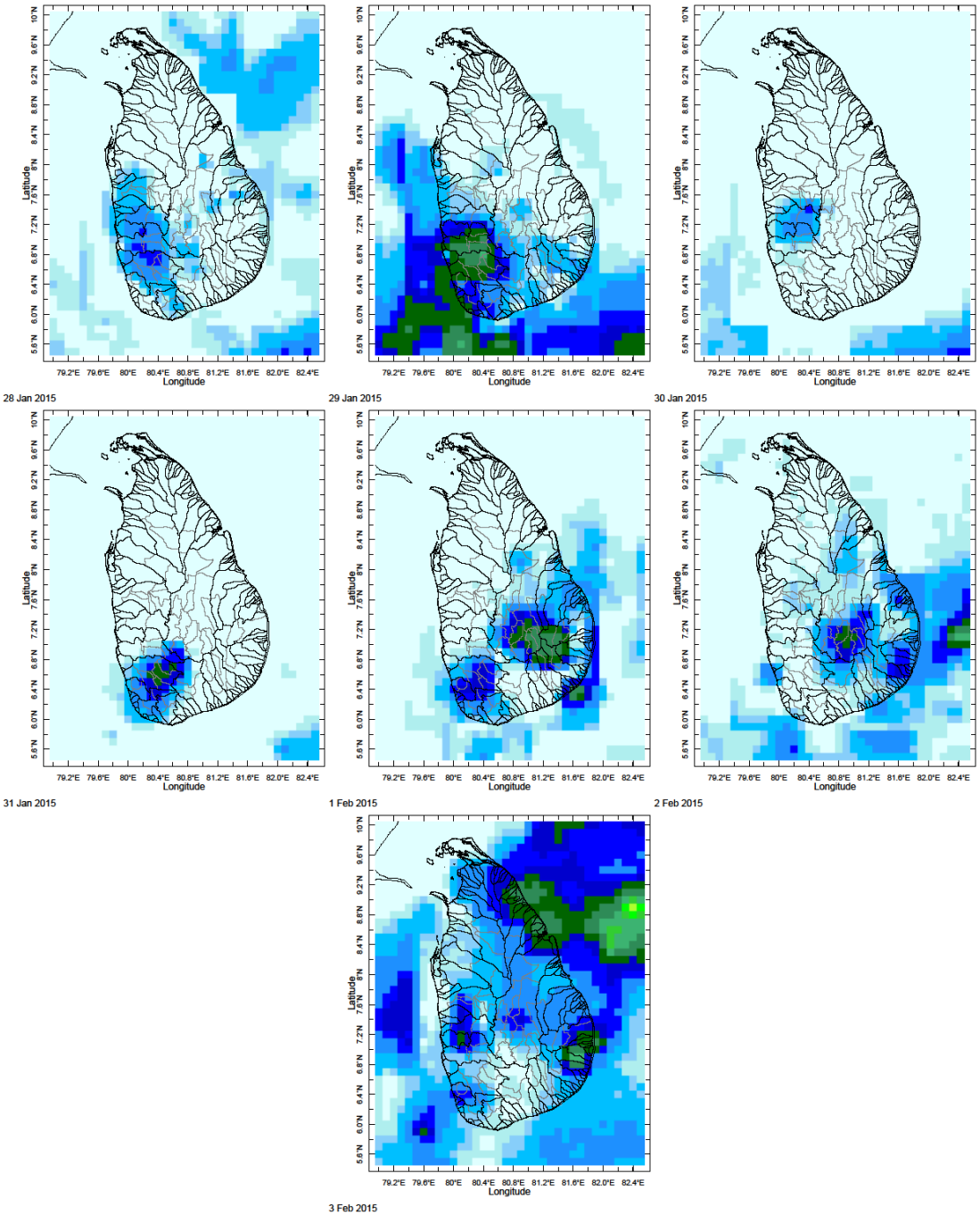
1. Monitoring

a) *Daily Satellite Derived Rainfall Estimate* Maps: 28th January 2015 –3rd February 2015 *(Left-Right, Top-Bottom)*



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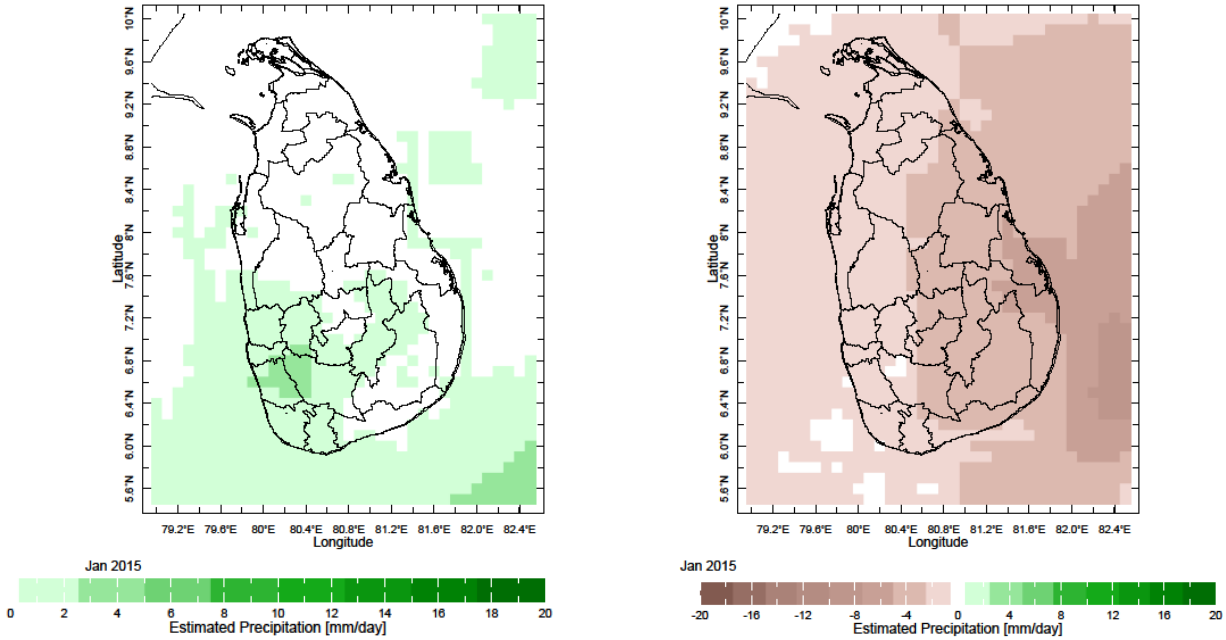
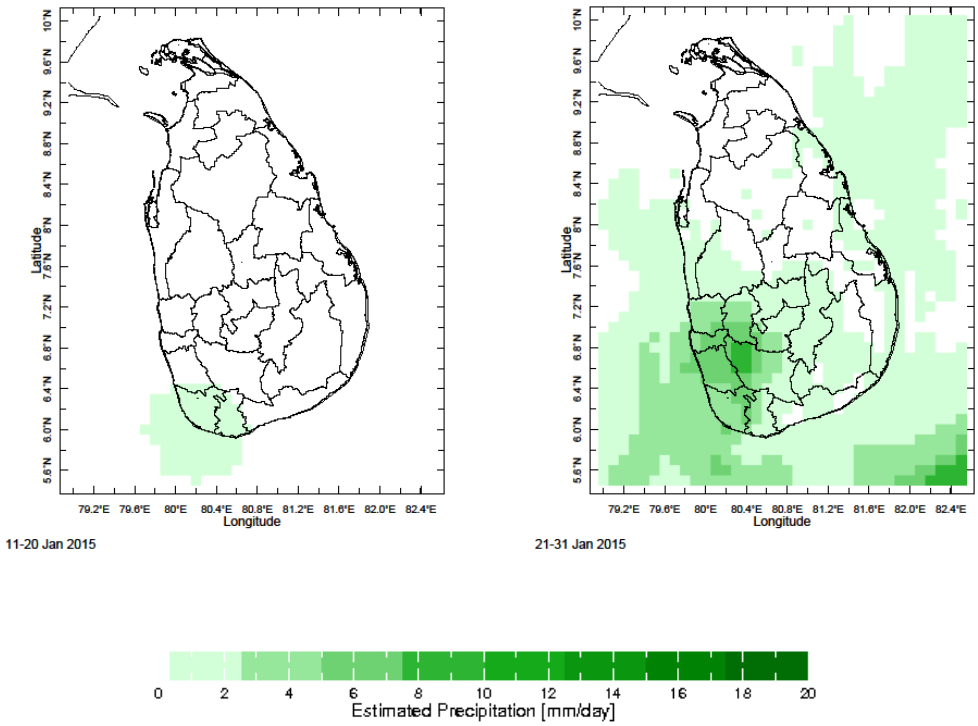
b) Monthly Satellite Derived Rainfall Estimates for January 2014 (Average – Left and Anomaly - Right)



c) Dekadal (10 Day) Satellite Derived Rainfall Estimates 11-20 ,21-31 Jan 2015)



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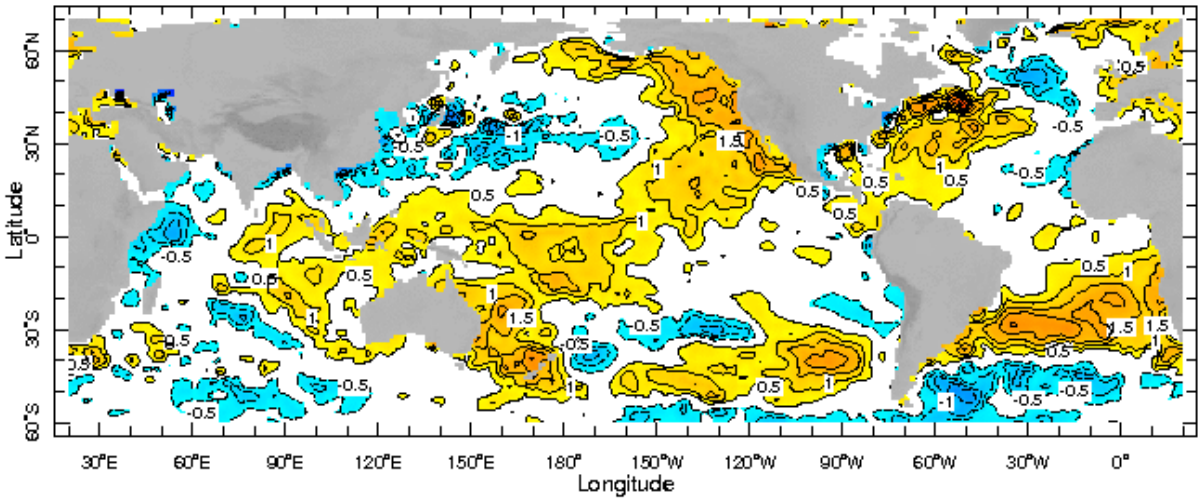
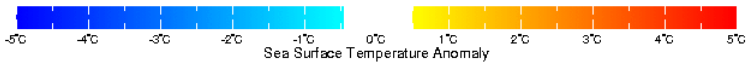
d) Weekly Average SST Anomalies



25-31 Jan 2015



Weekly Average SST Anomalies (^{0}C), 25th – 31st January, 2015

Data Source: NCEP Environmental monitoring center (Climatology 1971-2000)

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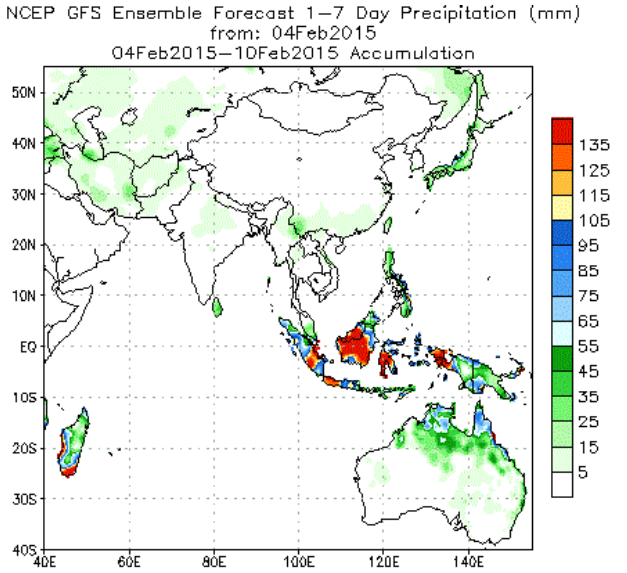
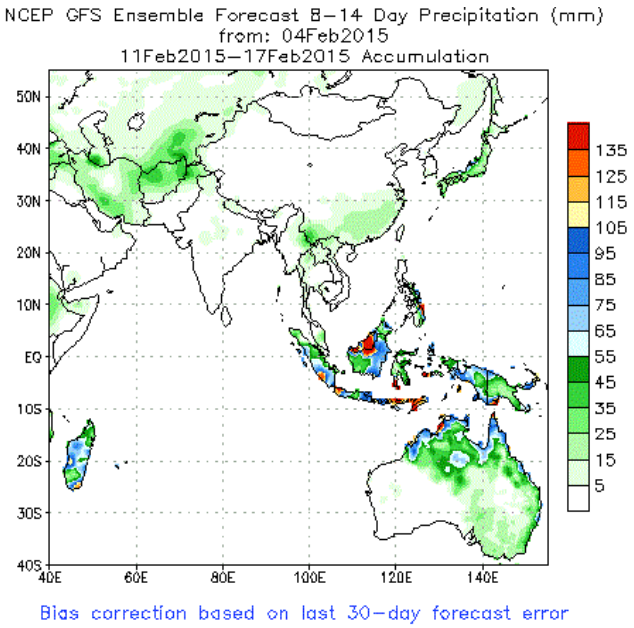
2. Predictions

a) NCEP GFS Ensemble 1-14 day predictions, NOAA, Climate Prediction Centre, USA.





Source – NOAA Climate Prediction Center

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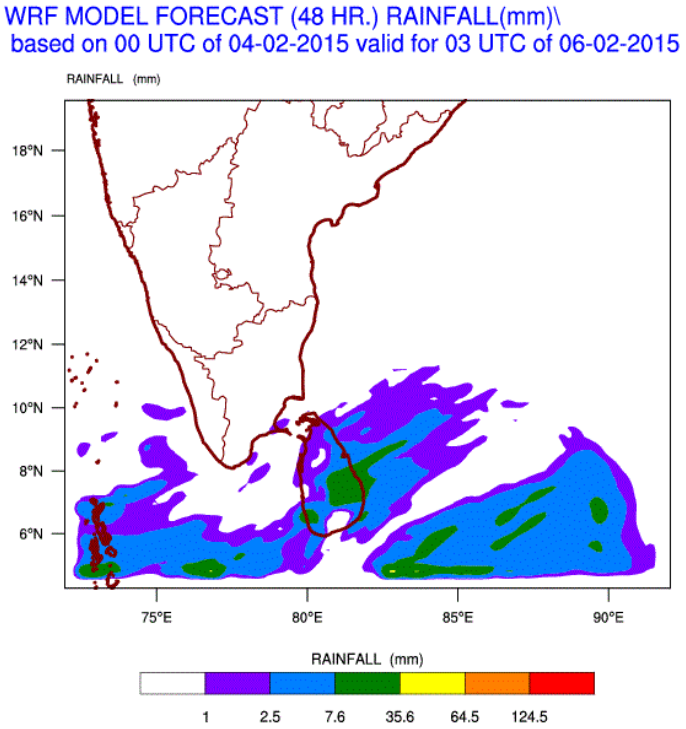
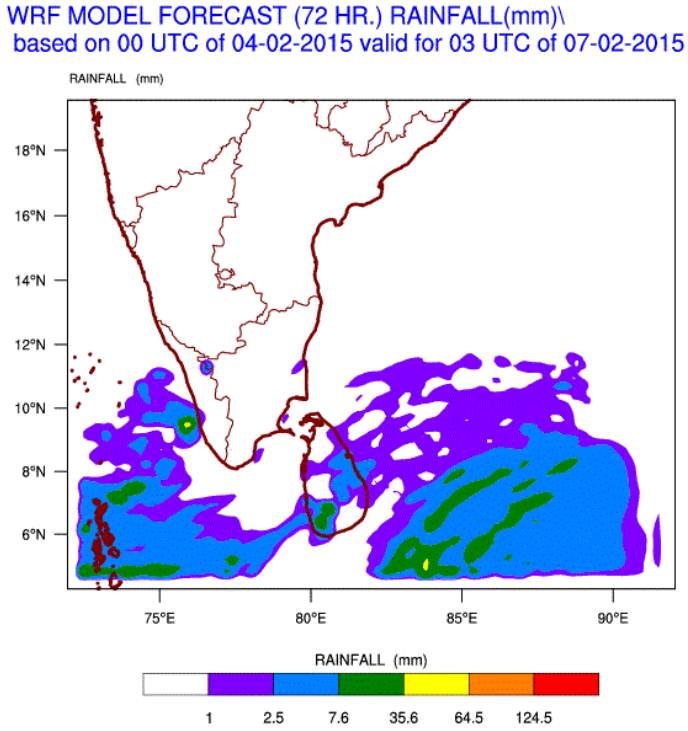
b) *WRF model forecast from*Regional MeteorologicalCenter, Chennai of Indian Meteorological Department





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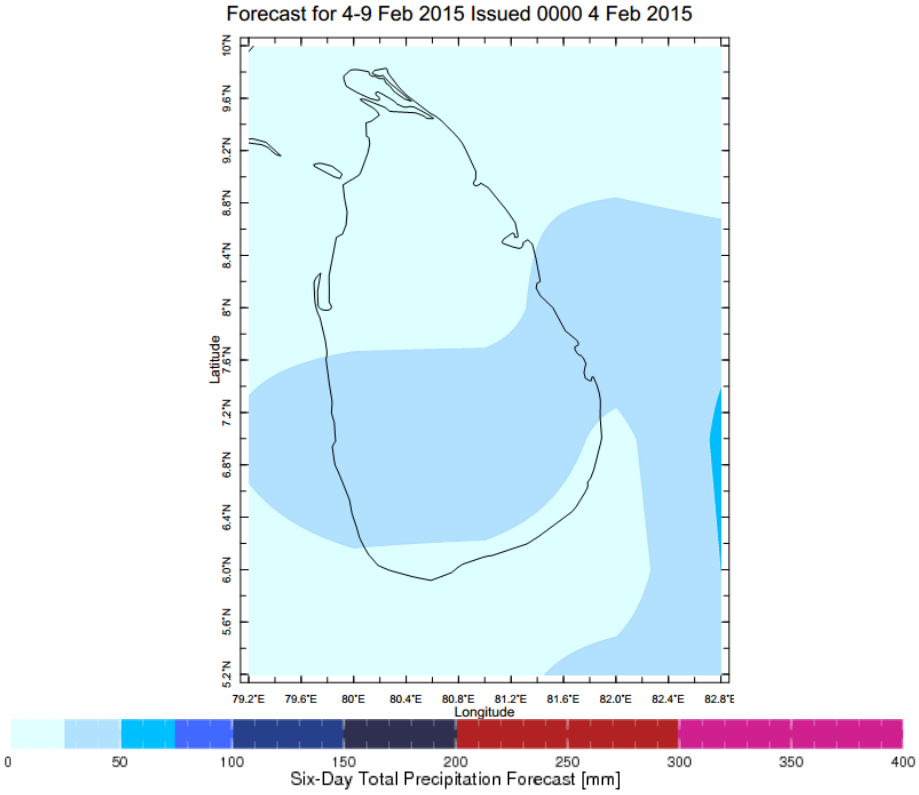
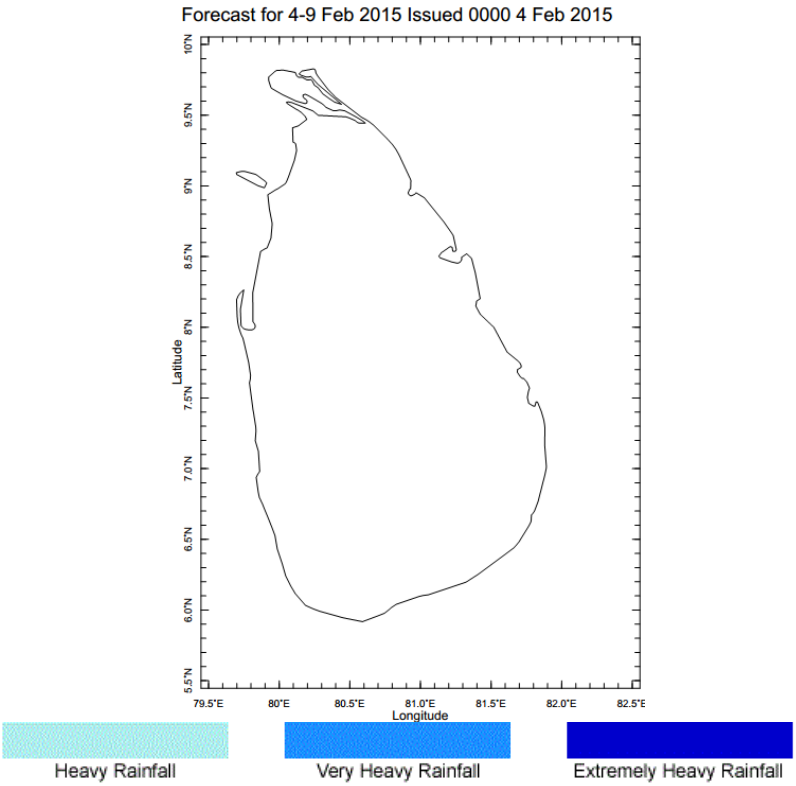
c) Weekly Precipitation Forecast for 4th – 9th February 2015 (Precipitation Forecast in Context Map Tool, IRI)





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e) Seasonal Rainfall and Temperature Predictions from IRI