

Experimental Climate Monitoring and Prediction

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17 July 2014

FECT BLOG

Past reports available at
<http://fectsl.blogspot.com/> and

<http://fectsl.wordpress.com/>

FECT WEBSITES

<http://www.climate.lk> and
<http://www.tropicalclimate.org/>

19 June, 2014

PACIFIC SEAS STATE

During May through mid-June the observed ENSO conditions remained near the borderline of a weak El Niño condition in the ocean, but the atmosphere so far has shown little involvement. Most of the ENSO prediction models indicate more warming coming in the months ahead, leading to sustained El Niño conditions by the middle of northern summer.

(Text Courtesy IRI)

INDIAN OCEAN STATE

A neutral sea surface temperature anomaly was observed around Sri Lanka

MJO STATE

MJO is at phase 6 in the Western Pacific and this shall lead to suppressed rainfall conditions in Sri Lanka

Highlights

Monitoring and Predictions:

Lesser rainfall is observed in the entire country and a decreasing rainfall trend was observed during last two weeks. However intense wind was observed in the country during the past week. Neutral sea surface temperature anomaly persists around Sri Lanka.

Summary

Monitoring

Weekly Monitoring: Only slight amount of rainfall was observed throughout the country during 8th – 14th of July. Highest rainfall of 30 mm was observed on the 9th in Kegalle and Galle districts.

Monthly Monitoring: The southwest monsoon was active during the month of June. Due to this the south western region received higher rainfall than rest of the country. The entire southern half of the island received rainfall during this month but except for Colombo, Kaluthara, Galle, Matara, Ratnapura, Kegalle, western areas of Nuwara-Eliya and southern areas of Gampaha districts, rainfall received in the country was below-average. In the above mentioned districts up to 200 mm of excess rainfall, compared to the average rainfall received in the past during June, was observed.

Predictions

14 day prediction: Rainfall is expected in South Western region of the country which shall be up to 35 mm.

IMD WRF & IRI Model Forecast: IMD WRF model forecasts are not available this week. IRI models predict up to 50 mm of rainfall in the entire country except in North Western region during 15th- 20th July. Rainfall may go up to 100 mm in some parts along the South Western coast and adjacent sea. No unusually high rainfall events are predicted for this time period.

Seasonal Prediction: As per IRI Multi Model Probability Forecast issued on June 2014; for July 2014 to September 2014, the precipitation shall be climatological while there is a 70% chance that temperature shall be above normal.

Inside this Issue

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- Daily Satellite Derived Rain fall Estimates
- Monthly Rain fall Estimates
- Decadal (10 Day) Satellite Derived Rainfall Estimates
- Weekly Average SST Anomalies

2. Predictions

- NCEP GFS Ensemble 1-14 day predictions
- WRF model forecast Regional Meteorological Center, Chennai, Indian Meteorological Department)
- Weekly precipitation forecast (IRI)
- Seasonal Predictions from IRI

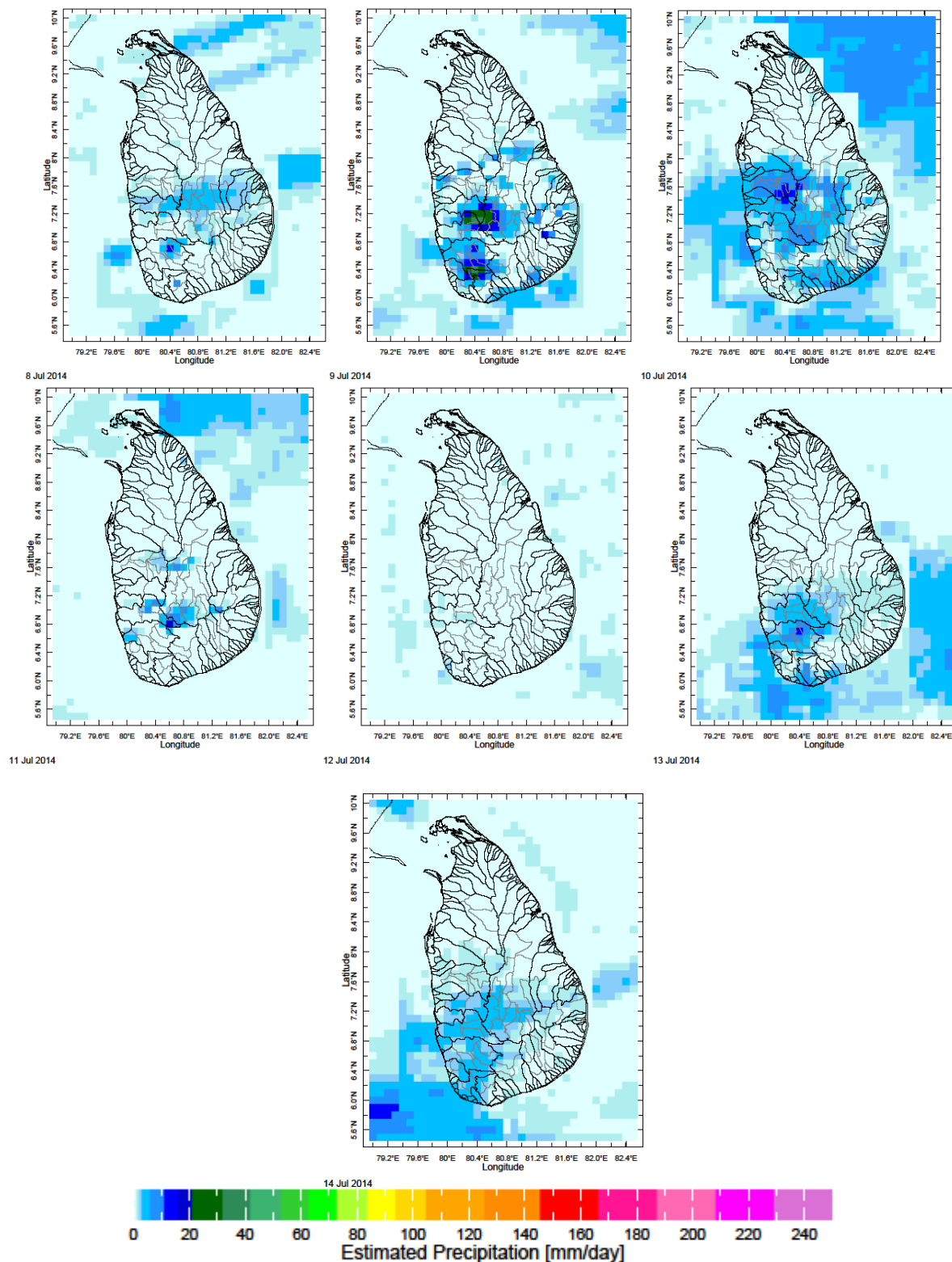
¹ International Research Institute for Climate and Society, Earth Institute at Columbia University, New York.

² These interpretations of hydro-meteorological conditions for the Mahaweli basins are provided for the use of the WMS/MASL.

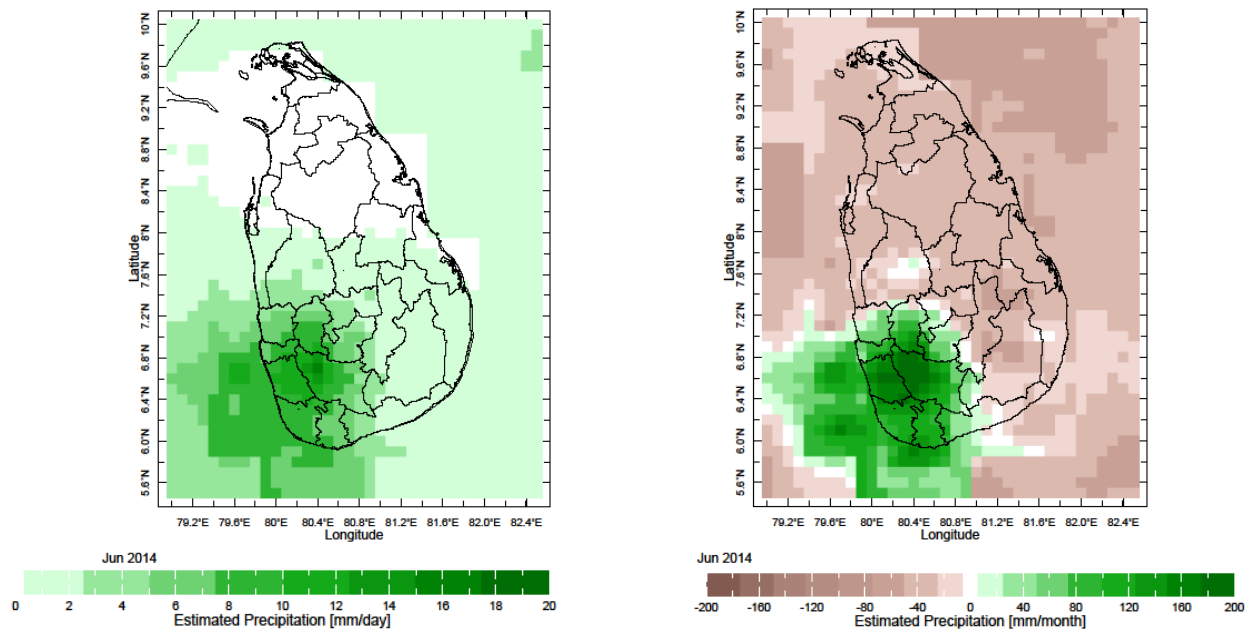
Official hydro-meteorological statements are provided by the Sri Lanka Department of Meteorology and Department of Irrigation.

1. Monitoring

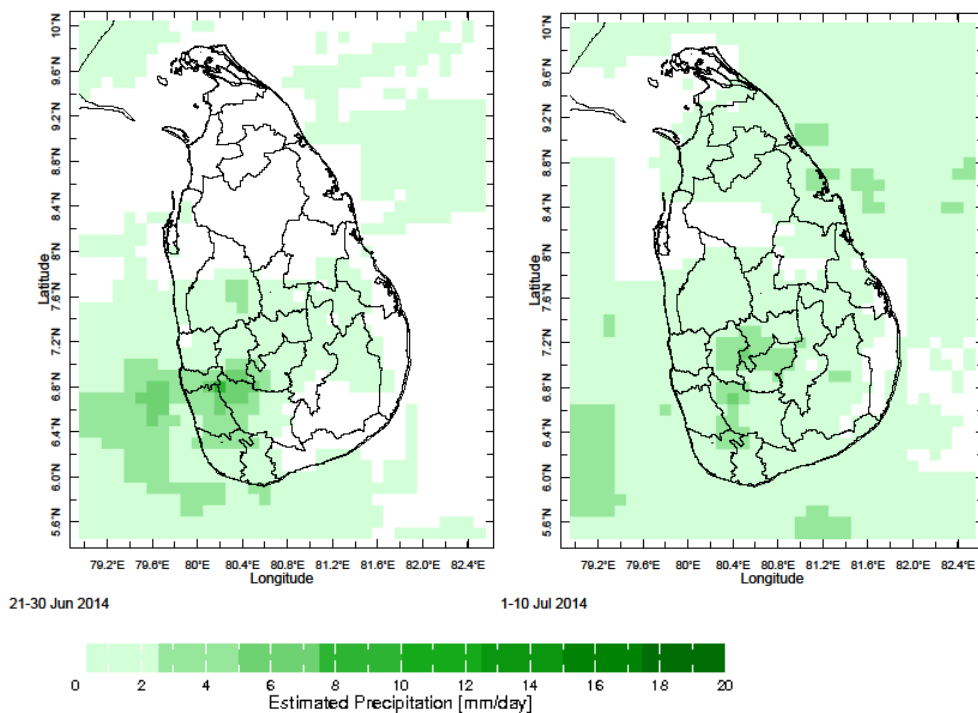
a) Daily Satellite Derived Rainfall Estimate Maps: 8th – 14th July 2014 (Left-Right, Top-Bottom)



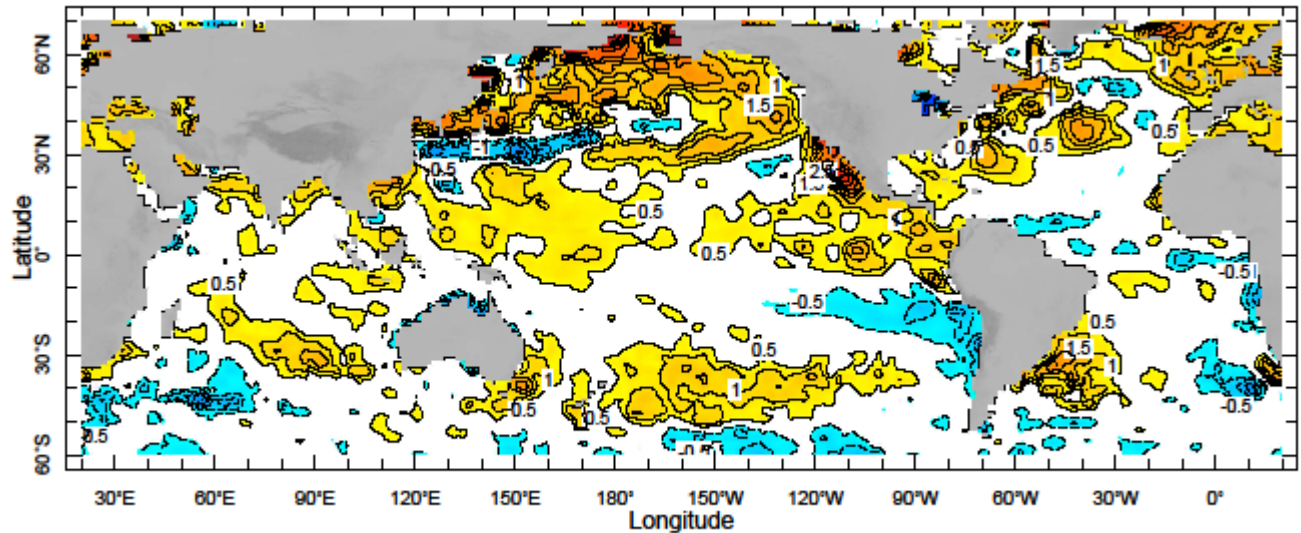
b) Monthly Satellite Derived Rainfall Estimates for June 2014 (Average – Left and Anomaly - Right)



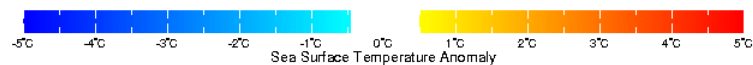
c) Dekadal (10 Day) Satellite Derived Rainfall Estimates (21- 30 June & 1- 10 July, 2014)



d) Weekly Average SST Anomalies



6-12 Jul 2014



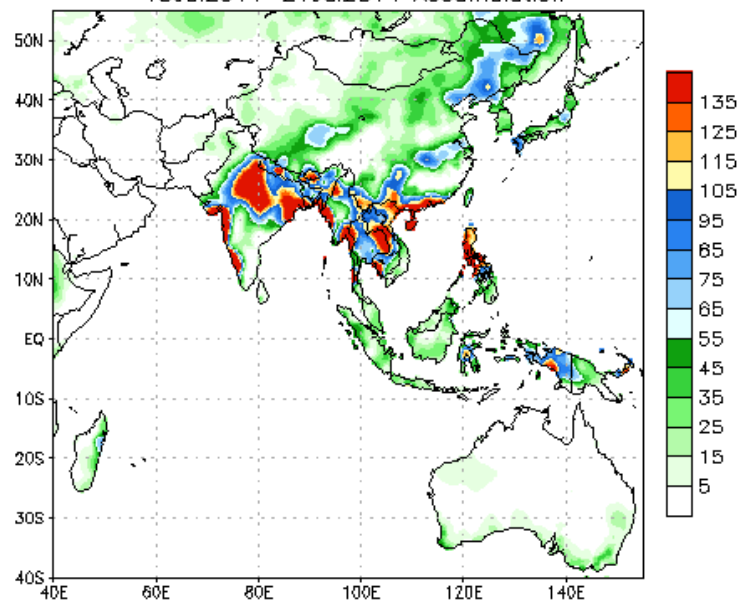
Weekly Average SST Anomalies ($^{\circ}\text{C}$), 6th- 12th July, 2014

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

2. Predictions

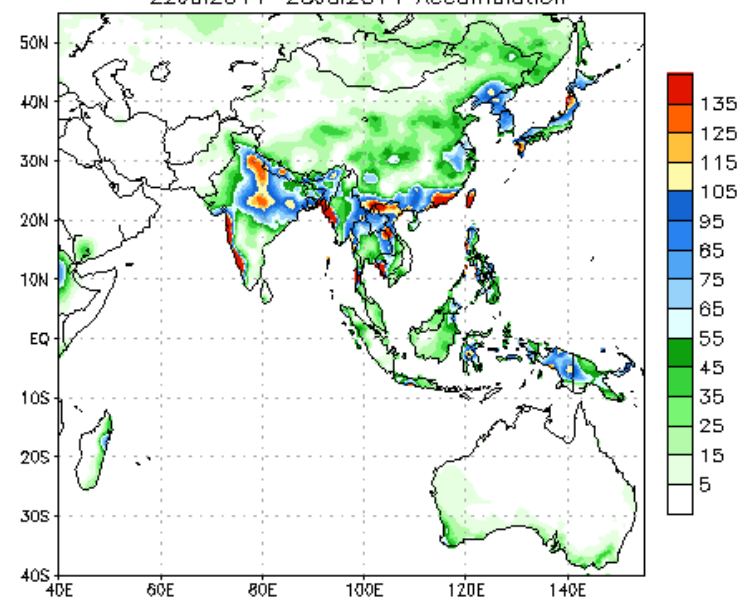
a) NCEP GFS Ensemble 1-14 day predictions, NOAA, Climate Prediction Centre, USA.

NCEP GFS Ensemble Forecast 1-7 Day Precipitation (mm)
from: 15Jul2014
15Jul2014-21Jul2014 Accumulation



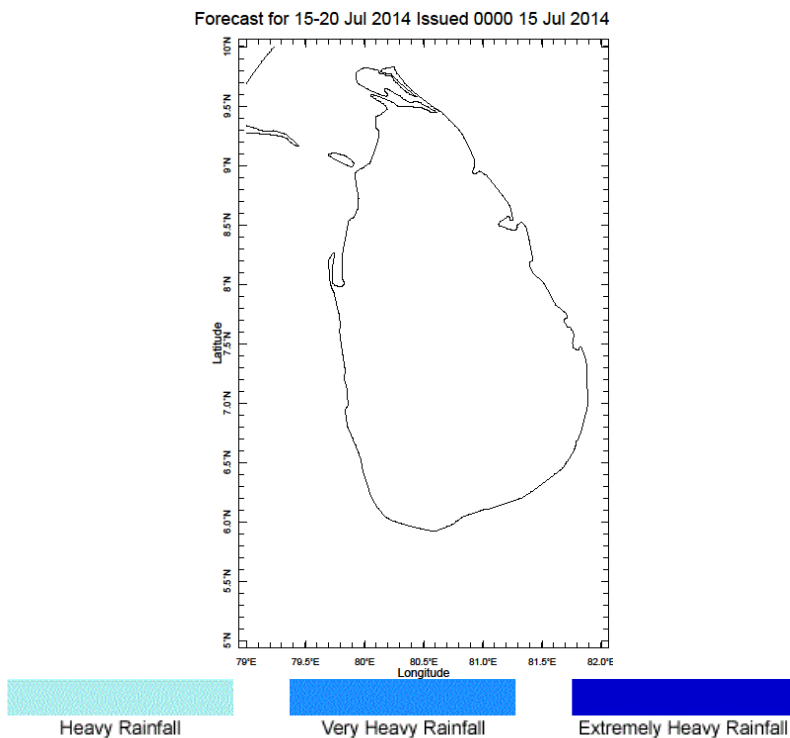
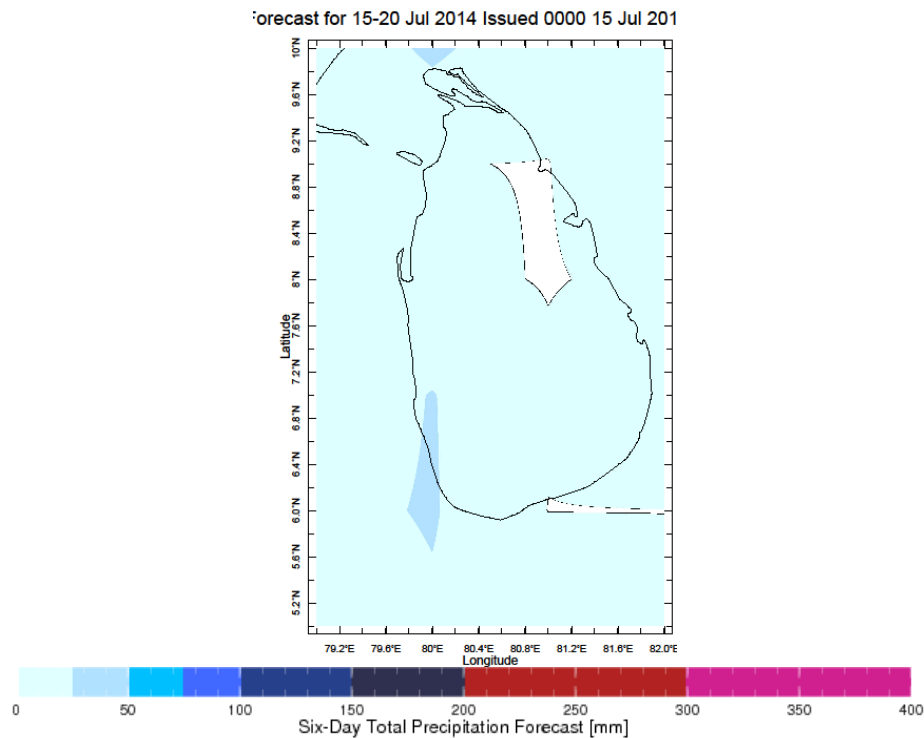
Bias correction based on last 30-day forecast error

NCEP GFS Ensemble Forecast 8-14 Day Precipitation (mm)
from: 15Jul2014
22Jul2014-28Jul2014 Accumulation



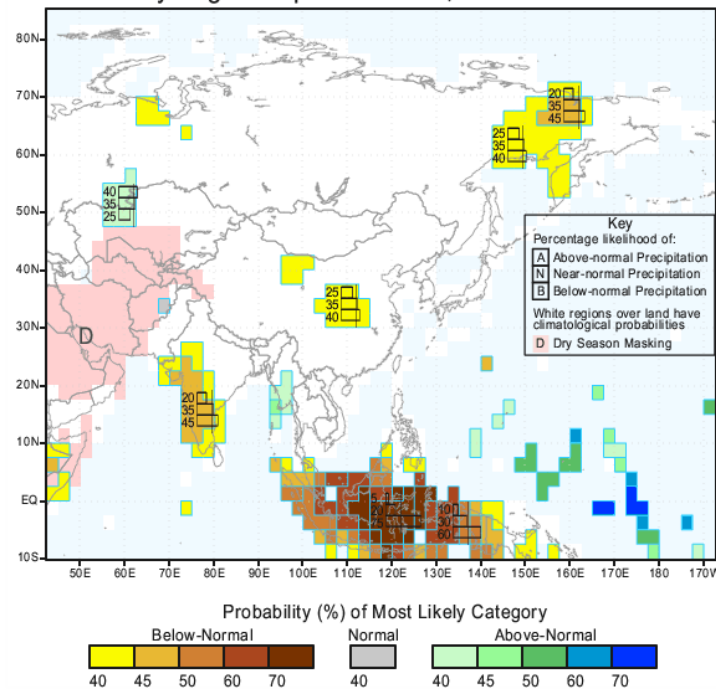
Bias correction based on last 30-day forecast error

c) Weekly Precipitation Forecast for 15th -20th July 2014 (Precipitation Forecast in Context Map Tool, IRI)



d) Seasonal Rainfall and Temperature Predictions from IRI

IRI Multi-Model Probability Forecast for Precipitation
for July-August-September 2014, Issued June 2014



IRI Multi-Model Probability Forecast for Temperature
for July-August-September 2014, Issued June 2014

