

# Experimental Hydro-meteorological Advisories for Sri Lanka...

FETC has been providing weekly hydro-meteorological advisories for the Water Management Secretariat (WMS) of the Mahaweli Authority of Sri Lanka since 2008. The advisory reviews and interprets weekly to seasonal monitored climate and predictions from 3-days to 6 months ahead from various agencies and scientists including our own. These advisories are reviewed weekly by participants in the Water Management Panel from the Ceylon Electricity Board, Department of Irrigation, Mahaweli Authority and Water Supply Board in deciding on large scale water allocations for systems in the Mahaweli, Kelani, Walawe and associated basins.

## The Weekly Hydro-Meteorological Advisory

The weekly report consists of two parts namely *Monitoring and Predictions*. Monitoring Includes Daily Satellite Derived Rainfall Estimates, Monthly and Dekadal (10 Day) Satellite Derived Rainfall Estimates, and the Weekly Average SST Anomalies. Predictions include forecasts for the subsequent week from Indian Meteorological Department, and NOAA, a 30 day forecast from Paul Roundy of SUNY-Albany and seasonal precipitation and temperature predictions from the International Research Institute for Climate and Society.

## What it Conveys?

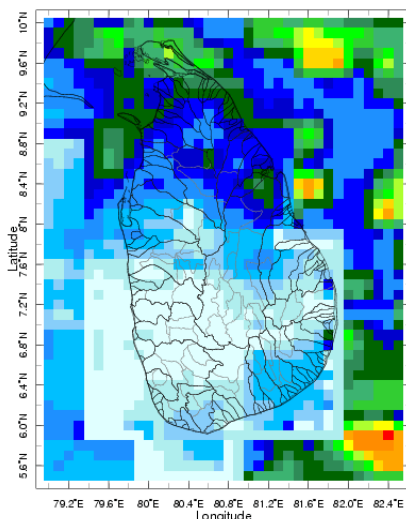
### 1. Monitoring

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

### 2. Predictions

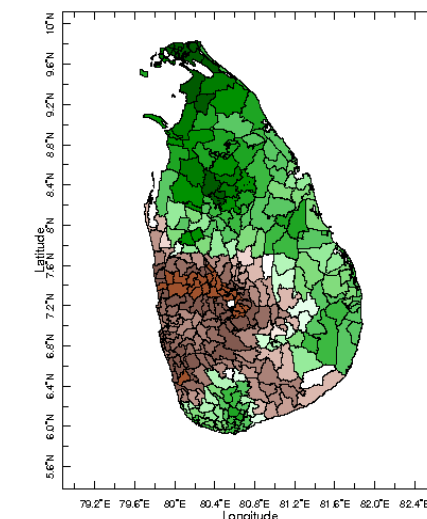
- NCEP GFS Ensemble 1-7 day predictions, NOAA, CPC,USA
- IMD WRF Model Forecast
- Weekly Precipitation Forecast (IRI)
- 1 month experimental predictions by Paul Roundy and L. Zubair
- Seasonal Predictions from IRI

## Examples of Climate Monitoring of Daily Rainfall, Rainfall Anomalies and SST



19 Dec 2011

Daily Satellite Derived Rainfall for 19<sup>th</sup> Dec 2011



Nov 2011

Monthly Satellite Derived Rainfall Anomaly, Nov 2011

Source: NOAA-CPC and IRI



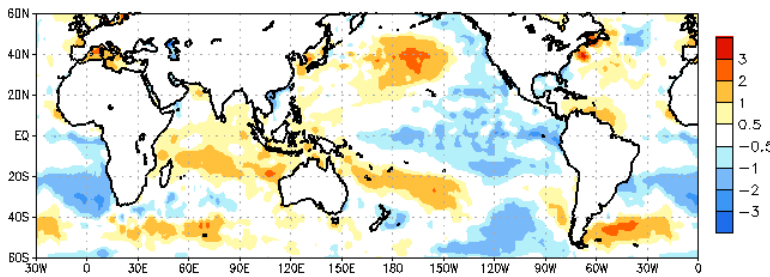
## FECT

### Team Members

Lareef Zubair  
Madhura P. Weerasekera  
Sewwandhi Chandrasekera  
Zeenas Yahiya  
Sanjaya Rathnayake  
Badra Navarathne  
Sumudhu Adikari  
Michael Bell

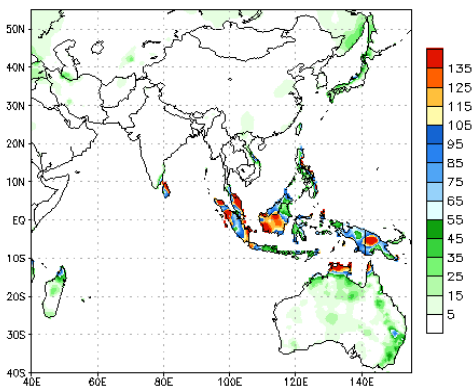
### Partners

Mahaweli Authority of Sri Lanka (MASL)  
International Research Institute for Climate and Society (IRI)  
State University of New York, Albany (SUNY)  
Indian Meteorological Department (IMD)

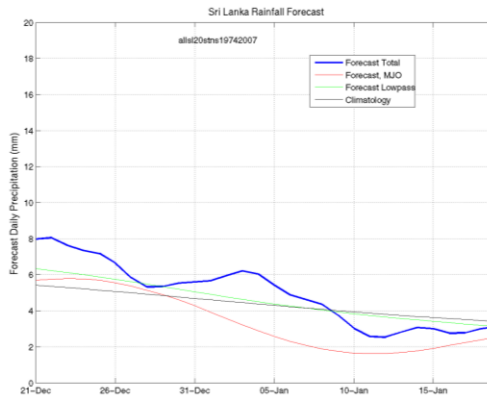


Weekly Average Sea Surface Temperature (SST) Anomalies ( $^{\circ}\text{C}$ ), 14<sup>th</sup> December, 2011

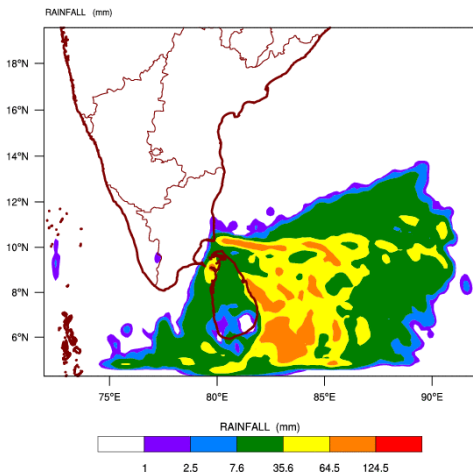
### Example of Climate Prediction Products



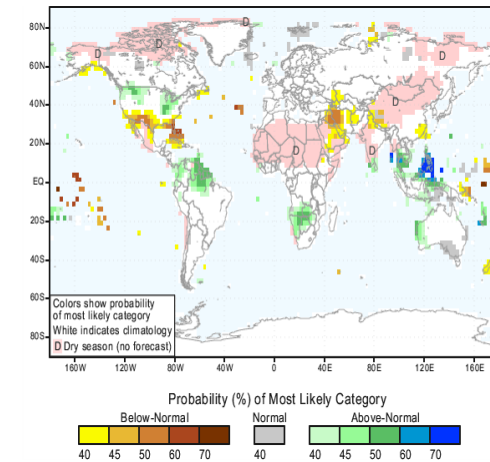
NCEP GFS Ensemble 7 day rainfall predictions, NOAA, Climate Prediction Centre, USA.



30 Days ahead predictions for rainfall by Paul Roundy



Indian Meteorological Department WRF Model Forecast (72 hr) Rainfall (mm) valid for 24-12-2011



Seasonal Rainfall Predictions for January to March 2012 from IRI

### The WMP & WMS at MASL

Mahaweli Authority of Sri Lanka (MASL) oversees all Government Agencies concerned with the management and operation of the Mahaweli river basin and six associated basins. The Water Management Panel (WMP) of the MASL oversees overall management of the water resources of the Mahaweli system. The WMP is assisted by a specialized Water Management Secretariat (WMS). The WMS provides information and recommendations to the WMP to assist it in reaching its operational policy decisions.

### Availability and Accessibility

This report is accessible at <http://fectsl.blogspot.com/>. Currently this report is being prepared as an experimental advisory for technically proficient users. In future we hope to make it accessible for the use of others who may need this for their reference.



*An Institute for the Application of Science for Societal Welfare & Environmental Sustainability focusing on Sri Lanka and Maldives*

*We started FECT as a non-profit company in 2003. Our officers have been working on projects on environment, climate and technologies in Sri Lanka for 15 years. At present, we work in climate adaptation, information technology, communication and capacity building for sustainable development.*

*Our work is oriented towards developing useable scientific information that can be applied in diverse sectors. We build capacity through education, training, and collaborations.*

### Contact for Information

FECT,  
C/o MASL,  
Digana Village,  
Rajawella, 20180  
Sri Lanka.

Tp: +94-81-2376746

Email: [climate@slt.net.lk](mailto:climate@slt.net.lk)  
[fectsl@gmail.com](mailto:fectsl@gmail.com)

Web: [www.climate.lk](http://www.climate.lk)