FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

Experimental Climate Monitoring and Prediction for the Maldives –August 2012

Prepared by Staff from Foundation for Environment, Climate and Technology, Sri Lanka and USA, Maldives Meteorological Service, and International Research Institute for Climate and Society

22 August 2012

Follow news of FECT at our web site

www.climate.lk

FECT Maldives website

www.tropicalclimate.org/maldives

FECT Maldives blog

www.fectmv.blogspot.com

PACIFIC SEAS STATE

August 16, 2012

More than 75% of the ENSO prediction models predict El Nino conditions during the August- October season, continuing through the rest of 2012. Meanwhile, about 20% of the models still indicate persistence of ENSO-neutral conditions. No model indicates a re-emergence of La Nina conditions.

(Text Courtesy IRI)

Highlights[2]

DROUGHT AND WARMER SEAS

Drought over the Central Maldivian Islands continues and has been sustained for nearly a year. The Northern Islands too have been in significant drought in the last months. Warming sea surfaces around Maldives and Pacific Oceans have contributed towards these conditions.

Summary[2]

CLIMATOLOGY

Monthly Climatology: The climatology refers to the average conditions experienced historically for a given month. Usually the climatology is a good guide to what one may expect in a given month absent other information. The historical average rainfall for the Northern islands is high in July (200-250 mm), higher in August (250- 300 mm) and drops in September & October (100- 200 mm). In the Central islands rainfall is usually moderate (150- 200 mm) during the August – October period. Heavy rainfall is typical for the Southern islands during these four months. The winds over the Northern & Central islands are usually westerly (from West to East) and wind speeds are expected to be high. For Southern islands, low wind speeds are expected for July and August but stronger westerly winds in September and October.

MONITORING

Weekly Monitoring: 5- 30 mm of rainfall was observed during 12th-17th August in the Northern and Central parts of Maldives. Slight rainfall was observed on Southern-most parts of Maldives between the 12th & 15th of July. On the 13th heavy rainfall was observed in this region. 10-50 mm of rainfall was observed on 16th &17th in Southern Maldives.

Monthly and Seasonal Monitoring: Overall a maximum of 10 mm of rainfall was observed in Maldives in the months of April, May, June & July. Compared to the past 8 years, rainfall has been significantly lower for all of Maldives this year, particularly from February to May. Rainfall in the past 365 days has been significantly lower compared to the average rainfall recorded for the past 8 years. An above average cumulative precipitation is only observed in Northern Maldives, up-to May 2012 and thereafter a below average cumulative precipitation is observed. The rainfall over Maldives for the last 365 days has been below normal. The deficit or drought in the central region has been the most pronounced with high deficits in the Northern region in the last four months as well.

Sea Surface Temperatures and ENSO state: In the Pacific Ocean, the ENSO state is moving towards an El Nino state. Most models predict a transition in the coming months. The unusually warmer sea surfaces of the Central Western Indian Ocean are stronger than normal during El Nino periods. Past work, has shown that these conditions lead to lower rainfall in the Northern Indian Ocean.

PREDICTIONS

Weekly Rainfall Forecast: No rainfall is expected for Maldives for the period of 20th -25th of August 2012.

Seasonal Rainfall and Temperature Prediction: As per IRI Multi Model Probability Forecast for September 2012 to January 2013, there is a 40- 50% probability for precipitation to be above normal. Furthermore, there is 50% probability for Temperature to be above-normal.

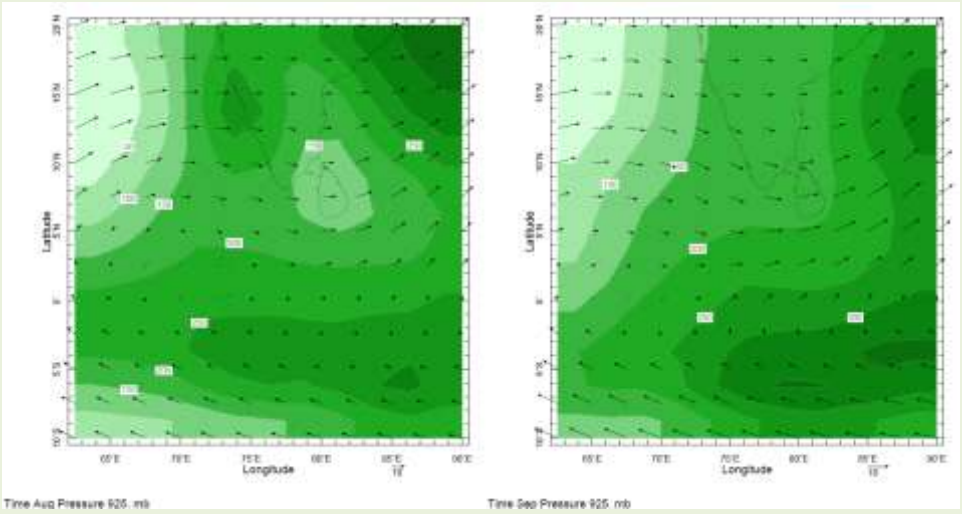
Inside this Issue

[1] International Research Institute for Climate and Society.
[2] These interpretations of climatic conditions are an experimental product. Please consult with the Maldives Meteorological Services for advice on interpretation.

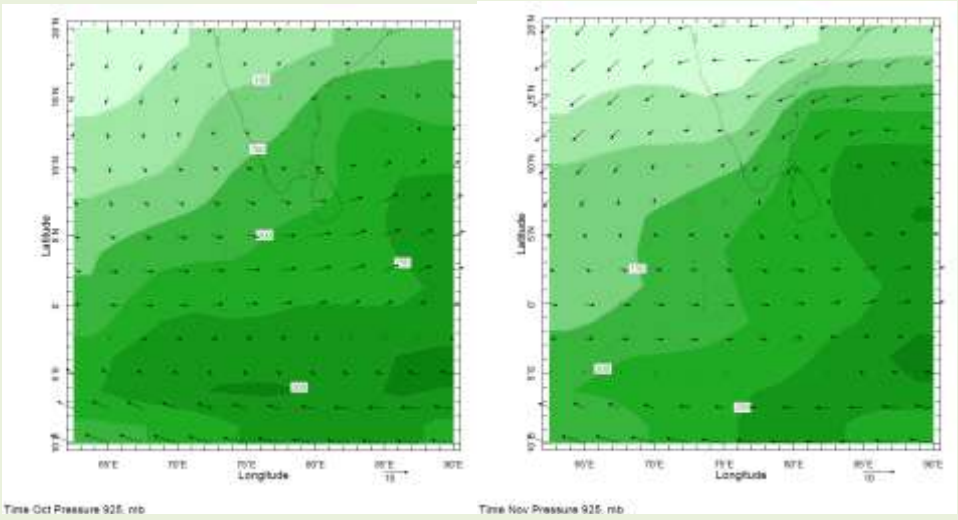
FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

1). Monthly Climatology (CAMS-OPI):

a) Rainfall**: Maps*: ***August, September, October, November (Left-Right)



August **September**



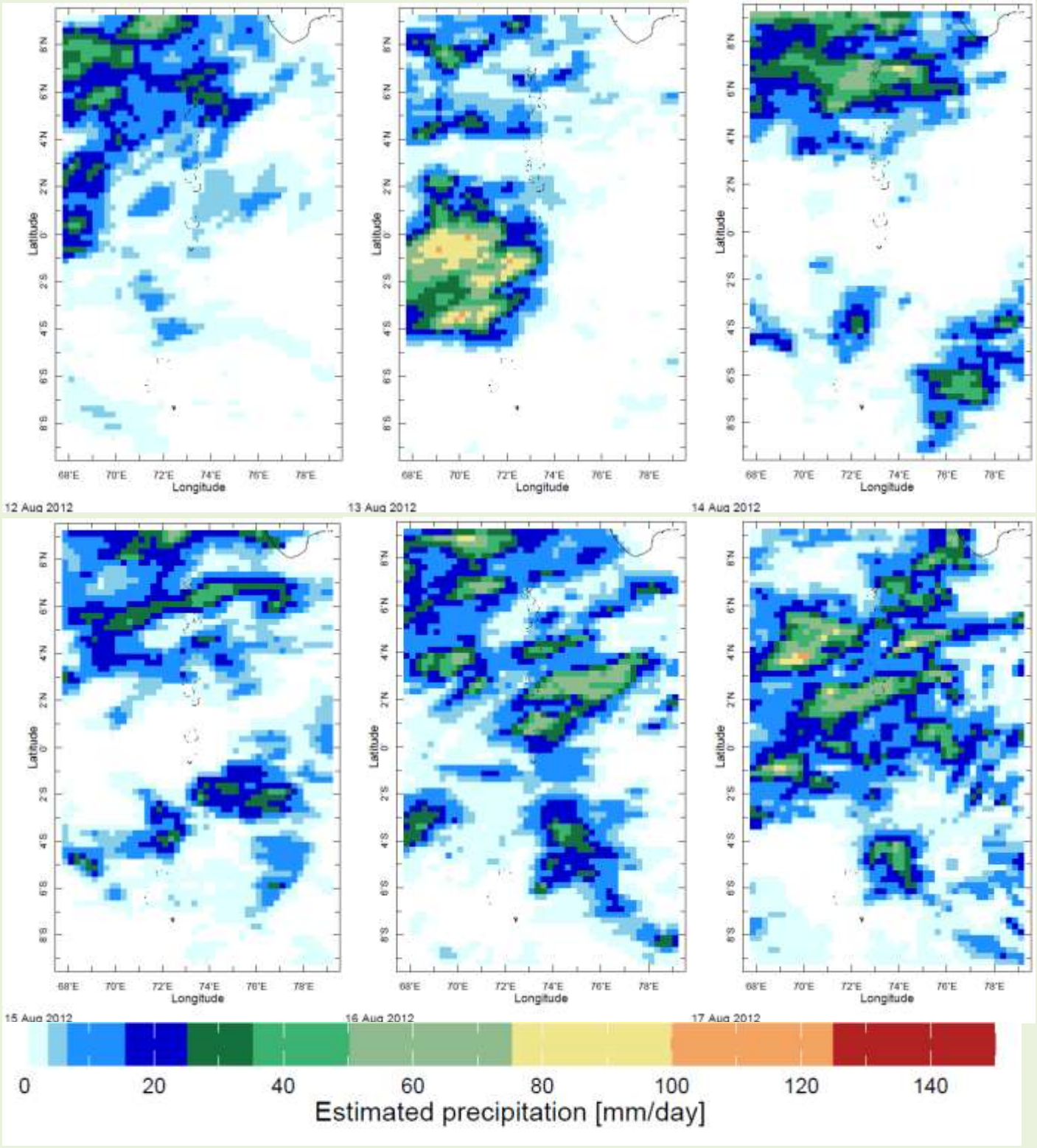
October **November**

Rainfall Climatology for Maldives Islands for August, September, October and November 2012. Islands on the Top, Middle and Bottom are roughly assumed as Northern, Central and Southern Respectively.

FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority,
Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

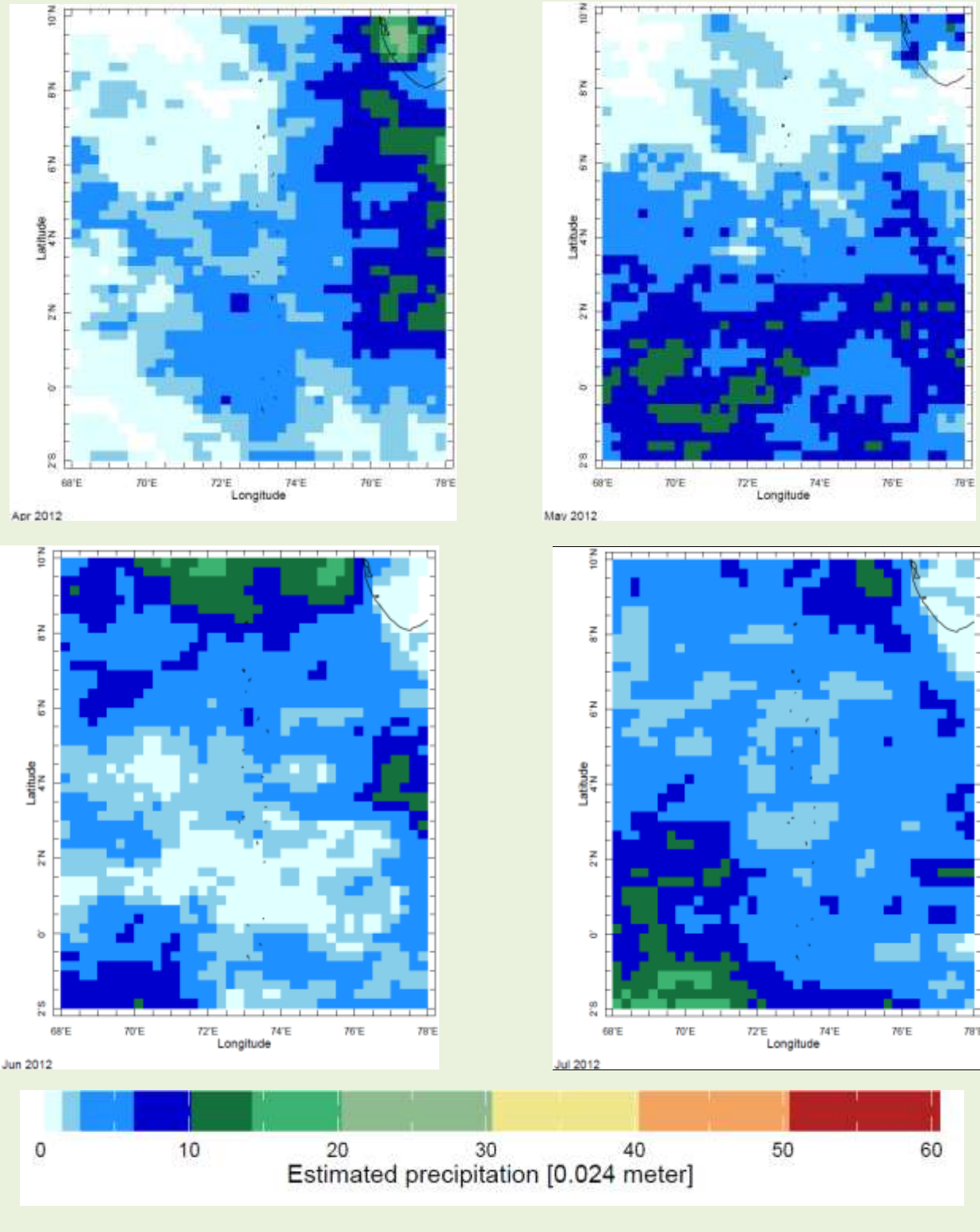
2) Rainfall Monitoring

a) Daily Satellite Derived Rainfall Estimate **Maps: *12th August – 17th August, 2012 (Left-Right, Top-Bottom)***



FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority,
Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

b) Monthly Rainfall* (April to July 2012), *Derived from Satellite Rainfall Estimates

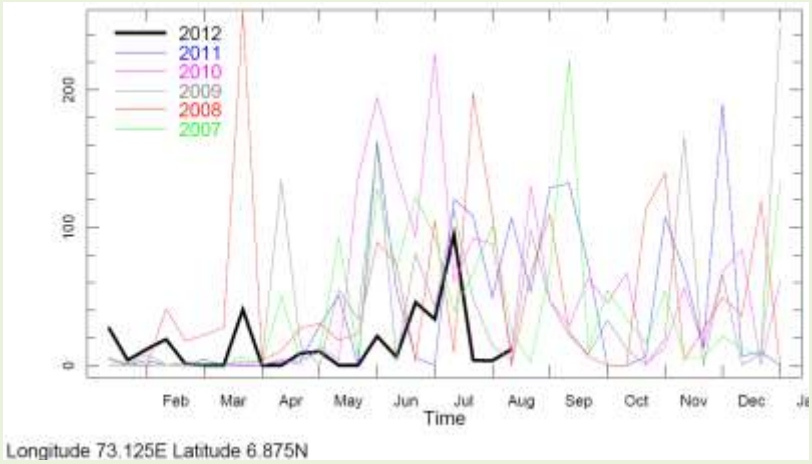


FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

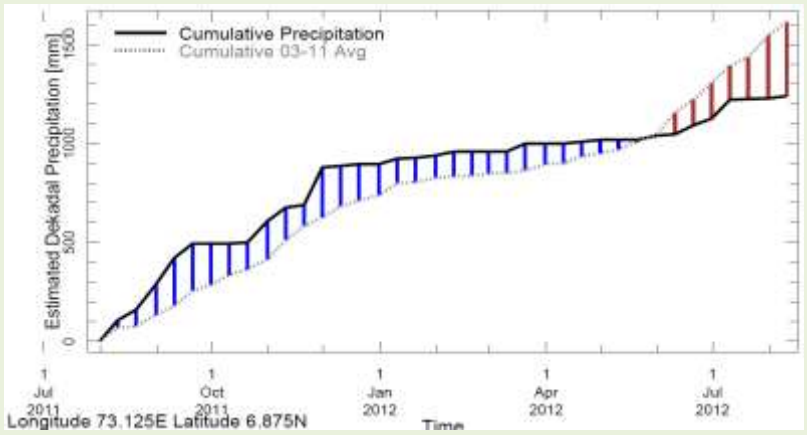
c) Seasonal to Annual Rainfall Monitoring

i) For Northern Maldives

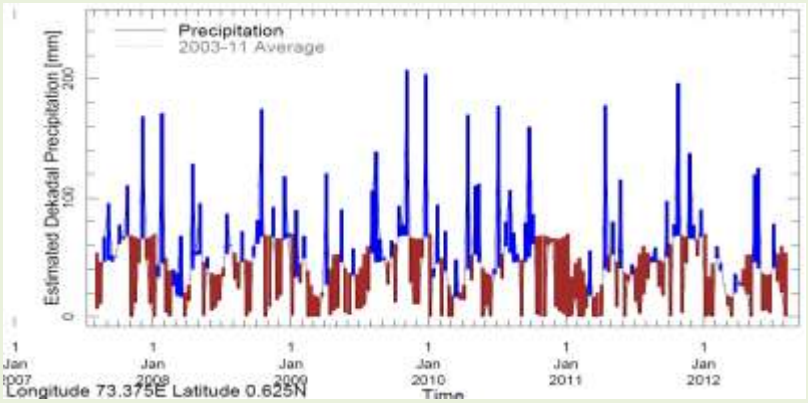
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



2) Rainfall of past 365 days (black) compared to average rainfall in previous 8 years.



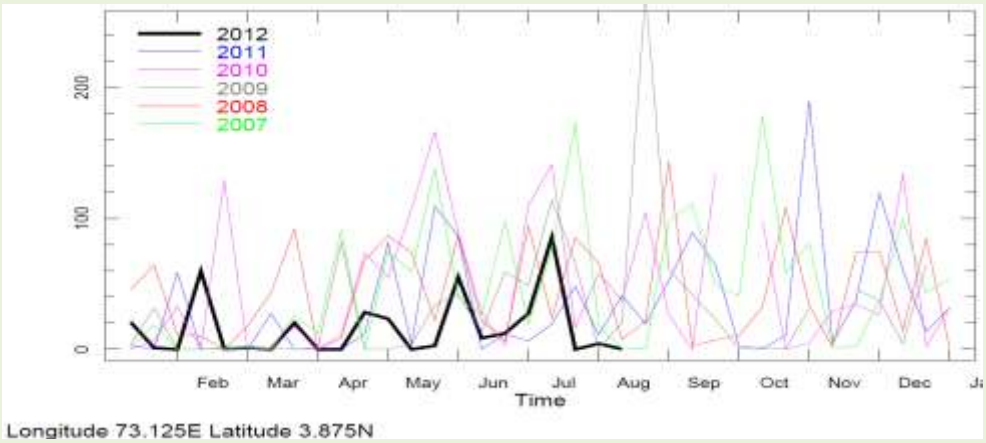
3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.



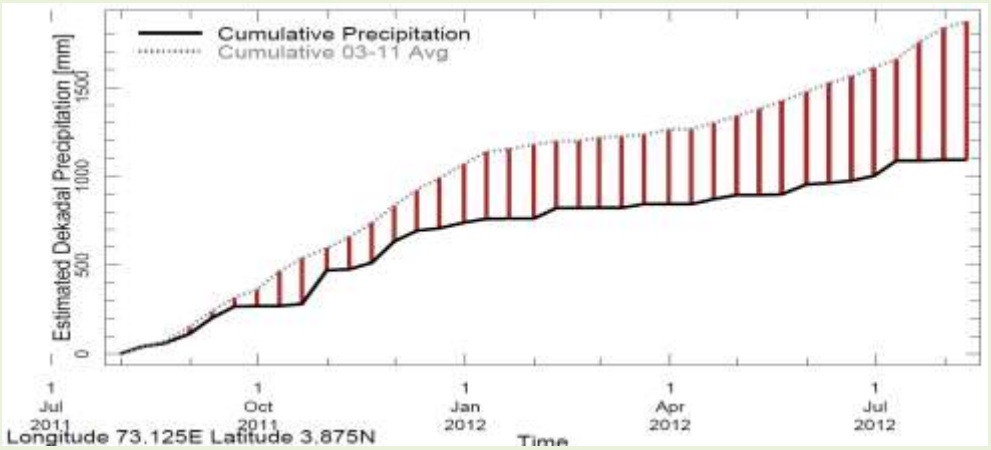
FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

ii) For Central Maldives

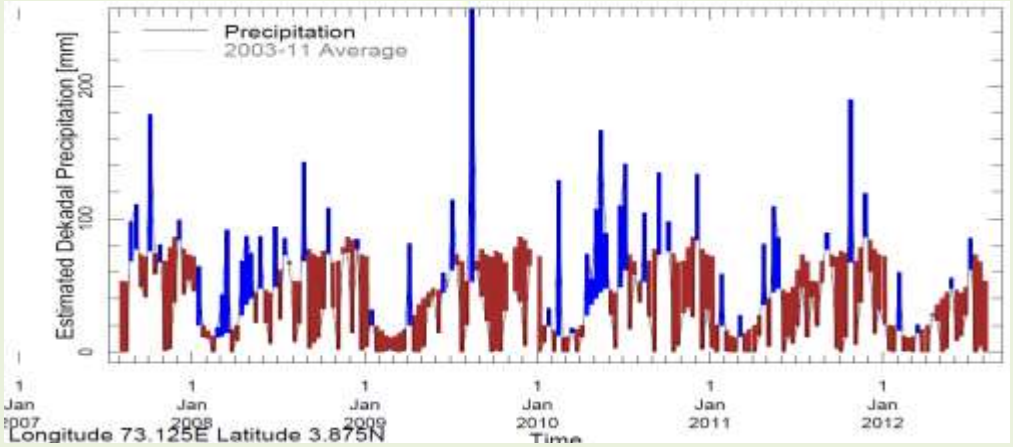
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



2) Rainfall of past 365 days (black) compared to average rainfall in previous 8 years.



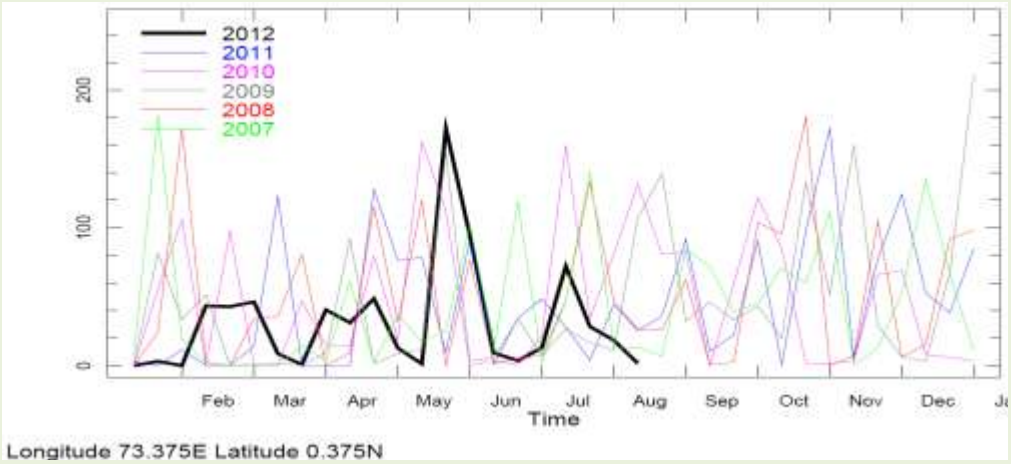
3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.



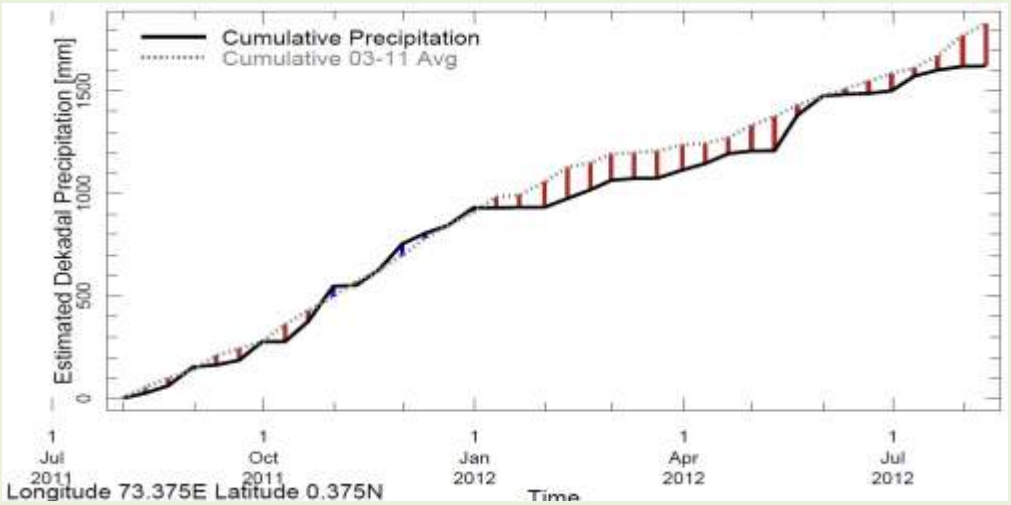
FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

iii) For Southern Maldives

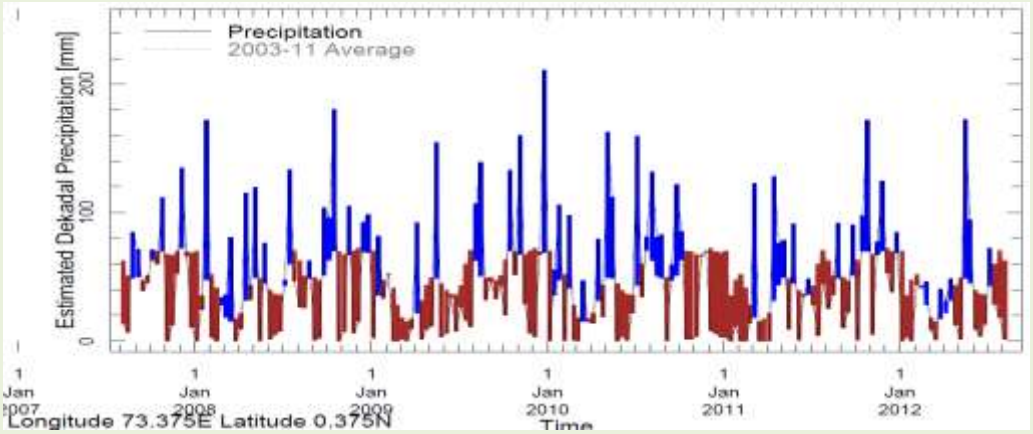
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



2) Rainfall of past 365 days (black) compared to average rainfall in previous 8 years.

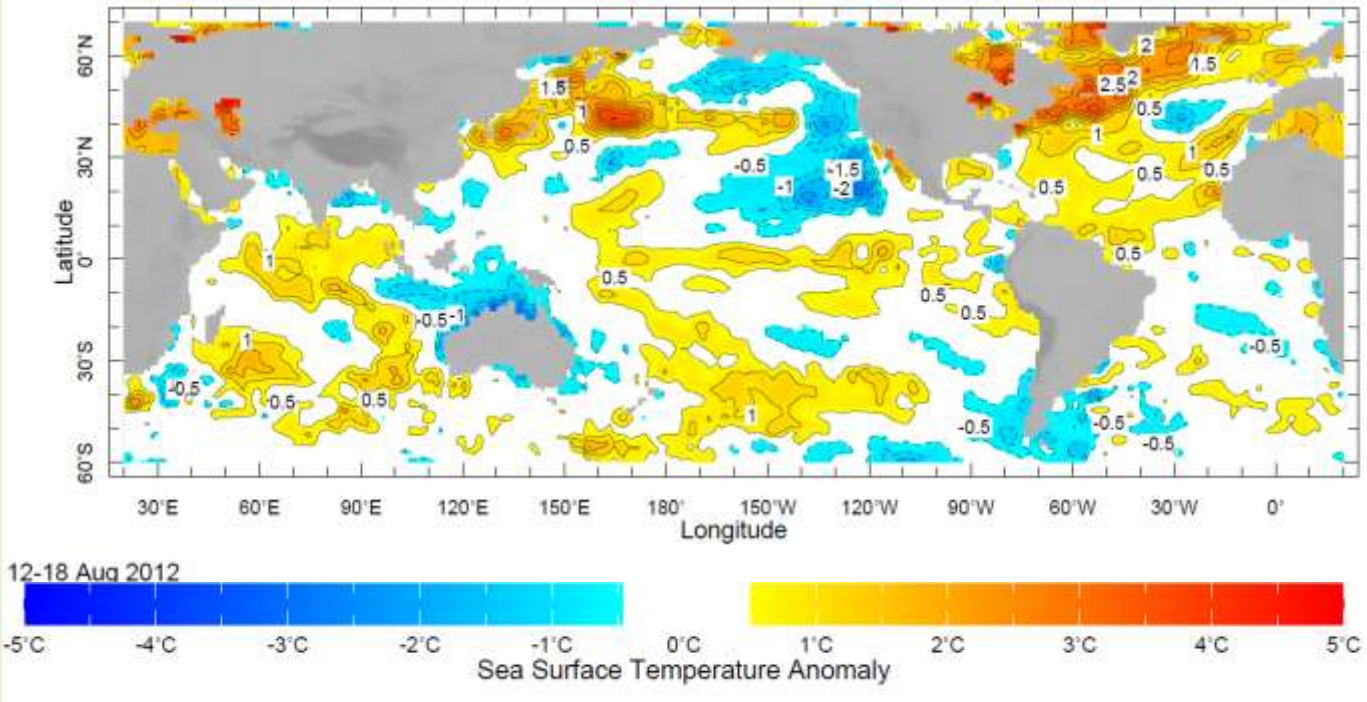


3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.



FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

d) Weekly Average SST Anomalies (^{0}C), 12th -18th August, 2012

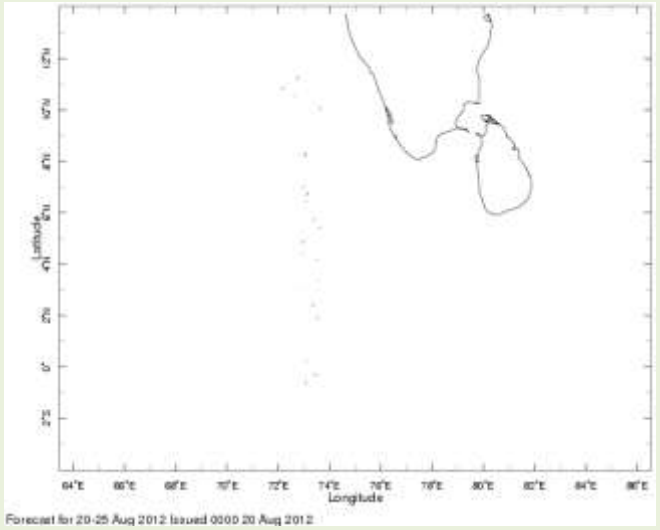


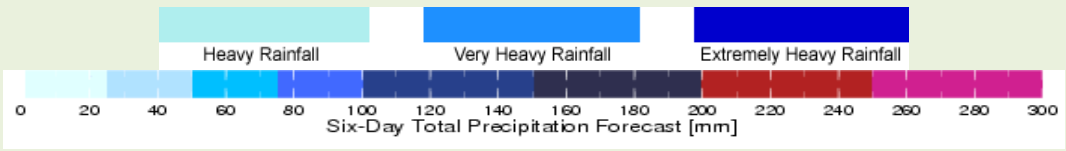
Data Source: NCEP, Environmental Monitoring Center

Base Period of Climatology: 1971- 2000

3). Predictions

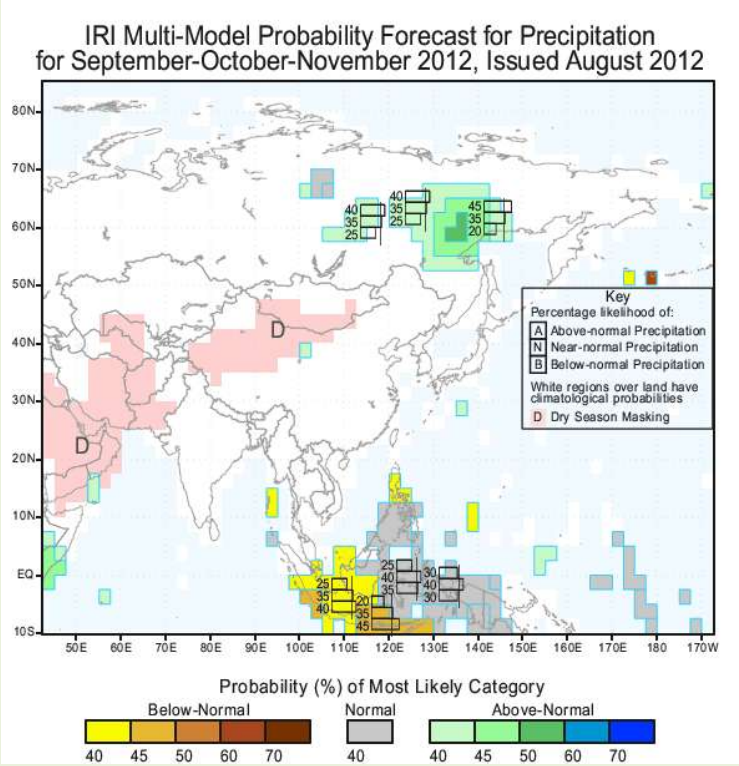
a) Weekly Precipitation Forecast for 20th -25th August, 2012: Issued 20th August, 2012

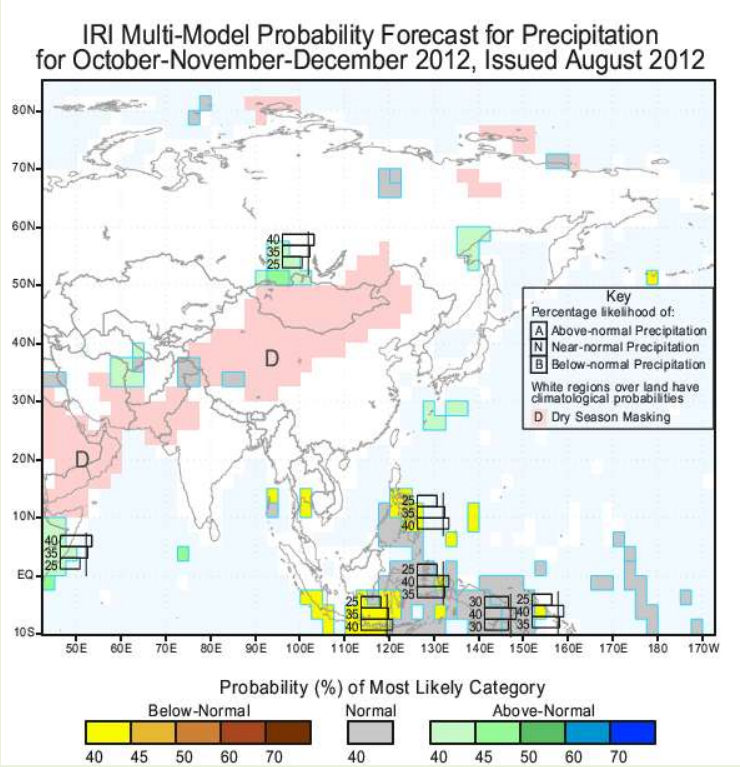




FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

b) Seasonal Rainfall and Temperature Predictions from IRI





FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

b) Seasonal Climate Predictions (IRI) continued