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 –July 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

20 July 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

July 19, 2012

Slightly more than 70% of the ENSO prediction models predict El Nino conditions developing around the August-October season, continuing through the rest of 2012. However, nearly 30% of the models still indicate persistence of ENSO-neutral conditions, No models indicate a re-emergence of La Nina conditions

(Text Courtesy IRI)

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 with the absence of other information. In Maldives the historical average rainfall for the Northern islands is high in July (200-250 mm) and higher in August (250- 300 mm). Rainfall in the following two months (September & October) are usually lower (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 this four months period. 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 usual for July and August but stronger westerly wind speeds are experienced in September and October.

MONITORING

This section describes the weather and climate experienced during the recent months and weeks.

Weekly Monitoring: 10- 40 mm of rainfall was observed from 8th -10th July throughout Maldives. Slight rainfall observed on Northern-most parts of Maldives on 11th & 13th July. No rainfall was observed in Central Maldives during the week. Around 20 mm rainfall observed in South Maldives on 11th & 12th and rain diminished on the 13th.
Monthly Rainfall Maps: Overall rainfall reached up to 15 mm during March, April, May & June with maximum in Southern Islands of Maldives. Rainfall observed in April and May was higher than rainfall recorded in March and June.
Monthly and Seasonal Monitoring: Compared to the past 10 years rainfall has been significantly low for all of Maldives this year, particularly between the period from February to May. Rainfall in the past 365 days has been less compared to the average rainfall recorded for the past 8 years with the exception of the period October 2011 to January 2012, in Northern Maldives, where the average rainfall has been almost the same as previous years. An above average cumulative precipitation is only observed in Northern Maldives. For Central Maldives the deviation of cumulative precipitation from the average value continues to increase while in South Maldives the decrement remained almost constant during past 365 days.
Sea Surface Temperatures and ENSO state: In the Pacific Ocean, the ENSO state is neutral with some models indicating a transition to El Nino conditions after July till September 2012. In the Indian Ocean weak warm conditions persist in the Western equatorial Indian Ocean.

PREDICTIONS

Weekly Precipitation Forecast: No rainfall is expected for Maldives for the period of 8-15th of July 2012.
Seasonal Rainfall and Temperature Prediction: As per IRI Multi Model Probability Forecast for June 2012 to August 2012, issued on May 2012, the rainfall remains climatological. However, there is 40% probability for Temperature to be near-normal. No deviations from climatology are predicted for the August-October period as well. Note, the 3-5 month forecasts are less skillful than the 0-2 month forecast.

Inside this Issue

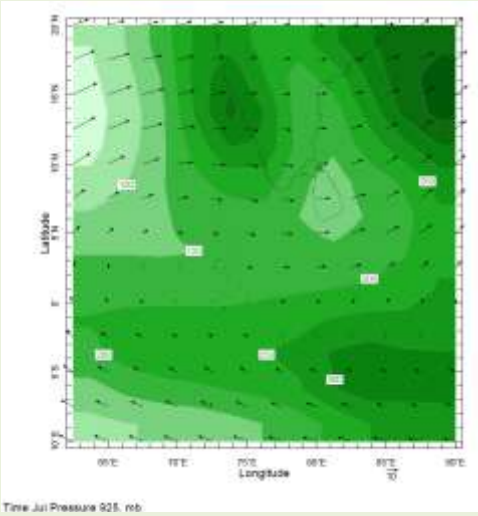
1. Monthly Climatology
2. Rainfall Monitoring
   a. Daily Satellite derived Rainfall Estimates
   b. Monthly Rainfall derived from Satellite Rainfall Estimate
   c. Monthly and Seasonal Monitoring
   d. Weekly Average SST Anomalies
3. Rainfall Predictions
   a. Weekly Predictions from NOAA/NCEP
   b. Seasonal Predictions from IRI[1]

[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.

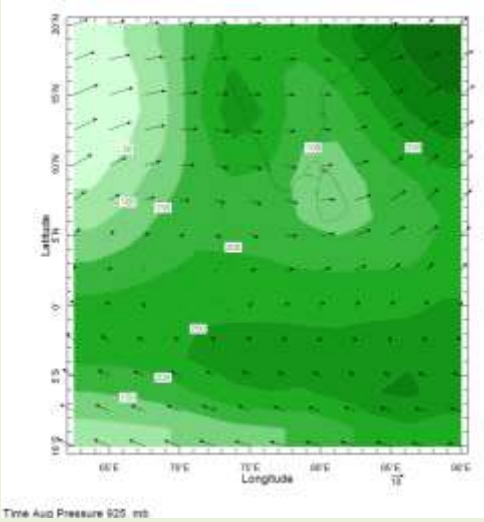
FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

1). Monthly Climatology (CAMS-OPI):

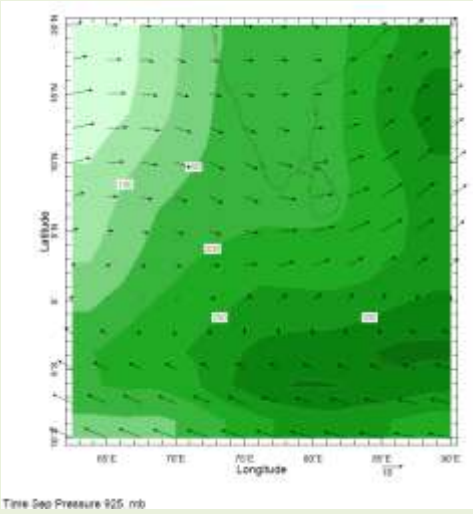
a) Rainfall**: Maps*: ***June, July, August and September (Left-Right)



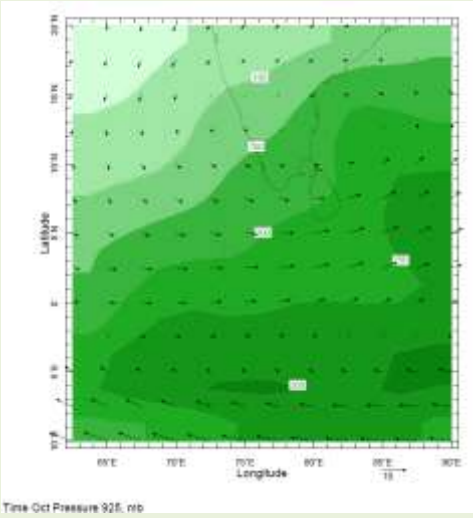
July



August



September



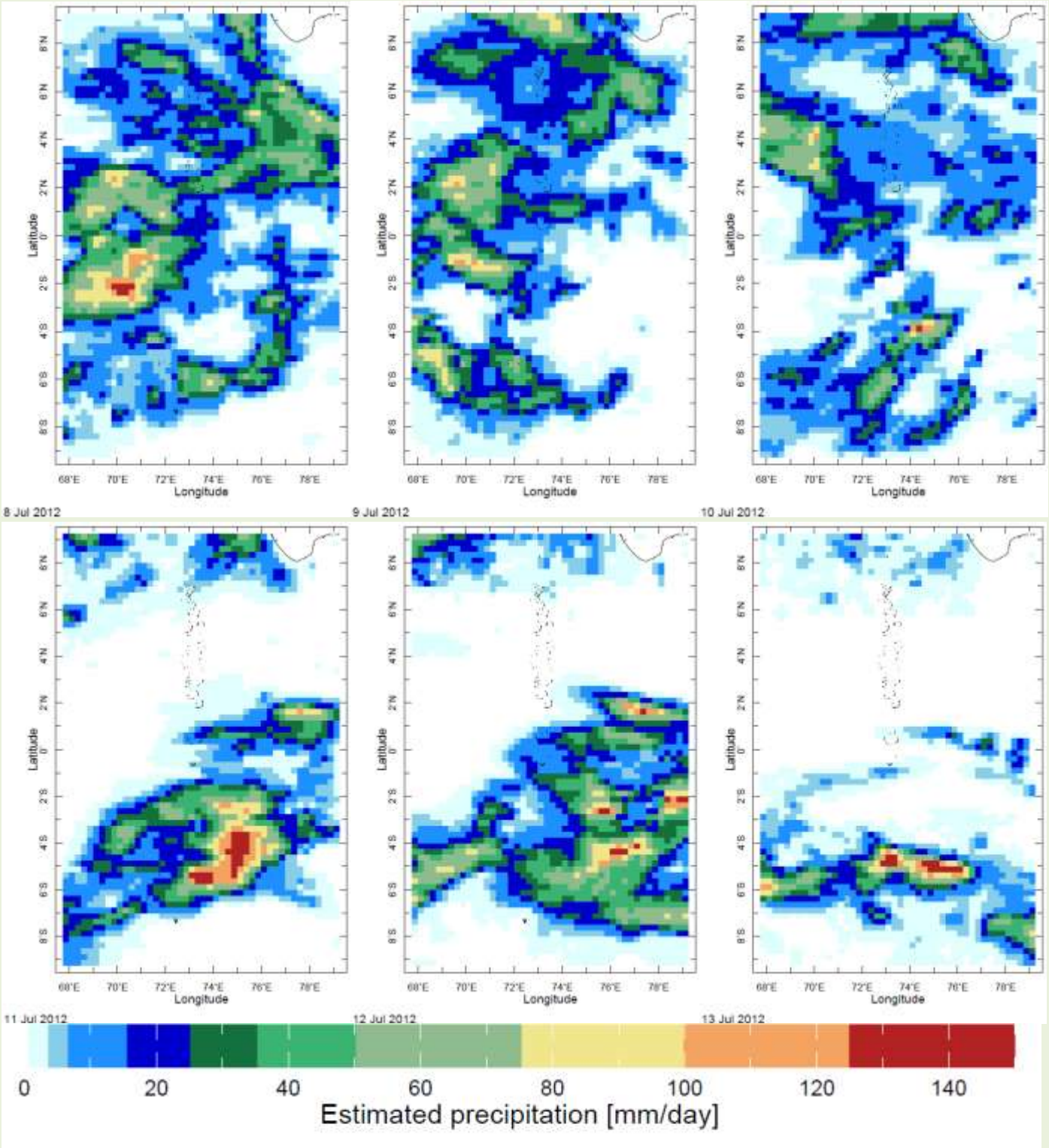
October

Rainfall Climatology for Maldives Islands for July, August, September and October 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

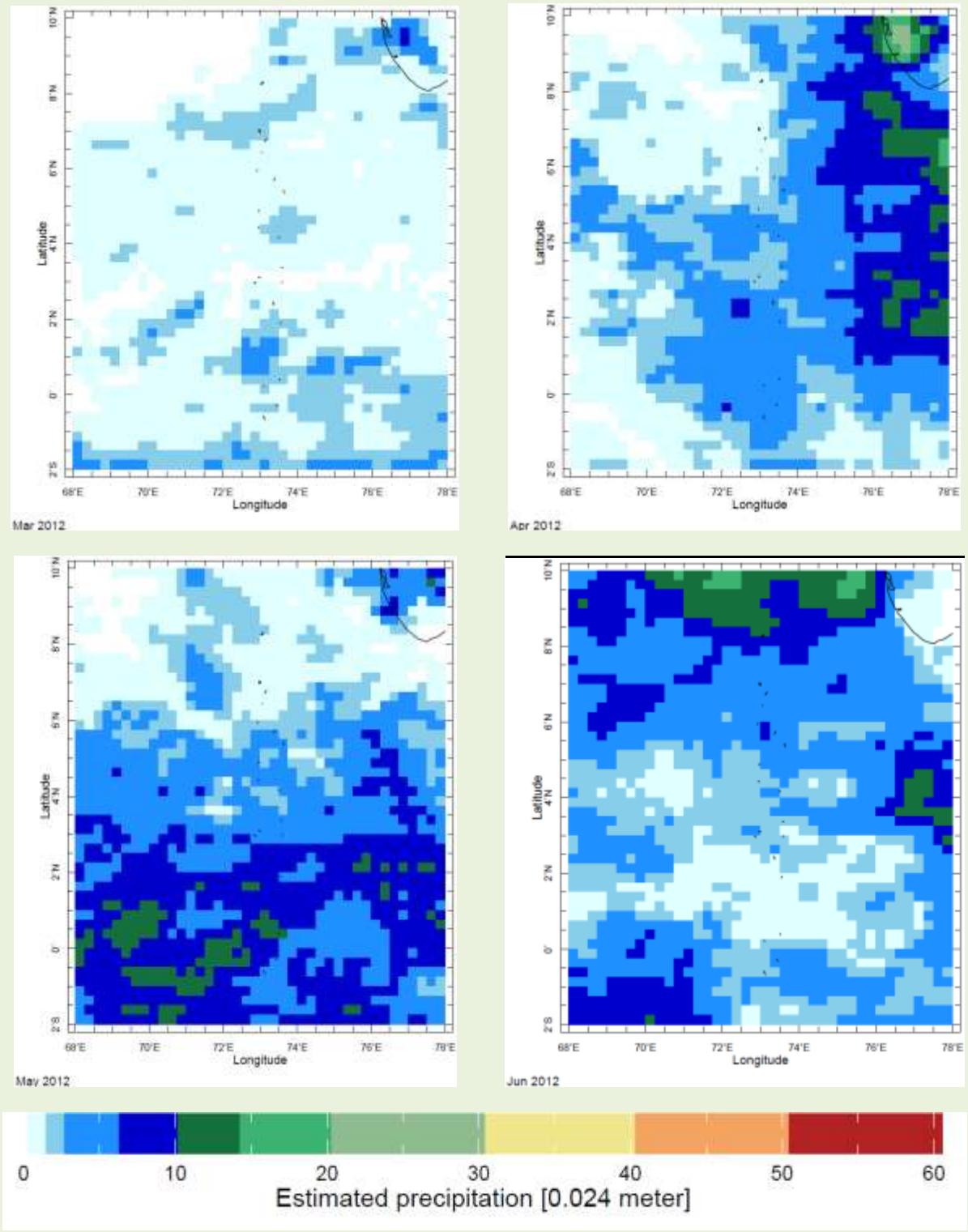
2) Rainfall Monitoring

a) Daily Satellite Derived Rainfall Estimate Maps: *8th July – 13th July, 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* (March to June 2012), *Derived from Satellite Rainfall Estimates

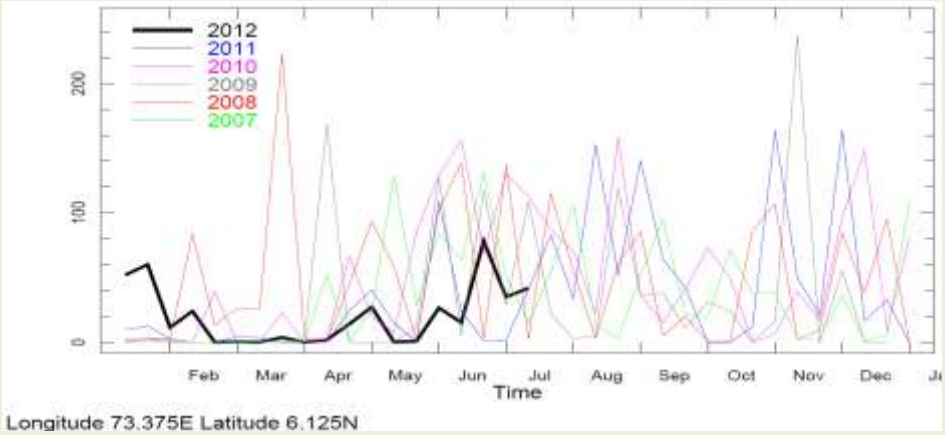


FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

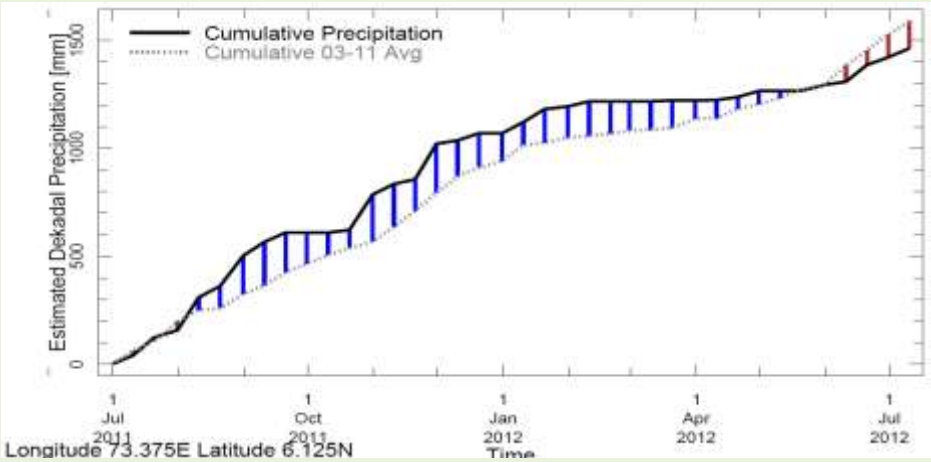
c) Seasonal to Annual Rainfall Monitoring

i) For Northern Maldives

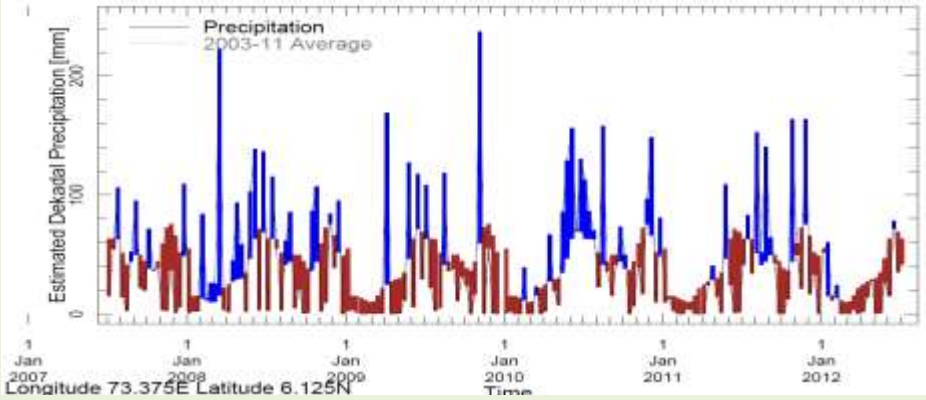
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



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



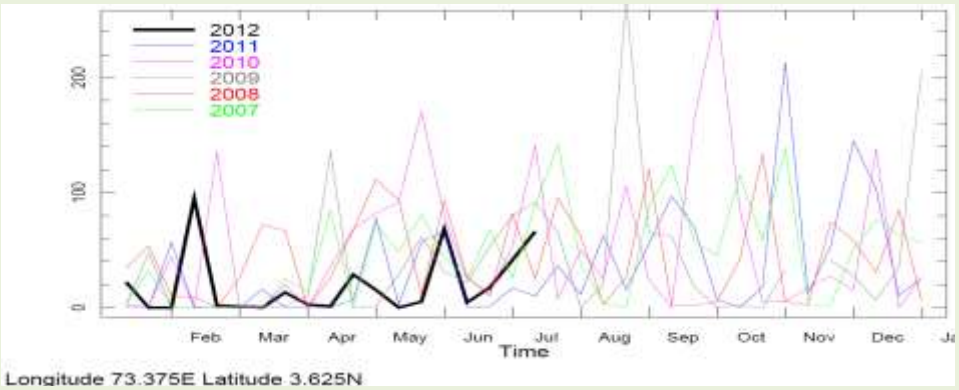
3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.



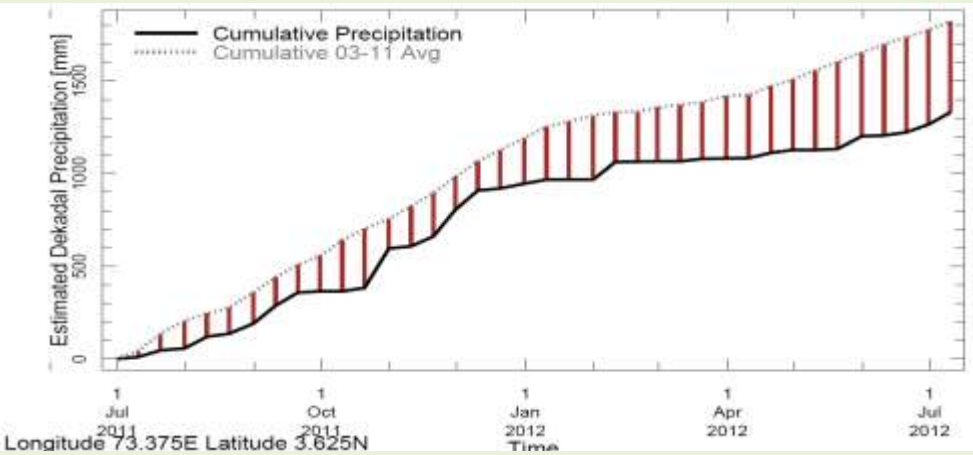
FECT Foundation for Environment Climate and Technology
c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.
Phone (+94) 81-2376746, 4922992 E-mail climate@sltnet.lk Web Site http://www.climate.lk

ii) For Central Maldives

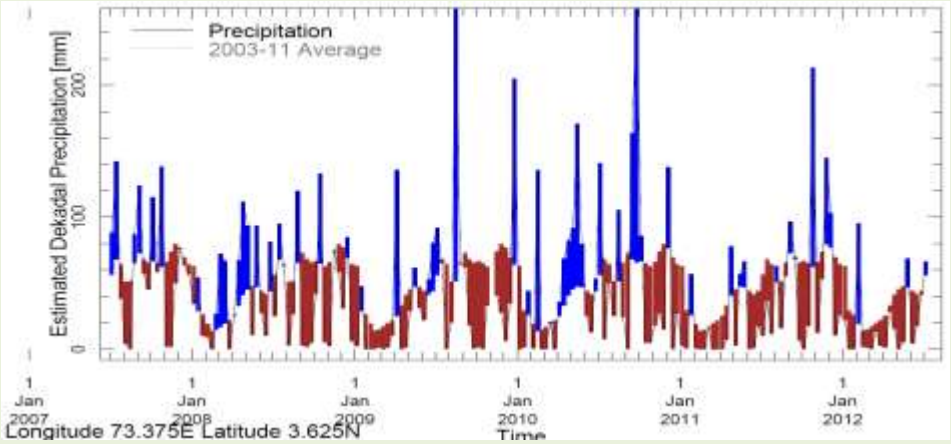
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



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

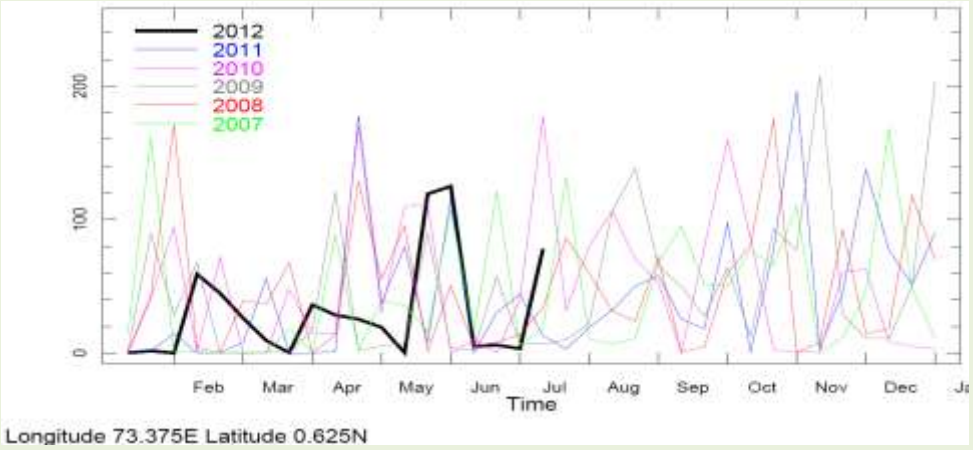


3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.

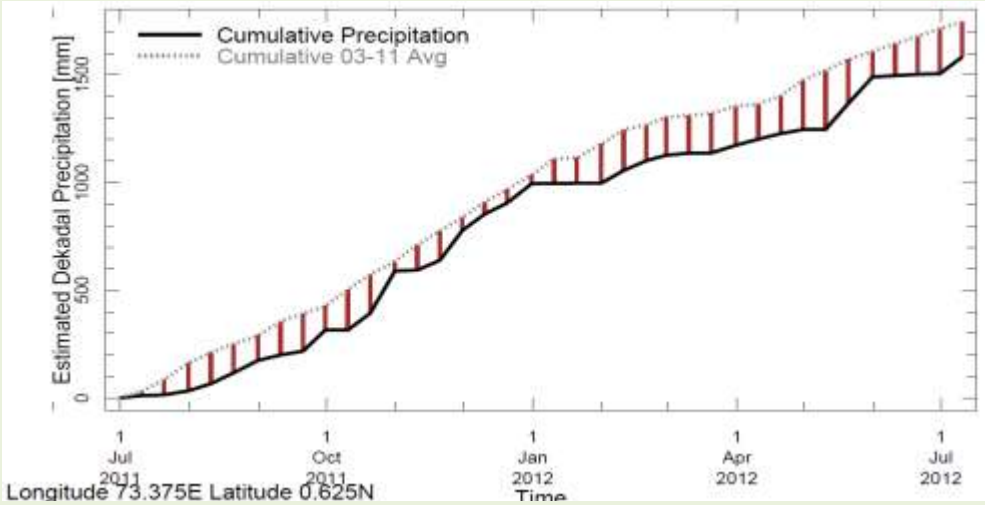


iii) For Southern Maldives

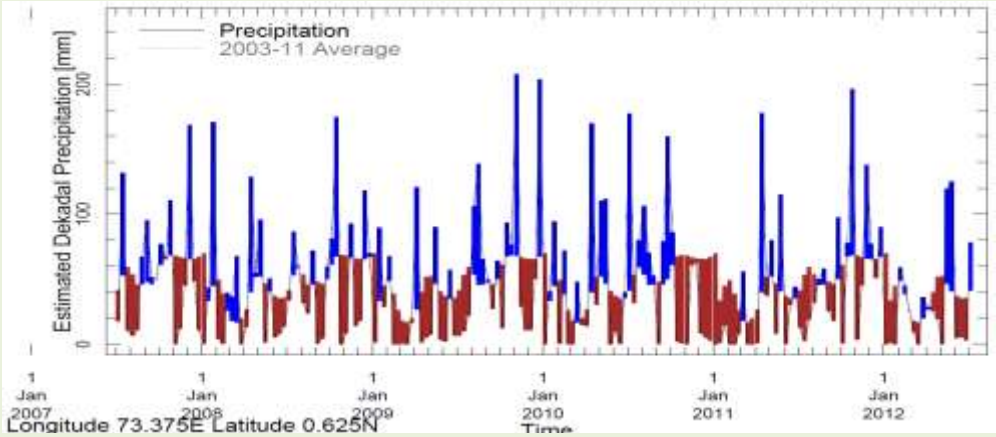
1) Rainfall in 2012 (black) compared to rainfall in previous 5 years



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

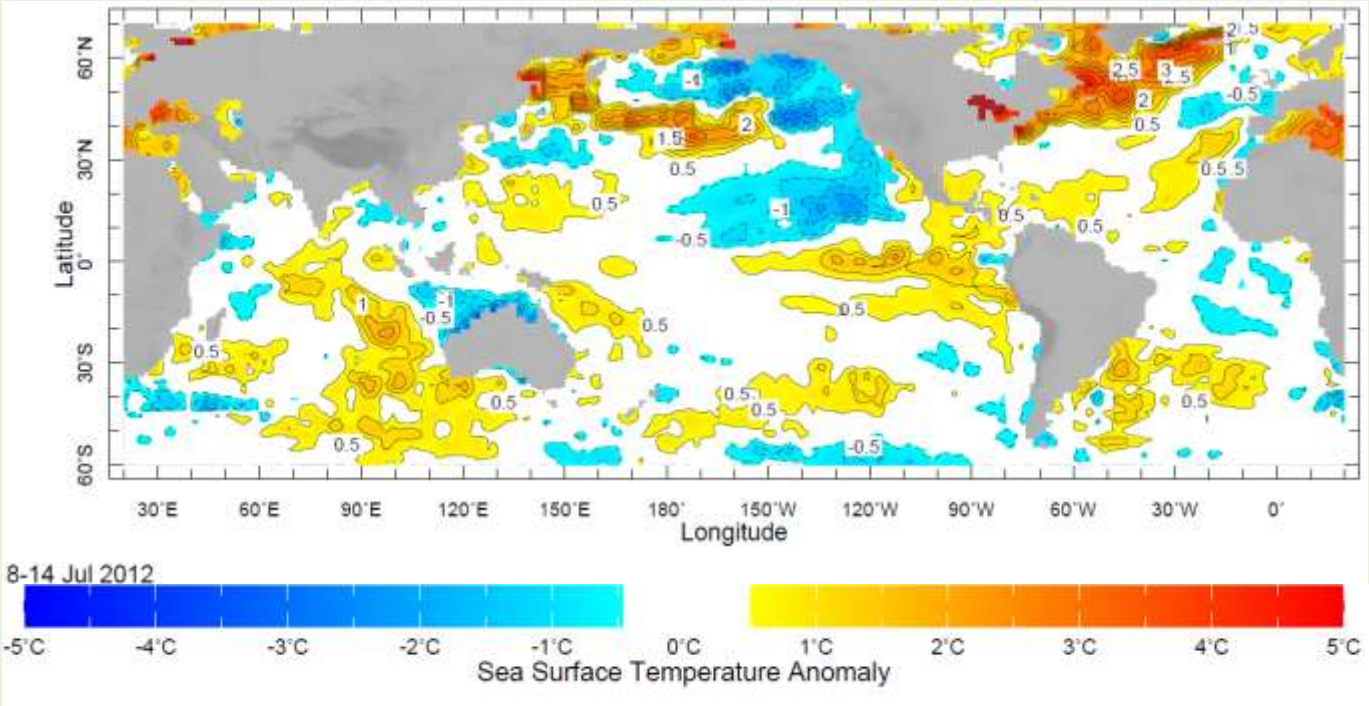


3) Rainfall for the past 5 years with above-average (compared to the last 8 years) hatched in blue and below normal in brown.



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), 8th -14th July, 2012

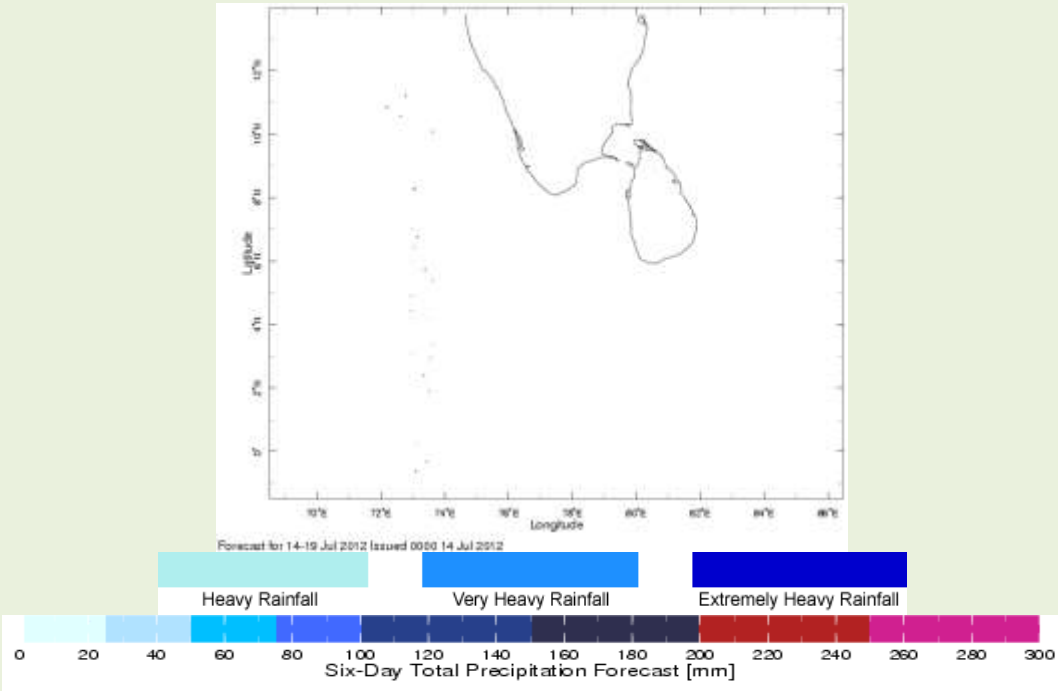


Data Source: NCEP, Environmental Monitoring Center

Base Period of Climatology: 1971- 2000

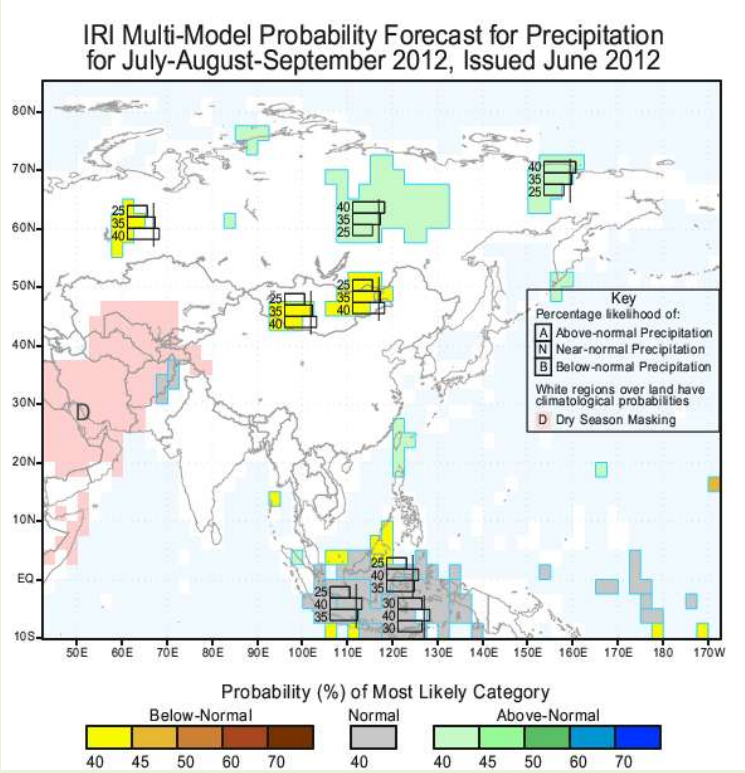
3). Predictions

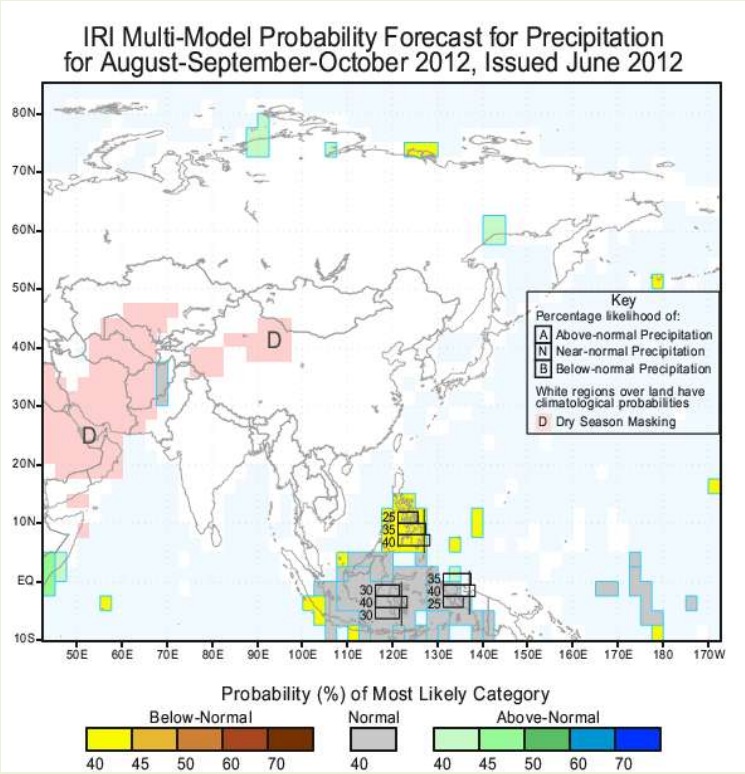
a) Weekly Precipitation Forecast for 15-20 Jul, 2012: Issued 15th Jul, 2012



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