

Experimental Climate Monitoring and Prediction for the Maldives...

Climate variability and change poses compelling challenges for the Maldives. In comparison with the potential impact and risks, there has been inadequate use of climate. As indicated by the Maldivian Minister of Environment the capacity to undertake climate, climate change and climate adaptation related work should be enhanced in the Maldives. The Foundation for Environment, Climate and Technology (FECT) grew out of the decade-long collaboration between Sri Lanka institutions and the Earth Institute at Columbia University. FECT focuses on the Equatorial South Asian region which includes Maldives. FECT has been providing a monthly hydro-meteorological advisories for Maldives in collaboration with Maldives Meteorological Services (MMS). The report comprises weekly to seasonal review of the monitored climate over Maldives and predictions from 3-days to 6 months ahead from various agencies and scientists including our own.

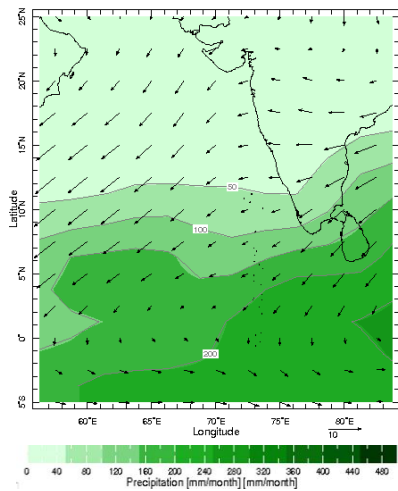
The Monthly Hydro-Meteorological Advisory

The monthly report consists of two parts as *Monitoring and Predictions*. Monitoring Includes Daily Satellite Derived Rainfall Estimates, Monthly Rainfall Estimates, Dekadal (10 Day) Satellite Derived Rainfall Estimates Weekly Average SST Anomalies while predictions include coming week conditions to be like.

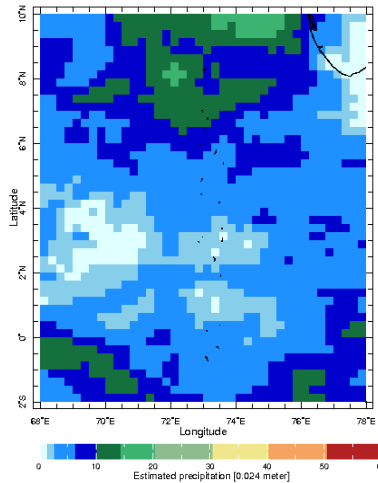
What it Conveys?

1. Monthly Climatology
2. Rainfall Monitoring
 - a. Daily Satellite Derived Rain fall 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

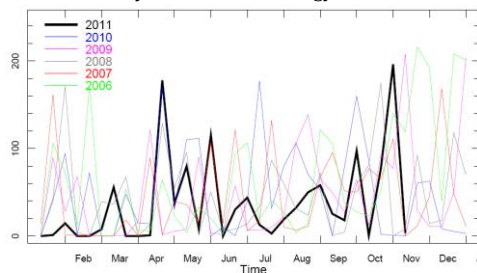
Examples of Climate Monitoring Products



Monthly Rainfall Climatology for December



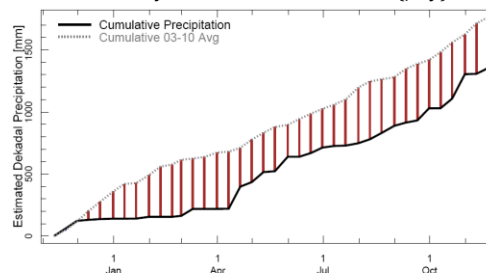
Monthly satellite derived Rainfall (July)



Longitude 73.375E Latitude 0.625N

Rainfall in 2011 (black) compared to rainfall in previous 5 years

Source: IRI data library



Longitude 73.375E Latitude 0.625N

Rainfall the past 365 days (black) compared to average rainfall in previous 8 years



FECT

Team Members

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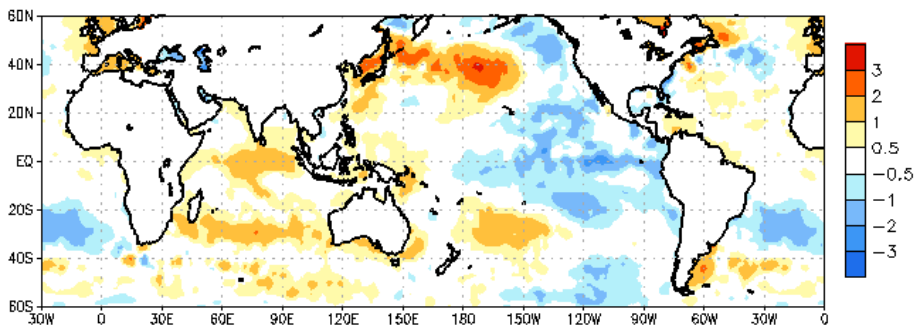
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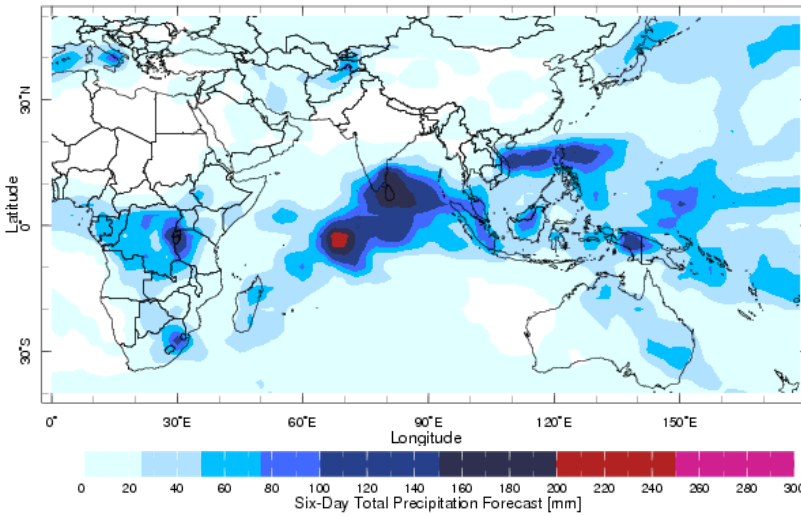
Partners

International Research Institute
 for Climate and Society (IRI)
 Maldives Meteorological Services
 (MMS)



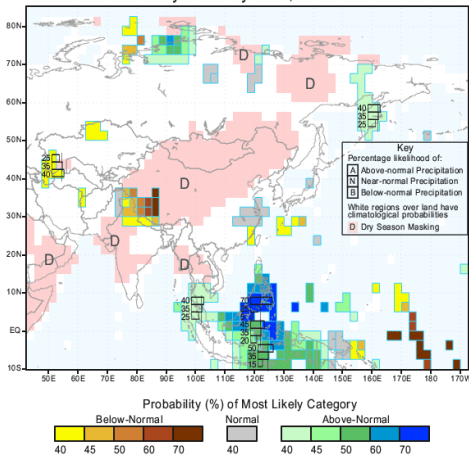
Average SST Anomalies (°C), 16th November, 2011
 Data Source: NCEP Global Sea Surface Temperature Analysis (Climatology 1979-1995)

Example of Climate Prediction Products

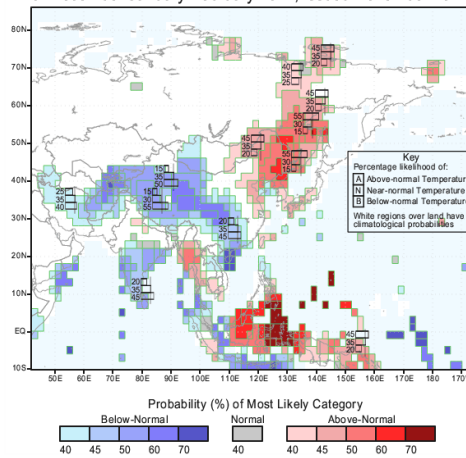


Weekly Precipitation Forecast for 21-26 Nov, 2011: Issued 21 Nov, 2011

IRI Multi-Model Probability Forecast for Precipitation for December-January-February 2012, Issued November 2011



IRI Multi-Model Probability Forecast for Temperature for December-January-February 2012, Issued November 2011



Seasonal Rainfall and Temperature Predictions from IRI

Availability and Accessibility

This report can be accessed and commented through our blog at <http://fectmv.blogspot.com/>. At present, this is an experimental advisory made for technically proficient users. We hope to make it more accessible for other users and to enhance its use.



*For the application of
 Science for Scientific
 Welfare &
 Environmental
 Sustainability*

Our officers have been working on projects on environment, climate and technologies. We started a Foundation in 2002 and registered it as a non-profit company in 2003. 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.

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