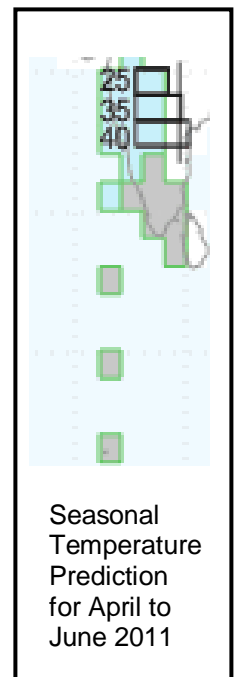
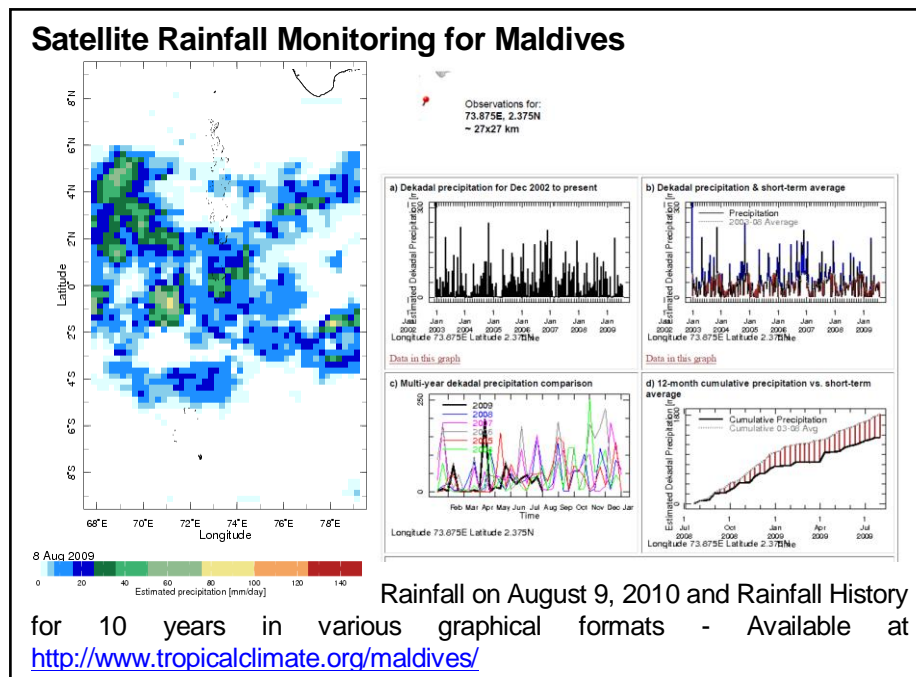
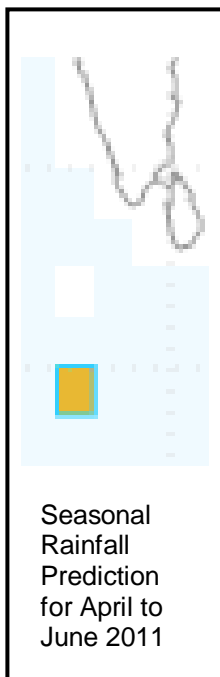


Foundation for Environment, Climate and Technology - Maldives

Principal Collaborators: Ministry of Environment and Energy (MEE), Male, Maldives, Foundation for Environment, Climate and Technology (FECT), Sri Lanka and New York, And Columbia University, New York USA.

Introduction: Climate variability and change poses compelling challenges for the Maldives. In comparison with the potential impact and risks, there has been inadequate understanding of the local climate and its impacts. As indicated by the Maldivian Ministry of Environment, the capacity to undertake climate, climate change and climate adaptation related work should be enhanced in the Maldives. The Ministry for Environment and the Earth Institute of Columbia University initiated discussions in 2009. The Foundation for Environment, Climate and Technology in Sri Lanka and New York grew out of the decade-long collaboration between Sri Lanka institutions and the Earth Institute at Columbia University. FECT Maldives was set up formally in June 2012 as an independent non-profit company in the Maldives to ensure that research and scientific knowledge is retained and capacity is built. We produce a monthly bulletin on climate in the Maldives (see <http://fectmv.blogspot.com/>).



Time Line

- May 2009: Invitation from Minister of Housing, Transport and Environment
- June 2009: One week visit by Lareef Zubair for meetings hosted by Ministry of Environment with
 - Minister of Environment and subordinate agencies, including for Energy and Water
 - State Minister of Fisheries and Agriculture, Maldivian College of Higher Education, Dept of Meteorology, Disaster Management Center,
- July 2009: Submission of Plans for Scientific work and for the Development of a Climate Change Unit
- August 2009: Development of Rainfall Monitoring Tool for Maldives
- December 2009: Proposal to develop a Masters in Sustainable Development Practice in Sri Lanka with Maldivian Ministry of Environment collaboration supported by MacArthur Foundation
- March 2010: Visit by Lareef Zubair to Male, Meetings with Secretary, Ministry of Environment, UNDP
- June 2010: Concept Note for proposals for climate analysis and capacity development submitted.
- July 2010 ongoing: Research on El Nino impacts on Maldivian Climate with Dept. of Meteorology.
- March 2011: Visit by L. Zubair to MHE, National Univ., Meteorological Service, etc.
- May to August: Development of Monthly Experimental Climate Advisory
- May 2012: Visit by Dr L. Zubair to MHE, UNDP, MNU, MMS, REM, LAMER, and MHE project personnel (Island Resiliency, MEMP, USAID project, on climate and water security)
- June 2012: Formal setting up of FECT Maldives.

Projects

- **Planning for Capacity and Science Development in Climate in Maldives** (2009-2011)

This collaboration focuses on capacity development for climate analysis for the Ministry of Environment. A proposal for staged development was prepared.

- **Satellite Rainfall Monitoring Tool** (2009-2011)

Michael Bell and Lareef Zubair at Columbia University and FECT have developed a tool to obtain 10 years of rainfall history over every 100/250 km regions in the Maldives. These compare well with ground observations from Maldivian Meteorological Service.

- **Climatological Analysis** (2010-2011)

In Collaboration with the Climate Division of the Maldivian Met Service, monthly climate analysis from ground and satellite observations were completed. Marked differences in Climate from North to South of Maldives were quantified. A research paper on El Nino impacts on Maldives has been drafted.

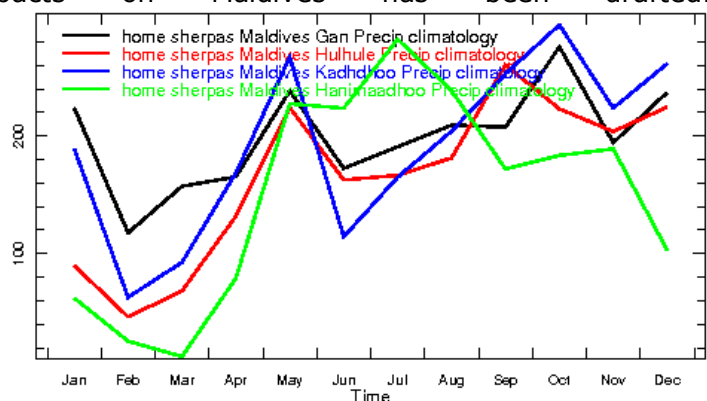


Chart: Average Monthly Rainfall over Maldives at Gan, Hulhule, Kadhdhoo and Hanimaadhoo for the last 20 years.

- **Climate Predictions for Maldives** (2011 onwards)

Every month, IRI produces climate predictions for 3-6 months ahead – we are now trying to improve the coverage so that all islands are covered, downscaling is implemented and skill analysis is undertaken

- **Masters in Sustainable Development Practice at the University of Peradeniya** (2010-onwards)

This program focuses on Sri Lanka and Maldives. FECT supports collaboration with Maldives through curriculum development, research support, and placements for Maldivian students at the University of Peradeniya. Supported by MacArthur Foundation. See <http://www.tropicalclimate.org/mdp/>

- **Intra-Seasonal Climate Predictions for Maldives** (2012-5)

1-30 day rainfall prediction system is being developed in collaboration with SUNY, Columbia University, MMS supported by the US National Academy of Sciences. Resources from the DYNAMO project are being used.

Collaborations and Consultations

Maldivian Institutions

[Ministry of Environment](#) (MEE)
[Ministry of Fisheries and Agriculture](#)
[Maldivian Meteorological Service](#) (MMS)
[Disaster Management Centre](#)
[Maldivian National University](#) (MNU)
[Renewable Energy Maldives](#) (REM)
[LaMer Pvt Ltd](#)
[UNDP Maldives](#)
[Marine Resources Center](#) (MRC)

International Institutions

[University of Peradeniya](#), Sri Lanka.
[Columbia University Engineering](#)
[Lamont Doherty Earth Observatory](#)
[SUNY-Albany](#)
[Columbia University Water Center](#)
[Indian Meteorological Dept., Chennai](#)
[IFM-GEOMAR](#), Germany
[Lund University](#), Sweden

Contributors in Maldives

Ms H. Ahmed
Dr. Zahid
Dr. Mizna Mohamed

Contributors at FECT

Zeenas Yahiya, S. Chandrasekera,
Prabodha Agalawatte, Lareef Zubair

Contributors @ Columbia University

Michael Bell, Shaky Sherpas, Upmanu Lall,
Jian-Hu Qian, Benno Blumenthal, John Del Corral,
Kevin Coffey, Michael Tippet, Tony Barnston,
Joaquim Goes, Adam Sobel

Other International Contributors

Cintia Uvo, Martin Visbeck, Paul Roundy,
Rashed Choudhury, Tristan Graham

Further Information

Websites:

<http://www.tropicalclimate.org/maldives/>

Email: fectmv@gmail.com

Contact in Male

H. Ahmad
REM, Madhrasaadhoshuge, Henveiru,
Hadheebee Magu, Male, 20184,
Maldives

Contact in Digana

Z. Yahiya
Digana Village, Rajawella, Sri Lanka
KY 20180