



# Climate Science for Climate Services

**Simon Mason**

**[simon@iri.columbia.edu](mailto:simon@iri.columbia.edu)**

International Research Institute  
for Climate and Society

EARTH INSTITUTE | COLUMBIA UNIVERSITY

*WCRP Conference for Latin America and the Caribbean:  
Developing, Linking, and Applying Climate Knowledge  
Montevideo, Uruguay, 17 – 21 March 2014*

# Climate Services

Date: Thursday 28 October 1993

Request: forecasts for Saturday 23 and 30 April 1994

The academic

The sleazy salesman

The apologist

The equivocator

The voice of authority



“Climate is what you expect,  
but weather is what you get.”

But what if you don't know what to expect in the first place?

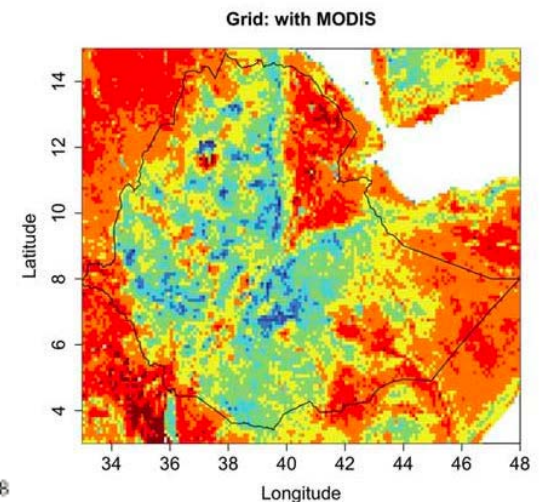
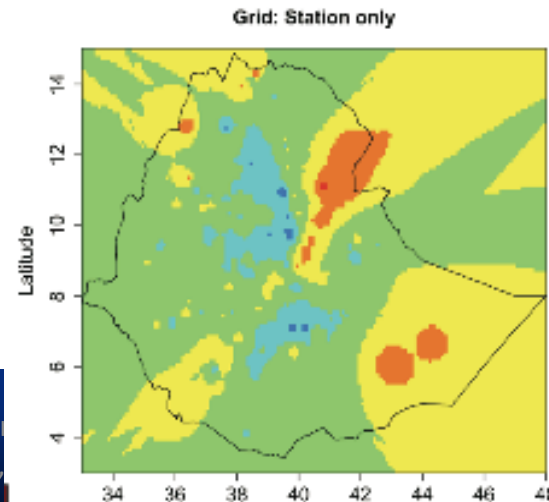
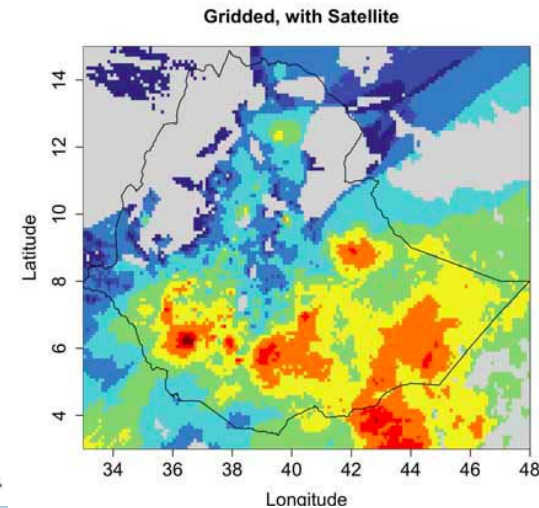
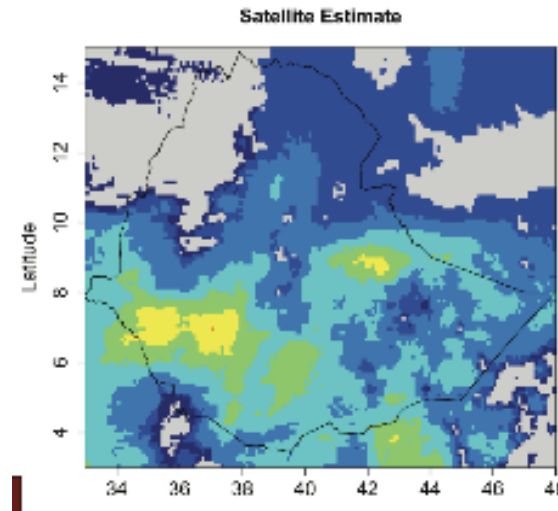
# ENhanced NAtional ClimaTe Services (ENACTS) products

Improving availability,  
access and use of  
climate information

by Tufa Dinku<sup>1</sup>, Kinfe Hilemariam<sup>2</sup>, David Grimes<sup>3</sup>,  
and Stephen Connor<sup>4</sup>



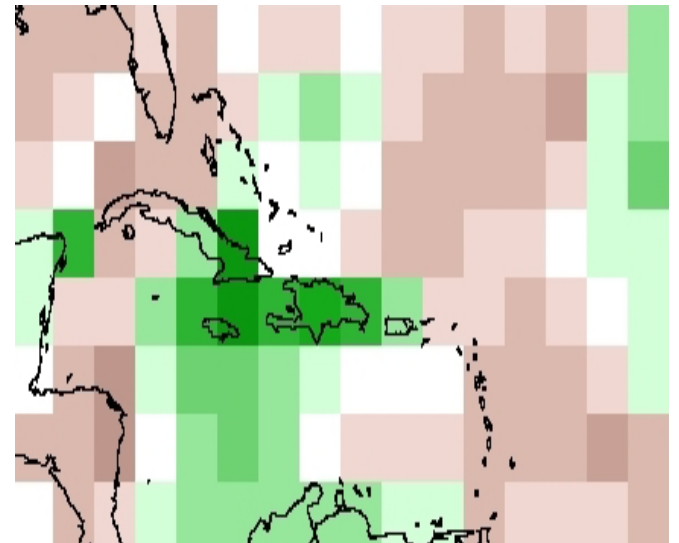
These ENACTS products combine locally calibrated satellite rainfall and temperature (min and max) estimates and all available quality controlled ground-based meteorological station gauge data (>300 for temperature and >600 for rainfall) available in Ethiopia for the period (1983-2010).



## Climate Change Projections (end of 21st century)



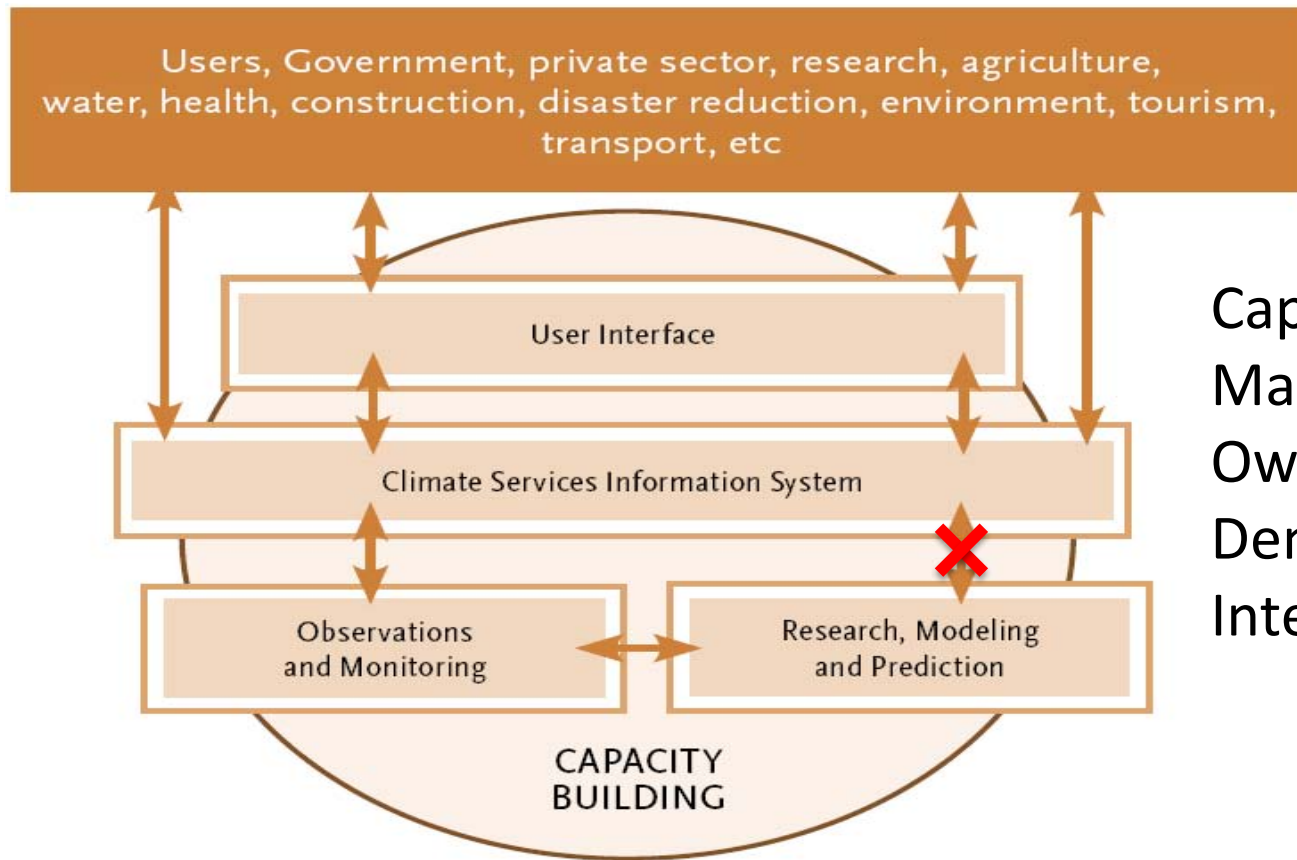
## Observations (last 15 years)



# Early Warnings as One Component of a Climate Risk Management System for Health

- estimate populations at risk (**risk mapping**)
- estimate seasonality of disease and **timing of interventions**
- monitor and predict year-to-year variations in incidence (including **early warning systems**)
- monitor and predict longer term trends (**climate change impacts and vulnerability assessments**)
- improve assessment of the impact of interventions (by **removing climate as a confounder**)

# Science-to-Operations



you expect,  
you get.”

Capacity  
Mandates  
Ownership  
Demand  
International standards