

Year of Tropical Convection (YOTC)

*Organized Tropical Convection - Global Interaction
(timescales up to seasonal)*



WCRP



THORPEX
A World Weather Research Programme

Seamless Prediction/Weather-Climate Intersection

Origin and Context of YOTC

- **Response to a recommendation of WCRP/WWRP-THORPEX Workshop at International Centre for Theoretical Physics (ICTP), Trieste, Italy, March 2006**
- **WCRP / WWRP-THORPEX priority project**
- **International coordination/collaboration a keynote**
- **Emphasis on organized tropical convection and its interactions across scales, and phenomena that present difficulties for weather and climate models**

Progress

- **Science Plan** – Completed
- **Science Sessions** – Fall AGU'08, AMS'09, Spring AGU'09...
- **~100 Presentations since 2006**
- **High-Resolution Analysis & Forecast Data Archives**
 - ECMWF – ~25km, on-line
 - NASA/GEOS5 - ~25km, in progress
 - NCEP - ~40km, in progress
- **Project Office**
 - US THORPEX Executive Committee (USTEC) supports YOTC Project Office (www.ucar.edu/yotc)
- **Implementation Plan drafted for this meeting with input from many of you**

... Continued

- **Satellite Data Archive and Dissemination**

- ~15 satellite-mission data sets identified

- **Connections**

- WMO letters to various agencies soliciting interest/support

- **Outreach**

- Field campaigns, e.g., AMY, VOCALS, T-PARC, DYNAMO.
- *GCSS, CLIVAR, WGNE, AMY, Pan-Monsoon, THORPEX ...*
- *East-Asia/Deep-Tropics with Indian Ocean, West Pacific, Africa, Atlantic locales as focal areas ... Africa, S. America, China, India, Korea, Taiwan*
- *US Multiscale Modeling Framework (CMMAP, NASA Goddard); DOE/ARM CAPT; Japan's NICAM; UK's Cascade*

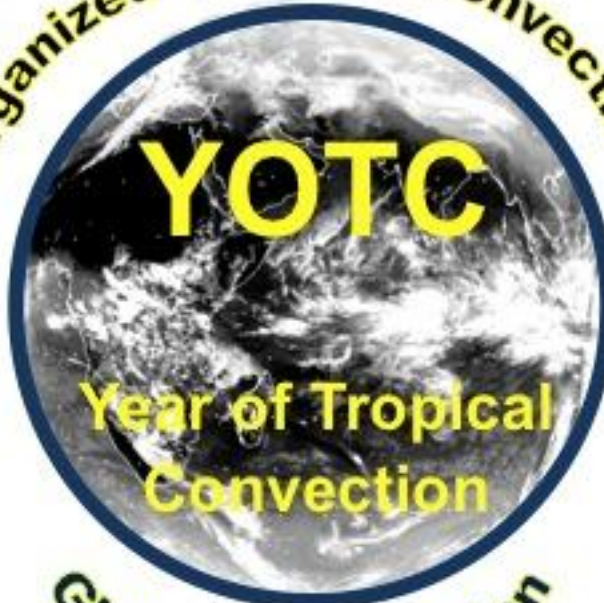
Global Prediction

High-resolution operational
deterministic-model data sets

Integrated Observations

Satellite, field-campaign, *in-situ*
data sets

Organized Tropical Convection



Year of Tropical
Convection

Global Interaction

Research

Attribution studies of global data sets; parameterized,
superparameterized, and explicit convection in
regional-to-global models; theoretical studies

Objectives of Workshop

- **Build on what we have already accomplished**
- **Consolidate tropical convection as a key weather-climate process**
- **Identify YOTC events for research**
- **Form collaborative projects**
- **Foster cross-agency interest**
- **Contribute to WCRP/WWRP-THORPEX Seamless Prediction Initiative**
- **Finalize YOTC Implementation Plan**
- **Summarize actions to WCRP/WWRP**