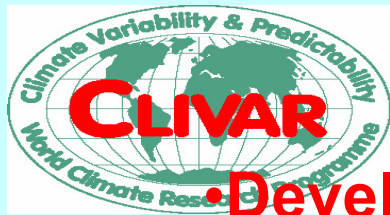




Discussion items

- **Developments in Monsoon modeling and prediction**
 - **Initiate coordinated AA monsoon prediction and modeling studies (e.g., impact of improved IO observing system on intraseasonal-interannual prediction/predictability)**
 - **Discuss potential AAMP-coordinated analysis of TFSP datasets**
- **Intraseasonal Variability**
 - **Are there key activities that AAMP can help spin up to address existing deficiencies of convective parameterizations and multiscale interactions which continue to hinder simulation and prediction**



Discussion items

• Developments in Ocean Observing Systems and role of Oceans in AA Monsoon

- How to link AAMP, IOP, PP efforts (and other panels) in monsoon studies.
- Do we need coordinated numerical experiments

• Decadal Variability and ACC

- Should AAMP develop strategy for analyses of CMIP3
- Prepare contribution for CLIVAR view of ACC (e.g., monsoon climate change as a result of a changed ENSO)

• Applications

- How can AAMP promote expanded application of predictions and simulations

Proactive and collaborative Activities

- Monsoon seasonal prediction: WGSIP (APCC). Joint workshop with WGSIP/TFSP, Barcelona June'07?
- Monsoon-ISO-ENSO (IOP, POP, MJO WG, WGSIP, MAHASRI, NASA):
GCM-RCM study/projection (MAHASRI)
MJO-MISO prediction/application
- IPCC AR4, Application: MAIRS/AAM training 01'08.
- Coordinating AMY'08 and the Joint WCRP/THOPEX Year of tropical convection (AIPO, CTCZ, JAMSTEC, SPICE,....)
- WMO International Workshop on Monsoon (IWM-4) late 2008.



AAMP8 2-19-2007

Proposed AAMP-IOP-POP-TFSP-WGSIP Activities

Request from TFSP/WGSIP

AAMP organize session at Barcelona Workshop
Joint Activity with existing TFSP hindcasts
Additional numerical experiments (Kirtman examples)

POP: ISO-ENSO, SPICE, ITF, Decadal Atlantic

IOP: COARE

Can one or two activities span all?

Request for a CLIVAR View of ACC

1-Tier vs. 2-Tier

- 2-Tier Prediction System has Inconsistency Between Surface Fluxes and SSTs
- 1-Tier Prediction System Allows for the Removal of the Systematic Error
- How Does this Inconsistency Impact Atmosphere-Ocean Co-Variability?
- How Does this Impact Predictability and Prediction Skill?

Example 2: Coupled Processes in Indian Ocean and Western Pacific

- Relative Roles of Thermodynamic vs. Ocean Dynamical Feedbacks in Monsoon Variability
 - Global Coupled Model
 - Use Mixed-Layer Model in Indian
 - Use Mixed-Layer Model in West Pacific
 - Flux Over-Ride Experiments

Example 3: Land-Atmosphere Interactions

- Role of Soil Moisture in Monsoon Variability and Predictability (GLASS)
 - Local Land-Atmosphere Coupling Strength (GLACE)
- Land Use Change and Monsoon Variability (GEWEX)
- Land Initialization in Monsoon Predictability (TFSP/GLASS)



Existing TFSP hindcasts

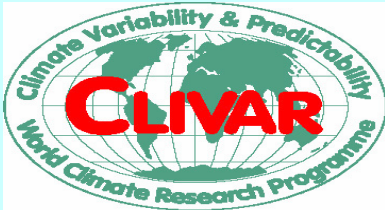
ISV/ENSO: Case study of onset 97 El Nino/impact of MJO (POP)
sketch out analysis of existing forecasts
including order 0 assessment of ability to
simulate/predict MJO (USCMJO WG)

ISV: Case study of 2002 ISV of Indian Monsoon
Can it be dynamically predicted and if so at what leadtime

Additional numerical experiments

How sensitive to initial ocean conditions e.g., impact of improved IO
observing system, sensitivity to atmospheric initial conditions
(phase of MJO), coupling, (resolve diurnal mixed layer) ...
MJO Metrics,

comparison with empirical predictions



Operational forecasts (continued)

Seasonal Prediction:

Case study of 2006 IOD/ENSO

Describe as best we can with existing obs (IOP)

At what leadtime predictable? (TFSP)

Decoupling experiments (does local coupling matter)

Sensitivity to IO initial conditions

Is predictability only coming from ENSO

Is there really an IOD trigger?

Why dipole this year?

Session at Barcelona: Is it feasible this late to organize?

AAMP-MAHASRI :

Coordinated GCM/RCM Process study on Monsoon ISO and onset (SEA+MC)

- Integration of observation and modelling, Meteorology and Hydrology
- Domain: MC+SEA (70-140E, 15S-40N)—a critical region for monsoon ISO influence
- Phenomenon and Issues: ISO, and its interaction with diurnal cycle, meso-scale and synoptic scale regulation. Onset of monsoon (summer and winter); impacts of Tibetan Plateau land surface processes
- Design: Driving field, Output, validation strategy and Data,...
- Participating model groups: both AGCM and RCM, each 4-5

MME Downscaling Seasonal Prediction Experiment

Develop effective strategy and methodology for RCM downscaling

Assess the added values of RCM MME downscaling

Determine the predictability of monsoon precipitation

Large scale driving: 10 CGCM from DEMETER and APCC/CliPAS models