

CIMS breakout session

## **1, Phase-I milestones, Phase II plan:**

-Focus on diurnal, seasonal monsoon cycle, inter-monsoon characteristics, model-intercomparison studies,

- CIMS workshops thematic workshops e.g. Milan, 2003, Montevideo 2004, Rome, Italy, 2005, Lhasa (or TBD ) in China, Aug. 2006

-Increased CEOP visibility through Joint sessions, AMS, AGU; invited overview talks at international symposium, IAMAP; averaged at least 2 events per year

-8 papers in Special Issues JMSJ

Continued above activities into Phase II

-Continue diurnal, seasonal cycle focus for model physic improvement, land-atmosphere interaction in conjunction with reference site validations, and CSE heritage

- Phase II new thrusts: aerosol-monsoon water cycle interaction, extreme event diagnostics

## **2. Current data collection, and new data set requirements:**

Incomplete reference site data for EOP periods continued to be a source of frustration. MOLTS data, not much used yet? May need to be used more

## **3. New data requirements**

- Reference sites in northern India- Pakistan-Himalayas-Tibet-western China region, e.g. Kanpur, Pune reference site over India; Lhasa, Lanzhou (semi-arid region) reference stations in China,
- MOLTS, subset satellite data set
- West Africa AMMA region reference— need Project Office help to get AMMA data for data analysis and model validation
- South American monsoon region? Explore flux tower in Santa Fe, in Argentina?
  - TRMM 3hr rainfall data available for diurnal studies
  - Need to include AERONET network, as part of CEOP database, with links to existing web sites.
  - UMDSRB (Pinker); Global 20 year at 2.5 degree 3 hourly (not exactly, ), half degree for 10 years for N and S. America, include LBA (3 hourly), *Beija-Flor*, India Ocean + subcontinent 1 year (Sept 2002- Sept 2003), 1 hour.

#### **4. Framework for accommodating new science focus**

Model intercomparison, downscaling/telescoping, detailed model evaluation aimed at improvement of physics,

- focused on unique science priorities not covered in GEWEX/CLIVAR panel, but coordinate with existing panels
- dust transport from semi-arid region
- high altitude cold land processes impacts on monsoon processes, e.g. aerosols, snow cover, land hydrology

#### **5. Connection, joint project, new opportunities**

- International field campaign: Rajo-Megha – dust cloud experiments over Indo-Gangetic Plain/Himalayas/Tibet/Western China to test aerosol “elevated heat pump” hypothesis
- West African Monsoon Model Evaluation (WAMME) project – a white paper has been written and passed onto AMMA modelers
- Encourage specific group on aerosol-monsoon interaction for South American monsoon- link to VAMOS , CSE’s (LBA, LPB)

## 6. Concrete objectives, deliverables, time frame, implementation steps

- CEOP co-sponsorship of joint international project/workshop: Raju-Megha in 2007-8
- Establish contact with AMMA at project level within next 2 months, WAMME workshop in late 2006
- CEOP co-sponsored aerosol-monsoon workshop in July-Aug, 2006, China
- Formation of the South American monsoon-aerosol group in a year. Yes or No?.
- keep up peered referred publications related to CEOP