



**Monsoon Asia Integrated Regional Study (MAIRS)  
Open Science Conference – Future Earth in Asia**  
(draft version 5.0, Dec 2013)



April 7-10, 2014  
*Beijing Friendship Hotel, Beijing, China*

### **Introduction**

The Asian monsoon region is uniquely affected by global climate change, drawing international attention to the magnitude and scale of climate variations and their impacts on the nations of the region. The MAIRS (Monsoon Asia Integrated Regional Studies) programme was established in 2006 to specifically address the interactions between climate and human systems in the monsoon Asia region, using interdisciplinary approaches to integrate research on human communities, climate and ecosystems. By focusing on the integrated studies in three vulnerable zones (Coastal Urban, Mountain, and Dryland), the MAIRS programme has achieved a significant understanding how the climate-human system interacts but at the same time identified knowledge gaps. The 2014 MAIRS Open Science Conference, to be held in Beijing China, provides a platform for scientists, stakeholders, policy makers, and public in general to present the state-of-the-art findings and challenges in addressing climate change issues in the Monsoon Asia.

### **Conference Objectives**

This Open Science Conference is intended to bring the regional experts to better understand the complexity of the interactive nature between climate, ecosystem and human systems, to enhance integration of different disciplines, sectors, programs, and national efforts across spatial-temporal scales in the Monsoon Asia.

### **Themes and Sessions**

#### **Theme I: Asian Monsoon, Changes and Feedbacks under Global Change**

1. MAIRS achievements in last 10 years
2. Asian monsoon, natural variability and anthropogenic changes

#### **Theme II: Dynamic Asia**

1. Observations and modeling
2. Natural variability and Trend
3. Future projection in monsoon Asia
4. Extreme events and thresholds
5. Drivers of Asian social economic change

#### **Theme III: Asian Development**

1. Ecosystem services and food security
2. Water supply and water security
3. Urbanization and energy supply

#### 4. Human health and wellbeing

### Theme IV: Transformation to Sustainable Development

1. Risk management and adaptation strategy
2. Public involvement in sustainability research
3. Discussion with stakeholders
4. Co-design, co-production and co-delivery

#### Organizers

Monsoon Asia Integrated Regions Studies (MAIRS)

Institute of Sociology, Chinese Academy of Social Sciences (CASS)

Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences (CAS)

#### Conference Website:

<http://www.mairs2014.org/dct/page/1>

#### Sponsors

Chinese Academy Of Sciences (CAS)

Asia-Pacific Network for Global Change Research (APN)

China Association for Science And Technology (CAST)

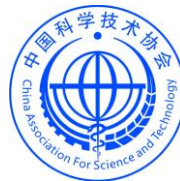
ICSU Regional Office for Asia and the Pacific (ICSU-ROAP)

National Science Foundation of China (NSFC)

Research Institute for Humanity and Nature (RIHN)

World Climate Research Program (WCRP)

Land-Ocean Interactions in the Coastal Zone (LOICZ)



## **Tentative Agenda**

### ***Day 1: Asian Monsoon, changes and feedbacks under global/regional environmental change***

**08:00-09:00 Registration**

**09:00-09:30 Welcome Speeches**

**09:30-10:20 MAIRS Program: History, Future and scientific achievements: Michael Manton**

**10:20-10:50 Coffee Break and Group Photo**

**10:50-12:00 Keynote Talks**

- Keynote speeches (45 minutes including discussion)
  - Keynote 1 (10:50-11:15)
  - Keynote 2 (11:15-12:00)

**12:00-13:30 Lunch**

**13:30-16:50 Keynote Talks**

- Keynote speeches: (45 minutes including discussion)
  - Keynote 3 (13:30-14:15)
  - Keynote 4 (14:15-15:00)

**15:00-15:20 Coffee Break**

- Keynote speeches:
  - Keynote 5 (15:20-16:05)
  - Keynote 6 (16:05-16:50)

**17:00-18:30 Poster Session P1**

all posters will be presented from 09:00 to 18:30

**19:00-20:30 Reception**

## **Day 2: Dynamic Asia**

### **Main Topics:**

1. Observations and modeling
2. Natural variability and Trend
3. Future projection in monsoon Asia
4. Extreme events and thresholds
5. Drivers of Asian social economic change

### **08:30-09:00 Plenary session**

- ✓ Summary report of day1
- ✓ Best poster award for P1

### **09:00-12:00 Keynote Talks**

- Keynote speeches: (40 minutes including discussion)
  - Keynote 7: (09:00-09:40)
  - Keynote 8: (09:40-10:20)

### **10:20 -10:40 Coffee Break**

- Keynote 9 (10:40-11:20)
- Keynote 10 (11:20-12:00)

### **12:00-13:30 Lunch**

### **13:30-16:50 Parallel Sessions:**

- Parallel Sessions R1 (13:30-15:00)
  - Session R1-01 Toshio Koike: Integrated study of Asian water cycle under GEOSS/AWCI I
  - Session R1-02 Jun Asanuma, Kun YANG: Progress in Landsurface modeling in Eastern Eurasia, and their future perspective
  - Session R1-03 Shuyu WANG, R. Krishnan: Regional climate modeling in Asia
  - Session R1-04 Jun WEN, Yeonjoo KIM: Soil Moisture Observation & Modeling and its Climatology
  - Session R1-05 Jiaguo QI, Ho Long Phi, Charlie Navanugraha: Linking Terrestrial Processes to Coastal Ecosystem Services in East and Southeast Asia: Understanding the Socioeconomic Drivers and Consequences.

### **15:00-15:20 Coffee Break**

- Parallel sessions R2 (15:20-16:50)
  - Session R2-01 Jianping HUANG: Observation of the aridity effect of Asia dust
  - Session R2-02 Xin LI, Soroosh Sorooshian, Dawen YANG: Integrated study on eco-hydrological processes in inland river basins
  - Session R2-03 Yili ZHANG: Land cover and land use change in the High Asia under climate change and regional development
  - Session R2-04 Jianlong LI, Jiaguo QI: Assessing Variability of Grassland Degradations and Carbon Sinks in response to Climate Change and human activities in long term

### **17:00-18:30 Poster Session P2**

all posters will be presented from 09:00 to 18:30

### ***Day 3: Asian Development***

Main topics:

1. Ecosystem services and food security
2. Water supply and water security
3. Urbanization and energy supply
4. Human health and wellbeing

#### **08:30-09:00 Plenary Session**

- ✓ Summary report of day2
- ✓ Best poster award for P2

#### **09:00-12:00 Keynote Talks**

- Keynote speeches: (40 minutes including discussion)
  - Keynote 11: (9:00- 9:40)
  - Keynote 12: (9:40-10:20)

#### **10:20-10:40 Coffee Break**

- Keynote 13 (10:40-11:20)
- Keynote 14 (11:20-12:00)

#### **Lunch: 12:00-13:30**

#### **13:30-16:50 Parallel Sessions:**

- Parallel Sessions R3 (13:30-15:00)
  - Session R3-01 Qiang FENG (IRDR), Climate change and natural disasters in Asia
  - Session R3-02 Tong ZHU: Human health and air quality in megacities of Asia
  - Session R3-03 R. Ramesh: Coastal development and vulnerability in south Asia
  - Session R3-04 Juanle WANG: Mountain land user/cover change under economic development and climate change
  - Session R3-05 Makoto Taniguchi: Water, energy and food security in Asia

#### **15:00-15:20 Coffee Break**

Parallel sessions R4 (15:20-16:50)

- - Session R4-01 Hein Mallee: Ecosystems and Human Health
  - Session R4-02 Heqing HUANG, Saskia Werners: Adaptive land use and water management in the Pearl River delta under climate change and sea level rise
  - Session R4-03 Cheng TANG, Jan Harff: Sediment dynamics and anthropogenic impacts of river mouth and coastal systems of marginal seas
  - Session R4-04 Jianzhong YAN, Laixiang Sun, Giovanna Gioli : Climate change and social-economic transformation
  - Session R4-05 Jiaguo Qi, Alim Pulatov, Termirbek Bobuchov: Water Security and Sustainable Development in Central Asia

#### **17:00-18:30 Poster Session P3**

## ***Day 4 Transformation to sustainability of Asia***

Main topics:

1. Risk management and adaptation strategy
2. Public involvement in sustainability research
3. Discussion with stakeholders
4. Co-design, co-production and co-delivery

### **08:30-09:00 Plenary Session**

- ✓ Summary report of day3
- ✓ Best poster award for P3

### **09:00-12:00 Keynote Talks**

- Keynote speeches: (40 minutes including discussion)
  - Keynote 15: (09:00-09:40)
  - Keynote 16: (09:40-10:20)

### **10:20-10:40 Coffee Break**

- Keynote 17 (10:40-11:20)
- Keynote 18 (11:20-12:00)

**Lunch: 12:00-13:30**

### **13:30-16:30 Parallel Sessions**

Parallel Sessions R5 (13:30-15:00)

- Session R5-01 Ho-ching LEE & Xiaoyi WANG: Adapting to Climate Change: social research and local actions (part 1)
- Session R5-02 Lance Heath, Paul McShane, Katherine Morton: Climate change adaptation and social resilience in Himalayan region (part 1)
- Session R5-03 Pavel Groisman, Shamil Maksyutov, Evgeny Gordov: Future northern Asia (part 1)
- Session R5-04 Yinpeng LI: Urban spatial planning, climate change adaptation and disaster risk reduction

### **15:00-15:20 Coffee Break**

Parallel Sessions R6 (15:20-16:50)

- Session R6-01 Ho-ching LEE & Xiaoyi WANG: Adapting to Climate Change: social research and local actions (part 2)
- Session R6-02 Lance Heath, Paul McShane, Katherine Morton: Climate change adaptation and social resilience in Himalayan region (part 2)
- Session R6-03 Pavel Groisman, Shamil Maksyutov, Evgeny Gordov: Future northern Asia (part 2)
- Session R6-04 Ailikun, Hein Malle: Co-design, co-production and co-delivery in Future Earth
- Session R6-05 Chuluun, Dennis Ojima, Future Dryland

### **17:00-18:00 Plenary Session**

- ✓ Summary and conclusions
- ✓ Closing