

# GEWEX/LS4P Phase II International Kickoff Workshop

## Sunday, 11 December (9am-6pm Central Time (CT))

### Venue: History, level 2, Marriott Marquis, Chicago (in person) and on-line everywhere

**Objectives:** The workshop will consist in an overview for what LS4P-I has achieved and items in phase I which need to be addressed, present the challenging issues that the LS4P project faces, and discuss the phase II protocol which is to be distributed for iteration before the workshop (the experimental design, time frame of the study, potential workshops and publications, and broad impact).

### The LS4P Phase II Workshop Program

#### 1). General Session (Chairs: Yongkang Xue, Aaron Boone) 9:30-10.45

**Speakers** (10-15 minutes)

- **Xubin Zeng** (GEWEX) The GEWEX Update
- **Andy Robinson** (WCRP S2S) Updates on the WWRP/WCRP Sub-seasonal to Seasonal Prediction Project (S2S)
- **Tandong Yao** (TPE RHP) The imbalance of the Asian Water Tower
- **Tim Schneider** (N. American RHP) Progress Towards a Regional Hydroclimate Project over the CONUS: Crosscutting Opportunities for LS4P
- **Anne Verhoef** (Univ. of Reading) Current and planned collaborations between GLASS activities and LS4P Phase II'
- **Frederic Vitart** (ECMWF) Impact of ocean-atmosphere coupling on MJO S2S prediction

**Coffee Break** (15 minutes)

#### 2). LS4P Phase-I Summary Session I (Chairs: Aaron Boone; Bill Lau) (11:00-12:30)

**Speakers** (5-10 minutes):

**Qi Tang** (Lawrence Livermore National Laboratory, U.S.A.) Impact of nudging method in land surface temperature initialization on LS4P simulation

**Constantin Ardilouze** (Meteo-France), Conserving soil enthalpy in the LS4P setup: rationale and first results.

**Subodh Saha** (Indian Institute of Tropical Meteorology) A Dominant Mode in the First Phase of the Asian Summer Monsoon Rainfall: Role of Antecedent Land Surface Temperature

**Xin-Zhong Liang** (University of Maryland, College Park, U.S.A.) Regional Climate Modeling to Understand Tibetan Heating Remote Impacts on East China Precipitation

**LS4P-I summary:** *Yongkang Xue, Aaron Boone, Tandong Yao, Ismaila Diallo*  
**DISCUSSION**

Lunch Break (12:30-1:30pm) The workshop will provide lunch

### 3). Challenging Issue Session (Chairs: Craig Ferguson; Shaocheng Xie) 1:30-3:00

Speakers (10 minutes)

- **Jessie Carman** (NOAA Weather Program Office, U.S.A.) Update on NOAA/OAR Hydrology and Precipitation Activities
- **Bill Lau** (Earth System Science Interdisciplinary Center, U.S.A.) High-terrain land surface temperature, circumpolar teleconnection and sub-seasonal to seasonal (S2S) precipitation predictability
- **Jeff Basara** (Oklahoma Univ., U.S.A.) The Changing Hydroclimate of the Great Plains

#### i). LST/SUBT and other effect, such as soil moisture, interactive SST

Speakers (5 minutes):

**Guiling Wang** (Univ. of Connecticut, U.S.A.) The impact of initial soil moisture and soil temperature anomalies on local hydroclimate in Tropical South America

**Hiroshi Takahashi** (Tokyo Metropolitan Univ., Japan)

Discussion

#### ii). Improve initialization over high mountain areas

Speaker (5 minutes)

**Qing Bao** (LASG, Institute of Atmospheric Physics, China) Initialization method of FGOALS-f2: subseasonal to decadal system

**Enrico Zorzetto** (GFDL) GFDL Land-Atmosphere-Snow Scheme: formulation and evaluation of a new snow model for Earth system science applications

Discussion

Coffee Break (3:00-3:20)

### 3). Challenging Issue Session II (Chairs: Shaocheng Xie; Craig Ferguson) 3:20-4:00

#### iii). Causes of LST/SUBT anomaly

Speaker (5 min):

**Yang Zhang** (Nanjing University, China) Atmospheric circulations affecting the thermal state of Tibet Plateau

Discussion

#### IV). Tibetan Plateau Regional climate and RCM downscaling

Speakers (5 min):

**Jianping Tang** (Nanjing University, China) LS4P regional climate model intercomparison over the Tibetan Plateau

**Shiori Sugimoto** (Japan Agency for Marine Earth Science and Technology, Japan) Assessing East Asian June precipitation bias in the WRF-JAMSTEC dataset

**Yuan Qiu** (Institute of Atmospheric Physics, China) Memory of land temperature anomalies over Tibetan Plateau in different land models

**Xin Qi** (Beijing Normal University, China) Subseasonal warming of surface soil enhances precipitation over the eastern Tibetan Plateau in early summer

Discussion

4). Phase II Protocol Session (Chairs: Peter van Oevelen; Bill Lau) (4:00-6:00pm)

**Protocol: Yongkang Xue, Aaron Boone, Hara Nayak**

**DISCUSSION**

### Workshop Registration and Logistic Issues:

i). To attend the meeting in-person or on-line, please send an email to Yongkang ([yxue@geog.ucla.edu](mailto:yxue@geog.ucla.edu)) if you have not done so. The workshop will send a link to those participants who indicate they will attend the workshop on-line and a confirmation email for those who will attend the workshop in person before October 31, 2022. For the meeting participants, if you did not hear anything from the workshop by October 31, 2022, please contact us.

ii). The workshop will provide lunch for the workshop participants. The meeting venue will request to be informed of the lunch order beforehand, therefore please let us know your intention to attend in person in advance.