

## 2024 Noah-MP International Workshop Agenda

June 3-4, 2024 two full days (8am-5pm, US Mountain Time)

Location: **NCAR Foothills Lab (EOL-Atrium)** and remote  
NCAR Foothills Lab: 3450 Mitchell Lane Boulder, CO 80301

Virtual Zoom Meeting link: (to be sent a few days before workshop)

Workshop sessions will be recorded and published online later at the workshop website:  
<https://ral.ucar.edu/events/2024/2024-noah-mpr-international-annual-users-workshop>

### June 3, 2023 (8am-5pm, Monday, US Mountain Time)

Time	Plan / Presentation title	Presenter	In person / remote
7:45 - 8:00 am	Setup and coffee		
8:00 - 8:05 am	Welcome and logistics	Cenlin He	In person
8:05 - 8:20 am	Opening remarks	Roy Rasmussen (NCAR)	In person
<b>Session 1: Noah-MP Overview</b> (Moderator: Cenlin He)			
8:20 - 8:35 am	Overview of past year's Noah-MP community activities	Cenlin He (NCAR)	In person
8:35 - 8:50 am	Opportunities in land surface modeling for Hong Kong and Southeast Asia regions	Fei Chen (HKUST)	Remote (14 hours ahead)
8:50 - 9:05 am	Embracing Uniqueness: Advancing the Noah-MP Land Surface Model as a Community Resource	Zong-Liang Yang (UT Austin)	Remote
9:05 - 9:10 am	NOAA SFS development plan and application	Yan Xue (NOAA NWS/OSTI)	In person

<b>Session 2: Earth System Coupling</b> (Moderator: Cenlin He)			
9:10 - 9:25 am	Current status and plan of KIM/Noah-MP coupled model	Myung-Seo Koo (KIAPS, South Korea)	Remote (15 hours ahead)
9:25 - 9:40 am	Advanced research strategies for studying land-atmosphere feedback	Volker Wulfmeyer (U of Hohenheim, Germany)	Remote (8 hours ahead)
9:40 - 9:55 am	NoahMP Operational Transition at NOAA/EMC	Mike Barlage (NOAA)	In person
9:55 - 10:10 am	Improving the Land Component in Earth System Models via a Hierarchical System Development Approach	Michael Ek (NCAR)	In person
10:10 - 10:30 am	Coffee break & Group photo		
10:30 - 10:45 am	Overview of LIS and Noah-MP efforts and NCAR-NASA/GSFC strategic partnership	David Mocko (NASA)	In person
10:45 - 11:00 am	Humans and Hydroclimate in the U.S. (H2US): A Convergent Science Approach at the Land-Atmosphere Interface	Tim Schneider (NCAR)	In person
11:00 - 11:05 am	Additional Q&A for speakers in the session		
<b>Session 3: Hydrology</b> (Moderator: Samar Minallah)			
11:05 - 11:20 am	Subgrid hydrology in NOAH-MP	Gonzalo Miguez-Macho (USC, Spain)	Remote (8 hours ahead)
11:20 - 11:35 am	Exploring Global Hydrological Sensitivity: Assessing Noah-MP Runoff Models in Discharge Simulations	Mohamed Hamitouche (IUSS, Italy)	Remote (8 hours ahead)
11:35 - 11:50 am	Low dynamics in Noah-MP simulated groundwater	Bailing Li (NASA)	Remote
11:50 - 12:45 pm	Lunch (on your own)		

12:45 - 13:00 pm	Terrestrial Hydrology in the Great Lakes Watershed	Samar Minallah (NCAR)	In person
13:00 - 13:15 pm	The Shrinking Great Salt Lake May Exacerbate Droughts by Reducing Local Precipitation: A Case Study	Hongping Gu (USU)	Remote
13:15 - 13:30 pm	Refining Water and Carbon Fluxes Modeling in Terrestrial Ecosystems via Plant Hydraulics Integration	Lingcheng Li (PNNL)	Remote
13:30 - 13:45 pm	Implementing a deep, dynamic root water uptake scheme in Noah-MP	Carolina Bieri (UIUC)	In person
13:45 - 13:50 pm	Additional Q&A for speakers in the session		
<b>Session 4: Extremes and Water Resource</b> (Moderator: Ronnie Abolafia-Rosenzweig)			
13:50 - 14:05 pm	Land Surface Model Aids in Understanding the Low Probability Floods in the Mountainous Colorado Front Range	Guo Yu (DRI)	Remote
14:05 - 14:20 pm	Evaluating land surface model skill and sensitivity responses to large fire disturbances in the western U.S.	Ronnie Abolafia-Rosenzweig (NCAR)	In person
14:20 - 14:35 pm	Use and improvement of NoahMP in operational water supply forecasting	David Gochis (ASO)	In person
14:35 - 14:50 pm	Influence of glacier retreat on streamflow in East Asia using the constrained WRF-Hydro/Glacier with LSTM	Jaehyeong Lee (YSU, South Korea)	In person
14:50 - 14:55 pm	Additional Q&A for speakers in the session		
<b>Session 5: Urban</b> (Moderator: Aaron Alexander)			
14:55 - 15:10 pm	BEP-BEM	Alberto Martilli (CIEMAT, Spain)	Remote (8 hours ahead)
15:10 - 15:30 pm	Coffee break		
15:30 - 15:45 pm	Urban and extremes/ international partnerships and future direction	Dev Niyogi (UT Austin)	Recorded video

15:45 - 16:00 pm	Better Representation of Urban Hydrologic Processes Alters Surface Water and Temperature Cycles in Coupled Regional Climate Models	Aaron Alexander (UWM)	In person
16:00 - 16:15 pm	A Novel Downscaling Approach for Urban Climate: Land-Surface-Physics-Based Downscaling	Lingbo Xue (U of Tsukuba, Japan)	Remote (15 hours ahead)
16:15 - 16:20 pm	Additional Q&A for speakers in the session		
<b>Session 6: Snowpack</b> (Moderator: Tzu-Shun Lin)			
16:20 - 16:35 pm	Improving Snow Simulation in the Upper Colorado River Basin through the National Water Model: The Role of Forcing and Parameterization	Yanjun Gan (UT Arlington)	Remote
16:35 - 16:50 pm	Teleconnections and Topography: How the Use of Sea Surface Temperature Data to Predict Snow Water Equivalent varies within Small Watersheds in the Western US	Jeremy Barroll (CU Boulder)	In person
16:50 - 17:05 pm	NoahMP-SNICAR snow albedo	Tzu-Shun Lin (NCAR)	In person
17:05 - 17:10 pm	Additional Q&A for speakers in the session		
17:05 pm	Adjourn		
	Dinner (on your own)		

**June 4, 2023 (8am-5pm, Tuesday, US Mountain Time)**

<b>Time</b>	<b>Plan / Presentation title</b>	<b>Presenter</b>	<b>In person / remote</b>
7:45 - 8:00 am	Setup and coffee		
<b>Session 6: Snowpack Cont'd</b> (Moderator: Tzu-Shun Lin)			
8:00 - 8:15 am	Improving Snow Physics Processes in the KIM-NoahMP Coupled Model	Mee-Hyun Cho (KIAPS, South Korea)	Remote (15 hours ahead)
8:15 - 8:30 am	Simulation of the regional climatic effect by black carbon and dust on snow in Central Italian Apennines with the WRF-Noah-MP/CHIMERE coupled model	Paolo Tuccella (U of L'Aquila, Italy)	Remote (8 hours ahead)
8:30 - 8:45 am	Impact of snow drift on snow cover in the central Apennines simulated with the WRF/Noah-MP model	Edoardo Raparelli (U of L'Aquila, Italy)	Remote (8 hours ahead)
8:45 - 8:50 am	Additional Q&A for speakers in the session		
<b>Session 7. Agriculture and Vegetation</b> (Moderator: Zhe Zhang)			
8:50 - 9:05 am	Improvement of Forest Canopy Characterization Based on NoahMP and Its Impact on Land Air Exchange Processes	Ming Chang (JNU)	Remote (14 hours ahead)
9:05 - 9:20 am	Noah-MP Dynamic Irrigation Scheme: Development, Calibration and Validation	Prasanth Valayamkunnath (IISER TVM, India)	Remote (11.5 hours ahead)
9:20 - 9:35 am	A crop-specific dynamic irrigation scheme in a regional land surface-hydrologic modeling framework for improving human water-use estimation and irrigation impact assessment	Jianhui Wei (KIT, Germany)	Remote (8 hours ahead)
9:35 - 9:50 am	High-resolution modeling of Farmers' heat stress over intensely irrigated lands of California	Sagar Parajuli (SDSU)	Remote

9:50 - 10:10 am	Coffee break		
10:10 - 10:25 am	US Corn Belt enhances regional precipitation recycling	Zhe Zhang (NCAR)	In person
10:25 - 10:40 am	FEWS NET Land Data Assimilation System System (FLDAS): Noah-MP Applications in Food Security Analysis	Kimberly Slinski (U of Maryland /NASA)	In person
10:40 - 10:45 am	Additional Q&A for speakers in the session		
<b>Session 8. Model evaluation and diagnosis</b> (Moderator: Aniket Gupta)			
10:45 - 11:00 am	Evaluation of Noah-MP's simulated ground heat flux and temperatures at a pine forest and a grassland site in Germany	Kirsten Warrach-Sagi (U. Hohenheim, Germany)	Remote (8 hours ahead)
11:00 - 11:15 am	Assessment of Noah-MP Land Surface Model for parameterization schemes selection across the Iberian Peninsula	Nicolas Tacoronte (U of Granada, Spain)	Remote (8 hours ahead)
11:15 - 11:30 am	Analysis of different configurations of Noah-MP land surface model over the Iberian Peninsula considering energy fluxes	David Donaire Montano (U of Granada, Spain)	Remote (8 hours ahead)
11:30 - 11:45 am	Improved simulation of snowpack and leaf area index through the dynamic vegetation model in Noah-MP V5: insight into current and future model developments	Aniket Gupta (U of Arizona)	In person
11:45 - 12:00 am	Improving Forecast of Near-Surface Fields Through Noah-MP Coupled in the Unified Forecast System	Weizhong Zheng (NOAA)	Remote
12:00 - 12:05 pm	Additional Q&A for speakers in the session		
12:05 - 13:00 pm	Lunch (on your own)		
<b>Session 9. Discussion on future plan</b> (Moderator: Cenlin He)			
13:00 - 13:30 pm	Summary of last year's discussion Set the stage for this year's discussion	Cenlin He (NCAR)	In person

13:30 - 15:00 pm	Group discussion in person + remote (theme by theme)	All attendees	In person & remote
15:00 - 15:30 pm	Coffee break		
15:30 - 16:30 pm	Group discussion Cont'd and Summary	All attendees	In person & remote
16:30 - 17:00 pm	Workshop summary and planned next step	Cenlin He (NCAR)	
17:00 pm	Adjourn		
	Dinner (on your own)		

**Some hotels near NCAR Foothills lab or in Boulder:**

1. Residence Inn by Marriott Boulder (0.9 mile): 3030 Center Green Dr, Boulder, CO 80301
2. Courtyard by Marriott Boulder (1.2 mile): 4710 Pearl E Cir, Boulder, CO 80301
3. Hyatt Place Boulder/Pearl Street (1.7 mile): 2280 Junction Pl, Boulder, CO 80301
4. Residence Inn by Marriott Boulder Canyon Boulevard (2.5 mile): 2550 Canyon Blvd, Boulder, CO 80302
5. Hilton Garden Inn Boulder (2.5 mile): 2701 Canyon Blvd, Boulder, CO 80302
6. Boulder Marriott (2.5 mile): 2660 Canyon Blvd, Boulder, CO 80302
7. Embassy Suites by Hilton Boulder (2.5 mile): 2601 Canyon Blvd, Boulder, CO 80302
8. Millennium Harvest House Boulder (3.1 mile): 1345 28th St, Boulder, CO 80302