

RHESSys Conference Schedule

1-2 May 2024

Version 2

*Times are Pacific Daylight Time (UTC-07:00)

Day 1 – Wednesday May 1st

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| 9:00-9:10 | Welcome remarks & meeting logistics |
| 9:10-9:55 | Keynote: RHESSys Pieces: Seeds, Roots, Stems and Branches
Larry Band, University of Virginia |
| 9:55-10:00 | Break |
| 10:00-10:15 | Precipitation variability effects on dryland carbon sequestration depend on resource availability
Jianning Ren, National University of Singapore |
| 10:15-10:30 | MSR in the City: sub-patch surface water sharing for simulating trees as green infrastructure
Rachel Torres, Cal-Poly Humboldt |
| 10:30-10:45 | Incorporating the effects of plant dimensions and species tolerances into RHESSys modeling
Antoine Randolph, US Forest Service (external) |
| 10:45-11:00 | Comparative Hydrological Dynamics and Water Security in Sundarjal Watershed: A RHESSys Modeling Approach for Broadleaf and Conifer Forests
Tejendra Kandel, University of Virginia |
| 11:00-11:10 | Break |
| 11:10-11:17 | Modeling the effects of wildfire on hydrologic processes in a mixed pine forest in the Pacific Northwest (Lighting)
Hyunwoo Kang, Oregon State University |
| 11:17-11:24 | Calibration of RHESSys with Soil Moisture Data and the Performance of RSS Soil Inputs (Lighting)
Carlos Quintero, ORISE |
| 11:24-11:31 | Coupling RHESSys to HEC-RAS 2D (Lighting)
Daniel Pelletier, University of Virginia |
| 11:31-11:38 | Ecohydrological Modeling with RHESSys: A new guide for learning how to model with RHESSys (Lighting)
Ryan Bart, University of California, Merced |
| 11:38-11:45 | Break |
| 11:45-12:00 | GEE-based Platform For Preparing Spatial Inputs For RHESSys
Mingliang Liu, Washington State University |
| 12:00-12:15 | RHESSys-Preprocessing & RHESSysIOinR: Overview and Demonstration of R Packages used to setup and run of RHESSys in R
Will Burke, University of Nevada, Reno |

- 12:15-12:30 **Streamlined R tools for preparing RHESSys Model Inputs**
Motasem Abualqumboz, Utah State University
- 12:30-12:45 **Investigating changes in blue/green water partitioning under drought through modelling experiments**
Clare Stephens, Western Sydney University
- 12:45-1:15 **Networking (optional)**

Day 2 – Thursday May 2nd

- 9:00-9:05 **Meeting Opening**
- 9:05-9:20 **Changes and risks of water retention and carbon sequestration capacity in the Yangtze River Basin under climate and permafrost change**
Hui Peng, Ocean University of China
- 9:20-9:35 **Interactions between annual grass invasion and climate variability: effects on N export in drylands**
Maxwell Kay Strain, University of Nevada, Reno
- 9:35-9:50 **Modeling the co-benefits of mechanical thinning on forest structure and hydrological refugia**
Louis Graup, University of California, Santa Barbara
- 9:50-10:05 **Impacts of reduced domestic water use on stream water quality in suburban watersheds**
Ruoyu (Roy) Zhang, University of Virginia
- 10:05-10:10 Break
- 10:10-10:35 **RHESSys as a virtual laboratory - recent advances and new directions**
Naomi Tague, University of California, Santa Barbara
- 10:35-10:42 **Installation Guide for RHESSys on Linux Executed Over Windows Using WSL (Lighting)**
Jorge García Hernández, Instituto Pirenaico de Ecología
- 10:42-10:49 **The use of RHESSYS in the Pyrenees: Land management and implications on climatic and vegetation variables (Lighting)**
Javier Zabalza-Martínez, Instituto Pirenaico de Ecología
- 10:49-10:56 **Modelling ecohydrological responses to climate change in a wet high-altitude sub-alpine headwater catchment in Eastern Himalaya (Lighting)**
Manish Kumar, University of Birmingham
- 10:56-11:03 **Incorporating surface and subsurface characteristics for improving hydrological prediction in a managed Sierra Nevada catchment (Lighting)**
Shishir Basant, Texas A&M University
- 11:03-11:10 Break
- 11:10-11:25 **Utilizing RHESSys in Coastal Areas: Challenges Arising from Running the Model in Flat Terrains and Integration with a Coastal Surge Model (ADCIRC)**
Hanne Borstlap, University of Virginia

- 11:25-11:40 **What factors regulate the post-fire hydrologic response in a mountainous terrain?**
Moazzam Rind, Washington State University
- 11:40-11:55 **Using RHESSys to help California achieve carbon neutrality**
Ryan Bart, University of California, Merced
- 11:55-12:00 Break
- 12:00-1:00 **Panel Discussion and Q&A**
- 1:00-1:05 **Meeting wrap up**
- 1:05-1:35 **Networking (optional)**