

OWP IS AT AGU

2022 FALL MEETING

Science Leads the Future

Sharing research and knowledge that our community is building with the world so we can foster a sustainable environment for the future.



December 12–16



Chicago, IL
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TOWN HALLS

December 12, 2022 **12:45-1:45 pm CST**

NOAA's National Water Center: Programmatic Update
and Opportunities for Collaboration

Trey Flowers

<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/157735>



Website: <https://water.noaa.gov>

Email: nws.nwc@noaa.gov

Locations: Tuscaloosa, AL - Silver Spring, MD - Chanhassen, MN

DECEMBER 15, 2022

H44C Advancing the State of the Science Water Resources Modeling: Community Development at the Intersection of Domain, Data, and Computer Sciences
Trey Flowers • 1:45-2:45 CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/172759>

H44C-03 Calibrating Hydrological Models in the Next Generation Water Resources Modeling Framework Using a Prototype Model Agnostic Calibration Capability
Xia Feng • 1:45-2:45 CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1130911>



H44C-04 Potential Evapotranspiration Module Parameter Sensitivity Evaluation within the Next Generation Water Resources Modeling Framework
Wanru Wu • 1:45-2:45 CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1127833>

ORAL

DECEMBER 12, 2022

H16F-03 Deploying Coupled Snow and Runoff Models in the Next Generation Water Resources Modeling Framework
Keith Jennings • 5:05-5:15 PM CST • E258
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1147791>

DECEMBER 14, 2022

H33C-02 Identifying the Optimal Spatial Resolution of LiDAR Derived Elevation Data for Continental Scale Flood Inundation Mapping Applications
Fernando Aristizabal • 11:10-11:20 PM CST • E451a
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1048880>

DECEMBER 15, 2022

H45F-04 An Investigation of Reforecast Thinning as a Strategy to Support Calibration and Validation of the Hydrologic Ensemble Forecast Service at Reduced Cost
Mark Fresch • 3:15-3:25 PM CST • E451b
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1126939>

IN46A-02 HydroVIS - Providing a Cloud Based Framework for Processing and Synthesizing Large Scale Model Outputs into Actionable Intelligence
Corey Krewson • 4:55-5:05 PM CST • E252
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1162877>

IN46A-07 Old School Cool - Utilizing SQL to Simplify and Optimize National Water Model Data Pipelines
Tyler Schrag • 5:45-5:55 PM CST • E252
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1171099>

DECEMBER 16, 2022

H52B Advancing the State of the Science Water Resources Modeling: Community Development at the Intersection of Domain, Data, and Computer Sciences
Trey Flowers • 9:00-10:30 AM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/172738>

H52B-01 The National Water Model: Current Status and Evolution to the NextGen Framework
Brian Cosgrove • 9:00-9:10 AM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1071884>

H52B-04 The NOAA Next Generation Water Resources Modeling Framework Hydrofabric: Version 1.0
Mike Johnson • 9:30-9:40 AM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1181341>

H52B-07 Exploring the Benefits of Machine Learning: Improving Stormflow Predictions using Long Short-Term Memory Networks
Jessica Garrett • 10:00-10:10 AM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1197251>

H52B-08 Exploring Impacts of Model Calibration Strategies on Regionalization within the Next Generation Water Resources Modeling Framework
Yuqiong Liu • 10:10-10:20 AM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1147924>

H53B Advancing the State of the Science Water Resources Modeling: Community Development at the Intersection of Domain, Data, and Computer Sciences
Trey Flowers • 11:00-12:30 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/172738>

H53B-06 Evaluation of a Total Water Level Forecasting Capability for the National Water Model (NWM) V3.0
Qi Shi • 11:50 AM-12:00 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1086936>

H53B-07 Development of a Compound Flood Modeling System for the COASTAL Act Program
Henok Kefelegn • 12:00-12:10 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1196810>

H55E Advancing the State of the Science Water Resources Modeling: Community Development at the Intersection of Domain, Data, and Computer Sciences
Trey Flowers • 2:45-4:15 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/172752>

H55E-02 Evaluating National Water Model Derived High Water Thresholds Using NWS Storm Data
Liliana Hernandez Gonzalez • 2:55 AM-3:05 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1148832>

H55E-06 Model Performance of High Flow Events Using a Heterogeneous Land Surface Configuration
Rachel McDaniel • 3:35-3:45 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1150476>

H55E-08 Identifying Optimal Model Sets and Configurations in the Next Generation Water Resources Modeling Framework
Luciana Cunha • 3:55-4:05 PM CST • E352
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1154707>

POSTERS (POSTER HALL A)

DECEMBER 14, 2022

H35L-1279 Using Hydrologic Forecasts from the Hydrologic Ensemble Forecast Service for Forecast Informed Reservoir Operations (FIRO)
Haksu Lee • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1192374>

DECEMBER 15, 2022

H45I Advancing the State of the Science Water Resources Modeling: Community Development at the Intersection of Domain, Data, and Computer Sciences
Trey Flowers • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Session/157738>

H45I-1489 Domain and Formulation Scalability of the Next Generation National Water Model Framework
Donald Johnson • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1109901>

H45I-1492 Layered Green-Ampt With Redistribution: An Efficient, Accurate, And Reliable Approximation Of The Richards/Richardson Equation
Peter LaFollette • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1130209>

H45I-1495 Model as a Service and Distributed Model on Demand: Tools to Automate and Abstract Model Development Overhead Tasks
Robert Bartel • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1156219>

H45I-1496 Fitting GIUH Probability Distributions to Observed Data Using Scalar Values to Facilitate Hydrologic Model Calibration
Matt Williamson • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1158740>

H45I-1498 Building a Dynamic Middleware Framework to Couple 2D Ocean Circulation Models to the National Water Model
Jason Ducker • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1162903>

H45I-1499 Support for Spatially Gridded, Component-based Models in the Next Generation National Water Modeling Framework
Scott Peckham • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1164392>

H45I-1500 Estimating Flood-Relevant Statistics for the U.S. from 40 Years of National Water Model Streamflow
Katherine Moore-Powell • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1164809>

H45I-1501 Evaluating Soil Freeze Thaw Approaches for Hydrologic Models using the Next Generation Water Resources Modeling Framework
Ahmad Jan • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1167200>

H45I-1502 Improving Water Resources Modeling Efficiency Using Live Data Communication
Christopher Tubbs • 2:45-6:15 PM CST
<https://agu.confex.com/agu/fm22/meetingapp.cgi/Paper/1173291>