

**TIME IN CST (UTC-6)**



**Papers by GIWS Members at 2022 Fall AGU (December 12 - 16, 2022 | Chicago, IL & Online)**

Author(s)	Session - ID	Title	Date	Time (CST)	Location
<b>Monday, 12 December 2022</b>					
Shahla Asgharina & others (incl. Mazda Kompanizare)	B12E-1116	<a href="#">An IoT Automated Platform For Detection Of Real-Time Sap Velocity Applying A Semi-analytical Solution</a>	12-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Ignacio Aguirre, Cherie Westbrook & Glynnis Hood	H12A-44	<a href="#">Incorporating beaver dams in a physically-based hydrological model</a>	12-Dec-22	09:00 - 12:30	Poster Monitor 4
Magali Nehemy & others (incl. Jeff McDonnell)	H12R-0888	<a href="#">Linking plant hydraulics, groundwater access, and tree water isotopes to understand water strategies in a tropical ecosystem</a>	12-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Martyn Clark, Wouter Knoben, Guoqiang Tang, Ashley Van Beusekom, Shervan Gharari, Louise Arnal & Raymond Spiteri	H12F-02	<a href="#">Advancing capabilities of terrestrial system models</a>	12-Dec-22	09:10 - 09:20	E270 (Lakeside, Level 2)
Ala Bahrami, Alain Pietroniro, Bruce Davison, Martyn Clark, Wouter Knoben, Shervan Gharari & Daniel Princz	H12F-05	<a href="#">Development of an open-source workflow for community large-scale hydrological modeling</a>	12-Dec-22	09:40 - 09:50	E270 (Lakeside, Level 2)
Luca Trotter, Wouter Knoben & others	H12F-06	<a href="#">Modular Assessment of Rainfall–Runoff Models Toolbox (MARRMoT) v2.1: a better, faster and more accessible tool for reproducible watershed modelling.</a>	12-Dec-22	09:50 - 10:00	E270 (Lakeside, Level 2)
Zhe Zhang & others (incl. Yanping Li)	H13E-06	<a href="#">Impact of meteorological forcing data on integrated crop-water-use-climate simulations over North America</a>	12-Dec-22	11:50 - 12:00	E270 (Lakeside, Level 2)
Ya Huang, Zhenhua Li & Yanping Li	H14G-01	<a href="#">Effects of large-scale irrigation on precipitation during crop growing season in Northwest China</a>	12-Dec-22	13:45 - 14:45	Online Only
Xinlei He, Yanping Li & others	H14G-02	<a href="#">Impact of Land Data Assimilation on Land-Atmosphere Interactions in the Heihe River Basin, Northwest China</a>	12-Dec-22	13:45 - 14:45	Online Only
Qi Zhao, Yanping Li & Zhenhua Li	H14G-03	<a href="#">Assessing the effectiveness of adaptation measures in mitigating drought impacts on crop yield using an integrated modeling framework: a case study of spring wheat in Saskatchewan</a>	12-Dec-22	14:05 - 14:15	Online Poster Discussion
Zhenhua Li, Yanping Li & others (incl. Zhe Zhang)	H14G-04	<a href="#">Scale-matching bias-correction of high-resolution dynamical downscaling climate simulation for hydrological application</a>	12-Dec-22	13:45 - 14:45	Online Only
Ying Zhao	H15Q-0995	<a href="#">Efficient utilization and optimal allocation of water resources for high-quality agricultural development in the Yellow River Basin</a>	12-Dec-22	14:45 - 18:15	Poster Hall A (South, Level 3)

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Lijie Guo	H15Q-0997	<a href="#">Quantifying the Hydrological Effects of Agricultural Land-use and Climate Change in a Cold Semi-Arid Region</a>	12-Dec-22	14:45 - 18:15	Poster Hall A (South, Level 3) <i>iPoster Only</i>
Danqiong Dai & others (incl. Zhe Zhang, Zhenhua Li, Yanping Li)	H15Q-0998	<a href="#">The impacts of anthropogenic activities on terrestrial water cycle, Part I : census data based estimation of irrigation amount in North China Plain</a>	12-Dec-22	14:45 - 18:15	Poster Hall A (South, Level 3)
Zhijia He, Kevin Shook, Christopher Spence, John Pomeroy & Colin Whitfield	H15K-0921	<a href="#">Modeling the Streamflow Sensitivity to Wetland Drainage and Restoration Over the Canadian Prairies Using a Basin Classification Approach</a>	12-Dec-22	14:45 - 18:15	Poster Hall A (South, Level 3)
Juan Sebastian Acero Triana, Hoori Ajami & Saman Razavi	H15F-05	<a href="#">Uncertainty and Sensitivity Analyses of a Semi-Distributed Non-Parsimonious Hydrologic Model Across Spatial and Temporal Scales Using New and Traditional Global Sensitivity Analysis Approaches</a>	12-Dec-22	15:25 - 15:35	E353c (Lakeside, Level 3)
Mohamed Abdelhamed, Mohamed Elshamy, Saman Razavi & Howard Wheeler	H15D-07	<a href="#">Insights into spatiotemporal evolution of permafrost under climate change – hydrologic-land surface modelling in the Canadian subarctic</a>	12-Dec-22	15:45 - 15:55	E265 (Lakeside, Level 2)
Warren Helgason & others (incl. Jay Famiglietti)	H15G-07	<a href="#">Validating SMAP Soil Moisture and Vegetation Optical Depth in Forests: Summary of Activities in 2022</a>	12-Dec-22	15:45 - 15:55	E252 (Lakeside, Level 2)
Guoqiang Tang, Martyn Clark, Wouter Knoben, Hongli Liu, Shervan Gharari, Louise Arnal & others (incl. Simon Papalexioiu)	H15F-08	<a href="#">The impact of meteorological forcing uncertainty on hydrological modeling in representative cryosphere basins on the global scale</a>	12-Dec-22	15:55 - 16:05	E353c (Lakeside, Level 3)
Hrishikesh Arvind Chandanpurkar, James Famiglietti, Adam Purdy & Matthew Rodell	G16A-05	<a href="#">Decreasing Global Land Water Storage and its Regional Contributors</a>	12-Dec-22	17:25 - 17:35	S105a (South, Level 1)
Chandler Noyes & others (incl. Grant Ferguson)	H16C-06	<a href="#">Variations in Groundwater Recharge during the mid-Holocene Revealed in the Tucson Basin (Arizona, USA) using Radioisotopes and Noble Gases</a>	12-Dec-22	17:40 - 17:50	E352 (Lakeside, Level 3)
Jessica Ng & others (incl. Grant Ferguson)	H16C-07	<a href="#">Interpreting excess air in groundwater with new hydroclimate tracers</a>	12-Dec-22	17:50 - 18:00	E352 (Lakeside, Level 3)
<b>Tuesday, 13 December 2022</b>					
Mazda Kompanizare, Bruce Davison, Mohamed Elshamy, Alain Pietroniro, Daniel Princz & Ala Bahrami	H21B-03	<a href="#">Assessment of Deep-Groundwater Interactions in some Selected Sub-Basins in Great Lakes Basin: Introducing a New Baseflow Module in a Hydrology Land-surface Scheme (MESH)</a>	13-Dec-22	08:00 - 09:00	Online Only
Ji-Hyun Kim & others (incl. Grant Ferguson)	H22X-1151	<a href="#">Clumped and conventional isotopes of natural gas reveal basin burial, denudation, flushing, and biodegradation history</a>	13-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Chris Marsh, Zhibang Lv, Kevin Green, Vincent Vionnet, Raymond Spiteri & John Pomeroy	C22C-02	<a href="#">Large Extent Snowdrift-resolving Snowpack Simulations Across the Canadian Cordillera</a>	13-Dec-22	09:10 - 09:20	S504d (South, Level 5)
Giuseppe Mascaro, Simon Papalexioiu, Daniel Wright	H22J-03	<a href="#">Gaining Insights into Sub-Daily Precipitation through a High-Density Rain Gage Network and Space-Time Stochastic Simulations</a>	13-Dec-22	09:22 - 09:32	E353ab (Lakeside, Level 3)

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Magnus Ivarsen & others (incl. <b>Jean-Pierre St. Maurice</b> )	SA23A-08	<a href="#">The dissipation of F region ionospheric irregularities</a>	13-Dec-22	12:10 - 12:20	S402a (South, Level 4)
<b>Yanping Li, Ya Huang &amp; Zhenhua Li</b>	H24I-05	<a href="#">Modeling Water Use Efficiency and Optimal Irrigation Quantity for Spring maize in Hetao Irrigation District in China</a>	13-Dec-22	13:45 - 14:45	Online Only
Amin Dezfuli, <b>Saman Razavi</b> & Benjamin Zaitchik	U25A-01	<a href="#">Potential Impacts of Climate Change on Future Transboundary Water Conflicts in the Middle East</a>	13-Dec-22	14:47 - 14:57	N427A-D
<b>Fuad Yassin, John Pomeroy, Alain Pietroniro &amp; Bruce Davison</b>	H25C-06	<a href="#">Uncertainty Due to Precipitation Phase Estimation Methods of Large-Scale Hydrological Predictions Under Climate Change</a>	13-Dec-22	15:35 - 15:45	E265 (Lakeside, Level 2)
<b>Mohamed Elshamy, Mohamed Abdelhamed, John Pomeroy, Alain Pietroniro &amp; Bruce Davison</b>	H25C-07	<a href="#">Land Surface Hydrological Modelling of the Mackenzie River Basin: Parametrization to Simulate Streamflow and Permafrost Dynamics Concurrently</a>	13-Dec-22	15:45 - 15:55	E265 (Lakeside, Level 2)
<b>Glenn Hussey, Adam Lozinsky, Brian Pitzel &amp; others (incl. Draven Galeschuk, Kathryn McWilliams, Jean-Pierre St-Maurice)</b>	SA26A-03	<a href="#">Unambiguous High-Resolution VHF Coherent Radar Observations of the E-region by the Fully Digital ICEBEAR-3D Radar</a>	13-Dec-22	17:07 - 17:17	S402a (South, Level 4)
<b>Magnus Ivarsen, Jean-Pierre St-Maurice, Glenn Hussey, Adam Lozinsky, Draven Galeschuk, Brian Pitzel &amp; Kathryn McWilliams</b>	SA26A-06	<a href="#">Coherent scatter radar: Separating meteor trail echoes from ionospheric scatter</a>	13-Dec-22	17:37 - 17:47	S402a (South, Level 4)
<b>Wednesday, 14 December 2022</b>					
<b>Razi Sheikholeslami, Mohammad Ghoreishi &amp; others</b>	H32Q-1134	<a href="#">Why Sensitivity Auditing Matters for the Socio-hydrological Perspective in Water Resources Modelling</a>	14-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
<b>John Pomeroy, Xing Fang, Kabir Rasouli, Zhihua He, Caroline Aubry-Wake, Alex Cebulski &amp; Juan Iganacio López</b>	C32B-04	<a href="#">Wither Sublimation? Lower Sublimation Losses with Climate Warming Due to Suppression of Blowing Snow Transport and Forest Snow Interception Processes</a>	14-Dec-22	09:30 - 09:40	S505ab (South, Level 5)
<b>James Famiglietti &amp; others (incl. Hrishi Chandanpurkar)</b>	H32H-04	<a href="#">Remote Sensing and Modeling of Global Scale Groundwater Recharge and Groundwater Storage Changes Using SMAP, GRACE/FO, and GLDAS (Invited)</a>	14-Dec-22	09:35 - 09:45	E353ab (Lakeside, Level 3)
<b>Irena Creed &amp; others (incl. Patrick Lloyd-Smith)</b>	B32B-06	<a href="#">Can restoration of freshwater mineral soil wetlands deliver nature-based climate solutions to agricultural landscapes?</a>	14-Dec-22	09:50 - 10:00	S501a (South, Level 5)
<b>Zhe Zhang, Yanping Li &amp; others (incl. Jay Famiglietti, Zhenhua Li)</b>	GC35L-0833	<a href="#">Agricultural practices help mitigate climate change challenges on food production and water use in the North American Breadbasket</a>	14-Dec-22	14:45 - 18:15	Poster Hall, Hall - A (South, Level 3)
<b>Mohammad Ghoreishi, Apurba Das &amp; Karl-Erich Lindenschmidt</b>	H35I-1234	<a href="#">Advancing Ice-jam Flood Risk Assessment Using Agent-based Modeling: a Conceptual Framework on Human Adaptation</a>	14-Dec-22	14:45 - 18:15	Poster Hall, Hall - A (South, Level 3)
<b>Fernando Jarmillo &amp; others (incl. Jay Famiglietti)</b>	H35E-05	<a href="#">Hydrogeodesy: A technological platform to evaluate the status of global water resources and stability of the Earth system, and to answer unsolved hydrological questions (Invited)</a>	14-Dec-22	15:25 - 15:35	E450b (Lakeside, Level 4)

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Hebataallah Mohamed Abdelmoaty & Simon Papalexioiu	H35B-07	<a href="#">Understanding the Variability of Precipitation Extremes in CMIP6 Projections: Should We Use Stationary or Nonstationary Models?</a>	14-Dec-22	15:45 - 15:55	E352 (Lakeside, Level 3)
<b>Thursday, 15 December 2022</b>					
Elmira Hassanzadeh & others (incl. Karl-Erich Lindenschmidt	GC42I-0806	<a href="#">Are Beneficial Management Practices Still “Beneficial” Under Warming Climate?</a>	15-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Dinesh Kumar & others (incl. Saman Razavi)	H42J-1407	<a href="#">Assessing Water Management Pathways for Environmental Flow Management under Uncertain Futures in the Upper Yamuna Basin</a>	15-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3) <i>iPoster Only</i>
Zoe Pierrat & others (incl. Bruce Johnson, Alan Barr)	B42A-05	<a href="#">Forests for Forests: Combining vegetation indices and solar-induced chlorophyll fluorescence in random forest models improves gross primary production prediction in the Boreal Forest</a>	15-Dec-22	09:40 - 09:50	S502ab (South, Level 4)
Wouter Knoben & Martyn Clark	H43B-03	<a href="#">CAMELS-spat: Catchment Data for Spatially Distributed Large-Sample Hydrology</a>	15-Dec-22	11:25 - 11:35	E352 (Lakeside, Level 3)
Mohamed Ismaiel Ahmed, Kevin Shook, Alain Pietroniro & others (incl. John Pomeroy)	H45N-1563	<a href="#">Accounting For Dynamic Contributing Areas in The HYPE Model Framework</a>	15-Dec-22	14:45 - 18:15	Poster Hall, Hall - A (South, Level 3)
Zhihua He, Christopher Spence, Colin Whitfield, John Pomeroy & Kevin Shook	H45A-02	<a href="#">Development of the Prairie Hydrology Design and Analysis Product (PHYDAP)</a>	15-Dec-22	14:55 - 15:05	E353c (Lakeside, Level 3)
<b>Friday, 16 December 2022</b>					
Ignacio Aguirre, Cherie Westbrook & Glynnis Hood	EP52C-0772	<a href="#">Augmenting traditional hydrometric observations with trail cameras to capture ecohydrological dynamics of beaver dams</a>	16-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Louise Arnal, Martyn Clark, Vincent Fortin, Alain Pietroniro, Vicent Vionnet, Paul Whitfield & Andy Wood	H52I-0568	<a href="#">A Benchmark for Probabilistic Seasonal Streamflow Forecasting over North America</a>	16-Dec-22	09:00 - 12:30	Poster Hall, Hall - A (South, Level 3)
Hongli Liu, Martyn Clark, Guoqiang Tang, Wouter Knoben, Shervan Gharari, Jim Freer, Louise Arnal & David Casson	H52B-03	<a href="#">A New Spin on Global Sensitivity Analysis: Sensitivity Analysis of the SUMMA Model on the Global Scale</a>	16-Dec-22	09:20 - 09:30	E352 (Lakeside, Level 3)
Louise Arnal, Martyn Clark, Effie Kosmas, John Pomeroy & Corinne Schuster-Wallace	SY52A-04	<a href="#">The Art-Water-Climate Connection: Changing Attitudes through Art</a>	16-Dec-22	09:30 - 09:40	N426c (North, Level 4)
Li Xu, James Famiglietti, Palash Sanyal, Kayla Garvey, Kerstin Bluhm & David Ferris	INV52C-10	<a href="#">Global assessment of industrial impacts on freshwater: big data analytics and evidence synthesis</a>	16-Dec-22	11:30 - 11:40	S406a (South, Level 4)
Miina Porkka & others (incl. Chinchu Mohan)	GC55E-02	<a href="#">Global Water Cycle Shifts Substantially Beyond Stable Pre-industrial Conditions – Planetary Boundary for Freshwater Change Transgressed</a>	16-Dec-22	14:58 - 15:09	S406b (South, Level 4)