



WATER OBSERVING TECHNOLOGY FORUM

**July 28-30,
2026**

Tuscaloosa, Alabama



CIROH
Cooperative Institute for Research
to Operations in Hydrology



THE UNIVERSITY OF
ALABAMA | Alabama Water
Institute



DAY 1 Tuesday, July 28, 2026

Time	Room	Topic Presenter(s)
8:00 AM		Registration
8:30 AM	Hotel Capstone (HC) Ballroom	Opening Remarks Welcome to WOTF 2026 Steve Burian - Director, CIROH
8:45 AM	HC Ballroom	Welcome - USGS Welcome to the USGS Hydrologic Instrumentation Facility Derek Bussan - Hydrologic Instrumentation Research and Operations Chief, USGS HIF
9:00 AM	HC Ballroom	Welcome - UA Welcome to the University of Alabama Dr. Lesley Reid - University of Alabama Provost
9:15 AM	HC Ballroom	Keynote Who we are, What we do - Floods and Technology Jeff Smitherman - Director, Alabama EMA
10:00 AM	HC Hallway	Coffee Break
10:30 AM	HC Ballroom	Plenary Technical Presentation 1 The NASA Disasters Program - Connecting Remote Water Monitoring through Earth Observations to Informed Decision Making for Disaster Management Ronan Lucey - University of Alabama Huntsville / NASA Disasters Program
11:00 AM	HC Ballroom	Plenary Technical Presentation 2 Water Monitoring: The Foundation for a Healthier and More Resilient Iowa Larry Weber - U. of Iowa, Director, IIHR, Interim Director, Iowa Flood Center
11:30 AM	HC Ballroom	Plenary Technical Presentation 3 Machine Learning River Stage Detection from Webcam Imagery Derek Loftis - VIMS, Sridhar Katragadda - City of Virginia Beach
12:00 PM	HC Ballroom	Lunch
1:30 PM	HC Ballroom	Workshop From Innovation to Implementation: The Future of Product Evaluation and Research & Development at the HIF Christopher Wilson - USGS HIF, Dot Lundberg - USGS HIF
2:00 PM	HC Ballroom	Industry Panel Discussion "Partnering for Progress: Industry Perspectives on Water Monitoring Innovation" Matt Parse - Dell Federal, Tomaslav Grubesa - Geolux, Kevin Simpson - Xylem / YSI, Shannon Hicks - Stroud Water Research Center Moderators: Mario Tamburri - ACT, Brandon Forbes - USGS
3:00 PM	HC Hallway	Coffee Break Group Photo

Day 1 Parking instructions

Parking code for the Bryan Conference Center parking deck 9218#

DAY 1 Tuesday, July 28, 2026

Time	Room	Topic Presenter(s)
3:30 - 4:30 PM	HC Ballroom	Lightning Talks FLOW (Future Leaders in Observation of Water) Academy Team 1: Testing bubble tracers for particle imagery velocimetry measurement with the SPEC (Deep Analytics) edge camera system Ryan Johnson - mentor, University of Utah; Members: Daniel Alguindigue - University of Oklahoma; Sayem UI Alam - University of Alabama; Jordan Rose - California State University., Northridge Team 2: Velocity measurement under a range of roughness conditions with the HyQuant (Kisters) and GeoLux-FX200 instruments Marian Muste - mentor, University of Iowa; Members: Jingyang Cui - University Of Alabama; Charles Dubrule - University Of Vermont; Richard Iyun - University Of Alabama; Natalie Restrepo - Florida State University Team 3: Measuring stage with radar levels including the Pyxis PRL-100 and a “DIY” build Christopher Lowry - mentor, University at Buffalo; Members: Jacob Ahlstrom - Florida Gulf Coast University; Robert Galleta - Stevens Institute of Technology; Briar Pierce - University of Florida Team 4: An open-source, optical backscatter turbidity sensor “DIY” Build Xiangyu Wang - mentor, University of Alabama; Members: Connor D. Burns - Missouri State University; Michael Tice - University Of Alabama; Cadence Welgos - University of Kansas Team 5: Thermal mapping in rivers to identify surface and groundwater exchange locations Yuehan Lu - mentor, University of Alabama; Members: Yeonju Kim - University of Connecticut; Mendbayasgalan Lkhagvadorj - University Of Utah; Tantu Mandal - University Of Alabama; Taylor Sullivan - Mississippi State University
4:30 - 4:45 PM	HC Ballroom	Closing remarks
4:45 - 7:00 PM	HC Hallway	WOTF Technology Showcase & Exhibitors

EXHIBITORS



DAY 2

Wednesday, July 29, 2026

Time	Room	Topic Presenter(s)
7:45 AM	HC	Transportation Buses from Hotel Capstone to HIF (8:00 departure)
8:30 AM	HIF Auditorium / Loft	Welcome Logistics and overview of the day Derek Bussan - USGS
8:45 AM	NOC Rm 102	Training Session 1 Processing Surface Velocities Using the SPEC: Camera-based system for Non-Contact Stream Monitoring Makayla Hayes and Greg Hewitt - Deep Analytics
8:45 AM	Wet Training Rm 128	Training Session 2 Inundation Monitoring with Machine Learning (Image-Paired ML Model) Derek Loftis – Virginia Institute of Marine Science, and Sridhar Katragadda - City of Virginia Beach
8:45 AM	HIF Auditorium / Loft	Training Session 3 Discharge on Demand: The Desktop Hydrographer and the Evolution of Streamgaging using Remotely Piloted Drones Brandon Forbes, John Fulton, and Rich Thereau - USGS
8:45 AM	Dry Training Rm 208	Training Session 4 GRIME-AI: Boosting Environmental Monitoring Using Camera Networks Troy Gilmore, John Stranzl – University of Nebraska
8:45 AM	Classroom 209	Training Session 5 AI 101 for Water Observations: Core Concepts and Practical Applications Jonathan Frame - University of Alabama
10:15 AM	HIF 2nd Floor Break Area	Coffee Break
10:30 AM		Breakout Group Discussions
	Wet Training Rm 128	BO1: AI for Water Observations: Lessons from Current Practice and Priorities for the Future
	Dry Training Rm 208	BO2: Non-contact Monitoring Technologies for Emergency Management
	NOC Rm 102	BO3: Responsible and Cost-Effective Use of AI in Water Monitoring
	Classroom 209	BO4: Scaling Non-contact, Camera Based Monitoring into National Operations
12:00 PM	Auditorium/Loft	Breakout Group Report Outs
12:30 PM	2nd Floor Break Area	Buffet Lunch
1:30 PM		Poster Session
1:30 PM	Auditorium	HIF Tour 1 Derek Bussan - USGS
2:00 PM	Auditorium	HIF Tour 2 Darrell Lambeth - USGS
2:30 PM	Auditorium	HIF Tour 3 Christopher Wilson - USGS

DAY 2 Wednesday, July 29, 2026

Time	Room	Topic Presenter(s)
3:30 PM	HIF Auditorium / Loft	End of Day 2 - Closing Remarks Derek Bussan - USGS
3:30 PM		Transportation Buses from HIF to Hotel Capstone
4:45 PM		Transportation Buses back to HIF
5:00 PM	HIF Auditorium / Loft	Night @ the HIF Hors D'oeuvres Poster Session B
6:00 PM	HIF Auditorium / Loft	Special Presentation: IT Starts with Water Steve Davis - ADMH Historian
7:00 PM		Transportation Buses from HIF to Hotel Capstone Buses from HIF to The Sanctuary (2 routes available)
9:00 PM		Transportation Buses from The Sanctuary back to Hotel Capstone

SPONSORS

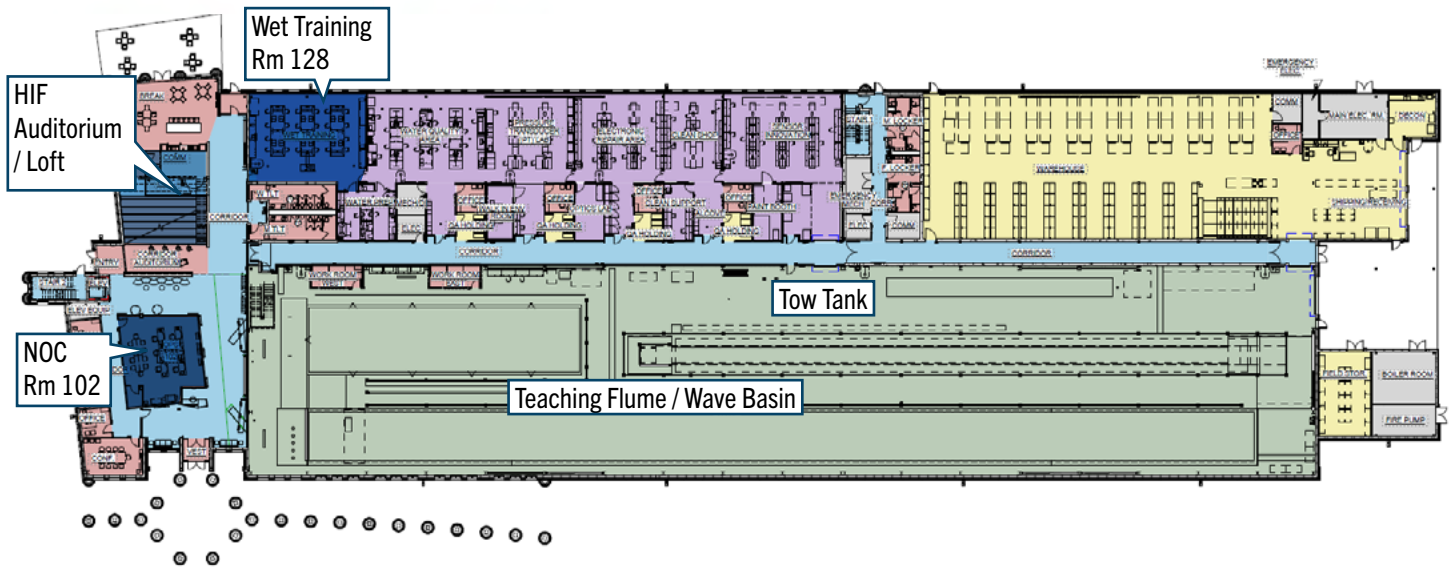


DAY 3 Thursday, July 30, 2026

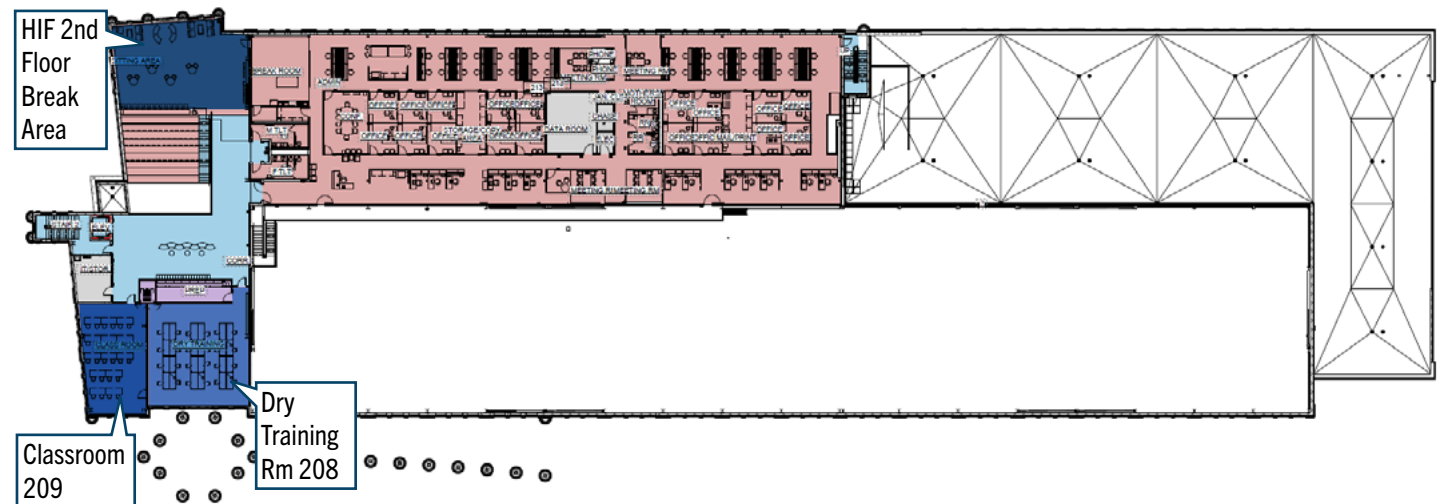
Time	Room	Topic Presenter(s)
7:45 AM	HC	Transportation Buses from Hotel Capstone to HIF (8:00 departure)
8:30 AM	HIF Auditorium / Loft	Welcome Christopher Wilson - USGS
	Technology Demo	
8:45 AM	Group 1 Dell/Simplicity/ Sterling - "Streamgage in a box" Dry Training Rm 208	Group 2 Geolux - FX200 Wet Training Rm 128
		Group 3 Xylem/YSI - Live views of deployed QC4s NOC Rm 102
		Group 4 CSignum - EM2 Tow Tank
		Group 5 Kisters - HyQuant/ HSR-10 Teaching Flume / Wave Basin
9:45 AM	Group 5 Dell/Simplicity/ Sterling - "Streamgage in a box" Dry Training Rm 208	Group 1 Geolux - FX200 Wet Training Rm 128
		Group 2 Xylem/YSI - Live views of deployed QC4s NOC Rm 102
		Group 3 CSignum - EM2 Tow Tank
		Group 4 Kisters - HyQuant/ HSR-10 Teaching Flume / Wave Basin
10:45 AM	HIF 2nd Floor Break Area	Coffee Break
	Technology Demo	
11:00 AM	Group 4 Dell/Simplicity/ Sterling - "Streamgage in a box" Dry Training Rm 208	Group 5 Geolux - FX200 Wet Training Rm 128
		Group 1 Xylem/YSI - Live views of deployed QC4s NOC Rm 102
		Group 2 CSignum - EM2 Tow Tank
		Group 3 Kisters - HyQuant/ HSR-10 Teaching Flume / Wave Basin
12:00 PM	HIF 2nd Floor Break Area	Lunch
	Technology Demo	
1:30 PM	Group 3 Dell/Simplicity/ Sterling - "Streamgage in a box" Dry Training Rm 208	Group 4 Geolux - FX200 Wet Training Rm 128
		Group 5 Xylem/YSI - Live views of deployed QC4s NOC Rm 102
		Group 1 CSignum - EM2 Tow Tank
		Group 2 Kisters - HyQuant/ HSR-10 Teaching Flume / Wave Basin
2:30 PM	Group 2 Dell/Simplicity/ Sterling - "Streamgage in a box" Dry Training Rm 208	Group 3 Geolux - FX200 Wet Training Rm 128
		Group 4 Xylem/YSI - Live views of deployed QC4s NOC Rm 102
		Group 5 CSignum - EM2 Tow Tank
		Group 1 Kisters - HyQuant/ HSR-10 Teaching Flume / Wave Basin
3:30 PM	HIF Auditorium / Loft	Closing Remarks Steve Burian - Director, CIROH
4:00 PM		Transportation Buses from HIF to Hotel Capstone

USGS HIF

Level 1



Level 2





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