
FAIR Modeling, Call for Clinics - CSDMS 2027 Annual Meeting - CSDMS Newsletter

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ON THE SURFACE

CSDMS Newsletter
September 2026

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**A Path to FAIR Models Supported by Research
Infrastructure**

	1: prototype	2: refinement	3: iteration & growth
F	define metadata v1 establish catalog	metadata v2, improve search	
A		implement identifiers	publish data model and records
I		implement API	standard names, coupling interface, data components
R	scoping with users		code notebooks

Ever wondered how hard it is to make numerical models truly findable, accessible, interoperable, and reusable? Albert Kettner, Leslie Hsu, and Brandon Serna tackled exactly that in their recent GMD paper. They trace the journey of both the CSDMS Model Repository and the USGS Model Catalog toward FAIR4RS compliance, the FAIR principles for research software. Spoiler: some steps were easy, some took a village, and a few are still works in progress. Insightful read for anyone navigating the open science landscape!

Title: ***The Path to FAIR Research Models: Lessons Learned***

Authors: Albert Kettner, Leslie Hsu, and Brandon Serna

<https://doi.org/10.5194/egusphere-2025-5256>



Call for Clinics! CSDMS Annual Meeting

CSDMS 2027: From Mountain Tops to Ocean Floor....and Back Again

Join us at the University of Colorado, Boulder as we explore a source to sink theme this year. CSDMS invites you to submit a request to provide a clinic presentation at the CSDMS 2027 Annual Meeting, May 18th - 20th, 2027. [Additional details and the submission form can be found here.](#) Deadline to submit is October 31st, 2026. Clinic submitters will be notified of acceptance decisions by November 13th, 2026. Travel and lodging support is available for selected presenters!

Please note: poster presentation submissions and registration will open in mid to late January, 2027.

Presentations from the 2026 CSDMS Annual Meeting can be viewed [HERE](#).



Fora.ai is Northeastern University's collaborative whiteboard platform to bring teams together, anytime, anywhere.

Fora.ai: Reshaping collaborative modeling & decision-making for innovation, impact, and resilience

Today's most pressing social and environmental challenges demand both innovative solutions and genuine engagement by the people they affect—yet these two elements are often at odds. Typical community engagement strategies are limited to listening sessions where stakeholders react to pre-formed solutions, rather than participating as partners in defining the problem and shaping the response. The result is predictable: communication gaps, confusion about data, conflict among competing interests, distrust of decision-makers, and communities that feel excluded from decisions that shape their lives.

Participatory modeling (PM) offers a proven, balanced path forward. Rather than presenting communities with predetermined solutions, PM brings stakeholders together to jointly map a problem, build a shared model of its root causes and ramifications, and iteratively design and test solutions—with all knowledge types

at the table, whether scientific or experiential, formal or tacit. As environmental and social crises grow in frequency and complexity, this kind of coordinated, evidence-based engagement is essential for the long-term stability of life-supporting systems. Collaborative modeling and scenario simulation build the empathy, trust, and collective agency needed to move from conflict to solutions.

Fora.ai, developed at Northeastern University, is the PM platform built to meet this moment. It provides an intuitive digital environment where diverse stakeholders—scientists, policymakers, residents, industry, advocates—simulate complex real-world problems together and collaborate to design workable solutions. Models are transparent and adaptable, capturing the essential dynamics of a problem without overwhelming users. Participants engage with the platform and with each other, iteratively creating and testing solutions until they meet a broad range of needs and concerns. Fora.ai produces rapid, data-driven proofs-of-concept ready for real-world application—giving every participant the power to contribute meaningfully and co-create the future they want to live in.

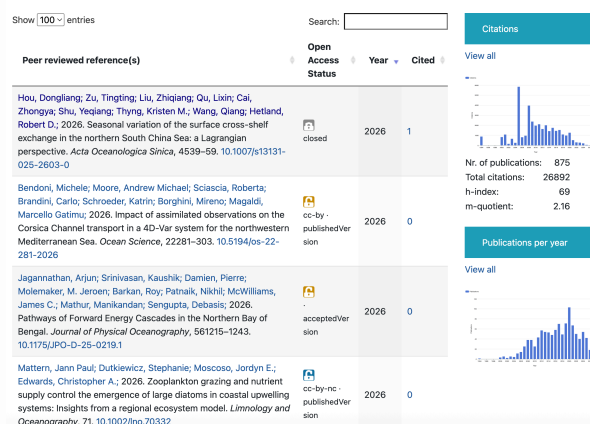
In collaboration with CSDMS IF, we have developed a web API to embed the Landlab OverlandFlow component in Fora.ai. The web application couples Landlab's OverlandFlow and SoilInfiltrationGreenAmpt components to simulate surface runoff and soil infiltration processes, and evaluates performance metrics of planned interventions based on the simulation results. The Fora.ai platform sends requests to and receives results from the web application, enabling PM of wildfire-impacted watersheds and supporting the design and evaluation of mitigation scenarios. The Landlab application now works seamlessly with Fora.ai, and was successfully tested in a facilitated clinic at the 2026 CSDMS annual meeting.

Work with stakeholders is an ongoing challenge for the scientific community, to communicate across scientific communities, to communicate findings, and to incorporate feedback from stakeholders into models. The CSDMS community has called for platforms like Fora.ai to support reciprocal interaction with stakeholders and collectively understand interdependence of variables and how it influences results, particularly in coastal areas.

Smarter, More Connected Model Documentation at CSDMS

Ever wondered how widely a model you use has been cited, or whether you can actually download the paper behind it? We have been quietly upgrading how CSDMS tracks your scientific literature. For many of the models in the CSDMS repository (https://csdms.colorado.edu/wiki/Model_download_portal), references are now collected and displayed automatically at each model's reference page (see e.g. the reference page of ROMS, the Regional Ocean Modeling System: <https://csdms.colorado.edu/wiki/ROMS-Publications>).

Better yet, we keep track of each reference citation count, and compute an h-index for every model, so you can instantly check out a model's scientific footprint and impact over time. And starting now, each reference carries also an open access badge: a colored lock icon tells you at a glance whether a paper is freely available, what license it carries, and links you directly to the download. Green means go, no paywall in sight. Head over to any model page on the CSDMS wiki, scroll and click to the publications section, and see how your favorite model stacks up!



CSDMS Community News



The recipients of the 2026 CSDMS Annual Meeting Poster Award (tied for first place) are **Annie Thompson**, University of Oregon and **Aidan Lewandowski**, University of California, Santa Cruz. Annie was awarded for her presentation, ["Impacts of Erosional Style on Tectonically Varied Landscapes"](#), and Aidan was awarded for the presentation, ["Simulating the Impact of Glacial Isostatic Adjustment on Potomac River Erosion Patterns"](#)

[near Great Falls Using Hydrodynamic Models](#)". Congratulations Annie and Aidan!



2026 Open Earthscape Summer Visiting Scholar: [Viet Bui](#), PhD student at University of Florida (Advisor Jorge Lorenzo-Trueba). Viet has worked with the CSDMS RSEs to refine and couple the GIA-delta evolution (model built within the CSDMS PyMT) and prepare it for contribution to the LandLab library. The model is designed to fill a gap between event-scale morphodynamic delta models and highly idealized delta geometry approach.

2026 Open Earthscape Summer Visiting Scholar: [Selina Davila Olivera](#), PhD student at the University of Oregon (Advisor: Josh Roering). Selina focused on improving her model for shallow landslide failure recurrence in steep, soil-mantled landscapes and developing an attendant Landlab component.



Other Community Opportunities

Funding Opportunity: Army Research Laboratory [Earth Materials and Processes Program](#) - closing date November 19, 2027. Technical contact, Joshua Boschelli (joshua.d.boschelli.civ@army.mil).

Training Opportunity, GSA, Denver, CO, Oct 10, 2026: [Inverting Bedrock River Profiles: Theory, Practice, and Applications](#)

Leads: Sean F. Gallen and Frank J. Pazzaglia

Description: This one-day short course introduces theory and practical implementation of river-profile inversion methods used to infer uplift histories, base-level change, and landscape response to tectonic forcing. Participants will learn the conceptual basis of channel profile analysis and apply inversion techniques using MATLAB and the open-source TopoToolbox framework. Hands-on exercises will guide participants through data preparation, model assumptions, calibration and execution, uncertainty assessment, and interpretation of results. Participants may work with the provided example datasets or optionally apply the methods to their own digital elevation models.

Community Member Publication: Tian Dong, UTexas, Rio Grande Valley and Lawrence Vulis, U California, Irvine (who met at the CSDMS Spring Training in 2022), [*"Apparent Hack's Law in River Deltas"*](#).

Training Opportunity: The International Institute for Applied Systems Analysis (IIASA) is offering a 3-month long [Young Scientist Summer Program](#) and application for the 2027 cohort opens in October, 2026.

CSDMS Community Teaching and Research Resources

CSDMS Workbench - <https://csdms.colorado.edu/wiki/Workbench>

CSDMS Model Repo - https://csdms.colorado.edu/wiki/Model_download_portal

Open Earthscape Jupyter Hub - <https://csdms.colorado.edu/wiki/JupyterHub>

CSDMS EKT Labs - https://csdms.colorado.edu/wiki/Labs_portal

Office Hours (via Zoom) with a CSDMS Research Software Engineer - 9AM on Wednesdays. To register - <https://csdms.colorado.edu/wiki/OfficeHours>

CSDMS Jobs Board - <https://csdms.colorado.edu/wiki/Jobs>

CSDMS Help Desk - <https://csdms.github.io/help-desk/>

CSDMS Forum - <https://forum.csdms.io>

CSDMS YouTube Channel - <https://www.youtube.com/@CSDMSmovie/videos>

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[Community Surface Dynamics Modeling System on LinkedIn](#).





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