

Eric W. H. Hutton

Research Scientist II, Institute of Arctic and Alpine Research (INSTAAR)
Chief Software Architect, Community Surface Dynamics Modeling System (CSDMS)
University of Colorado
Boulder, CO 80309-0399 USA

Telephone: +1 303 492 6233

Web: <https://www.colorado.edu/instaar/eric-hutton>

ORCID: <https://orcid.org/0000-0002-5864-6459>

EDUCATION

- B.A.Sc., Engineering Physics (Geophysics option), 1997
University of British Columbia, Vancouver, British Columbia
- Ph.D., Geophysics (Graduate Certificate in Oceanography; Graduate Certificate in Hydrology), 2007
University of Colorado, Boulder, Colorado

ACADEMIC APPOINTMENTS

- 2021 - present: Research Scientist II, INSTAAR, University of Colorado
- 2007 - present: Chief Software Engineer, CSDMS, University of Colorado
- 2007 - 2021: Research Scientist I, INSTAAR, University of Colorado
- 1997 - 2007: Professional Research Assistant, INSTAAR, University of Colorado

MEMBERSHIPS

- American Geophysical Union
- European Geophysical Union
- Community Surface Dynamics Modeling System

PUBLICATIONS

Refereed Journal Articles, Book Chapters, and Proceedings

- Adams, Jordan M, Nicole M Gasparini, Daniel EJ Hopley, et al. 2017. "The Landlab V1. 0 OverlandFlow Component: A Python Tool for Computing Shallow-Water Flow Across Watersheds." *Geoscientific Model Development* 10 (4): 1645–63.
- Ashton, Andrew D, Eric WH Hutton, Albert J Kettner, et al. 2013. "Progress in Coupling Models of Coastline and Fluvial Dynamics." *Computers & Geosciences* 53: 21–29.
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- Barnhart, Katherine R, Eric Hutton, and Gregory E Tucker. 2019. “Umami: A Python Package for Earth Surface Dynamics Objective Function Construction.” *Journal of Open Source Software* 4 (42): 1776.
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- Hu, Ningjie, A Brad Murray, Katherine M Ratliff, Zachary Little, and Eric WH Hutton. 2022. “Wave-Climate Asymmetry Influence on Delta Evolution and River Dynamics.” *Geophysical Research Letters* 49 (9): e2021GL096315.
- Hut, Rolf, Niels Drost, Nick van de Giesen, et al. 2022. “The eWaterCycle Platform for Open and FAIR Hydrological Collaboration.” *Geoscientific Model Development* 15 (13): 5371–90.
- Hutton, Eric. 2020. *Landlab V2. 0: Create and Couple Earth Surface Models in a Python Framework*.
- Hutton, Eric W. H., James P. M. Syvitski, and Scott D. Peckham. 2010. “Producing CSDMS-Compliant Morphodynamic Code to Share with the RCEM Community.” *River, Coastal and Estuarine Morphodynamics RCEM 2009*, 959–62.
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Non-refereed conference proceedings and presentations, technical reports, field guides, and other

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- Adams, JM, NM Gasparini, GE Tucker, et al. 2013. “Modeling Wildfire and Hydrologic Response to Global Climate Change Using the Landlab Modeling Environment.” *AGU Fall Meeting Abstracts* 2013: GC21C–0847.

- Adams, Jordan Marie, Nicole M Gasparini, Gregory E Tucker, et al. 2015. "Modeling Overland Flow-Driven Erosion Across a Watershed DEM Using the Landlab Modeling Framework." *AGU Fall Meeting Abstracts 2015*: H13C–1542.
- Adams, Jordan Marie, Francis K Rengers, Nicole M Gasparini, et al. 2014. "Exploring Post-Wildfire Hydrologic Response in Central Colorado Using Field Observations and the Landlab Modeling Framework." *AGU Fall Meeting Abstracts 2014*: EP51E–3562.
- Adams, Jordan M, Sai S Nudurupati, Nicole M Gasparini, et al. 2014. "Landlab: Sustainable Software Development in Practice." *The Second Workshop on Sustainable Software for Science: Practice and Experiences (WSSSPE2), New Orleans, LA, USA* 16.
- Aerts, Jerom PM, Rolf Hut, Niels Drost, et al. 2019. "ERA-Interim Vs ERA-5 Hydrology Comparison." *AGU Fall Meeting Abstracts 2019*: H51D–07.
- Bandaragoda, Christina, Anthony M Castronova, Erkan Istanbuluoglu, et al. 2019. "Enabling Collaborative Numerical Modeling in Hydrology Using Knowledge Infrastructure." *AGU Fall Meeting Abstracts 2019*: H11J–1618.
- Bandaragoda, Christina, Anthony M Castronova, Jimmy Phuong, et al. 2017. "Lowering the Barriers to Computational Modeling of Earth's Surface: Coupling Jupyter Notebooks with Landlab, HydroShare, and CyberGIS for Research and Education." *AGU Fall Meeting Abstracts 2017*: ED32B–06.
- Bandaragoda, Christina, Jimmy Phuong, Sean Mooney, et al. 2017. "Building Infrastructure to Prevent Disasters Like Hurricane Maria." *AGU Fall Meeting Abstracts 2017*: NH23E–2888.
- Barton, C Michael, Gerald Charles Nelson, Gregory E Tucker, et al. 2017. "A Community Framework for Integrative, Coupled Modeling of Human-Earth Systems." *AGU Fall Meeting Abstracts 2017*: GC23F–01.
- Campforts, Benjamin, Charles M Shobe, Irina Overeem, et al. 2020. "The Impact of Landslides on Sediment Dynamics, Fluvial Bedrock Incision and Steady-State Topography." *AGU Fall Meeting Abstracts 2020*: EP019–0002.
- Deng, Hang, Lesli Wood, Irina Overeem, and Eric Hutton. 2016. "The Influence of Topography on Subaqueous Sediment Gravity Flows and the Resultant Deposits: Examples from Deep-Water Systems in Offshore Morocco and Offshore Trinidad." *AGU Fall Meeting Abstracts 2016*: EP43B–0953.
- Drost, Niels, Jerom PM Aerts, Fakhreh Alidoost, et al. 2021. "Towards Open and FAIR Hydrological Modelling with eWaterCycle." *EGU General Assembly Conference Abstracts*, EGU21–7797.
- Drost, Niels, Jaro Camphuijsen, Rolf Hut, et al. 2020. "The eWaterCycle Platform for FAIR and Open Hydrological Modeling." *EGU General Assembly Conference Abstracts*, 11495.
- Drost, Niels, Rolf Hut, Nick Van De Giesen, et al. 2019. "The eWaterCycle Platform for Open Science Hydrology." *AGU Fall Meeting 2019*.
- Drost, Niels, Rolf Hut, Nick Van De Giesen, et al. 2020. "Coupling Hydrological Models Using BMI in eWaterCycle." *EGU General Assembly Conference Abstracts*, 11730.
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- Gasparini, Nicole M, Daniel EJ Hobley, Gregory E Tucker, et al. 2014. “A Comparison of the CHILD and Landlab Computational Landscape Evolution Models and Examples of Best Practices in Numerical Modeling of Surface Processes.” *AGU Fall Meeting Abstracts 2014*: EP51E–3564.
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- Harris, Courtney Kay, Irina Overeem, Eric Hutton, Julia Moriarty, and Patricia Wiberg. 2016. “Introducing Students to Ocean Modeling via a Web-Based Implementation for the Regional Ocean Modeling System (ROMS) River Plume Case Study.” *AGU Fall Meeting Abstracts 2016*: ED13C–0946.
- Harris, Courtney Kay, James P Syvitski, Hernan Arango, et al. 2018. “Toward Quantifying the Influence of Hurricanes on Generating Turbidity Currents in the Gulf of Mexico: A Multi-Model Workflow.” *AGU Fall Meeting Abstracts 2018*: EP53B–22.
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- Hobley, Daniel EJ, Gregory E Tucker, Jordan M Adams, et al. 2013. “Landlab—a New, Open-Source, Modular, Python-Based Tool for Modeling Landscape Dynamics.” *Geological Society of America Abstracts with Programs* 45: 649.
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- Hobley, DE, GE Tucker, JM Adams, et al. 2013. “Modeling Impact Cratering as a Geomorphic Process Using the Novel Landscape Evolution Model Landlab.” *AGU Fall Meeting Abstracts 2013*: EP33A–0868.
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- Hu, Ningjie, A Brad Murray, Katherine Ratliff, Zachary Little, and Eric Hutton. 2021. “How Does Wave Asymmetry Influence Delta Evolution and River Dynamics?” *AGU Fall Meeting Abstracts 2021*: EP14A–02.
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RESEARCH GRANTS

Current Support

- **Collaborative Research: Facility: CSDMS: Engaging a thriving community of practice in Earth-surface dynamics.** U.S. National Science Foundation Geoinformatics Program. PI: G. Tucker, with CU Boulder co-investigators M. Piper, E.W.H. Hutton, A. Kettner, and I. Overeem, and external collaborators N. Gasparini and M. Zellner. 2022–2027, \$5,403,958 to CU Boulder.
- **Collaborative Research: Frameworks: OpenEarthscape—Transformative Cyberinfrastructure for Modeling and Simulation in the Earth-Surface Science Communities.** U.S. National Science Foundation Office of Advanced Cyberinfrastructure (OAC). PI: G. Tucker, with CU Boulder co-investigators J. Moriarty, E.W. Hutton, A. Kettner, and I. Overeem, and external collaborators N. Gasparini, D. Gochis, E. Istanbulluoglu, and A. Pfeiffer. 2021–2026, \$2,562,303 to CU Boulder.
- **Collaborative Research: Frameworks: Sandpiper - A community toolchain to support geomorphology from data acquisition to analysis.** U.S. National Science Foundation Office of Advanced Cyberinfrastructure (OAC). PI: E. Hutton, and external collaborators A. Moodie, C. Nguyen, A. Wickert, and E. Barefoot. 2024-2028 \$353,745.00 to CU Boulder.

Past Support

- **BSF-NSF: Collaborative Research: Deciphering the role of extreme rainstorms and hydroclimatic regime on arid escarpment retreat and sub-cliff slope evolution.** U.S. National Science Foundation EAR Division. PI: G. Tucker, with co-investigators M. Rossi and E. Hutton, and external collaborators J. Pederson, Y. Enzel and E. Morin. 2021–2024, \$336,534 to CU Boulder.
- **Community Facility Support: The Community Surface Dynamics Modeling System (CSDMS).** U.S. National Science Foundation EAR Division. PI: G. Tucker, with co-investigators E. Hutton, A. Kettner, and I. Overeem, 2018-21 (extended with supplemental funding to 2022), \$3,916,960.
- **EarthCube Capabilities: Cloud-Based Accessible and Reproducible Modeling for Water and Sediment Research.** U.S. National Science Foundation EAR Division, PI: G. Tucker, with co-investigator E. Hutton, 2020-21 (extended to 2023), \$189,733.
- **CNH-L: Climate Change Adaptation in a Coupled Geomorphic-Economic Coastal System.** U.S. National Science Foundation, Division Of Earth Sciences. (Sub-contract from UNCW). 2017-2023, \$32,770 to CU Boulder.
- **Collaborative Research: Exploring the linkages between Sea-Level Change, Sediment Transport and Geomorphology on Coastal Freshwater Water Sequestration.** U.S. National Science Foundation, Division Of Earth Sciences. PI: E. Hutton, 2019-2023, \$92,477
- **RAPID: COLLABORATIVE RESEARCH: Building Infrastructure to Prevent Disasters like Hurricane Maria.** U.S. National Science Foundation, Office of Advanced Cyberinfrastructure. PI: E. Hutton, 2019-2020, \$14,807.

SOFTWARE PRODUCTS

- **Landlab:** developer. First release in December 2013. Under active development.
<https://github.com/landlab/landlab>.
- **BMI (The Basic Model Interface):** project leader and developer. First publication 2012. Under active development.
<https://github.com/csdms/bmi>.
- **PyMT:** project leader and developer. First release in April 2015. Under active development.
<https://github.com/csdms/pymt>.
- **The Babelizer:** project leader and developer. First release in April 2018. Under active development.
<https://github.com/csdms/babelizer>.
- **Sequence:** developer. First release in August 2018. Under active development.
<https://github.com/sequence-dev/sequence>.
- **Sedflux:** project leader and developer: First publication 2001. Under maintenance.
<https://github.com/mcflugen/sedflux>.