

James S. (Jay) Famiglietti
Global Futures Professor
School of Sustainability
School of Sustainable Engineering and the Built Environment
Arizona State University



Jay Famiglietti is a pioneering satellite hydrologist and a Global Futures Professor in the School of Sustainability at Arizona State University, where he is Director of Science for the Arizona Water Innovation Initiative. Famiglietti and his research team use satellites to track changing water availability and water risk across the globe. They developed the groundbreaking methods to detect groundwater depletion from space using the NASA GRACE mission. This work has driven Famiglietti's interest in global groundwater sustainability, science-based groundwater use targets, corporate water stewardship, innovations in financial tools and data-driven water risk and reporting platforms, international water diplomacy, and science communication. He has led a major water risk report with the sustainability non-profit Ceres, and he is a lead author on the World Bank's upcoming flagship global water monitoring report. He is a former advisor to Schmidt Sciences, and he was founding Chief Scientist of the Silicon Valley tech startup, Waterplan. He is a regular, multi-sectoral collaborator and advisor on science-based water sustainability, water risk assessment, water technology, and water-tech investments.

Leadership Positions:

Arizona State University, Global Futures Laboratory

2024-present Director of Science, Arizona Water Innovation Initiative

University of Saskatchewan, Global Institute for Water Security

2018-2022 Executive Director, Global Institute for Water Security

NASA Jet Propulsion Laboratory, California Institute of Technology, Earth Science

2016-2018 Chief Scientist, Western Water Applications Office

2015-2018 Project Scientist, Western States Water Mission

2015-2018 Group Supervisor, Terrestrial Hydrology Group

2014-2018 JPL Senior Water Scientist

University of California, Irvine

2009-2014 Founding Director, University of California Center for Hydrologic Modeling

2008-2009 Director, Institute of Geophysics and Planetary Physics, UC Irvine Branch

2003-2006 Vice Chair for Graduate Studies, Department of Earth System Science

Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI)

2008-2010 Chair, Board of Directors (Elected)

University of Texas at Austin, Department of Geological Sciences

2001 Founding Associate Director, Environmental Science Institute

Academic and Research Appointments:

Primary

Arizona State University, School of Sustainability and School of Sustainable Engineering and the Built Environment

2023-present Global Futures Professor

University of Saskatchewan, Global Institute for Water Security, School of Environment and Sustainability

2023-present Professor Emeritus

2018-2022 Canada 150 Research Chair in Hydrology and Remote Sensing

NASA Jet Propulsion Laboratory, California Institute of Technology, Earth Science Section

2014-2018 Senior Water Scientist

University of California, Irvine, Department of Earth System Science, and Department of Civil and Environmental Engineering

2006-2016 Professor

2001-2006 Associate Professor

University of Texas at Austin, Department of Geological Sciences

2000-2001 Associate Professor

1994-2000 Assistant Professor

Visiting

University of California, Los Angeles, Department of Civil and Environmental Engineering

2015-2017 Visiting Professor

Stanford University, Department of Civil and Environmental Engineering

2010 Shimizu Visiting Professorship, Winter Quarter

National Center for Atmospheric Research, Climate and Global Dynamics Division

1994-1995 Visiting Scientist (Summers)

Postdoctoral

National Center for Atmospheric Research, Climate and Global Dynamics Division

1993 Postdoctoral Research Fellow, Climate System Modeling Program

Princeton University, Department of Civil Engineering and Operations Research

1992-1993 Postdoctoral Research Fellow

Political Appointments:

California State Water Boards, Appointed by California Governor Jerry Brown

2017-2018 Member, Region 4, Los Angeles

2013-2016 Member, Region 8, Santa Ana

Consulting and Advising:

2024-present OceanWell, Advisory Board

2023 Schmidt Sciences, Virtual Institute for Earth's Water, Advisory Board, Co-Chair

2022-present World Bank, Global Water Monitoring Report

2022-2023 Waterplan, Founding Chief Scientist/Advisor
2021-2022 National Geographic, Global Water Availability

Education:

1992 Ph.D. Princeton University, Civil Engineering (Water Resources Program)
1988 M.A. Princeton University, Civil Engineering (Water Resources Program)
1986 M.S. University of Arizona, Hydrology and Water Resources Administration
1982 B.S. Tufts University, Geology

Awards, Honors and Recognition:

2023 Boussinesq Lecture, Boussinesq Center for Hydrology, Amsterdam
2022 Web of Science Highly-Cited Researcher, 2022
2021 Water Canada, Water's Next Award, Education and Outreach, for Let's Talk About Water podcast
Web of Science Highly-Cited Researcher, 2021
2020 Peter S. Eagleson Hydrologic Sciences Award, American Geophysical Union
Web of Science Highly-Cited Researcher, 2020
2019 Distinguished Achievement Alumni Award, Tufts University
Web of Science Highly-Cited Researcher, 2019
Japan Society for the Promotion of Science Invitational Fellowship for Research in Japan
Centennial Keynote, American Geophysical Union Fall Meeting, 2019
2018 Canada 150 Research Chair in Hydrology and Remote Sensing
Centennial Keynote, American Geophysical Union Fall Meeting, 2018
2017 Principal Scientist, Earth Science Division, NASA Jet Propulsion Laboratory, California Institute of Technology
2016 Seven Experts to Watch on California Groundwater, News Deeply, July 21, 2016
2015 Global Environmental Change Special Lecture, Global Environmental Change Section, American Geophysical Union Fall Meeting 2015
2014 Princeton Club of Orange County, In the Nation's Service Award
Orange County's 100 Most Influential People of 2014, Orange County Register
Invited cover, Science Magazine, September 26, 2014
Fellow, Geological Society of America
David Keith Todd Distinguished Lecturer, Groundwater Resources Association of California
Editor's Choice, Science Magazine, for Castle et al., 2014, August 14, 2014
2013 Editor's Choice Award, Water Resources Research, for Voss et al., 2013
2012 Fellow, American Geophysical Union

	Birdsall-Dreiss Distinguished Lecturer, Geological Society of America
	Action Figure, Circle of Blue
2011	Feature Story, New York Times Science Times, May 31, 2011
2010	Top 10 Earth Science stories of 2010, Science News, for Syed et al., 2010, PNAS
2005	Outstanding Contributions to Undergraduate Education University of California, Irvine
1998	Dean's Fellow, University of Texas at Austin
1996	NASA New Investigator Award
1996	Achievement Award for New Scholars, Conference of Southern Graduate Schools
	NSF Presidential Faculty Fellow Finalist
1992-1993	UCAR Climate System Modeling Program Postdoctoral Fellowship

Editorial:

American Geophysical Union

2005-2009	Editor-in-Chief, <i>Geophysical Research Letters</i>
2001-2004	Editor, Hydrology and Land Surface Processes, <i>Geophysical Research Letters</i>
1997-2001	Associate Editor, <i>Water Resources Research</i>
	<i>Proceedings of the National Academy of Sciences</i>
2014, 2021	Guest Editor

Board Service:

Bolin Centre for Climate Research, Stockholm University

2023-present	Chair, External Science Advisory Group
2020-2023	External Science Advisory Group

Blue Legacy

2012-present	Advisory Board
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Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI)

2011	Board of Directors (elected)
2008-2010	Chair, Board of Directors (Elected)
2005-2010	Executive Committee, Board of Directors (elected)

National Academies of Sciences, Engineering, and Medicine

2017-2023	Board on Agriculture and Natural Resources
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University of Texas at Austin

2018-present	Planet Texas 2050, Technical Advisory Council
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Water Deeply

2018-present	Advisory Council
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Professional Affiliations and Selected Service:

American Geophysical Union

2024	Hydrology, candidate for section president
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2023-present Hydrology, Hydrologic Science Award Committee
 2022-present Union, Bowie Medal Committee
 2021-2022 Hydrology, Task Force on Future Awards and Honors
 2017 Hydrology, Task Force on Strategic Communications, Chair
 2004 Hydrology Fall Meeting Program Chair
 2001-2009 Hydrology Executive Committee
 2000-2003 Hydrology Section, Remote Sensing Committee, Co-Chair
 1996-present Hydrology Section, Remote Sensing Committee
 1986-present Member

American Meteorological Society

1995-1998 Hydrology Committee
 1992-2000 Member

Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI)

2007-2011 Community Hydrologic Modeling Platform (CHyMP), Lead Scientist

European Geosciences Union

2021-present Lifetime member

Geological Society of America

2012-2014 Birdsall-Dreiss Distinguished Lecturer Selection Committee
 2011-present Member

Other Society Memberships

2000-2005 American Society of Civil Engineers, IEEE

Congressional and Parliamentary Testimony

2024 **House of Commons of Canada**, Standing Committee on Environment and Sustainable Development, The Global Groundwater Crisis, February 6, 2024
 2020 **House of Commons of Canada**, Standing Committee on Environment and Sustainable Development, Threats to Global and Canadian Water Security, March 10, 2020
 2012 [Congressional Testimony](#), U. S. House of Representatives, Committee on Science, Space and Technology, Hearing on Drought Forecasting, Monitoring and Decision Making: A Review of the National Integrated Drought Monitoring System, July 25
 2010 [Congressional Testimony](#), U. S. House of Representatives, Committee on Natural Resources, Sub-Committee on Water and Power, Groundwater Depletion in California’s Central Valley, January 25

International, Federal, Provincial and State Government Advising and Briefing

2024 **U.S. Senator Mark Kelly**, staff briefing on satellite observations of groundwater storage changes in Arizona, May TBD

- Arizona Attorney General Kris Mayes**, briefing on satellite observations of groundwater storage changes in Arizona, May 14
- U.S. Senate Budget Committee**, staff briefing on the economic value of groundwater, April 1
- U. S. Representative Greg Stanton**, staff briefing on Arizona Water Issues, March 15
- Arizona Governor's Office**, discussion of Arizona Water Innovation Initiative with Water Policy Advisor Patrick Adams, February 16, March 14, April 29
- 2023 **U. S. Department of State**, U. S. Speaker Program (2023-present)
- Bahrain**, U. S. Ambassador to Bahrain Steven Bondy
- Bahrain**, Ministry of Municipalities Affairs and Agriculture
- Bahrain**, Ministry of Electricity and Water
- Bahrain**, Ministry of Works
- President's Council of Advisors on Science and Technology**, Groundwater Depletion in the United States, December 1
- 2021 **Canada, Members of Parliament Saskatchewan Caucus**, Discussion of issues in Canadian Water Security, invited presentation, July 27, 2021
- Canada, House of Commons Standing Committee on Environment and Sustainable Development**, Study on Freshwater, invited briefing submitted May 7, 2021
- Canada, Member of Parliament, House of Commons, Brad Redekopp**, Saskatoon, Briefing on water research and GIWS at the University of Saskatchewan, February 8, 2021
- 2020 **Canada, Member of Parliament, House of Commons, Brad Redekopp**, Saskatoon, Briefing on water research and GIWS at the University of Saskatchewan, October 26, 2020
- Ministry of Water Resources, Bangladesh Secretary Kabir Bin Anwar**, Briefing on satellite observations of groundwater depletion in Bangladesh, February 11, 2020
- Canada, Water Day on the Hill, Parliament, Ottawa, ON**, Lead organizer of water science communication day in Parliament
Brought 24 water scientists from 14 institutions and 7 provinces to meet Ministers, Members and Agency Heads, *March 10, 2020*
- Canada, Member of Parliament, House of Commons, Leona Alleslev**, Ontario, Vice-Chair, Standing Committee on Foreign Affairs and International Development, Briefing on Canadian and global water security, Ottawa, ON, March 10, 2020
- Canada, Member of Parliament, House of Commons, Neil Ellis**, Ontario, Parliamentary Secretary to the Minister of Agriculture and Agri-Food, Briefing on Canada Water Security Agency, Ottawa, ON, March 10, 2020
- Canada, Member of Parliament, House of Commons, Kevin Waugh**, Saskatoon, Briefing on Canadian and Saskatchewan water security, Ottawa, ON, March 10, 2020

- Canada, Member of Parliament, House of Commons, Brad Redekopp,** Saskatoon, Briefing on Water Day on the Hill, Global Institute for Water Security, University of Saskatchewan, March 3, 2020
- Canada, Member of Parliament, House of Commons, Brad Redekopp,** Saskatoon, Briefing on sustainability research at the University of Saskatchewan, January 17, 2020
- 2019 **Deputy Minister Dylan Jones,** Western Economic Diversification Canada, briefing on Canadian Water Security Agency, November 27
- Deputy Minister of Agriculture, Saskatchewan, Penny McCall,** Briefing on remote sensing of root zone soil moisture, Regina, November 13
- Science Advisor to Canada, Dr. Mona Nemer,** Briefing on Water Diplomacy in the Middle East, Ottawa, ON, September 10
- Minister of Science and Sport, Dr. Kirsty Duncan,** Briefing on water research activities at the Global Institute for Water Security, University of Saskatchewan, July 23
- Science Advisor to Canada, Dr. Mona Nemer,** Briefing on Indigenous co-developed research partnerships. Global Institute for Water Security, University of Saskatchewan, July 8
- Minister of Infrastructure Ralph Goodale and Western Economic Diversification Canada,** Presentation on climate change impacts on water availability, Regina, SK, June 24
- Deputy Minister of Agriculture, Saskatchewan, Rick Burton,** Briefing on remote sensing of root zone soil moisture, University of Saskatchewan, April 26
- 2018 **Lieutenant Governor of Ontario, Elizabeth Dowdeswell,** briefing on sustainability and the Global Institute for Water Security, University of Saskatchewan
- Minister of Fisheries, Oceans and the Coast Guard, Jonathan Wilkinson, and MP Francis Scarpaleggia,** Briefing on freshwater security research and training at the University of Saskatchewan, September 11.
- White House Round Table on Federal Challenges and Prizes, Secretary of Energy Rick Perry** convening. Invited participant, March 13.
- California State Water Resources Control Board,** Advising on technology for implementing California groundwater legislation, February 27.
- 2017 **U. S. Representative John Culberson,** briefing on NASA flooding and drought research, February 25, 2017
- U. S. Representative Grace Napolitano,** field trip on enhanced groundwater recharge facilities in Los Angeles basin, August 3, 2017
- 2016 **U. S. Sen. Diane Feinstein,** requested update on drought research
- California State Water Resources Control Board,** Advising on satellite capabilities for water management, June 20

- White House Water Innovation Summit**, invited participant and Fact Sheet Contributor, March 22
- 2015 **U. S. Sen. Diane Feinstein**, requested update on drought research
U. S. Representative Ken Calvert, requested update on drought research
California Secretary of Food and Agriculture Karen Ross, Secretary of Business, Consumer Service and Housing Anna Caballero, requested update on drought research
California State Water Resources Control Board, Advising on implementing California groundwater legislation, February 11
- 2014 **U. S. Congressional Briefing**, UC Research: Managing Water from Floods to Droughts, May 6, Washington, DC
California State Assembly Committee on Water, Parks and Wildlife, Groundwater management hearing, March 11, Sacramento
U. S. Department of Defense, Office of Net Assessment, briefing on global water security, February 20, Washington, DC
California State Water Resources Control Board, Groundwater concept paper workshop, January 22, Sacramento
- 2013 **U. S. Department of Defense, Office of Net Assessment**, briefing on global water security, November 14, Washington, DC
U. S. Senate, Staff Briefing on Groundwater in the United States and on Science paper “Water in the Balance, ” July 29
Consul General to Israel, Los Angeles, Briefing on Middle East Water Security and Water Diplomacy
U.S. Embassy, Tel Aviv, Briefing on Middle East Water Security and Water Diplomacy
U.S. Embassy, Amman, Briefing on Middle East Water Security and Water Diplomacy
- 2011 **U. S. Secretary of Energy, Steven Chu**, Obama Administration, Briefing on global groundwater depletion including California’s Central Valley, September 19, Vienna
- 2011 **United Nations, Former Director General, Kofi Annan**, Briefing on global water issues, April 18, Berlin
- 2010-present Multiple personal and staff briefings:
U.S. Senators Barbara Boxer (CA), Diane Feinstein (CA), Brian Schatz (HI), Sheldon Whitehouse (RI)
U.S. Representatives Ken Calvert (CA), Jim Costa (CA), John Garamendi (CA), Zoe Lofgren (CA), Kevin McCarthy (CA), George Miller (CA), Grace Napolitano (CA), Dana Rohrabacher (CA), Ed Royce (CA), Loretta Sanchez (CA), David Valadao (CA), Harry Waxman (CA),
U. S. Senate Committee on Energy and Natural Resources
U. S. House Committee on Appropriations
U.S. House Committee on Space, Science and Technology
U. S. House Committee on Natural Resources, Subcommittee on Water and Power
U. S. Congressional Research Service

White House: Office of Science and Technology Policy; Council on Environmental Quality

U.S. Department of State: Water Team

U. S. Department of Interior: Assistant Secretary for Water and Science
California Office of the Governor; Office of Planning and Research; Washington DC staff; Secretary of Natural Resources; State Water Resources Control Board; State Board on Food and Agriculture

Orange County Water District, Municipal Water District of Orange County, Water Advisory Council of Orange County, Irvine Ranch Water District, Southern California Association of Governments

2001 **U. S. Secretary of Commerce, Don Evans,** G. W. Bush Administration, Briefing on Global Change, February 14, Austin

Working Groups and Committees

2021-2023 National Academy of Science, Board on Agriculture and Natural Resources, Water Security for Food Security, Lead

2021 CDP-Water Footprint Network-Mercer, Surveying Financiers on Valuing Water Technical Working Group

2016 National Academy of Science, Board on Agriculture and Natural Resources, Presentation on Groundwater Depletion and Threats to Food Security, December 6, 2016

National Academy of Engineering, Earth Resources Engineering Symposium on Groundwater Depletion, October 11, 2016

2015 National Academy of Science, Board on Atmospheric Science and Climate, Testimony on water security as a driver of human migration, November 10, 2015

2011-2012 National Academy of Science, National Research Council, Board on Atmospheric Sciences and Climate, Committee on A National Strategy for Advancing Climate Modeling

2010-2012 Committee on Earth Observation Satellites (CEOS), Working Group and Calibration and Validation, Land Product Validation Subgroup, Soil Moisture Validation Focus

2009-2010 National Academy of Science, National Research Council, Committee on Climate, Energy and National Security, Panel on Hydrology and Water Resources

2008-2010 Community Surface Dynamics Modeling System (CSDMS)/CUAHSI Hydrology Focus Research Group, Chair

2007-2011 Global Climate Observing System (GCOS)/Global Terrestrial Observing System (GTOS), Terrestrial Observation Panel for Climate Integrated Global Observing Strategy (IGOS) Water Cycle Observations (IGWCO) Theme, Science Advisory Committee

2006-2010 International Soil Moisture Working Group

2005-2007 National Academy of Science, National Research Council, Committee on Integrated Observations for Hydrologic and Related Studies

2005 NASA, Earth Science and Applications from Space Strategic Roadmap Committee, Subcommittee on Discovery and Exploration

2003-2004	Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI) Hydrologic Observatory Prototype Design Committee
2002-present	NASA, Terrestrial Hydrology Program, Surface Water Working Group
1999-present	NASA, Terrestrial Hydrology Program, Soil Moisture Working Group
1998-2003	International Earth Rotation Service, Special Bureau for Hydrology
1997-2007	External Advisory Team, Center for Hydrology, Soil Climatology and Remote Sensing, Alabama A & M University
1996-present	NCAR Climate System Model Land Working Group
1997-1999	Southern Great Plains 1997 Hydrology Experiment Soil Moisture Working Group

Symposia and Workshops Organized

2024	Frontiers in Global Hydrology, ASU-NASA JPL-University of Texas workshop, Los Angeles, CA, November 7-8, 2024, co-organizer
2023	Adapting to Climate Change, Managing Water for Agriculture, National Academies of Science, Engineering, and Medicine, June 16, 2023, co-organizer
2022	The Walrus Leadership Forum, Groundwater Sustainability, Ottawa, ON, Canada, September 27, 2022, co-organizer
2021	Groundwater Scarcity: Implications for U.S. Agricultural Production and Global Food Security, National Academies of Science, Engineering, and Medicine, June 8, 2021, co-organizer
2020	Connecting the Drops: A Workshop on Food-Water Nexus Research, 16-17 November, University of Saskatchewan, co-organizer
2015	Water Sustainability in Metropolitan Los Angeles, Resnick Institute for Sustainability and NASA Jet Propulsion Laboratory Joint Workshop, California Institute of Technology, co-organizer City of Sierra Madre, CA, World Water Day Water Fair, co-organizer; Drought Panel, co-organizer
2012	DOE Water Cycle Workshop, 25-28 September, Washington, DC. Co-organizer
2011	NASA Energy and Water Cycle (NEWS) Science Team Meeting, June 13-15, Irvine, CA, co-organizer 3 rd Workshop on the Community Hydrologic Modeling Platform (CHyMP): Strategic and Implementation Plan, March 15-17, Irvine, CA, co-organizer
2009	Second Workshop of the CSDMS Hydrology Focus Research Group, 16-17 November, Boulder, CO, co-organizer 2 nd Workshop on a Community Hydrological Modeling Platform (CHyMP), March 31-April 1, Memphis, TN, co-organizer First Workshop of the CSDMS Hydrology Focus Research Group, 20-21 January, Boulder, CO, organizer
2008	UNESCO-UCI International Conference on Water Scarcity, Global Changes and Groundwater Management Responses, 1-6 December, Irvine, CA, Organizing and Scientific Committees

- International Conference on Groundwater and Climate in Africa, 25-28 June, Kampala, Uganda, Scientific Steering Committee
- Scoping Workshop on a Community Hydrological Modeling Platform (CHyMP), March 26-27, Washington, DC, co-organizer
- 2007 IGWCO/GARS/UNESCO Workshop on Global Monitoring of Groundwater Resources, October 18-19, Utrecht, The Netherlands, co-organizer
- UCI-JPL Workshop on Satellite Observations of the Global Water Cycle, March 7-9, Beckman Center of the National Academies, Irvine, CA, co-organizer
- 2004 GRACE Hydrology Workshop, March 22, Beckman Center of the National Academies, Irvine, CA, organizer

Publications:

Op-Eds

- Famiglietti, J. Will we have to pump the Great Lakes to California to Feed the Nation?, invited essay, New York Times, August 5, 2024
- Famiglietti, J., Why California will still have a water shortage no matter how much it rains this year, invited, Los Angeles Times, March 23, 2023
- Famiglietti, J., Earth's dismal water future, mapped, invited, Los Angeles Times, June 10, 2018
- Famiglietti, J. and M. Miro, Los Angeles Times, California will always be thirsty, March 7, 2017
- Famiglietti, J., Is the California drought America's wake-up call, Los Angeles Times, April 15, 2016
- Famiglietti, J., Water crisis calls for immediate action, The Desert Sun, March 17, 2016
- Famiglietti, J. and M. Lubber, Food industry needs to step up on responsible groundwater use, San Francisco Chronicle, August 24, 2015
- Famiglietti, J., Up a Dry Creek, Los Angeles Times, March 12, 2015
- Famiglietti, J., How much water does California have left, Los Angeles Times, July 9, 2014
- Famiglietti, J., Just how bad is California's epic drought, Takepart.com, February 22, 2014
- Famiglietti, J. and S. Richey, California's water house of cards, Los Angeles Times, September 23, 2013

Selected Articles and Blog Posts

- Gallindo, J. I., N. Wertheimer, and J. Famiglietti, From Droughts to Floods, Water Risk is an Urgent Business Issue, Harvard Business Review, November 9, 2022
- Gallindo, J. I. S, and J. Famiglietti, Why Mitigating Water Risk Makes Sound Business Sense, Water Technology, September 6, 2022
- Famiglietti, J., and J. I. Gallindo, Water Shortages Must be Placed on the Climate Change Agenda, World Economic Forum, August 24, 2022
- Famiglietti, J., J. Gallindo, P. Sanyal and L. Xu, Water is the New Carbon, Circle of Blue, April, 2022
- Famiglietti, J., A Map of the Future of Water, Trend Magazine, The Pew Charitable Trusts, March, 2019
- Famiglietti, J., Your Move California, Years of Living Dangerously Blog, November 9, 2016.
- Famiglietti, J., How the West was Lost, National Geographic Water Currents, July 24, 2014

- Famiglietti, J., Coping with California's Water Future will Require a Sea Change in Perspective, Huffington Post, April 7, 2014
- Famiglietti, J., Epic California Drought and Groundwater: Where Do We Go From Here, National Geographic Water Currents, February 4, 2014
- Famiglietti, J., Water and the Roots of Violent Conflict in Syria, Huffington Post, September 7, 2013
- Famiglietti, J., Weighty Water Matters in the Middle East, National Geographic Water Currents, February 22, 2013
- Famiglietti, J., Wanted: Vision and Leadership to Ensure a Sustainable Water Future for America, National Geographic Water Currents, July 2, 2012
- Famiglietti, J., Rallying Around Our Known Unknowns: What We Don't Know Will Hurt Us, Water 50/50, June 28, 2012
- Famiglietti, J., Spin Cycle: Will Changing Global Hydrology Throw the Geopolitical Machine Off-Balance? Water 50/50, November 22, 2011

Book Chapters

2024

- Purdy, A. J. and J. S. Famiglietti, Groundwater monitoring with GRACE, In: Cardille, J.A., Crowley, M.A., Saah, D., Clinton, N.E. (eds) *Cloud-Based Remote Sensing with Google Earth Engine*. Springer, Cham. https://doi.org/10.1007/978-3-031-26588-4_40

2023

- Di Baldassarre, G., Y. Wei, E. Savelli, L. Xu, P. Van Oel, J. O'Keefe, N. J. Shanono, J. S. Famiglietti, Coevolution of coupled human-water systems : emergent phenomena, in Tian, F., M, Sivapalan, B, Günter, (eds), *Coevolution and Prediction of Coupled Human-Water Systems: A Synthesis of Change in Hydrology and Society*. Cambridge University Press.

2018

- Chen, J., C. R. Wilson, J. S. Famiglietti and B. R. Scanlon, Groundwater Storage Monitoring From Space. In S. Liang (Ed.), *Comprehensive Remote Sensing*, Vol. 4, pp. 295–314. Oxford: Elsevier.

2016

- Lo, M.-H., J. Famiglietti, J. T. Reager, M. Rodell, S. Swenson, and W.-Y. Wu, GRACE-based Estimates of Global Groundwater Depletion, in *Terrestrial Water Cycle and Climate Change: Natural and Human-Induced Impacts*, Geophysical Monograph 221, AGU Geophysical Monograph Series, 252 pages
- Rodell, M., V. Lakshmi, H. Kato-Beaudoin, C. D. Peters-Lidard, J. S. Famiglietti, and R. D. Koster, Large-Scale and Global Hydrology, Chapter 92 in *Handbook of Applied Hydrology*, V.P. Singh, ed., McGraw-Hill.

2013

- Gleick, P. H., H. Cooley, J. S. Famiglietti, D. P. Lettenmaier, T. Oki, C. J. Vörösmarty and E. Wood, Improving Understanding of the Global Hydrologic Cycle, in *Climate Science for*

Serving Society: Research, Modeling and Prediction Priorities, G. R. Asrar and J. W. Hurrell, eds., Springer Science + Business Media Dordrecht, pp151-184.

2012

Swenson, S. and J. Famiglietti, Sustainable Groundwater Management for Large Aquifer Systems: Tracking Depletion Rates from Space, in *Climate Change Effects on Water Resources: A Global Synthesis of Findings and Recommendations*, H. Treidel, J.L. Martin-Bordes, and J.J. Gurdak, eds., Taylor and Francis Group, CRC Press, pp367-374.

2011

Famiglietti, J., The global water challenge as seen from space, in *Focusing on Performance: Global Water Summit 2011*, Global Water Intelligence, pp. 12-21.

2010

Milly, P.C.D., A. Cazenave, J. S. Famiglietti, V. Gornitz, K. Laval, D. P. Lettenmaier, D. L. Sahagian, J. M. Wahr and C. R. Wilson, Terrestrial Water-Storage Contributions to Sea-Level Rise and Variability, in *Understanding Sea-Level Rise and Variability*, 1st Edition, J. A. Church, P. L. Woodworth, T. Aarup and W. S. Wilson, eds., Blackwell Publishing, Ltd., pp. 226-255.

2004

Famiglietti, J. S., Remote Sensing of Terrestrial Water Storage, Soil Moisture and Surface Waters, in *The State of the Planet: Frontiers and Challenges in Geophysics*, Geophysical Monograph Series, Volume 150, R. S. J. Sparks and C. J. Hawkesworth, eds., pp197-207.

2001

Mohr, K. I., J. S. Famiglietti and A.Boone, The Effect of Field-Scale Sub-Grid Variability of Soil Moisture on the Simulation of Soil Moisture and Heat Fluxes for a Mesoscale Watershed: A Case Study from the Southern Great Plains 1997 Hydrology Experiment, in *Observations and Modeling of the Land Surface Hydrological Processes*, American Geophysical Union, Water Science and Applications 3, V. Lakshmi, J. Albertson and J.Schaake, eds, pp161-176.

1995

Famiglietti, J. S., B. H. Braswell, and F. Giorgi, Process Controls and Similarity in the U. S. Continental-Scale Hydrological Cycle from EOF Analysis of Regional Climate Model Simulations, in *Scale Issues in Hydrological Modeling*, J. D. Kalma and M. Sivapalan, eds., Wiley, 504 pp.

1991

Famiglietti, J. S. and E. F. Wood, Evapotranspiration and Runoff from Large Land Areas: Land Surface Hydrology for Atmospheric General Circulation Models, in *Land Surface-Atmosphere Interactions for Climate Models: Observations, Models and Analyses*, E. F. Wood, ed., Springer, The Netherlands, pp. 179-204, doi:10.1007/978-94-009-2155-9_9

Peer-Reviewed Articles

Web of Science Highly Cited Researcher 2019-2022

Web of Science ResearcherID
Web of Science: Famiglietti, James
Scopus: Famiglietti, James S.
Google Scholar: Famiglietti JS

<http://www.researcherid.com/rid/G-7383-2017>
h-index 83
h-index 83
h-index 93

In preparation:

Abdelmohsen, K., J. S. Famiglietti, B. Mohajer and H. A. Chandanpurkar, Continued groundwater depletion in the Colorado River basin threatens western U. S. water security
Chandanpurkar, H. A., J. S. Famiglietti, A. J. Purdy et al., Recent continental drying and implications for freshwater availability and sea level rise
Huggins, X., T. Gleeson, M.-L. Moore, and J. S. Famiglietti, Groundwaterscapes comprehensively map groundwater sustainability challenges

In review, discussion or revision:

Wade, J., C. H. David, E. L. Collins, M. Denbina, A. Cerbelaud, M. Tom, J. T. Reager, J. S. Famiglietti, T. Lee and M. Geirach, Intrinsic spatial scales of river stores and fluxes and their relative contributions to the global water cycle, *Geophys. Res. Lett.*, in revision
Seo, K.-W., D. Ryu, T. Jeon, K. Youm, J.S. Kim, E. H. Oh, J. Chen, J. S. Famiglietti, and C. R. Wilson, Transition to a drier hydrologic regime in the 21st century leaves record in sea level rise and Earth's pole shift, submitted, *Nature*
Hogeboom, R. J., I. Dobrescu, and J. S. Famiglietti, Private investments worth USD 118 trillion at risk of deepening world's water crises, submitted, *Nature Water*
Li. H., Y. Pan, Z. Huang, C. Zhang, L. Xu, H. Gong, and J. S. Famiglietti, A new GRACE downscaling approach for deriving high-resolution groundwater storage changes using ground-based scaling factors, in revision, *Wat. Resour. Res.*
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- Gordon, W. G., J. S. Famiglietti, N. L. Fowler, T. G. F. Kittel and K. A. Hibbard, Validation of Simulated Runoff from Six Terrestrial Ecosystem Models Using Observed Streamflow: Results from the VEMAP II Model Intercomparison, *Ecological Applications*, 14(2), 527-545.
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- Mohanty, B. P., J. S. Famiglietti and T. H. Skaggs, Evolution of Soil Moisture Spatial Structure in a Mixed-Vegetation Pixel During the Southern Great Plains (SGP97) Hydrology Experiment, *Wat. Resour. Res.*, 36(12), 3675-3686.
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- Olivera, F., J. S. Famiglietti, and K. Asante, Global-Scale Flow Routing Using a Source-to-Sink Algorithm, *Wat. Resour. Res.*, 36 (8), 2197-2207.

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- Famiglietti, J. S., J. A. Devereaux, C. Laymon, T. Tsegaye, P. R. Houser, T. J. Jackson, S. T. Graham, M. Rodell and P. J. vanOevelen Ground-Based Investigation of Spatial-Temporal Soil Moisture Variability Within Remote Sensing Footprints During SGP97, *Wat. Resour. Res.*, 35(6), 1839-1851.
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Famiglietti, J. S. and E. F. Wood, Effects of Spatial Variability and Scale on Areally-Averaged Evapotranspiration, *Wat. Resour. Res.*, 31(3), 699-712.

1994

Famiglietti, J. S. and E. F. Wood, Multi-Scale Modeling of Spatially-Variable Water and Energy Balance Processes, *Wat. Resour. Res.*, 30(11), 3061-3078.

Famiglietti, J. S. and E. F. Wood, Application of Multi-Scale Water and Energy Balance models on a Tallgrass Prairie, *Wat. Resour. Res.*, 30(11), 3079-3093.

1993

Wood, E. F., D-S. Lin, M. Mancini, D. Thongs, P. A. Troch, T. J. Jackson, J. S. Famiglietti and E. T. Engman, Intercomparisons Between Passive and Active Microwave Remote Sensing, and Hydrologic Modeling for Soil Moisture, *Adv. Space. Res.*, 13, (5), 167-176.

1992

Famiglietti, J. S., E. F. Wood, M. Sivapalan and D. J. Thongs, A Catchment Scale Water Balance Model for FIFE, *J. Geophys. Res.*, 97(D17), 18997-19007.

1991

Famiglietti, J. S. and E. F. Wood, Evapotranspiration and Runoff from Large Land Areas: Land Surface Hydrology for Atmospheric General Circulation Models, *Surveys in Geophysics*, 12, 179-204.

Selected Non-Refereed Publications (Proceedings, Reports, Articles):

2023

Global Assessment of Changing Freshwater Availability, World Bank, in preparation

2022

Global Assessment of Private Sector Impacts, a joint report of the Global Institute for Water Security, University of Saskatchewan, and Ceres, April 11, 2022.

2014

UCCHM Water Advisory, Water Storage Changes in California's Sacramento and San Joaquin River Basins From GRACE: Updated Results for 2003-2013

2012

Committee on a National Strategy for Advancing Climate Modeling. Board on Atmospheric Studies and Climate, Division on Earth and Life Studies, National Research Council of the National Academies. *A National Strategy for Advancing Climate Modeling*. The National Academies Press, Washington, DC, 294 pp.

2011

Famiglietti, J., L. Murdoch, V. Lakshmi and J. Arrigo, Establishing a Framework for Community Modeling in Hydrologic Science, Report from the 3rd Workshop on a Community Hydrologic Modeling Platform (CHyMP): A Strategic and Implementation Plan, Irvine, CA, March 15-17, 2011

2010

CUAHSI Board of Directors, Water in a Dynamic Planet. A Five-year *Strategic Plan* for Water Science, Consortium of Universities for the Advancement of Hydrologic Science, Inc., doi:10.4211/stratplan.201012

Famiglietti, J., L. Murdoch, V. Lakshmi and R. Hooper, Towards a Framework for Community Modeling in Hydrologic Science, Report from the 2nd Workshop on a Community Hydrologic Modeling Platform (CHyMP): Blueprint for a Community Hydrologic Modeling Platform University of Memphis, Memphis, TN, March 31-April 1, 2009, doi:10.4211/techrpts.20100616.tr9

Rodell M., J. S. Famiglietti and B. R. Scanlon, Realizing the Potential for Satellite Gravimetry in Hydrology: Second GRACE Hydrology Workshop, August 4, 2009, Austin, TX, EOS Trans. AGU, 91(10), 96.

2009

Famiglietti, J., L. Murdoch, V. Lakshmi and R. Hooper, Rationale and Strategy for a Community Modeling Platform in the Hydrologic Sciences, Community Modeling in Hydrologic Science, Report of the CHyMP Scoping Workshop held March 26-27, 2008, Washington, DC, CUAHSI Technical Report #8, April 12, 2008, doi:10.4211/techrpts.200911.tr8

2008

Committee on Integrated Observations for Hydrologic and Related Sciences, Water Science and Technology Board, Division on Earth and Life Studies, National Research Council of the National Academies. *Integrating Multiscale Observations of U. S. Waters*, The National Academies Press, Washington, DC, 210 pp.

Famiglietti, J., L. Murdoch, V. Lakshmi and R. Hooper, 2008, Community Modeling in Hydrologic Science, EOS, Transactions, American Geophysical Union, 89(32), pp. 292

Famiglietti, J., Global terrestrial network for groundwater (GTN-GW), in Terrestrial Essential Climate Variables for Climate Change Assessment, Mitigation and Adaptation (GTOS 52), R. Sessa and H. Dolman, eds, Food and Agriculture Organization of the United Nations, Rome, 2008

2007

Famiglietti, J. S., Geophysical Research Letters: New Policies and Features for AGU's Top-Cited Journal, EOS, Transactions, American Geophysical Union, 88(49), 4 December 2007.

2005

Alsdorf, D., D. Lettenmaier, J. Famiglietti, and Charles Vörösmarty, Observing surface water from space: The Water Elevation Recovery (WatER) Mission, GEWEX News, 15(3), August
Reckhow, K. and the Neuse Prototype Hydrologic Observatory Design Team, Designing Hydrologic Observatories: A Paper Prototype of the Neuse Watershed, A Report to the Consortium of Universities for the Advancement of Hydrologic Sciences, Inc.

1993

Pitman, A. J., A. Henderson-Sellers, F. Abramopoulos, R. Avissar, G. Bonan, A. Boone, R. E. Dickinson, M. Elk, D. Entekhabi, J. Famiglietti, J. R. Garratt, M. Frech, A. Hahmann, R. Koster, E. Kowalczyk, K. Laval, J. Lean, T. J. Lee, D. Lettenmaier, X. Liang, J-F. Mahfouf, L. Mahr, P. C. D. Milly, K. Mitchell, N. deNoblet, J. Noilhan, H. Pan, R. Pielke, A. Robock, C. Rosenzweig, C. A. Schlosser, R. Scott, M. Suarez, S., Project for Intercomparison of Landsurface Parameterization Schemes (PILPS): Results from Off-Line Control Simulation (Phase 1a), International GEWEX Project Office Publication Series, No. 7, 47pp.

Recent Invited Lectures:

Keynotes and Named Lectures

Boussinesq Lecture, Boussinesq Center for Hydrology, Amsterdam, October 5, 2023

ASO Annual Workshop, Mammoth Lakes, California, September 11-12, 2023

Water Tech Alliance, Virtual, September 12, 2023

7th International Congress on Subterranean Environment – CIMAS, Keynote, Sao Paulo, August 30, 2023

The President's Lecture Series, Guth Memorial Lecture in Environmental Philosophy, University of Montana, February 9, 2023

Water in the West Symposium, Global Successes and Solutions, Keynote, CSU Spur, Denver, CO, USA, November 2, 2022

AWRA, Virtual Annual Water Resources Conference, Keynote (Virtual), November 10, 2021

IWRA Online Conference 2020, Keynote (Virtual), Paris, France, October 28, 2020

American Geophysical Union, Fall Meeting 2019, Centennial Keynote, December 10, 2019

WATEC Israel 2019, Keynote, Tel Aviv, Israel, November 20, 2019

World Water Week, Focus on the Americas, Keynote, Stockholm, Sweden, August 28, 2019

NovCare 2019 International Conference, Keynote, Waterloo, ON, Canada, May 29, 2019

IAEA International Symposium on Isotope Hydrology: Advancing the Understanding of Water Cycle Processes, May 21, 2019, Vienna, Austria

Canadian Water Network, Blue Cities 2019, Keynote Toronto, ON, Canada, May 8, 2019

Tansley Lecture, Johnson Shoyama School of Public Policy, University of Regina, Regina, SK, April 11, 2019

2nd International Workshop, Impact of Groundwater in Earth System Models, March 18, 2019

AgBio Challenge, College of Agriculture and Bioresources, University of Saskatchewan, January 24, 2019

American Geophysical Union, Fall Meeting 2018, Centennial Keynote, December 14, 2018

Urban Water Institute, Annual Water Conference, San Diego, CA, Keynote Address, August 22, 2018

Northwestern University, Students for Ecological and Environmental Development, Evanston, IL, Public Lecture, May 14, 2018

Resources for Future Generations, RFG 2018, Vancouver, BC, Keynote Address, June 20, 2018

Frontiers of Geosciences Lecture, Los Alamos National Laboratory, Los Alamos, NM, June 12, 2017

Case Western University, Think Forum, Cleveland, OH, April 2, 2017

Salmonid Restoration Federation, Salmonid Conference Keynote Address, March 31, 2017
Mississippi State University, Energy Institute, The Future of Water Conference, Keynote Address, March 28, 2017
California Irrigation Institute, 55th Annual Conference, Sacramento, CA, January 30, 2017
Henry C. Gardiner Global Food Systems Lecture, Kansas State University, Lawrence, KS, October 3, 2016
2016 Distinguished Lecture, Water Institute, University of Waterloo, Ontario, April 28, 2016
Aiken Lecture Series, University of Vermont, Burlington, VT, April 12, 2016
Association of American Geographers, Annual Meeting, Climate Specialty Group, Keynote Address, San Francisco, CA, March 29-April 2, 2016
Vital and Alice Pellissier Family Distinguished Speaker, University of California, Merced, March 9, 2016
The 5th University of Florida Water Institute Symposium, Gainesville, FL, Keynote Address, February 16-17, 2016

Other Invited Lectures

2024

IESE Business School, University of Navarra, Barcelona, Spain; Arizona Hydrological Society, Tempe, AZ; University of Arizona, Tucson, AZ; Community Church of the Verdes, Rio Verde, AZ

2023

Mohamed bin Mubarak Al Khalifa Academy for Diplomatic Studies. Arabian Gulf University, Arizona Business Leaders, Scottsdale, AZ; Foundation for Natural Resources and Energy Law Water Law Institute, Chandler, AZ

2022 (all virtual)

Hansgrohe Sustainability Forum; Global Changes and Water Resources: Past, Present and Future, University of Pisa; Moon Soul Graduate School of Future Strategy, Korea Advanced Institute of Science and Technology

2021 (all virtual)

SEOGC Online Forum; Water Now Alliance, Assiniboine River Basin Initiative, Winnipeg, Ontario; Bolin Climate Research Centre, Stockholm, Sweden

2020

University of California, Santa Barbara (virtual), King Abdullah University of Science and Technology, Thuwai, Saudi Arabia (virtual). Oak Ridge National Laboratory, Oak Ridge, TN, USA (virtual), Ceres 2020 Virtual Plenary, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

2019

Pacific Northwest Economic Region (PNWER), Saskatoon, SK; Rotary Club of Saskatoon, SK; University of Tokyo, Japan; Hokkaido University, Japan; JAXA, Tokyo, Japan; University of Virginia, Charlottesville, VA

2018

McMaster University, Hamilton, Ontario; World Bank, Washington, DC

2017

University of Rhode Island, Kingston, RI; AquaHack, Cleveland, OH

2016

San Gabriel Valley Water Association, Whittier, CA; League of Women Voters, Pasadena, CA; Irvine Unified Congregational Church, Irvine, CA; School of Earth and Space Exploration, Arizona State University; Pasadena Optimists Club, Pasadena, CA; UCLA, Los Angeles, CA (2)

Recent Invited Presentations:

2023

Famiglietti, J. S., H. Chandanpurkar, X. Huggins, T. Gleeson, and M. Rodell, Global Groundwater Storage Changes as Viewed From Space, UNICEF, Virtual

2022

Famiglietti, J.S., A. J. Purdy, X. Huggins, M. Rodell, and H. Chandanpurkar, Remote Sensing and Modeling of Global Scale Groundwater Recharge and Groundwater Storage Changes Using SMAP, GRACE/FO, and GLDAS, AGU Fall Meeting, Chicago, IL
Famiglietti, J. S., H. Chandanpurkar, X. Huggins, T. Gleeson, and M. Rodell, Global Groundwater Storage Changes as Viewed From Space, UN-Water Summit on Groundwater, Paris, France

2020

Famiglietti, J. S., Elements of Global Groundwater Sustainability, AWRA 2020 Virtual Annual Water Resources Conference

2019

Famiglietti, J. S., A Map of the Future of Water. Princeton Environment Forum, Princeton Environment Institute, Princeton, NJ, October 25, 2019
Famiglietti, J. S., The Global Groundwater Crisis as Revealed from Space: Implications for Human Security, AGU Chapman Conference, Valencia, Spain
Famiglietti, J. S., Global Change Impacts on Freshwater Availability from the Global to Regional Scales, Prairie Water Summit, Regina, SK, June 24, 2019
Famiglietti, J. S., A Map of the Future of Water, National Academies of Science, Engineering and Medicine, Water Science and Technology Board, Washington, DC, USA, June 17, 2019
Famiglietti, J. S., Challenges for Global Water Futures, Integrated Modeling for Prediction and Management of Change, Global Water Futures Program, University of Saskatchewan, Saskatoon, SK, Canada, June 12, 2019
Famiglietti, J. S., A Map of the Future of Water, 10X Water Summit, Phoenix, AZ, March 27, 2019

Famiglietti, J. S., A Map of the Future of Water, National Academies of Science, Engineering and Medicine, March 22, Washington, DC

2018

Famiglietti, J. S. P.-W. Liu, A. McEvoy, D. N. Wiese, J. T. Reager, A. J. Purdy, M. Rodell and C. H. David, Food Grows where Groundwater Flows: California Grapples with Chronic Water Scarcity, AGU Fall Meeting, Washington, DC

Famiglietti, J. S., M. Rodell, J. T. Reager, C. H. David, D. Stampoulis, M. H. Lo, Y. Wada, H. Beaudoin, D. N. Wiese and F. W. Landerer, How Can GRACE and GRACE-FO Global Hydrology Inform Land Surface Model Development and Evaluation? AGU Fall Meeting, Washington, DC

2017

Famiglietti, J. S., M. Rodell, A. Richey and J. T. Reager, The Global Groundwater Crisis, AOGS, Singapore

Famiglietti, J. S., M. Rodell, A. Richey and J. T. Reager, The Global Groundwater Crisis, AGU-JpGU Conference, Tokyo

Famiglietti, J. S., GEWEX/GLASS, Tokyo

2016

Famiglietti, J. S., Modern Rates of Groundwater Depletion Monitored from Space, National Academy of Science, Dec. 6.

Famiglietti, J., GRACE and Groundwater Management: Experiences from California, IUSSTF Three-Day Bi-lateral Conference on Assessments of Regional Hydrology Using Spaceborne Gravity Observations, Hyderabad, India, November 14-16

Famiglietti, J. S., Combining Isotope and Satellite Data in Hydrology, Technical Meeting on Coupled Use of Isotope Tracers and Satellite Data in Water Resources Management, IAEA, Vienna, Austria, November 7-9

Famiglietti J. S., The Realities of 21st Century Water Security as Viewed from Space, National Geographic Society, Advisory Council, Santa Barbara, CA, October 24-25.

Famiglietti, J. S., Modern Rates of Groundwater Depletion Monitored from Space, National Academy of Engineering, Washington, DC, October 11.

Famiglietti, J. S., Observing Human Impacts of Water Management from Space, GEWEX GHP-GLASS, Gif-sur-Yvette, France, September 28-30.

Famiglietti, J. S., Satellites Reveal Challenges to 21st Century Water Security, World Federation of Scientists, Erice, Sicily, August 23

Famiglietti, J. S., Connecting Water Research with Stakeholder Needs during the California Drought, Texas Water Research Network, University of Texas at Austin, August 18

Painter, T. H., J. S. Famiglietti and G. L. Stephens, Leveraging this Golden Age of Remote Sensing and Modeling of Terrestrial Hydrology to Understand Water Cycling in the Water Availability Grand Challenge for North America, American Geophysical Union Fall Meeting, San Francisco, Dec. 12-16

Rodell, M., J. S. Famiglietti, J. T. Reager, D. N. Wiese, H. K. Beaudoin and B. Li, Remote Sensing of Groundwater with GRACE and GRACE Follow On, American Geophysical Union Fall Meeting, San Francisco, Dec. 12-16

Rodell, M., J. A. Santonello, S. Kumar, H. K. Beaudoin and J. S. Famiglietti, Water Management Effects on the Water Cycle, American Geophysical Union Fall Meeting, San Francisco, Dec. 12-16

Outreach and Communication

Selected Film and Video

- 2022 **The fight for water (Part 1); What happens when our water dries up? (Part 2); Who owns water? (Part 3)**, DW Documentary, featured expert
- 2021 **Day Zero**, Amazon Prime water documentary, featured expert
- 2020 **H₂O: The Molecule That Made Us**, 3-part PBS Water Documentary Mini-Series, Featured Expert, Part 3: Crisis
- 2017 **Parched: The Water Wars**, Jigsaw Productions, Series Advisor and Interview Subject, March, 2017
Water and Power: A California Heist, Jigsaw Productions, Advisor and Interview Subject, January, 2017
- 2016 **Years of Living Dangerously**, November 9, 2016
The Nature of Things, CBC, October 23, 2016
VICE on HBO, End of Water, March 4, 2016
- 2015 **PBS NewsHour**, Is desalination the future of drought relief in California, *October 31, 2015*
The Rachel Maddow Show, New research sounds alarm on global water supply, June 17, 2015
PBS NewsHour, Is the World's Fresh Water Supply Running Out? June 17, 2015
Tavis Smiley, Earth Day 2015 interview on the California Drought. April 22, 2015
Real Time with Bill Maher, mid-show interview guest, March 27, 2015
CBS This Morning, California governor defends sparing farmers from drought rules. April 6, 2015
- 2014 **Al Jazeera America**, TechKnow, California drought episode, October 18, 2014
Pivot TV, update on 'Last Call at the Oasis'
60 Minutes, Depleting the Water, featured expert, story consultant, November 16, 2014
PBS SoCal Water expert video
- 2013 **Sip, Do Not Gulp**. Filmed interview for de Saisset Museum installation, Santa Clara University
TEDx, "Can We End the Global Water Crisis," May 3
- 2012 **ESPN/Longhorn Network**, Interview and filming of public outreach lecture "Last Call at the Oasis: Is This Our Inconvenient Truth," for broadcast on ESPN/Longhorn Network, Oct. 26
- 2010-2012 **Participant Media**, featured expert, water documentary, 'Last Call at the Oasis'
<http://www.takepart.com/lastcall>
- 2011 **Visualizing.org**, HeadsUp2011 Times Square Challenge: Visualize Global Groundwater Trends. Scientific visualization competition for

Times Square electronic billboards on World Water Day, March 22, 2012.
Data provider and judge

Water Brothers, Canadian public television documentary television series, featured expert on California water issues.

Participant Media, consultant on Social Action campaign for water documentary, ‘Last Call at the Oasis’

<http://www.takepart.com/lastcall>

Future of Water, Virtual Conference, Water cycle change,
<http://www.youtube.com/watch?v=MJnoGcfo7ys>

2009 **Nature Magazine**, Nature Videos, ‘An Indian Hotspot,’
<http://www.nature.com/nature/videoarchive/indianhotspot/>

2008 **American Museum of Natural History**, New York, Science Bulletin video series, ‘GRACE: Tracking Water From Space’
<http://www.youtube.com/watch?v=vfXXGYxEoM>

What About Water? <https://www.whataboutwater.org/>

2019—present What About Water Podcast, Host
What About Water Online Film Festival
What About Water International Film Prize
Let’s Talk About Water Youth Engagement

Radio, Television, Newspaper, Magazines, Blogs

2009-present Multiple interviews on hydrology, flooding, drought, groundwater depletion and water security, including New York Times, Los Angeles Times, San Francisco Chronicle, The Washington Post, The Guardian, Bloomberg, Financial Times, Sydney Morning Herald, Times of India, Jerusalem Post, 60 Minutes, CNN, CNN International, MSNBC, CNBC, Al-Jazeera, Al Jazeera America, The Atlantic, Barron’s, Bloomberg, CBS, NBC, ABC, PBS News Hour, Pivot TV, The Economist, Esquire, Smithsonian, Nature, The New Yorker, Science, Pacific Standard, Time, Newsweek, Vice, Mother Jones, ClimateWire, Mashable, ThinkProgress, BBC, NPR, CBC, German Public Radio, etc.

Podcasts

2023 **The Big Story**, [Will Your Kids Fight in the Water Waters](#), CBC, April 10, 2023

2022 [One Planet podcast](#), September, 2022

[A Climate Change](#), September, 2022

AgWatchers, [Day Zero for Water?](#) June, 2022

10X Podcast, [The art of communicating our water crisis](#), February 11, 2022

2021 **The Compass**, BBC World Service, [Ecological Crises, Water: Too Much and Not Enough](#), April 11, 2021

The Edge of Energy, **The Walrus**, [Closing the Loop on Ecosystem Conservation](#)

The Root of the Matter, [Will the U.S. Run out of Water](#), June 7, 2021

- 2020 **Raw Talk Podcast, University of Toronto,**<https://www.rawtalkpodcast.com/episode/87>, **Water: Access, Equity and Greater Impacts**, December 12, 2020
- 2019 **Serving Up Science, NPR, [The Future of Water Security](#)** August 7, 2019
Freakonomics Radio Live, [Episode 381, Long-Term Thinking in a Start-Up Town](#), May 16, 2019.
The Water Values Podcast, [Groundwater Depletion and Water Conflict with Jay Famiglietti](#). January 1, 2019.
- 2018 **Forecast, [Jay Famiglietti on GRACE and Global Hydrology](#)**, April 18, 2018.
- 2017 **Freshwater Talk [Jay Famiglietti, Senior Water Scientist for NASA](#)**, October 8, 2017.
- 2016 **Hound Tall with Moshe Kasher, [Drought](#)**, July 8, 2016.
- 2015 **Planet Money, NPR, [The Bottom of the Well](#)**, Episode #640, July 22, 2015
Probably Science, [Water Crisis with Jay Famiglietti](#). April 7, 2015

Blog writing

- 2012-2017 **National Geographic Water Currents, Contributor**
<https://blog.nationalgeographic.org/tag/jay-famiglietti/>
Huffington Post, Contributor
<https://www.huffpost.com/author/jay-famiglietti>
- 2011-2013 **Water 50/50, Author**
<http://blog.ucchm.org>

Current Support:

All USD unless otherwise noted

- 2024 ASU-Planet Labs Partnership, PI, \$100,000
- 2023-2026 Arizona Water Innovation Initiative, Core Design Team Member, Director of Science, and Integration Leader, \$6M (of \$40M), Arizona Office of the Governor.
- 2022-2028 Food-Water Network Education and Training (FWNET), NSCERC CREATE, \$1.6M (CAD)
- 2020-2022 Ceres, Valuing Water Global Assessment, PI, \$120,000
- 2018-2025 Canada 150 Research Chair in Hydrology and Remote Sensing, \$7M (CAD)
 Global Water Futures Program, \$1.5M (CAD)
 University of Saskatchewan, Office of the Vice-President Research, \$0.5M (CAD)

Current Graduate Student and Postdoctoral Fellowships:

Completed Support and Graduate Student and Postdoctoral Fellowships:

All USD unless otherwise noted

- 2019-2022 David Ferris, Global Water Futures Graduate Fellowship, \$150,000 (CAD)

2017-2018 NASA WWA0: Supporting the Western States Water Mission with the Land Information System, Co-PI, with PI Christa Peters-Lidard (NASA/GSFC), \$550,000

2016-2019 NASA Earth and Space Science Fellowship, Adam Purdy, SMAP Soil Moisture & OCO-2 Solar Induced Fluorescence to Characterize ET Stress and Improve PTJPL-ET, \$90,000

2016-2018 NASA PMM: Precipitation Measurement Mission for Improved Forcing in Hyper-Resolution Land Surface Models, PI, \$385,000

2015-2019 NASA GRACE Science Team Recompetition: Terrestrial Hydrology from GRACE and GRACE-FO, Co-PI, with PI Matt Rodell (NASA/GSFC), \$900,000
 NASA GRACE Science Team Recompetition: Advancing the science on hydrologic states using GRACE: The role of terrestrial water storage in extreme events, Co-I, with PI JT Reager (NASA/JPL), \$500,000
 NASA SWOT Science Team: Integration of SWOT into global, terrestrial hydrological models, Co-I, with PI CH David (NASA/JPL), \$750,000

2014-2017 NASA Sea Level, Land Contributions to Regional and Global Mean Sea Level Rise, PI, \$1,300,000

2014-2017 NASA NEWS, Water Cycle Change from GRACE and NEWS Research, PI, \$500,000

2014-2017 JPL Water Initiative, \$3,000,000, Lead Scientist

2014-2017 NASA Earth and Space Science Fellowship, Kurt Solander, A SWOT-based reservoir model for climate models, \$90,000

2013-2016 NASA Earth and Space Science Fellowship, Jamiat Nanteza, A Remote-Sensing Based Decision Support for East Africa, \$90,000

2013-2016 NASA Earth and Space Science Fellowship, Aimee Gibbons, Remote Sensing Water Quality with GRACE, \$90,000

2014 University of California, Office of the President, MRPI Program, \$300,000

2013-2016 JPL, GRACE FO Core Science Team, PI, \$210,000

2012-2015 NASA Earth and Space Science Fellowship, Zhao Liu, An Explicit Representation of River Networks in a Catchment-based Land Surface Model Framework for SWOT Assimilation, \$90,000

2012-2015 NSF Science, Engineering and Education for Sustainability Postdoctoral Fellowship, Neeta Bijoor, A framework for sustainable irrigation practice: integrating social, hydrologic, and ecologic factors to meet the urban water challeng, \$249,973

2012-2013 NSF EarthCube, Linking hydrological models across scales, (Co-I, with PI David Gochis, NCAR), UCI Share, \$50,000

2011-2015 NASA GRACE Science Team Recompetition: Terrestrial Hydrology from GRACE, PI, with Co-PI Matt Rodell (NASA/GSFC), \$1,000,000

2011-2014 NASA Earth and Space Science Fellowship, Sasha Richey, An Index of Global Water Stress that Incorporates GRACE Observations, \$90,000

2010-2013 NASA Earth and Space Science Fellowship, Karli Anderson, Groundwater remote sensing using GRACE, GPS and InSAR, \$90,000

2010-2013 NASA Graduate Student Researchers Program, Alys Thomas, Characterizing Drought Using GRACE, \$90,000

2009-2014 University of California, Office of the President, A U.C. Center for Hydrologic Modeling, (PI), \$2,430,000

2009-2014 NSF, A Consortium of Universities for the Advancement of Hydrologic Sciences, Inc., Phase 2 Renewal, (Co-PI, with PI Richard Hooper) \$6,000,000, UCI share, \$0

2009-2013 NASA NEWS, Mass Changes in Earth's Global Water Reservoirs (PI, with Co-PIs Steven Nerem, Don Chambers, Isabella Velicogna), \$1,030,000, UCI share \$600,000
 NASA THP, Scales of Variability of Groundwater Storage, \$480,000 (Co-PI with PI Matt Rodell), UCI share \$240,000

2009-2012 NASA Earth and Space Science Fellowship, J. T. Reager, Terrestrial water storage capacity and flood potential using GRACE , \$90,000

2008-2012 NASA IDS, The Contribution of Changes in Terrestrial Water Storage to Sea Level Variation, \$450,000 (PI, with Co-PI Matt Rodell, NASA GSFC), UCI share, \$330,000
 NASA GRACE Science Team, Terrestrial Hydroclimatology from GRACE, \$450,000 (PI, with Co-PI Matt Rodell, NASA GSFC), UCI share, \$350,000
 NASA Decision, Integrating Enhanced GRACE Water Storage Data into the U.S. and North American Drought Monitors (Co-I, with PI Matt Rodell), UCI share \$60,000

2008-2011 NASA Earth and Space Science Fellowship, Minhui Lo, The Role of Progressively Deeper Soil Moisture and Groundwater in Land-Atmosphere Interaction, \$90,000

2008-2009 NSF Hydrological Science, A CUAHSI Scoping Workshop on a Community Hydrological Modeling Platform (CHyMP), \$40,000 to CUAHSI (PI)

2007-2010 NASA IDS, Black Carbon Impacts on Cryosphere Climate Sensitivity. \$607,000,(Co-I, with PI Charlie Zender, UCI), Famiglietti share, 1 month summer

2005-2008 NASA NEWS, A Study of the First Global Measurements of the Water Cycle (PI), with Co-PIs Steven Nerem, Don Chambers, Isabella Velicogna, \$600,000, UCI share \$150,000

2005-2008 NOAA CPPA, Basin-Scale Terrestrial Water Storage Variations Using GRACE and Implications for Land Memory Processes (PI), \$270,000

2003-2009 NASA REASoN CAN: GRACE Products for Oceanography and Hydrology, (Co-I, with PI Victor Zlotnicki (JPL), \$3,120,000, UCI share, \$421,000

2005-2008 NASA Earth System Science Fellowship, Gopi Goteti, Explicit Representation of Lakes, Wetlands and Rivers in a Land Surface Model: A Framework for Coupling Terrestrial Biogeochemistry and Hydrology, \$72,000

2005-2008 NASA Earth System Science Fellowship, Hassan Syed, Estimating Continental Water Storage Changes and Discharge using GRACE: Implications for Global Mean Sea Level Rise, \$72,000

2005-2007 UC Water Resources Center, 2005-2006, Monitoring California Water Resources from Space (PI), \$60,000

2004-2006 NASA Earth System Science Fellowship, Dongryeol Ryu, Footprint-Scale Soil Moisture Spatial Variability and Correlation Structure: Implications for Satellite Validation and Hydrologic Data Assimilation, \$72,000

2003-2007 NASA IDS: The Contribution of Changes in Terrestrial Water Storage to

- Sea Level Variation, \$400,000 (PI), UCI share, \$330,000
- NASA SENH: Terrestrial Water Storage Variations Using GRACE: Estimation, Uncertainty and Validation, \$540,000, (PI, with Co-PI's Clark Wilson (UT) and Matt Rodell (NASA/GSFC)) UCI share \$240,000
- NSF MRI: Acquisition of an Earth System Modeling Facility for Coupled Climate, Chemistry, and Biogeochemistry Studies, Co-PI with Charles Zender, PI, UCI, \$1,100,100, Famiglietti share \$0
- 2003-2005 NASA THP, 2003-2005 A Virtual Mission to Determine the Feasibility of a Future Surface Water Satellite Mission, NASA Terrestrial Hydrology, Co-PI with Doug Alsdorf, PI, UCLA. UCI share \$35,000
- 2003-2004 A CUAHSI Hydrologic Observatory: Example Using the Neuse River Basin,, Co-I with Ken Reckhow, Duke, PI. Famiglietti share one month summer salary.
- 2002-2005 NASA GWEC: Catchment-Based Global River Routing Scheme for Climate Models and Assimilation of Streamflow and Altimetry Data, \$330,000, (PI, with Co-PI Paul Houser, NASA/GSFC, UCI share \$165,000)
- 2002-2005 NASA Earth System Science Fellowship, Ki-Weon Seo (at UT), Estimating Water Content Variations, Error Analysis, and Validation of GRACE, \$72,000
- 2002-2005 NASA Earth System Science Fellowship, Aaron Berg, Uncertainty in Soil Moisture Initialization and Impacts on Seasonal-to-Interannual Prediction, \$72,000
- 2002-2003 NASA Oceans and Climate: Initialization of NSIPP Land Surface Model Soil Water States for Improved Seasonal-to-Interannual Prediction, \$80,000, PI
- 2000-2003 NASA: Floodplain Modeling Based on Fusion of Polarimetric SAR Interferometry and Laser Altimetry, \$300,000, (Co-PI, with Melba Crawford and Bob Schutz, UTCSR, and Jakob VanZyl and Yunjin Kim, NASA/JPL, UCI share \$105,000)
- 1999-2003 NASA: The Role of Soil Moisture Variability in Land-Atmosphere Interaction during SGP97, \$225,000, PI
- 1999-2003 NASA: Optimal Land Initialization for Seasonal Climate Predictions, \$600,000 (Co-PI, with Paul Houser, NASA/GSFC) UT/UCI share \$300,000
- 1999-2002 DOE Graduate Research Environmental Fellowship, Wendy Gordon, Role of the Hydrologic Cycle in Vegetation Response to Climate Change: An Analysis Using VEMAP Phase 2 Model Experiments, \$66,000
- 1999-2002 DOE Graduate Research Environmental Fellowship, Marcia Branstetter, An Investigation of the Effects of Continental Runoff on Climate Dynamics Using a Parallel Earth System Model, \$66,000
- 1999-2001 NASA Graduate Student Researchers Program, Karen Mohr, A Study of Land/Atmosphere Interactions in the Development of Mesoscale Convective Systems Using a Coupled Numerical Cloud and Land Surface Process Model, \$44,000
- 1998-2001 NASA Earth System Science Fellowship, Matthew Rodell, Estimating Variations in Continental Water Storage from Satellite Observations of the Time-Dependent Gravity Field, \$66,000
- 1997-2000 NSF: Closing the Global Water Cycle in Fully-Coupled Climate System Models: Terrestrial Hydrology and River Transport for the NCAR CSM, \$530,500 (PI, with CO-PI's David Maidment (UT), David Schimel (NCAR) and Charles Vorosmarty (UNH)), UT share \$315,000

- 1996-2000 NASA: New Investigator Award: Multiscale Soil Moisture Variability from Combined Remote Sensing, Modeling, and Observations, \$340,000 (PI)
- 1994-2000 NSF: Graduate Research Traineeships in Hydrology: Role of the Hydrological Cycle in the Coupled Earth System, \$562,500 (PI)
- 1996-1999 NASA Graduate Student Researchers Program, High Performance Computing and Communications Component, Marcia Branstetter, Development of a Parallel Algorithm for Land Surface Hydrology and River Transport in Coupled Climate System Models, \$66,000
- 1994-1998 NASA: Remote Sensing Soil Moisture Using Four-Dimensional Data Assimilation, \$222,000 (Co-PI, with Jim Shuttleworth, University of Arizona)
- 1996-1999 NASA Earth System Science Fellowship, Stephen Graham, A Continental River Routing Algorithm for Global Water Cycle Closure in Coupled Earth System Models, \$66,000

Current and Former Student and Staff Supervision

Current graduate student advisees

Xander Huggins, Ph.D. candidate, University of Victoria (co-supervised with Tom Gleeson), dissertation topic, socio-ecologic systems framework for analyzing groundwater governance and sustainability

Behshad Mohajer Iranvanloo, Ph.D. candidate, Arizona State University, dissertation topic, characterizing the complex interactions between humans and hydrological systems for sustainable water management

Current postdoctoral advisees

Yufei Ao (Ph. D., 2023, Virginia Tech), research topic, food-water nexus

Karem Abdelmohsen (Ph. D., 2020, Michigan State University), research topic, terrestrial hydrology from GRACE/FO

Current research staff supervision

Hrishi Chandanpurkar (Ph.D., 2016, University of California, Irvine), Research Scientist

Eliza Litvak (Ph.D., 2013, University of California, Irvine), Research Scientist

Current administrative staff supervision

Alexa Bolla, AWODSS, Administrative Assistant, 2023-present

Former students

James Anderson, M.A., 1996, co-supervised with Prof. Phil Bennett. Thesis title, “Nonpoint Source Pollution by Organochlorine Pesticides in the Lavaca-Navidad Watershed, Texas,” University of Texas at Austin. Current employment, Program Manager, Department of Justice, Washington, DC.

Kwabena Asante, Ph. D., 2000, co-supervised with Prof. David Maidment. Dissertation title, “A Comparison of Grid-Based and Watershed-Based Continental-Scale River Routing Schemes,” University of Texas at Austin. Current employment, Senior Hydrologist, GEI Consultants

Aaron A. Berg, M. S., 2001; Ph. D., 2003. M. S. thesis title, “The Sensitivity of Land Surface Model Simulations to Bias Correction of the European Centre for Medium-Range Weather Forecasts Reanalysis,” University of Texas at Austin. Ph. D. dissertation title, “Modeling and Analysis of Regional and Global Soil Moisture Variations,” University of California, Irvine. Current employment, Professor, University of Guelph, Department of Geography.

Marcia L. Branstetter, Ph.D., 2001. Dissertation title, "Development of a Parallel River Transport Model and Applications to Climate Studies," University of Texas at Austin. Current employment, research scientist, Oak Ridge National Laboratory, Computer Science and Mathematics Division, Climate Dynamics Group, Retired

Stephanie L. Castle, M.S.U.R.P/M. S. C. E., 2013, thesis title: Quantifying water storage changes in the Colorado River Basin using satellite observations, modeled results and in situ data, Current employment, Senior Professional, Geosyntec Consultants, Tustin, CA

Hrishi A. Chandanpurkar, Ph. D., 2016, Global continental discharge and its effects on ocean and climate, Current employment, Consultant, World Bank Group

Johanna Devereaux, M.S., 1998. Thesis title, "A Study of Soil Moisture Variability Within Remote Sensing Footprints," University of Texas at Austin. Current employment, Technical Writer, National Instruments

David Ferris, Ph.D. candidate, University of Saskatchewan, dissertation topic, prairie groundwater sustainability

Aimee Gibbons, Ph. D., 2016, dissertation title, Assessing characterization of large-scale groundwater quality with remote sensing. Current employment, Sr. Technical Professional, NASA Goddard Space Flight Center

Wendy Gordon, Ph. D., 2003, co-supervised with Prof. Norma Fowler. Dissertation title, "Climate change, hydrology, and ecological models: intercomparison and validation," University of Texas at Austin. Current employment, Ecologist, Texas Commission on Environmental Quality

Gopi Goteti, Ph. D., 2008, dissertation title, Methods for incorporating surface water routing in land surface models, University of California, Irvine. Current employment, Flood Modeler, Risk Management Solutions, San Francisco, CA

Stephen Graham, Ph.D., 2000. Dissertation title, "The Role of Continental Surface Waters in Land-Atmosphere and Land-Ocean Interaction," University of Texas at Austin. Current employment, Research associate, Dept. of Geography, University of Minnesota, Duluth

Michael Harren, M.A., 1996, co-supervised with Prof. Phil Bennett. Thesis title, "Source and Distribution of Hydrocarbons in the Gaines Creek Watershed, Austin, TX," University of Texas at Austin.

Sally Holl, M.S., 2004. Thesis title, "The Sensitivity of Land Surface Model Simulations to Bias Reduction of ERA-15 Radiation Forcing," University of Texas at Austin. Current employment, USGS, Austin, TX

John Horn, M.A. , 2013

Collin B. Lawrence, Ph. D., 2014, Dissertation title, Glaciers and freshwater resources in a changing climate, Current employment, USGS, Reston, VA

Huidong Liu, Ph. D., 2013, Dissertation title, Lakes in land surface models: Simulation and validation using satellite measurements, current employment, FM Global Insurance, Boston, MA

Zhao Liu, Ph. D., 2014, Dissertation title, An Explicit Representation of River Networks in a Continental-Scale Catchment-based Land Surface Model Framework, Current employment, FM Global Insurance, Boston, MA

Min-Hui Lo, Ph.D., 2010, dissertation title, 'The Role of Groundwater in Hydrological Processes and Memory, University of California, Irvine. Current employment, Assistant Professor, Department of Atmospheric Science, National Taiwan University

Eric McWilliams (M. A., 2013)

- Michelle E. Miro (Ph. D., 2017), Dissertation title, Science-based approaches to water resources management: Studies in remote sensing, groundwater and California's Central Valley, University of California, Los Angeles, Department of Civil and Environmental Engineering. Current Employment, Research Scientist, RAND Corporation, Santa Monica, CA
- Karen I. Mohr, Ph.D., 2000. Dissertation title, "The Role of Surface-Atmosphere Interaction in the Development of Mesoscale Convective Systems," University of Texas at Austin. Current employment, Research Scientist, Mesoscale Atmospheric Processes Branch, NASA Goddard Space Flight Center
- Mary Lear, M. S., 2000, co-supervised with Prof. David Maidment. Thesis title, "Scaling River Network Extraction from High to Low Resolution Global Digital Elevation Models," University of Texas at Austin. Current employment, Water Resources Engineer, Pentec Environmental, Seattle, WA
- Jamiat Nanteza, Ph. D., 2016, Dissertation title, Earth observation and land surface model applications for improved groundwater resources monitoring over East Africa, Current employment, Lecturer, Dept.of Geography, Makerere University, Kampala, Uganda
- Karli Ouellette (Ph. D., 2013), Dissertation title, Hydrologic applications of GPS site-position observations in the Western U.S.
- Adam J. (AJ) Purdy (Ph.D. 2018), dissertation research, high resolution evapotranspiration modeling using SMAP satellite observations of soil moisture
- Matthew Rodell, Ph.D., 2000. Dissertation title, "Estimating Continental Water Storage Using Satellite Observations of Time-Variable Gravity," University of Texas at Austin. Current employment, Deputy Director of Earth Sciences for Hydrosphere, Biosphere and Geophysics, NASA Goddard Space Flight Center, Greenbelt, MD.
- John T. (JT) Reager II, Ph. D., 2012, Dissertation title, Terrestrial water storage across scales: Applications of the GRACE satellite mission for global hydrology, Current employment, Research Scientist, NASA Jet Propulsion Laboratory, Caltech, Pasadena, CA
- A. Sasha Richey, M. S., 2012 (Civil and Environmental Engineering), Thesis title, "Quantifying Groundwater Stress with Total Water Volumes and GRACE." (Ph. D., 2014), dissertation title, A GRACE-based characterization of global groundwater stress (Dept. of Civil and Environmental Engineering), Current employment, Assistant Professor, Washington State University
- James Rudnicki, M.A., 1996. Thesis title, "Process Controls on Hillslope-Scale Soil Moisture Variability: Rattlesnake Hill, TX," University of Texas at Austin. Current employment, Bush and Motes, law firm, Arlington, Texas.
- Dongryeol Ryu, Ph.D., 2006, Dissertation title, "Footprint-Scale Soil Moisture Spatial Temporal Variability and Implications for Satellite Validation." Current employment, Professor, University of Melbourne, Australia
- Kurt Solander, Ph. D., 2016, Dissertation title, Numerical modeling and remote sensing of global water management systems: Applications for land surface modeling, satellite missions, and sustainable water resources management, Current employment, Postdoctoral Researcher, Los Alamos National Laboratory
- Tajdarul Hassan Syed, Ph. D., 2007, Dissertation title, "Remote Sensing of Terrestrial Water Storage: Implications for Continental Freshwater Discharge Estimation." Current employment, Associate Professor, Indian Institute of Technology Kanpur

Alys Thomas, Ph.D., 2014, Dissertation title, Utilizing G.R.A.C.E. Satellite Data for Hydrologic Drought Research, Current employment, Dept. of Homeland Security

Former undergraduate advisees

Ilham Ali, B. S., University of Alabaman, September 2018-May 2019.

Karen An, January 2012-June 2013, urban domestic water use; GRACE and groundwater stress

David Blum, UCSB, June 2011-Dec. 2011, Continental hydrogeology

Rachel Druffel-Rodriguez, Loyola-Marymount University, Summer, 2011, Estimating global groundwater storage

Aimee Gibbons, Chemistry major, Winter-Spring 2011, Terrestrial water storage changes in China

Avery McEvoy (B.S., USC, 2017), JPL Summer Intern, research topic, a satellite-based analysis of recovery from the 2011-2015 California drought

Royce Rivera, Earth and Environmental Science major, Summer-Fall, 2010, Terrestrial water storage changes in Australia

Robin Sehler (CSULA, expected degree, 2018), JPL Year-Round Intern, research topic, SMAP investigation of rainfall-runoff relationships

Katalyn A. Voss, Georgetown University, Research Specialist, Summer, 2010 and B. S. Thesis, Fall 2010-Spring, 2011, Groundwater depletion in Turkey and the Middle East

Stephanie Ho (B.S. Hon., 2009), Thesis title, "Total Water Storage Change Over the San Joaquin and Sacramento River Basins: Comparing GRACE and Observational Data "

Former NSF REU advisees

Amabella Lambinico, REU, summer 2012, contribution of groundwater depletion to global mean sea level rise

James Bethune, Summer, 2009, Carleton College, Groundwater depletion in California's Central Valley

Katalyn A. Voss, Summer, 2009, Georgetown University, A global index of groundwater scarcity

Karli Anderson, Summer, 2007, University of Minnesota, Terrestrial water storage changes in California and the western United States

Brain Kiel, Summer, 2006, Ohio State University, Basin-scale trends in terrestrial water storage

Lindsay McKenna, Summer, 2006, Brown University, Mass changes in Earth's global water reservoirs

Former Postdoctoral and Research Scientist advisees

Ray Anderson (Ph. D., University of California, Irvine, 2010) Research topic: Remote sensing of evapotranspiration, Current Employment, Research Scientist, USDA Agricultural Research Service, U.S. Salinity Laboratory, Riverside, CA

Neeta Bijoor, (Ph. D., University of California, Irvine, 2011) Research topic: Residential irrigation and landscape water balance. Current employment, Santa Clara Valley Water District, Water Conservation Specialist

Kerstin Bluhm (Ph.D., 2016, RWTH Aachen University), Research topic: Valuing water global assessment. Current employment, Global Institute for Water Security

Caroline de Linage (Ph. D., Universite de Strassbourg, 2008) Research topic: Gravity variations and hydrology

Frédéric Frappart (Ph.D., University Paul Sabatier, 2006) Research topic: remote sensing of terrestrial and global hydrology, surface water remote sensing using altimetry. Current employment, Research Scientist, French National Institute for Food, Agriculture and Environment

Wenje Hwu (Ph. D., Arizona, 1998): January, 1998-September, 1999. Research topic: Role of soil moisture variability in land-atmosphere interaction using SGP97 remotely-sensed observations and the MM5 Mesoscale Meteorological Model.

Byunghyun Kim (Ph. D., Seoul National University, 2010) September, 2011-August, 2014, Research topic: High-resolution hydrodynamic modeling of floodplain inundation

Hyungjun Kim (Ph. D., University of Tokyo, 2010) September, 2010– April 2012, Research topic: Land surface modeling Current employment, Research Professor, Korea Advanced Institute of Science and Technology

Pang-Wei Liu (Ph.D., University of Florida, 2014) July 2017-June 2018, Research topic: Hyper-resolution land surface modeling and data integration. Current employment, Research Scientist, NASA Goddard Space Flight Center

Min-Hui Lo, (Ph. D., University of California, Irvine, 2010), June 2010-March 2012, Research topic: Land Subsurface-Atmosphere Interactions. Current employment, Professor, Department of Atmospheric Science, National Taiwan University

Chinchu Mohan (Ph.D., 2020, University of Melbourne) Research topic: Water and biodiversity in a planetary boundary framework (co-supervised with Tom Gleeson, University of Victoria), Current employment, Senior Research Scientist, Waterplan

Catalina Oaida (Ph. D., UCLA, 2014) March 2016-February 2018. Research topic: Data assimilation of Snow Water Equivalent in a land surface model. Current employment, Research Scientist, NASA Applied Earth Scientist

Corinna Prietzsch (Ph. D., Potsdam, 1998): July, 1998 – July, 1999. Research topic: Characterization of spatial-temporal variability in remotely-sensed soil moisture images from SGP97, SAR Training Manager, Airbus Defence and Space

John T. (JT) Reager II (Ph.D., University of California, Irvine, 2012) Research topic: Land surface modeling and global water cycle dynamics, Current employment, Research Scientist, NASA Jet Propulsion Laboratory, California Institute of Technology

Sara Sadri (Ph.D., 2010, University of Waterloo), Research topic: Soil moisture remote sensing, drought, irrigation management using remote sensing. Current employment, Senior Scientist, United Nations University-Flores

Dimitrios Stampoulis (Ph.D., University of Connecticut, 2014) March 2016-February 2018. Research topic: Data assimilation of GRACE and groundwater in a land surface model. Modeling soil moisture dynamics in large-scale hydrological models. Current employment, Senior Research Scientist, Southwestern Research Institute.

Tajdarul Hassan Syed (Ph. D., U.C. Irvine, 2007) Research topic: GRACE-based estimates of continental freshwater discharge and the contribution of terrestrial water storage variations to sea level rise. Current employment, Associate Professor, Indian Institute of Technology Kanpur

Brian F. Thomas. (Ph. D., Tufts University, 2012) Research topic: Surface water-groundwater interactions, Storage-discharge-baseflow relationships. Current employment, University College London

Li Xu (Ph. D., 2015, Curtin University) Research topic: Socio-hydrology, climate migration, data mining. Current employment, Senior Scientist, Dept. of Planning and Environment, New South Wales, Australia

Pat J-F. Yeh (Ph.D., MIT, 2002) Research topic: terrestrial water storage variations, groundwater remote sensing. Current employment, Associate Professor, Monash University Malaysia

Jefferson Wong (Ph.D., 2016, University of Bristol) Research topic: Continental-scale land surface modeling in Canada. Current employment, Research Scientist, Luxembourg Institute of Science and Technology

Former staff supervision

Phani Adapa, GIWS, Assistant Director and Director of Research, July 2018-December 2022

Alan Barr, GIWS, Research Scientist

Callie M. Brazil, UCCHM Communications and Outreach Coordinator, April 2013-June 30, 2014

Stephanie L. Castle, UCCHM Data Specialist, July 2009-September 2011, UCCHM Junior Specialist, July 2013-August 2014

Cedric H. David, UCCHM Project Scientist and JPL Research Scientist, July 1, 2012 –June 30, 2018

Rachel Druffel-Rodriguez, UCCHM Junior Specialist, July 2012-June 2013

Jake Edman, UCCHM, Junior Specialist, July 2011-June 2012

Mark Ferguson, GIWS, Director of Communications, July 2018-December 2022

Kayla Garvey, GIWS, Post-master's researcher, November 2020-December 2021

Cal Hamm, GIWS, Director of Finance, July 2021-December 2022

Stephanie Ho, UCCHM, Junior Specialist, April 2011-August 2011

Karan Kaushik, UCCHM, Technical Assistant, April 2011-December 2011

Hyungtae Kim, UCCHM Junior Specialist, July 2012-August 2014

Michelle Martel-Andre, GIWS, Executive Officer, July 2018-December 2022

Kelly McShane, GIWS, Director of Finance, July 2018-June 2021

Roxanne Murillo, UCCHM Outreach and Communications Intern, July 2012-November 2012

John T. (JT) Reager II, JPL Research Scientist, July 2014-June 2018

Palash Sanyal, GIWS, Strategic Partnership and Project Manager, July 2019-December 2022

Garth van der Kamp, GIWS, Research Scientist, July 2018-December 2022

Katalyn A. Voss, UCCHM Water Policy Fellow, July 2010-June 2014

Jennifer Wilkens, UCCHM Office Manager, July 2010-June 2014

Former Sabbatical and other Visitors

Prof. Hyungjun Kim, 2015-2018, JPL Water Initiative periodic visitor, University of Tokyo, Institute of Industrial Science

Dr. Annette Eicker (March-September, 2015), JPL Water Initiative Visitor, University of Bonn, Institute of Geodesy and Geoinformation

Prof. Kang-Kun Lee, 2009-2010, UCCHM Sabbatical Visitor, Seoul National University