

Amir AghaKouchak, PhD, PE

Amir AghaKouchak
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Current Position

Professor, University of California, Irvine

Professional Licensure

Professional Licensed Civil Engineer in the State of California (License Number: 78586).

Education

PhD, Civil and Environmental Engineering, University of Stuttgart, Germany, 2010

Dissertation: Simulation of remotely sensed rainfall fields using copulas

MSc, Civil Engineering - Water Resources, K.N.Toosi University of Technology, Tehran, Iran, 2005

BSc, Civil Engineering (Major: Water Resources), K.N.Toosi University of Technology, Tehran, Iran, 2003

Academic Experience

Professor, University of California, Irvine, Irvine, CA, 2019 - present.

Associate Professor, University of California, Irvine, Irvine, CA, 2016 - 2019.

Assistant Professor, University of California, Irvine, Irvine, CA, Jul. 2011 - Jun. 2016.

Postdoctoral Associate, University of California, Irvine, Irvine, CA, Mar. 2010 - Jun. 2011.

Visiting Scholar, University of Louisiana at Lafayette, Lafayette, LA, Dec. 2007 - Oct. 2009.

Graduate Student, University of Stuttgart, Stuttgart, Germany, Oct. 2005 - Feb. 2010.

Honors & Awards

AGU's James B. Macelwane Medal, 2019

Fellow, American Geophysical Union (AGU), 2019

International Union of Geodesy and Geophysics (IUGG) Early Career Scientist Award, 2019

AGU Hydrologic Sciences Early Career Award, 2017

IAHS/STAHY Best Paper Award" for 2017 (Cheng, L., AghaKouchak, A. Nonstationary precipitation intensity-duration-frequency curves for infrastructure design in a changing climate (2014) Scientific Reports, 4, art. no. 7093).

Outstanding ASCE Faculty Advisor, 2016

Editors' Citation for Excellence in Refereeing for Geophysical Research Letters, 2016

Orange County Engineering Council (OCEC) Distinguished Educator Award, 2016

ASCE Outstanding Reviewer, 2016

United States Frontiers of Engineering (FOE), National Academy of Engineering (NAE) of the National Academies, 2014, (*"The FOE program brings together a select group of emerging engineering leaders from industry, academe, and government labs to discuss pioneering technical work and leading edge research in various engineering fields and industry sectors"*).

Early Career Innovation in Teaching Award (2014-15).

Hellman Fellowship Award (2013-14).

Frontiers of Engineering Education (FOEE) Award, National Academy of Engineering (NAE) of the National Academies. 2012, (*"The FOEE program brings together some of the nation's most engaged and innovative engineering educators in order to recognize, reward, and promote effective, substantive, and inspirational engineering education through a sustained dialogue within the emerging generation of innovative faculty"*).

World Climate Research Programme (WCRP) award to support participation and oral presentation in the WCRP Workshop on Drought Predictability and Prediction in a Changing Climate, March 2-4, 2011, Barcelona, Spain.

National Oceanic and Atmospheric Administration (NOAA) Educational Partnership Program Award, 2009.

Selected Grants & Projects

Total funding: **PI: \$3,725,049**; Co-PI/Co-I: \$22,018,698

23. Title: Indicators for the Detection and Attribution of Concurrent and Compound Extremes in CMIP6 Climate Model Simulations
Agency: **NOAA**; Dates: 9/1/19-8/31/21
Funding: \$200,000; PI: **Amir AghaKouchak**
22. Title: Frameworks: Collaborative Proposal: Software Infrastructure for Transformative Urban Sustainability Research
Agency: **NSF**; Dates: 9/1/19-8/31/23
Funding: \$252,000; PI: **Amir AghaKouchak**

21. Title: A Multi-Hazard Investigation of Climate Vulnerability of the Natural Gas Energy System in Southern California
Agency: **California Energy Commission (CEC)**; Dates: 01/1/17-12/31/19
Funding: \$900,000; PI: **Amir AghaKouchak**, Co-Investigators: Kuolin Hsu, Jack Brouwer (\$300K Subcontract to UCLA)
20. Title: Advancing Drought Onset Detection and Seasonal Prediction Using a Composite of NASA Models and Satellite Data
Agency: **NASA**; Dates: 12/1/14-11/30/18
Funding: \$1,172,549; PI: **Amir AghaKouchak**; Co-Is: S Sorooshian, K Hsu
19. Title: Collaborative Research: Resilience of Geotechnical Infrastructure under a Changing Climate: Quantitative Assessment for Extreme Events
Agency: **NSF-Engineering for Natural Hazards (ENH)**; Dates: 9/1/16-8/31/19
UCI Funding: \$240,000; UCI PI: **Amir AghaKouchak**, (Collaborating with PI Vahedifard, Mississippi State University).
18. Title: INFEWS: Monitoring and managing food, energy, and water systems under stress: The California crucible
Agency: **NSF - Innovations at the Nexus of Food, Energy and Water Systems**; Dates: 09/1/16-8/31/21
Funding: \$2,887,140; PI: Steven Davis; Co-PIs: **Amir AghaKouchak**, Jack Brouwer, Jennifer Burney, Frances Moore
17. Title: Weather Augmented Risk Determination System (WARDS)
Agency: **NSF - Innovation Corps (I-Corps)**; Dates: 7/1/17-12/31/18
Funding: \$50,000; PI: **Amir AghaKouchak**
16. Title: Improving Hydrologic and Energy Demand Forecasts for Hydropower Operations with Climate Change
Agency: **California Energy Commission (CEC)**; Dates: 04/1/16-3/30/20
Funding: \$720,000; PI: Soroosh Sorooshian, Co-Investigators: Kuolin Hsu, **Amir AghaKouchak**.
15. Title: Improving hydrologic and energy demand forecasts for hydropower operations with climate change
Agency: **Department of Energy**; Dates: 10/1/15-9/30/20
Funding: \$7,893,386; PI: Soroosh Sorooshian, Co-Investigators: Scott Samuelson, Kuolin Hsu, Jack Brouwer, Tiantian Yang, **Amir AghaKouchak**.
14. Title: Codevelopment of Modeling Tools to Manage Sediment for Sustainable and Resilient Coastal Lowland Habitat in Southern California
Agency: **NOAA**; Dates: 01/1/17-12/31/20
Funding: \$1,150,000; PI: Brett Sanders; Investigators: **Amir AghaKouchak**, Richard Matthew, Eric Stein
13. Title: A Nested Multi-Scale Hydrological Modeling Framework: Assessing Resilience and Vulnerability to Climate Change

- Agency: **NSF-Hydrological Sciences**; Dates: 9/1/13-8/31/16
Funding: \$225,000; PI: **Amir AghaKouchak**
12. Title: Advancing Drought Monitoring and Prediction Using a Multi-Index Multivariate Framework
Agency: **NOAA**; Dates: 9/1/14-8/31/17
Funding: \$440,000 (UCI's share: \$247,000); Lead PI: **Amir AghaKouchak**; Co-PIs: Andy Wood, Mark Svoboda
 11. Title: Drought Emergency Seasonal Forecasting via Conditional Analog Year
Agency: **CA Dept. of Water Resources**; Dates: 10/1/14-5/31/15
Funding: \$134,599; PI: **Amir AghaKouchak**
 10. Title: Frameworks for Analysis of Regional, Concurrent, Conditional and Non-Stationary Extremes in Geosciences
Agency: **ARL**; Dates: 12/1/14-8/31/15
Funding: \$50,000; PI: **Amir AghaKouchak**
 9. Title: Drought Monitoring Using NASA Atmospheric Infrared Sounder (AIRS) Data
Agency: **NASA**; Dates: 10/1/14-9/30/15
Funding: \$54,000; PI: **Amir AghaKouchak**
 8. Title: Global Integrated Drought Monitoring and Prediction System
Agency: **NSF - Innovation Corps (I-Corps)**; Dates: 10/1/13-9/30/14
Funding: \$50,000; PI: **Amir AghaKouchak**
 7. Title: Building a Climate Change Resilient Electricity System for Meeting California's Energy and Environmental Goals
Agency: **California Energy Commission (CEC)**; Dates: 07/1/15-6/30/18
Funding: \$698,792; PI: Scott Samuelsen; Co-Investigators: **Amir AghaKouchak**, Brian Tarroja, David Feldman, Brendan P. Shaffer, Kaveh Madani
 6. Title: Hazards SEES Type 2: Preventing Flood Hazards from Becoming Disasters through Two-Way Communication of Parcel-Level Flood Risk
Agency: **NSF**; Dates: 09/1/14-8/31/17
Funding: \$2,819,380; PI: Brett Sanders; Investigators: **Amir AghaKouchak**, Victoria Basolo, John Houston, Richard Matthew, James Famiglietti
 5. Title: Low Energy Options for Making Water from Wastewater
Agency: **NSF**; Dates: 10/1/12-9/30/17
Funding: \$4,900,000; PI: Stanley Grant; Investigators: **Amir AghaKouchak**, R Ambrose, P Bowler, B Cooper, R Detwiler, S Elghobashi, D Feldman, S Jiang, R Lejano, L Levin, M McBride, M Prather, J.D. Saphores, D Rosso, B Sanders, A Sengupta, E Stein, M Sutula, W Tang, K Treseder, J Vrugt, R Brown, P Cook, A Deletic, T Fletcher, A Hamilton, I Marusic, D McCarthy, M Stewardson, A Western

4. Title: Analysis of Weather and Climate Extremes Using AIRS Satellite Data
Agency: **NASA**; Dates: 5/1/13-4/30/14
Funding: \$53,901; PI: **Amir AghaKouchak**
3. Title: Quantifying Climate Projections Uncertainty Using a Non-Gaussian Model and an Adaptive Weighting Ensemble Algorithm: Application to Water Resources Management
Agency: **USBR**; Dates: 9/1/11-8/31/13
Funding: \$200,000; PI: **Amir AghaKouchak**; Co-PI: Jialun Li
2. Title: Improving near real-time high-resolution satellite-derived precipitation estimation for hydrologic modeling and decision-making applications
Agency: **ARL**; Dates: 10/1/11-9/30/13
Funding: \$670,000; PI: Soroosh Sorooshian; Co-PIs: **Amir AghaKouchak**, Kuolin Hsu, Xiaogang Gao
1. Title: Impacts of Global Climate Change (GCC) on the Water Resources of Morocco
Agency: **World Bank**; Dates: 8/1/11-12/31/12
Funding: \$240,000; PI: Soroosh Sorooshian; Co-PIs: **Amir AghaKouchak**, Jialun Li

Editorial

Editor, *Earth's Future* (American Geophysical Union, AGU), 2016-present.

Editorial Board Member, *Scientific Reports* (Nature Publishing Group), 2015-present.

Editorial Board Member, *Scientific Data* (Nature Publishing Group), 2014-present.

Associate Editor, *Journal of Hydrology* (ASCE), 2016-2019.

Associate Editor, *Journal of Hydrologic Engineering* (ASCE), 2016-present.

Patent

Weather Augmented Risk Determination System (WARDS), United States Pending Patent (Application Number US15806143), Niknejad M, Mazdiyasni O., Momtaz F, **AghaKouchak A.**, 2017.

Selected as a 2017 National Science Foundation (NSF) Innovation Corps (I-Corps).

Publications

Journal Publications (Students & Postdocs Underlined>

151. Pendergrass A.G., Meehl G.A., Pulwarty R., Hobbins M, Hoell A., **AghaKouchak A.**, Bonfils C.J.W., A.J.E., Hoerling M., Hoffmann D., Kaatz L., Lehner F, Llewellyn D., Mote P, Neale R., Overpeck J.T., Sheffield A., Stahl K., Svoboda M, Wheeler M.C., Wood A.W.,

- Woodhouse C.A., 2020, Flash Droughts Present a New Challenge for Subseasonal-to-Seasonal Prediction, *Nature Climate Change*, in press.
150. Azarderakhsh M., Prakash S., Zhao Y., **AghaKouchak A.**, 2020, Satellite-Based Analysis of Extreme Land Surface Temperatures and Diurnal Variability Across the Hottest Place on Earth, *IEEE Geoscience and Remote Sensing Letters*, doi: 10.1109/LGRS.2019.2962055.
 149. Sun Q., Miao C., **AghaKouchak A.**, Mallakpour I., Ji D., Duan Q., 2020, Possible Increased frequency of ENSO-related dry and wet conditions over some major watersheds in a warming climate, *Bulletin of the American Meteorological Society*, doi: 10.1175/BAMS-D-18-0258.1.
 148. You Q., Wu T., Shen L., Pepin N., Zhang L., Jiang Z., Wu Z., Kang S., **AghaKouchak A.**, 2020, Review of Snow Cover Variation over the Tibetan Plateau and its Influence on the Broad Climate System, *Earth-Science Reviews*, 201, 103043, doi: 10.1016/j.earscirev.2019.103043.
 147. Sanders B.F., Schubert J.E., Goodrich K., Houston D., Feldman D.L., Basolo V., Luke A., Boudreau D., Karlin B., Cheung W., Contreras S., Reyes A., Eguiarte A., Serrano K., Allaire M., Moftakhari M., **AghaKouchak A.**, Matthew, R.A., 2020, Collaborative Modeling with Fine Resolution Data Enhances Flood Awareness, Minimizes Differences in Flood Perception, and Produces Actionable Flood Maps, *Earth's Future*, 7, e2019EF001391, doi: 10.1029/2019EF001391.
 146. Mazdiyasni O., **AghaKouchak A.**, 2020, Natural Disasters Are Prejudiced Against Disadvantaged and Vulnerable Populations: The Lack of Publicly Available Health-Related Data Hinders Research at the Cusp of the Global Climate Crisis, *GeoHealth*, 4 (1), e2019GH000219, doi: 10.1029/2019GH000219.
 145. Shojaeezadeh S.A., Nikoo M.R., Mirchi A., Mallakpour I., **AghaKouchak A.**, Sadegh, M., 2020, Probabilistic hazard assessment of contaminated sediment in rivers, *Science of The Total Environment*, 703, 134875, doi: 10.1016/j.scitotenv.2019.134875.
 144. Ragno E., **AghaKouchak A.**, Cheng L., Sadegh, M., 2019, A Generalized Framework for Process-informed Nonstationary Extreme Value Analysis, *Advances in Water Resources*, 130, 270-282, doi: 10.1016/j.advwatres.2019.06.007.
 143. Feng Q., Yang L., Deo R.C., **AghaKouchak A.**, Adamowski J.F., Stone R., Yin Z., Liu W., Si J., Wen X., Zhu M., Cao S., 2019, Domino Effect of Climate Change over Two Millennia in Ancient China's Hexi Corridor, *Nature Sustainability*, 2(10), 957-961, doi: 10.1038/s41893-019-0397-9.
 142. Mazdiyasni O., Chiang F., Sadegh M., **AghaKouchak A.**, 2019, Heat wave Intensity Duration Frequency Curve: A Multivariate Approach for Hazard and Attribution Analysis, *Scientific Reports*, 9, 14117, doi: 10.1038/s41598-019-50643-w

141. Zhang B., Xia Y., Huning L.S., Wei J., Wang G., **AghaKouchak A.**, 2019, A Framework for Global Multicategory and Multiscalar Drought Characterization Accounting for Snow Processes, *Water Resources Research*, 55 (11), 9258-9278, doi: 10.1029/2019WR025529.
140. Pan B., Hsu K., **AghaKouchak A.**, Sorooshian S., 2019, Improving Precipitation Estimation Using Convolutional Neural Network, *Water Resources Research*, 55, 2301-2321, doi: 10.1029/2018WR024090.
139. Moftakhari H.M., **AghaKouchak A.**, 2019, Increasing Exposure of Energy Infrastructure to Compound Hazards: Cascading Wildfires and Extreme Rainfall, *Environmental Research Letters*, 14 (10), 104018, doi: 10.1088/1748-9326/ab41a6.
138. Qin Y., Mueller N.D., Siebert S., Jackson R.B., **AghaKouchak A.**, Zimmerman J.B., Tong D., Hong C. Davis S.J., 2019, Flexibility and intensity of global water use, *Nature Sustainability*, 2, 515-523, doi: 10.1038/s41893-019-0294-2.
137. Mallakpour I., Sadegh M., **AghaKouchak A.**, 2019, Climate-Induced Changes in the Risk of Hydrological Failure of Major Dams in California, *Geophysical Research Letters*, 46 (4), 2130-2139, doi: 10.1029/2018GL081888.
136. Moftakhari H.M., Schubert J.E., **AghaKouchak A.**, Matthew, R.A., Sanders, B.F., 2019, Linking Statistical and Hydrodynamic Modeling for Compound Flood Hazard Assessment in Tidal Channels and Estuaries, *Advances in Water Resources*, 128, 28-38, doi: 10.1016/j.advwatres.2019.04.009.
135. Mamalakis A., Yu J.-Y., Randerson J.T., **AghaKouchak A.**, Foufoula-Georgiou E., 2019, Reply to A critical examination of a newly proposed interhemispheric teleconnection to Southwestern US winter precipitation, *Nature Communications*, 10, 2918, doi: 10.1038/s41467-019-10528-y.
134. Ashraf B., **AghaKouchak A.**, Nazemi, A., Mirchi, A., Sadegh, M., Moftakhari, H.R., Hasanzadeh E., Miao C.-Y., Madani K., Mousavi Baygi M., Anjileli H., Arab D.R., Norouzi H., Mazdiasni O., Azarderakhsh M., 2019, Compounding Effects of Human Activities and Climatic Changes on Surface Water Availability in Iran, *Climatic change*, 152(3-4), 379-391, doi: 10.1007/s10584-018-2336-6.
133. Tabari H., Hosseinzadehtalaei P., **AghaKouchak A.**, Willems P., 2019, Latitudinal Heterogeneity and Hotspots of Uncertainty in Projected Extreme Precipitation, *Environmental Research Letters*, 14 (12), 124032, doi: 10.1088/1748-9326/ab55fd.
132. Anjileli H., Moftakhari H.R., Mazdiasni O., Norouzi H., Ashraf S., Farahmand A., Bowler P., Azarderakhsh M., Huxman T.E., **AghaKouchak A.**, 2019, Analyzing High-Frequency Soil Respiration Using a Probabilistic Model in a Semiarid, Mediterranean Climate, *Journal of Geophysical Research: Biogeosciences*, 124, 509-520, doi: 10.1029/2018JG004640.

131. Khazaei B., Khatami S., Alemohammad S. H., Rashidi L., Wu C., Madani K., Kalantari Z., Destouni G., **AghaKouchak A.**, 2019, Climatic or Regionally Induced by Humans? Tracing Hydro-Climatic and Land-Use Changes to Better Understand the Lake Urmia Tragedy, *Journal of Hydrology*, 569, 203-217, doi: 10.1016/j.jhydrol.2018.12.004.
130. Tarroja B., Forrest K., Chiang F., **AghaKouchak A.**, Samuelson S., 2019, Implications of Hydropower Variability from Climate Change for a Future, Highly-Renewable Electric Grid in California, *Applied Energy*, 237, 353-366, doi: 10.1016/j.apenergy.2018.12.079.
129. Fowler M., Rad A.M., Utych S., Adams A., Alamian S., Pierce J., Dennison P., Abatzoglou J.T., **AghaKouchak A.**, Montrose L., Sadegh M., 2019, A dataset on Human Perception of and Response to Wildfire Smoke, *Scientific data*, 6(1), 1-10, doi: 10.1038/s41597-019-0251-y.
128. Pan B., Hsu K., **AghaKouchak A.**, Sorooshian S., Higgins W., 2019, Precipitation Prediction Skill for the West Coast United States: From Short to Extended Range, *Journal of Climate*, 32 (1), 161-182, doi: 10.1175/JCLI-D-18-0355.1.
127. Zhang B., **AghaKouchak A.**, Yang Y., Wei J., Wang G., 2019, A Water-Energy Balance Approach for Multi-Category Drought Assessment across Globally Diverse Hydrological Basins, *Agricultural and Forest Meteorology*, 264, 247-265, doi: 10.1016/j.agrformet.2018.10.010.
126. Song X., Zhang J., Zou X., Zhang C. **AghaKouchak A.**, Kong F., 2019, Changes in precipitation extremes in the Beijing metropolitan area during 1960-2012, *Atmospheric Research*, 222, 134-153, doi: 10.1016/j.atmosres.2019.02.006.
125. **AghaKouchak A.**, Huning L., Chiang F., Sadegh M., Vahedifard F., Mazdiyasn O., Moftakhari H., Mallakpour I., 2018, How do Natural Hazards Cascade to Cause Disasters?, *Nature*, 561, 458-460, doi: 10.1038/d41586-018-06783-6.
124. Huning L., **AghaKouchak A.**, 2018, Mountain Snowpack Response to Different Levels of Warming, *Proceedings of the National Academy of Sciences*, 115 (43) 10932-10937, doi: 10.1073/pnas.1805953115.
123. Papalexiou S., Markonis Y., Lombardo F., **AghaKouchak A.**, Foufoula-Georgiou, E., 2018, Precise temporal Disaggregation Preserving Marginals and Correlations (DiPMaC) for stationary and non-stationary processes, *Water Resources Research*, 54, 7435-7458, doi: 10.1029/2018WR022726.
122. Liu L., Peng S., **AghaKouchak A.**, Huang Y., Li Y., Qin D., Xie A., Li S., 2018, Broad Consistency Between Satellite and Vegetation Model Estimates of Net Primary Productivity Across Global and Regional Scales, *Journal of Geophysical Research-Biogeosciences*, 123 (12), 3603-3616, doi: 10.1029/2018JG004760.
121. Chiang F., Mazdiyasn O., **AghaKouchak A.**, 2018, Amplified Warming of Droughts in Southern United States in Observations and Model Simulations, *Science Advances*, 4 (8), eaat2380, doi: 10.1126/sciadv.aat2380.

120. Mallakpour I., Sadegh M., AghaKouchak A., 2018, A New Normal for Streamflow in California in a Warming Climate: Wetter Wet Seasons and Drier Dry Seasons, *Journal of Hydrology*, 567, 203-211, doi: 10.1016/j.jhydrol.2018.10.023.
119. Papalexiou S., AghaKouchak A., Fofoula-Georgiou, E., 2018, A Diagnostic Framework for Understanding Climatology of Tails of Hourly Precipitation Extremes in the United States, *Water Resources Research*, 54, 6725-6738, doi: 10.1029/2018WR022732.
118. Nguyen P., Ombadi M., Sorooshian S., Hsu K., **AghaKouchak A.**, Braithwaite D., Ashouri H., Thorstensen A., 2018, The PERSIANN Family of Global Satellite Precipitation Data: A Review and Evaluation of Products, *Hydrology and Earth System Sciences*, 22 (11), 5801-5816, doi: 10.5194/hess-22-5801-2018.
117. Mamalakis A., Yu J.-Y., Randerson J.T., **AghaKouchak A.**, Fofoula-Georgiou E., 2018, A New Interhemispheric Teleconnection Increases Predictability of Winter Precipitation in Southwestern US, *Nature Communications*, 9, 2332, doi: 10.1038/s41467-018-04722-7.
116. Zscheischler J., Westra S., van den Hurk B.J.J.M. , Seneviratne S.I., Ward P.J., Pitman A. **AghaKouchak A.**, Bresch D.N., Leonard M., Wahl T., Zhang X., 2018, Future Climate Risk from Compound Events, *Nature Climate Change*, 8 (6), 469-477, doi: 10.1038/s41558-018-0156-3.
115. Turco M., Jerez S., Doblas-Reyes F, **AghaKouchak A.**, Carmen Llasat M., Provenzale A., 2018, Skillful Forecasting of Global Fire Activity Using Seasonal Climate Predictions, *Nature Communications*, 9, 2718, doi: 10.1038/s41467-018-05250-0.
114. Moftakhari H.M., AghaKouchak A., Sanders, B.F, Allaire M., Matthew, R.A., 2018, What is Nuisance Flooding? Defining and Monitoring an Emerging Challenge, *Water Resources Research*, 54, 4218-4227, doi: 10.1029/2018WR022828.
113. Sadegh M., Moftakhari H.M., Gupta H.V, Ragno E., Mazdidasni O., Sanders, B.F, Matthew, R.A., **AghaKouchak A.**, 2018, Multi-Hazard Scenarios for Analysis of Compound Extreme Events, *Geophysical Research Letters*, 45, 5470-5480, doi: 10.1029/2018GL077317.
112. Di Baldassarre G, Wanders N, **AghaKouchak A.**, Kuil L, Rangelcroft S, Veldkamp T.I.E., Garcia M., van Oel P.R., Breinl K., and Van Loon A.F, 2018, Water Shortages Worsened by Reservoir Effects, *Nature Sustainability*, 1, 617-622, doi: 10.1038/s41893-018-0159-0.
111. Forrest K., Tarroja B., Chiang F, AghaKouchak A., Samuelsen S., 2018, Assessing Climate Change Impacts on California Hydropower Generation and Ancillary Services Provision, *Climatic Change*, 151 (3-4), 395-412, doi: 10.1007/s10584-018-2329-5.
110. Ragno E., AghaKouchak A., Love C.A., Cheng L., Vahedifard F, Lima C.H.R., 2018, Quantifying Changes in Future Intensity-Duration-Frequency Curves Using Multi-Model Ensemble Simulations, *Water Resources Research*, 54, 1751-1764, doi: 10.1002/2017WR021975.

109. Alborzi A., Mirchi A., Moftakhari H., Mallakpour I., Alian S., Nazemi A., Hassanzadeh E., Mazdiyasn O., Ashraf S., Madani K., Norouzi H., Azarderakhsh M., Mehran A., Sadegh M., Castelletti A., **AghaKouchak A.**, 2018, Climate-Informed Environmental Inflows to Revive a Drying Lake Facing Meteorological and Anthropogenic Droughts, *Environmental Research Letters*, 13 (8), 084010, doi: 10.1088/1748-9326/aad246.
108. Raei E., Nikoo M.R., **AghaKouchak A.**, Mazdiyasn O., Sadegh M., 2018, GHWR, A Multi-Method Global Heatwave and Warm-Spell Record and Toolbox, *Scientific Data*, 5, 180206, doi: 10.1038/sdata.2018.206.
107. Shojaeezadeh S.-A., Nikoo M.R., **AghaKouchak A.**, Sadegh S., 2018, Stochastic Modeling of Suspended Sediment Load in Alluvial Rivers, *Advances in Water Resources*, 119, 188-196, doi: 10.1016/j.advwatres.2018.06.006.
106. **AghaKouchak A.**, van der Pluijm B., 2018, We Can Work It Out: Avoiding Disasters, *Eos, Transactions American Geophysical Union*, 99, doi: 10.1029/2018EO105299.
105. Papalexiou S., **AghaKouchak A.**, Trenberth, K., Foufoula-Georgiou, E., 2018, Global, Regional and Megacity Trends in the Highest Temperature of the Year: Diagnostics and Evidence for Accelerating Trends, *Earth's Future*, 6, 71-79, doi: 10.1002/2017EF000709.
104. Tarroja B., Chiang F., **AghaKouchak A.**, Samuelsen S., 2018, Assessing Future Water Resource Constraints on Thermally-Based Renewable Energy Resources in California, *Applied Energy*, 226, 49-60, doi: 10.1016/j.apenergy.2018.05.105.
103. Lima C., **AghaKouchak A.**, Randerson J., 2018, Unraveling the Role of Temperature and Rainfall on Active Fires in the Brazilian Amazon Using a Nonlinear Poisson Model, *Journal of Geophysical Research-Biogeosciences*, 123 (1), 117-128, doi: 10.1002/2017JG003836.
102. Rahnamay Naeini M., Yang T., Sadegh M., **AghaKouchak A.**, Hsu K., Sorooshian S., Duan Q., Lei X., 2018, Shuffled Complex-Self Adaptive Hybrid Evolution (SC-SAHEL) Optimization Framework, *Environmental Modelling and Software*, 104, 215-235, doi: 10.1016/j.envsoft.2018.03.019.
101. Wahl T., Ward P., Winsemius H., **AghaKouchak A.**, Bender J., Haigh I., Jain S., Leonard M., Veldkamp T., Westra S., 2018, When Environmental Forces Collide, *Eos, Transactions American Geophysical Union*, 99, doi: 10.1029/2018EO099745.
100. Nguyen P., Thorstensen A., Sorooshian S., Hsu K., **AghaKouchak A.**, Ashouri H., Tran H., Braithwaite D., 2018, Global Precipitation Trends across Spatial Scales Using Satellite Observations, *Bulletin of the American Meteorological Society*, 99 (4), 689-697, doi: 10.1175/BAMS-D-17-0065.1.
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PNAS	NAS	9.504	3
Earth-Science Reviews	Elsevier	9.530	1
Applied Energy	Elsevier	7.900	3
BAMS	AMS	7.804	4
Environmental Science & Technology	ACS	6.653	1
Scientific Data	Nature	5.305	3
Energy	Elsevier	4.968	1
Journal of Climate	Springer	4.661	2
Science of the Total Environment	Elsevier	4.610	3
Earth's Future	AGU	4.594	3
Environmental Research Letters	IOP	4.541	5
Water Resources Research	AGU	4.361	12
Geophysical Research Letters	AGU	4.339	10
Hydrology and Earth System Sciences	EGU	4.256	3
Environmental Modelling and Software	Elsevier	4.177	1
Scientific Reports	Nature	4.122	8
Agricultural and Forest Meteorology	Elsevier	4.039	1

Atmospheric Research	Elsevier	3.817	2
Journal of Hydrometeorology	AMS	3.790	4
Climate Dynamics	Springer	3.774	1
Earth System Dynamics	EGU	3.769	1
Journal of Hydrology	Elsevier	3.727	9
Climatic Change	Springer	3.537	3
IEEE Geoscience and Remote Sensing Letters	Springer	3.534	1
Advances in Water Resources	Elsevier	3.512	8
Remote Sensing	MDPI	3.406	3
Journal of Geophysical Research-A., -B., -O.	AGU	3.380	11
J. Geotech. and Geoenvironmental Eng.	ASCE	3.305	2
Hydrological Processes	Wiley	3.181	2
Sustainable Cities and Society	Elsevier	3.073	1
Environment: Sci. Pol. Sus. Develop.	T&F	2.963	1
Water Resources Management	Springer	2.644	1
Canadian Geotechnical Journal	NRC	2.565	1
Natural Hazards and Earth System Sciences	EGU	2.510	2
Journal of Great Lakes Research	Elsevier	2.354	1
Theoretical and Applied Climatology	Springer	2.321	2
Weather and Forecasting	AMS	2.276	1
Physics and Chemistry of the Earth	Elsevier	1.923	1
Climate Research	IR	1.859	1
Int. Journal of Remote Sensing	T&F	1.782	1
Journal of Hydrologic Engineering	ASCE	1.576	1
Int. J. Engineering Education	T&F	0.575	1
Iranian Studies	T&F	0.430	1
Nature Sustainability	Nature		3
Stat	Wiley	-	1
Eos	GeoHealth	-	1
Eos	AGU	-	5
Total			151

Table 1: Summary of Journal Publications.

Books

3. **AghaKouchak A.**, Easterling D., Hsu K., Schubert S., Sorooshian S., Extremes in a Changing Climate, Springer Netherlands, Dordrecht, ISBN 978-94-007-4478-3.
2. **AghaKouchak A.**, 2010, Simulation of Remotely Sensed Rainfall Fields Using Copulas, University of Stuttgart, ISBN 978-3-933761-92-7.
1. **AghaKouchak A.**, Nasrollahi N., Firouz Bahadori, 2002, Engineering Hydrology: Practice Questions and Answers, Angizeh, ISBN 964-7517-03-3 (in Persian).

Book Chapters

9. Wardlow B.D., Anderson M., Hain C., Crow W., Otkin J., Tadesse T., **AghaKouchak A.** "Advancements in Satellite Remote Sensing for Drought Monitoring: Integrating Science, Management, and Policy" Book Chapter in: *Drought and Water Crises* (eds. Wilhite D. and Pulwarty R.S.), CRC Press, 2017.
8. Sadegh M., Love C., Farahmand A., Mehran A., Tourian M.J., **AghaKouchak A.** "Multi-Sensor Remote Sensing of Drought from Space." Book Chapter in: *Remote Sensing of Hydrological Extremes*, pp. 219-247. Springer International Publishing, 2017.
7. Sorooshian S., Nguyen P., Sellars S., Braithwaite D., **AghaKouchak A.**, Hsu, K., 2014, Satellite-based Remote Sensing Estimation of Precipitation for Early Warning Systems, Book Chapter in: *Extreme Natural Hazards, Disaster Risks and Societal Implications* (eds. Ismail-Zadeh A., Fucugauchi J., Kijko A., Takeuchi K., Zaliapin I.), Cambridge University Press, ISBN: 9781107033863.
6. **Amir AghaKouchak**, Zengchao Hao, Navid Nakhjiri, Lisa Damberg, 2013, Droughts, Invited Book Chapter in: *Encyclopedia of Natural Hazards*, Taylor & Francis.
5. **AghaKouchak A.**, Sorooshian S., Hsu K., Gao X., 2013, The Potential of Precipitation Remote Sensing for Water Resources Vulnerability Assessment in Arid Southwestern United States, Invited Book Chapter in: *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources - Water Encyclopedia* (eds. Hossain and Pielke), Elsevier, Academic Press, 141–149 pp., ISBN: 9780123847034.
4. **AghaKouchak A.**, Sellars S., Sorooshian S., Methods of Tail Dependence Estimation, In: *Extremes in a Changing Climate* (eds. AghaKouchak A., Easterling D., Hsu K., Schubert S. and Sorooshian S.), Springer Netherlands, Dordrecht, ISBN 978-94-007-4478-3.
3. **Amir AghaKouchak**, Kuolin Hsu, Soroosh Sorooshian, Xiaogang Gao, Bisher Imam, 2012, Precipitation Estimation from Remotely Sensed Information using the Artificial Neural Networks Algorithm: Application to Drought Monitoring and Analysis, Book Chapter in: *Remote Sensing of Drought - Innovative Monitoring Approaches* (eds. B. Wardlow, M. Anderson, J. Verdin), CRC Press, ISBN: 978-1439835579.
2. Soroosh Sorooshian, **Amir AghaKouchak**, 2011, Advancement towards a state-of-the-art hydrologic flood forecasting system, Invited Book Chapter in: *Korea Environmental Institute Book Series*, Korea Institute of Construction Technology (KICT).
1. Hengl T., **AghaKouchak A.**, Perčec Tadić M., 2010, Methods and data sources for spatial prediction of rainfall, Book Chapter in *Rainfall: State of the Science* (eds. Testik F.Y. and Gebremichael M.), American Geophysical Union, ISBN: 978-0-87590-481-8.

Technical Reports, White Papers, and Other Publications

15. Lall, U., T. Johnson, P. Colohan, **A.**, **AghaKouchak**, C. Brown, G. McCabe, R. Pulwarty, and A. Sankarasubramanian, 2018: Water. In *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 145?173. doi: 10.7930/NCA4.2018.CH3

14. Vahedifard F, **AghaKouchak A.**, 2018, The risk of cascading natural disasters is on the rise, The Conversation, October 22, 2018, View Article: <https://goo.gl/kf9Wjc>
13. AghaKouchak, Amir, Elisa Ragno, Charlotte Love, and Hamed Moftakhari. (University of California, Irvine), 2018, Projected changes in California's precipitation intensity-duration-frequency curves. California's Fourth Climate Change Assessment, California Energy Commission. Publication Number: CCCA4-CEC-2018-005.
12. Contributing author, Climate-Safe Infrastructure Working Group (CSIWG). 2018. Paying it forward: The Path Toward Climate-Safe Infrastructure in California. Executive Summary of a Report of the Climate-Safe Infrastructure Working Group to the California State Legislature and the Strategic Growth Council. Sacramento, CA: CNRA, Publication number: CNRA-CCA4-CSI-001.
11. Mirchi A., Madani K., **Amir AghaKouchak**, 2015, Lake Urmia: how Iran's most famous lake is disappearing, The Guardian, Friday 23 January 2015, View Article: <http://gu.com/p/455zb/tw>
10. Hoerling M., Schubert S., Mo K., **AghaKouchak A.**, Berbery H., Dong J., Kumar A., Lakshmi V., Leung R., Li J., Liang X., Luo L., Lyon B., Miskus D., Quan X., Seager R., Sorooshian S., Wang H., Xia Y., Zeng N., 2013, An Interpretation of the Origins of the 2012 Central Great Plains Drought, Assessment Report, NOAA Drought Task Force Narrative Team, Office of Oceanic and Atmospheric Research, Climate Program Office.
9. Kuolin Hsu, Soroosh Sorooshian, Xiaogang Gao, Dan Braithwaite, **Amir AghaKouchak**, 2012, Monitoring global precipitation using satellites, SPIE Newsroom.
8. Christa Peters-Lidard, Ana Barros, Wade Crow, Witold Krajewski, Robert Houze, Walt Petersen, **Amir AghaKouchak**, Manos Anagnostou, Eyal Amitai, Rafael Bras, Robert Cifelli, David Gochis, David C. Goodrich, Kuolin Hsu, Dennis Lettenmaier, Douglas Miller, Timothy Schneider, Marshall Shepherd, James Smith, Soroosh Sorooshian, Ali Tokay, Jingfeng Wang, Xubin Zeng, 2011, Global Precipitation Mission (GPM) Integrated Hydrologic Ground Validation Science Implementation Plan, PMM Hydrology Working Group, Goddard Space Flight Center, Greenbelt, MD.
7. NOWCAST ARTICLE: Sorooshian S., **AghaKouchak A.**, Arkin P, Eylander J., Foufoula-Georgiou E., Harmon R., Hendrickx J., Hsu K., Imam B., Kuligowski R., Skahill B., Skofronick-Jackson G., 2011, Advancing the Remote Sensing of Precipitation, *Bulletin of the American Meteorological Society - Nowcast*, 92 (10), 1271-1272 doi: 10.1175/BAMS-D-11-00116.1.
6. Wade T. Crow, Kuolin Hsu, Jingfeng Wang, **Amir AghaKouchak**, Eyal Amitai, Rafael Bras, David Gochis, David C. Goodrich, Soroosh Sorooshian, and Xubin Zeng, 2011, Potential GPM Ground Validation Activities within the Semi-Arid Walnut Gulch/Upper San Pedro River Basin, White Paper submitted to the Global Precipitation Mission (GPM) Ground Validation Program, NASA GSFC, Greenbelt, MD.
5. Sorooshian S., **AghaKouchak A.**, Hsu K., Gao X., 2011, Annual Report: Satellite Data Support for Hydrologic and Water Resource Planning and Management, University of California Irvine, submitted to the National Oceanic and Atmospheric Administration, National Environmental Satellite Data and Information Service, National Climatic Data Center.
4. Sorooshian S., **AghaKouchak A.**, Hsu K., Gao X., Imam B., 2010, Annual Report: Satellite Data Support for Hydrologic and Water Resource Planning and Management, University of California Irvine, submitted to the National Oceanic and Atmospheric Administration, National Environmental Satellite Data and Information Service, National Climatic Data Center.

3. **Amir AghaKouchak**, Soroosh Sorooshian, 2010, Workshop Report: Advanced Concepts on Remote Sensing of Precipitation at Multiple Scales, University of California Irvine, March 15-17, 2010.
2. **AghaKouchak A.**, Sorooshian S., Imam B., Hsu K., Gao X., 2010, NASA Satellites Help Monitor the Pakistan Flooding: An Application of Near-Real-Time Satellite Observations, *The Earth Observer*, 22 (6), 4-6.
1. Contributing author to the World Climate Research Program (WCRP) White Paper on Drought Predictability and Prediction in a Changing Climate: Assessing Current Predictive Knowledge and Capabilities, User Requirements and Research Priorities.

Scientific & Educational Software

6. **Multivariate Copula Analysis Toolbox (MvCAT):**
By Mojtaba Sadegh, Elisa Ragno and **Amir AghaKouchak**
URL: <http://amir.eng.uci.edu/MvCAT.php>
5. **Non-stationary Extreme Value Analysis (NEVA) Toolbox:**
By Linyin Cheng, and **Amir AghaKouchak**
URL: <http://amir.eng.uci.edu/neva.php>
4. **Standardized Drought Analysis Toolbox (SDAT):**
By Alireza Farahmand, and **Amir AghaKouchak**
URL: <http://amir.eng.uci.edu/sdat.php>
3. **Validation Toolbox:** Performance Metrics for Evaluation of Remote Sensing Observations and Climate Model Simulations
By **Amir AghaKouchak** and Ali Mehran
URL: <http://amir.eng.uci.edu/downloads/ValidationToolbox.zip>
2. **HBV-EDU:** A MATLAB Hands-on Toolbox for Teaching Hydrologic Processes
By **Amir AghaKouchak** and Emad Habib
URL: <http://amir.eng.uci.edu/education.html>
1. **HBV-Ensemble:** A MATLAB Toolbox for Ensemble Streamflow Simulation
By **Amir AghaKouchak**, Navid Nakhjiri, and Emad Habib
URL: http://amir.eng.uci.edu/downloads/HBV_Ensemble.zip

Service, Committee & Panel Assignments

National and International

Member of the Board of Directors (elected), Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI), 2018-2020.

Member, ASCE Committee on Adaptation to a Changing Climate (CACC) Subcommittee on Future Weather & Climate Extremes.

Contributing Author, Water Chapter of the Fourth National Climate Assessment Volume II (USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. U.S. Global Change Research Program, Washington, DC, USA. doi: 10.7930/NCA4.2018).

Contributing Author, California's Fourth Climate Change Assessment (AghaKouchak et al., 2018, Projected changes in California's precipitation intensity-duration-frequency curves. California's Fourth Climate Change Assessment, California Energy Commission. Publication Number: CCA4-CEC-2018-005).

Member, California Climate-Safe Infrastructure Working Group (CSIWG) - Appointed by the California Secretary of Natural Resources. Contributed to CSIWG, 2018 (Paying it forward: The Path Toward Climate-Safe Infrastructure in California. Report of the Climate-Safe Infrastructure Working Group to the California State Legislature and the Strategic Growth Council. Sacramento, CA: CNRA, Publication number: CNRA-CCA4-CSI-001)

Ad-hoc proposal reviewer for NSF, NASA, ARL, DOI, SENSE, NSERC.

Organizing Committee, The 2017 MENA Region-American Frontiers of Science, Engineering, and Medicine Symposium, US National Academy of Sciences.

Co-Chair, The 2015 United States Frontiers of Engineering, National Academy of Engineering (NAE) of the National Academies.

Secretary of Natural Hazards 2015 (elected), American Geophysical Union.

Member, Visiting International Fellow (VIF) Technical Committee, Environmental and Water Resources Institute (EWRI), American Society of Civil Engineers, 2015-present.

Horton Research Grant Committee, American Geophysical Union (AGU), 2015.

Member of the NOAA Drought Task Force (2014-2017).

Proposal Review Panel, NSF Graduate Research Fellowships Program (GRFP), 2015.

Proposal Review Panel, National Science Foundation (NSF), 2014.

Proposal Review Panel, NSF Graduate Research Fellowships Program (GRFP), 2014.

Graduate Student Award Committee, American Geophysical Union (AGU), Natural Hazards Focus Group, 2014.

Chair of the Organizing Committee, IAHS Summer School Copulas for Hydrology and Climate, 28 Jul - 1 Aug 2014, University of California, Irvine, USA.

Member, Coordinated Energy and Water Cycle Observations Project (CEOP), Global Energy and Water Cycle Experiment (GEWEX) Extremes Work Group.

Member, Drought Interest Group (DIG), Climate Variability and Predictability Project (CLIVAR).

Vice President of the IAHR Student Chapter, University of Stuttgart, 2006-2008

Project Coordinator of the IAHR Student Chapter, University of Stuttgart, 2005-2006

Vice President of the Student Science Council, Department of Civil Engineering, K.N.Toosi University of Technology, 2003-2004

Member of the Editorial Board, Abangan Student Water Engineering Journal, Department of Civil

Engineering, K.N.Toosi University of Technology, 1999-2002

Conference/Session Chair, Convener, or Moderator

Co-Convener of the session Hydroclimatic Extremes under Change: Advancing the Science and Implementation in Hazard Prevention and Control (Conveners: Simon Michael Papalexiou, Efi Foufoula-Georgiou, Christian Onof, Caspar Honegger, John Hillier, Amir AghaKouchak), EGU General Assembly 2018, 8-13 April 2018, Vienna, Austria.

Co-Convener of the session Water Resources Management and Policy in a Changing World (Conveners: Manuel Pulido-Velazquez, Andrea Castelletti, Kaveh Madani, Patrick Reed, Amaury Tilmant, Greg Characklis, Julien Harou, Jan Kwakkel, Amir AghaKouchak, Wouter Buytaert), EGU General Assembly 2017, 23-28 April 2017, Vienna, Austria.

Member of the Scientific Committee, IAHS 2016 Statistical hydrology workshop, 26-27 Sep 2016, Québec City, Canada.

Co-Convener of the session Science for Disaster Risk Reduction: From Integrated Research and Assessment of Risks to Communication and Engagements, AGU Fall Meeting, 14-18 Dec 2015, San Francisco, CA, USA.

Co-Convener of the session Advances in Remote Sensing of Natural Hazards, AGU Fall Meeting, 14-18 Dec 2015, San Francisco, CA, USA.

Co-Convener of the session Monitoring, Prediction, and Hazard Mitigation of Hydroclimatic Extreme Events, AGU Fall Meeting, 14-18 Dec 2015, San Francisco, CA, USA.

Co-Convener of the session White Lecture. Natural Hazard Science: Building the Community through Integrated Research and Practice, AGU Fall Meeting, 14-18 Dec 2015, San Francisco, CA, USA.

Moderator, Session on Adaptive Management and Impact Assessment, ASCE, World Environmental & Water Resources Congress, Austin TX, Austin, Texas, USA, May 17-21, 2015.

Co-Chair of the Scientific Committee, California Drought: Causes, Impacts, and Policy, AGU Chapman Conference, Beckman Center of the National Academies of Sciences and Engineering, Irvine, California, USA, April 20-22, 2015.

Convener of the session Hydroclimatic Extremes: Drought, AGU Fall Meeting, 15-19 Dec 2014, San Francisco, CA, USA.

Convener of the session Satellite Remote Sensing and Management of Natural Disasters, AGU Fall Meeting, 15-19 Dec 2014, San Francisco, CA, USA.

Convener of the session Sustainable Water Quantity and Quality in the Built Environment, AGU Fall Meeting, 15-19 Dec 2014, San Francisco, CA, USA.

Member of the Scientific Committee, IAHS 5th STAHY workshop, 10-11 Nov 2014, Abu Dhabi, United Arab Emirates.

Technical Committee, 2013 ASCE International Workshop on Computing in Civil Engineering, June 23-25, 2013, University of Southern California, Los Angeles, CA, USA.

Convener of the session Hydrohazards: Processes, Diagnosis and Projection, AGU Fall Meeting, 3-7 Dec 2012, San Francisco, CA, USA.

Convener of the session Hydroclimatic Extremes: Monitoring, Diagnosis & Prediction, AGU Fall Meeting, 5-9 Dec 2011, San Francisco, CA, USA.

Convener of the session Hydroclimatic Extremes: Monitoring, Diagnosis & Prediction, AGU Fall Meeting, 13-17 Dec 2010, San Francisco, CA, USA.

Co-convener and coordinator, Advanced Concepts Workshop on Remote Sensing of Precipitation at Multiple Scales, March 15-17, 2010, University of California Irvine, Beckman Center, Irvine, CA, USA.

Member of the Scientific Committee, 7th IWA Biennial World Water Congress, 19-24 September 2010, Montreal, Canada.

Member of the organizing committee of the IAHR-SSC 2007 Colloquium: Hydraulic Engineering and Renewable Energy, 31 October 2007, Stuttgart, Germany.

Member of the organizing committee of the IAHR-SSC 2006 Colloquium: Integrated Surface Water Management, 5 July 2006, Stuttgart, Germany.

Member of the Organizing Committee, International Conference on Hydraulics of Dams and Rivers Structures, Tehran, 26-28 April 2004

University of California, Irvine

Graduate Advisor, 2012 - Present

Faculty Search Committee Member, 2018-2019

Chair, CEE Faculty Search Committee, 2017-2018

Faculty Search Committee Member (Advanced Power and Energy Program), 2017-2018

Member, UCI HSSOE Research Committee 2017-present

Member, HSSOE Tech Advisory Committee, 2017 - Present

Faculty Search Committee Member, 2016-2017

Faculty Search Committee Member, 2013-2014

Edison Scholarship Selection Committee, California Alliance for Minority Participation, 2014 and 2015

Environmental Engineering Seminar Series, Organizer of Hydrology Talks, 2011-2013

Graduate and Postdoctoral Advisees

Postdoctoral Scholars

Laurie Huning (2017 - present).

Iman Mallakpour (2016 - present).

Omid Mazdiyasn (2018 - present).

Simon Papalexiou (2016 - 2018; jointly with Prof. E Foufoula-Georgiou).

Mojtaba Sadegh (2016 - 2017).

Hamed Moftakhari Rostamkhani (2015 - 2018).

Shahrbanou Madadgar (2014 - 2016).

Zengchao Hao (2012 - 2013).

PhD Students (Advisor; and Committee Chair)

Elisa Ragno, PhD, 2018.
Omid Mazdiyasni, PhD, 2018.
Alireza Farahmand, PhD, 2016.
Ali Mehran, PhD, 2015.
Linyin Cheng, PhD, 2014.
Charlotte Love, PhD Student, 2015 - present.
Felicia Chiang, PhD Student, 2015 - present.
Hassan Anjileli, PhD Student, 2015 - present.
Baoxiang Pan, PhD, 2015 - Present (with K Hsu and S Sorooshian).
Alexandre Martinez, PhD Student, 2016 - present.
Aneseh Alborzi, PhD Student, 2016 - present.
Yunxia Zhao, PhD Student, 2017 - present.

PhD Students (Co-Advisor)

Phu Nguyen, PhD, 2014 (Advisor: S Sorooshian).
Jingjing Li, PhD, 2012 (Advisor: S Sorooshian).

PhD Dissertation Committee Member

Enrico Ciraci, PhD, 2018 (Advisors: I Velicogna).
Adan Luke, PhD, 2018 (Advisors: B Sanders).
Ricardo Medina, PhD, 2018 (Advisors: R Detwiler).
Elias Massoud, PhD, 2018 (Advisor: J Vrugt).
Haider Ali PhD, 2018, Indian Institute of Technology Gandhinagar, India, (Advisor: Prof. Vimal Mishra).
Nadeeka Parana Manage PhD, 2017, University of Newcastle, Australia, (Advisor: Prof. Garry Willgoose).
Nathan Okoth Agutu PhD, 2017, Curtin University, Australia, (Advisor: Prof. Joseph L. Awange).
Reepal Shah PhD, 2017, Indian Institute of Technology Gandhinagar, India, (Advisor: Prof. Vimal Mishra).
V. AGILAN PhD, 2017, Indian Institute of Technology, India, (Advisor: Prof. Umamahesh).
Andrea Thorstensen, PhD, 2016 (Advisors: S Sorooshian, K Hsu).
Ashley Payne, PhD, 2016 (Advisor: Gudrun Magnusdottir).
Tiantian Yang, PhD, 2015 (Advisor: S Sorooshian).
Morteza Shakeri Majd, PhD, 2015 (Advisor: B Sanders).
Masoud Irannezhad PhD, 2015, University of Oulu, Finland, (Advisor: Bjørn Kløve).
Hussein Wazneh PhD, 2015, Institut national de la recherche scientifique - Eau Terre Environnement (INRS-ETE), Québec, Canada, (Advisors: F Chebana).
Hao Liu PhD, 2015 (Advisor: S Sorooshian).
Mojtaba Sadegh PhD, 2015 (Advisor: J Vrugt).
Sasha Richey PhD, 2014 (Advisor: J Famiglietti).
Shakiba Ayatollahi PhD, 2013 (Advisor: W Cooper).
Marzi Azarderakhsh PhD, 2011, City University of New York (Advisors: W Rossow, R Khanbilvardi).

MS Students (Advisor, and Committee Chair)

Mohammad Sasani, 2018.
Yasir Ak, 2017.
Hassan Anjileli, 2016.
Sofia Hallerback, 2016.
Juan Diego Rivadeneira, 2016.
Sofia Eckersten, 2016.
Mohsen Niknejad, 2015.
Omid Mazdiyasni, 2015.
Lei Li, 2015.
Zhu Liu, 2014.
Lisa Damberg MSc, 2013.
Alireza Farahmand MSc, 2013.

Visiting Scholars Hosted

Qiaohong Sun, Beijing Normal University, China, 2016-present.
Prof. Carlos Lima, University of Brasília, Brazil, 2015-2016.
Samaneh Ashraf, Ferdowsi Mashhad University, 2015-2016.
Dr. Ali Torabi, University of Oulu, 2016.

MS Thesis Committee Member

Mustafa Onur, 2018 (Advisor: J Vrugt).
Shukai Cai, 2017 (Advisor: K Davis).
Sixue Wang, 2017 (Advisor: R Detwiler).
Maia Colyar, 2016 (Advisor: R Detwiler).
Farshad Momtaz, 2016 (Advisor: T Givargis).
Kate Forrest, 2016 (Advisor: S Samuelsen).
Azadeh Hemati, 2016 (Advisor: S Grant).
Farshad Momtaz, 2016 (Advisor: XXXXX).
Matin Rahnamay Naeini, 2016 (Advisor: J Vrugt).
Hao Guo, 2015 (Advisor: J Vrugt).
Xin Su MSc, 2015 (Advisor: K Hsu).
Zheng Zhao MSc, 2015 (Advisor: S Jiang).
Dongfeng Li MSc, 2014 (Advisor: D Rosso).

Part-Time Research Assistants Sponsored

Wenkai (Kevin) Zhang, Undergraduate Student, 6/2018 - 9/2018.
Wentao Xie, Undergraduate Student, 6/2018 - 9/2018.
Chen Sun, Undergraduate Student, 6/2017 - 9/2017.
Farshad Momtaz, MS Student, 9/2013 - present.
Navid Nakhjiri, PhD Student, 7/2011 - 6/2013.
Marielisa Hecht, Undergraduate Student, 6/2012 - 9/2014.
Aria Askari, Undergraduate Student, 4/2012 - 9/2013.
Eduardo Rossi, MS Student, 1/2012 - 4/2012.

Jonard Ualat Talamayan, Undergraduate Student, 4/2012 - 9/2012.
Sina Khosravi, Undergraduate Student, 4/2012 - 12/2012.
Farshad Farhangi, Undergraduate Student, 6/2012 - present.
Matthew Nagy, MS Student, 7/2011 - 10/2011.
Chi-Han Cheng, PhD Student, 10/2011 - 1/2012.

Dissertation/Exam Committees

PhD Qualifying Exams

Felicia Chiang, September 2018.
Hassan Anjileli, September 2017.
Kate Forrest, May 2018.
Raie Alharbi, May 2018.
Matin Rahnamay-Naeini, December 2017.
Omid Mazdiasni, December 2017.
Negin Hayatbini, December 2017.
Ata Akbari Asanjan, December 2017.
Pouya Faridzad, November 2017.
Dawn Woodard, August 2017.
Nasir Emami, June 2017.
Hongchen Qin, May 2017.
Megan Fowler, April 2017.
Adam Luke, December 2016.
Ata Akbari, December 2016.
Yu-Chiao Liang, September 2016.
Sungduk Yu, July 2016.
Paul Levine, May 2016.
Adam Luke, May 2016.
Elisa Ragno, December 2015.
Ricardo Medina, July 2015.
Erin Delman, May 2015.
Alireza Farahmand, December 2014.
Enrico Ciraci, July 2014.
AJ Purdy, June 2014 (Progress Report).
Wenshan Wang, June 2014.
Morteza Shakeri Majd, April 2014.
Negar Karbalaee, April 2014.
Andrea Thorstensen, December 2013.
Sasha Richey, September 2013.
Chia-Wei Hsu, June 2013.
Tiantian Yang, March 2013.
Shakiba Ayatollahi, October 2012.
Ali Mehran (chair), September 2012.
Xiao Huang, October 2012.
Ashley Payne, September 2012.
Linyin Cheng (chair), September 2012.
Tyler Sutterley, June 2012.

Pooria Mohammadi Yaghni, June 2012.
Scott Sellars, June 2012.
Hao Liu, March 2012.
Mojtaba Sadegh, March 2012.
Phu Nguyen, March 2012.
Navid Nakhjiri, September 2011.
Ashkan Eghbal, September 2011.

PhD Preliminary Exams

Charlotte Love, June 2017.
Felicia Chiang, June 2017.
Antonios Mamalakis, June 2017.
Mohammed Salah, May 2017.
Aneseh Alborzi, April 2017.
Azadeh Hemati, December 2016.
Kate Forrest, December 2016.
Raied Alharbi, September 2016.
Kimberly Duong, July 2016.
Negin Hayatbini May 2016.
Baoxiang Pan May 2016.
Mohammad Faridzad May 2016.
Matin Rahnamay-Naeini May 2015.
Elisa Ragno May 2015.
Omid Mazdiyasni May 2014.
Aryan Safaie, April 2014.
Negar Karbalaee, May 2013.
Yumeng Tao, May 2013.
Kathleen Low, May 2013.
Michelle Miro, March 2013.
Alireza Farahmand, March 2013.
Tiantian Yang, April 2012.
Andrea Thorstensen, April 2012.
Yin Tung, March 2012.
Ali Mehran (chair), March 2012.
Linyin Cheng (chair), March 2012.

Teaching Experience

CEE 274: Climate Data Analysis (graduate), UC-Irvine, (2018, 2017, 2016, 2015, 2014).
CEE 173 and CEE 273: Watershed Modeling (undergraduate, graduate), UC-Irvine, (2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011).
CEE 81B: Civil Engineering Practicum II (undergraduate), UC-Irvine, (2018, 2017, 2016, 2015, 2014, 2013, 2012).
CEE 176 and CEE 276: Hydrology (undergraduate, graduate), UC-Irvine, (2012).

CEE 195: Introduction to Surveying (undergraduate), UC-Irvine, (2012).

Invited Talks, Invited Lectures, Summer Schools

58. **Amir AghaKouchak**, Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis using Statistical and Data Science Techniques, CUAHSI Biennial Colloquium, July 29 - August 1, 2018, Shepherdstown, WV, USA.
57. **Amir AghaKouchak**, Chiang F, Mazdiyasni O., Amplified Temperature Shifts under Droughts in Observations and Model Simulations, Land-Atmosphere Interactions and Extremes Workshop. April 4, 2018, NOAA Center for Weather and Climate Prediction (NCWCP), College Park, MD, USA.
56. **Amir AghaKouchak**, Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis, Chapman University, February 16, 2018.
55. **Amir AghaKouchak**, Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis, NASA Goddard Space Flight Center, January 31, 2018.
54. **AghaKouchak A.**, M Sadegh, I Mallakpour, A Data Analysis Toolbox for Modeling the Global Food-Energy-Water Nexus, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
53. **AghaKouchak A.**, A AghaKouchak, LS Huning, CA Love, A Farahmand, Remote Sensing of Drought: Progress and Opportunities for Improving Drought Monitoring and Prediction, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
52. **Amir AghaKouchak**, Ragno E, Sadegh M, Cheng L, Mazdiyasni O, Moftakhari H, Salvadori G., Sanders B., Matthew R., Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis, University of Southern California, Davis, California, November 14, 2017.
51. **Amir AghaKouchak**, Ragno E, Sadegh M, Cheng L, Mazdiyasni O, Moftakhari H, Salvadori G., Sanders B., Matthew R., Frameworks for Detection and Modeling Compound and Concurrent Climate Extremes, University of Southern California, Los Angeles, California, September 8, 2017.
50. **Amir AghaKouchak**, Multivariate Analysis in Hydrology and Climate Studies, Workshop: Environmental Risk Modeling and Extreme Events, Universite de Montreal, Montreal, Quebec, Canada, August 28-31, 2017.
49. **Amir AghaKouchak**, Ragno E, Sadegh M, Cheng L, Mazdiyasni O, Moftakhari H, Salvadori G. Frameworks for Detection and Modeling Compound and Concurrent Climate Extremes, Concordia University, Montreal, Canada, August 24, 2017.
48. **Amir AghaKouchak**, Compound and Concurrent Climate Extremes (Keynote), WCRP Workshop on Addressing the Challenge of Compound Events, Zurich, Switzerland, April 19-21, 2017.
47. **Amir AghaKouchak**, Madadgar S., Shukla S., Cheng L., Hsu K., A probabilistic framework for linking drought information to impact on agricultural production, Scoping Meeting Agricultural Risk Assessment, UNISDR-NOAA, Boulder, Colorado, USA, February 7-9, 2017.
46. **Amir AghaKouchak**, Cheng L, Mazdiyasni O, Moftakhari H, Salvadori G., Sanders B., Matthew R., Compound and Concurrent Climate Extremes, Iowa State University, IA, February 3, 2017.

45. **Amir AghaKouchak**, Madadgar S., Shukla S., Cheng L., Hsu K., Improving seasonal drought prediction in California by combining statistical and dynamical models, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
44. **Amir AghaKouchak**, Mehran A., Mazdidasni O., Ashraf B., Frameworks for Assessing Human Influence on Water Availability, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
43. **Amir AghaKouchak**, Mehran A., Mazdidasni O., Compounding Impacts of Human-Induced Water Stress and Climate Change on Water Availability, Concordia University, Montreal, Canada, May 20, 2016.
42. **Amir AghaKouchak**, Mehran A., Mazdidasni O., Socioeconomic Drought in a Changing Climate: Modeling and Management, European Geosciences Union General Assembly 2016, Vienna, Austria, April 17-22, 2016.
41. **Amir AghaKouchak**, Mehran A., Mazdidasni O., Integrating Human Interactions in Water Availability Assessment under Climate Change, Lund University, Lund, Sweden, April 13, 2016.
40. **Amir AghaKouchak**, Remote Sensing of Drought: Progress, Challenges Opportunities for Improving Drought Monitoring (Keynote Speech), 2016 NASA Atmospheric Infrared Sounder (AIRS) Spring Science Team Meeting, California Institute of Technology, Pasadena, California, USA, March 22-24, 2016.
39. **Amir AghaKouchak**, Madadgar S., Cheng L., Shukla S., Wood A., Svoboda M., A Hybrid Statistical-Dynamical Drought Prediction Framework: Application to the Southwestern US, NOAA Modeling, Analysis, Predictions, and Projections (MAPP) Webinar Series, February 25, 2016.
38. **Amir AghaKouchak**, Droughts, Climate Change and Human Interactions: Modeling and Assessment, Imperial College London, UK, January 25, 2016.
37. **Amir AghaKouchak**, Farahmand A., Remote Sensing of Drought: Progress and Opportunities for Improving Drought Monitoring, AGU Fall Meeting, San Francisco, California, USA, December 14-18, 2015.
36. **Amir AghaKouchak**, Mehran A., Assessing Climate Change Impacts on Water Availability Accounting for Human-Induced Water Stress, AGU Fall Meeting, San Francisco, California, USA, December 14-18, 2015.
35. **Amir AghaKouchak**, Drought, Environmental Modeling and Human Interactions, Interagency Steering Committee on Multimedia Environmental Models (ISCMEM), Davis, CA, USA, October 27-29, 2015.
34. **Amir AghaKouchak**, Available Frameworks and Information Sources for Understanding Integrated Water Resources Management: What are the Gaps and Unrealized Opportunities, Aspen Global Change Institute Workshop on Opportunities for Integration of Remote Sensing, Integrated Assessment, and Adaptation, Aspen, Colorado, USA, October 11-16, 2015.
33. **Amir AghaKouchak**, Extreme Events and Water Resources Availability and Distribution, Aspen Global Change Institute Workshop on Opportunities for Integration of Remote Sensing, Integrated Assessment, and Adaptation, Aspen, Colorado, USA, October 11-16, 2015.

32. **Amir AghaKouchak**, The Severity and Urgency of the Global Water Crisis, Pacific Council on International Policy, Santa Monica, CA, USA, October 9-10, 2015.
31. **Amir AghaKouchak**, Integrating Human Interactions into Climate Change Impacts on Water Availability, University of California, Los Angeles, CA, USA, October 8, 2015.
30. **Amir AghaKouchak**, Anthropogenic Drought: A Global-Local Perspective, Santa Monica Public Library, July 29, 2015.
29. **Amir AghaKouchak**, Madadgar S., Cheng L., Shukla S., Wood A., Svoboda M., Improving seasonal precipitation forecasting in California through integration of dynamic and statistical models, NOAA Modeling, Analysis, Predictions, and Projections (MAPP) Webinar Series, June 9, 2015.
28. **Amir AghaKouchak**, Madadgar S., Cheng L., Shukla S., Advancing Drought Prediction Using an Analog-Year Model Combined with Dynamic Model Simulations, Western States Water Council Workshop on Sub-Seasonal and Seasonal Precipitation Forecasting, San Diego, CA, USA, May 27-29, 2015.
27. **Amir AghaKouchak**, Invited lectures on Integrated Water Cycle Analysis, 3rd Workshop on Water Resources in Developing Countries: Planning and Management in Face of Hydroclimatological Extremes and Variability, International Centre for Theoretical Physics (ICTP), Trieste, Italy, April 27-30, 2015.
26. **Amir AghaKouchak**, Water Scarcity Iran: Challenges and Opportunities, US-Iran Symposium on Climate Change: Impacts and Mitigation, Beckman Center of the National Academies of Sciences and Engineering, March 30 - April 1, 2015.
25. **Amir AghaKouchak**, Farahmand A., Drought Monitoring Using NASA Atmospheric Infrared Sounder (AIRS) Data, NASA Jet Propulsion Laboratory (JPL), Pasadena, California, USA, March 25, 2015.
24. **Amir AghaKouchak**, Drought and Water Stress Assessment, Transforming Stormwater into a Resource: Design, Risks, and Benefits, New Delhi, India, March 16-17, 2015.
23. **Amir AghaKouchak**, Advancing Drought Onset Detection and Seasonal Prediction Using a Composite of NASA Model and Satellite Data, NASA Applied Sciences Program, Water Resources Meeting, College Park, Maryland, USA, March 3-4, 2015.
22. **Amir AghaKouchak**, Global Integrated Drought Monitoring and Prediction System (GIDMaPS), An International Global Drought Information System Workshop: Next Steps, California Institute of Technology, Pasadena, CA, USA, December 11-13, 2014.
21. **Amir AghaKouchak**, Monitoring Endangered Ecosystems from Space, Eighth Annual Meeting of the US-China EcoPartnership on Wetlands, Beckman Center of the National Academies of Sciences and Engineering, December 8, 2014.
20. **Amir AghaKouchak**, Remote Sensing Applications for Drought Monitoring, International Expert Symposium "Building a Community of Practice on Drought Management Tools", Santiago, Chile, November 19-21, 2014.
19. **Amir AghaKouchak**, The 2014 California Drought: Opportunities for Drought-Proofing California, Civil and Environmental Engineering Fall Quarterly Meeting, UCI University Club, November 7, 2014.

18. **Amir AghaKouchak**, IAHS Summer School Copulas for Hydrology and Climate, Jul 28 - Aug 1, 2014, University of California, Irvine, USA.
17. **Amir AghaKouchak**, California Drought: How Bad is It?, UC Drought Summit, Sacramento, California, April 25, 2014.
16. **Amir AghaKouchak**, Farahmand A., Nakhjiri N., Advancing Global Drought Monitoring and Prediction Using GPM Data, NASA's Global Precipitation Mission Land Surface Working Group, March 7, 2014.
15. **Amir AghaKouchak**, Advancing Global Drought Monitoring and Prediction: Introducing GIDMaPS, NASA Jet Propulsion Laboratory (JPL), Pasadena, California, USA, January 29, 2014.
14. **Amir AghaKouchak**, Mehran A., Global Terrestrial Hydrologic Modeling: Roadblocks, Challenges and Opportunities, AGU Fall Meeting, San Francisco, California, USA, December 9-13, 2013.
13. **Amir AghaKouchak**, Monitoring Extremes, Southern California Society for Risk Analysis, October 21, 2013, Irvine, California, USA.
12. **Amir AghaKouchak**, Advancing Global Drought Monitoring and Prediction: An Overview of GIDMaPS, University of Central Florida, Orlando, Florida, September 17, 2013.
11. **Amir AghaKouchak**, The Global Integrated Drought Monitoring and Prediction System (GIDMaPS), The Desert Research Workshop, Beckman Center of the National Academies of Sciences and Engineering, June 5, 2013.
10. **Amir AghaKouchak**, Invited lectures on Integrated Water Cycle Analysis, 2nd Workshop on Water Resources in Developing Countries: Planning and Management in a Climate Change Scenario, International Centre for Theoretical Physics (ICTP), Trieste, Italy, May 6-17, 2013.
9. **Amir AghaKouchak**, Zengchao Hao, Navid Nakhjiri, Multi-Index Drought Monitoring: A Prototype Global Drought GeoServer, American Geophysical Union (AGU) Meeting of the Americas, Cancun, Mexico, 14-17 May 2013.
8. **Amir AghaKouchak**, Middle East Hydroclimate Extremes, Groundwater and Climate Change in the Middle East, Beckman Center of the National Academies of Sciences and Engineering, November 9-11, 2012.
7. **Amir AghaKouchak**, A Nested Hydrological Model for Coupled Probabilistic and Deterministic Flood Forecasting, NOAA Center for Cooperative Remote Sensing Sciences and Technology (CREST), The City College of the City University of New York, New York, NY, September 19, 2011.
6. **Amir AghaKouchak**, Soroosh Sorooshian, Kuolin Hsu, Application of Remotely Sensed Precipitation Data in Monitoring and Analysis of Extremes: Challenges and Opportunities; In Drought Research Initiative Workshop on Weather and Climate Extremes over Canada: Science and Adaptation, Winnipeg, Canada, February 7-9, 2011
5. **Amir AghaKouchak**, Kuolin Hsu, Soroosh Sorooshian, Satellite Data Support for Hydrologic and Water Resource Planning and Management, Cooperative Institute for Climate and Satellites (CICS) Science Meeting, University of Maryland, College Park, September 8-9, 2010.
4. **Amir AghaKouchak**, Remote Sensing of Rainfall, UCI Extension Osher Lifelong Learning Institute fall class on Water Research at UCI, University of California Irvine, September 23, 2010.

3. **Amir AghaKouchak**, Verification of satellite-based extreme precipitation estimates, NASA Energy and Water cycle Study (NEWS) Extreme Drought and Flood Workshop, University of North Dakota, Grand Forks, ND, July 15-16, 2010.
2. **Amir AghaKouchak**, Kuolin Hsu, Analysis of Extreme Precipitation Events in a Changing Climate: Toward Capturing Nonstationarity, NOAA's National Climatic Data Center, Asheville, NC, April 6, 2010.
1. **Amir AghaKouchak**, Iran's Climate Change, Environmental and Water Resources Challenges, Samuel Jordan Center for Persian Studies, University of California, Irvine, November 8, 2010.

Conference Papers, Presentations and Abstracts

147. Huning L.S., **AghaKouchak A.**, Frameworks for Improving Monitoring Snow from Space, SIAM Conference on Mathematics of Planet Earth (MPE18), September 13-15, 2018, Philadelphia, Pennsylvania, USA.
146. Nelson AK, Skahill BE, Scharffenberg W, **AghaKouchak A.**, Baggettd J, HEC-HMS Markov Chain Monte Carlo Implementation: Existing Capabilities and Future Opportunities , 9th International Congress on Environmental Modelling and Software, June 24-28, 2018, Fort Collins, Colorado, USA.
145. Mazdidasni O., **AghaKouchak A.**, Increasing probability of mortality during Indian heat waves, 8th GEWEX Open Science Conference: Extremes and Water on the Edge, May 6-11, 2018, Canmore, Alberta, Canada.
144. Love C., Skahill BE, **AghaKouchak A.**, Comparison of extreme precipitation return levels using spatial Bayesian hierarchical modeling versus regional frequency analysis, 8th GEWEX Open Science Conference: Extremes and Water on the Edge, May 6-11, 2018, Canmore, Alberta, Canada.
143. Huning L.S., **AghaKouchak A.**, Snow Water Equivalent Response to Hydrometeorological Variability, Climate Change, and Extreme Winter Storms Across the Western United States, 8th GEWEX Open Science Conference: Extremes and Water on the Edge, May 6-11, 2018, Canmore, Alberta, Canada.
142. Mallakpour I., Sadegh M., **AghaKouchak A.**, A new normal for streamflow over northern California: Less moderates, more extremes, 8th GEWEX Open Science Conference: Extremes and Water on the Edge, May 6-11, 2018, Canmore, Alberta, Canada.
141. Chiang F., Mazdidasni O., **AghaKouchak A.**, Accelerated Warming of Temperatures during Droughts, 8th GEWEX Open Science Conference: Extremes and Water on the Edge, May 6-11, 2018, Canmore, Alberta, Canada.
140. Mamalakis A., Vrugt V., **AghaKouchak A.**, Fofoula-Georgiou E., A new methodology for fitting time-varying distributions to hydroclimatic extremes using data assimilation techniques, EGU General Assembly Conference, Vienna, Austria, April 8-13, 2018.
139. Vahedifard F., Williams J.M., **AghaKouchak A.**, Geotechnical Engineering in the Face of Climate Change: Role of Multi-Physics Processes in Partially Saturated Soils, International Foundation

- Congress and Equipment Expo (IFCEE) 2018:Advances in Geomaterial Modeling and Site Characterization, Geotechnical Special Publication No. 295., Orlando, Florida USA, March 5-10, 2018, ASCE, Reston, VA, 353-364, doi: 10.1061/9780784481585.035.
138. M Sadegh, H Moftakhari, **AghaKouchak A.**, Multi-hazard Assessment and Scenario Toolbox (MhAST): A Framework for Analyzing Compounding Effects of Multiple Hazards, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 137. A Alborzi, H Moftakhari, A Azaranfar, I Mallakpour, B Ashraf, **AghaKouchak A.**, Compounding Impacts of Climate Change and Increased Human Water Withdrawal on Urmia Lake Water Availability, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 136. S Michael Papalexiou, E Foufoula-Georgiou, **AghaKouchak A.**, Spatial coherence of extreme precipitation trends in the contiguous United States, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 135. M Rahnamay Naeini, M Sadegh, **AghaKouchak A.**, KL Hsu, S Sorooshian, T Yang, Developing a Shuffled Complex-Self Adaptive Hybrid Evolution (SC-SAHEL) Framework for Water Resources Management and Water-Energy System Optimization, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 134. O Mazdiyasn, **AghaKouchak A.**, Tropopause Pressure May Explain California Droughts and Wet Period, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 133. F Chiang, **AghaKouchak A.**, Effect of Ocean Heat on Tropical Cyclone-Related Precipitable Water: The 2017 Hurricane Season from a Historical Perspective, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 132. Y Zhou, X Xiao, W Jiang, J Dong, JB Basara, **AghaKouchak A.**, PH Gowda, VG Kakani, Water-related Spectral Reflectance Indices: Principle, Constructing, Application, and Improvement, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 131. I Mallakpour, **AghaKouchak A.**, H Moftakhari, E Ragno, Assessing changes in failure probability of dams in a changing climate, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 130. Moftakhari, JE Schubert, **AghaKouchak A.**, A Luke, R Matthew, B Sanders, Modeling Compound Flood Hazards in Coastal Embayments, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 129. B Tarroja, **AghaKouchak A.**, K Forrest, F Chiang, S Samuelsen, Unraveling the Importance of Climate Change Resilience in Planning the Future Sustainable Energy System, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 128. K Forrest, B Tarroja, **AghaKouchak A.**, F Chiang, S Samuelsen, Investigating the Impact of Climate Change on Hydroelectric Generation and Ancillary Services in California, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
 127. E Ragno, L Cheng, M Sadegh, **AghaKouchak A.**, A Generalized Framework for Non-Stationary Extreme Value Analysis, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.

126. Di Baldassarre, V Srinivasan, F Tian, Y Mohamed, T Krueger, H Kreibich, J Liu, TJ Troy, **AghaKouchak A.**, F Chiang, S Samuelson, Panta Rhei-Everything flows: Global Hotspots of Human-Water Interactions, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
125. V Mishra, R Kumar, S Mukherjee, **AghaKouchak A.**, DA Stone, M Huber, Heat stress risk in India under the observed and projected 1.5 and 2.0 °C warming, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
124. Q Sun, C Miao, **AghaKouchak A.**, Increased frequency of ENSO-related hydroclimate extremes in a warming climate, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
123. LS Huning, **AghaKouchak A.**, Understanding Montane Snow Water Equivalent Response to Climate Change and Variability, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
122. CH Ribeiro Lima, **AghaKouchak A.**, On the Relationship of Rainfall and Temperature across Amazonia, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
121. M Niknejad, O Mazdiyasni, F Momtaz, **AghaKouchak A.**, Weather Augmented Risk Determination (WARD) System, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
120. CA Love, BE Skahill, **AghaKouchak A.**, GS Karlovits, JF England, AM Duren, Comparison of Extreme Precipitation Return Levels using Spatial Bayesian Hierarchical Modeling versus Regional Frequency Analysis, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
119. H Anjileli, H Moftakhari, O Mazdiyasni, H Norouzi, B Ashraf, A Farahmand, M Azarderakhsh, **AghaKouchak A.**, Analysis of high frequency soil respiration in a semi-arid area in Southern California, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
118. M Shakeri Majd, I Mallakpour, **AghaKouchak A.**, H Moftakhari, M Sadegh, F Vahedifard, Quantifying Changes in Los Angeles River Breakout Triggered by Sea Level Rise Using a Hydrodynamic Model, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
117. B Pan, KL Hsu, **AghaKouchak A.**, S Sorooshian, The Use of Convolutional Neural Network in Relating Precipitation to Circulation, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
116. B Ashraf, **AghaKouchak A.**, Changes of Climate Extremes in Urmia Lake Basin: Observations and Multimodel Ensemble Projections, AGU Fall Meeting, December 10-14, 2017, New Orleans, Louisiana, USA.
115. **AghaKouchak A.**, Sadegh M., Mallakpour I., Mazdiyasni O., Modeling the Food-Energy-Water Nexus: A Data Analysis Toolbox, IAHS General Assembly, July 10-14, 2017, Port Elizabeth, South Africa.
114. **AghaKouchak A.**, Sadegh M., Ragno E., Multivariate Dependence Analysis Toolbox (MvDAT), IAHS General Assembly, July 10-14, 2017, Port Elizabeth, South Africa.
113. **AghaKouchak A.**, Mehran A., Mazdiyasni O., Ashraf S., Anthropogenic Drought: Assessment and Modeling Frameworks, EWRI World Environmental & Water Resources Congress, May 21 - 25, 2017, Sacramento, California, USA.

112. Jasim F.H., Vahedifard F., Ragno E., **AghaKouchak A.**, Ellithy G., Effects of Climate Change on Fragility Curves of Earthen Levees Subjected to Extreme Precipitations, *Geo-Risk* 2017, pp. 498-507.
111. Ragno E., **AghaKouchak A.**, Love C, Vahedifard F, Cheng L., Lima C., Intensity-Duration-Frequency Curves for US Cities in a Warming Climate, EGU General Assembly Conference, 19, 18246, Vienna, Austria, April 23-28, 2017.
110. Di Baldassarre G., **AghaKouchak A.**, Rangelcroft S., Wanders N., Kuil L., et al., Drought and reservoirs: intended benefits and unintended consequences, EGU General Assembly Conference, 19, 12832, Vienna, Austria, April 23-28, 2017.
109. Rangelcroft S., Van Loon A., Bosman M., Wanders N., Di Baldassarre G., **AghaKouchak A.**, et al., Progressing the state of knowledge on the human influence on hydrological droughts through case studies, EGU General Assembly Conference, 19, 13409, Vienna, Austria, April 23-28, 2017.
108. Ashraf B., **AghaKouchak A.**, Mousavi-Baygi M., Moftakhari H., Anjileli H., Assessing surface water availability considering human water use and projected climate variability, EGU General Assembly Conference, 19, 18246, Vienna, Austria, April 23-28, 2017.
107. Papalexioiu S.M., **AghaKouchak A.**, Foufoula-Georgiou E., A global assessment of changes in extreme daily maximum temperature, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
106. Hallerback S.A.M., **AghaKouchak A.**, Stensen K., David G., Persson M., Reduced Duration of Ice Cover in Swedish Lakes and Rivers, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
105. Ashraf B., **AghaKouchak A.**, Mousavi Baygi M., Alizadeh A., Moftakhari H., Chiyuan M. Arab D.R., Anjileli H., Impact of surface water withdrawals on water storage variations under a changing climate, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
104. Lima C.H.R., **AghaKouchak A.**, Lall U., Large Scale Processes and Extreme Floods in Brazil, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
103. Madadgar S., **AghaKouchak A.**, Sanford T.J., Kenward A., Increased Fire Risk in a Warming and Drying Climate, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
102. Rajendran V, Dhanya C.T, Chakravorty A., **AghaKouchak A.**, Evolution of Diurnal Asymmetry of Surface Temperature over Different Climatic Zones, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
101. Ragno E., **AghaKouchak A.**, Updated Intensity-Duration-Frequency Curves Under Different Future Climate Scenarios, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
100. Love C.A., Skahill B.E., **AghaKouchak A.**, Karlovits G.S., England J.F, Duren A.M., Extreme Rainfall Analysis using Bayesian Hierarchical Modeling in the Willamette River Basin, Oregon, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
99. Vahedifard F, Robinson J.D., Love C.A., **AghaKouchak A.**, Drought causes substantial reductions in non-isothermal soil strength, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.

98. Mazdidasni O., **AghaKouchak A.**, Heatwaves and Heat-Related Mortality in India, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
97. Moftakhari H.M., Salvadori G., **AghaKouchak A.**, Sanders B.F, Matthew R., Estimating flood risk along the coasts of United States considering compounding effects of multiple flood drivers, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
96. Nguyen P, Sorooshian S., Hsu K., Gao X., **AghaKouchak A.**, Braithwaite D., Thorstensen A.R., Ashouri H., Tran H., Huynh P, Palacios T., UC Irvine CHRS RainSphere - a new user friendly tool for analyzing global remotely sensed rainfall estimates, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
95. Tarroja B., **AghaKouchak A.**, Forrest K., Chiang F, Samuelson S., The Moving Target of Climate Mitigation: Examples from the Energy Sector in California, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
94. Sadegh M., Ragno E., **AghaKouchak A.**, MvDAT: Multivariate Dependence Analysis Toolbox, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
93. Chiang F, **AghaKouchak A.**, Mazdidasni O., Observed and Projected Droughts Conditioned on Temperature Change, AGU Fall Meeting, San Francisco, California, USA, December 12-16, 2016.
92. **AghaKouchak A.**, Ragno E, Love C., Cheng L., Nonstationary Rainfall Frequency Analysis: Historical Assessment and Future Projections, IAHS STAHY2016 Workshop, September 26-27, 2016, Québec City, Québec, Canada.
91. Sanders B.F, Luke A., Schubert J.E., Moftakhari H.R., AghaKouchak A., Matthew R.A., Goodrich K., Cheung W., Feldman D.L., Basolo V, Houston D., Co-Development of Coastal Flood Models: Making the Leap From Expert Analysis to Decision Support, 4th IAHR Europe Congress, July 27-29, 2016, Liege Belgium.
90. **AghaKouchak A.**, Ragno E., Cheng L., Nonstationarity in Extremes and Changes in Flood Risk in a Warming Climate, EWRI World Environmental & Water Resources Congress, May 22-26, 2016, West Palm Beach, Florida, USA.
89. **Amir AghaKouchak**, Advancing Drought Onset Detection and Seasonal Prediction Using a Composite of NASA Model and Satellite Data, NASA Applied Sciences Program, Water Resources Meeting, Tuscaloosa, Alabama, USA, April 26-28, 2016.
88. Hovhannisyanyan D., Kurdahi F, Eltawil A., **AghaKouchak A.**, Al Faruque M.A. , Poster Abstract: Unifying Modeling Substrate for Irrigation Cyber-Physical Systems, ACM/IEEE International Conference on Cyber-Physical Systems (ICCPs'16), April 11-14, 2016, Vienna, Austria.
87. Schubert J., Cheung W., Luke A., Gallien T., **AghaKouchak A.**, Feldman D., Matthew R., Sanders B.F, Making Coastal Flood Hazard Maps to Support Decision-Making - What End Users Want, American Association of Geographers 2016 Annual Meeting, March 29- April 2, San Francisco, California, USA.
86. Ragno E., **AghaKouchak A.**, Assessing Impacts of Human-Induced Climate Change on California's Meteorological Drought, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.

85. Madadgar S., Cheng L., Wood A.W., Svoboda M., **AghaKouchak A.**, A Hybrid Framework for Improving NMME Precipitation Forecasts, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.
84. Love C., **AghaKouchak A.**, Madadgar S., Tourian M.J., California Drought Recovery Assessment Using GRACE Satellite Gravimetry Information, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.
83. Chen Y., Norouzi H., **AghaKouchak A.**, Blake R., The Feasibility Study of Using Microwave Emission in Detecting Drought and Land-Cover/Land-Use Change Studies, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.
82. Mazdiyasi O., **AghaKouchak A.**, Changes in Concurrent Droughts and Heatwaves in the United States, December 14-18, 2015, San Francisco, California, USA.
81. Cheng L., Hoerling M.P., **AghaKouchak A.**, Livneh B., Quan X-W, Eischeid J.K., How Has Human-induced Climate Change Affected California Drought Risk?, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.
80. Robinson J.D., Vahedifard F., **AghaKouchak A.**, Possible Weakening Processes Imposed on California's Earthen Levees under Protracted Drought, AGU Fall Meeting, December 14-18, 2015, San Francisco, California, USA.
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Professional Societies

American Geophysical Union (AGU)

American Association for the Advancement of Science (AAAS)

American Meteorological Society (AMS)

European Geosciences Union (EGU)

International Association of Hydrological Sciences (IAHS)

International Association of Hydro-Environment Engineering and Research (IAHR)

American Society of Civil Engineers (ASCE)

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