Amir AghaKouchak, PhD, PE

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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

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.

Honors & Awards

ASCE Huber Prize, 2020

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

Mid-Career Faculty Innovation in Teaching, Samueli School of Engineering, UC Irvine, 2019

AGU Hydrologic Sciences Early Career Award, 2017

IAHS/STAHY Best Paper Award" for 2017 (Cheng, L., AghaKouchak, A. Nonstatlonary 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: $5,276,183**; Co-PI/Co-I: $22,437,294

29. Title: SCC-IRG Track 1: Reducing the Vulnerability of Disadvantaged Communities to the Impacts of Cascading Hazards under a Changing Climate
    Agency: **NSF-NIFA**; Dates: 9/1/21-8/30/24
    Funding: $553,134; PI: **Amir AghaKouchak**, Co-PIs: Roxane Cohen Silver, Tirtha Banerjee

28. Title: Updating California Precipitation Intensity-Duration-Frequency Curves Using Multi-Model Future Projections and Historical Observations
    Agency: **Caltrans**; Dates: 5/1/21-10/31/23
    Funding: $548,000; PI: **Amir AghaKouchak**

27. Title: AccelNet-Implementation: PEER2PEER International Convergence Research Networks in Transboundary Water Security
Agency: **NSF**; Dates: 1/1/22-12/31/27
UCI Funding: $400,000; UCI PI: **Amir AghaKouchak**, Co-PIs: David Feldman (Lead Institution: US National Academy of Sciences)

26. Title: SCC-PG: Reducing the Vulnerability of Disadvantaged Communities to the Impacts of Cascading Hazards under a Changing Climate
Agency: **NSF**; Dates: 8/1/20-7/31/21
Funding: $118,724; PI: Farshid Vahedifard, Co-PI: **Amir AghaKouchak**

25. Title: Indicators for the Detection and Attribution of Concurrent and Compound Extremes in CMIP6 Climate Model Simulations
Agency: **NOAA**; Dates: 9/1/19-8/31/22
Funding: $240,000; PI: **Amir AghaKouchak**

24. Title: RAPID: Collecting Critical Data for Advancing our Understanding of Wildfire Impacts on Soil Characteristics and Research on Post-Wildfire Compound Hazards
Agency: **NSF**; Dates: 10/1/20-3/31/21
Funding: $50,000; PI: **Amir AghaKouchak**

23. 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**

22. Title: CoPe EAGER: Modeling the Social Ecology of Coastal Flood Risk
Agency: **NSF**; Dates: 9/1/19-8/31/21
Funding: $299,872; PI: Richard Matthew, Senior Personnel: **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 Soroosian, 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 Samuelsen, 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 in Chief, ***Earth's Future*** (American Geophysical Union, AGU), 2020-present.

Editor, ***Earth's Future*** (American Geophysical Union, AGU), 2016-2019.

Editorial Board Member, ***Scientific Reports*** (Nature Publishing Group), 2015-2019.

Editorial Board Member, ***Scientific Data*** (Nature Publishing Group), 2014-2019.

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

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

Publications

Journal Publications *(Students & Postdocs Underlined)*

Citation:15,600, *h-index: 70 (Google Scholar)*

199. ***AghaKouchak A.****, Mirchi A., Madani K., Di Baldassarre G., Nazemi A., Alborzi A., Anjileli H., Azarderakhsh M., Chiang F., Hassanzadeh E., Huning L.S., Mallakpour I., Martinez A., Mazdiyasni O., Moftakhari M., Norouzi H., Sadegh M., Sadeqi D., Van Loon A.F., Wanders N., 2021, Anthropogenic Drought: Definition, Challenges, and Opportunities,* ***Reviews of Geophysics****, 59 (2), e2019RG000683, doi: 10.1029/2019RG000683.*

198. *Chiang F., Mazdiyasni O.,* ***AghaKouchak A.****, 2021, Evidence of Anthropogenic Impacts on Global Drought Frequency, Duration, and Intensity,* ***Nature Communications*** *, 12 (1), 2754, doi: 10.1038/s41467-021-22314-w.*

197. *Chiang F., Greve P., Mazdiyasni O., Wada Y.,* ***AghaKouchak A.****, 2021, A Multivariate Conditional Probability Ratio Framework for the Detection and Attribution of Compound Climate Extremes,* ***Geophysical Research Letters*** *, 48 (15), e2021GL094361, doi: 10.1029/2021GL094361.*

196. *Zhao Y., Norouzi H., Azarderakhsh M.,* ***AghaKouchak A.****, 2021, Global Patterns of Hottest, Coldest, and Extreme Diurnal Variability on Earth,* ***Bulletin of the American Meteorological Society*** *, 102 (9), E1672-E1681, doi: 10.1175/BAMS-D-20-0325.1.*

195. *Zachariah M., Mondal A.,* ***AghaKouchak A.****, 2021, Probabilistic Assessment of Extreme Heat Stress on Indian Wheat Yields under Climate Change,* ***Geophysical Research Letters****, 48(20), e2021GL094702, doi: 10.1029/2021GL094702.*

194. *Wu Y., Miao C., Sun Y.,* ***AghaKouchak A.****, Shen C., Fan X., 2021, Global Observations and CMIP6 Simulations of Compound Extremes of Monthly Temperature and Precipitation,* ***GeoHealth****, 5 (5), e2021GH000390, doi: 10.1029/2021GH000390.*

193. *Arellano-Gonzalez J.,* ***AghaKouchak A.****, Levy M.C., Qin Y., Burney J., Davis S.J., Moore F.C., 2021, The Adaptive Benefits of Agricultural Water Markets in California,* ***Environmental Research Letters****, 16 (4), 044036, doi: 10.1088/1748-9326/abde5b.*

192. *Clark M.P., Luce C.H., **AghaKouchak A.**, Berghuijs W., David C.H., Duan Q., Ge S., van Meerveld I., Zheng C., Parlange M.B., Tyler S.W., 2021, Open Science: Open Data, Open Models,âĂę and Open Publications?, **Water Resources Research**, 57(4), e2020WR029480; doi: 10.1029/2020WR029480.*

191. *Markonis Y., Kumar R., Hanel M., Rakovec O., MÃąca P., **AghaKouchak A.**, 2021, The Rise of Compound Warm-Season Droughts in Europe, **Science Advances**, 7(6), eabb9668, doi: 10.1126/sciadv.abb9668.*

190. *Abdelmoaty H.M., Papalexiou S.M., Rajulapati C.R., **AghaKouchak A.**, 2021, Biases Beyond the Mean in CMIP6 Extreme Precipitation: A Global Investigation, **Earth's Future**, 9(10), e2021EF002196, doi: 10.1029/2021EF002196.*

189. *Filippelli G., Beal L., Rajaram H., **AghaKouchak A.**, Balikhin M.A., Destouni G., East A., Faccenna C., Florindo F., Frost C., Griffies S., 2021, Geoscientists, who have documented the rapid and accelerating climate crisis for decades, are now pleading for immediate collective action, **Geophysical Research Letters**, 48(21), e2021GL096644, doi: 10.1029/2021GL096644.*

188. *Balting D.F., **AghaKouchak A.**, Lohmann G., Ionita, M., 2021, Northern Hemisphere Drought Risk in a Warming Climate, **npj Climate and Atmospheric Science**, 4(1), 1-13, doi: 10.1038/s41612-021-00218-2.*

187. *Cheng J., You Q., Zhou Y., Cai M., Pepin N., Chen D., **AghaKouchak A.**, Kang S., Li M., 2021, Increasing Cloud Water Resource in a Warming World, **Environmental Research Letters**, 16(12), 124067, doi: 10.1088/1748-9326/ac3db0.*

186. *Park E.S., Harlow A., **AghaKouchak A.**, et al., 2021, Instructor Facilitation Mediates Students' Negative Perceptions of Active Learning Instruction, **PLOS One**, 16(12), e0261706, doi: 10.1371/journal.pone.0261706.*

185. *Ashraf A., Nazemi A., **AghaKouchak A.**, 2021, Anthropogenic Drought Dominates Groundwater Depletion in Iran, **Scientific Reports**, 11 (1), 9135, doi: 10.1038/s41598-021-88522-y.*

184. *Bevacqua A.G., Chaffe P.L.B., Chagas V.B.P., **AghaKouchak A.**, 2021, Spatial and Temporal Patterns of Propagation from Meteorological to Hydrological Droughts in Brazil, **Journal of Hydrology**, 603, 126902, doi: 10.1016/j.jhydrol.2021.126902.*

183. *Lo, M.H., Wey, H.W., Im, E.S., Tang, L.I., Anderson, R.G., Wu, R.J., Chien, R.Y., Wei, J., **AghaKouchak A.**, Wada, Y., 2021, Intense Agricultural Irrigation Induced Contrasting Precipitation Changes in Saudi Arabia, **Environmental Research Letters**, 16 (6), 064049, doi: 10.1088/1748-9326/ac002e.*

182. *Yazdandoost F., Moradian S., Izadi A., **AghaKouchak A.**, 2021, Evaluation of CMIP6 Precipitation Simulations Across Different Climatic Zones: Uncertainty and Model Intercomparison, **Atmospheric Research**, 250, 105369, doi: 110.1080/14693062.2020.1833824.*

181. *Vahedifard F., Madani K., **AghaKouchak A.**, Thota, S.K., 2021, Are We Ready for More Dam Removals in the United States?, Environmental Research: Infrastructure and Sustainability, **Environmental Research: Infrastructure and Sustainability**, 1, 013001, doi: 10.1088/2634-4505/abe639.*

180. *Wu J., Chen X., Yuan X., Yao H., Zhao Y., **AghaKouchak A.**, 2021,The Interactions between Hydrological Drought Evolution and Precipitation-Streamflow Relationship, **Journal of Hydrology**, 597, 126210, doi: 10.1016/j.jhydrol.2021.126210.*

179. *Anjileli H., Huning L.S., Moftakhari H., Ashraf S., Asanjan A.A., Norouzi H., **AghaKouchak A.**, 2021, Extreme Heat Events Heighten Soil Respiration, **Scientific Reports**, 11 (1), 6632, doi: 10.1038/s41598-021-85764-8.*

178. *Moftakhari, H., Shao, W., Moradkhani, H., **AghaKouchak A.**, Sanders, B., Matthew, R., Jones, S. and Orbinski, J., 2021, Enabling Incremental Adaptation in Disadvantaged Communities: Polycentric Governance With a Focus on Non-Financial Capital, **Climate Policy**, 21 (3), 396-405, doi: 110.1080/14693062.2020.1833824.*

177. *Huning L.S., **AghaKouchak A.**, 2020, Global Snow Drought Hot Spots and Characteristics, **Proceedings of the National Academy of Sciences**, 117 (33), 19753-19759, doi: 10.1073/pnas.1915921117.*

176. ***AghaKouchak A.**, Chiang F., Huning L.S. Love C.A., Mallakpour I., Mazdiyasni O., Moftakhari H., Papalexiou S.M., Ragno E., Sadegh, M., 2020, Climate Extremes and Compound Hazards in a Warming World, **Annual Review of Earth and Planetary Sciences**, 48, 519-548, doi: 10.1146/annurev-earth-071719-055228.*

175. *Raymond C., Horton R.M., Zscheischler J., Martius O., **AghaKouchak A.**, Balch J., Bowen S.G., Camargo S.J., Hess J., Kornhuber K., Oppenheimer M., 2020, Understanding and Managing Connected Extreme Events, **Nature Climate Change**, 10, 611-621, doi: 10.1038/s43017-020-0060-z.*

174. *Zscheischler J., Martius O., Westra S., Bevacqua E., Raymond C., Horton R.M., van den Hurk B., **AghaKouchak A.**, Jezequel A., Mahecha M.D., Maraun D., Krajewski W., 2020, A Typology of Compound Weather and Climate Events, **Nature Reviews Earth and Environment**, doi: 10.1038/s43017-020-0060-z.*

173. *Qin Y., Abatzoglou J.T., Siebert S., Huning L.S., **AghaKouchak A.**, Mankin J.S., Hong C., Tong D., Davis S.J., Mueller N.D., 2020, Agricultural Risks from Changing Snowmelt, **Nature Climate Change**, 10(5), 459-465, doi: 10.1038/s41558-020-0746-8.*

172. *Sadegh, M., **AghaKouchak A.**, Mallakpour, I., Huning, L.S., Mazdiyasni, O., Niknejad, M., Foufoula-Georgiou, E., Moore, F.C., Brouwer, J., Farid, A. and Alizadeh, M.R., 2020, Data and Analysis Toolbox for Modeling the Nexus of Food, Energy and Water, **Sustainable Cities and Society**, 61, 102281, doi: 10.1016/j.scs.2020.102281.*

171. *Mallakpour I., Sadegh M., **AghaKouchak A.**, 2020, Changes in the Exposure of California?s Levee-Protected Critical Infrastructure to Flooding Hazard in a Warming Climate, **Environmental Research Letters**, 15, 064032, doi: 10.1088/1748-9326/ab80ed.*

170. *Madadgar S., Sadegh M., Chiang F., Ragno E.,* ***AghaKouchak A.****, 2020, Quantifying Increased Fire Risk in California in Response to Different Levels of Warming and Drying,* ***Stochastic Environmental Research and Risk Assessment****, 34 (12), 2023-2031.*

169. *Khorshidi, M. S., Dennison, P. E., Nikoo, M. R.,* ***AghaKouchak A.****, Luce, C. H., Sadegh, M. (2020). Increasing concurrence of wildfire drivers tripled megafire critical danger days in Southern California between 1982-2018.* ***Environmental Research Letters****, doi: 10.1088/1748-9326/abae9e.*

168. *Hong C., Mueller N.D., Burney J.A., Zhang Y.,* ***AghaKouchak A.****, Moore,F.C., Qin Y., Tong D., Davis S.J., 2020, Impacts of Ozone and Climate Change on Yields of Perennial Crops in California,* ***Nature Food****, 1(3), 166-172, doi: 10.1038/s43016-020-0043-8.*

167. *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****, 10(3), 191-199, doi: 10.1038/s41558-020-0709-0.*

166. *Love C.A., Skahill B.E., England J.F., Karlovits G., Duren A.,* ***AghaKouchak A.****, 2020, Integrating Climatic and Physical Information in a Bayesian Hierarchical Model of Extreme Daily Precipitation,* ***Water****, 12 (8), 2211, doi: 10.3390/w12082211.*

165. *Vahedifard F., Madani K.,* ***AghaKouchak A.****, Thota S.K., 2020, Preparing for proactive dam removal decisions,* ***Science****, 369 (6500), 150-150.*

164. *Christianson D.S., Malhotra A., Pennington S.C., Sihi D.,* ***AghaKouchak A.****, et al., 2020, COSORE: A Community Database for Continuous Soil Respiration and Other Soil-Atmosphere Greenhouse Gas Flux Data,* ***Global Change Biology****, 26 (12), 7268-7283, doi: 10.1111/gcb.15353.*

163. *Vahedifard F., Jasim F.H., Tracy F.T., Abdollahi M., Alborzi A.,* ***AghaKouchak A.****, 2020, Levee Fragility Behavior under Projected Future Flooding in a Warming Climate,* ***Journal of Geotechnical and Geoenvironmental Engineering****, 146 (12), 04020139, doi: 10.1061/(ASCE)GT.1943-5606.0002399.*

162. *Ward P.J., de Ruiter M.C., MÃěrd J., SchrÃűter K., Van Loon A., Veldkamp T., von Uexkull N., Wanders N.,* ***AghaKouchak A.****, et al., 2020, The Need to Integrate Flood and Drought Disaster Risk Reduction Strategies,* ***Water Security****, 11, 100070, doi: 10.1016/j.wasec.2020.100070.*

161. *Wu J., Chen X., Love C.A., Yao H., Chen X.,* ***AghaKouchak A.****, 2020, Determination of Water Required to Recover From Hydrological Drought: Perspective From Drought Propagation and Non-Standardized Indices,* ***Journal of Hydrology****, 590, 125227, doi: 10.1016/j.jhydrol.2020.125227.*

160. *Hosseini-Moghari S.M., Araghinejad S., Ebrahimi K., Tang Q.,* ***AghaKouchak A.****, 2020, Using GRACE Satellite Observations for Separating Meteorological Variability from*

Anthropogenic Impacts on Water Availability, ***Scientific Reports****, 10, 15098, doi: 10.1038/s41598-020-71837-7.*

159. *You Q., Chen D., Wu F., Pepin N., Cai Z., Ahrens B., Jiang Z., Wu Z., Kang S.,* ***AghaKouchak A.****, et al., 2020, Elevation Dependent Warming over the Tibetan Plateau: Patterns, Mechanisms and Perspectives,* ***Earth-Science Reviews****, 210, 103349, doi: 10.1016/j.earscirev.2020.103349.*

158. *Huning L.S.,* ***AghaKouchak A.****, 2020, Approaching 80 Years of Snow Water Equivalent Information by Merging Different Data Streams,* ***Scientific Data****, 7(1), 333, doi: 10.1038/s41597-020-00649-1.*

157. *Rahnamay Naeini M., Yang T., Tavakoly A., Analui B.,* ***AghaKouchak A.****, Hsu K., Sorooshian S., 2020, A Model Tree Generator (MTG) Framework for Simulating Hydrologic Systems: Application to Reservoir Routing, Water, 12(9), 2373, doi: 10.3390/w12092373.*

156. *Alizadeh M.R., Adamowski J., Nikoo M.R.,* ***AghaKouchak A.****, Dennison P., Sadegh M., 2020, A Century of Observations Reveals Increasing Likelihood of Continental-Scale Compound Dry-Hot Extremes,* ***Science Advances****, 6 (39), eaaz4571, doi: 10.1016/j.scs.2020.102281.*

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Table 1. Summary of Journal Publications.

Journal	***Publisher***	***Impact Factor***	***Publications***
Nature	*Nature*	*49.96*	*2*
Science	*AAAS*	*41.84*	*5*
Reviews of Geophysics	*AGU*	*21.45*	*2*
Nature Climate Change	*Nature*	*20.89*	*4*
Nature Communications	*Nature*	*14.91*	*4*
Science Advances	*AAAS*	*14.14*	*4*
Annual Review of Earth and Planetary Sciences	*Annual Reviews*	*12.81*	*1*
Earth-Science Reviews	*Elsevier*	*12.41*	*2*
PNAS	*NAS*	*11.20*	*4*
Global Change Biology	*Wiley*	*10.86*	*1*
Nature Sustainability	*Nature*	*9.65*	*3*
BAMS	*AMS*	*9.38*	*7*
Applied Energy	*Elsevier*	*8.85*	*3*
npj Climate and Atmospheric Science	*Nature*	*8.62*	*1*
Science of the Total Environment	*Elsevier*	*7.96*	*3*
Environmental Science & Technology	*ACS*	*7.86*	*1*
Earth's Future	*AGU*	*7.26*	*4*
Energy	*Elsevier*	*7.15*	*1*
Scientific Data	*Nature*	*6.44*	*4*
Environmental Research Letters	*IOP*	*6.19*	*10*
Journal of Hydrology	*Elsevier*	*5.72*	*13*
Sustainable Cities and Society	*Elsevier*	*5.27*	*2*
Water Resources Research	*AGU*	*5.24*	*13*
Hydrology and Earth System Sciences	*EGU*	*5.24*	*3*
Climate Policy	*T&F*	*5.19*	*1*
Journal of Climate	*Springer*	*5.15*	*2*
Remote Sensing	*MDPI*	*4.84*	*3*
Environmental Modelling and Software	*Elsevier*	*4.81*	*1*
Geophysical Research Letters	*AGU*	*4.72*	*13*
Advances in Water Resources	*Elsevier*	*4.71*	*8*
Atmospheric Research	*Elsevier*	*4.67*	*3*
Agricultural and Forest Meteorology	*Elsevier*	*4.65*	*1*
Earth System Dynamics	*EGU*	*4.59*	*1*
GeoHealth	*AGU*	*4.53*	*2*
Scientific Reports	*Nature*	*4.38*	*11*
Climate Dynamics	*Springer*	*4.37*	*1*
Journal of Geophysical Research-A., -B., -O.	*AGU*	*4.26*	*11*
Climatic Change	*Springer*	*4.13*	*3*

Natural Hazards and Earth System Sciences	*EGU*	*4.11*	*2*
IEEE Geoscience and Remote Sensing Letters	*Springer*	*3.97*	*1*
Journal of Hydrometeorology	*AMS*	*3.89*	*4*
Canadian Geotechnical Journal	*NRC*	*3.73*	*1*
Water Resources Management	*Springer*	*3.52*	*2*
Stochastic Env. Res. Risk A.	*Springer*	*3.38*	*2*
Hydrological Processes	*Wiley*	*3.25*	*2*
PLOS One	*PLOS*	*3.24*	*1*
Sensing Environment: Sci. Pol. Sus. Develop.	*1T&F*	*3.22*	*1*
Theoretical and Applied Climatology	*Springer*	*3.18*	*2*
Int. Journal of Remote Sensing	*T&F*	*3.15*	*1*
Water Security	*Elsevier*	*3.04*	*1*
Weather and Forecasting	*AMS*	*3.03*	*1*
Environment: Sci. Pol. Sus. Develop.	*T&F*	*2.96*	*1*
J. Geotech. and Geoenvironmental Eng.	*ASCE*	*2.71*	*3*
Physics and Chemistry of the Earth	*Elsevier*	*2.71*	*1*
Water	*MDPI*	*2.71*	*3*
Journal of Great Lakes Research	*Elsevier*	*2.48*	*1*
Journal of Arid Environments	*Elevier*	*2.2*	*1*
Journal of Hydrologic Engineering	*ASCE*	*2.02*	*1*
Climate Research	*IR*	*1.97*	*1*
Int. J. Engineering Education	*T&F*	*1.30*	*1*
Iranian Studies	*T&F*	*0.21*	*1*
Stat	*Wiley*	*0.92*	*1*
Nature Food	*Nature*		*1*
Nature Reviews Earth and Environment	*Nature*		*1*
Environmental Research: Infra. & Sustain.	*IOP*	-	*1*
Eos	*AGU*		*5*
Total			***200***

Books

4. *Contributing Author to the ASCE Book: Impacts of Future Weather and Climate Extremes on United States Infrastructure: Assessing and Prioritizing Adaptation Actions, American Society of Civil Engineers, 2021, ISBN 978-0-7844-1586-3.*

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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

17. *Sadegh, M., **AghaKouchak, A.** and Abatzoglou, J., 2021. Another Dangerous Fire Season is Looming in the Western US, and the Drought-Stricken Region is Headed for a Water Crisis. The Conversation.*

16. *Tarroja, Brian, Scott Samuelsen, **Amir AghaKouchak**, David Feldman, Kate Forrest, Felicia Chiang, 2019, Building a Climate Change-Resilient Electricity System for Meeting California's Energy and Environmental Goals, California Energy Commission. Publication Number: CEC-500-2019-015.*

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 Atmsopheric 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 Wold 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

10. ***Process-informed Nonstationary Extreme Value Analysis (ProNEVA)**:*
*By Elisa Ragno, Linyin Cheng, and **Amir AghaKouchak***
URL: http://amir.eng.uci.edu/downloads/ProNEVA.zip

9. ***Nexus of Food Energy Water (NeFEW) Toolbox**:*
*By Mojtaba Sadegh, and **Amir AghaKouchak***
URL: http://amir.eng.uci.edu/downloads/NeFEW.zip

8. ***Multi-hazard Scenario Analysis Toolbox (MhAST)**:*
*By Mojtaba Sadegh, Elisa Ragno and **Amir AghaKouchak***
URL: http://amir.eng.uci.edu/MhAST.php

7. ***Nonstationary Conceptual Rainfall Runoff Toolbox (NCRRT)**:*
*By Mojtaba Sadegh, and **Amir AghaKouchak***
URL: http://amir.eng.uci.edu/downloads/NCRRT.zip

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.php

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

President, International Association of Hydrological Sciences (IAHS) International Commission on Remote Sensing (ICRS), 2021-2023.

AGU Bowie Medal Committee Member, 2020-2022.

AGU Hydrology Section Nominations and Canvassing Committee, Member, 2022-2024.

Co-Chair of Working Group 1: ASCE Special Project on Effect of Climate Change on Life-Cycle Performance, Safety, Reliability and Risk of Structures and Infrastructure Systems, Technical Council on Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems, 2021-2023.

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, 2017-present.

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: CCCA4-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, SNSF, 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

Technical Committee, ASCE Geo-Extreme 2021 Conference, November 7-10 2021, Savannah, Georgia.

Organizing Committee, Workshop on Correlated Extremes, Columbia University, May 29-31, 2019, New York City, NY, USA.

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

Prelim Chair, Hydrology and Water Resources 2020 - 2021

Committee Member, UC Disaster Resilience Network, 2020-present

Teaching Plan Coordinator, 2018-2021

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 2017-2019

Member, HSSOE Tech Advisory Committee, 2017 - 2019

Faculty Search Committee Member, 2016-2017

Faculty Search Committee Member, 2013-2014

Edison Scholarship Selection Committee, California Alliance for Minority Participation, 2014-2019

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

Graduate and Postdoctoral Advisees

Postdoctoral Scholars

***Iman Mallakpour** (2016 - 2021).*
***Laurie Huning** (2017 - 2020).*
***Omid Mazdiyasni** (2018 - 2020).*
***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)

***Alexandre Martinez**, PhD, 2021.*
***Aneseh Alborzi**, PhD, 2021.*

***Hassan Anjileli**, PhD, 2020.*
***Felicia Chiang**, PhD, 2020.*
***Baoxiang Pan**, PhD, 2019 (with K Hsu and S Sorooshian).*
***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.*
***Yunxia Zhao**, PhD Student, 2017 - present.*
***Annika Hjelmstad**, PhD Student, 2020- present.*
***Shakil Jiwa**, PhD Student, 2021 - present.*

PhD Students (Co-Advisor)

***Matin Rahnamay Naeini**, PhD, 2020 (Advisor: S Sorooshian).*
***Phu Nguyen**, PhD, 2014 (Advisor: S Sorooshian).*
***Jingjing Li**, PhD, 2012 (Advisor: S Sorooshian).*

PhD Dissertation Committee Member

***Meng Zhao**, PhD, 2021 (Advisors: I Velicogna).*
***Antonios Mamalakis**, PhD, 2020 (Advisors: E Foufoula-Georgiou).*
***Negin Hayatbini**, PhD, 2020 (Advisors: S Sorooshian).*
***Matthew W. Brand**, PhD, 2020 (Advisor: B Sanders).*
***Vinnarasi Rajendran** PhD, 2019, Indian Institute of Technology Delhi, India, (Advisor: Prof. Dhanya C. T.).*
***Nasser Najibi** PhD, 2019, City University of New York (Advisors: Naresh Devineni).*
***Harsh L. Shah** PhD, 2019, Indian Institute of Technology Gandhinagar, India, (Advisor: Prof. Vimal Mishra).*
***Raie Alharbi**, 2019.*
***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

***Pedro L.B. Chaffe**, Federal University of Santa Catarina, Brazil, 2020-2021.*
***Jiefeng Wu**, Nanjing University of Information Science and Technology, China, 2018-2019.*
***Qiaohong Sun**, Beijing Normal University, China, 2016-2017.*
***Prof. Carlos Lima**, University of Brasilia, 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

***Yunxia Zhao**, September 2021.*
***Aneseh Alborzi**, September 2021.*
***Eric Shearer**, February 2021.*
***Charlotte Love**, May 2020.*
***Alex Martinez**, February 2020.*
***Maryam Seyyedhosseini**, June 2019.*
***Matthew Brand**, April 2019.*
***Robert Fofrich**, March 2019.*
***Kevin Wright**, February 2019.*
***Felicia Chiang**, September 2018.*
***Hassan Anjileli**, September 2018.*
***Kate Forrest**, May 2018.*
***Raie Alharbi**, May 2018.*
***Matin Rahnamay-Naeini**, December 2017.*
***Omid Mazdiyasni**, 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

***Claudia Jimenez Arellano**, May 2021.*
***Margarita Rivera**, May 2021.*
***vu Ngoc Dao**, May 2021.*
***Shu Li**, May 2021.*
***Ari Jong**, November 2020.*
***Daniel Kahl**, November 2020.*
***Esther Cookson**, November 2020.*
***Debora Oliveira**, November 2020.*
***Yunxia Zhao**, November 2018.*
***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, (2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014).*

***CEE 173 and CEE 273: Watershed Modeling** (undergraduate, graduate), UC-Irvine, (2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011).*

***CEE 81B: Civil Engineering Practicum II** (undergraduate), UC-Irvine, (2021, 2020, 2019, 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

95. ***AghaKouchak A.**, Anthropogenic Drought: Definition and Modeling Frameworks (Invited), American Meteorological Society (AMS) 102nd Annual Meeting, January 23-27, 2022, New Houston, TX, USA.*

94. ***AghaKouchak A.**, Ragno E., Multimodel Rainfall IntensityâĂŞ DurationâĂŞFrequency curves for infrastructure design and risk assessment in a changing climate, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

93. ***AghaKouchak A.**, Multimodel Rainfall IntensityâĂŞ DurationâĂŞFrequency curves for infrastructure design and risk assessment in a changing climate, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

92. ***AghaKouchak A.**, Extreme Value Analysis Workshop, University of Oulu, Finland, December 8, 2021.*

91. ***AghaKouchak A.**, Achieving Climate Justice âĂŞ Community Leadership,Climate Reality Conversation at Glasgow Kelvin College, Glasgow Scotland, November 9, 2021.*

90. ***AghaKouchak A.**, Quantifying Changes in Future Precipitation IDF Curves, Our Changing Precipitation Webinar Series: A Conversation on the Science of Precipitation and Planning for the Future, Organized by the National Oceanic and Atmospheric Administration (NOAA), September 28, 2021.*

89. ***AghaKouchak A.**, Extreme Events and Systems, ASCE Future Weather & Climate Extremes Webinar (Part 1), August 30, 2021.*

88. ***AghaKouchak A.**, Compound and Cascading Hazards: Typology, Modeling and Risk Assessment, Distinguished Scientist Seminar Series (DSSS), Lawrence Berkeley National Laboratory (LBNL), August 13, 2021.*

87. ***AghaKouchak A.**, Compound Flood Hazard Assessment: A Hybrid Statistical-Hydrodynamic Framework, Karlsruhe Institute of Technology, June 23, 2021, Karlsruhe, Germany.*

86. ***AghaKouchak A.**, Multi-hazard Scenarios for Analysis of Compound Extreme Events, Federation of Earth Science Information Partners (ESIP), December 15, 2020, Online Event.*

85. ***AghaKouchak A.**, Nexus of Food, Energy, and Water (NeFEW): A Data Analysis Toolbox (Invited), AGU Fall Meeting, December 1-17, 2020, Online Event.*

84. ***AghaKouchak A.**, Nonstationary precipitation intensity-duration-frequency curves for infrastructure design in a changing climate, Climate Change and Stormwater: A panel discussion of the latest research, Chesapeake Bay Trust, November 10, 2020, Online Event.*

83. ***AghaKouchak A.**, Multi-hazard Scenarios for Analysis of Compound Extreme Events, UC Center Sacramento, November 4, 2020, Sacramento, CA, USA.*

82. ***AghaKouchak A.**, Compound Events in a Changing Climate, University of Colorado Boulder, November 14, 2020.*

81. ***AghaKouchak A.**, MultiâĂŘhazard Scenarios for Analysis of Compound Extreme Events, USACE Monthly Climate Calls, February 12, 2020.*

80. ***AghaKouchak A.**, Anthropogenic Drought: Modeling the Compounding Impacts of Droughts and Increasing Water Demands (Invited), AGU Fall Meeting, December 9-13, 2019, San Francisco, CA, USA.*

79. ***AghaKouchak A.**, 2019, December. Navigating Careers in Natural Hazards and Disaster Science. In AGU Fall Meeting Abstracts (Vol. 2019, pp. NH25A-03).*

78. ***AghaKouchak A.**, Martinez A., Linking Droughts in Major Food Producing Countries to Impacts on Food Supply and Agricultural Production in North Africa, Seventh Arab-American Frontiers of Science, Engineering, and Medicine Symposium, November 17-19, 2019, Cairo, Egypt.*

77. ***AghaKouchak A.**, Multi-hazard Scenarios for Analysis of Compound Extreme Events, Western University, November 4, 2019, London, Ontario, Canada.*

76. ***AghaKouchak A.**, Anthropogenic Drought: Definition, Challenges and Opportunities, IAHS Panta Rhei Drought in the Anthropocene Workshop, October 28-20, 2019, Arizona State University, Tempe, AZ, USA.*

75. ***AghaKouchak A.**, Extreme Value Analysis Workshop, 2019 PEER Forum - Transboundary Water Research in Central Asia (organized by the US National Academies of Sciences, Engineering, and Medicine, and the United States Agency for International Development), October 21-22, 2019, Tashkent, Uzbekistan.*

74. ***AghaKouchak A.**, Hands-on Workshop on Extreme Value Analysis, Nanjing University, October 9, 2019, Nanjing, China.*

73. ***AghaKouchak A.**, Modeling Compound and Concurrent Climate Extremes, East China Normal University, October 7, 2019, Shanghai, China.*

72. ***AghaKouchak A.**, Hands-on Workshop on Multivariate Analysis, Concordia University, July 3, 2019, Montreal, Quebec, Canada.*

71. ***AghaKouchak A.**, The Challenge of Compound and Cascading Hazards in Geosciences (Award Lecture), The 27th IUGG General Assembly, July 8-18, 2019, Montreal, Quebec, Canada.*

70. ***AghaKouchak A.**, Workshop on Extreme Value Analysis, June 13, 2019, Uppsala University, Uppsala, Sweden.*

69. ***AghaKouchak A.**, Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis, The Fourth Northern European Conference on Emergency and Disaster Studies (NEEDS), June 10-12, 2019, Uppsala, Sweden.*

68. ***AghaKouchak A.**, Statistical Methods for Analysis of Compound Events, Workshop on Correlated Extremes, Columbia University, May 29-31, 2019, New York City, NY, USA.*

67. ***AghaKouchak A.**, Compound and Concurrent Climate Extremes: Detection, Modeling and Risk Analysis, University of Illinois Urbana-Champaign, April 5, 2019, IL, USA.*

66. ***AghaKouchak A.**, Compound Coastal Flooding: Drivers and Modeling, USACE Workshop: Compound Flooding due to Interactions between Coastal Storm Surge and Rainfall-induced Riverine Flows, April 2-3, 2019, USACE Galveston, TX, USA.*

65. ***AghaKouchak A.**, Compound Hazards in a Warming Climate, 29th Pacific Climate Workshop, February 17-20, 2019, Pacific Grove, CA, USA..*

64. ***AghaKouchak A.**, Compound and Cascading Hazards, University of California, Riverside, January 18, 2019.*

63. ***AghaKouchak A.**, Amplified Temperature Shifts under Droughts in Observations and Model Simulations (Invited), AGU Fall Meeting, December 10-14, 2018, Washington DC, USA.*

62. ***AghaKouchak A.**, Compound Events: Detection, Modeling and Risk Analysis (Invited), AGU Fall Meeting, December 10-14, 2018, Washington DC, USA.*

61. ***Amir AghaKouchak**, A Multi-Hazard Investigation of Climate Vulnerability of the Natural Gas Energy System in Southern California, California Energy Commission, October 15, 2018, Sacramento, CA, USA.*

60. ***Amir AghaKouchak**, Compounding effects of human activities and climatic changes on surface water availability, Drought on Subseasonal to Seasonal Timescales: Water and Food Security, September 9-14, 2018, Aspen, CO, USA.*

59. ***Amir AghaKouchak**, Future Climate Risk from Compound Events, DOD Strategic Multilayer Assessment (SMA), Directorate for Global Operations, August 14, 2018.*

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.**, 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., Mazdiyasni 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., Mazdiyasni 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., Mazdiyasni 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., Mazdiyasni 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

207. *Hjelmstad A., **AghaKouchak A.**, Impact-Based Attribution of Extreme Events, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

206. *Nevermann H., **AghaKouchak A.**, Shokri N., Climate Change Implications on Future Dynamics of Coastal Wetlands, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

205. *Baijnath-Rodino J., Martinez A., York R., **AghaKouchak A.**, Foufoula-Georgio E., Banerjee T., High-Resolution Mapping of Post-Wildfire Using Unmanned Aerial Vehicles: Creek Fire Case Study, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

204. *Sanders B.F., Schubert J.E., Davis S.J., Kahl D., **AghaKouchak A.**, Allaire M., Brady D., Forman F., Matthew R., Ulibarri N., Intersection of Urban Flood Hazards and Neighborhood Disadvantage across the Los Angeles Metropolitan Region, AGU Fall Meeting, December 13-17, 2021, New Orleans, LA, USA.*

203. *Nevermann, H., **AghaKouchak A.**, and Shokri, N., 2021, April. Sea-level rise driven soil salinization. In EGU General Assembly Conference Abstracts (pp. EGU21-14453).*

202. *Huning L. and **AghaKouchak A.**, Extreme Precipitation Variability in a Warming World. In 101st American Meteorological Society Annual Meeting. AMS, January 2021.*

201. *Mamalakis, A., Foufoula-Georgiou, E., **AghaKouchak, A.** and Randerson, J.T., 2020, December. Probabilistic assessment of the practical predictability of extreme wet and dry years in the southwestern US in observed and CMIP6 climates. In AGU Fall Meeting Abstracts (Vol. 2020, pp. H185-05).*

200. *Alizadeh, M.R., Adamowski, J.F., Sadegh, M. and **AghaKouchak, A.**, 2020, December. Century-Scale Assessment of Compound Dry-Hot Extremes across Space and Time. In AGU Fall Meeting Abstracts (Vol. 2020, pp. GC098-0001).*

199. *Huning, L. and **AghaKouchak, A.**, 2020, December. Extreme Climatic Events in a Warming World. In AGU Fall Meeting Abstracts (Vol. 2020, pp. GC089-08).*

198. *Ashraf, S., Nazemi, A. and **AghaKouchak, A.**, 2020, December. Anthropogenic and Climatic Controls on Groundwater Availability in Iran. In AGU Fall Meeting Abstracts (Vol. 2020, pp. H050-01).*

197. *Huning, L.S. and **AghaKouchak, A.**, 2020, January. How are Snow Droughts and Their Impacts Changing across the World?(Invited Presentation). In 100th American Meteorological Society Annual Meeting. AMS.*

196. *Jasim, F.H., Vahedifard, F., Alborzi, A., Moftakhari, H. and **AghaKouchak, A.**, 2020, February. Effect of compound flooding on performance of earthen levees. In Geo-Congress 2020: Engineering, Monitoring, and Management of Geotechnical Infrastructure (pp. 707-716). Reston, VA: American Society of Civil Engineers.*

195. *Giovannettone, J.P., Tye, M.R., **AghaKouchak, A.**, Olsen, J.R., Barros, A.P. and Huang, J., 2020, December. Prioritizing Actions to Adapt AmericaâĂŹs Infrastructure for Climate Change. In AGU Fall Meeting 2020. AGU.*

194. *Love, C.A., Skahill, B. and **AghaKouchak, A.**, 2019, December. Quantifying Future Changes in Extreme Precipitation Using a Max-Stable Process Model. In AGU Fall Meeting 2019. AGU.*

193. *Chiang, F., Greve, P., Mazdiyasni, O., Veldkamp, T., Wada, Y. and **AghaKouchak, A.**, 2019, December. Compound Temperature and Precipitation Shifts in Historical and Historical Natural-Only Model Simulations. In AGU Fall Meeting Abstracts (Vol. 2019, pp. GC52A-06).*

192. *Farahmand, A., Behrangi, A. and **AghaKouchak, A.**, 2019, December. Coupling Irrigation Demand With Drought Conditions. In AGU Fall Meeting Abstracts (Vol. 2019, pp. H34H-02).*

191. *Zhao, Y. and **AghaKouchak, A.**, 2019, December. The Spatial Patterns of Hot and Cold Skin-temperature Extremes Across the World and Their Corresponding Diurnal Variability Based on Satellite Observations. In AGU Fall Meeting Abstracts (Vol. 2019, pp. H53K-1908).*

190. *Pan, B., Hsu, K.L., **AghaKouchak, A.**, and Sorooshian, S., 2019, December. Benchmarking Quantitative Precipitation Forecast Using a Composite of Numerical Modeling and Deep Neural Networks. In AGU Fall Meeting Abstracts (Vol. 2019, pp. GC43D-1349).*

189. *Huning, L. and **AghaKouchak, A.**, 2019, December. Global Snow Drought Hotspots and Their Impacts. In AGU Fall Meeting Abstracts (Vol. 2019, pp. H12F-02).*

188. *Moftakhari, H., Jay, D.A., Tessler, Z.D., Moradkhani, H. and **AghaKouchak, A.**, 2019, December. A global view of the interaction of sea-level rise and tidal flooding. In AGU Fall Meeting Abstracts (Vol. 2019, pp. OS21A-01).*

187. *Sadegh, M., Khorshidi, M.S., Dennison, P.E., Nikoo, M., **AghaKouchak, A.**, and Luce, C.H., 2019, December. Increasing Concurrence of Wildfire Drivers Doubles Megafire Critical Danger Days in Southern California. In AGU Fall Meeting Abstracts (Vol. 2019, pp. NH52A-04).*

186. *Martinez, A., **AghaKouchak, A.**, and Davis, S.J., 2019, December. Predicting the impacts of local drought in Northern America on global nutrition supply. In AGU Fall Meeting Abstracts (Vol. 2019, pp. GC43H-1407).*

185. *Azarderakhsh, M., Prakash, D.S., **AghaKouchak, A.**, and Hernandez, V., 2019, December. Effect of Surface Characteristics on Sentinel-1 SAR Observations for Detecting Freeze and Thaw States in Boreal Regions. In AGU Fall Meeting Abstracts (Vol. 2019, pp. G13C-0569).*

184. *Alborzi, A., Jasim, F., Mallakpour, I., Vahedifard, F. and **AghaKouchak, A.**, 2019, December. Integrating future climate extremes into hydrologic design concepts. In AGU Fall Meeting Abstracts (Vol. 2019, pp. H52A-07).*

183. *Qin, Y., Abatzoglou, J.T., Siebert, S., Huning, L., **AghaKouchak, A.**, Mankin, J.S., Hong, C., Tong, D., Davis, S.J. and Mueller, N., 2019, December. Agricultural vulnerability to changing snowmelt. In AGU Fall Meeting Abstracts (Vol. 2019, pp. GC33D-04).*

182. *Anjileli, H., Huning, L., Mallakpour, I. and **AghaKouchak, A.**, 2019, December. Response of the Terrestrial Biosphere Carbon Flux to 1.5 to 2.0 o C of Warming. In AGU Fall Meeting Abstracts (Vol. 2019, pp. B13H-2605).*

181. *Sanders, B.F., Moftakhari, H., Schubert, J.E., **AghaKouchak, A.**, and Matthew, R., 2019, December. Linking Statistical and Hydrodynamic Modeling to Map and Communicate Compound Coastal Flood Hazards. In AGU Fall Meeting Abstracts (Vol. 2019, pp. NH31E-0899).*

180. *Hong, C., Mueller, N., Burney, J.A., Zhang, Y., **AghaKouchak, A.**, Moore, F.C., Qin, Y., Tong, D. and Davis, S.J., 2019, December. Impacts of ozone and climate change on California perennial crops. In AGU Fall Meeting Abstracts (Vol. 2019, pp. GC43H-1403).*

179. *Kaatz, L., Tye, M.R., Giovannettone, J.P, **AghaKouchak, A.**, Barros, A.P, Beighley, E., Capehart, W.J., Douglas, E.M., Fehrenbacher, N., Fields, R.C. and Ganguly, A.R., 2019, December. Prioritizing Actions to Adapt America's Infrastructure for Climate Change. In AGU Fall Meeting Abstracts (Vol. 2019, pp. NH23B-1016).*

178. *Tye, M.R., Giovannettone, J.P, **AghaKouchak, A.**, Barros, A.P, Beighley, E., Capehart, W.J., Douglas, E.M., Fehrenbacher, N., Fields, R.C., Ganguly, A.R. and Huang, J., 2019, December. Prioritizing Actions to Adapt AmericaâĂŹs Infrastructure for Climate Change. In AGU Fall Meeting 2019. AGU.*

177. *Khazaei, B., Khatami, S., Alemohammad, H., Wu, C., Madani, K., Kalantari, Z., Destouni, G. and **AghaKouchak, A.**, 2019, January. Using observed hydro-climatic and land-use changes to explain the desiccation of Lake Urmia. In EGU General Assembly Conference Abstracts (p. 6161).*

176. *Love, C.A., Skahill, B.E. and **AghaKouchak, A.**, 2018, December. Analysis of Annual Maxima Daily Precipitation Data Using a Max-Stable Spatial Process: Quantifying the Cost of Assuming Spatial Independence Among Extreme Data. In AGU Fall Meeting 2018. AGU.*

175. *Sadegh, M. and **AghaKouchak, A.**, 2018, December. Multivariate Modeling in Hydrology, Climatology, and Geosciences: Copulas, Multihazard Analysis, and Probabilistic Prediction. In AGU Fall Meeting 2018. AGU.*

174. *van der Pluijm, Ben, and **AghaKouchak, A.**, "Toward a More Resilient Global Society." In AGU Fall Meeting 2018. AGU, 2018.*

173. *Arellano Gonzalez, J., Moore, F.C., **AghaKouchak, A.** and Qin, Y., 2018, December. Estimating the Adaptive Benefits of Water Market Reform for Irrigated Agriculture. In AGU Fall Meeting Abstracts (Vol. 2018, pp. GC51I-0897).*

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171. *Huning, L., **AghaKouchak, A.** and Margulis, S.A., 2018, December. Progress in Remote Sensing-Based Snow Hydrology and Its Applications. In AGU Fall Meeting Abstracts (Vol. 2018, pp. H42F-03).*

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

American Society of Civil Engineers (ASCE)

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