susan.stillman@dri.edu

EDUCATION

Ph.D. Hydrometeorology, University of Arizona, Tucson, AZ	2016
M.S. Hydrometeorology, University of Arizona, Tucson, AZ	2012
B.S. Physics, University of Texas at Dallas, Richardson, TX	2010

PROFESSIONAL EXPERIENCE

Postdoctoral Fellow at Desert Research Institute, Las Vegas, NV

2018-present

- Developed a method to forecast future changes in playa lake flood frequency using climate model projections and historical inundation data.
- Analyzed meteorological conditions that affect the transport of radionuclides by air and ephemeral streams at the Nevada National Security Sites.
- Synthesized available data and publications related to wildfire impacts on hydrology to create tools for land managers and wildfire response teams
- Reviewed technical reports and grant proposals

Postdoctoral Research Associate at University of Arizona, Tucson, AZ

2016-2018

- Evaluated NASA's SMAP soil moisture relative to five other satellite products over various land cover types and quantification of uncertainty due to representativeness of in situ data and measurement error
- Assessed the relationships between antecedent soil moisture on afternoon convective precipitation using satellite-based precipitation and soil moisture

Research Assistant at University of Arizona, Tucson AZ

- Identified deficiencies in the Climate Research Unit's monthly number of raining days 2016 product and developed an improved 110-year 0.5 degree global raining day product
- Comprehensive performance evaluation of 22 precipitation and 23 soil moisture product
 including climate models, reanalyses, and remotely sensed data
- Developed a soil moisture model trained on quality controlled observations and analyzed long-term spatiotemporal variability of soil moisture over a watershed
- Analyzed spatiotemporal variability of precipitation within a watershed 2012-2013
- Contributed to the development of Cosmic Ray Soil Moisture Observing System (COSMOS) probe effective measurement depth function

 2011
- Collected field samples for COSMOS soil moisture probe calibration 2010

Supplemental Instructor at University of Texas at Dallas, Richardson TX 2008-2009

• Developed lesson plans and lead weekly review sessions for PHYS2326 (electromagnetism and waves).

PUBLICATIONS

- **Stillman, S.** and X. Zeng, 2018: Evaluation of SMAP soil moisture relative to five other satellite products using the Climate Reference Network measurements over the continental U.S., *IEEE Trans. Geosci. Remote Sens.*, **99**, doi: 10.1109/TGRS.2018.2835316
- **Stillman, S.** and X. Zeng, 2016: Development of a 0.5° global monthly raining day product from 1901 to 2010, *Geophys. Res. Lett.*, **43**, 9704–9711, doi: 10.1002/2016GL070244.
- **Stillman, S.**, X. Zeng, and M. G. Bosilovich, 2016: Evaluation of 22 precipitation and 23 soil moisture products over a semiarid area in southeastern Arizona. *J. Hydrometeor.*, **17**, 211–230. doi: http://dx.doi.org/10.1175/JHM-D-15-0007.1
- **Stillman, S.**, J. Ninneman, X. Zeng, T. Franz, R. L. Scott, W. J. Shuttleworth, and K. Cummins, 2014: Summer Soil Moisture Spatiotemporal Variability in Southeastern Arizona. *J. Hydrometeor.*, **15**, 1473-1485, doi: 10.1175/JHM-D-13-0173.1
- **Stillman, S.**, X. Zeng, W. J. Shuttleworth, D. C. Goodrich, C. L. Unkrich, and M. Zreda, 2013: Spatiotemporal variability of summer precipitation in southeastern Arizona. *J. Hydrometeor.*, **14**, 1944–1951, doi: 10.1175/JHM-D-13-017.1
- Franz, T. E., Zreda, M., Ferre, P. A., Rosolem, R., Zweck, C., **Stillman, S.**, Zeng, X., and Shuttleworth, W. J., 2012: Measurement depth of the cosmic-ray soil moisture probe affected by hydrogen from various sources, *Water Resour. Res.*, **48**, W08515, doi:10.1029/2012WR011871

HONORS

AMS Early Career Leadership Academy participant (competitively selected)	2019
Hargis award, Dia del Agua Conference, Univ. of AZ (financial award for best poster	
presentation)	2016
Galileo Scholar, Univ. of AZ (financial award for excellent scholarship)	2013
Graduate Diversity Fellowship, Univ. of AZ (financial award for diversity in graduate	
programs)	2010
Academic Excellence Scholarship, Univ. of TX Dallas (financial award for excellent	
scholarship)	2006

OUTREACH AND VOLUNTEERING

American Geophysical Union Fall Meeting session planner	2018
• Reviewed manuscripts for four respected peer reviewed journal	2015-present
• Community outreach through presenting science to middle and high school stu	idents 2015
• Presenter at N. American monsoon discussion at University of Arizona: weekl	y 2014
briefings of the progressions of the North American Monsoon and daily websi	ite
updates on the monsoon activity in southwest US and Mexico.	
• Committee Chair of Atmospheric and Interdisciplinary Research Graduate	2013-2014
Student Conference, a conference organized entirely by graduate students	

PROFESSIONAL AFFILIATIONS

American Geophysical Union Member American Meteorological Society Member 2014-present 2010-present