Shraddhanand Shukla, PhD
Assistant Researcher-IV
Department of Geography, University of California, Santa Barbara, CA, USA. 93106,

Education:

- ***PhD***, Civil and Environmental Engineering, 2012, University of Washington, Seattle, WA.
- ***Masters of Technology***, Water Resources Development and Management, 2005, Indian Institute of Technology, Kharagpur, West Bengal, India.
- ***Bachelors of Technology***, Agricultural Engineering, 2003 C.S.A.U., Kanpur, Uttar Pradesh, India.

Professional Experience:

- **Assistant Researcher** University of California, Santa Barbara (UCSB)(August 2014-Present)
- **UCAR's PACE Postdoctoral Fellow,** University of California, Santa Barbara (UCSB)(September 2012-August 2014)
- **Postdoctoral Research Associate,** University of Washington (UW), Seattle, WA (June-August 2012)

Selected Academic and Professional Service:

- Editor of the journal Advances in Meteorology (April 2015-present), and Hydrology and Earth System Sciences (since October 2016)
- Proposal reviewer for the US National Science Foundation (NSF) Hydrologic Sciences program and the Mississippi-Alabama Sea Grant Consortium.
- Reviewer of high impact journals (*Water Resources Research, Bulletin of the American Meteorological Society, Geophysical Research Letters, Journal of Geophysical Research, Environmental Research Letters, Journal of Hydrometeorology, Hydrology and Earth System Sciences, Climate Research, Climatic Change, Intl. Journal of Climatology, Journal of Hydrology* etc)
- Member of American Water Resources Association, American Geophysical Union and American Meteorological Society (2007-Present)
- Vice-president and treasurer of Chi Epsilon Honor Society-UW Chapter (2009-2011)

Selected Awards and Fellowships:

- The University Corporation for Atmospheric Research (UCAR)'s 2012 Postdocs Applying Climate Expertise (PACE) Fellowship (2012-2014)
- Federal Commission Scholarship by the Swiss Government (2005-2006)
- Recipient of the Ministry of Human Resources and Development Scholarship for the pursuit of a Master's degree at the Indian Institute of Technology. (2003-2005)

Peer-Reviewed Publications (in last 3 years):

- **Shukla, S.**, J. Roberts, A. Hoell, C. C. Funk, F. Robertson and B. Kirtman: Assessing North American multimodel ensemble (NMME) seasonal forecast skill to assist in the early warning of anomalous hydrometeorological events over East Africa. *Climate Dynamics. 1-17. doi:10.1007/s00382-016-3296-z*
- McNally, A., **S. Shukla**, K. Arsenault, S. Wang, C. Peters-Lidard, and J. P Verdin: Evaluating ESA CCI soil moisture in East Africa. 48, 96–109, *International Journal of Applied Earth Observation and Geoinformation.* doi:10.1016/j.jag.2016.01.001.
- S. Madadgar, A. AghaKouchak, **S. Shukla**, A. W. Wood, L. Cheng, S. Sorooshian, K. Hsu, M. Svoboda: A Hybrid Statistical Dynamical Drought Prediction Framework: Application to the

Southwestern United States. *Water Resources Research*. 52, 5095–5110, doi:10.1002/2015WR018547.

- **Shukla, S.**, A. Steinemann, S.F. Iacobellis and D.R. Cayan: Annual Drought in California: Association with Monthly Precipitation and Climate Phases. Journal of Applied Meteorology and Climatology *J. Appl. Meteor. Climatol.*, **54**, 2273–2281. doi: http://dx.doi.org/10.1175/JAMC-D-15-0167.1
- **Shukla, S.**, M. Safeeq, A. AghaKouchak, K. Guan, and C. Funk, 2015: Temperature Impacts on the Water Year 2014 Drought in California. Geophys. Res. Lett., 42, doi: 10.1002/2015GL063666.
- C. Funk, P. Peterson, M. Landsfeld, D. Pedreros, J. Verdin, **S. Shukla**, G. Husak and L. Harrison:A new environmental record for monitoring hydrologic extremes. *Nat. Sci. Data. 2, 150066. doi:10.1038/sdata.2015.66*
- Hoell, A., **S. Shukla**, M. Barlow, F. Cannon, C. Kelley and C. Funk 2015: The Forcing of Monthly Precipitation Variability over Southwest Asia During the Boreal Cold Season. *J. Clim. DOI: http://dx.doi.org/10.1175/JCLI-D-14-00757.1*
- Safeeq, M., **S. Shukla**, I. Arismendi, G. Grant, S. Lewis, and A. Nolin: Influence of winter season climate variability winter season climate variability on snow precipitation ratio in the Western U.S. *Intl. J. Clim*. doi:10.1002/joc.4545
- Grace, K., F. Davenport, H. Hanson, C. Funk, and **S. Shukla**: Examining the Relationship between Temperature, Rainfall and Low Birth Weight in sub-Saharan Africa. *Glob. Env. Change. 25 (125-137), doi:10.1016/j.gloenvcha.2015.06.010*
- Funk, C., **S. Shukla**, A. Hoell and B. Livneh: Assessing the contributions of East African and west Pacific warming to the 2014 boreal spring East African drought. *Bull. Am. Met. Soc.*
- **Shukla S.**, Funk, C., and Hoell, A. 2014: Using constructed analogs to improve the skill of National Multi-Model Ensemble March-April-May precipitation forecasts in equatorial East Africa. *Enviorn. Res. Lett.* 9, 094009. *http://iopscience.iop.org/1748-9326/9/9/094009.*
- **Shukla, S.**, McNally, A., Husak, G., and Funk, C. 2014: A seasonal agricultural drought forecast system for food-insecure regions of East Africa, *Hydrol. Earth Syst. Sci.*, 18, 3907-3921, doi:10.5194/hess-18-3907-2014.
- Funk, C., Hoell, A., **Shukla, S.**, Bladé, I., Liebmann, B., Roberts, J. B., Robertson, F. R., and Husak, G. 2014: Predicting East African spring droughts using Pacific and Indian Ocean sea surface temperature indices, *Hydrol. Earth Syst. Sci., 18, 4965-4978, doi:10.5194/hess-18-4965-2014.*
- Nijssen, B., **S. Shukla**, C. Lin, H. Gao, T. Zhou, J. Sheffield, E. F. Wood, D. P. Lettenmaier, 2014: A prototype Global Drought Information System based on multiple land surface models, *J. Hydrometeorol.* doi:http://dx.doi.org/10.1175/JHM-D-13-090.1

Other Relevant Publications:

- Shukla, S., J. Sheffield, E. F. Wood and D. P. Lettenmaier, 2013: On the sources of global land surface hydrologic predictability, Hydrol. Earth Syst. Sci., 17, 2781-2796.
- Shukla, S., and D. P. Lettenmaier, 2013: Multi-RCM ensemble downscaling of NCEP CFS winter season forecasts: Implications for seasonal hydrologic forecast skill, J. Geophys. Res. Atmos., 118,10,770–10,790, doi:10.1002/jgrd.50628.
- Shukla, S., N. Voisin, and D. P. Lettenmaier, 2012:Value of medium range weather forecasts in the improvement of seasonal hydrologic prediction skill,Hydrol. Earth Syst. Sci., 16, 2825-2838, doi:10.5194/hess-16-2825-2012
- Mo, K. C., S. Shukla, D. P. Lettenmaier, and L.-C. Chen. 2012. Do climate forecast system (CFSv2) forecasts improve seasonal soil moisture prediction?, Geophys. Res. Lett., doi:10.1029/2012GL053598.