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Education and Training

2008	Purdue University, Civil Engineering, PhD
2001	National Taiwan University, Civil Engineering, MS
1999	National Taiwan University, Civil Engineering, BS

Research and Professional Experience

2010-Present	Research Scientist. Oak Ridge National Laboratory, TN.
2009-2010	Post-doctoral Research Associate. Oak Ridge National Laboratory, TN.
2008-2009	Post-doctoral Research Associate. Purdue University, IN.
2004-2008	Graduate Research/Teaching Assistant. Purdue University, IN.

Publications

1. Sale, M. J., S.-C. Kao, M. Ashfaq, D. P. Kaiser, R. Martinez, C. Webb and Y. Wei (2012), *Effects of Climate Change on Federal Hydropower*, Technical Manual 2011/251, Oak Ridge National Laboratory, Oak Ridge, TN.
2. Ghosh, S., D. Das, S.-C. Kao, A. R. Ganguly (2012), Lack of uniform trends but increasing spatial variability in observed Indian rainfall extremes, *Nature Climate Change*, in press.
3. Kao, S.-C. and N.-B. Chang (2012), Copula-based Flood Frequency at Ungaged Basin Confluences: A Case Study for Nashville, TN, *Journal of Hydrologic Engineering*, in press.
4. Hadjerioua, B., Y. Wei, S.-C. Kao and B. T. Smith (2012), *An Assessment of Energy Potential at Non-powered Dams in the United States*, Technical Manual 2011/341, Oak Ridge National Laboratory, Oak Ridge, TN.
5. Kao, S.-C. and A. R. Ganguly (2011), Intensity, duration, and frequency of precipitation extremes under 21st-century warming scenarios, *Journal of Geophysical Research - Atmospheres*, *116*, D16119, doi:10.1029/2010JD015529.
6. Grimaldi, S., S.-C. Kao, A. Castellarin, S.-M. Papalexiou, A. Viglione, F. Laio, H. Aksoy, and A. Gedikli (2011), Statistical Hydrology, *Treatise on Water Science*, *479*, doi:10.1016/B978-0-444-53199-5.00046-4.
7. Kao, S.-C. and R. S. Govindaraju (2010), Reply to Comment by T. P. Hutchinson on "Trivariate Statistical Analysis of Extreme Rainfall Events via the Plackett Family of Copulas", *Water Resources Research*, *46*, W04802, doi:10.1029/2009WR008774.
8. Kao, S.-C. and R. S. Govindaraju (2010), A Copula-based Joint Deficit Index for Droughts, *Journal of Hydrology*, *380*, 121-134, doi:10.1016/j.jhydrol.2009.10.029.
9. Hadjerioua, B., S.-C. Kao, M. J. Sale, Y. Wei, S. K. SanthanaVannan, H. A. Shanafield III, D. P. Kaiser, R. Devarakonda, C. Odeh, G. Palanisamy and B. T. Smith (2010), *National Hydropower Asset Assessment Project (NHAAP) 2010 Final Annual Report*, Technical Manual 2010/260, Oak Ridge National Laboratory, Oak Ridge, TN.
10. Kao, S.-C., T. P. Chan, R. Sultana, T. Konopka, T. Cooper, B. Partridge and R. S. Govindaraju (2009), Hydrologic and Environmental Performance of a Subsurface Constructed Wetland at a Highway Rest Area: A Case Study, *Water Quality, Exposure and Health*, *1*, 35-48, doi:10.1007 /s12403-009-0004-9.
11. Kao, S.-C. and R. S. Govindaraju (2008), Trivariate Statistical Analysis of Extreme Rainfall Events via Plackett Family of Copulas, *Water Resources Research*, *44*, W02415, doi:10.1029/ 2007WR006261
12. Kao, S.-C. and A. R. Rao (2008), At-Site Based Evaluation of Rainfall Estimates for Indiana, *Journal of Hydrologic Engineering*, *13*(3), 184-188, doi:10.1061/(ASCE)1084-0699(2008)13: 3(184).

13. Kao, S.-C. and R. S. Govindaraju (2007), A Bivariate Frequency Analysis of Extreme Rainfall with Implications for Design, *Journal of Geophysical Research - Atmospheres*, *112*, D13119, doi:10.1029/2007JD008522.
14. Kao, S.-C. and R. S. Govindaraju (2007), Probabilistic Structure of Storm Surface Runoff Considering the Dependence between Average Intensity and Storm Duration of Rainfall Events, *Water Resources Research*, *43*, W06410, doi:10.1029/2006WR005564.
15. Rao, A. R. and S.-C. Kao (2007), Discussion of "Updated Precipitation Frequency Estimates for Kansas City: Comparison with TP-40 and HYDRO-35" by C. Bryan Young and Bruce M. McEnroe, *Journal of Hydrologic Engineering*, *12*(6), 694-699, doi:10.1061/(ASCE)1084-0699 (2007)12:6(694)
16. Lin, G.-F., L.-H. Chen and S.-C. Kao (2005), Development of Regional Design Hyetographs, *Hydrologic Process*, *19*, 937-946, doi:10.1002/hyp.5550.

Synergistic Activities

1. Reviewer for Advances in Water Resources, Hydrological Processes, Hydrological Sciences Journal, International Journal of Climatology, Journal of Computing in Civil Engineering, Journal of Geophysical Research, Journal of Hydrologic Engineering, Journal of Hydrology, Physics and Chemistry of the Earth, Scientia Agricola, Water Resources Research
2. Statistics in Hydrology Working Group, IAHS
3. Hydrologic Technical Committee, EWRI, ASCE
4. Program Committee - 2010 IEEE ICDM International Workshop on Spatial and Spatiotemporal Data Mining, December 14, Sydney, Australia.
5. Program Committee - 2010 IEEE ICDM Workshop on Knowledge Discovery from Climate Data: Prediction, Extremes, and Impacts, December 14, Sydney, Australia.
6. Scientific Committee - 2010 IAHS-STAHY International Workshop on Advances in Statistical Hydrology, May 23-25, Taormina, Italy.
7. Program Committee - 2009 IEEE ICDM Workshop on Knowledge Discovery from Climate Data: Prediction, Extremes, and Impacts, December 6, Miami, FL.

Graduate and Postdoctoral Advisors

PhD Advisor: Dr. Rao S. Govindaraju (Purdue University)
Master's Advisor: Dr. Gwo-Fong Lin (National Taiwan University)