

### **Publications List**

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Pagano, T.C., H.C. Hartmann, and S. Sorooshian, (Invited) "A Case Study of the 1997-98 El Nino in Arizona: A Focus on Water Management," CLIMAS Seminar, Institute for the Study of Planet Earth, University of Arizona, Tucson, Arizona, April 1, 1999.

Mahani, S.E., S. Sorooshian, and X. Gao, "Improving High-Resolution Satellite-Based Precipitation and Cloud Feature Estimation: A Procedure for Pixel-Based Displacement Adjustment Caused by Cloud-Top Height," Poster Presentation, 9th Annual Hydrology Research Exposition "El Dia del Agua", Dept. of Hydrology and Water Resources, University of Arizona, Tucson, Arizona, April 7, 1999.

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Gupta, H.V. and S. Sorooshian, "Parameter Estimation and Data Assimilation in Hydrologic Modeling," Invited Presentation, Dept. of Civil Engineering, Princeton University, Princeton, New Jersey, May 20, 1999.

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Pagano, T.C., H.C. Hartmann, and S. Sorooshian, (Invited) "Seasonal Forecasts and Water Management in Arizona: A Case Study of the 1997-98 El Nino," 26<sup>th</sup> Annual Conference of the Water Resources Planning and Management Division, American Society of Civil Engineers, Tempe, Arizona, June 6-9, 1999.

Bastidas, L., H.V. Gupta, S. Sorooshian, and W.J. Shuttleworth, "Advances in Parameter Identification of Land-Surface Schemes Using Multi-Criteria Methods," Presentation, PILPS Review Meeting, University of Birmingham, Birmingham, United Kingdom, July 20, 1999.

Gupta, H.V. and S. Sorooshian, "Parameter Estimation and Data Assimilation in Hydrologic Modeling," Invited Presentation, Dept. of Civil and Environmental Engineering, Imperial College, London, United Kingdom, July 22, 1999.

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Sorooshian, S., L.A. Bastidas, and H.V. Gupta, "Application of Multi-Objective Optimization Algorithms for Hydrologic Model Identification and Parameterization," Presentation, 2<sup>nd</sup> International Conference on Multiple Objective Decision Support Systems for Land, Water, and Environmental Management, Brisbane, Australia, August 1-5, 1999.

Sorooshian, S., "A New Perspective on Water Resources: Concerns of the Next Millennium," Presentation, Erice International Seminar, Erice, Italy, August 17-23, 1999.

Sorooshian, S., T.C. Pagano, and H.C. Hartmann, "Climate Forecast Use in Southwestern U.S. Water Management: Lessons Learned from the 1997-98 El Nino," Workshop on the Impacts of the 1997-99 ENSO, Taiwan Central Weather Bureau, Taipei, Taiwan, October 6, 1999.

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Blasch, K.W., L.A. Bastidas, R.L. Scott, H.V. Gupta, and S. Sorooshian, "Monsoonal/Non-Monsoonal Land-Surface Model Parameterizations for Semi-Arid Riparian Locations," Presentation, NOAA 24<sup>th</sup> Annual Climate Diagnostics and Prediction Workshop, Tucson, Arizona, November 1-5, 1999.

Hartmann, H.C. and S. Sorooshian, "Interaction Between Ecosystems and Climate Indicators in the U.S. Southwest," Presentation, NOAA's 24<sup>th</sup> Annual Climate Diagnostics and Prediction Workshop, Tucson, Arizona, November 1-5, 1999.

Whitaker, P., H.C. Hartmann, T.C. Pagano, R. Bales, and S. Sorooshian, "Seasonal Forecasts for Water Resources in the U.S. Southwest: Applications and Evaluations," Presentation, NOAA's 24<sup>th</sup> Annual Climate Diagnostics and Prediction Workshop, Tucson, Arizona, November 1-5, 1999.

Hartmann, H.C., R. Bales, and S. Sorooshian, "A Guide to Weather, Climate, and Hydrologic Forecasts for the U.S. Southwest," San Pedro Conference, Dept. of Agriculture, Cananea, Mexico and Bisbee, Arizona, November 7-10, 1999.

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Pagano, T.C., H.C. Hartmann, S. Sorooshian, and B. Imam, (Invited) “Colorado River Basin Issues in a Nutshell,” Dept. of Hydrology and Water Resources Seminar Series, University of Arizona, Tucson, Arizona, November 16, 1999.

Blasch, K.W., L.A. Bastidas, H.V. Gupta, and S. Sorooshian, “Inferring Areal Scale Parameter Estimates for Land-Surface Models from Available Observational Data,” Presentation, AGU Fall Meeting, San Francisco, California, December 13-17, 1999.

Bastidas, L.A., H.V. Gupta, and S. Sorooshian, “Evaluating the Consistency of Multiple-Output Models Using Observational Data,” Presentation, AGU Fall Meeting, San Francisco, California, December 13-17, 1999.

Gupta, H., L.A. Bastidas, and S. Sorooshian, (Invited) “Assimilating Data for Estimation of Parameters in Hydrological Modeling,” Australian Nuclear Science and Technology Organization (ANSTO), Sydney, Australia, March 1, 2000.

“Water and Climate Change”, on the NSF Science and Technology Center for “Sustainability of Water Resources in Semi-Arid Regions”, World Water Forum, The Hague, Netherlands, March 17, 2000.

Hogue, T.S., S. Sorooshian, H. Gupta, A. Holz, and D. Braatz, “A Multi-Step Automatic Calibration Scheme (MACS) for River Forecasting Models,” Presentation, 10<sup>th</sup> Annual Hydrology Research Exposition “El Dia del Agua”, Dept. of Hydrology and Water Resources, University of Arizona, Tucson, Arizona, April 5, 2000.

Whitaker, P., H.C. Hartmann, R. Bales, and S. Sorooshian, “Seasonal Water Supply Forecast Performance: Issues and Evaluations,” *Eos Transactions*, American Geophysical Union, Supplement 81(19): S205, Spring Meeting, Washington, D.C., May 30-June 3, 2000.

Hartmann, H.C., T.C. Pagano, C. Brown, R. Bales, and S. Sorooshian, “Seasonal Climate Forecasts for Water Management: Applications and Evaluations,” *Eos Transactions*, American Geophysical Union, Supplement 81(19): S206, Spring Meeting, Washington, D.C., May 30-June 3, 2000.

Bastidas, L.A., H.V. Gupta, Y. Liu, and S. Sorooshian, “Comparative Performance Evaluation of Different Levels of LSM Model Complexity,” Presentation, AGU Fall Meeting, San Francisco, California, December 15-19, 2000.

Hsu, K.L., X. Gao, S. Sorooshian, and H. Gupta, (Invited) “Rainfall Estimation from Combined Geostationary and TRMM Satellite Information Using an Artificial Neural Network,” Presentation, Rainfall Estimation Workshop, Pretoria, South Africa, May 9-11, 2000.

“Hydrologic Sciences: Water Resources Sustainability in a Changing World”, IRI Lecture Series on Linking Science to Society, Columbia University, Palisades, New York, June 15, 2000.

(Invited Presentation) Sorooshian, S., H. Gupta, and L. Bastidas, “Assimilating Data for Estimation of Parameters in Hydrologic Modeling,” Presentation, Western Pacific Geophysics Meeting of the American Geophysical Union, Tokyo, Japan, July 2000.

Gao, X., K.L. Hsu, S. Sorooshian, and H.V. Gupta, “Evaluation of Tropical Rainfall Derived Using TRMM and GOES Satellite Data,” Presentation, Progress in Electronics Research Symposium (PIERS), Cambridge, Massachusetts, July 5-14, 2000.

Hogue, T.S., S. Sorooshian, and H. Gupta, (Invited), “Bridging the Gap Between Research and Operations: Automatic Calibration of NWS River Forecasting Models,” Presentation, NWS River Forecast Center Science Conference, NOAA Office of Hydrology, Silver Spring, Maryland, August 8-11, 2000.

Welles, E., H. Hartmann, H. Gupta, and S. Sorooshian, “What is a Good Probability Forecast?”, Presentation,

Southwest Weather Symposium, Tucson, Arizona, September 21-22, 2000.

Sorooshian, S. and H. Gupta, "Improving Calibration of Flood Forecast Models: A Multi-Criteria Approach," Presentation, International Symposium on Flood Defense, Kassel, Germany, September 20-23, 2000.

Sorooshian, B., B. Imam, D. Reigle, and R. Bales, "UA-Raytheon Partnership: Snow Mapping, Precipitation, and Digital Watershed Report," NSGIC Annual Conference, Lake Tahoe, Nevada, September 29-Oct. 3, 2000.

Sorooshian, S., "Water Issues Pivotal in the 21<sup>st</sup> Century," Honors Forum Series Seminar, University of Arizona Honors College, Tucson, Arizona, March 6, 2001.

(Invited) Sorooshian, S., "Hydrologic Science: The Role of Water Cycle Studies and Its Relevance to Water Resources Sustainability," University of California-Irvine, April 11, 2001.

Gupta, H.V., S. Sorooshian, X. Gao, L. Bastidas, K. Hsu, B. Imam, and S. Mahani, "The Role of Mathematical Models in the Sustainability of Water Resources Systems," International Conference on Hydraulic Structures, Kerman, Iran, May 1-2, 2001.

Sorooshian, S., B. Imam, T. Pagano, and S. Mahani, "Impact of Climate Variability and Change on Regional Water Resources," International Conference on Hydraulic Structures, Kerman, Iran, May 1-2, 2001.

Zahraie, B., M. Karamouz, B. Imam, and S. Sorooshian, "Improved Statistical Streamflow Forecasting by Snow Budget Calculation," AGU Spring Meeting, Boston, Massachusetts, May 29-June 2, 2001.

Claggett, S., B. Imam, S. Sorooshian, and K. Hsu, "Evaluation of Satellite and NEXRAD Precipitation Estimates for Water Resources Applications," AGU Spring Meeting, Boston, Massachusetts, May 29-June 2, 2001.

Hsu, K., X. Gao, and S. Sorooshian, "Rainfall Estimation Using Satellite-Based Cloud Classification Maps," 7<sup>th</sup> International Conference on Precipitation: Predictability of Rainfall at All Scales," Rockport, Maine, June 30-July 3, 2001.

Imam, B., S. Sorooshian, R.C. Bales, H. Hartmann, and T. Pagano, "Utilization of Remote Sensing Information for Water Resources Management in the Southwestern U.S., IGAARS 2001, Sydney, Australia, July 9-13, 2001.

Gupta, H. and S. Sorooshian, "Assimilation of Data for the Calibration of Watershed Models," Keynote talk, International Workshop on Catchment-Scale Hydrological Modeling and Data Assimilation, Wageningen, The Netherlands, September 3-5, 2001.

Gao, X., S. Sorooshian, K. Hsu, R.A. Maddox, Y. Hong, B. Imam, and H.V. Gupta, "Diurnal Variability of Tropical Rainfall Retrieved from Combined GOES and TRMM Satellite Information," 4<sup>th</sup> International Scientific Conference on the Global Water and Energy Cycle Experiment, Paris, France, September 10-14, 2001.

Gao, X., K. Li, S. Sorooshian, and B. Imam, "Summertime Severe Rainfall Prediction Over the Semi-Arid Southwest U.S. Using Mesoscale Modeling: the July 1999 Event in Las Vegas," 4<sup>th</sup> International Scientific Conference on the Global Water and Energy Cycle Experiment, Paris, France, September 10-14, 2001.

Hogue, T.S., L.A. Bastidas, H.V. Gupta, and S. Sorooshian, "Estimating Surface Carbon Fluxes Using Multi-Objective Techniques," 4<sup>th</sup> International Scientific Conference on the Global Water and Energy Cycle Experiment," Paris, France, September 10-14, 2001.

Liu, Y., L.A. Bastidas, H.V. Gupta, and S. Sorooshian, "Multi-Criteria Parameter Estimation for Coupled Land-Surface Models," 4<sup>th</sup> International Scientific Conference on the Global Water and Energy Cycle Experiment," Paris, France, September 10-14, 2001.

Gupta, H., S. Sorooshian, X. Gao, B. Imam, K. Hsu, L. Bastidas, and S. Mahani, "On the Challenge of Predicting Flash Floods from Thunderstorm Rainfall," British Royal Society Meeting on Floods, November 21-22, 2001.

Sorooshian, S., "Overview of SAHRA: Sustainability of semi-Arid Hydrology and Riparian Areas", Presented at the Building Partnerships and Educational Programs for Water/Watershed Education Workshop, Tucson, Arizona, December 5, 2001.

Sorooshian, S., "Hydrologic Sciences: The Role of Water Cycle Studies and Their Relevance to Water Resources Sustainability," 3<sup>rd</sup> International Symposium on Environmental Hydraulics, Arizona State University, Tempe, Arizona, December 6, 2001.

Bastidas, L., K. Hsu, I. Yucel, S. Sorooshian, and J. Shuttleworth, "Applications of Satellite Data Assimilation for Improved Model Estimations in Semi-Arid Lands," AGU Fall Meeting, San Francisco, California, December 10-14, 2001.

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