

CURRICULUM VITAE

DAVID J. GOCHIS

3450 Mitchell Lane
Boulder, CO 80301
303.497.2809 tel / 303.497.8401 fax

1. Educational Information:

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| 1994: B.S. | University of Kansas, Lawrence, Kansas |
| 1998: M.S. | Oregon State University, Corvallis, Oregon: Thesis title: "Estimated plant water use and crop coefficients for drip irrigated hybrid poplars" |
| 2002: Ph.D. | University of Arizona, Tucson, Arizona: Dissertation title: "Modeled sensitivities of the North American Monsoon" |

2. Work History:

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| 2011-present: | Scientist III, National Center for Atmospheric Research, Boulder, CO |
| 2007-2011: | Scientist II, National Center for Atmospheric Research, Boulder, CO |
| 2004-2007: | Scientist I, National Center for Atmospheric Research, Boulder, CO |
| 2002-2004: | Postdoctoral Fellow, National Center for Atmospheric Research, Advanced Study Program, Research Applications Program (RAP), Boulder CO, USA |
| 1998-2002: | Research Assistant/Associate, University of Arizona, USA |
| 1998: | Consulting Engineer, CH2M Hill, Portland, Oregon, USA |
| 1995-1998: | Research Assistant, Oregon State University, USA |

3. Research Foci:

- Modeling and diagnostic research into the physical mechanisms controlling the regional hydroclimate of southwestern North America.
- Analysis and modeling of terrain induced atmospheric convection and heavy rainfall structures over western Mexico and the Colorado Front Range.
- Design and implementation of domestic and international field hydrometeorological observing systems for research and operational forecasting.
- Development and testing of multi-scale surface water and energy exchange formulations in community land surface models for weather and climate prediction.
- Development and application of coupled and un-coupled physics-based hydrometeorological prediction systems for weather and water resource applications.

4. Community Service:

4.1 Educational activities

- Developed and lead multiple training courses on the WRF-Hydro Modeling System
- Guest lecturer at:
 - MICMOR Helmholtz Research School (Mechanisms and Interactions of Climate Change in Mountain Regions) – Karlsruhe Institute of Technology, Germany
 - European Center for Medium Range Weather Forecasting (ECMWF-Reading U.K.)
 - Bjerknes Center for Climate Research
 - University of Texas at Austin
 - University of Nebraska-Lincoln
 - Creighton University
 - Arizona State University
 - University of Colorado
 - Colorado State University
 - University of Arizona
 - Cyprus Institute
 - Colorado School of Mines
 - University of Oklahoma
- Instructor for U.S. National Weather Service/UCAR COMET courses in Hydrometeorology

4.2 Mentoring Activities

- Significant Opportunities in Atmospheric Research and Science (SOARS) Science and Writing Mentor (multiple)
- NCAR HIRO program scientific advisor (2011)
- NCAR Early Career Scientist Assembly, Co-organizer, June 2003 and July 2007
- AGU Hydrology Section Outstanding Student Paper Award Committee (2008-2011)
- Supervisor of 4 NCAR staff technicians within NCAR
- Supervisor of 1 Software Engineer within NCAR
- Supervisor of 3 Associate Scientists within NCAR

4.3 Student advisory committees

2015 to present: Francesca Viterbo (PhD), University of Savona, Italy

2015 to present: MaryMicheal Forrester (MS), Colorado School of Mines, Main Advisor – Reed Maxwell

2013 to present: Aleya Kushik, (PhD), University of Colorado, Main Advisor – David Noone

2013 to present: Jose Camarena, CIBNOR-Guymas, Sonora, Mexico , Main Advisor – Luis Brito-Castillo

2012 to present: Scott Landolt (PhD), University of Colorado, Main Advisor – John Cassano

2016: Tiantian Xiang (PhD), Arizona State University, Main Advisor - Enrique Vivoni

2013: Joel Beiderman (PhD), University of Arizona, Main Advisor – Paul Brooks

2012: Hernan Moreno (PhD), Arizona State University, Main Advisor - Enrique Vivoni

2011: Wei Yu (PhD), U. of Colorado, Main Advisor – Weiqiu Wang

2008: Michael Barnes, U. of Arizona, NOAA Hollingsworth Summer Fellowship

2008: Kazungu Maitaria (PhD), U. Arizona, Main advisor – Jim Shuttleworth

2007: Chunmei Zhu (PhD), U. Washington, Main advisor – Dennis Lettenmaier

2007: Angela Rowe (MS), Colorado State University, Main advisor – Steve Rutledge

4.4 Editorial Activities

2011-present Associate Editor for the Journal of Hydrology

2011: J. of Hydrometeorology, guest editor, Special Collection on Land Surface-Atmosphere Interactions and the role of vegetation

2010: J. of Arid Environments, guest editor, Special Issue on land surface eco-hydrology of the North American Monsoon

2007: J. Climate, guest editor, Special Issue on the North American Monsoon Experiment (NAME)

2002-2013: Journal Reviewer: Science, Climate Dynamics, J. of Climate, J. Hydrometeorology, Monthly Weather Review, Geophysical Research Letters, Water Resources Research, J. of Applied Meteorology, Climate Change, Advances in Water Resources, International Journal of Climatology, Bulletin of the American Meteorological Society, Q. Journal of the Royal Meteorological Society, J. Geophysical Research, J. Arid Environments, J. of Hydrology

4.5 Advisory Activities

2013- American Meteorological Society – Committee on Hydrology

2010-2013: Co-chair of CLIVAR Variability of American Monsoon Systems (VAMOS) Panel

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| 2010-2012: | National Research Council (NRC) Panel Member, Assessment of the U.S. National Weather Service Modernization Program |
| 2008-2010 | NOAA Climate Change Prediction Program for the Americas (CPPA) Advisory Panel Member |
| 2007-present: | CLIVAR Variability of American Monsoon Systems (VAMOS) Panel member |
| 2007-2013: | NSF-NCAR-BEACHON (Bio-hydro-atmosphere interactions of Energy Aerosols, Carbon, H ₂ O, Organics & Nitrogen) Science Working Group |
| 2008-2009: | NCAR Workforce Management Retreat Working Group Lead |
| 2008-2009: | Water Cycle Science Steering Group to inform the Water Cycle Inter-Agency Working Group of the U.S. Climate Change Science Program (CCSP) |
| 2006-2010: | Chair North American Monsoon Experiment (NAME) Science Working Group |
| 2004-2010: | Member NAME Science Working Group |
| 2004-2006: | Member of the Consortium of Universities for the Advancement of Hydrological Sciences, Inc. (CUAHSI) Science Advisory Team |

4.6 Conference/Workshop/Symposium Chair/Session convener:

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| 2016 | Annual Meeting of the American Meteorological Society, 30 th Conference on Hydrology Program co-Chair. |
| 2013 | Annual Meeting of the American Geophysical Union, Session co-Chair. |
| 2013 | 16 th CLIVAR-VAMOS Panel Meeting, Meeting Co-Chair |
| 2011 | Annual Meeting of the American Meteorological Society, Session Chair. |
| 2010 | Annual Meeting of the American Meteorological Society, Session Chair. |
| 2009 | Fall AGU Meeting, Session Chair. |
| 2008 | Fall AGU Meeting Session Chair |
| 2006 | 2nd World Weather Research Program on QPF and Hydrology, Boulder, CO, Co-Chair, July |
| 2008 | 10th NAME Science Working Group Meeting, Miami, FL. Chair and lead organizer |
| 2007 | Spring Joint AGU/UGM Meeting, May 2007 Session Chair |
| 2007 | 9th NAME Science Working Group Meeting, Acapulco, Mexico, Chair and lead organizer |
| 2006 | 8th Science Working Group Meeting, Tucson Arizona, Chair and lead organizer |
| 2006 | NAME Monsoon Applications Workshop, Guaymas, Mexico, May, Co-chair |
| 2006 | Joint NCAR ASP/IAI Summer colloquium on climate change, climate variability in Latin America, July, Co-chair |

2005 7.5th NAME Science Working Group Meeting, State College, PA, Chair, lead organizer

5. Honors and Awards:

2015 NCAR Publication of the year award
2011 Nominated for the AMS Horton Award for Hydrology
2001 Dept. of Hydrology and Water Resources Departmental Scholarship
1999 Institute for the Study of Planet Earth (ISPE) Fellowship, University of Arizona
1997 Recipient of the Wade Rain Scholarship, Oregon State
1996 Recipient of the Jefferson B. Rogers Scholarship, Oregon State
1994 Departmental Honors, Atmospheric Sciences, University of Kansas

6. Publication List:

6.1 Theses:

Gochis, D.J., 1998: Estimated plant water use and crop coefficients for drip irrigated hybrid poplars. MS Thesis, Oregon State University, Corvallis, Oregon, USA.

Gochis, D.J., 2002: Modeled sensitivities of the North American Monsoon. PhD Dissertation, U. of Arizona, Tucson, Arizona, USA, 179 pages.

6.2 Refereed Journal Articles

1. **Gochis, D.J.** and R.H. Cuenca, 2000: Plant water use and crop curves for hybrid poplars. *J. of Irrigation and Drainage Engineering*, **126(4)**, 206-214.
2. Yang, Z.-L., **D.J. Gochis**, and W.J. Shuttleworth, 2001: Evaluation of the simulations of the North American Monsoon in the NCAR CCM3. *Geophys. Res. Lett.*, **28(7)**, April 1 2001, 1211-1214.
3. **Gochis, D.J.**, W.J. Shuttleworth, and Z.-L. Yang, 2002: Sensitivity of the Modeled North American Monsoon Regional Climate to Convective Parameterization. *Monthly Weather Review*, **130**, 1282-1298.
4. Yang, Z.-L., **Gochis D.**, and Shuttleworth W.J., 2003: The impact of sea surface temperature on the North American monsoon: A GCM study. *Geophys. Res. Lett.*, **30(2)**, 1033, Jan. 17, 2003.
5. **Gochis, D.J.**, W.J. Shuttleworth, and Z.-L. Yang, 2003. Hydrometeorological response of the modeled North American Monsoon to convective parameterization. *J. Hydrometeorology*, **4**, 235-250.
6. **Gochis, D.J.**, J.C., Leal, W.J. Shuttleworth, C.J. Watts and J. Garatuza-Payan, 2003: Preliminary diagnostics from a new event-based precipitation monitoring system in support of the North American monsoon experiment. *J. Hydrometeorology*, **4(5)**, 974-981.

7. **Gochis, D.J.**, A. Jimenez, C.J. Watts, J. Garatuza-Payan, and W.J. Shuttleworth, 2004: Analysis of 2002 and 2003 warm-season precipitation from the North American Monsoon Experiment (NAME) Event Rain Gauge Network (NERN). *Monthly Weather Review*, **132(12)**, 2938-2953.
8. Mapes, B., T. Warner, M. Xu, and **D. Gochis**, 2004: Comparison of cumulus parameterizations and entrainment using domain-mean wind divergence in a regional model. *J. Atmos. Sciences*, **61(11)**, 1284-1295.
9. **Gochis, D.J.** B. Anderson, and A. Barros, et al, 2005: Future Scientific Directions, Views from early career scientists, The Water Cycle Across Scales. *Bull. Am. Meteor. Soc.*, **86**, 1743-1746.
10. Higgins, R.W. D. Ahijevych, and J. Amador, et al, 2006: The NAME 2004 field campaign and modeling strategy. *Bull. Amer. Meteor. Soc.*, **87(1)**, 79-94.
11. Vera, C., R.W. Higgins, J. Amador, T. Ambrizzi, R. Garreaud, **D. Gochis**, D. Gutzler, D. Lettenmaier, J. Morengo, C.R. Mechoso, J. Nogues-Peagle, P.L. Silva-Dias, and C. Zhang, 2006: Towards a unified view of the American monsoon systems. *J. Climate*, **19**, 4977-5000.
12. **Gochis, D.J.**, L. Brito-Castillo, and W.J. Shuttleworth, 2006: Hydroclimatology of the North American Monsoon Region in northwest Mexico. *J. Hydrology*, **316**, 53-70.
13. **Gochis, D.J.**, C.J. Watts, J. Garatuza-Payan, and J. Cesar-Rodriguez, 2007a: Spatial and temporal patterns of precipitation intensity as observed by the NAME Event Rain Gauge Network from 2002 to 2004. *J. Climate*, **20**, 1734-1750.
14. Higgins, R.W. and **D.J. Gochis**, 2007: Synthesis of results from the North American Monsoon Experiment (NAME) Process Study. *J. Climate*, **20(9)**, 1601-1607.
15. Hong, Y., **D.J. Gochis**, J.-T. Cheng, K.-L. Hsu, and S. Sorooshian, 2007: Evaluation of satellite-based rainfall measurement using the North American Monsoon Experiment (NAME) Event Rain gauge Network (NERN). *J. Hydrometeorology*, **8**, 469-482.
16. **Gochis, D.J.**, L. Brito-Castillo, and W. J. Shuttleworth, 2007b: Correlations between sea-surface temperatures and warm season streamflow in northwest Mexico. *Intl. J. Climatology*, **27**, 883-901.
17. Ray, A.J., G.M. Garfin, L. Brito-Castillo, M. Cortez-Vazquez, H.F. Diaz, J. Garatuza-Payan, **D. Gochis**, R. Lobato-Sanchez, R. Varady, and C. Watts, 2007: Monsoon region climate applications: Integrating climate science with regional planning and policy. *Bull. Amer. Meteor. Soc.*, **88(6)**, 933-935.
18. Liebmann, B., I. Blade, N.A. Bond, **D.J. Gochis**, D. Allured, and G. Bates, 2008: Characteristics of North American summertime rainfall with emphasis on the monsoon. *J. Climate*, **21**, 1277-1294.
19. Nesbitt, S., **Gochis, D.J.**, and T. Lang, 2008: The diurnal cycle of clouds and precipitation along the Sierra Madre Occidental observed during NAME-2004: Implications for warm season precipitation estimation in complex terrain. *J. Hydrometeorology*, **9**, 728-743.
20. Lyon, S., **D. Gochis**, F. Dominguez, N.A. Brunzell; C.L. Castro; F.K. Chow; Y. Fan; D. Fuka, Y. Hong; P.A. Kucera; S. W. Nesbitt; N. Salzmann; J. Schmidli; P.K. Snyder; A.J. TeuLing; T.E. Twine; S. Levis; J.D. Lundquist; G.D. Salvucci; A.M. Sealy and M.T. Walter, 2008: Coupling terrestrial and atmospheric water dynamics to improve prediction in a changing environment. *Bull. Amer. Meteor. Soc.*, Sept. 2008, 1275-1278.

21. Kursinski, E.R., R.A. Bennett, **D. Gochis**, S.I. Gutman, K.L. Holub, R. Mastaler, C.M. Sosa, I.M. Sosa, and T. van Hove, 2008: Water Vapor and surface observations in northwestern Mexico during the 2004 NAME Enhanced Observing Period. *Geophys. Res. Lett.*, **35(3)**, L03815, Feb. 14, 2008.
22. Vivoni, E.R., K. Tai, and **D.J. Gochis**, 2008: Effects of initial soil moisture on rainfall generation and subsequent hydrologic response during the North American Monsoon. *J. Hydrometeorology*, **10(3)**, 644-664.
23. **Gochis, D.J.**, W. Shi, J. Schemm, and R.W. Higgins, 2009: A forum for evaluating forecasts of the North American Monsoon: The NAME Forecast Forum. *Eos. Transactions*, **90(29)**, July 21, 2009.
24. David, C.H., **D.J. Gochis**, D.R. Maidment, W. Yu, D.N. Yates, and Z.-L. Yang, 2009: Using NHDPlus as the land base for the Noah-distributed model. *Transactions in GIS*, **13(4)**, 363-377.
25. Rosero, E., Z.-L. Yang, L.E. Gulden, G.-Y. Niu, F. Chen, K.E. Mitchell, and **D.J. Gochis**, 2009: Rethinking land-surface model development: an integrated approach to evaluating enhanced hydrological representations in the Noah-LSM. *J. Hydrometeorology*, **10**, 600-622.
26. Zhu, C., R. L. Leung, **D. Gochis**, Y. Qian, and D. P. Lettenmaier, 2009: Evaluating the influence of antecedent soil moisture on variability of the North American Monsoon precipitation in the coupled MM5/VIC modeling system, *J. Adv. Model. Earth Syst.*, **1(13)**, 22 pp., doi:10.3894/JAMES.2009.1.13.
27. **Gochis, D.J.**, S. Nesbitt, W. Yu, and S.F. Williams, 2009: Assessment of quantitative precipitation estimates from space-borne platforms during the 2004 North American Monsoon Experiment. *Atmosfera*, **22**, 69-98.
28. Brito-Castillo, L., E. R. Vivoni, **D. Gochis**, A. Filonov, I. Tereschenko, and C. Monzon, 2010: An anomaly in the occurrence of the month of maximum precipitation distribution in northwest Mexico. *J. of Arid Environments*, **74**, 531-539.
29. Vivoni, E.R., C.J. Watts, and **D.J. Gochis**, 2010: Land surface eco-hydrology of the North American Monsoon. *J. Arid Environments*, **74**, 529-530.
30. **Gochis, D.J.**, E.R. Vivoni, and C.J. Watts, 2010: The impact of soil depths on land surface energy and water fluxes in the North American Monsoon region. *J. Arid Environments*, **74**, 564-571.
31. Ikeda, K. R. Rasmussen, C. Liu, **D.J. Gochis**, D.N. Yates, F. Chen, M. Tewari, M. Barlage, J. Dudhia, K. Miller, K. Arsenault, V. Grubisic, and G. Thompson, 2010: Simulation of Seasonal Snowfall over Colorado. *Atmospheric Research*, **97**, 462-477.
32. Yucel, I., R.J. Kuligowski, and **D.J. Gochis**, 2011: Evaluating the Hydro-Estimator Satellite Rainfall Algorithm over a Mountainous Region. *Int. J. Rem. Sens. and Environ.* **32(22)**, 7315-7342.
33. Barlage, M., F. Chen, M. Tewari, K. Ikeda, **D. Gochis**, J. Dudhia, R. Rasmussen, B. Livneh, M. Ek, and K. Mitchell, 2010: Noah Land Surface Model Modifications to Improve Snowpack Prediction in the Colorado Rocky Mountains. *J. Geophys. Res.*, 115, DOI: 10.1029/2009JD013470.
34. Yu, W., W. Han, E. Maloney, **D. Gochis**, and S.-P. Xie, 2011: Observations of Eastward Propagation of Atmospheric Intraseasonal Oscillations from the Pacific to the Atlantic. *J. Geophys. Res.* 116, DOI: 10.1029/2010JD014336.

35. Rasmussen, R., C. Liu, K. Ikeda, **D.J. Gochis**, D. Yates, F. Chen, M. Tewari, M. Barlage, J. Dudhia, W. Yu, K. Miller, K. Arsenault, V. Grubišić, G. Thompson, E. Gutmann, 2010: High-Resolution Coupled Climate Runoff Simulations of Seasonal Snowfall over Colorado: A Process Study of Current and Warmer Climate. *J. Climate*, 24, 3015 – 3048.
36. Wood, E.F., J.K. Roundy, T.J. Troy, R. van Beek, M. Bierkens, E. Blyth, A. de Roo, P. Döll, M. Ek, J. Famiglietti, **D. Gochis**, N. van de Giesen, P. Houser, P.R. Jaffé, S. Kollet, B. Lehner, D.P. Lettenmaier, C. Peters-Lidard, M. Sivapalan, J. Sheffield, A. Wade, P. Whitehead, 2011: Hyper-Resolution Global Land Surface Modeling: Meeting a Grand Challenge for Monitoring Earth's Terrestrial Water. *Water Resources Research*. 47, DOI: 10.1029/2010WR010090.
37. Wood, E.F., J.K. Roundy, T.J. Troy, R. van Beek, M. Bierkens, E. Blyth, A. de Roo, P. Döll, M. Ek, J. Famiglietti, **D. Gochis**, N. van de Giesen, P. Houser, P.R. Jaffé, S. Kollet, B. Lehner, D.P. Lettenmaier, C. Peters-Lidard, M. Sivapalan, J. Sheffield, A. Wade, P. Whitehead, 2012: Reply to comment by Keith J. Beven and Hannah L. Cloke on "Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water" *Water Resources Research*. 48, DOI: 10.1029/2011WR011202.
38. Moreno, H.A., E.R. Vivoni, and **D. Gochis**, 2012: Utility of quantitative precipitation estimates for high resolution hydrologic forecasts in mountain watersheds of the Colorado Front Range. *J. Hydrol.*, 438-439, 66-83.
39. Gutmann, E.D., R. Rasmussen, C. Liu, K. Ikeda, **D.J. Gochis**, M. Clark, G. Thompson, 2012: A Comparison of Statistical and Dynamical Downscaling of Winter Precipitation over Complex Terrain. *J. Climate*, 25(1), 262-288. doi:10.1175/2011JCLI4109.1.
40. Waliser, D.E. M. Moncrieff, D. Burridge, A. Fink, **D.J. Gochis**, B. N., Goswami, B. Guan, P. Harr, J. Heming, H.-H. Hsu, R. Johnson, C. Jakob, S. Jones, P. Knippertz, J. Marengo, H. Nguyen, M. Pope, Y. Sera, C. Thorncroft, M. Wheeler, R. Wood, 2010: The "Year" of Tropical Convection (May 2008 to April 2010): Climate Variability and Weather Highlights. *Bull. of Amer. Meteorol. Soc.* 93(8), 1218 DOI: 10.1175/2011BAMS3095.1.
41. Rasmussen, R., B. Baker, J. Kochendorfer, T. Myers, S. Landolt, A. Fisher, J. Black, J. Theriault, P. Kucera, **D.J. Gochis**, C. Smith, R. Nitu, M. Hall, S. Cristanelli and E. Gutmann, 2010: The NOAA/FAA/NCAR Winter Precipitation Test Bed: How Well Are We Measuring Snow? *Bull. of Amer. Meteorol. Soc.*, 93(6), 811-829.
42. Edburg, S.L., J.A. Hicke, P.D. Brooks, E. Pendall, B. Ewers, U. Norton, **D.J. Gochis** and E. Gutmann: Cascading Impacts of Bark Beetle-Caused Tree Mortality to Coupled Biogeophysical and Biogeochemical Processes, *Frontiers in Ecology and the Environment*, 10(8), 1416-1424.
43. Greenberg, J., D. Asensio, A. Turnipseed, A. Guenther, T. Karl, **D. Gochis**, 2012: Contribution of leaf and needle litter to whole ecosystem BVOC fluxes. *Atmospheric Environ.*, 59, 302-311.
44. Yu, W., W. Han, **D. Gochis**, 2012: Influence of the Madden-Julian Oscillation and Intraseasonal Waves on Surface Wind and Convection of the Tropical Atlantic Ocean. *J. of Climate*, 25(23), 8057-8074.
45. Duhl, T.R., **D. Gochis**, A. Guenther and S. Ferrenberg, 2012: Emissions of BVOC from Lodgepole Pine trees at two forest sites impacted differently by the Mountain Pine Beetle (MPB) following MPB attack. *Biogeosciences*, 10(1), 483-499.

46. Matrosov, S., R. Cifelli, **D.J. Gochis**, 2012: Measurements of Heavy Convective Rainfall in Flood-Prone Areas Using an X-Band Polarimetric Radar. *J. Applied Met. and Climatol.*, 52(2), 395-407.
47. Rasmussen, S.H., J. H. Christensen, M. Drews, **D. J. Gochis** and J. C. Refsgaard, 2012: Spatial scale characteristics of precipitation simulated by regional climate models and the implications for hydrological modeling. *J. of Hydrometeorology*, 13(6), 1817-1835.
48. Moreno, H. E. Vivoni and **D. Gochis**, 2013: Limits to Flood Forecasting in the Colorado Front Range for Two Summer Convection Periods Using Radar Nowcasting and a Distributed Hydrologic Model. *J. Hydrometeorology*, 4(4), 1075-1097.
49. J. A. Huffman et al., 2013: High concentrations of biological aerosol particles and ice nuclei during and after rain. *Atmos. Chem. & Phys.*, 13(13), 6151-6164.
50. Fiori, E., A. Comellas, L. Molini, N. Reborá, F. Siccardi, **D. Gochis**, S. Tanelli, A. Parodi, 2014: Analysis and hindcast simulations of an extreme event in the Mediterranean area: the Genoa 2011 case. *Atmospheric Research*, 15, 13-29.
51. Mascaro, G., E. Vivoni, **D. Gochis**, C. Watts, J. Rodriguez, 2014: Temporal downscaling and statistical analysis of rainfall across a topographic transect in northwest Mexico. *Journal of Applied Meteorology and Climatology*, 53(4), 910-927.
52. Ortega et al., 2014: Overview of the Manitou Experimental Forest Observatory: Site description and selected science results from 2008-2013. *Atmospheric Chemistry and Physics*, 14(12), 6345-6367.
53. Moreno, H.A, Vivoni, E.R., and **Gochis, D.J.**, 2014. Addressing Uncertainty in Reflectivity-Rainfall Relations in Mountain Watersheds during Summer Convection. *Hydrological Processes*. 28(3): 688-704.
54. Bukovsky, M. S., **Gochis, D.J.**, Mearns, L.O., 2013: Towards Assessing NARCCAP Regional Climate Model Credibility for the North American Monsoon: Current Climate Simulations. *Journal of Climate*. 26(22), 8802-8826.
55. Berkelhammer, M., Hu, J., Bailey, A., Noone, D.C., Still, C.J., Barnard, H., **Gochis, D.**, Hsiao, G.S., Rahn, T., Turnipseed, A., 2013: The nocturnal water cycle in an open-canopy forest. *Journal of Geophysical Research-Atmospheres*, 118(17), 10225-10242.
56. Kaser, L., Karl, T., Guenther, A., Graus, M, Schnitzhofer, R., Turnipseed, A., Fischer, L., Harley, P., Madronich, M., **Gochis, D.**, Keutsch, E.N., Hansel, A., 2013: Undisturbed and disturbed above canopy ponderosa pine emissions: PTR-TOF-MS measurements and MEGAN 2.1 model results. *Atmospheric Chemistry and Physics*, 13(23), 11935-11947.
57. Xiang, T., Vivoni, E.R. and **Gochis, D.J.** 2014. Seasonal Evolution of Ecohydrological Controls on Land Surface Temperature over Complex Terrain. *Water Resources Research*. 50(5): 3852-3874.
58. Rasmussen et al., 2014: Impacts of Climate Change on the Water Balance of the Colorado Headwaters: High Resolution Regional Climate Model Simulations. *J. of Hydrometeorology*. 15(3), 1091-1116.
59. Biederman, J. A., Harpold, A. A., **Gochis, D. J.**, Ewers, B.E., Reed, D.E., S.A. Papuga, Brooks, P.D., 2014: Increased evaporation following widespread tree mortality limits streamflow response.

Water Res. Research, 50(7), 5395-5409.

60. Biederman, J. A., P.D. Brooks, Harpold, A. A., **Gochis, D. J.**, Gutmann, E., Reed, D.E., Pendall, E. Ewers, B.E., 2014: Multiscale observations of snow accumulation and peak snowpack following widespread, insect-induced lodgepole pine mortality. *Ecohydrology*, 7(1), 150-162.
61. Yucel, I., Onen, A., Yilmaz, K. and **Gochis, D.** 2015. Calibration and evaluation of a flood forecasting system: Utility of numerical weather prediction model, data assimilation and satellite-based rainfall. *J. Hydrol.* 523, 49 – 66.
62. **Gochis, D.J.**, R. Schumacher, K. Friedrich, N. Doesken, M. Kelsch, J. Sun, K. Ikeda, D. Lindsey, A. Wood, B. Dolan, S. Matrosov, A. Newman, K. Mahoney, S. Rutledge, R. Johnson, R. Kucera, P. Kennedy, D. Sempere-Torres, M. Steiner, R. Roberts, J. Wilson, W. Yu, V. Chandrasekar, R. Rasmussen, A. Anderson and B. Brown, 2016: The Great Colorado Flood of September 2013. *Bull. Amer. Meteorol. Soc.* 96(9), 1461-1487.
63. Fan, Y., Richard, S., Bristol, R. S., Peters, S. E., Ingebritsen, S. E., Moosdorf, N., Packman, A., Gleeson, T., Zaslavsky, I., Peckham, S., Murdoch, L., Fienen, M., Cardiff, M., Tarboton, D., Jones, N., Hooper, R., Arrigo, J., **Gochis D.J.**, Olson, J., Wolock, D., 2014: DigitalCrust - a 4D data system of material properties for transforming research on crustal fluid flow. *Geofluids*, 12, 1-2, 372-379.
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